Form 3160-3 FORM APPROVED OMB No. 1004-0137 (June 2015) Expires: January 31, 2018 **UNITED STATES** DEPARTMENT OF THE INTERIOR 5. Lease Serial No. NMNM93432 **BUREAU OF LAND MANAGEMENT** APPLICATION FOR PERMIT TO DRILL OR REENTER 6. If Indian, Allotee or Tribe Name 7. If Unit or CA Agreement, Name and No. **✓** DRILL REENTER 1a. Type of work: Oil Well 1b. Type of Well: Gas Well Other 8. Lease Name and Well No. 1c. Type of Completion: Hydraulic Fracturing ✓ Single Zone Multiple Zone KINGS LANDING 25/24 FED COM 511H 2. Name of Operator 9. API Well No. MEWBOURNE OIL COMPANY 30-025-54732 3a. Address 3b. Phone No. (include area code) 10. Field and Pool, or Exploratory QUERECHO PLAINS/BONE SPRING P O BOX 5270, HOBBS, NM 88241 (575) 393-5905 4. Location of Well (Report location clearly and in accordance with any State requirements.*) 11. Sec., T. R. M. or Blk. and Survey or Area SEC 24/T18S/R32E/NMP At surface NWNW / 309 FNL / 451 FWL / LAT 32.7393582 / LONG -103.7269463 At proposed prod. zone SWSW / 100 FSL / 660 FWL / LAT 32.7114342 / LONG -103.7262238 14. Distance in miles and direction from nearest town or post office* 12. County or Parish 13. State NM LEA 10 miles 15. Distance from proposed* 16. No of acres in lease 17. Spacing Unit dedicated to this well 210 feet location to nearest property or lease line, ft. 320.0 (Also to nearest drig. unit line, if any) 18. Distance from proposed location* 19. Proposed Depth 20. BLM/BIA Bond No. in file to nearest well, drilling, completed, 20 feet 9624 feet / 20181 feet FED: NM1693 applied for, on this lease, ft. 21. Elevations (Show whether DF, KDB, RT, GL, etc.) 22. Approximate date work will start* 23. Estimated duration 3801 feet 04/20/2024 60 days 24. Attachments The following, completed in accordance with the requirements of Onshore Oil and Gas Order No. 1, and the Hydraulic Fracturing rule per 43 CFR 3162.3-3 (as applicable) 1. Well plat certified by a registered surveyor. 4. Bond to cover the operations unless covered by an existing bond on file (see Item 20 above). 2. A Drilling Plan. 3. A Surface Use Plan (if the location is on National Forest System Lands, the 5. Operator certification. SUPO must be filed with the appropriate Forest Service Office). 6. Such other site specific information and/or plans as may be requested by the Name (Printed/Typed) Date 25. Signature BRADLEY BISHOP / Ph: (575) 393-5905 02/22/2024 (Electronic Submission) Title Regulatory Approved by (Signature) Date Name (Printed/Typed) (Electronic Submission) CODY LAYTON / Ph: (575) 234-5959 05/09/2025 Title Office Assistant Field Manager Lands & Minerals Carlsbad Field Office Application approval does not warrant or certify that the applicant holds legal or equitable title to those rights in the subject lease which would entitle the

applicant to conduct operations thereon.

Conditions of approval, if any, are attached.

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



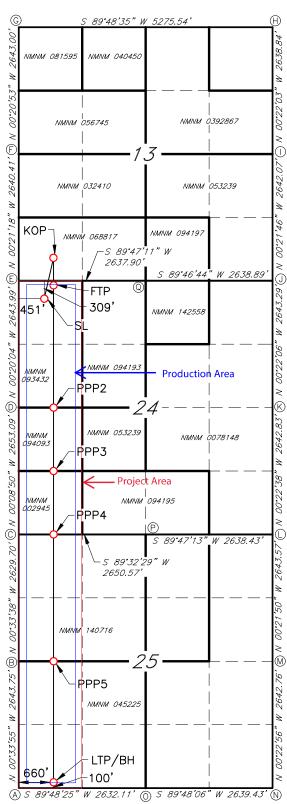
<u>C-102</u>	2		Enei	rgy, Min	State of Neverals & Natura	v Mexico Il Resources Dep	artment	Revised July 9, 2024						
	Electronica CD Permittin					ION DIVISION				✓ Initial Submit	tal			
Via OC	D Fermittin	ıg						Submit						
								Type:	-	☐ As Drilled				
			<u> </u>		WELL LOCAT	TION INFORMATION								
API Nu	mber 30-0	25-54732	Pool Code 50510		F	Pool Name QUERECHO PLAINS; LOWER BONE SPRING								
Property	Code 33	7326	Property Na	nme KII	NGS LANDI	NG 25/24 F	511H							
OGRID No. Operator Name MEWBOUI				MEWBOURI	NE OIL COM	PANY	•	Groun	nd Level Elevation	3801'				
	Owner: 🗆 S	State Fee]Tribal ☑ Fo	ederal		Mineral Owner:	☐State ☐Fee [☐ Tribal S	Z Fede	eral				
					Surfa	ace Location								
UL	Section	Township	Range	Lot	Ft. from N/S	Ft. from E/W	Latitude		Longit	tude	County			
D	24	18S	32E	201	309 FNL	451 FWL			_	7269463°W	LEA			
				l		Hole Location								
UL	Section	Township	Range	Lot	Ft. from N/S	Ft. from E/W	Latitude]	Longit	tude	County			
M	25	18S	32E		100 FSL	660 FWL	32.711434	42°N 1	03.	7262238°W	LEA			
	l .		l .											
Dedicated Acres Infill or Defining Well Defining Well API 320					Well API	Overlapping Spa	cing Unit (Y/N)	Consolida	ation C	Code				
Order N	umbers.					Well setbacks are under Common Ownership: ☐ Yes ☐ No								
Kick Off Point (KOP)														
UL	Section	Township	Range	Lot	Ft. from N/S	Ft. from E/W	Latitude	I	Longit	tude	County			
M	13	18S	32E		473 FSL	660 FWL	32.74150	68°N 1	03.	7262670°W	LEA			
					First Ta	ke Point (FTP)		I						
UL	Section	Township	Range	Lot	Ft. from N/S	Ft. from E/W	Latitude		Longit	County				
D	24	18S	32E		100 FNL	660 FWL	32.73993	23°N 1	03.	7262663°W	LEA			
	l	I	Ι_	Ι_		ke Point (LTP)	Γ							
UL	Section	Township	Range	Lot	Ft. from N/S	Ft. from E/W	Latitude		Longit		County			
M	25	18S	32E		100 FSL	660 FWL	32.711434	42 N 1	.03.	7262238°W	LEA			
Unitized	d Area or Ar	rea of Uniform	Interest	Spacing	Unit Type 🛭 Hori	izontal	Groun 3829'	d Floor El	levatio	on:				
				•			•							
OPER.	ATOR CER	TIFICATIONS	\$			SURVEYOR CER	TIFICATIONS							
my know organiza including	ledge and belie tion either own the proposed	ef, and , if the well as a working intero bottom hole locat	l is a vertical or est or unleased i ion or has a rigi	directional w mineral inter ht to drill this	est in the land	I hereby certify that th surveys made by me u my belief.								
interest,					order heretofore			19680		3				
consent of	of at least one l ract (in the targ	get pool or format	a working inter tion) in which ar	est or unleas 1y part of the	ed mineral interest well's completed		To the second							
in each tract (in the target pool or formation) in which any part of the well's completed interval will be located or obtained a compulsory pooling order from the division.							1.08/	ONAL S	UR					
Conner Whitley 11/05/2024 Signature Date						Signature and Seal of Prof								
	er Whitl	ey				Robert N	1. Howet							
Printed Na						Certificate Number	Date of Surve	у						
		wbourne.	com			19680		30	3/09	9/2024				
Email Add	lress								-	•				

ACREAGE DEDICATION PLATS

This grid represents a standard section. You may superimpose a non-standard section, or larger area, over this grid. Operators must outline the dedicated acreage in a red box, clearly show the well surface location and bottom hole location, if it is a directionally drilled, with the dimensions from the section lines in the cardinal directions. If this is a horizontal wellbore show on this plat the location of the First Take Point and Last Take Point, and the point within the Completed interval (other than the First Take Point or Last Take Point) that is closest to any outer boundary of the tract.

Surveyors shall use the latest United States government survey or dependent resurvey. Well locations will be in reference to the New Mexico Principal Meridian. If the land is not surveyed, contact the OCD Engineering Bureau. Independent subdivision surveys will not be acceptable.

KINGS LANDING 25/24 FED COM #511H



<u>GEODETIC DATA</u> NAD 83 GRID — NM EAST

SURFACE LOCATION (SL)
N: 633243.8 - E: 727787.7
LAT: 32.7393582* N
LONG: 103.7269463* W

KICK OF POINT (KOP) 473' FSL & 660' FWL SEC.13 N: 634026.7 - E: 727992.1 LAT: 32.7415068' N LONG: 103.7262670' W

FIRST TAKE POINT (FTP) 100' FNL & 660' FWL SEC.24 N: 633453.9 - E: 727995.6 LAT: 32.7399323' N LONG: 103.7262663' W

PROPOSED PENETRATION POINT 2 (PPP2)
2650' FSL & 663' FWL SEC.24
N: 630910.6 - E: 728013.4
LAT: 32.7329419' N
LONG: 103.7262558' W

PROPOSED PENETRATION POINT 3 (PPP3)

1325' FSL & 669' FWL SEC.24

N: 629585.8 - E: 728022.6

LAT: 32.7293004' N

LONG: 103.7262504' W

PROPOSED PENETRATION POINT 4 (PPP4)

0' FNL & 675' FWL SEC.25

N: 628261.0 - E: 728031.9

LAT: 32.7256589' N

LONG: 103.7262450' W

PROPOSED PENETRATION POINT 5 (PPP5)
2644' FSL & 667' FWL SEC.25
N: 625628.8 - E: 728050.3
LAT: 32.7184239' N
LONG: 103.7262342' W

LAST TAKE POINT (LTP)/ BOTTOM HOLE (BH) N: 623085.8 - E: 728068.0 LAT: 32.7114342* N LONG: 103.7262238* W

<u>CORNER DATA</u> NAD 83 GRID — NM EAST

A: FOUND BRASS CAP "1913" N: 622983.6 - E: 727409.2

B: FOUND BRASS CAP "1913" N: 625626.6 - E: 727383.1

C: FOUND BRASS CAP "1913" N: 628255.6 - E: 727357.4

D: FOUND BRASS CAP "1913" N: 630908.0 - E: 727350.6

E: FOUND BRASS CAP "1913" N: 633551.4 - E: 727335.2

F: FOUND BRASS CAP "1913' N: 636191.1 - E: 727318.8

G: FOUND BRASS CAP "1913" N: 638833.4 - E: 727302.8

H: FOUND BRASS CAP "1913" N: 638850.9 - E: 732577.0

I: FOUND BRASS CAP "1913" N: 636212.8 - E: 732594.0 J: FOUND BRASS CAP "1913" N: 633571.4 - E: 732610.7

K: FOUND BRASS CAP "1913" N: 630928.8 - E: 732627.7

L: FOUND BRASS CAP "1913" N: 628286.6 - E: 732645.1

M: FOUND BRASS CAP "1913" N: 625643.7 - E: 732661.8

N: FOUND BRASS CAP "1913"

N: 623001.6 - E: 732679.5 O: FOUND BRASS CAP "1913"

N: 622992.5 - E: 730040.7

P: FOUND BRASS CAP "1913" N: 628276.8 - E: 730007.3

Q: FOUND BRASS CAP "1913" N: 633561.2 - E: 729972.4 Page 5

State of New Mexico Energy, Minerals and Natural Resources Department

Submit Electronically Via E-permitting

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

	N	ATURAL G	AS MANA	GEMENT P	LAN			
This Natural Gas Mana	gement Plan m	ust be submitted w	vith each Applicat	ion for Permit to	Drill (APD) for	a new o	r recompleted well.	
		Section <u>E</u>	1 – Plan De	escription 2021				
I. Operator: Me	wbourne (Oil Co.	OGRID:	14744	Date	: <u>5/2</u>	2/22	
II. Type: 💢 Original [☐ Amendment	due to □ 19.15.27	7.9.D(6)(a) NMA	C □ 19.15.27.9.D	(6)(b) NMAC [Other.		
If Other, please describe	e:							
III. Well(s): Provide the recompleted from a s					wells proposed	to be dr	illed or proposed to	
Well Name	API	ULSTR	Footages	Anticipated Oil BBL/D	Anticipated Gas MCF/D	F	Anticipated roduced Water BBL/D	
Kings Landing 25/24 Fed Com 511F		D 24 18S 32E	309' FNL x 451' FW	1500	1000		4000	
				Y1:300 Y2:180 Y3: 120	Y1:400 Y2:250 Y3:200	Υ	1:600 Y2: 400 Y3: 300	
IV. Central Delivery F V. Anticipated Schedu proposed to be recompl	le: Provide the	following information		or recompleted v			27.9(D)(1) NMAC] osed to be drilled or	
Well Name	API	Spud Date	TD Reached Date	Completion Commencement		Flow Date	First Production Date	
Kings Landing 25/24 Fed Com 511H		8/20/25	9/10/25	10/1/25	10/20	0/25	10/20/25	
VI. Separation Equipm VII. Operational Practices Subsection A through F VIII. Best Management during active and plann	etices: 🖾 Attac of 19.15.27.8	ch a complete desc NMAC. Attach a comple	cription of the act	ions Operator wi	ll take to compl	y with 1	the requirements of	

Page 6

Section 2 - Enhanced Plan EFFECTIVE APRIL 1, 2022

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

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

IX. Anticipated Natural Gas Production:

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

X. Natural Gas Gathering System (NGGS):

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

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

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

XIII. Line Pro	essure. Operator	\square does \square does i	not anticipate th	nat its existing w	vell(s) connecte	ed to the same	segment, o	or portion,	of the
natural gas gat	thering system(s)	described above	will continue to	o meet anticipate	ed increases in	line pressure of	caused by	the new we	ell(s).

Attach (Onerator's	nlan to	manage	production	in response	to the	increased	line pressu	ıre
Attach	Oberaior s	s Dian ic	manage	Droduction	III Tesponse	LO LHE	Hicreased	Time bressu	пс

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

Released to Imaging: 6/10/2025 3:32:47 PM

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

Operator certifies that, after reasonable inquiry and based on the available information at the time of submittal: 🖾 Operator will be able to connect the well(s) to a natural gas gathering system in the general area with sufficient capacity to transport one hundred percent of the anticipated volume of natural gas produced from the well(s) commencing on the date of first production, taking into account the current and anticipated volumes of produced natural gas from other wells connected to the pipeline gathering system; or ☐ Operator will not be able to connect to a natural gas gathering system in the general area with sufficient capacity to transport one hundred percent of the anticipated volume of natural gas produced from the well(s) commencing on the date of first production, taking into account the current and anticipated volumes of produced natural gas from other wells connected to the pipeline gathering system. If Operator checks this box, Operator will select one of the following: Well Shut-In. ☐ Operator will shut-in and not produce the well until it submits the certification required by Paragraph (4) of Subsection D of 19.15.27.9 NMAC; or Venting and Flaring Plan.

Operator has attached a venting and flaring plan that evaluates and selects one or more of the potential alternative beneficial uses for the natural gas until a natural gas gathering system is available, including: power generation on lease; (a) (b) power generation for grid; compression on lease; (c) liquids removal on lease; (d) reinjection for underground storage; (e)

reinjection for temporary storage; **(f)**

- reinjection for enhanced oil recovery; **(g)**
- fuel cell production; and (h)
- 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:
- 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
- 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.

Bradley Bishop
BRADLEY BISHOP
REGULATORY MANAGER
BBISHOP@MEWBOURNE.COM
5/2/22
575-393-5905
OIL CONSERVATION DIVISION
(Only applicable when submitted as a standalone form)
approval:

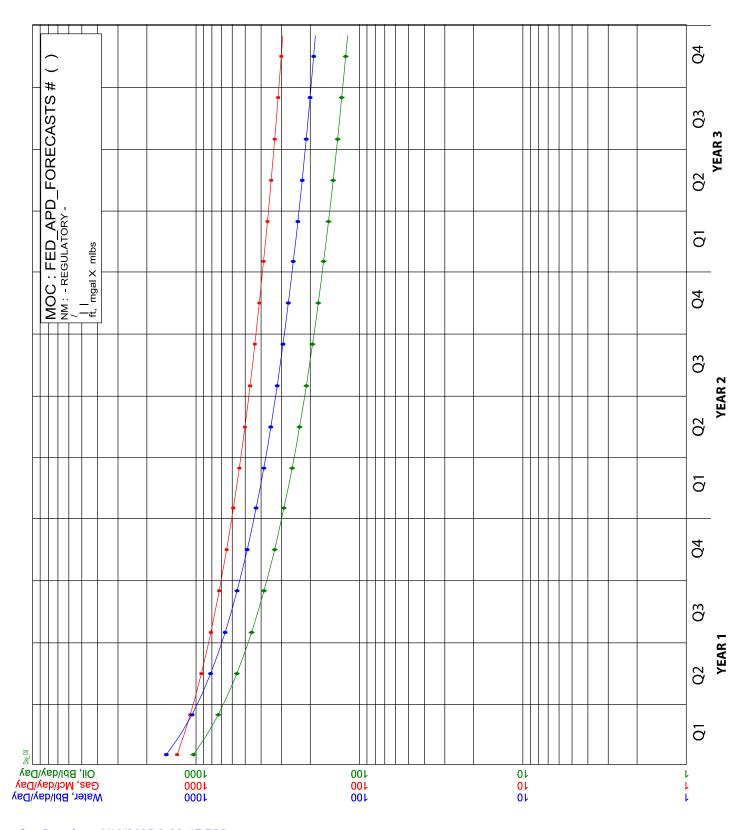
Mewbourne Oil Company

Natural Gas Management Plan – Attachment

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

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

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





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

Drilling Plan Data Report 05/12/2025

APD ID: 10400097220

Operator Name: MEWBOURNE OIL COMPANY

Well Name: KINGS LANDING 25/24 FED COM

Well Type: OIL WELL

Submission Date: 02/22/2024

Highlighted data reflects the most recent changes

Well Number: 511H

Well Work Type: Drill

Show Final Text

Section 1 - Geologic Formations

Formation ID	Formation Name	Elevation	True Vertical	Measured Depth	Lithologies	Mineral Resources	Producing Formatio
15602302	RUSTLER	3801	1235	1235	ANHYDRITE, DOLOMITE	USEABLE WATER	N
15602303	TOP SALT	2324	1477	1477	SALT	NONE	N
15602313	BASE OF SALT	1195	2606	2606	SALT	NONE	N
15602314	YATES	1026	2775	2775	SANDSTONE	NATURAL GAS, OIL	N
15602306	SEVEN RIVERS	533	3268	3268	DOLOMITE	NATURAL GAS, OIL	N
15602315	QUEEN	-207	4008	4008	DOLOMITE, SANDSTONE	NATURAL GAS, OIL	N
15602307	SAN ANDRES	-831	4632	4632	DOLOMITE	NATURAL GAS, OIL	N
15602308	LAMAR	-1162	4963	4963	DOLOMITE, LIMESTONE	NATURAL GAS, OIL	N
15602316	BONE SPRING	-3073	6874	6874	LIMESTONE	NATURAL GAS, OIL	N
15602310	BONE SPRING 1ST	-4544	8345	8345	SANDSTONE	NATURAL GAS, OIL	N
15602311	BONE SPRING 2ND	-5225	9026	9026	SANDSTONE	NATURAL GAS, OIL	Y

Section 2 - Blowout Prevention

Pressure Rating (PSI): 5M Rating Depth: 20181

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 43 CFR Part 3172 requirements. The System may be upgraded to a higher

Well Name: KINGS LANDING 25/24 FED COM Well Number: 511H

pressure but still tested to the working pressure listed in the table above. If the system is upgraded all the components installed will be functional and tested. Pipe rams will be operationally checked each 24 hour period. Blind rams will be operationally checked on each trip out of the hole. These checks will be noted on the daily tour sheets.

Choke Diagram Attachment:

Kings_Landing_25_24_Fed_Com__511H_5M_BOPE_Choke_Diagram_20240221080629.pdf Flex Line Specs API 16C 20241106155444.pdf

BOP Diagram Attachment:

Kings_Landing_25_24_Fed_Com__511H_5M_BOPE_Schematic_20240221080721.pdf
Kings_Landing_25_24_Fed_Com__511H_MOC_Break_Testing_Variance_20240221080730.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	1310	0	1310	3801	2491	1310	J-55	54.5	ST&C	1.93	4.66	DRY	7.2	DRY	11.9 5
2	INTERMED IATE	12.2 5	9.625	NEW	API	N	0	2900	0	2900		901	2900	J-55	36	LT&C	1.32	2.29	DRY	4.34	DRY	5.4
3	PRODUCTI ON	8.75	7.0	NEW	API	N	0	8910	0	8852		-5051	8910	P- 110	26	LT&C	1.4	2.23	DRY	2.99	DRY	3.58
4	LINER	6.12 5	4.5	NEW	API	N	8710	20181	8652	9624	-4851	-5823	11471	P- 110	13.5	LT&C	1.94	2.25	DRY	2.18	DRY	2.73

Casing Attachments

Well Name: KINGS LANDING 25/24 FED COM Well Number: 511H

Casing ID: 1

String

SURFACE

Inspection Document:

Spec Document:

Tapered String Spec:

Casing Design Assumptions and Worksheet(s):

 $13.375 in_54.5 \underline{\hspace{0.3cm}} J55 \underline{\hspace{0.3cm}} STC \underline{\hspace{0.3cm}} Csg \underline{\hspace{0.3cm}} 20241107071013.pdf$

Casing ID: 2

String

INTERMEDIATE

Inspection Document:

Spec Document:

Tapered String Spec:

Casing Design Assumptions and Worksheet(s):

9.625in_36__J55_LTC_Csg_20241107071538.pdf

Casing ID: 3

٦

String

PRODUCTION

Inspection Document:

Spec Document:

Tapered String Spec:

Casing Design Assumptions and Worksheet(s):

7in_26__P110_LTC_Csg_20241107071107.pdf

Well Name: KINGS LANDING 25/24 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):

4.5in_13.5__P110_LTC_Csg_20241107071623.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	1119	740	2.12	12.5	1570	100	Class C	Salt, Gel, Extender, LCM
SURFACE	Tail		1119	1310	200	1.34	14.8	268	100	Class C	Retarder
INTERMEDIATE	Lead		0	2205	400	2.12	12.5	850	25	Class C	Salt, Gel, Extender, LCM
INTERMEDIATE	Tail		2205	2900	200	1.34	14.8	268	25	Class C	Retarder
PRODUCTION	Lead	6200	2700	5494	250	2.12	12.5	530	25	Class C	Salt, Gel, Extender, LCM, Defoamer
PRODUCTION	Tail		5494	6200	100	1.34	14.8	134	25	Class C	Retarder, Fluid Loss, Defoamer
PRODUCTION	Lead	6200	6200	7416	110	2.12	12.5	240	25	CLASS C	GEL, SALT, EXTENDER LCM, DEFOAMER
PRODUCTION	Tail		7416	8910	250	1.18	15.6	295	25	CLASS H	RETARDER, FLUID LOSS, DEFOAMER
LINER	Lead		8710	2018	730	1.85	13.5	1360	25	Class C	Salt, Gel, Fluid Loss, Retarder, Dispersant, Defoamer, Anti-settling Agent

Well Name: KINGS LANDING 25/24 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 43 CFR 3172:

Diagram of the equipment for the circulating system in accordance with 43 CFR 3172:

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 (lbs/gal)	Max Weight (lbs/gal)	Density (lbs/cu ft)	Gel Strength (lbs/100 sqft)	НА	Viscosity (CP)	Salinity (ppm)	Filtration (cc)	Additional Characteristics
0	1310	SPUD MUD	8.4	8.6		V					
1310	2900	SALT SATURATED	10	10.2	7						
2900	8910	SALT SATURATED	8.6	9.7							
9810	2018 1	OIL-BASED MUD	10	11							

Well Name: KINGS LANDING 25/24 FED COM Well Number: 511H

Section 6 - Test, Logging, Coring

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

No logs are planned based on well control or offset log information. Offset Well: Kings Landing 24/25 Fed Com 513H

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

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

Coring operation description for the well:

None

Section 7 - Pressure

Anticipated Bottom Hole Pressure: 5505 Anticipated Surface Pressure: 3387

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

Kings_Landing_25_24_Fed_Com__511H_H2S_Plan_20240221101840.pdf

Section 8 - Other Information

Proposed horizontal/directional/multi-lateral plan submission:

Kings_Landing_25_24_Fed_Com_511H_MOC_Dir_Plan_20241107074758.pdf Kings_Landing_25_24_Fed_Com_511H_MOC_Dir_Plot_20241107074808.pdf

Other proposed operations facets description:

Other proposed operations facets attachment:

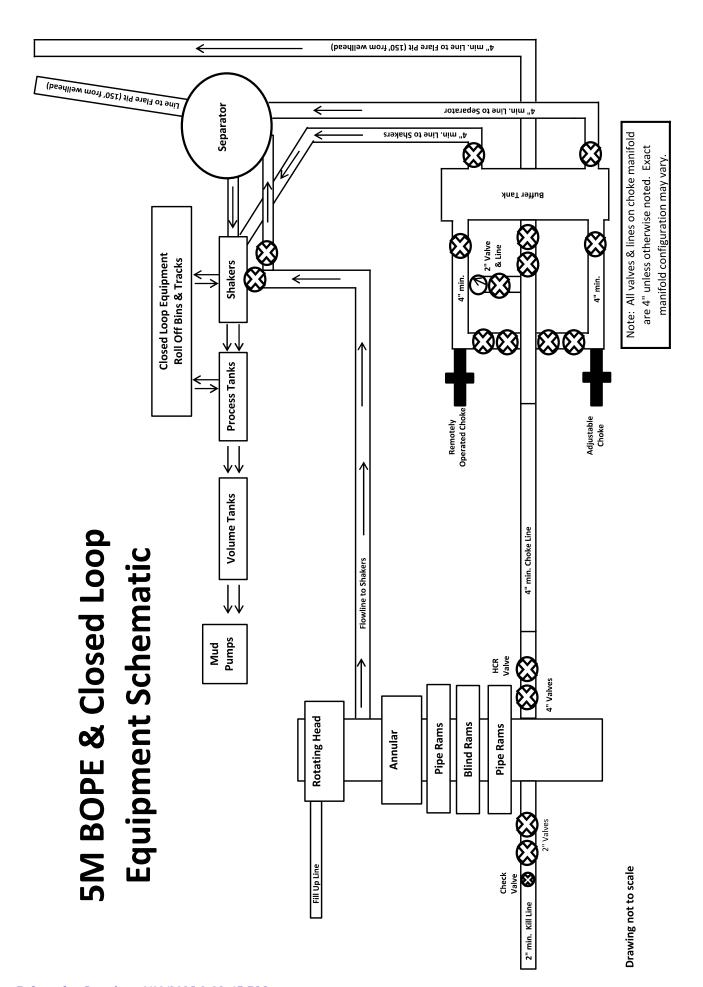
Kings_Landing_25_24_Fed_Com_511H_Drlg_Program_20241107074824.pdf Kings_Landing_25_24_Fed_Com_511H_NGMP_20241107083856.pdf

Other Variance request(s)?:

Other Variance attachment:

Kings_Landing_25_24_Fed_Com__511H_MOC_Offline_Cementing_Variance_20240221102754.pdf
Kings_Landing_25_24_Fed_Com__511H_MOC_Break_Testing_Variance_20240221102801.pdf







LUOHE LETONE HYDRAULICS TECHNOLOGY CO.,LTD

HYDROSTATIC TESTING REPORT

LTYY/QR-5.7.1-28

№: 230826015

Product Name	Cho	ke And Kill Hose		Standard	I AP	I Spec 16C 3 rd edition	
Product Specification	3″×1000	3"×10000psi×60ft (18.29m)			ber	7660144	
Inspection Equipmen	t MTU	J-BS-1600-3200-E		Test mediu	ım	Water	
Inspection Departmen	t Ç	.C. Department		Inspection I	Date	2023.08.26	
		Rate of le	ngth chang	ge	•	2000000	
Standard requirement	s At working pro	essure, the rate of le	ngth chang	e should not m	nore than ± 2	%	
Testing result	10000psi (69.0	MPa) ,Rate of leng	th change).7%			
		Hydrosta	atic testing				
Standard requirements At 1.5 times working pressure, the initial pressure-holding period of not less than three minutes the second pressure-holding period of not less than one hour, no leaks.							
Testing result	15000psi (103	.5MPa), 3 min for t	he first tim	e, 60 min for th	ne second time	, no leakage	
Graph of pressure testing	ng:					Albert 150 c	
100 100 100 100 100 100 100 100 100 100			100 90 80 70 60 50 10				
21,062/1 21,023/1 21,062/1 21,062/1 21,062/1 21,062/1 21,062/1 21,062/1 21,062/1 22,							
Conclusion	The inspec	ted items meet stan	dard requi	rements of API	Spec 16C 3rd	edition	
Approver	Jian long Chen	Auditor	High	ng Dong	Inspector	Zhansheng Wang	



LUOHE LETONE HYDRAULICS TECHNOLOGY CO.,LTD

CERTIFICATE OF QUALITY

LTYY/QR-5.7.1-19B

№: LT2023-126-002

Customer Name	Austin Hose							
Product Name	Choke And Kill Hose							
Product Specification	3"×10000psi×60ft (18.29m)	Quantity	2PCS					
Serial Number	7660143~7660144	FSL	FSL3					
Temperature Range	Temperature Range -29°C ~+121°C		API Spec 16C 3 rd edition					
Inspection Department	Q.C. Department	Inspection date	2023.08.26					

Inspection Items					Inspection results			
	Appearance C	Checking	g		In accordance with API Spec 16C 3 rd edition			
	Size and Lengths					nce with API Spec	16C 3 rd edition	
Dimensions and Tolerances					In accordance with API Spec 16C 3 rd edition			
End Connections: 4-1/16"×10000psi Integral flange for sour gas service				In accordance with API Spec 6A 21st edition				
End Connections: 4-1	End Connections: 4-1/16"×10000psi Integral flange for sour gas service				In accordance with API Spec 17D 3 rd edition			
	Hydrostatic Testing				In accordance with API Spec 16C 3 rd edition			
	product Ma	arking			In accordance with API Spec 16C 3 rd edition			
Inspection con	Inspection conclusion The inspected items me					ments of API Spec	16C 3 rd edition	
Remark	Remarks							
Approver	Jian long Ca	iken	Auditor	1/1	nging Dong	Inspector	Zhansheng Wang	



LUOHE LETONE HYDRAULICS TECHNOLOGY CO.,LTD

CERTIFICATE OF CONFORMANCE

№:LT230826016

Product Name: Choke And Kill Hose

Product Specification: 3"×10000psi×60ft (18.29m)

Serial Number: 7660143~7660144

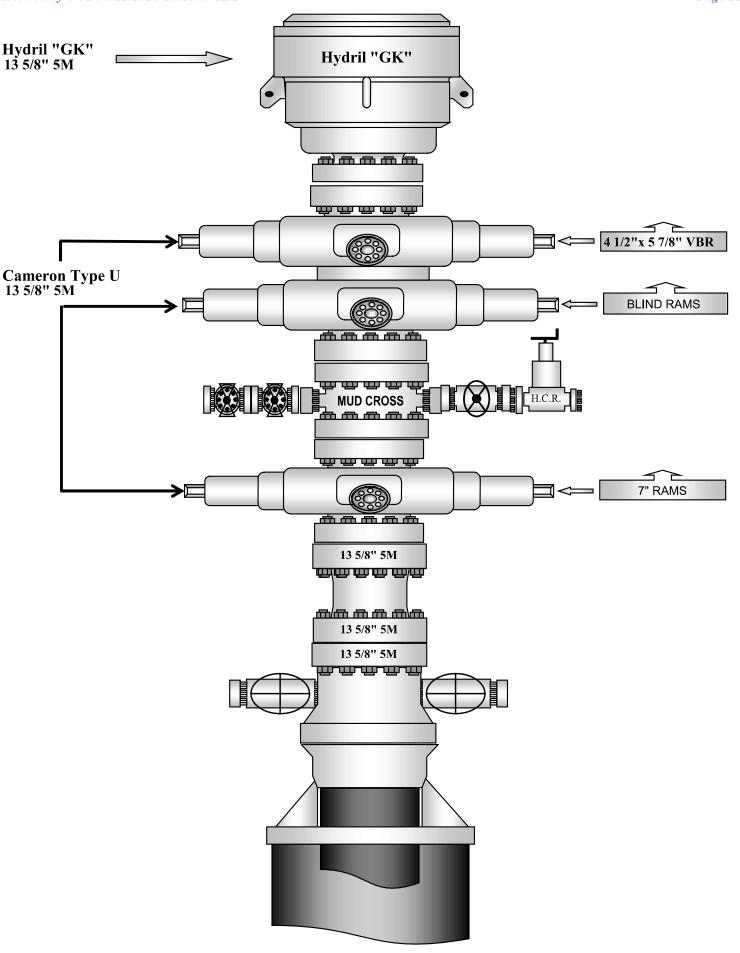
End Connections: 4-1/16"×10000psi Integral flange for sour gas service

The Choke And Kill Hose assembly was produced by LUOHE LETONE HYDRAULICS TECHNOLOGY CO.,LTD. in Aug 2023, and inspected by LUOHE LETONE HYDRAULICS TECHNOLOGY CO.,LTD. according to API Spec 16C 3rd edition on Aug 26, 2023. The overall condition is good. This is to certify that the Choke And Kill Hose complies with all current standards and specifications for API Spec 16C 3rd edition.

Jian long Chen

QC Manager:

Date: Aug 26, 2023





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 guick 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

<u>Summary</u>

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.



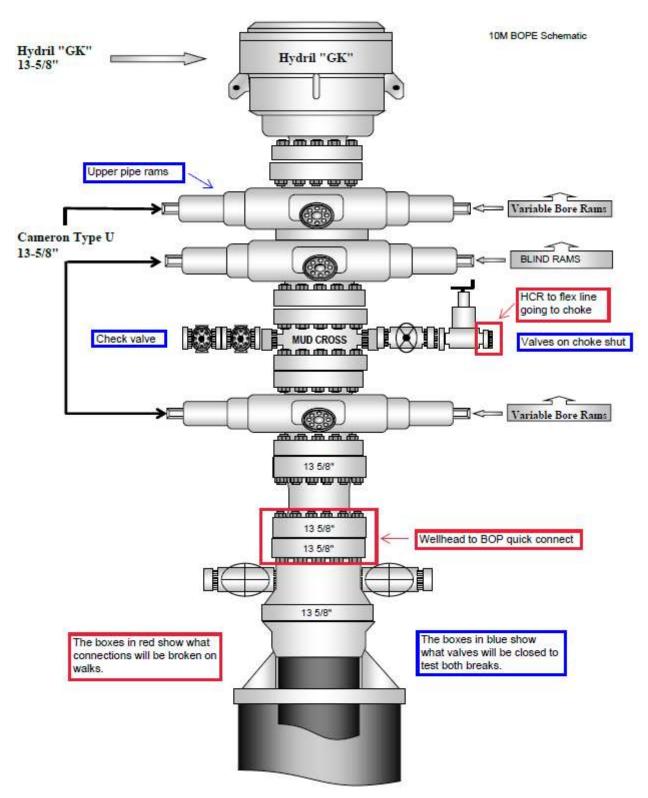


Figure 1. BOP diagram



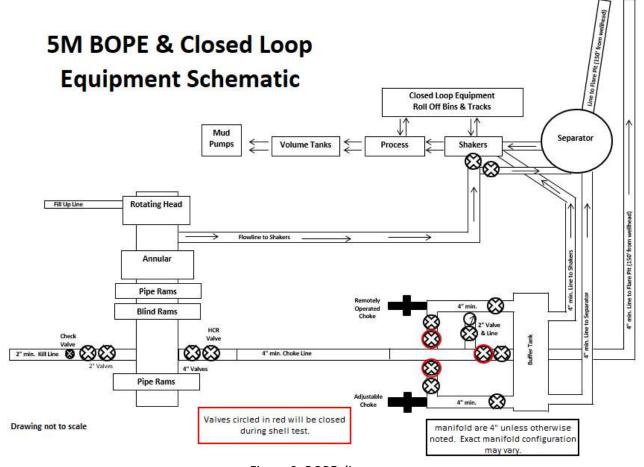


Figure 2. BOPE diagram





Figure 3. BOP handling system





Figure 4. BOP handling system



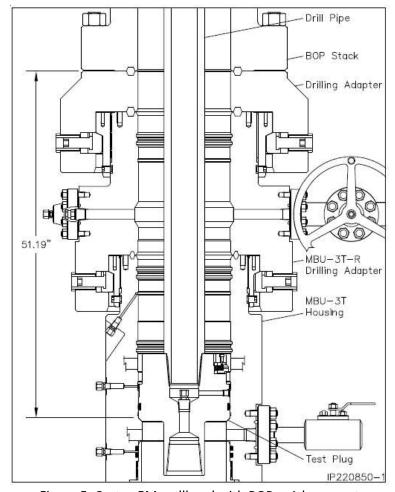


Figure 5. Cactus 5M wellhead with BOP quick connect

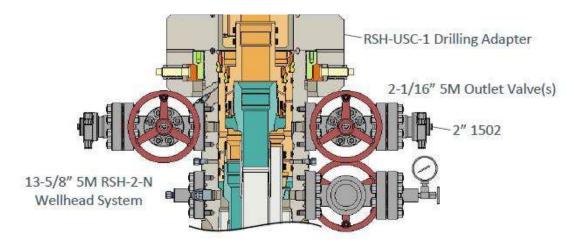


Figure 6. Vault 5M wellhead with BOP quick connect

■Tenaris

API STC

 Coupling
 Pipe Body

 Grade: J55 (Casing)
 Grade: J55 (Casing)

 Body: Bright Green
 1st Band: Bright Green

 1st Band: White
 2nd Band:

 2nd Band: 3rd Band:

 3rd Band: 4th Band:

Outside Diameter	13.375 in.	Wall Thickness	0.380 in.	Grade	J55 (Casing)
Min. Wall Thickness	87.50 %	Pipe Body Drift	API Standard	Туре	Casing
Connection OD Option	Regular				

Pipe Body Data

Geometry			
Nominal OD	13,375 in.	Drift	12.459 in.
Wall Thickness	0.380 in.	Plain End Weight	52.79 lb/ft
Nominal Weight	54.500 lb/ft	OD Tolerance	API
Nominal ID	12.615 in.		

55,000 psi
75,000 psi
853 x1000 lb
2730 psi
1130 psi
19 °/100 ft

Connection Data

Hand Tight Stand Off	3.500 in.	Internal Pressure Capacity	2730 psi	Maximum Torque	6430 ft-lb
Connection OD	14.375 in.	Coupling Face Load	519 x1000 lb	Optimum Torque	5140 ft-lb
Thread per In	8	Joint Strength	514 x1000 lb	Minimum Torque	3860 ft-lb
Geometry		Performance		Make-Up Torques	

Notes

For products according to API Standards 5CT & 5B; Performance calculated considering API Technical Report 5C3 (Sections 9 & 10) equations.

For geometrical and steel grades combinations not considered in the API Standards 5CT and/or 5B; Performance calculations indirectly derived from API Technical Report 5C3 (Sections 9 & 10) equations.

Couplings OD are shown according to current API 5CT 10th Edition.

Tenaris has issued this document for general information only, and the information in this document, including, without limitation, any pictures, drawings or designs ("Information") is not intended to constitute professional or any other type of advice or recommendation and is provided on an "as is" basis. No warranty is given. Tenaris has not independently verified any information —if any- provided by the user in connection with, or for the purpose of, the Information contained hereunder. The use of the Information is at user's own risk and Tenaris does not assume any responsibility or liability of any kind for any loss, damage or injury resulting from, or in connection with any Information contained hereunder or any use thereof. The Information in this document is subject to change or modification without notice. Tenaris's products and services are subject to Tenaris's standard terms and conditions or otherwise to the terms resulting from the respective contracts of sale or services, as the case may be, between petitioner and Tenaris. For more complete information please contact a Tenaris's representative or visit our website at www.lenaris.com. ©Tenaris 2024. All rights reserved.



Coupling	Pipe Body
Grade: P110	Grade: P110
Body: White	1st Band: White
1st Band: -	2nd Band: -
2nd Band: -	3rd Band: -
3rd Band: -	4th Band: -

Outside Diameter	7.000 in.	Wall Thickness	0.362 in.	Grade	P110
Min. Wall Thickness	87.50 %	Pipe Body Drift	API Standard	Туре	Casing
Connection OD Option	Regular				

Pipe Body Data

Geometry			
Nominal OD	7.000 in.	Drift	6.151 in.
Wall Thickness	0.362 in.	Plain End Weight	25.69 lb/ft
Nominal Weight	26 lb/ft	OD Tolerance	API
Nominal ID	6.276 in.		

Performance	
SMYS	110,000 psi
Min UTS	125,000 psi
Body Yield Strength	830 x1000 lb
Min. Internal Yield Pressure	9960 psi
Collapse Pressure	6230 psi
Max. Allowed Bending	72 °/100 ft

Connection Data

N					
Hand Tight Stand Off	3 in.	Internal Pressure Capacity	9960 psi	Maximum Torque	8660 ft-lb
Connection OD	7.875 in.	Coupling Face Load	799 x1000 lb	Optimum Torque	6930 ft-lb
Thread per In	8	Joint Strength	693 x1000 lb	Minimum Torque	5200 ft-lb
Geometry		Performance		Make-Up Torques	

Notes

For products according to API Standards 5CT & 5B; Performance calculated considering API Technical Report 5C3 (Sections 9 & 10) equations.

For geometrical and steel grades combinations not considered in the API Standards 5CT and/or 5B; Performance calculations indirectly derived from API Technical Report 5C3 (Sections 9 & 10) equations.

Couplings OD are shown according to current API 5CT 10th Edition,

Tenaris has issued this document for general information only, and the information in this document, including, without limitation, any pictures, drawings or designs ("Information") is not intended to constitute professional or any other type of advice or recommendation and is provided on an "as is" basis. No warranty is given. Tenaris has not independently verified any information —if any- provided by the user in connection with, or for the purpose of, the Information contained hereunder. The use of the Information is at user's own risk and Tenaris does not assume any responsibility or liability of any kind for any loss, damage or injury resulting from, or in connection with any Information contained hereunder or any use thereof. The Information in this document is subject to change or modification without notice. Tenaris's products and services are subject to Tenaris's standard terms and conditions or otherwise to the terms resulting from the respective contracts of sale or services, as the case may be, between petitioner and Tenaris. For more complete information please contact a Tenaris's representative or visit our website at www.tenaris.com. ©Tenaris 2024. All rights reserved.

Tenaris

API LTC

 Coupling
 Pipe Body

 Grade: J55 (Casing)
 Grade: J55 (Casing)

 Body: Bright Green
 1st Band: Bright Green

 1st Band: White
 2nd Band:

 2nd Band: 3rd Band:

 3rd Band: 4th Band:

Outside Diameter	9.625 in.	Wall Thickness	0.352 in.	Grade	J55 (Casing)
Min. Wall Thickness	87.50 %	Pipe Body Drift	API Standard	Туре	Casing
Connection OD Option	Regular				

Pipe Body Data

Geometry			
Nominal OD	9.625 in.	Drift	8.765 in.
Wall Thickness	0.352 in.	Plain End Weight	34.89 lb/ft
Nominal Weight	36 lb/ft	OD Tolerance	API
Nominal ID	8.921 in.		

Performance	
SMYS	55,000 psi
Min UTS	75,000 psi
Body Yield Strength	564 x1000 lb
Min. Internal Yield Pressure	3520 psi
Collapse Pressure	2020 psi
Max. Allowed Bending	26 °/100 ft

Connection Data

N					
Hand Tight Stand Off	3.500 in.	Internal Pressure Capacity	3520 psi	Maximum Torque	5660 ft-lb
Connection OD	10.625 in.	Coupling Face Load	433 x1000 lb	Optimum Torque	4530 ft-lb
Thread per In	8	Joint Strength	453 x1000 lb	Minimum Torque	3400 ft-lb
Geometry		Performance		Make-Up Torques	

Notes

For products according to API Standards 5CT & 5B; Performance calculated considering API Technical Report 5C3 (Sections 9 & 10) equations.

For geometrical and steel grades combinations not considered in the API Standards 5CT and/or 5B; Performance calculations indirectly derived from API Technical Report 5C3 (Sections 9 & 10) equations.

Couplings OD are shown according to current API 5CT 10th Edition,

Tenaris has issued this document for general information only, and the information in this document, including, without limitation, any pictures, drawings or designs ("Information") is not intended to constitute professional or any other type of advice or recommendation and is provided on an "as is" basis. No warranty is given. Tenaris has not independently verified any information —if any- provided by the user in connection with, or for the purpose of, the Information contained hereunder. The use of the Information is at user's own risk and Tenaris does not assume any responsibility of any kind for any loss, damage or injury resulting from, or in connection with any Information contained hereunder or any use thereof. The Information in this document is subject to change or modification without notice. Tenaris's products and services are subject to Tenaris's standard terms and conditions or otherwise to the terms resulting from the respective contracts of sale or services, as the case may be, between petitioner and Tenaris. For more complete information please contact a Tenaris's representative or visit our website at www.tenaris.com. ©Tenaris 2024. All rights reserved.



Coupling	Pipe Body
Grade: P110	Grade: P110
Body: White	1st Band: White
1st Band: -	2nd Band: -
2nd Band: -	3rd Band: -
3rd Band: -	4th Band: -

Outside Diameter	4.500 in.	Wall Thickness	0.290 in.	Grade	P110
Min. Wall Thickness	87.50 %	Pipe Body Drift	API Standard	Туре	Casing
Connection OD Option	Regular				

Pipe Body Data

Geometry			
Nominal OD	4.500 in.	Drift	3,795 in.
Wall Thickness	0.290 in.	Plain End Weight	13.05 lb/ft
Nominal Weight	13.500 lb/ft	OD Tolerance	API
Nominal ID	3.920 in.		

110,000 psi
125,000 psi
422 x1000 lb
12,410 psi
10,690 psi
112 °/100 ft

Connection Data

Geometry		Performance		Make-Up Torques	
Thread per In	8	Joint Strength	338 x1000 lb	Minimum Torque	2750 ft-lb
Connection OD	5.250 in.	Coupling Face Load	473 x1000 lb	Optimum Torque	3660 ft-lb
Hand Tight Stand Off	3 in.	Internal Pressure Capacity	12,410 psi	Maximum Torque	4580 ft-lb

Notes

For products according to API Standards 5CT & 5B; Performance calculated considering API Technical Report 5C3 (Sections 9 & 10) equations.

For geometrical and steel grades combinations not considered in the API Standards 5CT and/or 5B; Performance calculations indirectly derived from API Technical Report 5C3 (Sections 9 & 10) equations.

Couplings OD are shown according to current API 5CT 10th Edition,

Tenaris has issued this document for general information only, and the information in this document, including, without limitation, any pictures, drawings or designs ("Information") is not intended to constitute professional or any other type of advice or recommendation and is provided on an "as is" basis. No warranty is given. Tenaris has not independently verified any information —if any- provided by the user in connection with, or for the purpose of, the Information contained hereunder. The use of the Information is at user's own risk and Tenaris does not assume any responsibility or liability of any kind for any loss, damage or injury resulting from, or in connection with any Information contained hereunder or any use thereof. The Information in this document is subject to change or modification without notice. Tenaris's products and services are subject to Tenaris's standard terms and conditions or otherwise to the terms resulting from the respective contracts of sale or services, as the case may be, between petitioner and Tenaris. For more complete information please contact a Tenaris's representative or visit our website at www.tenaris.com. ©Tenaris 2024. All rights reserved.

Mewbourne Oil Company, Kings Landing 25/24 Fed Com 511H Sec 24, T18S, R32E

SHL: 309' FNL 451' FWL (Sec 24) BHL: 100' FSL 660' FWL (Sec 25)

Well Location GL: 3801'

Point	Calls	Leases	Aliquot	Section	Township	Range	County	Lat	Long	TVD	MD
SHL	SHL: 309' FNL & 451' FWL (Sec 24)	NMNM093432	NWNW	24	18S	32E	Lea	32.7393582	- 103.7269463	0'	0'
KOP	KOP: 473' FSL & 660' FWL (Sec 13)	NMNM068817	SWSW	13	18S	32E	Lea	32.7415068	- 103.7262670	8,852'	8,910'
FTP	FTP: 100' FNL & 660' FWL (Sec 24)	NMNM093432	NWNW	24	18S	32E	Lea	32.7399323	- 103.7262663	9,425'	9,810'
PPP2	PPP2: 2650' FSL & 663' FWL (Sec 24)	NMNM094093	SWNW	24	18S	32E	Lea	32.7329419	- 103.7262558	9,474'	12,354'
PPP3	PPP3: 1325' FSL & 669' FWL (Sec 24)	NMNM002945	NWSW	24	18S	32E	Lea	32.7293004	- 103.7262504	9,499'	13,679'
PPP4	PPP4: 0' FNL & 675' FWL (Sec 25)	NMNM140716	SWSW	25	18S	32E	Lea	32.7256589	- 103.7262450	9,525'	15,004'
PPP5	PPP5: 2644' FSL & 667' FWL (Sec 25)	NMNM045225	SWNW	25	18S	32E	Lea	32.7184239	- 103.7262342	9,575'	17,637'
BHL	BHL: 100' FSL & 660' FWL (Sec 25)	NMNM045225	SWSW	25	18S	32E	Lea	32.7114342	- 103.7262238	9,624'	20,181'

GEOLOGY

Formation	Est. Top (TVD)	Lithology	Mineral Resources	Formation	Est. Top (TVD)	Lithology	Mineral Resources
Rustler	1235'	Dolomite/Anhydrite	Usable Water	Yeso			
Castile				Delaware (Lamar)	4963'	Limestone/Dolomite	Oil/Natural Gas
Salt Top	1477'	Salt	None	Bell Canyon			
Marker Bed 126				Cherry Canyon			
Salt Base	2606'	Salt	None	Manzanita Marker			
Yates	2775'	Sandstone	Oil/Natural Gas	Basal Brushy Canyon			
Seven Rivers	3268'	Dolomite	Oil/Natural Gas	Bone Spring	6874'	Limestone	Oil/Natural Gas
Queen	4008'	Sandstone/Dolomite	Oil/Natural Gas	1st Bone Spring	8345'	Sandstone	Oil/Natural Gas
Capitan				2nd Bone Spring	9026'	Sandstone	Oil/Natural Gas
Grayburg	4308'			3rd Bone Spring			
San Andres	4632'	Dolomite	Oil/Natural Gas	Wolfcamp			

		Casing Progra	am Design A			BLM Minimum Safety Factors	1.125	1.0	1.6 Dry	1.6 Dry
		Casing Frogr	am Design A			DENT WINNIGHT Safety Factors	1.125	1.0	1.8 Wet	1.8 Wet
String	Hole Size	Top MD	Top TVD	Bot MD	Bot TVD	Csg. Size	SF Collapse	SF Burst	SF Jt Tension	SF Body Tension
Surface	17.5"	0'	0'	1310'	1310'	13.375" 54.5# J55 STC	1.93	4.66	7.20	11.95
Surface		0	0							11.73
Intermediate	12.25"	0'	0'	2900'	2900'	9.625" 36# J55 LTC	1.32	2.29	4.34	5.40
Production	8.75"	0'	0'	8910'	8852'	7" 26# P110 LTC	1.40	2.23	2.99	3.58
Liner	6.125"	8710'	8652'	20181'	9624'	4.5" 13.5# P110 LTC	1.94	2.25	2.18	2.73

All casing strings will be tested in accordance with 43 CFR Part 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 easing API approved? If no, attach easing specification sheet.	Y
Is premium or uncommon casing planned? If yes attach casing specification sheet.	N
Does the above casing design meet or exceed BLM's minimum standards? If not provide justification (loading assumptions, casing design criteria).	Y
Will the pipe be kept at a minimum 1/3 fluid filled to avoid approaching the collapse pressure rating of the casing?	Y
Is well located within Capitan Reef?	N
If yes, does production easing cement tie back a minimum of 50' above the Reef?	
Is well within the designated 4 string boundary.	N
Is well located in SOPA but not in R-111-Q?	N
If yes, are the first 2 strings cemented to surface and 3 rd string cement tied back 500' into previous casing?	
Is well located in R-111-Q and SOPA?	N
If yes, are the first three strings cemented to surface?	
Is 2 nd string set 100' to 600' below the base of salt?	
Is an open annulus used to satisfy R-111-Q? If yes, see cement design.	
Is an engineered weak point used to satisfy R-111-Q?	
If yes, at what depth is the weak point planned?	
Is well located in high Cave/Karst?	N
If yes, are there two strings cemented to surface?	
(For 2 string wells) If yes, is there a contingency casing if lost circulation occurs?	
Is well located in critical Cave/Karst?	N
If yes, are there three strings cemented to surface?	

Mewbourne Oil Company, Kings Landing 25/24 Fed Com 511H Sec 24, T18S, R32E

SHL: 309' FNL 451' FWL (Sec 24) BHL: 100' FSL 660' FWL (Sec 25)

Design A - Cement Program

Csg. Size		# Sacks	Wt., lb/gal	Yield, ft ³ /sack	тос/вос	Volume, ft ³	% Excess	Slurry Description
13,375 in	LEAD	740	12.5	2.12	0' - 1119'	1570	100%	Class C: Salt, Gel, Extender, LCM
13.375 III	TAIL	200	14.8	1.34	1119' - 1310'	268	10076	Class C: Retarder
9,625 in	LEAD	400	12.5	2.12	0' - 2205'	850	25%	Class C: Salt, Gel, Extender, LCM
9.023 m	TAIL	200	14.8	1.34	2205' - 2900'	268	2376	Class C: Retarder
1st Stg 7 in	LEAD	110	12.5	2.12	6200' - 7416'	240	25%	Class C: Salt, Gel, Extender, LCM, Defoamer
1st Stg / III	TAIL	250	15.6	1.18	7416' - 8910'	295	2376	Class H: Retarder, Fluid Loss, Defoamer
					7	''' DV Tool @ 6200'		
2nd Stg 7 in	LEAD	250	12.5	2.12	2700' - 5494'	530	25%	Class C: Salt, Gel, Extender, LCM, Defoamer
Ziid Sig / iii	TAIL	100	14.8	1.34	5494' - 6200'	134	2376	Class C: Retarder, Fluid Loss, Defoamer
4.5 in	LEAD	730	13.5	1.85	8710' - 20181'	1360	25%	Class H: Salt, Gel, Fluid Loss, Retarder, Dispersant, Defoamer, Anti- settling Agent

Pressure Control Equipment

BOP installed and tested before drilling hole, in:	Size, in	System Rated WP	Туре		Туре		Туре			Tested to:	Rating Depth
		5M	A	nnular	X	2500#/3500#					
			Bli	nd Ram	X]				
12.25	13.375	5M	Pi	pe Ram	X	5000#	20,181'				
		SIVI	Dot	ıble Ram		3000#					
			Other*								

^{*}Specify if additional ram is utilized.

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.

Variance Request: A variance is requested for the use of a flexible 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. If a breaktesting variance is approved & incorporated, API Standard 53 will be incorporated and testing annular BOP to 70% of RWP or 100% of MASP, whichever is greater, will be performed.

Testing Procedure: BOP/BOPE will be tested by an independent service company to 250 psi low and the high pressure indicated above per 43 CFR Part 3172 requirements. The System may be upgraded to a higher pressure but still tested to the working pressure listed in the table above. If the system is upgraded all the components installed will be functional and tested. Pipe rams will be operationally checked each 24 hour period. Blind rams will be operationally checked on each trip out of the hole. These checks will be noted on the daily tour sheets.

Y	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.	
N	Mewbourne Oil Company request a variance to use a 5000 psi annular BOP with a 10,000 psi BOP stack.	ĺ

Mud Program

Depth (MD)	Mud Wt., lb/gal	Mud Type
	8.4 - 8.6	Fresh Water
0' - 1310'	8.4 - 8.6	Fresh Water
1310' - 2900'	10.0 - 10.2	Brine
2900' - 8910'	8910' 8.6 - 9.7 Cut-Brine	
8910' - 20181'	10.0 - 11.	OBM

Sufficient mud materials to maintain mud properties and meet minimum lost circulation and weight increase requirements will be kept on location at all times.

What will be used to monitor the loss or gain of fluid?	Pagen/DVT/A/igual Manitaring

Mewbourne Oil Company, Kings Landing 25/24 Fed Com 511H Sec 24, T18S, R32E

SHL: 309' FNL 451' FWL (Sec 24) BHL: 100' FSL 660' FWL (Sec 25)

Logging and Testing Procedures

	Logging	s, Coring and Testing.
	NI	Will run GR/CNL from KOP (8910') to surface (horizontal well – vertical portion of hole). Stated logs run will be in the Completion Report and submitted to the BLM.
	Y	No logs are planned based on well control or offset log information. Offset Well: Kings Landing 24/25 Fed Com 513H
ſ	N	Coring? If yes, explain:

Open & Cased Hole Logs Run In the Well

Caliper		Cement Bond Log	CNL/FDC
Compensated Densilog		Compensated Neutron Log	Computer Generated Log
Dip Meter Log	2	Directional Survey	Dual Induction/Microresistivity
Dual Lateral Log/Microspherically Focused	To '	Electric Log	Formation Density Compensated Log
Gamma Ray Log	2	Measurement While Drilling	Mud Log/Geological Lithology Log
Other		Porosity-Resistivity Log	Sidewall Neutron Log
Sonic Log		Spontaneous Potential Log	Temperature Log

Drilling Conditions

Condition	Specify what type and where?
BH Pressure at deepest TVD	5505 psi
BH Temperature	140
Abnormal Temp, Pressure, or Geologic Hazards	No

Mitigation measure for abnormal conditions. Describe. Lost circulation material/sweeps/mud scavengers in surface hole. Weighted mud for possible over-pressure in Wolfcamp formation.

Hydrogen Sulfide (H2S) monitors will be installed prior to drilling out the surface shoe. If H2S is detected in concentrations greater than 100 ppm, the operator will comply with the provisions of Onshore Oil and Gas Order #6. If Hydrogen Sulfide is encountered, measured values and formations will be provided to the BLM.

	H2S is present
X	H2S Plan attached

Mewbourne Oil Company, Kings Landing 25/24 Fed Com 511H Sec 24, T18S, R32E

SHL: 309' FNL 451' FWL (Sec 24) BHL: 100' FSL 660' FWL (Sec 25)

Other facets of operation

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

Offline Cementing Variance: Variance is requested to perform offline cementing according to the attached procedure. R-111Q: Mewbourne proposes performing Open Hole Cementing per R-111Q Guidelines if well is in Potash.

		Casing Progra	am Dosian R			BLM Minimum Safety Factors	1.125	1.0	1.6 Dry	1.6 Dry
		Casing 110gi	am Design D			DEM Minimum Safety Factors	1.123	1.0	1.8 Wet	1.8 Wet
String	Hole Size	Top MD	Top TVD	Bot MD	Bot TVD	Csg. Size	SF Collapse	SF Burst	SF Jt	SF Body
Surface	17.5"	0'	0'	1310'	1310'	13.375" 54.5# J55 STC	1.93	4.66	7.20	11.95
Int	12.25"	0'	0'	2900'	2900'	9.625" 36# J55 LTC	1.32	2.29	4.34	5.40
Production	8.75"	0'	0'	9810'	9425'	7" 26# P110 LTC	1.31	2.09	2.72	3.25
Liner	6.125"	8910'	8852'	20181'	9624'	4.5" 13.5# P110 LTC	1.94	2.25	2.22	2.77

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

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

Design B - Cement Program

Csg. Size		# Sacks	Wt., lb/gal	Yield, ft ³ /sack	TOC/BOC	Volume, ft ³	% Excess	Slurry Description
13.375 in	LEAD	740	12.5	2.12	0' - 1119'	1570	100%	Class C: Salt, Gel, Extender, LCM
13.375 III	TAIL	200	14.8	1.34	1119' - 1310'	268	100%	Class C: Retarder
9.625 in	LEAD	400	12.5	2.12	0' - 2205'	850	25%	Class C: Salt, Gel, Extender, LCM
9.023 III	TAIL	200	14.8	1.34	2205' - 2900'	268	2376	Class C: Retarder
1st Stg 7 in	LEAD	100	12.5	2.12	6200' - 7348'	220	25%	Class C: Salt, Gel, Extender, LCM, Defoamer
1st Stg / III	TAIL	400	15.6	1.18	7348' - 9810'	472	2376	Class H: Retarder, Fluid Loss, Defoamer
					7	" DV Tool @ 6200'		
2nd Stg 7 in	LEAD	250	12.5	2.12	2700' - 5494'	530	25%	Class C: Salt, Gel, Extender, LCM, Defoamer
Ziiu Sig / iii	TAIL	100	14.8	1.34	5494' - 6200'	134	2376	Class C: Retarder, Fluid Loss, Defoamer
4.5 in	LEAD	720	13.5	1.85	8910' - 20181'	1340	25%	Class H: Salt, Gel, Fluid Loss, Retarder, Dispersant, Defoamer, Anti- settling Agent

Mewbourne Oil Company, Kings Landing 25/24 Fed Com 511H Sec 24, T18S, R32E

SHL: 309' FNL 451' FWL (Sec 24) BHL: 100' FSL 660' FWL (Sec 25)

		Casing Pro	gram Design	С		BLM Minimum Safety Factors	1.125	1.0	1.6 Dry 1.8 Wet	1.6 Dry 1.8 Wet
String Hole Size Top MD Top TVD Bot MD Bot TVD				Csg. Size	SF Collapse	SF Burst	SF Jt Tension	SF Body Tension		
Surface	17.5"	0'	0'	1310'	1310'	13.375" 54.5# J55 STC	1.93	4.66	7.20	11.95
Intermediate	12.25"	0'	0'	2900'	2900'	9.625" 36# J55 LTC	1.32	2.29	4.34	5.40
Production	8.75"	0'	0'	8910'	8852'	7" 26# P110 LTC	1.31	2.09	2.99	3.58
Production	8.5"	8910'	8852'	20181'	9624'	4.5" 13.5# RYS110 CDC HTQ	1.94	2.26	2.81	2.77

Cement Program

Casing		# Sacks	Wt. lb/gal	Yield ft ³ /sack	тос/вос	Volume ft ³	% Excess	Slurry Description
13,375 in	LEAD	740	12.5	2.12	0' - 1119'	1570	100%	Class C: Salt, Gel, Extender, LCM
13.373 III	TAIL	200	14.8	1.34	1119' - 1310'	268	10076	Class C: Retarder
1st Stg 9.625 in	LEAD	400	12.5	2.12	0' - 2205'	850	25%	Class C: Salt, Gel, Extender, LCM
18t Stg 9.025 III	TAIL	200	14.8	1.34	2205' - 2900'	268	2370	Class C: Retarder
7 in - 4.5 in	LEAD	650	12.5	2.12	2700' - 7364'	1380	25%	Class C: Salt, Gel, Extender, LCM, Defoamer
/ III = 4.5 III	TAIL	2050	13.5	1.85	7364' - 20181'	3793	2370	Class H: Retarder, Fluid Loss, Defoamer

Design A - Mud Program

Depth	Mud Wt	Mud Type
	8.4 - 8.6	
0' - 1310'	8.4 - 8.6	Fresh Water
1310' - 2900'	10.0 - 10.2	Brine
2900' - 8910'	8.6 - 9.5	Cut-Brine
8910' - 20181'	10.0 - 11.	OBM

Geolog

Geology					
Formation	Est. Top (TVD)	Mineral Resources	Formation	Est. Top (TVD)	Mineral Resources
Rustler	1235'	Usable Water	Yeso		
Castile			Delaware (Lamar)	4963'	Oil/Natural Gas
Salt Top	1477'	None	Bell Canyon		
Marker Bed 126			Cherry Canyon		
Salt Base	2606'	None	Manzanita Marker		
Yates	2775'	Oil/Natural Gas	Basal Brushy Canyon		
Seven Rivers	3268'	Oil/Natural Gas	Bone Spring	6874'	Oil/Natural Gas
Queen	4008'	Oil/Natural Gas	1st Bone Spring	8345'	Oil/Natural Gas
Capitan			2nd Bone Spring	9026'	Oil/Natural Gas
Grayburg	4308'	None	3rd Bone Spring		
San Andres	4632'	Oil/Natural Gas	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.	Y
Does the above casing design meet or exceed BLM's minimum standards? If not provide justification (loading assumptions, casing design criteria).	Y
Will the pipe be kept at a minimum 1/3 fluid filled to avoid approaching the collapse pressure rating of the casing?	Y
Is well located within Capitan Reef?	N
If yes, does production casing cement tie back a minimum of 50' above the Reef?	
Is well within the designated 4 string boundary.	N
Is well located in SOPA but not in R-111-Q?	N
If yes, are the first 2 strings cemented to surface and 3 rd string cement tied back 500' into previous casing?	
Is well located in R-111-Q and SOPA?	N
If yes, are the first three strings cemented to surface?	
Is 2 nd string set 100' to 600' below the base of salt?	
Is an open annulus used to satisfy R-111-Q? If yes, see cement design.	
Is an engineered weak point used to satisfy R-111-Q?	
If yes, at what depth is the weak point planned?	
Is well located in high Cave/Karst?	N
If yes, are there two strings cemented to surface?	
(For 2 string wells) If yes, is there a contingency casing if lost circulation occurs?	
Is well located in critical Cave/Karst?	N
If yes, are there three strings cemented to surface?	

Mewbourne Oil Company

Lea County, New Mexico NAD 83 Kings Landing 25-24 Fed Com 511H

Sec 24, T18S, R32E

SHL: 309' FNL & 451' FWL (Sec 24) BHL: 100' FSL & 660' FWL (Sec 25)

Plan: Design #1

Standard Planning Report

06 November, 2024

Database: Hobbs

Company: Mewbourne Oil Company

Project: Lea County, New Mexico NAD 83 Kings Landing 25-24 Fed Com 511H Site:

Well: Sec 24, T18S, R32E

BHL: 100' FSL & 660' FWL (Sec 25) Wellbore:

Design: Design #1 Local Co-ordinate Reference:

TVD Reference: MD Reference: North Reference:

Survey Calculation Method:

Site Kings Landing 25-24 Fed Com 511H Well @ 3829.0usft (Original well Elev) Well @ 3829.0usft (Original well Elev)

Minimum Curvature

Project Lea County, New Mexico NAD 83

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

North American Datum 1983 New Mexico Eastern Zone

System Datum: Mean Sea Level

Kings Landing 24-25 Fed Com 511H Site

Northing: 633,243.80 usft Site Position: Latitude: 32.7393582 From: Мар Easting: 727,787.70 usft Longitude: -103.7269462

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

Well Sec 24, T18S, R32E

Well Position 32.7393582 +N/-S 0.0 usft Northing: 633,243.80 usfl Latitude: +E/-W 0.0 usft Easting: 727,787.70 usfl Longitude: -103.7269462

Position Uncertainty 0.0 usft Wellhead Elevation: 3,829.0 usfl Ground Level: 3,801.0 usfl

0.33° **Grid Convergence:**

Wellbore BHL: 100' FSL & 660' FWL (Sec 25)

Declination Magnetics **Model Name** Dip Angle Field Strength Sample Date (°) (°) (nT) 48,552,16516800 **IGRF2010** 12/31/2014 7.26 60.55

Design #1 Design

Audit Notes:

PROTOTYPE Tie On Depth: 0.0 Version: Phase:

Vertical Section: Depth From (TVD) +N/-S +E/-W Direction (usft) (usft) (usft) (°) 0.0 0.0 0.0 178.42

Plan Survey Tool Program Date 11/6/2024

Depth From Depth To

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

0.0 20,180.6 Design #1 (BHL: 100' FSL & 660' 1

Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)	TFO (°)	Target
0.0	0.00	0.00	0.0	0.0	0.0	0.00	0.00	0.00	0.00	
3,000.0	0.00	0.00	3,000.0	0.0	0.0	0.00	0.00	0.00	0.00	
3,424.0	8.48	14.63	3,422.4	30.3	7.9	2.00	2.00	0.00	14.63	
8,486.4	8.48	14.63	8,429.6	752.6	196.5	0.00	0.00	0.00	0.00	
8,910.4	0.00	0.00	8,852.0	782.9	204.4	2.00	-2.00	0.00	180.00 K	OP: 473' FSL & 6
9,799.7	88.90	179.60	9,425.0	220.8	208.3	10.00	10.00	0.00	179.60	
20,180.6	88.90	179.60	9,624.0	-10,158.0	280.3	0.00	0.00	0.00	0.00 B	HL: 100' FSL & 66

Database: Hobbs

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

Site: Kings Landing 25-24 Fed Com 511H

Well: Sec 24, T18S, R32E

Wellbore: BHL: 100' FSL & 660' FWL (Sec 25)

Design: Design #1

Local Co-ordinate Reference:

TVD Reference: MD Reference: North Reference:

Survey Calculation Method:

Site Kings Landing 25-24 Fed Com 511H Well @ 3829.0usft (Original well Elev) Well @ 3829.0usft (Original well Elev)

Grid

ned Survey									
Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)
0.0	0.00	0.00	0.0	0.0	0.0	0.0	0.00	0.00	0.00
SHL: 309' 100.0	FNL & 451' FW 0.00	/L (Sec 24) 0.00	100.0	0.0	0.0	0.0	0.00	0.00	0,00
200.0	0.00	0.00	200.0	0.0	0.0	0.0	0.00	0.00	0.00
300.0	0.00	0.00	300.0	0.0	0.0	0.0	0.00	0.00	0.00
400.0	0.00	0.00	400.0	0.0	0.0	0.0	0.00	0.00	0.00
500.0	0.00	0.00	500.0	0.0	0.0	0.0	0.00	0.00	0.00
600.0	0.00	0.00	600.0	0.0	0.0	0.0	0.00	0.00	0.00
700.0	0.00	0.00	700.0	0.0	0.0	0.0	0.00	0.00	0.00
800.0 900.0	0.00 0.00	0.00 0.00	800.0 900.0	0.0 0.0	0.0 0.0	0.0 0.0	0.00 0.00	0.00 0.00	0.00 0.00
1,000.0 1,100.0	0.00 0.00	0.00 0.00	1,000.0 1,100.0	0.0 0.0	0.0 0.0	0.0 0.0	0.00 0.00	0.00 0.00	0.00 0.00
1,100.0	0.00	0.00	1,100.0	0.0	0.0	0.0	0.00	0.00	0.00
1,300.0	0.00	0.00	1,300.0	0.0	0.0	0.0	0.00	0.00	0.00
1,400.0	0.00	0.00	1,400.0	0.0	0.0	0.0	0.00	0.00	0.00
1,500.0	0.00	0.00	1,500.0	0.0	0.0	0.0	0.00	0.00	0.00
1,600.0	0.00	0.00	1,600.0	0.0	0.0	0.0	0.00	0.00	0.00
1,700.0	0.00	0.00	1,700.0	0.0	0.0	0.0	0.00	0.00	0.00
1,800.0 1,900.0	0.00 0.00	0.00 0.00	1,800.0 1,900.0	0.0 0.0	0.0 0.0	0.0 0.0	0.00 0.00	0.00 0.00	0.00 0.00
2.000.0	0.00	0.00	2.000.0	0.0	0.0	0.0	0.00	0.00	0.00
2,000.0	0.00	0.00	2,100.0	0.0	0.0	0.0	0.00	0.00	0.00
2,200.0	0.00	0.00	2,200.0	0.0	0.0	0.0	0.00	0.00	0.00
2,300.0	0.00	0.00	2,300.0	0.0	0.0	0.0	0.00	0.00	0.00
2,400.0	0.00	0.00	2,400.0	0.0	0.0	0.0	0.00	0.00	0.00
2,500.0	0.00	0.00	2,500.0	0.0	0.0	0.0	0.00	0.00	0.00
2,600.0 2,700.0	0.00 0.00	0.00 0.00	2,600.0 2,700.0	0.0 0.0	0.0 0.0	0.0 0.0	0.00 0.00	0.00 0.00	0.00 0.00
2,800.0	0.00	0.00	2,800.0	0.0	0.0	0.0	0.00	0.00	0.00
2,900.0	0.00	0.00	2,900.0	0.0	0.0	0.0	0.00	0.00	0.00
3,000.0	0.00	0.00	3,000.0	0.0	0.0	0.0	0.00	0.00	0.00
3,100.0	2.00	14.63	3,100.0	1.7	0.4	-1.7	2.00	2.00	0.00
3,200.0	4.00	14.63	3,199.8	6.8	1.8	-6.7	2.00	2.00	0.00
3,300.0 3,400.0	6.00 8.00	14.63 14.63	3,299.5 3,398.7	15.2 27.0	4.0 7.0	-15.1 -26.8	2.00 2.00	2.00 2.00	0.00 0.00
3,424.0	8.48	14.63	3,422.4	30.3	7.9	-30.1	2.00	2.00	0.00
3,500.0	8.48	14.63	3,497.6	41.1	10.7	-30.1 -40.8	0.00	0.00	0.00
3,600.0	8.48	14.63	3,596.5	55.4	14.5	-55.0	0.00	0.00	0.00
3,700.0	8.48	14.63	3,695.4	69.7	18.2	-69.2	0.00	0.00	0.00
3,800.0	8.48	14.63	3,794.3	84.0	21.9	-83.3	0.00	0.00	0.00
3,900.0	8.48	14.63	3,893.3	98.2	25.6	-97.5	0.00	0.00	0.00
4,000.0 4,100.0	8.48 8.48	14.63 14.63	3,992.2 4,091.1	112.5 126.8	29.4 33.1	-111.6 -125.8	0.00 0.00	0.00 0.00	0.00 0.00
4,100.0	8.48	14.63	4,091.1	141.0	36.8	-125.6 -140.0	0.00	0.00	0.00
4,300.0	8.48	14.63	4,288.9	155.3	40.5	-154.1	0.00	0.00	0.00
4,400.0	8.48	14.63	4,387.8	169.6	44.3	-168.3	0.00	0.00	0.00
4,500.0	8.48	14.63	4,486.7	183.8	48.0	-182.4	0.00	0.00	0.00
4,600.0	8.48	14.63	4,585.6	198.1	51.7	-196.6	0.00	0.00	0.00
4,700.0 4,800.0	8.48 8.48	14.63 14.63	4,684.5 4,783.4	212.4 226.6	55.4 59.2	-210.7 -224.9	0.00 0.00	0.00 0.00	0.00 0.00
4,900.0 5,000.0	8.48 8.48	14.63 14.63	4,882.3 4,981.2	240.9 255.2	62.9 66.6	-239.1 -253.2	0.00 0.00	0.00 0.00	0.00 0.00
5,000.0	8.48	14.63	5,080.1	269.4	70.3	-253.2 -267.4	0.00	0.00	0.00

Project:

Site:

Hobbs

Mewbourne Oil Company

Lea County, New Mexico NAD 83 Kings Landing 25-24 Fed Com 511H

Well: Sec 24, T18S, R32E

Wellbore: BHL: 100' FSL & 660' FWL (Sec 25)

Design: Design #1

Local Co-ordinate Reference:

TVD Reference: MD Reference: North Reference:

Survey Calculation Method:

Site Kings Landing 25-24 Fed Com 511H Well @ 3829.0usft (Original well Elev) Well @ 3829.0usft (Original well Elev)

Grid

Jesigii.									
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	8.48	14.63	5,179.0	283.7	74.1	-281.5	0.00	0.00	0.00
5,300.0	8.48	14.63	5,277.9	298.0	77.8	-295.7	0.00	0.00	0.00
5,400.0	8.48	14.63	5,376.9	312.2	81.5	-309.9	0.00	0.00	0.00
5,500.0	8.48	14.63	5,475.8	326.5	85.2	-324.0	0.00	0.00	0.00
5,600.0	8.48	14.63	5,574.7	340.8	89.0	-338.2	0.00	0.00	0.00
5,700.0 5,800.0	8.48 8.48	14.63 14.63	5,673.6 5,772.5	355.0 369.3	92.7 96.4	-352.3 -366.5	0.00 0.00	0.00 0.00	0.00 0.00 0.00
5,900.0	8.48	14.63	5,871.4	383.6	100.1	-380.7	0.00	0.00	0.00
6,000.0	8.48	14.63	5,970.3	397.8	103.9	-394.8	0.00	0.00	0.00
6,100.0	8.48	14.63	6.069.2	412.1	107.6	-409.0	0.00	0.00	0.00
6,200.0	8.48	14.63	6,168.1	426.4	111.3	-423.1	0.00	0.00	0.00
6,300.0	8.48	14.63	6,267.0	440.6	115.0	-437.3	0.00	0.00	0.00
6,400.0	8.48	14.63	6,365.9	454.9	118.8	-451.5	0.00	0.00	0.00
6,500.0	8.48	14.63	6,464.8	469.2	122.5	-465.6	0.00	0.00	0.00
6,600.0	8.48	14.63	6,563.7	483.4	126.2	-479.8	0.00	0.00	0.00
6,700.0	8.48	14.63	6,662.6	497.7	129.9	-493.9	0.00	0.00	0.00
6,800.0	8.48	14.63	6,761.5	512.0	133.7	-508.1		0.00	0.00
6,900.0	8.48	14.63	6,860.5	526.2	137.4	-522.3	0.00	0.00	0.00
7,000.0	8.48	14.63	6,959.4	540.5	141.1	-536.4	0.00	0.00	0.00
7,100.0	8.48	14.63	7,058.3	554.8	144.8	-550.6	0.00	0.00	0.00
7,200.0	8.48	14.63	7,157.2	569.1	148.6	-564.7	0.00	0.00	0.00
7,300.0	8.48	14.63	7,256.1	583.3	152.3	-578.9	0.00	0.00	0.00
7,400.0	8.48	14.63	7,355.0	597.6	156.0	-593.1	0.00	0.00	0.00
7,500.0	8.48	14.63	7,453.9	611.9	159.7	-607.2	0.00	0.00	0.00
7,600.0	8.48	14.63	7,552.8	626.1	163.5	-621.4	0.00	0.00	0.00
7,700.0	8.48	14.63	7,651.7	640.4	167.2	-635.5	0.00	0.00	0.00
7,800.0	8.48	14.63	7,750.6	654.7	170.9	-649.7	0.00	0.00	0.00
7,900.0	8.48	14.63	7,849.5	668.9	174.6	-663.9	0.00	0.00	0.00
8,000.0	8.48	14.63	7,948.4	683.2	178.4	-678.0	0.00	0.00	0.00
8,100.0	8.48	14.63	8,047.3	697.5	182.1	-692.2	0.00	0.00	0.00
8,200.0	8.48	14.63	8,146.2	711.7	185.8	-706.3	0.00	0.00	0.00
8,300.0 8,400.0	8.48 8.48	14.63 14.63	8,245.1 8,344.1	726.0 740.3	189.5 193.3	-720.5 -734.7	0.00	0.00 0.00	0.00
8,486.4	8.48	14.63	8,429.6	752.6	196.5	-746.9	0.00	0.00	0.00
8,500.0	8.21	14.63	8,443.0	754.5	197.0	-748.8	2.00	-2.00	0.00
8,600.0	6.21	14.63	8,542.2	766.6	200.2	-760.8	2.00	-2.00	0.00
8,700.0	4.21	14.63	8,641.8	775.4	202.4	-769.5	2.00	-2.00	0.00
8,800.0	2.21	14.63	8,741.6	780.8	203.9	-774.9	2.00	-2.00	0.00
8,900.0	0.21	14.63	8,841.6	782.9	204.4	-776.9	2.00	-2.00	0.00
8,910.4	0.00	0.00	8,852.0	782.9	204.4	-777.0	2.00	-2.00	0.00
8,950.0 9,000.0	FSL & 660' FW 3.96 8.95	7L (Sec 13) 179.60 179.60	8,891.5 8,941.2	781.5 775.9	204.4 204.4	-775.6 -770.0	10.00 10.00	10.00 10.00	0.00 0.00
9,050.0	13.95	179.60	8,990.2	766.0	204.5	-760.1	10.00	10.00	0.00
9,100.0	18.95	179.60	9,038.1	751.8	204.6	-745.9	10.00	10.00	0.00
9,150.0	23.95	179.60	9,084.6	733.6	204.7	-727.6	10.00	10.00	0.00
9,200.0	28.95	179.60	9,129.4	711.3	204.9	-705.4	10.00	10.00	0.00
9,250.0	33.95	179.60	9,172.0	685.2	205.1	-679.3	10.00	10.00	0.00
9,300.0	38.95	179.60	9,212.3	655.5	205.3	-649.6	10.00	10.00	0.00
9,350.0	43.95	179.60	9,249.7	622.4	205.5	-616.5	10.00	10.00	0.00
9,400.0	48.94	179.60	9,284.2	586.2	205.8	-580.3	10.00	10.00	0.00
9,450.0	53.94	179.60	9,315.3	547.1	206.0	-541.2	10.00	10.00	0.00
9,500.0	58.94	179.60	9,342.9	505.5	206.3	-499.6	10.00	10.00	0.00

Database: Hobbs Company: Mewbo

Project:

Site:

Mewbourne Oil Company

Lea County, New Mexico NAD 83 Kings Landing 25-24 Fed Com 511H

Well: Sec 24, T18S, R32E

Wellbore: BHL: 100' FSL & 660' FWL (Sec 25)

Design: Design #1

Local Co-ordinate Reference:

TVD Reference: MD Reference: North Reference:

Survey Calculation Method:

Site Kings Landing 25-24 Fed Com 511H Well @ 3829.0usft (Original well Elev) Well @ 3829.0usft (Original well Elev)

Grid

Planned Survey									
Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)
9,550.0 9,600.0 9,650.0 9,700.0 9,750.0	68.94 73.94 78.94	179.60 179.60 179.60 179.60 179.60	9,366.8 9,386.8 9,402.7 9,414.5 9,421.9	461.6 415.8 368.4 319.8 270.4	206.6 206.9 207.3 207.6 208.0	-455.7 -409.9 -362.5 -313.9 -264.5	10.00 10.00 10.00 10.00 10.00	10.00 10.00 10.00 10.00 10.00	0.00 0.00 0.00 0.00 0.00
9,799.7 9,810.4	88.90	179.60 179.60	9,425.0 9,425.2	220.8 210.1	208.3 208.4	-215.0 -204.3	10.00 0.00	10.00 0.00	0.00 0.00
FTP/LP: 1 9,900.0 10,000.0 10,100.0	88.90	1 FWL (Sec 24) 179.60 179.60 179.60	9,426.9 9,428.8 9,430.8	120.5 20.5 -79.5	209.0 209.7 210.4	-114.7 -14.7 85.2	0.00 0.00 0.00	0.00 0.00 0.00	0.00 0.00 0.00
10,200.0 10,300.0 10,400.0 10,500.0 10,600.0	88.90 88.90 88.90 88.90	179.60 179.60 179.60 179.60 179.60	9,432.7 9,434.6 9,436.5 9,438.4 9,440.3	-179.4 -279.4 -379.4 -479.4 -579.4	211.1 211.8 212.5 213.2 213.9	185.2 285.2 385.1 485.1 585.0	0.00 0.00 0.00 0.00 0.00	0.00 0.00 0.00 0.00 0.00	0.00 0.00 0.00 0.00 0.00
10,700.0 10,800.0 10,900.0 11,000.0 11,100.0	88.90 88.90 88.90 88.90	179.60 179.60 179.60 179.60 179.60	9,442.3 9,444.2 9,446.1 9,448.0 9,449.9	-679.3 -779.3 -879.3 -979.3 -1,079.3	214.5 215.2 215.9 216.6 217.3	685.0 785.0 884.9 984.9 1,084.8	0.00 0.00 0.00 0.00 0.00	0.00 0.00 0.00 0.00 0.00	0.00 0.00 0.00 0.00 0.00
11,200.0 11,300.0 11,400.0 11,500.0 11,600.0	88.90 88.90 88.90	179.60 179.60 179.60 179.60 179.60	9,451.8 9,453.8 9,455.7 9,457.6 9,459.5	-1,179.2 -1,279.2 -1,379.2 -1,479.2 -1,579.2	218.0 218.7 219.4 220.1 220.8	1,184.8 1,284.8 1,384.7 1,484.7 1,584.6	0.00 0.00 0.00 0.00 0.00	0.00 0.00 0.00 0.00 0.00	0.00 0.00 0.00 0.00 0.00
11,700.0 11,800.0 11,900.0 12,000.0 12,100.0	88.90 88.90 88.90	179.60 179.60 179.60 179.60 179.60	9,461.4 9,463.3 9,465.3 9,467.2 9,469.1	-1,679.1 -1,779.1 -1,879.1 -1,979.1 -2,079.0	221.5 222.2 222.9 223.6 224.3	1,684.6 1,784.6 1,884.5 1,984.5 2,084.4	0.00 0.00 0.00 0.00 0.00	0.00 0.00 0.00 0.00 0.00	0.00 0.00 0.00 0.00 0.00
12,200.0 12,300.0 12,354.2	88.90	179.60 179.60 179.60	9,471.0 9,472.9 9,474.0	-2,179.0 -2,279.0 -2,333.2	224.9 225.6 226.0	2,184.4 2,284.4 2,338.5	0.00 0.00 0.00	0.00 0.00 0.00	0.00 0.00 0.00
12,400.0 12,500.0	88.90	179.60 179.60	9,474.8 9,476.8	-2,379.0 -2,479.0	226.3 227.0	2,384.3 2,484.3	0.00 0.00	0.00 0.00	0.00 0.00
12,600.0 12,700.0 12,800.0 12,900.0 13,000.0	88.90 88.90 88.90	179.60 179.60 179.60 179.60 179.60	9,478.7 9,480.6 9,482.5 9,484.4 9,486.3	-2,578.9 -2,678.9 -2,778.9 -2,878.9 -2,978.9	227.7 228.4 229.1 229.8 230.5	2,584.2 2,684.2 2,784.2 2,884.1 2,984.1	0.00 0.00 0.00 0.00 0.00	0.00 0.00 0.00 0.00 0.00	0.00 0.00 0.00 0.00 0.00
13,100.0 13,200.0 13,300.0 13,400.0 13,500.0	88.90 88.90 88.90	179.60 179.60 179.60 179.60 179.60	9,488.3 9,490.2 9,492.1 9,494.0 9,495.9	-3,078.8 -3,178.8 -3,278.8 -3,378.8 -3,478.8	231.2 231.9 232.6 233.3 234.0	3,084.0 3,184.0 3,284.0 3,383.9 3,483.9	0.00 0.00 0.00 0.00 0.00	0.00 0.00 0.00 0.00 0.00	0.00 0.00 0.00 0.00 0.00
13,600.0 13,679.3 PPP3: 13		179.60 179.60 FWL (Sec 24)	9,497.9 9,499.4	-3,578.7 -3,658.0	234.7 235.2	3,583.8 3,663.1	0.00 0.00	0.00 0.00	0.00 0.00
13,700.0 13,800.0 13,900.0	88.90 88.90	179.60 179.60 179.60	9,499.8 9,501.7 9,503.6	-3,678.7 -3,778.7 -3,878.7	235.4 236.0 236.7	3,683.8 3,783.8 3,883.7	0.00 0.00 0.00	0.00 0.00 0.00	0.00 0.00 0.00

Hobbs

Mewbourne Oil Company

Lea County, New Mexico NAD 83 Kings Landing 25-24 Fed Com 511H

Well:

Project:

Site:

Sec 24, T18S, R32E

Wellbore: BHL: 100' FSL & 660' FWL (Sec 25)

Design: Design #1

Local Co-ordinate Reference:

TVD Reference: MD Reference: North Reference:

Survey Calculation Method:

Site Kings Landing 25-24 Fed Com 511H Well @ 3829.0usft (Original well Elev) Well @ 3829.0usft (Original well Elev)

Grid

esign:	Design #1								
Planned Survey									
Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)
14,000.0	88.90	179.60	9,505.5	-3,978.7	237.4	3,983.7	0.00	0.00	0.00
14,100.0	88.90	179.60	9,507.4	-4,078.6	238.1	4,083.6	0.00	0.00	0.00
14,200.0	88.90	179.60	9,509.4	-4,178.6	238.8	4,183.6	0.00	0.00	0.00
14,300.0	88.90	179.60	9,511.3	-4,278.6	239.5	4,283.6	0.00	0.00	0.00
14,400.0	88.90	179.60	9,513.2	-4,378.6	240.2	4,383.5	0.00	0.00	0.00
14,500.0	88.90	179.60	9,515.1	-4,478.5	240.9	4,483.5	0.00	0.00	0.00
14,600.0	88.90	179.60	9,517.0	-4,578.5	241.6	4,583.5	0.00	0.00	0.00
14,700.0	88.90	179.60	9,518.9	-4,678.5	242.3	4,683.4	0.00	0.00	0.00
14,800.0	88.90	179.60	9,520.9	-4,778.5	243.0	4,783.4	0.00	0.00	0.00
14,900.0	88.90	179.60	9,522.8	-4,878.5	243.7	4,883.3	0.00	0.00	0.00
15,000.0	88.90	179.60	9,524.7	-4,978.4	244.4	4,983.3	0.00	0.00	0.00
15,004.4	88.90	179.60	9,524.8	-4,982.8	244.4	4,987.6	0.00	0.00	0.00
	IL & 675' FWL								
15,100.0	88.90	179.60	9,526.6	-5,078.4	245.1	5,083.3	0.00	0.00	0.00
15,200.0	88.90	179.60	9,528.5	-5,178.4	245.8	5,183.2	0.00	0.00	0.00
15,300.0	88.90	179.60	9,530.4	-5,278.4	246.4	5,283.2	0.00	0.00	0.00
15,400.0	88.90	179.60	9,532.4	-5,378.4	247.1	5,383.1	0.00	0.00	0.00
15,500.0	88.90	179.60	9,534.3	-5,478.3	247.8	5,483.1	0.00	0.00	0.00
15,600.0	88.90	179.60	9,536.2	-5,578.3	248.5	5,583.1	0.00	0.00	0.00
15,700.0	88.90	179.60	9,538.1	-5,678.3	249.2	5,683.0	0.00	0.00	0.00
15,800.0	88.90	179.60	9,540.0	-5,778.3	249.9	5,783.0	0.00	0.00	0.00
15,900.0	88.90	179.60	9,541.9	-5,878.3	250.6	5,882.9	0.00	0.00	0.00
16,000.0	88.90	179.60	9,543.9	-5,978.2	251.3	5,982.9	0.00	0.00	0.00
16,100.0	88.90	179.60	9,545.8	-6,078.2	252.0	6,082.9	0.00	0.00	0.00
16,200.0	88.90	179.60	9,547.7	-6,178.2	252.7	6,182.8	0.00	0.00	0.00
16,300.0	88.90	179.60	9,549.6	-6,278.2	253.4	6,282.8	0.00	0.00	0.00
16,400.0	88.90	179.60	9,551.5	-6,378.2	254.1	6,382.7	0.00	0.00	0.00
16,500.0	88.90	179.60	9,553.4	-6,478.1	254.8	6,482.7	0.00	0.00	0.00
16,600.0	88.90	179.60	9,555.4	-6,578.1	255.5	6,582.7	0.00	0.00	0.00
16,700.0	88.90	179.60	9,557.3	-6,678.1	256.2	6,682.6	0.00	0.00	0.00
16,800.0 16,900.0 17,000.0 17,100.0 17,200.0	88.90 88.90 88.90 88.90	179.60 179.60 179.60 179.60	9,559.2 9,561.1 9,563.0 9,564.9 9,566.9	-6,778.1 -6,878.1 -6,978.0 -7,078.0 -7,178.0	256.9 257.5 258.2 258.9 259.6	6,782.6 6,882.5 6,982.5 7,082.5 7,182.4	0.00 0.00 0.00 0.00 0.00	0.00 0.00 0.00 0.00 0.00	0.00 0.00 0.00 0.00 0.00
17,300.0 17,400.0 17,500.0 17,600.0 17,637.1	88.90 88.90 88.90 88.90	179.60 179.60 179.60 179.60 179.60	9,568.8 9,570.7 9,572.6 9,574.5 9,575.2	-7,278.0 -7,377.9 -7,477.9 -7,577.9 -7,615.0	260.3 261.0 261.7 262.4 262.7	7,282.4 7,382.3 7,482.3 7,582.3 7,619.3	0.00 0.00 0.00 0.00 0.00	0.00 0.00 0.00 0.00 0.00	0.00 0.00 0.00 0.00 0.00
	' FSL & 667' F								
17,700.0 17,800.0 17,900.0 18,000.0 18,100.0 18,200.0	88.90 88.90 88.90 88.90 88.90	179.60 179.60 179.60 179.60 179.60 179.60	9,576.4 9,578.4 9,580.3 9,582.2 9,584.1 9,586.0	-7,677.9 -7,777.9 -7,877.8 -7,977.8 -8,077.8 -8,177.8	263.1 263.8 264.5 265.2 265.9 266.6	7,682.2 7,782.2 7,882.1 7,982.1 8,082.1 8,182.0	0.00 0.00 0.00 0.00 0.00 0.00	0.00 0.00 0.00 0.00 0.00 0.00	0.00 0.00 0.00 0.00 0.00 0.00
18,300.0	88.90	179.60	9,587.9	-8,277.8	267.3	8,282.0	0.00	0.00	0.00
18,400.0	88.90	179.60	9,589.9	-8,377.7	267.9	8,381.9	0.00	0.00	0.00
18,500.0	88.90	179.60	9,591.8	-8,477.7	268.6	8,481.9	0.00	0.00	0.00
18,600.0	88.90	179.60	9,593.7	-8,577.7	269.3	8,581.9	0.00	0.00	0.00
18,700.0	88.90	179.60	9,595.6	-8,677.7	270.0	8,681.8	0.00	0.00	0.00
18,800.0	88.90	179.60	9,597.5	-8,777.7	270.7	8,781.8	0.00	0.00	0.00
18,900.0	88.90	179.60	9,599.5	-8,877.6	271.4	8,881.7	0.00	0.00	0.00

Database: Hobbs

Company: Mewbourne Oil Company

Project: Lea County, New Mexico NAD 83
Site: Kings Landing 25-24 Fed Com 511H

Well: Sec 24, T18S, R32E

Wellbore: BHL: 100' FSL & 660' FWL (Sec 25)

Design: Design #1

Local Co-ordinate Reference:

TVD Reference: MD Reference: North Reference:

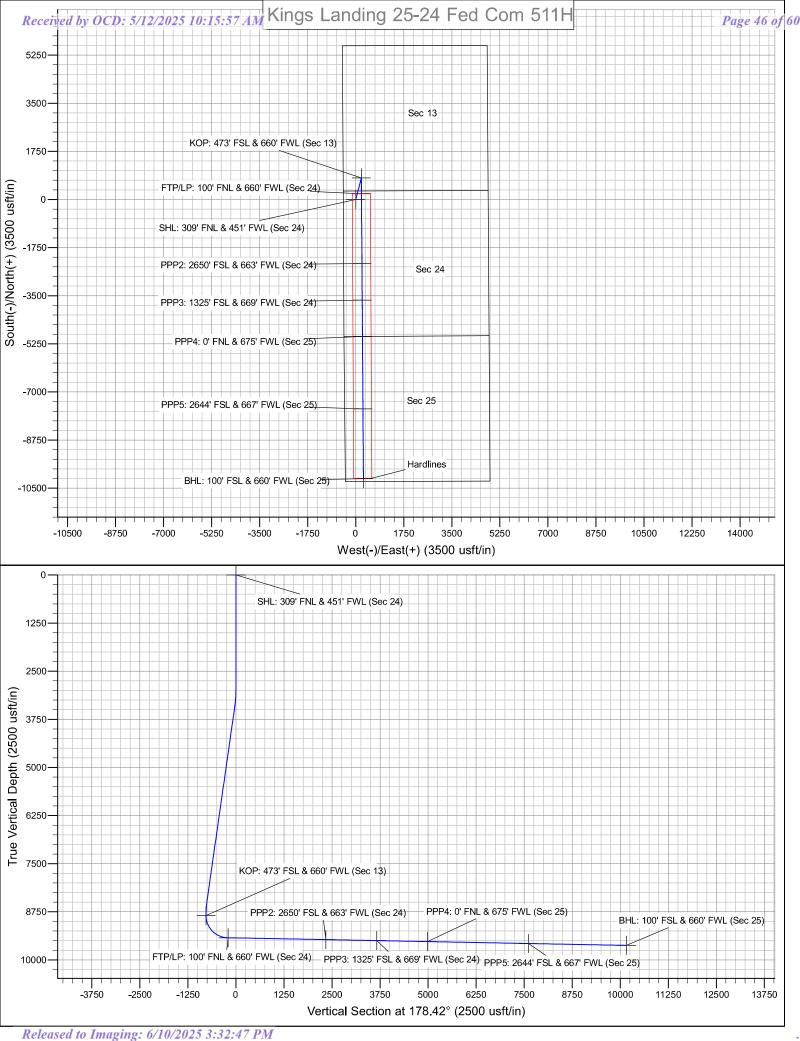
Survey Calculation Method:

Site Kings Landing 25-24 Fed Com 511H Well @ 3829.0usft (Original well Elev) Well @ 3829.0usft (Original well Elev)

Grid

Planned Survey									
Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)
19,000.0	88.90	179.60	9,601.4	-8,977.6	272.1	8,981.7	0.00	0.00	0.00
19,100.0	88.90	179.60	9,603.3	-9,077.6	272.8	9,081.7	0.00	0.00	0.00
19,200.0	88.90	179.60	9,605.2	-9,177.6	273.5	9,181.6	0.00	0.00	0.00
19,300.0	88.90	179.60	9,607.1	-9,277.6	274.2	9,281.6	0.00	0.00	0.00
19,400.0	88.90	179.60	9,609.0	-9,377.5	274.9	9,381.5	0.00	0.00	0.00
19,500.0	88.90	179.60	9,611.0	-9,477.5	275.6	9,481.5	0.00	0.00	0.00
19,600.0	88.90	179.60	9,612.9	-9,577.5	276.3	9,581.5	0.00	0.00	0.00
19,700.0	88.90	179.60	9,614.8	-9,677.5	277.0	9,681.4	0.00	0.00	0.00
19,800.0	88.90	179.60	9,616.7	-9,777.4	277.7	9,781.4	0.00	0.00	0.00
19,900.0	88.90	179.60	9,618.6	-9,877.4	278.4	9,881.3	0.00	0.00	0.00
20,000.0	88.90	179.60	9,620.5	-9,977.4	279.0	9,981.3	0.00	0.00	0.00
20,100.0	88.90	179.60	9,622.5	-10,077.4	279.7	10,081.3	0.00	0.00	0.00
20,180.6	88.90	179.60	9,624.0	-10,158.0	280.3	10,161.9	0.00	0.00	0.00
BHL: 100'	FSL & 660' FW	/L (Sec 25)							

Design Targets									
Target Name - hit/miss target Dip - Shape	o Angle (°)	Dip Dir. (°)	TVD (usft)	+N/-S (usft)	+E/-W (usft)	Northing (usft)	Easting (usft)	Latitude	Longitude
SHL: 309' FNL & 451' - plan hits target cente - Point	0.00 er	0.00	0.0	0.0	0.0	633,243.80	727,787.70	32.7393582	-103.7269462
KOP: 473' FSL & 660' - plan hits target cente - Point	0.00 er	0.00	8,852.0	782.9	204.4	634,026.70	727,992.10	32.7415068	-103.7262669
FTP/LP: 100' FNL & 6 - plan hits target cente - Point	0.00 er	0.00	9,425.2	210.1	208.4	633,453.90	727,996.07	32.7399324	-103.7262646
PPP2: 2650' FSL & 66 - plan hits target cente - Point	0.00 er	0.00	9,474.0	-2,333.2	226.0	630,910.60	728,013.71	32.7329418	-103.7262547
PPP3: 1325' FSL & 66 - plan hits target cente - Point	0.00 er	0.00	9,499.4	-3,658.0	235.2	629,585.80	728,022.90	32.7293004	-103.7262495
PPP4: 0' FNL & 675' F - plan hits target cente - Point	0.00 er	0.01	9,524.8	-4,982.8	244.4	628,261.00	728,032.09	32.7256590	-103.7262442
PPP5: 2644' FSL & 66 - plan hits target cente - Point	0.00 er	0.00	9,575.2	-7,615.0	262.7	625,628.80	728,050.35	32.7184240	-103.7262339
BHL: 100' FSL & 660' - plan hits target cente - Point	0.00 er	0.00	9,624.0	-10,158.0	280.3	623,085.80	728,068.00	32.7114342	-103.7262239



PECOS DISTRICT DRILLING CONDITIONS OF APPROVAL

OPERATOR'S NAME: MEWBOURNE OIL COMPANY

WELL NAME & NO.: KINGS LANDING 25/24 FED COM 511H

APD ID: 10400097220

LOCATION: Section 24, T18S, R32E. NMP

COUNTY: Lea County, New Mexico

COA

H ₂ S	C	No	© Yes			
Potash /	None	 Secretary 	C R-111-Q	Open Annulus		
WIPP				■ WIPP		
Cave / Karst	Low	Medium	C High	Critical		
Wellhead	Conventional	Multibowl	Both	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 p	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 all requirements from 43 CFR 3176, which includes equipment and personnel/public protection items. If Hydrogen Sulfide is encountered, please provide measured values and formations to the BLM.

B. CASING

Primary Casing Program (Design A)

- 1. The 13-3/8 inch surface casing shall be set at approximately 1310 ft. (a minimum of 25 feet (Lea County) into the Rustler Anhydrite and above the salt) and cemented to the surface. If salt is encountered, set casing at least 25 ft. above the salt.
 - a. If cement does not circulate to the surface, the appropriate BLM office shall be notified and a temperature survey utilizing an electronic-type temperature survey with surface log readout will be used or a cement bond log shall be run to verify the top of the cement. Temperature survey will be run a minimum of six hours after pumping cement and ideally between 8-10 hours after completing the cement job.
 - b. Wait on cement (WOC) time for a primary cement job will be a minimum of **8 hours** or **500 psi compressive strength**, whichever is greater. (This is to include the lead

cement)

- c. Wait on cement (WOC) time for a remedial job will be a minimum of 4 hours after bringing cement to surface or 500 pounds compressive strength, whichever is greater.
- d. If cement falls back, remedial cementing will be done prior to drilling out that string.
- 2. The 9-5/8 inch intermediate casing shall be set in a competent bed at approximately 2,900 ft. The minimum required fill of cement behind the 9-5/8 inch intermediate casing is:
 - **Cement to surface.** If cement does not circulate see B.1.a, c-d above.

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

3. Operator has proposed to set **7 inch** production casing at approximately **8,910 ft.** (8,852 ft. TVD). The minimum required fill of cement behind the **7** inch production casing is:

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

Option 2 (Two-stage): 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 inch production liner is:
 - Cement should tie-back **100 feet** into the previous casing. Operator shall provide method of verification.

Alternate Casing Program (Design B)

- 1. The 13-3/8 inch surface casing shall be set at approximately 1310 ft. (a minimum of 25 feet (Lea County) into the Rustler Anhydrite and above the salt) and cemented to the surface. If salt is encountered, set casing at least 25 ft. above the salt.
 - a. If cement does not circulate to the surface, the appropriate BLM office shall be notified and a temperature survey utilizing an electronic-type temperature survey with surface log readout will be used or a cement bond log shall be run to verify the top of the cement. Temperature survey will be run a minimum of six hours after pumping cement and ideally between 8-10 hours after completing the cement job.
 - b. Wait on cement (WOC) time for a primary cement job will be a minimum of **8 hours** or **500 psi compressive strength**, whichever is greater. (This is to include the lead cement)
 - c. Wait on cement (WOC) time for a remedial job will be a minimum of 4 hours after bringing cement to surface or 500 pounds compressive strength, whichever is greater.

- d. If cement falls back, remedial cementing will be done prior to drilling out that string.
- 2. The 9-5/8 inch intermediate casing shall be set in a competent bed at approximately 2,900 ft. The minimum required fill of cement behind the 9-5/8 inch intermediate casing is:
 - Cement to surface. If cement does not circulate see B.1.a, c-d above.

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

3. Operator has proposed to set **7 inch** production casing at approximately **9,810 ft.** (9,425 ft. TVD). The minimum required fill of cement behind the **7** inch production casing is:

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

Option 2 (Two-stage): 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 inch production liner is:
 - Cement should tie-back **100 feet** into the previous casing. Operator shall provide method of verification.

Alternate Casing Program (Design C)

- 1. The 13-3/8 inch surface casing shall be set at approximately 1310 ft. (a minimum of 25 feet (Lea County) into the Rustler Anhydrite and above the salt) and cemented to the surface. If salt is encountered, set casing at least 25 ft. above the salt.
 - a. If cement does not circulate to the surface, the appropriate BLM office shall be notified and a temperature survey utilizing an electronic-type temperature survey with surface log readout will be used or a cement bond log shall be run to verify the top of the cement. Temperature survey will be run a minimum of six hours after pumping cement and ideally between 8-10 hours after completing the cement job.
 - b. Wait on cement (WOC) time for a primary cement job will be a minimum of **8 hours** or **500 psi compressive strength**, whichever is greater. (This is to include the lead cement)
 - c. Wait on cement (WOC) time for a remedial job will be a minimum of 4 hours after bringing cement to surface or 500 pounds compressive strength, whichever is greater.
 - d. If cement falls back, remedial cementing will be done prior to drilling out that string.

- 2. The 9-5/8 inch intermediate casing shall be set in a competent bed at approximately 2,900 ft. The minimum required fill of cement behind the 9-5/8 inch intermediate casing is:
 - Cement to surface. If cement does not circulate see B.1.a, c-d above.

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

- **3.** Operator has proposed to set **7 inch** x **4-1/2 inch** tapered production casing at approximately **20,181 ft.** (9,624 ft. TVD). The hole and casing size change at KOP, approximately at 8,910 ft. The minimum required fill of cement behind the tapered production casing is:
 - Cement should tie-back at least 200 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 **Lea County:** 575-689-5981.

C. PRESSURE CONTROL

- 1. Variance approved to use **flex line** from BOP to choke manifold. Manufacturer's specification to be readily available. No external damage to flex line. Flex line to be installed as straight as possible (no hard bends).
- 2. Operator has proposed a multi-bowl wellhead assembly. 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. The BOP/BOPE and annular preventer shall be pressure-tested in accordance with title 43 CFR 3172.
 - 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 (575-689-5981 Lea County) 4 hours prior to BOPE tests.
- As a minimum, a full BOPE test shall be performed at 21-day intervals.
- In the event any repairs or replacement of the BOPE is required, the BOPE shall test as per 43 CFR 3172.
- If in the event break testing is not utilized, then a full BOPE test would be conducted.

D. SPECIAL REQUIREMENT (S)

Communitization Agreement

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

GENERAL REQUIREMENTS

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

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

Contact Lea County Petroleum Engineering Inspection Staff:

Call the Hobbs Field Station, 414 West Taylor, Hobbs NM 88240, (575) 689-5981.

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

A. CASING

- 1. Changes to the approved APD casing program need prior approval if the items substituted are of lesser grade or different casing size or are Non-API. The Operator can exchange the components of the proposal with that of superior strength (i.e. changing from J-55 to N-80, or from 36# to 40#). Changes to the approved cement program need prior approval if the altered cement plan has less volume or strength or if the changes are substantial (i.e. Multistage tool, ECP, etc.). The initial wellhead installed on the well will remain on the well with spools used as needed.
- 2. Wait on cement (WOC) for Potash Areas: After cementing but before commencing any tests, the casing string shall stand cemented under pressure until both of the following

Page 6 of 9

- conditions have been met: 1) cement reaches a minimum compressive strength of 500 psi for all cement blends of both lead and tail cement, 2) until cement has been in place at least 8 hours. WOC time will be recorded in the driller's log. The casing integrity test can be done (prior to the cement setting up) immediately after bumping the plug.
- 3. Wait on cement (WOC) for Water Basin: After cementing but before commencing any tests, the casing string shall stand cemented under pressure until both of the following conditions have been met: 1) cement reaches a minimum compressive strength of 500 psi at the shoe, 2) until cement has been in place at least 8 hours. WOC time will be recorded in the driller's log. See individual casing strings for details regarding lead cement slurry requirements. The casing integrity test can be done (prior to the cement setting up) immediately after bumping the plug.
- **4.** Provide compressive strengths including hours to reach required 500 pounds compressive strength prior to cementing each casing string. Have well specific cement details onsite prior to pumping the cement for each casing string.
- **5.** No pea gravel permitted for remedial or fall back remedial without prior authorization from the BLM engineer.
- **6.** On that portion of any well approved for a 5M BOPE system or greater, a pressure integrity test of each casing shoe shall be performed. Formation at the shoe shall be tested to a minimum of the mud weight equivalent anticipated to control the formation pressure to the next casing depth or at total depth of the well. This test shall be performed before drilling more than 20 feet of new hole.
- 7. If hardband drill pipe is rotated inside casing, returns will be monitored for metal. If metal is found in samples, drill pipe will be pulled and rubber protectors which have a larger diameter than the tool joints of the drill pipe will be installed prior to continuing drilling operations.
- **8.** Whenever a casing string is cemented in the R-111-Q potash area, the NMOCD requirements shall be followed.

B. PRESSURE CONTROL

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

- **3.** 5M or higher system requires an HCR valve, remote kill line and annular to match. The remote kill line is to be installed prior to testing the system and tested to stack pressure.
- **4.** If the operator has proposed a multi-bowl wellhead assembly in the APD. The following requirements must be met:
 - i. Wellhead shall be installed by manufacturer's representatives, submit documentation with subsequent sundry.
 - ii. If the welding is performed by a third party, the manufacturer's representative shall monitor the temperature to verify that it does not exceed the maximum temperature of the seal.
 - iii. Manufacturer representative shall install the test plug for the initial BOP test.
 - iv. Whenever any seal subject to test pressure is broken, all the tests in 43 CFR 3172.6(b)(9) must be followed.
 - v. If the cement does not circulate and one-inch operations would have been possible with a standard wellhead, the well head shall be cut off, cementing operations performed and another wellhead installed.
- **5.** The appropriate BLM office shall be notified a minimum of 4 hours in advance for a representative to witness the tests.
 - i. In a water basin, for all casing strings utilizing slips, these are to be set as soon as the crew and rig are ready and any fallback cement remediation has been done. The casing cut-off and BOP installation can be initiated four hours after installing the slips, which will be approximately six hours after bumping the plug. For those casing strings not using slips, the minimum wait time before cut-off is eight hours after bumping the plug. BOP/BOPE testing can begin after cut-off or once cement reaches 500 psi compressive strength (including lead cement), whichever is greater. However, if the float does not hold, cut-off cannot be initiated until cement reaches 500 psi compressive strength (including lead when specified).
 - ii. In potash areas, for all casing strings utilizing slips, these are to be set as soon as the crew and rig are ready and any fallback cement remediation has been done. For all casing strings, casing cut-off and BOP installation can be initiated at twelve hours after bumping the cement plug. The BOPE test can be initiated after bumping the cement plug with the casing valve open. (Only applies to single stage cement jobs, prior to the cement setting up.)
 - iii. The tests shall be done by an independent service company utilizing a test plug not a cup or J-packer and can be initiated immediately with the casing valve open. The operator also has the option of utilizing an independent tester to test without a plug (i.e. against the casing) pursuant to 43 CFR 3172 with the pressure not to exceed 70% of the burst rating for the casing. Any test against the casing must meet the WOC time for 8 hours or 500 pounds compressive strength, whichever is greater, prior to initiating the test (see casing segment as lead cement may be critical item).

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

C. DRILLING MUD

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

D. WASTE MATERIAL AND FLUIDS

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

SA 04/09/2025

Hydrogen Sulfide Drilling Operations Plan Mewbourne Oil Company

1. General Requirements

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

2. Hydrogen Sulfide Training

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

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

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

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

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

3. Hydrogen Sulfide Safety Equipment and Systems

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

1. Well Control Equipment

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

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

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

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

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

4. <u>Visual Warning Systems</u>

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

4. Mud Program

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

5. Metallurgy

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

6. Communications

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

7. Well Testing

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

8. Emergency Phone Numbers

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

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

Operator Name: MEWBOURNE OIL COMPANY

Well Name: KINGS LANDING 25/24 FED COM Well Number: 511H

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

Temporary disposal of produced water into reserve pit? NO

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

Reserve pit depth (ft.) Reserve pit volume (cu. yd.)

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

Reserve pit liner

Reserve pit liner specifications and installation description

Cuttings Area

Cuttings Area being used? NO

Are you storing cuttings on location? N

Description of cuttings location

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

Cuttings area depth (ft.)

Cuttings area volume (cu. yd.)

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

Cuttings area liner

Cuttings area liner specifications and installation description

Operator Name: MEWBOURNE OIL COMPANY

Well Name: KINGS LANDING 25/24 FED COM Well Number: 511H

Section 8 - Ancillary

Are you requesting any Ancillary Facilities?: N

Ancillary Facilities

Comments:

Section 9 - Well Site

Well Site Layout Diagram:

Kings_Landing_25_24_Fed_Com_511H_WellSiteLayout_20241107081622.pdf

Comments: NONE

Section 10 - Plans for Surface

Type of disturbance: New Surface Disturbance Multiple Well Pad Name:

Multiple Well Pad Number:

Recontouring

Drainage/Erosion control construction: NONE

Drainage/Erosion control reclamation: NONE

Well pad proposed disturbance Well pad interim reclamation (acres): Well pad long term disturbance

(acres): 5.9 1.67 (acres): 4.23

Road proposed disturbance (acres): Road interim reclamation (acres): 0 Road long term disturbance (acres): 0

0.15

Powerline proposed disturbance Powerline interim reclamation (acres): Powerline long term disturbance

(acres): 0 (acres): 0

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

(acres): 0

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

Total proposed disturbance: Total interim reclamation: 1.67 Total long term disturbance: 4.23

6.0500000000000001

Disturbance Comments: In areas to be heavily disturbed, the top 6 inches of soil material, will be stripped and stockpiled on the perimeter of the well location to keep topsoil viable, and to make redistribution of topsoil more efficient during interim reclamation. Stockpiled topsoil should include vegetative material. Topsoil will be clearly segregated and stored separately from subsoils. Contaminated soil will not be stockpiled, but properly treated and handled prior to topsoil salvaging.

Reconstruction method: The areas planned for interim reclamation will then be recontoured to the original contour if feasible, or if not feasible, to an interim contour that blends with the surrounding topography as much as possible. Where applicable, the fill material of the well pad will be backfilled into the cut to bring the area back to the original contour. The interim cut and fill slopes prior to re-seeding will not be steeper than a 3:1 ration, unless the adjacent native topography is steeper. Note: Constructed slopes may be much steeper during drilling, but will be recontoured to the above ratios during interim reclamation.

Topsoil redistribution: Topsoil will be evenly respread and aggressively revegetated over the entire disturbed area not needed for all-weather operations including cuts & fills. To see the area, the proper BLM seed mixture, free of noxious weeks, will be used.

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

General Information Phone: (505) 629-6116

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

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

CONDITIONS

Action 460882

CONDITIONS

Operator:	OGRID:
MEWBOURNE OIL CO	14744
P.O. Box 5270	Action Number:
Hobbs, NM 88241	460882
	Action Type:
	[C-101] BLM - Federal/Indian Land Lease (Form 3160-3)

CONDITIONS

Created By	Condition	Condition Date
mleal	Cement is required to circulate on both surface and intermediate1 strings of casing.	5/12/2025
mleal	If cement does not circulate on any string, a Cement Bond Log (CBL) is required for that string of casing.	5/12/2025
matthew.gomez	Notify the OCD 24 hours prior to casing & cement.	6/10/2025
matthew.gomez	A [C-103] Sub. Drilling (C-103N) is required within (10) days of spud.	6/10/2025
matthew.gomez	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.	6/10/2025
matthew.gomez	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.	6/10/2025
matthew.gomez	File As Drilled C-102 and a directional Survey with C-104 completion packet.	6/10/2025