

POINT 5: MUD PROGRAM

<u>DEPTH</u>	<u>MUD TYPE</u>	<u>WEIGHT</u>	<u>FV</u>	<u>PV</u>	<u>YP</u>	<u>FL</u>	<u>Ph</u>
0' - 600'	FW Spud Mud	8.4 - 9.0	32-38	NC	NC	NC	10.0
600' - 3,875'	BW	10.0 - 10.2	28-30	NC	NC	NC	10.0-10.5
3,875' - 7,750'	FW Mud	8.4 - 8.8	28-32	4-2	2-2	NC	9.5-10.5
7,750' - 11,200'	FW - BW	8.8 - 11.2	32-35	8-6	4-2	NC-20	10.0-10.5

POINT 6: TECHNICAL STAGES OF OPERATION**A) TESTING**

None anticipated.

B) LOGGING

GR-CNL-LDT and GR-Phasor-DIL-SFL from TD to 8-5/8" casing.
GR-CNL through 8-5/8" casing to surface.

C) CONVENTIONAL CORING

None anticipated.

D) CEMENT

<u>INTERVAL</u>	<u>AMOUNT SXS</u>	<u>FT OF FILL</u>	<u>TYPE</u>	<u>GALS/SX</u>	<u>PPG</u>	<u>FT³/SX</u>
SURFACE						
Lead 0-300'	165 (100% excess circ to surface)	300'	Class "C" + 6% Gel + 2% CaCl ₂ + 1/4#/sk Cello-Seal	10.65	12.50	1.96
Tail 300-600'	235 (100% excess circ to surface)	300'	Class "C" + 2% CaCl ₂	6.32	14.80	1.34
INTERMEDIATE						
Lead 0-3375'	675 (100% excess circ to surface)	3375'	50/50 Poz (C) + 10% Gel + 5% Salt + 1/4#/sk Cello-Seal	13.51	11.90	2.37
Tail 3375-3875'	215 (100% excess circ to surface)	500'	Class "C"	6.32	14.80	1.32
PRODUCTION						
STAGE #1						
Lead 7000-11,200'	915 (100% excess tie back to DV Tool)	4200'	Class "H" + 8#/sk CSE + .75% CF-14 + .2% Thrifty Lite + .2% Diacel LWL	7.90	14.03	1.61
STAGE #2						
Lead 3625-6500'	405 (100% excess tie back to int csg)	2875'	50/50 Poz (C) + 5% Salt + 1/4#/sx Cello-Seal + 10% Gel	13.51	11.90	2.37
Tail 6500-7000'	115 (100% excess tie back to int csg)	500'	Class "H"	5.19	15.63	1.17