

DRILLING PLAN

STATE A COM #1E
NW NW Section 36-29N-11W
San Juan County, New Mexico

1. SURFACE GEOLOGICAL FORMATION: Tertiary Huerfano

2. ESTIMATED TOPS OF GEOLOGICAL MARKERS:

Ojo Alamo	779'	Upper Mancos	4522'
Kirtland	789'	Gallup	5381'
Fruitland	1599'	Lower Mancos	5926'
Pictured Cliffs	1803'	Greenhorn	6141'
Lewis	2006'	Graneros	6204'
Chacra	2813'	Dakota A	6239'
Cliff House	3395'	Dakota B	6322'
Menefee	3525'	Morrison	6527'
Point Lookout	4110'		

3. ESTIMATED TOPS OF POSSIBLE WATER, OIL, GAS OR MINERALS:

Ojo Alamo	779'	Water
Fruitland	1599'	Gas
Pictured Cliffs	1803'	Gas
Cliff House	3395'	Gas
Gallup	5381'	Gas
Dakota	6239'-6322'	Oil & Gas

4. PROPOSED CASING PROGRAM:

<u>Casing</u>	<u>Hole Size</u>	<u>Interval</u>	<u>Section Length</u>	<u>Size OD</u>	<u>Weight Grade and Joint</u>	<u>New Used</u>
Conductor	---	---	---	---	---	---
Surface	12-1/4"	0-400'		8-5/8"	24#,K-55,STC	New
Intermediate	---	---	---	---	---	---
Production	7-7/8"	0-6521'		4-1/2"	10.5#,K-55,STC	New
Liner	---	---	---	---	---	---

Cement Program

Conductor	---
Surface	Circulate cement to surface with 2% CaCl ₂ additive
Intermediate	---
Production	Volume of cement will depend on caliphed hole volume. Neat cement will be placed about 1000' above lower producing formations. Estimated 175 sx 50/50 poz mix with 4% gel and friction reducer followed by 160 sx Class "G" cement. Set DV tool 100' below Ojo Alamo and cement into surface casing.
Liner	---