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. NMNM120910 **BUREAU OF LAND MANAGEMENT** APPLICATION FOR PERMIT TO DRILL OR REENTER 6. If Indian, Allotee or Tribe Name 7. If Unit or CA Agreement, Name and No. **✓** DRILL REENTER 1a. Type of work: 1b. Type of Well: Gas Well Oil Well Other OTH 8. Lease Name and Well No. 1c. Type of Completion: Hydraulic Fracturing ✓ Single Zone Multiple Zone PADUCA 7/6 W2HA FED 2H 2. Name of Operator 9. API Well No. 30-025-53715 MEWBOURNE OIL COMPANY 10. Field and Pool, or Exploratory 3a. Address 3b. Phone No. (include area code) P O BOX 5270, HOBBS, NM 88241 (575) 393-5905 Jennings/Bone Spring West 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 7/T26S/R32E/NMP At surface NESE / 2465 FSL / 500 FEL / LAT 32.0569748 / LONG -103.7074371 At proposed prod. zone NENE / 100 FNL / 1310 FEL / LAT 32.0792934 / LONG -103,7101081 14. Distance in miles and direction from nearest town or post office* 12. County or Parish 13. State LEA NM 10 miles 15. Distance from proposed* 16. No of acres in lease 17. Spacing Unit dedicated to this well 100 feet location to nearest property or lease line, ft. 480.0 (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 12610 feet / 20783 feet FED: NM 1693 applied for, on this lease, ft. 21. Elevations (Show whether DF, KDB, RT, GL, etc.) 22. Approximate date work will start* 23. Estimated duration 3255 feet 05/25/2022 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 11/21/2022 (Electronic Submission) Title Regulatory Approved by (Signature) Date Name (Printed/Typed) (Electronic Submission) CODY LAYTON / Ph: (575) 234-5959 09/25/2024 Title Office Assistant Field Manager Lands & Minerals Carlsbad Field Office Application approval does not warrant or certify that the applicant holds legal or equitable title to those rights in the subject lease which would entitle the applicant to conduct operations thereon.

Conditions of approval, if any, are attached.

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-10</u>	2		State of New Energy, Minerals & Natural							Revised July 9, 2024		
C b	Electrical de la		En		inerals & Natu			nent				
	Electronicall Dermitting	У	OIL CONSERVATI				NDIVISION		Submittal		☐ Initial Submittal	
										☐ Amended	l Report	
									Type:	☐ As Drille	d	
					WELL LOCA	ATION	INFORMATION					
API Nu	umber 30-0	25-53715	Pool Code	97903 Pool WE-025 G-08 S253235				5G;LO				
Propert	y Code 33	36383	Property N	ame PA	DUCA 7/6	W2F	HA FED	ED Well Number 2H				
OGRIE	^{No.} 14	744	Operator N	^{lame} ME	EWBOURN	IE OI	IL COMPAN	Υ		Ground Lev	el Elevation 3227	
Surface	Owner: 🗆 S	State □ Fee □	Tribal 🛚 Fe	deral			Mineral Owner:	State □ Fee I	□ Tribal □	Federal N	/A	
					Su	rface L	ocation					
-			Range 32E	Lot	Ft. from N/S 2465 FSI	_	Ft. from E/W 500 FEL	Latitude 32.0569		Longitude 103.7074371	County LEA	
	•	•	1	I.	Botto	m Hole	e Location	1	•			
UL	Section	Township	Range Lot Ft. from N/S			Ft. from E/W	Latitude		Longitude	County		
Α	6	26S	32E		100 FNL	. 1	1310 FEL 32.0792934 -1		03.7101081	LEA		
Dedicat	ted Acres	Infill or Defu	ning Wall	Definin	og Well ADI	Τ,	Overlapping Spacing	TInit (V/N)	Consolidat	tion Code		
	Dedicated Acres Infill or Defining Well Defining Well API 480			ig well Al I		Overlapping Spacing	g Omt (1/1 v)	Consolidat	non code			
Order N	Numbers.					,	Well setbacks are un	der Common (Ownership:	□Yes □No	N/A	
					Kick	Off Po	int (KOP)					
UL	Section	Township	Range	Lot	Ft. from N/S]	Ft. from E/W	Latitude	I	Longitude	County	
I	7	26S	32E		2198 FSL	-	1310 FEL	32.0562	2446 -	103.7100541	LEA	
					First	Take P	oint (FTP)	1				
UL	Section	Township	Range	Lot	Ft. from N/S		Ft. from E/W	Latitude		Longitude	County	
Н	7	26S	32E		2571 FN	L 1	1310 FEL	32.0157	78196 - ⁻	103.7100579	LEA	
		1		ı			oint (LTP)	T				
UL	Section	Township	Range	Lot	Ft. from N/S		Ft. from E/W	Latitude		Longitude	County	
Α	6	26S	32E		100 FNL	'	1310 NEL	32.0792	2934 -1	03.7101081	LEA	
**		077 :0 7							1.51 .51			
Unitize	d Area or Ar	ea of Uniform I	nterest	Spacing	g Unit Type □ Ho	rizontal	Vertical	Groui	nd Floor Ele	evation: 325	55	
OPER.A	ATOR CERT	IFICATIONS				SU	RVEYOR CERTIFI	CATIONS				
my know organiza including location interest,	vledge and beli ution either own g the proposed pursuant to a	ef, and, if the weli ns a working inter bottom hole loca contract with an c ary pooling agree	l is a vertical or rest or unleased tion or has a ri owner of a work	directional mineral int ght to drill t ing interest	terest in the land	sur my	ereby certify that the w veys made by me or und belief.					

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.

9/26/24

BRADLEY BISHOP

BBISHOP@MEWBOURNE.COM

Email Address

Printed Name

Signature and Seal of Professional Surveyor

Date of Survey

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

Certificate Number

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

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

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

☐ AMENDED REPORT

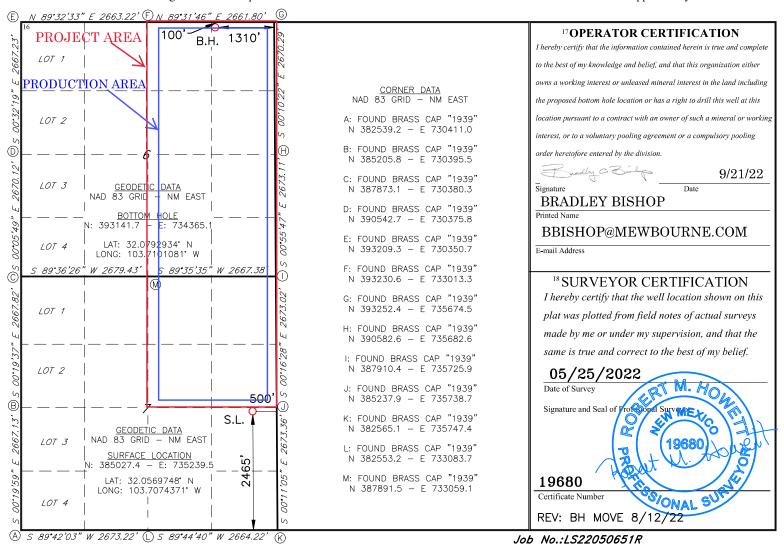
WELL LOCATION AND ACREAGE DEDICATION PLAT

¹ API Number		² Pool Code 98065				
⁴ Property Code			poperty Name P/6 W2HA FED	⁶ Well Number 2H		
7 OGRID NO. 14744			erator Name E OIL COMPANY	⁹ Elevation 3227'		
		10 C	face Location			

¹⁰ Surface Location

Surface Location										
UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet From the	East/West line	County	
I	7	26S	32E		2465	SOUTH	500	EAST	LEA	
11 Bottom Hole Location If Different From Surface										
UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County	
A	6	26S	32E		100	NORTH	1310	EAST	LEA	
12 Dedicated Acres	s 13 Joint	or Infill 14	Consolidation	Code 15 (Order No.					
480										

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



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

NATURAL GAS MANAGEMENT PLAN

This Natural Gas Management Plan must be submitted with each Application for Permit to Drill (APD) for a new or recompleted well.										
Section 1 — Plan Description Effective May 25, 2021										
I. Operator: Mewbourne Oil Co. OGRID: 14744 Date: 9/27/24										
II. Type: X Original] Amendment	due to □ 19.15.27	'.9.D(6)(a) NMAC	C □ 19.15.27.9.D(6)(b) NMAC □ (Other.				
If Other, please describe	c									
III. Well(s): Provide the be recompleted from a s					wells proposed to	be dri	lled or proposed to			
Well Name	API	ULSTR	Footages	Anticipated Oil BBL/D	Anticipated Gas MCF/D	·				
PADUCA 7/6 W2HA FED COM 2H		I 7 26S 32E	2465' FSL x 500' FE	L 1000	3000	4000				
				Y1-300 Y2-200 Y3-100	Y1-1000 Y2-600 Y3-300	Y	1-600 Y2-400 Y3-200			
IV. Central Delivery Po	oint Name:	PADUCA	A 7/6 W2HA FED	COM 2H	[See 1	9.15.2	7.9(D)(1) NMAC]			
V. Anticipated Schedul proposed to be recomple					ell or set of wells	propo	sed to be drilled or			
Well Name	API	Spud Date	TD Reached Date	Completion Commencement			First Production Date			
PADUCA 7/6 W2HA FED COM 2H		1/27/25	2/27/25	3/27/25	4/11	/25	4/16/25			
VI. Separation Equipment: Attach a complete description of how Operator will size separation equipment to optimize gas capture. VII. Operational Practices: Attach a complete description of the actions Operator will take to comply with the requirements of Subsection A through F of 19.15.27.8 NMAC. VIII. Best Management Practices: Attach a complete description of Operator's best management practices to minimize venting during active and planned maintenance.										

Page 6

Sec	<u>ction</u>	2 –	E	<u>ıha</u>	nce	ed	Plar	1
	EFFE	CTIV	VE A	APR	IL 1.	. 20	22	

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						
V. Nistanuel Con Codh sain a Santan (NCCS)									

X. Natural Gas Gathering System (NGGS):

Operator	System	ULSTR of Tie-in	Anticipated Gathering	Available Maximum Daily Capacity
			Start Date	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 an	nticipated natural ga	ıS
production volume from the well prior to the date of first production.		

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

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

XIV. C	Confidentiality: 🗌 Ope	rator asserts confid	dentiality pursuant	o Section	71-2-8 NMSA	1978 for the	information	provided in
Section	2 as provided in Paragra	aph (2) of Subsection	on D of 19.15.27.9 1	NMAC, and	d attaches a full	description of	f the specific	information
for whi	ch confidentiality is asse	rted and the basis t	for such assertion.					

Released to Imaging: 10/16/2024 11:09:53 AM

Page 7

Section 3 - Certifications Effective May 25, 2021

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

Operator has attached a venting and flaring plan that evaluates and selects one or more of the potential alternative beneficial uses for the natural gas until a natural gas gathering system is available, including: power generation on lease; (a) power generation for grid; (b) 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. (i)

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 (a) 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.

Signature:	Bradley Bishop
Printed Name:	BRADLEY BISHOP
Title:	REGULATORY MANAGER
E-mail Address:	BBISHOP@MEWBOURNE.COM
Date:	9/27/24
Phone:	575-393-5905
	OIL CONSERVATION DIVISION (Only applicable when submitted as a standalone form)
Approved By:	
Title:	
Approval Date:	
Conditions of Ap	proval:

Mewbourne Oil Company

Natural Gas Management Plan – Attachment

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

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

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

APD ID: 10400087544

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

Well Name: PADUCA 7/6 W2HA FED

Drilling Plan Data Report

Submission Date: 11/21/2022

Operator Name: MEWBOURNE OIL COMPANY

Well Number: 2H

W. H. T. OTHER

Well Type: OTHER Well Work Type: Drill

Highlighted data reflects the most recent changes

Show Final Text

Section 1 - Geologic Formations

Formation ID	Formation Name	Elevation	True Vertical	Measured Depth	Lithologies	Mineral Resources	Producing Formatio
14214397	UNKNOWN	3255	28	28	OTHER : Topsoil	NONE	N
14214398	RUSTLER	2256	999	999	ANHYDRITE, DOLOMITE	USEABLE WATER	N
14214408	TOP SALT	1923	1332	1332	SALT	NONE	N
14214409	BASE OF SALT	-857	4112	4112	SALT	NONE	N
14214411	LAMAR	-1070	4325	4325	LIMESTONE	NATURAL GAS, OIL	N
14214412	BELL CANYON	-1093	4348	4348	SANDSTONE	NATURAL GAS, OIL	N
14214413	CHERRY CANYON	-2104	5359	5359	SANDSTONE	NATURAL GAS, OIL	N
14214414	MANZANITA	-2231	5486	5486	LIMESTONE	NATURAL GAS, OIL	N
14214405	BONE SPRING	-5091	8346	8346	LIMESTONE, SHALE	NATURAL GAS, OIL	N
14214406	BONE SPRING 1ST	-6107	9362	9362	SANDSTONE	NATURAL GAS, OIL	N
14214416	BONE SPRING 2ND	-6672	9927	9927	SANDSTONE	NATURAL GAS, OIL	N
14214417	BONE SPRING 3RD	-7945	11200	11200	SANDSTONE	NATURAL GAS, OIL	N
14214418	WOLFCAMP	-8380	11635	11635	LIMESTONE, SANDSTONE, SHALE	NATURAL GAS, OIL	Y

Section 2 - Blowout Prevention

Well Name: PADUCA 7/6 W2HA FED Well Number: 2H

Pressure Rating (PSI): 10M Rating Depth: 20783

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

Requesting Variance? YES

Variance request: A variance is requested for the use of a flexible choke line from the BOP to Choke Manifold. See attached for hydrostatic test chart. Anchors are not required by manufacturer. A variance is requested to use a multi-bowl wellhead. A variance is requested to use a 5000 psi annular BOP with a 10,000 psi BOP stack.

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

Choke Diagram Attachment:

Paduca 7 6 W2HA Fed 2H 10M BOPE Choke Diagram 20220818132127.pdf

Paduca_7_6_W2HA_Fed_2H_Flex_Line_Specs_20220818132204.pdf

Paduca 7 6 W2HA Fed 2H Flex Line Specs API 16C 20220818132204.pdf

BOP Diagram Attachment:

Paduca_7_6_W2HA_Fed_2H_10M_BOPE_Schematic_20220818132134.pdf

Paduca_7_6_W2HA_Fed_2H_10M_Annular_BOP_Variance_20220818132134.pdf

Paduca_7_6_W2HA_Fed_2H_10M_Multi_Bowl_WH_20220818132134.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	1075	0	1075	3255	2180	1075	H-40	48	ST&C	1.57	3.52	DRY	6.24	DRY	10.4 8
2	INTERMED IATE	12.2 5	9.625	NEW	API	N	0	3453	0	3453		-198	3453	J-55	36	LT&C	1.13	1.96	DRY	2.9	DRY	3.61
3	INTERMED IATE	12.2 5	9.625	NEW	API	N	3453	4250	3453	4250	-174	-995	797	J-55	40	LT&C	1.16	1.79	DRY	16.3 1	DRY	19.7 6
4	PRODUCTI ON	8.75	7.0	NEW	API	N	0	10979	0	10949		-7694	10979	P- 110	26	LT&C	1.12 5	1.57	DRY	2.24	DRY	2.91
5	PRODUCTI ON	8.75	7.0	NEW	API	N	10979	12780	10949	12578	-7694	-9323	1801	HCP -110	26	LT&C	1.23	1.57	DRY	14.8	DRY	17.7 2
6	LINER	6.12 5	4.5	NEW	API	N	12070	20783	12037	12610	-8782	-9355	8713	P- 110	13.5	LT&C	1.25	1.46	DRY	2.87	DRY	3.59

Well Name: PADUCA 7/6 W2HA FED Well Number: 2H

Casina	Attachm	ante
Casina	Attachm	ents

Casing ID: 1

String

SURFACE

Inspection Document:

Spec Document:

Tapered String Spec:

Casing Design Assumptions and Worksheet(s):

Paduca_7_6_W2HA_Fed_2H_Csg_Assumptions_20220818134105.pdf

Casing ID: 2

String

INTERMEDIATE

Inspection Document:

Spec Document:

Tapered String Spec:

Casing Design Assumptions and Worksheet(s):

Paduca_7_6_W2HA_Fed_2H_Csg_Assumptions_20220818134157.pdf

Casing ID: 3

String

INTERMEDIATE

Inspection Document:

Spec Document:

Tapered String Spec:

Casing Design Assumptions and Worksheet(s):

Paduca_7_6_W2HA_Fed_2H_Csg_Assumptions_20220818134335.pdf

Well Name: PADUCA 7/6 W2HA FED Well Number: 2H

Casing ID: 4

String

PRODUCTION

Inspection Document:

Spec Document:

Tapered String Spec:

Casing Design Assumptions and Worksheet(s):

Paduca_7_6_W2HA_Fed_2H_Csg_Assumptions_20220818134136.pdf

Casing ID: 5

String

PRODUCTION

Inspection Document:

Spec Document:

Tapered String Spec:

Casing Design Assumptions and Worksheet(s):

Paduca_7_6_W2HA_Fed_2H_Csg_Assumptions_20220818134045.pdf

Casing ID: 6

٦

String

LINER

Inspection Document:

Spec Document:

Tapered String Spec:

Casing Design Assumptions and Worksheet(s):

Paduca_7_6_W2HA_Fed_2H_Csg_Assumptions_20220818134240.pdf

Section 4 - Cement

Well Name: PADUCA 7/6 W2HA FED Well Number: 2H

String Type	Lead/Tail	Stage Tool Depth	Top MD	Bottom MD	Quantity(sx)	Yield	Density	Cu Ft	Excess%	Cement type	Additives
SURFACE	Lead		0	883	580	2.12	12.5	1230	100	Class C	Salt, Gel, Extender, LCM
SURFACE	Tail		883	1075	200	1.34	14.8	268	100	Class C	Retarder
INTERMEDIATE	Lead		0	3567	660	2.12	12.5	1399	25	Class C	Salt, Gel, Extender, LCM
INTERMEDIATE	Tail		3567	4250	200	1.34	14.8	268	25	Class C	Retarder
PRODUCTION	Lead	5460	4050	4835	70	2.12	12.5	148	25	Class C	Salt, Gel, Extender, LCM, Defoamer
PRODUCTION	Tail		4835	5460	100	1.18	15.6	118	25	Class H	Retarder
PRODUCTION	Lead	5460	5460	1028 3	430	2.12	12.5	912	25	Class C	Salt, Gel, Extender, LCM Defoamer
PRODUCTION	Tail		1028 3	1278 0	400	1.18	15.6	472	25	Class H	Retarder, Fluid Loss, Defoamer
LINER	Lead		1207 0	2078 3	550	1.85	13.5	1018	25	Class H	Salt, Gel, Fluid Loss, Retarder, Dispersant, Defoamer, Anti-settling Agent

Section 5 - Circulating Medium

Mud System Type: Closed

Will an air or gas system be Used? NO

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

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

Describe what will be on location to control well or mitigate other conditions: Lost circulation material, sweeps, mud scavengers

Describe the mud monitoring system utilized: Visual Monitoring

Circulating Medium Table

Well Name: PADUCA 7/6 W2HA FED Well Number: 2H

Top Depth	Bottom Depth	Mud Type	Min Weight (lbs/gal)	Max Weight (lbs/gal)	Density (lbs/cu ft)	Gel Strength (lbs/100 sqft)	РН	Viscosity (CP)	Salinity (ppm)	Filtration (cc)	Additional Characteristics
0	1075	SPUD MUD	8.4	8.8							
1075	4250	SALT SATURATED	10	10						9	
4250	1278 0	WATER-BASED MUD	8.6	9.7					~		
1278 0	2078 3	OIL-BASED MUD	8.6	13						1	

Section 6 - Test, Logging, Coring

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

Will run GR/CNL logs from KOP to surface in offset well: Paduca 7/6 W2GB Fed #1H.

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: 8524 Anticipated Surface Pressure: 5749

Anticipated Bottom Hole Temperature(F): 210

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

Describe:

Contingency Plans geoharzards description:

Contingency Plans geohazards

Hydrogen Sulfide drilling operations plan required? YES

Hydrogen sulfide drilling operations

Paduca_7_6_W2HA_Fed_2H_H2S_Plan_20220818134956.pdf

Well Name: PADUCA 7/6 W2HA FED Well Number: 2H

Section 8 - Other Information

Proposed horizontal/directional/multi-lateral plan submission:

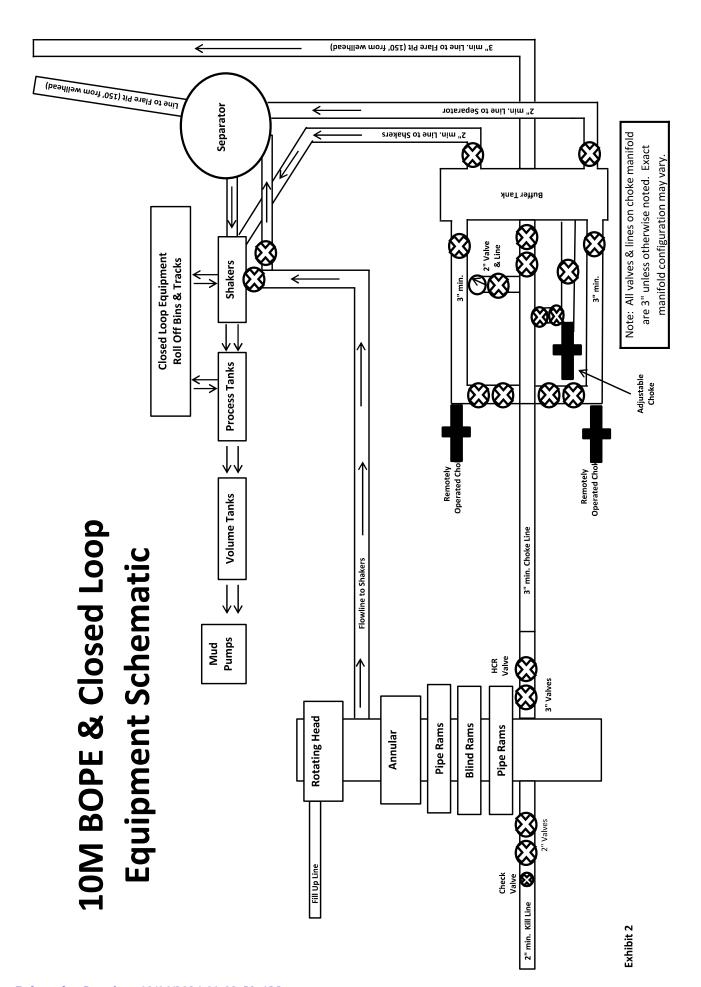
Paduca_7_6_W2HA_Fed_2H_MOC_DIR_PLOT_20220818135024.pdf Paduca_7_6_W2HA_Fed_2H_MOC_DIR_PLAN_20220818135024.pdf

Other proposed operations facets description:

Other proposed operations facets attachment:

 $Paduca_7_6_W2HA_Fed_2H_Additional_Information__Permitting_20220818135030.pdf$

Other Variance attachment:





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

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

EMAIL: Tim.Cantu@gates.com

www.gates.com

10K CEMENTING ASSEMBLY PRESSURE TEST CERTIFICATE

Customer: Customer Ref. :

Invoice No.:

AUSTIN DISTRIBUTING

4060578 500506

Test Date:

Hose Serial No.: Created By:

4/30/2015

D-043015-7 JUSTIN CROPPER

Product Description:

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

End Fitting 1:

Working Pressure:

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

4773-6290 10,000 PSI End Fitting 2:

Assembly Code:

Test Pressure:

4 1/16 10K FLG

L36554102914D-043015-7

15,000 PSI

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

Quality Manager:

Date:

Signature:

QUALITY

4/30/2015

Produciton:

Date:

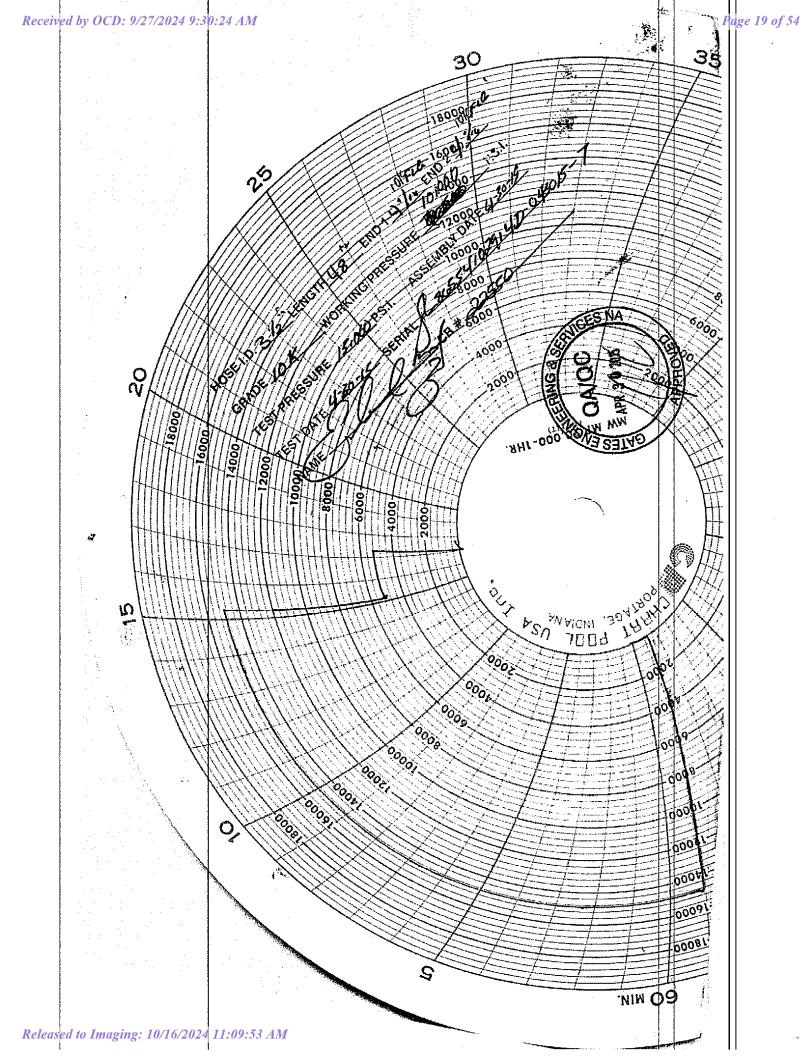
Signature :

PRODUCTION

4/30/20**1**5

Forn PTC - 01 Rev.0 2







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

PHONE: (281) 602 - 4119

FAX:

EMAIL: Troy.Schmidt@gates.com

WEB: www.gates.com

10K CHOKE & KILL ASSEMBLY PRESSURE TEST CERTIFICATE

Test Date: 8/20/2018 A-7 AUSTIN INC DBA AUSTIN HOSE Customer: Hose Serial No.: H-082018-10 Customer Ref .: 4101901 Created By: Moosa Nagvi Invoice No.: 511956 10KF3.035.0CK41/1610KFLGFXDxFLT_L/E Product Description: End Fitting 2: 4 1/16 in. Float Flange End Fitting 1: 4 1/16 in. Fixed Flange Assembly Code: L40695052218H-082018-10 Gates Part No.: 68503010-9721632 Test Pressure: 15,000 psi. Working Pressure: 10,000 psi.

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

Quality:

Date:

QUALITY

8/20/2018 Date: Signature:

Production:

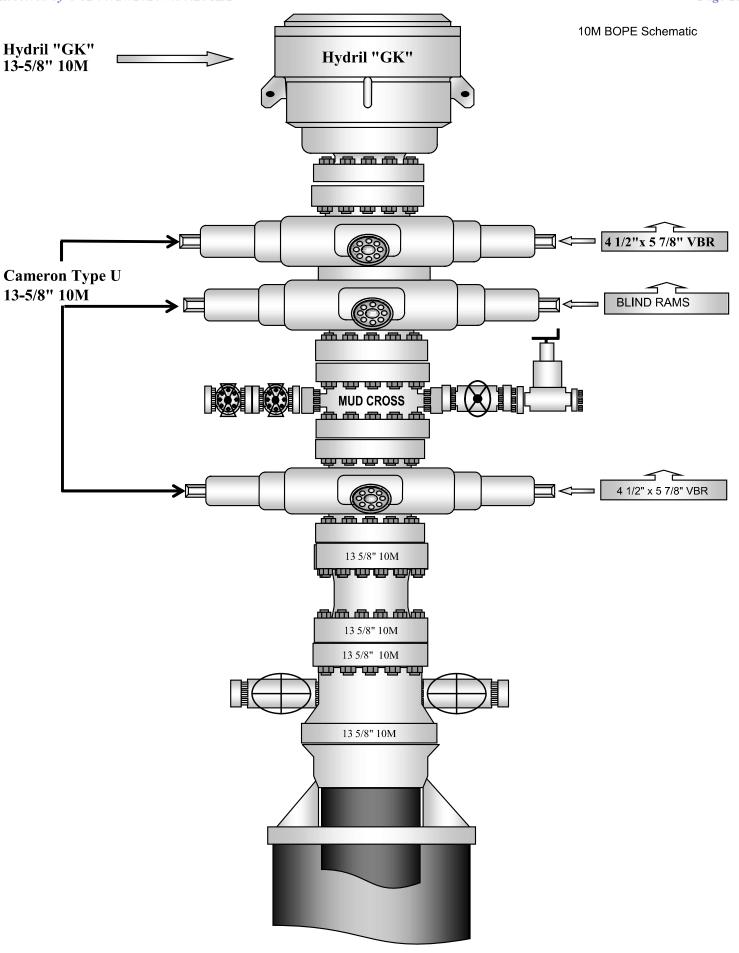
Signature:

Form PTC - 01 Rev.0 2



PRODUCTION

8/20/2018



10,000 PSI Annular BOP Variance Request

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

1. Component and Preventer Compatibility Tables

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

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

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

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

VBR = Variable Bore Ram

2. Well Control Procedures

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

General Procedure While Drilling

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

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

General Procedure While Tripping

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

General Procedure While Running Production Casing

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

General Procedure With No Pipe In Hole (Open Hole)

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

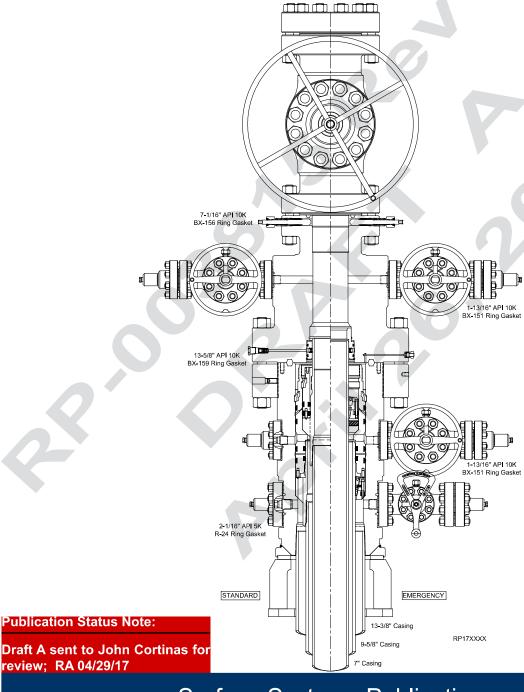
General Procedures While Pulling BHA Through Stack

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

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

RUNNING PROCEDURE

Mewbourne Oil Co



Surface Systems Publication



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

Sec 7, T26S, R32E 465' FSL & 500' FEL. Sec

SHL: 2465' FSL & 500' FEL, Sec 7 BHL: 100' FNL & 1310' FEL, Sec 6

Casing Program

Hole	Casing	Interval	Csg.	Weight	Grade	Conn.	SF	SF	SF Jt	SF Body
Size	From	To	Size	(lbs)			Collapse	Burst	Tension	Tension
17.5"	0'	1075'	13.375"	48	H40	STC	1.57	3.52	6.24	10.48
12.25"	0'	3453'	9.625"	36	J55	LTC	1.13	1.96	2.90	3.61
12.25"	3453'	4250'	9.625"	40	J55	LTC	1.16	1.79	16.31	19.76
8.75"	0'	10979'	7"	26	P110	LTC	1.125	1.57	2.24	2.91
8.75"	10979'	12780'	7"	26	HCP110	LTC	1.23	1.57	14.80	17.72
6.125"	12070'	20783'	4.5"	13.5	P110	LTC	1.25	1.46	2.87	3.59
		•		BL	M Minimu	m Safety	1.125	1	1.6 Dry	1.6 Dry
						Factor			1.8 Wet	1.8 Wet

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.	N
Does the above casing design meet or exceed BLM's minimum standards? If not provide	Y
justification (loading assumptions, casing design criteria).	
Will the pipe be kept at a minimum 1/3 fluid filled to avoid approaching the	Y
collapse pressure rating of the casing?	
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-P?	N
If yes, are the first 2 strings cemented to surface and 3 rd string cement tied back	
500' into previous casing?	
Is well located in R-111-P and SOPA?	N
If yes, are the first three strings cemented to surface?	
Is 2 nd string set 100' to 600' below the base of salt?	Y
Is well located in high Cave/Karst?	Y
If yes, are there two strings cemented to surface?	Y
(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?	

Sec 7, T26S, R32E

SHL: 2465' FSL & 500' FEL, Sec 7 BHL: 100' FNL & 1310' FEL, Sec 6

Casing Program

Hole	Casing	Interval	Csg.	Weight	Grade	Conn.	SF	SF	SF Jt	SF Body
Size	From	To	Size	(lbs)			Collapse	Burst	Tension	Tension
17.5"	0'	1075'	13.375"	48	H40	STC	1.57	3.52	6.24	10.48
12.25"	0'	3453'	9.625"	36	J55	LTC	1.13	1.96	2.90	3.61
12.25"	3453'	4250'	9.625"	40	J55	LTC	1.16	1.79	16.31	19.76
8.75"	0'	10979'	7"	26	P110	LTC	1.125	1.57	2.24	2.91
8.75"	10979'	12780'	7"	26	HCP110	LTC	1.23	1.57	14.80	17.72
6.125"	12070'	20783'	4.5"	13.5	P110	LTC	1.25	1.46	2.87	3.59
			•	BL	M Minimu	m Safety	1.125	1	1.6 Dry	1.6 Dry
						Factor			1.8 Wet	1.8 Wet

With 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.	N
Does the above casing design meet or exceed BLM's minimum standards? If not provide	Y
justification (loading assumptions, casing design criteria).	
Will the pipe be kept at a minimum 1/3 fluid filled to avoid approaching the	Y
collapse pressure rating of the casing?	
Is well located within Capitan Reef?	N
If yes, does production casing cement tie back a minimum of 50' above the Reef?	11
Is well within the designated 4 string boundary.	N
Is well located in SOPA but not in R-111-P?	N
If yes, are the first 2 strings cemented to surface and 3 rd string cement tied back	
500' into previous casing?	
Is well located in R-111-P and SOPA?	N
If yes, are the first three strings cemented to surface?	
Is 2 nd string set 100' to 600' below the base of salt?	Y
Is well located in high Cave/Karst?	Y
If yes, are there two strings cemented to surface?	Y
(For 2 string wells) If yes, is there a contingency casing if lost circulation occurs?	1
Is well located in critical Cave/Karst?	N
If yes, are there three strings cemented to surface?	

Sec 7, T26S, R32E 2465' FSL & 500' FFL Sec

SHL: 2465' FSL & 500' FEL, Sec 7 BHL: 100' FNL & 1310' FEL, Sec 6

Casing Program

Hole	Casing	Interval	Csg.	Weight	Grade	Conn.	SF	SF	SF Jt	SF Body
Size	From	To	Size	(lbs)			Collapse	Burst	Tension	Tension
17.5"	0'	1075'	13.375"	48	H40	STC	1.57	3.52	6.24	10.48
12.25"	0'	3453'	9.625"	36	J55	LTC	1.13	1.96	2.90	3.61
12.25"	3453'	4250'	9.625"	40	J55	LTC	1.16	1.79	16.31	19.76
8.75"	0'	10979'	7"	26	P110	LTC	1.125	1.57	2.24	2.91
8.75"	10979'	12780'	7"	26	HCP110	LTC	1.23	1.57	14.80	17.72
6.125"	12070'	20783'	4.5"	13.5	P110	LTC	1.25	1.46	2.87	3.59
	•		•	BL	M Minimu	m Safety	1.125	1	1.6 Dry	1.6 Dry
						Factor			1.8 Wet	1.8 Wet

With 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.	N
Does the above casing design meet or exceed BLM's minimum standards? If not provide	Y
justification (loading assumptions, casing design criteria).	
Will the pipe be kept at a minimum 1/3 fluid filled to avoid approaching the	Y
collapse pressure rating of the casing?	
Is well located within Capitan Reef?	N
If yes, does production casing cement tie back a minimum of 50' above the Reef?	11
Is well within the designated 4 string boundary.	N
Is well located in SOPA but not in R-111-P?	N
If yes, are the first 2 strings cemented to surface and 3 rd string cement tied back	
500' into previous casing?	
Is well located in R-111-P and SOPA?	N
If yes, are the first three strings cemented to surface?	
Is 2 nd string set 100' to 600' below the base of salt?	Y
Is well located in high Cave/Karst?	Y
If yes, are there two strings cemented to surface?	Y
(For 2 string wells) If yes, is there a contingency casing if lost circulation occurs?	1
Is well located in critical Cave/Karst?	N
If yes, are there three strings cemented to surface?	

Sec 7, T26S, R32E

SHL: 2465' FSL & 500' FEL, Sec 7 BHL: 100' FNL & 1310' FEL, Sec 6

Casing Program

Hole	Casing	Interval	Csg.	Weight	Grade	Conn.	SF	SF	SF Jt	SF Body
Size	From	To	Size	(lbs)			Collapse	Burst	Tension	Tension
17.5"	0'	1075'	13.375"	48	H40	STC	1.57	3.52	6.24	10.48
12.25"	0'	3453'	9.625"	36	J55	LTC	1.13	1.96	2.90	3.61
12.25"	3453'	4250'	9.625"	40	J55	LTC	1.16	1.79	16.31	19.76
8.75"	0'	10979'	7"	26	P110	LTC	1.125	1.57	2.24	2.91
8.75"	10979'	12780'	7"	26	HCP110	LTC	1.23	1.57	14.80	17.72
6.125"	12070'	20783'	4.5"	13.5	P110	LTC	1.25	1.46	2.87	3.59
		•	•	BL	M Minimu	m Safety	1.125	1	1.6 Dry	1.6 Dry
						Factor			1.8 Wet	1.8 Wet

With 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.	N
Does the above casing design meet or exceed BLM's minimum standards? If not provide	Y
justification (loading assumptions, casing design criteria).	
Will the pipe be kept at a minimum 1/3 fluid filled to avoid approaching the	Y
collapse pressure rating of the casing?	
Is well located within Capitan Reef?	N
If yes, does production casing cement tie back a minimum of 50' above the Reef?	11
Is well within the designated 4 string boundary.	N
Is well located in SOPA but not in R-111-P?	N
If yes, are the first 2 strings cemented to surface and 3 rd string cement tied back	
500' into previous casing?	
Is well located in R-111-P and SOPA?	N
If yes, are the first three strings cemented to surface?	
Is 2 nd string set 100' to 600' below the base of salt?	Y
Is well located in high Cave/Karst?	Y
If yes, are there two strings cemented to surface?	Y
(For 2 string wells) If yes, is there a contingency casing if lost circulation occurs?	1
Is well located in critical Cave/Karst?	N
If yes, are there three strings cemented to surface?	

Mewbourne Oil Company, Paduca 7/6 W2HA Fed #2H Sec 7, T26S, R32E

SHL: 2465' FSL & 500' FEL, Sec 7

BHL: 100' FNL & 1310' FEL, Sec 6

Casing Program

Hole	Casing	Interval	Csg.	Weight	Grade	Conn.	SF	SF	SF Jt	SF Body
Size	From	To	Size	(lbs)			Collapse	Burst	Tension	Tension
17.5"	0'	1075'	13.375"	48	H40	STC	1.57	3.52	6.24	10.48
12.25"	0'	3453'	9.625"	36	J55	LTC	1.13	1.96	2.90	3.61
12.25"	3453'	4250'	9.625"	40	J55	LTC	1.16	1.79	16.31	19.76
8.75"	0'	10979'	7"	26	P110	LTC	1.125	1.57	2.24	2.91
8.75"	10979'	12780'	7"	26	HCP110	LTC	1.23	1.57	14.80	17.72
6.125"	12070'	20783'	4.5"	13.5	P110	LTC	1.25	1.46	2.87	3.59
			•	BL	M Minimu	m Safety	1.125	1	1.6 Dry	1.6 Dry
						Factor			1.8 Wet	1.8 Wet

With the table for contingency casing	Y or N					
Is casing new? If used, attach certification as required in Onshore Order #1	Y					
	Y					
Is casing API approved? If no, attach casing specification sheet.						
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	Y					
justification (loading assumptions, casing design criteria).						
Will the pipe be kept at a minimum 1/3 fluid filled to avoid approaching the						
collapse pressure rating of the casing?						
Is well located within Capitan Reef?	N					
If yes, does production casing cement tie back a minimum of 50' above the Reef?	1.4					
Is well within the designated 4 string boundary.	N					
is wen within the designated 4 string boundary.	IN					
Is well located in SOPA but not in R-111-P?	N					
If yes, are the first 2 strings cemented to surface and 3 rd string cement tied back						
500' into previous casing?						
Is well located in R-111-P and SOPA?	N					
If yes, are the first three strings cemented to surface?						
Is 2 nd string set 100' to 600' below the base of salt?	Y					
Is well located in high Cave/Karst?	Y					
If yes, are there two strings cemented to surface?	Y					
(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?						

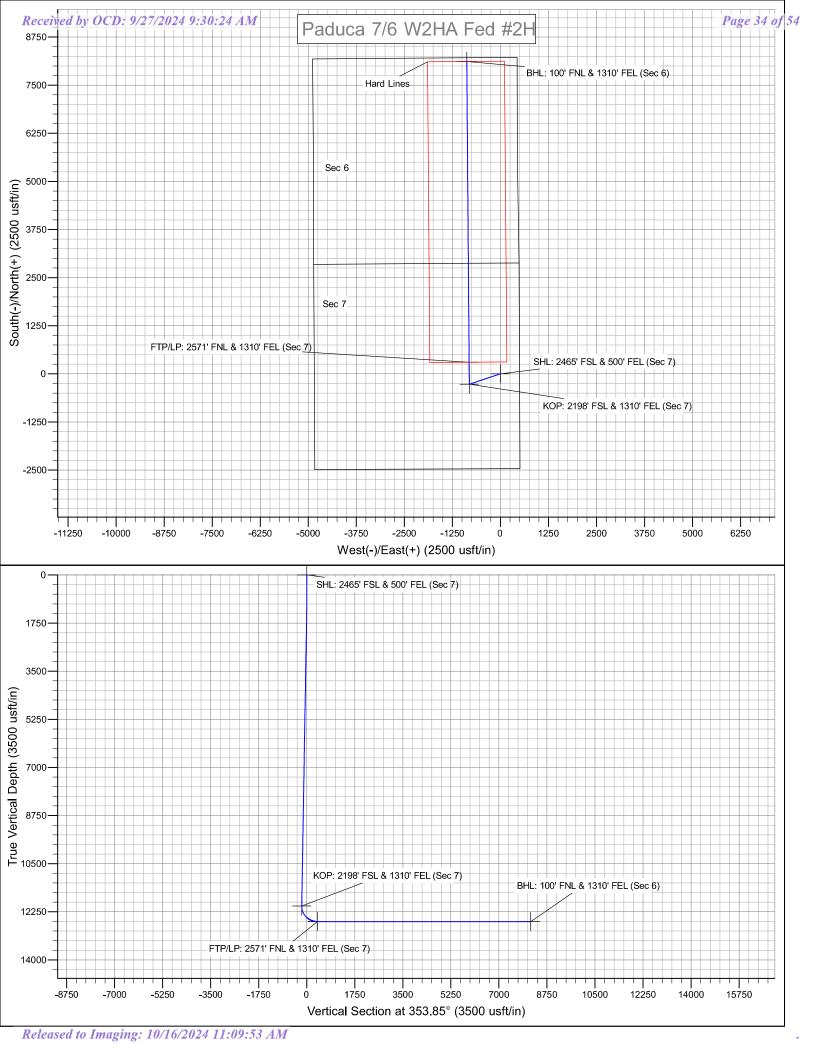
Sec 7, T26S, R32E SHL: 2465' FSL & 500' FEL, Sec 7

SHL: 2465' FSL & 500' FEL, Sec 7 BHL: 100' FNL & 1310' FEL, Sec 6

Casing Program

Hole	Casing	Interval	Csg.	Weight	Grade	Conn.	SF	SF	SF Jt	SF Body
Size	From	To	Size	(lbs)			Collapse	Burst	Tension	Tension
17.5"	0'	1075'	13.375"	48	H40	STC	1.57	3.52	6.24	10.48
12.25"	0'	3453'	9.625"	36	J55	LTC	1.13	1.96	2.90	3.61
12.25"	3453'	4250'	9.625"	40	J55	LTC	1.16	1.79	16.31	19.76
8.75"	0'	10979'	7"	26	P110	LTC	1.125	1.57	2.24	2.91
8.75"	10979'	12780'	7"	26	HCP110	LTC	1.23	1.57	14.80	17.72
6.125"	12070'	20783'	4.5"	13.5	P110	LTC	1.25	1.46	2.87	3.59
	•		•	BL	M Minimu	m Safety	1.125	1	1.6 Dry	1.6 Dry
						Factor			1.8 Wet	1.8 Wet

With 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.	N					
Does the above casing design meet or exceed BLM's minimum standards? If not provide	Y					
justification (loading assumptions, casing design criteria).						
Will the pipe be kept at a minimum 1/3 fluid filled to avoid approaching the						
collapse pressure rating of the casing?						
Is well located within Capitan Reef?	N					
If yes, does production casing cement tie back a minimum of 50' above the Reef?	1					
Is well within the designated 4 string boundary.	N					
Is well located in SOPA but not in R-111-P?	N					
If yes, are the first 2 strings cemented to surface and 3 rd string cement tied back						
500' into previous casing?						
Is well located in R-111-P and SOPA?	N					
If yes, are the first three strings cemented to surface?						
Is 2 nd string set 100' to 600' below the base of salt?	Y					
Is well located in high Cave/Karst?	Y					
If yes, are there two strings cemented to surface?	Y					
(For 2 string wells) If yes, is there a contingency casing if lost circulation occurs?						
	N					
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 Paduca 7/6 W2HA Fed #2H Sec 7, T26S, R32E

SHL: 2465' FSL & 500' FEL (Sec 7) BHL: 100' FNL & 1310' FEL (Sec 6)

Plan: Design #1

Standard Planning Report

11 August, 2022

Planning Report

Database:HobbsCompany:Mewbourne Oil CompanyProject:Lea County, New Mexico NAD 83Site:Paduca 7/6 W2HA Fed #2H

Well: Sec 7, T26S, R32E
Wellbore: BHL: 100' FNL & 1310' FEL (Sec 6)

Design: Design #1

Local Co-ordinate Reference:

TVD Reference: MD Reference: North Reference:

Survey Calculation Method:

Site Paduca 7/6 W2HA Fed #2H

WELL @ 3255.0usft (Original Well Elev) WELL @ 3255.0usft (Original Well Elev)

Grid

Minimum Curvature

Project Lea County, New Mexico NAD 83

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

System Datum:

Mean Sea Level

Site Paduca 7/6 W2HA Fed #2H

 Site Position:
 Northing:
 385,027.40 usft
 Latitude:
 32.0569749

 From:
 Map
 Easting:
 735,239.50 usft
 Longitude:
 -103,7074370

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

Sec 7, T26S, R32E Well **Well Position** +N/-S 0.0 usft 32.0569749 Northing: 385.027.40 usft Latitude: +E/-W 0.0 usft Easting: 735,239.50 usft Longitude: -103.7074370 0.0 usft Wellhead Elevation: Ground Level: **Position Uncertainty** 3,255.0 usft 3,227.0 usft **Grid Convergence:** 0.33

BHL: 100' FNL & 1310' FEL (Sec 6) Wellbore Magnetics **Model Name** Sample Date Declination Dip Angle Field Strength (°) (°) (nT) IGRF2010 12/31/2014 7.20 59.92 48,148.58656294

Design Design #1 Audit Notes: PROTOTYPE Version: Phase: Tie On Depth: 0.0 +N/-S +E/-W Vertical Section: Depth From (TVD) Direction (usft) (usft) (usft) (°) 353.85 0.0 0.0 0.0

 Plan Survey Tool Program
 Date | 8/11/2022

 Depth From (usft)
 Depth To (usft)
 Survey (Wellbore)
 Tool Name
 Remarks

 1
 0.0
 20,782.7
 Design #1 (BHL: 100' FNL & 1310)

Plan Sections Vertical Build Measured Dogleg Turn +N/-S Depth Inclination Azimuth Depth +E/-W Rate Rate Rate TFO (usft) (°) (°) (usft) (usft) (usft) (°/100usft) (°/100usft) (°/100usft) Target (°) 0.0 0.00 0.00 0.0 0.0 0.0 0.00 0.00 0.00 0.00 1,275,0 0.00 0.00 1,275.0 0.0 0.0 0.00 0.00 0.00 0.00 0.00 0.00 0.00 1,275.0 4 53 251 53 1.275 0 0.0 0.0 0.00 12,070.8 4.53 251.53 12.037.0 -270.4 -809.2 0.00 0.00 0.00 0.00 12,070.8 0.00 0.00 12,037.0 -270.4 -809.2 0.00 0.00 0.00 0.00 KOP: 2198' FSL & 13 12,970.8 90.00 359.55 12,610.0 302.6 -813.7 10.00 10.00 0.00 -0.45 20,782.7 90.00 359.55 12,610.0 8,114.3 -874.7 0.00 0.00 0.00 0.00 BHL: 100' FNL & 131(

Database:HobbsCompany:Mewbourne Oil CompanyProject:Lea County, New Mexico NAD 83Site:Paduca 7/6 W2HA Fed #2H

Well: Sec 7, T26S, R32E
Wellbore: BHL: 100' FNL & 1310' FEL (Sec 6)

Design: Design #1

Local Co-ordinate Reference:

TVD Reference: MD Reference: North Reference:

Survey Calculation Method:

Site Paduca 7/6 W2HA Fed #2H WELL @ 3255.0usft (Original Well Elev) WELL @ 3255.0usft (Original Well Elev)

311u

d Survey									
Measured Depth	Inclination	Azimuth	Vertical Depth	+N/-S	+E/-W	Vertical Section	Dogleg Rate	Build Rate	Turn Rate
(usft)	(°)	(°)	(usft)	(usft)	(usft)	(usft)	(°/100usft)	(°/100usft)	(°/100usft)
0.0	0.00	0.00	0.0	0.0	0.0	0.0	0.00	0.00	0.00
SHL: 2465'	FSL & 500' FEL (Sec 7)							
100.0	0.00	0.00	100.0	0.0	0.0	0.0	0.00	0.00	0.00
200.0	0.00	0.00	200.0	0.0	0.0	0.0	0.00	0.00	0.00
300.0	0.00	0.00	300.0	0.0	0.0	0.0	0.00	0.00	0.00
400.0	0.00	0.00	400.0	0.0	0.0	0.0	0.00	0.00	0.00
500.0	0.00	0.00	500.0	0.0	0.0	0.0	0.00	0.00	0.00
600.0	0.00	0.00	600.0	0.0	0.0	0.0	0.00	0.00	0.00
700.0	0.00	0.00	700.0	0.0	0.0	0.0	0.00	0.00	0.00
800.0	0.00	0.00	800.0	0.0	0.0	0.0	0.00	0.00	0.00
900.0	0.00	0.00	900.0	0.0	0.0	0.0	0.00	0.00	0.00
1,000.0	0.00	0.00	1,000.0	0.0	0.0	0.0	0.00	0.00	0.00
1,100.0	0.00	0.00	1,100.0	0.0	0.0	0.0	0.00	0.00	0.00
1,200.0	0.00	0.00	1,200.0	0.0	0.0	0.0	0.00	0.00	0.00
1,275.0	4.53	251.53	1,275.0	0.0	0.0	0.0	6.04	6.04	0.00
1,300.0	4.53	251.53	1,299.9	-0.6	-1.9	-0.4	0.00	0.00	0.00
1,400.0	4.53	251.53	1,399.6	-3.1	-9.4	-2.1	0.00	0.00	0.00
1,500.0	4.53	251.53	1,499.3	-5.6	- 16.9	-3.8	0.00	0.00	0.00
1,600.0	4.53	251.53	1,599.0	-8.1	-24.4	-5.5	0.00	0.00	0.00
1,700.0	4.53	251.53	1,698.7	-10.6	-31.9	- 7.2	0.00	0.00	0.00
1,800.0	4.53	251.53	1,798.4	-13.1	-39.4	-8.9	0.00	0.00	0.00
			1,000,0				0.00		
1,900.0 2,000.0	4.53 4.53	251,53 251,53	1,898.0 1,997.7	-15.7 -18.2	-46.8 -54.3	-10.5 -12.2	0.00 0.00	0,00 0,00	0,00 0,00
2,000,0	4.53	251.53	2,097.4	-16.2 -20.7	-54.3 -61.8	-12.2 -13.9	0,00	0,00	0.00
2,100,0	4.53	251,53	2,197.1	-23.2	-69.3	-15.9 -15.6	0,00	0.00	0.00
2,200,0	4.53	251,53	2,197.1	-25.7	-09.3 -76.8	-17.3	0.00	0.00	0.00
2,400.0	4.53	251.53	2,396.5	- 28.2	-84.3	- 19.0	0.00	0.00	0.00
2,500.0	4.53	251.53	2,496.2	- 30.7	- 91.8	- 20.7	0.00	0.00	0.00
2,600.0	4.53	251.53	2,595.9	- 33.2	-99.3	-22.3	0.00	0.00	0.00
2,700.0	4.53	251.53	2,695.5	-35.7	-106.8	-24.0	0.00	0.00	0.00
2,800.0	4.53	251.53	2,795.2	-38.2	-114.3	-25.7	0.00	0.00	0.00
2,900.0	4.53	251.53	2,894.9	-40.7	-121.8	-27.4	0.00	0.00	0.00
3,000.0	4.53	251.53	2,994.6	-43.2	-129.3	-29.1	0.00	0.00	0.00
3,100.0	4.53	251.53	3,094.3	-45.7	-136.8	-30.8	0.00	0.00	0.00
3,200.0	4.53	251.53	3,194.0	-48.2	-144.3	-32.5	0.00	0.00	0.00
3,300.0	4.53	251.53	3,293.7	-50.7	-151.8	-34.2	0.00	0.00	0.00
3,400.0	4.53	251.53	3,393.4	-53.2	-159.3	-35.8	0.00	0.00	0.00
3,500.0	4.53	251.53	3,493.0	-55.7	-166.8	-37.5	0.00	0.00	0.00
3,600.0	4.53	251.53	3,592.7	-58.2	-174.3	-37.3 -39.2	0.00	0.00	0.00
3,700.0	4.53	251.53	3,692.4	-60.7	-181.8	-40.9	0.00	0.00	0.00
3,800.0	4.53	251.53	3,792.1	-63.2	-189.3	- 42.6	0.00	0.00	0.00
3,900.0	4.53	251.53	3,891.8	-65.7	-196.8	-44.3	0.00	0.00	0.00
4,000.0	4.53	251.53	3,991.5	-68.2 70.7	-204.3	-46.0	0.00	0.00	0.00
4,100.0	4.53	251.53	4,091.2	-70.7	-211.8	-47.6	0.00	0.00	0.00
4,200.0	4.53	251.53	4,190.8	-73.3	-219.3	-49.3 51.0	0.00	0.00	0.00
4,300.0	4.53	251.53	4,290.5	-75.8	-226.8	-51.0	0.00	0.00	0.00
4,400.0	4.53	251.53	4,390.2	-78.3	-234.2	- 52.7	0.00	0.00	0.00
4,500.0	4.53	251.53	4,489.9	-80.8	-241.7	-54.4	0.00	0.00	0.00
4,600.0	4.53	251.53	4,589.6	-83.3	-249.2	-56.1	0.00	0.00	0.00
4,700.0	4.53	251.53	4,689.3	-85.8	-256.7	-57.8	0.00	0.00	0.00
4,800.0	4.53	251.53	4,789.0	-88.3	-264.2	-59.5	0.00	0.00	0.00
4,900.0	4.53	251.53	4,888.7	-90.8	-271.7	-61.1	0.00	0.00	0.00
5,000.0	4.53	251.53	4,988.3	-93.3	-279.2	-62.8	0.00	0.00	0.00
5,100.0	4.53	251.53	5,088.0	-95.8	-286.7	-64.5	0.00	0.00	0.00

Database:HobbsCompany:Mewbourne Oil CompanyProject:Lea County, New Mexico NAD 83Site:Paduca 7/6 W2HA Fed #2H

Well: Sec 7, T26S, R32E
Wellbore: BHL: 100' FNL & 1310' FEL (Sec 6)

Design: Design #1

Local Co-ordinate Reference: TVD Reference: MD Reference:

North Reference: Survey Calculation Method: Site Paduca 7/6 W2HA Fed #2H WELL @ 3255.0usft (Original Well Elev) WELL @ 3255.0usft (Original Well Elev)

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	4.53	251,53	5,187.7	-98.3	- 294.2	- 66.2	0.00	0.00	0.00
5,300.0	4.53	251,53	5,287.4	-100.8	- 301.7	- 67.9	0.00	0.00	0.00
5,400.0	4.53	251.53	5,387.1	-103.3	-309.2	-69.6	0.00	0.00	0.00
5,500.0	4.53	251.53	5,486.8	-105.8	-316.7	-71.3	0.00	0.00	0.00
5,600.0	4.53	251.53	5,586.5	-108.3	-324.2	-72.9	0.00	0.00	0.00
5,700.0	4.53	251.53	5,686.2	-110.8	-331.7	-74.6	0.00	0.00	0.00
5,800.0	4.53	251.53	5,785.8	-113.3	-339.2	-76.3	0.00	0.00	0.00
5,900.0	4.53	251.53	5,885.5	-115.8	-346.7	-78.0	0.00	0.00	0.00
6,000.0	4.53	251.53	5,985.2	-118.3	-354.2	-79.7	0.00	0.00	0.00
6,100.0	4.53	251.53	6,084.9	-120.8	-361.7	-81.4	0.00	0.00	0.00
6,200.0	4.53	251.53	6,184.6	-123.3	-369.2	-83.1	0.00	0.00	0.00
6,300.0	4.53	251.53	6,284.3	-125.8	-376.7	-84.8	0.00	0.00	0.00
6,400.0	4.53	251.53	6,384.0	-128.3	-384.2	-86.4	0.00	0.00	0.00
6,500.0	4.53	251.53	6,483.7	-130.9	-391.7	-88.1	0.00	0.00	0.00
6,600.0	4.53	251.53	6,583.3	-133.4	-399.2	-89.8	0.00	0.00	0.00
6,700.0	4.53	251.53	6,683.0	-135.9	-406.7	-91.5	0.00	0.00	0.00
6,800.0 6,900.0	4.53 4.53	251.53 251.53	6,782.7 6,882.4	-138.4 -140.9	-414.1 -421.6	-93.2 -94.9	0.00	0.00	0.00 0.00
7,000.0	4.53	251,53	6,982,1	-143,4	-429.1	-96.6	0.00	0.00	0.00
7,100.0	4.53	251,53	7,081,8	-145,9	-436.6	-98.2	0.00	0.00	0.00
7,200.0	4.53	251,53	7,181,5	-148,4	-444.1	-99.9	0.00	0.00	0.00
7,300.0	4.53	251,53	7,281.2	-150.9	-451.6	-101.6	0,00	0.00	0.00
7,400.0	4.53	251.53	7,380.8	-153.4	-459.1	-103.3	0.00		0.00
7,500.0	4.53	251.53	7,480.5	-155.9	-466.6	-105.0	0.00	0.00	0.00
7,600.0	4.53	251.53	7,580.2	-158.4	-474.1	-106.7	0.00	0.00	0.00
7,700.0	4.53	251.53	7,679.9	-160.9	-481.6	-108.4	0.00	0.00	0.00
7,800.0 7,800.0	4.53 4.53	251.53 251.53	7,779.6 7,879.3	-163.4 -165.9	-489.1 -496.6	-110.1 -111.7	0.00	0.00	0.00
8,000.0	4.53	251,53	7,979.0	-168.4	-504.1	-113.4	0.00	0.00	0.00
8,100.0	4.53	251,53	8,078.7	-170.9	-511.6	-115.1	0.00	0.00	0.00
8,200.0	4.53	251,53	8,178.3	-173.4	-519.1	-116.8	0.00	0.00	0.00
8,300.0	4.53	251,53	8,278.0	-175.9	-526.6	-118.5	0.00		0.00
8,400.0	4.53	251.53	8,377.7	-178.4	-534.1	-120.2	0.00	0.00	0.00
8,500.0	4.53	251.53	8,477.4	-180.9	-541.6	-121.9	0.00	0.00	0.00
8,600.0	4.53	251.53	8,577.1	-183.4	-549.1	-123.5	0.00	0.00	0.00
8,700.0	4.53	251.53	8,676.8	-186.0	-556.6	-125.2	0.00	0.00	0.00
8,800.0	4.53	251.53	8,776.5	-188.5	-564.1	-126.9	0.00	0.00	0.00
8,900.0 9,000.0 9,100.0	4.53 4.53	251.53 251.53	8,876.1 8,975.8	-191.0 -193.5	-571.6 -579.1	-128.6 -130.3	0.00 0.00	0.00 0.00 0.00	0.00 0.00 0.00
9,100.0 9,200.0 9,300.0	4.53 4.53 4.53	251,53 251,53 251,53	9,075.5 9,175.2 9,274.9	-196.0 -198.5 -201.0	-586.6 -594.0 -601.5	-132.0 -133.7 -135.4	0.00 0.00 0.00	0.00 0.00	0.00 0.00 0.00
9,400.0	4.53	251.53	9,374.6	-203.5	-609.0	-137.0	0.00	0.00	0.00
9,500.0	4.53	251.53	9,474.3	-206.0	-616.5	-138.7	0.00	0.00	0.00
9,600.0	4.53	251.53	9,574.0	-208.5	-624.0	-140.4	0.00	0.00	0.00
9,700.0	4.53	251.53	9,673.6	-211.0	-631.5	-142.1	0.00	0.00	0.00
9,800.0	4.53	251.53	9,773.3	-213.5	-639.0	-143.8	0.00	0.00	0.00
9,900.0	4.53	251.53	9,873.0	-216.0	-646.5	-145.5	0.00	0.00	0.00
10,000.0	4.53	251.53	9,972.7	-218.5	-654.0	-147.2	0.00	0.00	0.00
10,100.0	4.53	251,53	10,072.4	-221.0	-661,5	-148.8	0.00	0,00	0.00
10,200.0	4.53	251,53	10,172.1	-223.5	-669,0	-150.5	0.00	0,00	0.00
10,300.0	4.53	251,53	10,271.8	-226.0	-676,5	-152.2	0.00	0,00	0.00
10,400.0	4.53	251.53	10,371.5	-228.5	-684.0	-153.9	0.00	0.00	0.00
10,500.0	4.53	251.53	10,471.1	-231.0	-691.5	-155.6	0.00	0.00	0.00

Database:HobbsCompany:Mewbourne Oil CompanyProject:Lea County, New Mexico NAD 83Site:Paduca 7/6 W2HA Fed #2H

Well: Sec 7, T26S, R32E
Wellbore: BHL: 100' FNL & 1310' FEL (Sec 6)

Design: Design #1

Local Co-ordinate Reference: TVD Reference:

MD Reference:
North Reference:

Survey Calculation Method:

Site Paduca 7/6 W2HA Fed #2H WELL @ 3255.0usft (Original Well Elev) WELL @ 3255.0usft (Original Well Elev)

Grid

anned Survey									
Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)
· · · · ·	()		(3.3.1)	(usit)	(usit)	(3.5.1)	((, , , , , , , , , , , , , , , , , , ,	(, , , , , , , , , , , , , , , , , , ,
10,600.0	4.53	251,53	10,570.8	-233.5	-699.0	-157.3	0.00	0.00	0.00
10,700.0	4.53	251,53	10,670.5	-236.0	-706.5	-159.0	0.00	0.00	0.00
10,800.0	4.53	251,53	10,770.2	-238.5	-714.0	-160.6	0.00	0.00	0.00
70,00010		201,00	.0,		, , ,,,,	10010			
10,900.0	4.53	251.53	10,869.9	-241.0	-721.5	-162.3	0.00	0.00	0.00
11,000.0	4.53	251.53	10,969.6	-243.6	-729.0	-164.0	0.00	0.00	0.00
11,100.0	4.53	251.53	11,069.3	-246.1	-736.5	-165.7	0.00	0.00	0.00
11,200.0	4.53	251.53	11,169.0	-248.6	-744.0	-167.4	0.00	0.00	0.00
			· ·						
11,300.0	4.53	251.53	11,268.6	-251.1	-751.5	-169.1	0.00	0.00	0.00
11,400.0	4.53	251.53	11,368.3	-253.6	-759.0	-170.8	0.00	0.00	0.00
11,500.0	4.53	251,53	11,468.0	-256.1	-766.5	-172.5	0.00	0.00	0.00
11,600.0	4.53	251,53	11,567.7	-258.6	-774.0	-174.1	0.00	0.00	0,00
			· ·						
11,700.0	4.53	251.53	11,667.4	-261.1	-781.4	-175.8	0.00	0.00	0.00
11,800.0	4.53	251,53	11,767.1	-263.6	-788.9	-177.5	0.00	0.00	0.00
11,900.0	4.53	251.53	11,866.8	-266.1	-796.4	-179.2	0.00	0.00	0.00
,			,						
12,000.0	4.53	251.53	11,966.5	-268.6	-803.9	-180.9	0.00	0.00	0.00
12,070.8	0.00	0.00	12,037.0	-270.4	-809.2	-182.1	6.40	-6.40	0.00
KOP: 2198' F	SL & 1310' FEL	(Sec 7)							
12,100.0	2.92	359.55	12.066.2	-269.6	-809.2	-181.3	10.00	10.00	0.00
,			,						
12,200.0	12.92	359.55	12,165.1	-255.9	-809.4	- 167.7	10.00	10.00	0.00
12.300.0	22,92	359,55	12,260,2	-225.1	-809,6	-137.1	10.00	10,00	0,00
12,400.0	32.92	359,55	12,348.4	-178.4	-810.0	-90.5	10.00	10.00	0.00
12,500.0	42.92	359.55	12,427.2	-117.0	- 810.4	-29.5	10.00	10.00	0.00
12,600.0	52.92	359,55	12,494.1	- 42.9	- 811.0	44.3	10,00	10.00	0.00
12,700.0	62.92	359,55	12,547.2	41.7	-811.7	128,5	10,00	10,00	0.00
12,800.0	72.92	359.55	12,584.7	134.3	-812.4	220.6	10.00	10.00	0.00
12,900.0	82.92	359.55	12,605.6	231.9	- 813.2	317.8	10.00	10.00	0.00
12,970.8	90.00	359.55	12,610.0	302.6	-813.7	388.1	10.00	10.00	0.00
FTP/I P: 2571	I' FNL & 1310' F	FL (Sec. 7)							
13,000.0	90.00	359.55	12,610.0	331.8	-813.9	417.1	0.00	0.00	0.00
,									
13,100.0	90.00	359.55	12,610.0	431.8	-814.7	516.6	0.00	0.00	0.00
13,200.0	90.00	359.55	12,610.0	531.8	-815.5	616.1	0.00	0.00	0.00
13,300.0	90.00	359.55	12,610.0	631.8	-816.3	715.6	0.00	0.00	0.00
13,400.0	90.00	359.55	12,610.0	731.7	-817.1	815.1	0.00	0.00	0.00
13,500.0	90.00	359.55	12,610.0	831.7	-817.8	914.6	0.00	0.00	0.00
13,600.0	90.00	359.55	12,610.0	931.7	-818.6	1,014.1	0.00	0.00	0.00
13,700.0	90.00	359.55	12,610.0	1,031.7	-819.4	1,113.6	0.00	0.00	0.00
13,800.0	90.00	359.55	12,610.0	1,131.7	-820.2	1,213.1	0.00	0.00	0.00
13,900.0	90.00	359.55	12,610.0	1,231.7	-821.0	1,312.6	0.00	0.00	0.00
14,000.0	90.00	359.55	12,610.0	1,331.7	-821.7	1,412.1	0.00	0.00	0.00
14,100.0	90.00	359.55	12,610.0	1,431.7	-822.5	1,511.6	0.00	0.00	0.00
14, 100.0	30.00	555.55	12,010.0	1,701.7	-022.3	1,511.0	0.00	0.00	0.00
14,200.0	90.00	359.55	12,610.0	1,531.7	-823.3	1,611.1	0.00	0.00	0.00
14,300.0	90.00	359.55	12,610.0	1,631.7	-824.1	1,710.6	0.00	0.00	0.00
14,400.0	90.00	359.55	12,610.0	1,731.7	-824.9	1,810.1	0.00	0.00	0.00
14,500.0	90.00	359.55	12,610.0	1,831.7	-825.6	1,909.7	0.00	0.00	0.00
14,600.0	90.00	359.55	12,610.0	1,931.7	-826.4	2,009.2	0.00	0.00	0.00
14,700.0	90.00	359.55	12,610.0	2,031.7	-827.2	2,108.7	0.00	0.00	0.00
14,800.0	90.00	359.55	12,610.0	2,131.7	-828.0	2,208.2	0.00	0.00	0.00
14,900.0	90.00	359.55	12,610.0	2,231.7	-828.8	2,307.7	0.00	0.00	0.00
		050.55	12,610.0	2,331.7	-829.5	2,407.2	0.00	0.00	0.00
15,000.0	90.00	359.55	12,010.0						
				2,431.7	-830.3	2,506.7	0.00	0.00	0.00
15,100.0	90.00	359.55	12,610.0	2,431.7	-830.3	2,506.7	0.00	0.00	0.00
				2,431.7 2,531.7	-830.3 -831.1	2,506.7 2,606.2	0.00	0.00	0.00 0.00
15,100.0	90.00	359.55	12,610.0			· ·			
15,100.0 15,200.0	90.00 90.00	359.55 359.55	12,610.0 12,610.0	2,531.7	-831.1	2,606.2	0.00	0.00	0.00

Database:HobbsCompany:Mewbourne Oil CompanyProject:Lea County, New Mexico NAD 83Site:Paduca 7/6 W2HA Fed #2H

Well: Sec 7, T26S, R32E
Wellbore: BHL: 100' FNL & 1310' FEL (Sec 6)

Design: Design #1

Local Co-ordinate Reference:

TVD Reference: MD Reference: North Reference:

Survey Calculation Method:

Site Paduca 7/6 W2HA Fed #2H WELL @ 3255.0usft (Original Well Elev) WELL @ 3255.0usft (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)
15,600.0	90.00	359,55	12,610.0	2,931.7	-834.2	3,004.2	0.00	0.00	0.00
15,700.0	90.00	359,55	12,610.0	3,031.7	-835.0	3,103.7	0.00	0.00	0.00
15,800.0	90.00	359.55	12,610.0	3,131.7	-835.8	3,203.2	0.00	0.00	0.00
15,900.0	90.00	359,55	12,610.0	3,231.7	-836.6	3,302.7	0.00	0.00	0.00
16,000.0	90.00	359.55	12,610.0	3,331.7	-837.3	3,402.2	0.00	0.00	0.00
16,100.0	90.00	359.55	12,610.0	3,431.7	-838.1	3,501.7	0.00	0.00	0.00
16,200.0	90.00	359,55	12,610.0	3,531.7	-838.9	3,601.2	0.00	0.00	0,00
16,300.0	90.00	359.55	12,610.0	3,631.7	-839.7	3,700.7	0.00	0.00	0.00
16,400.0 16,500.0	90.00 90.00	359,55 359,55	12,610.0 12,610.0	3,731.7 3,831.7	-840.5 -841.3	3,800.2 3,899.7	0.00 0.00	0.00 0.00	0.00 0.00
16,600.0	90.00	359.55	12,610.0	3,931.7	-842.0	3,999.2	0.00	0.00	0.00
16,700.0	90.00	359.55	12,610.0	4,031.6	-842.8	4,098.8	0.00	0.00	0.00
16,800.0 16,900.0	90 <u>.</u> 00 90 <u>.</u> 00	359.55 359.55	12,610.0 12,610.0	4,131.6 4,231.6	-843.6 -844.4	4,198.3 4,297.8	0.00 0.00	0.00 0.00	0.00 0.00
16,900.0	90.00	359.55 359.55	12,610.0	4,231.6 4,331.6	-844.4 -845.2	4,297.8 4.397.3	0.00	0.00	0.00
17,000.0	90.00	359.55 359.55	12,610.0	4,331.6 4,431.6	-845.2 -845.9	4,397.3 4,496.8	0.00	0.00	0.00
17,200,0	90.00	359,55	12,610,0	4,531.6	-846.7	4,596.3	0,00	0.00	0,00
17,300.0	90.00	359,55	12,610,0	4,631.6	-847.5	4,695.8	0.00	0.00	0,00
17,400.0 17,500.0	90.00 90.00	359,55	12,610,0 12,610,0	4,731,6	-848.3	4,795.3	0.00 0.00	0,00 0,00	0.00 0.00
17,500.0	90.00	359,55 359,55	12,610.0	4,831,6 4,931,6	-849.1 -849.8	4,894.8 4,994.3	0.00	0,00	0.00
17,700.0	90.00	359.55	12,610.0	5,031.6	-850.6	5,093.8	0.00	0.00	0.00
17,800.0	90.00	359.55	12,610.0	5,131.6	-851.4	5,193.3	0.00	0.00	0.00
17,900.0	90.00	359.55	12,610.0	5,231.6	-852.2	5,292.8	0.00	0.00	0.00
18,000.0	90.00 90.00	359.55	12,610.0	5,331.6	-853.0 -853.7	5,392.3	0.00 0.00	0.00 0.00	0.00
18,100.0		359.55	12,610.0	5,431.6		5,491.8			0.00
18,200.0	90.00	359,55	12,610.0	5,531.6	-854.5	5,591.3	0,00	0.00	0,00
18,300.0	90.00	359,55	12,610.0	5,631.6	-855.3	5,690.8	0.00	0.00	0,00
18,400.0	90.00	359,55	12,610.0	5,731.6	-856.1	5,790.3	0.00	0.00	0,00
18,500.0 18,600.0	90.00 90.00	359,55 359,55	12,610,0 12,610,0	5,831.6 5,931.6	-856.9 -857.6	5,889.8 5,989.3	0.00 0.00	0.00 0.00	0.00 0.00
18,700.0	90.00	359.55	12,610.0	6,031.6	-858.4	6,088.8	0.00	0.00	0.00
18,800.0	90.00	359.55	12,610.0	6,131.6	-859.2	6,188.4	0.00	0.00	0.00
18,900.0	90.00	359.55	12,610.0	6,231.6	-860.0	6,287.9	0.00	0.00	0.00
19,000.0 19,100.0	90.00 90.00	359.55 359.55	12,610.0 12,610.0	6,331.6 6,431.6	-860.8 -861.5	6,387.4 6,486.9	0.00 0.00	0.00 0.00	0.00 0.00
			•	,					
19,200.0	90.00	359,55	12,610.0	6,531.6	-862.3	6,586.4	0.00	0.00	0,00
19,300.0	90.00	359,55	12,610.0	6,631.6	-863.1	6,685.9	0,00	0.00	0.00
19,400.0	90.00	359.55 359.55	12,610.0	6,731.6	-863.9 864.7	6,785.4	0.00	0.00	0.00
19,500.0 19,600.0	90 . 00 90 . 00	359,55 359,55	12,610.0 12,610.0	6,831.6 6,931.6	-864.7 -865.4	6,884.9 6,984.4	0.00 0.00	0.00 0.00	0.00 0.00
19,700.0	90.00	359.55	12,610.0	7,031.6	-866.2	7,083.9	0.00	0.00	0.00
19,800.0	90.00	359.55	12,610.0	7,131.6	-867.0	7,183.4	0.00	0.00	0.00
19,900.0	90.00	359.55	12,610.0	7,231.6	-867.8	7,282.9	0.00	0.00	0.00
20,000.0 20,100.0	90 <u>.</u> 00 90 <u>.</u> 00	359.55 359.55	12,610.0 12,610.0	7,331.5 7,431.5	-868.6 -869.3	7,382.4 7,481.9	0.00 0.00	0.00 0.00	0.00 0.00
20,200.0	90.00	359.55	12,610.0	7,531.5	-870.1	7,581.4	0.00	0.00	0.00
20,300.0	90.00	359,55	12,610.0	7,631.5	-870.9	7,680.9	0.00	0.00	0.00
20,400.0	90.00	359.55	12,610.0	7,731.5	-871.7	7,780.4	0.00	0.00	0.00
20,500.0	90.00	359,55 350,55	12,610,0	7,831.5	-872.5	7,879.9 7,070.4	0.00	0.00	0,00
20,600.0	90.00	359,55	12,610,0	7,931,5	-873.2	7,979.4	0,00	0,00	0,00
20,700.0	90.00	359.55	12,610.0	8,031.5	-874.0	8,078.9	0.00	0.00	0.00
20,782.7	90.00	359.55	12,610.0	8,114.3	-874.7	8,161.3	0.00	0.00	0.00

Database:HobbsCompany:Mewbourne Oil CompanyProject:Lea County, New Mexico NAD 83Site:Paduca 7/6 W2HA Fed #2H

BHL: 100' FNL & 1310' FEL (Sec 6)

Well: Sec 7, T26S, R32E

Design: Design #1

Local Co-ordinate Reference:

TVD Reference:
MD Reference:
North Reference:

Survey Calculation Method:

Site Paduca 7/6 W2HA Fed #2H

WELL @ 3255.0usft (Original Well Elev) WELL @ 3255.0usft (Original Well Elev)

Grid

Minimum Curvature

Planned Survey

Wellbore:

Measured Vertical Vertical Dogleg Build Turn Depth Inclination Azimuth Depth +N/-S +E/-W Section Rate Rate Rate (usft) (°/100usft) (°/100usft) (°/100usft) (usft) (usft) (°) (°) (usft) (usft)

BHL: 100' FNL & 1310' FEL (Sec 6)

Design Targets									
Target Name - hit/miss target - Shape	Dip Angle (°)	Dip Dir. (°)	TVD (usft)	+N/-S (usft)	+E/-W (usft)	Northing (usft)	Easting (usft)	Latitude	Longitude
SHL: 2465' FSL & 500' F - plan hits target cent - Point	0.00 er	0.00	0.0	0.0	0.0	385,027.40	735,239.50	32.0569749	-103.7074370
KOP: 2198' FSL & 1310' - plan hits target cent - Point	0.00 er	0.00	12,037.0	-270.4	-809.2	384,757.03	734,430.25	32.0562446	-103.7100541
BHL: 100' FNL & 1310' F - plan hits target cent - Point	0.00 er	0.00	12,610.0	8,114.3	- 874 <u>.</u> 7	393,141.67	734,364.83	32.0792934	-103.7101090
FTP/LP: 2571' FNL & 13 - plan hits target cent - Point	0.00 er	0.00	12,610.0	302.6	- 813.7	385,330.00	734,425.78	32.0578196	- 103.7100579

Operator Name: Mewbourne Oil Company	Property Name: Paduca 7/6 W2HA Fed	Well Number 2H
--------------------------------------	---------------------------------------	-------------------

Kick Off Point (KOP)

UL [Section 7	Township 26S	Range 32E	Lot	Feet 2198	From N/S	Feet 1310	From E/W	County Lea
Latitu					Longitude				NAD
32.	05624	146			-103.71	100541			83

First Take Point (FTP)

UL H	Section 7	Township 26S	Range 32E	Lot	Feet 2571	From N/S	Feet 1310	From E/W	County Lea
Latitu 32.	ode 05781	196			Longitude -103.71	00579			NAD 83

Last Take Point (LTP)

UL A	Section 6	Township 26S	Range 32E	Lot	Feet 100	From N/S	Feet 1310	From E/W	County Lea
Latitu 32.	^{de} 07929	934			Longitud	.71010	81		NAD 83

Is this well the defining well fo	or the Horizontal Spacing Unit?	N
Is this well an infill well?	Υ	

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

API#			
Operator Name:	pany	Property Name:	Well Number
Mewbourne Oil Com		Paduca 7/6 W2GB Fed	1H

KZ 06/27/2018

PECOS DISTRICT DRILLING CONDITIONS OF APPROVAL

OPERATOR'S NAME: MEWBOURNE OIL COMPANY
WELL NAME & NO.: PADUCA 7/6 W2HA FED 2H
SURFACE HOLE FOOTAGE: 2465'/S & 500'/E
BOTTOM HOLE FOOTAGE 100'/N & 1310'/E
SURFACE LOCATION: I, Section 7, T.26 S., R.32 E. NMP.
COUNTY: Lea County, New Mexico

COA

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

A. HYDROGEN SULFIDE

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

B. CASING

Primary Casing Design:

- 1. The 13-3/8 inch surface casing shall be set at approximately 1,075 ft. (a minimum of 25 feet (Lea County) into the Rustler Anhydrite and above the salt) and cemented to the surface.
 - a. If cement does not circulate to the surface, the appropriate BLM office shall be notified and a temperature survey utilizing an electronic type temperature survey with surface log readout will be used or a cement bond log shall be run to verify the top of the cement. Temperature survey will be run a minimum of six hours after pumping cement and ideally between 8-10 hours after completing the cement job.

- b. Wait on cement (WOC) time for a primary cement job will be a minimum of **8** hours or **500** psi compressive strength, whichever is greater. (This is to include the lead cement)
- c. Wait on cement (WOC) time for a remedial job will be a minimum of 4 hours after bringing cement to surface or 500 psi compressive strength, whichever is greater.
- d. If cement falls back, remedial cementing will be done prior to drilling out that string.
- 2. The 9-5/8 inch intermediate casing shall be set at approximately 4,250 ft. The minimum required fill of cement behind the 9-5/8 inch intermediate casing is:
 - Cement to surface. If cement does not circulate see B.1.a, c-d above. Wait on cement (WOC) time for a primary cement job is to include the lead cement slurry due to cave/karst or potash.
 - ❖ In Medium <u>Cave/Karst Areas</u> if cement does not circulate to surface on the first two casing strings, the cement on the 3rd casing string must come to surface.

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

3. Operator has proposed to set production casing at approximately 12,780 ft. MD. The minimum required fill of cement behind the 7 in. production casing is:

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

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

- a. First stage to DV tool: Cement to circulate. If cement does not circulate off the DV tool, contact the appropriate BLM office before proceeding with second stage cement job.
- b. Second stage above DV tool:
 - Operator shall provide method of verification. If cement does not circulate, contact the appropriate BLM office. Wait on cement (WOC) time for a primary cement job is to include the lead cement slurry due to cave/karst, potash.

Note: Excess cement for 2nd stage (from DV tool to 4,050 ft.) is below CFO's recommendation of %25. More cement might be needed.

- 4. The minimum required fill of cement behind the 4-1/2 in. production liner is:
 - Cement should tie-back at least 100 feet into previous casing string. Operator shall provide method of verification.

C. PRESSURE CONTROL

- 1. Variance approved to use **flex line** from BOP to choke manifold. Manufacturer's specification to be readily available. No external damage to flex line. Flex line to be installed as straight as possible (no hard bends).
- 2. Operator has proposed 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 10,000 (10M) psi. Variance granted to use a 5M annular preventer with 10M BOP/BOPE. Before drilling out surface casing shoe, BOP/BOPE and annular preventer must 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 43 CFR 3172 must be followed.

GENERAL REQUIREMENTS

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

- a. Spudding well (minimum of 24 hours)
- b. Setting and/or Cementing of all casing strings (minimum of 4 hours)
- c. BOPE tests (minimum of 4 hours)
 - ⊠ Eddy County
 Call the Carlsbad Field Office, 620 East Greene St., Carlsbad, NM 88220, (575) 361-2822
 - Lea County

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

- 1. Unless the production casing has been run and cemented or the well has been properly plugged, the drilling rig shall not be removed from over the hole without prior approval.
 - a. In the event the operator has proposed to drill multiple wells utilizing a skid/walking rig. Operator shall secure the wellbore on the current well, after installing and testing the wellhead, by installing a blind flange of like pressure rating to the wellhead and a pressure gauge that can be monitored while drilling is performed on the other well(s).
 - b. When the operator proposes to set surface casing with Spudder Rig
 - Notify the BLM when moving in and removing the Spudder Rig.
 - Notify the BLM when moving in the 2nd Rig. Rig to be moved in within 90 days of notification that Spudder Rig has left the location.
 - BOP/BOPE test to be conducted per 43 CFR part 3170 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. The record of the drilling rate along with the GR/N well log run from TD to surface (horizontal well vertical portion of hole) shall be submitted to the BLM office as well as all other logs run on the borehole 30 days from completion. If available, a digital copy of the logs is to be submitted in addition to the paper copies. The Rustler top and top and bottom of Salt are to be recorded on the Completion Report.

A. CASING

- 1. Changes to the approved APD casing program need prior approval if the items substituted are of lesser grade or different casing size or are Non-API. The Operator can exchange the components of the proposal with that of superior strength (i.e. changing from J-55 to N-80, or from 36# to 40#). Changes to the approved cement program need prior approval if the altered cement plan has less volume or strength or if the changes are substantial (i.e. Multistage tool, ECP, etc.). The initial wellhead installed on the well will remain on the well with spools used as needed.
- 2. Wait on cement (WOC) for Potash Areas: After cementing but before commencing any tests, the casing string shall stand cemented under pressure until both of the following conditions have been met: 1) cement reaches a minimum compressive strength of 500 psi for all cement blends, 2) until cement has been in place at least 24

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

B. PRESSURE CONTROL

- 1. All blowout preventer (BOP) and related equipment (BOPE) shall comply with well control requirements as described in 43 CFR part 3170 and API RP 53 Sec. 17.
- 2. If a variance is approved for a flexible hose to be installed from the BOP to the choke manifold, the following requirements apply: The flex line must meet the requirements of API 16C. Check condition of flexible line from BOP to choke manifold, replace if exterior is damaged or if line fails test. Line to be as straight as possible with no hard bends and is to be anchored according to Manufacturer's requirements. The flexible hose can be exchanged with a hose of equal size and equal or greater pressure rating. Anchor requirements, specification sheet and hydrostatic pressure test certification matching the hose in service, to be onsite for review. These documents shall be posted in the company man's trailer and on the rig floor.

- 3. 5M or higher system requires an HCR valve, remote kill line and annular to match. The remote kill line is to be installed prior to testing the system and tested to stack pressure.
- 4. If the operator has proposed a multi-bowl wellhead assembly in the APD. The following requirements must be met:
 - a. Wellhead shall be installed by manufacturer's representatives, submit documentation with subsequent sundry.
 - b. If the welding is performed by a third party, the manufacturer's representative shall monitor the temperature to verify that it does not exceed the maximum temperature of the seal.
 - c. Manufacturer representative shall install the test plug for the initial BOP test.
 - d. Whenever any seal subject to test pressure is broken, all the tests in 43 CFR 3172.6(b)(9) must be followed.
 - e. If the cement does not circulate and one inch operations would have been possible with a standard wellhead, the well head shall be cut off, cementing operations performed and another wellhead installed.
- 5. The appropriate BLM office shall be notified a minimum of 4 hours in advance for a representative to witness the tests.
 - a. In a water basin, for all casing strings utilizing slips, these are to be set as soon as the crew and rig are ready and any fallback cement remediation has been done. The casing cut-off and BOP installation can be initiated four hours after installing the slips, which will be approximately six hours after bumping the plug. For those casing strings not using slips, the minimum wait time before cut-off is eight hours after bumping the plug. BOP/BOPE testing can begin after cut-off or once cement reaches 500 psi compressive strength (including lead cement), whichever is greater. However, if the float does not hold, cut-off cannot be initiated until cement reaches 500 psi compressive strength (including lead when specified).
 - b. In potash areas, for all casing strings utilizing slips, these are to be set as soon as the crew and rig are ready and any fallback cement remediation has been done. For all casing strings, casing cut-off and BOP installation can be initiated at twelve hours after bumping the cement plug. The BOPE test can be initiated after bumping the cement plug with the casing valve open. (only applies to single stage cement jobs, prior to the cement setting up.)
 - c. 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 3170 subpart

3172 with the pressure not to exceed 70% of the burst rating for the casing. Any test against the casing must meet the WOC time for water basin (8 hours) or potash (24 hours) or 500 pounds compressive strength, whichever is greater, prior to initiating the test (see casing segment as lead cement may be critical item).

- d. The test shall be run on a 5000 psi chart for a 2-3M BOP/BOP, on a 10000 psi chart for a 5M BOP/BOPE and on a 15000 psi chart for a 10M BOP/BOPE. If a linear chart is used, it shall be a one hour chart. A circular chart shall have a maximum 2 hour clock. If a twelve hour or twenty-four hour chart is used, tester shall make a notation that it is run with a two hour clock.
- e. The results of the test shall be reported to the appropriate BLM office.
- f. All tests are required to be recorded on a calibrated test chart. A copy of the BOP/BOPE test chart and a copy of independent service company test will be submitted to the appropriate BLM office.
- g. The BOP/BOPE test shall include a low pressure test from 250 to 300 psi. The test will be held for a minimum of 10 minutes if test is done with a test plug and 30 minutes without a test plug. This test shall be performed prior to the test at full stack pressure.
- h. BOP/BOPE must be tested by an independent service company within 500 feet of the top of the Wolfcamp formation if the time between the setting of the intermediate casing and reaching this depth exceeds 20 days. This test does not exclude the test prior to drilling out the casing shoe as per 43 CFR 3170 subpart 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 08/07/2023

Hydrogen Sulfide Drilling Operations Plan Mewbourne Oil Company

1. General Requirements

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

2. Hydrogen Sulfide Training

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

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

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

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

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

3. Hydrogen Sulfide Safety Equipment and Systems

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

1. Well Control Equipment

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

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

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

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

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

4. <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
2	Bradley Bishop	575-390-6838
Drilling Foreman	Wesley Noseff	575-441-0729

Operator Name: MEWBOURNE OIL COMPANY

Well Name: PADUCA 7/6 W2HA FED Well Number: 2H

Disposal location description: City of Carlsbad Water Treatment facility

Waste type: GARBAGE

Waste content description: Garbage & Trash

Amount of waste: 1500 pounds

Waste disposal frequency: One Time Only

Safe containment description: Enclosed trash trailer

Safe containment attachment:

Waste disposal type: HAUL TO COMMERCIAL Disposal location ownership: PRIVATE

FACILITY

Disposal type description:

Disposal location description: Waste Management facility in Carlsbad.

Reserve Pit

Reserve Pit being used? NO

Temporary disposal of produced water into reserve pit? NO

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

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

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

Reserve pit liner

Reserve pit liner specifications and installation description

Cuttings Area

Cuttings Area being used? NO

Are you storing cuttings on location? N

Description of cuttings location

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

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

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

WCuttings area liner

Cuttings area liner specifications and installation description

Operator Name: MEWBOURNE OIL COMPANY

Well Name: PADUCA 7/6 W2HA FED Well Number: 2H

Section 8 - Ancillary

Are you requesting any Ancillary Facilities?: N

Ancillary Facilities

Comments:

Section 9 - Well Site

Well Site Layout Diagram:

Paduca_7_6_W2HA_Fed_Com_2H_WellSiteLayout_20220922134610.pdf

Comments: NONE

Section 10 - Plans for Surface Reclamation

Type of disturbance: New Surface Disturbance Multiple Well Pad Name: Paduca GB well pad

Multiple Well Pad Number: 6

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): 4.59 0.68 (acres): 3.91

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

0.07

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): (acres): 0

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

Total proposed disturbance: 4.66 Total interim reclamation: 0.68 Total long term disturbance: 3.91

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.

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

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

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

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

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

CONDITIONS

Action 387819

CONDITIONS

Operator:	OGRID:	
MEWBOURNE OIL CO	14744	
P.O. Box 5270	Action Number:	
Hobbs, NM 88241	387819	
	Action Type:	
	[C-101] BLM - Federal/Indian Land Lease (Form 3160-3)	

CONDITIONS

Created By	Condition	Condition Date
pkautz	Will require a File As Drilled C-102 and a Directional Survey with the C-104	10/16/2024
pkautz	Once the well is spud, to prevent ground water contamination through whole or partial conduits from the surface, the operator shall drill without interruption through the fresh water zone or zones and shall immediately set in cement the water protection string	10/16/2024
pkautz	Oil base muds are not to be used until fresh water zones are cased and cemented providing isolation from the oil or diesel. This includes synthetic oils. Oil based mud, drilling fluids and solids must be contained in a steel closed loop system	10/16/2024
pkautz	Cement is required to circulate on both surface and intermediate1 strings of casing	10/16/2024
pkautz	If cement does not circulate on any string, a CBL is required for that string of casing	10/16/2024