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. NMNM115421 **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: Oil Well 1b. Type of Well: Gas Well Other 8. Lease Name and Well No. 1c. Type of Completion: Hydraulic Fracturing ✓ Single Zone Multiple Zone JENNINGS 27 W2BO FED COM 2H 9. API Well No. **30-025-53772** 2. Name of Operator MEWBOURNE OIL COMPANY 3a. Address 3b. Phone No. (include area code) 10. Field and Pool, or Exploratory WC-025 G-08 S263205N/UPPER WOLFC 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 27/T25S/R32E/NMP At surface NWNE / 660 FNL / 1410 FEL / LAT 32.1069118 / LONG -103.6588023 At proposed prod. zone SWSE / 100 FSL / 2310 FEL / LAT 32.0944888 / LONG -103.6616897 14. Distance in miles and direction from nearest town or post office\* 12. County or Parish 13. State NM LEA 10 miles 15. Distance from proposed\* 16. No of acres in lease 17. Spacing Unit dedicated to this well 100 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, 20 feet 13002 feet / 17871 feet FED: NM 1693 applied for, on this lease, ft. 21. Elevations (Show whether DF, KDB, RT, GL, etc.) 22. Approximate date work will start\* 23. Estimated duration 3394 feet 10/03/2020 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 08/16/2022 (Electronic Submission) Title Regulatory Approved by (Signature) Date Name (Printed/Typed) (Electronic Submission) CHRISTOPHER WALLS / Ph: (575) 234-2234 10/10/2024 Title Office Petroleum Engineer Carlsbad Field Office Application approval does not warrant or certify that the applicant holds legal or equitable title to those rights in the subject lease which would entitle the applicant to conduct operations thereon.

Conditions of approval, if any, are attached.

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



ived by C-10		<u> </u>	13:46 PM		State of Nev	w Mexico				Page 2 Revised July 9, 2024	
<u>C 10</u>	<u>~</u>		En		nerals & Natura	al Resources Departr		, , , , , , , ,			
	Electronicall	у		OIL (	CONSERVAT	TION DIVISION	✓ Initial Su	hmittal			
VIA OCL	) Permitting							Submittal	☐ Amended		
								Type:	☐ As Drille		
					WELL LOCAT	TION INFORMATION		l			
API Nu	mber 30-	025-53772	Pool Code	98065	5	Pool Name WC-025 G	G-08 S26320	5N· UPPF	ER WOLFCA	MP	
Propert	v Code	6432	Property N	ame		W2BO FED C			Well Number		
OGRID	No	744	Operator N	ame MF	WBOURNE	OIL COMPAN	ΙΥ		Ground Lev		
Surface		State ☐ Fee ☐	Tribal [X Fee		WBOOK NE	Mineral Owner:		□ Tribal [X]		<u> </u>	
Surrace	Owner.	State 11 rec 11	THOM ET CO	iciai		Willierar Owner.	State 🗆 rec 1		1 cuciai		
					Surfa	ace Location					
UL	Section	Township	Range	Lot	Ft. from N/S	Ft. from E/W	Latitude		Longitude	County	
В	27	25S	32E		660 FNL	1410 FEL	32.1069	9119  -10	03.6588023	LEA	
	I.	l		_1	Bottom	Hole Location		I			
UL	Section	Township	Range	Lot	Ft. from N/S	Ft. from E/W	Latitude	L	ongitude	County	
0	27	25S	32E		100 FSL	2310 FEL	32.094	4886 -10	03.6616897	LEA	
	ı			•	•	1		<b>'</b>			
	Dedicated Acres Infill or Defining Well Defining Well API  320 DEFINING			Well API	Overlapping Spacing Unit (Y/N) Consolidation Code						
Order N	lumbers.	1		_1		Well setbacks are un	nder Common (	Ownership: [	□Yes □No		
					Kick O	ff Point (KOP)					
UL	Section	Township	Range	Lot	Ft. from N/S	Ft. from E/W	Latitude	L	ongitude	County	
В	27	25S	32E		10 FNL	2310 FEL	32.1086844		03.6617273	LEA	
	l .			1	First Ta	nke Point (FTP)					
UL	Section	Township	Range	Lot	Ft. from N/S	Ft. from E/W	Latitude	L	ongitude	County	
В	27	25S	32E		100 FNL	2310 FEL	32.108	4371 -1	03.6617266	LEA	
	I	1			Last Ta	ike Point (LTP)					
UL	Section	Township	Range	Lot	Ft. from N/S	Ft. from E/W	Latitude	L	ongitude	County	
Ο	27	25S	32E		100 FSL	2310 FEL	32.0944	888 -10	03.6616897	LEA	
					1	1	-	<b>'</b>			
Unitize	d Area or Ar	ea of Uniform I	nterest	Spacing	Unit Type 🗷 Horiz	contal   Vertical	Grou	nd Floor Elev	vation: 339	4	
OPERA	TOR CERT	IFICATIONS				SURVEYOR CERTIFI	ICATIONS				
			gined horoin is	true and com	plete to the best of			un on this -1-	it was platted for	m field notes of notice	
my know	ledge and beli	ef, and, if the well	is a vertical or	directional v	vell, that this	I hereby certify that the well location shown on this plat was plotted from field notes of actu surveys made by me or under my supervision, and that the same is true and correct to the best					
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					my belief.						
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 we	ell is a horizon	tal well, I further o	certify that this	organization	has received the						
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.											
	Bradley (				0/14/24						
Signature		`	Date			Signature and Seal of Profes	ssional Surveyor				
ВІ	RADLE'	Y BISHOF	•								
Printed N						Certificate Number	Date of Surve				

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

Email Address

BBISHOP@MEWBOURNE.COM

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

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

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

☐ AMENDED REPORT

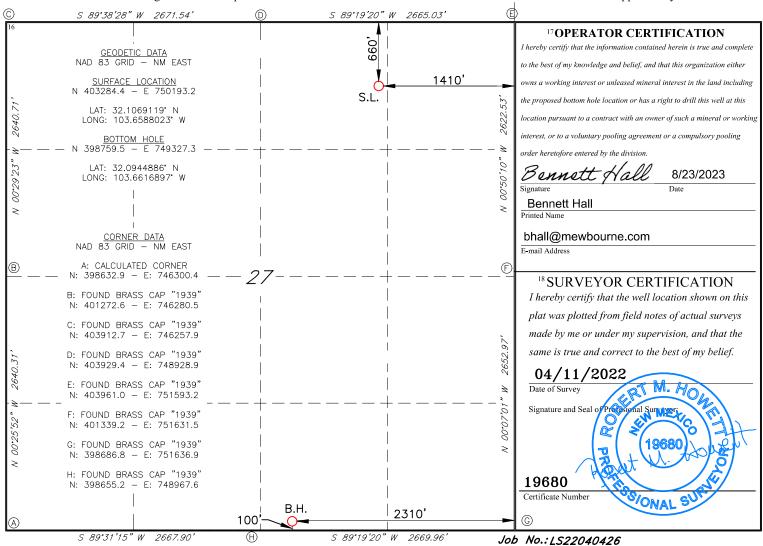
#### WELL LOCATION AND ACREAGE DEDICATION PLAT

<sup>1</sup> API Number		<sup>2</sup> Pool Code <b>98065</b>	WC-025 G-08 S263205N; UPPER WOLFCAMP				
<sup>4</sup> Property Code			operty Name 6 Well Number 2 W2BO FED COM 2H				
<sup>7</sup> OGRID NO.		1	erator Name COMPANY	<sup>9</sup> Elevation <b>3394</b>			

<sup>10</sup> Surface Location

UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet From the	East/West line	County
В	27	25S	32E		660	NORTH	1410	EAST	LEA
			<sup>11</sup> ]	Bottom H	lole Location	If Different Fr	om Surface		
UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
0	27	25S	32E		100	SOUTH	2310	EAST	LEA
12 Dedicated Acres	13 Joint	or Infill 14	Consolidation	Code 15 (	Order No.				

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



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

Submit Electronically Via E-permitting

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

	IN.	ATURAL G	AS MANA	GEMENT P	LAN	
This Natural Gas Manage	ement Plan mi	ıst be submitted w	vith each Applicat	tion for Permit to I	Orill (APD) for a	new or recompleted well.
			<u>1 – Plan D</u> Effective May 25,			
I. Operator: Mew	bourne C	Oil Co.	OGRID:	14744	Date:	5/2/22
II. Type: X Original □	Amendment	due to □ 19.15.27	7.9.D(6)(a) NMA	C □ 19.15.27.9.D(	(6)(b) NMAC □ (	Other.
If Other, please describe:						
III. Well(s): Provide the be recompleted from a sir	following inf	ormation for each or connected to a	new or recomple central delivery p	ted well or set of voint.		
Well Name	API	ULSTR	Footages	Anticipated Oil BBL/D	Anticipated Gas MCF/D	Anticipated Produced Water BBL/D
JENNINGS 27 W2BO FED COM 2H		B 27 25S 32E	660' FNL x 1410' F	EL 2000	3500	3500
<ul><li>IV. Central Delivery Por</li><li>V. Anticipated Schedule proposed to be recompleted</li></ul>	: Provide the	following information		v or recompleted w		9.15.27.9(D)(1) NMAC] proposed to be drilled or
Well Name	API	Spud Date	TD Reached Date	Completion Commencement		
JENNINGS 27 W2BO FED COM 2H		7/2/22	8/2/22	9/2/22	9/17/2:	9/17/22
VI. Separation Equipmed VII. Operational Practic Subsection A through F of VIII. Best Management during active and planned	ces: 🛭 Attac	h a complete desc NMAC.	cription of the act	tions Operator wil	l take to comply	

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

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

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

#### IX. Anticipated Natural Gas Production:

Well	API	Anticipated Average Natural Gas Rate MCF/D	Anticipated Volume of Natural Gas for the First Year MCF
X. Natural Gas Gathering System (NO	GGS):		

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

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

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

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

П,	Attach (	Operator's	plan to	manage	production	in resi	onse to	the	increased	line	press	sure
-	$\Delta$ uac $_{\rm II}$ $_{\rm V}$	Operator 5	Dian to	manage	Dioduction	111 1 CS	JULISC IC	, uic	micreaseu	11110	$\nu_{\rm L}$	$-\infty$

XIV. Co	onfidentiality: [	$\square$ Operator a	isserts con	nfidentiality	pursuant to	Section	71-2-8	NMSA	1978	for the	information	provided in
Section 2	2 as provided in	Paragraph (2)	of Subsec	ction D of 1	9.15.27.9 NN	MAC, and	d attach	es a full	descrip	ption o	f the specific	information
for which	h confidentiality	is asserted as	nd the basi	is for such a	assertion.							

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## 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

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

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

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

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

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

#### **Section 4 - Notices**

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

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

Signature:	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** 10/14/2024

**APD ID:** 10400087309

**Submission Date:** 08/16/2022

Highlighted data reflects the most recent changes

**Operator Name: MEWBOURNE OIL COMPANY** 

Well Number: 2H

Well Name: JENNINGS 27 W2BO FED COM

Well Type: OIL WELL Well Work Type: Drill **Show Final Text** 

#### **Section 1 - Geologic Formations**

Formation ID	Formation Name	Elevation	True Vertical	Measured Depth	Lithologies	Mineral Resources	Producing Formatio
14298386	UNKNOWN	3422	28	28	OTHER : Topsoil	NONE	N
14298387	RUSTLER	2719	703	703	ANHYDRITE, DOLOMITE	USEABLE WATER	N
14298397	TOP SALT	2353	1069	1069	SALT	NONE	N
14298398	BASE OF SALT	-985	4407	4407	SALT	NONE	N
14298400	LAMAR	-1204	4626	4626	LIMESTONE	NATURAL GAS, OIL	N
14298401	BELL CANYON	-1230	4652	4652	SANDSTONE	NATURAL GAS, OIL	N
14298402	CHERRY CANYON	-2249	5671	5671	SANDSTONE	NATURAL GAS, OIL	N
14298403	MANZANITA	-2396	5818	5818	LIMESTONE	NATURAL GAS, OIL	N
14298404	BRUSHY CANYON	-5029	8451	8451	SANDSTONE	NATURAL GAS, OIL	N
14298394	BONE SPRING	-5246	8668	8668	LIMESTONE, SANDSTONE, SHALE	NATURAL GAS, OIL	N
14298395	BONE SPRING 1ST	-6253	9675	9675	SANDSTONE	NATURAL GAS, OIL	N
14298396	BONE SPRING 2ND	-6822	10244	10244	SANDSTONE	NATURAL GAS, OIL	N
14298405	BONE SPRING 3RD	-7940	11362	11362	SANDSTONE	NATURAL GAS, OIL	N
14298406	WOLFCAMP	-8420	11842	11842	LIMESTONE, SANDSTONE, SHALE	NATURAL GAS, OIL	Y

#### **Section 2 - Blowout Prevention**

Well Name: JENNINGS 27 W2BO FED COM Well Number: 2H

Pressure Rating (PSI): 10M Rating Depth: 17871

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

Requesting Variance? YES

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

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

Jennings\_27\_W2BO\_Fed\_Com\_2H\_Flex\_Line\_Specs\_API\_16C\_20220812105204.pdf

Jennings\_27\_W2BO\_Fed\_Com\_2H\_10M\_BOPE\_Choke\_Diagram\_20220812105204.pdf

Jennings\_27\_W2BO\_Fed\_Com\_2H\_Flex\_Line\_Specs\_20220812105204.pdf

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

Jennings\_27\_W2BO\_Fed\_Com\_2H\_10M\_BOPE\_Schematic\_20220812105153.pdf

Jennings\_27\_W2BO\_Fed\_Com\_2H\_10M\_Annular\_BOP\_Variance\_20220812105153.pdf

Jennings\_27\_W2BO\_Fed\_Com\_2H\_10M\_Multi\_Bowl\_WH\_20220812105153.pdf

#### Section 3 - Casing

Casing ID	String Type	Hole Size	Csg Size	Condition	Standard	Tapered String	Top Set MD	Bottom Set MD	Top Set TVD	Bottom Set TVD	Top Set MSL	Bottom Set MSL	Calculated casing length MD	Grade	Weight	Joint Type	Collapse SF	Burst SF	Joint SF Type	Joint SF	Body SF Type	Body SF
1	SURFACE	17.5	13.375	NEW	API	N	0	780	0	780	3422	2642	780	H-40	48	ST&C	2.16	4.85	DRY	8.6	DRY	14.4 5
2		12.2 5	9.625	NEW	API	N	0	3453	0	4353		-931	3453	J-55	36	LT&C	1.13	1.96	DRY	2.71	DRY	3.37
3		12.2 5	9.625	NEW	API	N	3453	4393	3453	4393	-31	-971	940	J-55	40	LT&C	1.13	1.73	DRY	12.1 3	DRY	14.6 9
	INTERMED IATE	12.2 5	9.625	NEW	API	N	4393	4525	4393	4525	-971	-1103	132	N-80	40	LT&C	1.31	2.44	DRY	99.9 9	DRY	99.9 9
5	PRODUCTI ON	8.75	7.0	NEW	API	N	0	10979	0	10931		-7509	10979	P- 110	26	LT&C	1.12 5	1.53	DRY	2.24	DRY	2.91
6	PRODUCTI ON	8.75	7.0	NEW	API	N	10979	13080	10931	12863	-7509	-9441	2101	HCP -110	26	LT&C	1.2	1.53	DRY	12.6 9	DRY	15.1 9

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Well Name: JENNINGS 27 W2BO FED COM Well Number: 2H

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
7	LINER	6.12 5	4.5	NEW	API	N	12378	17871	12324	13002	-8902	-9580	5493	P- 110	13.5	LT&C	1.21	1.41	DRY	4.56	DRY	5.69

**Inspection Document:** 

**Spec Document:** 

**Tapered String Spec:** 

#### Casing Design Assumptions and Worksheet(s):

Jennings\_27\_W2BO\_Fed\_Com\_2H\_Csg\_Assumptions\_20220812105636.pdf

Casing ID: 2 String INTERMEDIATE

**Inspection Document:** 

**Spec Document:** 

**Tapered String Spec:** 

#### Casing Design Assumptions and Worksheet(s):

Jennings\_27\_W2BO\_Fed\_Com\_2H\_Csg\_Assumptions\_20220812110602.pdf

Well Name: JENNINGS 27 W2BO FED COM Well Number: 2H

Casing	<b>Attachments</b>
--------	--------------------

Casing ID: 3

String

**INTERMEDIATE** 

**Inspection Document:** 

**Spec Document:** 

**Tapered String Spec:** 

Casing Design Assumptions and Worksheet(s):

Jennings\_27\_W2BO\_Fed\_Com\_2H\_Csg\_Assumptions\_20220812110506.pdf

Casing ID: 4

String

**INTERMEDIATE** 

**Inspection Document:** 

**Spec Document:** 

**Tapered String Spec:** 

Casing Design Assumptions and Worksheet(s):

Jennings\_27\_W2BO\_Fed\_Com\_2H\_Csg\_Assumptions\_20220812110444.pdf

Casing ID: 5

String

**PRODUCTION** 

**Inspection Document:** 

**Spec Document:** 

**Tapered String Spec:** 

Casing Design Assumptions and Worksheet(s):

Jennings\_27\_W2BO\_Fed\_Com\_2H\_Csg\_Assumptions\_20220812105744.pdf

Well Name: JENNINGS 27 W2BO FED COM Well Number: 2H

#### **Casing Attachments**

Casing ID: 6

String

**PRODUCTION** 

**Inspection Document:** 

**Spec Document:** 

**Tapered String Spec:** 

Casing Design Assumptions and Worksheet(s):

Jennings\_27\_W2BO\_Fed\_Com\_2H\_Csg\_Assumptions\_20220812105911.pdf

Casing ID: 7

String

**LINER** 

**Inspection Document:** 

**Spec Document:** 

**Tapered String Spec:** 

Casing Design Assumptions and Worksheet(s):

 ${\sf Jennings\_27\_W2BO\_Fed\_Com\_2H\_Csg\_Assumptions\_20220812110528.pdf}$ 

#### **Section 4 - Cement**

String Type	Lead/Tail	Stage Tool Depth	Top MD	Bottom MD	Quantity(sx)	Yield	Density	Cu Ft	Excess%	Cement type	Additives
SURFACE	Lead		0	589	390	2.12	12.5	827	100	Class C	Salt, Gel, Extender, LCM
SURFACE	Tail		589	780	200	1.34	14.8	268	100	Class C	Retarder
INTERMEDIATE	Lead		0	3841	710	2.12	12.5	1505	25	Class C	Salt, Gel, Extender, LCM
INTERMEDIATE	Tail		3841	4525	200	1.34	14.8	268	25	Class C	Retarder
PRODUCTION	Lead	5790	4325	5189	80	2.12	12.5	170	25	Class C	Salt, Gel, Extender, Defoamer

Well Name: JENNINGS 27 W2BO FED COM Well Number: 2H

String Type	Lead/Tail	Stage Tool Depth	Top MD	Bottom MD	Quantity(sx)	Yield	Density	Cu Ft	Excess%	Cement type	Additives
PRODUCTION	Tail		5189	5790	100	1.18	15.6	118	25	Class H	Retarder
PRODUCTION	Lead	5790	5790	1059 3	430	2.12	12.5	912	25	Class C	Salt, Gel, Extender, LCM, Defoamer
PRODUCTION	Tail		1059 3	1308 0	400	1.18	15.6	472	25	Class H	Retarder, Fluid loss, defoamer
LINER	Lead		1237 8	1787 1	350	1.85	13.5	648	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

Describe the mud monitoring system utilized: Visual Monitoring

### **Circulating Medium Table**

Top Depth	Bottom Depth	Mud Type	Min Weight (lbs/gal)	Max Weight (lbs/gal)	Density (lbs/cu ft)	Gel Strength (lbs/100 sqft)	Hd	Viscosity (CP)	Salinity (ppm)	Filtration (cc)	Additional Characteristics
0	780	SPUD MUD	8.6	8.8							
780	4525	SALT SATURATED	10	10							
4525	1308 0	WATER-BASED MUD	8.6	9.7							

Well Name: JENNINGS 27 W2BO FED COM Well Number: 2H

Top Depth	Bottom Depth	Mud Type	Min Weight (lbs/gal)	Max Weight (lbs/gal)	Density (lbs/cu ft)	Gel Strength (lbs/100 sqft)	ЬН	Viscosity (CP)	Salinity (ppm)	Filtration (cc)	Additional Characteristics
1308 0	1787 1	OIL-BASED MUD	9.7	13							

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

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

Will run GR/CNL on deeper offset Jennings 27 W2BO Fed Com #1H from KOP to surface.

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

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

Coring operation description for the well:

None

#### **Section 7 - Pressure**

Anticipated Bottom Hole Pressure: 8789 Anticipated Surface Pressure: 5928

Anticipated Bottom Hole Temperature(F): 210

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

Jennings\_27\_W2BO\_Fed\_Com\_2H\_H2S\_Plan\_20220812111750.pdf

Well Name: JENNINGS 27 W2BO FED COM Well Number: 2H

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

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

Jennings\_27\_W2BO\_Fed\_Com\_2H\_MOC\_DIR\_PLAN\_20220812111854.pdf Jennings\_27\_W2BO\_Fed\_Com\_2H\_MOC\_DIR\_PLOT\_20220812111854.pdf

Other proposed operations facets description:

Other proposed operations facets attachment:

Jennings\_27\_W2BO\_Fed\_Com\_2H\_Additional\_Information\_\_\_Permitting\_20220812111839.pdf

Other Variance attachment:



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

PHONE: (281) 602 - 4119

FAX:

EMAIL: Troy.Schmidt@gates.com

WEB: www.gates.com

## **10K CHOKE & KILL ASSEMBLY PRESSURE TEST CERTIFICATE**

Test Date: 8/20/2018 A-7 AUSTIN INC DBA AUSTIN HOSE Customer: Hose Serial No.: H-082018-10 Customer Ref .: 4101901 Created By: Moosa Nagvi Invoice No.: 511956 10KF3.035.0CK41/1610KFLGFXDxFLT\_L/E Product Description: End Fitting 2: 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

Production: Date:

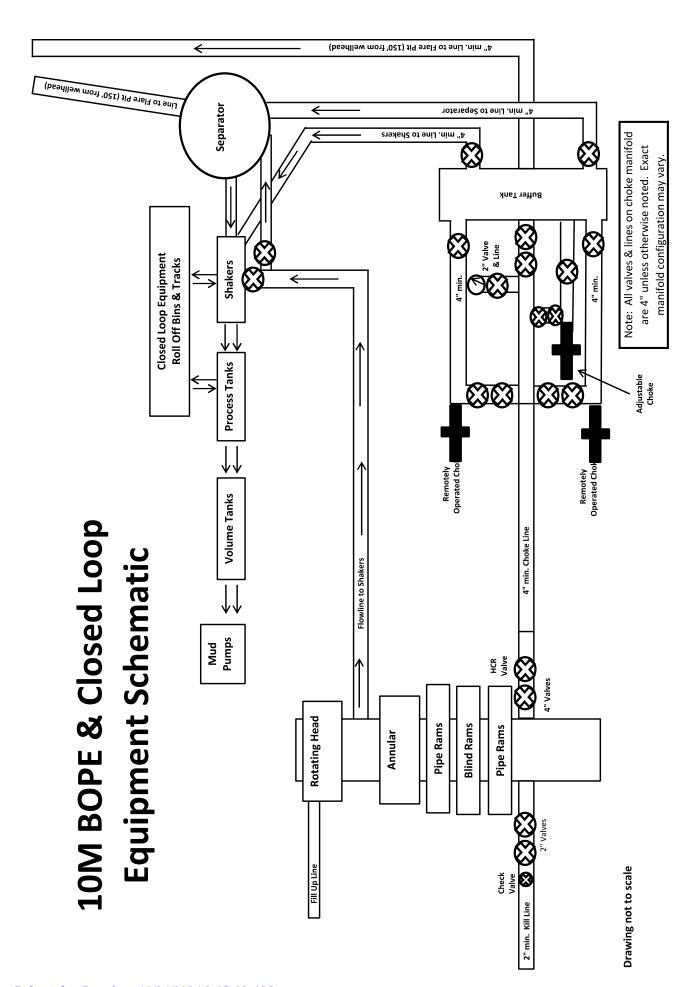
Signature:

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 : Customer Ref. :

Invoice No.:

AUSTIN DISTRIBUTING

4060578 500506

3

Test Date:

Hose Serial No.: Created By: 4/30/2015

D-043015-7 JUSTIN CROPPER

Product Description:

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

End Fitting 1:

Gates Part No. :

Working Pressure :

4 1/16 10K FLG

4773-6290 10,000 PSI

End Fitting 2:

Assembly Code:

Test Pressure:

4 1/16 10K FLG

L36554102914D-043015-7

15,000 PSI

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

Quality Manager:

Date:

Signature:

QUALITY

4/30/2015

Produciton:

Date:

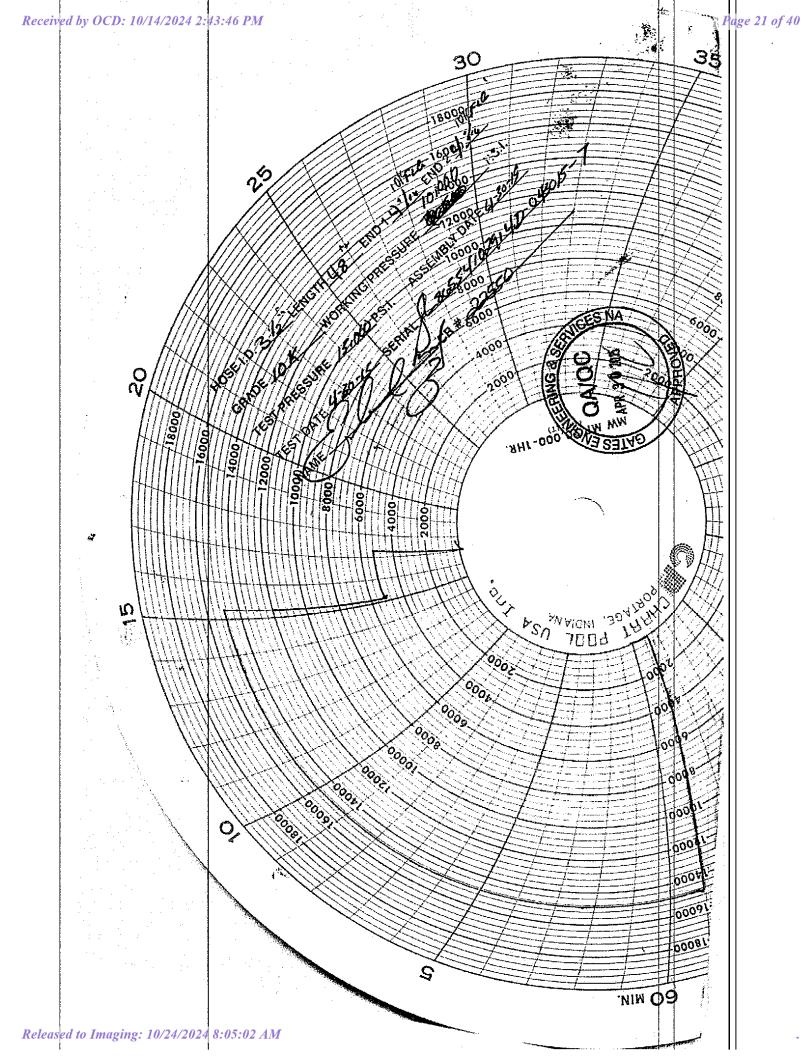
Signature :

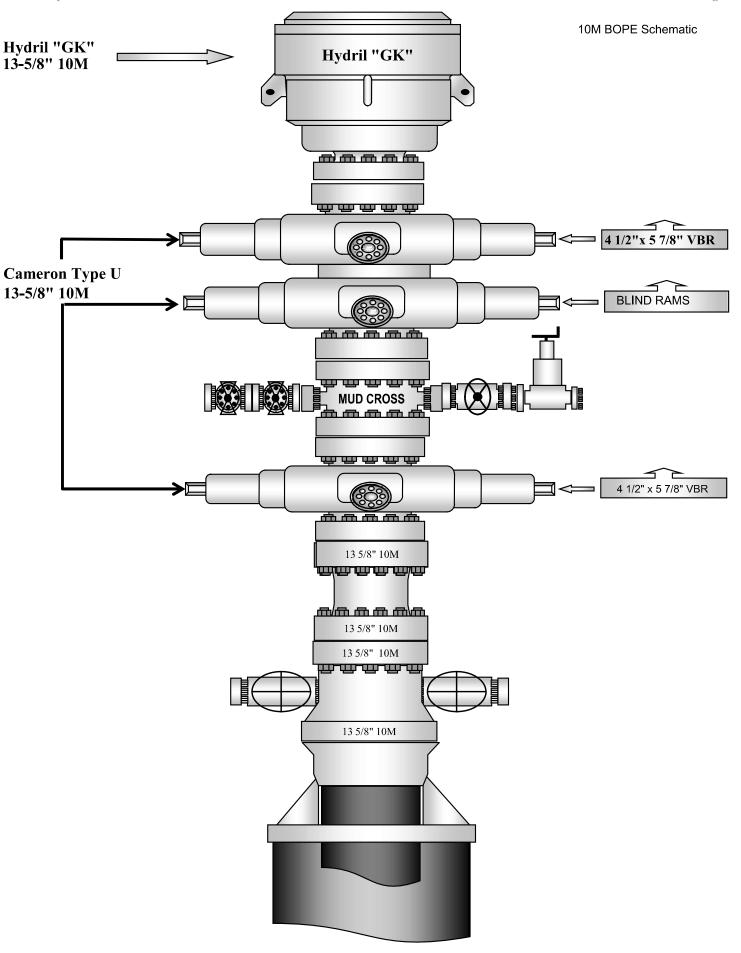
PRODUCTION

4/30/2015

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#### 10,000 PSI Annular BOP Variance Request

Mewbourne Oil Company request a variance to use a 5000 psi annular BOP with a 10,000 psi BOP stack. The component and compatibility tables along with the general well control plans demonstrate how the 5000 psi annular BOP will be protected from pressures that exceed its rated working pressure (RWP). The pressure at which the control of the wellbore is transferred from the annular preventer to another available preventer will not exceed 3500 psi (70% of the RWP of the 5000 psi annular BOP).

#### 1. Component and Preventer Compatibility Tables

The tables below outline the tubulars and the compatible preventers in use. This table, combined with the drilling fluid, documents that two barriers to flow will be maintained at all times.

12-1/4" Intermediate Hole Section 10M psi Requirement												
Component	OD	<b>Primary Preventer</b>	RWP	Alternate Preventer(s)	RWP							
Drillpipe	5.000" or	Annular	5M	Upper 3.5"-5.5" VBR	10M							
	4.500"			Lower 3.5"-5.5" VBR	10M							
HWDP	5.000" or	Annular	5M	Upper 3.5"-5.5" VBR	10M							
	4.500"			Lower 3.5"-5.5" VBR	10M							
Jars	6.500"	Annular	5M	-	_							
DCs and MWD tools	6.500"-8.000"	Annular	5M	-	-							
Mud Motor	8.000"-9.625"	Annular	5M	-	-							
Intermediate Casing	9.625"	Annular	5M	-	-							
Open-Hole	-	Blind Rams	10M	-	-							

	8-3/4" Production Hole Section												
10M psi Requirement													
Component	OD	<b>Primary Preventer</b>	RWP	Alternate Preventer(s)	RWP								
Drillpipe	5.000" or	Annular	5M	Upper 3.5"-5.5" VBR	10M								
	4.500"			Lower 3.5"-5.5" VBR	10M								
HWDP	5.000" or	Annular	5M	Upper 3.5"-5.5" VBR	10M								
	4.500"			Lower 3.5"-5.5" VBR	10M								
Jars	6.500"	Annular	5M	-	-								
DCs and MWD tools	6.500"-8.000"	Annular	5M	-	-								
Mud Motor	6.750"-8.000"	Annular	5M	-	-								
Production Casing	7"	Annular	5M	-	-								
Open-Hole	-	Blind Rams	10M	-	-								

6-1/8" Lateral Hole Section										
10M psi Requirement										
Component	OD	Primary Preventer	RWP	Alternate Preventer(s)	RWP					
Drillpipe	4.500"	Annular	5M	Upper 3.5"-5.5" VBR	10M					
				Lower 3.5"-5.5" VBR	10M					
HWDP	4.500"	Annular	5M	Upper 3.5"-5.5" VBR	10M					
				Lower 3.5"-5.5" VBR	10M					
DCs and MWD tools	4.750"-5.500"	Annular	5M	Upper 3.5"-5.5" VBR	10M					
				Lower 3.5"-5.5" VBR	10M					
Mud Motor	4.750"-5.500"	Annular	5M	Upper 3.5"-5.5" VBR	10M					
				Lower 3.5"-5.5" VBR	10M					
Production Casing	4.500"	Annular	5M	Upper 3.5"-5.5" VBR	10M					
				Upper 3.5"-5.5" VBR	10M					
Open-Hole	-	Blind Rams	10M	-	-					

VBR = Variable Bore Ram

#### 2. Well Control Procedures

Below are the minimal high-level tasks prescribed to assure a proper shut-in while drilling, tripping, running casing, pipe out of the hole (open hole), and moving the BHA through the BOPs. At least one well control drill will be performed weekly per crew to demonstrate compliance with the procedure and well control plan. The well control drill will be recorded in the daily drilling log. The type of drill will be determined by the ongoing operations, but reasonable attempts will be made to vary the type of drill conducted (pit, trip, open hole, choke, etc.). This well control plan will be available for review by rig personnel in the Mewbourne Oil Company drilling supervisor's office on location and on the rig floor. All BOP equipment will be tested as per Onshore O&G Order No. 2 with the exception of the 5000 psi annular which will be tested to 70% of its RWP.

#### General Procedure While Drilling

- 1. Sound alarm (alert crew)
- 2. Space out drill string
- 3. Shut down pumps (stop pumps and rotary)
- 4. Shut-in well (uppermost applicable BOP, typically annular preventer, first. HCR & choke will already be in the closed position.)
- 5. Confirm shut-in
- 6. Notify toolpusher/company representative
- 7. Read and record the following:
  - a. SIDPP & SICP
  - b. Pit gain
  - c. Time
- 8. Regroup and identify forward plan

9. If pressure has built or is anticipated during the kill to reach 70% or greater of the RWP of the annular preventer, confirm spacing and close the upper variable bore rams.

#### **General Procedure While Tripping**

- 1. Sound alarm (alert crew)
- 2. Stab full-opening safety valve & close
- 3. Space out drill string
- 4. Shut-in well (uppermost applicable BOP, typically annular preventer, first. HCR & choke will already be in the closed position.)
- 5. Confirm shut-in
- 6. Notify toolpusher/company representative
- 7. Read and record the following:
  - a. SIDPP & SICP
  - b. Pit gain
  - c. Time
- 8. Regroup and identify forward plan
- 9. If pressure has built or is anticipated during the kill to reach 70% of the RWP of the annular preventer, confirm spacing and close the upper variable bore rams.

#### **General Procedure While Running Production Casing**

- 1. Sound alarm (alert crew)
- 2. Stab crossover and full-opening safety valve and close
- 3. Space out string
- 4. Shut-in well (uppermost applicable BOP, typically annular preventer, first. HCR & choke will already be in the closed position.)
- 5. Confirm shut-in
- 6. Notify toolpusher/company representative
- 7. Read and record the following:
  - a. SIDPP & SICP
  - b. Pit gain
  - c. Time
- 8. Regroup and identify forward plan
- 9. If pressure has built or is anticipated during the kill to reach 70% or greater of the RWP of the annular preventer, confirm spacing and close the upper variable bore rams.

#### General Procedure With No Pipe In Hole (Open Hole)

- 1. Sound alarm (alert crew)
- 2. Shut-in with blind rams (HCR & choke will already be in the closed position)
- 3. Confirm shut-in
- 4. Notify toolpusher/company representative
- 5. Read and record the following:
  - a. SICP
  - b. Pit gain
  - c. Time
- 6. Regroup and identify forward plan

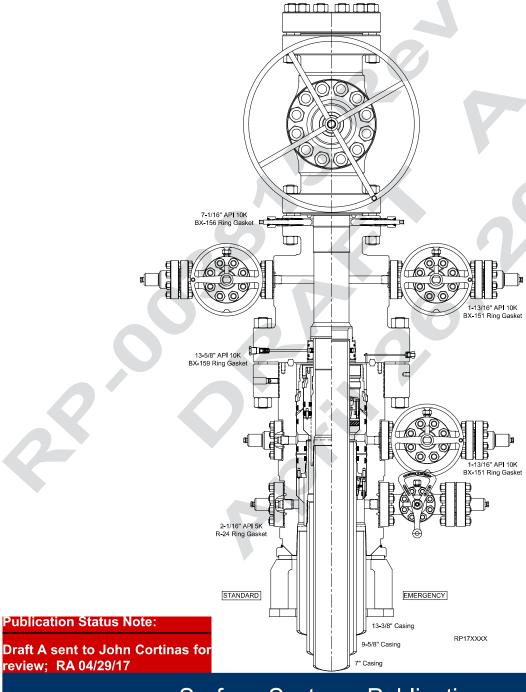
#### General Procedures While Pulling BHA Through Stack

- 1. PRIOR to pulling last joint of drillpipe through stack:
  - a. Perform flow check. If flowing, continue to (b).
  - b. Sound alarm (alert crew)
  - c. Stab full-opening safety valve and close
  - d. Space out drill string with tool joint just beneath the upper variable bore rams
  - e. Shut-in using upper variable bore rams (HCR & choke will already be in the closed position)
  - f. Confirm shut-in
  - g. Notify toolpusher/company representative
  - h. Read and record the following:
    - i. SIDPP & SICP
    - ii. Pit gain
    - iii. Time
  - i. Regroup and identify forward plan
- 2. With BHA in the stack and compatible ram preventer and pipe combination immediately available:
  - a. Sound alarm (alert crew)
  - b. Stab crossover and full-opening safety valve and close
  - c. Space out drill string with upset just beneath the upper variable bore rams
  - d. Shut-in using upper variable bore rams (HCR & choke will already be in the closed position)
  - e. Confirm shut-in
  - f. Notify toolpusher/company representative
  - g. Read and record the following:
    - i. SIDPP & SICP

- ii. Pit gain
- iii. Time
- h. Regroup and identify forward plan
- 3. With BHA in the stack and NO compatible ram preventer and pipe combination immediately available:
  - a. Sound alarm (alert crew)
  - b. If possible, pull string clear of the stack and follow "Open Hole" procedure.
  - c. If impossible to pull string clear of the stack:
  - d. Stab crossover, make up one joint/stand of drillpipe and full-opening safety valve and close
  - e. Space out drill string with tooljoint just beneath the upper variable bore ram
  - f. Shut-in using upper variable bore ram (HCR & choke will already be in the closed position)
  - g. Confirm shut-in
  - h. Notify toolpusher/company representative
  - i. Read and record the following:
    - i. SIDPP & SICP
    - ii. Pit gain
    - iii. Time
  - j. Regroup and identify forward plan

## **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

SHL: 660' FNL & 1410' FEL, Sec 27

BHL: 100' FSL & 2310' FEL, Sec 27

**Casing Program** 

Hole	Casing	Interval	Csg.	Weight	Grade	Conn.	SF	SF	SF Jt	SF Body
Size	From	To	Size	(lbs)			Collapse	Burst	Tension	Tension
17.5"	0'	780'	13.375"	48	H40	STC	2.16	4.85	8.60	14.45
12.25"	0'	3453'	9.625"	36	J55	LTC	1.13	1.96	2.71	3.37
12.25"	3453'	4393'	9.625"	40	J55	LTC	1.13	1.73	12.13	14.69
12.25"	4393'	4525'	9.625"	40	N80	LTC	1.31	2.44	139.76	173.70
12.25"	0'	10979'	7"	26	P110	LTC	1.125	1.53	2.24	2.91
8.75"	10979'	13080'	7"	26	HCP110	LTC	1.20	1.53	12.69	15.19
6.125"	12378'	17871'	4.5"	13.5	P110	LTC	1.21	1.41	4.56	5.69
				BLM Minimum Safety			1.125	1	1.6 Dry	1.6 Dry
						Factor			1.8 Wet	1.8 Wet

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

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

SHL: 660' FNL & 1410' FEL, Sec 27 BHL: 100' FSL & 2310' FEL, Sec 27

**Casing Program** 

Hole	Casing	Interval	Csg.	Weight	Grade	Conn.	SF	SF	SF Jt	SF Body
Size	From	To	Size	(lbs)			Collapse	Burst	Tension	Tension
17.5"	0'	780'	13.375"	48	H40	STC	2.16	4.85	8.60	14.45
12.25"	0'	3453'	9.625"	36	J55	LTC	1.13	1.96	2.71	3.37
12.25"	3453'	4393'	9.625"	40	J55	LTC	1.13	1.73	12.13	14.69
12.25"	4393'	4525'	9.625"	40	N80	LTC	1.31	2.44	139.76	173.70
12.25"	0'	10979'	7"	26	P110	LTC	1.125	1.53	2.24	2.91
8.75"	10979'	13080'	7"	26	HCP110	LTC	1.20	1.53	12.69	15.19
6.125"	12378'	17871'	4.5"	13.5	P110	LTC	1.21	1.41	4.56	5.69
			•	BLM Minimum Safety			1.125	1	1.6 Dry	1.6 Dry
						Factor			1.8 Wet	1.8 Wet

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

	Y or N
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Does the above casing design meet or exceed BLM's minimum standards? If not provide justification (loading assumptions, casing design criteria).	Y
Will the pipe be kept at a minimum 1/3 fluid filled to avoid approaching the collapse pressure rating of the casing?	Y
Is well located within Capitan Reef?	N
If yes, does production casing cement tie back a minimum of 50' above the Reef?	
Is well within the designated 4 string boundary.	
Is well located in SOPA but not in R-111-P?	N
If yes, are the first 2 strings cemented to surface and 3 <sup>rd</sup> string cement tied back 500' into previous casing?	
Is well located in R-111-P and SOPA?	N
If yes, are the first three strings cemented to surface?	
Is 2 <sup>nd</sup> string set 100' to 600' below the base of salt?	
Is well located in high Cave/Karst?	N
If yes, are there two strings cemented to surface?	
(For 2 string wells) If yes, is there a contingency casing if lost circulation occurs?	
Is well located in critical Cave/Karst?	N
If yes, are there three strings cemented to surface?	

SHL: 660' FNL & 1410' FEL, Sec 27 BHL: 100' FSL & 2310' FEL, Sec 27

**Casing Program** 

Hole	Casing	Interval	Csg.	Weight	Grade	Conn.	SF	SF	SF Jt	SF Body
Size	From	To	Size	(lbs)			Collapse	Burst	Tension	Tension
17.5"	0'	780'	13.375"	48	H40	STC	2.16	4.85	8.60	14.45
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12.25"	3453'	4393'	9.625"	40	J55	LTC	1.13	1.73	12.13	14.69
12.25"	4393'	4525'	9.625"	40	N80	LTC	1.31	2.44	139.76	173.70
12.25"	0'	10979'	7"	26	P110	LTC	1.125	1.53	2.24	2.91
8.75"	10979'	13080'	7"	26	HCP110	LTC	1.20	1.53	12.69	15.19
6.125"	12378'	17871'	4.5"	13.5	P110	LTC	1.21	1.41	4.56	5.69
				BLM Minimum Safety			1.125	1	1.6 Dry	1.6 Dry
						Factor			1.8 Wet	1.8 Wet

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

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

SHL: 660' FNL & 1410' FEL, Sec 27 BHL: 100' FSL & 2310' FEL, Sec 27

**Casing Program** 

Hole	Casing	Interval	Csg.	Weight	Grade	Conn.	SF	SF	SF Jt	SF Body
Size	From	To	Size	(lbs)			Collapse	Burst	Tension	Tension
17.5"	0'	780'	13.375"	48	H40	STC	2.16	4.85	8.60	14.45
12.25"	0'	3453'	9.625"	36	J55	LTC	1.13	1.96	2.71	3.37
12.25"	3453'	4393'	9.625"	40	J55	LTC	1.13	1.73	12.13	14.69
12.25"	4393'	4525'	9.625"	40	N80	LTC	1.31	2.44	139.76	173.70
12.25"	0'	10979'	7"	26	P110	LTC	1.125	1.53	2.24	2.91
8.75"	10979'	13080'	7"	26	HCP110	LTC	1.20	1.53	12.69	15.19
6.125"	12378'	17871'	4.5"	13.5	P110	LTC	1.21	1.41	4.56	5.69
-		•		BLM Minimum Safety			1.125	1	1.6 Dry	1.6 Dry
						Factor			1.8 Wet	1.8 Wet

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

<u> </u>	Y or N
Is casing new? If used, attach certification as required in Onshore Order #1	Y
Is casing API approved? If no, attach casing specification sheet.	Y
Is premium or uncommon casing planned? If yes attach casing specification sheet.	N
Does the above casing design meet or exceed BLM's minimum standards? If not provide justification (loading assumptions, casing design criteria).	Y
Will the pipe be kept at a minimum 1/3 fluid filled to avoid approaching the collapse pressure rating of the casing?	Y
Is well located within Capitan Reef?	N
If yes, does production casing cement tie back a minimum of 50' above the Reef?	
Is well within the designated 4 string boundary.	
Is well located in SOPA but not in R-111-P?	N
If yes, are the first 2 strings cemented to surface and 3 <sup>rd</sup> string cement tied back 500' into previous casing?	
Is well located in R-111-P and SOPA?	N
If yes, are the first three strings cemented to surface?	
Is 2 <sup>nd</sup> string set 100' to 600' below the base of salt?	
Is well located in high Cave/Karst?	N
If yes, are there two strings cemented to surface?	
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## 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. <u>Visual Warning Systems</u>

- 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
<b>Closest Medical Facility - Columbia Medical Center</b>	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	

Well Name: JENNINGS 27 W2BO FED COM Well Number: 2H

Waste type: SEWAGE

Waste content description: Human waste & grey water

Amount of waste: 1500 gallons

Waste disposal frequency: Weekly

. . . .

Safe containment description: 2,000 gallon plastic container

Safe containmant attachment:

Waste disposal type: HAUL TO COMMERCIAL 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

#### **Cuttings Area**

Cuttings Area being used? NO

Are you storing cuttings on location? N

Well Name: JENNINGS 27 W2BO FED COM Well Number: 2H

**Description of cuttings location** 

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

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

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

WCuttings area liner

Cuttings area liner specifications and installation description

#### **Section 8 - Ancillary**

Are you requesting any Ancillary Facilities?: N

**Ancillary Facilities** 

#### Comments:

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

Well Site Layout Diagram:

Jennings\_27\_W2BO\_Fed\_Com\_1H\_WELLSITELAYOUT\_20220816075557.pdf

Comments:

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

Type of disturbance: New Surface Disturbance Multiple Well Pad Name: Jennings 27 W1BO/B2BO Fed Com wells

Multiple Well Pad Number: 3

Recontouring

**Drainage/Erosion control construction: NONE** Drainage/Erosion control reclamation: NONE

Well pad proposed disturbance

(acres): 4.4

Road proposed disturbance (acres):

0.04

Powerline proposed disturbance

(acres): 0

Pipeline proposed disturbance

(acres): 0

Other proposed disturbance (acres): 0 Other interim reclamation (acres): 0

Well pad interim reclamation (acres):

Road interim reclamation (acres): 0

Well pad long term disturbance

(acres): 4.4

Road long term disturbance (acres): 0

Powerline interim reclamation (acres): Powerline long term disturbance

(acres): 0

Pipeline interim reclamation (acres): 0 Pipeline long term disturbance

(acres): 0

Other long term disturbance (acres): 0

Total proposed disturbance: 4.44 Total interim reclamation: 0.6 Total long term disturbance: 4.4

District I
1625 N. French Dr., Hobbs, NM 88240
Phone: (575) 393-6161 Fax: (575) 393-0720 District II

811 S. First St., Artesia, NM 88210 Phone:(575) 748-1283 Fax:(575) 748-9720 District III

1000 Rio Brazos Rd., Aztec, NM 87410 Phone:(505) 334-6178 Fax:(505) 334-6170

1220 S. St Francis Dr., Santa Fe, NM 87505 Phone:(505) 476-3470 Fax:(505) 476-3462

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

CONDITIONS

Action 392519

#### **CONDITIONS**

Operator:	OGRID:
MEWBOURNE OIL CO	14744
P.O. Box 5270	Action Number:
Hobbs, NM 88241	392519
	Action Type:
	[C-101] BLM - Federal/Indian Land Lease (Form 3160-3)

#### CONDITIONS

Created By	Condition	Condition Date
pkautz	REQUIRES NAME CHANGE	10/24/2024
pkautz	Will require a File As Drilled C-102 and a Directional Survey with the C-104	10/24/2024
pkautz	Once the well is spud, to prevent ground water contamination through whole or partial conduits from the surface, the operator shall drill without interruption through the fresh water zone or zones and shall immediately set in cement the water protection string	10/24/2024
pkautz	Oil base muds are not to be used until fresh water zones are cased and cemented providing isolation from the oil or diesel. This includes synthetic oils. Oil based mud, drilling fluids and solids must be contained in a steel closed loop system	10/24/2024
pkautz	Cement is required to circulate on both surface and intermediate1 strings of casing	10/24/2024
pkautz	If cement does not circulate on any string, a CBL is required for that string of casing	10/24/2024