OCD-ARTESIA

FORM APPROVED OMB No 1004-0136 Expires January 31, 2004

UNITED STATES
DEPARTMENT OF THE INTERIO
BUREAU OF LAND MANAGEMENT

APPLICATION I	EOD DERM	ווד דה הפוו ו	OR REENTER

if. Lease Serial No. BHL NMNM0553777 & Fee

6. If Indian, Allottee or Tribe Name

ALL EIGHT ON LEMMY TO BE	WEE OIL					
la. Type of Work: DRILL REENTE	7. If Unit or CA Agreement, Name and No.					
1b. Type of Well: Oil Well Gas Well Other	iple Zone	8. Lease Name and We Fast Draw 4 AD Fed				
2. Name of Operator				9. API Well No.	0C2041	
Mewbourne Oil Company - 14744				30-015-	<u> 3757/</u>	
3a. Address		10. Field and Pool, or E	Exploratory			
PO Box 5270 Hobbs, NM 88241	575-393-59	005		N Seven Rivers Gl		
4. Location of Well (Report location clearly and in accordance with a	iny State requ	irements. *)		11. Sec., T., R., M., or	Blk and Survey or Area	
At surface (SL) 350' FNL & 330' FEL Unit A				Sec 4, T20S, R25E		
At proposed prod. zone (BHL) 350' FNL & 330' FWL Unit [)			000 4, 1200, 1252		
14. Distance in miles and direction from nearest town or post office*				12. County or Parish	13 State	
14 Miles S of Artesia				Eddy	NM	
 Distance from proposed* location to nearest property or lease line, ft. 	16 No of Acres in lease 17. Space		17. Spacin	ing Unit dedicated to this well		
(Also to nearest drig unit line, if any) 330'	280	160				
18. Distance from proposed location* to nearest well, drilling, completed, applied for, on this lease, ft				BIA Bond No. on file		
1679' 21 Elevations (Show whether DF, KDB, RT, GL, etc.)	+	2548' TVD imate date work will s		, Nationwide 23. Estimated duration		
3497' GL	ASAP	iniate date work will s	tart	15		
	24. Atta	chments				
The following, completed in accordance with the requirements of Onshoi	re Oil and Gas	Order No 1, shall be at	tached to the	s form:		
 Well plat certified by a registered surveyor A Drilling Plan. A Surface Use Plan (if the location is on National Forest System SUPO shall be filed with the appropriate Forest Service Office) 	Lands, the	Item 20 above). 5 Operator certific	ation specific info	s unless covered by an e		
5. Signature	Name	(Printed/Typed)			Date	
Jackie Lathan	Jacki	e Lathan			05/31/11	
Title () Hobbs Regulatory						
Approved by (Signature) /s/ Don Peterson	Name	Name (Printed/Typed) Date AIIG				
FIELD MANAGER	Office	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.

APPROVAL FOR TWO YEARS Conditions of approval, if any, are attached

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)

Roswell Controlled Water Basin

AUG 24 2011 NMOCD ARTESIA

SEE ATTACHED FOR CONDITIONS OF APPROVAL **Approval Subject to General Requirements** & Special Stipulations Attached

<u>Drilling Program</u> Mewbourne Oil Company

Fast Draw "4" AD Federal Com #1H 350' FNL & 330' FEL (SHL) Sec 4-T20S-R25E Eddy County, New Mexico

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

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

Water

Fresh water is anticipated @ 190' and will be protected by setting surface

casing at 805' 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 9 %" & 7" casing. Pressure tests will be conducted and BOPE will remain in use until completion of drilling operations. The BOP will be inspected and operated daily to ensure mechanical integrity and the inspection will be recorded on the daily drilling report.

Will test the BOPE to 1500# with a third party testing company before drilling below shoe as per BLM Onshore Oil and Gas Order #2.

4. MOC proposes to drill a vertical wellbore to 1975' & kick off to horizontal @ 2548' TVD. The well will be drilled to 6960' MD (2493' TVD). See attached directional plan.

5. Proposed casing and cementing program:

Coning Drograms

Hole Size	Casing 9 1/8" (new)	:	<u>Wt/Ft.</u> 36#	<u>Grade</u> J55	Depth 0'-805'	Jt Type LT&C
8 3/4"	7" (new)		26#	J55	0'-1975'	LT&C
8 3/4"	7" (new)		26#	J55	1975'-2883' ME	BT&C
6 1/8"	4 ½" (new)	***	11.6#	J55	2683'-6934' ME	LT&C

Minimum casing design factors: Collapse 1.125, Burst 1.0, Tensile strength 1.8. *Subject to availability of casing.



Drilling Program
Mewbourne Oil Company
Fast Draw 4 AD Fed Com #1H
Page 2

B. Cementing Program:

iii.

Surface Casing: 375 sacks sacks class "C" w/2% CaCl2. Yield at 1.34 cuft/sk.
 Cmt circulated to surface with 100% excess.

Production Casing: 125 sacks Class C *light cement with additives. Yield at 2.05 cuft/sk. 200 sacks Class C cement w/fluid loss additives. Yield at 1.33 cuft/sk Cmt circulated to surface with 25% excess.

<u>Production Liner</u>: This will be a Packer/<u>Port</u> 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>	Type System	<u>Weight</u>	Viscosity	Fluid Loss
0'-805'	FW spud mud	8.6-9.0	32-34	NA
805'-1875' (KOP-100')	Fresh water	8.4-8.6	28-30	NA
1875'- TD	FW w/Polymer	8.5-8.7	32-35	20

7. Evaluation Program:

Samples: 10' samples from surface casing to TD.

Logging: Gyro, CN,& GR Surface to 1875'. GR 1875' - TVD

8. Downhole Conditions

Zones of abnormal pressure: None anticipated

Zones of lost circulation: Anticipated in surface and intermediate holes

Maximum bottom hole temperature: 100 degree F

Maximum bottom hole pressure: 8.4 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 15 days involved in drilling operations and an additional 10 days involved in completion operations on the project.

Mewbourne Oil Co

Eddy County, New Mexico Sec 4-20S-25E Fast Draw 4 AD Fed Com #1H

Wellbore #1

Plan: Design #1

DDC Well Planning Report

26 May, 2011



DDC

Well Planning Report



EDM 5000.1 Single User Db Database Company: Mewbourne Oil Co

Project: Eddy County, New Mexico

Site: Sec 4-20S-25E

Well: Fast Draw 4 AD Fed Com #1H

Wellbore: Wellbore #1 Design #1

Local Co-ordinate Reference:

TVD Reference: MD Reference:

North Reference:

Survey Calculation Method:

Well Fast Draw 4 AD Fed Com #1H

WELL @ 3516.0usft (Patterson UTI #101)

WELL @ 3516.0usft (Patterson UTI #101) Grid

Minimum Curvature

Eddy County, New Mexico Project

Map System:

US State Plane 1927 (Exact solution)

NAD 1927 (NADCON CONUS)

Geo Datum: Map Zone:

New Mexico East 3001

System Datum:

Mean Sea Level

Sec 4-20S-25E

Site Position:

Northing:

581,878.03 usft

Latitude:

32° 35' 58.542 N

From:

Easting:

452,952.66 usft

Longitude:

Position Uncertainty:

104° 29' 9.974 W

0.0 usft Slot Radius:

13-3/16 "

Grid Convergence:

STEET WALKERS WATER WATER STOP TO THE TRANSPORT OF THE PROPERTY OF THE PROPERT

-0.08

Fast Draw 4 AD Fed Com #1H

Well Position

+N/-S 3,291.7 usft +E/-W 1,328.0 usft Northing: Easting:

585,169.77 usft 454,280.65 usft Latitude: Longitude: 32° 36' 31.135 N

Position Uncertainty

0.0 usft

Wellhead Elevation:

Ground Level:

104° 28' 54.504 W 3,497.0 usft

Wellbore Wellbore #1

Model Name

Declination

Field Strength

IGRF2010

270.30

Design,

Audit Notes:

Version:

2,493.0

Tie On Depth:

Phase:

0.00

0.00

Direction

Vertical Section

Depth From (TVD) (usft)

(usft)

(°) 270.30

0.00

Plan Sections Build Measured Vertical Dogleg Build Rate Rate Turn Depth Inclination Azimuth Depth 🦚 (usft) (°/100usft) (°/100usft) (°/100usft) (usft) (usft) 🕏 0.0 0.00 0.00 0.0 0.0 0.0 0.00 0.00 0.00 0 00 1.975.1 0.00 0.00 1.975.1 0.0 0.0 0.00 0.00 0.00 0.00 2,882.9 90.78 270.30 2,548.0 3.1 -580.7 10.00 10.00 -9 88 270.30

-4,630.7

24.6

6,933.3

90.78

0.00 PBHL Fast Draw 4.

DDC

Well Planning Report



Database: Company Project: Site: Well: Wellbore:

en de la company EDM 5000.1 Single User Db Mewbourne Oil Co Eddy County, New Mexico

Sec 4-20S-25E

Design: Design #1

Fast Draw 4 AD Fed Com #1H Wellbore #1

TVD Reference:
MD Reference:
North Reference:
Survey Calculation Method:

Local Co-ordinate Reference: Well Fast Draw 4 AD Fed Com #1H WELL @ 3516.0usft (Patterson UTI #101) WELL @ 3516:0usft (Patterson UTI #101) Grid

Minimum Curvature

Design: L	Jesign #1	engamente na machanamamamamamamamamamamamamamamamamamama	PT ALGERIA TO MARKS - THE SERT STRUMENTS				Corthograph , Mornages / Shieles-	adiomes viewers or personalized in the con-	economicos nos nomes mechanismos
Planned Survey		and many properties of the second					and and object of the Control of the		
* Measured			Vertical			Vertical	Dogleg	Build	Turn
Depth In (usft)		Azimuth		+N/-S:		Section (usft) (Rate	Rate °/100usft) (Rate
(usit)	(°)	(°)	(usity	(usft)	(usft)		/ioousit/, (moodsity.	//ousity
0.0	0.00	0.00	0.0	0.0	0.0	0.0	0.00	0.00	0.00
100.0 200.0	0.00 0.00	0.00	100.0	0.0	0.0	0.0	0.00	0.00	0.00
300.0	0.00	0.00 0.00	200.0 300.0	0.0 0.0	0.0 0.0	0.0 0.0	0.00 0.00	0.00 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 1,300.0	0.00 0.00	0.00 0.00	1,200.0 1,300.0	0.0 0.0	0.0 0.0	0.0 0.0	0.00 0.00	0.00 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	00	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
Build 10°/100'			٠						
1,975.1	0.00	0 00	1,975 1	0.0	0.0	0.0	0 00	0.00	0.00
2,000 0 2,100 0	2.49	270.30	2,000 0	0.0	-0.5	0.5	10.00	10 00	0.00
2,100 0	12.49 22.49	270.30 270 30	2,099.0 2,194.3	0 1 0 2	-13.6 -43.6	13.6 43.6	10.00 10.00	10.00 10.00	0.00 0.00
2,300 0	32.49	270.30	2,194.3	05	-89.7	89.7	10.00	10.00	0.00
2,400 0	42.49	270 30	2,362.1	0.8	-150.5	150.5	10.00	10 00	0.00
2,500 0	52 49	270.30	2,429.6	1.2	-224.1	224.1	10.00	10 00	0.00
2,600.0	62.49	270 30	2,483.3	1.6	-308 3	308.3	10.00	10.00	0.00
2,700.0	72.49	270 30	2,521 5	2.1	-400.6	400.6	10.00	10.00	0.00
2,800.0	82.49	270.30	2,543 1	2.6	-498.1	498.1	10 00	10.00	0.00
			Azm / 2548' TV						
2,882.9 2,900.0	90 78 90 78	270.30 270.30	2,548 0 2,547.8	3 1 3.2	-580.7 -597.8	580.7 597.9	10.00 0.00	10 00 0.00	0.00 0.00
3,000.0	90.78	270.30	2,546.4	3.7	-697.8	697.8	0.00	0.00	0.00
3,100.0	90 78	270.30	2,545.1	4.2	-797.8	797.8	0.00	0.00	0.00
3,200.0	90.78	270.30	2,543.7	4.8	-897.8	897.8	0 00	0 00	0.00
3,300.0	90.78	270.30	2,542 3	5.3	-997.8	997.8	0.00	0.00	0.00
3,400.0	90.78	270.30	2,541.0	58	-1,097.8	1,097.8	0.00	0.00	0.00
3,500.0 3,600.0	90 78	270 30	2,539.6	6.4	-1,197.8	1,197.8	0.00	0.00	0.00
3,600.0 3,700.0	90.78 90 78	270.30 270.30	2,538.3 2,536.9	6.9 7.4	-1,297.8 -1,397.8	1,297.8 1,397.8	0.00 0.00	0.00 0.00	0.00 0.00
3.800.0	90.78	270.30	2,535 6	8.0	-1,497.8	1,497.8	0.00	0.00	0.00
3,900.0	90.78	270.30	2,535 6	8.5	-1,497.6 -1,597.7	1,497.8	0.00	0.00	0.00
4,000.0	90 78	270.30	2,532.8	9.0	-1,697.7	1,697.8	0.00	0.00	0.00
4,100 0	90 78	270 30	2,531.5	9.6	-1,797.7	1,797.7	0.00	0.00	0 00
4,200 0	90.78	270 30	2,530.1	10.1	-1,897.7	1,897.7	0 00	0.00	0.00
4,300.0	90.78	270 30	2,528.8	10.6	-1,997.7	1,997.7	0.00	0.00	0.00
4,400.0	90.78	270.30	2,527.4	11.1	-2,097.7	2,097.7	0.00	0.00	0.00
4,500.0 4,600.0	90 78 90 78	270 30 270.30	2,526.0 2.524.7	11.7	-2,197.7 2,297.7	2,197.7	0.00	0.00	0.00
4,700.0 4,700.0	90 78	270.30	2,524.7 2,523.3	12.2 12.7	-2,297.7 -2,397.7	2,297.7 2,397.7	0.00 0.00	0 00 0.00	0.00 0.00
4,800.0	90.78	270.30	2,522.0		-2,397.7				
4,800.0 4,900.0	90.78 90.78	270.30 270.30	2,522 0 2,520 6	13 3 13 8	-2,497.6 -2,597.6	2,497.7 2,597.7	0.00 0.00	0.00 0.00	0.00 0.00
					2,001.0	2,001.1	0.00	0.00	0.00

DDC

Well Planning Report



Database: Company Project: Site: Well: Well: Wellbore:

EDM 5000.1 Single User Db Mewbourne Oil Co

Eddy County, New Mexico Sec 4-20S-25E

Fast Draw 4 AD Fed Com #1H Wellbore #1 Design #1

MD Reference: MD Reference: North Reference: Survey Calculation Method:

Local Co-ordinate Reference: Well Fast Draw 4 AD Fed Com #1H
TVD Reference: WELL @ 3516.0usft (Patterson UTI: WELL @ 3516.0usft (Patterson UTI #101) WELL @ 3516.0usft (Patterson UTI #101) Grid Minimum Curvature

Design:	Design #1		Dan Periodo de Sentido de Constante de Con				SECTION ASSESSED SALES TO CONTRACT OF THE CONT	nya kepelindira disaganifkah baantsida Egik Jamban s	galar Jawan, walinkanincencah, diventry, karintahakhintaharing
Planned Survey									
Measured			Vertical			Vertical	Dogleg	Bulld	Turn
Depth	Inclination	Azimuth	Depth	+N/-S:	+E/-W	Section *	Rate	Rate	Rate
(usft)	(°)	(°)	(usft)	(usft)	(usft)	(usft)	(°/100usft)	(°/100usft)	(°/100usft)
5,000.0	90.78	270.30	2,519.3	14.3	-2,697.6	2,697.7	0.00	0.00	. 0.00
5,100.0	90.78	270.30	2,517.9	14.9	-2,797.6	2,797.7	0.00	0.00	0.00
5,200.0	90.78	270.30	2,516.5	15.4	-2,897.6	2,897.6	0.00	0.00	0.00
5,300.0	90.78	270.30	2,515.2	15.9	-2,997.6	2,997.6	0.00	0.00	0.00
5,400.0	90.78	270.30	2,513.8	16.5	-3.097.6	3,097.6	0.00	0.00	0.00
5,500.0	90.78	270.30	2,512.5	17.0	-3,197.6	3,197.6	0.00	0.00	0.00
5,600.0	90.78	270.30	2,511.1	17.5	-3,297.6	3,297.6	0.00	0.00	0.00
5,700.0	90.78	270.30	2,509.7	18.0	-3,397.5	3,397.6	0.00	0.00	0.00
5,800.0	90.78	270.30	2,508.4	18.6	-3,497.5	3,497.6	0.00	0.00	0.00
5,900.0	90.78	270.30	2,507.0	19.1	-3,597.5	3,597.6	0.00	0.00	0.00
6,000.0	90.78	270.30	2,505.7	19.6	-3,697.5	3,697.6	0.00	0.00	0.00
6,100.0	90.78	270.30	2,504.3	20.2	-3,797.5	3,797.6	0.00	0.00	0.00
6,200.0	90.78	270.30	2,503.0	20.7	-3,897.5	3,897.6	0.00	0.00	0.00
6,300.0	90.78	270.30	2,501.6	21.2	-3,997.5	3,997.5	0.00	0.00	0.00
6,400.0	90.78	270.30	2,500.2	21.8	-4,097.5	4,097.5		0.00	0.00
6,500.0	90.78	270.30	2,498.9	22.3	-4,197.5	4,197.5	0.00	0.00	0.00
6,600.0	90.78	270 30	2,497.5	22 8	-4,297.5	4,297.5	0.00	0.00	0.00
6,700.0	90.78	270.30	2,496.2	23.4	-4,397.4	4,397.5	0.00	0.00	0.00
6,800.0 6,900.0	90.78 90.78	270.30 270.30	2,494.8 2,493.5	23.9 24.4	-4,497.4 -4,597.4	4,497.5 4,597.5	0.00	0.00	0 00 0.00
	'.MD ∕.,2493' TV 90.78		2,493.0	24.6	-4,630.7	4,630.8	0.00	0.00	0.00

Design Targets	NUMBER OF STREET	and which come	interestation of the second	production facult from .	Parimeter Cession VI.	incomendation with appropriate in a	air-driffesiallismoth istrational	are en la resulta de la como de l	, ng o'f fine loften (Lenen 1855, 1950-èle d'Albande, 185 ,	14.000
Target Name										
- hit/miss target Dip /										
- Shape ((ustt)	(üsπ): (i	usft)	· (usft)	"(usft)	Latitude	Longitude	
PBHL Fast Draw 4 AE	0.00	360.00	2.493.0	24.6 -	4.630.7	585.194 37	449.649.95	320 361 34 34	1 N 104° 29' 48.642	۱۸/
FBIIL I dol DIdW 4 AL	0.00	500.00	2,433.0	24.0	4,000.7	303, 134 37	773,043.33	JZ JU 31.31	114 104 25 40.042	v v

- plan hits target center

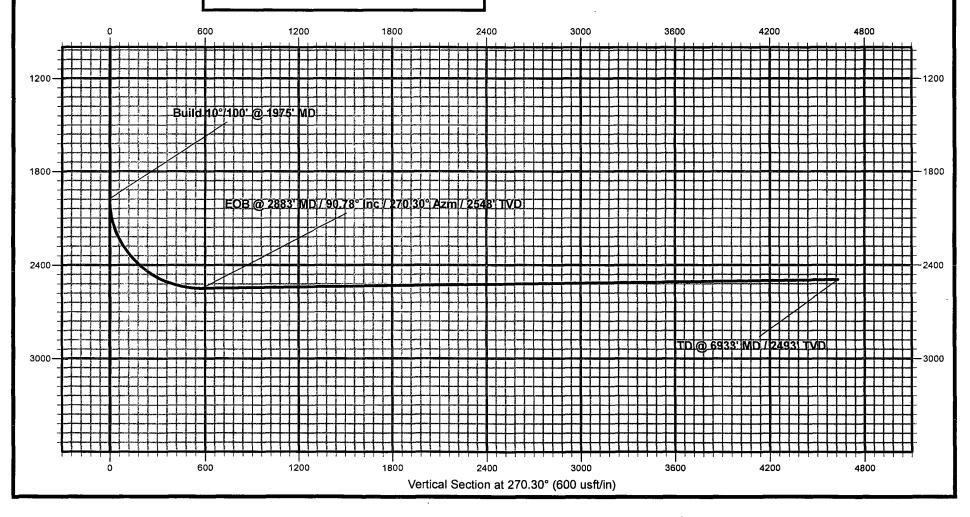
- Point

Plan Annotations Measured Depth (usft)	Depth +	Local Coord N/-S usft)	r+E/-W	Comment
1,975.1	1,975.1	0.0	0.0	Build 10°/100' @ 1975' MD
2,882.9	2,548.0	3.1	-580.7	EOB @ 2883' MD / 90.78° Inc / 270.30° Azm / 2548' TVD
6,933.3	2.493.0	24.6	-4.630 7	TD @ 6933' MD / 2493' TVD

Mewbourne Oil Company

Eddy County, New Mexico
Fast Draw 4 AD Fed Com #1H
Quote 110373

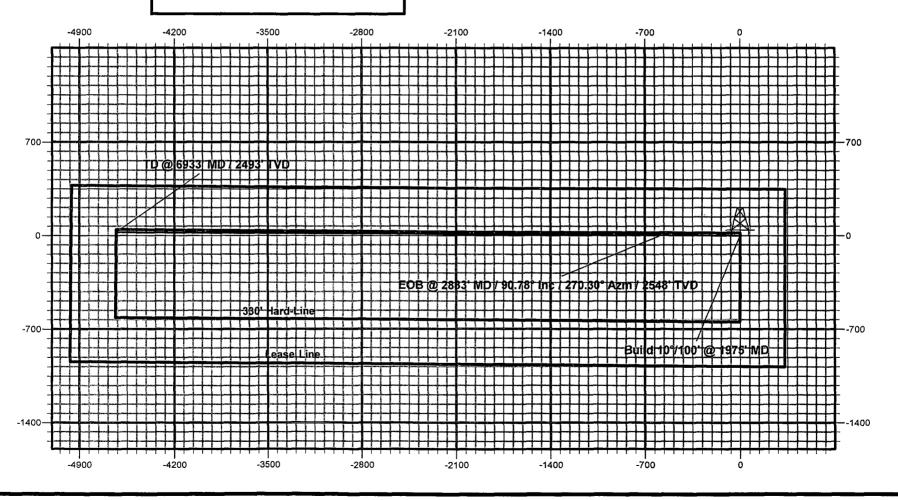




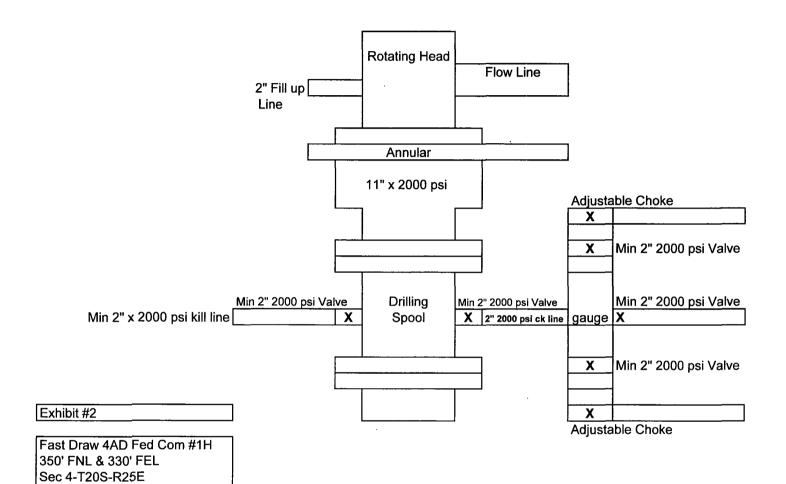
Mewbourne Oil Company

Eddy County, New Mexico
Fast Draw 4 AD Fed Com #1H
Quote 110373

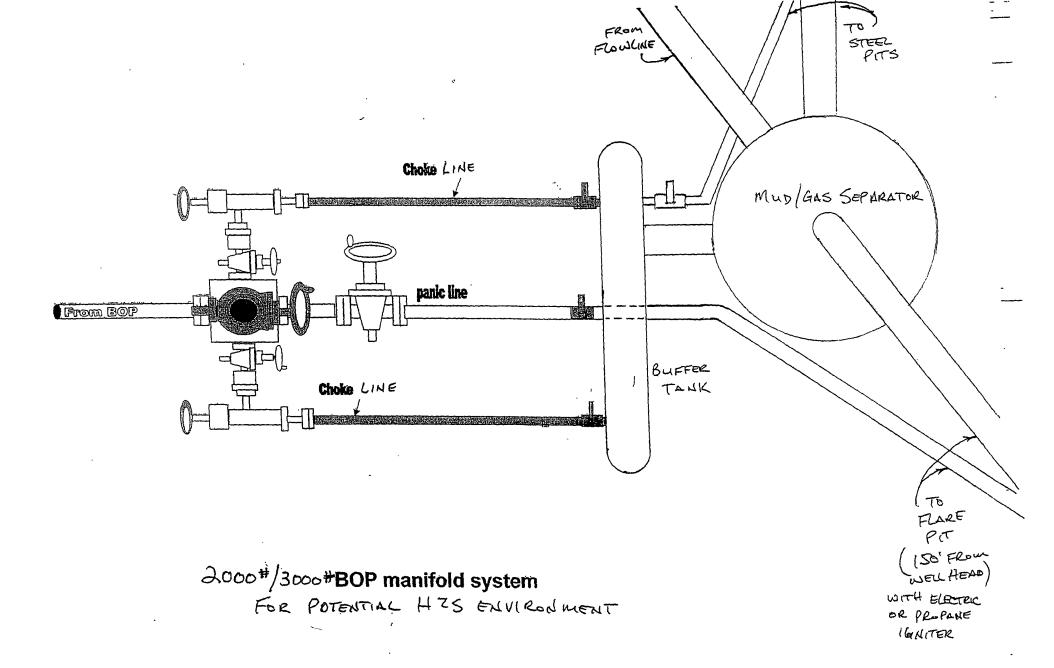




Mewbourne Oil Company BOP Scematic for 8 3/4" & 6 1/8" Hole



Eddy, County New Mexico



Notes Regarding Blowout Preventer Mewbourne Oil Company

Fast Draw "4" AD Federal Com #1H 350' FNL & 330' FEL (SHL) Sec 4-T20S-R25E Eddy 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 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 2000 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.