

OCD Hobbs
HOBBS OCDFORM APPROVED
OMB No. 1004-0136
Expires January 31, 2004UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

SEP 29 2011

APPLICATION FOR PERMIT TO DRILL OR REENTER

1a Type of Work: ☒ DRILL ☐ REENTER1b Type of Well: ☒ Oil Well ☐ Gas Well ☐ Other ☐ Single Zone ☐ Multiple Zone

2 Name of Operator

Mewbourne Oil Company <14744>

3a. Address

PO Box 5270 Hobbs, NM 88241

3b. Phone No. (include area code)

575-393-5905

4 Location of Well (Report location clearly and in accordance with any State requirements.)

At surface 230' FSL & 2150' FEL Unit O

At proposed prod. zone 2310' FSL & 2150' FEL Unit J

14 Distance in miles and direction from nearest town or post office*

16 miles SW of Monument, NM

15 Distance from proposed*
location to nearest
property or lease line, ft.
(Also to nearest drig. unit line, if any) 230'

16. No. of Acres in lease

80

17 Spacing Unit dedicated to this well

80

18 Distance from proposed location*
to nearest well, drilling completed,
applied for, on this lease, ft

462'

19. Proposed Depth
15434' MD -12, 794
10883' TVD -10, 932

20. BLM/BIA Bond No. on file

NM1693, Nationwide

21 Elevations (Show whether DF, KDB, RT, GL, etc.)

3654' GL

22 Approximate date work will start*

ASAP

23 Estimated duration

45 days

24 Attachments

The following completed in accordance with the requirements of Onshore Oil and Gas Order No. 1, shall 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 shall 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
authorized officer.

25 Signature

Title

Hobbs Regulatory

Approved by (Signature)

Is/ Don Peterson

Name (Printed/Typed)

Jackie Lathan

Date

08/05/11

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.

*(Instructions on reverse)

CAPITAN CONTROLLED WATER BASIN

Conditions of Approval for Non Standard Location
Intent to drill ONLY-CANNOT produce until the
Non- Standard Location has been approved by OCD
Santa Fe Office.Witness Surface &
Intermediate CasingSEE ATTACHED FOR
CONDITIONS OF APPROVALAPPROVAL SUBJECT TO
GENERAL REQUIREMENTS
AND SPECIAL STIPULATIONS
ATTACHED

Drilling Program
Mewbourne Oil Company
Marathon Road "14" Federal Com #3H
230' FSL & 2150' FEL (SHL)
Sec 14-T20S-R34E
Lea County, New Mexico

HOBBS OCD

SEP 29 2011

RECEIVED

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

Rustler	1620'
Yates	3700'
Capitan top	4000'
Capitan base	5300'
*Delaware	5500'
*Bone Springs	8300'
*1 st Bone Spring Sand	9518'

← Missing Top of Salt

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 7" & 9 5/8" 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 10386' & kick off to horizontal @ 10959' TVD. The well will be drilled to 12793' MD (10932' TVD). See attached directional plan.

10959 OK

5. Proposed casing and cementing program:

A. Casing Program:

Hole Size	Casing	Wt/Ft.	Grade	Depth	Jt Type
17 1/2"	13 3/8" (new)	61#	J55	0'-1645' 1685	BT&C
12 1/4"	9 5/8" (new)	40#	K55	0'-4200'	ST&C
12 1/4"	9 5/8" (new)	40#	HCK55	4200'-5400' ✓	ST&C
8 3/4"	7" (new)	26#	P110	0'-10390' MD	LT&C
8 3/4"	7" (new)	26#	P110	10390'-11290' MD	BT&C
6 1/8"	4 1/2" (new)	11.6#	P110	11090'-12793' MD	LT&C

See COA

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

→ Subject to availability of casing.

See COA

B. Cementing Program:

** See COA For excess cement*

- i. Surface Casing: 540 sacks *Lite "C" (35:65:4) cement w/salt and lost circulation material additives. Yield at 2.15 cuft/sk. 200 sks class "C" w/1% CaCl₂. Yield at 1.34 cuft/sk. Cmt circulated to surface w/25% excess.
- ii. Intermediate Casing: 700 sacks *Lite "C" (35:65:4) cement w/lost circulation material additives. Yield at 2.15 cuft/sk. 400 sks class "C" neat. Yield at 1.33 cuft/sk. Cmt circulated to surface w/25% excess.
- iii. Production Casing: 280 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 @ 2380' 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 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:

See COA

<u>Interval</u>	<u>Type System</u>	<u>Weight</u>	<u>Viscosity</u>	<u>Fluid Loss</u>
0'-1625'	FW spud mud	8.6-9.0	32-34	NA
1625'-5400'	Brine water	10.0-10.2	28-30	NA
5400'-10300'	FW	8.3-8.6	28-30	NA
10300'- 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' (10287') to surface. GR from 10287' 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

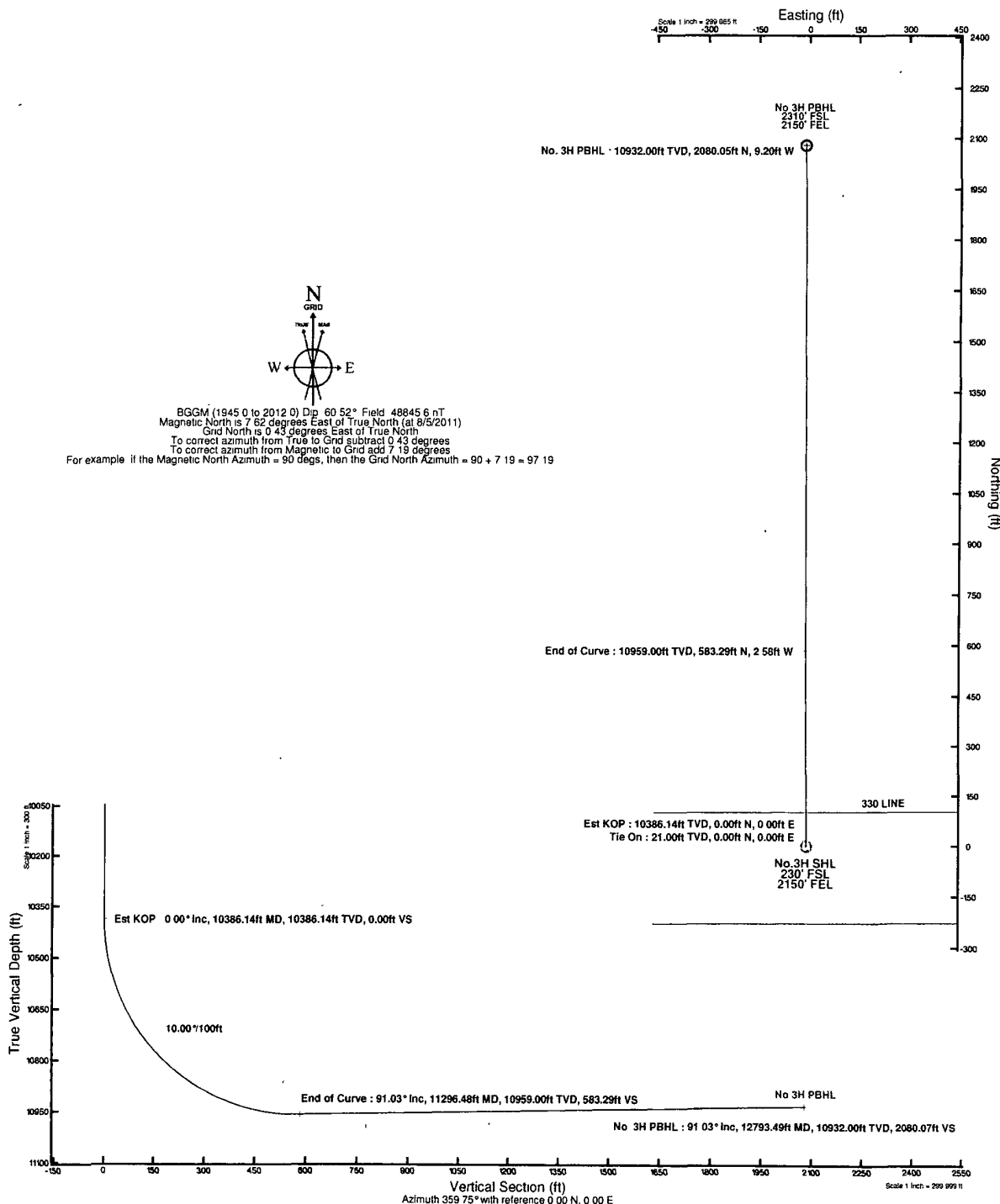
9. Anticipated Starting Date:

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 10 days involved in completion operations on the project.

Well Profile Data

Design Comment	MD (ft)	Inc (°)	Az (°)	TVD (ft)	Local N (ft)	Local E (ft)	DLS (°/100ft)	VS (ft)
Tie On	21.00	0.000	359.747	21.00	0.00	0.00	0.00	0.00
Est KOP	10386.14	0.000	359.747	10386.14	0.00	0.00	0.00	0.00
End of Curve	11296.48	91.034	359.747	10959.00	583.29	-2.58	10.00	583.29
No. 3H PBHL	12793.49	91.034	359.747	10932.00	2080.05	-9.20	0.00	2080.07

Plot reference wellpath is Prelim 2	Grid System NAD27 / TM New Mexico SP, Eastern Zone (3001), US feet
True vertical depths are referenced to Rig on No.3H SHL (KB)	North Reference Grid north
Measured depths are referenced to Rig on No.3H SHL (KB)	Scale True distance
Rig on No.3H SHL (KB) to Mean Sea Level 3675 feet	Depths are in feet
Mean Sea Level to Mud line (At Slot No.3H SHL) -3654 feet	Created by calphik on 8/5/2011
Coordinates are in feet referenced to Slot	



Planned Wellpath Report

 Mewbourne Oil Company

Prelim_2
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REFERENCE WELLPATH IDENTIFICATION			
Operator	Mewbourne Oil Company	Slot	No.3H SHL
Area	Lea County, NM	Well	No.3H
Field	(Marathon) Sec 14, T20S, R34E	Wellbore	No.3H PWB
Facility	Marathon Road 14 Fed Com No.3H		

REPORT SETUP INFORMATION			
Projection System	NAD27 / TM New Mexico SP, Eastern Zone (3001), US feet	Software System	WellArchitect® 3.0.0
North Reference	Grid	User	Calhphik
Scale	0.999979	Report Generated	8/5/2011 at 11:22:02 AM
Convergence at slot	0.43° East	Database/Source file	WA_Midland/No.3H_PWB.xml

WELLPATH LOCATION						
	Local coordinates		Grid coordinates		Geographic coordinates	
	North[ft]	East[ft]	Easting[US ft]	Northing[US ft]	Latitude	Longitude
Slot Location	0.00	0.00	746857.90	570692.00	32°33'58.986"N	103°31'55.381"W
Facility Reference Pt			746857.90	570692.00	32°33'58.986"N	103°31'55.381"W
Field Reference Pt			749494.08	570810.74	32°33'59.964"N	103°31'24.569"W

WELLPATH DATUM			
Calculation method	Minimum curvature	Rig on No.3H SHL (KB) to Mean Sea Level	21.00ft
Horizontal Reference Pt	Slot	Rig on No.3H SHL (KB) to Mean Sea Level	3675.00ft
Vertical Reference Pt	Rig on No.3H SHL (KB)	Rig on No.3H SHL (KB) to Mud Line at Slot (No.3H SHL)	21.00ft
MD Reference Pt	Rig on No.3H SHL (KB)	Section Origin	N 0.00, E 0.00 ft
Field Vertical Reference	Mean Sea Level	Section Azimuth	359.75°

Planned Wellpath Report

 Mewbourne Oil Company

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REFERENCE WELLPATH IDENTIFICATION			
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Field	(Marathon) Sec 14, T20S, R34E	Wellbore	No.3H PWB
Facility	Marathon Road 14 Fed Com No.3H		

WELLPATH DATA (132 stations) † = interpolated/extrapolated station												
MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Vert Sect [ft]	North [ft]	East [ft]	Grid East [US ft]	Grid North [US ft]	Latitude	Longitude	DLS [°/100ft]	Comments
0.00†	0.000	359.747	0.00	0.00	0.00	0.00	746857.90	570692.00	32°33'58.986"N	103°31'55.381"W	0.00	
21.00	0.000	359.747	21.00	0.00	0.00	0.00	746857.90	570692.00	32°33'58.986"N	103°31'55.381"W	0.00	Tie On
121.00†	0.000	359.747	121.00	0.00	0.00	0.00	746857.90	570692.00	32°33'58.986"N	103°31'55.381"W	0.00	
221.00†	0.000	359.747	221.00	0.00	0.00	0.00	746857.90	570692.00	32°33'58.986"N	103°31'55.381"W	0.00	
321.00†	0.000	359.747	321.00	0.00	0.00	0.00	746857.90	570692.00	32°33'58.986"N	103°31'55.381"W	0.00	
421.00†	0.000	359.747	421.00	0.00	0.00	0.00	746857.90	570692.00	32°33'58.986"N	103°31'55.381"W	0.00	
521.00†	0.000	359.747	521.00	0.00	0.00	0.00	746857.90	570692.00	32°33'58.986"N	103°31'55.381"W	0.00	
621.00†	0.000	359.747	621.00	0.00	0.00	0.00	746857.90	570692.00	32°33'58.986"N	103°31'55.381"W	0.00	
721.00†	0.000	359.747	721.00	0.00	0.00	0.00	746857.90	570692.00	32°33'58.986"N	103°31'55.381"W	0.00	
821.00†	0.000	359.747	821.00	0.00	0.00	0.00	746857.90	570692.00	32°33'58.986"N	103°31'55.381"W	0.00	
921.00†	0.000	359.747	921.00	0.00	0.00	0.00	746857.90	570692.00	32°33'58.986"N	103°31'55.381"W	0.00	
1021.00†	0.000	359.747	1021.00	0.00	0.00	0.00	746857.90	570692.00	32°33'58.986"N	103°31'55.381"W	0.00	
1121.00†	0.000	359.747	1121.00	0.00	0.00	0.00	746857.90	570692.00	32°33'58.986"N	103°31'55.381"W	0.00	
1221.00†	0.000	359.747	1221.00	0.00	0.00	0.00	746857.90	570692.00	32°33'58.986"N	103°31'55.381"W	0.00	
1321.00†	0.000	359.747	1321.00	0.00	0.00	0.00	746857.90	570692.00	32°33'58.986"N	103°31'55.381"W	0.00	
1421.00†	0.000	359.747	1421.00	0.00	0.00	0.00	746857.90	570692.00	32°33'58.986"N	103°31'55.381"W	0.00	
1521.00†	0.000	359.747	1521.00	0.00	0.00	0.00	746857.90	570692.00	32°33'58.986"N	103°31'55.381"W	0.00	
1621.00†	0.000	359.747	1621.00	0.00	0.00	0.00	746857.90	570692.00	32°33'58.986"N	103°31'55.381"W	0.00	
1721.00†	0.000	359.747	1721.00	0.00	0.00	0.00	746857.90	570692.00	32°33'58.986"N	103°31'55.381"W	0.00	
1821.00†	0.000	359.747	1821.00	0.00	0.00	0.00	746857.90	570692.00	32°33'58.986"N	103°31'55.381"W	0.00	
1921.00†	0.000	359.747	1921.00	0.00	0.00	0.00	746857.90	570692.00	32°33'58.986"N	103°31'55.381"W	0.00	
2021.00†	0.000	359.747	2021.00	0.00	0.00	0.00	746857.90	570692.00	32°33'58.986"N	103°31'55.381"W	0.00	
2121.00†	0.000	359.747	2121.00	0.00	0.00	0.00	746857.90	570692.00	32°33'58.986"N	103°31'55.381"W	0.00	
2221.00†	0.000	359.747	2221.00	0.00	0.00	0.00	746857.90	570692.00	32°33'58.986"N	103°31'55.381"W	0.00	
2321.00†	0.000	359.747	2321.00	0.00	0.00	0.00	746857.90	570692.00	32°33'58.986"N	103°31'55.381"W	0.00	
2421.00†	0.000	359.747	2421.00	0.00	0.00	0.00	746857.90	570692.00	32°33'58.986"N	103°31'55.381"W	0.00	
2521.00†	0.000	359.747	2521.00	0.00	0.00	0.00	746857.90	570692.00	32°33'58.986"N	103°31'55.381"W	0.00	
2621.00†	0.000	359.747	2621.00	0.00	0.00	0.00	746857.90	570692.00	32°33'58.986"N	103°31'55.381"W	0.00	
2721.00†	0.000	359.747	2721.00	0.00	0.00	0.00	746857.90	570692.00	32°33'58.986"N	103°31'55.381"W	0.00	
2821.00†	0.000	359.747	2821.00	0.00	0.00	0.00	746857.90	570692.00	32°33'58.986"N	103°31'55.381"W	0.00	
2921.00†	0.000	359.747	2921.00	0.00	0.00	0.00	746857.90	570692.00	32°33'58.986"N	103°31'55.381"W	0.00	
3021.00†	0.000	359.747	3021.00	0.00	0.00	0.00	746857.90	570692.00	32°33'58.986"N	103°31'55.381"W	0.00	
3121.00†	0.000	359.747	3121.00	0.00	0.00	0.00	746857.90	570692.00	32°33'58.986"N	103°31'55.381"W	0.00	
3221.00†	0.000	359.747	3221.00	0.00	0.00	0.00	746857.90	570692.00	32°33'58.986"N	103°31'55.381"W	0.00	
3321.00†	0.000	359.747	3321.00	0.00	0.00	0.00	746857.90	570692.00	32°33'58.986"N	103°31'55.381"W	0.00	
3421.00†	0.000	359.747	3421.00	0.00	0.00	0.00	746857.90	570692.00	32°33'58.986"N	103°31'55.381"W	0.00	
3521.00†	0.000	359.747	3521.00	0.00	0.00	0.00	746857.90	570692.00	32°33'58.986"N	103°31'55.381"W	0.00	
3621.00†	0.000	359.747	3621.00	0.00	0.00	0.00	746857.90	570692.00	32°33'58.986"N	103°31'55.381"W	0.00	
3721.00†	0.000	359.747	3721.00	0.00	0.00	0.00	746857.90	570692.00	32°33'58.986"N	103°31'55.381"W	0.00	
3821.00†	0.000	359.747	3821.00	0.00	0.00	0.00	746857.90	570692.00	32°33'58.986"N	103°31'55.381"W	0.00	
3921.00†	0.000	359.747	3921.00	0.00	0.00	0.00	746857.90	570692.00	32°33'58.986"N	103°31'55.381"W	0.00	
4021.00†	0.000	359.747	4021.00	0.00	0.00	0.00	746857.90	570692.00	32°33'58.986"N	103°31'55.381"W	0.00	
4121.00†	0.000	359.747	4121.00	0.00	0.00	0.00	746857.90	570692.00	32°33'58.986"N	103°31'55.381"W	0.00	
4221.00†	0.000	359.747	4221.00	0.00	0.00	0.00	746857.90	570692.00	32°33'58.986"N	103°31'55.381"W	0.00	
4321.00†	0.000	359.747	4321.00	0.00	0.00	0.00	746857.90	570692.00	32°33'58.986"N	103°31'55.381"W	0.00	

Planned Wellpath Report

 Mewbourne Oil Company

Prelim_2

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WELLPATH DATA (132 stations) † = interpolated/extrapolated station

MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Vert Sect [ft]	North [ft]	East [ft]	Grid East [US ft]	Grid North [US ft]	Latitude	Longitude	DLS [°/100ft]	Comments
4421.00†	0.000	359.747	4421.00	0.00	0.00	0.00	746857.90	570692.00	32°33'58.986"N	103°31'55.381"W	0.00	
4521.00†	0.000	359.747	4521.00	0.00	0.00	0.00	746857.90	570692.00	32°33'58.986"N	103°31'55.381"W	0.00	
4621.00†	0.000	359.747	4621.00	0.00	0.00	0.00	746857.90	570692.00	32°33'58.986"N	103°31'55.381"W	0.00	
4721.00†	0.000	359.747	4721.00	0.00	0.00	0.00	746857.90	570692.00	32°33'58.986"N	103°31'55.381"W	0.00	
4821.00†	0.000	359.747	4821.00	0.00	0.00	0.00	746857.90	570692.00	32°33'58.986"N	103°31'55.381"W	0.00	
4921.00†	0.000	359.747	4921.00	0.00	0.00	0.00	746857.90	570692.00	32°33'58.986"N	103°31'55.381"W	0.00	
5021.00†	0.000	359.747	5021.00	0.00	0.00	0.00	746857.90	570692.00	32°33'58.986"N	103°31'55.381"W	0.00	
5121.00†	0.000	359.747	5121.00	0.00	0.00	0.00	746857.90	570692.00	32°33'58.986"N	103°31'55.381"W	0.00	
5221.00†	0.000	359.747	5221.00	0.00	0.00	0.00	746857.90	570692.00	32°33'58.986"N	103°31'55.381"W	0.00	
5321.00†	0.000	359.747	5321.00	0.00	0.00	0.00	746857.90	570692.00	32°33'58.986"N	103°31'55.381"W	0.00	
5421.00†	0.000	359.747	5421.00	0.00	0.00	0.00	746857.90	570692.00	32°33'58.986"N	103°31'55.381"W	0.00	
5521.00†	0.000	359.747	5521.00	0.00	0.00	0.00	746857.90	570692.00	32°33'58.986"N	103°31'55.381"W	0.00	
5621.00†	0.000	359.747	5621.00	0.00	0.00	0.00	746857.90	570692.00	32°33'58.986"N	103°31'55.381"W	0.00	
5721.00†	0.000	359.747	5721.00	0.00	0.00	0.00	746857.90	570692.00	32°33'58.986"N	103°31'55.381"W	0.00	
5821.00†	0.000	359.747	5821.00	0.00	0.00	0.00	746857.90	570692.00	32°33'58.986"N	103°31'55.381"W	0.00	
5921.00†	0.000	359.747	5921.00	0.00	0.00	0.00	746857.90	570692.00	32°33'58.986"N	103°31'55.381"W	0.00	
6021.00†	0.000	359.747	6021.00	0.00	0.00	0.00	746857.90	570692.00	32°33'58.986"N	103°31'55.381"W	0.00	
6121.00†	0.000	359.747	6121.00	0.00	0.00	0.00	746857.90	570692.00	32°33'58.986"N	103°31'55.381"W	0.00	
6221.00†	0.000	359.747	6221.00	0.00	0.00	0.00	746857.90	570692.00	32°33'58.986"N	103°31'55.381"W	0.00	
6321.00†	0.000	359.747	6321.00	0.00	0.00	0.00	746857.90	570692.00	32°33'58.986"N	103°31'55.381"W	0.00	
6421.00†	0.000	359.747	6421.00	0.00	0.00	0.00	746857.90	570692.00	32°33'58.986"N	103°31'55.381"W	0.00	
6521.00†	0.000	359.747	6521.00	0.00	0.00	0.00	746857.90	570692.00	32°33'58.986"N	103°31'55.381"W	0.00	
6621.00†	0.000	359.747	6621.00	0.00	0.00	0.00	746857.90	570692.00	32°33'58.986"N	103°31'55.381"W	0.00	
6721.00†	0.000	359.747	6721.00	0.00	0.00	0.00	746857.90	570692.00	32°33'58.986"N	103°31'55.381"W	0.00	
6821.00†	0.000	359.747	6821.00	0.00	0.00	0.00	746857.90	570692.00	32°33'58.986"N	103°31'55.381"W	0.00	
6921.00†	0.000	359.747	6921.00	0.00	0.00	0.00	746857.90	570692.00	32°33'58.986"N	103°31'55.381"W	0.00	
7021.00†	0.000	359.747	7021.00	0.00	0.00	0.00	746857.90	570692.00	32°33'58.986"N	103°31'55.381"W	0.00	
7121.00†	0.000	359.747	7121.00	0.00	0.00	0.00	746857.90	570692.00	32°33'58.986"N	103°31'55.381"W	0.00	
7221.00†	0.000	359.747	7221.00	0.00	0.00	0.00	746857.90	570692.00	32°33'58.986"N	103°31'55.381"W	0.00	
7321.00†	0.000	359.747	7321.00	0.00	0.00	0.00	746857.90	570692.00	32°33'58.986"N	103°31'55.381"W	0.00	
7421.00†	0.000	359.747	7421.00	0.00	0.00	0.00	746857.90	570692.00	32°33'58.986"N	103°31'55.381"W	0.00	
7521.00†	0.000	359.747	7521.00	0.00	0.00	0.00	746857.90	570692.00	32°33'58.986"N	103°31'55.381"W	0.00	
7621.00†	0.000	359.747	7621.00	0.00	0.00	0.00	746857.90	570692.00	32°33'58.986"N	103°31'55.381"W	0.00	
7721.00†	0.000	359.747	7721.00	0.00	0.00	0.00	746857.90	570692.00	32°33'58.986"N	103°31'55.381"W	0.00	
7821.00†	0.000	359.747	7821.00	0.00	0.00	0.00	746857.90	570692.00	32°33'58.986"N	103°31'55.381"W	0.00	
7921.00†	0.000	359.747	7921.00	0.00	0.00	0.00	746857.90	570692.00	32°33'58.986"N	103°31'55.381"W	0.00	
8021.00†	0.000	359.747	8021.00	0.00	0.00	0.00	746857.90	570692.00	32°33'58.986"N	103°31'55.381"W	0.00	
8121.00†	0.000	359.747	8121.00	0.00	0.00	0.00	746857.90	570692.00	32°33'58.986"N	103°31'55.381"W	0.00	
8221.00†	0.000	359.747	8221.00	0.00	0.00	0.00	746857.90	570692.00	32°33'58.986"N	103°31'55.381"W	0.00	
8321.00†	0.000	359.747	8321.00	0.00	0.00	0.00	746857.90	570692.00	32°33'58.986"N	103°31'55.381"W	0.00	
8421.00†	0.000	359.747	8421.00	0.00	0.00	0.00	746857.90	570692.00	32°33'58.986"N	103°31'55.381"W	0.00	
8521.00†	0.000	359.747	8521.00	0.00	0.00	0.00	746857.90	570692.00	32°33'58.986"N	103°31'55.381"W	0.00	
8621.00†	0.000	359.747	8621.00	0.00	0.00	0.00	746857.90	570692.00	32°33'58.986"N	103°31'55.381"W	0.00	
8721.00†	0.000	359.747	8721.00	0.00	0.00	0.00	746857.90	570692.00	32°33'58.986"N	103°31'55.381"W	0.00	
8821.00†	0.000	359.747	8821.00	0.00	0.00	0.00	746857.90	570692.00	32°33'58.986"N	103°31'55.381"W	0.00	

Planned Wellpath Report

 Mewbourne Oil Company

Prelim_2
Page 4 of 4



REFERENCE WELLPATH IDENTIFICATION			
Operator	Mewbourne Oil Company	Slot	No.3H SHL
Area	Lea County, NM	Well	No.3H
Field	(Marathon) Sec 14, T20S, R34E	Wellbore	No.3H PWB
Facility	Marathon Road 14 Fed Com No.3H		

WELLPATH DATA (132 stations) † = interpolated/extrapolated station												
MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Vert Sect [ft]	North [ft]	East [ft]	Grid East [US ft]	Grid North [US ft]	Latitude	Longitude	DLS [°/100ft]	Comments
8921.00†	0.000	359.747	8921.00	0.00	0.00	0.00	746857.90	570692.00	32°33'58.986"N	103°31'55.381"W	0.00	
9021.00†	0.000	359.747	9021.00	0.00	0.00	0.00	746857.90	570692.00	32°33'58.986"N	103°31'55.381"W	0.00	
9121.00†	0.000	359.747	9121.00	0.00	0.00	0.00	746857.90	570692.00	32°33'58.986"N	103°31'55.381"W	0.00	
9221.00†	0.000	359.747	9221.00	0.00	0.00	0.00	746857.90	570692.00	32°33'58.986"N	103°31'55.381"W	0.00	
9321.00†	0.000	359.747	9321.00	0.00	0.00	0.00	746857.90	570692.00	32°33'58.986"N	103°31'55.381"W	0.00	
9421.00†	0.000	359.747	9421.00	0.00	0.00	0.00	746857.90	570692.00	32°33'58.986"N	103°31'55.381"W	0.00	
9521.00†	0.000	359.747	9521.00	0.00	0.00	0.00	746857.90	570692.00	32°33'58.986"N	103°31'55.381"W	0.00	
9621.00†	0.000	359.747	9621.00	0.00	0.00	0.00	746857.90	570692.00	32°33'58.986"N	103°31'55.381"W	0.00	
9721.00†	0.000	359.747	9721.00	0.00	0.00	0.00	746857.90	570692.00	32°33'58.986"N	103°31'55.381"W	0.00	
9821.00†	0.000	359.747	9821.00	0.00	0.00	0.00	746857.90	570692.00	32°33'58.986"N	103°31'55.381"W	0.00	
9921.00†	0.000	359.747	9921.00	0.00	0.00	0.00	746857.90	570692.00	32°33'58.986"N	103°31'55.381"W	0.00	
10021.00†	0.000	359.747	10021.00	0.00	0.00	0.00	746857.90	570692.00	32°33'58.986"N	103°31'55.381"W	0.00	
10121.00†	0.000	359.747	10121.00	0.00	0.00	0.00	746857.90	570692.00	32°33'58.986"N	103°31'55.381"W	0.00	
10221.00†	0.000	359.747	10221.00	0.00	0.00	0.00	746857.90	570692.00	32°33'58.986"N	103°31'55.381"W	0.00	
10321.00†	0.000	359.747	10321.00	0.00	0.00	0.00	746857.90	570692.00	32°33'58.986"N	103°31'55.381"W	0.00	
10386.14	0.000	359.747	10386.14	0.00	0.00	0.00	746857.90	570692.00	32°33'58.986"N	103°31'55.381"W	0.00	Est KOP
10421.00†	3.486	359.747	10420.98	1.06	1.06	0.00	746857.90	570693.06	32°33'58.997"N	103°31'55.381"W	10.00	
10521.00†	13.486	359.747	10519.76	15.80	15.80	-0.07	746857.83	570707.80	32°33'59.143"N	103°31'55.381"W	10.00	
10621.00†	23.486	359.747	10614.48	47.47	47.46	-0.21	746857.69	570739.46	32°33'59.456"N	103°31'55.380"W	10.00	
10721.00†	33.486	359.747	10702.26	95.10	95.10	-0.42	746857.48	570787.10	32°33'59.927"N	103°31'55.378"W	10.00	
10821.00†	43.486	359.747	10780.44	157.25	157.25	-0.70	746857.20	570849.25	32°34'00.542"N	103°31'55.376"W	10.00	
10921.00†	53.486	359.747	10846.63	232.04	232.03	-1.03	746856.87	570924.03	32°34'01.282"N	103°31'55.373"W	10.00	
11021.00†	63.486	359.747	10898.84	317.18	317.18	-1.40	746856.50	571009.17	32°34'02.125"N	103°31'55.370"W	10.00	
11121.00†	73.486	359.747	10935.46	410.09	410.09	-1.81	746856.09	571102.08	32°34'03.044"N	103°31'55.366"W	10.00	
11221.00†	83.486	359.747	10955.40	507.96	507.95	-2.25	746855.65	571199.94	32°34'04.012"N	103°31'55.363"W	10.00	
11296.48	91.034	359.747	10959.00	583.29	583.29	-2.58	746855.32	571275.27	32°34'04.758"N	103°31'55.360"W	10.00	End of Curve
11321.00†	91.034	359.747	10958.56	607.81	607.81	-2.69	746855.21	571299.79	32°34'05.001"N	103°31'55.359"W	0.00	
11421.00†	91.034	359.747	10956.76	707.80	707.79	-3.13	746854.77	571399.77	32°34'05.990"N	103°31'55.356"W	0.00	
11521.00†	91.034	359.747	10954.95	807.78	807.77	-3.57	746854.33	571499.75	32°34'06.979"N	103°31'55.352"W	0.00	
11621.00†	91.034	359.747	10953.15	907.76	907.76	-4.02	746853.89	571599.73	32°34'07.969"N	103°31'55.348"W	0.00	
11721.00†	91.034	359.747	10951.35	1007.75	1007.74	-4.46	746853.44	571699.72	32°34'08.958"N	103°31'55.345"W	0.00	
11821.00†	91.034	359.747	10949.54	1107.73	1107.72	-4.90	746853.00	571799.70	32°34'09.947"N	103°31'55.341"W	0.00	
11921.00†	91.034	359.747	10947.74	1207.72	1207.70	-5.34	746852.56	571899.68	32°34'10.936"N	103°31'55.337"W	0.00	
12021.00†	91.034	359.747	10945.93	1307.70	1307.69	-5.78	746852.12	571999.66	32°34'11.926"N	103°31'55.334"W	0.00	
12121.00†	91.034	359.747	10944.13	1407.68	1407.67	-6.23	746851.67	572099.64	32°34'12.915"N	103°31'55.330"W	0.00	
12221.00†	91.034	359.747	10942.33	1507.67	1507.65	-6.67	746851.23	572199.62	32°34'13.904"N	103°31'55.327"W	0.00	
12321.00†	91.034	359.747	10940.52	1607.65	1607.63	-7.11	746850.79	572299.60	32°34'14.894"N	103°31'55.323"W	0.00	
12421.00†	91.034	359.747	10938.72	1707.63	1707.62	-7.55	746850.35	572399.58	32°34'15.883"N	103°31'55.319"W	0.00	
12521.00†	91.034	359.747	10936.92	1807.62	1807.60	-8.00	746849.91	572499.56	32°34'16.872"N	103°31'55.316"W	0.00	
12621.00†	91.034	359.747	10935.11	1907.60	1907.58	-8.44	746849.46	572599.54	32°34'17.862"N	103°31'55.312"W	0.00	
12721.00†	91.034	359.747	10933.31	2007.59	2007.57	-8.88	746849.02	572699.52	32°34'18.851"N	103°31'55.308"W	0.00	
12793.49	91.034	359.747	10932.00†	2080.07	2080.05	-9.20	746848.70	572772.00	32°34'19.568"N	103°31'55.306"W	0.00	No. 3H PBHL

TARGETS									
Name	MD [ft]	TVD [ft]	North [ft]	East [ft]	Grid East [US ft]	Grid North [US ft]	Latitude	Longitude	Shape

1) No.3H PBHL	12793.49	10932.00	2080.05	-9.20	746848.70	572772.00	32°34'19.568"N	103°31'55.306"W	point
EST LP		10962.00	589.31	998.42	747856.30	571281.30	32°34'04.743"N	103°31'43.664"W	point

SURVEY PROGRAM - Ref Wellbore: No.3H PWB Ref Wellpath: Prelim_2				
Start MD [ft]	End MD [ft]	Positional Uncertainty Model	Log Name/Comment	Wellbore
21.00	12793.49	NaviTrak (Standard)		No.3H PWB

Mewbourne Oil Company

BOP Scematic for

12 1/4" Hole



Bell Nipple

Flow Line

Annular

13 5/8" x 2000 psi

Adjustable Choke

X

X

Min 2" 2000 psi Valve

Min 2" 2000 psi Valve

Drilling Spool

Min 3" 2000 psi Valve

Min 3" 2000 psi Valve

Min 2" x 2000 psi kill line

X	3" 2000 psi ck lin
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gauge	X
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☒

X

Min 2" 2000 psi Valve

X

Adjustable Choke

Exhibit #2

Marathon Road 14 Fed Com #3H
230' FSL & 2150' FEL
Sec 14, T20S, R34E
Lea, County
New Mexico

BOP Schematic for 6 1/8" & 8 3/4" Holes

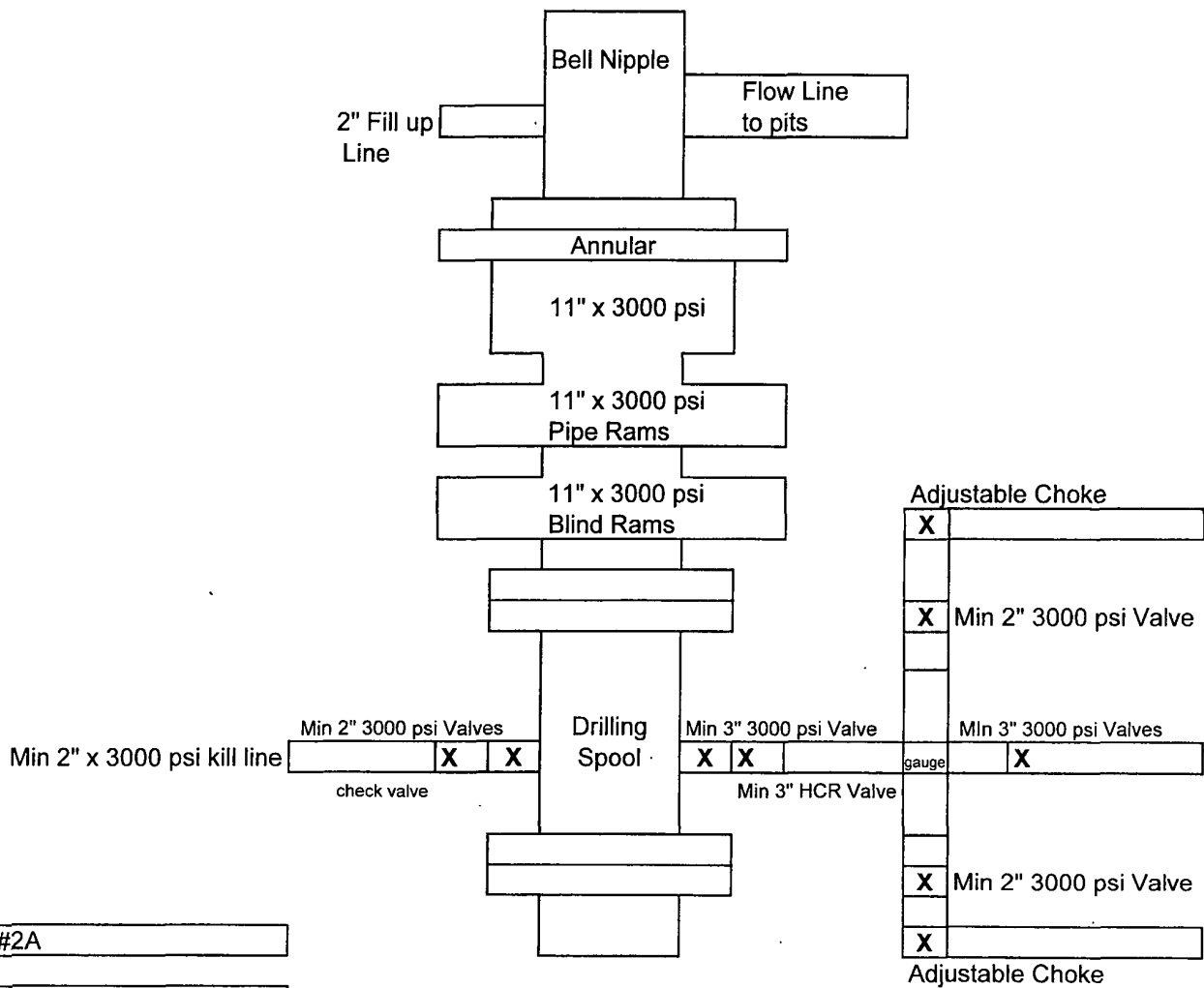


Exhibit #2A

Marathon Road 14 Fed Com #3H
230' FSL & 2150' FEL
Sec 14, T20S, R34E
Lea, County
New Mexico

Notes Regarding Blowout Preventer

Mewbourne Oil Company

Marathon Road "14" Federal Com #3H

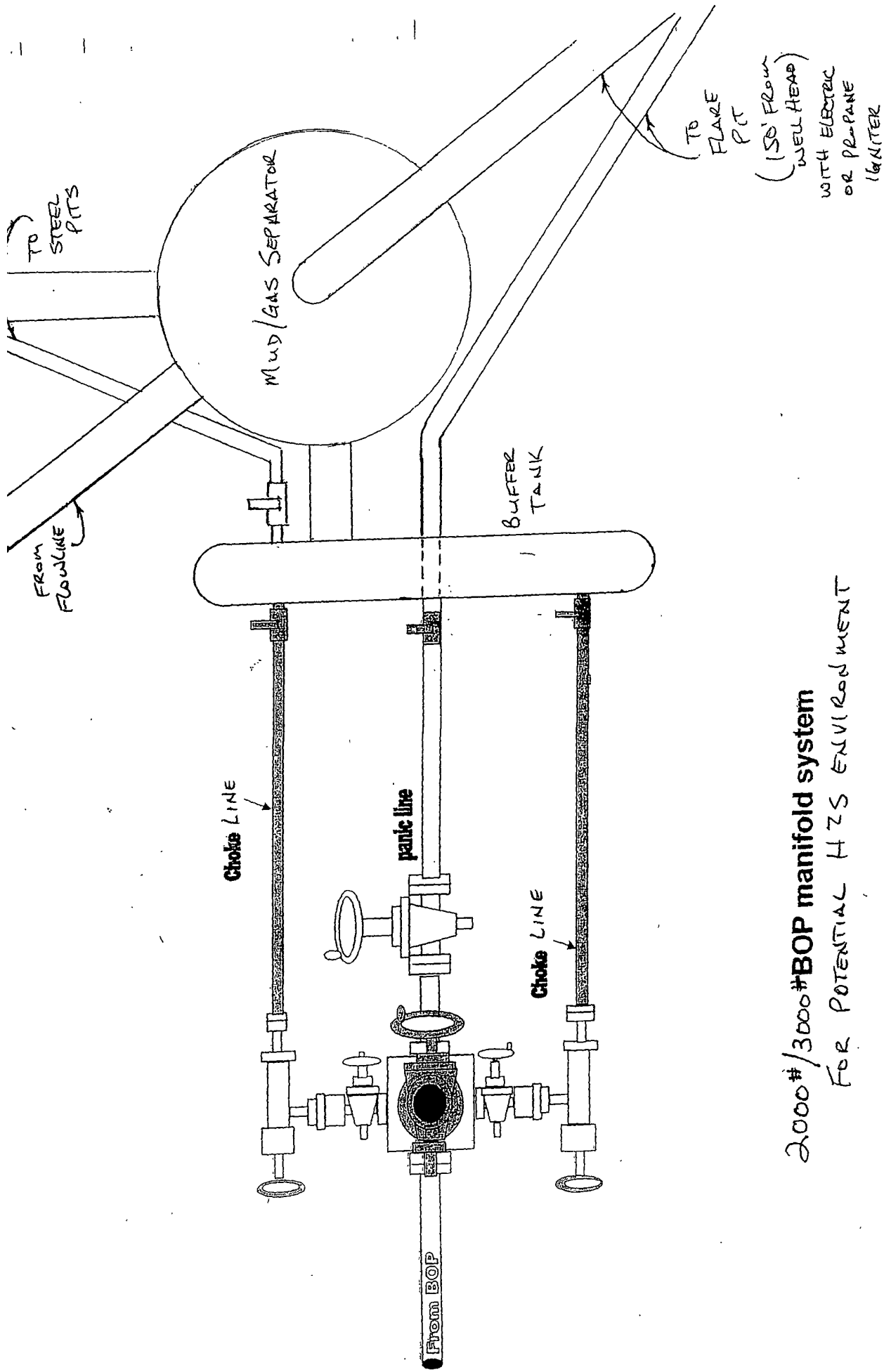
230' FSL & 2150' FEL (SHL)

Sec 14-T20S-R34E

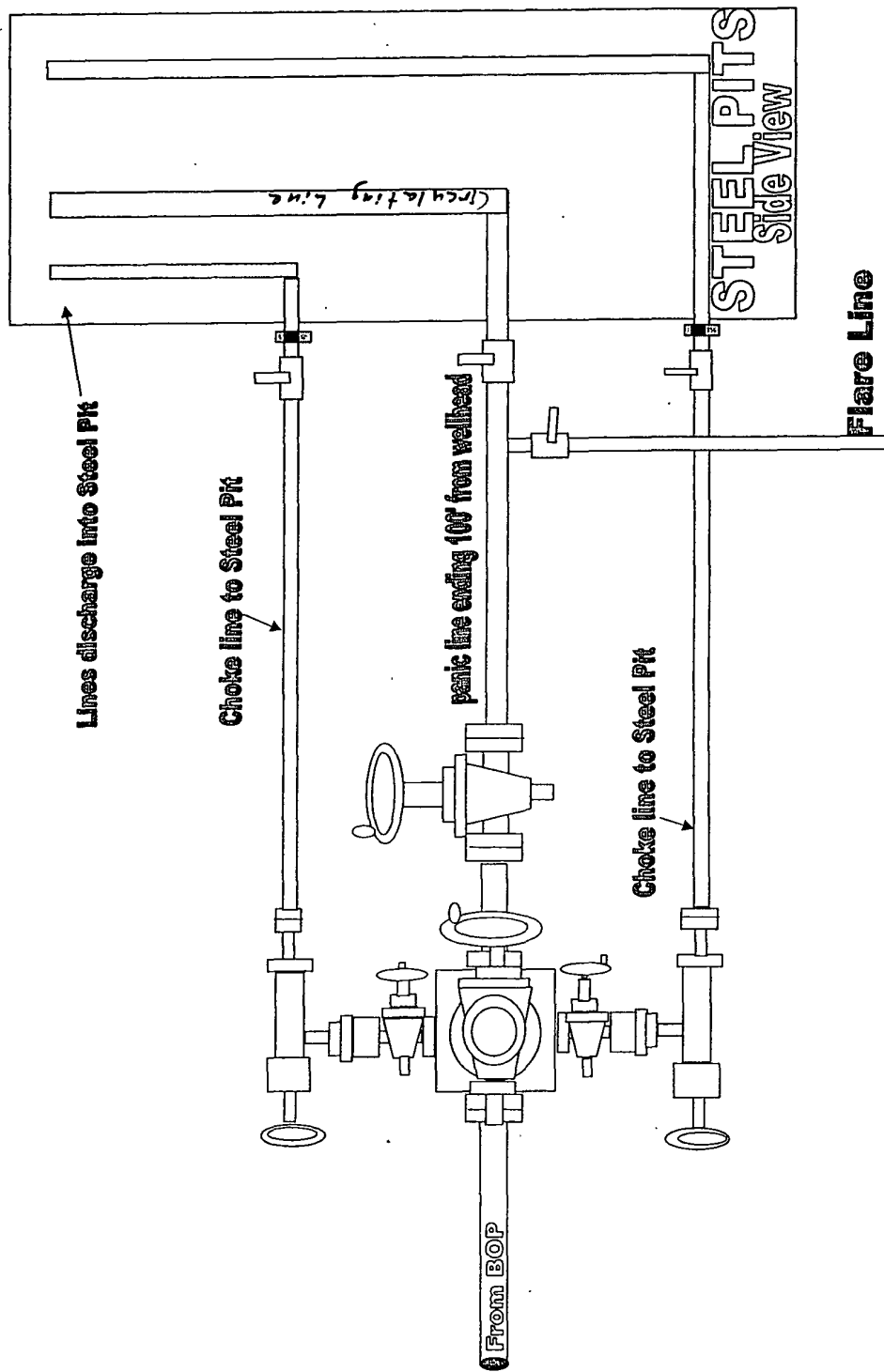
Lea County, New Mexico

- 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 and accumulator of at least 40 gallon capacity, two independent sources of pressure on closing unit, and meet all other API specifications.



2000#/3000# BOP manifold system
FOR POTENTIAL H₂S ENVIRONMENT



2000# & 3000# BOP manifold system for Exhibit 2 & 2A

Closed Loop Pad Dimensions 280' x 320'

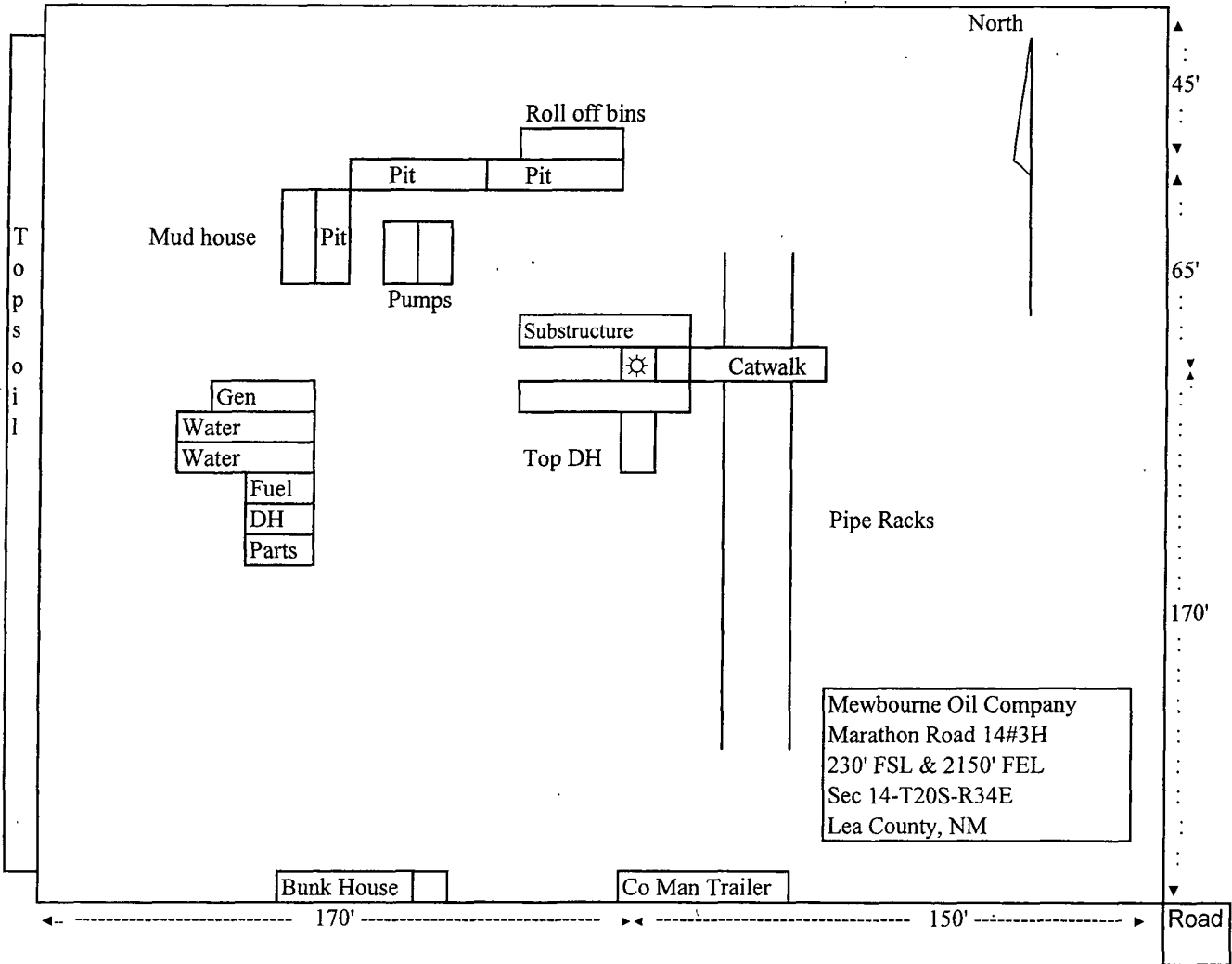


Exhibit 5