ENSERCH EXPLORATION, INC. HARPER FEDERAL NO. 1 SECTION 13 - T6S-R29E CHAVES COUNTY, NEW MEXICO

### 1. GEOLOGICAL SURFACE FORMATION

Pleistocene Alluvium

# 2. ESTIMATED TOPS OF IMPORTANT GEOLOGICAL MARKERS

FORMATION	DEPTH	
Pleistocene Alluvium	Surface	
Yates	1190'	
Queen	1800'	
San Andres	2240'	
Glorieta	3430'	
Tubb	4900'	
Abo	5660'	
Wolfcamp	6384 '	
Cisco	6990'	
Mississippian	7590'	
Fusselman	8140'	

## 3. ESTIMATED DEPTHS OF ANTICIPATED WATER, OIL, GAS OR MINERALS

FORMATION	DEPTH	REMARKS
San Andres - P3 Zone	3070'	Water, Oil and Gas
Cisco	6990 <b>'</b>	Water, Oil and Gas
Strawn	7430'	Water, Oil and Gas
Fusselman	8140'	Water, Oil and Gas

# 4. PROPOSED CASING PROGRAM - MINIMUM REQUIREMENTS

SIZE	GRADE	WEIGHT/FOOT	CONDITION	SETTING DEPTH
13-3/8"	Н40	48.0#	New	0 - 350'
9-5/8"	К55	36.0#	New	0 -3450'
4-1/2"	K55	10.5#	New	0 -7500'
4-1/2"	K55	11.6#	New	7500 -8200'

### 5. BLOWOUT PREVENTION EQUIPMENT

Exhibit "A" is a schematic diagram of the minimum blow-out preventer requirements. The BOP's will be hydraulically tested to the full working pressure after nippling up and after any use under pressure. Pipe rams will be operationally checked each 24-hour period and blind rams checked each time pipe is pulled out of the hole.

Accessories to the BOP's include an upper and lower kelly cock, full opening safety valve and choke manifold with a pressure rating equivalent to the BOP stack.