

12-975

OCD Hobbs

Form 3160-3
(March 2012)

HOBBS OCD

JUN 12 2013

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

APPLICATION FOR PERMIT TO DRILL OR REENTER

FORM APPROVED
OMB No. 1004-0137
Expires October 31, 20145. Lease Serial No.
NM-15913, NM-110836, NM-1089706. If Indian, Allottee or Tribe Name
N/A7. If Unit or CA Agreement, Name and No.
N/A8. Lease Name and Well No. **<39956>**
Fearless "BSF" Federal Com. #1H

9. API Well No.

10. Field and Pool, or Exploratory

11. Sec., T. R. M. or Blk. and Survey or Area
Section 23 & 26, T25S-R32E12. County or Parish
Lea County13. State
NM1a. Type of work: ☒ DRILL ☐ REENTER1b. Type of Well: ☒ Oil Well ☐ Gas Well ☐ Other ☒ Single Zone ☐ Multiple Zone

2. Name of Operator YATES PETROLEUM CORPORATION

3a. Address 105 South Fourth Street
Artesia, NM 882103b. Phone No. (include area code)
575-748-4347

4. Location of Well (Report location clearly and in accordance with any State requirements.)*

At surface Ut. Ltr. J, 2440' FSL & 2200' FEL, Section 23, T25S-R32E, NWSE

At proposed prod. zone Ut. Ltr. O, 330' FSL & 2200' FEL, Section 26, T25S-R32E, SWSE

14. Distance in miles and direction from nearest town or post office*
approximately 30 miles east of Carlsbad, New Mexico15. Distance from proposed* 200'
location to nearest
property or lease line, ft.
(Also to nearest drig. unit line, if any)16. No. of acres in lease
NM15913-280ac.
NM-110836-1160ac.

NM 108970 - 480 ac.

18. Distance from proposed location* 1900'
to nearest well, drilling, completed,
applied for, on this lease, ft.19. Proposed Depth
10830' TVD 17970 MD17. Spacing Unit dedicated to this well
W2SE, Sec.23 & W2E2, Sec. 26, T25S-R32E20. BLM/BIA Bond No. on file
Nationwide Bond #NM-B000434
Individual Bond NMB00092021. Elevations (Show whether DF, KDB, RT, GL, etc.)
3417 GL22. Approximate date work will start*
09/27/201223. Estimated duration
70 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)
Cy Cowan

Date

8/16/12

Title

Land Regulatory Agent

Approved by (Signature)

/s/ James Stovall

Name (Printed/Typed)

Date JUN 7 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

Kc
06/13/13Approval Subject to General Requirements
& Special Stipulations AttachedSEE ATTACHED FOR
CONDITIONS OF APPROVAL

JUN 18 2013

dm

YATES PETROLEUM CORPORATION
 Fearless "BSF" Federal Com. #1H
 2440' FSL and 2200' FEL, Section 23-25S-32E, Surface Hole Location
 330' FSL and 2200' FEL, Section 26-25S-32E, Bottom Hole Location
 Lea County, New Mexico

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

FORMATION	VERTICAL DEPTH	FORMATION	VERTICAL DEPTH	MD DEPTH
Rustler	740'	Brushy Canyon	7080' Oil	
Salado	1080'	Bone Spring	8800' Oil	
Castile	3560'	Lower Avalon	8890' Oil	
Base of Salt	4510'	Target Avalon	9255' Oil	
Delaware	4720'	FBSG	9835' Oil	
Bell Canyon	4870' Oil	Kick Off	10315'	
Cherry Canyon	5730' Oil	SBSG	10345' Oil	10345'
		Target SBSG	10793' Oil	11063'
		TD Lateral	10830'	17970'

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

Water: 160'

Oil or Gas: Zones: See above

3. Pressure Control Equipment: 3000 PSI BOPE with a 13.625" opening will be installed and tested on the 13.3/8" casing and a 5000 PSI will be installed and tested on the 9 5/8" casing. Pressure tests to 3000 PSI on the 3000 PSI BOP and 5000 PSI on the 5000 PSI BOP and held for 30 minutes will be conducted before drilling out from under all casing strings, which are set and cemented in place. 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 B.
4. 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.

5. THE PROPOSED CASING AND CEMENTING PROGRAM:

A. Casing Program: (All New)

See COA

Hole Size	Casing Size	Wt./Ft	Grade	Coupling	Interval	Length
26"	20"	94#	H-40	ST&C	0-40'	40'
17 1/2"	13 3/8"	48#	H-40/J-55 Hybrid	ST&C	0- 765' 837'	765' 837'
12 1/4"	9 5/8"	40#	HCK-55	LT&C	0-80'	80'
12 1/4"	9 5/8"	36#	J-55	LT&C	80'-3200'	3120'
12 1/4"	9 5/8"	40#	HCK-55	LT&C	3200'-4720'	1520'
8 3/4"	5 1/2"	17#	P110	LT&C	0-10300'	10300'
8 1/2"	5 1/2"	17#	P110	Buttress	10300'-17970'	7670'

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

B. CEMENTING PROGRAM:

Conductor Cement: One inch cement to surface. TOC is surface.

Surface Casing: Cement with 390 sacks 35:65:6PzC (Wt. 12.50 Yld. 2.00). Tail in with 200 sacks Class C with 2% CaCl₂ (Wt. 14.80 Yld. 1.34). TOC is surface. Cement designed with 100% excess.

Intermediate Casing will be cemented in two stages with DV tool set at 1500'.

See
COA

Intermediate Casing: Stage One; Lead with 1715 sacks of 35:65:6PzC (Wt. 12.50 Yld. 2.00). Tail in with 200 sacks Class C with 2% CaCl₂ (Wt. 14.80 Yld. 1.34). TOC is 1500'. Cement designed with 100% excess.

Intermediate Casing: Stage Two; Lead with 450 sacks of 35:65:6PzC (Wt. 12.50 Yld. 2.00). Tail in with 200 sacks of class C with 2% CaCl₂ (Wt. 14.80 Yld. 1.34). TOC is surface. Cement designed with 100% excess.

Production Casing will be cemented in two stages with DV tool set at approximately 7000'.

See
COA

Production Casing: 1st stage; Lead with 680 sacks 35:65:6PzC (Wt. 12.50 Yld. 2.00). Tail in with 1685 sacks Pecos VILt with D112-Fluid Loss-0.4-%, D151-Calcium Carbonate-22.5-lb/sack, D174-Extender-1.5-lb/sack, D177-Retarder-0.01-lb/sack, D800-Retarder-0.6-lb/sack and D46-Antiform Agent-0.15-lb/sack (Wt. 13.00 Yld. 1.41). TOC 7000'. Cement designed with 35% excess.

Production Casing: 2nd stage; Lead with 335 sacks 35:65:6PzC (Wt. 12.50 Yld. 2.00). Tail in with 200 sacks Pecos VILt with D112-Fluid Loss-0.4-%, D151-Calcium Carbonate-22.5-lb/sack, D174-Extender-1.5-lb/sack, D177-Retarder-0.01-lb/sack, D800-Retarder-0.6-lb/sack and D46-Antiform Agent-0.15-lb/sack (Wt. 13.00 Yld. 1.41). TOC 4200'. Cement designed with 35% excess.

Well will be drilled vertically to 10315'. The well will then be kicked off at approximately 10315' and directionally drilled at 12 degrees per 100' with an 8 3/4" hole to 11063' MD (10793' TVD). Hole size will be reduced to an 8 1/2" hole and drilled to 17970' MD (10830' TVD) where 5 1/2' will be run and cemented in two stages. A DV tool will be placed at approximately 7000'. Penetration point of producing zone will be encountered at 1966' FSL and 2197' FEL in Section 23-25S 32E. Deepest TVD in the well will be in the lateral at 10830' in the lateral.

6. MUD PROGRAM AND AUXILIARY EQUIPMENT:

See
COA

INTERVAL	TYPE	WEIGHT	VISCOSITY	FLUID LOSS
0-740' 837'	Fresh Water	8.60-9.20	28-32	N/C
740'-4720'	Brine Water	10.00-10.20	28-30	N/C
4720'-17970'	Cut Brine (Lateral)	8.80-9.20	30-32	N/C

Sufficient mud material(s) to maintain mud properties, control lost circulation and to contain a blowout will be available at the well site during drilling operations. Rig personnel will check mud hourly.

7. EVALUATION PROGRAM:

Samples: 30' samples to 4720'. 10' samples 4720' to TD

Logging: Platform Express: CNL/LDT/NGT: TD to intermediate casing; CNL/GR: TD to surface;

DLL/MSFL: TD to surface casing; BHC Sonic: TD to surface casing; CMR: TD to intermediate casing;

Horizontal: MWD-GR: Horizontal

Coring: None anticipated

DST's: None Anticipated

Mudlogging: Yes. From intermediate casing to TD.

8. ABNORMAL CONDITIONS, BOTTOM HOLE PRESSURE, AND POTENTIAL HAZARDS:

Maximum Anticipated BHP:

0'-765'	366 PSI
765'-4720' 837'	2503 PSI
4720'-10830'	5182 PSI

Abnormal Pressures Anticipated: None

Lost Circulation Zones Anticipated: None.

H2S Zones Anticipated: None Anticipated

Maximum Bottom Hole temperature is 170 F

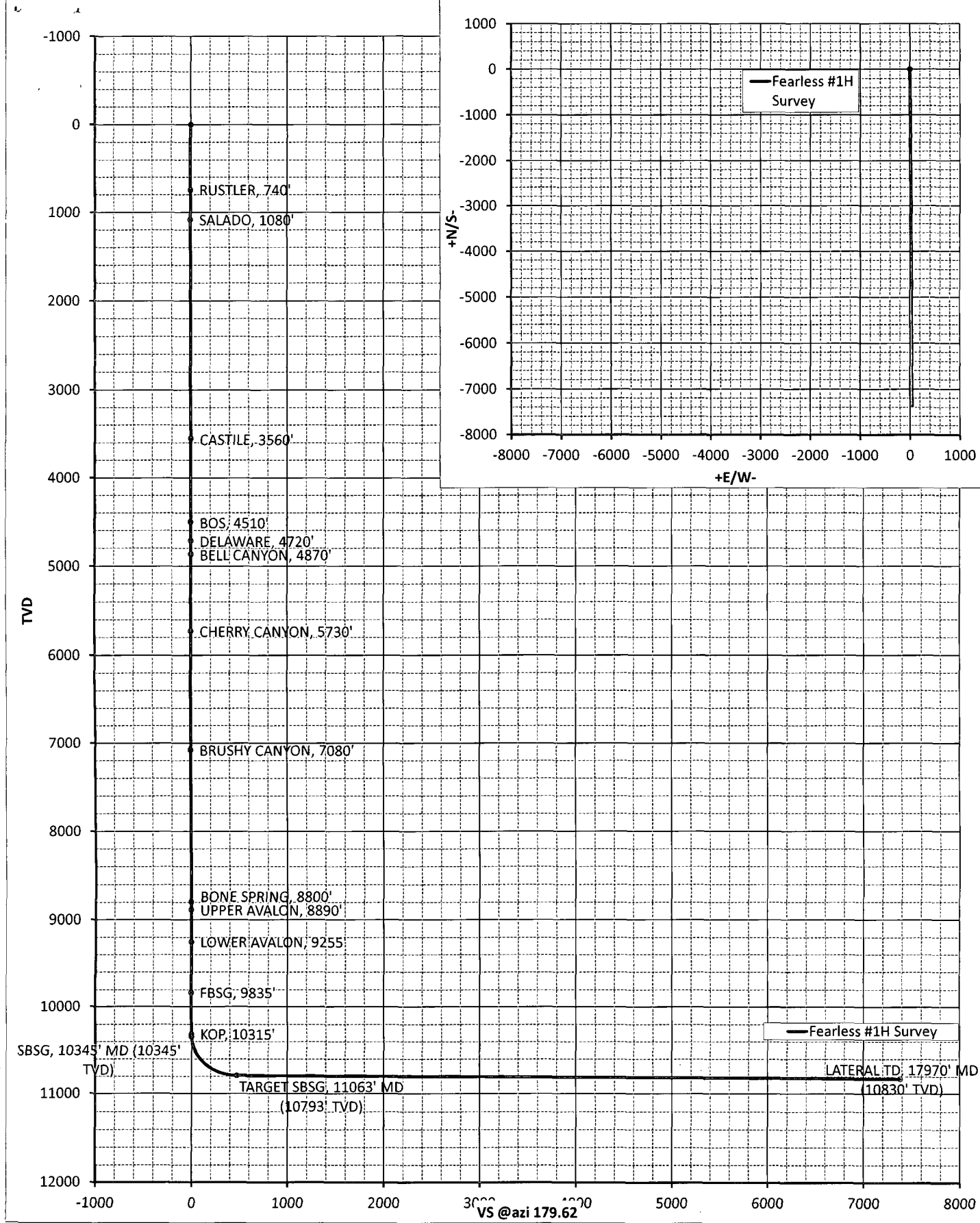
9. ANTICIPATED STARTING DATE:

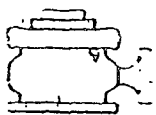
Plans are to drill this well as soon as possible after receiving approval. It should take approximately 70 days to drill the well with completion taking another 30 days.

Survey/Planning Report

Operator	Yates Petroleum Corp.			Northing Easting Elevation Latitude Longitude Units	Feet	Date System Datum Zone Scale Fac. Converg.	7-Aug-12		
Dir. Co.	Yates Petroleum Corp.						2 - St. Plane		
Well Name	Fearless #1H Survey						1983 - NAD83		
Location	Sec.23, 25S-32E						4302 - Utah Central		
Rig									
Job									
MD	INC	AZI	TVD	+N/S-	+E/W-	VS@179.62°	BR	TR	DLS
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
740.00	0.00	0.00	740.00	0.00	0.00	0.00	0.00	0.00	0.00
740: RUSTLER, 740'									
1080.00	0.00	0.00	1080.00	0.00	0.00	0.00	0.00	0.00	0.00
1080: SALADO, 1080'									
3560.00	0.00	0.00	3560.00	0.00	0.00	0.00	0.00	0.00	0.00
3560: CASTILE, 3560'									
4510.00	0.00	0.00	4510.00	0.00	0.00	0.00	0.00	0.00	0.00
4510: BOS, 4510'									
4720.00	0.00	0.00	4720.00	0.00	0.00	0.00	0.00	0.00	0.00
4720: DELAWARE, 4720'									
4870.00	0.00	0.00	4870.00	0.00	0.00	0.00	0.00	0.00	0.00
4870: BELL CANYON, 4870'									
5730.00	0.00	0.00	5730.00	0.01	0.00	-0.01	0.00	0.00	0.00
5730: CHERRY CANYON, 5730'									
7080.00	0.00	0.00	7080.00	0.01	0.00	-0.01	0.00	0.00	0.00
7080: BRUSHY CANYON, 7080'									
8800.00	0.00	0.00	8800.00	0.01	0.00	-0.01	0.00	0.00	0.00
8800: BONE SPRING, 8800'									
8890.00	0.00	0.00	8890.00	0.01	0.00	-0.01	0.00	0.00	0.00
8890: UPPER AVALON, 8890'									
9255.00	0.00	0.00	9255.00	0.01	0.00	-0.01	0.00	0.00	0.00
9255: LOWER AVALON, 9255'									
9835.00	0.00	0.00	9835.00	0.01	0.00	-0.01	0.00	0.00	0.00
9835: FBSG, 9835'									
10315.17	0.00	179.62	10315.17	0.01	0.00	-0.01	0.00	1.74	0.00
10315.17: KOP, 10315'									
10345.02	3.58	179.62	10345.00	-0.92	0.01	0.92	12.00	0.00	12.00
10345.02: SBSG, 10345' MD (10345' TVD)									
10400.00	10.18	179.62	10399.55	-7.51	0.05	7.51	12.00	0.00	12.00
10500.00	22.18	179.62	10495.42	-35.32	0.23	35.32	12.00	0.00	12.00
10600.00	34.18	179.62	10583.41	-82.45	0.55	82.46	12.00	0.00	12.00
10700.00	46.18	179.62	10659.67	-146.85	0.97	146.86	12.00	0.00	12.00
10800.00	58.18	179.62	10720.88	-225.70	1.49	225.70	12.00	0.00	12.00
10900.00	70.18	179.62	10764.35	-315.55	2.09	315.56	12.00	0.00	12.00
11000.00	82.18	179.62	10788.20	-412.47	2.73	412.48	12.00	0.00	12.00
11062.59	89.69	179.62	10792.63	-474.86	3.14	474.87	12.00	0.00	12.00
11062.59: TARGET SBSG, 11063' MD (10793' TVD)									
17969.82	89.69	179.62	10830.00	-7381.84	48.83	7382.00	0.00	0.00	0.00
17969.82: LATERAL TD, 17970' MD (10830' TVD)									



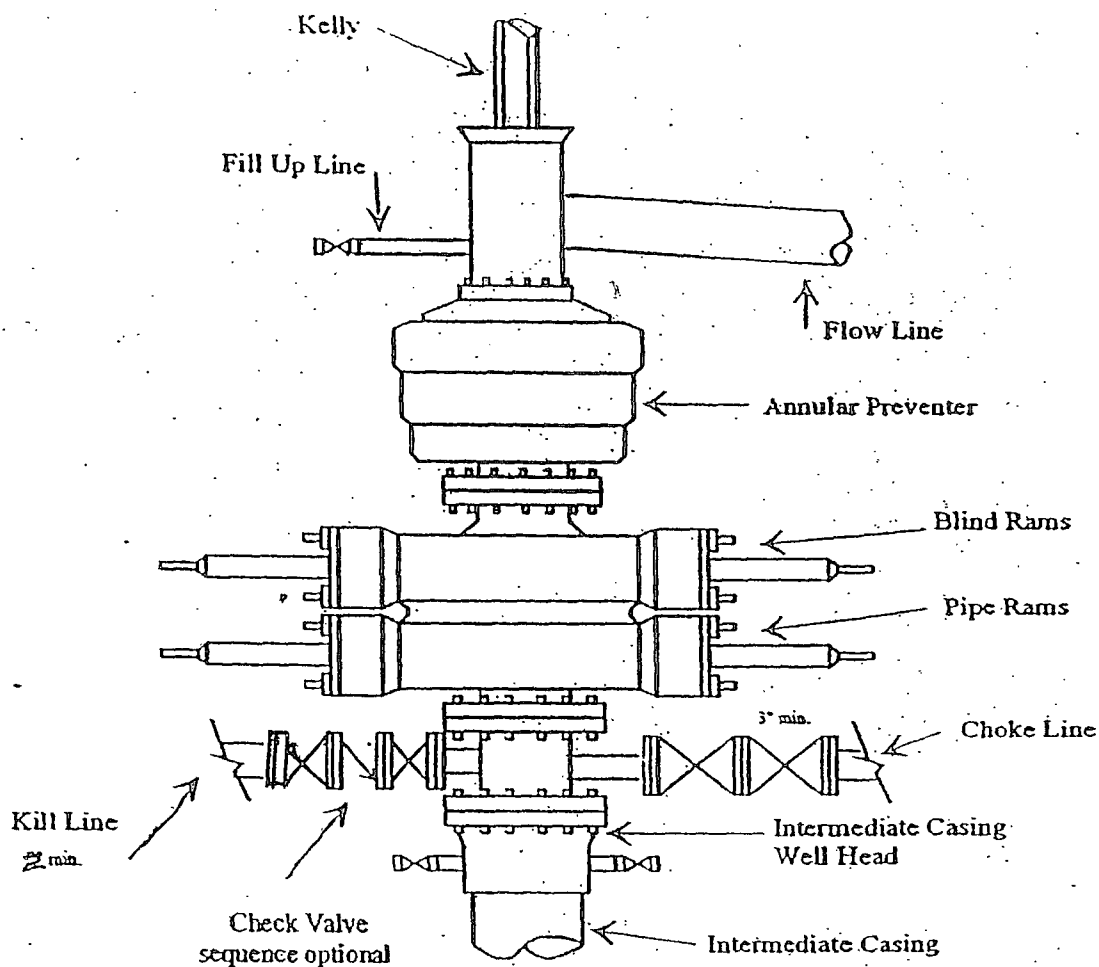




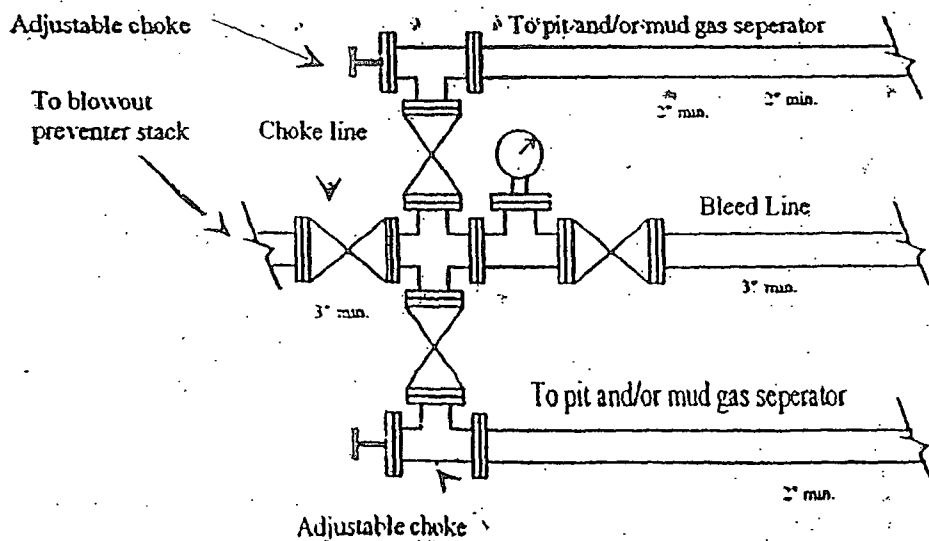
Yates Petroleum Corporation
 Typical 3,000 psi Pressure System
 Schematic
 Annular with Double Ram Preventer Stack

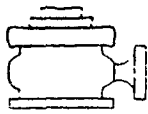
BOP-3

Exhibit



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

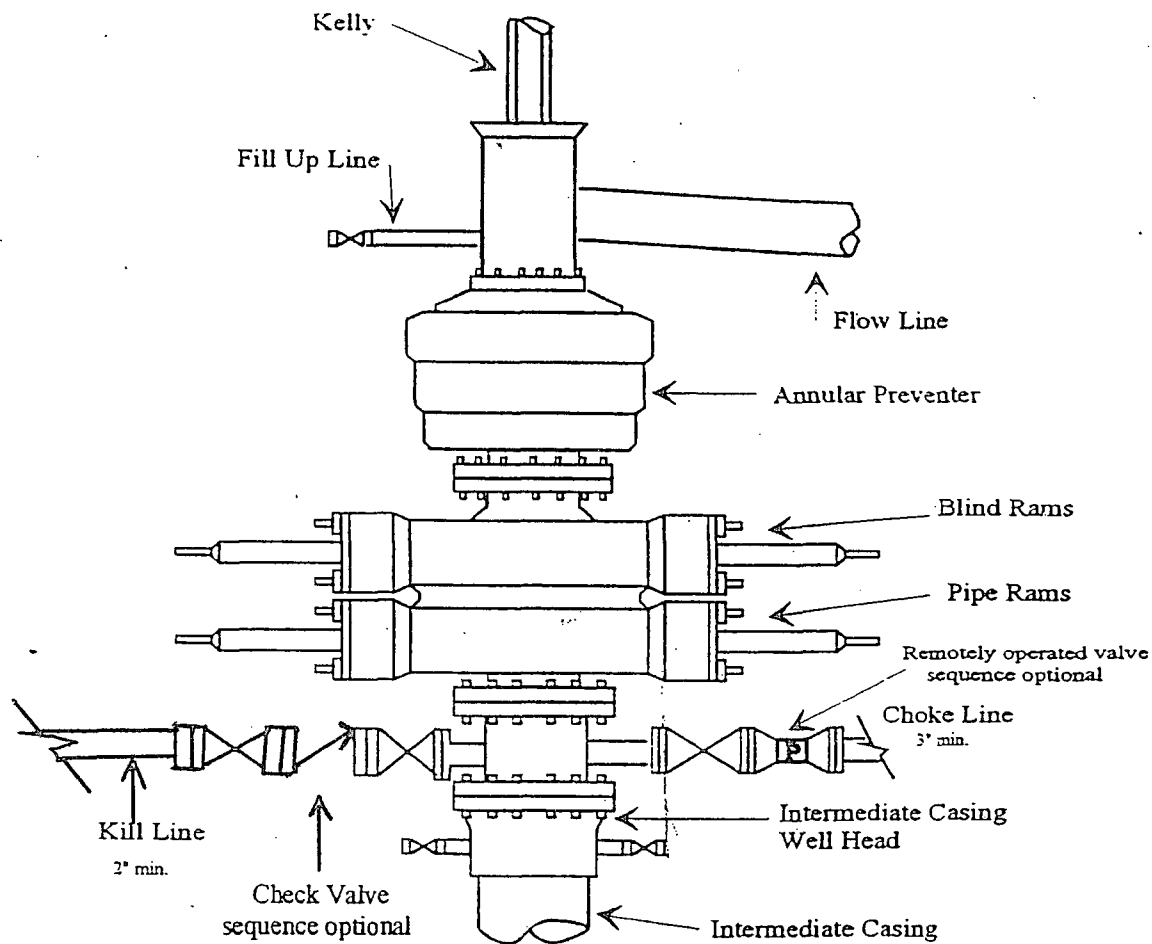




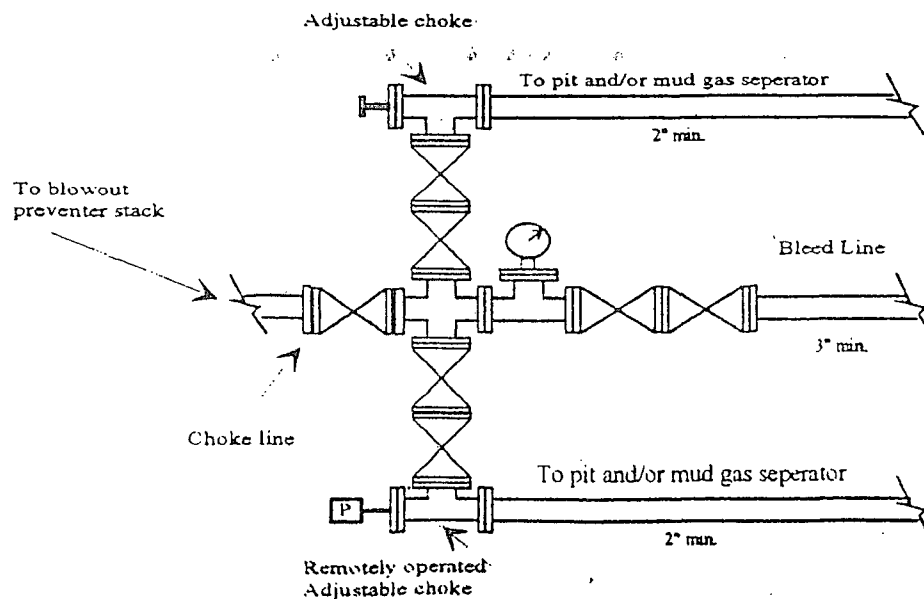
Yates Petroleum Corporation
Typical 5,000 psi Pressure System
Schematic
Annular with Double Ram Preventer Stack

BOP-4

Exhibit



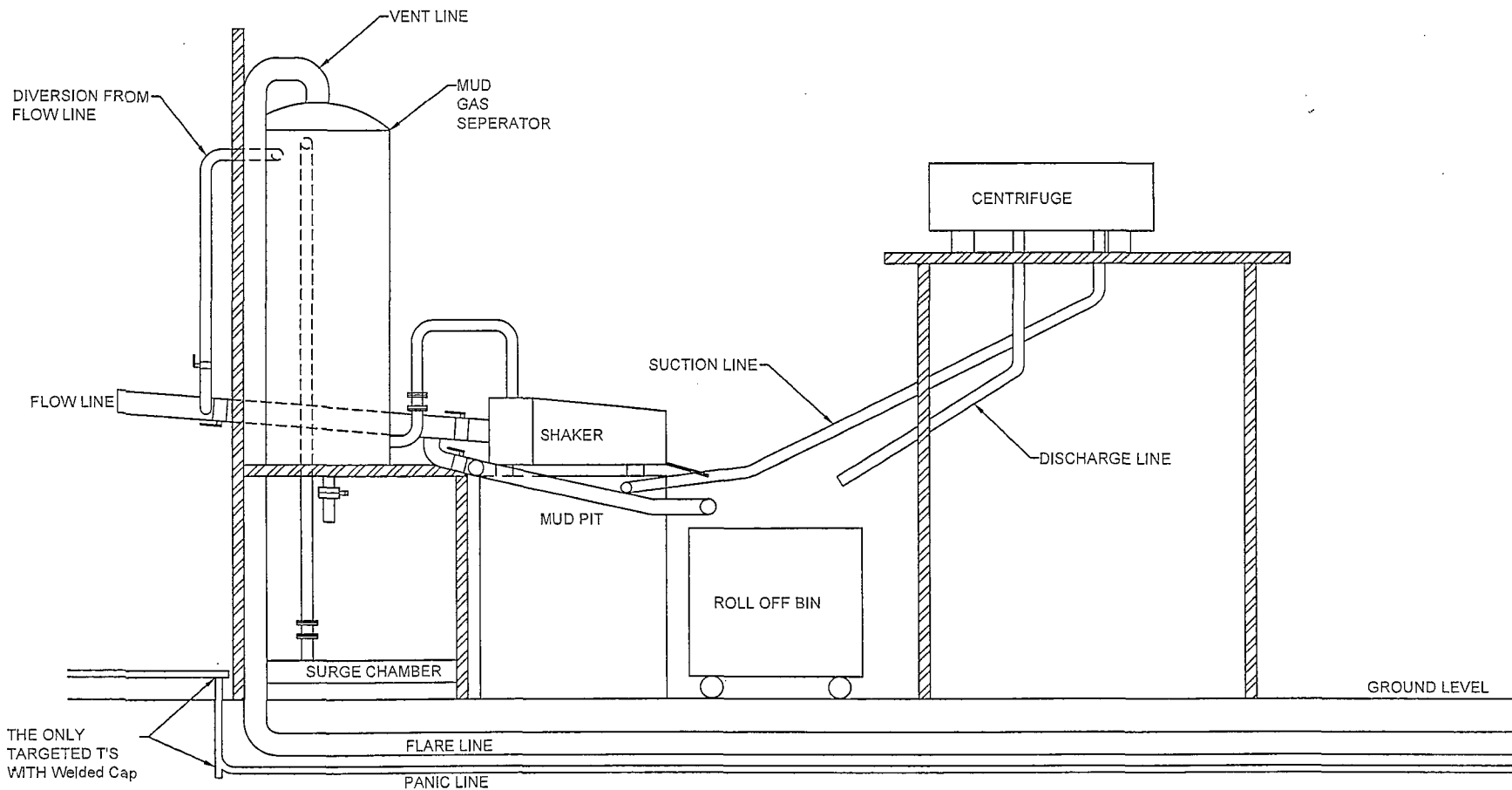
Typical 5,000 psi choke manifold assembly with at least these minimum features



Exhibit

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.

Yates Petroleum Corporation

Closed Loop System

Equipment Design Plan

Closed Loop System will consist of:

1 – double panel shale shaker

1 – (minimum) Centrifuge, certain wells and flow rates may require 2 centrifuges

On certain wells, the Centrifuge will be replaced by a Clackco Settling Tank System

1 – minimum centrifugal pump to transfer fluids

2- 500 bbl. FW Tanks

1 – 500 bbl. BW Tank

1 – half round frac tank – 250 bbl. capacity as necessary to catch cement / excess mud returns generated during a cement job.

1 Set of rail cars / catch bins

Certain wells will use an ASC Auger Tank

Operation Plan

All equipment will be inspected at least hourly by rig personnel and daily by contractors' personnel.

Any spills / leaks will be reported to YPC, NMOCD, and cleaned up without delay.

Closure Plan

Drilling with Closed Loop System, haul off bins will be taken to Gandy Marley, Lea Land Farm, CRI or Sundance Services Inc.