

Well Information

Anchor Drilling Fluids

Operator: Conoco Norway Inc.

Well: 6507/7-10

Start Date : 27-9-93
 Finish Date : 25-10-93

Rig : Sonat Arcade Frontier
 Water Depth : 395 m

Interval	From m	To m	Casing	From m	To m	First FSR	Last FSR	Drilling Fluid	Mud Density/sg	Hole Angle deg. (max)	Mud Cost NoK	Eng. Cost NoK	Total Interval Cost/NoK
36"	418	521	30"	418	518	1	3	Seawater/ Hi Vis PH Gel Sweeps	1,05-1,14	0	130 581,00	29 800,00	160 381,00
17 1/2"	518	1 161	13 3/8"	418	1 150	4	6	Seawater/ Hi Vis PH Gel Sweeps	1,05-1,20	0	108 326,00	29 600,00	137 926,00
12 1/4"	1 150	2 416	9 5/8"	418	2 407	7	15	KCL/Polymer	1,41-1,46	0	1 113 769,30	66 600,00	1 180 369,30
8 1/2"	2 407	3 310	7"	418	Not Run	16	28	KCL/Polymer	1,20	0	336 308,98	96 400,00	432 708,98
													1 911 385,28
Total =											1 688 985,28	222 400,00	1 911 385,28

Engineers : John McCullough; Jan Berge; Steve Nygård; Nick Hilbig

Daily Mud Properties

Anchor Drilling Fluids

Operator: Conoco Norway Inc.

Well: 6507/7-110

Start Date Well: 27-9-93
 Last Date Well: 25-10-93
 Last PSR # Well: 28

Date	PSR #	Section	Time	Depth m	Temp In deg C	Temp Out deg C	Density kg/m3	Funnel Vis sec/qt	600 RPM	300 RPM	200 RPM	100 RPM	60 RPM	30 RPM	6 RPM	3 RPM	"n" 600/300	"K" 600/300	"n" 60/6	"K" 60/6	PV cP	YP Pa	Relax- ation secs	Gels 10 sec Pa	Gels 10 min Pa	Gels 30 min Pa	HTHP F.Loss ml	Cake mm
------	-------	---------	------	---------	---------------	----------------	---------------	-------------------	---------	---------	---------	---------	--------	--------	-------	-------	-------------	-------------	----------	----------	-------	-------	-------------------	----------------	----------------	----------------	----------------	---------

36" Interval: Sea Water / Hi Vis PH Gel Sweeps

27-9-93	1	36"	6.00	Pit	Displ. Mud	1,14	60	44	32								0,46	9,32			12	10						
	1	36"	16.00	Pit	Hi Vis Mud	1,07	120+	100	72								0,47	19,17			28	22						
28-9-93	2	36"	8.00	521	Displ. Mud	1,14	60	44	32								0,46	9,32			12	10						
	2	36"	18.00	521	Hi Vis Mud	1,07	120+	100	73								0,45	22,00			27	23						

17 1/2" Interval: Sea Water / Hi Vis PH Gel Sweeps

29-9-93	3	9 7/8" PH	11.00	572	Kill Mud	1,44	63	42	32								0,39	14,16			10	11						
	3	9 7/8" PH	12.00	572	Hi Vis Mud	1,07	120+	103	75								0,46	22,09			28	23,5						
30-9-93	4	17 1/2"	11.00	1160	Kill Mud	1,44	63	42	32								0,39	14,16			10	11						
	4	17 1/2"	14.00	1160	Hi Vis Mud	1,07	120+	98	72								0,44	22,98			26	23						
1-10-93	5	17 1/2"	6.00	1160	Hi Vis Mud	1,07	120+	101	73								0,47	20,12			28	22,5						
	5	17 1/2"	10.00	1160	Displ. Mud	1,20	55	30	20								0,58	2,67			10	5						
2-10-93	6	17 1/2"	22.00	1160	Hi Vis Mud	1,07	120+	101	73								0,47	20,12			28	22,5						

Daily Mud Properties

Anchor Drilling Fluids

Operator: Conoco Norway Inc.

Well: 6507/7-10

Start Date Well: 27-9-93
 Last Date Well: 25-10-93
 Last FSR # Well: 28

Date	FSR #	Section	Time	Depth m	Temp In deg C	Temp Out deg C	Density kg/m3	Funnel Vis sec/qt	600 RPM	300 RPM	200 RPM	100 RPM	60 RPM	30 RPM	6 RPM	3 RPM	"n" 600/300	"K" 600/300	"n" 60/6	"K" 60/6	PV-cP	YP Pa	Relax-ation secs	Gels 10 sec Pa	Gels 10 min Pa	Gels 30 min Pa	HTHP F.Loss ml	Cake mm
1/2 1/4" Interval KCl/Polymer																												
3-10-93	7	12 1/4"	4,00	1 160	Pit		1,37	66	57	37	29	19			3	2	0,62	3,88			20	8,5		1,5	1,5			
	7	12 1/4"	21,00	1 160	Pit		1,37	59	56	35	28	18			3	2	0,68	2,61			21	7		1,5	1,5		12,6	1
4-10-93	8	12 1/4"	18,00	1 311	Pit	24	1,41	51	60	41	34	22	16	10	5	4	0,55	6,82	0,51	7,89	19	11		1	1,5		12,7	1
	8	12 1/4"	20,00	1 311	F/L	24	1,40	49	63	44	36	23	17	12	5	4	0,52	8,91	0,53	7,42	19	12,5		1	1,5		12,7	1
5-10-93	9	12 1/4"	21,00	1 700	Pit	24	1,42	52	58	38	30	19	14	9	4	3	0,61	4,33	0,54	5,77	20	9		1,5	3		12,4	2
	9	12 1/4"	23,00	1 735	F/L	25	1,42	53	60	40	31	21	15	10	5	4	0,58	5,33	0,48	8,42	20	10		2	3,5			
6-10-93	10	12 1/4"	19,00	2 280	Pit	27	1,42	53	60	38	29	18	13	8	3	2	0,66	3,19	0,64	3,49	22	8		1,5	4		13,3	2
	10	12 1/4"	21,00	2 290	F/L	27	1,42	52	62	40	30	19	14	8	3	2	0,63	3,97	0,67	3,24	22	9		1,5	4			
7-10-93	11	12 1/4"	4,00	2 369	F/L	23	1,42	50	62	39	29	18	12	8	3	2	0,67	1,94	0,60	3,78	23	8		1	7		14,2	2
	11	12 1/4"	6,00	2 391	Pit	24	1,42	51	58	37	27	17	12	8	3	2	0,65	3,32	0,60	3,78	21	8		1	6,5			
	11	12 1/4"	20,00	2 416	Pit	21	1,42	52	59	38	28	18	12	9	4	3	0,63	3,71	0,48	6,74	21	8,5		1	7			
8-10-93	12	12 1/4"	8,00	1 155	Pit	18	1,42	54	57	36	24	14	11	8	3	2	0,66	2,95	0,56	4,13	21	7,5		1,5	10			
	12	12 1/4"	21,00	2 416	Pit	24	1,42	56	61	37	28	17	12	8	3	2	0,72	2,11	0,60	3,78	24	6,5		1,5	7,5		14,4	2
9-10-93	13	12 1/4"	7,00	1 340	F/L	19	1,44	54	52	32	23	14	10	7	3	2	0,48	6,03	0,54	2,88	9	7		1	8			
	13	12 1/4"	13,00	2 416	Pit	24	1,46	55	71	46	36	24	18	12	6	4	0,63	4,74	0,48	10,10	25	10,5		2,5	7,5		14,0	2
10-10-93	14	12 1/4"	20,00	2 416	Pit	17	1,46	57	70	46	35	24	18	12	6	4	0,61	5,39	0,48	10,10	24	11		2,5	7,5		14,0	2
11-10-93	15	12 1/4"	6,00	2 416	Pit	17	1,46	57	70	46	35	24	18	12	6	4	0,61	5,39	0,48	10,10	24	11		2,5	7,5		14,0	2

Min							1,37	49	52	32	23	14	10	7	3	2	0,48	1,94	0,48	2,88	9	7		1,0	1,5		12,4	1
Max							1,46	66	71	46	36	24	18	12	6	4	0,72	8,91	0,67	10,10	25	13		2,5	10,0		14,4	2
Avg							1,42	54	61	39	30	19	14	9	4	3	0,62	4,39	0,55	6,11	21	9		1,5	5,2		13,4	2

Daily Fluid Properties

Anchor Drilling Fluids

Operator: Conoco Norway Inc.

Well: 6507/7-10

API F.Loss ml	Cake mm	pH	Pm	PI	Mf	Total Hardness mg/l	Ca ++ mg/l	Mg ++ mg/l	K+ mg/l	Cl- mg/l	Corr. Rate mpy	Solids uncorr %	Water %	Solids corr. %	Avg. Solids s.g.	Sand %	MBT kg/m3	HC solids kg/m3	Solids +Chems %	LG solids kg/m3	KCl kg/m3	PHPA kg/m3	Anco 208 %	Date	FSR #
																								12/1/49 interval	
3.8	1	9.5		0.15	0.4	70	60	6	57 000	57 000											120			3-10-93	7
3.7	1	9.5		0.15	0.4	70	60	6	57 000	57 000											120				7
3.8	1	9.4		0.45	1.05	160	120	24	57 000	56 200	14	86	11.1	4.19	0.75	14	465		1	109	2			4-10-93	8
3.8	1	9.3		0.4	0.9	160	120	24	57 000	56 200	14	86	11.1	4.19	0.75	15	465		1	109	1				8
3.6	1	8.8		0.1	0.4	280	140	85	54 974	59 000	14.5	86	11.5	4.15	1	14	469		9	105	3.75			5-10-93	9
3.7	1	8.7		0.05	0.4	270	160	67	53 927	58 000	14.5	86	11.6	4.14	1	14.25	469		10	103	4.28				9
3.9	1	8.2		0.05	0.4	600	280	194	57 592	62 000	16	84	12.9	3.79	1.5	26	405		86	110	3.85			6-10-93	10
4	1	8.1		0.05	0.35	580	300	170	53 403	58 000	16	84	13.1	3.78	1.5	28	407		90	102	3.6				10
4.6	1	8.5		0.1	0.5	620	300	194	51 309	62 000	17	83	14	3.59	1.5	34	363		138	98	3.6			7-10-93	11
4.4	1	8.4		0.1	0.6	340	240	182	56 545	64 000	17	83	13.9	3.59	1.5	35	362		136	108	3.8				11
4.5	1	8.4		0.1	0.55	540	260	170	54 450	63 000	17	83	13.9	3.59	1.5	35	363		137	104	3.75				11
4.2	1	8.2		0.05	0.5	640	300	207	53 403	62 000	17	83	14	3.59	1.5	42	363		138	102	3.6			8-10-93	12
4.2	1	8.4		0.1	0.5	620	300	194	55 497	64 000	17	83	13.9	3.59	1	42	362		136	106	3.99				12
4.6	1	8.3		0.05	0.5	640	320	194	54 974	63 000	18	82	15	3.55	1.5	45	373		158	105	3.75			9-10-93	13
4.6	1	8.2		0.15	0.55	640	320	194	55 497	64 000	18	82	14.9	3.69	1.25	48.5	426		124	106	4.85				13
4.5	1	8.2		0.15	0.55	620	320	182	55 497	64 000	18	82	14.9	3.69	1.25	48	426		124	106	4.75			10-10-93	14
4.5	1	8.2		0.15	0.55	620	320	182	55 497	64 000	18	82	14.9	3.69	1.25	48	426		124	106	4.75			11-10-93	15
3.6	1	8.1		0.05	0.35	70	60	6	51 309	56 200	14	82	11.10	3.55	0.75	14	362		1	98	1				Min
4.6	1	9.5		0.45	1.05	640	320	207	57 592	64 000	18	86	15.00	4.19	1.50	49	469		158	120	4.85				Max
4.1	1	8.5		0.14	0.54	451	231	134	55 327	60 788	16.4	84	13.38	3.79	1.25	33	410		94	107	3.688				Avg

Daily Mud Properties

Anchor Drilling Fluids

Operator: Comoco Norway Inc.

Well: 6507/7-10

Start Date Well: 27-9-93
 Last Date Well: 25-10-93
 Last FSR # Well: 28

Date	FSR #	Section	Time	Depth m	Temp In deg C	Temp Out deg C	Density kg/m3	Funnel Vis sec/qt	600 RPM	300 RPM	200 RPM	100 RPM	60 RPM	30 RPM	6 RPM	3 RPM	"n" 600/300	"K" 600/300	"n" 60/6	"K" 60/6	PV, cP	YP Pa	Relax-ation secs	Gels 10 sec Pa	Gels 10 min Pa	Gels 30 min Pa	HTHP F.Loss ml	Cake mm
12-10-93	16	8 1/2"	22,00	2 420	Pit	18	1,20	70	71	47	36	24	17	11	3	2	0,59	5,88	0,75	2,66	24	11,5		1,5	2		8,9	1
13-10-93	17	8 1/2"	4,30	2 435	Pit	23	1,21	71	64	42	32	20	14	8	3	2	0,61	4,86	0,67	3,24	22	10		1,5	2		9,3	1
	17	8 1/2"	15,00	2 448	Pit	24	1,20	68	58	38	29	18	13	8	3	2	0,61	4,33	0,64	3,49	20	9		1,5	2		9,1	1
14-10-93	18	8 1/2"	4,15	2 454	Pit	15	1,20	73	66	44	33	21	15	10	4	3	0,58	5,86	0,57	5,38	22	11		2	3		9,0	1
	18	8 1/2"	22,00	2 476	Pit	22	1,20	78	71	48	37	23	17	11	4	3	0,56	7,25	0,63	4,74	23	12,5		2,5	4		9,1	1
15-10-93	19	8 1/2"	10,00	2 488	Pit	11	1,20	75	71	48	37	24	17	11	4	3	0,56	7,25	0,63	4,74	23	12,5		2	3,5		9,3	1
16-10-93	20	8 1/2"	2,30	2 525	Pit	16	1,20	71	77	50	39	25	18	11	4	3	0,62	5,28	0,65	4,48	27	11,5		2	3		9,3	1
	20	8 1/2"	22,00	2 551	Pit		1,20	78	81	54	44	28	21	13	5	3	0,58	7,20	0,62	6,00	27	13,5		2	3,5		9,1	1
17-10-93	21	8 1/2"	5,30	2 569	Pit	21	1,20	120	84	55	43	28	20	13	4	3	0,61	6,23	0,70	4,02	29	13		1,5	2		9,5	1
	21	8 1/2"	8,30	2 624	Pit	21	1,20	128	95	63	50	33	24	15	5	4	0,59	8,01	0,68	5,24	32	15,5		2	2,5			
	22	8 1/2"	19,00	2 819	Pit	20	1,20	85	103	69	54	36	26	17	6	3	0,58	9,61	0,64	6,97	34	17,5		2,5	3,5		9,6	1
	21	8 1/2"	21,15	2 881	F/L	25	1,20	82	103	69	54	35	26	16	6	4	0,58	9,61	0,64	6,97	34	17,5		2,5	3,5			
18-10-93	22	8 1/2"	4,30	2 996	Pit	25	1,20	160	110	74	59	36	28	18	6	4	0,57	10,70	0,67	6,47	36	19		2	3		10,0	1
	22	8 1/2"	21,00	3 012	Pit		1,20	130	97	65	50	32	23	15	5	3	0,58	9,07	0,66	5,47	32	16,5		2	2,5			
19-10-93	23	8 1/2"	8,30	3 050	Pit	22	1,20	148	94	61	47	30	21	13	4	3	0,62	6,38	0,72	3,83	33	14		1,5	2	2,5	10,0	1
	23	8 1/2"	21,00	3 136	Pit	25	1,20	146	98	64	49	31	22	14	5	3	0,61	7,09	0,64	5,72	34	15		2	2,5	3	10,0	1
20-10-93	24	8 1/2"	16,45	3 277	Pit	28	1,20	151	110	72	56	36	26	17	6	4	0,61	8,14	0,64	6,97	38	17		2	3		9,6	1
	24	8 1/2"	20,45	3 304	F/L	30	1,20	132	111	73	56	36	26	17	6	4	0,60	8,61	0,64	6,97	38	17,5		2,5	3			
21-10-93	25	8 1/2"	4,30	3 310	Pit	28	1,20	165	104	69	53	35	25	16	6	4	0,59	8,81	0,62	7,25	35	17		2	3	3,5	10,5	1
	25	8 1/2"	21,15	3 310	Pit		1,20	159	104	69	54	35	25	16	6	4	0,59	8,81	0,62	7,25	35	17		2	3,5			
22-10-93	26	8 1/2"	21,45	3 310	Pit		1,20	145	93	60	46	30	21	14	5	3	0,63	5,96	0,62	6,00	33	13,5		2	3		9,0	1
23-10-93	27	8 1/2"	21,45	3 310	Pit		1,20	150	107	71	55	36	26	16	6	4	0,59	9,07	0,64	6,97	36	17,5		2	2,5			
24-10-93	28	8 1/2"	19,45	1 050	Pit		1,20	130	107	71	55	36	27	17	6	4	0,59	9,07	0,65	6,71	36	17,5		2,5	7			
Min							1,20	68	58	38	29	18	13	8	3	2	0,56	4,33	0,57	2,66	20	9		1,5	2	2,5	8,9	1
Max							1,21	165	111	74	59	36	28	18	6	4	0,63	10,70	0,75	7,25	38	19		2,5	7	3,5	10,5	1
Avg							1,20	114	90	60	46	30	22	14	5	3	0,60	7,52	0,65	5,55	31	15		2	3	3	9,5	1

Daily Mud Properties

Anchor Drilling Fluids

Operator: Conoco Norway Inc

Well: 6507/7-110

API F.Loss ml	Cake mm	pH	Pm	Pf	Mf	Total Hardness mg/l	Ca ++ mg/l	Mg ++ mg/l	K+ mg/l	Cl- mg/l	Corr. Rate mpy	Solids uncorr %	Water %	Solids corr. %	Avg. Solids s.g.	Sand %	MBT kg/m3	HG Solids kg/m3	Solids +Chems %	LG Solids kg/m3	KCl kg/m3	PHPA kg/m3	Anco 208 %	Date	FSR #	
3.2	1	9.4		0.25	0.7	660	360	182	50 785	61 000		10	90	6.8	3.04	0.25	17	78		128	97	4		12-10-93	16	
3.4	1	9.5		0.25	0.75	660	360	182	54 974	63 000		9	91	5.6	3.58	0.5	17	145		56	105	3.65		13-10-93	17	
3.3	1	8.9		0.15	0.5	480	260	134	56 021	64 000		9	91	5.6	3.41	0.1	14	118		72	107	3.5			17	
3.2	1	8.6		0.15	0.7	400	240	97	54 974	63 000		9	91	5.6	3.40	0.25	11	119		79	105	3.5		14-10-93	18	
3.2	1	8.5		0.15	0.75	380	200	109	51 832	56 000		9	91	6	3.38	0.5	14	122		80	99	3.3			18	
3.3	1	8.5		0.2	0.85	320	200	73	52 880	57 000		8	92	4.9	3.87	0.25	14.3	164		26	101	4		15-10-93	19	
3.3	1	8.5		0.2	0.9	360	200	97	50 262	54 000		8	92	5.1	3.84	0.25	14	165		30	96	3.7		16-10-93	20	
3.3	1	8.5		0.15	0.9	360	200	97	50 262	55 000		8	92	5	3.85	0.3	14	165		29	96	3.6			20	
3.4	1	8.5		0.15	0.9	320	160	97	50 262	54 000		8.5	91.5	5.5	3.58	0.4	11	144		56	96	3.6		17-10-93	21	
3.4	1	8.4		0.15	0.9	320	160	97	50 262	54 000		9	91	6.1	3.37	0.3	11	123		82	96	3.5			21	
3.4	1	8.4		0.1	0.8	340	160	109	49 215	55 000		9	91	6.1	3.37	0.5	11	123		81	94	3.5			21	
3.6	1	8.3		0.1	0.7	340	160	109	49 215	55 000		9.5	90.5	6.6	3.19	0.75	11	102		108	94	3.4			21	
3.6	1	8.2		0.1	0.9	360	160	122	48 168	54 000		9.5	90.5	6.6	3.19	0.6	10	103		109	92	3.4		18-10-93	22	
3.5	1	8.2		0.1	0.8	340	120	134	47 644	55 000		9.5	90.5	6.6	3.19	0.5	10	102		108	91	3.2			22	
4.4	1	8.2		0.05	0.6	300	100	122	39 267	42 000		8.5	91.5	6.2	3.52	0.35	10	150		69	75	2.8		19-10-93	23	
4	1	8.2		0.05	0.6	260	80	109	47 644	53 000		9	91	6.2	3.37	0.6	10	124		83	91	2.9			23	
3.4	1	8.0		0	0.55	220	60	97	48 168	52 000		9	91	6.2	3.36	0.5	10	125		84	92	2.8		20-10-93	24	
4	1	8.2		0	0.4	240	160	49	48 168	52 000		9.5	90.5	6.7	3.19	1	10	104		111	92	2.8			24	
4.3	1	8.0		0.05	0.7	240	160	49	45 550	48 000		9	91	6.4	3.35	1	10	127		89	87	2.7		21-10-93	25	
3.7	1	8.0		0.05	0.55	240	160	49	45 550	48 000		9	91	6.4	3.35	0.7	10	127		89	87	2.7			25	
3.6	1	8.0		0.05	0.55	240	160	49	45 550	48 000		9	91	6.4	3.35	0.6	10	127		89	87	2.7		22-10-93	26	
3.8	1	8.3		0.1	1.3	600	420	109	45 550	48 000		9	91	6.4	3.35	0.7	10	127		89	87	2.7		23-10-93	27	
		9.2											100												24-10-93	28
3.2	1	8.0		0.00	0.40	220	60	49	39 267	42 000		8	90	4.90	3.04	0.10	10	78		26	75	2.70			Min	
4.4	1	9.5		0.25	1.30	660	420	182	56 021	64 000		10	100	6.80	3.87	1.00	17	165		128	107	4.00			Max	
3.6	1	8.5		0.12	0.75	363	193	103	49 191	54 136		9	91	6.05	3.41	0.51	12	127		79	94	3.27			Avg	

Product Additions 36" Hole Section

Anchor Drilling Fluids

Operator: Conoco Norway Inc

Well: 6507/7-110

Start Date For Hole Section: 27-9-93 Last Date Hole Section: 28-9-93 Bit Size: 36" From: 418 To: 521
 Start PSR # For Hole Section: 1 Days On Section: 2 Casing: 30" From: 418 To: 518
 Start Cum. Cost Hole Section: 0,00

Date	FSR #	Daily Cost	Cumulative Sect. Cost	Cumulative Well Cost	Barite mt	Bentonite mt	Bentonite kg	C. Soda kg	Desco CF kg	Soda Ash 25 kg
					798,00	2 065,00	3,68	5,40	17,10	7,60

27-9-93	1	100 506,00	100 506,00	100 506,00	57	26				175
28-9-93	2	30 075,00	130 581,00	130 581,00		14		75		100

Product Addition:			36'	-	57	40	0	75	0	275
-------------------	--	--	-----	---	----	----	---	----	---	-----

Check Product Cost: 130 581,00 - 45 486,00 82 600,00 0,00 405,00 0,00 2 090,00

Volume transferred in (m3)	0	Net cost of interval	NoK 130 581,00
Volume mixed (m3)	357	Cost per metre	NoK 1 267,78
Volume used (m3)	214	Cost per m3	NoK 365,77

Product Additions 17 1/2" Hole Section

Anchor Drilling Fluids

Operator: Conoco Norway Inc.

Well: 6507/7-110

Start Date For Hole Section: 29-9-93
 Start FSR # For Hole Section: 4
 Start Cum. Cost Hole Section: 130 581,00

Last Date Hole Section: 2-10-93
 Days On Section: 4

Bit Size: 17 1/2" From: 518 To: 1161
 Casing: 13 3/8" From: 418 To: 1150

Date	FSR #	Daily Cost	Cumulative Sect. Cost	Cumulative Well Cost	Barite mt	Bentonite mt	Bentonite 25 kg	C. Soda kg	Desco CF kg	Soda Ash kg	XCD Polymer kg
					798,00	2 065,00	92,00	5,40	17,10	7,60	66,40
29-9-93	4	48 165,00	48 165,00	178 746,00	10	19				125	
30-9-93	5	23 803,00	71 968,00	202 549,00	11	7				75	
1-10-93	6	36 358,00	108 326,00	238 907,00	21	6				75	100
2-10-93	7	0,00	108 326,00	238 907,00							

Product Addition:	17 1/2"	-	42	32	0	0	0	0	275	100
-------------------	---------	---	----	----	---	---	---	---	-----	-----

Check Product Cost: 108 326,00 - 33 516,00 66 080,00 0,00 0,00 0,00 2 090,00 6 640,00

Volume transferred in (m3):	143	Net cost of interval:	108 326,00
Volume mixed (m3):	438	Cost per metre:	168,47
Volume used (m3):	581	Cost per m3:	247,32

Product Additions 12 1/4" Hole Section

Anchor Drilling Fluids

Operator: Conoco Norway Inc.

Well: 6507//7-10

Start Date For Hole Section: 3-10-93 Last Date Hole Section: 11-10-93 Bit Size: 12 1/4" From: 1150 To: 2416
 Start PSR # For Hole Section: 7 Days On Section: 9 Casing: 9 5/8" From: 418 To: 2407
 Start Cum. Cost Hole Section: 238 907,00

Date	PSR #	Daily Cost	Cumulative Sect. Cost	Cumulative Well Cost	Anco PHPA kg	Barite mt	Drispac kg	Drispac SL kg	KCl/Pol (wt) m3	KCl/Pol (unw) m3	KCl Brine m3	Pot. Carb kg	XCD Poly kg	Soda Ash kg
------	-------	------------	-----------------------	----------------------	--------------	-----------	------------	---------------	-----------------	------------------	--------------	--------------	-------------	-------------

3-10-93	7	393 246,00	393 246,00	632 153,00		57			260					
4-10-93	8	282 646,54	675 892,54	914 799,54	100	26	91		70	154			350	
5-10-93	9	121 917,68	797 810,22	1 036 717,22	225	52	45	477			56	50	25	
6-10-93	10	177 810,00	975 620,22	1 214 527,22	350	70		750			87	75	25	
7-10-93	11	79 764,54	1 055 384,76	1 294 291,76	150	27		341			42	25		200
8-10-93	12	10 247,54	1 065 632,30	1 304 539,30	25	8		91						
9-10-93	13	48 137,00	1 113 769,30	1 352 676,30			34					175	300	
10-10-93	14	0,00	1 113 769,30	1 352 676,30										
11-10-93	15	0,00	1 113 769,30	1 352 676,30										

Product Addition:	12 1/4"	-	850	274	136	1 659	350	154	185	325	700	200		
-------------------	---------	---	-----	-----	-----	-------	-----	-----	-----	-----	-----	-----	--	--

Check Product Cost: 1 113 769,30 - 26 350,00 218 652,00 4 615,84 56 306,46 434 700,00 145 530,00 177 600,00 2 015,00 46 480,00 1 520,00

Volume transferred in (m3)	0	Net cost of interval	1 113 769,30
Volume mixed (m3)	834	Cost per metre	879,75
Volume used (m3)	326	Cost per m3	1 335,45
Volume transferred to next section (m3)	508		

Product Additions 8 1/2" Hole Section

Anchon Drilling Fluids

Operator: Conoco Norway Inc

Well: 6507//7-110

Start Date For Hole Section: 12-10-93 Last Date Hole Section: 25-10-93 Bit Size: 8 1/2" From: 2407 To: 3310
 Start FSR # For Hole Section: 16 Days On Section: 14 Casing: 7" From: To: Not Run
 Start Cum. Cost Hole Section: 1 352 676,30

Date	FSR #	Daily Cost	Cumulative Sect. Cost	Cumulative Well Cost	Anco PHPA kg	Barite mt	Cal Carb C kg	Citric Acid kg	Drispac kg	Drispac SL kg	KCl Brine m3	Pot. Bicarb kg	Pot. Carb kg	XCD Poly kg
					31,00	798,00	1,08	12,80	33,94	33,94	960,00	8,80	6,20	66,40
12-10-93	16	84 996,00	84 996,00	1 437 672,30	50	27		175		1 250	11	175	25	75
13-10-93	17	7 463,14	92 459,14	1 445 135,44					45	136		150		
14-10-93	18	28 620,46	121 079,60	1 473 755,90		3			91	568		250		25
15-10-93	19	19 578,08	140 657,68	1 493 333,98		2				432				50
16-10-93	20	19 324,38	159 982,06	1 512 658,36						227				175
17-10-93	21	14 662,06	174 644,14	1 527 320,44						432				
18-10-93	22	32 834,52	207 478,66	1 560 154,96		9				658				50
19-10-93	23	63 862,30	271 340,96	1 624 017,26		10			114	681	18			175
20-10-93	24	9 541,24	280 882,20	1 633 558,50		10				46				
21-10-93	25	2 700,00	283 582,20	1 636 258,50			2 500							
22-10-93	26	23 052,16	306 634,36	1 659 310,66		13	300		364					
23-10-93	27	0,00	306 634,36	1 659 310,66										
24-10-93	28	29 674,62	336 308,98	1 688 985,28		13		750	23			825		25
25-10-93	29	0,00	336 308,98	1 688 985,28										

Product Addition:	8 1/2"	-	50	87	2 800	925	637	4 430	29	1 400	25	575	0	0	0
-------------------	--------	---	----	----	-------	-----	-----	-------	----	-------	----	-----	---	---	---

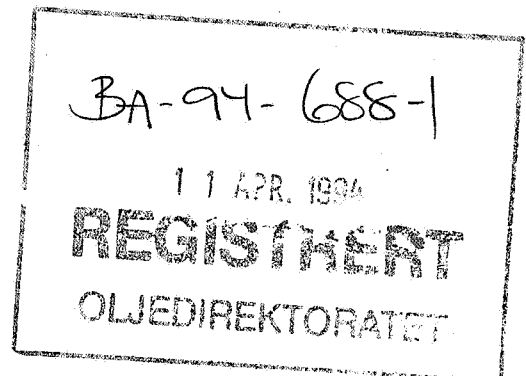
Check Product Cost: 336 308,98 1 550,00 69 426,00 3 024,00 11 840,00 21 619,78 150 354,20 27 840,00 12 320,00 155,00 38 180,00 0,00 0,00 0,00

Volume transferred in (m3)	508	Net cost of interval	336 308,98
Volume mixed (m3)	191	Cost per metre	372,44
Volume used (m3)	450	Cost per m3	1 760,78
Volume transferred to next section (m3)	249		

Geochemical Report for
Well NOCS 6507/7-10

Authors:

Kjell A. Bakken
Geir Hansen
Ian L. Ferriday



Geolab Nor A/S
P.O. Box 5740 Fossegrenda
7002 Trondheim
Norway

Date :

17.02.94

Chapter 1

INTRODUCTION

1.1 General Comments

The cuttings samples were supplied unwashed in bags. The samples were washed, described and picked before analysis commenced. The conventional core samples were supplied as core-chips which were used after removal of any superficial contamination. The side-wall cores were cleansed of drill mud before analysis.

The quality of the rock samples was good. The samples did not pose any analytical problems.

1.2 Analytical Program

<u>Analysis type</u>	<u>No of sample</u>	<u>Tables</u>
Lithology description	196	1
TOC	126	1,2
Rock-Eval pyrolysis	126	2
Thermal extraction GC (GHM, S ₁)	24	
Pyrolysis GC (GHM, S ₂)	24	3
Soxhlet Extraction of organic matter	22	
MPLC/HPLC separation	22	4a-d
Saturated hydrocarbon GC	20	5
Aromatic hydrocarbon GC	20	6
Vitrinite reflectance	24	7
Visual kerogen microscopy	19	7,8
Isotope composition C ₁₅ + fractions		9a-b
GC - MS of saturated and aromatic HC	11	10a-i

Experimental Procedures

Headspace Gas Analysis

The analysis is performed using a Perkin Elmer 8310 gas chromatograph with a 50 m Plot fused silica Al₂O₃/KCL column, loop injector and flame ionization detector. Nitrogen is used as carrier gas and the column is run from 70°C to 200°C, at a rate of 12°C/min. Final hold time is 5 min.

Two cm³ of headspace gas are removed from each sample can for chromatographic analysis of the C₁ to C₇ range of hydrocarbons.

Occluded Gas Analysis

The gas chromatograph used for this analysis is identical to that used for headspace gas analysis and is operated under the same conditions.

The canned samples are washed in thermostat-controlled water to remove drilling contaminants and sieved on a 2 mm mesh sieve to remove large, caved rock fragments. An aliquot (ca 25 mg) of sieved sample is crushed with 25 cm³ water in an airtight ball mill. After crushing, 2 cm³ of the released gas are removed from the ball mill for gas chromatographic analysis.

Total Organic Carbon (TOC) and Total Carbon Analysis

This analysis is performed using a LECO CS244 Carbon Analyser.

Hand-picked lithologies from cuttings samples are crushed with a mortar and pestle and approximately 200 mg (50 mg for coals) are accurately weighed into LECO

crucibles. The samples are then treated three times with 10 % hydrochloric acid to remove oxidized (carbonate) carbon, and washed four times with distilled water. The samples are dried on a hotplate at 60 - 70°C before analysis of total organic carbon. Total carbon is also analysed on the same instrument using approximately 200 mg of untreated crushed whole rock. Oxidized (carbonate) carbon is calculated by weight difference.

Total organic carbon can also be analysed on the Rock-Eval II Pyrolyser during the normal run of the instrument.

Rock-Eval Pyrolysis

This analysis is performed by using a Rock-Eval II Pyrolyser. Approximately 100 mg crushed whole rock is analysed. The sample is first heated at 300°C for three min in an atmosphere of helium to release the free hydrocarbons present (S1 peak) and then pyrolysed by increasing the temperature from 300°C to 600°C (temp. gradient 25°C/min) (S2 peak). Both the S1 and S2 yields are measured using a flame ionization detector (FID). In the temperature interval between 300°C and 390°C, the released gases are split and a proportion passed through a carbon dioxide trap, which is connected to a thermal conductivity detector (TCD). The value obtained from the TCD corresponds to the amount of oxygen contained in the kerogen of the sample and is reported as the S3 peak.

The Rock-Eval II Pyrolyser also analyses the TOC of each sample during the normal run of the instrument.

Thermal Extraction/Pyrolysis Gas Chromatography

The instrument used for this analysis is a Varian 3400 Gas Chromatograph interfaced to a pyrolysis oven (the pyrolyser). Up to 15 mg of whole rock sample is loaded on the pyrolyser and heated isothermally, at 300°C, for 4 min, during which time thermal

extraction of the free hydrocarbons occurs (equivalent to the S1 peak of the Rock-Eval). The released gases pass to a 25 m OV1 column with a liquid nitrogen-cooled trap.

After 4 min the pyrolysis oven is temperature programmed up to 530°C, at a rate of 37°C/min, causing bound hydrocarbons to be released from the kerogen (equivalent to the S2 peak of the Rock-Eval). The released gases pass to a 25 m OV1 column with a liquid nitrogen-cooled trap.

The temperature program of the gas chromatograph oven, in which the columns are housed is -10°C to 290°C at a rate of 6°C/min.

Both the columns are linked to a FID.

Solvent Extraction of Organic Matter (EOM)

The samples are extracted using a Tecator Soxtec HT-System. Carefully weighed samples are taken in a pre-extracted thimble. Some activated copper is added to the extraction cup and dichloromethane is used as an extraction solvent. The samples are boiled for 1 hour and then rinsed for 2 hours. If the samples contain more than 10 % TOC, then the whole procedure is repeated once. The resulting solution is filtered and the solvent removed by rotary evaporation (200 mb, 30°C). The amount of EOM is gravimetrically established.

Removal of Asphaltenes

Asphaltenes are removed from the EOM by precipitation in n-pentane. N-pentane is added to the EOM and the solution is then stored in the dark and at ambient temperature for at least 8 hours. The solution is then filtered (Baker 10-spe system) and the precipitated asphaltenes dissolved in dichloromethane are returned to the original flask. The solvent is removed by rotary evaporation (200 mb and 30°C).

Chromatographic Separation of deasphalted EOM

Chromatographic separation is performed using an MPLC system developed by the company. The EOM (minus asphaltenes) is injected into the MPLC and separated using hexane as an eluent. The saturated and aromatic hydrocarbon fractions are collected and the solvent removed using a rotary evaporator at 30°C. The fractions are then transferred to small pre-weighed vials and evaporated to dryness in a stream of nitrogen. The vials are re-weighed to obtain the weights of both the saturated and the aromatic fractions. The weight of the NSO fraction which is retained on the column, is obtained by weight difference.

Gas Chromatographic Analyses

Saturated hydrocarbon fractions:

The instrument used for this analysis is a PERKIN ELMER 8320 Gas Chromatograph equipped with an FID detector and an OV1 column. The carrier gas is helium and the temperature program runs from 80°C to 300°C at a rate of 4°C/min. Final hold time is 20 mins. The saturated hydrocarbon fraction is diluted by 1:30 and a 1 microlitre aliquot of this is injected into the instrument.

Aromatic hydrocarbon fractions:

The instrument used is a Varian 3400 Gas Chromatograph with a 25 m SE 54 capillary column, split injector and a column splitter leading to FID and FPD detectors, which allows simultaneous analysis of co-eluting hydrocarbons and sulphur compounds. The carrier gas is helium and the temperature program runs from 40°C to 290°C at a rate of 4°C/min. Final hold time is 10 mins. The aromatic hydrocarbon fraction is diluted by 1:30 and a 1 microlitre aliquot of this is injected into the instrument.

Whole Oil/Whole Extract

Whole oil chromatograms are determined on a Perkin Elmer Sigma 2000 gas chromatograph fitted with a split injector, 25 m SE54 capillary column and effluent splitter connected to FID and FPD detectors allowing simultaneous determination of hydrocarbons and sulphur compounds. Approximately 0.1 microlitres of whole oil are injected and the temperature program on the chromatograph runs from -10°C to 300°C at 4°C/min.

Vitrinite Reflectance Analysis

Samples to be analysed for vitrinite reflectance are ground to small granules (if necessary) using a pestle and mortar and are then mounted in a fast setting resin. The resin blocks are first ground flat using a coarse corundum paper to expose the rock granule surfaces and then with three finer grades of corundum paper to improve these surfaces and reduce scratches. The blocks are finally polished on a rotating Selvyt-covered lap using three grades of diamond suspension fluid. An appropriate lubricant is used when necessary.

Reflectance measurements are made under oil immersion at 546 nm using a Zeiss Universal Photo microscope II equipped with a HP 9000 series computer system. The polished blocks are mounted on the microscope stage and scanned manually in order to locate and measure particles of vitrinite. An attempt is made to obtain readings from 15-20 individual particles per sample, but this is not always possible in samples with low amounts of phytoclasts.

Visual Kerogen Microscopy

Kerogen concentrates are obtained from samples prepared by HCl and HF digestion

followed by zinc bromide flotation to remove pyrite and other heavy mineral residues. The cleaned concentrates are mounted on slides by smearing, these being analysed microscopically in transmitted white light and UV light (530 nm barrier filter) to determine the Spore Colour or Thermal Alteration Indices (SCI or TAI) and the colour and intensity of spore fluorescence. The spore colour index, backed by spore fluorescence, is used as an alternative maturity parameter to verify the results obtained from vitrinite reflectance.

Fluorescence Colour	Colour Index	Corresp. Vitrinite Reflectance
Green	1	0.2 %
Green/yellow	2	0.2-0.3 %
Yellow	3	0.3 %
Yellow/orange	4	0.4 %
Light orange	5	0.5 %
Moderate-orange	6	0.6 %
Dark orange	7	0.8 %
Dark orange/red	8	1.0 %
Spore fluorescence extinction	9	1.3 %

NB. This table only provides a rudimentary correlation as vitrinite reflectance and spore fluorescence colour are both independently affected by factors such as depositional environment and catagenic history.

Combined Gas Chromatography - Mass Spectrometry (GC-MS)

The GC-MS analyses are performed on a VG TS250 system interfaced to a Hewlett Packard 5890 gas chromatograph. The GC is fitted with a fused silica SE54 capillary column (40 m x 0.22 mm i.d.) directly into the ion source. Helium (12 psi) is used as carrier gas and the injections are performed in splitless mode. The GC oven is programmed from 45°C to 150°C at 35°C/min, at which point the programme rate is 2°C/min up to 310°C where the column is held isothermally for 15 min. For the aromatic hydrocarbons, the GC oven is programmed from 50°C to 310°C at 5°C/min. and held isothermally at 310°C for 15 min. The mass spectrometer is operated in electron impact (EI) mode at 70 eV electron energy, a trap current of 500 uA and a source temperature of 220°C. The instrument resolution used is 1500 (10 % value).

The data system used is a VG PDP11/73 for acquiring data, and a Vax station 3100

for peak processing the data. The samples are analysed in multiple ion detection mode (MID) at a scan cycle time of approximately 1.1 sec.

Calculation of peak ratios is performed from peak heights in the appropriate mass fragmentograms.

Saturated Fractions

Terpanes

The most commonly used fragment ions for detection of terpanes are M/Z 163 for detection of 25,28,30 trisnormoretane or 25,28,30 trisnorhopane, M/Z 177 for detection of demethylated hopanes or moretanes, M/Z 191 for detection of tricyclic, tetracyclic- and pentacyclic terpanes and M/Z 205 for methylated hopanes or moretanes. The molecular ions M/Z 370 and 384 are also recorded for identification of C₂₇ and C₂₈ triterpanes respectively.

Steranes

The most commonly used fragment ions for detection of steranes are M/Z 149 to distinguish between 5 α and 5 β steranes, M/Z 189 and 259 for detection of rearranged steranes, M/Z 217 for detection of rearranged and normal steranes and M/Z 218 for detection of 14 β (H) 17 β (H) steranes.

The M/Z 231 fragment ion is used to detect possible aromatic contamination of the saturated fraction. It is also used for detection of methyl steranes.

Aromatic Fractions

Alkyl-substituted Benzenes

The M/Z 106 fragment ion is often used to detect the alkyl-substituted benzenes. It is especially useful for the detection of di-substituted benzenes. M/Z 134 can also be used for the detection of C₄-alkylbenzenes, but benzothiophene will also give a signal with this fragment ion.

Naphthalenes

Methyl naphthalenes are normally detected by the M/Z 142 fragment ion, while C₂-naphthalenes are detected by M/Z 156 and C₃-naphthalenes by M/Z 170.

Benzothiophenes and Dibenzothiophenes

Benzothiophene can be detected, as mentioned above, by M/Z 134. The M/Z 198 and M/Z 212 fragment ions are used for methyl-substituted dibenzothiophenes and dimethyl-substituted dibenzothiophenes respectively.

Phenanthrenes

Phenanthrene is detected using the M/Z 178 fragment ion. Anthracene will, if present, also give a signal in the M/Z 178 fragment ion. Methyl-substituted phenanthrenes give signals in the M/Z 192 fragment ion, while the M/Z 206 fragment ion shows the dimethyl-substituted phenanthrenes and the M/Z 220 fragment ion shows the C₃ substituted phenanthrenes.

Aromatic Steranes

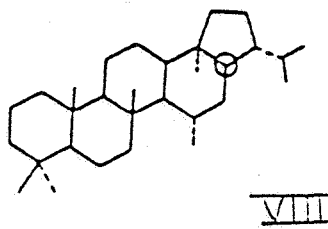
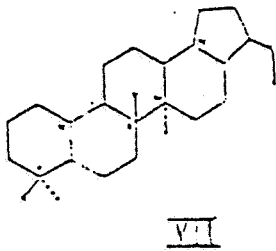
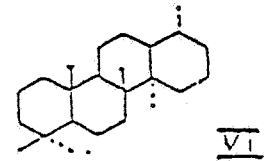
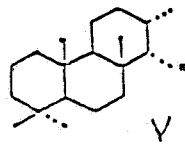
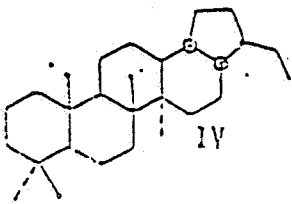
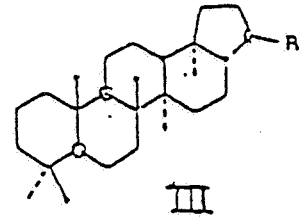
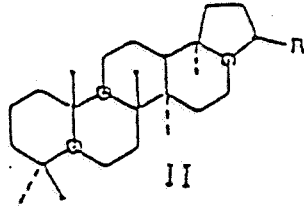
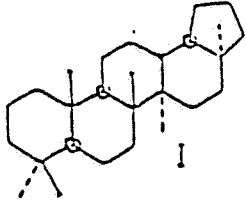
Monoaromatic steranes are detected using the M/Z 253 fragment ion, while the triaromatic steranes are detected using the M/Z 231 fragment ion.

Mass Fragmentograms representing Terpanes
(M/Z 163, 177, 191, 205, 370, 384, 398, 412 and 426)

Peak Identification: (α and β refer to hydrogen atoms at C-17 and C-21 respectively unless indicated otherwise)

A.	18 α trisnorneohopane (T_s)	$C_{27}H_{44}$	(I)
B.	17 α trisnorhopane (T_m)	$C_{27}H_{46}$	(II, R=H)
Z.	Bisnorhopane	$C_{28}H_{48}$	(IV)
C.	$\alpha\beta$ norhopane	$C_{29}H_{50}$	(II, R= C_2H_5)
D.	$\beta\alpha$ norhopane	$C_{29}H_{50}$	(III, R= C_2H_5)
E.	$\alpha\beta$ hopane	$C_{30}H_{52}$	(II, R=i- C_3H_7)
F.	$\beta\alpha$ hopane	$C_{30}H_{52}$	(III, R=i- C_3H_7)
G.	22S $\alpha\beta$ homohopane	$C_{31}H_{54}$	(II, R=i- C_4H_9)
H.	22R $\alpha\beta$ homohopane	$C_{31}H_{54}$	(II, R=i- C_4H_9)
I.	$\beta\alpha$ homohopane	$C_{31}H_{54}$	(III, R=i- C_4H_9)
J.	22S $\alpha\beta$ bishomohopane	$C_{32}H_{56}$	(II, R=i- C_5H_{11})
	22R $\alpha\beta$ bishomohopane	$C_{32}H_{56}$	(II, R=i- C_5H_{11})
K.	22S $\alpha\beta$ trishomohopane	$C_{33}H_{58}$	(II, R=i- C_6H_{13})
	22R $\alpha\beta$ trishomohopane	$C_{33}H_{58}$	(II, R=i- C_6H_{13})
L.	22S $\alpha\beta$ tetrakishomohopane	$C_{34}H_{60}$	(II, R=i- C_7H_{15})
	22R $\alpha\beta$ tetrakishomohopane	$C_{34}H_{60}$	(II, R=i- C_7H_{15})
M.	22S $\alpha\beta$ pentakishomohopane	$C_{35}H_{62}$	(II, E=i- C_8H_{17})
	22R $\alpha\beta$ pentakishomohopane	$C_{35}H_{62}$	(II, R=i- C_8H_{17})
P.	Tricyclic terpane	$C_{23}H_{42}$	(V, R=i- C_4H_9)
Q.	Tricyclic terpane	$C_{24}H_{44}$	(V, R=i- C_5H_{11})
R.	Tricyclic terpane (17R, 17S)	$C_{25}H_{66}$	(V, R=i- C_6H_{13})
S.	Tetracyclic terpane	$C_{24}H_{42}$	(VI)
T.	Tricyclic terpane (17R, 17S)	$C_{26}H_{48}$	(V, R=i- C_7H_{15})
N.	Tricyclic terpane	$C_{21}H_{38}$	(V, R= C_2H_5)
O.	Tricyclic terpane	$C_{22}H_{40}$	(V, R= C_3H_7)
Y.	25,28,30-trisnorhopane/moretane	$C_{27}H_{46}$	(VII)
X.	$\alpha\beta$ diahopane	$C_{30}H_{52}$	(VIII)

STRUCTURES REPRESENTING TERPANES



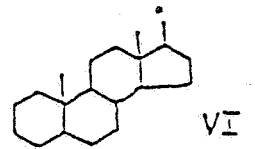
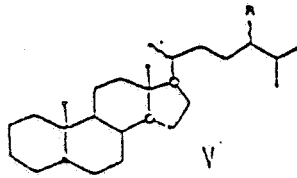
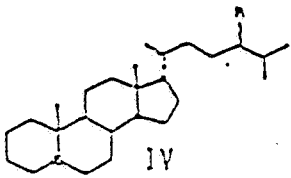
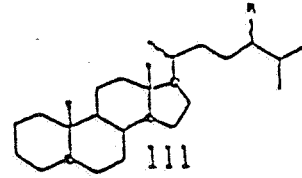
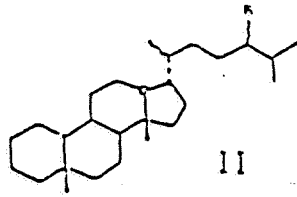
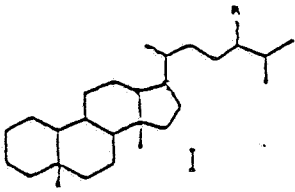
Mass Fragmentograms representing Steranes

(M/Z 149, 189, 217, 218, 259, 372, 386, 400 and 414)

Peak Identifications: α and β refer to hydrogen atoms at C-5, C-14 and C-17 in regular steranes and at C-13 and C-17 in diasteranes).

a.	20S $\beta\alpha$ diacholestane	$C_{27}H_{48}$	(I, R=H)
b.	20R $\beta\alpha$ diacholestane	$C_{27}H_{48}$	(I, R=H)
c.	20S $\alpha\beta$ diacholestane	$C_{27}H_{48}$	(II, R=H)
d.	20R $\alpha\beta$ diacholestane	$C_{27}H_{48}$	(II, R=H)
e.	20S $\beta\alpha$ 24-methyl-diacholestane	$C_{28}H_{50}$	(I, R=CH ₃)
f.	20R $\beta\alpha$ 24-methyl-diacholestane	$C_{28}H_{50}$	(I, R=CH ₃)
g.	20S $\alpha\beta$ 24-methyl-diacholestane	$C_{28}H_{50}$	(II, R=CH ₃)
	+ 20S $\alpha\alpha\alpha$ cholestane	$C_{27}H_{48}$	(III, R=H)
h.	20S $\beta\alpha$ 24-ethyl-diacholestane	$C_{29}H_{52}$	(II, R=C ₂ H ₅)
	+ 20R $\alpha\beta\beta$ cholestane	$C_{27}H_{48}$	(IV, R=H)
i.	20S $\alpha\beta\beta$ cholestane	$C_{27}H_{48}$	(IV, R=H)
	+ 20R $\alpha\beta$ 24-methyl-diacholestane	$C_{28}H_{50}$	(II, R=CH ₃)
j.	20R $\alpha\alpha\alpha$ cholestane	$C_{27}H_{48}$	(III, R=H)
k.	20R $\beta\alpha$ 24-ethyl-diacholestane	$C_{29}H_{52}$	(I, R=C ₂ H ₅)
l.	20R $\alpha\beta$ 24-ethyl-diacholestane	$C_{29}H_{52}$	(II, R=C ₂ H ₅)
m.	20S $\alpha\alpha\alpha$ 24-methyl-cholestane	$C_{28}H_{50}$	(III, R=CH ₃)
n.	20R $\alpha\beta\beta$ 24-methyl-cholestane	$C_{28}H_{50}$	(IV, R=CH ₃)
	+ 20R $\alpha\beta$ 24-ethyl-diacholestane	$C_{29}H_{52}$	(II, R=C ₂ H ₅)
o.	20S $\alpha\beta\beta$ 24-methyl-cholestane	$C_{28}H_{50}$	(IV, R=CH ₃)
p.	20R $\alpha\alpha\alpha$ 24-methyl-cholestane	$C_{28}H_{50}$	(III, R=CH ₃)
q.	20S $\alpha\alpha\alpha$ 24-ethyl-cholestane	$C_{29}H_{52}$	(III, R=C ₂ H ₅)
r.	20R $\alpha\beta\beta$ 24-ethyl-cholestane	$C_{29}H_{52}$	(IV, R=C ₂ H ₅)
s.	20S $\alpha\beta\beta$ 24-ethyl-cholestane	$C_{29}H_{52}$	(IV, R=C ₂ H ₅)
t.	20R $\alpha\alpha\alpha$ 24-ethyl-cholestane	$C_{29}H_{52}$	(III, R=C ₂ H ₅)
u.	5 α sterane	$C_{21}H_{36}$	(VI, R=C ₂ H ₅)
v.	5 α sterane	$C_{22}H_{38}$	(VI, R=C ₃ H ₇)

STRUCTURES REPRESENTING STERANES

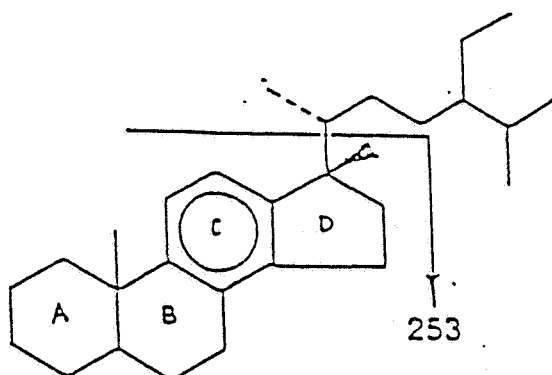


**Mass Fragmentograms representing Monoaromatic Steranes
(M/Z 253)**

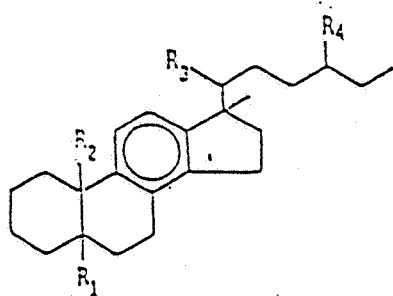
Description of C-ring monoaromatic steroid hydrocarbons

Peak	R ₁	Substituents		R ₄	Abbreviation of Compound
		R ₂	R ₃		
A1					C ₂₁ M
B1					C ₂₂ MA
C1	β(H)	CH ₃	S(CH ₃)	H	βSC ₂₇ MA
	β(H)	CH ₃	R(CH ₃)	H	βRC ₂₇ MA
D1	CH ₃	H	R(CH ₃)	H	RC ₂₇ DMA
	α(H)	CH ₃	S(CH ₃)	H	αSC ₂₇ MA
E1	β(H)	CH ₃	S(CH ₃)	CH ₃	βSC ₂₈ MA
	CH ₃	H	S(CH ₃)	CH ₃	SC ₂₈ DMA
F1	α(H)	CH ₃	R(CH ₃)	H	αRC ₂₇ MA
	α(H)	CH ₃	S(CH ₃)	CH ₃	αSC ₂₈ MA
	β(H)	CH ₃	R(CH ₃)	CH ₃	βRC ₂₈ MA
G1	CH ₃	H	R(CH ₃)	CH ₃	RC ₂₈ DMA
	β(H)	CH ₃	S(CH ₃)	C ₂ H ₅	βSC ₂₉ MA
	CH ₃	H	S(CH ₃)	C ₂ H ₅	SC ₂₉ DMA
	α(H)	CH ₃	R(CH ₃)	CH ₃	αRC ₂₈ MA
H1	β(H)	CH ₃	R(CH ₃)	C ₂ H ₅	βRC ₂₉ MA
	CH ₃	H	R(CH ₃)	C ₂ H ₅	RC ₂₉ DMA
I1	α(H)	CH ₃	R(CH ₃)	C ₂ H ₅	αRC ₂₉ MA

STRUCTURES REPRESENTING MONOAROMATIC STERANES



I

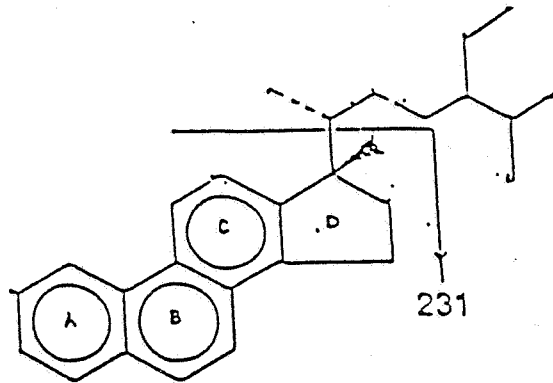


**Mass Fragmentograms representing Triaromatic Steranes
(M/Z 231)**

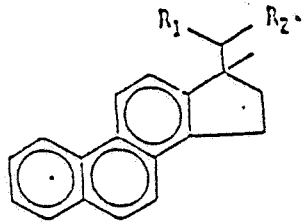
Description of ABC-ring triaromatic steroid hydrocarbons

Peak	Substituents		Abbreviation of Compound
	R ₁	R ₂	
a1	CH ₃	H	C ₂₀ TA
b1	CH ₃	CH ₃	C ₂₁ TA
c1	S(CH ₃)	C ₆ H ₁₋₃	SC ₂₆ TA
d1	R(CH ₃)	C ₆ H ₁₃	RC ₂₆ TA
	S(CH ₃)	C ₇ H ₁₅	SC ₂₇ TA
e1	S(CH ₃)	C ₈ H ₁₇	SC ₂₈ TA
f1	S(CH ₃)	C ₇ H ₁₅	RC ₂₇ TA
g1	R(CH ₃)	C ₈ H ₁₇	RC ₂₈ TA

STRUCTURES REPRESENTING TRIAROMATIC STERANES



II



Stable Carbon Isotope Ratio Mass Spectrometry

Carbon isotope analysis is performed on a dual inlet VG SIRA 10 instrument. The combustion of the samples is performed by a Carlo Erba EA 1108 element analyser directly connected to the inlet system of the mass spectrometer.

The combustion temperature is 1020°C and the carrier gas used was Helium. After the combustion H₂O and CO₂ are trapped in individual cool traps. The CO₂ gas is then heated up before admission into the mass spectrometer. The whole operation is controlled by an IBM PC50 computer system.

δ-values

The isotope ratios are given as δ-values in ‰ versus the PDB-standard:

$$\delta^{13}\text{C} = (R_{\text{sample}} - R_{\text{standard}}/R_{\text{standard}}) \times 1000$$
$$R = {}^{13}\text{C}/{}^{12}\text{C}$$

The PDB-standard (a marine chalk of the Pee Dee-formation, USA) was created by Craig 1957. All results of ¹³C/¹²C-analysis of organic matter today are calculated (Craig correction) against this international standard.

Reproducibility

The precision of the combustion system and the mass spectrometer is controlled by determination of an international calibrated standard, NBS22 oil and a house standard carbon. Replicate analyses are also performed on samples.

List of abbreviations used for parameters, ratios and analytical methods
(sorted alphabetically)

CPI	=	Carbon Preference Index, $0.5 \times \frac{C_{25}+C_{27}+C_{29}+C_{31}+C_{33}}{C_{24}+C_{26}+C_{28}+C_{30}+C_{32}} + \frac{C_{25}+C_{27}+C_{29}+C_{31}+C_{33}}{C_{26}+C_{28}+C_{30}+C_{32}+C_{34}}$
EOM	=	Extractable Organic Matter
FID	=	Flame Ionisation Detector
FPD	=	Flame Photometric Detector
GC	=	Gas Chromatograph
GC-MS	=	Gas Chromatograph - Mass Spectrometer
GHM	=	Geofina Hydrocarbon Meter (combined thermal extraction - pyrolysis gas chromatograph)
HC	=	Hydrocarbons
HI	=	Hydrogen Index (100 x S ₂ /TOC)
HPLC	=	High Pressure Liquid Chromatograph
MDBT(4/1)	=	Ratio of 4-/1-methyl dibenzothiophene
MNR	=	Ratio of 2-/1-methyl naphthalene
MP	=	Methyl phenanthrene
MPI1	=	Methyl phenanthrene Index, $1.5 \times (3MP+2MP) / P+9MP+1MP$
MPLC	=	Medium Pressure Liquid Chromatograph
NSO	=	Nitrogen-, Sulphur- and Oxygen-compounds
OI	=	Oxygen Index (100 x S ₃ /TOC)
P	=	Phenanthrene
PI	=	Production Index (S ₁ /(S ₁ +S ₂))
PP	=	Petroleum Potential (S ₁ +S ₂)
Ro (%)	=	Measured Vitrinite Reflectance in Percent
Rock-Eval	=	Oil show and source rock evaluation instrument
S1	=	Amount of Free Hydrocarbons, Rock-Eval
S2	=	Amount of Kerogen pyrolysate, Rock-Eval
S3	=	Amount of Oxidised Organic Material
SCI	=	Spore Colour Index (maturity indicator)
TCD	=	Thermal Conductivity Detector
TAI	=	Thermal Alteration Index (maturity indicator)
T _{max}	=	Temperature of maximum pyrolysate yield, Rock-Eval
TOC	=	Total Organic Carbon

Abbreviations

List of abbreviations used for lithology description (sorted alphabetically)

ang	= angular
bar	= Baryte (mud additive)
bit	= bituminous
bl	= blue/blueish
blk	= black
br	= brittle
brn	= brown/brownish
Ca	= Carbonate (limestone/chalk/dolomite/siderite)
calc	= calcareous
carb	= carbonaceous
cem	= cement used as additive (under "cont") or to describe cemented S/Sst
Chert	= Chert
chk	= Chalk/chalky
cly	= clayey/shaly
cngl	= conglomeratic
Coal	= Coal
Coal-ad	= Coal-like additive (e.g. chromlignosulfonate)
Congl	= Conglomerat
Cont	= Contamination(s)
crs	= coarse grained
dd	= dried drilling mud
dol	= Dolomite/dolomitic
drk	= dark (colour)
dsk	= dusk/dusky (colour)
evap	= Salt/Gypsum/Halite (natural "Other" or as additive "Cont")
f	= fine grained
fe	= ferruginous
fib	= fibres (mud additive/contamination)
fis	= fissile
fos	= fossiliferous
glauc	= glauconite/glauconitic
gn	= green/greenish
gy	= grey/greyish
hd	= hard
ign	= Igneous (material derived from igneous source)
Kaolin	= Kaolin(ite)
kln	= kaolinitic
l	= loose
lam	= laminated/laminae
lt	= light (colour)
m	= medium (colour or grain size)
Marl	= Marl (calcareous claystone/mudstone)
mic	= micaceous
Mica-ad	= Mica used as mud additive

mrl	= marly
No Mat.	= No material left over after washing
ns	= nutshells (mud additive)
ol	= olive
ool	= Oolite/oolitic
or	= orange
Other	= Other lithology/mineral, specified after this word
pi	= pink/pinkish
pl	= pale (colour)
prp	= paint/rust/plastic contaminations/additives
pu	= purple
pyr	= Pyrite/pyritic
red	= red/reddish
rnd	= round/rounded
s	= sandy
sft	= soft
S/Sst	= Sand and/or sandstone
Sh/Clst	= Shale and/or claystone
sid	= Siderite/sideritic
sil	= siliceous/cherty
slt	= silty
Sltst	= siltstone
st	= stained (with natural oil or oil-like additive)
tar-ad	= Tar-like additive (e.g. "Black Magic")
trbfgs	= turbodrilled fragments
Tuff	= Tuff
tuff	= tuffaceous
v col	= various colours
w	= white
wx	= waxy
y	= yellow/yellowish

Appendix 1

Tables

- 1 -

Table 1 : Lithology description for well NOCS 6507/7-10

Depth unit of measure: m

Depth	Type	Grp	Frm	Age	Trb	Sample
Int	Cvd	TOC%	%	Lithology description		
1170.00						0071
				65 Cont : dd		0071-1L
				30 Sltst : lt gy, s		0071-3L
				5 Cont : prp, fib		0071-2L
				tr S/Sst : w, lt gy, crs		0071-4L
				tr Ca : w		0071-5L
1200.00						0072
				60 S/Sst : lt gy, slt, f		0072-3L
				40 Cont : dd		0072-1L
				tr Cont : prp, fib		0072-2L
				tr S/Sst : w, lt gy, crs		0072-4L
				tr Ca : w		0072-5L
1230.00						0089
				50 Cont : dd		0089-1L
				50 S/Sst : lt gy, slt, l		0089-3L
				tr Cont : prp, fib		0089-2L
				tr S/Sst : w, lt gy, crs		0089-4L
				tr Ca : w		0089-5L
1260.00						0073
	0.32			80 S/Sst : lt gy, slt, l		0073-3L
				20 Cont : dd		0073-1L
				tr Cont : prp, fib		0073-2L
				tr S/Sst : w, lt gy, crs		0073-4L
				tr Ca : w		0073-5L

- 2-

Table 1 : Lithology description for well NOCS 6507/7-10

Depth unit of measure: m

Depth	Type	Grp	Frm	Age	Trb	Sample
Int	Cvd	TOC%	%	Lithology description		
1290.00						0074
				50 Cont : dd		0074-1L
				50 Sltst : lt gy, s		0074-3L
				tr Cont : prp, fib		0074-2L
				tr S/Sst : w, lt gy, crs		0074-4L
				tr Ca : w		0074-5L
1310.00						0075
				50 Cont : dd		0075-1L
				50 Sltst : lt gy, s		0075-3L
				tr Cont : prp, fib		0075-2L
				tr S/Sst : w, lt gy, crs		0075-4L
				tr Ca : w		0075-5L
1340.00						0077
				40 Sltst : lt gy, s		0077-3L
				40 S/Sst : lt gy, l		0077-4L
				20 Cont : dd		0077-1L
				tr Cont : prp, fib		0077-2L
				tr Ca		0077-5L
1370.00						0078
				60 S/Sst : lt gy, l		0078-4L
				20 Cont : dd		0078-1L
				20 Sltst : lt gy, s		0078-3L
				tr Cont : prp, fib		0078-2L
				tr Ca		0078-5L
1400.00						0079
	0.43			80 Sltst : lt gy, s		0079-3L
				10 Cont : dd		0079-1L
				10 S/Sst : lt gy, l		0079-4L
				tr Cont : prp, fib		0079-2L
				tr Ca		0079-5L

- 3-

Table 1 : Lithology description for well NOCS 6507/7-10

Depth unit of measure: m

Depth	Type	Grp	Frm	Age	Trb	Sample
Int	Cvd	TOC%	%	Lithology description		
1430.00						0080
			85	Sltst : lt gy		0080-3L
			15	Cont : dd		0080-1L
			tr	Cont : prp, fib		0080-2L
			tr	S/Sst : lt gy, l		0080-4L
			tr	Ca		0080-5L
1460.00						0081
	0.49		95	Sltst : lt gy		0081-3L
			5	Cont : dd		0081-1L
			tr	Cont : prp, fib		0081-2L
			tr	S/Sst : lt gy, l		0081-4L
			tr	Ca		0081-5L
1480.00						0118
			90	Sltst : lt gy		0118-3L
			10	Cont : dd		0118-1L
			tr	Cont : prp, fib		0118-2L
			tr	S/Sst : lt gy, l		0118-4L
			tr	Ca		0118-5L
1520.00						0119
	0.66		100	Sltst : lt gy, cly		0119-3L
			tr	Cont : dd		0119-1L
			tr	Cont : prp, fib		0119-2L
			tr	S/Sst : lt gy, l		0119-4L
			tr	Ca		0119-5L
1550.00						0120
			70	Sltst : lt gy		0120-3L
			30	Cont : dd		0120-1L
			tr	Cont : prp, fib		0120-2L
			tr	S/Sst : lt gy, l		0120-4L
			tr	Ca		0120-5L

- 4-

Table 1 : Lithology description for well NOCS 6507/7-10

Depth unit of measure: m

Depth	Type	Grp	Frm	Age	Trb	Sample
Int	Cvd	TOC%	%	Lithology description		
1580.00						0082
	0.79			40 Sltst : lt gy to lt brn gy		0082-3L
				40 Sh/Clst: lt gy to m gy to lt brn gy		0082-6L
				20 Cont : dd		0082-1L
				tr Cont : prp, fib		0082-2L
				tr S/Sst : lt gy, l		0082-4L
				tr Ca		0082-5L
1610.00						0083
				60 Sh/Clst: lt gy to m gy to lt brn gy, slt		0083-6L
				30 Sltst : lt gy to lt brn gy		0083-3L
				10 Cont : dd		0083-1L
				tr Cont : prp, fib		0083-2L
				tr S/Sst : lt gy, l		0083-4L
				tr Ca		0083-5L
1640.00						0084
	0.76			80 Sltst : lt gy to lt brn gy, m gy, s		0084-3L
				20 Sh/Clst: lt gy to m gy to lt brn gy, slt		0084-6L
				tr Cont : dd		0084-1L
				tr Cont : prp, fib		0084-2L
				tr S/Sst : lt gy, l		0084-4L
				tr Ca		0084-5L
1670.00						0121
				50 Cont : dd		0121-1L
				50 Sltst : lt gy, s		0121-3L
				tr Cont : prp, fib		0121-2L
				tr S/Sst : lt gy, l		0121-4L
				tr Ca		0121-5L

- 5-

Table 1 : Lithology description for well NOCS 6507/7-10

Depth unit of measure: m

Depth	Type	Grp	Frm	Age	Trb	Sample
Int	Cvd	TOC%	%	Lithology description		
1700.00						0122
				50 Cont : dd		0122-1L
				50 S/Sst : lt gy, slt, f		0122-3L
				tr Cont : prp, fib		0122-2L
				tr S/Sst : lt gy, l		0122-4L
				tr Ca		0122-5L
1730.00						0085
	0.56			90 S/Sst : lt gy to m gy to lt brn gy, slt, glauc		0085-6L
				10 Sltst : lt gy to lt brn gy, m gy, s		0085-3L
				tr Cont : dd		0085-1L
				tr Cont : prp, fib		0085-2L
				tr S/Sst : lt gy, l		0085-4L
				tr Ca		0085-5L
1760.00						0086
				50 Sltst : lt gy to lt brn gy, m gy, s		0086-3L
				50 S/Sst : lt gy to lt brn gy, slt, glauc		0086-4L
				tr Cont : dd		0086-1L
				tr Cont : prp, fib		0086-2L
				tr Ca		0086-5L
				tr Sh/Clst: lt gy to m gy to lt brn gy, slt		0086-6L
1790.00						0123
				50 Cont : dd		0123-1L
				50 S/Sst : lt gy, slt, f		0123-3L
				tr Cont : prp, fib		0123-2L
				tr S/Sst : lt gy, l		0123-4L
				tr Ca		0123-5L

- 6 -

Table 1 : Lithology description for well NOCS 6507/7-10

Depth unit of measure: m

Depth	Type	Grp	Frm	Age	Trb	Sample
Int	Cvd	TOC%	%	Lithology description		
1820.00						0125
	0.61	50	Sltst	: lt gy to lt brn gy, m gy, s		0125-3L
		50	S/Sst	: lt gy to lt brn gy, slt, glauc, f		0125-4L
			tr Cont	: dd		0125-1L
			tr Cont	: prp, fib		0125-2L
			tr Ca			0125-5L
			tr Sh/Clst:	lt gy to m gy to lt brn gy, slt		0125-6L
1850.00						0087
		90	S/Sst	: lt gy to lt brn gy, slt, glauc, f		0087-4L
		10	Sltst	: lt gy to lt brn gy, m gy, s		0087-3L
			tr Cont	: dd		0087-1L
			tr Cont	: prp, fib		0087-2L
			tr Ca			0087-5L
			tr Sh/Clst:	lt gy to m gy to lt brn gy, slt		0087-6L
1880.00						0124
	1.33	85	S/Sst	: lt gy to lt brn gy, slt, glauc, f		0124-4L
		10	Cont	: dd		0124-1L
		5	Sltst	: lt gy to lt brn gy, m gy, s		0124-3L
			tr Cont	: prp, fib		0124-2L
			tr Ca			0124-5L
			tr Sh/Clst:	lt gy to m gy to lt brn gy, slt		0124-6L
1910.00						0088
		90	Sltst	: lt gy to lt brn gy, m gy, s		0088-3L
		10	S/Sst	: lt gy to lt brn gy, slt, glauc, f		0088-4L
			tr Cont	: dd		0088-1L
			tr Cont	: prp, fib		0088-2L
			tr Ca			0088-5L
			tr Sh/Clst:	lt gy to m gy to lt brn gy, slt		0088-6L

- 7 -

Table 1 : Lithology description for well NOCS 6507/7-10

Depth unit of measure: m

Depth	Type	Grp	Frm	Age	Trb	Sample
Int	Cvd	TOC%	%	Lithology description		
1940.00						0126
			90	Sh/Clst: lt gy to lt brn gy to gn gy		0126-6L
			10	Cont : dd		0126-1L
			tr	Cont : prp, fib		0126-2L
			tr	Sltst : lt gy to lt brn gy, m gy, s		0126-3L
			tr	S/Sst : lt gy to lt brn gy, slt, glauc, f		0126-4L
			tr	Ca		0126-5L
1970.00						0127
	0.41	100	Sh/Clst: lt gy to lt brn gy to gn gy			0127-6L
			tr	Cont : dd		0127-1L
			tr	Cont : prp, fib		0127-2L
			tr	Sltst : lt gy to lt brn gy, m gy, s		0127-3L
			tr	S/Sst : lt gy to lt brn gy, slt, glauc, f		0127-4L
			tr	Ca		0127-5L
1990.00						0200
		100	Sh/Clst: lt gy to lt brn gy to gn gy			0200-1L
			tr	Sltst : lt gy to lt brn gy, m gy, s		0200-2L
			tr	S/Sst : lt gy to lt brn gy, slt, glauc, f		0200-3L
2019.50	swc					0001
	0.81	100	Sh/Clst: m gy to brn gy			0001-1L
2030.00						0128
		80	Sh/Clst: lt gy to gn gy, gy red			0128-6L
		20	Sh/Clst: m gy to drk gy			0128-3L
		tr	Cont : dd			0128-1L
		tr	Cont : prp, fib			0128-2L
		tr	S/Sst : lt gy to lt brn gy, slt, glauc, f			0128-4L
		tr	Ca			0128-5L

- 8-

Table 1 : Lithology description for well NOCS 6507/7-10

Depth unit of measure: m

Depth	Type	Grp	Frm	Age	Trb	Sample
Int Cvd	TOC%	%	Lithology description			
2052.50	swc					0002
	4.07	100	Sh/Clst: m gy to lt brn gy			0002-1L
2060.00						0129
		100	Sh/Clst: lt gy to m gy, slt, sil			0129-3L
			tr Cont : dd			0129-1L
			tr Cont : prp			0129-2L
			tr S/Sst : lt gy to lt brn gy, slt, glauc, f			0129-4L
			tr Ca			0129-5L
			tr Sh/Clst: lt gy to gn gy, gy red			0129-6L
2090.00						0130
		100	Sh/Clst: m gy to lt brn gn			0130-3L
			tr Cont : dd			0130-1L
			tr Cont : prp			0130-2L
			tr S/Sst : lt gy to lt brn gy, slt, glauc, f			0130-4L
			tr Ca			0130-5L
			tr Sh/Clst: lt gy to gn gy, gy red			0130-6L
2097.00	swc					0003
	0.01	100	Sh/Clst: drk gy			0003-1L
2103.00	swc					0004
		100	Sh/Clst: m gy to lt brn gn, glauc, pyr, mic			0004-1L
2113.00	swc					0005
	0.25	100	Sh/Clst: m gy			0005-1L

- 9-

Table 1 : Lithology description for well NOCS 6507/7-10

Depth unit of measure: m

Depth	Type	Grp	Frm	Age	Trb	Sample
Int	Cvd	TOC%	%	Lithology description		
2120.00						0131
			100	Sh/Clst: m gy		0131-3L
			tr	Cont : dd		0131-1L
			tr	Cont : prp		0131-2L
			tr	S/Sst : lt gy to lt brn gy, slt, glauc, f		0131-4L
			tr	Ca		0131-5L
			tr	Sh/Clst: lt gy to gn gy, gy red		0131-6L
2126.00	swc					0006
			100	Sh/Clst: m gy		0006-1L
2154.50	swc					0007
	0.22		100	Sh/Clst: m gy, pyr		0007-1L
2168.00	swc					0008
			100	Sh/Clst: m gy to drk gy		0008-1L
2180.00						0132
			100	Sh/Clst: m gy		0132-3L
			tr	Cont : dd		0132-1L
			tr	Cont : prp		0132-2L
			tr	S/Sst : lt gy to lt brn gy, slt, glauc, f		0132-4L
			tr	Ca		0132-5L
			tr	Sh/Clst: lt gy to gn gy, gy red		0132-6L
2195.00	swc					0009
	0.63		100	Sh/Clst: m gy to brn gy, slt		0009-1L

- 10-

Table 1 : Lithology description for well NOCS 6507/7-10

Depth unit of measure: m

Depth	Type	Grp	Frm	Age	Trb	Sample
Int	Cvd	TOC%	%	Lithology description		
2210.00						0133
				100 Sh/Clst: m gy		0133-3L
				tr Cont : dd		0133-1L
				tr Cont : prp		0133-2L
				tr S/Sst : lt gy to lt brn gy, slt, glauc, f		0133-4L
				tr Ca		0133-5L
				tr Sh/Clst: lt gy to gn gy, gy red		0133-6L
2222.00	swc					0010
		1.03		100 Sh/Clst: m gy to brn gy, slt		0010-1L
2240.00						0134
				100 Sh/Clst: m gy		0134-3L
				tr Cont : dd		0134-1L
				tr Cont : prp		0134-2L
				tr S/Sst : lt gy to lt brn gy, slt, glauc, f		0134-4L
				tr Ca		0134-5L
				tr Sh/Clst: lt gy to gn gy, gy red		0134-6L
2268.00	swc					0011
		0.74		100 Sh/Clst: m gy, slt		0011-1L
2288.50	swc					0012
				100 Sh/Clst: drk gy		0012-1L
2303.00	swc					0013
				100 Sh/Clst: m gy to drk gy		0013-1L

- 11-

Table 1 : Lithology description for well NOCS 6507/7-10

Depth unit of measure: m

Depth	Type	Grp	Frm	Age	Trb	Sample
Int	Cvd	TOC%	%	Lithology description		
2319.00	swc					0014
	0.82	100		Sh/Clst: m gy to drk gy		0014-1L
2335.00	swc					0015
		100		Sh/Clst: brn gy, sft		0015-1L
2342.50	swc					0016
		100		Sh/Clst: m gy		0016-1L
2355.50	swc					0017
		100		Sh/Clst: m gy to drk gy		0017-1L
2362.50	swc					0018
		100		Sh/Clst: drk gy to brn gy, calc, slt		0018-1L
2373.50	swc					0019
		100		Sh/Clst: drk gy to lt brn gy, calc		0019-1L
2379.00	swc					0020
		100		Sh/Clst: drk gy to brn gy, calc		0020-1L
2384.00	swc					0021
	0.56	100		Sh/Clst: drk gy to brn gy, calc		0021-1L

- 12-

Table 1 : Lithology description for well NOCS 6507/7-10

Depth unit of measure: m

Depth	Type	Grp	Frm	Age	Trb	Sample
Int	Cvd	TOC%	%	Lithology description		
2390.50	swc					0022
			100	Sh/Clst: drk gy to brn gy, calc		0022-1L
2420.00	swc					0023
		0.90	100	Sh/Clst: m gy to brn gy		0023-1L
2441.00						0090
		1.12	80	Sh/Clst: lt gy to m gy, calc		0090-2L
			20	Cont : prp, dd		0090-1L
			tr Ca	: m gy		0090-3L
2444.00						0091
		1.18	50	Cont : dd		0091-1L
			45	Sh/Clst: lt gy to m gy, calc		0091-2L
			5	Cont : prp		0091-4L
			tr Ca	: m gy		0091-3L
			tr Sh/Clst:	brn gy to dsk brn		0091-5L
2447.00						0092
		6.01	45	Sh/Clst: lt gy to m gy, calc		0092-2L
			35	Cont : dd		0092-1L
			10	Ca : w		0092-3L
			5	Cont : prp		0092-4L
			5	Sh/Clst: dsk brn to brn blk, slt		0092-5L
2448.50	ccp					0056
		8.23	100	Sh/Clst: drk ol gy to dsk y brn		0056-1L

- 13-

Table 1 : Lithology description for well NOCS 6507/7-10

Depth unit of measure: m

Depth	Type	Grp	Frm	Age	Trb	Sample
Int Cvd	TOC%	%	Lithology description			
2450.50	ccp					0057
	8.38	100	Sh/Clst: dsk y brn			0057-1L
2453.10	ccp					0058
	8.78	100	Sh/Clst: dsk y brn			0058-1L
2459.00						0093
	6.64	100	Sh/Clst: brn gy to dsk y brn, slt			0093-5L
			tr Cont : dd			0093-1L
			tr Sh/Clst: lt gy to m gy, calc			0093-2L
			tr Ca : w			0093-3L
			tr Cont : prp			0093-4L
2461.00	swc					0024
	3.49	100	Sh/Clst: brn gy to m brn gy, calc			0024-1L
2468.00	swc					0025
	7.90	100	Sh/Clst: brn gy to m brn gy, slt			0025-1L
2470.00	swc					0026
	6.97	100	Sh/Clst: brn gy to m brn gy to m gy, slt			0026-1L
2472.00	swc					0027
	7.97	100	Sh/Clst: m brn gy to brn blk, slt, s			0027-1L

- 14-

Table 1 : Lithology description for well NOCS 6507/7-10

Depth unit of measure: m

Depth	Type	Grp	Frm	Age	Trb	Sample
Int	Cvd	TOC%	%	Lithology description		
2474.00	swc					0028
	9.35	100		Sh/Clst: drk ol brn to brn blk		0028-1L
2476.70	ccp					0059
	1.04	100		S/Sst : dsk y brn, pyr, cly, glauc		0059-1L
2477.00	ccp					0060
	1.54	100		S/Sst : brn gy to dsk y brn, cly		0060-1L
2477.50	ccp					0061
	9.27	100		Sh/Clst: brn blk, carb		0061-1L
2479.50	ccp					0062
	4.36	100		Sh/Clst: dsk y brn, carb		0062-1L
2483.00						0094
	9.32	75		Sh/Clst: brn gy to dsk y brn, slt		0094-5L
		25		Sh/Clst: lt gy to m gy, calc		0094-2L
				tr Cont : dd		0094-1L
				tr Ca : w		0094-3L
				tr Cont : prp		0094-4L
2487.00	swc					0029
	2.34	100		Sh/Clst: m gy to drk gy, slt		0029-1L

- 15-

Table 1 : Lithology description for well NOCS 6507/7-10

Depth unit of measure: m

Depth	Type	Grp	Frm	Age	Trb	Sample
Int	Cvd	TOC%	%	Lithology description		
2492.00	swc					0030
	1.62	100		Sh/Clst: m gy to brn gy, slt, s		0030-1L
2498.00	swc					0055
	1.24	100		Sh/Clst: brn gy to m brn gy, slt, s		0055-1L
2502.00	swc					0031
	0.78	100		Sh/Clst: m gy to brn gy, slt, s, pyr		0031-1L
2505.00	swc					0032
	0.80	100		Sh/Clst: m gy, slt, s, pyr		0032-1L
2507.00						0095
				85 Sh/Clst: m gy, slt, pyr		0095-2L
				10 Ca : w		0095-3L
				5 Cont : dd		0095-1L
				tr Cont : prp		0095-4L
				tr Sh/Clst: brn gy to dsk y brn, slt		0095-5L
2510.00	swc					0033
	0.06	100		S/Sst : gy w, f, hd, l		0033-1L
2515.00	swc					0034
	1.12	100		S/Sst : gy w, f, hd, l		0034-1L

- 16-

Table 1 : Lithology description for well NOCS 6507/7-10

Depth unit of measure: m

Depth	Type	Grp	Frm	Age	Trb	Sample
Int	Cvd	TOC%	%	Lithology description		
2522.00						0202
			85	Sh/Clst: m gy, pyr, slt		0202-1L
			10	Ca : w		0202-2L
			5	Cont : prp		0202-3L
			tr	Sh/Clst: brn gy to dsk y brn, slt		0202-4L
2525.19	ccp					0063
		0.02	100	S/Sst : lt gy		0063-1L
2527.00	ccp					0064
		0.01	100	S/Sst : lt gy to m gy		0064-1L
2532.00	ccp					0065
		0.01	100	S/Sst : lt gy to m gy		0065-1L
2534.51	ccp					0066
		0.03	100	S/Sst : m gy, f		0066-1L
2535.52	ccp					0067
		0.01	100	S/Sst : m gy, f		0067-1L
2538.13	ccp					0068
		0.02	100	S/Sst : m gy, f		0068-1L

- 17-

Table 1 : Lithology description for well NOCS 6507/7-10

Depth unit of measure: m

Depth	Type	Grp	Frm	Age	Trb	Sample	
Int Cvd	TOC%	%	Lithology description				
2547.00	ccp					0069	
	0.52	100	S/Sst : m gy, carb, pyr			0069-1L	
2549.25	ccp					0070	
	0.03	100	S/Sst : lt gy to m gy			0070-1L	
2554.00	swc					0035	
	0.07	100	sltst : gy w to lt gy, s			0035-1L	
2558.00	swc					0036	
		100	sltst : gy w to lt gy, s			0036-1L	
2560.50	swc					0037	
	0.01	100	sltst : lt gy			0037-1L	
2562.00	swc					0038	
		100	S/Sst : m gy to brn gy to ol gy, slt, mic, kln			0038-1L	
2565.00	swc					0039	
	0.32	100	sltst : m gy, s, cly			0039-1L	
2570.00						0147	
	0.27	95	S/Sst : w to lt gy, cem, l, crs			0147-5L	
		5	Sh/Clst: lt gy to m gy			0147-2L	
			tr Cont : dd			0147-1L	
			tr Ca : lt brn gy, dol			0147-3L	
			tr Cont : prp			0147-4L	

- 18-

Table 1 : Lithology description for well NOCS 6507/7-10

Depth unit of measure: m

Depth	Type	Grp	Frm	Age	Trb	Sample
Int	Cvd	TOC%	%	Lithology description		
2580.00	swc					0040
	0.88	100	Sltst	: lt gy to m gy to brn gy, s, cly		0040-1L
2587.00						0135
	0.53	100	S/Sst	: w to lt gy, cem		0135-5L
			tr Cont	: dd		0135-1L
			tr Sh/Clst	: m gy, slt, pyr		0135-2L
			tr Ca	: w		0135-3L
			tr Cont	: prp		0135-4L
2590.00	swc					0041
	1.03	100	Sltst	: lt gy to m gy to brn gy, s, cly		0041-1L
2595.00	swc					0042
	0.62	100	Sltst	: lt gy to m gy to brn gy, cly		0042-1L
2599.00	swc					0043
	1.02	100	Sltst	: lt gy to brn gy, cly		0043-1L
2601.00	swc					0044
		100	Sltst	: gy w to lt gy		0044-1L
2612.00						0136
	1.03	100	S/Sst	: m gy to lt brn gy, slt, cem		0136-5L
			tr Cont	: dd		0136-1L
			tr Sh/Clst	: m gy, slt, pyr		0136-2L
			tr Ca	: w		0136-3L
			tr Cont	: prp		0136-4L

- 19-

Table 1 : Lithology description for well NOCS 6507/7-10

Depth unit of measure: m

Depth	Type	Grp	Frm	Age	Trb	Sample
Int	Cvd	TOC%	%	Lithology description		
2624.00						0137
	0.49	100	S/Sst	: w to lt gy, cem, l, crs, kln		0137-5L
			tr Cont	: dd		0137-1L
			tr Sh/Clst:	m gy, slt, pyr		0137-2L
			tr Ca	: w		0137-3L
			tr Cont	: prp		0137-4L
2632.00	swc					0045
	0.06	100	Sltst	: gy w to lt gy, cly		0045-1L
2639.00						0138
	0.96	100	S/Sst	: w to lt gy, l, crs, kln, pyr		0138-5L
			tr Cont	: dd		0138-1L
			tr Sh/Clst:	m gy, slt, pyr		0138-2L
			tr Ca	: w		0138-3L
			tr Cont	: prp		0138-4L
2645.00						0139
	0.98	100	S/Sst	: w to lt gy, l, cem, kln, pyr, crs		0139-5L
			tr Cont	: dd		0139-1L
			tr Sh/Clst:	m gy, slt, pyr		0139-2L
			tr Ca	: w		0139-3L
			tr Cont	: prp		0139-4L
2654.00						0140
	0.84	90	S/Sst	: w to lt gy, cem, calc, pyr		0140-5L
		10	Ca	: lt brn gy, dol		0140-3L
			tr Cont	: dd		0140-1L
			tr Sh/Clst:	m gy, slt, pyr		0140-2L
			tr Cont	: prp		0140-4L

- 20-

Table 1 : Lithology description for well NOCS 6507/7-10

Depth unit of measure: m

Depth	Type	Grp	Frm	Age	Trb	Sample
Int	Cvd	TOC%	%	Lithology description		
2666.00						0141
	0.50	100	S/Sst	: w to lt gy, l, pyr, crs		0141-5L
			tr Cont	: dd		0141-1L
			tr Sh/Clst	: m gy, slt, pyr		0141-2L
			tr Ca	: lt brn gy, dol		0141-3L
			tr Cont	: prp		0141-4L
2672.00						0142
		95	S/Sst	: w to lt gy, cem, l		0142-5L
		5	Ca	: lt brn gy, dol		0142-3L
			tr Cont	: dd		0142-1L
			tr Sh/Clst	: m gy, slt, pyr		0142-2L
			tr Cont	: prp		0142-4L
2678.00						0143
	0.68	100	S/Sst	: w to lt gy, cem, l		0143-5L
			tr Cont	: dd		0143-1L
			tr Sh/Clst	: m gy, slt, pyr		0143-2L
			tr Ca	: lt brn gy, dol		0143-3L
			tr Cont	: prp		0143-4L
2681.00						0144
		85	S/Sst	: w to lt gy, cem, l, crs		0144-5L
		15	Slstst	: m gy		0144-2L
			tr Cont	: dd		0144-1L
			tr Ca	: lt brn gy, dol		0144-3L
			tr Cont	: prp		0144-4L
2690.00						0145
	0.69	100	S/Sst	: w to lt gy, cem, l, crs		0145-5L
			tr Cont	: dd		0145-1L
			tr Slstst	: m gy		0145-2L
			tr Ca	: lt brn gy, dol		0145-3L
			tr Cont	: prp		0145-4L

- 21-

Table 1 : Lithology description for well NOCS 6507/7-10

Depth unit of measure: m

Depth	Type	Grp	Frm	Age	Trb	Sample
Int	Cvd	TOC%	%	Lithology description		
2696.00						0146
			100	S/Sst : w to lt gy, slt, cem, kln		0146-5L
				tr Cont : dd		0146-1L
				tr Slst : m gy		0146-2L
				tr Ca : lt brn gy, dol		0146-3L
				tr Cont : prp		0146-4L
2705.00						0148
	0.98		100	S/Sst : w to lt gy, slt, cem		0148-1L
				tr Sh/Clst: m gy to dsk brn		0148-2L
				tr Ca : or gy		0148-3L
2711.00						0149
			100	S/Sst : w to lt gy, slt, cem, kln, f		0149-1L
				tr Sh/Clst: m gy to dsk brn		0149-2L
				tr Ca : or gy		0149-3L
2717.00						0150
	1.09		100	S/Sst : w to lt gy, slt, cem, kln, f		0150-1L
				tr Sh/Clst: m gy to dsk brn		0150-2L
				tr Ca : or gy		0150-3L
2720.00						0151
			100	S/Sst : w to lt gy, slt, cem, kln, f		0151-1L
				tr Sh/Clst: m gy to dsk brn		0151-2L
				tr Ca : or gy		0151-3L

- 22-

Table 1 : Lithology description for well NOCS 6507/7-10

Depth unit of measure: m

Depth	Type	Grp	Frm	Age	Trb	Sample
Int	Cvd	TOC%	%	Lithology description		
2730.00						0152
			100	S/Sst : w to lt gy, slt, cem, kln, f		0152-1L
				tr Sh/Clst: m gy to dsk brn		0152-2L
				tr Ca : or gy		0152-3L
2738.00	swc					0046
	0.10		100	Sltst : gy w to lt gy to brn gy, s, cly, mic		0046-1L
2747.00						0153
			100	S/Sst : w to lt gy, slt, cem, kln, f		0153-1L
				tr Sh/Clst: m gy to dsk brn		0153-2L
				tr Ca : or gy		0153-3L
2759.00						0154
	0.83		100	S/Sst : w to lt gy, slt, cem, kln		0154-1L
				tr Sh/Clst: brn gy to brn blk, carb		0154-2L
				tr Coal : blk		0154-3L
2765.00						0096
			80	S/Sst : w to lt gy, slt, cem, kln		0096-1L
			20	Sh/Clst: brn gy to brn blk, carb		0096-2L
				tr Coal : blk		0096-3L
2771.00						0155
	0.78		95	S/Sst : w to lt gy, slt, cem, l, kln		0155-1L
			5	Sh/Clst: brn gy to brn blk, carb		0155-2L
				tr Coal : blk		0155-3L

- 23-

Table 1 : Lithology description for well NOCS 6507/7-10

Depth unit of measure: m

Depth	Type	Grp	Frm	Age	Trb	Sample	
Int Cvd	TOC%	%	Lithology description				
2780.00						0097	
		85	S/Sst	: w to lt gy, slt, cem, kln		0097-1L	
		15	Sh/Clst:	brn gy to brn blk, carb		0097-2L	
			tr Coal	: blk		0097-3L	
2786.00						0156	
	13.40	70	Sltst	: brn gy to brn blk, lt gy to m gy, carb		0156-2L	
		30	S/Sst	: w to lt gy, slt, cem, l, kln		0156-1L	
			tr Coal	: blk		0156-3L	
2792.00						0098	
	19.10	60	S/Sst	: w to lt gy, slt, cem, kln		0098-1L	
		35	Sh/Clst:	brn gy to brn blk, carb		0098-2L	
		5	Coal	: blk		0098-3L	
2801.00						0099	
		90	S/Sst	: w to lt gy, slt, cem, kln		0099-1L	
		10	Sh/Clst:	brn gy to brn blk, carb		0099-2L	
			tr Coal	: blk		0099-3L	
2810.00						0100	
	0.97	95	S/Sst	: w to lt gy, slt, cem, kln		0100-1L	
		5	Sh/Clst:	brn gy to brn blk, carb		0100-2L	
			tr Coal	: blk		0100-3L	
2819.00						0101	
		95	S/Sst	: w to lt gy, slt, cem, l, kln		0101-1L	
		5	Sh/Clst:	brn gy to brn blk, carb		0101-2L	
			tr Coal	: blk		0101-3L	

- 24-

Table 1 : Lithology description for well NOCS 6507/7-10

Depth unit of measure: m

Depth	Type	Grp	Frm	Age	Trb	Sample
Int	Cvd	TOC%	%	Lithology description		
2822.00						0102
	0.43		95	S/Sst : w to lt gy, cem, rnd, l, kln 5 Sh/Clst: brn gy to brn blk, carb tr Coal : blk		0102-1L 0102-2L 0102-3L
2831.00						0201
			95	S/Sst : w to lt gy, cem, l, kln 5 Sh/Clst: brn gy to brn blk, carb tr Coal : blk		0201-1L 0201-2L 0201-3L
2843.00						0104
	0.97		95	S/Sst : w to lt gy, cem, rnd, kln, slt 5 Sh/Clst: brn gy to brn blk, carb tr Coal : blk		0104-1L 0104-2L 0104-3L
2849.00						0158
			100	S/Sst : w, l, crs, kln tr Sh/Clst: dsk brn tr Coal : blk		0158-1L 0158-2L 0158-3L
2858.00						0159
	11.90		85	S/Sst : w, l, crs, kln 15 Sh/Clst: brn gy to dsk brn to brn blk, carb tr Coal : blk		0159-1L 0159-2L 0159-3L
2867.00						0105
			90	S/Sst : w to lt gy, cem, l, kln, crs 10 Sh/Clst: brn gy to brn blk, carb tr Coal : blk		0105-1L 0105-2L 0105-3L

- 25-

Table 1 : Lithology description for well NOCS 6507/7-10

Depth unit of measure: m

Depth	Type	Grp	Frm	Age	Trb	Sample	
Int Cvd	TOC%	%	Lithology description				
2873.00						0161	
			95	S/Sst	w to lt gy to brn gy, cem, l, kln	0161-1L	
			5	Sh/Clst:	brn gy to dsk brn to brn blk, carb	0161-2L	
			tr	Coal	: blk	0161-3L	
2879.00						0106	
	1.11		95	S/Sst	w to lt gy, cem, l, kln, crs	0106-1L	
			5	Sh/Clst:	brn gy to brn blk, carb	0106-2L	
			tr	Coal	: blk	0106-3L	
2885.00						0107	
			60	Sltst	: lt gy, cly, s	0107-4L	
			30	S/Sst	: w to lt gy, cem, l, kln, crs	0107-1L	
			10	Sh/Clst:	brn gy to brn blk, carb	0107-2L	
			tr	Coal	: blk	0107-3L	
2893.00	swc					0047	
	0.30	100	Sh/Clst:	lt gy to lt brn gy, slt, mic		0047-1L	
2897.00						0108	
			70	S/Sst	: w to lt gy, cem, l, kln, crs	0108-1L	
			20	Sltst	: lt gy, cly, s	0108-4L	
			10	Sh/Clst:	brn gy to brn blk, carb	0108-2L	
			tr	Coal	: blk	0108-3L	
2906.00						0157	
	0.45		80	S/Sst	: w to lt gy, slt, cem	0157-1L	
			20	Sh/Clst:	lt gy to m gy, brn gy	0157-2L	
			tr	Coal	: blk	0157-3L	

- 26-

Table 1 : Lithology description for well NOCS 6507/7-10

Depth unit of measure: m

Depth	Type	Grp	Frm	Age	Trb	Sample
Int	Cvd	TOC%	%	Lithology description		
2912.00						0160
			80	S/Sst : w to lt gy, l, crs, kln		0160-1L
			15	Sh/Clst: brn gy to dsk brn to brn blk, carb		0160-2L
			5	Coal : blk		0160-3L
2921.00						0109
	0.97		65	S/Sst : w to lt gy, cem, l, kln, crs		0109-1L
			30	Sltst : lt gy, cly, s		0109-4L
			5	Sh/Clst: brn gy to brn blk, carb		0109-2L
			tr	Coal : blk		0109-3L
2927.00						0162
			85	S/Sst : w to lt gy to brn gy, slt, cem, kln		0162-1L
			10	Sh/Clst: brn gy to dsk brn to brn blk, carb		0162-2L
			5	Coal : blk		0162-3L
2933.00						0163
			60	S/Sst : w to lt gy to brn gy, slt, cem, l		0163-1L
			20	Sh/Clst: brn gy to dsk brn to brn blk, carb		0163-2L
	49.00		20	Coal : blk		0163-3L
2945.00						0164
	43.90		85	S/Sst : w, l		0164-1L
			15	Coal : blk		0164-3L
			tr	Sh/Clst: brn gy to dsk brn to brn blk, carb		0164-2L

- 27 -

Table 1 : Lithology description for well NOCS 6507/7-10

Depth unit of measure: m

Depth	Type	Grp	Frm	Age	Trb	Sample
Int	Cvd	TOC%	%	Lithology description		
2951.00						0165
			80	S/Sst : w, l		0165-1L
			15	Coal : blk		0165-3L
			5	Sh/Clst: brn gy to dsk brn to brn blk, carb		0165-2L
2957.00						0166
	10.70		50	Sh/Clst: brn gy to dsk brn to brn blk, carb		0166-2L
	51.60		30	Coal : blk		0166-3L
			20	S/Sst : w to lt gy, cem, l, slt		0166-1L
2963.00						0167
	8.47		50	S/Sst : w to lt gy, cem, l, slt		0167-1L
			40	Sh/Clst: dsk brn to brn blk, carb		0167-2L
			10	Coal : blk		0167-3L
2969.00						0168
	8.80		75	S/Sst : w to lt gy, cem, l		0168-1L
			20	Sh/Clst: dsk brn to brn blk, carb		0168-2L
			5	Coal : blk		0168-3L
2975.00						0169
	13.00		50	S/Sst : w to lt gy, slt, cem		0169-1L
			35	Sh/Clst: dsk brn to brn blk, carb		0169-2L
			15	Coal : blk		0169-3L

- 28 -

Table 1 : Lithology description for well NOCS 6507/7-10

Depth unit of measure: m

Depth	Type	Grp	Frm	Age	Trb	Sample
Int	Cvd	TOC%	%	Lithology description		
2984.00						0170
	5.81	65	S/Sst	: w to lt gy to brn gy, slt, cem		0170-1L
		30	Sh/Clst:	brn gy to dsk brn to brn blk, carb		0170-2L
		5	Coal	: blk		0170-3L
2990.00						0172
	7.14	70	S/Sst	: w to lt gy, crs, l		0172-1L
		25	Sh/Clst:	brn gy to dsk brn to brn blk, slt		0172-2L
		5	Coal	: blk		0172-3L
2996.00						0173
	5.64	85	S/Sst	: w to lt gy, crs, l		0173-1L
		15	Sh/Clst:	brn gy to dsk brn to brn blk, slt		0173-2L
		tr	Coal	: blk		0173-3L
3002.00						0174
		100	S/Sst	: w to lt gy, crs, cem, l		0174-1L
		tr	Sh/Clst:	brn gy to dsk brn to brn blk, slt		0174-2L
		tr	Coal	: blk		0174-3L
3008.00						0175
	0.42	100	S/Sst	: w to lt gy, crs, cem, l		0175-1L
		tr	Sh/Clst:	brn gy to dsk brn to brn blk, slt		0175-2L
		tr	Coal	: blk		0175-3L
3011.00						0176
		100	S/Sst	: w to lt gy, crs, cem, l		0176-1L
		tr	Sh/Clst:	brn gy to dsk brn to brn blk, slt		0176-2L
		tr	Coal	: blk		0176-3L

- 29 -

Table 1 : Lithology description for well NOCS 6507/7-10

Depth unit of measure: m

Depth	Type	Grp	Frm	Age	Trb	Sample	
Int Cvd	TOC%	%	Lithology description				
3017.00						0177	
		75	S/Sst	: w to lt gy to lt brn gy, slt,		0177-1L	
				cem, l			
	2.03	20	Sh/Clst:	brn gy to dsk brn to brn blk, slt		0177-2L	
		5	Coal	: blk		0177-3L	
3023.00						0178	
		60	S/Sst	: w to lt gy to lt brn gy, slt,		0178-1L	
				cem, l			
	1.83	40	Sh/Clst:	brn gy to dsk brn to brn blk, slt		0178-2L	
		tr	Coal	: blk		0178-3L	
3029.00						0180	
	0.43	75	sltst	: lt gy to lt brn gy, s		0180-1L	
		20	Cont	: dd		0180-4L	
		5	Sh/Clst:	brn gy to dsk brn to brn blk, slt		0180-2L	
		tr	Coal	: blk		0180-3L	
3033.00						0181	
		50	S/Sst	: lt gy to lt brn gy, slt, l		0181-1L	
		25	Sh/Clst:	brn gy to dsk brn to brn blk, slt		0181-2L	
		20	Cont	: dd		0181-4L	
		5	Coal	: blk		0181-3L	
3041.00						0182	
	5.97	80	Sh/Clst:	brn gy to dsk brn to brn blk, slt		0182-2L	
		10	S/Sst	: lt gy to lt brn gy, crs, l		0182-1L	
		10	Cont	: dd		0182-4L	
		tr	Coal	: blk		0182-3L	

- 30-

Table 1 : Lithology description for well NOCS 6507/7-10

Depth unit of measure: m

Depth	Type	Grp	Frm	Age	Trb	Sample
Int	Cvd	TOC%	%	Lithology description		
3047.00						0183
				70 S/Sst : w to lt gy, crs, cem, l, kln		0183-1L
				30 Sh/Clst: brn gy to dsk brn to brn blk, slt		0183-2L
				tr Coal : blk		0183-3L
				tr Cont : dd		0183-4L
3056.00	swc					0048
	0.59	100	Sltst	: lt gy w to lt gy to lt brn gy, s, cly, mic		0048-1L
3062.00						0110
	0.55	100	Sh/Clst:	lt gy to m gy, slt		0110-4L
			tr S/Sst	: w to lt gy, cem, l, kln, crs		0110-1L
			tr Sh/Clst:	brn gy to brn blk		0110-2L
			tr Coal	: blk		0110-3L
3068.00						0111
	2.08	85	Sh/Clst:	brn gy to brn blk		0111-2L
		10	S/Sst	: w to lt gy, cem, l, kln, crs		0111-1L
		5	Sh/Clst:	lt gy to m gy, slt		0111-4L
			tr Coal	: blk		0111-3L
3074.00						0184
	4.45	65	Sltst	: w to lt gy, s		0184-1L
		30	Sh/Clst:	brn gy to dsk brn to brn blk, slt		0184-2L
		5	Coal	: blk		0184-3L
			tr Cont	: dd		0184-4L

- 31-

Table 1 : Lithology description for well NOCS 6507/7-10

Depth unit of measure: m

Depth	Type	Grp	Frm	Age	Trb	Sample	
Int Cvd	TOC%	%	Lithology description				
3080.00						0185	
	0.40	80	Sltst	: lt gy, s		0185-1L	
		20	Sh/Clst:	brn gy to dsk brn to brn blk, slt		0185-2L	
			tr Coal	: blk		0185-3L	
			tr Cont	: dd		0185-4L	
3089.00						0112	
	0.74	85	S/Sst	: w to lt gy, cem, l, kln, crs		0112-1L	
		15	Sh/Clst:	brn gy to brn blk		0112-2L	
			tr Coal	: blk		0112-3L	
			tr Sh/Clst:	lt gy to m gy, slt		0112-4L	
3095.00						0113	
	2.37	60	S/Sst	: w to lt gy, cem, l, kln, crs		0113-1L	
		40	Sh/Clst:	brn gy to brn blk		0113-2L	
			tr Coal	: blk		0113-3L	
			tr Sh/Clst:	lt gy to m gy, slt		0113-4L	
3101.00						0114	
	1.49	50	S/Sst	: w to lt gy, cem, l, kln, crs		0114-1L	
		50	Sh/Clst:	brn gy to brn blk		0114-2L	
			tr Coal	: blk		0114-3L	
			tr Sh/Clst:	lt gy to m gy, slt		0114-4L	
3107.00						0187	
	0.74	90	Sltst	: lt gy to m gy, s		0187-1L	
		10	Sh/Clst:	brn gy to brn blk		0187-2L	
			tr Coal	: blk		0187-3L	
			tr Sh/Clst:	lt gy to m gy, slt		0187-4L	

- 32 -

Table 1 : Lithology description for well NOCS 6507/7-10

Depth unit of measure: m

Depth	Type	Grp	Frm	Age	Trb	Sample	
Int Cvd	TOC%	%	Lithology description				
3116.00						0115	
	0.79	70	S/Sst : w to lt gy, cem, l, kln, crs			0115-1L	
		20	Sh/Clst: brn gy to brn blk			0115-2L	
		5	Coal : blk			0115-3L	
		5	Sh/Clst: lt gy to m gy, slt			0115-4L	
3125.00						0116	
		60	S/Sst : w to lt gy, cem, l, kln, crs			0116-1L	
		30	Sh/Clst: lt gy to m gy, slt			0116-4L	
		10	Sh/Clst: brn gy to brn blk			0116-2L	
		tr	Coal : blk			0116-3L	
3134.00						0188	
	0.29	95	S/Sst : w to lt gy, crs, cem, l, kln			0188-1L	
		5	Sh/Clst: brn gy to brn blk			0188-2L	
		tr	Coal : blk			0188-3L	
		tr	Sh/Clst: lt gy to m gy, slt			0188-4L	
3140.00						0189	
		100	S/Sst : w to lt gy, cem, kln, slt			0189-1L	
		tr	Sh/Clst: brn gy to brn blk			0189-2L	
		tr	Coal : blk			0189-3L	
		tr	Sh/Clst: lt gy to m gy, slt			0189-4L	
3146.00						0117	
	0.27	100	S/Sst : w to lt gy, l, kln, crs			0117-1L	
		tr	Sh/Clst: brn gy to brn blk			0117-2L	
		tr	Coal : blk			0117-3L	
		tr	Sh/Clst: lt gy to m gy, slt			0117-4L	

- 33-

Table 1 : Lithology description for well NOCS 6507/7-10

Depth unit of measure: m

Depth	Type	Grp	Frm	Age	Trb	Sample
Int	Cvd	TOC%	%	Lithology description		
3152.00						0190
			100	S/Sst : w, l, crs, kln		0190-1L
			tr	Sh/Clst: brn gy to brn blk		0190-2L
			tr	Coal : blk		0190-3L
			tr	Sh/Clst: lt gy to m gy, slt		0190-4L
3158.00						0191
			55	S/Sst : w to lt gy, l, cem, crs, kln		0191-1L
		36.30	35	Sh/Clst: brn gy to brn blk, carb		0191-2L
			10	Coal : blk		0191-3L
			tr	Sh/Clst: lt gy to m gy, slt		0191-4L
3165.00	swc					0049
		0.27	100	Sh/Clst: dsk brn		0049-1L
3177.00	swc			Grey	Triassic	0050
		0.01	100	S/Sst : lt gy w to lt gy w, f, slt		0050-1L
3185.00						0192
		5.14	75	Sh/Clst: brn gy to brn blk, slt		0192-2L
			20	S/Sst : w to m gy, slt		0192-1L
			5	Coal : blk		0192-3L
			tr	Sh/Clst: lt gy to m gy, slt		0192-4L
3193.00	swc					0051
		0.01	100	S/Sst : gy w to lt gy, f, slt, mic		0051-1L

- 34-

Table 1 : Lithology description for well NOCS 6507/7-10

Depth unit of measure: m

Depth	Type	Grp	Frm	Age	Trb	Sample
Int	Cvd	TOC%	%	Lithology description		
3212.50	swc					0052
	0.01	100		Sh/Clst: m gy to brn gy, slt		0052-1L
3223.00	swc					0053
	0.01	100		Sh/Clst: brn gy to m ol gy to m ol brn		0053-1L
3230.00						0193
	1.61	65		Sh/Clst: brn gy to brn blk		0193-2L
		35		S/Sst : w to lt gy, l, cem, slt		0193-1L
				tr Coal : blk		0193-3L
				tr Sh/Clst: lt gy to m gy, slt		0193-4L
3237.00	swc					0054
	0.01	100		sltst : lt gy w to lt gy, s, cly		0054-1L
3248.00						0194
	0.88	65		Sh/Clst: brn gy		0194-2L
		35		S/Sst : w to lt gy, l, cem, kln		0194-1L
				tr Coal : blk		0194-3L
				tr Sh/Clst: lt gy to m gy, slt		0194-4L
3260.00						0195
	0.23	60		S/Sst : w to lt gy, l, cem, kln		0195-1L
		35		Sh/Clst: lt gy to m gy to drk y brn		0195-4L
		5		Sh/Clst: brn gy		0195-2L
				tr Coal : blk		0195-3L

- 35-

Table 1 : Lithology description for well NOCS 6507/7-10

Depth unit of measure: m

Depth	Type	Grp	Frm	Age	Trb	Sample	
Int Cvd	TOC%	%	Lithology description				
3272.00						0196	
			85	Sltst	: m gy to brn gy	0196-4L	
			15	S/Sst	: w to lt gy, l, cem, kln	0196-1L	
			tr	Sh/Clst:	brn gy	0196-2L	
			tr	Coal	: blk	0196-3L	
3281.00						0197	
	1.78		90	Sltst	: lt gy to drk gy to brn gy, cly	0197-4L	
			10	S/Sst	: w to lt gy, cem	0197-1L	
			tr	Sh/Clst:	brn gy	0197-2L	
			tr	Coal	: blk	0197-3L	
3308.00						0198	
	1.79		65	Sltst	: lt gy to drk gy to brn gy, cly	0198-4L	
			35	S/Sst	: w to lt gy, cem, slt	0198-1L	
			tr	Sh/Clst:	brn gy	0198-2L	
			tr	Coal	: blk	0198-3L	

Table 2 : Rock-Eval table for well NOCS 6507/7-10

Depth unit of measure: m

Depth	Typ	Lithology	S1	S2	S3	S2/S3	TOC	HI	OI	PP	PI	Tmax	Sample
1260.00	cut	S/Sst : lt gy	0.05	0.19	0.47	0.40	0.32	59	147	0.2	0.21	412	0073-3L
1400.00	cut	Sltst : lt gy	0.05	0.28	0.66	0.42	0.43	65	153	0.3	0.15	409	0079-3L
1460.00	cut	Sltst : lt gy	0.07	0.47	0.52	0.90	0.49	96	106	0.5	0.13	413	0081-3L
1520.00	cut	Sltst : lt gy	0.15	0.67	0.74	0.91	0.66	102	112	0.8	0.18	420	0119-3L
1580.00	cut	Sh/Clst: lt gy to m gy to lt brn gy	0.12	0.97	1.04	0.93	0.79	123	132	1.1	0.11	426	0082-6L
1640.00	cut	Sltst : lt gy to lt brn gy, m gy	0.14	0.86	0.67	1.28	0.76	113	88	1.0	0.14	419	0084-3L
1730.00	cut	S/Sst : lt gy to m gy to lt brn gy	0.09	0.41	0.84	0.49	0.56	73	150	0.5	0.18	402	0085-6L
1820.00	cut	Sltst : lt gy to lt brn gy, m gy	0.09	0.52	1.12	0.46	0.61	85	184	0.6	0.15	411	0125-3L
1880.00	cut	S/Sst : lt gy to lt brn gy	0.26	1.72	0.99	1.74	1.33	129	74	2.0	0.13	415	0124-4L
1970.00	cut	Sh/Clst: lt gy to lt brn gy to gn gy	0.04	0.33	0.44	0.75	0.41	80	107	0.4	0.11	415	0127-6L
2019.50	swc	Sh/Clst: m gy to brn gy	0.06	1.03	0.72	1.43	0.81	127	89	1.1	0.06	423	0001-1L
2052.50	swc	Sh/Clst: m gy to lt brn gy	1.30	15.90	0.92	17.28	4.07	391	23	17.2	0.08	400	0002-1L
2097.00	swc	Sh/Clst: drk gy	0.02	0.62	0.38	1.63	0.12	517	317	0.6	0.03	589	0003-1L

Schlumberger

Geco-Prakla

GEOLAB NOR

Table 2 : Rock-Eval table for well NOCS 6507/7-10

Depth unit of measure: m

Depth	Typ	Lithology	S1	S2	S3	S2/S3	TOC	HI	OI	PP	PI	Tmax	Sample
2113.00	swc	Sh/Clst: m gy	0.01	0.09	0.26	0.35	0.25	36	104	0.1	0.10	405	0005-1L
2154.50	swc	Sh/Clst: m gy	0.03	0.26	0.18	1.44	0.22	118	82	0.3	0.10	433	0007-1L
2195.00	swc	Sh/Clst: m gy to brn gy	0.03	0.63	0.63	1.00	0.63	100	100	0.7	0.05	416	0009-1L
2222.00	swc	Sh/Clst: m gy to brn gy	0.09	0.77	0.76	1.01	1.03	75	74	0.9	0.10	419	0010-1L
2268.00	swc	Sh/Clst: m gy	0.09	0.90	0.44	2.05	0.74	122	59	1.0	0.09	417	0011-1L
2319.00	swc	Sh/Clst: m gy to drk gy	0.04	0.78	0.65	1.20	0.82	95	79	0.8	0.05	423	0014-1L
2384.00	swc	Sh/Clst: drk gy to brn gy	0.08	0.62	0.85	0.73	0.56	111	152	0.7	0.11	416	0021-1L
2420.00	swc	Sh/Clst: m gy to brn gy	0.16	1.33	0.42	3.17	0.90	148	47	1.5	0.11	422	0023-1L
2441.00	cut	Sh/Clst: lt gy to m gy	0.12	1.19	1.11	1.07	1.12	106	99	1.3	0.09	427	0090-2L
2444.00	cut	Sh/Clst: lt gy to m gy	0.16	1.65	1.41	1.17	1.18	140	119	1.8	0.09	426	0091-2L
2447.00	cut	Sh/Clst: lt gy to m gy	0.80	19.63	1.29	15.22	6.01	327	21	20.4	0.04	404	0092-2L
2448.50	ccp	Sh/Clst: drk ol gy to dsk y brn	2.42	36.07	0.81	44.53	8.23	438	10	38.5	0.06	395	0056-1L
2450.50	ccp	Sh/Clst: dsk y brn	1.30	31.67	0.56	56.55	8.38	378	7	33.0	0.04	405	0057-1L
2453.10	ccp	Sh/Clst: dsk y brn	2.01	33.03	0.69	47.87	8.78	376	8	35.0	0.06	402	0058-1L
2459.00	cut	Sh/Clst: brn gy to dsk y brn	0.87	22.43	1.38	16.25	6.64	338	21	23.3	0.04	409	0093-5L

Depth unit of measure: m

Depth	Typ	Lithology	S1	S2	S3	S2/S3	TOC	HI	OI	PP	PI	Tmax	Sample
2461.00	swc	Sh/Clst: brn gy to m brn gy	0.65	7.76	0.96	8.08	3.49	222	28	8.4	0.08	405	0024-1L
2468.00	swc	Sh/Clst: brn gy to m brn gy	1.05	23.44	0.76	30.84	7.90	297	10	24.5	0.04	405	0025-1L
2470.00	swc	Sh/Clst: brn gy to m brn gy to m gy	1.19	17.14	0.94	18.23	6.97	246	13	18.3	0.06	406	0026-1L
2472.00	swc	Sh/Clst: m brn gy to brn blk	2.77	23.02	1.14	20.19	7.97	289	14	25.8	0.11	407	0027-1L
2474.00	swc	Sh/Clst: drk ol brn to brn blk	4.53	26.22	0.75	34.96	9.35	280	8	30.8	0.15	413	0028-1L
2476.70	ccp	S/Sst : dsk y brn	6.12	2.28	0.42	5.43	1.04	219	40	8.4	0.73	414	0059-1L
2477.00	ccp	S/Sst : brn gy to dsk y brn	12.80	3.28	0.45	7.29	1.54	213	29	16.1	0.80	407	0060-1L
2477.50	ccp	Sh/Clst: brn blk	2.95	28.70	1.74	16.49	9.27	310	19	31.7	0.09	417	0061-1L
2479.50	ccp	Sh/Clst: dsk y brn	0.86	4.37	1.29	3.39	4.36	100	30	5.2	0.16	427	0062-1L
2483.00	cut	Sh/Clst: brn gy to dsk y brn	3.24	32.30	1.47	21.97	9.32	347	16	35.5	0.09	414	0094-5L
2487.00	swc	Sh/Clst: m gy to drk gy	0.08	1.15	1.10	1.05	2.34	49	47	1.2	0.07	426	0029-1L
2492.00	swc	Sh/Clst: m gy to brn gy	0.06	0.96	1.13	0.85	1.62	59	70	1.0	0.06	432	0030-1L
2498.00	swc	Sh/Clst: brn gy to m brn gy	0.09	0.75	0.47	1.60	1.24	60	38	0.8	0.11	428	0055-1L
2502.00	swc	Sh/Clst: m gy to brn gy	0.06	0.54	0.90	0.60	0.78	69	115	0.6	0.10	422	0031-1L

Depth unit of measure: m

Depth	Typ	Lithology	S1	S2	S3	S2/S3	TOC	HI	OI	PP	PI	Tmax	Sample
2505.00	swc	Sh/Clst: m gy	0.08	0.49	0.29	1.69	0.80	61	36	0.6	0.14	425	0032-1L
2510.00	swc	S/Sst : gy w	0.01	0.03	0.34	0.09	0.06	50	567	-	0.25	430	0033-1L
2515.00	swc	S/Sst : gy w	1.03	1.75	3.79	0.46	1.12	156	338	2.8	0.37	416	0034-1L
2525.19	ccp	S/Sst : lt gy	0.11	0.13	0.68	0.19	0.02	650	3400	0.2	0.46	459	0063-1L
2527.00	ccp	S/Sst : lt gy to m gy	0.03	-	0.50	-	0.01	-	5000	-	1.00	317	0064-1L
2532.00	ccp	S/Sst : lt gy to m gy	0.04	0.07	0.46	0.15	0.01	700	4600	0.1	0.36	385	0065-1L
2534.51	ccp	S/Sst : m gy	0.22	0.21	0.63	0.33	0.03	700	2100	0.4	0.51	449	0066-1L
2535.52	ccp	S/Sst : m gy	-	0.08	0.43	0.19	0.01	800	4300	0.1	-	376	0067-1L
2538.13	ccp	S/Sst : m gy	0.09	0.19	0.28	0.68	0.02	950	1400	0.3	0.32	496	0068-1L
2547.00	ccp	S/Sst : m gy	-	0.61	0.26	2.35	0.52	117	50	0.6	-	431	0069-1L
2549.25	ccp	S/Sst : lt gy to m gy	0.09	0.14	0.15	0.93	0.03	467	500	0.2	0.39	400	0070-1L
2554.00	swc	Sltst : gy w to lt gy	0.01	-	0.40	-	0.07	-	571	-	1.00	420	0035-1L
2560.50	swc	Sltst : lt gy	0.10	-	0.35	-	0.01	-	3500	0.1	1.00	321	0037-1L
2565.00	swc	Sltst : m gy	0.10	0.74	0.57	1.30	0.32	231	178	0.8	0.12	430	0039-1L
2570.00	cut	S/Sst : w to lt gy	0.03	0.07	0.65	0.11	0.27	26	241	0.1	0.30	376	0147-5L

Depth unit of measure: m

Depth	Typ	Lithology	S1	S2	S3	S2/S3	TOC	HI	OI	PP	PI	Tmax	Sample
2580.00	swc	Sltst : lt gy to m gy to brn gy	0.10	2.70	0.56	4.82	0.88	307	64	2.8	0.04	429	0040-1L
2587.00	cut	S/Sst : w to lt gy	0.06	0.33	1.10	0.30	0.53	62	208	0.4	0.15	425	0135-5L
2590.00	swc	Sltst : lt gy to m gy to brn gy	0.11	3.17	0.57	5.56	1.03	308	55	3.3	0.03	429	0041-1L
2595.00	swc	Sltst : lt gy to m gy to brn gy	0.09	2.18	0.50	4.36	0.62	352	81	2.3	0.04	431	0042-1L
2599.00	swc	Sltst : lt gy to brn gy	0.15	3.51	0.36	9.75	1.02	344	35	3.7	0.04	432	0043-1L
2612.00	cut	S/Sst : m gy to lt brn gy	0.12	2.96	0.69	4.29	1.03	287	67	3.1	0.04	432	0136-5L
2624.00	cut	S/Sst : w to lt gy	0.06	0.83	1.11	0.75	0.49	169	227	0.9	0.07	432	0137-5L
2632.00	swc	Sltst : gy w to lt gy	0.03	0.30	0.54	0.56	0.06	500	900	0.3	0.09	457	0045-1L
2639.00	cut	S/Sst : w to lt gy	0.12	2.02	1.38	1.46	0.96	210	144	2.1	0.06	433	0138-5L
2645.00	cut	S/Sst : w to lt gy	0.11	1.74	1.88	0.93	0.98	178	192	1.9	0.06	432	0139-5L
2654.00	cut	S/Sst : w to lt gy	0.08	1.42	1.20	1.18	0.84	169	143	1.5	0.05	434	0140-5L
2666.00	cut	S/Sst : w to lt gy	0.06	0.74	0.82	0.90	0.50	148	164	0.8	0.07	431	0141-5L
2678.00	cut	S/Sst : w to lt gy	0.10	0.84	1.37	0.61	0.68	124	201	0.9	0.11	430	0143-5L
2690.00	cut	S/Sst : w to lt gy	0.08	0.62	1.34	0.46	0.69	90	194	0.7	0.11	431	0145-5L
2705.00	cut	S/Sst : w to lt gy	0.12	1.55	1.28	1.21	0.98	158	131	1.7	0.07	431	0148-1L

Table 2 : Rock-Eval table for well NOCS 6507/7-10

Depth unit of measure: m

Depth	Typ	Lithology	S1	S2	S3	S2/S3	TOC	HI	OI	PP	PI	Tmax	Sample
2717.00	cut	S/Sst : w to lt gy	0.12	1.47	1.14	1.29	1.09	135	105	1.6	0.08	429	0150-1L
2738.00	swc	Sltst : gy w to lt gy to brn gy	0.06	0.26	1.31	0.20	0.10	260	1310	0.3	0.19	444	0046-1L
2759.00	cut	S/Sst : w to lt gy	0.09	0.69	0.85	0.81	0.83	83	102	0.8	0.12	429	0154-1L
2771.00	cut	S/Sst : w to lt gy	0.09	0.84	0.63	1.33	0.78	108	81	0.9	0.10	430	0155-1L
2786.00	cut	Sltst : brn gy to brn blk, lt gy to m gy	2.10	51.89	1.55	33.48	13.40	387	12	54.0	0.04	425	0156-2L
2792.00	cut	Sh/Clst: brn gy to brn blk	2.69	75.35	1.15	65.52	19.10	395	6	78.0	0.03	418	0098-2L
2810.00	cut	S/Sst : w to lt gy	0.11	1.26	0.74	1.70	0.97	130	76	1.4	0.08	431	0100-1L
2822.00	cut	S/Sst : w to lt gy	0.04	0.28	0.60	0.47	0.43	65	140	0.3	0.13	432	0102-1L
2843.00	cut	S/Sst : w to lt gy	0.09	0.98	1.06	0.92	0.97	101	109	1.1	0.08	432	0104-1L
2858.00	cut	Sh/Clst: brn gy to dsk brn to brn blk	1.59	30.79	1.25	24.63	11.90	259	11	32.4	0.05	424	0159-2L
2879.00	cut	S/Sst : w to lt gy	0.10	0.91	0.57	1.60	1.11	82	51	1.0	0.10	433	0106-1L
2893.00	swc	Sh/Clst: lt gy to lt brn gy	0.03	0.32	0.58	0.55	0.30	107	193	0.3	0.09	434	0047-1L
2906.00	cut	S/Sst : w to lt gy	0.03	0.24	1.99	0.12	0.45	53	442	0.3	0.11	430	0157-1L
2921.00	cut	Sltst : lt gy	0.10	1.54	0.68	2.26	0.97	159	70	1.6	0.06	427	0109-4L

Table 2 : Rock-Eval table for well NOCS 6507/7-10

Depth unit of measure: m

Depth	Typ	Lithology	S1	S2	S3	S2/S3	TOC	HI	OI	PP	PI	Tmax	Sample
2933.00	cut	Coal : blk	4.74	146.41	3.71	39.46	49.00	299	8	151.2	0.03	424	0163-3L
2945.00	cut	Coal : blk	4.67	149.22	3.37	44.28	43.90	340	8	153.9	0.03	423	0164-3L
2957.00	cut	Sh/Clst: brn gy to dsk brn to brn blk	0.62	27.48	2.31	11.90	10.70	257	22	28.1	0.02	424	0166-2L
2957.00	cut	Coal : blk	2.63	128.75	3.61	35.66	51.60	250	7	131.4	0.02	423	0166-3L
2963.00	cut	Sh/Clst: dsk brn to brn blk	0.49	22.41	0.79	28.37	8.47	265	9	22.9	0.02	425	0167-2L
2969.00	cut	Sh/Clst: dsk brn to brn blk	0.52	22.26	1.65	13.49	8.80	253	19	22.8	0.02	429	0168-2L
2975.00	cut	Sh/Clst: dsk brn to brn blk	1.07	41.18	1.58	26.06	13.00	317	12	42.3	0.03	424	0169-2L
2984.00	cut	Sh/Clst: brn gy to dsk brn to brn blk	0.20	7.86	0.71	11.07	5.81	135	12	8.1	0.02	434	0170-2L
2990.00	cut	Sh/Clst: brn gy to dsk brn to brn blk	0.41	9.46	0.91	10.40	7.14	132	13	9.9	0.04	430	0172-2L
2996.00	cut	Sh/Clst: brn gy to dsk brn to brn blk	0.20	6.61	0.61	10.84	5.64	117	11	6.8	0.03	433	0173-2L
3008.00	cut	S/Sst : w to lt gy	0.05	0.44	0.71	0.62	0.42	105	169	0.5	0.10	434	0175-1L
3017.00	cut	Sh/Clst: brn gy to dsk brn to brn blk	0.08	2.10	0.63	3.33	2.03	103	31	2.2	0.04	434	0177-2L

Table 2 : Rock-Eval table for well NOCS 6507/7-10

Depth unit of measure: m

Depth	Typ	Lithology	S1	S2	S3	S2/S3	TOC	HI	OI	PP	PI	Tmax	Sample
3023.00	cut	Sh/Clst: brn gy to dsk brn to brn blk	0.09	1.90	0.48	3.96	1.83	104	26	2.0	0.05	430	0178-2L
3029.00	cut	Sltst : lt gy to lt brn gy	0.05	0.13	1.40	0.09	0.43	30	326	0.2	0.28	423	0180-1L
3041.00	cut	Sh/Clst: brn gy to dsk brn to brn blk	0.51	13.45	0.89	15.11	5.97	225	15	14.0	0.04	430	0182-2L
3056.00	swc	Sltst : lt gy w to lt gy to lt brn gy	0.22	0.98	0.34	2.88	0.59	166	58	1.2	0.18	424	0048-1L
3062.00	cut	Sh/Clst: lt gy to m gy	0.06	0.22	1.09	0.20	0.55	40	198	0.3	0.21	420	0110-4L
3068.00	cut	Sh/Clst: brn gy to brn blk	0.07	2.36	0.42	5.62	2.08	113	20	2.4	0.03	433	0111-2L
3074.00	cut	Sh/Clst: brn gy to dsk brn to brn blk	0.19	5.46	0.52	10.50	4.45	123	12	5.7	0.03	436	0184-2L
3080.00	cut	Sltst : lt gy	0.05	0.17	1.13	0.15	0.40	43	283	0.2	0.23	428	0185-1L
3089.00	cut	S/Sst : w to lt gy	0.10	0.73	1.33	0.55	0.74	99	180	0.8	0.12	428	0112-1L
3095.00	cut	Sh/Clst: brn gy to brn blk	0.14	2.25	0.32	7.03	2.37	95	14	2.4	0.06	437	0113-2L
3101.00	cut	Sh/Clst: brn gy to brn blk	0.05	1.18	0.20	5.90	1.49	79	13	1.2	0.04	437	0114-2L
3107.00	cut	Sltst : lt gy to m gy	0.08	0.29	1.32	0.22	0.74	39	178	0.4	0.22	434	0187-1L
3116.00	cut	S/Sst : w to lt gy	0.10	0.61	1.40	0.44	0.79	77	177	0.7	0.14	424	0115-1L

Table 2 : Rock-Eval table for well NOCS 6507/7-10

Depth unit of measure: m

Depth	Typ	Lithology	S1	S2	S3	S2/S3	TOC	HI	OI	PP	PI	Tmax	Sample
3134.00	cut	S/Sst : w to lt gy	0.05	0.14	1.07	0.13	0.29	48	369	0.2	0.26	418	0188-1L
3146.00	cut	S/Sst : w to lt gy	0.04	0.13	0.51	0.25	0.27	48	189	0.2	0.24	379	0117-1L
3158.00	cut	Sh/Clst: brn gy to brn blk	2.31	88.93	1.24	71.72	36.30	245	3	91.2	0.03	420	0191-2L
3165.00	swc	Sh/Clst: dsk brn	-	0.13	0.07	1.86	0.27	48	26	0.1	-	431	0049-1L
3177.00	swc	S/Sst : lt gy w to lt gy w	0.08	0.01	0.38	0.03	0.01	100	3800	0.1	0.89	363	0050-1L
3185.00	cut	Sh/Clst: brn gy to brn blk	0.17	7.20	1.00	7.20	5.14	140	19	7.4	0.02	437	0192-2L
3193.00	swc	S/Sst : gy w to lt gy	0.11	0.08	0.16	0.50	0.01	800	1600	0.2	0.58	296	0051-1L
3212.50	swc	Sh/Clst: m gy to brn gy	0.01	0.09	0.16	0.56	0.01	900	1600	0.1	0.10	425	0052-1L
3223.00	swc	Sh/Clst: brn gy to m ol gy to m ol brn	-	0.03	0.21	0.14	0.01	300	2100	-	-	345	0053-1L
3230.00	cut	Sh/Clst: brn gy to brn blk	0.06	0.69	0.48	1.44	1.61	43	30	0.8	0.08	438	0193-2L
3237.00	swc	Sltst : lt gy w to lt gy	0.02	0.01	0.19	0.05	0.01	100	1900	-	0.67	296	0054-1L
3248.00	cut	Sh/Clst: brn gy	0.04	0.33	0.41	0.80	0.88	38	47	0.4	0.11	433	0194-2L
3260.00	cut	S/Sst : w to lt gy	0.03	0.06	1.16	0.05	0.23	26	504	0.1	0.33	431	0195-1L
3281.00	cut	Sltst : lt gy to drk gy to brn gy	0.14	3.34	0.69	4.84	1.78	188	39	3.5	0.04	440	0197-4L

Table 2 : Rock-Eval table for well NOCS 6507/7-10

Depth unit of measure: m

Depth	Typ	Lithology	S1	S2	S3	S2/S3	TOC	HI	OI	PP	PI	Tmax	Sample
3308.00	cut	Sltst : lt gy to drk gy to brn gy	0.15	4.05	1.06	3.82	1.79	226	59	4.2	0.04	439	0198-4L

Depth unit of measure: m

Depth	Typ	Lithology	C1	C2-C5	C6-C14	C15+	S2 from Rock-Eval	Sample
1880.00	cut	S/Sst : lt gy to lt brn gy	11.47	19.96	56.91	11.66	1.72	0124-4L
2052.50	swc	Sh/Clst: m gy to lt brn gy	15.10	13.98	49.84	21.07	15.90	0002-1L
2444.00	cut	Sh/Clst: lt gy to m gy	17.93	14.87	50.03	17.17	1.65	0091-2L
2448.50	ccp	Sh/Clst: drk ol gy to dsk y brn	13.67	7.74	33.06	45.52	36.07	0056-1L
2450.50	ccp	Sh/Clst: dsk y brn	14.26	7.80	33.19	44.75	31.67	0057-1L
2453.10	ccp	Sh/Clst: dsk y brn	14.06	7.31	32.29	46.35	33.03	0058-1L
2459.00	cut	Sh/Clst: brn gy to dsk y brn	7.70	10.26	35.75	46.29	22.43	0093-5L
2470.00	swc	Sh/Clst: brn gy to m brn gy to m gy	9.64	12.28	37.59	40.50	17.14	0026-1L
2474.00	swc	Sh/Clst: drk ol brn to brn blk	14.51	5.86	32.32	47.32	26.22	0028-1L
2476.70	ccp	S/Sst : dsk y brn	4.09	7.98	18.44	69.49	2.28	0059-1L
2477.00	ccp	S/Sst : brn gy to dsk y brn	2.65	6.37	11.22	79.75	3.28	0060-1L
2477.50	ccp	Sh/Clst: brn blk	11.74	18.66	38.42	31.18	28.70	0061-1L
2479.50	ccp	Sh/Clst: dsk y brn	29.88	19.57	45.13	5.42	4.37	0062-1L
2483.00	cut	Sh/Clst: brn gy to dsk y brn	9.10	14.93	36.44	39.53	32.30	0094-5L

Table 3 : Pyrolysis GC Data (S2 peak) as Percentage of Total Area for Well NOCS 6507/7-10

Depth unit of measure: m

Depth	Typ	Lithology	C1	C2-C5	C6-C14	C15+	S2 from Rock-Eval	Sample
2515.00	swc	S/Sst : gy w	25.21	30.68	38.65	5.46	1.75	0034-1L
2639.00	cut	S/Sst : w to lt gy	9.38	17.08	41.88	31.67	2.02	0138-5L
2786.00	cut	Sltst : brn gy to brn blk, lt gy to m gy	11.44	13.16	30.92	44.48	51.89	0156-2L
2792.00	cut	Sh/Clst: brn gy to brn blk	9.40	11.75	29.77	49.08	75.35	0098-2L
2858.00	cut	Sh/Clst: brn gy to dsk brn to brn blk	14.04	8.48	29.20	48.27	30.79	0159-2L
2945.00	cut	Coal : blk	21.61	4.67	26.99	46.74	149.22	0164-3L
2957.00	cut	Coal : blk	23.52	5.47	28.36	42.65	128.75	0166-3L
2975.00	cut	Sh/Clst: dsk brn to brn blk	19.46	5.75	29.06	45.73	41.18	0169-2L
3041.00	cut	Sh/Clst: brn gy to dsk brn to brn blk	23.07	5.81	30.17	40.95	13.45	0182-2L
3158.00	cut	Sh/Clst: brn gy to brn blk	15.74	11.81	25.58	46.87	88.93	0191-2L

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
2052.50	swc	Sh/Clst: m gy to lt brn gy	1.8	5.7	1.8	1.0	0.6	2.3	2.8	2.8	3.65	0002-1L
2444.00	cut	Sh/Clst: lt gy to m gy	6.1	4.3	1.4	0.6	0.8	1.5	2.0	2.3	1.50	0091-2L
2448.50	ccp	Sh/Clst: drk ol gy to dsk y brn	5.1	22.6	2.0	3.8	9.2	7.5	5.8	16.8	10.30	0056-1L
2450.50	ccp	Sh/Clst: dsk y brn	5.3	13.9	1.6	2.9	4.6	4.8	4.5	9.4	7.96	0057-1L
2453.10	ccp	Sh/Clst: dsk y brn	5.6	15.4	2.5	2.8	3.8	6.2	5.3	10.0	7.94	0058-1L
2459.00	cut	Sh/Clst: brn gy to dsk y brn	6.3	21.2	1.6	3.6	8.5	7.5	5.2	16.0	8.12	0093-5L
2470.00	swc	Sh/Clst: brn gy to m brn gy to m gy	0.6	1.5	0.2	0.4	0.5	0.5	0.6	0.9	9.25	0026-1L
2474.00	swc	Sh/Clst: drk ol brn to brn blk	2.5	18.9	5.9	7.5	1.5	4.0	13.4	5.5	11.30	0028-1L
2476.70	ccp	S/Sst : dsk y brn	10.2	81.5	45.1	17.5	1.3	17.6	62.6	18.9	0.92	0059-1L
2477.00	ccp	S/Sst : brn gy to dsk y brn	10.7	126.9	72.0	27.1	3.5	24.2	99.1	27.8	1.20	0060-1L
2477.50	ccp	Sh/Clst: brn blk	7.0	30.1	7.3	10.9	5.1	6.8	18.2	11.9	9.53	0061-1L
2479.50	ccp	Sh/Clst: dsk y brn	7.5	14.9	4.2	4.0	1.1	5.5	8.3	6.6	5.31	0062-1L
2483.00	cut	Sh/Clst: brn gy to dsk y brn	6.5	29.5	7.5	9.5	4.9	7.7	17.0	12.6	10.00	0094-5L

Schlumberger

Geco-Prakla

GEOLAB NOR

Table 4 a: Weight of EOM and Chromatographic Fraction for well NOCS 6507/7-10

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
2515.00	swc	S/Sst : gy w	0.3	1.2	0.3	0.3	0.3	0.3	0.6	0.6	2.17	0034-1L
2786.00	cut	Sltst : brn gy to brn blk, lt gy to m gy	6.8	14.9	1.0	3.3	6.4	4.3	4.3	10.7	7.21	0156-2L
2792.00	cut	Sh/Clst: brn gy to brn blk	5.1	21.0	1.5	4.3	10.2	5.0	5.8	15.2	11.60	0098-2L
2858.00	cut	Sh/Clst: brn gy to dsk brn to brn blk	1.6	11.7	0.3	2.0	6.6	2.8	2.3	9.3	16.50	0159-2L
2945.00	cut	Coal : blk	2.4	52.1	3.3	9.8	30.2	8.8	13.1	39.0	50.10	0164-3L
2957.00	cut	Coal : blk	4.2	60.8	4.9	13.4	30.2	12.3	18.3	42.5	48.60	0166-3L
2975.00	cut	Sh/Clst: dsk brn to brn blk	2.8	10.3	0.9	2.2	4.8	2.4	3.2	7.1	13.60	0169-2L
3041.00	cut	Sh/Clst: brn gy to dsk brn to brn blk	3.3	5.5	0.4	1.6	1.6	1.8	2.1	3.4	5.91	0182-2L
3158.00	cut	Sh/Clst: brn gy to brn blk	2.5	26.9	1.2	4.7	16.0	5.0	5.9	21.0	30.40	0191-2L

Table 4 b: Concentration of EOM and Chromatographic Fraction (wt ppm rock) for well NOCS 6507/7-10

Depth unit of measure: m

Depth	Typ	Lithology	EOM	Sat	Aro	Asph	NSO	HC	Non-HC	Sample
2052.50	swc	Sh/Clst: m gy to lt brn gy	3149	994	580	331	1243	1574	1574	0002-1L
2444.00	cut	Sh/Clst: lt gy to m gy	696	221	98	131	245	319	377	0091-2L
2448.50	ccp	Sh/Clst: drk ol gy to dsk y brn	4467	405	744	1827	1489	1150	3316	0056-1L
2450.50	ccp	Sh/Clst: dsk y brn	2617	292	551	864	908	844	1772	0057-1L
2453.10	ccp	Sh/Clst: dsk y brn	2734	443	507	676	1108	950	1784	0058-1L
2459.00	cut	Sh/Clst: brn gy to dsk y brn	3396	257	574	1358	1206	831	2564	0093-5L
2470.00	swc	Sh/Clst: brn gy to m brn gy to m gy	2719	263	789	877	789	1052	1666	0026-1L
2474.00	swc	Sh/Clst: drk ol brn to brn blk	7396	2313	2925	588	1568	5239	2156	0028-1L
2476.70	ccp	S/Sst : dsk y brn	7995	4426	1713	124	1730	6140	1854	0059-1L
2477.00	ccp	S/Sst : brn gy to dsk y brn	11869	6734	2536	332	2265	9271	2597	0060-1L
2477.50	ccp	Sh/Clst: brn blk	4298	1044	1554	730	969	2598	1699	0061-1L
2479.50	ccp	Sh/Clst: dsk y brn	1982	564	536	150	732	1100	882	0062-1L
2483.00	cut	Sh/Clst: brn gy to dsk y brn	4554	1157	1459	754	1182	2617	1936	0094-5L

Table 4 b: Concentration of EOM and Chromatographic Fraction (wt ppm rock) for well NOCS 6507/7-10

Depth unit of measure: m

Depth	Typ	Lithology	EOM	Sat	Aro	Asph	NSO	HC	Non-HC	Sample
2515.00	swc	S/Sst : gy w	4444	1111	1111	1111	1111	2222	2222	0034-1L
2786.00	cut	Sltst : brn gy to brn blk, lt gy to m gy	2192	151	477	936	627	628	1563	0156-2L
2792.00	cut	Sh/Clst: brn gy to brn blk	4125	293	848	2003	980	1141	2984	0098-2L
2858.00	cut	Sh/Clst: brn gy to dsk brn to brn blk	7445	197	1292	4171	1783	1490	5955	0159-2L
2945.00	cut	Coal : blk	21537	1376	4053	12462	3644	5429	16107	0164-3L
2957.00	cut	Coal : blk	14446	1161	3187	7173	2923	4349	10097	0166-3L
2975.00	cut	Sh/Clst: dsk brn to brn blk	3745	345	807	1727	865	1152	2592	0169-2L
3041.00	cut	Sh/Clst: brn gy to dsk brn to brn blk	1646	134	494	479	538	628	1017	0182-2L
3158.00	cut	Sh/Clst: brn gy to brn blk	10764	496	1864	6416	1987	2360	8404	0191-2L

Table 4 c: Concentration of EOM and Chromatographic Fraction (mg/g TOC(e)) for well NOCS 6507/7-10

Depth unit of measure: m

Depth	Typ	Lithology	EOM	Sat	Aro	Asph	NSO	HC	Non-HC	Sample
2052.50	swc	Sh/Clst: m gy to lt brn gy	86.28	27.25	15.89	9.08	34.06	43.14	43.14	0002-1L
2444.00	cut	Sh/Clst: lt gy to m gy	46.45	14.75	6.56	8.74	16.39	21.31	25.14	0091-2L
2448.50	ccp	Sh/Clst: drk ol gy to dsk y brn	43.37	3.94	7.23	17.74	14.46	11.17	32.20	0056-1L
2450.50	ccp	Sh/Clst: dsk y brn	32.88	3.68	6.93	10.87	11.41	10.61	22.27	0057-1L
2453.10	ccp	Sh/Clst: dsk y brn	34.44	5.58	6.39	8.52	13.96	11.97	22.48	0058-1L
2459.00	cut	Sh/Clst: brn gy to dsk y brn	41.83	3.17	7.07	16.73	14.86	10.25	31.59	0093-5L
2470.00	swc	Sh/Clst: brn gy to m brn gy to m gy	29.40	2.84	8.53	9.48	8.53	11.38	18.02	0026-1L
2474.00	swc	Sh/Clst: drk ol brn to brn blk	65.45	20.48	25.89	5.21	13.88	46.36	19.09	0028-1L
2476.70	ccp	S/Sst : dsk y brn	869.03	481.18	186.24	13.55	188.06	667.43	201.60	0059-1L
2477.00	ccp	S/Sst : brn gy to dsk y brn	989.09	561.19	211.41	27.67	188.81	772.61	216.48	0060-1L
2477.50	ccp	Sh/Clst: brn blk	45.11	10.96	16.31	7.66	10.18	27.27	17.84	0061-1L
2479.50	ccp	Sh/Clst: dsk y brn	37.34	10.62	10.09	2.84	13.79	20.72	16.62	0062-1L
2483.00	cut	Sh/Clst: brn gy to dsk y brn	45.54	11.57	14.60	7.55	11.82	26.17	19.37	0094-5L

Table 4 c: Concentration of EOM and Chromatographic Fraction (mg/g TOC(e)) for well NOCS 6507/7-10

Depth unit of measure: m

Depth	Typ	Lithology	EOM	Sat	Aro	Asph	NSO	HC	Non-HC	Sample
2515.00	swc	S/Sst : gy w	204.81	51.20	51.20	51.20	51.20	102.41	102.41	0034-1L
2786.00	cut	Sltst : brn gy to brn blk, lt gy to m gy	30.41	2.10	6.62	12.99	8.70	8.72	21.69	0156-2L
2792.00	cut	Sh/Clst: brn gy to brn blk	35.57	2.53	7.31	17.28	8.45	9.84	25.73	0098-2L
2858.00	cut	Sh/Clst: brn gy to dsk brn to brn blk	45.13	1.20	7.84	25.28	10.81	9.03	36.09	0159-2L
2945.00	cut	Coal : blk	42.99	2.75	8.09	24.88	7.27	10.84	32.15	0164-3L
2957.00	cut	Coal : blk	29.73	2.39	6.56	14.76	6.02	8.95	20.78	0166-3L
2975.00	cut	Sh/Clst: dsk brn to brn blk	27.54	2.54	5.94	12.70	6.36	8.48	19.06	0169-2L
3041.00	cut	Sh/Clst: brn gy to dsk brn to brn blk	27.86	2.28	8.36	8.11	9.12	10.64	17.22	0182-2L
3158.00	cut	Sh/Clst: brn gy to brn blk	35.41	1.63	6.13	21.11	6.54	7.76	27.64	0191-2L

Table 4 d: Composition of material extracted from the rock (%) for well NOCS 6507/7-10

Depth unit of measure: m

Depth	Typ	Lithology	Sat	Aro	Asph	NSO	HC	Non-HC	Sat	HC	Sample
			EOM	EOM	EOM	EOM	EOM	EOM	Aro	Non-HC	
2052.50	swc	Sh/Clst: m gy to lt brn gy	31.58	18.42	10.53	39.47	50.00	50.00	171.43	100.00	0002-1L
2444.00	cut	Sh/Clst: lt gy to m gy	31.76	14.12	18.82	35.29	45.88	54.12	225.00	84.78	0091-2L
2448.50	ccp	Sh/Clst: drk ol gy to dsk y brn	9.09	16.67	40.91	33.33	25.75	74.25	54.52	34.69	0056-1L
2450.50	ccp	Sh/Clst: dsk y brn	11.18	21.08	33.05	34.70	32.26	67.74	53.06	47.62	0057-1L
2453.10	ccp	Sh/Clst: dsk y brn	16.20	18.54	24.72	40.53	34.74	65.26	87.37	53.24	0058-1L
2459.00	cut	Sh/Clst: brn gy to dsk y brn	7.58	16.91	39.99	35.52	24.49	75.51	44.85	32.44	0093-5L
2470.00	swc	Sh/Clst: brn gy to m brn gy to m gy	9.68	29.03	32.26	29.03	38.71	61.29	33.33	63.16	0026-1L
2474.00	swc	Sh/Clst: drk ol brn to brn blk	31.28	39.55	7.95	21.21	70.84	29.16	79.09	242.91	0028-1L
2476.70	ccp	S/Sst : dsk y brn	55.37	21.43	1.56	21.64	76.80	23.20	258.36	331.06	0059-1L
2477.00	ccp	S/Sst : brn gy to dsk y brn	56.74	21.37	2.80	19.09	78.11	21.89	265.45	356.90	0060-1L
2477.50	ccp	Sh/Clst: brn blk	24.29	36.16	16.98	22.57	60.45	39.55	67.19	152.86	0061-1L
2479.50	ccp	Sh/Clst: dsk y brn	28.45	27.03	7.60	36.92	55.48	44.52	105.22	124.62	0062-1L
2483.00	cut	Sh/Clst: brn gy to dsk y brn	25.42	32.06	16.57	25.96	57.47	42.53	79.28	135.14	0094-5L

Table 4 d: Composition of material extracted from the rock (%) for well NOCS 6507/7-10

Depth unit of measure: m

Depth	Typ	Lithology	Sat	Aro	Asph	NSO	HC	Non-HC	Sat	HC	Sample
			EOM	EOM	EOM	EOM	EOM	EOM	EOM	Aro	
2515.00	swc	S/Sst : gy w	25.00	25.00	25.00	25.00	50.00	50.00	100.00	100.00	0034-1L
2786.00	cut	Sltst : brn gy to brn blk, lt gy to m gy	6.90	21.77	42.73	28.60	28.67	71.33	31.69	40.19	0156-2L
2792.00	cut	Sh/Clst: brn gy to brn blk	7.11	20.56	48.57	23.76	27.67	72.33	34.57	38.26	0098-2L
2858.00	cut	Sh/Clst: brn gy to dsk brn to brn blk	2.65	17.37	56.03	23.95	20.02	79.98	15.27	25.03	0159-2L
2945.00	cut	Coal : blk	6.39	18.82	57.87	16.92	25.21	74.79	33.94	33.71	0164-3L
2957.00	cut	Coal : blk	8.04	22.07	49.65	20.24	30.11	69.89	36.44	43.07	0166-3L
2975.00	cut	Sh/Clst: dsk brn to brn blk	9.22	21.55	46.12	23.11	30.78	69.22	42.79	44.46	0169-2L
3041.00	cut	Sh/Clst: brn gy to dsk brn to brn blk	8.18	30.00	29.09	32.73	38.18	61.82	27.27	61.76	0182-2L
3158.00	cut	Sh/Clst: brn gy to brn blk	4.61	17.32	59.61	18.47	21.92	78.08	26.61	28.08	0191-2L

Table 5: Saturated Hydrocarbon Ratios for well NOCS 6507/7-10

Depth unit of measure: m

Depth	Typ	Lithology	Pristane	Pristane	Pristane/nC17	Phytane	CPI1	nC17	Sample
			nC17	Phytane	Phytane/nC18	nC18		nC17+nC27	
2052.50	swc	Sh/Clst: m gy to lt brn gy	3.26	0.27	1.36	2.41	0.95	0.25	0002-1L
2444.00	cut	Sh/Clst: lt gy to m gy	1.38	2.42	2.13	0.65	1.77	0.55	0091-2L
2448.50	ccp	Sh/Clst: drk ol gy to dsk y brn	4.96	0.92	0.63	7.86	0.37	1.00	0056-1L
2450.50	ccp	Sh/Clst: dsk y brn	3.14	0.73	0.51	6.14	0.48	1.00	0057-1L
2453.10	ccp	Sh/Clst: dsk y brn	2.28	1.01	0.56	4.08	1.29	0.79	0058-1L
2459.00	cut	Sh/Clst: brn gy to dsk y brn	3.16	0.95	0.37	8.44	0.55	1.00	0093-5L
2470.00	swc	Sh/Clst: brn gy to m brn gy to m gy	1.41	1.16	1.28	1.10	1.34	0.60	0026-1L
2474.00	swc	Sh/Clst: drk ol brn to brn blk	0.81	1.03	0.89	0.90	1.11	0.88	0028-1L
2476.70	ccp	S/Sst : dsk y brn	0.94	0.91	0.90	1.04	1.07	0.81	0059-1L
2477.00	ccp	S/Sst : brn gy to dsk y brn	0.92	0.93	0.90	1.02	1.03	0.80	0060-1L
2477.50	ccp	Sh/Clst: brn blk	1.16	1.39	1.12	1.03	1.93	0.53	0061-1L
2479.50	ccp	Sh/Clst: dsk y brn	1.37	1.76	1.47	0.93	1.11	0.82	0062-1L
2483.00	cut	Sh/Clst: brn gy to dsk y brn	1.05	1.18	0.96	1.09	1.31	0.84	0094-5L
2515.00	swc	S/Sst : gy w	-	-	-	-	-	-	0034-1L
2786.00	cut	Sltst : brn gy to brn blk, lt gy	2.07	5.95	5.93	0.35	2.53	0.39	0156-2L

Table 5: Saturated Hydrocarbon Ratios for well NOCS 6507/7-10

Depth unit of measure: m

Depth	Typ	Lithology	Pristane	Pristane	Pristane/nC17	Phytane	CPI1	nC17	Sample
			nC17	Phytane	Phytane/nC18	nC18		nC17+nC27	
		to m gy							
2792.00	cut	Sh/Clst: brn gy to brn blk	2.47	5.07	5.49	0.45	2.22	0.38	0098-2L
2858.00	cut	Sh/Clst: brn gy to dsk brn to brn blk	6.51	-	-	-	1.09	1.00	0159-2L
2945.00	cut	Coal : blk	5.05	7.78	8.71	0.58	1.92	0.34	0164-3L
2957.00	cut	Coal : blk	4.31	7.59	8.62	0.50	2.10	0.34	0166-3L
2975.00	cut	Sh/Clst: dsk brn to brn blk	3.67	6.72	7.45	0.49	2.16	0.36	0169-2L
3041.00	cut	Sh/Clst: brn gy to dsk brn to brn blk	3.03	6.56	7.02	0.43	2.21	0.28	0182-2L
3158.00	cut	Sh/Clst: brn gy to brn blk	5.77	7.65	8.00	0.72	1.75	0.34	0191-2L

Table 6a: Aromatic Hydrocarbon Ratios for well NOCS 6507/7-10

Depth unit of measure: m

Depth	Typ	Lithology	MNR	DMNR	BPhR	2/1MP	MPI1	MPI2	Rc	DBT/P	4/1MDBT	(3+2) /1MDBT	Sample
2052.50	swc	Sh/Clst: m gy to lt brn gy	-	1.07	-	-	-	-	-	-	-	-	0002-1L
2444.00	cut	Sh/Clst: lt gy to m gy	-	-	-	0.78	0.44	0.50	0.66	-	-	-	0091-2L
2448.50	ccp	Sh/Clst: drk ol gy to dsk y brn	0.61	2.05	-	1.30	0.99	0.99	0.99	-	-	-	0056-1L
2450.50	ccp	Sh/Clst: dsk y brn	0.45	1.61	-	-	3.35	3.09	2.41	-	-	-	0057-1L
2453.10	ccp	Sh/Clst: dsk y brn	0.57	0.94	-	-	2.41	2.17	1.85	-	-	-	0058-1L
2459.00	cut	Sh/Clst: brn gy to dsk y brn	0.65	1.18	-	-	-	-	-	-	-	-	0093-5L
2470.00	swc	Sh/Clst: brn gy to m brn gy to m gy	-	-	-	-	-	-	-	-	-	-	0026-1L
2474.00	swc	Sh/Clst: drk ol brn to brn blk	0.93	0.69	-	-	-	-	-	-	1.56	0.57	0028-1L
2476.70	ccp	S/Sst : dsk y brn	-	-	-	-	-	-	-	-	-	-	0059-1L
2477.00	ccp	S/Sst : brn gy to dsk y brn	-	-	-	-	-	-	-	-	-	-	0060-1L
2477.50	ccp	Sh/Clst: brn blk	0.90	0.68	-	-	-	-	-	0.25	1.28	0.38	0061-1L
2479.50	ccp	Sh/Clst: dsk y brn	0.82	0.61	-	-	-	-	-	0.26	0.56	0.16	0062-1L
2483.00	cut	Sh/Clst: brn gy to dsk y brn	0.82	0.66	-	-	-	-	-	-	1.21	0.43	0094-5L
2515.00	swc	S/Sst : gy w	-	-	-	-	-	-	-	-	-	-	0034-1L
2786.00	cut	Sltst : brn gy to brn blk, lt gy to m gy	0.96	0.85	0.65	0.79	0.38	0.47	0.63	0.03	-	-	0156-2L

Table 6a: Aromatic Hydrocarbon Ratios for well NOCS 6507/7-10

Depth unit of measure: m

Depth	Typ	Lithology	MNR	DMNR	BPhR	2/1MP	MPI1	MPI2	Rc	DBT/P	4/1MDBT (3+2) /1MDBT	Sample	
2792.00	cut	Sh/Clst: brn gy to brn blk	0.97	0.85	0.63	0.79	0.40	0.48	0.64	0.04	4.62	1.03	0098-2L
2858.00	cut	Sh/Clst: brn gy to dsk brn to brn blk	1.00	0.96	0.58	1.00	0.35	0.56	0.61	0.02	4.42	1.06	0159-2L
2945.00	cut	Coal : blk	0.96	0.86	0.38	0.90	0.43	0.51	0.66	0.04	2.50	1.00	0164-3L
2957.00	cut	Coal : blk	1.02	1.08	0.65	0.74	0.46	0.51	0.68	0.06	1.60	0.87	0166-3L
2975.00	cut	Sh/Clst: dsk brn to brn blk	0.96	1.13	0.47	0.81	0.51	0.56	0.71	0.05	1.16	0.70	0169-2L
3041.00	cut	Sh/Clst: brn gy to dsk brn to brn blk	1.05	1.31	0.33	0.82	0.54	0.57	0.72	-	-	-	0182-2L
3158.00	cut	Sh/Clst: brn gy to brn blk	1.18	1.25	0.46	0.65	0.46	0.49	0.68	-	-	-	0191-2L

Table 6b: Aromatic Hydrocarbon Ratios for well NOCS 6507/7-10

Depth unit of measure: m

Depth	Typ	Lithology	F1	F2	Sample
2052.50	swc	Sh/Clst: m gy to lt brn gy	-	-	0002-1L
2444.00	cut	Sh/Clst: lt gy to m gy	0.37	0.21	0091-2L
2448.50	ccp	Sh/Clst: drk ol gy to dsk y brn	0.48	0.24	0056-1L
2450.50	ccp	Sh/Clst: dsk y brn	1.00	0.46	0057-1L
2453.10	ccp	Sh/Clst: dsk y brn	1.00	0.45	0058-1L
2459.00	cut	Sh/Clst: brn gy to dsk y brn	-	-	0093-5L
2470.00	swc	Sh/Clst: brn gy to m brn gy to m gy	-	-	0026-1L
2474.00	swc	Sh/Clst: drk ol brn to brn blk	-	-	0028-1L
2476.70	ccp	S/Sst : dsk y brn	-	-	0059-1L
2477.00	ccp	S/Sst : brn gy to dsk y brn	-	-	0060-1L
2477.50	ccp	Sh/Clst: brn blk	-	-	0061-1L
2479.50	ccp	Sh/Clst: dsk y brn	-	-	0062-1L
2483.00	cut	Sh/Clst: brn gy to dsk y brn	-	-	0094-5L
2515.00	swc	S/Sst : gy w	-	-	0034-1L
2786.00	cut	Sltst : brn gy to brn blk, lt gy to m gy	0.38	0.23	0156-2L

Table 6b: Aromatic Hydrocarbon Ratios for well NOCS 6507/7-10

Depth unit of measure: m

Depth	Typ	Lithology	F1	F2	Sample
2792.00	cut	Sh/Clst: brn gy to brn blk	0.38	0.23	0098-2L
2858.00	cut	Sh/Clst: brn gy to dsk brn to brn blk	0.35	0.28	0159-2L
2945.00	cut	Coal : blk	0.39	0.23	0164-3L
2957.00	cut	Coal : blk	0.38	0.21	0166-3L
2975.00	cut	Sh/Clst: dsk brn to brn blk	0.40	0.22	0169-2L
3041.00	cut	Sh/Clst: brn gy to dsk brn to brn blk	0.43	0.23	0182-2L
3158.00	cut	Sh/Clst: brn gy to brn blk	0.38	0.20	0191-2L

Depth unit of measure: m

Depth	Typ Lithology	Vitrinite Reflectance (%)	Number of Readings	Standard Deviation	Spore Fluorescence Colour	SCI	T _{max} (°C)	Sample
1170.00	cut Sltst : lt gy	0.27	8	0.06	-	-	-	0071-3L
1290.00	cut Sltst : lt gy	0.29	8	0.03	-	-	-	0074-3L
1340.00	cut Sltst : lt gy	0.23	3	0.02	-	-	-	0077-3L
1400.00	cut Sltst : lt gy	0.24	4	0.02	-	-	409	0079-3L
1480.00	cut Sltst : lt gy	0.32	9	0.05	-	-	-	0118-3L
1580.00	cut Sh/Clst: lt gy to m gy to lt brn gy	0.40	4	0.05	-	-	426	0082-6L
1610.00	cut Sh/Clst: lt gy to m gy to lt brn gy	NDP	-	-	-	-	-	0083-6L
1670.00	cut Sltst : lt gy	0.41	7	0.06	-	-	-	0121-3L
1760.00	cut Sltst : lt gy to lt brn gy, m gy	0.21	3	0.00	-	-	-	0086-3L
2019.50	swc Sh/Clst: m gy to brn gy	0.43	6	0.08	-	-	423	0001-1L
2052.50	swc Sh/Clst: m gy to lt brn gy	-	-	-	-	3.5(?)	400	0002-1L
2097.00	swc Sh/Clst: drk gy	NDP	-	-	-	-	589	0003-1L
2195.00	swc Sh/Clst: m gy to brn gy	0.47	6	0.03	-	-	416	0009-1L

Table 7 : Thermal Maturity Data for well NOCS 6507/7-10

Depth unit of measure: m

Depth	Typ Lithology	Vitrinite Reflectance (%)	Number of Readings	Standard Deviation	Spore Fluorescence Colour	SCI	T _{max} (°C)	Sample
2268.00	swc Sh/Clst: m gy	NDP	-	-	-	-	417	0011-1L
2303.00	swc Sh/Clst: m gy to drk gy	0.43	6	0.07	-	-	-	0013-1L
2390.50	swc Sh/Clst: drk gy to brn gy	0.50	3	0.02	-	-	-	0022-1L
2444.00	cut Sh/Clst: lt gy to m gy	-	-	-	-	5.0(?)	426	0091-2L
2448.50	ccp Sh/Clst: drk ol gy to dsk y brn	-	-	-	-	5.5(??)	395	0056-1L
2450.50	ccp Sh/Clst: dsk y brn	-	-	-	-	5.5	405	0057-1L
2453.10	ccp Sh/Clst: dsk y brn	-	-	-	-	5.5	402	0058-1L
2459.00	cut Sh/Clst: brn gy to dsk y brn	-	-	-	-	5.5	409	0093-5L
2470.00	swc Sh/Clst: brn gy to m brn gy to m gy	0.59	12	0.05	-	6.0	406	0026-1L
2474.00	swc Sh/Clst: drk ol brn to brn blk	-	-	-	-	6.0	413	0028-1L
2477.50	ccp Sh/Clst: brn blk	-	-	-	-	6.0	417	0061-1L
2479.50	ccp Sh/Clst: dsk y brn	-	-	-	-	5.5-6.0	427	0062-1L
2483.00	cut Sh/Clst: brn gy to dsk y brn	-	-	-	-	5.5-6.0	414	0094-5L

Table 7 : Thermal Maturity Data for well NOCS 6507/7-10

Depth unit of measure: m

Depth	Typ	Lithology	Vitrinite Reflectance (%)	Number of Readings	Standard Deviation	Spore Fluorescence Colour	SCI	T _{max} (°C)	Sample
2505.00	swc	Sh/Clst: m gy	0.60	5	0.07	-	-	425	0032-1L
2632.00	swc	Sltst : gy w to lt gy	0.67	6	0.04	-	-	457	0045-1L
2738.00	swc	Sltst : gy w to lt gy to brn gy	0.35	5	0.03	-	-	444	0046-1L
2786.00	cut	Sltst : brn gy to brn blk, lt gy to m gy	-	-	-	-	5.5-6.0	425	0156-2L
2792.00	cut	Sh/Clst: brn gy to brn blk	-	-	-	-	6.0-6.5	418	0098-2L
2858.00	cut	Sh/Clst: brn gy to dsk brn to brn blk	-	-	-	-	5.5-6.0	424	0159-2L
2893.00	swc	Sh/Clst: lt gy to lt brn gy	0.72	2	0.10	-	-	434	0047-1L
2945.00	cut	Coal : blk	-	-	-	-	6.0	423	0164-3L
2957.00	cut	Sh/Clst: brn gy to dsk brn to brn blk	-	-	-	-	6.5	424	0166-2L
2957.00	cut	Coal : blk	0.71	2	0.01	-	-	423	0166-3L
2975.00	cut	Sh/Clst: dsk brn to brn blk	-	-	-	-	6.0-6.5	424	0169-2L
3041.00	cut	Sh/Clst: brn gy to dsk brn to brn blk	-	-	-	-	6.0	430	0182-2L

Table 7 : Thermal Maturity Data for well NOCS 6507/7-10

Depth unit of measure: m

Depth	Typ	Lithology	Vitrinite Reflectance (%)	Number of Readings	Standard Deviation	Spore Fluorescence Colour	SCI	T _{max} (°C)	Sample
3158.00	cut	Sh/Clst: brn gy to brn blk	-	-	-	-	6.0-6.5	420	0191-2L
3165.00	swc	Sh/Clst: dsk brn	NDP	-	-	-	-	431	0049-1L
3223.00	swc	Sh/Clst: brn gy to m ol gy to m ol brn	0.84	3	0.05	-	-	345	0053-1L
3308.00	cut	Sltst : lt gy to drk gy to brn gy	NDP	-	-	-	-	439	0198-4L

Depth unit of measure: m

Depth	Typ	Lithology	L	A	L	S	C	D			I	S	I	M	S	V	C	V	A	Sample		
			P	m	i	p	u	R	A	B	N	F	t	c	B	I	T	e	l		m	
			T	r	D	P	i	s	g	o	r	d	r	e	R	T	l	D	r			
			%	L	t	l	n	e	l	t	L	%	n	s	t	n	o	I	%	n	V	V
2052.50	swc	Sh/Clst: m gy to lt brn gy	100	**	*		*	*			TR	*			TR		*				0002-1L	
2444.00	cut	Sh/Clst: lt gy to m gy	90	**	**	*		*	*		10		*		TR		*				0091-2L	
2448.50	ccp	Sh/Clst: drk ol gy to dsk y brn	85	**		*	*	*			5	*	*		10	*	**				0056-1L	
2450.50	ccp	Sh/Clst: dsk y brn	70	**		*		*	*		10	*	**		20	*	**				0057-1L	
2453.10	ccp	Sh/Clst: dsk y brn	75	**		*		*			15	*	**	*	10	*		*			0058-1L	
2459.00	cut	Sh/Clst: brn gy to dsk y brn	65	**		*		*			10	**	*		25	**	*	*			0093-5L	
2470.00	swc	Sh/Clst: brn gy to m brn gy to m gy	50	**		*		*			30	**	*		20	**	*	*			0026-1L	
2474.00	swc	Sh/Clst: drk ol brn to brn blk	75	**		*		*			15	**	*		10	**	*	*			0028-1L	
2477.50	ccp	Sh/Clst: brn blk	85	**		*		*			10	**	*		5	**		*			0061-1L	
2479.50	ccp	Sh/Clst: dsk y brn	10	*	**			*			45	*	**		45	**	*				0062-1L	
2483.00	cut	Sh/Clst: brn gy to dsk y brn	80	**		*		*			10	**	*		10	**	*	*			0094-5L	
2786.00	cut	Sltst : brn gy to brn blk, lt gy to m gy	70	**	**	*		*			10	**	*		20	**	*	*			0156-2L	

Table 8 : Visual Kerogen Composition Data for well NOCS 6507/7-10

Depth unit of measure: m

Depth	Typ	Lithology	L	A	L	S	C	D			I	S	I	M	S	V	C	V	A	Sample					
			P	m	i	p	u	R	A	A	B	N	F	n	i	c	I	T	O		i				
			T	r	D	P	i	s	g	o	r	t	F	D	r	e	t	R	e	D	R				
			%	L	t	l	l	n	e	l	t	L	%	n	s	t	n	o	I	%	n	n	t	V	V
2792.00	cut	Sh/Clst: brn gy to brn blk	45	*	*	**	*	*				25	**	*				30	**	*	*				0098-2L
2858.00	cut	Sh/Clst: brn gy to dsk brn to brn blk	50	*		**	*	*				20	**	*				30	**	*					0159-2L
2945.00	cut	Coal : blk	50	**		*	*	*				20	*					30	**	*					0164-3L
2957.00	cut	Sh/Clst: brn gy to dsk brn to brn blk	60	**	*	*	*	*				10	*					30	**	*					0166-2L
2975.00	cut	Sh/Clst: dsk brn to brn blk	55	**	*	*	*	*				15	*					30	**	*					0169-2L
3041.00	cut	Sh/Clst: brn gy to dsk brn to brn blk	40	**		**	*					20	*					40	**	*					0182-2L
3158.00	cut	Sh/Clst: brn gy to brn blk	30	*		**	*	?				15	**	*				55	**	*	*				0191-2L

Table 9A: Tabulation of carbon isotope data for EOM/EOM - fractions for well NOCS 6507/7-10

Depth unit of measure: m

Depth	Typ	Lithology	EOM	Saturated	Aromatic	NSO	Asphaltenes	Kerogen	Sample
2052.50	swc	Sh/Clst	-	-28.42	-30.45	-30.41	-30.83	-	0002-1
2444.00	cut	Sh/Clst	-	-30.04	-27.45	-27.34	-26.25	-	0091-2
2450.50	ccp	Sh/Clst	-29.87	-32.25	-31.20	-30.20	-28.43	-	0057-1
2459.00	cut	Sh/Clst	-29.05	-30.51	-30.18	-29.83	-28.12	-	0093-5
2474.00	swc	Sh/Clst	-27.71	-28.96	-27.47	-27.21	-26.13	-	0028-1
2476.70	ccp	S/Sst	-28.84	-29.11	-28.35	-28.65	-28.11	-	0059-1
2477.00	ccp	S/Sst	-28.74	-29.13	-28.40	-28.58	-28.49	-	0060-1
2483.00	cut	Sh/Clst	-27.44	-28.79	-27.49	-27.45	-26.52	-	0094-5
2792.00	cut	Sh/Clst	-27.05	-32.78	-28.55	-27.28	-25.77	-	0098-2
2945.00	cut	Coal	-26.99	-30.89	-27.78	-27.04	-25.65	-	0164-3
3158.00	cut	Sh/Clst	-26.54	-30.07	-27.07	-26.73	-25.96	-	0191-2

Table 9B: Tabulation of cv values from carbon isotope data for well NOCS 6507/7-10

Depth unit of measure: m

<u>Depth</u>	<u>Typ</u>	<u>Lithology</u>	<u>Saturated</u>	<u>Aromatic</u>	<u>cv value</u>	<u>Sample</u>
2052.50	swc	Sh/Clst	-28.42	-30.45	-7.35	0002-1
2444.00	cut	Sh/Clst	-30.04	-27.45	3.41	0091-2
2450.50	ccp	Sh/Clst	-32.25	-31.20	0.68	0057-1
2459.00	cut	Sh/Clst	-30.51	-30.18	-1.46	0093-5
2474.00	swc	Sh/Clst	-28.96	-27.47	0.64	0028-1
2476.70	ccp	S/Sst	-29.11	-28.35	-0.94	0059-1
2477.00	ccp	S/Sst	-29.13	-28.40	-1.00	0060-1
2483.00	cut	Sh/Clst	-28.79	-27.49	0.16	0094-5
2792.00	cut	Sh/Clst	-32.78	-28.55	7.90	0098-2
2945.00	cut	Coal	-30.89	-27.78	4.83	0164-3
3158.00	cut	Sh/Clst	-30.07	-27.07	4.33	0191-2

Table 10A: Variation in Triterpane Distribution (peak height) SIR for Well NOCS 6507/7-10

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
2052.50	Sh/Clst	2.30	0.70	0.27	1.02	0.51	-	0.08	0.08	0.07	0.66	0.67	0.47	0.39	58.68	0002-1
2444.00	Sh/Clst	2.76	0.73	0.16	0.74	0.42	0.07	1.03	1.39	0.51	0.02	0.70	0.47	0.55	31.75	0091-2
2450.50	Sh/Clst	3.91	0.80	0.16	0.40	0.28	0.05	0.05	0.13	0.05	0.01	0.64	0.31	0.64	14.71	0057-1
2459.00	Sh/Clst	3.73	0.79	0.21	0.56	0.36	0.06	0.10	0.17	0.09	0.02	0.63	0.38	0.64	16.03	0093-5
2474.00	Sh/Clst	1.00	0.50	0.25	0.58	0.37	0.22	0.39	0.68	0.28	0.19	0.72	0.41	0.50	47.24	0028-1
2476.70	S/Sst	0.92	0.48	0.21	0.53	0.35	0.36	0.38	0.72	0.28	0.23	0.77	0.39	0.40	52.25	0059-1
2477.00	S/Sst	0.83	0.45	0.19	0.55	0.36	0.20	0.28	0.51	0.22	0.10	0.87	0.38	0.20	54.74	0060-1
2483.00	Sh/Clst	1.49	0.60	0.18	0.55	0.36	0.08	0.15	0.28	0.13	0.06	0.74	0.39	0.41	32.28	0094-5
2792.00	Sh/Clst	10.03	0.91	0.17	0.79	0.44	0.14	0.19	0.24	0.16	-	0.64	0.46	0.62	25.01	0098-2
2945.00	Coal	24.48	0.96	0.25	0.57	0.36	0.15	0.16	0.27	0.13	0.01	0.68	0.41	0.58	38.60	0164-3
3158.00	Sh/Clst	20.05	0.95	0.26	0.56	0.36	0.20	0.06	0.10	0.05	-	0.68	0.38	0.53	48.79	0191-2

Schlumberger

Geco-Prakla

GEOLAB NOR

List of Triterpane Distribution Ratios

Ratio 1: B / A

Ratio 2: $B / B+A$

Ratio 3: $B / B+E+F$

Ratio 4: C / E

Ratio 5: $C / C+E$

Ratio 6: X / E

Ratio 7: Z / E

Ratio 8: Z / C

Ratio 9: $Z / Z+E$

Ratio 10: Q / E

Ratio 11: $E / E+F$

Ratio 12: $C+D / C+D+E+F$

Ratio 13: $D+F / C+E$

Ratio 14: $J1 / J1+J2 (\%)$

Table 10B: Variation in Sterane Distribution (peak height) SIR for Well NOCS 6507/7-10

Depth unit of measure: m

Depth	Lithology	Ratio1	Ratio2	Ratio3	Ratio4	Ratio5	Ratio6	Ratio7	Ratio8	Ratio9	Ratio10	Sample
2052.50	Sh/Clst	0.07	7.82	48.21	0.59	0.86	0.17	0.14	0.32	0.08	0.50	0002-1
2444.00	Sh/Clst	0.30	9.71	55.06	0.56	0.86	0.20	0.15	0.38	0.11	0.68	0091-2
2450.50	Sh/Clst	0.12	6.73	57.60	0.39	0.91	0.12	0.08	0.40	0.07	0.73	0057-1
2459.00	Sh/Clst	0.15	7.25	59.92	0.42	0.91	0.14	0.10	0.43	0.08	0.81	0093-5
2474.00	Sh/Clst	0.52	27.06	64.57	0.95	0.77	0.29	0.22	0.48	0.37	1.25	0028-1
2476.70	S/Sst	0.62	41.87	69.83	1.02	0.73	0.20	0.14	0.54	0.72	1.99	0059-1
2477.00	S/Sst	0.68	40.50	72.90	0.89	0.77	0.18	0.13	0.57	0.68	2.26	0060-1
2483.00	Sh/Clst	0.44	14.84	60.65	0.84	0.84	0.27	0.21	0.44	0.17	0.91	0094-5
2792.00	Sh/Clst	0.50	9.57	57.42	0.19	0.88	0.04	0.03	0.40	0.11	0.75	0098-2
2945.00	Coal	0.57	8.58	65.07	0.12	0.92	0.06	0.05	0.48	0.09	1.02	0164-3
3158.00	Sh/Clst	0.62	12.64	59.15	0.17	0.85	0.07	0.05	0.42	0.14	0.83	0191-2

Schlumberger

Geco-Prakla

GEOLAB NOR

List of Sterane Distribution Ratios

Ratio 1: $a / a+j$

Ratio 2: $q / q+t$ (%)

Ratio 3: $2*(r+s) / (q+t + 2*(r+s))$ (%)

Ratio 4: $a+b+c+d / h+k+l+n$

Ratio 5: $r+s / r+s+q$

Ratio 6: $u+v / u+v+q+r+s+t$

Ratio 7: $u+v / u+v+i+m+n+q+r+s+t$

Ratio 8: $r+s / q+r+s+t$

Ratio 9: q / t

Ratio 10: $r+s / t$

Table 10C: Variation in Triaromatic Sterane Distribution (peak height) for Well NOCS 6507/7-10

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>
2052.50	Sh/Clst	-	-	-	-	-	0002-1
2444.00	Sh/Clst	-	-	-	-	-	0091-2
2450.50	Sh/Clst	0.23	0.20	0.08	0.09	0.11	0057-1
2459.00	Sh/Clst	0.40	0.27	0.13	0.17	0.20	0093-5
2474.00	Sh/Clst	0.64	0.67	0.39	0.35	0.45	0028-1
2476.70	S/Sst	0.29	0.34	0.15	0.12	0.19	0059-1
2477.00	S/Sst	0.28	0.29	0.14	0.12	0.19	0060-1
2483.00	Sh/Clst	0.61	0.63	0.37	0.34	0.45	0094-5
2792.00	Sh/Clst	-	0.40	0.15	-	-	0098-2
2945.00	Coal	-	0.24	0.08	-	-	0164-3
3158.00	Sh/Clst	0.20	0.20	0.13	0.10	0.23	0191-2

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

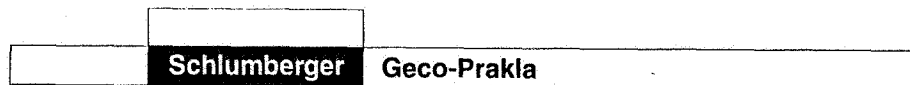


Table 10D: Variation in Monoaromatic Sterane Distribution (peak height) for Well NOCS 6507/7-10

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>
2052.50	Sh/Clst	0.23	0.15	0.11	0.07	0002-1
2444.00	Sh/Clst	0.05	0.03	0.03	0.03	0091-2
2450.50	Sh/Clst	0.06	0.12	0.03	0.04	0057-1
2459.00	Sh/Clst	0.07	0.04	0.03	0.02	0093-5
2474.00	Sh/Clst	0.34	0.19	0.19	0.12	0028-1
2476.70	S/Sst	0.22	0.16	0.13	0.11	0059-1
2477.00	S/Sst	0.25	0.17	0.15	0.11	0060-1
2483.00	Sh/Clst	0.24	0.11	0.11	0.07	0094-5
2792.00	Sh/Clst	0.22	0.13	0.08	0.05	0098-2
2945.00	Coal	0.26	0.17	0.08	0.06	0164-3
3158.00	Sh/Clst	0.19	0.06	0.06	0.03	0191-2

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

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



Table 10E: Aromatisation of Steranes (peak height) for Well NOCS 6507/7-10

Depth unit of measure: m

<u>Depth</u>	<u>Lithology</u>	<u>Ratio1</u>	<u>Ratio2</u>	<u>Sample</u>
2052.50	Sh/Clst	0.22	0.81	0002-1
2444.00	Sh/Clst	1.00	-	0091-2
2450.50	Sh/Clst	0.92	0.13	0057-1
2459.00	Sh/Clst	0.92	0.12	0093-5
2474.00	Sh/Clst	0.34	0.69	0028-1
2476.70	S/Sst	0.48	0.76	0059-1
2477.00	S/Sst	0.49	0.74	0060-1
2483.00	Sh/Clst	0.55	0.54	0094-5
2792.00	Sh/Clst	0.79	0.28	0098-2
2945.00	Coal	0.72	0.48	0164-3
3158.00	Sh/Clst	0.62	0.66	0191-2

Ratio1: $\frac{C1+D1+E1+F1+G1+H1+I1}{C1+D1+E1+F1+G1+H1+I1 + c1+d1+e1+f1+g1}$ Ratio2: $g1 / g1 + I1$

Table 10F: Raw triterpane data (peak height) m/z 191 SIR for Well NOCS 6507/7-10

Depth unit of measure: m

Depth	Lithology	P	Q	R	S	T	A	B	Z	C	Sample
		X	D	E	F	G	H	I	J1	J2	
		K1	K2	L1	L2	M1	M2				
2052.50	Sh/Clst	4617277.0 0.0 1338703.0	3313094.0 1478171.0 1027716.0	1648946.0 5008661.0 747668.6	1044280.0 2496737.0 510050.4	878184.5 3458071.0 608963.2	1204700.0 2820928.0 435656.6	2772862.0 566707.6	398959.4 2173051.0	5131352.0 1530198.0	0002-1
2444.00	Sh/Clst	247005.5 355586.6 218058.5	112907.8 2549474.0 376758.8	103898.0 4920639.0 137278.7	196064.7 2140161.0 199836.6	44490.4 1391027.0 87344.1	478408.0 4500841.0 151264.4	1319938.0 1549981.0	5068112.0 403188.8	3635736.0 866707.9	0091-2
2450.50	Sh/Clst	81689.9 252895.1 200888.5	63224.0 1741995.0 1166752.0	66622.1 5445236.0 79054.1	155597.4 3123286.0 386695.5	60397.8 992870.4 135554.2	429920.4 4567457.0 860165.2	1683138.0 1880921.0	271919.8 253348.2	2157034.0 1468360.0	0057-1
2459.00	Sh/Clst	130134.4 345015.4 280487.0	100967.1 2292514.0 1404659.0	98873.8 5525440.0 115922.7	242429.3 3219229.0 456847.4	89291.8 1523858.0 159085.2	635020.7 5099267.0 915935.2	2371450.0 2551345.0	531526.0 369597.6	3086132.0 1935582.0	0093-5
2474.00	Sh/Clst	1991854.0 1800853.0 2780963.0	1497530.0 3188986.0 2777741.0	653360.5 8005108.0 2031630.0	2262656.0 3150047.0 1922062.0	522576.8 4280427.0 1481108.0	3758327.0 4698448.0 1765161.0	3743909.0 2349974.0	3150104.0 3489135.0	4658716.0 3897553.0	0028-1

Table 10F: Raw triterpane data (peak height) m/z 191 SIR for Well NOCS 6507/7-10

Depth unit of measure: m

Depth	Lithology	P	Q	R	S	T	A	B	Z	C	Sample
		X	D	E	F	G	H	I	J1	J2	
		K1	K2	L1	L2	M1	M2				
2476.70	S/Sst	2099552.0	2014562.0	1108576.0	2202293.0	963028.0	3413260.0	3131822.0	3388897.0	4677034.0	0059-1
		3170283.0	2766317.0	8843681.0	2699939.0	4308325.0	3831511.0	1838676.0	4430787.0	4049332.0	
		4372658.0	3799982.0	4061820.0	3242605.0	3730819.0	3220417.0				
2477.00	S/Sst	290645.0	264018.5	126187.6	275154.1	110390.0	844780.6	697469.0	718874.7	1400507.0	0060-1
		517176.1	423832.0	2540975.0	375472.8	1045661.0	823325.1	186759.1	1098472.0	908397.8	
		998359.0	696760.9	672517.1	464660.5	599461.5	366673.9				
2483.00	Sh/Clst	336685.4	220195.9	92953.1	375584.5	72307.0	771516.2	1152819.0	607201.6	2169697.0	0094-5
		315151.5	1144719.0	3933484.0	1355252.0	1244418.0	3283458.0	1032948.0	600983.8	1260689.0	
		409142.2	765997.9	294603.8	511906.2	300540.6	576435.5				
2792.00	Sh/Clst	20161.3	25174.6	17328.8	118627.9	8175.1	184553.2	1851751.0	1054794.0	4412458.0	0098-2
		801486.2	3072369.0	5602806.0	3160337.0	2472797.0	4420139.0	2049696.0	464202.2	1391518.0	
		142329.0	444999.3	118046.9	306531.8	38943.8	104089.3				
2945.00	Coal	61981.6	120660.5	0.0	446543.4	40473.0	205921.8	5040405.0	1622695.0	5946395.0	0164-3
		1582658.0	4596767.0	10412200.0	4905761.0	5268701.0	5269922.0	3924413.0	2484311.0	3952171.0	
		512257.8	1123591.0	277071.2	638656.6	96956.6	138167.7				

Schlumberger

Geco-Prakla

GEOLAB NOR

Table 10F: Raw triterpane data (peak height) m/z 191 SIR for Well NOCS 6507/7-10

Depth unit of measure: m

Depth	Lithology	P	Q	R	S	T	A	B	Z	C	Sample
		X	D	E	F	G	H	I	J1	J2	
		K1	K2	L1	L2	M1	M2				
3158.00	Sh/Clst	62017.3	31228.8	0.0	276434.5	50572.2	215104.6	4312089.0	461551.4	4577452.0	0191-2
		1685263.0	2794492.0	8227797.0	3944864.0	4400820.0	3700519.0	2315135.0	1866067.0	1958620.0	
		449552.2	526244.2	261352.2	334211.0	86736.6	108833.6				

Depth unit of measure: m

Depth	Lithology	u	v	a	b	c	d	e	f	g	Sample
		h	i	j	k	l	m	n	o		
		p	q	r	s	t					
2052.50	Sh/Clst	1899397.0	977669.4	685543.0	416499.5	204916.5	1560877.0	369277.6	230898.2	4156904.0	0002-1
		837728.6	507322.4	8816209.0	730691.8	494716.8	428667.4	2774401.0	380633.6		
		6186300.0	759979.4	3831713.0	691555.7	8959972.0					
2444.00	Sh/Clst	515341.8	118551.2	350325.0	294903.6	198203.3	154539.7	481402.7	453502.0	449591.4	0091-2
		518657.3	319543.0	835135.0	430351.0	171160.1	152186.6	664520.1	354416.5		
		979605.8	152763.3	650595.0	312861.3	1420118.0					
2450.50	Sh/Clst	403466.2	126780.1	348562.4	286798.6	218448.6	157716.4	194652.1	213238.1	1225198.0	0057-1
		826365.8	564503.4	2634018.0	448929.4	165903.6	325729.5	1131510.0	670737.8		
		1622247.0	163305.5	956809.0	691626.2	2263444.0					
2459.00	Sh/Clst	594453.9	186712.0	482775.8	406275.2	286842.9	221899.1	264394.0	288671.3	1216650.0	0093-5
		1045985.0	761508.4	2755347.0	581070.3	250800.6	490645.6	1414708.0	855177.7		
		1813135.0	192906.0	1140012.0	850377.2	2469303.0					
2474.00	Sh/Clst	2737519.0	1503540.0	3408706.0	2542100.0	1364910.0	1291628.0	1896387.0	1294883.0	1544704.0	0028-1
		3475662.0	2274651.0	3109888.0	2617987.0	1239060.0	843042.2	1694503.0	2002022.0		
		1820189.0	1471294.0	2970025.0	1985522.0	3966742.0					

Depth unit of measure: m

Depth	Lithology	u	v	a	b	c	d	e	f	g	Sample
		h	i	j	k	l	m	n	o		
		p	q	r	s	t					
2476.70	S/Sst	2230073.0	1244783.0	4540853.0	3655150.0	2008501.0	2110407.0	3377832.0	2118888.0	2292951.0	0059-1
		4222844.0	3339253.0	2786476.0	3458839.0	1782506.0	1483639.0	2607850.0	3202512.0		
		1883695.0	2717000.0	4002838.0	3505713.0	3772666.0					
2477.00	S/Sst	293628.6	146868.9	777776.2	508910.0	220380.3	243901.0	442083.1	263332.3	285303.7	0060-1
		835549.9	480891.0	372513.0	537100.8	226977.0	188579.7	367971.6	474467.6		
		216816.6	345713.1	645619.7	502366.2	507944.6					
2483.00	Sh/Clst	555088.4	244009.0	527178.8	394996.6	212003.1	176537.3	243802.8	175570.8	282147.3	0094-5
		610852.9	332661.8	661743.0	404454.2	168257.4	148615.4	373054.8	328281.5		
		397260.3	180761.3	578710.2	359847.2	1036916.0					
2792.00	Sh/Clst	39028.8	8810.6	85555.8	64976.0	37571.8	36403.8	64436.2	57776.4	102383.0	0098-2
		454908.2	74928.7	84504.6	351879.2	149604.0	32902.7	200652.0	57724.1		
		81054.4	74128.2	354403.5	167663.9	700222.9					
2945.00	Coal	162478.1	30064.1	128460.4	89427.9	60168.1	67576.2	215598.4	184919.4	196205.7	0164-3
		1252664.0	190931.9	94950.0	894848.1	456171.2	111025.0	317743.8	192527.1		
		196626.1	136768.2	982758.7	501326.7	1456882.0					

Depth unit of measure: m

Depth	Lithology	u	v	a	b	c	d	e	f	g	Sample
		h	i	j	k	l	m	n	o		
		p	q	r	s	t					
3158.00	Sh/Clst	119903.8	29796.7	166406.0	108811.2	53329.3	66449.7	169080.9	127887.4	148968.1	0191-2
		1038894.0	172944.1	102430.3	659830.1	345753.2	100002.9	235018.1	163172.6		
		133913.6	154871.6	570896.8	316362.3	1070668.0					



Table 10H: Raw triaromatic sterane data (peak height) m/z 231 for Well NOCS 6507/7-10

Depth unit of measure: m

Depth	Lithology	a1	b1	c1	d1	e1	f1	g1	Sample
2052.50	Sh/Clst	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0002-1
2444.00	Sh/Clst	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0091-2
2450.50	Sh/Clst	15579.6	13098.6	46326.4	125774.5	41818.9	56640.5	52117.5	0057-1
2459.00	Sh/Clst	10376.5	5630.4	15780.5	42503.0	15237.1	20302.8	15395.8	0093-5
2474.00	Sh/Clst	72026.8	82732.1	23306.2	89793.1	40314.7	52709.9	40069.4	0028-1
2476.70	S/Sst	27531.9	34855.0	30919.7	116224.0	71253.8	65053.4	67845.7	0059-1
2477.00	S/Sst	22855.7	23500.8	25627.3	100087.3	59900.5	52737.4	58389.9	0060-1
2483.00	Sh/Clst	292195.3	319318.8	99296.8	362566.9	173939.5	200737.4	189491.9	0094-5
2792.00	Sh/Clst	0.0	18866.1	8082.8	30041.2	28248.5	15427.5	27968.8	0098-2
2945.00	Coal	0.0	11432.8	8517.7	33610.8	36121.8	18295.7	35992.7	0164-3
3158.00	Sh/Clst	112738.9	113970.1	99407.9	373917.0	369974.7	225373.9	464757.3	0191-2

Depth unit of measure: m

Depth	Lithology	A1	B1	C1	D1	E1	F1	G1	H1	I1	Sample
2052.50	Sh/Clst	4165.9	2520.4	9481.2	7939.7	14280.7	3210.8	19087.3	25446.7	12546.7	0002-1
2444.00	Sh/Clst	5838.8	3597.8	10135.5	9613.2	100991.8	9985.8	98162.8	67532.3	14415.4	0091-2
2450.50	Sh/Clst	50816.3	97517.2	249481.8	275305.8	734177.8	62829.0	1159466.0	962394.2	334042.8	0057-1
2459.00	Sh/Clst	16899.3	8751.8	76743.0	87524.4	225298.1	24096.6	395008.8	337121.0	110511.7	0093-5
2474.00	Sh/Clst	12797.6	5660.3	12799.7	11474.3	24921.1	4435.1	28576.4	29341.5	18088.9	0028-1
2476.70	S/Sst	22559.8	15827.5	38936.5	37481.3	81965.5	15293.0	72237.4	57513.9	21814.4	0059-1
2477.00	S/Sst	22020.8	13668.8	36292.7	31810.9	66577.3	13214.1	62365.3	50015.4	20869.3	0060-1
2483.00	Sh/Clst	68723.5	26766.6	107157.0	98037.1	219487.4	30757.7	311983.0	307189.1	161462.0	0094-5
2792.00	Sh/Clst	13757.6	7396.5	18738.5	17846.1	49089.5	10910.1	118945.8	121127.0	71256.7	0098-2
2945.00	Coal	14705.4	8585.5	10340.8	8602.9	41152.6	18819.3	123238.9	106539.8	39201.7	0164-3
3158.00	Sh/Clst	70124.6	17963.7	76874.7	72407.0	290252.5	161337.1	839825.0	775767.3	236000.1	0191-2

Schlumberger

Geco-Prakla

GEOLAB NOR