


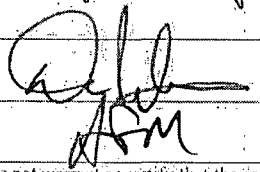
Operator Copy

FORM APPROVED
OMB No. 1004-0137
Expires July 31, 2010UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT
APPLICATION FOR PERMIT TO DRILL OR REENTER

1a. Type of work: <input checked="" type="checkbox"/> DRILL <input type="checkbox"/> REENTER		5. Lease Serial No. (SL) NM-02295-2 (BHL) NM-0455265	
1b. Type of Well: <input checked="" type="checkbox"/> Oil Well <input type="checkbox"/> Gas Well <input type="checkbox"/> Other <input type="checkbox"/> Single Zone <input type="checkbox"/> Multiple Zone		6. Indian, Allottee or Tribe Name	
2. Name of Operator Mewbourne Oil Company		7. If Unit or CA Agreement, Name and No.	
3a. Address PO Box 5270 Hobbs, NM		8. Lease Name and Well No. Voyager 11 EH Fed Com #1H	
3b. Phone No. (include area code) 575-393-5905		9. API Well No. 30-015-41258	
4. Location of Well (Report location clearly and in accordance with any State requirements.) At surface 1980' FNL & 150' FWL, Sec. 11 T20S R27E At proposed prod. zone 2150' FNL & 330' FEL, Sec. 11 T20S R27E		10. Field and Prod. or Explor. Name Wildcat Bone Spring	
11. Sec., T. R. M. or Blk. and Survey or Area Sec. 11 T20S R27E		12. County or Parish Eddy	
13. State NM		14. Distance in miles and direction from nearest town or post office* 12 miles N of Carlsbad, NM	
15. Distance from proposed* location to nearest property or lease line, ft. (Also to nearest drig. unit line, if any) 150'		16. No. of acres in lease NM-02295-2, 123.19 NM-0455265-2, 320.48	
17. Spacing Unit dedicated to this well 160		18. Distance from proposed location* to nearest well, drilling, completed, "11"-P&A'ed applied for, on this lease, ft. 170'-Amarillo Gulf	
19. Proposed Depth 6199' - TVD 10,637' - MD		20. BLM/BIA Bond No. on file NM-1693 Nationwide, NMB000919	
21. Elevations (Show whether DF, KDB, RT, GL, etc.) 3349' - GL		22. Approximate date work will start* 11/15/2012	
23. Estimated duration 60 days		24. Attachments	

The following, completed in accordance with the requirements of Onshore Oil and Gas Order No.1, must be attached to this form:

1. Well plat certified by a registered surveyor.
2. A Drilling Plan.
3. A Surface Use Plan (if the location is on National Forest System Lands, the SUPO must be filed with the appropriate Forest Service Office).
4. Bond to cover the operations unless covered by an existing bond on file (see Item 20 above).
5. Operator certification
6. Such other site specific information and/or plans as may be required by the BLM.

25. Signature 	Name (Printed/Typed) Bradley Bishop	Date 10-17-12
Title		
Approved by (Signature) 	Name (Printed/Typed) Is/ Don Peterson	Date 2/5/13
Title	Office 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 enable 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)

Received

FEB 07 2013

Mewbourne Oil Company
Hobbs

**United States Department of the Interior
Bureau of Land Management
Roswell Field Office
2909 West Second Street
Roswell, New Mexico 88201-1287**

Statement Accepting Responsibility for Operations

Operator Name: Mewbourne Oil Company
Street or Box: P.O. Box 5270
City, State: Hobbs, New Mexico
Zip Code: 88241

The undersigned accepts all applicable terms, conditions, stipulations, and restrictions concerning operations conducted of the leased land or portion thereof, as described below.

Lease Number: NM-02295, NM-0455265

Legal Description of Land: Section 11, T-20S, R-27E Eddy County, New Mexico.
Location @ 1980' FNL & 150' FWL.

Formation (if applicable): Bone Springs

Bond Coverage: \$150,000

BLM Bond File: NM1693, Nationwide, NMB-000919

Authorized Signature: _____


Name: NM (Micky) Young

Title: District Manager

Date: 10/2/12

Mewbourne Oil Company

PO Box 5270
Hobbs, NM 88241
(575) 393-5905

I hereby certify that I, or someone under my direct supervision, have inspected the drill site and access route proposed herein; that I am familiar with the conditions which currently exist; that I have full knowledge of State and Federal laws applicable to this operation; that the statements made in this APD package are, to the best of my knowledge, true and correct; and that the work associated with the operations proposed herein will be performed in conformity with this APD package and the terms and conditions under which it is approved. I also certify that I, or the company I represent, am responsible for the operations conducted under this application. These statements are subject to the provisions of 18 U.S.C. 1001 for the filing of false statements.

Executed this 17 day of Oct, 2012.

Name: NM Young

Signature: 

Position Title: Hobbs District Manager

Address: PO Box 5270, Hobbs NM 88241

Telephone: 575-393-5905

E-mail: myoung@mewbourne.com

DISTRICT I
1825 N. French Dr., Hobbs, NM 88240
Phone (575) 393-8181 Fax: (575) 393-0720

DISTRICT II
811 S. First St., Artesia, NM 88210
Phone (575) 748-1283 Fax: (575) 748-0720

DISTRICT III
1000 Rio Brazos Rd., Aztec, NM 87410
Phone (505) 334-6178 Fax: (505) 334-6179

DISTRICT IV
1220 S. St. Francis Dr., Santa Fe, NM 87505
Phone (505) 476-3460 Fax: (505) 476-3462

State of New Mexico
Energy, Minerals and Natural Resources Department

OIL CONSERVATION DIVISION

1220 South St. Francis Dr.
Santa Fe, New Mexico 87505

Form C-102
Revised August 1, 2011

Submit one copy to appropriate
District Office

WELL LOCATION AND ACREAGE DEDICATION PLAT

☐ AMENDED REPORT

API Number 30-015-41258	Pool Code 97105 98016	Pool Name Wildcat Bone Spring
39807	Property Name WC-015 G-03 S202711 H: B.S.	Well Number 1H
OCRID No. 14744	Operator Name MEWBOURNE OIL COMPANY	Elevation 3349'

Surface Location

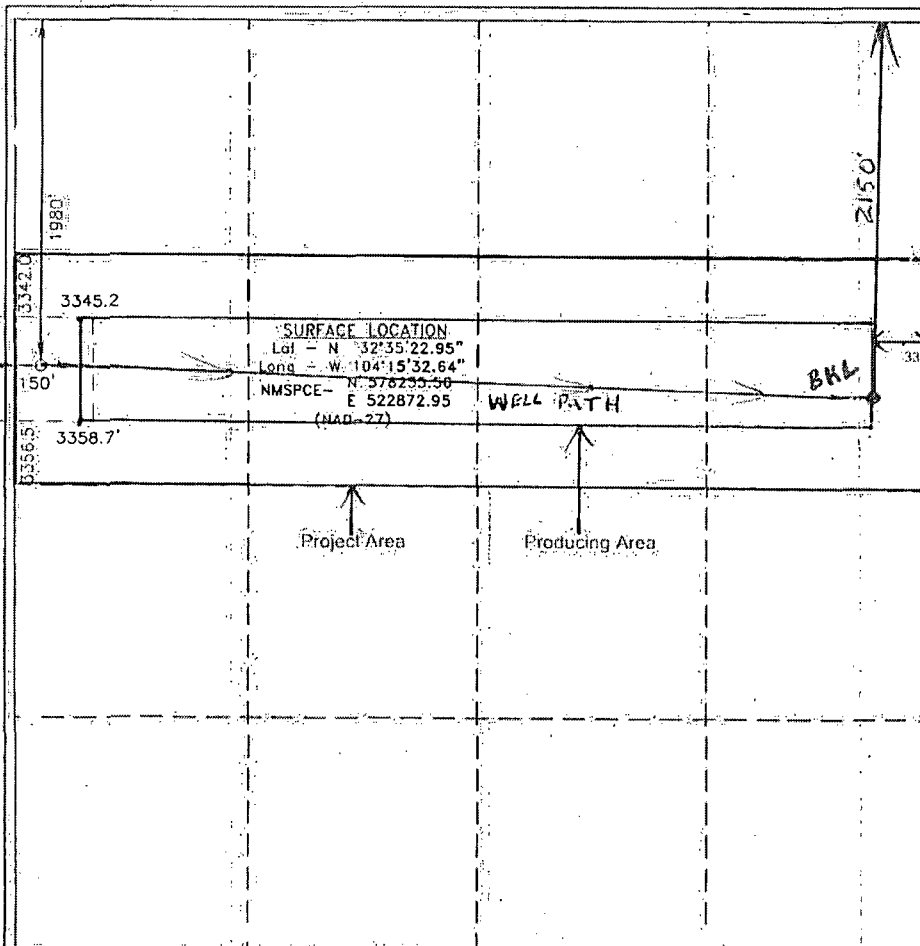
UL or lot No.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
H	11	20 S	27 E		1980	NORTH	150	WEST	EDDY

Bottom Hole Location If Different From Surface

UL or lot No.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
E	11	20S	27E		2150	NORTH	330	EAST	EDDY

Dedicated Acres 160	Joint or Infill	Consolidation Code	Order No.
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NO ALLOWABLE WILL BE ASSIGNED TO THIS COMPLETION UNTIL ALL INTERESTS HAVE BEEN CONSOLIDATED
OR A NON-STANDARD UNIT HAS BEEN APPROVED BY THE DIVISION

	<p>OPERATOR CERTIFICATION</p> <p>I hereby certify that the information contained herein is true and complete to the best of my knowledge and belief, and that this organization either owns a working interest or unleased mineral interest in the land including the proposed bottom hole location or has a right to drill this well at this location pursuant to a contract with an owner of such a mineral or working interest, or to a voluntary pooling agreement or a compulsory pooling order heretofore entered by the Division.</p> <p>Signature: <i>[Signature]</i> Date: 8/17/12</p> <p>Printed Name: Jim Young</p> <p>Email Address: _____</p> <p>SURVEYOR CERTIFICATION</p> <p>I hereby certify that the well location shown on this plat was plotted from field notes of actual surveys made by me or under my supervision and that the same is true and correct to the best of my belief.</p> <p>SEPTEMBER 2012</p> <p>Date Surveyed: _____</p> <p>Signature of Professional Surveyor: <i>[Signature]</i></p> <p>Certificate No. 7977</p> <p>Basin Survey S 27294</p>
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basin
surveys
focused on excellence
in the oilfield

Date: 09-20-2012

MEWBOURNE
OIL COMPANY

Drilling Program
Mewbourne Oil Company
Voyager 11 EH Fed Com #1H
1980' FNL & 150' FWL (SHL)
Sec 11-T20S-R27E
Eddy County, New Mexico

1. The estimated tops of geological markers are as follows:

Rustler	390'
Top Salt	NP
Yates	515'
*Queen	1440'
Grayburg	NP
*San Andres	1540'
*Delaware	3000'
*Bone Springs	3640'
Wolfcamp	8400'

2. Estimated depths of anticipated fresh water, oil, or gas:

Water	Fresh water will be protected by setting surface casing at 450' and cementing to surface.
Hydrocarbons	Oil and gas are anticipated in the above (*) formations. These zones will be protected by casing as necessary.

3. Pressure control equipment:

A 2000# WP Annular will be installed after running 13 3/8" casing. A 5000# WP Double Ram BOP and 5000# WP Annular will be installed after running 9 5/8" & 7" casing. Pressure tests will be conducted prior to drilling out under all casing strings. BOP controls will be installed prior to drilling under surface casing and will remain in use until completion of drilling operations. BOPE will be inspected and operated as recommended in Onshore Order #2. A kelly cock and a sub equipped with a full opening valve sized to fit the drill pipe and collars will be available on the rig floor in the open position when the kelly is not in use. Will test the 7" & 9 5/8" BOPE to 5000# and the Annular to 2500# with a third party testing company before drilling below each shoe, but will test again, if needed, in 30 days from the last test as per BLM Onshore Oil and Gas Order #2.

4. MOC proposes to drill a vertical wellbore to 8800' & log all Bone Springs & top of Wolfcamp. Will plug back for Bone Springs horizontal test as follows:

A. TIH open ended to 8800'. B. Pump 363 sks of 35:65:6 Class H cmt (12.5 ppg @ 2.1 cuft/sk yield). C. TOOH to 7300' and circulate bottoms up. D. Pump 340 sks of 35:65:6 Class H cmt (12.5 ppg @ 2.1 cuft/sk yield). E. TOOH to 5870' and circulate bottoms up. F. Pump 1000 gal of *mudclean 1* spacer ahead of 340 sks of Class "H" cmt w/1% CV32 & 5% salt (18ppg @ 0.9 y cuft/sk yield). G. TOOH to 5371' and circulate bottoms up. H. WOC, TIH with dress-off assembly. I. Dress cement off to 5571'. Kick off to horizontal @ 6,049' TVD. The well will be drilled to 10,637' MD (6,199' TVD). See attached directional plan.

5. Proposed casing and cementing program:

A. Casing Program:

<u>Hole Size</u>	<u>Casing</u>	<u>Wt/Ft.</u>	<u>Grade</u>	<u>Depth</u>	<u>Jt Type</u>
17 1/2"	13 3/8" (new)	48#	H40	0'-450'	ST&C
12 1/4"	9 5/8" (new)	36#	J55	0'-2050'	LT&C
8 3/4"	7" (new)	26#	P110	0'-5570' MD	LT&C
8 3/4"	7" (new)	26#	P110	5570'-6835' MD	BT&C
6 1/8"	4 1/2" (new)	11.6#	P110	6635'-10637' MD	LT&C

Minimum casing design factors: Collapse 1.125, Burst 1.0, Tensile strength 1.8.

*Subject to availability of casing

B. Cementing Program:

- i. Surface Casing: 450 sks Class "C" cement w/ 2% CaCl₂. Yield at 1.34 cuft/sk. Cmt circulated to surface w/100% excess.
- ii. Intermediate Casing: 425 sks Class "C" (35:65:4) light cement w/ salt & LCM additives. Yield @ 2.12 cuft/sk. 200 sacks Class "C" cement w/2% CaCl₂. Yield at 1.34 cuft/sk. Cmt circulated to surface w/25% excess.
- iii. Production Casing: 350 sacks Class "H" (35:65:4) light cement w/ salt, FL & LCM additives. Yield @ 2.12 cuft/sk. 400 sacks Class "H" cement w/ salt & FL additives. Yield @ 1.19 cuft/sk. Cmt circulated to surface w/25% excess.
- iv. Production Liner: This will be a Packer/Port completion from TD up inside 7" casing with packer type liner hanger.

*Referring to above blends of light cement: (wt% fly ash : wt% cement : wt% bentonite of the total of first two numbers). Generic names of additives are used since the availability of specific company and products are unknown at this time.

6. Mud Program:

<u>Interval</u>	<u>Type System</u>	<u>Weight</u>	<u>Viscosity</u>	<u>Fluid Loss</u>
0' - 450'	FW spud mud	8.6-9.0	32-34	NA
450'-2050'	Brine water	10.0-10.2	28-30	NA
2050'-5570'	Cut Brine	8.5-8.7	28-30	NA
5570'- TD	Cut Brine w/polymer	9.0	32-35	15

7. Evaluation Program: See CoA

Samples: 10' samples from surface casing to TD
Logging: DLL, DN, CN & GR from 8800' to surface. Gyro from 5500' to surface.
GR from 5500' to horizontal TD.

8. Downhole Conditions

Zones of abnormal pressure: None anticipated
Zones of lost circulation: Anticipated in surface and intermediate holes
Maximum bottom hole temperature: 120 degree F
Maximum bottom hole pressure: 8.3 lbs/gal gradient or less (.43668 x 8800'=3842.78 psi)

9. Anticipated Starting Date:

Mewbourne Oil Company intends to drill this well as soon as possible after receiving approval with approximately 45 days involved in drilling operations and an additional 10 days involved in completion operations on the project.

Mewbourne Oil Co

Eddy County, New Mexico

Sec 11,T20S,R27E

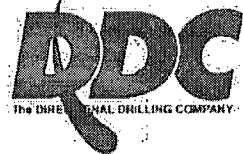
Voyager 11 EH Fed Com 1H

Wellbore #1

Plan: Design #1

DDC Well Planning Report

02 October, 2012



DDC Well Planning Report



Database:	EDM 5000.1 Single User Db	Local Co-ordinate Reference:	Well Voyager 11 EH Fed Com 1H
Company:	Mewbourne Oil Co	TVD Reference:	WELL @ 3369.0usft (Patterson-UTI #46)
Project:	Eddy County, New Mexico	MD Reference:	WELL @ 3369.0usft (Patterson-UTI #46)
Site:	Sec 11,T20S,R27E	North Reference:	Grid
Well:	Voyager 11 EH Fed Com 1H	Survey Calculation Method:	Minimum Curvature
Wellbore:	Wellbore #1		
Design:	Design #1		

Project	Eddy County, New Mexico		
Map System:	US State Plane 1927 (Exact solution)	System Datum:	Mean Sea Level
Geo.Datum:	NAD 1927 (NADCON CONUS)		
Map Zone:	New Mexico East 3001		

Site	Sec 11,T20S,R27E				
Site Position:		Northing:	578,255.56 usft	Latitude:	32° 35' 22.950 N
From:	Map	Easting:	522,872.95 usft	Longitude:	104° 15' 32.649 W
Position Uncertainty:	0.0 usft	Slot Radius:	13-3/16 "	Grid Convergence:	0.04 °

Well	Voyager 11 EH Fed Com 1H					
Well Position	+N-S	0.0 usft	Northing:	578,255.56 usft	Latitude:	32° 35' 22.950 N
	+E-W	0.0 usft	Easting:	522,872.95 usft	Longitude:	104° 15' 32.649 W
Position Uncertainty	0.0 usft	Wellhead Elevation:		Ground Level:	3,349.0 usft	

Wellbore Wellbore #1

Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	IGRF2010	10/2/2012	7.77	60.37	48,631

Design Design #1

Audit Notes:

Version:	Phase:	PLAN	Tie On Depth:	0.0
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Vertical Section:	Depth From (TVD) (usft)	+N-S (usft)	+E-W (usft)	Direction (°)
	0.0	0.0	0.0	92.22

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	
5,571.8	0.00	0.00	5,571.8	0.0	0.0	0.00	0.00	0.00	0.00	
6,305.3	88.02	92.22	6,049.0	-17.8	460.6	12.00	12.00	12.57	92.22	
10,637.4	88.02	92.22	6,199.0	-185.5	4,786.9	0.00	0.00	0.00	0.00	PBHL Voyager 11 E

DDC Well Planning Report



Database:	EDM 5000.1 Single User Db	Local Co-ordinate Reference:	Well Voyager 11 EH Fed Com 1H
Company:	Mewbourne Oil Co	TVD Reference:	WELL @ 3369.0usft (Patterson-UTI #46)
Project:	Eddy County, New Mexico	MD Reference:	WELL @ 3369.0usft (Patterson-UTI #46)
Site:	Sec 11, T20S, R27E	North Reference:	Grid
Well:	Voyager 11 EH Fed Com 1H	Survey Calculation Method:	Minimum Curvature
Wellbore:	Wellbore #1		
Design:	Design #1		

Planned Survey

Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)
Build 12° / 100'									
5,571.8	0.00	0.00	5,571.8	0.0	0.0	0.0	0.00	0.00	0.00
5,575.0	0.38	92.22	5,575.0	0.0	0.0	0.0	12.00	12.00	0.00
5,600.0	3.38	92.22	5,600.0	0.0	0.8	0.8	12.00	12.00	0.00
5,625.0	6.38	92.22	5,624.9	-0.1	3.0	3.0	12.00	12.00	0.00
5,650.0	9.38	92.22	5,649.7	-0.2	6.4	6.4	12.00	12.00	0.00
5,675.0	12.38	92.22	5,674.2	-0.4	11.1	11.1	12.00	12.00	0.00
5,700.0	15.38	92.22	5,698.5	-0.7	17.1	17.1	12.00	12.00	0.00
5,725.0	18.38	92.22	5,722.4	-0.9	24.3	24.4	12.00	12.00	0.00
5,750.0	21.38	92.22	5,745.9	-1.3	32.8	32.9	12.00	12.00	0.00
5,775.0	24.38	92.22	5,768.9	-1.6	42.6	42.6	12.00	12.00	0.00
5,800.0	27.38	92.22	5,791.4	-2.1	53.5	53.5	12.00	12.00	0.00
5,825.0	30.38	92.22	5,813.3	-2.5	65.5	65.6	12.00	12.00	0.00
5,850.0	33.38	92.22	5,834.5	-3.1	78.7	78.8	12.00	12.00	0.00
5,875.0	36.38	92.22	5,855.0	-3.6	93.0	93.1	12.00	12.00	0.00
5,900.0	39.38	92.22	5,874.8	-4.2	108.3	108.4	12.00	12.00	0.00
5,925.0	42.38	92.22	5,893.7	-4.8	124.7	124.8	12.00	12.00	0.00
5,950.0	45.38	92.22	5,911.7	-5.5	142.0	142.1	12.00	12.00	0.00
5,975.0	48.38	92.22	5,928.8	-6.2	160.2	160.4	12.00	12.00	0.00
6,000.0	51.38	92.22	5,944.9	-6.9	179.3	179.5	12.00	12.00	0.00
6,025.0	54.38	92.22	5,959.9	-7.7	199.3	199.4	12.00	12.00	0.00
6,050.0	57.38	92.22	5,974.0	-8.5	219.9	220.1	12.00	12.00	0.00
6,075.0	60.38	92.22	5,986.9	-9.4	241.3	241.5	12.00	12.00	0.00
6,100.0	63.38	92.22	5,998.7	-10.2	263.4	263.6	12.00	12.00	0.00
6,125.0	66.38	92.22	6,009.3	-11.1	286.0	286.2	12.00	12.00	0.00
6,150.0	69.38	92.22	6,018.7	-12.0	309.1	309.3	12.00	12.00	0.00
6,175.0	72.38	92.22	6,026.9	-12.9	332.7	333.0	12.00	12.00	0.00
6,200.0	75.38	92.22	6,033.8	-13.8	356.7	357.0	12.00	12.00	0.00
6,225.0	78.38	92.22	6,039.5	-14.8	381.0	381.3	12.00	12.00	0.00
6,250.0	81.38	92.22	6,043.9	-15.7	405.6	405.9	12.00	12.00	0.00
6,275.0	84.38	92.22	6,047.0	-16.7	430.4	430.7	12.00	12.00	0.00
6,300.0	87.38	92.22	6,048.8	-17.6	455.3	455.7	12.00	12.00	0.00
EOB @ 88.02° Inc / 92.22° Amz / 6049' TVD									
6,305.3	88.02	92.22	6,049.0	-17.8	460.6	460.9	12.00	12.00	0.00
6,400.0	88.02	92.22	6,052.3	-21.5	555.2	555.6	0.00	0.00	0.00
6,500.0	88.02	92.22	6,055.7	-25.4	655.1	655.6	0.00	0.00	0.00
6,600.0	88.02	92.22	6,059.2	-29.3	754.9	755.5	0.00	0.00	0.00
6,700.0	88.02	92.22	6,062.6	-33.1	854.8	855.4	0.00	0.00	0.00
6,800.0	88.02	92.22	6,066.1	-37.0	954.7	955.4	0.00	0.00	0.00
6,900.0	88.02	92.22	6,069.6	-40.9	1,054.5	1,055.3	0.00	0.00	0.00
7,000.0	88.02	92.22	6,073.0	-44.7	1,154.4	1,155.3	0.00	0.00	0.00
7,100.0	88.02	92.22	6,076.5	-48.6	1,254.3	1,255.2	0.00	0.00	0.00
7,200.0	88.02	92.22	6,080.0	-52.5	1,354.1	1,355.1	0.00	0.00	0.00
7,300.0	88.02	92.22	6,083.4	-56.3	1,454.0	1,455.1	0.00	0.00	0.00
7,400.0	88.02	92.22	6,086.9	-60.2	1,553.8	1,555.0	0.00	0.00	0.00
7,500.0	88.02	92.22	6,090.4	-64.1	1,653.7	1,655.0	0.00	0.00	0.00
7,600.0	88.02	92.22	6,093.8	-68.0	1,753.6	1,754.9	0.00	0.00	0.00
7,700.0	88.02	92.22	6,097.3	-71.8	1,853.4	1,854.8	0.00	0.00	0.00
7,800.0	88.02	92.22	6,100.7	-75.7	1,953.3	1,954.8	0.00	0.00	0.00
7,900.0	88.02	92.22	6,104.2	-79.6	2,053.2	2,054.7	0.00	0.00	0.00
8,000.0	88.02	92.22	6,107.7	-83.4	2,153.0	2,154.7	0.00	0.00	0.00
8,100.0	88.02	92.22	6,111.1	-87.3	2,252.9	2,254.6	0.00	0.00	0.00
8,200.0	88.02	92.22	6,114.6	-91.2	2,352.8	2,354.5	0.00	0.00	0.00
8,300.0	88.02	92.22	6,118.1	-95.0	2,452.6	2,454.5	0.00	0.00	0.00

DDC Well Planning Report



Database: EDM 5000.1 Single User Db
Company: Mewbourne Oil Co
Project: Eddy County, New Mexico
Site: Sec 11,T20S,R27E
Well: Voyager 11 EH Fed Com 1H
Wellbore: Wellbore #1
Design: Design #1

Local Co-ordinate Reference: Well Voyager 11 EH Fed Com 1H
TVD Reference: WELL @ 3369.0usft (Patterson-UTI #46)
MD Reference: WELL @ 3369.0usft (Patterson-UTI #46)
North Reference: Grid
Survey Calculation Method: Minimum Curvature

Planned Survey

Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)
8,400.0	88.02	92.22	6,121.5	-98.9	2,552.5	2,554.4	0.00	0.00	0.00
8,500.0	88.02	92.22	6,125.0	-102.8	2,652.4	2,654.4	0.00	0.00	0.00
8,600.0	88.02	92.22	6,128.4	-106.7	2,752.2	2,754.3	0.00	0.00	0.00
8,700.0	88.02	92.22	6,131.9	-110.5	2,852.1	2,854.2	0.00	0.00	0.00
8,800.0	88.02	92.22	6,135.4	-114.4	2,952.0	2,954.2	0.00	0.00	0.00
8,900.0	88.02	92.22	6,138.8	-118.3	3,051.8	3,054.1	0.00	0.00	0.00
9,000.0	88.02	92.22	6,142.3	-122.1	3,151.7	3,154.1	0.00	0.00	0.00
9,100.0	88.02	92.22	6,145.8	-126.0	3,251.6	3,254.0	0.00	0.00	0.00
9,200.0	88.02	92.22	6,149.2	-129.9	3,351.4	3,353.9	0.00	0.00	0.00
9,300.0	88.02	92.22	6,152.7	-133.7	3,451.3	3,453.9	0.00	0.00	0.00
9,400.0	88.02	92.22	6,156.1	-137.6	3,551.1	3,553.8	0.00	0.00	0.00
9,500.0	88.02	92.22	6,159.6	-141.5	3,651.0	3,653.8	0.00	0.00	0.00
9,600.0	88.02	92.22	6,163.1	-145.4	3,750.9	3,753.7	0.00	0.00	0.00
9,700.0	88.02	92.22	6,166.5	-149.2	3,850.7	3,853.6	0.00	0.00	0.00
9,800.0	88.02	92.22	6,170.0	-153.1	3,950.6	3,953.6	0.00	0.00	0.00
9,900.0	88.02	92.22	6,173.5	-157.0	4,050.5	4,053.5	0.00	0.00	0.00
10,000.0	88.02	92.22	6,176.9	-160.8	4,150.3	4,153.5	0.00	0.00	0.00
10,100.0	88.02	92.22	6,180.4	-164.7	4,250.2	4,253.4	0.00	0.00	0.00
10,200.0	88.02	92.22	6,183.9	-168.6	4,350.1	4,353.3	0.00	0.00	0.00
10,300.0	88.02	92.22	6,187.3	-172.4	4,449.9	4,453.3	0.00	0.00	0.00
10,400.0	88.02	92.22	6,190.8	-176.3	4,549.8	4,553.2	0.00	0.00	0.00
10,500.0	88.02	92.22	6,194.2	-180.2	4,649.7	4,653.2	0.00	0.00	0.00
10,600.0	88.02	92.22	6,197.7	-184.1	4,749.5	4,753.1	0.00	0.00	0.00
TD @ 10637' MD / 6199' TVD									
10,637.4	88.02	92.22	6,199.0	-185.5	4,786.9	4,790.5	0.00	0.00	0.00

Design Targets

Target Name

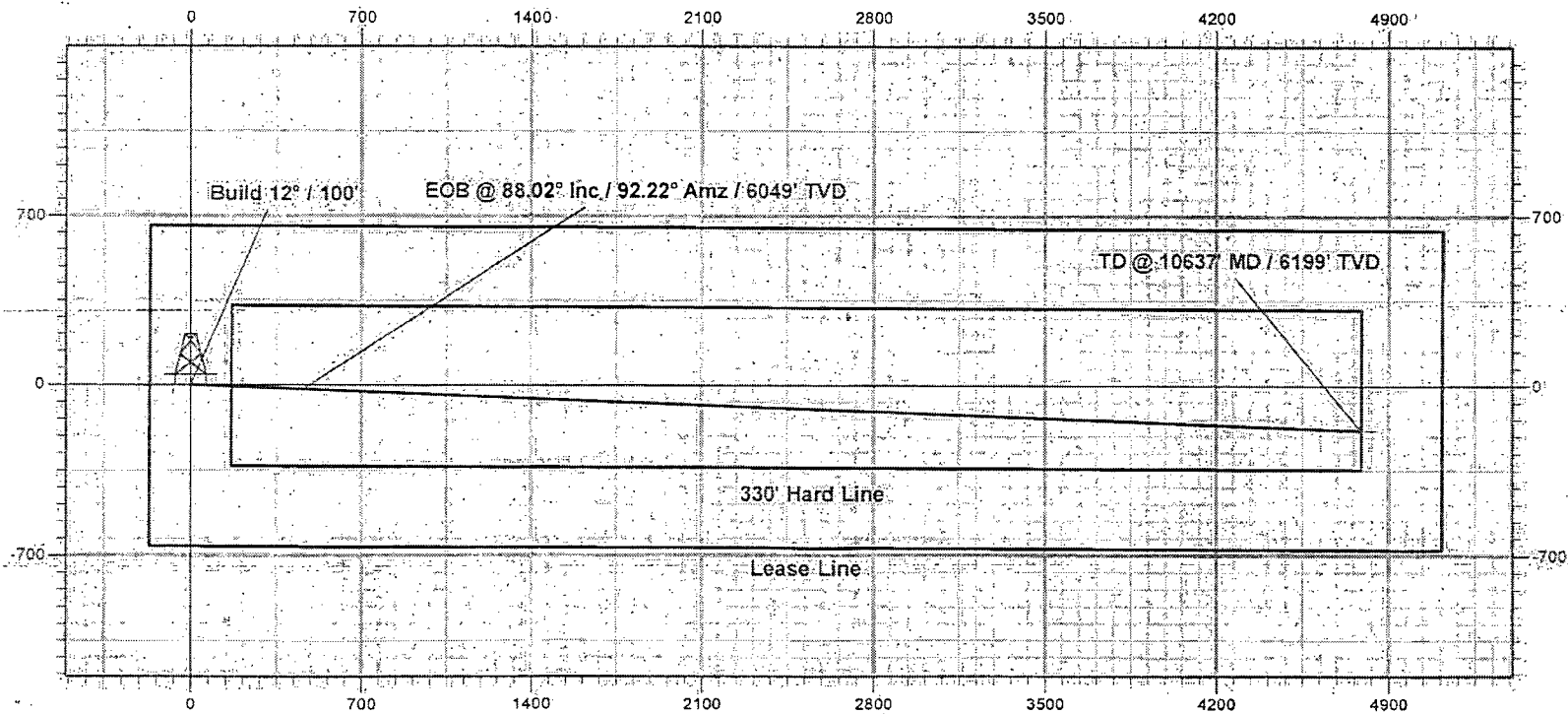
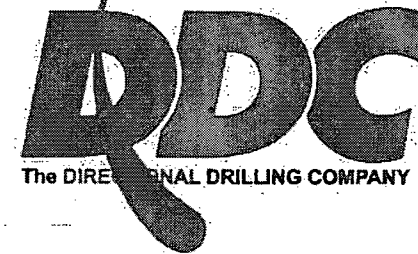
hit/miss target	Dip Angle	Dip Dir.	TVD	+N/-S	+E/-W	Northing	Easting	Latitude	Longitude
- Shape	(°)	(°)	(usft)	(usft)	(usft)	(usft)	(usft)		
PBHL Voyager 11 EH	0.00	0.00	6,199.0	-185.5	4,786.9	578,070.06	527,659.85	32° 35' 21.078 N	104° 14' 36.699 W
- plan hits target center									
- Point									

Plan Annotations

Measured Depth (usft)	Vertical Depth (usft)	Local Coordinates		Comment
		+N/-S (usft)	+E/-W (usft)	
5,571.8	5,571.8	0.0	0.0	Build 12" / 100'
6,305.3	6,049.0	-17.8	460.6	EOB @ 88.02° Inc / 92.22° Amz / 6049' TVD
10,637.4	6,199.0	-185.5	4,786.9	TD @ 10637' MD / 6199' TVD

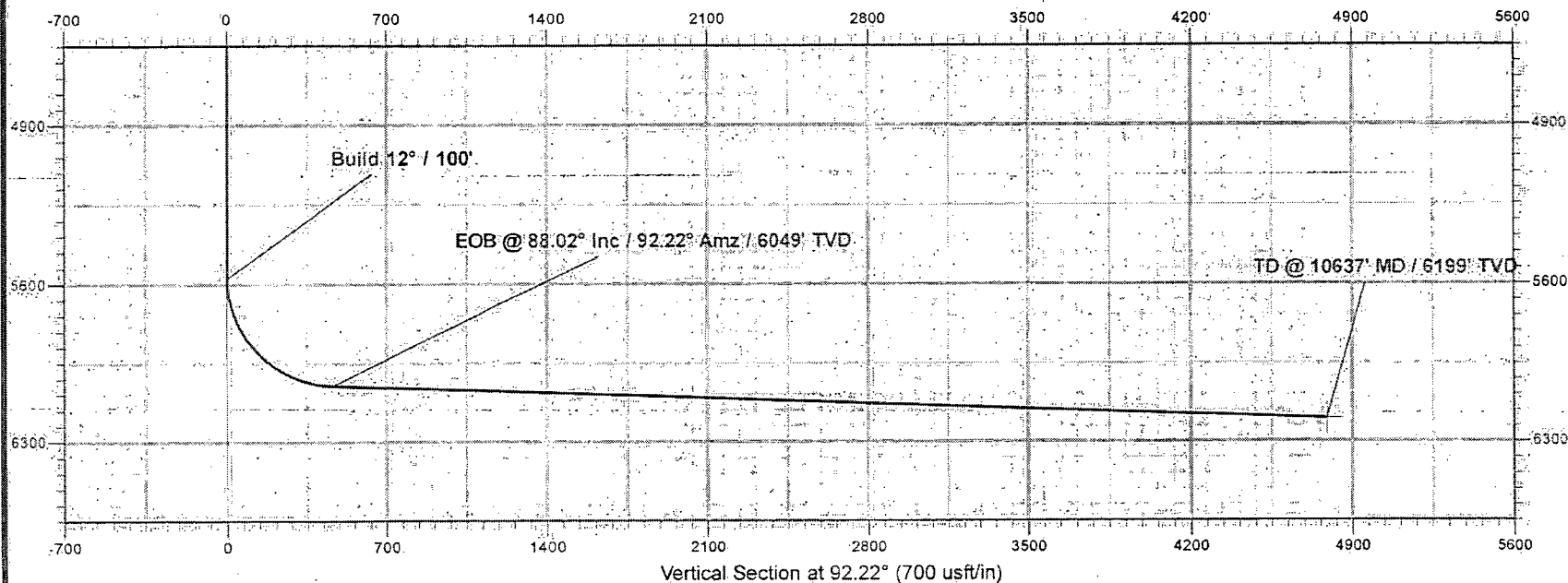
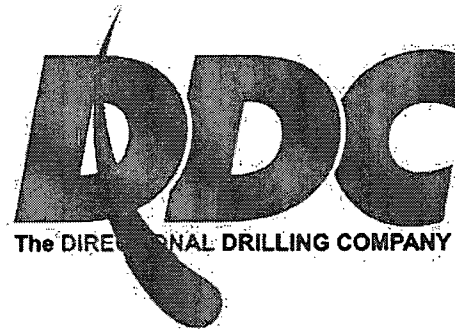
Mewbourne Oil Company

Eddy County, New Mexico
Voyager 11 EH Fed Com 1H
Quote 120743
Design #1



Mewbourne Oil Company

Eddy County, New Mexico
Voyager 11 EH Fed Com 1H
Quote 120743
Design #1



Notes Regarding Blowout Preventer

Mewbourne Oil Company

Voyager 11 EH Fed Com #1H
1980' FNL & 150' FWL (SHL)

Sec 11-T20S-R27E

Eddy County, New Mexico

- I. Drilling nipple (bell nipple) to be constructed so that it can be removed without the use of a welder through the opening of the rotary table with minimum internal diameter equal to blowout preventer bore.
- II. Blowout preventer and all fittings must be in good condition with a minimum 2500 psi working pressure on 13 3/8" casing and 5000 psi working pressure on 9 5/8" & 7" casing.
- III. Safety valve must be available on the rig floor at all times with proper connections to install in the drill string. Valve must be full bore with minimum 5000 psi working pressure.
- IV. Equipment through which bit must pass shall be at least as large as internal diameter of the casing.
- V. A kelly cock shall be installed on the kelly at all times.

Blowout preventer closing equipment to include and accumulator of at least 40 gallon capacity, two independent sources of pressure on closing unit, and meet all other API specifications.

13 5/8" 2M BOPE & Closed Loop Equipment Schematic

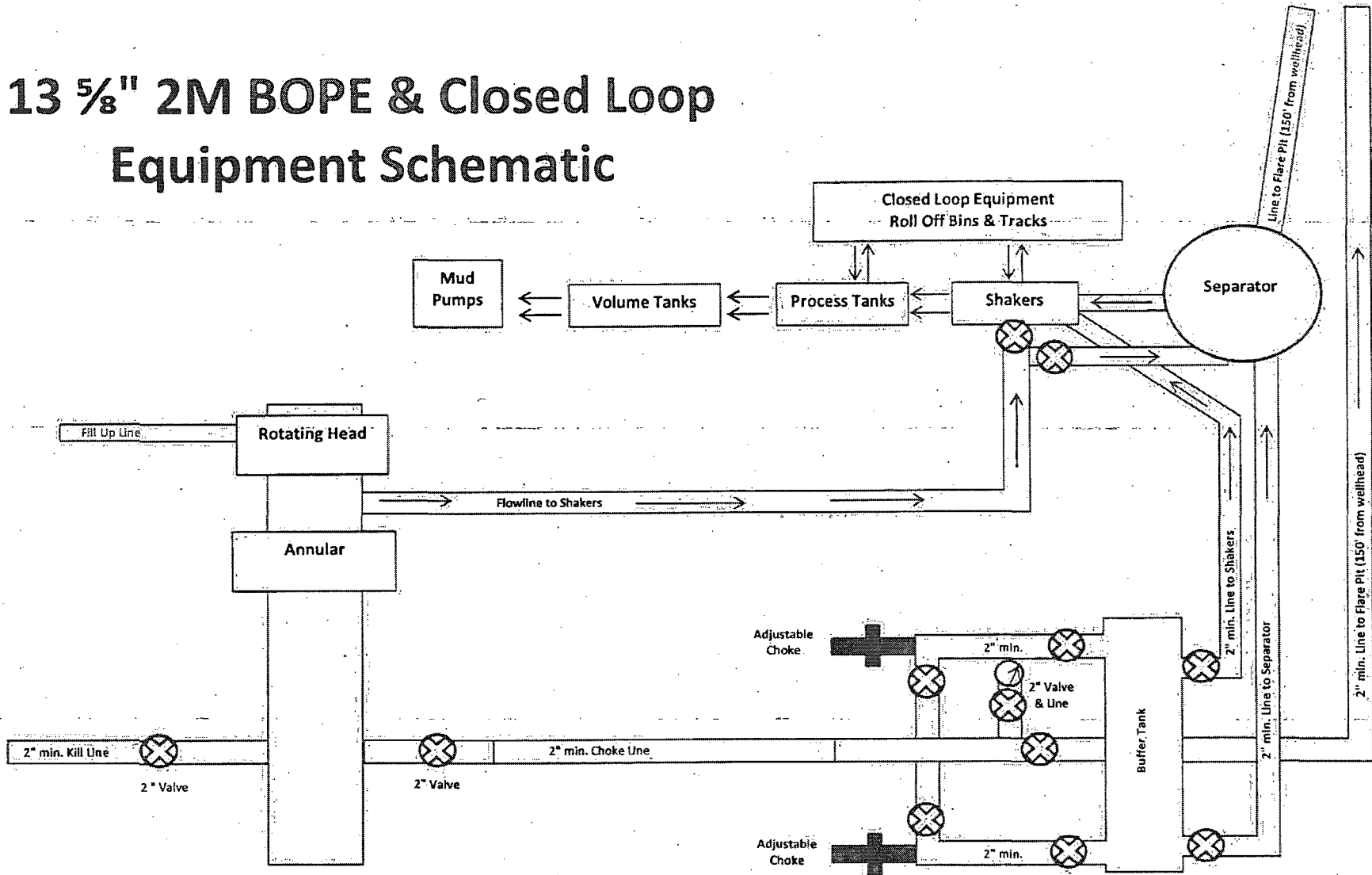
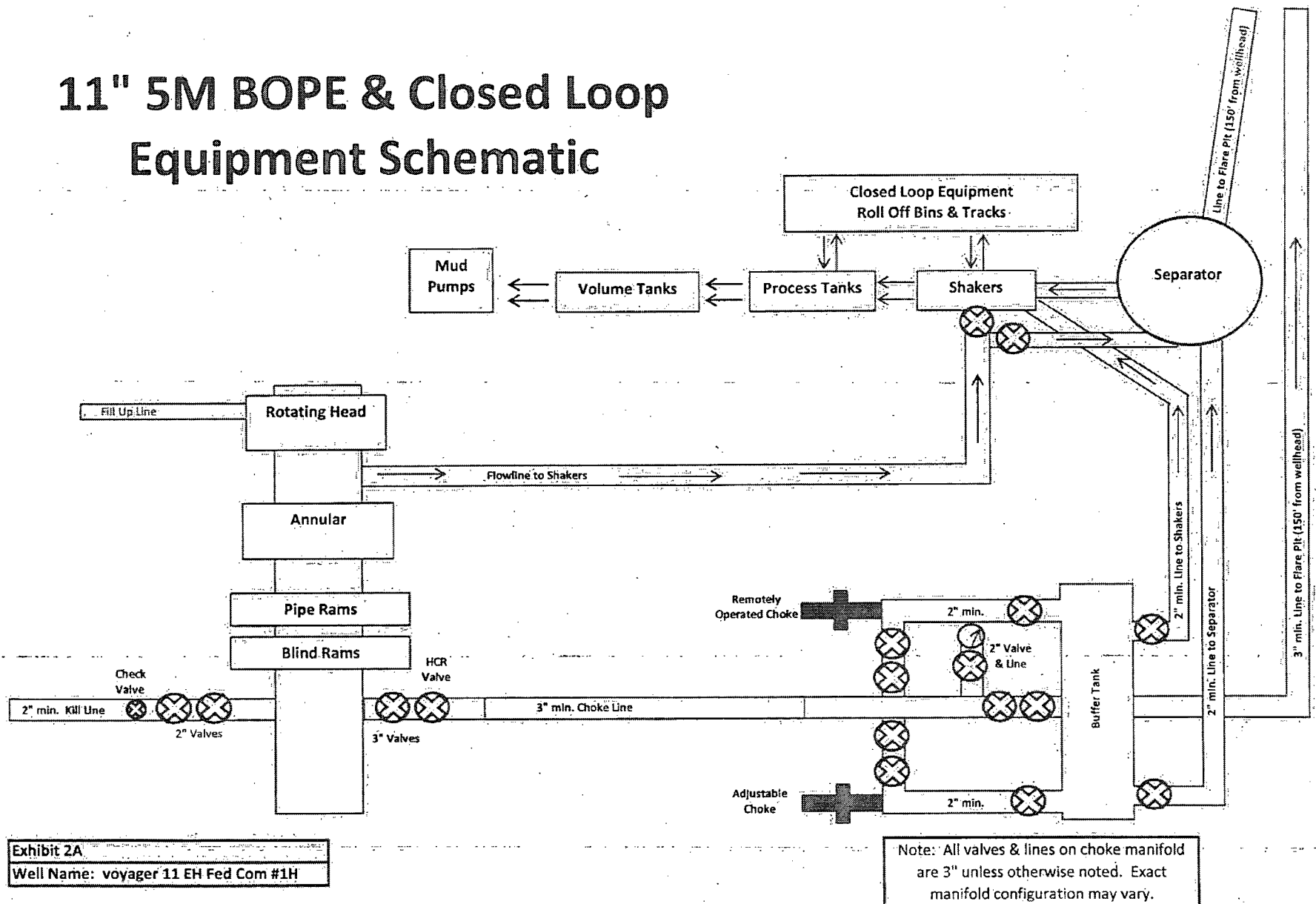


Exhibit 2

Well Name: Voyager 11 EH Fed Com #1H

11" 5M BOPE & Closed Loop Equipment Schematic



H2S Diagram
Closed Loop Pad Dimensions 280' x 320'

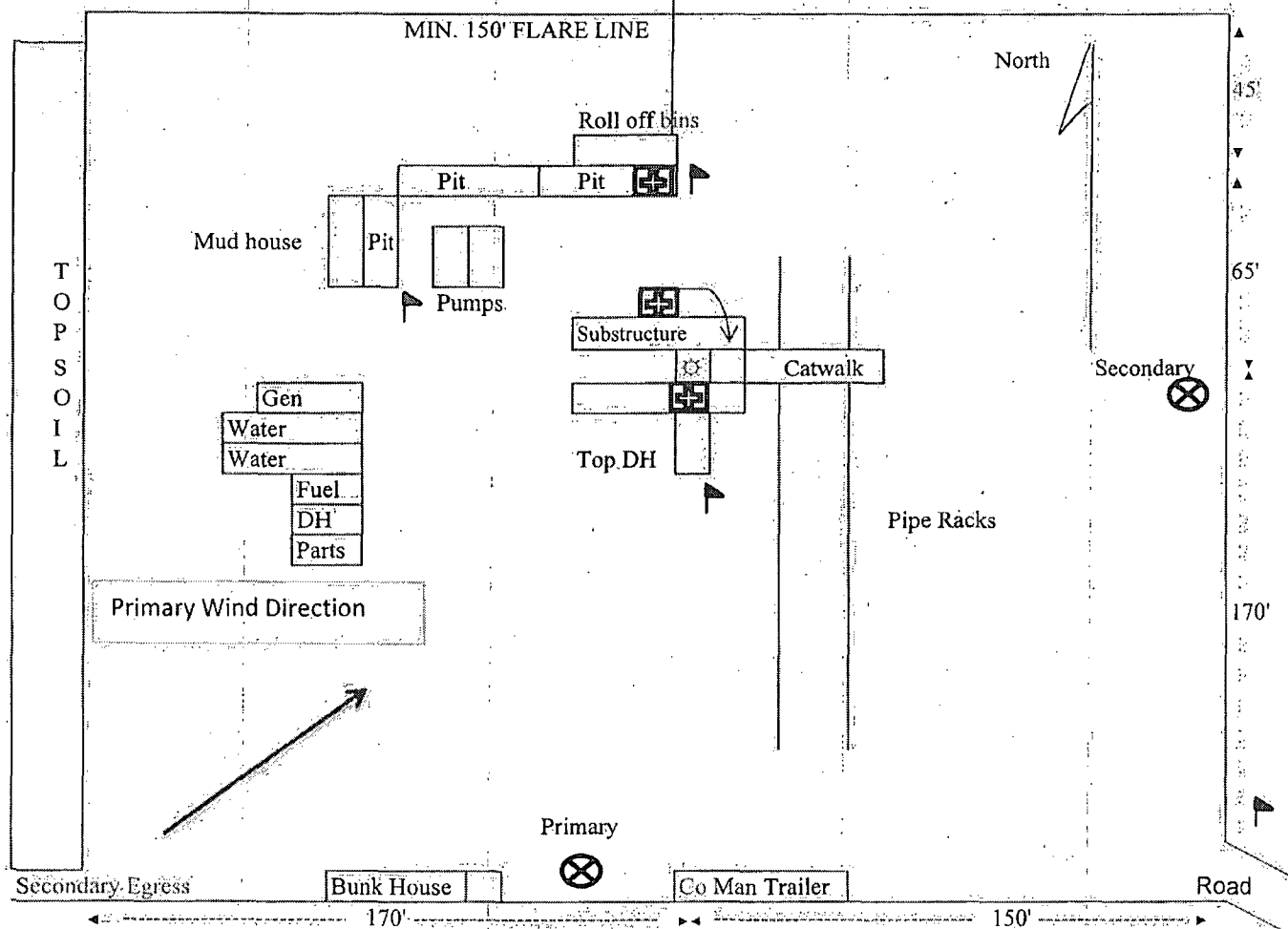


Exhibit 6



= Safety Stations



= Wind Markers



= H2S Monitors

Mewbourne Oil Company
Voyager 11 EH Fed Com #1H
1980' FNL & 150' FWL
Sec. 11 T20S R27E
Eddy County, NM

Hydrogen Sulfide Drilling Operations Plan

Mewbourne Oil Company

Voyager 11 EH Fed Com #1H

1980' FNL & 150' FWL

Sec 11-T20S-R27E

Eddy County, New Mexico

1. General Requirements

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

2. Hydrogen Sulfide Training

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

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

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

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

There will be an initial training session prior to encountering a known 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 intermediate casing.

1. Well Control Equipment

- A. Choke manifold with minimum of one adjustable 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 to comply with Onshore Order

3. Hydrogen Sulfide Protection and Monitoring Equipment

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. 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
Artesia Fire Dept	911 or 575-616-7155
Loco Hills Volunteer Fire Dept.	911 or 575-677-3266
Closest Medical Facility – Artesia General Hospital	575-748-3333

Mewbourne Oil Company	Hobbs District Office	575-393-5905
	Fax	575-397-6252
	2 nd Fax	575-393-7259

District Manager	Micky Young	575-390-0999
Drilling Superintendent	Frosty Lathan	575-390-4103
Drilling Foreman	Wesley Noseff	575-441-0729
	Bradley Bishop	575-390-6838

Closed Loop Pad Dimensions 280' x 320'

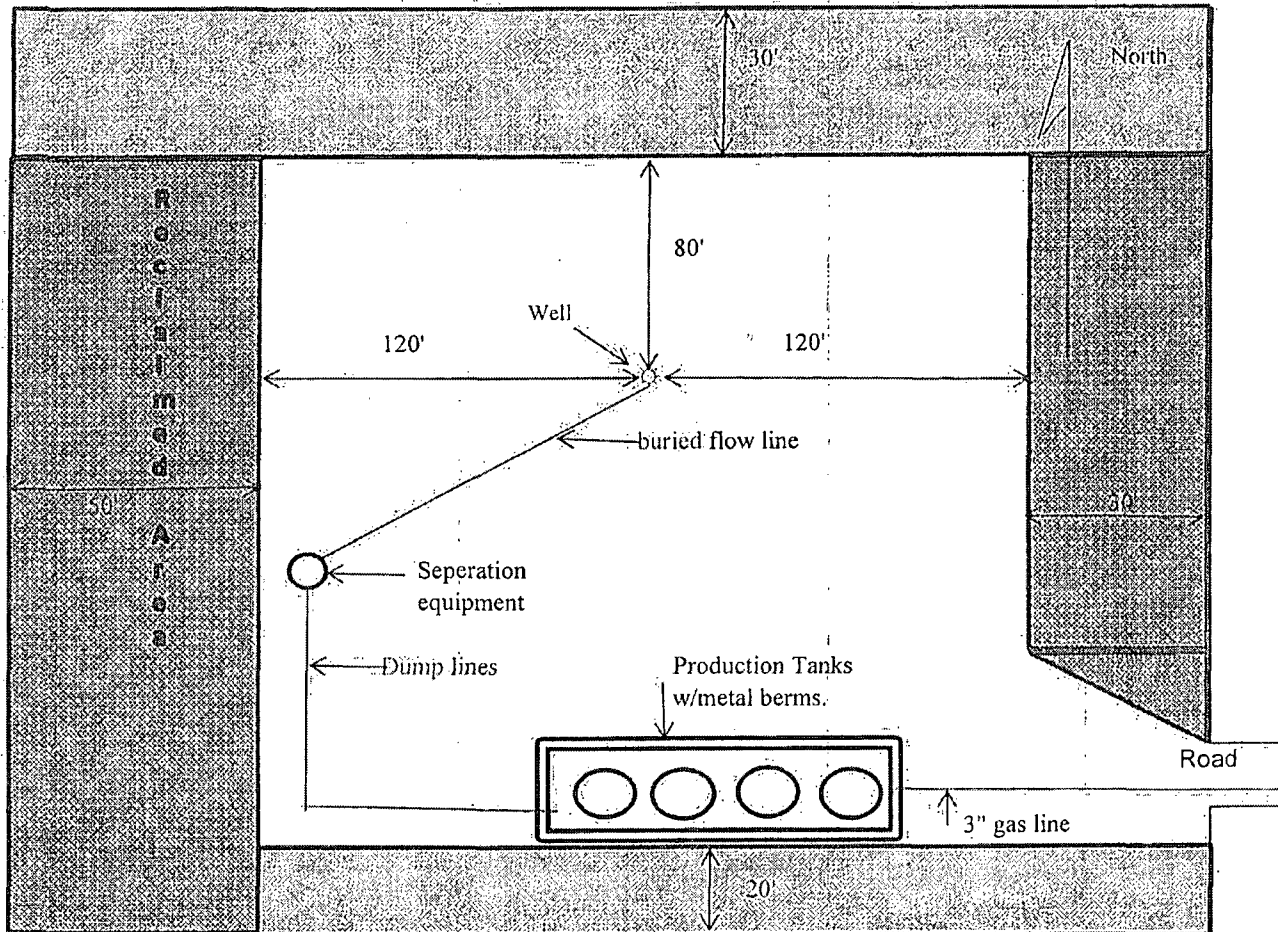


Exhibit 6

Mewbourne Oil Company
Voyager 11 EH Fed Com #1H
1980' FNL & 150' FWL
Sec. 11 T20S R27E
Eddy County, NM

PECOS DISTRICT CONDITIONS OF APPROVAL

OPERATOR'S NAME:	MEWBOURNE OIL COMPANY
LEASE NO.:	NM0455265
WELL NAME & NO.:	1H-VOYAGER 11 EH FEDERAL COM
SURFACE HOLE FOOTAGE:	1980'/N. & 150'/W.
BOTTOM HOLE FOOTAGE	2150'/N. & 330'/E.
LOCATION:	Section 11, T. 20 S., R. 27 E., NMPM
COUNTY:	Eddy County, New Mexico

TABLE OF CONTENTS

Standard Conditions of Approval (COA) apply to this APD. If any deviations to these standards exist or special COA's are required, the section with the deviation or requirement will be checked below.

- ☐ **General Provisions**
- ☐ **Permit Expiration**
- ☐ **Archaeology, Paleontology, and Historical Sites**
- ☐ **Noxious Weeds**
- ☒ **Special Requirements**
 - Production Facility and Interim Reclamation
 - Berm Well Pad
 - Cattleguard Installation
 - Cave/Karst
 - Communitization Agreement
- ☒ **Construction**
 - Notification
 - Topsoil
 - Closed Loop System
 - Federal Mineral Material Pits
 - Well Pads
 - Roads
- ☐ **Road Section Diagram**
- ☒ **Drilling**
 - High Cave/Karst
 - Waste Material and Fluids
 - Logging Requirements
- ☒ **Production (Post Drilling)**
 - Well Structures & Facilities
 - Pipelines-not permitted with APD
- ☐ **Interim Reclamation**
- ☐ **Final Abandonment & Reclamation**

2. The minimum required fill of cement behind the **13-3/8** inch 1st intermediate casing **which shall be set at approximately 2600' as per sundry, 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 Capitan Reef.**

3. The minimum required fill of cement behind the **9-5/8** inch 2nd intermediate casing **which shall be set at approximately 4500' as per sundry, is:**

Note: DV tool shall be set a minimum of 50 feet below previous casing shoe.

- a. First stage to DV tool:

☒ Cement to circulate. If cement does not circulate, contact the appropriate BLM office before proceeding with second stage cement job. Operator should have plans as to how they will achieve circulation on the next stage.

- b. Second stage above DV tool:

☒ Cement to surface. If cement does not circulate see B.1.a, c-d above. **Additional cement shall be required as excess calculates to 20%. Wait on cement (WOC) time for a primary cement job is to include the lead cement slurry due to Capitan Reef.**

Positive standoff centralizers shall be utilized for the production string every other joint of casing from 100' MD above KOP or at the legal footage setback, whichever is the deeper MD, up to TOC.

4. The minimum required fill of cement behind the **5-1/2** inch production casing is:

Note: DV tool shall be set a minimum of 50 feet below previous casing shoe

- a. First stage to DV tool, cement shall:

☒ Cement to circulate. If cement does not circulate, contact the appropriate BLM office before proceeding with second stage cement job. Operator should have plans as to how they will achieve circulation on the next stage..

- b. Second stage above DV tool, cement shall:

☒ Cement should tie-back a minimum of **200 feet** above the Capitan Reef. Operator shall provide method of verification.

5. 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.

A. PRESSURE CONTROL

1. All blowout preventer (BOP) and related equipment (BOPE) shall comply with well control requirements as described in Onshore Oil and Gas Order No. 2 and API RP 53 Sec. 17. **For H&P rigs – the stump test is not an approved BOP test. Equipment shall be tested when mounted on well head.**
2. Variance approved to use flex line from BOP to choke manifold. 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.** If the BLM inspector questions the straightness of the hose, a BLM engineer will be contacted and will review in the field or via picture supplied by inspector to determine if changes are required (operator shall expect delays if this occurs).
3. Minimum working pressure of the blowout preventer (BOP) and related equipment (BOPE) required for drilling below the surface casing shoe shall be **2000 (2M) psi. Operator has proposed a 20" 2M Annular preventer for drilling below the surface casing shoe, it shall be tested to a minimum of 2000 psi (which may require upgrading to 3M or 5M annular).**
4. Minimum working pressure of the blowout preventer (BOP) and related equipment (BOPE) required for drilling below the **9-5/8** inch intermediate casing shoe shall be **3000 (3M) psi.**
5. The appropriate BLM office shall be notified a minimum of 4 hours in advance for a representative to witness the tests.
 - a. In a water basin, for all casing strings utilizing slips, these are to be set as soon as the crew and rig are ready and any fallback cement remediation has been done. The casing cut-off and BOP installation can be initiated four hours after installing the slips, which will be approximately six hours after bumping the plug. For those casing strings not using slips, the minimum wait time before cut-off is eight hours after bumping the plug. BOP/BOPE testing can begin after cut-off or once cement reaches 500 psi compressive strength (including lead when specified), whichever is greater. However, if the float does not hold, cut-off cannot be initiated until cement reaches 500 psi compressive strength (including lead when specified).
 - b. The tests shall be done by an independent service company utilizing a test plug **not a cup or J-packer.** The operator also has the option of utilizing an independent tester to test without a plug (i.e. against the casing) pursuant to

Onshore Order 2 with the pressure not to exceed 70% of the burst rating for the casing. Any test against the casing must meet the WOC time for water basin (18 hours) or potash (24 hours) or 500 pounds compressive strength, whichever is greater, prior to initiating the test (see casing segment as lead cement may be critical item).

- c. The results of the test shall be reported to the appropriate BLM office.
- d. 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.**
- e. 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.

B. DRILL STEM TEST

If drill stem tests are performed, Onshore Order 2.III.D shall be followed.

C. 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.

EGF 032513

VII. DRILLING

A. DRILLING OPERATIONS REQUIREMENTS

The BLM is to be notified a minimum of 4 hours in advance for a representative to witness:

- a. Spudding well
- b. Setting and/or Cementing of all casing strings
- c. BOPE tests

☒ **Eddy County**

Call the Carlsbad Field Office, 620 East Greene St., Carlsbad, NM 88220,
(575) 361-2822

1. **Although Hydrogen Sulfide has not been reported in this section, it is always a potential hazard. If Hydrogen Sulfide is encountered, please report measured amounts and formations to the BLM.**
2. 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. **If the drilling rig is removed without approval – an Incident of Non-Compliance will be written and will be a “Major” violation.**
3. 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 is located, this does not include the dog house or stairway area.
4. **The record of the drilling rate along with the GR/N well log run from TD to surface (horizontal well – vertical portion of hole) shall be submitted to the BLM office as well as all other logs run on the borehole 30 days from completion. If available, a digital copy of the logs is to be submitted in addition to the paper copies.**

B. CASING

Changes to the approved APD casing program need prior approval if the items substituted are of lesser grade or different casing size. 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.).

Centralizers required on surface casing per Onshore Order 2.III.B.1.f.

Wait on cement (WOC) time prior to drilling out for a primary cement job will be a minimum 18 hours for a water basin, 24 hours in the potash area, or 500 pounds compressive strength, whichever is greater for all casing strings. DURING THIS WOC TIME, NO DRILL PIPE, ETC. SHALL BE RUN IN THE HOLE. Provide compressive strengths including hours to reach required 500 pounds compressive strength prior to cementing each casing string. See individual casing strings for details regarding lead cement slurry requirements.

No pea gravel permitted for remedial or fall back remedial without prior authorization from the BLM engineer.

High Cave/Karst

Possible lost circulation in the Grayburg, San Andres, Delaware and Bone Spring.

1. The 13-3/8 inch surface casing shall be set at approximately 450 feet and cemented to the surface.
 - a. If cement does not circulate to the surface, the appropriate BLM office shall be notified and a temperature survey utilizing an electronic type temperature survey with surface log readout will be used or a cement bond log shall be run to verify the top of the cement. Temperature survey will be run a minimum of six hours after pumping cement and ideally between 8-10 hours after completing the cement job.
 - b. **Wait on cement (WOC) time for a primary cement job is to include the lead cement slurry.**
 - 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 minimum required fill of cement behind the 9-5/8 inch intermediate casing is:
 - ☒ Cement to surface. If cement does not circulate see B.1.a, c-d above.
Wait on cement (WOC) time for a primary cement job is to include the lead cement slurry due to cave/karst.

Formation below the 9-5/8" shoe to be tested according to Onshore Order 2.III.B.1.i. Test to be done as a mud equivalency test using the mud weight necessary for the pore pressure of the formation below the shoe (not the mud weight required to prevent dissolving the salt formation) and the mud weight for the bottom of the hole. Report results to BLM office.

Centralizers required on horizontal leg, must be type for horizontal service and a minimum of one every other joint.

The pilot hole plug must have 200' of class H neat cement on bottom otherwise plugback is adequate.

3. The minimum required fill of cement behind the 7 inch production casing is:
 - ☒ Cement to surface. If cement does not circulate, contact the appropriate BLM office. **Additional cement may be required – excess calculates to 23%.**
4. The minimum required fill of cement behind the 4-1/2 inch production Liner is:
 - ☒ Cement not required – Packer/Port system to be used.
5. 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.

C. PRESSURE CONTROL

1. All blowout preventer (BOP) and related equipment (BOPE) shall comply with well control requirements as described in Onshore Oil and Gas Order No. 2 and API RP 53 Sec. 17.
2. Minimum working pressure of the blowout preventer (BOP) and related equipment (BOPE) required for drilling below the surface casing shoe shall be 2000 (2M) psi.
 - a. **For surface casing only:** If the BOP/BOPE is to be tested against casing, the wait on cement (WOC) time for that casing is to be met (see WOC statement at start of casing section). Independent service company required.
3. Minimum working pressure of the blowout preventer (BOP) and related equipment (BOPE) required for drilling below the 9-5/8 inch intermediate casing shoe shall be 5000 (5M) psi. **5M 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. The appropriate BLM office shall be notified a minimum of 4 hours in advance for a representative to witness the tests.
 - a. In a water basin, for all casing strings utilizing slips, these are to be set as soon as the crew and rig are ready and any fallback cement remediation has been done. The casing cut-off and BOP installation can be initiated four hours after installing the slips, which will be approximately six hours after bumping the plug. For those casing strings not using slips, the minimum wait time before cut-off is eight hours after bumping the plug. BOP/BOPE testing can begin after cut-off or once cement reaches 500 psi compressive strength (including lead when specified), whichever is greater. However, if the float does not hold, cut-off cannot be initiated until cement reaches 500 psi compressive strength (including lead when specified).
 - b. The tests shall be done by an independent service company utilizing a test plug **not a cup or J-packer**. The operator also has the option of utilizing an independent tester to test without a plug (i.e. against the casing) pursuant to Onshore Order 2 with the pressure not to exceed 70% of the burst rating for the casing. Any test against the casing must meet the WOC time for water basin (18 hours) or potash (24 hours) or 500 pounds compressive strength, whichever is greater, prior to initiating the test (see casing segment as lead cement may be critical item).
 - c. The results of the test shall be reported to the appropriate BLM office.
 - d. 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.**
 - e. 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.

D. 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.

E. DRILL STEM TEST

If drill stem tests are performed, Onshore Order 2.III.D shall be followed.

F. 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.

CRW 020413