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. NMNM121942 **BUREAU OF LAND MANAGEMENT** APPLICATION FOR PERMIT TO DRILL OR REENTER 6. If Indian, Allotee or Tribe Name 7. If Unit or CA Agreement, Name and No. **✓** DRILL REENTER 1a. Type of work: Oil Well 1b. Type of Well: Gas Well Other 8. Lease Name and Well No. 1c. Type of Completion: Hydraulic Fracturing Single Zone ✓ Multiple Zone BONANZA 22/15 FED COM 874H 2. Name of Operator 9. API Well No. MEWBOURNE OIL COMPANY 30**-0**15-56637 10. Field and Pool, or Exploratory 3a. Address 3b. Phone No. (include area code) PURPLE SAGE;/WOLFCAMP P O BOX 5270, HOBBS, NM 88241 (575) 393-5905 4. Location of Well (Report location clearly and in accordance with any State requirements.*) 11. Sec., T. R. M. or Blk. and Survey or Area SEC 22/T25S/R28E/NMP At surface NWSW / 2570 FSL / 780 FWL / LAT 32.1152987 / LONG -104.0812152 At proposed prod. zone NENW / 330 FNL / 2180 FWL / LAT 32.1364539 / LONG -104.0766894 14. Distance in miles and direction from nearest town or post office* 12. County or Parish 13. State **EDDY** NM 10 miles 15. Distance from proposed* 16. No of acres in lease 17. Spacing Unit dedicated to this well 330 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 1062 feet / 18336 feet FED: NM1693 applied for, on this lease, ft. 21. Elevations (Show whether DF, KDB, RT, GL, etc.) 22. Approximate date work will start* 23. Estimated duration 2979 feet 06/04/2025 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 04/11/2025 (Electronic Submission) Title Regulatory Approved by (Signature) Date Name (Printed/Typed) (Electronic Submission) CODY LAYTON / Ph: (575) 234-5959 05/19/2025 Title Office Assistant Field Manager Lands & Minerals Carlsbad Field Office Application approval does not warrant or certify that the applicant holds legal or equitable title to those rights in the subject lease which would entitle the applicant to conduct operations thereon.

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.



Conditions of approval, if any, are attached.

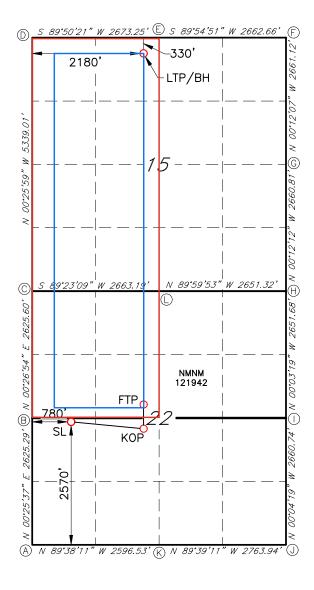
<u>C-102</u>	2		Ene	 rgy, Min	State of New erals & Natura	v Mexico Il Resources Dep	artment			Revised J	uly 9, 2024			
	Electronica					TION DIVISION				✓ Initial Submit	to1			
Via OC	CD Permittir	ıg				Submittal								
						Type:								
					WELL LOCAT	TION INFORMATIC)N							
API Nu	mber 30-015-	56637	Pool Code	9822	1,	Pool Name PURPLE SAGE; WOLFCAMP (GAS)								
Property 3	Code 37185		Property Na	ame	BONANZA	22/15 FED	СОМ		Well	Number	874H			
OGRID	No. 14 7	744	Operator Na	ame	MEWBOUR!	NE OIL COM	PANY		Grou	and Level Elevation	2979'			
Surface		State ☑ Fee □	⊥ ∃Tribal □ F	ederal		Mineral Owner:		e 🗌 Tribal	∠ Fe	deral				
					Surfa	ace Location								
UL	Section	Township	Range	Lot	Ft. from N/S	Ft. from E/W	Latitude		Long	gitude	County			
L	22	25S	28E		2570 FSL	780 FWL	32.1152	987°N	104	.0812152°W	EDDY			
				-	Bottom	Hole Location								
UL	Section	Township	Range	Lot	Ft. from N/S	Ft. from E/W	Latitude			gitude	County			
C	15	25S	28E		330 FNL	2180 FWL	32.1364	539°N	104	.0766894°W	EDDY			
		T		T		Ta				~ .				
I	ed Acres 80	Infill or Defin	-	Defining	g Well API	Overlapping Spacing Unit (Y/N) Consolidation Code C								
Order N		DEFIN.	ING				Y Well setbacks are under Common Ownership: ☐ Yes ☑ No							
Order IV	umoers.					Well setoucks an	e unuer commit	on o whersi	тр	1 1 0 1 1 1 1 1				
	<u> </u>		1	1	1	ff Point (KOP)	Γ	ı			ı			
UL	Section	Township	Range	Lot	Ft. from N/S	Ft. from E/W	Latitude	004037	_	gitude	County			
K	22	25S	28E		2397 FSL		32.1147	901°N	104	.0766999°W	EDDY			
T 11	G. dien	T1.:.		T	_	ake Point (FTP) Ft. from E/W Latitude Longitud				*, 1	Gt			
UL F	Section 22	Township 25S	Range 28E	Lot	Ft. from N/S 2318 FNL			6 4 QONT	_	.0766813°W	County EDDY			
r	22	200	LOE			ke Point (LTP)	J. 1103	040 N	104	.0700013 W	EDDI			
UL	Section	Township	Range	Lot	Ft. from N/S	Ft. from E/W	Latitude		Lone	gitude	County			
C	15	25S	28E	Lot	330 FNL	2180 FWL		539°N		.0766894°W	EDDY			
			1	<u> </u>	1 333 11.2	1.0100 1.11	0.002							
Unitized	d Area or Aı	rea of Uniform	Interest	Spacing	Unit Type 🛭 Hori	izontal 🗆 Vertical	Gro	und Floor l	Elevat	ion: 3007'				
										3001				
OPER/	ATOR CER	TIFICATIONS	3			SURVEYOR CER	TIFICATIONS	3						
					plete to the best of					as plotted from field no				
		ef, and , if the well ns a working inter				surveys made by me u my belief.	nder my supervisi	and that	the sar	ne is true and correct t	to the best of			
		bottom hole locat contract with an o			s well at this r unleased mineral	,		ME						
interest, e		ary pooling agreen			g order heretofore			40000	10 /	[4]				
	•	tal well, I further o	certify that this	organization	has received the			(19680	"					
consent of	of at least one i		f a working inter	rest or unleas	sed mineral interest		RO T	$\overline{}$						
interval v	vill be located	or obtained a con	npulsory pooling	g order from	the division.		1.00	PONAL S	SUP					
Joh	en Sn	rith	04/04/2	<u> 2025 </u>				ONAL	<u></u>					
John S	Smith		Date			Signature and Seal of Prot	fessional Surveyor	1						
Printed Na						Certificate Number	Date of Su	rvey						
 john.s	mith@m	ewbourne.	.com					^	n /4	0 /0005				
Email Add						19680		0	3/1	2/2025				

ACREAGE DEDICATION PLATS

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

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

BONANZA 22/15 FED COM #874H



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

<u>SURFACE LOCATION (SL)</u> <u>2570' FSL - 780' FWL SEC. 22</u> N: 405773.2 - E: 619393.3

> LAT: 32.1152987° N LONG: 104.0812152° W

KICK OFF POINT (KOP) 2397' FSL & 2180' FWL SEC. 22 N: 405591.5 - E: 620791.6 LAT: 32.1147901' N LON: 104.0766999' W

FIRST TAKE POINT (FTP)
2318' FNL & 2180' FWL SEC. 22
N: 406164.3 - E: 620796.0
LAT: 32.1163648' N
LONG: 104.0766813' W

LAST TAKE POINT/BOTTOM HOLE (LTP/BH) 330' FNL - 2180' FWL SEC. 15 N: 413472.3 - E: 620776.1

> LAT: 32.1364539* N LONG: 104.0766894* W

CORNER DATA
NAD 83 GRID — NM EAST

A: FOUND BRASS CAP "1940" N: 403208.9 - E: 618594.4

B: FOUND BRASS CAP "1940" N: 405833.5 - E: 618613.9

C: FOUND BRASS CAP "1940" N: 408458.4 - E: 618634.5

D: FOUND BRASS CAP "1940' N: 413796.1 - E: 618594.1

E: FOUND BRASS CAP "1940" N: 413803.6 - E: 621266.8

F: FOUND BRASS CAP "1940" N: 413807.6 - F: 623928.9

G: FOUND BRASS CAP "1940" N: 411147.1 - E: 623938.2

N: 41114/.1 - E: 623938.2 H: FOUND BRASS CAP "1940"

N: 408486.9 - E: 623947.7

I: FOUND BRASS CAP "1940" N: 405835.8 - E: 623950.2

J: FOUND BRASS CAP "1940" N: 403175.6 - E: 623953.6

K: FOUND BRASS CAP "1940" N: 403192.4 - E: 621190.3

L: FOUND BRASS CAP "1940" N: 408487.0 - E: 621296.9

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

		$\mathbf{N}_{\mathbf{k}}$	ATURAL G	SAS MANA	GEMENT P	LAN	
This Natural Gas	Manage	ement Plan mu	ıst be submitted v	vith each Applicat	tion for Permit to I	Orill (APD) for a	new or recompleted well.
				1 – Plan Do Effective May 25,			
I. Operator:	Mew	bourne C	Oil Co.	OGRID:	14744	Date:	4/21/25
II. Type: 💢 Orig	ginal □	Amendment	due to □ 19.15.27	7.9.D(6)(a) NMA	C □ 19.15.27.9.D((6)(b) NMAC □ (Other.
If Other, please de	escribe:						
III. Well(s): Provide recompleted from						wells proposed to	be drilled or proposed to
Well Name		API	ULSTR	Footages	Anticipated Oil BBL/D	Anticipated Gas MCF/D	Anticipated Produced Water BBL/D
BONANZA 22/15 FED COM	M 874H		L 22 25S 28E	2570' FSL x 780' F	v/∟ 1000	10000	5000
					Y1-500 Y2-300 Y3-200	Y1-5000 Y2-3000 Y3-20	00 Y1-2500 Y2-1500 Y3-500
IV. Central Deliv V. Anticipated So	chedule	: Provide the	following inform	ation for each new	v or recompleted w		9.15.27.9(D)(1) NMAC] s proposed to be drilled or
Well Name		API	Spud Date	TD Reached Date	Completion Commencement		
BONANZA 22/15 FED COI	M 874H		6/4/25	6/22/25	7/22/25	8/6/2	5 8/7/25
VII. Operational Subsection A thro	l Practi ough F c	ces: 🛛 Attacl	n a complete deso NMAC.	cription of the act	tions Operator wil	l take to comply	at to optimize gas capture. with the requirements of tices to minimize venting

Section 2 - Enhanced Plan **EFFECTIVE APRIL 1, 2022**

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

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

IX. Anticipated Natural Gas Production:

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

X. Natural Gas Gathering System (NGGS):

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

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

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

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

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

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

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

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

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

Section 4 - Notices

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

other alternative beneficial uses approved by the division.

reinjection for enhanced oil recovery;

fuel cell production; and

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

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(g)

(h)

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

Signature:	Bradley Bishop
Printed Name:	BRADLEY BISHOP
Title:	REGULATORY MANAGER
E-mail Address:	BBISHOP@MEWBOURNE.COM
Date:	10/30/24
Phone:	575-393-5905
	OIL CONSERVATION DIVISION (Only applicable when submitted as a standalone form)
Approved By:	
Title:	
Approval Date:	
Conditions of Ap	proval:

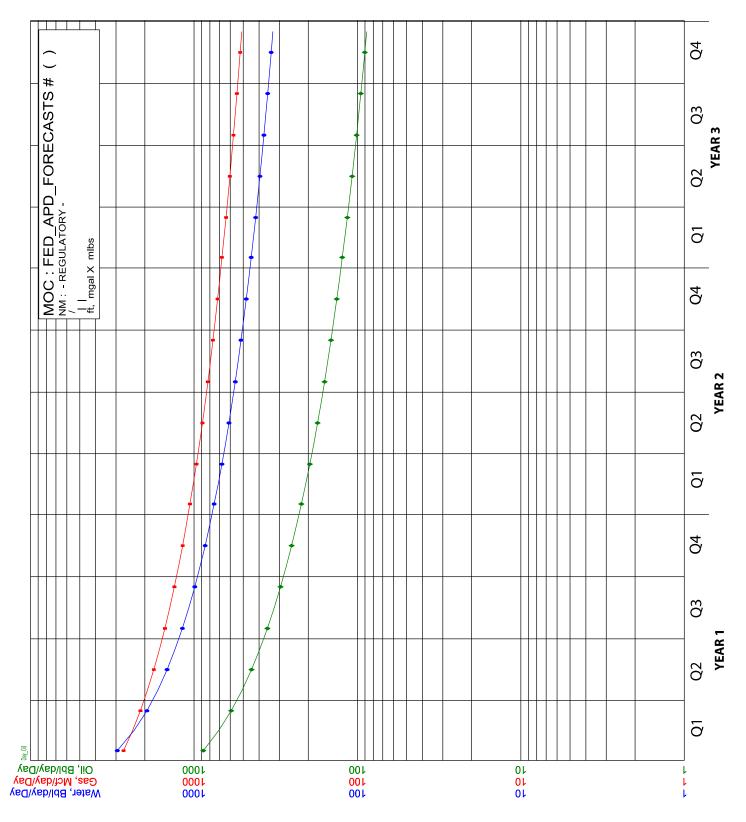
Mewbourne Oil Company

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.



Highlighted data



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

Drilling Plan Data Report

APD ID: 10400104317 **Submission Date:** 04/11/2025

Operator Name: MEWBOURNE OIL COMPANY

Well Name: BONANZA 22/15 FED COM Well Number: 874H

Well Type: OIL WELL

reflects the most recent changes

Well Work Type: Drill Show Final Text

Section 1 - Geologic Formations

Formation			True Vertical			Mineral Resources	Producing
ID	Formation Name	Elevation		Depth	Lithologies		Formatio
15646935	UNKNOWN	3515	28	28	OTHER : Topsoil	NONE	N
15646946	TOP SALT	2627	888	888	SALT	NONE	N
15646947	BASE OF SALT	1173	2342	2342	SALT	NONE	N
15646953	LAMAR	982	2533	2533	DOLOMITE, LIMESTONE	NATURAL GAS, OIL	N
15646954	BELL CANYON	940	2575	2575	SANDSTONE	NATURAL GAS, OIL	N
15646955	CHERRY CANYON	76	3439	3439	SANDSTONE	NATURAL GAS, OIL	N
15646956	MANZANITA	-74	3589	3589	LIMESTONE	NATURAL GAS, OIL	N
15646958	BRUSHY CANYON LOWER	-2480	5995	5995	SANDSTONE	NATURAL GAS, OIL	N
15646957	BONE SPRING	-2775	6290	6290	LIMESTONE	NATURAL GAS, OIL	N
15646944	BONE SPRING 1ST	-3654	7169	7169	SANDSTONE	NATURAL GAS, OIL	Y
15646945	BONE SPRING 2ND	-4421	7936	7936	SANDSTONE	NATURAL GAS, OIL	Y
15646951	BONE SPRING 3RD	-5525	9040	9040	SANDSTONE	NATURAL GAS, OIL	Y
15646952	WOLFCAMP	-5906	9421	9421	LIMESTONE, SANDSTONE, SHALE	NATURAL GAS, OIL	Y

Section 2 - Blowout Prevention

Well Name: BONANZA 22/15 FED COM Well Number: 874H

Pressure Rating (PSI): 5M Rating Depth: 18336

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 the choke manifold. See attached for hydrostatic test chart. Anchors are not required by manufacturer. Variance is requested to use a multi bowl wellhead. Variance is requested to perform break testing according to attached procedure. If a breaktesting variance is approved & incorporated, API Standard 53 will be incorporated and testing annular BOP to 70% of RWP or 100% of MASP, whichever is greater, will be performed.

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

Choke Diagram Attachment:

5M BOPE Choke Diagram 20250404104502.pdf

Flex_Line_Specs_API_16C_20250404104507.pdf

BOP Diagram Attachment:

5M_BOPE_Schematic_20250404104518.pdf

Multibowl_5K_WH_Schematic_20250404104527.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	Z	0	475	0	475	2979	2504	475	H-40	48	ST&C	3.62	8.14	DRY	14.1 2	DRY	23.7
2		12 . 2 5	9.625	NEW	API	N	0	2475	0	2475		504	2475	J-55	36	LT&C	1.54	2.68	DRY	5.08	DRY	6.33
3	PRODUCTI ON	8.75	7.0	NEW	API	N	0	10128	0	10021	3542	-7042	10128	P- 110	26	LT&C	1.23	1.97	DRY	2.63	DRY	3.15
4	LINER	6.12 5	4.5	NEW	API	N	9928	18336	9813	10622	-6834	-7643	8408	P- 110	13.5	LT&C	1.68	1.95	DRY	2.98	DRY	3.72

Casing Attachments

Well Name: BONANZA 22/15 FED COM Well Number: 874H

Casing ID: 1

String

SURFACE

Inspection Document:

Spec Document:

Tapered String Spec:

Casing Design Assumptions and Worksheet(s):

13.375in_48__H40_STC_Csg_20250404104635.pdf

Casing ID: 2

String

INTERMEDIATE

Inspection Document:

Spec Document:

Tapered String Spec:

Casing Design Assumptions and Worksheet(s):

9.625in_36__J55_LTC_Csg_20250404104750.pdf

Casing ID: 3

String

PRODUCTION

Inspection Document:

Spec Document:

Tapered String Spec:

Casing Design Assumptions and Worksheet(s):

7in_26__P110_LTC_Csg_20250404104813.pdf

Well Name: BONANZA 22/15 FED COM Well Number: 874H

Casing Attachments

Casing ID: 4

String

LINER

Inspection Document:

Spec Document:

Tapered String Spec:

Casing Design Assumptions and Worksheet(s):

4.5in_13.5__P110_LTC_Csg_20250404104854.pdf

Section 4 - Cement

String Type	Lead/Tail	Stage Tool Depth	Top MD	Bottom MD	Quantity(sx)	Yield	Density	Cu Ft	Excess%	Cement type	Additives
SURFACE	Lead		0	287	190	2.12	12.5	410	100	Class C	Salt, Gel, Extender, LCM
SURFACE	Tail		287	475	200	1.34	14.8	268	100	Class C	Retarder
INTERMEDIATE	Lead		0	1790	330	2.12	12.5	700	25	Class C	Salt, Gel, Extender, LCM
INTERMEDIATE	Tail	1	1790	2475	200	1.34	14.8	268	25	Class C	Retarder
PRODUCTION	Lead	3564	2275	2856	50	2.12	12.5	110	25	Class C	Salt, Gel, Extender, LCM, Defoamer
PRODUCTION	Tail		2856	3564	100	1.34	14.8	134	25	Class C	Retarder, Fluid Loss, Defoamer
PRODUCTION	Lead	3564	3564	7364	340	2.12	12.5	730	25	Class C	Salt, Gel, Extender, LCM, Defoamer
PRODUCTION	Tail		7364	1012 8	450	1.18	15.6	531	25	Class H	Retarder, Fluid Loss, Defoamer
LINER	Lead		9928	1833 6	540	1.85	13.5	1000	25	CLASS H	SALT GEL FLUID LOSS RETARDER DISPERSANT DEFOAMER ANTI

Well Name: BONANZA 22/15 FED COM Well Number: 874H

Section 5 - Circulating Medium

Mud System Type: Closed

Will an air or gas system be Used? NO

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

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

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

Describe the mud monitoring system utilized: Pason/PVT/visual monitoring

Circulating Medium Table

Top Depth	Bottom Depth	Mud Type	Min Weight (lbs/gal)	Max Weight (lbs/gal)	Density (lbs/cu ft)	Gel Strength (lbs/100 sqft)	РН	Viscosity (CP)	Salinity (ppm)	Filtration (cc)	Additional Characteristics
0	475	SPUD MUD	8.4	8.6	1	V					
475	2475	SALT SATURATED	10	10.2	,						
2475	1085 0	WATER-BASED MUD	8.6	9.7							
1085 0	1833 6	OIL-BASED MUD	10	11.5							

Well Name: BONANZA 22/15 FED COM Well Number: 874H

Section 6 - Test, Logging, Coring

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

No logs are planned based on well control or offset log information. Offset Well: Bonanza 22/15 Fed Com 554H

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: 6352 Anticipated Surface Pressure: 4021

Anticipated Bottom Hole Temperature(F): 165

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

H2S_Plan_20240718141454.pdf

Section 8 - Other Information

Proposed horizontal/directional/multi-lateral plan submission:

Bonanza_22_15_Fed_Com__874H_MOC_Dir_Plan_20250404105445.pdf Bonanza_22_15_Fed_Com__874H_MOC_Dir_Plot_20250404105450.pdf

Other proposed operations facets description:

Other proposed operations facets attachment:

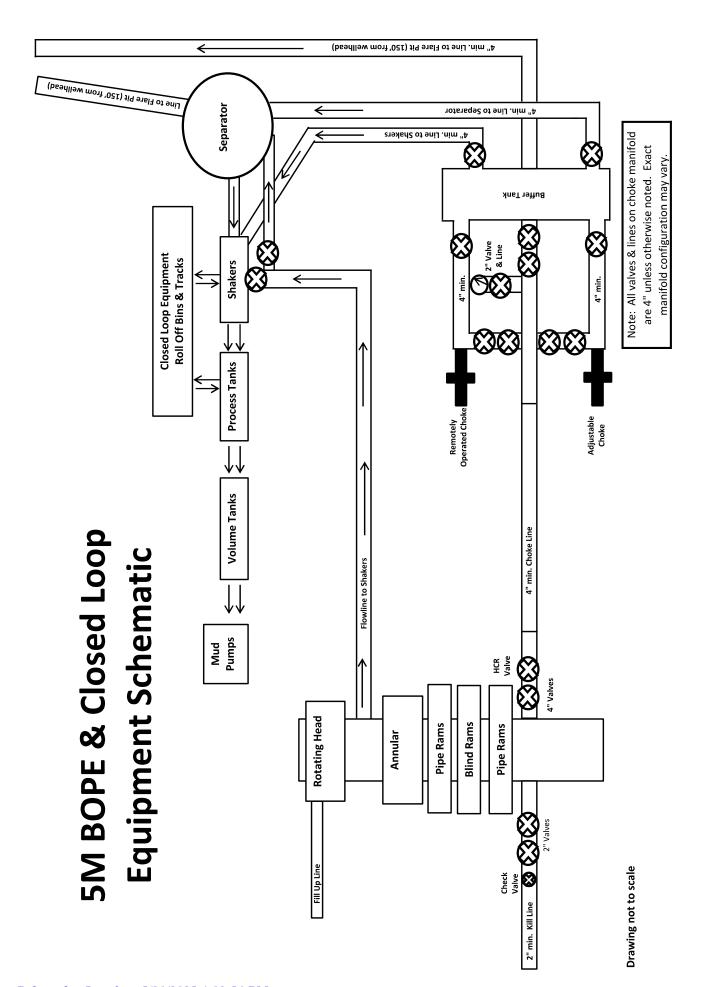
Bonanza_22_15_Fed_Com_874H_Drlg_Program_20250404105500.pdf Bonanza 22 15 Fed Com 874H NGMP 20250421162639.pdf

Other Variance request(s)?:

Other Variance attachment:

MOC_Break_Testing_Variance_20240723160325.pdf
MOC_Offline_Cementing_Variance_20240723160325.pdf







LUOHE LETONE HYDRAULICS TECHNOLOGY CO.,LTD

HYDROSTATIC TESTING REPORT

LTYY/QR-5.7.1-28

№: 230826015

Product Name	Cho	oke And Kill Hose	Stan	dard	API	Spec 16C 3 rd edition
Product Specification	n 3″×1000	0psi×60ft(18.29m	Serial 1	Number	-4	7660144
Inspection Equipmen	nt MTU	J-BS-1600-3200-E	Test n	edium		Water
Inspection Departme	nt (Q.C. Department	Inspect	on Date		2023.08.26
		Rate of le	ength change			
Standard requiremen	ts At working pr	essure, the rate of le	ngth change should n	ot more than	n ±2%	
Testing result	10000psi (69.0	MPa) ,Rate of leng	th change 0.7%			
		Hydrosta	ntic testing			
Standard requiremen			e initial pressure-hold d of not less than one			s than three minute
Testing result	15000psi (103	.5MPa), 3 min for the	he first time, 60 min	or the secon	nd time,	no leakage
Graph of pressure testi	ng:					रेले.सच्चि
	121 115621 115621 115621 115621 115	SIL21 22:00:		API Spec 10	4 (50.000,000,000)	oozess oosess o
		1		nspe		



LUOHE LETONE HYDRAULICS TECHNOLOGY CO.,LTD

CERTIFICATE OF QUALITY

LTYY/QR-5.7.1-19B

№: LT2023-126-002

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

Inspection Items				Inspection result	ds		
Appearance Checking				In accordance with API Spec 16C 3 rd edition			
Size and Lengths			In accordance with API Spec 16C 3 rd edition				
Dimensions and Tolerances			In accordar	nce with API Spec	16C 3 rd edition		
End Connections: 4-1/16"×10000psi Integral flange for sour gas service			In accordance with API Spec 6A 21st edition				
End Connections: 4-	End Connections: 4-1/16"×10000psi Integral flange for sour gas service			In accordance with API Spec 17D 3 rd edition			
	Hydrostatic Testing				In accordance with API Spec 16C 3 rd edition		
	product M	arking			In accordance with API Spec 16C 3 rd edition		
Inspection conclusion The inspected items n				ms m	eet standard requirer	ments of API Spec	16C 3 rd edition
Remarks							
Approver	Jian long (Chen	Auditor	1/1	nging Dong	Inspector	Zhansheng Wang



LUOHE LETONE HYDRAULICS TECHNOLOGY CO.,LTD

CERTIFICATE OF CONFORMANCE

№:LT230826016

Product Name: Choke And Kill Hose

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

Serial Number: 7660143~7660144

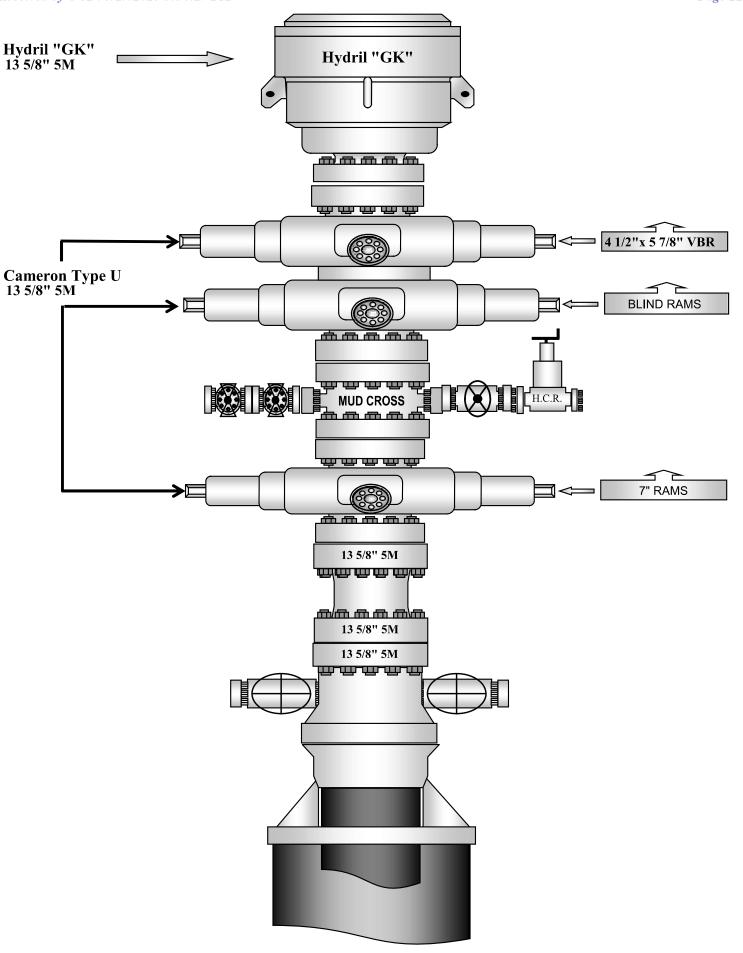
End Connections: 4-1/16"×10000psi Integral flange for sour gas service

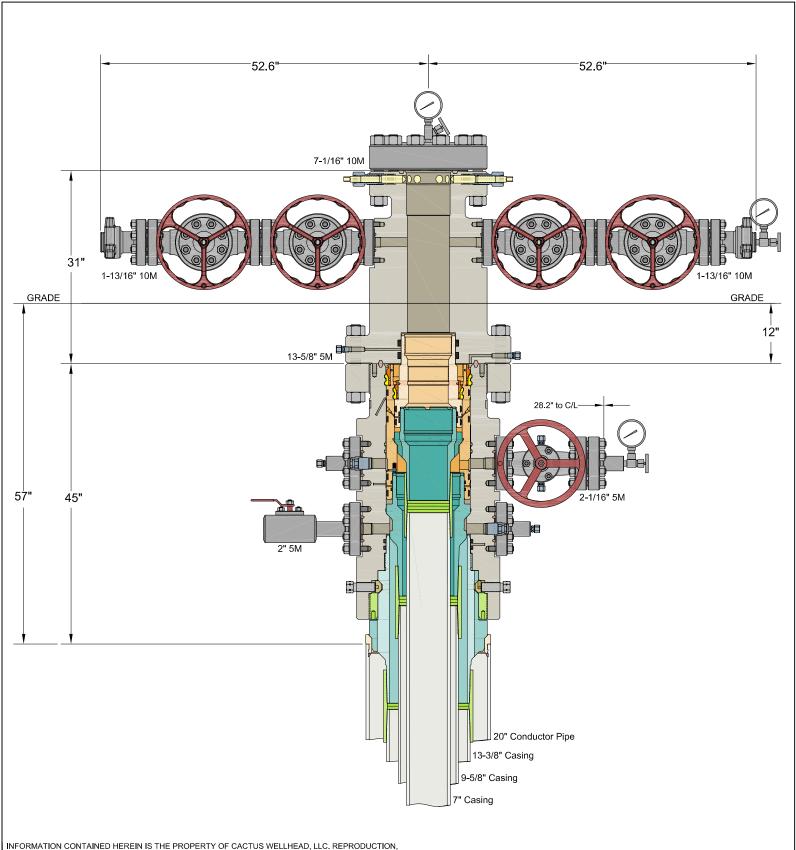
The Choke And Kill Hose assembly was produced by LUOHE LETONE HYDRAULICS TECHNOLOGY CO.,LTD. in Aug 2023, and inspected by LUOHE LETONE HYDRAULICS TECHNOLOGY CO.,LTD. according to API Spec 16C 3rd edition on Aug 26, 2023. The overall condition is good. This is to certify that the Choke And Kill Hose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

Jian long Chen

QC Manager:

Date: Aug 26, 2023





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CACTUS WELLHEAD LLC

20" x 13-3/8" x 9-5/8" x 7" MBU-3T-CFL-R-DBLO Wellhead System With 9-5/8" & 7" Fluted Mandrel Casing Hangers And 13-5/8" 5M x 7-1/16" 10M CTH-DBLHPS Tubing Head

ALL DIMENSIONS APPROXIMATE MEWBOURNE OIL COMPANY

DRAWN DLE 18APR22
APPRV

DRAWING NO. HBE0000660



API STC

 Coupling
 Pipe Body

 Grade: H40
 Grade: H40

 Body: 1st Band: Black

 1st Band: Black
 2nd Band:

 2nd Band: 3rd Band:

 3rd Band: 4th Band:

Outside Diameter	13.375 in.	Wall Thickness	0.330 in.	Grade	H40
Min. Wall Thickness	87.50 %	Pipe Body Drift	API Standard	Туре	Casing
Connection OD Option	Regular				

Pipe Body Data

Geometry			
Nominal OD	13,375 in.	Drift	12,559 in.
Wall Thickness	0.330 in.	Plain End Weight	46.02 lb/ft
Nominal Weight	48 lb/ft	OD Tolerance	API
Nominal ID	12.715 in.		

Performance	
SMYS	40,000 psi
Min UTS	60,000 psi
Body Yield Strength	541 x1000 lb
Min. Internal Yield Pressure	1730 psi
Collapse Pressure	740 psi
Max. Allowed Bending	14 °/100 ft

Connection Data

Geometry		Performance		Make-Up Torques	
Thread per In	8	Joint Strength	322 x1000 lb	Minimum Torque	2420 ft-lb
Connection OD	14.375 in.	Coupling Face Load	377 x1000 lb	Optimum Torque	3220 ft-lb
Hand Tight Stand Off	3.500 in.	Internal Pressure Capacity	1730 psi	Maximum Torque	4030 ft-lb

Notes

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

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

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

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■ Tenaris

API LTC

 Coupling
 Pipe Body

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

 Body: Bright Green
 1st Band: Bright Green

 1st Band: White
 2nd Band:

 2nd Band: 3rd Band:

 3rd Band: 4th Band:

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

Pipe Body Data

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

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

Connection Data

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

Notes

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

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

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

Pipe Body Data

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

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

Connection Data

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

Notes

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

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

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

Pipe Body Data

Geometry			
Nominal OD	4.500 in.	Drift	3.795 in.
Wall Thickness	0.290 in.	Plain End Weight	13.05 lb/ft
Nominal Weight	13.500 lb/ft	OD Tolerance	API
Nominal ID	3.920 in.		

Performance	
SMYS	110,000 psi
Min UTS	125,000 psi
Body Yield Strength	422 x1000 lb
Min. Internal Yield Pressure	12,410 psi
Collapse Pressure	10,690 psi
Max. Allowed Bending	112 °/100 ft

Connection Data

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

Notes

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

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SHL: 2570' FSL 780' FWL (Sec 22) BHL: 330' FNL 2180' FWL (Sec 15)

Well Location GL: 2979'

Point	Calls	Leases	Aliquot	Section	Township	Range	County	Lat	Long	TVD	MD
SHL	SHL: 2570' FSL & 780' FWL (Sec 22)	Fee	NWSW	22	25S	28E	Eddy	32.1152987	- 104.0812152	0'	0'
KOP	KOP: 2397' FSL & 2180' FWL (Sec 22)	Fee	NESW	22	25S	28E	Eddy	32.1147901	- 104.0766999	10,021'	10,128'
FTP	FTP/LP: 2318' FNL & 2180' FWL (Sec 22)	NMNM121942	SENW	22	25S	28E	Eddy	32.1163648	- 104.0766813	10,594'	11,028'
BHL	BHL: 330' FNL & 2180' FWL (Sec 15)	State	NENW	15	25S	28E	Eddy	32.1364539	- 104.0766894	10,622'	18,336'

GEOLOGY

Formation	Est. Top (TVD)	Lithology	Mineral Resources	Formation	Est. Top (TVD)	Lithology	Mineral Resources
Rustler	N/A	Dolomite/Anhydrite	Usable Water	Delaware (Lamar)	2533'	Limestone	Oil/Natural Gas
Castile				Bell Canyon	2575'	Sandstone	Oil/Natural Gas
Salt Top	888'	Salt	None	Cherry Canyon	3439'	Sandstone	Oil/Natural Gas
Marker Bed 126				Manzanita Marker	3589'	Limestone	Oil/Natural Gas
Salt Base	2342'	Salt	None	Basal Brushy Canyon	5995'	Sandstone	Oil/Natural Gas
Yates				Bone Spring	6290'	Limestone/Shale	Oil/Natural Gas
Seven Rivers				1st Bone Spring Carbonate	7118'	Limestone	Oil/Natural Gas
Queen				1st Bone Spring Sand	7169'	Sandstone	Oil/Natural Gas
Capitan				2nd Bone Spring Carbonate	7617'	Limestone	Oil/Natural Gas
Grayburg				2nd Bone Spring Sand	7936'	Sandstone	Oil/Natural Gas
San Andres				3rd Bone Spring Carbonate	8317'	Limestone	Oil/Natural Gas
Glorietta				3rd Bone Spring Sand	9040'	Sandstone	Oil/Natural Gas
Yeso				Wolfcamp	9421'	Shale/Sandstone/Limestone	Oil/Natural Gas

		Casing Progra	m Docion A			BLM Minimum Safety Factors	1.125	1.0	1.6 Dry	1.6 Dry
		Casing Frogra		BEN William Salety Factors	1.123	1.0	1.8 Wet	1.8 Wet		
Surface	17.5"	0'	0'	475'	475'	13.375" 48# H40 STC	3.62	8.14	14.12	23.73
Intermediate	12.25"	0'	0'	2475'	2475'	9.625" 36# J55 LTC	1.54	2.68	5.08	6.33
Production	8.75"	0'	0'	10128'	10021'	7" 26# P110 LTC	1.23	1.97	2.63	3.15
Liner	6.125"	9928'	9813'	18336'	10622'	4.5" 13.5# P110 LTC	1.68	1.95	2.98	3.72

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

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

SHL: 2570' FSL 780' FWL (Sec 22) BHL: 330' FNL 2180' FWL (Sec 15)

Design A - Cement Program

LEAD	190	12.5	2.12	0' - 287'	410	1000/	Class C: Salt, Gel, Extender, LCM
TAIL	200	14.8	1.34	287' - 475'	268	100%	Class C: Retarder
LEAD	330	12.5	2.12	0' - 1790'	700	259/	Class C: Salt, Gel, Extender, LCM
TAIL	200	14.8	1.34	1790' - 2475'	268	2376	Class C: Retarder
LEAD	340	12.5	2.12	3564' - 7364'	730	259/	Class C: Salt, Gel, Extender, LCM, Defoamer
TAIL	450	15.6	1.18	7364' - 10128'	531	2376	Class H: Retarder, Fluid Loss, Defoamer
				7''	DV Tool @ 3564'		
LEAD	50	12.5	2.12	2275' - 2856'	110		Class C: Salt, Gel, Extender, LCM, Defoamer
TAIL	100	14.8	1.34	2856' - 3564'	134	25%	Class C: Retarder, Fluid Loss, Defoamer
LEAD	540	13.5	1.85	9928' - 18336'	1000	25%	Class H: Salt, Gel, Fluid Loss, Retarder, Dispersant, Defoamer, Anti-
	TAIL LEAD TAIL LEAD TAIL LEAD TAIL LEAD TAIL	TAIL 200 LEAD 330 TAIL 200 LEAD 340 TAIL 450 LEAD 50 TAIL 100	TAIL 200 14.8 LEAD 330 12.5 TAIL 200 14.8 LEAD 340 12.5 TAIL 450 15.6 LEAD 50 12.5 TAIL 100 14.8	TAIL 200 14.8 1.34 LEAD 330 12.5 2.12 TAIL 200 14.8 1.34 LEAD 340 12.5 2.12 TAIL 450 15.6 1.18 LEAD 50 12.5 2.12 TAIL 100 14.8 1.34	TAIL 200 14.8 1.34 287 - 475' LEAD 330 12.5 2.12 0' - 1790' TAIL 200 14.8 1.34 1790' - 2475' LEAD 340 12.5 2.12 3564' - 7364' TAIL 450 15.6 1.18 7364' - 10128' T' LEAD 50 12.5 2.12 2275' - 2856' TAIL 100 14.8 1.34 2856' - 3564'	TAIL 200 14.8 1.34 287' - 475' 268 LEAD 330 12.5 2.12 0' - 1790' 700 TAIL 200 14.8 1.34 1790' - 2475' 268 LEAD 340 12.5 2.12 3564' - 7364' 730 TAIL 450 15.6 1.18 7364' - 10128' 531 TO V Tool @ 3564' LEAD 50 12.5 2.12 2275' - 2856' 110 TAIL 100 14.8 1.34 2856' - 3564' 134	TAIL 200 14.8 1.34 287' - 475' 268 100% LEAD 330 12.5 2.12 0' - 1790' 700 25% TAIL 200 14.8 1.34 1790' - 2475' 268 25% LEAD 340 12.5 2.12 3564' - 7364' 730 25% TAIL 450 15.6 1.18 7364' - 10128' 531 25% TO V Tool @ 3564' LEAD 50 12.5 2.12 2275' - 2856' 110 TAIL 100 14.8 1.34 2856' - 3564' 134 25%

Pressure Control Equipment

BOP installed and tested before drilling hole, in:	Size, in	System Rated WP Type		Туре				Tested to:	Rating Depth
		5M		Annular	X	2500#/3500#			
			В	lind Ram	X		I		
12.25	13.375	5M	P	ipe Ram	X	5000#	18,336'		
		SIVI	Do	ouble Ram		3000#			
		l	Other*				l		

^{*}Specify if additional ram is utilized.

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

Variance Request: A variance is requested for the use of a flexible choke line from the BOP to the choke manifold. See attached for hydrostatic test chart. Anchors are not required by manufacturer. Variance is requested to use a multi bowl wellhead. Variance is requested to perform break testing according to attached procedure. If a breaktesting variance is approved & incorporated, API Standard 53 will be incorporated and testing annular BOP to 70% of RWP or 100% of MASP, whichever is greater, will be performed.

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

Y	Formation integrity test will be performed per 43 CFR Part 3172. On Exploratory wells or on that portion of any well approved for a 5M BOPE system or greater, a pressure integrity test of each casing shoe shall be performed. Will be tested in accordance with 43 CFR Part 3172.
N	Mewbourne Oil Company request a variance to use a 5000 psi annular BOP with a 10,000 psi BOP stack.

Mud Program

Depth (MD)	Mud Wt., lb/gal	Mud Type
0' - 475'	8.4 - 8.6	Fresh Water
475' - 2475'	10.0 - 10.2	Brine
2475' - 10850'	8.6 - 9.7	Cut-Brine
100501 102261	10.0 11.5	ODM

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

What will be used to monitor the loss or gain of fluid?	Pason/PVT/Visual Monitoring
---	-----------------------------

SHL: 2570' FSL 780' FWL (Sec 22) BHL: 330' FNL 2180' FWL (Sec 15)

Logging and Testing Procedures

Loggin	g, Coring and Testing.
N	Will run GR/CNL from KOP (10128') to surface (horizontal well – vertical portion of hole). Stated logs run will be in the Completion Report and submitted to the
N	BLM.
Y	No logs are planned based on well control or offset log information. Offset Well: Bonanza 22/15 Fed Com #554H
N	Coring? If yes, explain:

Open & Cased Hole Logs Run In the Well

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

Drilling Conditions

Condition	Specify what type and where?
BH Pressure at deepest TVD	6352 psi
BH Temperature	165
Abnormal Temp, Pressure, or Geologic Hazards	No

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

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

	H2S is present
X	H2S Plan attached

SHL: 2570' FSL 780' FWL (Sec 22) BHL: 330' FNL 2180' FWL (Sec 15)

Other facets of operation

Mewbourne Oil Company also requests approval to implement additional designs as described below &/or in other attachments. BLM will be notified of elected design.

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

		Casing Duagua	m Dociem P		BLM Minimum Safety Factors	1.125	1.0	1.6 Dry	1.6 Dry	
	,	Casing Progra	iii Desigii B			BLM Minimum Salety Factors	1.125	1.0	1.8 Wet	1.8 Wet
Surface	17.5"	0'	0'	475'	475'	13.375" 48# H40 STC	3.62	8.14	14.12	23.73
Intermediate	12.25"	0'	0'	2475'	2475'	9.625" 36# J55 LTC	1.54	2.68	5.08	6.33
Production	8.75"	0'	0'	10850'	10567'	7" 26# P110 LTC	1.17	1.87	2.46	2.94
Liner	6.125"	10128'	10021'	18336'	10622'	4.5" 13.5# P110 LTC	1.68	1.95	3.05	3.81

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

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

Design B - Cement Program

13,375 in	LEAD	190	12.5	2.12	0' - 287'	410	100%	Class C: Salt, Gel, Extender, LCM
13.373 III	TAIL	200	14.8	1.34	287' - 475'	268	10076	Class C: Retarder
9.625 in	LEAD	330	12.5	2.12	0' - 1790'	700	25%	Class C: Salt, Gel, Extender, LCM
9.025 III	TAIL	200	14.8	1.34	1790' - 2475'	268	2370	Class C: Retarder
1st Stg 7 in	LEAD	320	12.5	2.12	3564' - 7134'	680	25%	Class C: Salt, Gel, Extender, LCM, Defoamer
18t Stg / III	TAIL	600	15.6	1.18	7134' - 10850'	708	2376	Class H: Retarder, Fluid Loss, Defoamer
					7''	DV Tool @ 3564'		
	LEAD	50	12.5	2.12	2275' - 2856'	110		Class C: Salt, Gel, Extender, LCM, Defoamer
2nd Stg 7 in	TAIL	100	14.8	1.34	2856' - 3564'	134	25%	Class C: Retarder, Fluid Loss, Defoamer
4.5 in	LEAD	520	13.5	1.85	10128' - 18336'	970	25%	Class H: Salt, Gel, Fluid Loss, Retarder, Dispersant, Defoamer, Anti-

Mewbourne Oil Company

Eddy County, New Mexico NAD 83 Bonanza 22/15 Fed Com #874H

Sec 22, T25S, R28E

SHL: 2570' FSL & 780' FWL (Sec 22) BHL: 330' FNL & 2180' FWL (Sec 15)

Plan: Design #1

Standard Planning Report

04 April, 2025

Database: Hobbs

Company: Mewbourne Oil Company
Project: Eddy County, New Mexico NAD 83
Site: Bonanza 22/15 Fed Com #874H

Well: Sec 22, T25S, R28E

Wellbore: BHL: 330' FNL & 2180' FWL (Sec 15)

Design: Design #1

Local Co-ordinate Reference:

TVD Reference: MD Reference: North Reference:

Survey Calculation Method:

Site Bonanza 22/15 Fed Com #874H WELL @ 3007.0usft (Original Well Elev) WELL @ 3007.0usft (Original Well Elev)

Grid

Minimum Curvature

Project Eddy County, New Mexico NAD 83

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

System Datum:

Ground Level

Site Bonanza 22/15 Fed Com #874H

 Site Position:
 Northing:
 405,773.20 usft of 19,393.30 usft of 1

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

Well Sec 22, T25S, R28E

 Well Position
 +N/-S
 0.0 usft
 Northing:
 405,773.20 usft
 Latitude:
 32.1152987

 +E/-W
 0.0 usft
 Easting:
 619,393.30 usft
 Longitude:
 -104.0812151

Position Uncertainty 0.0 usft Wellhead Elevation: 3,007.0 usft Ground Level: 2,979.0 usft

Grid Convergence: 0.13 °

Wellbore BHL: 330' FNL & 2180' FWL (Sec 15)

 Magnetics
 Model Name
 Sample Date
 Declination (°)
 Dip Angle (nT)
 Field Strength (nT)

 IGRF2010
 12/31/2014
 7.38
 59.91
 48,141.82446782

Design #1

Audit Notes:

Version:Phase:PROTOTYPETie On Depth:0.0

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

 0.0
 0.0
 0.0
 10.18

Plan Survey Tool Program Date 4/4/2025

Depth From Depth To

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

1 0.0 18,335.7 Design #1 (BHL: 330' FNL & 2180

Plan Sections Dogleg Measured Vertical Build Turn Depth Inclination **Azimuth** Depth +N/-S +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 0.00 475.0 0.00 0.00 475.0 0.0 0.0 0.00 0.00 0.00 0.00 915.2 8.80 97.40 913.4 -4.3 33.5 2.00 2.00 0.00 97.40 97.40 0.00 0.00 9,687.6 8.80 9.582.6 -177.4 1,364.8 0.00 0.00 1,398.3 0.00 10,021.0 -181.7 2.00 -2.00 10,127.8 0.00 0.00 180.00 KOP: 2397' FSL & 2 11,025.7 89.78 359.89 10,594.0 389.1 1,397.2 10.00 10.00 0.00 -0.11 89.78 359.89 10,622.0 7,699.1 1,382.8 0.00 0.00 0.00 0.00 BHL: 330' FNL & 21 18,335.7

Database: Hobbs

Company: Mewbourne Oil Company
Project: Eddy County, New Mexico NAD 83
Site: Bonanza 22/15 Fed Com #874H

Well: Sec 22, T25S, R28E

Wellbore: BHL: 330' FNL & 2180' FWL (Sec 15)

Design: Design #1

Local Co-ordinate Reference:

TVD Reference: MD Reference: North Reference:

Survey Calculation Method:

Site Bonanza 22/15 Fed Com #874H WELL @ 3007.0usft (Original Well Elev) WELL @ 3007.0usft (Original Well Elev)

Grid

Minimum Curvature

ned Survey										
Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)	
0.0	0.00	0.00	0.0	0.0	0.0	0.0	0.00	0.00	0.00	
SHL: 2570' FSL & 780' FWL (Sec 22)										
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	
475.0	0.00	0.00	475.0	0.0	0.0	0.0	0.00	0.00	0.00	
500.0	0.50	97.40	500.0	0.0	0.1	0.0	2.00	2.00	0.00	
600.0 700.0	2.50 4.50	97.40 97.40	600.0 699.8	-0.4 -1.1	2.7 8.8	0.1 0.4	2.00 2.00	2.00 2.00	0.00 0.00	
800.0	6.50	97.40 97.40	799.3	-1.1 -2.4	18.3	0.4	2.00	2.00	0.00	
900.0 915.2	8.50 8.80	97.40 97.40	898.4 913.4	-4.1 -4.3	31.2 33.5	1.5 1.6	2.00 2.00	2.00 2.00	0.00 0.00	
1,000.0	8.80	97.40 97.40	913.4	-4.3 -6.0	46.3	2.3	0.00	0.00	0.00	
1,100.0	8.80	97.40	1,096.1	-8.0	61.5	3.0	0.00	0.00	0.00	
1,200.0	8.80	97.40	1,194.9	-10.0	76.7	3.7	0.00	0.00	0.00	
1,300.0	8.80	97.40	1,293.7	-11.9	91.9	4.5	0.00	0.00	0.00	
1,400.0	8.80	97.40	1,392.6	-13.9	107.0	5.2	0.00	0.00	0.00	
1,500.0	8.80	97.40	1,491.4	-15.9	122.2	6.0	0.00	0.00	0.00	
1,600.0	8.80	97.40	1,590.2	-17.9	137.4	6.7	0.00	0.00	0.00	
1,700.0	8.80	97.40	1,689.0	-19.8	152.6	7.5	0.00	0.00	0.00	
1,800.0	8.80	97.40	1,787.8	-21.8	167.8	8.2	0.00	0.00	0.00	
1,900.0	8.80	97.40	1,886.7	-23.8	182.9	8.9	0.00	0.00	0.00	
2,000.0	8.80	97.40	1,985.5	-25.7	198.1	9.7	0.00	0.00	0.00	
2,100.0 2,200.0	8.80 8.80	97.40 97.40	2,084.3 2,183.1	-27.7 -29.7	213.3 228.5	10.4 11.2	0.00 0.00	0.00 0.00	0.00 0.00	
2,300.0 2,400.0	8.80 8.80	97.40 97.40	2,282.0 2,380.8	-31.7 -33.6	243.6 258.8	11.9 12.7	0.00 0.00	0.00 0.00	0.00 0.00	
2,500.0	8.80	97.40	2,479.6	-35.6	274.0	13.4	0.00	0.00	0.00	
2,600.0	8.80	97.40	2,578.4	-37.6	289.2	14.1	0.00	0.00	0.00	
2,700.0	8.80	97.40	2,677.2	-39.5	304.3	14.9	0.00	0.00	0.00	
2,800.0	8.80	97.40	2,776.1	-41.5	319.5	15.6	0.00	0.00	0.00	
2,900.0	8.80	97.40	2,874.9	-43.5	334.7	16.4	0.00	0.00	0.00	
3,000.0	8.80	97.40	2,973.7	-45.5	349.9	17.1	0.00	0.00	0.00	
3,100.0	8.80	97.40	3,072.5	-47.4	365.1	17.8	0.00	0.00	0.00	
3,200.0	8.80	97.40	3,171.4	-49.4	380.2	18.6	0.00	0.00	0.00	
3,300.0	8.80	97.40	3,270.2	-51.4	395.4	19.3	0.00	0.00	0.00	
3,400.0	8.80	97.40	3,369.0	-53.4	410.6	20.1	0.00	0.00	0.00	
3,500.0	8.80	97.40	3,467.8	-55.3	425.8	20.8	0.00	0.00	0.00	
3,600.0 3,700.0	8.80 8.80	97.40 97.40	3,566.6 3,665.5	-57.3 -59.3	440.9 456.1	21.6 22.3	0.00 0.00	0.00 0.00	0.00 0.00	
3,800.0	8.80	97.40	3,764.3	-61.2	471.3	23.0	0.00	0.00	0.00	
3,900.0	8.80	97.40 97.40	3,764.3 3,863.1	-63.2	486.5	23.8	0.00	0.00	0.00	
4,000.0	8.80	97.40	3,961.9	-65.2	501.6	24.5	0.00	0.00	0.00	
4,100.0	8.80	97.40	4,060.8	-67.2	516.8	25.3	0.00	0.00	0.00	
4,200.0	8.80	97.40	4,159.6	-69.1	532.0	26.0	0.00	0.00	0.00	
4,300.0	8.80	97.40	4,258.4	-71.1	547.2	26.7	0.00	0.00	0.00	
4,400.0	8.80	97.40	4,357.2	-73.1	562.3	27.5	0.00	0.00	0.00	
4,500.0	8.80	97.40	4,456.0	-75.0	577.5	28.2	0.00	0.00	0.00	
4,600.0	8.80	97.40	4,554.9	-77.0	592.7	29.0	0.00	0.00	0.00	
4,700.0	8.80	97.40	4,653.7	-79.0	607.9	29.7	0.00	0.00	0.00	
4,800.0	8.80	97.40	4,752.5	-81.0	623.1	30.5	0.00	0.00	0.00	
4,900.0	8.80	97.40	4,851.3	-82.9	638.2	31.2	0.00	0.00	0.00	
5,000.0	8.80	97.40	4,950.1	-84.9	653.4	31.9	0.00	0.00	0.00	

Database: Company:

Hobbs

Mewbourne Oil Company

Eddy County, New Mexico NAD 83 Bonanza 22/15 Fed Com #874H

Well:

Project:

Site:

Sec 22, T25S, R28E

Wellbore: BHL: 330' Design: Design #1

BHL: 330' FNL & 2180' FWL (Sec 15)

Local Co-ordinate Reference:

TVD Reference: MD Reference: North Reference:

Survey Calculation Method:

Site Bonanza 22/15 Fed Com #874H WELL @ 3007.0usft (Original Well Elev) WELL @ 3007.0usft (Original Well Elev)

Grid

Minimum Curvature

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)
5,100.0	8.80	97.40	5,049.0	-86.9	668.6	32.7	0.00	0.00	0.00
5,200.0	8.80	97.40	5,147.8	-88.9	683.8	33.4	0.00	0.00	0.00
5,300.0	8.80	97.40	5,246.6	-90.8	698.9	34.2	0.00	0.00	0.00
5,400.0	8.80	97.40	5,345.4	-92.8	714.1	34.9	0.00	0.00	0.00
5,500.0	8.80	97.40	5,444.3	-94.8	729.3	35.6	0.00	0.00	0.00
5,600.0	8.80	97.40	5,543.1	-96.7	744.5	36.4	0.00	0.00	0.00
5,700.0	8.80	97.40	5,641.9	-98.7	759.6	37.1	0.00	0.00	0.00
5,800.0 5,900.0 6,000.0 6,100.0 6,200.0	8.80 8.80 8.80 8.80	97.40 97.40 97.40 97.40 97.40	5,740.7 5,839.5 5,938.4 6,037.2 6,136.0	-100.7 -102.7 -104.6 -106.6 -108.6	774.8 790.0 805.2 820.4 835.5	37.9 38.6 39.4 40.1 40.8	0.00 0.00 0.00 0.00 0.00	0.00 0.00 0.00 0.00 0.00	0.00 0.00 0.00 0.00 0.00
6,300.0	8.80	97.40	6,234.8	-110.5	850.7	41.6	0.00	0.00	0.00
6,400.0	8.80	97.40	6,333.7	-112.5	865.9	42.3	0.00	0.00	0.00
6,500.0	8.80	97.40	6,432.5	-114.5	881.1	43.1	0.00	0.00	0.00
6,600.0	8.80	97.40	6,531.3	-116.5	896.2	43.8	0.00	0.00	0.00
6,700.0	8.80	97.40	6,630.1	-118.4	911.4	44.5	0.00	0.00	0.00
6,800.0	8.80	97.40	6,728.9	-120.4	926.6	45.3	0.00	0.00	0.00
6,900.0	8.80	97.40	6,827.8	-122.4	941.8	46.0	0.00	0.00	0.00
7,000.0	8.80	97.40	6,926.6	-124.3	956.9	46.8	0.00	0.00	0.00
7,100.0	8.80	97.40	7,025.4	-126.3	972.1	47.5	0.00	0.00	0.00
7,200.0	8.80	97.40	7,124.2	-128.3	987.3	48.3	0.00	0.00	0.00
7,300.0	8.80	97.40	7,223.1	-130.3	1,002.5	49.0	0.00	0.00	0.00
7,400.0	8.80	97.40	7,321.9	-132.2	1,017.6	49.7	0.00	0.00	0.00
7,500.0	8.80	97.40	7,420.7	-134.2	1,032.8	50.5	0.00	0.00	0.00
7,600.0	8.80	97.40	7,519.5	-136.2	1,048.0	51.2	0.00	0.00	0.00
7,700.0	8.80	97.40	7,618.3	-138.2	1,063.2	52.0	0.00	0.00	0.00
7,800.0 7,900.0 8,000.0 8,100.0 8,200.0	8.80 8.80 8.80 8.80	97.40 97.40 97.40 97.40 97.40	7,717.2 7,816.0 7,914.8 8,013.6 8,112.5	-140.1 -142.1 -144.1 -146.0 -148.0	1,078.4 1,093.5 1,108.7 1,123.9 1,139.1	52.7 53.5 54.2 54.9 55.7	0.00 0.00 0.00 0.00 0.00	0.00 0.00 0.00 0.00 0.00	0.00 0.00 0.00 0.00 0.00
8,300.0	8.80	97.40	8,211.3	-150.0	1,154.2	56.4	0.00	0.00	0.00
8,400.0	8.80	97.40	8,310.1	-152.0	1,169.4	57.2	0.00	0.00	0.00
8,500.0	8.80	97.40	8,408.9	-153.9	1,184.6	57.9	0.00	0.00	0.00
8,600.0	8.80	97.40	8,507.7	-155.9	1,199.8	58.6	0.00	0.00	0.00
8,700.0	8.80	97.40	8,606.6	-157.9	1,214.9	59.4	0.00	0.00	0.00
8,800.0	8.80	97.40	8,705.4	-159.8	1,230.1	60.1	0.00	0.00	0.00
8,900.0	8.80	97.40	8,804.2	-161.8	1,245.3	60.9	0.00	0.00	0.00
9,000.0	8.80	97.40	8,903.0	-163.8	1,260.5	61.6	0.00	0.00	0.00
9,100.0	8.80	97.40	9,001.8	-165.8	1,275.6	62.4	0.00	0.00	0.00
9,200.0	8.80	97.40	9,100.7	-167.7	1,290.8	63.1	0.00	0.00	0.00
9,300.0	8.80	97.40	9,199.5	-169.7	1,306.0	63.8	0.00	0.00	0.00
9,400.0	8.80	97.40	9,298.3	-171.7	1,321.2	64.6	0.00	0.00	0.00
9,500.0	8.80	97.40	9,397.1	-173.7	1,336.4	65.3	0.00	0.00	0.00
9,524.1	8.80	97.40	9,421.0	-174.1	1,340.0	65.5	0.00	0.00	0.00
9,600.0 9,687.6 9,700.0 9,800.0 9,900.0 10,000.0	8.80 8.80 8.56 6.56 4.56 2.56	97.40 97.40 97.40 97.40 97.40	9,496.0 9,582.6 9,594.8 9,693.9 9,793.4 9,893.2	-175.6 -177.4 -177.6 -179.3 -180.5 -181.3	1,351.5 1,364.8 1,366.7 1,379.7 1,389.3 1,395.5	66.1 66.7 66.8 67.4 67.9 68.2	0.00 0.00 2.00 2.00 2.00 2.00	0.00 0.00 -2.00 -2.00 -2.00 -2.00	0.00 0.00 0.00 0.00 0.00 0.00

Database: Hobbs

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

 Site:
 Bonanza 22/15 Fed Com #874H

 Well:
 Sec 22, T25S, R28E

Wellbore: BHL: 330' FNL & 2180' FWL (Sec 15)

Design: Design #1

Local Co-ordinate Reference:

TVD Reference: MD Reference: North Reference:

Survey Calculation Method:

Site Bonanza 22/15 Fed Com #874H WELL @ 3007.0usft (Original Well Elev) WELL @ 3007.0usft (Original Well Elev)

Grid

Minimum Curvature

esigii.	Design #1								
lanned Survey									
Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)
10,100.0 10,127.8	0.56 0.00	97.40 0.00 FWL (Sec 22)	9,993.2 10,021.0	-181.7 -181.7	1,398.2 1,398.3	68.3 68.3	2.00 2.00	-2.00 -2.00	0.00 0.00
10,150.0	2.22	359.89	10,043.2	-181.3	1,398.3	68.8	10.00	10.00	0.00
10,200.0	7.22	359.89	10,093.0	-177.2	1,398.3	72.8	10.00	10.00	0.00
10,250.0	12.22	359.89	10,142.3	-168.7	1,398.3	81.1	10.00	10.00	0.00
10,300.0	17.22	359.89	10,190.6	-156.0	1,398.2	93.6	10.00	10.00	0.00
10,350.0	22.22	359.89	10,237.7	-139.2	1,398.2	110.2	10.00	10.00	0.00
10,400.0	27.22	359.89	10,283.1	-118.3	1,398.2	130.8	10.00	10.00	0.00
10,450.0	32.22	359.89	10,326.5	-93.5	1,398.1	155.2	10.00	10.00	0.00
10,500.0	37.22	359.89	10,367.6	-65.0	1,398.1	183.2	10.00	10.00	0.00
10,550.0	42.22	359.89	10,406.0	-33.1	1,398.0	214.6	10.00	10.00	0.00
10,600.0	47.22	359.89	10,441.5	2.1	1,397.9	249.2	10.00	10.00	0.00
10,650.0	52.22	359.89	10,473.9	40.2	1,397.9	286.7	10.00	10.00	0.00
10,700.0	57.22	359.89	10,502.7	81.0	1,397.8	326.8	10.00	10.00	0.00
10,750.0	62.21	359.89	10,527.9	124.2	1,397.7	369.3	10.00	10.00	0.00
10,800.0	67.21	359.89	10,549.3	169.4	1,397.6	413.8	10.00	10.00	0.00
10,850.0	72.21	359.89	10,566.6	216.3	1,397.5	459.9	10.00	10.00	0.00
10,900.0	77.21	359.89	10,579.8	264.5	1,397.4	507.4	10.00	10.00	0.00
10,950.0	82.21	359.89	10,588.7	313.7	1,397.3	555.7	10.00	10.00	0.00
11,000.0	87.21	359.89	10,593.3	363.4	1,397.2	604.7	10.00	10.00	0.00
11,025.7	89.78	359.89	10,594.0	389.1	1,397.2	630.0	10.00	10.00	0.00
11,027.7	89.78	359.89	10,594.0	391.1	1,397.2	631.9	0.00	0.00	0.00
		30' FWL (Sec 2		100.1	4.007.0	700.4	0.00	0.00	0.00
11,100.0	89.78	359.89	10,594.3	463.4	1,397.0	703.1	0.00	0.00	0.00
11,200.0	89.78	359.89	10,594.7	563.4	1,396.8	801.5	0.00	0.00	0.00
11,300.0	89.78	359.89	10,595.1	663.4	1,396.6	899.9	0.00	0.00	0.00
11,400.0	89.78	359.89	10,595.4	763.4	1,396.4	998.3	0.00	0.00	0.00
11,500.0	89.78	359.89	10,595.8	863.4	1,396.2	1,096.6	0.00	0.00	0.00
11,600.0	89.78	359.89	10,596.2	963.4	1,396.0	1,195.0	0.00	0.00	0.00
11,700.0	89.78	359.89	10,596.6	1,063.4	1,395.9	1,293.4	0.00	0.00	0.00
11,800.0	89.78	359.89	10,597.0	1,163.4	1,395.7	1,391.8	0.00	0.00	0.00
11,900.0	89.78	359.89	10,597.3	1,263.4	1,395.5	1,490.2	0.00	0.00	0.00
12,000.0	89.78	359.89	10,597.7	1,363.4	1,395.3	1,588.6	0.00	0.00	0.00
12,100.0	89.78	359.89	10,598.1	1,463.4	1,395.1	1,687.0	0.00	0.00	0.00
12,200.0	89.78	359.89	10,598.5	1,563.4	1,394.9	1,785.4	0.00	0.00	0.00
12,300.0	89.78	359.89	10,598.9	1,663.4	1,394.7	1,883.8	0.00	0.00	0.00
12,400.0	89.78	359.89	10,599.3	1,763.4	1,394.5	1,982.2	0.00	0.00	0.00
12,500.0	89.78	359.89	10,599.6	1,863.4	1,394.3	2,080.5	0.00	0.00	0.00
12,600.0	89.78	359.89	10,600.0	1,963.4	1,394.1	2,178.9	0.00	0.00	0.00
12,700.0	89.78	359.89	10,600.4	2,063.4	1,393.9	2,277.3	0.00	0.00	0.00
12,800.0	89.78	359.89	10,600.8	2,163.4	1,393.7	2,375.7	0.00	0.00	0.00
12,900.0	89.78	359.89	10,601.2	2,263.4	1,393.5	2,474.1	0.00	0.00	0.00
13,000.0	89.78	359.89	10,601.6	2,363.4	1,393.3	2,572.5	0.00	0.00	0.00
13,100.0	89.78	359.89	10,601.9	2,463.4	1,393.1	2,670.9	0.00	0.00	0.00
13,200.0	89.78	359.89	10,602.3	2,563.4	1,392.9	2,769.3	0.00	0.00	0.00
13,300.0	89.78	359.89	10,602.7	2,663.4	1,392.7	2,867.7	0.00	0.00	0.00
13,400.0	89.78	359.89	10,603.1	2,763.4	1,392.5	2,966.0	0.00	0.00	0.00
13,500.0	89.78	359.89	10,603.5	2,863.4	1,392.3	3,064.4	0.00	0.00	0.00
13,600.0	89.78	359.89	10,603.9	2,963.4	1,392.1	3,162.8	0.00	0.00	0.00
13,700.0	89.78	359.89	10,604.2	3,063.4	1,391.9	3,261.2	0.00	0.00	0.00
13,800.0	89.78	359.89	10,604.6	3,163.4	1,391.7	3,359.6	0.00	0.00	0.00
13,900.0	89.78	359.89	10,605.0	3,263.4	1,391.5	3,458.0	0.00	0.00	0.00
14,000.0	89.78	359.89	10,605.4	3,363.4	1,391.3	3,556.4	0.00	0.00	0.00

Planning Report

Database: Company: Hobbs

Mewbourne Oil Company

Eddy County, New Mexico NAD 83 Bonanza 22/15 Fed Com #874H

Well: Wellbore:

Project:

Site:

Sec 22, T25S, R28E

BHL: 330' FNL & 2180' FWL (Sec 15)

Design: Design #1

Local Co-ordinate Reference:

TVD Reference: MD Reference: North Reference:

Survey Calculation Method:

Site Bonanza 22/15 Fed Com #874H WELL @ 3007.0usft (Original Well Elev)

WELL @ 3007.0usft (Original Well Elev)
Grid

Minimum Curvature

esign:	Design #1								
lanned Survey									
Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)
14,100.0	89.78	359.89	10,605.8	3,463.4	1,391.1	3,654.8	0.00	0.00	0.00
14,200.0	89.78	359.89	10,606.2	3,563.4	1,390.9	3,753.2	0.00	0.00	0.00
14,300.0	89.78	359.89	10,606.5	3,663.4	1,390.7	3,851.6	0.00	0.00	0.00
14,400.0	89.78	359.89	10,606.9	3,763.4	1,390.5	3,949.9	0.00	0.00	0.00
14,500.0	89.78	359.89	10,607.3	3,863.4	1,390.3	4,048.3	0.00	0.00	0.00
14,600.0	89.78	359.89	10,607.7	3,963.4	1,390.1	4,146.7	0.00	0.00	0.00
14,700.0	89.78	359.89	10,608.1	4,063.4	1,390.0	4,245.1	0.00	0.00	0.00
14,800.0	89.78	359.89	10,608.5	4,163.4	1,389.8	4,343.5	0.00	0.00	0.00
14,900.0	89.78	359.89	10,608.8	4,263.4	1,389.6	4,441.9	0.00	0.00	0.00
15,000.0	89.78	359.89	10,609.2	4,363.4	1,389.4	4,540.3	0.00	0.00	0.00
15,100.0	89.78	359.89	10,609.6	4,463.4	1,389.2	4,638.7	0.00	0.00	0.00
15,200.0	89.78	359.89	10,610.0	4,563.4	1,389.0	4,737.1	0.00	0.00	0.00
15,300.0	89.78	359.89	10,610.4	4,663.4	1,388.8	4,835.4	0.00	0.00	0.00
15,400.0	89.78	359.89	10,610.8	4,763.4	1,388.6	4,933.8	0.00	0.00	0.00
15,500.0	89.78	359.89	10,611.1	4,863.4	1,388.4	5,032.2	0.00	0.00	0.00
15,600.0	89.78	359.89	10,611.5	4,963.4	1,388.2	5,130.6	0.00	0.00	0.00
15,700.0	89.78	359.89	10,611.9	5,063.4	1,388.0	5,229.0	0.00	0.00	0.00
15,800.0	89.78	359.89	10,612.3	5,163.4	1,387.8	5,327.4	0.00	0.00	0.00
15,900.0	89.78	359.89	10,612.7	5,263.4	1,387.6	5,425.8	0.00	0.00	0.00
16,000.0	89.78	359.89	10,613.1	5,363.4	1,387.4	5,524.2	0.00	0.00	0.00
16,100.0	89.78	359.89	10,613.4	5,463.4	1,387.2	5,622.6	0.00	0.00	0.00
16,200.0	89.78	359.89	10,613.8	5,563.4	1,387.0	5,721.0	0.00	0.00	0.00
16,300.0	89.78	359.89	10,614.2	5,663.4	1,386.8	5,819.3	0.00	0.00	0.00
16,400.0	89.78	359.89	10,614.6	5,763.4	1,386.6	5,917.7	0.00	0.00	0.00
16,500.0	89.78	359.89	10,615.0	5,863.4	1,386.4	6,016.1	0.00	0.00	0.00
16,600.0	89.78	359.89	10,615.4	5,963.4	1,386.2	6,114.5	0.00	0.00	0.00
16,700.0	89.78	359.89	10,615.7	6,063.4	1,386.0	6,212.9	0.00	0.00	0.00
16,800.0	89.78	359.89	10,616.1	6,163.4	1,385.8	6,311.3	0.00	0.00	0.00
16,900.0 17,000.0 17,100.0 17,200.0 17,300.0	89.78 89.78 89.78 89.78 89.78	359.89 359.89 359.89 359.89	10,616.5 10,616.9 10,617.3 10,617.6 10,618.0	6,263.4 6,363.4 6,463.4 6,563.4 6,663.4	1,385.6 1,385.4 1,385.2 1,385.0 1,384.8	6,409.7 6,508.1 6,606.5 6,704.8 6,803.2	0.00 0.00 0.00 0.00 0.00	0.00 0.00 0.00 0.00 0.00	0.00 0.00 0.00 0.00 0.00
17,400.0	89.78	359.89	10,618.4	6,763.4	1,384.6	6,901.6	0.00	0.00	0.00
17,500.0	89.78	359.89	10,618.8	6,863.4	1,384.4	7,000.0	0.00	0.00	0.00
17,600.0	89.78	359.89	10,619.2	6,963.4	1,384.2	7,098.4	0.00	0.00	0.00
17,700.0	89.78	359.89	10,619.6	7,063.4	1,384.1	7,196.8	0.00	0.00	0.00
17,800.0	89.78	359.89	10,619.9	7,163.4	1,383.9	7,295.2	0.00	0.00	0.00
17,900.0	89.78	359.89	10,620.3	7,263.4	1,383.7	7,393.6	0.00	0.00	0.00
18,000.0	89.78	359.89	10,620.7	7,363.4	1,383.5	7,492.0	0.00	0.00	0.00
18,100.0	89.78	359.89	10,621.1	7,463.4	1,383.3	7,590.4	0.00	0.00	0.00
18,200.0	89.78	359.89	10,621.5	7,563.4	1,383.1	7,688.7	0.00	0.00	0.00
18,300.0	89.78	359.89	10,621.9	7,663.4	1,382.9	7,787.1	0.00	0.00	0.00
18,335.7	89.78	359.89	10,622.0	7,699.1	1,382.8	7,822.3	0.00	0.00	0.00

Planning Report

Database: Hobbs

Site:

Company: Mewbourne Oil Company
Project: Eddy County, New Mexico

Eddy County, New Mexico NAD 83 Bonanza 22/15 Fed Com #874H

Well: Sec 22, T25S, R28E

Wellbore: BHL: 330' FNL & 2180' FWL (Sec 15)

Design: Design #1

Local Co-ordinate Reference:

TVD Reference: MD Reference: North Reference:

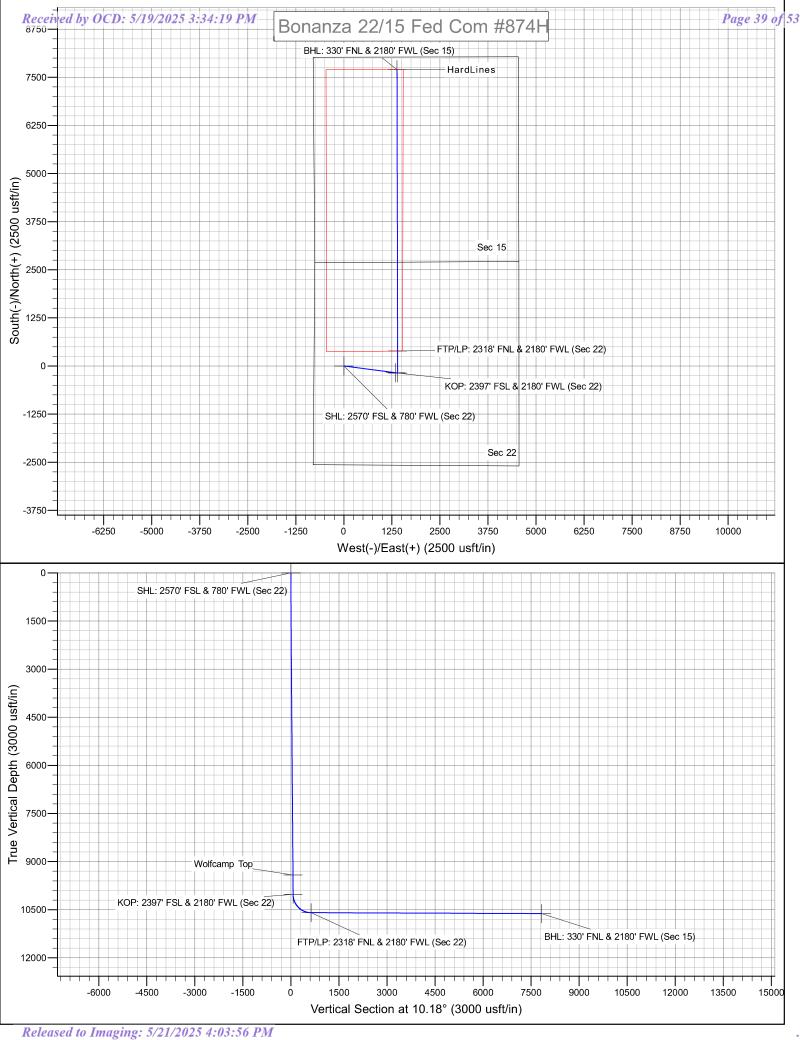
Survey Calculation Method:

Site Bonanza 22/15 Fed Com #874H WELL @ 3007.0usft (Original Well Elev) WELL @ 3007.0usft (Original Well Elev)

Grid

Minimum Curvature

Design Targets									
Target Name - hit/miss target D - Shape	ip Angle (°)	Dip Dir. (°)	TVD (usft)	+N/-S (usft)	+E/-W (usft)	Northing (usft)	Easting (usft)	Latitude	Longitude
SHL: 2570' FSL & 78(- plan hits target cen - Point	0.00 iter	0.00	0.0	0.0	0.0	405,773.20	619,393.30	32.1152987	-104.0812151
Wolfcamp Top - plan hits target cen - Point	0.00 iter	0.00	9,421.0	-174.1	1,340.0	405,599.07	620,733.32	32.1148114	-104.0768882
KOP: 2397' FSL & 21a - plan hits target cen - Point	0.00 iter	0.00	10,021.0	-181.7	1,398.3	405,591.50	620,791.60	32.1147902	-104.0767000
FTP/LP: 2318' FNL & - plan hits target cen - Point	0.00 iter	0.00	10,594.0	391.1	1,397.2	406,164.30	620,790.48	32.1163648	-104.0766993
BHL: 330' FNL & 218(- plan hits target cen - Point	0.00 iter	0.00	10,622.0	7,699.1	1,382.8	413,472.30	620,776.10	32.1364540	-104.0766895



PECOS DISTRICT DRILLING CONDITIONS OF APPROVAL

OPERATOR'S NAME: MEWBOURNE OIL COMPANY **WELL NAME & NO.:** BONANZA 22/15 FED COM 874H

APD ID: 10400104317

LOCATION: Section 22, T.25 S., R.28 E. NMP.

COUNTY: Eddy County, New Mexico

COA

H_2S	C	No	Yes		
Potash /	None	Secretary	C R-111-Q	Open Annulus	
WIPP				■ WIPP	
Cave / Karst	□ Low	Medium	C High	Critical	
Wellhead	Conventional	Multibowl	© Both	Diverter	
Cementing	Primary Squeeze	Cont. Squeeze	EchoMeter	DV Tool	
Special Req	Capitan Reef	Water Disposal	▼ COM	Unit	
Waste Prev.	C Self-Certification	Waste Min. Plan	C APD Submitted p	rior to 06/10/2024	
Additional	Flex Hose	Casing Clearance	Pilot Hole	Break Testing	
Language	Four-String	Offline Cementing	Fluid-Filled		

A. HYDROGEN SULFIDE

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

B. CASING DESIGN

Primary Casing Program

- 1. The 13-3/8 inch surface casing shall be set at approximately 475 ft. (a minimum of 70 feet (Eddy County) into the Rustler Anhydrite and above the salt) and cemented to the surface. If salt is encountered, set casing at least 25 ft. above the salt.
 - a. If cement does not circulate to the surface, the appropriate BLM office shall be notified and a temperature survey utilizing an electronic-type temperature survey with surface log readout will be used or a cement bond log shall be run to verify the top of the cement. Temperature survey will be run a minimum of six hours after pumping cement and ideally between 8-10 hours after completing the cement job.
 - b. Wait on cement (WOC) time for a primary cement job will be a minimum of 8

- <u>hours</u> or **500 psi compressive strength**, whichever is greater. (This is to include the lead cement)
- c. Wait on cement (WOC) time for a remedial job will be a minimum of 4 hours after bringing cement to surface or 500 psi compressive strength, whichever is greater.
- d. If cement falls back, remedial cementing will be done prior to drilling out that string.
- 2. The 9-5/8 inch intermediate casing shall be set at approximately 2,475 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.

Note: Cement excess is less than 25%, more cement is required if washout occurs. Adjust cement volume and excess based on a fluid caliper or similar method that reflects the as-drilled size of the wellbore.

- ❖ In Medium Cave/Karst Areas if cement does not circulate to surface on the first two casing strings, the cement on the 3rd casing string must come to surface.
- 3. Operator has proposed to set 7 inch production casing at approximately 10,128 ft. (10,021 ft. TVD). The minimum required fill of cement behind the 7 inch production casing is:
 - **Option 1 (Single Stage):** Cement should tie-back **at least 200 feet** into previous casing string. Operator shall provide method of verification. Wait on cement (WOC) time for a primary cement job is to include the lead cement slurry due to cave/karst.
 - **Option 2 (Two-Stage):** Operator has proposed a DV tool, the depth may be adjusted as long as the cement is changed proportionally. The DV tool may be cancelled if cement circulates to surface on the first stage.
 - a. First stage to DV tool: Cement to circulate. If cement does not circulate off the DV tool, contact the appropriate BLM office before proceeding with second stage cement job.
 - b. Second stage above DV tool: Cement should tie-back at least 200 feet into previous casing string. Operator shall provide method of verification. If cement does not circulate, contact the appropriate BLM office. Wait on cement (WOC) time for a primary cement job is to include the lead cement slurry due to cave/karst.
- 4. The minimum required fill of cement behind the 4-1/2 in. production liner is:
 - Cement should tie-back at least 100 feet into previous casing string. Operator shall provide method of verification.

Alternate Casing Program

- 1. The 13-3/8 inch surface casing shall be set at approximately 475 ft. (a minimum of 70 feet (Eddy County) into the Rustler Anhydrite and above the salt) and cemented to the surface. If salt is encountered, set casing at least 25 ft. above the salt.
 - a. If cement does not circulate to the surface, the appropriate BLM office shall be notified and a temperature survey utilizing an electronic-type temperature survey with surface log readout will be used or a cement bond log shall be run to verify the top of the cement. Temperature survey will be run a minimum of six hours after pumping cement and ideally between 8-10 hours after completing the cement job.
 - b. Wait on cement (WOC) time for a primary cement job will be a minimum of **8** hours or **500 psi compressive strength**, whichever is greater. (This is to include the lead cement)
 - c. Wait on cement (WOC) time for a remedial job will be a minimum of 4 hours after bringing cement to surface or 500 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 2,475 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.

Note: Cement excess is less than 25%, more cement is required if washout occurs. Adjust cement volume and excess based on a fluid caliper or similar method that reflects the as-drilled size of the wellbore.

- ❖ In Medium Cave/Karst Areas if cement does not circulate to surface on the first two casing strings, the cement on the 3rd casing string must come to surface.
- **3.** Operator has proposed to set **7 inch** production casing at approximately **10,850 ft.** (10,567 ft. TVD). The minimum required fill of cement behind the **7 inch** production casing is:

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

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

- a. First stage to DV tool: Cement to circulate. If cement does not circulate off the DV tool, contact the appropriate BLM office before proceeding with second stage cement job.
- b. Second stage above DV tool: Cement should tie-back at least 200 feet into previous casing string. Operator shall provide method of verification. If cement does not circulate, contact the appropriate BLM office. Wait on cement (WOC) time for a primary cement job is to include the lead cement slurry due to cave/karst.

Note: Production casing must be kept fluid-filled to meet BLM's minimum requirement for collapse design safety factor.

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

Offline Cementing

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

C. PRESSURE CONTROL

- 1. Variance approved to use flex line from BOP to choke manifold. Manufacturer's specification to be readily available. No external damage to flex line. Flex line to be installed as straight as possible (no hard bends).
- 2. Operator has proposed a multi-bowl wellhead assembly. Minimum working pressure of the blowout preventer (BOP) and related equipment (BOPE) required for drilling below the surface casing shoe shall be 5000 (5M) psi. BOP and BOPE shall be tested in accordance with title 43 CFR 3172.
 - i. Wellhead shall be installed by manufacturer's representatives, submit documentation with subsequent sundry.
 - ii. If the welding is performed by a third party, the manufacturer's representative shall monitor the temperature to verify that it does not exceed the maximum temperature of the seal.
 - iii. Manufacturer representative shall install the test plug for the initial BOP
 - iv. 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.
 - v. Whenever any seal subject to test pressure is broken, all the tests in 43 CFR 3172 must be followed.

BOPE Break Testing Variance

- BOPE Break Testing is ONLY permitted for intervals utilizing a 5M BOPE or less. (Annular preventer must be tested to a minimum of 70% of BOPE working pressure and shall be higher than the MASP.)
- BOPE Break Testing is NOT permitted to drilling the production hole section.
- Variance only pertains to the intermediate hole-sections and no deeper than the Bone Springs formation.
- While in transfer between wells, the BOPE shall be secured by the hydraulic carrier or cradle.
- Any well control event while drilling require notification to the BLM Petroleum Engineer (575-706-2779) prior to the commencement of any BOPE Break Testing
- A full BOPE test is required prior to drilling the first deep intermediate hole section. If any subsequent hole interval is deeper than the first, a full BOPE test will be required. (200' TVD tolerance between intermediate shoes is allowable).
- The BLM is to be contacted (575-361-2822 Eddy County) 4 hours prior to BOPE tests.
- As a minimum, a full BOPE test shall be performed at 21-day intervals.
- In the event any repairs or replacement of the BOPE is required, the BOPE shall test as per 43 CFR 3172.
- If in the event break testing is not utilized, then a full BOPE test would be conducted.

D. SPECIAL REQUIREMENT (S)

Communitization Agreement

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

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)

Page 5 of 9

Contact Eddy County Petroleum Engineering Inspection Staff:

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

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

A. CASING

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

both of the following conditions have been met: 1) cement reaches a minimum compressive strength of 500 psi for all cement blends of both lead and tail cement, 2) until cement has been in place at least <u>8 hours</u>. WOC time will be recorded in the driller's log. The casing integrity test can be done (prior to the cement setting up) immediately after bumping the plug.

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

B. PRESSURE CONTROL

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

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

valve open. The operator also has the option of utilizing an independent tester to test without a plug (i.e. against the casing) pursuant to **43 CFR 3172** with the pressure not to exceed 70% of the burst rating for the casing. Any test against the casing must meet the WOC time for 8 hours or 500 pounds compressive strength, whichever is greater, prior to initiating the test (see casing segment as lead cement may be critical item).

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

C. DRILLING MUD

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

D. WASTE MATERIAL AND FLUIDS

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

SA 05/09/2025

Hydrogen Sulfide Drilling Operations Plan Mewbourne Oil Company

1. General Requirements

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

2. Hydrogen Sulfide Training

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

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

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

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

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

3. Hydrogen Sulfide Safety Equipment and Systems

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

1. Well Control Equipment

- A. Choke manifold with minimum of one adjustable choke/remote choke.
- B. Blowout preventers equipped with blind rams and pipe rams to accommodate all pipe sizes with properly sized closing unit
- C. Auxiliary equipment including annular type blowout preventer.
- 2. <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: BONANZA 22/15 FED COM Well Number: 874H

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

FACILITY

Disposal type description:

Disposal location description: City of Carlsbad Water Treatment facility

Waste type: GARBAGE

Waste content description: Garbage & Trash

Amount of waste: 1500 pounds

Waste disposal frequency : One Time Only

Safe containment description: Enclosed trash trailer

Safe containment attachment:

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

FACILITY

Disposal type description:

Disposal location description: Waste Management facility in Carlsbad.

Reserve Pit

Reserve Pit being used? NO

Temporary disposal of produced water into reserve pit? NO

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

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

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

Reserve pit liner

Reserve pit liner specifications and installation description

Cuttings Area

Cuttings Area being used? NO

Are you storing cuttings on location? N

Description of cuttings location

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

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

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

Cuttings area liner

Cuttings area liner specifications and installation description

Operator Name: MEWBOURNE OIL COMPANY

Well Name: BONANZA 22/15 FED COM Well Number: 874H

Section 8 - Ancillary

Are you requesting any Ancillary Facilities?: N

Ancillary Facilities

Comments:

Section 9 - Well Site

Well Site Layout Diagram:

BONANZA_22_15_RED_COM__874H_WellSiteLayout_20250404105648.pdf

Comments: None

Section 10 - Plans for Surface

Type of disturbance: New Surface Disturbance Multiple Well Pad Name: Bonanza 22/15 Fed Com 552H 554H 874H

Multiple Well Pad Number: 3

Recontouring

BONANZA 22 15 RED COM 874H InterimReclamationMap 20250404105656.pdf

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): 4.22 1.01 (acres): 3.21

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

0.18

Powerline proposed disturbance Powerline interim re

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

(acres): 0 (acres): 0

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

(acres): 0 (acres)

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

Total proposed disturbance: Total interim reclamation: 1.01 Total long term disturbance: 3.21

4.399999999999995

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

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

General Information Phone: (505) 629-6116

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

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

CONDITIONS

Action 464885

CONDITIONS

Operator:	OGRID:
MEWBOURNE OIL CO	14744
P.O. Box 5270	Action Number:
Hobbs, NM 88241	464885
	Action Type:
	[C-101] BLM - Federal/Indian Land Lease (Form 3160-3)

CONDITIONS

Created By	Condition	Condition Date
mleal	Cement is required to circulate on both surface and intermediate1 strings of casing.	5/19/2025
mleal	If cement does not circulate on any string, a Cement Bond Log (CBL) is required for that string of casing.	5/19/2025
ward.rikala	Notify the OCD 24 hours prior to casing & cement.	5/21/2025
ward.rikala	File As Drilled C-102 and a directional Survey with C-104 completion packet.	5/21/2025
ward.rikala	Once the well is spud, to prevent ground water contamination through whole or partial conduits from the surface, the operator shall drill without interruption through the fresh water zone or zones and shall immediately set in cement the water protection string.	5/21/2025
ward.rikala	Oil base muds are not to be used until fresh water zones are cased and cemented providing isolation from the oil or diesel. This includes synthetic oils. Oil based mud, drilling fluids and solids must be contained in a steel closed loop system.	5/21/2025