

~~OPERATOR'S COPY~~

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

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

OCD

APPLICATION FOR PERMIT TO DRILL OR REENTER

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 - 14744

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 330' FNL & 400' FEL Unit A

At proposed prod. zone 330' FSL & 400' FEL Unit P

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

10 miles N of Carlsbad, 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

650

17. Spacing Unit dedicated to this well

160

18. Distance from proposed location*

to nearest well, drilling, completed,
applied for, on this lease, ft. 3000'

19. Proposed Depth

10537' TUB 6191'

20. BLM/BIA Bond No. on file

NM1693, Nationwide

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

3313' GL

22. Approximate date work will start*

ASAP

23. Estimated duration

40

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.

2. A Drilling Plan.

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).

4. Bond to cover the operations unless covered by an existing bond on file (see
Item 20 above).

5. Operator certification.

6. Such other site specific information and/or plans as may be required by the
authorized officer.

25. Signature

Name (Printed/Typed)

Date

Jackie Lathan

08/24/10

Title

Hobbs Regulatory

Approved by (Signature)

Name (Printed/Typed)

Date

Office

CARLSBAD FIELD OFFICE

FIELD MANAGER

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)

Capitan Controlled Water Basin

Approval Subject to General Requirements
& Special stipulations Attached

DEC 08 2010

BY:

SEE ATTACHED FOR
CONDITIONS OF APPROVAL

Drilling Program
Mewbourne Oil Company
 Burton Flat "7" Federal #5H
 330' FNL & 400' FEL (SHL)
 Sec 7-T20S-R28E
 Eddy County, New Mexico

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

*Yates	810'
*Delaware	2800'
*Bone Spring	4450'
*1 st Bone Springs Sand	6070'

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

Water	Fresh water will be protected by setting surface casing at ^{460'} 300' 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 3000# WP Double Ram BOP and 3000# WP Annular will be installed after running 9 5/8" 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. BOP's 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" BOPE to 3000# and the 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. MOC proposes to drill a vertical wellbore to 5579' & kick off to horizontal @ 6152' TVD. The well will be drilled to 10537' MD (6241' TVD). See attached directional plan.

5. Proposed casing and cementing program:

See COA

A. Hole Size	Casing Program:	Wt/Ft.	Grade	Depth	Jt Type
12 1/4"	9 5/8" (new)	36#	J55	0'-300' ^{700' - 450'}	LT&C
8 3/4"	7" (new)	26#	P110	0'-5579' MD	LT&C
8 3/4"	7" (new)	26#	P110	5579'-6466' MD	BT&C
6 1/8"	4 1/2" (new)	11.6#	P110	6200'-10537' MD	LT&C

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

(*Subject to availability of casing.)

See COA

B. Cementing Program:

- See COA*
- i. Surface Casing: 100 sks Class C cement containing 2% CaCl. Yield at 1.34 cuft/sk. Cmt circulated to surface.
 - ii. Intermediate Casing: 450 sacks Class H light cement with additives. Yield at 2.12 cuft/sk. 400 sacks Class H cement Containing FLA. Yield at 1.18 cuft/sk. Cmt circulated to surface.
 - ii. Production Liner: This will be a Packer/Port completion from TD up inside 7" casing with packer type liner hanger.

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

6. Mud Program:

<u>Interval</u>	<u>Type System</u>	<u>Weight</u>	<u>Viscosity</u>	<u>Fluid Loss</u>
0'-300' <i>405'</i>	FW spud mud	8.6-9.0	32-34	NA
<i>405'</i> 300'-6466'	Brine water	10.0-10.2	28-30	NA
6466'- 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: Tie-in GR & Gyro from KOP (5579') to surface. GR from 5579' 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 Company

Loc: Eddy County, NM
Field: (Burton) Sec 7, T20S, R28E
Facility: Burton Flat 7 Fed No. 5H

Slot: No. 5H SH
Well: No. 5H
Wellbore: No. 5H PWB

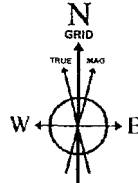
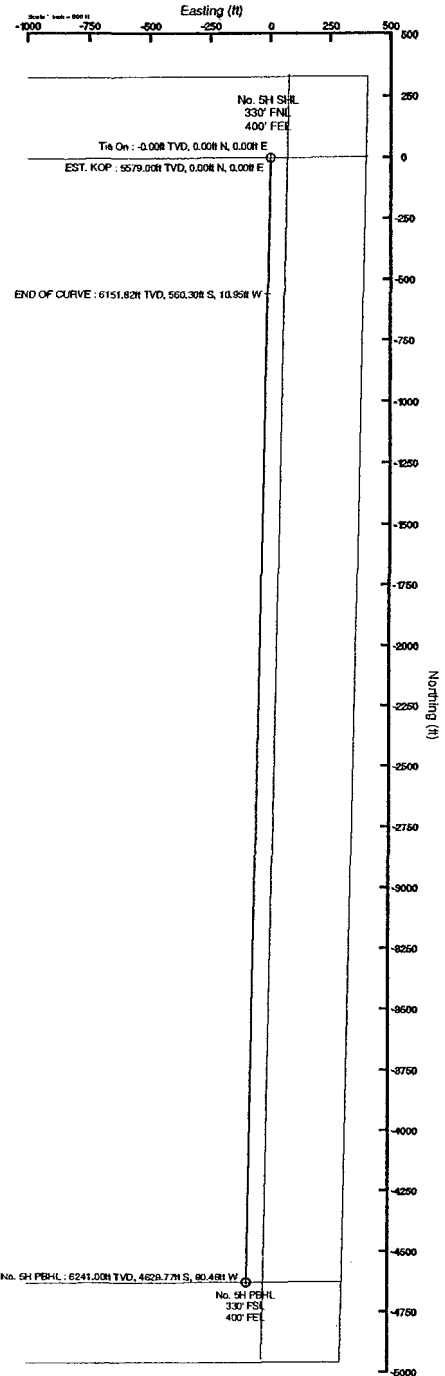
Well Profile Data

Design Comment	MD (ft)	Inc (°)	Az (°)	TVD (ft)	Local N (ft)	Local E (ft)	DLS (°/100ft)	VS (ft)
Tie On	0.00	0.000	181.119	0.00	0.00	0.00	0.00	0.00
EST. KOP	5579.00	0.000	181.119	5579.00	0.00	0.00	0.00	0.00
END OF CURVE	6466.45	88.745	181.119	6151.82	-560.30	-10.95	10.00	560.41
No. 5H PBHL	10537.67	88.745	181.119	6241.00	-4629.77	-90.46	0.00	4630.66

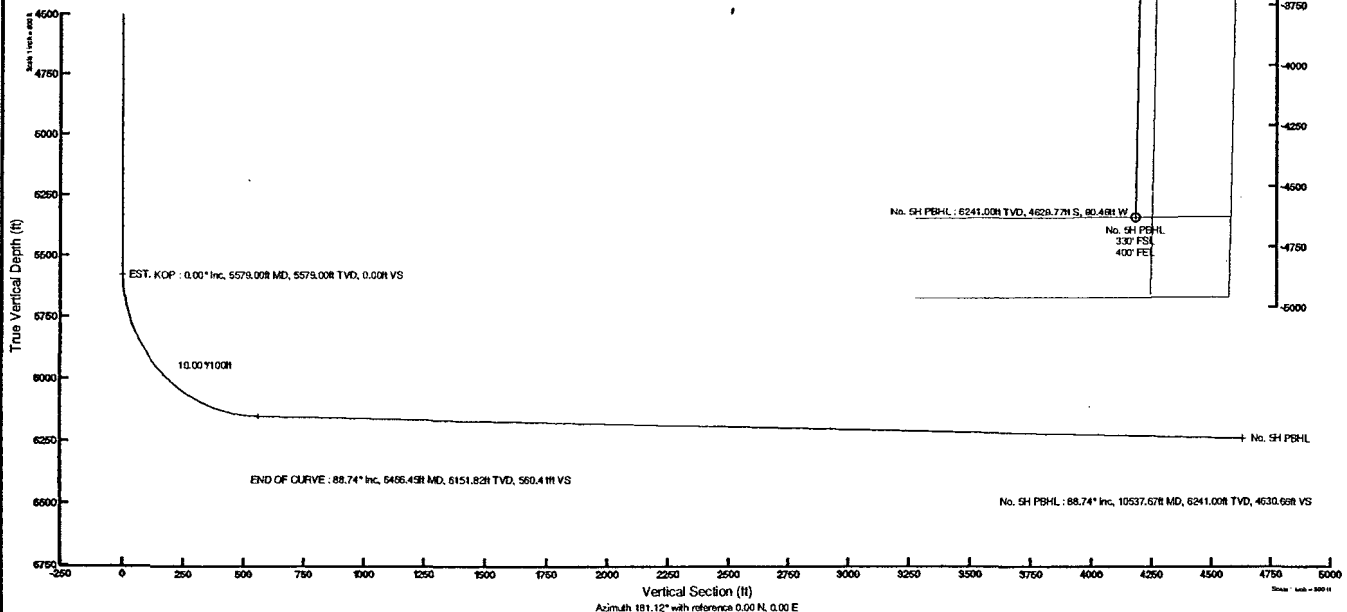


Mewbourne Oil Company

Plot reference wellpath is Phase 1	Grid System: NAD83 / TM New Mexico State Plane, Eastern Zone (3001), US feet
True vertical depths are referenced to Rig on No. 5H SHL (KB)	North Reference: Grid north
Measured depths are referenced to Rig on No. 5H SHL (KB)	Scale: True distance
Rig on No. 5H SHL (KB) to Mean Sea Level: 3331 feet	Depths are in feet
Mean Sea Level to Mud Line (Facility: Burton Flat 7 Fed No. 5H): -3313 feet	Created by: Victor Hernandez on 9/16/2010
Coordinates are in feet referenced to Slot	



BGGM (1945.0 to 2011.0) Dip: 60.45° Field: 48914.5 nT
Magnetic North is 8.05 degrees East of True North (at 8/16/2010)
Grid North is 0.07 degrees East of True North
To correct azimuth from True to Grid subtract 0.07 degrees
To correct azimuth from Magnetic to Grid add 7.98 degrees
For example: If the Magnetic North Azimuth = 90 degs, then the Grid North Azimuth = 90 + 7.98 = 97.98



Planned Wellpath Report

Prelim_1

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REFERENCE WELLPATH IDENTIFICATION

Operator	Mewbourne Oil Company	Slot	No. 5H SHL
Area	Eddy County, NM	Well	No. 5H
Field	(Burton) Sec 7, T20S, R28E	Wellbore	No. 5H PWB
Facility	Burton Flat 7 Fed No. 5H		

REPORT SETUP INFORMATION

Projection System	NAD27 / TM New Mexico State Planes, Eastern Zone (3001), US feet	Software System	WellArchitect® 2.0
North Reference	Grid	User	Victor Hernandez
Scale	0.999911	Report Generated	8/16/2010 at 11:29:39 AM
Convergence at slot	0.07° East	Database/Source file	WA_Midland/No. 5H_PWB.xml

WELLPATH LOCATION

	Local coordinates		Grid coordinates		Geographic coordinates	
	North[ft]	East[ft]	Easting[USft]	Northing[USft]	Latitude	Longitude
Slot Location	0.00	0.00	538285.95	579941.25	32°35'39.489"N	104°12'32.471"W
Facility Reference Pt			538285.95	579941.25	32°35'39.489"N	104°12'32.471"W
Field Reference Pt			538285.95	579941.25	32°35'39.489"N	104°12'32.471"W

WELLPATH DATUM

Calculation method	Minimum curvature	Rig on No. 5H SHL (KB) to GL	18.00ft
Horizontal Reference Pt	Slot	Rig on No. 5H SHL (KB) to Mean Sea Level	3331.00ft
Vertical Reference Pt	Rig on No. 5H SHL (KB)	GL to Mud Line (Facility)	0.00ft
MD Reference Pt	Rig on No. 5H SHL (KB)	Section Origin	N 0.00, E 0.00 ft
Field Vertical Reference	Mean Sea Level	Section Azimuth	181.12°

Planned Wellpath Report

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Field	(Burton) Sec 7, T20S, R28E	Wellbore	No. 5H PWB
Facility	Burton Flat 7 Fed No. 5H		

WELLPATH DATA (53 stations) † = interpolated/extrapolated station

MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Vert Sect [ft]	North [ft]	East [ft]	Grid East [srv ft]	Grid North [srv ft]	Latitude	Longitude	DLS [°/100ft]	Comments
0.00	0.000	181.119	0.00	0.00	0.00	0.00	538285.95	579941.25	32°35'39.489"N	104°12'32.471"W	0.00	Tie On
5579.00	0.000	181.119	5579.00	0.00	0.00	0.00	538285.95	579941.25	32°35'39.489"N	104°12'32.471"W	0.00	EST. KOP
5679.00†	10.000	181.119	5678.49	8.70	-8.70	-0.17	538285.78	579932.55	32°35'39.403"N	104°12'32.473"W	10.00	
5779.00†	20.000	181.119	5774.96	34.55	-34.55	-0.67	538285.28	579906.71	32°35'39.147"N	104°12'32.479"W	10.00	
5879.00†	30.000	181.119	5865.48	76.76	-76.75	-1.50	538284.43	579864.51	32°35'38.729"N	104°12'32.490"W	10.00	
5979.00†	40.000	181.119	5947.29	134.05	-134.02	-2.62	538283.33	579807.24	32°35'38.163"N	104°12'32.503"W	10.00	
6079.00†	50.000	181.119	6017.91	204.67	-204.63	-4.00	538281.95	579736.64	32°35'37.464"N	104°12'32.520"W	10.00	
6179.00†	60.000	181.119	6075.20	286.48	-286.42	-5.60	538280.35	579654.85	32°35'36.655"N	104°12'32.540"W	10.00	
6279.00†	70.000	181.119	6117.40	376.99	-376.92	-7.36	538278.59	579564.36	32°35'35.759"N	104°12'32.562"W	10.00	
6379.00†	80.000	181.119	6143.25	473.46	-473.37	-9.25	538276.70	579467.92	32°35'34.805"N	104°12'32.586"W	10.00	
6466.45	88.745	181.119	6151.82	560.41	-560.30	-10.95	538275.00	579381.00	32°35'33.945"N	104°12'32.607"W	10.00	END OF CURVE
6479.00†	88.745	181.119	6152.10	572.96	-572.85	-11.19	538274.76	579368.46	32°35'33.821"N	104°12'32.610"W	0.00	
6579.00†	88.745	181.119	6154.29	672.93	-672.80	-13.15	538272.81	579268.51	32°35'32.832"N	104°12'32.634"W	0.00	
6679.00†	88.745	181.119	6156.48	772.91	-772.76	-15.10	538270.85	579168.56	32°35'31.843"N	104°12'32.658"W	0.00	
6779.00†	88.745	181.119	6158.67	872.88	-872.72	-17.05	538268.90	579068.61	32°35'30.854"N	104°12'32.682"W	0.00	
6879.00†	88.745	181.119	6160.86	972.86	-972.67	-19.00	538266.95	578968.66	32°35'29.865"N	104°12'32.706"W	0.00	
6979.00†	88.745	181.119	6163.05	1072.84	-1072.63	-20.96	538264.99	578868.72	32°35'28.876"N	104°12'32.731"W	0.00	
7079.00†	88.745	181.119	6165.24	1172.81	-1172.59	-22.91	538263.04	578768.77	32°35'27.886"N	104°12'32.755"W	0.00	
7179.00†	88.745	181.119	6167.43	1272.79	-1272.54	-24.86	538261.09	578668.82	32°35'26.897"N	104°12'32.779"W	0.00	
7279.00†	88.745	181.119	6169.62	1372.76	-1372.50	-26.82	538259.14	578568.87	32°35'25.908"N	104°12'32.803"W	0.00	
7379.00†	88.745	181.119	6171.81	1472.74	-1472.46	-28.77	538257.18	578468.93	32°35'24.919"N	104°12'32.827"W	0.00	
7479.00†	88.745	181.119	6174.00	1572.72	-1572.42	-30.72	538255.23	578368.98	32°35'23.930"N	104°12'32.851"W	0.00	
7579.00†	88.745	181.119	6176.19	1672.69	-1672.37	-32.68	538253.28	578269.03	32°35'22.941"N	104°12'32.876"W	0.00	
7679.00†	88.745	181.119	6178.38	1772.67	-1772.33	-34.63	538251.32	578169.08	32°35'21.952"N	104°12'32.900"W	0.00	
7779.00†	88.745	181.119	6180.57	1872.64	-1872.29	-36.58	538249.37	578069.13	32°35'20.963"N	104°12'32.924"W	0.00	
7879.00†	88.745	181.119	6182.76	1972.62	-1972.24	-38.53	538247.42	577969.19	32°35'19.974"N	104°12'32.948"W	0.00	
7979.00†	88.745	181.119	6184.95	2072.60	-2072.20	-40.49	538245.47	577869.24	32°35'18.985"N	104°12'32.972"W	0.00	
8079.00†	88.745	181.119	6187.14	2172.57	-2172.16	-42.44	538243.51	577769.29	32°35'17.996"N	104°12'32.997"W	0.00	
8179.00†	88.745	181.119	6189.33	2272.55	-2272.11	-44.39	538241.56	577669.34	32°35'17.007"N	104°12'33.021"W	0.00	
8279.00†	88.745	181.119	6191.52	2372.52	-2372.07	-46.35	538239.61	577569.40	32°35'16.018"N	104°12'33.045"W	0.00	

Planned Wellpath Report

Prelim_1
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REFERENCE WELLPATH IDENTIFICATION

Operator	Mewbourne Oil Company	Slot	No. 5H SHL
Area	Eddy County, NM	Well	No. 5H
Field	(Burton) Sec 7, T20S, R28E	Wellbore	No. 5H PWB
Facility	Burton Flat 7 Fed No. 5H		

WELLPATH DATA (53 stations) † = interpolated/extrapolated station

MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Vert Sect [ft]	North [ft]	East [ft]	Grid East [srv ft]	Grid North [srv ft]	Latitude	Longitude	DLS [°/100ft]	Comments
8379.00†	88.745	181.119	6193.71	2472.50	-2472.03	-48.30	538237.65	577469.45	32°35'15.029"N	104°12'33.069"W	0.00	
8479.00†	88.745	181.119	6195.91	2572.48	-2571.99	-50.25	538235.70	577369.50	32°35'14.040"N	104°12'33.093"W	0.00	
8579.00†	88.745	181.119	6198.10	2672.45	-2671.94	-52.21	538233.75	577269.55	32°35'13.051"N	104°12'33.118"W	0.00	
8679.00†	88.745	181.119	6200.29	2772.43	-2771.90	-54.16	538231.80	577169.60	32°35'12.062"N	104°12'33.142"W	0.00	
8779.00†	88.745	181.119	6202.48	2872.40	-2871.86	-56.11	538229.84	577069.66	32°35'11.073"N	104°12'33.166"W	0.00	
8879.00†	88.745	181.119	6204.67	2972.38	-2971.81	-58.06	538227.89	576969.71	32°35'10.084"N	104°12'33.190"W	0.00	
8979.00†	88.745	181.119	6206.86	3072.36	-3071.77	-60.02	538225.94	576869.76	32°35'09.095"N	104°12'33.214"W	0.00	
9079.00†	88.745	181.119	6209.05	3172.33	-3171.73	-61.97	538223.99	576769.81	32°35'08.106"N	104°12'33.238"W	0.00	
9179.00†	88.745	181.119	6211.24	3272.31	-3271.68	-63.92	538222.03	576669.86	32°35'07.117"N	104°12'33.263"W	0.00	
9279.00†	88.745	181.119	6213.43	3372.28	-3371.64	-65.88	538220.08	576569.92	32°35'06.128"N	104°12'33.287"W	0.00	
9379.00†	88.745	181.119	6215.62	3472.26	-3471.60	-67.83	538218.13	576469.97	32°35'05.139"N	104°12'33.311"W	0.00	
9479.00†	88.745	181.119	6217.81	3572.24	-3571.55	-69.78	538216.17	576370.02	32°35'04.150"N	104°12'33.335"W	0.00	
9579.00†	88.745	181.119	6220.00	3672.21	-3671.51	-71.74	538214.22	576270.07	32°35'03.161"N	104°12'33.359"W	0.00	
9679.00†	88.745	181.119	6222.19	3772.19	-3771.47	-73.69	538212.27	576170.13	32°35'02.171"N	104°12'33.384"W	0.00	
9779.00†	88.745	181.119	6224.38	3872.16	-3871.43	-75.64	538210.32	576070.18	32°35'01.182"N	104°12'33.408"W	0.00	
9879.00†	88.745	181.119	6226.57	3972.14	-3971.38	-77.59	538208.36	575970.23	32°35'00.193"N	104°12'33.432"W	0.00	
9979.00†	88.745	181.119	6228.76	4072.12	-4071.34	-79.55	538206.41	575870.28	32°34'59.204"N	104°12'33.456"W	0.00	
10079.00†	88.745	181.119	6230.95	4172.09	-4171.30	-81.50	538204.46	575770.33	32°34'58.215"N	104°12'33.480"W	0.00	
10179.00†	88.745	181.119	6233.14	4272.07	-4271.25	-83.45	538202.50	575670.39	32°34'57.226"N	104°12'33.505"W	0.00	
10279.00†	88.745	181.119	6235.33	4372.04	-4371.21	-85.41	538200.55	575570.44	32°34'56.237"N	104°12'33.529"W	0.00	
10379.00†	88.745	181.119	6237.52	4472.02	-4471.17	-87.36	538198.60	575470.49	32°34'55.248"N	104°12'33.553"W	0.00	
10479.00†	88.745	181.119	6239.71	4572.00	-4571.12	-89.31	538196.65	575370.54	32°34'54.259"N	104°12'33.577"W	0.00	
10537.67	88.745	181.119	6241.00†	4630.66	-4629.77	-90.46	538195.50	575311.90	32°34'53.679"N	104°12'33.591"W	0.00	No. 5H PBHL

REFERENCE WELLPATH IDENTIFICATION

Operator	Mewbourne Oil Company	Slot	No. 5H SHL
Area	Eddy County, NM	Well	No. 5H
Field	(Burton) Sec 7, T20S, R28E	Wellbore	No. 5H PWB
Facility	Burton Flat 7 Fed No. 5H		

TARGETS

Name	MD [ft]	TVD [ft]	North [ft]	East [ft]	Grid East [srv ft]	Grid North [srv ft]	Latitude	Longitude	Shape
1) No. 5H PBHL	10537.67	6241.00	4629.77	90.46	538195.50	575311.90	32°34'53.679"N	104°12'33.591"W	point

SURVEY PROGRAM Ref Wellbore: No. 5H PWB Ref Wellpath: Prelim_1

Start MD [ft]	End MD [ft]	Positional Uncertainty Model	Log Name/Comment	Wellbore
18.00	10537.67	NaviTrak (Standard)		No. 5H PWB

Notes Regarding Blowout Preventer

Mewbourne Oil Company

Burton Flat "7" Federal #5H

330' FNL & 400' FEL (SL)

Sec 7-T20S-R28E

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 3000 psi working pressure on 9 5/8" casing and 3000 psi working pressure on 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
6 1/8" Hole

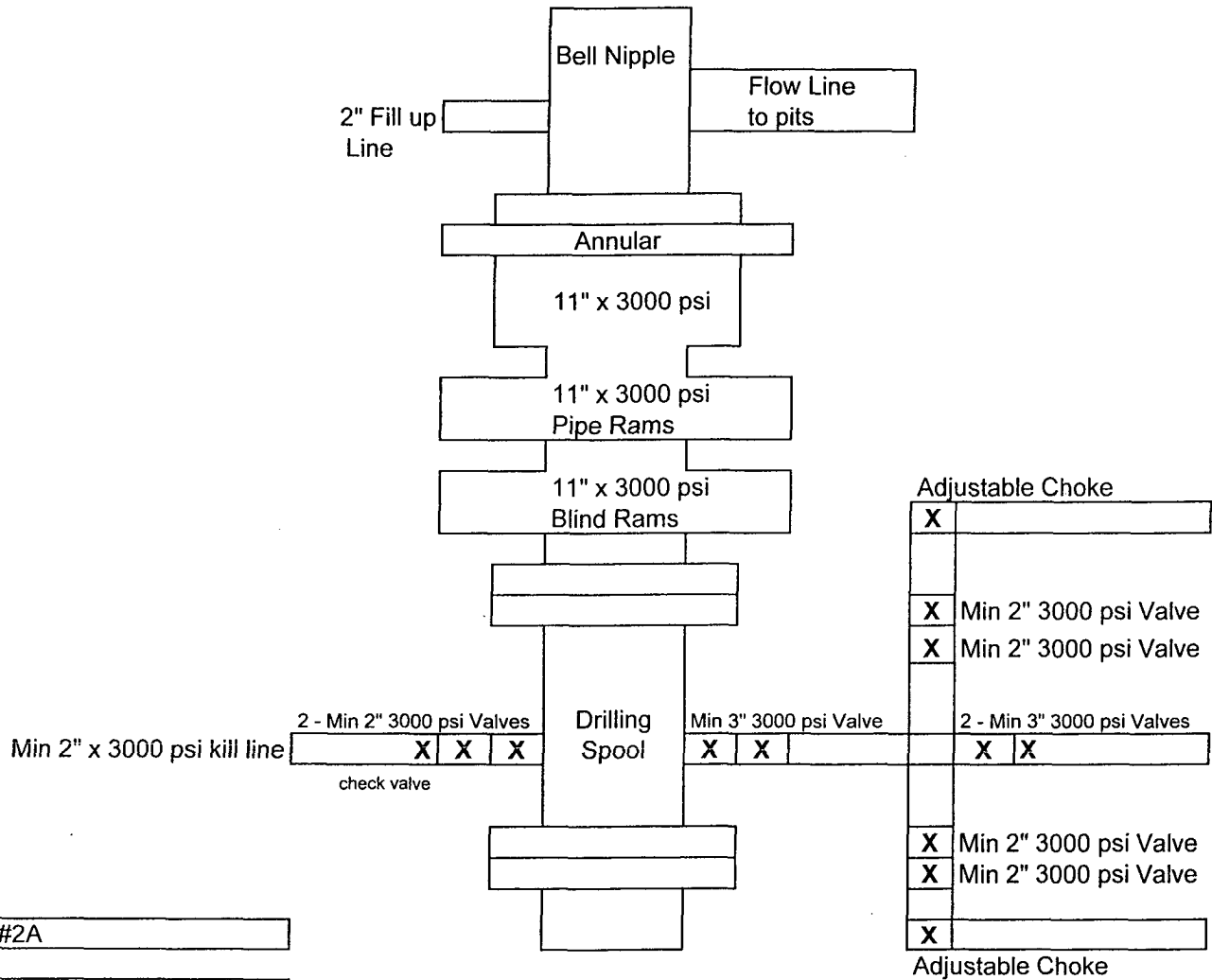
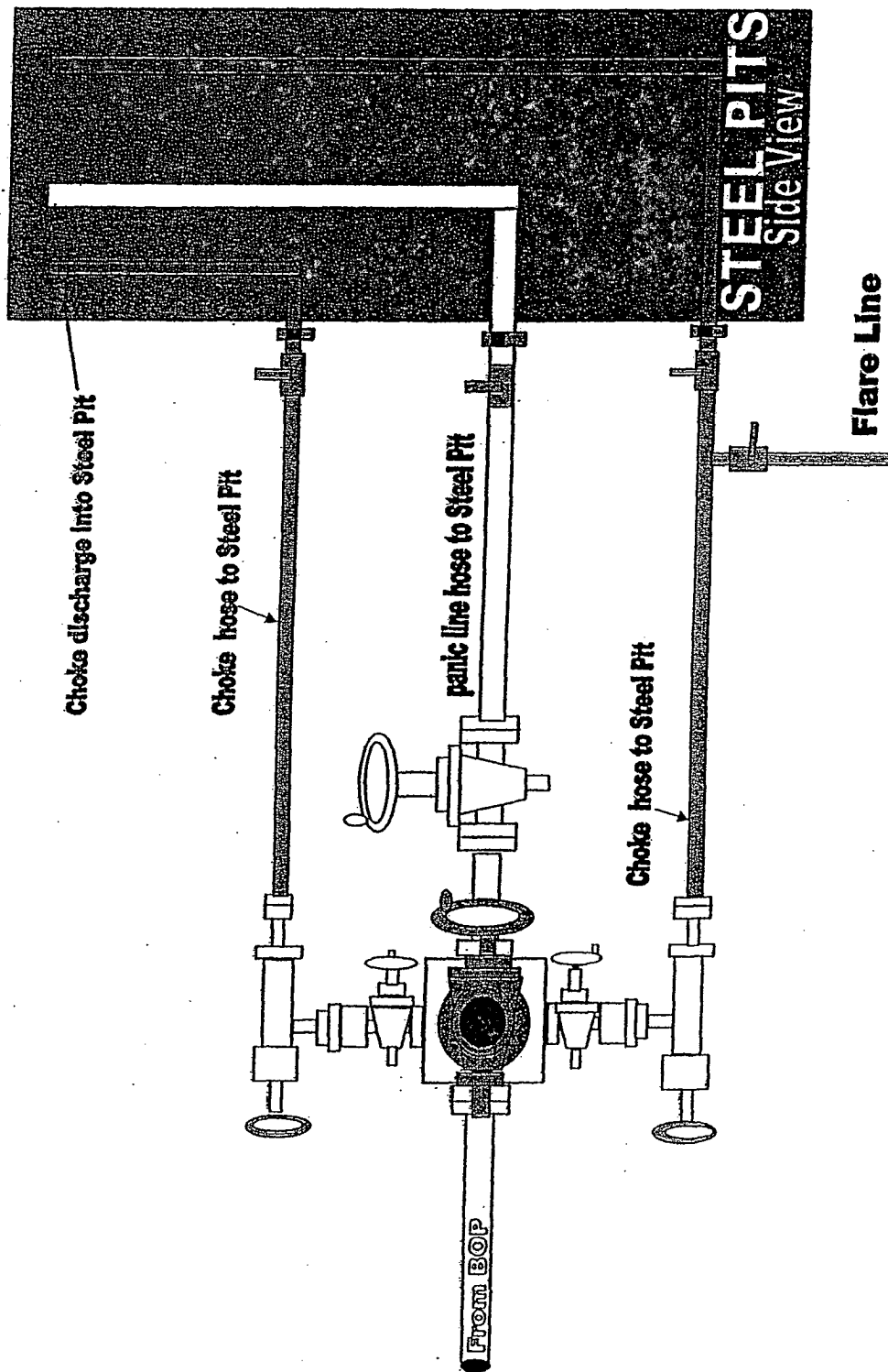


Exhibit #2A

Burton Flat 7 Fed #5H
330' FNL & 400' FEL
Sec 7-T20S-R28E
Eddy, County
New Mexico



2000#/3000#BOP manifold system

For Exhibit 2 + 2A