Attached to Fo 3160-3
Mack Energy Corporation
MC Federal #1
2275 FNL & 1268 FWL
SW/4 NW/4, Sec 22 T17S R32E
Lea County, NM

DRILLING PROGRAM

1. Geologic Name of Surface Formation

Quaternary

2. Estimated Tops of Important Geologic Markers:

Quaternary	Surface	Tubb	6541	Morrow	12044
Top of Salt	1020'	Abo	7756	Barnett	12749
Base of Salt	2070'	Wolfcamp	9007	Silurian	13608
Yates	2024'	Cisco	10284		
Queen	3071'	Canyon	10860		
San Andres	3751'	Strawn	11385		
Paddock	5231'	Atoka	11803		

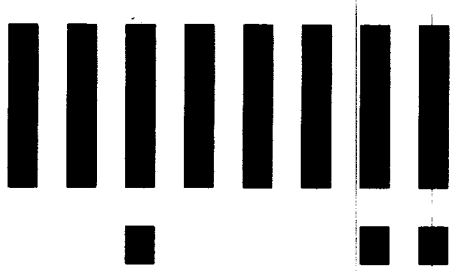
3. Estimated Depths of Anticipated Fresh Water, Oil and Gas:

Water Sand	150'	Fresh Water	Canyon	10860	Oil/Gas
Grayburg	2300'	Oil/Gas	Strawn	11385	Oil/Gas
San Andres	2500'	Oil/Gas	Atoka	11803	Oil/Gas
Paddock	4050'	Oil/Gas	Morrow	12044	Gas
Tubb	6541	Oil/Gas	Silurian	13608	Oil/Gas
Abo	7756	Oil/Gas	Ellenburger	14500	Gas
Wolfcamp	9007	Oil/Gas			
Cisco	10284	Oil/Gas			

No other formations are expected to give up oil, gas or fresh water in measurable quantities. Setting 13 3/8" casing to 650' and circulating cement back to surface will protect the surface fresh water sand. Salt Section will be protect by setting 9 5/8" casing to 4600' 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 7" production casing which will be run at TD.

4. Casing Program:

Hole Size	Interval	OD Casing	Weight, Grade, Jt, Cond., Type
17 ½"	0-650'	13 3/8"	54.5#, K-55, ST&C, New, R-3
12 ¼"	0-4600'	9 5/8"	40#, L-80, ST&C, New, R-3
7 7/8"	0-TD	7"	32#, L-80, LT&C, New, R-3



LTR

Job separation sheet

5. Cement Program:

13 3/8" Surface Casing: Circulate to Surface with Class C w/2% CaCl2.

9 5/8 Intermediate Casing: Circulate to Surface with Class C W/2% CaCl2.

7" Production Casing: Cement Casing with Class C w/6# Salt & 2/10 of 1% CFR-3 per sack. We will run a hole caliper and run sufficient cement to tie back to 9 5/8"Casing.

6. Minimum Specifications for Pressure Control:

The blowout preventer equipment (BOP) shown in Exhibit #9 will consist of a double ram-type (3000 psi or higher WP) preventer. This unit will be hydraulically operated with one annular preventer and two ram type preventers and will be equipped with blind rams on top of 4 1/2" drill pipe rams on bottom. Before drilling below the 13 3/8" surface casing, the BOP will be nippled up on the 13 3/8" surface casing and used continuously until TD to set intermediate casing is reached. Before drilling out intermediate casing, the BOP will be nippled up on the 9 5/8" intermediate casing and used continuously until TD is reached. All BOP's and accessory equipment will be tested to 1000 psi before drilling out of intermediate casing. Before drilling out of intermediate casing, the ram type BOP and accessory equipment will be tested to 3000 psi. Pipe rams will be operationally checked each 24-hour period. Blind rams will be operationally checked on each trip out of the hole. These checks will be noted on the daily tour sheets. Other accessories to the BOP equipment (Exhibit #10) will include a Kelly cock and floor safety valve and choke lines and choke manifold (Exhibit #11) with 3000 psi or higher WP rating.

7. Types and Characteristics of the Proposed Mud System:

The well will be drilled to TD with a combination of brine, cut brine and polymer mud system. The applicable depths and properties of this system are as follows:

DEPTH	TYPE	WEIGHT	VISCOSITY	WATERLOSS
0-650'	Fresh Water	8.5	28	N.C.
650-4600	Brine	10	30	N.C.
4600-TD	Cut Brine	9.1	29	N.C.

Sufficient mud materials to maintain mud properties and meet minimum lost circulation and weight increase requirements will be kept at the well site at all times.

8. Auxiliary Well Control and Monitoring Equipment:

A. Kelly cock will be kept in the drill string at all times.