

**1.7.2 MDT SAMPLING DATA**

No MDT samples were obtained from the well.

**1.7.3 DST PRESSURE TEST DATA**

No drill stem tests were conducted in the well.

### 1.8 Mud Summary

9 7/8" Pilot hole to 400 m /36" conductor hole/26" surface hole

Sea water/Bentonite Hi-Vis pills as required

1.2 SG Hi-Vis mud left in hole for casing run

3216 bbls used

Total cost 25 834 \$

12 1/4" intermediate hole

KCl/Polymer (1.20-1.24 SG)

1600 bbls used

Total Cost 85 092 \$

8 1/2" reservoir section

KCl/Polymer/GEM (1.31-1.32 SG)

3110 bbls used

Total Cost 73 117 \$

**REGISTRERT**  
**OLJEDIREKTORATET**

20 JUNI 2001

BA 01-4470-1

**Geochemical Report for**  
**NOCS Well 16/4-3**

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## Chapter 1

### INTRODUCTION

#### 1.1 General comments on 16/4-3

This well is the third well in this block and is to the north of the previous two wells on the block. The well was drilled with a water based mud.

#### 1.2 Analytical program

Based on the instructions from BPAmoco, the following analyses were carried out

##### Rocks

<i>Analysis type</i>	<i>No. of samples</i>	<i>Fig.</i>	<i>Table</i>
Headspace Gas Analysis	7	2.1a-e	1a
Washing of cuttings	10	-	-
Lithology Description	10	-	2
Extraction	10	2.4c	3a-e
Asphaltene separation	7	-	3a-e
MPLC separation	7	2.4c	3a-e
EOM GC	3	2.4a-b, 2.4j	-
Saturated hydrocarbon GC	6	2.4d-g	4
Aromatic hydrocarbon GC	6	2.4h-i	5a-b
Saturated hydrocarbon GC-MS	6	2.5a-g	6a-b,f-i
Aromatic hydrocarbon GC-MS	6	2.5h-k	6c-e,j-k

Table 1a: C1 to C7 hydrocarbons in HEADSPACE gas  
(µl gas/kg rock)

Project: NOCS 16/4-3

Well: NOCS 16/4-3

Depth unit of measure: m \* Indicated values in ml gas/kg rock

Depth	C1	C2	C3	iC4	nC4	C5+	sum C1-C4	sum C2-C4	%wet ness	iC4 --- nC4
1000.00	6784	4	-	-	-	10	6788	4	0.1	-
1500.00	8122	28	6	-	-	67	8155	34	0.4	-
2000.00	15625	171	39	8	5	16	15848	223	1.4	1.51
2277.00	5551	410	241	36	68	244	6307	755	12.0	0.54
2370.00	5048	300	169	23	48	172	5588	540	9.7	0.48
2415.00	4656	255	174	29	63	337	5177	521	10.1	0.45
2425.00	2777	138	98	15	35	182	3063	286	9.3	0.43

Table 2 : Lithology description for well NOCS 16/4-3

Depth unit of measure: m

Depth	Type	Grp	Frm	Age	Trb	Sample
Int	Cvd	TOC%	%	Lithology description		
2152.00						0018
				95 Sh/Clst: m gy, slt		0018-1L
				5 Sh/Clst: gn gy to lt gy		0018-2L
				tr S/Sst : w to lt gy		0018-3L
				tr Ca : lt gy to y gy		0018-4L
				tr Cont : st		0018-5L
2194.00						0019
				100 Sltst : m gy to lt gy, s, argill		0019-1L
				tr Sh/Clst: gn gy, gy red		0019-2L
				tr S/Sst : w to lt gy		0019-3L
				tr Ca : lt gy to y gy		0019-4L
				tr Cont : st		0019-5L
2197.00						0020
				90 Sltst : m gy to lt gy, s, argill		0020-1L
				10 S/Sst : w to lt gy		0020-3L
				tr Sh/Clst: gn gy, gy red		0020-2L
				tr Ca : lt gy to y gy		0020-4L
				tr Cont : st		0020-5L
2200.00						0021
				85 Sltst : m gy to lt gy, s, argill		0021-1L
				15 S/Sst : w to lt gy		0021-3L
				tr Sh/Clst: gn gy, gy red		0021-2L
				tr Ca : lt gy to y gy		0021-4L
				tr Cont : st		0021-5L
2203.00						0022
				75 Sltst : m gy to lt gy, s, argill		0022-1L
				25 S/Sst : w to lt gy, cem		0022-3L
				tr Sh/Clst: gn gy, gy red		0022-2L
				tr Ca : lt gy to y gy		0022-4L
				tr Cont : st		0022-5L

Table 2 : Lithology description for well NOCS 16/4-3

Depth unit of measure: m

Depth	Type	Grp	Frm	Age	Trb	Sample
Int	Cvd	TOC%	%	Lithology description		
2206.00						0023
				80 S/Sst : w to lt gy, l, cem		0023-3L
				20 Sltst : lt gy to m gy, s, argill		0023-1L
				tr Sh/Clst: gn gy, gy red		0023-2L
				tr Ca : lt gy to y gy		0023-4L
				tr Cont : st		0023-5L
2212.00						0024
				50 Sltst : lt gy to m gy, s, argill		0024-1L
				50 S/Sst : w to lt gy, l, cem		0024-3L
				tr Sh/Clst: gn gy, gy red		0024-2L
				tr Ca : lt gy to y gy		0024-4L
				tr Cont : st		0024-5L
2221.00						0025
				55 S/Sst : w to lt gy, cem, l		0025-3L
				45 Sltst : lt gy to m gy, s, argill		0025-1L
				tr Sh/Clst: gn gy, gy red		0025-2L
				tr Ca : lt gy to y gy		0025-4L
				tr Cont : st		0025-5L
2281.00						0026
				90 Sh/Clst: lt gy to gn gy to bl gy		0026-2L
				10 S/Sst : w to lt gy, cem, l		0026-3L
				tr Sltst : lt gy to m gy, s, argill		0026-1L
				tr Ca : lt gy to y gy		0026-4L
				tr Cont : st		0026-5L
				tr Sh/Clst: gy red		0026-6L
2353.00						0027
				50 S/Sst : w to lt gy, l		0027-3L
				40 Sh/Clst: lt gy to gn gy to bl gy		0027-2L
				10 Sltst : lt gy to m gy, s, argill		0027-1L
				tr Ca : lt gy to y gy		0027-4L
				tr Cont : st		0027-5L
				tr Sh/Clst: gy red		0027-6L

Table 3a: MPLC Bulk Composition: Weight of EOM and Fraction for well NOCS 16/4-3

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
2152.00	cut	bulk	7.6	4.6	-	-	-	-	-	-	1.54	0018-0B
2194.00	cut	bulk	7.5	15.9	3.2	3.2	1.0	8.4	6.5	9.4	0.84	0005-0B
2197.00	cut	S/Sst : w to lt gy	8.7	29.5	2.8	3.4	1.2	22.2	6.1	23.4	1.01	0020-3L
2200.00	cut	S/Sst : w to lt gy	8.3	15.7	1.5	2.1	1.1	11.0	3.7	12.0	0.96	0021-3L
2203.00	cut	S/Sst : w to lt gy	8.1	23.4	3.1	3.5	1.1	15.7	6.6	16.8	0.96	0022-3L
2206.00	cut	S/Sst : w to lt gy	8.8	13.7	2.2	2.4	1.1	8.1	4.5	9.2	0.81	0023-3L
2212.00	cut	S/Sst : w to lt gy	8.2	14.8	0.5	1.1	0.9	12.3	1.6	13.2	0.76	0024-3L
2221.00	cut	S/Sst : w to lt gy	8.1	9.0	0.2	0.6	1.0	7.2	0.8	8.2	1.04	0025-3L
2281.00	cut	S/Sst : w to lt gy	7.6	4.2	-	-	-	-	-	-	0.40	0026-3L
2353.00	cut	S/Sst : w to lt gy	6.9	4.1	-	-	-	-	-	-	0.18	0027-3L



Table 3b: MPLC Bulk Composition: Concentration of EOM and Fraction (wt ppm rock) for well NOCS 16/4-3

Depth unit of measure: m

Depth	Typ	Lithology	EOM	Sat	Aro	Asph	NSO	HC	Non-HC	Sample
2152.00	cut	bulk	609	-	-	-	-	-	-	0018-0B
2194.00	cut	bulk	2128	434	434	129	1129	869	1259	0005-0B
2197.00	cut	S/Sst : w to lt gy	3402	322	386	138	2555	708	2693	0020-3L
2200.00	cut	S/Sst : w to lt gy	1889	185	254	130	1319	439	1449	0021-3L
2203.00	cut	S/Sst : w to lt gy	2892	382	433	140	1936	815	2077	0022-3L
2206.00	cut	S/Sst : w to lt gy	1565	247	269	126	922	517	1048	0023-3L
2212.00	cut	S/Sst : w to lt gy	1809	66	133	108	1500	200	1609	0024-3L
2221.00	cut	S/Sst : w to lt gy	1104	23	71	122	885	95	1008	0025-3L
2281.00	cut	S/Sst : w to lt gy	552	-	-	-	-	-	-	0026-3L
2353.00	cut	S/Sst : w to lt gy	589	-	-	-	-	-	-	0027-3L

Table 3c: MPLC Bulk Composition: Concentration of EOM and Fraction (mg/g TOC(e)) for well NOCS 16/4-3

Depth unit of measure: m

Depth	Typ	Lithology	EOM	Sat	Aro	Asph	NSO	HC	Non-HC	Sample
2152.00	cut	bulk	39.56	-	-	-	-	-	-	0018-0B
2194.00	cut	bulk	253.39	51.74	51.74	15.41	134.51	103.47	149.92	0005-0B
2197.00	cut	S/Sst : w to lt gy	336.88	31.90	38.27	13.67	253.04	70.17	266.71	0020-3L
2200.00	cut	S/Sst : w to lt gy	196.80	19.29	26.52	13.57	137.42	45.81	150.99	0021-3L
2203.00	cut	S/Sst : w to lt gy	301.30	39.82	45.12	14.63	201.73	84.94	216.36	0022-3L
2206.00	cut	S/Sst : w to lt gy	193.30	30.54	33.32	15.59	113.85	63.86	129.43	0023-3L
2212.00	cut	S/Sst : w to lt gy	238.06	8.78	17.55	14.24	197.49	26.33	211.73	0024-3L
2221.00	cut	S/Sst : w to lt gy	106.18	2.30	6.91	11.80	85.18	9.21	96.97	0025-3L
2281.00	cut	S/Sst : w to lt gy	138.16	-	-	-	-	-	-	0026-3L
2353.00	cut	S/Sst : w to lt gy	327.74	-	-	-	-	-	-	0027-3L

Table 3d: MPLC Bulk Composition: Material extracted from the rock (%) for well NOCS 16/4-3

Depth unit of measure: m

Depth	Typ	Lithology	Sat	Aro	Asph	NSO	Total	HC	Non-HC	Recov. MPLC	Recov. Asph	Sample
2152.00	cut	bulk	-	-	-	-	-	-	-	-	-	0018-0B
2194.00	cut	bulk	20.42	20.42	6.08	53.08	100.00	40.83	59.17	-	0.06	0005-0B
2197.00	cut	S/Sst : w to lt gy	9.47	11.36	4.06	75.11	100.00	20.83	79.17	-	0.04	0020-3L
2200.00	cut	S/Sst : w to lt gy	9.80	13.48	6.90	69.83	100.00	23.28	76.72	-	0.07	0021-3L
2203.00	cut	S/Sst : w to lt gy	13.21	14.98	4.85	66.95	100.00	28.19	71.81	-	0.05	0022-3L
2206.00	cut	S/Sst : w to lt gy	15.80	17.24	8.06	58.90	100.00	33.04	66.96	-	0.08	0023-3L
2212.00	cut	S/Sst : w to lt gy	3.69	7.37	5.98	82.96	100.00	11.06	88.94	-	0.06	0024-3L
2221.00	cut	S/Sst : w to lt gy	2.17	6.50	11.11	80.22	100.00	8.67	91.33	-	0.11	0025-3L
2281.00	cut	S/Sst : w to lt gy	-	-	-	-	-	-	-	-	-	0026-3L
2353.00	cut	S/Sst : w to lt gy	-	-	-	-	-	-	-	-	-	0027-3L

Table 3e: MPLC Bulk Composition: Ratios for well NOCS 16/4-3

Depth unit of measure: m

Depth	Typ	Lithology	Sat	HC	Asp	Sample
			Aro	Non-HC	NSO	
2152.00	cut	bulk	-	-	-	0018-0B
2194.00	cut	bulk	1.00	0.69	0.11	0005-0B
2197.00	cut	S/Sst : w to lt gy	0.83	0.26	0.05	0020-3L
2200.00	cut	S/Sst : w to lt gy	0.73	0.30	0.10	0021-3L
2203.00	cut	S/Sst : w to lt gy	0.88	0.39	0.07	0022-3L
2206.00	cut	S/Sst : w to lt gy	0.92	0.49	0.14	0023-3L
2212.00	cut	S/Sst : w to lt gy	0.50	0.12	0.07	0024-3L
2221.00	cut	S/Sst : w to lt gy	0.33	0.09	0.14	0025-3L
2281.00	cut	S/Sst : w to lt gy	-	-	-	0026-3L
2353.00	cut	S/Sst : w to lt gy	-	-	-	0027-3L

Table 4: Saturated Hydrocarbon Ratios (peak area) for well NOCS 16/4-3

Depth unit of measure: m

Depth	Typ	Lithology	Pristane	Pristane	Pristane/nC17	Phytane	CPI1	nC17	Sample
			nC17	Phytane	Phytane/nC18	nC18		nC17+nC27	
2194.00	cut	bulk	2.51	0.68	1.40	1.79	1.08	0.23	0005-0B
2197.00	cut	S/Sst : w to lt gy	2.29	0.87	1.36	1.69	1.06	0.32	0020-3L
2200.00	cut	S/Sst : w to lt gy	2.21	1.01	1.45	1.52	1.01	0.41	0021-3L
2203.00	cut	S/Sst : w to lt gy	2.35	0.99	1.47	1.60	1.10	0.42	0022-3L
2206.00	cut	S/Sst : w to lt gy	2.27	0.96	1.44	1.58	1.05	0.41	0023-3L
2212.00	cut	S/Sst : w to lt gy	2.46	0.72	1.50	1.64	0.97	0.31	0024-3L
2221.00	cut	S/Sst : w to lt gy	3.55	0.98	2.59	1.37	0.83	1.00	0025-3L

Table 5a: Aromatic Hydrocarbon Ratios (peak area) for well NOCS 16/4-3

Depth unit of measure: m

Depth	Typ	Lithology	MNR	DMNR	BPhR	2/1MP	MPI1	MPI2	Rc	DBT/P	4/1MDBT	(3+2) /1MDBT	Sample
2194.00	cut	bulk	-	-	-	-	-	-	-	-	-	-	0005-0B
2197.00	cut	S/Sst : w to lt gy	-	0.82	0.50	1.48	0.97	0.99	0.98	-	-	-	0020-3L
2200.00	cut	S/Sst : w to lt gy	-	0.82	0.58	1.54	0.90	0.97	0.94	-	-	-	0021-3L
2203.00	cut	S/Sst : w to lt gy	-	0.80	0.48	1.37	0.99	0.99	1.00	-	-	-	0022-3L
2206.00	cut	S/Sst : w to lt gy	-	1.08	0.46	1.41	1.03	1.06	1.02	-	-	-	0023-3L
2212.00	cut	S/Sst : w to lt gy	-	2.73	0.77	1.57	0.86	0.97	0.92	-	-	-	0024-3L
2221.00	cut	S/Sst : w to lt gy	-	-	-	1.63	0.71	0.94	0.82	-	-	-	0025-3L

Table 5b: Aromatic Hydrocarbon Ratios (peak area) for well NOCS 16/4-3

Depth unit of measure: m

Depth	Typ	Lithology	F1	F2	Sample
2194.00	cut	bulk	-	-	0005-0B
2197.00	cut	S/Sst : w to lt gy	0.56	0.28	0020-3L
2200.00	cut	S/Sst : w to lt gy	0.53	0.29	0021-3L
2203.00	cut	S/Sst : w to lt gy	0.54	0.27	0022-3L
2206.00	cut	S/Sst : w to lt gy	0.53	0.27	0023-3L
2212.00	cut	S/Sst : w to lt gy	0.57	0.32	0024-3L
2221.00	cut	S/Sst : w to lt gy	0.44	0.29	0025-3L

Table 6a: Variation in Triterpane Distribution (peak height) SIR for Well NOCS 16/4-3

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
2194.00	bulk	1.89	0.65	0.14	0.47	0.32	0.05	0.70	1.50	0.41	0.05	0.92	0.37	0.18	59.33	0005-0
2197.00	S/Sst	1.85	0.65	0.13	0.47	0.32	0.05	0.74	1.58	0.43	0.05	0.92	0.39	0.21	59.20	0020-3
2203.00	S/Sst	1.88	0.65	0.13	0.49	0.33	0.06	0.96	1.95	0.49	0.05	0.91	0.41	0.25	59.91	0022-3
2206.00	S/Sst	1.76	0.64	0.12	0.45	0.31	0.04	1.06	2.38	0.51	0.04	0.91	0.42	0.30	59.39	0023-3
2212.00	S/Sst	1.69	0.63	0.12	0.44	0.31	0.06	1.46	3.28	0.59	0.04	0.90	0.48	0.48	54.71	0024-3
2221.00	S/Sst	1.90	0.66	0.10	0.35	0.26	0.07	2.00	5.76	0.67	0.03	0.87	0.43	0.50	35.78	0025-3



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 6b: Variation in Sterane Distribution (peak height) SIR for Well NOCS 16/4-3

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>
2194.00	bulk	0.57	27.91	64.00	1.21	0.76	0.17	0.12	0.47	0.39	1.23	0005-0
2197.00	S/Sst	0.55	26.50	60.81	1.21	0.75	0.17	0.12	0.44	0.36	1.06	0020-3
2203.00	S/Sst	0.60	30.07	62.92	1.19	0.74	0.19	0.13	0.46	0.43	1.21	0022-3
2206.00	S/Sst	0.57	28.20	60.61	1.14	0.73	0.18	0.13	0.43	0.39	1.07	0023-3
2212.00	S/Sst	0.55	25.18	57.48	1.01	0.73	0.18	0.13	0.40	0.34	0.90	0024-3
2221.00	S/Sst	0.40	34.05	51.89	0.49	0.61	0.12	0.10	0.35	0.52	0.82	0025-3

List of Sterane Distribution Ratios

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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 6c: Variation in Triaromatic Sterane Distribution (peak height) for Well NOCS 16/4-3

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>Sample</u>
2194.00	bulk	0.16	0.17	0.06	0.06	0.08	0005-0
2197.00	S/Sst	0.21	0.17	0.07	0.07	0.09	0020-3
2203.00	S/Sst	0.29	0.29	0.11	0.11	0.13	0022-3
2206.00	S/Sst	0.28	0.27	0.10	0.10	0.13	0023-3
2212.00	S/Sst	0.25	0.24	0.08	0.09	0.11	0024-3
2221.00	S/Sst	0.39	0.27	0.15	0.17	0.23	0025-3

Ratio1:  $a1 / a1 + g1$

Ratio2:  $b1 / b1 + g1$

Ratio3:  $a1 + b1 / a1 + b1 + c1 + d1 + e1 + f1 + g1$

Ratio4:  $a1 / a1 + e1 + f1 + g1$

Ratio5:  $a1 / a1 + d1$

Table 6d: Variation in Monoaromatic Sterane Distribution (peak height) for Well NOCS 16/4-3

Depth unit of measure: m

<u>Depth</u>	<u>Lithology</u>	<u>Ratio1</u>	<u>Ratio2</u>	<u>Ratio3</u>	<u>Ratio4</u>	<u>Sample</u>
2194.00	bulk	0.21	0.13	0.13	0.11	0005-0
2197.00	S/Sst	0.20	0.13	0.12	0.10	0020-3
2203.00	S/Sst	0.26	0.18	0.16	0.13	0022-3
2206.00	S/Sst	0.22	0.15	0.14	0.11	0023-3
2212.00	S/Sst	0.21	0.12	0.13	0.10	0024-3
2221.00	S/Sst	0.17	0.11	0.10	0.08	0025-3

Ratio1: A1 / A1 + E1  
 Ratio2: B1 / B1 + E1

Ratio3: A1 / A1 + E1 + G1  
 Ratio4: A1+B1 / A1+B1+C1+D1+E1+F1+G1+H1+I1

Table 6e: Aromatisation of Steranes (peak height) for Well NOCS 16/4-3

Depth unit of measure: m

<u>Depth</u>	<u>Lithology</u>	<u>Ratio1</u>	<u>Ratio2</u>	<u>Sample</u>
2194.00	bulk	0.38	0.85	0005-0
2197.00	S/Sst	0.45	0.78	0020-3
2203.00	S/Sst	0.40	0.79	0022-3
2206.00	S/Sst	0.42	0.79	0023-3
2212.00	S/Sst	0.55	0.61	0024-3
2221.00	S/Sst	0.82	0.26	0025-3

$$\text{Ratio1: } \frac{C1+D1+E1+F1+G1+H1+I1}{C1+D1+E1+F1+G1+H1+I1 + c1+d1+e1+f1+g1}$$

$$\text{Ratio2: } g1 / g1 + I1$$

Table 6f: Raw triterpane data (peak height) m/z 191 SIR for Well NOCS 16/4-3

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	
2194.00	bulk	19180.6	14025.3	7385.0	14527.9	4691.4	27086.7	51281.9	209733.8	16284.5	0005-0
		139718.5	58585.0	15394.4	53327.5	54870.7	299895.5	25991.9	0.0	98297.0	
		67304.1	57422.1	39365.5	57105.4	36370.1	31631.4	16100.8	32483.8	21884.5	
2197.00	S/Sst	28703.4	21204.5	11722.0	22274.0	7660.2	40471.0	74928.2	337480.4	33204.2	0020-3
		213496.6	91343.8	23053.6	102142.8	127793.1	454224.1	39177.3	0.0	142770.1	
		104174.6	85498.0	58922.7	85743.0	55956.1	45922.6	25878.1	50695.8	34550.1	
2203.00	S/Sst	24233.4	17404.7	8601.5	18262.8	5771.1	31788.9	59654.8	336716.4	30383.9	0022-3
		172548.8	88051.1	19932.8	96448.7	146347.7	351440.0	34997.1	0.0	117568.0	
		89657.9	73149.0	48951.4	72829.9	47256.0	40622.1	21147.3	44693.2	29525.2	
2206.00	S/Sst	15703.5	11582.3	5845.6	12689.9	3765.9	22903.3	40288.6	276748.1	17125.1	0023-3
		116060.1	65836.9	11018.2	86885.4	121087.7	260775.3	24856.1	14343.0	72890.9	
		58368.2	44214.7	30229.8	41509.6	29409.1	23354.4	12645.8	25261.2	17573.0	
2212.00	S/Sst	25431.1	16023.1	8659.3	18270.8	5206.9	35133.7	59411.5	596603.0	44640.0	0024-3
		181670.9	166216.1	26105.6	237130.4	237951.8	408668.3	46775.1	0.0	108874.7	
		96798.5	59530.2	49283.4	57764.8	44910.9	31602.2	19972.9	35547.7	27064.2	
2221.00	S/Sst	23985.9	14098.6	21813.4	14390.1	5112.6	35938.5	68281.9	1012710.0	119416.0	0025-3
		175780.3	167343.3	37379.6	263769.5	177223.6	505192.0	77374.6	0.0	43189.6	
		121763.1	17095.5	30680.7	10484.3	18106.2	7507.0	8055.3	7263.2	9960.0	

Table 6g: Raw sterane data (peak height) m/z 217 SIR for Well NOCS 16/4-3

Depth unit of measure: m

Depth	Lithology	21a	22a	27dBS	27dBR	27daR	27daS	28dBS	28dBR	28daR*	Sample
		29dBS*	28daS*	27aaR	29dBR	29daR	28aaS	29daS*	28BSB		
		28aaR	29aaS	29BSR	29BSB	29aaR					
2194.00	bulk	32376.0	13795.6	111983.4	66493.6	26021.7	31581.0	43690.4	27960.8	43852.0	0005-0
		82147.7	53250.4	82855.4	48888.2	20957.8	26224.4	42677.7	42493.8		
		43047.9	33260.6	68969.2	36961.1	85902.3					
2197.00	S/Sst	52455.9	22035.3	162284.1	101384.1	41114.5	47074.4	66924.9	42253.6	64680.8	0020-3
		120309.0	77454.6	134584.2	73117.4	31882.1	40182.0	65787.6	64037.9		
		75983.2	54531.4	100991.5	58644.6	151237.1					
2203.00	S/Sst	46735.1	19039.6	132474.5	80284.6	32845.1	34999.1	51300.5	32367.3	52343.7	0022-3
		98192.5	62537.9	89308.7	59967.2	25833.6	32742.0	52753.4	52638.9		
		52670.1	46707.8	82089.8	49684.7	108631.1					
2206.00	S/Sst	31115.5	12386.4	87291.7	53756.8	22050.8	24414.0	33597.9	21428.8	34465.9	0023-3
		66562.6	41740.8	64903.7	43807.9	18050.9	20996.1	35668.6	33947.9		
		37428.5	31498.4	53990.3	31957.5	80211.0					
2212.00	S/Sst	50175.8	19998.6	108992.0	68505.4	37210.7	32336.5	46316.9	30989.0	47072.8	0024-3
		94493.5	55487.5	88975.1	70092.5	27339.7	30519.7	52598.2	49587.3		
		58085.6	46932.6	77620.5	48346.4	139443.5					
2221.00	S/Sst	33811.3	12690.8	44116.5	34594.4	31604.7	20874.9	27325.6	24173.7	31989.8	0025-3
		86188.6	29043.9	65281.0	102975.2	38305.7	19617.4	40502.7	24863.8		
		56906.1	74295.9	80312.1	37360.6	143925.7					

\* 28daR coel with 27aaS, 29dBS coel with 27BSR, 28daS coel with 27BSB, 29daS coel with 28BSR



Table 6h: Raw sterane data (peak height) m/z 218 SIR for Well NOCS 16/4-3

Depth unit of measure: m

Depth	Lithology	27 $\beta$ BR	27 $\beta$ BS	28 $\beta$ BR	28 $\beta$ BS	29 $\beta$ BR	29 $\beta$ BS	30 $\beta$ BR	30 $\beta$ BS	Sample
2194.00	bulk	81786.9	69935.8	61052.4	58495.4	74396.2	58457.7	20903.3	21445.8	0005-0
2197.00	S/Sst	123768.1	97726.0	88745.0	88315.8	104827.3	86700.1	32671.5	32241.0	0020-3
2203.00	S/Sst	100224.0	78148.3	71291.6	70150.6	87478.2	73457.5	26983.6	27801.4	0022-3
2206.00	S/Sst	65329.6	52905.7	48817.9	47446.1	57813.3	48011.5	17881.4	17517.6	0023-3
2212.00	S/Sst	83606.1	66545.5	68166.3	69280.6	87677.1	76626.6	34821.5	27651.5	0024-3
2221.00	S/Sst	43726.9	24415.9	68488.4	51716.5	95355.3	73187.1	23525.7	20586.5	0025-3

Table 6i: Raw triterpane data (peak height) m/z 177 SIR for Well NOCS 16/4-3

Depth unit of measure: m

<u>Depth</u>	<u>Lithology</u>	<u>25nor28aß</u>	<u>25nor30aß</u>	<u>Sample</u>
2194.00	bulk	113529.2	8283.8	0005-0
2197.00	S/Sst	207295.6	13090.8	0020-3
2203.00	S/Sst	178039.1	21102.1	0022-3
2206.00	S/Sst	141371.0	17915.1	0023-3
2212.00	S/Sst	257196.0	38818.2	0024-3
2221.00	S/Sst	120760.3	96838.5	0025-3

Table 6j: Raw triaromatic sterane data (peak height) m/z 231 for Well NOCS 16/4-3

Depth unit of measure: m

Depth	Lithology	a1	b1	c1	d1	e1	f1	g1	Sample
2194.00	bulk	12440.6	12489.7	44877.7	149814.3	61181.0	80202.5	63196.7	0005-0
2197.00	S/Sst	9628.4	7443.2	24284.2	92976.0	34536.0	47828.9	36851.3	0020-3
2203.00	S/Sst	3655.7	3590.9	6825.4	24450.1	9091.3	11867.9	8804.6	0022-3
2206.00	S/Sst	5788.8	5446.1	11135.2	38700.9	16237.2	18656.3	15093.3	0023-3
2212.00	S/Sst	4709.0	4546.7	12334.4	39148.7	14777.9	20458.7	14497.0	0024-3
2221.00	S/Sst	2493.1	1395.2	1950.5	8264.2	4007.1	4154.0	3820.7	0025-3

Table 6k: Raw monoaromatic sterane data (peak height) m/z 253 for Well NOCS 16/4-3

Depth unit of measure: m

Depth	Lithology	A1	B1	C1	D1	E1	F1	G1	H1	I1	Sample
2194.00	bulk	19186.4	10402.1	36153.7	32002.3	71458.5	9412.9	56189.3	32546.7	10807.7	0005-0
2197.00	S/Sst	13808.5	7717.8	24648.5	23435.4	53928.7	6890.6	44824.6	28913.0	10337.7	0020-3
2203.00	S/Sst	3689.3	2366.7	5671.5	4626.4	10768.8	1592.4	9316.7	6358.0	2308.0	0022-3
2206.00	S/Sst	5780.3	3488.3	10018.8	7966.2	20231.8	3028.7	16586.3	10535.8	4043.0	0023-3
2212.00	S/Sst	9132.0	4830.3	14995.7	12825.0	35114.0	4253.8	27365.6	19436.3	9232.0	0024-3
2221.00	S/Sst	5512.6	3101.0	8505.2	7969.6	26303.6	4078.7	22073.2	19178.1	10634.9	0025-3