

GEOCHEMICAL ANALYSIS REPORT  
WELL NOCS 33/6-1

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## INTRODUCTION

Samples were collected between 1890 m and 3900.5 m from the Norwegian Petroleum Directorate in Stavanger. A total of 110 samples was collected, washed (only the cuttings samples) and described. The analysed section of the well is from 1920 m to 3900.5 m, with a sampling interval of 6 to 30 m for the cuttings samples and a variable interval for the core chip samples. A careful selection of suitable samples was made for screening analysis (i.e. TOC and Rock-Eval analysis). Sixty samples were selected for these analyses, and from the data obtained samples were chosen for follow-up analyses. These were:

Thermal extraction - pyrolysis - gas chromatography	28 samples
Extraction, MPLC fractionation, saturated and aromatic hydrocarbon gas chromatography	6 samples
Vitrinite reflectance microscopy	16 samples
Visual kerogen analysis	8 samples
Isotope analysis of C15+ fractions	3 samples
Gas chromatography - mass spectrometry	4 samples

Tables listing in detail the samples analysed and the results are located in Appendix 1.

Table 1 : Lithology description for well NOCS 33/6-1

Depth unit of measure: m

Depth	Type	Grp	Frm	Age	Trb	Sample
Int	Cvd	TOC%	%	Lithology description		
1890.00						0069
				100 Sh/Clst: lt ol gy to lt gy, slt		0069-1L
				tr Ca : brn gy		0069-2L
				tr S/Sst : w		0069-3L
1920.00						0070
	0.32			50 Marl : lt gy to m gy		0070-4L
				45 Sh/Clst: lt ol gy, slt		0070-1L
				5 Ca : w to lt gy		0070-6L
				tr Ca : brn gy		0070-2L
				tr S/Sst : w		0070-3L
				tr Sh/Clst: gy red		0070-5L
1950.00						0071
				40 Marl : lt gy to m gy		0071-3L
				30 Sh/Clst: lt ol gy, slt		0071-1L
				30 Cont : dd		0071-2L
				tr Sh/Clst: gy red		0071-4L
				tr Ca : w to lt gy		0071-5L
1980.00						0072
				35 Sh/Clst: lt ol gy, slt		0072-1L
				35 Cont : dd		0072-2L
				30 Marl : lt gy to m gy		0072-3L
				tr Sh/Clst: gy red		0072-4L
				tr Ca : w to lt gy		0072-5L

Table 1 : Lithology description for well NOCS 33/6-1

Depth unit of measure: m

Depth	Type	Grp	Frm	Age	Trb	Sample
Int	Cvd	TOC%	%	Lithology description		
2010.00						0073
				90 Sh/Clst: lt ol gy		0073-1L
				10 S/Sst : lt gy, f, l		0073-4L
				tr Cont : prp		0073-2L
				tr Marl : lt gy to m gy		0073-3L
				tr Ca : lt or		0073-5L
				tr Ca : m brn, dol		0073-6L
2040.00						0074
	0.58			55 Marl : lt gy to m gy, slt, mic		0074-3L
				30 S/Sst : lt gy, f, l		0074-4L
				15 Sh/Clst: lt ol gy		0074-1L
				tr Cont : prp		0074-2L
				tr Ca : m brn, dol		0074-5L
2070.00						0075
				45 Other : glauc, evap, l		0075-6L
				30 Sh/Clst: lt ol gy		0075-1L
				20 S/Sst : lt gy, f, l		0075-4L
				5 Marl : lt gy to m gy, slt, mic		0075-3L
				tr Cont : prp		0075-2L
				tr Ca : m brn, dol		0075-5L
2100.00						0076
				35 Other : glauc, evap, l		0076-6L
				30 S/Sst : lt gy, f, l		0076-4L
				20 Sh/Clst: lt ol gy		0076-1L
				15 Marl : lt gy to m gy, slt, mic		0076-3L
				tr Cont : prp		0076-2L
				tr Ca : m brn, dol		0076-5L

Table 1 : Lithology description for well NOCS 33/6-1

Depth unit of measure: m

Depth	Type	Grp	Frm	Age	Trb	Sample
Int	Cvd	TOC%	%	Lithology description		
2130.00						0077
				40 Sh/Clst: lt ol gy		0077-1L
				30 Marl : lt gy to m gy, slt, mic		0077-3L
				25 Other : glauc, evap, l		0077-6L
				5 S/Sst : lt gy, f, l		0077-4L
				tr Cont : prp		0077-2L
				tr Ca : m brn, dol		0077-5L
2160.00						0078
	0.17			40 S/Sst : lt gy, f, l		0078-4L
				30 Sh/Clst: lt ol gy		0078-1L
				10 Marl : lt gy to m gy, slt, mic		0078-3L
				10 Ca : m brn, dol		0078-5L
				5 Cont : prp		0078-2L
				5 Other : glauc, evap, l		0078-6L
2190.00						0079
				90 S/Sst : lt gy, glauc, f, l		0079-4L
				5 Marl : lt gy to m gy, slt, mic		0079-3L
				5 Ca : lt brn gy		0079-6L
				tr Sh/Clst: lt ol gy		0079-1L
				tr Cont : prp		0079-2L
				tr Ca : m brn, dol		0079-5L
2220.00						0080
				60 S/Sst : lt gy, glauc, f, l		0080-4L
				20 Marl : lt gy to m gy, slt, mic		0080-3L
				10 Ca : m brn, dol		0080-5L
				5 Ca : lt brn gy		0080-6L
				5 Other : pyr		0080-7L
				tr Sh/Clst: lt ol gy		0080-1L
				tr Cont : prp		0080-2L

Table 1 : Lithology description for well NOCS 33/6-1

Depth unit of measure: m

Depth	Type	Grp	Frm	Age	Trb	Sample	
Int Cvd	TOC%	%	Lithology description				
2250.00						0081	
			35	Sh/Clst:	lt ol gy	0081-1L	
			25	Marl	: lt gy to m gy, slt, mic	0081-3L	
			25	Ca	: brn gy to drk gy, dol	0081-5L	
			10	S/Sst	: lt gy, glauc, f, l	0081-4L	
			5	Other	: pyr	0081-6L	
			tr	Cont	: prp	0081-2L	
2280.00						0082	
	0.59		55	Marl	: lt gy to m gy, slt, mic	0082-3L	
			25	Ca	: brn gy to m brn, dol	0082-5L	
			20	Cont	: dd	0082-2L	
			tr	Sh/Clst:	lt ol gy	0082-1L	
			tr	S/Sst	: lt gy, glauc, f, l	0082-4L	
			tr	Other	: pyr	0082-6L	
2310.00						0083	
			70	Marl	: lt gy to m gy, slt, s, mic	0083-3L	
			30	Ca	: brn gy to m brn, dol	0083-5L	
			tr	Sh/Clst:	lt ol gy	0083-1L	
			tr	Cont	: dd	0083-2L	
			tr	S/Sst	: lt gy, glauc, f, l	0083-4L	
			tr	Other	: pyr	0083-6L	
2340.00						0084	
			90	Marl	: lt gy to m gy, slt, s, mic	0084-2L	
			10	Ca	: brn gy to m brn, dol	0084-4L	
			tr	Cont	: prp	0084-1L	
			tr	S/Sst	: lt gy, glauc, f, l	0084-3L	
			tr	Other	: pyr	0084-5L	

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Depth unit of measure: m

Depth	Type	Grp	Frm	Age	Trb	Sample
Int	Cvd	TOC%	%	Lithology description		
2370.00						0085
				60 S/Sst : lt gy, calc, glauc, l		0085-3L
				20 Ca : brn gy to m brn, dol		0085-4L
				15 Sh/Clst: lt ol gy		0085-6L
				5 Marl : lt gy to m gy, slt, s, mic		0085-2L
				tr Cont : prp		0085-1L
				tr Other : pyr		0085-5L
2400.00						0086
				90 S/Sst : lt gy, calc, glauc, cem, l		0086-3L
				10 Ca : brn gy to m brn, dol		0086-4L
				tr Cont : prp		0086-1L
				tr Marl : lt gy to m gy, slt, s, mic		0086-2L
				tr Other : pyr		0086-5L
				tr Sh/Clst: lt ol gy		0086-6L
2430.00						0087
				85 S/Sst : lt gy, calc, cem		0087-3L
				15 Ca : brn gy to m brn, dol		0087-4L
				tr Cont : prp		0087-1L
				tr Marl : lt gy to m gy, slt, s, mic		0087-2L
				tr Other : pyr		0087-5L
2460.00						0088
	0.17			90 S/Sst : lt gy, calc, cem, l		0088-3L
				10 Ca : brn gy to m brn, dol		0088-4L
				tr Cont : prp		0088-1L
				tr Marl : lt gy to m gy, slt, s, mic		0088-2L
				tr Other : pyr		0088-5L

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Depth unit of measure: m

Depth	Type	Grp	Frm	Age	Trb	Sample
Int	Cvd	TOC%	%	Lithology description		
2490.00						0089
				90 S/Sst : lt gy, calc, cem, l		0089-3L
				10 Ca : brn gy to m brn, dol		0089-4L
				tr Cont : prp		0089-1L
				tr Marl : lt gy to m gy, slt, s, mic		0089-2L
				tr Other : pyr		0089-5L
2520.00						0090
	0.18			85 S/Sst : lt gy, calc, cem, l		0090-3L
				15 Ca : brn gy to m brn, dol		0090-4L
				tr Cont : prp		0090-1L
				tr Marl : lt gy to m gy, slt, s, mic		0090-2L
				tr Other : pyr		0090-5L
2550.00						0091
				95 S/Sst : lt gy, calc, cem		0091-3L
				5 Ca : brn gy to m brn, dol		0091-4L
				tr Cont : prp		0091-1L
				tr Marl : lt gy to m gy, slt, s, mic		0091-2L
				tr Other : pyr		0091-5L
2580.00						0092
	0.07			95 S/Sst : lt gy, calc, cem		0092-3L
				5 Ca : brn gy to m brn, dol		0092-4L
				tr Cont : Coal-ad, prp		0092-1L
				tr Marl : lt gy to m gy, slt, s, mic		0092-2L
				tr Other : pyr		0092-5L
2610.00						0093
				100 S/Sst : lt gy, calc, cem		0093-3L
				tr Cont : prp		0093-1L
				tr Marl : lt gy to m gy, slt, s, mic		0093-2L
				tr Ca : brn gy to m brn, dol		0093-4L
				tr Other : pyr		0093-5L



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Depth unit of measure: m

Depth	Type	Grp	Frm	Age	Trb	Sample
Int	Cvd	TOC%	%	Lithology description		
2640.00						0094
	0.11		90	S/Sst : lt gy, calc, cem		0094-3L
			10	Ca : brn gy to m brn, dol		0094-4L
			tr	Cont : prp		0094-1L
			tr	Marl : lt gy to m gy, slt, s, mic		0094-2L
			tr	Other : pyr		0094-5L
2670.00						0095
			90	S/Sst : lt gy, calc, cem		0095-3L
			10	Ca : brn gy to m brn, dol		0095-4L
			tr	Cont : prp		0095-1L
			tr	Marl : lt gy to m gy, slt, s, mic		0095-2L
			tr	Other : pyr		0095-5L
2700.00						0096
			95	Sh/Clst: m gy, calc		0096-2L
			5	S/Sst : lt gy, calc, cem		0096-3L
			tr	Cont : prp		0096-1L
			tr	Ca : brn gy to m brn, dol		0096-4L
			tr	Other : pyr		0096-5L
2730.00						0097
	0.23		75	S/Sst : lt gy, calc, l		0097-3L
			15	Sh/Clst: m gy, calc		0097-2L
			10	Ca : brn gy to m brn, dol		0097-4L
			tr	Cont : prp		0097-1L
			tr	Other : pyr		0097-5L
2760.00						0098
			80	Sh/Clst: m gy, lt ol gy, calc, slt		0098-2L
			20	S/Sst : lt gy, calc, l		0098-3L
			tr	Cont : prp		0098-1L
			tr	Ca : brn gy to m brn, dol		0098-4L
			tr	Other : pyr		0098-5L

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Depth unit of measure: m

Depth	Type	Grp	Frm	Age	Trb	Sample
Int	Cvd	TOC%	%	Lithology description		
2790.00						0099
				45 Sh/Clst: m gy, lt ol gy, calc, slt		0099-2L
				30 S/Sst : lt gy, calc, l		0099-3L
				25 Ca : brn gy to m brn, dol		0099-4L
				tr Cont : prp		0099-1L
				tr Other : pyr		0099-5L
2820.00						0100
	0.29			70 S/Sst : lt gy, calc, cem, l		0100-3L
				20 Sh/Clst: m gy, lt ol gy, calc, slt		0100-2L
				10 Ca : brn gy to m brn, dol		0100-4L
				tr Cont : prp		0100-1L
				tr Other : pyr		0100-5L
2850.00						0101
				80 S/Sst : lt gy, calc, cem, l		0101-3L
				15 Sh/Clst: m gy, lt ol gy, calc, slt		0101-2L
				5 Ca : brn gy to m brn, dol		0101-4L
				tr Cont : prp		0101-1L
				tr Other : pyr		0101-5L
2880.00						0102
				80 S/Sst : lt gy, calc, l		0102-3L
				10 Sh/Clst: m gy, lt ol gy, calc, slt		0102-2L
				10 Ca : brn gy to m brn, dol		0102-4L
				tr Cont : prp		0102-1L
				tr Other : pyr		0102-5L
2910.00						0103
	0.10			90 S/Sst : lt gy to m gy, calc, slt, cem, l		0103-3L
				10 Ca : brn gy to m brn, dol		0103-4L
				tr Cont : prp		0103-1L
				tr Sh/Clst: m gy, lt ol gy, calc, slt		0103-2L
				tr Other : pyr		0103-5L

Table 1 : Lithology description for well NOCS 33/6-1

Depth unit of measure: m

Depth	Type	Grp	Frm	Age	Trb	Sample
Int	Cvd	TOC%	%	Lithology description		
2940.00						0104
				60 S/Sst : lt gy to m gy, calc, slt, cem, 1		0104-3L
				30 Sh/Clst: m gy, lt ol gy, calc, slt		0104-2L
				10 Ca : brn gy to m brn, dol		0104-4L
				tr Cont : prp		0104-1L
				tr Other : pyr		0104-5L
2970.00						0105
	0.79			80 Sh/Clst: m gy, calc		0105-2L
				15 S/Sst : lt gy to m gy, calc, slt, cem, 1		0105-3L
				5 Ca : brn gy to m brn, dol		0105-4L
				tr Cont : prp		0105-1L
3000.00						0106
				80 Sh/Clst: m gy, calc		0106-2L
				15 Coal : blk		0106-5L
				5 S/Sst : lt gy to m gy, calc, slt, cem, 1		0106-3L
				tr Cont : prp		0106-1L
				tr Ca : brn gy to m brn, dol		0106-4L
3030.00						0107
	0.29			85 S/Sst : lt gy to m gy, calc, slt, 1		0107-3L
				10 Ca : brn gy to m brn, dol		0107-4L
				5 Sh/Clst: m gy, calc		0107-2L
				tr Cont : prp		0107-1L
				tr Coal : blk		0107-5L
3060.00						0108
				90 Sh/Clst: m gy, calc		0108-2L
				5 S/Sst : lt gy to m gy, calc, slt, 1		0108-3L
				5 Ca : brn gy to m brn, dol		0108-4L
				tr Cont : prp		0108-1L
				tr Coal : blk		0108-5L

Table 1 : Lithology description for well NOCS 33/6-1

Depth unit of measure: m

Depth	Type	Grp	Frm	Age	Trb	Sample	
Int Cvd	TOC%	%	Lithology description				
3090.00						0109	
	0.83	85	Sh/Clst: m gy, calc			0109-2L	
		15	Cont : dd			0109-1L	
		tr	S/Sst : lt gy to m gy, calc, slt, l			0109-3L	
		tr	Ca : brn gy to m brn, dol			0109-4L	
		tr	Coal : blk			0109-5L	
3115.00						0110	
		85	Sh/Clst: m gy, calc			0110-2L	
		10	Cont : dd			0110-1L	
		5	S/Sst : lt gy to m gy, calc, slt, l			0110-3L	
		tr	Ca : brn gy to m brn, dol			0110-4L	
		tr	Coal : blk			0110-5L	
3150.00						0111	
	0.43	85	Sh/Clst: m gy, calc, slt, mic			0111-2L	
		15	S/Sst : lt gy to m gy, calc, slt, l			0111-3L	
		tr	Cont : prp			0111-1L	
		tr	Ca : brn gy to m brn, dol			0111-4L	
3180.00						0112	
		100	Sh/Clst: m gy, calc, slt, mic			0112-2L	
		tr	Cont : prp			0112-1L	
		tr	S/Sst : lt gy to m gy, calc, slt, l			0112-3L	
		tr	Ca : brn gy to m brn, dol			0112-4L	
3210.00						0113	
		80	Sh/Clst: m gy, calc, slt, mic			0113-2L	
		15	S/Sst : lt gy to m gy, calc, slt, l			0113-3L	
		5	Ca : brn gy to m brn, dol			0113-4L	
		tr	Cont : prp			0113-1L	

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Depth unit of measure: m

Depth	Type	Grp	Frm	Age	Trb	Sample
Int	Cvd	TOC%	%	Lithology description		
3240.00						0114
	1.04	40	Sh/Clst:	m gy, calc, slt, mic		0114-2L
		30	S/Sst	: lt gy to m gy, calc, slt, l		0114-3L
		30	Ca	: brn gy to m brn, dol		0114-4L
			tr Cont	: prp		0114-1L
3535.00						0115
	0.93	85	Sh/Clst:	drk gy		0115-2L
		15	Ca	: w to gy pi, chk		0115-4L
			tr Cont	: prp		0115-1L
			tr S/Sst	: lt gy to m gy, calc, cem		0115-3L
			tr Sltst	: dsk y brn, s		0115-5L
3540.00						0116
	0.54	95	Sh/Clst:	drk gy		0116-2L
		5	S/Sst	: w, calc, cem, l		0116-3L
			tr Cont	: prp		0116-1L
			tr Ca	: w to gy pi, chk		0116-4L
			tr Sltst	: dsk y brn, s		0116-5L
			tr Other	: evap		0116-6L
3545.00						0117
	0.49	95	Sh/Clst:	drk gy, fis		0117-2L
		5	S/Sst	: w, calc, cem, l		0117-3L
			tr Cont	: prp		0117-1L
			tr Ca	: w to gy pi, chk		0117-4L
			tr Sltst	: dsk y brn, s		0117-5L
			tr Other	: evap		0117-6L

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Depth unit of measure: m

Depth	Type	Grp	Frm	Age	Trb	Sample
Int	Cvd	TOC%	%	Lithology description		
3553.00						0118
			100	Cont : cem, dd		0118-1L
				tr Sh/Clst: drk gy, fis		0118-2L
				tr S/Sst : w, calc, cem, l		0118-3L
				tr Ca : w to gy pi, chk		0118-4L
				tr Other : evap		0118-5L
3559.00						0119
			100	Cont : cem, dd		0119-1L
				tr Sh/Clst: drk gy, fis		0119-2L
				tr S/Sst : w, calc, cem, l		0119-3L
				tr Ca : w to gy pi, chk		0119-4L
				tr Other : evap		0119-5L
3565.00						0120
			65	Cont : cem, dd, evap		0120-1L
	3.12		20	Sltst : dsk brn to dsk y brn, mic		0120-4L
			15	S/Sst : w, calc, cem, l		0120-3L
				tr Sh/Clst: drk gy, fis		0120-2L
3571.00						0121
			50	Cont : cem, dd, evap		0121-1L
	3.70		30	Sltst : dsk brn to dsk y brn to brn blk, mic		0121-4L
			20	S/Sst : w, calc, l		0121-3L
				tr Sh/Clst: drk gy, fis		0121-2L
3577.00						0122
			3.73	100 Sh/Clst: dsk brn to dsk y brn to brn blk, slt		0122-3L
				tr Cont : cem, dd, evap		0122-1L
				tr S/Sst : w, calc, l		0122-2L

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Depth unit of measure: m

Depth	Type	Grp	Frm	Age	Trb	Sample
Int	Cvd	TOC%	%	Lithology description		
3583.00						0123
	2.30	100	Sh/Clst:	dsk brn to dsk y brn to brn blk, slt, mic		0123-3L
			tr Cont	: cem, dd, evap		0123-1L
			tr S/Sst	: w, calc, l		0123-2L
3589.00						0124
	2.78	80	Sh/Clst:	gy brn to dsk y brn to brn blk, slt, mic		0124-3L
			10 Cont	: cem, dd, evap		0124-1L
			10 Ca	: m brn, dol		0124-5L
			tr S/Sst	: w, calc, l		0124-2L
			tr Other	: pyr		0124-4L
3595.00						0125
	3.09	100	Sh/Clst:	gy brn to dsk y brn to brn blk, slt, mic		0125-3L
			tr Cont	: cem, dd, evap		0125-1L
			tr S/Sst	: w, calc, l		0125-2L
			tr Other	: pyr		0125-4L
			tr Ca	: m brn, dol		0125-5L
3601.00						0126
	2.88	90	Sh/Clst:	gy brn to dsk y brn to brn blk, slt, mic		0126-3L
			5 Cont	: prp, dd, evap		0126-1L
			5 Ca	: m brn, dol		0126-5L
			tr S/Sst	: w, calc, l		0126-2L
			tr Other	: pyr		0126-4L

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Depth unit of measure: m

Depth	Type	Grp	Frm	Age	Trb	Sample	
Int Cvd	TOC%	%	Lithology description				
3607.30	ccp					0127	
	0.14	100	S/Sst	: w to lt gy, calc, cem		0127-1L	
3612.70	ccp					0128	
	2.03	100	Sltst	: m gy, s, lam		0128-1L	
3615.50	ccp					0129	
	1.61	100	Sltst	: m gy, s, lam		0129-1L	
3619.00						0130	
			95 Sh/Clst:	dsk y brn to brn blk, slt, mic		0130-2L	
			5 Coal	: blk		0130-4L	
			tr S/Sst	: w, cem		0130-1L	
			tr Cont	: dd		0130-3L	
3625.00						0131	
	3.24	90	Sltst	: dsk y brn to brn blk, s, cly, mic		0131-2L	
		10	Coal	: blk		0131-4L	
			tr S/Sst	: w, cem		0131-1L	
			tr Cont	: dd		0131-3L	
			tr Other	: pyr		0131-5L	
3634.00						0132	
	2.32	95	Sh/Clst:	dsk y brn to brn blk, slt, mic		0132-2L	
		5	S/Sst	: w to dsk brn, cem		0132-1L	
			tr Cont	: prp		0132-3L	
			tr Coal	: blk		0132-4L	
			tr Other	: pyr		0132-5L	



Table 1 : Lithology description for well NOCS 33/6-1

Depth unit of measure: m

Depth	Type	Grp	Frm	Age	Trb	Sample
Int	Cvd	TOC%	%	Lithology description		
3640.00						0133
	3.41	85		Sh/Clst: dsk y brn to brn blk, slt, s, mic		0133-2L
		15		S/Sst : w to dsk brn, cem		0133-1L
				tr Cont : prp		0133-3L
				tr Coal : blk		0133-4L
				tr Other : pyr		0133-5L
3646.00						0134
	3.57	100		Sh/Clst: dsk y brn to brn blk, slt, s, mic		0134-2L
				tr S/Sst : w to dsk brn, cem		0134-1L
				tr Cont : prp		0134-3L
				tr Coal : blk		0134-4L
				tr Other : pyr		0134-5L
				tr Ca : lt brn gy		0134-6L
3652.00						0135
	3.40	95		Sh/Clst: dsk y brn to brn blk, slt, s, mic		0135-2L
		5		S/Sst : w to dsk brn, cem		0135-1L
				tr Cont : prp, dd		0135-3L
				tr Coal : blk		0135-4L
3658.00						0136
	2.86	100		Sh/Clst: gy brn to dsk brn to brn blk, slt, mic		0136-2L
				tr S/Sst : w to dsk brn, cem		0136-1L
				tr Cont : prp, dd		0136-3L
				tr Coal : blk		0136-4L
3664.00						0137
	3.27	100		Sh/Clst: dsk brn to brn blk, slt, mic		0137-2L
				tr S/Sst : w to dsk brn, cem		0137-1L
				tr Cont : prp, dd		0137-3L
				tr Coal : blk		0137-4L
				tr Other : pyr		0137-5L

Table 1 : Lithology description for well NOCS 33/6-1

Depth unit of measure: m

Depth	Type	Grp	Frm	Age	Trb	Sample	
Int Cvd	TOC%	%	Lithology description				
3670.00						0138	
	2.35	90	Sh/Clst:	dsk brn to brn blk, slt, mic		0138-2L	
		10	Ca	: brn gy to dsk brn		0138-6L	
			tr S/Sst	: w to dsk brn, cem		0138-1L	
			tr Cont	: prp, dd		0138-3L	
			tr Coal	: blk		0138-4L	
			tr Other	: pyr		0138-5L	
3676.00						0139	
	4.07	100	Sh/Clst:	dsk brn to brn blk, slt, mic		0139-2L	
			tr S/Sst	: w to dsk brn, cem		0139-1L	
			tr Cont	: prp, dd		0139-3L	
			tr Ca	: brn gy to dsk brn		0139-4L	
3682.00						0140	
	2.65	100	Sh/Clst:	dsk brn to brn blk, carb, slt, mic		0140-2L	
			tr S/Sst	: w to dsk brn, cem		0140-1L	
			tr Cont	: prp, dd		0140-3L	
			tr Ca	: brn gy to dsk brn		0140-4L	
3685.00						0141	
	2.31	95	Sh/Clst:	dsk brn to brn blk, carb, slt, mic		0141-2L	
		5	Ca	: brn gy to dsk brn		0141-4L	
			tr S/Sst	: w to dsk brn, cem		0141-1L	
			tr Cont	: prp, dd		0141-3L	
3691.00						0142	
	3.04	100	Sh/Clst:	dsk brn to brn blk, carb, slt, mic		0142-2L	
			tr S/Sst	: w to dsk brn, cem		0142-1L	
			tr Cont	: prp, dd		0142-3L	
			tr Ca	: brn gy to dsk brn		0142-4L	

Table 1 : Lithology description for well NOCS 33/6-1

Depth unit of measure: m

Depth	Type	Grp	Frm	Age	Trb	Sample
Int	Cvd	TOC%	%	Lithology description		
3697.00						0144
	2.95	100		Sh/Clst: dsk brn to brn blk, slt, mic tr S/Sst : w to lt y brn, cem tr Cont : prp, dd tr Ca : brn gy to lt gy		0144-2L 0144-1L 0144-3L 0144-4L
3703.00						0145
		100		Sh/Clst: dsk brn to brn blk, slt, mic tr S/Sst : w to lt y brn, cem tr Cont : prp, dd tr Ca : brn gy to lt gy		0145-2L 0145-1L 0145-3L 0145-4L
3709.00						0146
	3.12	85		Sh/Clst: dsk brn to brn blk, slt, mic 15 S/Sst : w to lt y brn, calc, cem tr Cont : prp, dd tr Ca : brn gy to lt gy		0146-2L 0146-1L 0146-3L 0146-4L
3715.00						0147
		90		Sh/Clst: dsk brn to brn blk, slt, mic 10 S/Sst : w to lt y brn to dsk brn, calc, cem tr Cont : prp, dd tr Ca : brn gy to lt gy		0147-2L 0147-1L 0147-3L 0147-4L
3721.00						0148
	0.41	75		Sh/Clst: dsk brn to brn blk, slt, mic 25 S/Sst : w to lt y brn to dsk brn, calc, cem tr Cont : prp, fib tr Ca : brn gy to lt gy		0148-2L 0148-1L 0148-3L 0148-4L

Table 1 : Lithology description for well NOCS 33/6-1

Depth unit of measure: m

Depth	Type	Grp	Frm	Age	Trb	Sample
Int	Cvd	TOC%	%	Lithology description		
3727.00						0149
	0.91			75 Sh/Clst: dsk brn to brn blk, slt, mic		0149-2L
				20 S/Sst : w to lt y brn to dsk brn, calc, slt, cem		0149-1L
				5 Ca : brn gy to lt gy		0149-4L
				tr Cont : prp, fib		0149-3L
3733.00						0150
				65 Sh/Clst: brn gy to brn blk, carb, slt, mic		0150-2L
				20 Coal : blk		0150-5L
				10 S/Sst : w to lt y brn to dsk brn, calc, slt, cem		0150-1L
				5 Ca : brn gy to lt gy		0150-4L
				tr Cont : prp, fib		0150-3L
				tr Sh/Clst: m gy to drk gy		0150-6L
3739.00						0151
	56.57			50 Sh/Clst: brn gy to brn blk, slt, mic		0151-2L
				35 Coal : blk		0151-5L
				10 Ca : brn gy to gy brn		0151-4L
				5 Cont : prp, fib, evap		0151-3L
				tr S/Sst : w to lt y brn to dsk brn, calc, slt, cem		0151-1L
				tr Sh/Clst: m gy to drk gy		0151-6L
3745.00						0152
				65 Sh/Clst: brn gy to brn blk, slt, mic		0152-2L
				20 Ca : brn gy to gy brn to m brn, fe		0152-4L
				15 Coal : blk		0152-5L
				tr S/Sst : w to lt y brn to dsk brn, calc, slt, cem		0152-1L
				tr Cont : evap		0152-3L
				tr Sh/Clst: gy red		0152-6L

Table 1 : Lithology description for well NOCS 33/6-1

Depth unit of measure: m

Depth	Type	Grp	Frm	Age	Trb	Sample
Int	Cvd	TOC%	%	Lithology description		
3751.00						0153
	3.40	95	Sh/Clst:	brn gy to dsk y brn, slt, mic		0153-2L
		5	Coal	: blk		0153-5L
		tr	S/Sst	: w to lt y brn to dsk brn, calc, slt, cem		0153-1L
		tr	Cont	: evap		0153-3L
		tr	Ca	: brn gy to gy brn to m brn		0153-4L
		tr	Sh/Clst:	gy red		0153-6L
3757.00						0154
	0.54	50	S/Sst	: w to lt y brn, calc, slt, cem		0154-1L
		50	Sh/Clst:	brn gy to dsk y brn, slt, mic		0154-2L
		tr	Cont	: evap		0154-3L
		tr	Ca	: brn gy to gy brn to m brn		0154-4L
		tr	Coal	: blk		0154-5L
		tr	Sh/Clst:	gy red		0154-6L
3763.00						0155
		75	Sh/Clst:	brn gy to dsk brn, slt, mic		0155-2L
		20	S/Sst	: w to lt y brn, calc, slt, cem, l		0155-1L
		5	Ca	: brn gy to gy brn to m brn		0155-4L
		tr	Cont	: prp		0155-3L
		tr	Coal	: blk		0155-5L
3769.00						0156
	2.17	70	Sh/Clst:	brn gy to dsk brn, slt, mic		0156-2L
		25	Ca	: brn gy to gy brn to m brn		0156-4L
		5	S/Sst	: w to lt y brn, calc, slt, cem, l		0156-1L
		tr	Cont	: prp		0156-3L
		tr	Coal	: blk		0156-5L

Table 1 : Lithology description for well NOCS 33/6-1

Depth unit of measure: m

Depth	Type	Grp	Frn	Age	Trb	Sample
Int	Cvd	TOC%	%	Lithology description		
3775.00						0157
				55 Sh/Clst: brn gy to dsk brn, slt, mic		0157-2L
				45 Ca : brn gy to gy brn to m brn, fe		0157-4L
				tr S/Sst : w to lt y brn, calc, slt, cem, l		0157-1L
				tr Cont : prp		0157-3L
				tr Coal : blk		0157-5L
3781.00						0158
				55 Sh/Clst: brn gy to dsk brn, slt, mic		0158-2L
				20 Ca : brn gy to gy brn to m brn		0158-4L
	62.26			20 Coal : blk		0158-5L
				5 Cont : fib, evap		0158-3L
				tr S/Sst : w to lt y brn, calc, slt, cem, l		0158-1L
3787.00						0159
				55 Sh/Clst: brn gy to dsk brn, slt, mic		0159-2L
				25 Coal : blk		0159-5L
				15 Ca : brn gy to gy brn to m brn		0159-4L
				5 Cont : fib, evap		0159-3L
				tr S/Sst : w to lt y brn, calc, slt, cem, l		0159-1L
3793.00						0160
				100 S/Sst : w to lt y brn, crs, l		0160-1L
				tr Sh/Clst: brn gy to dsk brn, slt, mic		0160-2L
				tr Cont : prp		0160-3L
				tr Ca : brn gy to gy brn to m brn		0160-4L
				tr Coal : blk		0160-5L
3799.00						0161
	0.17			100 S/Sst : w to lt y brn, calc, crs, cem, l		0161-1L
				tr Sh/Clst: brn gy to dsk brn, slt, mic		0161-2L
				tr Cont : prp		0161-3L
				tr Ca : brn gy to gy brn to m brn		0161-4L
				tr Coal : blk		0161-5L

Table 1 : Lithology description for well NOCS 33/6-1

Depth unit of measure: m

Depth	Type	Grp	Frm	Age	Trb	Sample
Int	Cvd	TOC%	%	Lithology description		
3802.00	ccp					0162
	0.12	100	S/Sst	: w to lt y brn, calc, crs, cem		0162-1L
3806.60	ccp					0163
	0.25	100	S/Sst	: w to lt y brn, calc, crs, cem		0163-1L
3808.00						0164
			80 S/Sst	: w to lt y brn, crs, l		0164-1L
			20 Sh/Clst:	brn gy to dsk y brn, slt, mic		0164-2L
			tr Cont	: prp		0164-3L
3814.00						0165
	0.05		85 S/Sst	: w to lt y brn, crs, l		0165-1L
			15 Sh/Clst:	brn gy to dsk y brn, slt, mic		0165-2L
			tr Cont	: prp		0165-3L
3820.00						0166
			95 S/Sst	: w to lt y brn, crs, l		0166-1L
			5 Sh/Clst:	brn gy to brn blk, slt, mic		0166-2L
			tr Cont	: prp		0166-3L
3826.00						0167
	0.02		95 S/Sst	: w to lt y brn, crs, l		0167-1L
			5 Sh/Clst:	brn gy to brn blk, slt, mic		0167-2L
			tr Cont	: prp		0167-3L

Table 1 : Lithology description for well NOCS 33/6-1

Depth unit of measure: m

Depth	Type	Grp	Frm	Age	Trb	Sample	
Int Cvd	TOC%	%	Lithology description				
3832.00						0168	
			95 S/Sst	: w to lt y brn, crs, l		0168-1L	
			5 Sh/Clst:	dsk y brn to brn blk, slt, mic		0168-2L	
			tr Cont	: prp		0168-3L	
3838.00						0169	
	0.03		90 S/Sst	: w to lt y brn, crs, l		0169-1L	
			10 Sh/Clst:	dsk y brn to brn blk, slt, mic		0169-2L	
			tr Cont	: prp		0169-3L	
3844.00						0170	
			75 S/Sst	: w, crs, l		0170-1L	
			15 Sh/Clst:	brn gy to gy red to lt y gn		0170-4L	
			10 Sh/Clst:	dsk y brn to brn blk, slt, mic		0170-2L	
			tr Cont	: prp		0170-3L	
3850.00						0171	
	0.03		65 S/Sst	: w, crs, l		0171-1L	
			20 Sh/Clst:	brn gy to gy red to lt y gn, slt, mic		0171-4L	
			15 Sh/Clst:	dsk y brn to brn blk, slt, mic		0171-2L	
			tr Cont	: Coal-ad, prp		0171-3L	
3856.00						0172	
			50 S/Sst	: w, crs, l		0172-1L	
			50 Sh/Clst:	gy red, slt, mic		0172-4L	
			tr Sh/Clst:	dsk y brn to brn blk, slt, mic		0172-2L	
			tr Cont	: Coal-ad, prp		0172-3L	



Table 1 : Lithology description for well NOCS 33/6-1

Depth unit of measure: m

Depth	Type	Grp	Frm	Age	Trb	Sample
Int	Cvd	TOC%	%	Lithology description		
3862.00						0173
				60 S/Sst : w, crs, l		0173-1L
				35 Sh/Clst: gy red, slt, mic		0173-4L
				5 Sh/Clst: dsk y brn to brn blk, slt, mic		0173-2L
				tr Cont : Coal-ad, prp		0173-3L
3868.00						0174
				55 Sh/Clst: gy red, slt, mic		0174-4L
				40 S/Sst : w, crs, l		0174-1L
				5 Sh/Clst: dsk y brn to brn blk, slt, mic		0174-2L
				tr Cont : Coal-ad, prp		0174-3L
				tr Ca : w		0174-5L
3874.00						0175
	0.02			50 S/Sst : w, crs, l		0175-1L
				45 Sh/Clst: gy red, slt, mic		0175-4L
				5 Sh/Clst: dsk y brn to brn blk, slt, mic		0175-2L
				tr Cont : prp		0175-3L
				tr Ca : w		0175-5L
3880.00						0176
				85 S/Sst : w, crs, l		0176-1L
				15 Sh/Clst: gy red, slt, mic		0176-4L
				tr Sh/Clst: dsk y brn to brn blk, slt, mic		0176-2L
				tr Cont : prp		0176-3L
				tr Ca : w		0176-5L
3886.00						0177
				45 S/Sst : w, crs, l		0177-1L
				45 Sh/Clst: gy red, slt, mic		0177-4L
				10 Sh/Clst: dsk y brn to brn blk, slt, mic		0177-2L
				tr Cont : prp		0177-3L
				tr Ca : w		0177-5L

Table 1 : Lithology description for well NOCS 33/6-1

Depth unit of measure: m

Depth	Type	Grp	Frm	Age	Trb	Sample
Int	Cvd	TOC%	%	Lithology description		
3892.00						0178
				50 S/Sst : w, crs, l		0178-1L
				50 Sh/Clst: gy red, slt, mic		0178-4L
				tr Sh/Clst: dsk y brn to brn blk, slt, mic		0178-2L
				tr Cont : prp		0178-3L
				tr Ca : w		0178-5L
3900.50						0179
	0.10			70 Sh/Clst: gy red, slt, mic		0179-4L
				20 S/Sst : w, crs, l		0179-1L
				10 Sh/Clst: dsk y brn to brn blk, slt, mic		0179-2L
				tr Cont : prp		0179-3L
				tr Ca : w		0179-5L

Table 2 : Rock-Eval table for well NOCS 33/6-1

Depth unit of measure: m

Depth	Typ	Lithology	S1	S2	S3	S2/S3	TOC	HI	OI	PP	PI	Tmax	Sample
1920.00	cut	Marl : lt gy to m gy	0.03	0.05	0.97	0.05	0.32	16	303	0.1	0.38	359	0070-4L
2040.00	cut	Marl : lt gy to m gy	0.02	0.12	0.85	0.14	0.58	21	147	0.1	0.14	423	0074-3L
2160.00	cut	S/Sst : lt gy	0.02	0.08	0.42	0.19	0.17	47	247	0.1	0.20	402	0078-4L
2280.00	cut	Marl : lt gy to m gy	0.05	0.22	0.47	0.47	0.59	37	80	0.3	0.19	424	0082-3L
2430.00	com	bulk	0.06	0.10	0.14	0.71	0.11	91	127	0.2	0.38	388	0181-0B
2460.00	cut	S/Sst : lt gy	0.17	0.24	0.13	1.85	0.17	141	76	0.4	0.41	395	0088-3L
2520.00	cut	S/Sst : lt gy	0.07	0.13	0.18	0.72	0.18	72	100	0.2	0.35	413	0090-3L
2580.00	cut	S/Sst : lt gy	-	0.03	0.08	0.38	0.07	43	114	-	-	368	0092-3L
2640.00	cut	S/Sst : lt gy	0.03	0.06	0.14	0.43	0.11	55	127	0.1	0.33	376	0094-3L
2730.00	cut	S/Sst : lt gy	0.05	0.10	-	-	0.23	43	-	0.2	0.33	332	0097-3L
2820.00	cut	S/Sst : lt gy	0.09	0.16	0.22	0.73	0.29	55	76	0.3	0.36	419	0100-3L
2910.00	cut	S/Sst : lt gy to m gy	0.03	0.11	0.16	0.69	0.10	110	160	0.1	0.21	416	0103-3L
2970.00	cut	Sh/Clst: m gy	0.12	0.20	0.26	0.77	0.79	25	33	0.3	0.38	427	0105-2L
3030.00	cut	S/Sst : lt gy to m gy	0.20	0.26	0.18	1.44	0.29	90	62	0.5	0.43	386	0107-3L
3090.00	cut	Sh/Clst: m gy	0.09	0.44	0.27	1.63	0.83	53	33	0.5	0.17	431	0109-2L

Table 2 : Rock-Eval table for well NOCS 33/6-1

Depth unit of measure: m

Depth	Typ	Lithology	S1	S2	S3	S2/S3	TOC	HI	OI	PP	PI	Tmax	Sample
3150.00	cut	Sh/Clst: m gy	0.05	0.15	0.31	0.48	0.43	35	72	0.2	0.25	424	0111-2L
3240.00	cut	Sh/Clst: m gy	0.12	0.82	0.36	2.28	1.04	79	35	0.9	0.13	432	0114-2L
3535.00	cut	Sh/Clst: drk gy	0.07	0.21	0.11	1.91	0.93	23	12	0.3	0.25	432	0115-2L
3540.00	cut	Sh/Clst: drk gy	0.06	0.14	0.09	1.56	0.54	26	17	0.2	0.30	427	0116-2L
3545.00	cut	Sh/Clst: drk gy	0.06	0.10	0.08	1.25	0.49	20	16	0.2	0.38	425	0117-2L
3565.00	cut	Sltst : dsk brn to dsk y brn	1.51	13.14	0.78	16.85	3.12	421	25	14.7	0.10	433	0120-4L
3571.00	cut	Sltst : dsk brn to dsk y brn to brn blk	1.70	13.74	0.81	16.96	3.70	371	22	15.4	0.11	433	0121-4L
3577.00	cut	Sh/Clst: dsk brn to dsk y brn to brn blk	0.75	6.81	0.28	24.32	3.73	183	8	7.6	0.10	438	0122-3L
3583.00	cut	Sh/Clst: dsk brn to dsk y brn to brn blk	0.77	6.95	0.31	22.42	2.30	302	13	7.7	0.10	440	0123-3L
3589.00	cut	Sh/Clst: gy brn to dsk y brn to brn blk	0.82	10.55	0.45	23.44	2.78	379	16	11.4	0.07	441	0124-3L
3595.00	cut	Sh/Clst: gy brn to dsk y brn to brn blk	1.17	9.54	0.52	18.35	3.09	309	17	10.7	0.11	437	0125-3L
3601.00	cut	Sh/Clst: gy brn to dsk y brn to brn blk	0.62	6.51	0.37	17.59	2.88	226	13	7.1	0.09	443	0126-3L

Table 2 : Rock-Eval table for well NOCS 33/6-1

Depth unit of measure: m

Depth	Typ	Lithology	S1	S2	S3	S2/S3	TOC	HI	OI	PP	PI	Tmax	Sample
3607.30	ccp	S/Sst : w to lt gy	0.05	0.07	0.23	0.30	0.14	50	164	0.1	0.42	441	0127-1L
3612.70	ccp	Sltst : m gy	0.33	1.12	0.45	2.49	2.03	55	22	1.5	0.23	443	0128-1L
3615.50	ccp	Sltst : m gy	0.28	1.03	0.55	1.87	1.61	64	34	1.3	0.21	445	0129-1L
3625.00	cut	Sltst : dsk y brn to brn blk	0.75	8.11	0.47	17.26	3.24	250	15	8.9	0.08	441	0131-2L
3634.00	cut	Sh/Clst: dsk y brn to brn blk	0.55	5.95	0.84	7.08	2.32	256	36	6.5	0.08	446	0132-2L
3640.00	cut	Sh/Clst: dsk y brn to brn blk	0.76	7.62	0.32	23.81	3.41	223	9	8.4	0.09	440	0133-2L
3646.00	cut	Sh/Clst: dsk y brn to brn blk	0.76	10.83	0.39	27.77	3.57	303	11	11.6	0.07	441	0134-2L
3652.00	cut	Sh/Clst: dsk y brn to brn blk	0.75	8.01	0.44	18.20	3.40	236	13	8.8	0.09	440	0135-2L
3658.00	cut	Sh/Clst: gy brn to dsk brn to brn blk	0.80	8.06	0.50	16.12	2.86	282	17	8.9	0.09	442	0136-2L
3664.00	cut	Sh/Clst: dsk brn to brn blk	0.91	8.64	0.49	17.63	3.27	264	15	9.6	0.10	438	0137-2L
3670.00	cut	Sh/Clst: dsk brn to brn blk	0.53	7.18	0.39	18.41	2.35	306	17	7.7	0.07	443	0138-2L
3676.00	cut	Sh/Clst: dsk brn to brn blk	0.85	8.90	0.49	18.16	4.07	219	12	9.8	0.09	439	0139-2L
3682.00	cut	Sh/Clst: dsk brn to brn blk	0.46	5.82	0.39	14.92	2.65	220	15	6.3	0.07	440	0140-2L
3685.00	cut	Sh/Clst: dsk brn to brn blk	0.53	6.23	0.34	18.32	2.31	270	15	6.8	0.08	442	0141-2L

Table 2 : Rock-Eval table for well NOCS 33/6-1

Depth unit of measure: m

Depth	Typ	Lithology	S1	S2	S3	S2/S3	TOC	HI	OI	PP	PI	Tmax	Sample
3691.00	cut	Sh/Clst: dsk brn to brn blk	0.85	9.29	0.48	19.35	3.04	306	16	10.1	0.08	439	0142-2L
3697.00	cut	Sh/Clst: dsk brn to brn blk	0.61	6.88	0.53	12.98	2.95	233	18	7.5	0.08	440	0144-2L
3709.00	cut	Sh/Clst: dsk brn to brn blk	0.75	8.16	0.38	21.47	3.12	262	12	8.9	0.08	443	0146-2L
3721.00	cut	S/Sst : w to lt y brn to dsk brn	0.08	0.42	0.17	2.47	0.41	102	41	0.5	0.16	441	0148-1L
3727.00	cut	S/Sst : w to lt y brn to dsk brn	0.27	1.26	0.40	3.15	0.91	138	44	1.5	0.18	441	0149-1L
3739.00	cut	Coal : blk	1.73	27.69	30.00	0.92	56.57	49	53	29.4	0.06	433	0151-5L
3751.00	cut	Sh/Clst: brn gy to dsk y brn	0.79	8.07	0.40	20.17	3.40	237	12	8.9	0.09	439	0153-2L
3757.00	cut	S/Sst : w to lt y brn	0.10	0.28	0.19	1.47	0.54	52	35	0.4	0.26	445	0154-1L
3769.00	cut	Sh/Clst: brn gy to dsk brn	0.58	7.70	0.20	38.50	2.17	355	9	8.3	0.07	440	0156-2L
3781.00	cut	Coal : blk	1.52	22.82	38.35	0.60	62.26	37	62	24.3	0.06	431	0158-5L
3799.00	cut	S/Sst : w to lt y brn	0.04	0.20	0.19	1.05	0.17	118	112	0.2	0.17	318	0161-1L
3802.00	ccp	S/Sst : w to lt y brn	0.12	0.08	0.62	0.13	0.12	67	517	0.2	0.60	407	0162-1L
3806.60	ccp	S/Sst : w to lt y brn	0.05	0.12	0.01	12.00	0.25	48	4	0.2	0.29	400	0163-1L
3814.00	cut	S/Sst : w to lt y brn	0.02	0.01	0.01	1.00	0.05	20	20	-	0.67	297	0165-1L
3826.00	cut	S/Sst : w to lt y brn	0.01	0.02	0.01	2.00	0.02	100	50	-	0.33	368	0167-1L

Table 2 : Rock-Eval table for well NOCS 33/6-1

Depth unit of measure: m

Depth	Typ	Lithology	S1	S2	S3	S2/S3	TOC	HI	OI	PP	PI	Tmax	Sample
3838.00	cut	S/Sst : w to lt y brn	0.01	0.03	0.01	3.00	0.03	100	33	-	0.25	297	0169-1L
3850.00	cut	S/Sst : w	0.02	0.03	0.01	3.00	0.03	100	33	0.1	0.40	322	0171-1L
3874.00	cut	S/Sst : w	0.01	0.01	0.01	1.00	0.02	50	50	-	0.50	247	0175-1L
3900.50	cut	Sh/Clst: gy red	0.08	0.09	0.02	4.50	0.10	90	20	0.2	0.47	357	0179-4L

Table 3 : Pyrolysis GC Data (S2 peak) as Percentage of Total Area for Well NOCS 33/6-1

Depth unit of measure: m

Depth	Typ	Lithology	C1	C2-C5	C6-C14	C15+	S2 from Rock-Eval	Sample
2460.00	cut	S/Sst : lt gy	11.89	32.93	48.46	6.72	0.24	0088-3L
3030.00	cut	S/Sst : lt gy to m gy	7.98	34.73	50.91	6.38	0.26	0107-3L
3565.00	cut	Sltst : dsk brn to dsk y brn	3.49	17.70	34.86	43.95	13.14	0120-4L
3571.00	cut	Sltst : dsk brn to dsk y brn to brn blk	3.69	16.79	35.38	44.13	13.74	0121-4L
3577.00	cut	Sh/Clst: dsk brn to dsk y brn to brn blk	4.97	17.19	35.69	42.15	6.81	0122-3L
3583.00	cut	Sh/Clst: dsk brn to dsk y brn to brn blk	3.84	16.45	35.37	44.34	6.95	0123-3L
3589.00	cut	Sh/Clst: gy brn to dsk y brn to brn blk	4.07	17.24	32.72	45.97	10.55	0124-3L
3595.00	cut	Sh/Clst: gy brn to dsk y brn to brn blk	3.99	16.95	35.24	43.82	9.54	0125-3L
3601.00	cut	Sh/Clst: gy brn to dsk y brn to brn blk	3.43	16.24	32.48	47.85	6.51	0126-3L
3612.70	ccp	Sltst : m gy	11.05	24.08	32.66	32.21	1.12	0128-1L
3615.50	ccp	Sltst : m gy	10.42	22.45	35.23	31.90	1.03	0129-1L



Table 3 : Pyrolysis GC Data (S2 peak) as Percentage of Total Area for Well NOCs 33/6-1

Depth unit of measure: m

Depth	Typ	Lithology	C1	C2-C5	C6-C14	C15+	S2 from Rock-Eval	Sample
3625.00	cut	Sltst : dsk y brn to brn blk	4.41	17.94	35.46	42.19	8.11	0131-2L
3634.00	cut	Sh/Clst: dsk y brn to brn blk	4.11	16.80	35.60	43.50	5.95	0132-2L
3640.00	cut	Sh/Clst: dsk y brn to brn blk	4.08	17.60	33.17	45.15	7.62	0133-2L
3646.00	cut	Sh/Clst: dsk y brn to brn blk	3.68	17.66	34.77	43.88	10.83	0134-2L
3652.00	cut	Sh/Clst: dsk y brn to brn blk	4.39	18.66	36.68	40.28	8.01	0135-2L
3658.00	cut	Sh/Clst: gy brn to dsk brn to brn blk	3.72	16.44	34.87	44.97	8.06	0136-2L
3670.00	cut	Sh/Clst: dsk brn to brn blk	3.73	16.34	35.75	44.19	7.18	0138-2L
3682.00	cut	Sh/Clst: dsk brn to brn blk	3.88	16.91	36.50	42.71	5.82	0140-2L
3685.00	cut	Sh/Clst: dsk brn to brn blk	3.85	16.61	38.82	40.73	6.23	0141-2L
3691.00	cut	Sh/Clst: dsk brn to brn blk	3.30	15.53	35.38	45.80	9.29	0142-2L
3709.00	cut	Sh/Clst: dsk brn to brn blk	3.61	15.93	34.50	45.97	8.16	0146-2L
3727.00	cut	S/Sst : w to lt y brn to dsk brn	3.03	16.91	31.11	48.52	1.26	0149-1L
3739.00	cut	Coal : blk	9.32	18.48	35.37	36.83	27.69	0151-5L
3757.00	cut	S/Sst : w to lt y brn	4.00	20.41	27.76	47.84	0.28	0154-1L

Table 3 : Pyrolysis GC Data (S2 peak) as Percentage of Total Area for Well NOCS 33/6-1

Depth unit of measure: m

Depth	Typ Lithology	C1	C2-C5	C6-C14	C15+	S2 from Rock-Eval	Sample
3769.00	cut Sh/Clst: brn gy to dsk brn	4.36	18.26	35.71	41.68	7.70	0156-2L
3781.00	cut Coal : blk	9.44	18.90	31.78	39.88	22.82	0158-5L
3802.00	ccp S/Sst : w to lt y brn	6.16	29.50	30.62	33.73	0.08	0162-1L

Table 4 a: Weight of EOM and Chromatographic Fraction for well NOCS 33/6-1

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
3583.00	cut	Sh/Clst: dsk brn to dsk y brn to brn blk	4.8	8.8	3.6	3.1	1.4	0.7	6.7	2.1	3.34	0123-3L
3589.00	cut	Sh/Clst: gy brn to dsk y brn to brn blk	2.4	5.7	1.7	2.7	0.5	0.8	4.4	1.3	4.39	0124-3L
3595.00	cut	Sh/Clst: gy brn to dsk y brn to brn blk	3.9	9.0	4.5	3.1	0.8	0.6	7.6	1.4	3.56	0125-3L
3601.00	cut	Sh/Clst: gy brn to dsk y brn to brn blk	3.1	6.2	2.6	2.0	0.5	1.1	4.6	1.6	3.43	0126-3L
3612.70	ccp	Sltst : m gy	7.2	3.2	0.5	1.4	0.8	0.5	1.9	1.3	1.54	0128-1L
3615.50	ccp	Sltst : m gy	7.5	1.8	0.3	0.6	0.4	0.5	0.9	0.9	1.25	0129-1L
3634.00	cut	Sh/Clst: dsk y brn to brn blk	3.6	4.9	2.0	1.8	0.2	0.9	3.8	1.1	2.73	0132-2L
3646.00	cut	Sh/Clst: dsk y brn to brn blk	4.4	7.1	3.2	1.7	0.8	1.4	4.9	2.2	3.20	0134-2L
3652.00	cut	Sh/Clst: dsk y brn to brn blk	4.8	7.7	3.5	2.4	0.7	1.1	5.9	1.8	3.37	0135-2L
3670.00	cut	Sh/Clst: dsk brn to brn blk	3.3	5.7	2.0	2.0	0.3	1.4	4.0	1.7	3.45	0138-2L
3691.00	cut	Sh/Clst: dsk brn to brn blk	3.4	6.6	2.0	2.6	0.4	1.6	4.6	2.0	2.90	0142-2L
3709.00	cut	Sh/Clst: dsk brn to brn blk	2.0	4.6	1.7	1.8	0.6	0.5	3.5	1.1	4.21	0146-2L

Table 4 a: Weight of EOM and Chromatographic Fraction for well NOCS 33/6-1

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
3745.00	com	Composite sample - see table 4 e	0.5	1.5	0.5	0.2	0.3	0.5	0.7	0.8	42.50	0182-0B
3769.00	cut	Sh/Clst: brn gy to dsk brn	2.0	2.5	0.9	0.8	0.4	0.4	1.7	0.8	2.23	0156-2L

Table 4 b: Concentration of EOM and Chromatographic Fraction (wt ppm rock) for well NOCS 33/6-1

Depth unit of measure: m

Depth	Typ	Lithology	EOM	Sat	Aro	Asph	NSO	HC	Non-HC	Sample
3583.00	cut	Sh/Clst: dsk brn to dsk y brn to brn blk	1829	748	644	291	145	1392	436	0123-3L
3589.00	cut	Sh/Clst: gy brn to dsk y brn to brn blk	2355	702	1115	206	330	1818	537	0124-3L
3595.00	cut	Sh/Clst: gy brn to dsk y brn to brn blk	2325	1162	801	206	155	1963	361	0125-3L
3601.00	cut	Sh/Clst: gy brn to dsk y brn to brn blk	1980	830	638	159	351	1469	511	0126-3L
3612.70	ccp	Sltst : m gy	441	69	193	110	69	262	179	0128-1L
3615.50	ccp	Sltst : m gy	238	39	79	53	66	119	119	0129-1L
3634.00	cut	Sh/Clst: dsk y brn to brn blk	1376	561	505	56	252	1067	308	0132-2L
3646.00	cut	Sh/Clst: dsk y brn to brn blk	1613	727	386	181	318	1113	499	0134-2L
3652.00	cut	Sh/Clst: dsk y brn to brn blk	1621	736	505	147	231	1242	378	0135-2L
3670.00	cut	Sh/Clst: dsk brn to brn blk	1732	607	607	91	425	1215	516	0138-2L
3691.00	cut	Sh/Clst: dsk brn to brn blk	1946	589	766	117	471	1356	589	0142-2L
3709.00	cut	Sh/Clst: dsk brn to brn blk	2323	858	909	303	252	1767	555	0146-2L

Table 4 b: Concentration of EOM and Chromatographic Fraction (wt ppm rock) for well NOCS 33/6-1

Depth unit of measure: m

Depth	Typ	Lithology	EOM	Sat	Aro	Asph	NSO	HC	Non-HC	Sample
3745.00	com	Composite sample - see table 4 e	3260	1086	434	652	1086	1521	1739	0182-0B
3769.00	cut	Sh/Clst: brn gy to dsk brn	1243	447	398	199	199	845	398	0156-2L

Table 4 c: Concentration of EOM and Chromatographic Fraction (mg/g TOC(e)) for well NOCS 33/6-1

Depth unit of measure: m

Depth	Typ	Lithology	EOM	Sat	Aro	Asph	NSO	HC	Non-HC	Sample
3583.00	cut	Sh/Clst: dsk brn to dsk y brn to brn blk	54.78	22.41	19.30	8.71	4.36	41.70	13.07	0123-3L
3589.00	cut	Sh/Clst: gy brn to dsk y brn to brn blk	53.65	16.00	25.41	4.71	7.53	41.42	12.24	0124-3L
3595.00	cut	Sh/Clst: gy brn to dsk y brn to brn blk	65.33	32.66	22.50	5.81	4.36	55.16	10.16	0125-3L
3601.00	cut	Sh/Clst: gy brn to dsk y brn to brn blk	57.75	24.22	18.63	4.66	10.25	42.85	14.90	0126-3L
3612.70	ccp	Sltst : m gy	28.70	4.48	12.56	7.18	4.48	17.04	11.66	0128-1L
3615.50	ccp	Sltst : m gy	19.10	3.18	6.37	4.24	5.31	9.55	9.55	0129-1L
3634.00	cut	Sh/Clst: dsk y brn to brn blk	50.42	20.58	18.52	2.06	9.26	39.10	11.32	0132-2L
3646.00	cut	Sh/Clst: dsk y brn to brn blk	50.43	22.73	12.07	5.68	9.94	34.80	15.62	0134-2L
3652.00	cut	Sh/Clst: dsk y brn to brn blk	48.10	21.86	14.99	4.37	6.87	36.86	11.24	0135-2L
3670.00	cut	Sh/Clst: dsk brn to brn blk	50.22	17.62	17.62	2.64	12.33	35.24	14.98	0138-2L
3691.00	cut	Sh/Clst: dsk brn to brn blk	67.13	20.34	26.45	4.07	16.28	46.79	20.34	0142-2L
3709.00	cut	Sh/Clst: dsk brn to brn blk	55.18	20.39	21.59	7.20	6.00	41.99	13.20	0146-2L

Table 4 c: Concentration of EOM and Chromatographic Fraction (mg/g TOC(e)) for well NOCS 33/6-1

Depth unit of measure: m

Depth	Typ	Lithology	EOM	Sat	Aro	Asph	NSO	HC	Non-HC	Sample
3745.00	com	Composite sample - see table 4 e	7.67	2.56	1.02	1.53	2.56	3.58	4.09	0182-0B
3769.00	cut	Sh/Clst: brn gy to dsk brn	55.77	20.08	17.85	8.92	8.92	37.93	17.85	0156-2L



Table 4 d: Composition of material extracted from the rock (%) for well NOCS 33/6-1

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	
3583.00	cut	Sh/Clst: dsk brn to dsk y brn to brn blk	40.91	35.23	15.91	7.95	76.14	23.86	116.13	319.05	0123-3L
3589.00	cut	Sh/Clst: gy brn to dsk y brn to brn blk	29.82	47.37	8.77	14.04	77.19	22.81	62.96	338.46	0124-3L
3595.00	cut	Sh/Clst: gy brn to dsk y brn to brn blk	50.00	34.44	8.89	6.67	84.44	15.56	145.16	542.86	0125-3L
3601.00	cut	Sh/Clst: gy brn to dsk y brn to brn blk	41.94	32.26	8.06	17.74	74.19	25.81	130.00	287.50	0126-3L
3612.70	ccp	Sltst : m gy	15.63	43.75	25.00	15.63	59.38	40.63	35.71	146.15	0128-1L
3615.50	ccp	Sltst : m gy	16.67	33.33	22.22	27.78	50.00	50.00	50.00	100.00	0129-1L
3634.00	cut	Sh/Clst: dsk y brn to brn blk	40.82	36.73	4.08	18.37	77.55	22.45	111.11	345.45	0132-2L
3646.00	cut	Sh/Clst: dsk y brn to brn blk	45.07	23.94	11.27	19.72	69.01	30.99	188.24	222.73	0134-2L
3652.00	cut	Sh/Clst: dsk y brn to brn blk	45.45	31.17	9.09	14.29	76.62	23.38	145.83	327.78	0135-2L
3670.00	cut	Sh/Clst: dsk brn to brn blk	35.09	35.09	5.26	24.56	70.18	29.82	100.00	235.29	0138-2L
3691.00	cut	Sh/Clst: dsk brn to brn blk	30.30	39.39	6.06	24.24	69.70	30.30	76.92	230.00	0142-2L
3709.00	cut	Sh/Clst: dsk brn to brn blk	36.96	39.13	13.04	10.87	76.09	23.91	94.44	318.18	0146-2L

Table 4 d: Composition of material extracted from the rock (%) for well NOCS 33/6-1

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	
3745.00	com	Composite sample - see table 4 e	33.33	13.33	20.00	33.33	46.67	53.33	250.00	87.50	0182-0B
3769.00	cut	Sh/Clst: brn gy to dsk brn	36.00	32.00	16.00	16.00	68.00	32.00	112.50	212.50	0156-2L

Depth unit of measure: m

NOTE: Depths shown in tables 4 a to d correspond to the composite samples' lower depth.

<u>Upper depth</u>	<u>Lower depth</u>	<u>Typ</u>	<u>Sample</u>	<u>Depth</u>	<u>Typ</u>	<u>Lithology</u>	<u>Sample</u>
3733.00	3745.00	com	0182-0B is composed of:	3733.00	cut	Coal : blk	0150-5L
				3739.00	cut	Coal : blk	0151-5L
				3745.00	cut	Coal : blk	0152-5L

Table 5 : Saturated Hydrocarbon Ratios for well NOCS 33/6-1

Depth unit of measure: m

Depth	Typ	Lithology	Pristane	Pristane	Pristane + Phytane	Phytane	CPI	Sample
			nC17	Phytane	nC17 + nC18	nC18		
3583.00	cut	Sh/Clst: dsk brn to dsk y brn to brn blk	0.66	1.89	0.56	0.43	1.05	0123-3L
3589.00	cut	Sh/Clst: gy brn to dsk y brn to brn blk	0.63	2.02	0.53	0.40	1.05	0124-3L
3595.00	cut	Sh/Clst: gy brn to dsk y brn to brn blk	0.61	1.75	0.51	0.39	1.11	0125-3L
3601.00	cut	Sh/Clst: gy brn to dsk y brn to brn blk	0.71	1.97	0.59	0.44	1.04	0126-3L
3612.70	ccp	Sltst : m gy	0.67	2.99	0.55	0.35	1.09	0128-1L
3615.50	ccp	Sltst : m gy	0.57	3.74	0.44	0.23	1.05	0129-1L
3634.00	cut	Sh/Clst: dsk y brn to brn blk	0.69	2.34	0.53	0.35	1.08	0132-2L
3646.00	cut	Sh/Clst: dsk y brn to brn blk	0.75	2.74	0.56	0.34	1.07	0134-2L
3652.00	cut	Sh/Clst: dsk y brn to brn blk	0.66	1.96	0.55	0.41	1.02	0135-2L
3670.00	cut	Sh/Clst: dsk brn to brn blk	0.67	2.25	0.54	0.38	1.03	0138-2L
3691.00	cut	Sh/Clst: dsk brn to brn blk	0.65	1.83	0.56	0.45	1.04	0142-2L
3709.00	cut	Sh/Clst: dsk brn to brn blk	0.69	1.82	0.58	0.46	1.08	0146-2L

Table 5 : Saturated Hydrocarbon Ratios for well NOCS 33/6-1

Depth unit of measure: m

Depth	Typ	Lithology	Pristane	Pristane	Pristane + Phytane	Phytane	CPI	Sample
			nC17	Phytane	nC17 + nC18	nC18		
3745.00	com	bulk	0.41	1.78	0.33	0.25	0.75	0182-0B
3769.00	cut	Sh/Clst: brn gy to dsk brn	0.48	1.82	0.40	0.31	1.12	0156-2L

Table 6 : Aromatic Hydrocarbon Ratios for well NOCS 33/6-1

Depth unit of measure: m

Depth	Typ	Lithology	MNR	DMNR	BPhR	2/1MP	MPI1	MPI2	Rc	DBT/P	4/1MDBT	(3+2) /1MDBT	Sample
3583.00	cut	Sh/Clst: dsk brn to brn blk dsk y brn to brn blk	0.68	1.33	0.07	0.63	0.44	0.46	0.66	0.17	1.91	0.41	0123-3L
3589.00	cut	Sh/Clst: gy brn to dsk y brn to brn blk	0.90	1.40	0.10	0.64	0.47	0.49	0.68	0.16	1.71	0.38	0124-3L
3595.00	cut	Sh/Clst: gy brn to dsk y brn to brn blk	0.48	1.06	-	0.64	0.47	0.48	0.68	0.16	1.64	0.41	0125-3L
3601.00	cut	Sh/Clst: gy brn to dsk y brn to brn blk	0.88	1.38	0.12	0.63	0.45	0.46	0.67	0.15	1.45	0.39	0126-3L
3612.70	ccp	Sltst : m gy	1.02	1.84	0.23	0.85	0.44	0.50	0.66	0.10	-	-	0128-1L
3615.50	ccp	Sltst : m gy	1.03	1.87	0.20	0.92	0.50	0.57	0.70	0.11	-	-	0129-1L
3634.00	cut	Sh/Clst: dsk y brn to brn blk	0.91	1.48	0.11	0.69	0.49	0.53	0.69	0.12	2.19	0.50	0132-2L
3646.00	cut	Sh/Clst: dsk y brn to brn blk	1.01	1.53	0.15	0.71	0.51	0.55	0.71	0.14	2.58	0.56	0134-2L
3652.00	cut	Sh/Clst: dsk y brn to brn blk	0.58	1.26	0.06	0.67	0.50	0.53	0.70	0.17	2.03	0.43	0135-2L
3670.00	cut	Sh/Clst: dsk brn to brn blk	0.91	1.58	0.12	0.70	0.48	0.50	0.69	0.14	1.88	0.47	0138-2L
3691.00	cut	Sh/Clst: dsk brn to brn blk	0.94	1.42	0.15	0.80	0.58	0.62	0.75	0.26	2.10	0.45	0142-2L
3709.00	cut	Sh/Clst: dsk brn to brn blk	0.91	1.61	0.11	0.74	0.51	0.54	0.71	0.18	2.12	0.45	0146-2L
3745.00	com	bulk	-	-	-	0.99	0.49	0.56	0.69	0.08	-	-	0182-0B

Table 6 : Aromatic Hydrocarbon Ratios for well NOCS 33/6-1

Depth unit of measure: m

Depth	Typ	Lithology	MNR	DMNR	BPhR	2/1MP	MPI1	MPI2	Rc	DBT/P	4/1MDBT	(3+2) /1MDBT	Sample
3769.00	cut	Sh/Clst: brn gy to dsk brn	0.62	1.48	0.05	0.74	0.49	0.52	0.69	0.13	2.22	0.59	0156-2L

Table 7 : Thermal Maturity Data for well NOCS 33/6-1

Depth unit of measure: m

Depth	Typ Lithology	Vitrinite Reflectance (%)	Number of Readings	Standard Deviation	Spore Fluorescence Colour	SCI	T <sub>max</sub> (°C)	Sample
1920.00	cut bulk	NDP	-	-	0	-	-	0070-0B
2040.00	cut bulk	0.40	1	0.00	4	-	-	0074-0B
2040.00	cut Marl : lt gy to m gy	-	-	-	-	5.0-5.5	423	0074-3L
2130.00	cut bulk	0.45	5	0.08	3+4	-	-	0077-0B
2340.00	cut bulk	0.34	2	0.01	3+4	-	-	0084-0B
2820.00	com bulk	0.41	3	0.06	3+4	-	-	0180-0B
2850.00	cut bulk	0.46	3	0.06	3+4	-	-	0101-0B
2970.00	cut bulk	0.50	2	0.01	4	-	-	0105-0B
3000.00	cut bulk	0.66	1	0.00	4	-	-	0106-0B
3150.00	cut bulk	0.68	2	0.03	4	-	-	0111-0B
3240.00	cut bulk	NDP	-	-	4	-	-	0114-0B
3240.00	cut Sh/Clst: m gy	-	-	-	-	4.5-5.0	432	0114-2L
3535.00	cut bulk	0.65	5	0.13	4	-	-	0115-0B
3565.00	cut Sltst : dsk brn to dsk y brn	-	-	-	-	4.0-5.5	433	0120-4L



Table 7 : Thermal Maturity Data for well NOCS 33/6-1

Depth unit of measure: m

Depth	Typ Lithology	Vitrinite Reflectance (%)	Number of Readings	Standard Deviation	Spore Fluorescence Colour	SCI	T <sub>max</sub> (°C)	Sample
3583.00	cut bulk	0.53	7	0.02	4	-	-	0123-0B
3601.00	cut Sh/Clst: gy brn to dsk y brn to brn blk	-	-	-	-	5.5	443	0126-3L
3615.50	ccp Sltst : m gy	-	-	-	-	5.5	445	0129-1L
3664.00	cut bulk	0.46	23	0.05	4+5	-	-	0137-0B
3670.00	cut Sh/Clst: dsk brn to brn blk	-	-	-	-	5.0-5.5	443	0138-2L
3697.00	cut bulk	0.47	20	0.07	4+5	-	-	0144-0B
3751.00	cut Sh/Clst: brn gy to dsk y brn	-	-	-	-	6.0	439	0153-2L
3769.00	cut Sh/Clst: brn gy to dsk brn	-	-	-	-	5.5	440	0156-2L
3787.00	cut bulk	0.31	22	0.02	3-4	-	-	0159-0B
3850.00	cut bulk	0.58	9	0.04	4	-	-	0171-0B

Table 8 : Visual Kerogen Composition Data for well NOCS 33/6-1

Depth unit of measure: m

Depth	Typ	Lithology	L	A	L	S	C	R	A	D	I	S	I	M	S	V	C	V	A	Sample
			P	m	i	p	u	e	l	n	c	n	F	e	n	i	I	T	e	
			T	r	D	P	i	s	g	o	R	u	F	D	c	T	l	D	m	
			%	L	t	e	o	c	i	a	f	s	F	e	r	R	i	r	t	V
2040.00	cut	Marl : lt gy to m gy	45	*	*		*		*		5	*	*			50	*	*		0074-3L
3240.00	cut	Sh/Clst: m gy	35	*	**	*		**	*	*	5		*			60	*	**		0114-2L
3565.00	cut	Sltst : dsk brn to dsk y brn	70	**	*	**	*	**	*	*	20	*	**			10	*	*	**	0120-4L
3601.00	cut	Sh/Clst: gy brn to dsk y brn to brn blk	60			**	*	*			5	*	*			35	**	*		0126-3L
3615.50	ccp	Sltst : m gy	TR			**	**	*			25	*	*			75	*	*		0129-1L
3670.00	cut	Sh/Clst: dsk brn to brn blk	75	*		**		*	*		5	*	*			20	*	*		0138-2L
3751.00	cut	Sh/Clst: brn gy to dsk y brn	75	*		*		*	*		5		*			20	**	*		0153-2L
3769.00	cut	Sh/Clst: brn gy to dsk brn	85	**		**		**	*	*	10	*	*	**		5	*	*		0156-2L

Table 9a : Tabulation of carbon isotope data for EOM/Oil - fractions or Oils for well NOCS 33/6-1

Depth unit of measure: m

Depth	Typ	Lithology	EOM/Oil	Saturated	Aromatic	NSO	Asphaltenes	Kerogen	Sample
3583.00	cut		-26.91	-27.47	-27.36	-26.75	-25.57	-	0123-3L
3612.70	ccp		-	-26.22	-26.60	-25.39	-24.64	-	0128-1L
3670.00	cut		-	-27.96	-28.04	-27.40	-26.30	-	0138-2L

Table 9b : Tabulation of cv values from carbon isotope data for well NOCS 33/6-1

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>
3583.00	cut		-27.47	-27.36	-2.89	0123-3L
3612.70	ccp		-26.22	-26.60	-4.37	0128-1L
3670.00	cut		-27.96	-28.04	-3.16	0138-2L

Table 10A: Variation in Triterpane Distribution (peak height) for Well NOCS 33/6-1

Depth unit of measure: m

Depth	Lithology	B/A	B/B+A	B		C/E	C/C+E	X/E	Z/E	Z/C	Z/Z+E	Q/E	E/E+F	C+D		J1		Sample
				B+E+F										C+D+E+F	D+F/C+E	J1+J2%		
3583.00	Sh/Clst	2.47	0.71	0.14	0.48	0.32	0.09	0.02	0.05	0.02	0.05	0.90	0.32	0.11	59.89	0123-3		
3612.70	Sltst	18.00	0.95	0.29	0.85	0.46	0.05	0.04	0.05	0.04	0.15	0.83	0.44	0.16	61.50	0128-1		
3670.00	Sh/Clst	1.69	0.63	0.13	0.54	0.35	0.10	0.02	0.05	0.02	0.06	0.89	0.35	0.13	61.51	0138-2		
3745.00	bulk	25.01	0.96	0.24	0.97	0.49	-	0.01	0.01	0.01	0.02	0.50	0.55	1.26	100.00	0182-0		

Table 10B: Variation in Sterane Distribution (peak height) for Well NOCS 33/6-1

Depth unit of measure: m

Depth	Lithology	Ratio1	Ratio2	Ratio3	Ratio4	Ratio5	Ratio6	Ratio7	Ratio8	Ratio9	Ratio10	Sample
3583.00	Sh/Clst	0.67	49.40	73.47	1.04	0.74	0.30	0.24	0.58	0.98	2.74	0123-3
3612.70	Sltst	0.54	46.68	72.57	0.35	0.74	0.46	0.40	0.57	0.88	2.48	0128-1
3670.00	Sh/Clst	0.69	47.06	73.56	1.01	0.75	0.33	0.27	0.58	0.89	2.63	0138-2
3745.00	bulk	0.43	9.13	53.73	0.83	0.86	0.14	0.13	0.37	0.10	0.64	0182-0

Ratio1:  $a / a + j$

Ratio2:  $q / q + t * 100\%$

Ratio3:  $2(r + s) / (q + t + 2(r + s)) * 100\%$

Ratio4:  $a + b + c + d / h + k + l + n$

Ratio5:  $r + s / r + s + q$

Ratio6:  $u + v / u + v + q + r + s + t$

Ratio7:  $u + v / u + v + i + m + n + q + r + s + t$

Ratio8:  $r + s / q + r + s + t$

Ratio9:  $q / t$

Ratio10:  $r + s / t$

Table 10C: Raw GCMS triterpane data (peak height) for Well NOCS 33/6-1

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			
3583.00	Sh/Clst	50.10	24.79	19.98	35.33	5.05	35.01	86.48	11.47	229.69	0123-3
		42.05	19.02	479.00	56.17	233.83	169.63	26.15	132.42		
		88.67	81.06	55.88	58.96	38.11	40.82	22.89			
3612.70	Sltst	39.62	17.43	5.75	11.57	2.02	3.12	56.17	4.79	97.71	0128-1
		5.79	11.36	115.03	23.15	61.61	43.38	14.13	30.08		
		18.83	10.56	7.07	5.66	3.35	0.00	0.00			
3670.00	Sh/Clst	73.88	39.42	24.47	56.15	10.95	69.04	116.56	16.57	357.00	0138-2
		66.08	49.02	665.14	86.00	336.03	249.32	65.12	207.28		
		129.70	106.17	75.53	69.41	40.09	44.41	27.06			
3745.00	bulk	7.58	2.29	1.63	12.80	0.77	2.98	74.53	1.59	116.13	0182-0
		0.00	175.80	119.47	121.50	39.89	350.93	0.00	11.52		
		0.00	0.00	0.00	0.00	0.00	0.00	0.00			

Table 10D: Raw GCMS sterane data (peak height) for Well NOCS 33/6-1

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					
3583.00	Sh/Clst	42.06	23.39	84.01	56.19	19.40	45.46	44.24	38.69	47.45	0123-3
		95.97	39.14	40.81	56.01	22.47	0.00	22.35	25.48		
		18.58	31.30	43.86	43.86	32.06					
3612.70	sltst	21.89	7.10	5.18	3.66	1.58	3.45	3.20	3.52	1.23	0128-1
		20.09	2.73	4.40	9.84	3.20	0.00	6.30	3.06		
		2.37	6.88	9.75	9.75	7.86					
3670.00	Sh/Clst	75.59	41.56	139.13	81.08	30.36	56.96	56.96	43.38	16.32	0138-2
		131.15	33.09	62.05	96.45	38.37	9.54	39.72	43.20		
		24.88	47.08	69.58	69.58	52.97					
3745.00	bulk	4.47	2.15	5.39	2.80	0.88	3.60	3.09	2.00	3.51	0182-0
		6.88	1.14	7.01	3.91	1.89	0.00	2.62	2.84		
		5.78	2.44	7.76	7.76	24.29					



Table 10E: Variation in Monoaromatic Sterane Distribution for Well NOCS 33/6-1

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>
3583.00	Sh/Clst	0.26	0.15	0.15	0.11	0123-3
3612.70	Slst	0.42	-	0.16	0.06	0128-1
3670.00	Sh/Clst	0.29	0.21	0.16	0.13	0138-2
3745.00	bulk	0.24	0.22	0.13	0.08	0182-0

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

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

Table 10F: Variation in Triaromatic Sterane Distribution for Well NOCS 33/6-1

Depth unit of measure: m

Depth	Lithology	Ratio1	Ratio2	Ratio3	Ratio4	Ratio5	Sample
3583.00	Sh/Clst	0.61	0.56	0.29	0.31	0.39	0123-3
3612.70	Sltst	0.83	0.73	0.61	0.62	0.80	0128-1
3670.00	Sh/Clst	0.58	0.55	0.29	0.30	0.39	0138-2
3745.00	bulk	0.50	0.47	0.26	0.28	0.35	0182-0

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 10G: Aromatisation of Steranes for Well NOCS 33/6-1

Depth unit of measure: m

Depth	Lithology	Ratio1	Ratio2	Sample
3583.00	Sh/Clst	0.32	0.93	0123-3
3612.70	Sltst	0.46	0.67	0128-1
3670.00	Sh/Clst	0.29	0.94	0138-2
3745.00	bulk	0.52	0.36	0182-0

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

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

Table 10H: Raw GCMS monoaromatic sterane data (peak height) for Well NOCS 33/6-1

Depth unit of measure: m

Depth	Lithology	a1	b1	c1	d1	e1	f1	g1	h1	i1	Sample
3583.00	Sh/Clst	234.99	118.07	432.68	349.47	682.53	251.18	638.30	400.17	62.39	0123-3
3612.70	Slstst	23.22	0.00	9.56	66.13	31.60	83.52	87.61	41.04	42.68	0128-1
3670.00	Sh/Clst	223.14	146.65	391.97	308.94	552.37	214.06	603.52	409.21	62.45	0138-2
3745.00	bulk	10.13	8.89	21.86	25.25	31.69	6.91	36.91	34.32	70.07	0182-0

Table 10I: Raw GCMS trioaromatic sterane data (peak height) for Well NOCS 33/6-1

Depth unit of measure: m

Depth	Lithology	a1	b1	c1	d1	e1	f1	g1	Sample
3583.00	Sh/Clst	1371.44	1093.63	891.22	2131.39	1192.76	938.06	876.87	0123-3
3612.70	Sltst	418.65	236.93	62.75	106.85	128.85	39.14	85.87	0128-1
3670.00	Sh/Clst	1362.77	1188.65	968.91	2098.82	1385.40	869.03	970.07	0138-2
3745.00	bulk	39.97	34.79	33.64	75.11	32.88	29.18	39.35	0182-0