

ATS-13-221

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

OCD Artesia

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-Fee, BHL-NM 16104	
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. If Indian, Allottee or Tribe Name TOS 1/15/2013	
2. Name of Operator Mewbourne Oil Company		7. If Unit or CA Agreement, Name and No.	
3a. Address PO Box 5270 Hobbs, NM 88241		8. Lease Name and Well No. Malaga 13 CN Fed Com #1H <39632>	
3b. Phone No. (include area code) 575-393-5905		9. API Well No. 30-015-40974	
4. Location of Well (Report location clearly and in accordance with any State requirements. *) At surface 250' FNL & 1900' FWL, Sec. 13 T25S R28E At proposed prod. zone 330' FSL & 1980' FWL, Sec. 13 T25S R28E		10. Field and Pool, or Exploratory Southwest Willow Lake, Bone Spring, 962177	
11. Sec., T. R. M. or Blk. and Survey or Area Sec. 13 T25S R28E		12. County or Parish Eddy	
12. Distance in miles and direction from nearest town or post office* 7 miles South of Malaga, NM		13. State NM	
15. Distance from proposed* 250' location to nearest property or lease line, ft. (Also to nearest drig. unit line, if any)		16. No. of acres in lease 1520.06	
17. Spacing Unit dedicated to this well 160		18. Distance from proposed location* None to nearest well, drilling, completed, applied for, on this lease, ft.	
19. Proposed Depth 12,770' - MD 8293' - TVD		20. BLM/BIA Bond No. on file NM 1693 Nationwide, NMB000919	
21. Elevations (Show whether DF, KDB, RT, GL, etc.) 2893' GL		22. Approximate date work will start* 12/15/2012	
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 <i>Bradley Bishop</i>	Name (Printed/Typed) Bradley Bishop	Date 11-20-12
Title		
Approved by (Signature) <i>/s/ Don Peterson</i>	Name (Printed/Typed)	Date JAN 11 2013
Title FIELD MANAGER	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 entitle the applicant to conduct operations thereon.
Conditions of approval, if any, are attached.

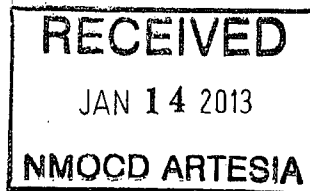
APPROVAL FOR TWO YEARS

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)

Carlsbad Controlled Water Basin

Approval Subject to General Requirements
& Special Stipulations AttachedSEE ATTACHED FOR
CONDITIONS OF APPROVAL

**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: (SL) Fee, (BHL) NM-16104

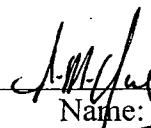
Legal Description of Land: Section 13, T-25S, R-28E Eddy County, New Mexico.
Location @ 250' FNL & 1900' FWL.

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: 11/20/12

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 20 day of Nov, 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

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

DISTRICT II

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

DISTRICT III

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

DISTRICT IV

1220 S. St. Francis Dr., Santa Fe, NM 87505
Phone (505) 476-3480 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

ARI Number 40974	Pool Code 96217	Pool Name Southwest Willow Lake; Bone Spring, SE
Property Code 39632	Property Name MALAGA 13 CN FEDERAL COM	Well Number 1H
OGRI No. 14744	Operator Name MEWBOURNE OIL COMPANY	Elevation 2893'

Surface Location

UL or lot No.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
C	13	25 S	28 E		250	NORTH	1900	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
N	13	25 S	28 E		330	SOUTH	1980	WEST	EDDY

Dedicated Acres	Joint or Infill	Consolidation Code	Order No.
160			

NO ALLOWABLE WILL BE ASSIGNED TO THIS COMPLETION UNTIL ALL INTERESTS HAVE BEEN CONSOLIDATED
OP A NON-STANDARD UNIT HAS BEEN APPROVED BY THE DIVISION

<p>N: 413810.6 E: 588031.7 (NAD 27)</p> <p>1900'</p> <p>2886.9' - 2891.3'</p> <p>SURFACE LOCATION Lat - N 52°08'11.69" Long - W 104°02'34.06" NMSPCE - N 413530.909 E 589931.615 (NAD-27)</p> <p>PROJECT AREA PRODUCING AREA</p> <p>WELL PATH</p> <p>BHL</p> <p>330'</p> <p>N: 411153.5 E: 588037.9 (NAD 27)</p> <p>N: 408495.6 E: 588056.6 (NAD 27)</p>	<p>N: 413728.5 E: 593324.1 (NAD 27)</p> <p>N: 411080.9 E: 593329.3 (NAD 27)</p>	<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: 11/20/12</p> <p>Printed Name: G. M. 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>Date Surveyed: 11/20/12</p> <p>Signature & Seal of Professional Surveyor: <i>[Signature]</i></p> <p>Certificate No. Gary L. Jones 7977</p> <p>BASIN SURVEYS 27504</p>
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Drilling Program
Mewbourne Oil Company
 Malaga 13 "CN" Fed Com #1H
 250' FNL & 1900' FWL
 Sec 13 T25S R28E
 Eddy County, New Mexico

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

Rustler	740'
Top Salt	1070'
Base Salt	2410'
Lamar	2525'
*Delaware	2550'
*Bone Springs	6290'
*Wolfcamp	Will Not Penetrate

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

Water	Fresh water is anticipated @ 60' and will be protected by setting surface casing at 765' 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 3000# WP Double Ram BOP and 3000# 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. BOP's 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 13 3/8" Annular to 1000# and 9 5/8" & 7" BOPE to 3000# and the Annular to 1500# with a third party testing company before drilling below each shoe, but will test again, if needed, in 30 days from the 1st test as per BLM Onshore Oil and Gas Order #2.

4. MOC proposes to drill a vertical wellbore to 7806' & kick off to horizontal @ 8283' TVD. The well will be drilled to 12770' MD (8293' 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' - 765' 400	ST&C
12 1/4"	9 5/8" (new)	36#	J55	0' - 2525' MD	LT&C
8 3/4"	7" (new)	26#	P110	0' - 7806' MD	LT&C
8 3/4"	7" (new)	26#	P110	7806' - 8554' MD	BT&C
6 1/8"	4 1/2" (new)	13.5#	P110	8354' - TD	LT&C

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

*Subject to availability of casing.

See
COA

B. Cementing Program:

- i. Surface Casing: 820 sks Class C cement containing 2% CaCl₂. Yield at 1.34 cuft/sk. Cmt circulated to surface w/100% excess.
- ii. Intermediate Casing: 365 sacks Class C light cement with salt & LCM. Yield at 2.16 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: 565 sks Class "H" light cement w/salt, FL & LCM additives. Yeild @ 2.12 cuft/sk. 400 sks Class "H" cement w/ salt & FL additives. Yeild @ 1.19 cuft/sk. Cmt circulated w/25% excess.
- ii. 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: (65% fly ash : 35% cement : 4% 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:

Interval	Type System	Weight	Viscosity	Fluid Loss
0' - 765' 400	FW spud mud	8.6-9.0	32-34	NA
765' - 2525'	Brine water	10.0-10.2	28-30	NA
2525' - 7806' (KOP)	Cut Brine	8.5-8.7	28-30	NA
7806' - TD	Cut Brine w/Polymer	8.5-8.7	32-35	15

7. Evaluation Program: *See COA*

Samples: 10' samples from KOP to TD
Logging: GR, CN & Gyro 100' above KOP (7520') to surface. GR from 7520' to 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 8293'=3621.39 psi)

9. Anticipated Starting Date:

Mewbourne Oil Company intends to drill this well as soon as possible after receiving approval with approximately 40 days involved in drilling operations and an additional 20 days involved in completion operations on the project.

Mewbourne Oil Co

Eddy County, New Mexico

Sec 13, T25S, R28E

Malaga 13 CN Fed Com #1H

Wellbore #1

Plan: Design #1

DDC Well Planning Report

05 November, 2012



DDC Well Planning Report



Database: EDM 5000.1 Single User Db
Company: Mewbourne Oil Co.
Project: Eddy County, New Mexico
Site: Sec.13, T25S, R28E
Well: Malaga 13 CN Fed Com
Wellbore: Wellbore #1
Design: Design #1

Local Co-ordinate Reference: Well Malaga 13 CN Fed Com
TVD Reference: WELL @ 2913.0usft (Patterson #75)
MD Reference: WELL @ 2913.0usft (Patterson #75)
North Reference: Grid
Survey Calculation Method: Minimum Curvature

Project: Eddy County, New Mexico

Map System: US State Plane 1927 (Exact solution)
Geo Datum: NAD 1927 (NADCON CONUS)
Map Zone: New Mexico East 3001

System Datum: Mean Sea Level

Site: Sec.13, T25S, R28E

Site Position: Northing: 413,530.91 usft Latitude: 32° 8' 11.687 N
From: Map Easting: 589,931.62 usft Longitude: 104° 2' 34.064 W
Position Uncertainty: 0.0 usft Slot Radius: 13-3/16" Grid Convergence: 0.15°

Well: Malaga 13 CN Fed Com

Well Position +N/-S 0.0 usft Northing: 413,530.91 usft Latitude: 32° 8' 11.687 N
+E/-W 0.0 usft Easting: 589,931.62 usft Longitude: 104° 2' 34.064 W
Position Uncertainty 0.0 usft Wellhead Elevation: Ground Level: 2,893.0 usft

Wellbore: Wellbore #1

Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	IGRF2010	11/5/2012	7.62	59.99	48,376

Design: Design #1

Audit Notes:

Version: Phase: PLAN Tie On Depth: 0.0

Vertical Section	Depth From (TVD) (usft)	+N/-S (usft)	+E/-W (usft)	Direction (°)
	0.0	0.0	0.0	178.75

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	
7,805.5	0.00	0.00	7,805.5	0.0	0.0	0.00	0.00	0.00	0.00	
8,554.4	89.86	178.75	8,283.0	-476.2	10.4	12.00	12.00	23.87	178.75	
12,770.6	89.86	178.75	8,293.0	-4,691.4	102.6	0.00	0.00	0.00	0.00	PBHL Malaga 13 C

DDC Well Planning Report



Database: EDM 5000.1 Single User Db
Company: Mewbourne Oil Co
Project: Eddy County, New Mexico
Site: Sec 13, T25S, R28E
Well: Malaga 13 CN Fed Com
Wellbore: Wellbore #1
Design: Design #1

Local Co-ordinate Reference: Well Malaga 13 CN Fed Com
TVD Reference: WELL @ 2913.0usft (Patterson #75)
MD Reference: WELL @ 2913.0usft (Patterson #75)
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)
Build 12° / 100'									
7,805.5	0.00	0.00	7,805.5	0.0	0.0	0.0	0.00	0.00	0.00
7,825.0	2.34	178.75	7,825.0	-0.4	0.0	0.4	12.00	12.00	0.00
7,850.0	5.34	178.75	7,849.9	-2.1	0.0	2.1	12.00	12.00	0.00
7,875.0	8.34	178.75	7,874.8	-5.0	0.1	5.0	12.00	12.00	0.00
7,900.0	11.34	178.75	7,899.4	-9.3	0.2	9.3	12.00	12.00	0.00
7,925.0	14.34	178.75	7,923.8	-14.9	0.3	14.9	12.00	12.00	0.00
7,950.0	17.34	178.75	7,947.8	-21.7	0.5	21.7	12.00	12.00	0.00
7,975.0	20.34	178.75	7,971.5	-29.8	0.7	29.8	12.00	12.00	0.00
8,000.0	23.34	178.75	7,994.7	-39.1	0.9	39.1	12.00	12.00	0.00
8,025.0	26.34	178.75	8,017.3	-49.6	1.1	49.6	12.00	12.00	0.00
8,050.0	29.34	178.75	8,039.5	-61.2	1.3	61.2	12.00	12.00	0.00
8,075.0	32.34	178.75	8,060.9	-74.0	1.6	74.1	12.00	12.00	0.00
8,100.0	35.34	178.75	8,081.7	-88.0	1.9	88.0	12.00	12.00	0.00
8,125.0	38.34	178.75	8,101.7	-102.9	2.3	103.0	12.00	12.00	0.00
8,150.0	41.34	178.75	8,120.9	-119.0	2.6	119.0	12.00	12.00	0.00
8,175.0	44.34	178.75	8,139.2	-135.9	3.0	136.0	12.00	12.00	0.00
8,200.0	47.34	178.75	8,156.6	-153.9	3.4	153.9	12.00	12.00	0.00
8,225.0	50.34	178.75	8,173.1	-172.7	3.8	172.7	12.00	12.00	0.00
8,250.0	53.34	178.75	8,188.5	-192.3	4.2	192.4	12.00	12.00	0.00
8,275.0	56.34	178.75	8,202.9	-212.8	4.7	212.8	12.00	12.00	0.00
8,300.0	59.34	178.75	8,216.2	-233.9	5.1	234.0	12.00	12.00	0.00
8,325.0	62.34	178.75	8,228.4	-255.8	5.6	255.8	12.00	12.00	0.00
8,350.0	65.34	178.75	8,239.4	-278.2	6.1	278.3	12.00	12.00	0.00
8,375.0	68.34	178.75	8,249.3	-301.2	6.6	301.2	12.00	12.00	0.00
8,400.0	71.34	178.75	8,257.9	-324.6	7.1	324.7	12.00	12.00	0.00
8,425.0	74.34	178.75	8,265.2	-348.5	7.6	348.6	12.00	12.00	0.00
8,450.0	77.34	178.75	8,271.4	-372.7	8.2	372.8	12.00	12.00	0.00
8,475.0	80.34	178.75	8,276.2	-397.3	8.7	397.3	12.00	12.00	0.00
8,500.0	83.34	178.75	8,279.7	-422.0	9.2	422.1	12.00	12.00	0.00
8,525.0	86.34	178.75	8,282.0	-446.9	9.8	447.0	12.00	12.00	0.00
8,550.0	89.34	178.75	8,282.9	-471.9	10.3	472.0	12.00	12.00	0.00
EOB @ 89.86° Inc / 178.75° Azm / 8283' TVD									
8,554.4	89.86	178.75	8,283.0	-476.2	10.4	476.3	12.00	12.00	0.00
8,600.0	89.86	178.75	8,283.1	-521.8	11.4	522.0	0.00	0.00	0.00
8,700.0	89.86	178.75	8,283.3	-621.8	13.6	622.0	0.00	0.00	0.00
8,800.0	89.86	178.75	8,283.5	-721.8	15.8	722.0	0.00	0.00	0.00
8,900.0	89.86	178.75	8,283.8	-821.8	18.0	822.0	0.00	0.00	0.00
9,000.0	89.86	178.75	8,284.0	-921.7	20.2	922.0	0.00	0.00	0.00
9,100.0	89.86	178.75	8,284.3	-1,021.7	22.3	1,022.0	0.00	0.00	0.00
9,200.0	89.86	178.75	8,284.5	-1,121.7	24.5	1,122.0	0.00	0.00	0.00
9,300.0	89.86	178.75	8,284.7	-1,221.7	26.7	1,222.0	0.00	0.00	0.00
9,400.0	89.86	178.75	8,285.0	-1,321.6	28.9	1,322.0	0.00	0.00	0.00
9,500.0	89.86	178.75	8,285.2	-1,421.6	31.1	1,422.0	0.00	0.00	0.00
9,600.0	89.86	178.75	8,285.5	-1,521.6	33.3	1,522.0	0.00	0.00	0.00
9,700.0	89.86	178.75	8,285.7	-1,621.6	35.5	1,622.0	0.00	0.00	0.00
9,800.0	89.86	178.75	8,285.9	-1,721.5	37.6	1,722.0	0.00	0.00	0.00
9,900.0	89.86	178.75	8,286.2	-1,821.5	39.8	1,822.0	0.00	0.00	0.00
10,000.0	89.86	178.75	8,286.4	-1,921.5	42.0	1,922.0	0.00	0.00	0.00
10,100.0	89.86	178.75	8,286.6	-2,021.5	44.2	2,022.0	0.00	0.00	0.00
10,200.0	89.86	178.75	8,286.9	-2,121.5	46.4	2,122.0	0.00	0.00	0.00
10,300.0	89.86	178.75	8,287.1	-2,221.4	48.6	2,222.0	0.00	0.00	0.00
10,400.0	89.86	178.75	8,287.4	-2,321.4	50.8	2,322.0	0.00	0.00	0.00
10,500.0	89.86	178.75	8,287.6	-2,421.4	53.0	2,422.0	0.00	0.00	0.00

DDC Well Planning Report



Database:	EDM 5000.1 Single User Db	Local Co-ordinate Reference:	Well Malaga 13 CN Fed Com
Company:	Mewbourne Oil Co	TVD Reference:	WELL @ 2913.0usft (Patterson #75)
Project:	Eddy County, New Mexico	MD Reference:	WELL @ 2913.0usft (Patterson #75)
Site:	Sec 13, T25S, R28E	North Reference:	Grid
Well:	Malaga 13 CN Fed Com	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)
10,600.0	89.86	178.75	8,287.8	-2,521.4	55.1	2,522.0	0.00	0.00	0.00
10,700.0	89.86	178.75	8,288.1	-2,621.3	57.3	2,622.0	0.00	0.00	0.00
10,800.0	89.86	178.75	8,288.3	-2,721.3	59.5	2,722.0	0.00	0.00	0.00
10,900.0	89.86	178.75	8,288.5	-2,821.3	61.7	2,822.0	0.00	0.00	0.00
11,000.0	89.86	178.75	8,288.8	-2,921.3	63.9	2,922.0	0.00	0.00	0.00
11,100.0	89.86	178.75	8,289.0	-3,021.2	66.1	3,022.0	0.00	0.00	0.00
11,200.0	89.86	178.75	8,289.3	-3,121.2	68.3	3,122.0	0.00	0.00	0.00
11,300.0	89.86	178.75	8,289.5	-3,221.2	70.4	3,222.0	0.00	0.00	0.00
11,400.0	89.86	178.75	8,289.7	-3,321.2	72.6	3,322.0	0.00	0.00	0.00
11,500.0	89.86	178.75	8,290.0	-3,421.1	74.8	3,422.0	0.00	0.00	0.00
11,600.0	89.86	178.75	8,290.2	-3,521.1	77.0	3,522.0	0.00	0.00	0.00
11,700.0	89.86	178.75	8,290.5	-3,621.1	79.2	3,622.0	0.00	0.00	0.00
11,800.0	89.86	178.75	8,290.7	-3,721.1	81.4	3,722.0	0.00	0.00	0.00
11,900.0	89.86	178.75	8,290.9	-3,821.0	83.6	3,822.0	0.00	0.00	0.00
12,000.0	89.86	178.75	8,291.2	-3,921.0	85.8	3,922.0	0.00	0.00	0.00
12,100.0	89.86	178.75	8,291.4	-4,021.0	87.9	4,022.0	0.00	0.00	0.00
12,200.0	89.86	178.75	8,291.6	-4,121.0	90.1	4,122.0	0.00	0.00	0.00
12,300.0	89.86	178.75	8,291.9	-4,220.9	92.3	4,222.0	0.00	0.00	0.00
12,400.0	89.86	178.75	8,292.1	-4,320.9	94.5	4,322.0	0.00	0.00	0.00
12,500.0	89.86	178.75	8,292.4	-4,420.9	96.7	4,422.0	0.00	0.00	0.00
12,600.0	89.86	178.75	8,292.6	-4,520.9	98.9	4,522.0	0.00	0.00	0.00
12,700.0	89.86	178.75	8,292.8	-4,620.8	101.1	4,622.0	0.00	0.00	0.00
TD @ 12771' MD / 8293' TVD									
12,770.6	89.86	178.75	8,293.0	-4,691.4	102.6	4,692.5	0.00	0.00	0.00

Design Targets

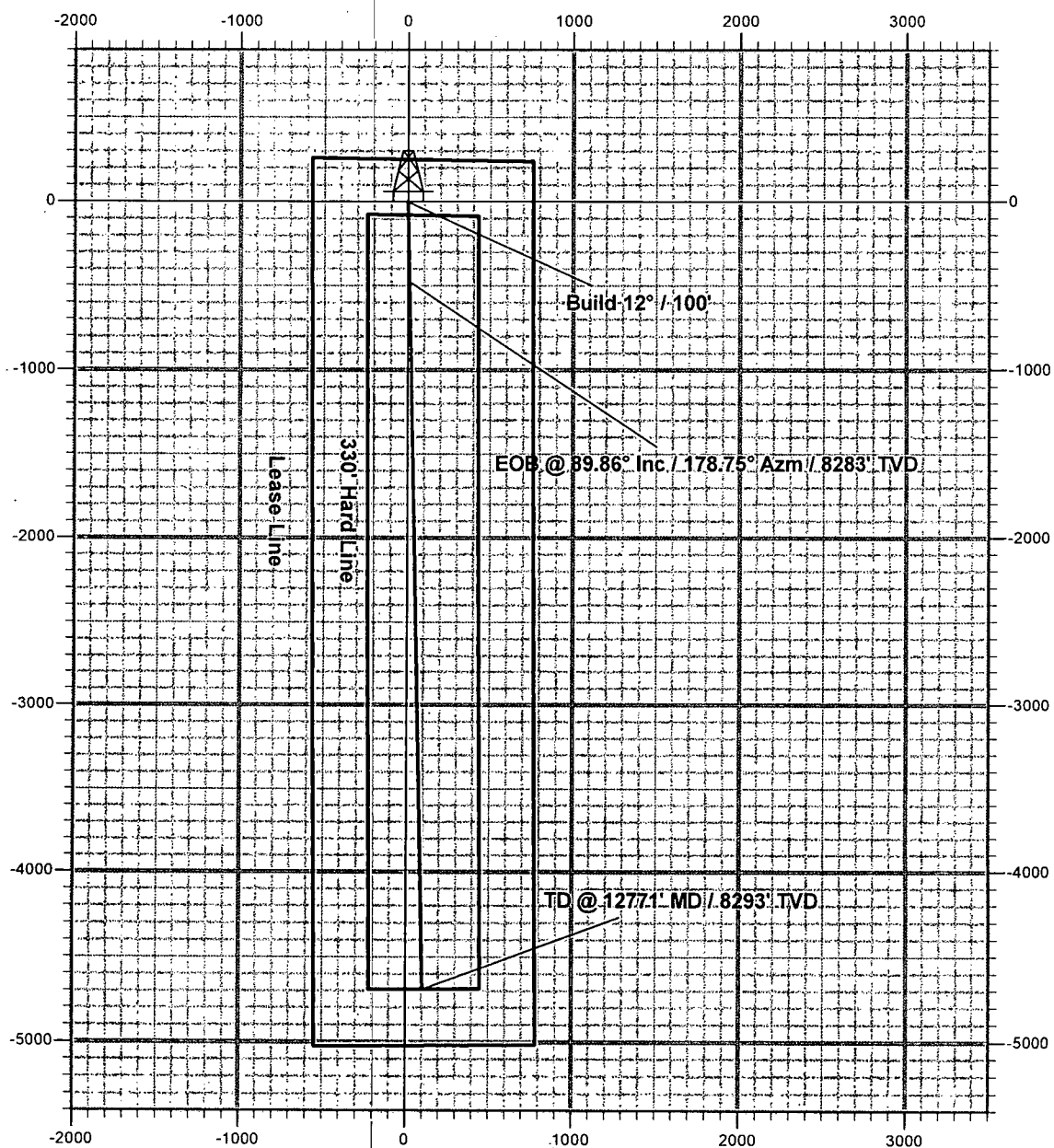
Target Name	Dip Angle (°)	Dip Dir (°)	TVD (usft)	+N/-S (usft)	+E/-W (usft)	Northing (usft)	Easting (usft)	Latitude	Longitude
- hit/miss target									
- Shape									
PBHL Malaga 13 CN	0.00	0.00	8,293.0	-4,691.4	102.6	408,839.51	590,034.22	32° 7' 25.256 N	104° 2' 33.018 W
- plan hits target center									
- Point									

Plan Annotations

Measured Depth (usft)	Vertical Depth (usft)	Local Coordinates	Comment
		+N/-S (usft)	+E/-W (usft)
7,805.5	7,805.5	0.0	0.0
8,554.4	8,283.0	-476.2	10.4
12,770.6	8,293.0	-4,691.4	102.6
			Build 12° / 100'
			EOB @ 89.86° Inc / 178.75° Azm / 8283' TVD
			TD @ 12771' MD / 8293' TVD

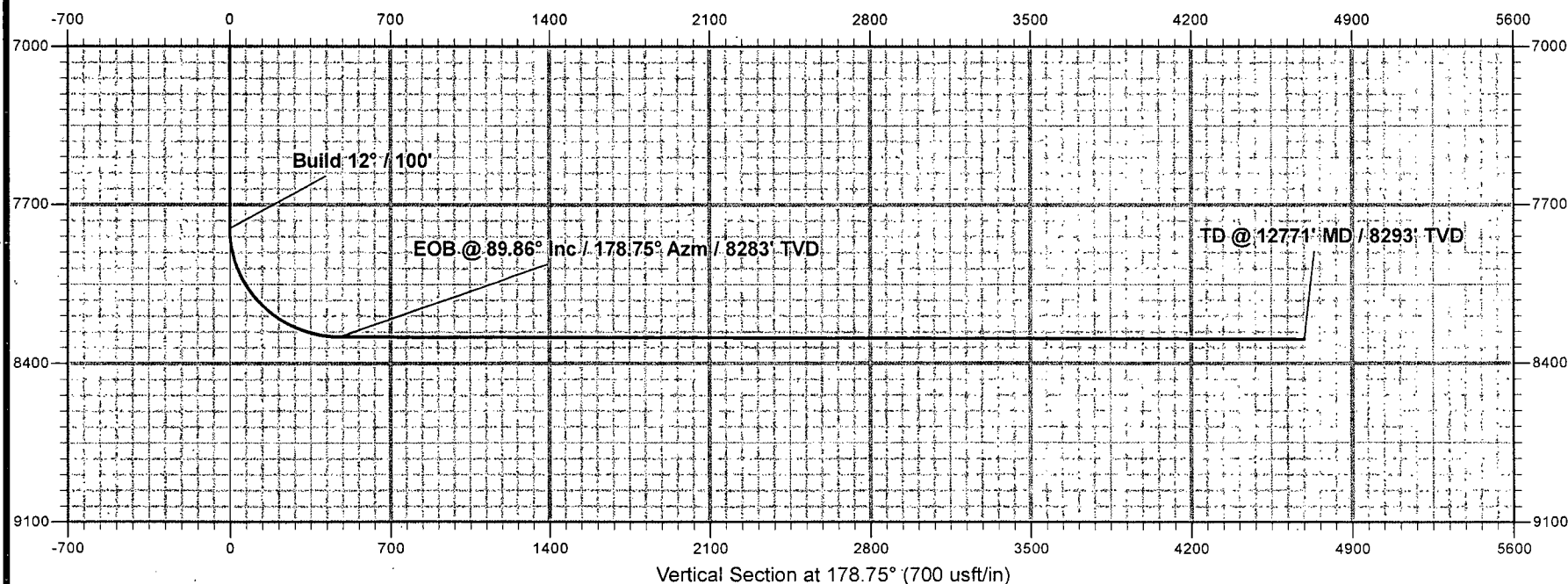
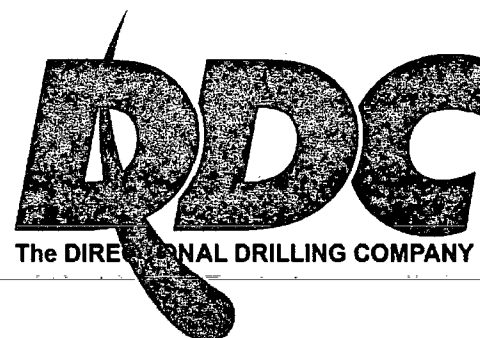
Mewbourne Oil Company

Eddy County, New Mexico
Malaga 13 CN Fed Com #1H
Quote 120828
Design #1



Mewbourne Oil Company

Eddy County, New Mexico
Malaga 13 CN Fed Com #1H
Quote 120828
Design #1



11" 3M BOPE & Closed Loop Equipment Schematic

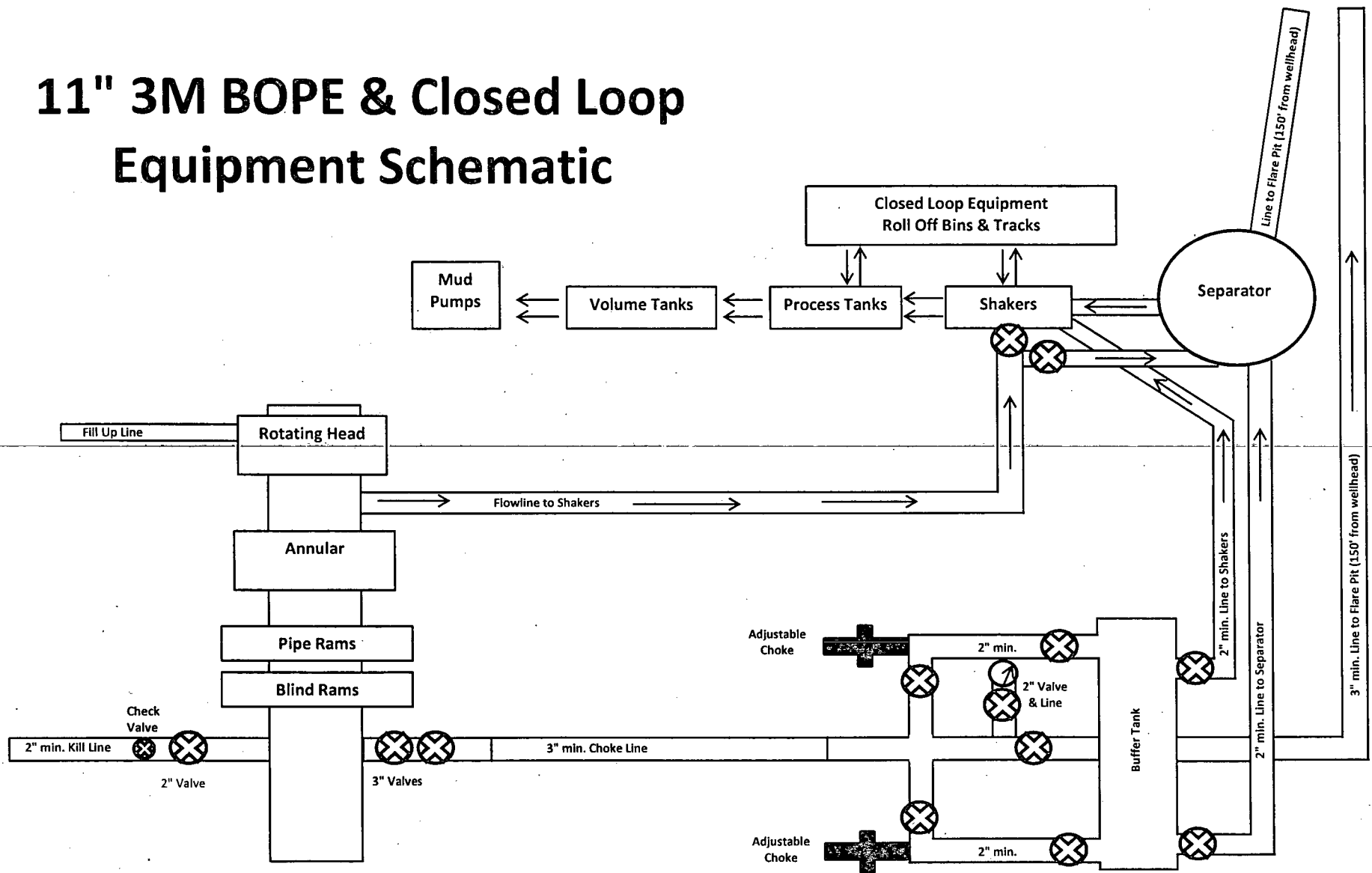


Exhibit 2
Well Name: Malaga 13 CN Fed Com #1H

Note: All valves & lines on choke manifold are 3" unless otherwise noted. Exact manifold configuration may vary.

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

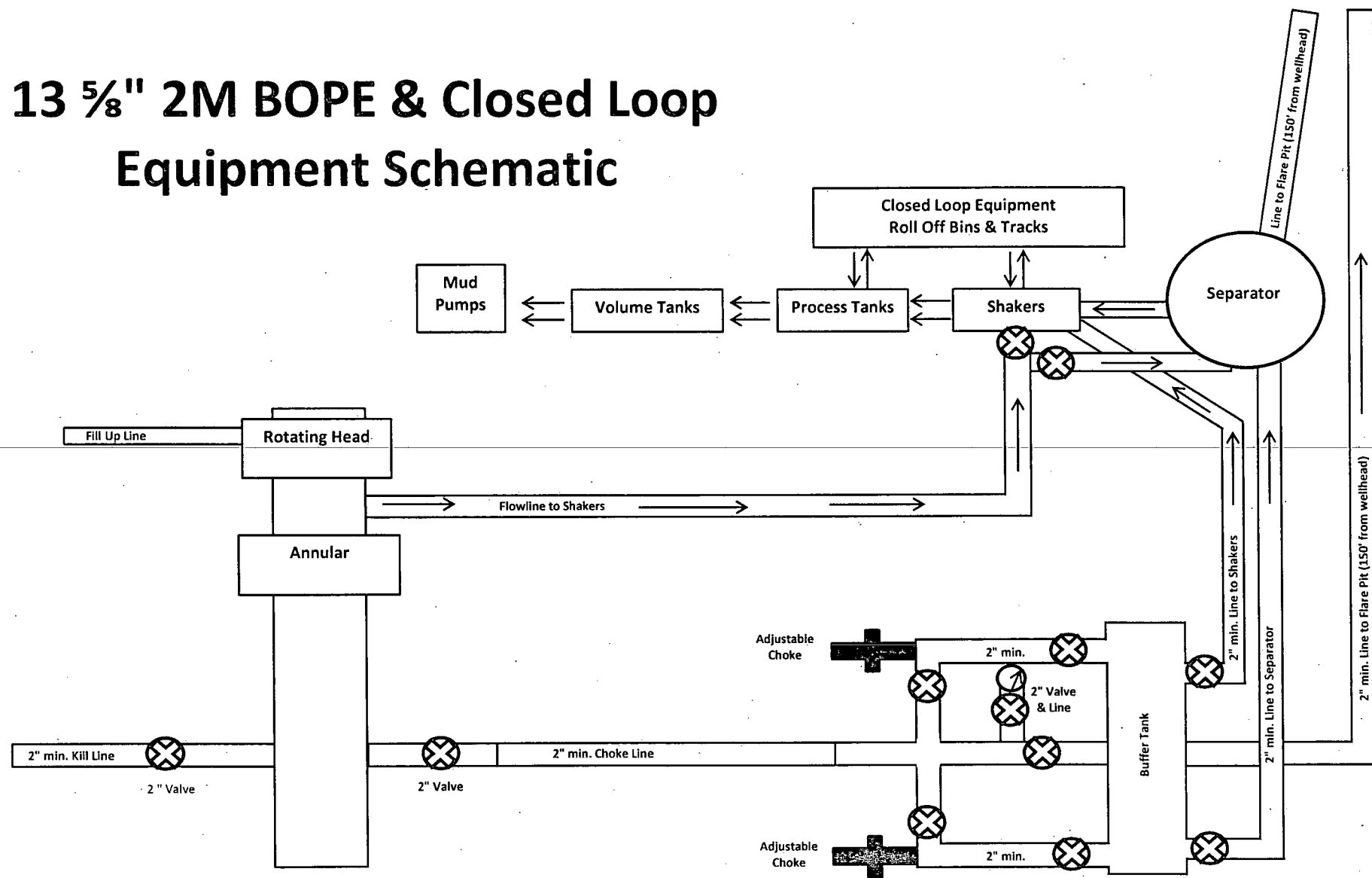


Exhibit 2A

Well Name: Malaga 13 CN Fed Com #1H

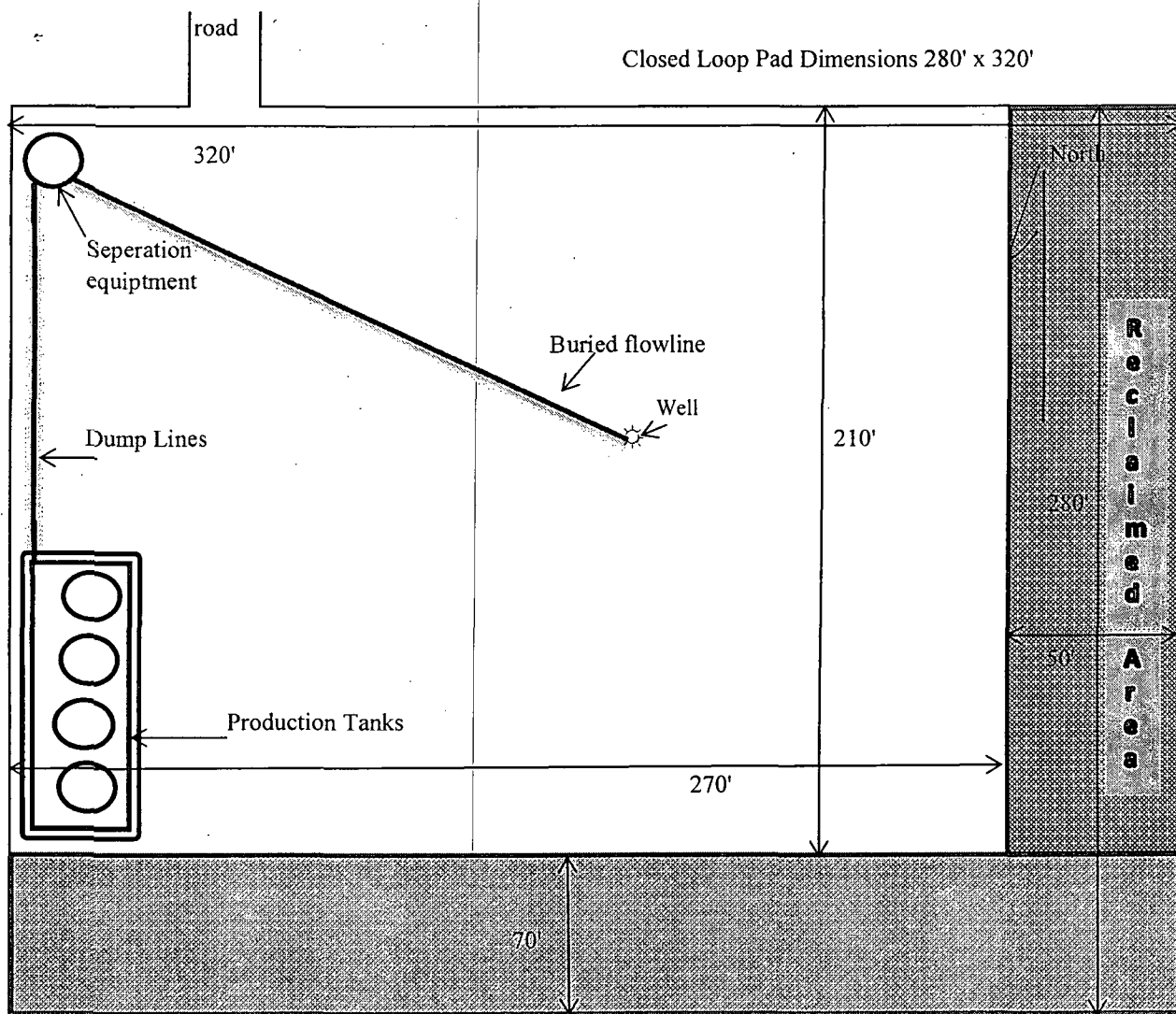


Exhibit 5

Mewbourne Oil Company
 Malaga 13 CN Fed Com #1H
 250' FNL & 1900' FWL
 Sec. 13 T25S R28E
 Eddy County, NM

Hydrogen Sulfide Drilling Operations Plan

Mewbourne Oil Company
Malaga 13 CN Fed Com #1H
250' FNL & 1900' FWL
Sec. 13 T25S R28E
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 Yates 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~~ *remotely operated* 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 6.

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

Notes Regarding Blowout Preventer

Mewbourne Oil Company

Malaga 13 "CN" Fed Com #1H

250' FNL & 1900' FWL (SHL)

Sec 13-T25S-R28E

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 2000 psi working pressure on 9 5/8" casing and 3000 psi working pressure on 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 3000 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.

H2S Diagram
Closed Loop Pad Dimensions 280' x 320'

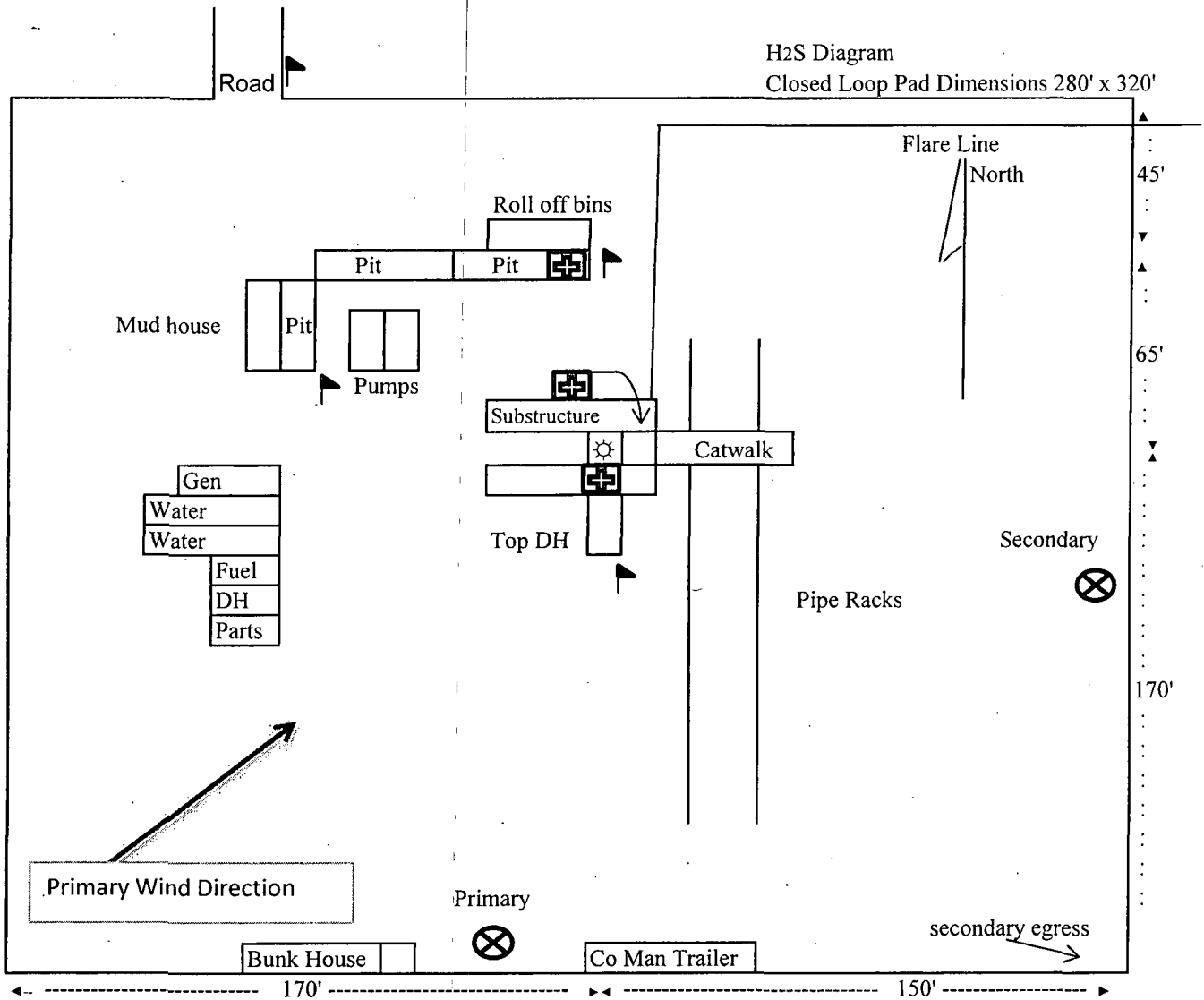


Exhibit 6



= Safety Stations



= Wind Markers



= H2S Monitors

Mewbourne Oil Company
Malaga 13 CN Fed Com #1H
250' FNL & 1900' FWL
Sec. 13 T25S R28E
Eddy County, NM

PECOS DISTRICT CONDITIONS OF APPROVAL

OPERATOR'S NAME:	Mewbourne Oil Co
LEASE NO.:	NM16104
WELL NAME & NO.:	1H Malaga 13 CN Fed Com
SURFACE HOLE FOOTAGE:	250'/ FNL & 1900'/ FWL
BOTTOM HOLE FOOTAGE:	330'/ FSL & 1980'/ FWL
LOCATION:	Section 13, T.25 S., R.28 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 COAs 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**
 - Construction Meeting Requirement
 - Access Road Requirement
 - Pad Construction Requirement
 - Production Facility Requirement
 - Communitization Agreement
- ☒ **Construction**
 - Notification
 - Topsoil
 - Closed Loop System
 - Federal Mineral Material Pits
 - Well Pads
 - Roads ----- ***Right-of-Way needed for off lease Road Route***
- ☐ **Road Section Diagram**
- ☒ **Drilling**
 - Medium Cave/Karst Potential
 - Logging requirements
 - Waste Material and Fluids
- ☒ **Production (Post Drilling)**
 - Well Structures & Facilities
 - Pipelines – Not approved with APD
 - Electric Lines– Not approved with APD
- ☐ **Interim Reclamation**
- ☐ **Final Abandonment & Reclamation**