OCD Artesia

ATS-11-856

Form 3160-3
(August 2007)

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

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

APPLICATION FOR PERMIT TO DRILL OR REENTER

5. Lease Serial No. NMNM 13237, NMNM 0144698 (SHL / BHL)

6. If Indian, Allotee 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. Ruger "6" Fed Com #4H [37768]

2. Name of Operator Mewbourne Oil Company <14744>

9. API Well No. 30-015-38686

3a. Address PO BOX 5270, Hobbs, NM 88240

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

10 Field and Pool, or Exploratory Winchester Bone Spring [65010]

4. Location of Well (Report location clearly and in accordance with any State requirements.*)
At surface 200' FNL & 750' FEL (Lot 1)
At proposed prod. zone 330' FSL & 750' FEL (Unit P)
UNORTHODOX LOCATION

11. Sec., T. R. M. or Blk. and Survey or Area Sec 6, T20S, R29E

14. Distance in miles and direction from nearest town or post office* 14.7 miles NE of Carlsbad, NM

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) 200'	16 No. of acres in lease 160	17. Spacing Unit dedicated to this well 160
18 Distance from proposed location* to nearest well, drilling, completed, applied for, on this lease, ft 705'	19 Proposed Depth 13532' MD / 8973' TVD	20. BLM/BIA Bond No. on file NM1693, Nationwide
21 Elevations (Show whether DF, KDB, RT, GL, etc.) 3285' GL	22. Approximate date work will start* 11/10/2011	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.
2. A Drilling Plan
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).
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 BLM

25 Signature Brett Bednarz	Name (Printed/Typed) Brett Bednarz	Date 09/01/2011
Title Petroleum Engineer		
Approved by (Signature) /s/ W. W. Ingram	Name (Printed/Typed)	Date NOV 15 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

(Continued on page 2)

*(Instructions on page 2)

Capitan Controlled Water Basin

RECEIVED
NOV 17 2011
NMOCD ARTESIA

SEE ATTACHED FOR CONDITIONS OF APPROVAL

APPROVAL SUBJECT TO GENERAL REQUIREMENTS AND SPECIAL STIPULATIONS ATTACHED

United States Department of the Interior
Bureau of Land Management
Roswell Field Office
2909 West Second Street
Roswell, New Mexico 88201-1287

Statement Accepting Responsibility for Operations

Operator Name: Mewbourne Oil Company
Street or Box: P.O. Box 5270
City, State: Hobbs, New Mexico
Zip Code: 88241

The undersigned accepts all applicable terms, conditions, stipulations, and restrictions concerning operations conducted of the leased land or portion thereof, as described below.

Lease Number: Lease Number NMNM-13237 NMNM-0144698

Legal Description of Land: Section 6, T-20S, R-29E Eddy County, New Mexico.
Location @ 200' FNL & 750' FEL.

Formation (if applicable): Bone Springs

Bond Coverage: $150,000

BLM Bond File: NM1693, Nationwide

Authorized Signature: Brett Berry for NM Young

Name: NM (~~Micky~~) Young
Title: District Manager
Date: Sept. 1st of 2011.

Drilling Program
Mewbourne Oil Company
Ruger "6" Fed Com #4H
200' FNL & 750' FEL (SHL)
Sec 6-T20S-R29E
Eddy County, New Mexico

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

Rustler	315'
Top Salt	620'
Base Salt	890'
Yates	1040'
Capitan	1375'
*Delaware	3315'
*Bone Springs	5000'
*3rd Bone Springs	8625'

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

Water	Fresh water is anticipated at 62' and will be protected by setting surface casing at 340' 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 2M diverter will be installed after running 20" casing. A 2000# WP Annular will be installed after running 13 ⅜" casing. A 3000# WP Double Ram BOP and 3000# WP Annular will be installed after running 9 ⅝" & 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. BOPE 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 7" & 9 ⅝" BOPE to 3000# and both Annular BOPs 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 8345' & kick off to horizontal @ 8918' TVD. The well will be drilled to 13532' MD (8973' TVD). See attached directional plan.

5. Proposed casing and cementing program:

A. Casing Program:

Hole Size	Casing	Wt/Ft.	Grade	Depth	Jt Type
26"	20" (new)	94#	J55	0'-340'/350	BT&C
17 ½"	13 ⅜" (new)	48#	H40	0'-1140'	ST&C
12 ¼"	9 ⅝" (new)	36#	J55	0'-3115'	LT&C
8 ¾"	7" (new)	26#	P110	0'-8345' MD	LT&C
8 ¾"	7" (new)	26#	P110	8345'-9245' MD	BT&C
6 1/8"	4 ½" (new)	11.6#	P110	9045'-13532' MD	LT&C

SEE COA

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

B. Cementing Program:

i. Surface Casing: 800 sacks HalCem Class "C" cement w/ 1% CaCl2. Yield at 1.34 cuft/sk. Cmt circulated to surface w/100% excess.

ii. 1st Intermediate Casing: 400 sacks EconoCem-HCL cement w/ 2% Econolite, salt and LCM additives. Yield at 2.09 cuft/sk. 200 sacks HalCem-C cement w/2% CaCl2. Yield at 1.35 cuft/sk. Cmt circulated to surface w/25% excess.

See COA

iii. 2nd Intermediate Casing: 500 sacks HLC Lite Class "C" cement w/ LCM additives. Yield at 2.09 cuft/sk. 200 sacks Class HalCem "C" cement w/1% CaCl2. Yield at 1.33 cuft/sk. Cmt circulated to surface w/25% excess.

iii Production Casing: 600 sacks EconoCem-HLH cement with fluid loss & salt additives. Yield at 1.99 cuft/sk. 400 sacks HalCem-H cement w/ .2% Halad-344, .3% CFR3 and salt additives. Yield at 1.21 cuft/sk. Cmt circulated to surface 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:

Interval	Type System	Weight	Viscosity	Fluid Loss
0' - 340' 350'	FW spud mud	8.6-9.0	32-34	NA
340' - 1140'	Brine water	10.0-10.2	28-30	NA
1140' - 8345' (KOP)	FW	8.3-8.6	28-30	NA
8345' - 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/N & Gyro from KOP -100' (8245') to surface. GR from 8245' 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 40 days involved in drilling operations and an additional 10 days involved in completion operations on the project.

Mewbourne Oil Company

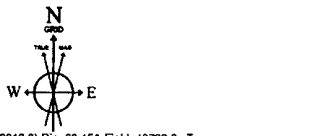
Mewbourne Oil Company

Location: Eddy County, NM
Field: (Ruger) Sec 6, T20S, R29E
Facility: Ruger 6 Federal Com
Slot: No. 4H SHL
Well: No. 4H
Wellbore: No. 4H PWB

BAKER HUGHES

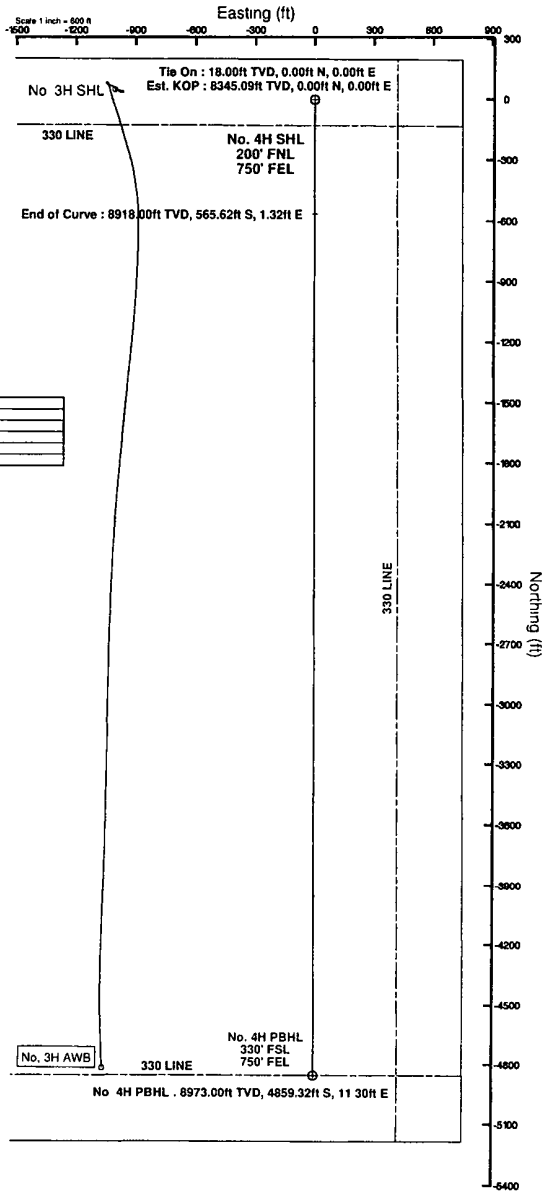
Well Profile Data

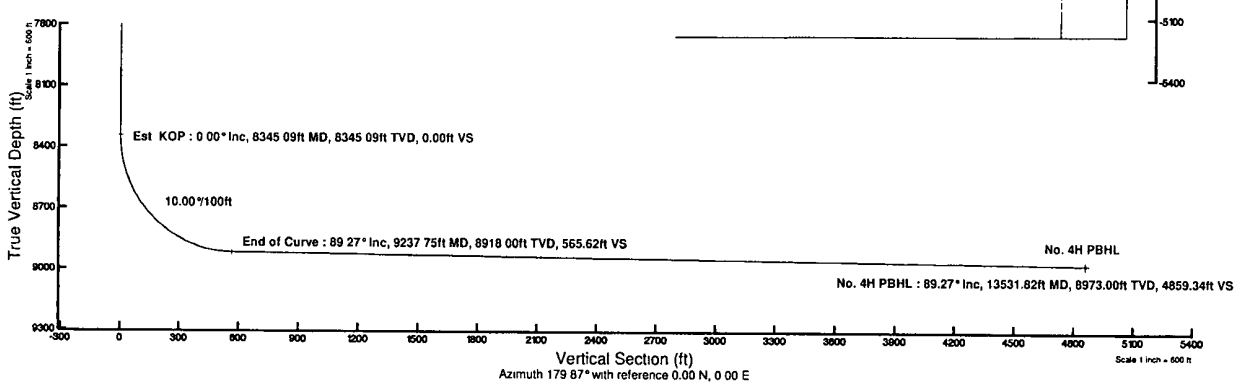
Design Comment	MD (ft)	Inc (°)	Az (°)	TVD (ft)	Local N (ft)	Local E (ft)	DLS (°/100ft)	VS (ft)
Tie On	18.00	0.000	179.867	18.00	0.00	0.00	0.00	0.00
Est. KOP	8345.09	0.000	179.867	8345.09	0.00	0.00	0.00	0.00
End of Curve	9237.75	89.266	179.867	8918.00	-565.62	1.32	10.00	565.62
No. 4H PBHL	13531.82	89.266	179.867	8973.00	-4859.32	11.30	0.00	4859.34



BGGM (1945 0 to 2012 0) Dip 60 45° Field 48793 6 nT
Magnetic North is 7 89 degrees East of True North (at 9/2/2011)
Grid North is 0 12 degrees East of True North
To correct azimuth from True to Grid subtract 0 12 degrees
To correct azimuth from Magnetic to Grid add 7 77 degrees
For example if the Magnetic North Azimuth = 90 degs, then the Grid North Azimuth = 90 + 7 77 = 97 77

Plot reference wellpath is Prelim_1	
True vertical depths are referenced to Rig on No. 4H SHL (RKB)	Grid System: NAD27 / TM New Mexico SP, Eastern Zone (3001), US feet
Measured depths are referenced to Rig on No. 4H SHL (RKB)	North Reference: Grid north
Rig on No. 4H SHL (RKB) to Mean Sea Level: 3303 feet	Scale: True distance
Mean Sea Level to Mud line (At Slot: No. 4H SHL): 0 feet	Depths are in feet
Coordinates are in feet referenced to Slot	Created by: cathphk on 9/2/2011





Mewbourne Oil Company

Clearance Report

Prelim_1

Closest Approach

BAKER HUGHES

REFERENCE WELLPATH IDENTIFICATION			
Operator	**Mewbourne Oil Company**	Slot	**No. 4H SHL**
Area	**Eddy County, NM**	Well	**No. 4H**
Field	**(Ruger) Sec 6, T20S, R29E**	Wellbore	**No. 4H PWB**
Facility	**Ruger 6 Federal Com**		

REPORT SETUP INFORMATION			
Projection System	**NAD27 / TM New Mexico SP, Eastern Zone (3001), US feet**	Software System	**WellArchitect® 3.0.0**
North Reference	**Grid**	User	**Calhphik**
Scale	**0.999915**	Report Generated	**9/2/2011 at 9:59:05 AM**
Convergence at slot	**0.12° East**	Database/Source file	**WA_Midland/No._4H_PWB_CR.xml**

WELLPATH LOCATION	Local coordinates		Grid coordinates		Geographic coordinates	
	North[ft]	East[ft]	Easting[US ft]	Northing[US ft]	Latitude	Longitude
Slot Location	-50.70	1004.78	**569465.50**	**585501.40**	32°36'34.003"N	104°06'27.873"W
Facility Reference Pt			**568460.81**	**585552.10**	32°36'34.526"N	104°06'39.618"W
Field Reference Pt			**568460.81**	**585552.10**	32°36'34.526"N	104°06'39.618"W

WELLPATH DATUM			
Calculation method	**Minimum Curvature**	Rig on No. 4H SHL (RKB) to GL	**3303.00ft**
Horizontal Reference Pt	**Slot**	Rig on No. 4H SHL (RKB) to Mean Sea Level	**3303.00ft**
Vertical Reference Pt	**Rig on No. 4H SHL (RKB)**	Rig on No. 4H SHL (RKB) to Mud Line at Slot (No. 4H SHL)	**3303.00ft**
MD Reference Pt	**Rig on No. 4H SHL (RKB)**		
Field Vertical Reference	**Mean Sea Level**		

POSITIONAL UNCERTAINTY CALCULATION SETTINGS					
Ellipse Confidence Limit	**3.00 Std Dev**	Ellipse Start MD	**3303.00ft**	Surface Position Uncertainty	**included**
Declination	**7.89° East of TN**	Dip Angle	**60.45°**	Mag Field Strength	**48794 nT**
Slot Surface Uncertainty @1SD		Horizontal	**0.100ft**	Vertical	**0.100ft**
Facility Surface Uncertainty @1SD		Horizontal	**8.200ft**	Vertical	**1.000ft**

ANTI-COLLISION RULE			
Rule Name	**R-type Stop Drilling, Closest Approach w/Hole&Csg Limit:1.0, StdDev:3.00 w/Surface Uncert R=(D-HnC)/PU**	Rule Based On	**Ratio**
Plane of Rule	**Closest Approach**	Threshold Value	**1.00**
Subtract Casing & Hole Size	**yes**	Apply Cone of Safety	**no**

SURVEY PROGRAM - **Ref Wellbore: No. 4H PWB** **Ref Wellpath: Prelim_1**

Start MD [ft]	End MD [ft]	Positional Uncertainty Model	Log Name/Comment	Wellbore
3303.00	13531.82	NaviTrak (Standard)		No. 4H PWB

Mewbourne Oil Company

Clearance Report

Prelim_1

Closest Approach

BAKER HUGHES

REFERENCE WELLPATH IDENTIFICATION			
Operator	**Mewbourne Oil Company**	Slot	**No. 4H SHL**
Area	**Eddy County, NM**	Well	**No. 4H**
Field	**(Ruger) Sec 6, T20S, R29E**	Wellbore	**No. 4H PWB**
Facility	**Ruger 6 Federal Com**		

CALCULATION RANGE & CUTOFF		
From: **18.00ft MD**	To: **13531.82ft MD**	C-C Cutoff: **(none)**

OFFSET WELL CLEARANCE SUMMARY (1 Offset Wellpath selected) Ratios are calculated in Closest Approach plane

					C-C Clearance Distance			ACR Separation Ratio			
Offset Facility	Offset Slot	Offset Well	Offset Wellbore	Offset Wellpath	Ref MD [ft]	Min C-C Clear Dist [ft]	Diverging from MD [ft]	Ref MD of Min Ratio [ft]	Min Ratio	Min Ratio Dvrg from [ft]	ACR Status
Ruger 6 Federal Com	No. 3H SHL	No. 3H	No, 3H AWB	No, 3H AWP	9241.76	887.58	13518.00	13531.82	3.42	13531.82	PASS

Mewbourne Oil Company

Clearance Report

Prelim_1

Closest Approach

BAKER HUGHES

REFERENCE WELLPATH IDENTIFICATION			
Operator	Mewbourne Oil Company	Slot	No. 4H SHL
Area	Eddy County, NM	Well	No. 4H
Field	(Ruger) Sec 6, T20S, R29E	Wellbore	No. 4H PWB
Facility	Ruger 6 Federal Com		

CLEARANCE DATA - Offset Wellbore: No, 3H AWB Offset Wellpath: No, 3H AWP

Facility: Ruger 6 Federal Com Slot: No. 3H SHL Well: No. 3H Threshold Value=1.00 † = interpolated/extrapolated station

Ref MD [ft]	Ref TVD [ft]	Ref North [ft]	Ref East [ft]	Offset MD [ft]	Offset TVD [ft]	Offset North [ft]	Offset East [ft]	Horiz Bearing [°]	C-C Clear Dist [ft]	Sep Ratio	ACR MASD [ft]	ACR Status
18.00	18.00	0.00	0.00	25.72	17.72	50.70	-1004.78	272.89	1006.06	NA	0.00	NA
118.00†	118.00	0.00	0.00	124.27	116.26	49.62	-1005.00	272.83	1006.22	NA	0.00	NA
218.00†	218.00	0.00	0.00	231.21	223.19	48.16	-1004.99	272.74	1006.15	NA	0.00	NA
318.00†	318.00	0.00	0.00	347.26	339.23	46.74	-1003.58	272.67	1004.89	NA	0.00	NA
418.00†	418.00	0.00	0.00	455.77	447.68	45.36	-1000.66	272.60	1002.13	NA	0.00	NA
518.00†	518.00	0.00	0.00	561.63	553.49	44.53	-997.37	272.56	998.99	NA	0.00	NA
618.00†	618.00	0.00	0.00	672.01	663.78	43.96	-992.89	272.54	994.92	NA	0.00	NA
718.00†	718.00	0.00	0.00	774.05	765.70	44.01	-987.97	272.55	990.10	NA	0.00	NA
818.00†	818.00	0.00	0.00	877.85	869.37	43.38	-982.85	272.53	985.15	NA	0.00	NA
918.00†	918.00	0.00	0.00	973.88	965.28	43.19	-977.93	272.53	980.03	NA	0.00	NA
1018.00†	1018.00	0.00	0.00	1064.81	1056.11	42.86	-973.94	272.52	975.63	NA	0.00	NA
1118.00†	1118.00	0.00	0.00	1156.21	1147.46	42.99	-970.79	272.54	972.19	NA	0.00	NA
1218.00†	1218.00	0.00	0.00	1247.69	1238.91	43.07	-968.39	272.55	969.57	NA	0.00	NA
1318.00†	1318.00	0.00	0.00	1341.72	1332.92	42.95	-966.75	272.54	967.82	NA	0.00	NA
1418.00†	1418.00	0.00	0.00	1438.07	1429.27	42.63	-965.39	272.53	966.40	NA	0.00	NA
1518.00†	1518.00	0.00	0.00	1532.54	1523.72	42.06	-964.63	272.50	965.56	NA	0.00	NA
1618.00†	1618.00	0.00	0.00	1630.07	1621.26	41.38	-964.22	272.46	965.11	NA	0.00	NA
1718.00†	1718.00	0.00	0.00	1728.93	1720.11	40.42	-964.00	272.40	964.85	NA	0.00	NA
1818.00†	1818.00	0.00	0.00	1829.01	1820.19	39.47	-963.83	272.35	964.64	NA	0.00	NA
1918.00†	1918.00	0.00	0.00	1930.41	1921.58	38.63	-963.56	272.30	964.34	NA	0.00	NA
2018.00†	2018.00	0.00	0.00	2030.49	2021.66	37.97	-963.17	272.26	963.93	NA	0.00	NA
2118.00†	2118.00	0.00	0.00	2128.76	2119.93	37.45	-962.93	272.23	963.66	NA	0.00	NA
2218.00†	2218.00	0.00	0.00	2228.75	2219.92	37.18	-962.76	272.21	963.48	NA	0.00	NA
2318.00†	2318.00	0.00	0.00	2328.94	2320.11	36.78	-962.52	272.19	963.23	NA	0.00	NA
2418.00†	2418.00	0.00	0.00	2426.69	2417.86	36.53	-962.44	272.17	963.13	NA	0.00	NA
2518.00†	2518.00	0.00	0.00	2524.66	2515.83	36.28	-962.56	272.16	963.25	NA	0.00	NA
2618.00†	2618.00	0.00	0.00	2620.95	2612.12	36.09	-962.90	272.15	963.60	NA	0.00	NA
2718.00†	2718.00	0.00	0.00	2711.88	2703.04	36.12	-963.92	272.15	964.71	NA	0.00	NA
2818.00†	2818.00	0.00	0.00	2808.38	2799.52	36.47	-965.60	272.16	966.47	NA	0.00	NA
2918.00†	2918.00	0.00	0.00	2911.96	2903.08	36.46	-967.42	272.16	968.22	NA	0.00	NA
3018.00†	3018.00	0.00	0.00	3019.27	3010.39	35.97	-968.64	272.13	969.33	NA	0.00	NA
3118.00†	3118.00	0.00	0.00	3119.79	3110.91	35.58	-969.35	272.10	970.03	NA	0.00	NA
3218.00†	3218.00	0.00	0.00	3215.65	3206.77	35.36	-970.30	272.09	971.01	NA	0.00	NA
3318.00†	3318.00	0.00	0.00	3316.12	3307.23	35.33	-971.44	272.08	972.15	1453.79	0.67	PASS
3418.00†	3418.00	0.00	0.00	3417.03	3408.13	35.37	-972.53	272.08	973.23	942.03	1.03	PASS
3518.00†	3518.00	0.00	0.00	3519.36	3510.45	35.40	-973.42	272.08	974.09	573.03	1.70	PASS
3618.00†	3618.00	0.00	0.00	3618.90	3609.98	35.42	-974.21	272.08	974.89	401.65	2.43	PASS
3718.00†	3718.00	0.00	0.00	3718.67	3709.75	35.42	-975.07	272.08	975.75	308.08	3.17	PASS
3818.00†	3818.00	0.00	0.00	3821.02	3812.11	35.41	-975.78	272.08	976.44	248.57	3.93	PASS
3918.00†	3918.00	0.00	0.00	3921.11	3912.19	35.42	-976.44	272.08	977.10	210.87	4.63	PASS
4018.00†	4018.00	0.00	0.00	4024.94	4016.02	35.50	-976.77	272.08	977.41	179.62	5.44	PASS
4118.00†	4118.00	0.00	0.00	4121.75	4112.83	35.77	-977.08	272.10	977.74	158.96	6.15	PASS
4218.00†	4218.00	0.00	0.00	4216.69	4207.77	36.48	-977.84	272.14	978.58	143.11	6.84	PASS
4318.00†	4318.00	0.00	0.00	4316.89	4307.96	37.83	-978.83	272.21	979.61	130.14	7.53	PASS
4418.00†	4418.00	0.00	0.00	4415.41	4406.47	39.06	-979.81	272.28	980.66	119.59	8.20	PASS

Mewbourne Oil Company

Clearance Report

Prelim_1

Closest Approach

BAKER HUGHES

REFERENCE WELLPATH IDENTIFICATION			
Operator	Mewbourne Oil Company	Slot	No. 4H SHL
Area	Eddy County, NM	Well	No. 4H
Field	(Ruger) Sec 6, T20S, R29E	Wellbore	No. 4H PWB
Facility	Ruger 6 Federal Com		

CLEARANCE DATA - Offset Wellbore: No, 3H AWB Offset Wellpath: No, 3H AWP

Facility: Ruger 6 Federal Com Slot: No. 3H SHL Well: No. 3H Threshold Value=1.00 † = interpolated/extrapolated station

Ref MD [ft]	Ref TVD [ft]	Ref North [ft]	Ref East [ft]	Offset MD [ft]	Offset TVD [ft]	Offset North [ft]	Offset East [ft]	Horiz Bearing [°]	C-C Clear Dist [ft]	Sep Ratio	ACR MASD [ft]	ACR Status
4518.00†	4518.00	0.00	0.00	4508.46	4499.49	40.37	-981.21	272.36	982.21	110.51	8.89	PASS
4618.00†	4618.00	0.00	0.00	4606.49	4597.49	41.92	-983.09	272.44	984.20	102.43	9.61	PASS
4718.00†	4718.00	0.00	0.00	4704.96	4695.93	43.40	-985.16	272.52	986.36	95.53	10.33	PASS
4818.00†	4818.00	0.00	0.00	4802.50	4793.44	44.85	-987.40	272.60	988.72	89.52	11.04	PASS
4918.00†	4918.00	0.00	0.00	4899.55	4890.42	46.60	-989.87	272.70	991.35	84.30	11.76	PASS
5018.00†	5018.00	0.00	0.00	4990.30	4981.10	48.84	-992.71	272.82	994.60	79.88	12.45	PASS
5118.00†	5118.00	0.00	0.00	5085.90	5076.59	51.67	-996.35	272.97	998.55	75.82	13.17	PASS
5218.00†	5218.00	0.00	0.00	5186.30	5176.87	54.57	-1000.37	273.12	1002.70	72.13	13.90	PASS
5318.00†	5318.00	0.00	0.00	5290.86	5281.32	57.01	-1004.31	273.25	1006.60	68.68	14.66	PASS
5418.00†	5418.00	0.00	0.00	5397.94	5388.33	58.91	-1007.74	273.35	1009.90	65.46	15.43	PASS
5518.00†	5518.00	0.00	0.00	5502.73	5493.08	60.78	-1010.45	273.44	1012.58	62.58	16.18	PASS
5618.00†	5618.00	0.00	0.00	5599.27	5589.57	62.46	-1012.89	273.53	1015.22	60.07	16.90	PASS
5718.00†	5718.00	0.00	0.00	5698.06	5688.30	64.04	-1015.63	273.61	1018.08	57.74	17.63	PASS
5818.00†	5818.00	0.00	0.00	5794.78	5784.97	65.44	-1018.51	273.68	1021.15	55.60	18.36	PASS
5918.00†	5918.00	0.00	0.00	5895.59	5885.72	66.88	-1021.66	273.75	1024.35	53.59	19.11	PASS
6018.00†	6018.00	0.00	0.00	5987.51	5977.58	68.30	-1024.80	273.81	1027.87	51.83	19.83	PASS
6118.00†	6118.00	0.00	0.00	6086.39	6076.37	69.79	-1028.70	273.88	1031.91	50.13	20.58	PASS
6218.00†	6218.00	0.00	0.00	6187.58	6177.47	71.11	-1032.65	273.94	1035.89	48.54	21.34	PASS
6318.00†	6318.00	0.00	0.00	6298.55	6288.37	71.80	-1036.42	273.96	1039.32	46.92	22.15	PASS
6418.00†	6418.00	0.00	0.00	6391.21	6380.99	72.70	-1039.31	274.00	1042.51	45.56	22.88	PASS
6518.00†	6518.00	0.00	0.00	6498.47	6488.17	74.65	-1042.68	274.10	1045.78	44.21	23.66	PASS
6618.00†	6618.00	0.00	0.00	6612.10	6601.78	76.50	-1045.06	274.19	1047.98	42.88	24.44	PASS
6718.00†	6718.00	0.00	0.00	6722.36	6712.03	77.28	-1046.03	274.23	1048.90	41.60	25.22	PASS
6818.00†	6818.00	0.00	0.00	6820.52	6810.18	77.53	-1046.69	274.24	1049.59	40.44	25.96	PASS
6918.00†	6918.00	0.00	0.00	6921.56	6911.23	77.53	-1047.39	274.23	1050.28	39.32	26.71	PASS
7018.00†	7018.00	0.00	0.00	7022.43	7012.08	77.31	-1048.05	274.22	1050.91	38.28	27.45	PASS
7118.00†	7118.00	0.00	0.00	7126.39	7116.05	76.96	-1048.47	274.20	1051.29	37.35	28.15	PASS
7218.00†	7218.00	0.00	0.00	7230.30	7219.96	76.09	-1048.51	274.15	1051.27	36.61	28.71	PASS
7318.00†	7318.00	0.00	0.00	7334.38	7324.03	75.50	-1048.21	274.12	1050.95	36.04	29.16	PASS
7418.00†	7418.00	0.00	0.00	7434.49	7424.13	75.88	-1047.39	274.14	1050.15	35.49	29.59	PASS
7518.00†	7518.00	0.00	0.00	7524.17	7513.81	77.14	-1047.26	274.21	1050.10	34.88	30.11	PASS
7618.00†	7618.00	0.00	0.00	7620.25	7609.87	79.11	-1047.79	274.32	1050.80	34.20	30.73	PASS
7718.00†	7718.00	0.00	0.00	7728.28	7717.89	80.44	-1048.08	274.39	1051.16	33.53	31.35	PASS
7818.00†	7818.00	0.00	0.00	7834.59	7824.18	81.66	-1047.71	274.46	1050.91	32.95	31.89	PASS
7918.00†	7918.00	0.00	0.00	7938.09	7927.67	83.04	-1046.67	274.54	1050.01	32.44	32.36	PASS
8018.00†	8018.00	0.00	0.00	8040.35	8029.92	83.84	-1045.75	274.58	1049.18	31.99	32.80	PASS
8118.00†	8118.00	0.00	0.00	8156.53	8146.07	83.66	-1043.60	274.58	1047.32	31.54	33.20	PASS
8218.00†	8218.00	0.00	0.00	8263.75	8253.23	82.54	-1040.21	274.54	1044.07	31.08	33.59	PASS
8318.00†	8318.00	0.00	0.00	8365.67	8354.99	78.02	-1037.63	274.30	1041.22	30.67	33.95	PASS
8345.09	8345.09	0.00	0.00	8416.39	8405.06	70.22	-1035.82	273.88	1039.93	30.58	34.00	PASS
8418.00†	8417.80	-4.63	0.01	8679.26	8643.94	-30.35	-1006.92	268.54	1032.33	30.39	33.96	PASS
8518.00†	8515.39	-25.89	0.06	8822.05	8746.63	-123.69	-975.54	264.28	1007.39	28.69	35.11	PASS
8618.00†	8607.80	-63.78	0.15	8945.40	8817.59	-220.41	-947.53	260.62	983.18	26.52	37.07	PASS
8718.00†	8692.22	-117.13	0.27	9044.28	8856.09	-307.82	-922.64	258.33	956.55	24.16	39.58	PASS
8818.00†	8766.10	-184.33	0.43	9085.42	8867.43	-346.24	-913.35	259.95	933.53	22.47	41.55	PASS

REFERENCE WELLPATH IDENTIFICATION			
Operator	Mewbourne Oil Company	Slot	No. 4H SHL
Area	Eddy County, NM	Well	No. 4H
Field	(Ruger) Sec 6, T20S, R29E	Wellbore	No. 4H PWB
Facility	Ruger 6 Federal Com		

CLEARANCE DATA - Offset Wellbore: No, 3H AWB Offset Wellpath: No, 3H AWP

Facility: Ruger 6 Federal Com Slot: No. 3H SHL Well: No. 3H Threshold Value=1.00 † = interpolated/extrapolated station

Ref MD [ft]	Ref TVD [ft]	Ref North [ft]	Ref East [ft]	Offset MD [ft]	Offset TVD [ft]	Offset North [ft]	Offset East [ft]	Horiz Bearing [°]	C-C Clear Dist [ft]	Sep Ratio	ACR MASD [ft]	ACR Status
8918.00†	8827.19	-263.35	0.61	9136.83	8878.16	-395.76	-904.71	261.68	916.38	20.83	43.99	PASS
9018.00†	8873.63	-351.77	0.82	9210.52	8886.61	-468.16	-894.21	262.59	902.66	19.11	47.23	PASS
9118.00†	8904.01	-446.91	1.04	9265.02	8891.13	-522.12	-888.04	265.16	892.35	17.73	50.32	PASS
9218.00†	8917.41	-545.88	1.27	9305.93	8893.67	-562.90	-886.06	268.90	887.81	16.66	53.28	PASS
9237.75	8918.00	-565.62	1.32	9316.09	8894.08	-573.05	-885.93	269.52	887.60	16.46	53.94	PASS
9241.76†	8918.05	-569.63	1.32	9317.20	8894.12	-574.16	-885.92	269.71	887.58	16.42	54.04	PASS
9318.00†	8919.03	-645.86	1.50	9381.02	8895.39	-637.96	-886.40	270.51	888.25	15.49	57.33	PASS
9418.00†	8920.31	-745.85	1.73	9474.53	8897.78	-731.44	-887.12	270.93	889.26	14.32	62.12	PASS
9518.00†	8921.59	-845.84	1.97	9545.51	8898.08	-802.36	-889.77	272.79	893.11	13.45	66.38	PASS
9618.00†	8922.87	-945.83	2.20	9644.64	8900.84	-901.34	-894.09	272.84	897.66	12.52	71.68	PASS
9718.00†	8924.15	-1045.83	2.43	9738.86	8903.96	-995.34	-899.63	273.20	903.70	11.74	76.95	PASS
9818.00†	8925.43	-1145.82	2.66	9821.96	8907.09	-1078.20	-905.13	274.26	910.50	11.11	81.92	PASS
9918.00†	8926.71	-1245.81	2.90	9894.83	8908.76	-1150.76	-911.72	275.93	919.72	10.63	86.54	PASS
10018.00†	8927.99	-1345.80	3.13	9991.94	8908.29	-1247.35	-921.58	276.08	930.15	10.10	92.13	PASS
10118.00†	8929.28	-1445.79	3.36	10101.35	8910.60	-1356.18	-932.65	275.47	940.48	9.57	98.29	PASS
10218.00†	8930.56	-1545.78	3.59	10200.25	8914.01	-1454.60	-941.73	275.51	949.86	9.12	104.10	PASS
10318.00†	8931.84	-1645.77	3.83	10294.51	8918.73	-1548.24	-951.32	275.83	960.20	8.75	109.75	PASS
10418.00†	8933.12	-1745.77	4.06	10407.07	8920.63	-1660.31	-961.58	275.06	969.49	8.34	116.21	PASS
10518.00†	8934.40	-1845.76	4.29	10504.78	8922.21	-1757.65	-969.84	275.17	978.18	8.01	122.08	PASS
10618.00†	8935.68	-1945.75	4.53	10603.96	8925.12	-1856.42	-978.66	275.19	987.29	7.71	128.05	PASS
10718.00†	8936.96	-2045.74	4.76	10707.14	8927.81	-1959.11	-988.10	274.99	996.67	7.43	134.21	PASS
10818.00†	8938.24	-2145.73	4.99	10832.54	8933.01	-2084.09	-997.14	273.52	1004.04	7.11	141.30	PASS
10918.00†	8939.52	-2245.72	5.22	10939.42	8935.21	-2190.74	-1003.74	273.12	1010.47	6.84	147.65	PASS
11018.00†	8940.80	-2345.72	5.46	11049.91	8938.23	-2301.05	-1009.34	272.52	1015.78	6.59	154.15	PASS
11118.00†	8942.08	-2445.71	5.69	11154.88	8941.57	-2405.84	-1014.11	272.24	1020.57	6.36	160.46	PASS
11218.00†	8943.36	-2545.70	5.92	11259.03	8946.78	-2509.79	-1017.57	272.01	1024.12	6.14	166.74	PASS
11318.00†	8944.64	-2645.69	6.15	11362.66	8950.67	-2613.29	-1021.13	271.81	1027.81	5.94	173.01	PASS
11418.00†	8945.93	-2745.68	6.39	11469.75	8952.90	-2720.33	-1024.27	271.41	1030.99	5.75	179.42	PASS
11518.00†	8947.21	-2845.67	6.62	11586.06	8955.51	-2836.60	-1026.01	270.50	1032.70	5.55	186.14	PASS
11618.00†	8948.49	-2945.66	6.85	11672.75	8955.59	-2923.25	-1027.40	271.24	1034.52	5.39	191.87	PASS
11718.00†	8949.77	-3045.66	7.08	11787.21	8954.37	-3037.70	-1029.58	270.44	1036.71	5.22	198.55	PASS
11818.00†	8951.05	-3145.65	7.32	11899.24	8955.78	-3149.69	-1029.46	269.78	1036.79	5.05	205.12	PASS
11918.00†	8952.33	-3245.64	7.55	11984.75	8958.25	-3235.19	-1029.56	270.58	1037.18	4.92	210.86	PASS
12018.00†	8953.61	-3345.63	7.78	12070.02	8959.66	-3320.43	-1031.06	271.39	1039.17	4.80	216.56	PASS
12118.00†	8954.89	-3445.62	8.01	12171.92	8961.04	-3422.27	-1033.93	271.28	1042.22	4.68	222.83	PASS
12218.00†	8956.17	-3545.61	8.25	12276.49	8967.81	-3526.58	-1034.95	271.05	1043.43	4.55	229.20	PASS
12318.00†	8957.45	-3645.61	8.48	12365.81	8971.39	-3615.82	-1037.48	271.63	1046.48	4.45	235.02	PASS
12418.00†	8958.73	-3745.60	8.71	12473.04	8974.19	-3722.96	-1039.47	271.24	1048.54	4.34	241.50	PASS
12518.00†	8960.01	-3845.59	8.94	12567.36	8975.56	-3817.24	-1041.87	271.55	1051.31	4.25	247.52	PASS
12618.00†	8961.30	-3945.58	9.18	12652.65	8975.94	-3902.50	-1044.94	272.34	1055.10	4.17	253.18	PASS
12718.00†	8962.58	-4045.57	9.41	12742.13	8974.46	-3991.88	-1048.89	272.90	1059.73	4.09	258.97	PASS
12818.00†	8963.86	-4145.56	9.64	12867.65	8973.17	-4117.29	-1053.54	271.52	1063.60	4.00	266.23	PASS
12918.00†	8965.14	-4245.55	9.87	12961.98	8972.90	-4211.58	-1056.20	271.83	1066.64	3.92	272.25	PASS
13018.00†	8966.42	-4345.55	10.11	13074.09	8972.59	-4323.62	-1059.48	271.17	1069.83	3.84	278.95	PASS
13118.00†	8967.70	-4445.54	10.34	13184.55	8973.86	-4434.08	-1060.92	270.61	1071.34	3.75	285.55	PASS

Mewbourne Oil Company

Clearance Report

Prelim_1

Closest Approach

BAKER HUGHES

REFERENCE WELLPATH IDENTIFICATION			
Operator	Mewbourne Oil Company	Slot	No. 4H SHL
Area	Eddy County, NM	Well	No. 4H
Field	(Ruger) Sec 6, T20S, R29E	Wellbore	No. 4H PWB
Facility	Ruger 6 Federal Com		

CLEARANCE DATA - Offset Wellbore: No, 3H AWB Offset Wellpath: No, 3H AWP

Facility: Ruger 6 Federal Com Slot: No. 3H SHL Well: No. 3H Threshold Value=1.00 † = interpolated/extrapolated station

Ref MD [ft]	Ref TVD [ft]	Ref North [ft]	Ref East [ft]	Offset MD [ft]	Offset TVD [ft]	Offset North [ft]	Offset East [ft]	Horiz Bearing [°]	C-C Clear Dist [ft]	Sep Ratio	ACR MASD [ft]	ACR Status
13218.00†	8968.98	-4545.53	10.57	13322.36	8974.36	-4571.84	-1059.31	268.59	1070.22	3.65	292.90	PASS
13318.00†	8970.26	-4645.52	10.80	13443.55	8972.14	-4692.95	-1055.16	267.45	1067.02	3.56	299.61	PASS
13418.00†	8971.54	-4745.51	11.04	13546.29	8971.41	-4795.58	-1050.79	267.30	1063.01	3.47	305.91	PASS
13518.00†	8972.82	-4845.50	11.27	13575.00	8971.36	-4824.26	-1049.44	271.15	1060.92	3.42	310.22	PASS
13531.82	8973.00	-4859.32	11.30	13575.00	8971.36	-4824.26	-1049.44	271.89	1061.32	3.42	310.55	PASS

POSITIONAL UNCERTAINTY - Offset Wellbore: No, 3H AWB Offset Wellpath: No, 3H AWP

Slot Surface Uncertainty @1SD	Horizontal	0.100ft	Vertical	0.100ft
Facility Surface Uncertainty @1SD	Horizontal	8.200ft	Vertical	1.000ft

WELLPATH COMPOSITION - Offset Wellbore: No, 3H AWB Offset Wellpath: No, 3H AWP

Start MD [ft]	End MD [ft]	Positional Uncertainty Model	Log Name/Comment	Wellbore
17.00	8229.00	Generic gyro - northseeking (Standard)	Gyro	No, 3H AWB
8229.00	13575.00	NaviTrak (Standard)	MWD	No, 3H AWB

OFFSET WELLPATH MD REFERENCE - Offset Wellbore: No, 3H AWB Offset Wellpath: No, 3H AWP

MD Reference: **Rig on No. 3h SHL (KB)**	*Offset TVD & local coordinates use Reference Wellpath settings (See WELLPATH DATUM on page 1 of this report)*
Ellipse Start MD	

Notes Regarding Blowout Preventer
Mewbourne Oil Company
Ruger "6" Fed Com #4H
200' FNL & 750' FEL (SHL)
Sec 6-T20S-R29E
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 13 3/8" casing and 3000 psi working pressure on 9 5/8" & 7" casing.

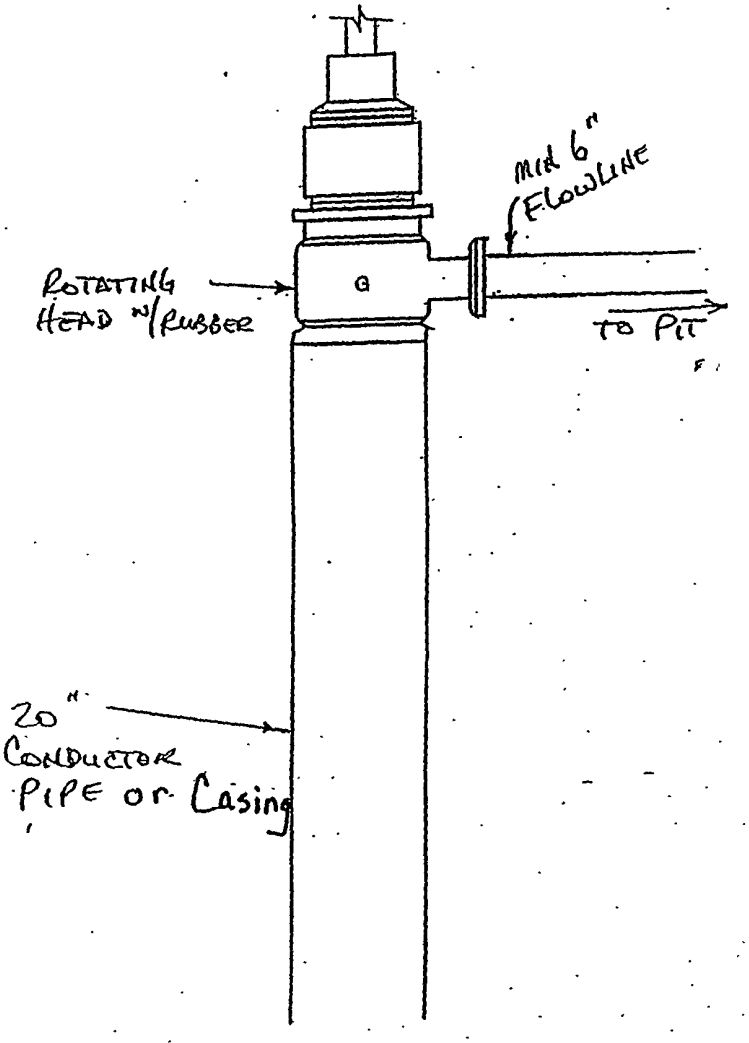
III. Safety valve must be available on the rig floor at all times with proper connections to install in the drill string. Valve must be full bore with minimum 3000 psi working pressure.

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.

20" DIVERTER SYSTEM



Ruger "6" Fed Com #4H

Mewbourne Oil Company
BOP Scematic for
12 ¼" Hole

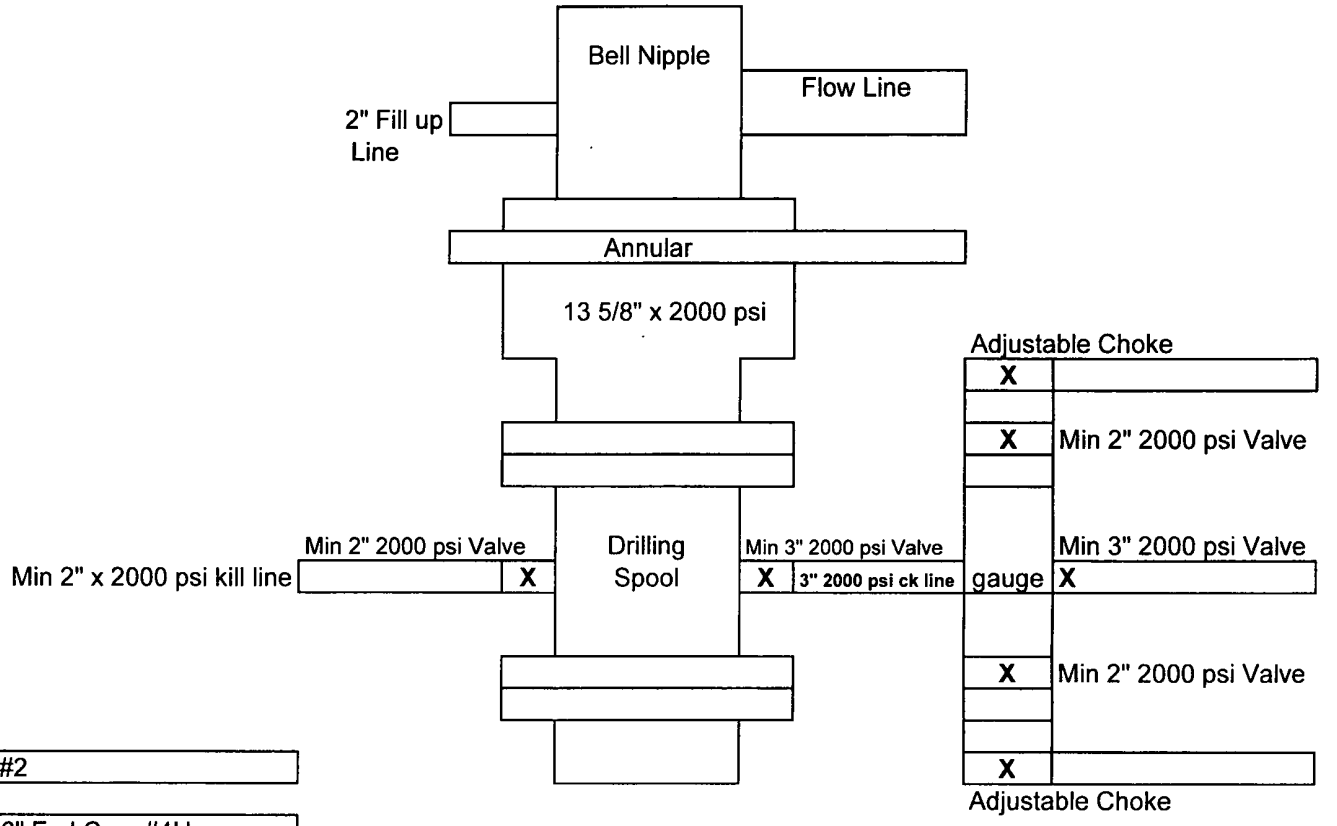


Exhibit #2

Ruger "6" Fed Com #4H
200' FNL & 750' FEL
Sec 6-T20S-R29E
Eddy, County
New Mexico

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

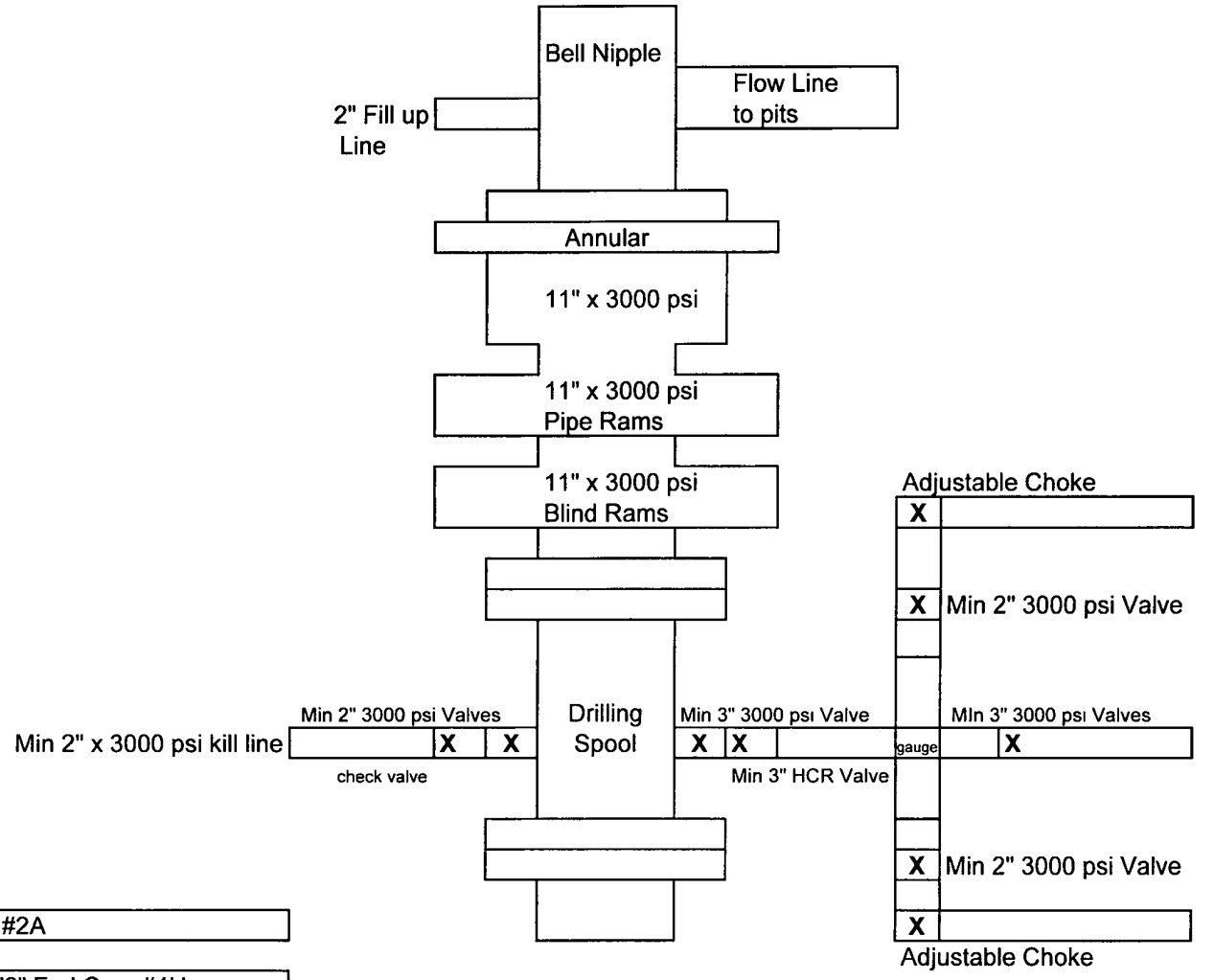
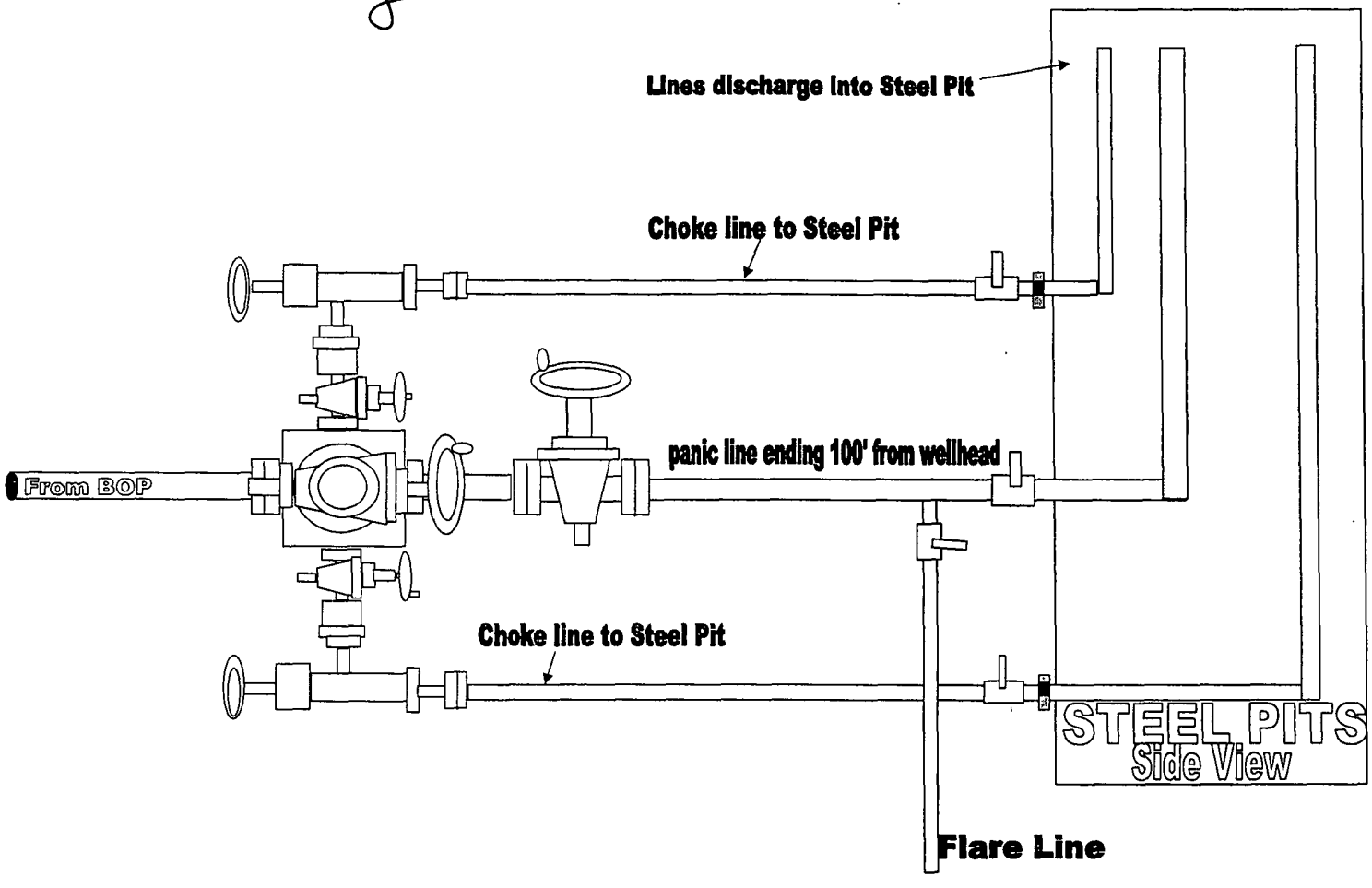


Exhibit #2A

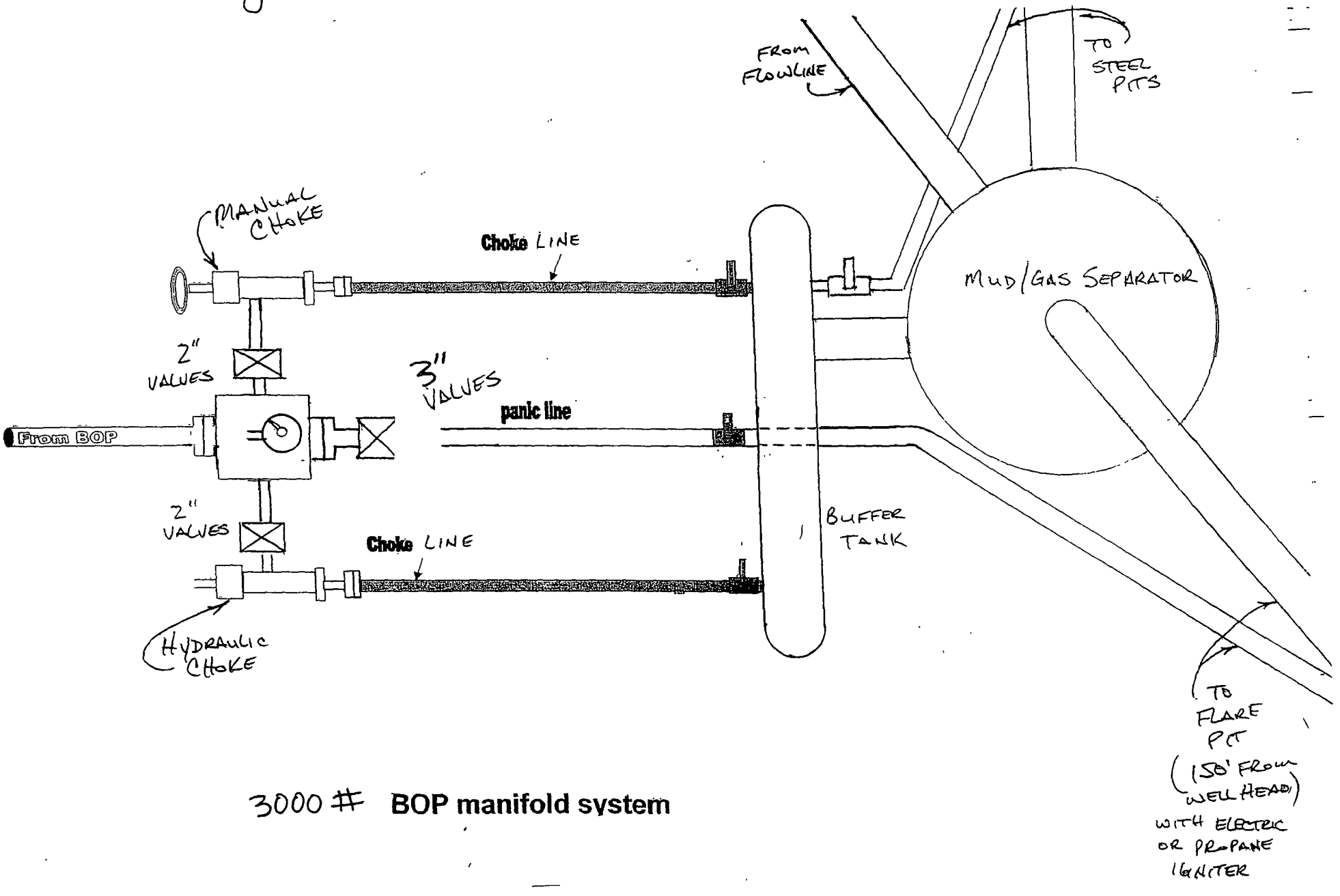
Ruger "6" Fed Com #4H
200' FNL & 750' FEL
Sec 6-T20S-R29E
Eddy, County
New Mexico

Ruger "6" Fed Com #4H



3000# BOP manifold system for Exhibit 2 & 2A

Ruger "6" Fed Com #4H



3000 # **BOP manifold system**

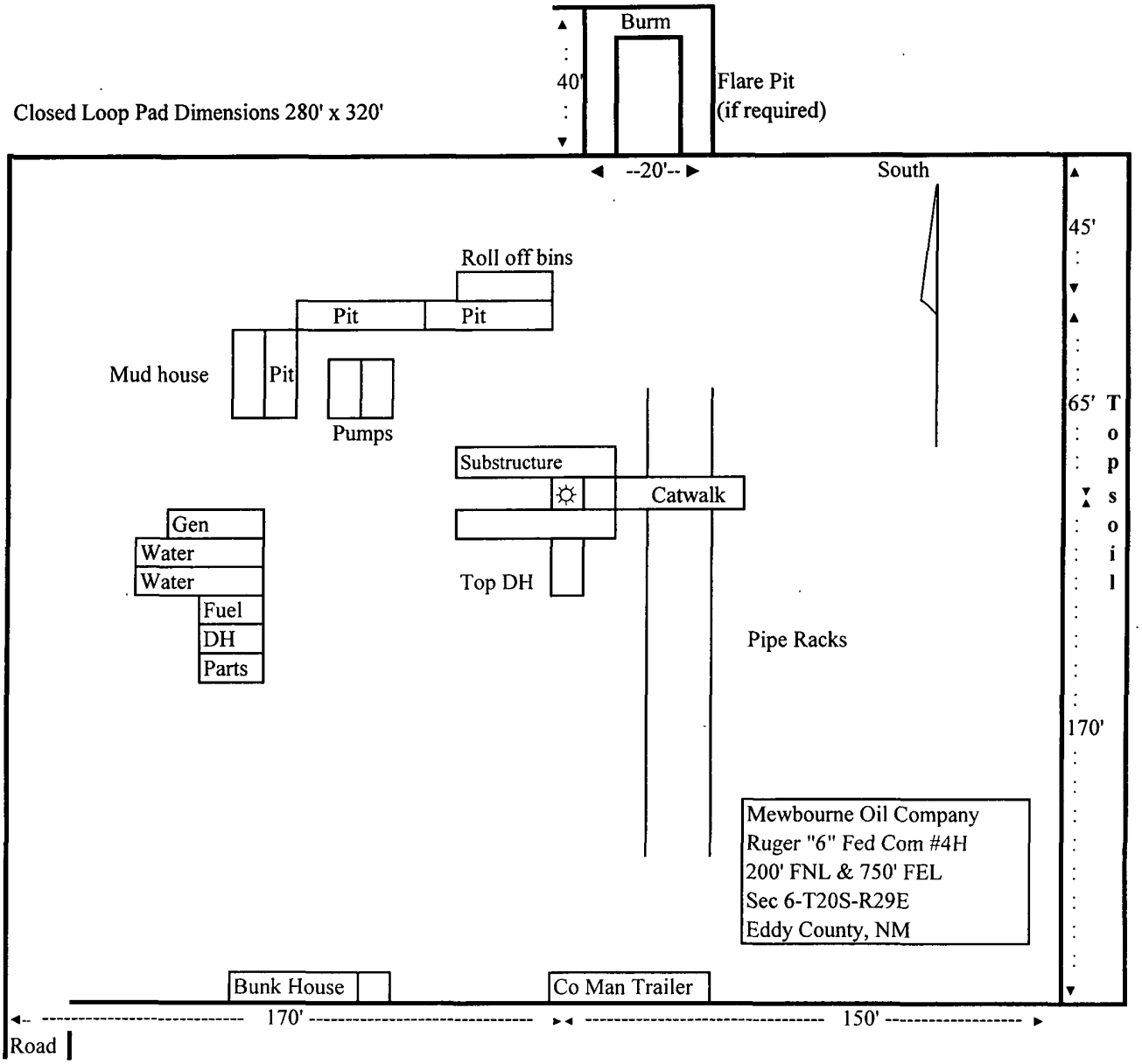

Closed Loop Pad Dimensions 280' x 320'
Burm
40'
Flare Pit
(if required)
--20'--
South
45'
65'
Topsoil
170'
Roll off bins
Pit
Pit
Mud house
Pit
Pumps
Substructure
Catwalk
Gen
Water
Water
Fuel
DH
Parts
Top DH
Pipe Racks
Mewbourne Oil Company
Ruger "6" Fed Com #4H
200' FNL & 750' FEL
Sec 6-T20S-R29E
Eddy County, NM
Bunk House
Co Man Trailer
170'
150'
Road

Exhibit 5

37768

DISTRICT I --- CHECKLIST FOR INTENTS TO DRILL

Operator Mewbourne OGRID # 147414

Well Name & # Ruger 6 Fed Com 4H Surface Type (F) (S) (P)

Location: UL 16 Sect 6 Twnship 20 s, RNG 25 e, Sub-surface Type (F) (S) (P)

A. Date C101 rec'd 11/17/2011 C101 reviewed 11/23/2011

B. 1. Check mark, Information is OK on Forms:
OGRID ✓, BONDING ✓, PROP CODE ____, WELL # ____, SIGNATURE ____
2. Inactive Well list as of: 11/23/2011 # wells 615, # Inactive wells 2
a. District Grant APD but see number of inactive wells:
No letter required ___; Sent Letter to Operator ____, to Santa Fe ____
3. Additional Bonding as of: 11/23/2011
a. District Denial because operator needs addition bonding:
No Letter required ✓; Sent Letter to Operator ____, To Santa Fe ____
b. District Denial because of Inactive well list and Financial Assurance:
No Letter required ✓; Sent Letter to Operator ____, To Santa Fe ___

C. C102 YES ✓, NO ___, Signature ✓
1. Pool Winchester B.S., Code 65010
a. Dedicated acreage _____, What Units _____
b. SUR. Location Standard _____: Non-Standard Location _____
c. Well shares acres: Yes ___, No ___, # of wells ____ plus this well # ____
2. 2nd. Operator in same acreage, Yes _____, No _____
Agreement Letter _____, Disagreement letter _____
3. Intent to Directional Drill Yes ✓, No ___
a. Dedicated acreage 160, What Units A/L-H-I-P
b. Bottomhole Location Standard _____, Non-Standard Bottomhole _____
4. Downhole Commingle: Yes _____, No _____
a. Pool #2 _____, Code _____, Acres _____
Pool #3 _____, Code _____, Acres _____
Pool #4 _____, Code _____, Acres _____
5. POTASH Area Yes _____, No ✓,

D. Blowout Preventer Yes ✓, No _____,

E. H2S Yes ✓, No _____,

F. C144 Pit Registration Yes _____, No _____,

G. Does APD require Santa Fe Approval:
1. Non-Standard Location: Yes _____, No ✓, NSL # _____
2. Non-Standard Proration: Yes _____, No ✓, NSP # _____
3. Simultaneous Dedication: Yes _____, No ✓, SD # _____
Number of wells _____ Plus # ✓
4. Injection order Yes _____, No ✓; PMX # _____ or WFX # _____
5. SWD order Yes _____, NO ✓; SWD # _____
6. DHC from SF _____; DHC-HOB _____; Holding _____

7. OCD Approval Date 11/23/2011 API #30-0 15-39686
8. Reviewers TES