Form 3160-3 (June 2015)	_				FORM OMB No Expires: Ja	APPROV o. 1004-0 inuary 31	/ED 0137 , 2018
UNITED STATES DEPARTMENT OF THE II BUREAU OF LAND MAN	S NTEI AGE	RIOR MENT	۰ ۲		5. Lease Serial No. NMLC058480		<u></u>
APPLICATION FOR PERMIT TO D	RILI		REENTER		6. If Indian, Allotee	or Tribe	Name
1a. Type of work: Image: Constraint of the second seco	EENT	ER			7. If Unit or CA Agi	reement,	Name and No.
1b. Type of Well:	ther						
1c. Type of Completion: Hydraulic Fracturing V Si	ingle Z	Zone [Multiple Zone		8. Lease Name and SWANSON 2/3 FE	Well No. ED COM	
2. Name of Operator MEWBOURNE OIL COMPANY					9. API Well No.	-015-	55398
3a. Address P O BOX 5270, HOBBS, NM 88241	3b. I (575	Phone N 5) 393-5	o. <i>(include area code</i> 905	e)	10. Field and Pool, 0 WC -025 G06 S22	or Exploi 3322J/B	ratory Sone Spring
 Location of Well (Report location clearly and in accordance v At surface NENE / 980 FNL / 205 FEL / LAT 32.78105 	with an 72 / L	ny State .ONG -	requirements.*) 104.0374905		11. Sec., T. R. M. or SEC 2/T18S/R29E	Blk. and	l Survey or Area
At proposed prod. zone NWNE / 380 FNL / 2541 FEL / L	AT 32	2.78273	348 / LONG -104.0	622654			
14. Distance in miles and direction from nearest town or post offi 10 miles	ice*				12. County or Parisl EDDY	h	13. State NM
15. Distance from proposed* 210 feet location to nearest property or lease line, ft. (Also to nearest drig. unit line, if any)	16.1	No of ac	res in lease	17. Spaci 240.0	ng Unit dedicated to t	his well	
18. Distance from proposed location* to nearest well, drilling, completed, applied for, on this lease, ft. 20 feet	19. I 6916	Proposed 6 feet /	d Depth 14752 feet	20, BLM	/BIA Bond No. in file 11693		
21. Elevations (Show whether DF, KDB, RT, GL, etc.) 3546 feet	22. / 12/2	Approxi 4/2023	mate date work will	start*	23. Estimated durati60 days	ion	
	24	. Attac	hments				
The following, completed in accordance with the requirements of (as applicable)	f Onsh	iore Oil	and Gas Order No. 1	l, and the H	Iydraulic Fracturing r	ule per 4	3 CFR 3162.3-3
 Well plat certified by a registered surveyor. A Drilling Plan. A Surface Use Plan (if the location is on National Forest System SUPO must be filed with the appropriate Forest Service Office 	m Lan	ids, the	 Bond to cover th Item 20 above). Operator certific Such other site sp BLM. 	e operation cation. pecific infor	is unless covered by an mation and/or plans as	n existing may be 1	bond on file (see
25. Signature (Electronic Submission)		Name BRAD	(Printed/Typed) LEY BISHOP / Ph	n: (575) 39	93-5905	Date 11/06/2	2023
Title		1				1	
Regulatory		21				Data	
(Electronic Submission)		CODY	(Printea/Typea) ' LAYTON / Ph: (57	75) 234-59	959	08/22/2	2024
Title Assistant Field Manager Lands & Minerals		Office Carlsb	ad Field Office	-		1	
Application approval does not warrant or certify that the applicant applicant to conduct operations thereon. Conditions of approval, if any, are attached.	nt hold	ls legal o	or equitable title to the	nose rights	in the subject lease w	hich wou	ld 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 of	nake it or repi	t a crime resentati	ons as to any matter	wingly and within its	willfully to make to a jurisdiction.	any depai	tment or agency



*(Instructions on page 2)

.

(Continued on page 2)

District I 1625 N. French Dr., Hobbs, NM 88240

811 S. First St., Artesia, NM 88210

Phone: (575) 393-6161 Fax: (575) 393-0720 District II Form C-102

Revised August 1, 2011

Submit one copy to appropriate

Phone: (575) 748-1283 Fax: (575) 748-9720 District Office 1220 South St. Francis Dr. District III 1000 Rio Brazos Road, Aztec, NM 87410 Santa Fe, NM 87505 Phone: (505) 334-6178 Fax: (505) 334-6170 AMENDED REPORT District IV 1220 S. St. Francis Dr., Santa Fe, NM 87505 Phone: (505) 476-3460 Fax: (505) 476-3462 WELL LOCATION AND ACREAGE DEDICATION PLAT ¹ API Number 2 Pool Code ³ Pool Name 30-015-55298 96832 SAND TANK; BONE SPRING 6 Well Number ⁴Property Code 5 Property Name SWANSON 2/3 FED COM 336241 511H 7 OGRID NO. 8 Operator Name 9Elevation 3546' 14744 MEWBOURNE OIL COMPANY 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 2 18S 29E 980 NORTH 205EAST EDDY A ¹¹ Bottom Hole Location If Different From Surface UL or lot no. Section Township Range Lot Idn Feet from the North/South line Feet from the East/West line County 3 В 18S 29E 380 NORTH 2541 EAST EDDY 12 Dedicated Acres 13 Joint or Infill 14 Consolidation Code 15 Order No. 240

State of New Mexico

OIL CONSERVATION DIVISION

Energy, Minerals & Natural Resources Department

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.

		1
19'04" E 2641.35' Ϣ S 00'08'37" E 2640.74' 〇	6 HAD 83 GRID - NM EAST SURFACE LOCATION N: 648007.9 - E: 632259.5 LAT: 32.7810572' N LONG: 104.0374905' W KICK OFF POINT (KDP) 380 [°] FNL - 10 [°] FEL SEC.2 N: 648607.9 - E: 632453.7 LAT: 32.7827051' N LONG: 104.0368530' W EIRST TAKE POINT (KTP) 380 [°] FNL - 10 [°] FEL SEC.2 N: 648607.9 - E: 632453.7 LAT: 32.7827051' N LONG: 104.0368530' W EIRST TAKE POINT (KTP) 380 [°] FNL - 10 [°] FEL SEC.2 N: 648607.9 - E: 632453.7 LAT: 32.7827051' N LONG: 104.037458' W LONG: 104.037458' W LONG: 104.0540004' W 380 [°] FNL - 10 [°] FEL SEC.2 N: 648597.6 - E: 624643.8 LAT: 32.7827055' N LONG: 104.0571458' W LONG: 104.06240657' © N 89'59'22'' W 2640.63' © S 89'56'34'' W 2641.13' © S 89'49'02'' W 2642.77' © S 89'49'12'' W 2640.65' © N 89'59'22'' W 2640.63' © S 89'56'34'' W 2641.13' © S 89'49'02'' W 2642.77' © S 89'49'12'' W 2640.65' © N 89'59'22'' W 2640.63' © S 89'56'34'' W 2641.13' © S 00'09'15'' E 2641.45' PROJECT AREA PRODUCTION AREA S 00'04'16'' E 2637.55' I I I I I I I I I I I I I I I I I I I	¹⁷ OPERATOR CERTIFICATION I hereby certify that the information contained herein is true and complete to the best of my knowledge and belief, and that this organization either owns a working interest or unleased mineral interest in the land including the proposed bottom hole location or has a right to drill this well at this location pursuant to a contract with an owner of such a mineral or working interest, or to a voluntary pooling agreement or a compulsory pooling order heretofore entered by the division. Number of the division. Number of the division. 10/26/23 Signafare RYAN MCDANIEL Printed Name RYANMCDANIEL Printed Name RYANMCDANIEL Printed Name RYANMCDANIEL 18 SURVEYOR CERTIFICATION I hereby certify that the well location shown on this plat was plotted from field notes of actual surveys made by me or under my supervision, and that the same is true and correct to the best of my belief. 09/21/2023 Date of Survey Signature and Seal of Provisional Survey: 19680
(A) 2 00.0:	NMLC0058125 ² / ₆ ¹ / ₆	Certificate Number REV: ADD WELL CALLS 10/06/23
_	\sim	JUD NU: LJZJUJUDJUK

		1220 S San	onservation Di South St. Franc ta Fe, NM 875	vision cis Dr. 505			
	N	ATURAL GA	AS MANA(GEMENT PI	LAN		
This Natural Gas Manage	ment Plan mu	ist be submitted wi <u>Section</u> <u>Ef</u>	ith each Applicat <u>1 — Plan De</u> <u>fective May 25,</u>	ion for Permit to E escription 2021	Drill (APD) for a	new or	recompleted well.
I. Operator: Mew	bourne C	Dil Co.	OGRID:	14744	Date:	10/	26/23
II. Type: 🗙 Original 🗆	Amendment	due to □ 19.15.27.	9.D(6)(a) NMAC	C 🗆 19.15.27.9.D(6)(b) NMAC 🗆	Other.	
If Other, please describe:							
III. Well(s): Provide the precompleted from a sin	following info	ormation for each 1 or connected to a c	new or recomplet entral delivery po	ted well or set of work.	vells proposed to	be dril	led or proposed to
Well Name	API	ULSTR	Footages	Anticipated Oil BBL/D	Anticipated Gas MCF/D	Pr	Anticipated oduced Water BBL/D
SWANSON 2/3 FED COM 511H		A 2 18S 29E	980' FNL x 205' FEI	2000	2500		2000
IV. Central Delivery Poi	int Name:	SWAN	ISON 2/3 FED CO	OM 511H	[See]	9.15.27	7.9(D)(1) NMAC]
V. Anticipated Schedule proposed to be recomplete	: Provide the ed from a sing	following informat gle well pad or con	tion for each new nected to a centra	or recompleted wal delivery point.	ell or set of well	s propo	sed to be drilled or
Well Name	API	Spud Date	TD Reached Date	Completion Commencement	Date Initial I Date Back I	Flow Date	First Production Date
SWANSON 2/3 FED COM 511H		12/26/23	1/26/24	2/26/24	2/29/2	4	2/29/24
VI. Separation Equipme VII. Operational Practic Subsection A through F o VIII. Best Management during active and planned	ent: 🛛 Attach ces: 🖾 Attach f 19.15.27.8 f Practices: 🕅 I maintenance	a complete descrip n a complete descr NMAC.] Attach a complet	ption of how Ope ription of the act te description of	rator will size septions Operator will Operator's best m	aration equipment take to comply	nt to opt with th tices to	timize gas capture. ne requirements of minimize venting

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Section 2 – Enhanced Plan EFFECTIVE APRIL 1, 2022

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

X 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).

 \Box 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.

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Page 5 of 54

<u>Section 3 - Certifications</u> <u>Effective May 25, 2021</u>

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

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

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

Section 4 - Notices

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

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

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

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

Page 8

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

Signature:	Bradley Bishop
Printed Name:	BRADLEY BISHOP
Title:	REGULATORY MANAGER
E-mail Address:	BBISHOP@MEWBOURNE.COM
Date:	10/26/23
Phone:	575-393-5905
	OIL CONSERVATION DIVISION (Only applicable when submitted as a standalone form)
Approved By:	
Title:	
Approval Date:	
Conditions of Ap	proval:

Mewbourne Oil Company

Natural Gas Management Plan - Attachment

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

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

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

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

APD ID: 10400095516

Operator Name: MEWBOURNE OIL COMPANY

Well Name: SWANSON 2/3 FED COM

Well Type: OIL WELL

Well Number: 511H Well Work Type: Drill

Submission Date: 11/06/2023

Highlighted data reflects the most recent changes

08/26/2024

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
13997837	UNKNOWN	3546	28	28	SALT	NONE	N
13997849	TOP SALT	3074	472	472	SALT	NONE	N
13997838	BOTTOM SALT	2548	998	998	SALT	NONE	N
13997850	YATES	2355	1191	1191	SANDSTONE	NATURAL GAS, OIL	Ν
13997851	SEVEN RIVERS	1999	1547	1547	DOLOMITE	NATURAL GAS, OIL	N
13997852	QUEEN	1360	2186	2186	DOLOMITE, SANDSTONE	NATURAL GAS, OIL	N
13997853	SAN ANDRES	474	3072	3072	DOLOMITE	NATURAL GAS, OIL	N
13997836	BONE SPRING	-799	4345	4345	LIMESTONE	NATURAL GAS, OIL	N
13997854	BONE SPRING 1ST	-2644	6190	6190	SANDSTONE	NATURAL GAS, OIL	N
13997835	BONE SPRING 2ND	-3105	6651	6651	SANDSTONE	NATURAL GAS, OIL	Y

Section 2 - Blowout Prevention

Pressure Rating (PSI): 3M

Rating Depth: 14752

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

Variance request: A variance is requested for the use of a variable choke line from the BOP to the choke manifold. See attached for hydrostatic test chart. Anchors are not required by manufacturer. Variance is requested to use a multi bowl wellhead. Variance is requested to perform break testing according to attached procedure.

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

Well Name: SWANSON 2/3 FED COM

Well Number: 511H

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:

Swanson_2_3_Fed_Com_511H_3M_Surface_BOPE_Choke_Diagram_20231026151754.pdf

Swanson_2_3_Fed_Com_511H_Flex_Line_Specs_API_16C_20231026151800.pdf

Swanson_2_3_Fed_Com_511H_Flex_Line_Specs_20231026151805.pdf

BOP Diagram Attachment:

Swanson_2_3_Fed_Com_511H_3M_BOPE_Schematic_20231026151826.pdf

Swanson_2_3_Fed_Com_511H_Cactus_Wellhead_Schematic_20231026151833.pdf

Swanson_2_3_Fed_Com_511H_Vault_WH_Drawing_with_Tbg_Spool_20231026151840.pdf

Swanson_2_3_Fed_Com_511H_Break_Testing_Variance_20231026151850.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	330	0	330	3546	3216	330	H-40	48	ST&C	5.1	11.4 6	DRY	20.3 3	DRY	34.1 5
2	INTERMED IATE	12.2 5	9.625	NEW	API	N	0	1140	0	1140	2968	2406	1140	J-55	36	LT&C	3.34	5.82	DRY	11.0 4	DRY	13.7 4
3	PRODUCTI ON	8.75	7.0	NEW	API	N	0	6611	0	6571	2968	-3025	6611	P- 110	26	LT&C	1.88	3	DRY	4.03	DRY	4.83
4	LINER	6.12 5	4.5	NEW	API	N	6411	14752	6371	7144	-2825	-3598	8341	P- 110	13.5	LT&C	2.87	3.34	DRY	3	DRY	3.75

Casing Attachments

Received by OCD: 8/26/2024 1:54:53 PM

Operator Name: MEWBOURNE OIL COMPANY

Well Name: SWANSON 2/3 FED COM

Well Number: 511H

Casing Attachments

Casing ID: 1 String	SURFACE
Inspection Document:	
Spec Document:	
Tapered String Spec:	
Casing Design Assumptions and	Worksheet(s):
Swanson_2_3_Fed_Com51	1H_CsgAssumptions_20240806101019.pdf
Casing ID: 2 String	INTERMEDIATE
Inspection Document:	
Spec Document:	
Tapered String Spec:	
Casing Design Assumptions and	Worksheet(s):
Swanson_2_3_Fed_Com51	1H_CsgAssumptions_20240806101027.pdf
Casing ID: 3 String	PRODUCTION
Inspection Document:	
Spec Document:	
Tapered String Spec:	
Casing Design Assumptions and	Worksheet(s):
Swanson_2_3_Fed_Com51	1H_CsgAssumptions_20240806101034.pdf

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Operator Name: MEWBOURNE OIL COMPANY

Well Name: SWANSON 2/3 FED COM

Well Number: 511H

Casing Attachments

Casing ID: 4 String LINER

Inspection Document:

Spec Document:

Tapered String Spec:

Casing Design Assumptions and Worksheet(s):

Swanson_2_3_Fed_Com__511H_CsgAssumptions_20240806100701.pdf

Section 4 - Cement

String Type	Lead/Tail	Stage Tool Depth	Top MD	Bottom MD	Quantity(sx)	Yield	Density	Cu Ft	Excess%	Cement type	Additives
SURFACE	Lead		0	141	90	2.12	12.5	200	100	Class C	Salt, Gel, Extender, LCM
SURFACE	Tail		141	330	200	1.34	14.8	268	100	Class C	Retarder
INTERMEDIATE	Lead		0	487	90	2.12	12.5	200	25	Class C	Salt, Gel, Extender, LCM
INTERMEDIATE	Tail		487	1140	200	1.34	14.8	268	25	Class C	Retarder
PRODUCTION	Lead	3000	940	2299	120	2.12	12.5	260	25	С	SALT GEL EXTENDER LCM DEFOAMER
PRODUCTION	Tail		2299	3000	100	1.34	14.8	134	25	С	RETARDER, FLUID LOSS, DEFOAMER
PRODUCTION	Lead	3000	3000	4132	100	2.12	12.5	220	25	Class C	Gel, Retarder, Defoamer, Extender, LCM
PRODUCTION	Tail		4132	6561	400	1.18	15.6	472	25	Class H	Retarder, Fluid Loss, Defoamer
LINER	Lead		6411	1475 2	530	1.85	13.5	990	25	Class H	SALT, GET, FLUID FLOSS, DEFOAMER, DISPERSANT

Operator Name: MEWBOURNE OIL COMPANY

Well Name: SWANSON 2/3 FED COM

Well Number: 511H

Section 5 - Circulating Medium

Mud System Type: Closed

Will an air or gas system be Used? NO

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

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

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

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

Circulating Medium Table

Top Depth	Bottom Depth	Mud Type	Min Weight (Ibs/gal)	Max Weight (Ibs/gal)	Density (Ibs/cu ft)	Gel Strength (lbs/100 sqft)	Н	Viscosity (CP)	Salinity (ppm)	Filtration (cc)	Additional Characteristics
0	330	SPUD MUD	8.4	8.8							
330	1140	SALT SATURATED	9.5	10.2							
1140	6611	WATER-BASED MUD	8.6	9.7							
6611	1475 2	OIL-BASED MUD	8.6	10							

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Operator Name: MEWBOURNE OIL COMPANY

Well Name: SWANSON 2/3 FED COM

Well Number: 511H

Section 6 - Test, Logging, Coring

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

Will run GR/CNL from KOP (6611') to surface (horizontal well vertical portion of hole). Stated logs run will be in the Completion Report and submitted to the BLM.

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

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

Coring operation description for the well:

None

Section 7 - Pressure

Anticipated Bottom Hole Pressure: 3715

Anticipated Surface Pressure: 2175

Anticipated Bottom Hole Temperature(F): 140

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

Swanson_2_3_Fed_Com_511H_H2S_Plan_20231026154517.pdf

Section 8 - Other Information

Proposed horizontal/directional/multi-lateral plan submission:

Swanson_2_3_Fed_Com_511H_MOC_Dir_Plan_20231026155050.pdf

Swanson_2_3_Fed_Com_511H_MOC_Dir_Plot_20231026155055.pdf

Other proposed operations facets description:

Mewbourne Oil Company also requests approval to implement Design B as described below. BLM will be notified of elected design.

Variance is request to perform offline cementing according to the attached procedure.

Other proposed operations facets attachment:

Swanson_2_3_Fed_Com_511H_AddInfo_20231026155112.pdf

Swanson_2_3_Fed_Com_511H_DrlgProgram_20240812104657.pdf

Other Variance attachment:

Swanson_2_3_Fed_Com_511H_Offline_Cementing_Variance_20231026155228.pdf Mewbourne_Break_Testing_Variance_20240812104731.pdf

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Drawing not to scale



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

10K CHOKE & KILL ASSEMBLY PRESSURE TEST CERTIFICATE

Customer:	A-7 AUSTIN INC DBA AUSTIN HOSE	Test Date:	8/20/2018
Customer Ref.:	4101901	Hose Serial No.:	H-082018-10
Invoice No.:	511956	Created By:	Moosa Naqvi
Product Description:	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
End Fitting 1:	4 1/16 in. Fixed Flange 68503010-9721632	End Fitting 2: Assembly Code:	4 1/16 in. Float Flange L40695052218H-082018-10

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:	PRODUCTION
Date :	8/20/2018	Date :	8/20/2018
Signature :	h h h h	Signature :	THE A
	Mossie Nothe	/	Form PTC - 01 Rev.0 2
	5		- dite



	, TEXAS 78405		FAX: 361-887-9807 FAX: 361-887-0812 EMAIL: <i>Tim.Cantu@gates.co</i> WEB: www.gates.com	om
10K C	EMENTING ASSEMB	LY PRESSURE 1	TEST CERTIFICATE	
Customers		Tect Date:	4/30/2015	
Customer Ref. :	4060578	Hose Serial No.:	D-043015-7	
Invoice No. :	500506	Created By:	JUSTIN CROPPER	
		10K3 548 0CK4 1/1610KEL	GE/E 1 F	
Product Description:		1010.040.00004.171010101		
End Fitting 1 :	4 1/16 10K FLG	End Fitting 2 :	4 1/16 10K FLG	
Gates Part No. :	4773-6290	Assembly Code :	L36554102914D-043015-7	
Working Pressure :	10,000 PSI	Test Pressure :	15,000 PSI	
Gates E & S I the Gates Oil	North America, Inc. certific ifield Roughneck Agreement/	es that the following h /Specification requirem Edition, June 2010, Te	hose assembly has been tested to nents and passed the 15 minute est pressure 9.6.7 and per Table 9	
Gates E & S I the Gates Oil hydrostatic tes to 15,000 psi	North America, Inc. certific Ifield Roughneck Agreement/ It per API Spec 7K/Q1, Fifth F i in accordance with this proc minimum of 2.5 times	es that the following h /Specification requiren Edition, June 2010, Te Juct number. Hose but the working pressure	hose assembly has been tested to nents and passed the 15 minute est pressure 9.6.7 and per Table 9 Irst pressure 9.6.7.2 exceeds the e per Table 9.	9
Gates E & S I the Gates Oil hydrostatic tes to 15,000 psi	North America, Inc. certific Ifield Roughneck Agreement/ st per API Spec 7K/Q1, Fifth f i in accordance with this proc minimum of 2.5 times	es that the following h /Specification requirem Edition, June 2010, Te Juct number. Hose but the working pressure	hose assembly has been tested to nents and passed the 15 minute est pressure 9.6.7 and per Table 9 Irst pressure 9.6.7.2 exceeds the e per Table 9.	9
Gates E & S I the Gates Oil hydrostatic tes to 15,000 psi	North America, Inc. certifie Ifield Roughneck Agreement/ st per API Spec 7K/Q1, Fifth I i in accordance with this proc minimum of 2.5 times	es that the following h /Specification requirem Edition, June 2010, Te Juct number. Hose bu the working pressure Produciton:	hose assembly has been tested to nents and passed the 15 minute est pressure 9.6.7 and per Table 9 Irst pressure 9.6.7.2 exceeds the e per Table 9.	9
Gates E & S I the Gates Oil hydrostatic tes to 15,000 psi Quality Manager : Date :	North America, Inc. certifie Ifield Roughneck Agreement/ st per API Spec 7K/Q1, Fifth F i in accordance with this proc minimum of 2.5 times	es that the following h /Specification requirem Edition, June 2010, Te Juct number. Hose but the working pressure Produciton: Date :	hose assembly has been tested to nents and passed the 15 minute est pressure 9.6.7 and per Table 9 irst pressure 9.6.7.2 exceeds the e per Table 9. PRODUCTION 4/30/2015	9
Gates E & S I the Gates Oil hydrostatic tes to 15,000 psi Quality Manager : Date : Signature :	North America, Inc. certifie Ifield Roughneck Agreement/ st per API Spec 7K/Q1, Fifth f i in accordance with this proc minimum of 2.5 times	es that the following h /Specification requirem Edition, June 2010, Te Juct number. Hose but the working pressure Produciton: Date : Signature :	hose assembly has been tested to nents and passed the 15 minute est pressure 9.6.7 and per Table 9 urst pressure 9.6.7.2 exceeds the e per Table 9. PRODUCTION 4/30/2015	
Gates E & S I the Gates Oil hydrostatic tes to 15,000 psi Quality Manager : Date : Signature :	North America, Inc. certific ifield Roughneck Agreement/ st per API Spec 7K/Q1, Fifth I i in accordance with this proc minimum of 2.5 times	es that the following h /Specification requiren Edition, June 2010, Te Juct number. Hose built the working pressure Produciton: Date : Signature :	hose assembly has been tested to nents and passed the 15 minute est pressure 9.6.7 and per Table 9 irst pressure 9.6.7.2 exceeds the e per Table 9. PRODUCTION 4/30/2015 Forn-PTC-01 Rev.	9
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Gates E & S I the Gates Oil hydrostatic tes to 15,000 psi Quality Manager : Date : Signature :	North America, Inc. certific ifield Roughneck Agreement/ st per API Spec 7K/Q1, Fifth F i in accordance with this proc minimum of 2.5 times	es that the following h /Specification requiren Edition, June 2010, Te duct number. Hose bu the working pressure Produciton: Date : Signature :	hose assembly has been tested to nents and passed the 15 minute est pressure 9.6.7 and per Table 9 irst pressure 9.6.7.2 exceeds the e per Table 9. PRODUCTION 4/30/2015 May Form PTC - 01 Rev.	0
Gates E & S I the Gates Oil hydrostatic tes to 15,000 psi Quality Manager : Date : Signature :	North America, Inc. certific lifield Roughneck Agreement/ st per API Spec 7K/Q1, Fifth f i in accordance with this proc minimum of 2.5 times	es that the following h /Specification requirem Edition, June 2010, Te duct number. Hose bu the working pressure Produciton: Date : Signature :	hose assembly has been tested to nents and passed the 15 minute est pressure 9.6.7 and per Table 9 urst pressure 9.6.7.2 exceeds the e per Table 9. PRODUCTION 4/30/2015 Form PTC - 01 Rev.	0 9 .02
Gates E & S I the Gates Oil hydrostatic tes to 15,000 psi Quality Manager : Date : Signature :	North America, Inc. certific ifield Roughneck Agreement/ st per API Spec 7K/Q1, Fifth F i in accordance with this proc minimum of 2.5 times	es that the following h /Specification requirem Edition, June 2010, Te duct number. Hose bu the working pressure Produciton: Date : Signature :	hose assembly has been tested to nents and passed the 15 minute est pressure 9.6.7 and per Table 9 urst pressure 9.6.7.2 exceeds the e per Table 9. PRODUCTION 4/30/2018 May Form PTC - 01 Rev.	0
Gates E & S I the Gates Oil hydrostatic tes to 15,000 psi Quality Manager : Date : Signature :	North America, Inc. certific ifield Roughneck Agreement/ st per API Spec 7K/Q1, Fifth f i in accordance with this proc minimum of 2.5 times	es that the following h /Specification requirem Edition, June 2010, Te Juct number. Hose bu the working pressure Produciton: Date : Signature :	hose assembly has been tested to nents and passed the 15 minute est pressure 9.6.7 and per Table 9 urst pressure 9.6.7.2 exceeds the e per Table 9. PRODUCTION 4/30/2015 Advance Form PTC-01 Rev.	099







7-1/16" 10M



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MEWBOURNE OIL COMPANY



Mewbourne Oil Co.

BOP Break Testing Variance

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

Procedures

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



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

Barriers

Before Nipple Down:

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

After Nipple Down:

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

Summary

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

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

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



Figure 1. BOP diagram





Figure 2. BOPE diagram





Figure 3. BOP handling system





Figure 4. BOP handling system





Figure 5. Cactus 5M wellhead with BOP quick connect



Figure 6. Vault 5M wellhead with BOP quick connect

Mewbourne Oil Company, Swanson 2/3 Fed Com 511H Sec 2, T18S, R29E SHL: 980' FNL 205' FEL (Sec 2) BHL: 380' FNL 2541' FEL (Sec 3)

Casing Program Design A

String	Hole Size	Ton MD	Top TVD	Pot MD	Pot TVD	Con Sino	Weight	Creada	Conn	SF	SF	SF Jt	SF Body
String	Hole Size	TOP MD	100 1 00	BOI MD	BOULAD	Csg. Size	(lbs)	Graue	Com.	Collapse	Burst	Tension	Tension
Surface	17.500 in	0'	0'	330'	330'	13.375	48.00	H40	STC	5.10	11.46	20.33	34.15
Int	12.250 in	0'	0'	1140'	1140'	9.625	36.00	J55	LTC	3.34	5.82	11.04	13.74
Production	8.750 in	0'	0'	6611'	6571'	7.000	26.00	P110	LTC	1.88	3.00	4.03	4.83
Liner	6.125 in	6411'	6371'	14752'	6916'	4.500	13.50	P110	LTC	2.87	3.34	3.00	3.75
BLM Minimum Safety Factors						1.125	1.0	1.6 Dry	1.6 Dry				
								-				1.8 Wet	1.8 Wet

Cement Program

	# Sacks	Wt. lb/gal	Yield ft ³ /sack	TOC/BOC	Volume ft ³	% Excess	Slurry Description		
LEAD	90	12.5	2.12	0' - 141'	200	100%	Class C: Salt, Gel, Extender, LCM		
TAIL	200	14.8	1.34	141' - 330'	268	10070	Class C: Retarder		
LEAD	90	12.5	2.12	0' - 487'	200	250/	Class C: Salt, Gel, Extender, LCM		
TAIL	200	14.8	1.34	487' - 1140'	268	2.376	Class C: Retarder		
LEAD	100	12.5	2.12	3000' - 4132'	220	250/	Class C: Salt, Gel, Extender, LCM, Defoamer		
TAIL	400	15.6	1.18	4132' - 6561'	472	2.376	Class H: Retarder, Fluid Loss, Defoamer		
7" DV Tool @ 3000'									
LEAD	120	12.5	2.12	940' - 2299'	260	250/	Class C: Salt, Gel, Extender, LCM, Defoamer		
TAIL	100	14.8	1.34	2299' - 3000'	134	2.376	Class C: Retarder, Fluid Loss, Defoamer		
LEAD	530	13.5	1.85	6411' - 14752'	990	25%	Class H: Salt, Gel, Fluid Loss, Retarder, Dispersant, Defoamer, Anti-		
	LEAD TAIL LEAD TAIL LEAD TAIL LEAD TAIL LEAD	# Sacks LEAD 90 TAIL 200 LEAD 90 TAIL 200 LEAD 90 TAIL 200 LEAD 100 TAIL 400 LEAD 120 TAIL 100 LEAD 530	# Sacks Wt. lb/gal LEAD 90 12.5 TAIL 200 14.8 LEAD 90 12.5 TAIL 200 14.8 LEAD 100 12.5 TAIL 200 14.8 LEAD 100 12.5 TAIL 100 12.5 TAIL 100 12.5 TAIL 100 14.8 LEAD 120 14.8 LEAD 530 13.5	# Sacks Wt. lb/gal Yield ft ³ /sack LEAD 90 12.5 2.12 TAIL 200 14.8 1.34 LEAD 90 12.5 2.12 TAIL 200 14.8 1.34 LEAD 90 12.5 2.12 TAIL 200 14.8 1.34 LEAD 100 12.5 2.12 TAIL 400 15.6 1.18 LEAD 120 12.5 2.12 TAIL 100 14.8 1.34 LEAD 530 13.5 1.85	# Sacks Wt. lb/gal Yield ft ³ /sack TOC/BOC LEAD 90 12.5 2.12 0'-141' TAIL 200 14.8 1.34 141'-330' LEAD 90 12.5 2.12 0'-487' TAIL 200 14.8 1.34 487'-1140' LEAD 100 12.5 2.12 3000'-4132' TAIL 200 14.8 1.34 487'-1140' LEAD 100 12.5 2.12 3000'-4132' TAIL 400 15.6 1.18 4132'-6561' TWD 12.0 12.5 2.12 940'-2299' TAIL 100 14.8 1.34 2299'-3000' LEAD 530 13.5 1.85 6411'-14752'	# Sacks Wt. lb/gal Yield ft ³ /sack TOC/BOC Volume ft ³ LEAD 90 12.5 2.12 0'.141' 200 TAIL 200 14.8 1.34 141'.30' 268 LEAD 90 12.5 2.12 0'.487' 200 TAIL 200 14.8 1.34 487'' 100 TAIL 200 14.8 1.34 487'' 100'' TAIL 200 14.8 1.34 487'' 140'' 268 LEAD 100 12.5 2.12 3000'' 413'' 200'' TAIL 400 15.6 1.18 413'' 413'' 472''' T''' DV Tool @ 3000'' 12.5 2.12 940''-229'' 260 TAIL 120 12.5 2.12 940''-229'' 260 TAIL 100 14.8 1.34 229''-3000'' 134 LEAD 530 13.5 1.85 6411''-14752''	# Sacks Wt. lb/gal Yield ft ³ /sack TOC/BOC Volume ft ³ % Excess LEAD 90 12.5 2.12 0'-141' 200 100% TAIL 200 14.8 1.34 141'-330' 268 100% LEAD 90 12.5 2.12 0'-487' 200 25% LEAD 200 14.8 1.34 487'-1140' 268 25% LEAD 100 12.5 2.12 3000'-4132' 220 25% TAIL 200 14.8 1.34 487'-1140' 268 25% LEAD 100 12.5 2.12 3000'-4132' 220 25% TAIL 400 15.6 1.18 4132'-6561' 472 25% TAIL 120 12.5 2.12 940'-2299' 2600' 25% TAIL 100 14.8 1.34 2299'-3000' 134 25% TEAD 530 13.5 1.85		

Design A -	Mud	Program
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Depth	Mud Wt	Mud Type
0' - 330'	8.4 - 8.8	Fresh Water
330' - 1140'	9.5-10.2	Brine
1140' - 6611'	8.6-9.7	Cut-Brine
6611' - 14752'	8.6-10.0	OBM
6611' - 14752'	8.6-10.0	OBM

Formation	Est. Top (TVD)	Mineral Resources	Formation	Est. Top (TVD)	Mineral Resources
Rustler			Yeso		
Castile			Delaware (Lamar)		
Salt Top	472'	None	Bell Canyon		
Salt Base	998'	None	Cherry Canyon		
Yates	1191'	Oil/Natural Gas	Manzanita Marker		
Seven Rivers	1547'	Oil/Natural Gas	Basal Brushy Canyon		
Queen	2186'	Oil/Natural Gas	Bone Spring	4345'	Oil/Natural Gas
Capitan			1st Bone Spring	6190'	Oil/Natural Gas
Grayburg	2521'	None	2nd Bone Spring	6651'	Oil/Natural Gas
San Andres	3072'	Oil/Natural Gas	3rd Bone Spring		
Glorieta			Wolfcamp		

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

	Y or N
Is casing new? If used, attach certification as required in Onshore Order #1	Y
Is casing API approved? If no, attach casing specification sheet.	Y
Is premium or uncommon casing planned? If yes attach casing specification sheet.	Ν
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?	Ν
If yes, does production casing cement tie back a minimum of 50' above the Reef?	
Is well within the designated 4 string boundary.	N
Is well located in SOPA but not in R-111-P?	N
If yes, are the first 2 strings cemented to surface and 3 rd string cement tied back 500' into previous casing?	
Is well located in R-111-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 an open annulus used to satisfy R-111-Q? If yes, see cement design.	
Is an engineered weak point used to satisfy R-111-Q?	
If yes, at what depth is the weak point planned?	
Is well located in high Cave/Karst?	N
If yes, are there two strings cemented to surface?	
(For 2 string wells) If yes, is there a contingency casing if lost circulation occurs?	
Is well located in critical Cave/Karst?	N
If yes, are there three strings cemented to surface?	

Mewbourne Oil Company

Eddy County, New Mexico NAD 83 Swanson 2/3 Fed Com #511H Sec 02, T18S, R29E SHL: 980' FNL & 205' FEL (Sec 2) BHL: 380' FNL & 2541' FEL (Sec 3)

Plan: Design #1

Standard Planning Report

25 October, 2023

Project Eddy County, New Mexico NAD 83	Eddy County, New Mexico NAD 83								
Map System:US State Plane 1983System Datum:Ground LevelGeo Datum:North American Datum 1983Map Zone:New Mexico Eastern Zone	S State Plane 1983 System Datum: Ground Level orth American Datum 1983 ew Mexico Eastern Zone								
Site Swanson 2/3 Fed Com #511H									
Site Position:Northing:648,007.90 usftLatitude:From:MapEasting:632,259.50 usftLongitude:Position Uncertainty:0.0 usftSlot Radius:13-3/16 "	32.7810573 -104.0374905								
Well Sec 02, T18S, R29E									
Well Position +N/-S 0.0 usft Northing: 648,007.90 usft Latitude: +E/-W 0.0 usft Easting: 632,259.50 usft Longitude: Position Uncertainty 0.0 usft Wellhead Elevation: 3,574.0 usft Ground Level: Grid Convergence: 0.16 °	32.7810573 -104.0374905 3,546.0 usft								
Wellbore BHL: 380' FNL & 2541' FEL (Sec 3)									
Magnetics Model Name Sample Date Declination Dip Angle Fiel (°) (°)	ld Strength (nT)								
IGRF2010 12/31/2014 7.41 60.53 4	18,519.44528966								
Design Design #1									
Audit Notes:									
Version:Phase:PROTOTYPETie On Depth:0.0									
Vertical Section: Depth From (TVD) +N/-S +E/-W Direction									
0.0 0.0 0.0 274.43									
Plan Survey Tool Program Date 10/25/2023 Depth From (usft) Depth To (usft) Survey (Wellbore) Tool Name Remarks									
1 0.0 14,752.0 Design #1 (BHL: 380' FNL & 2541									
Plan Sections									
Measured Vertical Dogleg Build Turn									
DepthInclinationAzimuthDepth+N/-S+E/-WRateRateRateTFO(usft)(°)(°)(usft)(usft)(°/100usft)(°/100usft)(°/100usft)(°)	Target								
	00								
1,400.0 0.00 1,400.0 0.0 0.0 0.0 0.00 0.00 0.00 0.00 0	00								
	94								
1,114.0 1.49 11.94 1,113.5 23.3 1.5 2.00 2.00 0.00 17.5									
1,774.0 7.49 17.94 1,773.5 23.3 7.5 2.00 2.00 0.00 17.9 6,236.7 7.49 17.94 6,197.5 576.7 186.7 0.00 0.00 0.00 0.00 0.00	00								
1,774.0 7.49 17.94 1,773.5 23.3 7.5 2.00 2.00 0.00 17.9 6,236.7 7.49 17.94 6,197.5 576.7 186.7 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 180.0 6,611.2 0.00 0.00 6,571.0 600.0 194.2 2.00 -2.00 0.00 180.0 7,529.8 91.81 269.93 7,144.0 599.2 -397.2 9.99 9.99 0.00 -90.0	00 00 KOP: 380' FNL & 10' 07								

10/25/2023 5:04:09PM

Database:	Hobbs	Local Co-ordinate Reference:	Site Swanson 2/3 Fed Com #511H
Company:	Mewbourne Oil Company	TVD Reference:	WELL @ 3574.0usft (Original Well Elev)
Project:	Eddy County, New Mexico NAD 83	MD Reference:	WELL @ 3574.0usft (Original Well Elev)
Site:	Swanson 2/3 Fed Com #511H	North Reference:	Grid
Well:	Sec 02, T18S, R29E	Survey Calculation Method:	Minimum Curvature
Wellbore:	BHL: 380' FNL & 2541' FEL (Sec 3)		
Design:	Design #1		

Planned Survey

0.0 0.00 0.0 0.0 0.00 0.00 Stt: Ser D 0.00 <th< th=""><th>Measured Depth (usft)</th><th>Inclination (°)</th><th>Azimuth (°)</th><th>Vertical Depth (usft)</th><th>+N/-S (usft)</th><th>+E/-W (usft)</th><th>Vertical Section (usft)</th><th>Dogleg Rate (°/100usft)</th><th>Build Rate (°/100usft)</th><th>Turn Rate (°/100usft)</th></th<>	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)
SHL: 980 FFL Ges 2) 911: 980 FFL 2002 0.00 </th <th>0.0</th> <th>0.00</th> <th>0.00</th> <th>0.0</th> <th>0.0</th> <th>0.0</th> <th>0.0</th> <th>0.00</th> <th>0.00</th> <th>0.00</th>	0.0	0.00	0.00	0.0	0.0	0.0	0.0	0.00	0.00	0.00
100.0 0.00 <t< td=""><td>SHL: 980' F</td><td>NL & 205' FEL (S</td><td>iec 2)</td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></t<>	SHL: 980' F	NL & 205' FEL (S	iec 2)							
200.0 0.00 200.0 0.0 0.0 0.00 0.00 0.00 0.00 400.0 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 600.0 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 600.0 0.00<	100.0	0.00	0.00	100.0	0.0	0.0	0.0	0.00	0.00	0.00
300.0 0.00 300.0 0.0 0.0 0.00 0.00 0.00 560.0 0.00 560.0 0.00	200.0	0.00	0.00	200.0	0.0	0.0	0.0	0.00	0.00	0.00
400.0 0.00 0.00 0.00 0.00 0.00 0.00 0.00 600.0 0.00	300.0	0.00	0.00	300.0	0.0	0.0	0.0	0.00	0.00	0.00
500.0 0.00 0.00 0.00 0.00 0.00 0.00 0.00 700.0 0.00 0.00 0.00 0.00 0.00 0.00 0.00 900.0 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 1000.0 0.0	400.0	0.00	0.00	400.0	0.0	0.0	0.0	0.00	0.00	0.00
660.0 0.00 <t< td=""><td>500.0</td><td>0.00</td><td>0.00</td><td>500.0</td><td>0.0</td><td>0.0</td><td>0.0</td><td>0.00</td><td>0.00</td><td>0.00</td></t<>	500.0	0.00	0.00	500.0	0.0	0.0	0.0	0.00	0.00	0.00
700.0 0.00 <t< td=""><td>600.0</td><td>0.00</td><td>0.00</td><td>600.0</td><td>0.0</td><td>0.0</td><td>0.0</td><td>0.00</td><td>0.00</td><td>0.00</td></t<>	600.0	0.00	0.00	600.0	0.0	0.0	0.0	0.00	0.00	0.00
800.0 0.00 0.00 900.0 0.00 0.00 0.00 0.00 0.00 1.000.0 0.00 0.00 1.000.0 0.00	700.0	0.00	0.00	700.0	0.0	0.0	0.0	0.00	0.00	0.00
900.0 0.00 0.00 0.00 0.00 0.00 0.00 0.00 1.000.0 0.00 0.00 1.000.0 0.00	800.0	0.00	0.00	800.0	0.0	0.0	0.0	0.00	0.00	0.00
$\begin{array}{c c c c c c c c c c c c c c c c c c c $	900.0	0.00	0.00	900.0	0.0	0.0	0.0	0.00	0.00	0.00
$\begin{array}{c c c c c c c c c c c c c c c c c c c $	1,000.0	0.00	0.00	1,000.0	0.0	0.0	0.0	0.00	0.00	0.00
$\begin{array}{c c c c c c c c c c c c c c c c c c c $	1,100.0	0.00	0.00	1,100.0	0.0	0.0	0.0	0.00	0.00	0.00
$\begin{array}{c c c c c c c c c c c c c c c c c c c $	1,200.0	0.00	0.00	1,200.0	0.0	0.0	0.0	0.00	0.00	0.00
1400.0 0.00 0.00 1.400.0 0.00 0.00 0.00 0.00 0.00 0.00 1500.0 2.00 17.94 1.569.8 6.6 2.1 -1.6 2.00 2.00 0.00 1700.0 6.00 17.94 1.789.5 23.3 7.5 -5.7 2.00 2.00 0.00 1.800.0 7.49 17.94 1.979.5 23.3 7.5 -5.7 2.00 0.00 0.00 1.900.0 7.49 17.94 1.987.9 38.8 12.6 -9.5 0.00 0.00 0.00 2.000.0 7.49 17.94 2.995.2 76.0 24.6 -15.6 0.00 0.00 0.00 2.200.0 7.49 17.94 2.994.4 88.4 28.6 -21.7 0.00 0.00 0.00 2.600.0 7.49 17.94 2.991.9 12.56 40.7 -308 0.00 0.00 0.00 2.600.0 7.49 17.94	1,300.0	0.00	0.00	1,300.0	0.0	0.0	0.0	0.00	0.00	0.00
$ \begin{array}{cccccccccccccccccccccccccccccccccccc$	1,400.0	0.00	0.00	1,400.0	0.0	0.0	0.0	0.00	0.00	0.00
$ \begin{array}{cccccccccccccccccccccccccccccccccccc$	1,500.0	2.00	17.94	1,500.0	1.7	0.5	-0.4	2.00	2.00	0.00
$ \begin{array}{cccccccccccccccccccccccccccccccccccc$	1,600.0	4.00	17.94	1,599.8	6.6	2.1	-1.6	2.00	2.00	0.00
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	1,700.0	6.00	17.94	1,699.5	14.9	4.8	-3.7	2.00	2.00	0.00
1800.07.4917.9417.9417.9726.48.6-6.50.000.000.000.001900.07.4917.941.897.938.812.6-9.50.000.000.002000.07.4917.942.096.263.620.6-15.60.000.000.00200.07.4917.942.195.376.024.6-18.70.000.000.002300.07.4917.942.293.6100.832.6-21.70.000.000.002600.07.4917.942.492.7113.236.7-27.80.000.000.002600.07.4917.942.691.9125.640.7-30.80.000.000.002600.07.4917.942.691.0138.144.7-33.80.000.000.002800.07.4917.942.688.3162.952.7-40.00.000.000.003000.07.4917.943.087.6187.766.7-43.00.000.000.003000.07.4917.943.085.9212.568.8-52.20.000.000.003000.07.4917.943.285.9212.568.8-52.20.000.000.003000.07.4917.943.681.224.972.855.20.000.000.003000.07.4917.943.781.6274.588.8-67.40.00	1,774.6	7.49	17.94	1,773.5	23.3	7.5	-5.7	2.00	2.00	0.00
1,900.0 7.49 17.94 $1,897.9$ 38.8 12.6 -9.5 0.00 0.00 0.00 $2,100.0$ 7.49 17.94 $2,966.2$ 63.6 20.6 -15.6 0.00 0.00 0.00 $2,200.0$ 7.49 17.94 $2,195.3$ 76.0 24.6 -15.6 0.00 0.00 0.00 $2,300.0$ 7.49 17.94 $2,294.4$ 88.4 28.6 -21.7 0.00 0.00 0.00 $2,400.0$ 7.49 17.94 $2,293.6$ 100.8 32.6 -24.8 0.00 0.00 0.00 $2,600.0$ 7.49 17.94 $2,492.7$ 113.2 36.7 -27.8 0.00 0.00 0.00 $2,600.0$ 7.49 17.94 $2,691.0$ 138.1 44.7 -33.9 0.00 0.00 0.00 $2,800.0$ 7.49 17.94 $2,898.3$ 162.9 52.7 -40.0 0.00 0.00 0.00 $2,900.0$ 7.49 17.94 $2,898.5$ 175.3 56.7 -43.0 0.00 0.00 0.00 $3,000.0$ 7.49 17.94 $3,887.6$ 187.7 60.7 -46.1 0.00 0.00 0.00 $3,000.0$ 7.49 17.94 $3,887.6$ 187.7 60.7 -46.1 0.00 0.00 0.00 $3,000.0$ 7.49 17.94 $3,885.1$ 22.9 70.6 $8-55.2$ 0.00 0.00 0.00 $3,600.0$	1,800.0	7.49	17.94	1,798.7	26.4	8.6	-6.5	0.00	0.00	0.00
2,000.0 7.49 17.94 1.997.0 51.2 16.6 -12.6 0.00 0.00 0.00 2,000.0 7.49 17.94 2,196.3 76.0 24.6 -18.7 0.00 0.00 0.00 2,300.0 7.49 17.94 2,294.4 88.4 28.6 -21.7 0.00 0.00 0.00 2,500.0 7.49 17.94 2,492.7 113.2 36.7 -27.8 0.00 0.00 0.00 2,600.0 7.49 17.94 2,691.9 125.6 40.7 -30.8 0.00 0.00 0.00 2,700.0 7.49 17.94 2,700.2 150.5 48.7 -36.9 0.00 0.00 0.00 2,800.0 7.49 17.94 2,898.5 175.3 56.7 -40.0 0.00 0.00 0.00 3,000.0 7.49 17.94 3,887.6 187.7 60.7 -46.1 0.00 0.00 0.00 3,000.0 7.49	1,900.0	7.49	17.94	1,897.9	38.8	12.6	-9.5	0.00	0.00	0.00
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	2,000.0	7.49	17.94	1,997.0	51.2	16.6	-12.6	0.00	0.00	0.00
2,200.0 7.49 17.94 2,195.3 76.0 24.6 -18.7 0.00 0.00 0.00 2,300.0 7.49 17.94 2,293.6 100.8 32.6 -24.8 0.00 0.00 0.00 2,500.0 7.49 17.94 2,492.7 113.2 36.7 -27.8 0.00 0.00 0.00 2,600.0 7.49 17.94 2,691.9 125.6 40.7 -30.8 0.00 0.00 0.00 2,700.0 7.49 17.94 2,691.0 138.1 44.7 -33.9 0.00 0.00 0.00 2,800.0 7.49 17.94 2,980.5 175.3 56.7 -43.0 0.00 0.00 0.00 3,000.0 7.49 17.94 3,867.6 187.7 60.7 -46.1 0.00 0.00 0.00 0.00 3,000.0 7.49 17.94 3,867.6 187.7 60.7 -46.1 0.00 0.00 0.00 0.00 3,000.0 7.49 17.94 3,867.5 224.9 72.8 -55.2 0.0	2,100.0	7.49	17.94	2,096.2	63.6	20.6	-15.6	0.00	0.00	0.00
2.300.0 7.49 17.94 2.294.4 88.4 28.6 -21.7 0.00 0.00 0.00 2.400.0 7.49 17.94 2.393.6 100.8 32.6 -24.8 0.00 0.00 0.00 2.600.0 7.49 17.94 2.691.9 125.6 40.7 -30.8 0.00 0.00 0.00 2.600.0 7.49 17.94 2.691.0 138.1 44.7 -33.9 0.00 0.00 0.00 2.800.0 7.49 17.94 2.680.3 162.9 52.7 -40.0 0.00 0.00 0.00 3.000.0 7.49 17.94 2.885.5 175.3 56.7 -43.0 0.00 0.00 0.00 3.000.0 7.49 17.94 3.087.6 187.7 60.7 -45.1 0.00 0.00 0.00 3.200.0 7.49 17.94 3.085.1 224.9 72.8 -55.2 0.00 0.00 0.00 3.400.0 7.49	2,200.0	7.49	17.94	2,195.3	76.0	24.6	-18.7	0.00	0.00	0.00
2,400.0 7,49 17,94 2,393.6 100.8 32.6 -24.8 0.00 0.00 0.00 2,600.0 7,49 17,94 2,591.9 125.6 40.7 -30.8 0.00 0.00 0.00 2,700.0 7,49 17,94 2,691.0 138.1 44.7 -33.9 0.00 0.00 0.00 2,800.0 7,49 17,94 2,898.3 162.9 52.7 -40.0 0.00 0.00 0.00 3,000.0 7,49 17,94 2,898.5 175.3 56.7 -43.0 0.00 0.00 0.00 3,000.0 7,49 17,94 3,087.6 187.7 60.7 -46.1 0.00 0.00 0.00 3,200.0 7,49 17,94 3,285.9 212.5 68.8 -52.2 0.00 0.00 0.00 3,400.0 7,49 17.94 3,385.1 224.9 72.8 -55.2 0.00 0.00 0.00 3,600.0 7,49 17.94 3,682.5 262.1 84.8 -61.3 0.00 0.00 0.	2,300.0	7.49	17.94	2,294.4	88.4	28.6	-21.7	0.00	0.00	0.00
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	2,400.0	7.49	17.94	2,393.6	100.8	32.6	-24.8	0.00	0.00	0.00
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	2,500.0	7.49	17.94	2,492.7	113.2	36.7	-27.8	0.00	0.00	0.00
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	2,600.0	7.49	17.94	2,591.9	125.6	40.7	-30.8	0.00	0.00	0.00
2,800.0 7.49 17.94 2,790.2 150.5 48.7 -36.9 0.00 0.00 0.00 2,900.0 7.49 17.94 2,889.3 162.9 52.7 40.0 0.00 0.00 0.00 3,000.0 7.49 17.94 2,988.5 175.3 56.7 -43.0 0.00 0.00 0.00 3,100.0 7.49 17.94 3,087.6 187.7 60.7 -46.1 0.00 0.00 0.00 3,200.0 7.49 17.94 3,865.1 224.9 72.8 -55.2 0.00 0.00 0.00 3,400.0 7.49 17.94 3,885.1 224.9 72.8 -55.2 0.00 0.00 0.00 3,600.0 7.49 17.94 3,682.5 262.1 84.8 -61.3 0.00 0.00 0.00 3,600.0 7.49 17.94 3,781.6 274.5 88.8 -67.4 0.00 0.00 0.00 4,000.0 7.49	2,700.0	7.49	17.94	2,691.0	138.1	44.7	-33.9	0.00	0.00	0.00
2,900.0 7.49 17.94 2,889.3 162.9 52.7 -40.0 0.00 0.00 0.00 3,000.0 7.49 17.94 2,988.5 175.3 56.7 -43.0 0.00 0.00 0.00 3,100.0 7.49 17.94 3,186.8 200.1 64.8 -49.1 0.00 0.00 0.00 3,200.0 7.49 17.94 3,285.9 212.5 68.8 -52.2 0.00 0.00 0.00 3,400.0 7.49 17.94 3,385.1 224.9 72.8 -55.2 0.00 0.00 0.00 3,600.0 7.49 17.94 3,583.4 249.7 80.8 -61.3 0.00 0.00 0.00 3,600.0 7.49 17.94 3,682.5 262.1 84.8 -64.3 0.00 0.00 0.00 3,600.0 7.49 17.94 3,682.5 262.1 84.8 -67.4 0.00 0.00 0.00 3,000.0 7.49 17.94 3,679.9 299.3 96.9 -73.5 0.00 0.00 0.	2,800.0	7.49	17.94	2,790.2	150.5	48.7	-36.9	0.00	0.00	0.00
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	2,900.0	7.49	17.94	2,889.3	162.9	52.7	-40.0	0.00	0.00	0.00
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	3,000.0	7.49	17.94	2,988.5	175.3	56.7	-43.0	0.00	0.00	0.00
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	3,100.0	7.49	17.94	3,087.6	187.7	60.7	-46.1	0.00	0.00	0.00
3,300.0 7.49 17.94 3,285.9 212.5 68.8 -52.2 0.00 0.00 0.00 3,400.0 7.49 17.94 3,385.1 224.9 72.8 -55.2 0.00 0.00 0.00 3,600.0 7.49 17.94 3,484.2 237.3 76.8 -58.2 0.00 0.00 0.00 3,600.0 7.49 17.94 3,683.4 249.7 80.8 -61.3 0.00 0.00 0.00 3,700.0 7.49 17.94 3,682.5 262.1 84.8 -64.3 0.00 0.00 0.00 3,800.0 7.49 17.94 3,781.6 274.5 88.8 -67.4 0.00 0.00 0.00 4,000.0 7.49 17.94 3,979.9 299.3 96.9 -73.5 0.00 0.00 0.00 4,000.0 7.49 17.94 4,079.1 311.7 100.9 -76.5 0.00 0.00 0.00 4,200.0 7.49	3,200.0	7.49	17.94	3,186.8	200.1	64.8	-49.1	0.00	0.00	0.00
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	3,300.0	7.49	17.94	3,285.9	212.5	68.8	-52.2	0.00	0.00	0.00
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	3,400.0	7.49	17.94	3,385.1	224.9	72.8	-55.2	0.00	0.00	0.00
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	3,500.0	7.49	17.94	3,484.2	237.3	76.8	-58.2	0.00	0.00	0.00
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	3,600.0	7.49	17.94	3,583.4	249.7	80.8	-61.3	0.00	0.00	0.00
3,800.0 7.49 17.94 3,781.6 274.5 88.8 -67.4 0.00 0.00 0.00 3,900.0 7.49 17.94 3,880.8 286.9 92.9 -70.4 0.00 0.00 0.00 4,000.0 7.49 17.94 3,979.9 299.3 96.9 -73.5 0.00 0.00 0.00 4,100.0 7.49 17.94 4,079.1 311.7 100.9 -76.5 0.00 0.00 0.00 4,200.0 7.49 17.94 4,178.2 324.1 104.9 -79.6 0.00 0.00 0.00 4,300.0 7.49 17.94 4,277.4 336.5 108.9 -82.6 0.00 0.00 0.00 4,400.0 7.49 17.94 4,376.5 348.9 112.9 -85.7 0.00 0.00 0.00 4,600.0 7.49 17.94 4,674.0 386.1 125.0 -94.8 0.00 0.00 0.00 4,600.0 7.49 17.94 4,674.0 386.1 125.0 -94.8 0.00 0.00	3,700.0	7.49	17.94	3,682.5	262.1	84.8	-64.3	0.00	0.00	0.00
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	3,800.0	7.49	17.94	3,781.6	274.5	88.8	-67.4	0.00	0.00	0.00
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	3,900.0	7.49	17.94	3,880.8	286.9	92.9	-70.4	0.00	0.00	0.00
$ \begin{array}{c ccccccccccccccccccccccccccccccccccc$	4,000.0	7.49	17.94	3,979.9	299.3	96.9	-73.5	0.00	0.00	0.00
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	4,100.0	7.49	17.94	4,079.1	311.7	100.9	-76.5	0.00	0.00	0.00
4,300.07.4917.944,277.4336.5108.9-82.60.000.000.004,400.07.4917.944,376.5348.9112.9-85.70.000.000.004,500.07.4917.944,475.7361.3116.9-88.70.000.000.004,600.07.4917.944,574.8373.7121.0-91.70.000.000.004,700.07.4917.944,674.0386.1125.0-94.80.000.000.004,800.07.4917.944,773.1398.5129.0-97.80.000.000.004,900.07.4917.944,872.3410.9133.0-100.90.000.000.005,000.07.4917.944,971.4423.3137.0-103.90.000.000.005,100.07.4917.945,070.6435.7141.0-107.00.000.000.00	4,200.0	7.49	17.94	4,178.2	324.1	104.9	-79.6	0.00	0.00	0.00
4,400.07.4917.944,376.5348.9112.9-85.70.000.000.004,500.07.4917.944,475.7361.3116.9-88.70.000.000.004,600.07.4917.944,574.8373.7121.0-91.70.000.000.004,700.07.4917.944,674.0386.1125.0-94.80.000.000.004,800.07.4917.944,773.1398.5129.0-97.80.000.000.004,900.07.4917.944,872.3410.9133.0-100.90.000.000.005,000.07.4917.944,971.4423.3137.0-103.90.000.000.005,100.07.4917.945,070.6435.7141.0-107.00.000.000.00	4,300.0	7.49	17.94	4,277.4	336.5	108.9	-82.6	0.00	0.00	0.00
$ \begin{array}{c ccccccccccccccccccccccccccccccccccc$	4,400.0	7.49	17.94	4,376.5	348.9	112.9	-85.7	0.00	0.00	0.00
4,600.0 7.49 17.94 4,574.8 373.7 121.0 -91.7 0.00 0.00 0.00 4,700.0 7.49 17.94 4,674.0 386.1 125.0 -94.8 0.00 0.00 0.00 0.00 4,800.0 7.49 17.94 4,674.0 386.1 125.0 -94.8 0.00 0.00 0.00 4,800.0 7.49 17.94 4,773.1 398.5 129.0 -97.8 0.00 0.00 0.00 4,900.0 7.49 17.94 4,872.3 410.9 133.0 -100.9 0.00 0.00 0.00 5,000.0 7.49 17.94 4,971.4 423.3 137.0 -103.9 0.00 0.00 0.00 5,100.0 7.49 17.94 5,070.6 435.7 141.0 -107.0 0.00 0.00 0.00	4,500.0	7.49	17.94	4,475.7	361.3	116.9	-88.7	0.00	0.00	0.00
4,700.07.4917.944,674.0386.1125.0-94.80.000.000.004,800.07.4917.944,773.1398.5129.0-97.80.000.000.004,900.07.4917.944,872.3410.9133.0-100.90.000.000.005,000.07.4917.944,971.4423.3137.0-103.90.000.000.005,100.07.4917.945,070.6435.7141.0-107.00.000.000.00	4,600.0	7.49	17.94	4,574.8	373.7	121.0	-91.7	0.00	0.00	0.00
4,800.07.4917.944,773.1398.5129.0-97.80.000.000.004,900.07.4917.944,872.3410.9133.0-100.90.000.000.005,000.07.4917.944,971.4423.3137.0-103.90.000.000.005,100.07.4917.945,070.6435.7141.0-107.00.000.000.00	4,700.0	7.49	17.94	4,674.0	386.1	125.0	-94.8	0.00	0.00	0.00
4,900.07.4917.944,872.3410.9133.0-100.90.000.000.005,000.07.4917.944,971.4423.3137.0-103.90.000.000.005,100.07.4917.945,070.6435.7141.0-107.00.000.000.00	4,800.0	7.49	17.94	4,773.1	398.5	129.0	-97.8	0.00	0.00	0.00
5,000.07.4917.944,971.4423.3137.0-103.90.000.000.005,100.07.4917.945,070.6435.7141.0-107.00.000.000.00	4,900.0	7.49	17.94	4,872.3	410.9	133.0	-100.9	0.00	0.00	0.00
<u>5,100.0</u> 7.49 17.94 5,070.6 435.7 141.0 -107.0 0.00 0.00 0.00	5,000.0	7.49	17.94	4,971.4	423.3	137.0	-103.9	0.00	0.00	0.00
	5,100.0	7.49	17.94	5,070.6	435.7	141.0	-107.0	0.00	0.00	0.00

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COMPASS 5000.16 Build 97

Database:	Hobbs	Local Co-ordinate Reference:	Site Swanson 2/3 Fed Com #511H
Company:	Mewbourne Oil Company	TVD Reference:	WELL @ 3574.0usft (Original Well Elev)
Project:	Eddy County, New Mexico NAD 83	MD Reference:	WELL @ 3574.0usft (Original Well Elev)
Site:	Swanson 2/3 Fed Com #511H	North Reference:	Grid
Well:	Sec 02, T18S, R29E	Survey Calculation Method:	Minimum Curvature
Wellbore:	BHL: 380' FNL & 2541' FEL (Sec 3)		
Design:	Design #1		

Planned Survey

Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)
5 200 0	7 49	17 94	5 169 7	448.2	145 1	-110.0	0.00	0.00	0.00
5,300.0	7.49	17.94	5,268.8	460.6	149.1	-113.1	0.00	0.00	0.00
E 400.0	7.40	17.04	F 269 0	472.0	152.4	116 1	0.00	0.00	0.00
5,400.0	7.49	17.94	5,300.0	475.0	155.1	-110.1	0.00	0.00	0.00
5,500.0	7.49	17.94	5,407.1	403.4	107.1	-119.1	0.00	0.00	0.00
5,000.0	7.49	17.94	5,500.5	497.0	101.1	-122.2	0.00	0.00	0.00
5,700.0	7.49	17.94	5,005.4	522.6	105.1	-120.2	0.00	0.00	0.00
0,000.0	7.45	17.54	0,704.0	022.0	100.1	-120.0	0.00	0.00	0.00
5,900.0	7.49	17.94	5,863.7	535.0	173.2	-131.3	0.00	0.00	0.00
6,000.0	7.49	17.94	5,962.9	547.4	177.2	-134.4	0.00	0.00	0.00
6,100.0	7.49	17.94	6,062.0	559.8	181.2	-137.4	0.00	0.00	0.00
6,200.0	7.49	17.94	6,161.2	572.2	185.2	-140.5	0.00	0.00	0.00
6,236.7	7.49	17.94	6,197.5	576.7	186.7	-141.6	0.00	0.00	0.00
6,300.0	6.22	17.94	6,260.4	583.9	189.0	-143.3	2.00	-2.00	0.00
6,400.0	4.22	17.94	6,360.0	592.6	191.8	-145.5	2.00	-2.00	0.00
6,500.0	2.22	17.94	6,459.8	597.9	193.5	-146.8	2.00	-2.00	0.00
6,600.0	0.22	17.94	6,559.8	600.0	194.2	-147.3	2.00	-2.00	0.00
6,611.2	0.00	0.00	6,571.0	600.0	194.2	-147.3	2.00	-2.00	0.00
KOP: 380' F	NL & 10' FEL (Se	ec 2)							
0.050.0	0.00	,	0.000.0	000.0	100.0	110.0	0.00	0.00	0.00
6,650.0	3.88	269.93	6,609.8	600.0	192.9	-146.0	9.99	9.99	0.00
6,700.0	8.87	269.93	6,659.4	600.0	187.3	-140.4	9.99	9.99	0.00
6,750.0	13.87	269.93	6,708.4	600.0	177.5	-130.6	9.99	9.99	0.00
6,800.0	18.87	269.93	0,750.4	600.0	163.4	-110.0	9.99	9.99	0.00
6,850.0	23.80	269.93	6,802.9	599.9	145.2	-98.4	9.99	9.99	0.00
6,900.0	28.86	269.93	6,847.7	599.9	123.0	-76.3	9.99	9.99	0.00
6,936.6	32.52	269.93	6,879.2	599.9	104.3	-57.7	9.99	9.99	0.00
FTP: 380' FN	IL & 100' FEL (Se	ec 2)							
6,950.0	33.86	269.93	6,890.4	599.9	97.0	-50.4	9.99	9.99	0.00
7,000.0	38.86	269.93	6,930.7	599.8	67.3	-20.8	9.99	9.99	0.00
7,050.0	43.85	269.93	6,968.2	599.8	34.3	12.1	9.99	9.99	0.00
7 100 0	48 85	269 93	7 002 7	599 7	-1.8	48.2	9 99	9 99	0.00
7 150 0	53 85	269.93	7 033 9	599.7	-40.9	87.1	9.99	9.99	0.00
7 200 0	58 84	269.93	7 061 6	599.6	-82.5	128.6	9.99	9.99	0.00
7.250.0	63.84	269.93	7.085.6	599.6	-126.4	172.3	9.99	9.99	0.00
7.300.0	68.84	269.93	7.105.6	599.5	-172.1	217.9	9.99	9.99	0.00
7,350.0	73.84	269.93	7,121.6	599.5	-219.5	265.1	9.99	9.99	0.00
7,400.0	78.83	269.93	7,133.4	599.4	-268.1	313.5	9.99	9.99	0.00
7,450.0	83.83	269.93	7,141.0	599.3	-317.5	302.8	9.99	9.99	0.00
7,500.0	88.83	269.93	7,144.2	599.3	-307.4	412.5	9.99	9.99	0.00
7,511.2	09.90	209.93	7,144.3	599.5	-370.0	423.7	9.99	9.99	0.00
LP: JOU FNL	. a 303 FEL (Se	u∠)							
7,529.8	91.81	269.93	7,144.0	599.2	-397.2	442.3	9.99	9.99	0.00
7,600.0	91.81	269.93	7,141.8	599.1	-467.3	512.2	0.00	0.00	0.00
7,700.0	91.81	269.93	7,138.6	599.0	-567.3	611.8	0.00	0.00	0.00
7,800.0	91.81	269.93	7,135.5	598.9	-667.2	711.5	0.00	0.00	0.00
7,900.0	91.81	269.93	7,132.3	598.8	-767.2	811.1	0.00	0.00	0.00
8,000.0	91.81	269.93	7,129.2	598.6	-867.1	910.8	0.00	0.00	0.00
8,100.0	91.81	269.93	7,126.0	598.5	-967 1	1.010.4	0.00	0.00	0.00
8,200.0	91.81	269 93	7,122.8	598.4	-1.067.0	1,110.0	0.00	0.00	0.00
8,300.0	91.81	269.93	7,119.7	598.2	-1,167.0	1,209.7	0.00	0.00	0.00
8,400.0	91.81	269.93	7,116.5	598.1	-1,266.9	1,309.3	0.00	0.00	0.00
2,.00.0					.,	.,	0.00	0.00	
8,500.0	91.81	269.93	7,113.4	598.0	-1,366.9	1,409.0	0.00	0.00	0.00
8,600.0	91.81	269.93	7,110.2	597.9	-1,466.8	1,508.6	0.00	0.00	0.00
8,700.0	91.81	269.93	7,107.1	597.7	-1,566.8	1,608.2	0.00	0.00	0.00

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COMPASS 5000.16 Build 97

Database:	Hobbs	Local Co-ordinate Reference:	Site Swanson 2/3 Fed Com #511H
Company:	Mewbourne Oil Company	TVD Reference:	WELL @ 3574.0usft (Original Well Elev)
Project:	Eddy County, New Mexico NAD 83	MD Reference:	WELL @ 3574.0usft (Original Well Elev)
Site:	Swanson 2/3 Fed Com #511H	North Reference:	Grid
Well:	Sec 02, T18S, R29E	Survey Calculation Method:	Minimum Curvature
Wellbore:	BHL: 380' FNL & 2541' FEL (Sec 3)		
Design:	Design #1		

Planned Survey

Measure	d		Vertical			Vertical	Dogleg	Build	Turn
Depth	Inclination	Azimuth	Depth	+N/-S	+E/-W	Section	Rate	Rate	Rate
(usft)	(°)	(°)	(usft)	(usft)	(usft)	(usft)	(°/100usft)	(°/100usft)	(°/100usft)
8.800).0 91.81	269.93	7.103.9	597.6	-1.666.7	1.707.9	0.00	0.00	0.00
8,900	0.0 91.81	269.93	7,100.7	597.5	-1,766.7	1,807.5	0.00	0.00	0.00
9 000	0 91.81	269 93	7 097 6	597.3	-1 866 6	1 907 2	0.00	0.00	0.00
9 100	0 91.81	269.93	7 094 4	597.2	-1 966 6	2 006 8	0.00	0.00	0.00
9 200	0 01.01	269.93	7,004.4	597.1	-2.066.5	2,000.0	0.00	0.00	0.00
9,200	0 01.01	260.00	7,001.0	506.0	-2,000.0	2,100.0	0.00	0.00	0.00
9,400).0 91.81	269.93	7,085.0	596.8	-2,100.3	2,200.1	0.00	0.00	0.00
9.500	0 91.81	269.93	7 081 8	596 7	-2 366 4	2 405 4	0.00	0.00	0.00
9,600	0 01.01	260.00	7,001.0	596.6	-2,000.4	2,400.4	0.00	0.00	0.00
9,000	0 01.01	203.33	7,070.0	506.4	2,400.0	2,000.0	0.00	0.00	0.00
0,800	0 01.01	203.33	7,073.3	506.3	2,500.5	2,004.7	0.00	0.00	0.00
9,000	0.0 91.01	209.93	7,072.3	506.2	-2,000.2	2,704.3	0.00	0.00	0.00
9,900		209.95	7,009.2	590.2	-2,700.2	2,005.9	0.00	0.00	0.00
10,000).0 91.81	269.93	7,066.0	596.0	-2,866.1	2,903.6	0.00	0.00	0.00
10,100).0 91.81	269.93	7,062.9	595.9	-2,966.1	3,003.2	0.00	0.00	0.00
10,200).0 91.81	269.93	7,059.7	595.8	-3,066.0	3,102.9	0.00	0.00	0.00
10,300).0 91.81	269.93	7,056.5	595.7	-3,166.0	3,202.5	0.00	0.00	0.00
10,400).0 91.81	269.93	7,053.4	595.5	-3,265.9	3,302.2	0.00	0.00	0.00
10,500).0 91.81	269.93	7,050.2	595.4	-3,365.9	3,401.8	0.00	0.00	0.00
10,600).0 91.81	269.93	7,047.1	595.3	-3,465.8	3,501.4	0.00	0.00	0.00
10,700).0 91.81	269.93	7,043.9	595.1	-3,565.8	3,601.1	0.00	0.00	0.00
10,800).0 91.81	269.93	7,040.8	595.0	-3,665.7	3,700.7	0.00	0.00	0.00
10,900).0 91.81	269.93	7,037.6	594.9	-3,765.7	3,800.4	0.00	0.00	0.00
11,000).0 91.81	269.93	7,034.4	594.7	-3,865.6	3,900.0	0.00	0.00	0.00
11,100).0 91.81	269.93	7,031.3	594.6	-3,965.6	3,999.6	0.00	0.00	0.00
11,200).0 91.81	269.93	7,028.1	594.5	-4,065.5	4,099.3	0.00	0.00	0.00
11,300).0 91.81	269.93	7,025.0	594.4	-4,165.5	4,198.9	0.00	0.00	0.00
11,400).0 91.81	269.93	7,021.8	594.2	-4,265.4	4,298.6	0.00	0.00	0.00
11.500).0 91.81	269.93	7.018.7	594.1	-4.365.4	4.398.2	0.00	0.00	0.00
11.600	0.0 91.81	269.93	7.015.5	594.0	-4,465,3	4,497,9	0.00	0.00	0.00
11.700).0 91.81	269.93	7.012.3	593.8	-4.565.3	4.597.5	0.00	0.00	0.00
11 800	0 91.81	269.93	7 009 2	593 7	-4 665 2	4 697 1	0.00	0.00	0.00
11,900).0 91.81	269.93	7,006.0	593.6	-4,765.2	4,796.8	0.00	0.00	0.00
12 000	0 9181	269 93	7 002 9	593 5	-4 865 1	4 896 4	0.00	0.00	0.00
12,100).0 91.81	269.93	6,999.7	593.3	-4.965.1	4,996,1	0.00	0.00	0.00
12,200	0 91.81	269.93	6 996 6	593.2	-5 065 0	5 095 7	0.00	0.00	0.00
12,210) 7 91.81	269.93	6 996 2	593.2	-5 075 7	5 106 4	0.00	0.00	0.00
PPP2: 3	80' FNL & 0' FEL (S	Sec 3)	-,		-,	-,			
12,300	0.0 91.81	269.93	6,993.4	593.1	-5,165.0	5,195.3	0.00	0.00	0.00
12,400).0 91.81	269.93	6,990.3	592.9	-5,264.9	5,295.0	0.00	0.00	0.00
12,500).0 91.81	269.93	6,987.1	592.8	-5,364.9	5,394.6	0.00	0.00	0.00
12,600).0 91.81	269.93	6,983.9	592.7	-5,464.8	5,494.3	0.00	0.00	0.00
12,700).0 91.81	269.93	6,980.8	592.6	-5,564.8	5,593.9	0.00	0.00	0.00
12,800).0 91.81	269.93	6,977.6	592.4	-5,664.7	5,693.6	0.00	0.00	0.00
12,900).0 91.81	269.93	6.974.5	592.3	-5.764.7	5.793.2	0.00	0.00	0.00
13.000).0 91.81	269.93	6.971.3	592.2	-5,864.6	5,892.8	0.00	0.00	0.00
13.100).0 91.81	269.93	6.968.2	592.0	-5,964.6	5,992.5	0.00	0.00	0.00
13.200).0 91.81	269.93	6.965.0	591.9	-6,064.5	6,092.1	0.00	0.00	0.00
13,300).0 91.81	269.93	6,961.8	591.8	-6,164.5	6,191.8	0.00	0.00	0.00
13.400).0 91.81	269.93	6.958.7	591.6	-6,264.4	6,291.4	0.00	0.00	0.00
13.500).0 91.81	269.93	6.955.5	591.5	-6,364.4	6,391.0	0.00	0.00	0.00
13.600).0 91.81	269.93	6.952.4	591.4	-6,464.3	6,490.7	0.00	0.00	0.00
13.700).0 91.81	269.93	6.949.2	591.3	-6,564.3	6,590.3	0.00	0.00	0.00
13.800).0 91.81	269.93	6.946.1	591.1	-6,664.2	6,690.0	0.00	0.00	0.00
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COMPASS 5000.16 Build 97

Database:	Hobbs	Local Co-ordinate Reference:	Site Swanson 2/3 Fed Com #511H
Company:	Mewbourne Oil Company	TVD Reference:	WELL @ 3574.0usft (Original Well Elev)
Project:	Eddy County, New Mexico NAD 83	MD Reference:	WELL @ 3574.0usft (Original Well Elev)
Site:	Swanson 2/3 Fed Com #511H	North Reference:	Grid
Well:	Sec 02, T18S, R29E	Survey Calculation Method:	Minimum Curvature
Wellbore:	BHL: 380' FNL & 2541' FEL (Sec 3)		
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)
13,900.0	91.81	269.93	6,942.9	591.0	-6,764.2	6,789.6	0.00	0.00	0.00
14,000.0	91.81	269.93	6,939.7	590.9	-6,864.1	6,889.3	0.00	0.00	0.00
14,100.0	91.81	269.93	6,936.6	590.7	-6,964.1	6,988.9	0.00	0.00	0.00
14,200.0	91.81	269.93	6,933.4	590.6	-7,064.0	7,088.5	0.00	0.00	0.00
14,300.0	91.81	269.93	6,930.3	590.5	-7,164.0	7,188.2	0.00	0.00	0.00
14,400.0	91.81	269.93	6,927.1	590.4	-7,263.9	7,287.8	0.00	0.00	0.00
14,500.0	91.81	269.93	6,924.0	590.2	-7,363.9	7,387.5	0.00	0.00	0.00
14,600.0	91.81	269.93	6,920.8	590.1	-7,463.8	7,487.1	0.00	0.00	0.00
14,700.0	91.81	269.93	6,917.6	590.0	-7,563.8	7,586.7	0.00	0.00	0.00
14,752.0	91.81	269.93	6,916.0	589.9	-7,615.7	7,638.5	0.00	0.00	0.00
BHL: 380' FN	NL & 2541' FEL (Sec 3)							

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: 980' FNL & 205' - plan hits target c - Point	FE 0.00 enter	0.00	0.0	0.0	0.0	648,007.90	632,259.50	32.7810573	-104.0374905
KOP: 380' FNL & 10' F - plan hits target c - Point	E 0.00 enter	0.00	6,571.0	600.0	194.2	648,607.90	632,453.70	32.7827049	-104.0368531
FTP: 380' FNL & 100' I - plan hits target c - Point	E 0.00 enter	0.00	6,879.2	599.9	104.3	648,607.79	632,363.80	32.7827053	-104.0371456
BHL: 380' FNL & 2541 - plan hits target c - Point	'F 0.00 enter	0.00	6,916.0	589.9	-7,615.7	648,597.80	624,643.80	32.7827348	-104.0622653
PPP2: 380' FNL & 0' F - plan hits target c - Point	El 0.00 enter	0.00	6,996.2	593.2	-5,075.7	648,601.09	627,183.80	32.7827256	-104.0540005
LP: 380' FNL & 583' Ft - plan hits target c - Point	EL 0.00 enter	0.00	7,144.3	599.3	-378.6	648,607.16	631,880.90	32.7827073	-104.0387169



Released to Imaging: 9/9/2024 4:44:37 PM

Mewbourne Oil Company, Swanson 2/3 Fed Com 511H Sec 2, T18S, R29E SHL: 980' FNL 205' FEL (Sec 2) BHL: 380' FNL 2541' FEL (Sec 3)

Operator Name:	Property Name:	Well Number
Mewbourne Oil Company	Swanson 2/3 Fed Com	511

Kick Off Point (KOP)

		/									
UL	Section	Township	Range	Lot	Feet	From N/S	Feet	From E/W	County		
Α	2	18	29	-	380'	FNL	10'	FEL	Eddy		
Latitude						Longitude					
32.7827051					-104.03685	83					

First Take Point (FTP)

UL	Section	Township	Range	Lot	Feet	From N/S	Feet	From E/W	County
А	2	18	29	-	380'	FNL	100'	FEL	Eddy
		Latitude				Long	itude		NAD
32.7827055	5				-104.03714	83			

Last Take Point (LTP)

UL	Section	Township	Range	Lot	Feet	From N/S	Feet	From E/W	County	
В	3	18	29	-	380'	FNL	2541'	FEL	Eddy	
Latitude						Longitude				
32.782734	8				-104.06226	83				

Y

Is this well the defining well for the Horizontal Spacing Unit? Is this well an infill well? N

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

_	
Property Name:	Well Number
	Property Name:

PECOS DISTRICT DRILLING CONDITIONS OF APPROVAL

OPERATOR'S NAME:MEWBOURNE OIL COMPANYWELL NAME & NO.:SWANSON 2/3 FED COM 511HAPD ID:10400095516LOCATION:Section 2, T.18 S., R.29 E. NMP.COUNTY:Eddy County, New Mexico

COA

H ₂ S	C No		• Yes	
Potash /	None	Secretary	C R-111-Q	Open Annulus
WIPP		-	_	□ WIPP
Cave / Karst	• Low	C Medium	🔘 High	Critical
Wellhead	Conventional	Multibowl	O Both	O Diverter
Cementing	Primary Squeeze	🗆 Cont. Squeeze	EchoMeter	🗹 DV Tool
Special Req	🗆 Capitan Reef	Water Disposal	COM	🗖 Unit
Waste Prev.	C Self-Certification	C Waste Min. Plan	• APD Submitted prior to 06/10/2024	
Additional	Flex Hose	Casing Clearance	Pilot Hole	Break Testing
Language	□ Four-String	Offline Cementing	🗖 Fluid-Filled	

A. HYDROGEN SULFIDE

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

B. CASING DESIGN

Primary Casing Design

- 1. The 13-3/8 inch surface casing shall be set at approximately 330 ft. (a minimum of 70 feet (Eddy County) into the Rustler Anhydrite and above the salt) and cemented to the surface. If salt is encountered, set casing at least 25 feet above the salt.
 - a. If cement does not circulate to the surface, the appropriate BLM office shall be notified and a temperature survey utilizing an electronic-type temperature survey with surface log readout will be used or a cement bond log shall be run to verify the top of the cement. Temperature survey will be run a minimum of six hours after pumping cement and ideally between 8-10 hours after

Page 1 of 9

completing the cement job.

- b. Wait on cement (WOC) time for a primary cement job will be a minimum of $\underline{8}$ <u>hours</u> or **500 psi compressive strength**, whichever is greater. (This is to include the lead cement)
- c. Wait on cement (WOC) time for a remedial job will be a minimum of 4 hours after bringing cement to surface or 500 psi compressive strength, whichever is greater.
- d. If cement falls back, remedial cementing will be done prior to drilling out that string.
- The 9-5/8 inch intermediate casing shall be set in a competent bed at approximately 1,140 ft. The minimum required fill of cement behind the 9-5/8 inch intermediate casing is:
 - **Cement to surface.** If cement does not circulate see B.1.a, c-d above.

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

3. Operator has proposed to set 7 in. (P-110 26#) production casing at approximately 6,611 ft. (6,571 ft. TVD). The minimum required fill of cement behind the 7 in. production casing is:

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

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

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

Alternate Casing Design

- 1. The 13-3/8 inch surface casing shall be set at approximately 330 ft. (a minimum of 70 feet (Eddy County) into the Rustler Anhydrite and above the salt) and cemented to the surface. If salt is encountered, set casing at least 25 feet above the salt.
 - a. If cement does not circulate to the surface, the appropriate BLM office shall be notified and a temperature survey utilizing an electronic-type temperature

Page 2 of 9

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>8</u>
 <u>hours</u> or **500 psi compressive strength**, whichever is greater. (This is to include the lead cement)
- c. Wait on cement (WOC) time for a remedial job will be a minimum of 4 hours after bringing cement to surface or 500 psi compressive strength, whichever is greater.
- d. If cement falls back, remedial cementing will be done prior to drilling out that string.
- The 9-5/8 inch intermediate casing shall be set in a competent bed at approximately 1,140 ft. The minimum required fill of cement behind the 9-5/8 inch intermediate casing is:
 - **Cement to surface.** If cement does not circulate see B.1.a, c-d above.

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

3. Operator has proposed to set 7 in. (P-110 26#) production casing at approximately 7,511 ft. (7,144 ft. TVD). The minimum required fill of cement behind the 7 in. production casing is:

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

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

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

Offline Cementing

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

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. Before drilling the surface casing shoe out, the BOP/BOPE shall be pressure-tested in accordance with title 43 CFR 3172 and API Standard 53.
 - a. Wellhead shall be installed by manufacturer's representatives, submit documentation with subsequent sundry.
 - b. If the welding is performed by a third party, the manufacturer's representative shall monitor the temperature to verify that it does not exceed the maximum temperature of the seal.
 - c. Manufacturer representative shall install the test plug for the initial BOP test.
 - d. If the cement does not circulate and one-inch operations would have been possible with a standard wellhead, the well head shall be cut off, cementing operations performed and another wellhead installed.
 - e. Whenever any seal subject to test pressure is broken, all the tests in the **title 43 CFR 3172.6(b)(9)** must be followed.

BOPE Break Testing Variance

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

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

D. SPECIAL REQUIREMENT (S)

Communitization Agreement

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

Contact Eddy County Petroleum Engineering Inspection Staff:

Email or call the Carlsbad Field Office, 620 East Greene St., Carlsbad, NM 88220; BLM NM CFO DrillingNotifications@BLM.GOV; (575) 361-2822.

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

A. CASING

- 1. Changes to the approved APD casing program need prior approval if the items substituted are of lesser grade or different casing size or are Non-API. The Operator can exchange the components of the proposal with that of superior strength (i.e. changing from J-55 to N-80, or from 36# to 40#). Changes to the approved cement program need prior approval if the altered cement plan has less volume or strength or if the changes are substantial (i.e. Multistage tool, ECP, etc.). The initial wellhead installed on the well will remain on the well with spools used as needed.
- 2. <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 of both lead and tail cement, 2) until cement has been in place at least <u>8 hours</u>. WOC time will be

Approval Date: 08/22/2024

recorded in the driller's log. The casing integrity test can be done (prior to the cement setting up) immediately after bumping the plug.

- **3.** <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 integrity test can be done (prior to the cement setting up) immediately after bumping the plug.
- **4.** Provide compressive strengths including hours to reach required 500 pounds compressive strength prior to cementing each casing string. Have well specific cement details onsite prior to pumping the cement for each casing string.
- **5.** No pea gravel permitted for remedial or fall back remedial without prior authorization from the BLM engineer.
- 6. On that portion of any well approved for a 5M BOPE system or greater, a pressure integrity test of each casing shoe shall be performed. Formation at the shoe shall be tested to a minimum of the mud weight equivalent anticipated to control the formation pressure to the next casing depth or at total depth of the well. This test shall be performed before drilling more than 20 feet of new hole.
- 7. If hardband drill pipe is rotated inside casing, returns will be monitored for metal. If metal is found in samples, drill pipe will be pulled and rubber protectors which have a larger diameter than the tool joints of the drill pipe will be installed prior to continuing drilling operations.
- **8.** Whenever a casing string is cemented in the R-111-Q potash area, the NMOCD requirements shall be followed.

B. PRESSURE CONTROL

- 1. All blowout preventer (BOP) and related equipment (BOPE) shall comply with well control requirements as described in 43 CFR 3172.
- 2. If a variance is approved for a flexible hose to be installed from the BOP to the choke manifold, the following requirements apply: The flex line must meet the requirements of API 16C. Check condition of flexible line from BOP to choke manifold, replace if exterior is damaged or if line fails test. Line to be as straight as possible with no hard bends and is to be anchored according to Manufacturer's requirements. The flexible hose can be exchanged with a hose of equal size and equal or greater pressure rating. Anchor requirements, specification sheet and hydrostatic pressure test certification matching the hose in service, to be onsite for review. These documents shall be posted in the company man's trailer and on the rig floor.

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- **3.** 5M or higher system requires an HCR valve, remote kill line and annular to match. The remote kill line is to be installed prior to testing the system and tested to stack pressure.
- **4.** If the operator has proposed a multi-bowl wellhead assembly in the APD. The following requirements must be met:
 - i. Wellhead shall be installed by manufacturer's representatives, submit documentation with subsequent sundry.
 - ii. If the welding is performed by a third party, the manufacturer's representative shall monitor the temperature to verify that it does not exceed the maximum temperature of the seal.
 - iii. Manufacturer representative shall install the test plug for the initial BOP test.
 - iv. Whenever any seal subject to test pressure is broken, all the tests in 43 CFR 3172.6(b)(9) must be followed.
 - v. If the cement does not circulate and one-inch operations would have been possible with a standard wellhead, the well head shall be cut off, cementing operations performed and another wellhead installed.
- **5.** The appropriate BLM office shall be notified a minimum of 4 hours in advance for a representative to witness the tests.
 - i. In a water basin, for all casing strings utilizing slips, these are to be set as soon as the crew and rig are ready and any fallback cement remediation has been done. The casing cut-off and BOP installation can be initiated four hours after installing the slips, which will be approximately six hours after bumping the plug. For those casing strings not using slips, the minimum wait time before cut-off is eight hours after bumping the plug. BOP/BOPE testing can begin after cut-off or once cement reaches 500 psi compressive strength (including lead cement), whichever is greater. However, if the float does not hold, cut-off cannot be initiated until cement reaches 500 psi compressive strength (including lead when specified).
 - ii. In potash areas, for all casing strings utilizing slips, these are to be set as soon as the crew and rig are ready and any fallback cement remediation has been done. For all casing strings, casing cut-off and BOP installation can be initiated at twelve hours after bumping the cement plug. The BOPE test can be initiated after bumping the cement plug with the casing valve open. (Only applies to single stage cement jobs, prior to the cement setting up.)
 - iii. The tests shall be done by an independent service company utilizing a test plug not a cup or J-packer and can be initiated immediately with the casing valve open. The operator also has the option of utilizing an independent tester to test without a plug (i.e. against the casing) pursuant to 43 CFR 3172 with the pressure not to exceed 70% of the burst rating for the casing.

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Any test against the casing must meet the WOC time for 8 hours or 500 pounds compressive strength, whichever is greater, prior to initiating the test (see casing segment as lead cement may be critical item).

- iv. The test shall be run on a 5000-psi chart for a 2-3M BOP/BOP, on a 10000 psi chart for a 5M BOP/BOPE and on a 15000 psi chart for a 10M BOP/BOPE. If a linear chart is used, it shall be a one-hour chart. A circular chart shall have a maximum 2-hour clock. If a twelve hour or twenty-four-hour chart is used, tester shall make a notation that it is run with a two hour clock.
- v. The results of the test shall be reported to the appropriate BLM office.
- vi. All tests are required to be recorded on a calibrated test chart. A copy of the BOP/BOPE test chart and a copy of independent service company test will be submitted to the appropriate BLM office.
- vii. The BOP/BOPE test shall include a low-pressure test from 250 to 300 psi. The test will be held for a minimum of 10 minutes if test is done with a test plug and 30 minutes without a test plug. This test shall be performed prior to the test at full stack pressure.
- viii. BOP/BOPE must be tested by an independent service company within 500 feet of the top of the Wolfcamp formation if the time between the setting of the intermediate casing and reaching this depth exceeds 20 days. This test does not exclude the test prior to drilling out the casing shoe as per 43 CFR 3172.

C. DRILLING MUD

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

D. WASTE MATERIAL AND FLUIDS

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

SA 08/14/2024

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. Visual Warning Systems

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

4. Mud Program

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

5. Metallurgy

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

6. Communications

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

7. Well Testing

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

8. Emergency Phone Numbers

Eddy County Sheriff's 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	575-393-5905	
	Fax	575-397-6252	
	2 nd Fax	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: SWANSON 2/3 FED COM

Well Number: 511H

Section 5 - Location ar	nd Types of Water Supply					
Water Source Tab	le					
Water source type: IRRIGATION						
Water source use type:	DUST CONTROL					
	CAMP USE					
	SURFACE CASING					
	INTERMEDIATE/PRODUCTION CASING STIMULATION					
Source latitude: 32.704819		Source longitude: -104.123086				
Source datum: NAD83						
Water source permit type:	WATER WELL					
Water source transport method:	TRUCKING					
Source land ownership: PRIVATE						
Source transportation land owner	ship: STATE					
Source transportation land owner Water source volume (barrels): 19	ship: STATE 040	Source volume (acre-feet): 0.2500526				
Source transportation land owner Water source volume (barrels): 19 Source volume (gal): 81480	ship: STATE 040	Source volume (acre-feet): 0.2500526				
Source transportation land owner Water source volume (barrels): 19 Source volume (gal): 81480 Water source type: IRRIGATION	ship: STATE 040	Source volume (acre-feet): 0.2500526				
Source transportation land owner Water source volume (barrels): 19 Source volume (gal): 81480 Water source type: IRRIGATION Water source use type:	ship: STATE 940 DUST CONTROL	Source volume (acre-feet): 0.2500526				
Source transportation land owner Water source volume (barrels): 19 Source volume (gal): 81480 Water source type: IRRIGATION Water source use type:	ship: STATE 940 DUST CONTROL SURFACE CASING	Source volume (acre-feet): 0.2500526				
Source transportation land owner Water source volume (barrels): 19 Source volume (gal): 81480 Water source type: IRRIGATION Water source use type:	bip: STATE DUST CONTROL SURFACE CASING INTERMEDIATE/PRODUCTION CASING STIMULATION	Source volume (acre-feet): 0.2500526				
Source transportation land owner Water source volume (barrels): 19 Source volume (gal): 81480 Water source type: IRRIGATION Water source use type: Source latitude: 32.32698	bip: STATE DUST CONTROL SURFACE CASING INTERMEDIATE/PRODUCTION CASING STIMULATION	Source longitude: -104.21917				
Source transportation land owner Water source volume (barrels): 19 Source volume (gal): 81480 Water source type: IRRIGATION Water source use type: Source latitude: 32.32698 Source datum: NAD83	DUST CONTROL SURFACE CASING INTERMEDIATE/PRODUCTION CASING STIMULATION	Source longitude: -104.21917				
Source transportation land owner Water source volume (barrels): 19 Source volume (gal): 81480 Water source type: IRRIGATION Water source use type: Source latitude: 32.32698 Source datum: NAD83 Water source permit type:	ship: STATE 940 DUST CONTROL SURFACE CASING INTERMEDIATE/PRODUCTION CASING STIMULATION WATER WELL	Source longitude: -104.21917				
Source transportation land owner Water source volume (barrels): 19 Source volume (gal): 81480 Water source type: IRRIGATION Water source use type: Source latitude: 32.32698 Source datum: NAD83 Water source permit type: Water source transport method:	ship: STATE 940 DUST CONTROL SURFACE CASING INTERMEDIATE/PRODUCTION CASING STIMULATION WATER WELL TRUCKING	Source volume (acre-feet): 0.2500526				

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Received by OCD: 8/26/2024 1:54:53 PM Page 51 of 54 **Operator Name: MEWBOURNE OIL COMPANY** Well Name: SWANSON 2/3 FED COM Well Number: 511H Source transportation land ownership: FEDERAL Water source volume (barrels): 1940 Source volume (acre-feet): 0.2500526 Source volume (gal): 81480 Water source and transportation Swanson_2_3_Fed_Com_511H_WaterSourceTransMap_20231026155339.pdf Water source comments: Both sources shown on one map. New water well? N **New Water Well Info** Well latitude: Well Longitude: Well datum: Well target aquifer: Est thickness of aquifer: Est. depth to top of aquifer(ft): Aquifer comments: Aquifer documentation: Well casing type: Well depth (ft): Well casing outside diameter (in.): Well casing inside diameter (in.): New water well casing? Used casing source: **Drilling method:** Drill material: Grout material: Grout depth: Casing length (ft.): Casing top depth (ft.): Well Production type: **Completion Method:** Water well additional information: State appropriation permit: Additional information attachment:

Section 6 - Construction Materials

Using any construction materials: YES Construction Materials description: Caliche Construction Materials source location Swanson_2_3_Fed_Com_511H_CalilcheSourceTransMap_20231026155350.pdf **Operator Name: MEWBOURNE OIL COMPANY**

Well Name: SWANSON 2/3 FED COM

Well Number: 511H

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Section 7 - Methods for Handling

Waste type: DRILLING

Waste content description: Drill cuttings

Amount of waste: 940 barrels

Waste disposal frequency : One Time Only

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

Safe 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

Reserve Pit being used? NO

Operator Name: MEWBOURNE OIL COMPANY

Well Name: SWANSON 2/3 FED COM

Well Number: 511H

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.)

Cuttings area width (ft.)

Cuttings area 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.)

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: Swanson_2_3_Fed_Com_511H_WellSiteLayout_20231026155404.pdf Comments: NONE

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

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

District III

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

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

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

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CONDITIONS

Action 377709

CONDITIONS

Operator:	OGRID:
MEWBOURNE OIL CO	14744
P.O. Box 5270	Action Number:
Hobbs, NM 88241	377709
	Action Type:
	[C-101] BLM - Federal/Indian Land Lease (Form 3160-3)

CONDITIONS

Created By	Condition	Condition Date
ward.rikala	Notify OCD 24 hours prior to casing & cement	9/9/2024
ward.rikala	Will require a File As Drilled C-102 and a Directional Survey with the C-104	9/9/2024
ward.rikala	Once the well is spud, to prevent ground water contamination through whole or partial conduits from the surface, the operator shall drill without interruption through the fresh water zone or zones and shall immediately set in cement the water protection string	9/9/2024
ward.rikala	Cement is required to circulate on both surface and intermediate1 strings of casing	9/9/2024
ward.rikala	If cement does not circulate on any string, a CBL is required for that string of casing	9/9/2024
ward.rikala	Oil base muds are not to be used until fresh water zones are cased and cemented providing isolation from the oil or diesel. This includes synthetic oils. Oil based mud, drilling fluids and solids must be contained in a steel closed loop system	9/9/2024
ward.rikala	Must submit C-102 on new C-102 form.	9/9/2024