

CASING DEPTH: 30" CONDUCTOR AT 390.0MMD (390.0M TVD RKB)
13 3/8" CASING AT 758.0MMD (758.0 M TVD RKB)
9 5/8" CASING AT 1951.0 MMD (1951.0 M TVD RKB)

LOT/FIT: LOT: 1.58 sg 13 3/8" SHOE
FIT: 1.85 sg 9 5/8" SHOE

MUD SYSTEM: PILOT HOLE: BENTONITE MUD
36" : SEAWATER/BENTONITE MUD
17 1/2": SEAWATER/BENTONITE MUD
12 1/4": ANCO 2000
8 1/2": ANCO VERT (OIL BASED)

3.0 WIRELINE PERFORMANCE

3.1 33/9-19S

Schlumberger ran the following logs on wireline run no. 2B after having fished the Supercombo tool at TD due to a cable-socket broke when pulling up too high and into upper sheave. The tools were: DIS/AS/LDL/CNL/GR/AMS. The main log was run on the way out. RFT points were taken with a MDT tool in run no. 2A. Only three 1-gallon chambers were recovered (6 bottles of 450 ccm³ was empty). AS/GR/AMS log was taken with run no. 2C. VSP-tool failed by test at 1900 mMD and after POOH to remove the upper tool, only a one-level tool was used with 15 m interval between each shot in the interval 3190 m to 832 m MD.

CST log was run over interval from 3132.5 to 2689.5 m MD. The recovery was 26 of 30 cores, core # 6,7 and 9 was empty and # 8 lost in hole.

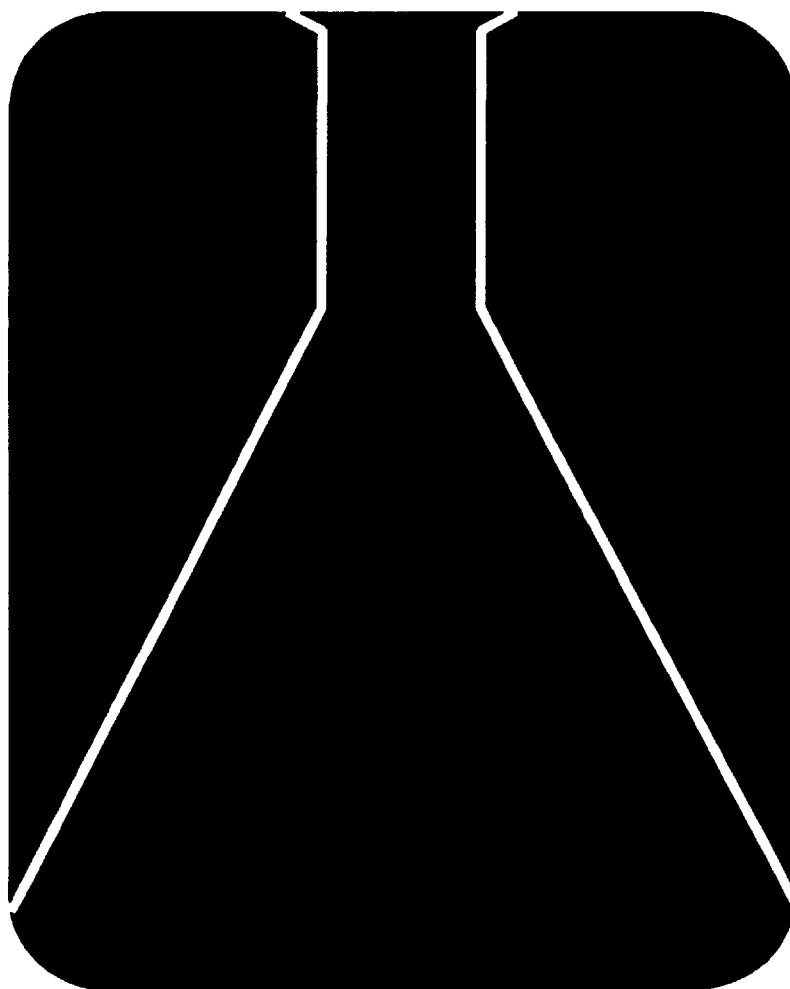
FMT DATA

WELL 33/9-19S

mRKB = 25

| TEST NO | mMD | mTVD | | INIT HYDRO | FORM PRESS | FINAL HYDRO | MOBILITY MD/CP | EMW sg (RT) | Temp | Seal y/n | DEVIATION SURVEYS | | | Comments |
|---------|---------|---------|---------|------------|------------|-------------|----------------|-------------|-------|----------|-------------------|----------|-------|-----------------------|
| | | RKB | MSL | | | | | | | | mMD | mTVD RKB | Incl | |
| 1 | 2692,00 | 2649,17 | 2624,17 | 423,40 | 388,26 | 423,00 | 1316,00 | 1,49 | 88,30 | Y | 2691,00 | 2648,36 | 35,90 | good |
| 2 | 2703,00 | 2658,07 | 2633,07 | 425,40 | 388,79 | 424,90 | 519,00 | 1,49 | 88,80 | Y | 2691,00 | 2648,36 | 35,90 | good |
| 3 | 2710,00 | 2663,72 | 2638,72 | 426,40 | 389,13 | 425,90 | 711,50 | 1,49 | 89,30 | Y | 2691,00 | 2648,36 | 35,90 | good |
| 4 | 2715,00 | 2667,75 | 2642,75 | 426,99 | 389,38 | 426,60 | 474,20 | 1,49 | 89,70 | Y | 2691,00 | 2648,36 | 35,90 | good |
| 5 | 2723,00 | 2674,19 | 2649,19 | 428,80 | 389,84 | 427,90 | 171,10 | 1,49 | 90,10 | Y | 2691,00 | 2648,36 | 35,90 | good |
| 6 | 2725,00 | 2675,80 | 2650,80 | 428,70 | 389,90 | 428,10 | 266,60 | 1,49 | 90,30 | Y | 2691,00 | 2648,36 | 35,90 | good |
| 7 | 2731,00 | 2680,62 | 2655,62 | 430,30 | 390,26 | 429,00 | 377,70 | 1,48 | 90,60 | Y | 2726,00 | 2676,60 | 36,50 | good |
| 8 | 2737,50 | 2685,84 | 2660,84 | 431,60 | 390,64 | 429,90 | 584,50 | 1,48 | 90,80 | Y | 2726,00 | 2676,60 | 36,50 | good |
| 9 | 2747,00 | 2693,47 | 2668,47 | 431,30 | 391,21 | 431,20 | 18,50 | 1,48 | | Y | 2726,00 | 2676,60 | 36,50 | good |
| 10 | 2751,00 | 2696,69 | 2671,69 | 431,60 | 391,45 | 431,95 | 106,50 | 1,48 | | Y | 2726,00 | 2676,60 | 36,50 | good |
| 11 | 2759,50 | 2703,51 | 2678,51 | 432,80 | 391,96 | 432,70 | 52,50 | 1,48 | 91,40 | Y | 2755,00 | 2699,90 | 36,60 | good |
| 12 | 2766,00 | 2708,70 | 2683,70 | 433,60 | 392,63 | 433,50 | 127,20 | 1,48 | 91,60 | Y | 2755,00 | 2699,90 | 36,60 | good |
| 13 | 2771,50 | 2713,08 | 2688,08 | 434,30 | 392,95 | 434,20 | 47,20 | 1,48 | 91,80 | Y | 2755,00 | 2699,90 | 36,60 | good |
| 14 | 2780,50 | 2720,22 | 2695,22 | 435,30 | 393,59 | 435,30 | 80,70 | 1,47 | 92,00 | Y | 2755,00 | 2699,90 | 36,60 | good |
| 15 | 2785,50 | 2724,18 | 2699,18 | 435,96 | 393,80 | 435,90 | 18,10 | 1,47 | 92,30 | Y | 2783,00 | 2722,20 | 37,80 | good |
| 16 | 2797,00 | 2733,26 | 2708,26 | 437,33 | 394,68 | 437,24 | 15,90 | 1,47 | 92,60 | Y | 2783,00 | 2722,20 | 37,80 | good |
| 17 | 2701,00 | 2656,46 | 2631,46 | 424,62 | 388,43 | 424,79 | 638,00 | 1,49 | 91,70 | Y | 2691,00 | 2648,36 | 35,90 | good, sample |
| 18 | 2728,50 | 2678,61 | 2653,61 | 427,33 | 390,11 | 427,26 | 159,50 | 1,48 | | Y | 2691,00 | 2648,36 | 35,90 | good |
| 19 | 2766,00 | 2708,70 | 2683,70 | 433,23 | 392,61 | 433,08 | 64,50 | 1,48 | | Y | 2755,00 | 2699,90 | 36,60 | good, depth check, OK |
| 20 | 2769,00 | 2711,09 | 2686,09 | 433,22 | 392,75 | 433,14 | 69,20 | 1,48 | 93,90 | Y | 2755,00 | 2699,90 | 36,60 | good |
| 21 | 2775,50 | 2716,26 | 2691,26 | 434,00 | 393,14 | 434,00 | 32,30 | 1,48 | 94,00 | Y | 2755,00 | 2699,90 | 36,60 | good |
| 22 | 2793,00 | 2730,10 | 2705,10 | 436,50 | 394,29 | 436,30 | 32,30 | 1,47 | 94,30 | Y | 2783,00 | 2722,20 | 37,80 | good |
| 23 | 2793,00 | 2730,10 | 2705,10 | 435,10 | 394,27 | 435,15 | 5,50 | 1,47 | | Y | 2783,00 | 2722,20 | 37,80 | good |
| 24 | 2797,00 | 2733,26 | 2708,26 | 435,90 | 394,66 | 435,80 | 17,60 | 1,47 | | Y | 2783,00 | 2722,20 | 37,80 | good |

Geochemical Data Report
NOCS 33/9-19S Geochemical Oil Analysis



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NORWAY

BA 97-472-1

18 MARS 1997

REGISTRERT

OLJEDIREKTORATET

GEOCHEMICAL DATA REPORT

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CONTRACT NO: DTJ 020215

TITLE

NOCS 33/9-19S GEOCHEMICAL OIL ANALYSIS

AUTHOR(S)

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GEOLAB PROJECT NO.

62329

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REPORT NO./FILE

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OIL SAMPLE

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GC-MS Saturated Hydrocarbon Fragmentograms**

GC-MS Aromatic Hydrocarbon Fragmentograms

IFE REPORT COPY

Table 8a: Weight of Oil and Chromatographic Fraction for Statoil, Statfjord North, Norwegian Sector

| Well | Description | Whole oil (mg) | Light (mg) | Topped (mg) | Sat (mg) | Aro (mg) | Asph (mg) | NSO (mg) | HC (mg) | Non-HC (mg) | Sample |
|---------------|-------------|----------------|------------|-------------|----------|----------|-----------|----------|---------|-------------|----------|
| NOCS 33/9-19S | Oil | 95.38 | 22.38 | 73.0 | 52.1 | 16.5 | 0.3 | 4.1 | 68.6 | 4.4 | N76/0001 |

Table 8b: Composition of the oil fraction (%) for Statoil, Statfjord North, Norwegian Sector

| Well | Description | Sat T.Oil | Aro T.Oil | Asph T.Oil | NSO T.Oil | HC T.Oil | Non-HC T.Oil | Sat Aro | HC Non-HC | Sample |
|---------------|-------------|-----------|-----------|------------|-----------|----------|--------------|---------|-----------|----------|
| NOCS 33/9-19S | Oil | 71.32 | 22.67 | 0.41 | 5.60 | 93.99 | 6.01 | 314.61 | 1562.67 | N76/0001 |

Table 8d: Iatroscan TLC Bulk Composition: Rel. percentages of sep. fractions for Statoil, Statfjord North, Norwegian Sector Page: 1

| <u>Well</u> | <u>Description</u> | <u>Sat HC</u> | <u>Aro HC</u> | <u>Resins</u> | <u>Asp</u> | <u>Tot HC</u> | <u>Tot Pol</u> | <u>Sample</u> |
|---------------|--------------------|---------------|---------------|---------------|------------|---------------|----------------|---------------|
| NOCS 33/9-19S | Oil | 75.47 | 17.37 | 6.75 | 0.41 | 92.84 | 7.16 | N76/0001 |

Table 8c: Iatroscan TLC Bulk Composition: Absolute yields in mg/g rock for Statoil, Statfjord North, Norwegian Sector Page: 1

Depth unit of measure: m

| <u>Depth</u> | <u>Typ</u> | <u>Lithology</u> | <u>EOM weighed</u> | <u>Sat HC</u> | <u>Aro HC</u> | <u>Resins</u> | <u>Asp</u> | <u>Tot HC</u> | <u>Tot Pol</u> | <u>EOM calcul.</u> | <u>Sample</u> |
|---------------|------------|------------------|--------------------|---------------|---------------|---------------|------------|---------------|----------------|--------------------|---------------|
| NOCS 33/9-19S | Oil | | 73.00 | 55.52 | 12.78 | 4.97 | 0.30 | 68.30 | 5.27 | 73.57 | 0001-0B |

| sample | nC15 mg/g sat | nC16 mg/g sat | iC18 mg/g sat | nC17 mg/g sat | Pr mg/g sat | nC18 mg/g sat | Ph mg/g sat | nC19 mg/g sat | nC20 mg/g sat | nC21 mg/g sat | nC22 mg/g sat | nC23 mg/g sat | nC24 mg/g sat | nC25 mg/g sat | nC26 mg/g sat | nC27 mg/g sat | nC28 mg/g sat | nC29 mg/g sat | nC30 mg/g sat | nC31 mg/g sat | nC32 mg/g sat | nC33 mg/g sat | nC34 mg/g sat |
|-----------------|---------------------|---------------------|---------------------|---------------------|-------------------|---------------------|-------------------|---------------------|---------------------|---------------------|---------------------|---------------------|---------------------|---------------------|---------------------|---------------------|---------------------|---------------------|---------------------|---------------------|---------------------|---------------------|---------------------|
| 33/9S-19, 2701m | 14.52 | 13.97 | 7.20 | 13.10 | 9.11 | 11.36 | 6.02 | 11.15 | 9.39 | 7.74 | 7.26 | 6.39 | 6.13 | 5.45 | 3.99 | 3.18 | 2.75 | 2.37 | 1.68 | 1.30 | 0.92 | 1.02 | 1.07 |

Table 9b: Saturated Hydrocarbon Ratios (peak area) for Statoil, Statfjord North, Norwegian Sector

| Well | Description | Pristane nC17 | Pristane Phytane | Pristane/nC17 Phytane/nC18 | Phytane nC18 | CPI1 | nC17 nC17+nC27 | Sample |
|---------------|-------------|------------------|---------------------|-------------------------------|-----------------|------|-------------------|----------|
| NOCS 33/9-19S | Oil | 0.70 | 1.51 | 1.31 | 0.53 | 1.08 | 0.80 | N76/0001 |

Table 9c : Aromatic Hydrocarbon Ratios (peak area) for Statoil, Statfjord North, Norwegian Sector

| Well | Description | F1 | F2 | Sample |
|---------------|-------------|------|------|----------|
| NOCS 33/9-19S | Oil | 0.52 | 0.32 | N76/0001 |

| Well | Description | MNR | DMNR | BPhR | 2/1MP | MPI1 | MPI2 | Rc | DBT/P | 4/1MDBT | (3+2) /1MDBT | Sample |
|---------------|-------------|------|------|------|-------|------|------|------|-------|---------|-----------------|----------|
| NOCS 33/9-19S | Oil | 2.11 | 8.40 | 0.48 | 1.71 | 0.89 | 1.09 | 0.93 | - | - | - | N76/0001 |

Table 10a: Tabulation of carbon isotope data on oils for Statoil, Statfjord North, Norwegian Sector

| Well | Descript. | Whole oil | Topped oil | Saturated | Aromatic | NSO | Asphaltenes | Sample |
|---------------|-----------|-----------|------------|-----------|----------|--------|-------------|----------|
| NOCS 33/9-19S | Oil | -28.80 | - | -28.60 | -27.55 | -27.41 | -27.66 | N76/0001 |

Table 10b: Tabulation of cv values from carbon isotope data for Statoil, Statfjord North, Norwegian Sector

| Well | Descript. | Saturated | Aromatic | cv value | Sample |
|---------------|-----------|-----------|----------|----------|----------|
| NOCS 33/9-19S | Oil | -28.60 | -27.55 | -0.45 | N76/0001 |

Table 11a: Variation in Triterpane Distribution (peak height) SIR for NOCS 33/9-19S

| Well | Descript. | Ratio1 | Ratio2 | Ratio3 | Ratio4 | Ratio5 | Ratio6 | Ratio7 | Ratio8 | Ratio9 | Rat.10 | Rat.11 | Rat.12 | Rat.13 | Rat.14 | Sample |
|----------|-----------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|----------|
| 33/9-19S | MDT | 0.65 | 0.39 | 0.14 | 0.45 | 0.31 | 0.11 | 0.11 | 0.25 | 0.10 | 0.22 | 0.92 | 0.31 | 0.08 | 58.93 | N76/0002 |

List of Triterpane Distribution Ratios

Ratio 1: $27Tm / 27Ts$

Ratio 2: $27Tm / 27Tm+27Ts$

Ratio 3: $27Tm / 27Tm+30a\beta+30\beta a$

Ratio 4: $29a\beta / 30a\beta$

Ratio 5: $29a\beta / 29a\beta+30a\beta$

Ratio 6: $30d / 30a\beta$

Ratio 7: $28a\beta / 30a\beta$

Ratio 8: $28a\beta / 29a\beta$

Ratio 9: $28a\beta / 28a\beta+30a\beta$

Ratio 10: $24/3 / 30a\beta$

Ratio 11: $30a\beta / 30a\beta+30\beta a$

Ratio 12: $29a\beta+29\beta a / 29a\beta+29\beta a+30a\beta+30\beta a$

Ratio 13: $29\beta a+30\beta a / 29a\beta+30a\beta$

Ratio 14: $32a\beta S / 32a\beta S+32a\beta R$ (%)

Table 11b: Variation in Sterane Distribution (peak height) SIR for NOCS 33/9-19S

| <u>Well</u> | <u>Descript.</u> | <u>Ratio1</u> | <u>Ratio2</u> | <u>Ratio3</u> | <u>Ratio4</u> | <u>Ratio5</u> | <u>Ratio6</u> | <u>Ratio7</u> | <u>Ratio8</u> | <u>Ratio9</u> | <u>Ratio10</u> | <u>Sample</u> |
|-------------|------------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|----------------|---------------|
| 33/9-19S | MDT | 0.81 | 44.66 | 78.16 | 1.59 | 0.80 | 0.60 | 0.44 | 0.64 | 0.81 | 3.23 | N76/0002 |

List of Sterane Distribution Ratios

Ratio 1: $27d\beta S / 27d\beta S + 27aaR$

Ratio 2: $29aaS / 29aaS + 29aaR$ (%)

Ratio 3: $2 * (29\beta\beta R + 29\beta\beta S) / (29aaS + 29aaR + 2 * (29\beta\beta R + 29\beta\beta S))$ (%)

Ratio 4: $27d\beta S + 27d\beta R + 27daR + 27daS / 29d\beta S + 29d\beta R + 29daR + 29daS$

Ratio 5: $29\beta\beta R + 29\beta\beta S / 29\beta\beta R + 29\beta\beta S + 29aaS$

Ratio 6: $21a + 22a / 21a + 22a + 29aaS + 29\beta\beta R + 29\beta\beta S + 29aaR$

Ratio 7: $21a + 22a / 21a + 22a + 28daS + 28aaS + 29daR + 29aaS + 29\beta\beta R + 29\beta\beta S + 29aaR$

Ratio 8: $29\beta\beta R + 29\beta\beta S / 29aaS + 29\beta\beta R + 29\beta\beta S + 29aaR$

Ratio 9: $29aaS / 29aaR$

Ratio 10: $29\beta\beta R + 29\beta\beta S / 29aaR$

Table 11c: Raw triterpane data (peak height) m/z 191 SIR for NOCS 33/9-19S

| Well | Descript. | 23/3 | 24/3 | 25/3 | 24/4 | 26/3 | 27Ts | 27Tm | 28aß | 25nor30aß | Sample |
|----------|-----------|--------|--------|-------|-------|-------|--------|-------|-------|-----------|----------|
| | | 29aß | 29Ts | 30d | 29ßa | 300 | 30aß | 30ßa | 30G | 31aßS | |
| | | 31aßR | 32aßS | 32aßR | 33aßS | 33aßR | 34aßS | 34aßR | 35aßS | 35aßR | |
| 33/9-19S | MDT | 1141.3 | 976.5 | 498.1 | 597.1 | 221.4 | 1251.5 | 812.3 | 513.5 | 236.4 | N76/0002 |
| | | 2023.7 | 1038.9 | 489.9 | 158.9 | 0.0 | 4472.6 | 391.5 | 0.0 | 1717.1 | |
| | | 1230.2 | 1047.2 | 729.9 | 601.1 | 501.5 | 403.8 | 275.2 | 338.5 | 214.1 | |

Table 11d: Raw sterane data (peak height) m/z 217 SIR for NOCS 33/9-19S

| Well | Descript. | 21a | 22a | 27dBS | 27dBR | 27daR | 27daS | 28dBS | 28dBR | 28daR* | Sample |
|----------|-----------|--------|--------|--------|--------|-------|-------|--------|-------|--------|----------|
| | | 29dBS* | 28daS* | 27aaR | 29dBR | 29daR | 28aaS | 29daS* | 28BS | | |
| | | 28aaR | 29aaS | 29BR | 29BS | 29aaR | | | | | |
| 33/9-19S | MDT | 2188.9 | 824.5 | 2685.7 | 1761.7 | 689.9 | 690.3 | 987.8 | 737.9 | 707.1 | N76/0002 |
| | | 1453.2 | 844.1 | 649.8 | 1169.7 | 410.1 | 309.5 | 626.3 | 587.9 | | |
| | | 207.9 | 320.4 | 616.1 | 667.9 | 397.1 | | | | | |

* 28daR coel with 27aaS, 29dBS coel with 27BR, 28daS coel with 27BS, 29daS coel with 28BR

Table 11e: Raw sterane data (peak height) m/z 218 SIR for NOCS 33/9-19S

| Well | Descript. | 27 β SR | 27 β SS | 28 β SR | 28 β SS | 29 β SR | 29 β SS | 30 β SR | 30 β SS | Sample |
|----------|-----------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|----------|
| 33/9-19S | MDT | 1056.1 | 965.0 | 722.4 | 763.3 | 714.7 | 796.5 | 292.9 | 288.8 | N76/0002 |

Table 11f: Raw triterpane data (peak height) m/z 177 SIR for NOCS 33/9-19S

| Well | Descript. | 25nor28aß | 25nor30aß | Sample |
|----------|-----------|-----------|-----------|----------|
| 33/9-19S | MDT | 1141.1 | 208.7 | N76/0002 |

Table 11g: Amount of triterpanes (ppb) m/z 191 SIR for NOCS 33/9-19S

| Well | Descript. | 23/3 | 24/3 | 25/3 | 24/4 | 26/3 | 27Ts | 27Tm | 28aß | 25nor30aß | Sample |
|----------|-----------|---------|---------|---------|---------|---------|----------|---------|---------|-----------|----------|
| | | 29aß | 29Ts | 30d | 29ßa | 300 | 30aß | 30ßa | 30G | 31aßS | |
| | | 31aßR | 32aßS | 32aßR | 33aßS | 33aßR | 34aßS | 34aßR | 35aßS | 35aßR | |
| 33/9-19S | MDT | 48214.8 | 41253.9 | 21044.3 | 25224.1 | 9351.1 | 52868.1 | 34316.3 | 21693.8 | 9988.7 | N76/0002 |
| | | 85492.7 | 43888.7 | 20695.3 | 6714.7 | 0.0 | 188945.7 | 16539.0 | 0.0 | 72540.1 | |
| | | 51972.1 | 44238.3 | 30835.4 | 25395.2 | 21187.5 | 17057.9 | 11625.7 | 14299.4 | 9042.6 | |

Table 11h: Amount of steranes (ppb) m/z 217 SIR for NOCS 33/9-19S

| Well | Descript. | 21a | 22a | 27dBS | 27dBR | 27daR | 27daS | 28dBS | 28dBR | 28daR* | Sample |
|----------|-----------|---------|---------|----------|---------|---------|---------|---------|---------|---------|----------|
| | | 29dBS* | 28daS* | 27aaR | 29dBR | 29daR | 28aaS | 29daS* | 28BS | | |
| | | 28aaR | 29aaS | 29BR | 29BS | 29aaR | | | | | |
| 33/9-19S | MDT | 92472.2 | 34832.9 | 113456.6 | 74424.6 | 29147.2 | 29160.4 | 41730.4 | 31173.6 | 29872.0 | N76/0002 |
| | | 61391.9 | 35658.5 | 27453.0 | 49415.2 | 17323.8 | 13074.6 | 26460.4 | 24835.5 | | |
| | | 8783.3 | 13537.5 | 26026.1 | 28214.3 | 16774.8 | | | | | |

* 28daR coel with 27aaS, 29dBS coel with 27BR, 28daS coel with 27BS, 29daS coel with 28BR

Table 11i: Amount of standard and weight of sample for NOCS 33/9-19S

| <u>Well</u> | <u>Descript.</u> | <u>Standard</u> | <u>Amount</u> | <u>Weight</u> | <u>Sample</u> |
|-------------|------------------|-----------------|---------------|---------------|---------------|
| 33/9-19S | MDT | 1127.2 | 0.700 | 14.7 | N76/0002 |

Table 13A: Light Hydrocarbons from Whole Oil GC for Statoil, Statfjord North, Norwegian Sector

| Well | Description | iC4 | nC4 | iC5 | nC5 | 2,2DMC4 | 2,3DMC4 | 2MC5 | 3MC5 | nC6 | MCyC5 | Benz | Sample |
|---------------|-------------|-----|-----|-----|-----|---------|---------|------|------|------|-------|------|----------|
| NOCS 33/9-19S | Oil | - | - | - | - | 0.08 | - | - | - | 5.91 | 3.20 | 0.77 | N76/0001 |

Table 13B: Light Hydrocarbons from Whole Oil GC for Statoil, Statfjord North, Norwegian Sector

| Well | Description | CyC6 | 2MC6 | 3MC6 | 1,3ci-DMCyC5 | 1,3tr-DMCyC5 | 1,2tr-DMCyC5 | nC7 | MCyC6 | Tol | nC8 | p/m-Xylene | Sample |
|---------------|-------------|------|------|------|--------------|--------------|--------------|------|-------|------|------|------------|----------|
| NOCS 33/9-19S | Oil | 4.49 | 2.42 | 1.85 | 0.72 | 0.68 | 1.54 | 5.73 | 7.29 | 2.69 | 5.51 | 2.65 | N76/0001 |

Table 13c: Thompson's indices for Statoil, Statfjord North, Norwegian Sector

| Well | Description | A | B | X | W | C | I | F | H | U | R | S | Sample |
|---------------|-------------|------|------|------|------|------|------|------|-------|------|------|-------|----------|
| NOCS 33/9-19S | Oil | 0.13 | 0.47 | 0.48 | 1.71 | 0.99 | 1.45 | 0.79 | 23.18 | 0.62 | 2.37 | 73.88 | N76/0001 |

Thompson Indices

Aromaticity

- A = Benzene / n-Hexane
 B = Toluene / n-Heptane
 X = m+p-Xylene / n-Octane
 W = Benzene × 10 / CyC₆

Paraffinicity

- C = $(nC_6 + nC_7) / (CyC_6 + MCyC_6)$
 I = $(2MC_6 + 3MC_6) / (1,3ciDMCyC_5 + 1,3trDMCyC_5 + 1,2trDMCyC_5)$
 F = $nC_7 / MCyC_6$
 H = $nC_7 \times 100 / (CyC_6 + 2MC_6 + 2,3DMCyC_5 + 3MC_6 + 1,3ciDMCyC_5 + 1,3trDMCyC_5 + 1,2trDMCyC_5 + nC_7 + MCyC_6)$

Naphthenes / Iso-compounds

- U = $CyC_6 / MCyC_5$

Paraffins / Iso-compounds

- R = $nC_7 / 2mC_6$
 S = $nC_6 / 2,2DMC_4$

| Sample | Depth | API | | | |
|---------------|--------------|------------|--|--|--|
| NOCS 33/9-19S | 2701 m | 36.65 | | | |