Form 3160-3
(June 2015)

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

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

APPLICATION FOR PERMIT TO DRILL OR REENTER

5. Lease Serial No.: NMNM134867

6. If Indian, Allotee or Tribe Name:

1a. Type of work: ☑ DRILL ☐ REENTER

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

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

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

8. Lease Name and Well No.: HOSS 2/11 B2AP FED COM 1H

2. Name of Operator: MEWBOURNE OIL COMPANY

9. API Well No.: 30 015 48950

3a. Address: PO Box 5270, Hobbs, NM 88240

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

10. Field and Pool, or Exploratory: SAN LORENZO NORTH BONE SPRING/

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

At surface: NENE / 300 FNL / 1120 FEL / LAT 32.1656762 / LONG -104.0529912

At proposed prod. zone: SESE / 100 FSL / 330 FEL / LAT 32.1377525 / LONG -104.0504847

11. Sec., T. R. M. or Blk. and Survey or Area: SEC 2/T25S/R28E/NMP

14. Distance in miles and direction from nearest town or post office*: 7 miles

12. County or Parish: EDDY

13. State: NM

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

16. No of acres in lease:

17. Spacing Unit dedicated to this well: 480.0

18. Distance from proposed location* to nearest well, drilling, completed, applied for, on this lease, ft.: 60 feet

19. Proposed Depth: 8320 feet / 18609 feet

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

21. Elevations (Show whether DF, KDB, RT, GL, etc.): 2952 feet

22. Approximate date work will start*: 06/13/2020

23. Estimated duration: 60 days

24. Attachments

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

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

25. Signature	Name *(Printed/Typed)*	Date
(Electronic Submission)	BRADLEY BISHOP / Ph: (575) 393-5905	04/13/2020

Title: Regulatory

Approved by *(Signature)*	Name *(Printed/Typed)*	Date
(Electronic Submission)	Cody Layton / Ph: (575) 234-5959	05/03/2021

Title	Office
Assistant Field Manager Lands & Minerals	Carlsbad Field Office

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

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

APPROVED WITH CONDITIONS

(Continued on page 2)

*(Instructions on page 2)

Approval Date: 05/03/2021

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

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

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

☐ AMENDED REPORT

WELL LOCATION AND ACREAGE DEDICATION PLAT

1 API Number	2 Pool Code	3 Pool Name
	53610	SAN LORENZO BONE SPRING NORTH

4 Property Code	5 Property Name	6 Well Number
	HOSS 2/11 B2AP FED COM	1H

7 OGRID NO.	8 Operator Name	9 Elevation
14744	MEWBOURNE OIL COMPANY	2952'

10 Surface Location

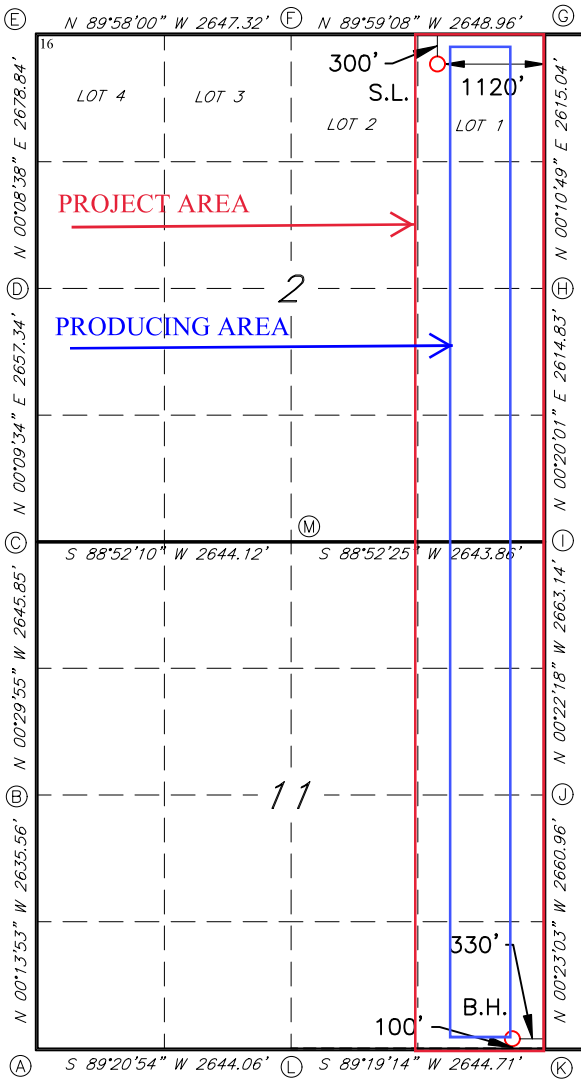
UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet From the	East/West line	County
1	2	25S	28E		300	NORTH	1120	EAST	EDDY

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
P	11	25S	28E		100	SOUTH	330	EAST	EDDY

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

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



GEODETIC DATA
NAD 83 GRID – NM EAST

SURFACE LOCATION
N: 424121.0 – E: 628083.7
LAT: 32.1656762° N
LONG: 104.0529912° W

BOTTOM HOLE LOCATION
N: 413965.1 – E: 628885.5
LAT: 32.1377527° N
LONG: 104.0504863° W

CORNER DATA
NAD 83 GRID – NM EAST

A: FOUND BRASS CAP "1940"
N: 413807.6 – E: 623928.9

B: FOUND BRASS CAP "1940"
N: 416442.5 – E: 623918.2

C: FOUND BRASS CAP "1940"
N: 419087.7 – E: 623895.2

D: FOUND BRASS CAP "1940"
N: 421744.4 – E: 623902.6

E: FOUND BRASS CAP "1940"
N: 424422.7 – E: 623909.3

F: FOUND BRASS CAP "1940"
N: 424421.1 – E: 626556.0

G: FOUND BRASS CAP "1940"
N: 424420.5 – E: 629204.4

H: FOUND BRASS CAP "1940"
N: 421806.0 – E: 629196.2

I: FOUND BRASS CAP "1940"
N: 419191.8 – E: 629181.0

J: FOUND BRASS CAP "1940"
N: 416529.3 – E: 629198.2

K: FOUND BRASS CAP "1940"
N: 413869.0 – E: 629216.1

L: FOUND BRASS CAP "1940"
N: 413837.7 – E: 626572.1

M: FOUND BRASS CAP "1940"
N: 419139.9 – E: 626538.2

17 OPERATOR CERTIFICATION

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

Bradley C Bishop 4-14-20
Signature Date

BRADLEY BISHOP
Printed Name

BBISHOP@MEWBOURNE.COM
E-mail Address

18 SURVEYOR CERTIFICATION

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

03-19-2020
Date of Survey

Signature and Seal of Professional Surveyor:

ROBERT M. HOWETT NEW MEXICO 19680 PROFESSIONAL SURVEYOR

19680
Certificate Number

RRC-Job No.: LS20030194

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:** 8/13/21

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
Hoss 2/11 B2AP Fed Com 1H		N 2 25S 28E	300' FNL x 1120' FEL	1500	2500	3500

IV. Central Delivery Point Name: Hoss 2/11 B2AP 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
Hoss 2/11 B2AP Fed Com 1H		10/13/21	11/13/21	12/13/21	12/28/21	12/28/21

VI. Separation Equipment: ☒ Attach a complete description of how Operator will size separation equipment to optimize gas capture.

VII. Operational Practices: ☒ Attach a complete description of the actions Operator will take to comply with the requirements of Subsection A through F of 19.15.27.8 NMAC.

VIII. Best Management Practices: ☒ Attach a complete description of Operator's best management practices to minimize venting during active and planned maintenance.

Section 2 – Enhanced Plan

EFFECTIVE APRIL 1, 2022

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

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

IX. Anticipated Natural Gas Production:

Well	API	Anticipated Average Natural Gas Rate MCF/D	Anticipated Volume of Natural Gas for the First Year MCF

X. Natural Gas Gathering System (NGGS):

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

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

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

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

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

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

Section 3 - Certifications

Effective May 25, 2021

Operator certifies that, after reasonable inquiry and based on the available information at the time of submittal:

☒ Operator will be able to connect the well(s) to a natural gas gathering system in the general area with sufficient capacity to transport one hundred percent of the anticipated volume of natural gas produced from the well(s) commencing on the date of first production, taking into account the current and anticipated volumes of produced natural gas from other wells connected to the pipeline gathering system; or

☐ Operator will not be able to connect to a natural gas gathering system in the general area with sufficient capacity to transport one hundred percent of the anticipated volume of natural gas produced from the well(s) commencing on the date of first production, taking into account the current and anticipated volumes of produced natural gas from other wells connected to the pipeline gathering system. ***If Operator checks this box, Operator will select one of the following:***

Well Shut-In. ☐ Operator will shut-in and not produce the well until it submits the certification required by Paragraph (4) of Subsection D of 19.15.27.9 NMAC; or

Venting and Flaring Plan. ☐ Operator has attached a venting and flaring plan that evaluates and selects one or more of the potential alternative beneficial uses for the natural gas until a natural gas gathering system is available, including:

- **(a)** power generation on lease;
- **(b)** power generation for grid;
- **(c)** compression on lease;
- **(d)** liquids removal on lease;
- **(e)** reinjection for underground storage;
- **(f)** reinjection for temporary storage;
- **(g)** reinjection for enhanced oil recovery;
- **(h)** fuel cell production; and
- **(i)** other alternative beneficial uses approved by the division.

Section 4 - Notices

1. If, at any time after Operator submits this Natural Gas Management Plan and before the well is spud:

(a) Operator becomes aware that the natural gas gathering system it planned to connect the well(s) to has become unavailable or will not have capacity to transport one hundred percent of the production from the well(s), no later than 20 days after becoming aware of such information, Operator shall submit for OCD's approval a new or revised venting and flaring plan containing the information specified in Paragraph (5) of Subsection D of 19.15.27.9 NMAC; or

(b) Operator becomes aware that it has, cumulatively for the year, become out of compliance with its baseline natural gas capture rate or natural gas capture requirement, no later than 20 days after becoming aware of such information, Operator shall submit for OCD's approval a new or revised Natural Gas Management Plan for each well it plans to spud during the next 90 days containing the information specified in Paragraph (2) of Subsection D of 19.15.27.9 NMAC, and shall file an update for each Natural Gas Management Plan until Operator is back in compliance with its baseline natural gas capture rate or natural gas capture requirement.

2. OCD may deny or conditionally approve an APD if Operator does not make a certification, fails to submit an adequate venting and flaring plan which includes alternative beneficial uses for the anticipated volume of natural gas produced, or if OCD determines that Operator will not have adequate natural gas takeaway capacity at the time a well will be spud.

Page 8

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

Signature:	Bradley Bishop
Printed Name:	BRADLEY BISHOP
Title:	REGULATORY MANAGER
E-mail Address:	BBISHOP@MEWBOURNE.COM
Date:	8/13/21
Phone:	575-393-5905

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

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

Mewbourne Oil Company

Natural Gas Management Plan – Attachment

VI. Separation equipment will be sized by construction engineering staff based on stated manufacturer daily throughput capacities and anticipated daily production rates to ensure adequate capacity. Closed vent system piping, compression needs, and VRUs will be sized utilizing ProMax modelling software to ensure adequate capacity for anticipated production volumes and conditions.

VII. Mewbourne Oil Company (MOC) will take following actions to comply with the regulations listed in 19.15.27.8 :

A. MOC will maximize the recovery of natural gas by minimizing the waste, as defined by 19.15.2 NMAC, of natural gas through venting and flaring. MOC will ensure that well(s) will be connected to a natural gas gathering system with sufficient capacity to transport natural gas. If there is no adequate takeaway for the gas, well(s) will be shut in until the natural gas gathering system is available.

B. All drilling operations will be equipped with a rig flare located at least 100 ft from the nearest surface hole. Rig flare will be utilized to combust any natural gas that is brought to surface during normal drilling operations. In the case of emergency venting or flaring the volumes will be estimated and reported appropriately.

C. During completion operations any natural gas brought to surface will be flared. Immediately following the finish of completion operations, all well flow will be directed to permanent separation equipment. Produced natural gas from separation equipment will be sent to sales. It is not anticipated that gas will not meet pipeline standards. However, if natural gas does not meet gathering pipeline quality specifications, MOC will flare the natural gas for 60 days or until the natural gas meets the pipeline quality specifications, whichever is sooner. MOC will ensure that the flare is sized properly and is equipped with automatic igniter or continuous pilot. The gas sample will analyzed twice per week and the gas will be routed into a gathering system as soon as pipeline specifications are met.

D. Natural gas will not be flared with the exceptions and provisions listed in the 19.15.27.8 D.(1) through (4). If there is no adequate takeaway for the separator gas, well(s) will be shut in until the natural gas gathering system is available with exception of emergency or malfunction situations. Venting and/or flaring volumes will be estimated and reported appropriately.

E. MOC will comply with the performance standards requirements and provisions listed in 19.15.27.8 E.(1) through (8). All equipment will be designed and sized to handle maximum anticipated pressures and throughputs in order to minimize the waste. Production storage tanks constructed after May 25, 2021 will be equipped with automatic gauging system. Flares constructed after May 25, 2021 will be equipped with automatic igniter or continuous pilot. Flares will be located at least 100' from the well and storage tanks unless otherwise approved by the division. MOC will conduct AVO inspections as described in 19.15.27.8 E (5) (a) with frequencies specified in 19.15.27.8 E (5) (b) and (c). All emergencies will be resolved as quickly and safely as feasible to minimize waste.

F. The volume of natural gas that is vented or flared as the result of malfunction or emergency during drilling and completions operations will be estimated. The volume of natural gas that is vented, flared or beneficially used during production operations, will be measured or estimated. MOC will install equipment to measure

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

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

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

Drilling Plan Data Report
08/30/2021

APD ID: 10400056124
Submission Date: 04/13/2020
Operator Name: MEWBOURNE OIL COMPANY
Well Name: HOSS 2/11 B2AP 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 - Geologic Formations

Formation ID	Formation Name	Elevation	True Vertical Depth	Measured Depth	Lithologies	Mineral Resources	Producing Formation
713740	UNKNOWN	2952	28	28	OTHER : Top Soil	NONE	N
713752	TOP SALT	1772	1180	1180	SALT	NONE	N
713744	BOTTOM SALT	537	2415	2415	SALT	NONE	N
713745	LAMAR	327	2625	2625	LIMESTONE	NATURAL GAS, OIL	N
713746	BELL CANYON	302	2650	2650	SANDSTONE	NATURAL GAS, OIL	N
713747	CHERRY CANYON	-593	3545	3545	SANDSTONE	NATURAL GAS, OIL	N
713748	MANZANITA	-718	3670	3670	LIMESTONE	NATURAL GAS, OIL	N
713749	BRUSHY CANYON	-1900	4852	4852	SANDSTONE	NATURAL GAS, OIL	N
713739	BONE SPRING	-3433	6385	6385	LIMESTONE, SHALE	NATURAL GAS, OIL	N
713742	BONE SPRING 1ST	-4383	7335	7335	SANDSTONE	NATURAL GAS, OIL	N
713743	BONE SPRING 2ND	-5173	8125	8125	SANDSTONE	NATURAL GAS, OIL	Y

Section 2 - Blowout Prevention

Pressure Rating (PSI): 5M
Rating Depth: 18609

Equipment: Annular, Pipe Ram, Blind Ram

Requesting Variance? YES

Variance request: A variance is requested for the use of a flexible choke line from the BOP to Choke Manifold. A multi-bowl wellhead is being used. See attached schematic.
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

Operator Name: MEWBOURNE OIL COMPANY

Well Name: HOSS 2/11 B2AP FED COM **Well Number:** 1H

cock and floor safety valve (inside BOP) and choke lines and choke manifold.

Choke Diagram Attachment:

Hoss_2_11_B2AP_Fed_Com_1H_5M_BOPE_Choke_Diagram_20200413150246.pdf

Hoss_2_11_B2AP_Fed_Com_1H_Flex_Line_Specs_20200413150246.pdf

Hoss_2_11_B2AP_Fed_Com_1H_Flex_Line_Specs_API_16C_20200413150247.pdf

BOP Diagram Attachment:

Hoss_2_11_B2AP_Fed_Com_1H_5M_BOPE_Schematic_20200413150258.pdf

Hoss_2_11_B2AP_Fed_Com_1H_Multi_Bowl_WH_20200413150258.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	450	0	450	2952	2502	450	H-40	48	ST&C	3.74	8.4	DRY	14.91	DRY	25.05
2	INTERMEDIATE	12.25	9.625	NEW	API	N	0	2550	0	2550	2996	402	2550	J-55	36	LT&C	1.52	2.65	DRY	4.93	DRY	6.14
3	PRODUCTION	8.75	7.0	NEW	API	N	0	8400	0	8260	2996	-5308	8400	HCP-110	26	LT&C	1.53	2.44	DRY	3.17	DRY	3.8
4	LINER	6.125	4.5	NEW	API	N	7893	18609	7843	8320	-4891	-5368	10716	P-110	13.5	LT&C	2.06	2.39	DRY	2.34	DRY	2.92

Casing Attachments

Operator Name: MEWBOURNE OIL COMPANY

Well Name: HOSS 2/11 B2AP FED COM **Well Number:** 1H

Casing Attachments

Casing ID: 1 **String Type:** SURFACE

Inspection Document:

Spec Document:

Tapered String Spec:

Casing Design Assumptions and Worksheet(s):

Hoss_2_11_B2AP_Fed_Com_1H_Csg_assumptions_20200413150348.pdf

Casing ID: 2 **String Type:** INTERMEDIATE

Inspection Document:

Spec Document:

Tapered String Spec:

Casing Design Assumptions and Worksheet(s):

Hoss_2_11_B2AP_Fed_Com_1H_Csg_assumptions_20200413150406.pdf

Casing ID: 3 **String Type:** PRODUCTION

Inspection Document:

Spec Document:

Tapered String Spec:

Casing Design Assumptions and Worksheet(s):

Hoss_2_11_B2AP_Fed_Com_1H_Csg_assumptions_20200413150525.pdf

Operator Name: MEWBOURNE OIL COMPANY

Well Name: HOSS 2/11 B2AP FED COM **Well Number:** 1H

Casing Attachments

Casing ID: 4 **String Type:** LINER

Inspection Document:

Spec Document:

Tapered String Spec:

Casing Design Assumptions and Worksheet(s):

Hoss_2_11_B2AP_Fed_Com_1H_Csg_assumptions_20200413150622.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	258	170	2.12	12.5	360	100	Class C	Salt, Gel, Extender, LCM
SURFACE	Tail		258	450	200	1.34	14.8	268	100	Class C	Retarder
INTERMEDIATE	Lead		0	1859	340	2.12	12.5	721	25	Class C	Salt, Gel, Extender, LCM
INTERMEDIATE	Tail		1859	2550	200	1.34	14.8	268	25	Class C	Retarder
PRODUCTION	Lead	3670	2350	2993	60	2.12	12.5	127	25	Class C	Gel, Extender, Salt, LCM
PRODUCTION	Tail		2993	3670	100	1.34	14.8	134	25	Class C	Retarder
PRODUCTION	Lead	3670	3670	5888	200	2.12	12.5	424	25	Class C	Gel, Retarder, Defoamer, Extender
PRODUCTION	Tail		5888	8400	400	1.18	15.6	472	25	Class H	Retarder, Fluid Loss, Defoamer
LINER	Lead		7893	18609	430	2.97	11.2	1277	25	Class H	Salt, Gel, Fluid Loss, Retarder, Dispersant, Defoamer, Anti-Settling Agent

Operator Name: MEWBOURNE OIL COMPANY

Well Name: HOSS 2/11 B2AP FED COM **Well Number:** 1H

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: Lost circulation material Sweeps Mud scavengers in surface hole

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	450	SPUD MUD	8.6	8.8							
450	2550	SALT SATURATED	10	10							
2550	8260	WATER-BASED MUD	8.6	9.5							
8260	8320	OIL-BASED MUD	10	12							MW up to 13.0 ppg may be required for shale control. The highest MW needed to balance formation pressure is expected to be 12.0 ppg.

Operator Name: MEWBOURNE OIL COMPANY

Well Name: HOSS 2/11 B2AP FED COM **Well Number:** 1H

Section 6 - Test, Logging, Coring

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

Will run GR/CNL from KOP (7893') to surface (horizontal well - vertical portion of hole). Stated logs run will be in the Completion Report submitted to the BLM.

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

COMPENSATED NEUTRON LOG,DIRECTIONAL SURVEY,GAMMA RAY LOG,MEASUREMENT WHILE DRILLING,MUD LOG/GEOLOGIC LITHOLOGY LOG,MUD LOG/GEOLOGICAL LITHOLOGY LOG,

Coring operation description for the well:

None

Section 7 - Pressure

Anticipated Bottom Hole Pressure: 5192 **Anticipated Surface Pressure:** 3361

Anticipated Bottom Hole Temperature(F): 165

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

Describe:

Contingency Plans geoharzards description:

Contingency Plans geohazards attachment:

Hydrogen Sulfide drilling operations plan required? YES

Hydrogen sulfide drilling operations plan:

Hoss_2_11_B2AP_Fed_Com_1H_H2S_Plan_20200413151124.pdf

Section 8 - Other Information

Proposed horizontal/directional/multi-lateral plan submission:

Hoss_2_11_B2AP_Fed_Com_1H_Dir_plot_20200413151149.pdf

Hoss_2_11_B2AP_Fed_Com_1H_Dir_plan_20200413151150.pdf

Other proposed operations facets description:

Other proposed operations facets attachment:

Hoss_2_11_B2AP_Fed_Com_1H_Add_Info_20200413151200.pdf

Other Variance attachment:

Mewbourne Oil Company
Hoss 2/11 B2AP Fed Com #1H
Sec 2, T25S, R28E
SL: 300' FNL & 1120' FEL
BHL: 100' FSL & 330' FEL

Hole Size	Casing Interval From	Casing Interval To	Csg. Size	Weight (lbs)	Grade	Conn.	SF Collapse	SF Burst	SF Jt Tension	SF Body Tension
17.5"	0'	450'	13.375"	48	H40	STC	3.74	8.40	14.91	25.05
12.25"	0'	2550'	9.625"	36	J55	LTC	1.52	2.65	4.93	6.14
8.75"	0'	8400'	7"	26	P110	LTC	1.53	2.44	2.34	2.92
6.125"	7893'	18609'	4.5"	13.5	P110	LTC	2.06	2.39	2.34	2.92
				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 3rd 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 2nd string set 100' to 600' below the base of salt?	
Is well located in high Cave/Karst?	Y
If yes, are there two strings cemented to surface?	Y
(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
Hoss 2/11 B2AP Fed Com #1H
Sec 2, T25S, R28E
SL: 300' FNL & 1120' FEL
BHL: 100' FSL & 330' FEL

Hole Size	Casing Interval From	Casing Interval To	Csg. Size	Weight (lbs)	Grade	Conn.	SF Collapse	SF Burst	SF Jt Tension	SF Body Tension
17.5"	0'	450'	13.375"	48	H40	STC	3.74	8.40	14.91	25.05
12.25"	0'	2550'	9.625"	36	J55	LTC	1.52	2.65	4.93	6.14
8.75"	0'	8400'	7"	26	P110	LTC	1.53	2.44	2.34	2.92
6.125"	7893'	18609'	4.5"	13.5	P110	LTC	2.06	2.39	2.34	2.92
				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 3rd 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 2nd string set 100' to 600' below the base of salt?	
Is well located in high Cave/Karst?	Y
If yes, are there two strings cemented to surface?	Y
(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
Hoss 2/11 B2AP Fed Com #1H
Sec 2, T25S, R28E
SL: 300' FNL & 1120' FEL
BHL: 100' FSL & 330' FEL

Hole Size	Casing Interval From	Casing Interval To	Csg. Size	Weight (lbs)	Grade	Conn.	SF Collapse	SF Burst	SF Jt Tension	SF Body Tension
17.5"	0'	450'	13.375"	48	H40	STC	3.74	8.40	14.91	25.05
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8.75"	0'	8400'	7"	26	P110	LTC	1.53	2.44	2.34	2.92
6.125"	7893'	18609'	4.5"	13.5	P110	LTC	2.06	2.39	2.34	2.92
				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 3rd 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 2nd string set 100' to 600' below the base of salt?	
Is well located in high Cave/Karst?	Y
If yes, are there two strings cemented to surface?	Y
(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
Hoss 2/11 B2AP Fed Com #1H
Sec 2, T25S, R28E
SL: 300' FNL & 1120' FEL
BHL: 100' FSL & 330' FEL

Hole Size	Casing Interval From	Casing Interval To	Csg. Size	Weight (lbs)	Grade	Conn.	SF Collapse	SF Burst	SF Jt Tension	SF Body Tension
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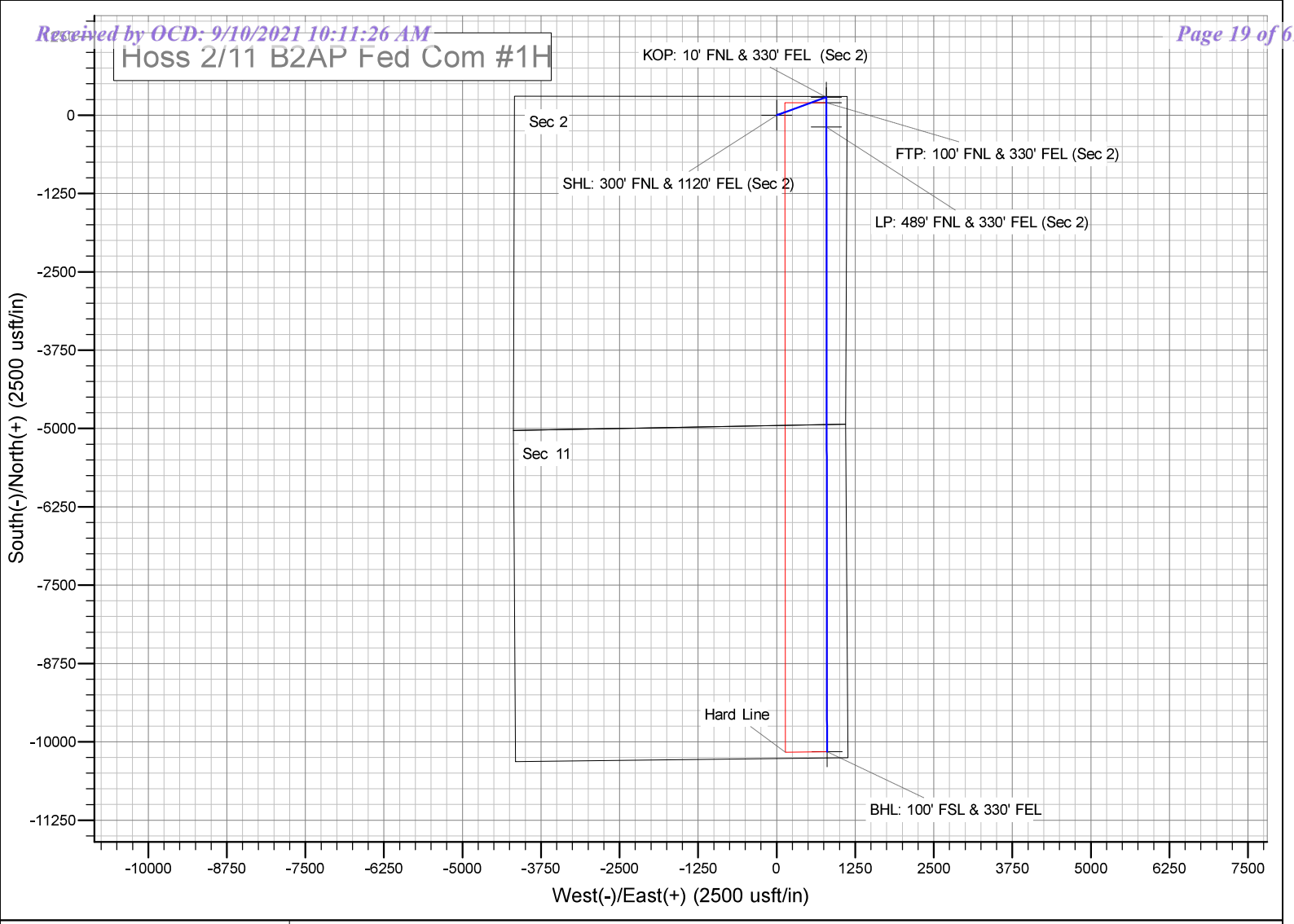
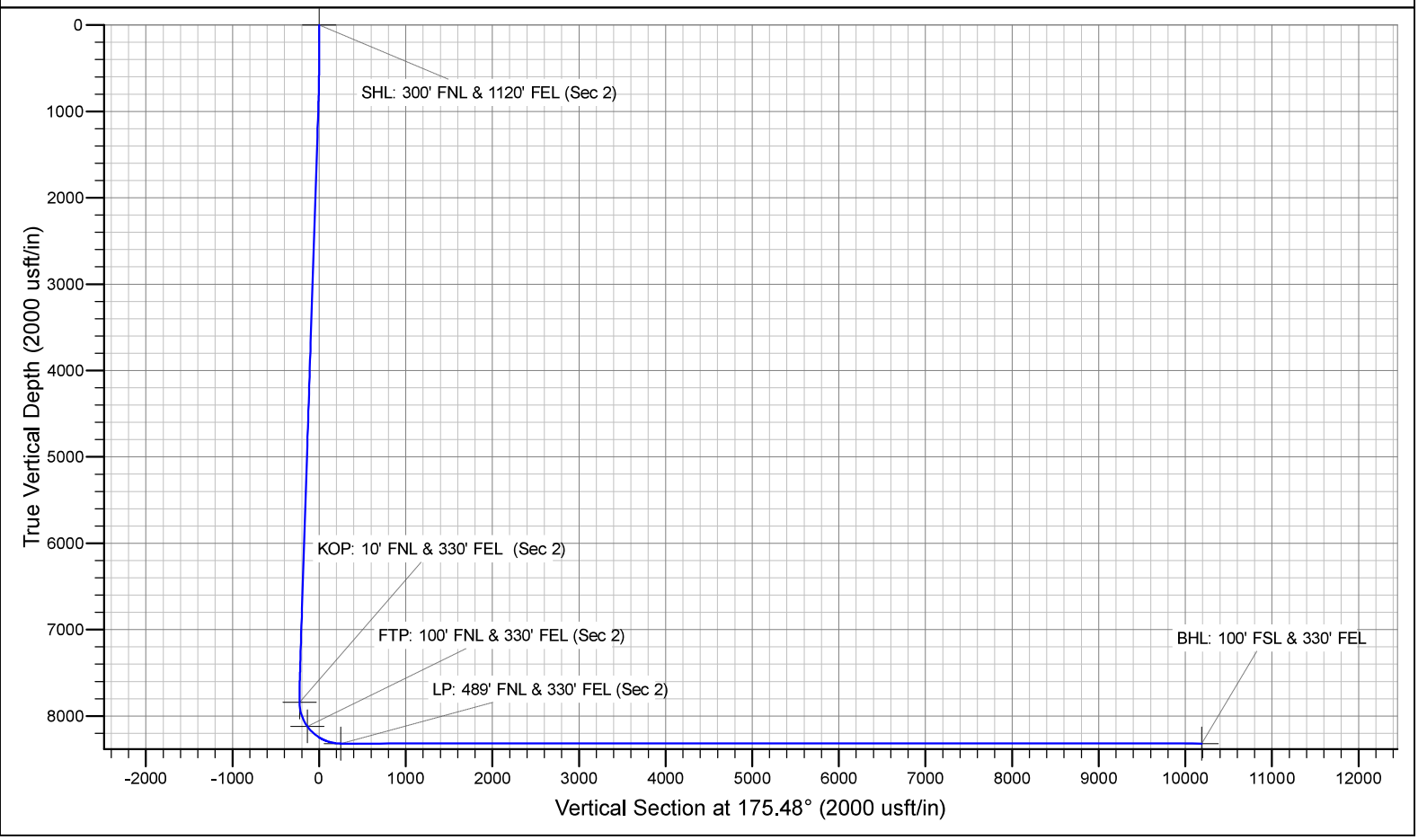
12.25"	0'	2550'	9.625"	36	J55	LTC	1.52	2.65	4.93	6.14
8.75"	0'	8400'	7"	26	P110	LTC	1.53	2.44	2.34	2.92
6.125"	7893'	18609'	4.5"	13.5	P110	LTC	2.06	2.39	2.34	2.92
				BLM Minimum Safety Factor			1.125	1	1.6 Dry 1.8 Wet	1.6 Dry 1.8 Wet

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 3rd 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 2nd string set 100' to 600' below the base of salt?	
Is well located in high Cave/Karst?	Y
If yes, are there two strings cemented to surface?	Y
(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?	


Hoss 2/11 B2AP Fed Com #1H
KOP: 10' FNL & 330' FEL (Sec 2)
Sec 2
FTP: 100' FNL & 330' FEL (Sec 2)
SHL: 300' FNL & 1120' FEL (Sec 2)
LP: 489' FNL & 330' FEL (Sec 2)
Sec 11
Hard Line
BHL: 100' FSL & 330' FEL
South(-)/North(+) (2500 usft/in)
West(-)/East(+) (2500 usft/in)


SHL: 300' FNL & 1120' FEL (Sec 2)
KOP: 10' FNL & 330' FEL (Sec 2)
FTP: 100' FNL & 330' FEL (Sec 2)
LP: 489' FNL & 330' FEL (Sec 2)
BHL: 100' FSL & 330' FEL
True Vertical Depth (2000 usft/in)
Vertical Section at 175.48° (2000 usft/in)

Mewbourne Oil Company

Eddy County, New Mexico NAD 83
Hoss 2/11 B2AP Fed Com #1H
Sec 2, T25S, R28E
SHL: 300' FNL & 1120' FEL, Sec 2
BHL: 100' FSL & 330' FEL, Sec 11

Plan: Design #1

Standard Planning Report

13 April, 2020

Planning Report

Database:	Hobbs	**Local Co-ordinate Reference:**	Site Hoss 2/11 B2AP Fed Com #1H
Company:	Mewbourne Oil Company	**TVD Reference:**	WELL @ 2980.0usft (Original Well Elev)
Project:	Eddy County, New Mexico NAD 83	**MD Reference:**	WELL @ 2980.0usft (Original Well Elev)
Site:	Hoss 2/11 B2AP Fed Com #1H	**North Reference:**	Grid
Well:	Sec 2, T25S, R28E	**Survey Calculation Method:**	Minimum Curvature
Wellbore:	BHL: 100' FSL & 330' FEL, Sec 11		
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 Hoss 2/11 B2AP Fed Com #1H

Site Position:		**Northing:**	424,121.00 usft	**Latitude:**	32.1656762
From:	Map	**Easting:**	628,084.00 usft	**Longitude:**	-104.0529903
Position Uncertainty:	0.0 usft	**Slot Radius:**	13-3/16 "	**Grid Convergence:**	0.15 °

Well Sec 2, T25S, R28E

Well Position	**+N/-S**	0.0 usft	**Northing:**	424,121.00 usft	**Latitude:**	32.1656762
	+E/-W	0.0 usft	**Easting:**	628,084.00 usft	**Longitude:**	-104.0529903
Position Uncertainty		0.0 usft	**Wellhead Elevation:**	2,980.0 usft	**Ground Level:**	2,952.0 usft

Wellbore BHL: 100' FSL & 330' FEL, Sec 11

Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	IGRF2010	12/31/2014	7.37	59.96	48,153

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	175.48

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	
450.0	0.00	0.00	450.0	0.0	0.0	0.00	0.00	0.00	0.00	
911.1	6.92	69.97	910.0	9.5	26.1	1.50	1.50	0.00	69.97	
7,431.6	6.92	69.97	7,383.0	278.5	763.9	0.00	0.00	0.00	0.00	
7,892.7	0.00	0.00	7,843.0	288.0	790.0	1.50	-1.50	0.00	180.00	KOP: 10' FNL & 330' I
8,642.0	90.00	179.93	8,320.0	-189.0	790.5	12.01	12.01	0.00	179.93	
18,609.0	90.00	179.93	8,320.0	-10,156.0	802.0	0.00	0.00	0.00	0.00	BHL: 100' FSL & 330'

Planning Report

Database:	Hobbs	**Local Co-ordinate Reference:**	Site Hoss 2/11 B2AP Fed Com #1H
Company:	Mewbourne Oil Company	**TVD Reference:**	WELL @ 2980.0usft (Original Well Elev)
Project:	Eddy County, New Mexico NAD 83	**MD Reference:**	WELL @ 2980.0usft (Original Well Elev)
Site:	Hoss 2/11 B2AP Fed Com #1H	**North Reference:**	Grid
Well:	Sec 2, T25S, R28E	**Survey Calculation Method:**	Minimum Curvature
Wellbore:	BHL: 100' FSL & 330' FEL, Sec 11		
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: 300' FNL & 1120' FEL (Sec 2)									
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
450.0	0.00	0.00	450.0	0.0	0.0	0.0	0.00	0.00	0.00
500.0	0.75	69.97	500.0	0.1	0.3	-0.1	1.50	1.50	0.00
600.0	2.25	69.97	600.0	1.0	2.8	-0.8	1.50	1.50	0.00
700.0	3.75	69.97	699.8	2.8	7.7	-2.2	1.50	1.50	0.00
800.0	5.25	69.97	799.5	5.5	15.1	-4.3	1.50	1.50	0.00
900.0	6.75	69.97	899.0	9.1	24.9	-7.1	1.50	1.50	0.00
911.1	6.92	69.97	910.0	9.5	26.1	-7.4	1.50	1.50	0.00
1,000.0	6.92	69.97	998.2	13.2	36.2	-10.3	0.00	0.00	0.00
1,100.0	6.92	69.97	1,097.5	17.3	47.5	-13.5	0.00	0.00	0.00
1,200.0	6.92	69.97	1,196.8	21.4	58.8	-16.7	0.00	0.00	0.00
1,300.0	6.92	69.97	1,296.1	25.6	70.1	-20.0	0.00	0.00	0.00
1,400.0	6.92	69.97	1,395.3	29.7	81.4	-23.2	0.00	0.00	0.00
1,500.0	6.92	69.97	1,494.6	33.8	92.7	-26.4	0.00	0.00	0.00
1,600.0	6.92	69.97	1,593.9	37.9	104.1	-29.6	0.00	0.00	0.00
1,700.0	6.92	69.97	1,693.1	42.1	115.4	-32.8	0.00	0.00	0.00
1,800.0	6.92	69.97	1,792.4	46.2	126.7	-36.1	0.00	0.00	0.00
1,900.0	6.92	69.97	1,891.7	50.3	138.0	-39.3	0.00	0.00	0.00
2,000.0	6.92	69.97	1,991.0	54.4	149.3	-42.5	0.00	0.00	0.00
2,100.0	6.92	69.97	2,090.2	58.6	160.6	-45.7	0.00	0.00	0.00
2,200.0	6.92	69.97	2,189.5	62.7	171.9	-49.0	0.00	0.00	0.00
2,300.0	6.92	69.97	2,288.8	66.8	183.3	-52.2	0.00	0.00	0.00
2,400.0	6.92	69.97	2,388.0	70.9	194.6	-55.4	0.00	0.00	0.00
2,500.0	6.92	69.97	2,487.3	75.1	205.9	-58.6	0.00	0.00	0.00
2,600.0	6.92	69.97	2,586.6	79.2	217.2	-61.8	0.00	0.00	0.00
2,700.0	6.92	69.97	2,685.9	83.3	228.5	-65.1	0.00	0.00	0.00
2,800.0	6.92	69.97	2,785.1	87.4	239.8	-68.3	0.00	0.00	0.00
2,900.0	6.92	69.97	2,884.4	91.6	251.2	-71.5	0.00	0.00	0.00
3,000.0	6.92	69.97	2,983.7	95.7	262.5	-74.7	0.00	0.00	0.00
3,100.0	6.92	69.97	3,082.9	99.8	273.8	-77.9	0.00	0.00	0.00
3,200.0	6.92	69.97	3,182.2	103.9	285.1	-81.2	0.00	0.00	0.00
3,300.0	6.92	69.97	3,281.5	108.1	296.4	-84.4	0.00	0.00	0.00
3,400.0	6.92	69.97	3,380.8	112.2	307.7	-87.6	0.00	0.00	0.00
3,500.0	6.92	69.97	3,480.0	116.3	319.0	-90.8	0.00	0.00	0.00
3,600.0	6.92	69.97	3,579.3	120.4	330.4	-94.1	0.00	0.00	0.00
3,700.0	6.92	69.97	3,678.6	124.6	341.7	-97.3	0.00	0.00	0.00
3,800.0	6.92	69.97	3,777.9	128.7	353.0	-100.5	0.00	0.00	0.00
3,900.0	6.92	69.97	3,877.1	132.8	364.3	-103.7	0.00	0.00	0.00
4,000.0	6.92	69.97	3,976.4	136.9	375.6	-106.9	0.00	0.00	0.00
4,100.0	6.92	69.97	4,075.7	141.1	386.9	-110.2	0.00	0.00	0.00
4,200.0	6.92	69.97	4,174.9	145.2	398.2	-113.4	0.00	0.00	0.00
4,300.0	6.92	69.97	4,274.2	149.3	409.6	-116.6	0.00	0.00	0.00
4,400.0	6.92	69.97	4,373.5	153.4	420.9	-119.8	0.00	0.00	0.00
4,500.0	6.92	69.97	4,472.8	157.6	432.2	-123.0	0.00	0.00	0.00
4,600.0	6.92	69.97	4,572.0	161.7	443.5	-126.3	0.00	0.00	0.00
4,700.0	6.92	69.97	4,671.3	165.8	454.8	-129.5	0.00	0.00	0.00
4,800.0	6.92	69.97	4,770.6	169.9	466.1	-132.7	0.00	0.00	0.00
4,900.0	6.92	69.97	4,869.8	174.1	477.4	-135.9	0.00	0.00	0.00
5,000.0	6.92	69.97	4,969.1	178.2	488.8	-139.2	0.00	0.00	0.00

Planning Report

Database:	Hobbs	**Local Co-ordinate Reference:**	Site Hoss 2/11 B2AP Fed Com #1H
Company:	Mewbourne Oil Company	**TVD Reference:**	WELL @ 2980.0usft (Original Well Elev)
Project:	Eddy County, New Mexico NAD 83	**MD Reference:**	WELL @ 2980.0usft (Original Well Elev)
Site:	Hoss 2/11 B2AP Fed Com #1H	**North Reference:**	Grid
Well:	Sec 2, T25S, R28E	**Survey Calculation Method:**	Minimum Curvature
Wellbore:	BHL: 100' FSL & 330' FEL, Sec 11		
Design:	Design #1		

Planned Survey

Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)
5,100.0	6.92	69.97	5,068.4	182.3	500.1	-142.4	0.00	0.00	0.00
5,200.0	6.92	69.97	5,167.7	186.4	511.4	-145.6	0.00	0.00	0.00
5,300.0	6.92	69.97	5,266.9	190.6	522.7	-148.8	0.00	0.00	0.00
5,400.0	6.92	69.97	5,366.2	194.7	534.0	-152.0	0.00	0.00	0.00
5,500.0	6.92	69.97	5,465.5	198.8	545.3	-155.3	0.00	0.00	0.00
5,600.0	6.92	69.97	5,564.8	202.9	556.6	-158.5	0.00	0.00	0.00
5,700.0	6.92	69.97	5,664.0	207.1	568.0	-161.7	0.00	0.00	0.00
5,800.0	6.92	69.97	5,763.3	211.2	579.3	-164.9	0.00	0.00	0.00
5,900.0	6.92	69.97	5,862.6	215.3	590.6	-168.1	0.00	0.00	0.00
6,000.0	6.92	69.97	5,961.8	219.4	601.9	-171.4	0.00	0.00	0.00
6,100.0	6.92	69.97	6,061.1	223.6	613.2	-174.6	0.00	0.00	0.00
6,200.0	6.92	69.97	6,160.4	227.7	624.5	-177.8	0.00	0.00	0.00
6,300.0	6.92	69.97	6,259.7	231.8	635.8	-181.0	0.00	0.00	0.00
6,400.0	6.92	69.97	6,358.9	235.9	647.2	-184.2	0.00	0.00	0.00
6,500.0	6.92	69.97	6,458.2	240.1	658.5	-187.5	0.00	0.00	0.00
6,600.0	6.92	69.97	6,557.5	244.2	669.8	-190.7	0.00	0.00	0.00
6,700.0	6.92	69.97	6,656.7	248.3	681.1	-193.9	0.00	0.00	0.00
6,800.0	6.92	69.97	6,756.0	252.4	692.4	-197.1	0.00	0.00	0.00
6,900.0	6.92	69.97	6,855.3	256.6	703.7	-200.4	0.00	0.00	0.00
7,000.0	6.92	69.97	6,954.6	260.7	715.1	-203.6	0.00	0.00	0.00
7,100.0	6.92	69.97	7,053.8	264.8	726.4	-206.8	0.00	0.00	0.00
7,200.0	6.92	69.97	7,153.1	268.9	737.7	-210.0	0.00	0.00	0.00
7,300.0	6.92	69.97	7,252.4	273.1	749.0	-213.2	0.00	0.00	0.00
7,400.0	6.92	69.97	7,351.7	277.2	760.3	-216.5	0.00	0.00	0.00
7,431.6	6.92	69.97	7,383.0	278.5	763.9	-217.5	0.00	0.00	0.00
7,500.0	5.89	69.97	7,451.0	281.1	771.1	-219.5	1.50	-1.50	0.00
7,600.0	4.39	69.97	7,550.6	284.2	779.5	-221.9	1.50	-1.50	0.00
7,700.0	2.89	69.97	7,650.4	286.3	785.4	-223.6	1.50	-1.50	0.00
7,800.0	1.39	69.97	7,750.3	287.6	788.9	-224.6	1.50	-1.50	0.00
7,892.7	0.00	0.00	7,843.0	288.0	790.0	-224.9	1.50	-1.50	0.00
KOP: 10' FNL & 330' FEL (Sec 2)									
7,900.0	0.88	179.93	7,850.3	287.9	790.0	-224.9	12.01	12.01	0.00
8,000.0	12.89	179.93	7,949.4	276.0	790.0	-212.9	12.01	12.01	0.00
8,100.0	24.90	179.93	8,043.8	243.7	790.1	-180.7	12.01	12.01	0.00
8,190.6	35.78	179.93	8,121.9	198.0	790.1	-135.2	12.01	12.01	0.00
FTP: 100' FNL & 330' FEL (Sec 2)									
8,200.0	36.91	179.93	8,129.5	192.4	790.1	-129.6	12.01	12.01	0.00
8,300.0	48.92	179.93	8,202.6	124.4	790.2	-61.8	12.01	12.01	0.00
8,400.0	60.94	179.93	8,259.9	42.7	790.3	19.6	12.01	12.01	0.00
8,500.0	72.95	179.93	8,299.0	-49.1	790.4	111.2	12.01	12.01	0.00
8,600.0	84.96	179.93	8,318.2	-147.1	790.5	208.9	12.01	12.01	0.00
8,642.0	90.00	179.93	8,320.0	-189.0	790.5	250.6	12.01	12.01	0.00
LP: 489' FNL & 330' FEL (Sec 2)									
8,700.0	90.00	179.93	8,320.0	-247.0	790.6	308.5	0.00	0.00	0.00
8,800.0	90.00	179.93	8,320.0	-347.0	790.7	408.2	0.00	0.00	0.00
8,900.0	90.00	179.93	8,320.0	-447.0	790.8	507.9	0.00	0.00	0.00
9,000.0	90.00	179.93	8,320.0	-547.0	791.0	607.6	0.00	0.00	0.00
9,100.0	90.00	179.93	8,320.0	-647.0	791.1	707.3	0.00	0.00	0.00
9,200.0	90.00	179.93	8,320.0	-747.0	791.2	807.0	0.00	0.00	0.00
9,300.0	90.00	179.93	8,320.0	-847.0	791.3	906.7	0.00	0.00	0.00
9,400.0	90.00	179.93	8,320.0	-947.0	791.4	1,006.4	0.00	0.00	0.00
9,500.0	90.00	179.93	8,320.0	-1,047.0	791.5	1,106.1	0.00	0.00	0.00
9,600.0	90.00	179.93	8,320.0	-1,147.0	791.6	1,205.8	0.00	0.00	0.00

Planning Report

Database:	Hobbs	**Local Co-ordinate Reference:**	Site Hoss 2/11 B2AP Fed Com #1H
Company:	Mewbourne Oil Company	**TVD Reference:**	WELL @ 2980.0usft (Original Well Elev)
Project:	Eddy County, New Mexico NAD 83	**MD Reference:**	WELL @ 2980.0usft (Original Well Elev)
Site:	Hoss 2/11 B2AP Fed Com #1H	**North Reference:**	Grid
Well:	Sec 2, T25S, R28E	**Survey Calculation Method:**	Minimum Curvature
Wellbore:	BHL: 100' FSL & 330' FEL, Sec 11		
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)
9,700.0	90.00	179.93	8,320.0	-1,247.0	791.8	1,305.5	0.00	0.00	0.00
9,800.0	90.00	179.93	8,320.0	-1,347.0	791.9	1,405.2	0.00	0.00	0.00
9,900.0	90.00	179.93	8,320.0	-1,447.0	792.0	1,504.9	0.00	0.00	0.00
10,000.0	90.00	179.93	8,320.0	-1,547.0	792.1	1,604.6	0.00	0.00	0.00
10,100.0	90.00	179.93	8,320.0	-1,647.0	792.2	1,704.3	0.00	0.00	0.00
10,200.0	90.00	179.93	8,320.0	-1,747.0	792.3	1,804.0	0.00	0.00	0.00
10,300.0	90.00	179.93	8,320.0	-1,847.0	792.5	1,903.7	0.00	0.00	0.00
10,400.0	90.00	179.93	8,320.0	-1,947.0	792.6	2,003.4	0.00	0.00	0.00
10,500.0	90.00	179.93	8,320.0	-2,047.0	792.7	2,103.1	0.00	0.00	0.00
10,600.0	90.00	179.93	8,320.0	-2,147.0	792.8	2,202.8	0.00	0.00	0.00
10,700.0	90.00	179.93	8,320.0	-2,247.0	792.9	2,302.5	0.00	0.00	0.00
10,772.0	90.00	179.93	8,320.0	-2,319.0	793.0	2,374.2	0.00	0.00	0.00
PPP2: 2615' FSL & 330' FEL (Sec 2)									
10,800.0	90.00	179.93	8,320.0	-2,347.0	793.0	2,402.2	0.00	0.00	0.00
10,900.0	90.00	179.93	8,320.0	-2,447.0	793.1	2,501.9	0.00	0.00	0.00
11,000.0	90.00	179.93	8,320.0	-2,547.0	793.3	2,601.6	0.00	0.00	0.00
11,100.0	90.00	179.93	8,320.0	-2,647.0	793.4	2,701.3	0.00	0.00	0.00
11,200.0	90.00	179.93	8,320.0	-2,747.0	793.5	2,801.0	0.00	0.00	0.00
11,300.0	90.00	179.93	8,320.0	-2,847.0	793.6	2,900.7	0.00	0.00	0.00
11,400.0	90.00	179.93	8,320.0	-2,947.0	793.7	3,000.4	0.00	0.00	0.00
11,500.0	90.00	179.93	8,320.0	-3,047.0	793.8	3,100.1	0.00	0.00	0.00
11,600.0	90.00	179.93	8,320.0	-3,147.0	793.9	3,199.8	0.00	0.00	0.00
11,700.0	90.00	179.93	8,320.0	-3,247.0	794.1	3,299.5	0.00	0.00	0.00
11,800.0	90.00	179.93	8,320.0	-3,347.0	794.2	3,399.2	0.00	0.00	0.00
11,900.0	90.00	179.93	8,320.0	-3,447.0	794.3	3,498.9	0.00	0.00	0.00
12,000.0	90.00	179.93	8,320.0	-3,547.0	794.4	3,598.6	0.00	0.00	0.00
12,100.0	90.00	179.93	8,320.0	-3,647.0	794.5	3,698.3	0.00	0.00	0.00
12,200.0	90.00	179.93	8,320.0	-3,747.0	794.6	3,798.0	0.00	0.00	0.00
12,300.0	90.00	179.93	8,320.0	-3,847.0	794.8	3,897.7	0.00	0.00	0.00
12,400.0	90.00	179.93	8,320.0	-3,947.0	794.9	3,997.4	0.00	0.00	0.00
12,500.0	90.00	179.93	8,320.0	-4,047.0	795.0	4,097.1	0.00	0.00	0.00
12,600.0	90.00	179.93	8,320.0	-4,147.0	795.1	4,196.8	0.00	0.00	0.00
12,700.0	90.00	179.93	8,320.0	-4,247.0	795.2	4,296.5	0.00	0.00	0.00
12,800.0	90.00	179.93	8,320.0	-4,347.0	795.3	4,396.2	0.00	0.00	0.00
12,900.0	90.00	179.93	8,320.0	-4,447.0	795.4	4,495.8	0.00	0.00	0.00
13,000.0	90.00	179.93	8,320.0	-4,547.0	795.6	4,595.5	0.00	0.00	0.00
13,100.0	90.00	179.93	8,320.0	-4,647.0	795.7	4,695.2	0.00	0.00	0.00
13,200.0	90.00	179.93	8,320.0	-4,747.0	795.8	4,794.9	0.00	0.00	0.00
13,300.0	90.00	179.93	8,320.0	-4,847.0	795.9	4,894.6	0.00	0.00	0.00
13,388.0	90.00	179.93	8,320.0	-4,935.0	796.0	4,982.3	0.00	0.00	0.00
PPP3: 0' FNL & 330' FEL (Sec 11)									
13,400.0	90.00	179.93	8,320.0	-4,947.0	796.0	4,994.3	0.00	0.00	0.00
13,500.0	90.00	179.93	8,320.0	-5,047.0	796.1	5,094.0	0.00	0.00	0.00
13,600.0	90.00	179.93	8,320.0	-5,147.0	796.2	5,193.7	0.00	0.00	0.00
13,700.0	90.00	179.93	8,320.0	-5,247.0	796.4	5,293.4	0.00	0.00	0.00
13,800.0	90.00	179.93	8,320.0	-5,347.0	796.5	5,393.1	0.00	0.00	0.00
13,900.0	90.00	179.93	8,320.0	-5,447.0	796.6	5,492.8	0.00	0.00	0.00
14,000.0	90.00	179.93	8,320.0	-5,547.0	796.7	5,592.5	0.00	0.00	0.00
14,100.0	90.00	179.93	8,320.0	-5,647.0	796.8	5,692.2	0.00	0.00	0.00
14,200.0	90.00	179.93	8,320.0	-5,747.0	796.9	5,791.9	0.00	0.00	0.00
14,300.0	90.00	179.93	8,320.0	-5,847.0	797.0	5,891.6	0.00	0.00	0.00
14,400.0	90.00	179.93	8,320.0	-5,947.0	797.2	5,991.3	0.00	0.00	0.00
14,500.0	90.00	179.93	8,320.0	-6,047.0	797.3	6,091.0	0.00	0.00	0.00
14,600.0	90.00	179.93	8,320.0	-6,147.0	797.4	6,190.7	0.00	0.00	0.00

Planning Report

Database:	Hobbs	**Local Co-ordinate Reference:**	Site Hoss 2/11 B2AP Fed Com #1H
Company:	Mewbourne Oil Company	**TVD Reference:**	WELL @ 2980.0usft (Original Well Elev)
Project:	Eddy County, New Mexico NAD 83	**MD Reference:**	WELL @ 2980.0usft (Original Well Elev)
Site:	Hoss 2/11 B2AP Fed Com #1H	**North Reference:**	Grid
Well:	Sec 2, T25S, R28E	**Survey Calculation Method:**	Minimum Curvature
Wellbore:	BHL: 100' FSL & 330' FEL, Sec 11		
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)
14,700.0	90.00	179.93	8,320.0	-6,247.0	797.5	6,290.4	0.00	0.00	0.00
14,800.0	90.00	179.93	8,320.0	-6,347.0	797.6	6,390.1	0.00	0.00	0.00
14,900.0	90.00	179.93	8,320.0	-6,447.0	797.7	6,489.8	0.00	0.00	0.00
15,000.0	90.00	179.93	8,320.0	-6,547.0	797.9	6,589.5	0.00	0.00	0.00
15,100.0	90.00	179.93	8,320.0	-6,647.0	798.0	6,689.2	0.00	0.00	0.00
15,200.0	90.00	179.93	8,320.0	-6,747.0	798.1	6,788.9	0.00	0.00	0.00
15,300.0	90.00	179.93	8,320.0	-6,847.0	798.2	6,888.6	0.00	0.00	0.00
15,400.0	90.00	179.93	8,320.0	-6,947.0	798.3	6,988.3	0.00	0.00	0.00
15,500.0	90.00	179.93	8,320.0	-7,047.0	798.4	7,088.0	0.00	0.00	0.00
15,600.0	90.00	179.93	8,320.0	-7,147.0	798.5	7,187.7	0.00	0.00	0.00
15,700.0	90.00	179.93	8,320.0	-7,247.0	798.7	7,287.4	0.00	0.00	0.00
15,800.0	90.00	179.93	8,320.0	-7,347.0	798.8	7,387.1	0.00	0.00	0.00
15,900.0	90.00	179.93	8,320.0	-7,447.0	798.9	7,486.8	0.00	0.00	0.00
16,000.0	90.00	179.93	8,320.0	-7,547.0	799.0	7,586.5	0.00	0.00	0.00
16,050.0	90.00	179.93	8,320.0	-7,597.0	799.1	7,636.3	0.00	0.00	0.00
PPP4: 2661' FSL & 330' FEL (Sec 11)									
16,100.0	90.00	179.93	8,320.0	-7,647.0	799.1	7,686.2	0.00	0.00	0.00
16,200.0	90.00	179.93	8,320.0	-7,747.0	799.2	7,785.9	0.00	0.00	0.00
16,300.0	90.00	179.93	8,320.0	-7,847.0	799.3	7,885.6	0.00	0.00	0.00
16,400.0	90.00	179.93	8,320.0	-7,947.0	799.5	7,985.3	0.00	0.00	0.00
16,500.0	90.00	179.93	8,320.0	-8,047.0	799.6	8,085.0	0.00	0.00	0.00
16,600.0	90.00	179.93	8,320.0	-8,147.0	799.7	8,184.7	0.00	0.00	0.00
16,700.0	90.00	179.93	8,320.0	-8,247.0	799.8	8,284.4	0.00	0.00	0.00
16,800.0	90.00	179.93	8,320.0	-8,347.0	799.9	8,384.1	0.00	0.00	0.00
16,900.0	90.00	179.93	8,320.0	-8,447.0	800.0	8,483.8	0.00	0.00	0.00
17,000.0	90.00	179.93	8,320.0	-8,547.0	800.2	8,583.5	0.00	0.00	0.00
17,100.0	90.00	179.93	8,320.0	-8,647.0	800.3	8,683.2	0.00	0.00	0.00
17,200.0	90.00	179.93	8,320.0	-8,747.0	800.4	8,782.9	0.00	0.00	0.00
17,300.0	90.00	179.93	8,320.0	-8,847.0	800.5	8,882.6	0.00	0.00	0.00
17,378.0	90.00	179.93	8,320.0	-8,925.0	800.6	8,960.3	0.00	0.00	0.00
PPP5: 1331' FSL & 330' FEL (Sec 11)									
17,400.0	90.00	179.93	8,320.0	-8,947.0	800.6	8,982.3	0.00	0.00	0.00
17,500.0	90.00	179.93	8,320.0	-9,047.0	800.7	9,082.0	0.00	0.00	0.00
17,600.0	90.00	179.93	8,320.0	-9,147.0	800.8	9,181.7	0.00	0.00	0.00
17,700.0	90.00	179.93	8,320.0	-9,247.0	801.0	9,281.4	0.00	0.00	0.00
17,800.0	90.00	179.93	8,320.0	-9,347.0	801.1	9,381.1	0.00	0.00	0.00
17,900.0	90.00	179.93	8,320.0	-9,447.0	801.2	9,480.8	0.00	0.00	0.00
18,000.0	90.00	179.93	8,320.0	-9,547.0	801.3	9,580.5	0.00	0.00	0.00
18,100.0	90.00	179.93	8,320.0	-9,647.0	801.4	9,680.2	0.00	0.00	0.00
18,200.0	90.00	179.93	8,320.0	-9,747.0	801.5	9,779.9	0.00	0.00	0.00
18,300.0	90.00	179.93	8,320.0	-9,847.0	801.6	9,879.6	0.00	0.00	0.00
18,400.0	90.00	179.93	8,320.0	-9,947.0	801.8	9,979.3	0.00	0.00	0.00
18,500.0	90.00	179.93	8,320.0	-10,047.0	801.9	10,079.0	0.00	0.00	0.00
18,600.0	90.00	179.93	8,320.0	-10,147.0	802.0	10,178.7	0.00	0.00	0.00
18,609.0	90.00	179.93	8,320.0	-10,156.0	802.0	10,187.6	0.00	0.00	0.00
BHL: 100' FSL & 330' FEL									

Planning Report

Database:	Hobbs	**Local Co-ordinate Reference:**	Site Hoss 2/11 B2AP Fed Com #1H
Company:	Mewbourne Oil Company	**TVD Reference:**	WELL @ 2980.0usft (Original Well Elev)
Project:	Eddy County, New Mexico NAD 83	**MD Reference:**	WELL @ 2980.0usft (Original Well Elev)
Site:	Hoss 2/11 B2AP Fed Com #1H	**North Reference:**	Grid
Well:	Sec 2, T25S, R28E	**Survey Calculation Method:**	Minimum Curvature
Wellbore:	BHL: 100' FSL & 330' FEL, Sec 11		
Design:	Design #1		

Design Targets

Target Name - hit/miss target - Shape	Dip Angle (°)	Dip Dir. (°)	TVD (usft)	+N/-S (usft)	+E/-W (usft)	Northing (usft)	Easting (usft)	Latitude	Longitude
SHL: 300' FNL & 1120' F - plan hits target center - Point	0.00	0.00	0.0	0.0	0.0	424,121.00	628,084.00	32.1656762	-104.0529903
KOP: 10' FNL & 330' FE - plan hits target center - Point	0.00	0.00	7,843.0	288.0	790.0	424,409.00	628,874.00	32.1664622	-104.0504348
FTP: 100' FNL & 330' FE - plan hits target center - Point	0.00	0.00	8,121.9	198.0	790.1	424,319.00	628,874.11	32.1662148	-104.0504353
PPP4: 2661' FSL & 330' - plan hits target center - Point	0.00	0.00	8,320.0	-7,597.0	799.1	416,524.00	628,883.06	32.1447870	-104.0504725
PPP5: 1331' FSL & 330' - plan hits target center - Point	0.00	0.00	8,320.0	-8,925.0	800.6	415,196.00	628,884.59	32.1411365	-104.0504789
LP: 489' FNL & 330' FEL - plan hits target center - Point	0.00	0.00	8,320.0	-189.0	790.5	423,932.00	628,874.50	32.1651510	-104.0504373
BHL: 100' FSL & 330' FE - plan hits target center - Point	0.00	0.00	8,320.0	-10,156.0	802.0	413,965.00	628,886.00	32.1377525	-104.0504847
PPP2: 2615' FSL & 330' - plan hits target center - Point	0.00	0.00	8,320.0	-2,319.0	793.0	421,802.00	628,877.00	32.1592958	-104.0504473
PPP3: 0' FNL & 330' FEI - plan hits target center - Point	0.00	0.00	8,320.0	-4,935.0	796.0	419,186.00	628,880.01	32.1521046	-104.0504598

Intent [X] As Drilled [ ]

API #

Operator Name:	Property Name:	Well Number
Mewbourne Oil Co.	Hoss 2/11 B2AP Fed Com	1H

Kick Off Point (KOP)

UL	Section	Township	Range	Lot	Feet	From N/S	Feet	From E/W	County
A	2	25S	28E		10	N	330'	E	Eddy

Latitude	Longitude	NAD
32.1664622	-104.0504348	83

First Take Point (FTP)

UL	Section	Township	Range	Lot	Feet	From N/S	Feet	From E/W	County
A	2	25S	28E		100	N	330	E	Eddy

Latitude	Longitude	NAD
32.1662148	-104.0504353	83

Last Take Point (LTP)

UL	Section	Township	Range	Lot	Feet	From N/S	Feet	From E/W	County
P	11	25S	28E		100	S	330	E	Eddy

Latitude	Longitude	NAD
32.1377525	-104.0504847	83

Is this well the defining well for the Horizontal Spacing Unit? [Y]

Is this well an infill well? [N]

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

API #

Operator Name:	Property Name:	Well Number

KZ 06/29/2018

PECOS DISTRICT
SURFACE USE
CONDITIONS OF APPROVAL

HOSS 2/11 W0AP FED COM 1H
Surface Hole Location: 300' FNL & 1150' FEL, Section 2, T. 25 S., R. 28 E.
Bottom Hole Location: 330' FSL & 330' FEL, Section 11, T. 25 S, R 28 E.

HOSS 2/11 W1AP FED COM 2H
Surface Hole Location: 300' FNL & 1180' FEL, Section 2, T. 25 S., R. 28 E.
Bottom Hole Location: 330' FSL & 990' FEL, Section 11, T. 25 S, R 28 E.

HOSS 2/11 W0BO FED COM 1H
Surface Hole Location: 300' FNL & 1210' FEL, Section 2, T. 25 S., R. 28 E.
Bottom Hole Location: 330' FSL & 1650' FEL, Section 11, T. 25 S, R 28 E.

HOSS 2/11 W1BO FED COM 2H
Surface Hole Location: 300' FNL & 1240' FEL, Section 2, T. 25 S., R. 28 E.
Bottom Hole Location: 330' FSL & 2310' FEL, Section 11, T. 25 S, R 28 E.

HOSS 2/11 B2AP FED COM 1H
Surface Hole Location: 300' FNL & 1120' FEL, Section 2, T. 25 S., R. 28 E.
Bottom Hole Location: 100' FSL & 330' FEL, Section 11, T. 25 S, R 28 E.

Eddy County New Mexico

Approval Date: 05/03/2021

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.

Approval Date: 05/03/2021

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.

IV. NOXIOUS WEEDS

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

acceptable weed control methods, which include following EPA and BLM requirements and policies.

V. SPECIAL REQUIREMENT(S)

Watershed

- The entire well pad will be bermed to prevent oil, salt, and other chemical contaminants from leaving the well pad. 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 berm shall be maintained through the life of the well and 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.

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 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 values 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 values, 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.

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

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.

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.

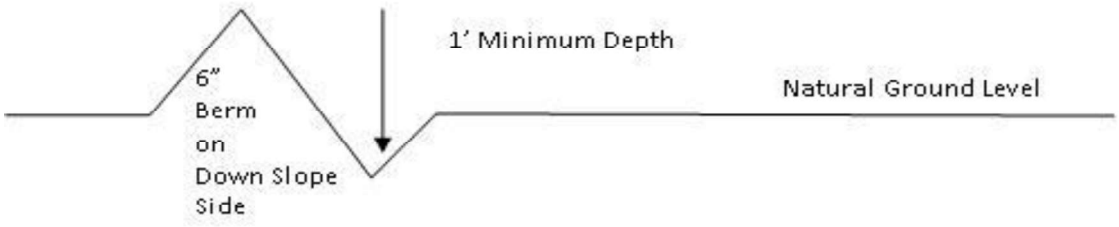
Ditching
Ditching shall be required on both sides of the road.

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 foot road with 4% road slope: $\frac{400'}{4\%}$ + 100' = 200' 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

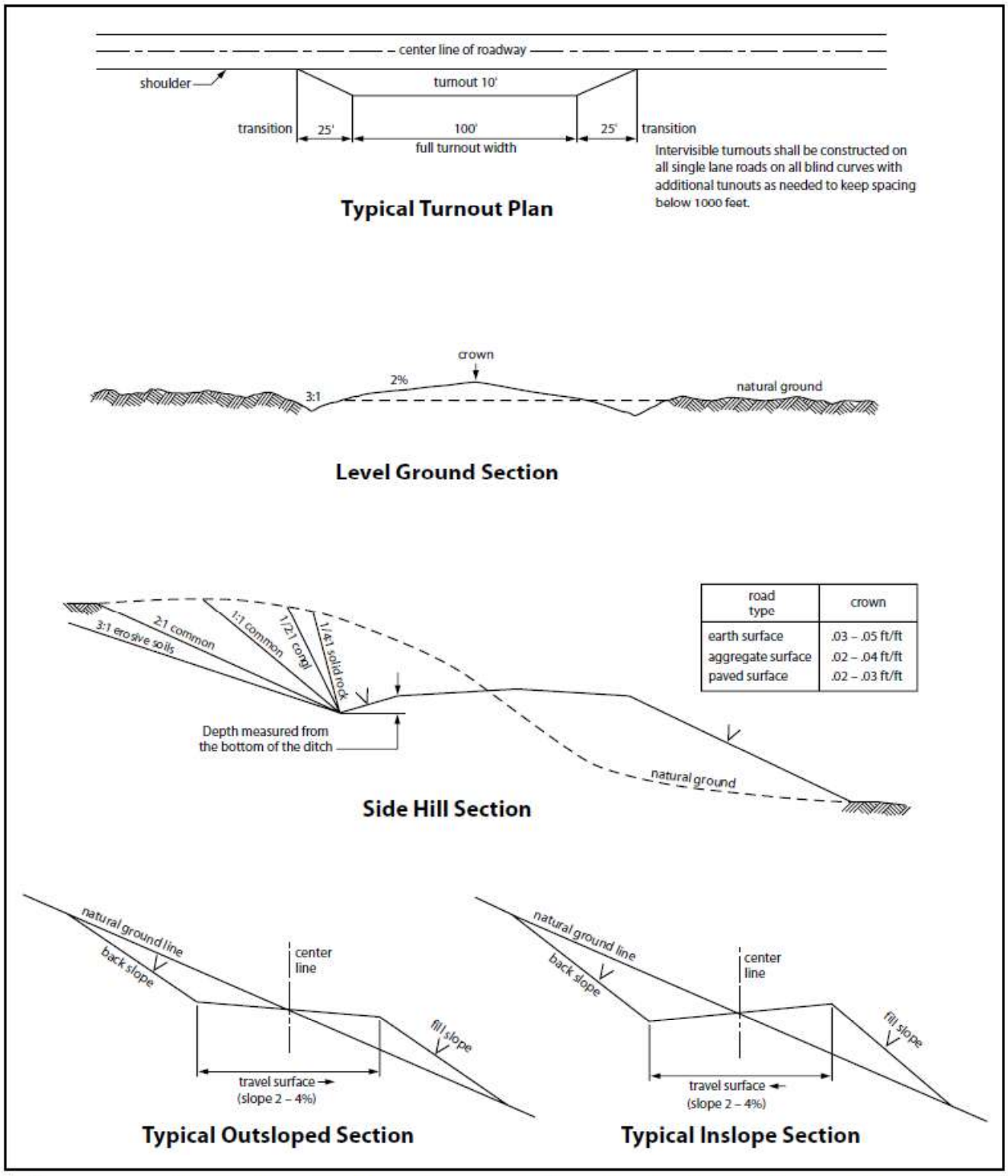


Figure 1. Cross-sections and plans for typical road sections representative of BLM resource or FS local and higher-class roads.

Approval Date: 05/03/2021

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

BURIED PIPELINE STIPULATIONS

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

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

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

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

3. The holder agrees to indemnify the United States against any liability arising from the release of any hazardous substance or hazardous waste (as these

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

4. If, during any phase of the construction, operation, maintenance, or termination of the pipeline, any oil or other pollutant should be discharged from the pipeline system, impacting Federal lands, the control and total removal, disposal, and cleaning up of such oil or other pollutant, wherever found, shall be the responsibility of holder, regardless of fault. Upon failure of holder to control, dispose of, or clean up such discharge on or affecting Federal lands, or to repair all damages resulting therefrom, on the Federal lands, the Authorized Officer may take such measures as he deems necessary to control and clean up the discharge and restore the area, including where appropriate, the aquatic environment and fish and wildlife habitats, at the full expense of the holder. Such action by the Authorized Officer shall not relieve holder of any responsibility as provided herein.

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

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

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

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

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

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

8. The holder shall stockpile an adequate amount of topsoil where blading is allowed. The topsoil to be stripped is approximately ___6___ inches in depth.

The topsoil will be segregated from other spoil piles from trench construction. The topsoil will be evenly distributed over the bladed area for the preparation of seeding.

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

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

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

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

☒ **Seed Mixture 1**

☐ Seed Mixture 2

☐ Seed Mixture 2/LPC

☐ Seed Mixture 3

☐ Seed Mixture 4

☐ Seed Mixture Aplomado Falcon

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

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

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

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

OR

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

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

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

17. 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."

18. 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.

19. 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 associated roads, 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.

20. Escape Ramps - The operator will construct and maintain pipeline/utility trenches [that are not otherwise fenced, screened, or netted] to prevent livestock, wildlife, and humans from becoming entrapped. At a minimum, the operator will construct and maintain escape ramps, ladders, or other methods of avian and terrestrial wildlife escape in the trenches according to the following criteria:
Any trench left open for eight (8) hours or less is not required to have escape ramps; however, before the trench is backfilled, the contractor/operator shall inspect the trench for wildlife, remove all trapped wildlife, and release them at least 100 yards from the trench.

For trenches left open for eight (8) hours or more, earthen escape ramps (built at no more than a 30 degree slope and spaced no more than 500 feet apart) shall be placed in the trench.

Karst:

The BLM, Carlsbad Field Office, will be informed immediately if any subsurface drainage channels, passages, or voids are intersected by trenching, and no pipe will be laid in the trench at that point until clearance has been issued by the Authorized Officer.

If a void is encountered alignments may be rerouted to avoid the karst feature and lessen; the potential of subsidence or collapse of karst features, buildup of toxic or combustible gas, or other possible impacts to cave and karst resources from the buried pipeline.

Special restoration stipulations or realignment may be required at such intersections, if any.

A leak detection plan **will be submitted to the BLM Carlsbad Field Office for approval** prior to pipeline installation. The method could incorporate gauges to detect pressure drops, situating values and lines so they can be visually inspected periodically or installing electronic sensors to alarm when a leak is present. The leak detection plan will incorporate an automatic shut off system that will be installed for proposed pipelines to minimize the effects of an undesirable event.

Regular monitoring is required to quickly identify leaks for their immediate and proper treatment.

All spills or leaks will be reported to the BLM immediately for their immediate and proper treatment.

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).

Seed Mixture 1 for Loamy Sites

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 shall 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 shall be either certified or registered seed. The seed container shall be tagged in accordance with State law(s) and available for inspection by the Authorized Officer.

Seed shall be planted using a drill equipped with a depth regulator to ensure proper depth regulator to ensure proper depth of planting where drilling is possible. The seed mixture shall be evenly and uniformly planted over the disturbed area (small/heavier seeds have a tendency to drop the bottom of the drill and are planted first). Holder shall take appropriate measures to ensure this does not occur. Where drilling is not possible, seed shall be broadcast and the area shall be raked or chained to cover the seed. When broadcasting the seed, the pounds per acre shall be doubled. The seeding shall be repeated until a satisfactory stand is established as determined by the Authorized Officer. Evaluation of growth may 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	lb/acre
Plains lovegrass (Eragrostis intermedia)	0.5
Sand dropseed (Sporobolus cryptandrus)	1.0
Sideoats grama (Bouteloua curtipendula)	5.0
Plains bristlegrass (Setaria macrostachya)	2.0

*Pounds of pure live seed:

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

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 know 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**

Operator Name: MEWBOURNE OIL COMPANY

Well Name: HOSS 2/11 B2AP FED COM **Well Number:** 1H

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

Disposal location description: Waste Management facility in Carlsbad.

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: DRILLING

Waste content description: Drill cuttings

Amount of waste: 940 barrels

Waste disposal frequency : One Time Only

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

Safe containmant attachment:

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

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

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

Operator Name: MEWBOURNE OIL COMPANY

Well Name: HOSS 2/11 B2AP FED COM **Well Number:** 1H

Cuttings Area

Cuttings Area being used? NO

Are you storing cuttings on location? N

Description of cuttings location

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

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

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

WCuttings area liner

Cuttings area liner specifications and installation description

Section 8 - Ancillary Facilities

Are you requesting any Ancillary Facilities?: N

Ancillary Facilities attachment:

Comments:

Section 9 - Well Site Layout

Well Site Layout Diagram:

HOSS2_11B2APFedCom1H_wellsitelayout_20200413113003.pdf

Comments:

Section 10 - Plans for Surface Reclamation

Type of disturbance: New Surface Disturbance

Multiple Well Pad Name: HOSS 2/11 AP & BO FED COM

Multiple Well Pad Number: 5

Recontouring attachment:

Drainage/Erosion control construction: None

Drainage/Erosion control reclamation: None

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

Drilling Plan Data Report
08/30/2021

APD ID: 10400056124
Submission Date: 04/13/2020
Operator Name: MEWBOURNE OIL COMPANY
Well Name: HOSS 2/11 B2AP 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 - Geologic Formations

Formation ID	Formation Name	Elevation	True Vertical Depth	Measured Depth	Lithologies	Mineral Resources	Producing Formation
713740	UNKNOWN	2952	28	28	OTHER : Top Soil	NONE	N
713752	TOP SALT	1772	1180	1180	SALT	NONE	N
713744	BOTTOM SALT	537	2415	2415	SALT	NONE	N
713745	LAMAR	327	2625	2625	LIMESTONE	NATURAL GAS, OIL	N
713746	BELL CANYON	302	2650	2650	SANDSTONE	NATURAL GAS, OIL	N
713747	CHERRY CANYON	-593	3545	3545	SANDSTONE	NATURAL GAS, OIL	N
713748	MANZANITA	-718	3670	3670	LIMESTONE	NATURAL GAS, OIL	N
713749	BRUSHY CANYON	-1900	4852	4852	SANDSTONE	NATURAL GAS, OIL	N
713739	BONE SPRING	-3433	6385	6385	LIMESTONE, SHALE	NATURAL GAS, OIL	N
713742	BONE SPRING 1ST	-4383	7335	7335	SANDSTONE	NATURAL GAS, OIL	N
713743	BONE SPRING 2ND	-5173	8125	8125	SANDSTONE	NATURAL GAS, OIL	Y

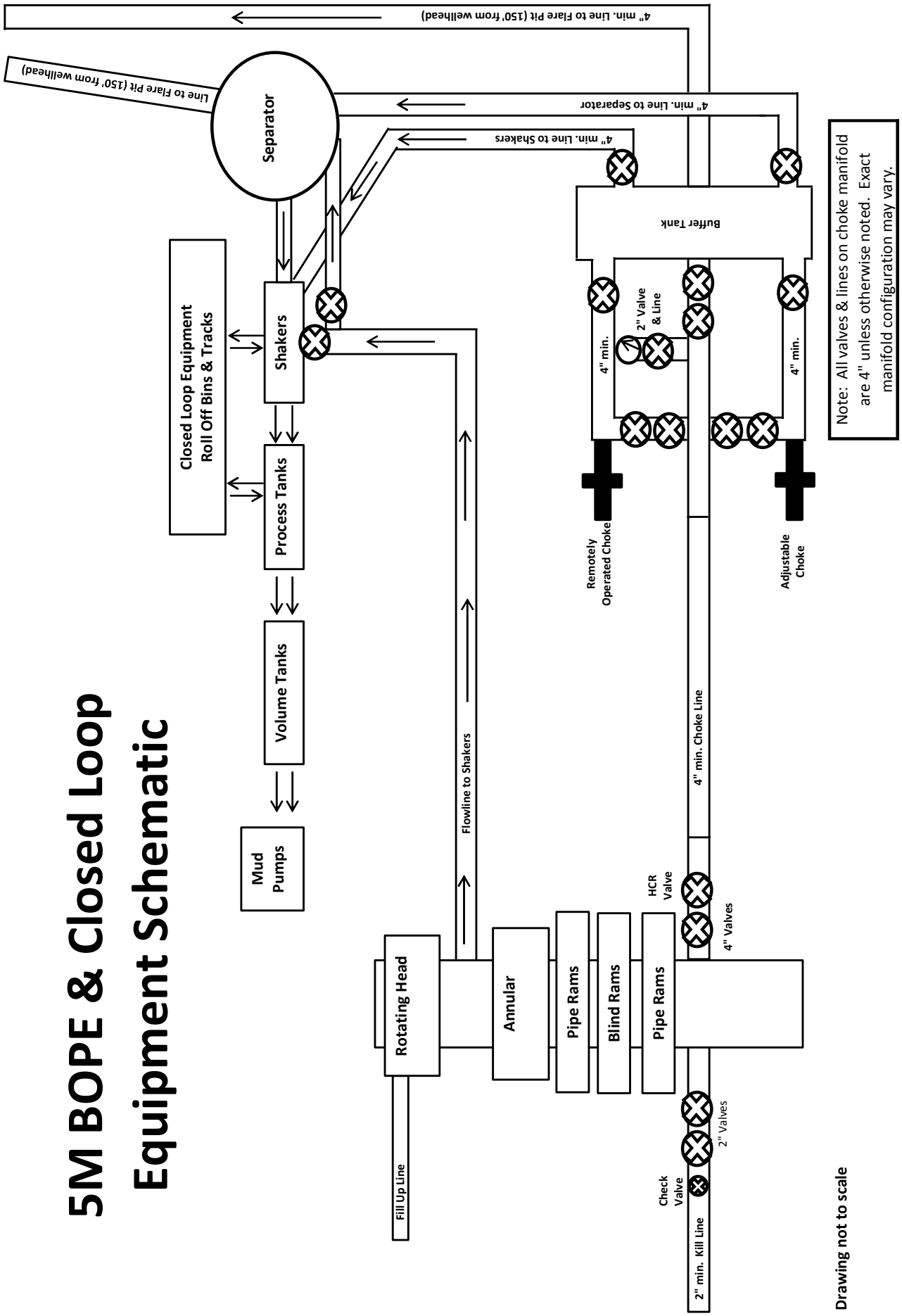
Section 2 - Blowout Prevention

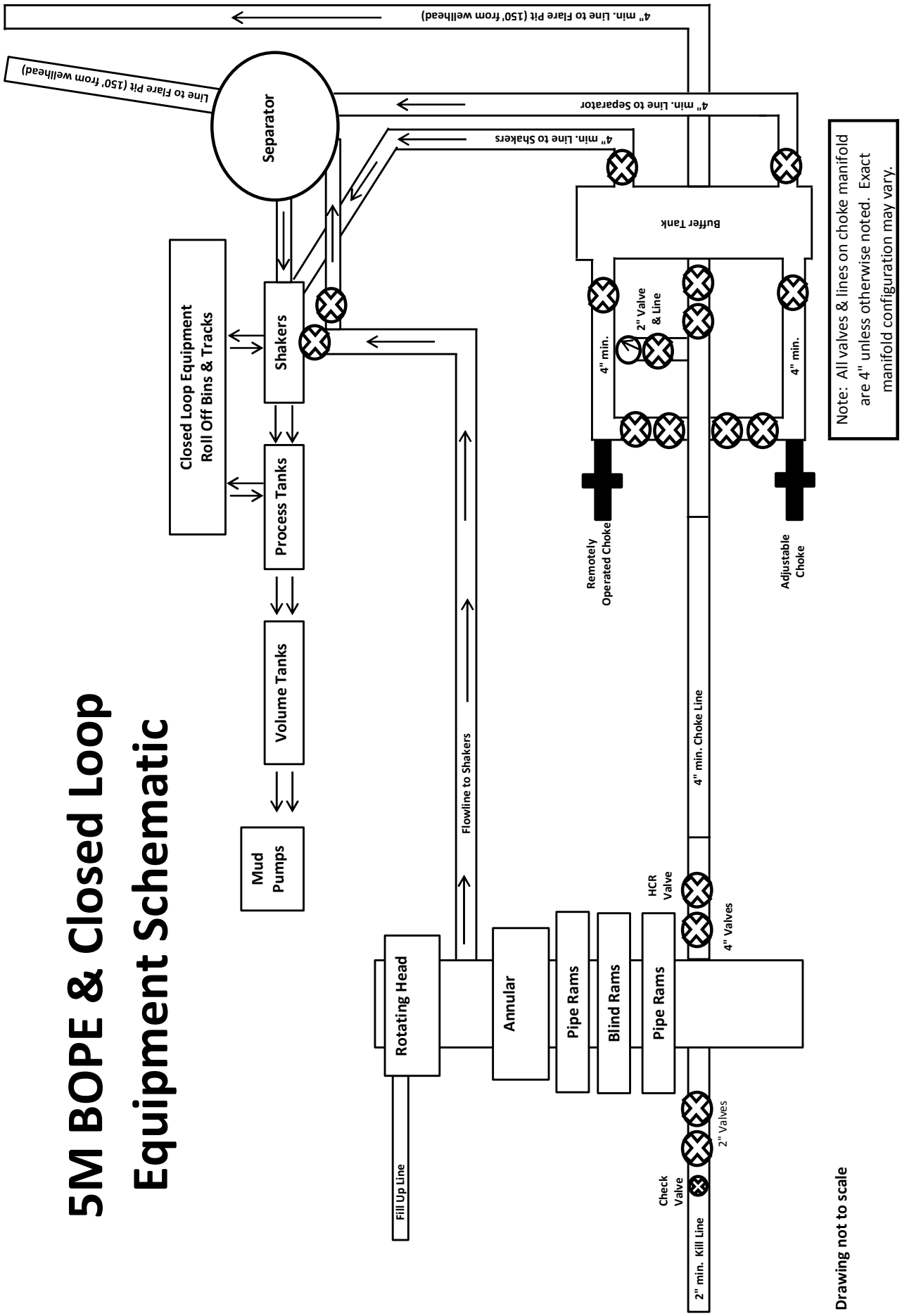
Pressure Rating (PSI): 5M
Rating Depth: 18609

Equipment: Annular, Pipe Ram, Blind Ram

Requesting Variance? YES

Variance request: A variance is requested for the use of a flexible choke line from the BOP to Choke Manifold. A multi-bowl wellhead is being used. See attached schematic.
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


5M BOPE & Closed Loop
Equipment Schematic
4" min. Line to Flare Pit (150' from wellhead)
Line to Flare Pit (150' from wellhead)
Separator
4" min. Line to Separator
4" min. Line to Shakers
Buffer Tank
Closed Loop Equipment
Roll Off Bins & Tracks
Shakers
Process Tanks
Volume Tanks
Mud Pumps
Flowline to Shakers
4" min.
2" Valve & Line
4" min.
Remotely Operated Choke
Adjustable Choke
4" min. Choke Line
HCR Valve
4" Valves
Rotating Head
Annular
Pipe Rams
Blind Rams
Pipe Rams
Fill Up Line
Check Valve
2" Valves
2" min. Kill Line
Note: All valves & lines on choke manifold are 4" unless otherwise noted. Exact manifold configuration may vary.
Drawing not to scale


4" min. Line to Flare Pit (150' from wellhead)
Line to Flare Pit (150' from wellhead)
Separator
4" min. Line to Separator
4" min. Line to Shakers
Buffer Tank
Closed Loop Equipment
Roll Off Bins & Tracks
Shakers
Process Tanks
Volume Tanks
Mud Pumps
4" min.
2" Valve & Line
4" min.
Remotely Operated Choke
Adjustable Choke
Note: All valves & lines on choke manifold are 4" unless otherwise noted. Exact manifold configuration may vary.
Flowline to Shakers
4" min. Choke Line
HCR Valve
4" Valves
Rotating Head
Annular
Pipe Rams
Blind Rams
Pipe Rams
Fill Up Line
Check Valve
2" Valves
2" min. Kill Line
5M BOPE & Closed Loop
Equipment Schematic
Drawing not to scale

ENGINEERING & SERVICES

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

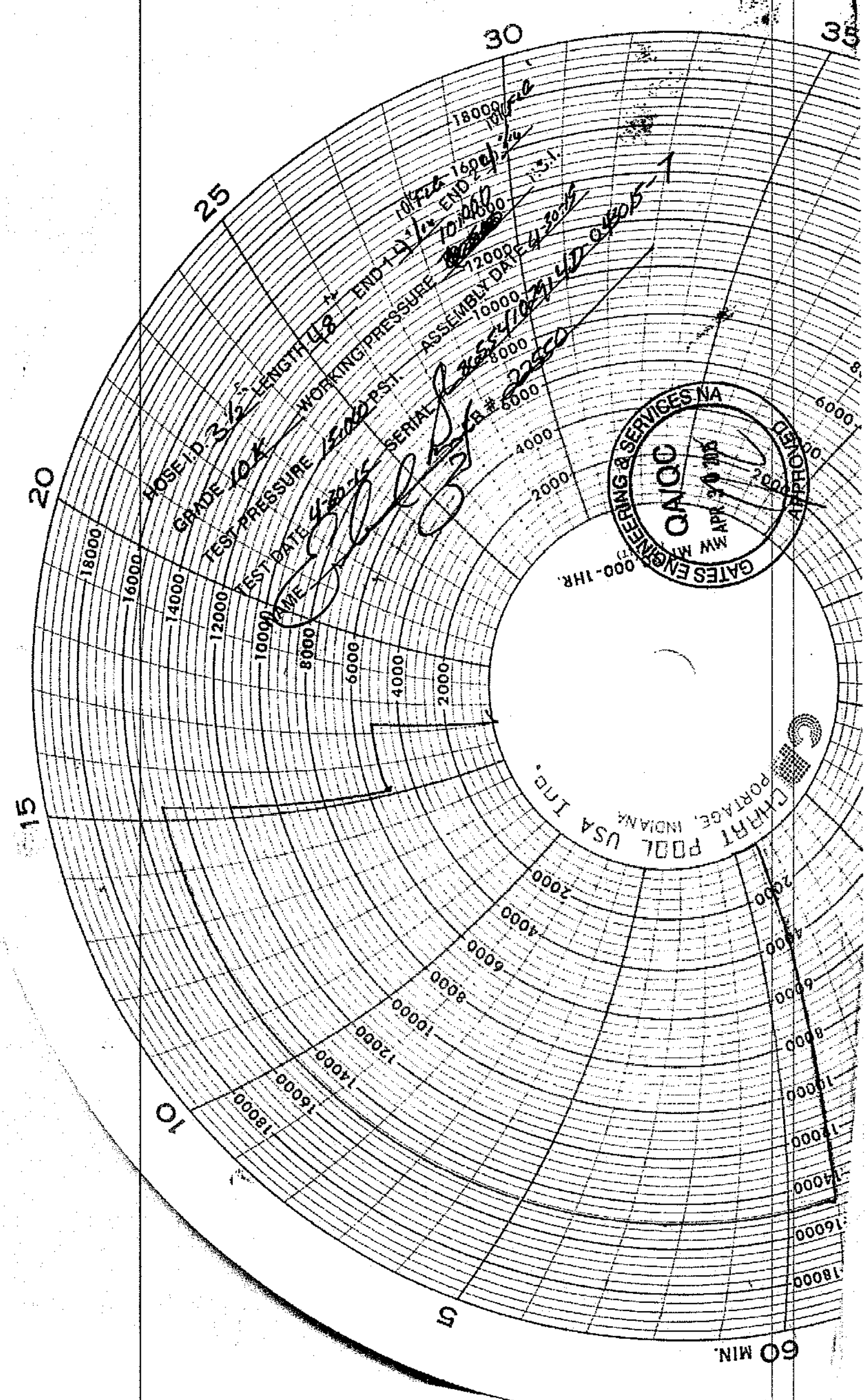
Product Description:	10K3.548.0CK4.1/1610KFLGE/E LE

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	Produciton:	PRODUCTION
Date :	4/30/2015	Date :	4/30/2015
Signature :		Signature :	

Form PTC - 01 Rev.0 2


HOSE I.D.
LENGTH
END
GRADE
WORKING PRESSURE
P.S.I.
TEST PRESSURE
P.S.I.
TEST DATE
SERIAL
ASSEMBLY DATE
CB #
NAME
GATES ENGINEERING & SERVICES NA
QA/QC
APPROVED
CHART POOL USA Inc.
PORTAGE, INDIANA
60 MIN.

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:	Moosa Naqvi

Product Description:	10KF3.035.0CK41/1610KFLGFXDxFLT L/E

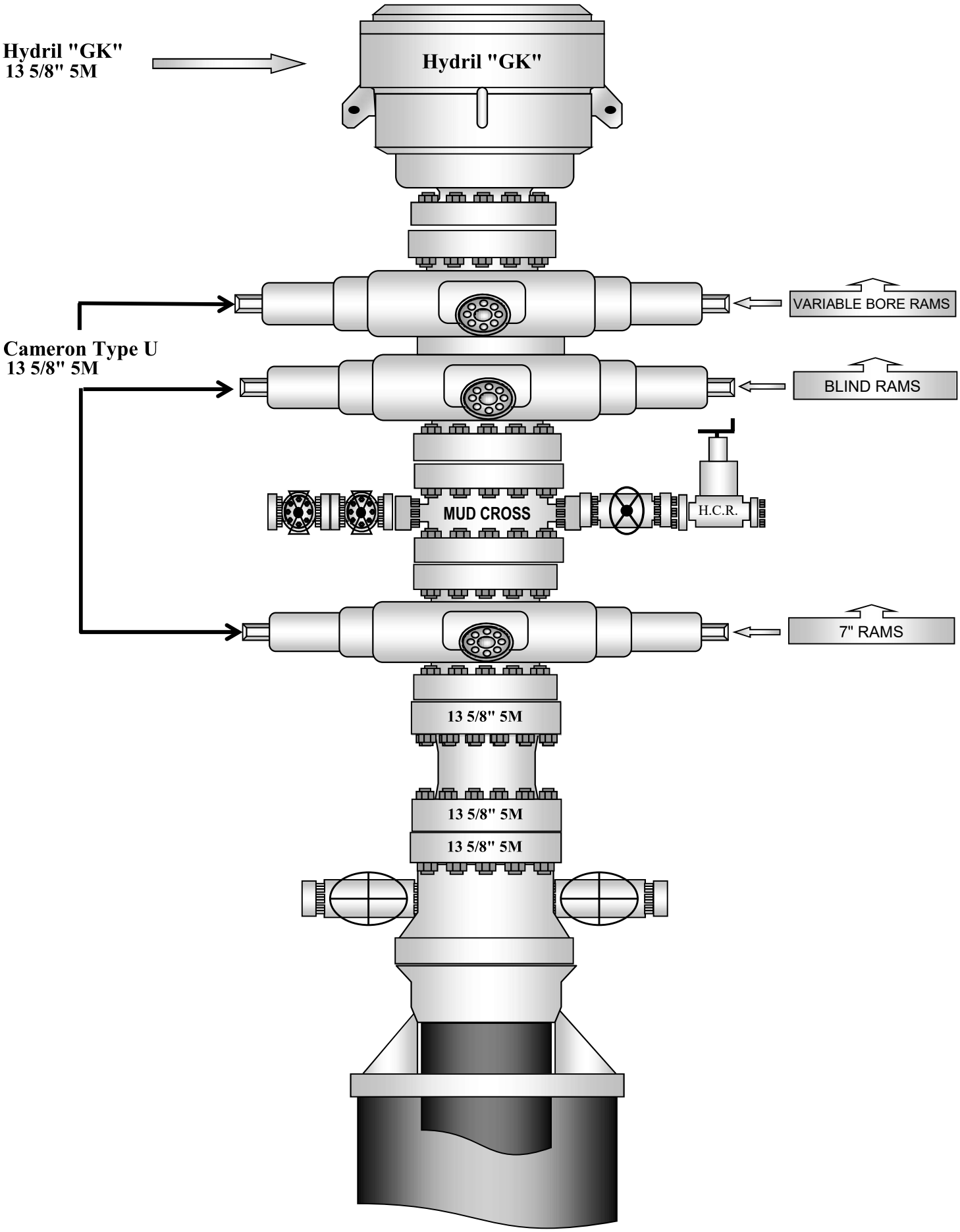
End Fitting 1:	4 1/16 in. Fixed Flange	End Fitting 2:	4 1/16 in. Float Flange
Gates Part No.:	68503010-9721632	Assembly Code:	L40695052218H-082018-10
Working Pressure:	10,000 psi.	Test Pressure:	15,000 psi.

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	Production:	PRODUCTION
Date :	8/20/2018	Date :	8/20/2018
Signature :	Moosa Naqvi	Signature :	

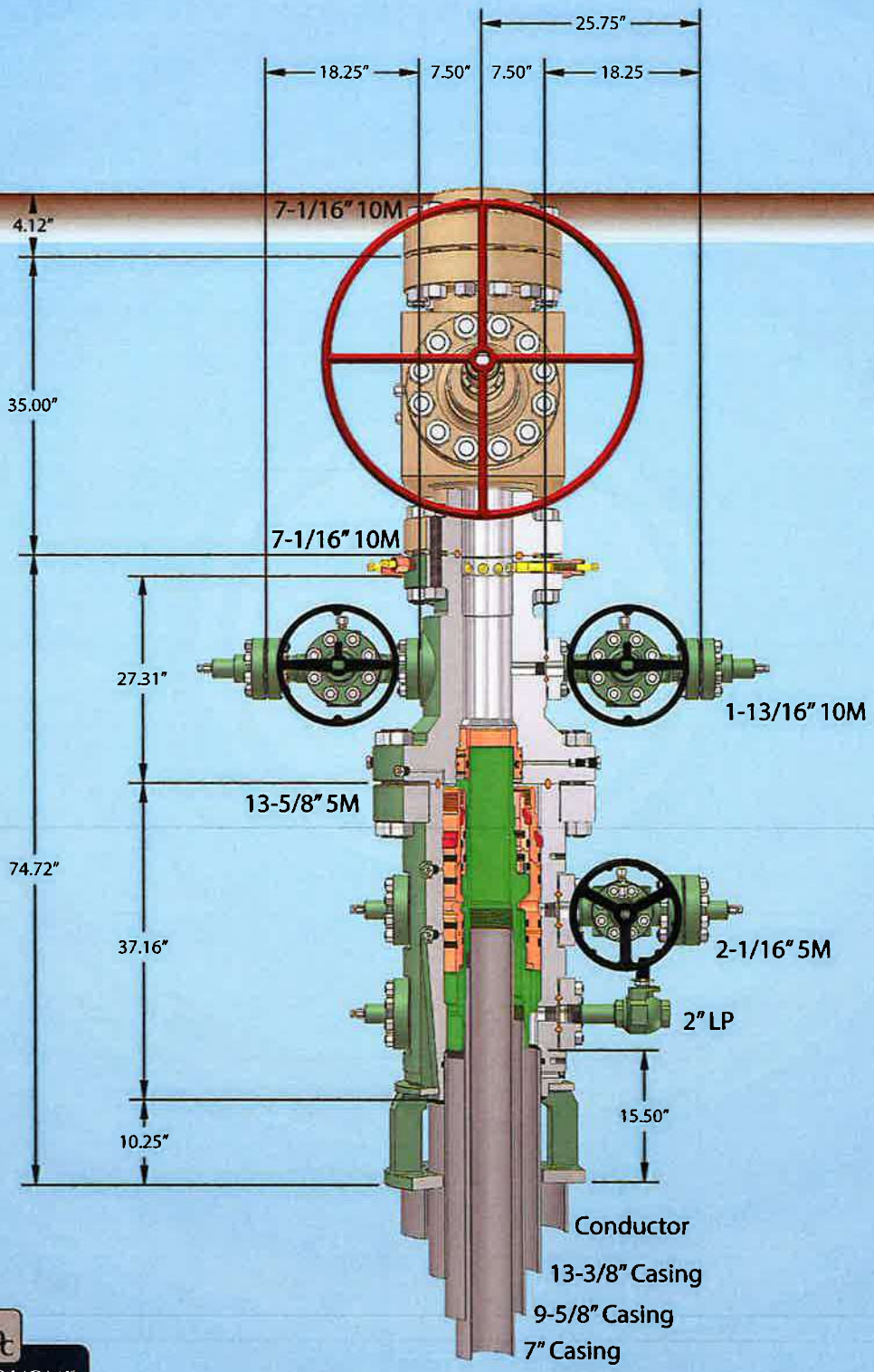
Form PTC - 01 Rev.0 2

5M BOPE Schematic



CAMERON
A Schlumberger Company

13-5/8" MN-DS Wellhead System



MEWBOURNE OIL COMPANY

C7585
Rev. 02

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

Capitan Range 57" conductor cut-off

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

COMMENTS

Action 47647

COMMENTS

Operator: MEWBOURNE OIL CO P.O. Box 5270 Hobbs, NM 88241	OGRID: 14744
	Action Number: 47647
	Action Type: [C-101] BLM - Federal/Indian Land Lease (Form 3160-3)

COMMENTS

Created By	Comment	Comment Date
kpickford	KP GEO Review 9/13/2021	9/13/2021

District I
1625 N. French Dr., Hobbs, NM 88240
Phone:(575) 393-6161 Fax:(575) 393-0720
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State of New Mexico
Energy, Minerals and Natural Resources
Oil Conservation Division
1220 S. St Francis Dr.
Santa Fe, NM 87505

CONDITIONS

Action 47647

CONDITIONS

Operator:	OGRID:
MEWBOURNE OIL CO P.O. Box 5270 Hobbs, NM 88241	14744
	Action Number: 47647
	Action Type: [C-101] BLM - Federal/Indian Land Lease (Form 3160-3)

CONDITIONS

Created By	Condition	Condition Date
kpickford	Notify OCD 24 hours prior to casing & cement	9/13/2021
kpickford	Will require a File As Drilled C-102 and a Directional Survey with the C-104	9/13/2021
kpickford	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	9/13/2021
kpickford	Cement is required to circulate on both surface and intermediate1 strings of casing	9/13/2021
kpickford	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	9/13/2021