

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

1a. Type of work: <input checked="" type="checkbox"/> DRILL <input type="checkbox"/> REENTER		5. Lease Serial No. NMNM86710
1b. Type of Well: <input type="checkbox"/> Oil Well <input checked="" type="checkbox"/> Gas Well <input type="checkbox"/> Other		6. If Indian, Allottee or Tribe Name
1c. Type of Completion: <input type="checkbox"/> Hydraulic Fracturing <input type="checkbox"/> Single Zone <input checked="" type="checkbox"/> Multiple Zone		7. If Unit or CA Agreement, Name and No.
2. Name of Operator MEWBOURNE OIL COMPANY		8. Lease Name and Well No. LOBO 33/28 FED COM 568H
3a. Address P O BOX 5270, HOBBS, NM 88241	3b. Phone No. (include area code) (575) 393-5905	9. API Well No. 30-025-53415
4. Location of Well (Report location clearly and in accordance with any State requirements. *) At surface SWSE / 150 FSL / 1740 FEL / LAT 32.4293583 / LONG -103.67682 At proposed prod. zone NENE / 100 FNL / 600 FEL / LAT 32.4567389 / LONG -103.6731179		10. Field and Pool, or Exploratory BILBERY BASIN/BONE SPRING
11. Sec., T. R. M. or Blk. and Survey or Area SEC 33/T21S/R32E/NMP		12. County or Parish LEA
14. Distance in miles and direction from nearest town or post office* 20 miles		13. State NM
15. Distance from proposed* location to nearest property or lease line, ft. (Also to nearest drig. unit line, if any) 330 feet	16. No of acres in lease	17. Spacing Unit dedicated to this well 320.0
18. Distance from proposed location* to nearest well, drilling, completed, applied for, on this lease, ft. 20 feet	19. Proposed Depth 11169 feet / 21533 feet	20. BLM/BIA Bond No. in file FED: NM1693
21. Elevations (Show whether DF, KDB, RT, GL, etc.) 3800 feet	22. Approximate date work will start* 07/14/2024	23. Estimated duration 60 days
24. Attachments		

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

- | | |
|--|---|
| 1. Well plat certified by a registered surveyor. | 4. Bond to cover the operations unless covered by an existing bond on file (see Item 20 above). |
| 2. A Drilling Plan. | 5. Operator certification. |
| 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). | 6. Such other site specific information and/or plans as may be requested by the BLM. |

25. Signature (Electronic Submission)	Name (Printed/Typed) BRADLEY BISHOP / Ph: (575) 393-5905	Date 05/16/2024
Title Regulatory		
Approved by (Signature) (Electronic Submission)	Name (Printed/Typed) CODY LAYTON / Ph: (575) 234-5959	Date 08/15/2024
Title Assistant Field Manager Lands & Minerals		
Office Carlsbad Field Office		

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

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



(Continued on page 2)

*(Instructions on page 2)

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

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

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

AMENDED REPORT

WELL LOCATION AND ACREAGE DEDICATION PLAT

1 API Number 30-025-53415		2 Pool Code 5695		3 Pool Name BILBREY BASIN; BONE SPRING	
4 Property Code 336223		5 Property Name LOBO 33/28 FED COM			6 Well Number 568H
7 GRID NO. 14744		8 Operator Name MEWBOURNE OIL COMPANY			9 Elevation 3800'

10 Surface Location

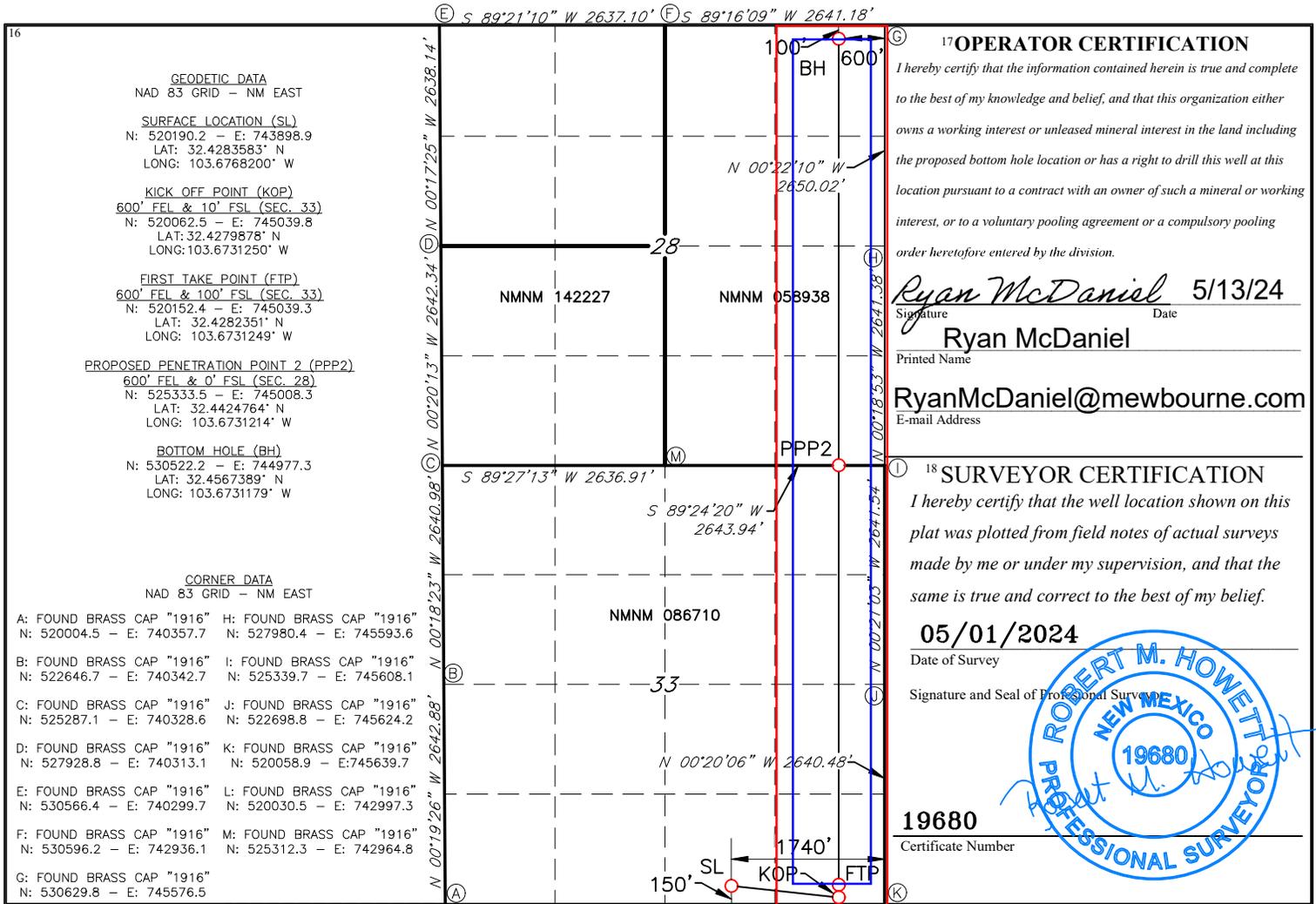
UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet From the	East/West line	County
0	33	21S	32E		150	SOUTH	1740	EAST	LEA

11 Bottom Hole Location If Different From Surface

UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
A	28	21S	32E		100	NORTH	600	EAST	LEA

12 Dedicated Acres 320	13 Joint or Infill	14 Consolidation Code	15 Order No.
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No allowable will be assigned to this completion until all interest have been consolidated or a non-standard unit has been approved by the division.



State of New Mexico
Energy, Minerals and Natural Resources Department

Submit Electronically
Via E-permitting

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

NATURAL GAS MANAGEMENT PLAN

This Natural Gas Management Plan must be submitted with each Application for Permit to Drill (APD) for a new or recompleted well.

Section 1 – Plan Description

Effective May 25, 2021

I. Operator: Mewbourne Oil Co. **OGRID:** 14744 **Date:** 5/2/22

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

If Other, please describe: _____

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

Well Name	API	ULSTR	Footages	Anticipated Oil BBL/D	Anticipated Gas MCF/D	Anticipated Produced Water BBL/D
LOBO 33/28 FED COM 568H		O 33 21S 32E	150' FSL x 1740' FEL	1500	3000	3000

IV. Central Delivery Point Name: LOBO 33/28 FED COM 568H [See 19.15.27.9(D)(1) NMAC]

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

Well Name	API	Spud Date	TD Reached Date	Completion Commencement Date	Initial Flow Back Date	First Production Date
LOBO 33/28 FED COM 568H		7/2/22	8/2/22	9/2/22	9/17/22	9/17/22

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

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

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

Section 2 – Enhanced Plan
EFFECTIVE APRIL 1, 2022

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

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

IX. Anticipated Natural Gas Production:

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

X. Natural Gas Gathering System (NGGS):

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

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

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

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

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

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

Section 3 - Certifications

Effective May 25, 2021

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

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

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

If Operator checks this box, Operator will select one of the following:

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

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

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

Section 4 - Notices

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

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

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

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

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

Signature:	<i>Bradley Bishop</i>
Printed Name:	BRADLEY BISHOP
Title:	REGULATORY MANAGER
E-mail Address:	BBISHOP@MEWBOURNE.COM
Date:	5/2/22
Phone:	575-393-5905
OIL CONSERVATION DIVISION (Only applicable when submitted as a standalone form)	
Approved By:	
Title:	
Approval Date:	
Conditions of Approval:	

Mewbourne Oil Company

Natural Gas Management Plan – Attachment

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

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

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



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

Drilling Plan Data Report

05/20/2024

APD ID: 10400098498

Submission Date:

Highlighted data reflects the most recent changes

Operator Name: MEWBOURNE OIL COMPANY

Well Name: LOBO 33/28 FED COM

Well Number: 568H

Well Type: CONVENTIONAL GAS WELL

Well Work Type: Drill

Show Final Text

Section 1 - Geologic Formations

Formation ID	Formation Name	Elevation	True Vertical	Measured Depth	Lithologies	Mineral Resources	Producing Formatio
13422872	UNKNOWN	3801	28	28	OTHER : Topsoil	NONE	N
13422886	RUSTLER	3031	770	770	ANHYDRITE, DOLOMITE	USEABLE WATER	N
13422873	TOP SALT	2706	1095	1095	SALT	NONE	N
13422875	BASE OF SALT	-569	4370	4370	SALT	NONE	N
13422876	LAMAR	-1034	4835	4835	DOLOMITE, LIMESTONE	NATURAL GAS, OIL	N
13422877	BELL CANYON	-1149	4950	4950	SANDSTONE	NATURAL GAS, OIL	N
13422879	MANZANITA	-2194	5995	5995	LIMESTONE	NATURAL GAS, OIL	N
13422881	BRUSHY CANYON	-4709	8510	8510	SANDSTONE	NATURAL GAS, OIL	N
13422882	BONE SPRING	-4994	8795	8795	LIMESTONE	NATURAL GAS, OIL	N
13422883	BONE SPRING 1ST	-6014	9815	9815	SANDSTONE	NATURAL GAS, OIL	Y
13422884	BONE SPRING 2ND	-6674	10475	10475	SANDSTONE	NATURAL GAS, OIL	N
13422885	BONE SPRING 3RD	-7174	10975	10975	SANDSTONE	NATURAL GAS, OIL	Y
13422887	WOLFCAMP	-8099	11900	11900	LIMESTONE, SANDSTONE, SHALE	NATURAL GAS, OIL	N

Section 2 - Blowout Prevention

Operator Name: MEWBOURNE OIL COMPANY

Well Name: LOBO 33/28 FED COM

Well Number: 568H

Pressure Rating (PSI): 5M

Rating Depth: 21533

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

Requesting Variance? YES

Variance request: A variance is requested for the use of a variable choke line from the BOP to the choke manifold. See attached for hydrostatic test chart. Anchors are not required by manufacturer. Variance is requested to use a multi bowl wellhead. Variance is requested to perform break testing according to attached procedure. If a breaktesting variance is approved & incorporated, API Standard 53 will be incorporated and testing annular BOP to 70% of RWP or 100% of MASP, whichever is greater, will be performed.

Testing Procedure: BOP/BOPE will be tested by an independent service company to 250 psi low and the high pressure indicated above per 43 CFR Part 3172 requirements. The System may be upgraded to a higher pressure but still tested to the working pressure listed in the table above. If the system is upgraded all the components installed will be functional and tested. Pipe rams will be operationally checked each 24 hour period. Blind rams will be operationally checked on each trip out of the hole. These checks will be noted on the daily tour sheets.

Choke Diagram Attachment:

5M_BOPE_Choke_Diagram_20240514093620.pdf

Flex_Line_Specs_API_16C_20240514093631.pdf

Flex_Line_Specs_20240514093653.pdf

BOP Diagram Attachment:

5M_BOPE_Schematic_20240514094001.pdf

Mewbourne_Break_Testing_Variance_20240514094011.pdf

Section 3 - Casing

Casing ID	String Type	Hole Size	Csg Size	Condition	Standard	Tapered String	Top Set MD	Bottom Set MD	Top Set TVD	Bottom Set TVD	Top Set MSL	Bottom Set MSL	Calculated casing length MD	Grade	Weight	Joint Type	Collapse SF	Burst SF	Joint SF Type	Joint SF	Body SF Type	Body SF
1	SURFACE	17.5	13.375	NEW	API	N	0	790	0	790	3800	3010	790	H-40	48	ST&C	2.18	4.9	DRY	8.49	DRY	14.27
2	INTERMEDIATE	12.25	9.625	NEW	API	N	0	4181	0	4181	-8529	-381	4181	J-55	40	LT&C	1.13	1.73	DRY	2.8	DRY	3.39
3	INTERMEDIATE	12.25	9.625	NEW	API	N	4184	4650	4184	4650	-384	-850	466	L-80	40	LT&C	1.22	2.26	DRY	39.54	DRY	49.14
4	PRODUCTION	8.75	7.0	NEW	API	N	0	10746	0	10746	-8529	-6946	10746	P-110	26	LT&C	1.19	1.89	DRY	2.48	DRY	2.97
5	LINER	6.125	4.5	NEW	API	N	10546	21533	10440	11215	-6640	-7415	10987	P-110	13.5	LT&C	1.52	1.77	BUOY	2.28	BUOY	2.85

Operator Name: MEWBOURNE OIL COMPANY

Well Name: LOBO 33/28 FED COM

Well Number: 568H

Casing Attachments

Casing ID: 1 **String** SURFACE

Inspection Document:

Spec Document:

Tapered String Spec:

Casing Design Assumptions and Worksheet(s):

Lobo_33_28_Fed_Com_568H_CsgAssumptions_20240514094316.pdf

Casing ID: 2 **String** INTERMEDIATE

Inspection Document:

Spec Document:

Tapered String Spec:

Casing Design Assumptions and Worksheet(s):

Lobo_33_28_Fed_Com_568H_CsgAssumptions_20240514094220.pdf

Casing ID: 3 **String** INTERMEDIATE

Inspection Document:

Spec Document:

Tapered String Spec:

Casing Design Assumptions and Worksheet(s):

Operator Name: MEWBOURNE OIL COMPANY

Well Name: LOBO 33/28 FED COM

Well Number: 568H

Casing Attachments

Casing ID: 4 **String** PRODUCTION

Inspection Document:

Spec Document:

Tapered String Spec:

Casing Design Assumptions and Worksheet(s):

Lobo_33_28_Fed_Com_568H_CsgAssumptions_20240514094356.pdf

Casing ID: 5 **String** LINER

Inspection Document:

Spec Document:

Tapered String Spec:

Casing Design Assumptions and Worksheet(s):

Lobo_33_28_Fed_Com_568H_CsgAssumptions_20240514094439.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	601	400	2.12	12.5	850	100	Class C	Salt, Gel, Extender, LCM
SURFACE	Tail		601	790	200	1.34	14.8	268	100	Class C	Retarder
INTERMEDIATE	Lead		0	1662	310	2.12	12.5	660	25	Class C	Salt, Gel, Extender, LCM
INTERMEDIATE	Tail		1662	2000	100	1.34	14.8	134	25	Class C	Retarder
INTERMEDIATE	Lead		2000	3979	370	2.12	12.5	790	25	CLASS C	SALT GEL EXTENDER LCM

Operator Name: MEWBOURNE OIL COMPANY

Well Name: LOBO 33/28 FED COM

Well Number: 568H

String Type	Lead/Tail	Stage Tool Depth	Top MD	Bottom MD	Quantity(sx)	Yield	Density	Cu Ft	Excess%	Cement type	Additives
INTERMEDIATE	Tail		3979	4650	200	1.34	14.8	268	25	CALSS C	RETARDER
PRODUCTION	Lead	2000	5200	7709	180	2.12	12.5	390	0	Class C	Gel, Retarder, Defoamer, Extender
PRODUCTION	Tail		7709	1074 6	400	1.18	15.6	472	0	Class H	Retarder, Fluid Loss, Defoamer
LINER	Lead		1054 6	2153 3	700	1.85	13.5	1300	25	Class H	Salt, Gel, Fluid Loss, Retarder, Dispersant, Defoamer, Anti-Settling Agent

Section 5 - Circulating Medium

Mud System Type: Closed

Will an air or gas system be Used? NO

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

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

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

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

Circulating Medium Table

Top Depth	Bottom Depth	Mud Type	Min Weight (lbs/gal)	Max Weight (lbs/gal)	Density (lbs/cu ft)	Gel Strength (lbs/100 sqft)	PH	Viscosity (CP)	Salinity (ppm)	Filtration (cc)	Additional Characteristics
0	790	SPUD MUD	8.4	8.6							
790	4650	SALT SATURATED	9.5	10.5							
4650	1074 6	WATER-BASED MUD	8.6	9.5							

Operator Name: MEWBOURNE OIL COMPANY

Well Name: LOBO 33/28 FED COM

Well Number: 568H

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
1074 6	2153 3	OIL-BASED MUD	10	12							

Section 6 - Test, Logging, Coring

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

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

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

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

Coring operation description for the well:

None

Section 7 - Pressure

Anticipated Bottom Hole Pressure: 6998

Anticipated Surface Pressure: 4535

Anticipated Bottom Hole Temperature(F): 140

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

Describe:

Contingency Plans geohazards description:

Contingency Plans geohazards

Hydrogen Sulfide drilling operations plan required? YES

Hydrogen sulfide drilling operations

H2S_Plan_20240514091303.pdf

Operator Name: MEWBOURNE OIL COMPANY

Well Name: LOBO 33/28 FED COM

Well Number: 568H

Section 8 - Other Information

Proposed horizontal/directional/multi-lateral plan submission:

Lobo_33_28_Fed_Com_568H_MOC_Dir_Plan_20240514094945.pdf

Lobo_33_28_Fed_Com_568H_MOC_Dir_Plot_20240514094949.pdf

Other proposed operations facets description:

Other proposed operations facets attachment:

Lobo_33_28_Fed_Com_568H_AddInfo_20240514095012.pdf

Lobo_33_28_Fed_Com_568H_Drlg_Program_20240514095004.pdf

Other Variance attachment:

Lobo_33_28_Fed_Com_568H_R_111Q_Variance_20240514095027.pdf

Mewbourne_Offline_Cementing_Variance_20240514095023.pdf

CONFIDENTIAL



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
Date :	8/20/2018
Signature :	<i>Moosa Naqvi</i>

Production:	PRODUCTION
Date :	8/20/2018
Signature :	<i>[Signature]</i>

Form PTC - 01 Rev.0 2





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

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

10K CEMENTING ASSEMBLY PRESSURE TEST CERTIFICATE

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

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

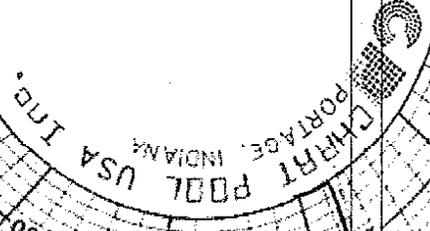
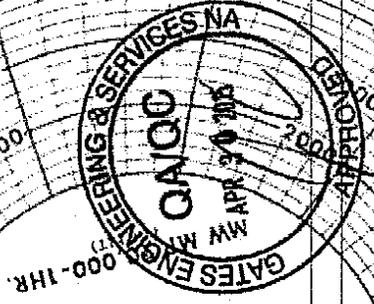
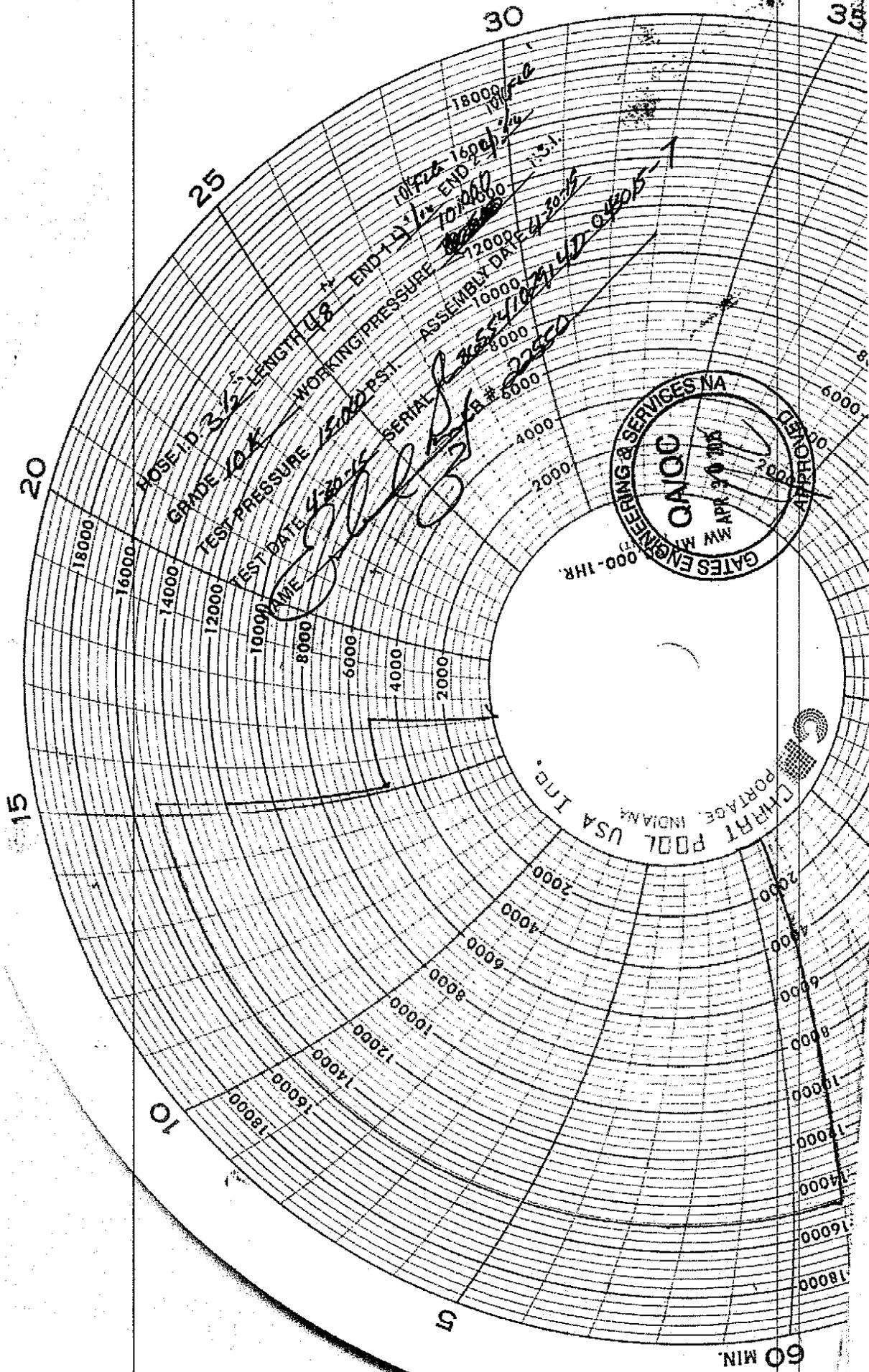
End Fitting 1 :	4 1/16 10K FLG	End Fitting 2 :	4 1/16 10K FLG
Gates Part No. :	4773-6290	Assembly Code :	L36554102914D-043015-7
Working Pressure :	10,000 PSI	Test Pressure :	15,000 PSI

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

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

Form-PTC - 01 Rev.02



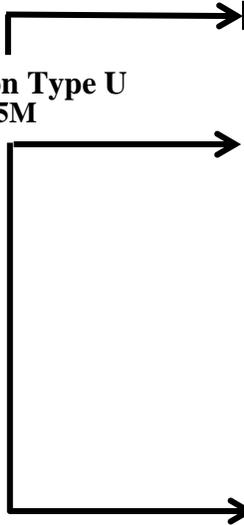


Hydril "GK"
13 5/8" 5M

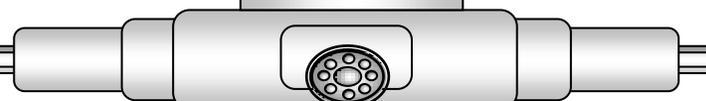


Hydril "GK"

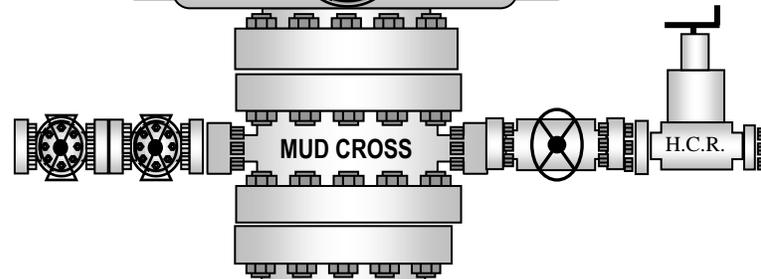
Cameron Type U
13 5/8" 5M



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

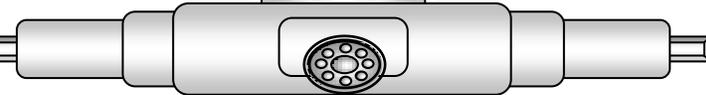


BLIND RAMS



MUD CROSS

H.C.R.

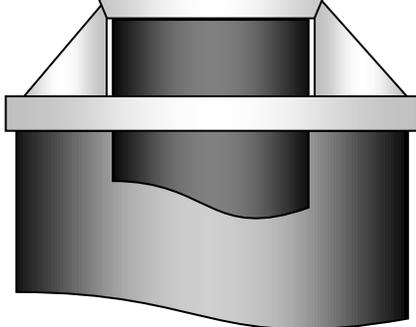
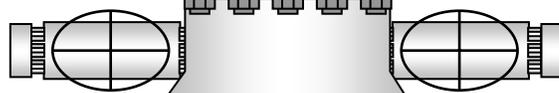


4 1/2" x 5 7/8" VBR

13 5/8" 5M

13 5/8" 5M

13 5/8" 5M





Mewbourne Oil Co.

BOP Break Testing Variance

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

Procedures

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



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

Barriers

Before Nipple Down:

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

After Nipple Down:

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

Summary

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

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

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

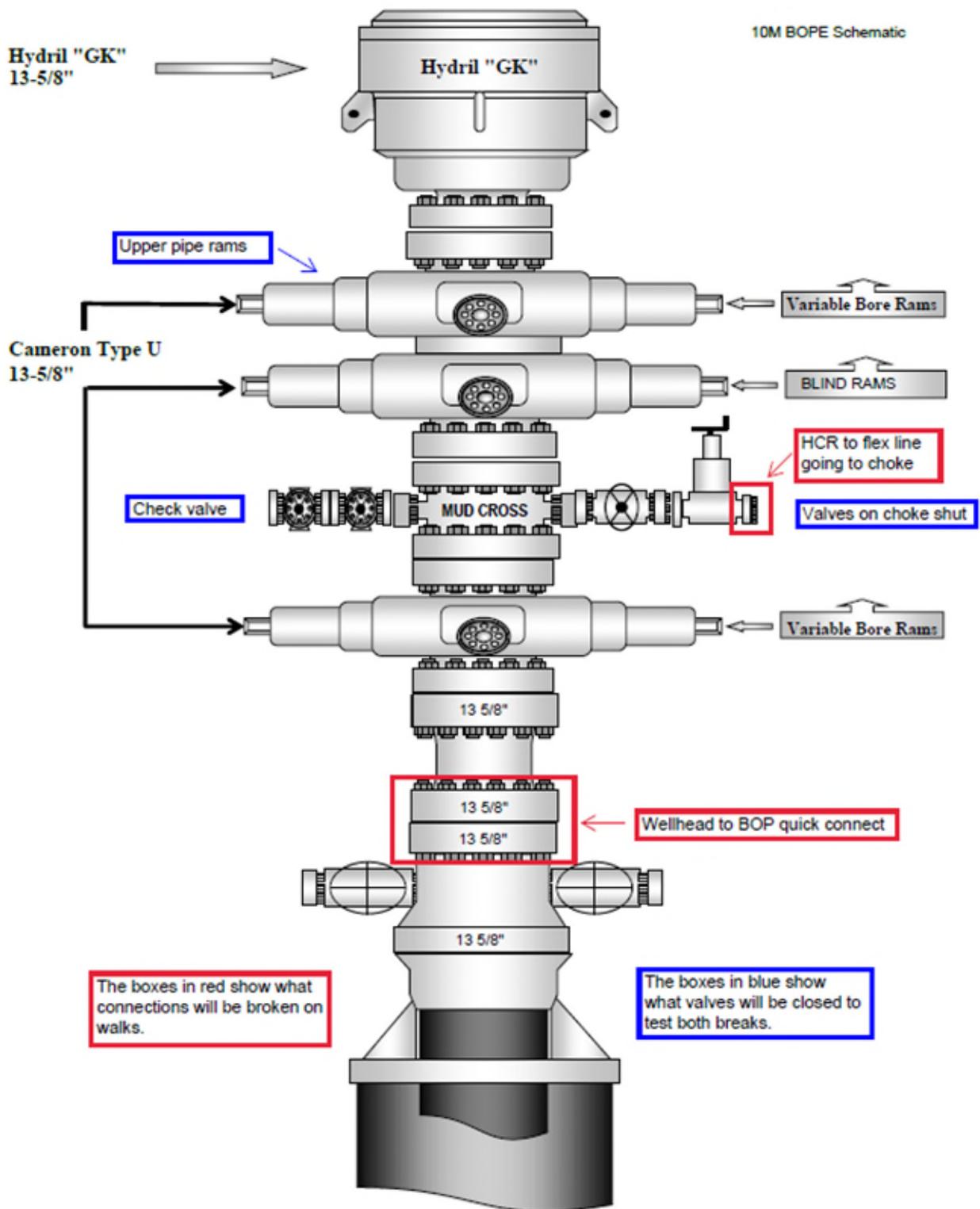


Figure 1. BOP diagram



5M BOPE & Closed Loop Equipment Schematic

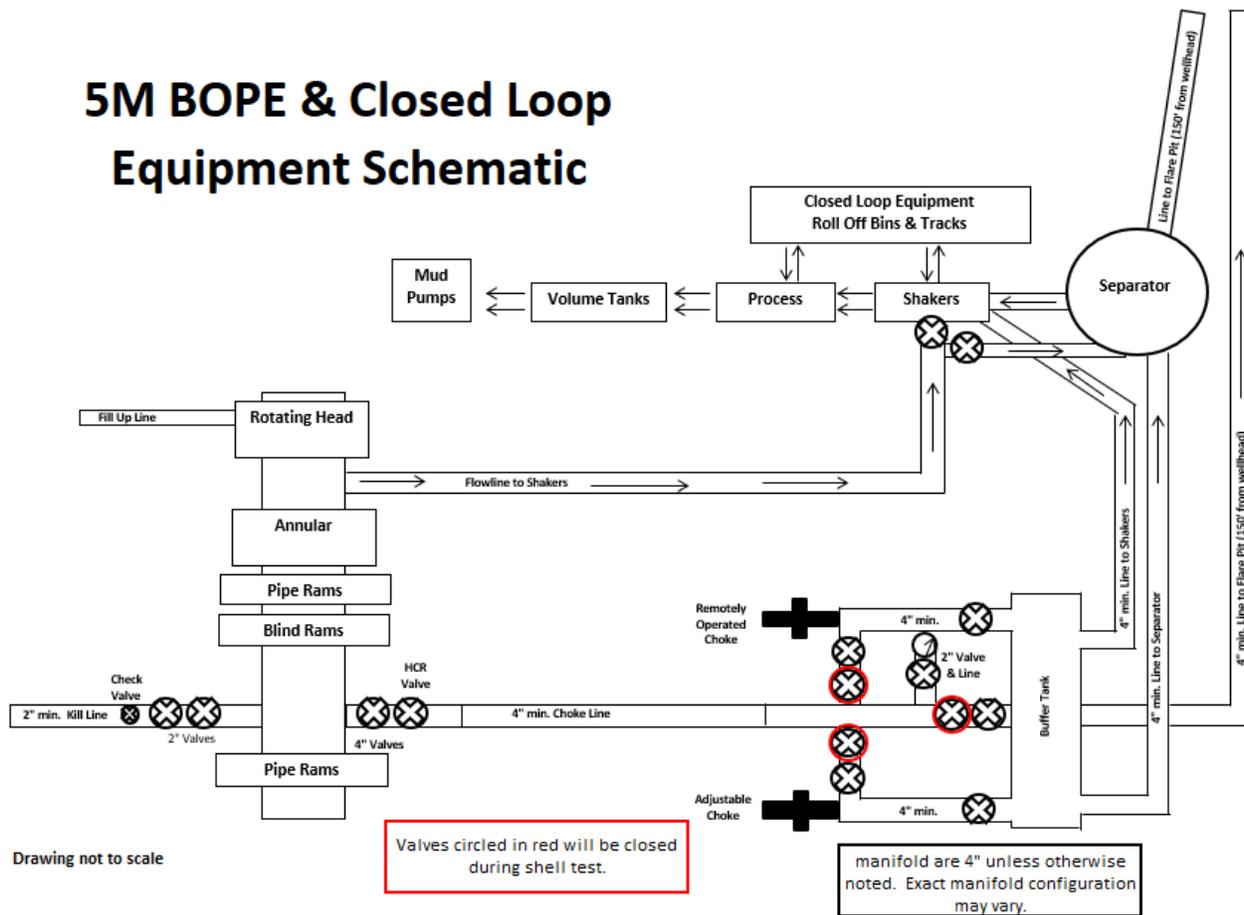


Figure 2. BOPE diagram

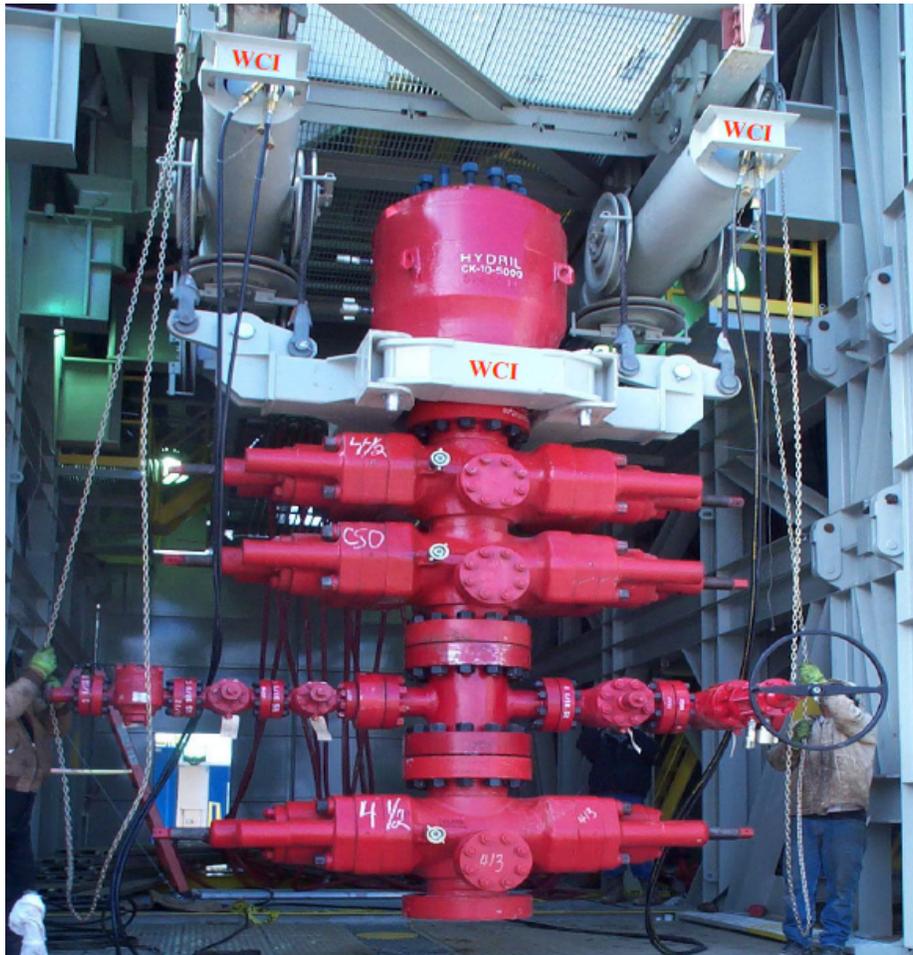


Figure 3. BOP handling system



Figure 4. BOP handling system

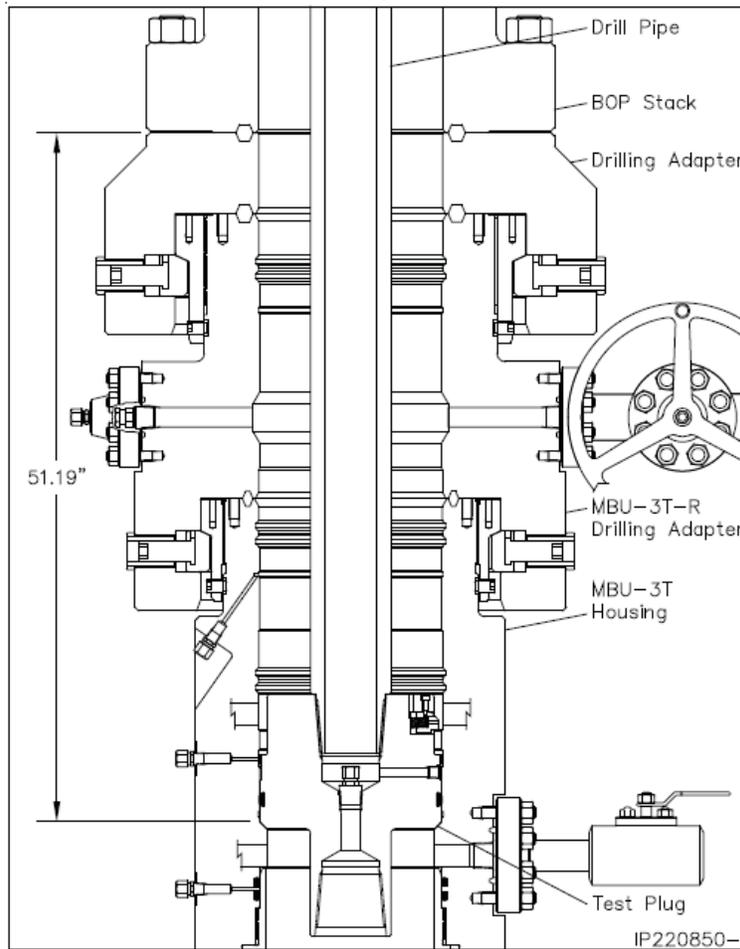


Figure 5. Cactus 5M wellhead with BOP quick connect

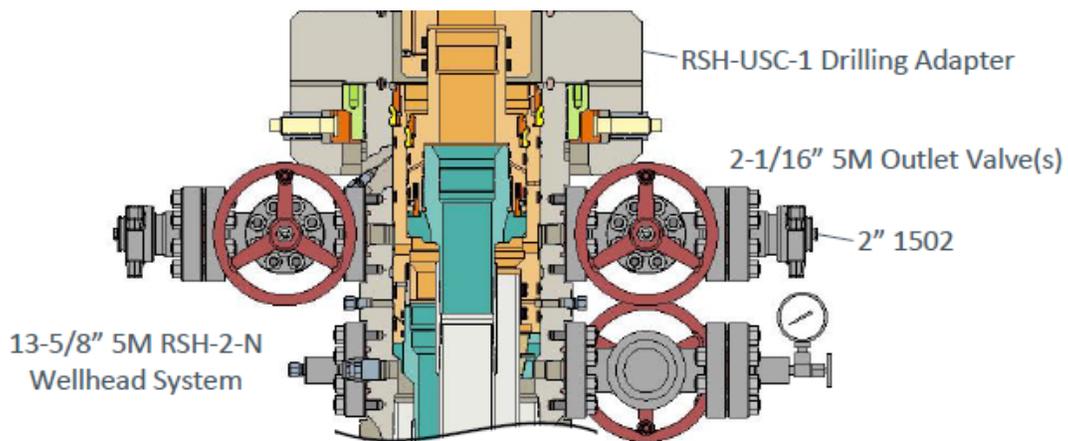


Figure 6. Vault 5M wellhead with BOP quick connect

Mewbourne Oil Company, Lobo 33/28 Fed Com 568H

Sec 33, T21S, R32E

SHL: 150' FSL 1740' FEL (Sec 33)

BHL: 100' FNL 600' FEL (Sec 28)

Casing Program Design A						BLM Minimum Safety Factors	1.125	1.0	1.6 Dry	1.6 Dry
String	Hole Size	Top MD	Top TVD	Bot MD	Bot TVD	Csg. Size	SF Collapse	SF Burst	SF Jt Tension	SF Body Tension
Surface	17.5"	0'	0'	790'	790'	13.375" 48# H40 STC	2.18	4.90	8.49	14.27
Int	12.25"	0'	0'	4184'	4184'	9.625" 40# J55 LTC	1.13	1.73	2.80	3.39
Int	12.25"	4184'	4184'	4650'	4650'	9.625" 40# L80 LTC	1.22	2.26	39.54	49.14
Production	8.75"	0'	0'	10746'	10633'	7" 26# P110 LTC	1.19	1.89	2.48	2.97
Liner	6.125"	10546'	10440'	21533'	11215'	4.5" 13.5# P110 LTC	1.52	1.77	2.28	2.85

Cement Program

Casing		# Sacks	Wt. lb/gal	Yield ft ³ /sack	TOC/BOC	Volume ft ³	% Excess	Slurry Description
13.375 in	LEAD	400	12.5	2.12	0' - 601'	850	100%	Class C: Salt, Gel, Extender, LCM
	TAIL	200	14.8	1.34	601' - 790'	268		Class C: Retarder
1st Stg 9.625 in	LEAD	370	12.5	2.12	2000' - 3979'	790	25%	Class C: Salt, Gel, Extender, LCM
	TAIL	200	14.8	1.34	3979' - 4650'	268		Class C: Retarder
9 5/8" DV Tool @ 2000'								
2nd Stg 9.625 in	LEAD	310	12.5	2.12	0' - 1662'	660	25%	Class C: Salt, Gel, Extender, LCM
	TAIL	100	14.8	1.34	1662' - 2000'	134		Class C: Retarder
7 in	LEAD	180	12.5	2.12	5200' - 7709'	390	0%	Class C: Salt, Gel, Extender, LCM, Defoamer
	TAIL	400	15.6	1.18	7709' - 10746'	472		Class H: Retarder, Fluid Loss, Defoamer
4.5 in	LEAD	700	13.5	1.85	10546' - 21533'	1300	25%	Class H: Salt, Gel, Fluid Loss, Retarder, Dispersant, Defoamer, Anti-settling Agent

Design A - Mud Program

Depth	Mud Wt	Mud Type
0' - 790'	8.4 - 8.6	Fresh Water
790' - 4650'	9.5 - 10.5	Brine
4650' - 10746'	8.6 - 9.5	Cut-Brine
10746' - 21533'	10.0 - 12.	OBM

Geology

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

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

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

Mewbourne Oil Company

Lea County, New Mexico NAD 83

Lobo 33/28 Fed Com #568H

Sec 33, T21S, R32E

SHL: 150' FSL & 1740' FEL (Sec 33)

BHL: 100' FNL & 600' FEL (Sec 28)

Plan: Design #1

Standard Planning Report

13 May, 2024

Planning Report

Database:	Hobbs	Local Co-ordinate Reference:	Site Lobo 33/28 Fed Com #568H
Company:	Mewbourne Oil Company	TVD Reference:	WELL @ 3828.0usft (Original Well Elev)
Project:	Lea County, New Mexico NAD 83	MD Reference:	WELL @ 3828.0usft (Original Well Elev)
Site:	Lobo 33/28 Fed Com #568H	North Reference:	Grid
Well:	Sec 33, T21S, R32E	Survey Calculation Method:	Minimum Curvature
Wellbore:	BHL: 100' FNL & 600' FEL (Sec 28)		
Design:	Design #1		

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

Site	Lobo 33/28 Fed Com #568H				
Site Position:		Northing:	520,190.20 usft	Latitude:	32.4283583
From:	Map	Easting:	743,898.90 usft	Longitude:	-103.6768199
Position Uncertainty:	0.0 usft	Slot Radius:	13-3/16 "		

Well	Sec 33, T21S, R32E					
Well Position	+N/-S	0.0 usft	Northing:	520,190.20 usft	Latitude:	32.4283583
	+E/-W	0.0 usft	Easting:	743,898.90 usft	Longitude:	-103.6768199
Position Uncertainty		0.0 usft	Wellhead Elevation:	3,828.0 usft	Ground Level:	3,800.0 usft
Grid Convergence:	0.35 °					

Wellbore	BHL: 100' FNL & 600' FEL (Sec 28)				
Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	IGRF2010	12/31/2014	7.21	60.27	48,370.82131072

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	5.96

Plan Survey Tool Program	Date	5/13/2024		
Depth From (usft)	Depth To (usft)	Survey (Wellbore)	Tool Name	Remarks
1	0.0	21,532.9	Design #1 (BHL: 100' FNL & 600')	

Plan Sections										
Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)	TFO (°)	Target
0.0	0.00	0.00	0.0	0.0	0.0	0.00	0.00	0.00	0.00	
4,000.0	0.00	0.00	4,000.0	0.0	0.0	0.00	0.00	0.00	0.00	
4,532.2	10.64	96.39	4,529.2	-5.5	49.0	2.00	2.00	0.00	96.39	
10,213.7	10.64	96.39	10,112.8	-122.2	1,091.9	0.00	0.00	0.00	0.00	
10,745.9	0.00	0.00	10,642.0	-127.7	1,140.9	2.00	-2.00	0.00	180.00	KOP: 10' FSL & 600' I
11,648.6	90.27	359.66	11,215.0	448.0	1,137.5	10.00	10.00	0.00	-0.34	
21,532.9	90.27	359.66	11,169.0	10,332.0	1,078.4	0.00	0.00	0.00	0.00	BHL: 100' FNL & 600'

Planning Report

Database:	Hobbs	Local Co-ordinate Reference:	Site Lobo 33/28 Fed Com #568H
Company:	Mewbourne Oil Company	TVD Reference:	WELL @ 3828.0usft (Original Well Elev)
Project:	Lea County, New Mexico NAD 83	MD Reference:	WELL @ 3828.0usft (Original Well Elev)
Site:	Lobo 33/28 Fed Com #568H	North Reference:	Grid
Well:	Sec 33, T21S, R32E	Survey Calculation Method:	Minimum Curvature
Wellbore:	BHL: 100' FNL & 600' FEL (Sec 28)		
Design:	Design #1		

Planned Survey										
Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)	
0.0	0.00	0.00	0.0	0.0	0.0	0.0	0.00	0.00	0.00	
SHL: 150' FSL & 1740' FEL (Sec 33)										
100.0	0.00	0.00	100.0	0.0	0.0	0.0	0.00	0.00	0.00	
200.0	0.00	0.00	200.0	0.0	0.0	0.0	0.00	0.00	0.00	
300.0	0.00	0.00	300.0	0.0	0.0	0.0	0.00	0.00	0.00	
400.0	0.00	0.00	400.0	0.0	0.0	0.0	0.00	0.00	0.00	
500.0	0.00	0.00	500.0	0.0	0.0	0.0	0.00	0.00	0.00	
600.0	0.00	0.00	600.0	0.0	0.0	0.0	0.00	0.00	0.00	
700.0	0.00	0.00	700.0	0.0	0.0	0.0	0.00	0.00	0.00	
800.0	0.00	0.00	800.0	0.0	0.0	0.0	0.00	0.00	0.00	
900.0	0.00	0.00	900.0	0.0	0.0	0.0	0.00	0.00	0.00	
1,000.0	0.00	0.00	1,000.0	0.0	0.0	0.0	0.00	0.00	0.00	
1,100.0	0.00	0.00	1,100.0	0.0	0.0	0.0	0.00	0.00	0.00	
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1,400.0	0.00	0.00	1,400.0	0.0	0.0	0.0	0.00	0.00	0.00	
1,500.0	0.00	0.00	1,500.0	0.0	0.0	0.0	0.00	0.00	0.00	
1,600.0	0.00	0.00	1,600.0	0.0	0.0	0.0	0.00	0.00	0.00	
1,700.0	0.00	0.00	1,700.0	0.0	0.0	0.0	0.00	0.00	0.00	
1,800.0	0.00	0.00	1,800.0	0.0	0.0	0.0	0.00	0.00	0.00	
1,900.0	0.00	0.00	1,900.0	0.0	0.0	0.0	0.00	0.00	0.00	
2,000.0	0.00	0.00	2,000.0	0.0	0.0	0.0	0.00	0.00	0.00	
2,100.0	0.00	0.00	2,100.0	0.0	0.0	0.0	0.00	0.00	0.00	
2,200.0	0.00	0.00	2,200.0	0.0	0.0	0.0	0.00	0.00	0.00	
2,300.0	0.00	0.00	2,300.0	0.0	0.0	0.0	0.00	0.00	0.00	
2,400.0	0.00	0.00	2,400.0	0.0	0.0	0.0	0.00	0.00	0.00	
2,500.0	0.00	0.00	2,500.0	0.0	0.0	0.0	0.00	0.00	0.00	
2,600.0	0.00	0.00	2,600.0	0.0	0.0	0.0	0.00	0.00	0.00	
2,700.0	0.00	0.00	2,700.0	0.0	0.0	0.0	0.00	0.00	0.00	
2,800.0	0.00	0.00	2,800.0	0.0	0.0	0.0	0.00	0.00	0.00	
2,900.0	0.00	0.00	2,900.0	0.0	0.0	0.0	0.00	0.00	0.00	
3,000.0	0.00	0.00	3,000.0	0.0	0.0	0.0	0.00	0.00	0.00	
3,100.0	0.00	0.00	3,100.0	0.0	0.0	0.0	0.00	0.00	0.00	
3,200.0	0.00	0.00	3,200.0	0.0	0.0	0.0	0.00	0.00	0.00	
3,300.0	0.00	0.00	3,300.0	0.0	0.0	0.0	0.00	0.00	0.00	
3,400.0	0.00	0.00	3,400.0	0.0	0.0	0.0	0.00	0.00	0.00	
3,500.0	0.00	0.00	3,500.0	0.0	0.0	0.0	0.00	0.00	0.00	
3,600.0	0.00	0.00	3,600.0	0.0	0.0	0.0	0.00	0.00	0.00	
3,700.0	0.00	0.00	3,700.0	0.0	0.0	0.0	0.00	0.00	0.00	
3,800.0	0.00	0.00	3,800.0	0.0	0.0	0.0	0.00	0.00	0.00	
3,900.0	0.00	0.00	3,900.0	0.0	0.0	0.0	0.00	0.00	0.00	
4,000.0	0.00	0.00	4,000.0	0.0	0.0	0.0	0.00	0.00	0.00	
4,100.0	2.00	96.39	4,100.0	-0.2	1.7	0.0	2.00	2.00	0.00	
4,200.0	4.00	96.39	4,199.8	-0.8	6.9	-0.1	2.00	2.00	0.00	
4,300.0	6.00	96.39	4,299.5	-1.7	15.6	-0.1	2.00	2.00	0.00	
4,400.0	8.00	96.39	4,398.7	-3.1	27.7	-0.2	2.00	2.00	0.00	
4,500.0	10.00	96.39	4,497.5	-4.8	43.3	-0.3	2.00	2.00	0.00	
4,532.2	10.64	96.39	4,529.2	-5.5	49.0	-0.4	2.00	2.00	0.00	
4,600.0	10.64	96.39	4,595.8	-6.9	61.4	-0.5	0.00	0.00	0.00	
4,700.0	10.64	96.39	4,694.1	-8.9	79.8	-0.6	0.00	0.00	0.00	
4,800.0	10.64	96.39	4,792.3	-11.0	98.1	-0.7	0.00	0.00	0.00	
4,900.0	10.64	96.39	4,890.6	-13.0	116.5	-0.9	0.00	0.00	0.00	
5,000.0	10.64	96.39	4,988.9	-15.1	134.9	-1.0	0.00	0.00	0.00	
5,100.0	10.64	96.39	5,087.2	-17.1	153.2	-1.2	0.00	0.00	0.00	

Planning Report

Database:	Hobbs	Local Co-ordinate Reference:	Site Lobo 33/28 Fed Com #568H
Company:	Mewbourne Oil Company	TVD Reference:	WELL @ 3828.0usft (Original Well Elev)
Project:	Lea County, New Mexico NAD 83	MD Reference:	WELL @ 3828.0usft (Original Well Elev)
Site:	Lobo 33/28 Fed Com #568H	North Reference:	Grid
Well:	Sec 33, T21S, R32E	Survey Calculation Method:	Minimum Curvature
Wellbore:	BHL: 100' FNL & 600' FEL (Sec 28)		
Design:	Design #1		

Planned Survey										
Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)	
5,200.0	10.64	96.39	5,185.5	-19.2	171.6	-1.3	0.00	0.00	0.00	
5,300.0	10.64	96.39	5,283.7	-21.3	189.9	-1.4	0.00	0.00	0.00	
5,400.0	10.64	96.39	5,382.0	-23.3	208.3	-1.6	0.00	0.00	0.00	
5,500.0	10.64	96.39	5,480.3	-25.4	226.6	-1.7	0.00	0.00	0.00	
5,600.0	10.64	96.39	5,578.6	-27.4	245.0	-1.8	0.00	0.00	0.00	
5,700.0	10.64	96.39	5,676.8	-29.5	263.4	-2.0	0.00	0.00	0.00	
5,800.0	10.64	96.39	5,775.1	-31.5	281.7	-2.1	0.00	0.00	0.00	
5,900.0	10.64	96.39	5,873.4	-33.6	300.1	-2.3	0.00	0.00	0.00	
6,000.0	10.64	96.39	5,971.7	-35.6	318.4	-2.4	0.00	0.00	0.00	
6,100.0	10.64	96.39	6,070.0	-37.7	336.8	-2.5	0.00	0.00	0.00	
6,200.0	10.64	96.39	6,168.2	-39.8	355.1	-2.7	0.00	0.00	0.00	
6,300.0	10.64	96.39	6,266.5	-41.8	373.5	-2.8	0.00	0.00	0.00	
6,400.0	10.64	96.39	6,364.8	-43.9	391.9	-2.9	0.00	0.00	0.00	
6,500.0	10.64	96.39	6,463.1	-45.9	410.2	-3.1	0.00	0.00	0.00	
6,600.0	10.64	96.39	6,561.4	-48.0	428.6	-3.2	0.00	0.00	0.00	
6,700.0	10.64	96.39	6,659.6	-50.0	446.9	-3.4	0.00	0.00	0.00	
6,800.0	10.64	96.39	6,757.9	-52.1	465.3	-3.5	0.00	0.00	0.00	
6,900.0	10.64	96.39	6,856.2	-54.1	483.6	-3.6	0.00	0.00	0.00	
7,000.0	10.64	96.39	6,954.5	-56.2	502.0	-3.8	0.00	0.00	0.00	
7,100.0	10.64	96.39	7,052.8	-58.2	520.3	-3.9	0.00	0.00	0.00	
7,200.0	10.64	96.39	7,151.0	-60.3	538.7	-4.0	0.00	0.00	0.00	
7,300.0	10.64	96.39	7,249.3	-62.4	557.1	-4.2	0.00	0.00	0.00	
7,400.0	10.64	96.39	7,347.6	-64.4	575.4	-4.3	0.00	0.00	0.00	
7,500.0	10.64	96.39	7,445.9	-66.5	593.8	-4.5	0.00	0.00	0.00	
7,600.0	10.64	96.39	7,544.2	-68.5	612.1	-4.6	0.00	0.00	0.00	
7,700.0	10.64	96.39	7,642.4	-70.6	630.5	-4.7	0.00	0.00	0.00	
7,800.0	10.64	96.39	7,740.7	-72.6	648.8	-4.9	0.00	0.00	0.00	
7,900.0	10.64	96.39	7,839.0	-74.7	667.2	-5.0	0.00	0.00	0.00	
8,000.0	10.64	96.39	7,937.3	-76.7	685.6	-5.2	0.00	0.00	0.00	
8,100.0	10.64	96.39	8,035.6	-78.8	703.9	-5.3	0.00	0.00	0.00	
8,200.0	10.64	96.39	8,133.8	-80.8	722.3	-5.4	0.00	0.00	0.00	
8,300.0	10.64	96.39	8,232.1	-82.9	740.6	-5.6	0.00	0.00	0.00	
8,400.0	10.64	96.39	8,330.4	-85.0	759.0	-5.7	0.00	0.00	0.00	
8,500.0	10.64	96.39	8,428.7	-87.0	777.3	-5.8	0.00	0.00	0.00	
8,600.0	10.64	96.39	8,526.9	-89.1	795.7	-6.0	0.00	0.00	0.00	
8,700.0	10.64	96.39	8,625.2	-91.1	814.1	-6.1	0.00	0.00	0.00	
8,800.0	10.64	96.39	8,723.5	-93.2	832.4	-6.3	0.00	0.00	0.00	
8,900.0	10.64	96.39	8,821.8	-95.2	850.8	-6.4	0.00	0.00	0.00	
9,000.0	10.64	96.39	8,920.1	-97.3	869.1	-6.5	0.00	0.00	0.00	
9,100.0	10.64	96.39	9,018.3	-99.3	887.5	-6.7	0.00	0.00	0.00	
9,200.0	10.64	96.39	9,116.6	-101.4	905.8	-6.8	0.00	0.00	0.00	
9,300.0	10.64	96.39	9,214.9	-103.4	924.2	-6.9	0.00	0.00	0.00	
9,400.0	10.64	96.39	9,313.2	-105.5	942.6	-7.1	0.00	0.00	0.00	
9,500.0	10.64	96.39	9,411.5	-107.6	960.9	-7.2	0.00	0.00	0.00	
9,600.0	10.64	96.39	9,509.7	-109.6	979.3	-7.4	0.00	0.00	0.00	
9,700.0	10.64	96.39	9,608.0	-111.7	997.6	-7.5	0.00	0.00	0.00	
9,800.0	10.64	96.39	9,706.3	-113.7	1,016.0	-7.6	0.00	0.00	0.00	
9,900.0	10.64	96.39	9,804.6	-115.8	1,034.3	-7.8	0.00	0.00	0.00	
10,000.0	10.64	96.39	9,902.9	-117.8	1,052.7	-7.9	0.00	0.00	0.00	
10,100.0	10.64	96.39	10,001.1	-119.9	1,071.0	-8.0	0.00	0.00	0.00	
10,200.0	10.64	96.39	10,099.4	-121.9	1,089.4	-8.2	0.00	0.00	0.00	
10,213.7	10.64	96.39	10,112.8	-122.2	1,091.9	-8.2	0.00	0.00	0.00	
10,300.0	8.92	96.39	10,197.9	-123.8	1,106.5	-8.3	2.00	-2.00	0.00	
10,400.0	6.92	96.39	10,297.0	-125.4	1,120.2	-8.4	2.00	-2.00	0.00	

Planning Report

Database:	Hobbs	Local Co-ordinate Reference:	Site Lobo 33/28 Fed Com #568H
Company:	Mewbourne Oil Company	TVD Reference:	WELL @ 3828.0usft (Original Well Elev)
Project:	Lea County, New Mexico NAD 83	MD Reference:	WELL @ 3828.0usft (Original Well Elev)
Site:	Lobo 33/28 Fed Com #568H	North Reference:	Grid
Well:	Sec 33, T21S, R32E	Survey Calculation Method:	Minimum Curvature
Wellbore:	BHL: 100' FNL & 600' FEL (Sec 28)		
Design:	Design #1		

Planned Survey										
Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)	
10,500.0	4.92	96.39	10,396.4	-126.5	1,130.4	-8.5	2.00	-2.00	0.00	
10,600.0	2.92	96.39	10,496.2	-127.3	1,137.2	-8.5	2.00	-2.00	0.00	
10,700.0	0.92	96.39	10,596.1	-127.7	1,140.5	-8.6	2.00	-2.00	0.00	
10,745.9	0.00	0.00	10,642.0	-127.7	1,140.9	-8.6	2.00	-2.00	0.00	
KOP: 10' FSL & 600' FEL (Sec 33)										
10,750.0	0.41	359.66	10,646.1	-127.7	1,140.9	-8.6	10.00	10.00	0.00	
10,800.0	5.41	359.66	10,696.0	-125.1	1,140.9	-6.0	10.00	10.00	0.00	
10,850.0	10.41	359.66	10,745.6	-118.3	1,140.8	0.8	10.00	10.00	0.00	
10,900.0	15.41	359.66	10,794.3	-107.1	1,140.8	11.9	10.00	10.00	0.00	
10,950.0	20.41	359.66	10,841.8	-91.7	1,140.7	27.2	10.00	10.00	0.00	
11,000.0	25.41	359.66	10,887.9	-72.3	1,140.6	46.5	10.00	10.00	0.00	
11,050.0	30.41	359.66	10,932.0	-48.9	1,140.4	69.8	10.00	10.00	0.00	
11,071.2	32.53	359.66	10,950.1	-37.8	1,140.4	80.8	10.00	10.00	0.00	
FTP: 100' FSL & 600' FEL (Sec 33)										
11,100.0	35.41	359.66	10,974.0	-21.7	1,140.3	96.8	10.00	10.00	0.00	
11,150.0	40.41	359.66	11,013.4	9.0	1,140.1	127.3	10.00	10.00	0.00	
11,200.0	45.41	359.66	11,050.1	43.0	1,139.9	161.1	10.00	10.00	0.00	
11,250.0	50.41	359.66	11,083.6	80.1	1,139.7	198.0	10.00	10.00	0.00	
11,300.0	55.41	359.66	11,113.7	120.0	1,139.4	237.6	10.00	10.00	0.00	
11,350.0	60.41	359.66	11,140.3	162.3	1,139.2	279.7	10.00	10.00	0.00	
11,400.0	65.41	359.66	11,163.0	206.8	1,138.9	323.9	10.00	10.00	0.00	
11,450.0	70.41	359.66	11,181.8	253.1	1,138.6	370.0	10.00	10.00	0.00	
11,500.0	75.41	359.66	11,196.5	300.9	1,138.3	417.5	10.00	10.00	0.00	
11,550.0	80.41	359.66	11,207.0	349.8	1,138.0	466.0	10.00	10.00	0.00	
11,600.0	85.41	359.66	11,213.2	399.4	1,137.8	515.3	10.00	10.00	0.00	
11,645.9	90.00	359.66	11,215.0	445.3	1,137.5	560.9	10.00	10.00	0.00	
LP: 583' FSL & 600' FEL (Sec 33)										
11,648.6	90.27	359.66	11,215.0	448.0	1,137.5	563.6	10.00	10.00	0.00	
11,700.0	90.27	359.66	11,214.8	499.3	1,137.2	614.7	0.00	0.00	0.00	
11,800.0	90.27	359.66	11,214.3	599.3	1,136.6	714.1	0.00	0.00	0.00	
11,900.0	90.27	359.66	11,213.8	699.3	1,136.0	813.5	0.00	0.00	0.00	
12,000.0	90.27	359.66	11,213.4	799.3	1,135.4	912.9	0.00	0.00	0.00	
12,100.0	90.27	359.66	11,212.9	899.3	1,134.8	1,012.3	0.00	0.00	0.00	
12,200.0	90.27	359.66	11,212.4	999.3	1,134.2	1,111.7	0.00	0.00	0.00	
12,300.0	90.27	359.66	11,212.0	1,099.3	1,133.6	1,211.1	0.00	0.00	0.00	
12,400.0	90.27	359.66	11,211.5	1,199.3	1,133.0	1,310.5	0.00	0.00	0.00	
12,500.0	90.27	359.66	11,211.0	1,299.3	1,132.4	1,409.9	0.00	0.00	0.00	
12,600.0	90.27	359.66	11,210.6	1,399.3	1,131.8	1,509.2	0.00	0.00	0.00	
12,700.0	90.27	359.66	11,210.1	1,499.3	1,131.2	1,608.6	0.00	0.00	0.00	
12,800.0	90.27	359.66	11,209.6	1,599.3	1,130.6	1,708.0	0.00	0.00	0.00	
12,900.0	90.27	359.66	11,209.2	1,699.3	1,130.0	1,807.4	0.00	0.00	0.00	
13,000.0	90.27	359.66	11,208.7	1,799.3	1,129.4	1,906.8	0.00	0.00	0.00	
13,100.0	90.27	359.66	11,208.2	1,899.3	1,128.8	2,006.2	0.00	0.00	0.00	
13,200.0	90.27	359.66	11,207.8	1,999.3	1,128.2	2,105.6	0.00	0.00	0.00	
13,300.0	90.27	359.66	11,207.3	2,099.3	1,127.6	2,205.0	0.00	0.00	0.00	
13,400.0	90.27	359.66	11,206.8	2,199.3	1,127.0	2,304.4	0.00	0.00	0.00	
13,500.0	90.27	359.66	11,206.4	2,299.3	1,126.4	2,403.8	0.00	0.00	0.00	
13,600.0	90.27	359.66	11,205.9	2,399.3	1,125.8	2,503.2	0.00	0.00	0.00	
13,700.0	90.27	359.66	11,205.5	2,499.3	1,125.2	2,602.6	0.00	0.00	0.00	
13,800.0	90.27	359.66	11,205.0	2,599.3	1,124.6	2,702.0	0.00	0.00	0.00	
13,900.0	90.27	359.66	11,204.5	2,699.3	1,124.0	2,801.4	0.00	0.00	0.00	
14,000.0	90.27	359.66	11,204.1	2,799.3	1,123.4	2,900.8	0.00	0.00	0.00	
14,100.0	90.27	359.66	11,203.6	2,899.3	1,122.8	3,000.2	0.00	0.00	0.00	

Planning Report

Database:	Hobbs	Local Co-ordinate Reference:	Site Lobo 33/28 Fed Com #568H
Company:	Mewbourne Oil Company	TVD Reference:	WELL @ 3828.0usft (Original Well Elev)
Project:	Lea County, New Mexico NAD 83	MD Reference:	WELL @ 3828.0usft (Original Well Elev)
Site:	Lobo 33/28 Fed Com #568H	North Reference:	Grid
Well:	Sec 33, T21S, R32E	Survey Calculation Method:	Minimum Curvature
Wellbore:	BHL: 100' FNL & 600' FEL (Sec 28)		
Design:	Design #1		

Planned Survey										
Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)	
14,200.0	90.27	359.66	11,203.1	2,999.3	1,122.2	3,099.6	0.00	0.00	0.00	
14,300.0	90.27	359.66	11,202.7	3,099.3	1,121.6	3,199.0	0.00	0.00	0.00	
14,400.0	90.27	359.66	11,202.2	3,199.3	1,121.0	3,298.4	0.00	0.00	0.00	
14,500.0	90.27	359.66	11,201.7	3,299.3	1,120.4	3,397.7	0.00	0.00	0.00	
14,600.0	90.27	359.66	11,201.3	3,399.3	1,119.8	3,497.1	0.00	0.00	0.00	
14,700.0	90.27	359.66	11,200.8	3,499.3	1,119.2	3,596.5	0.00	0.00	0.00	
14,800.0	90.27	359.66	11,200.3	3,599.3	1,118.6	3,695.9	0.00	0.00	0.00	
14,900.0	90.27	359.66	11,199.9	3,699.3	1,118.0	3,795.3	0.00	0.00	0.00	
15,000.0	90.27	359.66	11,199.4	3,799.2	1,117.4	3,894.7	0.00	0.00	0.00	
15,100.0	90.27	359.66	11,198.9	3,899.2	1,116.8	3,994.1	0.00	0.00	0.00	
15,200.0	90.27	359.66	11,198.5	3,999.2	1,116.2	4,093.5	0.00	0.00	0.00	
15,300.0	90.27	359.66	11,198.0	4,099.2	1,115.6	4,192.9	0.00	0.00	0.00	
15,400.0	90.27	359.66	11,197.5	4,199.2	1,115.0	4,292.3	0.00	0.00	0.00	
15,500.0	90.27	359.66	11,197.1	4,299.2	1,114.4	4,391.7	0.00	0.00	0.00	
15,600.0	90.27	359.66	11,196.6	4,399.2	1,113.9	4,491.1	0.00	0.00	0.00	
15,700.0	90.27	359.66	11,196.1	4,499.2	1,113.3	4,590.5	0.00	0.00	0.00	
15,800.0	90.27	359.66	11,195.7	4,599.2	1,112.7	4,689.9	0.00	0.00	0.00	
15,900.0	90.27	359.66	11,195.2	4,699.2	1,112.1	4,789.3	0.00	0.00	0.00	
16,000.0	90.27	359.66	11,194.7	4,799.2	1,111.5	4,888.7	0.00	0.00	0.00	
16,100.0	90.27	359.66	11,194.3	4,899.2	1,110.9	4,988.1	0.00	0.00	0.00	
16,200.0	90.27	359.66	11,193.8	4,999.2	1,110.3	5,087.5	0.00	0.00	0.00	
16,300.0	90.27	359.66	11,193.4	5,099.2	1,109.7	5,186.9	0.00	0.00	0.00	
16,344.1	90.27	359.66	11,193.1	5,143.3	1,109.4	5,230.7	0.00	0.00	0.00	
PPP2: 0' FSL & 600' FEL (Sec 28)										
16,400.0	90.27	359.66	11,192.9	5,199.2	1,109.1	5,286.3	0.00	0.00	0.00	
16,500.0	90.27	359.66	11,192.4	5,299.2	1,108.5	5,385.6	0.00	0.00	0.00	
16,600.0	90.27	359.66	11,192.0	5,399.2	1,107.9	5,485.0	0.00	0.00	0.00	
16,700.0	90.27	359.66	11,191.5	5,499.2	1,107.3	5,584.4	0.00	0.00	0.00	
16,800.0	90.27	359.66	11,191.0	5,599.2	1,106.7	5,683.8	0.00	0.00	0.00	
16,900.0	90.27	359.66	11,190.6	5,699.2	1,106.1	5,783.2	0.00	0.00	0.00	
17,000.0	90.27	359.66	11,190.1	5,799.2	1,105.5	5,882.6	0.00	0.00	0.00	
17,100.0	90.27	359.66	11,189.6	5,899.2	1,104.9	5,982.0	0.00	0.00	0.00	
17,200.0	90.27	359.66	11,189.2	5,999.2	1,104.3	6,081.4	0.00	0.00	0.00	
17,300.0	90.27	359.66	11,188.7	6,099.2	1,103.7	6,180.8	0.00	0.00	0.00	
17,400.0	90.27	359.66	11,188.2	6,199.2	1,103.1	6,280.2	0.00	0.00	0.00	
17,500.0	90.27	359.66	11,187.8	6,299.2	1,102.5	6,379.6	0.00	0.00	0.00	
17,600.0	90.27	359.66	11,187.3	6,399.2	1,101.9	6,479.0	0.00	0.00	0.00	
17,700.0	90.27	359.66	11,186.8	6,499.2	1,101.3	6,578.4	0.00	0.00	0.00	
17,800.0	90.27	359.66	11,186.4	6,599.2	1,100.7	6,677.8	0.00	0.00	0.00	
17,900.0	90.27	359.66	11,185.9	6,699.2	1,100.1	6,777.2	0.00	0.00	0.00	
18,000.0	90.27	359.66	11,185.4	6,799.2	1,099.5	6,876.6	0.00	0.00	0.00	
18,100.0	90.27	359.66	11,185.0	6,899.2	1,098.9	6,976.0	0.00	0.00	0.00	
18,200.0	90.27	359.66	11,184.5	6,999.2	1,098.3	7,075.4	0.00	0.00	0.00	
18,300.0	90.27	359.66	11,184.0	7,099.2	1,097.7	7,174.8	0.00	0.00	0.00	
18,400.0	90.27	359.66	11,183.6	7,199.2	1,097.1	7,274.1	0.00	0.00	0.00	
18,500.0	90.27	359.66	11,183.1	7,299.1	1,096.5	7,373.5	0.00	0.00	0.00	
18,600.0	90.27	359.66	11,182.6	7,399.1	1,095.9	7,472.9	0.00	0.00	0.00	
18,700.0	90.27	359.66	11,182.2	7,499.1	1,095.3	7,572.3	0.00	0.00	0.00	
18,800.0	90.27	359.66	11,181.7	7,599.1	1,094.7	7,671.7	0.00	0.00	0.00	
18,900.0	90.27	359.66	11,181.3	7,699.1	1,094.1	7,771.1	0.00	0.00	0.00	
19,000.0	90.27	359.66	11,180.8	7,799.1	1,093.5	7,870.5	0.00	0.00	0.00	
19,100.0	90.27	359.66	11,180.3	7,899.1	1,092.9	7,969.9	0.00	0.00	0.00	
19,200.0	90.27	359.66	11,179.9	7,999.1	1,092.3	8,069.3	0.00	0.00	0.00	
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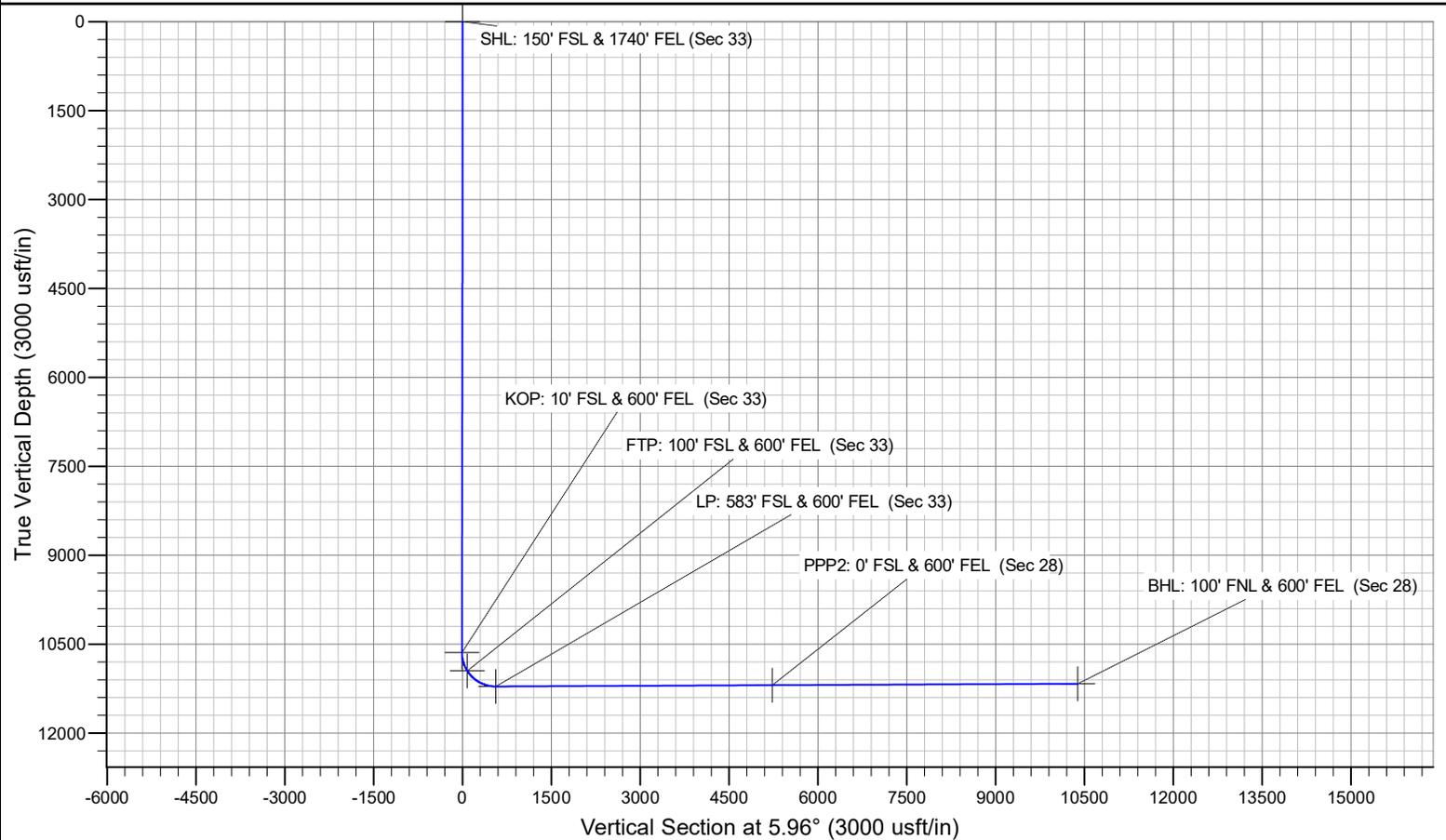
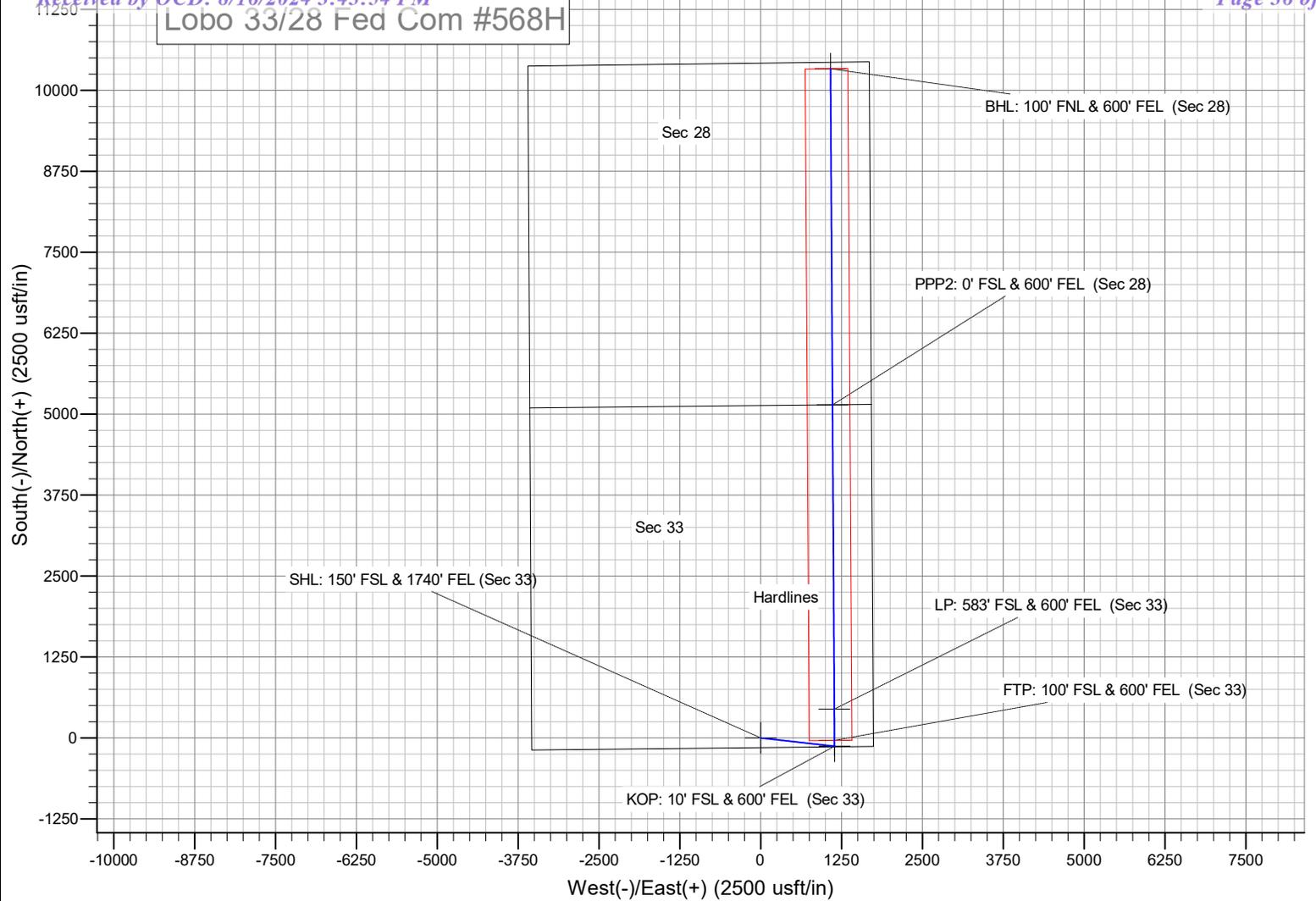
Planning Report

Database:	Hobbs	Local Co-ordinate Reference:	Site Lobo 33/28 Fed Com #568H
Company:	Mewbourne Oil Company	TVD Reference:	WELL @ 3828.0usft (Original Well Elev)
Project:	Lea County, New Mexico NAD 83	MD Reference:	WELL @ 3828.0usft (Original Well Elev)
Site:	Lobo 33/28 Fed Com #568H	North Reference:	Grid
Well:	Sec 33, T21S, R32E	Survey Calculation Method:	Minimum Curvature
Wellbore:	BHL: 100' FNL & 600' FEL (Sec 28)		
Design:	Design #1		

Planned Survey									
Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)
19,400.0	90.27	359.66	11,178.9	8,199.1	1,091.1	8,268.1	0.00	0.00	0.00
19,500.0	90.27	359.66	11,178.5	8,299.1	1,090.5	8,367.5	0.00	0.00	0.00
19,600.0	90.27	359.66	11,178.0	8,399.1	1,089.9	8,466.9	0.00	0.00	0.00
19,700.0	90.27	359.66	11,177.5	8,499.1	1,089.4	8,566.3	0.00	0.00	0.00
19,800.0	90.27	359.66	11,177.1	8,599.1	1,088.8	8,665.7	0.00	0.00	0.00
19,900.0	90.27	359.66	11,176.6	8,699.1	1,088.2	8,765.1	0.00	0.00	0.00
20,000.0	90.27	359.66	11,176.1	8,799.1	1,087.6	8,864.5	0.00	0.00	0.00
20,100.0	90.27	359.66	11,175.7	8,899.1	1,087.0	8,963.9	0.00	0.00	0.00
20,200.0	90.27	359.66	11,175.2	8,999.1	1,086.4	9,063.3	0.00	0.00	0.00
20,300.0	90.27	359.66	11,174.7	9,099.1	1,085.8	9,162.6	0.00	0.00	0.00
20,400.0	90.27	359.66	11,174.3	9,199.1	1,085.2	9,262.0	0.00	0.00	0.00
20,500.0	90.27	359.66	11,173.8	9,299.1	1,084.6	9,361.4	0.00	0.00	0.00
20,600.0	90.27	359.66	11,173.3	9,399.1	1,084.0	9,460.8	0.00	0.00	0.00
20,700.0	90.27	359.66	11,172.9	9,499.1	1,083.4	9,560.2	0.00	0.00	0.00
20,800.0	90.27	359.66	11,172.4	9,599.1	1,082.8	9,659.6	0.00	0.00	0.00
20,900.0	90.27	359.66	11,171.9	9,699.1	1,082.2	9,759.0	0.00	0.00	0.00
21,000.0	90.27	359.66	11,171.5	9,799.1	1,081.6	9,858.4	0.00	0.00	0.00
21,100.0	90.27	359.66	11,171.0	9,899.1	1,081.0	9,957.8	0.00	0.00	0.00
21,200.0	90.27	359.66	11,170.5	9,999.1	1,080.4	10,057.2	0.00	0.00	0.00
21,300.0	90.27	359.66	11,170.1	10,099.1	1,079.8	10,156.6	0.00	0.00	0.00
21,400.0	90.27	359.66	11,169.6	10,199.1	1,079.2	10,256.0	0.00	0.00	0.00
21,500.0	90.27	359.66	11,169.2	10,299.1	1,078.6	10,355.4	0.00	0.00	0.00
21,532.9	90.27	359.66	11,169.0	10,332.0	1,078.4	10,388.1	0.00	0.00	0.00
BHL: 100' FNL & 600' FEL (Sec 28)									

Design Targets									
Target Name	Dip Angle (°)	Dip Dir. (°)	TVD (usft)	+N/-S (usft)	+E/-W (usft)	Northing (usft)	Easting (usft)	Latitude	Longitude
SHL: 150' FSL & 1740' F - plan hits target center - Point	0.00	0.00	0.0	0.0	0.0	520,190.20	743,898.90	32.4283583	-103.6768199
KOP: 10' FSL & 600' FEI - plan hits target center - Point	0.00	0.00	10,642.0	-127.7	1,140.9	520,062.50	745,039.80	32.4279880	-103.6731249
FTP: 100' FSL & 600' FE - plan hits target center - Point	0.00	0.00	10,950.1	-37.8	1,140.4	520,152.40	745,039.26	32.4282351	-103.6731248
BHL: 100' FNL & 600' FE - plan hits target center - Point	0.00	0.00	11,169.0	10,332.0	1,078.4	530,522.20	744,977.30	32.4567388	-103.6731179
PPP2: 0' FSL & 600' FEI - plan hits target center - Point	0.00	0.00	11,193.1	5,143.3	1,109.4	525,333.50	745,008.30	32.4424765	-103.6731214
LP: 583' FSL & 600' FEL - plan hits target center - Point	0.00	0.00	11,215.0	445.2	1,137.5	520,635.45	745,036.37	32.4295628	-103.6731245

Lobo 33/28 Fed Com #568H



Mewbourne Oil Company, Lobo 33/28 Fed Com 568H

Sec 33, T21S, R32E

SHL: 150' FSL 1740' FEL (Sec 33)

BHL: 100' FNL 600' FEL (Sec 28)

Operator Name:	Property Name:	Well Number
Mewbourne Oil Company	Lobo 33/28 Fed Com	568H

Kick Off Point (KOP)

UL	Section	Township	Range	Lot	Feet	From N/S	Feet	From E/W	County
P	33	21	32	-	10'	FSL	600'	FEL	Lea
Latitude					Longitude				NAD
32.4279878					-103.6731250				83

First Take Point (FTP)

UL	Section	Township	Range	Lot	Feet	From N/S	Feet	From E/W	County
P	33	21	32	-	100'	FSL	600'	FEL	Lea
Latitude					Longitude				NAD
32.4282351					-103.6731249				83

Last Take Point (LTP)

UL	Section	Township	Range	Lot	Feet	From N/S	Feet	From E/W	County
A	28	21	32	-	100'	FNL	600'	FEL	Lea
Latitude					Longitude				NAD
32.4567389					-103.6731179				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

**PECOS DISTRICT
SURFACE USE
CONDITIONS OF APPROVAL**

Mewbourne Oil Co.

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

Wells:

LOBO 33/28 FED COM 402H

Surface Hole Location: 150' FSL & 1981' FWL, Section 33, T. 21S., R. 32E.
Bottom Hole Location: 2543' FSL & 930' FWL, Section 28, T. 21S., R 32E.

LOBO 33/28 FED COM 406H

Surface Hole Location: 150' FSL & 1780' FEL, Section 33, T. 21S., R. 32E.
Bottom Hole Location: 100' FNL & 1650' FEL, Section 28, T. 21S., R 32E.

LOBO 33/28 FED COM 474H

Surface Hole Location: 150' FSL & 2089' FWL, Section 33, T. 21S., R. 32E.
Bottom Hole Location: 2543' FSL & 2250' FWL, Section 28, T. 21S., R 32E.

LOBO 33/28 FED COM 564H

Surface Hole Location: 150' FSL & 2053' FWL, Section 33, T. 21S., R. 32E.
Bottom Hole Location: 2543' FSL & 2260' FWL, Section 28, T. 21S., R 32E.

LOBO 33/28 FED COM 568H

Surface Hole Location: 150' FSL & 1740' FEL, Section 33, T. 21S., R. 32E.
Bottom Hole Location: 100' FNL & 600' FEL, Section 28, T. 21S., R 32E.

LOBO 33/28 FED COM 582H

Surface Hole Location: 150' FSL & 1999' FWL, Section 33, T. 21S., R. 32E.
Bottom Hole Location: 2543' FSL & 940' FWL, Section 28, T. 21S., R 32E.

LOBO 33/28 FED COM 586H

Surface Hole Location: 150' FSL & 1800' FEL, Section 33, T. 21S., R. 32E.
Bottom Hole Location: 100' FNL & 1700' FEL, Section 28, T. 21S., R 32E.

TABLE OF CONTENTS

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

- General Provisions**
- Permit Expiration**
- Archaeology, Paleontology, and Historical Sites**
- Noxious Weeds**
- Special Requirements**
 - Watershed
 - Lesser Prairie Chicken
 - Potash Resources
- Construction**
 - Notification
 - Topsoil
 - Closed Loop System
 - Federal Mineral Material Pits
 - Well Pads
 - Roads
- Road Section Diagram**
- Production (Post Drilling)**
 - Well Structures & Facilities
 - Pipelines
 - Electric Lines
- Interim Reclamation**
- Final Abandonment & Reclamation**

I. GENERAL PROVISIONS

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

II. PERMIT EXPIRATION

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

III. ARCHAEOLOGICAL, PALEONTOLOGY & HISTORICAL SITES

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

OR

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

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

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

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

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

IV. NOXIOUS WEEDS

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

V. SPECIAL REQUIREMENT(S)

Watershed:

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

TANK BATTERY:

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

BURIED/SURFACE LINE(S):

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

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

Range:**Cattleguards**

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

Fence Requirement

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

Lesser Prairie Chicken:**Timing Limitation Stipulation/Condition of Approval for Lesser Prairie-Chicken:**

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

Timing Limitation Exceptions:

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

Ground-level Abandoned Well Marker to avoid raptor perching:

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

Potash Resources

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

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

VI. CONSTRUCTION

A. NOTIFICATION

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

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

B. TOPSOIL

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

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

C. CLOSED LOOP SYSTEM

Tanks are required for drilling operations: No Pits.

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

D. FEDERAL MINERAL MATERIALS PIT

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

E. WELL PAD SURFACING

Surfacing of the well pad is not required.

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

F. EXCLOSURE FENCING (CELLARS & PITS)

Exclosure Fencing

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

G. ON LEASE ACCESS ROADS

Road Width

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

Surfacing

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

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

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

Crowning

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

Ditching

Ditching shall be required on both sides of the road.

Turnouts

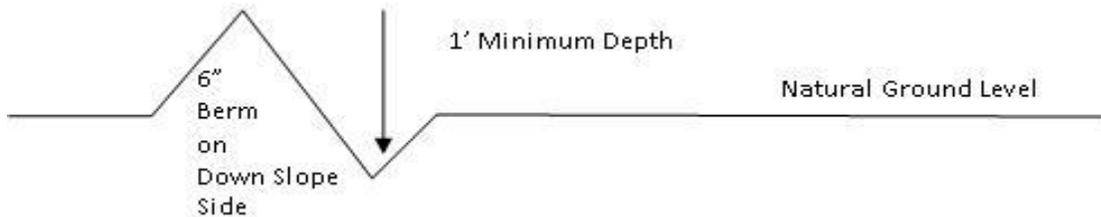
Vehicle turnouts shall be constructed on the road. Turnouts shall be intervisible with interval spacing distance less than 1000 feet. Turnouts shall conform to Figure 1; cross section and plans for typical road construction.

Drainage

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

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

Cross Section of a Typical Lead-off Ditch



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

Formula for Spacing Interval of Lead-off Ditches

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

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

Cattle guards

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

Fence Requirement

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

Public Access

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

Construction Steps

1. Salvage topsoil
2. Construct road

3. Redistribute topsoil
4. Revegetate slopes

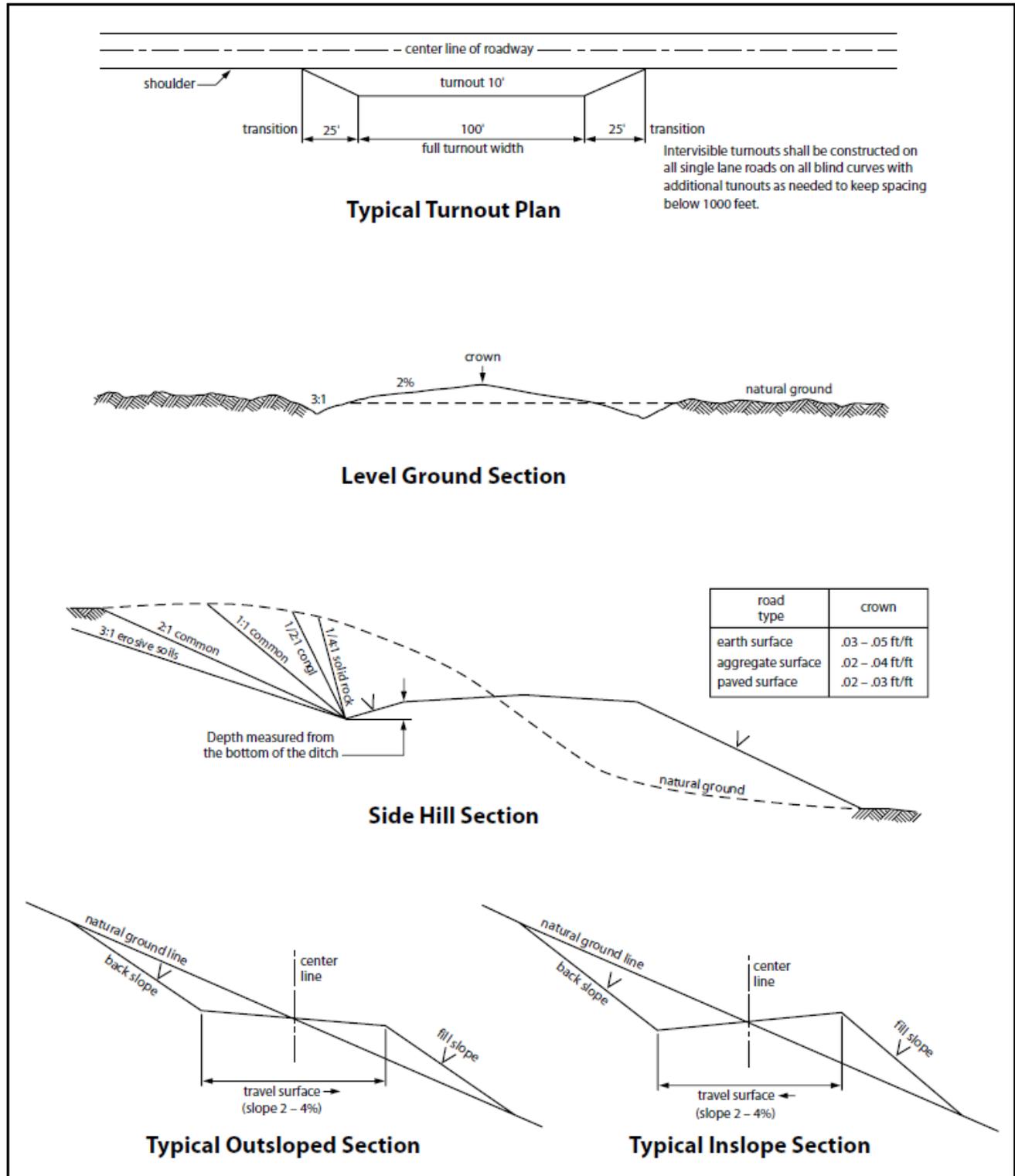


Figure 1. Cross-sections and plans for typical road sections representative of BLM resource or FS local and higher-class roads.

VII. PRODUCTION (POST DRILLING)

A. WELL STRUCTURES & FACILITIES

Placement of Production Facilities

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

Exclosure Netting (Open-top Tanks)

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

Chemical and Fuel Secondary Containment and Exclosure Screening

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

Open-Vent Exhaust Stack Exclosures

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

Containment Structures

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

Painting Requirement

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

B. PIPELINES

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

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

BURIED PIPELINE STIPULATIONS

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

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

1. The Holder shall indemnify the United States against any liability for damage to life or property arising from the occupancy or use of public lands under this grant.
2. The Holder shall comply with all applicable Federal laws and regulations existing or hereafter enacted or promulgated. In any event, the holder shall comply with the Toxic Substances Control Act of 1976 as amended, 15 USC 2601 et seq. (1982) with regards to any toxic substances that are used, generated by or stored on the right-of-way or on facilities authorized under this right-of-way grant. (See 40 CFR Part 702-799 and especially, provisions on polychlorinated biphenyls, 40 CFR 761.1-761.193.) Additionally, any release of toxic substances (leaks, spills, etc.) in excess of the reportable quantity established by 40 CFR Part 117 shall be reported as required by the Comprehensive Environmental Response, Compensation, and Liability Act, section 102b. A copy of any report required or requested by any Federal agency or State government as a result of a reportable release or spill of any toxic substances shall be furnished to the authorized officer concurrent with the filing of the reports to the involved Federal agency or State government.
3. The holder agrees to indemnify the United States against any liability arising from the release of any hazardous substance or hazardous waste (as these terms are defined in the Comprehensive Environmental Response, Compensation and Liability Act of 1980, 42 U.S.C. 9601, et seq. or the Resource Conservation and Recovery Act, 42 U.S.C.6901, et seq.) on the Right-of-Way (unless the release or threatened release is wholly unrelated to the Right-of-Way holder's activity on the Right-of-Way), or resulting from the activity of the Right-of-Way holder on the Right-of-Way. This agreement applies without regard to whether a release is caused by the holder, its agent, or unrelated third parties.
4. If, during any phase of the construction, operation, maintenance, or termination of the pipeline, any oil or other pollutant should be discharged from the pipeline system, impacting Federal lands, the control and total removal, disposal, and cleaning up of such oil or other pollutant, wherever

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

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

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

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

- Blading of vegetation within the right-of-way will be allowed: maximum width of blading operations will not exceed 20 feet. The trench is included in this area. (*Blading is defined as the complete removal of brush and ground vegetation.*)
- Clearing of brush species within the right-of-way will be allowed: maximum width of clearing operations will not exceed 30 feet. The trench and bladed area are included in this area. (*Clearing is defined as the removal of brush while leaving ground vegetation (grasses, weeds, etc.) intact. Clearing is best accomplished by holding the blade 4 to 6 inches above the ground surface.*)
- The remaining area of the right-of-way (if any) shall only be disturbed by compressing the vegetation. (*Compressing can be caused by vehicle tires, placement of equipment, etc.*)

8. The holder shall stockpile an adequate amount of topsoil where blading is allowed. The topsoil to be stripped is approximately 6 inches in depth. The topsoil will be segregated from other spoil piles from trench construction. The topsoil will be evenly distributed over the bladed area for the preparation of seeding.

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

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

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

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

- Seed Mixture 1
- Seed Mixture 2
- Seed Mixture 2/LPC
- Seed Mixture 3
- Seed Mixture 4
- Seed Mixture Aplomado Falcon Mixture

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

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

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

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

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

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

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:

- a. 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.
- b. 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.

21. Special Stipulations:

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, siting valves and lines so they can be visually inspected periodically or installing electronic sensors to alarm when a leak is present. The leak detection plan will incorporate an automatic shut off system that will be installed for proposed pipelines to minimize the effects of an undesirable event.
- 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.

STANDARD STIPULATIONS FOR SURFACE INSTALLED PIPELINES

A copy of the Grant and attachments, including stipulations, survey plat(s) and/or map(s), shall be on location during construction. BLM personnel may request to review 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. 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. Holder shall comply with all applicable Federal laws and regulations existing or hereafter enacted or promulgated. In any event, Holder shall comply with the Toxic Substances Control Act of 1976 as amended, 15 USC § 2601 *et seq.* (1982) with regard 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 in particular, 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. Holder agrees to indemnify the United States against any liability arising from the release of any hazardous substance or hazardous waste (as these terms are defined in the Comprehensive Environmental Response, Compensation and Liability Act of 1980, 42 U.S.C. § 9601, *et seq.* or the Resource Conservation and Recovery Act, 42 U.S.C. 6901, *et seq.*) on the Right-of-Way (unless the release or threatened release is wholly unrelated to activity of the Right-of-Way Holder's activity on the Right-of-Way), or resulting from the activity of the Right-of-Way Holder on the Right-of-Way. This provision applies without regard to whether a release is caused by Holder, its agent, or unrelated third parties.
4. Holder shall be liable for damage or injury to the United States to the extent provided by 43 CFR Sec. 2883.1-4. Holder shall be held to a standard of strict liability for damage or injury to the United States resulting from pipe rupture, fire, or spills caused or substantially aggravated by any of the following within the right-of-way or permit area:
 - a. Activities of Holder including, but not limited to: construction, operation, maintenance, and termination of the facility;
 - b. Activities of other parties including, but not limited to:
 - (1) Land clearing
 - (2) Earth-disturbing and earth-moving work
 - (3) Blasting

(4) Vandalism and sabotage;

c. Acts of God.

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

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

5. If, during any phase of the construction, operation, maintenance, or termination of the pipeline, any oil, salt water, or other pollutant should be discharged from the pipeline system, impacting Federal lands, the control and total removal, disposal, and cleaning up of such oil, salt water, or other pollutant, wherever found, shall be the responsibility of 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/she 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 Holder. Such action by the Authorized Officer shall not relieve Holder of any responsibility as provided herein.

6. All construction and maintenance activity shall be confined to the authorized right-of-way width of 30 feet. If the pipeline route follows an existing road or buried pipeline right-of-way, the surface pipeline shall be installed no farther than 10 feet from the edge of the road or buried pipeline right-of-way. If existing surface pipelines prevent this distance, the proposed surface pipeline shall be installed immediately adjacent to the outer surface pipeline. All construction and maintenance activity shall be confined to existing roads or right-of-ways.

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

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

9. The pipeline shall be buried with a minimum of 6 inches under all roads, "two-tracks," and trails. Burial of the pipe will continue for 20 feet on each side of each crossing. The condition of the road, upon completion of construction, shall be returned to at least its former state with no bumps or dips remaining in the road surface.

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

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

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

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

14. The holder shall not use the pipeline route as a road for purposes other than routine maintenance as determined necessary by the Authorized Officer in consultation with the holder. The holder will take whatever steps are necessary to ensure that the pipeline route is not used as a roadway.

15. Any 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 16 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.

16. 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."

17. 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.

18. The operator shall be held responsible if noxious weeds become established within the areas

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

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

C. ELECTRIC LINES

- 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.
- The BLM, Carlsbad Field Office, will be informed immediately if any subsurface drainage channels, cave passages, or voids are penetrated during construction.
- No further construction will be done until clearance has been issued by the Authorized Officer.
- Special restoration stipulations or realignment may be required.

STANDARD STIPULATIONS FOR OVERHEAD ELECTRIC DISTRIBUTION LINES

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. There will be no clearing or blading of the right-of-way unless otherwise agreed to in writing by the Authorized Officer.
5. Power lines shall be constructed and designed in accordance to standards outlined in "Suggested Practices for Avian Protection on Power lines: The State of the Art in 2006" Edison Electric Institute, APLIC, and the California Energy Commission 2006 . The holder shall assume the burden and expense of proving that pole designs not shown in the above publication deter

raptor perching, roosting, and nesting. Such proof shall be provided by a raptor expert approved by the Authorized Officer. The BLM reserves the right to require modification or additions to all powerline structures placed on this right-of-way, should they be necessary to ensure the safety of large perching birds. Such modifications and/or additions shall be made by the holder without liability or expense to the United States.

Raptor deterrence will consist of but not limited to the following: triangle perch discouragers shall be placed on each side of the cross arms and a nonconductive perching deterrence shall be placed on all vertical poles that extend past the cross arms.

6. 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 the fence. No permanent gates will be allowed unless approved by the Authorized Officer.

7. The BLM serial number assigned to this authorization shall be posted in a permanent, conspicuous manner where the power line crosses roads and at all serviced facilities. Numbers will be at least two inches high and will be affixed to the pole nearest the road crossing and at the facilities served.

8. Upon cancellation, relinquishment, or expiration of this grant, the holder shall comply with those abandonment procedures as prescribed by the Authorized Officer.

9. All surface structures (poles, lines, transformers, etc.) shall be removed within 180 days of abandonment, relinquishment, or termination of use of the serviced facility or facilities or within 180 days of abandonment, relinquishment, cancellation, or expiration of this grant, whichever comes first. This will not apply where the power line extends service to an active, adjoining facility or facilities.

10. 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 11 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.

11. 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."

12. 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.

13. Special Stipulations:

For reclamation remove poles, lines, transformer, etc. and dispose of properly.

Fill in any holes from the poles removed.

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).

Ground-level Abandoned Well Marker to avoid raptor perching: Upon the plugging and subsequent abandonment of the well, the well marker will be installed at ground level on a plate containing the pertinent information for the plugged well.

Seed Mixture for LPC Sand/Shinnery 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 will be tested and the viability testing of seed shall 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 will be planted using a drill equipped with a depth regulator to ensure proper depth of planting where drilling is possible. The seed mixture will be evenly and uniformly planted over the disturbed area (smaller/heavier seeds have a tendency to drop the bottom of the drill and are planted first). Holder shall take appropriate measures to ensure this does not occur. Where drilling is not possible, seed will be broadcast and the area shall be raked or chained to cover the seed. When broadcasting the seed, the pounds per acre are to be doubled. 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:

<u>Species</u>	<u>lb/acre</u>
Plains Bristlegrass	5lbs/A
Sand Bluestem	5lbs/A
Little Bluestem	3lbs/A
Big Bluestem	6lbs/A
Plains Coreopsis	2lbs/A
Sand Dropseed	1lbs/A

*Pounds of pure live seed:

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

PECOS DISTRICT DRILLING CONDITIONS OF APPROVAL

OPERATOR'S NAME: MEWBOURNE OIL COMPANY
WELL NAME & NO.: LOBO 33/28 FED COM 568H
APD ID: 10400098495
LOCATION: Section 33, T.21 S., R.32 E. NMP.
COUNTY: Lea County, New Mexico

COA

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

A. HYDROGEN SULFIDE

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

B. CASING DESIGN

Primary Casing Design

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

1. The **13-3/8** inch surface casing shall be set at approximately **1,072 ft.** (a minimum of 25 feet (Lea County) into the Rustler Anhydrite and above the salt) and cemented to the surface. **If salt is encountered, set casing at least 25 ft. above the salt.**
 - a. If cement does not circulate to the surface, the appropriate BLM office shall be notified and a temperature survey utilizing an electronic-type temperature survey with surface log readout will be used or a cement bond log shall be run to verify the top of the cement. Temperature survey will be run a minimum of six hours after pumping cement and ideally between 8-10 hours after

- completing the cement job.
- b. Wait on cement (WOC) time for a primary cement job will be a minimum of **8 hours** or **500 psi compressive strength**, whichever is greater. (This is to include the lead cement)
 - c. Wait on cement (WOC) time for a remedial job will be a minimum of 4 hours after bringing cement to surface or 500 psi compressive strength, whichever is greater.
 - d. If cement falls back, remedial cementing will be done prior to drilling out that string.
2. The **9-5/8 in.** intermediate casing shall be set at approximately **4,650 ft.** The minimum required fill of cement behind the **9-5/8** inch intermediate casing is:

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

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

- a. **First stage to DV tool:** Cement to circulate. If cement does not circulate off the DV tool, contact the appropriate BLM office before proceeding with second stage cement job.
- b. **Second stage above DV tool: Cement to surface.** If cement does not circulate see B.1.a, c-d above. Wait on cement (WOC) time for a primary cement job is to include the lead cement slurry due to Potash.

Note: Excess cement in 2nd stage is less than 25%, more cement is required if washout occurs. Adjust cement volume and excess based on a fluid caliper or similar method that reflects the as-drilled size of the wellbore.

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

- ❖ In Secretary Potash Areas if cement does not circulate to surface on the first two casing strings, the cement on the 3rd casing string must come to surface.
3. Operator has proposed to set **7 in.** production casing at approximately **10,746 ft.** (10,633 ft. TVD). The minimum required fill of cement behind the **7 in.** production casing is:
- Operator has proposed to cement in two stages by conventionally cementing the first stage and performing a bradenhead squeeze on the second stage within 180 days after well completion in accordance with the R-111-Q guidelines.
 - c. First stage: Operator will cement production casing with intent to bring cement to top of Brushy Canyon formation. Wait on cement (WOC) time for a

primary cement job is to include the lead cement slurry due to cave/karst and Potash.

- d. Second stage: Operator will perform bradenhead squeeze within 180 days after completion per R-111-Q requirements. Cement shall be tie-back **at least 500 ft. into intermediate casing and below the Marker Bed 126**. If cement does not circulate, the appropriate BLM office shall be notified.
- ❖ Operator must run a cement evaluation tool (fluid shot tool, Temperature log or CBL, etc.) to verify TOC after the second stage bradenhead. Submit the results to the BLM. If cement does not tie-back at least 500 ft. into the previous casing shoe, the appropriate BLM office shall be notified.
 - ❖ A monitored open annulus will be incorporated during completion by leaving the Intermediate Casing x Production Casing annulus un-cemented and monitored inside the Intermediate String. Operator must follow monitoring requirements listed within R-111-Q. Tieback requirements shall be met within 180 days.
4. The minimum required fill of cement behind the **4-1/2 in.** production liner is:
 - Cement should tie-back **at least 100 feet** into previous casing string. Operator shall provide method of verification.

Alternate Casing Design

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

1. The **13-3/8** inch surface casing shall be set at approximately **1,072 ft.** (a minimum of 25 feet (Lea County) into the Rustler Anhydrite and above the salt) and cemented to the surface. **If salt is encountered, set casing at least 25 ft. above the salt.**
 - e. If cement does not circulate to the surface, the appropriate BLM office shall be notified and a temperature survey utilizing an electronic-type temperature survey with surface log readout will be used or a cement bond log shall be run to verify the top of the cement. Temperature survey will be run a minimum of six hours after pumping cement and ideally between 8-10 hours after completing the cement job.
 - f. Wait on cement (WOC) time for a primary cement job will be a minimum of **8 hours** or **500 psi compressive strength**, whichever is greater. (This is to include the lead cement)
 - g. Wait on cement (WOC) time for a remedial job will be a minimum of 4 hours after bringing cement to surface or 500 psi compressive strength, whichever is greater.
 - h. If cement falls back, remedial cementing will be done prior to drilling out that string.
2. The **9-5/8 in.** intermediate casing shall be set at approximately **4,650 ft.** The minimum required fill of cement behind the **9-5/8** inch intermediate casing is:

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

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

- e. **First stage to DV tool:** Cement to circulate. If cement does not circulate off the DV tool, contact the appropriate BLM office before proceeding with second stage cement job.
- f. **Second stage above DV tool: Cement to surface.** If cement does not circulate see B.1.a, c-d above. Wait on cement (WOC) time for a primary cement job is to include the lead cement slurry due to Potash.

Note: Excess cement in 2nd stage is less than 25%, more cement is required if washout occurs. Adjust cement volume and excess based on a fluid caliper or similar method that reflects the as-drilled size of the wellbore.

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

- ❖ In Secretary Potash Areas if cement does not circulate to surface on the first two casing strings, the cement on the 3rd casing string must come to surface.

3. Operator has proposed to set **7 in.** production casing at approximately **11,646 ft.** (11,215 ft. TVD). The minimum required fill of cement behind the **7 in.** production casing is:

- Operator has proposed to cement in two stages by conventionally cementing the first stage and performing a bradenhead squeeze on the second stage within 180 days after well completion in accordance with the R-111-Q guidelines.
 - g. First stage: Operator will cement production casing with intent to bring cement to top of Brushy Canyon formation. Wait on cement (WOC) time for a primary cement job is to include the lead cement slurry due to cave/karst and Potash.
 - h. Second stage: Operator will perform bradenhead squeeze within 180 days after completion per R-111-Q requirements. Cement shall be tie-back **at least 500 ft. into intermediate casing and below the Marker Bed 126.** If cement does not circulate, the appropriate BLM office shall be notified.
- ❖ Operator must run a cement evaluation tool (fluid shot tool, Temperature log or CBL, etc.) to verify TOC after the second stage bradenhead. Submit the results to the BLM. If cement does not tie-back at least 500 ft. into the previous casing shoe, the appropriate BLM office shall be notified.

- ❖ A monitored open annulus will be incorporated during completion by leaving the Intermediate Casing x Production Casing annulus un-cemented and monitored inside the Intermediate String. Operator must follow monitoring requirements listed within R-111-Q. Tieback requirements shall be met within 180 days.

4. The minimum required fill of cement behind the **4-1/2 in.** production liner is:
 - Cement should tie-back **at least 100 feet** into previous casing string. Operator shall provide method of verification.

C. PRESSURE CONTROL

1. Variance approved to use **flex line** from BOP to choke manifold. Manufacturer's specification to be readily available. No external damage to flex line. Flex line to be installed as straight as possible (no hard bends).
2. Operator has proposed a multi-bowl wellhead assembly. This assembly will only be tested when installed on the surface casing. Minimum working pressure of the blowout preventer (BOP) and related equipment (BOPE) required for drilling below the surface casing shoe shall be **5000 (5M) psi**. The BOP/BOPE and annular preventer shall be pressure-tested in accordance with **title 43 CFR 3172 and API Standard 53**.
 - a. Wellhead shall be installed by manufacturer's representatives, submit documentation with subsequent sundry.
 - b. If the welding is performed by a third party, the manufacturer's representative shall monitor the temperature to verify that it does not exceed the maximum temperature of the seal.
 - c. Manufacturer representative shall install the test plug for the initial BOP test.
 - d. If the cement does not circulate and one-inch operations would have been possible with a standard wellhead, the well head shall be cut off, cementing operations performed and another wellhead installed.
 - e. Whenever any seal subject to test pressure is broken, all the tests in the **title 43 CFR 3172.6(b)(9)** must be followed.

BOPE Break Testing Variance

- BOPE Break Testing is **ONLY** permitted for intervals utilizing a 5M BOPE or less. (**Annular preventer must be tested to a minimum of 70% of BOPE working pressure and shall be higher than the MASP.**)
- BOPE Break Testing is **NOT** permitted to drilling the production hole section.
- Variance only pertains to the intermediate hole-sections and no deeper than the Bone Springs formation.
- While in transfer between wells, the BOPE shall be secured by the hydraulic carrier or cradle.
- Any well control event while drilling require notification to the BLM Petroleum Engineer (**575-706-2779**) prior to the commencement of any BOPE Break Testing operations.

- A full BOPE test is required prior to drilling the first deep intermediate hole section. If any subsequent hole interval is deeper than the first, a full BOPE test will be required. (200' TVD tolerance between intermediate shoes is allowable).
- The BLM is to be contacted (575-361-2822 Eddy County) 4 hours prior to BOPE tests.
- As a minimum, a full BOPE test shall be performed at 21-day intervals.
- In the event any repairs or replacement of the BOPE is required, the BOPE shall test as per **43 CFR 3172**.
- If in the event break testing is not utilized, then a full BOPE test would be conducted.

Offline Cementing

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

D. SPECIAL REQUIREMENT (S)

Communitization Agreement

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

GENERAL REQUIREMENTS

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

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

Contact Lea County Petroleum Engineering Inspection Staff:

Call the Hobbs Field Station, 414 West Taylor, Hobbs NM 88240, (575) 689-5981.

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

A. CASING

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

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

B. PRESSURE CONTROL

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

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

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

C. DRILLING MUD

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

D. WASTE MATERIAL AND FLUIDS

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

SA 08/05/2024

MEWBOURNE OIL COMPANY

Hydrogen Sulfide Plan Summary

- A. All personnel shall receive proper H2S training in accordance with Onshore Order III.C.3.a.
- B. Briefing Area: two perpendicular areas will be designated by signs and readily accessible.
- C. Required Emergency Equipment:

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

Breathing apparatus:

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

Auxiliary Rescue Equipment:

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

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

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

MEWBOURNE OIL COMPANY

ALTHEA 18 FED #101H

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

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

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

Operator Name: MEWBOURNE OIL COMPANY

Well Name: LOBO 33/28 FED COM

Well Number: 568H

Section 5 - Location and Types of Water Supply

Water Source Table

Water source type: IRRIGATION

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

Source latitude: 32.423752

Source longitude: -103.655604

Source datum: NAD83

Water source permit type: WATER WELL

Water source transport method: TRUCKING

Source land ownership: FEDERAL

Source transportation land ownership: FEDERAL

Water source volume (barrels): 3240

Source volume (acre-feet): 0.41761363

Source volume (gal): 136080

Water source type: IRRIGATION

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

Source latitude: 32.30893

Source longitude: -103.89153

Source datum: NAD83

Water source permit type: WATER WELL

Water source transport method: TRUCKING

Source land ownership: PRIVATE

Operator Name: MEWBOURNE OIL COMPANY

Well Name: LOBO 33/28 FED COM

Well Number: 568H

Source transportation land ownership: FEDERAL

Water source volume (barrels): 3240

Source volume (acre-feet): 0.41761363

Source volume (gal): 136080

Water source and transportation

Lobo_33_28_Fed_Com_568H_WaterSourceTransMap_20240514095445.pdf

Water source comments: Both sources shown on one map

New water well? N

New Water Well Info

Well latitude:

Well Longitude:

Well datum:

Well target aquifer:

Est. depth to top of aquifer(ft):

Est thickness of aquifer:

Aquifer comments:

Aquifer documentation:

Well depth (ft):

Well casing type:

Well casing outside diameter (in.):

Well casing inside diameter (in.):

New water well casing?

Used casing source:

Drilling method:

Drill material:

Grout material:

Grout depth:

Casing length (ft.):

Casing top depth (ft.):

Well Production type:

Completion Method:

Water well additional information:

State appropriation permit:

Additional information attachment:

Section 6 - Construction Materials

Using any construction materials: YES

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

Construction Materials source location

Lobo_33_28_Fed_Com_568H_CalicheSourceTransMap_20240514095457.pdf

Operator Name: MEWBOURNE OIL COMPANY

Well Name: LOBO 33/28 FED COM

Well Number: 568H

Section 7 - Methods for Handling

Waste type: DRILLING

Waste content description: Drill Cuttings

Amount of waste: 3240 barrels

Waste disposal frequency : One Time Only

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

Safe containmant attachment:

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

Disposal type description:

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

Waste type: SEWAGE

Waste content description: Human waste & Grey water

Amount of waste: 1500 gallons

Waste disposal frequency : Weekly

Safe containment description: 2000 gallon plastic container

Safe containmant attachment:

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

Disposal type description:

Disposal location description: City of Carlsbad Water Treatment Facility

Waste type: GARBAGE

Waste content description: Garbage & Trash

Amount of waste: 1500 pounds

Waste disposal frequency : One Time Only

Safe containment description: Enclosed Trash Trailer

Safe containmant attachment:

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

Disposal type description:

Disposal location description: Waste Management Facility in Carlsbad, NM

Reserve Pit

Reserve Pit being used? NO

Operator Name: MEWBOURNE OIL COMPANY

Well Name: LOBO 33/28 FED COM

Well Number: 568H

Temporary disposal of produced water into reserve pit? NO

Reserve pit length (ft.)

Reserve pit width (ft.)

Reserve pit depth (ft.)

Reserve pit volume (cu. yd.)

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

Reserve pit liner

Reserve pit liner specifications and installation description

Cuttings Area

Cuttings Area being used? NO

Are you storing cuttings on location? N

Description of cuttings location

Cuttings area length (ft.)

Cuttings area width (ft.)

Cuttings area depth (ft.)

Cuttings area volume (cu. yd.)

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

WCuttings area liner

Cuttings area liner specifications and installation description

Section 8 - Ancillary

Are you requesting any Ancillary Facilities?: N

Ancillary Facilities

Comments:

Section 9 - Well Site

Well Site Layout Diagram:

Lobo_33_28_Fed_Com_568H_WellSiteLayout_20240514095512.pdf

Comments: None

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

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

CONDITIONS
 Action 374749

CONDITIONS

Operator: MEWBOURNE OIL CO P.O. Box 5270 Hobbs, NM 88241	OGRID:	14744
	Action Number:	374749
	Action Type:	[C-101] BLM - Federal/Indian Land Lease (Form 3160-3)

CONDITIONS

Created By	Condition	Condition Date
pkautz	Will require a File As Drilled C-102 and a Directional Survey with the C-104	8/23/2024
pkautz	Once the well is spud, to prevent ground water contamination through whole or partial conduits from the surface, the operator shall drill without interruption through the fresh water zone or zones and shall immediately set in cement the water protection string	8/23/2024
pkautz	Oil base muds are not to be used until fresh water zones are cased and cemented providing isolation from the oil or diesel. This includes synthetic oils. Oil based mud, drilling fluids and solids must be contained in a steel closed loop system	8/23/2024
pkautz	Cement is required to circulate on both surface and intermediate1 strings of casing	8/23/2024
pkautz	If cement does not circulate on any string, a CBL is required for that string of casing	8/23/2024