OCD-ARTESIA

Form 3160 -3 (March 2012)

Split Estate

UNITED STATES SEP 17

DEPARTMENT OF THE INTERIOR BUREAU OF LAND MANAGEMENT

SEP 17 2012 FORM APPROVED OMB No 1004-0137 Expires October 31, 2014

NMOCD ARTES MM Lease Serial No.

ARIESMM 19619 & VO-7679

6. If Indian, Allotee or Tribe Name

APPLICATION FOR PERMIT TO **********************************	DRILL OR	REENTER		6. Il Indian, Alloice	or tribe Name		
la. Type of work: DRILL REEN	-			7 If Unit or CA Agr	reement, Name and No		
Ib. Type of Well: ✓ O₁i Well ☐ Gas Well ☐ Other	Sir	ngle Zone 🔲 Multi	ole Zone	8. Lease Name and Coltrane "BQR" Fe			
2. Name of Operator Yates Petroleum Corporation				9 API Well No. 30-015-38223	30-015-38419		
3a. Address 105 South Fourth Street Artesia. NM 88210	3b. Phone No. 575-748-43	. (include area code) 372		10. Field and Pool, or Hay Hollow Bone	•		
 Location of Well (Report location clearly and in accordance with At surface 430' FSL & 660' FEL, Section 36-T25S-R31 At proposed prod. zone 2310' FSL & 660' FEL, Section 25 	E, Unit Ltr P	,		11. Sec., T. R. M. or Blk. and Survey or Ar Sections 25 & 36-T25S-R31E			
14 Distance in miles and direction from nearest town or post office* Approximately 52 miles east of Carlsbad. NM	J-1200-101L,	Office 1		12. County or Parish Eddy County	13. State NM		
15. Distance from proposed* 5285' BHL 330' location to nearest property or lease line, ft (Also to nearest drig. unit line, if any)	16. No. of a NM-19619 VO-7679	cres in lease 326 520 320		ng Unit dedicated to this f 25-25S-31E & E2E			
18. Distance from proposed location* to nearest well, drilling, completed, applied for, on this lease, ft 330 BHL 430 SHL	19. Proposed 10,368 17,314	B'TVD F'MD	Nationw	BLM/BIA Bond No. on file tionwide Bond No. NMB000434			
21 Elevations (Show whether DF, KDB, RT, GL, etc.) 3299' GL		mate date work will sta APD 1y d rilling		23. Estimated duration Sixty days	on		
•- ⁹ •,	24. Attac	chments	•				
The following, completed in accordance with the requirements of Onsl	hore Oil and Gas	Order No.1, must be a	ttached to th	is form:			
 Well plat certified by a registered surveyor. A Drilling Plan. A Surface Use Plan (if the location is on National Forest Systems SUPO must be filed with the appropriate Forest Service Office) 	m Lands, the	Item 20 above). 5 Operator certification	cation	·	n existing bond on file (see		
25 Signature Clifter May FOR CY COWAN	Name Cy Ce	(Printed/Typed) owan			Date 5/7/2012		
Title Land Regulatory Agent					,		
Approved by (Signature) /s/ Don Peterson	Name	(Printed/Typed)/s/	Don P	eterson	Date 9/13/201		
Title FIELD MANAGER	Office		CARLSI	BAD FIELD OFFIC	E		
Application approval does not warrant or certify that the applicant he conduct operations thereon.	olds legal or equi	table title to those righ	its in the sub				
Conditions of approval, if any, are attached.	····				TWO YEARS		
Title 18 U.S.C. Section 1001 and Title 43 U.S.C. Section 1212, make it a States any false, fictitious or fraudulent statements or representations a			willfully to n	nake to any department	or agency of the United		
(Continued on page 2)				*(Ins	tructions on page 2)		

Carlsbad Controlled Water Basin

Approval Subject to General Requirements & Special Stipulations Attached

* Originally filed on NMOCK State John C101.

SEE ATTACHED FOR CONDITIONS OF APPROVAL

CERTIFICATION YATES PETROLEUM CORPORATION

Coltrane "BQR" Federal Com #1-H 430' FSL & 660' FEL, Section 36-T25S-R31E, Surface Hole 2310' FSL &660' FEL, Section 25-T25S-R31E, Bottom Hole

Eddy County, New Mexico

I hereby certify that I, or someone under my direct supervision, have inspected the drill site and access route proposed herein; that I am familiar with the conditions which currently exist; that I have full knowledge of state and federal laws applicable to this operation; that the statements made in this APD package are, to the best of my knowledge, true and correct; and that the work associated with the operations proposed herein will be performed in conformity with this APD package and the terms and conditions under which it is approved. I also certify that the company I represent, is responsible for the operations conducted under this application. These statements are subject to the provisions of 18 U.S.C. 1001 for the filing of false statements.

Executed this 7th day of // AY 2012.
Printed Name Cy Cowan
Signature Clifty May FOR CY COWAN
Position Title <u>Land Regulatory Agent</u>
Address 105 South Fourth Street, Artesia, NM 88210
Telephone <u>575-748-4372</u>
E-mail (optional) cy@yatespetroleum.com
Field Representative (if not above signatory)_Tim Bussell
Address (if different from above) Same
Telephone (if different from above) 575-748-4221

TO WHOM IT MAY CONCERN:

Coltrane "BQR" Federal Com #1H
430' FSL & 660' FEL, Section 36-T25S-R31E, Surface Hole
2310' FSL & 430' FEL, Section 25-T25S-R31E, Bottom Hole
Eddy County, New Mexico

This well was previously approved on 1/14/2011 by the Oil Conservation Division as the Coltrane "BQR" State Com #1H, API #30-015-38223, at the same surface location. This well is being rat holed and deepened every 20 days under the state APD. The bottom hole was to be 12791', but plans are now to drill into our federal lease in section 25, NM-19619.

DISTRICT I 1625 N. French Dr., Hobbs, NM 88240 DISTRICT II

1301 W. Grand Avenue, Artesia, NM 88210

State of New Mexico Energy, Minerals and Natural Resources Department Form C-102 Revised July 16, 2010

Submit one copy to appropriate District Office

DISTRICT III OIL CONSERVATION DIVISION

1000 Rio Brazos Rd., Aztec, NM 87410

DISTRICT IV 1220 S. St. Francis Dr., Santa Fe, NM 87505 1220 South St. Francis Dr. Santa Fe, New Mexico 87505

WELL LOCATION AND ACREAGE DEDICATION PLAT

☐ AMENDED REPORT

30-015-38223 38419	Pool Code 30215	Pool Name Hay Hollow Bone Spring	
Property Code 38259- 39453	COLTRANE "BC	Well Number	
0GRID No. 025575	•	ator Name ROLEUM CORP.	Elevation 3299'

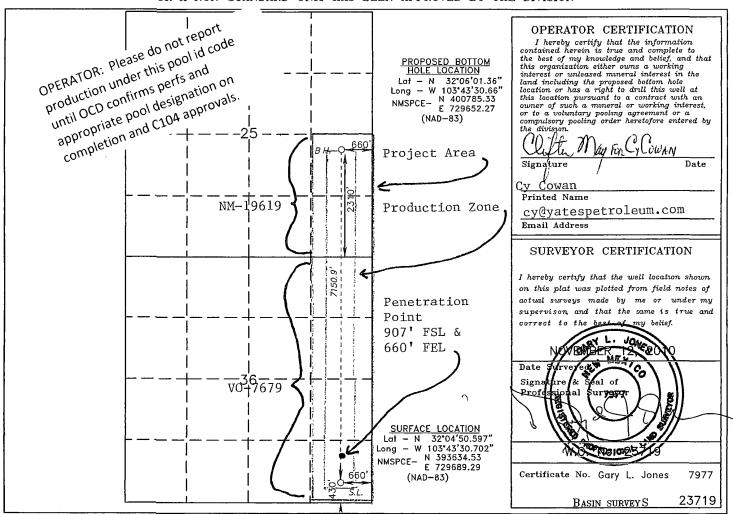
Surface Location

ſ	UL or lot No.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County	ĺ
	Р	36	25 S	31 E		430	SOUTH	660	EAST	EDDY	

Bottom Hole Location If Different From Surface

UL or lot No.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
1	25	25 S	31 E		2310	SOUTH	660	EAST	EDDY
Dedicated Acre	s Joint o	r Infill Co	nsolidation	Code Or	der No.				
240									

NO ALLOWABLE WILL BE ASSIGNED TO THIS COMPLETION UNTIL ALL INTERESTS HAVE BEEN CONSOLIDATED OR A NON-STANDARD UNIT HAS BEEN APPROVED BY THE DIVISION



YATES PETROLEUM CORPORATION

Coltrane "BQR" Federal Com. #1H

430' FSL and 660' FEL, Section 36-25S-31E, Surface Hole Location 2310' FSL and 660' FEL, Section 25-25S-31E, Bottom Hole Location Eddy County, New Mexico

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

FORMATION	DEPTH	FORMATION	VERTICAL DEPTH	MD DEPTH
Rustler	978'	Brushy Canyon	6705' Oil	
Top of Salt	1352'	Bone Spring	8380' Oil	
Castile	2537'	Avalon Shale	8460' Oil	
Base of Salt	4120'	Bone Spring 1/SD/	9050' Oil	
Bell Canyon	4385'	Bone Spring 2 /SD/	10030' Oil	10032'
Cherry Canyon	5340' Oil	Target SBSG	10367' Oil	10642'
		TD (Lateral Hole)	10340 Oil	17314'

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 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)

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	0-1095, 1285	1095'
12 1/4"	9 5/8"	26# 40#	J-55/K55	LT&C	0-4300'	4300'
8 3/4"	5 1/2"	17#	P110	LT&C	0-9890'	9890'
8 1/2"	5 1/2"	17#	P110	Buttress	9890'-17314'	7424'

Sper operator 9-11-12 CRW

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

B. CEMENTING PROGRAM:

Surface Casing: Cement with 620 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: Lead with 1205 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 surface. Cement designed with 100% excess.

Production Casing will be cemented in three stages with stage tools set at approximately 6600', and 9400'.

Production Casing: 1st stage lead with 205 sacks 35:65:6PzC (Wt. 12.50 Yld. 2.00). Tail in with 1625 sacks PecosVILt with D112-Fluid Loss-0.4-%, D151-Caclium 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 is 9400'. Cement designed with 35% excess.

Production Casing: 2nd stage lead with 410 sacks 35:65:6PzC (Wt. 12.50 Yld. 2.00). Tail in with 100 sacks Pecos VILt with D112-Fluid Loss-0.4-%, D151-Caclium 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 is 6600°. Cement designed with 35% excess.

Production Cement: 3rd stage lead with 410 sacks 35:65:6PzC (Wt. 12.50 Yld. 2.00). Tail in with 100 sacks Pecos VILt with D112-Fluid Loss-0.4-%, D151-Caclium 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 is 3800°. Cement designed with 35% excess.

Well will be drilled vertically to 9890'. The well will then be kicked off at approximately 9890' and directionally drilled at 12 degrees per 100' with an 8 3/4" hole to 10642' MD (10368' TVD). Hole size will reduced to an 8 1/2" hole and drilled to 17314' MD (10340' TVD) where 5 1/2' will be run and cemented. Penetration point of producing zone will encountered at 909' FSL and 662' FEL in Section 36-25S 31E. Deepest TVD in the well will be in the lateral at 10368' in the lateral.

6. MUD PROGRAM AND AUXILIARY EQUIPMENT:

INTERVAL	TYPE	WEIGHT	VISCOSITY	FLUID LOSS
0-1095' 1285	Fresh Water	8.60-9.20	32-34	N/C
1095'-4300'	Brine Water	10.00-10.20	28-29	N/C
4300'-10368	Cut Brine	8.80-9.20	28-32	N/C
10368'-17314'	Cut Brine (Lateral)	8.80-9.20	28-32	<10-12

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: See COA

Samples: 30' samples to 4500'. 10' samples 4500' 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; 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:

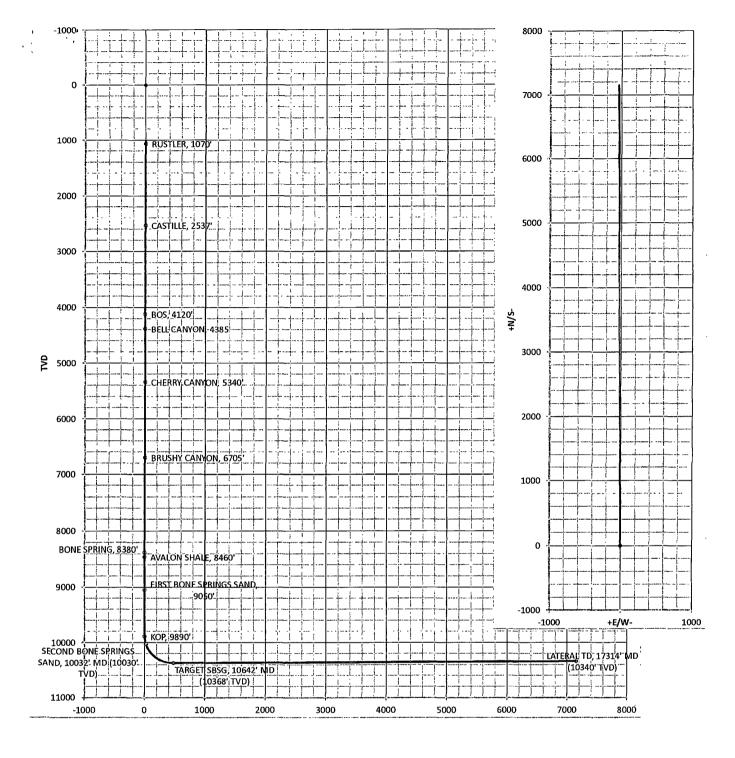
Maximum Anticipated BHP:

0'-1095' 524 PSI Abnormal Pressures Anticipated: None
1095'-4300' 2281 PSI Lost Circulation Zones Anticipated: None.
4300'10368' 4960 PSI H2S Zones Anticipated: None Anticipated
Maximum Bottom Hole Temperature: 170 F

9. 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.

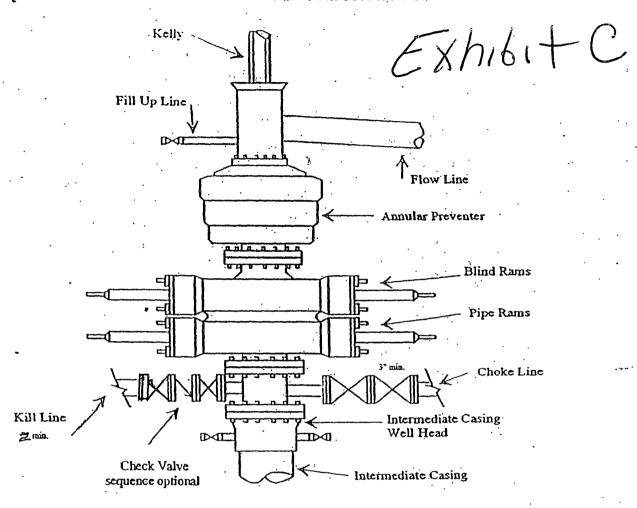
	Co:	Yates Pet	roleum Corp	oration		Units:	Feet, °, 7100ft		VS Az:	359.70	Method: Minimum Curvature
	Drillers:	0				Elevation:			Map System:	NAD83, St.	Plane, Wyoming West
	Well Name:	Coltrane E	3QR Federa	I Com #1H	ı ļ	Northing:			Latitude:		
	Location:	Sec. 36, 2	25S-31E			Easting:			Longitude:		
				Yates	s Petrole	um Corpo	oration: Colt	rane BQR Fe	ed Com #1F		
No.	MD	CL!	Inc.	Azi.	TVD	/ VS		+E/W-		WR	DLS: * Comments
0	1000.00	0.00	0.00	0.00	1000.00	0.00	0.00	0.00			
1	1070.00	70.00	0.00	360.00	1070.00	0.00	0.00	0.00	0.00	0.00	0.00 RUSTLER, 1070'
2	2537.00	1467.00	0.00	360.00	2537.00	0.00	0.00	0.00	0.00	0.00	0.00 CASTILLE, 2537'
3	4120.00	1583.00	0.00	360.00	4120.00	0.00	0.00	0.00	0.00	0.00	0.00 BOS, 4120'
4	4385.00	265.00	0.00	360.00	4385.00	0.00	0.00	0.00	0.00	0.00	0.00 BELL CANYON, 4385
5	5340.00	955.00	0.00	360.00	5340.00	0.00	0.00	0.00	0.00	0.00	0.00 CHERRY CANYON, 5340
6	6705.00	1365.00	0.00	360.00	6705.00	0.01	0.01	0.00	0.00	0.00	0.00 BRUSHY CANYON, 6705
7	8380.00	1675.00	0.00	360.00	8380.00	0.01	0.01	0.00	0.00	0.00	0.00 BONE SPRING, 8380'
8	8460.00	80.00	0.00	360.00	8460.00	0.01	0.01	0.00	0.00	0.00	0.00 AVALON SHALE, 8460'
9	9050.00	590.00	0.00	360.00	9050.00	0.01	0.01	0.00	0.00	0.00	0.00 FIRST BONE SPRINGS (
10	9890.49	840.49	0.00	359.70	9890.49	0.01	0.01	0.00	0.00	0.00	0.00 KOP, 9890'
11	9900.00	9.51	1.14	359.70	9900.00	0.10	0.10	0.00	12.00	0.00	12.00
12	10000.00	100.00	13.14	359.70	9999.04	12.51	12.51	-0.06	12.00	0.00	12.00
13	10032.06	32.06	16.99	359.70	10030.00	20.85	20.85	-0.11	12.00	0.00	12.00 SECOND BONE SPRING
14	· · 10100.00	67.94	25.14	359.70	10093.34	45.24	45.24	-0.23	12.00	0.00	.12.00
15	10200.00	100.00	37.14	359.70	10178.77	96.87	96.87	-0.50	12.00	0.00	12.00
16	10300.00	100.00	49.14	359.70	10251.60	165.12	165.12	-0.85	12.00	0.00	12.00
17	10400.00	100.00	61.14	359.70	10308.65	247.03	247.03	-1.28	12.00	0.00	12.00
18	10500.00	100.00	73.14	359.70	10347.43	339.01	339.01	-1.75	12.00	0.00	12.00
19	10600.00		85.14	359.70	10366.23	437.04	437.03	-2.26	12.00	0.00	12.00
20	10642,48	42.48	90.24	359.70	10367.95	479.47	479.47	-2.48	12.00	0.00	12.00 TARGET SBSG, 10642' N
21	17313.97	6671.49	90.24	359.70	10340.00	7150.90	7150.81	-37.01	0.00	0.00	0.00 LATERAL TD, 17314' MD
					• -				-		



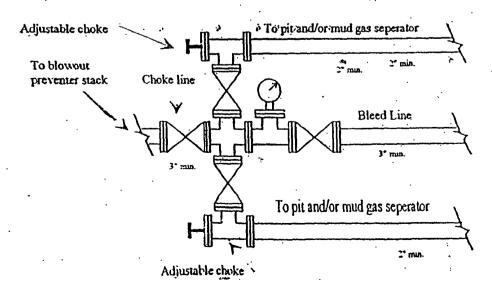


Yates Petroleum Corporation

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

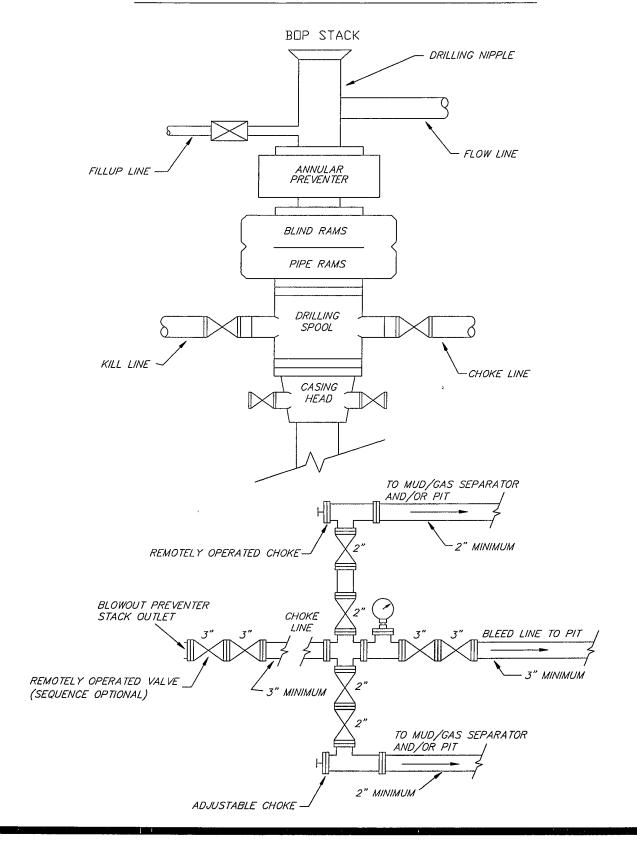


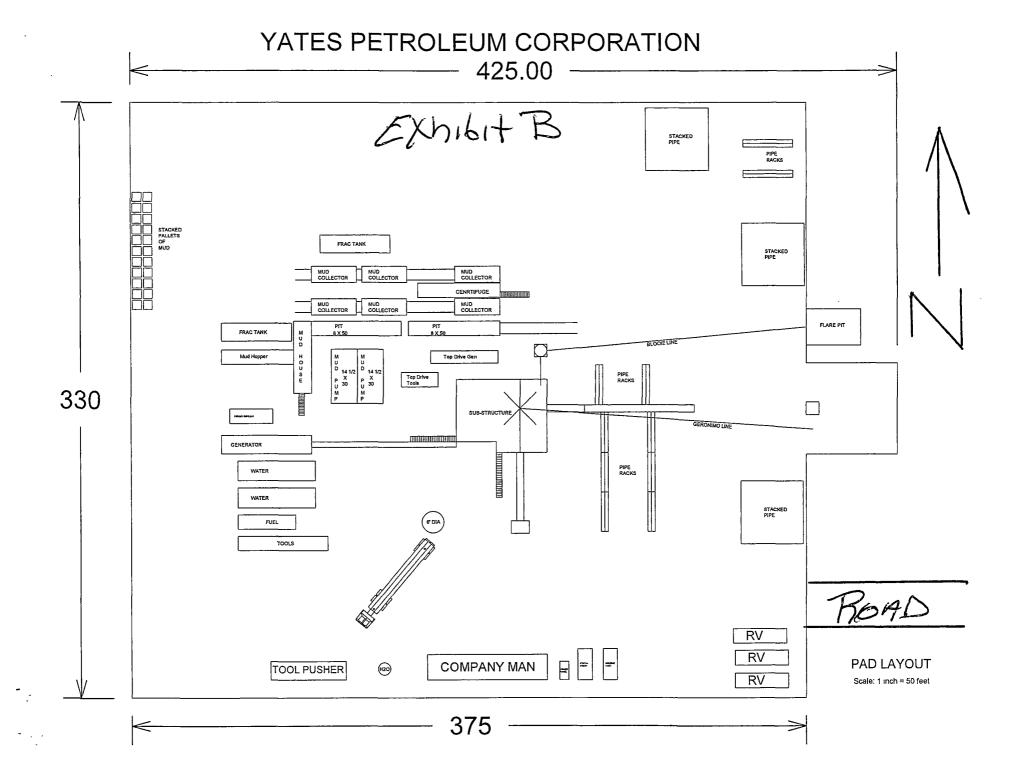
Typical 3,000 psi choke manifold assembly with at least these minimun features



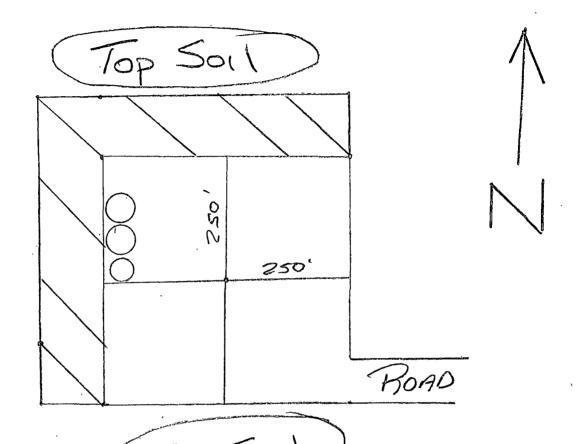
YATES PETROLEUM CORPORATION

$\begin{tabular}{lll} TYPICAL 5,000 & p.s.i. \\ BLOWOUT & PREVENTER & CHOKE & MANIFOLD & SCHEMATIC \\ \end{tabular}$





Reclaimation



Top Soil) Not To Scale

PLEASE Mote FINAL RECLAIMATION MAY COOK DIFFERENT THAN THIS PLAT.

Possible Reclaimed AREA

PECOS DISTRICT CONDITIONS OF APPROVAL

OPERATOR'S NAME: Yates Petroleum Corp
LEASE NO.: NM19619
WELL NAME & NO.: 1H Coltrane BQR Federal Com
SURFACE HOLE FOOTAGE: 430' FSL & 660' FEL
BOTTOM HOLE FOOTAGE 2310' FSL & 660' FEL, Sec.25
LOCATION: Section 36, T.25 S., R.31 E., NMPM
COUNTY: Eddy County, New Mexico

TABLE OF CONTENTS

Standard Conditions of Approval (COA) apply to this APD. If any deviations to these standards exist or special COAs are required, the section with the deviation or requirement will be checked below.

General Provisions
Permit Expiration
Archaeology, Paleontology, and Historical Sites
Noxious Weeds
Special Requirements
Lesser Prairie-Chicken Timing Stipulations
Ground-level Abandoned Well Marker
Communitization Agreement
☐ Construction
Notification
Topsoil
Closed Loop System
Federal Mineral Material Pits
Well Pads
Roads
☐ Road Section Diagram
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Waste Material and Fluids
H ₂ S Requirements-Onshore Order 6
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☐ Production (Post Drilling)
Well Structures & Facilities
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