

## MARATHON OIL COMPANY

## NORTH INDIAN BASIN UNIT #8

## ADDITIONAL INFORMATION

Comply with Order 1

In conjunction with Form 9-331C, Application to drill subject well, Marathon Oil Company submits the following items of information in accordance with BLM requirements:

1. Geological Name of Surface Formation

Quaternary Alluvium

2. Estimated Tops of Important Geological Markers

Grayburg	173'	L. Bone spring	5869'
San Andres	450'	Wolfcamp	5350'
Glorietta	1900'	U. Penn	7237'
U. Bone Spring	3250'		

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

Grayburg (water)	173'	L. Bone spring (water/oil)	5869'
San Andres (water)	450'	Wolfcamp (oil/gas)	5350'
Glorietta (water)	1900'	U. Penn (gas)	7237'
U. Bone Spring (water/oil)	3250'		

4. Casing and Cementing Program

13 3/8" Surface to 250': Cement to surface with 300 sxs Class "C" with 6% gel, 2% CaCl<sub>2</sub>

8 5/8" Intermediate to 2000': Cement to surface with 500 sxs Lite followed by 200 sxs Class "C" with 2% CaCl<sub>2</sub>

5 1/2" Production to 7900': Cement 1st stage with 250 sxs Lite with 2% NaCl, tail in with 250 sxs Class "H" 50:50 PozMix with 2% gel, 3% salt. Cement 2nd stage with 200 sxs Class "H" with 3% NaCl

5. Pressure Control Equipment (Exhibits A & B)

13 3/8" Surface: 11" 3000 psi working pressure annular preventer tested to 2000 psi

8 5/8" Intermediate: 11" 3000 psi working pressure annular preventer tested to 2000 psi

11" 3000 psi working pressure pipe rams and blind rams tested to 3000 psi

6. Proposed Mud Program

0 - 250	Native; Mud Wt: 8.3 - 9.2, Viscosity 35 - 40 Sec
250 - 2,000	Fresh Water; Mud Wt: 8.4 - 8.6, Viscosity 28 - 36 Sec
2,000 - 6,000	Fresh Water; Mud Wt: 8.4 - 8.8, Viscosity 36 - 40 Sec
6,000 - 7,300	K+ Polymer; Mud Wt: 8.6 - 8.8, Viscosity 36 - 40 Sec
7,300 - 8,000	K+ Polymer; Mud Wt: 8.6 - 8.8, Viscosity 36 - 40 Sec, Filtrate < 10