Marathon Oil Company Federal IBD Gas Com Well No. 2 Additional Information to Comply with NTL-6

1. Geologic Name of Surface Formation

Quaternary

2. Estimated Tops of Important Geologic Markers

San Andres - 410 Base of Leonard - 5540 Wolfcamp - 5720 Cisco - 6850

3. Estimated Depths of Anticipated Water, Oil, or Gas Bearing Formations

Oguallala (water) - 70' Upper Penn (Gas) - 7100'

4. Proposed Casing Program

See attached application

- 5. Blowout Equipment Specifications
  - 5000 psi working pressure with 10" API flange connections.
  - Blind rams, pipe rams, and choke manifold will be tested to 5000 psi.
  - Hydril will be tested to 3500 psi.
  - Will have both manual and remote controls on pipe and blind rams.
  - Pipe rams will be operated daily and blind rams will be operated every time drill pipe is tripped out of the hole.

(See attached schematic)

6. Proposed Mud Program

0 <b>' -</b> 150'	Native mud w/lime and fresh gel
	Mud wt. 8.8 - 9.2 ppg
150' - 2000'	Gel - lime slurry
	Mud wt. 8.4 - 9.0 ppg
2000' - 6800'	Fresh water with native solids
	Mud wt. 8.0 - 9.2 ppg Viscosity: 36 - 38 sec.
6800 <b>' -</b> 7500'	Salt gel with drispac
	Mud wt. 9.0 - 9.2 ppg Viscosity: 36 - 38 sec. Water loss: 6 - 8 cc

## 7. Auxilliary Equipment

A stabbing valve will be kept on the floor to be used when the Kelly is not in the string.

- 8. Testing, Logging, and Coring Programs
  - A. No cores are anticipated.
  - B. The logging program is as follows:

Compensated Neutron/Compensated Density - TD - 150' Gamma Ray/Caliper - TD - Surface Gamma Ray/Casing Collar/Cement Bond Log - TD - Surface

C. Possible Drill Stem Tests:

Upper Penn Formation