

YATES PETROLEUM CORPORATION
Cottonwood Federal #5
1980' FSL and 1980' FEL
Section 26-T6S-R25E
Chaves County, New Mexico

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

San Andres	480'	Wolfcamp	4395'
Glorieta	1465'	Cisco	4880'
Yeso	1545'	Strawn	5030'
Tubb	2980'	Granite	5165'
Abo	3615'	TD	5315'

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

Water: 250'-350'
Oil or Gas: All potential formations.

3. Pressure Control Equipment: BOPE will be installed on the 11 3/4" casing and rated for 2000# BOP systems 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 Preventor controls will be installed prior to drilling the surface plug and will remain in use until the well is completed or abandoned. Preventors 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.

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.

4. THE PROPOSED CASING AND CEMENTING PROGRAM:

- A. Casing Program: (All New)

<u>Hole Size</u>	<u>Casing Size</u>	<u>Wt./Ft</u>	<u>Grade</u>	<u>Coupling</u>	<u>Interval</u>	<u>Length</u>
14 3/4"	11 3/4"	42#	H-40	ST&C	0-900'	900'
11"	8 5/8" *	24#	J-55	ST&C	0-1500'	1500'
7 7/8"	5 1/2"	15.5#	J-55	ST&C	0-5315'	5315'

* - 8 5/8' will only be set if lost circulation is encountered.

1. Minimum Casing Design Factors: Collapse 1.125, Burst 1.0, and Tensile Strength 1.8
2. YPC requests a variance to be granted in requiring the casing and BOPE to be tested to 2000 psi to testing the casing and BOPE to 1000 psi. The rig pumps will be used to test the casing and BOPE. Rig pumps used in this area cannot safely test above 1000 psi. We would have to go to the greater expense of hiring an independent service company to do the testing. Also, the bottom hole pressure in this field is proven to be near 1000 psi. A shut in surface pressure would be less than 1000 psi. We feel that a 1100 psi test will demonstrate that the BOPE is functioning properly, and in the unlikely event of a gas influx that the BOPE would be sufficient to control the well.

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B. CEMENTING PROGRAM:

Surface Casing: Cement with 350 sx Lite "C" (YLD 2.0 WT 12.5). Tail in with 200 sx "C" + 2% CaCl₂ (YLD 1.33 WT 15.6).

Intermediate Casing: 250 sx class C + 2% CaCLW (YLD 1.32 WT 14.8)

Production Casing: 500 sx PVL (YLD 1.34 WT 13). TOC 3100'.

5. MUD PROGRAM AND AUXILIARY EQUIPMENT:

<u>Interval</u>	<u>Type</u>	<u>Weight</u>	<u>Viscosity</u>	<u>Fluid Loss</u>
0-900'	FW GEL/Paper/LCM	8.6-9.6	32-36	N/C
900'-3580'	Cut Brine/Brine	9.0-10.2	28	N/C
3580'-5315'	Starch/Salt Gel	9.3-10.2	32-40	<6CC

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:

Samples: 10' samples out from under surface casing.

Logging: Platform Express, CNL/LDT W/NGT to TD to surface casing, w/ GR/CNL TD to surface, DLL/MSFL TD to surface casing, BHC Sonic TD to surface casing; FMI TD - top of Wolfcamp.

Coring: Sidewall

DST's: None

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

Anticipated BHP:

From: 0	TO: 900'	Anticipated Max. BHP: 375 PSI
From: 900'	TO: 5315'	Anticipated Max. BHP: 2700 PSI

Abnormal Pressures Anticipated: None

Lost Circulation Zones Anticipated: None.

H₂S Zones Anticipated: None Anticipated

Maximum Bottom Hole Temperature: 110 F

8. ANTICIPATED STARTING DATE:

Plans are to drill this well as soon as possible after receiving approval. It should take approximately 15 days to drill the well with completion taking another 15 days.