Attached to Form 3160-3 Mack Ener 'orporation Barbary 17 Com #1 660 FNL & 1980 FWL NE/4 NW/4, Sec 17 T16S R28E Eddy County, NM

# **DRILLING PROGRAM**

## 1. Geologic Name of Surface Formation

Quaternary

## 2. Estimated Tops of Important Geologic Markers:

Quaternary	Surface	Wolfcamp	6600'
San Andres	1780'	Atoka	8800'
Glorieta	3250'	Morrow	9075'
Tubb	4430'	Mississippian	9350'
Abo	5290'		

#### 3. Estimated Depths of Anticipated Fresh Water, Oil and Gas:

Water Sand	<b>150'</b>	Fresh Water	Wolfcamp	6600'	Oil/Gas
San Andres	1780'	Oil/Gas	Atoka	8800'	Gas
Paddock	3300'	Oil/Gas	Morrow	9075'	Gas
Tubb	4430'	Oil/Gas			
Abo	5290'	Oil/Gas			

No other formations are expected to give up oil, gas or fresh water in measurable quantities. Setting 13 3/8" casing to 400' and circulating cement back to surface will protect the surface fresh water sand. Salt Section will be protected by setting 9 5/8" casing to 1800' and circulating cement back to surface. Any shallower zones above TD, which contain commercial quantities of oil and/or gas, will have cement circulated across them by cementing 5 1/2" production casing which will be run at TD.

#### 4. Casing Program:

Hole Size	Interval	OD Casing	Weight, Grade, Jt, Cond., Type
17 ½"	0-4 <del>00</del> '500'	13 3/8"	54.5#, K-55, ST&C, New, R-3
12 ¼"	0-1800'	9 5/8"	40#, L-80, ST&C, New, R-3
7 7/8"	0-TD	5 1/2"	32#, L-80, LT&C, New, R-3