

Report

| | |
|--|--|
| <p>Geological Report Well 9/2-7S PL 114 YME BETA VEST FIELD</p> | <p>OLJEDIREKTORATET</p> <p>16 FEB. 1998 97/793-4 98/716</p> <p>Sak/Dok.nr. 18/716</p> |
| <p>Project no.: PSO114B06</p> | |

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TIME

Subjects:

Drilling Results, Stratigraphic Tops, Structural Cross Section, Cores, FMT Summary, Composite Log, Formation Evaluation Log, CPI Log

| | | |
|-------------------------------------|---|--|
| Drawn up by: GEOTEK-RESU | Name: H.Crews J.T. Samlanes | Date/Signature 4/1-98 <i>Jon Tore Samlanes</i> |
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| Approved by: GEOTEK-RESU | Name: John Olav Fløtre | Date/Signature: <i>John Olav Fløtre</i> 5.2.98 |

DA 98-780-1
 29 APR 1998
REGISTRERT

TABLE 5

YME AREA / BETA VEST STRUCTURE

FMT DATA

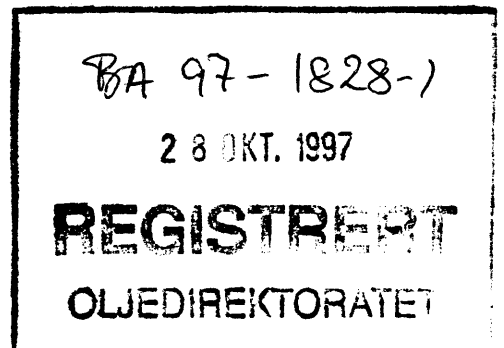
WELL 9/2-7S

| TEST NO | Depth mMD | Depth mTVD | Depth mSS | Initial Hydrostatic bars | Formation Pressure bars | Final Hydrostatic bars | Formation/Member | COMMENTS |
|---------|-----------|------------|-----------|--------------------------|-------------------------|------------------------|------------------|---------------------|
| | | | | | | | | RUN 1 |
| 1 | 3868.0 | 3164.6 | 3139.3 | 409.4 | | 409.5 | S11 | TIGHT |
| 2 | 3871.5 | 3168.1 | 3142.8 | 410.1 | | 410.1 | S11 | TIGHT |
| 3 | 3873.5 | 3170.1 | 3144.8 | 410.4 | | 410.5 | S11 | TIGHT |
| 4 | 3881.0 | 3177.6 | 3152.3 | 411.4 | 365.360 | 411.4 | S10 | SLIGHT SUPERCHARGED |
| 5 | 3887.0 | 3183.5 | 3158.2 | 412.2 | 365.100 | 412.3 | S9 | GOOD TEST |
| 6 | 3896.0 | 3192.5 | 3167.2 | 413.5 | 365.734 | 413.5 | S9 | GOOD TEST |
| 7 | 3904.0 | 3200.5 | 3175.2 | 414.6 | 366.324 | 414.6 | S9 | GOOD TEST |
| 8 | 3913.0 | 3209.5 | 3184.2 | 415.8 | 367.201 | 415.8 | S8 | GOOD TEST |
| 9 | 3929.0 | 3225.4 | 3200.1 | 418.0 | 368.665 | 418.2 | S7 | GOOD TEST |
| 10 | 3939.5 | 3235.9 | 3210.6 | 419.4 | 369.251 | 419.4 | S6 | GOOD TEST |
| 11 | 3949.5 | 3245.8 | 3220.5 | 421.1 | | 421.1 | S4 | TIGHT |
| 12 | 3948.5 | 3244.8 | 3219.5 | 420.7 | 371.700 | 420.7 | S4 | SUPERCHARGED |
| 13 | 3972.5 | 3268.7 | 3243.4 | 423.9 | | 424.0 | S2 | TIGHT |
| 14 | 3979.0 | 3275.2 | 3249.9 | 424.8 | 373.280 | 424.8 | S2 | GOOD TEST |
| 15 | 3988.0 | 3284.2 | 3258.9 | 426.0 | | 426.0 | S1 | TIGHT |
| 16 | 3999.0 | 3295.1 | 3269.8 | 427.6 | | 427.6 | BRYNE | TIGHT |
| 17 | 4016.0 | 3312.1 | 3286.8 | 429.9 | | 429.9 | BRYNE | TIGHT |
| 18 | 4020.0 | 3316.1 | 3290.8 | 430.4 | | 430.5 | BRYNE | TIGHT |
| 19 | 4025.5 | 3321.5 | 3296.2 | 431.2 | | 431.2 | BRYNE | TIGHT |
| 20 | 4039.0 | 3335.0 | 3309.7 | 433.1 | | 433.1 | BRYNE | TIGHT |
| 21 | 4045.0 | 3340.9 | 3315.6 | 433.9 | 379.171 | 433.9 | BRYNE | GOOD TEST |
| 22 | 4049.0 | 3344.9 | 3319.6 | 434.5 | 388.500 | 434.5 | BRYNE | SUPERCHARGED |
| 23 | 4047.0 | 3342.9 | 3317.6 | 434.2 | 379.045 | 434.2 | BRYNE | GOOD TEST |
| 24 | 4056.5 | 3352.4 | 3327.1 | 435.4 | | 435.5 | BRYNE | TIGHT |
| 25 | 4067.0 | 3362.8 | 3337.5 | 436.9 | | 436.8 | BRYNE | TIGHT |
| 26 | 3896.0 | 3192.5 | 3167.2 | 413.4 | 365.740 | 413.4 | S9 | SAMPLE |
| | | | | | | | | RUN 2 |
| 1 | 3896.0 | 3192.5 | 3167.2 | 413.4 | 365.740 | 413.4 | S9 | SAMPLE |

27 pressure tests. 11 good tests (2 Samples). 3 Supercharged. 13 Tight



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Approved by: *Gemma Hellixen*

Date: 30.7.97



MUD RESISTIVITY CORRECTION SHEET

COMPANY: STATOIL

JOB No: NOR 810

WELL No: 9/2-7S

| RUN NO | DEPTH (m) | Rms (Ohm-m) | Temps (deg C) | Rm (Ohm-m) | Downhole Temp (deg C) | MUD TYPE |
|---------------|----------------------|------------------------|--------------------------|-----------------------|----------------------------------|-----------------|
| 1 | 167m | | | 0.25 | 35 | SW |
| 2 | 1180m | 0.14 | 10 | 0.11 | 35 | KCl |
| 2 | 1425m | 0.11 | 13 | 0.10 | 51 | KCl |
| 2 | 1520m | 0.11 | 51 | 0.09 | 63 | KCl |
| 3 | 1635m | 0.06 | 52 | 0.05 | 62 | KCl |
| 4 | 1830m | 0.06 | 49 | 0.05 | 59 | KCl |
| 5 | 2090m | 0.06 | 47 | 0.05 | 60 | KCl |
| 6 | 2530m | 0.08 | 50 | 0.07 | 62 | KCl |
| 7 | 2576m | > 100 | N/A | > 100 | 63 | Petrofree |
| 8 | 3088m | > 100 | N/A | > 100 | 63 | Petrofree |
| 9 | 3128m | > 100 | N/A | > 100 | 95 | Petrofree |
| 10 | 3475m | > 100 | N/A | > 100 | 91 | Petrofree |
| 11 | 3525m | > 100 | N/A | > 100 | 103 | Petrofree |
| 12 | 3852m | > 100 | N/A | > 100 | 102 | Petrofree |
| 13 | 3867m | 0.08 | 52 | 0.07 | 71 | Aquadrill KCL |
| 14 | 3944m | 0.10 | 56 | 0.07 | 83 | Aquadrill KCL |

Rms = surface measured mud resistivity
 Temps = surface measured mud temperature
 Rm = calculated mud resistivity at downhole temperature
 Downhole Temp = transmitted tool temperature minus 3 degrees Celsius

| | | |
|---|---------------------------|-------------|
| Title: Geochemical Evaluation of Well 9/2-7S NOCS | | |
| Document no.: LTEK-PE0298 | Contract no./project no.: | Filing no.: |

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1 Introduction

Two FMT samples (Run 1A from 3896m MD and 152653 from 3895m MD) were analysed in detail and compared both with other oils in the Yme Field and cuttings/core-chips from 9/2-7S.

All the data from these analyses are reported in the Appendix. The analyses were carried out according to guidelines in the Norwegian Guide to Organic Geochemical Analyses (3rd Edition, 1993). Well 9/2-7S (Figure 1) was drilled with KCl mud from 1192mMD to 2576m, and thereafter with Petrofree mud (ester based) to 3697m and finally with Aquadrill (water based with glycols) mud to TD (4099m).

A total of 62 cutting samples, 11 core chips, and 2 oils were analysed according to the following analytical program.

| Analyses | Number of Samples | | | | total |
|--|-------------------|-----|-----|-----|-------|
| | cutt/core | mud | oil | gas | |
| TOC | 53 | | | | 53 |
| THA pyrolysis | 61 | | | | 61 |
| Vitrinite Reflectance | 11 | | | | 11 |
| Thermal extraction and pyrolysis GC | 22 | | | | 22 |
| Solvent extraction/asph. precipitation | 7 | | | | 7 |
| Iatroscan separation | 7 | | 2 | | 9 |
| MPLC separation | 7 | | 2 | | 9 |
| GC saturates | 7 | | 2 | | 9 |
| GC aromatics | 7 | | 2 | | 9 |
| GC-MS saturates/whole extract | 7 | | 2 | | 9 |
| GC-MS aromatics | 7 | | 2 | | 9 |

DATA REPORT

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CLIENT:

Statoil

REF(S)

Linda Stalker
G97-22

TITLE

NOCS 9/2-7S

AUTHOR(S)

GEOLAB PROJECT NO.

62384

DATE

04.11.97.

PROJECT LEADER

Kjell Arne Bakken,
Sr. Scientist

QA-RESPONSIBLE

Peter B.Hall,
Sr.Scientist

REPORT NO./FILE

FRONT PAGE

Samples for this study were analysed by Geolab Nor by order and program made by Statoil (Linda Stalker). Problems were encountered due to the drill mud. The mud was found to affect the hydrocarbon fractions, especially the aromatic fraction. This severely reduced the useability of chromatography, GC-MS and isotope analysis. It also made it necessary to "clean" the aromatic fraction by additional MPLC separation. The samples were analysed according to "The Norwegian Industry Guide to Organic Geochemical Analyses", Third Edition 1993. No experimental procedures enclosed.

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Thermal Extraction and Pyrolysis Gas Chromatograms

Iatroscan Printouts

Saturated Fraction Gas Chromatograms

Aromatic Fraction Gas Chromatograms before Additional Cleaning (FID and FPD)

Aromatic Fraction Gas Chromatograms (FID and FPD)

GC-MS Fragmentograms Saturated Fraction

GC-MS Fragmentograms Aromatic Fraction

GCIRMS Fragmentograms

Vitrinite Data from IFE

NOCS 9/2-7S Pre-Extracted Samples

Table 5a-b: Rock-Eval Data

NOCS 9/2-7S Oil Samples

Table 8a-c: MPLC Data
Table 8f-g: Iatroscan Data
Table 9a-b: Saturated GC Data
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Whole Oil Gas Chromatograms (FID and FPD)

Saturated Fraction Gas Chromatograms

Aromatic Fraction Gas Chromatograms (FID and FPD)

GC-MS Fragmentograms Saturated Fraction

GC-MS Fragmentograms Aromatic Fraction

GCIRMS Fragmentograms

| TABLE 1: ANALYTICAL PROGRAM | | | | | | | | | | DATABASE CODE: 8384 P64 | | | | | | | | | | | | | |
|----------------------------------|-------------|------------|-----------|----------|----------------|--------------|--------------|------------|--------------|-------------------------|--------------|---------------|--------|-----------------|----------|---------------------|-----------------|-------------------|-------------|-------------|-----|------------------------------|---|
| NOCS 9/2-7S | | | | | | | | | | | | | | | | | | | | | | | |
| PROJECT: STATOIL 9/2-7S , G97-22 | | | | | | | | | | | | | | | | | | | | | | | |
| Scientist: KAB | | | | | Technician: TØ | | | | | | | | | | | | | | | | | | |
| Client Contact: Linda Stalker | | | | | Date: 04.11.97 | | | | | | | | | | | | | | | | | | |
| Sample | Sample Type | Fractions | Lithology | Leco TOC | RockEval | Therm Ext GC | Pyrolysis GC | Extraction | MPLC & Deasp | Isotroscan | Whole Oil GC | Sat GC Quant. | Aro GC | Sat GCMS Quant. | Aro GCMS | delta 13C Fractions | delta 13C Asph. | delta 13C Kerogen | Vis Kerogen | Vit Reflect | API | GC-IRMS of Sat. Fraction/Oil | |
| Table Nos: | | | 3 | 5 | 5 | - | 6 | 8 | 8f | 13 | 9ab | 9c | 11 | 12 | 10 | 10 | 10 | 7 | 4 | 17 | 16 | | |
| 3140 | cut | P64/0012-1 | x | | | | | | | | | | | | | | | | | | | | |
| 3210 | cut | P64/0013-1 | x | | | | | | | | | | | | | | | | | | | | |
| 3310 | cut | P64/0014-1 | x | | | | | | | | | | | | | | | | | | | | |
| 3410 | cut | P64/0015-1 | x | | | | | | | | | | | | | | | | | | | | |
| 3510 | cut | P64/0016-1 | x | | | | | | | | | | | | | | | | | | | | |
| 3620 | cut | P64/0017-1 | x | | | | | | | | | | | | | | | | | | | | |
| 3690 | cut | P64/0018-1 | x | x | x | x | x | x | x | | x | x | x | | | x | x | x | | | | | x |
| 3699 | cut | P64/0019-1 | x | x | x | x | x | | | | | | | | | | | | | | | | |
| 3714 | cut | P64/0020-1 | x | x | x | | | | | | | | | | | | | | | | | | |
| 3723 | cut | P64/0021-1 | x | x | x | | | | | | | | | | | | | | | | | | |
| 3735 | cut | P64/0022-1 | x | x | x | x | x | | | | | | | | | | | | | | | | |
| 3741 | cut | P64/0023-1 | x | x | x | | | | | | | | | | | | | | | | | | |
| 3747 | cut | P64/0024-1 | x | x | x | x | x | | | | | | | | | | | | | | | | |
| 3774 | cut | P64/0025-1 | x | x | x | | | | | | | | | | | | | | | | | | |
| 3816 | cut | P64/0026-1 | x | x | x | | | | | | | | | | | | | | | | | | |
| 3822 | cut | P64/0027-1 | x | | | | | | | | | | | | | | | | | | | | |
| 3846 | cut | P64/0028-1 | x | x | x | | | | | | | | | | | | | | | | | | |
| 3869.55 | ccp | P64/0001-1 | x | | x | x | x | | | | | | | | | | | | | | | | |
| 3871.71 | ccp | P64/0002-1 | x | | x | | | | | | | | | | | | | | | | | | |
| 3885.19 | ccp | P64/0003-1 | x | | x | x | x | x | x | | x | x | x | x | | x | | | | | | | x |
| 3888.75 | ccp | P64/0004-1 | x | | x | | | | | | | | | | | | | | | | | | |
| 3895.99 | ccp | P64/0005-1 | x | | x | | | | | | | | | | | | | | | | | | |
| 3898.75 | ccp | P64/0006-1 | x | | x | | | | | | | | | | | | | | | | | | |
| 3904.79 | ccp | P64/0007-1 | x | | x | | | | | | | | | | | | | | | | | | |
| 3907.82 | ccp | P64/0008-1 | x | | x | x | x | | | | | | | | | | | | | | | | |
| 3910.68 | ccp | P64/0009-1 | x | | | | | | | | | | | | | | | | | | | | |
| 3919.87 | ccp | P64/0010-1 | x | | | | | | | | | | | | | | | | | | | | |
| 3922.37 | ccp | P64/0011-1 | x | | | | | | | | | | | | | | | | | | | | |
| 3924 | cut | P64/0029-1 | x | | | | | | | | | | | | | | | | | | | | |
| 3933 | cut | P64/0030-1 | x | x | x | x | x | x | x | | x | x | x | | | x | | | | | | | x |
| 3936 | cut | P64/0031-1 | x | x | x | | | | | | | | | | | | | | | | | | |
| 3954 | cut | P64/0032-1 | x | x | x | x | x | | | | | | | | | | | | | | | | |
| 3960 | cut | P64/0033-1 | x | x | x | | | | | | | | | | | | | | | | | | |
| 3981 | cut | P64/0034-1 | x | x | x | | | | | | | | | | | | | | | | | | |

| TABLE 1: ANALYTICAL PROGRAM | | | | | | | | | | DATABASE CODE: 8384 | | P64 | | | | | | | | | | | |
|----------------------------------|-------------|------------|-----------|----------|----------------|--------------|--------------|------------|--------------|---------------------|--------------|---------------|--------|-----------------|----------|---------------------|-----------------|-------------------|-------------|-------------|-----|------------------------------|---|
| NOCS 9/2-7S | | | | | | | | | | | | | | | | | | | | | | | |
| PROJECT: STATOIL 9/2-7S , G97-22 | | | | | | | | | | | | | | | | | | | | | | | |
| Scientist: KAB | | | | | Technician: TØ | | | | | | | | | | | | | | | | | | |
| Client Contact: Linda Stalker | | | | | Date: 04.11.97 | | | | | | | | | | | | | | | | | | |
| Sample | Sample Type | Fractions | Lithology | Leco TOC | RockEval | Therm Ext GC | Pyrolysis GC | Extraction | MPLC & Deasp | Introscon | Whole Oil GC | Sat GC Quant. | Aro GC | Sat GCMS Quant. | Aro GCMS | delta 13C Fractions | delta 13C Asph. | delta 13C Kerogen | Vis Kerogen | Vit Reflect | API | GC-IRMS of Sat. Fraction/Oil | |
| Table Nos: | | | 3 | 5 | 5 | - | 6 | 8 | 8 | 8f | 13 | 9ab | 9c | 11 | 12 | 10 | 10 | 10 | 7 | 4 | 17 | 16 | |
| 3984 | cut | P64/0035-1 | x | x | x | x | x | x | x | x | | x | x | x | | x | | | | | | x | |
| 3987 | cut | P64/0036-1 | x | x | x | | | | | | | | | | | | | | | | | | |
| 3990 | cut | P64/0037-2 | x | x | x | | | | | | | | | | | | | | | | | | |
| 3993 | cut | P64/0038-1 | x | x | x | x | x | | | | | | | | | | | | | | | | |
| 3996 | cut | P64/0039-1 | x | x | x | x | x | | | | | | | | | | | | | | | | |
| 3999 | cut | P64/0040-2 | x | x | x | | | | | | | | | | | | | | | | | | |
| 4002 | cut | P64/0041-2 | x | x | x | | | | | | | | | | | | | | | | | | |
| 4005 | cut | P64/0042-2 | x | x | x | | | | | | | | | | | | | | | | | | |
| 4020 | cut | P64/0043-2 | x | | | | | | | | | | | | | | | | | x | | | |
| 4023 | cut | P64/0044-2 | x | x | x | | | | | | | | | | | | | | | | | | |
| 4038 | cut | P64/0045-2 | x | x | x | | | | | | | | | | | | | | | | | | |
| 4050 | cut | P64/0046-2 | x | x | x | x | x | | | | | | | | | | | | | | | | |
| 4053 | cut | P64/0047-2 | x | x | x | | | | | | | | | | | | | | | | | | |
| 4059 | cut | P64/0048-3 | x | x | x | x | x | | | | | | | | | | | | | | | | |
| 4062 | cut | P64/0049-3 | x | x | x | x | x | | | | | | | | | | | | | | | | |
| 4071 | cut | P64/0050-3 | x | x | x | x | x | | | | | | | | | | | | | | | | |
| 4074 | cut | P64/0051-2 | x | x | x | x | x | | | | | | | | | | | | | | | | |
| 4080 | cut | P64/0052-3 | x | x | x | x | x | x | x | | x | x | x | | | x | | | | | | | x |
| 4086 | cut | P64/0053-2 | x | x | x | x | x | | | | | | | | | | | | | | | | |
| 4089 | cut | P64/0054-3 | x | x | x | x | x | | | | | | | | | | | | | | | | |
| 4092 | cut | P64/0055-3 | x | x | x | x | x | x | x | | x | x | x | | | x | | | | | | | x |
| 4095 | cut | P64/0056-2 | x | x | x | x | x | x | x | | x | x | x | | | x | | | x | | | | x |
| 3690 | cut | Q11/0001-0 | | x | x | | | | | | | | | | | | | | | | | | |
| 3699 | cut | Q11/0002-0 | | x | x | | | | | | | | | | | | | | | | | | |
| 3714 | cut | Q11/0003-0 | | x | x | | | | | | | | | | | | | | | | | | |
| 3723 | cut | Q11/0004-0 | | x | x | | | | | | | | | | | | | | | | | | |
| 3735 | cut | Q11/0005-0 | | x | x | | | | | | | | | | | | | | | | | | |
| 3741 | cut | Q11/0006-0 | | x | x | | | | | | | | | | | | | | | | | | |
| 3747 | cut | Q11/0007-0 | | x | x | | | | | | | | | | | | | | | | | | |
| 3774 | cut | Q11/0008-0 | | x | x | | | | | | | | | | | | | | | | | | |
| 3816 | cut | Q11/0009-0 | | x | x | | | | | | | | | | | | | | | | | | |
| 3845 | cut | Q11/0010-0 | | x | x | | | | | | | | | | | | | | | | | | |
| 3990 | cut | Q11/0011-0 | | x | x | | | | | | | | | | | | | | | | | | |
| 4002 | cut | Q11/0012-0 | | x | x | | | | | | | | | | | | | | | | | | |

| TABLE 1: ANALYTICAL PROGRAM | | | | | | | | | | DATABASE CODE: 8384 | | P64 | | | | | | | | | | | |
|----------------------------------|-------------|------------|-----------|----------|----------------|--------------|--------------|------------|--------------|---------------------|--------------|---------------|--------|-----------------|----------|---------------------|-----------------|-------------------|-------------|-------------|-----|------------------------------|--|
| NOCS 9/2-7S | | | | | | | | | | | | | | | | | | | | | | | |
| PROJECT: STATOIL 9/2-7S , G97-22 | | | | | | | | | | | | | | | | | | | | | | | |
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| Table Nos: | | | 3 | 5 | 5 | - | 6 | 8 | 8 | 8f | 13 | 9ab | 9c | 11 | 12 | 10 | 10 | 10 | 7 | 4 | 17 | 16 | |
| 4005 | cut | Q11/0013-0 | | x | x | | | | | | | | | | | | | | | | | | |
| 4023 | cut | Q11/0014-0 | | x | x | | | | | | | | | | | | | | | | | | |
| 4038 | cut | Q11/0015-0 | | x | x | | | | | | | | | | | | | | | | | | |
| 4053 | cut | Q11/0016-0 | | x | x | | | | | | | | | | | | | | | | | | |
| 4095 | cut | Q11/0017-0 | | x | x | | | | | | | | | | | | | | | | | | |
| FMT15653 | oil | P65/0001-0 | | | | | | | x | x | x | x | x | x | x | x | | | | | x | | |
| FMTRun1A | oil | P65/0002-0 | | | | | | | x | x | x | x | x | x | x | x | | | | | x | x | |
| Total No of Analysis | | | 56 | 53 | 61 | 22 | 22 | 7 | 9 | 9 | 2 | 9 | 9 | 9 | 3 | 2 | 7 | 1 | 1 | 11 | 2 | 8 | |

Table 3 : Lithology description for well NOCS 9/2-7S

Depth unit of measure: m

| Depth | Type | Grp | Frm | Age | Trb | Sample |
|---------|-------|------|-----|-------------------------------|-----|---------|
| Int | Cvd | TOC% | % | Lithology description | | |
| 3140.00 | | | | | | 0012 |
| | | | 100 | Sh/Clst: drk gy, dd | | 0012-1L |
| 3210.00 | | | | | | 0013 |
| | | | 100 | Sh/Clst: drk gy, dd | | 0013-1L |
| 3310.00 | | | | | | 0014 |
| | | | 100 | Sh/Clst: drk gy to gy blk, dd | | 0014-1L |
| 3410.00 | | | | | | 0015 |
| | | | 100 | Sh/Clst: drk gy to gy blk | | 0015-1L |
| 3510.00 | | | | | | 0016 |
| | | | 100 | Sh/Clst: drk gy to gy blk, dd | | 0016-1L |
| 3620.00 | | | | | | 0017 |
| | | | 100 | Sh/Clst: gy blk, dd | | 0017-1L |
| 3690.00 | | | | | | 0018 |
| | 11.80 | | 100 | Sh/Clst: brn blk | | 0018-1L |
| 3699.00 | | | | | | 0019 |
| | 13.00 | | 100 | Sh/Clst: brn blk | | 0019-1L |
| 3714.00 | | | | | | 0020 |
| | 12.00 | | 100 | Sh/Clst: brn blk | | 0020-1L |

Table 3 : Lithology description for well NOCS 9/2-7S

Depth unit of measure: m

| Depth | Type | Grp | Frm | Age | Trb | Sample | |
|-------------|-------|-----|-----------------------|-----|-----|---------|--|
| Int Cvd | TOC% | % | Lithology description | | | | |
| 3723.00 | | | | | | 0021 | |
| | 10.56 | 100 | Sh/Clst: brn blk | | | 0021-1L | |
| 3735.00 | | | | | | 0022 | |
| | 13.60 | 100 | Sh/Clst: brn blk, dd | | | 0022-1L | |
| 3741.00 | | | | | | 0023 | |
| | 12.40 | 100 | Sh/Clst: brn blk, dd | | | 0023-1L | |
| 3747.00 | | | | | | 0024 | |
| | 11.30 | 100 | Sh/Clst: brn blk, dd | | | 0024-1L | |
| 3774.00 | | | | | | 0025 | |
| | 9.29 | 100 | Sh/Clst: gy blk, dd | | | 0025-1L | |
| 3816.00 | | | | | | 0026 | |
| | 7.12 | 100 | Sh/Clst: brn blk, dd | | | 0026-1L | |
| 3822.00 | | | | | | 0027 | |
| | | 100 | Sh/Clst: brn blk, dd | | | 0027-1L | |
| 3846.00 | | | | | | 0028 | |
| | 7.49 | 100 | Sh/Clst: brn blk, dd | | | 0028-1L | |
| 3869.55 ccp | | | | | | 0001 | |
| | | 100 | S/Sst : lt gy | | | 0001-1L | |

Table 3 : Lithology description for well NOCS 9/2-7S

Depth unit of measure: m

| Depth | Type | Grp | Frm | Age | Trb | Sample |
|---------|------|------|-----|------------------------|-----|---------|
| Int | Cvd | TOC% | % | Lithology description | | |
| 3871.71 | ccp | | | | | 0002 |
| | | | 100 | S/Sst : m brn gy | | 0002-1L |
| 3885.19 | ccp | | | | | 0003 |
| | | | 100 | S/Sst : m gy, carb | | 0003-1L |
| 3888.75 | ccp | | | | | 0004 |
| | | | 100 | S/Sst : m brn gy | | 0004-1L |
| 3895.99 | ccp | | | | | 0005 |
| | | | 100 | S/Sst : drk brn gy | | 0005-1L |
| 3898.75 | ccp | | | | | 0006 |
| | | | 100 | S/Sst : drk brn gy | | 0006-1L |
| 3904.79 | ccp | | | | | 0007 |
| | | | 100 | S/Sst : drk brn gy | | 0007-1L |
| 3907.82 | ccp | | | | | 0008 |
| | | | 100 | S/Sst : lt gy, mic | | 0008-1L |
| 3910.68 | ccp | | | | | 0009 |
| | | | 100 | S/Sst : drk brn gy | | 0009-1L |
| 3919.87 | ccp | | | | | 0010 |
| | | | 100 | S/Sst : m brn gy, carb | | 0010-1L |

Table 3 : Lithology description for well NOCS 9/2-7S

Depth unit of measure: m

| Depth | Type | Grp | Frm | Age | Trb | Sample |
|---------|------|------|-----|---------------------------------|-----|---------|
| Int | Cvd | TOC% | % | Lithology description | | |
| 3922.37 | ccp | | | | | 0011 |
| | | | 100 | S/Sst : m gy | | 0011-1L |
| 3924.00 | | | | | | 0029 |
| | | | 80 | S/Sst : w, l | | 0029-1L |
| | | | 10 | Sh/Clst: brn blk | | 0029-2L |
| | | | 10 | Cont : prp | | 0029-3L |
| 3933.00 | | | | | | 0030 |
| | 0.68 | | 50 | S/Sst : w, l | | 0030-1L |
| | | | 30 | Cont : prp | | 0030-3L |
| | | | 20 | Sh/Clst: brn blk | | 0030-2L |
| 3936.00 | | | | | | 0031 |
| | 0.73 | | 50 | S/Sst : w, l | | 0031-1L |
| | | | 30 | Cont : prp | | 0031-3L |
| | | | 20 | Sh/Clst: brn blk | | 0031-2L |
| 3954.00 | | | | | | 0032 |
| | 0.64 | | 50 | S/Sst : w, l | | 0032-1L |
| | | | 30 | Cont : prp | | 0032-3L |
| | | | 20 | Sh/Clst: brn blk | | 0032-2L |
| 3960.00 | | | | | | 0033 |
| | 0.80 | | 50 | Cont : prp, dd | | 0033-3L |
| | | | 30 | S/Sst : w, l | | 0033-1L |
| | | | 20 | Sh/Clst: brn blk | | 0033-2L |
| 3981.00 | | | | | | 0034 |
| | 0.22 | | 40 | Sh/Clst: lt gy to m gy, trbofgs | | 0034-4L |
| | | | 20 | S/Sst : w, l | | 0034-1L |
| | | | 20 | Sh/Clst: brn blk | | 0034-2L |
| | | | 20 | Cont : prp, dd | | 0034-3L |

Table 3 : Lithology description for well NOCS 9/2-7S

Depth unit of measure: m

| Depth | Type | Grp | Frm | Age | Trb | Sample |
|---------|------|-------|-----|--------------------------------------|-----|---------|
| Int | Cvd | TOC% | % | Lithology description | | |
| 3984.00 | | | | | | 0035 |
| | | 0.32 | | 30 Cont : prp, dd | | 0035-3L |
| | | | | 30 Sh/Clst: lt gy to m gy, trbofgs | | 0035-4L |
| | | | | 20 S/Sst : w, l | | 0035-1L |
| | | | | 20 Sh/Clst: brn blk | | 0035-2L |
| 3987.00 | | | | | | 0036 |
| | | 0.27 | | 40 Sh/Clst: lt gy to m gy, trbofgs | | 0036-4L |
| | | | | 30 Cont : prp, dd | | 0036-3L |
| | | | | 20 S/Sst : w, l | | 0036-1L |
| | | | | 10 Sh/Clst: brn blk | | 0036-2L |
| 3990.00 | | | | | | 0037 |
| | | 1.10 | | 50 S/Sst : w, l | | 0037-1L |
| | | | | 20 Cont : prp, dd | | 0037-3L |
| | | | | 20 Sh/Clst: lt gy to m gy, trbofgs | | 0037-4L |
| | | | | 10 Sh/Clst: brn blk | | 0037-2L |
| 3993.00 | | | | | | 0038 |
| | | 0.60 | | 80 Sh/Clst: lt gy to drk gy, trbofgs | | 0038-3L |
| | | | | 10 S/Sst : w, l | | 0038-1L |
| | | | | 10 Cont : prp | | 0038-2L |
| 3996.00 | | | | | | 0039 |
| | | 0.58 | | 90 Sh/Clst: m gy to gy blk, trbofgs | | 0039-3L |
| | | | | 10 Cont : prp | | 0039-2L |
| | | | | tr S/Sst : w, l | | 0039-1L |
| 3999.00 | | | | | | 0040 |
| | | 8.77 | | 100 Sh/Clst: m gy to gy blk, trbofgs | | 0040-2L |
| | | | | tr Cont : prp | | 0040-1L |
| 4002.00 | | | | | | 0041 |
| | | 62.00 | | 90 Sh/Clst: m gy to gy blk, trbofgs | | 0041-1L |
| | | | | 10 Sh/Clst: dsk y brn, wx | | 0041-2L |

Table 3 : Lithology description for well NOCS 9/2-7S

Depth unit of measure: m

| Depth | Type | Grp | Frm | Age | Trb | Sample |
|---------|------|-------|-----|--|-----|--|
| Int | Cvd | TOC% | % | Lithology description | | |
| 4005.00 | | | | | | 0042 |
| | | 19.70 | | 90 Sh/Clst: m gy to gy blk, trbofgs 10 Sh/Clst: dsk y brn, wx | | 0042-1L 0042-2L |
| 4020.00 | | | | | | 0043 |
| | | | | 90 Sh/Clst: m gy to gy blk, trbofgs 10 Sh/Clst: dsk y brn to ol blk, wx | | 0043-1L 0043-2L |
| 4023.00 | | | | | | 0044 |
| | | 13.50 | | 90 Sh/Clst: m gy to gy blk, trbofgs 10 Sh/Clst: dsk y brn to ol blk, wx | | 0044-1L 0044-2L |
| 4038.00 | | | | | | 0045 |
| | | 2.86 | | 90 Sh/Clst: m gy to gy blk, trbofgs 10 Sh/Clst: dsk y brn to ol blk, wx | | 0045-1L 0045-2L |
| 4050.00 | | | | | | 0046 |
| | | 2.16 | | 90 Sh/Clst: lt gy to m gy, trbofgs 10 Sh/Clst: dsk y brn to ol blk, wx | | 0046-1L 0046-2L |
| 4053.00 | | | | | | 0047 |
| | | 2.41 | | 100 Sh/Clst: m gy to drk gy, trbofgs tr Sh/Clst: dsk y brn to ol blk, wx | | 0047-1L 0047-2L |
| 4059.00 | | | | | | 0048 |
| | | 0.11 | | 40 Sh/Clst: m gy to drk gy, trbofgs 25 Sh/Clst: dsk y brn to ol blk, wx 25 S/Sst : w, l 10 Cont : prp | | 0048-1L 0048-2L 0048-3L 0048-4L |
| 4062.00 | | | | | | 0049 |
| | | 0.12 | | 70 Sh/Clst: dsk y brn to ol blk 10 Sh/Clst: m gy to drk gy, trbofgs 10 S/Sst : w, l 10 Cont : prp | | 0049-2L 0049-1L 0049-3L 0049-4L |

Table 3 : Lithology description for well NOCS 9/2-7S

Depth unit of measure: m

| Depth | Type | Grp | Frm | Age | Trb | Sample |
|---------|------|------|-----|--|-----|--|
| Int | Cvd | TOC% | % | Lithology description | | |
| 4071.00 | | | | | | 0050 |
| | | 0.12 | | 80 Sh/Clst: m gy to drk gy, trbofgs 10 Sh/Clst: dsk y brn to ol blk, wx 5 S/Sst : w, l 5 Cont : prp | | 0050-1L 0050-2L 0050-3L 0050-4L |
| 4074.00 | | | | | | 0051 |
| | | 2.67 | | 90 Sh/Clst: m gy to drk gy, trbofgs 10 Sh/Clst: dsk y brn to ol blk, wx | | 0051-1L 0051-2L |
| 4080.00 | | | | | | 0052 |
| | | 0.12 | | 90 Sh/Clst: m gy to drk gy, trbofgs 10 Sh/Clst: dsk y brn to ol blk, wx tr S/Sst : w, cem | | 0052-1L 0052-2L 0052-3L |
| 4086.00 | | | | | | 0053 |
| | | 2.37 | | 90 Sh/Clst: m gy to drk gy, trbofgs 10 Sh/Clst: dsk y brn to ol blk, wx | | 0053-1L 0053-2L |
| 4089.00 | | | | | | 0054 |
| | | 0.12 | | 90 Sh/Clst: m gy to drk gy, trbofgs 10 Sh/Clst: dsk y brn to ol blk, wx tr S/Sst : w, cem | | 0054-1L 0054-2L 0054-3L |
| 4092.00 | | | | | | 0055 |
| | | 0.13 | | 90 Sh/Clst: m gy to drk gy, trbofgs 10 Sh/Clst: dsk y brn to ol blk, wx tr S/Sst : w, cem | | 0055-1L 0055-2L 0055-3L |
| 4095.00 | | | | | | 0056 |
| | | 1.67 | | 90 Sh/Clst: m gy to drk gy, trbofgs 10 Sh/Clst: dsk y brn to ol blk, wx tr S/Sst : w, cem | | 0056-1L 0056-2L 0056-3L |

Table 5A: Rock-Eval table for well NOCS 9/2-7S

Depth unit of measure: m

| Depth | Typ | Lithology | S1 | S2 | S3 | S2/S3 | TOC | HI | OI | PP | PI | Tmax | Sample |
|---------|-----|--------------------|-------|-------|------|-------|-------|-----|----|-------|------|------|---------|
| 3690.00 | cut | Sh/Clst: brn blk | 70.66 | 42.56 | 1.12 | 38.00 | 11.80 | 361 | 9 | 113.2 | 0.62 | 436 | 0018-1L |
| 3699.00 | cut | Sh/Clst: brn blk | 77.98 | 44.61 | 1.19 | 37.49 | 13.00 | 343 | 9 | 122.6 | 0.64 | 436 | 0019-1L |
| 3714.00 | cut | Sh/Clst: brn blk | 71.07 | 41.99 | 1.26 | 33.33 | 12.00 | 350 | 11 | 113.1 | 0.63 | 435 | 0020-1L |
| 3723.00 | cut | Sh/Clst: brn blk | 65.75 | 34.26 | 1.55 | 22.10 | 10.56 | 324 | 15 | 100.0 | 0.66 | 436 | 0021-1L |
| 3735.00 | cut | Sh/Clst: brn blk | 94.12 | 37.71 | 1.75 | 21.55 | 13.60 | 277 | 13 | 131.8 | 0.71 | 436 | 0022-1L |
| 3741.00 | cut | Sh/Clst: brn blk | 86.19 | 31.55 | 1.53 | 20.62 | 12.40 | 254 | 12 | 117.7 | 0.73 | 437 | 0023-1L |
| 3747.00 | cut | Sh/Clst: brn blk | 86.01 | 24.40 | 1.67 | 14.61 | 11.30 | 216 | 15 | 110.4 | 0.78 | 438 | 0024-1L |
| 3774.00 | cut | Sh/Clst: gy blk | 70.19 | 17.12 | 1.29 | 13.27 | 9.29 | 184 | 14 | 87.3 | 0.80 | 439 | 0025-1L |
| 3816.00 | cut | Sh/Clst: brn blk | 75.04 | 9.68 | 1.70 | 5.69 | 7.12 | 136 | 24 | 84.7 | 0.89 | 435 | 0026-1L |
| 3846.00 | cut | Sh/Clst: brn blk | 77.58 | 9.02 | 1.97 | 4.58 | 7.49 | 120 | 26 | 86.6 | 0.90 | 431 | 0028-1L |
| 3869.55 | ccp | S/Sst : lt gy | 11.24 | 1.31 | 0.22 | 5.95 | - | - | - | 12.6 | 0.90 | 373 | 0001-1L |
| 3871.71 | ccp | S/Sst : m brn gy | 5.39 | 7.95 | 0.87 | 9.14 | - | - | - | 13.3 | 0.40 | 367 | 0002-1L |
| 3885.19 | ccp | S/Sst : m gy | 12.75 | 7.50 | 0.35 | 21.43 | - | - | - | 20.2 | 0.63 | 432 | 0003-1L |
| 3888.75 | ccp | S/Sst : m brn gy | 7.59 | 4.19 | 0.58 | 7.22 | - | - | - | 11.8 | 0.64 | 378 | 0004-1L |
| 3895.99 | ccp | S/Sst : drk brn gy | 6.53 | 10.79 | 1.42 | 7.60 | - | - | - | 17.3 | 0.38 | 368 | 0005-1L |
| 3898.75 | ccp | S/Sst : drk brn gy | 10.22 | 7.47 | 0.94 | 7.95 | - | - | - | 17.7 | 0.58 | 382 | 0006-1L |

Table 5A: Rock-Eval table for well NOCS 9/2-7S

Depth unit of measure: m

| Depth | Typ | Lithology | S1 | S2 | S3 | S2/S3 | TOC | HI | OI | PP | PI | Tmax | Sample |
|---------|-----|------------------------------|-------|--------|------|-------|-------|-----|-----|-------|------|------|---------|
| 3904.79 | ccp | S/Sst : drk brn gy | 10.22 | 20.47 | 2.21 | 9.26 | - | - | - | 30.7 | 0.33 | 365 | 0007-1L |
| 3907.82 | ccp | S/Sst : lt gy | 10.72 | 5.39 | 0.67 | 8.04 | - | - | - | 16.1 | 0.67 | 335 | 0008-1L |
| 3933.00 | cut | S/Sst : w | 2.11 | 1.60 | 1.60 | 1.00 | 0.68 | 235 | 235 | 3.7 | 0.57 | 397 | 0030-1L |
| 3936.00 | cut | S/Sst : w | 1.69 | 1.51 | 1.40 | 1.08 | 0.73 | 207 | 192 | 3.2 | 0.53 | 397 | 0031-1L |
| 3954.00 | cut | S/Sst : w | 1.29 | 1.11 | 1.53 | 0.73 | 0.64 | 173 | 239 | 2.4 | 0.54 | 389 | 0032-1L |
| 3960.00 | cut | S/Sst : w | 1.30 | 1.33 | 2.01 | 0.66 | 0.80 | 166 | 251 | 2.6 | 0.49 | 391 | 0033-1L |
| 3981.00 | cut | S/Sst : w | 0.55 | 0.18 | 1.44 | 0.13 | 0.22 | 82 | 655 | 0.7 | 0.75 | 377 | 0034-1L |
| 3984.00 | cut | S/Sst : w | 1.06 | 0.45 | 1.91 | 0.24 | 0.32 | 141 | 597 | 1.5 | 0.70 | 372 | 0035-1L |
| 3987.00 | cut | S/Sst : w | 0.54 | 0.19 | 1.51 | 0.13 | 0.27 | 70 | 559 | 0.7 | 0.74 | 386 | 0036-1L |
| 3990.00 | cut | Sh/Clst: brn blk | 1.06 | 1.10 | 1.16 | 0.95 | 1.10 | 100 | 105 | 2.2 | 0.49 | 440 | 0037-2L |
| 3993.00 | cut | S/Sst : w | 0.89 | 0.37 | 2.25 | 0.16 | 0.60 | 62 | 375 | 1.3 | 0.71 | 410 | 0038-1L |
| 3996.00 | cut | S/Sst : w | 0.55 | 0.20 | 1.16 | 0.17 | 0.58 | 34 | 200 | 0.8 | 0.73 | 412 | 0039-1L |
| 3999.00 | cut | Sh/Clst: m gy to gy blk | 10.24 | 14.88 | 3.04 | 4.89 | 8.77 | 170 | 35 | 25.1 | 0.41 | 440 | 0040-2L |
| 4002.00 | cut | Sh/Clst: dsk y brn | 20.25 | 170.51 | 4.74 | 35.97 | 62.00 | 275 | 8 | 190.8 | 0.11 | 444 | 0041-2L |
| 4005.00 | cut | Sh/Clst: dsk y brn | 5.80 | 50.00 | 2.94 | 17.01 | 19.70 | 254 | 15 | 55.8 | 0.10 | 444 | 0042-2L |
| 4023.00 | cut | Sh/Clst: dsk y brn to ol blk | 3.51 | 32.07 | 1.44 | 22.27 | 13.50 | 238 | 11 | 35.6 | 0.10 | 447 | 0044-2L |

Table 5A: Rock-Eval table for well NOCS 9/2-7S

Depth unit of measure: m

| Depth | Typ | Lithology | S1 | S2 | S3 | S2/S3 | TOC | HI | OI | PP | PI | Tmax | Sample |
|---------|-----|------------------------------|------|------|------|-------|------|-----|-----|-----|------|------|---------|
| 4038.00 | cut | Sh/Clst: dsk y brn to ol blk | 0.90 | 6.40 | 0.97 | 6.60 | 2.86 | 224 | 34 | 7.3 | 0.12 | 451 | 0045-2L |
| 4050.00 | cut | Sh/Clst: dsk y brn to ol blk | 0.72 | 2.42 | 0.89 | 2.72 | 2.16 | 112 | 41 | 3.1 | 0.23 | 455 | 0046-2L |
| 4053.00 | cut | Sh/Clst: dsk y brn to ol blk | 0.97 | 3.25 | 1.13 | 2.88 | 2.41 | 135 | 47 | 4.2 | 0.23 | 453 | 0047-2L |
| 4059.00 | cut | S/Sst : w | 0.10 | 0.23 | 0.30 | 0.77 | 0.11 | 209 | 273 | 0.3 | 0.30 | 513 | 0048-3L |
| 4062.00 | cut | S/Sst : w | 0.17 | 0.24 | 0.30 | 0.80 | 0.12 | 200 | 250 | 0.4 | 0.41 | 485 | 0049-3L |
| 4071.00 | cut | S/Sst : w | 0.25 | 0.33 | 0.44 | 0.75 | 0.12 | 275 | 367 | 0.6 | 0.43 | 494 | 0050-3L |
| 4074.00 | cut | Sh/Clst: dsk y brn to ol blk | 1.04 | 4.90 | 0.60 | 8.17 | 2.67 | 184 | 22 | 5.9 | 0.18 | 449 | 0051-2L |
| 4080.00 | cut | S/Sst : w | 0.25 | 0.24 | 0.34 | 0.71 | 0.12 | 200 | 283 | 0.5 | 0.51 | 458 | 0052-3L |
| 4086.00 | cut | Sh/Clst: dsk y brn to ol blk | 0.62 | 2.37 | 0.71 | 3.34 | 2.37 | 100 | 30 | 3.0 | 0.21 | 455 | 0053-2L |
| 4089.00 | cut | S/Sst : w | 0.19 | 0.29 | 0.27 | 1.07 | 0.12 | 242 | 225 | 0.5 | 0.40 | 493 | 0054-3L |
| 4092.00 | cut | S/Sst : w | 0.48 | 0.27 | 0.41 | 0.66 | 0.13 | 208 | 315 | 0.8 | 0.64 | 464 | 0055-3L |
| 4095.00 | cut | Sh/Clst: dsk y brn to ol blk | 0.35 | 2.49 | 0.88 | 2.83 | 1.67 | 149 | 53 | 2.8 | 0.12 | 452 | 0056-2L |

Table 5B: Rock-Eval table for well RE,STD

Depth unit of measure: m

| Depth | Typ | Lithology | S1 | S2 | S3 | S2/S3 | TOC | HI | OI | PP | PI | Tmax | Sample |
|-------|-----|-----------|------|-------|------|-------|-----|----|----|------|------|------|---------|
| 1.00 | std | bulk | 0.39 | 19.13 | 1.90 | 10.07 | - | - | - | 19.5 | 0.02 | 418 | 0157-0B |
| 2.00 | std | bulk | 0.47 | 19.16 | 2.05 | 9.35 | - | - | - | 19.6 | 0.02 | 422 | 0174-0B |
| 3.00 | std | bulk | 0.48 | 19.41 | 2.05 | 9.47 | - | - | - | 19.9 | 0.02 | 423 | 0175-0B |

Table 6 : Pyrolysis GC Data (S2 peak) as Percentage of Total Area for Well NOCS 9/2-7S

Depth unit of measure: m

| Depth | Typ | Lithology | C1 | C2-C5 | C6-C14 | C15+ | S2 from Rock-Eval | Sample |
|---------|-----|------------------------------|-------|-------|--------|-------|----------------------|---------|
| 3690.00 | cut | Sh/Clst: brn blk | 5.03 | 15.45 | 38.77 | 40.74 | 42.56 | 0018-1L |
| 3699.00 | cut | Sh/Clst: brn blk | 8.15 | 16.41 | 37.24 | 38.21 | 44.61 | 0019-1L |
| 3735.00 | cut | Sh/Clst: brn blk | 7.23 | 19.01 | 41.77 | 31.98 | 37.71 | 0022-1L |
| 3747.00 | cut | Sh/Clst: brn blk | 4.72 | 18.80 | 40.47 | 36.01 | 24.40 | 0024-1L |
| 3869.55 | ccp | S/Sst : lt gy | 3.92 | 45.42 | 41.43 | 9.23 | 1.31 | 0001-1L |
| 3885.19 | ccp | S/Sst : m gy | 9.86 | 26.15 | 37.22 | 26.77 | 7.50 | 0003-1L |
| 3907.82 | ccp | S/Sst : lt gy | 6.06 | 47.00 | 32.94 | 14.00 | 5.39 | 0008-1L |
| 3933.00 | cut | S/Sst : w | 4.89 | 25.75 | 48.18 | 21.18 | 1.60 | 0030-1L |
| 3954.00 | cut | S/Sst : w | 6.45 | 26.32 | 47.48 | 19.76 | 1.11 | 0032-1L |
| 3984.00 | cut | S/Sst : w | 4.78 | 21.70 | 57.54 | 15.98 | 0.45 | 0035-1L |
| 3993.00 | cut | S/Sst : w | 6.94 | 24.16 | 51.64 | 17.26 | 0.37 | 0038-1L |
| 3996.00 | cut | S/Sst : w | 14.16 | 32.25 | 44.23 | 9.36 | 0.20 | 0039-1L |
| 4050.00 | cut | Sh/Clst: dsk y brn to ol blk | 15.45 | 32.05 | 35.06 | 17.44 | 2.42 | 0046-2L |
| 4059.00 | cut | S/Sst : w | 14.56 | 38.34 | 43.74 | 3.36 | 0.23 | 0048-3L |
| 4062.00 | cut | S/Sst : w | 14.88 | 37.03 | 42.92 | 5.16 | 0.24 | 0049-3L |
| 4071.00 | cut | S/Sst : w | 13.60 | 35.14 | 43.82 | 7.44 | 0.33 | 0050-3L |

Table 6 : Pyrolysis GC Data (S2 peak) as Percentage of Total Area for Well NOCS 9/2-7S

Depth unit of measure: m

| Depth | Typ | Lithology | C1 | C2-C5 | C6-C14 | C15+ | S2 from Rock-Eval | Sample |
|---------|-----|------------------------------|-------|-------|--------|-------|----------------------|---------|
| 4074.00 | cut | Sh/Clst: dsk y brn to ol blk | 16.58 | 34.33 | 32.25 | 16.83 | 4.90 | 0051-2L |
| 4080.00 | cut | S/Sst : w | 16.13 | 25.56 | 49.16 | 9.14 | 0.24 | 0052-3L |
| 4086.00 | cut | Sh/Clst: dsk y brn to ol blk | 17.62 | 30.39 | 36.70 | 15.29 | 2.37 | 0053-2L |
| 4089.00 | cut | S/Sst : w | 17.44 | 24.41 | 49.52 | 8.62 | 0.29 | 0054-3L |
| 4092.00 | cut | S/Sst : w | 16.24 | 25.66 | 50.76 | 7.35 | 0.27 | 0055-3L |
| 4095.00 | cut | Sh/Clst: dsk y brn to ol blk | 20.12 | 26.02 | 34.78 | 19.08 | 2.49 | 0056-2L |

Table 7: Visual Kerogen Composition Data for well NOCS 9/2-7S

Depth unit of measure: m

| Depth | Typ | Lithology | Amorphous | | | Algal/Phytoplankton | | | | | Herbaceous | | | | Woody | | | | Coaly | | | SCI | Sample |
|---------|-----|-----------|-----------|----|----|---------------------|----|----|----|----|------------|-----|----|----|-------|-----|----|----|-------|-----|----|---------|---------|
| | | | AM% | FA | HA | AP% | Cy | Ta | Bo | Di | De | HE% | SP | Cu | De | WO% | FL | NF | De | CO% | FS | | |
| 3690.00 | cut | Sh/Clst | 75 | ** | * | 20 | * | | ** | * | TR | * | * | TR | | * | | | 5 | * | * | 5.5-6.0 | 0018-1L |

Table 8a: MPLC Bulk Composition: Weight of EOM and Fraction for well NOCS 9/2-7S

Depth unit of measure: m

| Depth | Typ | Lithology | Rock Extracted (g) | EOM (mg) | Sat (mg) | Aro (mg) | Asph (mg) | NSO (mg) | HC (mg) | Non-HC (mg) | TOC(e) (%) | Sample |
|---------|-----|------------------------------|--------------------------|-------------|-------------|-------------|--------------|-------------|------------|----------------|---------------|---------|
| 3690.00 | cut | Sh/Clst: brn blk | 9.9 | 719.4 | 10.5 | 359.9 | 7.1 | 341.9 | 370.4 | 349.0 | 11.80 | 0018-1L |
| 3885.19 | ccp | S/Sst : m gy | 13.8 | 152.2 | 97.1 | 39.1 | 1.0 | 15.0 | 136.2 | 16.0 | 1.60 | 0003-1L |
| 3933.00 | cut | S/Sst : w | 2.8 | 11.3 | 1.5 | 0.8 | 0.7 | 8.3 | 2.3 | 9.0 | 0.68 | 0030-1L |
| 3984.00 | cut | S/Sst : w | 4.6 | 10.8 | 1.1 | 0.2 | 0.4 | 9.0 | 1.4 | 9.4 | 0.32 | 0035-1L |
| 4080.00 | cut | S/Sst : w | 2.0 | 3.6 | 0.5 | 0.5 | 0.3 | 2.4 | 0.9 | 2.7 | 0.12 | 0052-3L |
| 4092.00 | cut | S/Sst : w | 2.4 | 5.3 | 0.4 | 0.4 | 0.8 | 3.7 | 0.8 | 4.5 | 0.13 | 0055-3L |
| 4095.00 | cut | Sh/Clst: dsk y brn to ol blk | 7.7 | 15.0 | 1.3 | 1.3 | 0.6 | 11.8 | 2.6 | 12.4 | 1.67 | 0056-2L |

Table 8b: MPLC Bulk Composition: Concentration of EOM and Fraction (wt ppm rock) for well NOCS 9/2-7S

Depth unit of measure: m

| Depth | Typ | Lithology | EOM | Sat | Aro | Asph | NSO | HC | Non-HC | Sample |
|---------|-----|------------------------------|-------|------|-------|------|-------|-------|--------|---------|
| 3690.00 | cut | Sh/Clst: brn blk | 72374 | 1056 | 36211 | 714 | 34392 | 37267 | 35106 | 0018-1L |
| 3885.19 | ccp | S/Sst : m gy | 11028 | 7038 | 2829 | 72 | 1088 | 9868 | 1160 | 0003-1L |
| 3933.00 | cut | S/Sst : w | 3992 | 544 | 272 | 247 | 2928 | 817 | 3175 | 0030-1L |
| 3984.00 | cut | S/Sst : w | 2327 | 243 | 48 | 86 | 1949 | 292 | 2035 | 0035-1L |
| 4080.00 | cut | S/Sst : w | 1773 | 232 | 232 | 147 | 1161 | 464 | 1308 | 0052-3L |
| 4092.00 | cut | S/Sst : w | 2181 | 168 | 168 | 329 | 1515 | 336 | 1844 | 0055-3L |
| 4095.00 | cut | Sh/Clst: dsk y brn to ol blk | 1960 | 171 | 171 | 78 | 1540 | 342 | 1618 | 0056-2L |

Table 8c: MPLC Bulk Composition: Concentration of EOM and Fraction (mg/g TOC(e)) for well NOCS 9/2-7S

Depth unit of measure: m

| Depth | Typ | Lithology | EOM | Sat | Aro | Asph | NSO | HC | Non-HC | Sample |
|---------|-----|------------------------------|---------|--------|--------|--------|---------|--------|---------|---------|
| 3690.00 | cut | Sh/Clst: brn blk | 613.34 | 8.95 | 306.88 | 6.05 | 291.46 | 315.83 | 297.51 | 0018-1L |
| 3885.19 | ccp | S/Sst : m gy | 689.31 | 439.89 | 176.86 | 4.53 | 68.02 | 616.76 | 72.55 | 0003-1L |
| 3933.00 | cut | S/Sst : w | 587.20 | 80.12 | 40.06 | 36.37 | 430.64 | 120.18 | 467.02 | 0030-1L |
| 3984.00 | cut | S/Sst : w | 727.37 | 76.13 | 15.23 | 26.94 | 609.07 | 91.36 | 636.01 | 0035-1L |
| 4080.00 | cut | S/Sst : w | 1477.83 | 193.53 | 193.53 | 123.15 | 967.63 | 387.05 | 1090.78 | 0052-3L |
| 4092.00 | cut | S/Sst : w | 1677.75 | 129.50 | 129.50 | 253.24 | 1165.50 | 259.00 | 1418.75 | 0055-3L |
| 4095.00 | cut | Sh/Clst: dsk y brn to ol blk | 117.41 | 10.25 | 10.25 | 4.70 | 92.22 | 20.49 | 96.92 | 0056-2L |

Table 8d: MPLC Bulk Composition: Material extracted from the rock (%) for well NOCS 9/2-7S

Depth unit of measure: m

| Depth | Typ | Lithology | Sat | Aro | Asph | NSO | Total | HC | Non-HC | Recov. MPLC | Recov. Asph | Sample |
|---------|-----|------------------------------|-------|-------|-------|-------|--------|-------|--------|----------------|----------------|---------|
| 3690.00 | cut | Sh/Clst: brn blk | 1.46 | 50.03 | 0.99 | 47.52 | 100.00 | 51.49 | 48.51 | 0.53 | 0.99 | 0018-1L |
| 3885.19 | ccp | S/Sst : m gy | 63.82 | 25.66 | 0.66 | 9.87 | 100.00 | 89.47 | 10.53 | 0.60 | 0.84 | 0003-1L |
| 3933.00 | cut | S/Sst : w | 13.64 | 6.82 | 6.19 | 73.34 | 100.00 | 20.47 | 79.53 | 1.16 | 0.83 | 0030-1L |
| 3984.00 | cut | S/Sst : w | 10.47 | 2.09 | 3.70 | 83.74 | 100.00 | 12.56 | 87.44 | 1.11 | 0.80 | 0035-1L |
| 4080.00 | cut | S/Sst : w | 13.10 | 13.10 | 8.33 | 65.48 | 100.00 | 26.19 | 73.81 | 0.70 | 0.56 | 0052-3L |
| 4092.00 | cut | S/Sst : w | 7.72 | 7.72 | 15.09 | 69.47 | 100.00 | 15.44 | 84.56 | 0.63 | 0.68 | 0055-3L |
| 4095.00 | cut | Sh/Clst: dsk y brn to ol blk | 8.73 | 8.73 | 4.00 | 78.55 | 100.00 | 17.45 | 82.55 | 1.10 | 0.79 | 0056-2L |

Table 8e: MPLC Bulk Composition: Ratios for well NOCS 9/2-7S

Depth unit of measure: m

| Depth | Typ | Lithology | Sat | HC | Asp | Sample |
|---------|-----|------------------------------|------|--------|------|---------|
| | | | Aro | Non-HC | NSO | |
| 3690.00 | cut | Sh/Clst: brn blk | 0.03 | 1.06 | 0.02 | 0018-1L |
| 3885.19 | ccp | S/Sst : m gy | 2.49 | 8.50 | 0.07 | 0003-1L |
| 3933.00 | cut | S/Sst : w | 2.00 | 0.26 | 0.08 | 0030-1L |
| 3984.00 | cut | S/Sst : w | 5.00 | 0.14 | 0.04 | 0035-1L |
| 4080.00 | cut | S/Sst : w | 1.00 | 0.35 | 0.13 | 0052-3L |
| 4092.00 | cut | S/Sst : w | 1.00 | 0.18 | 0.22 | 0055-3L |
| 4095.00 | cut | Sh/Clst: dsk y brn to ol blk | 1.00 | 0.21 | 0.05 | 0056-2L |

Table 8F: Iatroscan TLC Bulk Composition: Absolute yields in mg/g rock for well NOCS 9/2-7S

Depth unit of measure: m

| Depth | Typ | Lithology | Sat HC | Aro HC | NSO | Asp | HC | Non-HC | EOM | Sample |
|---------|-----|-----------|--------|--------|-------|------|------|--------|-------|---------|
| 3690.00 | cut | Sh/Clst | 3.69 | 0.00 | 67.97 | 0.71 | 3.69 | 68.68 | 72.37 | 0018-1L |
| 3885.19 | ccp | S/Sst | 7.00 | 2.60 | 1.35 | 0.07 | 9.60 | 1.43 | 11.03 | 0003-1L |
| 3933.00 | cut | S/Sst | 1.16 | 0.39 | 2.20 | 0.25 | 1.55 | 2.45 | 3.99 | 0030-1L |
| 3984.00 | cut | S/Sst | 0.69 | 0.12 | 1.43 | 0.09 | 0.81 | 1.52 | 2.33 | 0035-1L |
| 4080.00 | cut | S/Sst | 0.24 | 0.00 | 1.38 | 0.15 | 0.24 | 1.53 | 1.77 | 0052-3L |
| 4092.00 | cut | S/Sst | 0.28 | 0.00 | 1.57 | 0.33 | 0.28 | 1.90 | 2.18 | 0055-3L |
| 4095.00 | cut | Sh/Clst | 0.34 | 0.34 | 1.20 | 0.08 | 0.68 | 1.28 | 1.96 | 0056-2L |

Table 8G: Iatroscan TLC Bulk Composition: Rel. percentages of sep. fractions for well NOCS 9/2-7S

Depth unit of measure: m

| <u>Depth</u> | <u>Typ</u> | <u>Lithology</u> | <u>Sat HC</u> | <u>Aro HC</u> | <u>NSO</u> | <u>Asp</u> | <u>Total</u> | <u>HC</u> | <u>Non-HC</u> | <u>Recov. Iatr.</u> | <u>Recov. Asp</u> | <u>Sample</u> |
|--------------|------------|------------------|---------------|---------------|------------|------------|--------------|-----------|---------------|-------------------------|-----------------------|---------------|
| 3690.00 | cut | Sh/Clst | 5.10 | - | 93.92 | 0.99 | 100.00 | 5.10 | 94.90 | 0.07 | 0.99 | 0018-1L |
| 3885.19 | ccp | S/Sst | 63.48 | 23.59 | 12.28 | 0.66 | 100.00 | 87.07 | 12.93 | 0.35 | 0.84 | 0003-1L |
| 3933.00 | cut | S/Sst | 29.05 | 9.69 | 55.06 | 6.19 | 100.00 | 38.75 | 61.25 | 0.44 | 0.83 | 0030-1L |
| 3984.00 | cut | S/Sst | 29.83 | 5.07 | 61.40 | 3.70 | 100.00 | 34.90 | 65.10 | 0.27 | 0.80 | 0035-1L |
| 4080.00 | cut | S/Sst | 13.71 | - | 77.96 | 8.33 | 100.00 | 13.71 | 86.29 | 0.07 | 0.56 | 0052-3L |
| 4092.00 | cut | S/Sst | 13.04 | - | 71.86 | 15.09 | 100.00 | 13.04 | 86.96 | 0.74 | 0.68 | 0055-3L |
| 4095.00 | cut | Sh/Clst | 17.26 | 17.57 | 61.17 | 4.00 | 100.00 | 34.83 | 65.17 | 0.30 | 0.79 | 0056-2L |

Table 9A: Quantitative Analysis of Saturated Fraction for well NOCS 9/2-7s

| 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 |
|----------|---------------------|---------------------|---------------------|---------------------|-------------------|---------------------|-------------------|---------------------|---------------------|---------------------|---------------------|---------------------|---------------------|---------------------|---------------------|---------------------|---------------------|---------------------|---------------------|---------------------|---------------------|---------------------|---------------------|
| 3690.00m | 19.78 | 18.86 | 6.33 | 18.78 | 10.57 | 8.90 | 5.90 | 6.87 | 4.74 | 6.45 | 2.77 | 2.26 | 2.05 | 2.26 | 1.24 | 0.98 | 0.94 | 1.18 | 0.70 | 0.95 | 0.46 | 0.43 | 0.27 |
| 3885.19m | 13.78 | 14.21 | 6.97 | 14.75 | 12.16 | 12.45 | 7.93 | 11.43 | 10.21 | 8.51 | 7.32 | 6.50 | 5.90 | 5.36 | 3.98 | 3.37 | 2.69 | 2.37 | 1.79 | 1.94 | 1.42 | 1.23 | 0.76 |
| 3933.00m | 11.06 | 14.72 | 6.12 | 13.43 | 9.93 | 11.34 | 6.66 | 9.70 | 8.34 | 6.73 | 6.03 | 5.36 | 4.96 | 5.03 | 3.88 | 3.28 | 2.93 | 3.29 | 2.51 | 3.11 | 2.15 | 1.72 | 1.61 |
| 3984.00m | 17.82 | 23.53 | 8.71 | 23.20 | 14.85 | 18.11 | 9.70 | 13.07 | 10.39 | 8.33 | 6.89 | 5.71 | 4.77 | 4.34 | 2.79 | 2.17 | 1.67 | 1.71 | 1.12 | 1.60 | 0.95 | 1.15 | 0.51 |
| 4080.00m | 2.45 | 9.03 | 3.52 | 11.00 | 6.77 | 9.88 | 4.73 | 6.63 | 7.15 | 5.06 | 4.73 | 4.04 | 3.27 | 2.80 | 1.98 | 2.09 | 1.28 | 2.58 | 1.01 | 3.22 | 0.54 | 0.00 | 0.00 |
| 4092.00m | 3.66 | 10.91 | 4.42 | 10.40 | 7.05 | 11.68 | 6.02 | 7.29 | 7.73 | 6.52 | 6.46 | 6.61 | 7.07 | 7.55 | 5.46 | 54.12 | 5.55 | 5.92 | 3.59 | 6.34 | 2.68 | 0.00 | 0.00 |
| 4095.00m | 16.81 | 17.78 | 3.46 | 15.93 | 6.37 | 13.58 | 2.85 | 12.22 | 10.72 | 9.89 | 9.21 | 8.97 | 8.74 | 8.19 | 6.26 | 6.53 | 4.44 | 3.67 | 2.15 | 2.23 | 1.16 | 0.64 | 0.49 |

Table 9B: Saturated Hydrocarbon Ratios (peak area) for well NOCS 9/2-7S

Depth unit of measure: m

| Depth | Typ | Lithology | Pristane | Pristane | Pristane/nC17 | Phytane | CPI1 | nC17 | Sample |
|---------|-----|------------------------------|----------|----------|---------------|---------|------|-----------|---------|
| | | | nC17 | Phytane | Phytane/nC18 | nC18 | | nC17+nC27 | |
| 3690.00 | cut | Sh/Clst: brn blk | 0.56 | 1.79 | 0.85 | 0.66 | 1.35 | 0.95 | 0018-1L |
| 3885.19 | ccp | S/Sst : m gy | 0.82 | 1.53 | 1.29 | 0.64 | 1.11 | 0.81 | 0003-1L |
| 3933.00 | cut | S/Sst : w | 0.74 | 1.49 | 1.26 | 0.59 | 1.16 | 0.80 | 0030-1L |
| 3984.00 | cut | S/Sst : w | 0.64 | 1.53 | 1.20 | 0.54 | 1.23 | 0.91 | 0035-1L |
| 4080.00 | cut | S/Sst : w | 0.62 | 1.43 | 1.28 | 0.48 | 1.82 | 0.84 | 0052-3L |
| 4092.00 | cut | S/Sst : w | 0.68 | 1.17 | 1.32 | 0.52 | 1.44 | 0.65 | 0055-3L |
| 4095.00 | cut | Sh/Clst: dsk y brn to ol blk | 0.40 | 2.23 | 1.90 | 0.21 | 1.21 | 0.71 | 0056-2L |

Table 9Ca: Aromatic Hydrocarbon Ratios (peak area) for well NOCS 9/2-7S

Depth unit of measure: m

| Depth | Typ | Lithology | MNR | DMNR | BPhR | 2/1MP | MPI1 | MPI2 | Rc | DBT/P | 4/1MDBT | (3+2) /1MDBT | Sample |
|---------|-----|------------------------------|------|------|------|-------|------|------|------|-------|---------|-----------------|---------|
| 3690.00 | cut | Sh/Clst: brn blk | - | - | - | - | - | - | - | - | - | - | 0018-1L |
| 3885.19 | ccp | S/Sst : m gy | 1.45 | 1.80 | - | 1.21 | 0.73 | 0.86 | 0.84 | - | - | - | 0003-1L |
| 3933.00 | cut | S/Sst : w | - | - | - | - | - | - | - | - | - | - | 0030-1L |
| 3984.00 | cut | S/Sst : w | - | - | - | 1.50 | 0.77 | 0.97 | 0.86 | - | - | - | 0035-1L |
| 4080.00 | cut | S/Sst : w | - | - | - | - | - | - | - | - | - | - | 0052-3L |
| 4092.00 | cut | S/Sst : w | - | - | - | - | - | - | - | - | - | - | 0055-3L |
| 4095.00 | cut | Sh/Clst: dsk y brn to ol blk | - | - | - | - | - | - | - | - | - | - | 0056-2L |

Table 9Cb: Aromatic Hydrocarbon Ratios (peak area) for well NOCS 9/2-7S

Depth unit of measure: m

| Depth | Typ | Lithology | F1 | F2 | Sample |
|---------|-----|------------------------------|------|------|---------|
| 3690.00 | cut | Sh/Clst: brn blk | - | - | 0018-1L |
| 3885.19 | ccp | S/Sst : m gy | 0.46 | 0.27 | 0003-1L |
| 3933.00 | cut | S/Sst : w | - | - | 0030-1L |
| 3984.00 | cut | S/Sst : w | 0.44 | 0.27 | 0035-1L |
| 4080.00 | cut | S/Sst : w | - | - | 0052-3L |
| 4092.00 | cut | S/Sst : w | - | - | 0055-3L |
| 4095.00 | cut | Sh/Clst: dsk y brn to ol blk | - | - | 0056-2L |

Table 10: Tabulation of carbon isotope data for EOM/EOM - fractions for well NOCS 9/2-7S

Depth unit of measure: m

| <u>Depth</u> | <u>Typ</u> | <u>Lithology</u> | <u>EOM</u> | <u>Saturated</u> | <u>Aromatic</u> | <u>NSO</u> | <u>Asphaltenes</u> | <u>Kerogen</u> | <u>Sample</u> |
|--------------|------------|------------------|------------|------------------|-----------------|------------|--------------------|----------------|---------------|
| 3690.00 | cut | bulk | - | - | - | - | -28.83 | -28.35 | 0018-0 |
| 3885.19 | ccp | S/Sst | - | - | - | - | -26.45 | - | 0003-1 |
| 3933.00 | cut | S/Sst | - | - | - | - | -26.29 | - | 0030-1 |
| 3984.00 | cut | S/Sst | - | - | - | - | -26.17 | - | 0035-1 |
| 4080.00 | cut | S/Sst | - | - | - | - | -28.86 | - | 0052-3 |
| 4092.00 | cut | S/Sst | - | - | - | - | -28.79 | - | 0055-3 |
| 4095.00 | cut | Sh/Clst | - | - | - | - | -24.97 | - | 0056-2 |

Table 11a: Variation in Triterpane Distribution (peak height) SIR for Well NOCS 9/2-7S

Depth unit of measure: m

| Depth | Lithology | Ratio1 | Ratio2 | Ratio3 | Ratio4 | Ratio5 | Ratio6 | Ratio7 | Ratio8 | Ratio9 | Rat.10 | Rat.11 | Rat.12 | Rat.13 | Rat.14 | Sample |
|---------|-----------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| 3690.00 | bulk | 1.04 | 0.51 | 0.15 | 0.60 | 0.37 | 0.04 | 0.03 | 0.06 | 0.03 | 0.06 | 0.91 | 0.38 | 0.11 | 60.26 | 0018-0 |
| 3885.19 | S/Sst | 0.84 | 0.46 | 0.09 | 0.40 | 0.29 | 0.06 | - | - | - | 0.03 | 0.91 | 0.29 | 0.10 | 59.31 | 0003-1 |
| 3933.00 | S/Sst | 0.93 | 0.48 | 0.08 | 0.41 | 0.29 | 0.06 | - | - | - | 0.03 | 0.91 | 0.29 | 0.11 | 57.99 | 0030-1 |
| 3984.00 | S/Sst | 0.97 | 0.49 | 0.12 | 0.56 | 0.36 | 0.06 | - | - | - | 0.27 | 0.91 | 0.36 | 0.10 | 60.01 | 0035-1 |
| 4080.00 | S/Sst | 1.15 | 0.54 | 0.11 | 0.49 | 0.33 | - | - | - | - | 0.43 | 0.95 | 0.32 | 0.03 | 60.00 | 0052-3 |
| 4092.00 | S/Sst | 1.18 | 0.54 | 0.13 | 0.45 | 0.31 | 0.04 | - | - | - | 0.18 | 0.92 | 0.31 | 0.09 | 60.13 | 0055-3 |
| 4095.00 | Sh/Clst | 11.36 | 0.92 | 0.31 | 0.93 | 0.48 | 0.07 | - | - | - | 0.02 | 0.88 | 0.47 | 0.11 | 60.21 | 0056-2 |

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 Well NOCS 9/2-7S

Depth unit of measure: m

| <u>Depth</u> | <u>Lithology</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> |
|--------------|------------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|----------------|---------------|
| 3690.00 | bulk | 0.30 | 42.93 | 70.82 | 1.15 | 0.74 | 0.34 | 0.24 | 0.55 | 0.75 | 2.13 | 0018-0 |
| 3885.19 | S/Sst | 0.64 | 48.09 | 73.13 | 1.22 | 0.74 | 0.29 | 0.18 | 0.58 | 0.93 | 2.62 | 0003-1 |
| 3933.00 | S/Sst | 0.56 | 46.06 | 72.94 | 1.05 | 0.75 | 0.26 | 0.17 | 0.57 | 0.85 | 2.50 | 0030-1 |
| 3984.00 | S/Sst | 0.55 | 46.62 | 74.97 | 1.43 | 0.76 | 0.69 | 0.55 | 0.60 | 0.87 | 2.81 | 0035-1 |
| 4080.00 | S/Sst | 0.22 | 39.00 | 75.91 | 2.35 | 0.80 | 0.88 | 0.79 | 0.61 | 0.64 | 2.58 | 0052-3 |
| 4092.00 | S/Sst | 0.35 | 43.16 | 77.42 | 1.06 | 0.80 | 0.45 | 0.36 | 0.63 | 0.76 | 3.02 | 0055-3 |
| 4095.00 | Sh/Clst | 0.30 | 43.61 | 69.63 | 0.51 | 0.72 | 0.41 | 0.34 | 0.53 | 0.77 | 2.03 | 0056-2 |

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) for Well NOCS 9/2-7S

Depth unit of measure: m

| Depth | Lithology | 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 | |
| 3690.00 | bulk | 4120.5 20858.5 8670.2 | 2257.2 8466.3 7024.2 | 1352.1 1553.3 4632.2 | 4303.6 2505.9 5033.8 | 1045.8 0.0 3199.3 | 6552.5 35024.3 3262.0 | 6806.2 3587.9 1900.0 | 1153.6 1083.5 2392.7 | 0.0 12964.1 1466.2 | 0018-0 |
| 3885.19 | S/Sst | 15937.0 145137.0 84654.2 | 9289.1 73257.1 76120.0 | 5030.2 20957.1 52216.4 | 15434.0 14275.2 63669.3 | 4160.5 0.0 41271.4 | 44389.6 361271.7 36153.6 | 37147.6 35115.1 22600.1 | 0.0 0.0 26182.1 | 0.0 135769.0 15238.9 | 0003-1 |
| 3933.00 | S/Sst | 5719.7 49028.9 30366.1 | 3298.7 24553.9 26935.0 | 1623.5 6872.6 19510.9 | 4108.1 5916.5 22764.9 | 1363.8 0.0 14817.7 | 13100.4 120125.4 13155.5 | 12212.0 11910.7 8278.5 | 0.0 0.0 9791.2 | 0.0 47636.6 5637.0 | 0030-1 |
| 3984.00 | S/Sst | 11435.7 12948.5 5603.8 | 6283.1 4722.7 4866.7 | 2077.5 1278.7 3242.7 | 2303.4 1150.4 3412.3 | 1066.2 0.0 2177.6 | 3483.9 23057.5 1846.9 | 3391.6 2273.1 1111.4 | 0.0 0.0 1163.5 | 0.0 8569.4 639.2 | 0035-1 |
| 4080.00 | S/Sst | 2197.2 1149.7 362.2 | 1001.4 269.0 218.0 | 235.9 0.0 145.4 | 338.5 0.0 144.6 | 83.9 0.0 78.9 | 265.3 2344.2 70.9 | 305.5 113.6 39.3 | 0.0 0.0 49.4 | 0.0 538.5 27.5 | 0052-3 |

Table 11c: Raw triterpane data (peak height) for Well NOCS 9/2-7S

Depth unit of measure: m

| Depth | Lithology | 23/3 | 24/3 | 25/3 | 24/4 | 26/3 | 27Ts | 27Tm | 28aß | 25nor30aß | Sample |
|---------|-----------|---------|---------|---------|---------|--------|---------|---------|--------|-----------|--------|
| | | 29aß | 29Ts | 30d | 29Ba | 300 | 30aß | 30Ba | 30G | 31aßS | |
| | | 31aßR | 32aßS | 32aßR | 33aßS | 33aßR | 34aßS | 34aßR | 35aßS | 35aßR | |
| 4092.00 | S/Sst | 2424.9 | 1335.2 | 472.9 | 741.0 | 245.8 | 1046.1 | 1234.6 | 0.0 | 0.0 | 0055-3 |
| | | 3262.5 | 1243.9 | 288.5 | 349.6 | 0.0 | 7329.9 | 609.7 | 501.6 | 2724.0 | |
| | | 1793.1 | 1936.1 | 1283.7 | 1477.6 | 929.7 | 1337.7 | 822.6 | 1266.2 | 808.7 | |
| 4095.00 | Sh/Clst | 3824.1 | 1342.2 | 0.0 | 23123.8 | 0.0 | 3393.5 | 38562.2 | 0.0 | 0.0 | 0056-2 |
| | | 71114.3 | 4809.4 | 5163.6 | 5668.1 | 0.0 | 76659.3 | 10318.2 | 0.0 | 33796.2 | |
| | | 21187.8 | 19209.9 | 12695.5 | 5429.7 | 3837.2 | 2086.9 | 1156.6 | 583.7 | 261.1 | |

Table 11d: Raw sterane data (peak height) m/z 217 SIR for Well NOCS 9/2-7S

Depth unit of measure: m

| Depth | Lithology | 21a | 22a | 27dBS | 27dBR | 27daR | 27daS | 28dBS | 28dBR | 28daR* | Sample |
|---------|-----------|-------------------------------|-------------------------------|-------------------------------|-------------------------------|-------------------------------|--------------------|--------------------|--------------------|---------|--------|
| | | 29dBS* | 28daS* | 27aaR | 29dBR | 29daR | 28aaS | 29daS* | 28BS | | |
| | | 28aaR | 29aaS | 29BR | 29BS | 29aaR | | | | | |
| 3690.00 | bulk | 6116.4 5235.3 2587.1 | 2389.2 4834.9 3166.6 | 6873.6 16107.7 4880.9 | 4445.6 2900.9 4069.7 | 1635.1 1259.3 4209.7 | 1621.2 2185.4 | 2593.0 3295.3 | 1945.0 3852.3 | 5354.0 | 0018-0 |
| 3885.19 | S/Sst | 35806.0 50115.6 16909.7 | 12468.4 47353.8 24518.0 | 72032.2 41297.9 36345.5 | 47377.8 35402.8 33044.0 | 17160.6 13411.4 26468.0 | 21145.6 18984.6 | 30873.6 29953.1 | 21781.3 38108.1 | 35919.8 | 0003-1 |
| 3933.00 | S/Sst | 10345.5 14258.6 4903.1 | 2865.1 13518.3 7499.9 | 17415.8 13522.7 11576.8 | 12003.4 10415.0 10368.7 | 4395.0 3958.1 8782.6 | 5547.9 5454.0 | 9006.0 8809.4 | 5732.4 12018.7 | 9924.8 | 0030-1 |
| 3984.00 | S/Sst | 11915.4 3273.0 890.3 | 3605.5 2989.3 1272.9 | 5351.4 4336.7 2209.1 | 3671.9 2276.2 1879.9 | 1169.8 784.6 1457.6 | 1373.6 1050.5 | 2159.2 1746.2 | 1299.2 2307.8 | 2081.0 | 0035-1 |
| 4080.00 | S/Sst | 1304.8 121.3 33.8 | 316.5 128.5 33.1 | 286.0 985.3 72.0 | 301.2 86.5 61.5 | 39.6 17.8 51.7 | 50.7 30.5 | 83.0 62.5 | 38.3 99.9 | 88.4 | 0052-3 |

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