Form 3160-3 FORM APPROVED OMB No. 1004-0137 (June 2015) Expires: January 31, 2018 **UNITED STATES** DEPARTMENT OF THE INTERIOR 5 Lease Serial No. NMLC063345 BUREAU OF LAND MANAGEMENT APPLICATION FOR PERMIT TO DRILL OR REENTER 6. If Indian, Allotee or Tribe Name 7. If Unit or CA Agreement, Name and No. **✓** DRILL REENTER 1a. Type of work: 1b. Type of Well: ✓ Oil Well Gas Well Other 8. Lease Name and Well No. 1c. Type of Completion: Hydraulic Fracturing ✓ Single Zone Multiple Zone DEEP ELLUM 25/26 B3AB FED COM 1H 2. Name of Operator 9. API Well No. MEWBOURNE OIL COMPANY 3a. Address 3b. Phone No. (include area code) 10. Field and Pool, or Exploratory P O BOX 5270, HOBBS, NM 88241 (575) 393-5905 TAMANO/BONE SPRING 4. Location of Well (Report location clearly and in accordance with any State requirements.*) 11. Sec., T. R. M. or Blk. and Survey or Area SEC 30/T18S/R31E/NMP At surface NWNW / 1055 FNL / 65 FWL / LAT 32.7229474 / LONG -103.8141693 At proposed prod. zone NWNE / 450 FNL / 2512 FEL / LAT 32.7245462 / LONG -103.839817 12. County or Parish 14. Distance in miles and direction from nearest town or post office* 13 State LEA NM 10 miles 15. Distance from proposed* 16. No of acres in lease 17. Spacing Unit dedicated to this well 210 feet location to nearest 240.0 property or lease line, ft. (Also to nearest drig. unit line, if any) 18. Distance from proposed location* 19. Proposed Depth 20. BLM/BIA Bond No. in file to nearest well, drilling, completed, 330 feet 9629 feet / 17402 feet FED: NM 1693 applied for, on this lease, ft. 21. Elevations (Show whether DF, KDB, RT, GL, etc.) 22. Approximate date work will start* 23. Estimated duration 3695 feet 03/06/2024 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 2. A Drilling Plan. Item 20 above). 3. A Surface Use Plan (if the location is on National Forest System Lands, the 5. Operator certification. 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 25. Signature Name (Printed/Typed) Date BRADLEY BISHOP / Ph: (575) 393-5905 (Electronic Submission) 08/08/2022 Title Regulatory Approved by (Signature) Date Name (Printed/Typed) (Electronic Submission) 07/12/2024 CODY LAYTON / Ph: (575) 234-5959 Title Office Assistant Field Manager Lands & Minerals Carlsbad Field Office Application approval does not warrant or certify that the applicant holds legal or equitable title to those rights in the subject lease which would entitle the applicant to conduct operations thereon. Conditions of approval, if any, are attached.

APPROVED WITH CONDITIONS

(Continued on page 2)

*(Instructions on page 2)

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

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

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

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

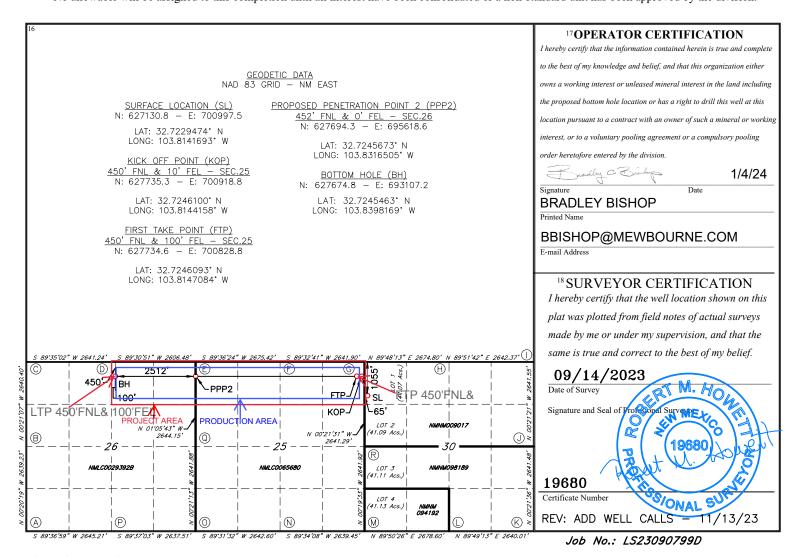
■ AMENDED REPORT

WELL LOCATION AND ACREAGE DEDICATION PLAT

¹ API Number		² Pool Code	³ Pool Name				
30-025-53396		58040	TAMANO; BONE SPR	RING			
4Property Code 5Property Name				6 Well Number			
336215 DEEP ELLUM 25/26 B3AB FED COM			0/26 B3AB FED COM	1H			
7 OGRID NO.			erator Name	⁹ Elevation			
14744		MEWBOURNE	E OIL COMPANY	3695'			
¹⁰ Surface Location							
III l. t							

Feet from the North/South line Feet From the UL or lot no. Section Township Range Lot Idn East/West line County 30 **18S** 32E NORTH 65 WEST 1 1055 LEA 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 26 **18S** 31E 450 NORTH 2512 EAST **EDDY** 12 Dedicated Acres 13 Joint or Infill 14 Consolidation Code 15 Order No. 240

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.



Page 5

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: Mev	vbourne (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	e:							
III. Well(s): Provide the be recompleted from a s					wells proposed to	be drilled or proposed to		
Well Name	API	ULSTR	Footages	Anticipated Oil BBL/D	Anticipated Gas MCF/D	Anticipated Produced Water BBL/D		
DEEP ELLUM 25/26 B3AB FED COM 1H A 30 18S 32E			1055' FNL x 65' FW	2000	2000	3000		
IV. Central Delivery Point Name: DEEP ELLUM 25/26 B3AB FED COM 1H [See 19.15.27.9(D)(1) NMAC] V. Anticipated Schedule: Provide the following information for each new or recompleted well or set of wells proposed to be drilled or proposed to be recompleted from a single well pad or connected to a central delivery point.								
Well Name	API	Spud Date	TD Reached Date	Completion Commencement		I		
DEEP ELLUM 25/26 B3AB FED CO	М 1Н	7/2/22	8/2/22	9/2/22	9/17/2	2 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.								

Page 6

Section 2 —	Enl	nand	ced	Plan
EFFECTIV	E AF	RIL	1, 20	22

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				
V N A LC CAL : C A AV							

X. Natural Gas Gathering System (NGGS):

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

XI. Map. \square 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 \square will \square will not have capacity to gather 100% of the anticipation of the system \square will \square will not have capacity to gather 100% of the anticipation of the system \square will \square will not have capacity to gather 100% of the anticipation of the system \square will not have capacity to gather 100% of the anticipation of the system \square will not have capacity to gather 100% of the anticipation of the system \square will not have capacity to gather 100% of the anticipation of the system \square will not have capacity to gather 100% of the anticipation of the system \square will not have capacity to gather 100% of the anticipation of the system \square will not have capacity to gather 100% of the system \square will not have	ited natural gas
production volume from the well prior to the date of first production.	

XIII. Line Pressure. Operator \square does \square 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).

\square Attach Operator's plan to manage production in response to the increased line r	e pressure
---	------------

XIV. (Confidentiality: \square Operator asserts confidentiality pursuant to Sec	ction 71-2-8 NMSA	1978 for the informatio	n provided in
Section	n 2 as provided in Paragraph (2) of Subsection D of 19.15.27.9 NMAC	C, and attaches a full	description of the specif	ic information
for whi	ich confidentiality is asserted and the basis for such assertion.			

Released to Imaging: 8/16/2024 2:22:19 PM

Page 7

Section 3 - Certifications Effective May 25, 2021

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

☑ Operator will be able to connect the well(s) to a natural gas gathering system in the general area with sufficient capacity to transport one hundred percent of the anticipated volume of natural gas produced from the well(s) commencing on the date of first production, taking into account the current and anticipated volumes of produced natural gas from other wells connected to the pipeline gathering system; or
 ☐ Operator will not be able to connect to a natural gas gathering system in the general area with sufficient capacity to transport one hundred percent of the anticipated volume of natural gas produced from the well(s) commencing on the date of first production, taking into account the current and anticipated volumes of produced natural gas from other wells connected to the pipeline gathering system. If Operator checks this box, Operator will select one of the following:
 Well Shut-In. ☐ Operator will shut-in and not produce the well until it submits the certification required by Paragraph (4) of Subsection D of 19.15.27.9 NMAC; or
 Venting and Flaring Plan. ☐ Operator has attached a venting and flaring plan that evaluates and selects one or more of the potential alternative beneficial uses for the natural gas until a natural gas gathering system is available, including:

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

Section 4 - Notices

- 1. If, at any time after Operator submits this Natural Gas Management Plan and before the well is spud:
- (a) Operator becomes aware that the natural gas gathering system it planned to connect the well(s) to has become unavailable or will not have capacity to transport one hundred percent of the production from the well(s), no later than 20 days after becoming aware of such information, Operator shall submit for OCD's approval a new or revised venting and flaring plan containing the information specified in Paragraph (5) of Subsection D of 19.15.27.9 NMAC; or
- (b) Operator becomes aware that it has, cumulatively for the year, become out of compliance with its baseline natural gas capture rate or natural gas capture requirement, no later than 20 days after becoming aware of such information, Operator shall submit for OCD's approval a new or revised Natural Gas Management Plan for each well it plans to spud during the next 90 days containing the information specified in Paragraph (2) of Subsection D of 19.15.27.9 NMAC, and shall file an update for each Natural Gas Management Plan until Operator is back in compliance with its baseline natural gas capture rate or natural gas capture requirement.
- 2. OCD may deny or conditionally approve an APD if Operator does not make a certification, fails to submit an adequate venting and flaring plan which includes alternative beneficial uses for the anticipated volume of natural gas produced, or if OCD determines that Operator will not have adequate natural gas takeaway capacity at the time a well will be spud.

Page 8

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

Signature:	Bradley Bishop
Printed Name:	BRADLEY BISHOP
Title:	REGULATORY MANAGER
E-mail Address:	BBISHOP@MEWBOURNE.COM
Date:	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 Ap	proval:

Mewbourne Oil Company

Natural Gas Management Plan – Attachment

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

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

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



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

Drilling Plan Data Report

07/19/2024

APD ID: 10400085804

Submission Date: 08/08/2022

Highlighted data reflects the most recent changes

Operator Name: MEWBOURNE OIL COMPANY

Well Number: 1H

Well Name: DEEP ELLUM 25/26 B3AB FED COM Well Type: OIL WELL

Well Work Type: Drill

Show Final Text

Section 1 - Geologic Formations

Formation			True Vertical			Mineral Resources	Producing
ID	Formation Name	Elevation		Depth	Lithologies		Formatio
13762322	UNKNOWN	3695	28	28	OTHER : Top soil	NONE	N
13762323	RUSTLER	2772	923	923	ANHYDRITE, DOLOMITE	USEABLE WATER	N
13762333	TOP SALT	2594	1101	1101	SALT	NONE	N
13762334	BASE OF SALT	1414	2281	2281	SALT	NONE	N
13762327	YATES	1202	2493	2493	SANDSTONE	NATURAL GAS, OIL	N
13762335	SEVEN RIVERS	755	2940	2940	DOLOMITE	NATURAL GAS, OIL	N
13762328	QUEEN	84	3611	3611	DOLOMITE, SANDSTONE	NATURAL GAS, OIL	N
13762325	GRAYBURG	-164	3859	3859	DOLOMITE, SANDSTONE	NATURAL GAS, OIL	N
13762337	SAN ANDRES	-536	4231	4231	DOLOMITE	NATURAL GAS, OIL	N
13762336	LAMAR	-1181	4876	4876	LIMESTONE	NATURAL GAS, OIL	N
13762330	BONE SPRING	-2917	6612	6612	LIMESTONE, SANDSTONE, SHALE	NATURAL GAS, OIL	N
13762331	BONE SPRING 1ST	-4347	8042	8042	SANDSTONE	NATURAL GAS, OIL	N
13762332	BONE SPRING 2ND	-4982	8677	8677	SANDSTONE	NATURAL GAS, OIL	N
13762321	BONE SPRING 3RD	-5865	9560	9560	SANDSTONE	NATURAL GAS, OIL	Y

Section 2 - Blowout Prevention

Well Name: DEEP ELLUM 25/26 B3AB FED COM Well Number: 1H

Pressure Rating (PSI): 5M Rating Depth: 17375

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 flexible choke line from the BOP to Choke Manifold. See attached for specs and hydrostatic test chart. Anchors are not required by manufacturer. A variance is requested to use a multi-bowl wellhead.

Testing Procedure: BOP/BOPE will be tested by an independent service company to 250 psi low and the high pressure indicated above per Onshore Order 2 requirements. The System may be upgraded to a higher pressure but still tested to the working pressure listed in the table above. If the system is upgraded all the components installed will be functional and tested. Pipe rams will be operationally checked each 24 hour period. Blind rams will be operationally checked on each trip out of the hole. These checks will be noted on the daily tour sheets.

Choke Diagram Attachment:

Deep_Ellum_25_26_B3AB_Fed__Com_1H_5M_BOPE_Choke_Diagram_20220602152219.pdf

Deep Ellum 25 26 B3AB Fed Com 1H Flex Line Specs API 16C 20220602152219.pdf

Deep_Ellum_25_26_B3AB_Fed_Com_1H_Flex_Line_Specs_20220602152219.pdf

BOP Diagram Attachment:

Deep_Ellum_25_26_B3AB_Fed_Com_1H_5M_BOPE_Schematic_20220602152237.pdf

Deep_Ellum_25_26_B3AB_Fed_Com_1H_5M_Mutli_Bowl_WH_20220602152237.pdf

Mewbourne_Break_Testing_Variance_20240311084516.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	1000	0	1000	3695	2695	1000	H-40	48	ST&C	1.68	3.78	DRY	6.71	DRY	11.2 7
2		12.2 5	9.625	NEW	API	N	0	3385	0	3385		310	3385	J-55	36	LT&C	1.13	1.96	DRY	2.54	DRY	3.16
3		12.2 5	9.625	NEW	API	N	3385	4307	3385	4307	310	-612	922	J-55	40	LT&C	1.13	1.73	DRY	9.19	DRY	11.1 3
4		12.2 5	9.625	NEW	API	N	4307	4800	4307	4800	-612	-1105	493	N-80	40	ST&C	1.21	2.26	DRY	37.3 7	DRY	46.4 5
5	PRODUCTI ON	8.75	7.0	NEW	API	N	0	9235	0	9207		-5512	9235	P- 110	26	LT&C	1.34	2.14	DRY	2.89	DRY	3.46
6	LINER	6.12 5	4.5	NEW	API	N	9035	17375	9008	9780	-5313	-6085	8340	P- 110	13.5	LT&C	2.1	2.44	DRY	3	DRY	3.75

Operator Name: MEWBOURNE OIL COMPANY Well Name: DEEP ELLUM 25/26 B3AB FED COM Well Number: 1H **Casing Attachments SURFACE** Casing ID: 1 String **Inspection Document: Spec Document: Tapered String Spec:** Casing Design Assumptions and Worksheet(s): Deep_Ellum_25_26_B3AB_Fed_Com_1H_CsgAssumptions_20240621164918.pdf Casing ID: 2 **String INTERMEDIATE Inspection Document: Spec Document: Tapered String Spec:** Casing Design Assumptions and Worksheet(s): Deep_Ellum_25_26_B3AB_Fed_Com_1H_CsgAssumptions_20240621164936.pdf

Casing ID: 3 String INTERMEDIATE

Inspection Document:

Spec Document:

Tapered String Spec:

Casing Design Assumptions and Worksheet(s):

Deep_Ellum_25_26_B3AB_Fed_Com_1H_CsgAssumptions_20240621164954.pdf

Well Name: DEEP ELLUM 25/26 B3AB FED COM Well Number: 1H

Casing	Attachments
--------	--------------------

Casing ID: 4

String

INTERMEDIATE

Inspection Document:

Spec Document:

Tapered String Spec:

Casing Design Assumptions and Worksheet(s):

Deep_Ellum_25_26_B3AB_Fed_Com_1H_CsgAssumptions_20240621165002.pdf

Casing ID: 5

String

PRODUCTION

Inspection Document:

Spec Document:

Tapered String Spec:

Casing Design Assumptions and Worksheet(s):

Deep_Ellum_25_26_B3AB_Fed_Com_1H_CsgAssumptions_20240621164925.pdf

Casing ID: 6

6

String

LINER

Inspection Document:

Spec Document:

Tapered String Spec:

Casing Design Assumptions and Worksheet(s):

Deep_Ellum_25_26_B3AB_Fed_Com_1H_CsgAssumptions_20240621164947.pdf

Section 4 - Cement

Well Name: DEEP ELLUM 25/26 B3AB FED COM Well Number: 1H

String Type	Lead/Tail	Stage Tool Depth	Top MD	Bottom MD	Quantity(sx)	Yield	Density	Cu Ft	Excess%	Cement type	Additives
SURFACE	Lead		0	808	530	2.12	12.5	1124	100	Class C	Salt, Gel, Extender, LCM
SURFACE	Tail		808	1000	200	1.34	14.8	268	100	Class C	Retarder
INTERMEDIATE	Lead		0	4119	760	2.12	12.5	1620	25	Class C	Salt, Gel, Extender, LCM
INTERMEDIATE	Tail		4119	4800	200	1.34	14.8	268	25	Class C	Retarder
PRODUCTION	Lead	6500	4600	5819	110	2.12	12.5	240	25	Class C	Salt, Gel, Extender, LCM, Defoamer
PRODUCTION	Tail		5819	6500	100	1.34	14.8	134	25	Class H	Retarder, Fluid Loss, Defoamer
PRODUCTION	Lead	6500	6500	7017	50	2.12	12.5	110	25	Class C	Salt, Gel, Extender, LCM, Defoamer
PRODUCTION	Tail		7017	9235	400	1.18	15.6	472	25	Class H	Retarder, Fluid Loss, Defoamer
LINER	Lead		9035	1737 5	530	1.85	13.5	990	25	Class C	Salt, Gel, Fluid Loss, Retarder, Dispersant, Defoamer, Anti-settling Agent

Section 5 - Circulating Medium

Mud System Type: Closed

Will an air or gas system be Used? NO

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

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

Describe what will be on location to control well or mitigate other conditions: Lost circulation material, sweeps, mud scavengers

Describe the mud monitoring system utilized: Pason/PVT/visual monitoring

Circulating Medium Table

Well Name: DEEP ELLUM 25/26 B3AB FED COM Well Number: 1H

Top Depth	Bottom Depth	Mud Type	Min Weight (lbs/gal)	Max Weight (lbs/gal)	Density (lbs/cu ft)	Gel Strength (lbs/100 sqft)	РН	Viscosity (CP)	Salinity (ppm)	Filtration (cc)	Additional Characteristics
0	1000	SPUD MUD	8.6	8.8							
1000	4800	SALT SATURATED	9.5	10.2							
4800	9235	WATER-BASED MUD	8.6	9.7							
9235	1737 5	OIL-BASED MUD	8.6	10							

Section 6 - Test, Logging, Coring

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

Will run GR/CN from KOP to surface (vertical portion of the hole) in offset well Deep Ellum 25/26 B3HG Fed Com #1H.

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

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

Coring operation description for the well:

None

Section 7 - Pressure

Anticipated Bottom Hole Pressure: 5086 Anticipated Surface Pressure: 2956

Anticipated Bottom Hole Temperature(F): 150

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

Describe:

Contingency Plans geoharzards description:

Contingency Plans geohazards

Hydrogen Sulfide drilling operations plan required? YES

Hydrogen sulfide drilling operations

Deep_Ellum_25_26_B3AB_Fed_Com_1_H2S_Plan_20220602154319.pdf

Well Name: DEEP ELLUM 25/26 B3AB FED COM Well Number: 1H

Section 8 - Other Information

Proposed horizontal/directional/multi-lateral plan submission:

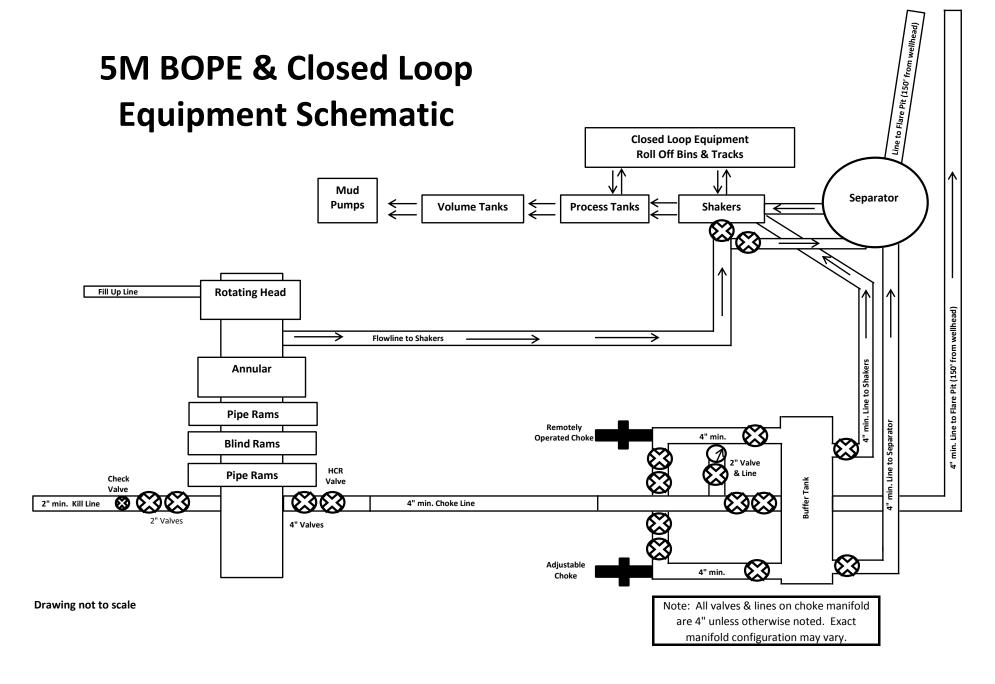
Deep_Ellum_25_26_B3AB_Fed_Com_1H_MOC_Dir_Plan_20240311085636.pdf Deep_Ellum_25_26_B3AB_Fed_Com_1H_MOC_Dir_Plot_20240311085636.pdf

Other proposed operations facets description:

Other proposed operations facets attachment:

Deep_Ellum_25_26_B3AB_Fed_Com_1H_AddInfo_20240311085739.pdf
Deep_Ellum_25_26_B3AB_Fed_Com_1H_Drlg_Program_20240621165107.pdf
Other Variance attachment:

Mewbourne_Break_Testing_Variance_20240311085658.pdf Mewbourne_Offline_Cementing_Variance_20240311085658.pdf





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

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

Signature:

Production: Date :

Signature:

// -------

MODUCTION

8/20/2018

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 : Customer Ref. :

Invoice No.:

AUSTIN DISTRIBUTING 4060578 500506 Test Date:
Hose Serial No.:
Created By:

4/30/2015 D-043015-7 JUSTIN CROPPER

Product Description:

10K3.548.0CK4.1/1610KFLGE/E LE

End Fitting 1 : Gates Part No. :

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

Test Pressure :

4 1/16 10K FLG

L36554102914D-043015-7

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:

Date:

Signature :

QUALITY

4/30/2015

Produciton:

Date:

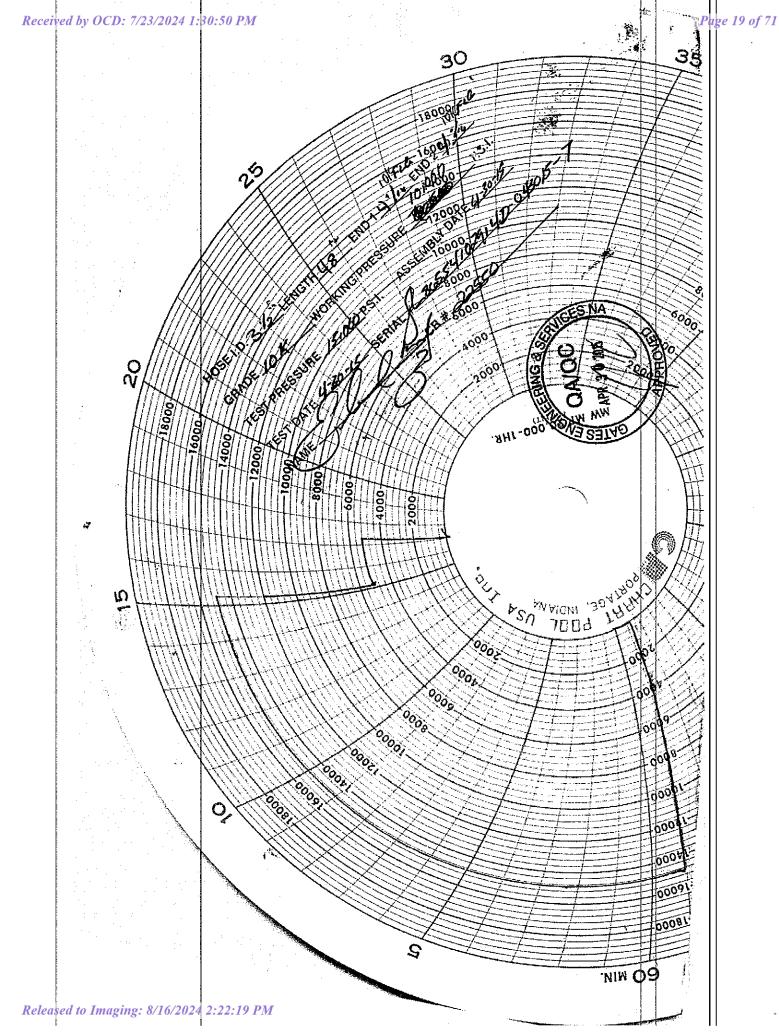
Signature :

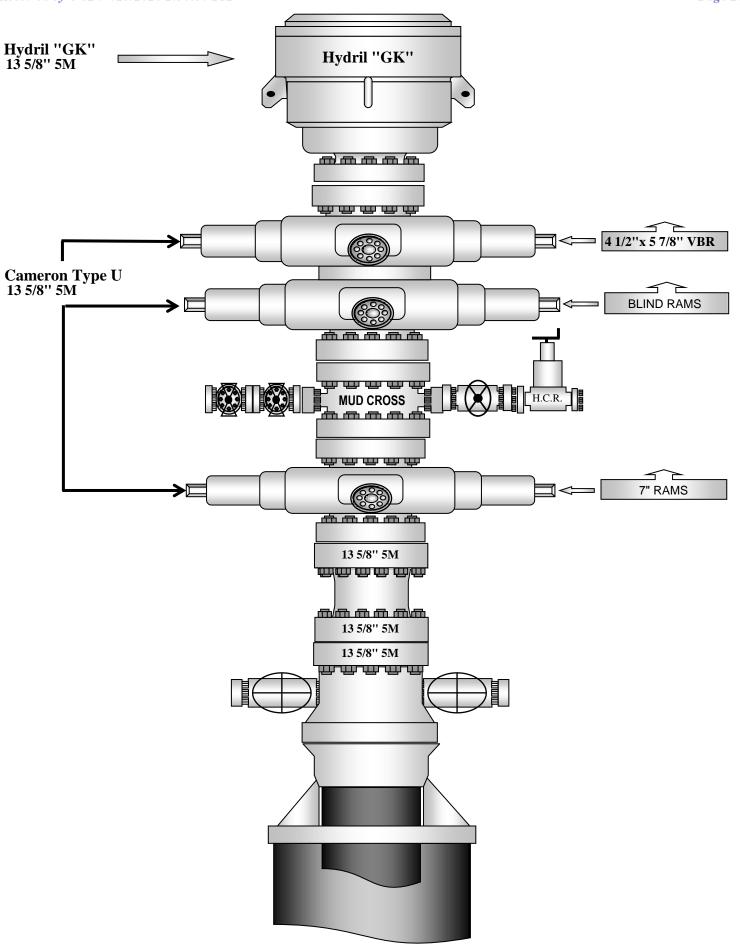
PRODUCTION

4/30/2015

Forn PTC - 01 Rev.0 2









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.



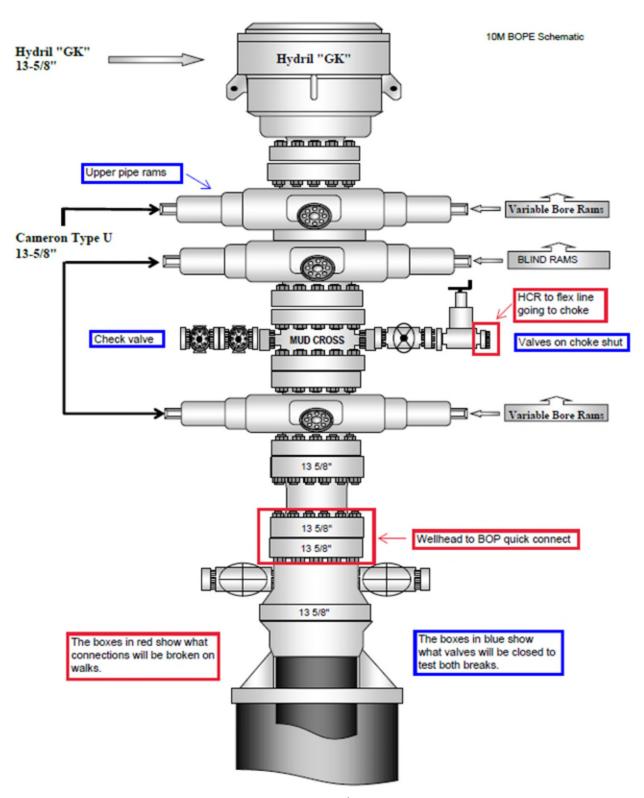


Figure 1. BOP diagram



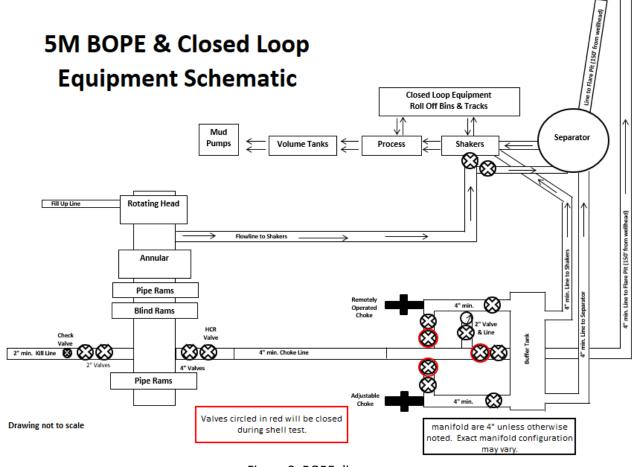


Figure 2. BOPE diagram





Figure 3. BOP handling system





Figure 4. BOP handling system



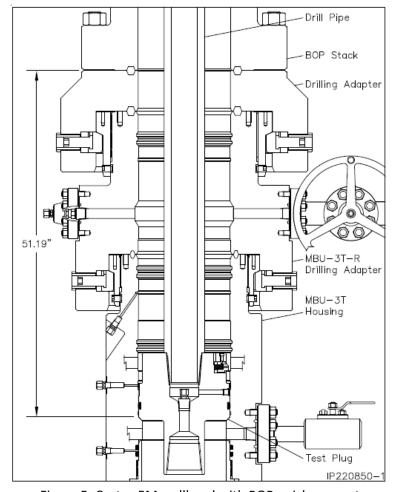


Figure 5. Cactus 5M wellhead with BOP quick connect

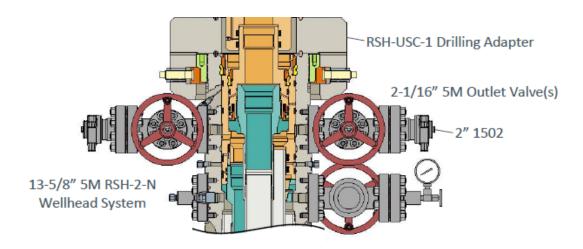


Figure 6. Vault 5M wellhead with BOP quick connect

Mewbourne Oil Company, Deep Ellum 25/26 B3AB Fed Com 1H Sec 30, T18S, R31E

SHL: 1055' FNL 65' FWL (Sec 30) BHL: 450' FNL 2512' FEL (Sec 26)

		Cosing Prog	ram Design A			BLM Minimum Safety	1,125	1.0	1.6 Dry	1.6 Dry
		Casing Frog	i aiii Desigii A			Factors	1.125	1.0	1.8 Wet	1.8 Wet
String	Hole Size	Top MD	Top TVD	Bot MD	Bot TVD	Csg. Size	SF Collapse	SF Burst	SF Jt Tension	SF Body Tension
Surface	17.5"	0'	0'	1000'	1000'	13.375" 48# H40 STC	1.72	3.87	6.71	11.27
Int	12.25"	0'	0'	3385'	3385'	9.625" 36# J55 LTC	1.13	1.96	2.54	3.16
Int	12.25"	3385'	3385'	4307'	4307'	9.625" 40# J55 LTC	1.13	1.73	9.19	11.13
Int	12.25"	4307'	4307'	4800'	4800'	9.625" 40# L80 LTC	1.21	2.26	37.37	46.45
Production	8.75"	0'	0'	9235'	9207'	7" 26# P110 LTC	1.34	2.14	2.89	3.46
Liner	6.125"	9035'	9008'	17375'	9780'	4.5" 13.5# P110 LTC	2.10	2.44	3.00	3.75

Cement Program

Casing		# Sacks	Wt. lb/gal	Yield ft ³ /sack	тос/вос	Volume ft ³	% Excess	Slurry Description
13.375 in	LEAD	530	12.5	2.12	0' - 808'	1130	100%	Class C: Salt, Gel, Extender, LCM
13.375 III	TAIL	200	14.8	1.34	808' - 1000'	268	100%	Class C: Retarder
9.625 in	LEAD	760	12.5	2.12	0' - 4119'	1620	25%	Class C: Salt, Gel, Extender, LCM
9.025 III	TAIL	200	14.8	1.34	4119' - 4800'	268	2.5%	Class C: Retarder
1st Stg 7 in	LEAD	50	12.5	2.12	6500' - 7017'	110	25%	Class C: Salt, Gel, Extender, LCM, Defoamer
1st Stg / III	TAIL	400	15.6	1.18	7017' - 9235'	472	23%	Class H: Retarder, Fluid Loss, Defoamer
					7" DV	Tool @ 6500'		
2nd Stg 7 in	LEAD	110	12.5	2.12	4600' - 5819'	240	25%	Class C: Salt, Gel, Extender, LCM, Defoamer
2lid Stg 7 lil	TAIL	100	14.8	1.34	5819' - 6500'	134	2370	Class C: Retarder, Fluid Loss, Defoamer
4.5 in	LEAD	530	13.5	1.85	9035' - 17375'	990	25%	Class H: Salt, Gel, Fluid Loss, Retarder, Dispersant, Defoamer, Anti-

Design A - Mud Program

Depth	Mud Wt	Mud Type
	8.4 - 8.6	
0' - 1000'	8.4 - 8.6	Fresh Water
1000' - 4800'	9.5 - 10.2	Brine
4800' - 9235'	8.6 - 9.7	Cut-Brine
9235' - 17375'	8.6 - 10.	OBM

Geology

Jeology					
Formation	Est. Top (TVD)	Mineral Resources	Formation	Est. Top (TVD)	Mineral Resources
Rustler	923'	Usable Water	Yeso		
Castile			Delaware (Lamar)	4876'	Oil/Natural Gas
Salt Top	1101'	None	Bell Canyon		
Salt Base	2281'	None	Cherry Canyon		
Yates	1231'	Oil/Natural Gas	Manzanita Marker		
Seven Rivers	2940'	Oil/Natural Gas	Basal Brushy Canyon		
Queen	3611'	Oil/Natural Gas	Bone Spring	6612'	Oil/Natural Gas
Capitan			1st Bone Spring	8042'	Oil/Natural Gas
Grayburg	3859'	None	2nd Bone Spring	8677'	Oil/Natural Gas
San Andres	4231'	Oil/Natural Gas	3rd Bone Spring	9560'	Oil/Natural Gas
Glorieta			Wolfcamp		

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?	N
If yes, are the first three strings cemented to surface?	
Is 2 nd string set 100' to 600' below the base of salt?	
Is an open annulus used to satisfy R-111-Q? If yes, see cement design.	
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?	TV.

Mewbourne Oil Company

Eddy County, New Mexico NAD 83 Deep Ellum 25/26 B3AB Fed Com #1H

Sec 30, T18S, R32E

SHL: 1055' FNL & 65' FWL (Sec 30) BHL: 450' FNL & 2512' FEL (Sec 26)

Plan: Design #1

Standard Planning Report

11 March, 2024

Hobbs Database:

Company: Mewbourne Oil Company

Project: Eddy County, New Mexico NAD 83

Deep Ellum 25/26 B3AB Fed Com #1H Site:

Well: Sec 30, T18S, R32E

Wellbore: BHL: 450' FNL & 2512' FEL (Sec 26)

Design #1 Design:

Local Co-ordinate Reference:

TVD Reference: MD Reference: North Reference:

Survey Calculation Method:

Site Deep Ellum 25/26 B3AB Fed Com #1H WELL @ 3723.0usft (Original Well Elev)

273.94

WELL @ 3723.0usft (Original Well Elev)

Minimum Curvature

Project Eddy County, New Mexico NAD 83

US State Plane 1983 Map System: North American Datum 1983 Geo Datum: Map Zone:

New Mexico Eastern Zone

System Datum:

Ground Level

Deep Ellum 25/26 B3AB Fed Com #1H Site

Northing: 627,130.80 usft Site Position: Latitude: 32.7229474 From: Мар Easting: 700,997.50 usft Longitude: -103.8141693

Position Uncertainty: 0.0 usft Slot Radius: 13-3/16 "

Well Sec 30, T18S, R32E

Well Position +N/-S 0.0 usft Northing: 627,130.80 usft Latitude: 32.7229474 +E/-W 0.0 usft Easting: 700,997.50 usft Longitude: -103.8141693

Position Uncertainty 0.0 usft Wellhead Elevation: 3,723.0 usft **Ground Level:** 3,695.0 usft

0.28 **Grid Convergence:**

BHL: 450' FNL & 2512' FEL (Sec 26) Wellbore

Declination Magnetics **Model Name** Sample Date Dip Angle Field Strength (°) (°) (nT) 48,507.76073538 IGRF2010 12/31/2014 7.30 60.52

Design Design #1 **Audit Notes: PROTOTYPE** Tie On Depth: 0.0 Version: Phase: Vertical Section: Depth From (TVD) +N/-S +E/-W Direction (usft) (usft) (usft) (°)

0.0

0.0

Plan Survey Tool Program Date 3/11/2024

Depth From Depth To

(usft) (usft) Survey (Wellbore) **Tool Name** Remarks

0.0

0.0 17,375.1 Design #1 (BHL: 450' FNL & 2512

lan Sections										
Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)	TFO (°)	Target
0.0	0.00	0.00	0.0	0.0	0.0	0.00	0.00	0.00	0.00	
2,300.0	0.00	0.00	2,300.0	0.0	0.0	0.00	0.00	0.00	0.00	
2,562.1	5.24	352.58	2,561.7	11.9	-1.5	2.00	2.00	0.00	352.58	
8,972.5	5.24	352.58	8,945.3	592.6	-77.2	0.00	0.00	0.00	0.00	
9,234.5	0.00	0.00	9,207.0	604.5	-78.7	2.00	-2.00	0.00	180.00	KOP: 450' FNL & 10'
10,146.8	91.20	269.56	9,780.0	600.0	-663.8	10.00	10.00	0.00	-90.44	
17,375.1	91.20	269.56	9,629.0	544.0	-7,890.3	0.00	0.00	0.00	0.00	BHL: 450' FNL & 251

Hobbs Database:

Wellbore:

Company: Mewbourne Oil Company

Eddy County, New Mexico NAD 83 Project: Deep Ellum 25/26 B3AB Fed Com #1H Site:

Well: Sec 30, T18S, R32E

BHL: 450' FNL & 2512' FEL (Sec 26) Design: Design #1

TVD Reference: MD Reference: North Reference:

Survey Calculation Method:

Local Co-ordinate Reference:

Site Deep Ellum 25/26 B3AB Fed Com #1H WELL @ 3723.0usft (Original Well Elev) WELL @ 3723.0usft (Original Well Elev)

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: 1055' F	NL & 65' FWL (S	Sec 30)							
100.0	0.00	0.00	100.0	0.0	0.0	0.0	0.00	0.00	0.00
200.0	0.00	0.00	200.0	0.0	0.0	0.0	0.00	0.00	0.00
300.0	0.00	0.00	300.0	0.0	0.0	0.0	0.00	0.00	0.00
400.0	0.00	0.00	400.0	0.0	0.0	0.0	0.00	0.00	0.00
500.0	0.00	0.00	500.0	0.0	0.0	0.0	0.00	0.00	0.00
600.0	0.00	0.00	600.0	0.0	0.0	0.0	0.00	0.00	0.00
700.0	0.00	0.00	700.0	0.0	0.0	0.0	0.00	0.00	0.00
800.0	0.00	0.00	800.0	0.0	0.0	0.0	0.00	0.00	0.00
900.0	0.00	0.00	900.0	0.0	0.0	0.0	0.00	0.00	0.00
1,000.0	0.00	0.00	1,000.0	0.0	0.0	0.0	0.00	0.00	0.00
1,100.0	0.00	0.00	1,100.0	0.0	0.0	0.0	0.00	0.00	0.00
1,200.0	0.00	0.00	1,200.0	0.0	0.0	0.0	0.00	0.00	0.00
1,300.0	0.00	0.00	1,300.0	0.0	0.0	0.0	0.00	0.00	0.00
1,400.0	0.00	0.00	1,400.0	0.0	0.0	0.0	0.00	0.00	0.00
1,500.0	0.00	0.00	1,500.0	0.0	0.0	0.0	0.00	0.00	0.00
1,600.0	0.00	0.00	1,600.0	0.0	0.0	0.0	0.00	0.00	0.00
1,700.0	0.00	0.00	1,700.0	0.0	0.0	0.0	0.00	0.00	0.00
1,800.0	0.00	0.00	1,800.0	0.0	0.0	0.0	0.00	0.00	0.00
1,900.0	0.00	0.00	1,900.0	0.0	0.0	0.0	0.00	0.00	0.00
2,000.0	0.00	0.00	2,000.0	0.0	0.0	0.0	0.00	0.00	0.00
2,100.0	0.00	0.00	2,100.0	0.0	0.0	0.0	0.00	0.00	0.00
2,200.0	0.00	0.00	2,200.0	0.0	0.0	0.0	0.00	0.00	0.00
2,300.0	0.00	0.00	2,300.0	0.0	0.0	0.0	0.00	0.00	0.00
2,400.0	2.00	352.58	2,400.0	1.7	-0.2	0.3	2.00	2.00	0.00
2,500.0	4.00	352.58	2,499.8	6.9	-0.9	1.4	2.00	2.00	0.00
2,562.1	5.24	352.58	2,561.7	11.9	-1.5	2.4	2.00	2.00	0.00
2,600.0	5.24	352.58	2,599.5	15.3	-2.0	3.0	0.00	0.00	0.00
2,700.0	5.24	352.58	2,699.1	24.4	-3.2	4.8	0.00	0.00	0.00
2,800.0	5.24	352.58	2,798.6	33.4	-4.4	6.6	0.00	0.00	0.00
2,900.0	5.24	352.58	2,898.2	42.5	-5.5	8.4	0.00	0.00	0.00
3,000.0	5.24	352.58	2,997.8	51.6	-6.7	10.2	0.00	0.00	0.00
3,100.0	5.24	352.58	3,097.4	60.6	-7.9	12.0	0.00	0.00	0.00
3,200.0	5.24	352.58	3,197.0	69.7	-9.1	13.8	0.00	0.00	0.00
3,300.0	5.24	352.58	3,296.5	78.7	-10.2	15.6	0.00	0.00	0.00
3,400.0	5.24	352.58	3,396.1	87.8	-11.4	17.4	0.00	0.00	0.00
3,500.0	5.24	352.58	3,495.7	96.8	-12.6	19.2	0.00	0.00	0.00
3,600.0	5.24	352.58	3,595.3	105.9	-13.8	21.0	0.00	0.00	0.00
3,700.0	5.24	352.58	3,694.9	115.0	-15.0	22.8	0.00	0.00	0.00
3,800.0	5.24	352.58	3,794.5	124.0	-16.1	24.6	0.00	0.00	0.00
3,900.0	5.24	352.58	3,894.0	133.1	-17.3	26.4	0.00	0.00	0.00
4,000.0	5.24	352.58	3,993.6	142.1	-18.5	28.2	0.00	0.00	0.00
4,100.0	5.24	352.58	4,093.2	151.2	-19.7	30.0	0.00	0.00	0.00
4,200.0	5.24	352.58	4,192.8	160.3	-20.9	31.8	0.00	0.00	0.00
4,300.0	5.24	352.58	4,292.4	169.3	-22.0	33.6	0.00	0.00	0.00
4,400.0	5.24	352.58	4,391.9	178.4	-23.2	35.4	0.00	0.00	0.00
4,500.0	5.24	352.58	4,491.5	187.4	-24.4	37.2	0.00	0.00	0.00
4,600.0	5.24	352.58	4,591.1	196.5	-25.6	39.0	0.00	0.00	0.00
4,700.0	5.24	352.58	4,690.7	205.6	-26.8	40.8	0.00	0.00	0.00
4,800.0	5.24	352.58	4,790.3	214.6	-27.9	42.6	0.00	0.00	0.00
4,900.0	5.24	352.58	4,889.9	223.7	-29.1	44.4	0.00	0.00	0.00
5,000.0	5.24	352.58	4,989.4	232.7	-30.3	46.2	0.00	0.00	0.00

Hobbs Database: Company:

Project:

Mewbourne Oil Company

Eddy County, New Mexico NAD 83 Deep Ellum 25/26 B3AB Fed Com #1H

Site: Well: Sec 30, T18S, R32E

BHL: 450' FNL & 2512' FEL (Sec 26) Wellbore:

Design: Design #1 Local Co-ordinate Reference:

TVD Reference: MD Reference: North Reference:

Survey Calculation Method:

Site Deep Ellum 25/26 B3AB Fed Com #1H WELL @ 3723.0usft (Original Well Elev) WELL @ 3723.0usft (Original Well Elev)

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 5,300.0	5.24 5.24	352.58 352.58	5,188.6 5,288.2	250.9 259.9	-32.7 -33.8	49.8 51.6	0.00 0.00	0.00 0.00	0.00 0.00
5,400.0	5.24	352.58	5,387.8	269.0	-35.0	53.4	0.00	0.00	0.00
5,500.0	5.24 5.24	352.58 352.58	5,487.3 5,586.9	278.0 287.1	-36.2 -37.4	55.2 57.0	0.00	0.00 0.00	0.00
5,600.0 5,700.0	5.24 5.24	352.58 352.58	5,586.9 5,686.5	287.1	-37.4 -38.6	57.0 58.8	0.00 0.00	0.00	0.00 0.00
5,800.0	5.24	352.58	5,786.1	305.2	-39.7	60.6	0.00	0.00	0.00
5,900.0	5.24	352.58	5,885.7	314.3	-40.9	62.4	0.00	0.00	0.00
6,000.0	5.24	352.58	5,985.3	323.3	-42.1	64.2	0.00	0.00	0.00
6,100.0	5.24	352.58	6,084.8	332.4	-43.3	66.0	0.00	0.00	0.00
6,200.0 6,300.0	5.24 5.24	352.58 352.58	6,184.4 6,284.0	341.5 350.5	-44.5 -45.6	67.8 69.6	0.00 0.00	0.00 0.00	0.00 0.00
6,400.0	5.24	352.58	6,383.6	359.6	-46.8	71.4	0.00	0.00	0.00
6,500.0	5.24	352.58	6,483.2	368.6	-48.0	73.2	0.00	0.00	0.00
6,600.0	5.24	352.58	6,582.7	377.7	-49.2	75.0	0.00	0.00	0.00
6,700.0	5.24	352.58	6,682.3	386.7	-50.4	76.8	0.00	0.00	0.00
6,800.0	5.24	352.58	6,781.9	395.8	-51.5	78.6	0.00	0.00	0.00
6,900.0	5.24	352.58	6,881.5	404.9	-52.7	80.4	0.00	0.00	0.00
7,000.0 7,100.0	5.24 5.24	352.58 352.58	6,981.1 7,080.7	413.9 423.0	-53.9 -55.1	82.2 84.0	0.00 0.00	0.00 0.00	0.00 0.00
7,100.0	5.24	352.58	7,080.7	432.0	-56.2	85.8	0.00	0.00	0.00
7,300.0	5.24	352.58	7,279.8	441.1	-57.4	87.6	0.00	0.00	0.00
7,400.0	5.24	352.58	7,379.4	450.2	-58.6	89.4	0.00	0.00	0.00
7,500.0	5.24	352.58	7,479.0	459.2	-59.8	91.2	0.00	0.00	0.00
7,600.0	5.24	352.58	7,578.6	468.3	-61.0	93.0	0.00	0.00	0.00
7,700.0 7,800.0	5.24 5.24	352.58 352.58	7,678.1 7,777.7	477.3 486.4	-62.1 -63.3	94.8 96.6	0.00 0.00	0.00 0.00	0.00 0.00
7,900.0	5.24	352.58	7,877.3	495.5	-64.5	98.4	0.00	0.00	0.00
8,000.0	5.24	352.58	7,976.9	504.5	-65.7	100.2	0.00	0.00	0.00
8,100.0	5.24	352.58	8,076.5	513.6	-66.9	102.0	0.00	0.00	0.00
8,200.0	5.24	352.58	8,176.1	522.6	-68.0	103.8	0.00	0.00	0.00
8,300.0	5.24	352.58	8,275.6	531.7	-69.2	105.6	0.00	0.00	0.00
8,400.0	5.24	352.58	8,375.2	540.8	-70.4	107.4	0.00	0.00	0.00
8,500.0	5.24	352.58	8,474.8	549.8	-71.6	109.2	0.00	0.00	0.00
8,600.0	5.24	352.58	8,574.4	558.9	-72.8 -73.0	111.0	0.00	0.00	0.00
8,700.0 8,800.0	5.24 5.24	352.58 352.58	8,674.0 8,773.5	567.9 577.0	-73.9 -75.1	112.8 114.6	0.00 0.00	0.00 0.00	0.00 0.00
8,900.0	5.24	352.58	8,873.1	586.1	-76.3	116.4	0.00	0.00	0.00
8,972.5	5.24	352.58	8,945.3	592.6	-77.2	117.7	0.00	0.00	0.00
9,000.0	4.69	352.58	8,972.7	595.0	-77.5	118.2	2.00	-2.00	0.00
9,100.0 9,200.0	2.69 0.69	352.58 352.58	9,072.5 9,172.5	601.4 604.3	-78.3 -78.7	119.5 120.1	2.00 2.00	-2.00 -2.00	0.00 0.00
9,234.5	0.00	0.00	9,207.0	604.5	-78.7	120.1	2.00	-2.00	0.00
	NL & 10' FEL (Se								
9,250.0	1.55	269.56	9,222.5	604.5	-78.9	120.3	10.00	10.00	0.00
9,300.0	6.54	269.56	9,272.3	604.5	-82.4	123.8	10.00	10.00	0.00
9,350.0	11.54	269.56	9,321.7	604.4	-90.3	131.6	10.00	10.00	0.00
9,400.0	16.54	269.56	9,370.2	604.3	-102.4	143.7	10.00	10.00	0.00
9,450.0	21.54	269.56	9,417.4	604.2	-118.7	160.0	10.00	10.00	0.00
9,500.0	26.54	269.56	9,463.1	604.0	-139.1	180.3	10.00	10.00	0.00
9,550.0	31.54	269.56	9,506.8	603.8	-163.3	204.5	10.00	10.00	0.00
9,560.1	32.55	269.56	9,515.3	603.8	-168.7	209.8	10.00	10.00	0.00
9,600.0	L & 100' FEL (S 36.54	ec 25) 269.56	9,548.2	603.6	-191.3	232.4	10.00	10.00	0.00

Hobbs Database: Company:

Mewbourne Oil Company

Eddy County, New Mexico NAD 83 Project: Deep Ellum 25/26 B3AB Fed Com #1H Site:

Well: Sec 30, T18S, R32E

BHL: 450' FNL & 2512' FEL (Sec 26) Wellbore:

Design: Design #1 Local Co-ordinate Reference:

TVD Reference: MD Reference: North Reference:

Survey Calculation Method:

Site Deep Ellum 25/26 B3AB Fed Com #1H WELL @ 3723.0usft (Original Well Elev) WELL @ 3723.0usft (Original Well Elev)

Planned Survey									
Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)
9,650.0	41.53	269.56	9,587.0	603.4	-222.8	263.8	10.00	10.00	0.00
9,700.0	46.53	269.56	9,623.0	603.1	-257.5	298.4	10.00	10.00	0.00
9,750.0	51.53	269.56	9,655.7	602.8	-295.3	336.0	10.00	10.00	0.00
9,800.0	56.53	269.56	9,685.1	602.5	-335.7	376.4	10.00	10.00	0.00
9,850.0	61.53	269.56	9,710.8	602.2	-378.6	419.1	10.00	10.00	0.00
9,900.0	66.53	269.56	9,732.7	601.8	-423.5	463.9	10.00	10.00	0.00
9,950.0	71.53	269.56	9,750.6	601.5	-470.2	510.5	10.00	10.00	0.00
10,000.0	76.52	269.56	9,764.3	601.1	-518.2	558.4	10.00	10.00	0.00
10,050.0	81.52	269.56	9,773.9	600.7	-567.3	607.3	10.00	10.00	0.00
10,100.0	86.52	269.56	9,779.1	600.3	-617.0	656.9	10.00	10.00	0.00
10,134.7	89.99	269.56	9,780.1	600.1	-651.7	691.4	10.00	10.00	0.00
	_ & 583' FEL (Se		3,700.1	000.1	-031.7	031.4	10.00	10.00	0.00
10,146.8	91.20	269.56	9,780.0	600.0	-663.8	703.5	10.00	10.00	0.00
10,200.0	91.20	269.56	9,778.9	599.6	-717.0	756.5	0.00	0.00	0.00
10,300.0	91.20	269.56	9.776.8	598.8	-817.0	856.2	0.00	0.00	0.00
10,400.0	91.20	269.56	9,774.7	598.0	-916.9	955.9	0.00	0.00	0.00
10.500.0									
10,500.0	91.20 91.20	269.56 269.56	9,772.6 9,770.5	597.2 596.5	-1,016.9 -1,116.9	1,055.6 1,155.3	0.00 0.00	0.00 0.00	0.00 0.00
10,700.0	91.20	269.56 269.56	9,770.5	595.7	-1,116.9	1,155.3	0.00	0.00	0.00
10,700.0	91.20	269.56	9,766.4	594.9		1,255.0	0.00	0.00	
10,800.0	91.20	269.56 269.56	9,766.4 9,764.3	594.9 594.1	-1,316.8 -1,416.8	1,354.6	0.00	0.00	0.00 0.00
11,000.0	91.20	269.56	9,762.2	593.4	-1,516.8	1,554.0	0.00	0.00	0.00
11,100.0	91.20	269.56	9,760.1	592.6	-1,616.8	1,653.7	0.00	0.00	0.00
11,200.0	91.20	269.56	9,758.0	591.8	-1,716.7	1,753.4	0.00	0.00	0.00
11,300.0	91.20	269.56	9,755.9	591.0	-1,816.7	1,853.1	0.00	0.00	0.00
11,400.0	91.20	269.56	9,753.8	590.3	-1,916.7	1,952.8	0.00	0.00	0.00
11,500.0	91.20	269.56	9,751.7	589.5	-2,016.7	2,052.4	0.00	0.00	0.00
11,600.0	91.20	269.56	9,749.6	588.7	-2,116.6	2,152.1	0.00	0.00	0.00
11,700.0	91.20	269.56	9,747.6	587.9	-2,216.6	2,251.8	0.00	0.00	0.00
11,800.0	91.20	269.56	9,745.5	587.2	-2,316.6	2,351.5	0.00	0.00	0.00
11,900.0	91.20	269.56	9,743.4	586.4	-2,416.6	2,451.2	0.00	0.00	0.00
12,000.0	91.20	269.56	9,741.3	585.6	-2,516.5	2,550.9	0.00	0.00	0.00
12,100.0	91.20	269.56	9,739.2	584.8	-2,616.5	2,650.6	0.00	0.00	0.00
12,200.0	91.20	269.56	9,737.1	584.1	-2,716.5	2,750.2	0.00	0.00	0.00
12,300.0	91.20	269.56	9,735.0	583.3	-2,816.5	2,849.9	0.00	0.00	0.00
12,400.0	91.20	269.56	9,732.9	582.5	-2,916.4	2,949.6	0.00	0.00	0.00
12,500.0	91.20	269.56	9,730.8	581.7	-3,016.4	3,049.3	0.00	0.00	0.00
12,600.0	91.20	269.56	9,728.8	581.0	-3,116.4	3,149.0	0.00	0.00	0.00
12,700.0	91.20	269.56	9,726.7	580.2	-3,216.4	3,248.7	0.00	0.00	0.00
12,800.0	91.20	269.56	9,724.6	579.4	-3,316.3	3,348.3	0.00	0.00	0.00
12,900.0	91.20	269.56	9,722.5	578.7	-3,416.3	3,448.0	0.00	0.00	0.00
13.000.0	91.20	269.56	9,720.4	577.9	-3,516.3	3,547.7	0.00	0.00	0.00
13,100.0	91.20	269.56	9,720.4 9,718.3	577.9 577.1	-3,516.3 -3,616.3	3,547.7 3,647.4	0.00	0.00	0.00
13,200.0	91.20	269.56	9,716.2	576.3	-3,716.2	3,747.1	0.00	0.00	0.00
13,300.0	91.20	269.56	9,714.1	575.6	-3,816.2	3,846.8	0.00	0.00	0.00
13,400.0	91.20	269.56	9,712.0	574.8	-3,916.2	3,946.5	0.00	0.00	0.00
13,500.0	91.20	269.56	9,710.0	574.0	-4,016.2	4,046.1	0.00	0.00	0.00
13,600.0	91.20	269.56	9,707.9	573.2	-4,116.1	4,145.8	0.00	0.00	0.00
13,700.0	91.20	269.56	9,705.8	572.5	-4,216.1	4,245.5	0.00	0.00	0.00
13,800.0	91.20	269.56	9,703.7	571.7	-4,316.1	4,345.2	0.00	0.00	0.00
13,900.0	91.20	269.56	9,701.6	570.9	-4,416.1	4,444.9	0.00	0.00	0.00
14,000.0	91.20	269.56	9,699.5	570.1	-4,516.0	4,544.6	0.00	0.00	0.00
14,100.0	91.20	269.56	9,697.4	569.4	-4,616.0	4,644.3	0.00	0.00	0.00

Hobbs Database:

Company: Mewbourne Oil Company

Eddy County, New Mexico NAD 83 Project: Deep Ellum 25/26 B3AB Fed Com #1H Site:

Well: Sec 30, T18S, R32E

BHL: 450' FNL & 2512' FEL (Sec 26) Wellbore:

Design: Design #1 Local Co-ordinate Reference:

TVD Reference: MD Reference: North Reference:

Survey Calculation Method:

Site Deep Ellum 25/26 B3AB Fed Com #1H WELL @ 3723.0usft (Original Well Elev) WELL @ 3723.0usft (Original Well Elev)

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	91.20	269.56	9,695.3	568.6	-4,716.0	4,743.9	0.00	0.00	0.00
14,300.0	91.20	269.56	9,693.2	567.8	-4,816.0	4,843.6	0.00	0.00	0.00
14,400.0	91.20	269.56	9,691.1	567.0	-4,915.9	4,943.3	0.00	0.00	0.00
14,500.0	91.20	269.56	9,689.1	566.3	-5,015.9	5,043.0	0.00	0.00	0.00
14,600.0	91.20	269.56	9,687.0	565.5	-5,115.9	5,142.7	0.00	0.00	0.00
14,700.0	91.20	269.56	9,684.9	564.7	-5,215.9	5,242.4	0.00	0.00	0.00
14,800.0	91.20	269.56	9,682.8	563.9	-5,315.9	5,342.0	0.00	0.00	0.00
14,863.1	91.20	269.56	9,681.5	563.5	-5,378.9	5,404.9	0.00	0.00	0.00
PPP2: 450' F	NL & 0' FEL (Se	ec 26)							
14.900.0	91.20	269.56	9,680.7	563.2	-5,415.8	5,441.7	0.00	0.00	0.00
15,000.0	91.20	269.56	9,678.6	562.4	-5,515.8	5,541.4	0.00	0.00	0.00
15,100.0	91.20	269.56	9,676.5	561.6	-5,615.8	5,641.1	0.00	0.00	0.00
15,200.0	91.20	269.56	9,674.4	560.8	-5,715.8	5,740.8	0.00	0.00	0.00
15,300.0	91.20	269.56	9,672.3	560.1	-5,815.7	5,840.5	0.00	0.00	0.00
15,400.0	91.20	269.56	9,670.3	559.3	-5,915.7	5,940.2	0.00	0.00	0.00
15,500.0	91.20	269.56	9,668.2	558.5	-6,015.7	6,039.8	0.00	0.00	0.00
15,600.0	91.20	269.56	9,666.1	557.7	-6,115.7	6,139.5	0.00	0.00	0.00
15,700.0	91.20	269.56	9,664.0	557.0	-6,215.6	6,239.2	0.00	0.00	0.00
15,800.0	91.20	269.56	9,661.9	556.2	-6,315.6	6,338.9	0.00	0.00	0.00
15,900.0	91.20	269.56	9,659.8	555.4	-6,415.6	6,438.6	0.00	0.00	0.00
16,000.0	91.20	269.56	9,657.7	554.6	-6,515.6	6,538.3	0.00	0.00	0.00
16,100.0	91.20	269.56	9,655.6	553.9	-6,615.5	6,638.0	0.00	0.00	0.00
16,200.0	91.20	269.56	9,653.5	553.1	-6,715.5	6,737.6	0.00	0.00	0.00
16,300.0	91.20	269.56	9,651.5	552.3	-6,815.5	6,837.3	0.00	0.00	0.00
16,400.0	91.20	269.56	9,649.4	551.6	-6,915.5	6,937.0	0.00	0.00	0.00
16,500.0	91.20	269.56	9,647.3	550.8	-7,015.4	7,036.7	0.00	0.00	0.00
16,600.0	91.20	269.56	9,645.2	550.0	-7,115.4	7,136.4	0.00	0.00	0.00
16,700.0	91.20	269.56	9,643.1	549.2	-7,215.4	7,236.1	0.00	0.00	0.00
16,800.0	91.20	269.56	9,641.0	548.5	-7,315.4	7,335.8	0.00	0.00	0.00
16,900.0	91.20	269.56	9,638.9	547.7	-7,415.3	7,435.4	0.00	0.00	0.00
17,000.0	91.20	269.56	9,636.8	546.9	-7,515.3	7,535.1	0.00	0.00	0.00
17,100.0	91.20	269.56	9,634.7	546.1	-7,615.3	7,634.8	0.00	0.00	0.00
17,200.0	91.20	269.56	9,632.7	545.4	-7,715.3	7,734.5	0.00	0.00	0.00
17,300.0	91.20	269.56	9,630.6	544.6	-7,815.2	7,834.2	0.00	0.00	0.00
17,375.1	91.20	269.56	9,629.0	544.0	-7,890.3	7,909.0	0.00	0.00	0.00

Database: Hobbs

Company: Mewbourne Oil Company

Project: Eddy County, New Mexico NAD 83

Site: Deep Ellum 25/26 B3AB Fed Com #1H

Well: Sec 30, T18S, R32E

Wellbore: BHL: 450' FNL & 2512' FEL (Sec 26)

Design: Design #1

Local Co-ordinate Reference:

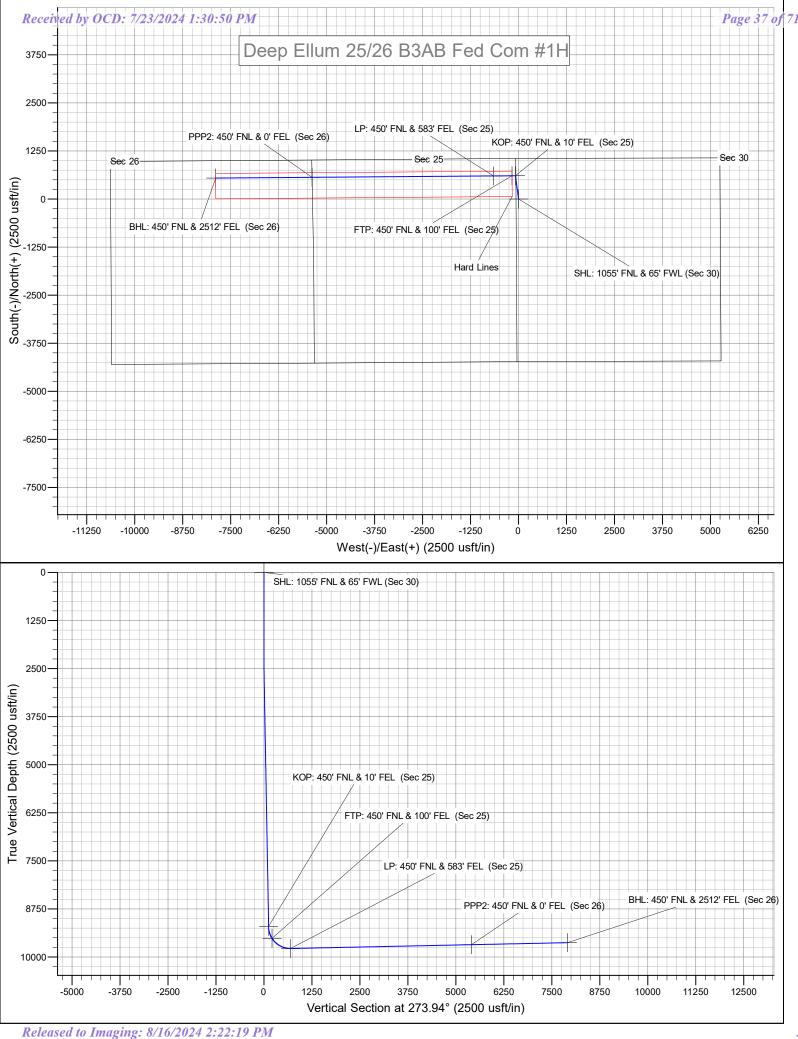
TVD Reference: MD Reference: North Reference:

Survey Calculation Method:

Site Deep Ellum 25/26 B3AB Fed Com #1H WELL @ 3723.0usft (Original Well Elev) WELL @ 3723.0usft (Original Well Elev)

Grid

Design Targets									
Target Name - hit/miss target - Shape	Dip Angle (°)	Dip Dir. (°)	TVD (usft)	+N/-S (usft)	+E/-W (usft)	Northing (usft)	Easting (usft)	Latitude	Longitude
SHL: 1055' FNL & 65' F\ - plan hits target cent - Point	0.00 er	0.00	0.0	0.0	0.0	627,130.80	700,997.50	32.7229474	-103.8141693
KOP: 450' FNL & 10' FE - plan hits target cent - Point	0.00 eer	0.00	9,207.0	604.5	-78.7	627,735.30	700,918.80	32.7246100	-103.8144156
FTP: 450' FNL & 100' FE - plan hits target cent - Point	0.00 er	0.00	9,515.3	603.8	-168.7	627,734.61	700,828.80	32.7246093	-103.8147083
BHL: 450' FNL & 2512' F - plan hits target cent - Point	0.00 er	0.00	9,629.0	544.0	-7,890.3	627,674.80	693,107.20	32.7245462	-103.8398170
PPP2: 450' FNL & 0' FEI - plan hits target cent - Point	0.00 er	0.01	9,681.5	563.5	-5,378.9	627,694.25	695,618.60	32.7245673	-103.8316506
LP: 450' FNL & 583' FEL - plan hits target cent - Point	0.00 er	0.00	9,780.1	600.1	-651.7	627,730.87	700,345.80	32.7246055	-103.8162789



Mewbourne Oil Company, Deep Ellum 25/26 B3AB Fed Com 1H Sec 30, T18S, R32E

SHL: 1055' FNL 65' FWL (Sec 30) BHL: 450' FNL 2512' FEL (Sec 26)

Operator Name:	Property Name:	Well Number
Mewbourne Oil Company	Deep Ellum 25/26 B3AB Fed Com	1H

Kick	Off	Point ((KOP)

UL	Section	Township	Range	Lot	Feet	From N/S	Feet	From E/W	County	
A	25	18	31	1	450'	FNL	10'	FEL	Eddy	
	Latitude					Longitude				
32.72461					-103.81441	83				

First Take Point (FTP)

UL	Section	Township	Range	Lot	Feet	From N/S	Feet	From E/W	County
A	25	18	31	-	450'	FNL	100'	FEL	Eddy
		Latitude				NAD			
32.7246093					-103.81470	83			

Last Take Point (LTP)

	East Take Tolk (E11)								
UL	Section	Township	Range	Lot	Feet	From N/S	Feet	From E/W	County
В	26	18	31	-	450'	FNL	2512'	FEL	Eddy
Latitude						NAD			
32.7245463					-103.83981	83			

Is this well the defining well for the Horizontal Is this well an infill well?	Spacing Unit? Y	
If infill is yes please provide API if available, C Spacing Unit.	operator Name and well number for Defining well for Horizontal	
API#		
Operator Name:	Property Name:	Well Number

PECOS DISTRICT SURFACE USE CONDITIONS OF APPROVAL

Mewbourne Oil Co.

Lease No: Lease Number NMLC0065680 Eddy County

DEEP ELLUM 25/26 B2AB FED COM 1H

Surface Hole Location: 1035' FNL & 65' FWL, Section 30, T. 18 S., R. 33 E. Bottom Hole Location: 450' FNL & 2512' FEL, Section 26, T. 18 S, R 31 E.

DEEP ELLUM 25/26 B2HG FED COM 1H

Surface Hole Location: 1095' FNL & 65' FWL, Section 30, T. 18 S., R. 32 E. Bottom Hole Location: 1900' FNL & 2530' FEL, Section 26, T. 18 S, R 31 E.

DEEP ELLUM 25/26 B3AB FED COM 1H

Surface Hole Location: 1055' FNL & 65' FWL, Section 30, T. 18 S., R. 32 E. Bottom Hole Location: 450' FNL & 2512' FEL, Section 26, T. 18 S, R 31 E.

DEEP ELLUM 25/26 B3HG FED COM 1H

Surface Hole Location: 1075' FNL & 65' FWL, Section 30, T. 18 S., R. 32 E. Bottom Hole Location: 1900' FNL & 2530' FEL, Section 26, T. 18 S, R 31 E.

TABLE OF CONTENTS

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

General Provisions
☐ Permit Expiration
Archaeology, Paleontology, and Historical Sites
Noxious Weeds
⊠ Special Requirements
Watershed
Lesser Prairie Chicken
☐ 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

Page 1 of 18

I. GENERAL PROVISIONS

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

II. PERMIT EXPIRATION

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

III. ARCHAEOLOGICAL, PALEONTOLOGY & HISTORICAL SITES

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

OR

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

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

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

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

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

IV. NOXIOUS WEEDS

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

V. SPECIAL REQUIREMENT(S)

Watershed:

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

TANK BATTERY:

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

BURIED/SURFACE LINE(S):

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

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

ELECTRIC LINE(S):

Any water erosion that may occur due to the construction of overhead electric line and during the life of the power line will be quickly corrected and proper measures will be taken to prevent future erosion. A power pole should not be placed in drainages, playas, wetlands, riparian areas, or floodplains and must span across the features at a distance away that would not promote further erosion.

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.

VI. CONSTRUCTION

A. NOTIFICATION

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

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

B. TOPSOIL

The operator shall strip the top portion of the soil (root zone) from the entire well pad area and stockpile the topsoil along the edge of the well pad as depicted in the APD. The root zone is typically six (6) inches in depth. All the stockpiled topsoil will be redistributed over the interim

reclamation areas. Topsoil shall not be used for berming the pad or facilities. For final reclamation, the topsoil shall be spread over the entire pad area for seeding preparation.

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

C. CLOSED LOOP SYSTEM

Tanks are required for drilling operations: No Pits.

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

D. FEDERAL MINERAL MATERIALS PIT

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

E. WELL PAD SURFACING

Surfacing of the well pad is not required.

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

F. EXCLOSURE FENCING (CELLARS & PITS)

Exclosure Fencing

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

G. ON LEASE ACCESS ROADS

Road Width

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

Surfacing

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

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

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

Crowning

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

Ditching

Ditching shall be required on both sides of the road.

Turnouts

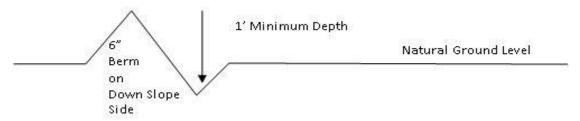
Vehicle turnouts shall be constructed on the road. Turnouts shall be intervisible with interval spacing distance less than 1000 feet. Turnouts shall conform to Figure 1; cross section and plans for typical road construction.

Drainage

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

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

Cross Section of a Typical Lead-off Ditch



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

Formula for Spacing Interval of Lead-off Ditches

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

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

Cattle guards

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

Fence Requirement

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

Public Access

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

Construction Steps

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

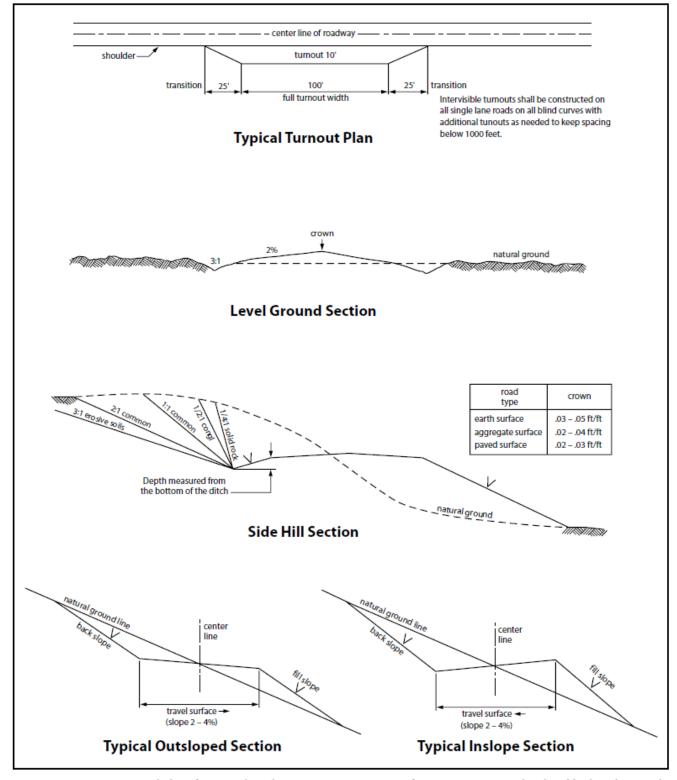


Figure 1. Cross-sections and plans for typical road sections representative of BLM resource or FS local and higher-class roads.

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

Page 9 of 18

- 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.
- No blading and/or earthwork will be allowed in order to place the pipeline except burying the line under crossings.
- The pipeline will be buried under all intersecting routes, including BLM-designated trails and access roads into caliche pits, rancher watering stations, etc. All such buried crossings will be removed when the pipeline is removed, unless otherwise approved by the Authorized Officer. Pipelines larger than 6.5-inch OD may utilize other crossing methodologies (but any fill placed over pipeline must be brought in from off-site).
- Pipeline crossings of fences should be avoided where possible. If a crossing is necessary, contact fence owner [usually the grazing permittee] prior to installation, and install by threading pipeline under the lowest wire of the fence; pipeline should never cross on top of any fence wires.
- The pipeline shall stay within 10 feet maximum of existing disturbance (e.g. lease road, pipeline right-of-way etc.); placement should be within 5 feet whenever possible.
- Placement of pumps or other high-maintenance equipment shall be installed along maintained lease roads.
- Gas or diesel pumps, generators, or compressors shall be placed on visquen matting [or 20 mil plastic] and in a containment structure capable of containing all potentially released fuels. Containments must be protected against wildlife deaths in accordance with oilfield best management practices.
- Due to potential damage to natural resources, no work is allowed during inclement weather.
- Pipeline will be marked with your company's name and contact number, at beginning and ending points, at all public-road crossings, and at intervals not exceeding every 0.6 mile, unless otherwise approved by the Authorized Officer.
- Should unforeseen damage occur to resources, BLM will require reclamation of the impacted land.
- No water may be released into the environment without BLM consent.
- Placement of surface pipelines along or under public roadways may require permits from the road authority.
- This authorization is limited to lands under BLM jurisdiction. If your proposed pipeline crosses lands under private ownership or under other agency jurisdiction, you are responsible for obtaining all necessary permits and approvals from those parties.

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.

Page 11 of 18

- 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 <u>20</u> 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 <u>30</u> 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 h	nolder	will	reseed	all	disturbed	areas.	Seeding	will	be	done	accord	ling to	the	attache
seed	ding re	equirer	nent	s, using	j th	e following	seed m	nix.							

\boxtimes	Seed Mixture 1
	Seed Mixture 2
	Seed Mixture 2/LPC
	Seed Mixture 3
	Seed Mixture 4
	Seed Mixture Aplomado Falcon Mixture

Page 12 of 18

- 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. <u>Escape Ramps</u> 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.

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

A copy of the grant and attachments, including stipulations, survey plat and/or map, will be on location during construction. BLM personnel may request to you a copy of your permit during construction to ensure compliance with all stipulations.

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

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

Page 14 of 18

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.: DEEP ELLUM 25/26 B3AB FED COM 1H

APD ID: 10400085804

LOCATION: Section 30, T18S, R32E. NMP

COUNTY: Lea County, New Mexico

COA

H_2S	0	No	Yes			
Potash /	None	Secretary	O R-111-Q	☐ Open Annulus		
WIPP				\square WIPP		
Cave / Karst	• Low	O Medium	O High	Critical		
Wellhead	Conventional	Multibowl	O Both	Diverter		
Cementing	☐ Primary Squeeze	☐ Cont. Squeeze	☐ EchoMeter	DV Tool		
Special Req	☐ Capitan Reef	☐ Water Disposal	✓ COM	☐ Unit		
Waste Prev.	O Self-Certification	O Waste Min. Plan	• APD Submitted prior to 06/10/2			
Additional	▼ Flex Hose	☐ Casing Clearance	☐ Pilot Hole	Break Testing		
Language	☐ Four-String	Offline Cementing	✓ 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 all requirements from 43 CFR 3176, which includes equipment and personnel/public protection items. If Hydrogen Sulfide is encountered, please provide measured values and formations to the BLM.

B. CASING

Primary Casing Design

- 1. The 13-3/8 inch surface casing shall be set at approximately 1,000 ft. (a minimum of 25 feet (Lea County) into the Rustler Anhydrite, above the salt, and below usable fresh water) 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 pounds compressive strength, whichever is greater.
- d. If cement falls back, remedial cementing will be done prior to drilling out that string.
- 2. The 9-5/8 inch intermediate casing shall be set in a competent bed at approximately 4,800 ft. The minimum required fill of cement behind the 9-5/8 inch intermediate casing is:

Cement to surface. If cement does not circulate see B.1.a, c-d above.

Note: Excess cement is below the BLM's recommendation of 25%. More cement might be needed.

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

3. Operator has proposed to set **7 inch 26# P-110** production casing at approximately **9,235 ft.** (9,207 ft. TVD). The minimum required fill of cement behind the **7** inch production casing is:

Option 1 (Single Stage): Cement should tie-back at least 200 feet into previous casing string. Operator shall provide method of verification.

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

- **a. First stage to DV tool:** Cement to circulate. If cement does not circulate off the DV tool, contact the appropriate BLM office before proceeding with second stage cement job.
- **b. Second stage above DV tool:** Cement should tie-back at least **200 feet** into previous casing string. Operator shall provide method of verification.
- **4.** The minimum required fill of cement behind the **4-1/2** inch production liner is:
 - Cement should tie-back **100 feet** into the previous casing. Operator shall provide method of verification.

Alternate Casing Design

- 1. The 13-3/8 inch surface casing shall be set at approximately 1,000 ft. (a minimum of 25 feet (Lea County) into the Rustler Anhydrite, above the salt, and below usable fresh water) 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 pounds 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 inch intermediate casing shall be set in a competent bed at approximately 4,800 ft. The minimum required fill of cement behind the 9-5/8 inch intermediate casing is:

Cement to surface. If cement does not circulate see B.1.a, c-d above.

Note: Excess cement is below the BLM's recommendation of 25%. More cement might be needed.

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

3. Operator has proposed to set **7 inch 26# P-110** production casing at approximately **10,135 ft.** (9,780 ft. TVD). The minimum required fill of cement behind the **7** inch production casing is:

Option 1 (Single Stage): Cement should tie-back at least **200 feet** into previous casing string. Operator shall provide method of verification.

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

- **a. First stage to DV tool:** Cement to circulate. If cement does not circulate off the DV tool, contact the appropriate BLM office before proceeding with second stage cement job.
- **b. Second stage above DV tool:** Cement should tie-back at least **200 feet** into previous casing string. Operator shall provide method of verification.
- **4.** The minimum required fill of cement behind the **4-1/2** inch production liner is:
 - Cement should tie-back **100 feet** into the previous casing. Operator shall provide method of verification.

Offline Cementing

Operator has been (**Approved**) to pump the proposed cement program offline in the **Surface and intermediate(s) intervals**. Offline cementing should commence within 24 hours of landing the

casing for the interval. Notify the BLM 4hrs prior to the commencement of any offline cementing procedure at **Lea County:** 575-689-5981.

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. 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 43 CFR 3172 must be followed.

BOPE Break Testing Variance

- BOPE Break Testing is ONLY permitted for intervals utilizing a 5M BOPE or less. (Annular preventer must be tested to a minimum of 70% of BOPE working pressure and shall be higher than the MASP.)
- BOPE Break Testing is NOT permitted to drilling the production hole section.
- Variance only pertains to the intermediate hole-sections and no deeper than the Bone Springs formation.
- While in transfer between wells, the BOPE shall be secured by the hydraulic carrier or cradle.
- Any well control event while drilling require notification to the BLM Petroleum Engineer (575-706-2779) prior to the commencement of any BOPE Break Testing operations.
- A full BOPE test is required prior to drilling the first deep intermediate hole section. If any subsequent hole interval is deeper than the first, a full BOPE test will be required. (200' TVD tolerance between intermediate shoes is allowable).
- The BLM is to be contacted (575-689-5981 Lea County) 4 hours prior to BOPE tests.
- As a minimum, a full BOPE test shall be performed at 21-day intervals.
- In the event any repairs or replacement of the BOPE is required, the BOPE shall test as per 43 CFR 3172.
- If in the event break testing is not utilized, then a full BOPE test would be conducted.

D. SPECIAL REQUIREMENT (S)

Communitization Agreement

- The operator will submit a Communitization Agreement to the Santa Fe Office, 301 Dinosaur Trail Santa Fe, New Mexico 87508, at least 90 days before the anticipated date of first production from a well subject to a spacing order issued by the New Mexico Oil Conservation Division. The Communitization Agreement will include the signatures of all working interest owners in all Federal and Indian leases subject to the Communitization Agreement (i.e., operating rights owners and lessees of record), or certification that the operator has obtained the written signatures of all such owners and will make those signatures available to the BLM immediately upon request.
- The operator will submit an as-drilled survey well plat of the well completion, but are not limited to, those specified in 43 CFR 3171 and 3172.
- 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.

Page 5 of 9

- 2. Floor controls are required for 3M or Greater systems. These controls will be on the rig floor, unobstructed, readily accessible to the driller and will be operational at all times during drilling and/or completion activities. Rig floor is defined as the area immediately around the rotary table; the area immediately above the substructure on which the draw works are located, this does not include the doghouse or stairway area.
- **3.** For intervals in which cement to surface is required, cement to surface should be verified with a visual check and density or pH check to differentiate cement from spacer and drilling mud. The results should be documented in the driller's log and daily reports.

A. CASING

- 1. Changes to the approved APD casing program need prior approval if the items substituted are of lesser grade or different casing size or are Non-API. The Operator can exchange the components of the proposal with that of superior strength (i.e. changing from J-55 to N-80, or from 36# to 40#). Changes to the approved cement program need prior approval if the altered cement plan has less volume or strength or if the changes are substantial (i.e. Multistage tool, ECP, etc.). The initial wellhead installed on the well will remain on the well with spools used as needed.
- 2. Wait on cement (WOC) for Potash Areas: After cementing but before commencing any tests, the casing string shall stand cemented under pressure until both of the following conditions have been met: 1) cement reaches a minimum compressive strength of 500 psi for all cement blends of both lead and tail cement, 2) until cement has been in place at least 8 hours. WOC time will be recorded in the driller's log. The casing integrity test can be done (prior to the cement setting up) immediately after bumping the plug.
- 3. Wait on cement (WOC) for Water Basin: After cementing but before commencing any tests, the casing string shall stand cemented under pressure until both of the following conditions have been met: 1) cement reaches a minimum compressive strength of 500 psi at the shoe, 2) until cement has been in place at least 8 hours. WOC time will be recorded in the driller's log. See individual casing strings for details regarding lead cement slurry requirements. The casing integrity test can be done (prior to the cement setting up) immediately after bumping the plug.
- **4.** Provide compressive strengths including hours to reach required 500 pounds compressive strength prior to cementing each casing string. Have well specific cement details onsite prior to pumping the cement for each casing string.
- **5.** No pea gravel permitted for remedial or fall back remedial without prior authorization from the BLM engineer.
- **6.** On that portion of any well approved for a 5M BOPE system or greater, a pressure integrity test of each casing shoe shall be performed. Formation at the shoe shall be tested to a minimum of the mud weight equivalent anticipated to control the formation pressure to the next casing depth or at total depth of the well. This test shall be performed before drilling more than 20 feet of new hole.

- 7. If hardband drill pipe is rotated inside casing, returns will be monitored for metal. If metal is found in samples, drill pipe will be pulled and rubber protectors which have a larger diameter than the tool joints of the drill pipe will be installed prior to continuing drilling operations.
- **8.** Whenever a casing string is cemented in the R-111-Q potash area, the NMOCD requirements shall be followed.

B. PRESSURE CONTROL

- 1. All blowout preventer (BOP) and related equipment (BOPE) shall comply with well control requirements as described in 43 CFR 3172.
- 2. If a variance is approved for a flexible hose to be installed from the BOP to the choke manifold, the following requirements apply: The flex line must meet the requirements of API 16C. Check condition of flexible line from BOP to choke manifold, replace if exterior is damaged or if line fails test. Line to be as straight as possible with no hard bends and is to be anchored according to Manufacturer's requirements. The flexible hose can be exchanged with a hose of equal size and equal or greater pressure rating. Anchor requirements, specification sheet and hydrostatic pressure test certification matching the hose in service, to be onsite for review. These documents shall be posted in the company man's trailer and on the rig floor.
- **3.** 5M or higher system requires an HCR valve, remote kill line and annular to match. The remote kill line is to be installed prior to testing the system and tested to stack pressure.
- **4.** If the operator has proposed a multi-bowl wellhead assembly in the APD. The following requirements must be met:
 - i. Wellhead shall be installed by manufacturer's representatives, submit documentation with subsequent sundry.
 - ii. If the welding is performed by a third party, the manufacturer's representative shall monitor the temperature to verify that it does not exceed the maximum temperature of the seal.
 - iii. Manufacturer representative shall install the test plug for the initial BOP test.
 - iv. Whenever any seal subject to test pressure is broken, all the tests in 43 CFR 3172.6(b)(9) must be followed.
 - v. If the cement does not circulate and one-inch operations would have been possible with a standard wellhead, the well head shall be cut off, cementing operations performed and another wellhead installed.
- **5.** The appropriate BLM office shall be notified a minimum of 4 hours in advance for a representative to witness the tests.
 - i. In a water basin, for all casing strings utilizing slips, these are to be set as soon as the crew and rig are ready and any fallback cement remediation has been done. The casing cut-off and BOP installation can be initiated four hours after installing the slips, which will be approximately six hours after bumping the plug. For those casing

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

C. DRILLING MUD

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

D. WASTE MATERIAL AND FLUIDS

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

SA 07/08/2024

<u>Hydrogen Sulfide Drilling Operations Plan</u> **Mewbourne Oil Company**

1. General Requirements

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

2. Hydrogen Sulfide Training

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

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

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

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

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

3. Hydrogen Sulfide Safety Equipment and Systems

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

1. Well Control Equipment

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

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

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

3. <u>Hydrogen Sulfide Protection and Monitoring Equipment</u>

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

4. Visual Warning Systems

- A. Wind direction indicators as indicated on the wellsite diagram.
- B. Caution signs shall be posted on roads providing access to location. Signs shall be painted a high visibility color with lettering of sufficient size to be readable at reasonable distances from potentially contaminated areas.

4. Mud Program

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

5. Metallurgy

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

6. Communications

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

7. Well Testing

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

8. Emergency Phone Numbers

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

Mewbourne Oil Company	Hobbs District Office Fax 2 nd Fax	575-393-5905 575-397-6252 575-393-7259
District Manager	Robin Terrell	575-390-4816
Drilling Superintendent	Frosty Lathan	575-390-4103
	Bradley Bishop	575-390-6838
Drilling Foreman	Wesley Noseff	575-441-0729

Operator Name: MEWBOURNE OIL COMPANY

Well Name: DEEP ELLUM 25/26 B3AB FED COM Well Number: 1H

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: 32.78658 Source longitude: -103.830576

Source datum: NAD83

Water source permit type: WATER WELL

Water source transport method: TRUCKING

Source land ownership: PRIVATE

Source transportation land ownership: STATE

Water source volume (barrels): 1940 Source volume (acre-feet): 0.2500526

Source volume (gal): 81480

Water source and transportation

DeepEllum25_26B3ABFedCom1H_Watersourcetransmap_20220602093612.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.):

Operator Name: MEWBOURNE OIL COMPANY

Well Name: DEEP ELLUM 25/26 B3AB FED COM Well Number: 1H

New water well casing?

Used casing source:

Drilling method: Drill material:

Grout material: Grout depth:

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

Well Production type: Completion Method:

Water well additional information:

State appropriation permit:

Additional information attachment:

Section 6 - Construction Materials

Using any construction materials: YES

Construction Materials description: Caliche

Construction Materials source location

DeepEllum25_26B3ABFedCom1H_Calichesourcetransmap_20220602093623.pdf

Section 7 - Methods for Handling

Waste type: DRILLING

Waste content description: DRILL CUTTINGS

Amount of waste: 940 barrels

Waste disposal frequency: One Time Only

Safe containment description: DRILL CUTTINGS WILL BE PROPERLY CONTAINED IN STEEL TANKS (20 YARD ROLL

OFF BINS.)

Safe containment attachment:

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

FACILITY

Disposal type description:

Disposal location description: NMOCD approved waste disposal locations are CRI or Lea Land, both facilities are located

on HWY 62/180, Sec 27, T20S, R32E

Waste type: SEWAGE

Waste content description: Human waste & grey water

Amount of waste: 1500 gallons

Waste disposal frequency: Weekly

Safe containment description: 2,000 gallon plastic container

Safe containment attachment:

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

FACILITY

Disposal type description:

Received by OCD: 7/23/2024 1:30:50 PM

Page 70 of 71

Operator Name: MEWBOURNE OIL COMPANY

Well Name: DEEP ELLUM 25/26 B3AB FED COM Well Number: 1H

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 containment attachment:

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

FACILITY

Disposal type description:

Disposal location description: Waste Management facility in Carlsbad.

Reserve Pit

Reserve Pit being used? NO

Temporary disposal of produced water into reserve pit? NO

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

Reserve pit depth (ft.)

Reserve pit volume (cu. yd.)

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

Reserve pit liner

Reserve pit liner specifications and installation description

Cuttings Area

Cuttings Area being used? NO

Are you storing cuttings on location? 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

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 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 366520

CONDITIONS

Operator:	OGRID:
MEWBOURNE OIL CO	14744
P.O. Box 5270	Action Number:
Hobbs, NM 88241	366520
	Action Type:
	[C-101] BLM - Federal/Indian Land Lease (Form 3160-3)

CONDITIONS

Created By	Condition	Condition Date
ward.rikala	Notify OCD 24 hours prior to casing & cement	8/16/2024
ward.rikala	Will require a File As Drilled C-102 and a Directional Survey with the C-104	8/16/2024
ward.rikala	Once the well is spud, to prevent ground water contamination through whole or partial conduits from the surface, the operator shall drill without interruption through the fresh water zone or zones and shall immediately set in cement the water protection string	8/16/2024
ward.rikala	Cement is required to circulate on both surface and intermediate1 strings of casing	8/16/2024
ward.rikala	If cement does not circulate on any string, a CBL is required for that string of casing	8/16/2024
ward.rikala	Oil base muds are not to be used until fresh water zones are cased and cemented providing isolation from the oil or diesel. This includes synthetic oils. Oil based mud, drilling fluids and solids must be contained in a steel closed loop system	8/16/2024
ward.rikala	This well can not be produced until the well name is changed per proper naming convention.	8/16/2024