

13-688

HOBBS OCD
Form 3160-3
(August 2007)
JUL 01 2013
RECEIVED

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

OCD Hobbs

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

APPLICATION FOR PERMIT TO DRILL OR REENTER

1a. Type of work: ☒ DRILL ☐ REENTER		7. If Unit or CA Agreement, Name and No.
1b. Type of Well: ☒ Oil Well ☐ Gas Well ☐ Other ☐ Single Zone ☐ Multiple Zone		8. Lease Name and Well No. <4000> Excalibur 17 MP Fed Com #1H
2. Name of Operator Mewbourne Oil Company		9. API Well No. 30-025-41255
3a. Address PO Box 5270 Hobbs, NM 88241	3b. Phone No. (include area code) 575-393-5905	10. Field and Pool, or Exploratory Tonto Bone Spring (59475)
4. Location of Well (Report location clearly and in accordance with any State requirements.) At surface 500' FSL & 20' FWL, Sec. 17 T19S R33E Unit M At proposed prod. zone 500' FSL & 330' FEL, Sec. 17 T19S R33E Unit P		11. Sec., T. R. M. or Blk. and Survey or Area Sec. 17 T19S R33E
14. Distance in miles and direction from nearest town or post office* 31 miles West of Hobbs, NM		12. County or Parish Lea
15. Distance from proposed* location to nearest property or lease line, ft. (Also to nearest drig. unit line, if any) 20'		13. State NM
16. No. of acres in lease NM-97895 - 120 acres NM-077004 - 802.25 acres		17. Spacing Unit dedicated to this well 160
18. Distance from proposed location* to nearest well, drilling, completed, applied for, on this lease, ft. 160' - William Bobb #1		20. BLM/BIA Bond No. on file NM-1693 Nationwide, NMB-000919
21. Elevations (Show whether DF, KDB, RT, GL, etc.) 3627' GL		22. Approximate date work will start* 05/13/2013
		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 4-12-13
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Approved by (Signature) /s/George MacDonell	Name (Printed/Typed) /s/George MacDonell	Date JUN 26 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)

Capitan Controlled Water Basin

LZ
07/10/13

Approval Subject to General Requirements
& Special Stipulations Attached

SEE ATTACHED FOR
CONDITIONS OF APPROVAL
JUL 11 2013

dmr

Drilling Program
Mewbourne Oil Company
Excalibur 17 MP Fed Com #1H
500' FSL & 20' FWL (SHL)
Sec 17-T19S-R33E
Lea County, New Mexico

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

Rustler	1320'
Top Salt	1490'
Base Salt	2620'
Yates	3120'
Seven Rivers	NP
Queen	NP
Top Capitan	3400'
Base Capitan	4210'
Grayburg	NP
San Andres	NP
Glorieta	NP
Yeso	NP
*Lamar	5990'
*Bone Springs	7600'
*1 st Bone Spring Sand	8900'
*2 nd Bone Spring Sand	9470'
3 rd Bone Spring Sand	Will Not Penetrate
Wolfcamp	Will Not Penetrate

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

Water	<i>See COA</i>	Fresh water is anticipated @ 150' & will be protected by setting surface casing at 1345' 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:

MOC requests a variance to install a 2M diverter after running 20" casing 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 strings. 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 both Annular BOPs 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 9420' & kick off to horizontal @ 9897' TVD. The well will be drilled to 14627' MD (9962' TVD). See attached directional plan.

5. Proposed casing and cementing program:

A. Casing Program:

Hole Size	Casing	Wt/Ft.	Grade	Depth	Jt Type
26"	20" (new)	133#	K55	0'- 1345' 1425'	BT&C
17 1/2"	13 3/8" (new)	61#	J55	0'-2500'	ST&C
See COA 17 1/2"	13 3/8" (new)	68#	J55	2500'- 3200' 3500'	ST&C
12 1/4"	9 5/8" (new)	36#	J55	0'-3000'	LT&C
12 1/4"	9 5/8" (new)	40#	J55	3000'-4000'	LT&C
12 1/4"	9 5/8" (new)	40#	N80	4000'- 4400' 5100'	LT&C
8 3/4"	7" (new)	26#	P110	0'-9420' MD	LT&C
8 3/4"	7" (new)	26#	P110	9420'-10163' MD	BT&C
6 1/8"	4 1/2" (new)	13.5#	P110	9963'-14627' 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: 1800 sacks Class "C" (35:65:4) light cement w/ 2% CaCl₂ & LCM additives. Yield at 2.15 cuft/sk. 200 sacks Class "C" cement w/ 1% CaCl₂. Yield at 1.34 cuft/sk. Cmt circulated to surface w/100% excess.
- See COA ii. 1st Intermediate Casing: 1200 sacks Class "C" (35:65:4) light cement w/ salt and LCM additives. Yield at 2.15 cuft/sk. 200 sacks Class "C" cement w/2% CaCl₂. Yield at 1.34 cuft/sk. Cmt circulated to surface w/25% excess.
- iii. 2nd Intermediate Casing: 720 sacks Class "C" (35:65:4) light cement w/ salt and LCM additives. Yield at 2.0 cuft/sk. 200 sacks Class "C" cement w/2% CaCl₂. Yield at 1.34 cuft/sk. Cmt circulated to surface w/25% excess.
- See COA iii. Production Casing: 340 sacks Class H light cement (35:65:4) with fluid loss, LCM, & salt additives. Yield at 2.12 cuft/sk. 400 sacks Class H cement containing fluid loss additives. Yield at 1.18 cuft/sk cmt calculated to tie into 9 5/8" casing at ~~4200'~~ 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:

Interval	Type System	Weight	Viscosity	Fluid Loss
See COA 0' - 1345' 1425'	FW spud mud	8.6-9.0	32-34	NA
1345' - 3200' 3500'	Brine water	10.0-10.2	28-30	NA
3200' - 4400' 5100'	Fresh Water	8.4-8.6	28-30	NA
4400' - 9420' (KOP)	Cut Brine	8.5-8.7	28-30	15
9420' - TD	Cut Brine w/Polymer	8.5-8.7	32-35	15

**Visual mud monitoring system shall be in place to detect volume changes indicating loss or gain of circulation fluid volume. Sufficient mud materials will be kept on location at all times to combat abnormal conditions.

7. Evaluation Program:

Samples: 10' samples from surface casing to TD
Logging: GR & Gyro from KOP -100' (9320') to surface. GR from 9320' to TD.

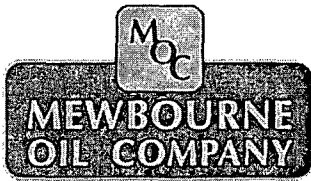
Drilling Program
Mewbourne Oil Company
Excalibur 17 MP Fed Com #1H
Page 3

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 ($.43368 \times 9962' = 4320$ 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 10 days involved in completion operations on the project.



Mewbourne Oil Company

LEA COUNTY, NM (NAD83)

SECTION 17

Excalibur 17 MP Federal Com #1H

Wellbore #1

Plan: Proposal 1

Standard Planning Report

09 April, 2013





Stryker Directional Planning Report



Database:	EDM 5000.1 Single User Db	Local Co-ordinate Reference:	Well Excalibur 17 MP Federal Com #1H
Company:	Mewbourne Oil Company	TVD Reference:	WELL @ 3647.0usft (Original Well Elev)
Project:	LEA COUNTY, NM (NAD83)	MD Reference:	WELL @ 3647.0usft (Original Well Elev)
Site:	SECTION 17	North Reference:	Grid
Well:	Excalibur 17 MP Federal Com #1H	Survey Calculation Method:	Minimum Curvature
Wellbore:	Wellbore #1		
Design:	Proposal 1		

Project	LEA COUNTY, NM (NAD83), NM-East		
Map System:	US State Plane 1983	System Datum:	Mean Sea Level
Geo Datum:	North American Datum 1983		
Map Zone:	New Mexico Eastern Zone		

Site	SECTION 17			
Site Position:		Northing:	602,402.30 usft	Latitude: 32° 39' 15.917 N
From: Map		Easting:	738,174.70 usft	Longitude: 103° 41' 37.577 W
Position Uncertainty:	0.0 usft	Slot Radius:	13-3/16 "	Grid Convergence: 0.35 °

Well	Excalibur 17 MP Federal Com #1H			
Well Position	+N/-S	0.0 usft	Northing:	602,402.30 usft
	+E/-W	0.0 usft	Easting:	738,174.70 usft
Position Uncertainty	0.0 usft	Wellhead Elevation:	Ground Level:	3,627.0 usft

Wellbore	Wellbore #1			
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Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	IGRF2010	4/9/2013	7.45	60.52	48,679

Design	Proposal 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	89.72

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	
9,419.9	0.00	0.00	9,419.9	0.0	0.0	0.00	0.00	0.00	0.00	
10,163.0	89.17	89.72	9,897.3	2.3	470.5	12.00	12.00	0.00	89.72	
14,627.2	89.17	89.72	9,962.0	23.8	4,934.2	0.00	0.00	0.00	0.00	PBHL Excalibur 17 MI



Stryker Directional Planning Report



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Site:	SECTION 17	North Reference:	Grid
Well:	Excalibur 17 MP Federal Com #1H	Survey Calculation Method:	Minimum Curvature
Wellbore:	Wellbore #1		
Design:	Proposal 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)	
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	



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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	
9,419.9	0.00	0.00	9,419.9	0.0	0.0	0.0	0.00	0.00	0.00	
KOP @ 9419.9 MD										
9,500.0	9.61	89.72	9,499.6	0.0	6.7	6.7	12.00	12.00	0.00	
9,600.0	21.61	89.72	9,595.8	0.2	33.6	33.6	12.00	12.00	0.00	
9,700.0	33.61	89.72	9,684.2	0.4	79.8	79.8	12.00	12.00	0.00	
9,800.0	45.61	89.72	9,761.1	0.7	143.5	143.5	12.00	12.00	0.00	
9,900.0	57.61	89.72	9,823.1	1.1	221.7	221.7	12.00	12.00	0.00	
10,000.0	69.61	89.72	9,867.5	1.5	311.1	311.1	12.00	12.00	0.00	
10,100.0	81.61	89.72	9,892.3	2.0	407.8	407.8	12.00	12.00	0.00	
10,162.4	89.10	89.72	9,897.3	2.3	470.0	470.0	12.00	12.00	0.00	
LP Excalibur 17 MP Federal Com #1H										
10,163.0	89.17	89.72	9,897.3	2.3	470.5	470.5	12.00	12.00	0.00	



Stryker Directional Planning Report



Database:	EDM 5000.1 Single User Db	Local Co-ordinate Reference:	Well Excalibur 17 MP Federal Com #1H
Company:	Mewbourne Oil Company	TVD Reference:	WELL @ 3647.0usft (Original Well Elev)
Project:	LEA COUNTY, NM (NAD83)	MD Reference:	WELL @ 3647.0usft (Original Well Elev)
Site:	SECTION 17	North Reference:	Grid
Well:	Excalibur 17 MP Federal Com #1H	Survey Calculation Method:	Minimum Curvature
Wellbore:	Wellbore #1		
Design:	Proposal 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)	
LP @ 10163.0 MD										
10,200.0	89.17	89.72	9,897.9	2.4	507.5	507.5	0.00	0.00	0.00	
10,300.0	89.17	89.72	9,899.3	2.9	607.5	607.5	0.00	0.00	0.00	
10,400.0	89.17	89.72	9,900.8	3.4	707.5	707.5	0.00	0.00	0.00	
10,500.0	89.17	89.72	9,902.2	3.9	807.5	807.5	0.00	0.00	0.00	
10,600.0	89.17	89.72	9,903.7	4.4	907.5	907.5	0.00	0.00	0.00	
10,700.0	89.17	89.72	9,905.1	4.9	1,007.5	1,007.5	0.00	0.00	0.00	
10,800.0	89.17	89.72	9,906.6	5.3	1,107.5	1,107.5	0.00	0.00	0.00	
10,900.0	89.17	89.72	9,908.0	5.8	1,207.5	1,207.5	0.00	0.00	0.00	
11,000.0	89.17	89.72	9,909.5	6.3	1,307.4	1,307.5	0.00	0.00	0.00	
11,100.0	89.17	89.72	9,910.9	6.8	1,407.4	1,407.4	0.00	0.00	0.00	
11,200.0	89.17	89.72	9,912.4	7.3	1,507.4	1,507.4	0.00	0.00	0.00	
11,300.0	89.17	89.72	9,913.8	7.8	1,607.4	1,607.4	0.00	0.00	0.00	
11,400.0	89.17	89.72	9,915.3	8.2	1,707.4	1,707.4	0.00	0.00	0.00	
11,500.0	89.17	89.72	9,916.7	8.7	1,807.4	1,807.4	0.00	0.00	0.00	
11,600.0	89.17	89.72	9,918.1	9.2	1,907.4	1,907.4	0.00	0.00	0.00	
11,700.0	89.17	89.72	9,919.6	9.7	2,007.4	2,007.4	0.00	0.00	0.00	
11,800.0	89.17	89.72	9,921.0	10.2	2,107.4	2,107.4	0.00	0.00	0.00	
11,900.0	89.17	89.72	9,922.5	10.6	2,207.3	2,207.4	0.00	0.00	0.00	
12,000.0	89.17	89.72	9,923.9	11.1	2,307.3	2,307.4	0.00	0.00	0.00	
12,100.0	89.17	89.72	9,925.4	11.6	2,407.3	2,407.3	0.00	0.00	0.00	
12,200.0	89.17	89.72	9,926.8	12.1	2,507.3	2,507.3	0.00	0.00	0.00	
12,300.0	89.17	89.72	9,928.3	12.6	2,607.3	2,607.3	0.00	0.00	0.00	
12,400.0	89.17	89.72	9,929.7	13.1	2,707.3	2,707.3	0.00	0.00	0.00	
12,500.0	89.17	89.72	9,931.2	13.5	2,807.3	2,807.3	0.00	0.00	0.00	
12,600.0	89.17	89.72	9,932.6	14.0	2,907.3	2,907.3	0.00	0.00	0.00	
12,700.0	89.17	89.72	9,934.1	14.5	3,007.2	3,007.3	0.00	0.00	0.00	
12,800.0	89.17	89.72	9,935.5	15.0	3,107.2	3,107.3	0.00	0.00	0.00	
12,900.0	89.17	89.72	9,937.0	15.5	3,207.2	3,207.3	0.00	0.00	0.00	
13,000.0	89.17	89.72	9,938.4	16.0	3,307.2	3,307.2	0.00	0.00	0.00	
13,100.0	89.17	89.72	9,939.9	16.4	3,407.2	3,407.2	0.00	0.00	0.00	
13,200.0	89.17	89.72	9,941.3	16.9	3,507.2	3,507.2	0.00	0.00	0.00	
13,300.0	89.17	89.72	9,942.8	17.4	3,607.2	3,607.2	0.00	0.00	0.00	
13,400.0	89.17	89.72	9,944.2	17.9	3,707.2	3,707.2	0.00	0.00	0.00	
13,500.0	89.17	89.72	9,945.7	18.4	3,807.2	3,807.2	0.00	0.00	0.00	
13,600.0	89.17	89.72	9,947.1	18.8	3,907.1	3,907.2	0.00	0.00	0.00	
13,700.0	89.17	89.72	9,948.6	19.3	4,007.1	4,007.2	0.00	0.00	0.00	
13,800.0	89.17	89.72	9,950.0	19.8	4,107.1	4,107.2	0.00	0.00	0.00	
13,900.0	89.17	89.72	9,951.5	20.3	4,207.1	4,207.2	0.00	0.00	0.00	
14,000.0	89.17	89.72	9,952.9	20.8	4,307.1	4,307.1	0.00	0.00	0.00	
14,100.0	89.17	89.72	9,954.4	21.3	4,407.1	4,407.1	0.00	0.00	0.00	
14,200.0	89.17	89.72	9,955.8	21.7	4,507.1	4,507.1	0.00	0.00	0.00	
14,300.0	89.17	89.72	9,957.3	22.2	4,607.1	4,607.1	0.00	0.00	0.00	
14,400.0	89.17	89.72	9,958.7	22.7	4,707.0	4,707.1	0.00	0.00	0.00	
14,500.0	89.17	89.72	9,960.2	23.2	4,807.0	4,807.1	0.00	0.00	0.00	
14,600.0	89.17	89.72	9,961.6	23.7	4,907.0	4,907.1	0.00	0.00	0.00	
14,627.2	89.17	89.72	9,962.0	23.8	4,934.2	4,934.3	0.00	0.00	0.00	
TD at 14627.2 MD - PBHL Excalibur 17 MP Federal Com #1H										



Stryker Directional Planning Report



Database:	EDM 5000.1 Single User Db	Local Co-ordinate Reference:	Well Excalibur 17 MP Federal Com #1H
Company:	Mewbourne Oil Company	TVD Reference:	WELL @ 3647.0usft (Original Well Elev)
Project:	LEA COUNTY, NM (NAD83)	MD Reference:	WELL @ 3647.0usft (Original Well Elev)
Site:	SECTION 17	North Reference:	Grid
Well:	Excalibur 17 MP Federal Com #1H	Survey Calculation Method:	Minimum Curvature
Wellbore:	Wellbore #1		
Design:	Proposal 1		

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)		
LP Excalibur 17 MP Fed	0.00	0.00	9,897.0	2.3	470.0	602,404.60	738,644.69	32° 39' 15.912 N	103° 41' 32.080 W
- plan misses target center by 0.3usft at 10162.4usft MD (9897.3 TVD, 2.3 N, 470.0 E)									
- Point									
PBHL Excalibur 17 MP F	0.00	0.01	9,962.0	23.8	4,934.2	602,426.10	743,108.90	32° 39' 15.855 N	103° 40' 39.863 W
- plan hits target center									
- Point									

Plan Annotations				
Measured Depth	Vertical	Local Coordinates		
Depth	Depth	+N/-S	+E/-W	Comment
(usft)	(usft)	(usft)	(usft)	
9,419.9	9,419.9	0.0	0.0	KOP @ 9419.9 MD
10,163.0	9,897.3	2.3	470.5	LP @ 10163.0 MD
14,627.2	9,962.0	23.8	4,934.2	TD at 14627.2 MD

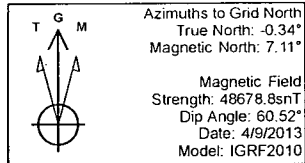


COMPANY: Mewbourne Oil Company
 WELL: Excalibur 17 MP Federal Com #1H
 COUNTY: LEA COUNTY, NM (NAD83)
 DATUM: North American Datum 1983
 RIG: PATTERSON #47
 GRID CORRECTION: 7.11° E



OFFICE: 936.582.7296

PLANNING: 214.784.3778



CREATED BY: BRANDON ESTES

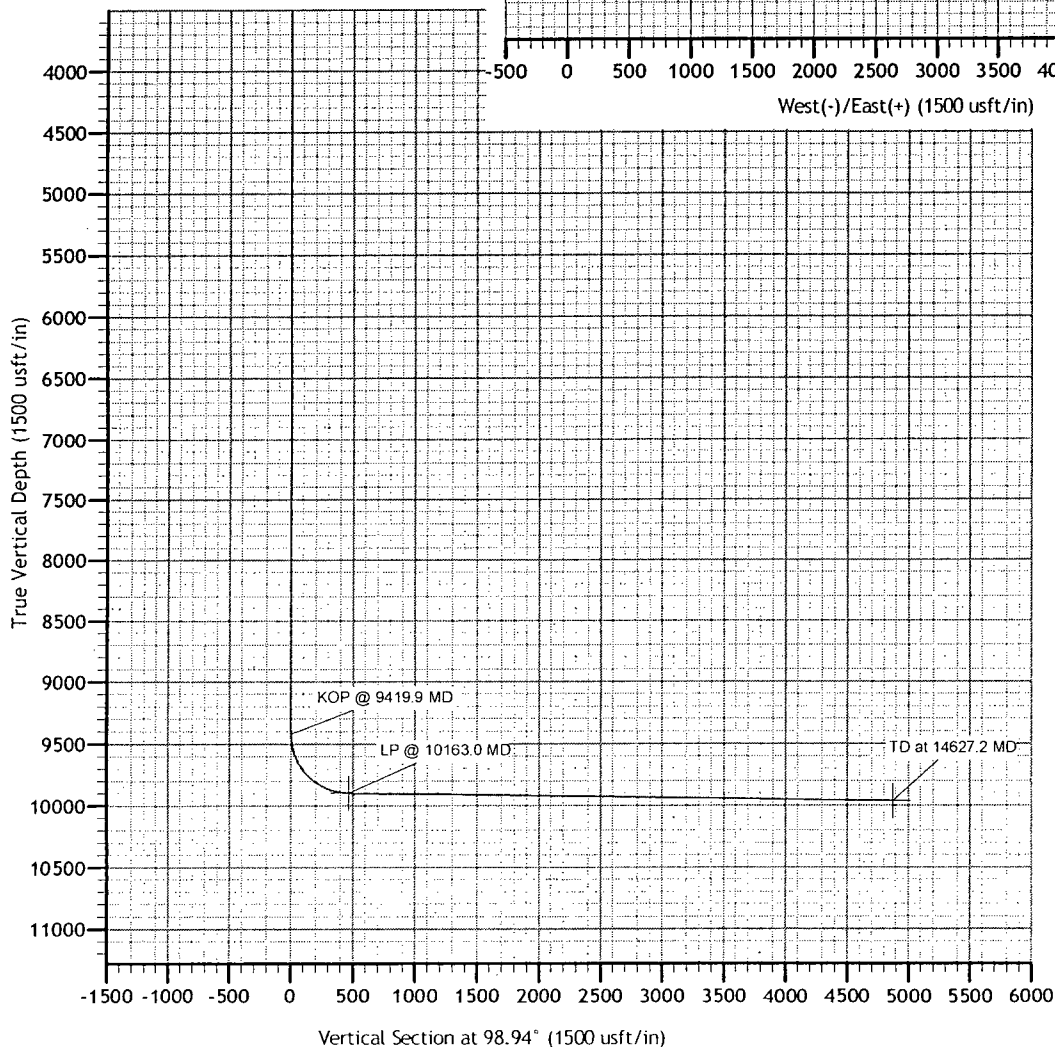
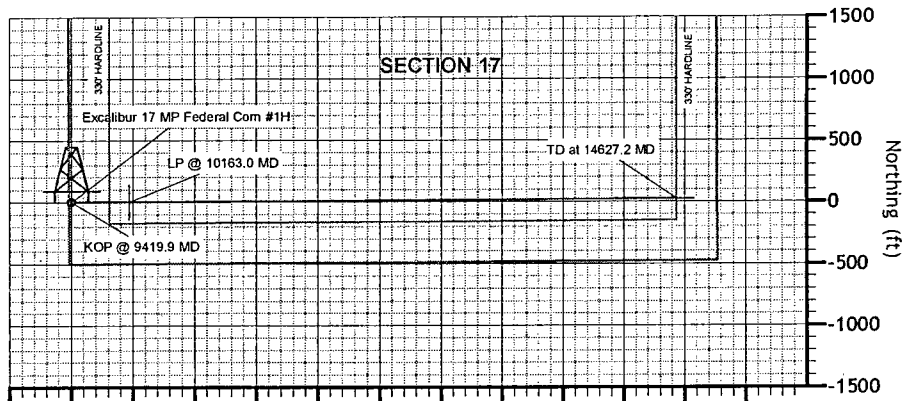
DATE: 9-11, April 09 2013
 PLAN: Proposal 1

GEODETIC ZONE: New Mexico Eastern Zone
 WELL @ 3647.0usft (Original Well Elev)
 GROUND ELEVATION: 3627.0

+N/-S	+E/-W	Northing	Easting	Latitude	Longitude
0.0	0.0	602402.30	738174.70	32° 39' 15.917 N	103° 41' 37.577 W

CRITICAL POINTS

TVD	MD	Inc	Azi	+N/-S	+E/-W	VSect	Departure	Annotation
9419.9	9419.9	0.00	0.00	0.0	0.0	0.0	0.0	KOP @ 9419.9 MD
9897.3	10163.0	89.17	89.72	2.3	470.5	470.5	470.5	LP @ 10163.0 MD
9962.0	14627.2	89.17	89.72	23.8	4934.2	4934.3	4934.3	TD at 14627.2 MD



Notes Regarding Blowout Preventer

Mewbourne Oil Company

Excalibur 17 MP Fed Com #1H

500' FSL & 20' FWL (SHL)

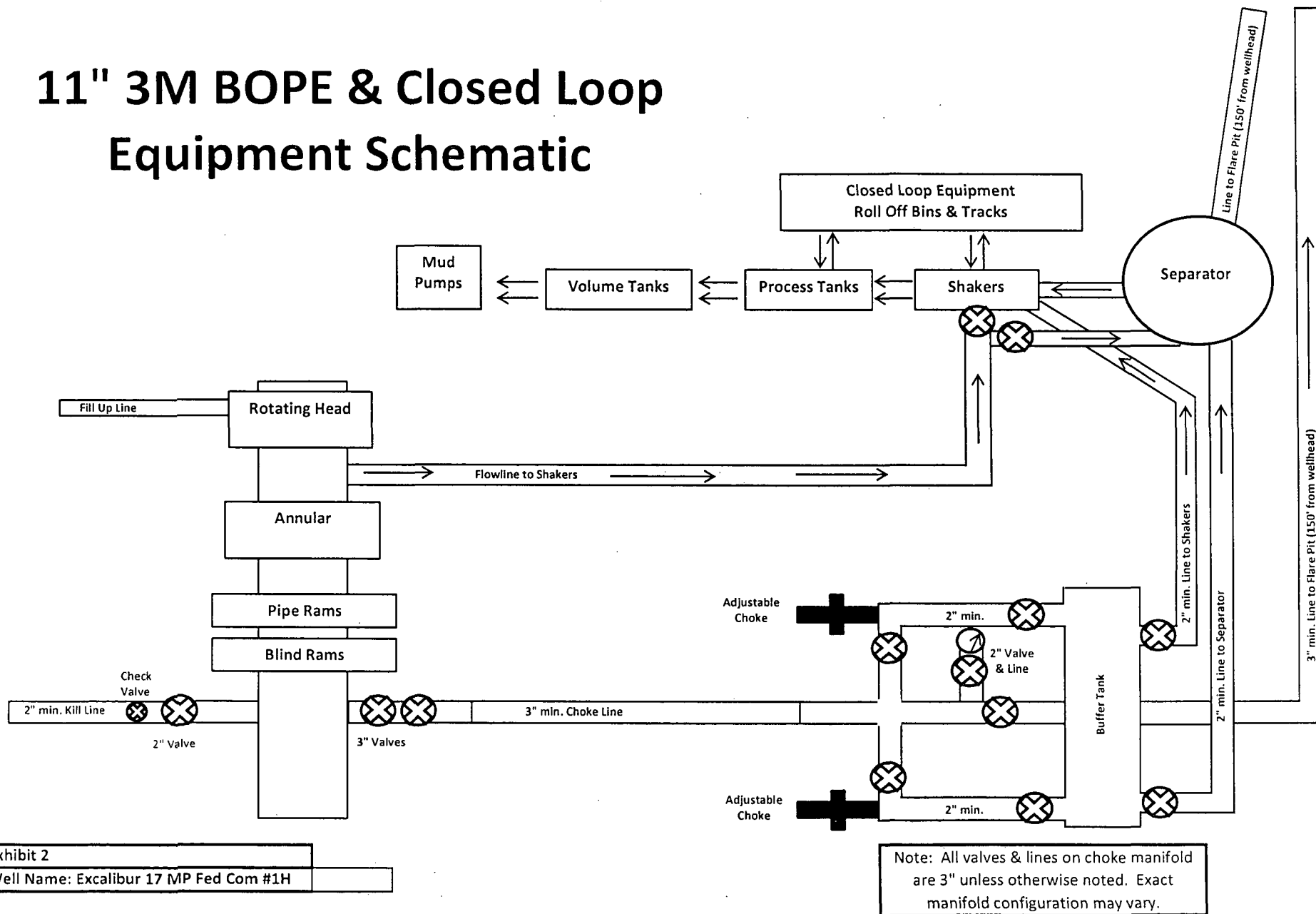
Sec 17-T19S-R33E

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" 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.

11" 3M BOPE & Closed Loop Equipment Schematic



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

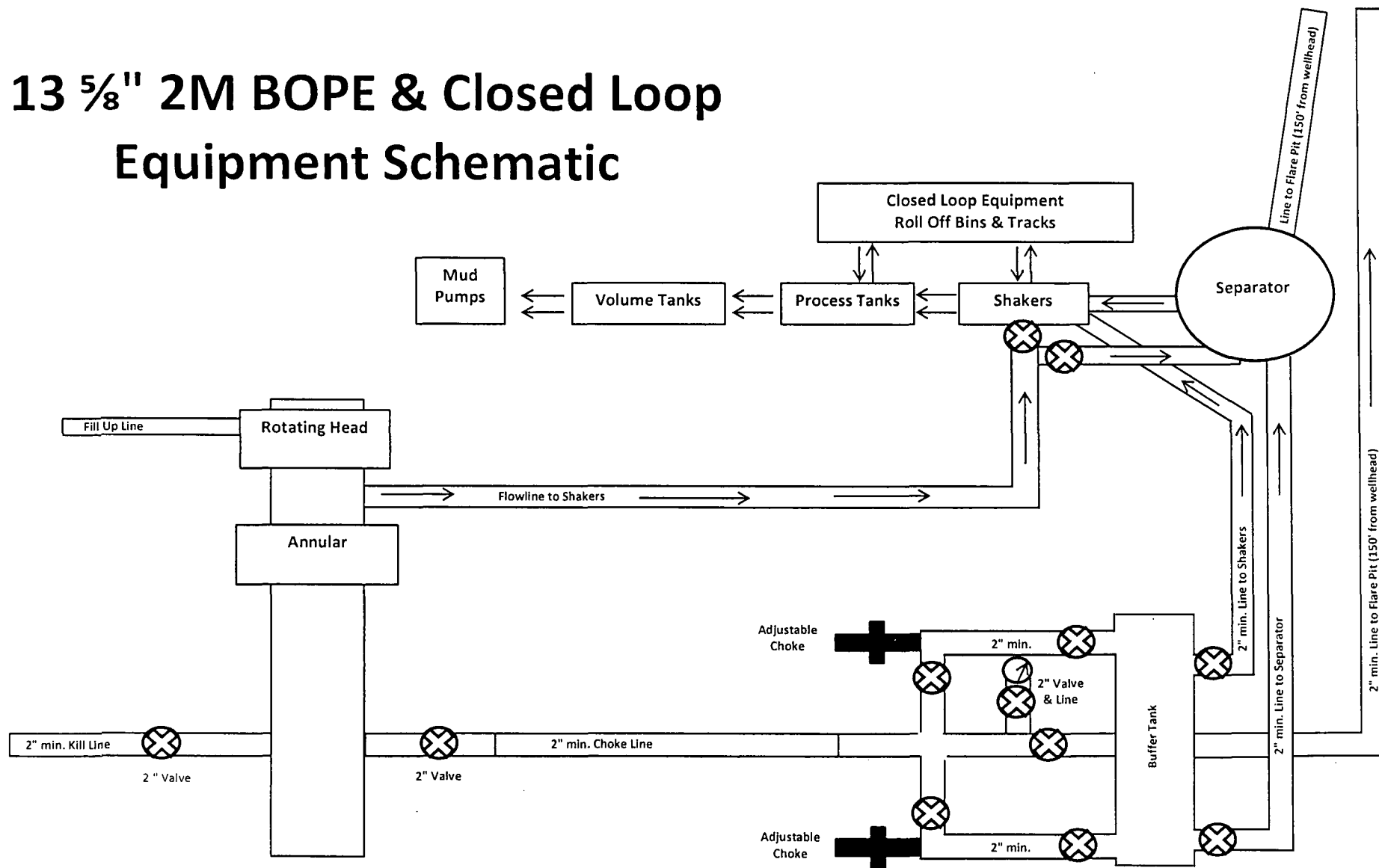
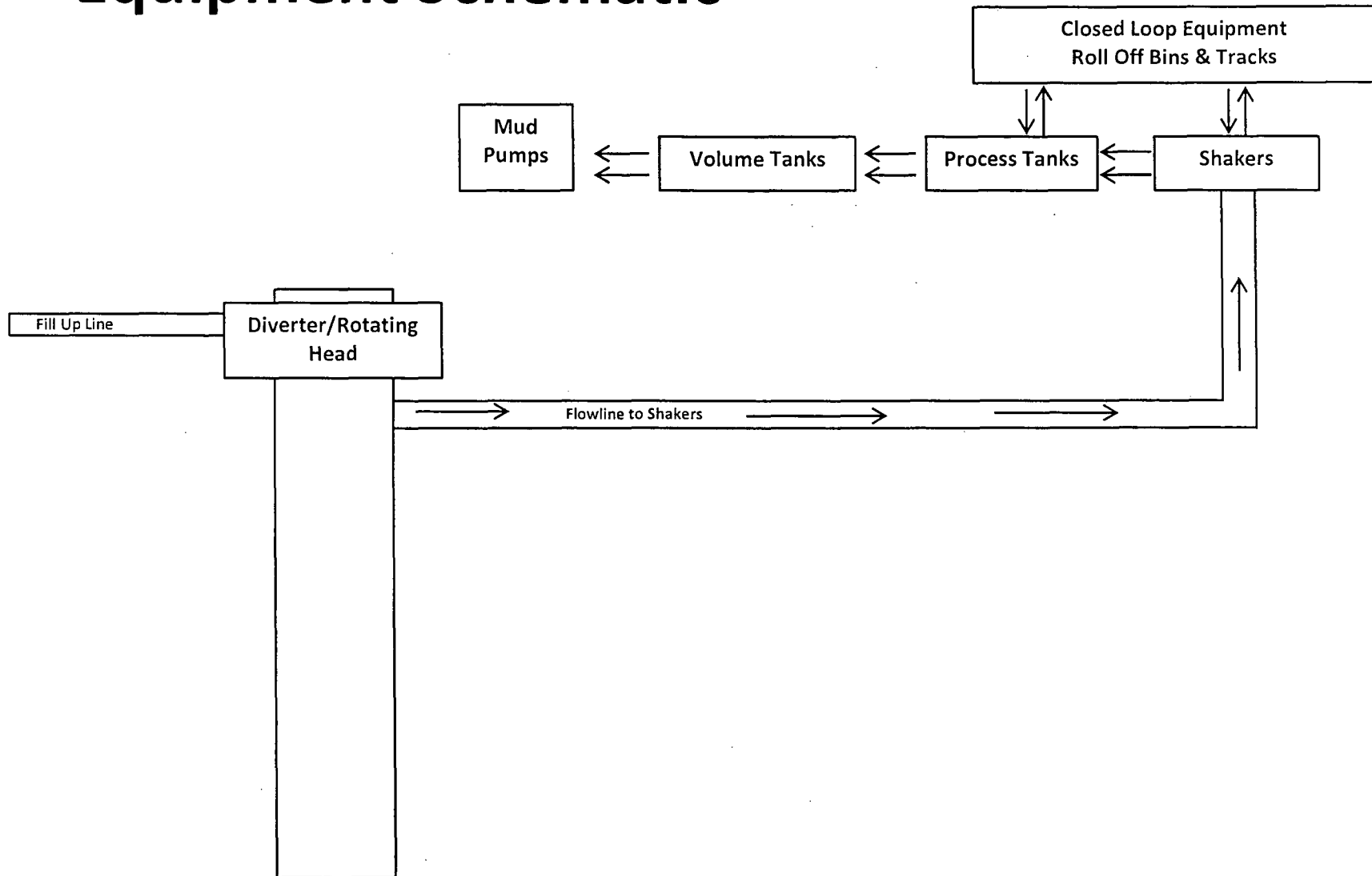


Exhibit 2A
Well Name: Excalibur 17 MP Fed Com #1H

20" Diverter & Closed Loop Equipment Schematic



H2S Diagram
Closed Loop Pad Dimensions 260' x 320'

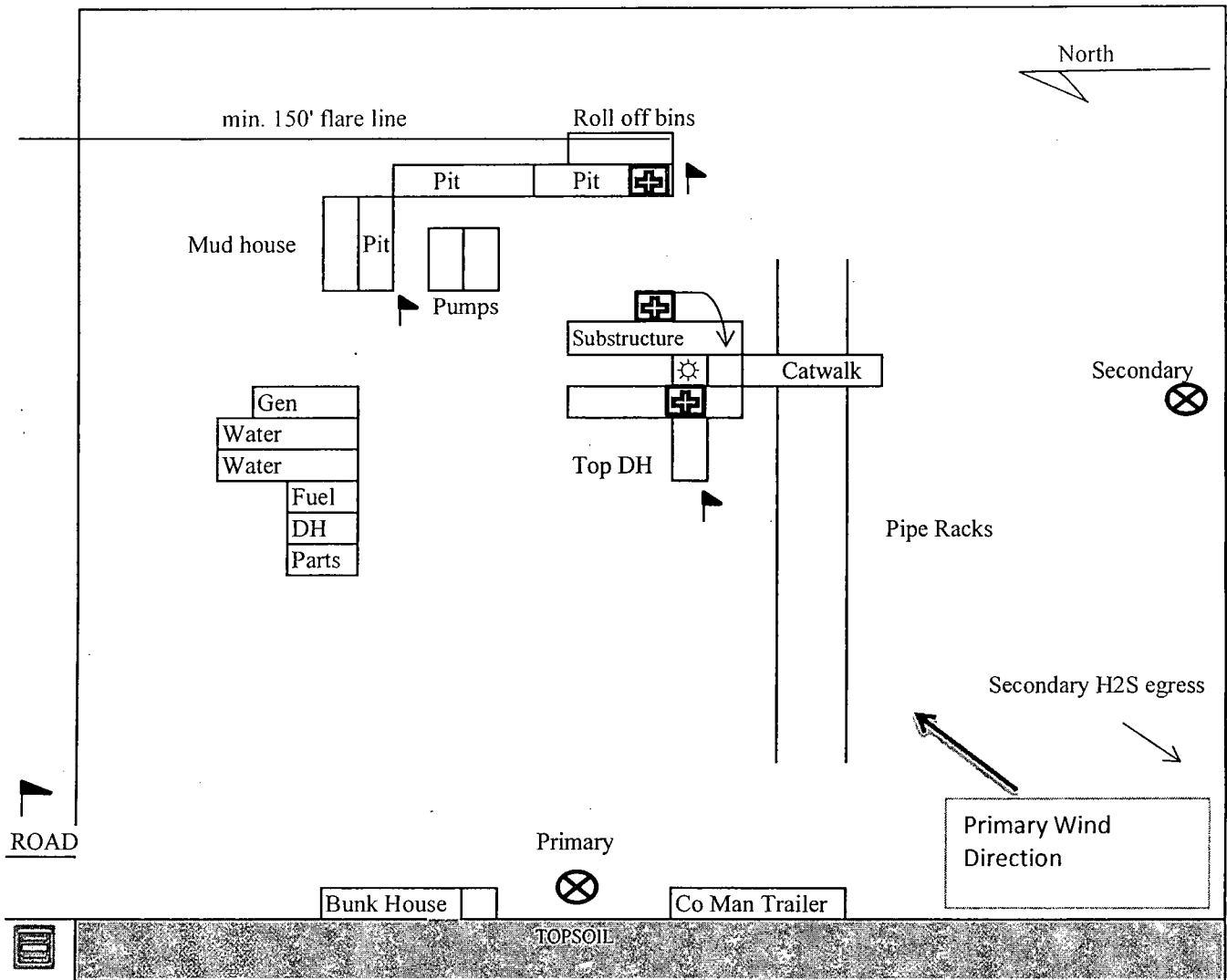


Exhibit 6



= H2S Monitors



= Wind Markers



= Safety Stations



= Warning Signs

Mewbourne Oil Company
Excalibur 17 MP Fed Com #1H
500' FSL & 20' FWL
Sec. 17 T19S R33E
Lea County, NM