

HOBBS OCD
FEB 05 2013

OCD-HOBBS

ATS-12-799

RECEIVED

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

SECRETARY'S POTASH

FORM APPROVED
OMB No. 1004-0137
Expires July 31, 2010

APPLICATION FOR PERMIT TO DRILL OR REENTER

1a. Type of work: ☒ DRILL ☐ REENTER		5. Lease Serial No. NM - 78273 SL & BHL
1b. Type of Well: ☒ Oil Well ☐ Gas Well ☐ Other ☐ Single Zone ☐ Multiple Zone		6. If 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 88241	3b. Phone No. (include area code) 575-393-5905	8. Lease Name and Well No. <39691> Marathon Road 14 NC Federal #1H
4. Location of Well (Report location clearly and in accordance with any State requirements.) At surface 170' FNL & 1980 FWL At proposed prod. zone 330' FNL & 2310' FWL (Sec 14 T20S R34E)		9. API Well No. 30-025-40984
14. Distance in miles and direction from nearest town or post office* 25 miles West of Hobbs, NM.		10. Field and Pool, or Exploratory Lea Bone Spring (R-1827-A) <37570>
15. Distance from proposed* location to nearest property or lease line, ft. (Also to nearest drig. unit line, if any) 170'	16. No. of acres in lease 400	11. Sec., T. R. M. or Blk. and Survey or Area Sec 23 T20S R34E
18. Distance from proposed location* to nearest well, drilling, completed, applied for, on this lease, ft. 200' (Aztec Fed. # 2H)	19. Proposed Depth 15,902 MD 10,900 TVD	12. County or Parish Lea
21. Elevations (Show whether DF, KDB, RT, GL, etc.) 3655' GL	22. Approximate date work will start*	13. State NM
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. | 4. Bond to cover the operations unless covered by an existing bond on file (see Item 20 above). |
| 2. A Drilling Plan. | 5. Operator certification |
| 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). | 6. Such other site specific information and/or plans as may be required by the BLM. |

25. Signature Bradley Bishop	Name (Printed/Typed) Bradley Bishop	Date 06/01/2012
Title		

Approved by (Signature) ADEN L. SEIDLITZ	Name (Printed/Typed) ADEN L. SEIDLITZ	Date JAN 25 2013
Title ACTING STATE DIRECTOR	Office NM STATE 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)
Capitan Controlled Water Basin**KC**
02/06/13SEE ATTACHED FOR
CONDITIONS OF APPROVALApproval Subject to General Requirements
& Special Stipulations Attached

FEB 07 2013

Drilling Program
Mewbourne Oil Company
Marathon Road "14" NC Federal #1H
170' FNL & 1980' FWL (SHL)
Sec 23-T20S-R34E
Lea County, New Mexico

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

Rustler	1590'
Top of Salt	1960'
Bottom of Salt	3400'
Yates	3590'
Seven Rivers	NP
Queen	NP
Capitan	4050'- may contain water
Grayburg	NP
*San Andreas	NP
*Delaware	5550'
*Bone Spring	8280'
Wolfcamp	will not penetrate

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

Water	Fresh water is anticipated @ 125' and will be protected by setting surface casing at 1625' 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. 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 3000# and all annulars 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 10498' & kick off to horizontal @ 10975' TVD. The well will be drilled to 15902' MD (10900' TVD). See attached directional plan.

5. Proposed casing and cementing program:

* See COA *

A. Casing Program:

Hole Size	Casing	Wt/Ft.	Grade	Depth	Jt Type
17 1/2"	13 3/8" (new)	61#	J55	0'-1625' 1655	BT&C
12 1/4"	9 5/8" (new)	40#	K55	0'-4200'	LT&C
12 1/4"	9 5/8" (new)	40#	HCK55	4200'-5400'	LT&C
8 3/4"	7" (new)	26#	P110	0'-10400' MD	LT&C
8 3/4"	7" (new)	26#	P110	10400'-11275' MD	BT&C
6 1/8"	4 1/2" (new)	11.6#	P110	11000'-15902' 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: 600 sacks *Lite "C" (35:65:4) cement w/salt and lost circulation material additives. Yield at 2.05 cuft/sk. 400 sks class "C". Yield at 1.34 cuft/sk. Cmt circulated to surface w/25% excess.
- ii. Intermediate Casing: 1000 sacks *Lite "C" (35:65:4) cement w/lost circulation material additives. Yield at 2.05 cuft/sk. 400 sks class "C" neat. Yield at 1.33 cuft/sk. Cmt circulated to surface w/25% excess.
- iii. Production Casing: 400 sacks *Lite "H" (35:65:6) cement w/salt and fluid loss additives. Yield at 2.47 cuft/sk. 400 sks class "H" w/salt and fluid loss additives. Yield at 1.18 cuft/sk. Cmt calculated to tieback into intermediate casing @ 4000' w/25% excess.

*Referring to above blends of lite 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.

*Mewbourne Oil Company reserves the right to change cement designs as hole conditions may warrant.

6. Mud Program:

<u>Interval</u>	<u>Type System</u>	<u>Weight</u>	<u>Viscosity</u>	<u>Fluid Loss</u>
0'-1625' 1625' 1655'	FW spud mud	8.6-9.0	32-34	NA
1625'-5400'	Brine water	10.0-10.2	28-30	NA
5400' 5400'-10400'	FW	8.3-8.6	28-30	NA
10400'- TD.	FW w/Polymer	8.5-8.7	32-35	15

7. Evaluation Program: *See COA*

Samples: 10' samples from surface casing to TD
Logging: GR, Neutron, & Gyro from KOP -100' (10400') to surface. GR from 10289' 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: 135 degree F
Maximum bottom hole pressure: 8.3 lbs/gal gradient or less

9. Anticipated Starting Date:

Mewbourne Oil Company intends to drill this well as soon as possible after receiving approval with approximately 60 days involved in drilling operations and an additional 10 days involved in completion operations on the project.

30-025-40984

Mewbourne Oil Co

Lea County, NM

Sec 23 T20S R34E

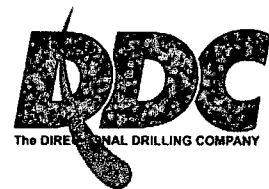
Marathon Road 14 NC Fed #1H

Wellbore #1

Plan: Design #1

DDC Well Planning Report

25 May, 2012



FEB 07 2013

DDC Well Planning Report



Database: EDM 5000.1 Single User Db
Company: Mewbourne Oil Co
Project: Lea County, NM
Site: Sec 23 T20S R34E
Well: Marathon Road 14 NC Fed #1H
Wellbore: Wellbore #1
Design: Design #1

Local Co-ordinate Reference: Well Marathon Road 14 NC Fed #1H
TVD Reference: WELL @ 3675.0usft (Patterson)
MD Reference: WELL @ 3675.0usft (Patterson)
North Reference: Grid
Survey Calculation Method: Minimum Curvature

Project: Lea County, NM

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 23 T20S R34E

Site Position: Northing: 570,285.20 usft Latitude: 32° 33' 55.060 N
From: Map Easting: 745,520.43 usft Longitude: 103° 32' 11.044 W
Position Uncertainty: 0.0 usft Slot Radius: 13-3/16" Grid Convergence: 0.43°

Well: Marathon Road 14 NC Fed #1H

Well Position: +N/-S 6.0 usft Northing: 570,291.15 usft Latitude: 32° 33' 55.032 N
+E/-W 1,169.7 usft Easting: 746,690.15 usft Longitude: 103° 31' 57.377 W
Position Uncertainty: 0.0 usft Wellhead Elevation: Ground Level: 3,655.0 usft

Wellbore: Wellbore #1

Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	IGRF2010	5/25/2012	7.48	60.49	48,730

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	3.24

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	
10,497.6	0.00	0.00	10,497.6	0.0	0.0	0.00	0.00	0.00	0.00	
11,255.3	90.92	3.24	10,975.0	484.4	27.4	12.00	12.00	0.43	3.24	
15,902.1	90.92	3.24	10,900.0	5,123.2	289.8	0.00	0.00	0.00	0.00	PBHL Marathon Ro

DDC Well Planning Report



Database: EDM 5000.1 Single User Db
Company: Mewbourne Oil Co
Project: Lea County, NM
Site: Sec 23 T20S R34E
Well: Marathon Road 14 NC Fed #1H
Wellbore: Wellbore #1
Design: Design #1

Local Co-ordinate Reference: Well Marathon Road 14 NC Fed #1H
TVD Reference: WELL @ 3675.0usft (Patterson)
MD Reference: WELL @ 3675.0usft (Patterson)
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)
0.0	0.00	0.00	0.0	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
200.0	0.00	0.00	200.0	0.0	0.0	0.0	0.00	0.00	0.00
300.0	0.00	0.00	300.0	0.0	0.0	0.0	0.00	0.00	0.00
400.0	0.00	0.00	400.0	0.0	0.0	0.0	0.00	0.00	0.00
500.0	0.00	0.00	500.0	0.0	0.0	0.0	0.00	0.00	0.00
600.0	0.00	0.00	600.0	0.0	0.0	0.0	0.00	0.00	0.00
700.0	0.00	0.00	700.0	0.0	0.0	0.0	0.00	0.00	0.00
800.0	0.00	0.00	800.0	0.0	0.0	0.0	0.00	0.00	0.00
900.0	0.00	0.00	900.0	0.0	0.0	0.0	0.00	0.00	0.00
1,000.0	0.00	0.00	1,000.0	0.0	0.0	0.0	0.00	0.00	0.00
1,100.0	0.00	0.00	1,100.0	0.0	0.0	0.0	0.00	0.00	0.00
1,200.0	0.00	0.00	1,200.0	0.0	0.0	0.0	0.00	0.00	0.00
1,300.0	0.00	0.00	1,300.0	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
1,500.0	0.00	0.00	1,500.0	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
1,700.0	0.00	0.00	1,700.0	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
1,900.0	0.00	0.00	1,900.0	0.0	0.0	0.0	0.00	0.00	0.00
2,000.0	0.00	0.00	2,000.0	0.0	0.0	0.0	0.00	0.00	0.00
2,100.0	0.00	0.00	2,100.0	0.0	0.0	0.0	0.00	0.00	0.00
2,200.0	0.00	0.00	2,200.0	0.0	0.0	0.0	0.00	0.00	0.00
2,300.0	0.00	0.00	2,300.0	0.0	0.0	0.0	0.00	0.00	0.00
2,400.0	0.00	0.00	2,400.0	0.0	0.0	0.0	0.00	0.00	0.00
2,500.0	0.00	0.00	2,500.0	0.0	0.0	0.0	0.00	0.00	0.00
2,600.0	0.00	0.00	2,600.0	0.0	0.0	0.0	0.00	0.00	0.00
2,700.0	0.00	0.00	2,700.0	0.0	0.0	0.0	0.00	0.00	0.00
2,800.0	0.00	0.00	2,800.0	0.0	0.0	0.0	0.00	0.00	0.00
2,900.0	0.00	0.00	2,900.0	0.0	0.0	0.0	0.00	0.00	0.00
3,000.0	0.00	0.00	3,000.0	0.0	0.0	0.0	0.00	0.00	0.00
3,100.0	0.00	0.00	3,100.0	0.0	0.0	0.0	0.00	0.00	0.00
3,200.0	0.00	0.00	3,200.0	0.0	0.0	0.0	0.00	0.00	0.00
3,300.0	0.00	0.00	3,300.0	0.0	0.0	0.0	0.00	0.00	0.00
3,400.0	0.00	0.00	3,400.0	0.0	0.0	0.0	0.00	0.00	0.00
3,500.0	0.00	0.00	3,500.0	0.0	0.0	0.0	0.00	0.00	0.00
3,600.0	0.00	0.00	3,600.0	0.0	0.0	0.0	0.00	0.00	0.00
3,700.0	0.00	0.00	3,700.0	0.0	0.0	0.0	0.00	0.00	0.00
3,800.0	0.00	0.00	3,800.0	0.0	0.0	0.0	0.00	0.00	0.00
3,900.0	0.00	0.00	3,900.0	0.0	0.0	0.0	0.00	0.00	0.00
4,000.0	0.00	0.00	4,000.0	0.0	0.0	0.0	0.00	0.00	0.00
4,100.0	0.00	0.00	4,100.0	0.0	0.0	0.0	0.00	0.00	0.00
4,200.0	0.00	0.00	4,200.0	0.0	0.0	0.0	0.00	0.00	0.00
4,300.0	0.00	0.00	4,300.0	0.0	0.0	0.0	0.00	0.00	0.00
4,400.0	0.00	0.00	4,400.0	0.0	0.0	0.0	0.00	0.00	0.00
4,500.0	0.00	0.00	4,500.0	0.0	0.0	0.0	0.00	0.00	0.00
4,600.0	0.00	0.00	4,600.0	0.0	0.0	0.0	0.00	0.00	0.00
4,700.0	0.00	0.00	4,700.0	0.0	0.0	0.0	0.00	0.00	0.00
4,800.0	0.00	0.00	4,800.0	0.0	0.0	0.0	0.00	0.00	0.00
4,900.0	0.00	0.00	4,900.0	0.0	0.0	0.0	0.00	0.00	0.00
5,000.0	0.00	0.00	5,000.0	0.0	0.0	0.0	0.00	0.00	0.00
5,100.0	0.00	0.00	5,100.0	0.0	0.0	0.0	0.00	0.00	0.00
5,200.0	0.00	0.00	5,200.0	0.0	0.0	0.0	0.00	0.00	0.00
5,300.0	0.00	0.00	5,300.0	0.0	0.0	0.0	0.00	0.00	0.00

DDC Well Planning Report



Database:	EDM 5000.1 Single User Db	Local Co-ordinate Reference:	Well Marathon Road 14 NC Fed #1H
Company:	Mewbourne Oil Co	TVD Reference:	WELL @ 3675.0usft (Patterson)
Project:	Lea County, NM	MD Reference:	WELL @ 3675.0usft (Patterson)
Site:	Sec 23 T20S R34E	North Reference:	Grid
Well:	Marathon Road 14 NC Fed #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)
5,400.0	0.00	0.00	5,400.0	0.0	0.0	0.0	0.00	0.00	0.00
5,500.0	0.00	0.00	5,500.0	0.0	0.0	0.0	0.00	0.00	0.00
5,600.0	0.00	0.00	5,600.0	0.0	0.0	0.0	0.00	0.00	0.00
5,700.0	0.00	0.00	5,700.0	0.0	0.0	0.0	0.00	0.00	0.00
5,800.0	0.00	0.00	5,800.0	0.0	0.0	0.0	0.00	0.00	0.00
5,900.0	0.00	0.00	5,900.0	0.0	0.0	0.0	0.00	0.00	0.00
6,000.0	0.00	0.00	6,000.0	0.0	0.0	0.0	0.00	0.00	0.00
6,100.0	0.00	0.00	6,100.0	0.0	0.0	0.0	0.00	0.00	0.00
6,200.0	0.00	0.00	6,200.0	0.0	0.0	0.0	0.00	0.00	0.00
6,300.0	0.00	0.00	6,300.0	0.0	0.0	0.0	0.00	0.00	0.00
6,400.0	0.00	0.00	6,400.0	0.0	0.0	0.0	0.00	0.00	0.00
6,500.0	0.00	0.00	6,500.0	0.0	0.0	0.0	0.00	0.00	0.00
6,600.0	0.00	0.00	6,600.0	0.0	0.0	0.0	0.00	0.00	0.00
6,700.0	0.00	0.00	6,700.0	0.0	0.0	0.0	0.00	0.00	0.00
6,800.0	0.00	0.00	6,800.0	0.0	0.0	0.0	0.00	0.00	0.00
6,900.0	0.00	0.00	6,900.0	0.0	0.0	0.0	0.00	0.00	0.00
7,000.0	0.00	0.00	7,000.0	0.0	0.0	0.0	0.00	0.00	0.00
7,100.0	0.00	0.00	7,100.0	0.0	0.0	0.0	0.00	0.00	0.00
7,200.0	0.00	0.00	7,200.0	0.0	0.0	0.0	0.00	0.00	0.00
7,300.0	0.00	0.00	7,300.0	0.0	0.0	0.0	0.00	0.00	0.00
7,400.0	0.00	0.00	7,400.0	0.0	0.0	0.0	0.00	0.00	0.00
7,500.0	0.00	0.00	7,500.0	0.0	0.0	0.0	0.00	0.00	0.00
7,600.0	0.00	0.00	7,600.0	0.0	0.0	0.0	0.00	0.00	0.00
7,700.0	0.00	0.00	7,700.0	0.0	0.0	0.0	0.00	0.00	0.00
7,800.0	0.00	0.00	7,800.0	0.0	0.0	0.0	0.00	0.00	0.00
7,900.0	0.00	0.00	7,900.0	0.0	0.0	0.0	0.00	0.00	0.00
8,000.0	0.00	0.00	8,000.0	0.0	0.0	0.0	0.00	0.00	0.00
8,100.0	0.00	0.00	8,100.0	0.0	0.0	0.0	0.00	0.00	0.00
8,200.0	0.00	0.00	8,200.0	0.0	0.0	0.0	0.00	0.00	0.00
8,300.0	0.00	0.00	8,300.0	0.0	0.0	0.0	0.00	0.00	0.00
8,400.0	0.00	0.00	8,400.0	0.0	0.0	0.0	0.00	0.00	0.00
8,500.0	0.00	0.00	8,500.0	0.0	0.0	0.0	0.00	0.00	0.00
8,600.0	0.00	0.00	8,600.0	0.0	0.0	0.0	0.00	0.00	0.00
8,700.0	0.00	0.00	8,700.0	0.0	0.0	0.0	0.00	0.00	0.00
8,800.0	0.00	0.00	8,800.0	0.0	0.0	0.0	0.00	0.00	0.00
8,900.0	0.00	0.00	8,900.0	0.0	0.0	0.0	0.00	0.00	0.00
9,000.0	0.00	0.00	9,000.0	0.0	0.0	0.0	0.00	0.00	0.00
9,100.0	0.00	0.00	9,100.0	0.0	0.0	0.0	0.00	0.00	0.00
9,200.0	0.00	0.00	9,200.0	0.0	0.0	0.0	0.00	0.00	0.00
9,300.0	0.00	0.00	9,300.0	0.0	0.0	0.0	0.00	0.00	0.00
9,400.0	0.00	0.00	9,400.0	0.0	0.0	0.0	0.00	0.00	0.00
9,500.0	0.00	0.00	9,500.0	0.0	0.0	0.0	0.00	0.00	0.00
9,600.0	0.00	0.00	9,600.0	0.0	0.0	0.0	0.00	0.00	0.00
9,700.0	0.00	0.00	9,700.0	0.0	0.0	0.0	0.00	0.00	0.00
9,800.0	0.00	0.00	9,800.0	0.0	0.0	0.0	0.00	0.00	0.00
9,900.0	0.00	0.00	9,900.0	0.0	0.0	0.0	0.00	0.00	0.00
10,000.0	0.00	0.00	10,000.0	0.0	0.0	0.0	0.00	0.00	0.00
10,100.0	0.00	0.00	10,100.0	0.0	0.0	0.0	0.00	0.00	0.00
10,200.0	0.00	0.00	10,200.0	0.0	0.0	0.0	0.00	0.00	0.00
10,300.0	0.00	0.00	10,300.0	0.0	0.0	0.0	0.00	0.00	0.00
10,400.0	0.00	0.00	10,400.0	0.0	0.0	0.0	0.00	0.00	0.00
Build 12°/100' @ 10498' MD									
10,497.6	0.00	0.00	10,497.6	0.0	0.0	0.0	0.00	0.00	0.00

DDC Well Planning Report



Database:	EDM 5000.1 Single User Db	Local Co-ordinate Reference:	Well Marathon Road 14 NC Fed #1H
Company:	Mewbourne Oil Co	TVD Reference:	WELL @ 3675.0usft (Patterson)
Project:	Lea County, NM	MD Reference:	WELL @ 3675.0usft (Patterson)
Site:	Sec 23 T20S R34E	North Reference:	Grid
Well:	Marathon Road 14 NC Fed #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)
10,500.0	0.29	3.24	10,500.0	0.0	0.0	0.0	12.00	12.00	0.00
10,600.0	12.29	3.24	10,599.2	10.9	0.6	10.9	12.00	12.00	0.00
10,700.0	24.29	3.24	10,694.0	42.2	2.4	42.3	12.00	12.00	0.00
10,800.0	36.29	3.24	10,780.2	92.5	5.2	92.6	12.00	12.00	0.00
10,900.0	48.29	3.24	10,854.0	159.5	9.0	159.8	12.00	12.00	0.00
11,000.0	60.29	3.24	10,912.3	240.4	13.6	240.8	12.00	12.00	0.00
11,100.0	72.29	3.24	10,952.4	331.7	18.8	332.2	12.00	12.00	0.00
11,200.0	84.29	3.24	10,972.7	429.3	24.3	429.9	12.00	12.00	0.00
EOB @ 11255' MD / 90.92° Inc / 3.24° Azm / 10975' TVD									
11,255.3	90.92	3.24	10,975.0	484.4	27.4	485.2	12.00	12.00	0.00
11,300.0	90.92	3.24	10,974.3	529.0	29.9	529.9	0.00	0.00	0.00
11,400.0	90.92	3.24	10,972.7	628.8	35.6	629.8	0.00	0.00	0.00
11,500.0	90.92	3.24	10,971.1	728.7	41.2	729.8	0.00	0.00	0.00
11,600.0	90.92	3.24	10,969.4	828.5	46.9	829.8	0.00	0.00	0.00
11,700.0	90.92	3.24	10,967.8	928.3	52.5	929.8	0.00	0.00	0.00
11,800.0	90.92	3.24	10,966.2	1,028.1	58.2	1,029.8	0.00	0.00	0.00
11,900.0	90.92	3.24	10,964.6	1,128.0	63.8	1,129.8	0.00	0.00	0.00
12,000.0	90.92	3.24	10,963.0	1,227.8	69.5	1,229.8	0.00	0.00	0.00
12,100.0	90.92	3.24	10,961.4	1,327.6	75.1	1,329.8	0.00	0.00	0.00
12,200.0	90.92	3.24	10,959.8	1,427.5	80.7	1,429.7	0.00	0.00	0.00
12,300.0	90.92	3.24	10,958.1	1,527.3	86.4	1,529.7	0.00	0.00	0.00
12,400.0	90.92	3.24	10,956.5	1,627.1	92.0	1,629.7	0.00	0.00	0.00
12,500.0	90.92	3.24	10,954.9	1,726.9	97.7	1,729.7	0.00	0.00	0.00
12,600.0	90.92	3.24	10,953.3	1,826.8	103.3	1,829.7	0.00	0.00	0.00
12,700.0	90.92	3.24	10,951.7	1,926.6	109.0	1,929.7	0.00	0.00	0.00
12,800.0	90.92	3.24	10,950.1	2,026.4	114.6	2,029.7	0.00	0.00	0.00
12,900.0	90.92	3.24	10,948.5	2,126.3	120.3	2,129.7	0.00	0.00	0.00
13,000.0	90.92	3.24	10,946.8	2,226.1	125.9	2,229.6	0.00	0.00	0.00
13,100.0	90.92	3.24	10,945.2	2,325.9	131.6	2,329.6	0.00	0.00	0.00
13,200.0	90.92	3.24	10,943.6	2,425.7	137.2	2,429.6	0.00	0.00	0.00
13,300.0	90.92	3.24	10,942.0	2,525.6	142.9	2,529.6	0.00	0.00	0.00
13,400.0	90.92	3.24	10,940.4	2,625.4	148.5	2,629.6	0.00	0.00	0.00
13,500.0	90.92	3.24	10,938.8	2,725.2	154.2	2,729.6	0.00	0.00	0.00
13,600.0	90.92	3.24	10,937.2	2,825.0	159.8	2,829.6	0.00	0.00	0.00
13,700.0	90.92	3.24	10,935.5	2,924.9	165.4	2,929.5	0.00	0.00	0.00
13,800.0	90.92	3.24	10,933.9	3,024.7	171.1	3,029.5	0.00	0.00	0.00
13,900.0	90.92	3.24	10,932.3	3,124.5	176.7	3,129.5	0.00	0.00	0.00
14,000.0	90.92	3.24	10,930.7	3,224.4	182.4	3,229.5	0.00	0.00	0.00
14,100.0	90.92	3.24	10,929.1	3,324.2	188.0	3,329.5	0.00	0.00	0.00
14,200.0	90.92	3.24	10,927.5	3,424.0	193.7	3,429.5	0.00	0.00	0.00
14,300.0	90.92	3.24	10,925.9	3,523.8	199.3	3,529.5	0.00	0.00	0.00
14,400.0	90.92	3.24	10,924.2	3,623.7	205.0	3,629.5	0.00	0.00	0.00
14,500.0	90.92	3.24	10,922.6	3,723.5	210.6	3,729.4	0.00	0.00	0.00
14,600.0	90.92	3.24	10,921.0	3,823.3	216.3	3,829.4	0.00	0.00	0.00
14,700.0	90.92	3.24	10,919.4	3,923.1	221.9	3,929.4	0.00	0.00	0.00
14,800.0	90.92	3.24	10,917.8	4,023.0	227.6	4,029.4	0.00	0.00	0.00
14,900.0	90.92	3.24	10,916.2	4,122.8	233.2	4,129.4	0.00	0.00	0.00
15,000.0	90.92	3.24	10,914.6	4,222.6	238.9	4,229.4	0.00	0.00	0.00
15,100.0	90.92	3.24	10,912.9	4,322.5	244.5	4,329.4	0.00	0.00	0.00
15,200.0	90.92	3.24	10,911.3	4,422.3	250.2	4,429.4	0.00	0.00	0.00
15,300.0	90.92	3.24	10,909.7	4,522.1	255.8	4,529.3	0.00	0.00	0.00
15,400.0	90.92	3.24	10,908.1	4,621.9	261.4	4,629.3	0.00	0.00	0.00
15,500.0	90.92	3.24	10,906.5	4,721.8	267.1	4,729.3	0.00	0.00	0.00
15,600.0	90.92	3.24	10,904.9	4,821.6	272.7	4,829.3	0.00	0.00	0.00

DDC Well Planning Report



Database:	EDM 5000.1 Single User Db	Local Co-ordinate Reference:	Well Marathon Road 14 NC Fed #1H
Company:	Mewbourne Oil Co	TVD Reference:	WELL @ 3675.0usft (Patterson)
Project:	Lea County, NM	MD Reference:	WELL @ 3675.0usft (Patterson)
Site:	Sec 23 T20S R34E	North Reference:	Grid
Well:	Marathon Road 14 NC Fed #1H	Survey Calculation Method:	Minimum Curvature
Wellbore:	Wellbore #1		
Design:	Design #1		

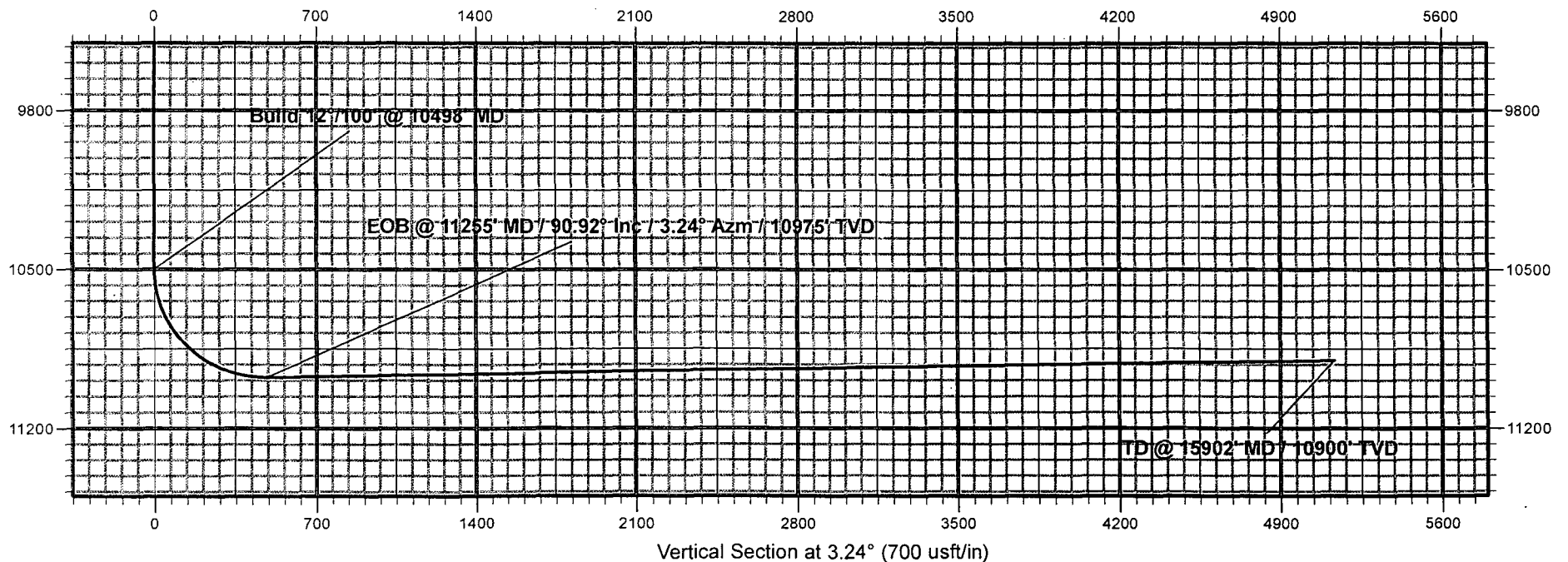
Planned Survey									
Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)
15,700.0	90.92	3.24	10,903.3	4,921.4	278.4	4,929.3	0.00	0.00	0.00
15,800.0	90.92	3.24	10,901.6	5,021.2	284.0	5,029.3	0.00	0.00	0.00
15,900.0	90.92	3.24	10,900.0	5,121.1	289.7	5,129.3	0.00	0.00	0.00
TD @ 15902' MD / 10900' TVD									
15,902.1	90.92	3.24	10,900.0	5,123.2	289.8	5,131.4	0.00	0.00	0.00

Design Targets									
Target Name	hit/miss target	Dip Angle (°)	Dip Dir. (°)	TVD (usft)	+N/-S (usft)	+E/-W (usft)	Northing (usft)	Easting (usft)	Latitude Longitude
PBHL Marathon Road		0.00	0.01	10,900.0	5,123.2	289.8	575,414.35	746,979.95	32° 34' 45.704 N 103° 31' 53.539 W
- plan hits target center									
- Point									

Plan Annotations				
Measured Depth (usft)	Vertical Depth (usft)	Local Coordinates		Comment
		+N/-S (usft)	+E/-W (usft)	
10,497.6	10,497.6	0.0	0.0	Build 12°/100' @ 10498' MD
11,255.3	10,975.0	484.4	27.4	EOB @ 11255' MD / 90.92° Inc / 3.24° Azm / 10975' TVD
15,902.1	10,900.0	5,123.2	289.8	TD @ 15902' MD / 10900' TVD

Mewbourne Oil Company

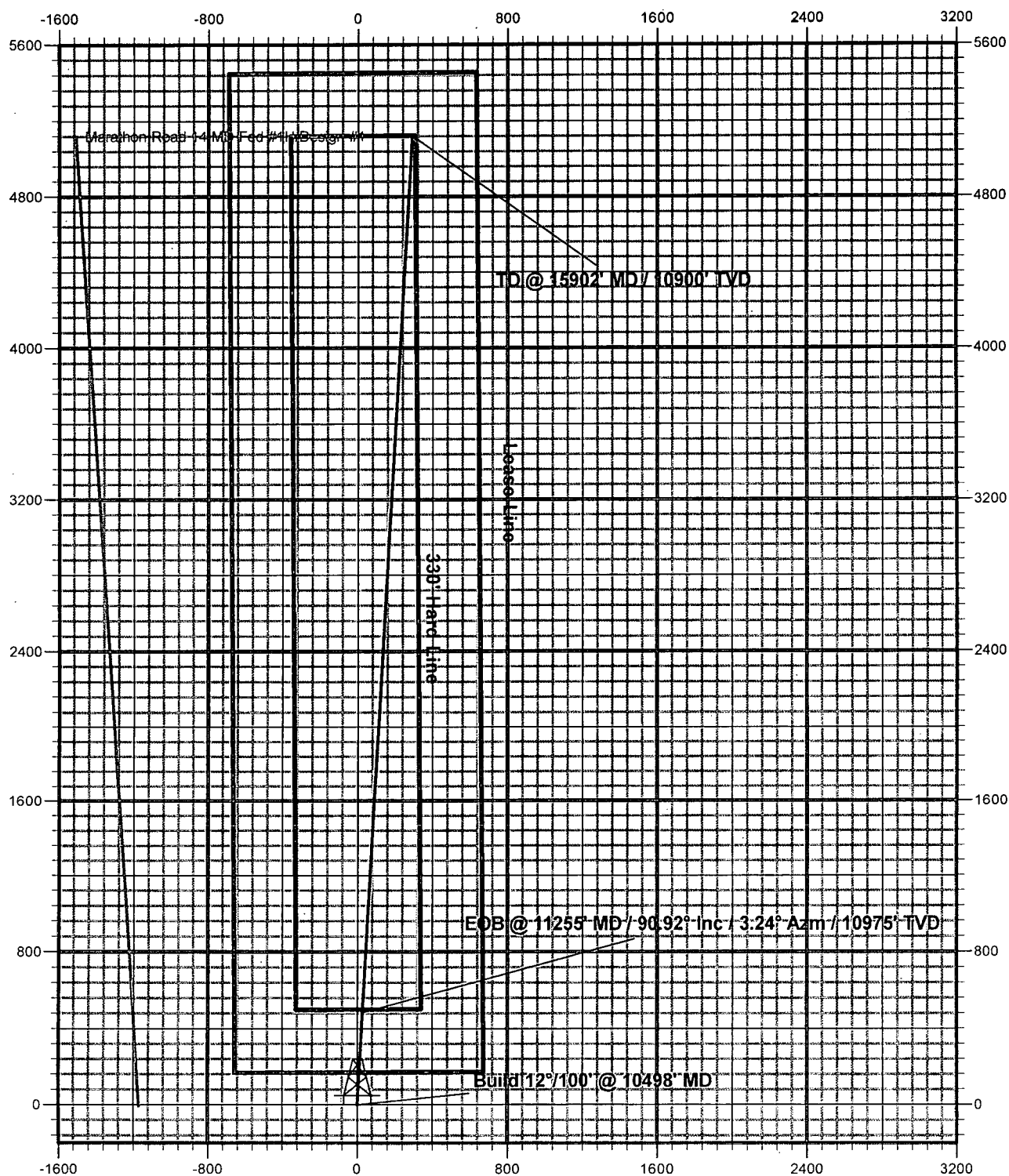
Lea County, NM
Marathon Road 14 NC Fed #1H
Quote 120408



Mewbourne Oil Company



Lea County, NM
Marathon Road 14 NC Fed #1H
Quote 120408



Notes Regarding Blowout Preventer

Mewbourne Oil Company

Marathon Road "14" NC Federal #1H

170' FNL & 1980' FWL (SHL)

Sec 23-T20S-R34E

Lea 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 13 3/8" casing and 3000 psi working pressure on 9 5/8" & 7".
- 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 an 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

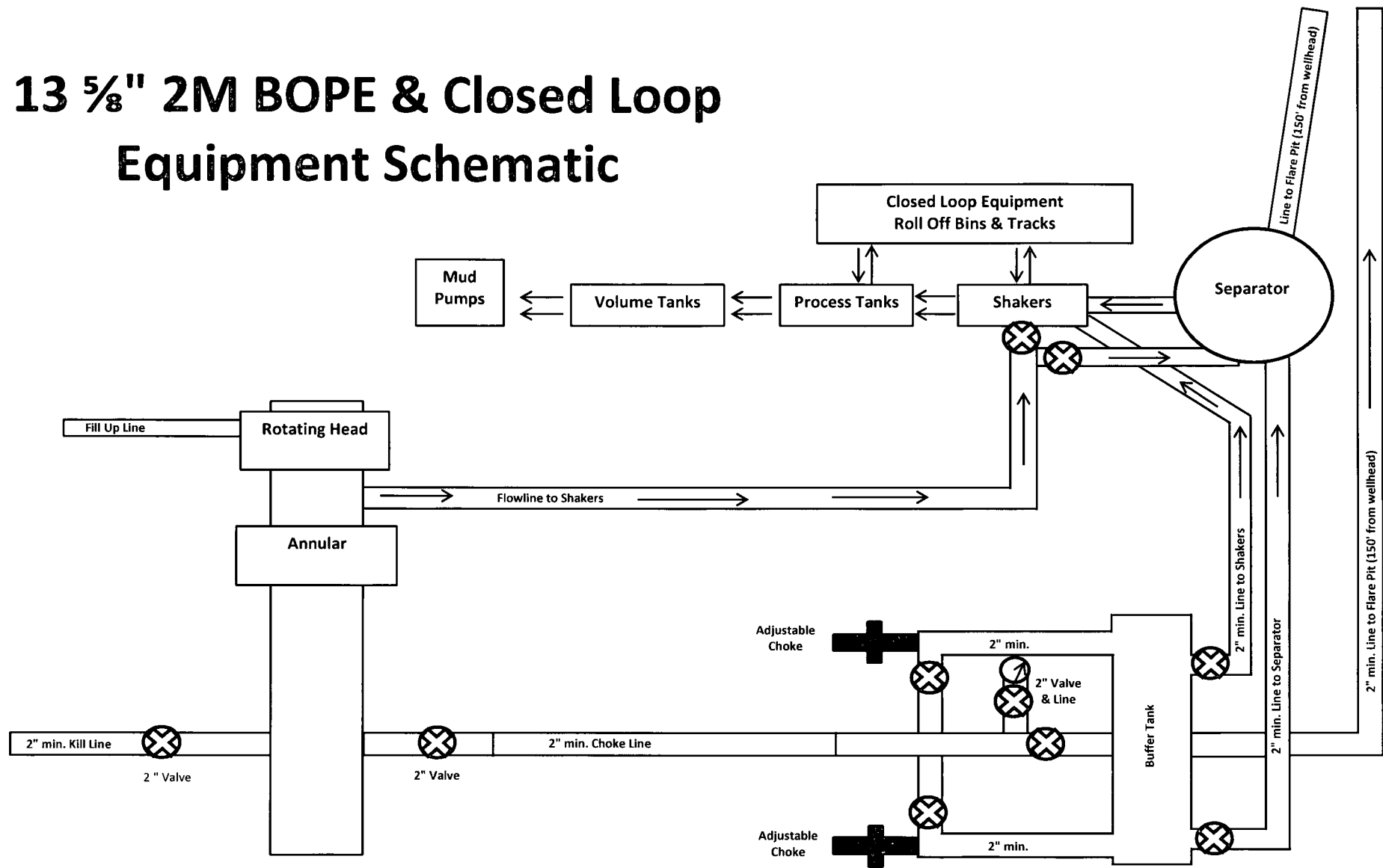


Exhibit 2
Well Name: Marathon Road 14 NC Federal #1H

11" 3M BOPE & Closed Loop Equipment Schematic

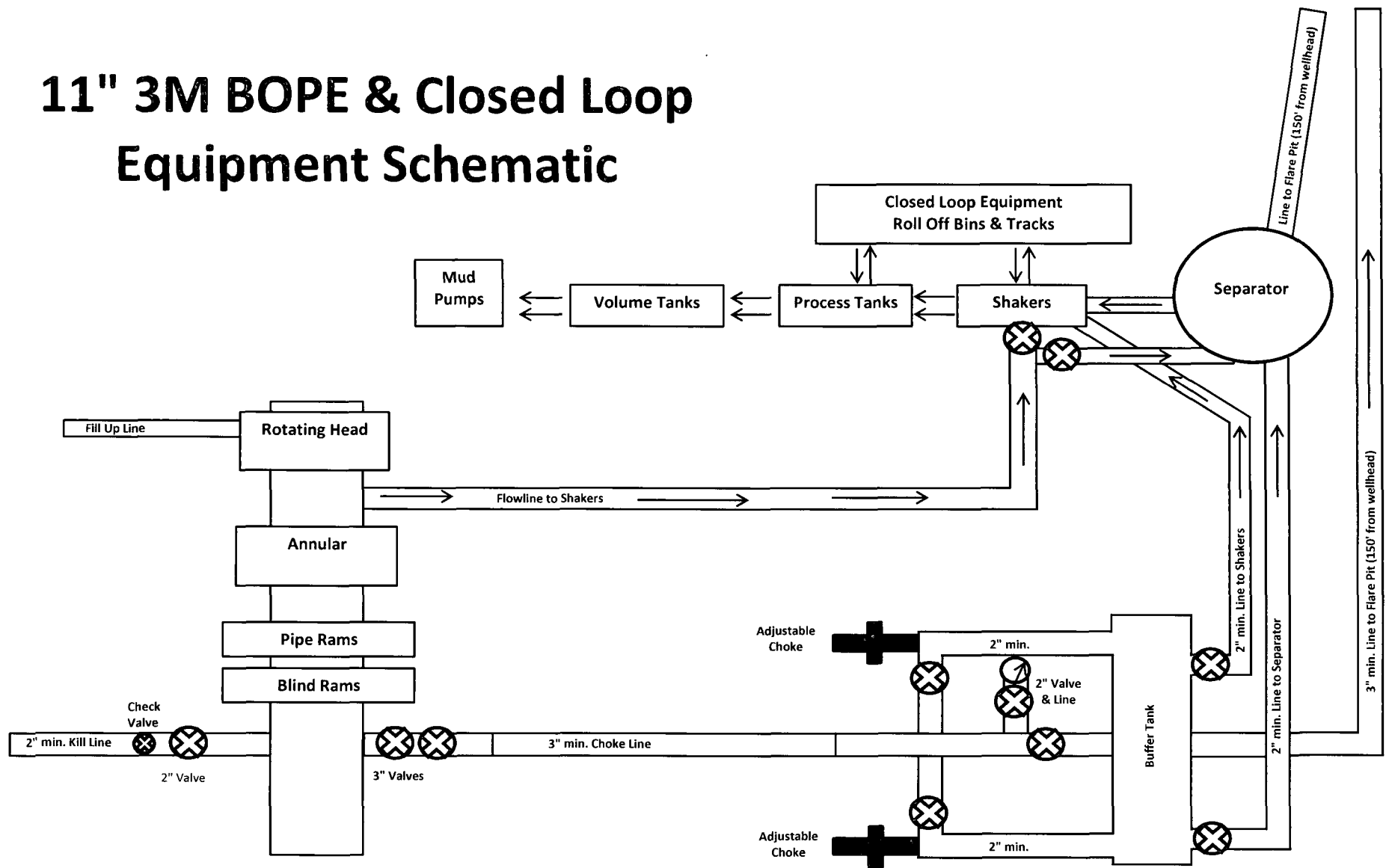


Exhibit 2
Well Name: Marathon Road 14 NC Federal #1H

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

H2S Diagram
Closed Loop Pad Dimensions 280' x 320'

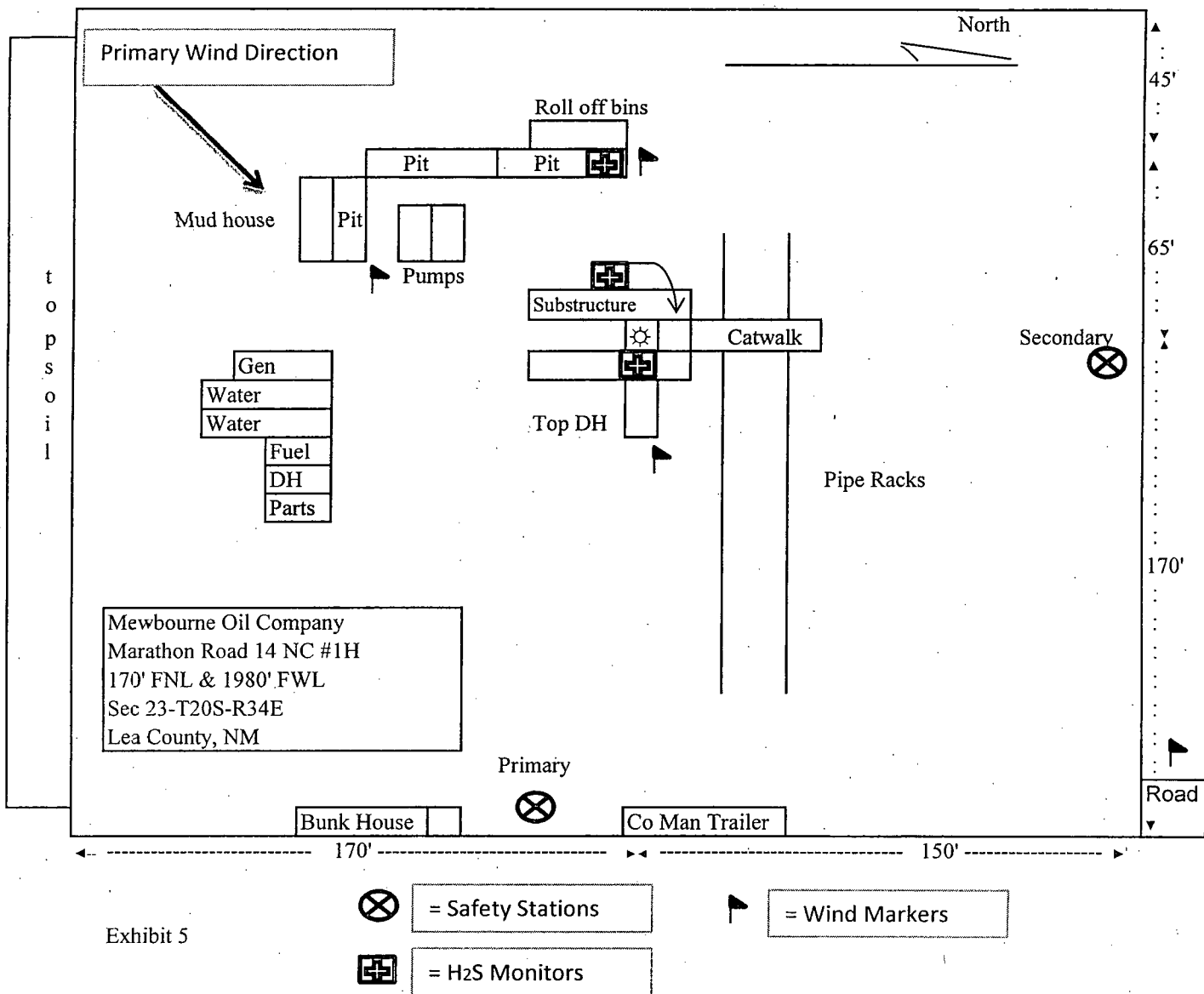


Exhibit 5

need flare line