

UNITED STATES  
DEPARTMENT OF THE INTERIOR  
BUREAU OF LAND MANAGEMENT

OCD, Hobbs OCD

## APPLICATION FOR PERMIT TO DRILL OR REENTER

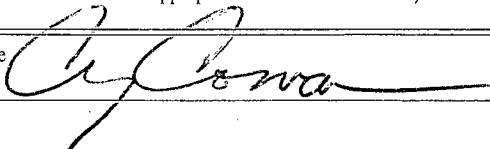
JUL 25 2013

1a. Type of work: <input checked="" type="checkbox"/> DRILL <input type="checkbox"/> REENTER		7. If Unit or CA Agreement, Name and No.	
1b. Type of Well: <input checked="" type="checkbox"/> Oil Well <input type="checkbox"/> Gas Well <input type="checkbox"/> Other <input checked="" type="checkbox"/> Single Zone <input type="checkbox"/> Multiple Zone		8. Lease Name and Well No. <b>&lt;40043&gt;</b> Chukar BTA Federal Com. #1H	
2. Name of Operator YATES PETROLEUM CORPORATION		9. API Well No. <b>30-025-41294</b>	
3a. Address 105 South Fourth Street, Artesia, NM 88210	3b. Phone No. (include area code) <b>&lt;25575&gt;</b> 575-748-4372	10. Field and Pool, or Exploratory <b>Lea</b> Undesignated Bone Spring, South <b>&lt;37580&gt;</b>	
4. Location of Well (Report location clearly and in accordance with any State requirements. *) At surface 1110' FSL and 200' FEL Section 28, T20S-R34E <b>Unit P</b> At proposed prod. zone 860' FSL and 2310' FEL Section 29, T20S-R34E <b>Unit D</b>		11. Sec., T. R. M. or Blk. and Survey or Area Section 28, T20S-R34E & Section 29, T20S-R34E	
14. Distance in miles and direction from nearest town or post office* Approximately 39 miles east of Carlsbad, New Mexico.		12. County or Parish Lea County	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 NM-039256 320 acres NM-108977 120 acres	17. Spacing Unit dedicated to this well S/2S/2 of Section 28 & S/2SE/4 of Section 29	
18. Distance from proposed location* to nearest well, drilling, completed, applied for, on this lease, ft. 200'	19. Proposed Depth MD 17800' 7 TVD 10588'	20. BLM/BIA Bond No. on file NMB000434	
21. Elevations (Show whether DF, KDB, RT, GL, etc.) 3725' GL	22. Approximate date work will start* 08/01/2012	23. Estimated duration 69 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.   | 4. Bond to cover the operations unless covered by an existing bond on file (see Item 20 above). |
| 2. A Drilling Plan.  | 5. Operator certification   |
| 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). | 6. Such other site specific information and/or plans as may be required by the BLM.             |

25. Signature 	Name (Printed/Typed) Cy Cowan	Date 06/29/2012
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Title

Approved by (Signature) <b>/s/Aden L. Seidlitz</b>	Name (Printed/Typed)	Date <b>JUL 17 2013</b>
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Title

NM STATE OFFICE

Office

STATE DIRECTOR

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)

Capitan Controlled Water Basin

SEE ATTACHED FOR  
CONDITIONS OF APPROVALApproval Subject to General Requirements  
& Special Stipulations Attached

JUL 31 2013

**YATES PETROLEUM CORPORATION**

Chukar BTA Federal Com. #1H

1110' FSL &amp; 200' FEL, Section 28-T20S-R34E, Surface Hole

860' FSL &amp; 2310' FEL, Section 29-T20S-R34E, Bottom Hole

Lea County, New Mexico

## 1. THE ESTIMATED TOPS OF GEOLOGIC MARKERS ARE AS FOLLOW:

Rustler	1628'	Bone Spring LM	8583'	
Top of Salt	1763'	Avalon Sand	8658'--Oil	
Base of Salt	3308'	Middle Avalon	8993'--Oil	
Yates	3508'--Oil	Lower Avalon	9178'--Oil	
Seven Rivers/ Capitan	3758'	Bone Spring 1/SD/	9638'--Oil	
Delaware	5623'	Bone Spring 2/SD/	10318'--Oil	10324'--MD
Cherry Canyon	5678'--Oil	Target SBSG	10598'	10871--MD
Brushy Canyon	6868'--Oil	TD	10588'	17800'--MD

## 2. THE ESTIMATED DEPTHS AT WHICH ANTICIPATED WATER, OIL OR GAS FORMATIONS ARE EXPECTED TO

Water: Approx 250' - 350'

Oil or Gas: See above--All Potential Zones

## 3. PRESURECONTROL EQUIPMENT:

A BOP with a minimum opening of 21 1/4" will be installed on the 20" casing rated for 2000# BOP systems. A BOP with a minimum opening of 13 5/8" will be installed on the 13 3/8" rated for 3000# BOP systems and a 5000# BOP system will be installed on the 9 5/8" casing and will be consistent with API RP 53. Pressure tests 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.

## 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.

## 4. THE PROPOSED CASING AND CEMENTING PROGRAM:

## A. Casing Program: (All New)

CASING	HOLE SIZE	CASING SIZE	WT./FT.	GRADE	COUPLING	INTERVAL	LENGTH
Conductor	36"	30"		H-40	ST&C	0'-40'	40'
Surface	26"	20"	133#	K-55	ST&C	0'-1655' <i>1700</i>	1655'
Intermediate 1	17 1/2"	13 3/8"	68#	HCK-55	ST&C	0'-80'	80'
Intermediate 1	17 1/2"	13 3/8"	61#	HCK-55	ST&C	80'-3300'	3220'
Intermediate 1	17 1/2"	13 3/8"	68#	HCK-55	ST&C	3300'-3450'	150'
Intermediate 2	12 1/4"	9 5/8"	40#	HCK-55	LT&C	0'-80'	80'
Intermediate 2	12 1/4"	9 5/8"	36#	J-55 or K-55	LT&C	80'-3500'	3420'
Intermediate 2	12 1/4"	9 5/8"	40#	HCK-55	LT&C	3500'-5750'	2250'
Production	8 3/4"	5 1/2"	17#	P-110	LT&C	0'-10300'	10300'
Production	8 1/2"	5 1/2"	17#	P-110	Buttress	10300'-17800'	7500'

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

## B. CEMENTING PROGRAM:

Conductor Casing: Cement with Ready Mix to surface.

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Conductor Casing: Cement with Ready Mix to surface.

2 1/2" Surface casing: Lead with 2355 sacks Class 35:65:6PzC (Wt. 12.50 Yld. 2.00). Tail in with 200 sacks Class C with 2% CaCl (Wt. 14.80 Yld. 1.34). Cement designed with 100% excess. TOC-Surface.

13 3/8" Intermediate Casing 1: Lead with 2260 sacks Class 35:65:6PzC (Wt. 12.50 Yld. 2.00). Tail in with 200 sacks Class C with 2% CaCl (Wt. 14.80 Yld. 1.34). Cement designed with 100% excess. TOC-Surface.

9 5/8" Intermediate Casing 2: Stage One- Lead with 455 sacks of Class 35:65:6PzC (Wt. 12.50 Yld. 2.00). Tail in 200 sacks of Class C with 2% CaCl (Wt. 14.80 Yld. 1.34). Cement designed with 100% excess. TOC 3700'. DV tool at 3700'.

Intermediate Casing 2: Stage Two- Lead with 1065 sacks of Class 35:65:6PzC (Wt. 12.50 Yld. 2.00). Tail in with 200 sacks of Class C with 2% CaCl (Wt. 14.80 Yld. 1.34). Cement designed with 100% excess. TOC surface.

Production Casing: Cement to be done in three stages with DV tool will be set approximately at 9600 and 7000'.

Stage 1 from 9600'-17800'; Lead with 205 sacks Class 35:65:6PzC (Wt. 12.50 Yld. 2.00). Tail in 1695 sacks of PecosVILt 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; D46, Antifoam Agent (Wt. 13.00 Yld. 1.41). Cement designed with 35% excess. TOC-9600'

Stage 2 from 7000'-9600'; Lead with 305 sacks of Class 35:65:6PzC (Wt. 12.50 Yld. 2.00). Tail in 200 sacks PecosVILt 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; D46, Antifoam Agent (Wt. 13.00 Yld. 1.41). Cement designed with 35% excess. TOC-7000'.

Stage 3 from 3500'-7000'; Lead with 460 sacks of Class 35:65:6PzC (Wt. 12.50 Yld. 2.00). Tail in 200 sacks PecosVILt 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; D46, Antifoam Agent (Wt. 13.00 Yld. 1.41). Cement designed with 35% excess. TOC-3500'

Well will be drilled vertically to 10324'. Well will be kicked off at approximately 10324' and directionally drilled at 12 degrees per 100' with an 8 3/4" hole to 10871' MD (10598' TVD). Hole size will then be reduced to 8 1/2" and drilled to 17800' MD (10588' TVD) where 5 1/2" casing will be set and cemented. A DV tool will be set at 9600' and 7000'. Penetration point of producing zone will be encountered at 900' FSL & 678' FEL, Section 28-T20S-34E. Deepest TVD is 10598' in the lateral.

5. MUD PROGRAM AND EQUIPMENT:

INTERVAL	TYPE	WEIGHT	VISCOSITY	FLUID LOSS
0-1655' 1700'	Fresh Water	8.60-9.20	32-34	N/C
1655'-3450'	Brine Water	10.00-10.20	28-29	N/C
3450'-5750'	Fresh Water	8.60-9.20	32-34	N/C
5750'-17800'	Cut Brine	8.80-9.20	28-32	<15

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.

6. EVALUATION PROGRAM: See COT

Samples: 30' samples to 3450'. 10' samples from 3450' to TD.

Logging: NGT: Surface to TD, Neutron: Surface to 30 degrees into curve, Density intermediate casing to 30 degrees in to curve, Resistivity intermediate casing to 30 degrees into curve, CMR intermediate casing to 30 degrees into curve.

Coring: As warranted.

DST's: As warranted.  
Mudlogging from the surface casing to TD

7. ABNORMAL CONDITIONS, Bottom hole pressure and potential hazards:

Anticipated BHP:

From: 0'	TO: 1655'	Anticipated Max. BHP:	792 PSI
From: 1655'	TO: 3450'	Anticipated Max. BHP:	1830 PSI
From: 3450'	TO: 5750'	Anticipated Max. BHP:	2751 PSI
From: 5750'	TO: 10598'	Anticipated Max. BHP:	5070 PSI

No abnormal pressures or temperatures are anticipated.

Lost Circulation Zones Anticipated: None.

H2S Zones Anticipated: None

8. ANTICIPATED STARTING DATE:

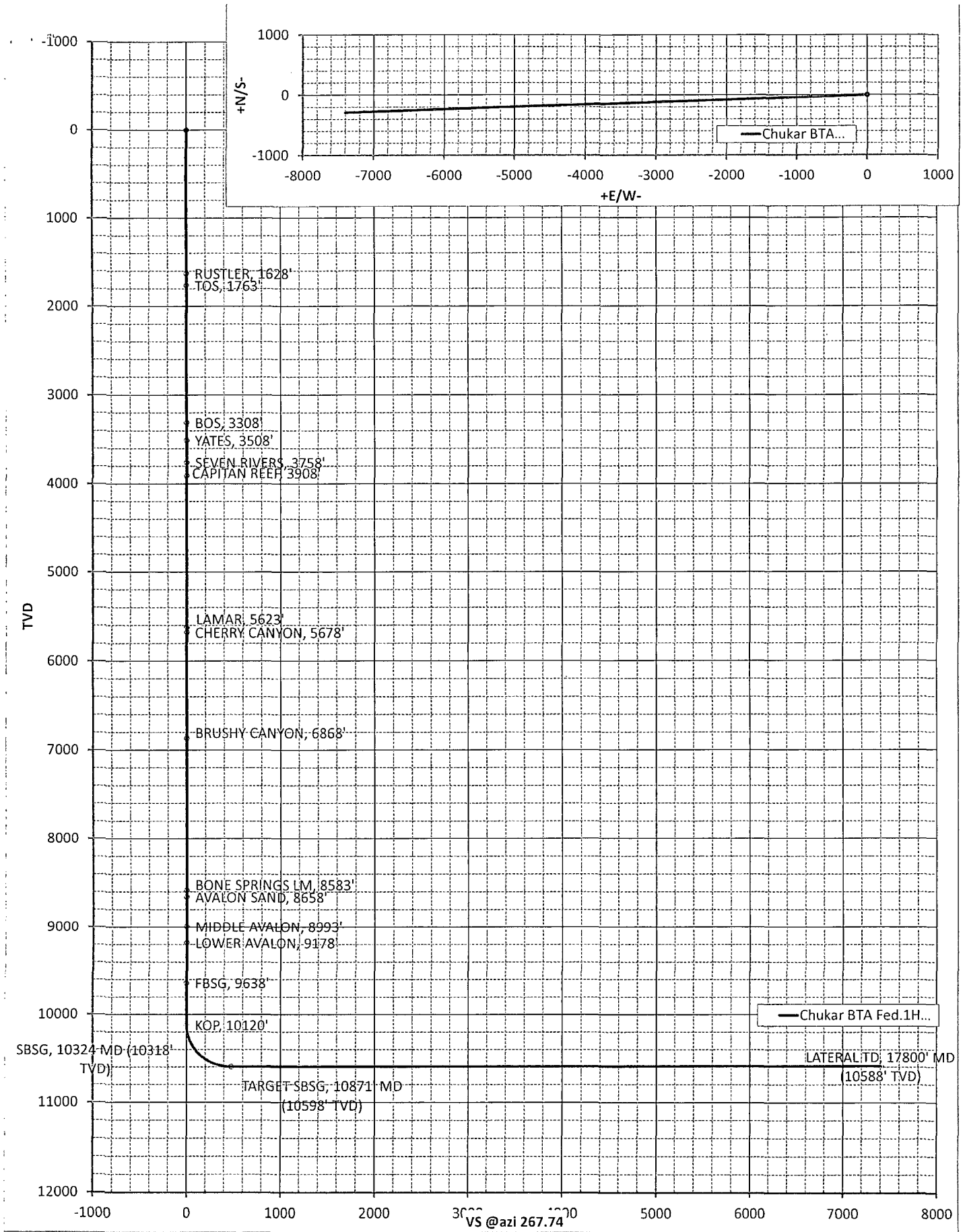
Plans are to drill this well as soon as possible after receiving approval. It should take approximately 60 days to drill the well with completion taking another 30 days.

Operator Co.

Your Co.

Survey/Planning Report									
Operator	Yates Petroleum Corp.			Northing			Date	9-Aug-12	
Dir. Co.	Yates Petroleum Corp.			Easting			System	2 - St. Plane	
Well Name	Chukar BTA Fed.1H Survey			Elevation			Datum	1983 - NAD83	
Location	Sec. 28, 20S-34E			Latitude			Zone	4302 - Utah Central	
Rig				Longitude			Scale Fac.		
Job				Units	Feet		Converg.		
MD	INC	AZI	TVD	N/S	E/W	VS@267.74	BR	TR	DLS
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1628.00	0.00	360.00	1628.00	0.00	0.00	0.00	0.00	0.00	0.00
1628: RUSTLER, 1628'									
1763.00	0.00	360.00	1763.00	0.00	0.00	0.00	0.00	0.00	0.00
1763: TOS, 1763'									
3308.00	0.00	360.00	3308.00	0.00	0.00	0.00	0.00	0.00	0.00
3308: BOS, 3308'									
3508.00	0.00	360.00	3508.00	0.00	0.00	0.00	0.00	0.00	0.00
3508: YATES, 3508'									
3758.00	0.00	360.00	3758.00	0.00	0.00	0.00	0.00	0.00	0.00
3758: SEVEN RIVERS, 3758'									
3908.00	0.00	360.00	3908.00	0.00	0.00	0.00	0.00	0.00	0.00
3908: CAPITAN REEF, 3908'									
5623.00	0.00	360.00	5623.00	0.00	0.00	0.00	0.00	0.00	0.00
5623: LAMAR, 5623'									
5678.00	0.00	360.00	5678.00	0.01	0.00	0.00	0.00	0.00	0.00
5678: CHERRY CANYON, 5678'									
6868.00	0.00	360.00	6868.00	0.01	0.00	0.00	0.00	0.00	0.00
6868: BRUSHY CANYON, 6868'									
8583.00	0.00	360.00	8583.00	0.01	0.00	0.00	0.00	0.00	0.00
8583: BONE SPRINGS LM, 8583'									
8658.00	0.00	360.00	8658.00	0.01	0.00	0.00	0.00	0.00	0.00
8658: AVALON SAND, 8658'									
8993.00	0.00	360.00	8993.00	0.01	0.00	0.00	0.00	0.00	0.00
8993: MIDDLE AVALON, 8993'									
9178.00	0.00	360.00	9178.00	0.01	0.00	0.00	0.00	0.00	0.00
9178: LOWER AVALON, 9178'									
9638.00	0.00	360.00	9638.00	0.01	0.00	0.00	0.00	0.00	0.00
9638: FBSG, 9638'									
10120.21	0.00	267.74	10120.21	0.01	0.00	0.00	0.00	2.65	0.00
10120.21: KOP, 10120'									
10200.00	9.57	267.74	10199.63	-0.25	-6.65	6.65	12.00	0.00	12.00
10300.00	21.57	267.74	10295.78	-1.31	-33.42	33.45	12.00	0.00	12.00
10324.17	24.47	267.74	10318.02	-1.68	-42.86	42.90	12.00	0.00	12.00
10324.17: SBSG, 10324 MD (10318' TVD)									
10400.00	33.57	267.74	10384.26	-3.13	-79.59	79.65	12.00	0.00	12.00
10500.00	45.57	267.74	10461.20	-5.63	-143.13	143.24	12.00	0.00	12.00
10600.00	57.57	267.74	10523.24	-8.70	-221.26	221.44	12.00	0.00	12.00
10700.00	69.57	267.74	10567.67	-12.22	-310.58	310.82	12.00	0.00	12.00
10800.00	81.57	267.74	10592.53	-16.03	-407.18	407.49	12.00	0.00	12.00
10870.88	90.08	267.74	10597.68	-18.81	-477.76	478.13	12.00	0.00	12.00
10870.88: TARGET SBSG, 10871' MD (10598' TVD)									
17800.31	90.08	267.74	10587.99	-291.47	-7401.82	7407.56	0.00	0.00	0.00
17800.31: LATERAL TD, 17800' MD (10588' TVD)									







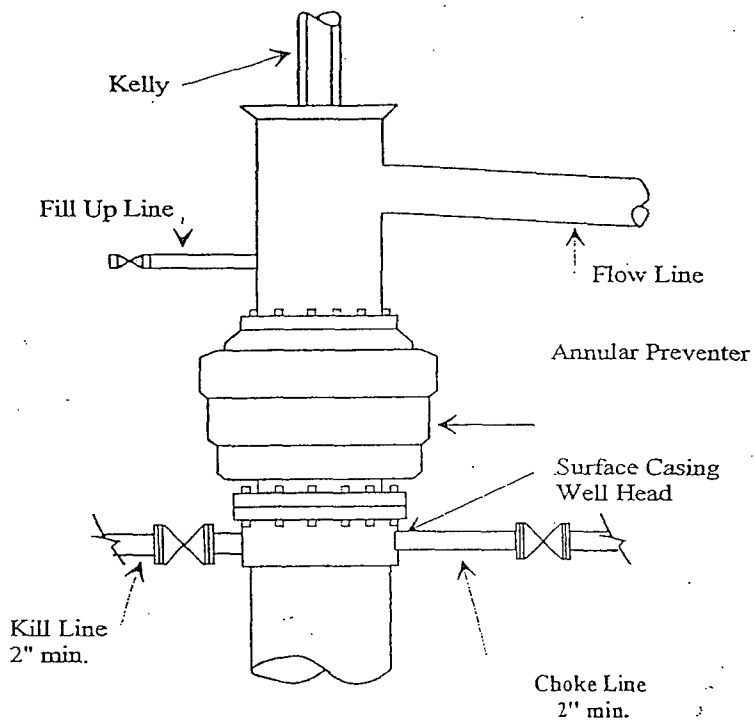
# Yates Petroleum Corporation

BOP-1

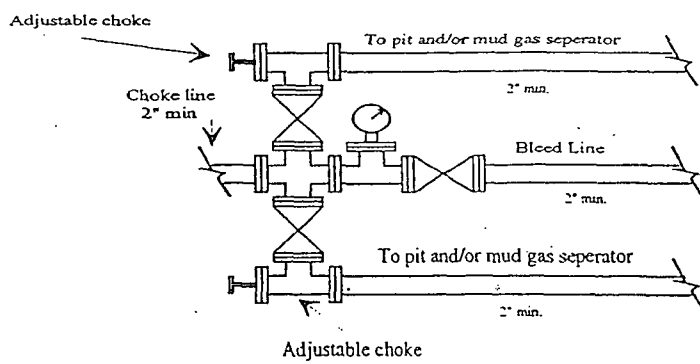
Typical low Pressure System  
Schematic

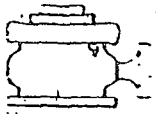
Annular Preventer 2,000 psi

*Exhibit*



Typical 2,000 psi choke manifold assembly with at least these minimum features

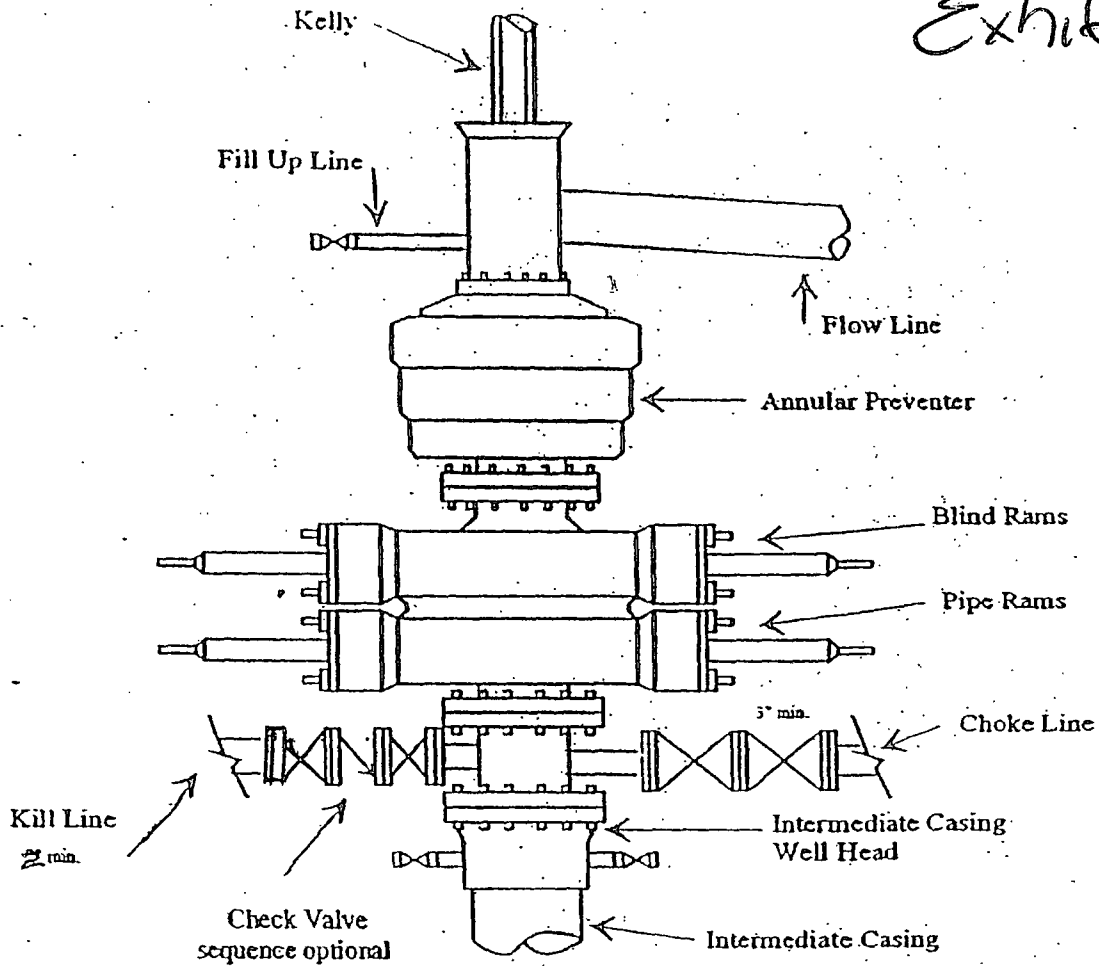




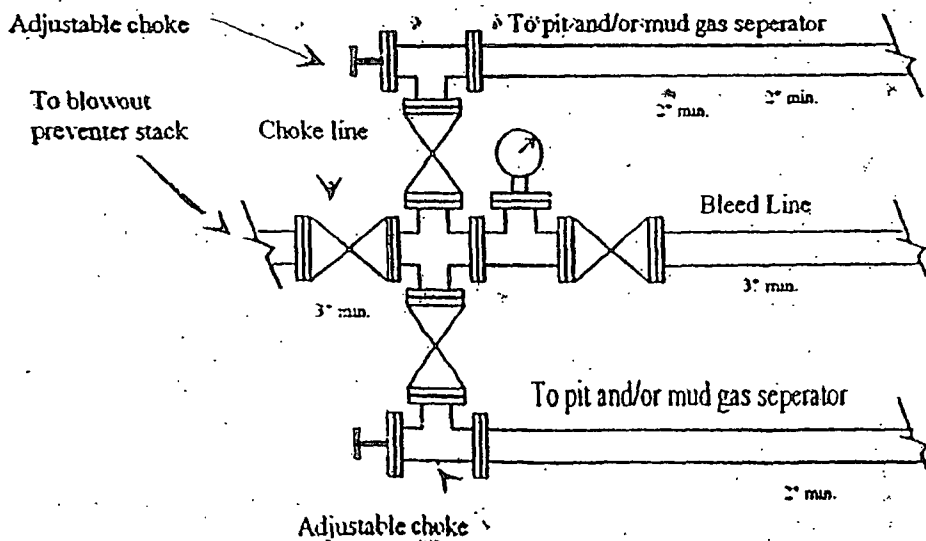
Yates Petroleum Corporation  
Typical 3,000 psi Pressure System  
Schematic  
Annular with Double Ram Preventer Stack

BOP-3

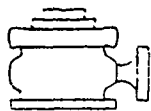
*Exhibit*



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



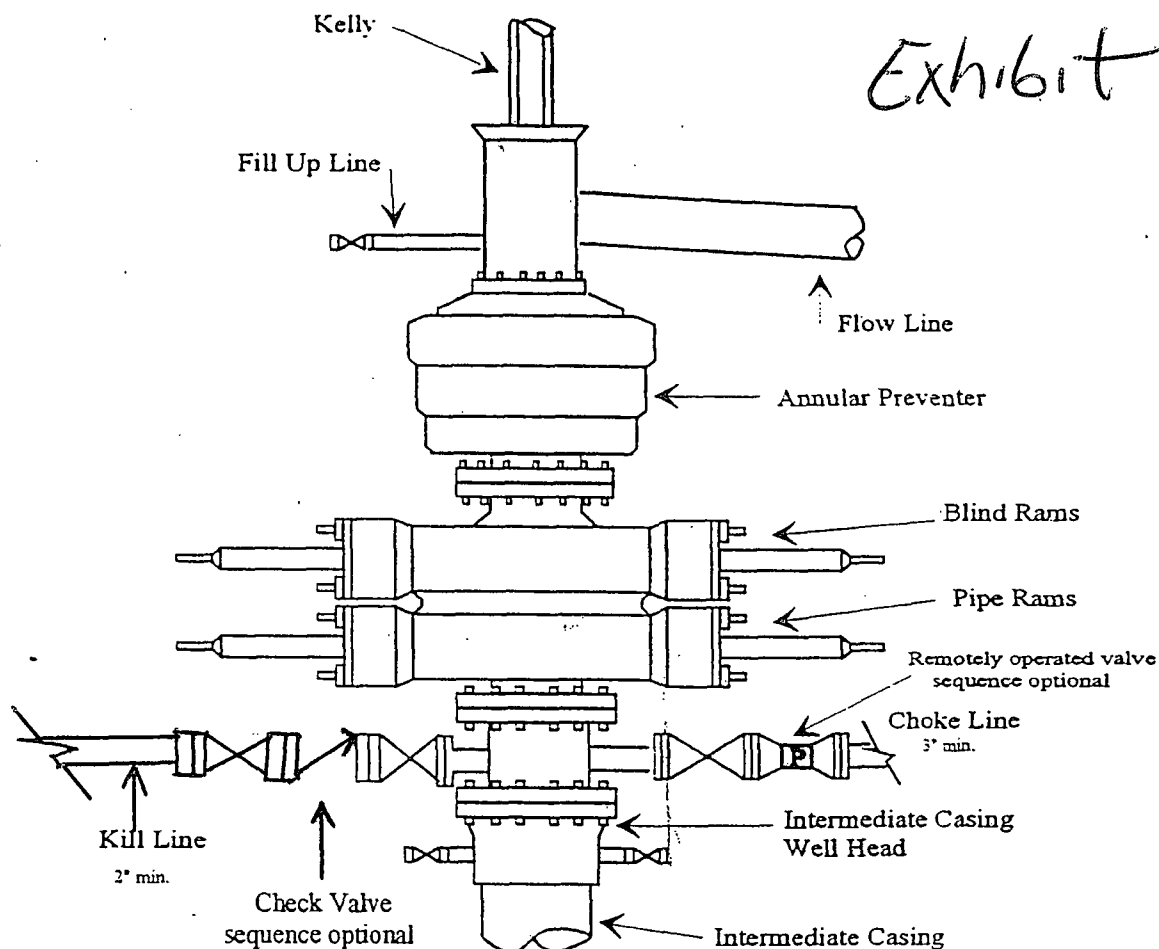




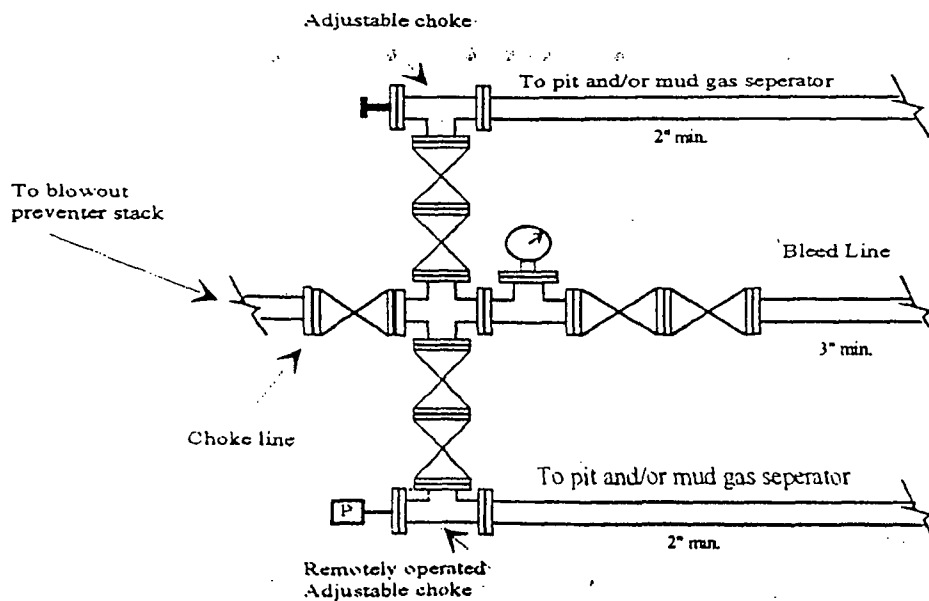
# Yates Petroleum Corporation

BOP-4

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



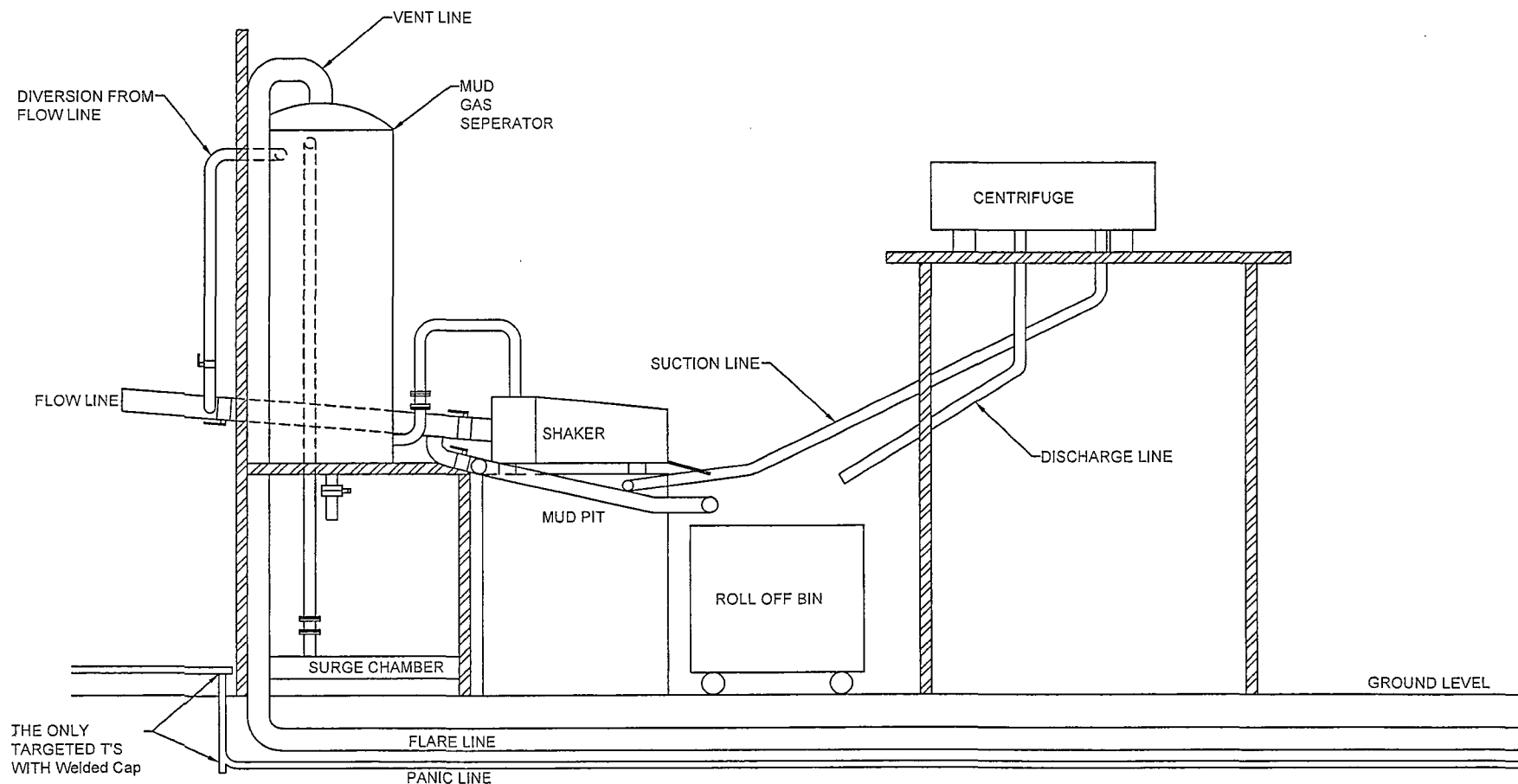
Typical 5,000 psi choke manifold assembly with at least these minimum features



# YATES PETROLEUM CORPORATION

Piping from Choke Manifold  
to the Closed Loop Drilling Mud System

*Exhibit*



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