ATS-10-458

Form 3160-3
(September 2001)

OCD-ARTESIA

FORM APPROVED
OMB No. 1004-0136
Expires January 31, 2004 EA 10-1227

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

APPLICATION FOR PERMIT TO DRILL OR REENTER

5. Lease Serial No.
NM 14758

6. If Indian, Allottee or Tribe Name

1a. Type of Work: ☑ DRILL ☐ REENTER

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

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

8. Lease Name and Well No.
Long Draw 10 DC Federal #1H (38440)

2. Name of Operator
Mewbourne Oil Company (14744)

9. API Well No.
30-015-38364

3a. Address
PO Box 5270 Hobbs, NM 88241

3b. Phone No. *(include area code)*
575-393-5905

10. Field and Pool, or Exploratory
COMMINGLE
~~Undesignated~~ Yeso (11795)

4. Location of Well *(Report location clearly and in accordance with any State requirements. *)*
At surface 350' FNL & 280' FEL (Unit A) Sec 9, T20S, R25E UNORTHODOX
At proposed prod. zone 350' FNL & 2310' FWL Unit C Sec 10, T20S, R25E LOCATION

11. Sec., T., R., M., or Blk. and Survey or Area
Sec 9 - T20S - R25E

14. Distance in miles and direction from nearest town or post office*
16 Miles NW of Carlsbad

12. County or Parish
Eddy

13. State
NM

15. Distance from proposed* location to nearest property or lease line, ft. (Also to nearest drig. unit line, if any) 280'

16. No. of Acres in lease
1442

17. Spacing Unit dedicated to this well
80

18. Distance from proposed location* to nearest well, drilling, completed, applied for, on this lease, ft.
527

19. Proposed Depth
2899 TVD
5060' (MD) 5020

20. BLM/BIA Bond No. on file
NM1693, Nationwide

21. Elevations (Show whether DF, KDB, RT, GL, etc.)
3455' GL

22. Approximate date work will start*
ASAP

23. Estimated duration
15

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: Jackie Lathan
Name *(Printed/Typed)*: Jackie Lathan
Date: 09/10/10

Title: Hobbs Regulatory

Approved by *(Signature)*: /s/ Don Peterson
Name *(Printed/Typed)*:
Date: DEC 6 2010

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)*

SEE ATTACHED FOR
CONDITIONS OF APPROVAL

KZ

RECEIVED
DEC 07 2010
NMOCD ARTESIA

Roswell Controlled Water Basin

GENERAL REQUIREMENTS
AND SPECIAL STIPULATIONS
ATTACHED

Drilling Program
Mewbourne Oil Company
Long Draw "10" DC Federal #1H
350' FNL & 280' FEL (SHL)
Sec 9-T20S-R25E
Eddy County, New Mexico

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

San Andres	925'
*Glorietta	2315'
*Yeso	2435'

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

Water	Below 100'.
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 5/8" 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 2282' & kick off to horizontal @ 2855' TVD. The well will be drilled to ~~5207~~ MD (2899' TVD). See attached directional plan.

~~5207~~ 5020' From directional survey

5. Proposed casing and cementing program:

A. Casing Program:

Hole Size	Casing	Wt/Ft.	Grade	Depth	Jt Type
12 ¼"	9 5/8" (new)	36#	J55	0'-900'	LT&C
8 ¾"	5 ½" (new)	17#	J55	0'-2300'	LT&C
8 ¾"	5 ½" (new)	17#	J55	2300'-3200' MD	BT&C
7 7/8"	4 ½" (new)	11.6#	J55	3200'-~~5020~~' MD	LT&C

OK

Minimum casing design factors: Collapse 1.125, Burst 1.0, Tensile strength 1.8. ~~From directional~~ Survey

See COA → *Subject to availability of casing.

B. Cementing Program:

i. Surface Casing: 350 sacks sacks class "C" w/2% CaCl2. Yield at 1.34 cuft/sk. Cmt circulated to surface.

ii. Production Casing: Lateral hole will utilize a packer/port system of isolation. An ECP will be placed to isolate the Glorietta form the San Andres. A FO cement tool will be placed immediately above the KOP and cemented w/230 sacks light class "C" w/additives. Yield at 2.45 cuft/sk. And 100 sacks class "C". Yield at 1.32 cuft.sk. Cmt calculated to circulate from FO cementer to surface.

See COA

Option (1): Plans are to run a packer/port completion system in the lateral production hole. A FO Cementer will be placed at KOP. After casing has been run and the hole is circulated clean, the isolation packers will be set. Drilling rig will set casing slips, ND drilling equipment, NU wellhead, NU completion BOPE/frac valve, RD&MO drilling rig. BOPE will be tested to 1000#. Gauges will be installed and checked daily on the 9 ⅝" x 5 ½" annulus and on the 5 ½" casing. A pressure relief valve set at 150 psi will release excess pressure into a frac tank. A completion rig will MI&RU within one week after the drilling equipment is moved off location. Run tubing with cementer opening tool, and circulate cement to surface. Then normal completion operations will begin.

Option (2): If hole conditions do not allow option one to be put into place, the drilling rig will run tubing with opening tool, cement casing to surface, and normal operations will continue.

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'-950'	FW spud mud	8.6-9.0	32-34	NA
950'-2200'	Fresh water	8.4-8.6	28-30	NA
2200'- TD	FW w/Polymer	8.5-8.7	32-35	20

7. Evaluation Program: See COA

Samples: 10' samples from surface casing to TD
Logging: GR from 2200' 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:	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 Company

Mewbourne Oil Company

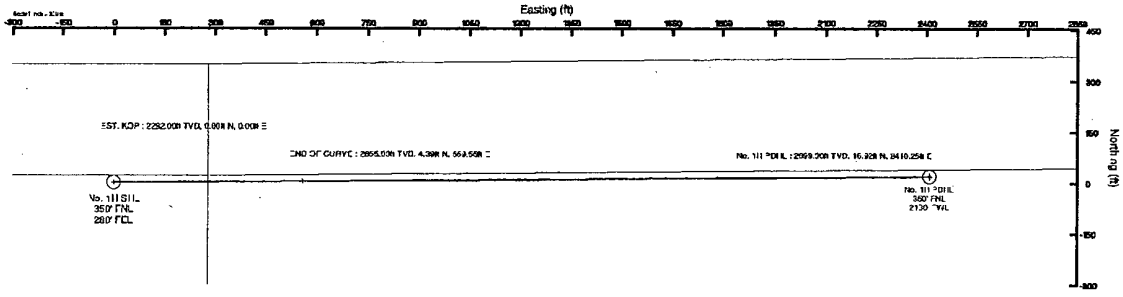
Location: Eddy County, NM
Field: (Long) Sec 9, T20S, R25E
Facility: Long Draw 10 DC Fed No. 1H

Slot: No. 1H SHL
Well: No. 1H
Wellbore: No. 1H PWB

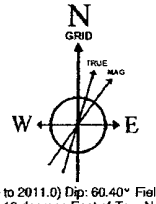
BAKER HUGHES

Well Profile Data

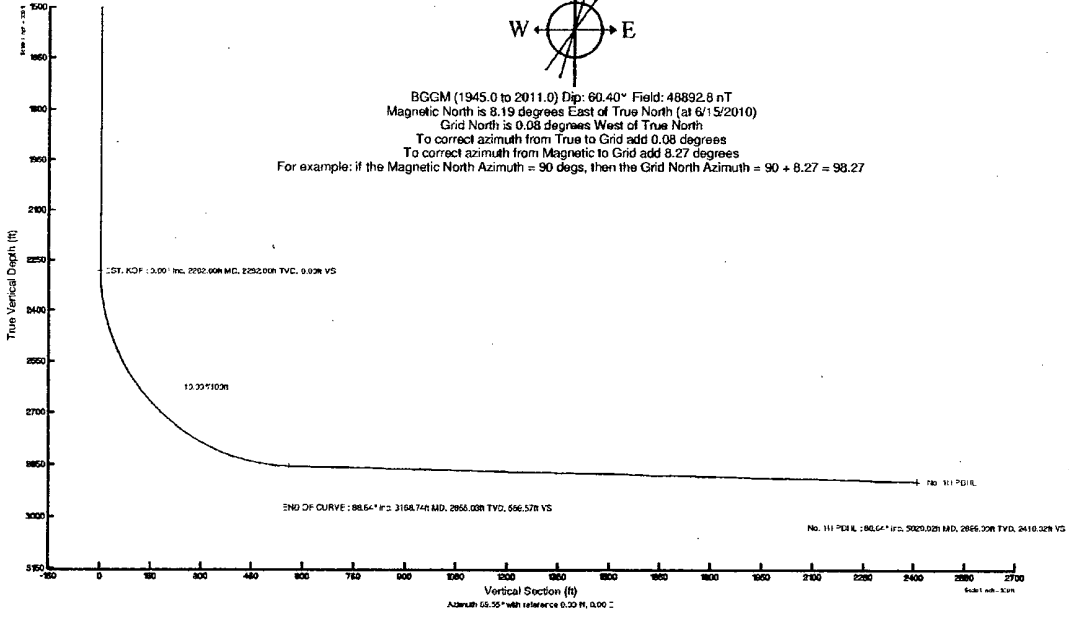
Design Comment	MD (ft)	Inc (°)	Az (°)	TVD (ft)	Local N (ft)	Local E (ft)	DLS (°/100ft)	VS (ft)
Tie On	0.00	0.000	89.550	0.00	0.00	0.00	0.00	0.00
EST. KOP	2282.00	0.000	89.550	2282.00	0.00	0.00	0.00	0.00
END OF CURVE	3168.74	88.639	89.550	2855.03	4.39	559.55	10.00	559.57
No. 1H PBHL	5020.02	88.639	89.550	2899.00	18.92	2410.25	0.00	2410.32



Plot reference wellpath is Prelim_1	
True vertical depths are referenced to Rig on No. 1H SHL (KB)	Grid System: NAD27 / TM New Mexico State Planes, Eastern Zone (3001), US feet
Measured depths are referenced to Rig on No. 1H SHL (KB)	North Reference: Grid north
Rig on No. 1H SHL (KB) to Mean Sea Level: 3469 feet	Scale: True distance
Mean Sea Level to Mud line (Facility: Long Draw 10 DC Fed No. 1H): 3455 feet	Depths are in feet
Coordinates are in feet referenced to Slot	Created by: Victor Hernandez on 6/16/2010



BGGM (1945.0 to 2011.0) Dip: 60.40° Field: 48892.8 nT
Magnetic North is 8.19 degrees East of True North (at 6/15/2010)
Grid North is 0.08 degrees West of True North
To correct azimuth from True to Grid add 0.08 degrees
To correct azimuth from Magnetic to Grid add 8.27 degrees
For example: if the Magnetic North Azimuth = 90 degs, then the Grid North Azimuth = 90 + 8.27 = 98.27



Mewbourne Oil Company

Planned Wellpath Report

Prelim_1

BAKER HUGHES

REFERENCE WELLPATH IDENTIFICATION			
Operator	**Mewbourne Oil Company**	Slot	**No. 1H SHL**
Area	**Eddy County, NM**	Well	**No. 1H**
Field	**(Long) Sec 9, T20S, R25E**	Wellbore	**No. 1H PWB**
Facility	**Long Draw 10 DC Fed No. 1H**		

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	**6/16/2010** at **8:56:46 AM**
Convergence at slot	**0.08° West**	Database/Source file	**WA_Midland/No._1H_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**	454317.67	579886.88	32°35'38.857"N	104°28'53.985"W
Facility Reference Pt			**454317.67**	**579886.88**	32°35'38.857"N	104°28'53.985"W
Field Reference Pt			**454317.67**	**579886.88**	32°35'38.857"N	104°28'53.985"W

WELLPATH DATUM			
Calculation method	**Minimum curvature**	Rig on No. 1H SHL (KB) to GL	**14.00ft**
Horizontal Reference Pt	**Slot**	Rig on No. 1H SHL (KB) to Mean Sea Level	**3469.00ft**
Vertical Reference Pt	**Rig on No. 1H SHL (KB)**	GL to Mud Line (Facility)	**0.00ft**
MD Reference Pt	**Rig on No. 1H SHL (KB)**	Section Origin	**N 0.00, E 0.00 ft**
Field Vertical Reference	**Mean Sea Level**	Section Azimuth	**89.55°**

REFERENCE WELLPATH IDENTIFICATION			
Operator	Mewbourne Oil Company	Slot	No. 1H SHL
Area	Eddy County, NM	Well	No. 1H
Field	(Long) Sec 9, T20S, R25E	Wellbore	No. 1H PWB
Facility	Long Draw 10 DC Fed No. 1H		

WELLPATH DATA (31 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	89.550	0.00	0.00	0.00	0.00	454317.67	579886.88	32°35'38.857"N	104°28'53.985"W	0.00	Tie On
2282.00	0.000	89.550	2282.00	0.00	0.00	0.00	454317.67	579886.88	32°35'38.857"N	104°28'53.985"W	0.00	EST. KOP
2382.00†	9.996	89.550	2381.49	8.70	0.07	8.70	454326.37	579886.95	32°35'38.858"N	104°28'53.883"W	10.00	
2482.00†	19.992	89.550	2477.97	34.54	0.27	34.54	454352.21	579887.15	32°35'38.860"N	104°28'53.581"W	10.00	
2582.00†	29.988	89.550	2568.49	76.73	0.60	76.73	454394.39	579887.48	32°35'38.864"N	104°28'53.088"W	10.00	
2682.00†	39.984	89.550	2650.31	134.00	1.05	133.99	454451.65	579887.93	32°35'38.869"N	104°28'52.419"W	10.00	
2782.00†	49.980	89.550	2720.96	204.60	1.61	204.59	454522.24	579888.49	32°35'38.876"N	104°28'51.594"W	10.00	
2882.00†	59.976	89.550	2778.27	286.39	2.25	286.38	454604.02	579889.13	32°35'38.883"N	104°28'50.638"W	10.00	
2982.00†	69.972	89.550	2820.52	376.88	2.96	376.87	454694.51	579889.84	32°35'38.891"N	104°28'49.580"W	10.00	
3082.00†	79.968	89.550	2846.42	473.34	3.72	473.32	454790.95	579890.60	32°35'38.900"N	104°28'48.453"W	10.00	
3168.74	88.639	89.550	2855.03	559.57	4.39	559.55	454877.17	579891.27	32°35'38.908"N	104°28'47.445"W	10.00	END OF CURVE
3182.00†	88.639	89.550	2855.34	572.82	4.50	572.81	454890.42	579891.38	32°35'38.909"N	104°28'47.290"W	0.00	
3282.00†	88.639	89.550	2857.72	672.80	5.28	672.78	454990.38	579892.16	32°35'38.918"N	104°28'46.122"W	0.00	
3382.00†	88.639	89.550	2860.09	772.77	6.07	772.74	455090.34	579892.95	32°35'38.928"N	104°28'44.953"W	0.00	
3482.00†	88.639	89.550	2862.47	872.74	6.85	872.71	455190.30	579893.73	32°35'38.937"N	104°28'43.785"W	0.00	
3582.00†	88.639	89.550	2864.84	972.71	7.64	972.68	455290.26	579894.52	32°35'38.946"N	104°28'42.617"W	0.00	
3682.00†	88.639	89.550	2867.22	1072.68	8.42	1072.65	455390.22	579895.30	32°35'38.955"N	104°28'41.448"W	0.00	
3782.00†	88.639	89.550	2869.59	1172.66	9.21	1172.62	455490.18	579896.08	32°35'38.964"N	104°28'40.280"W	0.00	
3882.00†	88.639	89.550	2871.97	1272.63	9.99	1272.59	455590.14	579896.87	32°35'38.973"N	104°28'39.111"W	0.00	
3982.00†	88.639	89.550	2874.34	1372.60	10.78	1372.56	455690.10	579897.65	32°35'38.982"N	104°28'37.943"W	0.00	
4082.00†	88.639	89.550	2876.72	1472.57	11.56	1472.53	455790.06	579898.44	32°35'38.991"N	104°28'36.774"W	0.00	
4182.00†	88.639	89.550	2879.09	1572.54	12.34	1572.49	455890.02	579899.22	32°35'39.000"N	104°28'35.606"W	0.00	
4282.00†	88.639	89.550	2881.47	1672.51	13.13	1672.46	455989.98	579900.01	32°35'39.010"N	104°28'34.438"W	0.00	
4382.00†	88.639	89.550	2883.84	1772.49	13.91	1772.43	456089.94	579900.79	32°35'39.019"N	104°28'33.269"W	0.00	
4482.00†	88.639	89.550	2886.22	1872.46	14.70	1872.40	456189.90	579901.58	32°35'39.028"N	104°28'32.101"W	0.00	
4582.00†	88.639	89.550	2888.60	1972.43	15.48	1972.37	456289.86	579902.36	32°35'39.037"N	104°28'30.932"W	0.00	
4682.00†	88.639	89.550	2890.97	2072.40	16.27	2072.34	456389.82	579903.15	32°35'39.046"N	104°28'29.764"W	0.00	
4782.00†	88.639	89.550	2893.35	2172.37	17.05	2172.31	456489.78	579903.93	32°35'39.055"N	104°28'28.595"W	0.00	
4882.00†	88.639	89.550	2895.72	2272.34	17.84	2272.27	456589.74	579904.72	32°35'39.064"N	104°28'27.427"W	0.00	
4982.00†	88.639	89.550	2898.10	2372.32	18.62	2372.24	456689.70	579905.50	32°35'39.073"N	104°28'26.259"W	0.00	

REFERENCE WELLPATH IDENTIFICATION			
Operator	**Mewbourne Oil Company**	Slot	**No. 1H SHL**
Area	**Eddy County, NM**	Well	**No. 1H**
Field	**(Long) Sec 9, T20S, R25E**	Wellbore	**No. 1H PWB**
Facility	**Long Draw 10 DC Fed No. 1H**		

WELLPATH DATA (31 stations)

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
5020.02	88.639	89.550	2899.00[1]	2410.32	18.92	2410.25	456727.70	579905.80	32°35'39.077"N	104°28'25.814"W	0.00	No. 1H PBHL

TARGETS

Name	MD [ft]	TVD [ft]	North [ft]	East [ft]	Grid East [srv ft]	Grid North [srv ft]	Latitude	Longitude	Shape
1) No. 1H PBHL	5020.02	2899.00	18.92	2410.25	**456727.70**	**579905.80**	32°35'39.077"N	104°28'25.814"W	point

SURVEY PROGRAM Ref Wellbore: No. 1H PWB Ref Wellpath: Prelim_1

Start MD [ft]	End MD [ft]	Positional Uncertainty Model	Log Name/Comment	Wellbore
14.00	5020.02	NaviTrak (Standard)		No. 1H PWB

Notes Regarding Blowout Preventer
Mewbourne Oil Company
Long Draw "10" DC Federal #1H
350' FNL & 280' FEL (SHL)
Sec 9-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" 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.

Mewbourne Oil Company
BOP Scematic for
8 3/4" & 7 7/8" Hole

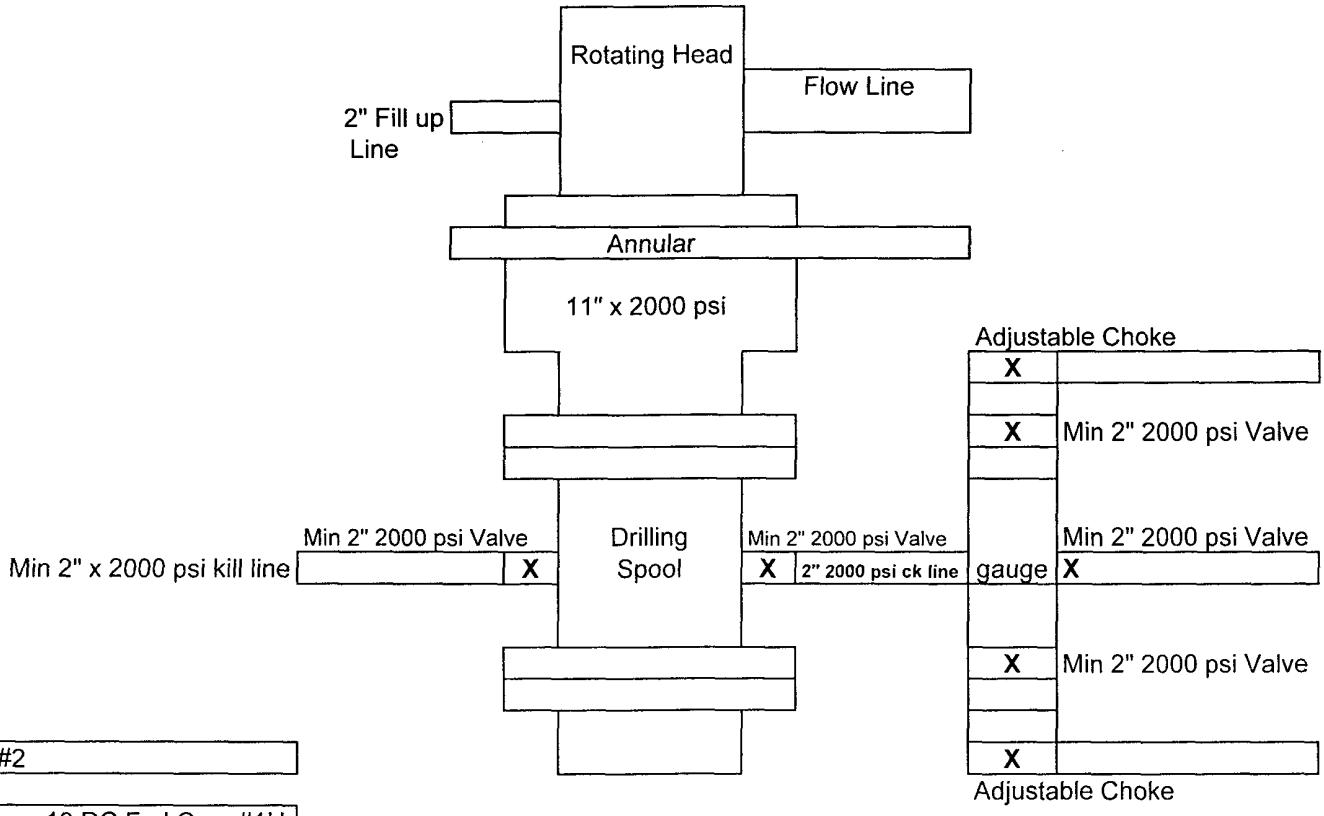
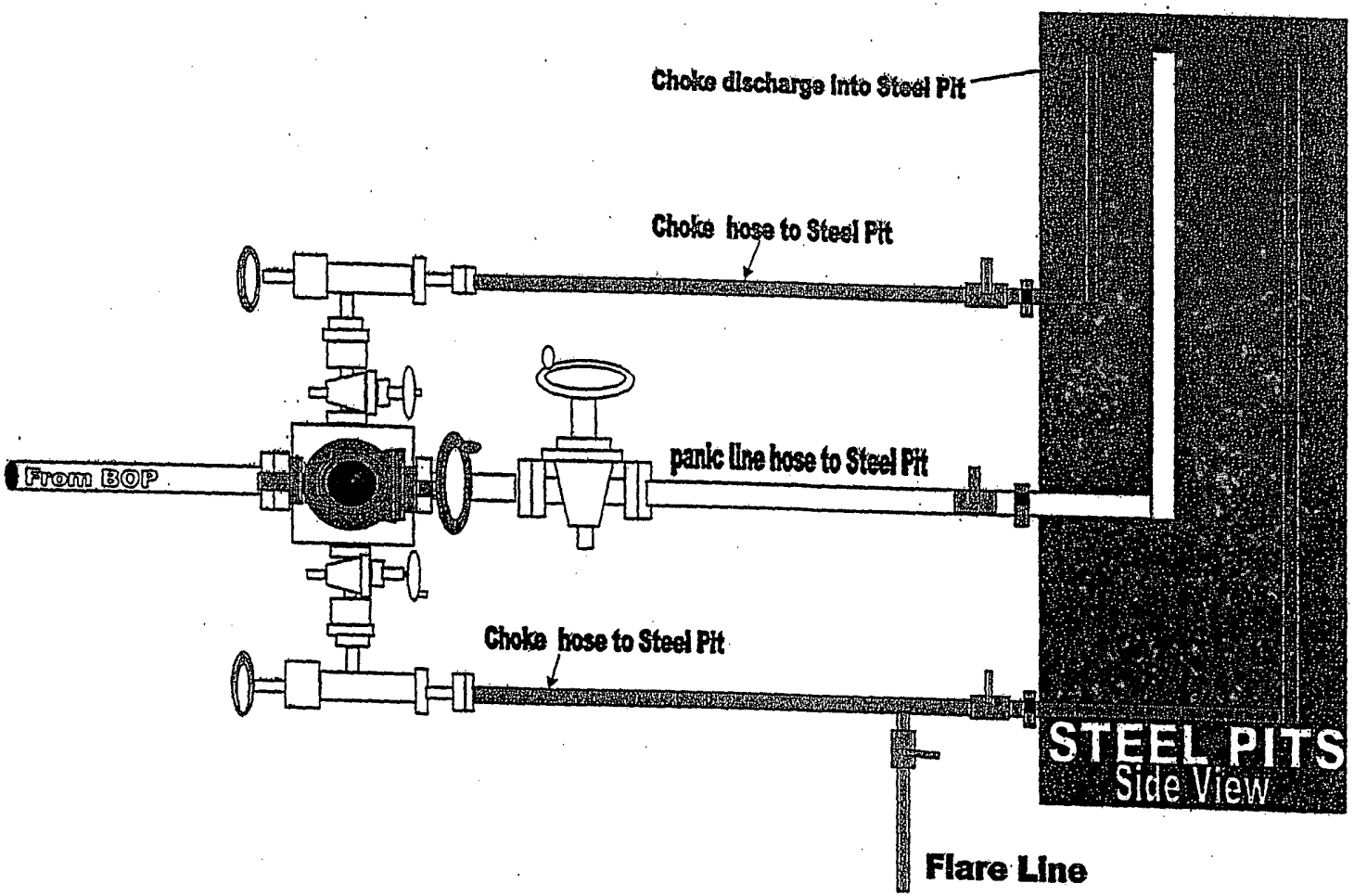


Exhibit #2

Long Draw 10 DC Fed Com #1H
350' FNL & 280' FEL
Sec 9-T20S-R25E
Eddy, County
New Mexico



2000#/3000#BOP manifold system

For Exhibit 2 + 2A