Form 3160-3 (June 2015) UNITED STATES		OMB No	APPROVED 5. 1004-0137 nuary 31, 2018
DEPARTMENT OF THE IN	NTERIOR	5. Lease Serial No.	
BUREAU OF LAND MANA		NMNM114989	T 1 . N
APPLICATION FOR PERMIT TO DI	RILL OR REENTER	6. If Indian, Allotee	or Tribe Name
		7 If Unit or CA Age	eement, Name and No.
	EENTER	7. If Ollit of Cringi	coment, rume and rus.
	her	8. Lease Name and	Well No.
Ic. Type of Completion: Hydraulic Fracturing	ngle Zone 🔛 Multiple Zone		30B FED COM [333060]
2. Name of Operator MEWBOURNE OIL COMPANY [14744]		9. API Well No.	30-025-50332
	3b. Phone No. (include area code) (575) 393-5905	10. Field and Pool, o GRAMA RIDGE/B	or Exploratory [28432] ONE SPRING WEST
4. Location of Well (<i>Report location clearly and in accordance w</i>	vith any State requirements.*)		Blk. and Survey or Area
At surface SESE / 250 FSL / 1180 FEL / LAT 32.41415	588 / LONG -103.4873129	SEC 5/T22S/R34E	/NMP
At proposed prod. zone NWNE / 100 FNL / 1950 FEL / LA	AT 32.4422982 / LONG -103.489743		
14. Distance in miles and direction from nearest town or post office 20 miles	ce*	12. County or Parish LEA	n 13. State
15. Distance from proposed* location to nearest property or lease line, ft. (Also to nearest drig. unit line, if any)	16. No of acres in lease 17. Si 320.0	pacing Unit dedicated to the	his well
 Distance from proposed location* to nearest well, drilling, completed, applied for, on this lease, ft. 	19. Proposed Depth 20, BI 11877 feet / 21993 feet FED:	LM/BIA Bond No. in file	
21. Elevations (Show whether DF, KDB, RT, GL, etc.) 3604 feet	22. Approximate date work will start* 12/25/2021	23. Estimated durati 60 days	on
	24. Attachments		
The following, completed in accordance with the requirements of (as applicable)	Onshore Oil and Gas Order No. 1, and t	he Hydraulic Fracturing r	ule per 43 CFR 3162.3-3
 Well plat certified by a registered surveyor. A Drilling Plan. A Surface Lee Plan (if the leastion is an National Forget Surtan 	4. Bond to cover the opera Item 20 above).	ations unless covered by an	n existing bond on file (see
3. A Surface Use Plan (if the location is on National Forest System SUPO must be filed with the appropriate Forest Service Office)		nformation and/or plans as	may be requested by the
25. Signature (Electronic Submission)	Name (Printed/Typed) BRADLEY BISHOP / Ph: (575) 393-5905	Date 10/26/2021
Title Regulatory			
Approved by (Signature) (Electronic Submission)	Name (Printed/Typed) CHRISTOPHER WALLS / Ph:	(575) 234-2234	Date 06/23/2022
Title Petroleum Engineer	Office Carlsbad Field Office		
Application approval does not warrant or certify that the applicant applicant to conduct operations thereon. Conditions of approval, if any, are attached.	t holds legal or equitable title to those rig	ghts in the subject lease w	hich would entitle the
Title 18 U.S.C. Section 1001 and Title 43 U.S.C. Section 1212, m of the United States any false, fictitious or fraudulent statements o			ny department or agency

NGMP Rec 07/13/2022



KZ 07/13/2022

District I

District II

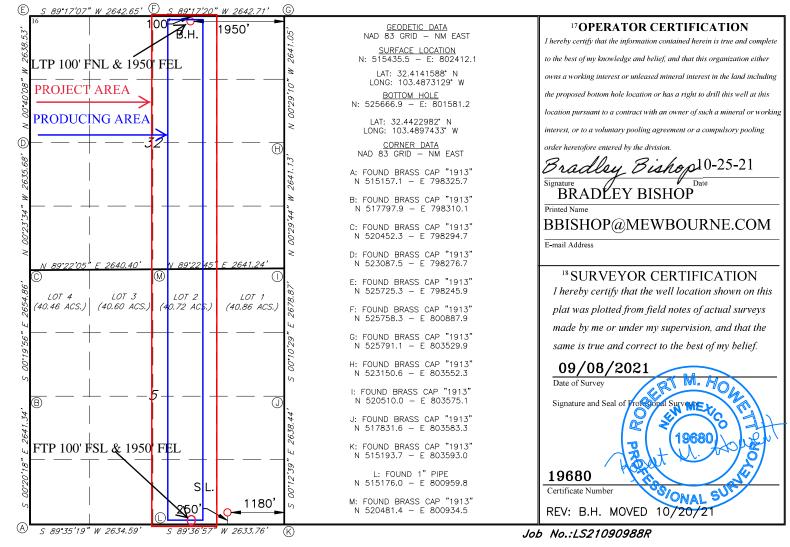
District III

District IV

State of New Mexico Form C-102 1625 N. French Dr., Hobbs, NM 88240 Energy, Minerals & Natural Resources Department Revised August 1, 2011 Phone: (575) 393-6161 Fax: (575) 393-0720 Submit one copy to appropriate OIL CONSERVATION DIVISION 811 S. First St., Artesia, NM 88210 Phone: (575) 748-1283 Fax: (575) 748-9720 **District Office** 1220 South St. Francis Dr. 1000 Rio Brazos Road, Aztec, NM 87410 Phone: (505) 334-6178 Fax: (505) 334-6170 Santa Fe, NM 87505 AMENDED REPORT 1220 S. St. Francis Dr., Santa Fe, NM 87505 Phone: (505) 476-3460 Fax: (505) 476-3462

		V	VELL L	OCATIO	N AND ACF	REAGE DEDIC	CATION PLA	T					
30-025	API Number 5-50332			² Pool Code			³ Pool Na						
50-020	-30332		28432 GRAMA RIDGE; BONE SPRING WEST										
⁴ Property Co					⁵ Property N				6 Well Number				
333060)]	RED ST.	AG 5/32 B	30B FED CO	M		$1 \mathrm{H}$				
7 OGRID 1	NO.				8 Operator N				9Elevation				
1474	4			MEWI	BOURNE OI	L COMPANY			3604'				
					¹⁰ Surface	Location							
UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet From the	East/West	line County				
Р	5	22S	34E		250	SOUTH	1180	EAST	LEA				
			11]	Bottom H	Iole 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				
В	32	21S	34E		100	NORTH	1950	EAST	LEA				
12 Dedicated Acres	13 Joint	or Infill 14	Consolidation	Code 15 (Order No.								
320													

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



Released to Imaging: 7/13/2022 3:24:32 PM

1 460 5										
State of New Mexico Submit Electronically Energy, Minerals and Natural Resources Department Via E-permitting Oil Conservation Division 1220 South St. Francis Dr. Santa Fe, NM 87505 Santa Fe, NM 87505										
	N	ATURAL G	AS MANA	CEMENT PI						
This Natural Gas Mana							n uncommisted viali			
		Section	<u>1 – Plan D</u> ffective May 25,	escription	AFD) IOF a	new 0	recompleted wen.			
I. Operator: Me	wbourne C	Dil Co.	OGRID:	14744	Date:	10/	/6/21			
II. Type: X Original			9.D(6)(a) NMA	C 🗆 19.15.27.9.D(6)(b) NMAC 🗆	Other.				
III. Well(s): Provide th be recompleted from a s					vells proposed to	be dri	illed or proposed to			
Well Name	API	ULSTR	Footages	Anticipated Oil BBL/D	Anticipated Gas MCF/D	Р	Anticipated roduced Water BBL/D			
Red Stag 5/32 B3OB Fed Com #1H	30-025-50332	P 5 22S 34E	250' FSL x 1180' FE	1500	6000		6000			
IV. Central Delivery P V. Anticipated Schedu proposed to be recomple	le: Provide the		tion for each new	v or recompleted w			7.9(D)(1) NMAC]			
Well Name	API	Spud Date	TD Reached Date	Completion Commencement	Date Back D		First Production Date			
Red Stag 5/32 B3OB Fed Com #1H	30-025-50332	12/6/21	1/6/21	2/6/22	2/21/2:	2	2/21/22			
VI. Separation Equipn VII. Operational Prac Subsection A through F VIII. Best Managemen during active and planne	tices: 🛛 Attacl of 19.15.27.8 P nt Practices: 👳	h a complete descr NMAC.	iption of the act	ions Operator will	take to comply	with t	he requirements of			
Subsection A through F VIII. Best Managemen	of 19.15.27.8 Not Practices:	MAC. Attach a complet	-							

Section 2 – Enhanced Plan EFFECTIVE APRIL 1, 2022

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

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

IX. Anticipated Natural Gas Production:

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

X. Natural Gas Gathering System (NGGS):

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

XI. Map. \Box 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 natural gas production volume from the well prior to the date of first production.

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

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

XIV. Confidentiality: \Box 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:

X 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

 \Box 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 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.

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
Datc: 10/6/21
Phone: 575-393-5905
OIL CONSERVATION DIVISION
(Only applicable when submitted as a standalone form)
Approved By:
Title:
Approval Date:
Conditions of Approval:

Mewbourne Oil Company

Natural Gas Management Plan – Attachment

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

the volume of natural gas flared from existing process piping or a flowline piped from equipment such as high pressure separators, heater treaters, or vapor recovery units associated with a well or facility associated with a well authorized by an APD issued after May 25, 2021 that has an average daily production greater than 60 Mcf/day. If metering is not practicable due to circumstances such as low flow rate or low 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

Operator Name: MEWBOURNE OIL COMPANY

Well Name: RED STAG 5/32 B3OB FED COM

Well Type: OIL WELL

Well Number: 1H Well Work Type: Drill

Submission Date: 10/26/2021

Highlighted data reflects the most recent changes

06/27/2022

Drilling Plan Data Report

Show Final Text

Section 1 - Geologic Formations

Formation ID	Formation Name	Elevation	True Vertical	Measured Depth	Lithologies	Mineral Resources	Producing Formatio
7724247	UNKNOWN	3604	28	28	OTHER : Top Soil	NONE	N
7724252	RUSTLER	1824	1780	1780	ANHYDRITE, DOLOMITE	USEABLE WATER	N
7724251	TOP SALT	1324	2280	2280	SALT	NONE	N
7724248	BOTTOM SALT	-136	3740	3740	SALT	NONE	N
7724255	YATES	-376	3980	3980	SANDSTONE	NATURAL GAS, OIL	N
7724256	CAPITAN REEF	-666	4270	4270	DOLOMITE, LIMESTONE	USEABLE WATER	N
7724253	DELAWARE	-1676	5280	5280	LIMESTONE	NATURAL GAS, OIL	N
7724246	CHERRY CANYON	-2316	5920	5924	SANDSTONE	NATURAL GAS, OIL	N
7724249	MANZANITA	-2476	6080	6085	SANDSTONE	NATURAL GAS, OIL	N
7724250	BRUSHY CANYON	-4806	8410	8410	SANDSTONE	NATURAL GAS, OIL	N
7728494	BONE SPRING	-5026	8630	8630	LIMESTONE, SHALE	NATURAL GAS, OIL	N
7728495	BONE SPRING 1ST	-6176	9780	9780	SANDSTONE	NATURAL GAS, OIL	N
7728496	BONE SPRING 2ND	-6816	10420	10420	SANDSTONE	NATURAL GAS, OIL	N
7728497	BONE SPRING 3RD	-7776	11380	11380	SANDSTONE	NATURAL GAS, OIL	Y

Section 2 - Blowout Prevention

Well Name: RED STAG 5/32 B3OB FED COM

Well Number: 1H

Pressure Rating (PSI): 5M

Rating Depth: 21993

Equipment: Annular, Pipe Rams, Blind Ram

Requesting Variance? YES

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

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

Choke Diagram Attachment:

Red_Stag_5_32_B3OB_Fed_Com_1H_5M_BOPE_Choke_Diagram_20211026080807.pdf

Red_Stag_5_32_B3OB_Fed_Com_1H_Flex_Line_Specs_API_16C_20211026080808.pdf

Red_Stag_5_32_B3OB_Fed_Com_1H_Flex_Line_Specs_20211026080807.pdf

BOP Diagram Attachment:

Red_Stag_5_32_B3OB_Fed_Com_1H_5M_Mutli_Bowl_WH_20211026080838.pdf

Red_Stag_5_32_B3OB_Fed_Com_1H_5M_BOPE_Schematic_20211026080838.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	1496	0	1496	3604	2108	1496	H-40	40	ST&C	1.13	2.53	DRY	3.64	DRY	6.12
2	OTHER	17.5	13.375	NEW	API	N	1496	1800	1496	1800	2108	1804	304	J-55	54.5	ST&C	1.37	3.31	DRY	31	DRY	51.4 4
3		12.2 5	9.625	NEW	API	N	0	3453	0	3453	3624	151	3453	J-55	36	LT&C	1.13	1.96	DRY	2.24	DRY	2.79
4		12.2 5	9.625	NEW	API	N	3453	4393	3453	4393	151	-789	940	J-55	40	LT&C	1.13	1.73	DRY	6.68	DRY	8.09
5		12.2 5	9.625	NEW	API	N	4393	5282	4393	5282	-789	-1678	889	N-80	40	LT&C	1.13	2.09	DRY	18.3	DRY	22.7 4
6	1	5						5400	5282	5400	-1678	-1796	118	HCL -80	40	LT&C	1.51	2.05	DRY	99.9 9	DRY	99.9 9
Kele	ased to Im	uging	;: //13/	2022	5:24:	52 P.	1	1			I			1								L

Well Name: RED STAG 5/32 B3OB FED COM

Well Number: 1H

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	PRODUCTI ON	8.75	7.0	NEW	API	N	0	12093	0	11702	3604	-8098	12093	HCP -110		LT&C	1.32	1.69	DRY	1.98	DRY	2.43
8	LINER	6.12 5	4.5	NEW	API	N	11188	21993	11129	11877	-7525	-8273	10805	P- 110	13.5	LT&C	1.73	2.01	DRY	2.32	DRY	2.89

Casing Attachments

Casing ID: 1	String	SURFACE		
Inspection Docume	ent:			
Spec Document:				
Tapered String Spe	ec:			
Casing Design Ass	umptions and W	/orksheet(s):		
Red_Stag_5_3	32_B3OB_Fed_C	com_1H_Csg_Assumpt	tions_20211026094449.pdf	
Casing ID: 2	String	OTHER	- SURFACE	
Casing ID: 2		OTHER	- SURFACE	
		OTHER	- SURFACE	
		OTHER	- SURFACE	
Inspection Docume		OTHER	- SURFACE	
Inspection Docume	ent:	OTHER	- SURFACE	
Inspection Docume	ent:	OTHER	- SURFACE	
Inspection Docume	ent:		- SURFACE	
Inspection Docume Spec Document: Tapered String Spe Casing Design Ass	ent: ec: umptions and W	/orksheet(s):	- SURFACE tions_20211026094620.pdf	

Received by OCD: 7/13/2022 10:25:57 AM

Operator Name: MEWBOURNE OIL COMPANY

Well Name: RED STAG 5/32 B3OB FED COM

Well Number: 1H

Casing Attachments
Casing ID: 3 String INTERMEDIATE
Inspection Document:
Spec Document:
Tapered String Spec:
Casing Design Assumptions and Worksheet(s):
Red_Stag_5_32_B3OB_Fed_Com_1H_Csg_Assumptions_20211026083253.pdf
Casing ID: 4 String INTERMEDIATE
Inspection Document:
Spec Document:
Tapered String Spec:
Casing Design Assumptions and Worksheet(s):
Red_Stag_5_32_B3OB_Fed_Com_1H_Csg_Assumptions_20211026083537.pdf
Casing ID: 5 String INTERMEDIATE
Inspection Document:
Spec Document:
Tapered String Spec:
Casing Design Assumptions and Worksheet(s):

Received by OCD: 7/13/2022 10:25:57 AM

Operator Name: MEWBOURNE OIL COMPANY

Well Name: RED STAG 5/32 B3OB FED COM

Well Number: 1H

Casing Attachments

Casing ID: 6 String INTERMEDIATE
Inspection Document:
Spec Document:
Tapered String Spec:
Cosing Design Assumptions and Weylehest(s):
Casing Design Assumptions and Worksheet(s):
Red_Stag_5_32_B3OB_Fed_Com_1H_Csg_Assumptions_20211026084022.pdf
Casing ID: 7 String PRODUCTION
Inspection Document:
Spec Decument:
Spec Document:
Tanawad String Space
Tapered String Spec:
Cacing Decign Accumptions and Workshoot(s):
Casing Design Assumptions and Worksheet(s):
Red_Stag_5_32_B3OB_Fed_Com_1H_Csg_Assumptions_20211026084207.pdf
Casing ID: 8 String LINER
Inspection Document:
Spec Document:
Tapered String Spec:
Casing Design Assumptions and Worksheet(s):
Red_Stag_5_32_B3OB_Fed_Com_1H_Csg_Assumptions_20211026084428.pdf

Well Name: RED STAG 5/32 B3OB 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
INTERMEDIATE	Lead		0	0	0	0	0	0		0	0

INTERMEDIATE	Lead		0	0	0	0	0	0		0	0	
--------------	------	--	---	---	---	---	---	---	--	---	---	--

INTERMEDIATE	Lead	0	0	0	0	0	0		0	0
								-		

SURFACE	Lead		0	1608	1060	2.12	12.5	2247	100	Class C	Salt, Gel, Extender, LCM
SURFACE	Tail		1608	1800	200	1.34	14.8	268	100	Class C	Retarder
INTERMEDIATE	Lead	4000	0	3372	680	2.12	12.5	1440	25	Class C	Salt, Gel, Extender, LCM
INTERMEDIATE	Tail		3372	4000	200	1.34	14.8	268	25	Class C	Retarder
INTERMEDIATE	Lead	4000	4000	5114	205	2.12	12.5	436	25	Class C	Salt, Gel Extender, LCM
INTERMEDIATE	Tail	1	5114	5800	200	1.34	14.8	268	25	Class C	Retarder
PRODUCTION	Lead	5450	4200	5450	200	1.34	14.8	268	25	Class C	Salt, Gel, LCM, Extender

PRODUCTION	Lead	5450	5450	9597	370	2.12	12.5	784	25	Class C	Salt, Gel, Extender, LCM
PRODUCTION	Tail		5450	1209 3	400	1.18	15.6	472	25	Class C	Retarder
LINER	Lead		1118 8	2199 3	430	2.97	11.2	1277	25	Class C	Salt, Gel, Extender, LCM

Well Name: RED STAG 5/32 B3OB FED COM

Well Number: 1H

Section 5 - Circulating Medium

Mud System Type: Closed

Will an air or gas system be Used? NO

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

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

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

Describe the mud monitoring system utilized: Visual Monitoring

Circulating Medium Table

Top Depth	Bottom Depth	Mud Type	Min Weight (Ibs/gal)	Max Weight (lbs/gal)	Density (Ibs/cu ft)	Gel Strength (lbs/100 sqft)	РН	Viscosity (CP)	Salinity (ppm)	Filtration (cc)	Additional Characteristics
0	1800	SPUD MUD	8.6	8.8							
1800	5400	SALT SATURATED	10	10							
5400	1209 3	WATER-BASED MUD	8.6	9.5							
1209 3	2199 3	OIL-BASED MUD	9	11							

Section 6 - Test, Logging, Coring

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

Will run GR/CNL from KOP (11188') to surface

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

COMPENSATED NEUTRON LOG, DIRECTIONAL SURVEY, GAMMA RAY LOG, MEASUREMENT WHILE DRILLING, MUD LOG/GEOLOGIC LITHOLOGY LOG, MUD LOG/GEOLOGICAL LITHOLOGY LOG, CEMENT BOND LOG, Coring operation description for the well:

None

Well Name: RED STAG 5/32 B3OB FED COM

Well Number: 1H

Section 7 - Pressure

Anticipated Bottom Hole Pressure: 3650

Anticipated Surface Pressure: 1037

Anticipated Bottom Hole Temperature(F): 150

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

Describe:

Contingency Plans geoharzards description:

Contingency Plans geohazards

Hydrogen Sulfide drilling operations plan required? YES

Hydrogen sulfide drilling operations

Red_Stag_5_32_B3OB_Fed_Com_1H_H2S_Plan_20211026110236.pdf

Section 8 - Other Information

Proposed horizontal/directional/multi-lateral plan submission:

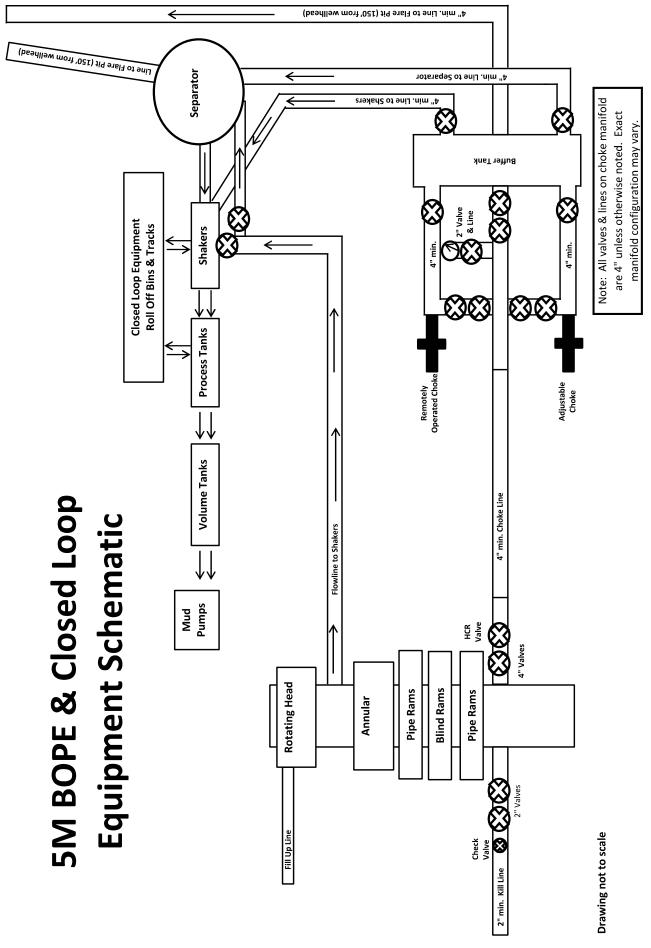
Red_Stag_5_32_B3OB_Fed_Com_1H_Dir_Plan_20211026110607.pdf Red_Stag_5_32_B3OB_Fed_Com_1H_Dir_Plot_20211026110607.pdf

Other proposed operations facets description:

Other proposed operations facets attachment:

Red_Stag_5_32_B3OB_Fed_Com_1H_Add_Info_20211026110615.pdf

Other Variance attachment:



Released to Imaging: 7/13/2022 3:24:32 PM



GATES ENGINEERING & SERVICES NORTH AMERICA 7603 Prairie Oak Dr. Houston, TX 77086 PHONE: (281) 602 - 4119 FAX: EMAIL: Troy.Schmidt@gates.com WEB: www.gates.com

10K CHOKE & KILL ASSEMBLY PRESSURE TEST CERTIFICATE

Customer:	A-7 AUSTIN INC DEA AUSTIN HOSE	Test Date:	8/20/2018
Customer Ref.:	4101901	Hose Serial No.:	H-082018-10
Invoice No.:	511956	Created By:	Moosa Naqvi
Product Description:	10KF.	3.035.0CK41/1610KFLGFXDxFLT	L/E
End Fitting 1:	4 1/16 in. Fixed Flange	End Fitting 2:	4 1/16 in. Float Flange

Gates Engineering & Services North America certifies that the following hose assembly has successfully passed all pressure testing requirements set forth in Gates specifications: GTS-04-052 (for 5K assemblies) or GTS-04-053 (10K assemblies), which include reference to Specification API 16C (2nd Edition); sections 7.5.4, 7.5.9, and 10.8.7. A test graph will accompany this test certificate to illustrate conformity to test requirements.

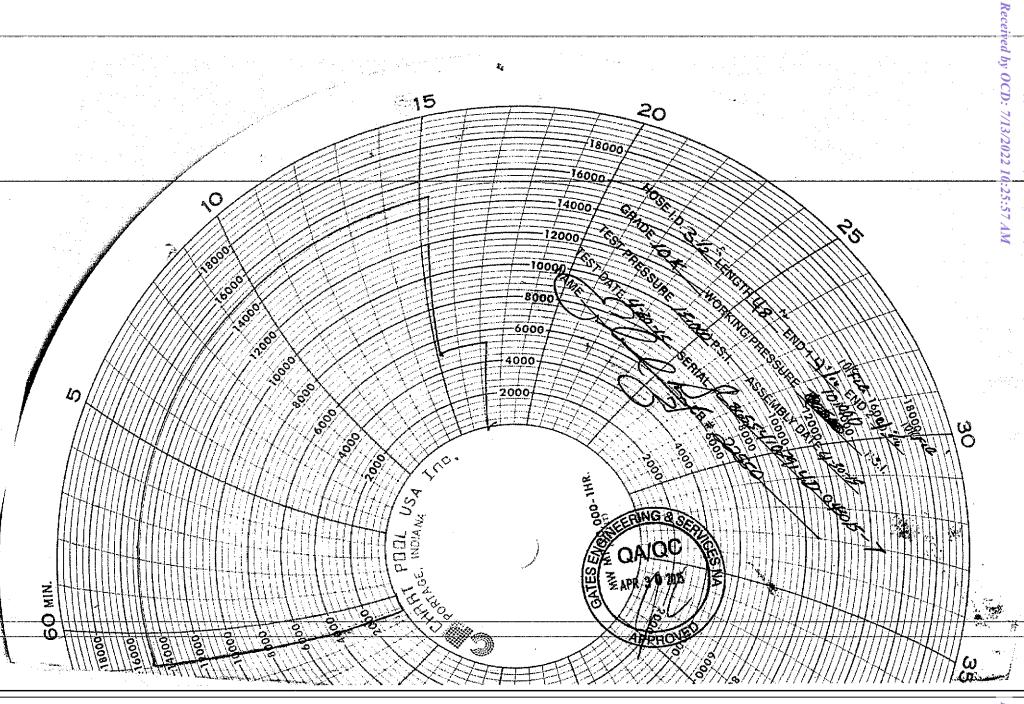
Quality:	QUALITY	Production:	BRODUCTION
Date :	8/20/2018	Date :	8/20/2018
Signature :	10 00	Signature :	THE A
	Mose Nym	/	Form PTC - 01 Rev.0 2
	U		



CORPUS CHRISTI	, TEXAS 78405		PHONE: 361-887-9807 FAX: 361-887-0812 EMAIL: <i>Tim.Cantu@gates.com</i> WEB: www.gates.com	
10K C	EMENTING ASSEMB	LY PRESSURE T	EST CERTIFICATE	
Customer : Customer Ref. : Invoice No. :	AUSTIN DISTRIBUTING 4060578 500506	Test Date: Hose Serial No.: Created By:	4/30/2015 D-043015-7 JUSTIN CROPPER	
Product Description:		10K3.548.0CK4.1/1610KFLGE	/E LE	
End Fitting 1 : Gates Part No. : 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. certifi	es that the following ho	ose assembly has been tested to	
the Gates Oil hydrostatic tes	Ifield Roughneck Agreement, it per API Spec 7K/Q1, Fifth i in accordance with this prov	/Specification requireme Edition, June 2010, Test	ents and passed the 15 minute t pressure 9.6.7 and per Table 9 st pressure 9.6.7.2 exceeds the	
the Gates Oil hydrostatic tes	Ifield Roughneck Agreement, it per API Spec 7K/Q1, Fifth i in accordance with this prov	/Specification requireme Edition, June 2010, Test duct number. Hose burs	ents and passed the 15 minute t pressure 9.6.7 and per Table 9 st pressure 9.6.7.2 exceeds the	
the Gates Oil hydrostatic tes to 15,000 psi Quality Manager : Date :	ifield Roughneck Agreement, t per API Spec 7K/Q1, Fifth i in accordance with this pro- minimum of 2.5 times	/Specification requireme Edition, June 2010, Test duct number. Hose burs the working pressure p Producton: Date :	ents and passed the 15 minute t pressure 9.6.7 and per Table 9 st pressure 9.6.7.2 exceeds the per Table 9. PRODUCTION	

•

Released to Imaging: 7/13/2022 3:24:32 PM



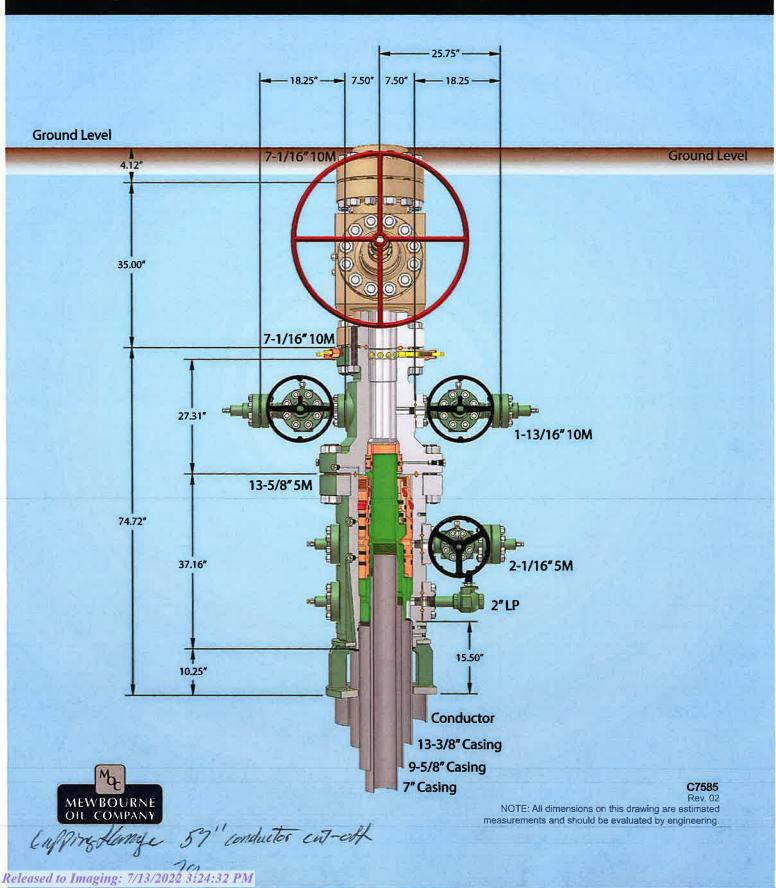
Page 20 of 57

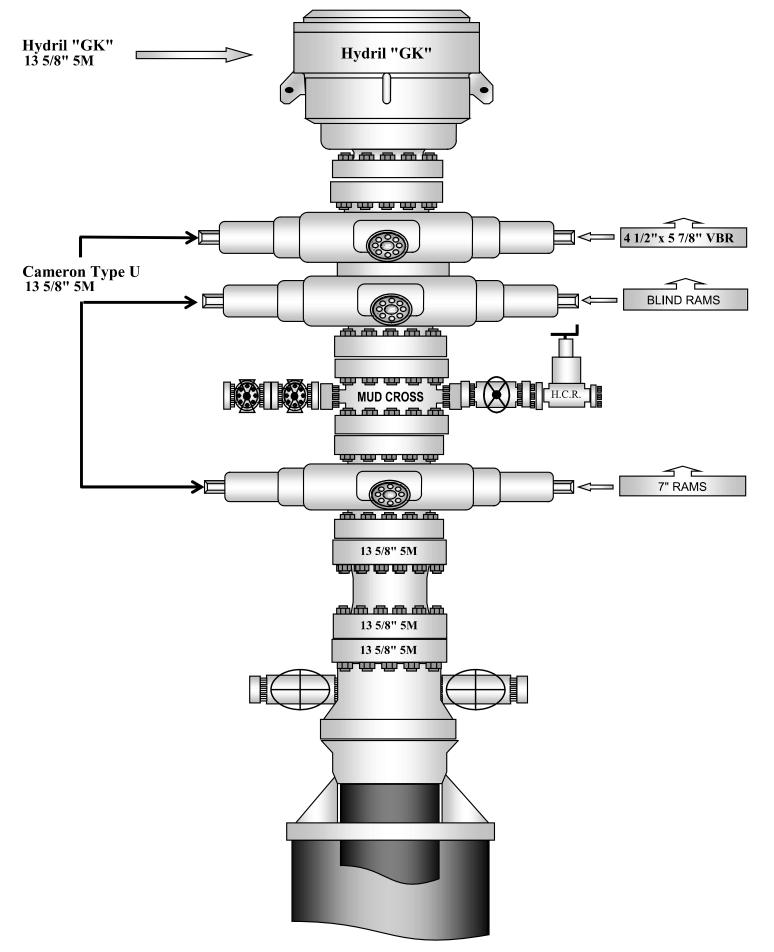


13-5/8" MN-DS Wellhead System

10

J.





Casing Program

Hole	Casing	Interval	Csg.	Weight	Grade	Conn.	SF	SF	SF Jt	SF Body
Size	From	То	Size	(lbs)			Collapse	Burst	Tension	Tension
17.5"	0'	1,496'	13.375"	48	H40	STC	1.13	2.53	3.64	6.12
	1,496'	1,800'	13.375"	54.5	J55	STC	1.37	3.31	31.00	51.44
	0'	3,453'	9.625"	36	J55	LTC	1.13	1.96	2.24	2.79
	3,453'	4,393'	9.625"	40	J55	LTC	1.13	1.73	6.68	8.09
12.25"	4,393'	5,282'	9.625"	40	N80	LTC	1.13	2.09	18.30	22.74
	5,282'	5,400'	9.625"	40	HCL80	LTC	1.51	2.05	177.41	194.15
8.75"	0	12,093'	7"	29	HCP110	LTC	1.32	1.69	1.98	2.43
6.125"	11,188'	21,993'	4.5"	13.5	P110	LTC	1.73	2.01	2.32	2.89
				BL	M Minimu	m Safety	1.125	1	1.6 Dry	1.6 Dry
						Factor			1.8 Wet	1.8 Wet

	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?	Y
If yes, does production casing cement tie back a minimum of 50' above the Reef?	Y
Is well within the designated 4 string boundary.	N
Is well located in SOPA but not in R-111-P?	Y
If yes, are the first 2 strings cemented to surface and 3 rd string cement tied back 500' into previous casing?	Y
Is well located in R-111-P and SOPA?	N
If yes, are the first three strings cemented to surface?	
Is 2 nd string set 100' to 600' below the base of salt?	
Is 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?	

Casing Program

Hole	Casing	Interval	Csg.	Weight	Grade	Conn.	SF	SF	SF Jt	SF Body
Size	From	То	Size	(lbs)			Collapse	Burst	Tension	Tension
17.5"	0'	1,496'	13.375"	48	H40	STC	1.13	2.53	3.64	6.12
	1,496'	1,800'	13.375"	54.5	J55	STC	1.37	3.31	31.00	51.44
	0'	3,453'	9.625"	36	J55	LTC	1.13	1.96	2.24	2.79
	3,453'	4,393'	9.625"	40	J55	LTC	1.13	1.73	6.68	8.09
12.25"	4,393'	5,282'	9.625"	40	N80	LTC	1.13	2.09	18.30	22.74
	5,282'	5,400'	9.625"	40	HCL80	LTC	1.51	2.05	177.41	194.15
8.75"	0	12,093'	7"	29	HCP110	LTC	1.32	1.69	1.98	2.43
6.125"	11,188'	21,993'	4.5"	13.5	P110	LTC	1.73	2.01	2.32	2.89
				BL	M Minimu	m Safety	1.125	1	1.6 Dry	1.6 Dry
						Factor			1.8 Wet	1.8 Wet

	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?	Y
If yes, does production casing cement tie back a minimum of 50' above the Reef?	Y
Is well within the designated 4 string boundary.	N
Is well located in SOPA but not in R-111-P?	Y
If yes, are the first 2 strings cemented to surface and 3 rd string cement tied back 500' into previous casing?	Y
Is well located in R-111-P and SOPA?	N
If yes, are the first three strings cemented to surface?	
Is 2 nd string set 100' to 600' below the base of salt?	
Is 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?	

Casing Program

Hole	Casing	Interval	Csg.	Weight	Grade	Conn.	SF	SF	SF Jt	SF Body
Size	From	То	Size	(lbs)			Collapse	Burst	Tension	Tension
17.5"	0'	1,496'	13.375"	48	H40	STC	1.13	2.53	3.64	6.12
	1,496'	1,800'	13.375"	54.5	J55	STC	1.37	3.31	31.00	51.44
	0'	3,453'	9.625"	36	J55	LTC	1.13	1.96	2.24	2.79
	3,453'	4,393'	9.625"	40	J55	LTC	1.13	1.73	6.68	8.09
12.25"	4,393'	5,282'	9.625"	40	N80	LTC	1.13	2.09	18.30	22.74
	5,282'	5,400'	9.625"	40	HCL80	LTC	1.51	2.05	177.41	194.15
8.75"	0	12,093'	7"	29	HCP110	LTC	1.32	1.69	1.98	2.43
6.125"	11,188'	21,993'	4.5"	13.5	P110	LTC	1.73	2.01	2.32	2.89
				BLM Minimum Safety			1.125	1	1.6 Dry	1.6 Dry
						Factor			1.8 Wet	1.8 Wet

	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?	Y
If yes, does production casing cement tie back a minimum of 50' above the Reef?	Y
Is well within the designated 4 string boundary.	N
Is well located in SOPA but not in R-111-P?	Y
If yes, are the first 2 strings cemented to surface and 3 rd string cement tied back 500' into previous casing?	Y
Is well located in R-111-P and SOPA?	N
If yes, are the first three strings cemented to surface?	
Is 2 nd string set 100' to 600' below the base of salt?	
Is 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?	

Casing Program

Hole	Casing	Interval	Csg.	Weight	Grade	Conn.	SF	SF	SF Jt	SF Body
Size	From	То	Size	(lbs)			Collapse	Burst	Tension	Tension
17.5"	0'	1,496'	13.375"	48	H40	STC	1.13	2.53	3.64	6.12
	1,496'	1,800'	13.375"	54.5	J55	STC	1.37	3.31	31.00	51.44
	0'	3,453'	9.625"	36	J55	LTC	1.13	1.96	2.24	2.79
	3,453'	4,393'	9.625"	40	J55	LTC	1.13	1.73	6.68	8.09
12.25"	4,393'	5,282'	9.625"	40	N80	LTC	1.13	2.09	18.30	22.74
	5,282'	5,400'	9.625"	40	HCL80	LTC	1.51	2.05	177.41	194.15
8.75"	0	12,093'	7"	29	HCP110	LTC	1.32	1.69	1.98	2.43
6.125"	11,188'	21,993'	4.5"	13.5	P110	LTC	1.73	2.01	2.32	2.89
				BLM Minimum Safety			1.125	1	1.6 Dry	1.6 Dry
						Factor			1.8 Wet	1.8 Wet

	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?	Y
If yes, does production casing cement tie back a minimum of 50' above the Reef?	Y
Is well within the designated 4 string boundary.	N
Is well located in SOPA but not in R-111-P?	Y
If yes, are the first 2 strings cemented to surface and 3 rd string cement tied back 500' into previous casing?	Y
Is well located in R-111-P and SOPA?	N
If yes, are the first three strings cemented to surface?	
Is 2 nd string set 100' to 600' below the base of salt?	
Is 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?	

Casing Program

Hole	Casing	Interval	Csg.	Weight	Grade	Conn.	SF	SF	SF Jt	SF Body
Size	From	То	Size	(lbs)			Collapse	Burst	Tension	Tension
17.5"	0'	1,496'	13.375"	48	H40	STC	1.13	2.53	3.64	6.12
	1,496'	1,800'	13.375"	54.5	J55	STC	1.37	3.31	31.00	51.44
	0'	3,453'	9.625"	36	J55	LTC	1.13	1.96	2.24	2.79
	3,453'	4,393'	9.625"	40	J55	LTC	1.13	1.73	6.68	8.09
12.25"	4,393'	5,282'	9.625"	40	N80	LTC	1.13	2.09	18.30	22.74
	5,282'	5,400'	9.625"	40	HCL80	LTC	1.51	2.05	177.41	194.15
8.75"	0	12,093'	7"	29	HCP110	LTC	1.32	1.69	1.98	2.43
6.125"	11,188'	21,993'	4.5"	13.5	P110	LTC	1.73	2.01	2.32	2.89
				BLM Minimum Safety			1.125	1	1.6 Dry	1.6 Dry
						Factor			1.8 Wet	1.8 Wet

	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?	Y
If yes, does production casing cement tie back a minimum of 50' above the Reef?	Y
Is well within the designated 4 string boundary.	N
Is well located in SOPA but not in R-111-P?	Y
If yes, are the first 2 strings cemented to surface and 3 rd string cement tied back 500' into previous casing?	Y
Is well located in R-111-P and SOPA?	N
If yes, are the first three strings cemented to surface?	
Is 2 nd string set 100' to 600' below the base of salt?	
Is 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?	

Casing Program

Hole	Casing	Interval	Csg.	Weight	Grade	Conn.	SF	SF	SF Jt	SF Body
Size	From	То	Size	(lbs)			Collapse	Burst	Tension	Tension
17.5"	0'	1,496'	13.375"	48	H40	STC	1.13	2.53	3.64	6.12
	1,496'	1,800'	13.375"	54.5	J55	STC	1.37	3.31	31.00	51.44
	0'	3,453'	9.625"	36	J55	LTC	1.13	1.96	2.24	2.79
	3,453'	4,393'	9.625"	40	J55	LTC	1.13	1.73	6.68	8.09
12.25"	4,393'	5,282'	9.625"	40	N80	LTC	1.13	2.09	18.30	22.74
	5,282'	5,400'	9.625"	40	HCL80	LTC	1.51	2.05	177.41	194.15
8.75"	0	12,093'	7"	29	HCP110	LTC	1.32	1.69	1.98	2.43
6.125"	11,188'	21,993'	4.5"	13.5	P110	LTC	1.73	2.01	2.32	2.89
				BLM Minimum Safety			1.125	1	1.6 Dry	1.6 Dry
						Factor			1.8 Wet	1.8 Wet

	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?	Y
If yes, does production casing cement tie back a minimum of 50' above the Reef?	Y
Is well within the designated 4 string boundary.	N
Is well located in SOPA but not in R-111-P?	Y
If yes, are the first 2 strings cemented to surface and 3 rd string cement tied back 500' into previous casing?	Y
Is well located in R-111-P and SOPA?	N
If yes, are the first three strings cemented to surface?	
Is 2 nd string set 100' to 600' below the base of salt?	
Is 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?	

Casing Program

Hole	Casing	Interval	Csg.	Weight	Grade	Conn.	SF	SF	SF Jt	SF Body
Size	From	То	Size	(lbs)			Collapse	Burst	Tension	Tension
17.5"	0'	1,496'	13.375"	48	H40	STC	1.13	2.53	3.64	6.12
	1,496'	1,800'	13.375"	54.5	J55	STC	1.37	3.31	31.00	51.44
	0'	3,453'	9.625"	36	J55	LTC	1.13	1.96	2.24	2.79
	3,453'	4,393'	9.625"	40	J55	LTC	1.13	1.73	6.68	8.09
12.25"	4,393'	5,282'	9.625"	40	N80	LTC	1.13	2.09	18.30	22.74
	5,282'	5,400'	9.625"	40	HCL80	LTC	1.51	2.05	177.41	194.15
8.75"	0	12,093'	7"	29	HCP110	LTC	1.32	1.69	1.98	2.43
6.125"	11,188'	21,993'	4.5"	13.5	P110	LTC	1.73	2.01	2.32	2.89
				BLM Minimum Safety			1.125	1	1.6 Dry	1.6 Dry
						Factor			1.8 Wet	1.8 Wet

	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?	Y
If yes, does production casing cement tie back a minimum of 50' above the Reef?	Y
Is well within the designated 4 string boundary.	N
Is well located in SOPA but not in R-111-P?	Y
If yes, are the first 2 strings cemented to surface and 3 rd string cement tied back 500' into previous casing?	Y
Is well located in R-111-P and SOPA?	N
If yes, are the first three strings cemented to surface?	
Is 2 nd string set 100' to 600' below the base of salt?	
Is 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?	

Hydrogen Sulfide Drilling Operations Plan Mewbourne Oil Company

1. General Requirements

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

2. Hydrogen Sulfide Training

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

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

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

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

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

3. Hydrogen Sulfide Safety Equipment and Systems

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

- 1. <u>Well Control Equipment</u>
 - 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

Eddy County Sheriff's Office911 or 575-887-7551Ambulance Service911 or 575-885-2111Carlsbad Fire Dept911 or 575-885-2111Loco Hills Volunteer Fire Dept.911 or 575-677-3266Closest Medical Facility - Columbia Medical Center of Carlsbad575-492-5000

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

Mewbourne Oil Company

Lea County, New Mexico NAD 83 Red Stag 5/32 B3OB Fed Com #1H Sec 5, T22S, R34E SHL: 250' FSL & 1180' FEL (Sec 5) BHL: 100' FNL & 1950' FEL (Sec 32)

Plan: Design #1

Standard Planning Report

26 October, 2021

Planning Report

Database: Company: Project: Site: Well: Wellbore: Design:	Lea Co Red S Sec 5,	ourne Oil Com ounty, New Me tag 5/32 B3OE T22S, R34E 100' FNL & 195			TVD Refer MD Refere North Ref	ence:		Site Red Stag 5 WELL @ 3632.0 WELL @ 3632.0 Grid Minimum Curva	Dusft (Original \ Dusft (Original \	Vell Elev)
Project	Lea Co	unty, New Me>	tico NAD 83							
Map System: Geo Datum: Map Zone:	North Arr	e Plane 1983 nerican Datum kico Eastern Zo			System Dat	tum:	Me	ean Sea Level		
Site	Red Sta	ag 5/32 B3OB	Fed Com #1H							
Site Position: From: Position Uncertain	Map ty:	0.0	Northi Eastin usft Slot R	-	802,4	435.00 usft 412.00 usft 3-3/16 "	Latitude: Longitude:			32.4141575 -103.4873132
Well	Sec 5, 1	22S, R34E								
Well Position Position Uncertain Grid Convergence	•	C C	.0 usft Ea	orthing: sting: ellhead Elevati	on:	515,435.00 802,412.00 3,632.0	usft Lor	tude: gitude: und Level:		32.4141575 -103.4873132 3,604.0 usft
				\ \						
Wellbore	BHL: 1	00' FNL & 195	0' FEL (Sec 32)						
Magnetics	Мо	del Name	Sample		Declina (°)		Dip A ('	') '	(r	itrength IT)
		IGRF2010	1	2/31/2014		7.12		60.29	48,3	58.23767033
Design	Design	#1								
Audit Notes:										
Version:			Phase	e: P	ROTOTYPE	Tie	On Depth:		0.0	
Vertical Section:		[epth From (T\ (usft)	/D)	+N/-S (usft)		:/-W sft)		ection (°)	
			0.0		0.0	0	.0	35	55.35	
Plan Survey Tool I Depth From (usft)			(Wellbore)		Tool Name		Remarks			
1 0.0	0 21,9	993.5 Design	#1 (BHL: 100'	FNL & 1950						
1 0.0 Plan Sections	0 21,9	993.5 Design	#1 (BHL: 100'	FNL & 1950						
Plan Sections Measured	D 21,s	Azimuth	#1 (BHL: 100' Vertical Depth (usft)	FNL & 1950 +N/-S (usft)	+E/-W (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)	TFO (°)	Target
Plan Sections Measured Depth Inc	clination	Azimuth	Vertical Depth	+N/-S		Rate	Rate	Rate		Target
Plan Sections Measured Depth Ind (usft) 0.0 5,400.0	clination (°) 0.00 0.00	Azimuth (°) 0.00 0.00	Vertical Depth (usft) 0.0 5,400.0	+N/-S (usft) 0.0 0.0	(usft) 0.0 0.0	Rate (°/100usft) 0.00 0.00	Rate (°/100usft) 0.00 0.00	Rate (°/100usft) 0.00 0.00	(°) 0.00 0.00	Target
Plan Sections Measured Depth Int (usft) 0.0 5,400.0 5,833.9	clination (°) 0.00 0.00 8.68	Azimuth (°) 0.00 0.00 252.35	Vertical Depth (usft) 0.0 5,400.0 5,832.2	+N/-S (usft) 0.0 0.0 -9.9	(usft) 0.0 0.0 -31.3	Rate (°/100usft) 0.00 0.00 2.00	Rate (°/100usft) 0.00 0.00 2.00	Rate (°/100usft) 0.00 0.00	(°) 0.00 0.00 252.35	Target
Plan Sections Measured Depth Inc. (usft) 0.0 5,400.0 5,833.9 10,754.8 10,754.8	clination (°) 0.00 0.00 8.68 8.68	Azimuth (°) 0.00 0.00 252.35 252.35	Vertical Depth (usft) 0.0 5,400.0 5,832.2 10,696.8	+N/-S (usft) 0.0 -9.9 -235.1	(usft) 0.0 -31.3 -738.7	Rate (*/100usft) 0.00 0.00 2.00 0.00	Rate (°/100usft) 0.00 0.00 2.00 0.00	Rate (*/100usft) 0.00 0.00 0.00	(°) 0.00 0.00 252.35 0.00	
Plan Sections Measured Depth In (usft) 0.0 5,400.0 5,833.9	clination (°) 0.00 0.00 8.68	Azimuth (°) 0.00 0.00 252.35	Vertical Depth (usft) 0.0 5,400.0 5,832.2	+N/-S (usft) 0.0 0.0 -9.9	(usft) 0.0 0.0 -31.3	Rate (°/100usft) 0.00 0.00 2.00	Rate (°/100usft) 0.00 0.00 2.00	Rate (°/100usft) 0.00 0.00	(°) 0.00 0.00 252.35 0.00	Target KOP: 10' FSL & 1950'

10/26/2021 8:43:59AM

Mewbourne Oil Company

Lea County, New Mexico NAD 83 Red Stag 5/32 B3OB Fed Com #1H Sec 5, T22S, R34E SHL: 250' FSL & 1180' FEL (Sec 5) BHL: 100' FNL & 1950' FEL (Sec 32)

Plan: Design #1

Standard Planning Report

26 October, 2021

Planning Report

Database: Company: Project: Site: Well: Wellbore: Design:	Lea Co Red Sta Sec 5, ⁻	urne Oil Com unty, New Me ag 5/32 B3OB T22S, R34E 20' FNL & 195 #1	xico NAD 8 Fed Com #	1H	TVD Refer MD Refer North Ref	ence:		Site Red Stag 5, WELL @ 3632.0 WELL @ 3632.0 Grid Minimum Curva)usft (Original))usft (Original)	Well Elev)
Project	Lea Cou	nty, New Mex	tico NAD 83							
Map System: Geo Datum: Map Zone:	North Ame	Plane 1983 erican Datum co Eastern Zo			System Dat	tum:	Me	ean Sea Level		
Site	Red Sta	g 5/32 B3OB	Fed Com #1	Н						
Site Position: From: Position Uncertainty:	Мар	0.0	Eas	thing: sting: t Radius:	802,	435.00 usft 412.00 usft 3-3/16 "	Latitude: Longitude:			32.4141575 -103.4873132
Well	Sec 5, T2	22S, R34E								
Well Position Position Uncertainty Grid Convergence:	+N/-S +E/-W	0 0	.0 usft .0 usft .0 usft 15 °	Northing: Easting: Wellhead Eleva	tion:	515,435.00 802,412.00 3,632.0	usft Lor	tude: gitude: und Level:		32.4141575 -103.4873132 3,604.0 usft
Wellbore	BHL: 10)0' FNL & 195	0' FEL (Sec	32)						
Magnetics		lel Name		ple Date	Declina (°)	tion	Dip A ('	-		Strength nT)
		IGRF2010		12/31/2014		7.12		60.29		358.23767033
Design	Design #	<i>‡</i> 1								
Audit Notes: Version:			Ph	ase:	PROTOTYPE	Tie	On Depth:		0.0	
Vertical Section:		C	Depth From (usft)	(TVD)	+N/-S (usft)		/-W sft)		ection (°)	
			0.0		0.0	0	.0	35	55.35	
Plan Survey Tool Pro Depth From (usft) 1 0.0	ogram Depth (usft 21,99	t) Survey	(Wellbore) #1 (BHL: 10	0' FNL & 1950	Tool Name		Remarks			
Plan Sections										
•	nation (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)	TFO (°)	Target
. , ,	0.00	0.00	0.	0.0	0.0	0.00	0.00	0.00	0.00	
0.0 5,400.0 5,833.9 10,754.8 11,188.6	0.00 0.00 8.68 8.68 0.00	0.00 252.35 252.35 0.00	5,400.0 5,832.3 10,696.0 11,129.0	2 -9.9 3 -235.1	0.0 -31.3 -738.7 -770.0	0.00 2.00 0.00 2.00	0.00 2.00 0.00 -2.00	0.00 0.00 0.00 0.00	0.00 252.35 0.00 180.00	KOP: 10' FSL & 1950'

10/26/2021 8:43:59AM

Planning Report

Database:	Hobbs	Local Co-ordinate Reference:	Site Red Stag 5/32 B3OB Fed Com #1H
Company:	Mewbourne Oil Company	TVD Reference:	WELL @ 3632.0usft (Original Well Elev)
Project:	Lea County, New Mexico NAD 83	MD Reference:	WELL @ 3632.0usft (Original Well Elev)
Site:	Red Stag 5/32 B3OB Fed Com #1H	North Reference:	Grid
Well:	Sec 5, T22S, R34E	Survey Calculation Method:	Minimum Curvature
Wellbore:	BHL: 100' FNL & 1950' FEL (Sec 32)		
Design:	Design #1		

Planned Survey

Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)
0.0	0.00	0.00	0.0	0.0	0.0	0.0	0.00	0.00	0.00
	6.00 6L & 1180' FEL (0.0	0.0	0.0	0.0	0.00	0.00	0.00
SHL: 250° FS 100.0	0.00	5ec 5) 0.00	100.0	0.0	0.0	0.0	0.00	0.00	0.00
	0.00		200.0	0.0	0.0	0.0	0.00	0.00	
200.0		0.00							0.00
300.0	0.00	0.00	300.0	0.0	0.0	0.0	0.00	0.00	0.00
400.0	0.00	0.00	400.0	0.0	0.0	0.0	0.00	0.00	0.00
500.0	0.00	0.00	500.0	0.0	0.0	0.0	0.00	0.00	0.00
600.0	0.00	0.00	600.0	0.0	0.0	0.0	0.00	0.00	0.00
700.0	0.00	0.00	700.0	0.0	0.0	0.0	0.00	0.00	0.00
800.0	0.00	0.00	800.0	0.0	0.0	0.0	0.00	0.00	0.00
900.0	0.00	0.00	900.0	0.0	0.0	0.0	0.00	0.00	0.00
300.0	0.00	0.00	500.0	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
2,000.0	0.00	0.00	2,000.0	0.0	0.0	0.0	0.00	0.00	0.00
	0.00	0.00	,	0.0	0.0	0.0	0.00	0.00	0.00
2,200.0			2,200.0						
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	0.00	5,100.0	0.0	0.0	0.0	0.00	0.00	0.00
0,100.0	0.00	0.00	5,200.0	0.0	0.0	0.0	0.00	0.00	0.00

10/26/2021 8:43:59AM

COMPASS 5000.16 Build 97

Database:	Hobbs	Local Co-ordinate Reference:	Site Red Stag 5/32 B3OB Fed Com #1H
Company:	Mewbourne Oil Company	TVD Reference:	WELL @ 3632.0usft (Original Well Elev)
Project:	Lea County, New Mexico NAD 83	MD Reference:	WELL @ 3632.0usft (Original Well Elev)
Site:	Red Stag 5/32 B3OB Fed Com #1H	North Reference:	Grid
Well:	Sec 5, T22S, R34E	Survey Calculation Method:	Minimum Curvature
Wellbore:	BHL: 100' FNL & 1950' FEL (Sec 32)		
Design:	Design #1		
Design:	Design #1		

Planned Survey

Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)
5,300.0	0.00	0.00	5,300.0	0.0	0.0	0.0	0.00	0.00	0.00
5,400.0	0.00	0.00	5,400.0	0.0	0.0	0.0	0.00	0.00	0.00
5,500.0	2.00	252.35	5,500.0	-0.5	-1.7	-0.4	2.00	2.00	0.00
5,600.0	4.00	252.35	5,599.8	-2.1	-6.6	-1.6	2.00	2.00	0.00
5,700.0	6.00	252.35	5,699.5	-4.8	-15.0	-3.5	2.00	2.00	0.00
5,800.0	8.00	252.35	5,798.7	-8.5	-26.6	-6.3	2.00	2.00	0.00
5,833.9	8.68	252.35	5,832.2	-9.9	-31.3	-7.4	2.00	2.00	0.00
5,900.0	8.68	252.35	5,897.6	-13.0	-40.8	-9.6	0.00	0.00	0.00
6,000.0	8.68	252.35	5,996.4	-17.5	-55.1	-13.0	0.00	0.00	0.00
6,100.0	8.68	252.35	6,095.3	-22.1	-69.5	-16.4	0.00	0.00	0.00
6,200.0	8.68	252.35	6,194.2	-26.7	-83.9	-19.8	0.00	0.00	0.00
6,300.0	8.68	252.35	6,293.0	-31.3	-98.3	-23.2	0.00	0.00	0.00
6,400.0	8.68	252.35	6,391.9	-35.8	-112.6	-26.6	0.00	0.00	0.00
	8.68	252.35		-40.4		-20.0	0.00	0.00	0.00
6,500.0			6,490.7		-127.0				
6,600.0	8.68	252.35	6,589.6	-45.0	-141.4	-33.4	0.00	0.00	0.00
6,700.0	8.68	252.35	6,688.4	-49.6	-155.8	-36.8	0.00	0.00	0.00
6,800.0	8.68	252.35	6,787.3	-54.1	-170.2	-40.2	0.00	0.00	0.00
6,900.0	8.68	252.35	6,886.1	-58.7	-184.5	-43.6	0.00	0.00	0.00
7,000.0	8.68	252.35	6,985.0	-63.3	-198.9	-47.0	0.00	0.00	0.00
7,100.0	8.68	252.35	7,083.8	-67.9	-213.3	-50.4	0.00	0.00	0.00
7,200.0	8.68	252.35	7,182.7	-72.4	-227.7	-53.7	0.00	0.00	0.00
7,300.0	8.68	252.35	7,281.6	-77.0	-242.0	-57.1	0.00	0.00	0.00
7,400.0	8.68	252.35	7,380.4	-81.6	-256.4	-60.5	0.00	0.00	0.00
7,500.0	8.68	252.35	7,479.3	-86.2	-270.8	-63.9	0.00	0.00	0.00
7,600.0	8.68	252.35	7,578.1	-90.7	-285.2	-67.3	0.00	0.00	0.00
7,700.0	8.68	252.35	7,677.0	-95.3	-299.6	-70.7	0.00	0.00	0.00
7,800.0	8.68	252.35	7,775.8	-99.9	-313.9	-74.1	0.00	0.00	0.00
7,900.0	8.68	252.35	7,874.7	-104.5	-328.3	-77.5	0.00	0.00	0.00
8,000.0	8.68	252.35	7,973.5	-109.0	-342.7	-80.9	0.00	0.00	0.00
		252.35	8,072.4		-357.1		0.00		0.00
8,100.0	8.68			-113.6		-84.3		0.00	
8,200.0	8.68	252.35	8,171.3	-118.2	-371.4	-87.7	0.00	0.00	0.00
8,300.0	8.68	252.35	8,270.1	-122.8	-385.8	-91.1	0.00	0.00	0.00
8,400.0	8.68	252.35	8,369.0	-127.3	-400.2	-94.5	0.00	0.00	0.00
8,500.0	8.68	252.35	8,467.8	-131.9	-414.6	-97.9	0.00	0.00	0.00
8,600.0	8.68	252.35	8,566.7	-136.5	-428.9	-101.3	0.00	0.00	0.00
8,700.0	8.68	252.35	8,665.5	-141.1	-443.3	-104.7	0.00	0.00	0.00
8,800.0	8.68	252.35	8,764.4	-145.6	-457.7	-108.1	0.00	0.00	0.00
8,900.0	8.68	252.35	8,863.2	-150.2	-472.1	-111.4	0.00	0.00	0.00
9,000.0	8.68	252.35	8,962.1	-154.8	-486.5	-114.8	0.00	0.00	0.00
9,100.0	8.68	252.35	9,061.0	-159.4	-500.8	-118.2	0.00	0.00	0.00
9,200.0	8.68	252.35	9,159.8	-163.9	-515.2	-121.6	0.00	0.00	0.00
9,300.0	8.68	252.35	9,258.7	-168.5	-529.6	-125.0	0.00	0.00	0.00
9,400.0	8.68	252.35	9.357.5	-173.1	-544.0	-128.4	0.00	0.00	0.00
9,500.0	8.68	252.35	9,456.4	-177.7	-558.3	-131.8	0.00	0.00	0.00
9,600.0	8.68	252.35	9,555.2	-182.2	-572.7	-135.2	0.00	0.00	0.00
9,700.0	8.68	252.35	9,654.1	-186.8	-587.1	-138.6	0.00	0.00	0.00
9,800.0	8.68	252.35	9,752.9	-191.4	-601.5	-142.0	0.00	0.00	0.00
9,900.0	8.68	252.35	9,851.8	-196.0	-615.9	-145.4	0.00	0.00	0.00
10,000.0	8.68	252.35	9,950.7	-200.5	-630.2	-148.8	0.00	0.00	0.00
10,100.0	8.68	252.35	10,049.5	-205.1	-644.6	-152.2	0.00	0.00	0.00
10,200.0	8.68	252.35	10,148.4	-209.7	-659.0	-155.6	0.00	0.00	0.00
10,300.0	8.68	252.35	10,247.2	-214.3	-673.4	-159.0	0.00	0.00	0.00
10,400.0	8.68	252.35	10,346.1	-218.8	-687.7	-162.4	0.00	0.00	0.00
10.500.0	8.68	252.35	10,444.9	-223.4	-702.1	-165.8	0.00	0.00	0.00

10/26/2021 8:43:59AM

Page 4

COMPASS 5000.16 Build 97

Database:	Hobbs	Local Co-ordinate Reference:	Site Red Stag 5/32 B3OB Fed Com #1H
Company:	Mewbourne Oil Company	TVD Reference:	WELL @ 3632.0usft (Original Well Elev)
Project:	Lea County, New Mexico NAD 83	MD Reference:	WELL @ 3632.0usft (Original Well Elev)
Site:	Red Stag 5/32 B3OB Fed Com #1H	North Reference:	Grid
Well:	Sec 5, T22S, R34E	Survey Calculation Method:	Minimum Curvature
Wellbore:	BHL: 100' FNL & 1950' FEL (Sec 32)		
Design:	Design #1		

Planned Survey

Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)
10,600.0	8.68	252.35	10,543.8	-228.0	-716.5	-169.2	0.00	0.00	0.00
10,700.0	8.68	252.35	10,642.6	-232.6	-730.9	-172.5	0.00	0.00	0.00
10,754.8	8.68	252.35	10,696.8	-235.1	-738.7	-174.4	0.00	0.00	0.00
10,800.0	7.77	252.35	10,741.5	-237 0	-744.9	-175.9	2.00	-2.00	0.00
10,900.0	5.77	252.35	10,840.8	-240.6	-756.2	-178.5	2.00	-2.00	0.00
11,000.0	3.77	252.35	10,940.5	-243.1	-764.1	-180.4	2.00	-2.00	0.00
11,100.0	1.77	252.35	11,040.4	-244.6	-768.7	-181.5	2.00	-2.00	0.00
11,188.6	0.00	0.00	11,129.0	-245.0	-770.0	-181.8	2.00	-2.00	0.00
KOP: 10' FS	L & 1950' FEL (S	iec 5)							
11,200.0	1.14	359.66	11,140.4	-244.9	-770.0	-181.7	10.00	10.00	0.00
11,250.0	6.13	359.66	11,190.2	-241.7	-770.0	-178.5	10.00	10.00	0.00
11,300.0	11.13	359.66	11,239.7	-234.2	-770.1	-171.0	10.00	10.00	0.00
11,350.0	16.13	359.66	11,288.2	-222.4	-770.1	-159.3	10.00	10.00	0.00
11,400.0	21.13	359.66	11,335.6	-206.5	-770.2	- 143.4	10.00	10.00	0.00
11,450.0	26.13	359.66	11,381.4	-186.4	-770.3	-123.4	10.00	10.00	0.00
11,500.0	31.13	359.66	11,425.3	-162.5	-770.5	-99.5	10.00	10.00	0.00
11,523.4	33.46	359.66	11,445.0	-150.0	-770.6	-87.0	10.00	10.00	0.00
	L & 1950' FEL (,							
11,550.0	36.13	359.66	11,466.9	-134.8	-770.7	-71.9	10.00	10.00	0.00
11,600.0	41.13	359.66	11,505.9	-103.6	-770.8	-40.8	10.00	10.00	0.00
11,650.0	46.12	359.66	11,542.1	-69.1	-771.0	-6.4	10.00	10.00	0.00
11,700.0	51.12	359.66	11,575.2	-31.6	-771.3	31.0	10.00	10.00	0.00
11,750.0	56.12	359.66	11,604.8	8.6	-771.5	71.1	10.00	10.00	0.00
11,800.0	61.12	359.66	11,630.8	51.3	-771.8	113.7	10.00	10.00	0.00
11,850.0	66.12	359.66	11,653.0	96.1	-772.0	158.3	10.00	10.00	0.00
11,900.0	71.12	359.66	11,671.3	142.6	-772.3	204.8	10.00	10.00	0.00
11,950.0	76.12	359.66	11,685.4	190.6	-772.6	252.6	10.00	10.00	0.00
12,000.0	81.12	359.66	11,695.2	239.6	-772.9	301.4	10.00	10.00	0.00
12,050.0	86.12	359.66	11,700.8	289.3	-773.2	351.0	10.00	10.00	0.00
12,078.7	88.99	359.66	11,702.0	318.0	-773.3	379.6	10.00	10.00	0.00
12,093.8	88.99	359.66	11,702.3	333.0	-773.4	394.6	0.00	0.00	0.00
	. & 1950' FEL (Se								
12,100.0	88.99	359.66	11,702.4	339.2	-773.5	400.8	0.00	0.00	0.00
12,200.0	88.99	359.66	11,704.1	439.2	-774.0	500.5	0.00	0.00	0.00
12,300.0	88.99	359.66	11,705.9	539.2	-774.6	600.2	0.00	0.00	0.00
12,400.0	88.99	359.66	11,707.7	639.2	-775.2	699.9	0.00	0.00	0.00
12,500.0	88.99	359.66	11,709.4	739.2	-775.8	799.6	0.00	0.00	0.00
12,600.0	88.99	359.66	11,711.2	839.1	-776.4	899.3	0.00	0.00	0.00
12,700.0	88.99	359.66	11,713.0	939.1	-777.0	999.0	0.00	0.00	0.00
12,800.0	88.99	359.66	11,714.7	1,039.1	-777.6	1,098.7	0.00	0.00	0.00 0.00
12,829.9	88.99	359.66	11,715.3	1,069.0	-777.8	1,128.5	0.00	0.00	0.00
	FSL & 1950' FEI				/				
12,900.0	88.99	359.66	11,716.5	1,139.1	-778.2	1,198.4	0.00	0.00	0.00
13,000.0	88.99	359.66	11,718.3	1,239.1	-778.8	1,298.1	0.00	0.00	0.00
13,100.0	88.99	359.66	11,720.0	1,339.1	-779.4	1,397.8	0.00	0.00	0.00
13,200.0 13,300.0	88.99 88.99	359.66 359.66	11,721.8 11,723.6	1,439.0 1,539.0	-780.0 -780.6	1,497.5 1,597.2	0.00 0.00	0.00 0.00	0.00 0.00
13,400.0	88.99	359.66	11,725.3	1,639.0	-781.2	1,696.9	0.00	0.00	0.00
13,500.0	88.99	359.66	11,727.1	1,739.0	-781.7	1,796.6	0.00	0.00	0.00
13,600.0	88.99	359.66	11,728.9	1,839.0	-782.3	1,896.3	0.00	0.00	0.00
13,700.0	88.99	359.66	11,730.6 11,732.4	1,938.9	-782.9 782.5	1,996.0	0.00	0.00	0.00
13,800.0	88.99	359.66	11,732.4	2,038.9	-783.5	2,095.7	0.00	0.00	0.00
13,900.0	88.99	359.66	11,734.1	2,138.9	-784.1	2,195.4	0.00	0.00	0.00

10/26/2021 8:43:59AM

COMPASS 5000.16 Build 97

Database:	Hobbs	Local Co-ordinate Reference:	Site Red Stag 5/32 B3OB Fed Com #1H
Company:	Mewbourne Oil Company	TVD Reference:	WELL @ 3632.0usft (Original Well Elev)
Project:	Lea County, New Mexico NAD 83	MD Reference:	WELL @ 3632.0usft (Original Well Elev)
Site:	Red Stag 5/32 B3OB Fed Com #1H	North Reference:	Grid
Well:	Sec 5, T22S, R34E	Survey Calculation Method:	Minimum Curvature
Wellbore:	BHL: 100' FNL & 1950' FEL (Sec 32)		
Design:	Design #1		

Planned Survey

Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)
14,000.0	88.99	359.66	11,735.9	2,238.9	-784.7	2,295.1	0.00	0.00	0.00
14,100.0	88.99	359.66	11,737.7	2,338.9	-785.3	2,394.8	0.00	0.00	0.00
14,200.0	88.99	359.66	11,739.4	2,438.9	-785.9	2,494.5	0.00	0.00	0.00
14,300.0	88.99	359.66	11,741.2	2,538.8	-786.5	2,594.2	0.00	0.00	0.00
14,400.0	88.99	359.66	11,743.0	2,638.8	-787.1	2,693.9	0.00	0.00	0.00
14,500.0	88.99	359.66	11,744.7	2,738.8	-787.7	2,793.6	0.00	0.00	0.00
14,600.0	88.99	359.66	11,746.5	2,838.8	-788.3	2,893.3	0.00	0.00	0.00
14,700.0	88.99	359.66	11,748.3	2,938.8	-788.8	2,993.0	0.00	0.00	0.00
14,800.0	88.99	359.66	11,750.0	3,038.8	-789.4	3,092.7	0.00	0.00	0.00
14,900.0	88.99	359.66	11,751.8	3,138.7	-790.0	3,192.4	0.00	0.00	0.00
15,000.0	88.99	359.66	11,753.6	3,238.7	-790.6	3,292.1	0.00	0.00	0.00
15,100.0	88.99	359.66	11,755.3	3,338.7	-791.2	3,391.8	0.00	0.00	0.00
15,200.0	88.99	359.66	11,757.1	3,438.7	-791.8	3,491.6	0.00	0.00	0.00
15,300.0	88.99	359.66	11,758.9	3,538.7	-792.4	3,591.3	0.00	0.00	0.00
15,400.0	88.99	359.66	11,760.6	3,638.7	-793.0	3,691.0	0.00	0.00	0.00
15,500.0	88.99	359.66	11,762.4	3,738.6	-793.6	3,790.7	0.00	0.00	0.00
15,600.0	88.99	359.66	11,764.2	3,838.6	-794.2	3,890.4	0.00	0.00	0.00
15,700.0	88.99	359.66	11,765.9	3,938.6	-794.8	3,990.1	0.00	0.00	0.00
15,800.0	88.99	359.66	11,767.7	4,038.6	-795.4	4,089.8	0.00	0.00	0.00
15,900.0	88.99	359.66	11,769.4	4,138.6	-795.9	4,189.5	0.00	0.00	0.00
16,000.0	88.99	359.66	11,771.2	4,238.5	-796.5	4,289.2	0.00	0.00	0.00
16,100.0	88.99	359.66	11,773.0	4,338.5	-797.1	4,388.9	0.00	0.00	0.00
16,200.0	88.99	359.66	11,774.7	4,438.5	-797.7	4,488.6	0.00	0.00	0.00
16,300.0	88.99	359.66	11,776.5	4,538.5	-798.3	4,588.3	0.00	0.00	0.00
16,400.0	88.99	359.66	11,778.3	4,638.5	-798.9	4,688.0	0.00	0.00	0.00
16,500.0	88.99	359.66	11,780.0	4,738.5	-799.5	4,787.7	0.00	0.00	0.00
16,600.0	88.99	359.66	11,781.8	4,838.4	-800.1	4,887.4	0.00	0.00	0.00
16,700.0	88.99	359.66	11,783.6	4,938.4	-800.7	4,987.1	0.00	0.00	0.00
16,800.0	88.99	359.66	11,785.3	5,038.4	-801.3	5,086.8	0.00	0.00	0.00
16,822.6	88.99	359.66	11,785.7	5,061.0	-801.4	5,109.3	0.00	0.00	0.00
PPP3: 0' FSI	L & 1950' FEL (S	ec 32)							
16,900.0	88.99	359.66	11,787.1	5,138.4	-801.9	5,186.5	0.00	0.00	0.00
17,000.0	88.99	359.66	11,788.9	5,238.4	-802.5	5,286.2	0.00	0.00	0.00
17,100.0	88.99	359.66	11,790.6	5,338.4	-803.0	5,385.9	0.00	0.00	0.00
17,200.0	88.99	359.66	11,792.4	5,438.3	-803.6	5,485.6	0.00	0.00	0.00
17,300.0	88.99	359.66	11,794.2	5,538.3	-804.2	5,585.3	0.00	0.00	0.00
17,400.0	88.99	359.66	11,795.9	5,638.3	-804.8	5,685.0	0.00	0.00	0.00
17,500.0	88.99	359.66	11,797.7	5,738.3	-805.4	5,784.7	0.00	0.00	0.00
17,600.0	88.99	359.66	11,799.5	5,838.3	-806.0	5,884.4	0.00	0.00	0.00
17,700.0	88.99	359.66	11,801.2	5,938.3	-806.6	5,984.1	0.00	0.00	0.00
17,800.0	88.99	359.66	11,803.0	6,038.2	-807.2	6,083.8	0.00	0.00	0.00
17,900.0	88.99	359.66	11,804.7	6,138.2	-807.8	6,183.5	0.00	0.00	0.00
18,000.0	88.99	359.66	11,806.5	6,238.2	-808.4	6,283.2	0.00	0.00	0.00
18,100.0	88.99	359.66	11,808.3	6,338.2	-809.0	6,382.9	0.00	0.00	0.00
18,200.0	88.99	359.66	11,810.0	6,438.2	-809.6	6,482.6	0.00	0.00	0.00
18,300.0	88.99	359.66	11,811.8	6,538.1	-810.1	6,582.3	0.00	0.00	0.00
18,400.0	88.99	359.66	11,813.6	6,638.1	-810.7	6,682.0	0.00	0.00	0.00
18,500.0	88.99	359.66	11,815.3	6,738.1	-811.3	6,781.7	0.00	0.00	0.00
,	88.99	359.66	11,817.1	6,838.1	-811.9	6,881.4	0.00	0.00	0.00
18,600.0	88.99	359.66	11,818.9	6,938.1	-812.5	6,981.1	0.00	0.00	0.00
18,600.0 18,700.0									
	88.99	359.66	11,820.6	7,038.1	-813.1	7,080.8	0.00	0.00	0.00
18,700.0	88.99 88.99	359.66 359.66	11,820.6 11,822.4	7,038.1 7,138.0	-813.1 -813.7	7,080.8 7,180.5	0.00 0.00	0.00 0.00	0.00
18,700.0 18,800.0						,			

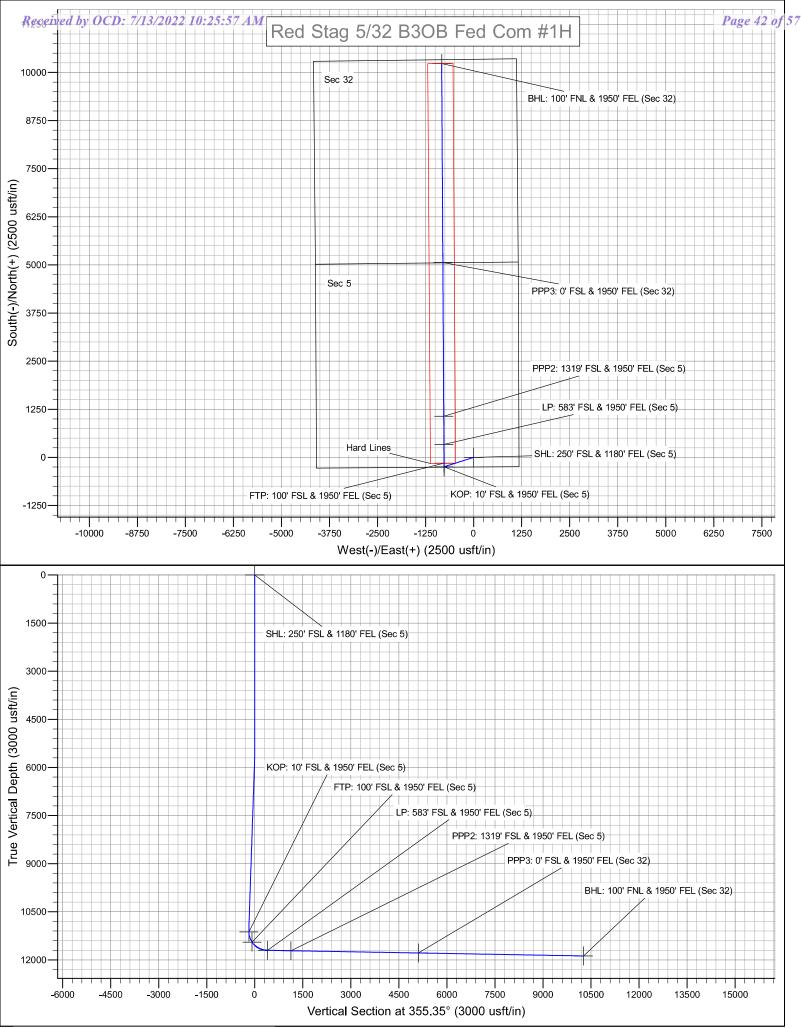
10/26/2021 8:43:59AM

Database:	Hobbs	Local Co-ordinate Reference:	Site Red Stag 5/32 B3OB Fed Com #1H
Company:	Mewbourne Oil Company	TVD Reference:	WELL @ 3632.0usft (Original Well Elev)
Project:	Lea County, New Mexico NAD 83	MD Reference:	WELL @ 3632.0usft (Original Well Elev)
Site:	Red Stag 5/32 B3OB Fed Com #1H	North Reference:	Grid
Well:	Sec 5, T22S, R34E	Survey Calculation Method:	Minimum Curvature
Wellbore:	BHL: 100' FNL & 1950' FEL (Sec 32)		
Design:	Design #1		

Planned Survey

Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)
19,200.0	88.99	359.66	11,827.7	7,438.0	-815.5	7,479.6	0.00	0.00	0.00
19,300.0	88.99	359.66	11,829.5	7,538.0	-816.1	7,579.3	0.00	0.00	0.00
19,400.0	88.99	359.66	11,831.2	7,638.0	-816.7	7,679.0	0.00	0.00	0.00
19,500.0	88.99	359.66	11,833.0	7,737.9	-817.2	7,778.7	0.00	0.00	0.00
19,600.0	88.99	359.66	11,834.8	7,837.9	-817.8	7,878.4	0.00	0.00	0.00
19,700.0	88.99	359.66	11,836 5	7,937.9	-818.4	7,978.1	0.00	0.00	0.00
19,800.0	88.99	359.66	11,838.3	8,037.9	-819.0	8,077.8	0.00	0.00	0.00
19,900.0	88.99	359.66	11,840.0	8,137.9	-819.6	8,177.5	0.00	0.00	0.00
20,000.0	88.99	359.66	11,841.8	8,237.9	-820.2	8,277.2	0.00	0.00	0.00
20,100.0	88.99	359.66	11,843.6	8,337.8	-820.8	8,376.9	0.00	0.00	0.00
20,200.0	88.99	359.66	11,845.3	8,437.8	-821.4	8,476.6	0.00	0.00	0.00
20,300.0	88.99	359.66	11,847.1	8,537.8	-822.0	8,576.3	0.00	0.00	0.00
20,400.0	88.99	359.66	11,848.9	8,637.8	-822.6	8,676.0	0.00	0.00	0.00
20,500.0	88.99	359.66	11,850.6	8,737.8	-823.2	8,775.7	0.00	0.00	0.00
20,600.0	88.99	359.66	11,852.4	8,837.8	-823.8	8,875.4	0.00	0.00	0.00
20,700.0	88.99	359.66	11,854.2	8,937.7	-824.3	8,975.1	0.00	0.00	0.00
20,800.0	88.99	359.66	11,855.9	9,037.7	-824.9	9,074.8	0.00	0.00	0.00
20,900.0	88.99	359.66	11,857.7	9,137.7	-825.5	9,174.5	0.00	0.00	0.00
21,000.0	88.99	359.66	11,859.5	9,237.7	-826.1	9,274.2	0.00	0.00	0.00
21,100.0	88.99	359.66	11,861.2	9,337.7	-826.7	9,373.9	0.00	0.00	0.00
21,200.0	88.99	359.66	11,863.0	9,437.6	-827.3	9,473.7	0.00	0.00	0.00
21,300.0	88.99	359.66	11,864.8	9,537.6	-827.9	9,573.4	0.00	0.00	0.00
21,400.0	88.99	359.66	11,866.5	9,637.6	-828.5	9,673.1	0.00	0.00	0.00
21,500.0	88.99	359.66	11,868.3	9,737.6	-829.1	9,772.8	0.00	0.00	0.00
21,600.0	88.99	359.66	11,870.1	9,837.6	-829.7	9,872.5	0.00	0.00	0.00
21,700.0	88.99	359.66	11,871.8	9,937.6	-830.3	9,972.2	0.00	0.00	0.00
21,800.0	88.99	359.66	11,873.6	10,037.5	-830.9	10,071.9	0.00	0.00	0.00
21,900.0	88.99	359.66	11,875.3	10,137.5	-831.4	10,171.6	0.00	0.00	0.00
21,993.5	88.99	359.66	11,877.0	10,231.0	-832.0	10,264.8	0.00	0.00	0.00
BHL: 100' FM	NL & 1950' FEL (Sec 32)							

Database: Company: Project: Site: Well: Wellbore: Design:	Red Stag 5/3 Sec 5, T22S,	New Mexico 2 B3OB Fed R34E	Mexico NAD 83 MD Reference: WELL @ 3632.0usft (Original Well Elev) OB Fed Com #1H North Reference: Grid						ll Elev)
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: 250' FSL & 1180' - plan hits target co - Point		0.00	0.0	0.0	0.0	515,435.00	802,412.00	32.4141575	-103.4873132
KOP: 10' FSL & 1950' - plan hits target co - Point		0.00	11,129.0	-245.0	-770.0	515,190.00	801,642.00	32.4135009	-103.4898145
FTP: 100' FSL & 1950' - plan hits target c - Point		0.00	11,445.0	-150.0	-770.6	515,285.00	801,641.44	32.4137620	-103.4898139
LP: 583' FSL & 1950' F - plan hits target c - Point		0.00	11,702.3	333.0	-773.4	515,768.00	801,638.58	32.4150896	-103.4898108
PPP2: 1319' FSL & 19 - plan hits target c - Point		0.00	11,715.3	1,069.0	- 777.8	516,504.00	801,634.22	32.4171126	-103.4898061
PPP3: 0' FSL & 1950' f - plan hits target c - Point		0.00	11,785.7	5,061.0	-801.4	520,496.00	801,610.60	32.4280852	-103.4897805
BHL: 100' FNL & 1950' - plan hits target c - Point		0.00	11,877.0	10,231.0	-832.0	525,666.00	801,580.00	32.4422957	-103.4897474



Operator Name:	Property Name:	Well Number
Mewbourne Oil Company	Red Stag 5/32 B3OB Fed Com	1H

Kick Off Point (KOP)

UL	Section	Township	Range	Lot	Feet	From N/S	Feet	From E/W	County
O	5	22S	34E		10	S	1950	E	Lea
	Latitude 32.4135009			Longitude -103.489	98145			NAD 83	

First Take Point (FTP)

UL	Section	Township	Range	Lot	Feet	From N/S	Feet	From E/W	County
O	5	22S	34E		100	S	1950	E	Lea
	Latitude 32.4137620				Longitude -103.489	98139			NAD 83

Last Take Point (LTP)

UL B	Section 32	Township 21S	Range 34E	Lot	Feet 100	From N/S N	Feet 1950	From E/W	County Lea
Latitu	de				Longitud	le			NAD
32.4	4229	57			-103.4	4897474	ŀ		83

Υ

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

Is this well an infill well?

Ν

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

API #		
Operator Name:	Property Name:	Well Number

PECOS DISTRICT DRILLING CONDITIONS OF APPROVAL

OPERATOR'S NAME:	MEWBOURNE OIL COMPANY
LEASE NO.:	NMNM114989
WELL NAME & NO.:	RED STAG 5-32 B3OB FED COM 1H
SURFACE HOLE FOOTAGE:	250'/S & 1180'/E
BOTTOM HOLE FOOTAGE	100'/N & 1950'/E
LOCATION:	Section 5, T.22 S., R.34 E., NMPM
COUNTY:	LEA County, New Mexico

COA

H2S	• Yes	○ No	
Potash	None	• Secretary	© R-111-P
Cave/Karst Potential	Low	O Medium	C High
Cave/Karst Potential	Critical		
Variance	^O None	Flex Hose	© Other
Wellhead	C Conventional	Multibowl	© Both
Other	4 String Area	🗹 Capitan Reef	□ WIPP
Other	Fluid Filled	Cement Squeeze	🔲 Pilot Hole
Special Requirements	Water Disposal	COM	🔲 Unit

A. HYDROGEN SULFIDE

A Hydrogen Sulfide (H2S) Drilling Plan shall be activated 500 feet prior to drilling into the **Undesignated** formation Grama Ridge Gas pool. As a result, the Hydrogen Sulfide area must meet Onshore Order 6 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

Casing Design:

- 1. The **13-3/8** inch surface casing shall be set at approximately **2,200** feet (a minimum of **25 feet (Lea County)** into the Rustler Anhydrite and above the salt) and cemented to the surface.
 - 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 <u>24 hours in the Potash Area</u> or 500 pounds compressive strength, whichever

Page 1 of 9

is greater. (This is to include the lead cement)

- c. Wait on cement (WOC) time for a remedial job will be a minimum of 4 hours after bringing cement to surface or 500 pounds compressive strength, whichever is greater.
- d. If cement falls back, remedial cementing will be done prior to drilling out that string.
- 2. The **9-5/8** inch first intermediate casing shall be set at approximately **5,400** feet. The minimum required fill of cement behind the **9-5/8** inch first intermediate casing is:

Option 1 (Single Stage):

Cement to surface. If cement does not circulate see B.1.a, c-d above.
 Wait on cement (WOC) time for a primary cement job is to include the lead cement slurry due to cave/karst or potash.
 Excess cement calculates to -61%, additional cement might be required.

Option 2:

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

- a. First stage to DV tool: Cement to circulate. If cement does not circulate off the DV tool, contact the appropriate BLM office before proceeding with second stage cement job.
- b. Second stage above DV tool:
 - Cement to surface. If cement does not circulate, 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 or potash.
 Excess cement calculates to 24%, additional cement might be required.
- In <u>Capitan Reef Areas</u> if cement does not circulate to surface on the first two casing strings, the cement on the 3rd casing string must come to surface.
- Special Capitan Reef requirements. If lost circulation (50% or greater) occurs below the Base of the Salt, the operator shall do the following:
 (Use this for 3 string wells in the Capitan Reef, if 4 string well ensure FW based mud used across the capitan interval)

Page 2 of 9

- Switch to fresh water mud to protect the Capitan Reef and use fresh water mud until setting the intermediate casing. The appropriate BLM office is to be notified for a PET to witness the switch to fresh water.
- Daily drilling reports from the Base of the Salt to the setting of the intermediate casing are to be submitted to the BLM CFO engineering staff via e-mail by 0800 hours each morning. Any lost circulation encountered is to be recorded on these drilling reports. The daily drilling report should show mud volume per shift/tour. Failure to submit these reports will result in an Incidence of Non-Compliance being issued for failure to comply with the Conditions of Approval. If not already planned, the operator shall run a caliper survey for the intermediate well bore and submit to the appropriate BLM office.
- 3. The minimum required fill of cement behind the 7 inch production casing is:

Option 1 (Single Stage):

Cement should tie-back at least 50 feet on top of Capitan Reef top. If cement does not circulate see B.1.a, c-d above.
 Excess cement calculates to 5%, additional cement might be required.

Option 2:

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.

- c. 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.
- d. Second stage above DV tool:
 - Cement should tie-back at least **50 feet** on top of Capitan Reef top. If cement does not circulate see B.1.a, c-d above.
- 4. The minimum required fill of cement behind the 4-1/2 inch production liner is:
 - Cement should tie-back **100 feet** into the previous casing. Operator shall provide method of verification.

C. PRESSURE CONTROL

- 1. Variance approved to use flex line from BOP to choke manifold. Manufacturer's specification to be readily available. No external damage to flex line. Flex line to be installed as straight as possible (no hard bends).'
 - 2. Operator has proposed a multi-bowl wellhead assembly. This assembly will only be tested when installed on the surface casing. Minimum working pressure of the blowout preventer (BOP) and related equipment (BOPE) required for drilling below the surface casing shoe shall be **5000 (5M)** psi.
 - 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 OOGO2.III.A.2.i must be followed.

D. SPECIAL REQUIREMENT (S)

Communitization Agreement

- The operator will submit a Communitization Agreement to the Carlsbad Field Office, 620 E Greene St. Carlsbad, New Mexico 88220, 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. <u>When the Communitization Agreement number is known, it shall also be on the sign.</u>

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 Call the Carlsbad Field Office, 620 East Greene St., Carlsbad, NM 88220, (575) 361-2822
 - Lea County Call the Hobbs Field Station, 414 West Taylor, Hobbs NM 88240, (575) 689-5981
- 1. Unless the production casing has been run and cemented or the well has been properly plugged, the drilling rig shall not be removed from over the hole without prior approval.
 - a. In the event the operator has proposed to drill multiple wells utilizing a skid/walking rig. Operator shall secure the wellbore on the current well, after installing and testing the wellhead, by installing a blind flange of like pressure rating to the wellhead and a pressure gauge that can be monitored while drilling is performed on the other well(s).
 - b. When the operator proposes to set surface casing with Spudder Rig
 - Notify the BLM when moving in and removing the Spudder Rig.
 - Notify the BLM when moving in the 2nd Rig. Rig to be moved in within 90 days of notification that Spudder Rig has left the location.
 - BOP/BOPE test to be conducted per Onshore Oil and Gas Order No. 2 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.
- <u>Wait on cement (WOC) for Potash Areas:</u> 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 <u>24 hours</u>. WOC time will be recorded in the driller's log. The casing intergrity test can be done (prior to the cement setting up) immediately after bumping the plug.
- 3. <u>Wait on cement (WOC) for Water Basin:</u> 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 <u>8 hours</u>. WOC time will be recorded in the driller's log. See individual casing strings for details regarding lead cement slurry requirements. The casing intergrity 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 Onshore Oil and Gas Order No. 2 and API RP 53 Sec. 17.
- 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 OOGO2.III.A.2.i 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 when specified), whichever is greater. However, if the float does not hold, cut-off cannot be initiated until cement reaches 500 psi compressive strength (including lead when specified).

Page 7 of 9

- 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 plug. However, **no tests** shall commence until the cement has had a minimum of 24 hours setup time, except the casing pressure test can be initiated immediately after bumping the plug (only applies to single stage cement jobs).
- c. The tests shall be done by an independent service company utilizing a test plug not a cup or J-packer. The operator also has the option of utilizing an independent tester to test without a plug (i.e. against the casing) pursuant to Onshore Order 2 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.
- e. 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.
- g. 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 Onshore Order No. 2.

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.

Page 8 of 9

D. WASTE MATERIAL AND FLUIDS

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

Porto-johns and trash containers will be on-location during fracturing operations or any other crew-intensive operations.

OTA06072022

Page 9 of 9

Hydrogen Sulfide Drilling Operations Plan Mewbourne Oil Company

1. General Requirements

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

2. Hydrogen Sulfide Training

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

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

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

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

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

3. Hydrogen Sulfide Safety Equipment and Systems

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

- 1. <u>Well Control Equipment</u>
 - 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

Eddy County Sheriff's Office911 or 575-887-7551Ambulance Service911 or 575-885-2111Carlsbad Fire Dept911 or 575-885-2111Loco Hills Volunteer Fire Dept.911 or 575-677-3266Closest Medical Facility - Columbia Medical Center of Carlsbad575-492-5000

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

Operator Name: MEWBOURNE OIL COMPANY

Well Name: RED STAG 5/32 B3OB FED COM

Well Number: 1H

Section 7 - Methods for Handling

Waste type: DRILLING

Waste content description: Drill cuttings

Amount of waste: 3510 barrels

Waste disposal frequency : One Time Only

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

Safe containmant attachment:

Waste disposal type: HAUL TO COMMERCIAL 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 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 containmant 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

Released to Imaging: 7/13/2022 3:24:32 PM Reserve Pit being used? NO **Operator Name:** MEWBOURNE OIL COMPANY **Well Name:** RED STAG 5/32 B3OB FED COM

Well Number: 1H

Temporary disposal of produced water into reserve pit? NO

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

Reserve pit depth (ft.)

Reserve pit volume (cu. yd.)

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

Reserve pit liner

Reserve pit liner specifications and installation description

Cuttings Area

Cuttings Area being used? NO

Are you storing cuttings on location? N

Description of cuttings location

Cuttings area length (ft.)

Cuttings area depth (ft.)

Cuttings area width (ft.)

Cuttings area volume (cu. yd.)

area depth (π.)

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:

RedStag5_32B3OBFedCom1H_wellsitelayout_20211025140641.pdf

Comments:

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

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

District III

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

District IV

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

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

CONDITIONS

Operator:	OGRID:
MEWBOURNE OIL CO	14744
P.O. Box 5270	Action Number:
Hobbs, NM 88241	124972
	Action Type:
	[C-101] BLM - Federal/Indian Land Lease (Form 3160-3)

CONDITIONS

Created By	Condition	Condition Date
pkautz	Will require a File As Drilled C-102 and a Directional Survey with the C-104	7/13/2022
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	7/13/2022
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	7/13/2022
pkautz	Cement is required to circulate on both surface and intermediate1 strings of casing	7/13/2022

CONDITIONS

Page 57 of 57

Action 124972