

Fluids and cement were pumped as follows:

1st. stage

10	barrels of fresh water
500	gallons of mud flush
10	barrels of fresh water
1045	sacks of Halliburton 50/50 Pozmix "A" Premium with 0.6% Halad 22A, 0.3% CFR-2 & 5* KCL/sx. mixed 14.3 */gal., 1.28 cf/sx.
75	bbls. 10*/gal. brine water
215	barrels of mud

Opened DV tool and circulated with rig pump for 4-1/2 hours; 150 sx. cement circulated to surface.

2nd. stage

1000	gallons of Flo-check 21
5	barrels of fresh water
100	sacks of Thix-set at 15.6*/gal.
2050	sacks of Halliburton 50/50 Pozmix "A" Premium with 0.4% Halad 22A, 0.3% CFR-2 & 5* KCL/sx. mixed 14.3 */gal., 1.28 cf/sx.
250	sacks of Thix-set at 15.6*/gal.
80	bbls. 10.5*/gal. mud*
135	bbls. 10*/gal. brine water

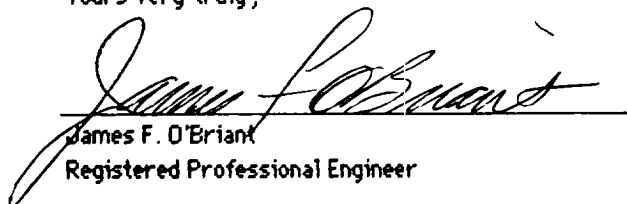
*Mud was used as water trucks could not get to location due to ice and snow.

The plug was landed and DV tool closed at 6:30 AM, 12/15/87; pressure was released and the plug held. Full returns were observed during all cementing and displacement operations. A temperature survey was not undertaken as per your instructions.

Field tickets, tallies and Mr. Baker's notes are attached. Halliburton's invoice represents book price; your invoice should reflect negotiated discounts.

Field operations were supervised by Bill Baker.

Yours very truly,


James F. O'Brian
Registered Professional Engineer

attachments

cc

Bill Baker