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. NMNM86913 BUREAU OF LAND MANAGEMENT APPLICATION FOR PERMIT TO DRILL OR REENTER 6. If Indian, Allotee or Tribe Name 7. If Unit or CA Agreement, Name and No. **✓** DRILL REENTER 1a. Type of work: 1b. Type of Well: ✓ Oil Well Gas Well Other 8. Lease Name and Well No. 1c. Type of Completion: Hydraulic Fracturing ✓ Single Zone Multiple Zone CABALLO LOCO 3/5 B3PO FED COM Bloomin Onion 11 14 Fed Com 713H 2. Name of Operator 9. API Well No. MEWBOURNE OIL COMPANY 30**-015-5**6953 3a. Address 3b. Phone No. (include area code) 10. Field and Pool, or Exploratory P O BOX 5270, HOBBS, NM 88241 (575) 393-5905 WC/WOLFCAMP 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 11/T20S/R30E/NMP At surface NWNW / 205 FNL / 1260 FWL / LAT 32.5944358 / LONG -103.9473006 At proposed prod. zone SESW / 330 FSL / 1980 FWL / LAT 32.5669372 / LONG -103.9450291 12. County or Parish 14. Distance in miles and direction from nearest town or post office* 13 State **EDDY** NM 20 miles 15. Distance from proposed* 16. No of acres in lease 17. Spacing Unit dedicated to this well 185 feet location to nearest 320.0 property or lease line, ft. (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 9869 feet / 19847 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 3228 feet 06/10/2025 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 2. A Drilling Plan. Item 20 above). 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 25. Signature Name (Printed/Typed) Date BRADLEY BISHOP / Ph: (575) 393-5905 (Electronic Submission) 01/09/2020 Title Regulatory Approved by (Signature) Date Name (Printed/Typed) (Electronic Submission) 07/03/2025 CODY LAYTON / Ph: (575) 234-5959 Title Office Assistant Field Manager Lands & Minerals Carlsbad Field Office Application approval does not warrant or certify that the applicant holds legal or equitable title to those rights in the subject lease which would entitle the applicant to conduct operations thereon. Conditions of approval, if any, are attached. Title 18 U.S.C. Section 1001 and Title 43 U.S.C. Section 1212, make it a crime for any person knowingly and willfully to make to any department or agency of the United States any false, fictitious or fraudulent statements or representations as to any matter within its jurisdiction



(Continued on page 2)

*(Instructions on page 2)

INSTRUCTIONS

GENERAL: This form is designed for submitting proposals to perform certain well operations, as indicated on Federal and Indian lands and leases for action by appropriate Federal agencies, pursuant to applicable Federal laws and regulations. Any necessary special instructions concerning the use of this form and the number of copies to be submitted, particularly with regard to local, area, or regional procedures and practices, either are shown below or will be issued by, or may be obtained from local Federal offices.

ITEM I: If the proposal is to redrill to the same reservoir at a different subsurface location or to a new reservoir, use this form with appropriate notations. Consult applicable Federal regulations concerning subsequent work proposals or reports on the well.

ITEM 4: Locations on Federal or Indian land should be described in accordance with Federal requirements. Consult local Federal offices for specific instructions.

ITEM 14: Needed only when location of well cannot readily be found by road from the land or lease description. A plat, or plats, separate or on the reverse side, showing the roads to, and the surveyed location of, the wen, and any other required information, should be furnished when required by Federal agency offices.

ITEMS 15 AND 18: If well is to be, or has been directionany drilled, give distances for subsurface location of hole in any present or objective productive zone.

ITEM 22: Consult applicable Federal regulations, or appropriate officials, concerning approval of the proposal before operations are started.

ITEM 24: If the proposal will involve hydraulic fracturing operations, you must comply with 43 CFR 3162.3-3, including providing information about the protection of usable water. Operators should provide the best available information about all formations containing water and their depths. This information could include data and interpretation of resistivity logs run on nearby wells. Information may also be obtained from state or tribal regulatory agencies and from local BLM offices.

NOTICES

The Privacy Act of 1974 and regulation in 43 CFR 2.48(d) provide that you be furnished the following information in connection with information required by this application.

AUTHORITY: 30 U.S.C. 181 et seq., 25 U.S.C. 396; 43 CFR 3160

PRINCIPAL PURPOSES: The information will be used to: (1) process and evaluate your application for a permit to drill a new oil, gas, or service wen or to reenter a plugged and abandoned well; and (2) document, for administrative use, information for the management, disposal and use of National Resource Lands and resources including (a) analyzing your proposal to discover and extract the Federal or Indian resources encountered; (b) reviewing procedures and equipment and the projected impact on the land involved; and (c) evaluating the effects of the proposed operation on the surface and subsurface water and other environmental impacts.

ROUTINE USE: Information from the record and/or the record win be transferred to appropriate Federal, State, and local or foreign agencies, when relevant to civil, criminal or regulatory investigations or prosecution, in connection with congressional inquiries and for regulatory responsibilities.

EFFECT OF NOT PROVIDING INFORMATION: Filing of this application and disclosure of the information is mandatory only if you elect to initiate a drilling or reentry operation on an oil and gas lease.

The Paperwork Reduction Act of 1995 requires us to inform you that:

The BLM conects this information to anow evaluation of the technical, safety, and environmental factors involved with drilling for oil and/or gas on Federal and Indian oil and gas leases. This information will be used to analyze and approve applications. Response to this request is mandatory only if the operator elects to initiate drilling or reentry operations on an oil and gas lease. The BLM would like you to know that you do not have to respond to this or any other Federal agency-sponsored information collection unless it displays a currently valid OMB control number.

BURDEN HOURS STATEMENT: Public reporting burden for this form is estimated to average 8 hours per response, including the time for reviewing instructions, gathering and maintaining data, and completing and reviewing the form. Direct comments regarding the burden estimate or any other aspect of this form to U.S. Department of the Interior, Bureau of Land Management (1004-0137), Bureau Information Conection Clearance Officer (WO-630), 1849 C Street, N.W., Mail Stop 401 LS, Washington, D.C. 20240.

Additional Operator Remarks

Location of Well

0. SHL: NWNW / 205 FNL / 1260 FWL / TWSP: 20S / RANGE: 30E / SECTION: 11 / LAT: 32.5944358 / LONG: -103.9473006 (TVD: 27 feet, MD: 27 feet) PPP: NENW / 330 FNL / 1980 FWL / TWSP: 20S / RANGE: 30E / SECTION: 11 / LAT: 32.5940631 / LONG: -103.9449645 (TVD: 9807 feet, MD: 9969 feet) PPP: NENW / 0 FNL / 1978 FWL / TWSP: 20S / RANGE: 30E / SECTION: 14 / LAT: 32.5805301 / LONG: -103.9449967 (TVD: 9867 feet, MD: 14902 feet) BHL: SESW / 330 FSL / 1980 FWL / TWSP: 20S / RANGE: 30E / SECTION: 14 / LAT: 32.5669372 / LONG: -103.9450291 (TVD: 9869 feet, MD: 19847 feet)

BLM Point of Contact

Name: PAMELLA HERNANDEZ

Title: LIE

Phone: (575) 234-5954

Email: PHERNANDEZ@BLM.GOV

(Form 3160-3, page 3)

Review and Appeal Rights

A person contesting a decision shall request a State Director review. This request must be filed within 20 working days of receipt of the Notice with the appropriate State Director (see 43 CFR 3165.3). The State Director review decision may be appealed to the Interior Board of Land Appeals, 801 North Quincy Street, Suite 300, Arlington, VA 22203 (see 43 CFR 3165.4). Contact the above listed Bureau of Land Management office for further information.



Form 3160-5 (June 2019)

UNITED STATES DEPARTMENT OF THE INTERIOR

FORM APPROVED
OMB No. 1004-0137
Expires: October 31, 2021

BUREAU OF LAND MAN	5. Lease Serial No.			
SUNDRY NOTICES AND REPO		6. If Indian, Allottee or Tribe	NMNM86913	
Do not use this form for proposals to abandoned well. Use Form 3160-3 (A	to drill or to re-enter an		Name	
SUBMIT IN TRIPLICATE - Other instru	7. If Unit of CA/Agreement,	7. If Unit of CA/Agreement, Name and/or No.		
1. Type of Well ✓ Oil Well Gas Well Other		8. Well Name and No. CABALLO LOCO 3/5 B3PO FED COM/1	н	
2. Name of Operator MEWBOURNE OIL COMPANY		9. API Well No.		
3a. Address P O BOX 5270, HOBBS, NM 88241	3b. Phone No. <i>(include area code)</i> (575) 393-5905) 10. Field and Pool or Explora	atory Area	
4. Location of Well (Footage, Sec., T.,R.,M., or Survey Description) SEC 11/T20S/R30E/NMP		11. Country or Parish, State EDDY/NM		
12. CHECK THE APPROPRIATE B	OX(ES) TO INDICATE NATURE	OF NOTICE, REPORT OR OT	THER DATA	
TYPE OF SUBMISSION	TYF	PE OF ACTION		
Notice of Intent Acidize Alter Casing	Deepen Hydraulic Fracturing	Production (Start/Resume) Reclamation	Water Shut-Off Well Integrity	
☐ Subsequent Report ☐ Casing Repair ✔ Change Plans	New Construction Plug and Abandon	Recomplete Temporarily Abandon	Other	
Final Abandonment Notice Convert to Injection	Plug Back	Water Disposal		
completed. Final Abandonment Notices must be filed only after is ready for final inspection.) Mewbourne Oil Company requests approval to make the Change well name from Caballo Loco 3/5 B3PO Fed Co	e following change to the appro	ved APD (10400051406):	the operator has determined that the site	
14. I hereby certify that the foregoing is true and correct. Name (<i>Pri</i> ANDY TAYLOR / Ph: (575) 393-5905	inted/Typed) Engineer Title			
Signature (Electronic Submission)	Date	07/03/2	2025	
THE SPACE	FOR FEDERAL OR STA	ATE OFICE USE		
Approved by				
PAMELLA HERNANDEZ / Ph: (575) 234-5954 / Approved	Title		07/07/2025 Date	
Conditions of approval, if any, are attached. Approval of this notice certify that the applicant holds legal or equitable title to those rights which would entitle the applicant to conduct operations thereon.		RLSBAD		
Title 18 U.S.C Section 1001 and Title 43 U.S.C Section 1212, make any false, fictitious or fraudulent statements or representations as to		ly and willfully to make to any c	lepartment or agency of the United States	

(Instructions on page 2)

GENERAL INSTRUCTIONS

This form is designed for submitting proposals to perform certain well operations and reports of such operations when completed as indicated on Federal and Indian lands pursuant to applicable Federal law and regulations. Any necessary special instructions concerning the use of this form and the number of copies to be submitted, particularly with regard to local area or regional procedures and practices, are either shown below, will be issued by or may be obtained from the local Federal office.

SPECIFIC INSTRUCTIONS

Item 4 - Locations on Federal or Indian land should be described in accordance with Federal requirements. Consult the local Federal office for specific instructions.

Item 13: Proposals to abandon a well and subsequent reports of abandonment should include such special information as is required by the local Federal office. In addition, such proposals and reports should include reasons for the abandonment; data on any former or present productive zones or other zones with present significant fluid contents not sealed off by cement or otherwise; depths (top and bottom) and method of placement of cement plugs; mud or other material placed below, between and above plugs; amount, size, method of parting of any casing, liner or tubing pulled and the depth to the top of any tubing left in the hole; method of closing top of well and date well site conditioned for final inspection looking for approval of the abandonment. If the proposal will involve **hydraulic fracturing operations**, you must comply with 43 CFR 3162.3-3, including providing information about the protection of usable water. Operators should provide the best available information about all formations containing water and their depths. This information could include data and interpretation of resistivity logs run on nearby wells. Information may also be obtained from state or tribal regulatory agencies and from local BLM offices.

NOTICES

The privacy Act of 1974 and the regulation in 43 CFR 2.48(d) provide that you be furnished the following information in connection with information required by this application.

AUTHORITY: 30 U.S.C. 181 et seq., 351 et seq., 25 U.S.C. 396; 43 CFR 3160.

PRINCIPAL PURPOSE: The information is used to: (1) Evaluate, when appropriate, approve applications, and report completion of subsequent well operations, on a Federal or Indian lease; and (2) document for administrative use, information for the management, disposal and use of National Resource lands and resources, such as: (a) evaluating the equipment and procedures to be used during a proposed subsequent well operation and reviewing the completed well operations for compliance with the approved plan; (b) requesting and granting approval to perform those actions covered by 43 CFR 3162.3-2, 3162.3-3, and 3162.3-4; (c) reporting the beginning or resumption of production, as required by 43 CFR 3162.4-1(c)and (d) analyzing future applications to drill or modify operations in light of data obtained and methods used.

ROUTINE USES: Information from the record and/or the record will be transferred to appropriate Federal, State, local or foreign agencies, when relevant to civil, criminal or regulatory investigations or prosecutions in connection with congressional inquiries or to consumer reporting agencies to facilitate collection of debts owed the Government.

EFFECT OF NOT PROVIDING THE INFORMATION: Filing of this notice and report and disclosure of the information is mandatory for those subsequent well operations specified in 43 CFR 3162.3-2, 3162.3-3, 3162.3-4.

The Paperwork Reduction Act of 1995 requires us to inform you that:

The BLM collects this information to evaluate proposed and/or completed subsequent well operations on Federal or Indian oil and gas leases.

Response to this request is mandatory.

The BLM would like you to know that you do not have to respond to this or any other Federal agency-sponsored information collection unless it displays a currently valid OMB control number.

BURDEN HOURS STATEMENT: Public reporting burden for this form is estimated to average 8 hours per response, including the time for reviewing instructions, gathering and maintaining data, and completing and reviewing the form. Direct comments regarding the burden estimate or any other aspect of this form to U.S. Department of the Interior, Bureau of Land Management (1004-0137), Bureau Information Collection Clearance Officer (WO-630), 1849 C St., N.W., Mail Stop 401 LS, Washington, D.C. 20240

(Form 3160-5, page 2)

Additional Information

Location of Well

0. SHL: NWNW / 205 FNL / 1260 FWL / TWSP: 20S / RANGE: 30E / SECTION: 11 / LAT: 32.5944358 / LONG: -103.9473006 (TVD: 27 feet, MD: 27 feet) PPP: NENW / 330 FNL / 1980 FWL / TWSP: 20S / RANGE: 30E / SECTION: 11 / LAT: 32.5940631 / LONG: -103.9449645 (TVD: 9807 feet, MD: 9969 feet) PPP: NENW / 0 FNL / 1978 FWL / TWSP: 20S / RANGE: 30E / SECTION: 14 / LAT: 32.5805301 / LONG: -103.9449967 (TVD: 9867 feet, MD: 14902 feet) BHL: SESW / 330 FSL / 1980 FWL / TWSP: 20S / RANGE: 30E / SECTION: 14 / LAT: 32.5669372 / LONG: -103.9450291 (TVD: 9869 feet, MD: 19847 feet)



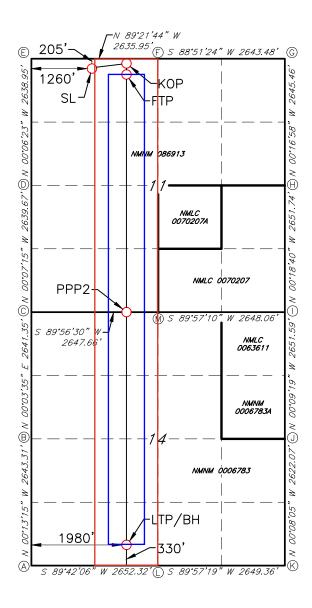
	2 Electronica CD Permittir		Ene			v Mexico I Resources Dep TON DIVISION	artment	Subm		Revised Ju Initial Submitt Amended Rep	
								Type:		☐ As Drilled	
					WELL LOCAT	ION INFORMATIO	N	•		•	
API Nu	mber <mark>30-015-5</mark>	6953	Pool Code 72120	Big Eddy	y; Wolfcamp (Pool Name Gas)	•	WC W	FM	P	
Property	y Code 335709		Property Na	ame B	LOOMIN ON	NION 11/14	FED COM		Well	Number	713H
OGRID	No. 1	4744	Operator N	ame	MEWBOURI	NE OIL COMI	PANY		Grou	nd Level Elevation	3228'
Surface	Owner:	State Fee	Tribal ☑ F	ederal		Mineral Owner:	☐State ☐Fee	□Tribal	☑ Fed	leral	
					Surfa	ce Location					•
UL	Section	Township	Range	Lot	Ft. from N/S	Ft. from E/W	Latitude		Long	itude	County
D	11	20S	30E		205 FNL	1260 FWL	32.59443	58°N	103	.9473006°W	EDDY
	T	I	I _	1_		Hole Location					
UL N	Section 14	Township 20S	Range 30E	Lot	Ft. from N/S 330 FSL	Ft. from E/W 1980 FWL	Latitude	~ ooni	Long	itude .9450291°W	County EDDY
IN	14	205	SUE		990 LST	1960 FWL	აგ.ანნშა	72 N	103.	.9430291 W	EDDI
Dedicat	ed Acres	Infill or Defi	ning Well	Defining	Well API	Overlapping Space	cing Unit (Y/N)	Consolio	dation	Code	
3	320	DEFI				N				C	!
Order N	lumbers.	N/A				Well setbacks are	under Common	Ownersl	nip: 🔽	Yes 🗆 No	
					Kick O	ff Point (KOP)					
UL	Section	Township	Range	Lot	Ft. from N/S	Ft. from E/W	Latitude		Long	itude	County
C	11	20S	30E		10 FNL	1980 FWL	32.59494	25°N	103	.9449626°W	EDDY
					First Ta	ke Point (FTP)					
UL	Section	Township	Range	Lot	Ft. from N/S	Ft. from E/W	Latitude		Long		County
С	11	20S	30E		330 FNL	1980 FWL	32.59406	31°N	103.	.9449645°W	EDDY
UL	Section	Township	Range	Lot	Ft. from N/S	ke Point (LTP) Ft. from E/W	Latitude		T	:64.	County
N N	14	20S	30E	Lot	330 FSL	1980 FWL	Latitude	72°N	Long:	.9450291°W	•
		1 700			000 102	1000 1	0.00000			.0100.001 11	
Unitize	d Area or Ar	rea of Uniform	Interest	Spacing	Unit Type 🛭 Hori	zontal Vertical	Groun	nd Floor l	Elevati	ion: 3228	3'
	. Top cer					avinviewa avin	TYPY G TY O. Y. G				
		TIFICATIONS				SURVEYOR CER				l - 44 - 1 f f 1 1	4
my know organiza including	ledge and belic tion either own g the proposed	ef, and , if the well as a working interd bottom hole locat	l is a vertical or est or unleased ion or has a rigi	directional w mineral inter ht to drill this	est in the land well at this	I hereby certify that th surveys made by me un my belief.	e wen tocation snow	an ME	the same	s plotted from fleta not the is true and correct t	o the best of
location pursuant to a contract with an owner of a working interest or unleased mineral interest, or to a voluntary pooling agreement or a compulsory pooling order heretofore entered by the division.					19680						
If this well is a horizontal well, I further certify that this organization has received the consent of at least one lessee or owner of a working interest or unleased mineral interest				A Control							
in each tract (in the target pool or formation) in which any part of the well's completed interval will be located or obtained a compulsory pooling order from the division.				100	ONAL	SURV	7				
And	<u>lrew (</u>	V Taylo	Date		7/3/2024	Signature and Seal of Prof					
Signature	rew T	<i>∨</i> aylor	Date			Robert M	i. Howe	+			
Printed Na						Certificate Number	Date of Surve	ey			
ataylo	or@mev	vbourne.c	om			19680		0	5/2	1/2025	
Email Add	dress				·			_	,	•	

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.

BLOOMIN ONION 11/14 FED COM #713H



GEODETIC DATA

NAD 83 GRID — NM EAST

SURFACE LOCATION (SL) 205' FNL & 1260' FWL - SEC.11 N: 580202.2 - E 660224.9 LAT: 32.5944358' N LONG: 103.9473006' W

KICK OFF POINT (KOP) 10' FNL & 1980' FWL - SEC.11 N: 580389.2 - E: 660944.3 LAT: 32.5949425' N LONG: 103.9449626' W

FIRST TAKE POINT (FTP)
330' FNL & 1980' FWL - SEC.11
N: 580069.3 - E: 660944.9
LAT: 32.5940631' N
LONG: 103.9449645' W

PROPOSED PENETRATION POINT (PPP2)

O' FNL & 1978' FWL — SEC.14

N: 575145.8 — E: 660952.9

LAT: 32.5805301' N

LONG: 103.9449967' W

LAST TAKE POINT (LTP)/BOTTOM HOLE (BH)
330' FSL & 1980' FWL - SEC.14
N: 570200.6 - E: 660961.0
LAT: 32.5669372' N
LONG: 103.9450291' W

NAD 83 GRID — NM EAST

A: FOUND BRASS CAP "1943" N: 569860.4 - E: 658982.8

B: FOUND BRASS CAP "1943" N: 572503.1 - E: 658972.6

C: FOUND BRASS CAP "1943" N: 575143.8 - E: 658975.3

D: FOUND BRASS CAP "1943" N: 577782.9 - E: 658969.8

E: FOUND BRASS CAP "1943" N: 580421.2 - E: 658964.9

F: FOUND BRASS CAP "1943" N: 580391.9 - E: 661600.1

G: FOUND BRASS CAP "1943"

N: 580444.6 - E: 664242.4 H: FOUND BRASS CAP "1943"

N: 577799.8 - E: 664255.5

I: FOUND BRASS CAP "1943" N: 575148.7 - E: 664269.8

J: FOUND BRASS CAP "1943" N: 572497.7 - E: 664277.0

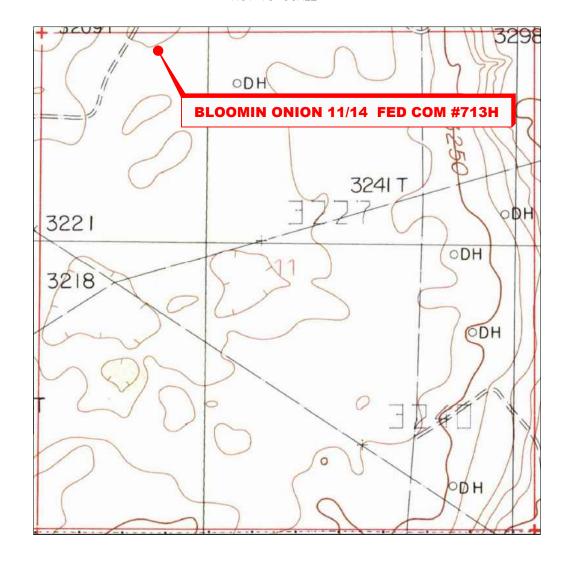
K: FOUND BRASS CAP "1943" N: 569876.3 - E: 664283.2

L: FOUND BRASS CAP "1943" N: 569874.2 - E: 661634.4

M: FOUND BRASS CAP "1943" N: 575146.5 - E: 661622.4

LOCATION VERIFICATION MAP

NOT TO SCALE



SECTION 11, TWP. 20 SOUTH, RGE. 30 EAST, N. M. P. M., EDDY CO., NEW MEXICO

OPERATOR: Mewbourne Oil Company LOCATION: 205' FNL & 1260' FWL

LEASE: Bloomin Onion 11/14 Fed Com CONTOUR INTERVAL: 10'

WELL NO.: _ 713H

ELEVATION: 3228'

USGS TOPO. SOURCE MAP:

Tower Hill North, NM (1985)

SL MOVE |5/21/25 1 NO. REVISION

JOB NO.: LS25020183R1 DWG. NO.: 25020183R1-3



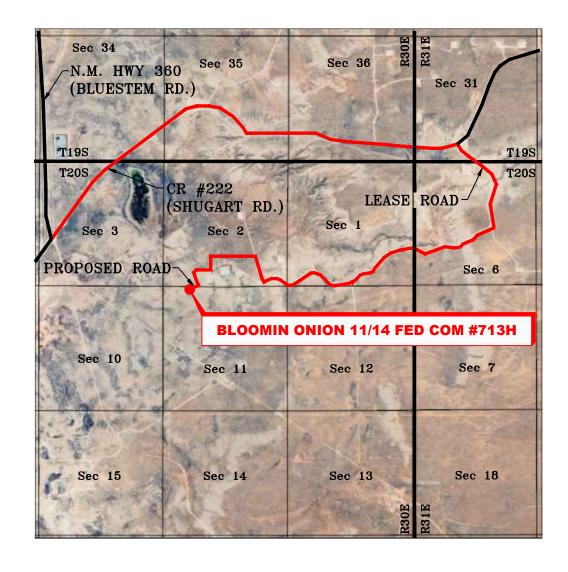
701 S. CECIL ST., HOBBS, NM 88240 (575) 964-8200

SCALE: N.T.S. DATE: 02/17/2025 SURVEYED BY: ML/JH DRAWN BY: RQ APPROVED BY: RMH SHEET: 1 OF 1

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VICINITY MAP

NOT TO SCALE



SECTION 11, TWP. 20 SOUTH, RGE. 30 EAST, N. M. P. M., EDDY COUNTY, NEW MEXICO

OPERATOR: Mewbourne Oil Company LOCATION: 205' FNL & 1260' FWL

LEASE: Bloomin Onion 11/14 Fed Com ELEVATION: 3228'

WELL NO.: 713H

5/21/25 SL MOVE 1 NO. REVISION

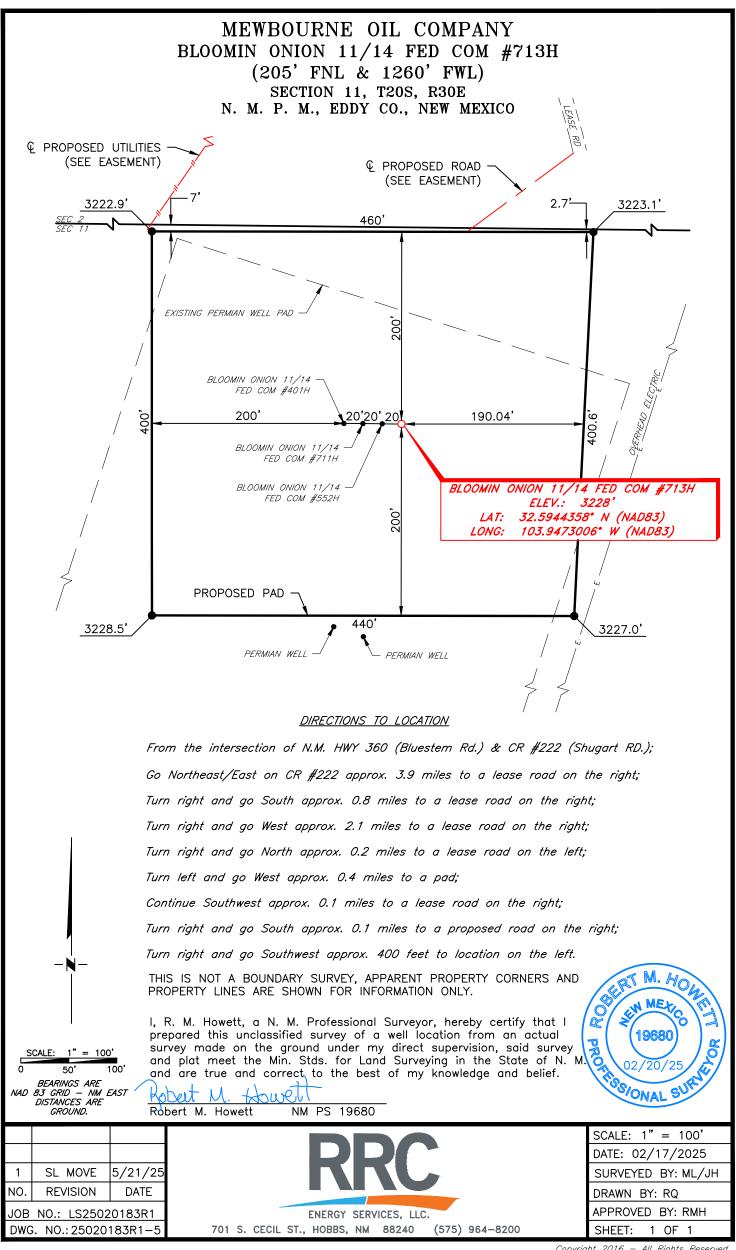
JOB NO.: LS25020183R1 DWG. NO.: 25020183R1-4



701 S. CECIL ST., HOBBS, NM 88240 (575) 964-8200

SCALE: N. T. S. DATE: 02/17/2025 SURVEYED BY: ML/JH DRAWN BY: RQ APPROVED BY: RMH SHEET: 1 OF 1

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Form 3160-5 (June 2019)

UNITED STATES DEPARTMENT OF THE INTERIOR

FORM APPROVED
OMB No. 1004-0137
Expires: October 31, 2021

(Juli	DE.	PARTMENT OF THE L	NTERIOR		E	xpires: October 31, 2021		
	BUR	EAU OF LAND MANA	AGEMENT		5. Lease Serial No.	NMNM86913		
		NOTICES AND REPO			6. If Indian, Allottee or Tribe	e Name		
		form for proposals t Use Form 3160-3 (A						
	SUBMIT IN	TRIPLICATE - Other instru	7. If Unit of CA/Agreement,	, Name and/or No.				
1. T	ype of Well				8. Well Name and No.			
2 N	Oil Well Gas		9. API Well No.	1H				
	MEWBOURNE	OIL COMPANY						
3a	Address P O BOX 5270, HOBB	S, NM 88241	3b. Phone No. (inc.) (575) 393-5905	lude area code)	10. Field and Pool or Explor	atory Area		
	ocation of Well (Footage, Sec., T.,, EC 11/T20S/R30E/NMP	R.,M., or Survey Description)			11. Country or Parish, State EDDY/NM			
	12. CHI	ECK THE APPROPRIATE BO	OX(ES) TO INDICA	ATE NATURE (OF NOTICE, REPORT OR O	ΓHER DATA		
	TYPE OF SUBMISSION			TYPI	E OF ACTION			
	Notice of Intent	Acidize	Deepen		Production (Start/Resume	e) Water Shut-Off		
	_	Alter Casing		c Fracturing	Reclamation	Well Integrity		
	Subsequent Report	Casing Repair	New Con		Recomplete	Other		
Г	Final Abandonment Notice	Change Plans Convert to Injection	Plug and Plug Bac		Temporarily Abandon Water Disposal			
12	Describe Proposed or Completed (,				1 1 :	C IC	
	completion of the involved operaticompleted. Final Abandonment Nois ready for final inspection.) Mewbourne Oil Company req Change well name from Caba	uests approval to make the	all requirements, in following change m #1H to Bloomin	cluding reclama	tion, have been completed and ed APD (10400051406):			
14. I hereby certify that the foregoing is true and correct. Name (<i>Printed/Typed</i>) ANDY TAYLOR / Ph: (575) 393-5905				Engineer le				
Signature (Electronic Submission)				te	07/03/	/2025		
		THE SPACE	FOR FEDER	AL OR STA	TE OFICE USE			
App	proved by							
PAMELLA HERNANDEZ / Ph: (575) 234-5954 / Approved				Title LIE		07/07/2025 Date		
certi	ditions of approval, if any, are attac fy that the applicant holds legal or th would entitle the applicant to co	equitable title to those rights	Office CAR	LSBAD				
	e 18 U.S.C Section 1001 and Title 4 false, fictitious or fraudulent staten				and willfully to make to any	department or agency of the Unit	ed States	

(Instructions on page 2)

GENERAL INSTRUCTIONS

This form is designed for submitting proposals to perform certain well operations and reports of such operations when completed as indicated on Federal and Indian lands pursuant to applicable Federal law and regulations. Any necessary special instructions concerning the use of this form and the number of copies to be submitted, particularly with regard to local area or regional procedures and practices, are either shown below, will be issued by or may be obtained from the local Federal office.

SPECIFIC INSTRUCTIONS

Item 4 - Locations on Federal or Indian land should be described in accordance with Federal requirements. Consult the local Federal office for specific instructions.

Item 13: Proposals to abandon a well and subsequent reports of abandonment should include such special information as is required by the local Federal office. In addition, such proposals and reports should include reasons for the abandonment; data on any former or present productive zones or other zones with present significant fluid contents not sealed off by cement or otherwise; depths (top and bottom) and method of placement of cement plugs; mud or other material placed below, between and above plugs; amount, size, method of parting of any casing, liner or tubing pulled and the depth to the top of any tubing left in the hole; method of closing top of well and date well site conditioned for final inspection looking for approval of the abandonment. If the proposal will involve **hydraulic fracturing operations**, you must comply with 43 CFR 3162.3-3, including providing information about the protection of usable water. Operators should provide the best available information about all formations containing water and their depths. This information could include data and interpretation of resistivity logs run on nearby wells. Information may also be obtained from state or tribal regulatory agencies and from local BLM offices.

NOTICES

The privacy Act of 1974 and the regulation in 43 CFR 2.48(d) provide that you be furnished the following information in connection with information required by this application.

AUTHORITY: 30 U.S.C. 181 et seq., 351 et seq., 25 U.S.C. 396; 43 CFR 3160.

PRINCIPAL PURPOSE: The information is used to: (1) Evaluate, when appropriate, approve applications, and report completion of subsequent well operations, on a Federal or Indian lease; and (2) document for administrative use, information for the management, disposal and use of National Resource lands and resources, such as: (a) evaluating the equipment and procedures to be used during a proposed subsequent well operation and reviewing the completed well operations for compliance with the approved plan; (b) requesting and granting approval to perform those actions covered by 43 CFR 3162.3-2, 3162.3-3, and 3162.3-4; (c) reporting the beginning or resumption of production, as required by 43 CFR 3162.4-1(c)and (d) analyzing future applications to drill or modify operations in light of data obtained and methods used.

ROUTINE USES: Information from the record and/or the record will be transferred to appropriate Federal, State, local or foreign agencies, when relevant to civil, criminal or regulatory investigations or prosecutions in connection with congressional inquiries or to consumer reporting agencies to facilitate collection of debts owed the Government.

EFFECT OF NOT PROVIDING THE INFORMATION: Filing of this notice and report and disclosure of the information is mandatory for those subsequent well operations specified in 43 CFR 3162.3-2, 3162.3-4.

The Paperwork Reduction Act of 1995 requires us to inform you that:

The BLM collects this information to evaluate proposed and/or completed subsequent well operations on Federal or Indian oil and gas leases.

Response to this request is mandatory.

The BLM would like you to know that you do not have to respond to this or any other Federal agency-sponsored information collection unless it displays a currently valid OMB control number.

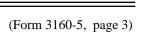
BURDEN HOURS STATEMENT: Public reporting burden for this form is estimated to average 8 hours per response, including the time for reviewing instructions, gathering and maintaining data, and completing and reviewing the form. Direct comments regarding the burden estimate or any other aspect of this form to U.S. Department of the Interior, Bureau of Land Management (1004-0137), Bureau Information Collection Clearance Officer (WO-630), 1849 C St., N.W., Mail Stop 401 LS, Washington, D.C. 20240

(Form 3160-5, page 2)

Additional Information

Location of Well

0. SHL: NWNW / 205 FNL / 1260 FWL / TWSP: 20S / RANGE: 30E / SECTION: 11 / LAT: 32.5944358 / LONG: -103.9473006 (TVD: 27 feet, MD: 27 feet) PPP: NENW / 330 FNL / 1980 FWL / TWSP: 20S / RANGE: 30E / SECTION: 11 / LAT: 32.5940631 / LONG: -103.9449645 (TVD: 9807 feet, MD: 9969 feet) PPP: NENW / 0 FNL / 1978 FWL / TWSP: 20S / RANGE: 30E / SECTION: 14 / LAT: 32.5805301 / LONG: -103.9449967 (TVD: 9867 feet, MD: 14902 feet) BHL: SESW / 330 FSL / 1980 FWL / TWSP: 20S / RANGE: 30E / SECTION: 14 / LAT: 32.5669372 / LONG: -103.9450291 (TVD: 9869 feet, MD: 19847 feet)



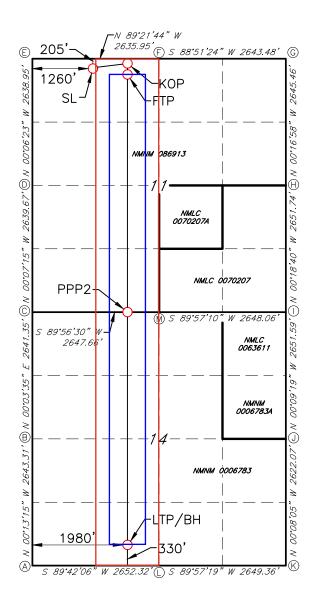
<u>C-102</u>	-	State of New Energy, Minerals & Natura				al Resources Department			Revised.	July 9, 2024	
	Electronica D Permittir			OIL (CONSERVAT	TON DIVISION				☐ Initial Submi	ttal
		C						Submi		✓ Amended Re	port
								турс.		☐ As Drilled	
					WELL LOCAT	ION INFORMATIO	N				
API Nu	mber		Pool Code		I	Pool Name	1	WC W	FMI)	
Property			Property Na	В	LOOMIN OF	NION 11/14	FED COM			Number	713H
OGRID	No. 1	4744	Operator Na	ame	MEWBOUR	NE OIL COM	PANY		Groun	d Level Elevation	ⁿ 3228'
Surface	Owner:	State Fee	Tribal ☑ F	ederal		Mineral Owner:	☐ State ☐ Fee	□Tribal	☑ Fede	eral	
					Surfa	ace Location					
UL	Section	Township	Range	Lot	Ft. from N/S	Ft. from E/W	Latitude		Longit	ude	County
D	11	20S	30E		205 FNL	1260 FWL	32.59443	58°N	103.9	9473006°W	EDDY
					Bottom	Hole Location		-			
UL	Section	Township	Range	Lot	Ft. from N/S	Ft. from E/W	Latitude		Longit		County
N	14	20S	30E		330 FSL	1980 FWL	32.56693	72°N	103.9	9450291°W	EDDY
		l		1							
	ed Acres	Infill or Defin		Defining	Well API	Overlapping Space N	cing Unit (Y/N)	Consolic	dation C		~
Order N		N/A	NIIVO				N C Well setbacks are under Common Ownership: ✓ Yes ☐ No				<i>J</i>
_ Grace 1	umoers.	14/11									
T.17	a .:	m 1:	l p	T .		ff Point (KOP)	T 1	Т	.	í	
UL C	Section 11	Township 20S	Range 30E	Lot	Ft. from N/S 10 FNL	Ft. from E/W 1980 FWL	Latitude	25°N	Longit	^{ude} 9449626°W	County EDDY
	11	203	JUE			ke Point (FTP)	J2.J9494	20 N	105.	9449020 W	EDDI
UL	Section	Township	Range	Lot	Ft. from N/S	Ft. from E/W	Latitude		Longit	ııde	County
C	11	205	30E		330 FNL	1980 FWL	1	31°N	_	9449645°W	1
					Last Ta	ke Point (LTP)					
UL	Section	Township	Range	Lot	Ft. from N/S	Ft. from E/W	Latitude		Longit	ude	County
N	14	20S	30E		330 FSL	1980 FWL	32.56693	72°N	103.9	9450291°W	EDDY
		277 :0	<u> </u>	G:			1.	1771 7	71		
Unitized	l Area or Ar N	rea of Uniform I/A	Interest	Spacing	Unit Type M Hor	zontal Vertical	Groui	nd Floor I	Elevatio	on: 322	8'
							•				
OPER.	ATOR CER	TIFICATIONS	3			SURVEYOR CER	TIFICATIONS				
		information conte ef, and , if the well			plete to the best of	I hereby certify that th surveys made by me u	e well location sho	wn on this	olat was	plotted from field n	otes of actual
organiza	tion either owr	is a working inter	est or unleased	mineral inter	est in the land	my belief.	nuci niy superiisa		10h	is true una correct	to the best of
including the proposed bottom hole location or has a right to drill this well at this location pursuant to a contract with an owner of a working interest or unleased mineral interest, or to a voluntary pooling agreement or a compulsory pooling order heretofore			· unleased mineral			" ME	6/4				
entered by the division.					(19680		2				
If this well is a horizontal well, I further certify that this organization has received the consent of at least one lessee or owner of a working interest or unleased mineral interest				\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\		' <u> </u>	<u>ō</u> /				
in each tract (in the target pool or formation) in which any part of the well's completed interval will be located or obtained a compulsory pooling order from the division.				Tille							
Ann	Isome 1	1) Taula			7/3/2024		Fessional Surveyor	ONAL S	SU.		
Signature		- inger	Date		. , <u> </u>	Signature and Seal of Prof	essional Surveyor	.)			
And	rew T	aylor				Robert M	1. Howe	tt			
Printed Na						Certificate Number	Date of Surv	ey			
		vbourne.c	om			19680		0	5/21	1/2025	
Email Add	ress										

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.

BLOOMIN ONION 11/14 FED COM #713H



GEODETIC DATA

NAD 83 GRID — NM EAST

SURFACE LOCATION (SL) 205' FNL & 1260' FWL - SEC.11 N: 580202.2 - E 660224.9 LAT: 32.5944358' N LONG: 103.9473006' W

KICK OFF POINT (KOP)

10' FNL & 1980' FWL - SEC.11

N: 580389.2 - E: 660944.3

LAT: 32.5949425' N

LONG: 103.9449626' W

FIRST TAKE POINT (FTP)
330' FNL & 1980' FWL - SEC.11
N: 580069.3 - E: 660944.9
LAT: 32.5940631' N
LONG: 103.9449645' W

PROPOSED PENETRATION POINT (PPP2)

O' FNL & 1978' FWL — SEC.14

N: 575145.8 — E: 660952.9

LAT: 32.5805301' N

LONG: 103.9449967' W

LAST TAKE POINT (LTP)/BOTTOM HOLE (BH)
330' FSL & 1980' FWL - SEC.14
N: 570200.6 - E: 660961.0
LAT: 32.5669372' N
LONG: 103.9450291' W

CORNER DATA NAD 83 GRID — NM EAST

A: FOUND BRASS CAP "1943" N: 569860.4 - E: 658982.8

B: FOUND BRASS CAP "1943" N: 572503.1 - E: 658972.6

C: FOUND BRASS CAP "1943" N: 575143.8 - E: 658975.3

D: FOUND BRASS CAP "1943" N: 577782.9 - E: 658969.8

E: FOUND BRASS CAP "1943" N: 580421.2 - E: 658964.9

F: FOUND BRASS CAP "1943" N: 580391.9 - E: 661600.1

G: FOUND BRASS CAP "1943"

N: 580444.6 - E: 664242.4 H: FOUND BRASS CAP "1943"

N: 577799.8 - E: 664255.5 I: FOUND BRASS CAP "1943"

N: 575148.7 - E: 664269.8

J: FOUND BRASS CAP "1943" N: 572497.7 - E: 664277.0

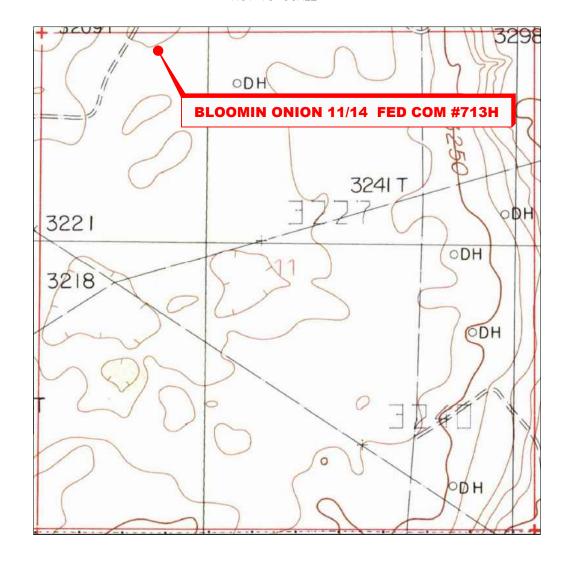
K: FOUND BRASS CAP "1943" N: 569876.3 - E: 664283.2

L: FOUND BRASS CAP "1943" N: 569874.2 - E: 661634.4

M: FOUND BRASS CAP "1943" N: 575146.5 - E: 661622.4

LOCATION VERIFICATION MAP

NOT TO SCALE



SECTION 11, TWP. 20 SOUTH, RGE. 30 EAST, N. M. P. M., EDDY CO., NEW MEXICO

OPERATOR: Mewbourne Oil Company LOCATION: 205' FNL & 1260' FWL

LEASE: Bloomin Onion 11/14 Fed Com CONTOUR INTERVAL: 10'

WELL NO.: _ 713H

ELEVATION: 3228'

USGS TOPO. SOURCE MAP:

Tower Hill North, NM (1985)

1	SL MOVE	5/21/25
NO.	REVISION	DATE
JOB	NO.: LS2502	20183R1

DWG. NO.: 25020183R1-3



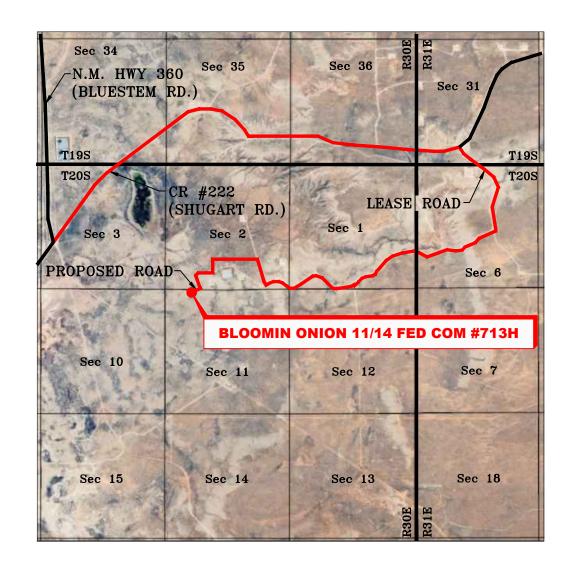
701 S. CECIL ST., HOBBS, NM 88240 (575) 964-8200

SCALE: N.T.S. DATE: 02/17/2025 SURVEYED BY: ML/JH DRAWN BY: RQ APPROVED BY: RMH SHEET: 1 OF 1

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VICINITY MAP

NOT TO SCALE



SECTION 11, TWP. 20 SOUTH, RGE. 30 EAST, N. M. P. M., EDDY COUNTY, NEW MEXICO

LEASE: Bloomin Onion 11/14 Fed Com ELEVATION: 3228'

WELL NO.: 713H

OPERATOR: Mewbourne Oil Company LOCATION: 205' FNL & 1260' FWL

5/21/25 SL MOVE 1 NO. REVISION JOB NO.: LS25020183R1

DWG. NO.: 25020183R1-4

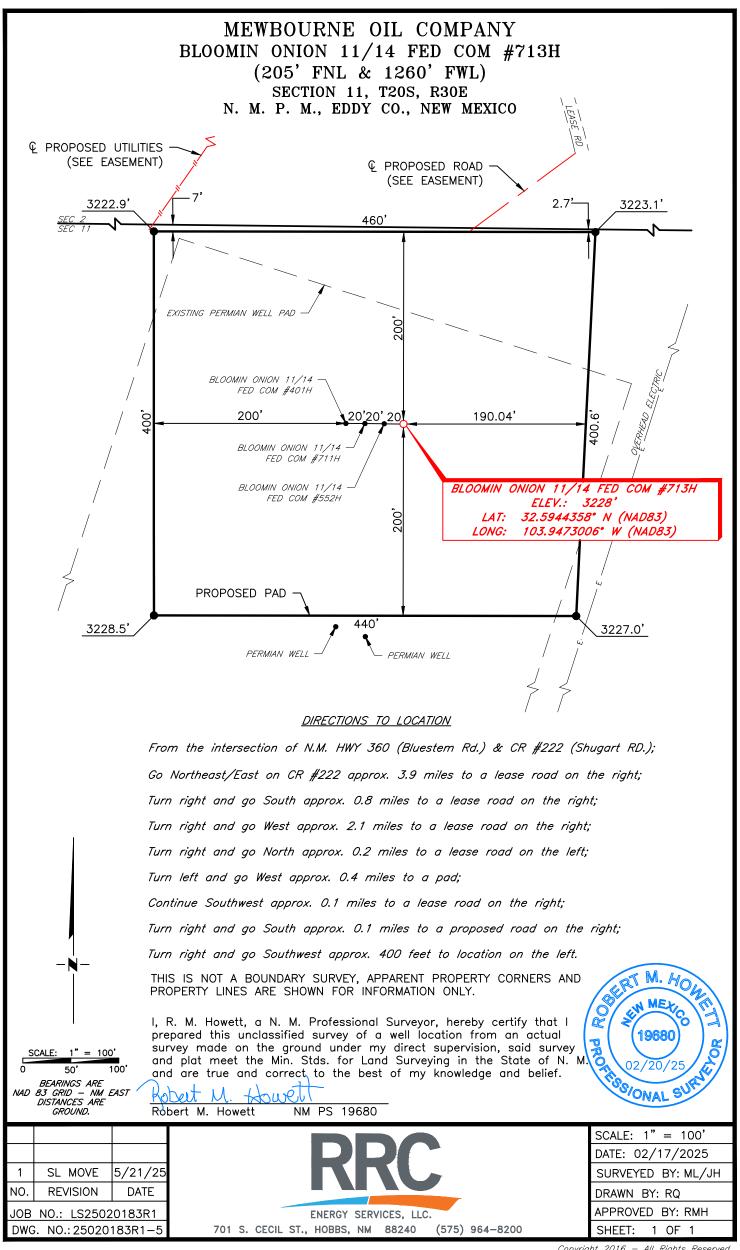
ENERGY SERVICES, LLC.

701 S. CECIL ST., HOBBS, NM 88240 (575) 964-8200

DATE: 02/17/2025 SURVEYED BY: ML/JH DRAWN BY: RQ APPROVED BY: RMH SHEET: 1 OF 1

SCALE: N. T. S.

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State of New Mexico Energy, Minerals and Natural Resources Department

Submit Electronically Via E-permitting

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

NATURAL GAS MANAGEMENT PLAN

This Natural Gas Mana	gement Plan m	ust be submitted w	ith each Applica	tion for Permit to I	Orill (APD) for a	new o	r recompleted well.		
			1 – Plan D Effective May 25						
I. Operator: Me	wbourne (Oil Co.	OGRID:	14744	Date:	3	3/27 <u>/25</u>		
II. Type: 🗶 Original [☐ Amendment	due to □ 19.15.27	7.9.D(6)(a) NMA	C □ 19.15.27.9.D((6)(b) NMAC □	Other.			
If Other, please describ	e:								
III. Well(s): Provide the recompleted from a s					wells proposed to	o be dri	illed or proposed to		
Well Name	API	ULSTR	Footages	Anticipated Oil BBL/D	Anticipated Gas MCF/D				
CABALLO LOCO 3/5 B3PO FED C	ОМ 1Н	D11 20S 30E	205' FNL x 1260' F	-w∟ 1500	1500	1500		600 4000	
IV. Central Delivery F V. Anticipated Schedu proposed to be recompl	l le: Provide the	following informa		w or recompleted w			7.9(D)(1) NMAC] used to be drilled or		
Well Name	API	Spud Date	TD Reached Date	Completion Commencement			First Production Date		
CABALLO LOCO 3/5 B3PO FED C	0М 1Н	4/27/25	5/27/25	6/27/25	7/3	/25	7/8/25		
VI. Separation Equiporation VII. Operational Praces Subsection A through Foundation VIII. Best Manageme during active and plann	etices: 🛭 Attac f of 19.15.27.8 nt Practices: §	ch a complete desc NMAC. Attach a comple	cription of the ac	tions Operator wil	l take to comply	with t	he requirements of		

<u>Sec</u>	<u>tion</u>	2 –	En	hai	1ce	<u>d P</u>	lan
]	EFFE	CTIV	/E A	PRI	L 1, 3	2022	2

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

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

IX. Anticipated Natural Gas Production:

Well	API	Anticipated Average Natural Gas Rate MCF/D	Anticipated Volume of Natural Gas for the First Year MCF
X. Natural Gas Gathering System (NG	GGS):		

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 anticipation of the system \square will \square will not have capacity to gather 100% of the anticipation of the system \square will \square will not have capacity to gather 100% of the anticipation of the system \square will not have capacity to gather 100% of the anticipation of the system \square will not have capacity to gather 100% of the anticipation of the system \square will not have capacity to gather 100% of the anticipation of the system \square will not have capacity to gather 100% of the anticipation of the system \square will not have capacity to gather 100% of the anticipation of the system \square will not have capacity to gather 100% of the system \square will not have	ited 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 we	ell(s).

\square Attach Operator's plan to manage production in response to the increased line r	e pressure
---	------------

XIV. Co	onfidentiality: [☐ Operator as	sserts confide	ntiality pur	suant to	Section	71-2-8	NMSA	1978 1	for the	information	provided i
Section 2	2 as provided in	Paragraph (2)	of Subsection	D of 19.15	5.27.9 NN	IAC, and	d attache	es a full	descrip	otion o	f the specific	informatio
for which	n confidentiality	is asserted an	d the basis fo	r such asser	tion.							

Released to Imaging: 7/9/2025 2:46:50 PM

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

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

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

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.

(g)

(h)

(i)

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:	3/27/25
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.



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

Drilling Plan Data Report

07/07/2025

APD ID: 10400051406

Well Type: OIL WELL

Submission Date: 01/09/2020

Highlighted data reflects the most

Operator Name: MEWBOURNE OIL COMPANY

Well Number: 1H

recent changes

Well Name: CABALLO LOCO 3/5 B3PO FED COM

Well Work Type: Drill

Show Final Text

Section 1 - Geologic Formations

Formation			True Vertical	Measured		Mineral Resources	Producing
ID	Formation Name	Elevation		Depth	Lithologies		Formatio
15970382	UNKNOWN	3228	28	28	OTHER : Top Soil	NONE	N
15970387	RUSTLER	3002	226	226	ANHYDRITE, DOLOMITE	USEABLE WATER	N
15970386	TOP SALT	2738	490	490	SALT	NONE	N
15970383	BOTTOM SALT	1603	1625	1625	SALT	NONE	N
15970390	YATES	1413	1815	1815	SANDSTONE	NATURAL GAS, OIL	N
15970391	CAPITAN REEF	1153	2075	2075	DOLOMITE, LIMESTONE	USEABLE WATER	N
15970388	DELAWARE	-432	3660	3660	LIMESTONE	NATURAL GAS, OIL	N
15970381	BONE SPRINGS	-3228	6456	6456	LIMESTONE, SHALE	NATURAL GAS, OIL	N
15970384	BONE SPRING 1ST	-4333	7561	7561	SANDSTONE	NATURAL GAS, OIL	N
15970385	BONE SPRING 2ND	-4999	8227	8227	SANDSTONE	NATURAL GAS, OIL	N
15970395	BONE SPRING 3RD	-6087	9315	9315	SANDSTONE	NATURAL GAS, OIL	N
15970396	WOLFCAMP	-6528	9756	9756	LIMESTONE, SANDSTONE, SHALE	NATURAL GAS, OIL	Y

Section 2 - Blowout Prevention

Pressure Rating (PSI): 5M Rating Depth: 19847

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

Well Name: CABALLO LOCO 3/5 B3PO FED COM Well Number: 1H

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:

Caballo_Loco_3_5_B3PO_Fed_Com_1H_5M_BOPE_Choke_Diagram_20250327193805.pdf Caballo Loco 3 5 B3PO Fed Com 1H Flex Line Specs API 16C 20250327193805.pdf

BOP Diagram Attachment:

Caballo_Loco_3_5_B3PO_Fed_Com_1H_5M_BOPE_Schematic_20250327193821.pdf

Mewbourne_Break_Testing_Variance_20250327193829.pdf

Caballo_Loco_3_5_B3PO_Fed_Com_1H_4_Str_5M_Multi_Bowl_WH_20250415145405.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	26	18.625	NEW	API	N	0	350	0	350	3228	2878	350	J-55	87.5	BUTT	4.03	14.3 8	DRY	43.4	DRY	44.6 4
- 1	INTERMED IATE	17.5	13.375	NEW	API	N	0	1290	0	1290	3224	1938	1290	H-40	48	ST&C	1.13	2.53	DRY	3.18	DRY	5.34
	INTERMED IATE	17.5	13.375	NEW	API	N	1290	1893	1290	1893	1938	1335	603	J-55	54.5	ST&C	1.13	2.72	DRY	13.0 5	DRY	21.6 5
	INTERMED IATE	17.5	13.375	NEW	API	N	1893	2000	1893	2000	1335	1228	107	J-55	61	ST&C	1.45	2.91	DRY	91.1 6	DRY	99.9 9
5	INTERMED IATE	12.2 5	9.625	NEW	API	N	0	3585	0	3585	3624	-357	3585	J-55	36	LT&C	1.26	2.2	DRY	3.51	DRY	4.37
6	PRODUCTI ON	8.75	7.0	NEW	API	N	0	9331	0	9293	3635	-6065		P- 110	26	LT&C	1.33	2.12	DRY	2.86	DRY	3.42
7		6.12 5	4.5	NEW	API	N	9131	19847	9123	9869	-5895	-6641	10716	P- 110	13.5	LT&C	1.73	2.02	DRY	2.34	DRY	2.92

Casing Attachments

Well Name: CABALLO LOCO 3/5 B3PO FED COM Well Number: 1H

Casing	Attachments
Casilia	Attacimiciti

Casing ID: 1

String

SURFACE

Inspection Document:

Spec Document:

Tapered String Spec:

Casing Design Assumptions and Worksheet(s):

18.625in_87.5__J55_BTC_Csg_20250327195505.pdf

Casing ID: 2

String

INTERMEDIATE

Inspection Document:

Spec Document:

Tapered String Spec:

Black_Sheep_4_B2MD_Fed_Com_2H_Surface_Csg_Tapered_String_20181018150949.pdf

Casing Design Assumptions and Worksheet(s):

13.375in_48__H40_STC_Csg_20250327195558.pdf

Casing ID: 3

3

String

INTERMEDIATE

Inspection Document:

Spec Document:

Tapered String Spec:

Casing Design Assumptions and Worksheet(s):

13.375in_54.5__J55_STC_Csg_20250327195700.pdf

Operator Name: MEWBOURNE OIL COMPANY

Well Name: CABALLO LOCO 3/5 B3PO FED COM

Well Number: 1H

Casing ID: 4

String

INTERMEDIATE

Inspection Document:

Spec Document:

Tapered String Spec:

Casing Design Assumptions and Worksheet(s):

 $13.375 in_61__J55_STC_Csg_20250327195757.pdf$

Casing ID: 5

String

INTERMEDIATE

Inspection Document:

Spec Document:

Tapered String Spec:

Casing Design Assumptions and Worksheet(s):

9.625in_36_J55_LTC_Csg_20250327195945.pdf

Casing ID: 6

ч

String

PRODUCTION

Inspection Document:

Spec Document:

Tapered String Spec:

Casing Design Assumptions and Worksheet(s):

7in_26_P110_LTC_Csg_20250327200027.pdf

Well Name: CABALLO LOCO 3/5 B3PO FED COM Well Number: 1H

Casing Attachments

Casing ID: 7

String

LINER

Inspection Document:

Spec Document:

Tapered String Spec:

Casing Design Assumptions and Worksheet(s):

 $4.5 in_13.5_P110_LTC_Csg_20250327200206.pdf$

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, 🗆	0	275	470	2.12	12.5	1000	100	Class C	Salt, Gel, Extender, LCM
SURFACE	Tail		275	350	200	1.34	14.8	268	100	Class C	Retarder
INTERMEDIATE	Lead	2050	0	1704	310	2.12	12.5	660	25	Class C	Salt, Gel, Extender, LCM
INTERMEDIATE	Tail		1704	2050	100	1.34	14.8	134	25	Class C	Retarder
INTERMEDIATE	Lead	2050	0	1730	810	2.12	12.5	1720	25	Class C	Salt, Gel, Extender, LCM
INTERMEDIATE	Tail		1730	2000	200	1.34	14.8	268	25	Class C	Retarder
INTERMEDIATE	Lead	2050	2050	2908	160	2.12	12.5	340	25	Class C	Salt, Gel Extender, LCM
INTERMEDIATE	Tail		2908	3585	200	1.34	14.8	268	25	Class C	Retarder
PRODUCTION	Lead		4585	6271	120	2.12	12.5	260	0	Class C	Gel, Retarder, Defoamer, Extender
PRODUCTION	Tail		6271	9331	400	1.18	15.6	472	0	Class H	Retarder, Fluid Loss, Defoamer
LINER	Lead		9131	1984	690	1.85	13.5	1280	25	Class C	Salt, Gel, Fluid Loss, Retarder, Dispersant, Defoamer, Anti-Settling Agent

Well Name: CABALLO LOCO 3/5 B3PO FED COM Well Number: 1H

Section 5 - Circulating Medium

Mud System Type: Closed

Will an air or gas system be Used? NO

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

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

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

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

Circulating Medium Table

Top Depth	Bottom Depth	Mud Type	Min Weight (lbs/gal)	Max Weight (lbs/gal)	Density (lbs/cu ft)	Gel Strength (lbs/100 sqft)	НА	Viscosity (CP)	Salinity (ppm)	Filtration (cc)	Additional Characteristics
0	350	SPUD MUD	8.4	8.6							
350	2000	SALT SATURATED	10	10.2							
2000	3585	WATER-BASED MUD	8.4	8.6							
1024 6	2009	OIL-BASED MUD	10	12							
3585	1024 6	WATER-BASED MUD	8.6	9.7							

Well Name: CABALLO LOCO 3/5 B3PO FED COM Well Number: 1H

Section 6 - Test, Logging, Coring

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

Will run GR/CNL from KOP (9346') to surface (horizontal well vertical portion of hole). Stated logs run will be in the Completion Report and submitted to the BLM

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

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

Coring operation description for the well:

None

Section 7 - Pressure

Anticipated Bottom Hole Pressure: 6158 Anticipated Surface Pressure: 3986

Anticipated Bottom Hole Temperature(F): 140

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

Describe:

Contingency Plans geoharzards description:

Contingency Plans geohazards

Hydrogen Sulfide drilling operations plan required? YES

Hydrogen sulfide drilling operations

Caballo_Loco_3_5_B3PO_Fed_Com_1H_H2S_Plan_20250327200939.pdf

Section 8 - Other Information

Proposed horizontal/directional/multi-lateral plan submission:

Caballo_Loco_3_5_B3PO_Fed_Com_1H_Dir_Plot_20250602100228.pdf

Caballo_Loco_3_5_B3PO_Fed_Com_1H_Dir_Plan_20250602100228.pdf

Other proposed operations facets description:

Mewbourne Oil Company requests approval to implement contingency casing design B as described in the drilling program. BLM will be notified of elected design.

A variance is requested to perform offline cementing according to the attached procedure.

Other proposed operations facets attachment:

Caballo_Loco_3_5_B3PO_Fed_Com_1H_NGMP_1_20250602102619.pdf

Caballo_Loco_3_5_B3PO_Fed_Com_1H_CsgAssumptions_20250602100255.pdf

Caballo_Loco_3_5_B3PO_Fed_Com_1H_Drlg_Program_20250602100255.pdf

Caballo_Loco_3_5_B3PO_Fed_Com_1H_R_111Q_Csg__Cmt_Assumptions_20250602100255.pdf

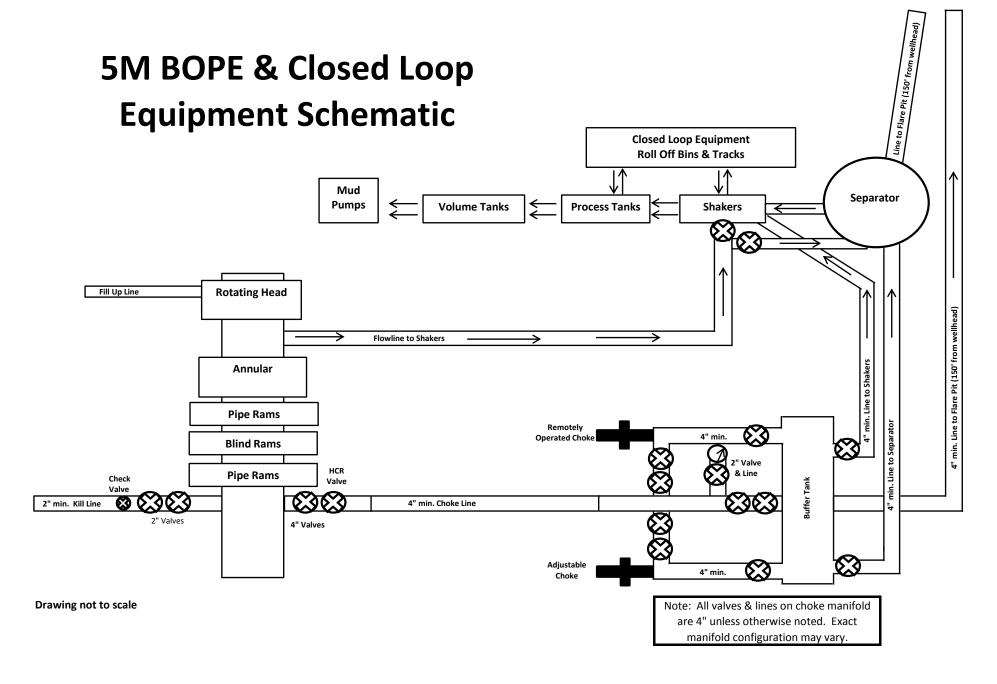
Other Variance request(s)?:

Υ

Well Name: CABALLO LOCO 3/5 B3PO FED COM Well Number: 1H

Other Variance attachment:

MOC_Offline_Cementing_Variance_20250327201215.pdf MOC_Break_Testing_Variance_20250401084912.pdf



LUOHE LETONE HYDRAULICS TECHNOLOGY CO.,LTD

HYDROSTATIC TESTING REPORT

LTYY/QR-5.7.1-28

№: 230826015

Released to Imaging: 7/9/2025 2:46:50 PM

LI I I/QK-5./.1-26	•				•	Nº: 230820013
Product Name	Cho	ke And Kill Hose		Standard	I AP	I Spec 16C 3 rd edition
Product Specification	3″×1000	0psi×60ft (18.29m	1)	Serial Num	ber	7660144
Inspection Equipment	MTU	J-BS-1600-3200-E		Test mediu	ım	Water
Inspection Department	C	.C. Department		Inspection I	Date	2023.08.26
		Rate of le	ength chang	ge	, ,	varance
Standard requirements	At working pro	essure, the rate of le	ngth chang	ge should not m	nore than ±2	%
Testing result	10000psi (69.0	MPa) ,Rate of leng	th change	0.7%		
	1	Hydrosta	atic testing			
Standard requirements		orking pressure, the				ess than three minutes
Testing result	15000psi (103	.5MPa), 3 min for the	he first tim	e, 60 min for th	ne second time	e, no leakage
Graph of pressure testing:						
100 100 100 100 100 100 100 100		B21 22-96-21		23:54 23:05-38 23:55 23:54 23:05-38 23:55		54 02/954 00/954 00
Conclusion	24	ted items meet stan			and confidences consider	
Approver];	awlong Chen	Auditor	1/1:3	ng Dong	Inspector	Zhansheng War



LUOHE LETONE HYDRAULICS TECHNOLOGY CO.,LTD

CERTIFICATE OF QUALITY

LTYY/QR-5.7.1-19B

№: LT2023-126-002

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

Inspection Items				Inspection resul	ts		
	Appearance Checking			In accordance with API Spec 16C 3 rd edition		16C 3 rd edition	
Size and Lengths			In accordance with API Spec 16C 3 rd edition				
Г	Dimensions and Tolerances		In accordance with API Spec 16C 3 rd edition		16C 3 rd edition		
End Connections: 4-1	End Connections: 4-1/16"×10000psi Integral flange for sour gas service		In accordance with API Spec 6A 21st edition				
End Connections: 4-1	End Connections: 4-1/16"×10000psi Integral flange for sour gas service		In accordance with API Spec 17D 3 rd edition				
	Hydrostatic Testing		In accordance with API Spec 16C 3 rd edition				
	product Marking				In accordar	nce with API Spec	16C 3 rd edition
Inspection conclusion The inspected items meet standard			eet standard requirer	ments of API Spec	16C 3 rd edition		
Remarks							
Approver	Jian long G	hen	Auditor	1/1	riging 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

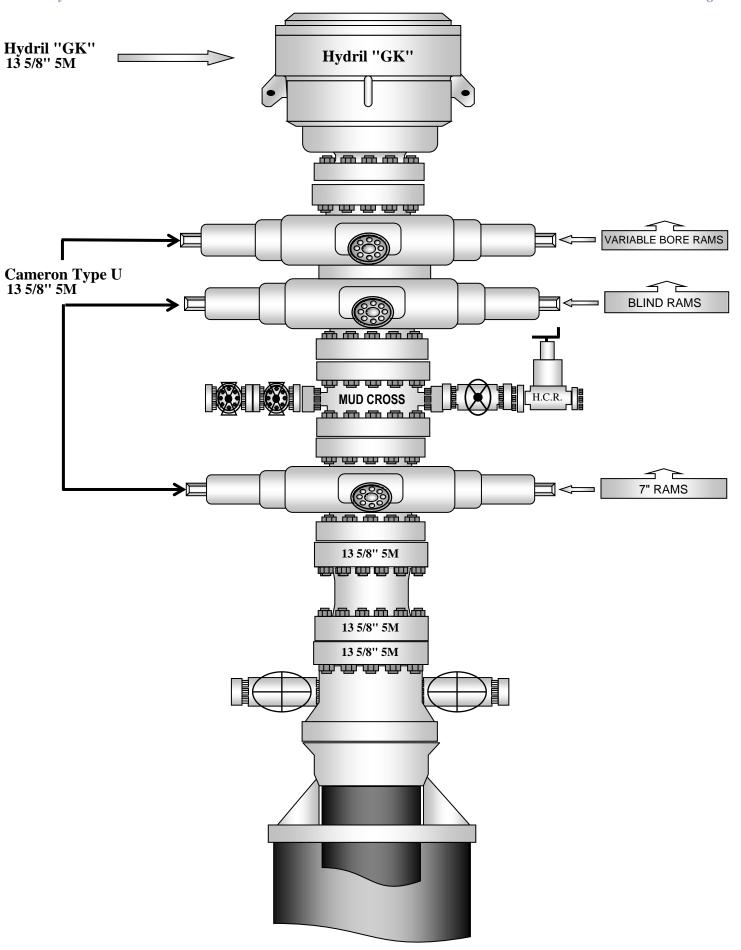
The Choke And Kill Hose assembly was produced by LUOHE LETONE HYDRAULICS TECHNOLOGY CO.,LTD . in Aug 2023, and inspected by LUOHE LETONE HYDRAULICS TECHNOLOGY CO.,LTD. according to API Spec 16C 3rd edition on Aug 26, 2023. The overall condition is good. This is to certify that the Choke And Kill Hose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

Jian long Chen

QC Manager:

Date: Aug 26, 2023

Released to Imaging: 7/9/2025 2:46:50 PM





Mewbourne Oil Co.

BOP Break Testing Variance

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

Procedures

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



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

Barriers

Before Nipple Down:

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

After Nipple Down:

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

Summary

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

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

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



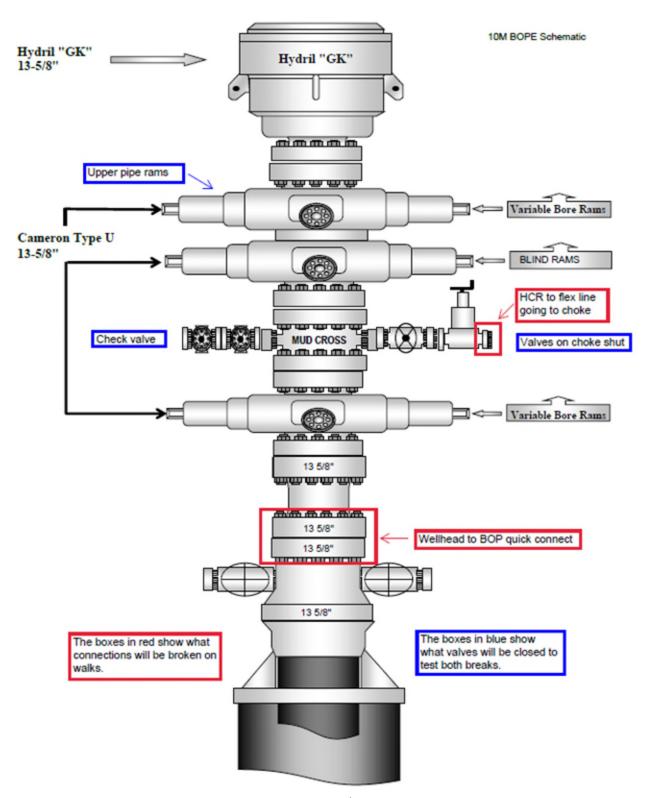


Figure 1. BOP diagram



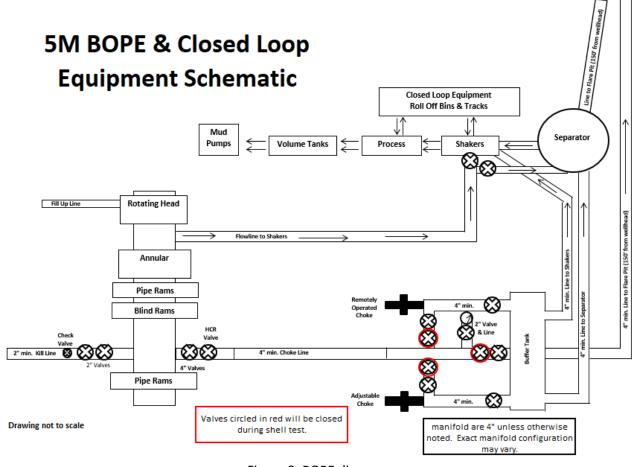


Figure 2. BOPE diagram





Figure 3. BOP handling system





Figure 4. BOP handling system



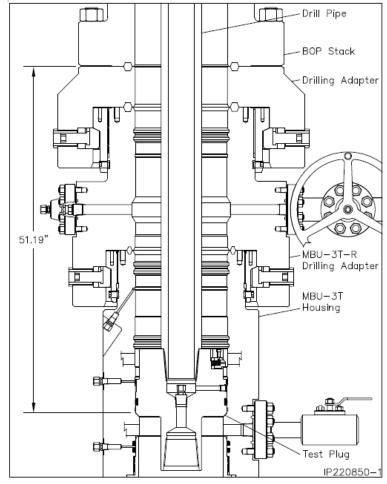


Figure 5. Cactus 5M wellhead with BOP quick connect

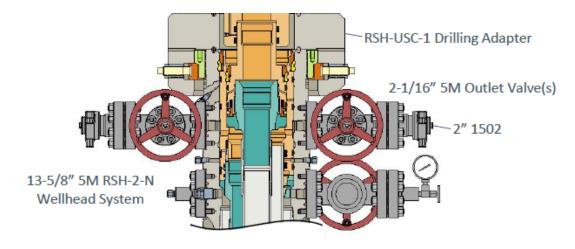
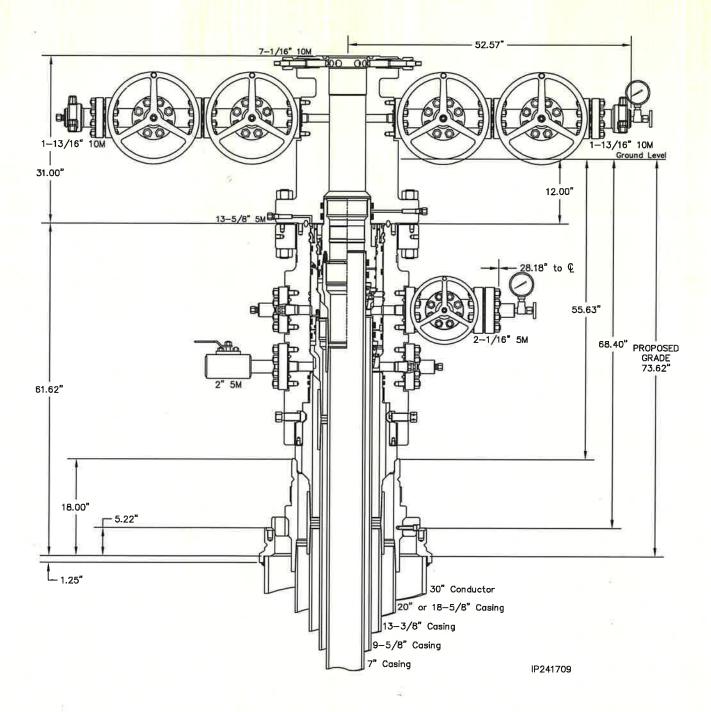


Figure 6. Vault 5M wellhead with BOP quick connect

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System Drawing



IP1703

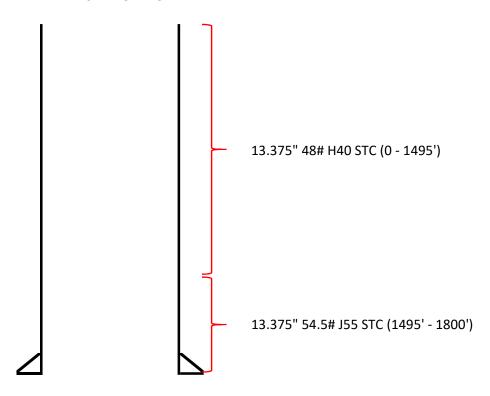
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Page 2

Mewbourne Oil Company 30" x 20" (or 18-5/8") x 13-3/8" x 9-5/8" x 7" 5/10M MBU-3T-CFL-SPR Wellhead System



TAPERED STRING DIAGRAM



			JOINT	
	COLLAPSE	BURST	YIELD	BODY YIELD
48#	1.125	2.530	3.710	6.240
54.5#	1.370	3.310	30.920	51.320

■ Tenaris

API STC

Coupling Pipe Body

Grade: J55 (Casing) Grade: J55 (Casing) Body: Bright Green 1st Band: Bright Green 1st Band: White 2nd Band: -

2nd Band: -3rd Band: -3rd Band: -4th Band: -

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

Pipe Body Data

Geometry			
Nominal OD	13.375 in.	Drift	12.459 in.
Wall Thickness	0.380 in.	Plain End Weight	52.79 lb/ft
Nominal Weight	54.500 lb/ft	OD Tolerance	API
Nominal ID	12.615 in.		

Performance	
SMYS	55,000 psi
Min UTS	75,000 psi
Body Yield Strength	853 x1000 lb
Min. Internal Yield Pressure	2730 psi
Collapse Pressure	1130 psi
Max. Allowed Bending	19 °/100 ft

Connection Data

Geometry	
Thread per In	8
Connection OD	14.375 in.
Hand Tight Stand Off	3.500 in.

Performance	
Joint Strength	514 x1000 lb
Coupling Face Load	519 x1000 lb
Internal Pressure Capacity	2730 psi

Make-Up Torques	
Minimum Torque	3860 ft-lb
Optimum Torque	5140 ft-lb
Maximum Torque	6430 ft-lb

Notes

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

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

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

■ Tenaris

API STC

Coupling Pipe Body

Grade: J55 (Casing) Grade: J55 (Casing) Body: Bright Green 1st Band: Bright Green 1st Band: White 2nd Band: -

2nd Band: -3rd Band: -3rd Band: -4th Band: -

Outside Diameter	13.375 in.	Wall Thickness	0.430 in.	Grade	J55 (Casing)
Min. Wall Thickness	87.50 %	Pipe Body Drift	API Standard	Туре	Casing
Connection OD Option	Regular				

Pipe Body Data

Geometry			
Nominal OD	13.375 in.	Drift	12.359 in.
Wall Thickness	0.430 in.	Plain End Weight	59.50 lb/ft
Nominal Weight	61 lb/ft	OD Tolerance	API
Nominal ID	12.515 in.		

Performance	
SMYS	55,000 psi
Min UTS	75,000 psi
Body Yield Strength	962 x1000 lb
Min. Internal Yield Pressure	3090 psi
Collapse Pressure	1540 psi
Max. Allowed Bending	19 °/100 ft

Connection Data

Geometry	
Thread per In	8
Connection OD	14.375 in.
Hand Tight Stand Off	3.500 in.

Performance	
Joint Strength	595 x1000 lb
Coupling Face Load	519 x1000 lb
Internal Pressure Capacity	3090 psi

Make-Up Torques	
Minimum Torque	4460 ft-lb
Optimum Torque	5950 ft-lb
Maximum Torque	7440 ft-lb

Notes

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

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

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

■ Tenaris

API STC

Coupling Pipe Body Grade: H40 Grade: H40 1st Band: Black Body: -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	
Thread per In	8
Connection OD	14.375 in.
Hand Tight Stand Off	3.500 in.

Performance	
Joint Strength	322 x1000 lb
Coupling Face Load	377 x1000 lb
Internal Pressure Capacity	1730 psi

Make-Up Torques	
Minimum Torque	2420 ft-lb
Optimum Torque	3220 ft-lb
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.

Tenaris

API LTC

Coupling Pipe Body

Grade: J55 (Casing) Grade: J55 (Casing) 1d Rand: Bright Green

Body: Bright Green	1st Band: Bright G
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	
S	MYS	55,000 psi
IV	lin UTS	75,000 psi
В	ody Yield Strength	564 x1000 lb
IV	lin. Internal Yield Pressure	3520 psi
C	collapse Pressure	2020 psi
IV	lax. Allowed Bending	26 °/100 ft

Connection Data

Geometry	
Thread per In	8
Connection OD	10.625 in.
Hand Tight Stand Off	3.500 in.

Performance	
Joint Strength	453 x1000 lb
Coupling Face Load	433 x1000 lb
Internal Pressure Capacity	3520 psi

Make-Up Torques	
Minimum Torque	3400 ft-lb
Optimum Torque	4530 ft-lb
Maximum Torque	5660 ft-lb

Notes

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

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

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

■Tenaris

API LTC

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

Geometry	
Thread per In	8
Connection OD	7.875 in.
Hand Tight Stand Off	3 in.

Performance	
Joint Strength	693 x1000 lb
Coupling Face Load	799 x1000 lb
Internal Pressure Capacity	9960 psi

Make-Up Torques	
Minimum Torque	5200 ft-lb
Optimum Torque	6930 ft-lb
Maximum Torque	8660 ft-lb

Notes

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

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

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

Tenaris

API LTC

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	
Thread per In	8
Connection OD	5.250 in.
Hand Tight Stand Off	3 in.

Performance	
Joint Strength	338 x1000 lb
Coupling Face Load	473 x1000 lb
Internal Pressure Capacity	12,410 psi

Make-Up Torques	
Minimum Torque	2750 ft-lb
Optimum Torque	3660 ft-lb
Maximum Torque	4580 ft-lb

Notes

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

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

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

Tenaris

API BTC

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	18.625 in.	Wall Thickness	0.435 in.	Grade	J55 (Casing)
Min. Wall Thickness	87.50 %	Pipe Body Drift	Special Drift	Туре	Casing
Connection OD Option	Regular				

Pipe Body Data

18.625 in.	Plain End Weight	84.59 lb/ft
0.435 in.	OD Tolerance	API
17.755 in.		
17.756 in.		
	0.435 in. 17.755 in.	

Performance	
SMYS	55,000 psi
Min UTS	75,000 psi
Body Yield Strength	1367 x1000 lb
Min. Internal Yield Pressure	2250 psi
Collapse Pressure	630 psi
Max. Allowed Bending	13.54 °/100 ft

Connection Data

Geometry	
Thread per In	5
Connection OD	20 in.
Hand Tight Stand Off	0.875 in.

Performance	
Joint Strength	1328 x1000 lb
Coupling Face Load	1669 x1000 lb
Internal Pressure Capacity	2250 psi

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.

Mewbourne Oil Company, Caballo Loco 3/5 B3PO Fed Com 1H Sec 11, T20S, R30E SHL: 205' FNL 1260' FWL (Sec 11)

BHL: 330' FSL 1980' FWL (Sec 14)

								1.6 Dry	1.6 Dry	
	Casing Program Design A					BLM Minimum Safety Factors	1.125	1.0	1.8 Wet	1.8 Wet
String	Hole Size	Top MD	Top TVD	Bot MD	Bot TVD	Csg. Size	SF Collapse	SF Burst	SF Jt Tension	SF Body Tension
Surface	26"	0'	0'	350'	350'	18 5/8" 87.5# J55 BTC	4.03	14.38	43.40	44.64
Intermediate 1	17.5"	0'	0'	1290'	1290'	13.375" 48# H40 STC	1.13	2.53	3.18	5.34
Intermediate 1	17.5"	1290'	1290'	1893'	1893'	13.375" 54.5# J55 STC	1.13	2.72	13.05	21.65
Intermediate 1	17.5"	1893'	1893'	2000'	2000'	13.375" 61# J55 STC	1.45	2.91	91.16	147.39
Intermediate 2	12.25"	0'	0'	3585'	3585'	9.625" 36# J55 LTC	1.26	2.20	3.51	4.37
Production	8.75"	0'	0'	9331'	9293'	7" 26# P110 LTC	1.33	2.12	2.86	3.42
Liner	6.125"	9131'	9123'	19847'	9869'	4.5" 13.5# P110 LTC	1.73	2.02	2.34	2.92

Cement Program

Casing		# Sacks	Wt. lb/gal	Yield ft ³ /sack	ТОС/ВОС	Volume ft ³	% Excess	Slurry Description
18.625 in	LEAD	470	12.5	2.12	0' - 275'	1000	100%	Class C: Salt, Gel, Extender, LCM
18.025 III	TAIL	200	14.8	1.34	275' - 350'	268	100%	Class C: Retarder
13.375 in	LEAD	810	12.5	2.12	0' - 1730'	1720	50%	Class C: Salt, Gel, Extender, LCM
13.375 III	TAIL	200	14.8	1.34	1730' - 2000'	268	30%	Class C: Retarder
1st Stg 9.625 in	LEAD	160	12.5	2.12	2050' - 2908'	340	25%	Class C: Salt, Gel, Extender, LCM
1st Stg 9.025 III	TAIL	200	14.8	1.34	2908' - 3585'	268	25%	Class C: Retarder
					9 5/8"]	DV Tool @ 2050'		
2nd Stg 9.625 in	LEAD	310	12.5	2.12	0' - 1704'	660	25%	Class C: Salt, Gel, Extender, LCM
2110 Stg 9.025 III	TAIL	100	14.8	1.34	1704' - 2050'	134	25%	Class C: Retarder
7 in	LEAD	120	12.5	2.12	4585' - 6271'	260	0%	Class C: Salt, Gel, Extender, LCM, Defoamer
/ III	TAIL	400	15.6	1.18	6271' - 9331'	472	0%	Class H: Retarder, Fluid Loss, Defoamer
4.5 in	LEAD	690	13.5	1.85	9131' - 19847'	1280	25%	Class H: Salt, Gel, Fluid Loss, Retarder, Dispersant, Defoamer, Anti-settling Agent

Design A - Mud Program

Depth	Mud Wt	Mud Type
0' - 350'	8.4 - 8.6	Fresh Water
350' - 2000'	10.0 - 10.2	Brine
2000' - 3585'	8.4 - 8.6	Fresh Water
3585' - 9331'	8.6 - 9.7	Cut-Brine
9331' - 19847'	10.0 - 12.	OBM

Geology

Formation	Est. Top (TVD)	Mineral Resources	Formation	Est. Top (TVD)	Mineral Resources
Rustler	226'	Usable Water	Delaware (Lamar)	3660'	Oil/Natural Gas
Castile			Bell Canyon		
Salt Top	490'	None	Cherry Canyon		
Marker Bed 126	991'	None	Manzanita Marker		
Salt Base	1625'	None	Basal Brushy Canyon		
Yates	1815'	Oil/Natural Gas	Bone Spring	6456'	Oil/Natural Gas
Seven Rivers			1st Bone Spring Carbonate	7318'	Oil/Natural Gas
Queen			1st Bone Spring Sand	7561'	Oil/Natural Gas
Capitan	2075'	Usable Water	2nd Bone Spring Carbonate	7940'	Oil/Natural Gas
Grayburg			2nd Bone Spring Sand	8227'	Oil/Natural Gas
San Andres			3rd Bone Spring Carbonate	8820'	Oil/Natural Gas
Glorietta			3rd Bone Spring Sand	9315'	Oil/Natural Gas
Yeso			Wolfcamp	9756'	Oil/Natural Gas

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

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

Mewbourne Oil Company, Caballo Loco 3/5 B3PO Fed Com 1H Sec 11, T20S, R30E SHL: 205' FNL 1260' FWL (Sec 11)

BHL: 330' FSL 1980' FWL (Sec 11)

Casing Program Design B						BLM Minimum Safety Factors	1.125	1.0	1.6 Dry 1.8 Wet	1.6 Dry 1.8 Wet
Surface	26"	0'	0'	350'	350'	18 5/8" 87.5# J55 BTC	4.03	14.38	43.40	44.64
Intermediate 1	17.5"	0'	0'	1290'	1290'	13.375" 48# H40 STC	1.13	2.53	3.18	5.34
Intermediate 1	17.5"	1290'	1290'	1893'	1893'	13.375" 54.5# J55 STC	1.13	2.72	13.05	21.65
Intermediate 1	17.5"	1893'	1893'	2000'	2000'	13.375" 61# J55 STC	1.45	2.91	91.16	147.39
Intermediate 2	12.25"	0'	0'	3585'	3585'	9.625" 36# J55 LTC	1.26	2.20	3.51	4.37
Production	8.75"	0'	0'	10232'	9866'	7" 26# P110 LTC	1.25	2.00	2.60	3.12
Liner	6.125"	9331'	9293'	19847'	9869'	4.5" 13.5# P110 LTC	1.73	2.02	2.38	2.97

Design B - Cement Program

Design b - Cement i Togran	11							
18.625 in	LEAD	470	12.5	2.12	0' - 275'	1000	100%	Class C: Salt, Gel, Extender, LCM
18.025 III	TAIL	200	14.8	1.34	275' - 350'	268	100%	Class C: Retarder
13.375 in	LEAD	810	12.5	2.12	0' - 1730'	1720	50%	Class C: Salt, Gel, Extender, LCM
13.375 III	TAIL	200	14.8	1.34	1730' - 2000'	268	30%	Class C: Retarder
1st Stg 9.625 in	LEAD	160	12.5	2.12	2050' - 2908'	340	25%	Class C: Salt, Gel, Extender, LCM
1st Stg 9.025 III	TAIL	200	14.8	1.34	2908' - 3585'	268	23%	Class C: Retarder
					9 5/8'' 1	DV Tool @ 2050'		
2nd Stg 9.625 in	LEAD	310	12.5	2.12	0' - 1704'	660	25%	Class C: Salt, Gel, Extender, LCM
2110 Stg 9.025 III	TAIL	100	14.8	1.34	1704' - 2050'	134	2370	Class C: Retarder
7 in	LEAD	180	12.5	2.12	4585' - 7140'	390	0%	Class C: Salt, Gel, Extender, LCM, Defoamer
/ In	TAIL	400	15.6	1.18	7140' - 10232'	472	0%	Class H: Retarder, Fluid Loss, Defoamer
4.5 in	LEAD	670	13.5	1.85	9331' - 19847'	1240	25%	Class H: Salt, Gel, Fluid Loss, Retarder, Dispersant, Defoamer,

	8.4 - 8.6	
Depth	10.0 - 10.2	Mud Type
0' - 350'	8.4 - 8.6	Fresh Water
350' - 2000'	8.6 - 9.7	Brine
2000' - 3585'	10.0 - 12.	Fresh Water
3585' - 10232'	8.6 - 9.7	Cut-Brine
10232' - 19847'	10.0 - 12.	OBM

Geology					
Formation	Est. Top (TVD)	Mineral Resources	Formation	Est. Top (TVD)	Mineral Resources
Rustler	226'	Usable Water	Delaware (Lamar)	3660'	Oil/Natural Gas
Castile			Bell Canyon		
Salt Top	490'	None	Cherry Canyon		
Marker Bed 126	991'	None	Manzanita Marker		
Salt Base	1625'	None	Basal Brushy Canyon		
Yates	1815'	Oil/Natural Gas	Bone Spring	6456'	Oil/Natural Gas
Seven Rivers			1st Bone Spring Carbonate	7318'	Oil/Natural Gas
Queen			1st Bone Spring Sand	7561'	Oil/Natural Gas
Capitan	2075'	Usable Water	2nd Bone Spring Carbonate	7940'	Oil/Natural Gas
Grayburg			2nd Bone Spring Sand	8227'	Oil/Natural Gas
San Andres			3rd Bone Spring Carbonate	8820'	Oil/Natural Gas
Glorietta			3rd Bone Spring Sand	9315'	Oil/Natural Gas
Yeso			Wolfcamp	9756'	Oil/Natural Gas

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

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

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Mewbourne Oil Company, Caballo Loco 3/5 B3PO Fed Com 1H Sec 11, T20S, R30E SHL: 205' FNL 1260' FWL (Sec 11)

BHL: 330' FSL 1980' FWL (Sec 14)

Well Location GL: 3228'

Point	Calls	Leases	Aliquot	Section	Township	Range	County	Lat	Long	TVD	MD
SHL	SHL: 205' FNL & 1260' FWL (Sec 11)	NMNM086913	NWNW	11	20S	30E	Eddy	32.5944358	- 103.9473006	0'	0'
KOP	KOP: 10' FNL & 1980' FWL (Sec 11)	NMNM086913	NENW	11	20S	30E	Eddy	32.5949425	- 103.9449626	9,293'	9,331'
FTP	FTP: 330' FNL & 1980' FWL (Sec 11)	NMNM086913	NENW	11	20S	30E	Eddy	32.5940631	- 103.9449645	9,807'	9,969'
PPP2	PPP2: 0' FNL & 1978' FWL (Sec 14)	NMNM0006783	NENW	14	20S	30E	Eddy	32.5805301	- 103.9449967	9,867'	14,902'
BHL	BHL: 330' FSL & 1980' FWL (Sec 14)	NMNM0006783	SESW	14	20S	30E	Eddy	32.5669372	- 103.9450291	9,869'	19,847'

GEOLOGY

Formation	Est. Top (TVD)	Lithology	Mineral Resources	Formation	Est. Top (TVD)	Lithology	Mineral Resources
Rustler	226'	Dolomite/Anhydrite	Usable Water	Delaware (Lamar)	3660'	Limestone	Oil/Natural Gas
Castile				Bell Canyon			
Salt Top	490'	Salt	None	Cherry Canyon			
Marker Bed 126	991'	Salt	None	Manzanita Marker			
Salt Base	1625'	Salt	None	Basal Brushy Canyon			
Yates	1815'	Sandstone	Oil/Natural Gas	Bone Spring	6456'	Limestone/Shale	Oil/Natural Gas
Seven Rivers				1st Bone Spring Carbonate	7318'	Limestone	Oil/Natural Gas
Queen				1st Bone Spring Sand	7561'	Sandstone	Oil/Natural Gas
Capitan	2075'	Limestone/Dolomite	Usable Water	2nd Bone Spring Carbonate	7940'	Limestone	Oil/Natural Gas
Grayburg				2nd Bone Spring Sand	8227'	Sandstone	Oil/Natural Gas
San Andres				3rd Bone Spring Carbonate	8820'	Limestone	Oil/Natural Gas
Glorietta				3rd Bone Spring Sand	9315'	Sandstone	Oil/Natural Gas
Yeso				Wolfcamp	9756'	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 110gra	ili Desigli A			BENT Minimum Safety Factors	1.125	1.0	1.8 Wet	1.8 Wet
Surface	26"	0'	0'	350'	350'	18 5/8" 87.5# J55 BTC	4.03	14.38	43.40	44.64
Intermediate 1	17.5"	0'	0'	1290'	1290'	13.375" 48# H40 STC	1.13	2.53	3.18	5.34
Intermediate 1	17.5"	1290'	1290'	1893'	1893'	13.375" 54.5# J55 STC	1.13	2.72	13.05	21.65
Intermediate 1	17.5"	1893'	1893'	2000'	2000'	13.375" 61# J55 STC	1.45	2.91	91.16	147.39
Intermediate 2	12.25"	0'	0'	3585'	3585'	9.625" 36# J55 LTC	1.26	2.20	3.51	4.37
Production	8.75"	0'	0'	9331'	9293'	7" 26# P110 LTC	1.33	2.12	2.86	3.42
Liner	6.125"	9131'	9123'	19847'	9869'	4.5" 13.5# P110 LTC	1.73	2.02	2.34	2.92

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?	Y
If yes, does production casing cement tie back a minimum of 50' above the Reef?	Y
Is well within the designated 4 string boundary.	Y
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?	Y
If yes, are the first three strings cemented to surface?	Y
Is 2 nd string set 100' to 600' below the base of salt?	Y
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?	Y
If yes, at what depth is the weak point planned?	
Is well located in high Cave/Karst?	Y
If yes, are there two strings cemented to surface?	Y
(For 2 string wells) If yes, is there a contingency casing if lost circulation occurs?	
Is well located in critical Cave/Karst?	N
If yes, are there three strings cemented to surface?	

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Mewbourne Oil Company, Caballo Loco 3/5 B3PO Fed Com 1H Sec 11, T20S, R30E SHL: 205' FNL 1260' FWL (Sec 11)

BHL: 330' FSL 1980' FWL (Sec 11)

Design A - Cement Program

10 (05)	LEAD	470	12.5	2.12	0' - 275'	1000	1,000/	Class C: Salt, Gel, Extender, LCM
18.625 in	TAIL	200	14.8	1.34	275' - 350'	268	100%	Class C: Retarder
13.375 in	LEAD	810	12.5	2.12	0' - 1730'	1720	50%	Class C: Salt, Gel, Extender, LCM
13.3/5 III	TAIL	200	14.8	1.34	1730' - 2000'	268	30%	Class C: Retarder
1st Stg 9.625 in	LEAD	160	12.5	2.12	2050' - 2908'	340	25%	Class C: Salt, Gel, Extender, LCM
18t Stg 9.025 III	TAIL	200	14.8	1.34	2908' - 3585'	268	2370	Class C: Retarder
					9 5/8'	' DV Tool @ 2050'		
	LEAD	310	12.5	2.12	0' - 1704'	660		Class C: Salt, Gel, Extender, LCM
2nd Stg 9.625 in	TAIL	100	14.8	1.34	1704' - 2050'	134	25%	Class C: Retarder
7 :	LEAD	120	12.5	2.12	4585' - 6271'	260	00/	Class C: Salt, Gel, Extender, LCM, Defoamer
7 in	TAIL	400	15.6	1.18	6271' - 9331'	472	0%	Class H: Retarder, Fluid Loss, Defoamer
4.5 in	LEAD	690	13.5	1.85	9131' - 19847'	1280	25%	Class H: Salt, Gel, Fluid Loss, Retarder, Dispersant, Defoamer, Anti-

Pressure Control Equipment

BOP installed and tested before drilling hole, in:	Size, in	System Rated WP		Туре		Tested to:	Rating Depth
		5M		Annular	X	2500#/3500#	
			Blind Ram		X		19,847'
17.5	20	5N/L	Pipe Ram		X	5000#	
		5M	Double Ram			5000#	
			Other*				

^{*}Specify if additional ram is utilized.

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

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

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

	Formation integrity test will be performed per 43 CFR Part 3172.	l
Y	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	۱
	be tested in accordance with 43 CFR Part 3172.	l
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)	10.0 - 10.2	Mud Type
0' - 350'	8.4 - 8.6	Fresh Water
350' - 2000'	8.6 - 9.7	Brine
2000' - 3585'	10.0 - 12.	Fresh Water
3585' - 10232'	8.6 - 9.7	Cut-Brine
10232' - 19847'	10.0 - 12.	OBM

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

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

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Mewbourne Oil Company, Caballo Loco 3/5 B3PO Fed Com 1H Sec 11, T20S, R30E SHL: 205' FNL 1260' FWL (Sec 11)

BHL: 330' FSL 1980' FWL (Sec 14)

Logging and Testing Procedures

Loggi	ing, Coring and Testing.
Y	Will run GR/CNL from KOP (9331') to surface (horizontal well – vertical portion of hole). Stated logs run will be in the Completion Report and submitted to the BLM.
N	No logs are planned based on well control or offset log information. Offset Well:
N	Coring? If yes, explain:

Open & Cased Hole Logs Run In the Well

	Caliper	□ Cement Bond Log		CNL/FDC
	Compensated Densilog	V	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
V	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	6158 psi
BH Temperature	140
Abnormal Temp, Pressure, or Geologic Hazards	No

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

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

	H2S is present
X	H2S Plan attached

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Mewbourne Oil Company, Caballo Loco 3/5 B3PO Fed Com 1H Sec 11, T20S, R30E SHL: 205' FNL 1260' FWL (Sec 11)

BHL: 330' FSL 1980' FWL (Sec 14)

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.

		Cosing Duogue	m Dogian D			BLM Minimum Safety Factors	1.125	1.0	1.6 Dry	1.6 Dry
	'	Casing Progra	iii Desigii D		bely ractors	1.125	1.0	1.8 Wet	1.8 Wet	
Surface	26"	0'	0'	350'	350'	18 5/8" 87.5# J55 BTC	4.03	14.38	43.40	44.64
Intermediate 1	17.5"	0'	0'	1290'	1290'	13.375" 48# H40 STC	1.13	2.53	3.18	5.34
Intermediate 1	17.5"	1290'	1290'	1893'	1893'	13.375" 54.5# J55 STC	1.13	2.72	13.05	21.65
Intermediate 1	17.5"	1893'	1893'	2000'	2000'	13.375" 61# J55 STC	1.45	2.91	91.16	147.39
Intermediate 2	12.25"	0'	0'	3585'	3585'	9.625" 36# J55 LTC	1.26	2.20	3.51	4.37
Production	8.75"	0'	0'	10232'	9866'	7" 26# P110 LTC	1.25	2.00	2.60	3.12
Liner	6.125"	9331'	9293'	19847'	9869'	4.5" 13.5# P110 LTC	1.73	2.02	2.38	2.97

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?	Y
If yes, does production casing cement tie back a minimum of 50' above the Reef?	Y
Is well within the designated 4 string boundary.	Y
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?	Y
If yes, are the first three strings cemented to surface?	Y
Is 2 nd string set 100' to 600' below the base of salt?	Y
Is an open annulus used to satisfy R-111-Q? If yes, see cement design.	Y
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?	Y
If yes, are there two strings cemented to surface?	Y
(For 2 string wells) If yes, is there a contingency casing if lost circulation occurs?	
Is well located in critical Cave/Karst?	N
If yes, are there three strings cemented to surface?	

Design B - Cement Program

Design D - Cen	icht i rogram	_							
18.625 in	LEAD	470	12.5	2.12	0' - 275'	1000	100%	Class C: Salt, Gel, Extender, LCM	
10.025 III	TAIL	200	14.8	1.34	275' - 350'	268	100%	Class C: Retarder	
13.375 in	LEAD	810	12.5	2.12	0' - 1730'	1720	50%	Class C: Salt, Gel, Extender, LCM	
13.375 III	TAIL	200	14.8	1.34	1730' - 2000'	268	30%	Class C: Retarder	
1st Sta 0 625 in	LEAD	160	12.5	2.12	2050' - 2908'	340	25%	Class C: Salt, Gel, Extender, LCM	
1st Stg 9.625 in	TAIL	200	14.8	1.34	2908' - 3585'	268	25%	Class C: Retarder	
9 5/8" DV Tool @ 2050'									
	LEAD	310	12.5	2.12	0' - 1704'	660		Class C: Salt, Gel, Extender, LCM	
2nd Stg 9.625 in	TAIL	100	14.8	1.34	1704' - 2050'	134	25%	Class C: Retarder	
7 :	LEAD	180	12.5	2.12	4585' - 7140'	390	00/	Class C: Salt, Gel, Extender, LCM, Defoamer	
7 in	TAIL	400	15.6	1.18	7140' - 10232'	472	0%	Class H: Retarder, Fluid Loss, Defoamer	
4.5 in	LEAD	670	13.5	1.85	9331' - 19847'	1240	25%	Class H: Salt, Gel, Fluid Loss, Retarder, Dispersant, Defoamer, Anti- settling Agent	

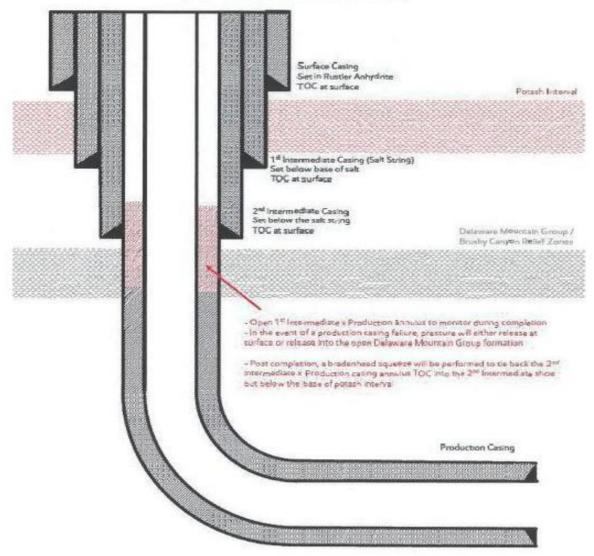
Mewbourne Oil Company R-111Q Procedure

Mewbourne Oil Company request permission to perform Open Hole Annulus procedure per R-111Q guidelines to be implemented as follows:

Production String

- a) The Production string shall consist new oil field casing in good condition that meets API specifications, rated for the loads expected over the lifecycle of the well.
- b) The 2nd intermediate string shall consist of new oil field casing in good condition that meets API specifications and rated for the loads expected over the lifecycle of the well.
- c) For all wells within the KPLA where a 2nd intermediate string will be utilized resulting in a four (4) -string wellbore design (surface, 1st intermediate, 2_{nd} intermediate, and production casing strings), the following method shall apply to safely divert flow of wellbore fluids away from the salt interval in the event of a sudden production casing failure. The surface equipment utilized during stimulation operations shall be designed to relieve pressure from the annulus between the 2nd intermediate and production casing strings below the failure threshold of the casing string components.
- iii) A monitored open annulus shall be incorporated by leaving the annulus between the 2nd intermediate and production string casings un-cemented and monitored inside of the 2nd intermediate string. Reference wellbore diagram Figure E in Exhibit B. This design is appropriate if the 2nd intermediate string. Set above the Delaware Mountain Group / Brushy Canyon formation.
- (1) The top of cement in the annulus between the 2nd intermediate and production casing strings shall stand un-cemented at least 500 feet below the 2nd intermediate casing point. Zero percent excess shall be pumped on the production cementing slurry to ensure no tie-back into the 2nd intermediate casing shoe.
- (2) After hydraulic fracturing operations have been concluded and no longer than 180 days after the well is brought online, the operator shall bradenhead cement to ensure at least a 500 foot tie-back has been established inside the 2nd intermediate casing but not higher than USGS Marker Bed No. 126.
- (3) The top of cement may be estimated through pumped displacement volumes or with the use of a fluid shot tool prior to filling backside with fluid

4-String Design – Open 1st Int x Production Casing (ICP 2 above relief zone)



[Figure E] 4 String – Uncemented Annulus between 2nd Intermediate and Production Casing Strings

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Mewbourne Oil Company, Caballo Loco 3/5 B3PO Fed Com 1H Sec 11, T20S, R30E SHL: 205' FNL 1260' FWL (Sec 11)

BHL: 330' FSL 1980' FWL (Sec 11)

		Carina Dana				BLM Minimum Safety Factors	1 105	1.0	1.6 Dry	1.6 Dry
		Casing Prog	ram Design A				1.125	1.0	1.8 Wet	1.8 Wet
String	Hole Size	Top MD	Top TVD	Bot MD	Bot TVD	Csg. Size	SF Collapse	SF Burst	SF Jt Tension	SF Body Tension
Surface	26"	0'	0'	350'	350'	18 5/8" 87.5# J55 BTC	4.03	14.38	43.40	44.64
Intermediate 1	17.5"	0'	0'	1290'	1290'	13.375" 48# H40 STC	1.13	2.53	3.18	5.34
Intermediate 1	17.5"	1290'	1290'	1893'	1893'	13.375" 54.5# J55 STC	1.13	2.72	13.05	21.65
Intermediate 1	17.5"	1893'	1893'	2000'	2000'	13.375" 61# J55 STC	1.45	2.91	91.16	147.39
Intermediate 2	12.25"	0'	0'	3585'	3585'	9.625" 36# J55 LTC	1.26	2.20	3.51	4.37
Production	8.75"	0'	0'	9331'	9293'	7" 26# P110 LTC	1.33	2.12	2.86	3.42
Liner	6.125"	9131'	9123'	19847'	9869'	4.5" 13.5# P110 LTC	1.73	2.02	2.34	2.92

Cement Program

Zement Frogram						_		
Casing		# Sacks	Wt. lb/gal	Yield ft ³ /sack	TOC/BOC	Volume ft ³	% Excess	Slurry Description
10 (05)	LEAD	470	12.5	2.12	0' - 275'	1000		Class C: Salt, Gel, Extender, LCM
18.625 in	TAIL	200	14.8	1.34	275' - 350'	268		Class C: Retarder
12.255	LEAD	810	12.5	2.12	0' - 1730'	1720	50 0/	Class C: Salt, Gel, Extender, LCM
13.375 in	TAIL	200	14.8	1.34	1730' - 2000'	1730 1720 1-2000' 268	30%	Class C: Retarder
1 at 54 a 0 (25 in	LEAD 160 12.5	2.12	2050' - 2908'	340	050/	Class C: Salt, Gel, Extender, LCM		
1st Stg 9.625 in	TAIL	200	14.8	1.34	2908' - 3585'	268	25%	Class C: Retarder
					9 5/8'' D	V Tool @ 2050'		
	LEAD	310	12.5	2.12	0' - 1704'	660	25%	Class C: Salt, Gel, Extender, LCM
2nd Stg 9.625 in	TAIL	100	14.8	1.34	1704' - 2050'	134		Class C: Retarder
7 •	LEAD	120	12.5	2.12	4585' - 6271'	260	00/	Class C: Salt, Gel, Extender, LCM, Defoamer
7 in	TAIL	400	15.6	1.18	6271' - 9331'	472	- 0%	Class H: Retarder, Fluid Loss, Defoamer
					7'' TOC @ 458	5', BHS TOC @ 2025'		
Braden Head Sqz	LEAD	340	14.8	1.34	2025' - 4585'	460	25%	Class C
4.5 in	LEAD	690	13.5	1.85	9131' - 19847'	1280	25%	Class H. Sait, Gel, Fluid Loss, Retarder, Dispersant, Deroamer, And

		Casing Prog	ram Design B			BLM Minimum Safety Factors	1.125	1.0	1.6 Dry 1.8 Wet	1.6 Dry 1.8 Wet
String	Hole Size	Top MD	Top TVD	Bot MD	Bot TVD	Csg. Size	SF Collapse	SF Burst	SF Jt Tension	SF Body Tension
Surface	26"	0'	0'	350'	350'	18 5/8" 87.5# J55 BTC	4.03	14.38	43.40	44.64
Intermediate 1	17.5"	0'	0'	1290'	1290'	13.375" 48# H40 STC	1.13	2.53	3.18	5.34
Intermediate 1	17.5"	1290'	1290'	1893'	1893'	13.375" 54.5# J55 STC	1.13	2.72	13.05	21.65
Intermediate 1	17.5"	1893'	1893'	2000'	2000'	13.375" 61# J55 STC	1.45	2.91	91.16	147.39
Intermediate 2	12.25"	0'	0'	3585'	3585'	9.625" 36# J55 LTC	1.26	2.20	3.51	4.37
Production	8.75"	0'	0'	10232'	9866'	7" 26# P110 LTC	1.25	2.00	2.60	3.12
Liner	6.125"	9331'	9293'	19847'	9869'	4.5" 13.5# P110 LTC	1.73	2.02	2.38	2.97

Design B - Cement Program

Casing		# Sacks	Wt. lb/gal	Yield ft ³ /sack	TOC/BOC	Volume ft ³	% Excess	Slurry Description
10 (25 :	LEAD	470	12.5	2.12	0' - 275'	1000	1000/	Class C: Salt, Gel, Extender, LCM
18.625 in	TAIL	200	14.8	1.34	275' - 350'	268	100%	Class C: Retarder
10.055 !	LEAD	810	12.5	2.12	0' - 1730'	1720	50%	Class C: Salt, Gel, Extender, LCM
13.375 in	TAIL	200	14.8	1.34	1730' - 2000'	268	30%	Class C: Retarder
1 . 0 . 0 . 0 . 0	LEAD	160	12.5	2.12	2050' - 2908'	340	250/	Class C: Salt, Gel, Extender, LCM
1st Stg 9.625 in	TAIL	200	14.8	1.34	2908' - 3585'	268	25%	Class C: Retarder
	-		-		9 5/8" D	V Tool @ 2050'		
2md Sta 0 625 in	LEAD	310	12.5	2.12	0' - 1704'	660	25%	Class C: Salt, Gel, Extender, LCM
2nd Stg 9.625 in	TAIL	100	14.8	1.34	1704' - 2050'	134	23%	Class C: Retarder
7:	LEAD	180	12.5	2.12	4585' - 7140'	390	00/	Class C: Salt, Gel, Extender, LCM, Defoamer
7 in	TAIL	400	15.6	1.18	7140' - 10232'	472	0%	Class H: Retarder, Fluid Loss, Defoamer
					7" TOC @ 458	5', BHS TOC @ 2025'		
Braden Head Sqz	LEAD	340	14.8	1.34	2025' - 4585'	460	25%	Class C
4.5 in	LEAD	670	13.5	1.85	9331' - 19847'	1240	25%	Class II. Sait, Gel, Fluid Loss, Retarder, Dispersant, Deroamer, Anti-



Mewbourne Oil Co.

Surface & Intermediate Offline Cementing Variance

Mewbourne Oil Company requests a variance to perform offline cementing for surface and intermediate casing strings with the following conditions:

- Offline cementing will not be performed on production casing.
- Offline cementing will not be performed on a hole section with MASP > 5000 psi.
- Offline cementing will not be performed concurrently with offset drilling.

Surface Casing Order of Operations:

- 1. Run 13 3/8" surface casing as per normal operations (TPGS and float collar).
- 2. Perform negative pressure test to confirm integrity of float equipment while running casing.
- 3. Confirm well is static.
- 4. Make up 13 %" wellhead or wellhead landing ring assembly and land on 20" conductor.
- 5. Fill pipe, circulate casing capacity and confirm float(s) are still holding.
- 6. Confirm well is static.
- 7. Back out landing joint and pull to rig floor. Lay down landing joint.
- 8. Walk rig to next well on pad with cement crew standing by to rig up.
- 9. Make up offline cement tool with forklift per wellhead manufacturer (Fig. 1 & 2).
- 10. Make up cement head on top of offline cement tool with forklift.
- 11. Commence cement operations.
- 12. If cement circulates, confirm well is static and proceed to step 16.
- 13. If cement does not circulate, notify the appropriate BLM office, wait a minimum of six hours, and run a temperature survey to determine the top of cement.
- 14. Use 1" pipe for remedial cement job until the surface casing is cemented to surface.
- 15. Confirm well is static.
- 16. Once cement job is complete, the cement head and offline cementing tool are removed. The wellhead technician returns to cellar to install wellhead/valves.
- 17. Install wellhead capping flange.

Barriers

Before Walk:

- Float(s) in casing
- Kill weight fluid in casing
- Kill weight fluid in annulus



After Walk:

- Float(s) in casing
- Kill weight fluid in casing
- Kill weight fluid in annulus
- Offline cementing tool tested to 5000 psi and cement head
- Capping flange after cementing

20" Surface Casing Order of Operations (4 string area):

- 1. Run 20" surface casing as per normal operations (TPGS and float collar).
- 2. Perform negative pressure test to confirm integrity of float equipment while running casing.
- 3. Fill pipe, circulate casing capacity and confirm float(s) are still holding.
- 4. Confirm well is static.
- 5. Back out landing joint and pull to rig floor. Lay down landing joint.
- 6. Make up cement head.
- 7. Walk rig to next well on pad with cement crew standing by to rig up.
- 8. Commence cement operations.
- 9. If cement circulates, confirm well is static and proceed to step 13.
- 10. If cement does not circulate, notify the appropriate BLM office, wait a minimum of six hours, and run a temperature survey to determine the top of cement.
- 11. Use 1" pipe for remedial cement job until the surface casing is cemented to surface.
- 12. Confirm well is static.
- 13. Once cement job is complete, remove cement head and install cap.

Barriers

Before Walk:

- Float(s) in casing
- Kill weight fluid in casing
- Kill weight fluid in annulus
- Cement Head

After Walk:

- Float(s) in casing
- Kill weight fluid in casing
- Kill weight fluid in annulus
- Cement head
- Capping flange after cementing



Intermediate Casing Order of Operations:

- 1. Run casing as per normal operations (float shoe and float collar).
- 2. Perform negative pressure test to confirm integrity of float equipment while running casing.
- 3. Confirm well is static (if running SBM).
- 4. Land casing.
- 5. Fill pipe, circulate casing capacity and confirm floats are still holding.
- 6. Confirm well is static.
- 7. Back out landing joint and pull to rig floor. Lay down landing joint. Install packoff & test.
- 8. Nipple down BOP.
- 9. Walk rig to next well on pad with cement crew standing by to rig up.
- 10. Make up offline cement tool using forklift per wellhead manufacturer (Fig. 3 8).
- 11. Make up cement head on top of offline cement tool.
- 12. Commence cement operations.
- 13. If cement circulates, confirm well is static and proceed to step 16.
- 14. If cement does not circulate (when required), notify the appropriate BLM office, wait a minimum of six hours, and run a temperature survey to determine the top of cement.
- 15. Pump remedial cement job if required.
- 16. Confirm well is static.
- 17. Remove cement head and offline cementing tool.
- 18. Install wellhead capping flange and test.

Barriers

Before Nipple Down:

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

After Nipple Down:

- Floats in casing
- Kill weight fluid in casing
- Kill weight fluid in annulus
- Solid body mandrel and/or packoff
- Offline cementing tool tested to 5000 psi and cement head
- Capping flange after cementing



Risks:

- Pressure build up in annulus before cementing
 - o Contact BLM if a well control event occurs.
 - o Rig up 3rd party pump or rig pumps to pump down casing and kill well.
 - Returns will be taken through the wellhead valves to a choke manifold (Fig 9 & 10).
 - Well could also be killed through the wellhead valves down the annulus.

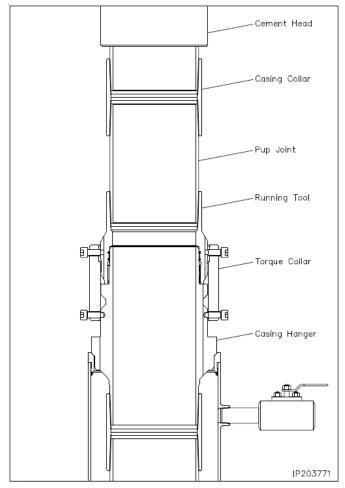


Figure 1. Cactus 13 3/8" 5M offline cementing tool. Pressure rating limited by the lesser of 5M tool rating or the 13 3/8" pup joint and casing.



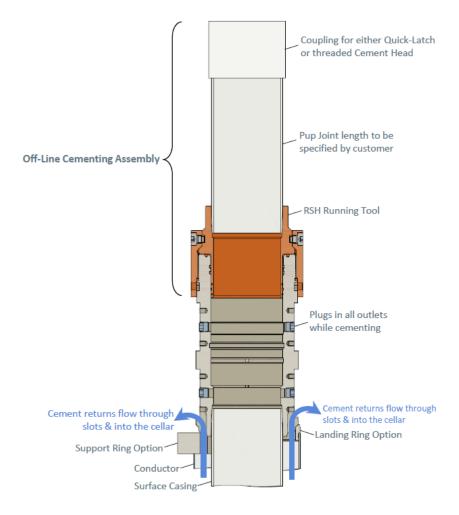


Figure 2. Vault 13 3/8" 5M offline cementing tool. Pressure rating limited by the lesser of 5M tool rating or the 13 3/8" pup joint and casing.



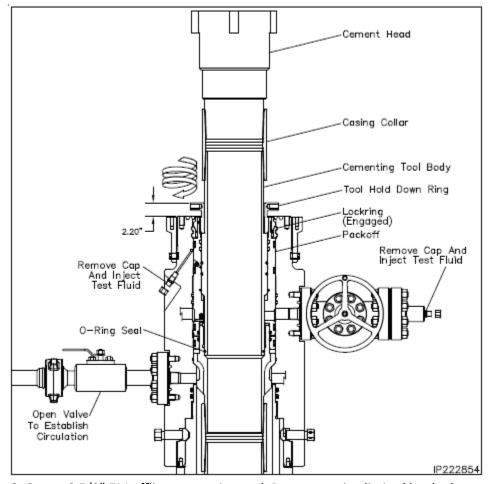


Figure 3. Cactus 9 5/8" 5M offline cementing tool. Pressure rating limited by the lesser of 5M tool rating or the 9 5/8" pup joint and casing.



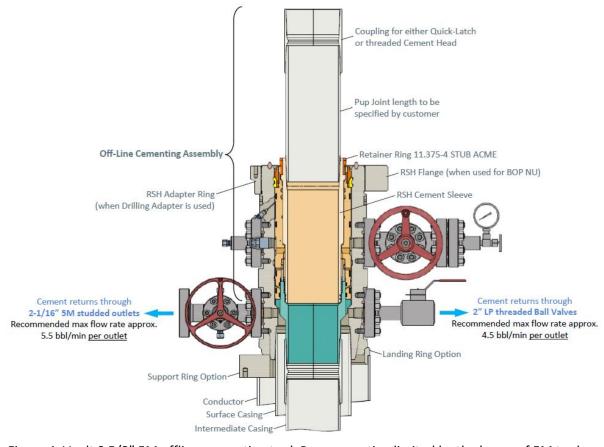


Figure 4. Vault 9 5/8" 5M offline cementing tool. Pressure rating limited by the lesser of 5M tool rating or the 9 5/8" pup joint and casing.



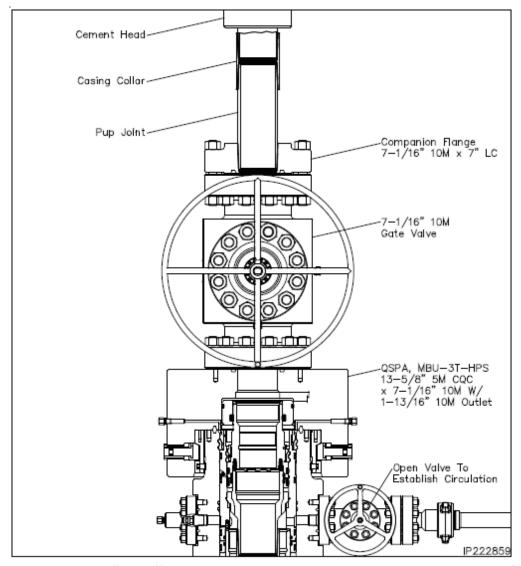


Figure 5. Cactus 7" 5M offline cementing tool. Pressure rating limited by the lesser of 5M tool rating or the 7" pup joint and casing.



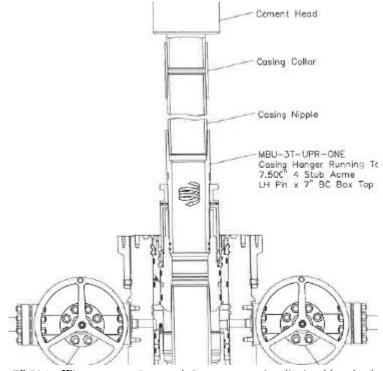


Figure 6. Cactus 7" 5M offline cementing tool. Pressure rating limited by the lesser of 5M tool rating or the 7" pup joint and casing.



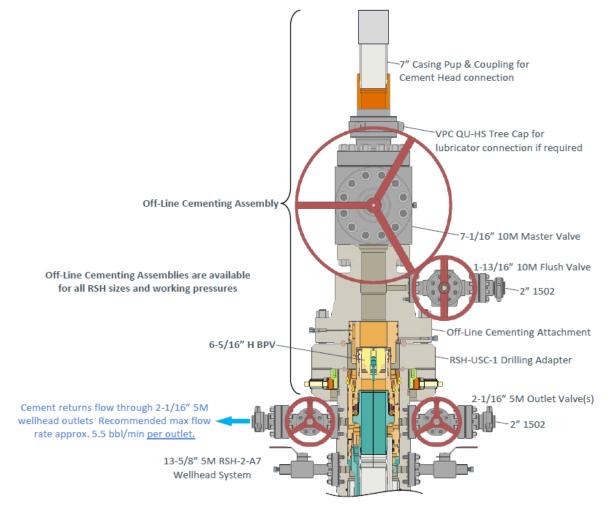


Figure 7. Vault 7" 5M offline cementing tool. Pressure rating limited by the lesser of 5M tool rating or the 7" pup joint and casing.



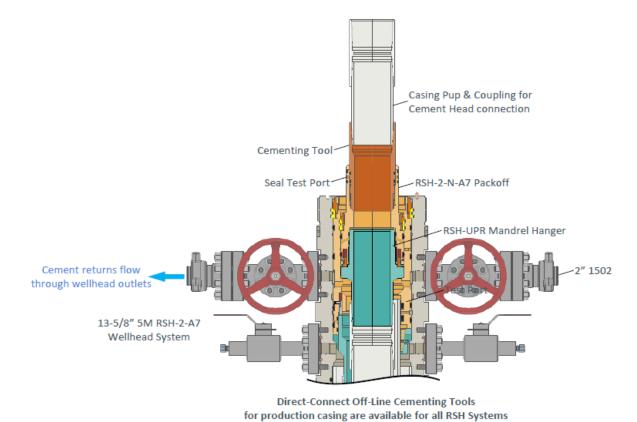


Figure 8. Vault 7" 5M offline cementing tool. Pressure rating limited by the lesser of 5M tool rating or the 7" pup joint and casing.



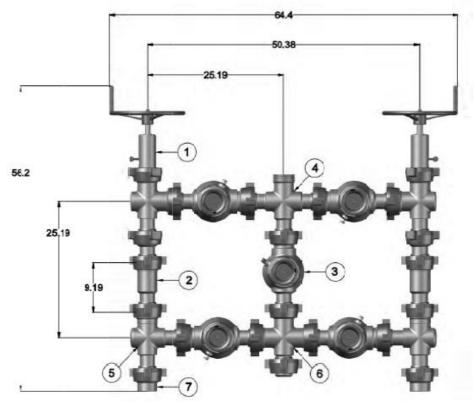


Figure 9. Five valve 15k choke manifold.

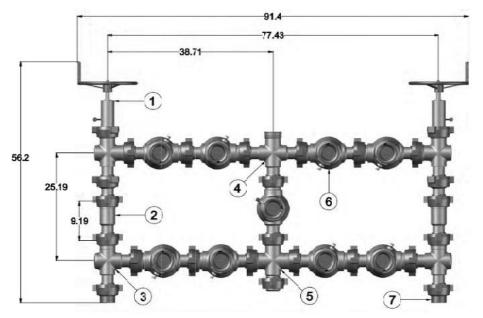
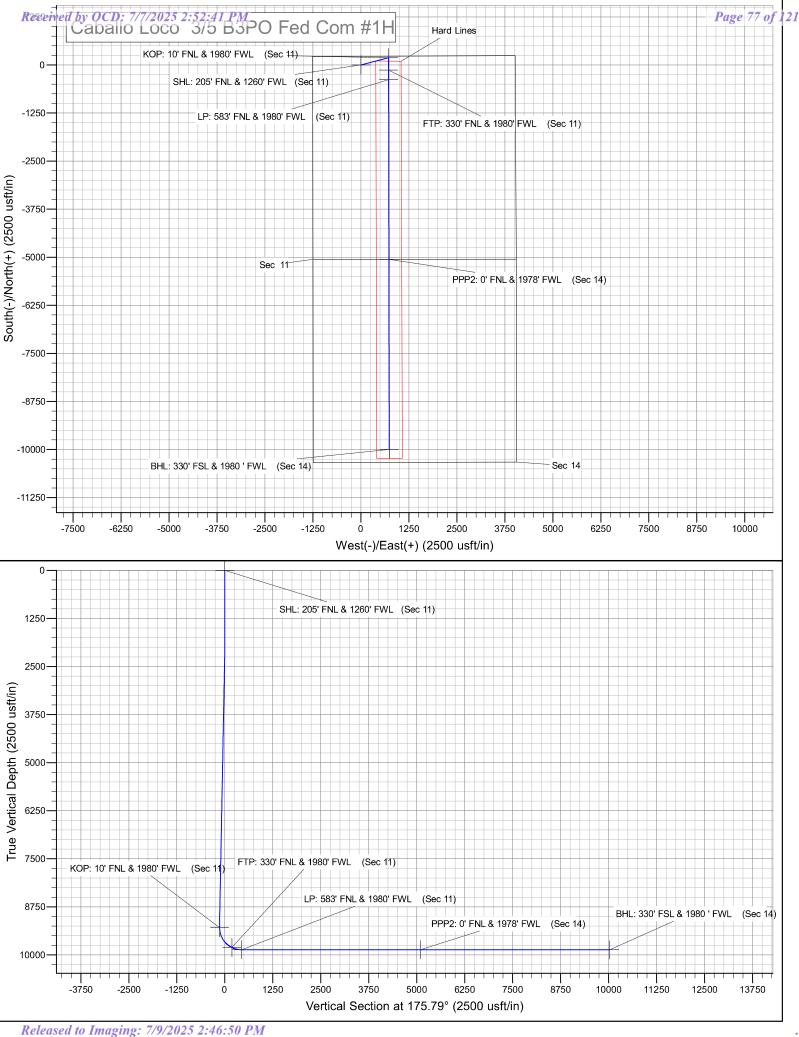


Figure 10. Nine valve 15k choke manifold.



Mewbourne Oil Company

Eddy County, New Mexico NAD 83 Caballo Loco 3/5 B3PO Fed Com #1H

Sec 11, T20S, R30E

SHL: 205' FNL & 1260' FWL (Sec 11) BHL: 330' FSL & 1980' FWL (Sec 14)

Plan: Design #1

Standard Planning Report

02 June, 2025

Database: Hobbs

Company: Mewbourne Oil Company

Project: Eddy County, New Mexico NAD 83
Site: Caballo Loco 3/5 B3PO Fed Com #1H

Well: Sec 11, T20S, R30E

Wellbore: BHL: 330' FSL & 1980' FWL (Sec 14)

Design: Design #1

Local Co-ordinate Reference:

TVD Reference:
MD Reference:
North Reference:

Survey Calculation Method:

Site Caballo Loco 3/5 B3PO Fed Com #1H WELL @ 3256.0usft (Original Well Elev)

WELL @ 3256.0usft (Original Well Elev)

Minimum Curvature

Project Eddy County, New Mexico NAD 83

Map System: US State Plane 1983
Geo Datum: North American Datum 1983

Geo Datum: North American Datum 198

Map Zone: New Mexico Eastern Zone

System Datum:

Ground Level

Site Caballo Loco 3/5 B3PO Fed Com #1H

 Site Position:
 Northing:
 580,202.20 usft
 Latitude:
 32.5944358

 From:
 Map
 Easting:
 660,224.90 usft
 Longitude:
 -103.9473007

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

Well Sec 11, T20S, R30E

 Well Position
 +N/-S
 0.0 usft
 Northing:
 580,202.20 usft
 Latitude:
 32.5944358

 +E/-W
 0.0 usft
 Easting:
 660,224.90 usft
 Longitude:
 -103.9473007

Position Uncertainty 0.0 usft Wellhead Elevation: 3,256.0 usft Ground Level: 3,228.0 usft

Grid Convergence: 0.21 °

Wellbore BHL: 330' FSL & 1980' FWL (Sec 14)

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

 IGRF2010
 12/31/2014
 7.35
 60.38
 48,420.02767020

Design #1

Audit Notes:

Version:Phase:PROTOTYPETie On Depth:0.0

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

 0.0
 0.0
 0.0
 175.79

Plan Survey Tool Program Date 6/2/2025

Depth From Depth To

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

1 0.0 19,847.5 Design #1 (BHL: 330' FSL & 1980

Plan Sections										
Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)	TFO (°)	Target
0.0	0.00	0.00	0.0	0.0	0.0	0.00	0.00	0.00	0.00	
2,000.0	0.00	0.00	2,000.0	0.0	0.0	0.00	0.00	0.00	0.00	
2,303.5	6.07	75.43	2,303.0	4.0	15.5	2.00	2.00	0.00	75.43	
9,028.3	6.07	75.43	8,990.0	183.0	703.9	0.00	0.00	0.00	0.00	
9,331.8	0.00	0.00	9,293.0	187.0	719.4	2.00	-2.00	0.00	180.00	KOP: 10' FNL & 1980'
10,231.7	89.98	179.91	9,866.0	-385.8	720.3	10.00	10.00	0.00	179.91	
19,847.5	89.98	179.91	9,869.0	-10,001.6	736.1	0.00	0.00	0.00	0.00	BHL: 330' FSL & 1980

Database: Hobbs

Company: Mewbourne Oil Company

Project: Eddy County, New Mexico NAD 83
Site: Caballo Loco 3/5 B3PO Fed Com #1H

Well: Sec 11, T20S, R30E

Wellbore: BHL: 330' FSL & 1980' FWL (Sec 14)

Design: Design #1

Local Co-ordinate Reference:

TVD Reference:
MD Reference:
North Reference:

Survey Calculation Method:

Site Caballo Loco 3/5 B3PO Fed Com #1H WELL @ 3256.0usft (Original Well Elev) WELL @ 3256.0usft (Original Well Elev)

Grid

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: 205'	FNL & 1260' FWL	(Sec 11)							
50.0	0.00	0.00	50.0	0.0	0.0	0.0	0.00	0.00	0.00
100.0	0.00	0.00	100.0	0.0	0.0	0.0	0.00	0.00	0.00
150.0	0.00	0.00	150.0	0.0	0.0	0.0	0.00	0.00	0.00
200.0		0.00	200.0	0.0	0.0	0.0	0.00	0.00	0.00
250.0	0.00	0.00	250.0	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
350.0	0.00	0.00	350.0	0.0	0.0	0.0	0.00	0.00	0.00
400.0		0.00	400.0	0.0	0.0	0.0	0.00	0.00	0.00
450.0		0.00	450.0	0.0	0.0	0.0	0.00	0.00	0.00
500.0	0.00	0.00	500.0	0.0	0.0	0.0	0.00	0.00	0.00
550.0		0.00	550.0	0.0	0.0	0.0	0.00	0.00	0.00
600.0		0.00	600.0	0.0	0.0	0.0	0.00	0.00	0.00
650.0		0.00	650.0	0.0	0.0	0.0	0.00	0.00	0.00
700.0		0.00	700.0	0.0	0.0	0.0	0.00	0.00	0.00
750.0	0.00	0.00	750.0		0.0	0.0	0.00	0.00	0.00
750.0		0.00	750.0	0.0	0.0	0.0	0.00	0.00	0.00
800.0		0.00	800.0	0.0	0.0	0.0	0.00	0.00	0.00
850.0		0.00	850.0	0.0	0.0	0.0	0.00	0.00	0.00
900.0		0.00	900.0 950.0	0.0	0.0	0.0	0.00	0.00	0.00
950.0		0.00		0.0	0.0	0.0	0.00	0.00	0.00
1,000.0		0.00	1,000.0	0.0	0.0	0.0	0.00	0.00	0.00
1,050.0		0.00	1,050.0	0.0	0.0	0.0	0.00	0.00	0.00
1,100.0		0.00	1,100.0	0.0	0.0	0.0	0.00	0.00	0.00
1,150.0		0.00	1,150.0	0.0	0.0	0.0	0.00	0.00	0.00
1,200.0	0.00	0.00	1,200.0	0.0	0.0	0.0	0.00	0.00	0.00
1,250.0		0.00	1,250.0	0.0	0.0	0.0	0.00	0.00	0.00
1,300.0		0.00	1,300.0	0.0	0.0	0.0	0.00	0.00	0.00
1,350.0		0.00	1,350.0	0.0	0.0	0.0	0.00	0.00	0.00
1,400.0	0.00	0.00	1,400.0	0.0	0.0	0.0	0.00	0.00	0.00
1,450.0	0.00	0.00	1,450.0	0.0	0.0	0.0	0.00	0.00	0.00
1,500.0		0.00	1,500.0	0.0	0.0	0.0	0.00	0.00	0.00
1,550.0	0.00	0.00	1,550.0	0.0	0.0	0.0	0.00	0.00	0.00
1,600.0	0.00	0.00	1,600.0	0.0	0.0	0.0	0.00	0.00	0.00
1,650.0	0.00	0.00	1,650.0	0.0	0.0	0.0	0.00	0.00	0.00
1,700.0	0.00	0.00	1,700.0	0.0	0.0	0.0	0.00	0.00	0.00
1,750.0		0.00	1,750.0	0.0	0.0	0.0	0.00	0.00	0.00
1,800.0	0.00	0.00	1,800.0	0.0	0.0	0.0	0.00	0.00	0.00
1,850.0	0.00	0.00	1,850.0	0.0	0.0	0.0	0.00	0.00	0.00
1,900.0	0.00	0.00	1,900.0	0.0	0.0	0.0	0.00	0.00	0.00
1,950.0	0.00	0.00	1,950.0	0.0	0.0	0.0	0.00	0.00	0.00
2,000.0		0.00	2,000.0	0.0	0.0	0.0	0.00	0.00	0.00
2,050.0		75.43	2,050.0	0.1	0.4	-0.1	2.00	2.00	0.00
2,100.0		75.43	2,100.0	0.4	1.7	-0.3	2.00	2.00	0.00
2,150.0		75.43	2,149.9	1.0	3.8	-0.7	2.00	2.00	0.00
2,200.0	4.00	75.43	2,199.8	1.8	6.8	-1.3	2.00	2.00	0.00
2,250.0		75.43	2,249.7	2.7	10.6	-2.0	2.00	2.00	0.00
2,300.0		75.43	2,299.5	3.9	15.2	-2.8	2.00	2.00	0.00
2,303.5		75.43	2,303.0	4.0	15.5	-2.9	2.00	2.00	0.00
2,350.0	6.07	75.43	2,349.2	5.3	20.3	-3.8	0.00	0.00	0.00
2,400.0	6.07	75.43	2,398.9	6.6	25.4	-4.7	0.00	0.00	0.00
2,450.0		75.43	2,448.6	7.9	30.5	-5.7	0.00	0.00	0.00
2,500.0		75.43	2,498.3	9.3	35.7	-6.6	0.00	0.00	0.00
2,550.0	6.07	75.43	2,548.1	10.6	40.8	-7.6	0.00	0.00	0.00

Database: Hobbs

Company: Mewbourne Oil Company

Project: Eddy County, New Mexico NAD 83
Site: Caballo Loco 3/5 B3PO Fed Com #1H

Well: Sec 11, T20S, R30E

Wellbore: BHL: 330' FSL & 1980' FWL (Sec 14)

Design: Design #1

Local Co-ordinate Reference:

TVD Reference: MD Reference: North Reference:

Survey Calculation Method:

Site Caballo Loco 3/5 B3PO Fed Com #1H WELL @ 3256.0usft (Original Well Elev) WELL @ 3256.0usft (Original Well Elev)

Grid

Planned Survey									
Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)
2,600.0 2,650.0	6.07 6.07	75.43 75.43	2,597.8 2,647.5	11.9 13.3	45.9 51.0	-8.5 -9.5	0.00 0.00	0.00 0.00	0.00 0.00
2,700.0	6.07	75.43	2,697.2	14.6	56.1	-10.4	0.00	0.00	0.00
2,750.0	6.07	75.43	2,746.9	15.9	61.2	-11.4	0.00	0.00	0.00
2,800.0 2,850.0	6.07 6.07	75.43 75.43	2,796.6 2,846.4	17.3 18.6	66.4 71.5	-12.3 -13.3	0.00 0.00	0.00 0.00	0.00 0.00
2,900.0	6.07	75.43 75.43	2,896.1	19.9	76.6	-14.2	0.00	0.00	0.00
2,950.0	6.07	75.43	2,945.8	21.2	81.7	-15.2	0.00	0.00	0.00
3,000.0	6.07	75.43	2,995.5	22.6	86.8	-16.1	0.00	0.00	0.00
3,050.0	6.07	75.43	3,045.2	23.9	92.0	-17.1	0.00	0.00	0.00
3,100.0	6.07	75.43	3,095.0	25.2	97.1	-18.0	0.00	0.00	0.00
3,150.0	6.07	75.43	3,144.7	26.6	102.2	-19.0	0.00	0.00	0.00
3,200.0	6.07	75.43	3,194.4	27.9	107.3	-19.9	0.00	0.00	0.00
3,250.0	6.07	75.43	3,244.1	29.2	112.4	-20.9	0.00	0.00	0.00
3,300.0	6.07	75.43	3,293.8	30.6	117.5	-21.8	0.00	0.00	0.00
3,350.0	6.07	75.43	3,343.6	31.9	122.7	-22.8	0.00	0.00	0.00
3,400.0	6.07	75.43	3,393.3	33.2	127.8	-23.7	0.00	0.00	0.00
3,450.0 3,500.0	6.07	75.43	3,443.0	34.5	132.9 138.0	-24.7	0.00 0.00	0.00	0.00
3,500.0 3,550.0	6.07 6.07	75.43 75.43	3,492.7 3,542.4	35.9 37.2	138.0	-25.6 -26.6	0.00	0.00 0.00	0.00 0.00
3,600.0	6.07	75.43 75.43	3,592.2	37.2 38.5	143.1	-26.6 -27.5	0.00	0.00	0.00
3,650.0	6.07	75.43	3,641.9	39.9	153.4	-28.5	0.00	0.00	0.00
3,700.0	6.07	75.43	3,691.6	41.2	158.5	-29.5	0.00	0.00	0.00
3,750.0	6.07	75.43	3,741.3	42.5	163.6	-30.4	0.00	0.00	0.00
3,800.0	6.07	75.43	3,791.0	43.9	168.7	-31.4	0.00	0.00	0.00
3,850.0	6.07	75.43	3,840.8	45.2	173.8	-32.3	0.00	0.00	0.00
3,900.0	6.07	75.43	3,890.5	46.5	179.0	-33.3	0.00	0.00	0.00
3,950.0	6.07	75.43	3,940.2	47.8	184.1	-34.2	0.00	0.00	0.00
4,000.0	6.07	75.43	3,989.9	49.2	189.2	-35.2	0.00	0.00	0.00
4,050.0	6.07	75.43	4,039.6	50.5	194.3	-36.1	0.00	0.00	0.00
4,100.0	6.07	75.43	4,089.4	51.8	199.4	-37.1	0.00	0.00	0.00
4,150.0	6.07	75.43	4,139.1	53.2	204.5	-38.0	0.00	0.00	0.00
4,200.0	6.07	75.43	4,188.8	54.5	209.7	-39.0	0.00	0.00	0.00
4,250.0	6.07	75.43	4,238.5	55.8	214.8	-39.9	0.00	0.00	0.00
4,300.0	6.07	75.43	4,288.2	57.2	219.9	-40.9	0.00	0.00	0.00
4,350.0	6.07	75.43	4,338.0	58.5	225.0	-41.8	0.00	0.00	0.00
4,400.0	6.07	75.43	4,387.7	59.8	230.1	-42.8	0.00	0.00	0.00
4,450.0	6.07	75.43	4,437.4	61.1	235.2	-43.7	0.00	0.00	0.00
4,500.0 4,550.0	6.07	75.43	4,487.1	62.5	240.4	-44.7	0.00	0.00	0.00
4,550.0 4,600.0	6.07 6.07	75.43 75.43	4,536.8 4,586.6	63.8 65.1	245.5 250.6	-45.6 -46.6	0.00 0.00	0.00 0.00	0.00 0.00
4,650.0 4,650.0	6.07	75.43 75.43	4,586.6	66.5	250.6 255.7	-46.6 -47.5	0.00	0.00	0.00
4,700.0	6.07	75.43	4,686.0	67.8	260.8	-48.5	0.00	0.00	0.00
4,750.0	6.07	75.43	4,735.7	69.1	266.0	-49.4	0.00	0.00	0.00
4,800.0	6.07	75.43	4,785.4	70.5	271.1	-50.4	0.00	0.00	0.00
4,850.0	6.07	75.43	4,835.2	71.8	276.2	-51.3	0.00	0.00	0.00
4,900.0	6.07	75.43	4,884.9	73.1	281.3	-52.3	0.00	0.00	0.00
4,950.0	6.07	75.43	4,934.6	74.5	286.4	-53.2	0.00	0.00	0.00
5,000.0	6.07	75.43	4,984.3	75.8	291.5	-54.2	0.00	0.00	0.00
5,050.0	6.07	75.43	5,034.0	77.1	296.7	-55.1	0.00	0.00	0.00
5,100.0	6.07	75.43	5,083.8	78.4	301.8	-56.1	0.00	0.00	0.00
5,150.0	6.07	75.43	5,133.5	79.8	306.9	-57.0	0.00	0.00	0.00
5,200.0	6.07	75.43	5,183.2	81.1	312.0	-58.0	0.00	0.00	0.00
5,250.0	6.07	75.43	5,232.9	82.4	317.1	-58.9	0.00	0.00	0.00

Database: Hobbs

Company: Mewbourne Oil Company

Project: Eddy County, New Mexico NAD 83
Site: Caballo Loco 3/5 B3PO Fed Com #1H

Well: Sec 11, T20S, R30E

Wellbore: BHL: 330' FSL & 1980' FWL (Sec 14)

Design: Design #1

Local Co-ordinate Reference:

TVD Reference:
MD Reference:
North Reference:

Survey Calculation Method:

Site Caballo Loco 3/5 B3PO Fed Com #1H WELL @ 3256.0usft (Original Well Elev) WELL @ 3256.0usft (Original Well Elev)

Grid

Planned Survey									
Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)
5,300.0	6.07	75.43	5,282.6	83.8	322.2	-59.9	0.00	0.00	0.00
5,350.0	6.07	75.43	5,332.3	85.1	327.4	-60.8	0.00	0.00	0.00
5,400.0	6.07	75.43	5,382.1	86.4	332.5	-61.8	0.00	0.00	0.00
5,450.0	6.07	75.43	5,431.8	87.8	337.6	-62.7	0.00	0.00	0.00
5,500.0	6.07	75.43	5,481.5	89.1	342.7	-63.7	0.00	0.00	0.00
5,550.0	6.07	75.43	5,531.2	90.4	347.8	-64.6	0.00	0.00	0.00
5,600.0	6.07	75.43	5,580.9	91.7	353.0	-65.6	0.00	0.00	0.00
5,650.0	6.07	75.43	5,630.7	93.1	358.1	-66.5	0.00	0.00	0.00
	0.07					-67.5			
5,700.0	6.07	75.43	5,680.4	94.4	363.2		0.00	0.00	0.00
5,750.0	6.07	75.43	5,730.1	95.7	368.3	-68.4	0.00	0.00	0.00
5,800.0 5,850.0	6.07	75.43 75.43	5,779.8 5,829.5	97.1	373.4 378.5	-69.4 -70.3	0.00 0.00	0.00 0.00	0.00
	6.07	75.43 75.43		98.4 99.7	383.7				0.00
5,900.0	6.07		5,879.3			-71.3	0.00	0.00	0.00
5,950.0	6.07	75.43	5,929.0	101.1	388.8	-72.2	0.00	0.00	0.00
6,000.0	6.07	75.43	5,978.7	102.4	393.9	-73.2	0.00	0.00	0.00
6,050.0	6.07	75.43	6,028.4	103.7	399.0	-74.2	0.00	0.00	0.00
6,100.0	6.07	75.43	6,078.1	105.0	404.1	-75.1	0.00	0.00	0.00
6,150.0	6.07	75.43	6,127.9	106.4	409.2	-76.1	0.00	0.00	0.00
6,200.0	6.07	75.43	6,177.6	107.7	414.4	-77.0	0.00	0.00	0.00
6,250.0	6.07	75.43	6,227.3	109.0	419.5	-78.0	0.00	0.00	0.00
6,300.0	6.07	75.43	6,277.0	110.4	424.6	-78.9	0.00	0.00	0.00
6,350.0	6.07	75.43	6,326.7	111.7	429.7	-79.9	0.00	0.00	0.00
6,400.0	6.07	75.43	6,376.5	113.0	434.8	-80.8	0.00	0.00	0.00
0.450.0	0.07	75.40	0.400.0	11.1.1	440.0	04.0	0.00	0.00	0.00
6,450.0	6.07 6.07	75.43	6,426.2	114.4 115.7	440.0	-81.8 -82.7	0.00 0.00	0.00 0.00	0.00 0.00
6,500.0 6,550.0	6.07	75.43 75.43	6,475.9 6,525.6	117.0	445.1 450.2	-83.7	0.00	0.00	0.00
6,600.0	6.07	75.43 75.43	6,575.3	118.4	455.3	-84.6	0.00	0.00	0.00
6,650.0	6.07	75.43 75.43	6,625.1	119.7	460.4	-85.6	0.00	0.00	0.00
6,700.0	6.07	75.43	6,674.8	121.0	465.5	-86.5	0.00	0.00	0.00
6,750.0	6.07	75.43	6,724.5	122.3	470.7	-87.5	0.00	0.00	0.00
6,800.0	6.07	75.43	6,774.2	123.7	475.8	-88.4	0.00	0.00	0.00
6,850.0	6.07	75.43	6,823.9	125.0	480.9	-89.4	0.00	0.00	0.00
6,900.0	6.07	75.43	6,873.7	126.3	486.0	-90.3	0.00	0.00	0.00
6,950.0	6.07	75.43	6,923.4	127.7	491.1	-91.3	0.00	0.00	0.00
7,000.0	6.07	75.43	6,973.1	129.0	496.2	-92.2	0.00	0.00	0.00
7,050.0	6.07	75.43	7,022.8	130.3	501.4	-93.2	0.00	0.00	0.00
7,100.0	6.07	75.43	7,072.5	131.7	506.5	-94.1	0.00	0.00	0.00
7,150.0	6.07	75.43	7,122.3	133.0	511.6	-95.1	0.00	0.00	0.00
7,200.0	6.07	75.43	7,172.0	134.3	516.7	-96.0	0.00	0.00	0.00
7,250.0	6.07	75.43	7,221.7	135.6	521.8	-97.0	0.00	0.00	0.00
7,300.0	6.07	75.43	7,271.4	137.0	527.0	-97.9	0.00	0.00	0.00
7,350.0	6.07	75.43	7,321.1	138.3	532.1	-98.9	0.00	0.00	0.00
7,400.0	6.07	75.43	7,370.9	139.6	537.2	-99.8	0.00	0.00	0.00
7.450.0									
7,450.0 7,500.0	6.07 6.07	75.43 75.43	7,420.6 7,470.3	141.0	542.3 547.4	-100.8 101.7	0.00 0.00	0.00 0.00	0.00 0.00
7,500.0 7.550.0	6.07	75.43 75.43	7,470.3 7,520.0	142.3 143.6	547.4 552.5	-101.7 -102.7	0.00	0.00	0.00
7,600.0	6.07	75.43 75.43	7,520.0 7,569.7	145.0	552.5 557.7	-102.7 -103.6	0.00	0.00	0.00
7,650.0	6.07	75.43 75.43	7,619.5	146.3	562.8	-103.6	0.00	0.00	0.00
7,700.0	6.07	75.43	7,669.2	147.6	567.9	-105.5	0.00	0.00	0.00
7,750.0	6.07	75.43	7,718.9	148.9	573.0	-106.5	0.00	0.00	0.00
7,800.0	6.07	75.43	7,768.6	150.3	578.1	-107.4	0.00	0.00	0.00
7,850.0	6.07	75.43	7,818.3	151.6	583.2	-108.4	0.00	0.00	0.00
7,900.0	6.07	75.43	7,868.0	152.9	588.4	-109.3	0.00	0.00	0.00
7,950.0	6.07	75.43	7,917.8	154.3	593.5	-110.3	0.00	0.00	0.00

Database: Hobbs

Company: Mewbourne Oil Company

Project: Eddy County, New Mexico NAD 83

Site: Caballo Loco 3/5 B3PO Fed Com #1H

Well: Sec 11, T20S, R30E

Wellbore: BHL: 330' FSL & 1980' FWL (Sec 14)

Design: Design #1

Local Co-ordinate Reference:

TVD Reference:
MD Reference:
North Reference:

Survey Calculation Method:

Site Caballo Loco 3/5 B3PO Fed Com #1H WELL @ 3256.0usft (Original Well Elev) WELL @ 3256.0usft (Original Well Elev)

Grid

ed 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)
8,000.0	6.07	75.43	7,967.5	155.6	598.6	-111.2	0.00	0.00	0.00
8,050.0	6.07	75.43	8,017.2	156.9	603.7	-112.2	0.00	0.00	0.00
8,100.0	6.07	75.43	8,066.9	158.3	608.8	-113.1	0.00	0.00	0.00
8,150.0	6.07	75.43	8,116.6	159.6	614.0	-114.1	0.00	0.00	0.00
8,200.0	6.07	75.43	8,166.4	160.9	619.1	-115.0	0.00	0.00	0.00
8,250.0	6.07	75.43	8,216.1	162.3	624.2	-116.0	0.00	0.00	0.00
8,300.0	6.07	75.43	8,265.8	163.6	629.3	-116.9	0.00	0.00	0.00
8,350.0	6.07	75.43	8,315.5	164.9	634.4	-117.9	0.00	0.00	0.00
8,400.0	6.07	75.43	8,365.2	166.2	639.5	-118.9	0.00	0.00	0.00
8,450.0	6.07	75.43	8,415.0	167.6	644.7	-119.8	0.00	0.00	0.00
8,500.0	6.07	75.43	8,464.7	168.9	649.8	-120.8	0.00	0.00	0.00
8,550.0	6.07	75.43	8,514.4	170.2	654.9	-121.7	0.00	0.00	0.00
8,600.0	6.07	75.43	8,564.1	171.6	660.0	-122.7	0.00	0.00	0.00
8,650.0	6.07	75.43	8,613.8	172.9	665.1	-123.6	0.00	0.00	0.00
8,700.0	6.07	75.43	8,663.6	174.2	670.2	-124.6	0.00	0.00	0.00
8,750.0	6.07	75.43	8,713.3	175.6	675.4	-125.5	0.00	0.00	0.00
8,800.0	6.07	75.43	8,763.0	176.9	680.5	-126.5	0.00	0.00	0.00
8,850.0	6.07	75.43	8,812.7	178.2	685.6	-127.4	0.00	0.00	0.00
8,900.0	6.07	75.43	8,862.4	179.5	690.7	-128.4	0.00	0.00	0.00
8,950.0	6.07	75.43	8,912.2	180.9	695.8	-129.3	0.00	0.00	0.00
9,000.0	6.07	75.43	8,961.9	182.2	701.0	-130.3	0.00	0.00	0.00
9,028.3	6.07	75.43	8,990.0	183.0	703.9	-130.8	0.00	0.00	0.00
9,050.0	5.64	75.43	9,011.6	183.5	706.0	-131.2	2.00	-2.00	0.00
9,100.0	4.64	75.43	9,061.4	184.6	710.3	-132.0	2.00	-2.00	0.00
9,150.0	3.64	75.43	9,111.3	185.5	713.8	-132.7	2.00	-2.00	0.00
9,200.0	2.64	75.43	9,161.2	186.2	716.5	-133.1	2.00	-2.00	0.00
9,250.0	1.64	75.43	9,211.2	186.7	718.3	-133.5	2.00	-2.00	0.00
9,300.0	0.64	75.43	9,261.2	187.0	719.2	-133.7	2.00	-2.00	0.00
9,331.8	0.00	0.00	9,293.0	187.0	719.4	-133.7	2.00	-2.00	0.00
KOP: 10' FN	L & 1980' FWL	(Sec 11)							
9,350.0	1.82	179.91	9,311.2	186.7	719.4	-133.4	10.00	10.00	0.00
9,400.0	6.81	179.91	9,361.0	183.0	719.4	-129.7	10.00	10.00	0.00
9,450.0	11.81	179.91	9,410.3	174.9	719.4	-121.6	10.00	10.00	0.00
9,500.0	16.81	179.91	9,458.8	162.5	719.4	-109.3	10.00	10.00	0.00
9,550.0	21.81	179.91	9,505.9	146.0	719.5	-92.8	10.00	10.00	0.00
9,600.0	26.81	179.91	9,551.5	125.4	719.5	-72.2	10.00	10.00	0.00
9,650.0	31.81	179.91	9,595.1	100.9	719.5	-47.8	10.00	10.00	0.00
9,700.0	36.81	179.91	9,636.3	72.7	719.6	-19.7	10.00	10.00	0.00
9,750.0	41.81	179.91	9,675.0	41.1	719.6	11.9	10.00	10.00	0.00
9,800.0	46.81	179.91	9,710.8	6.2	719.7	46.7	10.00	10.00	0.00
9,850.0	51.81	179.91	9,743.4	-31.7	719.8	84.5	10.00	10.00	0.00
9,900.0	56.81	179.91	9,772.5	-72.3	719.8	125.0	10.00	10.00	0.00
9,950.0	61.81	179.91	9,798.0	-115.3	719.9	167.9	10.00	10.00	0.00
9,969.8	63.79	179.91	9,807.1	-132.9	719.9	185.4	10.00	10.00	0.00
	NL & 1980' FWL		0.010.7	400.4	700 5	2125	10.05	10.05	2.22
10,000.0	66.81	179.91	9,819.7	-160.4	720.0	212.8	10.00	10.00	0.00
10,050.0	71.81	179.91	9,837.4	-207.1	720.0	259.4	10.00	10.00	0.00
10,100.0	76.81	179.91	9,850.9	-255.2	720.1	307.4	10.00	10.00	0.00
10,150.0	81.81	179.91	9,860.2	-304.4	720.2	356.4	10.00	10.00	0.00
10,200.0	86.81	179.91	9,865.1	-354.1	720.3	406.0	10.00	10.00	0.00
10,231.7	89.98	179.91	9,866.0	-385.8	720.3	437.7	10.00	10.00	0.00
10,232.0	89.98	179.91	9,866.0	-386.1	720.3	437.9	0.00	0.00	0.00
LD. FOOLEN	L & 1980' FWL	(Sec 11)							

Database: Hobbs

Company: Mewbourne Oil Company

Project: Eddy County, New Mexico NAD 83
Site: Caballo Loco 3/5 B3PO Fed Com #1H

Well: Sec 11, T20S, R30E

Wellbore: BHL: 330' FSL & 1980' FWL (Sec 14)

Design: Design #1

Local Co-ordinate Reference:

TVD Reference:
MD Reference:
North Reference:

Survey Calculation Method:

Site Caballo Loco 3/5 B3PO Fed Com #1H WELL @ 3256.0usft (Original Well Elev) WELL @ 3256.0usft (Original Well Elev)

Grid

Planned Survey									
Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)
10,250.0	89.98	179.91	9,866.0	-404.1	720.4	455.9	0.00	0.00	0.00
10,300.0	89.98	179.91	9,866.0	-454.1	720.5	505.7	0.00	0.00	0.00
10,350.0	89.98	179.91	9,866.0	-504.1	720.5	555.6	0.00	0.00	0.00
10,400.0	89.98	179.91	9,866.1	-554.1	720.6	605.5	0.00	0.00	0.00
10,450.0	89.98	179.91	9,866.1	-604.1	720.7	655.4	0.00	0.00	0.00
10,500.0	89.98	179.91	9,866.1	-654.1	720.8	705.2	0.00	0.00	0.00
10,550.0	89.98	179.91	9,866.1	-704.1	720.9	755.1	0.00	0.00	0.00
10,600.0	89.98	179.91	9,866.1	-754.1	720.9	805.0	0.00	0.00	0.00
10,650.0	89.98	179.91	9,866.1	-804.1	721.0	854.8	0.00	0.00	0.00
10,700.0	89.98	179.91	9,866.1	-854.1	721.1	904.7	0.00	0.00	0.00
10,750.0	89.98	179.91	9,866.2	-904.1	721.2	954.6	0.00	0.00	0.00
10,800.0	89.98	179.91	9,866.2	-954.1	721.3	1,004.5	0.00	0.00	0.00
10,850.0	89.98	179.91	9,866.2	-1,004.1	721.4	1,054.3	0.00	0.00	0.00
10,900.0	89.98	179.91	9,866.2	-1,054.1	721.4	1,104.2	0.00	0.00	0.00
10,950.0	89.98	179.91	9,866.2	-1,104.1	721.5	1,154.1	0.00	0.00	0.00
11,000.0	89.98	179.91	9,866.2	-1,154.1	721.6	1,203.9	0.00	0.00	0.00
11,050.0	89.98	179.91	9,866.3	-1,204.1	721.7	1,253.8	0.00	0.00	0.00
11,100.0	89.98	179.91	9,866.3	-1,254.1	721.8	1,303.7	0.00	0.00	0.00
11,150.0	89.98	179.91	9,866.3	-1,304.1	721.8	1,353.6	0.00	0.00	0.00
11,200.0	89.98	179.91	9,866.3	-1,354.1	721.9	1,403.4	0.00	0.00	0.00
11,250.0	89.98	179.91	9,866.3	-1,404.1	722.0	1,453.3	0.00	0.00	0.00
11,300.0	89.98	179.91	9,866.3	-1,454.1	722.1	1,503.2	0.00	0.00	0.00
11,350.0	89.98	179.91	9,866.3	-1,504.1	722.2	1,553.0	0.00	0.00	0.00
11,400.0	89.98	179.91	9,866.4	-1,554.1	722.3	1,602.9	0.00	0.00	0.00
11,450.0	89.98	179.91	9,866.4	-1,604.1	722.3	1,652.8	0.00	0.00	0.00
11,500.0	89.98	179.91	9,866.4	-1,654.1	722.4	1,702.6	0.00	0.00	0.00
11,550.0	89.98	179.91	9,866.4	-1,704.1	722.5	1,752.5	0.00	0.00	0.00
11,600.0	89.98	179.91	9,866.4	-1,754.1	722.6	1,802.4	0.00	0.00	0.00
11,650.0	89.98	179.91	9,866.4	-1,804.1	722.7	1,852.3	0.00	0.00	0.00
11,700.0	89.98	179.91	9,866.5	-1,854.1	722.7	1,902.1	0.00	0.00	0.00
11,750.0	89.98	179.91	9,866.5	-1,904.1	722.8	1,952.0	0.00	0.00	0.00
11,800.0	89.98	179.91	9,866.5	-1,954.1	722.9	2,001.9	0.00	0.00	0.00
11,850.0	89.98	179.91	9,866.5	-2,004.1	723.0	2,051.7	0.00	0.00	0.00
11,900.0	89.98	179.91	9,866.5	-2,054.1	723.1	2,101.6	0.00	0.00	0.00
11,950.0	89.98	179.91	9,866.5	-2,104.1	723.2	2,151.5	0.00	0.00	0.00
12,000.0	89.98	179.91	9,866.6	-2,154.1	723.2	2,201.4	0.00	0.00	0.00
12,050.0	89.98	179.91	9,866.6	-2,204.1	723.3	2,251.2	0.00	0.00	0.00
12,100.0	89.98	179.91	9,866.6	-2,254.1	723.4	2,301.1	0.00	0.00	0.00
12,150.0	89.98	179.91	9,866.6	-2,304.1	723.5	2,351.0	0.00	0.00	0.00
12,200.0	89.98	179.91	9,866.6	-2,354.1	723.6	2,400.8	0.00	0.00	0.00
12,250.0	89.98	179.91	9,866.6	-2,404.1	723.6	2,450.7	0.00	0.00	0.00
12,300.0	89.98	179.91	9,866.6	-2,454.1	723.7	2,500.6	0.00	0.00	0.00
12,350.0	89.98	179.91	9,866.7	-2,504.1	723.8	2,550.5	0.00	0.00	0.00
12,400.0	89.98	179.91	9,866.7	-2,554.1	723.9	2,600.3	0.00	0.00	0.00
12,450.0	89.98	179.91	9,866.7	-2,604.1	724.0	2,650.2	0.00	0.00	0.00
12,500.0	89.98	179.91	9,866.7	-2,654.1	724.1	2,700.1	0.00	0.00	0.00
12,550.0	89.98	179.91	9,866.7	-2,704.1	724.1	2,749.9	0.00	0.00	0.00
12,600.0	89.98	179.91	9,866.7	-2,754.1	724.2	2,799.8	0.00	0.00	0.00
12,650.0	89.98	179.91	9,866.8	-2,804.1	724.3	2,849.7	0.00	0.00	0.00
•									
12,700.0	89.98	179.91	9,866.8	-2,854.1	724.4	2,899.6	0.00	0.00	0.00
12,750.0	89.98	179.91	9,866.8	-2,904.1	724.5	2,949.4	0.00	0.00	0.00
12,800.0	89.98	179.91	9,866.8	-2,954.1	724.5	2,999.3	0.00	0.00	0.00
12,850.0	89.98	179.91	9,866.8	-3,004.1	724.6	3,049.2	0.00	0.00	0.00
12,900.0	89.98	179.91	9,866.8	-3,054.1	724.7	3,099.0	0.00	0.00	0.00

Database: Hobbs

Company: Mewbourne Oil Company

Project: Eddy County, New Mexico NAD 83
Site: Caballo Loco 3/5 B3PO Fed Com #1H

Well: Sec 11, T20S, R30E

Wellbore: BHL: 330' FSL & 1980' FWL (Sec 14)

Design: Design #1

Local Co-ordinate Reference:

TVD Reference: MD Reference: North Reference:

Survey Calculation Method:

Site Caballo Loco 3/5 B3PO Fed Com #1H WELL @ 3256.0usft (Original Well Elev) WELL @ 3256.0usft (Original Well Elev)

Grid

Measured Depth (usft)	Inclination		Vertical						
	(°)	Azimuth (°)	Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)
12,950.0	89.98	179.91	9,866.8	-3,104.1	724.8	3,148.9	0.00	0.00	0.00
13,000.0	89.98	179.91	9,866.9	-3,154.1	724.9	3,198.8	0.00	0.00	0.00
13,050.0	89.98	179.91	9,866.9	-3,204.1	725.0	3,248.7	0.00	0.00	0.00
13,100.0	89.98	179.91	9,866.9	-3,254.1	725.0	3,298.5	0.00	0.00	0.00
13,150.0	89.98	179.91	9,866.9	-3,304.1	725.1	3,348.4	0.00	0.00	0.00
13,200.0	89.98	179.91	9,866.9	-3,354.1	725.2	3,398.3	0.00	0.00	0.00
13,250.0	89.98	179.91	9,866.9	-3,404.1	725.3	3,448.1	0.00	0.00	0.00
13,300.0	89.98	179.91	9,867.0	-3,454.1	725.4	3,498.0	0.00	0.00	0.00
13,350.0	89.98	179.91	9.867.0	-3,504.1	725.4	3,547.9	0.00	0.00	0.00
13,400.0	89.98	179.91	9,867.0	-3,554.1	725.5	3,597.7	0.00	0.00	0.00
13,450.0	89.98	179.91	9,867.0	-3,604.1	725.6	3,647.6	0.00	0.00	0.00
13,500.0	89.98	179.91	9,867.0	-3,654.1	725.7	3,697.5	0.00	0.00	0.00
13,550.0	89.98	179.91	9,867.0	-3,704.1	725.8	3,747.4	0.00	0.00	0.00
13,600.0	89.98	179.91	9,867.1	-3,754.1	725.9	3,797.2	0.00	0.00	0.00
13,650.0	89.98	179.91	9,867.1	-3,804.1	725.9	3,847.1	0.00	0.00	0.00
13,700.0	89.98	179.91	9,867.1	-3,854.1	726.0	3,897.0	0.00	0.00	0.00
13,750.0	89.98	179.91	9,867.1	-3,904.1	726.0 726.1	3,946.8	0.00	0.00	0.00
13,800.0	89.98	179.91	9,867.1	-3,954.1	726.2	3,996.7	0.00	0.00	0.00
13,850.0	89.98	179.91	9,867.1	-4,004.1	726.2	4,046.6	0.00	0.00	0.00
13,900.0	89.98	179.91	9,867.1	-4,054.1 -4,054.1	726.3 726.4	4,046.5	0.00	0.00	0.00
13,900.0	09.90	179.91	9,007.1	-4,034.1	720.4	4,090.5	0.00	0.00	0.00
13,950.0	89.98	179.91	9,867.2	-4,104.1	726.4	4,146.3	0.00	0.00	0.00
14,000.0	89.98	179.91	9,867.2	-4,154.1	726.5	4,196.2	0.00	0.00	0.00
14,050.0	89.98	179.91	9,867.2	-4,204.1	726.6	4,246.1	0.00	0.00	0.00
14,100.0	89.98	179.91	9,867.2	-4,254.1	726.7	4,295.9	0.00	0.00	0.00
14,150.0	89.98	179.91	9,867.2	-4,304.1	726.8	4,345.8	0.00	0.00	0.00
14 200 0	89.98	179.91	9,867.2	-4,354.1	706.9	4,395.7	0.00	0.00	0.00
14,200.0			,		726.8				
14,250.0	89.98	179.91	9,867.3	-4,404.1	726.9	4,445.6	0.00	0.00	0.00
14,300.0	89.98	179.91	9,867.3	-4,454.1	727.0	4,495.4	0.00	0.00	0.00
14,350.0	89.98	179.91	9,867.3	-4,504.1	727.1	4,545.3	0.00	0.00	0.00
14,400.0	89.98	179.91	9,867.3	-4,554.1	727.2	4,595.2	0.00	0.00	0.00
14,450.0	89.98	179.91	9,867.3	-4,604.1	727.3	4,645.0	0.00	0.00	0.00
14,500.0	89.98	179.91	9,867.3	-4,654.1	727.3	4,694.9	0.00	0.00	0.00
14,550.0	89.98	179.91	9,867.3	-4,704.1	727.4	4,744.8	0.00	0.00	0.00
14,600.0	89.98	179.91	9,867.4	-4,754.1	727.5	4,794.7	0.00	0.00	0.00
14,650.0	89.98	179.91	9,867.4	-4,804.1	727.6	4,844.5	0.00	0.00	0.00
14,700.0	89.98	179.91	9,867.4	-4,854.1	727.7	4,894.4	0.00	0.00	0.00
14,750.0	89.98	179.91	9,867.4	-4,904.1	727.7	4,944.3	0.00	0.00	0.00
14,800.0	89.98	179.91	9,867.4	-4,954.1	727.8	4,994.1	0.00	0.00	0.00
14,850.0	89.98	179.91	9,867.4	-5,004.1	727.9	5,044.0	0.00	0.00	0.00
14,900.0	89.98	179.91	9,867.5	-5,054.1	728.0	5,093.9	0.00	0.00	0.00
14,902.3	89.98	179.91	9,867.5	-5,056.4	728.0	5,096.2	0.00	0.00	0.00
	. & 1978' FWL		-,	-,	. 25.3	-,	5.53	3,33	
14,950.0	89.98	179.91	9,867.5	-5,104.1	728.1	5,143.8	0.00	0.00	0.00
15,000.0	89.98	179.91	9,867.5 9,867.5	-5,104.1 -5,154.1	728.2	5,143.6 5,193.6	0.00	0.00	0.00
15,000.0	89.98	179.91	9,867.5 9,867.5	-5,154.1 -5,204.1	728.2 728.2	5,193.6	0.00	0.00	0.00
15,100.0	89.98	179.91	9,867.5	-5,254.1	728.3	5,293.4	0.00	0.00	0.00
15,150.0	89.98	179.91	9,867.5	-5,304.1	728.4	5,343.2	0.00	0.00	0.00
15,200.0	89.98	179.91	9,867.5	-5,354.1	728.5	5,393.1	0.00	0.00	0.00
15,250.0	89.98	179.91	9,867.6	-5,404.1	728.6	5,443.0	0.00	0.00	0.00
15,300.0	89.98	179.91	9,867.6	-5,454.1	728.6	5,492.9	0.00	0.00	0.00
15,350.0	89.98	179.91	9,867.6	-5,504.1	728.7	5,542.7	0.00	0.00	0.00
15,400.0	89.98	179.91	9,867.6	-5,554.1	728.8	5,592.6	0.00	0.00	0.00
15,450.0 15,500.0	89.98 89.98	179.91 179.91	9,867.6 9,867.6	-5,604.1 -5,654.1	728.9 729.0	5,642.5 5,692.3	0.00 0.00	0.00 0.00	0.00 0.00

Database: Company:

Hobbs

Mewbourne Oil Company

Eddy County, New Mexico NAD 83

Project: Site: Caballo Loco 3/5 B3PO Fed Com #1H

Well: Sec 11, T20S, R30E

BHL: 330' FSL & 1980' FWL (Sec 14) Wellbore:

Design: Design #1 Local Co-ordinate Reference:

TVD Reference: MD Reference: North Reference:

Survey Calculation Method:

Site Caballo Loco 3/5 B3PO Fed Com #1H WELL @ 3256.0usft (Original Well Elev) WELL @ 3256.0usft (Original Well Elev)

coigii.									
Planned Survey									
Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)
15,550.0	89.98	179.91	9.867.7	-5.704.1	729.1	5,742.2	0.00	0.00	0.00
15,600.0	89.98	179.91	9,867.7	-5,754.1	729.1	5,792.1	0.00	0.00	0.00
15,650.0	89.98	179.91	9,867.7	-5,804.1	729.2	5,841.9	0.00	0.00	0.00
15,700.0	89.98	179.91	9,867.7	-5,854.1	729.3	5,891.8	0.00	0.00	0.00
15,750.0	89.98	179.91	9,867.7	-5,904.1	729.4	5,941.7	0.00	0.00	0.00
15,800.0	89.98	179.91	9,867.7	-5,954.1	729.5	5,991.6	0.00	0.00	0.00
15,850.0	89.98	179.91	9,867.8	-6,004.1	729.5	6,041.4	0.00	0.00	0.00
15,900.0	89.98	179.91	9,867.8	-6,054.1	729.6	6,091.3	0.00	0.00	0.00
15,950.0	89.98	179.91	9,867.8	-6,104.1	729.7	6,141.2	0.00	0.00	0.00
16,000.0	89.98	179.91	9,867.8	-6,154.1	729.8	6,191.0	0.00	0.00	0.00
16,050.0	89.98	179.91	9,867.8	-6,204.1	729.9	6,240.9	0.00	0.00	0.00
16,100.0	89.98	179.91	9,867.8	-6,254.1	730.0	6,290.8	0.00	0.00	0.00
16,150.0	89.98	179.91	9,867.8	-6,304.1	730.0	6,340.7	0.00	0.00	0.00
16,200.0	89.98	179.91	9,867.9	-6,354.1 -6,354.1	730.1	6.390.5	0.00	0.00	0.00
16,250.0	89.98	179.91	9,867.9	-6,404.1 -6,404.1	730.1	6,440.4	0.00	0.00	0.00
16,300.0	89.98	179.91	9,867.9	-6,454.1	730.2	6,490.3	0.00	0.00	0.00
16,350.0	89.98	179.91	9,867.9 9,867.9	-6,454.1 -6,504.1	730.3 730.4	6,540.1	0.00	0.00	0.00
16,400.0	89.98	179.91	9,867.9	-6,554.1	730.4	6,590.0	0.00	0.00	0.00
16,450.0	89.98	179.91	9,867.9	-6,604.1	730.5	6,639.9	0.00	0.00	0.00
16,500.0	89.98	179.91	9,868.0	-6,654.1	730.6	6,689.8	0.00	0.00	0.00
16,550.0	89.98	179.91	9,868.0	-6,704.1	730.7	6,739.6	0.00	0.00	0.00
16,600.0	89.98	179.91	9,868.0	-6,754.1	730.8	6,789.5	0.00	0.00	0.00
16,650.0	89.98	179.91	9,868.0	-6,804.1	730.9	6,839.4	0.00	0.00	0.00
16,700.0	89.98	179.91	9,868.0	-6,854.1	730.9	6,889.2	0.00	0.00	0.00
16,750.0	89.98	179.91	9,868.0	-6,904.1	731.0	6,939.1	0.00	0.00	0.00
16,800.0	89.98	179.91	9,868.0	-6,954.1	731.1	6,989.0	0.00	0.00	0.00
16,850.0	89.98	179.91	9,868.1	-7,004.1	731.2	7,038.9	0.00	0.00	0.00
40,000.0	00.00	470.04	0.000.4	7.054.4	704.0	7,000,7	0.00	0.00	0.00
16,900.0	89.98	179.91	9,868.1	-7,054.1	731.3	7,088.7	0.00		
16,950.0	89.98	179.91	9,868.1	-7,104.1	731.4	7,138.6	0.00	0.00	0.00
17,000.0	89.98	179.91	9,868.1	-7,154.1	731.4	7,188.5	0.00	0.00	0.00
17,050.0	89.98	179.91	9,868.1	-7,204.1	731.5	7,238.3	0.00	0.00	0.00
17,100.0	89.98	179.91	9,868.1	-7,254.1	731.6	7,288.2	0.00	0.00	0.00
17,150.0	89.98	179.91	9,868.2	-7,304.1	731.7	7,338.1	0.00	0.00	0.00
17,200.0	89.98	179.91	9,868.2	-7,354.1	731.8	7,388.0	0.00	0.00	0.00
17,250.0	89.98	179.91	9.868.2	-7,404.1	731.8	7.437.8	0.00	0.00	0.00
17,300.0	89.98	179.91	9,868.2	-7,454.1	731.9	7,487.7	0.00	0.00	0.00
17,350.0		179.91	9,868.2	-7,504.1 -7,504.1	732.0	7,537.6	0.00	0.00	0.00
	89.98	179.91	9,868.2	-7,554.1		7,587.4	0.00	0.00	
17,400.0			,	,	732.1				0.00
17,450.0		179.91	9,868.3	-7,604.1	732.2	7,637.3	0.00	0.00	0.00
17,500.0		179.91	9,868.3	-7,654.1	732.3	7,687.2	0.00	0.00	0.00
17,550.0		179.91	9,868.3	-7,704.1	732.3	7,737.0	0.00	0.00	0.00
17,600.0		179.91	9,868.3	-7,754.1	732.4	7,786.9	0.00	0.00	0.00
17,650.0	89.98	179.91	9,868.3	-7,804.1	732.5	7,836.8	0.00	0.00	0.00
17,700.0	89.98	179.91	9,868.3	-7,854.1	732.6	7,886.7	0.00	0.00	0.00
17,750.0	89.98	179.91	9,868.3	-7,904.1	732.7	7,936.5	0.00	0.00	0.00
17,800.0	89.98	179.91	9,868.4	-7,954.1	732.7	7,986.4	0.00	0.00	0.00
17,850.0	89.98	179.91	9,868.4	-8,004.1	732.8	8,036.3	0.00	0.00	0.00
17,900.0	89.98	179.91	9,868.4	-8,054.1	732.9	8,086.1	0.00	0.00	0.00
17,950.0		179.91	9.868.4	-8,104.1	733.0	8,136.0	0.00	0.00	0.00
18,000.0		179.91	9,868.4	-8,154.1	733.1	8,185.9	0.00	0.00	0.00
18,050.0	89.98	179.91	9,868.4	-8,154.1 -8,204.1	733.1	8,235.8	0.00	0.00	0.00
18,100.0	89.98	179.91	9,868.5	-8,254.1	733.2 733.2	8,285.6	0.00	0.00	0.00
18,150.0	89.98	179.91	9,868.5	-8,304.1	733.3	8,335.5	0.00	0.00	0.00
18,200.0	89.98	179.91	9,868.5	-8,354.1	733.4	8,385.4	0.00	0.00	0.00

Database: Company: Hobbs

Mewbourne Oil Company

Eddy County, New Mexico NAD 83 Caballo Loco 3/5 B3PO Fed Com #1H

 Site:
 Caballo Loco 3/5 B3

 Well:
 Sec 11, T20S, R30E

Wellbore:

Project:

BHL: 330' FSL & 1980' FWL (Sec 14)

Design: Design #1

Local Co-ordinate Reference:

TVD Reference: MD Reference: North Reference:

Survey Calculation Method:

Site Caballo Loco 3/5 B3PO Fed Com #1H WELL @ 3256.0usft (Original Well Elev)

WELL @ 3256.0usft (Original Well Elev)

anned Survey									
aimeu 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)
18,250.0	89.98	179.91	9,868.5	-8,404.1	733.5	8,435.2	0.00	0.00	0.00
18,300.0	89.98	179.91	9,868.5	-8,454.1	733.6	8,485.1	0.00	0.00	0.00
18,350.0	89.98	179.91	9,868.5	-8,504.1	733.6	8,535.0	0.00	0.00	0.00
18,400.0	89.98	179.91	9,868.5	-8,554.1	733.7	8,584.9	0.00	0.00	0.00
18,450.0	89.98	179.91	9,868.6	-8,604.1	733.8	8,634.7	0.00	0.00	0.00
18,500.0	89.98	179.91	9,868.6	-8,654.1	733.9	8,684.6	0.00	0.00	0.00
18,550.0	89.98	179.91	9,868.6	-8,704.1	734.0	8,734.5	0.00	0.00	0.00
18,600.0	89.98	179.91	9,868.6	-8,754.1	734.1	8,784.3	0.00	0.00	0.00
18,650.0	89.98	179.91	9,868.6	-8,804.1	734.1	8,834.2	0.00	0.00	0.00
18,700.0	89.98	179.91	9,868.6	-8,854.1	734.2	8,884.1	0.00	0.00	0.00
18,750.0	89.98	179.91	9,868.7	-8,904.1	734.3	8,934.0	0.00	0.00	0.00
18,800.0	89.98	179.91	9,868.7	-8,954.1	734.4	8,983.8	0.00	0.00	0.00
18,850.0	89.98	179.91	9,868.7	-9,004.1	734.5	9,033.7	0.00	0.00	0.00
18,900.0	89.98	179.91	9,868.7	-9,054.1	734.5	9,083.6	0.00	0.00	0.00
18,950.0	89.98	179.91	9,868.7	-9,104.1	734.6	9,133.4	0.00	0.00	0.00
19,000.0	89.98	179.91	9,868.7	-9,154.1	734.7	9,183.3	0.00	0.00	0.00
19,050.0	89.98	179.91	9,868.8	-9,204.1	734.8	9,233.2	0.00	0.00	0.00
19,100.0	89.98	179.91	9,868.8	-9,254.1	734.9	9,283.1	0.00	0.00	0.00
19,150.0	89.98	179.91	9,868.8	-9,304.1	735.0	9,332.9	0.00	0.00	0.00
19,200.0	89.98	179.91	9,868.8	-9,354.1	735.0	9,382.8	0.00	0.00	0.00
19,250.0	89.98	179.91	9,868.8	-9,404.1	735.1	9,432.7	0.00	0.00	0.00
19,300.0	89.98	179.91	9,868.8	-9,454.1	735.2	9,482.5	0.00	0.00	0.00
19,350.0	89.98	179.91	9,868.8	-9,504.1	735.3	9,532.4	0.00	0.00	0.00
19,400.0	89.98	179.91	9,868.9	-9,554.1	735.4	9,582.3	0.00	0.00	0.00
19,450.0	89.98	179.91	9,868.9	-9,604.1	735.4	9,632.1	0.00	0.00	0.00
19,500.0	89.98	179.91	9,868.9	-9,654.1	735.5	9,682.0	0.00	0.00	0.00
19,550.0	89.98	179.91	9,868.9	-9,704.1	735.6	9,731.9	0.00	0.00	0.00
19,600.0	89.98	179.91	9,868.9	-9,754.1	735.7	9,781.8	0.00	0.00	0.00
19,650.0	89.98	179.91	9,868.9	-9,804.1	735.8	9,831.6	0.00	0.00	0.00
19,700.0	89.98	179.91	9,869.0	-9,854.1	735.9	9,881.5	0.00	0.00	0.00
19,750.0	89.98	179.91	9,869.0	-9,904.1	735.9	9,931.4	0.00	0.00	0.00
19,800.0	89.98	179.91	9,869.0	-9,954.1	736.0	9,981.2	0.00	0.00	0.00
19,847.5	89.98	179.91	9,869.0	-10,001.6	736.1	10,028.7	0.00	0.00	0.00
DIU - 0001 E0	L & 1980 ' FWL	(Sec 14)							

Hobbs Database:

Company:

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

Caballo Loco 3/5 B3PO Fed Com #1H Site:

Well: Sec 11, T20S, R30E

BHL: 330' FSL & 1980' FWL (Sec 14) Wellbore:

Design: Design #1 Local Co-ordinate Reference:

TVD Reference: MD Reference: North Reference:

Survey Calculation Method:

Site Caballo Loco 3/5 B3PO Fed Com #1H WELL @ 3256.0usft (Original Well Elev)

WELL @ 3256.0usft (Original Well Elev)

Design Targets									
Target Name - hit/miss target - Shape	Dip Angle (°)	Dip Dir. (°)	TVD (usft)	+N/-S (usft)	+E/-W (usft)	Northing (usft)	Easting (usft)	Latitude	Longitude
SHL: 205' FNL & 1260' F - plan hits target cent - Point	0.00 er	0.00	0.0	0.0	0.0	580,202.20	660,224.90	32.5944358	-103.9473007
KOP: 10' FNL & 1980' F' - plan hits target cent - Point	0.00 er	0.00	9,293.0	187.0	719.4	580,389.20	660,944.30	32.5949426	-103.9449626
FTP: 330' FNL & 1980' F - plan hits target cent - Point	0.00 er	0.00	9,807.1	-132.9	719.9	580,069.30	660,944.83	32.5940633	-103.9449647
LP: 583' FNL & 1980' FV - plan hits target cent - Point	0.00 er	0.00	9,866.0	-386.1	720.3	579,816.14	660,945.24	32.5933674	-103.9449664
PPP2: 0' FNL & 1978' F\ - plan hits target cent - Point	0.00 er	0.00	9,867.5	-5,056.4	728.0	575,145.80	660,952.90	32,5805300	-103.9449969
BHL: 330' FSL & 1980 ' - plan hits target cent - Point	0.00 er	0.00	9,869.0	-10,001.6	736.1	570,200.60	660,961.00	32.5669371	-103.9450292

PECOS DISTRICT SURFACE USE CONDITIONS OF APPROVAL

OPERATOR'S NAME: | MEWBOURNE OIL COMPANY

LEASE NO.: | **NMNM086913**

COUNTY: | Eddy County, New Mexico

Wells:

Bloomin Onion 11-14 Fed Com Well pad

Caballo Loco 3-5 B3IJ Fed Com 1H

Surface Hole Location: 205 feet FNL and 1220 feet FWL, Section 11, T. 20 S., R. 30 E. Bottom Hole Location: 330 feet FSL and 660 feet FWL, Section 14, T. 20 S, R 30 E.

Caballo Loco 3-5 B3PO Fed Com 1H

Surface Hole Location: 205 feet FNL and 1260 feet FWL, Section 11, T. 20 S., R. 30 E. Bottom Hole Location: 330 feet FSL and 1980 feet FWL, Section 14, T. 20 S, R 30 E.

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1. GENERAL PROVISIONS

The failure of the operator to comply with these requirements may result in the assessment of liquidated damages or penalties pursuant to 43 CFR 3163.1 or 3163.2. A copy of these conditions of approval shall be present on the location during construction, drilling and reclamation activity. Any request for a variance shall be submitted to the Authorized Officer on Form 3160-5, Sundry Notices and Report on Wells.

1.1. ARCHAEOLOGICAL, PALEONTOLOGY & HISTORICAL SITES

Any cultural resource (historic or prehistoric site or object) discovered by the operator, or any person working on the operator's behalf, on the public or federal land shall be immediately reported to the Authorized Officer. The operator shall suspend all operations in the immediate area (within 100ft) of such discovery until written authorization to proceed is issued by the Authorized Officer. An evaluation of the discovery will be made by the Authorized Officer, in conjunction with a BLM Cultural Resource Specialist, to determine appropriate actions to prevent the loss of significant scientific values. The operator shall be responsible for the cost of evaluation and any decision as to the proper mitigation measures will be made by the Authorized Officer after consulting with the operator.

Traditional Cultural Properties (TCPs) are protected by NHPA as codified in 36 CFR 800 for possessing traditional, religious, and cultural significance tied to a certain group of individuals. Though there are currently no designated TCPs within the project area or within a mile of the project area, but it is possible for a TCP to be designated after the approval of this project. If a TCP is designated in the project area after the project's approval, the BLM Authorized Officer will notify the operator of the following conditions and the duration for which these conditions are required.

- 1. Temporary halting of all construction, drilling, and production activities to lower noise.
- 2. Temporary shut-off of all artificial lights at night.

The operator is hereby obligated to comply with procedures established in the Native American Graves Protection and Repatriation Act (NAGPRA), specifically NAGPRA Subpart B regarding discoveries, to protect human remains, associated funerary objects, sacred objects, and objects of cultural patrimony discovered during project work. If any human skeletal remains, funerary objects, sacred objects, or objects of cultural patrimony are discovered at any time during construction, all construction activities shall halt and a BLM-CFO Authorized Officer will be notified immediately. The BLM will then be required to be notified, in writing, within 24 hours of the discovery. The written notification should include the geographic location by county and state, the contents of the discovery, and the steps taken to protect said discovery. You must also include any potential threats to the discovery and a conformation that all activity within 100ft of the discovery has ceased and work will not resume until written certification is issued. All work on the entire project must halt for a minimum of 3 days and work cannot resume until an Authorized Officer grants permission to do so.

Any paleontological resource discovered by the operator, or any person working on the operator's behalf, on public or Federal land shall be immediately reported to the Authorized Officer. The operator shall suspend all operations in the immediate area of such discovery until written authorization to proceed is issued by the Authorized Officer. The operator will be responsible for the cost of evaluation and any decision as to the proper mitigation measures will be made by the Authorized Officer after consulting with the operator.

1.2. RANGELAND RESOURCES

1.2.1. Cattleguards

Where a permanent cattleguard is approved, an appropriately sized cattleguard(s) sufficient to carry out the project shall be installed and maintained at fence crossing(s). Any existing cattleguard(s) on the access road shall be repaired or replaced if they are damaged or have deteriorated beyond practical use. The operator shall be responsible for the condition of the existing cattleguard(s) that are in place

and are utilized during lease operations. A gate shall be constructed on one side of the cattleguard and fastened securely to H-braces.

1.2.2. Fence Requirement

Where entry granted across a fence line, the fence must be braced and tied off on both sides of the passageway prior to cutting. Once the work is completed, the fence will be restored to its prior condition, or better. The operator shall notify the private surface landowner or the grazing allotment holder prior to crossing any fence(s).

1.2.3. Livestock Watering Requirement

Any damage to structures that provide water to livestock throughout the life of the well, caused by operations from the well site, must be immediately corrected by the operator. The operator must notify the BLM office (575-234-5972) and the private surface landowner or the grazing allotment holder if any damage occurs to structures that provide water to livestock.

1.3. NOXIOUS WEEDS

The operator shall be held responsible if noxious weeds become established within the areas of operations. Weed control shall be required on the disturbed land where noxious weeds exist, which includes the roads, pads, associated pipeline corridor, and adjacent land affected by the establishment of weeds due to this action. The operator shall consult with the Authorized Officer for acceptable weed control methods, which include following EPA, New Mexico Department of Agriculture, and BLM requirements and policies.

1.3.1 African Rue (Peganum harmala)

Spraying: The spraying of African Rue must be completed by a licensed or certified applicator. In order to attempt to kill or remove African Rue the proper mix of chemical is needed. The mix consists of 2% Arsenal (Imazapyr) and 2% Roundup (Glyphosate) along with a nonionic surfactant. Any other chemicals or combinations shall be approved by the BLM Noxious Weeds Coordinator prior to treatment. African Rue shall be sprayed in connection to any dirt working activities or disturbances to the site being sprayed. Spraying of African Rue shall be done on immature plants at initial growth through flowering and mature plants between budding and flowering stages. Spraying shall not be conducted after flowering when plant is fruiting. This will ensure optimal intake of chemical and decrease chances of developing herbicide resistance. After spraying, the operator or necessary parties must contact the Carlsbad Field Office to inspect the effectiveness of the application treatment to the plant species. No ground disturbing activities can take place until the inspection by the authorized officer is complete. The operator may contact the Environmental Protection Department or the BLM Noxious Weed Coordinator at (575) 234-5972 or BLM_NM_CFO_NoxiousWeeds@blm.gov.

Management Practices: In addition to spraying for African Rue, good management practices should be followed. All equipment should be washed off using a power washer in a designated containment area. The containment area shall be bermed to allow for containment of the seed to prevent it from entering any open areas of the nearby landscape. The containment area shall be excavated near or adjacent to the well pad at a depth of three feet and just large enough to get equipment inside it to be washed off. This will allow all seeds to be in a centrally located area that can be treated at a later date if the need arises.

1.4. LIGHT POLLUTION

1.4.1. Downfacing

All permanent lighting will be pointed straight down at the ground in order to prevent light spill beyond the edge of approved surface disturbance.

1.4.2. Shielding

All permanent lighting will use full cutoff luminaires, which are fully shielded (i.e., not emitting direct or indirect light above an imaginary horizontal plane passing through the lowest part of the light source).

1.4.3. Lighting Color

Lighting shall be 3,500 Kelvin or less (Warm White) except during drilling, completion, and workover operations. No bluish-white lighting shall be used in permanent outdoor lighting.

2. SPECIAL REQUIREMENTS

2.1. CAVE/KARST

2.1.1. General Construction

- No blasting
- The BLM, Carlsbad Field Office, will be informed immediately if any subsurface drainage channels, cave passages, or voids are penetrated during construction, and no additional construction shall occur until clearance has been issued by the Authorized Officer.
- All linear surface disturbance activities will avoid sinkholes and other karst features to lessen the
 possibility of encountering near surface voids during construction, minimize changes to runoff,
 and prevent untimely leaks and spills from entering the karst drainage system.
- This is a sensitive area and all spills or leaks will be reported to the BLM immediately for their immediate and proper treatment, as defined in NTL 3A for Major Undesirable Events.

2.1.2. Pad Construction

- The pad will be constructed and leveled by adding the necessary fill and caliche. No blasting will be used for any construction or leveling activities.
- The entire perimeter of the well pad will be bermed to prevent oil, salt, and other chemical contaminants from leaving the well pad.
- The compacted berm shall be constructed at a minimum of 12 inches high with impermeable mineral material (e.g., caliche).
- No water flow from the uphill side(s) of the pad shall be allowed to enter the well pad.
- The topsoil stockpile shall be located outside the bermed well pad.
- Topsoil, either from the well pad or surrounding area, shall not be used to construct the berm.
- No storm drains, tubing or openings shall be placed in the berm.
- If fluid collects within the bermed area, the fluid must be vacuumed into a safe container and disposed of properly at a state approved facility.
- The integrity of the berm shall be maintained around the surfaced pad throughout the life of the well and around the downsized pad after interim reclamation has been completed.
- Any access road entering the well pad shall be constructed so that the integrity of the berm height surrounding the well pad is not compromised (i.e. an access road crossing the berm cannot be lower than the berm height).
- Following a rain event, all fluids will be vacuumed off of the pad and hauled off-site and disposed at a proper disposal facility.

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2.1.3. Road Construction

- Turnout ditches and drainage leadoffs will not be constructed in such a manner as to alter the natural flow of water into or out of cave or karst features.
- Special restoration stipulations or realignment may be required if subsurface features are discovered during construction.

2.1.4. Buried Pipeline/Cable Construction

Rerouting of the buried line(s) may be required if a subsurface void is encountered during
construction to minimize the potential subsidence/collapse of the feature(s) as well as the
possibility of leaks/spills entering the karst drainage system.

2.1.5. Powerline Construction

- Smaller powerlines will be routed around sinkholes and other karst features to avoid or lessen
 the possibility of encountering near surface voids and to minimize changes to runoff or possible
 leaks and spills from entering karst systems.
- Larger powerlines will adjust their pole spacing to avoid cave and karst features.
- Special restoration stipulations or realignment may be required if subsurface voids are encountered.

2.1.6. Surface Flowlines Installation

 Flowlines will be routed around sinkholes and other karst features to minimize the possibility of leaks/spills from entering the karst drainage system.

2.1.7. Production Mitigation

- Tank battery locations and facilities will be bermed and lined with a 20-mil thick permanent liner that has a 4 oz. felt backing, or equivalent, to prevent tears or punctures. Secondary containment holding capacity must be large enough to contain 1 ½ times the content of the largest tank or 24-hour production, whichever is greater (displaced volume from all tanks within the berms MUST be subtracted from total volume of containment in calculating holding capacity).
- Implementation of a leak detection system to provide an early alert to operators when a leak has occurred.
- Automatic shut off, check values, or similar systems will be installed for pipelines and tanks to minimize the effects of catastrophic line failures used in production or drilling.

2.1.8. Residual and Cumulative Mitigation

The operator will perform annual pressure monitoring on all casing annuli. If the test results indicate a casing failure has occurred, contact a BLM Engineer immediately, and take remedial action to correct the problem.

2.1.9. Plugging and Abandonment Mitigation

Upon well abandonment in high cave karst areas, additional plugging conditions of approval may be required. The BLM will assess the situation and work with the operator to ensure proper plugging of the wellbore.

2.3 VISUAL RESOURCE MANAGEMENT

2.5.1 VRM IV

Above-ground structures including meter housing that are not subject to safety requirements are painted a flat non-reflective paint color, Carlsbad Canyon from the BLM Standard Environmental Color Chart (CC-001: June 2008).

2.5.2 VRM III Facility Requirement

Above-ground structures including meter housing that are not subject to safety requirements are painted a flat non-reflective paint color, Carlsbad Canyon from the BLM Standard Environmental Color Chart (CC-001: June 2008).

Potash Resources

Lessees must comply with the 2012Secretarial Potash Order. The Order is designed to manage the efficient development of oil, gas, and potash resources. Section 6 of the Order provides general provisions which must be followed to minimize conflict between the industries and ensure the safety of operations.

To minimize impacts to potash resources, the proposed well is confined within the boundaries of the established <u>Bloomin Onion</u> (**Shallow Only**) Drill Island.

3. CONSTRUCTION REQUIRENMENTS

3.1. CONSTRUCTION NOTIFICATION

The BLM shall administer compliance and monitor construction of the access road and well pad. Notify the Carlsbad Field Office at BLM_NM_CFO_Construction_Reclamation@blm.gov at least 3 working days prior to commencing construction of the access road and/or well pad.

When construction operations are being conducted on this well, the operator shall have the approved APD and COAs on the well site and they shall be made available upon request by the Authorized Officer.

3.1 TOPSOIL

The operator shall strip the topsoil (the A horizon) from the entire well pad area and stockpile the topsoil along the edge of the well pad as depicted in the APD. No more than the top 6 inches of topsoil shall be removed. All the stockpiled topsoil will be redistributed over the interim reclamation areas. Topsoil shall not be used for berming the pad or facilities. For final reclamation, the topsoil shall be spread over the entire pad area for seeding preparation.

Other subsoil (the B horizon and below) stockpiles must be completely segregated from the topsoil stockpile. Large rocks or subsoil clods (not evident in the surrounding terrain) must be buried within the approved area for interim and final reclamation.

3.2 CLOSED LOOP SYSTEM

Tanks are required for drilling operations: No reserve pits will be used for drill cuttings. The operator shall properly dispose of drilling contents at an authorized disposal site.

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3.3 FEDERAL MINERAL PIT

Payment shall be made to the BLM prior to removal of any federal mineral materials. Call the Carlsbad Field Office at (575) 234-5972.

3.4 WELL PAD & SURFACING

Any surfacing material used to surface the well pad will be removed at the time of interim and final reclamation.

3.5 EXCLOSURE FENCING (CELLARS & PITS)

The operator will install and maintain exclosure fencing for all open well cellars to prevent access to public, livestock, and large forms of wildlife before and after drilling operations until the well cellar is free of fluids and the operator initiates backfilling. (For examples of exclosure fencing design, refer to BLM's Oil and Gas Gold Book, Exclosure Fence Illustrations, Figure 1, Page 18.)

The operator will also install and maintain mesh netting for all open well cellars to prevent access to smaller wildlife before and after drilling operations until the well cellar is free of fluids and the operator. Use a maximum netting mesh size of 1 ½ inches. The netting must not have holes or gaps.

3.6 ON LEASE ACESS ROAD

3.6.1 Road Width

The access road shall have a driving surface that creates the smallest possible surface disturbance and does not exceed fourteen (14) feet in width. The maximum width of surface disturbance, when constructing the access road, shall not exceed twenty-five (25) feet.

3.6.2 Surfacing

Surfacing material is not required on the new access road driving surface. If the operator elects to surface the new access road or pad, the surfacing material may be required to be removed at the time of reclamation.

Where possible, no improvements will be made on the unsurfaced access road other than to remove vegetation as necessary, road irregularities, safety issues, or to fill low areas that may sustain standing water.

The Authorized Officer reserves the right to require surfacing of any portion of the access road at any time deemed necessary. Surfacing may be required in the event the road deteriorates, erodes, road traffic increases, or it is determined to be beneficial for future field development. The surfacing depth and type of material will be determined at the time of notification.

3.6.3 Crowning

Crowning shall be done on the access road driving surface. The road crown shall have a grade of approximately 2% (i.e., a 1" crown on a 14' wide road). The road shall conform to Figure 1; cross section and plans for typical road construction.

3.6.4 Ditching

Ditching shall be required on both sides of the road.

3.6.5 Turnouts

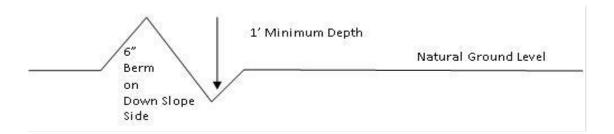
Vehicle turnouts shall be constructed on the road. Turnouts shall be intervisible with interval spacing distance less than 1000 feet. Turnouts shall conform to Figure 1; cross section and plans for typical road construction.

3.7.6 Drainage

Drainage control systems shall be constructed on the entire length of road (e.g. ditches, sidehill outsloping and insloping, leadoff ditches, culvert installation, and low water crossings).

A typical lead-off ditch has a minimum depth of 1 foot below and a berm of 6 inches above natural ground level. The berm shall be on the down-slope side of the lead-off ditch.

Cross Section of a Typical Lead-off Ditch



All lead-off ditches shall be graded to drain water with a 1 percent minimum to 3 percent maximum ditch slope. The spacing interval are variable for lead-off ditches and shall be determined according to the formula for spacing intervals of lead-off ditches, but may be amended depending upon existing soil types and centerline road slope (in %);

Formula for Spacing Interval of Lead-off Ditches

Example - On a 4% road slope that is 400 feet long, the water flow shall drain water into a lead-off ditch. Spacing interval shall be determined by the following formula:

400 foot road with 4% road slope:
$$\underline{400'} + 100' = 200'$$
 lead-off ditch interval

3.7.7 Public Access

Public access on this road shall not be restricted by the operator without specific written approval granted by the Authorized Officer.

Construction Steps

- Salvage topsoil
- 3. Redistribute topsoil
- 2. Construct road
- 4. Revegetate slopes

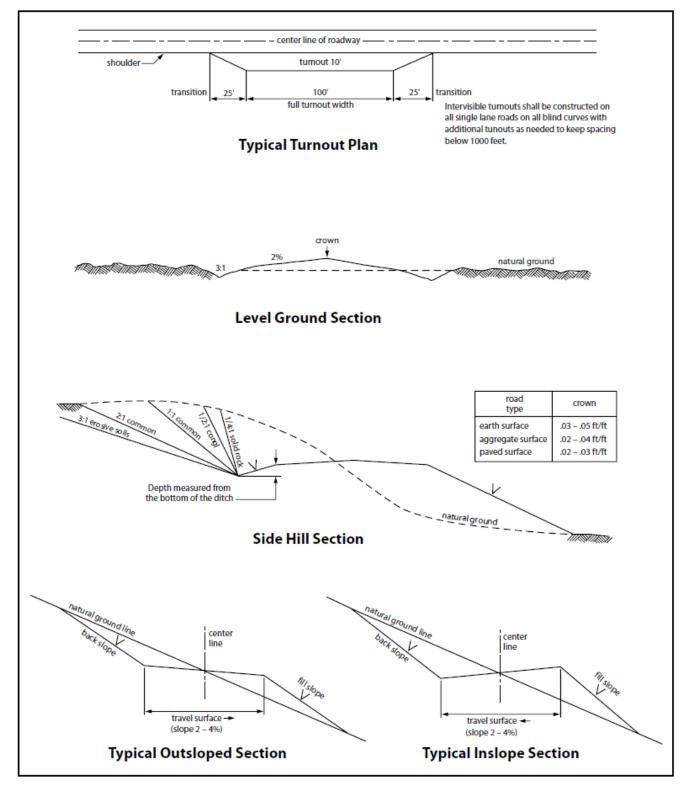


Figure 1. Cross-sections and plans for typical road sections representative of BLM resource or FS local and higher-class roads.

4. PIPELINES

- The BLM, Carlsbad Field Office, will be informed immediately if any subsurface drainage channels, passages, or voids are intersected by trenching, and no pipe will be laid in the trench at that point until clearance has been issued by the Authorized Officer.
- A leak detection plan will be submitted to the BLM Carlsbad Field Office for approval
 prior to pipeline installation. The method could incorporate gauges to detect pressure drops,
 situating values and lines so they can be visually inspected periodically or installing electronic
 sensors to alarm when a leak is present. The leak detection plan will incorporate an
 automatic shut off system that will be installed for proposed pipelines to minimize the effects
 of an undesirable event.
- Regular monitoring is required to quickly identify leaks for their immediate and proper treatment.
- All spills or leaks will be reported to the BLM immediately for their immediate and proper treatment.

4.1 BURIED PIPELINES

A copy of the application (APD, or Sundry Notice) and attachments, including conditions of approval, survey plat and/or map, will be on location during construction. BLM personnel may request a copy of your permit during construction to ensure compliance with all stipulations.

Operator agrees to comply with the following stipulations to the satisfaction of the Authorized Officer:

- 1. The Operator shall indemnify the United States against any liability for damage to life or property arising from the occupancy or use of public lands under this APD.
- 2. The Operator shall comply with all applicable Federal laws and regulations existing or hereafter enacted or promulgated. In any event, the operator shall comply with the Toxic Substances Control Act of 1976 as amended, 15 USC 2601 et seq. (1982) with regards to any toxic substances that are used, generated by or stored on the pipeline corridor or on facilities authorized under this APD. (See 40 CFR Part 702-799 and especially, provisions on polychlorinated biphenyls, 40 CFR 761.1-761.193.) Additionally, any release of toxic substances (leaks, spills, etc.) in excess of the reportable quantity established by 40 CFR Part 117 shall be reported as required by the Comprehensive Environmental Response, Compensation, and Liability Act, section 102b. A copy of any report required or requested by any Federal agency or State government as a result of a reportable release or spill of any toxic substances shall be furnished to the authorized officer concurrent with the filing of the reports to the involved Federal agency or State government.
- 3. The operator agrees to indemnify the United States against any liability arising from the release of any hazardous substance or hazardous waste (as these terms are defined in the Comprehensive Environmental Response, Compensation and Liability Act of 1980, 42 U.S.C. 9601, et seq. or the Resource Conservation and Recovery Act, 42 U.S.C.6901, et seq.) on the Pipeline corridor (unless the release or threatened release is wholly unrelated to the operator's activity on the pipeline corridor), or resulting from the activity of the Operator on the pipeline corridor. This agreement applies without regard to whether a release is caused by the operator, its agent, or unrelated third parties.
- 4. If, during any phase of the construction, operation, maintenance, or termination of the pipeline, any oil or other pollutant is discharged from the pipeline system, impacting Federal

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lands, the control and total removal, disposal, and cleaning up of such oil or other pollutant, wherever found, shall be the responsibility of operator, regardless of fault. Upon failure of operator to control, dispose of, or clean up such discharge on or affecting Federal lands, or to repair all damages resulting therefrom, on the Federal lands, the Authorized Officer may take such measures as he deems necessary to control and clean up the discharge and restore the area, including where appropriate, the aquatic environment and fish and wildlife habitats, at the full expense of the operator. Such action by the Authorized Officer shall not relieve operator of any responsibility as provided herein.

- 5. All construction and maintenance activity will be confined to the authorized pipeline corridor.
- 6. The pipeline will be buried with a minimum cover of 36 inches between the top of the pipe and ground level.
- 7. The maximum allowable disturbance for construction in this pipeline corridor will be 30 feet:
 - Blading of vegetation within the pipeline corridor will be allowed: maximum width of blading operations will not exceed <u>20</u> feet. The trench is included in this area. (*Blading is* defined as the complete removal of brush and ground vegetation.)
 - Clearing of brush species within the pipeline corridor will be allowed: maximum width of clearing operations will not exceed <u>30</u> feet. The trench and bladed area are included in this area. (Clearing is defined as the removal of brush while leaving ground vegetation (grasses, weeds, etc.) intact. Clearing is best accomplished by holding the blade 4 to 6 inches above the ground surface.)
 - The remaining area of the pipeline corridor (if any) shall only be disturbed by compressing the vegetation. (Compressing can be caused by vehicle tires, placement of equipment, etc.)
- 8. The operator shall stockpile an adequate amount of topsoil where blading is allowed. The topsoil to be stripped is approximately ___6__ inches in depth. The topsoil will be segregated from other spoil piles from trench construction. The topsoil will be evenly distributed over the bladed area for the preparation of seeding.
- 9. Vegetation, soil, and rocks left as a result of construction or maintenance activity will be randomly scattered on this pipeline corridor and will not be left in rows, piles, or berms, unless otherwise approved by the Authorized Officer. The entire pipeline corridor shall be recontoured to match the surrounding landscape. The backfilled soil shall be compacted, and a 6-inch berm will be left over the ditch line to allow for settling back to grade.
- 10. The pipeline will be identified by signs at the point of origin and completion of the pipeline corridor and at all road crossings. At a minimum, signs will state the operator's name, BLM serial number, and the product being transported. All signs and information thereon will be posted in a permanent, conspicuous manner, and will be maintained in a legible condition for the life of the pipeline.
- 11. The operator shall not use the pipeline route as a road for purposes other than routine maintenance as determined necessary by the Authorized Officer in consultation with the operator before maintenance begins. The operator will take whatever steps are necessary to ensure that the pipeline route is not used as a roadway. As determined necessary during the life of the pipeline, the Authorized Officer may ask the operator to construct temporary deterrence structures.
- 12. The operator shall be held responsible if noxious weeds become established within the areas of operations. Weed control shall be required on the disturbed land where noxious weeds

exist, which includes associated roads, pipeline corridor and adjacent land affected by the establishment of weeds due to this action. The operator shall consult with the Authorized Officer for acceptable weed control methods, which include following EPA and BLM requirements and policies.

- 13. <u>Escape Ramps</u> The operator will construct and maintain pipeline/utility trenches [that are not otherwise fenced, screened, or netted] to prevent livestock, wildlife, and humans from becoming entrapped. At a minimum, the operator will construct and maintain escape ramps, ladders, or other methods of avian and terrestrial wildlife escape in the trenches according to the following criteria:
 - a. Any trench left open for eight (8) hours or less is not required to have escape ramps; however, before the trench is backfilled, the contractor/operator shall inspect the trench for wildlife, remove all trapped wildlife, and release them alive at least 100 yards from the trench
 - b. For trenches left open for eight (8) hours or more, earthen escape ramps (built at no more than a 30-degree slope and spaced no more than 500 feet apart) shall be placed in the trench. Before the trench is backfilled, the contractor/operator shall inspect the trench for wildlife, remove all trapped wildlife, and release them alive at least 100 yards from the trench.

14. Special Stipulations:

Karst:

- The BLM, Carlsbad Field Office, will be informed immediately if any subsurface drainage channels, passages, or voids are intersected by trenching, and no pipe will be laid in the trench at that point until clearance has been issued by the Authorized Officer.
- If a void is encountered, alignments may be rerouted to avoid the karst feature and lessen the potential of subsidence or collapse of karst features, buildup of toxic or combustible gas, or other possible impacts to cave and karst resources from the buried pipeline.
- Special restoration stipulations or realignment may be required at such intersections, if any.
- A leak detection plan will be submitted to the BLM Carlsbad Field Office for approval
 prior to pipeline installation. The method could incorporate gauges to detect pressure
 drops, situating values and lines so they can be visually inspected periodically or
 installing electronic sensors to alarm when a leak is present. The leak detection plan will
 incorporate an automatic shut off system that will be installed for proposed pipelines to
 minimize the effects of an undesirable event.
- Regular monitoring is required to quickly identify leaks for their immediate and proper treatment.
- All spills or leaks will be reported to the BLM immediately for their immediate and proper treatment.

4.2 RANGELAND MITIGATION FOR PIPELINES

4.5.1 Fence Requirement

Where entry is granted across a fence line, the fence must be braced and tied off on both sides of the passageway with H-braces prior to cutting. Once the work is completed, the fence will be restored to its prior condition, or better. The operator shall notify the private surface landowner or the grazing allotment operator prior to crossing any fence(s).

4.5.2 Cattleguards

An appropriately sized cattleguard(s) sufficient to carry out the project shall be installed and maintained at road-fence crossing(s). Any existing cattleguard(s) on the access road shall be

repaired or replaced if they are damaged or have deteriorated beyond practical use. The operator shall be responsible for the condition of the existing cattleguard(s) that are in place and are utilized during lease operations. A gate shall be constructed on one side of the cattleguard and fastened securely to H-braces.

4.5.3 Livestock Watering Requirement

Structures that provide water to livestock, such as windmills, pipelines, drinking troughs, and earthen reservoirs, will be avoided by moving the proposed action.

Any damage to structures that provide water to livestock throughout the life of the well, caused by operations from the well site, must be immediately corrected by the operator. The operator must notify the BLM office (575-234-5972) and the private surface landowner or the grazing allotment operator if any damage occurs to structures that provide water to livestock.

- Livestock operators will be contacted, and adequate crossing facilities will be provided as needed to ensure livestock are not prevented from reaching water sources because of the open trench.
- Wildlife and livestock trails will remain open and passable by adding soft plugs (areas
 where the trench is excavated and replaced with minimal compaction) during the
 construction phase. Soft plugs with ramps on either side will be left at all well-defined
 livestock and wildlife trails along the open trench to allow passage across the trench and
 provide a means of escape for livestock and wildlife that may enter the trench.
- Trenches will be backfilled as soon as feasible to minimize the amount of open trench.
 The Operator will avoid leaving trenches open overnight to the extent possible and open
 trenches that cannot be backfilled immediately will have escape ramps (wooden) placed
 at no more than 2,500 feet intervals and sloped no more than 45 degrees.

5. OVERHEAD ELECTRIC LINES

A copy of the APD and attachments, including stipulations, survey plat and/or map, will be on location during construction. BLM personnel may request to you a copy of your permit during construction to ensure compliance with all stipulations.

Operator agrees to comply with the following stipulations to the satisfaction of the Authorized Officer:

- 1. The operator shall indemnify the United States against any liability for damage to life or property arising from the occupancy or use of public lands under this APD.
- 2. The operator shall comply with all applicable Federal laws and regulations existing or hereafter enacted or promulgated. In any event, the operator shall comply with the Toxic Substances Control Act of 1976 as amended, 15 USC 2601 et seq. (1982) with regards to any toxic substances that are used, generated by or stored on the powerline corridor or on facilities authorized under this powerline corridor. (See 40 CFR, Part 702-799 and especially, provisions on polychlorinated biphenyls, 40 CFR 761.1-761.193.) Additionally, any release of toxic substances (leaks, spills, etc.) in excess of the reportable quantity established by 40 CFR, Part 117 shall be reported as required by the Comprehensive Environmental Response, Compensation, and Liability Act, section 102b. A copy of any report required or requested by any Federal agency or State government as a result of a reportable release or spill of any toxic substances shall be furnished to the authorized officer concurrent with the filing of the reports to the involved Federal agency or State government.
- 3. The operator agrees to indemnify the United States against any liability arising from the release of any hazardous substance or hazardous waste (as these terms are defined in the Comprehensive Environmental Response, Compensation and Liability Act of 1980, 42 U.S.C. 9601, et seq. or the Resource Conservation and Recovery Act, 42 U.S.C. 6901, et seq.) on

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the Powerline corridor(unless the release or threatened release is wholly unrelated to the operator's activity on the powerline corridor), or resulting from the activity of the Operator on the powerline corridor. This agreement applies without regard to whether a release is caused by the operator, its agent, or unrelated third parties.

- 4. There will be no clearing or blading of the powerline corridor unless otherwise agreed to in writing by the Authorized Officer.
- 5. Power lines shall be constructed and designed in accordance to standards outlined in "Suggested Practices for Avian Protection on Power lines: The State of the Art in 2006" Edison Electric Institute, APLIC, and the California Energy Commission 2006. The operator shall assume the burden and expense of proving that pole designs not shown in the above publication deter raptor perching, roosting, and nesting. Such proof shall be provided by a raptor expert approved by the Authorized Officer. The BLM reserves the right to require modification or additions to all powerline structures placed on this powerline corridor, should they be necessary to ensure the safety of large perching birds. Such modifications and/or additions shall be made by the operator without liability or expense to the United States.
- 6. Raptor deterrence will consist of but not limited to the following: triangle perch discouragers shall be placed on each side of the cross arms and a nonconductive perching deterrence shall be placed on all vertical poles that extend past the cross arms.
- 7. The operator shall minimize disturbance to existing fences and other improvements on public lands. The operator is required to promptly repair improvements to at least their former state. Functional use of these improvements will be maintained at all times. The operator will contact the owner of any improvements prior to disturbing them. When necessary to pass through a fence line, the fence shall be braced on both sides of the passageway prior to cutting the fence. No permanent gates will be allowed unless approved by the Authorized Officer.
- 8. The BLM serial number assigned to this authorization shall be posted in a permanent, conspicuous manner where the power line crosses roads and at all serviced facilities. Numbers will be at least two inches high and will be affixed to the pole nearest the road crossing and at the facilities served.
- 9. Upon cancellation, relinquishment, or expiration of this APD, the operator shall comply with those abandonment procedures as prescribed by the Authorized Officer.
- 10. All surface structures (poles, lines, transformers, etc.) shall be removed within 180 days of abandonment, relinquishment, or termination of use of the serviced facility or facilities or within 180 days of abandonment, relinquishment, cancellation, or expiration of this APD, whichever comes first. This will not apply where the power line extends service to an active, adjoining facility or facilities.
- 11. Special Stipulations:
 - For reclamation remove poles, lines, transformer, etc. and dispose of properly. Fill in any holes from the poles removed.
- 12. Karst stipulations for overhead electric lines
 - Smaller powerlines will be routed around sinkholes and other karst features to avoid or lessen the possibility of encountering near surface voids and to minimize changes to runoff or possible leaks and spills from entering karst systems. Larger powerlines will adjust their pole spacing to avoid cave and karst features.
 - The BLM, Carlsbad Field Office, will be informed immediately if any subsurface drainage channels, cave passages, or voids are penetrated during construction.
 - No further construction will be done until clearance has been issued by the Authorized Officer.

Special restoration stipulations or realignment may be required.

6. PRODUCTION (POST DRILLING)

5.1 WELL STRUCTURES & FACILITIES

5.1.1 Placement of Production Facilities

Production facilities must be placed on the well pad to allow for maximum interim recontouring and revegetation of the well location.

5.1.2 Exclosure Netting (Open-top Tanks)

Immediately following active drilling or completion operations, the operator will take actions necessary to prevent wildlife and livestock access, including avian wildlife, to all open-topped tanks that contain or have the potential to contain salinity sufficient to cause harm to wildlife or livestock, hydrocarbons, or Resource Conservation and Recovery Act of 1976-exempt hazardous substances. At a minimum, the operator will net, screen, or cover open-topped tanks to exclude wildlife and livestock and prevent mortality. If the operator uses netting, the operator will cover and secure the open portion of the tank to prevent wildlife entry. The operator will net, screen, or cover the tanks until the operator removes the tanks from the location or the tanks no longer contain substances that could be harmful to wildlife or livestock. Use a maximum netting mesh size of 1 ½ inches. The netting must not be in contact with fluids and must not have holes or gaps.

5.1.3. Chemical and Fuel Secondary Containment and Exclosure Screening

The operator will prevent all hazardous, poisonous, flammable, and toxic substances from coming into contact with soil and water. At a minimum, the operator will install and maintain an impervious secondary containment system for any tank or barrel containing hazardous, poisonous, flammable, or toxic substances sufficient to contain the contents of the tank or barrel and any drips, leaks, and anticipated precipitation. The operator will dispose of fluids within the containment system that do not meet applicable state or U. S. Environmental Protection Agency livestock water standards in accordance with state law; the operator must not drain the fluids to the soil or ground. The operator will design, construct, and maintain all secondary containment systems to prevent wildlife and livestock exposure to harmful substances. At a minimum, the operator will install effective wildlife and livestock exclosure systems such as fencing, netting, expanded metal mesh, lids, and grate covers. Use a maximum netting mesh size of 1 ½ inches.

5.1.4. Open-Vent Exhaust Stack Exclosures

The operator will construct, modify, equip, and maintain all open-vent exhaust stacks on production equipment to prevent birds and bats from entering, and to discourage perching, roosting, and nesting. (*Recommended exclosure structures on open-vent exhaust stacks are in the shape of a cone.*) Production equipment includes, but may not be limited to, tanks, heater-treaters, separators, dehydrators, flare stacks, in-line units, and compressor mufflers.

5.1.5. Containment Structures

Proposed production facilities such as storage tanks and other vessels will have a secondary containment structure that is constructed to hold the capacity of 1.5 times the largest tank, plus freeboard to account for precipitation, unless more stringent protective requirements are deemed necessary.

7. RECLAMATION

Stipulations required by the Authorized Officer on specific actions may differ from the following general guidelines

6.1 ROAD AND SITE RECLAMATION

Any roads constructed during the life of the well will have the caliche removed or linear burial. If contaminants are indicated then testing will be required for chlorides and applicable contaminate anomalies for final disposal determination (disposed of in a manner approved by the Authorized Officer within Federal, State and Local statutes, regulations, and ordinances) and seeded to the specifications in sections 6.5 and 6.6.

6.2 EROSION CONTROL

Install erosion control berms, windrows, and hummocks. Windrows must be level and constructed perpendicular to down-slope drainage; steeper slopes will require greater windrow density. Topsoil between windrows must be ripped to a depth of at least 12", unless bedrock is encountered. Any large boulders pulled up during ripping must be deep-buried on location. Ripping must be perpendicular to down-slope. The surface must be left rough in order to catch and contain rainfall on-site. Any trenches resulting from erosion cause by run-off shall be addressed immediately.

6.3 INTERIM RECLAMATION

During the life of the development, all disturbed areas not needed for active support of production operations must undergo interim reclamation in order to minimize the environmental impacts of development on other resources and uses.

Within six (6) months of well completion, operators must work with BLM surface protection specialists (BLM_NM_CFO_Construction_Reclamation@blm.gov) to devise the best strategies to reduce the size of the location. Interim reclamation must allow for remedial well operations, as well as safe and efficient removal of oil and gas.

During reclamation, the removal of caliche and any other surface material is required. Removed caliche that is free of contaminants may be used for road repairs, fire walls or for building other roads and locations. In order to operate the well or complete workover operations, it may be necessary to drive, park and operate on restored interim vegetation within the previously disturbed area. Disturbing revegetated areas for production or workover operations will be allowed. If there is significant disturbance and loss of vegetation, the area will need to be revegetated. Communicate with the appropriate BLM office for any exceptions/exemptions if needed.

All disturbed areas after they have been satisfactorily prepared need to be reseeded with the seed mixture provided in section 6.6.

Upon completion of interim reclamation, the operator shall submit a Sundry Notice, Subsequent Report of Reclamation (Form 3160-5).

6.4 FINAL ABANDONMENT & RECLAMATION

Prior to surface abandonment, the operator shall submit a Notice of Intent Sundry Notice and reclamation plan.

At final abandonment, well locations, production facilities, and access roads must undergo "final" reclamation so that the character and productivity of the land are restored.

Earthwork for final reclamation must be completed within six (6) months of well plugging. All pads, pits, facility locations and roads must be reclaimed to a satisfactory revegetated, safe, and stable condition, unless an agreement is made with the landowner or BLM to keep the road and/or pad intact.

After all disturbed areas have been satisfactorily prepared, these areas need to be revegetated with the seed mixture provided below. Seeding will be accomplished by drilling on the contour whenever practical or by other approved methods. Seeding may need to be repeated until revegetation is successful, as determined by the BLM. After earthwork and seeding is completed, the operator is required to submit a Sundry Notice, Subsequent Report of Reclamation.

Operators shall contact a BLM surface protection specialist prior to surface abandonment operations for site specific objectives (BLM NM CFO Construction Reclamation@blm.gov).

6.5 SEEDING TECHNIQUES

Seeds shall be hydro-seeded, mechanically drilled, or broadcast, with the broadcast-seeded area raked, ripped or dragged to aid in covering the seed. The seed mixture shall be evenly and uniformly planted over the disturbed area.

6.6 SOIL SPECIFIC SEED MIXTURE

The lessee/permitee shall seed all disturbed areas with the seed mixture listed below. The seed mixture shall be planted in the amounts specified in pounds of pure live seed (PLS)* per acre. There shall be no primary or secondary noxious weeds in the seed mixture. Seed will be tested and the viability testing of seed will be done in accordance with State law(s) and within nine (9) months prior to purchase. Commercial seed will be either certified or registered seed. The seed container will be tagged in accordance with State law(s) and available for inspection by the Authorized Officer.

Seed land application will be accomplished by mechanical planting using a drill equipped with a depth regulator to ensure proper depth of planting where drilling is possible. The seed mixture will be evenly and uniformly planted over the disturbed area. Smaller/heavier seeds tend to drop the bottom of the drill and are planted first; the operator shall take appropriate measures to ensure this does not occur. Where drilling is not possible, seed will be broadcast and the area shall be raked or chained to cover the seed. When broadcasting the seed, the pounds per acre are to be doubled. The seeding will be repeated until a satisfactory BLM or Soil Conservation

District stand is established as determined by the Authorized Officer. Evaluation of growth will not be made before completion of at least one full growing season after seeding or until several months of precipitation have occurred, enabling a full four months of growth, with one or more seed generations being established.

Seed Mixture #1 for Loamy Sites

Species to be planted in pounds of pure live seed* per acre:

Species

	<u>lb/acre</u>
Plains lovegrass (Eragrostis intermedia)	0.5
Sand dropseed (Sporobolus cryptandrus)	1.0
Sideoats grama (Bouteloua curtipendula)	5.0
Plains bristlegrass (Setaria macrostachya)	2.0

^{*}Pounds of pure live seed:

Pounds of seed \mathbf{x} percent purity \mathbf{x} percent germination = pounds pure live seed

PECOS DISTRICT DRILLING CONDITIONS OF APPROVAL

OPERATOR'S NAME: MEWBOURNE OIL COMPANY

WELL NAME & NO.: CABALLO LOCO 3/5 B3PO FED COM 1H

APD ID: 10400051406

LOCATION: Section 11, T20S, R30E. NMP.

COUNTY: Eddy County, New Mexico

COA

H ₂ S	○ No		Yes	
Potash /	None	Secretary	⊙ R-111-Q	Open Annulus
WIPP	4-String Design: Open	2nd Int x Production Casing	g (ICP 2 above Relief 2	Zone) \square WIPP
Cave / Karst	C Low	Medium	• High	Critical
Wellhead	Conventional	• Multibowl	O Both	Diverter
Cementing	☐ Primary Squeeze	☐ Cont. Squeeze	☐ EchoMeter	DV Tool
Special Req	Capitan Reef	☐ Water Disposal	▼ COM	☐ Unit
Waste Prev.	C Self-Certification	C Waste Min. Plan	• APD Submitted prior to 06/10/2024	
Additional	Flex Hose	☐ Casing Clearance	☐ Pilot Hole	Break Testing
Language	Four-String	Offline Cementing	☐ Fluid-Filled	

A. HYDROGEN SULFIDE

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

APD is within the R-111-Q defined boundary. Operator must follow all applicable procedures and requirements listed within the Order No. R-111-Q.

B. CASING

Primary Casing Design

Note: The surface casing set depth was adjusted per BLM geologist's recommendation.

- 1. The 18-5/8-inch surface casing shall be set at approximately 430 ft. (a minimum of 70 feet (Eddy County) into the Rustler Anhydrite, above the salt, and below usable fresh water) and cemented to the surface. If salt is encountered set casing at least 25 ft. above the salt.
 - a. If cement does not circulate to the surface, the appropriate BLM office shall be notified

- and a temperature survey utilizing an electronic-type temperature survey with surface log readout will be used or a cement bond log shall be run to verify the top of the cement. Temperature survey will be run a minimum of six hours after pumping cement and ideally between 8-10 hours after completing the cement job.
- b. Wait on cement (WOC) time for a primary cement job will be a minimum of **8 hours** or **500 psi compressive strength**, whichever is greater. (This is to include the lead cement)
- c. Wait on cement (WOC) time for a remedial job will be a minimum of 4 hours after bringing cement to surface or 500 pounds compressive strength, whichever is greater.
- d. If cement falls back, remedial cementing will be done prior to drilling out that string.
- 2. The 13-3/8 inch 1st intermediate casing shall be set in a competent bed at approximately 2,000 ft. The minimum required fill of cement behind the 13-3/8 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, Capitan Reef, and Potash.
- 3. The 9-5/8 inch 2nd intermediate casing shall be set in a competent bed at approximately 3,585 ft. The minimum required fill of cement behind the 9-5/8 inch intermediate casing is:
 - **Option 1 (Single Stage): Cement to surface.** If cement does not circulate see B.1.a, c-d above. Wait on cement (WOC) time for a primary cement job is to include the lead cement slurry due to **cave/karst, Capitan Reef, and Potash.**
 - **Option 2** (**Two-Stage**): The operator has proposed to utilize a DV tool. Operator may adjust depth of DV tool if needed, adjust cement volumes accordingly. The DV tool may be cancelled if cement circulates to surface on the first stage.
 - a. **First stage to DV tool:** Cement to circulate. If cement does not circulate off the DV tool, contact the appropriate BLM office before proceeding with second stage cement job.
 - b. **Second stage above DV tool: Cement to surface.** If cement does not circulate 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**, **Capitan Reef**, and **Potash**.
 - ❖ Special Capitan Reef Requirement: Ensure freshwater based mud is used across the Capitan interval.

Note: Excess cement for the 2nd stage is below %25. More cement might be needed.

4. Operator has proposed to set 7" production casing at approximately **9,331 ft.** (9,293 ft. TVD). The minimum required fill of cement behind the **7** inch production casing is:

- Operator has proposed to cement the production casing in two stages by conventionally cementing the first stage and performing a bradenhead squeeze on the second stage within 180 days after well completion in accordance with the R-111-Q guidelines.
 - a. First stage: Operator will cement production casing with intent to bring cement to top of Brushy Canyon formation.
 - b. Second stage: Operator will perform bradenhead squeeze within 180 days after completion per R-111-Q requirements. Cement shall be tie-back at least 500 ft. into the 2nd intermediate casing and below the Marker Bed 126. If cement does not circulate, the appropriate BLM office shall be notified.
- ❖ Operator has proposed an open annulus completion in R-111-Q. Operator shall provide a method of verification pre-completion top of cement. **Submit results to the BLM.**
- ❖ Operator must verify top of cement per R-111-Q requirements. Submit results to the BLM. If cement does not circulate, contact the appropriate BLM office. If cement does not tieback at least 500 ft. into the previous casing shoe, the appropriate BLM office shall be notified.
- ❖ A monitored open annulus will be incorporated during completion by leaving the 2nd Intermediate Casing x Production Casing annulus un-cemented and monitored. Operator must follow <u>all</u> monitoring requirements listed within R-111-Q. Tieback shall be met within 180 days.
- ❖ In the event of a casing failure during completion, the operator must contact the BLM engineer at (575-706-2779) and inspection staff (575-361-2822 Eddy County).
- ❖ Pressure monitoring device and Pressure Safety Valves must be installed at surface on the open annulus for the life of the well.
- 5. The minimum required fill of cement behind the 4-1/2 inch production liner is:
 - Cement should tie-back **100 feet** into the previous casing. Operator shall provide method of verification.

Alternate Casing Design

Note: The surface casing set depth was adjusted per BLM geologist's recommendation.

- 1. The 18-5/8-inch surface casing shall be set at approximately 430 ft. (a minimum of 70 feet (Eddy County) into the Rustler Anhydrite, above the salt, and below usable fresh water) and cemented to the surface. If salt is encountered set casing at least 25 ft. above the salt.
 - a. If cement does not circulate to the surface, the appropriate BLM office shall be notified and a temperature survey utilizing an electronic-type temperature survey with surface log readout will be used or a cement bond log shall be run to verify the top of the cement. Temperature survey will be run a minimum of six hours after pumping cement and ideally between 8-10 hours after completing the cement job.
 - b. Wait on cement (WOC) time for a primary cement job will be a minimum of **8 hours** or **500 psi compressive strength**, whichever is greater. (This is to include the lead cement)
 - c. Wait on cement (WOC) time for a remedial job will be a minimum of 4 hours after

- bringing cement to surface or 500 pounds compressive strength, whichever is greater.
- d. If cement falls back, remedial cementing will be done prior to drilling out that string.
- 2. The 13-3/8 inch 1st intermediate casing shall be set in a competent bed at approximately 2,000 ft. The minimum required fill of cement behind the 13-3/8 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, Capitan Reef, and Potash.
- 3. The 9-5/8 inch 2nd intermediate casing shall be set in a competent bed at approximately 3,585 ft. The minimum required fill of cement behind the 9-5/8 inch intermediate casing is:

Option 1 (Single Stage): Cement to surface. If cement does not circulate see B.1.a, c-d above. Wait on cement (WOC) time for a primary cement job is to include the lead cement slurry due to **cave/karst, Capitan Reef, and Potash.**

Option 2 (Two-Stage): The operator has proposed to utilize a DV tool. Operator may adjust depth of DV tool if needed, adjust cement volumes accordingly. The DV tool may be cancelled if cement circulates to surface on the first stage.

- a. **First stage to DV tool:** Cement to circulate. If cement does not circulate off the DV tool, contact the appropriate BLM office before proceeding with second stage cement job.
- b. **Second stage above DV tool: Cement to surface.** If cement does not circulate 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**, **Capitan Reef**, and **Potash**.
- ❖ Special Capitan Reef Requirement: Ensure freshwater based mud is used across the Capitan interval.

Note: Excess cement for the 2nd stage is below %25. More cement might be needed.

- **4.** Operator has proposed to set 7" production casing at approximately **10,232 ft.** (9,866 ft. TVD). The minimum required fill of cement behind the **7** inch production casing is:
 - Operator has proposed to cement the production casing in two stages by conventionally cementing the first stage and performing a bradenhead squeeze on the second stage within 180 days after well completion in accordance with the R-111-Q guidelines.
 - a. First stage: Operator will cement production casing with intent to bring cement to top of Brushy Canyon formation.
 - b. Second stage: Operator will perform bradenhead squeeze within 180 days after completion per R-111-Q requirements. Cement shall be tie-back at least 500 ft. into

the 2nd intermediate casing and below the Marker Bed 126. If cement does not circulate, the appropriate BLM office shall be notified.

- ❖ Operator has proposed an open annulus completion in R-111-Q. Operator shall provide a method of verification pre-completion top of cement. **Submit results to the BLM.**
- ❖ Operator must verify top of cement per R-111-Q requirements. Submit results to the BLM. If cement does not circulate, contact the appropriate BLM office. If cement does not tieback at least 500 ft. into the previous casing shoe, the appropriate BLM office shall be notified.
- ❖ A monitored open annulus will be incorporated during completion by leaving the 2nd Intermediate Casing x Production Casing annulus un-cemented and monitored. Operator must follow <u>all</u> monitoring requirements listed within R-111-Q. Tieback shall be met within 180 days.
- ❖ In the event of a casing failure during completion, the operator must contact the BLM engineer at (575-706-2779) and inspection staff (575-361-2822 Eddy County).
- ❖ Pressure monitoring device and Pressure Safety Valves must be installed at surface on the open annulus for the life of the well.
- 5. The minimum required fill of cement behind the 4-1/2 inch production liner is:
 - Cement should tie-back **100 feet** into the previous casing. Operator shall provide method of verification.

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. Before drilling the surface casing shoe out, the BOP/BOPE and annular preventer shall be pressure-tested in accordance with title 43 CFR 3172.
 - a. Wellhead shall be installed by manufacturer's representatives, submit documentation with subsequent sundry.
 - b. If the welding is performed by a third party, the manufacturer's representative shall monitor the temperature to verify that it does not exceed the maximum temperature of the seal.

- c. Manufacturer representative shall install the test plug for the initial BOP test.
- d. If the cement does not circulate and one-inch operations would have been possible with a standard wellhead, the well head shall be cut off, cementing operations performed and another wellhead installed.
- e. Whenever any seal subject to test pressure is broken, all the tests in 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 operations.
- A full BOPE test is required prior to drilling the first deep intermediate hole section. If any subsequent hole interval is deeper than the first, a full BOPE test will be required. (200' TVD tolerance between intermediate shoes is allowable).
- The BLM is to be contacted (575-361-2822 Eddy County) 4 hours prior to BOPE tests.
- As a minimum, a full BOPE test shall be performed at 21-day intervals.
- In the event any repairs or replacement of the BOPE is required, the BOPE shall test as per 43 CFR 3172.
- If in the event break testing is not utilized, then a full BOPE test would be conducted.

D. SPECIAL REQUIREMENT (S)

Communitization Agreement

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

GENERAL REQUIREMENTS

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

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

Contact 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.

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

B. PRESSURE CONTROL

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

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

- WOC time for 8 hours or 500 pounds compressive strength, whichever is greater, prior to initiating the test (see casing segment as lead cement may be critical item).
- iv. The test shall be run on a 5000-psi chart for a 2-3M BOP/BOP, on a 10000 psi chart for a 5M BOP/BOPE and on a 15000 psi chart for a 10M BOP/BOPE. If a linear chart is used, it shall be a one-hour chart. A circular chart shall have a maximum 2-hour clock. If a twelve hour or twenty-four-hour chart is used, tester shall make a notation that it is run with a two hour clock.
- v. The results of the test shall be reported to the appropriate BLM office.
- vi. All tests are required to be recorded on a calibrated test chart. A copy of the BOP/BOPE test chart and a copy of independent service company test will be submitted to the appropriate BLM office.
- vii. The BOP/BOPE test shall include a low-pressure test from 250 to 300 psi. The test will be held for a minimum of 10 minutes if test is done with a test plug and 30 minutes without a test plug. This test shall be performed prior to the test at full stack pressure.
- viii. BOP/BOPE must be tested by an independent service company within 500 feet of the top of the Wolfcamp formation if the time between the setting of the intermediate casing and reaching this depth exceeds 20 days. This test does not exclude the test prior to drilling out the casing shoe as per 43 CFR 3172.

C. DRILLING MUD

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

D. WASTE MATERIAL AND FLUIDS

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

SA 06/06/2025

<u>Hydrogen Sulfide Drilling Operations Plan</u> **Mewbourne Oil Company**

1. General Requirements

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

2. Hydrogen Sulfide Training

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

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

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

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

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

3. Hydrogen Sulfide Safety Equipment and Systems

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

1. Well Control Equipment

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

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

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

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

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

4. Visual Warning Systems

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

4. Mud Program

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

5. Metallurgy

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

6. Communications

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

7. Well Testing

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

8. Emergency Phone Numbers

Eddy County Sheriff's 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 Cente	er of Carlsbad 575-492-5000

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

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 482277

CONDITIONS

Operator:	OGRID:
MEWBOURNE OIL CO	14744
P.O. Box 5270	Action Number:
Hobbs, NM 88241	482277
	Action Type:
	[C-101] BLM - Federal/Indian Land Lease (Form 3160-3)

CONDITIONS

Created By	Condition	Condition Date
bbishop	Cement is required to circulate on both surface and intermediate1 strings of casing.	7/7/2025
bbishop	If cement does not circulate on any string, a Cement Bond Log (CBL) is required for that string of casing.	
ward.rikala	Notify the OCD 24 hours prior to casing & cement.	7/9/2025
ward.rikala	File As Drilled C-102 and a directional Survey with C-104 completion packet.	7/9/2025
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.	7/9/2025
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.	7/9/2025
ward.rikala	This well is within the Capitan Reef. The first intermediate casing string shall be sat and cemented back to surface immediately above the Capitan Reef. The second intermediate string shall be set and cemented back to surface immediately below the base of the Capitan Reef.	7/9/2025
ward.rikala	Operator must comply with all of the R-111-Q requirements.	7/9/2025