

RFT RESULTS — PRESSURES
WELL: 30/9-7

| Run no/ Test no | Depth m RKB MD | IHP Bar | FP Bar | FHP Bar | MOBILITY EST. (mD/cp)/Temp° C | |
|--------------------|-------------------|------------|-----------|------------|----------------------------------|-------|
| 2A/1 | 2812.5 | 348.175 | 296.350 | 348.150 | 31.9 | 94.3 |
| 2A/2 | 2814.0 | 348.287 | 296.348 | 348.302 | 53.8 | 94.5 |
| 2A/3 | 2817.5 | 348.755 | 296.604 | 348.760 | 366.9 | 94.8 |
| 2A/4 | 2818.2 | 348.863 | 296.613 | 348.810 | 3983.0 | 94.9 |
| 2A/5 | 2820.3 | 349.107 | 296.778 | 349.074 | 45.6 | 95.2 |
| 2A/6 | 2823.0 | 349.408 | 296.926 | 349.382 | 108.2 | 95.4 |
| 2A/7 | 2828.0 | 350.104 | — | 350.117 | TIGHT | 95.5 |
| 2A/8 | 2828.5 | 350.062 | 297.395 | 350.006 | 20.6 | 95.0 |
| 2A/9 | 2842.5 | 351.82 | 298.730 | 351.778 | 56.8 | 95.8 |
| 2A/10 | 2858.7 | 353.950 | 300.829 | 353.890 | 31.4 | 96.3 |
| 2A/11 | 2883.0 | 357.150 | — | 357.235 | TIGHT | 96.5 |
| 2A/12 | 2883.5 | 356.864 | 302.918 | 356.800 | 437.3 | 98.0 |
| 2A/13 | 2884.7 | 356.906 | 302.980 | 356.936 | 25.3 | 98.9 |
| 2A/14 | 2887.5 | 357.347 | 303.289 | 357.303 | 24.4 | 99.1 |
| 2A/15 | 2890.0 | 357.656 | 303.521 | 357.621 | 458.4 | 99.4 |
| 2A/16 | 2912.0 | 360.252 | — | 360.380 | TIGHT | 99.8 |
| 2A/17 | 2912.5 | 360.446 | 307.076 | 360.480 | 51.0 | 99.9 |
| 2A/18 | 2937.5 | 363.545 | — | 363.579 | TIGHT | |
| 2A/19 | 2945.5 | 364.345 | 312.851 | 364.456 | S/CHR | 100.4 |
| 2A/20 | 2960.0 | 366.398 | 313.593 | 366.324 | 36.3 | 100.7 |
| 2A/21 | 2975.8 | 368.278 | 315.017 | 368.150 | 8.0 | 101.4 |
| 2A/22 | 3004.5 | 371.744 | 317.970 | 371.707 | 17.8 | — |
| 2A/23 | 3029.0 | 374.545 | 320.453 | 374.598 | 15.9 | 103.5 |
| 2A/24 | 3078.0 | 380.860 | 327.475 | 380.750 | 13.5 | 105.2 |
| 2A/25 | 3108.7 | 384.470 | 328.210 | 384.380 | 3242.0 | — |
| 2A/26 | 3138.5 | 388.446 | 333.496 | 388.270 | 4.0 | 108.0 |
| 2A/27 | 3149.0 | 389.620 | 334.403 | 389.490 | 99.0 | 109.0 |
| 2A/28 | 3167.0 | 391.720 | 336.260 | 391.690 | 3.0 | 109.5 |
| 2A/29 | 2818.2 | — | 296.620 | — | SAMPLE | |
| 2B/1 | 2828.6 | — | 297.190 | — | SAMPLE | |

All pressures from HP gauge.

Samples were taken in the Brent Group.

| | | | | |
|-------------------------------|---|--------|--------|--------|
| Run | : | 2A | 2B | 2B |
| Chamber vol.(Gal) | : | 2 3/4 | 2 3/4 | 1 |
| Filling time (min) | : | 7 | 9 | 7 |
| Shut in pressure, Bar(HP) | : | 296.30 | 296.87 | 297.19 |
| Chamber pressure surface, Bar | : | 120.69 | 0 | 0 |
| Gas volume (SCF) | : | — * | 0 | 0 |
| Oil volume (litres) | : | 2.0 | 0 | 0 |
| Oil gravity (API) | : | 36 | — | — |
| Water/filtrate (litres) | : | 3.5 | 9.5 | 3.7 |

* All the gas and a fair amount of the oil was lost because an O-ring broke. The volume given are the remaining part in the 2 3/4 gal chamber.

1 gal chamber, run 2A, shipped ashore for analysis.

6.1 Mud report

36" HOLE SECTION

This section was drilled with sea water and high viscous bentonite pills with returns to sea bed.

At 207 m, a 15 m³ high viscous pill was pumped and the hole was circulated for 30 minutes to clean up prior to a wiper trip to the seabed. The hole was reamed from 192 m to the bottom and a 10 m³ high viscous pill was circulated around before displacing the hole with 1.20 r.d. mud.

The 30" casing was run and cemented without problems.

17 1/2" HOLE SECTION

Sea water and high viscous bentonite pills were used to drill this section of hole with all returns to sea bed.

The cement and 30" casing shoe was drilled out with a 26" bit. Then a 17 1/2" bit was run in and the hole was drilled to section TD at 1072 m with surveys every 50 m and pumping 2-3 m³ high viscous pills on each connection.

At TD, a 10 m³ high viscous pill was circulated around prior to a wiper trip to the 30" casing shoe. When running back to bottom, the hole had to be reamed from 947 m to 1072 m. A second 10 m³ pill was pumped and circulated out of the hole.

Then a 4 stand short trip was made and a third 10 m³ pill was circulated around before displacing the hole to 1.20 r.d. mud.

The 13 3/8" casing was run and cemented at 1057 m with no problems.

12 1/4" HOLE SECTION

The 13 3/8" casing was drilled out with seawater prior to displacing the hole to 1.20 r.d. KCl/Polymer mud. The hole was drilled to section TD at 2770 m with a total of 12 bit runs.

At 1075 m a F.I.T. was performed to an equivalent mudweight of 1.68 r.d. Mudweight was increased to 1.45 r.d. at 1225 m.

Several tight hole sections were reamed while running back in hole after bit trips. To improve hole conditions small additions of Polyacrylamide were made.

KCl concentration was maintained in the 90-100 kg/m³ range and pH in the 8.5-9 range.

Logs were run without incidents and a clean up trip was performed prior to running and cementing the 9 5/8" casing successfully at 2756 m.

8 1/2" HOLE SECTION

The cement and float was drilled to 2755 m with 1.45 r.d. mud from the previous section. The mud weight was then cut back to 1.25 r.d. with unweighted KCl/Polymer mud prior to drill the shoe and 3 m of new formation.

F.I.T. was performed to 1.51 r.d. equivalent mud weight.

The hole was drilled with this system to 2832 m where the hole was displaced to a 1.25 r.d. saturated NaCl-system with suspended sized NaCl particles as bridging and weighting materials. The purpose with the system was to gain experience in mixing, handling and maintaining a clean non-damaging system for coring.

Two cores were cut from 2832-2860 m and from 2860-2888 m with recovery of 92% and 97% respectively. The hole was then drilled to TD at 3565 m with few problems.

For the coring operation, additions of sized salt was made to maintain the size distribution of the suspended salt for bridging and low filtrate characteristics. As drilling progressed, no attempt was made to maintain the concentration and size distribution of the suspended salt. Instead, additions of prehydrated bentonite coated with lignosulfonate and PAC-polymers were used for filtration control.

Eventuall, the fluid was allowed to become undersaturated and the suspended salt was replaced by bentonite and drilled solids. However, no hole problems were experienced and the hole remained in good condition for logging.

The 7" liner was run and cemented from 2953 m to 2907 m after plugging back the hole to 2955 m.

| | | | |
|--------------------------------|-------------------------------|--|-----------|
| ((((ooo) Norsk Hydro | M u d c o n s u m p t i o n | | Date |
| | ----- System : BORE | | 11/5-1989 |
| | Well: 30/9-7 | | |
| | Mud company: M.I. | | 13 |

Actual
used

Drilling of 36 " hole

| | | |
|--------------|----|-------|
| BENTONITE | Kg | 11500 |
| CAUSTIC SODA | l | 150 |

Drilling of 17 1/2" hole

| | | |
|--------------|----|-------|
| BENTONITE | Kg | 28000 |
| CAUSTIC SODA | l | 250 |

Drilling of 12 1/4" hole

| | | |
|----------------|----|--------|
| BARITE | Kg | 256000 |
| BENTONITE | Kg | 2000 |
| BORREWELL C | Kg | 123 |
| KCL | Kg | 13650 |
| MAGCOPOL LV | Kg | 3977 |
| MAGCOPOL REG | Kg | 7164 |
| POLY PLUS | Kg | 1032 |
| AMM-BISULPHIDE | l | 25 |
| CAUSTIC SODA | l | 1095 |
| CONQOR | l | 25 |
| KCL BRINE | l | 413000 |
| OILEX | l | 25 |

Drilling of 8 1/2" hole

| | | |
|---------------|----|--------|
| BARITE | Kg | 14000 |
| BENTONITE | Kg | 8000 |
| BORREWELL C | Kg | 221 |
| BRINEWATE A | Kg | 31718 |
| DESCO | Kg | 799 |
| MAGCOPOL LV | Kg | 2866 |
| MAGCOPOL REG | Kg | 1610 |
| NACL POWDER | Kg | 4750 |
| PH STABILIZER | Kg | 1420 |
| SOD BICARB | Kg | 1345 |
| THIXAL PLUS | Kg | 2645 |
| WATESALT A | Kg | 5000 |
| XC POLYMER | Kg | 573 |
| CAUSTIC SODA | l | 750 |
| DEFOAMER A604 | l | 624 |
| NACL BRINE | l | 293000 |

| ((((ooo) | M u d c o n s u m p t i o n | Date |
|----------------|-----------------------------------|-----------|
| Norsk Hydro | System : BORE | 11/5-1989 |
| | Well: 30/9-7 Mud company: M.I. | |
| | | 13 |

Actual
used

Test no. 1

| | | |
|----------------|----|-------|
| BENTONITE | Kg | 17000 |
| BORREWELL C | Kg | 74 |
| SOD BICARB | Kg | 1447 |
| AMM BISULPHITE | l | 66 |
| CONQOR 404 | l | 106 |
| OILEX | l | 106 |

Plug & Abandon

| | | |
|----------------|----|------|
| BARITE | Kg | 7000 |
| MAGCOPOL REG | Kg | 66 |
| AMM BISULPHITE | l | 150 |
| CONQOR 404 | l | 180 |
| OILEX | l | 120 |