



TABLE 3. CEMENT RECORD WELL HAMMERHEAD-1

JOB DATE	JOB DESCRIPTIONS	HOLE SIZE/DEPTH (m. bdf)	CASING SHOE (m. bdf)	CEMENT TYPE	CEMENT USED (mt)	SLURRY WEIGHT (SG)	MIXWATER	ADDITIVES	REMARKS
18.5	30" casing	36"/202	194	Class G	18.4	1.55	4.3 cum freshwater + 13.0 cum seawater	116 kg/cum bentonite in freshwater (total 2.9% BWOW)	Returns to seabed observed by diving camera. No losses. Design Figures: 1.31m ³ slurry/mt cement 0.94m ³ , mixwater/mt cement
				Class G	22.2	1.89	Seawater	No additives	Design Figures: 0.76m ³ slurry/mt cement 0.44m ³ mixwater/mt cement
26.5	20" casing	26"/565	554	Class A + G	67.0	1.32 (prog. 1.41)	Freshwater	4% Bentonite BWOW 2% CaCl ₂ BWOC 0.05% Defoamer BWOW	Returns to seabed observed by diving camera. No losses. Design Figures: 1.71m ³ slurry/mt cement 1.38m ³ mixwater/mt cement
				Class G	32.0	1.80 (prog. 1.89)	Seawater	No additives	Design Figures: 0.76m ³ slurry/mt cement 0.44m ³ mixwater/mt cement
2.6	Plug for kick-off	12-1/4"/591	20" at 554	Class G	20.0	1.95 (Prog. 2.04)	Freshwater	1% CFR-2 BWOC 2% CaCl ₂ BWOC	Plug was set from 591-530m after two cones of the 26" HO could not be retrieved. No losses. Design Figures: 0.62m ³ slurry/mt cement 0.31m ³ mixwater/mt cement
7.6	9-5/8" casing	12-1/4"/1200	1184	Class G	36.0	1.47 (Prog. 1.47)	Freshwater	3% Bentonite BWOW	No losses. Design Figures: 1.46m ³ slurry/mt cement 1.13m ³ mixwater/mt cement
						1.89 (Prog. 1.89)	Freshwater	No additives	No losses. Design Figures: 0.76m ³ slurry/mt cement 0.44m ³ mixwater/mt cement Difficulties in mixing tail slurry due to contamination of drillwater. Top plug did not bump after over-displacing by 5bbls. Hard cement tagged at 1130m.
20.6	Abandonment Plug 1	8-1/2"/2130	-	Class G	11.0	1.88	Freshwater	0.75% CFR-2 BWOC 0.5% HALAD-22A BWOC	No losses. Plug set 1980-1780m
	Plug 2		-	Class G	13.0	1.88	Freshwater	0.75% CFR-2 BWOC 0.5% HALAD 22A BWOC	No losses. Plug set 1580-1380m
	Plug 3		9-5/8" at 1184	Class G	15.0	1.88	Seawater	No additives	No losses. Plug set 1214-996m.
21.6	Plug 4	9-5/8" casing	-	Class G	5.0	1.88	Seawater	No additives	No losses. Plug set 288-188m. Design Figures: 0.76m ³ slurry/mt cement 0.44m ³ mixwater/mt cement