

The 12-1/4" hole was logged due to oil stained cuttings and also due to core samples taken from 6513' to 5749'. The logs ran were: ISF/BHC/GR/SP/MSFL/CAL and LDT-NT-GR-Cal.

At TD, the hole was logged with the following logging suite: (1) ISF/BHC/MSFL/GR/SP, (2) EPT/LDL/CNL/NGT/CAL, (3) HDT-GR, (4) RFT-GR.

Two hundred and sixteen joints of 9-5/8", 47 ppf, N-80 buttress casing were run, prior to hanging off and waiting on weather. After the weather subsided, fifty-six more joints were run, bringing the total to 272 joints. Eight additional joints made up the landing string. The shoe was landed at 10,957' with no difficulties using a Cameron WS-I 9-5/8" casing hanger.

The 9-5/8" string was cemented using a full bore Halliburton Multiple Stage Cementer (DV). The first stage slurry consisted of a 10 bbl SAM-5 spacer followed by 1975 sx 'G' w/0.5% Halad-22A BWOC. Density was 15.8 ppg, yield - 1.15 cuft/sx, 5.0 gal/sx freshwater with 9.6 gal/10 bbl CFR-2, and 6.9 gal/10 bbl HR-13L. A total of 235 barrels of mix water were used, and the slurry volume was 2271 cuft. The first stage was displaced with 15 barrels freshwater, and 780 barrels of mud, using the rig pumps. The second stage consisted of 10 bbl SAM-5 spacer, 436 sx 'G' w/ 0.5% Halad 22-A BWOC, density was 15.8 ppg, yield - 1.15 cuft/sx, 5.0 gal/sx freshwater with 9.6 gal/10 bbl CFR-2, and 6.9 gal/10 bbl HR-13L. A total of 52 barrels of mix water were used and the slurry volume was 501 CuFt. The second stage was displaced with 15 bbls freshwater followed by 470 bbls mud using the rig pumps.

After casing and cementing the 12-1/4" hole, the seal assembly would not test successfully. It was discovered that the 9-5/8" casing hanger was 40" high. After pulling the seal assembly, the casing, wellhead, BOP, and riser connection were tested to 4000 psi successfully, and final logging and DST operations commenced. Two CBL logs were run, one with 700 psi applied to 9-5/8" casing annulus, indicating that an overall satisfactory cement job had been performed.

The 9-5/8" casing hanger was high due to picking up hanger when returns were lost during cementing and packing off at the casing hanger was suspected as the cause. The 4000 psi pressure test gave an EMW of 23 ppg at the 13-3/8" shoe which indicated good cement in the 13-3/8" x 9-5/8" annulus.

#### TESTING

In preparation for DST No. 1, the interval 9222'-9267' was perforated in 3 runs using 4" casing guns (BH charges at 4 spf and 90° phasing). The interval 9216'-9233' missfired resulting in one extra run. The test tools and string were run in the hole. After making up the SSTT, the crossover 4-1/2" LTC thread between the fluted hanger and test tree body parted, and the test string was lost downhole.