

Form 3160-3
(June 2015)UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

APPLICATION FOR PERMIT TO DRILL OR REENTER

FORM APPROVED
OMB No. 1004-0137
Expires: January 31, 20185. Lease Serial No.
NMLC061497

6. If Indian, Allottee or Tribe Name

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

8. Lease Name and Well No.
FULLER 13/12 H3FC FED COM

1H

9. API Well No.
30-015-5525410. Field and Pool, or Exploratory
Corral Canyon/Bone Spring11. Sec., T. R. M. or Blk. and Survey or Area
SEC 13/T26S/R29E/NMP1a. Type of work: ☒ DRILL ☐ REENTER
1b. Type of Well: ☒ Oil Well ☐ Gas Well ☐ Other
1c. Type of Completion: ☐ Hydraulic Fracturing ☐ Single Zone ☒ Multiple Zone2. Name of Operator
MEWBOURNE OIL COMPANY3a. Address
P O BOX 5270, HOBBS, NM 882413b. Phone No. (include area code)
(575) 393-59054. Location of Well (Report location clearly and in accordance with any State requirements. *)
At surface NESW / 2610 FSL / 2195 FWL / LAT 32.0419472 / LONG -103.9384754
At proposed prod. zone NENW / 100 FNL / 1590 FWL / LAT 32.0639298 / LONG -103.940343414. Distance in miles and direction from nearest town or post office*
9 miles12. County or Parish
EDDY13. State
NM15. 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
640.018. Distance from proposed location*
to nearest well, drilling, completed,
applied for, on this lease, ft.
50 feet19. Proposed Depth
9620 feet / 17822 feet20. BLM/BIA Bond No. in file
FED:21. Elevations (Show whether DF, KDB, RT, GL, etc.)
2994 feet22. Approximate date work will start*
06/06/202223. 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) 393-5905Date
04/22/2022Title
RegulatoryApproved by (Signature)
(Electronic Submission)Name (Printed/Typed)
CODY LAYTON / Ph: (575) 234-5959Date
07/12/2024Title
Assistant Field Manager Lands & MineralsOffice
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.

(Continued on page 2)

*(Instructions on page 2)



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 well, 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 directionally 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 well 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 will 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 connects this information to an 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 Connection Clearance Officer (WO-630), 1849 C Street, N.W., Mail Stop 401 LS, Washington, D.C. 20240.

Additional Operator Remarks

Location of Well

0. SHL: NESW / 2610 FSL / 2195 FWL / TWSP: 26S / RANGE: 29E / SECTION: 13 / LAT: 32.0419472 / LONG: -103.9384754 (TVD: 0 feet, MD: 0 feet)
PPP: SENW / 2582 FNL / 1590 FWL / TWSP: 26S / RANGE: 29E / SECTION: 13 / LAT: 32.0423338 / LONG: -103.9404159 (TVD: 9590 feet, MD: 9966 feet)
PPP: SESW / 0 FSL / 1590 FWL / TWSP: 26S / RANGE: 29E / SECTION: 12 / LAT: 32.0495738 / LONG: -103.9355265 (TVD: 9600 feet, MD: 12548 feet)
PPP: SENW / 2700 FSL / 1590 FWL / TWSP: 26S / RANGE: 29E / SECTION: 12 / LAT: 32.0568197 / LONG: -103.9403673 (TVD: 9610 feet, MD: 15236 feet)
BHL: NENW / 100 FNL / 1590 FWL / TWSP: 26S / RANGE: 29E / SECTION: 12 / LAT: 32.0639298 / LONG: -103.9403434 (TVD: 9620 feet, MD: 17822 feet)

BLM Point of Contact

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

CONFIDENTIAL

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.

CONFIDENTIAL

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 30-015-55254	² Pool Code 13354	³ Pool Name CORRAL CANYON SOUTH (BONE SPRING) OIL
⁴ Property Code 334299	⁵ Property Name FULLER 13/12 H3FC FED COM	⁶ Well Number 1H
⁷ GRID NO. 14744	⁸ Operator Name MEWBOURNE OIL COMPANY	⁹ Elevation 2994'

¹⁰ Surface Location

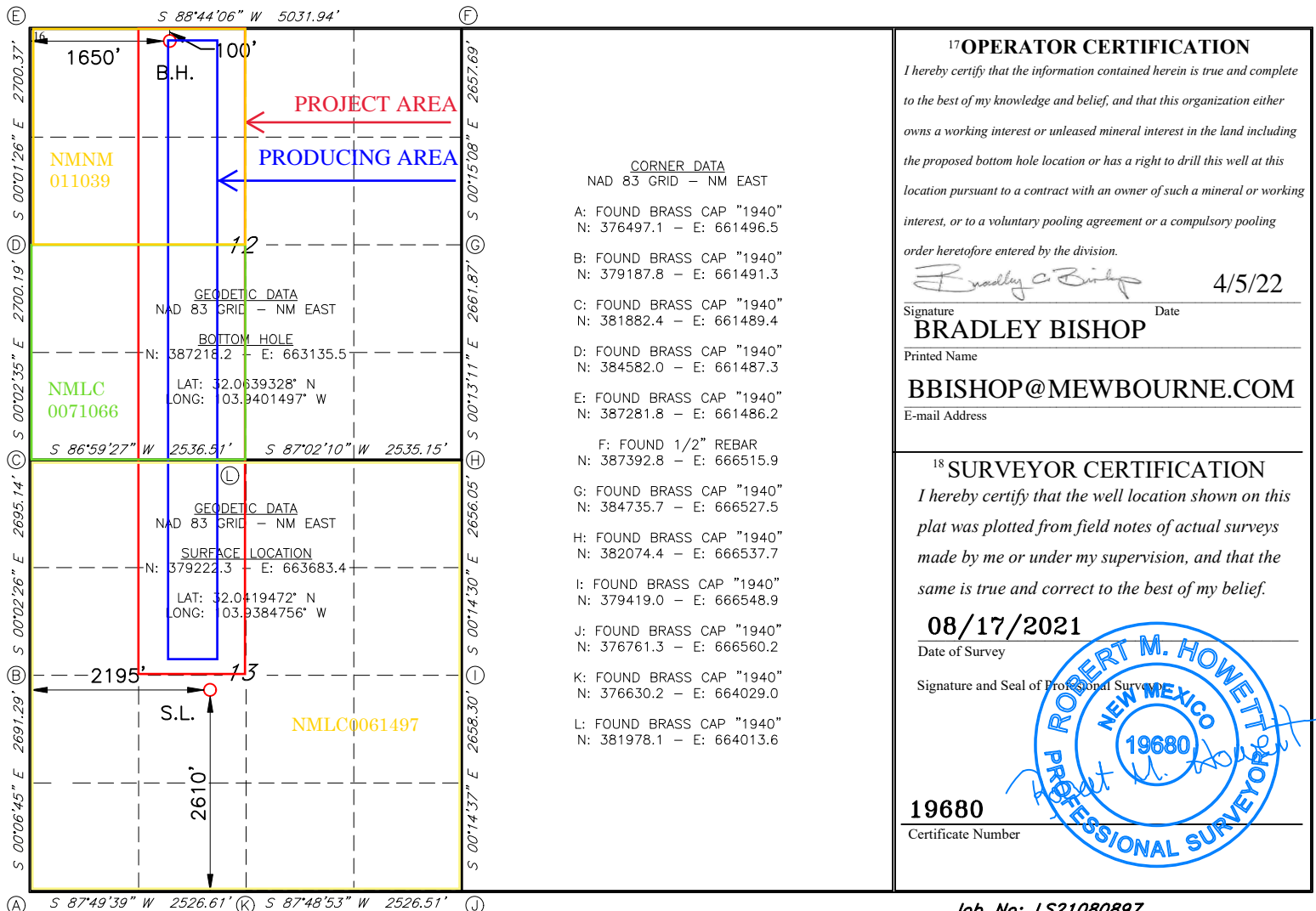
UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet From the	East/West line	County
K	13	26S	29E		2610	SOUTH	2195	WEST	EDDY

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
C	12	26S	29E		100	NORTH	1650	WEST	EDDY

¹² Dedicated Acres 240	¹³ Joint or Infill	¹⁴ Consolidation Code	¹⁵ Order No.
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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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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: 7/12/24

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
Fuller 13/12 H3FC Fed Com #1H		K 13 26S 29E	2610' FSL x 2195' FWL	1500	6000	6000

IV. Central Delivery Point Name: Fuller 13/12 H3FC Fed Com #1H [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
Fuller 13/12 H3FC Fed Com #1H		9/5/24	10/5/24	11/5/24	11/20/24	11/20/24

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:	<i>Bradley Bishop</i>
Printed Name:	BRADLEY BISHOP
Title:	REGULATORY MANAGER
E-mail Address:	BBISHOP@MEWBOURNE.COM
Date:	7/12/24
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 pressure venting and flaring, MOC will estimate the volume of vented or flared natural gas. Measuring equipment will conform to industry standards and will not be designed or equipped with a manifold that allows the diversion of natural gas around the metering element except for the sole purpose of inspecting and servicing the measurement equipment.

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



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

Drilling Plan Data Report

07/12/2024

APD ID: 10400084273

Submission Date: 04/22/2022

Highlighted data
reflects the most
recent changes

Operator Name: MEWBOURNE OIL COMPANY

Well Name: FULLER 13/12 H3FC FED COM

Well Number: 1H

Well Type: OIL WELL

Well Work Type: Drill

[Show Final Text](#)

Section 1 - Geologic Formations

Formation ID	Formation Name	Elevation	True Vertical	Measured Depth	Lithologies	Mineral Resources	Producing Formatio
13762364	UNKNOWN	3022	28	28	OTHER : Top soil	NONE	N
13762368	RUSTLER	2462	560	560	ANHYDRITE, DOLOMITE	USEABLE WATER	N
13762355	TOP SALT	2122	900	900	SALT	NONE	N
13762357	BOTTOM SALT	81	2941	2941	LIMESTONE	NATURAL GAS, OIL	N
13762358	LAMAR	-145	3167	3167	SANDSTONE	NATURAL GAS, OIL	N
13762365	BELL CANYON	-174	3196	3196	SANDSTONE	NATURAL GAS, OIL	N
13762360	CHERRY CANYON	-1057	4079	4079	SANDSTONE	NATURAL GAS, OIL	N
13762361	MANZANITA	-1233	4255	4255	SANDSTONE	NATURAL GAS, OIL	N
13762362	BRUSHY CANYON	-3706	6728	6728	SANDSTONE	NATURAL GAS, OIL	Y
13762370	BONE SPRING	-3938	6960	6960	LIMESTONE, SHALE	NATURAL GAS, OIL	N
13762371	BONE SPRING 1ST	-4858	7880	7880	SANDSTONE	NATURAL GAS, OIL	N
13762372	BONE SPRING 2ND	-5641	8663	8663	SANDSTONE	NATURAL GAS, OIL	Y

Section 2 - Blowout Prevention

Pressure Rating (PSI): 5M

Rating Depth: 17822

Equipment: Annular, Blind Ram, Pipe Ram

Requesting Variance? YES

Variance request: A variance is requested for the use of a flexible choke line from the BOP to Choke Manifold. Anchors are not required by manufacturer. A multi-bowl wellhead is being used. See attached schematic.

Operator Name: MEWBOURNE OIL COMPANY

Well Name: FULLER 13/12 H3FC FED COM

Well Number: 1H

Testing Procedure: BOP/BOPE will be tested by an independent service company to 250 psi low and the high pressure indicated above per Onshore Order 2 requirements. The System may be upgraded to a higher pressure but still tested to the working pressure listed in the table above. If the system is upgraded all the components installed will be functional and tested. Pipe rams will be operationally checked each 24 hour period. Blind rams will be operationally checked on each trip out of the hole. These checks will be noted on the daily tour sheets. Other accessories to the BOP equipment will include a Kelly cock and floor safety valve (inside BOP) and choke lines and choke manifold. See attached schematics.

Choke Diagram Attachment:

- Fuller_13_12_H3FC_Fed_Com_1H_5M_BOPE_Choke_Diagram_20220420111833.pdf
- Fuller_13_12_H3FC_Fed_Com_1H_Flex_Line_Specs_20220420111833.pdf
- Fuller_13_12_H3FC_Fed_Com_1H_Flex_Line_Specs_API_16C_20220420111833.pdf

BOP Diagram Attachment:

- Fuller_13_12_H3FC_Fed_Com_1H_5M_BOPE_Schematic_20220420111841.pdf
- Fuller_13_12_H3FC_Fed_Com_1H_5M_Mutli_Bowl_WH_20220420111841.pdf
- Mewbourne_Break_Testing_Variance_20240501160422.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	700	0	700	2994	2294	700	H-40	48	ST&C	2.52	5.66	DRY	4.49	DRY	7.54
2	INTERMEDIATE	12.25	9.625	NEW	API	N	0	3452	0	3452	2982	-458	3452	J-55	36	LT&C	1.13	1.96	DRY	2.94	DRY	3.66
3	INTERMEDIATE	12.25	9.625	NEW	API	N	3452	4200	3452	4200	-430	-1206	748	J-55	40	LT&C	1.18	1.81	DRY	17.38	DRY	21.06
4	PRODUCTION	8.75	7.0	NEW	API	N	0	9100	0	9052	2948	-6058	9100	P-110	26	LT&C	1.39	2.23	DRY	2.93	DRY	3.51
5	LINER	6.125	4.5	NEW	API	N	8900	17822	8852	9620	-5858	-6626	8922	P-110	13.5	LT&C	1.78	2.07	DRY	2.81	DRY	3.5

Casing Attachments

Operator Name: MEWBOURNE OIL COMPANY

Well Name: FULLER 13/12 H3FC FED COM

Well Number: 1H

Casing Attachments

Casing ID: 1	String	SURFACE
Inspection Document:		
Spec Document:		
Tapered String Spec:		
Casing Design Assumptions and Worksheet(s):		
Fuller_13_12_H3FC_Fed_Com_1H_Csg_Assumptions_20240501155831.pdf		
Casing ID: 2	String	INTERMEDIATE
Inspection Document:		
Spec Document:		
Tapered String Spec:		
Casing Design Assumptions and Worksheet(s):		
Fuller_13_12_H3FC_Fed_Com_1H_Csg_Assumptions_20240501155852.pdf		
Casing ID: 3	String	INTERMEDIATE
Inspection Document:		
Spec Document:		
Tapered String Spec:		
Casing Design Assumptions and Worksheet(s):		
Fuller_13_12_H3FC_Fed_Com_1H_Csg_Assumptions_20240501160029.pdf		

Operator Name: MEWBOURNE OIL COMPANY

Well Name: FULLER 13/12 H3FC FED COM

Well Number: 1H

Casing Attachments

Casing ID: 4StringPRODUCTION

Inspection Document:

Spec Document:

Tapered String Spec:

Casing Design Assumptions and Worksheet(s):

Fuller_13_12_H3FC_Fed_Com_1H_Csg_Assumptions_20240501155922.pdf

Casing ID: 5StringLINER

Inspection Document:

Spec Document:

Tapered String Spec:

Casing Design Assumptions and Worksheet(s):

Fuller_13_12_H3FC_Fed_Com_1H_Csg_Assumptions_20240501160019.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
SURFACE	Lead		0	363	340	2.12	12.5	721	100	Class C	Salt, Gel, Extender, LCM
SURFACE	Tail		363	700	200	1.34	14.8	268	100	Class C	Retarder
INTERMEDIATE	Lead	2940	0	2512	480	2.12	12.5	1018	25	Class C	Salt, Gel, Extender, LCM
INTERMEDIATE	Tail		2512	2940	100	1.34	14.8	134	25	Class C	Retarder
INTERMEDIATE	Lead	2940	2940	3392	110	2.12	12.5	233	25	Class C	Salt, Gel, Extender, LCM

Operator Name: MEWBOURNE OIL COMPANY**Well Name:** FULLER 13/12 H3FC FED COM**Well Number:** 1H

String Type	Lead/Tail	Stage Tool Depth	Top MD	Bottom MD	Quantity(sx)	Yield	Density	Cu Ft	Excess%	Cement type	Additives
INTERMEDIATE	Tail		3392	4200	200	1.34	14.8	268	25	Class C	Retarder
PRODUCTION	Lead	4300	3200	3409	30	2.12	12.5	64	25	Class C	Salt, Gel, Extender, LCM
PRODUCTION	Tail		3409	4300	100	1.34	14.8	472	25	Class C	Retarder
PRODUCTION	Lead	4300	4300	6013	210	2.12	12.5	445	25	Class C	Slat, Gelt, Extender, LCM
PRODUCTION	Tail		6013	9100	400	1.18	15.6	472	25	Class C	Retarder
LINER	Lead		8900	1782 2	570	1.85	13.5	1055	25	Class C	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:** Sufficient mud materials to maintain mud properties & meet minimum lost circulation and weight increase requirements will be kept on location at all times.**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	700	SPUD MUD	8.6	8.8							

Operator Name: MEWBOURNE OIL COMPANY**Well Name:** FULLER 13/12 H3FC FED COM**Well Number:** 1H

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
700	4200	SALT SATURATED	10	10							
4200	9100	WATER-BASED MUD	8.6	9.7							
9100	17822	OIL-BASED MUD	8.6	11							

Section 6 - Test, Logging, Coring

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

Will use GR/CNL logs from existing offset: Fuller 13/12 W1GB Fed Com #1H.

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

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

Coring operation description for the well:

None

Section 7 - Pressure

Anticipated Bottom Hole Pressure: 6253**Anticipated Surface Pressure:** 4136**Anticipated Bottom Hole Temperature(F):** 140**Anticipated abnormal pressures, temperatures, or potential geologic hazards?** NO**Describe:****Contingency Plans geohazards description:****Contingency Plans geohazards****Hydrogen Sulfide drilling operations plan required?** YES**Hydrogen sulfide drilling operations**

Fuller_13_12_H3FC_Fed_Com_1H_H2S_Plan_20220420114006.pdf

Operator Name: MEWBOURNE OIL COMPANY

Well Name: FULLER 13/12 H3FC FED COM

Well Number: 1H

Section 8 - Other Information

Proposed horizontal/directional/multi-lateral plan submission:

Fuller_13_12_H3_FC_Fed_Com_1H_Dir_Plan_20220420114030.pdf

Fuller_13_12_H3_FC_Fed_Com_1H_Dir_Plot_20220420114031.pdf

Other proposed operations facets description:

Other proposed operations facets attachment:

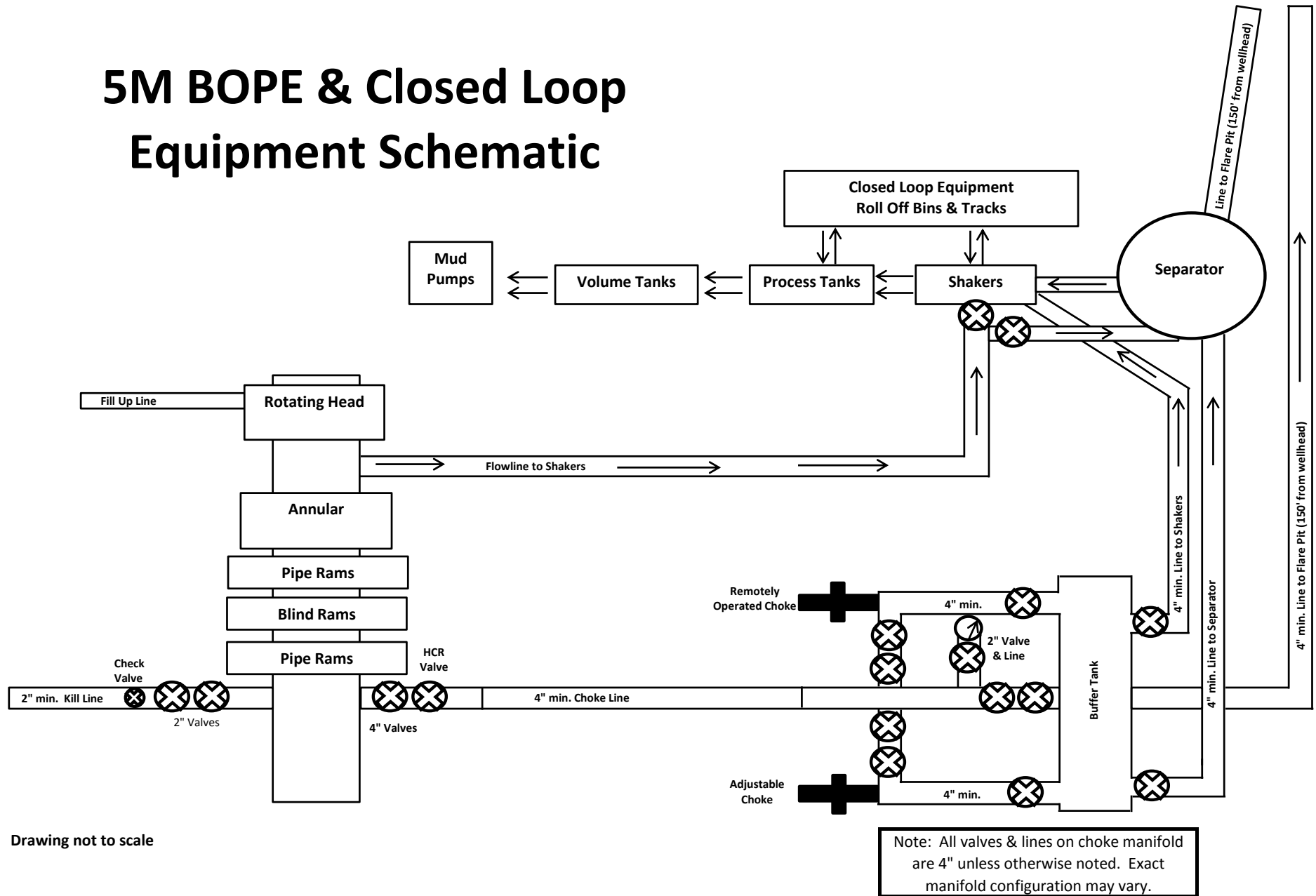
Fuller_13_12_H3FC_Fed_Com_1H_Add_Info_20220420114035.pdf

Other Variance attachment:

Mewbourne_Offline_Cementing_Variance_20240501160359.pdf

Mewbourne_Break_Testing_Variance_20240501160358.pdf

5M BOPE & Closed Loop Equipment Schematic



Drawing not to scale



GATES E & S NORTH AMERICA, INC.
134 44TH STREET
CORPUS CHRISTI, TEXAS 78405

PHONE: 361-887-9807
FAX: 361-887-0812
EMAIL: Tim.Cantu@gates.com
WEB: www.gates.com

10K CEMENTING ASSEMBLY PRESSURE TEST CERTIFICATE

Customer :	AUSTIN DISTRIBUTING	Test Date:	4/30/2015
Customer Ref. :	4060578	Hose Serial No.:	D-043015-7
Invoice No. :	500506	Created By:	JUSTIN CROPPER

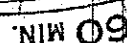
Product Description:	10K3.548.0CK4.1/1610KFLGE/E LE		
End Fitting 1 :	4 1/16 10K FLG	End Fitting 2 :	4 1/16 10K FLG
Gates Part No. :	4773-6290	Assembly Code :	L36554102914D-043015-7
Working Pressure :	10,000 PSI	Test Pressure :	15,000 PSI

Gates E & S North America, Inc. certifies that the following hose assembly has been tested to the Gates Oilfield Roughneck Agreement/Specification requirements and passed the 15 minute hydrostatic test per API Spec 7K/Q1, Fifth Edition, June 2010, Test pressure 9.6.7 and per Table 9 to 15,000 psi in accordance with this product number. Hose burst pressure 9.6.7.2 exceeds the minimum of 2.5 times the working pressure per Table 9.

Quality Manager :	QUALITY	Production:	PRODUCTION
Date :	4/30/2015	Date :	4/30/2015
Signature :	<i>Justin Cropper</i>	Signature :	<i>Justin Cropper</i>

Form PTC - 01 Rev.02







GATES ENGINEERING & SERVICES NORTH AMERICA
7603 Prairie Oak Dr.
Houston, TX 77086

PHONE: (281) 602 - 4119
FAX:
EMAIL: Troy.Schmidt@gates.com
WEB: www.gates.com

10K CHOKE & KILL ASSEMBLY PRESSURE TEST CERTIFICATE

Customer:	A-7 AUSTIN INC DBA AUSTIN HOSE	Test Date:	8/20/2018
Customer Ref.:	4101901	Hose Serial No.:	H-082018-10
Invoice No.:	511956	Created By:	Moose Naqvi
Product Description:	10KF3.035.0CK41/1610KFLGFXDxFLT L/E		
End Fitting 1:	4 1/16 in. Fixed Flange	End Fitting 2:	4 1/16 in. Float Flange
Gates Part No.:	68503010-9721632	Assembly Code:	L40695052218H-082018-10
Working Pressure:	10,000 psi.	Test Pressure:	15,000 psi.

Gates Engineering & Services North America certifies that the following hose assembly has successfully passed all pressure testing requirements set forth in Gates specifications: GTS-04-052 (for 5K assemblies) or GTS-04-053 (10K assemblies), which include reference to Specification API 16C (2nd Edition); sections 7.5.4, 7.5.9, and 10.8.7. A test graph will accompany this test certificate to illustrate conformity to test requirements.

Quality: **QUALITY**
Date : **8/20/2018**
Signature : *Moose Naqvi*

Production: **PRODUCTION**
Date : **8/20/2018**
Signature : *[Signature]*

Form PTC - 01 Rev.0 2

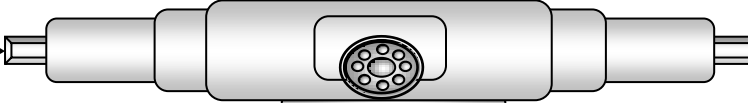


Hydril "GK"
13 5/8" 5M

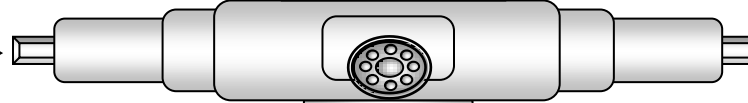


Hydril "GK"

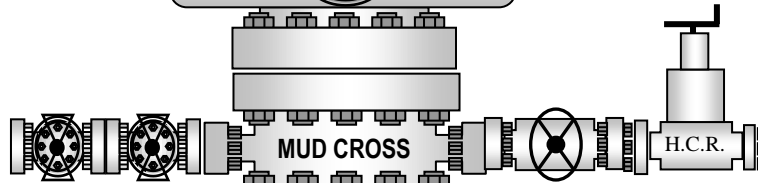
Cameron Type U
13 5/8" 5M



4 1/2" x 5 7/8" VBR

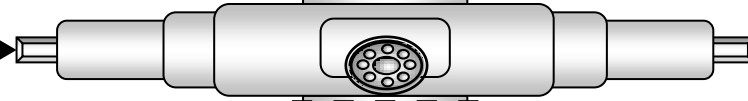


BLIND RAMS



MUD CROSS

H.C.R.



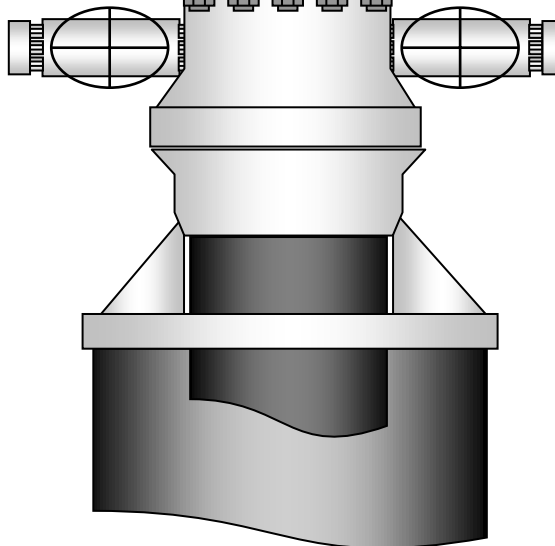
7" RAMS



13 5/8" 5M

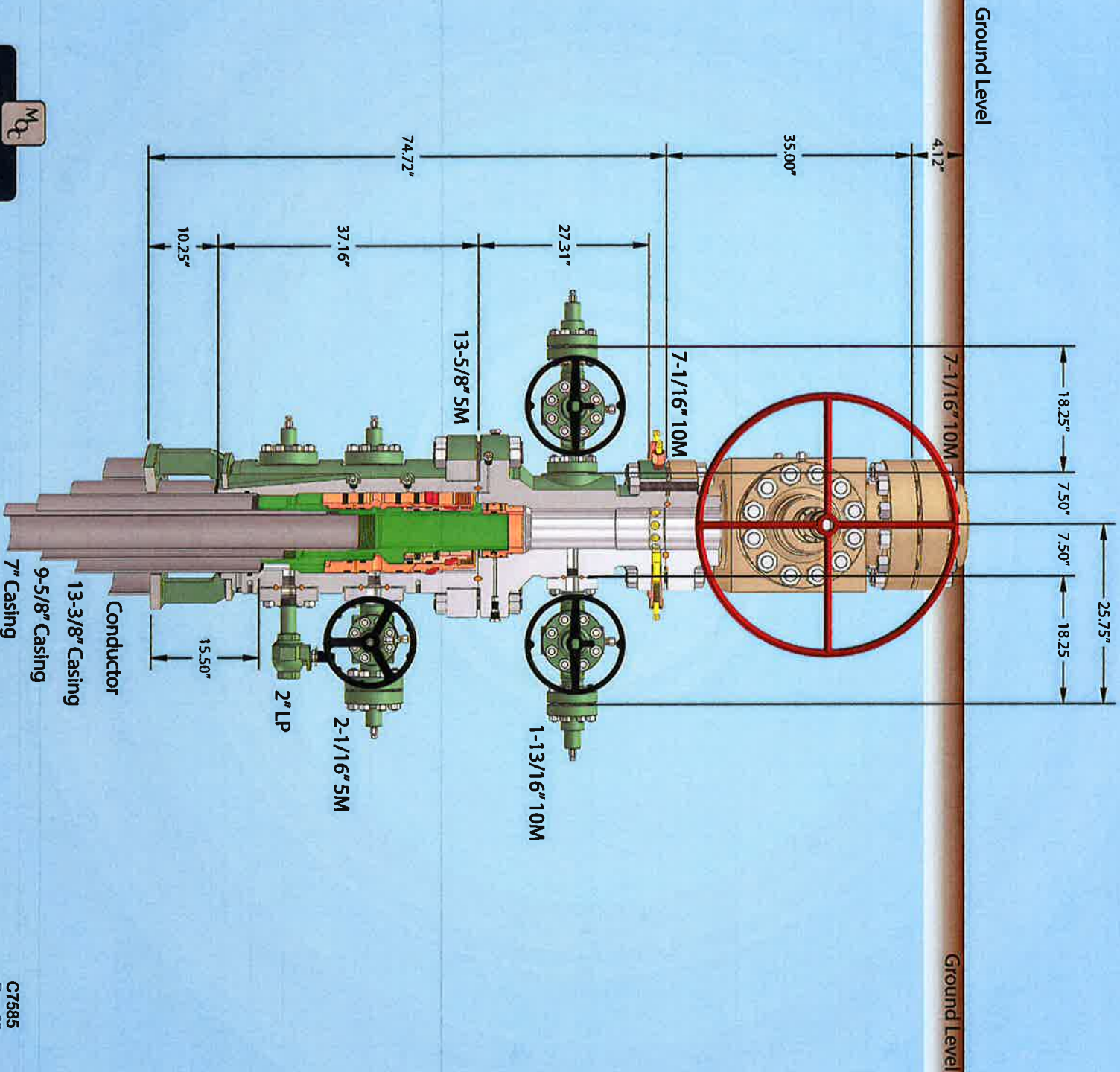
13 5/8" 5M

13 5/8" 5M





13-5/8" MN-DS Wellhead System



Engineering 537' conductor cut-off 79

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

C7585
Rev. 02



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.



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

Barriers

Before Nipple Down:

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

After Nipple Down:

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

Summary

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

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

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

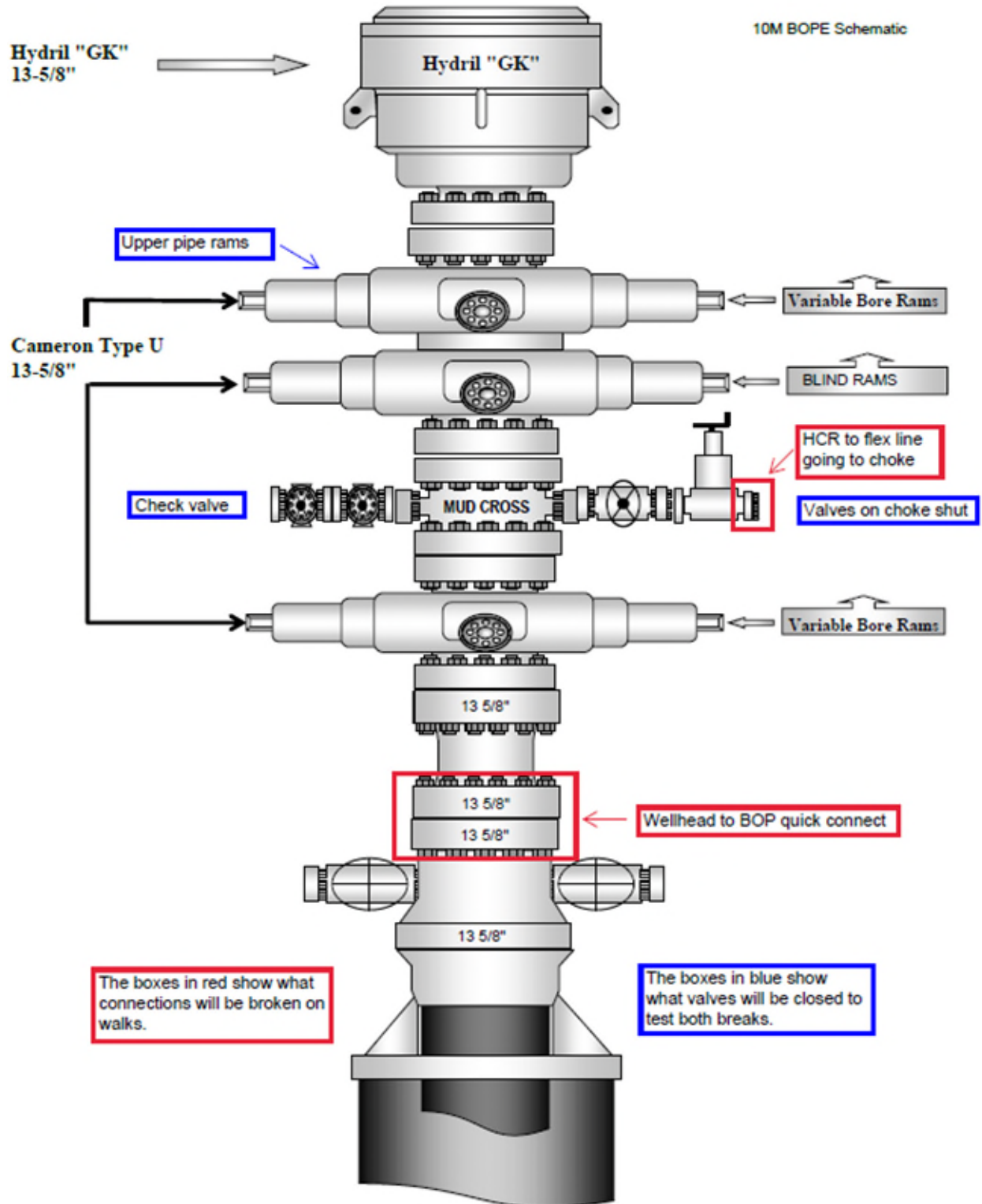


Figure 1. BOP diagram



5M BOPE & Closed Loop Equipment Schematic

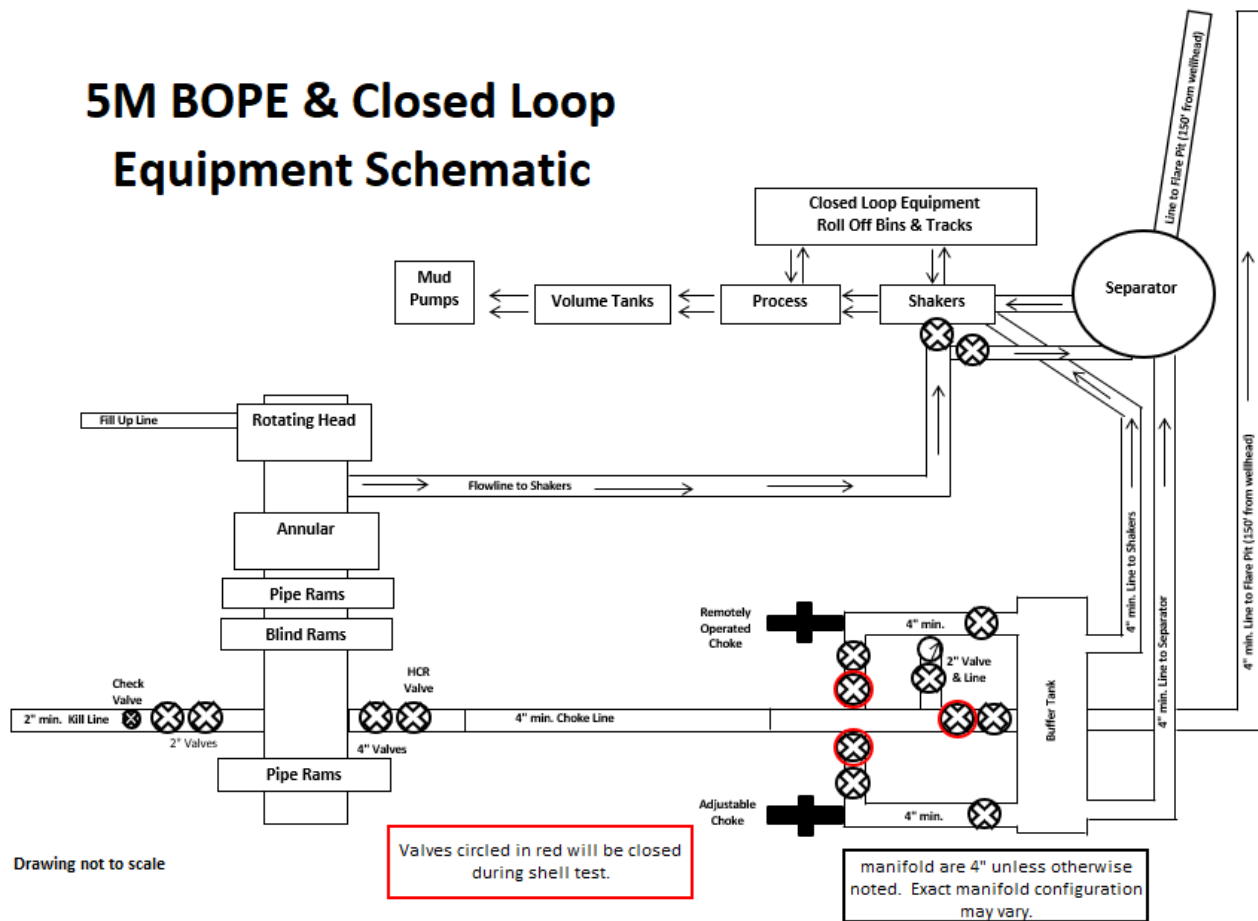


Figure 2. BOPE diagram

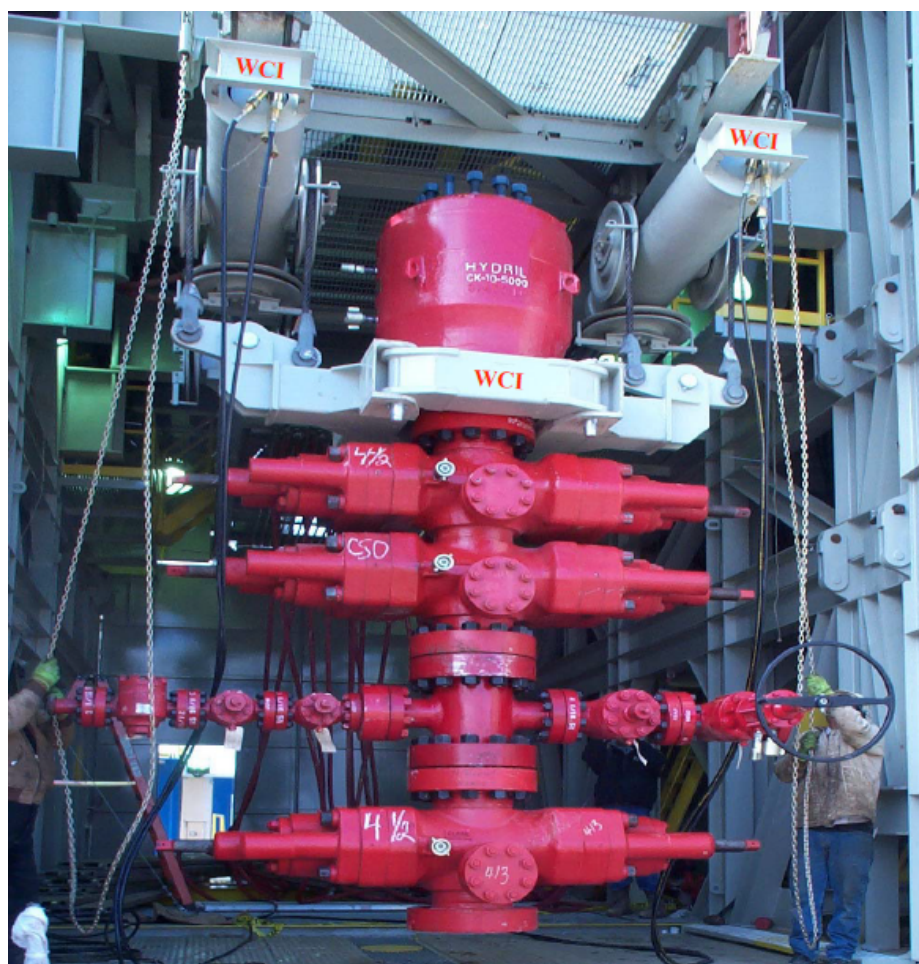


Figure 3. BOP handling system



Figure 4. BOP handling system

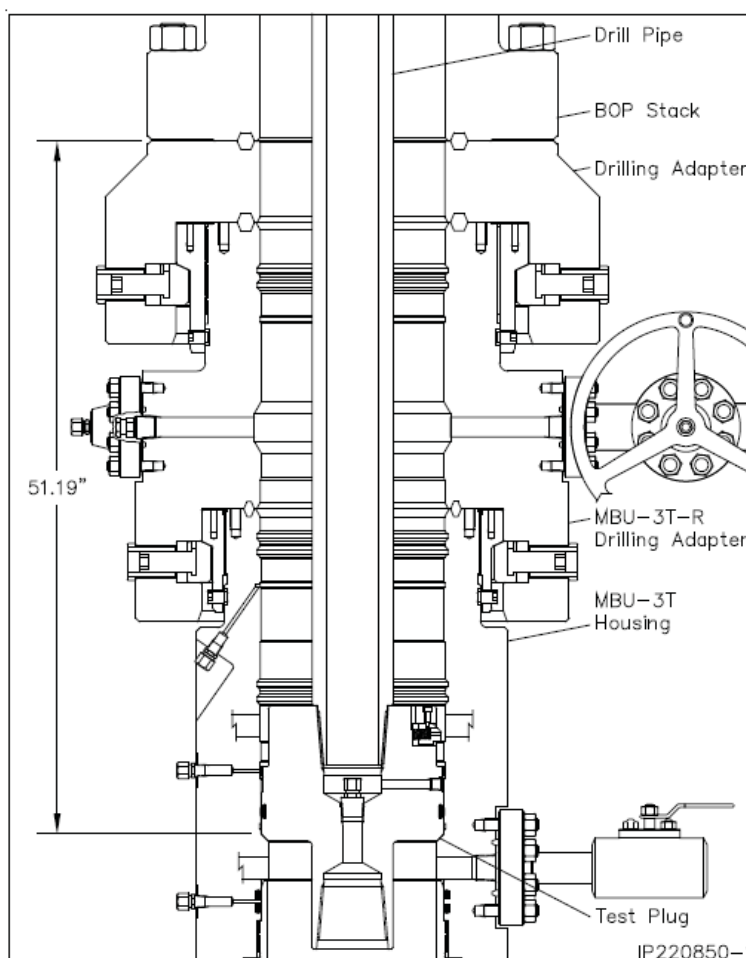


Figure 5. Cactus 5M wellhead with BOP quick connect

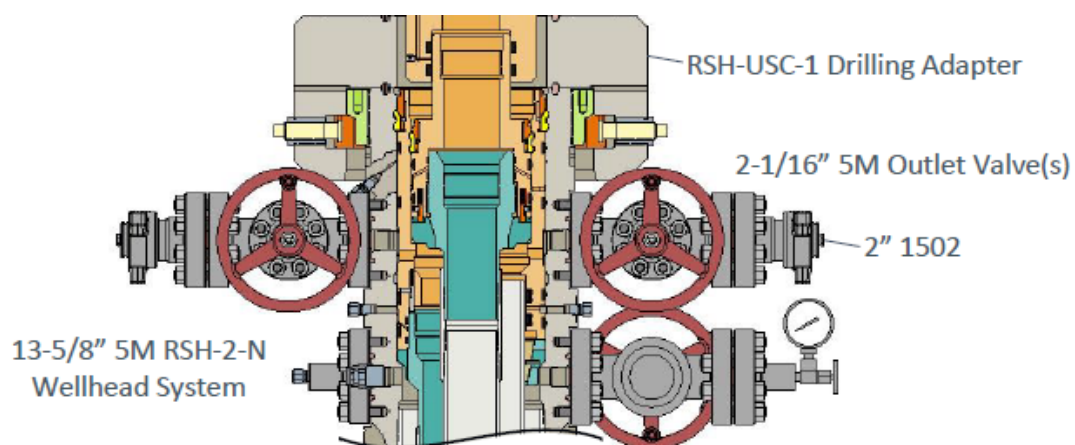


Figure 6. Vault 5M wellhead with BOP quick connect

Mewbourne Oil Company, Fuller 13/12 H3FC Fed Com #1H
Sec 13, T26S, R29E
SHL: 2610' FSL & 2195' FWL, Sec 13
BHL: 100' FNL & 1590' FWL, Sec 12

Casing Program

Hole Size	Casing Interval		Csg. Size	Weight (lbs)	Grade	Conn.	SF Collapse	SF Burst	SF Jt Tension	SF Body Tension
	From	To								
17.5"	0'	700'	13.375"	48	H40	STC	2.52	5.66	4.49	7.54
12.25"	0'	3452'	9.625"	36	J55	LTC	1.13	1.96	2.94	3.66
12.25"	3452'	4200'	9.625"	40	J55	LTC	1.18	1.81	17.38	21.06
8.75"	0'	9100'	7"	26	P110	LTC	1.39	2.23	2.93	3.51
6.125"	8900'	17822'	4.5"	13.5	P110	LTC	1.78	2.07	2.81	3.50
BLM Minimum Safety Factor							1.125	1	1.6 Dry 1.8 Wet	1.6 Dry 1.8 Wet

All casing strings will be tested in accordance with Onshore Oil and Gas Order #2 III.B.1.h
 Must have table for contingency casing

	Y or N
Is casing new? If used, attach certification as required in Onshore Order #1	Y
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.	
Is well located in SOPA but not in R-111-P?	N
If yes, are the first 2 strings cemented to surface and 3 rd string cement tied back 500' into previous casing?	
Is well located in R-111-P and SOPA?	N
If yes, are the first three strings cemented to surface?	
Is 2 nd string set 100' to 600' below the base of salt?	
Is well located in high Cave/Karst?	N
If yes, are there two strings cemented to surface?	
(For 2 string wells) If yes, is there a contingency casing if lost circulation occurs?	
Is well located in critical Cave/Karst?	N
If yes, are there three strings cemented to surface?	

Mewbourne Oil Company

Eddy County, New Mexico NAD 83

Fuller 13/12 H3FC Fed Com #1H

Sec 13, T26S, R29E

SHL: 2610' FSL & 2195' FWL, Sec 13

BHL: 100' FNL & 1590' FWL, Sec 12

Plan: Design #1

Standard Planning Report

18 April, 2022

Planning Report

Database:	Hobbs	Local Co-ordinate Reference:	Site Fuller 13/12 H3FC Fed Com #1H
Company:	Mewbourne Oil Company	TVD Reference:	WELL @ 3022.0usft (Original Well Elev)
Project:	Eddy County, New Mexico NAD 83	MD Reference:	WELL @ 3022.0usft (Original Well Elev)
Site:	Fuller 13/12 H3FC Fed Com #1H	North Reference:	Grid
Well:	Sec 13, T26S, R29E	Survey Calculation Method:	Minimum Curvature
Wellbore:	BHL: 100' FNL & 1590' FWL, Sec 12		
Design:	Design #1		

Project	Eddy County, New Mexico NAD 83		
Map System:	US State Plane 1983	System Datum:	Ground Level
Geo Datum:	North American Datum 1983		
Map Zone:	New Mexico Eastern Zone		

Site		Fuller 13/12 H3FC Fed Com #1H									
Site Position:		Northing:		379,222.30 usft		Latitude:		32.0419472			
From:		Map		Easting:		663,683.40 usft		Longitude:		-103.9384754	
Position Uncertainty:		0.0 usft		Slot Radius:		13-3/16 "					

Well	Sec 13, T26S, R29E					
Well Position	+N/-S	0.0 usft	Northing:	379,222.30 usft	Latitude:	32.0419472
	+E/-W	0.0 usft	Easting:	663,683.40 usft	Longitude:	-103.9384754
Position Uncertainty	0.0 usft	Wellhead Elevation:	3,022.0 usft	Ground Level:	2,994.0 usft	
Grid Convergence:	0.21 °					

Wellbore	BHL: 100' FNL & 1590' FWL, Sec 12				
Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	IGRF2010	12/31/2014	7.30	59.87	48,091.10719180

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	355.65

Plan Survey Tool Program	Date	4/18/2022		
Depth From (usft)	Depth To (usft)	Survey (Wellbore)	Tool Name	Remarks
1	0.0	17,822.3	Design #1 (BHL: 100' FNL & 1590	

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	
3,100.0	0.00	0.00	3,100.0	0.0	0.0	0.00	0.00	0.00	0.00	
3,481.9	7.64	234.11	3,480.8	-14.9	-20.6	2.00	2.00	0.00	234.11	
8,683.5	7.64	234.11	8,636.2	-420.2	-580.7	0.00	0.00	0.00	0.00	
9,065.4	0.00	0.00	9,017.0	-435.1	-601.3	2.00	-2.00	0.00	180.00	KOP: 2218' FSL & 15'
9,963.3	89.78	359.96	9,590.0	135.7	-601.8	10.00	10.00	0.00	-0.04	
17,822.3	89.78	359.96	9,620.0	7,994.6	-607.9	0.00	0.00	0.00	0.00	BHL/LTP: 100' FNL &

Planning Report

Database:	Hobbs	Local Co-ordinate Reference:	Site Fuller 13/12 H3FC Fed Com #1H
Company:	Mewbourne Oil Company	TVD Reference:	WELL @ 3022.0usft (Original Well Elev)
Project:	Eddy County, New Mexico NAD 83	MD Reference:	WELL @ 3022.0usft (Original Well Elev)
Site:	Fuller 13/12 H3FC Fed Com #1H	North Reference:	Grid
Well:	Sec 13, T26S, R29E	Survey Calculation Method:	Minimum Curvature
Wellbore:	BHL: 100' FNL & 1590' FWL, Sec 12		
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: 2610' FSL & 2195' FWL (13)									
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
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2,000.0	0.00	0.00	2,000.0	0.0	0.0	0.0	0.00	0.00	0.00
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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	2.00	234.11	3,200.0	-1.0	-1.4	-0.9	2.00	2.00	0.00
3,300.0	4.00	234.11	3,299.8	-4.1	-5.7	-3.7	2.00	2.00	0.00
3,400.0	6.00	234.11	3,399.5	-9.2	-12.7	-8.2	2.00	2.00	0.00
3,481.9	7.64	234.11	3,480.8	-14.9	-20.6	-13.3	2.00	2.00	0.00
3,500.0	7.64	234.11	3,498.7	-16.3	-22.5	-14.6	0.00	0.00	0.00
3,600.0	7.64	234.11	3,597.8	-24.1	-33.3	-21.5	0.00	0.00	0.00
3,700.0	7.64	234.11	3,696.9	-31.9	-44.1	-28.5	0.00	0.00	0.00
3,800.0	7.64	234.11	3,796.0	-39.7	-54.8	-35.4	0.00	0.00	0.00
3,900.0	7.64	234.11	3,895.2	-47.5	-65.6	-42.4	0.00	0.00	0.00
4,000.0	7.64	234.11	3,994.3	-55.3	-76.4	-49.3	0.00	0.00	0.00
4,100.0	7.64	234.11	4,093.4	-63.1	-87.2	-56.3	0.00	0.00	0.00
4,200.0	7.64	234.11	4,192.5	-70.9	-97.9	-63.2	0.00	0.00	0.00
4,300.0	7.64	234.11	4,291.6	-78.6	-108.7	-70.2	0.00	0.00	0.00
4,400.0	7.64	234.11	4,390.7	-86.4	-119.5	-77.1	0.00	0.00	0.00
4,500.0	7.64	234.11	4,489.8	-94.2	-130.2	-84.1	0.00	0.00	0.00
4,600.0	7.64	234.11	4,588.9	-102.0	-141.0	-91.0	0.00	0.00	0.00
4,700.0	7.64	234.11	4,688.1	-109.8	-151.8	-98.0	0.00	0.00	0.00
4,800.0	7.64	234.11	4,787.2	-117.6	-162.5	-104.9	0.00	0.00	0.00
4,900.0	7.64	234.11	4,886.3	-125.4	-173.3	-111.9	0.00	0.00	0.00
5,000.0	7.64	234.11	4,985.4	-133.2	-184.1	-118.9	0.00	0.00	0.00
5,100.0	7.64	234.11	5,084.5	-141.0	-194.8	-125.8	0.00	0.00	0.00

Planning Report

Database:	Hobbs	Local Co-ordinate Reference:	Site Fuller 13/12 H3FC Fed Com #1H
Company:	Mewbourne Oil Company	TVD Reference:	WELL @ 3022.0usft (Original Well Elev)
Project:	Eddy County, New Mexico NAD 83	MD Reference:	WELL @ 3022.0usft (Original Well Elev)
Site:	Fuller 13/12 H3FC Fed Com #1H	North Reference:	Grid
Well:	Sec 13, T26S, R29E	Survey Calculation Method:	Minimum Curvature
Wellbore:	BHL: 100' FNL & 1590' FWL, Sec 12		
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)
5,200.0	7.64	234.11	5,183.6	-148.8	-205.6	-132.8	0.00	0.00	0.00
5,300.0	7.64	234.11	5,282.7	-156.6	-216.4	-139.7	0.00	0.00	0.00
5,400.0	7.64	234.11	5,381.8	-164.4	-227.1	-146.7	0.00	0.00	0.00
5,500.0	7.64	234.11	5,481.0	-172.2	-237.9	-153.6	0.00	0.00	0.00
5,600.0	7.64	234.11	5,580.1	-179.9	-248.7	-160.6	0.00	0.00	0.00
5,700.0	7.64	234.11	5,679.2	-187.7	-259.4	-167.5	0.00	0.00	0.00
5,800.0	7.64	234.11	5,778.3	-195.5	-270.2	-174.5	0.00	0.00	0.00
5,900.0	7.64	234.11	5,877.4	-203.3	-281.0	-181.4	0.00	0.00	0.00
6,000.0	7.64	234.11	5,976.5	-211.1	-291.8	-188.4	0.00	0.00	0.00
6,100.0	7.64	234.11	6,075.6	-218.9	-302.5	-195.3	0.00	0.00	0.00
6,200.0	7.64	234.11	6,174.8	-226.7	-313.3	-202.3	0.00	0.00	0.00
6,300.0	7.64	234.11	6,273.9	-234.5	-324.1	-209.2	0.00	0.00	0.00
6,400.0	7.64	234.11	6,373.0	-242.3	-334.8	-216.2	0.00	0.00	0.00
6,500.0	7.64	234.11	6,472.1	-250.1	-345.6	-223.2	0.00	0.00	0.00
6,600.0	7.64	234.11	6,571.2	-257.9	-356.4	-230.1	0.00	0.00	0.00
6,700.0	7.64	234.11	6,670.3	-265.7	-367.1	-237.1	0.00	0.00	0.00
6,800.0	7.64	234.11	6,769.4	-273.5	-377.9	-244.0	0.00	0.00	0.00
6,900.0	7.64	234.11	6,868.5	-281.2	-388.7	-251.0	0.00	0.00	0.00
7,000.0	7.64	234.11	6,967.7	-289.0	-399.4	-257.9	0.00	0.00	0.00
7,100.0	7.64	234.11	7,066.8	-296.8	-410.2	-264.9	0.00	0.00	0.00
7,200.0	7.64	234.11	7,165.9	-304.6	-421.0	-271.8	0.00	0.00	0.00
7,300.0	7.64	234.11	7,265.0	-312.4	-431.7	-278.8	0.00	0.00	0.00
7,400.0	7.64	234.11	7,364.1	-320.2	-442.5	-285.7	0.00	0.00	0.00
7,500.0	7.64	234.11	7,463.2	-328.0	-453.3	-292.7	0.00	0.00	0.00
7,600.0	7.64	234.11	7,562.3	-335.8	-464.0	-299.6	0.00	0.00	0.00
7,700.0	7.64	234.11	7,661.4	-343.6	-474.8	-306.6	0.00	0.00	0.00
7,800.0	7.64	234.11	7,760.6	-351.4	-485.6	-313.5	0.00	0.00	0.00
7,900.0	7.64	234.11	7,859.7	-359.2	-496.4	-320.5	0.00	0.00	0.00
8,000.0	7.64	234.11	7,958.8	-367.0	-507.1	-327.5	0.00	0.00	0.00
8,100.0	7.64	234.11	8,057.9	-374.8	-517.9	-334.4	0.00	0.00	0.00
8,200.0	7.64	234.11	8,157.0	-382.5	-528.7	-341.4	0.00	0.00	0.00
8,300.0	7.64	234.11	8,256.1	-390.3	-539.4	-348.3	0.00	0.00	0.00
8,400.0	7.64	234.11	8,355.2	-398.1	-550.2	-355.3	0.00	0.00	0.00
8,500.0	7.64	234.11	8,454.3	-405.9	-561.0	-362.2	0.00	0.00	0.00
8,600.0	7.64	234.11	8,553.5	-413.7	-571.7	-369.2	0.00	0.00	0.00
8,683.5	7.64	234.11	8,636.2	-420.2	-580.7	-375.0	0.00	0.00	0.00
8,700.0	7.31	234.11	8,652.6	-421.5	-582.5	-376.1	2.00	-2.00	0.00
8,800.0	5.31	234.11	8,752.0	-427.9	-591.4	-381.8	2.00	-2.00	0.00
8,900.0	3.31	234.11	8,851.7	-432.3	-597.5	-385.8	2.00	-2.00	0.00
9,000.0	1.31	234.11	8,951.6	-434.7	-600.7	-387.9	2.00	-2.00	0.00
9,065.4	0.00	0.00	9,017.0	-435.1	-601.3	-388.3	2.00	-2.00	0.00
KOP: 2218' FSL & 1590' FWL (13)									
9,100.0	3.46	359.96	9,051.6	-434.1	-601.3	-387.2	10.00	10.00	0.00
9,150.0	8.46	359.96	9,101.3	-428.9	-601.3	-382.1	10.00	10.00	0.00
9,200.0	13.46	359.96	9,150.4	-419.4	-601.3	-372.6	10.00	10.00	0.00
9,250.0	18.46	359.96	9,198.4	-405.6	-601.3	-358.9	10.00	10.00	0.00
9,300.0	23.46	359.96	9,245.1	-387.8	-601.4	-341.1	10.00	10.00	0.00
9,350.0	28.46	359.96	9,290.0	-365.9	-601.4	-319.2	10.00	10.00	0.00
9,400.0	33.46	359.96	9,332.9	-340.2	-601.4	-293.6	10.00	10.00	0.00
9,450.0	38.46	359.96	9,373.4	-310.8	-601.4	-264.3	10.00	10.00	0.00
9,500.0	43.45	359.96	9,411.1	-278.1	-601.4	-231.7	10.00	10.00	0.00
9,550.0	48.45	359.96	9,445.9	-242.1	-601.5	-195.8	10.00	10.00	0.00
9,600.0	53.45	359.96	9,477.3	-203.3	-601.5	-157.1	10.00	10.00	0.00

Planning Report

Database:	Hobbs	Local Co-ordinate Reference:	Site Fuller 13/12 H3FC Fed Com #1H
Company:	Mewbourne Oil Company	TVD Reference:	WELL @ 3022.0usft (Original Well Elev)
Project:	Eddy County, New Mexico NAD 83	MD Reference:	WELL @ 3022.0usft (Original Well Elev)
Site:	Fuller 13/12 H3FC Fed Com #1H	North Reference:	Grid
Well:	Sec 13, T26S, R29E	Survey Calculation Method:	Minimum Curvature
Wellbore:	BHL: 100' FNL & 1590' FWL, Sec 12		
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)
9,650.0	58.45	359.96	9,505.3	-161.9	-601.5	-115.8	10.00	10.00	0.00
9,700.0	63.45	359.96	9,529.6	-118.2	-601.6	-72.3	10.00	10.00	0.00
9,750.0	68.45	359.96	9,550.0	-72.6	-601.6	-26.7	10.00	10.00	0.00
9,800.0	73.45	359.96	9,566.3	-25.3	-601.6	20.4	10.00	10.00	0.00
9,850.0	78.45	359.96	9,578.4	23.2	-601.7	68.7	10.00	10.00	0.00
9,900.0	83.45	359.96	9,586.3	72.5	-601.7	118.0	10.00	10.00	0.00
9,950.0	88.45	359.96	9,589.8	122.4	-601.8	167.7	10.00	10.00	0.00
9,963.3	89.78	359.96	9,590.0	135.7	-601.8	180.9	10.00	10.00	0.00
9,966.0	89.78	359.96	9,590.0	138.4	-601.8	183.7	0.00	0.00	0.00
LP/FTP/PPP1: 2582' FNL & 1590' FWL (13)									
10,000.0	89.78	359.96	9,590.1	172.4	-601.8	217.5	0.00	0.00	0.00
10,100.0	89.78	359.96	9,590.5	272.4	-601.9	317.2	0.00	0.00	0.00
10,200.0	89.78	359.96	9,590.9	372.4	-602.0	417.0	0.00	0.00	0.00
10,300.0	89.78	359.96	9,591.3	472.4	-602.0	516.7	0.00	0.00	0.00
10,400.0	89.78	359.96	9,591.7	572.4	-602.1	616.4	0.00	0.00	0.00
10,500.0	89.78	359.96	9,592.0	672.4	-602.2	716.1	0.00	0.00	0.00
10,600.0	89.78	359.96	9,592.4	772.4	-602.3	815.8	0.00	0.00	0.00
10,700.0	89.78	359.96	9,592.8	872.4	-602.3	915.5	0.00	0.00	0.00
10,800.0	89.78	359.96	9,593.2	972.4	-602.4	1,015.3	0.00	0.00	0.00
10,900.0	89.78	359.96	9,593.6	1,072.4	-602.5	1,115.0	0.00	0.00	0.00
11,000.0	89.78	359.96	9,594.0	1,172.4	-602.6	1,214.7	0.00	0.00	0.00
11,100.0	89.78	359.96	9,594.3	1,272.4	-602.7	1,314.4	0.00	0.00	0.00
11,200.0	89.78	359.96	9,594.7	1,372.4	-602.7	1,414.1	0.00	0.00	0.00
11,300.0	89.78	359.96	9,595.1	1,472.4	-602.8	1,513.9	0.00	0.00	0.00
11,400.0	89.78	359.96	9,595.5	1,572.4	-602.9	1,613.6	0.00	0.00	0.00
11,500.0	89.78	359.96	9,595.9	1,672.4	-603.0	1,713.3	0.00	0.00	0.00
11,600.0	89.78	359.96	9,596.2	1,772.4	-603.0	1,813.0	0.00	0.00	0.00
11,700.0	89.78	359.96	9,596.6	1,872.4	-603.1	1,912.7	0.00	0.00	0.00
11,800.0	89.78	359.96	9,597.0	1,972.4	-603.2	2,012.4	0.00	0.00	0.00
11,900.0	89.78	359.96	9,597.4	2,072.4	-603.3	2,112.2	0.00	0.00	0.00
12,000.0	89.78	359.96	9,597.8	2,172.4	-603.4	2,211.9	0.00	0.00	0.00
12,100.0	89.78	359.96	9,598.2	2,272.4	-603.4	2,311.6	0.00	0.00	0.00
12,200.0	89.78	359.96	9,598.5	2,372.4	-603.5	2,411.3	0.00	0.00	0.00
12,300.0	89.78	359.96	9,598.9	2,472.4	-603.6	2,511.0	0.00	0.00	0.00
12,400.0	89.78	359.96	9,599.3	2,572.4	-603.7	2,610.7	0.00	0.00	0.00
12,500.0	89.78	359.96	9,599.7	2,672.4	-603.7	2,710.5	0.00	0.00	0.00
12,548.0	89.78	359.96	9,599.9	2,720.4	-603.8	2,758.3	0.00	0.00	0.00
PPP2: 0' FSL & 1590' FWL (12)									
12,600.0	89.78	359.96	9,600.1	2,772.4	-603.8	2,810.2	0.00	0.00	0.00
12,700.0	89.78	359.96	9,600.4	2,872.4	-603.9	2,909.9	0.00	0.00	0.00
12,800.0	89.78	359.96	9,600.8	2,972.4	-604.0	3,009.6	0.00	0.00	0.00
12,900.0	89.78	359.96	9,601.2	3,072.4	-604.1	3,109.3	0.00	0.00	0.00
13,000.0	89.78	359.96	9,601.6	3,172.4	-604.1	3,209.0	0.00	0.00	0.00
13,100.0	89.78	359.96	9,602.0	3,272.4	-604.2	3,308.8	0.00	0.00	0.00
13,200.0	89.78	359.96	9,602.4	3,372.4	-604.3	3,408.5	0.00	0.00	0.00
13,300.0	89.78	359.96	9,602.7	3,472.4	-604.4	3,508.2	0.00	0.00	0.00
13,400.0	89.78	359.96	9,603.1	3,572.4	-604.4	3,607.9	0.00	0.00	0.00
13,500.0	89.78	359.96	9,603.5	3,672.4	-604.5	3,707.6	0.00	0.00	0.00
13,600.0	89.78	359.96	9,603.9	3,772.4	-604.6	3,807.4	0.00	0.00	0.00
13,700.0	89.78	359.96	9,604.3	3,872.4	-604.7	3,907.1	0.00	0.00	0.00
13,800.0	89.78	359.96	9,604.6	3,972.4	-604.8	4,006.8	0.00	0.00	0.00
13,900.0	89.78	359.96	9,605.0	4,072.4	-604.8	4,106.5	0.00	0.00	0.00
14,000.0	89.78	359.96	9,605.4	4,172.4	-604.9	4,206.2	0.00	0.00	0.00
14,100.0	89.78	359.96	9,605.8	4,272.4	-605.0	4,305.9	0.00	0.00	0.00

Planning Report

Database:	Hobbs	Local Co-ordinate Reference:	Site Fuller 13/12 H3FC Fed Com #1H
Company:	Mewbourne Oil Company	TVD Reference:	WELL @ 3022.0usft (Original Well Elev)
Project:	Eddy County, New Mexico NAD 83	MD Reference:	WELL @ 3022.0usft (Original Well Elev)
Site:	Fuller 13/12 H3FC Fed Com #1H	North Reference:	Grid
Well:	Sec 13, T26S, R29E	Survey Calculation Method:	Minimum Curvature
Wellbore:	BHL: 100' FNL & 1590' FWL, Sec 12		
Design:	Design #1		

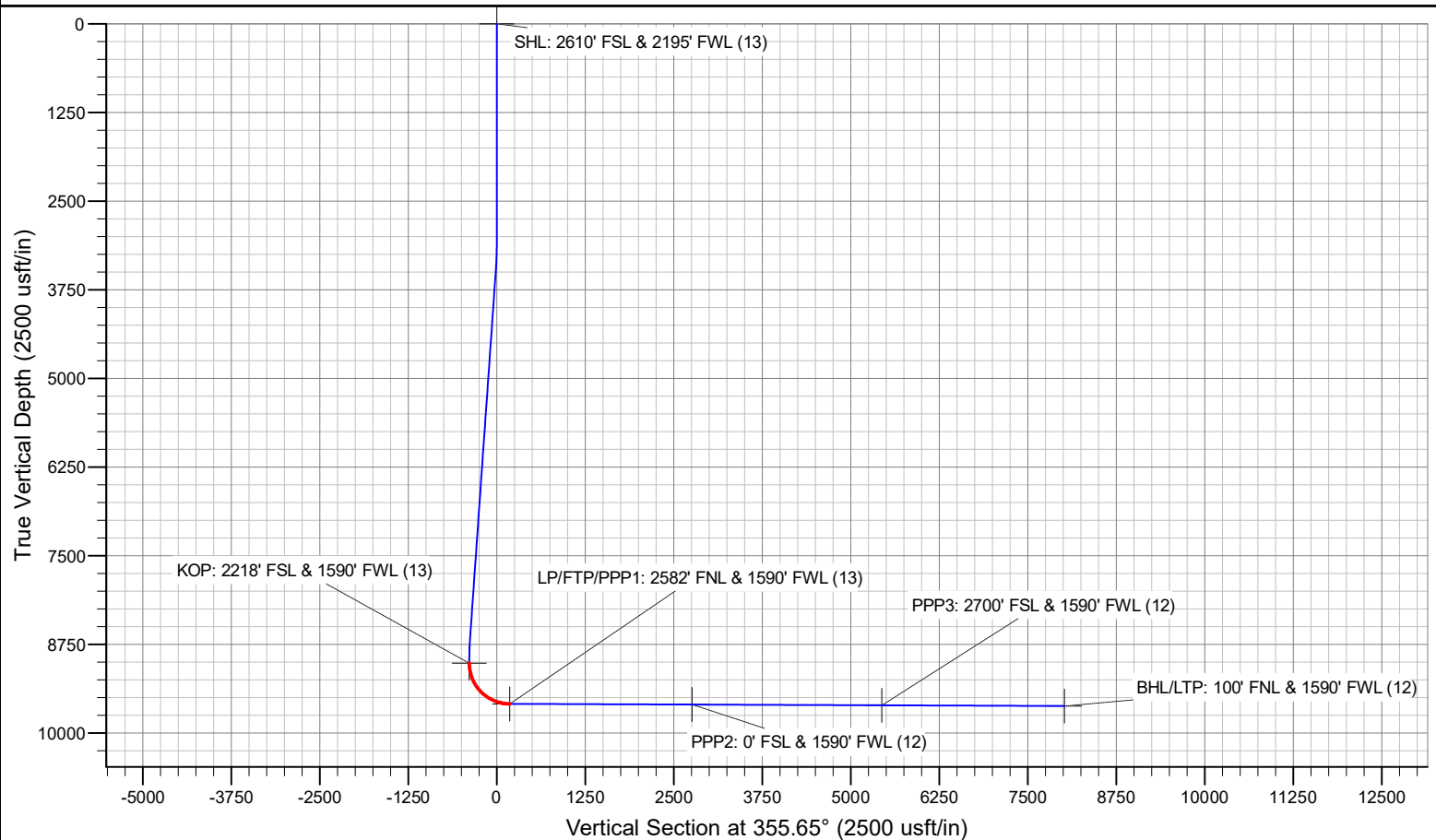
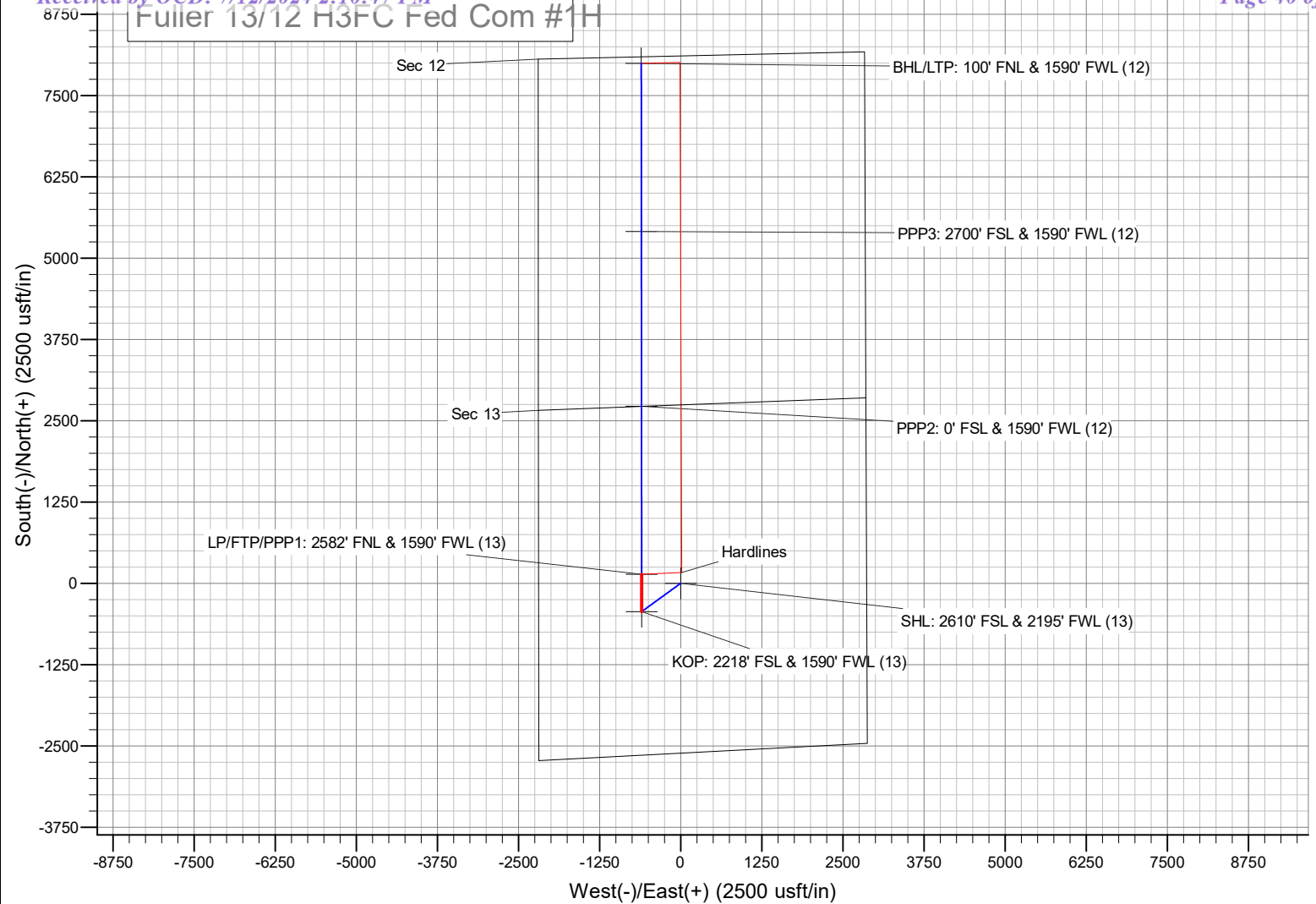
Planned Survey										
Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)	
14,200.0	89.78	359.96	9,606.2	4,372.4	-605.1	4,405.7	0.00	0.00	0.00	
14,300.0	89.78	359.96	9,606.6	4,472.4	-605.2	4,505.4	0.00	0.00	0.00	
14,400.0	89.78	359.96	9,606.9	4,572.4	-605.2	4,605.1	0.00	0.00	0.00	
14,500.0	89.78	359.96	9,607.3	4,672.4	-605.3	4,704.8	0.00	0.00	0.00	
14,600.0	89.78	359.96	9,607.7	4,772.4	-605.4	4,804.5	0.00	0.00	0.00	
14,700.0	89.78	359.96	9,608.1	4,872.4	-605.5	4,904.2	0.00	0.00	0.00	
14,800.0	89.78	359.96	9,608.5	4,972.4	-605.5	5,004.0	0.00	0.00	0.00	
14,900.0	89.78	359.96	9,608.8	5,072.4	-605.6	5,103.7	0.00	0.00	0.00	
15,000.0	89.78	359.96	9,609.2	5,172.4	-605.7	5,203.4	0.00	0.00	0.00	
15,100.0	89.78	359.96	9,609.6	5,272.4	-605.8	5,303.1	0.00	0.00	0.00	
15,200.0	89.78	359.96	9,610.0	5,372.4	-605.9	5,402.8	0.00	0.00	0.00	
15,235.7	89.78	359.96	9,610.1	5,408.1	-605.9	5,438.5	0.00	0.00	0.00	
PPP3: 2700' FSL & 1590' FWL (12)										
15,300.0	89.78	359.96	9,610.4	5,472.4	-605.9	5,502.5	0.00	0.00	0.00	
15,400.0	89.78	359.96	9,610.8	5,572.4	-606.0	5,602.3	0.00	0.00	0.00	
15,500.0	89.78	359.96	9,611.1	5,672.4	-606.1	5,702.0	0.00	0.00	0.00	
15,600.0	89.78	359.96	9,611.5	5,772.4	-606.2	5,801.7	0.00	0.00	0.00	
15,700.0	89.78	359.96	9,611.9	5,872.4	-606.2	5,901.4	0.00	0.00	0.00	
15,800.0	89.78	359.96	9,612.3	5,972.4	-606.3	6,001.1	0.00	0.00	0.00	
15,900.0	89.78	359.96	9,612.7	6,072.4	-606.4	6,100.8	0.00	0.00	0.00	
16,000.0	89.78	359.96	9,613.0	6,172.3	-606.5	6,200.6	0.00	0.00	0.00	
16,100.0	89.78	359.96	9,613.4	6,272.3	-606.6	6,300.3	0.00	0.00	0.00	
16,200.0	89.78	359.96	9,613.8	6,372.3	-606.6	6,400.0	0.00	0.00	0.00	
16,300.0	89.78	359.96	9,614.2	6,472.3	-606.7	6,499.7	0.00	0.00	0.00	
16,400.0	89.78	359.96	9,614.6	6,572.3	-606.8	6,599.4	0.00	0.00	0.00	
16,500.0	89.78	359.96	9,615.0	6,672.3	-606.9	6,699.2	0.00	0.00	0.00	
16,600.0	89.78	359.96	9,615.3	6,772.3	-606.9	6,798.9	0.00	0.00	0.00	
16,700.0	89.78	359.96	9,615.7	6,872.3	-607.0	6,898.6	0.00	0.00	0.00	
16,800.0	89.78	359.96	9,616.1	6,972.3	-607.1	6,998.3	0.00	0.00	0.00	
16,900.0	89.78	359.96	9,616.5	7,072.3	-607.2	7,098.0	0.00	0.00	0.00	
17,000.0	89.78	359.96	9,616.9	7,172.3	-607.3	7,197.7	0.00	0.00	0.00	
17,100.0	89.78	359.96	9,617.2	7,272.3	-607.3	7,297.5	0.00	0.00	0.00	
17,200.0	89.78	359.96	9,617.6	7,372.3	-607.4	7,397.2	0.00	0.00	0.00	
17,300.0	89.78	359.96	9,618.0	7,472.3	-607.5	7,496.9	0.00	0.00	0.00	
17,400.0	89.78	359.96	9,618.4	7,572.3	-607.6	7,596.6	0.00	0.00	0.00	
17,500.0	89.78	359.96	9,618.8	7,672.3	-607.6	7,696.3	0.00	0.00	0.00	
17,600.0	89.78	359.96	9,619.2	7,772.3	-607.7	7,796.0	0.00	0.00	0.00	
17,700.0	89.78	359.96	9,619.5	7,872.3	-607.8	7,895.8	0.00	0.00	0.00	
17,800.0	89.78	359.96	9,619.9	7,972.3	-607.9	7,995.5	0.00	0.00	0.00	
17,822.3	89.78	359.96	9,620.0	7,994.6	-607.9	8,017.7	0.00	0.00	0.00	
BHL/LTP: 100' FNL & 1590' FWL (12)										

Planning Report

Database:	Hobbs	Local Co-ordinate Reference:	Site Fuller 13/12 H3FC Fed Com #1H
Company:	Mewbourne Oil Company	TVD Reference:	WELL @ 3022.0usft (Original Well Elev)
Project:	Eddy County, New Mexico NAD 83	MD Reference:	WELL @ 3022.0usft (Original Well Elev)
Site:	Fuller 13/12 H3FC Fed Com #1H	North Reference:	Grid
Well:	Sec 13, T26S, R29E	Survey Calculation Method:	Minimum Curvature
Wellbore:	BHL: 100' FNL & 1590' FWL, Sec 12		
Design:	Design #1		

Design Targets									
Target Name									
- hit/miss target	Dip Angle	Dip Dir.	TVD	+N/-S	+E/-W	Northing	Easting	Latitude	Longitude
- Shape	(°)	(°)	(usft)	(usft)	(usft)	(usft)	(usft)		
SHL: 2610' FSL & 2195' - plan hits target center - Point	0.00	0.00	0.0	0.0	0.0	379,222.30	663,683.40	32.0419472	-103.9384754
KOP: 2218' FSL & 1590' - plan hits target center - Point	0.00	0.00	9,017.0	-435.1	-601.3	378,787.18	663,082.08	32.0407571	-103.9404212
LP/FTP/PPP1: 2582' FN - plan hits target center - Point	0.00	0.00	9,590.0	138.4	-601.8	379,360.74	663,081.64	32.0423338	-103.9404159
PPP2: 0' FSL & 1590' FV - plan hits target center - Point	0.00	0.00	9,599.9	2,720.4	-603.8	381,942.68	663,079.62	32.0494314	-103.9403921
PPP3: 2700' FSL & 1590' FV - plan hits target center - Point	0.00	0.00	9,610.1	5,408.1	-605.9	384,630.39	663,077.52	32.0568197	-103.9403673
BHL/LTP: 100' FNL & 1590' FWL - plan hits target center - Point	0.00	0.00	9,620.0	7,994.6	-607.9	387,216.90	663,075.50	32.0639298	-103.9403434

Fuller 13/12 H3FC Fed Com #1H



Intent ☐ As Drilled ☐

API #		
Operator Name:	Property Name:	Well Number

Kick Off Point (KOP)

UL	Section	Township	Range	Lot	Feet	From N/S	Feet	From E/W	County
Latitude					Longitude				NAD

First Take Point (FTP)

UL	Section	Township	Range	Lot	Feet	From N/S	Feet	From E/W	County
Latitude					Longitude				NAD

Last Take Point (LTP)

UL	Section	Township	Range	Lot	Feet	From N/S	Feet	From E/W	County
Latitude					Longitude				NAD

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

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

KZ 06/29/2018

PECOS DISTRICT SURFACE USE CONDITIONS OF APPROVAL

Mewbourne Oil Company

Eddy County, New Mexico

Well Pad B

FULLER 13/12 H3FC FED COM 1H

Surface Hole Location: 2610' FSL & 2195' FWL, Section 13, T. 26 S., R. 29 E.

Bottom Hole Location: 100' FNL & 1650' FWL, Section 12, T. 26 S, R 29 E.

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.

- ☐ **General Provisions**
- ☐ **Permit Expiration**
- ☐ **Archaeology, Paleontology, and Historical Sites**
- ☐ **Noxious Weeds**
- ☐ **Special Requirements**
 - Phantom Banks SMA
 - Texas Hornshell Mussel
 - Carlsbad Chihuahuan Desert Rivers
 - Cave/Karst
 - Cultural
- ☐ **Construction**
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 - Topsoil
 - Closed Loop System
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 - Roads
- ☐ **Road Section Diagram**
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 - Well Structures & Facilities
 - Pipelines
- ☐ **Interim Reclamation**
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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 and/or paleontological resource discovered by the operator or by any person working on the operator's behalf shall immediately report such findings to the Authorized Officer. The operator is fully accountable for the actions of their contractors and subcontractors. The operator 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 shall be made by the Authorized Officer to determine the appropriate actions that shall be required to prevent the loss of significant cultural or scientific values of the discovery. The operator shall be held responsible for the cost of the proper mitigation measures that the Authorized Officer assesses after consultation with the operator on the evaluation and decisions of the discovery. Any unauthorized collection or disturbance of cultural or paleontological resources may result in a shutdown order by the Authorized Officer.

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

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)

Phantom Bank Heronries

Surface disturbance will not be allowed within up to 200 meters of active heronries or by delaying activity for up to 120 days, or a combination of both.

Exhaust noise from engines must be muffled or otherwise controlled so as not to exceed 75 db measured at 30 ft. from the source of the noise.

Texas Hornshell Mussel

Texas Hornshell mussel (*Popenaias popeii*)-Federally Endangered

The proposed project area falls within the “covered zones” of the CCA. This project would have a “may affect, not likely to adversely affect” determination regarding the Texas Hornshell mussel (USFWS Consultation # 02ENNM00-2017-F-0871). This project is “not likely to adversely affect” the proposed critical habitat for the species. In addition, the following mitigation measures will be implemented.

Mitigation Measures

Oil and Gas Zone D - CCA Boundary requirements.

- Implement erosion control measures in accordance with the Reasonable and Prudent Practices for Stabilization (“RAPPS”)
- Comply with SPCC requirements in accordance with 40 CFR Part 112;
- Comply with the United States Army Corp of Engineers (USACE) Nationwide 12 General Permit, where applicable;
- Utilize technologies (like underground borings for pipelines), where feasible;
- Educate personnel, agents, contractors, and subcontractors about the requirements of conservation measures, COAs, Stips and provide direction in accordance with the Permit.

Carlsbad Chihuahuan Desert Rivers

Must stay 200m outside of the floodplain

Cave/Karst Surface Mitigation

The following stipulations will be applied to minimize impacts during construction, drilling and production:

Construction:

General Construction:

- No blasting
- The BLM, Carlsbad Field Office, will be informed immediately if any subsurface drainage channels, cave passages, or voids are penetrated during construction, and no additional construction shall occur until clearance has been issued by the Authorized Officer.
- All linear surface disturbance activities will avoid sinkholes and other karst features to lessen the possibility of encountering near surface voids during construction, minimize changes to runoff, and prevent untimely leaks and spills from entering the karst drainage system.
- All spills or leaks will be reported to the BLM immediately for their immediate and proper treatment.

Pad Construction:

- The pad will be constructed and leveled by adding the necessary fill and caliche – no blasting.
- The entire perimeter of the well pad 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 high with impermeable mineral material (e.g., caliche).
- No water flow from the uphill side(s) of the pad shall be allowed to enter the well pad.
- The topsoil stockpile shall be located outside the bermed well pad.
- Topsoil, either from the well pad or surrounding area, shall not be used to construct the berm.
- No storm drains, tubing or openings shall be placed in the berm.
- 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.
- 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 access road entering the well pad shall be constructed so that the integrity of the berm height surrounding the well pad is not compromised (i.e. an access road crossing the berm cannot be lower than the berm height).
- Following a rain event, all fluids will be vacuumed off of the pad and hauled off-site and disposed at a proper disposal facility.

Tank Battery Construction:

- The pad will be constructed and leveled by adding the necessary fill and caliche – no blasting.
- All tank battery locations and facilities will be lined and bermed.
- The liner should be at least 20 mil in thickness and installed with a 4 oz. felt backing, or equivalent, to prevent tears or punctures.
- Tank battery berms must be large enough to contain 1 ½ times the content of the largest tank.

Road Construction:

- Turnout ditches and drainage leadoffs will not be constructed in such a manner as to alter the natural flow of water into or out of cave or karst features.
- Special restoration stipulations or realignment may be required if subsurface features are discovered during construction.

Buried Pipeline/Cable Construction:

- Rerouting of the buried line(s) may be required if a subsurface void is encountered during construction to minimize the potential subsidence/collapse of the feature(s) as well as the possibility of leaks/spills entering the karst drainage system.

Powerline Construction:

- Smaller powerlines will be routed around sinkholes and other karst features to avoid or lessen the possibility of encountering near surface voids and to minimize changes to runoff or possible leaks and spills from entering karst systems.
- Larger powerlines will adjust their pole spacing to avoid cave and karst features.
- Special restoration stipulations or realignment may be required if subsurface voids are encountered.

Surface Flowlines Installation:

- Flowlines will be routed around sinkholes and other karst features to minimize the possibility of leaks/spills from entering the karst drainage system.

Leak Detection System:

- A method of detecting leaks is required. The method could incorporate gauges to measure loss, situating valves and lines so they can be visually inspected, or installing electronic sensors to alarm when a leak is present.
- A leak detection plan will be submitted to BLM that incorporates an automatic shut off system (see below) to minimize the effects of an undesirable event that could negatively sensitive cave/karst resources.
- Well heads, pipelines (surface and buried), storage tanks, and all supporting equipment should be monitored regularly after installation to promptly identify and fix leaks.

Automatic Shut-off Systems:

- Automatic shut off, check valves, or similar systems will be installed for pipelines and tanks to minimize the effects of catastrophic line failures used in production or drilling.

Cave/Karst Subsurface Mitigation

The following stipulations will be applied to protect cave/karst and groundwater concerns:

Closed Loop System:

- A closed loop system using steel tanks will be utilized during drilling – no pits
- All fluids and cuttings will be hauled off-site and disposed of properly at an authorized site

Rotary Drilling with Fresh Water:

- Fresh water will be used as a circulating medium in zones where caves or karst features are expected. SEE ALSO: Drilling COAs for this well.

Directional Drilling:

- The kick off point for directional drilling will occur at least 100 feet below the bottom of the cave occurrence zone. SEE ALSO: Drilling COAs for this well.

Lost Circulation:

- ALL lost circulation zones between surface and the base of the cave occurrence zone will be logged and reported in the drilling report.
- If a void of four feet or more and circulation losses greater than 70 percent occur simultaneously while drilling in any cave-bearing zone, regardless of the type of drilling machinery used, the BLM will be notified immediately by the operator. The BLM will assess the situation and work with the operator on corrective actions to resolve the problem.

Abandonment Cementing:

- Additional plugging conditions of approval may be required upon well abandonment in high and medium karst potential occurrence zones.
- The BLM will assess the situation and work with the operator to ensure proper plugging of the wellbore.

Pressure Testing:

- The operator will perform annual pressure monitoring on all casing annuli and reported in a sundry notice.
- If the test results indicated a casing failure has occurred, remedial action will be undertaken to correct the problem to the BLM's approval.

Hydrology

The entire well pad 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 top soil 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.

When crossing ephemeral drainages the pipeline 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.

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.

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 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.

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

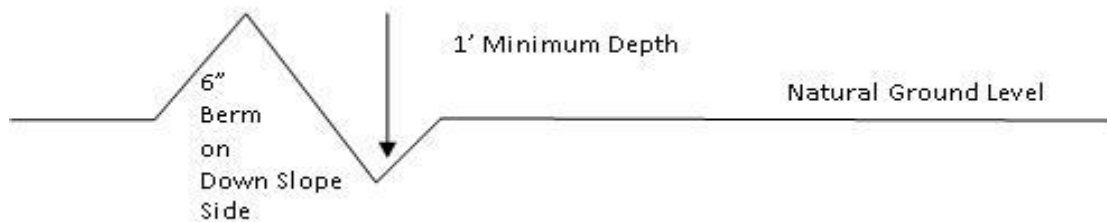
Vehicle turnouts shall be constructed on the road. Turnouts shall be intervisible with interval spacing distance less than 1000 feet. Turnouts shall conform to Figure 1; cross section and plans for typical road construction.

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:

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

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.

- Construction Steps
1. Salvage topsoil

2. Construct road

3. Redistribute topsoil

4. Revegetate slopes

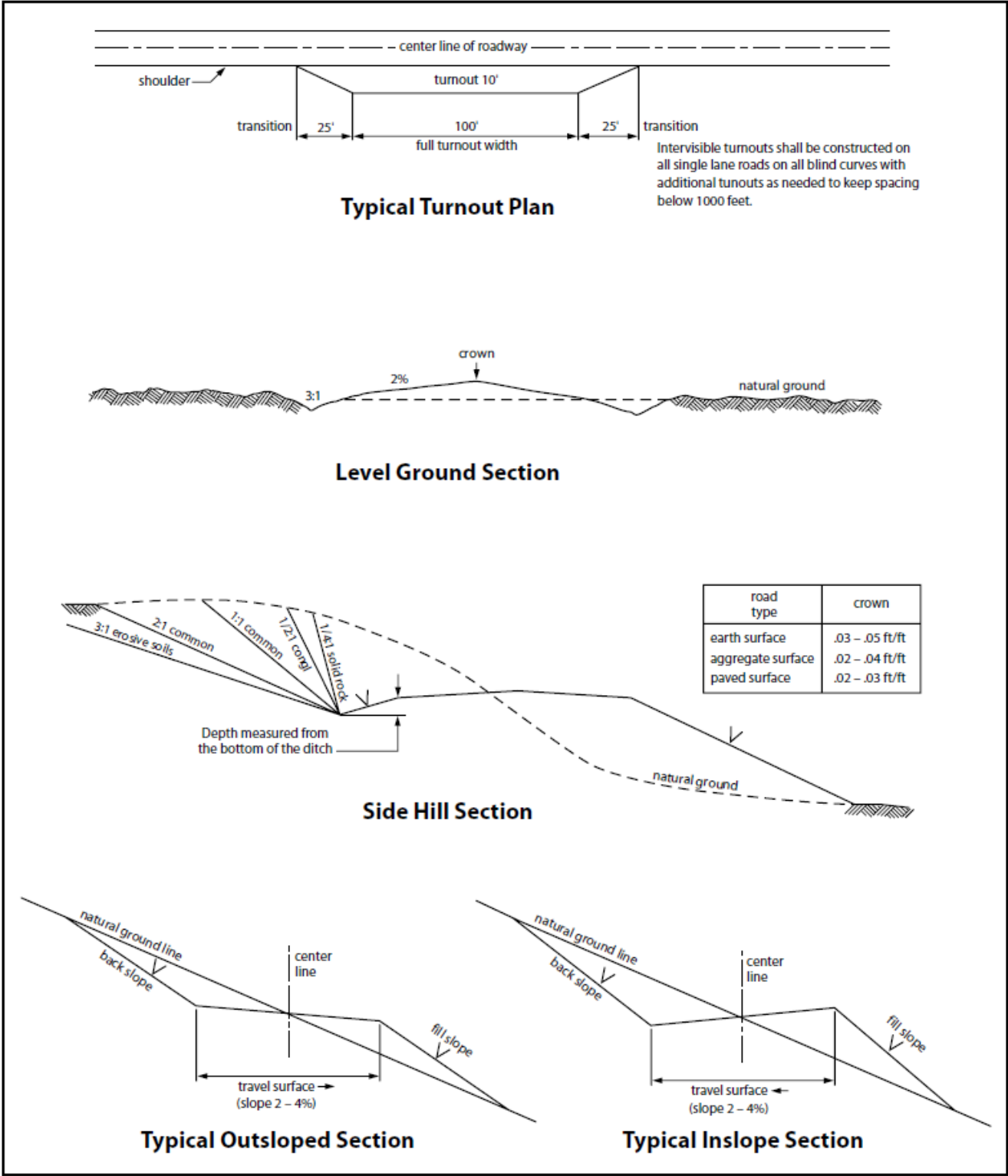


Figure 1. Cross-sections and plans for typical road sections representative of BLM resource or FS local and higher-class roads.

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

STANDARD STIPULATIONS FOR SURFACE INSTALLED PIPELINES

A copy of the application (Grant, Sundry Notice, APD) and attachments, including stipulations, 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 activity of 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. The holder shall be liable for damage or injury to the United States to the extent provided by 43 CFR Sec. 2883.1-4. The holder shall be held to a standard of strict liability for damage or injury to the United States resulting from pipe rupture, fire, or spills caused or substantially aggravated by any of the following within the right-of-way or permit area:

- a. Activities of the holder including, but not limited to construction, operation, maintenance, and termination of the facility.
- b. Activities of other parties including, but not limited to:
 - (1) Land clearing.
 - (2) Earth-disturbing and earth-moving work.
 - (3) Blasting.
 - (4) Vandalism and sabotage.
- c. Acts of God.

The maximum limitation for such strict liability damages shall not exceed one million dollars (\$1,000,000) for any one event, and any liability in excess of such amount shall be determined by the ordinary rules of negligence of the jurisdiction in which the damage or injury occurred.

This section shall not impose strict liability for damage or injury resulting primarily from an act of war or from the negligent acts or omissions of the United States.

5. If, during any phase of the construction, operation, maintenance, or termination of the pipeline, any oil, salt water, 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, salt water, or other pollutant, wherever found, shall be the responsibility of the holder, regardless of fault. Upon failure of the 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 the holder of any responsibility as provided herein.

6. All construction and maintenance activity will be confined to the authorized right-of-way width of 20 feet. If the pipeline route follows an existing road or buried pipeline right-of-way, the surface pipeline must be installed no farther than 10 feet from the edge of the road or buried pipeline right-of-way. If existing surface pipelines prevent this distance, the proposed surface pipeline must be installed immediately adjacent to the outer surface pipeline. All construction and maintenance activity will be confined to existing roads or right-of-ways.

7. No blading or clearing of any vegetation will be allowed unless approved in writing by the Authorized Officer.

8. The holder shall install the pipeline on the surface in such a manner that will minimize suspension of the pipeline across low areas in the terrain. In hummocky or dune areas, the pipeline will be "snaked" around hummocks and dunes rather than suspended across these features.

9. The pipeline shall be buried with a minimum of 24 inches under all roads, "two-tracks," and trails. Burial of the pipe will continue for 20 feet on each side of each crossing. The condition of the road, upon completion of construction, shall be returned to at least its former state with no bumps or dips remaining in the road surface.

10. 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.

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. Excluding the pipe, all above-ground structures not subject to safety requirement shall be painted by the holder to blend with the natural color of the landscape. The paint used shall be a color which simulates "Standard Environmental Colors" – **Shale Green**, Munsell Soil Color No. 5Y 4/2; designated by the Rocky Mountain Five State Interagency Committee.

13. 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. Signs will be maintained in a legible condition for the life of the pipeline.

14. 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. The holder will take whatever steps are necessary to ensure that the pipeline route is not used as a roadway.

15. 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.

16. 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, powerline 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.

17. Surface pipelines must be less than or equal to 4 inches and a working pressure below 125 psi.

VIII. INTERIM RECLAMATION

During the life of the development, all disturbed areas not needed for active support of production operations should undergo interim reclamation in order to minimize the environmental impacts of development on other resources and uses.

Within six (6) months of well completion, operators should work with BLM surface management specialists (Jim Amos: 575-234-5909) to devise the best strategies to reduce the size of the location. Interim reclamation should allow for remedial well operations, as well as safe and efficient removal of oil and gas.

During reclamation, the removal of caliche is important to increasing the success of revegetating the site. Removed caliche that is free of contaminants may be used for road repairs, fire walls or for building other roads and locations. In order to operate the well or complete workover operations, it may be necessary to drive, park and operate on restored interim vegetation within the previously disturbed area. Disturbing revegetated areas for production or workover

operations will be allowed. If there is significant disturbance and loss of vegetation, the area will need to be revegetated. Communicate with the appropriate BLM office for any exceptions/exemptions if needed.

All disturbed areas after they have been satisfactorily prepared need to be reseeded with the seed mixture provided below.

Upon completion of interim reclamation, the operator shall submit a Sundry Notices and Reports on Wells, Subsequent Report of Reclamation (Form 3160-5).

IX. FINAL ABANDONMENT & RECLAMATION

At final abandonment, well locations, production facilities, and access roads must undergo "final" reclamation so that the character and productivity of the land are restored.

Earthwork for final reclamation must be completed within six (6) months of well plugging. All pads, pits, facility locations and roads must be reclaimed to a satisfactory revegetated, safe, and stable condition, unless an agreement is made with the landowner or BLM to keep the road and/or pad intact.

After all disturbed areas have been satisfactorily prepared, these areas need to be revegetated with the seed mixture provided below. Seeding should be accomplished by drilling on the contour whenever practical or by other approved methods. Seeding may need to be repeated until revegetation is successful, as determined by the BLM.

Operators shall contact a BLM surface protection specialist prior to surface abandonment operations for site specific objectives (Jim Amos: 575-234-5909).

Exhibit A-1
Seed Mixture 2, for Sandy Sites

The holder shall seed all disturbed areas with the seed mixture listed below. The seed mixture shall be planted in the amounts specified in pounds of pure live seed (PLS)* per acre. There shall be no primary or secondary noxious weeds in the seed mixture. Seed will be tested and the viability testing of seed will be done in accordance with State law (s) and within nine (9) months prior to purchase. Commercial seed will be either certified or registered seed. The seed container will be tagged in accordance with State law(s) and available for inspection by the authorized officer.

Seed will be planted using a drill equipped with a depth regulator to ensure proper depth of planting where drilling is possible. The seed mixture will be evenly and uniformly planted over the disturbed area (smaller/heavier seeds have a tendency to drop the bottom of the drill and are planted first). The holder shall take appropriate measures to ensure this does not occur. Where drilling is not possible, seed will be broadcast and the area shall be raked or chained to cover the seed. When broadcasting the seed, the pounds per acre are to be doubled. The seeding will be repeated until a satisfactory stand is established as determined by the authorized officer. Evaluation of growth will not be made before completion of at least one full growing season after seeding.

Species to be planted in pounds of pure live seed* per acre:

Species

	<u>lb/acre</u>
Sand dropseed (<i>Sporobolus cryptandrus</i>)	1.0
Sand love grass (<i>Eragrostis trichodes</i>)	1.0
Plains bristlegrass (<i>Setaria macrostachya</i>)	2.0

*Pounds of pure live seed:

Pounds of seed x percent purity x percent germination = pounds pure live seed

PECOS DISTRICT DRILLING CONDITIONS OF APPROVAL

OPERATOR'S NAME:	MEWBOURNE OIL COMPANY
WELL NAME & NO.:	FULLER 13/12 H3FC FED COM 1H
APD ID:	10400084273
LOCATION:	Section 13, T.26 S., R.29 E. NMP.
COUNTY:	Eddy County, New Mexico ▼

COA

H ₂ S	<input type="radio"/> No		<input checked="" type="radio"/> Yes	
Potash / WIPP	<input checked="" type="radio"/> None	<input type="radio"/> Secretary	<input type="radio"/> R-111-Q	<input type="checkbox"/> Open Annulus <input type="checkbox"/> WIPP
Cave / Karst	<input type="radio"/> Low	<input checked="" type="radio"/> Medium	<input type="radio"/> High	<input type="radio"/> Critical
Wellhead	<input type="radio"/> Conventional	<input checked="" type="radio"/> Multibowl	<input type="radio"/> Both	<input type="radio"/> Diverter
Cementing	<input type="checkbox"/> Primary Squeeze	<input type="checkbox"/> Cont. Squeeze	<input type="checkbox"/> EchoMeter	<input checked="" type="checkbox"/> DV Tool
Special Req	<input type="checkbox"/> Capitan Reef	<input type="checkbox"/> Water Disposal	<input checked="" type="checkbox"/> COM	<input type="checkbox"/> Unit
Waste Prev.	<input type="radio"/> Self-Certification	<input type="radio"/> Waste Min. Plan	<input checked="" type="radio"/> APD Submitted prior to 06/10/2024	
Additional Language	<input checked="" type="checkbox"/> Flex Hose <input type="checkbox"/> Four-String	<input type="checkbox"/> Casing Clearance <input checked="" type="checkbox"/> Offline Cementing	<input type="checkbox"/> Pilot Hole <input checked="" type="checkbox"/> Fluid-Filled	<input checked="" type="checkbox"/> Break Testing

A. HYDROGEN SULFIDE

A Hydrogen Sulfide (H₂S) Drilling Plan shall be activated **AT SPUD**. As a result, the Hydrogen Sulfide area must meet **43 CFR 3176** requirements, which includes equipment and personnel/public protection items. If Hydrogen Sulfide is encountered, please provide measured values and formations to the BLM.

B. CASING DESIGN

Note: Surface casing set depth was adjusted per BLM geologist's recommendation.

1. The **13-3/8** inch surface casing shall be set at approximately **725 ft.** (a minimum of **70 feet (Eddy County)** into the Rustler Anhydrite and above the salt) and cemented to the surface. **If salt is encountered, set casing at least 25 ft. above the salt.**
 - a. If cement does not circulate to the surface, the appropriate BLM office shall be notified and a temperature survey utilizing an electronic-type temperature survey with surface log readout will be used or a cement bond log shall be run to verify the top of the cement. Temperature survey will be run a minimum of six hours after pumping cement and ideally between 8-10 hours after

- completing the cement job.
- b. Wait on cement (WOC) time for a primary cement job will be a minimum of **8 hours** or **500 psi compressive strength**, whichever is greater. (This is to include the lead cement)
 - c. Wait on cement (WOC) time for a remedial job will be a minimum of 4 hours after bringing cement to surface or 500 psi compressive strength, whichever is greater.
 - d. If cement falls back, remedial cementing will be done prior to drilling out that string.
2. The **9-5/8 inch** intermediate casing shall be set at approximately **4,200 ft.** The minimum required fill of cement behind the **9-5/8 inch** intermediate casing is:

Option 1 (Single Stage): Cement to surface. If cement does not circulate see B.1.a, c-d above. Wait on cement (WOC) time for a primary cement job is to include the lead cement slurry due to cave/karst.

Option 2 (Two-Stage): The operator has proposed utilize a DV tool. Operator may adjust depth of DV tool if needed, adjust cement volumes accordingly. The DV tool may be cancelled if cement circulates to surface on the first stage.

- a. First stage to DV tool: Cement to circulate. If cement does not circulate off the DV tool, contact the appropriate BLM office before proceeding with second stage cement job.
- b. Second stage above DV tool:
 - **Cement to surface.** If cement does not circulate, contact the appropriate BLM office. Wait on cement (WOC) time for a primary cement job is to include the lead cement slurry due to cave/karst.

Note: Excess cement for 2nd stage is below CFO's recommendation of %25. More cement might be needed.

Note: Intermediate casing must be kept fluid-filled to meet the minimum requirements for collapse design safety factor.

❖ In Medium Cave/Karst Areas if cement does not circulate to surface on the first two casing strings, the cement on the 3rd casing string must come to surface.

3. Operator has proposed to set **7 inch (26# P-110)** production casing at approximately **9,100 ft.** (9,052 ft. TVD). The minimum required fill of cement behind the **7 inch** production casing is:

Option 1 (Single Stage): Cement should tie-back **at least 200 feet** into previous casing string. Operator shall provide method of verification. Wait on cement (WOC) time for a primary cement job is to include the lead cement slurry due to cave/karst.

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

- c. First stage to DV tool: Cement to circulate. If cement does not circulate off the DV tool, contact the appropriate BLM office before proceeding with second stage cement job.
 - d. Second stage above DV tool:
 - Cement should tie-back **at least 200 feet** into previous casing string. Operator shall provide method of verification. If cement does not circulate, contact the appropriate BLM office. Wait on cement (WOC) time for a primary cement job is to include the lead cement slurry due to cave/karst.
4. The minimum required fill of cement behind the **4-1/2 in.** production liner is:
- Cement should tie-back **at least 100 feet** into previous casing string. Operator shall provide method of verification.

Offline Cementing

Operator has been (**Approved**) to pump the proposed cement program offline in the **Surface and intermediate(s) intervals**. Offline cementing should commence within 24 hours of landing the casing for the interval. Notify the BLM 4hrs prior to the commencement of any offline cementing procedure at **Eddy County: 575-361-2822**.

C. PRESSURE CONTROL

1. Variance approved to use **flex line** from BOP to choke manifold. Manufacturer's specification to be readily available. No external damage to flex line. Flex line to be installed as straight as possible (no hard bends).
2. Operator has proposed a **multi-bowl wellhead** assembly. This assembly will only be tested when installed on the surface casing. Minimum working pressure of the blowout preventer (BOP) and related equipment (BOPE) required for drilling below the surface casing shoe shall be **5000 (5M) psi**. Before drilling out surface casing shoe, BOP/ BOPE and annular preventer must be pressure tested in accordance with title 43 CFR 3172.
 - a. Wellhead shall be installed by manufacturer's representatives, submit documentation with subsequent sundry.
 - b. If the welding is performed by a third party, the manufacturer's representative shall monitor the temperature to verify that it does not exceed the maximum temperature of the seal.
 - c. Manufacturer representative shall install the test plug for the initial BOP test.
 - d. If the cement does not circulate and one-inch operations would have been possible with a standard wellhead, the well head shall be cut off, cementing operations performed and another wellhead installed.

- e. Whenever any seal subject to test pressure is broken, all the tests in 43 CFR 3172 must be followed.

BOPE Break Testing Variance

- BOPE Break Testing is ONLY permitted for intervals utilizing a 5M BOPE or less. **(Annular preventer must be tested to a minimum of 70% of BOPE working pressure and shall be higher than the MASP.)**
- BOPE Break Testing is NOT permitted to drilling the production hole section.
- Variance only pertains to the intermediate hole-sections and no deeper than the Bone Springs formation.
- While in transfer between wells, the BOPE shall be secured by the hydraulic carrier or cradle.
- Any well control event while drilling require notification to the BLM Petroleum Engineer **(575-706-2779)** prior to the commencement of any BOPE Break Testing operations.
- A full BOPE test is required prior to drilling the first deep intermediate hole section. If any subsequent hole interval is deeper than the first, a full BOPE test will be required. (200' TVD tolerance between intermediate shoes is allowable).
- The BLM is to be contacted (575-361-2822 Eddy County) 4 hours prior to BOPE tests.
- As a minimum, a full BOPE test shall be performed at 21-day intervals.
- In the event any repairs or replacement of the BOPE is required, the BOPE shall test as per **43 CFR 3172**.
- If in the event break testing is not utilized, then a full BOPE test would be conducted.

D. SPECIAL REQUIREMENT (S)

Communitization Agreement

- The operator will submit a Communitization Agreement to the Santa Fe Office, 301 Dinosaur Trail Santa Fe, New Mexico 87508, at least 90 days before the anticipated date of first production from a well subject to a spacing order issued by the New Mexico Oil Conservation Division. The Communitization Agreement will include the signatures of all working interest owners in all Federal and Indian leases subject to the Communitization Agreement (i.e., operating rights owners and lessees of record), or certification that the operator has obtained the written signatures of all such owners and will make those signatures available to the BLM immediately upon request.
- If the operator does not comply with this condition of approval, the BLM may take enforcement actions that include, but are not limited to, those specified in 43 CFR 3163.1.
- In addition, the well sign shall include the surface and bottom hole lease numbers. When the Communitization Agreement number is known, it shall also be on the sign.

GENERAL REQUIREMENTS

The BLM is to be notified in advance for a representative to witness:

- a. Spudding well (minimum of 24 hours)
- b. Setting and/or Cementing of all casing strings (minimum of 4 hours)
- c. BOPE tests (minimum of 4 hours)

Contact Eddy County Petroleum Engineering Inspection Staff:

Email or call the Carlsbad Field Office, 620 East Greene St., Carlsbad, NM 88220; [BLM NM CFO DrillingNotifications@BLM.GOV](mailto:BLM_NM_CFO_DrillingNotifications@BLM.GOV); (575) 361-2822.

1. Unless the production casing has been run and cemented or the well has been properly plugged, the drilling rig shall not be removed from over the hole without prior approval.
 - a. In the event the operator has proposed to drill multiple wells utilizing a skid/walking rig. Operator shall secure the wellbore on the current well, after installing and testing the wellhead, by installing a blind flange of like pressure rating to the wellhead and a pressure gauge that can be monitored while drilling is performed on the other well(s).
 - b. When the operator proposes to set surface casing with Spudder Rig
 - i. Notify the BLM when moving in and removing the Spudder Rig.
 - ii. Notify the BLM when moving in the 2nd Rig. Rig to be moved in within 90 days of notification that Spudder Rig has left the location.
 - iii. BOP/BOPE test to be conducted per **43 CFR 3172** as soon as 2nd Rig is rigged up on well.
2. Floor controls are required for 3M or Greater systems. These controls will be on the rig floor, unobstructed, readily accessible to the driller and will be operational at all times during drilling and/or completion activities. Rig floor is defined as the area immediately around the rotary table; the area immediately above the substructure on which the draw works are located, this does not include the doghouse or stairway area.
3. For intervals in which cement to surface is required, cement to surface should be verified with a visual check and density or pH check to differentiate cement from spacer and drilling mud. The results should be documented in the driller's log and daily reports.

A. CASING

1. Changes to the approved APD casing program need prior approval if the items substituted are of lesser grade or different casing size or are Non-API. The Operator can exchange the components of the proposal with that of superior strength (i.e. changing from J-55 to N-80, or from 36# to 40#). Changes to the

- approved cement program need prior approval if the altered cement plan has less volume or strength or if the changes are substantial (i.e. Multistage tool, ECP, etc.). The initial wellhead installed on the well will remain on the well with spools used as needed.
2. Wait on cement (WOC) for Potash Areas: After cementing but before commencing any tests, the casing string shall stand cemented under pressure until both of the following conditions have been met: 1) cement reaches a minimum compressive strength of 500 psi for all cement blends of both lead and tail cement, 2) until cement has been in place at least 8 hours. WOC time will be recorded in the driller's log. The casing integrity test can be done (prior to the cement setting up) immediately after bumping the plug.
 3. Wait on cement (WOC) for Water Basin: After cementing but before commencing any tests, the casing string shall stand cemented under pressure until both of the following conditions have been met: 1) cement reaches a minimum compressive strength of 500 psi at the shoe, 2) until cement has been in place at least 8 hours. WOC time will be recorded in the driller's log. See individual casing strings for details regarding lead cement slurry requirements. The casing integrity test can be done (prior to the cement setting up) immediately after bumping the plug.
 4. Provide compressive strengths including hours to reach required 500 pounds compressive strength prior to cementing each casing string. Have well specific cement details onsite prior to pumping the cement for each casing string.
 5. No pea gravel permitted for remedial or fall back remedial without prior authorization from the BLM engineer.
 6. On that portion of any well approved for a 5M BOPE system or greater, a pressure integrity test of each casing shoe shall be performed. Formation at the shoe shall be tested to a minimum of the mud weight equivalent anticipated to control the formation pressure to the next casing depth or at total depth of the well. This test shall be performed before drilling more than 20 feet of new hole.
 7. If hardband drill pipe is rotated inside casing, returns will be monitored for metal. If metal is found in samples, drill pipe will be pulled and rubber protectors which have a larger diameter than the tool joints of the drill pipe will be installed prior to continuing drilling operations.
 8. Whenever a casing string is cemented in the R-111-Q potash area, the NMOCD requirements shall be followed.

B. PRESSURE CONTROL

1. All blowout preventer (BOP) and related equipment (BOPE) shall comply with well control requirements as described in **43 CFR 3172**.

2. If a variance is approved for a flexible hose to be installed from the BOP to the choke manifold, the following requirements apply: The flex line must meet the requirements of API 16C. Check condition of flexible line from BOP to choke manifold, replace if exterior is damaged or if line fails test. Line to be as straight as possible with no hard bends and is to be anchored according to Manufacturer's requirements. The flexible hose can be exchanged with a hose of equal size and equal or greater pressure rating. Anchor requirements, specification sheet and hydrostatic pressure test certification matching the hose in service, to be onsite for review. These documents shall be posted in the company man's trailer and on the rig floor.
3. 5M or higher system requires an HCR valve, remote kill line and annular to match. The remote kill line is to be installed prior to testing the system and tested to stack pressure.
4. If the operator has proposed a multi-bowl wellhead assembly in the APD. The following requirements must be met:
 - i. Wellhead shall be installed by manufacturer's representatives, submit documentation with subsequent sundry.
 - ii. If the welding is performed by a third party, the manufacturer's representative shall monitor the temperature to verify that it does not exceed the maximum temperature of the seal.
 - iii. Manufacturer representative shall install the test plug for the initial BOP test.
 - iv. Whenever any seal subject to test pressure is broken, all the tests in 43 CFR 3172.6(b)(9) must be followed.
 - v. If the cement does not circulate and one-inch operations would have been possible with a standard wellhead, the well head shall be cut off, cementing operations performed and another wellhead installed.
5. The appropriate BLM office shall be notified a minimum of 4 hours in advance for a representative to witness the tests.
 - i. In a water basin, for all casing strings utilizing slips, these are to be set as soon as the crew and rig are ready and any fallback cement remediation has been done. The casing cut-off and BOP installation can be initiated four hours after installing the slips, which will be approximately six hours after bumping the plug. For those casing strings not using slips, the minimum wait time before cut-off is eight hours after bumping the plug. BOP/BOPE testing can begin after cut-off or once cement reaches 500 psi compressive strength (including lead cement), whichever is greater. However, if the float does not hold, cut-off cannot be initiated until cement reaches 500 psi compressive strength (including lead when specified).

- ii. In potash areas, for all casing strings utilizing slips, these are to be set as soon as the crew and rig are ready and any fallback cement remediation has been done. For all casing strings, casing cut-off and BOP installation can be initiated at twelve hours after bumping the cement plug. The BOPE test can be initiated after bumping the cement plug with the casing valve open. (Only applies to single stage cement jobs, prior to the cement setting up.)
- iii. The tests shall be done by an independent service company utilizing a test plug not a cup or J-packer and can be initiated immediately with the casing valve open. The operator also has the option of utilizing an independent tester to test without a plug (i.e. against the casing) pursuant to **43 CFR 3172** with the pressure not to exceed 70% of the burst rating for the casing. Any test against the casing must meet the WOC time for 8 hours or 500 pounds compressive strength, whichever is greater, prior to initiating the test (see casing segment as lead cement may be critical item).
- iv. The test shall be run on a 5000-psi chart for a 2-3M BOP/BOP, on a 10000 psi chart for a 5M BOP/BOPE and on a 15000 psi chart for a 10M BOP/BOPE. If a linear chart is used, it shall be a one-hour chart. A circular chart shall have a maximum 2-hour clock. If a twelve hour or twenty-four-hour chart is used, tester shall make a notation that it is run with a two hour clock.
- v. The results of the test shall be reported to the appropriate BLM office.
- vi. All tests are required to be recorded on a calibrated test chart. A copy of the BOP/BOPE test chart and a copy of independent service company test will be submitted to the appropriate BLM office.
- vii. The BOP/BOPE test shall include a low-pressure test from 250 to 300 psi. The test will be held for a minimum of 10 minutes if test is done with a test plug and 30 minutes without a test plug. This test shall be performed prior to the test at full stack pressure.
- viii. BOP/BOPE must be tested by an independent service company within 500 feet of the top of the Wolfcamp formation if the time between the setting of the intermediate casing and reaching this depth exceeds 20 days. This test does not exclude the test prior to drilling out the casing shoe as per **43 CFR 3172**.

C. DRILLING MUD

Mud system monitoring equipment, with derrick floor indicators and visual and audio alarms, shall be operating before drilling into the Wolfcamp formation, and shall be used until production casing is run and cemented.

D. WASTE MATERIAL AND FLUIDS

All waste (i.e. drilling fluids, trash, salts, chemicals, sewage, gray water, etc.) created as a result of drilling operations and completion operations shall be safely contained and disposed of properly at a waste disposal facility. No waste material or fluid shall be disposed of on the well location or surrounding area. Porto-johns and trash containers will be on-location during fracturing operations or any other crew-intensive operations.

SA 07/05/2024

Hydrogen Sulfide Drilling Operations Plan
Mewbourne Oil Company

1. General Requirements

Rule 118 does not apply to this well because MOC has researched this area and no high concentrations of H₂S were found. MOC will have on location and working all H₂S safety equipment before the Delaware formation for purposes of safety and insurance requirements.

2. Hydrogen Sulfide Training

All personnel, whether regularly assigned, contracted, or employed on an unscheduled basis, will have received training from a qualified instructor in the following areas prior to entering the drilling pad area of the well:

1. The hazards and characteristics of hydrogen sulfide gas.
2. The proper use of personal protective equipment and life support systems.
3. The proper use of hydrogen sulfide detectors, alarms, warning systems, briefing areas, evacuation procedures.
4. The proper techniques for first aid and rescue operations.

Additionally, supervisory personnel will be trained in the following areas:

- 1 The effects of hydrogen sulfide on metal components. If high tensile tubular systems are utilized, supervisory personnel will be trained in their special maintenance requirements.
- 2 Corrective action and shut in procedures, blowout prevention, and well control procedures while drilling a well.
- 3 The contents of the Hydrogen Sulfide Drilling Operations Plan.

There will be an initial training session prior to encountering a known hydrogen sulfide source. The initial training session shall include a review of the site specific Hydrogen Sulfide Drilling Operations Plan.

3. Hydrogen Sulfide Safety Equipment and Systems

All hydrogen sulfide safety equipment and systems will be installed, tested, and operational prior to drilling below the 9 5/8" intermediate casing.

1. Well Control Equipment
 - A. Choke manifold with minimum of one adjustable choke/remote choke.
 - B. Blowout preventers equipped with blind rams and pipe rams to accommodate all pipe sizes with properly sized closing unit
 - C. Auxiliary equipment including annular type blowout preventer.
2. Protective Equipment for Essential Personnel

Thirty minute self contained work unit located in the dog house and at briefing areas.

Additionally: If H₂S is encountered in concentrations less than 10 ppm, fans will be placed in work areas to prevent the accumulation of hazardous amounts of poisonous gas. If higher concentrations of H₂S are detected the well will be shut in and a rotating head, mud/gas separator, remote choke and flare line with igniter will be installed.

3. Hydrogen Sulfide Protection and Monitoring Equipment

Two portable hydrogen sulfide monitors positioned on location for optimum coverage and detection. The units shall have audible sirens to notify personnel when hydrogen sulfide levels exceed 20 PPM.

4. Visual Warning Systems

A. Wind direction indicators as indicated on the wellsite diagram.

B. Caution signs shall be posted on roads providing access to location. Signs shall be painted a high visibility color with lettering of sufficient size to be readable at reasonable distances from potentially contaminated areas.

4. **Mud Program**

The mud program has been designed to minimize the amount of hydrogen sulfide entrained in the mud system. Proper mud weight, safe drilling practices, and the use of hydrogen sulfide scavengers will minimize hazards while drilling the well.

5. **Metallurgy**

All tubular systems, wellheads, blowout preventers, drilling spools, kill lines, choke manifolds, and valves shall be suitable for service in a hydrogen sulfide environment when chemically treated.

6. **Communications**

State & County Officials phone numbers are posted on rig floor and supervisors trailer. Communications in company vehicles and toolpushers are either two way radios or cellular phones.

7. **Well Testing**

Drill stem testing is not an anticipated requirement for evaluation of this well. If a drill stem test is required, it will be conducted with a minimum number of personnel in the immediate vicinity. The test will be conducted during daylight hours only.

8. **Emergency Phone Numbers**

Eddy County Sheriff's Office	911 or 575-887-7551
Ambulance Service	911 or 575-885-2111
Carlsbad Fire Dept	911 or 575-885-2111
Loco Hills Volunteer Fire Dept.	911 or 575-677-3266
Closest Medical Facility - Columbia Medical Center of Carlsbad	575-492-5000

Mewbourne Oil Company	Hobbs District Office	575-393-5905
	Fax	575-397-6252
	2nd Fax	575-393-7259

District Manager	Robin Terrell	575-390-4816
Drilling Superintendent	Frosty Lathan	575-390-4103
	Bradley Bishop	575-390-6838
Drilling Foreman	Wesley Noseff	575-441-0729



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

Application Data

07/12/2024

APD ID: 10400084273

Submission Date: 04/22/2022

Operator Name: MEWBOURNE OIL COMPANY

Well Name: FULLER 13/12 H3FC FED COM

Well Number: 1H

Well Type: OIL WELL

Well Work Type: Drill

Highlighted data
reflects the most
recent changes
[Show Final Text](#)

Section 1 - General

APD ID: 10400084273

Tie to previous NOS? N

Submission Date: 04/22/2022

BLM Office: Carlsbad

User: Bradley Bishop

Title: Regulatory

Federal/Indian APD: FED

Is the first lease penetrated for production Federal or Indian? FED

Lease number: NMLC061497

Lease Acres:

Surface access agreement in place?

Allotted?

Reservation:

Agreement in place? NO

Federal or Indian agreement:

Agreement number:

Agreement name:

Keep application confidential? YES

Permitting Agent? NO

APD Operator: MEWBOURNE OIL COMPANY

Operator letter of

Operator Info

Operator Organization Name: MEWBOURNE OIL COMPANY

Operator Address: P O BOX 5270

Zip: 88241

Operator PO Box:

Operator City: HOBBS

State: NM

Operator Phone: (575)393-5905

Operator Internet Address:

Section 2 - Well Information

Well in Master Development Plan? NO

Master Development Plan name:

Well in Master SUPO? NO

Master SUPO name:

Well in Master Drilling Plan? NO

Master Drilling Plan name:

Well Name: FULLER 13/12 H3FC FED COM

Well Number: 1H

Well API Number:

Field/Pool or Exploratory? Field and Pool

Field Name: Corral Canyon

Pool Name: Bone Spring

Operator Name: MEWBOURNE OIL COMPANY**Well Name:** FULLER 13/12 H3FC FED COM**Well Number:** 1H

Fuller13_12H3FCFedCom1H_existingwellmap_20220406095105.pdf

Section 4 - Location of Existing and/or Proposed Production Facilities

Submit or defer a Proposed Production Facilities plan? SUBMIT

Production Facilities description: Pad is 480' x 400'. 1 3.5 buried steel flowline with a working pressure of 250#. 1 3.5 buried steel gas line for gas lift purposes with a working pressure of 250#. 1 1 buried gas supply line with a working pressure of 150#. These lines will be installed in one ditch following the attached route approximately 1500' in length. An overhead electric line will be installed within 15 of the flowline route. OHEL will be up to 22900 volts.

Production Facilities map:

Fuller13_12H3FCFedCom1H_productionfacilityandflowlinemap_20220406095117.pdf

Section 5 - Location and Types of Water Supply

Water Source Table

Water source type: IRRIGATION

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

Source latitude: 32.032591**Source longitude:** -103.882333**Source datum:** NAD83**Water source permit type:** WATER WELL**Water source transport method:** TRUCKING**Source land ownership:** PRIVATE**Source transportation land ownership:** PRIVATE**Water source volume (barrels):** 2135**Source volume (acre-feet):** 0.27518675**Source volume (gal):** 89670**Water source and transportation**

Fuller13_12H3FCFedCom1H_watersourceandtransmap_20220406095136.pdf

Water source comments:**New water well?** N

New Water Well Info

Operator Name: MEWBOURNE OIL COMPANY**Well Name:** FULLER 13/12 H3FC FED COM**Well Number:** 1H**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**Construction Materials source location**

Fuller13_12H3FCFedCom1H_calichesourceandtransmap_20220406095149.pdf

Section 7 - Methods for Handling

Waste type: DRILLING**Waste content description:** Drill cuttings**Amount of waste:** 1335 barrels**Waste disposal frequency :** One Time Only**Safe containment description:** 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 waste disposal locations are CRI or Lea Land, both facilities are located on HWY 62/180, Sec. 27 T20S R32E.

Operator Name: MEWBOURNE OIL COMPANY**Well Name:** FULLER 13/12 H3FC FED COM**Well Number:** 1H**Waste type:** SEWAGE**Waste content description:** Human waste & grey water**Amount of waste:** 1500 gallons**Waste disposal frequency :** Weekly**Safe containment description:** 2,000 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 from all drilling & completion procedures**Amount of waste:** 1500 pounds**Waste disposal frequency :** One Time Only**Safe containment description:** Enclosed trash trailers**Safe containmant attachment:****Waste disposal type:** HAUL TO COMMERCIAL FACILITY **Disposal location ownership:** PRIVATE**Disposal type description:****Disposal location description:** County of Eddy waste management

Reserve Pit

Reserve Pit being used? NO**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?** Y

Operator Name: MEWBOURNE OIL COMPANY

Well Name: FULLER 13/12 H3FC FED COM

Well Number: 1H

Description of cuttings location Drill cuttings will be properly contained in steel tanks (20 yard roll off bins.) and taken to an NMOCD approved disposal facility listed below. After drilling and completion operations, trash, chemicals, salts, frac sand and other waste material will be removed and disposed of properly at the said facilities. NMOCD approved waste disposal locations are CRI or Lea Land, both facilities are located on HWY 62/180, Sec. 27 T20S R32E.

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:

Fuller13_12H3FCFedCom1H_wellsitelayout_20220406095226.pdf

Comments:

Section 10 - Plans for Surface Reclamation

Type of disturbance: New Surface Disturbance

Multiple Well Pad Name: Fuller 13/12 H3 & B2 Fed Com wells

Multiple Well Pad Number: 12

Recontouring

Drainage/Erosion control construction: None required

Drainage/Erosion control reclamation: None required

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 363657

CONDITIONS

Operator: MEWBOURNE OIL CO P.O. Box 5270 Hobbs, NM 88241	OGRID:
	14744
	Action Number: 363657
	Action Type: [C-101] BLM - Federal/Indian Land Lease (Form 3160-3)

CONDITIONS

Created By	Condition	Condition Date
ward.rikala	Notify OCD 24 hours prior to casing & cement	7/19/2024
ward.rikala	Will require a File As Drilled C-102 and a Directional Survey with the C-104	7/19/2024
ward.rikala	Once the well is spud, to prevent ground water contamination through whole or partial conduits from the surface, the operator shall drill without interruption through the fresh water zone or zones and shall immediately set in cement the water protection string	7/19/2024
ward.rikala	Cement is required to circulate on both surface and intermediate1 strings of casing	7/19/2024
ward.rikala	If cement does not circulate on any string, a CBL is required for that string of casing	7/19/2024
ward.rikala	Oil base muds are not to be used until fresh water zones are cased and cemented providing isolation from the oil or diesel. This includes synthetic oils. Oil based mud, drilling fluids and solids must be contained in a steel closed loop system	7/19/2024