

HOEBS OCD

AUG 07 2013

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

OCD Hobbs

ATS-13-509
FORM APPROVED
OMB No. 1004-0137
Expires July 31, 2010

5. Lease Serial No.
NM 077004 - (SL & BHL)

6. If Indian, Allottee or Tribe Name

7. If Unit or CA Agreement, Name and No.

8. Lease Name and Well No.
Hubble 19 LI Fed Com #1H

9. API Well No.

30-025-41322

10. Field and Pool, or Exploratory

Tonto South Bone Spring Oil Pool

11. Sec., T. R. M. or Blk. and Survey or Area

Sec. 19 T19S R33E

12. County or Parish

Lea

13. State

NM

1a. Type of work: ☒ DRILL ☐ REENTER

1b. Type of Well: ☒ Oil Well ☐ Gas Well ☐ Other ☒ Single Zone ☐ Multiple Zone

2. Name of Operator Mewbourne Oil Company

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 1980' FSL & 330' FWL Sec. 19 T19S R33E - LOT 3

At proposed prod. zone 1980' FSL & 330' FEL Sec. 19 T19S R33E

Unit I

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

34 miles West of Hobbs, NM

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

330'

16. No. of acres in lease

NM-077004 - 802.25

17. Spacing Unit dedicated to this well

161.19

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

330' Wallen 19 Fed #2

19. Proposed Depth

14,329 - MD
9,919 - TVD

20. BLM/BIA Bond No. on file

NM-1693 Nationwide, NMB-000919

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

3604' GL

22. Approximate date work will start*

04/01/2013

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.

2. A Drilling Plan.

Drilling Program
Mewbourne Oil Company
Hubble 19 LI Federal #1H
1980' FSL & 330' FWL (SHL)
Sec 19-T19S-R33E
Lea County, New Mexico

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

Rustler	1170'
Top Salt	1280'
Base Salt	1850'
Yates	2930'
Seven Rivers	NP
Capitan	3025'
Capitan Reef top	3280'
Capitan Reef base	4210'
Queen	NP
Grayburg	NP
San Andres	NP
*Delaware	5200'
*Bone Springs	7770'
*1 st Bone Spring Sand	8870'
2 nd Bone Spring Sand	9740'
Wolfcamp	Will not penetrate

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

Water	Fresh water is anticipated @ 275' & will be protected by setting surface casing at 1200' 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 9396' & kick off to horizontal @ 9874' TVD. The well will be drilled to 14329' MD (9919' 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
26"	20" (new)	133#	K55	0'- 4200 1265'	BT&C
17 1/2"	13 3/8" (new)	61#	J55	0'-2500'	ST&C
17 1/2"	13 3/8" (new)	68#	J55	2500'- 2950 3200'	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 4800'	LT&C
8 3/4"	7" (new)	26#	P110	0'-9396' MD	LT&C
8 3/4"	7" (new)	26#	P110	9396'-10141' MD	BT&C
6 1/8"	4 1/2" (new)	13.5#	P110	9941'-14329' 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. 20" Surface Casing: 1600 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.
- ii. 13 3/8" 1st Intermediate Casing: 1100 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. 9 5/8" 2nd Intermediate Casing: 710 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.
- iii. 7" Production Casing: 330 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. 4 1/2" 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:

See COA

Interval	Type System	Weight	Viscosity	Fluid Loss
0' - 1200 1265'	FW spud mud	8.6-9.0	32-34	NA
1200' - 2950 3200'	Brine water	10.0-10.2	28-30	NA
2950' - 4400 4800'	Fresh Water	8.4-8.6	28-30	NA
4400' - 9396' (KOP)	Cut Brine	8.5-8.7	28-30	15
9396' - 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' (9296') to surface. GR from 9296' to TD.

8. Downhole Conditions

See COA	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 ($.43368 \times 9919' = 4302$ 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.

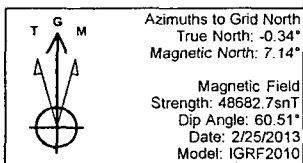


COMPANY: Mewbourne Oil Company
WELL: Hubble 19 LI Federal #1H
COUNTY: EDDY COUNTY, NM
DATUM: NAD 1927 (NADCON CONUS)
RIG: PATTERSON 47
GRID CORRECTION: 7.14° E



OFFICE: 936.582.7296

PLANNING: 214.784.3778

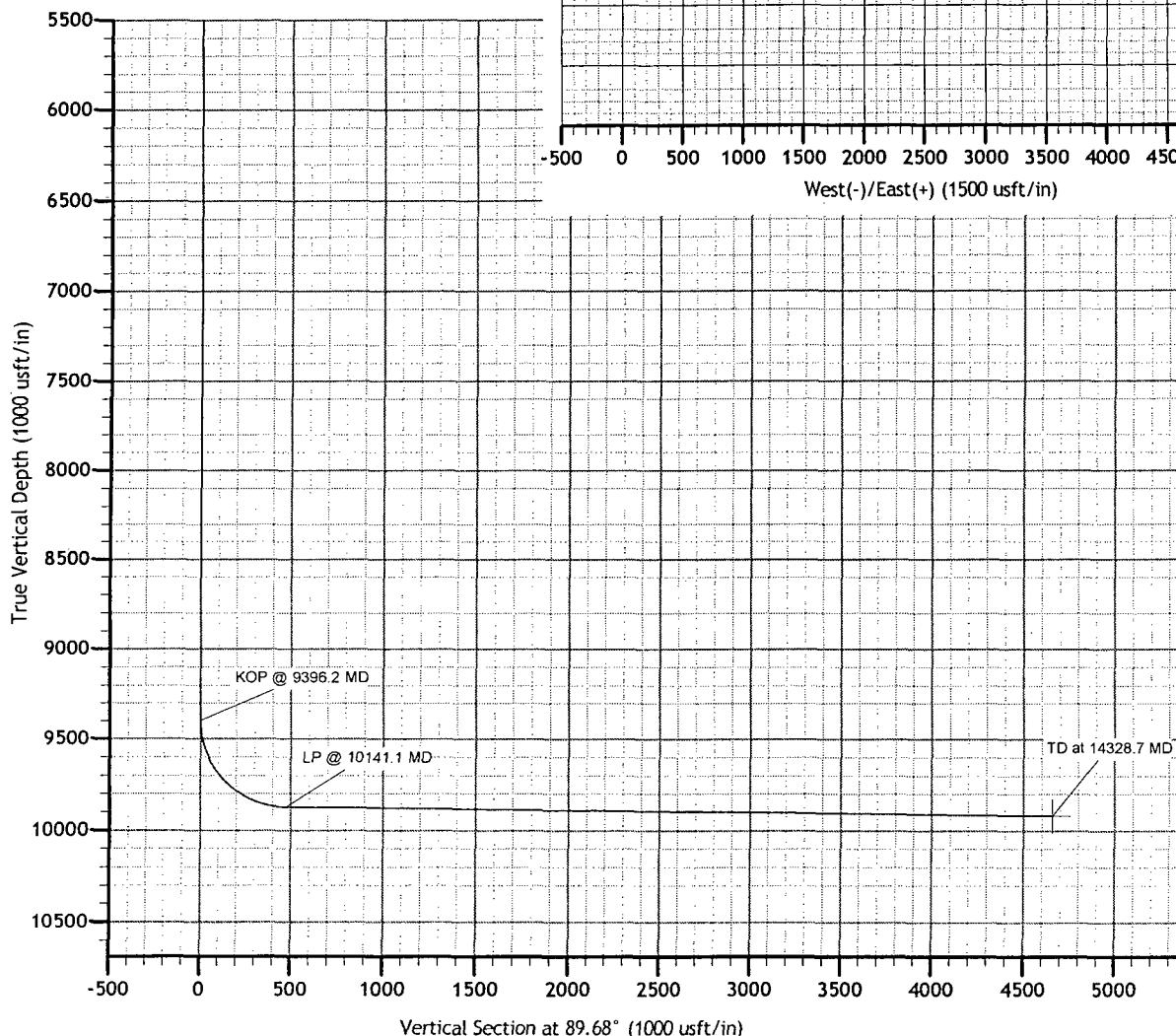
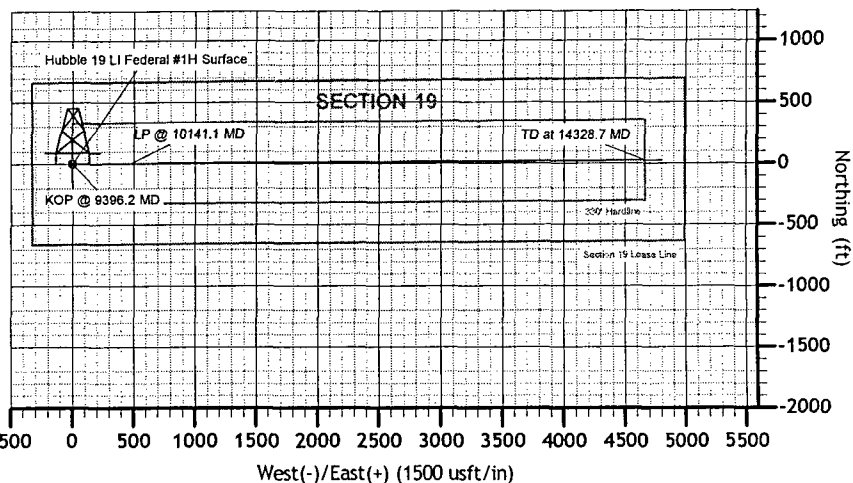


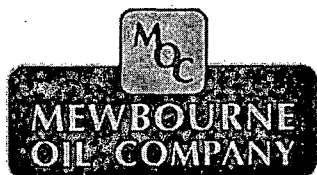
GEODETTIC ZONE: New Mexico East 3001					
WELL @ 3624.0usft (Original Well Elev)					
GROUND ELEVATION: 3604.0					
+N/-S	+E/-W	North	East	Latitude	Longitude
0.0	0.0	598509.55	691998.86	32° 38' 37.879 N	103° 42' 34.484 W

CRITICAL POINTS									
TVD	MD	Inc	Azi	+N/-S	+E/-W	Vsect	Departure	Annotation	
9396.2	9396.2	0.00	0.00	0.0	0.0	0.0	0.0	KOP @ 9396.2 MD	
9873.7	10141.1	89.38	89.68	2.6	472.3	472.3	472.3	LP @ 10141.1 MD	
9919.0	14328.7	89.38	89.68	26.0	4659.6	4659.7	4659.7	TD at 14328.7 MD	

CREATED BY: BRANDON ESTES

DATE: 10:54, February 25 2013
PLAN: Proposal 1





Mewbourne Oil Company

EDDY COUNTY, NM

SECTION 19

Hubble 19 LI Federal #1H

Wellbore #1

Plan: Proposal 1

Standard Planning Report

25 February, 2013





Stryker Directional Planning Report



Database:	EDM 5000.1 Single User Db	Local Co-ordinate Reference:	Well Hubble 19 LI Federal #1H
Company:	Mewbourne Oil Company	TVD Reference:	WELL @ 3624.0usft (Original Well Elev)
Project:	EDDY COUNTY, NM	MD Reference:	WELL @ 3624.0usft (Original Well Elev)
Site:	SECTION 19	North Reference:	Grid
Well:	Hubble 19 LI Federal #1H	Survey Calculation Method:	Minimum Curvature
Wellbore:	Wellbore #1		
Design:	Proposal 1		

Project:	EDDY COUNTY, NM, NM-EAST		
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:	SECTION 19				
Site Position:		Northing:	598,509.55 usft	Latitude:	32° 38' 37.879 N
From:	Map	Easting:	691,998.86 usft	Longitude:	103° 42' 34.484 W
Position Uncertainty:	0.0 usft	Slot Radius:	13-3/16 "	Grid Convergence:	0.34 °

Well:	Hubble 19 LI Federal #1H					
Well Position	+N/-S	0.0 usft	Northing:	598,509.55 usft	Latitude:	32° 38' 37.879 N
	+E/-W	0.0 usft	Easting:	691,998.86 usft	Longitude:	103° 42' 34.484 W
Position Uncertainty	0.0 usft		Wellhead Elevation:		Ground Level:	3,604.0 usft

Wellbore:	Wellbore #1				
Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	IGRF2010	2/25/2013	7.47	60.51	48,683

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	89.68

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	
9,396.2	0.00	0.00	9,396.2	0.0	0.0	0.00	0.00	0.00	0.00	
10,141.1	89.38	89.68	9,873.7	2.6	472.3	12.00	12.00	0.00	89.68	
14,328.7	89.38	89.68	9,919.0	26.0	4,659.6	0.00	0.00	0.00	0.00	PBHL Hubble 19 Fedr



Stryker Directional Planning Report



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Project:	EDDY COUNTY, NM	MD Reference:	WELL @ 3624.0usft (Original Well Elev)
Site:	SECTION 19	North Reference:	Grid:
Well:	Hubble 19 LI Federal #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



Stryker Directional Planning Report



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Company:	Mewbourne Oil Company	TVD Reference:	WELL @ 3624.0usft (Original Well Elev)
Project:	EDDY COUNTY, NM	MD Reference:	WELL @ 3624.0usft (Original Well Elev)
Site:	SECTION 19	North Reference:	Grid
Well:	Hubble 19 LI Federal #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)
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			



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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)
10,300.0	89.38	89.68	9,875.4	3.5	631.2	631.2	0.00	0.00	0.00
10,400.0	89.38	89.68	9,876.5	4.1	731.2	731.2	0.00	0.00	0.00
10,500.0	89.38	89.68	9,877.6	4.6	831.2	831.2	0.00	0.00	0.00
10,600.0	89.38	89.68	9,878.7	5.2	931.2	931.2	0.00	0.00	0.00
10,700.0	89.38	89.68	9,879.7	5.8	1,031.2	1,031.2	0.00	0.00	0.00
10,800.0	89.38	89.68	9,880.8	6.3	1,131.2	1,131.2	0.00	0.00	0.00
10,900.0	89.38	89.68	9,881.9	6.9	1,231.2	1,231.2	0.00	0.00	0.00
11,000.0	89.38	89.68	9,883.0	7.4	1,331.1	1,331.2	0.00	0.00	0.00
11,100.0	89.38	89.68	9,884.1	8.0	1,431.1	1,431.2	0.00	0.00	0.00
11,200.0	89.38	89.68	9,885.1	8.6	1,531.1	1,531.2	0.00	0.00	0.00
11,300.0	89.38	89.68	9,886.2	9.1	1,631.1	1,631.1	0.00	0.00	0.00
11,400.0	89.38	89.68	9,887.3	9.7	1,731.1	1,731.1	0.00	0.00	0.00
11,500.0	89.38	89.68	9,888.4	10.2	1,831.1	1,831.1	0.00	0.00	0.00
11,600.0	89.38	89.68	9,889.5	10.8	1,931.1	1,931.1	0.00	0.00	0.00
11,700.0	89.38	89.68	9,890.6	11.3	2,031.1	2,031.1	0.00	0.00	0.00
11,800.0	89.38	89.68	9,891.6	11.9	2,131.1	2,131.1	0.00	0.00	0.00
11,900.0	89.38	89.68	9,892.7	12.5	2,231.1	2,231.1	0.00	0.00	0.00
12,000.0	89.38	89.68	9,893.8	13.0	2,331.1	2,331.1	0.00	0.00	0.00
12,100.0	89.38	89.68	9,894.9						



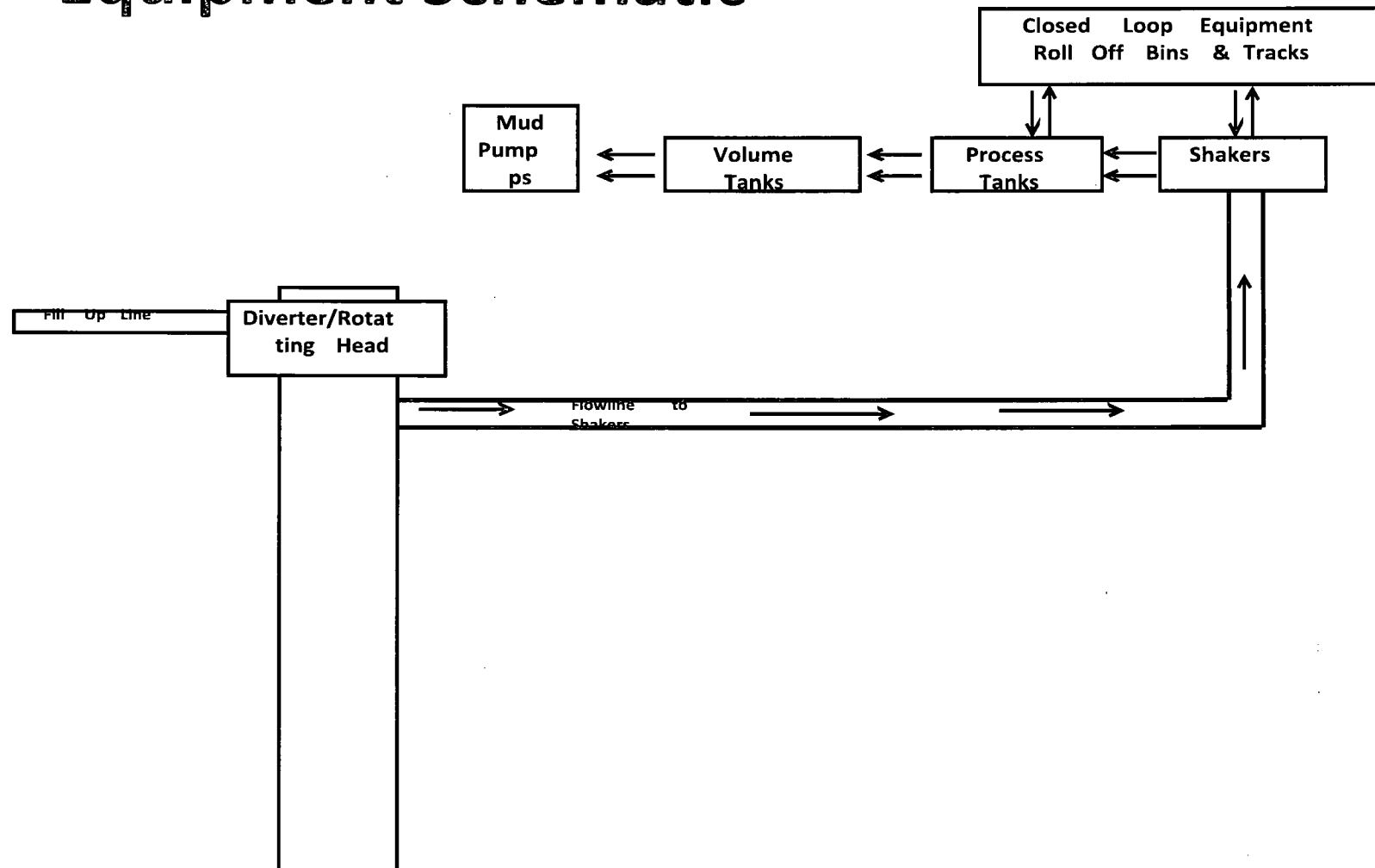
Stryker Directional Planning Report



Database:	EDM.5000.1.Single User.Db	Local Co-ordinate Reference:	Well Hubble 19 LI Federal #1H
Company:	Mewbourne Oil Company	TVD Reference:	WELL @ 3624.0usft (Original Well Elev)
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Site:	SECTION 19	North Reference:	Grid
Well:	Hubble 19 LI Federal #1H	Survey Calculation Method:	Minimum Curvature
Wellbore:	Wellbore #1		
Design:	Proposal 1		

Plan Annotations				
Measured Depth (usft)	Vertical Depth (usft)	Local Coordinates		Comment
		+N/-S (usft)	+E/-W (usft)	
9,396.2	9,396.2	0.0	0.0	KOP @ 9396.2 MD
10,141.1	9,873.7	2.6	472.3	LP @ 10141.1 MD
14,328.7	9,919.0	26.0	4,659.6	TD at 14328.7 MD

20" Diverter & Closed Loop Equipment Schematic



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

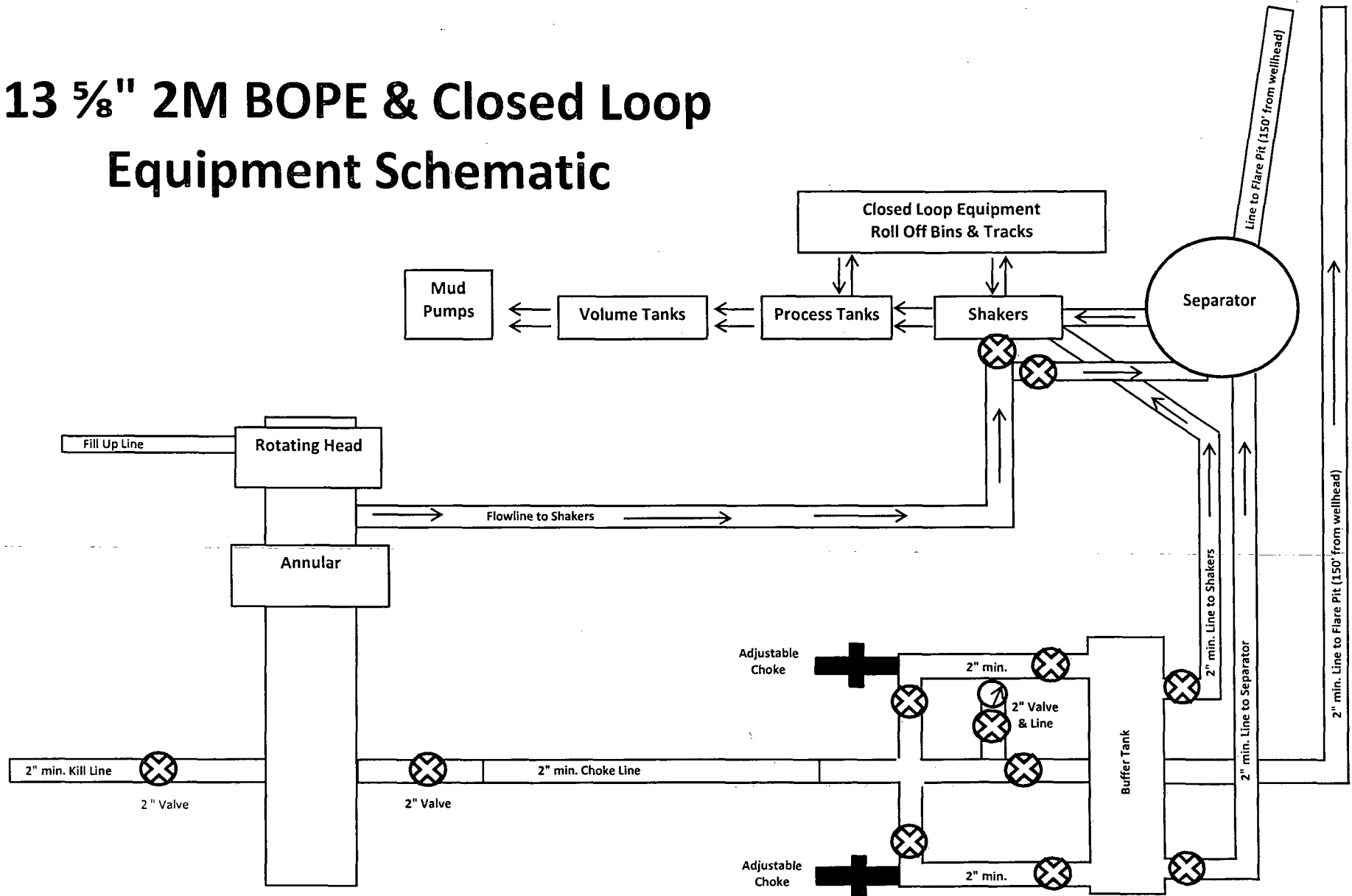
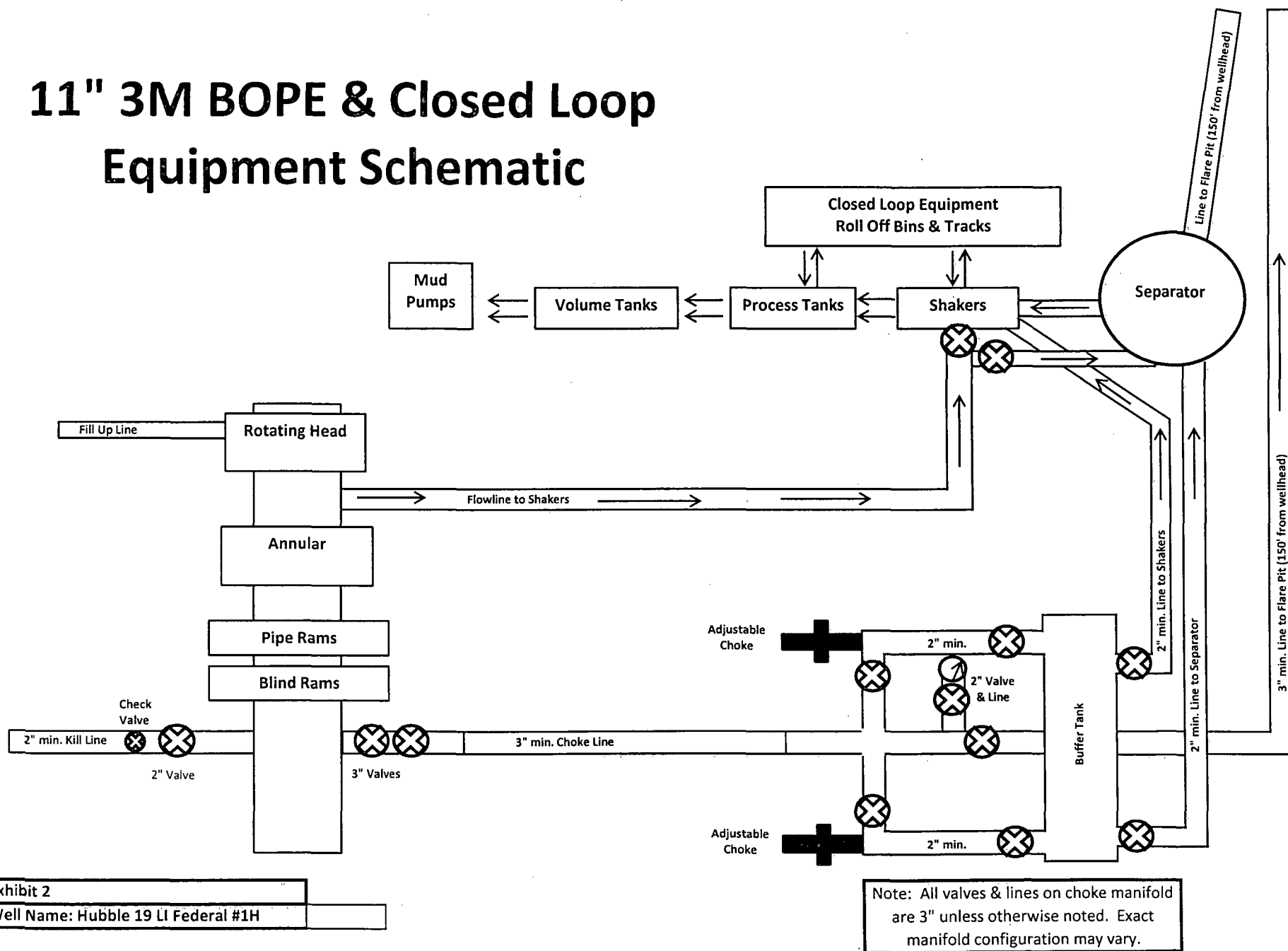


Exhibit 2A

Well Name: Hubble 19 LI Federal #1H

11" 3M BOPE & Closed Loop Equipment Schematic



Notes Regarding Blowout Preventer

Mewbourne Oil Company

Hubble 19 LI Federal #1H
1980' FSL & 330' FWL (SHL)

Sec 19-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.