#### General Well Data:

Well Name & Number--- Klein #7

Location----- SW/NW/4 Sec.33,T26N,R06W

Surveyed Footages--- 1550'FNL-990'FWL

County, State---- Rio Arriba County, NM

Field----- Blanco Mesaverde

Formation---- Mesaverde Surveyed Elevation--- 6762 'GL

#### Formation Tops:

San Jose	Surf	Chacra	3785 ′
Ojo Alamo	2250 ′	Mesaverde	4537 ′
Kirtland	2436 ′	Menefee	4617 ′
Fruitland	2643 '	Point Lookout	5136 ′
Pictured Cliffs	2934 ′	Intermediate TD	3966 ′
Lewis	2984 '	Total Depth	5675 /

#### **BOP Specifications and Tests:**

# Intermediate TD to Total Depth -

11" 2000 psi minimum Double Gate BOP Stack (Reference Figure #1). After nipple-up prior to drilling out Intermediate Casing, Rams and Casing will be tested to 1000 psi for 30 minutes.

# Surface to Total Depth -

2" nominal, 2000 psi minimum Choke Manifold (Reference Figure #3).

#### Completion Operations -

6" 3000 psi Double Gate BOP Stack (Reference Figure #2). After nipple-up prior to Completion, Pipe Rams, and Production Casing will be tested to 3000 psi for 15 minutes.

#### Wellhead -

10 3/4" X 7" X 4 1/2" X 2 3/8" 2000 psi Minimum Tree Assembly

#### General -

- \* Pipe Rams will be actuated once each day and Blind Rams will be actuated once each trip to test proper functioning.
- \* An Upper Kelly Cock Valve and brill String Safety Valves to fit each drill string will be available on the rig floors at all times.
- \* All of the BOP Tests and Drills will be recorded in the Daily Drilling Reports.
- \* Blind and Pipe Rams will be equipped with extension hand wheels.

# <u>Proposed Program for Casing, Cementing and Drilling Operations:</u> Casing and Cementing Program:

Tn+01(54)	Hole	Csg.				
Interval(ft)	Size	Size	Weight	Grade	Thread	Cond
=========	======	======	=====	=====	=======	====
0 - 173	15"	10 3/4"	32.8#	K-55	8rd LT&C	Existing
0 - 3966	9 5/8"	7"	23.0#	J-55	8rd LT&C	Existing
0 - 1400	6 1/4"	4 1/2"	11.6#	K~55	8rd ST&C	New
1400 - 5675	6 1/4"	4 1/2"	10.5#	J-55	8rd ST&C	New

#### Surface Casing - 10 3/4"

Cemented to Surface with 160 sacks.

# Intermediate Casing - 7"

Cemented with 310 sacks. Top of cement from temperature survey at 2290'. The Ojo Alamo and perforations in the Pictured Cliffs and the Chacra producing intervals will be squeeze cemented during remedial operations prior to commencing drilling operations.

#### Production Casing - 4 1/2"

Cement to Lap Intermediate Casing (150') with 200 sacks of 50/50 Class "B" Pozmix Cement with 2% Gel, 0.6% Fluid Loss Additive, 6 1/4# Gilsonite per sack and 1/4# Cellophane Flakes per sack. WOC a minimum of 18 hours prior to completing. Annulus will be loaded with corrosion inhibited fluid.

Slurry volume: 285 ft^3. Excess slurry: 50%.

Cement Nose Guide Shoe on bottom with Float Collar spaced on top of shoe joint. Bowspring Centralizers spaced every other joint 7 joints off bottom to the top of the Mesaverde or above.

#### General -

- \* If hole conditions permit, an adequate water spacer will be pumped ahead of each cement job to prevent cement/mud contamination or cement hydration.
- \* The pipe will be rotated and/or reciprocated, if hole conditions permit.
- \* The Cementing Contractor will provide the BLM with a chronological log of the pump rate, pump pressure, slurry density and volume for all cement jobs.

#### Special Drilling Operations (Gas/Mist Drilling):

The following equipment will be operational while gas/mist drilling.

- \* An anchored Blooie Line will be utilized to discharge all cuttings and circulating medium to the blow pit a minimum of 100' from the wellhead.
- \* The Blooie Line will be equipped with an Automatic Igniter or Pilot Light.
- \* Compressors will be located a minimum of 100' from the wellhead in the opposite direction from the Blooie Line.
- \* Engines will have Spark Arresters or Water Cooled Exhaust.
- \* Deduster Equipment will be utilized.
- \* The Rotating Head will be properly lubricated and maintained.
- \* A Float Valve will be utilized above the bit.
- \* Mud Circulating Equipment, Water, and Mud Materials will be sufficient to maintain control of the well.

#### Mud Program:

			Visc	
<pre>Interval(ft)</pre>	Туре	Weight(ppg)	(s/qt)	Fluid Loss
=========	=======	==========	<b>=====</b>	=======
3966 <b>-</b> 5 <b>675</b>	Mist	N/A	N/A	N/A

### Logging/Coring/DST Program:

Openhole Wireline Logging 
@ Total Depth

: CNL/DIL/LDT/Temp/GR

Mud Logs/Coring/DST -

Mud Logs - None Coring -None DST -None

# Anticipated Abnormal Temperature, Pressure, or Hazards:

\* No Abnormal Temperatures or Hazards are anticipated.

#### Additional Information:

- \* The Mesaverde formation will be completed.
- \* The W/2 of Sec.33,T26N,R06W is dedicated to this well.
- \* This gas is dedicated.
- \* Tubing: 5660 ' of 2 3/8" 4.7# J-55