HOBBS OCD

SEP 26 2013

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ATS-13-686

Form 3160-3
(March 2012)

OCD Hobbs

FORM APPROVED
OMB No. 1004-0137
Expires October 31, 2014

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

APPLICATION FOR PERMIT TO DRILL OR REENTER

1a. Type of work: ☑ DRILL ☐ REENTER	5. Lease Serial No. BHL NM-110835 SHL NM 15912
	6. If Indian, Allotee or Tribe Name
	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. <40171> Resolute BTO Federal Com #2H
2. Name of Operator Yates Petroleum Corporation <25575>	9. API Well No. 30-025-41457
3a. Address 105 S. Fourth St. Artesia, NM 88210	3b. Phone No. (include area code) 575-748-4120
	10. Field and Pool, or Exploratory WC-025 G-08 S253235G;LWR 2nd Bone Springs <97403>
4. Location of Well (Report location clearly and in accordance with any State requirements.*) At surface 2590' FNL & 2200' FEL, Sec. 24 Unit G	11. Sec., T. R. M. or Blk. and Survey or Area SHL: Sec. 24, T25S-R32E BHL: Sec. 13, T25S-R32E
At proposed prod. zone 330' FNL & 2200' FEL, Sec. 13 Unit B	
14. Distance in miles and direction from nearest town or post office* 42 miles East of Jal, NM	12. County or Parish Lea / 13. State NM

15. Distance from proposed* location to nearest property or lease line, ft. (Also to nearest drig. unit line, if any) 50'	16. No. of acres in lease 1160	17. Spacing Unit dedicated to this well W2NE4 Sec. 24, W2E2 Sec. 13 240 acres
18. Distance from proposed location* to nearest well, drilling, completed, applied for, on this lease, ft. 1870'	19. Proposed Depth 11200' Pilot Hole, 10920' TVD in Lateral, 18258' TD	20. BLM/BIA Bond No. on file NMB000920 NMB000434
21. Elevations (Show whether DF, KDB, RT, GL, etc.) 3458'	22. Approximate date work will start* 08/31/2013	23. Estimated duration 60 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	Name (Printed/Typed) Travis Hahn	Date 07/08/2013
Title Land Regulatory Agent		
Approved by (Signature) /S/ STEPHEN J. CAFFEY	Name (Printed/Typed)	Date SEP 23 2013
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)

Carlsbad Controlled Water Basin

KZ
10/11/13

SEE ATTACHED FOR CONDITIONS OF APPROVAL

Approval Subject to General Requirements & Special Stipulations Attached

OCT 15 2013

YATES PETROLEUM CORPORATION
Resolute BTO Federal Com #2H
2590' FNL & 2200' FEL, Surface Hole, Section 24 –T25S-R32E
330' FNL & 2200' FEL, Bottom Hole, Section 13 –T25S-R32E
Lea County, New Mexico

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

Rustler	810'	Brushy Canyon	7760' Oil
Salado	1130'	Bone Springs	9000' Oil
Castile	3680'	Upper Avalon	9070' Oil
Base of Salt	4620'	Lower Avalon	9420'
Delaware	4840'	Bone Spring SD/1	10020' Oil
Bell Canyon	4870' Oil	Bone Spring SD/2	10580' Oil
Cherry Canyon	5900' Oil	Target SBSG	10927'
		Base SBSG	11030'

2. The estimated depths at which anticipated water, oil or gas formations are expected to be encountered:

Water: Approx. 100' - 350'
Oil or Gas: Oil Zones: 4870', 5900', 7760', 9000', 9070', 10020', 10580'

3. Pressure Control Equipment: 3000 PSI BOPE with a 13.625" opening will be installed on the 13.375 casing and a 5000 PSI BOPE will be installed on the 9.625" casing. Pressure tests to 3000 PSI and held for 30 minutes will be conducted before drilling out from under all casing strings, which are set and cemented in place. BOP Preventers and equipment will be tested to the pressure approved in the APD. Test will be conducted by an Independent Tester, utilizing a test plug in the well head. Test will be held for 10" on each segment of the system tested. Any leaks will be repaired at the time of test. Annular preventer will be tested to 50% of rated working pressure. Accumulator system will be inspected for correct pre charge pressures, and proper functionality, prior to connection to the BOP system. Blowout Preventer controls will be installed prior to drilling the surface plug and will remain in use until the well is completed or abandoned. Preventers will be inspected and operated at least daily to ensure good mechanical working order, and this inspection recorded on the daily drilling report. See Exhibit.

4. Auxiliary Equipment:

A. Auxiliary Equipment: Kelly cock, pit level indicators, flow sensor equipment and a sub with full opening valve to fit the drill pipe and collars will be available on the rig floor in the open position at all times for use when kelly is not in use.

1. THE PROPOSED CASING AND CEMENTING PROGRAM:

A. Casing Program: (All New)

See COA

Hole Size	Casing Size	Wt./Ft	Grade	Coupling	Interval	Length
17 1/2"	13 3/8"	48#	H-40/J-55 Hybrid	ST&C	0'-~~835'~~ 910'	835'
12 1/4"	9 5/8"	40#	J-55	LT&C	0'-80'	80'
12 1/4"	9 5/8"	36#	J-55	LT&C	80'-3100'	3020'
12 1/4"	9 5/8"	40#	J-55	LT&C	3100'-4100'	1000'
12 1/4"	9 5/8"	40#	HCK-55	LT&C	4100'-~~5000~~ 4840'	900'
8 3/4"	5 1/2"	17#	P-110	Buttress Thread	0'-18258'	18258'

Minimum Casing Design Factors: Burst 1.0, Tensile 1.8, Collapse 1.125

B. CEMENTING PROGRAM:
Surface Casing: Lead with 545 sacks of Class H, 10% expanding agent and 2% CaCl2 (WT.14.20 YLD 1.62). Tail with 200 sacks Class C + 2% CaCl2 (WT 14.80, YLD 1.34). Casing designed with 100% excess. TOC-Surface

Intermediate Casing: Lead with 1425 sacks of PozC 35:65:6 (WT 12.50 YLD 2.00). Tail with 200 sacks of Class C + 2% CaCl2 (WT. 14.80 YLD 1.34). Casing designed with 100% excess. TOC-Surface

Production Casing: Cement to be done in three stages with a DV/Stage Packer tool from 9950'-10450' and 7250'-7750', calculations completed using DV tool depths of 10450' and 7500'. Cement volumes will be adjusted proportionately if DV tool is moved.

Stage 1 from 10450'-18258': Cement with 1900 sacks of Pecos Valley Lite (WT. 13.00 YLD 1.41), 30%CaCO, 3.2% Expansion additive, 2% Antifoam, .8% Retarder, 15 Fluid loss. Casing is designed with 35% excess. TOC-10450'.

Stage 2 from 7500'-10450': Lead with 360 sacks of PozC 35:65:6 (WT 12.50 YLD 2.00). Tail with 200 sacks of Pecos Valley Lite (WT 13.00, YLD 1.41), 30%CaCO, 3.2% Expansion additive, 2% Antifoam, .8% Retarder, 15 Fluid loss. Casing is designed with 35% excess. TOC-7500'.

See COA

Stage 3 from 4500'-7500': Lead with 370 sacks of PozC 35:65:6 (WT 12.50 YLD 2.00). Tail with 200 sacks of Pecos Valley Lite (WT 13.00, YLD 1.41), 30%CaCO, 3.2% Expansion additive, 2% Antifoam, .8% Retarder, 15 Fluid loss. Casing is designed with 35% excess. TOC-4500'.

See COA

Pilot hole will be drilled vertically to 11200'. Pilot hole will then be plugged with a 200' plug using Class H (YLD 0.94 WT 17.5) 100 sacks with 10% excess, and the additives being; Fresh Water 3.352 gal/sk, Dispersant 0.030 gal/sk, Retarder 0.070 gal/sk, Antifoam 0.020 gal/sk. A 600' kick off plug will then be placed from 10800' to 10200', plug will be Class H (YLD 0.94 WT 17.5) 360 sacks with 35% excess and the additives being; Fresh Water 3.352 gal/sk, Dispersant 0.030 gal/sk, Retarder 0.070 gal/sk, Antifoam 0.020 gal/sk. Well will be kicked off at approximately 10442' and directionally drilled at 12 degrees per 100' with an 8.75" hole to 11199' MD (10920' TVD). Hole will then be reduced to 8.5" and drilled to 18258' MD (10820' TVD) where 5.5" casing will be set and cemented. Penetration point of producing zone will be encountered at 2110' FNL & 2203' FEL, Section 24-25S-32E. Deepest TVD in the pilot hole is 11200' and in the lateral 10920'.

5. Mud Program and Auxiliary Equipment:

Interval	Type	Weight	Viscosity	Fluid Loss
0-~~835'~~ 910'	Fresh Water	8.6-9.2	28-32	N/C
~~835'-5000'~~ 4840'	Brine Water	10.0-10.20	28-30	N/C
~~5000'~~-11200'	Cut Brine	8.8-9.0	30-34	N/C
10442'-18258'	Cut Brine	8.8-9.0	30-34	N/C

See COA

Sufficient mud material(s) to maintain mud properties, control lost circulation and contain a blow out will be available at the well site during drilling operations. Mud will be checked hourly by rig personnel. Mud level monitoring: After surface casing is set, an electronic PVT system will be installed as our primary mud level monitoring system. A secondary system will also be implemented as to insure the PVT system is functioning properly. The secondary system will be comprised of the derrick hand checking the fluid level in the pits periodically using a nut on the end of a rope hanging just above the fluid level in the pit.

6. Evaluation Program:

Samples: 30' Samples to 5000', then 10' Samples from 5000' to TD.
Logging: Platform Express – curve
CNL/LDT/NGT: Intermediate casing to TD
CNL/GR: Surface to TD
DLL-MSFL: Intermediate casing to TD
CMR: Intermediate casing to TD
Horizontal-MWD-GR: 10000' MD to TD
Mudlogging: 2000' to TD

7. Abnormal Conditions, Bottom hole pressure and potential hazards:

Anticipated BHP:

From:	0	TO:	835'	Anticipated Max. BHP:	399	PSI
From:	835'	TO:	5000'	Anticipated Max. BHP:	2652	PSI
From:	5000'	TO:	11200'	Anticipated Max. BHP:	5358	PSI

No abnormal pressures or temperatures are anticipated.
H2S is not anticipated

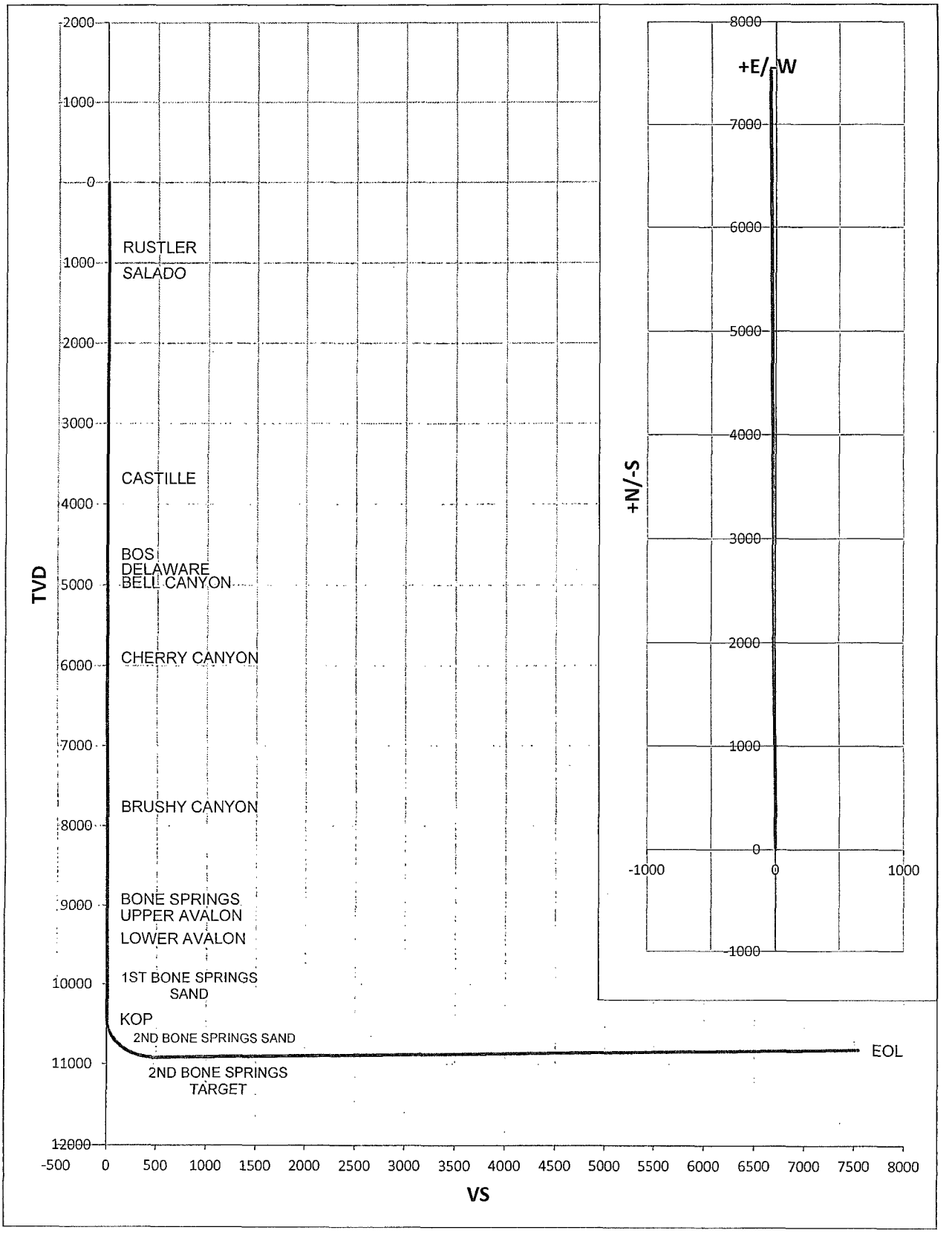
8. ANTICIPATED STARTING DATE:

Plans are to drill this well as soon as possible after receiving approval. It should take approximately 65 days to drill the well with completion taking another 30 days.

Well Name: Resolute BTO Federal Com. #2H		**Tgt N/-S:**	7542.85		
		Tgt E/-W:	-44.23	**EOC TVD/MD:**	10920.13 / 11199.49
Surface Location: Section 24 , Township 25S Range 32E		**VS:**	7542.98		
Bottom Hole Location: Section 13 , Township 25S Range 32E		**VS Az:**	359.66	**EOL TVD/MD:**	10820.00 / 18258.23

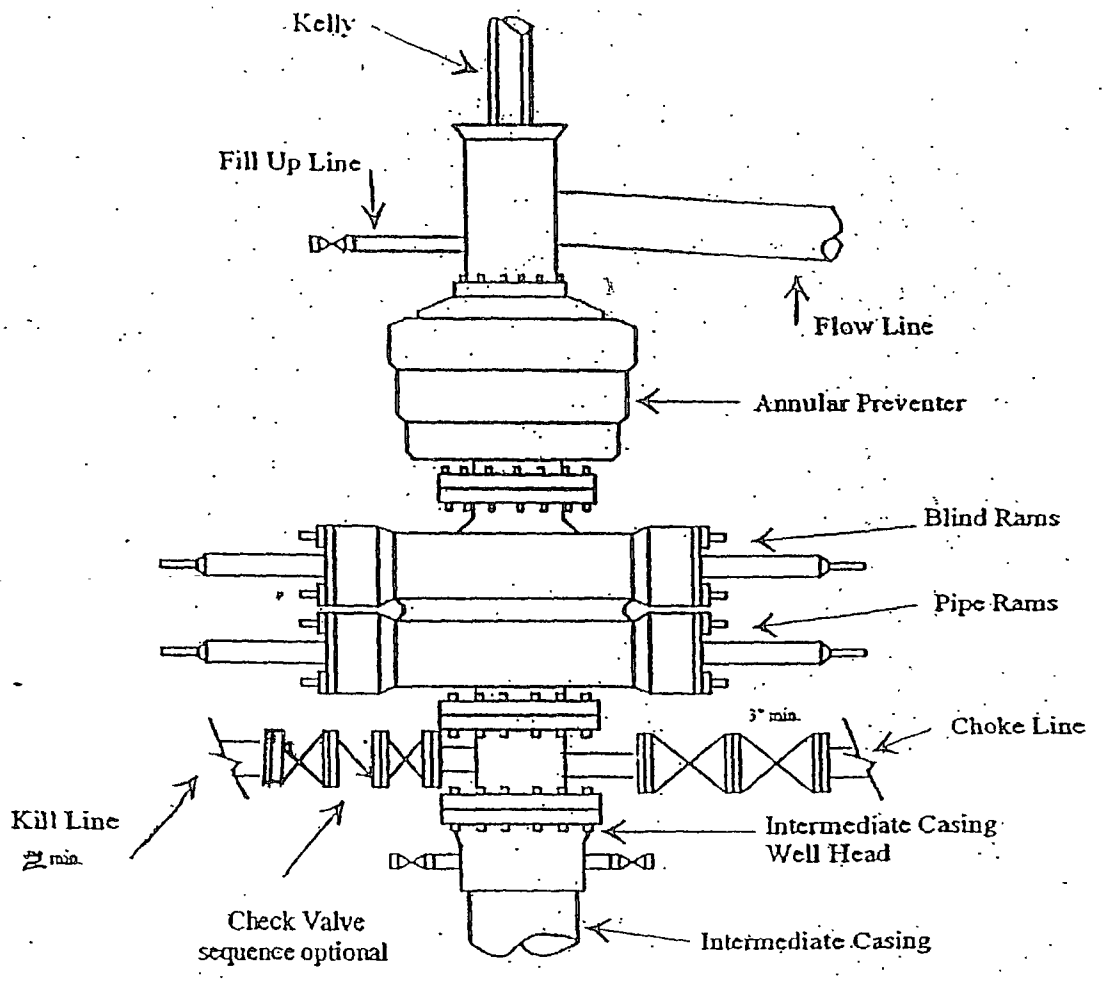
MD	Inc	Azi	TVD	+N/-S	+E/-W	VS	DLS	Comments
0	0	0	0	0	0	0	0	
810.00	0.00	0.00	810.00	0.00	0.00	0.00	0.00	RUSTLER
1130.00	0.00	0.00	1130.00	0.00	0.00	0.00	0.00	SALADO
3680.00	0.00	0.00	3680.00	0.00	0.00	0.00	0.00	CASTILLE
4620.00	0.00	0.00	4620.00	0.00	0.00	0.00	0.00	BOS
4840.00	0.00	0.00	4840.00	0.00	0.00	0.00	0.00	DELAWARE
4870.00	0.00	0.00	4870.00	0.00	0.00	0.00	0.00	BELL CANYON
5900.00	0.00	0.00	5900.00	0.00	0.00	0.00	0.00	CHERRY CANYON
7760.00	0.00	0.00	7760.00	0.00	0.00	0.00	0.00	BRUSHY CANYON
9000.00	0.00	0.00	9000.00	0.00	0.00	0.00	0.00	BONE SPRINGS
9070.00	0.00	0.00	9070.00	0.00	0.00	0.00	0.00	UPPER AVALON
9420.00	0.00	0.00	9420.00	0.00	0.00	0.00	0.00	LOWER AVALON
10020.00	0.00	0.00	10020.00	0.00	0.00	0.00	0.00	1ST BONE SPRINGS SAND
10442.71	0.00	0.00	10442.71	0.00	0.00	0.00	0.00	KOP
10450.00	0.87	359.66	10450.00	0.06	0.00	0.06	12.00	
10475.00	3.87	359.66	10474.98	1.09	-0.01	1.09	12.00	
10500.00	6.87	359.66	10499.86	3.43	-0.02	3.43	12.00	
10525.00	9.87	359.66	10524.59	7.07	-0.04	7.07	12.00	
10550.00	12.87	359.66	10549.10	12.00	-0.07	12.00	12.00	
10575.00	15.87	359.66	10573.31	18.21	-0.11	18.21	12.00	
10581.97	16.71	359.66	10580.00	20.16	-0.12	20.16	12.00	2ND BONE SPRINGS SAND
10600.00	18.87	359.66	10597.17	25.67	-0.15	25.67	12.00	
10625.00	21.87	359.66	10620.60	34.38	-0.20	34.38	12.00	
10650.00	24.87	359.66	10643.55	44.29	-0.26	44.29	12.00	
10675.00	27.87	359.66	10665.94	55.40	-0.32	55.40	12.00	
10700.00	30.87	359.66	10687.73	67.66	-0.40	67.66	12.00	
10725.00	33.87	359.66	10708.84	81.04	-0.48	81.04	12.00	
10750.00	36.87	359.66	10729.22	95.51	-0.56	95.51	12.00	
10775.00	39.87	359.66	10748.82	111.03	-0.65	111.03	12.00	
10800.00	42.87	359.66	10767.58	127.55	-0.75	127.56	12.00	
10825.00	45.87	359.66	10785.45	145.03	-0.85	145.04	12.00	
10850.00	48.87	359.66	10802.37	163.43	-0.96	163.43	12.00	
10875.00	51.87	359.66	10818.32	182.68	-1.07	182.68	12.00	
10900.00	54.87	359.66	10833.23	202.74	-1.19	202.74	12.00	
10925.00	57.87	359.66	10847.07	223.56	-1.31	223.56	12.00	
10950.00	60.87	359.66	10859.81	245.07	-1.44	245.07	12.00	
10975.00	63.87	359.66	10871.40	267.21	-1.57	267.22	12.00	
11000.00	66.87	359.66	10881.81	289.94	-1.70	289.94	12.00	
11025.00	69.87	359.66	10891.02	313.17	-1.84	313.18	12.00	
11050.00	72.87	359.66	10899.01	336.86	-1.98	336.87	12.00	
11075.00	75.87	359.66	10905.74	360.93	-2.12	360.94	12.00	
11100.00	78.87	359.66	10911.21	385.33	-2.26	385.33	12.00	
11125.00	81.87	359.66	10915.39	409.97	-2.40	409.98	12.00	
11150.00	84.87	359.66	10918.27	434.80	-2.55	434.81	12.00	
11175.00	87.87	359.66	10919.85	459.75	-2.70	459.75	12.00	
11199.49	90.81	359.66	10920.13	484.23	-2.84	484.24	12.00	2ND BONE SPRINGS TARGET
18258.23	90.81	359.66	10820.00	7542.85	-44.23	7542.98	0.00	EOL

Resolute BTO Federal Com. #2H

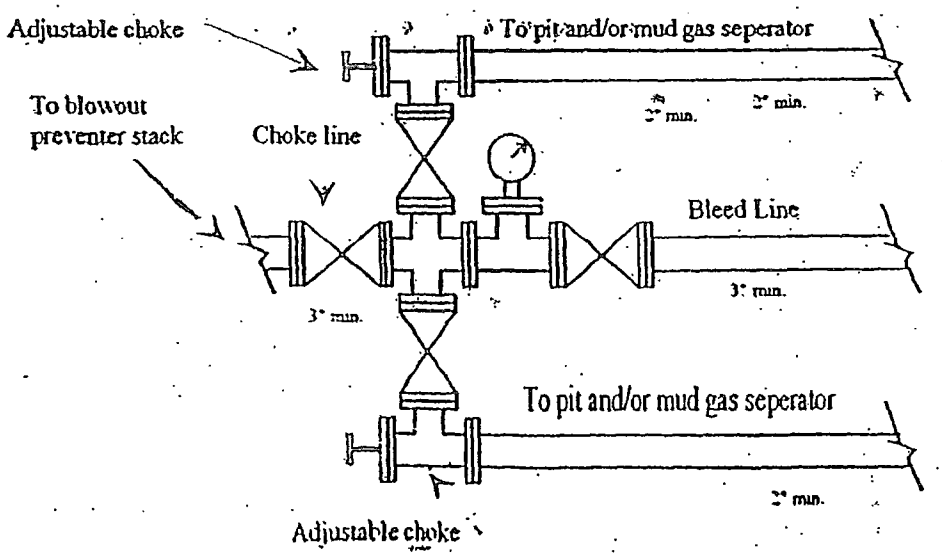


Yates Petroleum Corporation

Typical 3,000 psi Pressure System
Schematic
Annular with Double Ram Preventer Stack

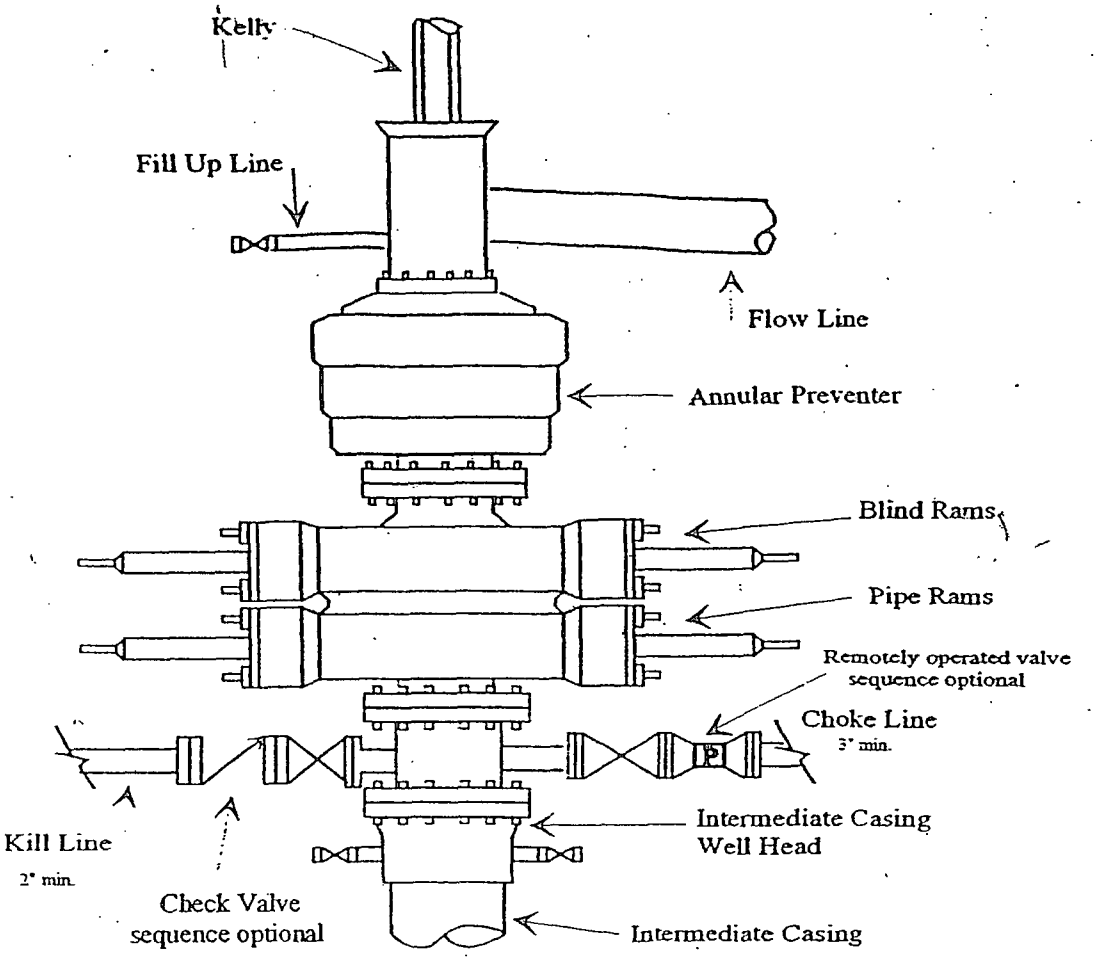


Typical 3,000 psi choke manifold assembly with at least these minimun features

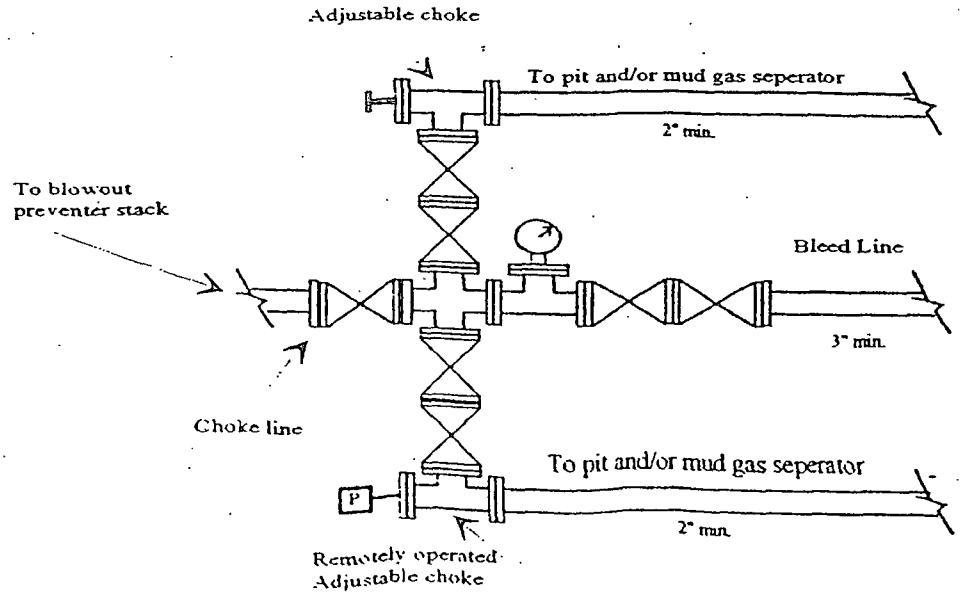


Yates Petroleum Corporation

Typical 5,000 psi Pressure System Schematic
Annular with Double Ram Preventer Stack

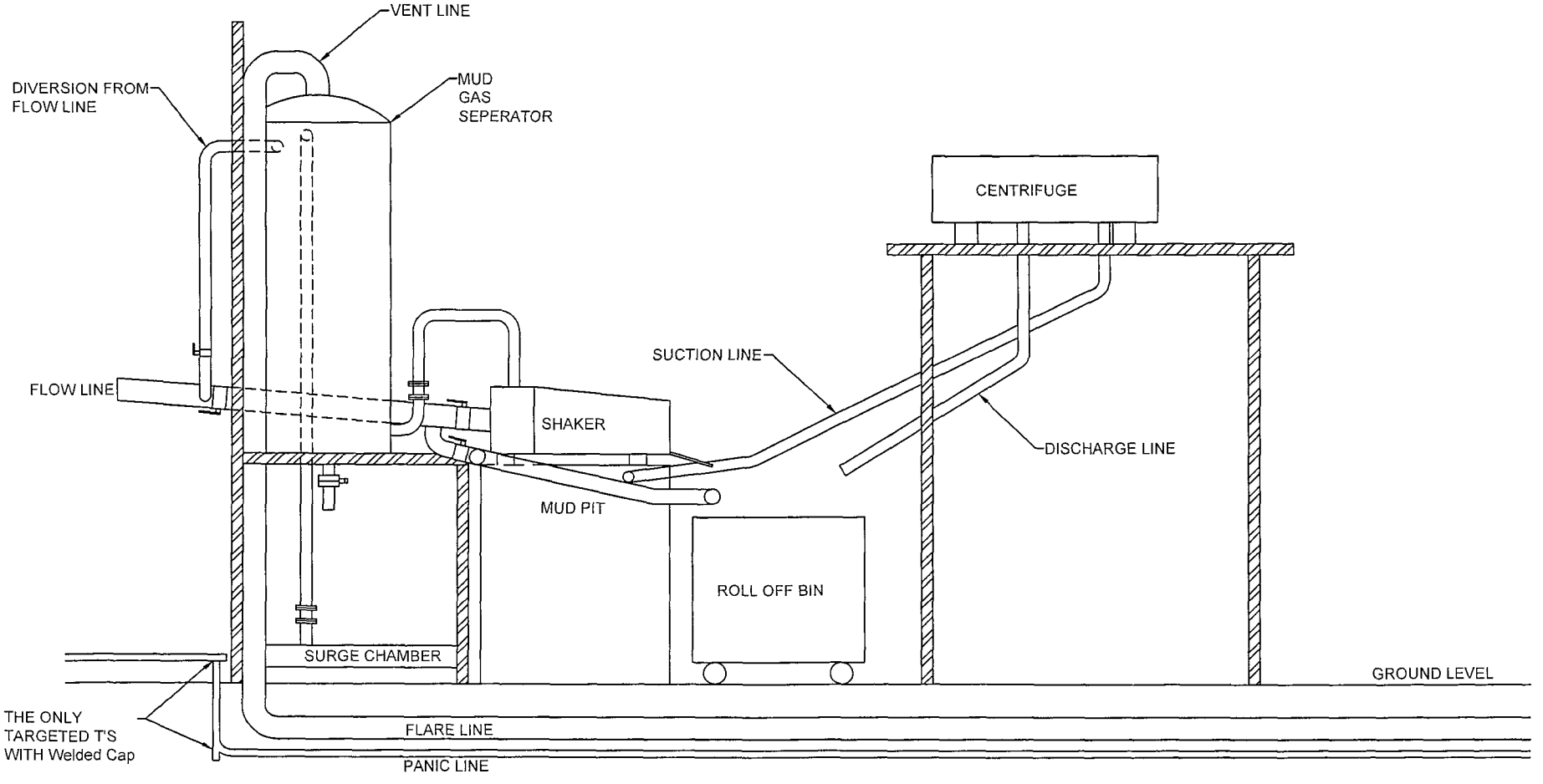


Typical 5,000 psi choke manifold assembly with at least these minimun features



YATES PETROLEUM CORPORATION

Piping from Choke Manifold
to the Closed Loop Drilling Mud System



The flare discharge must be 100' from wellhead for non H2S wells and 150' from wellhead for wells expected to encounter H2S.