STATOIL

ROUTINE CORE ANALYSIS

WELL: 31/6-5

DATE: JUNE 1984

GECO
GEOPHYSICAL COMPANY
OF NORWAY A·S

GECO

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## ROUTINE CORE ANALYSIS

### COMMENTS

GENERAL: Core analyses including horizontal and vertical permeability, porosity and grain density have been performed on samples from well 31/6-5 at the depths requested by Statoil A/S. In addition, formation resistivity factor and grain size distribution were measured and have been reported under two separate covers.

PREPARATION: The samples for analyses were collected by gently drilling with a one inch bore in the horizontal and vertical planes using liquid nitrogen as a cooling agent. The sample plugs were then cut to lengths of one inch and mounted while still frozen in Hassler-type holders at a confining sleeve pressure of 15 bar. After thawing, the plugs were cleaned, dried and thus ready for petrophysical analyses.

MEASUREMENTS: AIR PERMEABILITY

Standard air permeability, ka, was measured by injection of nitrogen gas at a net confining sleeve pressure of 15 bar and then converted empirically to liquid permeability, kl, on all samples.

POROSITY AND GRAIN DENSITY

Porosity and grain density data were collected only from the horizontal sample plugs. Pore volume was determined by injection of helium gas at a net confining sleeve pressure of 15 bar. After dismounting, grain volume values were determined by using a Boyles law porosimeter and helium. Knowing also the weight of the sample, porosity and grain density were calculated.

# FINAL REPORT

COMPANY : STATOIL
WELL : 31/6-5
FIELD : 31/6
STATE : NORWAY

CORE NO.: 1



DATE: JUNE 1984

GECO
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Petroleum laboratory

| Plug No. | Depth (meter) | Permeability (mD), horizontal $K_a$ | horizontal $K_l$ | vertical $K_a$ | vertical $K_l$ | Porosity (%) He | Porosity (%) Sum. | Pore saturation $S_o$ | Pore saturation $S_w$ | Grain dens. g/cc | Formation Description |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | 1470.00 | | | | | | | | | | |
| 1 | 1483.00 | 0.090 | 0.067 | 0.056 | 0.041 | 15.5 | | | | 2.52 | Clst.Dk-gry.Consol.w/Mic.foss.Sd-gr. |
| 2 | 1483.50 | 0.17 | 0.13 | | | 15.7 | | | | 2.53 | A.A. |
| 3 | 1483.75 | 0.23 | 0.17 | | | 15.9 | | | | 2.50 | A.A. |
| 4 | 1484.00 | nmp | | 0.23 | 0.17 | 15.1 | | | | 2.49 | A.A.fis. |
| 5 | 1484.25 | 0.20 | 0.15 | | | 16.8 | | | | 2.47 | A.A.w/o fis. |
| 6 | 1484.50 | 0.27 | 0.20 | | | 16.6 | | | | 2.50 | A.A. |
| 7 | 1484.75 | 0.49 | 0.38 | | | 15.9 | | | | 2.51 | A.A. |
| 8 | 1485.00 | 0.061 | 0.045 | 0.051 | 0.038 | 16.2 | | | | 2.50 | A.A. |
| 9 | 1485.25 | nmp | | | | 16.6 | | | | 2.53 | A.A.fis. |
| 10 | 1485.50 | 0.12 | 0.093 | | | 15.3 | | | | 2.48 | A.A. |
| 11 | 1485.75 | 0.092 | 0.069 | | | 15.6 | | | | 2.55 | A.A. |
| 12 | 1486.25 | 0.14 | 0.11 | 0.084 | 0.062 | 16.9 | | | | 2.58 | Sst.Gry.VF-gr.Sbang.VW-cmt.Cl-mtrx.w/Mic |
| 13 | 1486.50 | 0.21 | 0.16 | | | 16.9 | | | | 2.62 | A.A.W-srt. |
| 14 | 1486.75 | 0.18 | 0.14 | | | 16.3 | | | | 2.60 | A.A. |
| 15 | 1487.00 | 0.14 | 0.11 | 2.3 | 1.8 | 15.9 | | | | 2.62 | A.A. |
| 16 | 1487.25 | 0.17 | 0.13 | | | 16.6 | | | | 2.60 | A.A.w/foss. |
| 17 | 1487.50 | 0.12 | 0.089 | | | 15.8 | | | | 2.56 | Clst.Dk-gry.Consol.w/Mic.foss.Sd-gr. |
| 18 | 1487.75 | 0.15 | 0.12 | | | 15.7 | | | | 2.59 | Sst.Gry.VF-gr.Sbang.VW-cmt.Cl-mtrx.w/Mic |
| 19 | 1488.00 | 0.35 | 0.27 | 2.2 | 1.7 | 18.7 | | | | 2.63 | A.A.W-srt. |
| 20 | 1488.25 | 0.21 | 0.16 | | | 16.4 | | | | 2.60 | A.A. |
| 21 | 1488.50 | 0.16 | 0.12 | | | 16.3 | | | | 2.59 | A.A. |
| 22 | 1489.00 | 0.29 | 0.22 | 0.28 | 0.21 | 17.1 | | | | 2.64 | A.A.w/o Cl-mtrx.w/Cl-lam. |
| 23 | 1489.25 | 0.29 | 0.22 | | | 20.8 | | | | 2.64 | A.A. |
| 24 | 1489.50 | 0.15 | 0.12 | | | 12.3 | | | | 2.67 | A.A.Lt-gry.w/Calc.Pyr. |
| 25 | 1489.75 | 0.21 | 0.16 | | | 20.5 | | | | 2.65 | A.A.w/o Pyr. |
| 26 | 1490.00 | 0.65 | 0.50 | 0.67 | 0.51 | 21.4 | | | | 2.66 | A.A.w/Glauc. |
| 27 | 1490.25 | 0.24 | 0.18 | | | 13.1 | | | | 2.67 | A.A. |

COMPANY : STATOIL
WELL : 31/6-5
FIELD : 31/6
STATE : NORWAY

**FINAL REPORT**

CORE NO.: 1 (cont.)



DATE: JUNE 1984

GECO
GEOPHYSICAL COMPANY OF NORWAY A.S
Petroleum laboratory

| Plug No. | Depth (meter) | Permeability (mD), horizontal $K_a$ | horizontal $K_l$ | vertical $K_a$ | vertical $K_l$ | Porosity (%) He | Porosity (%) Sum. | Pore saturation $S_o$ | Pore saturation $S_w$ | Grain dens. g/cc | Formation Description |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 28 | 1490.50 | 0.59 | 0.46 | | | 19.0 | | | | 2.68 | A.A. |
| 29 | 1490.75 | 3.1 | 2.6 | | | 24.6 | | | | 2.67 | A.A.W-cmt. |
| 30 | 1491.00 | 6.0 | 5.2 | 4.4 | 3.8 | 26.5 | | | | 2.66 | A.A. |
| 31 | 1491.25 | 5.5 | 4.8 | | | 25.6 | | | | 2.66 | A.A. |
| 32 | 1491.75 | 13.4 | 11.9 | | | 27.2 | | | | 2.66 | A.A. |
| 33 | 1492.00 | nmp | | 4.2 | 3.6 | 27.3 | | | | 2.65 | A.A.fis. |
| 34 | 1492.25 | 6.1 | 5.3 | | | 27.3 | | | | 2.66 | A.A.w/o fis. |
| 35 | 1492.50 | 4.0 | 3.4 | | | 25.9 | | | | 2.67 | A.A. |
| 36 | 1492.75 | nmp | | | | 21.9 | | | | 2.65 | A.A.fis.w/o Calc. |
| 37 | 1493.00 | 0.60 | 0.46 | 0.50 | 0.39 | 21.1 | | | | 2.65 | A.A.VW-cmt.w/o Glauc. |
| 38 | 1493.25 | 0.23 | 0.17 | | | 17.7 | | | | 2.64 | A.A.Dk-gry. |
| 39 | 1493.50 | 0.42 | 0.32 | | | 21.3 | | | | 2.67 | A.A.ltl-Glauc. |
| 40 | 1493.75 | 0.83 | 0.64 | | | 21.0 | | | | 2.64 | A.A.w/o Glauc. |
| 41 | 1494.00 | 0.20 | 0.15 | 0.22 | 0.17 | 19.9 | | | | 2.68 | A.A.Gry.w/Pyr. |
| 42 | 1494.50 | 0.53 | 0.41 | | | 20.8 | | | | 2.68 | A.A. |
| 43 | 1494.75 | 0.24 | 0.18 | | | 19.4 | | | | 2.66 | A.A.w/o Pyr.w/ltl-Glauc. |
| 44 | 1495.00 | 0.42 | 0.32 | 0.36 | 0.28 | 20.8 | | | | 2.66 | A.A. |
| 45 | 1495.25 | 0.21 | 0.16 | | | 17.9 | | | | 2.65 | A.A. |
| 46 | 1495.50 | 0.39 | 0.30 | | | 20.2 | | | | 2.68 | A.A.w/incr.Glauc |
| 47 | 1495.75 | 1.8 | 1.4 | | | 24.4 | | | | 2.67 | A.A. |
| 48 | 1496.00 | 0.62 | 0.48 | 0.45 | 0.34 | 23.8 | | | | 2.72 | A.A.w/Pyr. |
| 49 | 1496.25 | 0.32 | 0.24 | | | 19.4 | | | | 2.68 | A.A.w/o Pyr. |
| 50 | 1496.50 | 0.23 | 0.17 | | | 17.8 | | | | 2.65 | A.A.Dk-gry.Cl-mtrx. |
| 51 | 1496.75 | 0.20 | 0.15 | | | 16.9 | | | | 2.66 | A.A. |
| 52 | 1497.00 | 0.21 | 0.16 | 0.11 | 0.085 | 17.4 | | | | 2.66 | A.A. |
| 53 | 1497.25 | 0.25 | 0.19 | | | 17.8 | | | | 2.66 | A.A. |
| | 1497.25 | | | | | | | | | | |

COMPANY : STATOIL
WELL : 31/6-5
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STATE : NORWAY

# FINAL REPORT

CORE NO.: 2



DATE: JUNE 1984

GECO
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Petroleum laboratory

| Plug No. | Depth (meter) | Permeability (mD), horizontal $K_a$ | horizontal $K_l$ | vertical $K_a$ | vertical $K_l$ | Porosity (%) He | Porosity (%) Sum. | Pore saturation $S_o$ | Pore saturation $S_w$ | Grain dens. g/cc | Formation Description |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | 1497.00 | | | | | | | | | | |
| 54 | 1497.00 | 0.54 | 0.41 | 0.17 | 0.13 | 18.1 | | | | 2.63 | Sst.Gry.VF-gr.Sbang.W-cmt.Cl-mtrx.w/Mic. |
| 55 | 1497.25 | 0.91 | 0.71 | | | 20.0 | | | | 2.69 | A.A.VW-srt.w/Glauc. |
| 56 | 1497.50 | 0.38 | 0.29 | | | 17.5 | | | | 2.67 | A.A.w/o Glauc. |
| 57 | 1497.75 | 0.69 | 0.53 | | | 18.5 | | | | 2.66 | A.A. |
| 58 | 1498.00 | 0.37 | 0.28 | 0.099 | 0.073 | 17.9 | | | | 2.66 | A.A. |
| 59 | 1498.25 | 0.30 | 0.23 | | | 17.1 | | | | 2.68 | A.A. |
| 60 | 1498.50 | 0.33 | 0.25 | | | 16.6 | | | | 2.66 | A.A. |
| 61 | 1498.75 | 0.34 | 0.26 | | | 18.4 | | | | 2.62 | A.A. |
| 62 | 1499.00 | 0.48 | 0.37 | 0.14 | 0.11 | 18.2 | | | | 2.67 | A.A. |
| 63 | 1499.50 | 0.32 | 0.24 | | | 16.3 | | | | 2.65 | A.A. |
| 64 | 1499.75 | 0.24 | 0.18 | | | 15.7 | | | | 2.65 | A.A. |
| 65 | 1500.00 | 0.26 | 0.20 | 0.076 | 0.056 | 15.9 | | | | 2.62 | A.A. |
| 66 | 1500.25 | 0.20 | 0.15 | | | 16.2 | | | | 2.62 | A.A. |
| 67 | 1500.50 | 0.40 | 0.31 | | | 16.5 | | | | 2.65 | A.A. |
| 68 | 1500.75 | 0.44 | 0.34 | | | 16.5 | | | | 2.65 | A.A. |
| 69 | 1501.00 | 0.20 | 0.15 | 0.057 | 0.042 | 15.5 | | | | 2.62 | A.A.Dk-gry.VW-cmt. |
| 70 | 1501.25 | 0.16 | 0.12 | | | 14.6 | | | | 2.63 | A.A.ltl-Calc. |
| 71 | 1501.50 | 0.15 | 0.11 | | | 15.6 | | | | 2.63 | A.A. |
| 72 | 1501.75 | 0.20 | 0.15 | | | 16.3 | | | | 2.63 | A.A. |
| 73 | 1502.00 | 0.31 | 0.23 | 0.12 | 0.087 | 16.8 | | | | 2.65 | A.A. |
| 74 | 1502.25 | 0.33 | 0.26 | | | 18.1 | | | | 2.65 | A.A. |
| 75 | 1502.50 | 0.22 | 0.17 | | | 19.7 | | | | 2.66 | A.A.Gry. |
| 76 | 1502.75 | 0.25 | 0.19 | 0.095 | 0.070 | 15.3 | | | | 2.63 | A.A.Dk-gry. |
| 77 | 1503.25 | 0.43 | 0.33 | | | 18.4 | | | | 2.65 | A.A. |
| 78 | 1503.50 | 0.35 | 0.26 | | | 16.0 | | | | 2.67 | A.A. |
| 79 | 1503.75 | 0.29 | 0.22 | | | 15.5 | | | | 2.65 | A.A. |
| 80 | 1504.00 | 0.23 | 0.17 | 0.18 | 0.14 | 16.2 | | | | 2.67 | A.A. |

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# FINAL REPORT

CORE NO.: 2 (cont.)



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Petroleum laboratory

| Plug No. | Depth (meter) | Permeability (mD), horizontal $K_a$ | horizontal $K_l$ | vertical $K_a$ | vertical $K_l$ | Porosity (%) He | Porosity (%) Sum. | Pore saturation $S_o$ | Pore saturation $S_w$ | Grain dens. g/cc | Formation Description |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 81 | 1504.25 | 0.26 | 0.20 | | | 15.7 | | | | 2.65 | A.A. |
| 82 | 1504.50 | 0.19 | 0.15 | | | 15.6 | | | | 2.66 | A.A. |
| 83 | 1504.75 | 0.21 | 0.16 | | | 16.8 | | | | 2.65 | A.A. |
| 84 | 1505.00 | 0.28 | 0.21 | 0.17 | 0.12 | 17.2 | | | | 2.66 | A.A. |
| 85 | 1505.50 | 0.35 | 0.27 | | | 14.8 | | | | 2.67 | A.A. |
| 86 | 1505.75 | 0.27 | 0.21 | | | 14.2 | | | | 2.64 | A.A. |
| 87 | 1506.00 | 0.17 | 0.12 | 0.085 | 0.063 | 14.7 | | | | 2.65 | A.A. |
| 88 | 1506.25 | 0.22 | 0.17 | | | 13.9 | | | | 2.67 | A.A.w/foss. |
| 89 | 1506.50 | 0.19 | 0.14 | | | 14.5 | | | | 2.64 | A.A.w/o foss. |
| 90 | 1507.00 | 0.32 | 0.24 | 0.13 | 0.096 | 15.1 | | | | 2.67 | A.A.w/o Calc.w/Pyr. |
| 91 | 1507.25 | 0.28 | 0.21 | | | 15.3 | | | | 2.66 | A.A.w/o Pyr. |
| 92 | 1507.50 | 0.24 | 0.18 | | | 16.0 | | | | 2.65 | A.A. |
| 93 | 1507.75 | 0.30 | 0.23 | | | 16.2 | | | | 2.66 | A.A. |
| 94 | 1508.00 | 0.23 | 0.18 | 0.27 | 0.21 | 16.7 | | | | 2.67 | A.A.Gry.w/Glauc. |
| 95 | 1508.25 | 0.28 | 0.21 | | | 17.5 | | | | 2.66 | A.A. |
| 96 | 1508.50 | 1.4 | 1.1 | | | 17.2 | | | | 2.65 | A.A.w-srt. |
| 97 | 1508.75 | 0.35 | 0.27 | | | 15.6 | | | | 2.65 | A.A.VW-srt. |
| 98 | 1509.00 | 0.47 | 0.36 | 4.2 | 3.6 | 17.6 | | | | 2.68 | A.A.w/Pyr. |
| 99 | 1509.25 | 0.60 | 0.47 | | | 18.6 | | | | 2.68 | A.A. |
| 100 | 1509.50 | 0.26 | 0.19 | | | 16.3 | | | | 2.65 | A.A. |
| 101 | 1509.75 | 0.22 | 0.17 | | | 16.6 | | | | 2.63 | A.A.w/Glauc.w/oPyr. |
| 102 | 1510.00 | 0.57 | 0.44 | 1.4 | 1.1 | 18.1 | | | | 2.71 | A.A.w/Pyr. |
| 103 | 1510.25 | 0.20 | 0.15 | | | 17.7 | | | | 2.65 | A.A.w/o Pyr.Glauc. |
| 104 | 1510.50 | 0.24 | 0.18 | | | 18.4 | | | | 2.68 | A.A.w/Pyr. |
| 105 | 1511.25 | 0.17 | 0.13 | 0.12 | 0.093 | 17.4 | | | | 2.70 | A.A.w/Glauc. |
| 106 | 1511.50 | 0.16 | 0.12 | | | 17.8 | | | | 2.67 | A.A.w/o Pyr. |
| 107 | 1511.75 | 0.38 | 0.29 | | | 18.5 | | | | 2.67 | A.A. |

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**FINAL REPORT**

CORE NO.: 2 (cont.)



DATE: JUNE 1984

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Petroleum laboratory

| Plug No. | Depth (meter) | Permeability (mD), horizontal $K_a$ | horizontal $K_l$ | vertical $K_a$ | vertical $K_l$ | Porosity (%) He | Porosity (%) Sum. | Pore saturation $S_o$ | Pore saturation $S_w$ | Grain dens. g/cc | Formation Description |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 108 | 1512.00 | 0.10 | 0.076 | 0.18 | 0.14 | 17.5 | | | | 2.67 | A.A. |
| 109 | 1512.25 | 0.27 | 0.20 | | | 18.3 | | | | 2.68 | A.A.w/Pyr. |
| 110 | 1512.50 | 0.21 | 0.16 | | | 16.9 | | | | 2.68 | A.A. |
| 111 | 1512.75 | 0.35 | 0.27 | | | 20.3 | | | | 2.71 | A.A. |
| 112 | 1513.00 | 0.21 | 0.16 | 0.19 | 0.15 | 17.8 | | | | 2.69 | A.A. |
| 113 | 1513.25 | 0.21 | 0.16 | | | 20.3 | | | | 2.68 | A.A. |
| 114 | 1513.75 | 0.21 | 0.16 | | | 20.0 | | | | 2.69 | A.A. |
| 115 | 1514.00 | 0.21 | 0.16 | 0.16 | 0.12 | 18.7 | | | | 2.71 | A.A. |
| 116 | 1514.25 | 0.096 | 0.072 | | | 19.2 | | | | 2.69 | Sltst.Gry.Consol.w/Mic.Glauc.Sd-gr. |
| 117 | 1514.50 | 0.068 | 0.050 | | | 17.3 | | | | 2.75 | A.A. |
| 118 | 1514.75 | 0.086 | 0.064 | | | 17.3 | | | | 2.71 | A.A. |
| 119 | 1515.00 | 0.39 | 0.29 | 0.11 | 0.079 | 19.8 | | | | 2.71 | Sst.Gry.VF-gr.Sbang.VW-cmt.w/Mic.Glauc. |
| 120 | 1515.25 | 0.37 | 0.28 | | | 23.1 | | | | 2.72 | A.A.W-srt. |
| 121 | 1515.50 | 0.78 | 0.61 | | | 28.0 | | | | 2.82 | A.A.Gnsh-gry.Cl-mtrx.w/Sid. |
| 122 | 1515.75 | 0.21 | 0.16 | | | 26.8 | | | | 2.84 | A.A.Slty.w/Glauc. |
| 123 | 1516.00 | 0.15 | 0.11 | 0.63 | 0.49 | 28.4 | | | | 2.84 | A.A. |
| 124 | 1516.50 | 0.031 | 0.023 | | | 13.1 | | | | 2.86 | Sltst.Gnsh-gry.Consol.w/Glauc.Mic.Sid. |
| 125 | 1516.75 | 0.061 | 0.045 | | | 14.6 | | | | 2.82 | A.A.w/Calc. |
| 126 | 1517.00 | 0.057 | 0.042 | 0.038 | 0.027 | 13.5 | | | | 2.82 | A.A. |
| 127 | 1517.25 | 0.31 | 0.24 | | | 29.4 | | | | 2.86 | A.A.w/Sd-gr. |
| 128 | 1517.50 | 0.11 | 0.084 | | | 26.9 | | | | 2.83 | A.A.w/foss. |
| 129 | 1517.75 | 0.65 | 0.50 | | | 34.0 | | | | 2.81 | A.A. |
| | 1517.95 | | | | | | | | | | |

COMPANY : STATOIL
WELL : 31/6-5
FIELD : 31/6
STATE : NORWAY

# FINAL REPORT

CORE NO.: 3



DATE: JUNE 1984

GECO
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Petroleum laboratory

| Plug No. | Depth (meter) | Permeability (mD), horizontal $K_a$ | horizontal $K_l$ | vertical $K_a$ | vertical $K_l$ | Porosity (%) He | Porosity (%) Sum. | Pore saturation $S_o$ | Pore saturation $S_w$ | Grain dens. g/cc | Formation Description |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | 1523.50 | | | | | | | | | | |
| 130 | 1523.50 | 3412 | 3356 | | | 33.5 | | | | 2.67 | Sst.Lt-gry.F-gr.Sbang.P-cmt.w/Mic. |
| 131 | 1523.75 | 1639 | 1604 | | | 33.0 | | | | 2.68 | A.A.Fr-cmt.W-srt. |
| 132 | 1524.00 | 0.47 | 0.36 | 0.51 | 0.39 | 8.7 | | | | 2.68 | Calc-sst.Lt-gry.VF-gr.Sbang.VW-cmt.w/Mic |
| 133 | 1524.25 | 394 | 379 | | | 24.8 | | | | 2.67 | Sst.Lt-gry.F-gr.Sbang.W-cmt.w/Mic.Calc. |
| 134 | 1524.50 | 491 | 475 | | | 31.1 | | | | 2.72 | A.A.W-srt.Calc-abd. |
| 135 | 1524.75 | 78.4 | 73.2 | | | 27.7 | | | | 2.70 | A.A.Gry.Cl/C-lam.w/o Calc.w/Pyr. |
| 136 | 1525.00 | 601 | 582 | 356 | 343 | 33.9 | | | | 2.68 | A.A.w/o Pyr.Cl.C.w/Calc. |
| 137 | 1525.25 | 457 | 441 | | | 33.4 | | | | 2.67 | A.A. |
| 138 | 1525.50 | 934 | 909 | | | 34.0 | | | | 2.67 | A.A. |
| 139 | 1525.75 | 1905 | 1867 | | | 30.9 | | | | 2.66 | A.A.w/o Calc.Fr-cmt.fis. |
| 140 | 1526.50 | 0.015 | 0.011 | 429 | 414 | 2.4 | | | | 2.69 | Calc-sst.Lt-gr.F-gr.Sbang.VW-cmt.w/Mic. |
| 141 | 1526.75 | 0.20 | 0.15 | | | 3.4 | | | | 2.68 | A.A. |
| 142 | 1527.00 | 5019 | 4949 | 3325 | 3270 | 32.3 | | | | 2.66 | Sst.Lt-gry.F-gr.Sbang.VP-cmt.w/Mic. |
| 143 | 1527.25 | 186 | 177 | | | 26.8 | | | | 2.67 | A.A.W-cmt.W-srt.w/Calc. |
| 144 | 1527.50 | 1813 | 1776 | | | 35.3 | | | | 2.65 | A.A. |
| 145 | 1527.75 | 974 | 948 | | | 33.8 | | | | 2.65 | A.A. |
| 146 | 1528.00 | 1107 | 1079 | 1221 | 1192 | 34.1 | | | | 2.65 | A.A. |
| 147 | 1528.25 | 310 | 298 | | | 31.8 | | | | 2.65 | A.A.w/foss. |
| 148 | 1528.50 | 7220 | 7133 | | | 34.6 | | | | 2.65 | A.A.VP-cmt.w/o foss. |
| 149 | 1529.00 | 899 | 875 | 1177 | 1148 | 35.2 | | | | 2.67 | A.A.Fr-cmt. |
| 150 | 1529.25 | 1386 | 1355 | | | 35.8 | | | | 2.66 | A.A. |
| 151 | 1529.50 | 920 | 896 | | | 35.5 | | | | 2.66 | A.A.ltl-C. |
| 152 | 1529.75 | 654 | 634 | | | 34.9 | | | | 2.66 | A.A. |
| 153 | 1530.00 | 990 | 965 | 443 | 428 | 35.6 | | | | 2.66 | A.A. |
| 154 | 1530.25 | 783 | 760 | | | 36.0 | | | | 2.66 | A.A. |
| 155 | 1530.50 | 1205 | 1176 | | | 35.8 | | | | 2.66 | A.A. |
| 156 | 1530.75 | 2496 | 2450 | | | 31.8 | | | | 2.65 | A.A.P-cmt. |

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STATE : NORWAY

# FINAL REPORT

CORE NO.: 3 (cont.)



DATE: JUNE 1984

GECO
GEOPHYSICAL COMPANY OF NORWAY A.S
Petroleum laboratory

| Plug No. | Depth (meter) | Permeability (mD), horizontal $K_a$ | horizontal $K_l$ | vertical $K_a$ | vertical $K_l$ | Porosity (%) He | Porosity (%) Sum. | Pore saturation $S_o$ | Pore saturation $S_w$ | Grain dens. g/cc | Formation Description |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 157 | 1531.00 | 2809 | 2760 | 1863 | 1824 | 35.7 | | | | 2.65 | A.A. |
| 158 | 1531.25 | 789 | 767 | | | 34.6 | | | | 2.65 | A.A.Fr-cmt. |
| 159 | 1531.75 | 1203 | 1174 | | | 37.0 | | | | 2.66 | A.A. |
| 160 | 1532.00 | 884 | 860 | 515 | 498 | 35.0 | | | | 2.67 | A.A. |
| 161 | 1532.25 | 630 | 611 | | | 30.4 | | | | 2.66 | A.A. |
| 162 | 1532.50 | 423 | 408 | | | 34.1 | | | | 2.66 | A.A. |
| 163 | 1532.75 | 387 | 372 | | | 34.1 | | | | 2.66 | A.A. |
| 164 | 1533.00 | 378 | 363 | 192 | 183 | 33.4 | | | | 2.65 | A.A. |
| 165 | 1533.25 | 974 | 949 | | | 30.9 | | | | 2.65 | A.A. |
| 166 | 1533.50 | 904 | 879 | | | 30.9 | | | | 2.65 | A.A. |
| 167 | 1533.75 | 742 | 720 | | | 31.8 | | | | 2.66 | A.A. |
| 168 | 1534.00 | 525 | 508 | 427 | 412 | 35.4 | | | | 2.66 | A.A. |
| 169 | 1534.50 | 382 | 367 | | | 33.8 | | | | 2.65 | A.A. |
| 170 | 1534.75 | 129 | 122 | | | 31.0 | | | | 2.66 | A.A.W-cmt.C-lam. |
| 171 | 1535.00 | 95.1 | 89.1 | 13.9 | 12.3 | 29.9 | | | | 2.67 | A.A.VF-gr. |
| 172 | 1535.25 | 152 | 144 | | | 30.7 | | | | 2.68 | A.A.Scat-C. |
| 173 | 1535.50 | 149 | 142 | | | 31.0 | | | | 2.68 | A.A. |
| 174 | 1535.75 | 258 | 247 | | | 32.1 | | | | 2.67 | A.A.F-gr. |
| 175 | 1536.00 | 120 | 114 | 17.6 | 15.7 | 30.1 | | | | 2.67 | A.A. |
| 176 | 1536.25 | 24.2 | 21.8 | | | 27.4 | | | | 2.69 | A.A.VF-gr. |
| 177 | 1536.50 | 64.6 | 6.0 | | | 29.3 | | | | 2.68 | A.A. |
| 178 | 1536.75 | 14.1 | 12.5 | | | 24.2 | | | | 2.69 | A.A.Gry.w/Cl. |
| 179 | 1537.25 | 208 | 199 | 196 | 187 | 33.9 | | | | 2.69 | A.A.Lt-gry.F-gr.Fr-cmt.w/o Cl. |
| 180 | 1537.50 | 146 | 138 | | | 34.0 | | | | 2.67 | A.A.incr-C. |
| 181 | 1537.75 | 33.7 | 30.7 | | | 29.1 | | | | 2.66 | A.A.W-cmt.C-lam. |
| 182 | 1538.00 | 82.8 | 77.4 | 1152 | 1123 | 34.3 | | | | 2.66 | A.A.w/Cl. |
| 183 | 1538.25 | 389 | 374 | | | 32.1 | | | | 2.65 | Sst.Lt-gry.F-gr.Sbrndd.VP-cmt.w/Mic. |

COMPANY : STATOIL
WELL : 31/6-5
FIELD : 31/6
STATE : NORWAY

# FINAL REPORT

CORE NO.: 3 (cont.)



DATE: JUNE 1984

GECO
GEOPHYSICAL COMPANY OF NORWAY A.S
Petroleum laboratory

| Plug No. | Depth (meter) | Permeability (mD), horizontal $K_a$ | horizontal $K_l$ | vertical $K_a$ | vertical $K_l$ | Porosity (%) He | Porosity (%) Sum. | Pore saturation $S_o$ | Pore saturation $S_w$ | Grain dens. g/cc | Formation Description |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 184 | 1538.50 | 1648 | 1613 | | | 24.9 | | | | 2.67 | A.A.P-srt.w/foss.-abd. |
| 185 | 1538.75 | 4.6 | 3.9 | | | 22.8 | | | | 2.68 | Sst.Gry.VF-gr.Sbang.VW-cmt.w/Mic.Calc.Cl |
| 186 | 1539.00 | 27.9 | 25.3 | 32.8 | 30.0 | 27.7 | | | | 2.68 | A.A.VW-srt. |
| 187 | 1539.25 | 765 | 743 | | | 33.4 | | | | 2.68 | A.A.F-gr.Fr-cmt.w/o Cl. |
| 188 | 1539.50 | 1363 | 1331 | | | 26.6 | | | | 2.85 | A.A.P-srt.w/Pyr. |
| 189 | 1540.00 | 357 | 343 | 71.8 | 67.0 | 34.0 | | | | 2.69 | A.A.VF-gr.W-cmt.W-srt.w/o Pyr. |
| 190 | 1540.25 | 162 | 154 | | | 31.8 | | | | 2.68 | A.A. |
| 191 | 1540.50 | 186 | 177 | | | 31.8 | | | | 2.68 | A.A. |
| 192 | 1540.75 | 163 | 155 | | | 30.3 | | | | 2.68 | A.A. |
| 193 | 1541.00 | 181 | 172 | 85.3 | 79.9 | 32.1 | | | | 2.68 | A.A. |
| 194 | 1541.25 | 85.4 | 79.9 | | | 30.3 | | | | 2.68 | A.A. |
| 195 | 1541.50 | 237 | 227 | | | 32.7 | | | | 2.68 | A.A.F-gr. |
| 196 | 1541.75 | 32.7 | 29.7 | | | 26.9 | | | | 2.68 | A.A.VF-gr. |
| 197 | 1542.00 | 129 | 122 | 4.2 | 3.5 | 31.4 | | | | 2.68 | A.A. |
| 198 | 1542.50 | 342 | 329 | | | 34.0 | | | | 2.68 | A.A. |
| 199 | 1542.75 | 127 | 120 | | | 31.9 | | | | 2.67 | A.A.w/Cl. |
| 200 | 1543.00 | 466 | 450 | | | 35.3 | | | | 2.68 | A.A.F-gr.w/o Cl. |
| 201 | 1543.25 | 791 | 768 | 311 | 298 | 35.9 | | | | 2.68 | A.A. |
| 202 | 1543.50 | 422 | 407 | | | 34.7 | | | | 2.67 | A.A. |
| 203 | 1543.75 | 485 | 468 | | | 35.4 | | | | 2.68 | A.A. |
| 204 | 1544.00 | 669 | 649 | 334 | 321 | 35.8 | | | | 2.67 | A.A. |
| 205 | 1544.25 | 560 | 542 | | | 36.0 | | | | 2.67 | A.A. |
| 206 | 1544.50 | 528 | 511 | | | 34.6 | | | | 2.68 | A.A. |
| 207 | 1544.75 | 236 | 226 | | | 33.3 | | | | 2.66 | A.A.w/C |
| 208 | 1545.25 | 96.3 | 90.3 | 120 | 113 | 31.2 | | | | 2.69 | A.A.VF-gr. |
| 209 | 1545.50 | 198 | 189 | | | 32.8 | | | | 2.67 | A.A. |
| 210 | 1545.75 | 444 | 428 | | | 36.0 | | | | 2.69 | A.A.F-gr. |

COMPANY : STATOIL
WELL : 31/6-5
FIELD : 31/6
STATE : NORWAY

# FINAL REPORT

CORE NO.: 3 (cont.)



DATE: JUNE 1984

GECO
GEOPHYSICAL COMPANY OF NORWAY A.S
Petroleum laboratory

| Plug No. | Depth (meter) | Permeability (mD), horizontal $K_a$ | horizontal $K_l$ | vertical $K_a$ | vertical $K_l$ | Porosity (%) He | Porosity (%) Sum. | Pore saturation $S_o$ | Pore saturation $S_w$ | Grain dens. g/cc | Formation Description |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 211 | 1546.00 | 514 | 497 | 239 | 228 | 36.6 | | | | 2.69 | A.A. |
| 212 | 1546.25 | 234 | 224 | | | 37.6 | | | | 2.70 | A.A.w/o C.w/Pyr. |
| 213 | 1546.50 | 1413 | 1381 | | | 35.0 | | | | 2.66 | A.A.P-amt.Fr-srt.w/o Pyr. |
| 214 | 1547.00 | 8396 | 8300 | 1200 | 1171 | 30.4 | | | | 2.67 | A.A.M-gr.VP-amt.P-srt. |
| 215 | 1547.25 | 541 | 523 | | | 28.9 | | | | 2.68 | A.A.F-gr.Fr-amt.W-srt. |
| 216 | 1547.50 | 51.8 | 47.8 | | | 26.8 | | | | 2.70 | A.A.Lt-gry.W-amt.Calc-abd. |
| 217 | 1548.00 | 8.1 | 7.1 | 14.7 | 13.2 | 19.5 | | | | 2.70 | A.A.VF-gr.VW-amt. |
| 218 | 1548.25 | 38.6 | 35.4 | | | 23.8 | | | | 2.69 | A.A.F-gr.W-amt. |
| 219 | 1548.50 | 0.058 | 0.043 | | | 6.7 | | | | 2.71 | Calc-sst.Lt-gry.VF-gr.Sbang.VW-amt.w/Mic |
| 220 | 1548.75 | 234 | 223 | | | 34.5 | | | | 2.69 | Sst.Lt-gry.F-gr.Sbang.Fr-amt.w/Mic.Calc. |
| 221 | 1549.00 | 272 | 261 | 250 | 239 | 35.0 | | | | 2.67 | A.A.W-srt. |
| 222 | 1549.25 | 120 | 113 | | | 29.6 | | | | 2.68 | A.A.Fr-srt. |
| 223 | 1549.50 | 13.7 | 12.1 | | | 24.2 | | | | 2.69 | A.A.Gry.VF-gr.W-amt.w/Cl. |
| 224 | 1550.00 | 1893 | 1854 | 326 | 313 | 37.5 | | | | 2.66 | A.A.Lt-gry.F-gr.P-amt.w/o Cl.Calc. |
| | 1550.50 | | | | | | | | | | |

COMPANY : STATOIL
WELL : 31/6-5
FIELD : 31/6
STATE : NORWAY

# FINAL REPORT

CORE NO.: 4



DATE: JUNE 1984

GECO
GEOPHYSICAL COMPANY OF NORWAY A.S
Petroleum laboratory

| Plug No. | Depth (meter) | Permeability (mD), horizontal $K_a$ | horizontal $K_l$ | vertical $K_a$ | vertical $K_l$ | Porosity (%) He | Porosity (%) Sum. | Pore saturation $S_o$ | Pore saturation $S_w$ | Grain dens. g/cc | Formation Description |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | 1550.50 | | | | | | | | | | |
| 225 | 1550.50 | 578 | 560 | | | 37.7 | | | | 2.68 | Sst.Lt-gry.F-gr.Sbang.VP-amt.w/Mic. |
| 226 | 1550.75 | 737 | 716 | | | 36.6 | | | | 2.68 | A.A.P-amt.W-srt.w/Calc. |
| 227 | 1551.00 | 151 | 143 | 125 | 118 | 33.5 | | | | 2.68 | A.A.Fr-amt. |
| 228 | 1551.25 | 51.3 | 47.5 | | | 30.1 | | | | 2.70 | A.A.ltl-Pyr. |
| 229 | 1551.50 | 54.6 | 50.5 | | | 30.7 | | | | 2.69 | A.A. |
| 230 | 1551.75 | 263 | 251 | | | 34.7 | | | | 2.70 | A.A. |
| 231 | 1552.00 | 6639 | 6556 | 2186 | 2144 | 32.1 | | | | 2.67 | A.A.M-gr.VP-amt.VP-srt.w/o Pyr. |
| 232 | 1552.25 | 4733 | 4666 | | | 27.2 | | | | 2.67 | A.A. |
| 233 | 1552.50 | 750 | 728 | | | 37.1 | | | | 2.68 | A.A.F-gr.Fr-amt.W-srt. |
| 234 | 1552.75 | 2689 | 2641 | | | 37.4 | | | | 2.66 | A.A.P-amt. |
| 235 | 1553.25 | 274 | 262 | | | 33.3 | | | | 2.72 | A.A.Gry.Fr-amt.w/Pyr.C. |
| 236 | 1553.50 | 471 | 454 | 113 | 106 | 33.4 | | | | 2.68 | A.A.w/o Pyr. |
| 237 | 1553.75 | 37.0 | 34.0 | | | 24.5 | | | | 2.72 | A.A.W-amt.w/Pyr. |
| 238 | 1554.00 | 307 | 294 | 37.7 | 34.6 | 34.4 | | | | 2.68 | A.A.Fr-amt.w/o Pyr. |
| 239 | 1554.25 | 289 | 278 | | | 33.5 | | | | 2.66 | A.A. |
| 240 | 1554.50 | 203 | 194 | | | 34.0 | | | | 2.68 | A.A. |
| 241 | 1554.75 | 155 | 147 | | | 33.3 | | | | 2.68 | A.A. |
| 242 | 1555.00 | 217 | 207 | 70.0 | 65.6 | 33.2 | | | | 2.66 | A.A. |
| 243 | 1555.25 | 108 | 101 | | | 31.7 | | | | 2.67 | A.A.w/foss. |
| 244 | 1555.50 | 431 | 415 | | | 34.3 | | | | 2.67 | A.A. |
| 245 | 1556.00 | 2622 | 2576 | 2419 | 2375 | 35.0 | | | | 2.66 | A.A.P-amt. |
| 246 | 1556.25 | 2844 | 2795 | | | 35.3 | | | | 2.67 | A.A.F/M-gr. |
| 247 | 1556.75 | 0.047 | 0.035 | | | 1.5 | | | | 2.69 | Calc-sst.Lt-gry.VF-gr.Sbang.VW-amt.w/Mic |
| 248 | 1557.00 | 0.039 | 0.028 | 0.068 | 0.051 | 1.6 | | | | 2.69 | A.A.W-srt. |
| 249 | 1557.25 | 0.022 | 0.016 | | | 1.4 | | | | 2.69 | A.A. |
| | 1557.35 | | | | | | | | | | |

COMPANY : STATOIL
WELL : 31/6-5
FIELD : 31/6
STATE : NORWAY

# FINAL REPORT

CORE NO.: 5



DATE: JUNE 1984

GECO
GEOPHYSICAL COMPANY OF NORWAY A.S
Petroleum laboratory

| Plug No. | Depth (meter) | Permeability (mD), horizontal $K_a$ | horizontal $K_l$ | vertical $K_a$ | vertical $K_l$ | Porosity (%) He | Porosity (%) Sum. | Pore saturation $S_o$ | Pore saturation $S_w$ | Grain dens. g/cc | Formation Description |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | 1557.50 | | | | | | | | | | |
| 250 | 1557.50 | 0.92 | 0.72 | | | 7.9 | | | | 2.70 | Calc-sst.Lt-gry.F-gr.Sbang.VW-cmt.w/Mic. |
| 251 | 1557.75 | 0.002 | <0.01 | | | 7.2 | | | | 2.69 | A.A.W-srt. |
| 252 | 1558.00 | 0.003 | <0.01 | 0.015 | 0.010 | 6.7 | | | | 2.71 | A.A. |
| 253 | 1558.25 | 2487 | 2442 | | | 37.8 | | | | 2.66 | Sd.Lt-gry.F-gr.Sbang.W-srt.w/Mic. |
| 254 | 1558.50 | 2078 | 2038 | | | 37.6 | | | | 2.68 | Sst.Lt-gry.F-gr.Sbang.VP-cmt.w/Mic.Calc. |
| 255 | 1558.75 | 4618 | 4551 | | | 35.2 | | | | 2.67 | A.A.W-srt. |
| 256 | 1559.00 | 3500 | 3444 | 1878 | 1840 | 36.8 | | | | 2.66 | Sd.Lt-gry.F-gr.Sbang.W-srt.w/Mic. |
| 257 | 1559.25 | 3146 | 3093 | | | 37.0 | | | | 2.65 | A.A. |
| 258 | 1559.50 | 4334 | 4270 | | | 37.6 | | | | 2.64 | A.A. |
| 259 | 1559.75 | 4577 | 4511 | | | 37.5 | | | | 2.64 | A.A. |
| 260 | 1560.25 | 4161 | 4099 | 4728 | 4661 | 37.5 | | | | 2.66 | Sst.Lt-gry.F-gr.Sbang.P-cmt.w/Mic.Calc. |
| 261 | 1561.00 | 5171 | 5100 | 1847 | 1810 | 36.9 | | | | 2.66 | Sd.Lt-gry.F-gr.Sbang.W-srt.w/Mic. |
| 262 | 1561.50 | nmp | | | | nmp | | | | | Sst.Dk-gry.F-gr.Sbang.VP-cmt.fis.w/C.Cl. |
| 263 | 1562.50 | 0.026 | 0.019 | 0.027 | 0.020 | 7.4 | | | | 2.67 | Calc-sst.Lt-gry.F-gr.Sbang.VW-cmt.w/Mic. |
| 264 | 1563.00 | 9720 | 9615 | 4256 | 4193 | 37.9 | | | | 2.67 | Sd.Lt-gry.F/M-gr.Sbang.W-srt.w/Mic. |
| 265 | 1563.25 | 8090 | 7996 | | | 37.0 | | | | 2.65 | A.A. |
| 266 | 1563.50 | 2.8 | 2.2 | | | 8.0 | | | | 2.67 | Calc-sst.Lt-gry.F-gr.Sbang.VWcmt.w/C.Mic |
| 267 | 1563.75 | 8295 | 8199 | | | 35.4 | | | | 2.66 | Sd.Lt-gry.F/M-gr.Sbang.W-srt.w/Mic. |
| 268 | 1564.00 | 4210 | 4148 | 4222 | 4159 | 37.5 | | | | 2.67 | A.A.F-gr. |
| 269 | 1564.25 | 2149 | 2108 | | | 36.4 | | | | 2.67 | Sst.Lt-gry.F-gr.Sbang.P-cmt.w/Mic.Calc. |
| 270 | 1564.50 | 10249 | 10140 | | | 37.6 | | | | 2.70 | Sd.Lt-gry.F/M-gr.Sbang.W-srt.w/Mic.Calc. |
| 271 | 1564.75 | 3654 | 3596 | | | 36.4 | | | | 2.69 | Sst.Lt-gry.F-gr.Sbang.P-cmt.w/Mic.Calc. |
| 272 | 1565.00 | 4169 | 4106 | 3307 | 3253 | 37.1 | | | | 2.68 | Sd.Lt-gry.F-gr.Sbang.W-srt.w/Mic.Calc. |
| 273 | 1565.25 | 1516 | 1482 | | | 36.0 | | | | 2.67 | Sst.Lt-gry.F-gr.Sbang.P-cmt.w/Mic.Calc. |
| 274 | 1565.50 | 2673 | 2626 | | | 36.3 | | | | 2.68 | A.A.VP-cmt.W-srt. |
| 275 | 1566.00 | 2674 | 2627 | 1776 | 1739 | 37.6 | | | | 2.69 | Sd.Lt-gry.F-gr.Sbang.W-srt.w/Mic.Calc. |
| 276 | 1566.25 | 1161 | 1132 | | | 36.8 | | | | 2.68 | A.A. |

# FINAL REPORT

COMPANY : STATOIL
WELL : 31/6-5
FIELD : 31/6
STATE : NORWAY

CORE NO.: 5 (cont.)



DATE: JUNE 1984

GECO
GEOPHYSICAL COMPANY OF NORWAY A.S
Petroleum laboratory

| Plug No. | Depth (meter) | Permeability (mD), horizontal $K_a$ | horizontal $K_l$ | vertical $K_a$ | vertical $K_l$ | Porosity (%) He | Porosity (%) Sum. | Pore saturation $S_o$ | Pore saturation $S_w$ | Grain dens. g/cc | Formation Description |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 277 | 1566.50 | 2338 | 2294 | | | 37.2 | | | | 2.66 | Sst.Lt-gry.F-gr.Sbang.VP-cmt.w/Mic. |
| 278 | 1566.75 | 7127 | 7040 | | | 37.9 | | | | 2.68 | Sd.Lt-gry.F-gr.Sbang.W-srt.w/Mic.Calc. |
| 279 | 1567.00 | 4041 | 3980 | 3659 | 3601 | 37.4 | | | | 2.68 | A.A. |
| 280 | 1567.25 | 1311 | 1280 | | | 34.0 | | | | 2.67 | Sst.Lt-gry.F-gr.Sbang.P-cmt.w/Mic.Calc. |
| 281 | 1567.50 | 5627 | 5552 | | | 37.0 | | | | 2.66 | Sd.Lt-gry.F-gr.Sbang.W-srt.w/Mic. |
| 282 | 1567.75 | 2981 | 2931 | | | 37.0 | | | | 2.67 | A.A. |
| 283 | 1568.00 | 12446 | 12324 | 7038 | 6952 | 36.4 | | | | 2.67 | A.A. |
| 284 | 1568.50 | 7854 | 7762 | | | 36.9 | | | | 2.65 | A.A. |
| 285 | 1568.75 | 8677 | 8579 | | | 37.2 | | | | 2.65 | A.A. |
| 286 | 1569.00 | 9588 | 9484 | 3753 | 3694 | 37.8 | | | | 2.65 | A.A. |
| 287 | 1569.25 | 1233 | 1203 | | | 31.5 | | | | 2.64 | Sst.Lt-gryF-grSbangFr-cmtC/Cl-lam.w/foss |
| 288 | 1569.50 | 275 | 263 | | | 34.5 | | | | 2.65 | A.A.fis. |
| 289 | 1569.75 | 1505 | 1472 | | | 37.2 | | | | 2.67 | Sd.lt-gry.F-gr.Sbang.W-srt.w/Mic. |
| 290 | 1570.00 | 1582 | 1547 | nvpp | | 38.0 | | | | 2.68 | A.A.w/Calc. |
| 291 | 1570.25 | 1354 | 1322 | | | 37.2 | | | | 2.66 | A.A.w/o Calc. |
| 292 | 1570.50 | 1344 | 1313 | | | 37.0 | | | | 2.66 | Sst.Lt-gry.F-gr.Sbang.VP-cmt.W-srt.w/Mic |
| 293 | 1570.75 | 1609 | 1574 | | | 37.2 | | | | 2.66 | Sd.Lt-gry.F-gr.Sbang.W-srt.w/Mic. |
| 294 | 1571.25 | 2519 | 2474 | 1677 | 1641 | 37.0 | | | | 2.66 | A.A.F/M-gr. |
| 295 | 1571.50 | 119 | 112 | | | 36.7 | | | | 2.66 | A.A.F-gr. |
| 296 | 1571.75 | nmp | | | | 6.2 | | | | 2.69 | Calc-sst.Lt-gry.F-gr.VW-cmt.w/Mic.foss. |
| 297 | 1572.00 | 1041 | 1014 | 106 | 99.6 | 32.7 | | | | 2.66 | Sst.Lt-gry.VF-gr.Sbang.VP-cmt.Mic-lam. |
| 298 | 1572.25 | 8506 | 8409 | | | 37.2 | | | | 2.64 | Sd.Lt-gry.F-gr.Sbang.W-srt.w/Mic. |
| 299 | 1572.50 | 6230 | 6150 | | | 37.7 | | | | 2.64 | A.A. |
| 300 | 1572.75 | 0.007 | <0.01 | | | 8.3 | | | | 2.67 | Calc-sst.Lt-gry.F-gr.Sbang.VW-cmt.w/Mic. |
| 301 | 1573.00 | 0.088 | 0.065 | 0.005 | 0.01 | 12.7 | | | | 2.65 | A.A.F/M-gr.w/C.Cl. |
| 302 | 1573.25 | 1480 | 1447 | | | 37.0 | | | | 2.65 | Sst.Lt-gry.F-gr.Sbang.VP-cmt.W-srt.w/Mic |
| 303 | 1573.50 | 3252 | 3198 | | | 37.7 | | | | 2.65 | Sd.Lt-gry.F-gr.Sbang.W-srt.w/Mic. |

COMPANY : STATOIL
WELL : 31/6-5
FIELD : 31/6
STATE : NORWAY

# FINAL REPORT

CORE NO.: 5 (cont.)



DATE: JUNE 1984

GECO
GEOPHYSICAL COMPANY OF NORWAY A-S
Petroleum laboratory

| Plug No. | Depth (meter) | Permeability (mD), horizontal $K_a$ | horizontal $K_l$ | vertical $K_a$ | vertical $K_l$ | Porosity (%) He | Porosity (%) Sum. | Pore saturation $S_o$ | Pore saturation $S_w$ | Grain dens. g/cc | Formation Description |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 304 | 1574.00 | 330 | 317 | 78.6 | 73.5 | 34.5 | | | | 2.65 | Sst.Lt-gry.F-gr.Sbang.Fr-cmt.W-srt.w/Mic |
| 305 | 1574.25 | 1664 | 1629 | | | 35.9 | | | | 2.66 | A.A. |
| 306 | 1574.50 | 1317 | 1287 | | | 35.4 | | | | 2.66 | A.A. |
| 307 | 1574.75 | 1091 | 1064 | | | 37.0 | | | | 2.67 | A.A.P-cmt. |
| 308 | 1575.00 | 1328 | 1297 | 908 | 884 | 37.2 | | | | 2.66 | A.A.Fr-cmt. |
| 309 | 1575.25 | 1014 | 988 | | | 35.8 | | | | 2.66 | A.A.w/Calc.C. |
| 310 | 1575.50 | 841 | 818 | | | 34.7 | | | | 2.66 | A.A. |
| 311 | 1575.75 | 1065 | 1038 | | | 36.3 | | | | 2.66 | A.A. |
| 312 | 1576.00 | 907 | 882 | 561 | 543 | 35.1 | | | | 2.66 | A.A. |
| 313 | 1576.25 | 952 | 926 | | | 35.9 | | | | 2.66 | A.A. |
| 314 | 1576.75 | 336 | 323 | | | 33.7 | | | | 2.67 | A.A. |
| 315 | 1577.00 | 46.4 | 42.7 | 263 | 252 | 34.7 | | | | 2.67 | A.A. |
| 316 | 1577.25 | 364 | 351 | | | 34.2 | | | | 2.65 | A.A.C-lam. |
| 317 | 1577.50 | 465 | 450 | | | 34.8 | | | | 2.67 | A.A. |
| 318 | 1577.75 | 196 | 187 | | | 31.1 | | | | 2.68 | A.A.w/o C-lam. |
| 319 | 1578.00 | 137 | 130 | 68.8 | 64.1 | 30.2 | | | | 2.67 | A.A.w/C. |
| 320 | 1578.25 | 214 | 205 | | | 33.8 | | | | 2.69 | A.A. |
| 321 | 1578.50 | 271 | 260 | | | 35.3 | | | | 2.68 | A.A. |
| 322 | 1578.75 | 94.9 | 89.2 | | | 31.3 | | | | 2.68 | A.A.VF-gr. |
| 323 | 1579.00 | 255 | 244 | 30.5 | 27.7 | 33.0 | | | | 2.69 | A.A.F-gr. |
| 324 | 1579.50 | 96.0 | 90.3 | | | 30.2 | | | | 2.67 | A.A.VF-gr. |
| 325 | 1579.75 | 40.2 | 36.2 | | | 27.5 | | | | 2.71 | A.A.W-cmt.w/Pyr. |
| 326 | 1580.00 | 102 | 96.1 | 18.9 | 17.1 | 29.1 | | | | 2.67 | A.A.w/o Pyr. |
| 327 | 1580.25 | 28.1 | 25.5 | | | 26.3 | | | | 2.68 | A.A. |
| 328 | 1580.50 | 1033 | 1007 | | | 34.0 | | | | 2.71 | A.A.F/M-gr.P-cmt.P-srt.w/Pyr. |
| 329 | 1580.75 | 942 | 917 | | | 36.1 | | | | 2.67 | A.A.F-gr.W-srt. |
| 330 | 1581.00 | 37.8 | 34.5 | nmp | | 35.8 | | | | 2.71 | A.A.Fr-cmt.Fr-srt.w/foss. |

COMPANY : STATOIL
WELL : 31/6-5
FIELD : 31/6
STATE : NORWAY

# FINAL REPORT

CORE NO.: 5 (cont.)



DATE: JUNE 1984

GECO
GEOPHYSICAL COMPANY OF NORWAY A.S
Petroleum laboratory

| Plug No. | Depth (meter) | Permeability (mD), horizontal $K_a$ | horizontal $K_l$ | vertical $K_a$ | vertical $K_l$ | Porosity (%) He | Porosity (%) Sum. | Pore saturation $S_o$ | Pore saturation $S_w$ | Grain dens. g/cc | Formation Description |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 331 | 1581.25 | 3657 | 3599 | | | 37.4 | | | | 2.65 | A.A.P-cmt.W-srt.w/o foss. |
| 332 | 1581.50 | 3018 | 2967 | | | 37.1 | | | | 2.65 | A.A. |
| 333 | 1582.00 | 0.016 | 0.011 | 0.005 | <0.01 | 7.7 | | | | 2.66 | Calc-sst.Lt-gry.F-gr.Sbang.VW-cmt.w/Mic. |
| 334 | 1582.25 | npp | | | | | | | | | |
| 335 | 1582.50 | 2025 | 1985 | | | 37.6 | | | | 2.66 | Sst.Lt-gry.F-gr.Sbang.VP-cmt.W-srt.w/Mic |
| 336 | 1583.75 | 264 | 253 | 232 | 222 | 31.2 | | | | 2.68 | A.A.Fr-cmt.w/Calc. |
| | 1584.00 | | | | | | | | | | |

COMPANY : STATOIL
WELL : 31/6-5
FIELD : 31/6
STATE : NORWAY

# FINAL REPORT

CORE NO.: 6



DATE: JUNE 1984

GECO
GEOPHYSICAL COMPANY OF NORWAY A.S
Petroleum laboratory

| Plug No. | Depth (meter) | Permeability (mD), horizontal $K_a$ | horizontal $K_l$ | vertical $K_a$ | vertical $K_l$ | Porosity (%) He | Porosity (%) Sum. | Pore saturation $S_o$ | Pore saturation $S_w$ | Grain dens. g/cc | Formation Description |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | 1584.00 | | | | | | | | | | |
| 337 | 1584.00 | 669 | 649 | 188 | 179 | 37.3 | | | | 2.68 | Sst.Lt-gry.F-gr.Sbang.VP-cmt.w/Mic.Calc. |
| 338 | 1584.25 | 225 | 214 | | | 31.3 | | | | 2.69 | A.A.Fr-cmt.W-srt. |
| 339 | 1584.50 | 682 | 661 | | | 33.5 | | | | 2.69 | A.A.w/C. |
| 340 | 1584.75 | 1262 | 1233 | | | 36.5 | | | | 2.70 | A.A.w/Pyr. |
| 341 | 1585.00 | 174 | 165 | 86.0 | 80.4 | 32.0 | | | | 2.68 | A.A.VF-gr.w/o Pyr. |
| 342 | 1585.25 | 516 | 499 | | | 36.2 | | | | 2.67 | A.A.F-gr. |
| 343 | 1585.50 | 252 | 241 | | | 33.3 | | | | 2.67 | A.A. |
| 344 | 1585.75 | 255 | 244 | | | 34.0 | | | | 2.67 | A.A. |
| 345 | 1586.00 | 11160 | 11045 | 10699 | 10588 | 36.5 | | | | 2.67 | Sd.Lt-gry.M-gr.Sbang.W-srt.w/Mic. |
| 346 | 1586.25 | 5771 | 5695 | | | 37.6 | | | | 2.66 | A.A. |
| 347 | 1586.75 | 0.030 | 0.022 | | | 2.2 | | | | 2.70 | Calc-sst.Lt-gry.F-gr.Sbang.VW-cmt.w/Mic. |
| 348 | 1587.00 | 0.027 | 0.020 | 0.044 | 0.032 | 2.4 | | | | 2.71 | A.A.W-srt.w/foss. |
| 349 | 1587.25 | 0.020 | 0.014 | | | 1.2 | | | | 2.72 | A.A. |
| 350 | 1587.50 | 0.43 | 0.33 | | | 3.9 | | | | 2.71 | A.A. |
| 351 | 1587.75 | 2579 | 2533 | | | 34.6 | | | | 2.67 | Sst.Lt-gry.F-gr.Sbang.P-cmt.W-srt.w/Mic. |
| 352 | 1588.00 | 1068 | 1041 | 1831 | 1793 | 37.1 | | | | 2.65 | A.A.Fr-cmt. |
| 353 | 1588.25 | 1991 | 1951 | | | 36.8 | | | | 2.67 | A.A. |
| 354 | 1588.50 | 872 | 848 | | | 34.6 | | | | 2.64 | A.A.w/C |
| 355 | 1588.75 | 2388 | 2344 | | | 36.4 | | | | 2.66 | A.A.P-cmt.w/o C |
| 356 | 1589.00 | 2123 | 2082 | 1477 | 1444 | 36.8 | | | | 2.66 | A.A. |
| 357 | 1589.50 | 7322 | 7234 | | | 34.7 | | | | 2.66 | Sd.Lt-gry.M-gr.Sbang.W-srt.w/Mic.Calc. |
| 358 | 1589.75 | 883 | 859 | | | 37.1 | | | | 2.67 | Sst.Lt-gry.F-gr.Sbang.P-cmt.W-srt.w/Mic. |
| 359 | 1590.00 | 468 | 452 | 195 | 186 | 34.2 | | | | 2.66 | A.A.w/C |
| 360 | 1590.25 | 1382 | 1350 | | | 37.4 | | | | 2.70 | A.A.VP-cmt.w/Pyr. |
| 361 | 1590.50 | 672 | 652 | | | 24.4 | | | | 2.68 | A.A.Fr-cmt.w/Calc.foss. |
| 362 | 1590.75 | 974 | 948 | | | 35.3 | | | | 2.66 | A.A.w/o foss |
| 363 | 1591.00 | 3267 | 3213 | 2781 | 2732 | 36.5 | | | | 2.64 | A.A.P-cmt. |

COMPANY : STATOIL
WELL : 31/6-5
FIELD : 31/6
STATE : NORWAY

**FINAL REPORT**

CORE NO.: 6 (cont.)



DATE: JUNE 1984

GECO
GEOPHYSICAL COMPANY OF NORWAY A.S
Petroleum laboratory

| Plug No. | Depth (meter) | Permeability (mD), horizontal $K_a$ | horizontal $K_l$ | vertical $K_a$ | vertical $K_l$ | Porosity (%) He | Porosity (%) Sum. | Pore saturation $S_o$ | Pore saturation $S_w$ | Grain dens. g/cc | Formation Description |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 364 | 1591.25 | 1886 | 1848 | | | 37.1 | | | | 2.65 | A.A.VP-cmt. |
| 365 | 1591.50 | 0.033 | 0.024 | | | 4.8 | | | | 2.69 | Calc-sst.Lt-gry.F-gr.Sbang.VW-cmt.w/Mic. |
| 366 | 1591.75 | 2248 | 2205 | | | 37.8 | | | | 2.65 | Sst.Lt-gry.F-gr.Sbrndd.VP-cmt.w/Mic. |
| 367 | 1592.25 | 825 | 802 | 199 | 189 | 34.8 | | | | 2.66 | A.A.Fr-cmt.w/Calc.C. |
| 368 | 1592.50 | 586 | 567 | | | 34.3 | | | | 2.67 | A.A.w/foss. |
| 369 | 1592.75 | 693 | 673 | | | 34.0 | | | | 2.66 | A.A. |
| 370 | 1593.00 | 1239 | 1210 | nvpp | | 36.0 | | | | 2.67 | A.A. |
| 371 | 1593.25 | 422 | 406 | | | 33.6 | | | | 2.65 | A.A.w/o Calc.foss. |
| 372 | 1593.50 | 1275 | 1244 | | | 36.4 | | | | 2.66 | A.A. |
| 373 | 1593.75 | 621 | 601 | | | 34.6 | | | | 2.67 | A.A.w/Calc. |
| 374 | 1594.00 | 631 | 612 | 276 | 264 | 35.6 | | | | 2.66 | A.A. |
| 375 | 1594.25 | 100 | 94.2 | | | 30.4 | | | | 2.65 | A.A.VF-gr.W-cmt. |
| 376 | 1594.50 | npp | | | | | | | | | |
| 377 | 1595.00 | 244 | 233 | 59.8 | 55.4 | 30.7 | | | | 2.68 | A.A. |
| 378 | 1595.25 | 43.9 | 40.3 | | | 28.4 | | | | 2.66 | A.A. |
| 379 | 1595.50 | 85.2 | 79.8 | | | 30.1 | | | | 2.66 | A.A. |
| 380 | 1595.75 | 117 | 110 | | | 31.1 | | | | 2.68 | A.A. |
| 381 | 1596.00 | 268 | 256 | 7.6 | 6.6 | 30.2 | | | | 2.68 | A.A. |
| 382 | 1596.25 | 461 | 445 | | | 33.0 | | | | 2.67 | A.A. |
| 383 | 1596.50 | 158 | 150 | | | 31.5 | | | | 2.67 | A.A. |
| 384 | 1596.75 | 231 | 220 | | | 33.2 | | | | 2.69 | A.A.w/foss. |
| 385 | 1597.00 | 238 | 228 | nvpp | | 32.9 | | | | 2.69 | A.A. |
| 386 | 1597.50 | 18.8 | 16.8 | | | 24.9 | | | | 2.67 | A.A. |
| 387 | 1597.75 | 149 | 142 | | | 34.5 | | | | 2.67 | A.A.w/o foss. |
| 388 | 1598.00 | 235 | 224 | 97.4 | 91.4 | 35.1 | | | | 2.68 | A.A. |
| 389 | 1599.25 | 62.5 | 58.0 | 42.6 | 39.1 | 29.2 | | | | 2.69 | A.A.Gry.w/Cl.Pyr. |
| 390 | 1599.50 | 26.9 | 24.3 | | | 27.1 | | | | 2.70 | A.A. |

COMPANY : STATOIL
WELL : 31/6-5
FIELD : 31/6
STATE : NORWAY

# FINAL REPORT

CORE NO.: 6 (cont.)



DATE: JUNE 1984

GECO
GEOPHYSICAL COMPANY OF NORWAY A-S
Petroleum laboratory

| Plug No. | Depth (meter) | Permeability (mD), horizontal $K_a$ | horizontal $K_l$ | vertical $K_a$ | vertical $K_l$ | Porosity (%) He | Porosity (%) Sum. | Pore saturation $S_o$ | Pore saturation $S_w$ | Grain dens. g/cc | Formation Description |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 391 | 1599.75 | 145 | 137 | | | 32.7 | | | | 2.68 | A.A.Lt-gry.w/o Cl.Pyr. |
| 392 | 1600.25 | 56.2 | 52.0 | 68.6 | 63.8 | 29.8 | | | | 2.67 | A.A. |
| 393 | 1601.00 | 0.63 | 0.49 | 0.024 | 0.017 | 4.8 | | | | 2.68 | Calc-sst.Gry.VF-gr.Sbang.VW-cmt.w/Mic.Cl |
| 394 | 1601.25 | 0.35 | 0.27 | | | 13.0 | | | | 2.70 | A.A. |
| 395 | 1601.50 | 0.47 | 0.36 | | | 15.6 | | | | 2.70 | A.A. |
| 396 | 1601.75 | 105 | 99.1 | | | 31.4 | | | | 2.73 | Sst.Lt-gry.VF-gr.Sbang.Fr-cmt.w/Mic.Pyr. |
| 397 | 1602.00 | 264 | 253 | 16.0 | 14.2 | 33.0 | | | | 2.67 | A.A.F-gr.W-srt.w/o Pyr. |
| 398 | 1602.25 | 32.3 | 29.4 | | | 28.6 | | | | 2.67 | A.A.VF-gr.w/Calc. |
| 399 | 1602.50 | 46.9 | 43.2 | | | 28.3 | | | | 2.66 | A.A. |
| 400 | 1603.00 | 22.9 | 20.6 | 7.0 | 6.1 | 27.1 | | | | 2.68 | A.A. |
| 401 | 1603.25 | 4.3 | 3.7 | | | 24.8 | | | | 2.67 | A.A. |
| 402 | 1603.50 | 7.9 | 6.9 | | | 27.8 | | | | 2.68 | A.A. |
| 403 | 1603.75 | 24.0 | 21.7 | | | 27.4 | | | | 2.68 | A.A. |
| 404 | 1604.00 | 37.6 | 34.4 | 3.3 | 2.8 | 29.7 | | | | 2.69 | A.A. |
| 405 | 1604.25 | 3.4 | 2.8 | | | 25.1 | | | | 2.71 | A.A.W-cmt.w/Pyr.Cl.C. |
| 406 | 1604.50 | 2.6 | 2.2 | | | 24.2 | | | | 2.68 | A.A.w/o Pyr. |
| 407 | 1604.75 | 2.7 | 2.3 | | | 24.6 | | | | 2.68 | A.A. |
| 408 | 1605.00 | 14.0 | 12.5 | 3.3 | 2.7 | 26.6 | | | | 2.67 | A.A.w/o Cl. |
| 409 | 1605.25 | 2.7 | 2.3 | | | 24.6 | | | | 2.67 | A.A.w/Cl. |
| 410 | 1605.75 | 2.7 | 2.2 | | | 25.4 | | | | 2.67 | A.A. |
| 411 | 1606.00 | 9.3 | 8.1 | 3.8 | 3.3 | 26.5 | | | | 2.67 | A.A. |
| 412 | 1606.25 | 8.1 | 7.1 | | | 25.7 | | | | 2.66 | A.A. |
| 413 | 1606.50 | 2.8 | 2.2 | | | 24.8 | | | | 2.68 | A.A. |
| 414 | 1606.75 | 23.1 | 20.8 | | | 23.5 | | | | 2.70 | A.A.w/Pyr. |
| 415 | 1607.00 | 2.7 | 2.1 | 0.61 | 0.47 | 24.9 | | | | 2.68 | A.A.w/o Pyr. |
| 416 | 1607.25 | 0.59 | 0.46 | | | 22.3 | | | | 2.68 | A.A. |
| 417 | 1607.50 | 0.43 | 0.33 | | | 22.7 | | | | 2.69 | A.A.w/foss. |

COMPANY : STATOIL
WELL : 31/6-5
FIELD : 31/6
STATE : NORWAY

# FINAL REPORT

CORE NO.: 6 (cont.)



DATE: JUNE 1984

GECO
GEOPHYSICAL COMPANY OF NORWAY A·S
Petroleum laboratory

| Plug No. | Depth (meter) | Permeability (mD), horizontal $K_a$ | horizontal $K_l$ | vertical $K_a$ | vertical $K_l$ | Porosity (%) He | Porosity (%) Sum. | Pore saturation $S_o$ | Pore saturation $S_w$ | Grain dens. g/cc | Formation Description |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 418 | 1607.75 | 0.72 | 0.56 | | | 23.4 | | | | 2.68 | A.A. |
| 419 | 1608.50 | 0.26 | 0.19 | | | 26.8 | | | | 2.80 | A.A.w/Glauc.Sid.Pyr.Cl. |
| 420 | 1608.75 | 0.25 | 0.19 | | | 28.2 | | | | 2.78 | A.A. |
| 421 | 1609.00 | 3.9 | 3.4 | 0.41 | 0.31 | 13.8 | | | | 2.72 | A.A.w/o Pyr. |
| 422 | 1609.25 | 0.019 | 0.014 | | | 3.3 | | | | 2.71 | Calc-sst.Lt-gry.VF-gr.Sbang.VW-cmt.w/Mic |
| 423 | 1609.50 | 0.028 | 0.020 | | | 4.1 | | | | 2.71 | A.A.W-srt.w/foss. |
| 424 | 1609.75 | 47.4 | 43.5 | | | 26.3 | | | | 2.70 | A.A.F-gr.Fr-srt. |
| 425 | 1610.00 | 347 | 333 | 252 | 241 | 34.5 | | | | 2.69 | Sst.Lt-gry.F-grSbang.Fr-cmt.w/Mic.Calc.C |
| 426 | 1610.25 | 259 | 248 | | | 34.8 | | | | 2.71 | A.A.W-srt.w/Pyr.foss. |
| 427 | 1610.50 | 357 | 343 | | | 34.8 | | | | 2.70 | A.A. |
| 428 | 1610.75 | 1133 | 1105 | | | 33.0 | | | | 2.67 | A.A.Fr-srt.w/o Pyr. |
| | 1611.00 | | | | | | | | | | |

COMPANY : STATOIL
WELL : 31/6-5
FIELD : 31/6
STATE : NORWAY

# FINAL REPORT

CORE NO.: 7



DATE: JUNE 1984

GECO
GEOPHYSICAL COMPANY OF NORWAY A.S
Petroleum laboratory

| Plug No. | Depth (meter) | Permeability (mD), horizontal $K_a$ | horizontal $K_l$ | vertical $K_a$ | vertical $K_l$ | Porosity (%) He | Porosity (%) Sum. | Pore saturation $S_o$ | Pore saturation $S_w$ | Grain dens. g/cc | Formation Description |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | 1611.00 | | | | | | | | | | |
| 429 | 1611.00 | 42.4 | 39.0 | 31.8 | 29.1 | 29.1 | | | | 2.68 | Sst.Gry.VF-gr.Sbang.W-cmt.w/Mic.Calc. |
| 430 | 1611.25 | 9.5 | 8.4 | | | 26.2 | | | | 2.64 | A.A.VW-srt.w/C.Cl. |
| 431 | 1611.50 | 51.3 | 47.5 | | | 28.6 | | | | 2.68 | A.A.ltl-C.Cl. |
| 432 | 1611.75 | 34.7 | 31.5 | | | 27.6 | | | | 2.68 | A.A. |
| 433 | 1612.00 | 41.3 | 37.9 | 12.0 | 10.7 | 28.1 | | | | 2.68 | A.A. |
| 434 | 1612.25 | 32.7 | 29.8 | | | 26.2 | | | | 2.66 | A.A. |
| 435 | 1612.50 | 35.8 | 32.9 | | | 28.9 | | | | 2.67 | A.A. |
| 436 | 1612.75 | 31.8 | 29.1 | | | 27.8 | | | | 2.67 | A.A. |
| 437 | 1613.00 | 20.0 | 18.0 | 2.1 | 1.6 | 25.6 | | | | 2.67 | A.A. |
| 438 | 1613.25 | 10.0 | 8.9 | | | 24.4 | | | | 2.68 | A.A. |
| 439 | 1613.75 | 40.1 | 36.8 | | | 27.7 | | | | 2.68 | A.A. |
| 440 | 1614.00 | 10.9 | 9.7 | 6.1 | 5.3 | 25.2 | | | | 2.67 | A.A. |
| 441 | 1614.25 | 13.0 | 11.6 | | | 26.2 | | | | 2.68 | A.A. |
| 442 | 1614.50 | 29.8 | 27.1 | | | 27.3 | | | | 2.68 | A.A. |
| 443 | 1614.75 | 22.4 | 20.1 | | | 26.7 | | | | 2.67 | A.A. |
| 444 | 1615.00 | 23.4 | 21.1 | 11.6 | 10.3 | 27.1 | | | | 2.66 | A.A. |
| 445 | 1615.25 | 24.1 | 21.7 | | | 26.4 | | | | 2.67 | A.A. |
| 446 | 1615.50 | 7.5 | 6.6 | | | 24.0 | | | | 2.68 | A.A. |
| 447 | 1615.75 | 27.2 | 24.7 | | | 26.0 | | | | 2.72 | A.A.VP-srt.w/Pyr. |
| 448 | 1616.00 | 1887 | 1849 | 421 | 406 | 37.0 | | | | 2.64 | A.A.Lt-gry.F/M-gr.Fr-cmt.w/o Pyr.incr-C |
| 449 | 1616.50 | 223 | 213 | | | 31.7 | | | | 2.66 | A.A.F-gr.W-srt.Pyr./C-lam.w/foss. |
| 450 | 1616.75 | 699 | 678 | | | 34.7 | | | | 2.67 | A.A. |
| 451 | 1617.00 | 700 | 679 | 285 | 273 | 34.6 | | | | 2.66 | A.A.w/o Pyr. |
| 452 | 1617.25 | 144 | 136 | | | 31.4 | | | | 2.66 | A.A.W-cmt. |
| 453 | 1617.50 | 119 | 112 | | | 32.2 | | | | 2.67 | A.A. |
| 454 | 1617.75 | 314 | 301 | | | 33.3 | | | | 2.67 | A.A. |
| 455 | 1618.00 | 233 | 223 | 144 | 136 | 33.8 | | | | 2.67 | A.A. |

COMPANY : STATOIL
WELL : 31/6-5
FIELD : 31/6
STATE : NORWAY

# FINAL REPORT

CORE NO.: 7 (cont.)



DATE: JUNE 1984

GECO
GEOPHYSICAL COMPANY OF NORWAY A.S
Petroleum laboratory

| Plug No. | Depth (meter) | Permeability (mD), horizontal $K_a$ | horizontal $K_l$ | vertical $K_a$ | vertical $K_l$ | Porosity (%) He | Porosity (%) Sum. | Pore saturation $S_o$ | Pore saturation $S_w$ | Grain dens. g/cc | Formation Description |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 456 | 1618.25 | 175 | 166 | | | 31.7 | | | | 2.66 | A.A. |
| 457 | 1618.50 | 154 | 146 | | | 32.0 | | | | 2.67 | A.A. |
| 458 | 1618.75 | 174 | 165 | | | 31.7 | | | | 2.68 | A.A. |
| 459 | 1619.25 | 148 | 140 | 23.8 | 21.6 | 31.7 | | | | 2.67 | A.A. |
| 460 | 1619.50 | 145 | 137 | | | 29.8 | | | | 2.68 | A.A. |
| 461 | 1619.75 | 95.6 | 89.7 | | | 29.7 | | | | 2.68 | A.A.VF-gr. |
| 462 | 1620.00 | 35.1 | 32.1 | 28.7 | 26.2 | 26.8 | | | | 2.67 | A.A. |
| 463 | 1620.25 | 37.6 | 34.4 | | | 27.1 | | | | 2.67 | A.A. |
| 464 | 1620.50 | 51.3 | 47.5 | | | 27.5 | | | | 2.67 | A.A.P-srt. |
| 465 | 1620.75 | 30.7 | 28.1 | | | 26.4 | | | | 2.68 | A.A. |
| 466 | 1621.00 | 323 | 310 | nvpp | | 24.4 | | | | 2.68 | Sst.Gry.M-gr.Sbrndd.VP-cmt.VP-srt.w/Mic. |
| 467 | 1621.25 | 3314 | 3260 | | | 33.1 | | | | 2.67 | A.A.Lt-gry. |
| 468 | 1621.50 | 1718 | 1682 | | | 35.3 | | | | 2.66 | Sst.Lt-gry.F-gr.Sbang.Fr-cmt.W-srt.w/Mic |
| 469 | 1622.00 | 4.0 | 3.5 | 1733 | 1697 | 11.3 | | | | 2.69 | Calc-sst.Lt-gry.M-gr.Sbang.VW-cmt.w/Mic |
| 470 | 1622.25 | 0.020 | 0.014 | | | 2.5 | | | | 2.72 | A.A.VF-gr.w/C.Sid. |
| 471 | 1622.50 | 0.019 | 0.014 | | | 1.2 | | | | 2.70 | A.A.w/o C.Sid. |
| 472 | 1622.75 | 6956 | 6871 | | | 32.9 | | | | 2.70 | Sd.Lt-gry.M-gr.Sbang.Fr-srt.w/Mic.Pyr. |
| 473 | 1623.00 | 66.6 | 62.1 | 24.4 | 22.2 | 28.6 | | | | 2.71 | Sst.Lt-gry.VF-gr.Sbang.W-cmt.w/Mic.Calc. |
| 474 | 1623.50 | 0.022 | 0.016 | | | 3.1 | | | | 2.71 | Calc-sst.Lt-gry.VF-gr.Sbang.VW-cmt.w/Mic |
| 475 | 1623.75 | 40.3 | 37.1 | | | 29.2 | | | | 2.70 | A.A.W-cmt.W-srt.w/foss. |
| 476 | 1624.00 | 115 | 108 | nvpp | | 31.6 | | | | 2.68 | A.A. |
| 477 | 1624.50 | 3383 | 3328 | | | 28.4 | | | | 2.66 | Sst.Lt-gry.M/Crs-gr.Sbrndd.VP-cmt.w/Mic. |
| 478 | 1624.75 | 1726 | 1689 | | | 29.1 | | | | 2.65 | A.A.M-gr.Fr-srt. |
| 479 | 1625.00 | 2802 | 2753 | 2828 | 2779 | 34.8 | | | | 2.67 | A.A.F-gr.Fr-cmt. |
| 480 | 1625.25 | 2043 | 2003 | | | 29.6 | | | | 2.67 | A.A. |
| 481 | 1625.50 | 1307 | 1277 | | | 34.4 | | | | 2.66 | A.A. |
| 482 | 1625.75 | 1454 | 1421 | | | 35.2 | | | | 2.66 | A.A.w/foss. |

COMPANY : STATOIL
WELL : 31/6-5
FIELD : 31/6
STATE : NORWAY

# FINAL REPORT

CORE NO.: 7 (cont.)



DATE: JUNE 1984

GECO
GEOPHYSICAL COMPANY OF NORWAY A.S
Petroleum laboratory

| Plug No. | Depth (meter) | Permeability (mD), horizontal $K_a$ | horizontal $K_l$ | vertical $K_a$ | vertical $K_l$ | Porosity (%) He | Porosity (%) Sum. | Pore saturation $S_o$ | Pore saturation $S_w$ | Grain dens. g/cc | Formation Description |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 483 | 1626.00 | 705 | 685 | 1117 | 1090 | 33.7 | | | | 2.65 | A.A. |
| 484 | 1626.25 | 1370 | 1338 | | | 35.3 | | | | 2.65 | A.A. |
| 485 | 1626.50 | 0.31 | 0.24 | | | 5.7 | | | | 2.69 | Calc-sst.Lt-gry.F-gr.Sbang.VW-cmt.w/Mic. |
| 486 | 1626.75 | 0.10 | 0.074 | | | 6.5 | | | | 2.70 | A.A.W-srt.w/foss. |
| 487 | 1627.25 | 0.26 | 0.19 | 1.2 | 0.91 | 9.5 | | | | 2.70 | A.A. |
| 488 | 1627.50 | 285 | 274 | | | 32.2 | | | | 2.70 | A.A.Fr-cmt. |
| 489 | 1627.75 | 1590 | 1556 | | | 35.7 | | | | 2.66 | A.A.decr-Calc. |
| 490 | 1628.00 | 3659 | 3602 | 6587 | 6504 | 32.7 | | | | 2.66 | A.A. |
| 491 | 1628.50 | 1261 | 1231 | | | 34.5 | | | | 2.66 | A.A.incr.Calc.C/Cl-lam. |
| 492 | 1628.75 | 463 | 447 | | | 34.3 | | | | 2.65 | A.A. |
| 493 | 1629.00 | 162 | 154 | 36.1 | 33.1 | 30.7 | | | | 2.65 | A.A. |
| 494 | 1629.25 | 251 | 240 | | | 33.8 | | | | 2.67 | A.A. |
| 495 | 1629.50 | 456 | 440 | | | 34.0 | | | | 2.66 | A.A. |
| 496 | 1630.00 | 131 | 124 | 63.9 | 59.5 | 31.9 | | | | 2.65 | A.A. |
| 497 | 1630.25 | 108 | 102 | | | 30.6 | | | | 2.66 | A.A. |
| 498 | 1630.50 | 61.9 | 57.6 | | | 28.3 | | | | 2.67 | A.A.W-cmt. |
| 499 | 1630.75 | 188 | 179 | | | 30.3 | | | | 2.67 | A.A. |
| 500 | 1631.00 | 6.6 | 5.8 | 2.3 | 1.8 | 23.7 | | | | 2.66 | A.A.Gry.VF-gr. |
| 501 | 1631.25 | 1.8 | 1.4 | | | 21.1 | | | | 2.66 | A.A. |
| 502 | 1631.50 | 14.5 | 12.8 | | | 25.0 | | | | 2.67 | A.A. |
| 503 | 1631.75 | 24.1 | 21.8 | | | 26.0 | | | | 2.68 | A.A. |
| 504 | 1632.00 | 12.7 | 11.4 | 2.8 | 2.2 | 26.1 | | | | 2.66 | A.A. |
| 505 | 1632.25 | 11.8 | 10.3 | | | 24.7 | | | | 2.67 | A.A. |
| 506 | 1632.75 | 14.0 | 12.4 | | | 26.5 | | | | 2.68 | A.A. |
| 507 | 1633.00 | 27.9 | 25.3 | 12.0 | 10.7 | 27.5 | | | | 2.68 | A.A. |
| 508 | 1633.25 | 2.3 | 1.8 | | | 27.3 | | | | 2.67 | A.A. |
| 509 | 1633.50 | 24.5 | 22.1 | | | 27.5 | | | | 2.68 | A.A. |

# FINAL REPORT

COMPANY : STATOIL
WELL : 31/6-5
FIELD : 31/6
STATE : NORWAY

CORE NO.: 7 (cont.)



DATE: JUNE 1984

GECO
GEOPHYSICAL COMPANY OF NORWAY A-S
Petroleum laboratory

| Plug No. | Depth (meter) | Permeability (mD), horizontal $K_a$ | horizontal $K_l$ | vertical $K_a$ | vertical $K_l$ | Porosity (%) He | Porosity (%) Sum. | Pore saturation $S_o$ | Pore saturation $S_w$ | Grain dens. g/cc | Formation Description |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 510 | 1633.75 | 2966 | 2915 | | | 32.1 | | | | 2.68 | A.A.F/M-gr.P-cmt.P-srt.w/o C.Cl. |
| 511 | 1634.00 | 1463 | 1430 | 776 | 754 | 30.6 | | | | 2.67 | A.A.Fr-cmt. |
| 512 | 1634.25 | 753 | 732 | | | 35.9 | | | | 2.68 | A.A.F-gr.W-srt. |
| 513 | 1634.50 | 608 | 589 | | | 34.6 | | | | 2.68 | A.A. |
| 514 | 1634.75 | 7365 | 7276 | | | 29.0 | | | | 2.68 | Sd.Gry.Crs-gr.Sbang.W-srt.ltl-Mic. |
| 515 | 1635.00 | 460 | 444 | 471 | 455 | 36.2 | | | | 2.69 | Sst.Lt-gry.F-gr.Sbang.Fr-cmt.w/Mic.Calc |
| 516 | 1635.50 | 290 | 279 | | | 35.8 | | | | 2.68 | A.A.W-srt. |
| 517 | 1635.75 | 238 | 228 | | | 35.1 | | | | 2.68 | A.A. |
| 518 | 1636.00 | 141 | 134 | 174 | 166 | 33.3 | | | | 2.68 | A.A. |
| 519 | 1636.25 | 188 | 179 | | | 29.0 | | | | 2.68 | A.A. |
| 520 | 1636.50 | 1.9 | 1.5 | | | 22.1 | | | | 2.67 | A.A.Gry.VF-gr.W-cmt. |
| 521 | 1636.75 | 2.9 | 2.5 | | | 22.5 | | | | 2.66 | A.A.w/Cl.C. |
| 522 | 1637.00 | 8.2 | 7.3 | 9.8 | 8.6 | 18.5 | | | | 2.66 | Sst.Gry.M-gr.Sbang.W-cmt.Cl-mtrx.w/Mic. |
| 523 | 1637.25 | 2.2 | 1.7 | | | 23.0 | | | | 2.66 | Sst-Gry.VF-gr.Sbang.W-cmt.w/Mic.Cl.Calc. |
| 524 | 1637.50 | 281 | 270 | | | 27.5 | | | | 2.66 | A.A.M/Crs-gr.VP-cmt.P-srt. |
| | 1637.75 | | | | | | | | | | |

COMPANY : STATOIL
WELL : 31/6-5
FIELD : 31/6
STATE : NORWAY

# FINAL REPORT

CORE NO.: 8



DATE: JUNE 1984

GECO
GEOPHYSICAL COMPANY OF NORWAY A.S
Petroleum laboratory

| Plug No. | Depth (meter) | Permeability (mD), horizontal $K_a$ | horizontal $K_l$ | vertical $K_a$ | vertical $K_l$ | Porosity (%) He | Porosity (%) Sum. | Pore saturation $S_o$ | Pore saturation $S_w$ | Grain dens. g/cc | Formation Description |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | 1638.00 | | | | | | | | | | |
| 525 | 1638.00 | 4311 | 4186 | 497 | 465 | 30.8 | | | | 2.69 | Sst.Gry.M-gr.Sbang.VP-cmt.w/Mic.Calc. |
| 526 | 1638.25 | 1259 | 1202 | | | 34.0 | | | | 2.67 | A.A.Lt-gry.F-gr.Fr-cmt.W-srt. |
| 527 | 1638.50 | 24924 | 24555 | | | 32.0 | | | | 2.65 | Sd.Lt-gry.M/Crs-gr.Sbang.Fr-srt.w/Mic. |
| 528 | 1638.75 | 609 | 573 | | | 35.9 | | | | 2.69 | Sst.Lt-gry.F-gr.Sbang.Fr-cmt.w/Mic.Calc. |
| 529 | 1639.00 | 281 | 259 | 118 | 106 | 34.6 | | | | 2.69 | A.A. |
| 530 | 1639.25 | 19437 | 19121 | | | 32.8 | | | | 2.66 | Sd.Lt-gry.M-Crs-grSbangFr-srt.w/Mic.foss |
| 531 | 1639.50 | 342 | 317 | | | 36.5 | | | | 2.68 | Sst.Lt-gry.F-gr.Sbang.Fr-cmt.w/Mic.Calc. |
| 532 | 1639.75 | 492 | 460 | | | 36.8 | | | | 2.68 | A.A.Fr-srt.w/foss. |
| 533 | 1640.00 | 365 | 338 | 160 | 145 | 37.1 | | | | 2.68 | A.A. |
| 534 | 1640.25 | 72.5 | 63.4 | | | 29.2 | | | | 2.68 | A.A.VF-gr.W-cmt.C/Mic-lam. |
| 535 | 1640.75 | 70.2 | 61.0 | | | 28.5 | | | | 2.68 | A.A. |
| 536 | 1641.00 | 34.9 | 29.5 | 28.5 | 24.4 | 27.0 | | | | 2.67 | A.A. |
| 537 | 1641.25 | 42.0 | 35.6 | | | 27.4 | | | | 2.68 | A.A. |
| 538 | 1641.50 | 57.6 | 49.6 | | | 28.5 | | | | 2.68 | A.A. |
| 539 | 1641.75 | 7.2 | 5.6 | | | 24.2 | | | | 2.67 | A.A. |
| 540 | 1642.00 | 20.9 | 17.1 | 11.0 | 8.9 | 26.5 | | | | 2.67 | A.A. |
| 541 | 1642.25 | 8.8 | 6.9 | | | 25.1 | | | | 2.68 | A.A. |
| 542 | 1642.50 | 28.8 | 23.9 | | | 28.0 | | | | 2.68 | A.A. |
| 543 | 1642.75 | 16.8 | 13.5 | | | 25.9 | | | | 2.68 | A.A. |
| 544 | 1643.00 | 14.7 | 11.7 | 9.2 | 7.3 | 26.6 | | | | 2.67 | A.A. |
| 545 | 1643.25 | 38.1 | 32.1 | | | 28.4 | | | | 2.69 | A.A. |
| 546 | 1643.50 | 134 | 120 | | | 30.6 | | | | 2.74 | A.A.F-gr.Fr-srt.w/Pyr. |
| 547 | 1643.75 | 213 | 194 | | | 33.3 | | | | 2.74 | A.A.Gry.Fr-cmt. |
| 548 | 1644.00 | 380 | 353 | 155 | 140 | 34.6 | | | | 2.72 | A.A. |
| 549 | 1644.50 | 0.29 | 0.22 | | | 9.9 | | | | 2.70 | Calc-sst.Lt-gry.F-gr.Sbang.VW-cmt.w/Mic |
| 550 | 1644.75 | 390 | 363 | | | 29.3 | | | | 2.72 | Sst.Gry.F-gr.Sbang.Fr-cmt.w/Mic.Pyr.Calc |
| 551 | 1645.00 | 1141 | 1086 | 1797 | 1725 | 36.7 | | | | 2.69 | A.A.Fr-srt.w/o Calc. |

COMPANY : STATOIL
WELL : 31/6-5
FIELD : 31/6
STATE : NORWAY

# FINAL REPORT

CORE NO.: 8 (cont.)



DATE: JUNE 1984

GECO
GEOPHYSICAL COMPANY OF NORWAY A.S
Petroleum laboratory

| Plug No. | Depth (meter) | Permeability (mD), horizontal $K_a$ | horizontal $K_l$ | vertical $K_a$ | vertical $K_l$ | Porosity (%) He | Porosity (%) Sum. | Pore saturation $S_o$ | Pore saturation $S_w$ | Grain dens. g/cc | Formation Description |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 552 | 1645.25 | 132 | 119 | | | 33.1 | | | | 2.70 | A.A.w/Calc. |
| 553 | 1645.50 | 554 | 519 | | | 37.5 | | | | 2.68 | A.A.w/o Pyr. |
| 554 | 1645.75 | 225 | 206 | | | 34.8 | | | | 2.69 | A.A. |
| 555 | 1646.25 | npp | | | | | | | | | |
| 556 | 1646.50 | 0.042 | 0.030 | | | 2.7 | | | | 2.68 | Calc-sst.Lt-gr.F-gr.Sbang.VW-cmt.w/Mic. |
| 557 | 1646.75 | 7.0 | 5.4 | | | 14.0 | | | | 2.69 | A.A.W-srt. |
| 558 | 1647.00 | 937 | 889 | 376 | 349 | 31.6 | | | | 2.68 | Sst.Lt-gry.F-gr.Sbang.Fr-cmt.w/Mic.Calc. |
| 559 | 1647.25 | 705 | 666 | | | 29.9 | | | | 2.69 | A.A.Fr-srt.w/foss. |
| 560 | 1647.50 | 364 | 338 | | | 35.3 | | | | 2.69 | A.A. |
| 561 | 1647.75 | 318 | 294 | | | 35.3 | | | | 2.68 | A.A. |
| 562 | 1648.00 | 522 | 489 | 431 | 402 | 36.3 | | | | 2.68 | A.A. |
| 563 | 1648.25 | 1268 | 1210 | | | 37.7 | | | | 2.69 | A.A. |
| 564 | 1648.50 | 383 | 356 | | | 35.0 | | | | 2.68 | A.A. |
| 565 | 1649.00 | 575 | 540 | 412 | 383 | 36.4 | | | | 2.68 | A.A. |
| 566 | 1649.25 | 289 | 267 | | | 33.8 | | | | 2.69 | A.A. |
| 567 | 1649.50 | 0.063 | 0.047 | | | 2.3 | | | | 2.69 | Calc-sst.Lt-gry.F-gr.Sbang.VW-cmt.w/Mic. |
| 568 | 1649.75 | 0.033 | 0.024 | | | 2.6 | | | | 2.71 | A.A.W-srt. |
| 569 | 1650.00 | 0.026 | 0.019 | 0.058 | 0.043 | 1.9 | | | | 2.70 | A.A. |
| 570 | 1650.25 | 306 | 282 | | | 35.6 | | | | 2.70 | Sst.Lt-gry.F-gr.Sbang.Fr-cmt.w/Mic.Calc. |
| 571 | 1650.50 | 391 | 364 | | | 34.1 | | | | 2.70 | A.A.P-srt.ltl-Pyr.w/foss. |
| 572 | 1650.75 | 205 | 187 | | | 33.2 | | | | 2.68 | A.A.w/C |
| 573 | 1651.00 | 124 | 111 | 85.7 | 76.0 | 32.4 | | | | 2.69 | A.A.W-cmt. |
| 574 | 1651.50 | 184 | 168 | | | 32.2 | | | | 2.68 | A.A.w/o Pyr. |
| 575 | 1651.75 | 167 | 152 | | | 30.7 | | | | 2.68 | A.A. |
| 576 | 1652.00 | 85.8 | 76.1 | 76.8 | 67.1 | 30.3 | | | | 2.68 | A.A. |
| 577 | 1652.25 | 47.8 | 41.7 | | | 28.1 | | | | 2.68 | A.A. |
| 578 | 1652.50 | 143 | 129 | | | 31.5 | | | | 2.68 | A.A. |

COMPANY : STATOIL
WELL : 31/6-5
FIELD : 31/6
STATE : NORWAY

# FINAL REPORT

CORE NO.: 8 (cont.)



DATE: JUNE 1984

GECO
GEOPHYSICAL COMPANY OF NORWAY A.S
Petroleum laboratory

| Plug No. | Depth (meter) | Permeability (mD), horizontal $K_a$ | horizontal $K_l$ | vertical $K_a$ | vertical $K_l$ | Porosity (%) He | Porosity (%) Sum. | Pore saturation $S_o$ | Pore saturation $S_w$ | Grain dens. g/cc | Formation Description |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 579 | 1652.75 | 37.6 | 32.4 | | | 26.6 | | | | 2.67 | A.A. |
| 580 | 1653.00 | 162 | 147 | 47.8 | 40.8 | 31.4 | | | | 2.69 | A.A. |
| 581 | 1653.25 | 59.1 | 51.9 | | | 27.1 | | | | 2.69 | A.A. |
| 582 | 1653.50 | 5.5 | 4.7 | | | 20.2 | | | | 2.69 | A.A.Calc.VW-cmt. |
| 583 | 1653.75 | 7.0 | 6.1 | | | 21.5 | | | | 2.69 | A.A. |
| 584 | 1654.25 | 43.0 | 37.3 | 11.1 | 10.0 | 28.5 | | | | 2.68 | A.A.W-cmt.decr-Calc. |
| 585 | 1654.50 | 155 | 140 | | | 31.8 | | | | 2.68 | A.A. |
| 586 | 1654.75 | 98.2 | 87.2 | | | 29.7 | | | | 2.68 | A.A. |
| 587 | 1655.00 | 77.2 | 68.3 | 13.6 | 10.8 | 30.6 | | | | 2.68 | A.A. |
| 588 | 1655.25 | 31.9 | 27.1 | | | 29.0 | | | | 2.69 | A.A. |
| 589 | 1655.50 | 73.2 | 64.2 | | | 27.4 | | | | 2.74 | A.A.w/Sid. |
| 590 | 1655.75 | 25.3 | 21.4 | | | 25.9 | | | | 2.68 | A.A.w/o Sid. |
| 591 | 1656.00 | 16.5 | 13.7 | 8.1 | 6.3 | 27.6 | | | | 2.68 | A.A.VF-gr. |
| 592 | 1656.25 | 5.8 | 5.0 | | | 22.0 | | | | 2.67 | A.A.VW-cmt. |
| 593 | 1656.50 | 4.7 | 4.0 | | | 23.0 | | | | 2.68 | A.A. |
| 594 | 1657.00 | 4.5 | 3.9 | 0.078 | 0.058 | 23.0 | | | | 2.68 | A.A. |
| 595 | 1657.25 | 6.7 | 5.8 | | | 23.6 | | | | 2.68 | A.A. |
| 596 | 1657.50 | 7.7 | 6.7 | | | 24.5 | | | | 2.68 | A.A. |
| 597 | 1657.75 | 18.7 | 15.1 | | | 27.1 | | | | 2.75 | A.A.w/Sid. |
| 598 | 1658.00 | 24.0 | 19.7 | 7.8 | 7.0 | 28.0 | | | | 2.70 | A.A.ltl-Sid. |
| 599 | 1658.25 | 74.2 | 64.7 | | | 31.2 | | | | 2.70 | A.A.W-cmt. |
| 600 | 1658.50 | 0.029 | 0.021 | | | 1.6 | | | | 2.69 | Calc-sst.Lt-gry.VF-gr.Sbang.VW-cmt.w/Mic |
| 601 | 1658.75 | 170 | 154 | | | 26.7 | | | | 2.68 | Sst.Lt-gry.F-gr.Sbang.W-cmt.w/Mic.Calc. |
| 602 | 1659.00 | 204 | 186 | 87.8 | 77.2 | 29.2 | | | | 2.70 | A.A.Fr-srt.w/foss.ltl-Sid. |
| 603 | 1659.25 | 119 | 107 | | | 30.2 | | | | 2.70 | A.A. |
| 604 | 1659.75 | 423 | 394 | | | 35.4 | | | | 2.69 | A.A.Fr-cmt.W-srt.w/o Sid. |
| 605 | 1660.00 | 400 | 372 | 484 | 453 | 34.3 | | | | 2.68 | A.A. |

COMPANY : STATOIL
WELL : 31/6-5
FIELD : 31/6
STATE : NORWAY

# FINAL REPORT

CORE NO.: 8 (cont.)



DATE: JUNE 1984

GECO
GEOPHYSICAL COMPANY OF NORWAY A.S
Petroleum laboratory

| Plug No. | Depth (meter) | Permeability (mD), horizontal $K_a$ | horizontal $K_l$ | vertical $K_a$ | vertical $K_l$ | Porosity (%) He | Porosity (%) Sum. | Pore saturation $S_o$ | Pore saturation $S_w$ | Grain dens. g/cc | Formation Description |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 606 | 1660.25 | 317 | 293 | | | 33.6 | | | | 2.69 | A.A.Fr-srt. |
| 607 | 1660.50 | 676 | 637 | | | 33.9 | | | | 2.68 | A.A. |
| 608 | 1660.75 | 6053 | 6898 | | | 31.0 | | | | 2.67 | A.A.M-gr.VP-cmt.VP-srt.w/C |
| 609 | 1661.00 | 182 | 165 | 112 | 99.6 | 32.3 | | | | 2.67 | A.A.F-gr.Fr-cmt.W-srt. |
| 610 | 1661.25 | 68.6 | 59.9 | | | 34.6 | | | | 2.70 | A.A.ltl-Pyr. |
| 611 | 1661.50 | 501 | 469 | | | 29.5 | | | | 2.67 | A.A.w/o Pyr.C-lam.ltl-Sid. |
| 612 | 1662.00 | 85.4 | 75.8 | 115 | 103 | 32.0 | | | | 2.70 | A.A.VF-gr.W-cmt.w/o Sid.w/Pyr. |
| 613 | 1662.25 | 9.1 | 7.1 | | | 22.9 | | | | 2.70 | A.A.VW-cmt.w/o Pyr.C w/Sid. |
| 614 | 1662.50 | 28.8 | 24.8 | | | 28.7 | | | | 2.69 | A.A.W-cmt.w/o Sid.w/ltl-Pyr.C. |
| 615 | 1662.75 | 61.5 | 53.1 | | | 31.6 | | | | 2.68 | A.A.w/o Pyr. |
| 616 | 1663.00 | 62.3 | 53.9 | 32.9 | 27.7 | 30.3 | | | | 2.69 | A.A.ltl-Sid. |
| 617 | 1663.25 | 43.4 | 37.8 | | | 29.3 | | | | 2.69 | A.A. |
| 618 | 1663.50 | 56.5 | 48.6 | | | 29.8 | | | | 2.69 | A.A. |
| 619 | 1663.75 | 29.8 | 24.8 | | | 27.7 | | | | 2.69 | A.A. |
| 620 | 1664.00 | 40.4 | 35.0 | 39.1 | 33.1 | 28.5 | | | | 2.69 | A.A. |
| 621 | 1664.25 | 16.7 | 13.5 | | | 26.5 | | | | 2.69 | A.A. |
| 622 | 1664.50 | 12.0 | 9.5 | | | 22.3 | | | | 2.70 | Sst.Gry.F/M-gr.Sbang.VW-cmt.w/Mic.Cl.Sid |
| 623 | 1664.75 | 1104 | 1050 | | | 28.5 | | | | 2.68 | Sst.Lt-gry.M-gr.Sbang.W-cmt.w/Mic.Calc. |
| 624 | 1665.00 | 311 | 287 | 489 | 457 | 27.6 | | | | 2.67 | A.A.Fr-srt. |
| 625 | 1665.25 | 699 | 659 | | | 25.2 | | | | 2.67 | A.A. |
| | 1665.80 | | | | | | | | | | |

COMPANY : STATOIL
WELL : 31/6-5
FIELD : 31/6
STATE : NORWAY

# FINAL REPORT

CORE NO.: 9



DATE: JUNE 1984

GECO
GEOPHYSICAL COMPANY OF NORWAY A.S
Petroleum laboratory

| Plug No. | Depth (meter) | Permeability (mD), horizontal $K_a$ | horizontal $K_l$ | vertical $K_a$ | vertical $K_l$ | Porosity (%) He | Porosity (%) Sum. | Pore saturation $S_o$ | Pore saturation $S_w$ | Grain dens. g/cc | Formation Description |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | 1665.50 | | | | | | | | | | |
| 626 | 1665.50 | npp | | | | | | | | | |
| 627 | 1665.75 | 6512 | 6350 | | | 36.9 | | | | 2.67 | Sd.Lt-gry.M-gr.Sbang.W-srt.w/Mic. |
| 628 | 1666.00 | 377 | 350 | 307 | 283 | 26.6 | | | | 2.68 | Sst.Lt-gry.F-gr.Sbang.Fr-cmt.w/Mic.Calc |
| 629 | 1666.25 | 0.083 | 0.061 | | | 10.9 | | | | 2.67 | Calc-sst.Lt-gry.F-gr.Sbang.VW-cmt.w/Mic. |
| 630 | 1666.50 | 62.6 | 54.1 | | | 24.5 | | | | 2.69 | A.A.W-cmt.W-srt. |
| 631 | 1666.75 | 23.3 | 19.7 | | | 18.9 | | | | 2.68 | A.A. |
| 632 | 1667.00 | 1298 | 1239 | 542 | 509 | 32.4 | | | | 2.67 | Sst.Lt-gry.F-gr.Sbang.P-cmt.W-srt.w/Mic. |
| 633 | 1667.25 | 218 | 199 | | | 32.7 | | | | 2.68 | A.A.P-srt.Calc-abd. |
| 634 | 1667.50 | 413 | 385 | | | 34.6 | | | | 2.67 | A.A. |
| 635 | 1667.75 | 292 | 269 | | | 34.9 | | | | 2.68 | A.A. |
| 636 | 1668.25 | 0.049 | 0.036 | 2.9 | 2.5 | 3.0 | | | | 2.69 | Calc-sst.Gry.F-gr.Sbang.VW-cmt.w/Pyr.Cl. |
| 637 | 1668.50 | 812 | 768 | | | 36.5 | | | | 2.67 | Sst.Lt-gry.F-gr.Sbang.Fr-cmt.w/Mic.Cl. |
| 638 | 1668.75 | 0.42 | 0.32 | | | 12.4 | | | | 2.75 | Calc-sst.Lt-gry.F-gr.Sbang.VW-cmt.w/Sid. |
| 639 | 1669.00 | 773 | 731 | 668 | 629 | 34.4 | | | | 2.66 | Sst.Lt-gry.F-gr.Sbang.Fr-cmt.w/Mic.Calc. |
| 640 | 1669.25 | 630 | 593 | | | 33.7 | | | | 2.66 | A.A.W-srt. |
| 641 | 1669.50 | 277 | 255 | | | 32.6 | | | | 2.66 | A.A.Fr-srt. |
| 642 | 1669.75 | 389 | 362 | | | 33.0 | | | | 2.67 | A.A.W-srt. |
| 643 | 1670.00 | 648 | 610 | 377 | 350 | 34.6 | | | | 2.67 | A.A. |
| 644 | 1670.25 | 467 | 436 | | | 33.9 | | | | 2.67 | A.A. |
| 645 | 1670.50 | 0.66 | 0.51 | | | 4.5 | | | | 2.67 | A.A.VW-cmt.Calc-abd.w/Cl. |
| 646 | 1671.00 | 398 | 371 | 289 | 266 | 34.2 | | | | 2.67 | A.A.VF-gr.Fr-cmt.w/Calc.Cl. |
| 647 | 1671.25 | 246 | 226 | | | 31.7 | | | | 2.67 | A.A.C-lam.ltl-Sid. |
| 648 | 1671.50 | 734 | 693 | | | 36.1 | | | | 2.67 | Sst.Lt-gry.F-gr.Sbang.VP-cmt.W-srt.w/Mic |
| 649 | 1671.75 | 516 | 484 | | | 34.7 | | | | 2.66 | A.A.Fr-cmt. |
| 650 | 1672.00 | 510 | 477 | 362 | 348 | 34.8 | | | | 2.67 | A.A.w/Calc. |
| 651 | 1672.25 | 295 | 272 | | | 33.6 | | | | 2.68 | A.A.VF-gr. |
| 652 | 1672.50 | 265 | 243 | | | 32.1 | | | | 2.68 | A.A. |

COMPANY : STATOIL
WELL : 31/6-5
FIELD : 31/6
STATE : NORWAY

# FINAL REPORT

CORE NO.: 9 (cont.)



DATE: JUNE 1984

GECO
GEOPHYSICAL COMPANY OF NORWAY A.S
Petroleum laboratory

| Plug No. | Depth (meter) | Permeability (mD), horizontal $K_a$ | horizontal $K_l$ | vertical $K_a$ | vertical $K_l$ | Porosity (%) He | Porosity (%) Sum. | Pore saturation $S_o$ | Pore saturation $S_w$ | Grain dens. g/cc | Formation Description |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 653 | 1672.75 | 186 | 169 | | | 32.0 | | | | 2.67 | A.A.ltl-C |
| 654 | 1673.00 | 101 | 89.9 | 21.5 | 19.5 | 30.4 | | | | 2.67 | A.A. |
| 655 | 1673.25 | 77.4 | 68.3 | | | 30.3 | | | | 2.68 | A.A.VW-cmt.w/Cl. |
| 656 | 1673.75 | 55.7 | 48.3 | | | 29.8 | | | | 2.68 | A.A. |
| 657 | 1674.00 | 15.7 | 13.0 | 19.4 | 17.5 | 26.2 | | | | 2.71 | A.A.w/Sid. |
| 658 | 1674.25 | 16.0 | 13.1 | | | 26.8 | | | | 2.76 | A.A. |
| 659 | 1674.50 | 35.7 | 30.4 | | | 29.1 | | | | 2.68 | A.A.w/o Sid. |
| 660 | 1674.75 | 27.6 | 23.1 | | | 25.4 | | | | 2.69 | A.A.w/Sid. |
| 661 | 1675.00 | 29.2 | 24.5 | 10.6 | 9.3 | 27.3 | | | | 2.68 | A.A. |
| 662 | 1675.25 | 11.4 | 9.0 | | | 27.2 | | | | 2.72 | A.A.w/Pyr. |
| 663 | 1675.50 | 41.8 | 36.3 | | | 28.6 | | | | 2.72 | A.A.w/o Pyr. |
| 664 | 1675.75 | 65.1 | 57.1 | | | 30.4 | | | | 2.70 | A.A. |
| 665 | 1676.50 | 47.7 | 41.4 | 31.3 | 26.1 | 30.1 | | | | 2.72 | A.A. |
| 666 | 1676.75 | 31.0 | 26.6 | | | 29.3 | | | | 2.71 | A.A. |
| 667 | 1677.00 | 3.4 | 2.9 | 2.2 | 1.7 | 22.2 | | | | 2.72 | A.A.Calc-abd. |
| 668 | 1677.25 | 3.0 | 2.6 | | | 21.8 | | | | 2.72 | A.A. |
| 669 | 1677.50 | 5.8 | 12.7 | | | 24.6 | | | | 2.72 | A.A. |
| 670 | 1677.75 | 1.4 | 1.1 | | | 21.2 | | | | 2.71 | A.A. |
| 671 | 1678.00 | 0.27 | 0.20 | 0.40 | 0.30 | 16.0 | | | | 2.71 | A.A.Gry.Cl-mtrx. |
| 672 | 1678.25 | 0.49 | 0.38 | | | 21.6 | | | | 2.70 | A.A. |
| 673 | 1678.50 | 0.52 | 0.40 | | | 21.4 | | | | 2.71 | A.A. |
| 674 | 1679.00 | 0.38 | 0.29 | 0.12 | 0.088 | 20.7 | | | | 2.70 | A.A. |
| 675 | 1679.25 | 0.48 | 0.37 | | | 21.0 | | | | 2.69 | A.A. |
| 676 | 1679.50 | 0.33 | 0.25 | | | 19.7 | | | | 2.69 | A.A. |
| 677 | 1679.75 | 9.8 | 8.6 | | | 20.0 | | | | 2.68 | A.A. |
| 678 | 1680.00 | 0.31 | 0.24 | 0.24 | 0.18 | 20.0 | | | | 2.68 | A.A.w/o Sid.w/Pyr. |
| 679 | 1680.25 | 0.37 | 0.28 | | | 18.9 | | | | 2.68 | A.A. |

COMPANY : STATOIL
WELL : 31/6-5
FIELD : 31/6
STATE : NORWAY

# FINAL REPORT

CORE NO.: 9 (cont.)



DATE: JUNE 1984

GECO
GEOPHYSICAL COMPANY OF NORWAY A/S
Petroleum laboratory

| Plug No. | Depth (meter) | Permeability (mD), horizontal $K_a$ | horizontal $K_l$ | vertical $K_a$ | vertical $K_l$ | Porosity (%) He | Porosity (%) Sum. | Pore saturation $S_o$ | Pore saturation $S_w$ | Grain dens. g/cc | Formation Description |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 680 | 1680.50 | 0.33 | 0.25 | | | 19.5 | | | | 2.67 | A.A. |
| 681 | 1680.75 | 0.31 | 0.24 | | | 19.2 | | | | 2.66 | A.A.w/o Pyr. |
| 682 | 1681.00 | 0.36 | 0.27 | 0.11 | 0.080 | 18.4 | | | | 2.67 | A.A.w/Pyr. |
| 683 | 1681.25 | 0.39 | 0.30 | | | 18.8 | | | | 2.66 | A.A.w/o Pyr. |
| 684 | 1681.75 | 0.32 | 0.24 | | | 18.4 | | | | 2.66 | A.A. |
| 685 | 1682.00 | 0.24 | 0.18 | 0.090 | 0.067 | 17.7 | | | | 2.64 | A.A.ltl-Calc. |
| 686 | 1682.25 | 0.28 | 0.22 | | | 18.9 | | | | 2.66 | A.A.incr.Calc. |
| 687 | 1682.50 | 0.29 | 0.22 | | | 17.2 | | | | 2.64 | A.A.ltl-Calc. |
| 688 | 1682.75 | 0.17 | 0.13 | | | 16.9 | | | | 2.67 | A.A.incr.Calc. |
| 689 | 1683.00 | 0.19 | 0.15 | 0.046 | 0.034 | 17.4 | | | | 2.68 | A.A. |
| 690 | 1683.25 | 0.20 | 0.15 | | | 17.3 | | | | 2.64 | A.A.ltl-Calc. |
| 691 | 1683.50 | 0.17 | 0.13 | | | 16.9 | | | | 2.68 | A.A.incr-Calc. |
| 692 | 1683.75 | 0.10 | 0.078 | | | 15.9 | | | | 2.64 | A.A.ltl-Calc. |
| 693 | 1684.00 | 0.093 | 0.070 | 0.042 | 0.031 | 16.3 | | | | 2.63 | A.A. |
| 694 | 1684.50 | 0.074 | 0.054 | | | 15.7 | | | | 2.65 | A.A. |
| 695 | 1684.75 | 0.098 | 0.073 | | | 16.9 | | | | 2.67 | A.A. |
| 696 | 1685.00 | 0.23 | 0.17 | 0.36 | 0.27 | 21.8 | | | | 2.70 | A.A.incr-Calc.w/Glauc. |
| 697 | 1685.25 | 0.29 | 0.22 | | | 21.2 | | | | 2.71 | A.A.Lt-gry.W-amt.ltl-Cl. |
| 698 | 1685.50 | 0.17 | 0.13 | | | 13.3 | | | | 2.72 | Calc-sst.Lt-gry.F-gr.Sbang.VW-amt.w/Mic. |
| 699 | 1685.75 | 1.5 | 1.2 | | | 21.2 | | | | 2.72 | A.A.W-srt. |
| 700 | 1686.00 | 32.2 | 29.3 | 65.4 | 61.3 | 29.6 | | | | 2.70 | A.A.W-amt.Fr-srt. |
| 701 | 1686.25 | 65.0 | 60.6 | | | 30.2 | | | | 2.69 | A.A. |
| 702 | 1686.50 | 26.2 | 23.7 | | | 24.4 | | | | 2.70 | A.A. |
| 703 | 1686.75 | 96.3 | 90.5 | | | 31.8 | | | | 2.69 | A.A. |
| 704 | 1687.25 | 133 | 125 | 115 | 109 | 33.1 | | | | 2.68 | A.A.Fr-amt. |
| 705 | 1687.50 | 104 | 93.4 | | | 32.3 | | | | 2.69 | A.A. |
| 706 | 1687.75 | 51.5 | 44.8 | | | 32.4 | | | | 2.69 | A.A. |

# FINAL REPORT

COMPANY : STATOIL
WELL : 31/6-5
FIELD : 31/6
STATE : NORWAY

CORE NO.: 9 (cont.)



DATE: JUNE 1984

GECO
GEOPHYSICAL COMPANY OF NORWAY A-S
Petroleum laboratory

| Plug No. | Depth (meter) | Permeability (mD), horizontal $K_a$ | horizontal $K_1$ | vertical $K_a$ | vertical $K_1$ | Porosity (%) He | Porosity (%) Sum. | Pore saturation $S_o$ | Pore saturation $S_w$ | Grain dens. g/cc | Formation Description |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 707 | 1688.00 | 3.7 | 3.1 | 5.3 | 4.6 | 24.2 | | | | 2.73 | A.A.VF-gr.W-cmt.w/Sid. |
| 708 | 1688.25 | 3.1 | 2.6 | | | 23.3 | | | | 2.71 | A.A.w/C |
| 709 | 1688.50 | 5.5 | 4.8 | | | 24.0 | | | | 2.71 | A.A. |
| 710 | 1688.75 | 1.7 | 1.3 | | | 22.3 | | | | 2.69 | A.A. |
| 711 | 1689.00 | 5.4 | 4.7 | 1.1 | 0.85 | 22.9 | | | | 2.72 | A.A. |
| 712 | 1689.25 | 7.0 | 6.2 | | | 25.6 | | | | 2.69 | A.A.w/foss. |
| 713 | 1689.50 | 2.1 | 1.6 | | | 22.7 | | | | 2.71 | A.A. |
| 714 | 1690.00 | 1.3 | 1.0 | 0.58 | 0.45 | 21.5 | | | | 2.70 | A.A. |
| 715 | 1690.25 | 0.91 | 0.70 | | | 21.2 | | | | 2.70 | A.A. |
| 716 | 1690.50 | 0.83 | 0.65 | | | 21.4 | | | | 2.72 | A.A.w/Pyr. |
| 717 | 1690.75 | 0.60 | 0.46 | | | 19.0 | | | | 2.68 | A.A.w/o Sid. |
| 718 | 1691.00 | 0.41 | 0.31 | 0.34 | 0.26 | 20.0 | | | | 2.69 | A.A.w/o Pyr. |
| 719 | 1691.25 | 0.69 | 0.54 | | | 19.9 | | | | 2.68 | A.A.decr.Calc. |
| 720 | 1691.50 | 0.83 | 0.65 | | | 20.1 | | | | 2.68 | A.A. |
| 721 | 1691.75 | 0.41 | 0.32 | | | 18.5 | | | | 2.68 | A.A.w/Cl.ltl-Sid.w/o foss |
| 722 | 1692.00 | 0.67 | 0.52 | 0.17 | 0.12 | 18.9 | | | | 2.69 | A.A. |
| 723 | 1692.50 | 0.43 | 0.33 | | | 18.8 | | | | 2.69 | A.A. |
| 724 | 1692.75 | 0.31 | 0.24 | | | 17.9 | | | | 2.68 | A.A. |
| 725 | 1693.00 | 0.30 | 0.23 | 0.11 | 0.084 | 17.8 | | | | 2.67 | A.A. |
| 726 | 1693.25 | 0.25 | 0.19 | | | 17.6 | | | | 2.67 | A.A. |
| 727 | 1693.50 | 0.80 | 0.62 | | | 18.5 | | | | 2.66 | A.A. |
| | 1693.50 | | | | | | | | | | |

COMPANY : STATOIL
WELL : 31/6-5
FIELD : 31/6
STATE : NORWAY

# FINAL REPORT

CORE NO.: 10



DATE: JUNE 1984

GECO
GEOPHYSICAL COMPANY OF NORWAY A·S
Petroleum laboratory

| Plug No. | Depth (meter) | Permeability (mD), horizontal $K_a$ | horizontal $K_l$ | vertical $K_a$ | vertical $K_l$ | Porosity (%) He | Porosity (%) Sum. | Pore saturation $S_o$ | Pore saturation $S_w$ | Grain dens. g/cc | Formation Description |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | 1693.00 | | | | | | | | | | |
| 728 | 1693.75 | 1.8 | 1.4 | | | 17.8 | | | | 2.67 | Sst.Lt-gry.VF-gr.Sbang.VW-cmt.w/Mic.Cl. |
| 729 | 1694.00 | 0.49 | 0.38 | 0.099 | 0.074 | 16.6 | | | | 2.68 | A.A.Slty.VW-srt.w/Calc. |
| 730 | 1694.25 | 0.71 | 0.55 | | | 17.3 | | | | 2.71 | A.A.w/Sid. |
| 731 | 1694.50 | 0.27 | 0.20 | | | 16.8 | | | | 2.65 | A.A.w/o Sid. |
| 732 | 1694.75 | 0.45 | 0.34 | | | 16.1 | | | | 2.65 | A.A. |
| 733 | 1695.00 | 0.36 | 0.27 | 0.045 | 0.033 | 16.3 | | | | 2.66 | A.A. |
| 734 | 1695.25 | 0.34 | 0.26 | | | 15.9 | | | | 2.67 | A.A.w/foss. |
| 735 | 1695.75 | 0.99 | 0.77 | | | 19.7 | | | | 2.69 | A.A.ltl-Pyr. |
| 736 | 1696.00 | 0.30 | 0.23 | 0.063 | 0.046 | 17.0 | | | | 2.67 | A.A.w/o Pyr. |
| 737 | 1696.25 | 0.36 | 0.28 | | | 15.6 | | | | 2.66 | A.A. |
| 738 | 1696.50 | 0.59 | 0.46 | | | 18.7 | | | | 2.71 | A.A.w/Pyr. |
| 739 | 1696.75 | 0.80 | 0.62 | | | 21.5 | | | | 2.68 | A.A.W-cmt.W-srt. |
| 740 | 1697.00 | 11.3 | 10.2 | 1.1 | 0.88 | 16.9 | | | | 2.67 | Sst.Lt-gry.F-gr.Sbang.VW-cmt.Calc.w/Mic. |
| 741 | 1697.25 | 49.6 | 42.6 | | | 18.3 | | | | 2.68 | A.A.W-srt.w/foss. |
| 742 | 1697.50 | 455 | 425 | | | 31.7 | | | | 2.67 | A.A.Fr-cmt. |
| 743 | 1697.75 | 141 | 126 | | | 31.0 | | | | 2.69 | A.A.Mic-lam.ltl-C. |
| 744 | 1698.00 | 45.8 | 39.2 | 31.9 | 26.6 | 28.7 | | | | 2.69 | A.A.VF-gr.w/Cl. |
| 745 | 1698.50 | 11.0 | 8.7 | | | 28.6 | | | | 2.69 | A.A. |
| 746 | 1698.75 | 4.9 | 4.3 | | | 22.7 | | | | 2.69 | A.A.W-cmt. |
| 747 | 1699.00 | 9.3 | 7.3 | 4.6 | 4.0 | 24.5 | | | | 2.69 | A.A.decr.Calc. |
| 748 | 1699.25 | 3.7 | 3.1 | | | 21.8 | | | | 2.69 | A.A.Gry. |
| 749 | 1699.50 | 5.5 | 4.8 | | | 23.0 | | | | 2.69 | A.A. |
| 750 | 1699.75 | 2.6 | 2.2 | | | 21.1 | | | | 2.70 | A.A.w/Sid. |
| 751 | 1700.00 | 8.4 | 6.6 | 3.9 | 3.4 | 23.8 | | | | 2.69 | A.A. |
| 752 | 1700.25 | 3.2 | 2.7 | | | 22.6 | | | | 2.69 | A.A. |
| 753 | 1700.50 | 8.7 | 7.4 | | | 23.8 | | | | 2.70 | A.A. |
| 754 | 1700.75 | 5.9 | 5.3 | | | 23.5 | | | | 2.69 | A.A. |

COMPANY : STATOIL
WELL : 31/6-5
FIELD : 31/6
STATE : NORWAY

# FINAL REPORT

CORE NO.: 10 (cont.)



DATE: JUNE 1984

GECO
GEOPHYSICAL COMPANY OF NORWAY A-S
Petroleum laboratory

| Plug No. | Depth (meter) | Permeability (mD), horizontal $K_a$ | horizontal $K_l$ | vertical $K_a$ | vertical $K_l$ | Porosity (%) He | Porosity (%) Sum. | Pore saturation $S_o$ | Pore saturation $S_w$ | Grain dens. g/cc | Formation Description |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 755 | 1701.25 | 3.5 | 3.0 | 1.3 | 1.0 | 22.5 | | | | 2.69 | A.A. |
| 756 | 1701.50 | 5.2 | 4.5 | | | 23.7 | | | | 2.69 | A.A. |
| 757 | 1701.75 | 3.8 | 3.2 | | | 23.0 | | | | 2.69 | A.A. |
| 758 | 1702.00 | 6708 | 6544 | 3858 | 3741 | 35.0 | | | | 2.66 | Sd.Lt-gry.M/Crs-gr.Sbang.W-srt.ltl-Mic. |
| 759 | 1702.25 | 3486 | 3376 | | | 33.7 | | | | 2.67 | A.A.Fr-srt. |
| 760 | 1702.50 | 8532 | 8341 | | | 34.4 | | | | 2.65 | A.A.W-srt. |
| 761 | 1702.75 | 11634 | 11403 | | | 36.4 | | | | 2.66 | A.A. |
| 762 | 1703.00 | 11459 | 11230 | 7685 | 7506 | 35.2 | | | | 2.66 | A.A. |
| 763 | 1703.25 | 5433 | 5288 | | | 32.8 | | | | 2.67 | A.A. |
| 764 | 1703.50 | 420 | 392 | | | 27.8 | | | | 2.68 | A.A.Fr-srt.w/Calc. |
| 765 | 1704.00 | 3163 | 3060 | 1783 | 1711 | 33.4 | | | | 2.66 | A.A.w/o Calc. |
| 766 | 1704.25 | 5474 | 5329 | | | 32.6 | | | | 2.65 | A.A. |
| 767 | 1704.50 | 2754 | 2659 | | | 32.3 | | | | 2.66 | A.A. |
| 768 | 1704.75 | 3434 | 3326 | | | 34.2 | | | | 2.65 | A.A. |
| 769 | 1705.00 | 11524 | 11294 | 3737 | 3622 | 34.9 | | | | 2.65 | A.A.w/foss. |
| 770 | 1705.25 | 1010 | 959 | | | 32.9 | | | | 2.67 | A.A.M-gr.W-srt.w/o foss.w/Mic. |
| 771 | 1705.50 | 5252 | 5110 | | | 32.9 | | | | 2.65 | A.A.M/Crs-gr. |
| 772 | 1705.75 | 449 | 419 | | | 35.3 | | | | 2.67 | A.A.F/M-gr.w/Cl. |
| 773 | 1706.00 | npp | | | | | | | | | |
| 774 | 1706.50 | 25.0 | 20.2 | | | 27.0 | | | | 2.71 | Sst.Lt-gry.F-gr.Sbang.W-cmt.w/Mic.Pyr. |
| 775 | 1706.75 | 23.7 | 19.5 | | | 27.0 | | | | 2.70 | A.A.W-srt.w/Calc. |
| 776 | 1707.00 | 15.6 | 14.0 | 4.0 | 3.4 | 24.4 | | | | 2.67 | A.A.VF-gr.VW-cmt.w/o Pyr. |
| 777 | 1707.25 | 7035 | 6885 | | | 31.0 | | | | 2.68 | Sd.Lt-gry.M/Crs-gr.Sbang.W-cmt.w/Mic. |
| 778 | 1707.50 | 51.9 | 44.5 | | | 26.2 | | | | 2.71 | Sst.Lt-gry.F-gr.Sbang.W-cmt.w/Mic.Pyr. |
| 779 | 1707.75 | 4468 | 4340 | | | 30.9 | | | | 2.67 | Sd.Lt-gry.M/Crs-gr.Sbang.Fr-srt.w/Mic. |
| 780 | 1708.00 | 5.0 | 4.4 | 0.56 | 0.44 | 18.4 | | | | 2.68 | Sst.Gry.M-gr.Sbang.VW-cmt.Cl-mtrx.w/Mic. |
| 781 | 1708.25 | 2.0 | 1.6 | | | 19.4 | | | | 2.67 | A.A.VF-gr.W-srt.w/Calc. |

COMPANY : STATOIL
WELL : 31/6-5
FIELD : 31/6
STATE : NORWAY

# FINAL REPORT

CORE NO.: 10 (cont.)



DATE: JUNE 1984

GECO
GEOPHYSICAL COMPANY OF NORWAY A-S
Petroleum laboratory

| Plug No. | Depth (meter) | Permeability (mD), horizontal $K_a$ | horizontal $K_l$ | vertical $K_a$ | vertical $K_l$ | Porosity (%) He | Porosity (%) Sum. | Pore saturation $S_o$ | Pore saturation $S_w$ | Grain dens. g/cc | Formation Description |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 782 | 1708.50 | 402 | 374 | | | 30.5 | | | | 2.68 | Sst.Lt-gry.M-gr.Sbang.P-cmt.P-srt.w/Mic. |
| 783 | 1708.75 | 601 | 565 | | | 31.9 | | | | 2.68 | Sd.Lt-gry.M-gr.Sbang.Fr-srt.w/Mic. |
| 784 | 1709.25 | 76.7 | 67.1 | 101 | 89.2 | 29.8 | | | | 2.70 | Sst.Lt-gry.F-gr.Sbang.W-cmt.w/Mic.Calc. |
| 785 | 1709.50 | 59.3 | 52.0 | | | 26.5 | | | | 2.70 | A.A.VP-srt.w/Cl.Sid. |
| 786 | 1709.75 | 734 | 693 | | | 32.2 | | | | 2.68 | Sst.Lt-gry.F/M-gr.Sbang.Fr-cmt.w/Mic. |
| 787 | 1710.00 | 812 | 768 | 612 | 575 | 32.4 | | | | 2.69 | A.A.W-srt.w/Calc. |
| 788 | 1710.25 | 66.4 | 57.9 | | | 29.6 | | | | 2.69 | A.A. |
| 789 | 1710.50 | 0.035 | 0.025 | | | 2.0 | | | | 2.69 | Calc-sst.Lt-gry.F-gr.Sbang.VW-cmt.w/Mic. |
| 790 | 1710.75 | 0.031 | 0.023 | | | 1.6 | | | | 2.71 | A.A.VW-srt. |
| 791 | 1711.25 | 2.3 | 1.7 | 135 | 121 | 30.4 | | | | 2.69 | A.A.W-cmt.w/foss. |
| 792 | 1711.50 | 478 | 447 | | | 32.8 | | | | 2.68 | Sst.Lt-gry.F-gr.Sbang.Fr-cmt.w/Mic.Calc. |
| 793 | 1712.00 | 1257 | 1199 | 444 | 415 | 28.1 | | | | 2.66 | A.A.Fr-srt. |
| 794 | 1712.25 | 861 | 815 | | | 30.7 | | | | 2.67 | A.A.W-srt. |
| 795 | 1712.50 | 634 | 597 | | | 31.9 | | | | 2.67 | A.A. |
| 796 | 1712.75 | 512 | 479 | | | 31.9 | | | | 2.68 | A.A. |
| 797 | 1713.00 | 829 | 784 | 1151 | 1096 | 35.1 | | | | 2.68 | A.A. |
| 798 | 1713.25 | 725 | 685 | | | 33.6 | | | | 2.68 | A.A. |
| 799 | 1713.50 | 5400 | 5256 | | | 33.2 | | | | 2.65 | Sd.Lt-gry.F-gr.Sbang.Fr-srt. |
| 800 | 1713.75 | 2280 | 2196 | | | 29.6 | | | | 2.66 | A.A.Crs-gr. |
| 801 | 1714.00 | 22.3 | 18.3 | nmp | | 19.8 | | | | 2.69 | Sst.Gry.M-gr.Sbang.VW-cmt.w/Mic.Cl.Calc. |
| 802 | 1714.25 | 849 | 804 | | | 31.2 | | | | 2.66 | A.A.P-cmt.P-srt. |
| 803 | 1714.75 | 2143 | 2062 | | | 32.9 | | | | 2.68 | Sst.Lt-gry.F/M-gr.Sbang.P-cmt.w/Mic.Calc |
| 804 | 1715.00 | 10.3 | 8.1 | 0.59 | 0.45 | 19.6 | | | | 2.74 | A.A.Gry.VW-cmt.Cl-lam.w/Pyr.Sid. |
| 805 | 1715.25 | 4596 | 4466 | | | 31.1 | | | | 2.66 | Sst.Lt-gry.F/M-gr.Sbang.VP-cmt.w/Mic. |
| 806 | 1715.50 | 5055 | 4917 | | | 31.6 | | | | 2.66 | A.A.VP-srt. |

COMPANY : STATOIL
WELL : 31/6-5
FIELD : 31/6
STATE : NORWAY

# FINAL REPORT

CORE NO.: 10 (cont.)



DATE: JUNE 1984

GECO
GEOPHYSICAL COMPANY OF NORWAY A.S
Petroleum laboratory

| Plug No. | Depth (meter) | Permeability (mD), horizontal $K_a$ | horizontal $K_l$ | vertical $K_a$ | vertical $K_l$ | Porosity (%) He | Porosity (%) Sum. | Pore saturation $S_o$ | Pore saturation $S_w$ | Grain dens. g/cc | Formation Description |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 807 | 1715.75 | 46.8 | 40.0 | | | 27.4 | | | | 2.68 | Sst.Lt-gry.VF-gr.Sbang.W-cmt.w/Mic.Calc. |
| 808 | 1716.00 | 11.8 | 9.4 | 7.1 | 6.3 | 25.6 | | | | 2.69 | A.A.W-srt.w/foss. |
| 809 | 1716.25 | 16.0 | 12.9 | | | 26.4 | | | | 2.69 | A.A. |
| 810 | 1716.50 | 13.8 | 12.5 | | | 25.8 | | | | 2.69 | A.A. |
| 811 | 1716.75 | 4.3 | 3.7 | | | 22.8 | | | | 2.70 | A.A.w/Sid. |
| 812 | 1717.00 | 11.1 | 8.9 | 3.8 | 3.2 | 25.5 | | | | 2.69 | A.A.w/o Sid. |
| 813 | 1717.50 | 1.7 | 1.3 | | | 21.9 | | | | 2.72 | A.A.w/Pyr. |
| 814 | 1717.75 | 1.9 | 1.5 | | | 21.7 | | | | 2.68 | A.A.w/o Pyr. |
| 815 | 1718.00 | 2.2 | 1.7 | 0.60 | 0.46 | 22.2 | | | | 2.68 | A.A. |
| 816 | 1718.25 | 0.93 | 0.73 | | | 20.0 | | | | 2.68 | A.A.w/Cl. |
| 817 | 1718.50 | 0.70 | 0.54 | | | 18.3 | | | | 2.67 | A.A. |
| 818 | 1718.75 | 1.7 | 1.3 | | | 19.4 | | | | 2.66 | A.A.M-gr.VW-cmt.Fr-srt. |
| 819 | 1719.00 | 9.2 | 7.2 | 39.8 | 37.0 | 25.1 | | | | 2.70 | A.A.VF-gr.w/Glauc. |
| 820 | 1719.25 | 13.2 | 10.6 | | | 28.2 | | | | 2.70 | A.A. |
| 821 | 1719.50 | 14.7 | 11.9 | | | 26.6 | | | | 2.70 | A.A. |
| 822 | 1719.75 | 28.7 | 24.1 | | | 27.5 | | | | 2.69 | A.A.w/o Glauc. |
| 823 | 1720.00 | 1319 | 1259 | 1456 | 1423 | 32.6 | | | | 2.67 | A.A.F/M-gr.P-cmt.P-srt. |
| 824 | 1720.25 | 3602 | 3490 | | | 34.6 | | | | 2.66 | A.A. |
| | 1720.65 | | | | | | | | | | |

COMPANY: STATØIL | FIELD: 31/6 | FILE:

WELL: 31/6-5 | COUNTY: | DATE: JUNE 1984

LOCATION: | STATE: NØRWAY | ELEV.:

# CORE GRAPH

GECO
GEOPHYSICAL COMPANY
OF NORWAY A.S



VERTICAL SCALE: 1:200

# LABORATORY

**CORE-GAMMA SURFACE-LOG**
(PATENT APPLIED FOR)
GAMMA RAY
RADIATION INCREASE ----->
VOLTAGE: 985 VOLT
INTEGRATING TIME: 11 SEC
COUNTS PER MINUTE: 10 K

**DEPTH METER**

POROSITY % — x — x —
PERMEABILITY mD HORIZONTAL — □ —
VERTICAL — △ —

% 42 39 36 33 30 27 24 21 18 15 12 9 6 3 %

1000mD 100mD 10mD 0

**FLUID SATURATION**

OTHER | OIL | WATER

80 60 40 20 %

CØRE NØ: 1

CØRE NØ: 2

1470.00
1473.00
1476.00
1479.00
1482.00
1485.00
1488.00
1491.00
1494.00
1497.00
1500.00
1503.00
1506.00
1509.00
1512.00
1515.00
1518.00

**LOGGED INTERVAL:**

CORE NO.1 :
1470.00 - 1497.25

CORE NO.2 :
1497.00 - 1517.95

COMPANY: STATØIL | FIELD: 31/6 | FILE:

WELL: 31/6-5 | COUNTY: | DATE: JUNE 1984

LOCATION: | STATE: NØRWAY | ELEV.:

# CORE GRAPH



GECO
GEOPHYSICAL COMPANY
OF NORWAY A.S

VERTICAL SCALE: 1:200

# LABORATORY

**CORE-GAMMA SURFACE-LOG**
(PATENT APPLIED FOR)
GAMMA RAY
RADIATION INCREASE ------>
VOLTAGE: 985 VOLT
INTEGRATING TIME: 11 SEC
COUNTS PER MINUTE: 10 K

**DEPTH METER**

**POROSITY %** — x — x —
**PERMEABILITY mD** HORIZONTAL — □ —
VERTICAL — △ —

% 42 39 36 33 30 27 24 21 18 15 12 9 6 3 %

1000mD 100mD 10mD 0

**FLUID SATURATION**

OTHER | OIL | WATER

80 60 40 20 %

CORE NO: 3

1524.00
1527.00
1530.00
1533.00
1536.00
1539.00
1542.00
1545.00
1548.00
1551.00

CORE NO: 4

1551.00
1554.00
1557.00
1560.00

**LOGGED INTERVAL:**

CORE NO.3 :
1523.50 - 1550.50

CORE NO.4 :
1550.50 - 1557.35

COMPANY: STATOIL | FIELD: 31/6 | FILE:

WELL: 31/6-5 | COUNTY: | DATE: JUNE 1984

LOCATION: | STATE: NORWAY | ELEV.:

# CORE GRAPH



GECO
GEOPHYSICAL COMPANY
OF NORWAY A.S

VERTICAL SCALE: 1:200

# LABORATORY

**CORE-GAMMA SURFACE-LOG**
(PATENT APPLIED FOR)
GAMMA RAY
RADIATION INCREASE ----->
VOLTAGE: 985 VOLT
INTEGRATING TIME: 11 SEC
COUNTS PER MINUTE: 10 K

**DEPTH METER**

**POROSITY %** — x — x —
**PERMEABILITY mD** HORIZONTAL — □ —
VERTICAL — △ —

% 42 39 36 33 30 27 24 21 18 15 12 9 6 3 %

1000mD 100mD 10mD 0

**FLUID SATURATION**

OTHER | OIL | WATER

80 60 40 20 %

CORE NO: 5

CORE NO: 6

1558.00
1561.00
1564.00
1567.00
1570.00
1573.00
1576.00
1579.00
1582.00
1585.00
1584.00
1587.00
1590.00
1593.00
1596.00
1599.00
1602.00
1605.00
1608.00
1611.00
1614.00

**LOGGED INTERVAL:**

CORE NO.5 :
1557.50 - 1584.00

CORE NO.6 :
1584.00 - 1611.00

COMPANY: STATØIL | FIELD: 31/6 | FILE:

WELL: 31/6-5 | COUNTY: | DATE: JUNE 1984

LOCATION: | STATE: NØRWAY | ELEV.:

# CORE GRAPH



GECO
GEOPHYSICAL COMPANY
OF NORWAY A.S

VERTICAL SCALE: 1:200

# LABORATORY

**CORE-GAMMA SURFACE-LOG**
(PATENT APPLIED FOR)
GAMMA RAY
RADIATION INCREASE ----->
VOLTAGE: 985 VOLT
INTEGRATING TIME: 11 SEC
COUNTS PER MINUTE: 10 K

**DEPTH METER**

POROSITY % — x — x —
PERMEABILITY mD HORIZONTAL — □ —
VERTICAL — △ —

% 42 39 36 33 30 27 24 21 18 15 12 9 6 3 %

1000mD 100mD 10mD 0

**FLUID SATURATION**

OTHER | OIL | WATER

80 60 40 20 %

CORE NO: 7

1611.00
1614.00
1617.00
1620.00
1623.00
1626.00
1629.00
1632.00
1635.00
1638.00

CORE NO: 8

1638.00
1641.00
1644.00
1647.00
1650.00
1653.00
1656.00
1659.00
1662.00
1665.00
1668.00

**LOGGED INTERVAL:**

CORE NO. 7 :
1611.00 - 1637.75

CORE NO.8 :
1638.00 - 1665.80

COMPANY: STATØIL | FIELD: 31/6 | FILE:

WELL: 31/6-5 | COUNTY: | DATE: JUNE 1984

LOCATION: | STATE: NØRWAY | ELEV.:

# CORE GRAPH



GECO
GEOPHYSICAL COMPANY
OF NORWAY A.S

VERTICAL SCALE: 1:200

# LABORATORY

**CORE-GAMMA SURFACE-LOG**
(PATENT APPLIED FOR)
GAMMA RAY
RADIATION INCREASE ----->
VOLTAGE: 985 VOLT
INTEGRATING TIME: 11 SEC
COUNTS PER MINUTE: 10 K

**DEPTH METER**

**POROSITY %** — x — x —
**PERMEABILITY mD** HORIZONTAL — ▫ —
VERTICAL —— △

% 42 39 36 33 30 27 24 21 18 15 12 9 6 3 %

1000mD 100mD 10mD 0

**FLUID SATURATION**

OTHER | OIL | WATER

80 60 40 20 %

CORE NO: 9

1666.00
1669.00
1672.00
1675.00
1678.00
1681.00
1684.00
1687.00
1690.00
1693.00

CORE NO: 10

1693.00
1696.00
1699.00
1702.00
1705.00
1708.00
1711.00
1714.00
1717.00
1720.00
1723.00

**LOGGED INTERVAL:**

CORE NO.9 :
1665.50 - 1693.50

CORE NO.10 :
1693.00 - 1720.65