

HOBBS OCD
OCD-HOBBS

ATS-11-474
FORM APPROVED
OMB No. 1004-0136
Expires January 31, 2004

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

MAY 25 2011

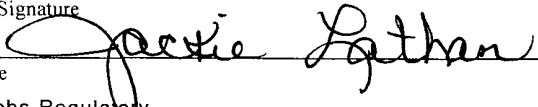
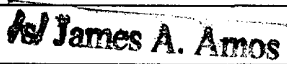
APPLICATION FOR PERMIT TO DRILL OR REENTER RECEIVED

1a. Type of Work: ☒ DRILL ☐ REENTER		5. Lease Serial No. NM-27507 BH=107343
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 {14744}		7. If Unit or CA Agreement, Name and No. 38643
3a. Address PO Box 5270 Hobbs, NM 88241		8. Lease Name and Well No. Red Hills West 21 Fed Com #1H
3b. Phone No. (include area code) 575-393-5905		9. API Well No. 30-025-40156
4. Location of Well (Report location clearly and in accordance with any State requirements. *) At surface 330' FNL & 950' FEL (SL) Unit A At proposed prod. zone 330' FSL & 950' FEL (BHL) Unit P		10. Field and Pool, or Exploratory Wildcat Bone Spring 297838
14. Distance in miles and direction from nearest town or post office* 30 miles W of Jal, NM		11. Sec., T., R., M., or Blk. and Survey or Area Sec 21 - T26S - R32E
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 80	12. County or Parish Lea
17. Spacing Unit dedicated to this well 160	13. State NM	
18. Distance from proposed location* to nearest well, drilling, completed, applied for, on this lease, ft. NA	19. Proposed Depth 13370' MD 9381' TVD	20. BLM/BIA Bond No. on file NM1693, Nationwide
21. Elevations (Show whether DF, KDB, RT, GL, etc.) 3162' GL	22. Approximate date work will start* ASAP	23. Estimated duration 45

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. | 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 shall be filed with the appropriate Forest Service Office). | 6. Such other site specific information and/or plans as may be required by the authorized officer. |

25. Signature 	Name (Printed/Typed) Jackie Lathan	Date 02/23/11
Title Hobbs Regulatory		
Approved by (Signature) 	Name (Printed/Typed) James A. Amos	Date MAY 18 2011
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)

Carlsbad Controlled Water Basin

K2 06/01/11

Approval Subject to General Requirements
& Special Stipulations Attached

SEE ATTACHED FOR
CONDITIONS OF APPROVAL
JUN 02 2011

Drilling Program
Mewbourne Oil Company
 Red Hills West 21 Federal #1H
 330' FNL & 950' FEL (SHL)
 Sec 21-T26S-R32E
 Lea County, New Mexico

HOBBS OCD

MAY 25 2011

RECEIVED

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

Rustler	1000'
Top of Salt	1450'
Base of Salt	4220'
Lamar	4440'
*Delaware	4465'
*Bone Springs	8500'
1 st Bone Springs sand	9500'
Wolfcamp	WILL NOT PENETRATE

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

Water	Fresh water is anticipated @ 200' and will be protected by setting surface casing at 1025' 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. BOPs will be inspected and operated as recommended in Onshore Order #2. A Kelly cock and a sub equipped with a full opening valve sized to fit the drill pipe and collars will be available on the rig floor in the open position when the Kelly is not in use.

Will test the 13 3/8" annular to 1500# and the 9 5/8" & 7" BOPE to 3000# and annular to 1500# with a third party testing company before drilling below each shoe, but will test again, if needed, in 30 days from the 1st test as per BLM Onshore Oil and Gas Order #2.

4. Drilling Program:

MOC proposes to drill a vertical wellbore to 8389' & kick off to horizontal @ 8962' TVD. The well will be drilled to 13406' MD (8977' TVD). See attached directional plan.

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)	48#	H40	0'-1025'	ST&C
12 1/4"	9 5/8" (new)	36#	K55	0'-3300'	ST&C
12 1/4"	9 5/8" (new)	40#	K55	3300'-4300'	ST&C
12 1/4"	9 5/8" (new)	40#	N80	4300'-4450'	LT&C
8 3/4"	7" (new)	26#	P110	0-8386' MD	LT&C
8 3/4"	7" (new)	26#	P110	8386'-9286' MD	BT&C
6 1/8"	4 1/2" (new)	11.6#	P110	9086'-13370' MD	LT&C

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

*Subject to availability of casing.

see COA

see COA

see COA

B. Cementing Program:

- See COA*
- i. Surface Casing: 300 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/28% excess.
 - ii. Intermediate Casing: 550 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: 200 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.
 - iv. Production Liner: No cement required Packer system will be used.

*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.

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

6. Mud Program:

Interval	Type System	Weight	Viscosity	Fluid Loss
0'-1025' <i>650</i>	FW spud mud	8.6-9.0	32-34	NA
1025'-4450' <i>415</i>	Brine water	10.0	28-30	NA
4450'-8300'	FW mud	8.6-8.8	28-30	NA
8300'- TD	FW w/Polymer	8.5-8.7	32-35	15

7. Evaluation Program: *see 10A*

Samples: 10' samples from surface casing to TD
Logging: GR & Gyro from KOP-100' (8289') to surface and GR to TVD.

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 45 days involved in drilling operations and an additional 10 days involved in completion operations on the project.

Mewbourne Oil Co

Lea County, NM

Section 21-26S-32E

Red Hills West 21 Fed Com #1H

Wellbore #1

Plan: Design #1

DDC Well Planning Report

19 January, 2011



DDC Well Planning Report



Database: EDM 5000.1 Single User Db
Company: Mewbourne Oil Co
Project: Lea County, NM
Site: Section 21-26S-32E
Well: Red Hills West 21 Fed Com #1H
Wellbore: Wellbore #1
Design: Design #1

Local Co-ordinate Reference: Well Red Hills West 21 Fed Com #1H
TVD Reference: WELL @ 3183.0usft (Patterson UTI #46)
MD Reference: WELL @ 3183.0usft (Patterson UTI #46)
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: Section 21-26S-32E
Site Position: Northing: 376,913.78 usft Latitude: 32° 2' 4.330 N
From: Map Easting: 704,320.13 usft Longitude: 103° 40' 26.342 W
Position Uncertainty: 0.0 usft Slot Radius: 13-3/16" Grid Convergence: 0.35°

Well: Red Hills West 21 Fed Com #1H
Well Position: +N/-S 0.0 usft Northing: 376,913.78 usft Latitude: 32° 2' 4.330 N
+E/-W 0.0 usft Easting: 704,320.13 usft Longitude: 103° 40' 26.342 W
Position Uncertainty: 0.0 usft Wellhead Elevation: Ground Level: 3,162.0 usft

Wellbore: Wellbore #1

Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	IGRF2010	1/19/2011	7.67	60.00	48,533

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	179.55

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	
8,389.0	0.00	0.00	8,389.0	0.0	0.0	0.00	0.00	0.00	0.00	
9,286.9	89.79	179.55	8,962.0	-570.8	4.5	10.00	10.00	20.00	179.55	
13,405.5	89.79	179.55	8,977.0	-4,689.3	37.0	0.00	0.00	0.00	0.00	PBHL Red Hills We

DDC Well Planning Report



Database:	EDM 5000.1 Single User Db	Local Co-ordinate Reference:	Well Red Hills West 21 Fed Com #1H
Company:	Mewbourne Oil Co	TVD Reference:	WELL @ 3183.0usft (Patterson UTI #46)
Project:	Lea County, NM	MD Reference:	WELL @ 3183.0usft (Patterson UTI #46)
Site:	Section 21-26S-32E	North Reference:	Grid
Well:	Red Hills West 21 Fed Com #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)
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



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Wellbore:	Wellbore #1		
Design:	Design #1		

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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
Build 10°/100' @ 8389' MD									
8,389.0	0.00	0.00	8,389.0	0.0	0.0	0.0	0.00	0.00	0.00
8,400.0	1.10	179.55	8,400.0	-0.1	0.0	0.1	10.00	10.00	0.00
8,500.0	11.10	179.55	8,499.3	-10.7	0.1	10.7	10.00	10.00	0.00
8,600.0	21.10	179.55	8,595.3	-38.4	0.3	38.4	10.00	10.00	0.00
8,700.0	31.10	179.55	8,685.0	-82.4	0.6	82.4	10.00	10.00	0.00
8,800.0	41.10	179.55	8,765.6	-141.2	1.1	141.2	10.00	10.00	0.00
8,900.0	51.10	179.55	8,834.9	-213.2	1.7	213.2	10.00	10.00	0.00
9,000.0	61.10	179.55	8,890.6	-296.0	2.3	296.1	10.00	10.00	0.00
9,100.0	71.10	179.55	8,931.1	-387.4	3.1	387.4	10.00	10.00	0.00
9,200.0	81.10	179.55	8,955.1	-484.3	3.8	484.3	10.00	10.00	0.00
EOB @ 9287' MD / 89.79° Inc / 179.55° Azm / 8962' TVD									
9,286.9	89.79	179.55	8,962.0	-570.8	4.5	570.9	10.00	10.00	0.00
9,300.0	89.79	179.55	8,962.0	-583.9	4.6	584.0	0.00	0.00	0.00
9,400.0	89.79	179.55	8,962.4	-683.9	5.4	684.0	0.00	0.00	0.00
9,500.0	89.79	179.55	8,962.7	-783.9	6.2	784.0	0.00	0.00	0.00
9,600.0	89.79	179.55	8,963.1	-883.9	7.0	884.0	0.00	0.00	0.00
9,700.0	89.79	179.55	8,963.5	-983.9	7.8	984.0	0.00	0.00	0.00
9,800.0	89.79	179.55	8,963.8	-1,083.9	8.5	1,084.0	0.00	0.00	0.00
9,900.0	89.79	179.55	8,964.2	-1,183.9	9.3	1,184.0	0.00	0.00	0.00
10,000.0	89.79	179.55	8,964.6	-1,283.9	10.1	1,284.0	0.00	0.00	0.00
10,100.0	89.79	179.55	8,964.9	-1,383.9	10.9	1,384.0	0.00	0.00	0.00
10,200.0	89.79	179.55	8,965.3	-1,483.9	11.7	1,484.0	0.00	0.00	0.00

DDC Well Planning Report



Database:	EDM 5000.1 Single User Db	Local Co-ordinate Reference:	Well Red Hills West 21 Fed Com #1H
Company:	Mewbourne Oil Co	TVD Reference:	WELL @ 3183.0usft (Patterson UTI #46)
Project:	Lea County, NM	MD Reference:	WELL @ 3183.0usft (Patterson UTI #46)
Site:	Section 21-26S-32E	North Reference:	Grid
Well:	Red Hills West 21 Fed Com #1H	Survey Calculation Method:	Minimum Curvature
Wellbore:	Wellbore #1		
Design:	Design #1		

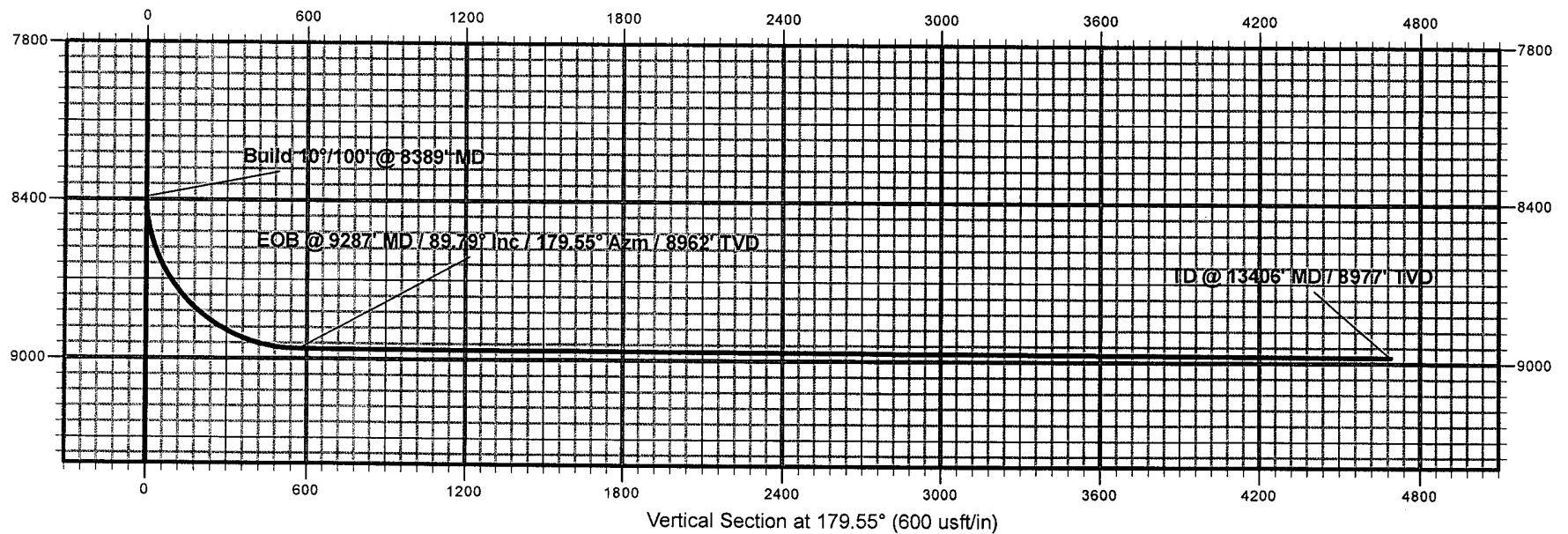
Planned Survey										
Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)	
10,300.0	89.79	179.55	8,965.7	-1,583.9	12.5	1,584.0	0.00	0.00	0.00	
10,400.0	89.79	179.55	8,966.0	-1,683.9	13.3	1,684.0	0.00	0.00	0.00	
10,500.0	89.79	179.55	8,966.4	-1,783.9	14.1	1,783.9	0.00	0.00	0.00	
10,600.0	89.79	179.55	8,966.8	-1,883.9	14.9	1,883.9	0.00	0.00	0.00	
10,700.0	89.79	179.55	8,967.1	-1,983.9	15.6	1,983.9	0.00	0.00	0.00	
10,800.0	89.79	179.55	8,967.5	-2,083.9	16.4	2,083.9	0.00	0.00	0.00	
10,900.0	89.79	179.55	8,967.8	-2,183.9	17.2	2,183.9	0.00	0.00	0.00	
11,000.0	89.79	179.55	8,968.2	-2,283.9	18.0	2,283.9	0.00	0.00	0.00	
11,100.0	89.79	179.55	8,968.6	-2,383.9	18.8	2,383.9	0.00	0.00	0.00	
11,200.0	89.79	179.55	8,968.9	-2,483.9	19.6	2,483.9	0.00	0.00	0.00	
11,300.0	89.79	179.55	8,969.3	-2,583.9	20.4	2,583.9	0.00	0.00	0.00	
11,400.0	89.79	179.55	8,969.7	-2,683.9	21.2	2,683.9	0.00	0.00	0.00	
11,500.0	89.79	179.55	8,970.0	-2,783.9	21.9	2,783.9	0.00	0.00	0.00	
11,600.0	89.79	179.55	8,970.4	-2,883.9	22.7	2,883.9	0.00	0.00	0.00	
11,700.0	89.79	179.55	8,970.8	-2,983.8	23.5	2,983.9	0.00	0.00	0.00	
11,800.0	89.79	179.55	8,971.1	-3,083.8	24.3	3,083.9	0.00	0.00	0.00	
11,900.0	89.79	179.55	8,971.5	-3,183.8	25.1	3,183.9	0.00	0.00	0.00	
12,000.0	89.79	179.55	8,971.9	-3,283.8	25.9	3,283.9	0.00	0.00	0.00	
12,100.0	89.79	179.55	8,972.2	-3,383.8	26.7	3,383.9	0.00	0.00	0.00	
12,200.0	89.79	179.55	8,972.6	-3,483.8	27.5	3,483.9	0.00	0.00	0.00	
12,300.0	89.79	179.55	8,973.0	-3,583.8	28.3	3,583.9	0.00	0.00	0.00	
12,400.0	89.79	179.55	8,973.3	-3,683.8	29.0	3,683.9	0.00	0.00	0.00	
12,500.0	89.79	179.55	8,973.7	-3,783.8	29.8	3,783.9	0.00	0.00	0.00	
12,600.0	89.79	179.55	8,974.1	-3,883.8	30.6	3,883.9	0.00	0.00	0.00	
12,700.0	89.79	179.55	8,974.4	-3,983.8	31.4	3,983.9	0.00	0.00	0.00	
12,800.0	89.79	179.55	8,974.8	-4,083.8	32.2	4,083.9	0.00	0.00	0.00	
12,900.0	89.79	179.55	8,975.2	-4,183.8	33.0	4,183.9	0.00	0.00	0.00	
13,000.0	89.79	179.55	8,975.5	-4,283.8	33.8	4,283.9	0.00	0.00	0.00	
13,100.0	89.79	179.55	8,975.9	-4,383.8	34.6	4,383.9	0.00	0.00	0.00	
13,200.0	89.79	179.55	8,976.2	-4,483.8	35.3	4,483.9	0.00	0.00	0.00	
13,300.0	89.79	179.55	8,976.6	-4,583.8	36.1	4,583.9	0.00	0.00	0.00	
13,400.0	89.79	179.55	8,977.0	-4,683.8	36.9	4,683.9	0.00	0.00	0.00	
13,405.5	89.79	179.55	8,977.0	-4,689.3	37.0	4,689.4	0.00	0.00	0.00	

Design Targets										
Target Name	Dip Angle (°)	Dip Dir. (°)	TVD (usft)	+N/-S (usft)	+E/-W (usft)	Northing (usft)	Easting (usft)	Latitude	Longitude	
PBHL Red Hills West	0.00	0.00	8,977.0	-4,689.3	37.0	372,224.50	704,357.10	32° 1' 17.923 N	103° 40' 26.245 W	
- hit/miss target										
- Shape										
- plan hits target center										
- Point										

Plan Annotations					
Measured Depth (usft)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Comment	
8,389.0	8,389.0	0.0	0.0	Build 10°/100' @ 8389' MD	
9,286.9	8,962.0	-570.8	4.5	EOB @ 9287' MD / 89.79° Inc / 179.55° Azm / 8962' TVD	
13,405.5	8,977.0	-4,689.3	37.0	TD @ 13406' MD / 8977' TVD	

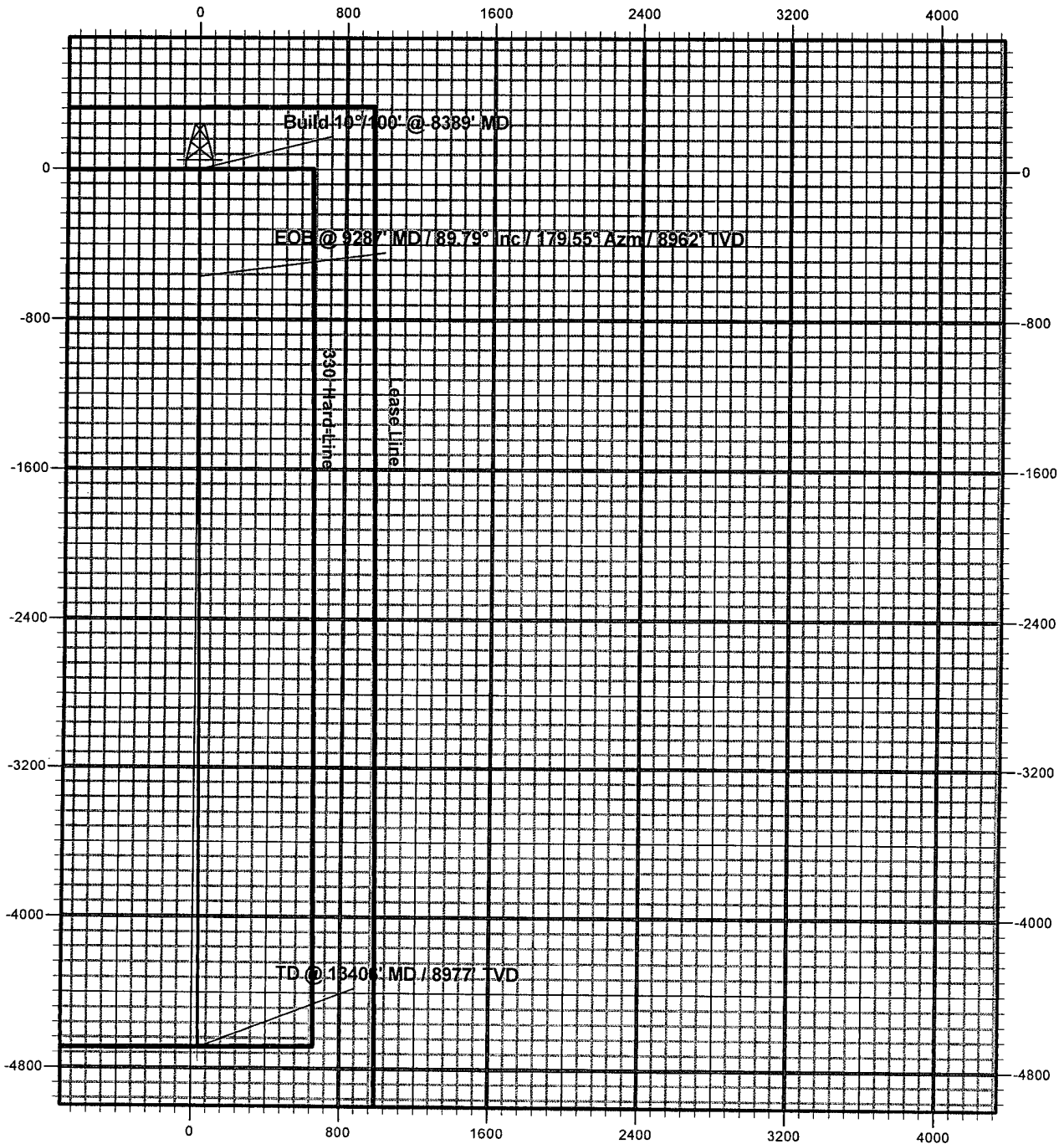
Mewbourne Oil Company

Lea County, NM
Red Hills West 21 Fed Com #1H
Quote 110035



Mewbourne Oil Company

Lea County, NM
Red Hills West 21 Fed Com #1H
Quote 110035



Notes Regarding Blowout Preventer

Mewbourne Oil Company

Red Hills West 21 Federal #1H

330' FNL & 950' FEL (SHL)

Sec 21-T26S-R32E

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.

Mewbourne Oil Company
BOP Scematic for
12 1/4" Hole

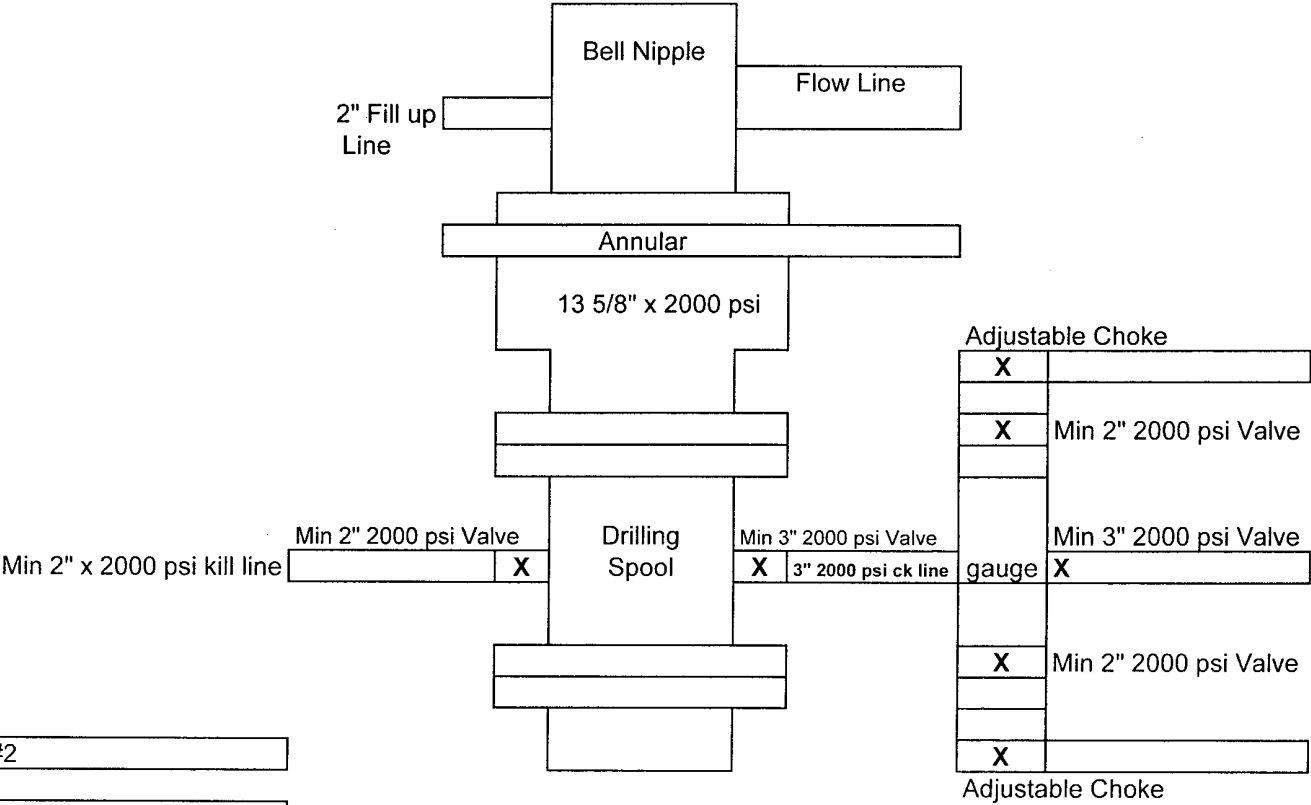


Exhibit #2

Red Hills West 21 Fed #1H
330' FNL & 950' FEL
Sec 21-T26S-R32E
Lea, County
New Mexico

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

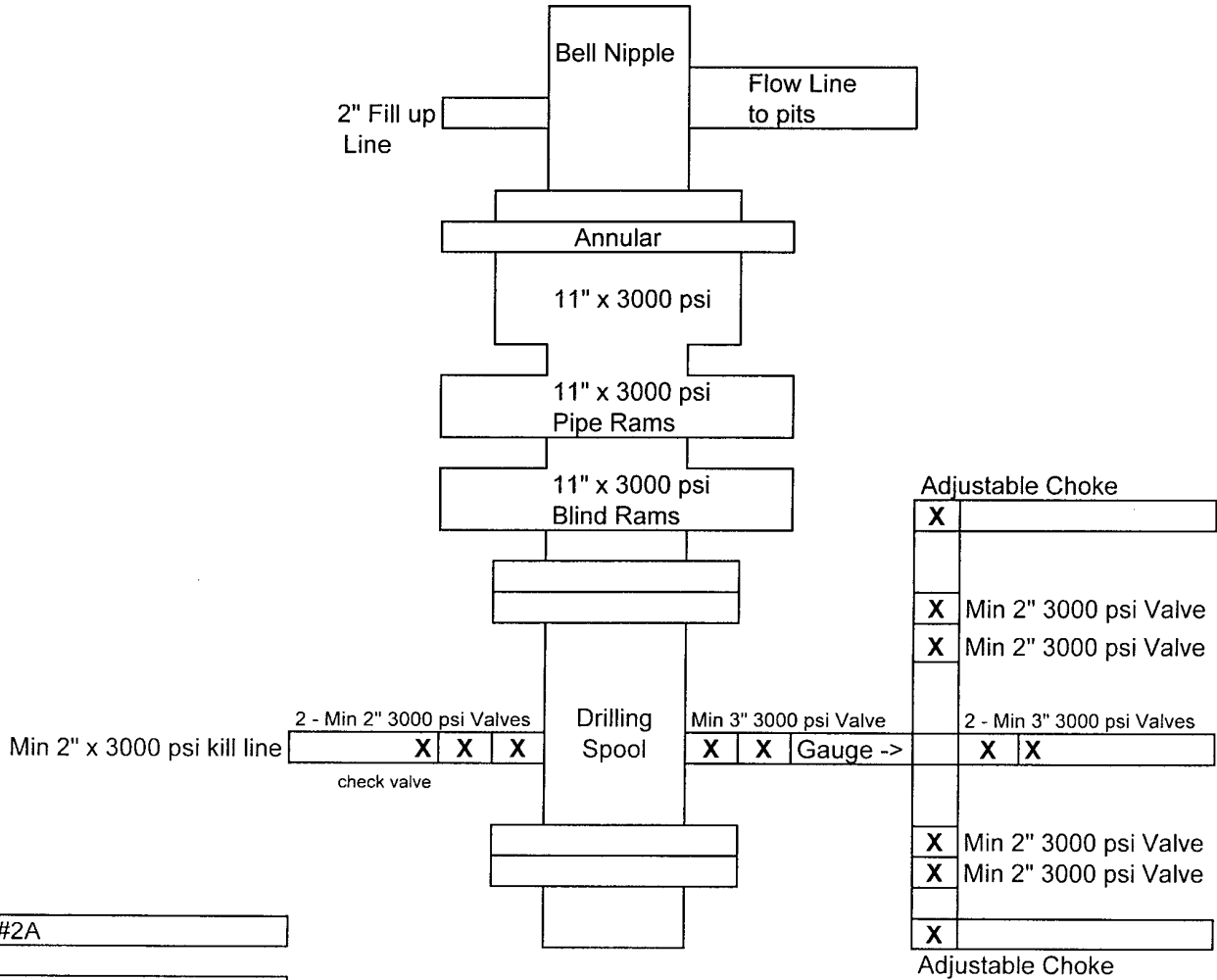
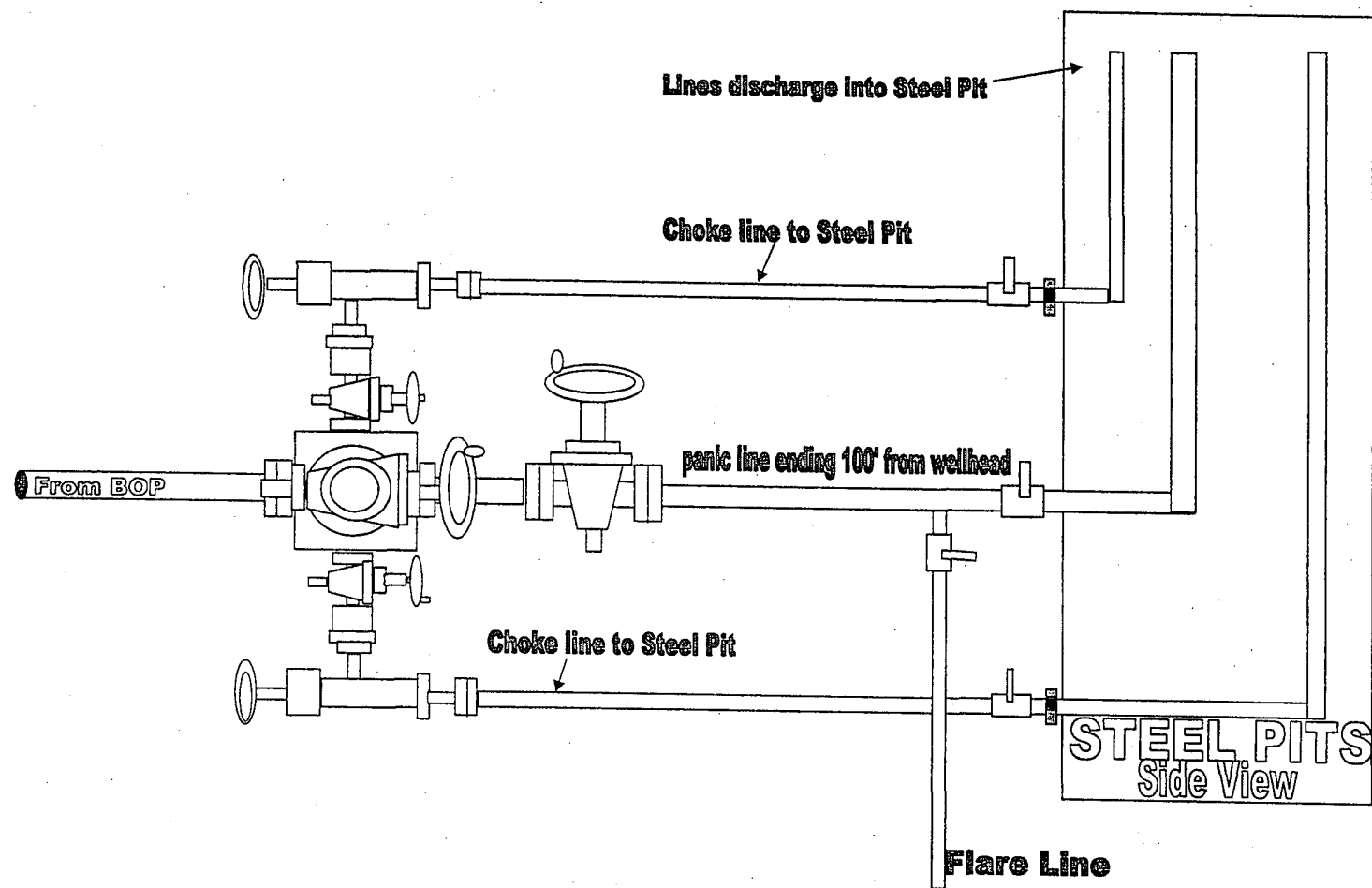
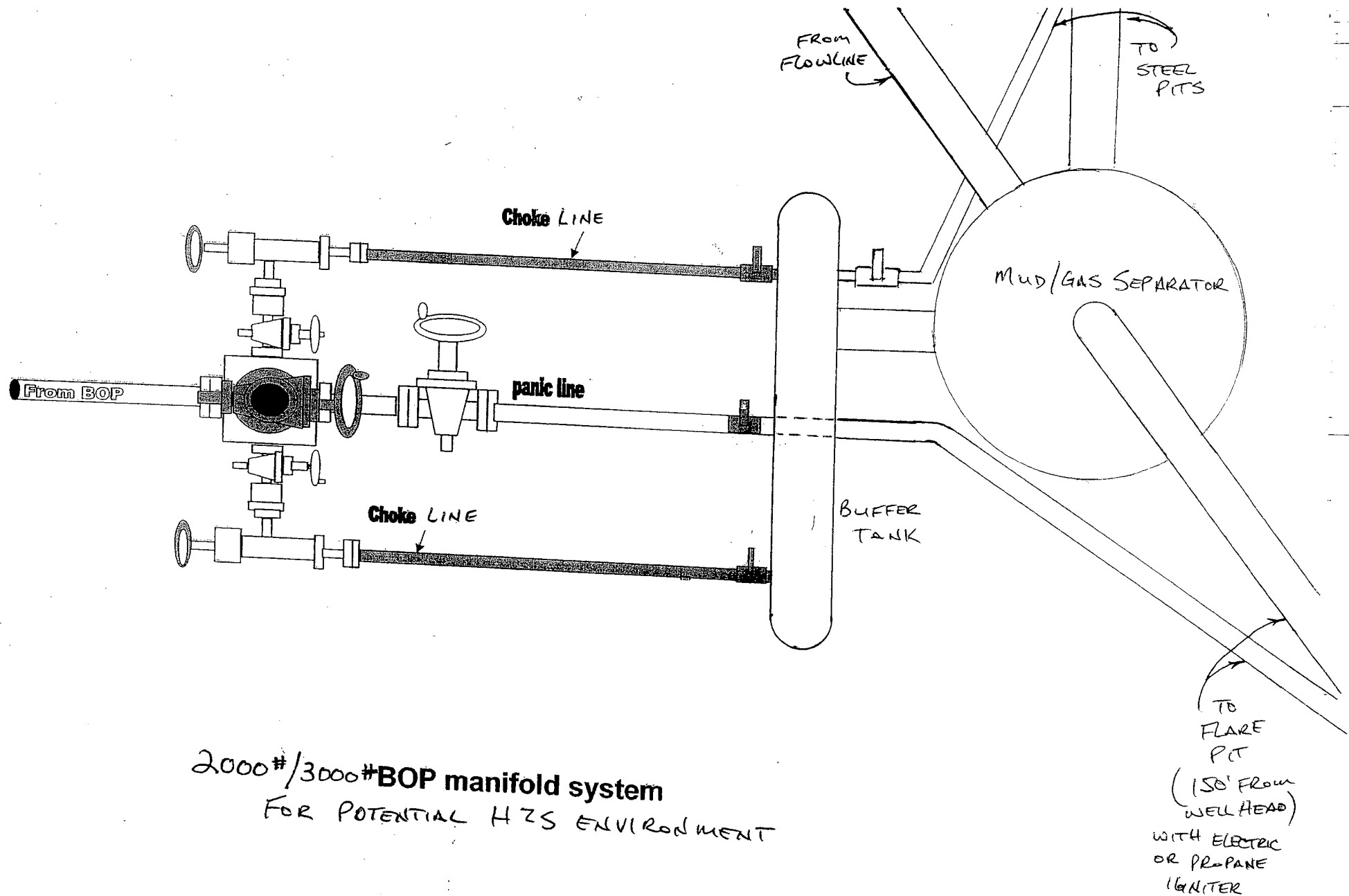


Exhibit #2A

Red Hills West 21 Fed #1H
330' FNL & 950' FEL
Sec 21-T26S-R32E
Lea County,
New Mexico



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



Mewbourne Oil Company

PO Box 5270
Hobbs, NM 88241
(575) 393-5905

HOBBS OCD

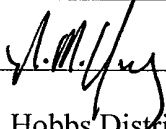
MAY 25 2011

RECEIVED

I hereby certify that I, or someone under my direct supervision, have inspected the drill site and access route proposed herein; that I am familiar with the conditions which currently exist; that I have full knowledge of State and Federal laws applicable to this operation; that the statements made in this APD package are, to the best of my knowledge, true and correct; and that the work associated with the operations proposed herein will be performed in conformity with this APD package and the terms and conditions under which it is approved. I also certify that I, or the company I represent, am responsible for the operations conducted under this application. These statements are subject to the provisions of 18 U.S.C. 1001 for the filing of false statements.

Executed this 21st day of February, 2011.

Name: NM Young

Signature: 

Position Title: Hobbs District Manager

Address: PO Box 5270, Hobbs NM 88241

Telephone: 575-393-5905

E-mail: myoung@mewbourne.com