

HOEBS OCD

OCD Hobbs

Form 3160-3  
(March 2012)

AUG 08 2013

RECEIVED

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, 2014

1a. Type of work: <input checked="" type="checkbox"/> DRILL <input type="checkbox"/> REENTER		5. Lease Serial No. NM-90
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		6. If Indian, Allottee or Tribe Name
2. Name of Operator Yates Petroleum Corporation		7. If Unit or CA Agreement, Name and No.
3a. Address 105 S. Fourth St. Artesia, NM 88210	3b. Phone No. (include area code) 575-748-4120	8. Lease Name and Well No. <b>&lt;30801&gt;</b> Amazing BAZ Federal #7H
4. Location of Well (Report location clearly and in accordance with any State requirements *) At surface 330' FNL & 1650' FEL <b>Unit B</b> At proposed prod. zone 330' FSL & 1980' FEL <b>Unit O</b>		9. API Well No. <b>30-025-41326</b>
14. Distance in miles and direction from nearest town or post office* 38 North West of Jal, NM		10. Field and Pool or Exploratory Undesignated/Bone Spring <b>South</b> <b>&lt;97366&gt;</b>
15. Distance from proposed* location to nearest property or lease line, ft. (Also to nearest drig. unit line, if any) 330'	16. No. of acres in lease 1760	11. Sec., T. R. M. or Blk. and Survey or Area Section 19, T22S-R32E
18. Distance from proposed location* to nearest well, drilling, completed, applied for, on this lease, ft. 2 miles	19. Proposed Depth 9700' Pilot hole, 9300' TVD 13729' TD	12. County or Parish Lea
21. Elevations (Show whether DF, KDB, RT, GL, etc.) 3643'	22. Approximate date work will start* 12/15/2013	13. State NM
17. Spacing Unit dedicated to this well 160 acres, W2E2		
20. BLM/BIA Bond No. on file NMB000434 NMB000920		
23. Estimated duration 30 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 <i>Travis Hahn</i>	Name (Printed/Typed) Travis Hahn	Date 01/03/2013
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Title  
Land Regulatory Agent

Approved by (Signature) <i>/s/George MacDonell</i>	Name (Printed/Typed) <i>/s/George MacDonell</i>	Date AUG - 6 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*  
*08/14/13**PM*SEE ATTACHED FOR  
CONDITIONS OF APPROVALApproval Subject to General Requirements  
& Special Stipulations Attached

AUG 16 2013

# YATES PETROLEUM CORPORATION

Amazing BAZ Federal #7H  
330' FNL & 1980' FEL, Surface Hole  
330' FSL & 1650' FEL, Bottom Hole  
Section 19 -T22S-R32E  
Lea County, New Mexico

- The estimated tops of geologic markers are as follows:

Rustler	800'	Bone Springs	8480'
Top of Salt	950'	Avalon Shale Target	9300' Oil
Base of Salt	4345'	Bone Springs 1/SD	9580' Oil
Bell Canyon	4650'	TD	9700' Oil
Cherry Canyon	5540'		
Brushy Canyon	6830'	Lateral Hole (TD)	13726' MD

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

Water: Approx.: 0' - 396' & 1743' - 3550'  
Oil or Gas: See above--All Potential Zones

- Pressure Control Equipment: A 3000 PSI BOP with a 13 5/8" opening will be installed on the 13 3/8" casing and also on the 9 5/8" 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. 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.

- Auxiliary Equipment:

- 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.

- THE PROPOSED CASING AND CEMENTING PROGRAM:

- Casing Program: (All New) 13 3/8" will be J-55/H-40 Hybrid

	Hole Size	Casing Size	Wt./Ft	Grade	Coupling	Interval	Length
	26"	20"	94#	H-40	Buttress Thread	0-58'	58'
See COA	17 1/2"	13 3/8"	48#	J-55	ST&C	0-825' <del>940</del>	825'
	12 1/4"	9 5/8"	40#	J-55	LT&C	0'-100'	100'
	12 1/4"	9 5/8"	36#	K-55	LT&C	100'-3300'	3200'
See COA	12 1/4"	9 5/8"	40#	J-55	LT&C	3300'-4450' <del>4600</del>	4450'
	8 3/4"	5 1/2"	17#	L-80	LT&C	0'-8800'	8800'
	8 1/2"	5 1/2"	17#	L-80	Buttress Thread	8800'-13729'	4929'

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

B. CEMENTING PROGRAM:

Surface casing: 855 sacks of Class C + 2% CaCl<sub>2</sub> (YLD 1.34 WT 14.80). Designed with 100% excess, TOC is surface.

Intermediate Casing (0'-4450'): Lead with 1255 sacks of Class C-Lite + 2% CaCl<sub>2</sub> (YLD 2.00 WT 12.50); tail in with 210 sacks of Class C + 2% CaCl<sub>2</sub> (YLD 1.34 WT 14.80). Designed with 100% excess, TOC is surface.

Production Casing: Cement to be done with DV Tool in two stages at approximately 8500' & 6000'.

Stage 3 from 3950'-6000': Lead with 400 sacks of Class C-Lite + 2% CaCl<sub>2</sub> (YLD 2.00 WT 12.50); tail in with 200 sacks of Class C + 2% CaCl<sub>2</sub> (YLD 1.34 WT 14.80). Designed with 35% excess, TOC-3950'.

Stage 2 from 6000'-8500': Lead with 510 sacks Class C-Lite + 2% CaCl<sub>2</sub> (YLD 2.00 WT 12.50); tail in with 200 sacks of Class C + 2% CaCl<sub>2</sub> (YLD 1.34 WT 14.80).

Stage 1 from 8500'-13729: Cement with 1350 sacks of Pecos VILt (WT13.00 YLD 1.83) additives include 30% CaCO<sub>3</sub>, 3.2% Expansion additive, 2% Antifoam, .8% Retarder, 15 Fluid loss. TOC- 4000' Designed with 35% excess.

Well will be drilled vertically with a pilot hole to a depth of 9700'. Isolation plug will be cemented from 9700' to 9500' with 100 sacks of Class H [YLD 0.94 WT 17.5] additive's being Fresh water is 3.352 gal/sack, Dispersant is 0.030 gal/sack, Retarder Acc is 0.070 gal/sack, and Antifoam 0.020 gal/sack, plug designed with 10% excess. Kick off plug will be at 9100' to 8600' with 300 sacks of Class H [YLD 0.94 WT 17.5] additive's being Fresh water 3.352 gal/sack, 0.3 gal/sack dispersant, 0.06 gal/sack retarder, and 0.02 gal/sack antifoam, plug designed with 35% excess. Well will then be kicked off at 8823' and drilled directionally at 12 degrees per 100' with a 8 ¾" hole to 9573' MD (9300' TVD). Hole will then be reduced to 8 ½" and drilled to 13729' MD (9300' TVD) where 5 ½" casing will be set and cemented. Penetration point of producing zone will be encountered at 806' FNL & 1681' FEL, Section 19-22S-32E. Deepest TVD in the pilot hole 9700', deepest TVD in the lateral will be 9300'. DV tools to be placed at 8500' and 6000' on production casing well will be cemented in three stages.

5. Mud Program and Auxiliary Equipment:

Interval	Type	Weight	Viscosity	Fluid Loss
0-825' <i>940</i>	Fresh Water	8.6-9.2	28-32	N/C
825'-4450' <i>4600</i>	Brine Water	10.0-10.2	28-30	N/C
4450'-9700'	Cut Brine	9.0-9.2	30-32	N/C
8823'-13729'	Cut Brine (lateral)	9.0-9.2	32-34	<10-12

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 COA*

Samples: 30' samples to 4450'. 10' samples 4450' to TD.

Logging: Platform Express CMR, Dipole Sonic

Coring: As warranted.

DST's: As warranted.

Mudlogging: On surface casing to TD (825'-13729')

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

Anticipated BHP:

From: 0	TO: 825'	Anticipated Max. BHP:	380	PSI
From: 825'	TO: 4450'	Anticipated Max. BHP:	2150	PSI
From: 4450'	TO: 9700'	Anticipated Max. BHP:	3875	PSI

No abnormal pressures or temperatures are anticipated.

H2S Not Anticipated

8. ANTICIPATED STARTING DATE:

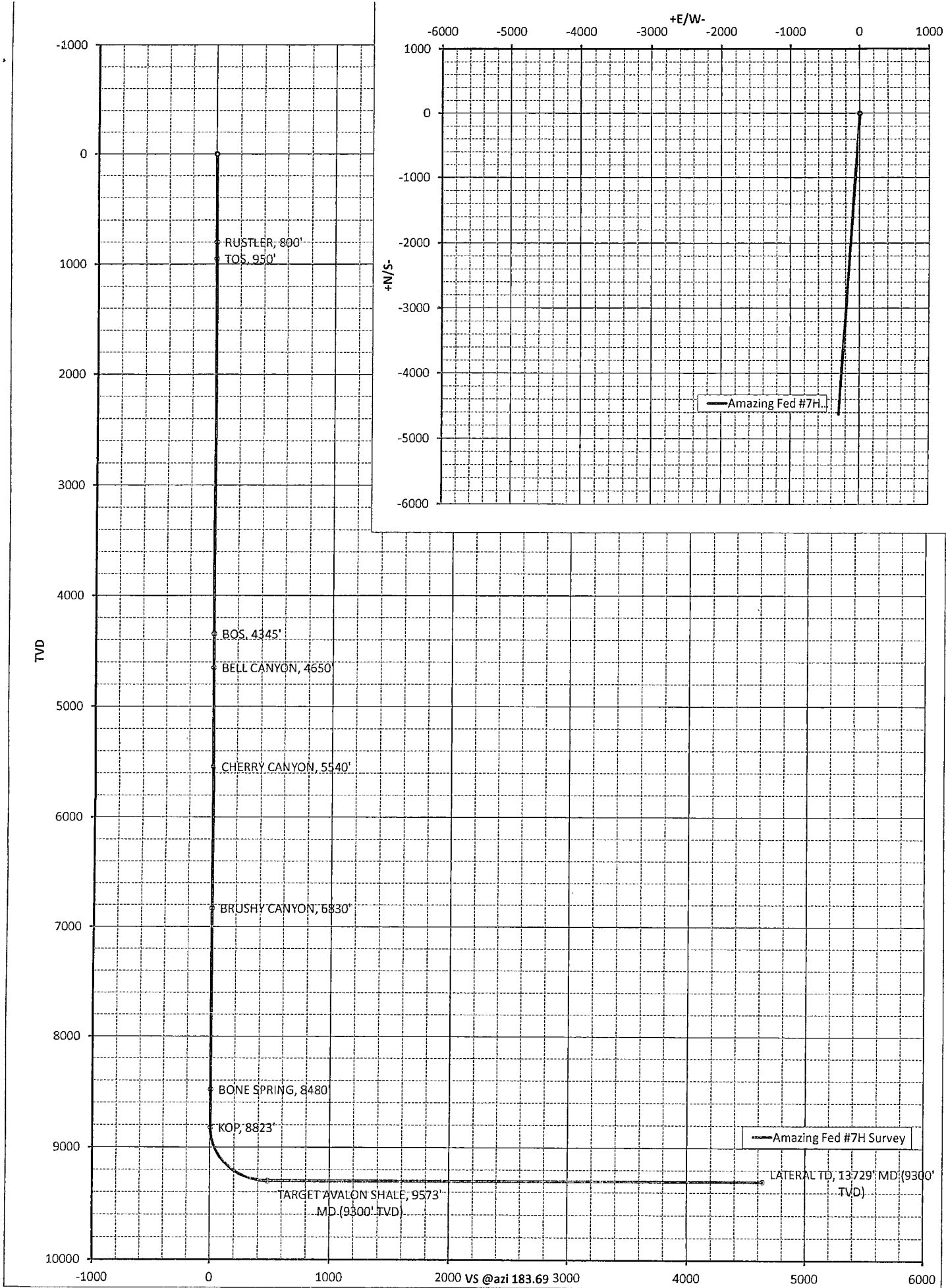
Plans are to drill this well as soon as possible after receiving approval. It should take approximately 65 days to drill the well with completion taking another 30 days.

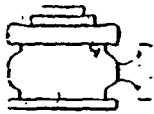
Operator Co.

Your Co.

Survey/Planning Report									
Operator Dir. Co. Well Name Location Rig Job	Yates Petroleum Corp.	Northing Easting Elevation Latitude Longitude Units	Feet	Date System Datum Zone Scale Fac. Converg.	12-Jun-12				
	Yates Petroleum Corp.				2 - St. Plane				
	Amazing Fed #7H Survey				1983 - NAD83				
	Sec. 19, 22S-32E				4302 - Utah Central				
MD	INC	AZI	TVD	NS	EW	VS@183.69	BR	TR	DLS
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
800.00	0.00	360.00	800.00	0.00	0.00	0.00	0.00	0.00	0.00
800: RUSTLER, 800'									
950.00	0.00	360.00	950.00	0.00	0.00	0.00	0.00	0.00	0.00
950: TOS, 950'									
4345.00	0.00	360.00	4345.00	0.00	0.00	0.00	0.00	0.00	0.00
4345: BOS, 4345'									
4650.00	0.00	360.00	4650.00	0.00	0.00	0.00	0.00	0.00	0.00
4650: BELL CANYON, 4650'									
5540.00	0.00	360.00	5540.00	0.00	0.00	0.00	0.00	0.00	0.00
5540: CHERRY CANYON, 5540'									
6830.00	0.00	360.00	6830.00	0.01	0.00	-0.01	0.00	0.00	0.00
6830: BRUSHY CANYON, 6830'									
8480.00	0.00	360.00	8480.00	0.01	0.00	-0.01	0.00	0.00	0.00
8480: BONE SPRING, 8480'									
8822.54	0.00	183.69	8822.54	0.01	0.00	-0.01	0.00	2.08	0.00
8822.54: KOP, 8823'									
8900.00	9.30	183.69	8899.66	-6.25	-0.40	6.26	12.00	0.00	12.00
9000.00	21.30	183.69	8995.94	-32.53	-2.10	32.59	12.00	0.00	12.00
9100.00	33.30	183.69	9084.64	-78.21	-5.05	78.37	12.00	0.00	12.00
9200.00	45.30	183.69	9161.89	-141.29	-9.12	141.59	12.00	0.00	12.00
9300.00	57.30	183.69	9224.31	-219.03	-14.14	219.48	12.00	0.00	12.00
9400.00	69.30	183.69	9269.16	-308.01	-19.88	308.65	12.00	0.00	12.00
9500.00	81.30	183.69	9294.50	-404.36	-26.10	405.20	12.00	0.00	12.00
9572.53	90.00	183.69	9300.00	-476.46	-30.76	477.46	12.00	0.00	12.00
9572.53: TARGET AVALON SHALE, 9573' MD (9300' TVD)									
13729.28	90.00	183.69	9300.01	-4624.57	-298.55	4634.20	0.00	0.00	0.00
13729.28: LATERAL TD, 13729' MD (9300' TVD)									



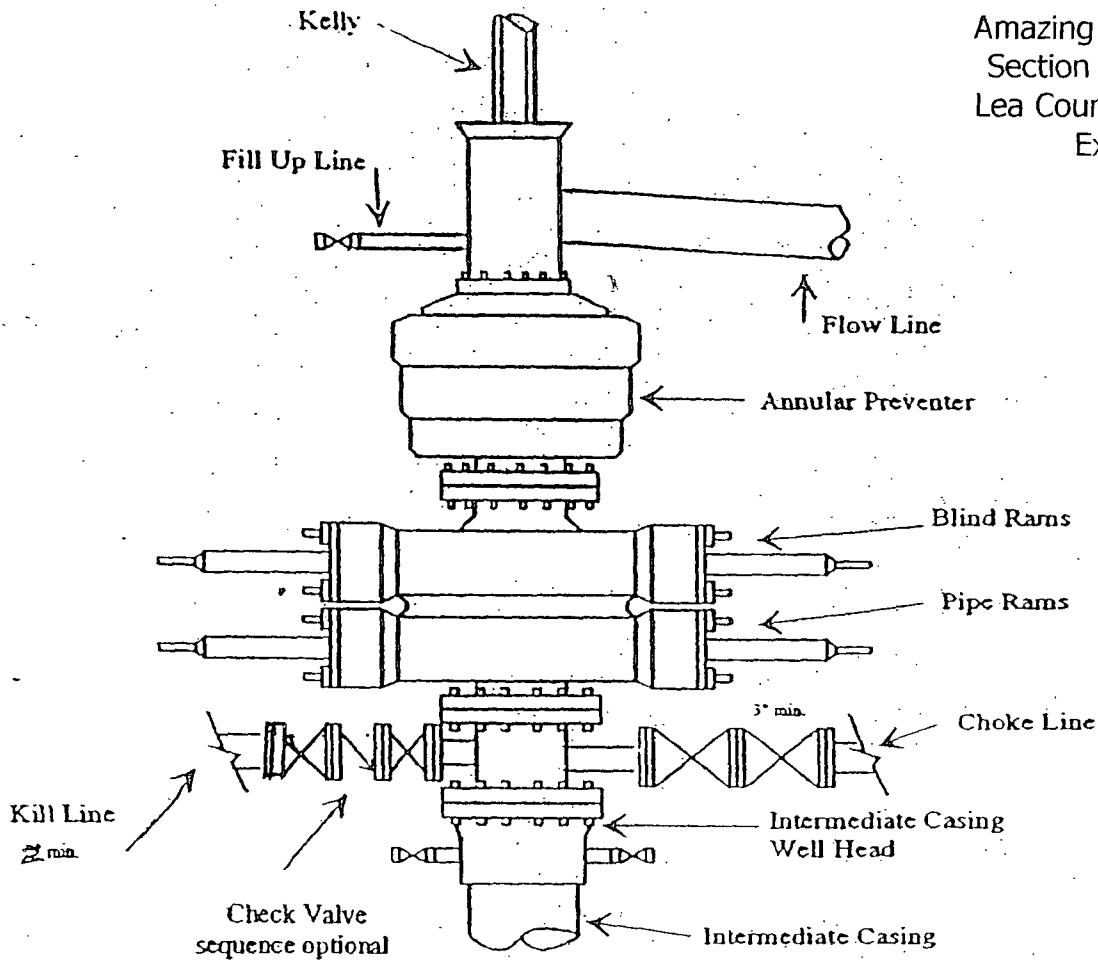




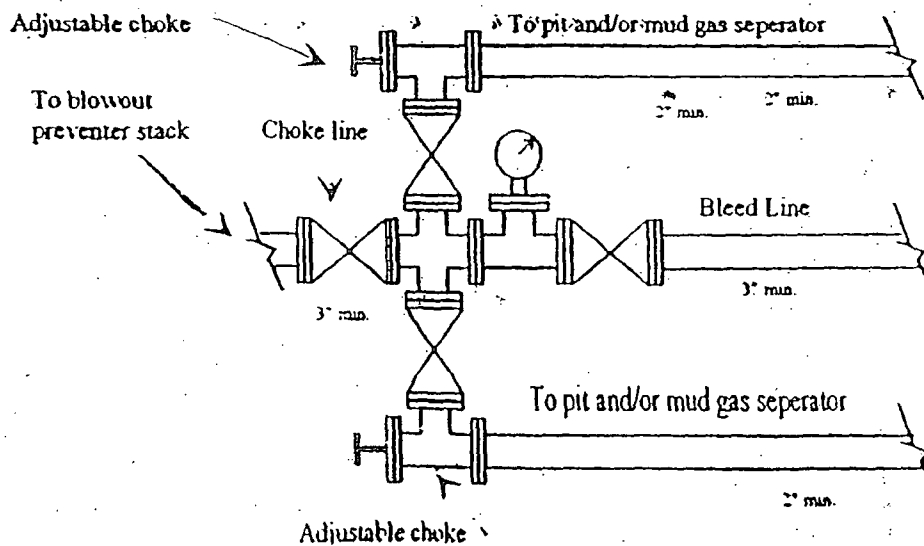
**Yates Petroleum Corporation**  
**Typical 3,000 psi Pressure System**  
**Schematic**  
**Annular with Double Ram Preventer Stack**

BOP-3

Amazing BAZ Federal #7  
 Section 19, T22S-R32E  
 Lea County, New Mexico  
 Exhibit "B"

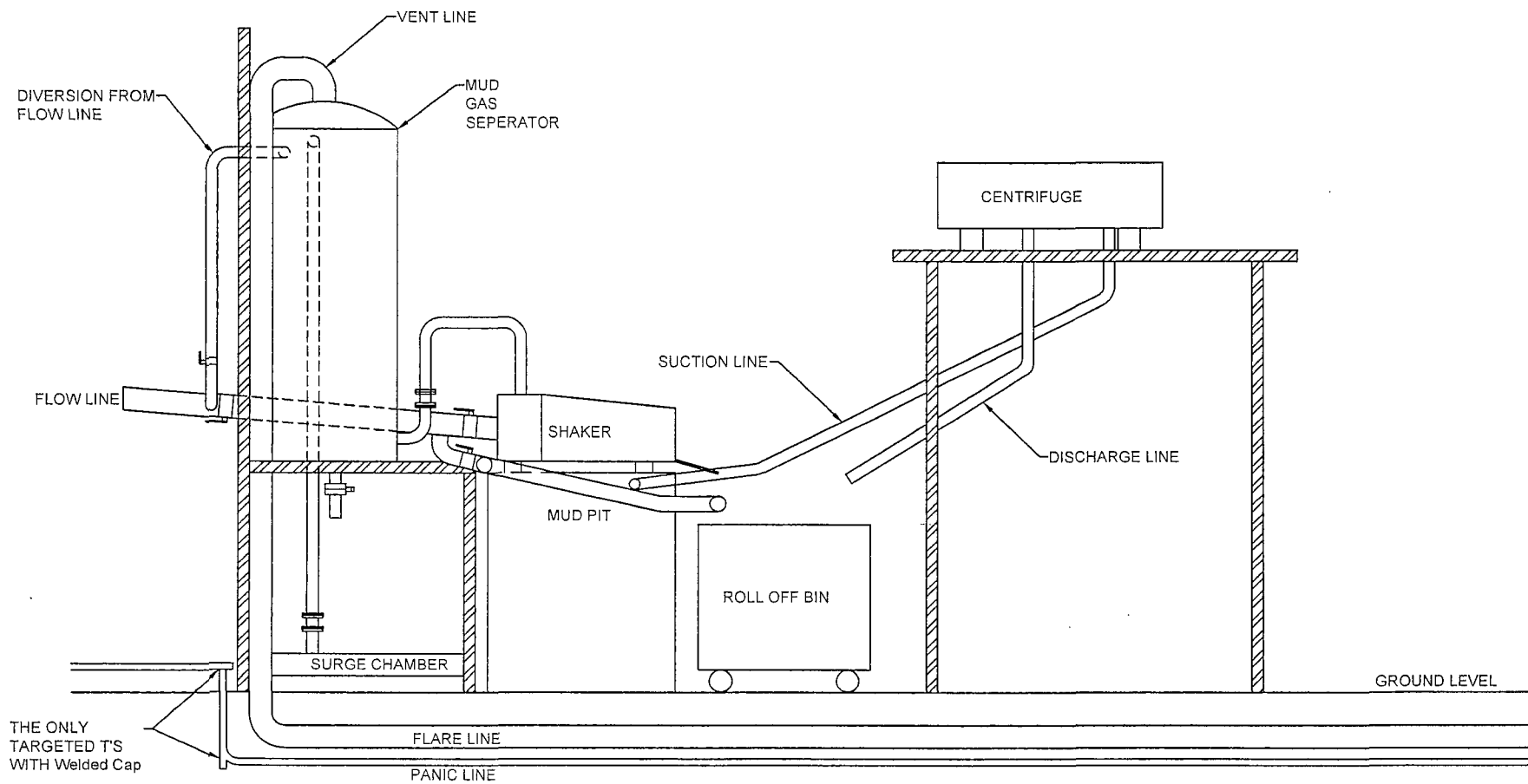


Typical 3,000 psi choke manifold assembly with at least these minimum features

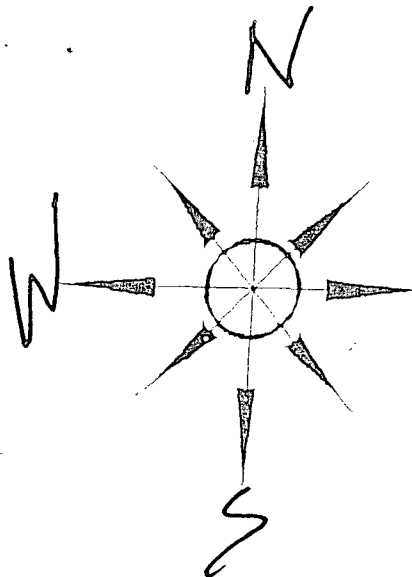


# YATES PETROLEUM CORPORATION

## Piping from Choke Manifold to the Closed Loop Drilling Mud System



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  
Location Layout for Permian Basin

Closed Loop Design Plan

Amazing BAZ Federal #7  
Section 19, T22S-R32E  
Lea County, New Mexico  
Exhibit "C"

\* NOT TO SCALE

