Anchor Drilling Fluids											Anchor Drilling Fluids	
OPERATOR: STATOIL											WELL: 6306/6-1	
Product	Unit size	Unit price NOK	36" sect.	Cost NOK	17 1/2" sect.	Cost NOK	12 1/4" sect.	Cost NOK	8 1/2" sect.	Cost NOK	Total consumed	Total cost NOK
Barite	M.T	725,44	70	50 780,80			70	50 780,80	97	70 367,68	237	171 929,28
Bentonite	M.T.	1 998,76	5	9 993,80	15	29 981,40			2	3 997,52	22	43 972,72
Celpol LV	kg	28,41					3875	110 088,75	2250	63 922,50	6125	174 011,25
Lampac Reg	kg	28,41							675	19 176,75	675	19 176,75
Ironite Sponge	kg	25,17					136	3 423,12			136	3 423,12
CMC EHV	kg	14,77	2000	29 540,00							2000	29 540,00
Soda ash	kg	2,34	50	117,00	50	117,00	125	292,50	125	292,50	350	819,00
Bicarbonate	kg	2,34							500	1 170,00	500	1 170,00
Lime	kg	2,33	60	139,80	20	46,60					80	186,40
KCL	kg	2,03							3000	6 090,00	3000	6 090,00
KCL brine	m3	492,08					170	83 653,60	90	44 287,20	260	127 940,80
Total cost	NOK			90 571,40		30 145,00		248 238,77		209 304,15		578 259,32
Hole drilled	m			50		77		324		561		1012
Cost per metre	NOK			1 811,43		391,49		766,17		373,09		571,40
Total days				1		2		3		6		12
Cost per day	NOK			90 571,40		15 072,50		82 746,26		34 884,03		48 188,28
Mud mixed	m3			300		90		301		221		912
Cost per m3	NOK			301,90		334,94		824,71		947,08		634,06

Anchor Drilling Fluids

MUD PROPERTIES SUMMARY

Anchor Drilling Fluids

WELL NO: 6306/6-1

AREA: NORTH SEA

DAY	DATE	DEPTH	HOLE	MW	F.VIS	VG-METER READINGS						AV	PV	YP	GEL	GEL	pH	API	HTHP	Cl-	Pf	Mf	TOT.	Ca++	SOLIDS	OIL	SAND	MBT	KCL	HGS	LGS	Bacteria
no.	1993/94		SIZE			600	300	200	100	6	3				10sec	10min							H									Test
		mtrs	inch	S.G.	s/qt.	rpm	rpm	rpm	rpm	rpm	rpm	cps	cps	Pa	Pa	Pa		ml	ml	mg/l	ml	ml	mg/l	mg/l	vol%	vol%	vol%	kg/m3	kg/m3	kg/m3	kg/m3	org./ml
1	22-jun	355	36	1,05	100+																				2							
2	23-jun	432	17 1/2	1,05	100+																											
3	24-jun	586	17 1/2																													
4	25-jun	465	12 1/4	1,20	45	38	23	10	4	2	1	19	15	4	0,5	1,5	9	3,1		47000	0,1	0,5	360	140	8		TR	5	100	158	47	
5	26-jun	756	12 1/4	1,20	51	34	22	13	7	2	1	17	12	5	0,5	1,5	9,6	3,6		49000	0,1	0,4	360	240	10		0,25	15	95	73	150	
6	27-jun	756	12 1/4	1,20	57	37	26	15	8	2	1	18,5	11	7,5	0,5	1,5	9,5	4,4		48000	0,4	1,2	440	300	10		1	15	90	74	151	
												0	0	0																	
7	28-jun	1027	8 1/2	1,30	72	64	37	28	15	2	1	32	27	5	0,5	1,5	9,4	3,2		55000	0,5	1,6	360	240	12		0,5	15	98	248	88	
8	29-jun	1176	8 1/2	1,25	82	68	41	33	20	3	1	34	27	7	1	3	9	3,1		56000	0,1	0,5	400	300	10		0,25	21	95	198	61	
9	30-jun	1300	8 1/2	1,25	84	65	40	30	18	2	1	32,5	25	7,5	1	3	9	2,8		55000	0,06	0,3	450	380	10,5		1	21	92	179	60	
10	1-jul	1317	8 1/2	1,25	87	63	38	28	18	2	1	31,5	25	6,5	1	3	9	2,9		58000	0,07	0,3	500	400	10,5		0,5	21	95	177	88	
11	2-jul	1317	8 1/2	1,25	84	62	37	27	17	2	1	31	25	6	1	3	9,1	2,9		58000	0,1	0,03	550	420	10,5		0,5	21	94	177	88	
12	3-jul	1317	8 1/2	1,25	74	44	27	20	12	2	1	22	17	5	0,5	1	9,8	3		55000	0	0,2	600	400	10,5		0,5	21	92	179	90	
13	4-jul	1317	8 1/2	1,03							Sea water in hole																					

ife

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1 Introduction

This report gives the result of routine vitrinite reflectance analyses on 14 samples covering the interval from 460 to 1279 mRKB in well 6306/6-1 offshore Norway.

2 Material

2.1 Samples

The material was provided from the client as 12 unwashed cuttings and 2 core chips. The sample positions are indicated in figure 1.

2.2 Geological information and casing points

Information on the stratigraphy was supplied from the client and is shown in figure 1.

3 Analytical techniques

3.1 Preparation

The cuttings samples were washed and then treated with hydrochloric and hydrofluoric acid prior to further preparation. The aim was to avoid soft and expanding mineral phases in order to ensure good polishing quality. The core chips were treated as bulk material.

The sample material resulting from the acid treatment and the bulk samples were embedded in an epoxy resin to make briquettes, ground flat and polished using 0.25 micron diamond paste and magnesium oxide as the two final steps.

3.2 Analysis

The analytical equipment being used was a Zeiss MPM 03 photometer microscope equipped with an Epiplan-Neofluar 40/0.90 oil objective. The sensitive measuring spot was kept constant for all measurements at about 2.5 micron in diameter. The measurements were made through a green band pass filter (546 nm) and in oil immersion (refractive index 1.515 at 18°C). The readings were made without a polarizer and using a stationary stage. This procedure is called measurement of random reflectance (%Rm). The photometer is calibrated daily against a standard of known reflectance (%Rm= 0.588) and routinely (daily) checked against two other standards of significant different reflectances (%Rm=0.879 and 1.696). A deviation from these values of less than ±0.01 and ±0.02 respectively is considered as acceptable. The calibration is routinely checked during the course of measurements at least every hour, and a deviation of less than ±0.005 is considered as acceptable.

For each sample at least 20 points were measured if possible, and quality ratings are given to various important aspects which may affect the measurements. The aspects are abundance of vitrinite, uncertainties in the identification of indigenous vitrinite, type of vitrinite, particle size, particle surface quality and abundance of pyrite.

Table 1 Vitrinite reflectance data

Well
6306/6-1

IFE no.	Depth, mRKB	Sample type	Lithology	%Rm	Std. dev.	N	Quality	Preparation
ST 1715	460	cut	clst	0.32	0.07	26	P	HF
ST 1705	480	cut	clst	0.34	0.04	22	M	HF
ST 1706	550	cut	clst	0.35	0.04	25	M	HF
ST 1707	720	cut	sst	0.35	0.04	23	M	HF
ST 1708	730	cut	sst	0.32	0.05	23	M	HF
ST 1709	850	cut	clst	0.35	0.05	22	M	HF
ST 1710	925.5	core	clst	0.39	0.03	9	M	bulk
ST 1711	1035	cut	clst	0.41	0.04	20	M	HF
ST 1712	1064	core	clst	0.37	0.06	10	M	bulk
ST 1713	1131	cut	clst	0.36	0.03	12	M	HF
ST 1714	1158	cut	clst	0.36	0.05	23	P	HF
ST 1716	1261	cut	sst	0.41	0.05	21	M	HF
ST 1717	1276	cut	coal	0.41	0.03	22	G	HF
ST 1718	1279	cut	coal	0.41	0.04	25	G	HF

G	Good quality	P	Poor quality	A	Mud additive	HF	HF-treated
M	Moderate quality	X	Not vitrinite	Barren	Barren of vitrinite	Bulk	Bulk rock

STATOIL

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SECTOR FOR GEOTECHNOLOGY

Geochemistry Department

Grading

Title		
Geochemical Report for Well 6306/6-1.		
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geochemistry, source rocks, migrated petroleum, thermal maturity, well 6306/6-1

Abstract

See summary on page 1-2.
The work described in this report has been carried out in accordance with the Norwegian Industry Guide to Organic geochemical Analysis, 3rd edition.

Prepared by	Approved by	
GEOLAB NOR	06.01.95	Trygve Meyer, Dept.Manager
	5/1-95	Kristin Skadsem Eikelmann, geochemist
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GEOLAB NOR

GEOCHEMICAL REPORT FOR WELL NOCS 6306/6-1

Client: Statoil

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Chapter 1

INTRODUCTION

This report concerns the geochemical analysis of well samples covering the 600-1279 m interval of well NOCS 6306/6-1

Both washed and wet cuttings, besides sidewall cores and conventional cores were analysed.

The aims of the Statoil-designed analytical program were both the assessment of source rocks and the detection/characterization of possible shows throughout the well section.

No optical maturity analyses were carried out by Geolab Nor. Vitrinite reflectance analysis was performed by IFE and made available to Geolab Nor towards the end of the study.

1.1 General Well Information

The well NOCS 6306/6-1 is situated offshore Mid-Norway in the Frøyabanken area, see Figure 1 for block location. The well was drilled in 1994 and classified as dry. No further information was supplied by the client.

1.2 Analytical Program

The analytical program for well NOCS 6306/6-1 was based on the samples selected by Statoil for screening and detailed follow-up analysis. The number of samples for the individual analyses are listed below:

Analysis type	No of samples	Figures	Tables
Headspace/Occluded gas	8	2a-d	1
Washing	8		
Lithology description	33	3	2
Picking for screening	19		
TOC	18	3	2,3
Rock-Eval pyrolysis	27	4,5,6,7,8,10,11	3
Thermal extraction GC (GHM, S_1)		9	
Pyrolysis GC (GHM, S_2)	3	9a-b,10	4
Picking for extraction	10		
Soxtec Extraction of organic matter	11	12	6a-e
Asphaltene separation	8		6a-e
Iatroscan TLC	8		5a-b
MPLC separation	8	12	6a-e
Whole oil GC	3*	13,14a-b	7
Saturated hydrocarbon GC	8	13,15a-c	7
Aromatic hydrocarbon GC	8	15d-f	8a-b
GC - MS of saturated HC	8	16a-l	10a-k
GC - MS of aromatic HC	8		10a-k
Isotope composition of EOM/fractions	11*	17,18	9a-b

* Three samples yielded insufficient EOM to warrant reliable MPLC separation. These were run on EOM GC and GC-MS as suggested by Geolab Nor and agreed to by the client. Of the 11 (total)samples run for bulk C isotopes, therefore, 3 of these were run for EOM only, the rest for EOM plus all fractions.

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

Project: NOCS 6306/6-1
Well: NOCS 6306/6-1
Depth unit of measure: m * Indicated values in ml gas/kg rock

Depth	C1	C2	C3	iC4	nC4	C5+	sum C1-C4	sum C2-C4	%wet ness	iC4/nC4
1000.00	28658	2921	3186	449	799	1165	36013	7355	20.4	0.56
1090.00	30668	2851	2860	363	496	165	37238	6570	17.6	0.73
1120.00	42649	2945	4351	781	1362	883	52088	9439	18.1	0.57
1150.00	10822	245	244	26	55	20	11392	570	5.0	0.47
1165.00	114168	1296	963	50	95	47	116572	2404	2.1	0.53
1225.00	300	15	35	7	19	47	376	76	20.2	0.37
1255.00	2789	27	27	5	10	25	2858	69	2.4	0.50
1270.00	14552	97	38	7	11	41	14705	153	1.0	0.64

Table 1b: C1 to C7 hydrocarbons in CUTTINGS gas
(µl gas/kg rock)

Project: NOCS 6306/6-1
Well: NOCS 6306/6-1
Depth unit of measure: m * Indicated values in ml gas/kg source rock

Depth	C1	C2	C3	iC4	nC4	C5+	sum C1-C4	sum C2-C4	%wet ness	iC4/nC4
1000.00	26	10	64	24	76	393	200	174	87.0	0.32
1090.00	66	42	229	67	146	87	550	484	88.0	0.46
1120.00	22	5	32	15	49	87	123	101	82.1	0.31
1150.00	1296	301	781	86	192	106	2656	1360	51.2	0.45
1165.00	1581	219	508	38	83	64	2429	848	34.9	0.46
1225.00	155	8	22	2	8	23	195	40	20.5	0.25
1255.00	103	4	6	1	5	20	119	16	13.5	0.20
1270.00	109	6	4	1	3	11	123	14	11.4	0.33

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

Project: NOCS 6306/6-1
Well: NOCS 6306/6-1
Depth unit of measure: m * Indicated values in ml gas/kg source rock

Depth	C1	C2	C3	iC4	nC4	C5+	sum C1-C4	sum C2-C4	%wet ness	iC4/nC4
1000.00	28684	2931	3250	473	875	1558	36213	7529	20.8	0.54
1090.00	30734	2893	3089	430	642	252	37788	7054	18.7	0.67
1120.00	42671	2950	4383	796	1411	970	52211	9540	18.3	0.56
1150.00	12118	546	1025	112	247	126	14048	1930	13.7	0.45
1165.00	115749	1515	1471	88	178	111	119001	3252	2.7	0.49
1225.00	455	23	57	9	27	70	571	116	20.3	0.33
1255.00	2892	31	33	6	15	45	2977	85	2.9	0.40
1270.00	14661	103	42	8	14	52	14828	167	1.1	0.57

Table 2 : Lithology description for well NOCS 6306/6-1

Depth unit of measure: m

Depth Int	Cvd	Type TOC%	%	Grp Frm Age Lithology description	Trb	Sample
600.00						0001
		1.29	100	Sltst : m gy, s		0001-1L
			tr	S/Sst : w to lt gy, cem, glauc		0001-2L
620.00						0002
			90	S/Sst : w to lt gy, l, glauc		0002-2L
			10	Sh/Clst: m gy to brn gy, slt, s		0002-1L
			tr	Cont : prp, Mica-ad		0002-3L
710.00						0003
			100	S/Sst : w to lt gy, l, glauc		0003-2L
			tr	Sh/Clst: m gy to brn gy, slt, s		0003-1L
			tr	Cont : prp, Mica-ad		0003-3L
730.00						0004
		0.06	100	S/Sst : w to lt gy, l, glauc		0004-2L
			tr	Sh/Clst: m gy to brn gy, slt, s		0004-1L
			tr	Cont : prp, Mica-ad		0004-3L
925.50	swc					0005
		1.14	95	Sh/Clst: drk gy		0005-1L
			5	Ca : brn gy to gy brn		0005-2L
993.00	swc					0006
		1.06	100	Sh/Clst: m gy to drk gy		0006-1L

Table 2 : Lithology description for well NOCS 6306/6-1

Depth unit of measure: m

Depth Int	Cvd	Type TOC%	%	Grp Frm Age Lithology description	Trb	Sample
1000.00						0007
			100	Sh/Clst: m gy		0007-1L
			tr	Ca : pl brn, lt brn gy		0007-2L
			tr	S/Sst : w to lt gy, cem		0007-3L
			tr	Cont : prp		0007-4L
1046.50		swc				0008
		1.19	50	Sh/Clst: m gy, sft		0008-1L
			50	Cont : dd		0008-2L
1064.00		swc				0009
		1.27	50	Sh/Clst: m gy, sft		0009-1L
			50	Cont : dd		0009-2L
1090.00						0010
			70	Sh/Clst: lt gy to m gy to drk gy, slt, s		0010-1L
			30	S/Sst : gy red, w, calc, cem		0010-2L
			tr	Cont : prp		0010-3L
1101.00						0011
		1.05	50	Sltst : m gy to drk gy to drk gy, calc, s		0011-1L
			50	S/Sst : gy red, w, calc, cem		0011-2L
			tr	Cont : prp		0011-3L
			tr	Ca : pl brn		0011-4L
1120.00						0012
			50	S/Sst : gy red, w, calc, cem		0012-2L
			40	Sltst : m gy to drk gy, calc, s		0012-1L
			10	Cont : prp		0012-3L
			tr	Ca : pl brn		0012-4L

Table 2 : Lithology description for well NOCS 6306/6-1

Depth unit of measure: m

Depth	Type		Grp	Frm	Age	Trb	Sample
Int Cvd	TOC%	%	Lithology description				
1131.00							0013
		55	Sh/Clst:	gy red, calc			0013-5L
		45	Sh/Clst:	lt gy			0013-6L
		tr	Sltst	: m gy to drk gy, calc, s			0013-1L
		tr	S/Sst	: gy red, w, calc, cem			0013-2L
		tr	Cont	: prp			0013-3L
		tr	Ca	: pl brn			0013-4L
1137.50	swc						0014
	6.15	100	Sh/Clst:	dsk brn to brn blk			0014-1L
1140.00							0015
	6.12	90	Sh/Clst:	dsk brn to brn blk, slt			0015-1L
		10	Other	: w, calc			0015-5L
		tr	Sh/Clst:	gy red, s			0015-2L
		tr	Cont	: prp			0015-3L
		tr	Coal	: blk			0015-4L
1149.00							0016
	4.48	100	Sltst	: dsk brn to brn gy, s			0016-1L
		tr	Sh/Clst:	gy red, s			0016-2L
		tr	Cont	: prp			0016-3L
		tr	Coal	: blk			0016-4L
		tr	Other	: w, calc			0016-5L
1150.00							0017
		70	Sltst	: dsk brn to brn gy, s			0017-1L
cvd		20	Sh/Clst:	gy red, lt gy, s			0017-2L
		10	Other	: w, calc			0017-5L
		tr	Cont	: prp			0017-3L
		tr	Coal	: blk			0017-4L

Table 2 : Lithology description for well NOCS 6306/6-1

Depth unit of measure: m

Depth Int	Cvd	Type TOC%	%	Grp	Frm	Age / Lithology description	Trb	Sample
1158.00								0018
		3.14	100	Sltst		: dsk brn to brn gy, s		0018-1L
	cvd		tr	Sh/Clst		: gy red, lt gy, s		0018-2L
			tr	Cont		: prp		0018-3L
			tr	Coal		: blk		0018-4L
			tr	Other		: w, calc		0018-5L
1161.00								0019
			95	Sltst		: dsk brn to brn gy, s		0019-1L
			5	S/Sst		: lt gy		0019-6L
	cvd		tr	Sh/Clst		: gy red, lt gy, s		0019-2L
			tr	Cont		: prp		0019-3L
			tr	Coal		: blk		0019-4L
			tr	Other		: w, calc		0019-5L
1165.00								0020
			85	Sltst		: dsk brn to brn gy, s		0020-1L
			15	S/Sst		: lt gy		0020-6L
	cvd		tr	Sh/Clst		: gy red, lt gy, s		0020-2L
			tr	Cont		: prp		0020-3L
			tr	Coal		: blk		0020-4L
			tr	Other		: w, calc		0020-5L
1177.13	ccp							0021
			100	S/Sst		: lt gy, cem, glauc, kln		0021-1L
1179.60	ccp							0023
			100	S/Sst		: lt gy, cem, glauc, kln		0023-1L

Table 2 : Lithology description for well NOCS 6306/6-1

Depth unit of measure: m

Depth Int	Cvd	Type TOC%	%	Grp Frm Age Lithology description	Trb	Sample
1186.75		ccp				0022
			100	S/Sst : lt gy, cem, glauc, kln		0022-1L
1215.00						0024
			100	S/Sst : lt gy, crs, l, cem		0024-1L
			tr	Cont : prp		0024-2L
1225.00						0025
			100	S/Sst : lt gy, crs, l		0025-1L
			tr	Cont : prp		0025-2L
1242.00						0026
			100	S/Sst : lt gy, crs, l		0026-1L
			tr	Cont : prp		0026-2L
1254.00						0027
			95	S/Sst : lt gy, crs, l		0027-1L
		64.20	5	Sh/Clst: brn blk to blk, carb		0027-3L
			tr	Cont : prp		0027-2L
1255.00						0028
		0.08	100	S/Sst : lt gy, crs, l		0028-1L
			tr	Cont : prp		0028-2L
			tr	Sh/Clst: brn blk to blk, carb		0028-3L

Table 2 : Lithology description for well NOCS 6306/6-1

Depth unit of measure: m

Depth	Type		Grp	Frm	Age	Trb	Sample
Int Cvd	TOC%	%	Lithology description				
1257.00							0029
		100	S/Sst	: lt gy, crs, cem			0029-1L
		tr	Cont	: prp			0029-2L
	10.50	tr	Sh/Clst	: brn blk to blk, carb			0029-3L
1270.00							0030
		100	S/Sst	: lt gy, crs, cem, kln			0030-1L
		tr	Cont	: prp			0030-2L
		tr	Sh/Clst	: brn blk to blk, carb			0030-3L
1273.00							0031
		95	S/Sst	: lt gy, crs, l			0031-1L
		5	Sh/Clst	: brn blk to blk, carb			0031-3L
		tr	Cont	: prp			0031-2L
1276.00							0032
		60	S/Sst	: lt gy, crs, l			0032-1L
		30	Sh/Clst	: brn blk to blk, carb			0032-3L
	56.70	10	Coal	: blk			0032-4L
		tr	Cont	: prp			0032-2L
1279.00							0033
		90	S/Sst	: lt gy, crs, l			0033-1L
	18.55	5	Sh/Clst	: brn blk to blk, carb			0033-3L
	61.60	5	Coal	: blk			0033-4L
		tr	Cont	: prp			0033-2L

Table 3 : Rock-Eval table for well NOCS 6306/6-1

Depth unit of measure: m

Depth	Typ	Lithology	S1	S2	S3	S2/S3	TOC	HI	OI	PP	PI	Tmax	Sample
600.00	cut	Sltst : m gy	0.02	0.52	0.95	0.55	1.29	40	74	0.5	0.04	424	0001-1L
620.00	cut	S/Sst : w to lt gy	0.02	0.03	0.28	0.11	-	-	-	0.1	0.40	429	0002-2L
710.00	cut	S/Sst : w to lt gy	0.02	0.01	0.35	0.03	-	-	-	-	0.67	336	0003-2L
730.00	cut	S/Sst : w to lt gy	-	-	0.17	-	0.06	-	283	-	-	-	0004-2L
925.50	swc	Sh/Clst: drk gy	0.04	0.54	1.48	0.36	1.14	47	130	0.6	0.07	427	0005-1L
993.00	swc	Sh/Clst: m gy to drk gy	0.05	0.48	0.27	1.78	1.06	45	25	0.5	0.09	419	0006-1L
1046.50	swc	Sh/Clst: m gy	1.40	1.37	4.33	0.32	1.19	115	364	2.8	0.51	416	0008-1L
1064.00	swc	Sh/Clst: m gy	1.01	1.28	3.63	0.35	1.27	101	286	2.3	0.44	415	0009-1L
1101.00	cut	Sltst : m gy to drk gy to drk gy	0.02	0.49	0.55	0.89	1.05	47	52	0.5	0.04	430	0011-1L
1131.00	com	bulk	0.04	0.35	0.83	0.42	0.64	55	130	0.4	0.10	428	0034-0B
1137.50	swc	Sh/Clst: dsk brn to brn blk	0.79	27.39	1.02	26.85	6.15	445	17	28.2	0.03	416	0014-1L
1140.00	cut	Sh/Clst: dsk brn to brn blk	0.93	32.27	0.82	39.35	6.12	527	13	33.2	0.03	418	0015-1L
1149.00	cut	Sltst : dsk brn to brn gy	0.99	25.20	0.47	53.62	4.48	563	10	26.2	0.04	413	0016-1L
1158.00	cut	Sltst : dsk brn to brn gy	0.53	15.18	0.83	18.29	3.14	483	26	15.7	0.03	412	0018-1L
1161.00	cut	Sltst : dsk brn to brn gy	0.54	16.37	0.85	19.26	-	-	-	16.9	0.03	413	0019-1L

Table 3 : Rock-Eval table for well NOCS 6306/6-1

Depth unit of measure: m

Depth	Typ	Lithology	S1	S2	S3	S2/S3	TOC	HI	OI	PP	PI	Tmax	Sample
1177.13	ccp	S/Sst : lt gy	-	-	0.25	-	-	-	-	-	-	-	0021-1L
1179.60	ccp	S/Sst : lt gy	0.01	0.09	0.15	0.60	-	-	-	0.1	0.10	422	0023-1L
1186.75	ccp	S/Sst : lt gy	-	-	0.14	-	-	-	-	-	-	-	0022-1L
1215.00	cut	S/Sst : lt gy	-	0.02	0.20	0.10	-	-	-	-	-	386	0024-1L
1242.00	cut	S/Sst : lt gy	-	-	0.14	-	-	-	-	-	-	-	0026-1L
1254.00	cut	Sh/Clst: brn blk to blk	7.57	181.66	3.93	46.22	64.20	283	6	189.2	0.04	411	0027-3L
1255.00	cut	S/Sst : lt gy	-	-	0.13	-	0.08	-	163	-	-	-	0028-1L
1257.00	cut	Sh/Clst: brn blk to blk	1.50	39.19	0.68	57.63	10.50	373	6	40.7	0.04	414	0029-3L
1273.00	cut	S/Sst : lt gy	-	-	0.17	-	-	-	-	-	-	-	0031-1L
1276.00	cut	Coal : blk	3.98	136.11	3.51	38.78	56.70	240	6	140.1	0.03	417	0032-4L
1279.00	cut	Sh/Clst: brn blk to blk	1.65	64.54	1.06	60.89	18.55	348	6	66.2	0.02	424	0033-3L
1279.00	cut	Coal : blk	3.39	125.84	5.66	22.23	61.60	204	9	129.2	0.03	420	0033-4L

Table 3b: Values for Rock-Eval standard BLACK VEN MARL

Well NOCS 6306/6-1

TMax	S1	S2	S3
419	0.42	19.04	2.00
423	0.43	19.82	1.80

Table 4 : Pyrolysis GC Data (S2 peak) as Percentage of Total Area for Well NOCS 6306/6-1

Depth unit of measure: m

Depth	Typ	Lithology	C1	C2-C5	C6-C14	C15+	S2 from Rock-Eval	Sample
1137.50	swc	Sh/Clst: dsk brn to brn blk	4.17	10.07	32.02	53.74	27.39	0014-1L
1149.00	cut	Sltst : dsk brn to brn gy	2.57	8.76	29.42	59.24	25.20	0016-1L
1276.00	cut	Coal : blk	11.52	12.13	34.75	41.60	136.11	0032-4L

Table 5A: Results of TLC-FID analysis: Absolute yields in mg/g rock for well NOCS 6306/6-1

Depth unit of measure: m

Depth	S Tp	F Tp	Lithology	Sat HC	Aro HC	Resins	Asp	Tot HC	Tot Pol	Tot EOM	Sample	
1137.50	swc	L	SHALE/CLAYSTONE	0.110	0.146	0.514	2.679	0.255	3.193	3.449	0014-1	L
1149.00	cut	L	SILTSTONE	0.024	0.039	0.144	0.820	0.063	0.964	1.027	0016-1	L
1158.00	cut	L	SILTSTONE	0.058	0.093	0.274	1.239	0.150	1.513	1.663	0018-1	L
1161.00	cut	L	SILTSTONE	0.068	0.121	0.391	1.372	0.188	1.763	1.952	0019-1	L
1257.00	cut	L	SHALE/CLAYSTONE	0.105	0.486	1.201	25.056	0.590	26.257	26.848	0029-3	L
1276.00	cut	L	COAL	0.269	1.809	1.349	15.054	2.078	16.403	18.481	0032-4	L
1279.00	cut	L	SHALE/CLAYSTONE	0.108	0.439	0.559	4.179	0.548	4.738	5.286	0033-3	L
1279.00	cut	L	COAL	0.273	1.637	1.455	20.628	1.910	22.084	23.994	0033-4	L

Table 5B: Results of TLC-FID analysis: Rel. percentages of sep. fractions for well NOCS 6306/6-1

Depth unit of measure: m

Depth	S Tp	F Tp	Lithology	Sat HC	Aro HC	Resins	Asp	Tot HC	Tot Pol	Sample	
1137.50	swc	L	SHALE/CLAYSTONE	3.18	4.22	14.91	77.68	7.40	92.60	0014-1	L
1149.00	cut	L	SILTSTONE	2.30	3.81	14.07	79.82	6.11	93.89	0016-1	L
1158.00	cut	L	SILTSTONE	3.46	5.56	16.45	74.52	9.03	90.97	0018-1	L
1161.00	cut	L	SILTSTONE	3.47	6.18	20.05	70.31	9.65	90.35	0019-1	L
1257.00	cut	L	SHALE/CLAYSTONE	0.39	1.81	4.47	93.33	2.20	97.80	0029-3	L
1276.00	cut	L	COAL	1.45	9.79	7.30	81.46	11.24	88.76	0032-4	L
1279.00	cut	L	SHALE/CLAYSTONE	2.05	8.31	10.57	79.07	10.36	89.64	0033-3	L
1279.00	cut	L	COAL	1.14	6.82	6.07	85.97	7.96	92.04	0033-4	L

Table 6 a: Weight of EOM and Chromatographic Fraction for well NOCS 6306/6-1

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
620.00	cut	S/Sst : w to lt gy	4.3	0.2	-	-	-	-	-	-	0.26	0002-2L
1137.50	swc	Sh/Clst: dsk brn to brn blk	6.4	26.3	1.7	2.7	17.2	4.7	4.4	21.9	5.94	0014-1L
1149.00	cut	Sltst : dsk brn to brn gy	10.0	14.2	0.5	2.5	8.2	2.9	3.1	11.1	4.35	0016-1L
1158.00	cut	Sltst : dsk brn to brn gy	8.5	20.6	1.9	4.2	10.6	4.0	6.1	14.5	3.38	0018-1L
1161.00	cut	Sltst : dsk brn to brn gy	9.8	22.7	0.7	4.2	13.5	4.4	4.8	17.9	3.43	0019-1L
1179.60	ccp	S/Sst : lt gy	10.9	0.6	-	-	-	-	-	-	0.21	0023-1L
1257.00	com	Composite sample - see table 6 e	0.5	16.4	0.4	1.8	12.8	1.4	2.2	14.2	31.80	0035-0B
1273.00	cut	S/Sst : lt gy	8.0	0.2	-	-	-	-	-	-	0.16	0031-1L
1276.00	cut	Coal : blk	2.7	55.2	6.0	5.0	41.1	3.1	11.0	44.2	59.10	0032-4L
1279.00	cut	Sh/Clst: brn blk to blk	4.3	24.4	0.7	3.0	18.1	2.7	3.6	20.8	18.30	0033-3L
1279.00	cut	Coal : blk	1.6	39.4	0.8	3.6	32.4	2.6	4.4	35.0	61.50	0033-4L

Table 6 b: Concentration of EOM and Chromatographic Fraction (wt ppm rock) for well NOCS 6306/6-1

Depth unit of measure: m

Depth	Typ	Lithology	EOM	Sat	Aro	Asph	NSO	HC	Non-HC	Sample
620.00	cut	S/Sst : w to lt gy	47	-	-	-	-	-	-	0002-2L
1137.50	swc	Sh/Clst: dsk brn to brn blk	4094	267	421	2679	726	688	3405	0014-1L
1149.00	cut	Sltst : dsk brn to brn gy	1416	53	253	819	289	307	1108	0016-1L
1158.00	cut	Sltst : dsk brn to brn gy	2414	218	491	1239	464	710	1704	0018-1L
1161.00	cut	Sltst : dsk brn to brn gy	2311	67	425	1372	447	492	1819	0019-1L
1179.60	ccp	S/Sst : lt gy	55	-	-	-	-	-	-	0023-1L
1257.00	com	Composite sample - see table 6 e	32176	784	3568	25058	2764	4352	27823	0035-0B
1273.00	cut	S/Sst : lt gy	25	-	-	-	-	-	-	0031-1L
1276.00	cut	Coal : blk	20219	2201	1816	15054	1146	4018	16201	0032-4L
1279.00	cut	Sh/Clst: brn blk to blk	5655	157	685	4180	631	842	4812	0033-3L
1279.00	cut	Coal : blk	25070	496	2305	20630	1636	2802	22267	0033-4L

Table 6 c: Concentration of EOM and Chromatographic Fraction (mg/g TOC(e)) for well NOCS 6306/6-1

Depth unit of measure: m

Depth	Typ	Lithology	EOM	Sat	Aro	Asph	NSO	HC	Non-HC	Sample
620.00	cut	S/Sst : w to lt gy	17.89	-	-	-	-	-	-	0002-2L
1137.50	swc	Sh/Clst: dsk brn to brn blk	68.94	4.50	7.10	45.11	12.23	11.60	57.34	0014-1L
1149.00	cut	Sltst : dsk brn to brn gy	32.56	1.24	5.83	18.84	6.65	7.07	25.49	0016-1L
1158.00	cut	Sltst : dsk brn to brn gy	71.43	6.46	14.55	36.67	13.75	21.01	50.42	0018-1L
1161.00	cut	Sltst : dsk brn to brn gy	67.40	1.96	12.39	40.00	13.05	14.35	53.05	0019-1L
1179.60	ccp	S/Sst : lt gy	26.21	-	-	-	-	-	-	0023-1L
1257.00	com	Composite sample - see table 6 e	101.18	2.47	11.22	78.80	8.69	13.69	87.50	0035-0B
1273.00	cut	S/Sst : lt gy	15.63	-	-	-	-	-	-	0031-1L
1276.00	cut	Coal : blk	34.21	3.72	3.07	25.47	1.94	6.80	27.41	0032-4L
1279.00	cut	Sh/Clst: brn blk to blk	30.90	0.86	3.74	22.84	3.45	4.60	26.30	0033-3L
1279.00	cut	Coal : blk	40.76	0.81	3.75	33.55	2.66	4.56	36.21	0033-4L

Table 6 d: Composition of material extracted from the rock (%) for well NOCS 6306/6-1

Depth unit of measure: m

Depth	Typ	Lithology	Sat / EOM	Aro / EOM	Asph / EOM	NSO / EOM	HC / EOM	Non-HC / EOM	Sat / Aro	HC / Non-HC	Sample
620.00	cut	S/Sst : w to lt gy	-	-	-	-	-	-	-	-	0002-2L
1137.50	swc	Sh/Clst: dsk brn to brn blk	6.53	10.29	65.44	17.74	16.82	83.18	63.47	20.23	0014-1L
1149.00	cut	Sltst : dsk brn to brn gy	3.81	17.90	57.86	20.44	21.71	78.29	21.26	27.72	0016-1L
1158.00	cut	Sltst : dsk brn to brn gy	9.04	20.37	51.34	19.25	29.41	70.59	44.39	41.67	0018-1L
1161.00	cut	Sltst : dsk brn to brn gy	2.91	18.39	59.35	19.36	21.30	78.70	15.83	27.06	0019-1L
1179.60	ccp	S/Sst : lt gy	-	-	-	-	-	-	-	-	0023-1L
1257.00	com	Composite sample - see table 6 e	2.44	11.09	77.88	8.59	13.53	86.47	21.98	15.64	0035-0B
1273.00	cut	S/Sst : lt gy	-	-	-	-	-	-	-	-	0031-1L
1276.00	cut	Coal : blk	10.89	8.99	74.46	5.67	19.87	80.13	121.17	24.80	0032-4L
1279.00	cut	Sh/Clst: brn blk to blk	2.78	12.12	73.93	11.17	14.90	85.10	22.97	17.51	0033-3L
1279.00	cut	Coal : blk	1.98	9.20	82.29	6.53	11.18	88.82	21.55	12.59	0033-4L

Table 6 e: List of composite samples appearing in the extraction tables for well NOCS 6306/6-1

Depth unit of measure: m

NOTE: Depths shown in tables 6 a to d correspond to the composite samples' lower depth.

Upper depth	Lower depth	Typ	Sample	Depth	Typ	Lithology	Sample
1254.00	1257.00	com	0035-0B is composed of:	1254.00	cut	Sh/Clst: brn blk to blk, carb	0027-3L
				1255.00	cut	Sh/Clst: brn blk to blk, carb	0028-3L
				1257.00	cut	Sh/Clst: brn blk to blk, carb	0029-3L

Table 7 : Saturated Hydrocarbon Ratios for well NOCS 6306/6-1

Depth unit of measure: m

Depth	Typ	Lithology	Pristane / nC17	Pristane / Phytane	Pristane + Phytane / nC17 + nC18	Phytane / nC18	CPI	Sample
620.00	cut	S/Sst : w to lt gy *	0.42	1.14	0.75	0.56	-	0002-2L
1137.50	swc	Sh/Clst: dsk brn to brn blk	2.77	1.51	2.55	2.27	1.37	0014-1L
1149.00	cut	Sltst : dsk brn to brn gy	2.79	1.17	2.86	2.95	1.34	0016-1L
1158.00	cut	Sltst : dsk brn to brn gy	3.39	1.15	3.42	3.44	1.26	0018-1L
1161.00	cut	Sltst : dsk brn to brn gy	3.76	1.06	3.78	3.81	1.19	0019-1L
1179.60	ccp	S/Sst : lt gy *	0.52	1.17	0.91	0.57	-	0023-1L
1257.00	com	bulk	-	1.62	-	-	1.10	0035-0B
1273.00	cut	S/Sst : lt gy *	1.29	0.90	1.12	1.25	-	0031-1L
1276.00	cut	Coal : blk	22.59	10.00	11.10	1.82	2.72	0032-4L
1279.00	cut	Sh/Clst: brn blk to blk	9.15	8.86	5.04	1.01	2.70	0033-3L
1279.00	cut	Coal : blk	8.16	10.00	4.46	0.81	2.56	0033-4L

* Ratios manually calculated from EOM FID chromatograms

Table 8a: Aromatic Hydrocarbon Ratios for well NOCS 6306/6-1

Depth unit of measure: m

Depth	Typ	Lithology	MNR	DMNR	BPhR	2/1MP	MPI1	MPI2	Rc	DBT/P	4/1MDBT	(3+2) /1MDBT	Sample
1137.50	swc	Sh/Clst: dsk brn to brn blk	0.66	1.25	0.12	1.41	1.14	1.23	1.08	-	-	-	0014-1L
1149.00	cut	Sltst : dsk brn to brn gy	0.66	0.94	0.11	1.29	1.01	1.02	1.01	0.30	-	-	0016-1L
1158.00	cut	Sltst : dsk brn to brn gy	0.75	1.09	-	1.16	0.72	0.90	0.83	0.26	-	-	0018-1L
1161.00	cut	Sltst : dsk brn to brn gy	0.80	1.09	-	1.00	0.61	0.66	0.77	0.19	-	-	0019-1L
1257.00	com	bulk	0.90	2.15	-	0.98	0.40	0.47	0.64	0.17	8.85	1.91	0035-0B
1276.00	cut	Coal : blk	1.18	0.94	0.36	0.64	0.51	0.54	0.71	0.24	-	-	0032-4L
1279.00	cut	Sh/Clst: brn blk to blk	1.13	1.03	0.37	0.64	0.50	0.52	0.70	0.24	1.38	0.61	0033-3L
1279.00	cut	Coal : blk	1.35	1.07	0.36	0.66	0.53	0.56	0.72	0.23	-	-	0033-4L

Table 8b: Aromatic Hydrocarbon Ratios for well NOCS 6306/6-1

Depth unit of measure: m

Depth	Typ	Lithology	F1	F2	Sample
1137.50	swc	Sh/Clst: dsk brn to brn blk	0.59	0.32	0014-1L
1149.00	cut	Sltst : dsk brn to brn gy	0.55	0.28	0016-1L
1158.00	cut	Sltst : dsk brn to brn gy	0.46	0.29	0018-1L
1161.00	cut	Sltst : dsk brn to brn gy	0.46	0.25	0019-1L
1257.00	com	bulk	0.38	0.22	0035-0B
1276.00	cut	Coal : blk	0.41	0.21	0032-4L
1279.00	cut	Sh/Clst: brn blk to blk	0.41	0.21	0033-3L
1279.00	cut	Coal : blk	0.41	0.22	0033-4L

Table 9A: Tabulation of carbon isotope data for EOM/EOM - fractions for well NOCS 6306/6-1

Depth unit of measure: m

Depth	Typ	Lithology	EOM	Saturated	Aromatic	NSO	Asphaltenes	Kerogen	Sample
620.00	cut	bulk	-29.47	-	-	-	-	-	0002-0
1137.50	swc	Sh/Clst	-29.67	-29.82	-30.73	-30.43	-28.89	-	0014-1
1149.00	cut	Sltst	-29.71	-30.61	-30.30	-30.36	-29.16	-	0016-1
1158.00	cut	Sltst	-29.82	-30.77	-30.45	-30.45	-29.16	-	0018-1
1161.00	cut	Sltst	-29.85	-30.70	-30.86	-30.76	-29.25	-	0019-1
1179.60	ccp	S/Sst	-28.39	-	-	-	-	-	0023-1
1257.00	com	Composite sample	-26.17	-27.38	-26.19	-27.08	-26.06	-	0035-0
1273.00	cut	S/Sst	-29.43	-	-	-	-	-	0031-1
1276.00	cut	Coal	-25.29	-27.86	-26.14	-25.66	-25.11	-	0032-4
1279.00	cut	Sh/Clst	-25.64	-28.00	-26.51	-26.10	-25.32	-	0033-3
1279.00	cut	Coal	-25.05	-27.88	-25.75	-25.69	-24.87	-	0033-4

Table 9B: Tabulation of cv values from carbon isotope data for well NOCS 6306/6-1

Depth unit of measure: m

Depth	Typ	Lithology	Saturated	Aromatic	cv value	Sample
620.00	cut	bulk	-	-	-	0002-0
1137.50	swc	Sh/Clst	-29.82	-30.73	-4.43	0014-1
1149.00	cut	Sltst	-30.61	-30.30	-1.47	0016-1
1158.00	cut	Sltst	-30.77	-30.45	-1.40	0018-1
1161.00	cut	Sltst	-30.70	-30.86	-2.49	0019-1
1179.60	ccp	S/Sst	-	-	-	0023-1
1257.00	com	Composite sample	-27.38	-26.19	-0.52	0035-0
1273.00	cut	S/Sst	-	-	-	0031-1
1276.00	cut	Coal	-27.86	-26.14	0.80	0032-4
1279.00	cut	Sh/Clst	-28.00	-26.51	0.34	0033-3
1279.00	cut	Coal	-27.88	-25.75	1.72	0033-4

List of Triterpane Distribution Ratios

Ratio 1: 27Tm / 27Ts

Ratio 2: 27Tm / 27Tm+27Ts

Ratio 3: 27Tm / 27Tm+30aß+30ßa

Ratio 4: 29aß / 30aß

Ratio 5: 29aß / 29aß+30aß

Ratio 6: 30d / 30aß

Ratio 7: 28aß / 30aß

Ratio 8: 28aß / 29aß

Ratio 9: 28aß / 28aß+30aß

Ratio 10: 24/3 / 30aß

Ratio 11: 30aß / 30aß+30ßa

Ratio 12: 29aß+29ßa / 29aß+29ßa+30aß+30ßa

Ratio 13: 29ßa+30ßa / 29aß+30aß

Ratio 14: 32aßS / 32aßS+32aßR (%)

Table 10a: Variation in Triterpane Distribution (peak height) SIR for Well NOCS 6306/6-1

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
620.00	S/Sst	1.24	0.55	0.17	0.71	0.41	0.07	0.19	0.27	0.16	0.06	0.78	0.42	0.29	49.37	0002-2
1137.50	Sh/Clst	5.41	0.84	0.17	0.42	0.29	0.04	0.04	0.09	0.04	0.09	0.74	0.32	0.40	20.48	0014-1
1149.00	Sltst	2.87	0.74	0.12	0.39	0.28	0.06	0.05	0.12	0.04	0.10	0.82	0.31	0.26	20.06	0016-1
1158.00	Sltst	3.69	0.79	0.17	0.33	0.25	0.08	0.04	0.13	0.04	0.07	0.83	0.30	0.30	24.04	0018-1
1161.00	Sltst	6.57	0.87	0.13	0.33	0.25	0.05	0.04	0.12	0.04	0.03	0.80	0.28	0.29	17.28	0019-1
1179.60	S/Sst	4.45	0.82	0.20	0.55	0.35	-	0.08	0.15	0.07	0.06	0.70	0.41	0.58	25.93	0023-1
1257.00	Sh/Clst	1.44	0.59	0.20	0.60	0.37	0.06	-	-	-	0.32	0.90	0.39	0.14	42.27	0035-0
1273.00	S/Sst	1.82	0.65	0.20	0.78	0.44	-	0.08	0.10	0.07	0.07	0.73	0.44	0.38	34.87	0031-1
1276.00	Coal	20.79	0.95	0.26	0.29	0.23	0.05	0.09	0.29	0.08	-	0.85	0.26	0.23	17.34	0032-4
1279.00	Sh/Clst	55.36	0.98	0.29	0.36	0.26	0.09	0.08	0.22	0.07	0.01	0.75	0.30	0.40	19.06	0033-3
1279.00	Coal	14.21	0.93	0.29	0.24	0.20	0.08	0.08	0.32	0.07	-	0.84	0.24	0.27	24.32	0033-4

List of Sterane Distribution Ratios

Ratio 1: 27dßS / 27dßS+27aaR

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

Ratio 3: 2*(29ßßR+29ßßS) / (29aaS+29aaR + 2*(29ßßR+29ßßS)) (%)

Ratio 4: 27dßS+27dßR+27daS+27daR / 29dßS+29dßR+29daS+29daR

Ratio 5: 29ßßR+29ßßS / 29ßßR+29ßßS+29aaS

Ratio 6: 21a+22a / 21a+22a+29aaS+29ßßR+29ßßS+29aaR

Ratio 7: 21a+22a / 21a+22a+28daR+28aaS+29daR+29aaS+29ßßR+29ßßS+29aaR

Ratio 8: 29ßßR+29ßßS / 29aaS+29ßßR+29ßßS+29aaR

Ratio 9: 29aaS / 29aaR

Ratio 10: 29ßßR+29ßßS / 29aaR

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Table 10b: Variation in Sterane Distribution (peak height) SIR for Well NOCS 6306/6-1

Depth unit of measure: m

Depth	Lithology	Ratio1	Ratio2	Ratio3	Ratio4	Ratio5	Ratio6	Ratio7	Ratio8	Ratio9	Ratio10	Sample
620.00	S/Sst	0.42	23.09	52.59	0.62	0.71	0.14	0.10	0.36	0.30	0.72	0002-2
1137.50	Sh/Clst	0.29	9.65	49.75	1.35	0.84	0.17	0.12	0.33	0.11	0.55	0014-1
1149.00	Sltst	0.30	7.57	50.42	1.47	0.87	0.15	0.11	0.34	0.08	0.55	0016-1
1158.00	Sltst	0.27	13.47	52.89	0.86	0.81	0.19	0.13	0.36	0.16	0.65	0018-1
1161.00	Sltst	0.34	9.22	52.19	1.19	0.86	0.11	0.08	0.35	0.10	0.60	0019-1
1179.60	S/Sst	0.30	11.28	50.28	1.00	0.82	0.13	0.10	0.34	0.13	0.57	0023-1
1257.00	Sh/Clst	0.41	10.40	55.11	0.29	0.86	0.18	0.14	0.38	0.12	0.69	0035-0
1273.00	S/Sst	0.35	13.53	55.35	0.82	0.82	0.09	0.07	0.38	0.16	0.72	0031-1
1276.00	Coal	0.59	5.83	62.94	0.10	0.94	0.09	0.08	0.46	0.06	0.90	0032-4
1279.00	Sh/Clst	0.41	6.61	60.98	0.14	0.92	0.08	0.07	0.44	0.07	0.84	0033-3
1279.00	Coal	0.37	17.43	62.65	0.24	0.83	0.20	0.16	0.46	0.21	1.02	0033-4

Table 10c: Variation in Triaromatic Sterane Distribution (peak height) for Well NOCS 6306/6-1

Depth unit of measure: m

Depth	Lithology	Ratio1	Ratio2	Ratio3	Ratio4	Ratio5	Sample
620.00	S/Sst	0.13	0.19	0.05	0.04	0.06	0002-2
1137.50	Sh/Clst	0.31	0.20	0.08	0.12	0.12	0014-1
1149.00	Sltst	0.49	0.35	0.15	0.21	0.22	0016-1
1158.00	Sltst	0.43	0.27	0.15	0.20	0.23	0018-1
1161.00	Sltst	0.44	0.25	0.14	0.20	0.23	0019-1
1179.60	S/Sst	0.22	0.23	0.09	0.08	0.12	0023-1
1257.00	Sh/Clst	0.70	0.69	0.43	0.43	0.51	0035-0
1273.00	S/Sst	0.22	0.13	0.09	0.09	0.19	0031-1
1276.00	Coal	0.74	0.46	0.47	0.51	0.69	0032-4
1279.00	Sh/Clst	0.71	0.40	0.46	0.51	0.70	0033-3
1279.00	Coal	0.80	0.51	0.56	0.60	0.79	0033-4

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 6306/6-1

Depth unit of measure: m

Depth	Lithology	Ratio1	Ratio2	Ratio3	Ratio4	Sample
620.00	S/Sst	0.11	0.07	0.06	0.05	0002-2
1137.50	Sh/Clst	0.12	0.07	0.06	0.05	0014-1
1149.00	Sltst	0.18	0.11	0.10	0.08	0016-1
1158.00	Sltst	0.20	0.11	0.11	0.09	0018-1
1161.00	Sltst	0.20	0.11	0.11	0.09	0019-1
1179.60	S/Sst	0.05	0.02	0.02	0.02	0023-1
1257.00	Sh/Clst	0.30	0.16	0.14	0.10	0035-0
1273.00	S/Sst	0.07	0.03	0.03	0.03	0031-1
1276.00	Coal	0.39	0.20	0.14	0.10	0032-4
1279.00	Sh/Clst	0.37	0.19	0.14	0.10	0033-3
1279.00	Coal	0.48	0.20	0.16	0.11	0033-4

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 10e: Aromatisation of Steranes (peak height) for Well NOCS 6306/6-1

Depth unit of measure: m

Depth	Lithology	Ratio1	Ratio2	Sample
620.00	S/Sst	0.72	0.48	0002-2
1137.50	Sh/Clst	0.91	0.20	0014-1
1149.00	Sltst	0.92	0.16	0016-1
1158.00	Sltst	0.92	0.18	0018-1
1161.00	Sltst	0.92	0.19	0019-1
1179.60	S/Sst	0.80	0.36	0023-1
1257.00	Sh/Clst	0.92	0.17	0035-0
1273.00	S/Sst	0.82	0.38	0031-1
1276.00	Coal	0.91	0.22	0032-4
1279.00	Sh/Clst	0.93	0.20	0033-3
1279.00	Coal	0.93	0.22	0033-4

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

Ratio2: g1 / g1 + I1

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Table 10f: Raw triterpane data (peak height) m/z 191 SIR for Well NOCS 6306/6-1

Depth unit of measure: m

Depth	Lithology	23/3	24/3	25/3	24/4	26/3	27Ts	27Tm	28aß	25nor30aß	Sample
		29aß	29Ts	30d	29ßa	30O	30aß	30ßa	30G	31aßS	
		31aßR	32aßS	32aßR	33aßS	33aßR	34aßS	34aßR	35aßS	35aßR	
620.00	S/Sst	1450.3	969.6	646.7	1356.0	635.5	3226.6	4003.1	2951.4	2684.7	0002-2
		10846.3	4400.8	1008.8	3420.2	0.0	15344.2	4273.3	0.0	4777.2	
		6438.0	2859.7	2932.4	0.0	0.0	0.0	0.0	0.0	0.0	
1137.50	Sh/Clst	583.6	387.1	254.8	179.8	127.2	230.7	1247.3	170.4	150.7	0014-1
		1819.7	263.3	184.4	921.1	0.0	4364.3	1537.6	0.0	1284.4	
		3962.5	343.9	1335.5	256.6	791.5	158.1	410.5	167.9	640.2	
1149.00	Sltst	44.3	42.3	26.2	21.5	15.3	24.2	69.7	18.8	17.7	0016-1
		159.2	33.7	23.6	57.4	0.0	406.0	86.7	0.0	92.0	
		298.7	27.6	110.1	26.4	92.9	18.2	65.3	29.1	151.1	
1158.00	Sltst	5.1	5.6	4.2	5.3	3.8	5.7	21.2	3.7	2.2	0018-1
		27.7	6.0	6.3	15.9	0.0	83.3	17.2	0.0	16.1	
		48.9	4.6	14.4	5.2	13.0	3.9	6.9	5.4	19.5	
1161.00	Sltst	53.6	35.4	33.5	36.5	23.5	31.8	209.1	44.9	36.7	0019-1
		384.1	68.8	55.0	163.6	0.0	1153.3	280.0	0.0	227.8	
		705.6	58.2	278.7	53.9	277.4	36.1	145.0	56.2	382.5	

Table 10f: Raw triterpane data (peak height) m/z 191 SIR for Well NOCS 6306/6-1

Depth unit of measure: m

Depth	Lithology	23/3	24/3	25/3	24/4	26/3	27Ts	27Tm	28aß	25nor30aß	Sample
		29aß	29Ts	30d	29ßa	30O	30aß	30ßa	30G	31aßS	
		31aßR	32aßS	32aßR	33aßS	33aßR	34aßS	34aßR	35aßS	35aßR	
1179.60	S/Sst	308.4	189.5	128.2	165.7	58.0	249.8	1111.3	244.9	0.0	0023-1
		1674.0	329.9	0.0	1402.7	0.0	3058.5	1327.3	0.0	1036.3	
		2371.6	493.1	1408.6	0.0	0.0	0.0	0.0	0.0	0.0	
1257.00	Sh/Clst	179.8	77.0	37.5	32.8	24.4	46.0	66.3	0.0	0.0	0035-0
		143.5	31.6	14.8	24.9	0.0	239.6	27.0	0.0	60.2	
		68.5	26.7	36.5	23.5	28.9	14.3	22.6	12.2	18.1	
1273.00	S/Sst	970.5	546.1	395.0	652.5	293.9	1513.5	2754.7	624.5	539.3	0031-1
		6344.2	1530.1	0.0	2448.1	0.0	8161.2	3029.1	0.0	3473.9	
		4280.7	1846.1	3448.1	0.0	0.0	0.0	0.0	0.0	0.0	
1276.00	Coal	0.0	0.0	0.0	0.0	0.0	9.9	206.0	43.2	26.2	0032-4
		147.9	34.4	23.3	62.4	0.0	502.0	86.7	0.0	75.1	
		134.0	13.1	62.3	5.5	18.9	0.0	9.4	0.0	0.0	
1279.00	Sh/Clst	201.6	118.2	57.8	256.2	76.0	143.0	7918.2	1153.2	329.3	0033-3
		5139.8	410.5	1250.8	2989.6	0.0	14474.1	4950.2	0.0	3833.4	
		6819.7	691.3	2935.8	154.5	820.9	77.7	290.6	0.0	54.0	

Table 10f: Raw triterpane data (peak height) m/z 191 SIR for Well NOCS 6306/6-1

Depth unit of measure: m

Depth	Lithology	23/3	24/3	25/3	24/4	26/3	27Ts	27Tm	28aß	25nor30aß	Sample
		29aß	29Ts	30d	29ßa	30O	30aß	30ßa	30G	31aßS	
		31aßR	32aßS	32aßR	33aßS	33aßR	34aßS	34aßR	35aßS	35aßR	
1279.00	Coal	0.0	0.0	0.0	0.0	0.0	4.2	59.1	9.3	5.7	0033-4
		29.2	4.8	9.2	17.0	0.0	119.7	23.6	0.0	22.3	
		35.1	4.0	12.3	0.0	0.0	0.0	0.0	0.0	0.0	

Table 10g: Raw sterane data (peak height) m/z 217 SIR for Well NOCS 6306/6-1

Depth unit of measure: m

Depth	Lithology	21a	22a	27dßS	27dßR	27daS	27daR	28dßS	28dßR	28daS*	Sample
		29dßS*	28daR*	27aaR	29dßR	29daS	28aaS	29daR*	28ßßS		
		28aaR	29aaS	29ßßR	29ßßS	29aaR					
620.00	S/Sst	1341.5	492.3	2641.2	1819.4	843.3	1198.4	1760.5	1078.4	1633.6	0002-2
		3041.3	1376.5	3600.1	3827.5	1706.5	1460.2	1966.9	1391.5		
		3993.0	1709.7	2601.4	1505.1	5695.1					
1137.50	Sh/Clst	1027.6	405.1	2811.0	2169.2	1137.1	867.9	1112.4	943.5	2644.6	0014-1
		1676.7	1128.8	6759.9	1500.2	471.8	714.4	1519.4	939.1		
		3243.9	454.3	1653.2	677.9	4255.1					
1149.00	Sltst	214.2	41.8	510.7	468.1	211.6	168.9	149.9	147.7	398.9	0016-1
		324.0	195.5	1169.3	258.9	94.4	211.2	245.3	182.8		
		465.7	70.7	332.4	142.1	862.5					
1158.00	Sltst	19.6	4.7	25.2	24.8	13.4	11.3	14.1	11.3	30.5	0018-1
		25.3	16.4	68.0	29.9	9.3	17.8	22.4	18.4		
		35.6	9.2	25.6	12.8	59.1					
1161.00	Sltst	382.2	66.0	1154.5	1109.7	561.8	371.8	501.0	465.2	976.4	0019-1
		885.6	520.6	2209.1	932.0	284.6	504.0	585.4	488.7		
		1090.3	207.1	833.4	393.3	2039.9					

* 28daS coel with 27aaS, 29dßS coel with 27ßßR, 28daR coel with 27ßßS, 29daR coel with 28ßßR

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Table 10g: Raw sterane data (peak height) m/z 217 SIR for Well NOCS 6306/6-1

Depth unit of measure: m

Depth	Lithology	21a	22a	27dßS	27dßR	27daS	27daR	28dßS	28dßR	28daS*	Sample
		29dßS*	28daR*	27aaR	29dßR	29daS	28aaS	29daR*	28ßßS		
		28aaR	29aaS	29ßßR	29ßßS	29aaR					
1179.60	S/Sst	270.6	110.9	673.1	604.0	239.3	188.1	280.6	272.7	625.6	0023-1
		571.6	353.9	1575.0	474.2	216.1	169.5	436.8	313.3		
		968.7	184.1	554.0	270.8	1447.3					
1257.00	Sh/Clst	71.7	23.9	73.1	54.3	26.4	33.2	47.1	46.1	66.0	0035-0
		275.8	66.2	104.4	218.3	98.5	32.8	49.5	37.4		
		46.3	28.9	111.4	59.1	248.8					
1273.00	S/Sst	451.8	250.3	1485.9	1111.0	649.6	618.4	799.3	575.1	1314.4	0031-1
		1884.9	559.4	2791.7	1301.1	467.4	650.2	1048.6	444.8		
		1628.2	581.7	1660.0	1005.4	3718.4					
1276.00	Coal	73.5	9.4	38.8	32.3	21.1	17.7	34.3	22.5	40.7	0032-4
		480.5	68.2	27.3	409.8	148.0	32.8	41.8	53.3		
		30.3	25.9	265.8	111.1	417.9					
1279.00	Sh/Clst	757.5	130.6	544.6	444.7	237.5	205.9	460.1	331.1	639.7	0033-3
		4202.0	488.7	787.9	3534.7	1775.1	430.7	704.2	189.1		
		321.0	378.7	2911.0	1564.6	5347.9					

* 28daS coel with 27aaS, 29dßS coel with 27ßßR, 28daR coel with 27ßßS, 29daR coel with 28ßßR

Depth unit of measure: m

Depth	Lithology	21a	22a	27dßS	27dßR	27daS	27daR	28dßS	28dßR	28daS*	Sample
		29dßS*	28daR*	27aaR	29dßR	29daS	28aaS	29daR*	28ßßS		
		28aaR	29aaS	29ßßR	29ßßS	29aaR					
1279.00	Coal'	12.9	3.9	5.0	4.6	4.1	3.9	5.6	4.3	6.1	0033-4
		30.2	10.4	8.3	27.6	9.9	5.6	5.4	8.1		
		5.2	6.5	18.9	12.3	30.7					

* 28daS coel with 27aaS, 29dßS coel with 27ßßR, 28daR coel with 27ßßS, 29daR coel with 28ßßR

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Table 10h: Raw triaromatic sterane data (peak height) m/z 231 for Well NOCS 6306/6-1

Depth unit of measure: m

Depth	Lithology	a1	b1	c1	d1	e1	f1	g1	Sample
620.00	S/Sst	628.1	922.9	2135.4	10739.6	4048.0	9150.2	4051.9	0002-2
1137.50	Sh/Clst	2900.8	1624.4	7632.1	20615.4	5190.3	9801.2	6359.8	0014-1
1149.00	Sltst	1868.4	1034.3	2400.5	6651.0	2014.5	2976.5	1952.0	0016-1
1158.00	Sltst	1841.3	923.1	2186.7	6330.1	2019.1	2941.2	2450.0	0018-1
1161.00	Sltst	2229.8	970.5	2641.8	7649.4	2336.4	3495.3	2858.0	0019-1
1179.60	S/Sst	2244.1	2279.3	5446.6	15859.2	4401.7	12561.4	7764.0	0023-1
1257.00	Sh/Clst	842.7	776.8	153.5	822.0	368.6	415.9	355.5	0035-0
1273.00	S/Sst	1061.5	537.2	1417.4	4619.4	2368.1	4890.3	3694.1	0031-1
1276.00	Coal	1311.1	383.9	71.4	581.3	518.3	286.6	459.3	0032-4
1279.00	Sh/Clst	1004.0	271.0	56.8	439.6	370.6	194.2	408.1	0033-3
1279.00	Coal	421.5	110.2	21.7	113.1	115.8	57.4	106.0	0033-4

Table 10i: Raw monoaromatic sterane data (peak height) m/z 253 for Well NOCS 6306/6-1

Depth unit of measure: m

Depth	Lithology	A1	B1	C1	D1	E1	F1	G1	H1	I1	Sample
620.00	S/Sst	2773.1	1721.6	4432.8	5654.7	21530.4	5600.8	22780.7	14374.1	4378.7	0002-2
1137.50	Sh/Clst	16929.4	8606.5	48865.8	52688.2	119644.1	16679.2	127208.3	83000.1	25641.4	0014-1
1149.00	Sltst	10830.7	5853.8	17580.6	20841.2	49276.8	6287.4	47615.3	33224.1	10634.5	0016-1
1158.00	Sltst	11708.3	5481.8	19413.6	19798.6	45606.0	6816.7	48166.8	33251.1	11222.8	0018-1
1161.00	Sltst	14846.8	7138.7	21985.3	23604.0	58667.3	8842.8	56288.0	38573.5	12426.2	0019-1
1179.60	S/Sst	2198.8	1106.0	15622.7	18550.5	45428.2	6899.7	50709.2	35296.0	13910.1	0023-1
1257.00	Sh/Clst	2064.0	879.7	1225.1	1197.2	4766.1	1750.7	8258.4	6172.5	1759.0	0035-0
1273.00	S/Sst	1292.8	654.0	6202.0	7297.9	18218.7	2837.8	20056.2	15168.2	5910.5	0031-1
1276.00	Coal	1563.4	588.8	550.5	443.1	2416.0	1478.2	7367.2	5812.1	1617.5	0032-4
1279.00	Sh/Clst	1445.1	573.5	534.8	438.1	2409.7	1421.7	6327.9	5710.2	1587.0	0033-3
1279.00	Coal	545.4	146.3	114.0	88.3	600.9	339.6	2355.3	1825.8	386.2	0033-4

Table 10j: Raw sterane data (peak height) m/z 218 SIR for Well NOCS 6306/6-1

Depth unit of measure: m

Depth	Lithology	27ßßR	27ßßS	28ßßR	28ßßS	29ßßR	29ßßS	30ßßR	30ßßS	Sample
620.00	S/Sst	2068.1	1329.2	1557.8	1441.6	2383.3	1877.6	803.3	630.4	0002-2
1137.50	Sh/Clst	1244.1	963.2	1103.1	905.1	1081.7	746.6	178.6	421.2	0014-1
1149.00	Sltst	208.7	144.5	176.2	193.9	241.3	176.2	31.3	47.1	0016-1
1158.00	Sltst	21.9	19.3	19.6	21.8	16.4	16.3	6.0	7.5	0018-1
1161.00	Sltst	550.5	425.9	557.6	513.9	641.6	461.8	82.2	137.2	0019-1
1179.60	S/Sst	409.1	296.7	352.7	335.4	405.2	301.2	134.9	167.8	0023-1
1257.00	Sh/Clst	67.2	42.1	37.6	50.3	105.5	68.7	9.2	11.8	0035-0
1273.00	S/Sst	1415.6	706.9	1127.5	772.8	1508.1	1322.6	0.0	540.5	0031-1
1276.00	Coal	97.4	22.0	28.7	47.2	212.2	129.3	0.0	0.0	0032-4
1279.00	Sh/Clst	1197.8	211.1	539.8	251.9	2592.9	1794.7	52.5	82.2	0033-3
1279.00	Coal	12.0	8.1	9.5	9.6	18.3	13.1	3.9	3.7	0033-4

Table 10k: Raw triterpane data (peak height) m/z 177 SIR for Well NOCS 6306/6-1

Depth unit of measure: m

Depth	Lithology	25nor28aß	25nor30aß	Sample
620.00	S/Sst	6392.2	2369.1	0002-2
1137.50	Sh/Clst	299.8	134.0	0014-1
1149.00	Sltst	64.1	22.3	0016-1
1158.00	Sltst	11.8	4.5	0018-1
1161.00	Sltst	171.9	31.2	0019-1
1179.60	S/Sst	593.3	124.6	0023-1
1257.00	Sh/Clst	52.4	32.3	0035-0
1273.00	S/Sst	766.6	472.4	0031-1
1276.00	Coal	21.3	29.5	0032-4
1279.00	Sh/Clst	274.4	300.0	0033-3
1279.00	Coal	1.6	7.3	0033-4