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. NMNM0359292 **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 SALADO DRAW 10 W2PA FED COM **1**H 2. Name of Operator 9. API Well No. MEWBOURNE OIL COMPANY 10. Field and Pool, or Exploratory 3a. Address 3b. Phone No. (include area code) RED HILLS/WOLFCAMP P O BOX 5270, HOBBS, NM 88241 (575) 393-5905 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 10/T26S/R33E/NMP At surface SWSE / 235 FSL / 1760 FEL / LAT 32.0513771 / LONG -103.5573312 At proposed prod. zone NENE / 330 FNL / 350 FEL / LAT 32.0643301 / LONG -103.552783 14. Distance in miles and direction from nearest town or post office\* 12. County or Parish 13. State NM LEA 20 miles 15. Distance from proposed\* 16. No of acres in lease 17. Spacing Unit dedicated to this well 320 feet location to nearest property or lease line, ft. 320.0 (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, 50 feet 13077 feet / 17914 feet FED: applied for, on this lease, ft. 21. Elevations (Show whether DF, KDB, RT, GL, etc.) 22. Approximate date work will start\* 23. Estimated duration 3319 feet 05/05/2021 60 days 24. Attachments The following, completed in accordance with the requirements of Onshore Oil and Gas Order No. 1, and the Hydraulic Fracturing rule per 43 CFR 3162.3-3 (as applicable) 1. Well plat certified by a registered surveyor. 4. Bond to cover the operations unless covered by an existing bond on file (see Item 20 above). 2. A Drilling Plan. 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 Name (Printed/Typed) Date 25. Signature BRADLEY BISHOP / Ph: (575) 393-5905 01/13/2023 (Electronic Submission) Title Regulatory Approved by (Signature) Date Name (Printed/Typed) (Electronic Submission) CODY LAYTON / Ph: (575) 234-5959 09/25/2024 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.

of the United States any false, fictitious or fraudulent statements or representations as to any matter within its jurisdiction.



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

Santa Fe Main Office

Phone: (505) 476-3441 Fax: (55) 476-3462

General Information Phone: (505) 629-6116

Online Phone Directory Visit:

https://www.emnrd.nm.gov/ocd/contact-us/

State of New Mexico Energy, Minerals & Natural Resources Department OIL CONSERVATION DIVISION

Revised July 9, 2024	
Submit Electronically via OCD Permitting	
☐ Initial Submittal	

Submittal ☐ Amended Report Type: ☐ As Drilled

#### WELL LOCATION INFORMATION

API Number	Pool Code 83600	Pool Name RED HILLS; WOLFCAMP		
Property Code	Property Name SALADO DI	RAW 10 W2PA FED COM	Well Number 1H	
OGRID No. 14744	Operator Name MEWBOUR	NE OIL COMPANY	Ground Level Elevation 3319	
Surface Owner: ☐ State ☐ Fee ☐	Tribal 🛚 Federal	Mineral Owner: ☐ State ☐ Fee ☐ Tribal 🗷 Fe	ederal	

#### **Surface Location**

UL	Section	Township	Range	Lot	Ft. from N/S	Ft. from E/W	Latitude	Longitude	County
0	10	26S	33E		235 FSL	1760 FEL	32.0513771	-103.5573312	LEA
	Bottom Hole Location								
UL	Section	Township	Range	Lot	Ft. from N/S	Ft. from E/W	Latitude	Longitude	County
Α	10	26S	33E		330 FNL	350 FEL	32.0643301	-103.5527830	LEA

Dedicated Acres	Infill or Defining Well	Defining Well API	Overlapping Spacing Unit (Y/N)	Consolidation Code
320	INFILL			
Order Numbers.			Well setbacks are under Common (	Ownership: □Yes □No

#### Kick Off Point (KOP)

U	ЛL	Section	Township	Range	Lot	Ft. from N/S	Ft. from E/W	Latitude	Longitude	County
		10	26S	33E		10 FSL	350 FEL	32.050753	-103.5527813	LEA
	First Take Point (FTP)									
U	ЛL	Section	Township	Range	Lot	Ft. from N/S	Ft. from E/W	Latitude	Longitude	County
		10	26S	33E		330 FSL	350 FEL	32.0516326	-103.5527814	LEA
						Last Take	Point (LTP)			
Ţ	Л	Section	Township	Range	Lot	Ft. from N/S	Ft. from E/W	Latitude	Longitude	County
		10	26S	33E		330 FNL	350 FEL	32.0643301	-103.5527830	LEA

Unitized Area or Area of Uniform Interest Spacing Unit Type ▼Horizontal □ Vertical G	Ground Floor Elevation: 3319
--	------------------------------

#### OPERATOR CERTIFICATIONS

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

If this well is a horizontal well, I further certify that this organization has received the consent of at least one lessee or owner of a working interest or unleased mineral interest in each tract (in the target pool or formation) in which any part of the well's completed interval will be located or obtained a compulsory pooling order from the division.

2/5/25

RYAN MCDANIEI

RYANMCDANIEL@MEWBOURNE.COM

#### SURVEYOR CERTIFICATIONS

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

SIONAL

Signature and Seal of Professional Surveyor

Certificate Number

Date of Survey

19680

Township

Section

Lot Idn

Range

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

County

#### WELL LOCATION AND ACREAGE DEDICATION PLAT

<sup>1</sup> API Number	<sup>2</sup> Pool Code	<sup>3</sup> Pool Name	
	83600	RED HILLS; WOLFCAMI	P
<sup>4</sup> Property Code	5 P	roperty Name	<sup>6</sup> Well Number
	SALADO DRAW	10 W2PA FED COM	1H
7OGRID NO.	8 O	perator Name	9Elevation
14744	MEWBOURN	E OIL COMPANY	3319'

<sup>10</sup> Surface Location

North/South line

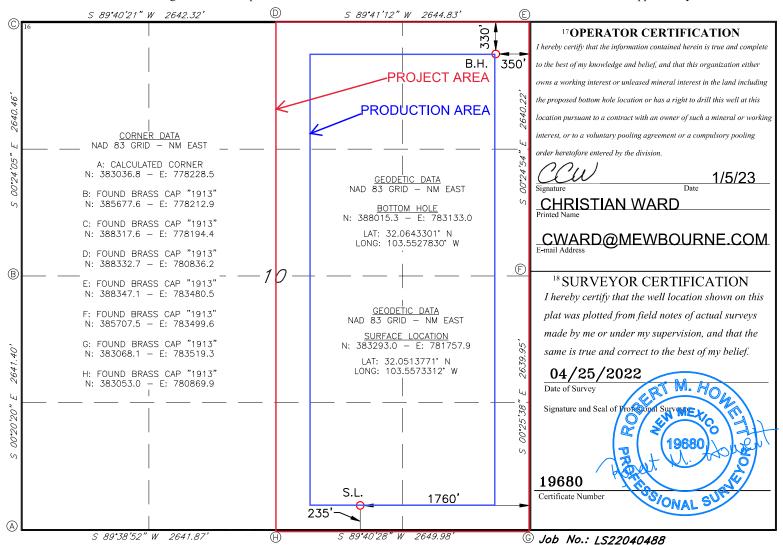
Feet From the

East/West line

Feet from the

0	10	26S	33E		235	SOUTH	1760	EAST	LEA
11 Bottom Hole Location If Different From Surface									
UL or lot no.	Section	Townshi	p Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
A	10	26S	33E		330	NORTH	350	EAST	LEA
12 Dedicated Acre	s 13 Joint	or Infill	14 Consolidation	Code 15 0	Order No.				
	1								

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



### State of New Mexico Energy, Minerals and Natural Resources Department

Submit Electronically Via E-permitting

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

#### NATURAL GAS MANAGEMENT PLAN

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

## Section 1 – Plan Description Effective May 25, 2021

		<u>E1</u>	rective may 23,	2021		
I. Operator: Me	wbourne (	Oil Co.	OGRID:	14744	Date:	5/2/22
II. Type: X Original	☐ Amendment	due to □ 19.15.27.	9.D(6)(a) NMA	C □ 19.15.27.9.De	(6)(b) NMAC □ (	Other.
If Other, please descri	be:					
III. Well(s): Provide to be recompleted from a	he following inf single well pad	formation for each to or connected to a connected t	new or recomple central delivery p	ted well or set of oint.	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
Salado Draw 10 W2PA Fed Com	1H	O 10 26S 33E	235' FSL x 1760' FI	L 1000	6000	6000
proposed to be recomp	ule: Provide the	following informa gle well pad or con	nected to a centr	or recompleted val delivery point.	vell or set of wells	9.15.27.9(D)(1) NMAC] proposed to be drilled or
Well Name	API	Spud Date	TD Reached Date	Completion Commencement		
Salado Draw 10 W2PA Fed Com 1	н	7/2/22	8/2/22	9/2/22	9/17/2	9/17/22
VII. Operational Pra Subsection A through	nctices: X Attac F of 19.15.27.8	h a complete desci NMAC. ☑ Attach a comple	ription of the act	ions Operator wil	ll take to comply	t to optimize gas capture. with the requirements of

## Section 2 – Enhanced Plan EFFECTIVE APRIL 1, 2022

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

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

#### IX. Anticipated Natural Gas Production:

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

#### X. Natural Gas Gathering System (NGGS):

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

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

XII. Line Capacity. The natural gas gathering system $\Box$ will $\Box$ will not have capacity to gather 100% of the anticipated n	iatural 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 we	ell(s).

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

XIV. Confidentiality: 

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

## Section 3 - Certifications Effective May 25, 2021

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

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

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

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

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

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

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

#### Section 4 - Notices

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

Released to Imaging: 2/21/2025 9:12:11 AM

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 02/05/2025

**APD ID:** 10400090165 **Submission Date:** 01/13/2023

**Operator Name: MEWBOURNE OIL COMPANY** 

Well Name: SALADO DRAW 10 W2PA FED COM Well Number: 1H

Well Type: CONVENTIONAL GAS WELL Well Work Type: Drill

Highlighted data reflects the most recent changes

Show Final Text

## **Section 1 - Geologic Formations**

Formation ID	Formation Name	Elevation	True Vertical	Measured Depth	Lithologies	Mineral Resources	Producing Formatio
14214229	UNKNOWN	3319	28	28	OTHER : Topsoil	NONE	N
14214245	RUSTLER	2394	925	925	ANHYDRITE, DOLOMITE	USEABLE WATER	N
14214241	TOP SALT	2039	1280	1280	SALT	NONE	N
14214230	BOTTOM SALT	-1431	4750	4750	SALT	NONE	N
14214237	LAMAR	-1671	4990	4990	LIMESTONE	NATURAL GAS, OIL	N
14214233	BELL CANYON	-1711	5030	5030	SANDSTONE	NATURAL GAS, OIL	N
14214234	CHERRY CANYON	-2761	6080	6080	SANDSTONE	NATURAL GAS, OIL	N
14214235	MANZANITA	-3011	6330	6330	LIMESTONE	NATURAL GAS, OIL	N
14214228	BONE SPRING	-5811	9130	9130	LIMESTONE, SHALE	NATURAL GAS, OIL	N
14214231	BONE SPRING 1ST	-6741	10060	10060	SANDSTONE	NATURAL GAS, OIL	N
14214232	BONE SPRING 2ND	-7331	10650	10650	SANDSTONE	NATURAL GAS, OIL	N
14214243	BONE SPRING 3RD	-8391	11710	11710	SANDSTONE	NATURAL GAS, OIL	N
14214244	WOLFCAMP	-8861	12180	12180	LIMESTONE, SANDSTONE, SHALE	NATURAL GAS, OIL	Y

## **Section 2 - Blowout Prevention**

Well Name: SALADO DRAW 10 W2PA FED COM Well Number: 1H

Pressure Rating (PSI): 10M Rating Depth: 17914

Equipment: Annular, Pipe Rams, Blind Rams

Requesting Variance? YES

**Variance request:** Request variance for the use of a flexible choke line from the BOP to Choke Manifold. Anchors not required by manufacturer. A multi-bowl wellhead will be used. See attached schematic. Request a variance to use a 5000 psi annular BOP with a 10.000 psi BOP stack.

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

#### **Choke Diagram Attachment:**

```
Salado_Draw_10_W2PA_Fed_Com_1H_Flex_Line_Specs_20230111082055.pdf
Salado_Draw_10_W2PA_Fed_Com_1H_Flex_Line_Specs_API_16C_20230111082055.pdf
Salado_Draw_10_W2PA_Fed_Com_1H_10M_BOPE_Choke_Diagram_20230111082056.pdf
```

#### **BOP Diagram Attachment:**

```
Salado_Draw_10_W2PA_Fed_Com_1H_10M__BOPE_Schematic_20230111082125.pdf
Salado_Draw_10_W2PA_Fed_Com_1H_10M_Annular_BOP_Variance_20230111082125.doc
Salado_Draw_10_W2PA_Fed_Com_1H_10M__Multi_Bowl_WH_20230111082125.pdf
```

Pressure Rating (PSI): 5M Rating Depth: 12648

Equipment: Annular, Pipe Rams, Blind Rams

#### Requesting Variance? YES

**Variance request:** Request variance for the use of a flexible choke line from the BOP to Choke Manifold. Anchors not required by manufacturer. A multi-bowl wellhead will be used. See attached schematic. Request a variance to use a 5000 psi annular BOP with a 10,000 psi BOP stack.

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

#### **Choke Diagram Attachment:**

```
Salado_Draw_10_W2PA_Fed_Com_1H_Flex_Line_Specs_20230111081907.pdf
Salado_Draw_10_W2PA_Fed_Com_1H_Flex_Line_Specs_API_16C_20230111081907.pdf
Salado Draw 10 W2PA Fed Com 1H 5M BOPE Choke Diagram 20230111081907.pdf
```

#### **BOP Diagram Attachment:**

```
Salado_Draw_10_W2PA_Fed_Com_1H_5M_BOPE_Schematic_20230111081954.pdf
Salado_Draw_10_W2PA_Fed_Com_1H_5M_Mutli_Bowl_WH_20230111081954.pdf
```

Well Name: SALADO DRAW 10 W2PA FED COM Well Number: 1H

Salado\_Draw\_10\_W2PA\_Fed\_Com\_1H\_Flex\_Line\_Specs\_20230111081907.pdf
Salado\_Draw\_10\_W2PA\_Fed\_Com\_1H\_Flex\_Line\_Specs\_API\_16C\_20230111081907.pdf
Salado\_Draw\_10\_W2PA\_Fed\_Com\_1H\_5M\_BOPE\_Choke\_Diagram\_20230111081907.pdf

Salado\_Draw\_10\_W2PA\_Fed\_Com\_1H\_5M\_BOPE\_Schematic\_20230111081954.pdf Salado\_Draw\_10\_W2PA\_Fed\_Com\_1H\_5M\_Mutli\_Bowl\_WH\_20230111081954.pdf

## **Section 3 - Casing**

	1	1	1	1		1	1	l		l			l						l	1	l	
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	3319	2319	1000	H-40	48	ST&C	1.68	3.78	DRY	6.71	DRY	11.2 7
2	INTERMED IATE	12.2 5	9.625	NEW	API	N	0	3453	0	3453	3220	-134	3453	J-55	36	LT&C	1.13	1.96	DRY	2.48	DRY	3.09
3	INTERMED IATE	12 <u>.</u> 2 5	9.625	NEW	API	N	3453	4393	3453	4393	-134	-1074	940	J-55	40	LT&C	1.13	1.73	DRY	8.89	DRY	10.7 7
4	INTERMED IATE	12 <b>.</b> 2 5	9.625	NEW	API	N	4393	4915	4393	4915	-1074	-1596	522	N-80	40	LT&C	1.21	2.25	DRY	35 <b>.</b> 3	DRY	43.8 8
5	PRODUCTI ON	8.75	7.0	NEW	API	N	0	13350	0	13043	3220	-9724	13350	HCP -110	26	LT&C	1.19	1.51	DRY	2	DRY	2.39
6	LINER	6.12 5	4.5	NEW	API	N	12648	17914	12504	13077	-9185	-9758	5266	P- 110	13.5	LT&C	1.16	1.35	DRY	4.75	DRY	5.94

#### **Casing Attachments**

Well Name: SALADO DRAW 10 W2PA FED COM Well Number: 1H

Casing ID: 1 String

SURFACE

**Inspection Document:** 

**Spec Document:** 

**Tapered String Spec:** 

Casing Design Assumptions and Worksheet(s):

Salado\_Draw\_10\_W2PA\_Fed\_Com\_1H\_Csg\_Assumptions\_20230111082159.pdf

Casing ID: 2

String

**INTERMEDIATE** 

**Inspection Document:** 

**Spec Document:** 

**Tapered String Spec:** 

Casing Design Assumptions and Worksheet(s):

Salado\_Draw\_10\_W2PA\_Fed\_Com\_1H\_Csg\_Assumptions\_20230111082225.pdf

Casing ID: 3

String

INTERMEDIATE

**Inspection Document:** 

**Spec Document:** 

**Tapered String Spec:** 

Casing Design Assumptions and Worksheet(s):

Salado\_Draw\_10\_W2PA\_Fed\_Com\_1H\_Csg\_Assumptions\_20230111082423.pdf

Well Name: SALADO DRAW 10 W2PA FED COM Well Number: 1H

Casing ID: 4

String

INTERMEDIATE

**Inspection Document:** 

**Spec Document:** 

**Tapered String Spec:** 

Casing Design Assumptions and Worksheet(s):

Salado\_Draw\_10\_W2PA\_Fed\_Com\_1H\_Csg\_Assumptions\_20230111082524.pdf

Casing ID: 5

String

**PRODUCTION** 

**Inspection Document:** 

**Spec Document:** 

**Tapered String Spec:** 

Casing Design Assumptions and Worksheet(s):

Salado\_Draw\_10\_W2PA\_Fed\_Com\_1H\_Csg\_Assumptions\_20230111082300.pdf

Casing ID: 6

String

**LINER** 

**Inspection Document:** 

**Spec Document:** 

**Tapered String Spec:** 

Casing Design Assumptions and Worksheet(s):

Salado\_Draw\_10\_W2PA\_Fed\_Com\_1H\_Csg\_Assumptions\_20230111082343.pdf

**Section 4 - Cement** 

Well Name: SALADO DRAW 10 W2PA 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	807	530	2.12	12.5	1124	100	Class C	Salt, Gel, Extender, LCM
SURFACE	Tail		807	1000	200	1.34	14.8	268	100	Class C	Retarder
INTERMEDIATE	Lead		0	4230	780	2.12	12.5	1654	25	Class C	Salt, Gel, Extender, LCM
INTERMEDIATE	Tail		4230	4915	200	1.34	14.8	268	25	Class C	Retarder
PRODUCTION	Lead	6300	4715	5686	100	2.12	12.5	212	50	Class C	Gel, Retarder, Defoamer, Extender
PRODUCTION	Tail		5686	6300	100	1.34	14.8	134	50	Class C	Retarder
PRODUCTION	Lead	6300	6300	1126 5	530	2.12	12.5	1124	50	Class C	Gel, Retarder, Defoamer, Extender
PRODUCTION	Tail		1126 5	1335 0	400	1.18	15.6	472	25	Class H	Retarder, Fluid Loss, Defoamer
LINER	Lead		1264 8	1791 4	340	1.85	13.5	629	25	Class H	Salt, Gel, Fluid Loss, Retarder, Dispersant, Defoamer, Anti-Settling Agent

## **Section 5 - Circulating Medium**

Mud System Type: Closed

Will an air or gas system be Used? NO

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

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

Describe what will be on location to control well or mitigate other conditions: Lost circulation material Sweeps Mud scavengers in surface hole

Describe the mud monitoring system utilized: PVT/Visual Monitoring

**Circulating Medium Table** 

Well Name: SALADO DRAW 10 W2PA 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	4915	SALT SATURATED	10	10						9	
4915	1335 0	WATER-BASED MUD	8.6	9.7					1		
1335 0	1791 4	OIL-BASED MUD	10	13.5						1	

#### **Section 6 - Test, Logging, Coring**

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

Will run GR/CNL from KOP (12648') to surface

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

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

Coring operation description for the well:

None

## **Section 7 - Pressure**

Anticipated Bottom Hole Pressure: 9180 Anticipated Surface Pressure: 6303

Anticipated Bottom Hole Temperature(F): 227

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

Salado\_Draw\_10\_W2PA\_Fed\_Com\_1H\_H2S\_Plan\_20230111082939.pdf

Well Name: SALADO DRAW 10 W2PA FED COM Well Number: 1H

#### **Section 8 - Other Information**

#### Proposed horizontal/directional/multi-lateral plan submission:

Salado\_Draw\_10\_W2PA\_Fed\_Com\_1H\_MOC\_Dir\_Plan\_20230111083005.pdf Salado\_Draw\_10\_W2PA\_Fed\_Com\_1H\_MOC\_Dir\_Plot\_20230111083005.pdf

Other proposed operations facets description:

Other proposed operations facets attachment:

 $Salado\_Draw\_10\_W2PA\_Fed\_Com\_1H\_Add\_Info\_20230111083015.pdf$ 

Other Variance attachment:



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

PHONE: 361-887-9807 FAX: 361-887-0812

EMAIL: Tim.Cantu@gates.com

WEB: www.gates.com

### 10K CEMENTING ASSEMBLY PRESSURE TEST CERTIFICATE

Customer:

**AUSTIN DISTRIBUTING** 

Test Date: Hose Serial No.: 4/30/2015

Customer Ref.: Invoice No.:

4060578 500506

Created By:

D-043015-7 JUSTIN CROPPER

Product Description:

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

End Fitting 1:

4 1/16 10K FLG Gates Part No.:

End Fitting 2:

4 1/16 10K FLG

Working Pressure:

4773-6290 10,000 PSI Assembly Code:

L36554102914D-043015-7

Test Pressure:

15,000 PSI

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

Quality Manager:

Date:

Signature:

QUALITY

4/30/2015

Produciton:

Date:

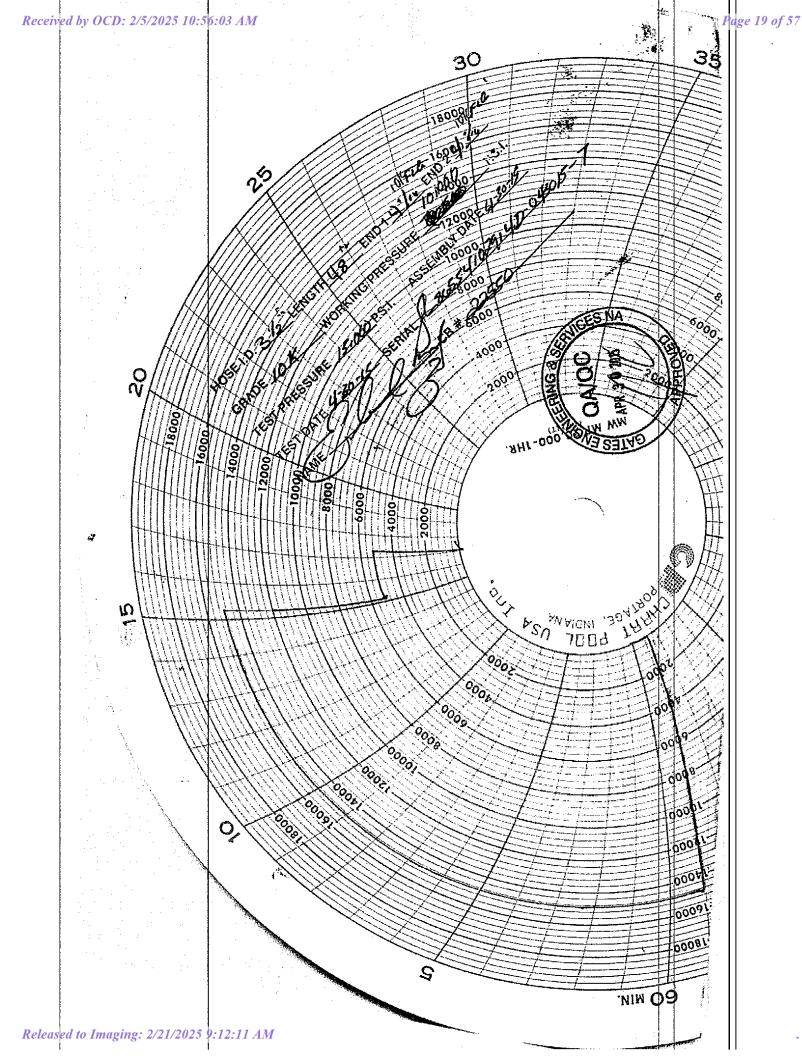
Signature :

**PRODUCTION** 

ط**ر**4/30/2/0

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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.: Customer Ref .: H-082018-10 4101901 Created By: Moosa Nagvi Invoice No.: 511956 10KF3.035.0CK41/1610KFLGFXDxFLT\_L/E Product Description: End Fitting 2: 4 1/16 in. Float Flange End Fitting 1: 4 1/16 in. Fixed 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:

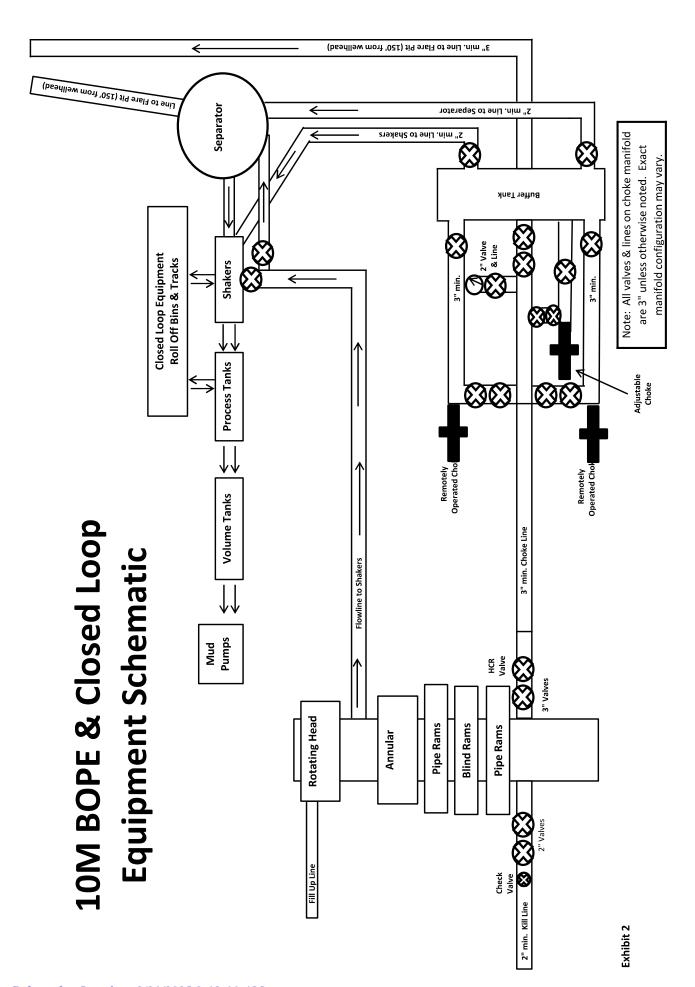
Production:

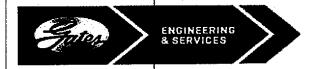
Date : Signature :

Form PTC - 01 Rev.0 2

PRODUCTION

8/20/2018





GATES E & S NORTH AMERICA, INC. 134 44TH STREET CORPUS CHRISTI, TEXAS 78405 PHONE: 361-887-9807 FAX: 361-887-0812

EMAIL: Tim.Cantu@gates.com

WEB: www.gates.com

### **10K CEMENTING ASSEMBLY PRESSURE TEST CERTIFICATE**

Customer:

AUSTIN DISTRIBUTING

4/30/2015

Customer Ref. : Invoice No. : 4060578 500506

Hose Serial No.: Created By:

Test Date:

D-043015-7 JUSTIN CROPPER

Product Description:

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

End Fitting 1:

ting 1: 4 1/16 10K FLG

End Fitting 2:

4 1/16 10K FLG

Gates Part No.: Working Pressure: 4773-6290 10,000 PSI Assembly Code:

L36554102914D-043015-7

Test Pressure:

15,000 PSI

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

Quality Manager:

Date:

Signature:

QUALITY

4/30/2015

Produciton:

Date:

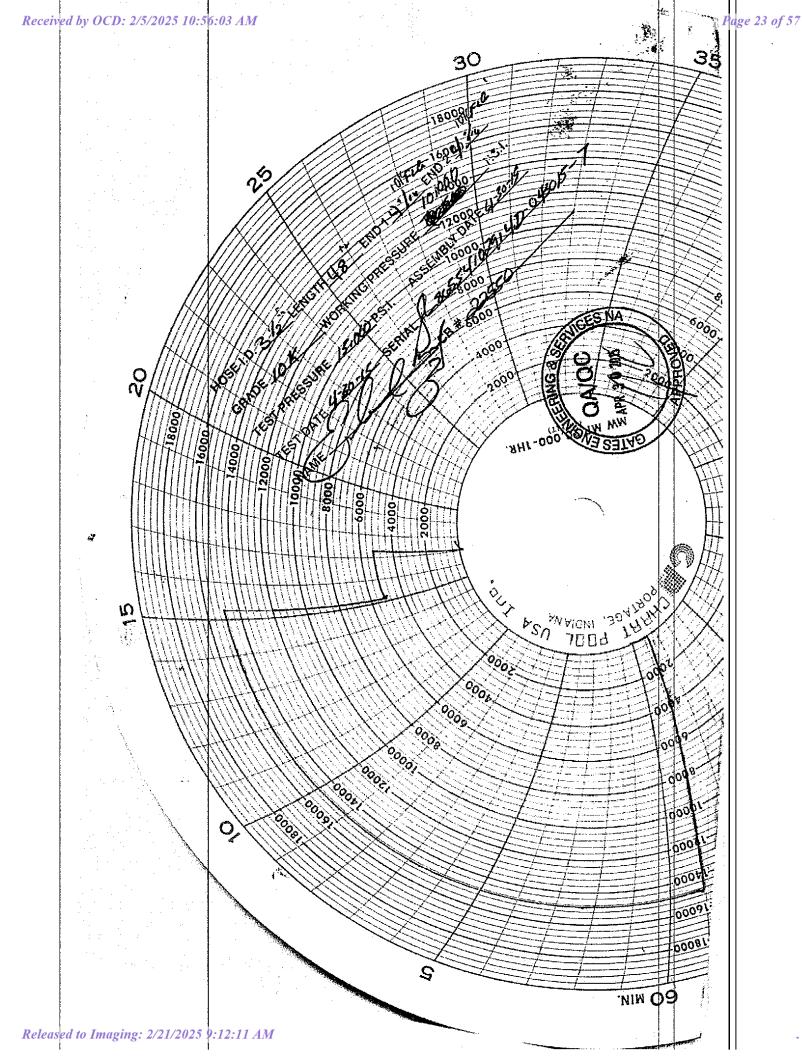
Signature :

**PRODUCTION** 

. 4/30/2015

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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.: Customer Ref .: H-082018-10 4101901 Created By: Moosa Nagvi Invoice No.: 511956 10KF3.035.0CK41/1610KFLGFXDxFLT\_L/E Product Description: End Fitting 2: 4 1/16 in. Float Flange End Fitting 1: 4 1/16 in. Fixed 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: Signature: QUALITY

8/20/2018

Date:

Signature:

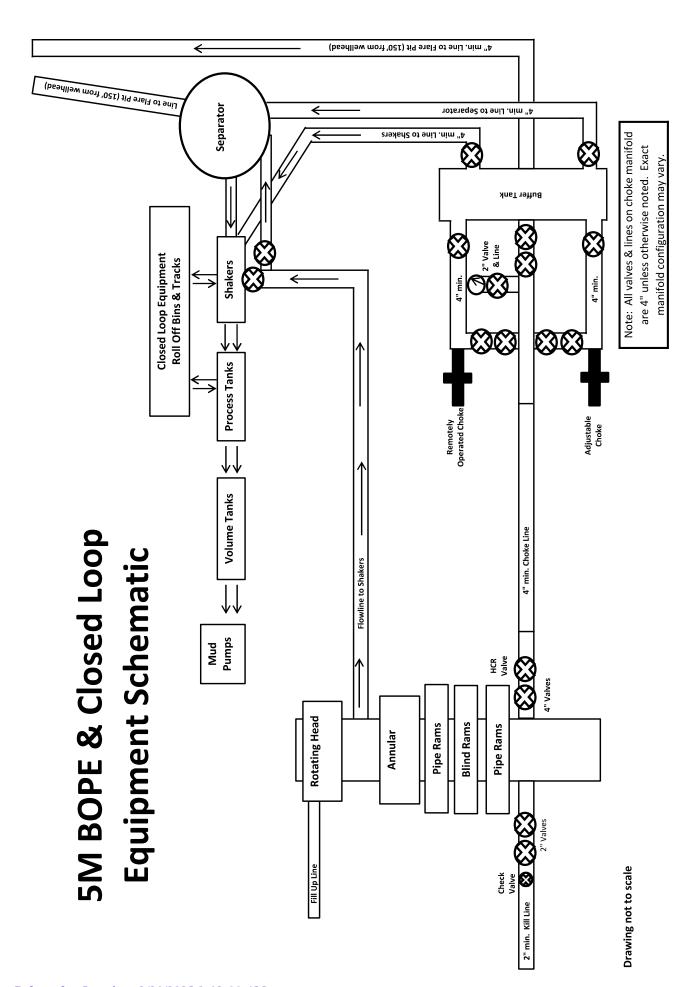
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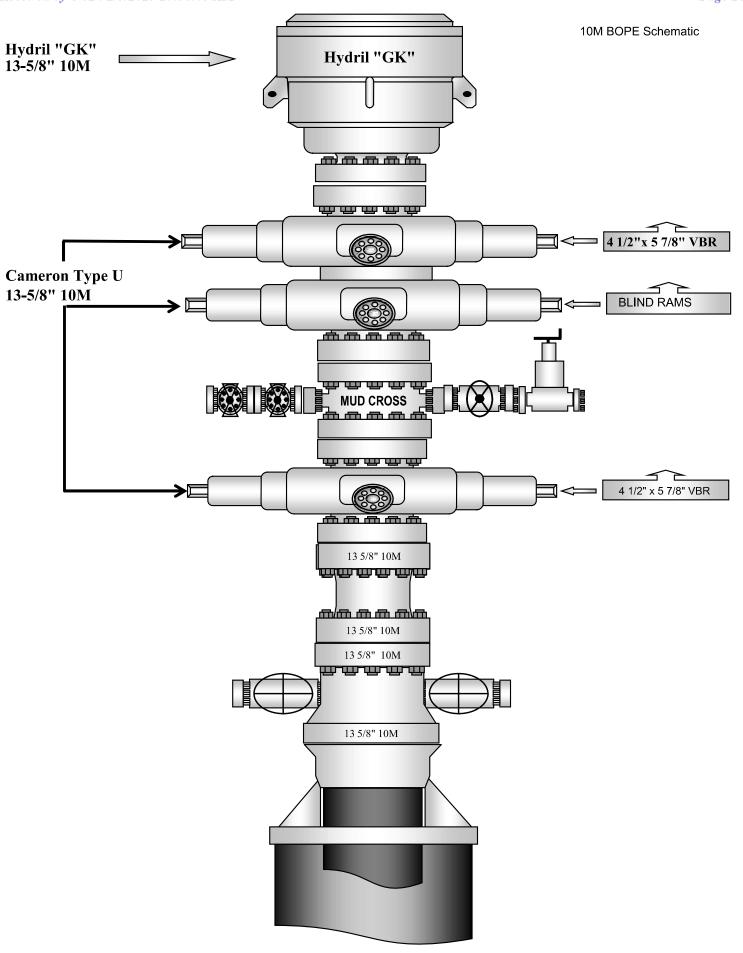
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PRODUCTION

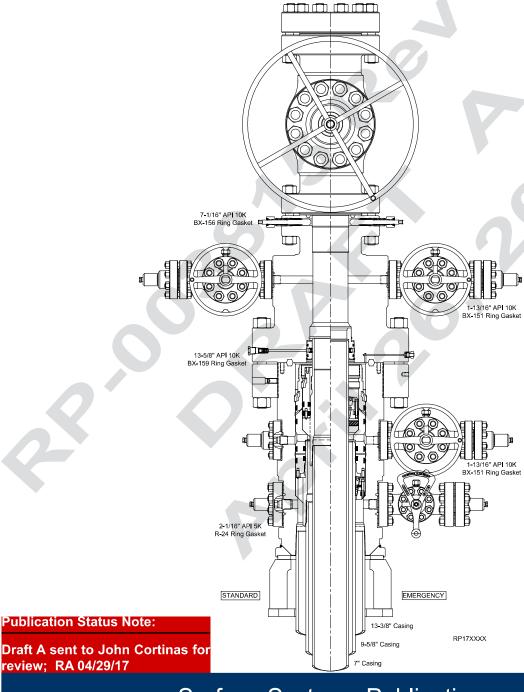
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## **RUNNING PROCEDURE**

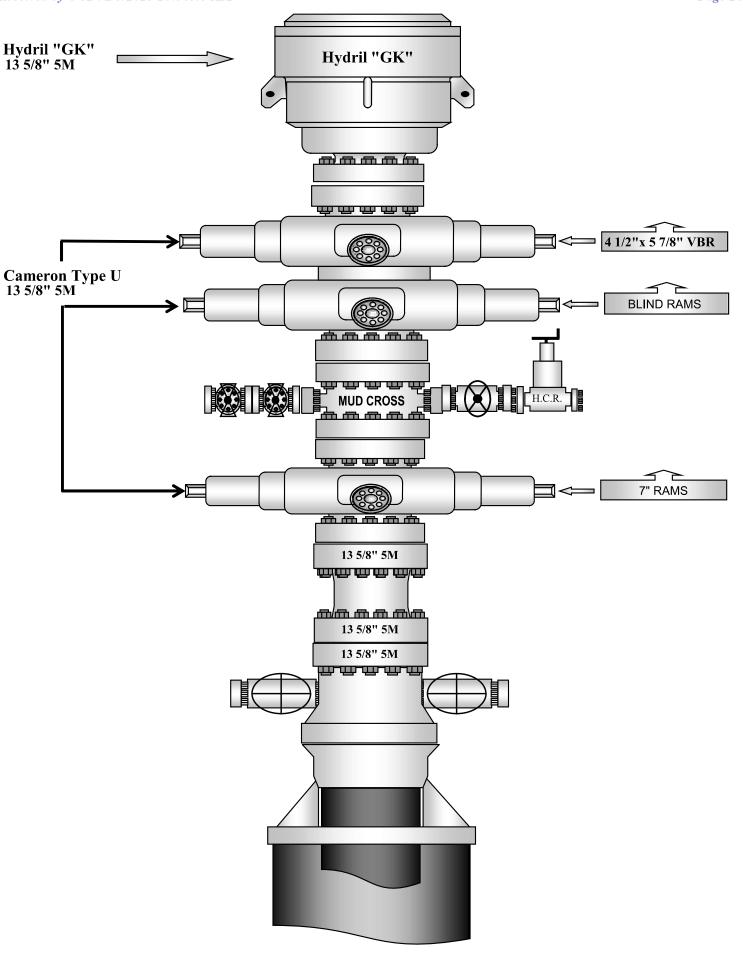
## Mewbourne Oil Co



**Surface Systems Publication** 

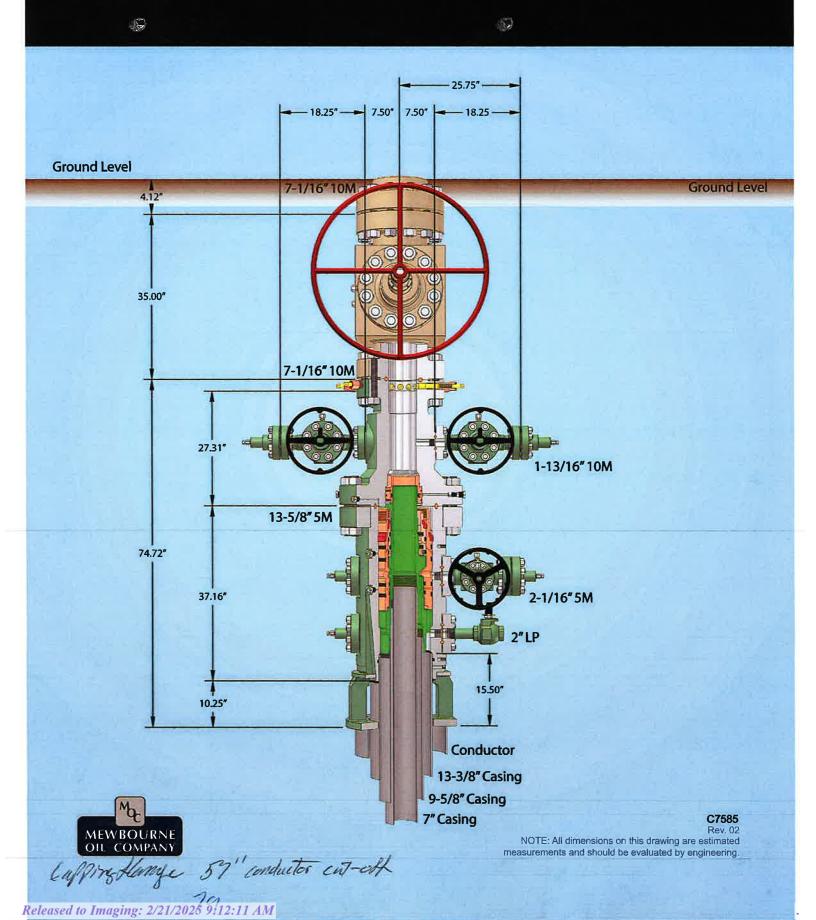


13-5/8" 10K MN-DS System 13-3/8" x 9-5/8" x 7" Casing Program RP-003815 Rev 01 Draft A





## 13-5/8" MN-DS Wellhead System



SHL: 235' FSL & 1760' FEL (Sec 10) BHL: 330' FNL & 350' FEL (Sec 10)

**Casing Program** 

Hala Sina	Hole Size From T		Csg. Size	Weight	Cuada	Conn.	SF	SE Daniel	SF Jt	SF Body
Hole Size	r rom	То	Csg. Size	(lbs)	Grade	Conn.	Collapse	SF Burst	Tension	Tension
17.500	0'	1000'	13.375	48.0	H40	STC	1.68	3.78	6.71	11.27
12.250	0'	3453'	9.625	36.0	J55	LTC	1.13	1.96	2.48	3.09
12.250	3453'	4393'	9.625	40.0	J55	LTC	1.13	1.73	8.89	10.77
12.250	4393'	4915'	9.625	40.0	N80	LTC	1.21	2.25	35.31	43.88
8.750	0'	13350'	7.000	26.0	HCP110	LTC	1.19	1.51	2.00	2.39
6.125	12648'	17914'	4.500	13.5	P110	LTC	1.16	1.35	4.75	5.94
				DIMM	nimum Safet	v Footon	1.125	1.0	1.6 Dry	1.6 Dry
				DLWI WII	mmum Salet	угасия	1.125	1.0	1.8 Wet	1.8 Wet

				Y or N			
Is casing new? If used, attach certification as requ	ired in Onshore Order	#1		Y			
Is casing API approved? If no, attach casing spe	cification sheet.			Y			
Is premium or uncommon casing planned? If yes		tion sheet		N			
			justification (loading assumptions, casing design criteria).	Y			
		-					
Will the pipe be kept at a minimum 1/3 fluid filled	to avoid approaching	the collapse press	are rating of the casing?	Y			
Is well located within Capitan Reef?				N			
If yes, does production casing cement tie back	a minimum of 50' ab	ove the Reef?					
Is well within the designated 4 string boundary				N			
Is well located in SOPA but not in R-111-P?							
If yes, are the first 2 strings cemented to surface	ce and 3 <sup>rd</sup> string cemer	nt tied back 500' in	nto previous casing?				
Is well located in R-111-P and SOPA?				N			
If yes, are the first three strings cemented to su	ırface?			14			
Is 2 <sup>nd</sup> string set 100' to 600' below the base of							
Is an open annulus used to satisfy R-111-O? If ye							
Is an engineered weak point used to satisfy R-111-Q: If ye	·						
If yes, at what depth is the weak point planned				_			
if yes, at what depth is the weak point plained	•			<u>-</u>			
Is well located in high Cave/Karst?				N			
If yes, are there two strings cemented to surface	re?						
(For 2 string wells) If yes, is there a contingend		tion occurs?					
(	- ,						
Is well located in critical Cave/Karst?				N			
If yes, are there three strings cemented to surfa	nce?						
Formation	Est. Top		Formation	Est. Top			
Rustler	925'		Delaware (Lamar)	4990'			
Salt Top	1280'		Bell Canyon	5030			
Salt Base	4750'		Cherry Canyon	6080'			
Yates			Manzanita Marker	6330'			
Seven Rivers			Basal Brushy Canyon				
Queen			Bone Spring	9130'			
Capitan			1st Bone Spring Sand	10060'			
Grayburg			2nd Bone Spring Sand	10650'			
San Andres			3rd Bone Spring Sand	11710'			
Glorieta			Abo				
Yeso			Wolfcamp	12180'			

SHL: 235' FSL & 1760' FEL (Sec 10) BHL: 330' FNL & 350' FEL (Sec 10)

**Casing Program** 

Hole Size From	Enom	To	Csg. Size	Weight	Grade	Conn.	SF	SF Burst	SF Jt	SF Body
Hole Size	rrom	10	Csg. Size	(lbs)	Grade	Conn.	Collapse	Sr Durst	Tension	Tension
17.500	0'	1000'	13.375	48.0	H40	STC	1.68	3.78	6.71	11.27
12.250	0'	3453'	9.625	36.0	J55	LTC	1.13	1.96	2.48	3.09
12.250	3453'	4393'	9.625	40.0	J55	LTC	1.13	1.73	8.89	10.77
12.250	4393'	4915'	9.625	40.0	N80	LTC	1.21	2.25	35.31	43.88
8.750	0'	13350'	7.000	26.0	HCP110	LTC	1.19	1.51	2.00	2.39
6.125	12648'	17914'	4.500	13.5	P110	LTC	1.16	1.35	4.75	5.94
				DIMM	inimum Cafa	Tooton	1.125	1.0	1.6 Dry	1.6 Dry
				DLM MI	mmum Saiei	ety Factor 1.125	1.0	1.8 Wet	1.8 Wet	

				Y or N	
Is casing new? If used, attach certification as required in Onshore Order #1					
Is casing API approved? If no, attach casing specification sheet.					
Is premium or uncommon casing planned? If yes a	attach casing specificat	ion sheet.		N	
Does the above casing design meet or exceed BLM	A's minimum standard	s? If not provide	justification (loading assumptions, casing design criteria).	Y	
Will the pipe be kept at a minimum 1/3 fluid filled t	to avoid approaching t	he callance press	ure rating of the casing?	Y	
This the pipe be kept at a minimum 1/3 had med to	o uvota approacining t	не сонарзе ргеза	the family of the casing.		
Is well located within Capitan Reef?				N	
If yes, does production casing cement tie back	a minimum of 50' abo	ve the Reef?			
Is well within the designated 4 string boundary.				N	
Is well located in SOPA but not in R-111-P?				N	
If yes, are the first 2 strings cemented to surface	e and 3 <sup>rd</sup> string cemen	t tied back 500':	into previous casing?		
Is well located in R-111-P and SOPA?				N	
If yes, are the first three strings cemented to su	rface?				
Is 2 <sup>nd</sup> string set 100' to 600' below the base of					
Is an open annulus used to satisfy R-111-Q? If yes					
Is an engineered weak point used to satisfy R-111-					
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 surfac	e?				
(For 2 string wells) If yes, is there a contingence	y casing if lost circulat	tion occurs?			
Is well located in critical Cave/Karst?				N	
If yes, are there three strings cemented to surfa	ce?				
Formation	Est. Top		Formation	Est. Top	
Rustler	925'		Delaware (Lamar)	4990'	
Salt Top	1280'		Bell Canyon	5030	
Salt Base	4750'		Cherry Canyon	6080'	
Yates			Manzanita Marker	6330'	
Seven Rivers			Basal Brushy Canyon		
Queen			Bone Spring	9130'	
Capitan			1st Bone Spring Sand	10060'	
Grayburg			2nd Bone Spring Sand	10650'	
San Andres			3rd Bone Spring Sand	11710'	
Glorieta			Abo		
Yeso			Wolfcamp	12180'	

SHL: 235' FSL & 1760' FEL (Sec 10) BHL: 330' FNL & 350' FEL (Sec 10)

**Casing Program** 

Hole Size	From	To	Can Sino	Weight	Grade	Conn.	SF	SF Burst	SF Jt	SF Body
noie Size	r rom	10	Csg. Size	(lbs)	Grade	Conn.	Collapse	Sr Durst	Tension	Tension
17.500	0'	1000'	13.375	48.0	H40	STC	1.68	3.78	6.71	11.27
12.250	0'	3453'	9.625	36.0	J55	LTC	1.13	1.96	2.48	3.09
12.250	3453'	4393'	9.625	40.0	J55	LTC	1.13	1.73	8.89	10.77
12.250	4393'	4915'	9.625	40.0	N80	LTC	1.21	2.25	35.31	43.88
8.750	0'	13350'	7.000	26.0	HCP110	LTC	1.19	1.51	2.00	2.39
6.125	12648'	17914'	4.500	13.5	P110	LTC	1.16	1.35	4.75	5.94
	•	•	•	BLM Minimum Safety		Tooton	1.125	1.0	1.6 Dry	1.6 Dry
						y ractor	1.125	1.0	1.8 Wet	1.8 Wet

				Y or N	
Is casing new? If used, attach certification as required in Onshore Order #1					
Is casing API approved? If no, attach casing specification sheet.					
Is premium or uncommon casing planned? If yes a	attach casing specificat	tion sheet.		N	
Does the above casing design meet or exceed BLM	M's minimum standard	s? If not provide	justification (loading assumptions, casing design criteria).	Y	
Will the pipe be kept at a minimum 1/3 fluid filled t	to avoid approaching t	he collance nress	sure rating of the casing?	Y	
The the pipe of kept at a minimum 1/3 had med to	o uvota approacining t	не сонарве ргеза	ore runing or the cusing.		
Is well located within Capitan Reef?				N	
If yes, does production casing cement tie back	a minimum of 50' abo	ve the Reef?			
Is well within the designated 4 string boundary.				N	
Is well located in SOPA but not in R-111-P?				N	
If yes, are the first 2 strings cemented to surface	e and 3 <sup>rd</sup> string cemen	t tied back 500'	into previous casing?		
Is well located in R-111-P and SOPA?				N	
If yes, are the first three strings cemented to su	rface?				
Is 2 <sup>nd</sup> string set 100' to 600' below the base of					
Is an open annulus used to satisfy R-111-Q? If yes					
Is an engineered weak point used to satisfy R-111-					
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 surfac	e?				
(For 2 string wells) If yes, is there a contingence	y casing if lost circula	tion occurs?			
	<u>,                                     </u>				
Is well located in critical Cave/Karst?				N	
If yes, are there three strings cemented to surfa	ce?				
Formation	Est. Top		Formation	Est. Top	
Rustler	925'		Delaware (Lamar)	4990'	
Salt Top	1280'		Bell Canyon	5030	
Salt Base	4750'		Cherry Canyon	6080'	
Yates			Manzanita Marker	6330'	
Seven Rivers			Basal Brushy Canyon		
Queen			Bone Spring	9130'	
Capitan			1st Bone Spring Sand	10060'	
Grayburg			2nd Bone Spring Sand	10650'	
San Andres			3rd Bone Spring Sand	11710'	
Glorieta			Abo		
Yeso			Wolfcamp	12180'	

SHL: 235' FSL & 1760' FEL (Sec 10) BHL: 330' FNL & 350' FEL (Sec 10)

**Casing Program** 

Hole Size	From	To	Csg. Size	Weight	Grade	Conn.	SF	SF Burst	SF Jt	SF Body
Hole Size	rrom	10	Csg. Size	(lbs)	Grade	Conn.	Collapse	or burst	Tension	Tension
17.500	0'	1000'	13.375	48.0	H40	STC	1.68	3.78	6.71	11.27
12.250	0'	3453'	9.625	36.0	J55	LTC	1.13	1.96	2.48	3.09
12.250	3453'	4393'	9.625	40.0	J55	LTC	1.13	1.73	8.89	10.77
12.250	4393'	4915'	9.625	40.0	N80	LTC	1.21	2.25	35.31	43.88
8.750	0'	13350'	7.000	26.0	HCP110	LTC	1.19	1.51	2.00	2.39
6.125	12648'	17914'	4.500	13.5	P110	LTC	1.16	1.35	4.75	5.94
				DIMM" : 6.64		Tooton	E 4 1125	10	1.6 Dry	1.6 Dry
				BLW Wilnim	BLM Minimum Safety	y Factor 1.1	1.125	1.0	1.8 Wet	1.8 Wet

				Y or N	
Is casing new? If used, attach certification as required in Onshore Order #1					
Is casing API approved? If no, attach casing specification sheet.					
Is premium or uncommon casing planned? If yes a	nttach casing specific	ation sheet.		N	
Does the above casing design meet or exceed BLM's minimum standards? If not provide justification (loading assumptions, casing design criteria).					
Will the pipe be kept at a minimum 1/3 fluid filled t	to avoid approaching	the collapse pres	sure rating of the casing?	Y	
Leavell Leave desired in Contract Day (D				.,	
Is well located within Capitan Reef?				N	
If yes, does production casing cement tie back		ove the Reef?			
Is well within the designated 4 string boundary.				N	
Is well located in SOPA but not in R-111-P?				N	
If yes, are the first 2 strings cemented to surfac	e and 3 <sup>rd</sup> string ceme	nt tied back 500'	into previous casing?		
11 yes, are the first 2 strings comenced to started	e und 5 Burng come	in the buck 500	mo previous easing.		
Is well located in R-111-P and SOPA?					
If yes, are the first three strings cemented to su	rface?				
Is 2 <sup>nd</sup> string set 100' to 600' below the base of	salt?				
Is an open annulus used to satisfy R-111-Q? If yes	s, 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 surfac	e?				
(For 2 string wells) If yes, is there a contingence	y casing if lost circul	ation occurs?			
Is well located in critical Cave/Karst?				N	
If yes, are there three strings cemented to surfa-	ce?				
Formation	Est. Top		Formation	Est. Top	
Rustler	925'		Delaware (Lamar)	4990'	
Salt Top	1280'		Bell Canyon	5030	
Salt Base	4750'		Cherry Canyon	6080'	
Yates			Manzanita Marker	6330'	
Seven Rivers			Basal Brushy Canyon		
Queen			Bone Spring	9130'	
Capitan			1st Bone Spring Sand	10060'	
Grayburg			2nd Bone Spring Sand	10650'	
San Andres			3rd Bone Spring Sand	11710'	
Glorieta			Abo	12100	
Yeso			Wolfcamp	12180'	

SHL: 235' FSL & 1760' FEL (Sec 10) BHL: 330' FNL & 350' FEL (Sec 10)

**Casing Program** 

Hole Size	From	To	Csg. Size	Weight	Grade Conn.	SF	SF Burst	SF Jt	SF Body	
noie Size	r rom	10	Csg. Size	(lbs) Grade		Conn.		Collapse	Tension	Tension
17.500	0'	1000'	13.375	48.0	H40	STC	1.68	3.78	6.71	11.27
12.250	0'	3453'	9.625	36.0	J55	LTC	1.13	1.96	2.48	3.09
12.250	3453'	4393'	9.625	40.0	J55	LTC	1.13	1.73	8.89	10.77
12.250	4393'	4915'	9.625	40.0	N80	LTC	1.21	2.25	35.31	43.88
8.750	0'	13350'	7.000	26.0	HCP110	LTC	1.19	1.51	2.00	2.39
6.125	12648'	17914'	4.500	13.5	P110	LTC	1.16	1.35	4.75	5.94
	•	•		BLM Minimum Safet		· 4 E 4	1.125	1.0	1.6 Dry	1.6 Dry
				DLWI WII	mmum Salet	y ractor	1.125	1.0	1.8 Wet	1.8 Wet

				Y or N	
Is casing new? If used, attach certification as required in Onshore Order #1					
Is casing API approved? If no, attach casing specification sheet.					
Is premium or uncommon casing planned? If yes a	attach casing specific	ation sheet.		N	
Does the above casing design meet or exceed BLM's minimum standards? If not provide justification (loading assumptions, casing design criteria).					
Will the pipe be kept at a minimum 1/3 fluid filled t	to avoid approaching	the collapse pres	sure rating of the casing?	Y	
V 11 - 1 - 11 - 0 - 1 - 2 - 2					
Is well located within Capitan Reef?				N	
If yes, does production casing cement tie back		ove the Reef?			
Is well within the designated 4 string boundary.				N	
Is well located in SOPA but not in R-111-P?				N	
If yes, are the first 2 strings cemented to surface	1 2 rd	11 1 5002	.,		
If yes, are the first 2 strings cemented to surface	e and 3 string ceme	nt tied back 500	into previous casing?		
Is well located in R-111-P and SOPA?					
If yes, are the first three strings cemented to su	rface?				
Is 2 <sup>nd</sup> string set 100' to 600' below the base of	`salt?				
Is an open annulus used to satisfy R-111-Q? If yes					
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	e?				
(For 2 string wells) If yes, is there a contingence	y casing if lost circul	ation occurs?			
I III				•	
Is well located in critical Cave/Karst?				N	
If yes, are there three strings cemented to surfa		_	_		
Formation	Est. Top		Formation	Est. Top	
Rustler	925'		Delaware (Lamar)	4990'	
Salt Top	1280'		Bell Canyon	5030	
Salt Base	4750'		Cherry Canyon	6080'	
Yates			Manzanita Marker	6330'	
Seven Rivers			Basal Brushy Canyon		
Queen			Bone Spring	9130'	
Capitan			1st Bone Spring Sand	10060'	
Grayburg			2nd Bone Spring Sand	10650'	
San Andres			3rd Bone Spring Sand	11710'	
Glorieta			Abo Wolfcamp	12180'	
Yeso	l		woncamp	12180	

SHL: 235' FSL & 1760' FEL (Sec 10) BHL: 330' FNL & 350' FEL (Sec 10)

**Casing Program** 

Hole Size	From	To	Can Sino	Weight	Grade	Conn.	SF	SF Burst	SF Jt	SF Body
noie Size	r rom	10	Csg. Size	(lbs)	Grade	Conn.	Collapse	Sr Durst	Tension	Tension
17.500	0'	1000'	13.375	48.0	H40	STC	1.68	3.78	6.71	11.27
12.250	0'	3453'	9.625	36.0	J55	LTC	1.13	1.96	2.48	3.09
12.250	3453'	4393'	9.625	40.0	J55	LTC	1.13	1.73	8.89	10.77
12.250	4393'	4915'	9.625	40.0	N80	LTC	1.21	2.25	35.31	43.88
8.750	0'	13350'	7.000	26.0	HCP110	LTC	1.19	1.51	2.00	2.39
6.125	12648'	17914'	4.500	13.5	P110	LTC	1.16	1.35	4.75	5.94
	•	•	•	BLM Minimum Safety		r. Eastan	1.125	1.0	1.6 Dry	1.6 Dry
						y ractor	1.125	1.0	1.8 Wet	1.8 Wet

			Y or N
Is casing new? If used, attach certification as requ	irad in Onchora Order #1		Y
<u> </u>			Y
Is casing API approved? If no, attach casing spec			_
Is premium or uncommon casing planned? If yes	attach casing specification sh	eet.	N
Does the above casing design meet or exceed BLI	M's minimum standards? If n	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 coll	lapse 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 within the designated 1 string obtaining			
Is well located in SOPA but not in R-111-P?			N
If yes, are the first 2 strings cemented to surface	e and 3 <sup>rd</sup> string cement tied b	back 500' into previous casing?	
Is well located in R-111-P and SOPA?			N
If yes, are the first three strings cemented to su	rface?		
Is 2 <sup>nd</sup> string set 100' to 600' below the base of			
Is an open annulus used to satisfy R-111-Q? If ye			
Is an engineered weak point used to satisfy R-111	-O?		
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	e?		
(For 2 string wells) If yes, is there a contingend	y casing if lost circulation oc	ceurs?	
Is well located in critical Cave/Karst?			N
If yes, are there three strings cemented to surfa	ce?		
Formation	Est. Top	Formation	Est. Top
Rustler	925'	Delaware (Lamar)	4990'
Salt Top	1280'	Bell Canyon	5030
Salt Base	4750'	Cherry Canyon	6080'
Yates		Manzanita Marker	6330'
Seven Rivers		Basal Brushy Canyon	
Queen		Bone Spring	9130'
Capitan		1st Bone Spring Sand	10060'
Grayburg		2nd Bone Spring Sand	10650'
San Andres		3rd Bone Spring Sand	11710'
Glorieta		Abo	12100
Yeso		Wolfcamp	12180'

## **Mewbourne Oil Company**

Lea County, New Mexico NAD 83 Salado Draw 10 W2PA Fed Com #1H

Sec 10, T26S, R33E

SHL: 235' FSL & 1760' FEL (Sec 10) BHL: 330' FNL & 350' FEL (Sec 10)

Plan: Design #1

## **Standard Planning Report**

05 January, 2023

Database: Hobbs

Company: Mewbe

Mewbourne Oil Company Lea County, New Mexico NAD 83

Project: Lea County, New Mexico NAD 83
Site: Salado Draw 10 W2PA Fed Com #1H

Well: Sec 10, T26S, R33E

**Wellbore:** BHL: 330' FNL & 350' FEL (Sec 10)

Design: Design #1

Local Co-ordinate Reference:

TVD Reference:
MD Reference:
North Reference:

Survey Calculation Method:

Site Salado Draw 10 W2PA Fed Com #1H WELL @ 3347.0usft (Original Well Elev) WELL @ 3347.0usft (Original Well Elev)

Grid

Minimum Curvature

Project Lea County, New Mexico NAD 83

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

System Datum:

Mean Sea Level

Site Salado Draw 10 W2PA Fed Com #1H

 Site Position:
 Northing:
 383,293.00 usft
 Latitude:
 32.0513772

 From:
 Map
 Easting:
 781,757.90 usft
 Longitude:
 -103.5573312

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

Well Sec 10, T26S, R33E

 Well Position
 +N/-S
 0.0 usft
 Northing:
 383,293.00 usft
 Latitude:
 32.0513772

 +E/-W
 0.0 usft
 Easting:
 781,757.90 usft
 Longitude:
 -103.5573312

Position Uncertainty0.0 usftWellhead Elevation:3,347.0 usftGround Level:3,319.0 usft

Grid Convergence: 0.41 °

Wellbore BHL: 330' FNL & 350' FEL (Sec 10)

 Magnetics
 Model Name
 Sample Date (°)
 Declination (°)
 Dip Angle (°)
 Field Strength (nT)

 IGRF2010
 12/31/2014
 7.13
 59.94
 48,160.43069044

Design #1

**Audit Notes:** 

Version:Phase:PROTOTYPETie On Depth:0.0

 Vertical Section:
 Depth From (TVD) (usft)
 +N/-S (usft)
 +E/-W (usft)
 Direction (°)

 0.0
 0.0
 0.0
 16.24

Plan Survey Tool Program Date 1/5/2023

Depth From Depth To

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

1 0.0 17,914.3 Design #1 (BHL: 330' FNL & 350'

an 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	
5,100.0	0.00	0.00	5,100.0	0.0	0.0	0.00	0.00	0.00	0.00	
5,692.1	11.84	98.74	5,687.9	-9.3	60.3	2.00	2.00	0.00	98.74	
12,055.7	11.84	98.74	11,916.1	-207.6	1,351.1	0.00	0.00	0.00	0.00	
12,647.9	0.00	0.00	12,504.0	-216.9	1,411.3	2.00	-2.00	0.00	180.00	KOP: 10' FSL & 350'
13,547.9	90.00	359.58	13,077.0	356.1	1,407.1	10.00	10.00	0.00	-0.42	
17,914.3	90.00	359.58	13,077.0	4,722.3	1,375.1	0.00	0.00	0.00	0.00	BHL: 330' FNL & 350'

Database: Hobbs

Company: Mewbourne Oil Company
Project: Lea County, New Mexico NAD 83
Site: Salado Draw 10 W2PA Fed Com #1H

Site: Salado Draw 10 W2P
Well: Sec 10, T26S, R33E

**Wellbore:** BHL: 330' FNL & 350' FEL (Sec 10)

Design: Design #1

Local Co-ordinate Reference:

TVD Reference:
MD Reference:
North Reference:

**Survey Calculation Method:** 

Site Salado Draw 10 W2PA Fed Com #1H WELL @ 3347.0usft (Original Well Elev) WELL @ 3347.0usft (Original Well Elev)

Grid

d Survey									
Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)
0.0	0.00	0.00	0.0	0.0	0.0	0.0	0.00	0.00	0.00
SHL: 235' F	SL & 1760' FEL (	Sec 10)							
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
0.008	0.00	0.00	0.008	0.0	0.0	0.0	0.00	0.00	0.00
900.0	0.00	0.00	900.0	0.0	0.0	0.0	0.00	0.00	0.00
1,000.0	0.00	0.00	1,000.0	0.0	0.0	0.0	0.00	0.00	0.00
1,100.0	0.00	0.00	1,100.0	0.0	0.0	0.0	0.00	0.00	0.00
1,200.0	0.00	0.00	1,200.0	0.0	0.0	0.0	0.00	0.00	0.00
1,300.0	0.00	0.00	1,300.0	0.0	0.0	0.0	0.00	0.00	0.00
1,400.0	0.00	0.00	1,400.0	0.0	0.0	0.0	0.00	0.00	0.00
1,500.0	0.00	0.00	1,500.0	0.0	0.0	0.0	0.00	0.00	0.00
1,600.0	0.00	0.00	1,600.0	0.0	0.0	0.0	0.00	0.00	0.00
1,700.0	0.00	0.00	1,700.0	0.0	0.0	0.0	0.00	0.00	0.00
1,800.0	0.00	0.00	1,800.0	0.0	0.0	0.0	0.00	0.00	0.00
1,900.0	0.00	0.00	1,900.0	0.0	0.0	0.0	0.00	0.00	0.00
2,000.0	0.00	0.00	2,000.0	0.0	0.0	0.0	0.00	0.00	0.00
2,100.0	0.00	0.00	2,100.0	0.0	0.0	0.0	0.00	0.00	0.00
2,200.0	0.00	0.00	2,200.0	0.0	0.0	0.0	0.00	0.00	0.00
2,300.0	0.00	0.00	2,300.0	0.0	0.0	0.0	0.00	0.00	0.00
2,400.0	0.00	0.00	2,400.0	0.0	0.0	0.0	0.00	0.00	0.00
2,500.0	0.00	0.00	2,500.0	0.0	0.0	0.0	0.00	0.00	0.00
2,600.0	0.00	0.00	2,600.0	0.0	0.0	0.0	0.00	0.00	0.00
2,700.0	0.00	0.00	2,700.0	0.0	0.0	0.0	0.00	0.00	0.00
2,800.0	0.00	0.00	2,800.0	0.0	0.0	0.0	0.00	0.00	0.00
2,900.0	0.00	0.00	2,900.0	0.0	0.0	0.0	0.00	0.00	0.00
3,000.0	0.00	0.00	3,000.0	0.0	0.0	0.0	0.00	0.00	0.00
3,100.0	0.00	0.00	3,100.0	0.0	0.0	0.0	0.00	0.00	0.00
3,200.0	0.00	0.00	3,200.0	0.0	0.0	0.0	0.00	0.00	0.00
3,300.0	0.00	0.00	3,300.0	0.0	0.0	0.0	0.00	0.00	0.00
3,400.0	0.00	0.00	3,400.0	0.0	0.0	0.0	0.00	0.00	0.00
3,500.0	0.00	0.00	3,500.0	0.0	0.0	0.0	0.00	0.00	0.00
3,600.0	0.00	0.00	3,600.0	0.0	0.0	0.0	0.00	0.00	0.00
3,700.0	0.00	0.00	3,700.0	0.0	0.0	0.0	0.00	0.00	0.00
3,800.0	0.00	0.00	3,800.0	0.0	0.0	0.0	0.00	0.00	0.00
3,900.0	0.00	0.00	3,900.0	0.0	0.0	0.0	0.00	0.00	0.00
4,000.0	0.00	0.00	4,000.0	0.0	0.0	0.0	0.00	0.00	0.00
4,100.0	0.00	0.00	4,100.0	0.0	0.0	0.0	0.00	0.00	0.00
4,200.0	0.00	0.00	4,200.0	0.0	0.0	0.0	0.00	0.00	0.00
4,300.0	0.00	0.00	4,300.0	0.0	0.0	0.0	0.00	0.00	0.00
4,400.0	0.00	0.00	4,400.0	0.0	0.0	0.0	0.00	0.00	0.00
4,500.0	0.00	0.00	4,500.0	0.0	0.0	0.0	0.00	0.00	0.00
4,600.0	0.00	0.00	4,600.0	0.0	0.0	0.0	0.00	0.00	0.00
4,700.0	0.00	0.00	4,700.0	0.0	0.0	0.0	0.00	0.00	0.00
4,800.0	0.00	0.00	4,800.0	0.0	0.0	0.0	0.00	0.00	0.00
4,900.0	0.00	0.00	4,900.0	0.0	0.0	0.0	0.00	0.00	0.00
5,000.0	0.00	0.00	5,000.0	0.0	0.0	0.0	0.00	0.00	0.00
5,100.0	0.00 2.00	0.00 98.74	5,100.0 5,200.0	0.0 -0.3	0.0 1.7	0.0 0.2	0.00 2.00	0.00 2.00	0.00 0.00

Database: Hobbs

Company: Mewbourne Oil Company
Project: Lea County, New Mexico NAD 83

Site: Salado Draw 10 W2PA Fed Com #1H

**Well:** Sec 10, T26S, R33E

**Wellbore:** BHL: 330' FNL & 350' FEL (Sec 10)

Design: Design #1

Local Co-ordinate Reference:

TVD Reference: MD Reference: North Reference:

Survey Calculation Method:

Site Salado Draw 10 W2PA Fed Com #1H WELL @ 3347.0usft (Original Well Elev) WELL @ 3347.0usft (Original Well Elev)

Grid

anned Survey									
Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)
5,300.0	4.00	98.74	5,299.8	-1.1	6.9	0.9	2.00	2.00	0.00
5,400.0	6.00	98.74	5,399.5	-2.4	15.5	2.0	2.00	2.00	0.00
5,500.0	8.00	98.74	5,498.7	-4.2	27.6	3.6	2.00	2.00	0.00
5,600.0	10.00	98.74	5,597.5	-6.6	43.0	5.7	2.00	2.00	0.00
5,692.1	11.84	98.74	5,687.9	-9.3	60.3	8.0	2.00	2.00	0.00
5,700.0	11.84	98.74	5,695.6	-9.5	61.9	8.2	0.00	0.00	0.00
5,800.0	11.84	98.74	5,793.5	-12.6	82.1	10.8	0.00	0.00	0.00
5,900.0	11.84	98.74	5,891.4	-15.7	102.4	13.5	0.00	0.00	0.00
6,000.0	11.84	98.74	5,989.2	-18.9	122.7	16.2	0.00	0.00	0.00
6,100.0	11.84	98.74	6,087.1	-22.0	143.0	18.9	0.00	0.00	0.00
6,200.0	11.84	98.74	6,185.0	-25.1	163.3	21.6	0.00	0.00	0.00
6,300.0	11.84	98.74	6,282.9	-28.2	183.6	24.2	0.00	0.00	0.00
6,400.0	11.84	98.74	6,380.7	-31.3	203.9	26.9	0.00	0.00	0.00
6,500.0	11.84	98.74	6,478.6	-34.4	224.1	29.6	0.00	0.00	0.00
6,600.0	11.84	98.74	6,576.5	-37.6	244.4	32.3	0.00	0.00	0.00
6,700.0	11.84	98.74	6,674.3	-40.7	264.7	34.9	0.00	0.00	0.00
6,800.0	11.84	98.74	6,772.2	-43.8	285.0	37.6	0.00	0.00	0.00
6,900.0	11.84	98.74	6,870.1	-46.9	305.3	40.3	0.00	0.00	0.00
7,000.0	11.84	98.74	6,968.0	-50.0	325.6	43.0	0.00	0.00	0.00
7,100.0	11.84	98.74	7,065.8	-53.1	345.8	45.7	0.00	0.00	0.00
7,200.0	11.84	98.74	7,163.7	-56.3	366.1	48.3	0.00	0.00	0.00
7,300.0	11.84	98.74	7,261.6	-59.4	386.4	51.0	0.00	0.00	0.00
7,400.0	11.84	98.74	7,359.4	-62.5	406.7	53.7	0.00	0.00	0.00
7,500.0	11.84	98.74	7,457.3	-65.6	427.0	56.4	0.00	0.00	0.00
7,600.0	11.84	98.74	7,555.2	-68.7	447.3	59.1	0.00	0.00	0.00
7,700.0	11.84	98.74	7,653.1	-71.9	467.5	61.7	0.00	0.00	0.00
7,800.0	11.84	98.74	7,750.9	-75.0	487.8	64.4	0.00	0.00	0.00
7,900.0	11.84	98.74	7,848.8	-78.1	508.1	67.1	0.00	0.00	0.00
8,000.0	11.84	98.74	7,946.7	-70.1 -81.2	528.4	69.8	0.00	0.00	0.00
8,100.0	11.84	98.74	8,044.5	-84.3	548.7	72.4	0.00	0.00	0.00
8,200.0	11.84	98.74	8,142.4	-87.4	569.0	75.1	0.00	0.00	0.00
8,300.0	11.84	98.74	8,240.3	-90.6	589.2	77.8	0.00	0.00	0.00
0.400.0	44.04	00.74	0.000.0	00.7	C00 F	00.5	0.00	0.00	0.00
8,400.0 8,500.0	11.84 11.84	98.74 98.74	8,338.2 8,436.0	-93.7 -96.8	609.5 629.8	80.5 83.2	0.00 0.00	0.00 0.00	0.00 0.00
	11.84 11.84				629.8 650.1			0.00	
8,600.0 8,700.0	11.84	98.74 98.74	8,533.9 8,631.8	-99.9 -103.0	670.4	85.8 88.5	0.00 0.00	0.00	0.00 0.00
8,700.0 8,800.0	11.84	98.74 98.74	8,631.8 8,729.6	-103.0 -106.1	670.4 690.7	88.5 91.2	0.00	0.00	0.00
8,900.0	11.84	98.74	8,827.5	-109.3	711.0	93.9	0.00	0.00	0.00
9,000.0	11.84	98.74	8,925.4	-112.4	731.2	96.5	0.00	0.00	0.00
9,100.0	11.84	98.74	9,023.3	-115.5	751.5	99.2	0.00	0.00	0.00
9,200.0	11.84	98.74	9,121.1	-118.6	771.8	101.9	0.00	0.00	0.00
9,300.0	11.84	98.74	9,219.0	-121.7	792.1	104.6	0.00	0.00	0.00
9,400.0	11.84	98.74	9,316.9	-124.8	812.4	107.3	0.00	0.00	0.00
9,500.0	11.84	98.74	9,414.7	-128.0	832.7	109.9	0.00	0.00	0.00
9,600.0	11.84	98.74	9,512.6	-131.1	852.9	112.6	0.00	0.00	0.00
9,700.0	11.84	98.74	9,610.5	-134.2	873.2	115.3	0.00	0.00	0.00
9,800.0	11.84	98.74	9,708.4	-137.3	893.5	118.0	0.00	0.00	0.00
9,900.0	11.84	98.74	9,806.2	-140.4	913.8	120.6	0.00	0.00	0.00
10,000.0	11.84	98.74	9,904.1	-143.6	934.1	123.3	0.00	0.00	0.00
10,100.0	11.84	98.74	10,002.0	-146.7	954.4	126.0	0.00	0.00	0.00
10,200.0	11.84	98.74	10,099.8	-149.8	974.6	128.7	0.00	0.00	0.00
10,300.0	11.84	98.74	10,197.7	-152.9	994.9	131.4	0.00	0.00	0.00
10,400.0 10,500.0	11.84 11.84	98.74 98.74	10,295.6 10,393.5	-156.0 -159.1	1,015.2 1,035.5	134.0 136.7	0.00 0.00	0.00 0.00	0.00 0.00

Hobbs Database:

Company: Mewbourne Oil Company Lea County, New Mexico NAD 83 Project:

Salado Draw 10 W2PA Fed Com #1H Site:

Well: Sec 10, T26S, R33E

Wellbore: BHL: 330' FNL & 350' FEL (Sec 10)

Design: Design #1 Local Co-ordinate Reference:

TVD Reference: MD Reference: North Reference:

**Survey Calculation Method:** 

Site Salado Draw 10 W2PA Fed Com #1H WELL @ 3347.0usft (Original Well Elev) WELL @ 3347.0usft (Original Well Elev)

anned Survey									
Measured Depth	Inclination	Azimuth	Vertical Depth	+N/-S	+E/-W	Vertical Section	Dogleg Rate	Build Rate	Turn Rate
(usft)	(°)	(°)	(usft)	(usft)	(usft)	(usft)	(°/100usft)	(°/100usft)	(°/100usft)
10,600.0	11.84	98.74	10,491.3	-162.3	1,055.8	139.4	0.00	0.00	0.00
10,700.0		98.74	10,589.2	-165.4	1,076.1	142.1	0.00	0.00	0.00
10,800.0	11.84	98.74	10,687.1	-168.5	1,096.3	144.7	0.00	0.00	0.00
10,900.0	11.84	98.74	10,784.9	-171.6	1,116.6	147.4	0.00	0.00	0.00
11,000.0		98.74	10,882.8	-174.7	1,136.9	150.1	0.00	0.00	0.00
11,100.0		98.74	10,980.7	-177.8	1,157.2	152.8	0.00	0.00	0.00
11,200.0	11.84	98.74	11,078.6	-181.0	1,177.5	155.5	0.00	0.00	0.00
11,300.0	11.84	98.74	11,176.4	-184.1	1,197.8	158.1	0.00	0.00	0.00
11,400.0	11.84	98.74	11,274.3	-187.2	1,218.1	160.8	0.00	0.00	0.00
11,500.0		98.74	11,372.2	-190.3	1,238.3	163.5	0.00	0.00	0.00
11,600.0		98.74	11,470.0	-193.4	1,258.6	166.2	0.00	0.00	0.00
11,700.0	11.84	98.74	11,567.9	-196.5	1,278.9	168.9	0.00	0.00	0.00
11,800.0	11.84	98.74	11,665.8	-199.7	1,299.2	171.5	0.00	0.00	0.00
11,900.0	11.84	98.74	11,763.7	-202.8	1,319.5	174.2	0.00	0.00	0.00
12,000.0		98.74	11,861.5	-205.9	1,339.8	176.9	0.00	0.00	0.00
12,055.7		98.74	11,916.1	-207.6	1,351.1	178.4	0.00	0.00	0.00
12,100.0		98.74	11,959.5	-209.0	1,359.7	179.5	2.00	-2.00	0.00
12,200.0		98.74	12,058.0	-211.6	1,376.8	181.8	2.00	-2.00	0.00
12,300.0	6.96	98.74	12,157.0	-213.7	1,390.5	183.6	2.00	-2.00	0.00
12,400.0		98.74	12,157.0	-215.7 -215.3	1,400.7	184.9	2.00	-2.00	0.00
12,500.0		98.74	12,356.2	-216.3	1,407.6	185.8	2.00	-2.00	0.00
12,600.0		98.74	12,456.1	-216.8	1,410.9	186.3	2.00	-2.00	0.00
12,647.9		0.00	12,504.0	-216.9	1,411.3	186.3	2.00	-2.00	0.00
KOP: 10' F	SL & 350' FEL (Se	ec 10)							
12,650.0	0.21	359.58	12,506.1	-216.9	1,411.3	186.3	10.00	10.00	0.00
12,700.0		359.58	12,556.1	-214.5	1,411.3	188.6	10.00	10.00	0.00
12,750.0	10.21	359.58	12,605.6	-207.8	1,411.3	195.0	10.00	10.00	0.00
12,800.0	15.21	359.58	12,654.4	-196.8	1,411.2	205.6	10.00	10.00	0.00
12,850.0	20.21	359.58	12,702.0	-181.6	1,411.1	220.1	10.00	10.00	0.00
12,900.0	25.21	359.58	12,748.1	-162.3	1,410.9	238.6	10.00	10.00	0.00
12,950.0		359.58	12,792.3	-139.1	1,410.8	260.9	10.00	10.00	0.00
13,000.0	35.21	359.58	12,834.4	-112.1	1,410.6	286.8	10.00	10.00	0.00
13,050.0		359.58	12,873.9	-81.5	1,410.3	316.1	10.00	10.00	0.00
13,100.0	45.21	359.58	12,910.7	-47.6	1,410.1	348.6	10.00	10.00	0.00
13,150.0	50.21	359.58	12,944.3	-10.6	1,409.8	384.0	10.00	10.00	0.00
13,200.0		359.58	12,974.6	29.2	1,409.5	422.1	10.00	10.00	0.00
13,250.0		359.58	13,001.3	71.4	1,409.2	462.6	10.00	10.00	0.00
13,285.9	63.80	359.58	13,018.1	103.1	1,409.0	492.9	10.00	10.00	0.00
	FSL & 350' FEL (Se	,							
13,300.0	65.21	359.58	13,024.2	115.8	1,408.9	505.1	10.00	10.00	0.00
13,350.0	70.21	359.58	13,043.2	162.1	1,408.6	549.4	10.00	10.00	0.00
13,400.0	75.21	359.58	13,058.0	209.8	1,408.2	595.1	10.00	10.00	0.00
13,450.0	80.21	359.58	13,068.7	258.6	1,407.8	641.9	10.00	10.00	0.00
13,500.0		359.58	13,075.0	308.2	1,407.5	689.4	10.00	10.00	0.00
13,547.9		359.58	13,077.0	356.1	1,407.1	735.3	10.00	10.00	0.00
LP: 583' FS	SL & 350' FEL (See	c 10)							
13,600.0	90.00	359.58	13,077.0	408.2	1,406.7	785.2	0.00	0.00	0.00
13,700.0		359.58	13,077.0	508.2	1,406.0	881.0	0.00	0.00	0.00
13,800.0	90.00	359.58	13,077.0	608.2	1,405.3	976.8	0.00	0.00	0.00
13,900.0	90.00	359.58	13,077.0	708.2	1,404.5	1,072.6	0.00	0.00	0.00
14,000.0	90.00	359.58	13,077.0	808.2	1,403.8	1,168.4	0.00	0.00	0.00
14,100.0	90.00	359.58	13,077.0	908.1	1,403.1	1,264.2	0.00	0.00	0.00
14,200.0		359.58	13,077.0	1,008.1	1,402.3	1,360.0	0.00	0.00	0.00

Database: Hobbs

Company: Mewbourne Oil Company
Project: Lea County, New Mexico NAD 83

Site: Salado Draw 10 W2PA Fed Com #1H

Well: Sec 10, T26S, R33E
Wellbore: BHL: 330' FNL & 350' FEL (Sec 10)

Design: Design #1

Local Co-ordinate Reference:

TVD Reference: MD Reference: North Reference:

**Survey Calculation Method:** 

Site Salado Draw 10 W2PA Fed Com #1H WELL @ 3347.0usft (Original Well Elev) WELL @ 3347.0usft (Original Well Elev)

Grid

Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)
14,300.0	90.00	359.58	13,077.0	1,108.1	1,401.6	1,455.8	0.00	0.00	0.00
14,400.0	90.00	359.58	13,077.0	1,208.1	1,400.9	1,551.6	0.00	0.00	0.00
14,500.0	90.00	359.58	13,077.0	1,308.1	1,400.1	1,647.4	0.00	0.00	0.00
14,600.0	90.00	359.58	13,077.0	1,408.1	1,399.4	1,743.2	0.00	0.00	0.00
14,700.0	90.00	359.58	13,077.0	1,508.1	1,398.7	1,839.0	0.00	0.00	0.00
14,800.0	90.00	359.58	13,077.0	1,608.1	1,397.9	1,934.8	0.00	0.00	0.00
14,900.0	90.00	359.58	13,077.0	1,708.1	1,397.2	2,030.6	0.00	0.00	0.00
15,000.0	90.00	359.58	13,077.0	1,808.1	1,396.5	2,126.4	0.00	0.00	0.00
15,100.0	90.00	359.58	13,077.0	1,908.1	1,395.7	2,222.3	0.00	0.00	0.00
15,200.0	90.00	359.58	13,077.0	2,008.1	1,395.0	2,318.1	0.00	0.00	0.00
15,300.0	90.00	359.58	13,077.0	2,108.1	1,394.3	2,413.9	0.00	0.00	0.00
15,400.0	90.00	359.58	13,077.0	2,208.1	1,393.5	2,509.7	0.00	0.00	0.00
15,500.0	90.00	359.58	13,077.0	2,308.1	1,392.8	2,605.5	0.00	0.00	0.00
15,600.0	90.00	359.58	13,077.0	2,408.1	1,392.1	2,701.3	0.00	0.00	0.00
15,700.0	90.00	359.58	13,077.0	2,508.1	1,391.3	2,797.1	0.00	0.00	0.00
15,800.0	90.00	359.58	13,077.0	2,608.1	1,390.6	2,892.9	0.00	0.00	0.00
15,900.0	90.00	359.58	13,077.0	2,708.1	1,389.9	2,988.7	0.00	0.00	0.00
16,000.0	90.00	359.58	13,077.0	2,808.1	1,389.1	3,084.5	0.00	0.00	0.00
16,100.0	90.00	359.58	13,077.0	2,908.1	1,388.4	3,180.3	0.00	0.00	0.00
16,200.0	90.00	359.58	13,077.0	3,008.1	1,387.7	3,276.1	0.00	0.00	0.00
16,300.0	90.00	359.58	13,077.0	3,108.1	1,386.9	3,371.9	0.00	0.00	0.00
16,400.0	90.00	359.58	13,077.0	3,208.1	1,386.2	3,467.7	0.00	0.00	0.00
16,500.0	90.00	359.58	13,077.0	3,308.1	1,385.5	3,563.5	0.00	0.00	0.00
16,600.0	90.00	359.58	13,077.0	3,408.1	1,384.7	3,659.3	0.00	0.00	0.00
16,700.0	90.00	359.58	13,077.0	3,508.1	1,384.0	3,755.1	0.00	0.00	0.00
16,800.0	90.00	359.58	13,077.0	3,608.1	1,383.3	3,850.9	0.00	0.00	0.00
16,900.0	90.00	359.58	13,077.0	3,708.1	1,382.5	3,946.7	0.00	0.00	0.00
17,000.0	90.00	359.58	13,077.0	3,808.1	1,381.8	4,042.5	0.00	0.00	0.00
17,100.0	90.00	359.58	13,077.0	3,908.1	1,381.1	4,138.3	0.00	0.00	0.00
17,200.0	90.00	359.58	13,077.0	4,008.1	1,380.3	4,234.1	0.00	0.00	0.00
17,300.0	90.00	359.58	13,077.0	4,108.1	1,379.6	4,330.0	0.00	0.00	0.00
17,400.0	90.00	359.58	13,077.0	4,208.1	1,378.9	4,425.8	0.00	0.00	0.00
17,500.0	90.00	359.58	13,077.0	4,308.1	1,378.1	4,521.6	0.00	0.00	0.00
17,600.0	90.00	359.58	13,077.0	4,408.1	1,377.4	4,617.4	0.00	0.00	0.00
17,700.0	90.00	359.58	13,077.0	4,508.1	1,376.7	4,713.2	0.00	0.00	0.00
17,800.0	90.00	359.58	13,077.0	4,608.0	1,375.9	4,809.0	0.00	0.00	0.00
17,900.0 17,914.3	90.00 90.00	359.58 359.58	13,077.0 13,077.0	4,708.0 4,722.3	1,375.2 1,375.1	4,904.8 4,918.4	0.00 0.00	0.00 0.00	0.00 0.00

Database: Hobbs

Company: Mewbourne Oil Company

Project: Lea County, New Mexico NAD 83
Site: Salado Draw 10 W2PA Fed Com #1H

Well: Sec 10, T26S, R33E

**Wellbore:** BHL: 330' FNL & 350' FEL (Sec 10)

Design: Design #1

Local Co-ordinate Reference:

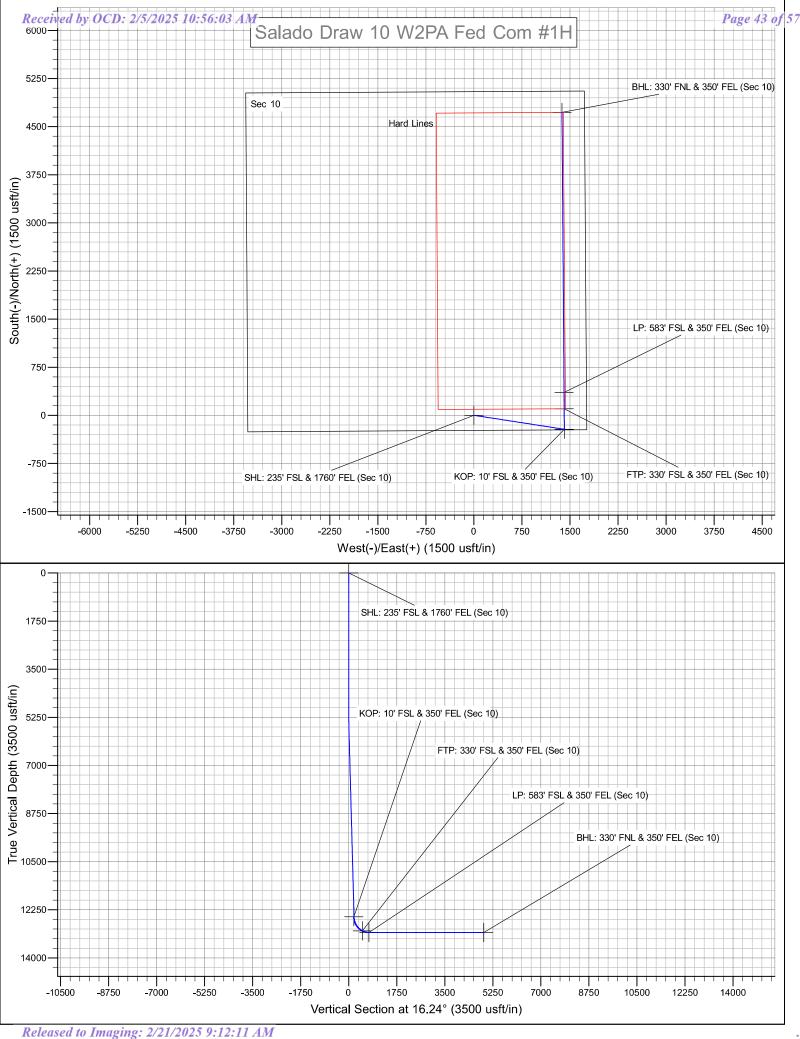
TVD Reference:
MD Reference:
North Reference:

Survey Calculation Method:

Site Salado Draw 10 W2PA Fed Com #1H WELL @ 3347.0usft (Original Well Elev) WELL @ 3347.0usft (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: 235' FSL & 1760' - plan hits target c - Point		0.00	0.0	0.0	0.0	383,293.00	781,757.90	32.0513772	-103.5573312
KOP: 10' FSL & 350' F - plan hits target c - Point		0.00	12,504.0	-216.9	1,411.3	383,076.10	783,169.23	32.0507530	-103.5527813
FTP: 330' FSL & 350' F - plan hits target c - Point		0.00	13,018.1	103.1	1,409.0	383,396.10	783,166.88	32.0516326	-103.5527814
BHL: 330' FNL & 350' - plan hits target c - Point		0.00	13,077.0	4,722.3	1,375.1	388,015.30	783,133.00	32.0643302	-103.5527829
LP: 583' FSL & 350' FB - plan hits target c - Point		0.00	13,077.0	356.1	1,407.1	383,649.09	783,165.02	32.0523281	-103.5527815



### Mewbourne Oil Company, Salado Draw 10 W2PA Fed Com #1H Sec 10, T26S, R33E

SHL: 235' FSL & 1760' FEL (Sec 10) BHL: 330' FNL & 350' FEL (Sec 10)

Γ	Operator Name:	Property Name:	Well Number
L	Operator Name:	Property Name:	well Number
	Mewbourne Oil Company	Salado Draw 10 W2PA Fed Com	#1H

### Kick Off Point (KOP)

UL	Section	Township	Range	Lot	Feet	From N/S	Feet	From E/W	County
SESE	10	26S	33E	-	10'	FSL	350'	FEL	Lea
		Latitude				Long	itude		NAD
32.050753					-103.552781	13			83

### First Take Point (FTP)

UL	Section	Township	Range	Lot	Feet	From N/S	Feet	From E/W	County
SESE	10	26S	33E	-	330'	FSL	350'	FEL	Lea
		Latitude				Long	itude		NAD
32.0516326					-103.552781	4			83

### Last Take Point (LTP)

API#

Is this well the defining well for the Horizontal Spacing Unit?

Mewbourne Oil Company

UL	Section	Township	Range	Lot	Feet	From N/S	Feet	From E/W	County
NENE	10	26S	33E	-	330'	FNL	350'	FEL	Lea
		Latitude				Long	itude		NAD
32.0643301					-103.552783	30			83

Is this well an infill well?	Y		
If infill is yes please provide	e API if available, Operator	Name and well number for	Defining well for Horizonta

If infill is yes please provide AP1 if available, Operator Name and well number for Defining well for Horizontal Spacing Unit.

Operator Name:	Property Name:	Well
		Number

Salado Draw 10 W0PA Fed Com

3H

## PECOS DISTRICT DRILLING CONDITIONS OF APPROVAL

OPERATOR'S NAME: | MEWBOURNE OIL COMPANY

WELL NAME & NO.: | SALADO DRAW 10 W2PA FED COM 1H

SURFACE HOLE FOOTAGE: 235'/S & 1760'/E BOTTOM HOLE FOOTAGE 330'/N & 350'/E

SURFACE LOCATION: | Section 10, T.26 S., R.33 E. NMP.

COUNTY: Lea County, New Mexico

### COA

$H_2S$	© Yes	□ No	
Potash	None	Secretary	C R-111-P
Cave/Karst Potential	C Low	• Medium	<sup>©</sup> High
Cave/Karst Potential	Critical		
Variance	© None	Flex Hose	Other Other
Wellhead	Conventional	• Multibowl	<sup>©</sup> Both
Other	4 String	Capitan Reef	■ WIPP
Other	Fluid Filled	Pilot Hole	Open Annulus
Special Requirements	Water Disposal	<b>☑</b> COM	Unit

### A. HYDROGEN SULFIDE

A Hydrogen Sulfide (H<sub>2</sub>S) Drilling Plan shall be activated **AT SPUD**. As a result, the Hydrogen Sulfide area must meet **title 43 CFR 3176** requirements, which includes equipment and personnel/public protection items. If Hydrogen Sulfide is encountered, please provide measured values and formations to the BLM.

### B. CASING DESIGN

- 1. The 13-3/8 inch surface casing shall be set at approximately 1000 ft. (a minimum of 25 feet (Lea County) into the Rustler Anhydrite and above the salt) and cemented to the surface. If salt is encountered, set casing at least 25 ft. above the salt.
  - a. If cement does not circulate to the surface, the appropriate BLM office shall be notified and a temperature survey utilizing an electronic type temperature survey with surface log readout will be used or a cement bond log shall be run to verify the top of the cement. Temperature survey will be run a minimum of six hours after pumping cement and ideally between 8-10 hours after completing the cement job.
  - b. Wait on cement (WOC) time for a primary cement job will be a minimum of **8** hours or **500** psi compressive strength, whichever is greater. (This is to include the lead cement)
  - c. Wait on cement (WOC) time for a remedial job will be a minimum of 4 hours

- after bringing cement to surface or 500 psi compressive strength, whichever is greater.
- d. If cement falls back, remedial cementing will be done prior to drilling out that string.
- 2. The 9-5/8 inch intermediate casing shall be set at approximately 4,915 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. Wait on cement (WOC) time for a primary cement job is to include the lead cement slurry due to cave/karst.
  - ❖ In Medium <u>Cave/Karst Areas</u> if cement does not circulate to surface on the first two casing strings, the cement on the 3<sup>rd</sup> casing string must come to surface.

**Note:** Excess cement for the intermediate casing is below CFO's recommendation of 25%. More cement might be needed.

**Note:** Intermediate casing must be kept fluid filled to meet BLM minimum collapse requirement.

3. Operator proposed to set 7 in. production casing at approximately 13,350 ft. The minimum required fill of cement behind the 7 in. production casing is:

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

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

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

### 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 to use a **multi-bowl wellhead** assembly. The assembly will be tested once installed. Minimum working pressure of the blowout preventer (BOP) and related equipment (BOPE) required for drilling **below the surface casing** shoe shall be **10,000 (10M)** psi. **Variance is approved to use a 5,000-psi annular preventer with 10,000 psi BOP stacks.** Before drilling out the intermediate casing shoe, the BOP/BOPE and annular preventer shall be pressure-tested in accordance with **title 43 CFR 3172** and **API Standard 53**.
  - a. Wellhead shall be installed by manufacturer's representatives, submit documentation with subsequent sundry.
  - b. If the welding is performed by a third party, the manufacturer's representative shall monitor the temperature to verify that it does not exceed the maximum temperature of the seal.
  - c. Manufacturer representative shall install the test plug for the initial BOP test.
  - d. If the cement does not circulate and one-inch operations would have been possible with a standard wellhead, the well head shall be cut off, cementing operations performed and another wellhead installed.
  - e. Whenever any seal subject to test pressure is broken, all the tests in the title 43 CFR 3172.6(b)(9) must be followed.

### D. SPECIAL REQUIREMENT (S)

### **Communitization Agreement**

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

### **GENERAL REQUIREMENTS**

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

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

**EMAIL** or call the Carlsbad Field Office, 620 East Greene St., Carlsbad, NM 88220,

**BLM\_NM\_CFO\_DrillingNotifications@BLM.GOV** (575) 361-2822

- ✓ Lea CountyCall 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
    - Notify the BLM when moving in and removing the Spudder Rig.
    - Notify the BLM when moving in the 2<sup>nd</sup> Rig. Rig to be moved in within 90 days of notification that Spudder Rig has left the location.
    - BOP/BOPE test to be conducted per title 43 CFR 3172
    - as soon as 2nd Rig is rigged up on well.
- 2. Floor controls are required for 3M or Greater systems. These controls will be on the rig floor, unobstructed, readily accessible to the driller and will be operational at all times during drilling and/or completion activities. Rig floor is defined as the area immediately around the rotary table; the area immediately above the substructure on which the draw works are located, this does not include the dog house or stairway area.
- 3. The record of the drilling rate along with the GR/N well log run from TD to surface (horizontal well vertical portion of hole) shall be submitted to the BLM office as well as all other logs run on the borehole 30 days from completion. If available, a digital copy of the logs is to be submitted in addition to the paper copies. The Rustler top and top and bottom of Salt are to be recorded on the Completion Report.

### 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, 2) until cement has been in place at least 24 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-P 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 the **title 43 CFR 3172** and **API STD 53 Sec. 5.3**.
- 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:
  - 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. Whenever any seal subject to test pressure is broken, all the tests in the title 43 CFR 3172.6(b)(9) must be followed.
  - e. 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.
  - a. 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, cutoff cannot be initiated until cement reaches 500 psi compressive strength (including lead when specified).
- b. 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.)
- 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 water basin (8 hours) or potash (24 hours) or 500 pounds compressive strength, whichever is greater, prior to initiating the test (see casing segment as lead cement may be critical item).
- d. 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.
- The results of the test shall be reported to the appropriate BLM office.
- f. 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.
- 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.
- h. 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 crewintensive operations.

### SA 10/20/2023

### Hydrogen Sulfide Drilling Operations Plan Mewbourne Oil Company

### 1. General Requirements

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

### 2. Hydrogen Sulfide Training

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

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

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

- 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. <u>Protective Equipment for Essential Personnel</u>

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

<b>Eddy County Sheriff's Office</b>	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	er of Carlsbad 575-492-5000

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

**Operator Name: MEWBOURNE OIL COMPANY** 

Well Name: SALADO DRAW 10 W2PA FED COM Well Number: 1H

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:

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

**Operator Name: MEWBOURNE OIL COMPANY** 

Well Name: SALADO DRAW 10 W2PA FED COM Well Number: 1H

### **Cuttings Area**

Cuttings Area being used? NO

Are you storing cuttings on location? N

**Description of cuttings location** 

Cuttings area length (ft.)

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

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

WCuttings area liner

Cuttings area liner specifications and installation description

### **Section 8 - Ancillary**

Are you requesting any Ancillary Facilities?: N

**Ancillary Facilities** 

Comments:

### **Section 9 - Well Site**

Well Site Layout Diagram:

Salado\_Draw\_10\_W2PA\_Fed\_Com\_1H\_WellSiteLayout\_20230110152655.pdf

Comments: NONE

### **Section 10 - Plans for Surface Reclamation**

Type of disturbance: New Surface Disturbance Multiple Well Pad Name: Salado Draw 10 OB/PA Fed Com wells

Multiple Well Pad Number: 3

Cuttings area width (ft.)

Recontouring

Drainage/Erosion control construction: None

Drainage/Erosion control reclamation: None

Sante Fe Main Office Phone: (505) 476-3441

General Information Phone: (505) 629-6116

Online Phone Directory https://www.emnrd.nm.gov/ocd/contact-us

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

CONDITIONS

Action 428577

### **CONDITIONS**

Operator:	OGRID:
MEWBOURNE OIL CO	14744
P.O. Box 5270	Action Number:
Hobbs, NM 88241	428577
	Action Type:
	[C-101] BLM - Federal/Indian Land Lease (Form 3160-3)

### CONDITIONS

Created By	Condition	Condition Date
mleal	Cement is required to circulate on both surface and intermediate1 strings of casing.	2/5/2025
mleal	If cement does not circulate on any string, a Cement Bond Log (CBL) is required for that string of casing.	2/5/2025
pkautz	Administrative order required for non-standard location prior to production.	2/21/2025
pkautz	Prior to production of this well a change to the well name/number is required to comply with the OCD well naming convention.	2/21/2025
pkautz	File As Drilled C-102 and a directional Survey with C-104 completion packet.	2/21/2025
pkautz	Once the well is spud, to prevent ground water contamination through whole or partial conduits from the surface, the operator shall drill without interruption through the fresh water zone or zones and shall immediately set in cement the water protection string.	2/21/2025
pkautz	Oil base muds are not to be used until fresh water zones are cased and cemented providing isolation from the oil or diesel. This includes synthetic oils. Oil based mud, drilling fluids and solids must be contained in a steel closed loop system.	2/21/2025