

Form 3160-3
(August 2007)

HOBBS OCD

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

MAY 23 2012

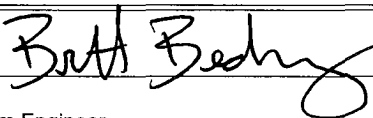
UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

APPLICATION FOR PERMIT TO DRILL OR REENTER RECEIVED

1a. Type of work: ☒ DRILL ☐ REENTER		5. Lease Serial No. NMLC 064790
1b. Type of Well: ☒ Oil Well ☐ Gas Well ☐ Other ☐ Single Zone ☐ Multiple Zone		6. If Indian, Allottee or Tribe Name
2. Name of Operator Mewbourne Oil Company		7. If Unit or CA Agreement, Name and No.
3a. Address PO Box 5270 Hobbs, NM 88240		8. Lease Name and Well No Norte "18" Fed #1H <392397>
3b. Phone No. (include area code) (575) 393-5905		9. API Well No. 30-025-40589
4. Location of Well (Report location clearly and in accordance with any State requirements *) At surface 1760' FNL & 375' FWL (Lot 2) At proposed prod zone 1760' FNL & 330' FEL (Unit H)		10. Field and Pool, or Exploratory Tonto Bone Spring <594757>
14. Distance in miles and direction from nearest town or post office* 33.3 miles West of Hobbs, NM		11. Sec., T. R. M. or Blk. and Survey or Area Sec 18, T19S, R33E
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 161.8 685.4 well 11/21/11	17. Spacing Unit dedicated to this well 161.8
18. Distance from proposed location* to nearest well, drilling, completed, applied for, on this lease, ft. 384' - Surface 820' - horizontal	19. Proposed Depth 14200' MD 9861' TVD	20. BLM/BIA Bond No. on file NM1693, Nationwide
21. Elevations (Show whether DF, KDB, RT, GL, etc.) 3635' GL	22. Approximate date work will start* 01/15/2011	23. Estimated duration 40 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 	Name (Printed/Typed) Brett Bednarz	Date 11/04/2011
Title Petroleum Engineer		
Approved by (Signature) /s/ James A. Amos	Name (Printed/Typed) /s/ James A. Amos	Date MAY 18 2012
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

Approval Subject to General Requirements
& Special Stipulations AttachedSEE ATTACHED FOR
CONDITIONS OF APPROVAL

Drilling Program
Mewbourne Oil Company
 Norte "18" Fed #1H
 1760' FNL & 375' FWL (SHL)
 Sec 18-T19S-R33E
 Lea County, New Mexico.

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

Rustler	1325'
Top of Salt	1450'
Base of Salt	2775'
Yates	3000'
Seven Rivers	3080'
Capitan	3250'
*Queen	4130'
Grayburg	4640'
*San Andres	4920'
*Delaware	5850'
*Bone Springs	7650'

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

Water	Fresh water is anticipated @ 350' & will be protected by setting surface casing at 1350' 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 BOP 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" and 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. 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 9 5/8" and 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 9232' & kick off to horizontal @ 9805' TVD. The well will be drilled to 14200' MD (9861' TVD). See attached directional plan.

5. Proposed casing and cementing program:

A. Casing Program:

*Per Operator
5/17/12 CRW*

Hole Size	Casing	Wt/Ft	Grade	Depth	Jt Type
<i>See COA</i> 17 1/2"	13 3/8" (new)	48#	H40	0'-1350' 1400	ST&C
12 1/4"	9 5/8" (new)	36# 40# or	H40 J55	0'-3600' 4400	LT&C
8 3/4"	7" (new)	26#	P110	0'-9232' MD	LT&C
8 3/4"	7" (new)	26#	P110	9232'-10124' MD	BT&C
6 1/8"	4 1/2" (new)	11.6#	P110	9924'-14200' 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:

- See COA
- i. Surface Casing: 785 sks Class "C" light (35:35:4) cement w/ LCM additives. Yield at 2.05 cuft/sk. 200 sks Class "C" cement w/ 2% CaCl₂. Yield at 1.34 cuft/sk. Cmt circulated to surface w/ 100% excess.
 - i. Intermediate Casing: 550 sacks Class "C" light (35:65:4) cement w/ salt, FL & LCM additives. Yield at 2.01 cuft/sk. 200 sacks Class "C" cement w/ 2% CaCl₂. Yield at 1.34 cuft/sk. Cmt circulated to surface w/ 25% excess.
 - iii. Production Casing: 385 sacks Class "H" light (35:65:4) cement w/ FL & LCM additives. Yield at 2.45 cuft/sk. 400 sacks Class "H" cement w/ FL additives. Yield at 1.20 cuft/sk. Cmt calculated for TOC @ 2500' in 9 5/8" csg 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:

<u>Interval</u>	<u>Type System</u>	<u>Weight</u>	<u>Viscosity</u>	<u>Fluid Loss</u>
0'-1350' 1400	FW spud mud	8.6-9.0	32-34	NA
1350'-3600' 4400	Brine water	10.0-10.2	28-30	NA
3600'-9232' (KOP)	FW	8.5-8.7	28-30	NA
9232'-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 & Gyro from KOP -100' (9132') to surface. GR from 9132' 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 45 days involved in drilling operations and an additional 10 days involved in completion operations on the project.

Mewbourne Oil Co

Lea County, NM

Sec 18, 19S, 33E

Norte 18 Fed Com #1H

Wellbore #1

Plan: Design #1

DDC Well Planning Report

25 October, 2011



DDC Well Planning Report



Database:	EDM 5000.1 Single User.Db	Local Co-ordinate Reference:	Well Norte 18 Fed Com #1H
Company:	Mewbourne Oil Co	TVD Reference:	WELL @ 3653.0usft (Patterson UTI #47)
Project:	Lea County, NM	MD Reference:	WELL @ 3653.0usft (Patterson UTI #47)
Site:	Sec 18, 19S, 33E	North Reference:	Grid
Well:	Norte 18 Fed Com #1H	Survey Calculation Method:	Minimum Curvature
Wellbore:	Wellbore #1		
Design:	Design #1		

Project:	Lea County, NM		
Map System:	US State Plane 1927 (Exact solution)	System Datum:	Mean Sea Level
Geo Datum:	NAD 1927 (NADCON CONUS)		
Map Zone:	New Mexico East 3001		

Site:	Sec 18, 19S, 33E		
Site Position:		Northing:	605,330.96 usft
From:	Map	Easting:	691,994.92 usft
Position Uncertainty:	0 0 usft	Slot Radius:	13-3/16 "
		Latitude:	32° 39' 45.378 N
		Longitude:	103° 42' 34.061 W
		Grid Convergence:	0 34 °

Well:	Norte 18 Fed Com #1H					
Well Position	+N/-S	0 0 usft	Northing:	605,330.96 usft	Latitude:	32° 39' 45.378 N
	+E/-W	0 0 usft	Easting:	691,994.92 usft	Longitude:	103° 42' 34.061 W
Position Uncertainty	0 0 usft	Wellhead Elevation:		Ground Level:	3,635.0 usft	

Wellbore		Wellbore #1			
Magnetics	Model Name	Sample Date	Declination	Dip Angle	Field Strength
			(°)	(°)	(nT)
	IGRF2010	10/25/2011	7.64	60.56	48,828

Design:	Design #1
Audit Notes:	
Version:	Phase: PLAN Tie On Depth: 0 0

Vertical Section:	Depth From (TVD)	+N/-S	+E/-W	Direction
	(usft)	(usft)	(usft)	(°)
	0 0	0 0	0.0	89.78

Plan Sections										
Measured Depth	Inclination	Azimuth	Vertical Depth	+N/-S	+E/-W	Dogleg Rate	Build Rate	Turn Rate	TFO	Target
(usft)	(°)	(°)	(usft)	(usft)	(usft)	(°/100usft)	(°/100usft)	(°/100usft)	(°)	
0.0	0.00	0 00	0.0	0.0	0 0	0.00	0.00	0 00	0 00	
9,232.1	0 00	0 00	9,232.1	0.0	0 0	0 00	0.00	0 00	0 00	
10,124.2	89 21	89.78	9,805.0	2 2	565.1	10 00	10.00	10 06	89 78	
14,199.5	89 21	89 78	9,861.0	17 7	4,639.9	0.00	0.00	0 00	0 00	PBHL Norte 18 Fed

DDC Well Planning Report



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Company	Mewbourne Oil Co	TVD Reference	WELL @ 3653.0usft (Patterson UTI #47)
Project	Lea County, NM	MD Reference	WELL @ 3653.0usft (Patterson UTI #47)
Site	Sec 18, 19S, 33E	North Reference	Grid
Well	Norte 18 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

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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	
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	
Build 10°/100' @ 9232' MD										
9,232.1	0.00	0.00	9,232.1	0.0	0.0	0.0	0.00	0.00	0.00	
9,300.0	6.79	89.78	9,299.8	0.0	4.0	4.0	10.00	10.00	0.00	
9,400.0	16.79	89.78	9,397.6	0.1	24.4	24.4	10.00	10.00	0.00	
9,500.0	26.79	89.78	9,490.3	0.2	61.5	61.5	10.00	10.00	0.00	
9,600.0	36.79	89.78	9,575.2	0.4	114.1	114.1	10.00	10.00	0.00	
9,700.0	46.79	89.78	9,649.7	0.7	180.7	180.7	10.00	10.00	0.00	
9,800.0	56.79	89.78	9,711.5	1.0	259.1	259.1	10.00	10.00	0.00	
9,900.0	66.79	89.78	9,758.7	1.3	347.2	347.2	10.00	10.00	0.00	
10,000.0	76.79	89.78	9,789.9	1.7	442.0	442.0	10.00	10.00	0.00	
10,100.0	86.79	89.78	9,804.2	2.1	540.9	540.9	10.00	10.00	0.00	
EOB @ 10124' MD / 89.21° Inc / 89.78° Azm / 9805' TVD										
10,124.2	89.21	89.78	9,805.0	2.2	565.1	565.1	10.00	10.00	0.00	
10,200.0	89.21	89.78	9,806.0	2.4	640.8	640.9	0.00	0.00	0.00	

DDC Well Planning Report



Database:	EDM 5000.1 Single User Db	Local Co-ordinate Reference:	Well Norte 18 Fed Com #1H
Company:	Mewbourne Oil Co	TVD Reference:	WELL @ 3653.0usft (Patterson UTI #47)
Project:	Lea County, NM	MD Reference:	WELL @ 3653.0usft (Patterson UTI #47)
Site:	Sec 18, 19S, 33E	North Reference:	Grid
Well:	Norte 18 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	89.21	89.78	9,807.4	2.8	740.8	740.8	0.00	0.00	0.00	
10,400.0	89.21	89.78	9,808.8	3.2	840.8	840.8	0.00	0.00	0.00	
10,500.0	89.21	89.78	9,810.2	3.6	940.8	940.8	0.00	0.00	0.00	
10,600.0	89.21	89.78	9,811.5	4.0	1,040.8	1,040.8	0.00	0.00	0.00	
10,700.0	89.21	89.78	9,812.9	4.4	1,140.8	1,140.8	0.00	0.00	0.00	
10,800.0	89.21	89.78	9,814.3	4.7	1,240.8	1,240.8	0.00	0.00	0.00	
10,900.0	89.21	89.78	9,815.7	5.1	1,340.8	1,340.8	0.00	0.00	0.00	
11,000.0	89.21	89.78	9,817.0	5.5	1,440.8	1,440.8	0.00	0.00	0.00	
11,100.0	89.21	89.78	9,818.4	5.9	1,540.8	1,540.8	0.00	0.00	0.00	
11,200.0	89.21	89.78	9,819.8	6.3	1,640.7	1,640.8	0.00	0.00	0.00	
11,300.0	89.21	89.78	9,821.2	6.6	1,740.7	1,740.7	0.00	0.00	0.00	
11,400.0	89.21	89.78	9,822.5	7.0	1,840.7	1,840.7	0.00	0.00	0.00	
11,500.0	89.21	89.78	9,823.9	7.4	1,940.7	1,940.7	0.00	0.00	0.00	
11,600.0	89.21	89.78	9,825.3	7.8	2,040.7	2,040.7	0.00	0.00	0.00	
11,700.0	89.21	89.78	9,826.7	8.2	2,140.7	2,140.7	0.00	0.00	0.00	
11,800.0	89.21	89.78	9,828.0	8.5	2,240.7	2,240.7	0.00	0.00	0.00	
11,900.0	89.21	89.78	9,829.4	8.9	2,340.7	2,340.7	0.00	0.00	0.00	
12,000.0	89.21	89.78	9,830.8	9.3	2,440.7	2,440.7	0.00	0.00	0.00	
12,100.0	89.21	89.78	9,832.2	9.7	2,540.7	2,540.7	0.00	0.00	0.00	
12,200.0	89.21	89.78	9,833.5	10.1	2,640.6	2,640.7	0.00	0.00	0.00	
12,300.0	89.21	89.78	9,834.9	10.5	2,740.6	2,740.7	0.00	0.00	0.00	
12,400.0	89.21	89.78	9,836.3	10.8	2,840.6	2,840.6	0.00	0.00	0.00	
12,500.0	89.21	89.78	9,837.6	11.2	2,940.6	2,940.6	0.00	0.00	0.00	
12,600.0	89.21	89.78	9,839.0	11.6	3,040.6	3,040.6	0.00	0.00	0.00	
12,700.0	89.21	89.78	9,840.4	12.0	3,140.6	3,140.6	0.00	0.00	0.00	
12,800.0	89.21	89.78	9,841.8	12.4	3,240.6	3,240.6	0.00	0.00	0.00	
12,900.0	89.21	89.78	9,843.1	12.7	3,340.6	3,340.6	0.00	0.00	0.00	
13,000.0	89.21	89.78	9,844.5	13.1	3,440.6	3,440.6	0.00	0.00	0.00	
13,100.0	89.21	89.78	9,845.9	13.5	3,540.6	3,540.6	0.00	0.00	0.00	
13,200.0	89.21	89.78	9,847.3	13.9	3,640.5	3,640.6	0.00	0.00	0.00	
13,300.0	89.21	89.78	9,848.6	14.3	3,740.5	3,740.6	0.00	0.00	0.00	
13,400.0	89.21	89.78	9,850.0	14.7	3,840.5	3,840.5	0.00	0.00	0.00	
13,500.0	89.21	89.78	9,851.4	15.0	3,940.5	3,940.5	0.00	0.00	0.00	
13,600.0	89.21	89.78	9,852.8	15.4	4,040.5	4,040.5	0.00	0.00	0.00	
13,700.0	89.21	89.78	9,854.1	15.8	4,140.5	4,140.5	0.00	0.00	0.00	
13,800.0	89.21	89.78	9,855.5	16.2	4,240.5	4,240.5	0.00	0.00	0.00	
13,900.0	89.21	89.78	9,856.9	16.6	4,340.5	4,340.5	0.00	0.00	0.00	
14,000.0	89.21	89.78	9,858.3	16.9	4,440.5	4,440.5	0.00	0.00	0.00	
14,100.0	89.21	89.78	9,859.6	17.3	4,540.4	4,540.5	0.00	0.00	0.00	
TD @ 14200' MD / 9861' TVD										
14,199.5	89.21	89.78	9,861.0	17.7	4,639.9	4,639.9	0.00	0.00	0.00	

Design Targets										
Target Name	hit/miss target	Dip Angle (°)	Dip Dir (°)	TVD (usft)	+N/-S (usft)	+E/-W (usft)	Northing (usft)	Easting (usft)	Latitude	Longitude
PBHL Norte 18 Fed C		0.00	0.00	9,861.0	17.7	4,639.9	605,348.66	696,634.82	32° 39' 45.280 N	103° 41' 39.785 W
- plan hits target center										
- Point										

DDC Well Planning Report



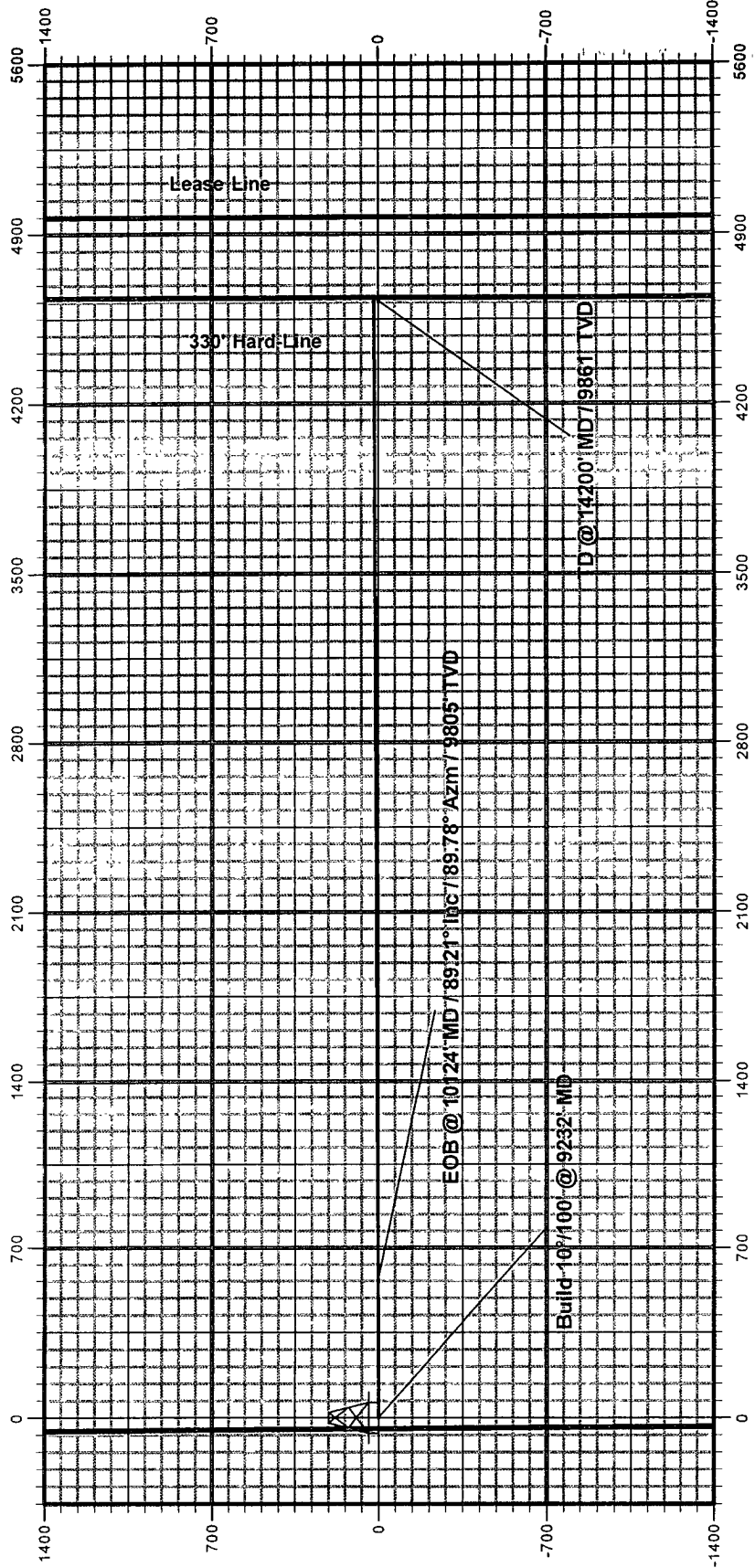
Database:	EDM 5000.1 Single User Db	Local Co-ordinate Reference:	Well Norte 18 Fed Com #1H
Company:	Mewbourne Oil Co	TVD Reference:	WELL @ 3653.0usft (Patterson UTI #47)
Project:	Lea County, NM	MD Reference:	WELL @ 3653.0usft (Patterson UTI #47)
Site:	Sec 18, 19S, 33E	North Reference:	Grid
Well:	Norte 18 Fed Com #1H	Survey Calculation Method:	Minimum Curvature
Wellbore:	Wellbore #1		
Design:	Design #1		

Plan Annotations				
Measured Depth (usft)	Vertical Depth (usft)	Local Coordinates		Comment
		+N/-S (usft)	+E/-W (usft)	
9,232.1	9,232.1	0.0	0.0	Build 10°/100' @ 9232' MD
10,124.2	9,805.0	2.2	565.1	EOB @ 10124' MD / 89 21° Inc / 89 78° Azm / 9805' TVD
14,199.5	9,861.0	17.7	4,639.9	TD @ 14200' MD / 9861' TVD

Mewbourne Oil Company



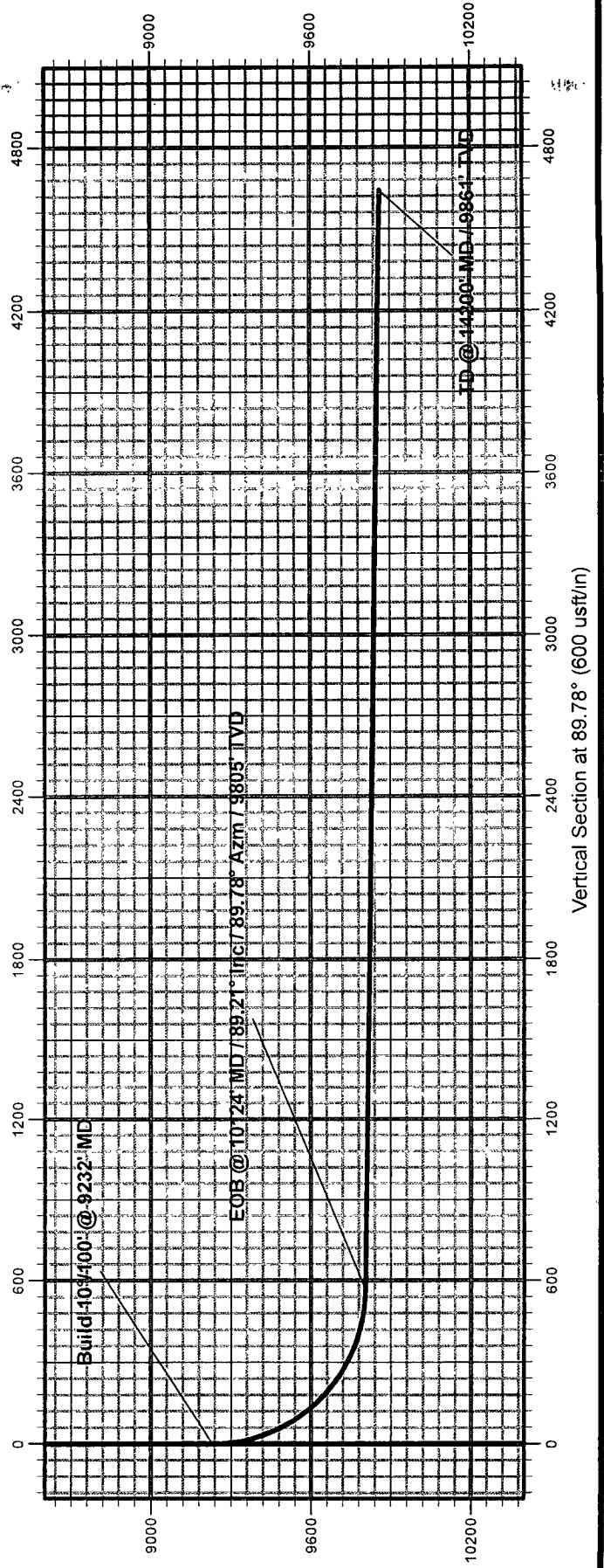
Lea County, NM
 Norte 18 Fed Com #1H
 Quote 110719



Mewbourne Oil Company



Lea County, NM
Norte 18 Fed Com #1H
Quote 110719



Notes Regarding Blowout Preventer

Mewbourne Oil Company

Norte "18" Fed #1H

1760' FNL & 375' FWL (SL)

Sec 18-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 $\frac{3}{8}$ " casing and 3000 psi working pressure on 9 $\frac{5}{8}$ " and 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.

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

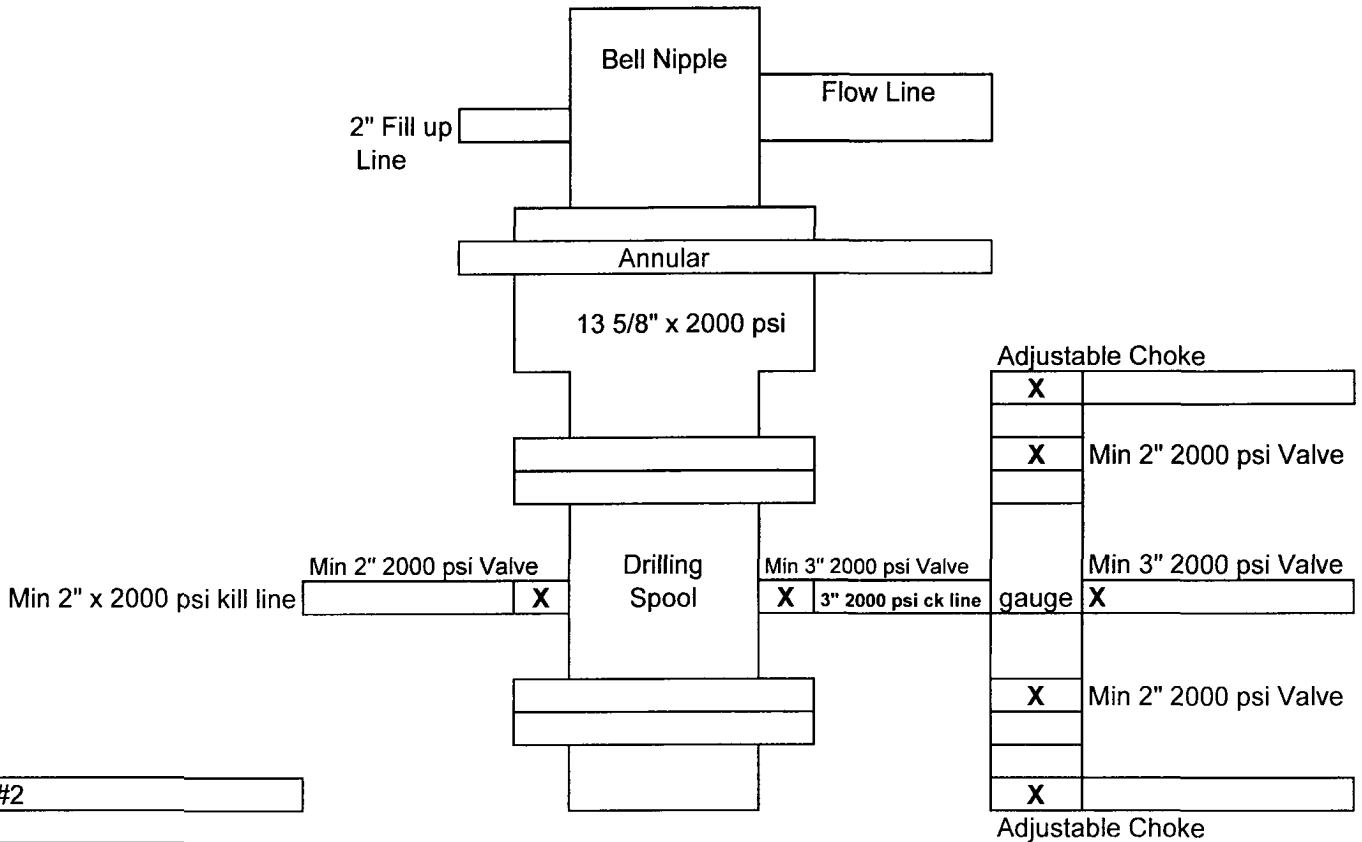


Exhibit #2

Norte "18" Fed #1H
1760' FNL & 375' FWL
Sec 18-T19S-R33E
Lea, County
New Mexico

Mewbourne Oil Company
BOP Scematic for
6 1/8" and 8 3/4" Holes

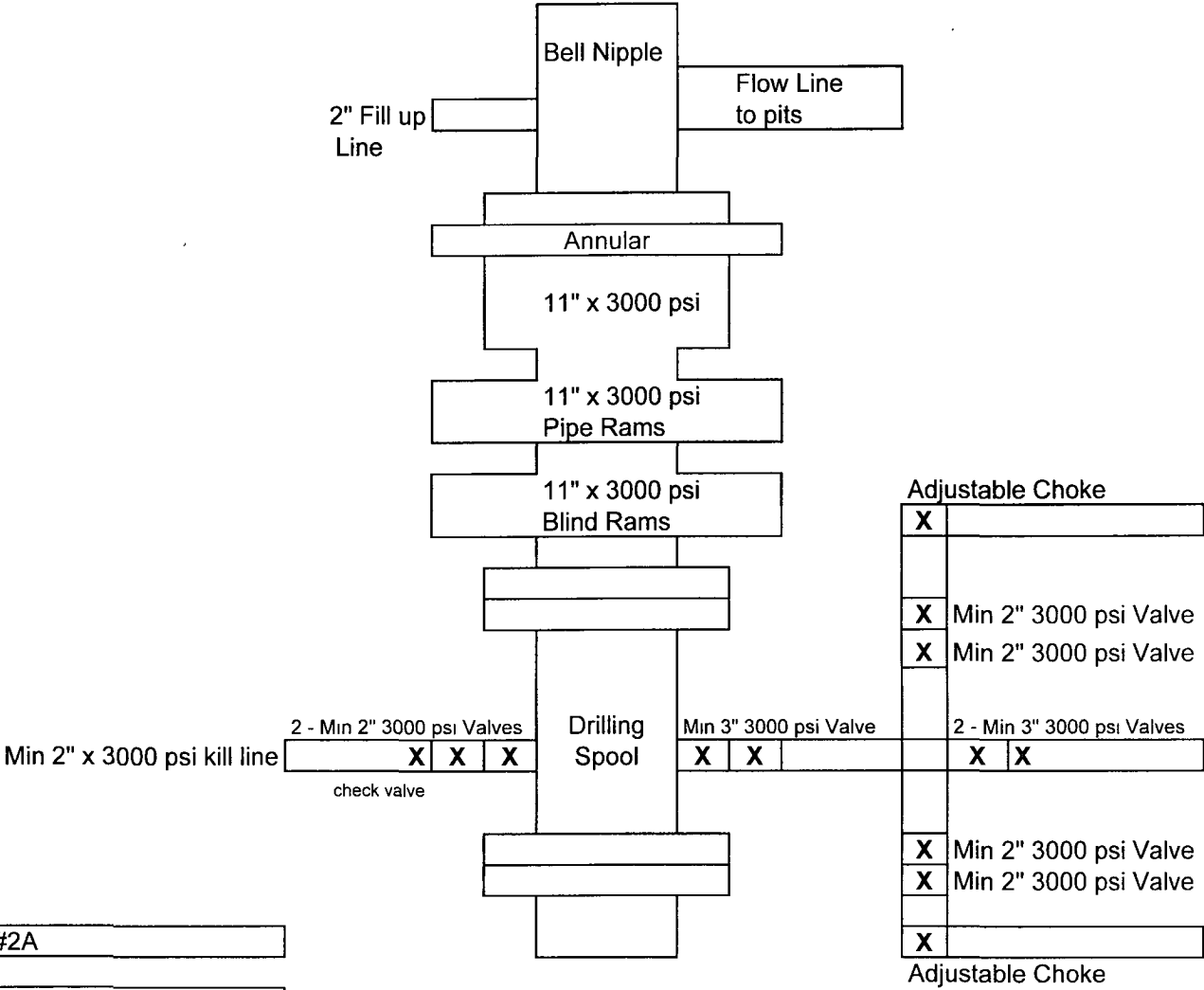
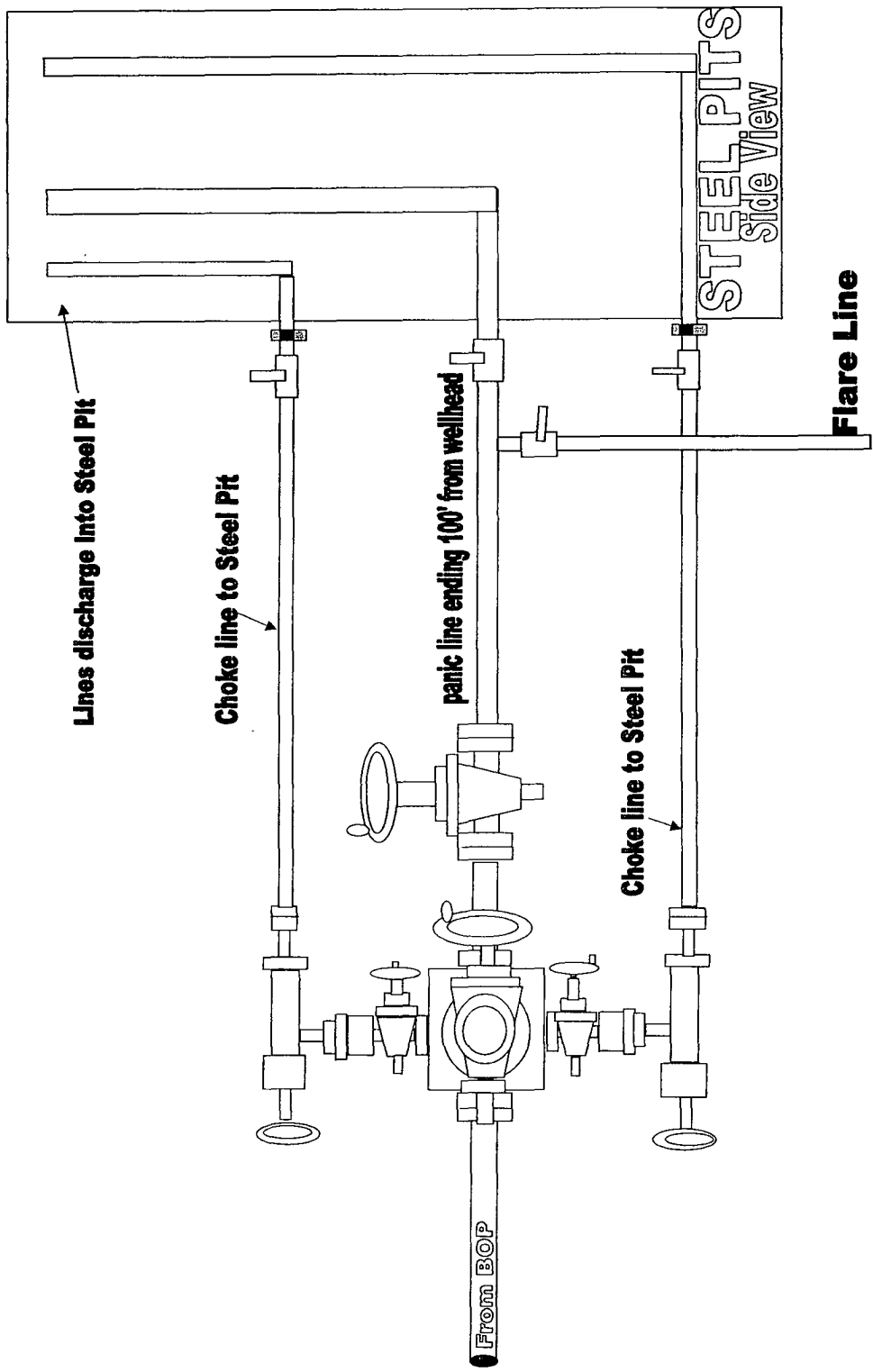


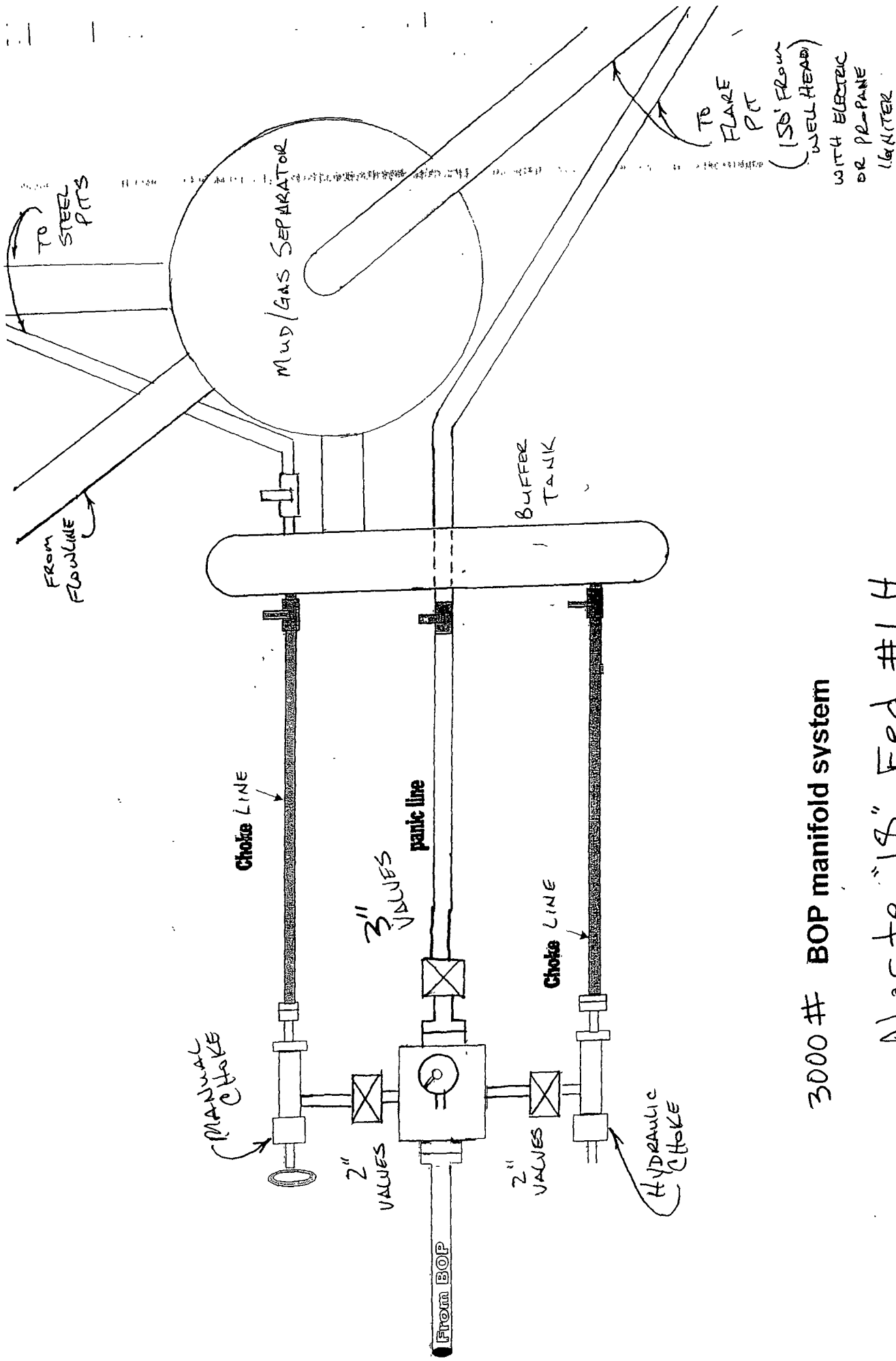
Exhibit #2A

Norte "18" Fed #1H
1760' FNL & 375' FWL
Sec 18-T19S-R33E
Lea County,
New Mexico



3000# BOP manifold system for Exhibit 2 & 2A

Note "18" Fed #114



3000# BOP manifold system

Norte "18" Fed #1 H

Closed Loop Pad Dimensions 280' x 320'

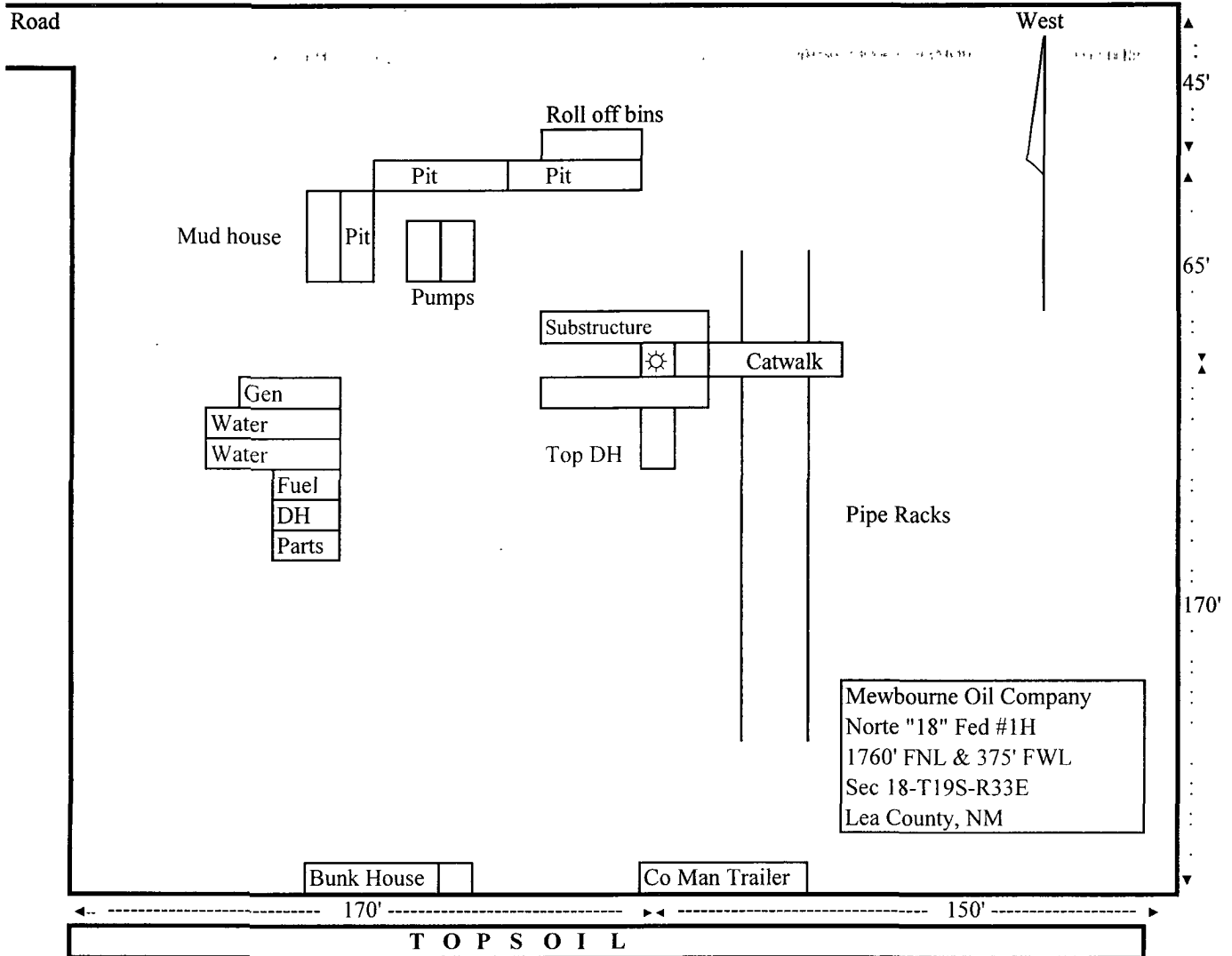


Exhibit 5