

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' - 560'	FW Spud Mud	8.5 - 9.2	45-35	NC	NC	NC	NC
560' - 3880'	Brine	9.8 -10.0	29-30	NC	NC	NC	10
3880' - 6200'	FW	8.3 - 8.5	28-30	NC	NC	NC	9-9.5
6200' - 7500'	FW/Starch	8.4 - 8.6	28-30	NC	NC	<100 cc	9-9.5
7500' - TD	FW/Starch/Gel	8.4 - 8.8	36-42	6-10	8-10	<100 cc	9-9.5

**Will increase vis for logging purposes only.*

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

None anticipated.

B) LOGGING

GR-CNL-LDT-AIT from TD to 8-5/8" casing shoe.
GR-CNL from base of 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 - 260' (100% excess circ to surface)	95	260	Interfill C + 1/4 pps Flocele + 2% CaCl ₂	14.35	11.9	2.49
Tail 260-560' (100% excess circ to surface)	240	300	Class C + 2% CaCl ₂	6.32	14.82	1.34
INTERMEDIATE:						
Lead 0 - 3580' (100% excess circ to surface)	675	3580	Interfill C + 2% CaCl ₂	14.35	11.9	2.49
Tail 3580-3880' (100% excess circ to surface)	140	300	Class C	6.32	14.80	1.34
PRODUCTION: A 2-stage cementing procedure with DV tool @ ±5600' will be required.						
2nd Stage						
Lead 3580'-5200' (50% excess Tie back to int csg)	170	1620	Interfill C	14.35	11.9	2.49
Tail 5600-5200 (50% excess to tie back to int csg)	75	400	Class C	6.32	14.8	1.34