

5. CEMENT PROGRAM, (continued)

LEAD: 35/65 POZ CLASS "C" + 1% CaCl + 6% BENTONITE GEL + 4 #/SX
GILSONITE MIXED WITH 9.65 GPS FRESH WATER @ 12.7 PPG
AND YIELD 1.87 CU FT/SX.

TAIL: CLASS "C" + 1% CaCl MIXED WITH 6.34 GPS FRESH WATER @
14.8 PPG AND YIELD 1.34 CU FT/SX

CALCULATED TOP OF CEMENT: CIRCULATED TO SURFACE
CALCULATED CEMENT FILL: 3,000' (2,500' LEAD AND 500' TAIL)

PRODUCTION CASING: 5-1/2" @ 10,950'

LEAD: 400 CU FT / 250 SX
TAIL: 400 CU FT / 300 SX
TOTAL: 800 CU FT / 550 SX (ASSUMING 25% EXCESS)

LEAD: 15/61/11 POZ CLASS "C" CSE + 8 #/SK GILSONITE + .5% FL25 +
.5% FL52 MIXED WITH 7.14 GPS FRESH WATER @ 13.2 PPG AND
YIELD 1.57 CU FT.SX

TAIL: CLASS "C" + .7% FL25 MIXED WITH 6.29 GPS FRESH WATER @
14.8 PPG AND YIELD 1.33 CU FT/SX

CALCULATED TOP OF CEMENT: 6,950'
CALCULATED CEMENT FILL: 4,000' (2,000' LEAD AND 2,000' TAIL)

Additional additives will be used to either/or retard cement, accelerate the cement, control loss circulation and control fluid loss. All cementing will be done in accordance with API cementing practices.

Anticipated cement tops will be reported as to depth, not the expected number of sacks of cement to be used. Torch Operating Company will notify the District Office, with sufficient lead time, in order to have a BLM representative on location while running all casing strings and cementing.