

# F.M.T. RESULTS

| TEST NO. | DEPTH. | PH I<br>psig | PF<br>psig | PHA<br>psig | REMARKS  |
|----------|--------|--------------|------------|-------------|--|
| 1/1      | 2633.5 | 5117         | 4199       | 5116        | EXCELLENT PERM.  |
| 1/2      | 2635.0 | 5120         | 4199       | 5119        | EXCELLENT PERM.  |
| 1/3      | 2637.0 | 5123         | 4200       | 5123        | GOOD PERM.   |
| 1/4      | 2639.0 | 5127         | 4202       | 5126        | GOOD PERM.   |
| 1/5      | 2640.5 | 5129         | 4203       | 5129        | GOOD PERM.   |
| 1/6      | 2643.0 | 5134         | 4205       | 5133        | GOOD PERM.   |
| 1/7      | 2645.0 | 5138         | 4207       | 5137        | GOOD PERM.   |
| 1/8      | 2646.5 | 5140         | 4208       | 5140        | GOOD PERM.   |
| 1/9      | 2650.0 | 5148         | 4272       | 5147        | TIGHT PERM.  |
| 1/10     | 2663.5 | 5174         | 4224       | 5172        | FAIR PERM.   |
| 1/11     | 2666.0 | 5177         | 4227       | 5177        | GOOD PERM.   |
| 1/12     | 2668.5 | 5182         | 4229       | 5181        | GOOD PERM.   |
| 1/13     | 2670.5 | 5186         | 4231       | 5185        | GOOD PERM.   |
| 1/14     | 2672.5 | 5189         | 4232       | 5189        | GOOD PERM.   |
| 1/15     | 2675.5 | 5195         | 4235       | 5194        | GOOD PERM.   |
| 1/16     | 2677.0 | 5197         | 4237       | 5194        | GOOD PERM.   |
| 1/17     | 2679.0 | 5201         | 4238       | 5200        | GOOD PERM.   |
| 1/18     | 2681.0 | 5205         | 4240       | 5204        | GOOD PERM.   |
| 1/19     | 2683.0 | 5209         | 4242       | 5208        | GOOD PERM.   |
| 1/20     | 2685.0 | 5213         | 4244       | 5212        | GOOD PERM.   |
| 1/21     | 2694.0 | 5229         | 0          | 5229        | NO SEAL PERM.  |
| 1/22     | 2695.5 | 5232         | 4475       | 5232        | BAD SEAL PERM.   |
| 1/23     | 2700.5 | 5242         | 0          | 5240        | NO SEAL PERM.  |
| 1/24     | 2708.0 | 5255         | 0          | 5255        | NO SEAL PERM.  |
| 1/25     | 2711.5 | 5261         | 0          | 5261        | NO SEAL PERM.  |
| 1/26     | 2713.0 | 5263         | 4263       | 5263        | GOOD PERM.   |
| 1/27     | 2714.5 | 5266         | 4263       | 5265        | GOOD PERM.   |
| 1/28     | 2716.0 | 5269         | 4265       | 5268        | GOOD PERM.   |
| 1/29     | 2724.5 | 5285         | 1960       | 5284        | TIGHT PERM.  |
| 1/30     | 2726.0 | 5287         | 4274       | 5286        | GOOD PERM.   |
| 1/31     | 2730.0 | 5293         | 4292       | 5293        | FAIR-GOOD PERM.  |
| 1/32     | 2734.0 | 5302         | 4282       | 5301        | GOOD PERM.   |
| 1/33     | 2736.0 | 5305         | 4288       | 5304        | FAIR-GOOD PERM.  |
| 1/34     | 2739.5 | 5311         | 4300       | 5311        | FAIR-GOOD PERM.  |
| 1/35     | 2742.5 | 5317         | 4296       | 5316        | GOOD PERM.   |
| 1/36     | 2744.5 | 5320         | 4298       | 5320        | GOOD PERM.   |
| 1/37     | 2747.0 | 5325         | 4301       | 5324        | GOOD PERM.   |
| 1/38     | 2750.0 | 5331         | 4306       | 5330        | FAIR-GOOD PERM.  |
| 1/39     | 2755.0 | 5339         | 4313       | 5339        | GOOD PERM.   |
| 1/40     | 2760.0 | 5349         | 4319       | 5348        | GOOD PERM.   |
| 1/41     | 2764.0 | 5356         | 4324       | 5355        | GOOD PERM.   |
| 1/42     | 2770.0 | 5368         | 4332       | 5367        | GOOD PERM.   |
| 1/43     | 2775.0 | 5378         | 4339       | 5377        | GOOD PERM.   |
| 1/44     | 2633.5 | 5101         | 4184       | 5101        | <b>Segregated Sample No. 1.</b><br>Opening pressure: 1800 psig (at 12°C).<br>Recovered: 15.0 SCF gas, 8.1 lt oil, 34° API.   |
| 2/1      | 2643.0 | 5116         | 4186       | 5116        | <b>Segregated sample No. 2.</b><br>Opening pressure: 1600 psig (at 11°C).<br>Recovered: 6.7 SCF gas, 1.5 lt oil, 33° API.<br>6.0 lt water/filtrate.                              |
| 3/1      | 2666   | 5176         | 4227       | 5175        | <b>Segregated sample No. 3.</b><br>Opening pressure: 2000 psig (at 11°C).<br>Recovered: 17.5 SCF gas, 5.8 lt oil, 33° API.<br>1.5 lt water/filtrate, Cl <sup>-</sup> 35,000 ppm. |
| 4/1      | 2676.0 | 5209         | 4234       | 5208        | <b>Segregated sample No. 4.</b><br>Opening pressure: 1900 psig (at 15°C).<br>Recovered: 11.5 SCF gas, 4.1 lt oil, 33° API.<br>3.5 lt water/filtrate Cl <sup>-</sup> 35,000 ppm.  |

|   |        |      |      |      |                                  |       |
|---|--------|------|------|------|----------------------------------|-------|
| 5/1   | 2684.0 | 5200 | 4245 | 5219 | <b>Segregated sample No. 5.</b>  |       |
| Opening pressure: 2100 psig (at 15°C).<br>Recovered: 7.1 lt oil, 32° API (at 10°C).<br>Gas meter failed.  |        |      |      |      |                                  |       |
| 5/2   | 2694.0 | 5234 | 0    | 5235 | NO SEAL.                         |       |
| 5/3   | 2693.5 | 5234 | 0    | 5234 | NO SEAL.                         |       |
| 5/4   | 2695.7 | 5239 | 0    | 5239 | TIGHT.                           |       |
| 5/5   | 2695.0 | 5238 | 0    | 5237 | NO SEAL.                         |       |
| 5/6   | 2694.0 | 5235 | 0    | 5235 | NO SEAL.                         |       |
| 5/7   | 2695.5 | 5240 | 0    | 5238 | TIGHT.                           |       |
| 5/8   | 2700.5 | 5249 | 0    | 5247 | TIGHT.                           |       |
| 5/9   | 2711.5 | 5269 | 0    | 5268 | NO SEAL.                         |       |
| 6/1   | 2714   | 5274 | 4270 | 5274 | <b>Segregated sample No. 6.</b>  |       |
| Opening pressure: 700 psig (at 14°C).<br>Recovered: 9.6 lt water/filtrate, Cl <sup>-</sup> 38,000 ppm.  |        |      |      |      |                                  |       |
| 7/1   | 2743.0 | 5335 | 4306 | 5334 | <b>Segregated sample No. 7.</b>  |       |
| Opening pressure: 600 psig (at 12°C).<br>Recovered: 9.6 lt water/filtrate, Cl <sup>-</sup> 35,000 ppm.  |        |      |      |      |                                  |       |
| 8/1   | 2633.5 | 5120 | 4196 | 5120 | <b>Segregated sample No. 8.</b>  |       |
| Opening pressure: 1800 psig (at 11°C).<br>Recovered: 12.6 SCF gas, 2.9 lt oil, 33° API.<br>5.0 lt water/filtrate, Cl <sup>-</sup> 35,000 ppm.   |        |      |      |      |                                  |       |
| 9/1   | 2666.0 | 5187 | 4229 | 5187 | <b>Segregated sample No. 9.</b>  |       |
| Opening pressure: 1300 psig (at 11° C).<br>Recovered: 16.7 SCF gas, 6.0 lt oil, 34° API.<br><1.0 lt water/filtrate, Cl <sup>-</sup> 34,000 ppm. |        |      |      |      |                                  |       |
| 10/1  | 2684.0 | 5216 | 4236 | 5215 | <b>Segregated sample No. 10.</b> |       |
| Opening pressure: 1200 psig (at 12° C).<br>Recovered: 18.5 SCF gas, 5.2 lt oil, 34° API.<br>Trace of water/filtrate.                            |        |      |      |      |                                  |       |
| 11/1  | 2713.0 | 5269 | 4262 | 5269 | <b>Segregated sample No. 11.</b> |       |
| Opening pressure: 1200 psig (at 13° C).<br>Recovered: 0.6 SCF gas.<br>9.3 lt water/filtrate, Cl <sup>-</sup> 36,000 ppm.                        |        |      |      |      |                                  |       |
| 12/1  | 3188.5 | 5742 | 5321 | 5742 | GOOD                             | PERM. |
| 12/2  | 3170.5 | 5694 | 0    | 5694 | NO SEAL.                         |       |
| 12/3  | 3171.0 | 5690 | 0    | 5690 | NO SEAL.                         |       |
| 12/4  | 3166.5 | 5675 | 5290 | 5675 | GOOD                             | PERM. |
| 12/5  | 3165.0 | 5683 | 5288 | 5684 | GOOD                             | PERM. |
| 12/6  | 3159.0 | 5674 | 5282 | 5674 | FAIR                             | PERM. |
| 12/7  | 3154.5 | 5666 | 5277 | 5666 | GOOD                             | PERM. |
| 12/8  | 3014.0 | 5446 | 5044 | 5446 | GOOD                             | PERM. |
| 12/9  | 3011.0 | 5427 | 5037 | 5426 | FAIR                             | PERM. |
| 12/10   | 2989.0 | 5393 | 5006 | 5393 | GOOD                             | PERM. |
| 12/11   | 2985.5 | 5380 | 0    | 5380 | NO SEAL.                         |       |
| 12/12   | 2985.0 | 5376 | 5001 | 5375 | GOOD                             | PERM. |
| 12013   | 2977.5 | 5363 | 4991 | 5364 | GOOD                             | PERM. |

PHI = Initial hydrostatic pressure.

PF = Formation pressure.

PHA = Final hydrostatic pressure.

Run 1: Max. recorded temperature 202° F. Correctio = - 17 psi.

Run 2: Max. recorded temperature 215° F. Correction = - 6 psi.

# DST RESULTS

## DST No. 1

**Perforated Interval** : 2729 - 2736 m  
**Flow rate** : 4844 B/D water  
**Rw** : 0.193 at 78° F  
**Choke** : 80/64"  
**BHT** : 230° F

## DST No. 2

**Perforated Interval** : 2711 - 2716 m  
**Oil rate** : 6467.5 STBO/D.  
**Gas rate** : 4.1 MM SCF/D.  
**Oil gravity** : 34.9° API  
**Gas gravity** : 0.72  
**GOR** : 634.2 SCF/STB.  
**CO<sub>2</sub>** : 0.8%  
**Choke** : 56/64"  
**BHT** : 230° F.

## DST No. 3

**Perforated Interval** : 2681 - 2684 m  
**Oil rate** : 3358 STBO/D  
**Gas rate** : 2.3 MM SCF/D  
**Oil gravity** : 33.9° API  
**Gas gravity** : 0.702  
**GOR** : 684.3 SCF/STB  
**CO<sub>2</sub>** : 0.2%  
**Choke** : 32/64"

## DST No. 4

**Perforated Interval** : 2632 - 2639 m  
**Oil rate** : 6400 STBO/D.  
**Gas rate** : 4.00 MM SCF/D.  
**Oil gravity** : 34.2° API  
**Gas gravity** : 0.700  
**GOR** : 624 SCF/STB  
**CO<sub>2</sub>** : 1.0%  
**Choke** : 48/64"

6.3 Mud report 30/6-7

36" hole section for 30" casing set at 227 m.

The 36" section was drilled from 136 m to 228 m using seawater as the drilling fluid. High viscosity pills (35 ppb) was pumped on each connection. At TD, this hole was displaced with high viscosity mud prior to running casing. The casing was run and cemented without problems.

26" hole section for 20" casing set at 952 m.

The hole was drilled according to the mud program.

Problems to keep the mud weight down to 1,10 SG were reported.

During drilling the sand section from 775 m to 820 m 40 m<sup>3</sup> of mud was lost to the formation. The high mud cost for this section is caused by the large quantity of LCM materials required to control the loss of mud in the sand section.

17 1/2" hole section for 13 3/8" casing set at 2285 m.

The section of hole was drilled with a KCl/polymer mud system. A total of 800 bbls of KCl brine (100 ppb) was brought on board on May 29 for preparation of the KCl/polymer. Initially the pH was raised above 10,5 in order to keep the effect of magnesium to a minimum (Mg<sup>++</sup> at the time was + 200 ppm). Once drilling began, foaming of the mud, caused some variance in pump pressure but was remedied by addition of Surflo - w 300. Foaming was caused by severe agitation and hydrocyclones in combination. Drilling proceeded at a rate of 40 m/hr. On the first trip out of hole at 1492 m, tight hole was experienced and the mud weight was raised to 1,35 SG. Subsequent trips also encountered tight spots to shoe. Calcium and sodium content started to increase around 2000 m. Small additions of walnut were added to reduce bit balling, and the mud cleaner was run as a

desilter to reduce solids build up. At this point the mud weight was raised to 1,45 along with a slight increase in yield point and viscosity. The latter was done due to some fill being experienced after trips. The pH and  $\text{Ca}^{++}$  increases was controlled with Sodium bicarbonate. Original casing depth of 2447 m was reached on June 7. The mud was circulated and conditioned to reduce viscosity, yield point and gels prior to logging and running 13 3/8" casing. Logging tools would not pass 2005 m. The mud was circulated and reconditioned, with the KCl content raised from 30 ppb to 36 ppb and the viscosity, YP and gels reduced.

The hole was logged, 13 3/8" casing was run, but at 2285 m the casing became differentially stuck. An 80 bbl diesel and EZ spot pill was pumped in an attempt to free the casing. It was decided to cement the casing in place. Six days were spent in cutting the casing and handling the hanger. A considerable volume of new mud was required for this operation. On June 18 the casing hanger was set and on June 19 drilling on cement began. No major problems were experienced on trips and fill encountered when running back to bottom. The fluid remained very stable except for the gels which tended to be very progressive, due to constantly raising viscosity and yield point. This did not produce any problem due to the fluid being thixotropic.

12 1/4" hole section for 9 5/8" casing set at 2900 m.

The drilling fluid used in this section was specially prepared for the coring interval to get minimal effect on the physical and chemical properties of the cores.

The drilling fluid in this section should not contain surfactants as Drispac and thinners, and Dextrid (a polysaccharide) was used as fluid loss agent and XC-polymer for viscosity.

Twelve cores were cut from 2648 m to 2812 m with no problems noticed.

When running in the hole after coring, a tight spot was noticed at 2761 m. The hole was reamed from 2744 m to 2812 m. The hole was then drilled to 2915 m without any problems.

The logging of the 12 1/4" hole was done without any problems. Before the 9 5/8" casing was run the hole was properly cleaned up and the casing was run.

No noticeable hole problems are mentioned. The only lost time due to hole problems that could be related to the mud is while reaming from 2744 m to 2812 m after 9 days coring.

8 3/8" hole section to 3236 m.

Before the 9 5/8" casing was set the mud was converted to a dispersed system by adding lignosulfonate. The casing shoe was drilled out. The mud weight was decreased to 1,26. The hole was drilled to 3009 m. POOH and found undergaged bit. The hole was then reamed and drilled to TD without problems.

During the drilling of this section the fluid loss was maintained with Dextrid and prehydrated gel.

# NORSK PETROLEUM SERVICES A/S.

OPERATING AREA : 30/6-7 SILVER BLOCK

## MATERIALS USED PER CASING INTERVAL

17 1/2" hole 952-2447m 13 3/8 csg set at 2285m

Section III

| <u>MATERIAL</u> | <u>QUANTITY</u> | <u>COST</u>     |
|-----------------|-----------------|-----------------|
| Alcomer         | 44              | 6140,20         |
| Bicarbonate     | 19              | 420,66          |
| Baroid          | 504.5           | 60287,75        |
| Barazan         | 233             | 68735,00        |
| Caustic Soda    | 166             | 2282,50         |
| Dextrid         | 748             | 45306,36        |
| EZ Spot         | 4               | 2872,20         |
| Potash (kcl)    | 1763            | 30147,30        |
| Surflo          | 6               | 3909,66         |
| Torq Trim       | 5               | 3590,25         |
| Soda Ash        | 53              | 1100,81         |
| Wallnut         | 12              | 183,36          |
| KLC Brine       | 1340            | <u>26518,60</u> |
| Total cost      |                 | \$ 251494.65    |
| Cost/meter      |                 | \$ 168,22       |

# NORSK PETROLEUM SERVICES A/S.

OPERATING AREA : 30/6-7 SILVER BLOCK

## MATERIALS USED PER CASING INTERVAL

12 1/4" hole 2285-2915m 9 5/8 " csg set at 2900m

Section IV

| <u>MATERIAL</u> | <u>QUANTITY</u> | <u>COST</u>   |
|-----------------|-----------------|---------------|
| Alcomer         | 20              | 2791,00       |
| Bicarbonat      | 22              | 487,08        |
| Boaoid          | 147             | 17566,50      |
| Barazan         | 83              | 24485,00      |
| Caustic Soda    | 40              | 550,00        |
| Dextrid         | 495             | 29982,15      |
| Lime            | 6               | 30,00         |
| Potash (KCL)    | 301             | 5147,10       |
| Q-Broxin        | 12              | 205,56        |
| Soda Ash        | 35              | 726,95        |
| Desco           | 4               | 148,72        |
| CMC (lovis)     | 6               | <u>263,70</u> |
| Total cost      |                 | \$ 82383,76   |
| Cost/meter      |                 | \$ 130,76     |



# NORSK PETROLEUM SERVICES A/S.

OPERATING AREA : 30/6-7 SILVER BLOCK

## MATERIALS USED PER CASING INTERVAL

8 3/8" hole 2900-3236m 336m drilled

Section V

| <u>MATERIAL</u> | <u>QUANTITY</u> | <u>COST</u>     |
|-----------------|-----------------|-----------------|
| Bicarbonate     | 16              | 354,24          |
| Barite          | 95              | 11,352,50       |
| Barazan         | 3               | 885,00          |
| Bentonite       | 28              | 7,700,00        |
| CC-16           | 70              | 1,123,50        |
| Caustic Soda    | 10              | 137,50          |
| CMC Lovis       | 15              | 659,25          |
| Desco           | 29              | 1,078,22        |
| Dextrid         | 247             | 14,960,79       |
| Q-Broxin        | 100             | 1,713,00        |
| Soda Ash        | 5               | 103,85          |
| Surflo W-300    | 6               | <u>3,909,66</u> |
| Total cost      |                 | \$ 43,977,51    |
| Cost/meter      |                 | \$ 130,88       |

# NORSK PETROLEUM SERVICES A/S.

OPERATING AREA :

## TOTAL MATERIAL CONSUMPTION

| MATERIAL     | PACKAGING | QUANTITY             |
|--------------|-----------|----------------------|
| Alcomer      | 25 kg     | 64=8931.20           |
| Bicarbonante | 50 kg     | 57=1261.98           |
| Baroid       | M/T       | 754.5=90162.75       |
| Barazan      | 50 lb     | 319=95105.00         |
| Bentonite    | M/T       | 103=28325.00         |
| Caustic Soda | 25 kg     | 270=3712.50          |
| Dextrid      | 50 lb     | 1490=90249.30        |
| EZ Spot      | 55 gal    | 4=2872.00            |
| Potash (kcl) | 50 kg     | 2064=35294.40        |
| Surflo W-300 | 55 gal    | 12=7819.32           |
| Desco        | 25 lb     | 33=1226.94           |
| Torq Trim    | 55 gal    | 5=3590.25            |
| Soda Ash     | 50 kg     | 93=1931.61           |
| Q-Broxin     | 25 kg     | 112=1918.56          |
| CMC (Lovis)  | 25 kg     | 21=922.95            |
| Wallnut      | 25 kg     | 67=1023.76           |
| Mica         | 25 kg     | 94=1645.94           |
| Lime         | 40 kg     | 14=70.00             |
| CC-16        | 50 lb     | 70=1123.50           |
| Brine        | BBL       | 1340=26518.60        |
| Total cost   |           | <u>\$ 402.705.56</u> |

|                        |                 |
|------------------------|-----------------|
| 30" csg Section I      | 7287.50         |
| 20" csg Section II     | 17562.34        |
| 13 3/8 csg Section III | 251494.65       |
| 9 5/8 csg Section IV   | 82383.76        |
| 8 3/8 open hole        | <u>43977.51</u> |
|                        | 402705.56       |

**MUD PROPERTY RECAP**

| DATE      | DEPTH                            | DENSITY             | VISC.<br>OSITY | FILTRATE | HT/HP filt |      | pH | RHEOLOGY(MPA) |    |      |     | FILTRATE ANALYSIS |       |       |     |      | RETORT ANALYSIS |       |                 | CEC  | OTHER |     |      |      |        |        |    |  |          |     |   |   |   |              |       |  |      |  |
|-----------|----------------------------------|---------------------|----------------|----------|------------|------|----|---------------|----|------|-----|-------------------|-------|-------|-----|------|-----------------|-------|-----------------|------|-------|-----|------|------|--------|--------|----|--|----------|-----|---|---|---|--------------|-------|--|------|--|
|           |                                  |                     |                |          | °500psi    | °    |    | PV            | YP | 10"  | 10' | Cl                | Ca    | Pl    | Mf  | Pm   | Oil             | Water | Corr.<br>Solids |      | PPB   | KCL | SAND | Mg++ |        |        |    |  |          |     |   |   |   |              |       |  |      |  |
|           |                                  |                     |                |          |            |      |    |               |    |      |     |                   |       |       |     |      |                 |       |                 |      |       |     |      |      | 1"/32" | 1"/32" | cp | lbs/100ft <sup>2</sup> -gms/100cm <sup>2</sup> | mg/litre | ppm | % | % | % | Bent.<br>Eq. | (PPB) |  | ppm  |  |
| 1982      | feet<br>metres                   | PPG/<br>Spci/<br>SG | secs           | ccs      | Cake       |      |    |               |    |      |     |                   |       |       |     |      |                 |       |                 |      |       |     |      |      |        |        |    |  |          |     |   |   |   |              |       |  |      |  |
| May<br>20 | High vis. mud prepared for spul. |                     |                |          |            |      |    |               |    |      |     |                   |       |       |     |      |                 |       |                 |      |       |     |      |      |        |        |    |  |          |     |   |   |   |              |       |  |      |  |
| 21        |                                  |                     | +400           |          |            |      |    |               |    |      |     |                   |       |       |     |      |                 |       |                 |      |       |     |      |      |        |        |    |  |          |     |   |   |   |              |       |  |      |  |
| 22        | 227                              |                     | +400           |          |            |      |    |               |    |      |     |                   |       |       |     |      |                 |       |                 |      |       |     |      |      |        |        |    |  |          |     |   |   |   |              |       |  |      |  |
| 23        |                                  | 1.06                | 40             |          |            |      |    | 8.4           |    |      |     |                   |       | 3.000 | 400 |      |                 |       |                 |      |       |     |      |      |        |        |    |  |          |     |   |   |   |              |       |  |      |  |
| 24        |                                  | 1.07                | 40             |          |            |      |    | 9.6           |    |      |     |                   |       | 6000  | 600 |      |                 |       |                 |      |       |     |      |      |        |        |    |  |          |     |   |   |   |              |       |  |      |  |
| 25        | 491                              | 1.08                | 46             | 62       | 8          |      |    | 8.9           | 8  | 15   | 11  | 11.5              | 8000  | 400   | .1  | .25  |                 |       | 95              | 5    | 14    |     |      |      |        |        |    |  |          |     |   |   |   |              |       |  |      |  |
| 26        | 938                              | 1.08                | 39             | 33       | 6          |      |    | 8.9           | 7  | 14   | 12  | 12                | 6500  | 240   | .02 | .12  |                 |       | 95              | 5    | 15    |     |      |      |        |        |    |  |          |     |   |   |   |              |       |  |      |  |
| 27        | No mud                           |                     |                |          |            |      |    |               |    |      |     |                   |       |       |     |      |                 |       |                 |      |       |     |      |      |        |        |    |  |          |     |   |   |   |              |       |  |      |  |
| 28        | No mud                           |                     |                |          |            |      |    |               |    |      |     |                   |       |       |     |      |                 |       |                 |      |       |     |      |      |        |        |    |  |          |     |   |   |   |              |       |  |      |  |
| 29        | 965                              | 1.07                | 31             | 15       |            | NC   |    | 10.8          | 2  | 4    | .5  | .5                | 48000 | 48    | .8  | 1.1  | -               | 0     | 97              | 3    | 0     | 35  |      | 0    |        |        |    |  |          |     |   |   |   |              |       |  | 0    |  |
| 30        | 965                              | 1.07                | 38             | 26.5     |            | NC   |    | 10.4          | 2  | 4    | .5  | .5                | 48000 | 80    | .38 | .88  | .38             | 0     | 98              | 2    | 0     | 32  |      | 0    |        |        |    |  |          |     |   |   |   |              |       |  | 85-4 |  |
| 31        | 965                              | 1.2                 | 38             | 8        | 1          | 16   | 2  | 10.4          | 8  | 7.5  | 1   | 1                 | 39000 | 20    | .42 | 1.1  | .3              | 0     | 95              | 5    | .4    | NR  |      | 2.5  |        |        |    |  |          |     |   |   |   |              |       |  | 24   |  |
| June<br>1 | 1490                             | 1.22                | 42             | 7        | 1          | 14   | 1  | 9.07          | 12 | 6    | 1.5 | 4                 | 51000 | 92    | .14 | .4   | .36             | 0     | 90              | 10   | 2     | 37  |      | 1    |        |        |    |  |          |     |   |   |   |              |       |  | 40.5 |  |
| 2         | 1860                             | 1.35                | 60             | 6        | 1          | 11.4 | 2  | 9.2           | 16 | 11.4 | 3   | 10                | 51000 | 48    | .02 | .25  | .14             | 0     | 82              | 18   | 3     | 35  |      | 1    |        |        |    |  |          |     |   |   |   |              |       |  | 24   |  |
| 3         |                                  | 1.35                | 59             | 6        | 1          | 12   | 2  | 9.76          | 13 | 12.5 | 2   | 17                | -     | 85    | .1  | .4   | .3              | 0     | 83              | 17   | 3.4   | 34  |      | 1.5  |        |        |    |  |          |     |   |   |   |              |       |  | 0    |  |
| 4         | 2200                             | 1.43                | 69             | 6        | 2          | 11.4 | 4  | 9.8           | 23 | 12   | 4.5 | 16                | 76000 | 120   | .06 | .19  | .25             | 0     | 81              | 19   | 4     | 38  |      | .5   |        |        |    |  |          |     |   |   |   |              |       |  | 0    |  |
| 5         | 2287                             | 1.45                | 72             | 5.4      | 1          | 11   | 3  | 9             | 20 | 15   | 7.5 | 25                | 65500 | 116   | .1  | .23  | .26             | 2.5   | 80              | 17.5 | 6     | 40  |      | 1    |        |        |    |  |          |     |   |   |   |              |       |  | 36   |  |
| 6         | 2400                             | 1.45                | 67             | 6.5      | 2          | 12   | 4  | 9.75          | 29 | 15.5 | 10  | 25                | 65000 | 80    | .34 | 1.34 | .15             | 1.25  | 81.25           | 17.5 | 20    | 47  |      | 1    |        |        |    |  |          |     |   |   |   |              |       |  | 47   |  |
| 7         | 2447                             | 1.45                | 57             | 7.3      | 2          | 13.5 | 4  | 9.5           | 15 | 13   | 8   | 15.5              | 58000 | 75    | .3  | .8   | .7              | 0     | 83              | 17   | 10    | 37  |      | .5   |        |        |    |  |          |     |   |   |   |              |       |  | 75   |  |
| 8         | 2447                             | 1.45                | 60             | 6.6      | 2          | 13   | 4  | 9.5           | 18 | 13   | 7   | 15                | 58000 | 20    | .2  | .7   | .7              | 0     | 83              | 17   | 10    | 30  |      | .5   |        |        |    |  |          |     |   |   |   |              |       |  | 20   |  |

WELL NAME: 30/6-7 SILVER BLOCK

MUD PROPERTY RECAP

| DATE | DEPTH  | DENSITY | VISC-O-SITY | FILTRATE    |      | HT/HP filt         |                | pH    | RHEOLOGY (MPA) |     |  |          | FILTRATE ANALYSIS |     |      |      |           | RETORT ANALYSIS |     |       | CEC  | OTHER        |     |     |      |      |  |  |
|------|--------|---------|-------------|-------------|------|--------------------|----------------|-------|----------------|-----|--|----------|-------------------|-----|------|------|-----------|-----------------|-----|-------|------|--------------|-----|-----|------|------|--|--|
|      |        |         |             | PPG/Spcf/SG | secs | Coke<br>1" / 32/mm | °500psi<br>ccs |       | 1" / 32/mm     | PV  | YP   | 10'      | 10'               | Cl  | Ca   | Pf   | Mf        | Pm              | Oil | Water |      | Corr. Solids | PPB | KCL | SAND | Mg++ |  |  |
|      |        |         |             |             |      |                    |                |       |                | cp  | lbs/100ft <sup>3</sup> -gms/100cm <sup>3</sup> | mg/litre | ppm               | %   | %    | %    | Bent. Eq. | (ppb)           |     | ppm   |      |              |     |     |      |      |  |  |
| 1982 | feet   |         |             |             |      |                    |                |       |                |     |  |          |                   |     |      |      |           |                 |     |       |      |              |     |     |      |      |  |  |
|      | metres |         |             |             |      |                    |                |       |                |     |  |          |                   |     |      |      |           |                 |     |       |      |              |     |     |      |      |  |  |
| 9    | 2447   | 1.47    | 60          | 6.6         | 2    | 13                 | 4              | 9.5   | 15             | 13  | 8  | 15.5     | 58000             | 20  | .2   | .7   | .6        | 0               | 83  | 17    | 10   | 36           | .5  | 20  |      |      |  |  |
| 10   | 2447   | 1.45    | 60          | 6.5         | 2    | 13                 | 4              | 9.5   | 14             | 12  | 8  | 15       | 55000             | 60  | .2   | .6   | .72       | 0               | 83  | 17    | 10   | 36.5         | .5  | 20  |      |      |  |  |
| 11   | 2447   | 1.45    | 60          | 6.5         | 2    | 13                 | 4              | 9.5   | 14             | 12  | 8  | 15       | 55000             | 60  | .2   | .6   | .7        | 0               | 83  | 17    | 10   | 36.5         | .5  | 20  |      |      |  |  |
| 12   | 2447   | 1.45    | 57          | 6.5         | 2    | 13                 | 4              | 9.4   | 14             | 12  | 8  | 15       | 55000             | 60  | .15  | .4   | .6        | 1               | 82  | 17    | 10   | 36.5         | .5  | 20  |      |      |  |  |
| 13   | 2285   | 1.45    | 60          | 6.5         | 2    | 13                 | 4              | 9.4   | 14             | 12  | 8  | 15       | 55000             | 60  | .15  | .4   | .6        | 1               | 82  | 17    | 10   | 36.5         | .5  | 20  |      |      |  |  |
| 14   | 2285   | 1.40    | 52          | 6.7         | 2    | 13                 | 4              | 9.2   | 10             | 10  | 3.5  | 11.5     | 53000             | 75  | .2   | .4   | .6        | 1               | 85  | 14    | 8    | 34           | TR  | 75  |      |      |  |  |
| 15   | 2285   | 1.45    | 58          | 5.6         | 2    | 12                 | 4              | 9.5   | 14             | 15  | 2.5  | 5        | 75000             | 90  | .2   | .4   | .5        | 0               | 87  | 13    | 2.5  | 42           | TR  | 80  |      |      |  |  |
| 16   | 2285   | 1.45    | 51          | 6.2         | 2    | 12.6               | 4              | 9.5   | 12             | 7.5 | 2.5  | 7.5      | 60000             | 140 | .2   | .4   | .6        | 0               | 85  | 15    | 10   | 35           | TR  | 100 |      |      |  |  |
| 17   | 2285   | 1.45    | 53          | 5.8         | 2    | 12.1               | 4              | 9.5   | 15             | 7.5 | 3.5  | 10       | 59000             | 140 | .2   | .4   | .6        | 1               | 84  | 15    | 10   | 35           | TR  | 100 |      |      |  |  |
| 18   | 2285   | 1.45    | 56          | 5.0         | 2    | 11.7               | 4              | 9.5   | 18             | 11  | 2.5  | 12       | 65000             | 150 | .2   | .4   | .6        | 1               | 82  | 17    | 10   | 40           | TR  | 120 |      |      |  |  |
| 19   | -      | 1.36    | 49          | 5.0         | 1    | 8.8                | -              | 10.8  | 13             | 9   | 2  | 11       | 53000             | 74  | .15  | .74  | 1.6       | 1               | 84  | 15    | 2.2  | 36           | TR  | 0   |      |      |  |  |
| 20   | 2456   | 1.36    | 62          | 6           | 2    | 9                  | 3              | 10.7  | 17             | 9.5 | 2  | 11       | 49000             | 52  | 1.55 | 3.4  | 2.6       | 1               | 83  | 16    | 2.2  | 35           | TR  | 0   |      |      |  |  |
| 21   | 2588   | 1.36    | 58          | 5           | 2    | 15                 | 2              | 10.46 | 17             | 8   | 1.5  | 9        | 54000             | 0   | 1.2  | 2.8  | 2.0       | 1               | 84  | 15    | 1.75 | 22           | TR  | 0   |      |      |  |  |
| 22   | 2648   | 1.36    | 50          | 6           | 1    | 12                 | 2              | 10.8  | 18             | 9   | 2  | 12       | 56000             | 80  | .05  | .2   | 1.55      | 0               | 83  | 17    | 1.8  | NR           | TR  | 0   |      |      |  |  |
| 23   | 2665   | 1.365   | 46          | 6           | 1    | 13                 | 2              | 9.58  | 16             | 8   | 2  | 12       | 50000             | 44  | .3   | 1.5  | 1.4       | 0               | 87  | 13    | 1.8  | 24.2         | TR  | 0   |      |      |  |  |
| 24   | 2692   | 1.36    | 48          | 6           | 1    | 13                 | 2              | 9.48  | 16             | 8.3 | 2  | 12       | 48000             | 32  | .24  | 1.7  | -         | 0               | 87  | 13    | 1.7  | 21.4         | TR  | 0   |      |      |  |  |
| 25   | 2701   | 1.36    | 45          | 4.3         | 1    | 8.8                | 1              | 9.34  | 14             | 8   | 2  | 12       | 46000             | 0   | .61  | 1.96 | -         | 0               | 84  | 16    | 1.75 | 34           | TR  | 0   |      |      |  |  |
| 26   | 2720   | 1.355   | 45          | 3.8         | 1    | 12.6               | 4              | 9.21  | 17             | 8.3 | 3  | 16       | 45000             | 0   | .4   | 1.52 | -         | 1               | 84  | 15    | 1.7  | 25           | TR  | 0   |      |      |  |  |
| 27   | 2734   | 1.36    | 46          | 3.8         | 1    | 11.2               | 3              | 8.97  | 16             | 8.3 | 4  | 16       | 47000             | 80  | .17  | 1.8  | -         | 1               | 84  | 15    | 1.6  | 26           | TR  | 0   |      |      |  |  |

WELL NAME: 30/6-7 SILVER BLOCK

MUD PROPERTY RECAP

| DATE | DEPTH          | DENSITY | VISCOSITY | FILTRATE   |           | HT/HP IIII |           | pH   | RHEOLOGY |   |     |      | FILTRATE ANALYSIS |     |     |     |    | RETORT ANALYSIS |      |       | CEC       | OTHER        |     |     |
|------|----------------|---------|-----------|------------|-----------|------------|-----------|------|----------|---|-----|------|-------------------|-----|-----|-----|----|-----------------|------|-------|-----------|--------------|-----|-----|
|      |                |         |           | PPG/Spc/SG | secs      | ccs        | Cake      |      | °500psi  | PV  | YP  | 10'  | 10'               | CI  | Ca  | PI  | Mf | Pm              | Oil  | Water |           | Corr. Solids | PPB | KCL |
| JUNE | feet<br>metres | SG      | secs      | ccs        | 1" / 32mm | ccs        | 1" / 32mm |      | cp       | lbs/100ft <sup>2</sup> -gms/cm <sup>2</sup> |     |      | mg/litre          | ppm |     |     |    | %               | %    | %     | Bent. Eq. | ppb          | %   | ppm |
| 28   | 2752           | 1.355   | 44        | 3.5        | 1         | 11         | 2         | 9.15 | 16       | 9   | 4   | 16   | 44000             | 40  | .01 | .65 | -  | 1               | 84.5 | 14.5  | 1.7       | 26           | TR  | 0   |
| 29   | 2761           | 1.355   | 50        | 4          | 1         | 13         | 2         | 9.51 | 17       | 9.1   | 3   | 14   | 44000             | 20  | .05 | .32 | -  | 1               | 84   | 15    | 1.8       | 26           | TR  | 0   |
| 30   | 2780           | 1.36    | 48        | 3.4        | 1         | 10         | 2         | 9.46 | 16       | 9.1   | 3   | 14   | 43000             | 90  | .01 | .63 | -  | 1               | 85   | 15    | 1.7       | 25           | "   | 0   |
| 1    | 2793           | 1.355   | 52        | 52         | 1         | 12         | 2         | 9.23 | 20       | 9   | 4   | 15   | 42000             | 90  | .1  | .17 | -  | 1               | 84   | 15    | 7         | NR           | "   | 12  |
| 2    | 2811           | 1.36    | 46        | 3.2        | 1         | 12.8       | 2         | 8.94 | 15       | 8.5   | 2.3 | 11.7 | 44000             | 100 | .01 | .4  | -  | 1               | 84   | 15    | 7         | NR           | "   | 24  |
| 3    | 2833           | 1.355   | 45        | 3.4        | 1         | 12.8       | 2         | 9.5  | 15       | 8   | 3   | 12   | 44000             | 60  | .08 | .38 | -  | 1               | 84   | 15    | 7.5       | NR           | "   | 60  |
| 4    | 2903           | 1.355   | 51        | 4.0        | 1         | 13.2       | 2         | 9.21 | 15       | 9.5   | 4   | 16   | 40000             | 40  | .1  | .3  | -  | 1               | 83   | 16    | 8.5       | NR           | "   | 60  |
| 5    | 2915           | 1.355   | 49        | 4.0        | 1         | 13.2       | 2         | 9.0  | 14       | 9.5   | 4   | 16   | 40000             | 40  | .1  | .3  | -  | 1               | 83   | 16    | 8.5       | NR           | "   | 40  |
|      |                |         |           |            |           |            |           |      |          |   |     |      |                   |     |     |     |    |                 |      |       |           |              |     |     |
|      |                |         |           |            |           |            |           |      |          |   |     |      |                   |     |     |     |    |                 |      |       |           |              |     |     |
|      |                |         |           |            |           |            |           |      |          |   |     |      |                   |     |     |     |    |                 |      |       |           |              |     |     |
|      |                |         |           |            |           |            |           |      |          |   |     |      |                   |     |     |     |    |                 |      |       |           |              |     |     |
|      |                |         |           |            |           |            |           |      |          |   |     |      |                   |     |     |     |    |                 |      |       |           |              |     |     |
|      |                |         |           |            |           |            |           |      |          |   |     |      |                   |     |     |     |    |                 |      |       |           |              |     |     |
|      |                |         |           |            |           |            |           |      |          |   |     |      |                   |     |     |     |    |                 |      |       |           |              |     |     |
|      |                |         |           |            |           |            |           |      |          |   |     |      |                   |     |     |     |    |                 |      |       |           |              |     |     |
|      |                |         |           |            |           |            |           |      |          |   |     |      |                   |     |     |     |    |                 |      |       |           |              |     |     |
|      |                |         |           |            |           |            |           |      |          |   |     |      |                   |     |     |     |    |                 |      |       |           |              |     |     |
|      |                |         |           |            |           |            |           |      |          |   |     |      |                   |     |     |     |    |                 |      |       |           |              |     |     |
|      |                |         |           |            |           |            |           |      |          |   |     |      |                   |     |     |     |    |                 |      |       |           |              |     |     |
|      |                |         |           |            |           |            |           |      |          |   |     |      |                   |     |     |     |    |                 |      |       |           |              |     |     |

Spesialtrykk a.s

**MUD PROPERTY RECAP**

| DATE   | DEPTH<br>feet<br>metres | DENSITY<br>PPG/<br>Spct/<br>SG | VISC-<br>OSITY<br>secs | FILTRATE        |         |       |    | pH    | RHEOLOGY (MPA) |     |     |     | FILTRATE ANALYSIS |     |     |      |     | RETORT ANALYSIS |                 |      | CEC | OTHER |      |      |     |       |    |                        |                            |          |     |   |   |   |              |     |     |       |       |     |
|--------|-------------------------|--------------------------------|------------------------|-----------------|---------|-------|----|-------|----------------|-----|-----|-----|-------------------|-----|-----|------|-----|-----------------|-----------------|------|-----|-------|------|------|-----|-------|----|------------------------|----------------------------|----------|-----|---|---|---|--------------|-----|-----|-------|-------|-----|
|        |                         |                                |                        | Cake<br>1"/32mm | °500psi |       | PV |       | YP             | 10" | 10' | Cl  | Ca                | Pl  | Mf  | Pm   | Oil | Water           | Corr.<br>Solids | PPB  |     | KCL   | SAND | Mg++ |     |       |    |                        |                            |          |     |   |   |   |              |     |     |       |       |     |
|        |                         |                                |                        |                 | ccs     | 32/mm |    |       |                |     |     |     |                   |     |     |      |     |                 |                 |      |     |       |      |      | ccs | 32/mm | cp | lbs/100ft <sup>2</sup> | gms/100<br>cm <sup>2</sup> | mg/litre | ppm | % | % | % | Bent.<br>Eq. | ppb | ppm |       |       |     |
|        |                         |                                |                        |                 |         |       |    |       |                |     |     |     |                   |     |     |      |     |                 |                 |      |     |       |      |      |     |       |    |                        |                            |          |     |   |   |   |              |     |     | 32/mm | 32/mm | ppm |
| 1982   |                         |                                |                        |                 |         |       |    |       |                |     |     |     |                   |     |     |      |     |                 |                 |      |     |       |      |      |     |       |    |                        |                            |          |     |   |   |   |              |     |     |       |       |     |
| July 6 | 2915                    | 1.36                           | 49                     | 4               | 1       | 13.2  | 2  | 9     | 14             | 9.5 | 4   | 16  | 4000              | 40  | .1  | .3   | -   | 1               | 83              | 16   | 8.5 | 28    | TR   | 40   |     |       |    |                        |                            |          |     |   |   |   |              |     |     |       |       |     |
| 7      | 2915                    | 1.36                           | 48                     | 4               | 1       | 13.2  | 2  | 8.95  | 15             | 8   | 4   | 15  | 40000             | 40  | .2  | .4   | -   | 1               | 84              | 15   | 8.5 | 28    | TR   | 40   |     |       |    |                        |                            |          |     |   |   |   |              |     |     |       |       |     |
| 8      | 2915                    | 1.365                          | 49                     | 4.2             | 1       | 13.5  | 3  | 8.5   | 15             | 8.5 | 4   | 15  | 40000             | 40  | .2  | .38  | -   | 1               | 84              | 15   | 8   | 27    | TR   | 40   |     |       |    |                        |                            |          |     |   |   |   |              |     |     |       |       |     |
| 9      | 2915                    | 1.36                           | 44                     | 4               | 1       | 13.2  | 3  | 9     | 15             | 7.5 | 4   | 12  | 38000             | 40  | .2  | .38  | -   | 1               | 82.5            | 16.5 | 8   | NR    | TR   | 40   |     |       |    |                        |                            |          |     |   |   |   |              |     |     |       |       |     |
| 10     | 2900                    | 1.36                           | 49                     | 4               | 1       | 13.2  | 3  | 8.75  | 13             | 8.5 | 4   | 13  | 38000             | 60  | .17 | .38  | -   | 1               | 84              | 15   | 8   | -     | TR   | 60   |     |       |    |                        |                            |          |     |   |   |   |              |     |     |       |       |     |
| 11     | 1830                    | 1.29                           | 40                     | 14              | 1       | NL    | -  | 12    | 10             | 7   | 3   | 6.5 | 31000             | 240 | 2.8 | 4.5  | 21  | 0               | 87.5            | 12.5 | 0   | -     | TR   | 50   |     |       |    |                        |                            |          |     |   |   |   |              |     |     |       |       |     |
| 12     | 2510                    | 1.16                           | 33                     | NL              | -       | NL    | -  | 12.17 | 5              | 3.5 | 1   | 2   | 25000             | 0   | 7   | 13   | 27  | 0               | 90              | 10   | -   | -     | 0    | 0    |     |       |    |                        |                            |          |     |   |   |   |              |     |     |       |       |     |
| 13     | 2897                    | 1.36                           | 47                     | 4.5             | 2       | -     | -  | 11    | 13             | 3.5 | 1.5 | 4   | 28000             | 100 | 1.0 | 3.0  | 10  | 0               | 84              | 14   | 7   | -     | 0    | 300  |     |       |    |                        |                            |          |     |   |   |   |              |     |     |       |       |     |
| 14     | 2915                    | 1.355                          | 47                     | 4.5             | 2       | -     | -  | 10.95 | 13             | 3.5 | 1.5 | 4   | 28000             | 100 | 1.0 | 3.0  | 10  | 0               | 86              | 14   | 7   | -     | 0    | 250  |     |       |    |                        |                            |          |     |   |   |   |              |     |     |       |       |     |
| 15     | 2915                    | 1.35                           | 47                     | 5               | 2       | -     | -  | 11.10 | 16             | 3.5 | .5  | 2   | 22000             | 0   | .8  | 1.7  | 7.5 | 0               | 87.5            | 12.5 | 7   | -     | 0    | 250  |     |       |    |                        |                            |          |     |   |   |   |              |     |     |       |       |     |
| 16     | 2915                    | 1.35                           | 47                     | 6.5             | 2       | -     | -  | 10.95 | 11             | 4   | 1.5 | 5   | 25000             | 50  | .7  | 1.6  | 7.5 | 0               | 87.5            | 12.5 | 10  | -     | 0    | 150  |     |       |    |                        |                            |          |     |   |   |   |              |     |     |       |       |     |
| 17     | 2915                    | 1.36                           | 43                     | 6.5             | 2       | 13    | -  | 11.05 | 14             | 4.5 | 1   | 12  | 30000             | 300 | .59 | 1.44 | -   | 1               | 81              | 18   | 10  | 7.4   | -    | -    |     |       |    |                        |                            |          |     |   |   |   |              |     |     |       |       |     |
| 18     | 2900                    | 1.36                           | 45                     | 7               | 2       | 14.2  | -  | 11.13 | 15             | 4   | .47 | 6   | 22300             | 320 | .21 | .8   | -   | 1               | 86              | 13   | 10  | 6.3   | -    | -    |     |       |    |                        |                            |          |     |   |   |   |              |     |     |       |       |     |
| 19     | 2941                    | 1.355                          | 44                     | 10              | 2       | 17    | -  | 11.72 | 11             | 5.5 | 1.3 | 10  | 22500             | 580 | .9  | 1.6  | -   | 1               | 85              | 14   | 9   | 6.3   | -    | 0    |     |       |    |                        |                            |          |     |   |   |   |              |     |     |       |       |     |
| 20     | 3009                    | 1.265                          | 48                     | 6.8             | 2       | 17    | -  | 11.2  | 11             | 7.5 | .47 | 7   | 17000             | 520 | .3  | 1.0  | -   | 1               | 89              | 10   | 12  | 2.9   | -    | 0    |     |       |    |                        |                            |          |     |   |   |   |              |     |     |       |       |     |
| 21     | 3057                    | 1.25                           | 60                     | 7               | 2       | 14    | -  | 11.96 | 16             | 8   | 2.3 | 7   | 13600             | 488 | .6  | .8   | -   | 1               | 89              | 10   | 17  | .6    | -    | 0    |     |       |    |                        |                            |          |     |   |   |   |              |     |     |       |       |     |
| 22     | 3108                    | 1.27                           | 67                     | 7               | 2       | 14    | -  | 10.9  | 22             | 10  | 4   | 20  | 12700             | 520 | .6  | .75  | -   | 1               | 87              | 12   | 17  | TR    | -    | 0    |     |       |    |                        |                            |          |     |   |   |   |              |     |     |       |       |     |
| 23     | 3168                    | 1.26                           | 55                     | 5               | 2       | 13    | -  | 10.23 | 19             | 7.5 | 2   | 16  | 12800             | 500 | .4  | .5   | -   | 1               | 87              | 12   | 17  | TR    | -    | 0    |     |       |    |                        |                            |          |     |   |   |   |              |     |     |       |       |     |
| 24     | 3236                    | 1.268                          | 58                     | 5               | 1       | 5     | -  | 10.61 | 19             | 8   | 2   | 17  | 12000             | 540 | .06 | .14  | -   | 11              | 88              | 11   | 17  | TR    | TR   | 0    |     |       |    |                        |                            |          |     |   |   |   |              |     |     |       |       |     |

WELL NAME: 30/6-7 SILVER BLOCK

MUD PROPERTY RECAP

| DATE  | DEPTH  | DENSITY | VISC.<br>OSITY | FILTRATE            |      | HT/HP filt |                    | pH   | RHEOLOGY (MPA)        |                        |                     |          | FILTRATE ANALYSIS |     |     |     |    | RETORT ANALYSIS |     |              | CEC  | OTHER           |     |     |
|-------|--------|---------|----------------|---------------------|------|------------|--------------------|------|-----------------------|------------------------|---------------------|----------|-------------------|-----|-----|-----|----|-----------------|-----|--------------|------|-----------------|-----|-----|
|       |        |         |                | PPG/<br>Spcf/<br>SG | secs | ccs        | Cake<br>1 1/2"/min |      | °500psi<br>1 1/2"/min | PV                     | YP                  | 10"      | 10'               | Cl  | Ca  | PI  | MI | Pm              | Oil | Water        |      | Corr.<br>Solids | PPB | KCL |
|       | metres |         |                |                     |      |            |                    |      | cp                    | lbs/100ft <sup>3</sup> | gms/cm <sup>3</sup> | mg/litre | ppm               |     |     |     | %  | %               | %   | Bent.<br>Eq. | ppb  |                 | ppm |     |
| 1982  | feet   |         |                |                     |      |            |                    |      |                       |                        |                     |          |                   |     |     |     |    |                 |     |              |      |                 |     |     |
| 25    | 3236   | 1.29    | 135            | 4.8                 | 1    | 13.4       | -                  | 1082 | 15                    | 7.5                    | .95                 | 15       | 12100             | 360 | .12 | .2  | -  | 1               | 87  | 12           | 17   | TR              | TR  | 0   |
| 26    | 3236   | 1.27    | 85             | 5                   | 1    | 14.2       | -                  | 1071 | 16                    | 8                      | 2                   | 17       | 12000             | 520 | .2  | .4  | -  | 1               | 87  | 12           | 17   | TR              | TR  | 0   |
| 27    | 2820   | 1.275   | 55             | 5.2                 | 2    | 16.4       | -                  | 10.9 | 21                    | 7.5                    | 2.5                 | 21       | 13000             | 800 | .1  | .18 | -  | 1               | 86  | 13           | 17   | TR              | TR  | 0   |
| 28    | 2858   | 1.24    | 44             | 7.2                 | 2    | 17.8       | -                  | 1132 | 12                    | 3.5                    | .98                 | 16       | 11200             | 840 | .2  | .3  | -  | 1               | 89  | 10           | 15   | TR              | TR  | 0   |
| 29    | -      | 1.24    | 41             | 8                   | 2    | -          | -                  | 1131 | 12                    | 3.5                    | .47                 | 12       | 10500             | 680 | .16 | .28 | -  | 1               | 89  | 10           | 14   | TR              | TR  | 0   |
| 30    | 2828   | 1.24    | 42             | 8                   | 2    | 21         | -                  | 11.2 | 12                    | 3.5                    | .47                 | 12       | 11000             | 620 | .13 | .24 | -  | 1               | 89  | 10           | 15   | TR              | TR  | 0   |
| 31    | 2828   | 1.24    | 42             | 8                   | 2    | 21         | -                  | 11.2 | 12                    | 3.5                    | .5                  | 12       | 11500             | 620 | .13 | .24 | -  | 1               | 89  | 10           | 15   | TR              | TR  | 0   |
| Aug-1 | 2828   | 1.24    | 43             | 8                   | 2    | 21         | -                  | 1126 | 12                    | 3.5                    | .5                  | 12       | 11300             | 620 | .15 | .3  | -  | 1               | 89  | 10           | 15   | TR              | TR  | 0   |
| 2     | 2828   | 1.235   | 43             | 8                   | 2    | 21         | -                  | 1095 | 12                    | 3                      | .5                  | 7.5      | 11500             | 680 | .15 | .3  | -  | 1               | 89  | 10           | 15   | TR              | TR  | 0   |
| 3     | 2858   | 1.24    | 45             | 8.5                 | 2    | 23         | -                  | 10.5 | 16                    | 3.5                    | .5                  | 15       | 11200             | 580 | .15 | .3  | -  | 1               | 89  | 10           | 12.5 | TR              | TR  | 0   |
| 4     | 2725   | 1.245   | 45             | 8.5                 | 2    | 23         | -                  | 10.5 | 13                    | 3                      | 1                   | 7.5      | 11300             | 680 | .2  | .35 | -  | 1               | 89  | 10           | 15   | TR              | TR  | 0   |
| 5     | 2725   | 1.24    | 45             | 8.5                 | 2    | 23         | -                  | 10.5 | 13                    | 3                      | 1                   | 7.5      | 11300             | 680 | .2  | .35 | -  | 1               | 89  | 10           | 15   | TR              | TR  | 0   |
| 6     | 2725   | 1.24    | 45             | 8.5                 | 2    | 23         | -                  | 10.5 | 13                    | 3                      | 1                   | 7.5      | 11300             | 680 | .2  | .35 | -  | 1               | 89  | 10           | 15   | TR              | TR  | 0   |
| 7     | 2725   | 1.24    | 45             | 8.5                 | 2    | 23         | -                  | 10.5 | 13                    | 3                      | 1                   | 7.5      | 11300             | 680 | .2  | .35 | -  | 1               | 89  | 10           | 15   | TR              | TR  | 0   |
| 8     | 2725   | 1.24    | 45             | 9                   | 2    | -          | -                  | 1025 | 13                    | 3                      | 2                   | 8.5      | 11300             | 680 | .2  | .4  | -  | 1               | 89  | 10           | .5   | TR              | TR  | 0   |
| 9     | 2708   | 1.245   | 44             | 10                  | 2    | 24.8       | -                  | 1046 | 12                    | 4                      | 3                   | 8        | 11200             | 720 | .25 | .45 | -  | 1               | 89  | 10           | 15   | TR              | TR  | 0   |
| 10    | 2684   | 1.25    | 43             | 10                  | 2    | 25         | -                  | 1046 | 12                    | 4                      | 3                   | 8        | 11200             | 680 | .25 | .45 | -  | 1               | 89  | 10           | 15   | TR              | TR  | 0   |
| 11    | 2690   | 1.25    | 44             | 11                  | 2    | 29         | -                  | 10   | 10                    | 3                      | 2                   | 7.5      | 11000             | 640 | .15 | .4  | -  | 1               | 90  | 9            | 15   | TR              | TR  | 0   |
| 12    | 2690   | 1.255   | 44             | 12                  | 2    | 33         | -                  | 10   | 10                    | 3                      | 2                   | 7.5      | 11000             | 640 | .15 | .35 | -  | 1               | 90  | 9            | 15   | TR              | TR  | 0   |

**NORSK PETROLEUM SERVICES A/S**

c/o Dolphin Services A/S  
4056 Tananger, Norway. Telephone 04-696524. Telex 33235

**WELL NAME: 30/6-7 SILVER BLOCK**

**MUD PROPERTY RECAP**

| DATE | DEPTH          | DENSITY             | VISC-OSITY | FILTRATE | HY/HP filt   |                     | pH | RHEOLOGY (MPA) |                        |                            |          | FILTRATE ANALYSIS |       |     |     |     | RETORT ANALYSIS |       |              | CEC | OTHER |  |  |     |
|------|----------------|---------------------|------------|----------|--------------|---------------------|----|----------------|------------------------|----------------------------|----------|-------------------|-------|-----|-----|-----|-----------------|-------|--------------|-----|-------|--|--|-----|
|      |                |                     |            |          | Cake         | <sup>o</sup> 500psi |    | PV             | YP                     | 10'                        | 10'      | CI                | Ca    | PI  | MI  | Pm  | Oil             | Water | Corr. Solids |     |       |  |  | PPB |
| 1982 | feet<br>metres | PPG/<br>Spct/<br>SG | secs       | ccs      | 1"<br>32/min | 1"<br>32/min        |    | cp             | lbs/100ft <sup>3</sup> | gms/100<br>cm <sup>3</sup> | mg/litre | ppm               |       |     |     | %   | %               | %     | Bent. Eq.    |     |       |  |  |     |
| 13   | 2690           | 1.25                | 44         | 13.5     | 2            | 37                  | -  | 9.95           | 10                     | 3                          | 2        | 7.5               | 11000 | 640 | .15 | .35 | -               | 1     | 90           | 9   | 15    |  |  |     |
| 14   | 2690           | 1.24                | 44         | 15       | 2            | 39                  | -  | 10             | 10                     | 2.5                        | 1        | 7                 | 11000 | 580 | .18 | .39 | -               | 1     | 90           | 9   | 17    |  |  |     |
| 15   | 2682           | 1.245               | 44         | 16       | 2            | 40                  | -  | 10.62          | 7                      | 3.5                        | .47      | 9                 | 9500  | 560 | .12 | .22 | -               | 1     | 91           | 8   | 15    |  |  |     |
| 16   | 2683           | 1.24                | 44         | 15       | 2            | 40                  | -  | 10.1           | 8                      | 3                          | 1        | 8                 | 11000 | 520 | .17 | .32 | -               | 1     | 91           | 8   | 16    |  |  |     |
| 17   | 2682           | 1.24                | 45         | 16       | 2            | 40                  | -  | 9.95           | 9                      | 3                          | 1        | 8                 | 11000 | 620 | .19 | .42 | -               | 1     | 90           | 9   | 16    |  |  |     |
| 18   | 2682           | 1.24                | 44         | 14       | 2            | 38                  | -  | 9.87           | 8                      | 2.5                        | 1        | 7                 | 10200 | 560 | .16 | .38 | -               | 1     | 90           | 9   | 15    |  |  |     |
| 19   | 2682           | 1.24                | 46         | 16       | 2            | 40                  | -  | 10.1           | 9                      | 3                          | 2        | 8                 | 10500 | 580 | .19 | .43 | -               | 1     | 90           | 9   | 15    |  |  |     |
| 20   | 2633           | 1.24                | 45         | 16       | 2            | 41                  | -  | 9.75           | 8                      | 2.5                        | 1        | 7                 | 9500  | 560 | .14 | .37 | -               | 1     | 90           | 9   | 16    |  |  |     |
| 21   | 2612           | 1.25                | 45         | 16       | 2            | 41                  | -  | 9.85           | 10                     | 3                          | 1        | 9                 | 9000  | 580 | .19 | .39 | -               | 1     | 89           | 10  | 16    |  |  |     |
| 22   | DUMPED MUD     |                     |            |          |              |                     |    |                |                        |                            |          |                   |       |     |     |     |                 |       |              |     |       |  |  |     |
|      |                |                     |            |          |              |                     |    |                |                        |                            |          |                   |       |     |     |     |                 |       |              |     |       |  |  |     |
|      |                |                     |            |          |              |                     |    |                |                        |                            |          |                   |       |     |     |     |                 |       |              |     |       |  |  |     |
|      |                |                     |            |          |              |                     |    |                |                        |                            |          |                   |       |     |     |     |                 |       |              |     |       |  |  |     |
|      |                |                     |            |          |              |                     |    |                |                        |                            |          |                   |       |     |     |     |                 |       |              |     |       |  |  |     |
|      |                |                     |            |          |              |                     |    |                |                        |                            |          |                   |       |     |     |     |                 |       |              |     |       |  |  |     |
|      |                |                     |            |          |              |                     |    |                |                        |                            |          |                   |       |     |     |     |                 |       |              |     |       |  |  |     |
|      |                |                     |            |          |              |                     |    |                |                        |                            |          |                   |       |     |     |     |                 |       |              |     |       |  |  |     |
|      |                |                     |            |          |              |                     |    |                |                        |                            |          |                   |       |     |     |     |                 |       |              |     |       |  |  |     |
|      |                |                     |            |          |              |                     |    |                |                        |                            |          |                   |       |     |     |     |                 |       |              |     |       |  |  |     |
|      |                |                     |            |          |              |                     |    |                |                        |                            |          |                   |       |     |     |     |                 |       |              |     |       |  |  |     |
|      |                |                     |            |          |              |                     |    |                |                        |                            |          |                   |       |     |     |     |                 |       |              |     |       |  |  |     |