Form 3160-3
(June 2015)

FORM APPROVED
OMB No. 1004-0137
Expires: January 31, 2018

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

APPLICATION FOR PERMIT TO DRILL OR REENTER

5. Lease Serial No.: NMNM86710

6. If Indian, Allotee or Tribe Name:

1a. Type of work: ☑ DRILL ☐ REENTER

1b. Type of Well: ☐ Oil Well ☑ Gas Well ☐ Other

1c. Type of Completion: ☐ Hydraulic Fracturing ☐ Single Zone ☑ Multiple Zone

7. If Unit or CA Agreement, Name and No.:

8. Lease Name and Well No.: LOBO 33/28 FED COM 406H

2. Name of Operator: MEWBOURNE OIL COMPANY

9. API Well No.: 30-025-53414

3a. Address: P O BOX 5270, HOBBS, NM 88241

3b. Phone No. *(include area code)*: (575) 393-5905

10. Field and Pool, or Exploratory: BILBERY BASIN/BONE SPRING

4. Location of Well *(Report location clearly and in accordance with any State requirements.*)*

At surface: SWSE / 150 FSL / 1780 FEL / LAT 32.4283577 / LONG -103.6769495

At proposed prod. zone: NENE / 100 FNL / 1650 FEL / LAT 32.4567199 / LONG -103.6765211

11. Sec., T. R. M. or Blk. and Survey or Area: SEC 33/T21S/R32E/NMP

14. Distance in miles and direction from nearest town or post office*: 20 miles

12. County or Parish: LEA

13. State: NM

15. Distance from proposed* location to nearest property or lease line, ft. (Also to nearest drig. unit line, if any): 330 feet

16. No of acres in lease:

17. Spacing Unit dedicated to this well: 320.0

18. Distance from proposed location* to nearest well, drilling, completed, applied for, on this lease, ft.: 20 feet

19. Proposed Depth: 9853 feet / 20063 feet

20. BLM/BIA Bond No. in file: FED: NM1693

21. Elevations (Show whether DF, KDB, RT, GL, etc.): 3800 feet

22. Approximate date work will start*: 07/14/2024

23. Estimated duration: 60 days

24. Attachments

The following, completed in accordance with the requirements of Onshore Oil and Gas Order No. 1, and the Hydraulic Fracturing rule per 43 CFR 3162.3-3 (as applicable)

1. Well plat certified by a registered surveyor.
2. A Drilling Plan.
3. A Surface Use Plan (if the location is on National Forest System Lands, the SUPO must be filed with the appropriate Forest Service Office).
4. Bond to cover the operations unless covered by an existing bond on file (see Item 20 above).
5. Operator certification.
6. Such other site specific information and/or plans as may be requested by the BLM.

25. Signature: (Electronic Submission)

Name *(Printed/Typed)*: BRADLEY BISHOP / Ph: (575) 393-5905

Date: 05/16/2024

Title: Regulatory

Approved by *(Signature)*: (Electronic Submission)

Name *(Printed/Typed)*: CODY LAYTON / Ph: (575) 234-5959

Date: 08/15/2024

Title: Assistant Field Manager Lands & Minerals

Office: Carlsbad Field Office

Application approval does not warrant or certify that the applicant holds legal or equitable title to those rights in the subject lease which would entitle the applicant to conduct operations thereon.
Conditions of approval, if any, are attached.

Title 18 U.S.C. Section 1001 and Title 43 U.S.C. Section 1212, make it a crime for any person knowingly and willfully to make to any department or agency of the United States any false, fictitious or fraudulent statements or representations as to any matter within its jurisdiction.

APPROVED WITH CONDITIONS

(Continued on page 2)

*(Instructions on page 2)

Approval Date: 08/15/2024

District I
1625 N. French Dr., Hobbs, NM 88240
Phone: (575) 393-6161 Fax: (575) 393-0720
District II
811 S. First St., Artesia, NM 88210
Phone: (575) 748-1283 Fax: (575) 748-9720
District III
1000 Rio Brazos Road, Aztec, NM 87410
Phone: (505) 334-6178 Fax: (505) 334-6170
District IV
1220 S. St. Francis Dr., Santa Fe, NM 87505
Phone: (505) 476-3460 Fax: (505) 476-3462

State of New Mexico
Energy, Minerals & Natural Resources Department
OIL CONSERVATION DIVISION
1220 South St. Francis Dr.
Santa Fe, NM 87505

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

☐ AMENDED REPORT

WELL LOCATION AND ACREAGE DEDICATION PLAT

1 API Number	2 Pool Code	3 Pool Name
30-025-53414	5695	BILBREY BASIN; BONE SPRING

4 Property Code	5 Property Name	6 Well Number
336223	LOBO 33/28 FED COM	406H

7 OGRID NO.	8 Operator Name	9 Elevation
14744	MEWBOURNE OIL COMPANY	3800'

10 Surface Location

UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet From the	East/West line	County
O	33	21S	32E		150	SOUTH	1780	EAST	LEA

11 Bottom Hole Location If Different From Surface

UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
B	28	21S	32E		100	NORTH	1650	EAST	LEA

12 Dedicated Acres	13 Joint or Infill	14 Consolidation Code	15 Order No.
320			

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

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GEODETIC DATA
NAD 83 GRID – NM EAST

SURFACE LOCATION (SL)
N: 520189.8 – E: 743858.9
LAT: 32.4283577° N
LONG: 103.6769495° W

KICK OFF POINT (KOP)
1650' FEL & 10' FSL (SEC. 33)
N: 520051.2 – E: 743990.1
LAT: 32.4289746° N
LONG: 103.6765272° W

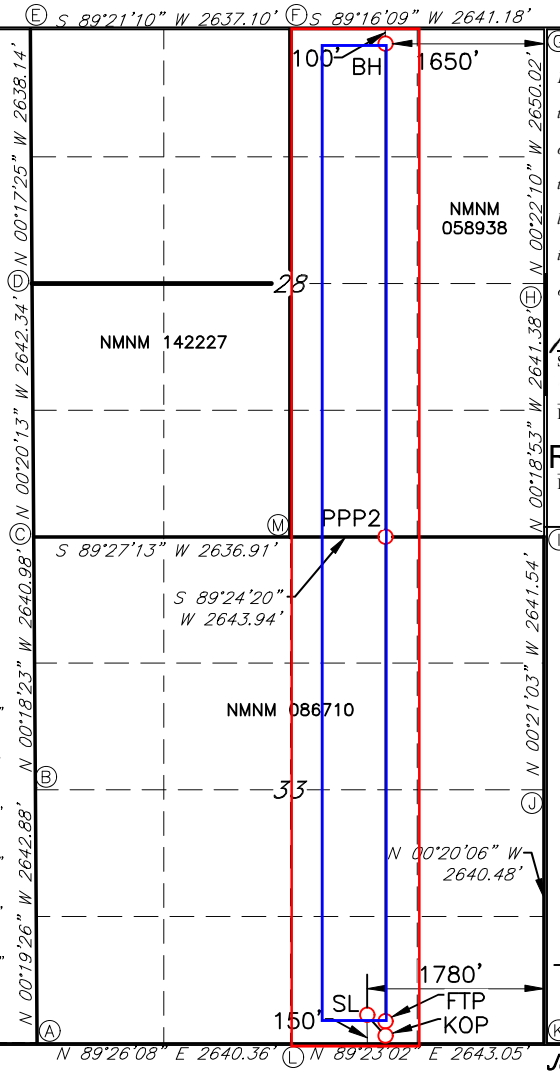
FIRST TAKE POINT (FTP)
1650' FEL & 100' FSL (SEC. 33)
N: 520141.1 – E: 743989.5
LAT: 32.4282219° N
LONG: 103.6765271° W

PROPOSED PENETRATION POINT 2 (PPP2)
1649' FEL & 0' FSL (SEC. 28)
N: 525322.6 – E: 743958.6
LAT: 32.4424643° N
LONG: 103.6765241° W

BOTTOM HOLE (BH)
N: 530508.8 – E: 743927.6
LAT: 32.4567199° N
LONG: 103.6765211° W

CORNER DATA
NAD 83 GRID – NM EAST

A: FOUND BRASS CAP "1916" N: 520004.5 – E: 740357.7
B: FOUND BRASS CAP "1916" N: 522646.7 – E: 740342.7
C: FOUND BRASS CAP "1916" N: 525287.1 – E: 740328.6
D: FOUND BRASS CAP "1916" N: 527928.8 – E: 740313.1
E: FOUND BRASS CAP "1916" N: 530566.4 – E: 740299.7
F: FOUND BRASS CAP "1916" N: 530596.2 – E: 742936.1
G: FOUND BRASS CAP "1916" N: 530629.8 – E: 745576.5
H: FOUND BRASS CAP "1916" N: 527980.4 – E: 745593.6
I: FOUND BRASS CAP "1916" N: 525339.7 – E: 745608.1
J: FOUND BRASS CAP "1916" N: 522698.8 – E: 745624.2
K: FOUND BRASS CAP "1916" N: 520058.9 – E:745639.7
L: FOUND BRASS CAP "1916" N: 520030.5 – E: 742997.3
M: FOUND BRASS CAP "1916" N: 525312.3 – E: 742964.8



17 OPERATOR CERTIFICATION

I hereby certify that the information contained herein is true and complete to the best of my knowledge and belief, and 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 such a mineral or working interest, or to a voluntary pooling agreement or a compulsory pooling order heretofore entered by the division.

Ryan McDaniel 5/13/24
Signature Date

Ryan McDaniel
Printed Name

RyanMcDaniel@mewbourne.com
E-mail Address

18 SURVEYOR CERTIFICATION

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

05/01/2024
Date of Survey

Signature and Seal of Professional Surveyor:

ROBERT M. HOWETT
NEW MEXICO
19680
PROFESSIONAL SURVEYOR

19680
Certificate Number

Job No.:LS24050376

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:** 5/2/22

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
LOBO 33/28 FED COM 406H		O 33 21S 32E	150' FSL x 1780' FEL	1500	3000	3000

IV. Central Delivery Point Name: LOBO 33/28 FED COM 406H [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
LOBO 33/28 FED COM 406H		7/2/22	8/2/22	9/2/22	9/17/22	9/17/22

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.

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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:	5/2/22
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.

AFMSS
U.S. Department of the Interior
BUREAU OF LAND MANAGEMENT

Drilling Plan Data Report
08/16/2024

APD ID: 10400098513
Submission Date: 05/16/2024
Operator Name: MEWBOURNE OIL COMPANY
Well Name: LOBO 33/28 FED COM
Well Number: 406H
Well Type: CONVENTIONAL GAS WELL
Well Work Type: Drill

Highlighted data reflects the most recent changes

Show Final Text

Section 1 - Geologic Formations

Formation ID	Formation Name	Elevation	True Vertical	Measured Depth	Lithologies	Mineral Resources	Producing Formatio
13962094	UNKNOWN	3801	28	28	OTHER : Topsoil	NONE	N
13962108	RUSTLER	3031	770	770	ANHYDRITE, DOLOMITE	USEABLE WATER	N
13962095	TOP SALT	2706	1095	1095	SALT	NONE	N
13962097	BASE OF SALT	-569	4370	4370	SALT	NONE	N
13962098	LAMAR	-1034	4835	4835	DOLOMITE, LIMESTONE	NATURAL GAS, OIL	N
13962099	BELL CANYON	-1149	4950	4950	SANDSTONE	NATURAL GAS, OIL	N
13962101	MANZANITA	-2194	5995	5995	LIMESTONE	NATURAL GAS, OIL	N
13962103	BRUSHY CANYON	-4709	8510	8510	SANDSTONE	NATURAL GAS, OIL	N
13962104	BONE SPRING	-4994	8795	8795	LIMESTONE	NATURAL GAS, OIL	N
13962105	BONE SPRING 1ST	-6014	9815	9815	SANDSTONE	NATURAL GAS, OIL	Y
13962106	BONE SPRING 2ND	-6674	10475	10475	SANDSTONE	NATURAL GAS, OIL	N
13962107	BONE SPRING 3RD	-7174	10975	10975	SANDSTONE	NATURAL GAS, OIL	Y
13962109	WOLFCAMP	-8099	11900	11900	LIMESTONE, SANDSTONE, SHALE	NATURAL GAS, OIL	N

Section 2 - Blowout Prevention

Operator Name: MEWBOURNE OIL COMPANY

Well Name: LOBO 33/28 FED COM **Well Number:** 406H

Pressure Rating (PSI): 5M **Rating Depth:** 20063

Equipment: Annular, Pipe Rams, Blind Rams, Other accessories to the BOP equipment will include a Kelly cock and floor safety valve (inside BOP) and choke lines and choke manifold. See attached schematics
Requesting Variance? YES

Variance request: A variance is requested for the use of a variable choke line from the BOP to the choke manifold. See attached for hydrostatic test chart. Anchors are not required by manufacturer. Variance is requested to use a multi bowl wellhead. Variance is requested to perform break testing according to attached procedure. If a breaktesting variance is approved & incorporated, API Standard 53 will be incorporated and testing annular BOP to 70% of RWP or 100% of MASP, whichever is greater, will be performed.
Testing Procedure: BOP/BOPE will be tested by an independent service company to 250 psi low and the high pressure indicated above per 43 CFR Part 3172 requirements. The System may be upgraded to a higher pressure but still tested to the working pressure listed in the table above. If the system is upgraded all the components installed will be functional and tested. Pipe rams will be operationally checked each 24 hour period. Blind rams will be operationally checked on each trip out of the hole. These checks will be noted on the daily tour sheets.

Choke Diagram Attachment:

5M_BOPE_Choke_Diagram_20240515074452.pdf

Flex_Line_Specs_API_16C_20240719111233.pdf

BOP Diagram Attachment:

5M_BOPE_Schematic_20240515074527.pdf

Mewbourne_Break_Testing_Variance_20240515074532.pdf

Multi_Bowl_WH_20240719111050.pdf

Section 3 - Casing

Casing ID	String Type	Hole Size	Csg Size	Condition	Standard	Tapered String	Top Set MD	Bottom Set MD	Top Set TVD	Bottom Set TVD	Top Set MSL	Bottom Set MSL	Calculated casing length MD	Grade	Weight	Joint Type	Collapse SF	Burst SF	Joint SF Type	Joint SF	Body SF Type	Body SF
1	SURFACE	17.5	13.375	NEW	API	N	0	790	0	790	3800	3010	790	H-40	48	ST&C	2.18	4.9	DRY	8.49	DRY	14.27
2	INTERMEDIATE	12.25	9.625	NEW	API	N	0	4307	0	4307	-8529	-507	4307	J-55	40	LT&C	1.13	1.73	DRY	2.8	DRY	3.39
3	INTERMEDIATE	12.25	9.625	NEW	API	N	4307	4650	4307	4650	-507	-850	343	L-80	40	LT&C	1.25	2.33	DRY	53.72	DRY	66.76
4	PRODUCTION	8.75	7.0	NEW	API	N	0	9279	0	9261	-8529	-5461	9279	P-110	26	LT&C	1.36	2.17	DRY	2.87	DRY	3.44
5	LINER	6.125	4.5	NEW	API	N	9079	20063	9072	9853	-5272	-6053	10984	P-110	13.5	LT&C	2.08	2.42	DRY	2.28	DRY	2.85

Operator Name: MEWBOURNE OIL COMPANY

Well Name: LOBO 33/28 FED COM **Well Number:** 406H

Casing Attachments

Casing ID: 1 **String** SURFACE

Inspection Document:

Spec Document:

Tapered String Spec:

Casing Design Assumptions and Worksheet(s):

Lobo_33_28_Fed_Com_406H_CsgAssumptions_20240729073249.pdf

Casing ID: 2 **String** INTERMEDIATE

Inspection Document:

Spec Document:

Tapered String Spec:

Casing Design Assumptions and Worksheet(s):

Lobo_33_28_Fed_Com_406H_CsgAssumptions_20240729073241.pdf

Casing ID: 3 **String** INTERMEDIATE

Inspection Document:

Spec Document:

Tapered String Spec:

Casing Design Assumptions and Worksheet(s):

Lobo_33_28_Fed_Com_406H_CsgAssumptions_20240729073318.pdf

Operator Name: MEWBOURNE OIL COMPANY

Well Name: LOBO 33/28 FED COM **Well Number:** 406H

Casing Attachments

Casing ID: 4 **String** PRODUCTION

Inspection Document:

Spec Document:

Tapered String Spec:

Casing Design Assumptions and Worksheet(s):

Casing ID: 5 **String** LINER

Inspection Document:

Spec Document:

Tapered String Spec:

Casing Design Assumptions and Worksheet(s):

Lobo_33_28_Fed_Com_406H_CsgAssumptions_20240729073309.pdf

Section 4 - Cement

String Type	Lead/Tail	Stage Tool Depth	Top MD	Bottom MD	Quantity(sx)	Yield	Density	Cu Ft	Excess%	Cement type	Additives
INTERMEDIATE	Lead		0	0	0	0	0	0	0	0	0
INTERMEDIATE	Tail		0	0	0	0	0	0	0		none
SURFACE	Lead		0	601	400	2.12	12.5	850	100	Class C	Salt, Gel, Extender, LCM
SURFACE	Tail		601	790	200	1.34	14.8	268	100	Class C	Retarder
INTERMEDIATE	Lead	2000	0	1662	310	2.12	12.5	660	25	Class C	Salt, Gel, Extender, LCM

Operator Name: MEWBOURNE OIL COMPANY

Well Name: LOBO 33/28 FED COM **Well Number:** 406H

String Type	Lead/Tail	Stage Tool Depth	Top MD	Bottom MD	Quantity(sx)	Yield	Density	Cu Ft	Excess%	Cement type	Additives
INTERMEDIATE	Tail		1662	2000	100	1.34	14.8	134	25	Class C	Retarder
INTERMEDIATE	Lead	2000	2000	3979	370	2.12	12.5	790	25	CALSS C	SALT GEL EXTENDER LCM
INTERMEDIATE	Tail		3979	4650	200	1.34	14.8	268	25	CLASS C	RETARDER
PRODUCTION	Lead	2000	5200	6184	70	2.12	12.5	150	0	Class C	Gel, Retarder, Defoamer, Extender
PRODUCTION	Tail		6184	9279	400	1.18	15.6	472	0	Class H	Retarder, Fluid Loss, Defoamer
LINER	Lead		9079	20063	700	1.85	13.5	1300	25	Class H	Salt, Gel, Fluid Loss, Retarder, Dispersant, Defoamer, Anti-Settling Agent

Section 5 - Circulating Medium

Mud System Type: Closed

Will an air or gas system be Used? NO

Description of the equipment for the circulating system in accordance with Onshore Order #2:

Diagram of the equipment for the circulating system in accordance with Onshore Order #2:

Describe what will be on location to control well or mitigate other conditions: Formation integrity test will be performed per 43 CFR Part 3172. On Exploratory wells or on that portion of any well approved for a 5M BOPE system or greater, a pressure integrity test of each casing shoe shall be performed. Will be tested in accordance with 43 CFR Part 3172.

Describe the mud monitoring system utilized: Pason/PVT/Visual Monitoring

Circulating Medium Table

Top Depth	Bottom Depth	Mud Type	Min Weight (lbs/gal)	Max Weight (lbs/gal)	Density (lbs/cu ft)	Gel Strength (lbs/100 sqft)	PH	Viscosity (CP)	Salinity (ppm)	Filtration (cc)	Additional Characteristics
0	790	SPUD MUD	8.4	8.6							

Operator Name: MEWBOURNE OIL COMPANY

Well Name: LOBO 33/28 FED COM **Well Number:** 406H

Top Depth	Bottom Depth	Mud Type	Min Weight (lbs/gal)	Max Weight (lbs/gal)	Density (lbs/cu ft)	Gel Strength (lbs/100 sqft)	PH	Viscosity (CP)	Salinity (ppm)	Filtration (cc)	Additional Characteristics
790	4650	SALT SATURATED	9.5	10.2							
4650	9279	WATER-BASED MUD	8.6	9.5							
9279	20063	OIL-BASED MUD	10	10							

Section 6 - Test, Logging, Coring

List of production tests including testing procedures, equipment and safety measures:

No logs are planned based on well control or offset log information. Offset Well: Lobo 33/28 Fed Com #706H

List of open and cased hole logs run in the well:

DIRECTIONAL SURVEY,MEASUREMENT WHILE DRILLING,MUD LOG/GEOLOGIC LITHOLOGY LOG,

Coring operation description for the well:

None

Section 7 - Pressure

Anticipated Bottom Hole Pressure: 5124 **Anticipated Surface Pressure:** 2956

Anticipated Bottom Hole Temperature(F): 140

Anticipated abnormal pressures, temperatures, or potential geologic hazards? NO

Describe:

Contingency Plans geoharzards description:

Contingency Plans geohazards

Hydrogen Sulfide drilling operations plan required? YES

Hydrogen sulfide drilling operations

H2S_Plan_20240514091303.pdf

Operator Name: MEWBOURNE OIL COMPANY

Well Name: LOBO 33/28 FED COM **Well Number:** 406H

Section 8 - Other Information

Proposed horizontal/directional/multi-lateral plan submission:

Lobo_33_28_Fed_Com_406H_MOC_Dir_Plan_20240515075504.pdf

Lobo_33_28_Fed_Com_406H_MOC_Dir_Plot_20240515075508.pdf

Other proposed operations facets description:

Variance is requested to perform offline cementing according to the attached procedure. R-111Q Varaince:
Variance is requested to perform Open Hole
Cementing Variance per R-111Q Guidelines if well is in Potash.

Other proposed operations facets attachment:

Lobo_33_28_Fed_Com_406H_AddInfo_20240515075518.pdf

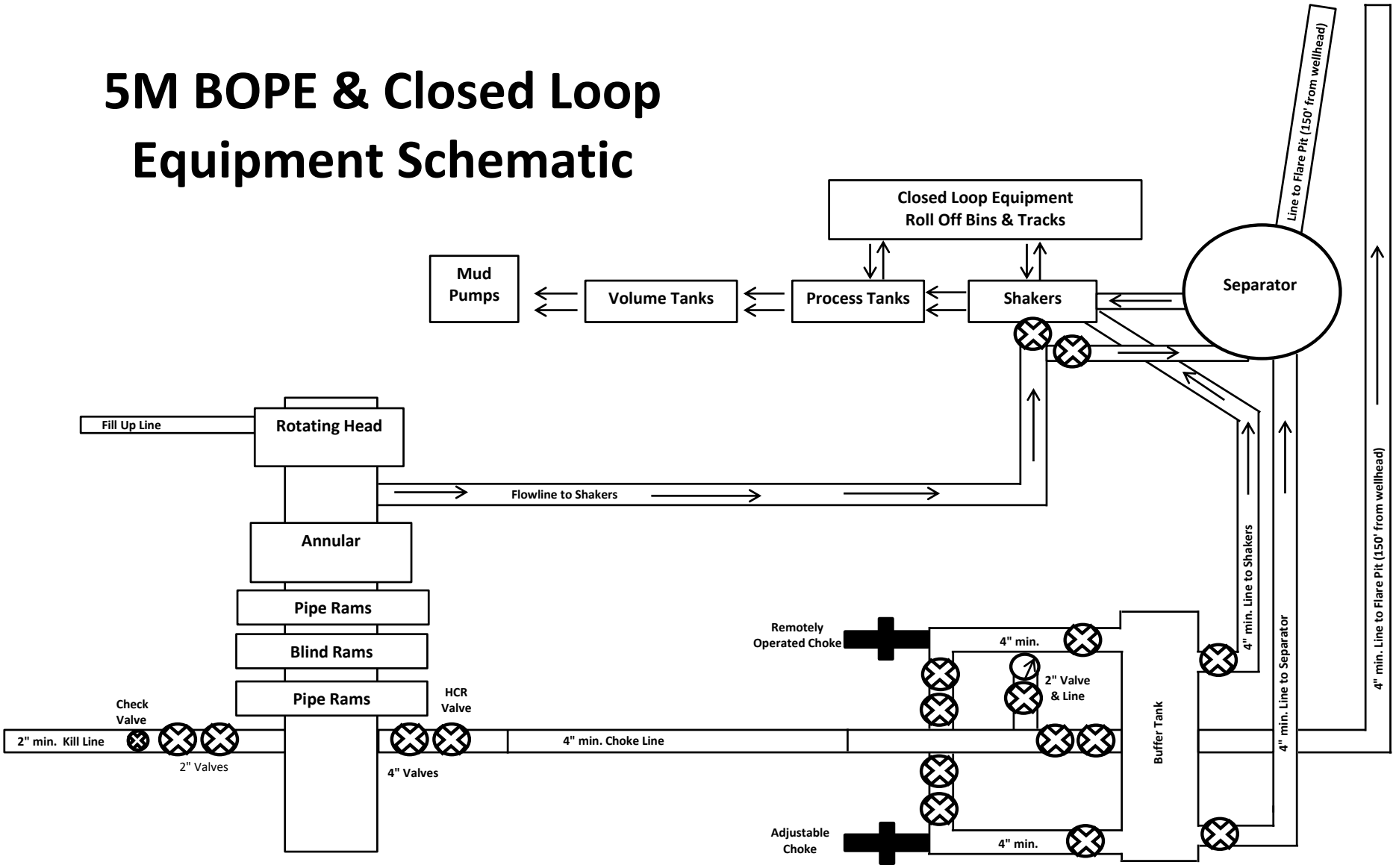
Lobo_33_28_Fed_Com_406H_Drlg_Program_20240729073333.pdf

Other Variance attachment:

Lobo_33_28_Fed_Com_406H_R_111Q_Variance_20240515075537.pdf

Mewbourne_Offline_Cementing_Variance_20240515075544.pdf

5M BOPE & Closed Loop Equipment Schematic



Drawing not to scale

Note: All valves & lines on choke manifold are 4" unless otherwise noted. Exact manifold configuration may vary.

LETONE

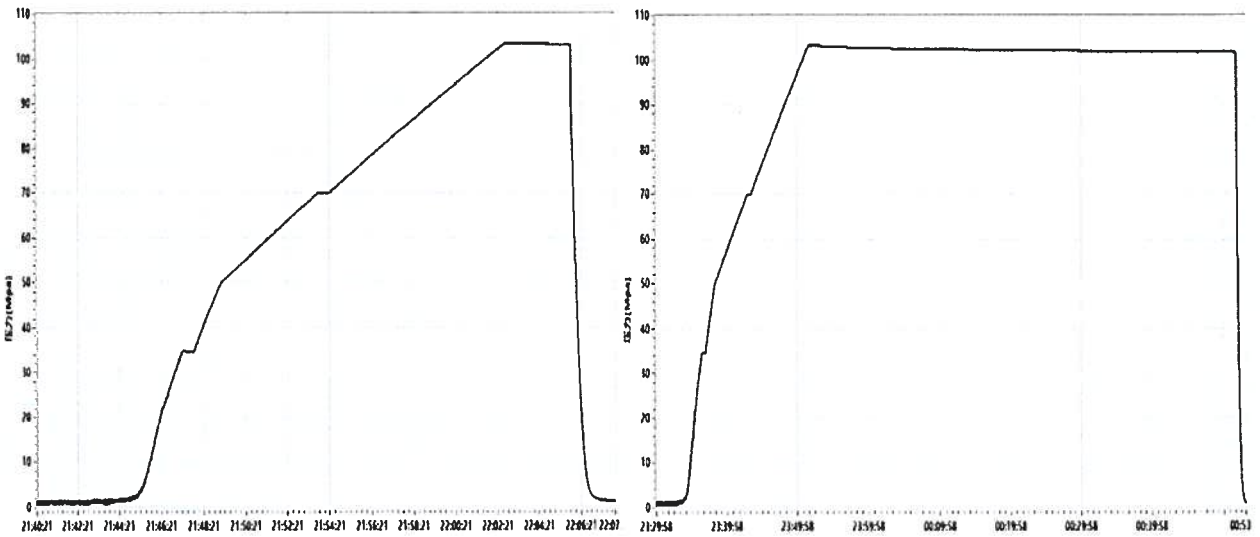
LUOHE LETONE HYDRAULICS TECHNOLOGY CO.,LTD

HYDROSTATIC TESTING REPORT

LTYY/QR-5.7.1-28 №: 230826015

Product Name	Choke And Kill Hose	Standard	API Spec 16C 3rd edition
Product Specification	3″×10000psi×60ft（18.29m）	Serial Number	7660144
Inspection Equipment	MTU-BS-1600-3200-E	Test medium	Water
Inspection Department	Q.C. Department	Inspection Date	2023.08.26
Rate of length change			
Standard requirements	At working pressure ,the rate of length change should not more than ±2%		
Testing result	10000psi (69.0MPa) ,Rate of length change 0.7%		
Hydrostatic testing			
Standard requirements	At 1.5 times working pressure, the initial pressure-holding period of not less than three minutes, the second pressure-holding period of not less than one hour, no leaks.		
Testing result	15000psi (103.5MPa), 3 min for the first time, 60 min for the second time, no leakage		

Graph of pressure testing:



Conclusion	The inspected items meet standard requirements of API Spec 16C 3rd edition				
Approver	Jiaolong Chen	Auditor	Hliqing Dong	Inspector	Zhansheng Wang

LETONE

LUOHE LETONE HYDRAULICS TECHNOLOGY CO.,LTD

CERTIFICATE OF QUALITY

LTYY/QR-5.7.1-19B №: LT2023-126-002

Customer Name	Austin Hose		
Product Name	Choke And Kill Hose		
Product Specification	3″×10000psi×60ft（18.29m）	Quantity	2PCS
Serial Number	7660143~7660144	FSL	FSL3
Temperature Range	-29℃～+121℃	Standard	API Spec 16C 3rd edition
Inspection Department	Q.C. Department	Inspection date	2023.08.26

Inspection Items	Inspection results
Appearance Checking	In accordance with API Spec 16C 3rd edition
Size and Lengths	In accordance with API Spec 16C 3rd edition
Dimensions and Tolerances	In accordance with API Spec 16C 3rd edition
End Connections: 4-1/16″×10000psi Integral flange for sour gas service	In accordance with API Spec 6A 21st edition
End Connections: 4-1/16″×10000psi Integral flange for sour gas service	In accordance with API Spec 17D 3rd edition
Hydrostatic Testing	In accordance with API Spec 16C 3rd edition
product Marking	In accordance with API Spec 16C 3rd edition
Inspection conclusion	The inspected items meet standard requirements of API Spec 16C 3rd edition
Remarks	

Approver	Jiaolong Chen	Auditor	Hlinging Dong	Inspector	Zhansheng Wang

LETONE

LUOHE LETONE HYDRAULICS TECHNOLOGY CO.,LTD

CERTIFICATE OF CONFORMANCE

№:LT230826016

Product Name：Choke And Kill Hose

Product Specification：3″×10000psi×60ft（18.29m）

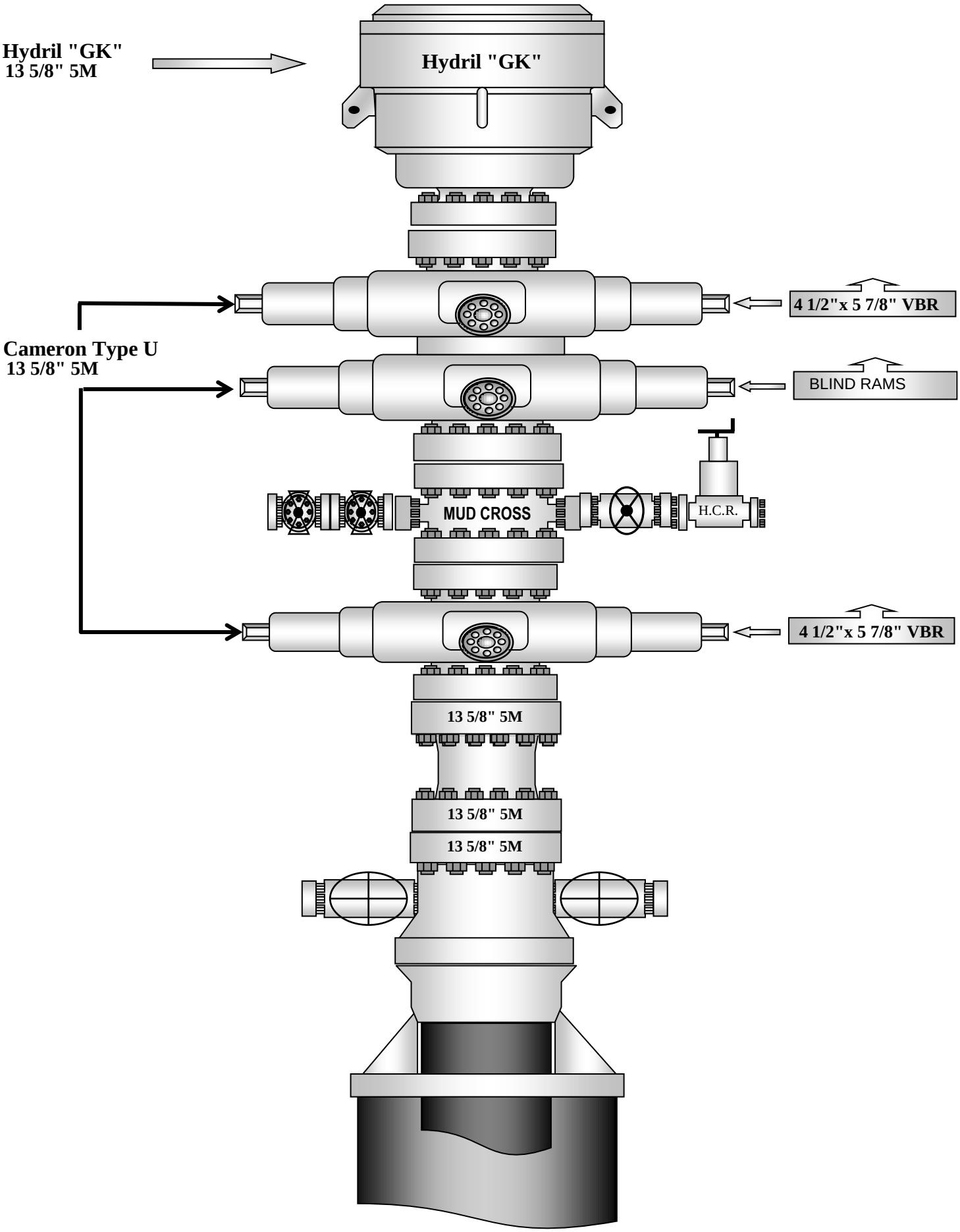
Serial Number：7660143~7660144

End Connections: 4-1/16″×10000psi Integral flange for sour gas service

The Choke And Kill Hose assembly was produced by LUOHE LETONE HYDRAULICS TECHNOLOGY CO.,LTD . in Aug 2023, and inspected by LUOHE LETONE HYDRAULICS TECHNOLOGY CO.,LTD. according to API Spec 16C 3rd edition on Aug 26, 2023. The overall condition is good. This is to certify that the Choke And Kill Hose complies with all current standards and specifications for API Spec 16C 3rd edition .

QC Manager：Jiaolong Chen　　Date:Aug 26, 2023

5M BOPE Schematic



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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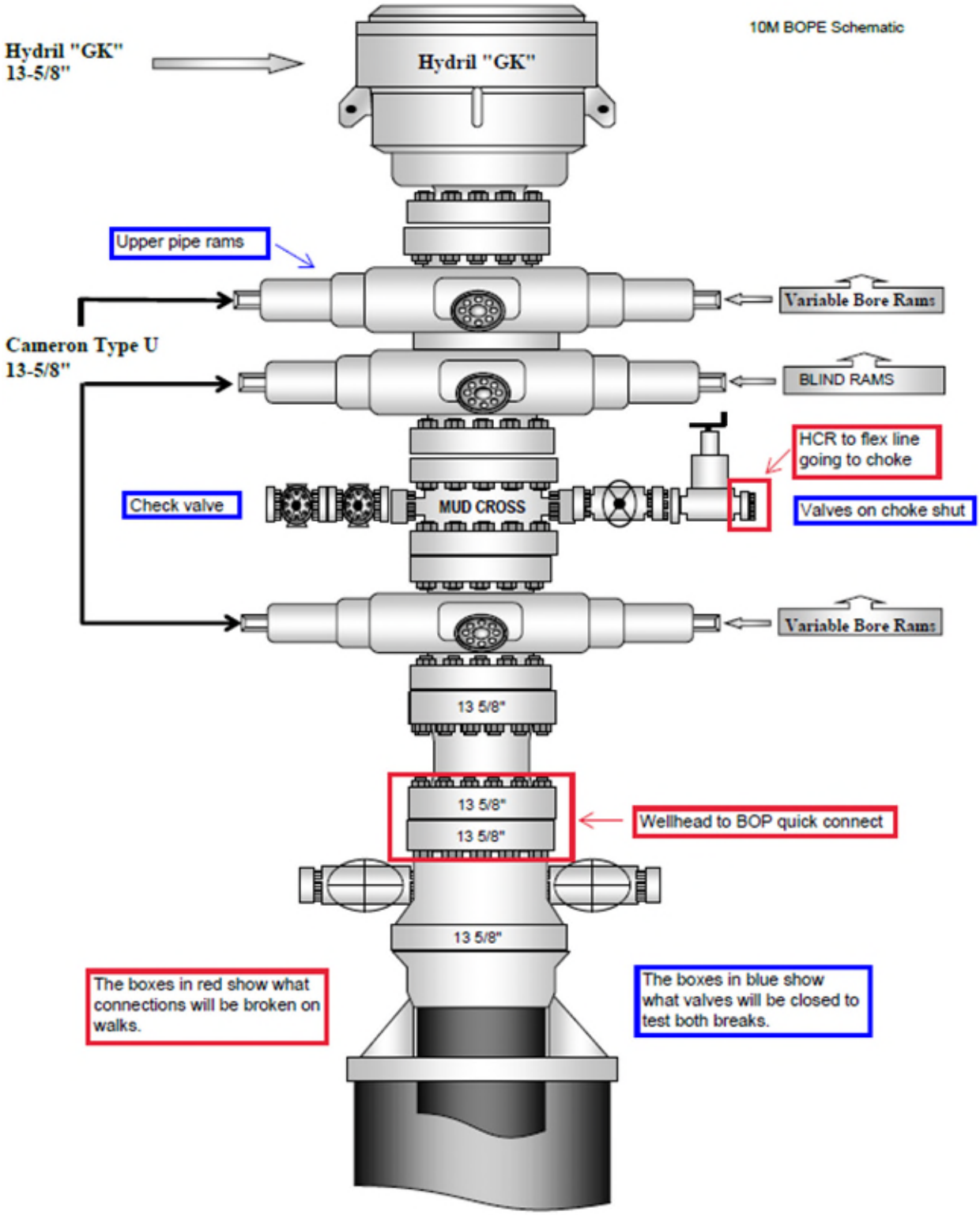

Figure 1. BOP diagram

MEWBOURNE
OIL COMPANY

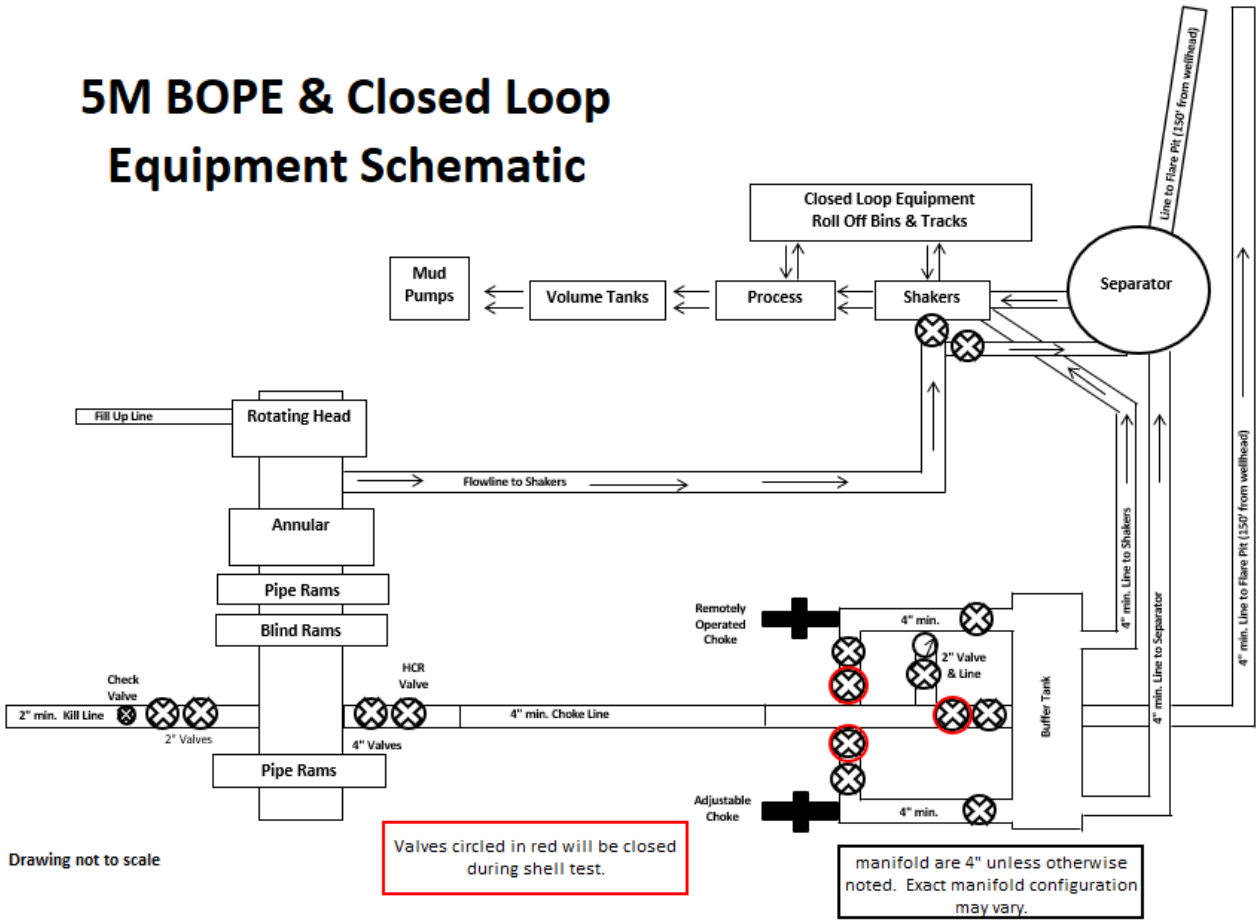

Figure 2. BOPE diagram

MEWBOURNE
OIL COMPANY

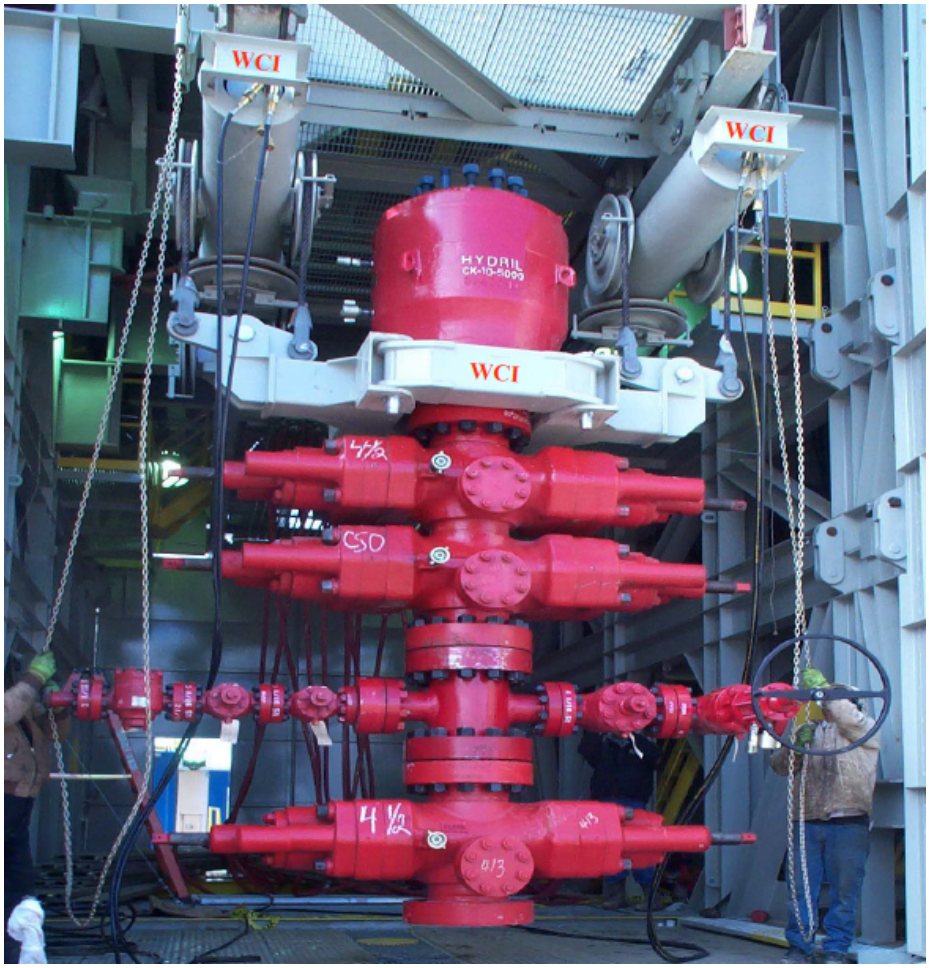

Figure 3. BOP handling system

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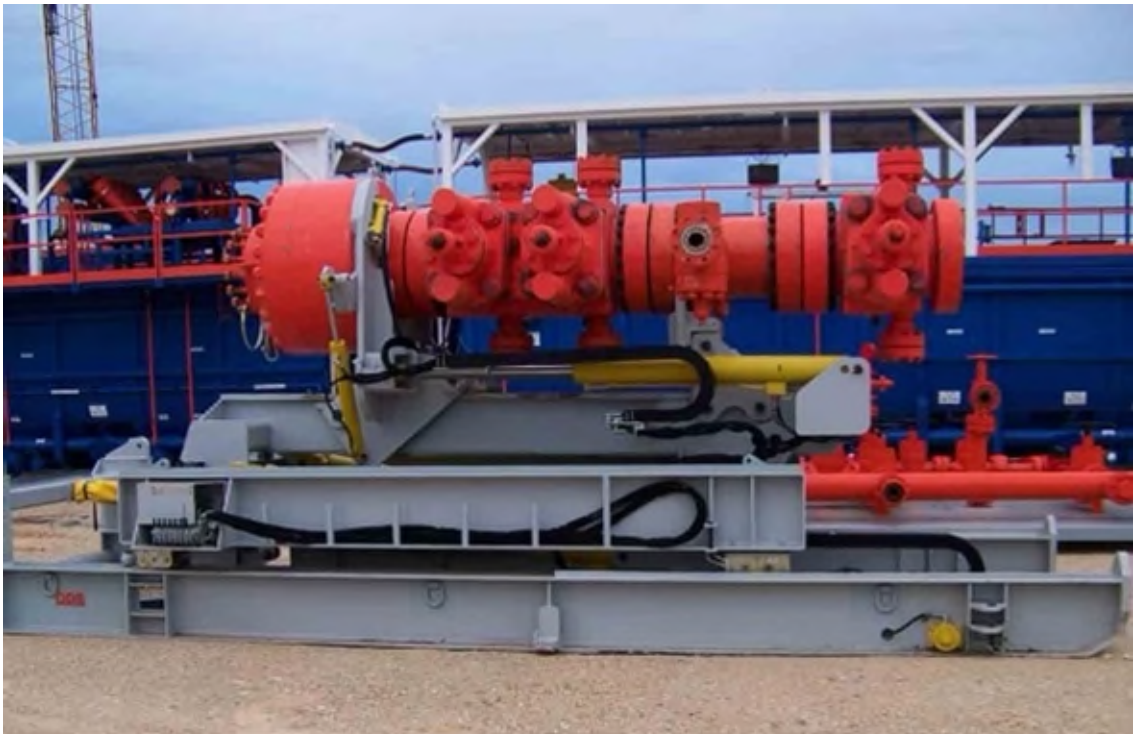

Figure 4. BOP handling system

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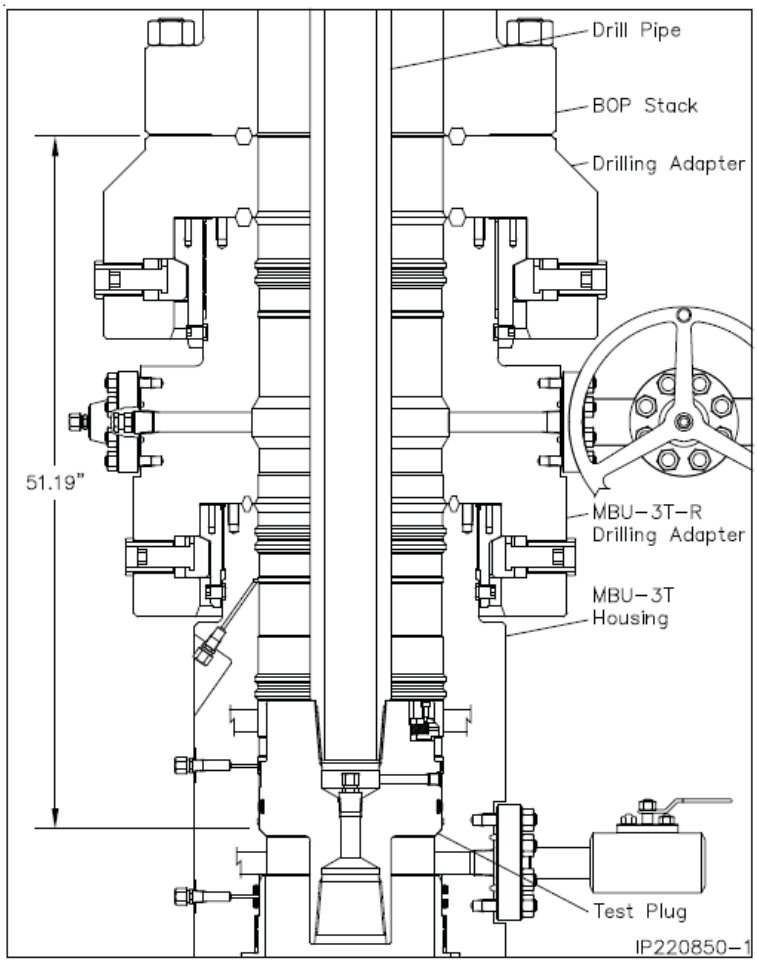


Figure 5. Cactus 5M wellhead with BOP quick connect

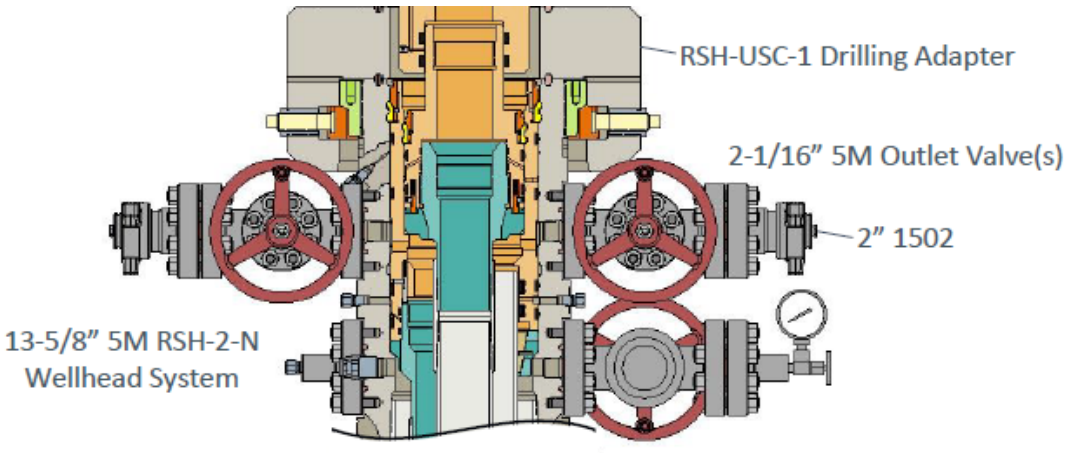
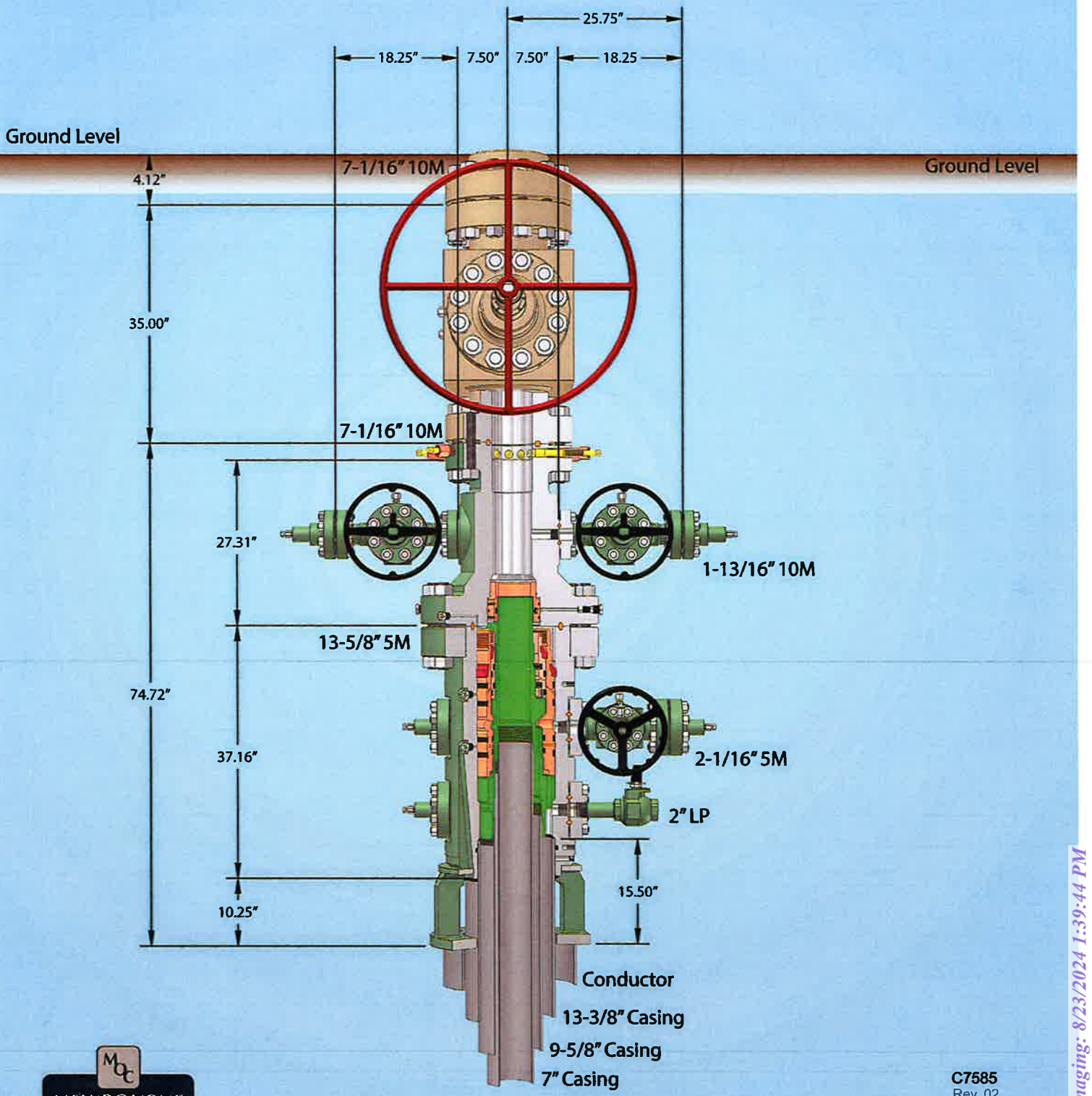


Figure 6. Vault 5M wellhead with BOP quick connect

CAMERON
A Schlumberger Company

13-5/8" MN-DS Wellhead System



MEWBOURNE OIL COMPANY

C7585
Rev. 02

NOTE: All dimensions on this drawing are estimated measurements and should be evaluated by engineering.

Capping flange 57" conductor cut-off

79

Mewbourne Oil Company, Lobo 33/28 Fed Com 406H
Sec 33, T21S, R32E
SHL: 150' FSL 1780' FEL (Sec 33)
BHL: 100' FNL 1650' FEL (Sec 28)

Casing Program Design A						BLM Minimum Safety Factors	1.125	1.0	1.6 Dry 1.8 Wet	1.6 Dry 1.8 Wet
String	Hole Size	Top MD	Top TVD	Bot MD	Bot TVD	Csg. Size	SF Collapse	SF Burst	SF Jt Tension	SF Body Tension
Surface	17.5"	0'	0'	790'	790'	13.375" 48# H40 STC	2.18	4.90	8.49	14.27
Int	12.25"	0'	0'	4307'	4307'	9.625" 40# J55 LTC	1.13	1.73	2.80	3.39
Int	12.25"	4307'	4307'	4650'	4650'	9.625" 40# L80 LTC	1.25	2.33	53.72	66.76
Production	8.75"	0'	0'	9279'	9261'	7" 26# P110 LTC	1.36	2.17	2.87	3.44
Liner	6.125"	9079'	9072'	20063'	9853'	4.5" 13.5# P110 LTC	2.08	2.42	2.28	2.85

Cement Program

Casing		# Sacks	Wt. lb/gal	Yield $ft^3/sack$	TOC/BOC	Volume ft^3	% Excess	Slurry Description
13.375 in	LEAD	400	12.5	2.12	0' - 601'	850	100%	Class C: Salt, Gel, Extender, LCM
	TAIL	200	14.8	1.34	601' - 790'	268		Class C: Retarder
1st Stg 9.625 in	LEAD	370	12.5	2.12	2000' - 3979'	790	25%	Class C: Salt, Gel, Extender, LCM
	TAIL	200	14.8	1.34	3979' - 4650'	268		Class C: Retarder
9 5/8" DV Tool @ 2000'								
2nd Stg 9.625 in	LEAD	310	12.5	2.12	0' - 1662'	660	25%	Class C: Salt, Gel, Extender, LCM
	TAIL	100	14.8	1.34	1662' - 2000'	134		Class C: Retarder
7 in	LEAD	70	12.5	2.12	5200' - 6184'	150	0%	Class C: Salt, Gel, Extender, LCM, Defoamer
	TAIL	400	15.6	1.18	6184' - 9279'	472		Class H: Retarder, Fluid Loss, Defoamer
4.5 in	LEAD	700	13.5	1.85	9079' - 20063'	1300	25%	Class H: Salt, Gel, Fluid Loss, Retarder, Dispersant, Defoamer, Anti-settling Agent

Design A - Mud Program

Depth	Mud Wt	Mud Type
0' - 790'	8.4 - 8.6	Fresh Water
790' - 4650'	9.5 - 10.2	Brine
4650' - 9279'	8.6 - 9.5	Cut-Brine
9279' - 20063'	9.2 - 10.	OBM

Geology

Formation	Est. Top (TVD)	Mineral Resources	Formation	Est. Top (TVD)	Mineral Resources
Rustler	770'	Usable Water	Yeso		
Castile			Delaware (Lamar)	4835'	Oil/Natural Gas
Salt Top	1095'	None	Bell Canyon	4950'	Oil/Natural Gas
Salt Base	4370'	None	Cherry Canyon		
Yates			Manzanita Marker	5995'	Oil/Natural Gas
Seven Rivers			Basal Brushy Canyon	8510'	Oil/Natural Gas
Queen			Bone Spring	8795'	Oil/Natural Gas
Capitan			1st Bone Spring	9815'	Oil/Natural Gas
Grayburg			2nd Bone Spring	10475'	Oil/Natural Gas
San Andres			3rd Bone Spring	10975'	Oil/Natural Gas
Glorieta			Wolfcamp	11900'	Oil/Natural Gas

All casing strings will be tested in accordance with 43 CFR Part 3170 Subpart 3172. Must have table for contingency casing.

	Y or N
Is casing new? If used, attach certification as required in Onshore Order #1	Y
Is casing API approved? If no, attach casing specification sheet.	Y
Is premium or uncommon casing planned? If yes attach casing specification sheet.	N
Does the above casing design meet or exceed BLM's minimum standards? If not provide justification (loading assumptions, casing design criteria).	Y
Will the pipe be kept at a minimum 1/3 fluid filled to avoid approaching the collapse pressure rating of the casing?	Y
Is well located within Capitan Reef?	N
If yes, does production casing cement tie back a minimum of 50' above the Reef?	
Is well within the designated 4 string boundary.	N
Is well located in SOPA but not in R-111-Q?	N
If yes, are the first 2 strings cemented to surface and 3rd string cement tied back 500' into previous casing?	
Is well located in R-111-Q and SOPA?	Y
If yes, are the first three strings cemented to surface?	N
Is 2nd string set 100' to 600' below the base of salt?	Y
Is an open annulus used to satisfy R-111-Q? If yes, see cement design.	Y
Is an engineered weak point used to satisfy R-111-Q?	
If yes, at what depth is the weak point planned?	
Is well located in high Cave/Karst?	N
If yes, are there two strings cemented to surface?	
(For 2 string wells) If yes, is there a contingency casing if lost circulation occurs?	
Is well located in critical Cave/Karst?	N
If yes, are there three strings cemented to surface?	

Mewbourne Oil Company

Lea County, New Mexico NAD 83
Lobo 33/28 Fed Com #406H
Sec 33, T21S, R32E
SHL: 150' FSL & 1780' FEL (Sec 33)
BHL: 100' FNL & 1650' FEL (Sec 28)

Plan: Design #1

Standard Planning Report

14 May, 2024

Planning Report

Database:	Hobbs	**Local Co-ordinate Reference:**	Site Lobo 33/28 Fed Com #406H
Company:	Mewbourne Oil Company	**TVD Reference:**	WELL @ 3828.0usft (Original Well Elev)
Project:	Lea County, New Mexico NAD 83	**MD Reference:**	WELL @ 3828.0usft (Original Well Elev)
Site:	Lobo 33/28 Fed Com #406H	**North Reference:**	Grid
Well:	Sec 33, T21S, R32E	**Survey Calculation Method:**	Minimum Curvature
Wellbore:	BHL: 100' FNL & 1650' FEL (Sec 28)		
Design:	Design #1		

Project Lea County, New Mexico NAD 83

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

Site Lobo 33/28 Fed Com #406H

Site Position:		**Northing:**	520,189.80 usft	**Latitude:**	32.4283579
From:	Map	**Easting:**	743,858.90 usft	**Longitude:**	-103.6769495
Position Uncertainty:	0.0 usft	**Slot Radius:**	13-3/16 "		

Well Sec 33, T21S, R32E

Well Position	**+N/-S**	0.0 usft	**Northing:**	520,189.80 usft	**Latitude:**	32.4283579
	+E/-W	0.0 usft	**Easting:**	743,858.90 usft	**Longitude:**	-103.6769495
Position Uncertainty		0.0 usft	**Wellhead Elevation:**	3,828.0 usft	**Ground Level:**	3,800.0 usft
Grid Convergence:		0.35 °				

Wellbore BHL: 100' FNL & 1650' FEL (Sec 28)

Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	IGRF2010	12/31/2014	7.21	60.27	48,370.80727306

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	0.38

Plan Survey Tool Program **Date** 5/14/2024

	Depth From (usft)	Depth To (usft)	Survey (Wellbore)	Tool Name	Remarks
1	0.0	20,063.4	Design #1 (BHL: 100' FNL & 1650		

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	
4,000.0	0.00	0.00	4,000.0	0.0	0.0	0.00	0.00	0.00	0.00	
4,105.7	2.11	136.57	4,105.7	-1.4	1.3	2.00	2.00	0.00	136.57	
9,172.8	2.11	136.57	9,169.3	-137.2	129.9	0.00	0.00	0.00	0.00	
9,278.5	0.00	0.00	9,275.0	-138.6	131.2	2.00	-2.00	0.00	180.00	KOP: 10' FSL & 1650'
10,178.3	89.97	359.66	9,848.0	434.1	127.8	10.00	10.00	0.00	-0.34	
20,063.4	89.97	359.66	9,853.0	10,319.0	68.7	0.00	0.00	0.00	0.00	BHL: 100' FNL & 165(

Planning Report

Database:	Hobbs	**Local Co-ordinate Reference:**	Site Lobo 33/28 Fed Com #406H
Company:	Mewbourne Oil Company	**TVD Reference:**	WELL @ 3828.0usft (Original Well Elev)
Project:	Lea County, New Mexico NAD 83	**MD Reference:**	WELL @ 3828.0usft (Original Well Elev)
Site:	Lobo 33/28 Fed Com #406H	**North Reference:**	Grid
Well:	Sec 33, T21S, R32E	**Survey Calculation Method:**	Minimum Curvature
Wellbore:	BHL: 100' FNL & 1650' FEL (Sec 28)		
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: 150' FSL & 1780' FEL (Sec 33)									
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
2,500.0	0.00	0.00	2,500.0	0.0	0.0	0.0	0.00	0.00	0.00
2,600.0	0.00	0.00	2,600.0	0.0	0.0	0.0	0.00	0.00	0.00
2,700.0	0.00	0.00	2,700.0	0.0	0.0	0.0	0.00	0.00	0.00
2,800.0	0.00	0.00	2,800.0	0.0	0.0	0.0	0.00	0.00	0.00
2,900.0	0.00	0.00	2,900.0	0.0	0.0	0.0	0.00	0.00	0.00
3,000.0	0.00	0.00	3,000.0	0.0	0.0	0.0	0.00	0.00	0.00
3,100.0	0.00	0.00	3,100.0	0.0	0.0	0.0	0.00	0.00	0.00
3,200.0	0.00	0.00	3,200.0	0.0	0.0	0.0	0.00	0.00	0.00
3,300.0	0.00	0.00	3,300.0	0.0	0.0	0.0	0.00	0.00	0.00
3,400.0	0.00	0.00	3,400.0	0.0	0.0	0.0	0.00	0.00	0.00
3,500.0	0.00	0.00	3,500.0	0.0	0.0	0.0	0.00	0.00	0.00
3,600.0	0.00	0.00	3,600.0	0.0	0.0	0.0	0.00	0.00	0.00
3,700.0	0.00	0.00	3,700.0	0.0	0.0	0.0	0.00	0.00	0.00
3,800.0	0.00	0.00	3,800.0	0.0	0.0	0.0	0.00	0.00	0.00
3,900.0	0.00	0.00	3,900.0	0.0	0.0	0.0	0.00	0.00	0.00
4,000.0	0.00	0.00	4,000.0	0.0	0.0	0.0	0.00	0.00	0.00
4,105.7	2.11	136.57	4,105.7	-1.4	1.3	-1.4	2.00	2.00	0.00
4,200.0	2.11	136.57	4,199.9	-3.9	3.7	-3.9	0.00	0.00	0.00
4,300.0	2.11	136.57	4,299.8	-6.6	6.3	-6.6	0.00	0.00	0.00
4,400.0	2.11	136.57	4,399.8	-9.3	8.8	-9.2	0.00	0.00	0.00
4,500.0	2.11	136.57	4,499.7	-12.0	11.3	-11.9	0.00	0.00	0.00
4,600.0	2.11	136.57	4,599.6	-14.7	13.9	-14.6	0.00	0.00	0.00
4,700.0	2.11	136.57	4,699.6	-17.3	16.4	-17.2	0.00	0.00	0.00
4,800.0	2.11	136.57	4,799.5	-20.0	19.0	-19.9	0.00	0.00	0.00
4,900.0	2.11	136.57	4,899.4	-22.7	21.5	-22.6	0.00	0.00	0.00
5,000.0	2.11	136.57	4,999.4	-25.4	24.0	-25.2	0.00	0.00	0.00
5,100.0	2.11	136.57	5,099.3	-28.1	26.6	-27.9	0.00	0.00	0.00
5,200.0	2.11	136.57	5,199.2	-30.7	29.1	-30.5	0.00	0.00	0.00

Planning Report

Database:	Hobbs	**Local Co-ordinate Reference:**	Site Lobo 33/28 Fed Com #406H
Company:	Mewbourne Oil Company	**TVD Reference:**	WELL @ 3828.0usft (Original Well Elev)
Project:	Lea County, New Mexico NAD 83	**MD Reference:**	WELL @ 3828.0usft (Original Well Elev)
Site:	Lobo 33/28 Fed Com #406H	**North Reference:**	Grid
Well:	Sec 33, T21S, R32E	**Survey Calculation Method:**	Minimum Curvature
Wellbore:	BHL: 100' FNL & 1650' FEL (Sec 28)		
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)
5,300.0	2.11	136.57	5,299.2	-33.4	31.6	-33.2	0.00	0.00	0.00
5,400.0	2.11	136.57	5,399.1	-36.1	34.2	-35.9	0.00	0.00	0.00
5,500.0	2.11	136.57	5,499.0	-38.8	36.7	-38.5	0.00	0.00	0.00
5,600.0	2.11	136.57	5,599.0	-41.5	39.2	-41.2	0.00	0.00	0.00
5,700.0	2.11	136.57	5,698.9	-44.1	41.8	-43.9	0.00	0.00	0.00
5,800.0	2.11	136.57	5,798.8	-46.8	44.3	-46.5	0.00	0.00	0.00
5,900.0	2.11	136.57	5,898.8	-49.5	46.9	-49.2	0.00	0.00	0.00
6,000.0	2.11	136.57	5,998.7	-52.2	49.4	-51.8	0.00	0.00	0.00
6,100.0	2.11	136.57	6,098.6	-54.9	51.9	-54.5	0.00	0.00	0.00
6,200.0	2.11	136.57	6,198.6	-57.5	54.5	-57.2	0.00	0.00	0.00
6,300.0	2.11	136.57	6,298.5	-60.2	57.0	-59.8	0.00	0.00	0.00
6,400.0	2.11	136.57	6,398.4	-62.9	59.5	-62.5	0.00	0.00	0.00
6,500.0	2.11	136.57	6,498.3	-65.6	62.1	-65.2	0.00	0.00	0.00
6,600.0	2.11	136.57	6,598.3	-68.2	64.6	-67.8	0.00	0.00	0.00
6,700.0	2.11	136.57	6,698.2	-70.9	67.1	-70.5	0.00	0.00	0.00
6,800.0	2.11	136.57	6,798.1	-73.6	69.7	-73.1	0.00	0.00	0.00
6,900.0	2.11	136.57	6,898.1	-76.3	72.2	-75.8	0.00	0.00	0.00
7,000.0	2.11	136.57	6,998.0	-79.0	74.7	-78.5	0.00	0.00	0.00
7,100.0	2.11	136.57	7,097.9	-81.6	77.3	-81.1	0.00	0.00	0.00
7,200.0	2.11	136.57	7,197.9	-84.3	79.8	-83.8	0.00	0.00	0.00
7,300.0	2.11	136.57	7,297.8	-87.0	82.4	-86.5	0.00	0.00	0.00
7,400.0	2.11	136.57	7,397.7	-89.7	84.9	-89.1	0.00	0.00	0.00
7,500.0	2.11	136.57	7,497.7	-92.4	87.4	-91.8	0.00	0.00	0.00
7,600.0	2.11	136.57	7,597.6	-95.0	90.0	-94.4	0.00	0.00	0.00
7,700.0	2.11	136.57	7,697.5	-97.7	92.5	-97.1	0.00	0.00	0.00
7,800.0	2.11	136.57	7,797.5	-100.4	95.0	-99.8	0.00	0.00	0.00
7,900.0	2.11	136.57	7,897.4	-103.1	97.6	-102.4	0.00	0.00	0.00
8,000.0	2.11	136.57	7,997.3	-105.8	100.1	-105.1	0.00	0.00	0.00
8,100.0	2.11	136.57	8,097.3	-108.4	102.6	-107.8	0.00	0.00	0.00
8,200.0	2.11	136.57	8,197.2	-111.1	105.2	-110.4	0.00	0.00	0.00
8,300.0	2.11	136.57	8,297.1	-113.8	107.7	-113.1	0.00	0.00	0.00
8,400.0	2.11	136.57	8,397.1	-116.5	110.3	-115.7	0.00	0.00	0.00
8,500.0	2.11	136.57	8,497.0	-119.2	112.8	-118.4	0.00	0.00	0.00
8,600.0	2.11	136.57	8,596.9	-121.8	115.3	-121.1	0.00	0.00	0.00
8,700.0	2.11	136.57	8,696.8	-124.5	117.9	-123.7	0.00	0.00	0.00
8,800.0	2.11	136.57	8,796.8	-127.2	120.4	-126.4	0.00	0.00	0.00
8,900.0	2.11	136.57	8,896.7	-129.9	122.9	-129.1	0.00	0.00	0.00
9,000.0	2.11	136.57	8,996.6	-132.6	125.5	-131.7	0.00	0.00	0.00
9,100.0	2.11	136.57	9,096.6	-135.2	128.0	-134.4	0.00	0.00	0.00
9,172.8	2.11	136.57	9,169.3	-137.2	129.9	-136.3	0.00	0.00	0.00
9,200.0	1.57	136.57	9,196.5	-137.8	130.5	-136.9	2.00	-2.00	0.00
9,278.5	0.00	0.00	9,275.0	-138.6	131.2	-137.7	2.00	-2.00	0.00
KOP: 10' FSL & 1650' FEL (Sec 33)									
9,300.0	2.15	359.66	9,296.5	-138.2	131.2	-137.3	10.00	10.00	0.00
9,350.0	7.15	359.66	9,346.3	-134.1	131.2	-133.3	10.00	10.00	0.00
9,400.0	12.15	359.66	9,395.6	-125.8	131.1	-124.9	10.00	10.00	0.00
9,450.0	17.15	359.66	9,444.0	-113.1	131.0	-112.3	10.00	10.00	0.00
9,500.0	22.15	359.66	9,491.0	-96.3	130.9	-95.4	10.00	10.00	0.00
9,550.0	27.15	359.66	9,536.5	-75.5	130.8	-74.6	10.00	10.00	0.00
9,600.0	32.15	359.66	9,579.9	-50.7	130.7	-49.9	10.00	10.00	0.00
9,603.8	32.53	359.66	9,583.1	-48.7	130.7	-47.8	10.00	10.00	0.00
FTP: 100' FSL & 1650' FEL (Sec 33)									
9,650.0	37.15	359.66	9,621.0	-22.3	130.5	-21.5	10.00	10.00	0.00
9,700.0	42.15	359.66	9,659.5	9.6	130.3	10.4	10.00	10.00	0.00

Planning Report

Database:	Hobbs	**Local Co-ordinate Reference:**	Site Lobo 33/28 Fed Com #406H
Company:	Mewbourne Oil Company	**TVD Reference:**	WELL @ 3828.0usft (Original Well Elev)
Project:	Lea County, New Mexico NAD 83	**MD Reference:**	WELL @ 3828.0usft (Original Well Elev)
Site:	Lobo 33/28 Fed Com #406H	**North Reference:**	Grid
Well:	Sec 33, T21S, R32E	**Survey Calculation Method:**	Minimum Curvature
Wellbore:	BHL: 100' FNL & 1650' FEL (Sec 28)		
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)
9,750.0	47.15	359.66	9,695.1	44.7	130.1	45.6	10.00	10.00	0.00
9,800.0	52.15	359.66	9,727.4	82.8	129.9	83.6	10.00	10.00	0.00
9,850.0	57.15	359.66	9,756.4	123.5	129.6	124.4	10.00	10.00	0.00
9,900.0	62.15	359.66	9,781.6	166.7	129.4	167.5	10.00	10.00	0.00
9,950.0	67.15	359.66	9,803.0	211.8	129.1	212.7	10.00	10.00	0.00
10,000.0	72.14	359.66	9,820.4	258.7	128.8	259.6	10.00	10.00	0.00
10,050.0	77.14	359.66	9,833.6	306.9	128.5	307.8	10.00	10.00	0.00
10,100.0	82.14	359.66	9,842.6	356.1	128.2	356.9	10.00	10.00	0.00
10,150.0	87.14	359.66	9,847.3	405.8	127.9	406.7	10.00	10.00	0.00
10,178.3	89.97	359.66	9,848.0	434.1	127.8	434.9	10.00	10.00	0.00
10,178.5	89.97	359.66	9,848.0	434.4	127.8	435.2	0.00	0.00	0.00
LP: 583' FSL & 1650' FEL (Sec 33)									
10,200.0	89.97	359.66	9,848.0	455.8	127.6	456.7	0.00	0.00	0.00
10,300.0	89.97	359.66	9,848.1	555.8	127.0	556.7	0.00	0.00	0.00
10,400.0	89.97	359.66	9,848.1	655.8	126.5	656.6	0.00	0.00	0.00
10,500.0	89.97	359.66	9,848.2	755.8	125.9	756.6	0.00	0.00	0.00
10,600.0	89.97	359.66	9,848.2	855.8	125.3	856.6	0.00	0.00	0.00
10,700.0	89.97	359.66	9,848.3	955.8	124.7	956.6	0.00	0.00	0.00
10,800.0	89.97	359.66	9,848.3	1,055.8	124.1	1,056.6	0.00	0.00	0.00
10,900.0	89.97	359.66	9,848.4	1,155.8	123.5	1,156.6	0.00	0.00	0.00
11,000.0	89.97	359.66	9,848.4	1,255.8	122.9	1,256.6	0.00	0.00	0.00
11,100.0	89.97	359.66	9,848.5	1,355.8	122.3	1,356.6	0.00	0.00	0.00
11,200.0	89.97	359.66	9,848.5	1,455.8	121.7	1,456.6	0.00	0.00	0.00
11,300.0	89.97	359.66	9,848.6	1,555.8	121.1	1,556.6	0.00	0.00	0.00
11,400.0	89.97	359.66	9,848.6	1,655.8	120.5	1,656.6	0.00	0.00	0.00
11,500.0	89.97	359.66	9,848.7	1,755.8	119.9	1,756.6	0.00	0.00	0.00
11,600.0	89.97	359.66	9,848.7	1,855.8	119.3	1,856.6	0.00	0.00	0.00
11,700.0	89.97	359.66	9,848.8	1,955.8	118.7	1,956.5	0.00	0.00	0.00
11,800.0	89.97	359.66	9,848.8	2,055.8	118.1	2,056.5	0.00	0.00	0.00
11,900.0	89.97	359.66	9,848.9	2,155.8	117.5	2,156.5	0.00	0.00	0.00
12,000.0	89.97	359.66	9,848.9	2,255.8	116.9	2,256.5	0.00	0.00	0.00
12,100.0	89.97	359.66	9,849.0	2,355.8	116.3	2,356.5	0.00	0.00	0.00
12,200.0	89.97	359.66	9,849.0	2,455.8	115.7	2,456.5	0.00	0.00	0.00
12,300.0	89.97	359.66	9,849.1	2,555.8	115.1	2,556.5	0.00	0.00	0.00
12,400.0	89.97	359.66	9,849.1	2,655.8	114.5	2,656.5	0.00	0.00	0.00
12,500.0	89.97	359.66	9,849.2	2,755.8	113.9	2,756.5	0.00	0.00	0.00
12,600.0	89.97	359.66	9,849.2	2,855.8	113.3	2,856.5	0.00	0.00	0.00
12,700.0	89.97	359.66	9,849.3	2,955.8	112.7	2,956.5	0.00	0.00	0.00
12,800.0	89.97	359.66	9,849.3	3,055.8	112.1	3,056.5	0.00	0.00	0.00
12,900.0	89.97	359.66	9,849.4	3,155.8	111.5	3,156.4	0.00	0.00	0.00
13,000.0	89.97	359.66	9,849.4	3,255.8	110.9	3,256.4	0.00	0.00	0.00
13,100.0	89.97	359.66	9,849.5	3,355.8	110.3	3,356.4	0.00	0.00	0.00
13,200.0	89.97	359.66	9,849.5	3,455.8	109.7	3,456.4	0.00	0.00	0.00
13,300.0	89.97	359.66	9,849.6	3,555.8	109.1	3,556.4	0.00	0.00	0.00
13,400.0	89.97	359.66	9,849.6	3,655.8	108.5	3,656.4	0.00	0.00	0.00
13,500.0	89.97	359.66	9,849.7	3,755.8	107.9	3,756.4	0.00	0.00	0.00
13,600.0	89.97	359.66	9,849.7	3,855.8	107.3	3,856.4	0.00	0.00	0.00
13,700.0	89.97	359.66	9,849.8	3,955.8	106.7	3,956.4	0.00	0.00	0.00
13,800.0	89.97	359.66	9,849.8	4,055.8	106.1	4,056.4	0.00	0.00	0.00
13,900.0	89.97	359.66	9,849.9	4,155.8	105.5	4,156.4	0.00	0.00	0.00
14,000.0	89.97	359.66	9,849.9	4,255.8	104.9	4,256.4	0.00	0.00	0.00
14,100.0	89.97	359.66	9,850.0	4,355.8	104.3	4,356.4	0.00	0.00	0.00
14,200.0	89.97	359.66	9,850.0	4,455.8	103.7	4,456.3	0.00	0.00	0.00

Planning Report

Database:	Hobbs	**Local Co-ordinate Reference:**	Site Lobo 33/28 Fed Com #406H
Company:	Mewbourne Oil Company	**TVD Reference:**	WELL @ 3828.0usft (Original Well Elev)
Project:	Lea County, New Mexico NAD 83	**MD Reference:**	WELL @ 3828.0usft (Original Well Elev)
Site:	Lobo 33/28 Fed Com #406H	**North Reference:**	Grid
Well:	Sec 33, T21S, R32E	**Survey Calculation Method:**	Minimum Curvature
Wellbore:	BHL: 100' FNL & 1650' FEL (Sec 28)		
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	89.97	359.66	9,850.1	4,555.8	103.1	4,556.3	0.00	0.00	0.00
14,400.0	89.97	359.66	9,850.1	4,655.7	102.5	4,656.3	0.00	0.00	0.00
14,500.0	89.97	359.66	9,850.2	4,755.7	101.9	4,756.3	0.00	0.00	0.00
14,600.0	89.97	359.66	9,850.2	4,855.7	101.4	4,856.3	0.00	0.00	0.00
14,700.0	89.97	359.66	9,850.3	4,955.7	100.8	4,956.3	0.00	0.00	0.00
14,800.0	89.97	359.66	9,850.3	5,055.7	100.2	5,056.3	0.00	0.00	0.00
14,877.1	89.97	359.66	9,850.4	5,132.8	99.7	5,133.3	0.00	0.00	0.00
PPP2: 0' FSL & 1650' FEL (Sec 28)									
14,900.0	89.97	359.66	9,850.4	5,155.7	99.6	5,156.3	0.00	0.00	0.00
15,000.0	89.97	359.66	9,850.4	5,255.7	99.0	5,256.3	0.00	0.00	0.00
15,100.0	89.97	359.66	9,850.5	5,355.7	98.4	5,356.3	0.00	0.00	0.00
15,200.0	89.97	359.66	9,850.5	5,455.7	97.8	5,456.3	0.00	0.00	0.00
15,300.0	89.97	359.66	9,850.6	5,555.7	97.2	5,556.3	0.00	0.00	0.00
15,400.0	89.97	359.66	9,850.6	5,655.7	96.6	5,656.2	0.00	0.00	0.00
15,500.0	89.97	359.66	9,850.7	5,755.7	96.0	5,756.2	0.00	0.00	0.00
15,600.0	89.97	359.66	9,850.7	5,855.7	95.4	5,856.2	0.00	0.00	0.00
15,700.0	89.97	359.66	9,850.8	5,955.7	94.8	5,956.2	0.00	0.00	0.00
15,800.0	89.97	359.66	9,850.8	6,055.7	94.2	6,056.2	0.00	0.00	0.00
15,900.0	89.97	359.66	9,850.9	6,155.7	93.6	6,156.2	0.00	0.00	0.00
16,000.0	89.97	359.66	9,850.9	6,255.7	93.0	6,256.2	0.00	0.00	0.00
16,100.0	89.97	359.66	9,851.0	6,355.7	92.4	6,356.2	0.00	0.00	0.00
16,200.0	89.97	359.66	9,851.0	6,455.7	91.8	6,456.2	0.00	0.00	0.00
16,300.0	89.97	359.66	9,851.1	6,555.7	91.2	6,556.2	0.00	0.00	0.00
16,400.0	89.97	359.66	9,851.1	6,655.7	90.6	6,656.2	0.00	0.00	0.00
16,500.0	89.97	359.66	9,851.2	6,755.7	90.0	6,756.2	0.00	0.00	0.00
16,600.0	89.97	359.66	9,851.2	6,855.7	89.4	6,856.2	0.00	0.00	0.00
16,700.0	89.97	359.66	9,851.3	6,955.7	88.8	6,956.1	0.00	0.00	0.00
16,800.0	89.97	359.66	9,851.3	7,055.7	88.2	7,056.1	0.00	0.00	0.00
16,900.0	89.97	359.66	9,851.4	7,155.7	87.6	7,156.1	0.00	0.00	0.00
17,000.0	89.97	359.66	9,851.5	7,255.7	87.0	7,256.1	0.00	0.00	0.00
17,100.0	89.97	359.66	9,851.5	7,355.7	86.4	7,356.1	0.00	0.00	0.00
17,200.0	89.97	359.66	9,851.6	7,455.7	85.8	7,456.1	0.00	0.00	0.00
17,300.0	89.97	359.66	9,851.6	7,555.7	85.2	7,556.1	0.00	0.00	0.00
17,400.0	89.97	359.66	9,851.7	7,655.7	84.6	7,656.1	0.00	0.00	0.00
17,500.0	89.97	359.66	9,851.7	7,755.7	84.0	7,756.1	0.00	0.00	0.00
17,600.0	89.97	359.66	9,851.8	7,855.7	83.4	7,856.1	0.00	0.00	0.00
17,700.0	89.97	359.66	9,851.8	7,955.7	82.8	7,956.1	0.00	0.00	0.00
17,800.0	89.97	359.66	9,851.9	8,055.7	82.2	8,056.1	0.00	0.00	0.00
17,900.0	89.97	359.66	9,851.9	8,155.7	81.6	8,156.0	0.00	0.00	0.00
18,000.0	89.97	359.66	9,852.0	8,255.7	81.0	8,256.0	0.00	0.00	0.00
18,100.0	89.97	359.66	9,852.0	8,355.7	80.4	8,356.0	0.00	0.00	0.00
18,200.0	89.97	359.66	9,852.1	8,455.7	79.8	8,456.0	0.00	0.00	0.00
18,300.0	89.97	359.66	9,852.1	8,555.7	79.2	8,556.0	0.00	0.00	0.00
18,400.0	89.97	359.66	9,852.2	8,655.7	78.6	8,656.0	0.00	0.00	0.00
18,500.0	89.97	359.66	9,852.2	8,755.7	78.0	8,756.0	0.00	0.00	0.00
18,600.0	89.97	359.66	9,852.3	8,855.7	77.4	8,856.0	0.00	0.00	0.00
18,700.0	89.97	359.66	9,852.3	8,955.7	76.8	8,956.0	0.00	0.00	0.00
18,800.0	89.97	359.66	9,852.4	9,055.7	76.3	9,056.0	0.00	0.00	0.00
18,900.0	89.97	359.66	9,852.4	9,155.7	75.7	9,156.0	0.00	0.00	0.00
19,000.0	89.97	359.66	9,852.5	9,255.7	75.1	9,256.0	0.00	0.00	0.00
19,100.0	89.97	359.66	9,852.5	9,355.7	74.5	9,356.0	0.00	0.00	0.00
19,200.0	89.97	359.66	9,852.6	9,455.7	73.9	9,455.9	0.00	0.00	0.00
19,300.0	89.97	359.66	9,852.6	9,555.7	73.3	9,555.9	0.00	0.00	0.00
19,400.0	89.97	359.66	9,852.7	9,655.7	72.7	9,655.9	0.00	0.00	0.00

Planning Report

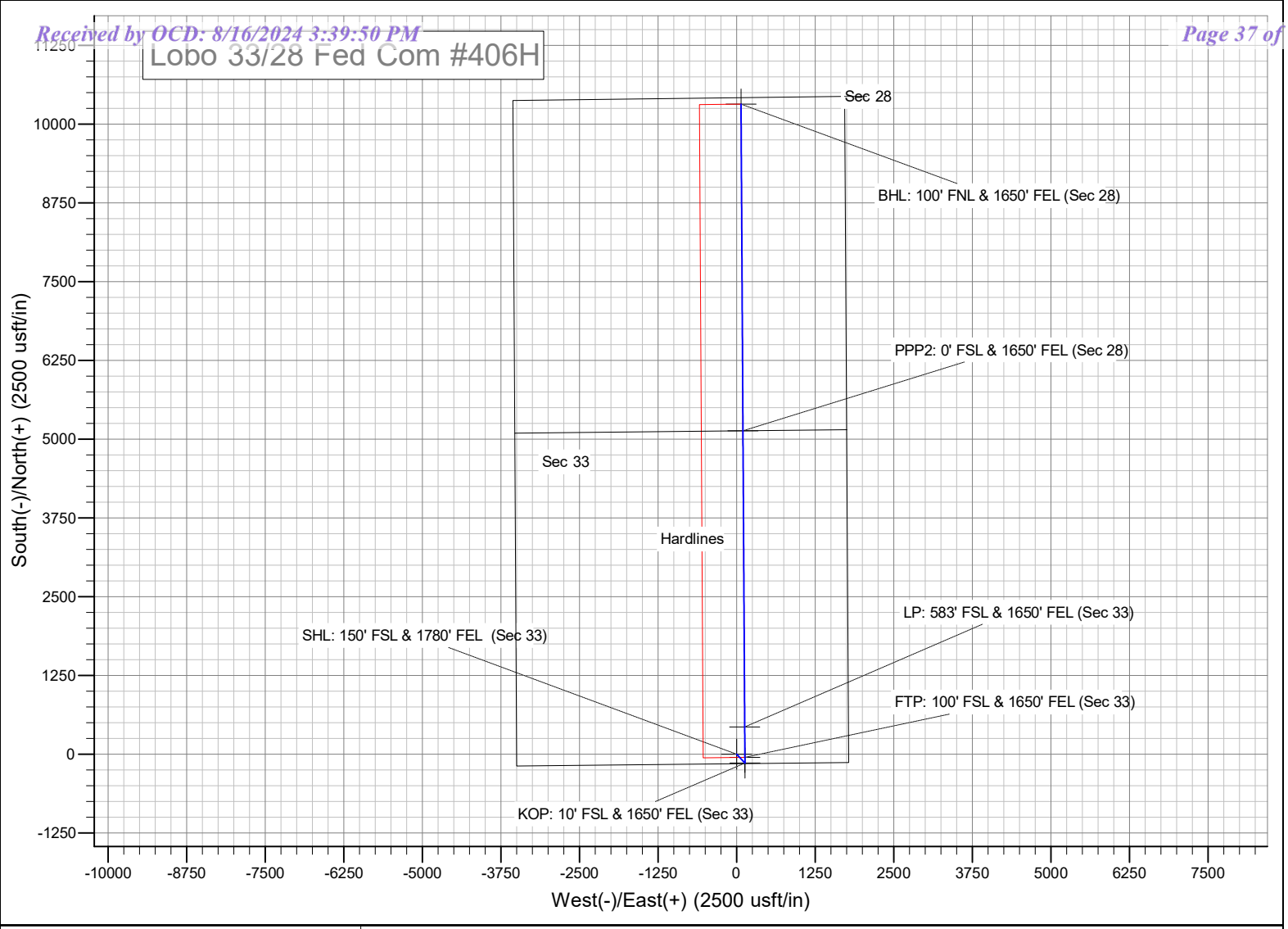
Database:	Hobbs	**Local Co-ordinate Reference:**	Site Lobo 33/28 Fed Com #406H
Company:	Mewbourne Oil Company	**TVD Reference:**	WELL @ 3828.0usft (Original Well Elev)
Project:	Lea County, New Mexico NAD 83	**MD Reference:**	WELL @ 3828.0usft (Original Well Elev)
Site:	Lobo 33/28 Fed Com #406H	**North Reference:**	Grid
Well:	Sec 33, T21S, R32E	**Survey Calculation Method:**	Minimum Curvature
Wellbore:	BHL: 100' FNL & 1650' FEL (Sec 28)		
Design:	Design #1		

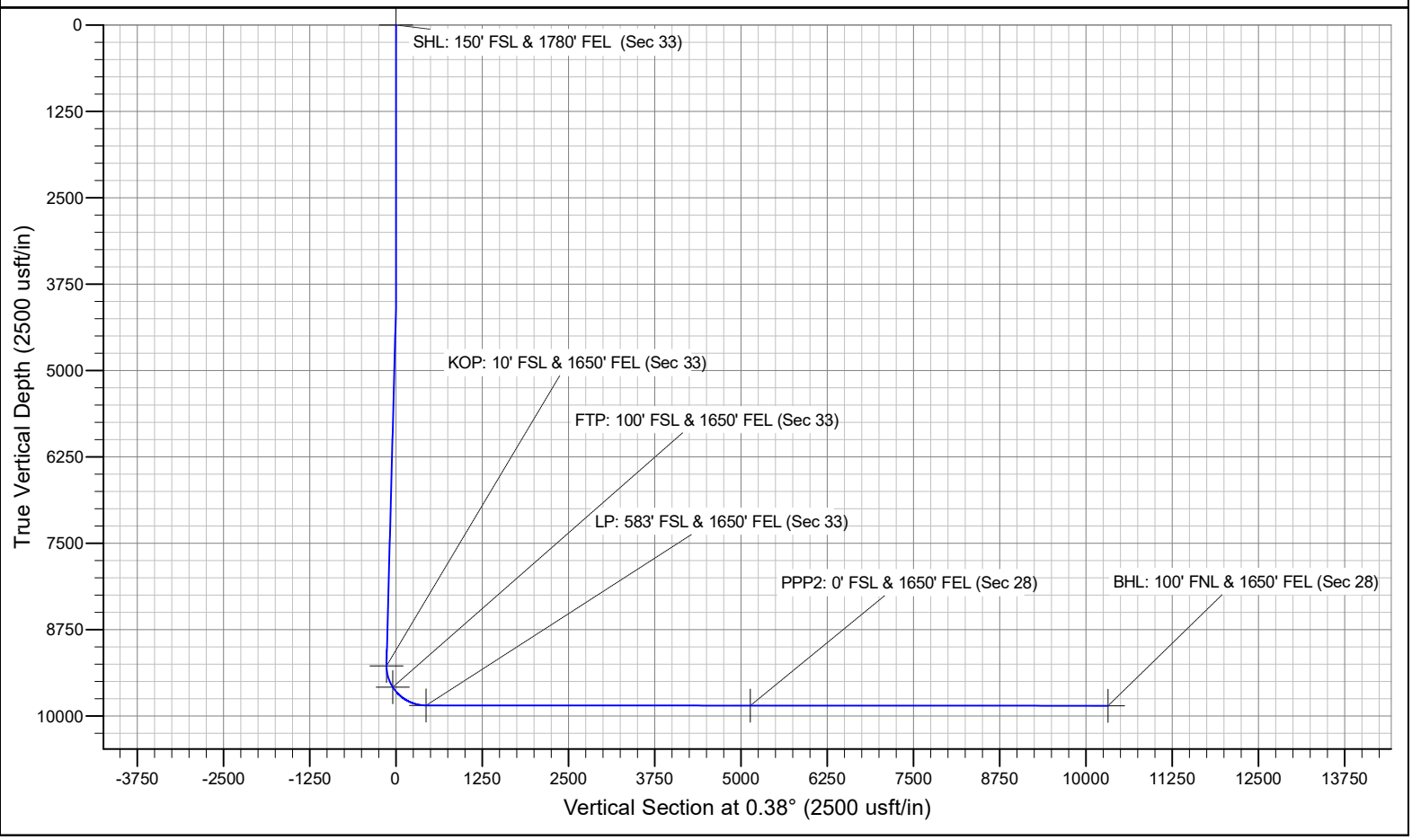
Planned Survey

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)
19,500.0	89.97	359.66	9,852.7	9,755.7	72.1	9,755.9	0.00	0.00	0.00
19,600.0	89.97	359.66	9,852.8	9,855.7	71.5	9,855.9	0.00	0.00	0.00
19,700.0	89.97	359.66	9,852.8	9,955.7	70.9	9,955.9	0.00	0.00	0.00
19,800.0	89.97	359.66	9,852.9	10,055.7	70.3	10,055.9	0.00	0.00	0.00
19,900.0	89.97	359.66	9,852.9	10,155.7	69.7	10,155.9	0.00	0.00	0.00
20,000.0	89.97	359.66	9,853.0	10,255.6	69.1	10,255.9	0.00	0.00	0.00
20,063.4	89.97	359.66	9,853.0	10,319.0	68.7	10,319.2	0.00	0.00	0.00
BHL: 100' FNL & 1650' FEL (Sec 28)									

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: 150' FSL & 1780' F - plan hits target center - Point	0.00	0.00	0.0	0.0	0.0	520,189.80	743,858.90	32.4283579	-103.6769495
KOP: 10' FSL & 1650' FI - plan hits target center - Point	0.00	0.00	9,275.0	-138.6	131.2	520,051.20	743,990.10	32.4279747	-103.6765271
FTP: 100' FSL & 1650' F - plan hits target center - Point	0.00	0.00	9,583.1	-48.7	130.7	520,141.10	743,989.56	32.4282218	-103.6765270
LP: 583' FSL & 1650' FE - plan hits target center - Point	0.00	0.00	9,848.0	434.4	127.8	520,624.16	743,986.67	32.4295496	-103.6765267
PPP2: 0' FSL & 1650' FE - plan hits target center - Point	0.00	0.00	9,850.4	5,132.8	99.7	525,322.60	743,958.59	32.4424644	-103.6765241
BHL: 100' FNL & 1650' F - plan hits target center - Point	0.00	0.00	9,853.0	10,319.0	68.7	530,508.80	743,927.60	32.4567198	-103.6765212


Lobo 33/28 Fed Com #406H
Sec 28
BHL: 100' FNL & 1650' FEL (Sec 28)
PPP2: 0' FSL & 1650' FEL (Sec 28)
Sec 33
Hardlines
LP: 583' FSL & 1650' FEL (Sec 33)
SHL: 150' FSL & 1780' FEL (Sec 33)
FTP: 100' FSL & 1650' FEL (Sec 33)
KOP: 10' FSL & 1650' FEL (Sec 33)
South(-)/North(+) (2500 usft/in)
West(-)/East(+) (2500 usft/in)


SHL: 150' FSL & 1780' FEL (Sec 33)
KOP: 10' FSL & 1650' FEL (Sec 33)
FTP: 100' FSL & 1650' FEL (Sec 33)
LP: 583' FSL & 1650' FEL (Sec 33)
PPP2: 0' FSL & 1650' FEL (Sec 28)
BHL: 100' FNL & 1650' FEL (Sec 28)
True Vertical Depth (2500 usft/in)
Vertical Section at 0.38° (2500 usft/in)

Mewbourne Oil Company, Lobo 33/28 Fed Com 406H
Sec 33, T21S, R32E
SHL: 150' FSL 1780' FEL (Sec 33)
BHL: 100' FNL 1650' FEL (Sec 28)

Operator Name:	Property Name:	Well Number
Mewbourne Oil Company	Lobo 33/28 Fed Com	406H

Kick Off Point (KOP)

UL	Section	Township	Range	Lot	Feet	From N/S	Feet	From E/W	County
P	33	21	32	-	10'	FSL	1650'	FEL	Lea
Latitude					Longitude				NAD
32.4289746					-103.6765272				83

First Take Point (FTP)

UL	Section	Township	Range	Lot	Feet	From N/S	Feet	From E/W	County
P	33	21	32	-	100'	FSL	1650'	FEL	Lea
Latitude					Longitude				NAD
32.4282219					-103.6765271				83

Last Take Point (LTP)

UL	Section	Township	Range	Lot	Feet	From N/S	Feet	From E/W	County
A	28	21	32	-	100'	FNL	1650'	FEL	Lea
Latitude					Longitude				NAD
32.4567199					-103.6765211				83

Is this well the defining well for the Horizontal Spacing Unit? Y
Is this well an infill well? N

If infill is yes please provide API if available, Operator Name and well number for Defining well for Horizontal Spacing Unit.

API #

Operator Name:	Property Name:	Well Number

INSTRUCTIONS

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

ITEM I: If the proposal is to redrill to the same reservoir at a different subsurface location or to a new reservoir, use this form with appropriate notations. Consult applicable Federal regulations concerning subsequent work proposals or reports on the well.

ITEM 4: Locations on Federal or Indian land should be described in accordance with Federal requirements. Consult local Federal offices for specific instructions.

ITEM 14: Needed only when location of well cannot readily be found by road from the land or lease description. A plat, or plats, separate or on the reverse side, showing the roads to, and the surveyed location of, the wen, and any other required information, should be furnished when required by Federal agency offices.

ITEMS 15 AND 18: If well is to be, or has been directionany drilled, give distances for subsurface location of hole in any present or objective productive zone.

ITEM 22: Consult applicable Federal regulations, or appropriate officials, concerning approval of the proposal before operations are started.

ITEM 24: If the proposal will involve hydraulic fracturing operations, you must comply with 43 CFR 3162.3-3, including providing information about the protection of usable water. Operators should provide the best available information about all formations containing water and their depths. This information could include data and interpretation of resistivity logs run on nearby wells. Information may also be obtained from state or tribal regulatory agencies and from local BLM offices.

NOTICES

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

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

PRINCIPAL PURPOSES: The information will be used to: (1) process and evaluate your application for a permit to drill a new oil, gas, or service wen or to reenter a plugged and abandoned well; and (2) document, for administrative use, information for the management, disposal and use of National Resource Lands and resources including (a) analyzing your proposal to discover and extract the Federal or Indian resources encountered; (b) reviewing procedures and equipment and the projected impact on the land involved; and (c) evaluating the effects of the proposed operation on the surface and subsurface water and other environmental impacts.

ROUTINE USE: Information from the record and/or the record win be transferred to appropriate Federal, State, and local or foreign agencies, when relevant to civil, criminal or regulatory investigations or prosecution, in connection with congressional inquiries and for regulatory responsibilities.

EFFECT OF NOT PROVIDING INFORMATION: Filing of this application and disclosure of the information is mandatory only if you elect to initiate a drilling or reentry operation on an oil and gas lease.

The Paperwork Reduction Act of 1995 requires us to inform you that:
The BLM conects this information to anow evaluation of the technical, safety, and environmental factors involved with drilling for oil and/or gas on Federal and Indian oil and gas leases. This information will be used to analyze and approve applications. Response to this request is mandatory only if the operator elects to initiate drilling or reentry operations on an oil and gas lease. The BLM would like you to know that you do not have to respond to this or any other Federal agency-sponsored information collection unless it displays a currently valid OMB control number.

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

(Continued on page 3)

Approval Date: 08/15/2024

Additional Operator Remarks

Location of Well

0. SHL: SWSE / 150 FSL / 1780 FEL / TWSP: 21S / RANGE: 32E / SECTION: 33 / LAT: 32.4283577 / LONG: -103.6769495 (TVD: 0 feet, MD: 0 feet)

PPP: SESE / 100 FSL / 1650 FEL / TWSP: 21S / RANGE: 32E / SECTION: 33 / LAT: 32.4282219 / LONG: -103.6765271 (TVD: 9582 feet, MD: 9604 feet)

PPP: SESE / 0 FSL / 1650 FEL / TWSP: 21S / RANGE: 32E / SECTION: 28 / LAT: 32.4424643 / LONG: -103.6765241 (TVD: 9850 feet, MD: 14877 feet)

BHL: NENE / 100 FNL / 1650 FEL / TWSP: 21S / RANGE: 32E / SECTION: 28 / LAT: 32.4567199 / LONG: -103.6765211 (TVD: 9853 feet, MD: 20063 feet)

BLM Point of Contact

Name: PAMELLA HERNANDEZ
Title: LIE
Phone: (575) 234-5954
Email: PHERNANDEZ@BLM.GOV

Review and Appeal Rights

A person contesting a decision shall request a State Director review. This request must be filed within 20 working days of receipt of the Notice with the appropriate State Director (see 43 CFR 3165.3). The State Director review decision may be appealed to the Interior Board of Land Appeals, 801 North Quincy Street, Suite 300, Arlington, VA 22203 (see 43 CFR 3165.4). Contact the above listed Bureau of Land Management office for further information.

PECOS DISTRICT
SURFACE USE
CONDITIONS OF APPROVAL

Mewbourne Oil Co.

LOBO DRILL ISLAND
Lea County, N.M.
Lease Number: NMNM086710

Wells:

East Well Pad

LOBO 33/28 B3OB FED COM 1H
Surface Hole Location: 150' FSL & 1780' FEL, Section 33, T. 21S., R. 32E.
Bottom Hole Location: 100' FNL & 1330' FEL, Section 28, T. 21S., R 32E.

LOBO 33/28 W0OB FED COM 1H
Surface Hole Location: 150' FSL & 1810' FEL, Section 33, T. 21S., R. 32E.
Bottom Hole Location: 100' FNL & 1980' FEL, Section 28, T. 21S., R 32E.

LOBO 33/28 W0PA FED COM 1H
Surface Hole Location: 150' FSL & 1750' FEL, Section 33, T. 21S., R. 32E.
Bottom Hole Location: 100' FNL & 440' FEL, Section 28, T. 21S., R 32E.

West Well Pad

LOBO 33 B2MD FED COM 1H
Surface Hole Location: 150' FSL & 1925' FWL, Section 33, T. 21S., R. 32E.
Bottom Hole Location: 100' FNL & 500' FWL, Section 33, T. 21S., R 32E.

LOBO 33 B2NC FED COM 1H
Surface Hole Location: 150' FSL & 1955' FWL, Section 33, T. 21S., R. 32E.
Bottom Hole Location: 100' FNL & 2140' FWL, Section 33, T. 21S., R 32E.

LOBO 33 B3NC FED COM 1H
Surface Hole Location: 150' FSL & 1985' FWL, Section 33, T. 21S., R. 32E.
Bottom Hole Location: 100' FNL & 1330' FWL, Section 33, T. 21S., R 32E.

LOBO 33 W0MD FED COM 1H
Surface Hole Location: 150' FSL & 2015' FWL, Section 33, T. 21S., R. 32E.
Bottom Hole Location: 100' FNL & 440' FWL, Section 33, T. 21S., R 32E.

LOBO 33 W0NC FED COM 1H
Surface Hole Location: 150' FSL & 2045' FWL, Section 33, T. 21S., R. 32E.
Bottom Hole Location: 100' FNL & 1980' FWL, Section 33, T. 21S., R 32E.

Approval Date: 08/15/2024

TABLE OF CONTENTS

Standard Conditions of Approval (COA) apply to this APD. If any deviations to these standards exist or special COAs are required, the section with the deviation or requirement will be checked below.

I. GENERAL PROVISIONS

The approval of the Application For Permit To Drill (APD) is in compliance with all applicable laws and regulations: 43 Code of Federal Regulations 3160, the lease terms, Onshore Oil and Gas Orders, Notices To Lessees, New Mexico Oil Conservation Division (NMOCD) Rules, National Historical Preservation Act As Amended, and instructions and orders of the Authorized Officer. Any request for a variance shall be submitted to the Authorized Officer on Form 3160-5, Sundry Notices and Report on Wells.

II. PERMIT EXPIRATION

If the permit terminates prior to drilling and drilling cannot be commenced within 60 days after expiration, an operator is required to submit Form 3160-5, Sundry Notices and Reports on Wells, requesting surface reclamation requirements for any surface disturbance. However, if the operator will be able to initiate drilling within 60 days after the expiration of the permit, the operator must have set the conductor pipe in order to allow for an extension of 60 days beyond the expiration date of the APD. (Filing of a Sundry Notice is required for this 60 day extension.)

III. ARCHAEOLOGICAL, PALEONTOLOGY & HISTORICAL SITES

Any cultural resource (historic or prehistoric site or object) discovered by the holder, or any person working on the holder's behalf, on public or Federal land shall be immediately reported to the Authorized Officer. The holder shall suspend all operations in the immediate area of such discovery until written authorization to proceed is issued by the Authorized Officer. An evaluation of the discovery will be made by the Authorized Officer to determine appropriate actions to prevent the loss of significant cultural or scientific values. The holder will be responsible for the cost of evaluation and any decision as to the proper mitigation measures will be made by the Authorized Officer after consulting with the holder.

OR

If the entire project is covered under the Permian Basin Programmatic Agreement (cultural resources only):

The proponent has contributed funds commensurate to the undertaking into an account for offsite mitigation. Participation in the PA serves as mitigation for the effects of this project on cultural resources. If any human skeletal remains, funerary objects, sacred objects, or objects of cultural patrimony are discovered at any time during construction, all construction activities shall halt and the BLM will be notified as soon as possible within 24 hours. Work shall not resume until a Notice to Proceed is issued by the BLM. See information below discussing NAGPRA.

If the proposed project is split between a Class III inventory and a Permian Basin Programmatic Agreement contribution, the portion of the project covered under Class III inventory should default to the first paragraph stipulations.

The holder is hereby obligated to comply with procedures established in the Native American Graves Protection and Repatriation Act (NAGPRA) to protect such cultural items as human remains, associated funerary objects, sacred objects, and objects of cultural patrimony discovered inadvertently during the course of project implementation. In the event that any of the cultural items listed above are discovered during the course of project work, the proponent shall immediately halt the disturbance and contact the BLM within 24 hours for instructions. The proponent or initiator of any project shall be held responsible for protecting, evaluating, reporting, excavating, treating, and disposing of these cultural items according to the procedures established by the BLM in consultation with Indian Tribes."

Any paleontological resource (historic or prehistoric site or object) discovered by the holder, or any person working on the holder's behalf, on public or Federal land shall be immediately reported to the Authorized Officer. The holder shall suspend all operations in the immediate area of such discovery until written authorization to proceed is issued by the Authorized Officer. An evaluation of the discovery will be made by the Authorized Officer to determine appropriate actions to prevent the loss of significant cultural or scientific values. The holder will be responsible for the cost of evaluation and any decision as to the proper mitigation measures will be made by the Authorized Officer after consulting with the holder.

IV. NOXIOUS WEEDS

The operator shall be held responsible if noxious weeds become established within the areas of operations. Weed control shall be required on the disturbed land where noxious weeds exist, which includes the roads, pads, associated pipeline corridor, and adjacent land affected by the establishment of weeds due to this action. The operator shall consult with the Authorized Officer for acceptable weed control methods, which include following EPA and BLM requirements and policies.

V. SPECIAL REQUIREMENT(S)

Watershed:

The entire well pad(s) will be bermed to prevent oil, salt, and other chemical contaminants from leaving the well pad. The compacted berm shall be constructed at a minimum of 12 inches with impermeable mineral material (e.g. caliche). Topsoil shall not be used to construct the berm. No water flow from the uphill side(s) of the pad shall be allowed to enter the well pad. The integrity of the berm shall be maintained around the surfaced pad throughout the life of the well and around the downsized pad after interim reclamation has been completed. Any water erosion that may occur due to the construction of the well pad during the life of the well will be quickly corrected and proper measures will be taken to prevent future erosion. Stockpiling of topsoil is required. The topsoil shall be stockpiled in an appropriate location to prevent loss of soil due to water or wind erosion and not used for berming or erosion control. If fluid collects within the bermed area, the fluid must be vacuumed into a safe container and disposed of properly at a state approved facility.

TANK BATTERY:

Tank battery locations will be lined and bermed. A 20 mil permanent liner will be installed with a 4 oz. felt backing to prevent tears or punctures. Tank battery berms must be large enough to contain 1 ½ times the content of the largest tank or 24 hour production, whichever is greater. Automatic shut off, check valves, or similar systems will be installed for tanks to minimize the effects of catastrophic line failures used in production or drilling.

BURIED/SURFACE LINE(S):

When crossing ephemeral drainages the pipeline(s) will be buried to a minimum depth of 48 inches from the top of pipe to ground level. Erosion control methods such as gabions and/or rock aprons should be placed on both up and downstream sides of the pipeline crossing. In addition, curled (weed free) wood/straw fiber wattles/logs and/or silt fences should be placed on the downstream side for sediment control during construction and maintained until soils and vegetation have stabilized. Water bars should be placed within the ROW to divert and dissipate surface runoff. A pipeline access road is not permitted to cross these ephemeral drainages. Traffic should be diverted to a preexisting route. Additional seeding may be required in floodplains and drainages to restore energy dissipating vegetation.

Prior to pipeline installation/construction a leak detection plan will be developed. The method(s) could incorporate gauges to detect pressure drops, situating valves and lines so they can be visually inspected periodically or installing electronic sensors to alarm when a leak is present. The leak detection plan will incorporate an automatic shut off system that will be installed for proposed pipelines to minimize the effects of an undesirable event.

Approval Date: 08/15/2024

Range:

Cattleguards
Where a permanent cattlegaurd is approved, an appropriately sized cattleguard(s) sufficient to carry out the project shall be installed and maintained at fence crossing(s). Any existing cattleguard(s) on the access road shall be repaired or replaced if they are damaged or have deteriorated beyond practical use. The operator shall be responsible for the condition of the existing cattleguard(s) that are in place and are utilized during lease operations. A gate shall be constructed on one side of the cattleguard and fastened securely to H-braces.

Fence Requirement
Where entry granted across a fence line, the fence must be braced and tied off on both sides of the passageway prior to cutting. Once the work is completed, the fence will be restored to its prior condition, or better. The operator shall notify the private surface landowner or the grazing allotment holder prior to crossing any fence(s).

Lesser Prairie Chicken:
Timing Limitation Stipulation/Condition of Approval for Lesser Prairie-Chicken:
Oil and gas activities including 3-D geophysical exploration, and drilling will not be allowed in lesser prairie-chicken habitat during the period from March 1st through June 15th annually. During that period, other activities that produce noise or involve human activity, such as the maintenance of oil and gas facilities, geophysical exploration other than 3-D operations, and pipeline, road, and well pad construction, will be allowed except between 3:00 am and 9:00 am. The 3:00 am to 9:00 am restriction will not apply to normal, around-the-clock operations, such as venting, flaring, or pumping, which do not require a human presence during this period. Additionally, no new drilling will be allowed within up to 200 meters of leks known at the time of permitting. Normal vehicle use on existing roads will not be restricted. Exhaust noise from pump jack engines must be muffled or otherwise controlled so as not to exceed 75 db measured at 30 ft. from the source of the noise.

Timing Limitation Exceptions:
The Carlsbad Field Office will publish an annual map of where the LPC timing and noise stipulations and conditions of approval (Limitations) will apply for the identified year (between March 1 and June 15) based on the latest survey information. The LPC Timing Area map will identify areas which are Habitat Areas (HA), Isolated Population Area (IPA), and Primary Population Area (PPA). The LPC Timing Area map will also have an area in red crosshatch. The red crosshatch area is the only area where an operator is required to submit a request for exception to the LPC Limitations. If an operator is operating outside the red crosshatch area, the LPC Limitations do not apply for that year and an exception to LPC Limitations is not required.

Ground-level Abandoned Well Marker to avoid raptor perching:
Upon the plugging and subsequent abandonment of the well, the well marker will be installed at ground level on a plate containing the pertinent information for the plugged well. For more installation details, contact the Carlsbad Field Office at 575-234-5972.

Special Status Plant Species:

I. Potash Resources

Lessees must comply with the 2012Secretarial Potash Order. The Order is designed to manage the efficient development of oil, gas, and potash resources. Section 6 of the Order provides general provisions which must be followed to minimize conflict between the industries and ensure the safety of operations.

To minimize impacts to potash resources, the proposed well is confined within the boundaries of the established Lobo 33 28 Drill Island.

VI. CONSTRUCTION

A. NOTIFICATION

The BLM shall administer compliance and monitor construction of the access road and well pad. Notify the Carlsbad Field Office at (575) 234-5909 at least 3 working days prior to commencing construction of the access road and/or well pad.

When construction operations are being conducted on this well, the operator shall have the approved APD and Conditions of Approval (COA) on the well site and they shall be made available upon request by the Authorized Officer.

B. TOPSOIL

The operator shall strip the top portion of the soil (root zone) from the entire well pad area and stockpile the topsoil along the edge of the well pad as depicted in the APD. The root zone is typically six (6) inches in depth. All the stockpiled topsoil will be redistributed over the interim reclamation areas. Topsoil shall not be used for berming the pad or facilities. For final reclamation, the topsoil shall be spread over the entire pad area for seeding preparation.

Other subsoil (below six inches) stockpiles must be completely segregated from the topsoil stockpile. Large rocks or subsoil clods (not evident in the surrounding terrain) must be buried within the approved area for interim and final reclamation.

C. CLOSED LOOP SYSTEM

Tanks are required for drilling operations: No Pits.

The operator shall properly dispose of drilling contents at an authorized disposal site.

D. FEDERAL MINERAL MATERIALS PIT

Payment shall be made to the BLM prior to removal of any federal mineral materials. Call the Carlsbad Field Office at (575) 234-5972.

E. WELL PAD SURFACING

Surfacing of the well pad is not required.

If the operator elects to surface the well pad, the surfacing material may be required to be removed at the time of reclamation. The well pad shall be constructed in a manner which creates the smallest possible surface disturbance, consistent with safety and operational needs.

F. EXCLOSURE FENCING (CELLARS & PITS)

Exclosure Fencing
The operator will install and maintain exclosure fencing for all open well cellars to prevent access to public, livestock, and large forms of wildlife before and after drilling operations until the pit is free of fluids and the operator initiates backfilling. (For examples of exclosure fencing design, refer to BLM's Oil and Gas Gold Book, Exclosure Fence Illustrations, Figure 1, Page 18.)

G. ON LEASE ACCESS ROADS

Road Width
The access road shall have a driving surface that creates the smallest possible surface disturbance and does not exceed fourteen (14) feet in width. The maximum width of surface disturbance, when constructing the access road, shall not exceed twenty-five (25) feet.

Surfacing
Surfacing material is not required on the new access road driving surface. If the operator elects to surface the new access road or pad, the surfacing material may be required to be removed at the time of reclamation.

Where possible, no improvements should be made on the unsurfaced access road other than to remove vegetation as necessary, road irregularities, safety issues, or to fill low areas that may sustain standing water.

The Authorized Officer reserves the right to require surfacing of any portion of the access road at any time deemed necessary. Surfacing may be required in the event the road deteriorates, erodes, road traffic increases, or it is determined to be beneficial for future field development. The surfacing depth and type of material will be determined at the time of notification.

Crowning
Crowning shall be done on the access road driving surface. The road crown shall have a grade of approximately 2% (i.e., a 1" crown on a 14' wide road). The road shall conform to Figure 1; cross section and plans for typical road construction.

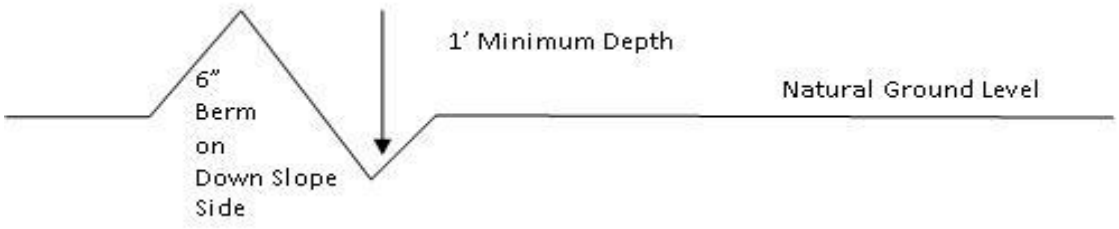
Ditching
Ditching shall be required on both sides of the road.

Turnouts
Vehicle turnouts shall be constructed on the road. Turnouts shall be intervisible with interval spacing distance less than 1000 feet. Turnouts shall conform to Figure 1; cross section and plans for typical road construction.

Drainage
Drainage control systems shall be constructed on the entire length of road (e.g. ditches, sidehill outsloping and insloping, lead-off ditches, culvert installation, and low water crossings).

A typical lead-off ditch has a minimum depth of 1 foot below and a berm of 6 inches above natural ground level. The berm shall be on the down-slope side of the lead-off ditch.

Cross Section of a Typical Lead-off Ditch



All lead-off ditches shall be graded to drain water with a 1 percent minimum to 3 percent maximum ditch slope. The spacing interval are variable for lead-off ditches and shall be determined according to the formula for spacing intervals of lead-off ditches, but may be amended depending upon existing soil types and centerline road slope (in %);

Formula for Spacing Interval of Lead-off Ditches

Example - On a 4% road slope that is 400 feet long, the water flow shall drain water into a lead-off ditch. Spacing interval shall be determined by the following formula:

$$\text{400 foot road with 4\% road slope: } \frac{400'}{4\%} + 100' = 200' \text{ lead-off ditch interval}$$

Cattle guards

An appropriately sized cattle guard sufficient to carry out the project shall be installed and maintained at fence/road crossings. Any existing cattle guards on the access road route shall be repaired or replaced if they are damaged or have deteriorated beyond practical use. The operator shall be responsible for the condition of the existing cattle guards that are in place and are utilized during lease operations.

Fence Requirement

Where entry is granted across a fence line, the fence shall be braced and tied off on both sides of the passageway prior to cutting. The operator shall notify the private surface landowner or the grazing allotment holder prior to crossing any fences.

Public Access

Public access on this road shall not be restricted by the operator without specific written approval granted by the Authorized Officer.

Approval Date: 08/15/2024

Construction Steps

1. Salvage topsoil
2. Construct road
3. Redistribute topsoil
4. Revegetate slopes

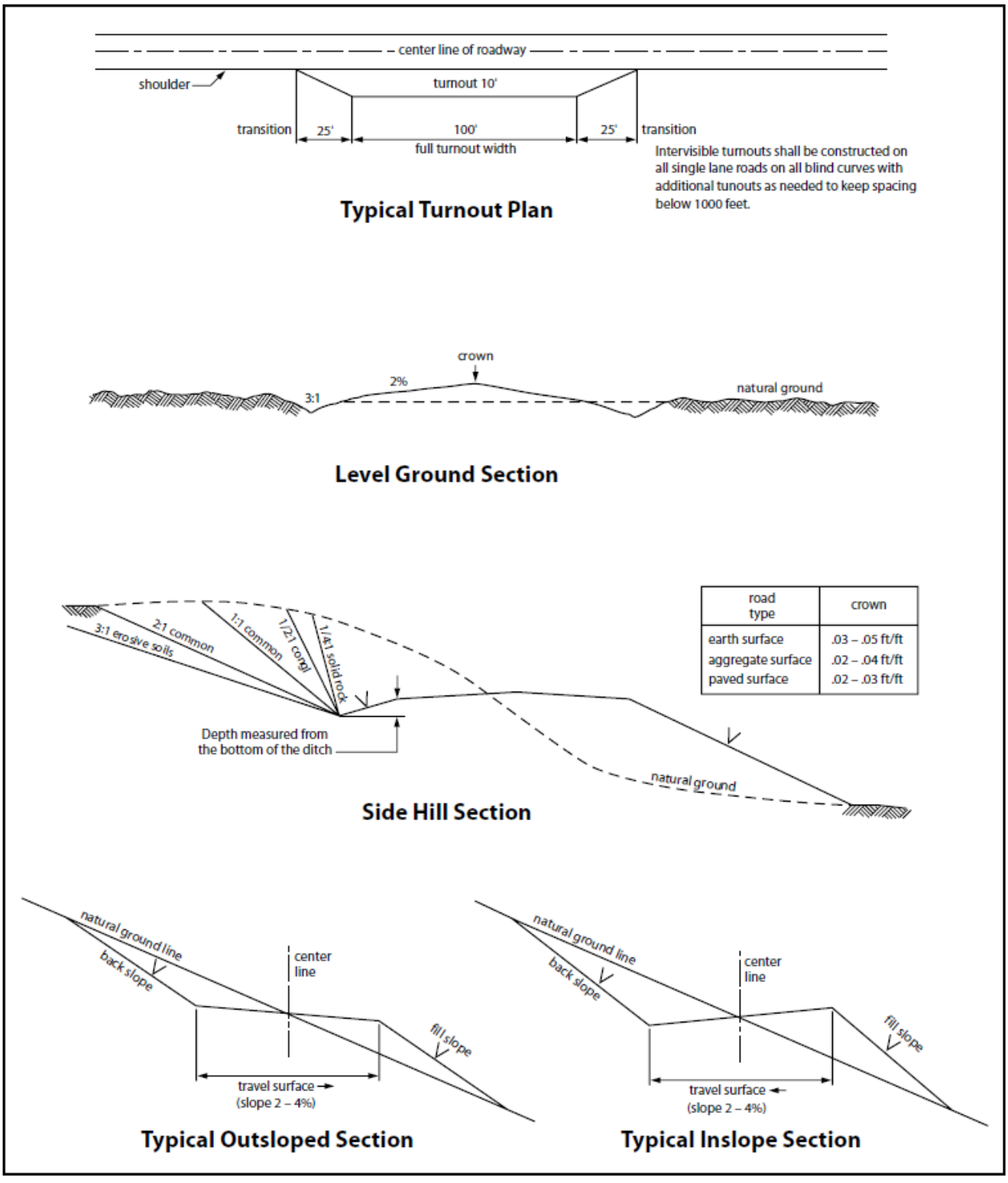


Figure 1. Cross-sections and plans for typical road sections representative of BLM resource or FS local and higher-class roads.

Approval Date: 08/15/2024

VII. PRODUCTION (POST DRILLING)

A. WELL STRUCTURES & FACILITIES

Placement of Production Facilities
Production facilities should be placed on the well pad to allow for maximum interim recontouring and revegetation of the well location.

Exclosure Netting (Open-top Tanks)
Immediately following active drilling or completion operations, the operator will take actions necessary to prevent wildlife and livestock access, including avian wildlife, to all open-topped tanks that contain or have the potential to contain salinity sufficient to cause harm to wildlife or livestock, hydrocarbons, or Resource Conservation and Recovery Act of 1976-exempt hazardous substances. At a minimum, the operator will net, screen, or cover open-topped tanks to exclude wildlife and livestock and prevent mortality. If the operator uses netting, the operator will cover and secure the open portion of the tank to prevent wildlife entry. The operator will net, screen, or cover the tanks until the operator removes the tanks from the location or the tanks no longer contain substances that could be harmful to wildlife or livestock. Use a maximum netting mesh size of 1 ½ inches. The netting must not be in contact with fluids and must not have holes or gaps.

Chemical and Fuel Secondary Containment and Exclosure Screening
The operator will prevent all hazardous, poisonous, flammable, and toxic substances from coming into contact with soil and water. At a minimum, the operator will install and maintain an impervious secondary containment system for any tank or barrel containing hazardous, poisonous, flammable, or toxic substances sufficient to contain the contents of the tank or barrel and any drips, leaks, and anticipated precipitation. The operator will dispose of fluids within the containment system that do not meet applicable state or U. S. Environmental Protection Agency livestock water standards in accordance with state law; the operator must not drain the fluids to the soil or ground. The operator will design, construct, and maintain all secondary containment systems to prevent wildlife and livestock exposure to harmful substances. At a minimum, the operator will install effective wildlife and livestock exclosure systems such as fencing, netting, expanded metal mesh, lids, and grate covers. Use a maximum netting mesh size of 1 ½ inches.

Open-Vent Exhaust Stack Exclosures
The operator will construct, modify, equip, and maintain all open-vent exhaust stacks on production equipment to prevent birds and bats from entering, and to discourage perching, roosting, and nesting. (*Recommended exclosure structures on open-vent exhaust stacks are in the shape of a cone*.) Production equipment includes, but may not be limited to, tanks, heater-treaters, separators, dehydrators, flare stacks, in-line units, and compressor mufflers.

Containment Structures
Proposed production facilities such as storage tanks and other vessels will have a secondary containment structure that is constructed to hold the capacity of 1.5 times the largest tank, plus freeboard to account for precipitation, unless more stringent protective requirements are deemed necessary.

Painting Requirement
All above-ground structures including meter housing that are not subject to safety requirements shall be painted a flat non-reflective paint color, **Shale Green** from the BLM Standard Environmental Color Chart (CC-001: June 2008).

B. PIPELINES

- The BLM, Carlsbad Field Office, will be informed immediately if any subsurface drainage channels, passages, or voids are intersected by trenching, and no pipe will be laid in the

trench at that point until clearance has been issued by the Authorized Officer.

- If a void is encountered alignments may be rerouted to avoid the karst feature and lessen; the potential of subsidence or collapse of karst features, buildup of toxic or combustible gas, or other possible impacts to cave and karst resources from the buried pipeline.
- Special restoration stipulations or realignment may be required at such intersections, if any.
- A leak detection plan **will be submitted to the BLM Carlsbad Field Office for approval** prior to pipeline installation. The method could incorporate gauges to detect pressure drops, situating values and lines so they can be visually inspected periodically or installing electronic sensors to alarm when a leak is present. The leak detection plan will incorporate an automatic shut off system that will be installed for proposed pipelines to minimize the effects of an undesirable event.
- Regular monitoring is required to quickly identify leaks for their immediate and proper treatment.
- All spills or leaks will be reported to the BLM immediately for their immediate and proper treatment.

BURIED PIPELINE STIPULATIONS

A copy of the application (Grant, APD, or Sundry Notice) and attachments, including conditions of approval, survey plat and/or map, will be on location during construction. BLM personnel may request to you a copy of your permit during construction to ensure compliance with all stipulations.

Holder agrees to comply with the following stipulations to the satisfaction of the Authorized Officer:

1. The Holder shall indemnify the United States against any liability for damage to life or property arising from the occupancy or use of public lands under this grant.

2. The Holder shall comply with all applicable Federal laws and regulations existing or hereafter enacted or promulgated. In any event, the holder shall comply with the Toxic Substances Control Act of 1976 as amended, 15 USC 2601 et seq. (1982) with regards to any toxic substances that are used, generated by or stored on the right-of-way or on facilities authorized under this right-of-way grant. (See 40 CFR Part 702-799 and especially, provisions on polychlorinated biphenyls, 40 CFR 761.1-761.193.) Additionally, any release of toxic substances (leaks, spills, etc.) in excess of the reportable quantity established by 40 CFR Part 117 shall be reported as required by the Comprehensive Environmental Response, Compensation, and Liability Act, section 102b. A copy of any report required or requested by any Federal agency or State government as a result of a reportable release or spill of any toxic substances shall be furnished to the authorized officer concurrent with the filing of the reports to the involved Federal agency or State government.

3. The holder agrees to indemnify the United States against any liability arising from the release of any hazardous substance or hazardous waste (as these terms are defined in the Comprehensive Environmental Response, Compensation and Liability Act of 1980, 42 U.S.C. 9601, et seq. or the Resource Conservation and Recovery Act, 42 U.S.C.6901, et seq.) on the Right-of-Way (unless the release or threatened release is wholly unrelated to the Right-of-Way holder's activity on the Right-of-Way), or resulting from the activity of the Right-of-Way holder on the Right-of-Way. This agreement applies without regard to whether a release is caused by the holder, its agent, or unrelated third parties.

4. If, during any phase of the construction, operation, maintenance, or termination of the pipeline, any oil or other pollutant should be discharged from the pipeline system, impacting Federal lands, the control and total removal, disposal, and cleaning up of such oil or other pollutant, wherever

found, shall be the responsibility of holder, regardless of fault. Upon failure of holder to control, dispose of, or clean up such discharge on or affecting Federal lands, or to repair all damages resulting therefrom, on the Federal lands, the Authorized Officer may take such measures as he deems necessary to control and clean up the discharge and restore the area, including where appropriate, the aquatic environment and fish and wildlife habitats, at the full expense of the holder. Such action by the Authorized Officer shall not relieve holder of any responsibility as provided herein.

5. All construction and maintenance activity will be confined to the authorized right-of-way.

6. The pipeline will be buried with a minimum cover of **36** inches between the top of the pipe and ground level.

7. The maximum allowable disturbance for construction in this right-of-way will be **30** feet:

- Blading of vegetation within the right-of-way will be allowed: maximum width of blading operations will not exceed **20** feet. The trench is included in this area. (*Blading is defined as the complete removal of brush and ground vegetation*.)

- Clearing of brush species within the right-of-way will be allowed: maximum width of clearing operations will not exceed **30** feet. The trench and bladed area are included in this area. (*Clearing is defined as the removal of brush while leaving ground vegetation (grasses, weeds, etc.) intact. Clearing is best accomplished by holding the blade 4 to 6 inches above the ground surface.*)

- The remaining area of the right-of-way (if any) shall only be disturbed by compressing the vegetation. (*Compressing can be caused by vehicle tires, placement of equipment, etc.*)

8. The holder shall stockpile an adequate amount of topsoil where blading is allowed. The topsoil to be stripped is approximately ___6___ inches in depth. The topsoil will be segregated from other spoil piles from trench construction. The topsoil will be evenly distributed over the bladed area for the preparation of seeding.

9. The holder shall minimize disturbance to existing fences and other improvements on public lands. The holder is required to promptly repair improvements to at least their former state. Functional use of these improvements will be maintained at all times. The holder will contact the owner of any improvements prior to disturbing them. When necessary to pass through a fence line, the fence shall be braced on both sides of the passageway prior to cutting of the fence. No permanent gates will be allowed unless approved by the Authorized Officer.

10. Vegetation, soil, and rocks left as a result of construction or maintenance activity will be randomly scattered on this right-of-way and will not be left in rows, piles, or berms, unless otherwise approved by the Authorized Officer. The entire right-of-way shall be recontoured to match the surrounding landscape. The backfilled soil shall be compacted and a 6 inch berm will be left over the ditch line to allow for settling back to grade.

Approval Date: 08/15/2024

11. In those areas where erosion control structures are required to stabilize soil conditions, the holder will install such structures as are suitable for the specific soil conditions being encountered and which are in accordance with sound resource management practices.

12. The holder will reseed all disturbed areas. Seeding will be done according to the attached seeding requirements, using the following seed mix.

☐ **Seed Mixture 1**
☐ **Seed Mixture 2**
☒ **Seed Mixture 2/LPC**
☐ **Seed Mixture 3**
☐ **Seed Mixture 4**
☐ **Seed Mixture Aplomado Falcon Mixture**

13. All above-ground structures not subject to safety requirements shall be painted by the holder to blend with the natural color of the landscape. The paint used shall be color which simulates "Standard Environmental Colors" – **Shale Green**, Munsell Soil Color No. 5Y 4/2.

14. The pipeline will be identified by signs at the point of origin and completion of the right-of-way and at all road crossings. At a minimum, signs will state the holder's name, BLM serial number, and the product being transported. All signs and information thereon will be posted in a permanent, conspicuous manner, and will be maintained in a legible condition for the life of the pipeline.

15. The holder shall not use the pipeline route as a road for purposes other than routine maintenance as determined necessary by the Authorized Officer in consultation with the holder before maintenance begins. The holder will take whatever steps are necessary to ensure that the pipeline route is not used as a roadway. As determined necessary during the life of the pipeline, the Authorized Officer may ask the holder to construct temporary deterrence structures.

16. Any cultural resource (historic or prehistoric site or object) discovered by the holder, or any person working on the holder's behalf, on public or Federal land shall be immediately reported to the Authorized Officer. The holder shall suspend all operations in the immediate area of such discovery until written authorization to proceed is issued by the Authorized Officer. An evaluation of the discovery will be made by the Authorized Officer to determine appropriate actions to prevent the loss of significant cultural or scientific values. The holder will be responsible for the cost of evaluation and any decision as to the proper mitigation measures will be made by the Authorized Officer after consulting with the holder.

If the entire project is covered under the Permian Basin Programmatic Agreement (cultural resources only):

The proponent has contributed funds commensurate to the undertaking into an account for offsite mitigation. Participation in the PA serves as mitigation for the effects of this project on cultural resources. If any human skeletal remains, funerary objects, sacred objects, or objects of cultural patrimony are discovered at any time during construction, all construction activities shall halt and the BLM will be notified as soon as possible within 24 hours. Work shall not resume until a Notice to Proceed is issued by the BLM. See Stipulation 17 for more information.

Approval Date: 08/15/2024

MEWBOURNE OIL COMPANY

Hydrogen Sulfide Plan Summary

A. All personnel shall receive proper H2S training in accordance with Onshore Order III.C.3.a.

B. Briefing Area: two perpendicular areas will be designated by signs and readily accessible.

C. Required Emergency Equipment:

- Well control equipment
  a. Flare line 150' from wellhead to be ignited by flare gun.
  b. Choke manifold with a remotely operated choke.
  c. Mud/gas separator

- Protective equipment for essential personnel.

  Breathing apparatus:
  a. Rescue Packs (SCBA) — 1 unit shall be placed at each breathing area, 2 shall be stored in the safety trailer.
  b. Work/Escape packs —4 packs shall be stored on the rig floor with sufficient air hose not to restrict work activity.
  c. Emergency Escape Packs —4 packs shall be stored in the doghouse for emergency evacuation.

  Auxiliary Rescue Equipment:
  a. Stretcher
  b. Two OSHA full body harness
  c. 100 ft 5/8 inch OSHA approved rope
  d. 1-20# class ABC fire extinguisher

- H2S detection and monitoring equipment:
  The stationary detector with three sensors will be placed in the upper dog house if equipped, set to visually alarm @ 10 ppm and audible @ 14 ppm. Calibrate a minimum of every 30 days or as needed. The sensors will be placed in the following places: Rig floor / Bell nipple / End of flow line or where well bore fluid is being discharged.
  (Gas sample tubes will be stored in the safety trailer)

- Visual warning systems.
  a. One color code condition sign will be placed at the entrance to the site reflecting the possible conditions at the site.
  b. A colored condition flag will be on display, reflecting the current condition at the site at the time.
  c. Two wind socks will be placed in strategic locations, visible from all angles.

MEWBOURNE OIL COMPANY

ALTHEA 18 FED #101H

- Mud program:
  The mud program has been designed to minimize the volume of H2S circulated to surface. The operator will have the necessary mud products to minimize hazards while drilling in H2S bearing zones.

- Metallurgy:
  All drill strings, casings, tubing, wellhead, blowout preventer, drilling spool, kill lines, choke manifold and lines, and valves shall be suitable for H2S service.

- Communication:
  Communication will be via cell phones and land lines where available.

Operator Name: MEWBOURNE OIL COMPANY

Well Name: LOBO 33/28 FED COM **Well Number:** 406H

Section 5 - Location and Types of Water Supply

Water Source Table

Water source type: IRRIGATION

Water source use type: DUST CONTROL
CAMP USE
SURFACE CASING
INTERMEDIATE/PRODUCTION CASING
STIMULATION

Source latitude: 32.423752 **Source longitude:** -103.655604

Source datum: NAD83

Water source permit type: WATER WELL

Water source transport method: TRUCKING

Source land ownership: FEDERAL

Source transportation land ownership: FEDERAL

Water source volume (barrels): 3240 **Source volume (acre-feet):** 0.41761363

Source volume (gal): 136080

Water source type: IRRIGATION

Water source use type: DUST CONTROL
CAMP USE
SURFACE CASING
INTERMEDIATE/PRODUCTION CASING
STIMULATION

Source latitude: 32.30893 **Source longitude:** -103.89153

Source datum: NAD83

Water source permit type: WATER WELL

Water source transport method: TRUCKING

Source land ownership: PRIVATE

Operator Name: MEWBOURNE OIL COMPANY

Well Name: LOBO 33/28 FED COM **Well Number:** 406H

Source transportation land ownership: FEDERAL

Water source volume (barrels): 3240 **Source volume (acre-feet):** 0.41761363

Source volume (gal): 136080

Water source and transportation

Lobo_33_28_Fed_Com_406H_WaterSourceTransMap_20240515075735.pdf

Water source comments: Both sources shown on one map

New water well? N

New Water Well Info

Well latitude: **Well Longitude:** **Well datum:**

Well target aquifer:

Est. depth to top of aquifer(ft): **Est thickness of aquifer:**

Aquifer comments:

Aquifer documentation:

Well depth (ft): **Well casing type:**

Well casing outside diameter (in.): **Well casing inside diameter (in.):**

New water well casing? **Used casing source:**

Drilling method: **Drill material:**

Grout material: **Grout depth:**

Casing length (ft.): **Casing top depth (ft.):**

Well Production type: **Completion Method:**

Water well additional information:

State appropriation permit:

Additional information attachment:

Section 6 - Construction Materials

Using any construction materials: YES

Construction Materials description: Caliche - both sources shown on one map

Construction Materials source location

Lobo_33_28_Fed_Com_406H_CalicheSourceTransMap_20240515075745.pdf

Operator Name: MEWBOURNE OIL COMPANY

Well Name: LOBO 33/28 FED COM **Well Number:** 406H

Section 7 - Methods for Handling

Waste type: DRILLING

Waste content description: Drill Cuttings

Amount of waste: 3240 barrels

Waste disposal frequency : One Time Only

Safe containment description: Drill cuttings will be properly contained in steel tanks (20 yard roll off bins.)

Safe containmant attachment:

Waste disposal type: HAUL TO COMMERCIAL FACILITY **Disposal location ownership:** PRIVATE

Disposal type description:

Disposal location description: NMOCD approved disposal locations are CRI or Lea Land, both facilities are located on HWY 62/180, Sec 27 T20S R32E.

Waste type: SEWAGE

Waste content description: Human waste & Grey water

Amount of waste: 1500 gallons

Waste disposal frequency : Weekly

Safe containment description: 2000 gallon plastic container

Safe containmant attachment:

Waste disposal type: HAUL TO COMMERCIAL FACILITY **Disposal location ownership:** PRIVATE

Disposal type description:

Disposal location description: City of Carlsbad Water Treatment Facility

Waste type: GARBAGE

Waste content description: Garbage & Trash

Amount of waste: 1500 pounds

Waste disposal frequency : One Time Only

Safe containment description: Enclosed Trash Trailer

Safe containmant attachment:

Waste disposal type: HAUL TO COMMERCIAL FACILITY **Disposal location ownership:** PRIVATE

Disposal type description:

Disposal location description: Waste Management Facility in Carlsbad, NM

Reserve Pit

Reserve Pit being used? NO

Operator Name: MEWBOURNE OIL COMPANY

Well Name: LOBO 33/28 FED COM **Well Number:** 406H

Temporary disposal of produced water into reserve pit? NO

Reserve pit length (ft.) **Reserve pit width (ft.)**

Reserve pit depth (ft.) **Reserve pit volume (cu. yd.)**

Is at least 50% of the reserve pit in cut?

Reserve pit liner

Reserve pit liner specifications and installation description

Cuttings Area

Cuttings Area being used? NO

Are you storing cuttings on location? N

Description of cuttings location

Cuttings area length (ft.) **Cuttings area width (ft.)**

Cuttings area depth (ft.) **Cuttings area volume (cu. yd.)**

Is at least 50% of the cuttings area in cut?

WCuttings area liner

Cuttings area liner specifications and installation description

Section 8 - Ancillary

Are you requesting any Ancillary Facilities?: N

Ancillary Facilities

Comments:

Section 9 - Well Site

Well Site Layout Diagram:

Lobo_33_28_Fed_Com_406H_WellSiteLayout_20240515075757.pdf

Comments: None

District I
1625 N. French Dr., Hobbs, NM 88240
Phone:(575) 393-6161 Fax:(575) 393-0720
District II
811 S. First St., Artesia, NM 88210
Phone:(575) 748-1283 Fax:(575) 748-9720
District III
1000 Rio Brazos Rd., Aztec, NM 87410
Phone:(505) 334-6178 Fax:(505) 334-6170
District IV
1220 S. St Francis Dr., Santa Fe, NM 87505
Phone:(505) 476-3470 Fax:(505) 476-3462

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

CONDITIONS

Action 374745

CONDITIONS

Operator: MEWBOURNE OIL CO P.O. Box 5270 Hobbs, NM 88241	OGRID: 14744
	Action Number: 374745
	Action Type: [C-101] BLM - Federal/Indian Land Lease (Form 3160-3)

CONDITIONS

Created By	Condition	Condition Date
pkautz	Will require a File As Drilled C-102 and a Directional Survey with the C-104	8/23/2024
pkautz	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	8/23/2024
pkautz	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	8/23/2024
pkautz	Cement is required to circulate on both surface and intermediate1 strings of casing	8/23/2024
pkautz	If cement does not circulate on any string, a CBL is required for that string of casing	8/23/2024