

RECEIVED
JUL 13 11 30 AM '93

SUPPLEMENTAL DRILLING DATA

POGO PRODUCING COMPANY
FEDERAL "31" WELL NO. 5

1. SURFACE FORMATION: Quaternary.

2. ESTIMATED TOPS OF GEOLOGIC MARKERS:

Rustler Anhydrite	800'
Delaware Lime	4600'
Cherry Canyon	5600'
Brushy Canyon	7300'

3. ANTICIPATED POSSIBLE HYDROCARBON BEARING ZONE:

Delaware Oil

4. PROPOSED CASING AND CEMENTING PROGRAM:

<u>CASING SIZE</u>	<u>SETTING DEPTH</u>		<u>WEIGHT</u>	<u>GRADE</u>	<u>JOINT</u>
	<u>FROM</u>	<u>TO</u>			
13 3/8"	0	850'	54.5#	J-55	STC
8 5/8"	0	1000'	32#	J-55	STC
"	1000'	2200'	24#	J-55	STC
"	2200'	4500'	32#	J-55	STC
5 1/2"	0	1000'	17#	J-55	LTC
"	1000'	6000'	15.5#	J-55	LTC
"	6000'	8700'	17#	N-80	LTC

MINIMUM DESIGN FACTORS: Collapse 1.125 Burst 1.1 Tension 1.7

13 3/8" casing is to be set at approximately 850' in 17-1/2" hole. Casing to be cemented with 500 sacks of Light cement tailed in with 200 sacks of Class "C". Cement to circulate.

8 5/8" casing is to be set at approximately 4500' in 11" hole. Casing is to be cemented with 1200 sacks of Light cement tailed in with 200 sacks of Class "C". Cement to circulate.

5 1/2" casing is to be set at 8700' in 7 7/8" hole. Casing is to be cemented with 600 sacks of Class "H" cement tailed in with 700 sx Class "C". Cement to tie back to 8 5/8" casing.

5. PRESSURE CONTROL EQUIPMENT:

Blowout prevention equipment, while drilling the 11" hole, will be either a 3000 psi working pressure double ram type preventer or a 3000 psi working pressure annular type preventer.

6. CIRCULATING MEDIUM:

<u>Surface to 850 feet:</u>	Fresh water spud mud. Viscosity 30 to 36 as required for hole cleaning.
<u>850 feet to 4500 feet:</u>	Brine conditioned as necessary for control of viscosity. Weight 9.8 to 10.0. PH 9 to 10. Viscosity 32 to 36.
<u>4500 feet to T.D.:</u>	Water based drilling fluid conditioned as necessary for control of weight, viscosity, ph and water-loss. Weight 9 to 10. Viscosity 38 - 45. ph 9-10. Filtrate while drilling pay zone 6-15.

7. AUXILIARY EQUIPMENT:

A mudlogging trailer will be used while drilling below Intermediate casing.

8. TESTING, LOGGING, AND CORING PROGRAMS:

Drill Stem tests will be made when well data indicate a test is warranted.

It is planned that electric logs will include GR-CNL- Density logs and GR-DLL logs.

No coring is planned.

9. ABNORMAL PRESSURES, TEMPERATURES, OR HYDROGEN SULFIDE GAS:

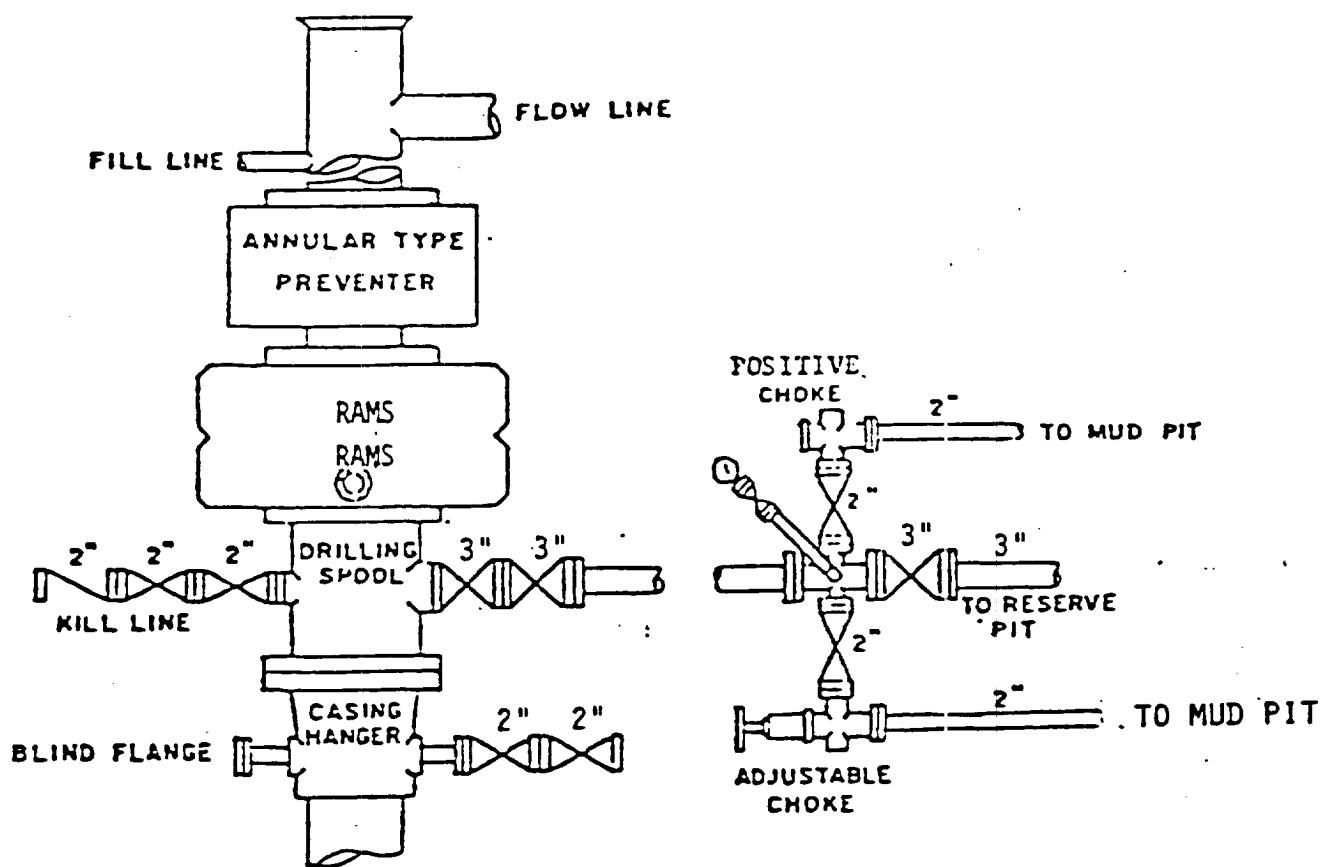
None anticipated.

Expected bottom hole pressure is approximately 3700 psi.

Expected bottom hole temperature is approximately 130 degrees Fahrenheit

10. ANTICIPATED STARTING DATE:

It is planned that operations will commence upon approval of this application, with drilling and completion operations lasting about 30 days.



BOP STACK

3000 PSI WORKING PRESSURE

BOP ARRANGEMENT