

# GEOCHEMICAL REPORT

## WELL NOCS 25/7-2

BA-90-1607-1

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**REGISTRERT**

OLJEDIREKTORATET

Client :

Conoco Norway Inc.

Authors :

Kjell Arne Bakken

Sunil Bharati

Ian L. Ferriday

Geolab Nor A/S

Hornebergveien 5

7038 Trondheim

Norway

Date :

30.08.90

## INTRODUCTION

Well NOCS 25/7-2 was analysed on behalf of Conoco Norway Inc. All samples, stratigraphic information etc. were supplied by Conoco. All depths referred to are relative to KB and in metres.

A total of forty-three rock samples and one oil sample were examined. Among these samples twenty rock samples were selected for screening analyses, i.e. TOC and Rock-Eval, all being side wall cores. Of these, twelve were selected for GHM-analysis on the basis of the Rock-Eval data, six for extraction/GC analyses, 21 for vitrinite and six for visual kerogen. The oil sample was analysed by whole oil GC, saturated and aromatic GC analyses, GC-MS and stable carbon isotope analysis.

Table 1 : Lithology description for well NOCS 25/7-2

Depth unit of measure: m

Depth	Type	Grp	Frm	Age	Trb	Sample
Int	Cvd	TOC%	%	Lithology description		
4072.00	swc					0002
	5.24	100	Sltst	: brn blk, carb, sft		0002-1L
4075.00	swc					0003
	2.67	100	Sltst	: brn blk, carb, sft		0003-1L
4078.00	swc					0004
	4.08	100	Sltst	: brn blk, carb, sft		0004-1L
4081.00	swc					0005
	3.43	100	Sltst	: brn blk, carb, sft		0005-1L
4100.00						0041
			40	Other : lt gy to m gy, brn blk, trbofgs		0041-2L
			35	Sh/Clst: brn blk		0041-4L
			20	Cont : prp		0041-3L
			5	Sltst : lt gy to m gy, s, mrl		0041-1L
4105.00	swc					0006
	1.40	100	Sh/Clst:	brn blk, carb, slt, sft		0006-1L
4108.00	swc					0007
	3.28	100	Sh/Clst:	brn blk, carb, slt, sft		0007-1L

Table 1 : Lithology description for well NOCS 25/7-2

Depth unit of measure: m

Depth	Type	Grp	Frm	Age	Trb	Sample
Int	Cvd	TOC%	%	Lithology description		
4188.00	swc					0008
	0.50	100	Sltst	: brn blk, carb, mic, sft		0008-1L
4199.00						0042
			70	S/Sst : w to drk y brn, l		0042-4L
			20	Cont : prp		0042-2L
			5	Other : lt gy to m gy, brn blk, trbofgs		0042-1L
			5	Sh/Clst: brn blk		0042-3L
4245.00	swc					0009
	1.66	100	Sltst	: brn blk, carb, mic, sft		0009-1L
4299.00	swc					0010
	1.77	100	Sh/Clst:	brn blk, carb, slt, mic, sft		0010-1L
4301.00						0043
			70	S/Sst : w to drk y brn, l		0043-4L
			15	Sh/Clst: brn blk, brn gy, carb		0043-3L
			10	Cont : prp		0043-2L
			5	Other : lt gy to m gy, brn blk, trbofgs		0043-1L
4305.00	swc					0011
	2.10	100	Sh/Clst:	brn blk, carb, slt, sft		0011-1L
4310.00	swc					0012
	1.36	100	Sh/Clst:	brn blk, carb, slt, sft		0012-1L

Table 1 : Lithology description for well NOCS 25/7-2

Depth unit of measure: m

Depth	Type	Grp	Frm	Age	Trb	Sample
Int	Cvd	TOC%	%	Lithology description		
4315.00	swc					0013
	1.66	100	Sh/Clst:	brn blk to dsk y brn, carb, sft,		0013-1L
4340.00	swc					0014
	1.72	100	Sltst	: brn blk to dsk y brn, carb		0014-1L
4365.00	swc					0015
	1.09	100	Sh/Clst:	brn blk to dsk y brn, carb, sft,		0015-1L
4370.00	swc					0016
	1.31	100	Sh/Clst:	brn blk to dsk y brn, carb, sft,		0016-1L
4415.00	swc					0017
	1.24	100	Sh/Clst:	brn blk to dsk y brn, carb, sft,		0017-1L
4425.00	swc					0018
	1.42	100	Sh/Clst:	brn blk to dsk y brn, carb, sft,		0018-1L
4615.00	swc					0019
	0.50	100	Sltst	: m gy, s		0019-1L

Table 1 : Lithology description for well NOCS 25/7-2

Depth unit of measure: m

Depth	Type	Grp	Frm	Age	Trb	Sample
Int	Cvd	TOC%	%	Lithology description		
4640.00	swc					0020
	1.66	100	Sltst	: brn blk, carb, mic		0020-1L

Table 2 : Rock-Eval table for well NOCS 25/7-2

Depth unit of measure: m

Depth	Typ	Lithology	S1	S2	S3	S2/S3	TOC	HI	OI	PP	PI	Tmax	Sample
4060.00	swc	Sltst : brn blk	5.72	23.90	0.51	46.86	7.28	328	7	29.6	0.19	448	0001-1L
4072.00	swc	Sltst : brn blk	5.99	15.13	0.49	30.88	5.24	289	9	21.1	0.28	445	0002-1L
4075.00	swc	Sltst : brn blk	2.79	5.22	0.56	9.32	2.67	196	21	8.0	0.35	445	0003-1L
4078.00	swc	Sltst : brn blk	4.54	10.46	0.46	22.74	4.08	256	11	15.0	0.30	449	0004-1L
4081.00	swc	Sltst : brn blk	4.30	10.74	0.59	18.20	3.43	313	17	15.0	0.29	449	0005-1L
4105.00	swc	Sh/Clst: brn blk	3.20	7.63	0.76	10.04	1.40	545	54	10.8	0.30	449	0006-1L
4108.00	swc	Sh/Clst: brn blk	4.74	10.30	1.09	9.45	3.28	314	33	15.0	0.32	448	0007-1L
4188.00	swc	Sltst : brn blk	0.33	0.93	0.50	1.86	0.50	186	100	1.3	0.26	451	0008-1L
4245.00	swc	Sltst : brn blk	2.59	4.06	0.54	7.52	1.66	245	33	6.7	0.39	455	0009-1L
4299.00	swc	Sh/Clst: brn blk	2.23	5.00	0.22	22.73	1.77	282	12	7.2	0.31	462	0010-1L
4305.00	swc	Sh/Clst: brn blk	2.41	5.64	0.25	22.56	2.10	269	12	8.1	0.30	460	0011-1L
4310.00	swc	Sh/Clst: brn blk	1.63	3.47	0.41	8.46	1.36	255	30	5.1	0.32	458	0012-1L
4315.00	swc	Sh/Clst: brn blk to dsk y brn	1.84	4.12	0.32	12.88	1.66	248	19	6.0	0.31	459	0013-1L
4340.00	swc	Sltst : brn blk to dsk y brn	1.63	3.52	0.40	8.80	1.72	205	23	5.2	0.32	463	0014-1L
4365.00	swc	Sh/Clst: brn blk to dsk y brn	1.35	2.52	0.43	5.86	1.09	231	39	3.9	0.35	458	0015-1L

Table 2 : Rock-Eval table for well NOCS 25/7-2

Depth unit of measure: m

Depth	Typ	Lithology	S1	S2	S3	S2/S3	TOC	HI	OI	PP	PI	Tmax	Sample
4370.00	swc	Sh/Clst: brn blk to dsk y brn	1.58	3.07	0.19	16.16	1.31	234	15	4.7	0.34	463	0016-1L
4415.00	swc	Sh/Clst: brn blk to dsk y brn	1.36	2.63	0.26	10.12	1.24	212	21	4.0	0.34	462	0017-1L
4425.00	swc	Sh/Clst: brn blk to dsk y brn	1.35	2.88	0.19	15.16	1.42	203	13	4.2	0.32	464	0018-1L
4615.00	swc	Sltst : m gy	0.17	0.55	0.44	1.25	0.50	110	88	0.7	0.24	441	0019-1L
4640.00	swc	Sltst : brn blk	1.63	3.44	0.16	21.50	1.66	207	10	5.1	0.32	464	0020-1L



Table 3 : Pyrolysis GC Data (S2 peak) as Percentage of Total Area for Well NOCS 25/7-2

Depth unit of measure: m

Depth	Typ	Lithology	C1	C2-C5	C6-C14	C15+	S2 from Rock-Eval	Sample
4060.00	swc	Sltst : brn blk	4.54	20.62	35.52	39.33	23.90	0001-1L
4075.00	swc	Sltst : brn blk	3.63	21.94	41.91	32.52	5.22	0003-1L
4078.00	swc	Sltst : brn blk	4.54	22.69	38.42	34.34	10.46	0004-1L
4105.00	swc	Sh/Clst: brn blk	4.55	22.44	38.49	34.52	7.63	0006-1L
4188.00	swc	Sltst : brn blk	8.00	30.79	45.71	15.50	0.93	0008-1L
4245.00	swc	Sltst : brn blk	5.54	22.02	38.71	33.73	4.06	0009-1L
4305.00	swc	Sh/Clst: brn blk	7.07	25.48	39.58	27.87	5.64	0011-1L
4340.00	swc	Sltst : brn blk to dsk y brn	8.32	25.96	37.80	27.92	3.52	0014-1L
4370.00	swc	Sh/Clst: brn blk to dsk y brn	8.32	27.27	38.70	25.70	3.07	0016-1L
4425.00	swc	Sh/Clst: brn blk to dsk y brn	8.28	28.68	41.16	21.88	2.88	0018-1L
4615.00	swc	Sltst : m gy	11.00	37.97	46.91	4.11	0.55	0019-1L
4640.00	swc	Sltst : brn blk	8.53	25.86	37.35	28.27	3.44	0020-1L

Table 4 a: Weight of EOM and Chromatographic Fraction for well NOCS 25/7-2

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
4060.00	swc	Sltst : brn blk	3.2	31.7	10.9	11.3	5.3	4.2	22.2	9.5	8.05	0001-1L
4105.00	swc	Sh/Clst: brn blk	5.4	29.7	14.1	9.7	2.9	3.0	23.8	5.9	4.40	0006-1L
4245.00	swc	Sltst : brn blk	8.5	33.8	16.4	8.5	2.3	6.6	24.9	8.9	2.50	0009-1L
4272.00	oil	bulk	-	104.1	86.0	14.3	2.6	1.2	100.3	3.8	-	0044-0B
4340.00	swc	Sltst : brn blk to dsk y brn	6.5	20.7	9.6	5.5	2.7	2.9	15.1	5.6	2.73	0014-1L
4425.00	swc	Sh/Clst: brn blk to dsk y brn	7.6	19.3	9.9	5.8	2.2	1.4	15.7	3.6	2.74	0018-1L
4640.00	swc	Sltst : brn blk	1.6	5.9	2.0	1.1	1.1	1.7	3.1	2.8	2.82	0020-1L

Table 4 b: Concentration of EOM and Chromatographic Fraction (wt ppm rock) for well NOCS 25/7-2

Depth unit of measure: m

Depth	Typ	Lithology	EOM	Sat	Aro	Asph	NSO	HC	Non-HC	Sample
4060.00	swc	Sltst : brn blk	9844	3385	3509	1645	1304	6894	2950	0001-1L
4105.00	swc	Sh/Clst: brn blk	5530	2625	1806	540	558	4432	1098	0006-1L
4245.00	swc	Sltst : brn blk	3995	1938	1004	271	780	2943	1052	0009-1L
4272.00	oil	bulk	-	-	-	-	-	-	-	0044-0B
4340.00	swc	Sltst : brn blk to dsk y brn	3165	1467	840	412	443	2308	856	0014-1L
4425.00	swc	Sh/Clst: brn blk to dsk y brn	2526	1295	759	287	183	2054	471	0018-1L
4640.00	swc	Sltst : brn blk	3710	1257	691	691	1069	1949	1761	0020-1L

Depth unit of measure: m

Depth	Typ	Lithology	EOM	Sat	Aro	Asph	NSO	HC	Non-HC	Sample
4060.00	swc	Sltst : brn blk	122.29	42.05	43.59	20.45	16.20	85.64	36.65	0001-1L
4105.00	swc	Sh/Clst: brn blk	125.70	59.67	41.05	12.27	12.70	100.73	24.97	0006-1L
4245.00	swc	Sltst : brn blk	159.81	77.54	40.19	10.87	31.21	117.73	42.08	0009-1L
4272.00	oil	bulk	-	-	-	-	-	-	-	0044-0B
4340.00	swc	Sltst : brn blk to dsk y brn	115.94	53.77	30.81	15.12	16.24	84.57	31.37	0014-1L
4425.00	swc	Sh/Clst: brn blk to dsk y brn	92.20	47.29	27.71	10.51	6.69	75.00	17.20	0018-1L
4640.00	swc	Sltst : brn blk	131.58	44.61	24.53	24.53	37.91	69.14	62.45	0020-1L

Table 4 d: Composition of material extracted from the rock (%) for well NOCS 25/7-2

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	
4060.00	swc	Sltst : brn blk	34.38	35.65	16.72	13.25	70.03	29.97	96.46	233.68	0001-1L
4105.00	swc	Sh/Clst: brn blk	47.47	32.66	9.76	10.10	80.13	19.87	145.36	403.39	0006-1L
4245.00	swc	Sltst : brn blk	48.52	25.15	6.80	19.53	73.67	26.33	192.94	279.78	0009-1L
4272.00	oil	bulk	82.61	13.74	2.50	1.15	96.35	3.65	601.40	2639.48	0044-0B
4340.00	swc	Sltst : brn blk to dsk y brn	46.38	26.57	13.04	14.01	72.95	27.05	174.55	269.64	0014-1L
4425.00	swc	Sh/Clst: brn blk to dsk y brn	51.30	30.05	11.40	7.25	81.35	18.65	170.69	436.11	0018-1L
4640.00	swc	Sltst : brn blk	33.90	18.64	18.64	28.81	52.54	47.46	181.82	110.71	0020-1L

Table 5 : Saturated Hydrocarbon Ratios for well NOCS 25/7-2

Depth unit of measure: m

Depth	Typ	Lithology	Pristane	Pristane	Pristane + Phytane	Phytane	CPI	Sample
			nC17	Phytane	nC17 + nC18	nC18		
4060.00	swc	Sltst : brn blk	0.34	0.99	0.37	0.41	0.94	0001-1L
4105.00	swc	Sh/Clst: brn blk	0.35	1.12	0.37	0.39	1.02	0006-1L
4245.00	swc	Sltst : brn blk	0.57	2.10	0.44	0.30	1.09	0009-1L
4272.00	oil	bulk	0.35	1.35	0.33	0.32	1.15	0044-0B
4340.00	swc	Sltst : brn blk to dsk y brn	0.44	2.83	0.32	0.18	1.13	0014-1L
4425.00	swc	Sh/Clst: brn blk to dsk y brn	0.36	2.62	0.26	0.16	1.12	0018-1L
4640.00	swc	Sltst : brn blk	0.39	2.75	0.28	0.16	1.13	0020-1L

Table 6.: Aromatic Hydrocarbon Ratios for well NOCS 25/7-2

Depth unit of measure: m

Depth	Typ	Lithology	MNR	DMNR	BPhR	2/1MP	MPI1	MPI2	Rc	DBT/P	4/1MDBT	(3+2) /1MDBT	Sample
4060.00	swc	Sltst : brn blk	0.68	1.17	0.16	0.56	0.48	0.53	0.69	-	3.22	1.86	0001-1L
4105.00	swc	Sh/Clst: brn blk	0.54	1.26	0.12	0.60	0.50	0.55	0.70	-	3.20	1.80	0006-1L
4245.00	swc	Sltst : brn blk	0.83	1.70	0.10	0.68	0.54	0.59	0.72	-	2.40	1.46	0009-1L
4272.00	oil	bulk	1.51	2.53	0.32	0.93	0.78	0.84	0.87	-	11.60	3.65	0044-0B
4340.00	swc	Sltst : brn blk to dsk y brn	1.10	2.69	0.13	0.75	0.65	0.72	0.79	-	3.87	2.28	0014-1L
4425.00	swc	Sh/Clst: brn blk to dsk y brn	1.15	2.90	0.14	0.82	0.70	0.76	0.82	-	4.52	2.76	0018-1L
4640.00	swc	Sltst : brn blk	-	2.17	-	0.80	0.68	0.72	0.81	-	2.90	2.20	0020-1L

Table 7 : Thermal Maturity Data for well NOCS 25/7-2

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
2099.00	cut	bulk	-	-	0.00	-	-	-	0021-0B
2099.00	cut	Sh/Clst: m gy	-	-	-	-	4.0	-	0021-1L
2201.00	cut	bulk	0.38	4	0.06	-	-	-	0023-0B
2300.00	cut	bulk	0.38	2	0.01	-	-	-	0022-0B
2399.00	cut	bulk	0.42	4	0.03	-	-	-	0024-0B
2501.00	cut	bulk	0.66	5	0.03	-	-	-	0025-0B
2501.00	cut	Sh/Clst: m gy	-	-	-	-	5.5	-	0025-1L
2600.00	cut	bulk	0.51	7	0.05	-	-	-	0026-0B
2699.00	cut	bulk	0.38	1	0.00	-	-	-	0027-0B
2900.00	cut	bulk	NDP	-	-	-	-	-	0029-0B
3299.00	cut	bulk	NDP	-	-	-	-	-	0033-0B
3401.00	cut	bulk	0.64	5	0.08	-	-	-	0034-0B
3500.00	cut	bulk	0.63	3	0.04	-	-	-	0038-0B
3500.00	cut	Sltst : lt gy to m gy	-	-	-	-	6.5-7.0	-	0038-1L



Table 7 : Thermal Maturity Data for well NOCS 25/7-2

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
3599.00	cut bulk	NDP	-	-	-	-	-	0036-0B
3800.00	cut bulk	0.55	4	0.06	-	-	-	0035-0B
4001.00	cut bulk	0.88	3	0.06	-	-	-	0040-0B
4060.00	swc bulk	0.82	4	0.04	-	-	-	0001-0B
4060.00	swc Sltst : brn blk	-	-	-	-	7.5	448	0001-1L
4108.00	swc bulk	0.91	7	0.07	-	-	-	0007-0B
4188.00	swc bulk	1.00	14	0.06	-	-	-	0008-0B
4299.00	swc bulk	1.03	9	0.07	-	-	-	0010-0B
4299.00	swc Sh/Clst: brn blk	-	-	-	-	7.5-8.0	462	0010-1L
4370.00	swc bulk	1.22	12	0.07	-	-	-	0016-0B
4425.00	swc bulk	1.23	9	0.09	-	-	-	0018-0B
4615.00	swc bulk	1.32	9	0.09	-	-	-	0019-0B
4640.00	swc Sltst : brn blk	-	-	-	-	8.0(??)	464	0020-1L

Table 8 : Visual Kerogen Composition Data for well NOCS 25/7-2

Depth unit of measure: m

Depth	Typ	Lithology	L I P T %	A m o r L t	L i p D e l	S p / P o l	C u t P i c l	R e s i n	A l g a l	D i n o f l	A c r i t	B i t L	I N E R T %	F u s i n	S e m F u s	I n t e r n	M i c r o	S c l e r o	B i t I	V I T R %	T e l l i n	C o l l i n	V i t e r n	A m o r b i t V	Sample	
2099.00	cut	Sh/Clst: m gy	NDP	**	*								NDP		*					NDP	*	**				0021-1L
2501.00	cut	Sh/Clst: m gy	NDP	**	*			*	?				NDP		*					NDP	*	**				0025-1L
3500.00	cut	Sltst : lt gy to m gy	NDP		*	*		*					NDP		*					NDP	*	**				0038-1L
4060.00	swc	Sltst : brn blk	95	**	*			*					TR		*					5	*		?			0001-1L
4299.00	swc	Sh/Clst: brn blk	75	**	*			*					10	*	*	*				15	*					0010-1L
4640.00	swc	Sltst : brn blk	90	**	*	*		*	*				TR		*					10	*	**				0020-1L

Table 9a: Tabulation of carbon isotope data for EOM/EOM - fractions or Oils for well NOCS 25/7-2

Depth unit of measure: m

Depth	Typ	Lithology	EOM/Oil	Saturated	Aromatic	NSO	Asphaltenes	Kerogen	Sample
4060.00	swc		-28.79	-29.88	-28.96	-28.17	-28.11	-	0001-1L
4105.00	swc		-28.84	-29.45	-28.71	-28.27	-28.68	-	0006-1L
4245.00	swc		-26.24 -26.20	-27.14	-25.34	-25.60 -25.53	-25.37	-	0009-1L
4272.00	oil		-28.74 -28.74	-29.19 -29.28	-27.65 -27.68	-26.98	-28.63 -28.67	-	0044-0B
4340.00	swc		-25.35	-26.15	-24.91	-25.39	-24.74	-	0014-1L
4425.00	swc		-25.21	-26.00	-24.85	-25.01	-24.69	-	0018-1L
4640.00	swc		-25.68	-26.81	-24.71	-25.89	-25.26	-	0020-1L

Table 9b: Tabulation of cv values from carbon isotope data for well NOCS 25/7-2

Depth unit of measure: m

Depth	Typ	Lithology	Saturated	Aromatic	cv value	Sample
4060.00	swc		-29.88	-28.96	-0.34	0001-1L
4105.00	swc		-29.45	-28.71	-0.88	0006-1L
4245.00	swc		-27.14	-25.34	0.76	0009-1L
4272.00	oil		-29.19	-27.65	0.82	0044-0B
4340.00	swc		-26.15	-24.91	-0.79	0014-1L
4425.00	swc		-26.00	-24.85	-1.04	0018-1L
4640.00	swc		-26.81	-24.71	1.32	0020-1L

Table 10A: Variation in Triterpane Distribution (peak height) for Well NOCS 25/7-2

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%		
4060.00	Sltst	0.04	0.04	0.06		0.71	0.42	0.34	0.34	0.48	0.25	1.04	1.00	0.42	-	63.04		0001-1
4105.00	Sh/Clst	-	-	-		0.94	0.48	0.62	0.32	0.34	0.24	2.02	0.83	0.44	0.10	65.02		0006-1
4245.00	Sltst	-	-	-		1.05	0.51	3.39	0.77	0.73	0.43	2.43	1.00	0.51	-	63.75		0009-1
4272.00	oil Dst.1	-	-	-		-	-	-	-	-	-	-	-	-	-	-		0044-0
4340.00	Sltst	-	-	-		1.12	0.53	8.18	2.10	1.88	0.68	1.11	1.00	0.53	-	-		0014-1
4425.00	Sh/Clst	-	-	-		1.18	0.54	6.81	1.32	1.12	0.57	2.71	1.00	0.54	-	-		0018-1
4640.00	Sltst	-	-	-		-	-	2.91	0.80	-	0.45	1.64	1.00	-	-	-		0020-1

Table 10B: Variation in Sterane Distribution (peak height) for Well NOCS 25/7-2

Depth unit of measure: m

Depth	Lithology	Ratio1	Ratio2	Ratio3	Ratio4	Ratio5	Ratio6	Ratio7	Ratio8	Ratio9	Ratio10	Sample
4060.00	Sltst	0.90	43.44	86.27	1.84	0.88	0.74	0.62	0.76	0.77	5.55	0001-1
4105.00	Sh/Clst	0.91	44.54	81.32	1.99	0.83	0.83	0.72	0.69	0.80	3.92	0006-1
4245.00	Sltst	0.96	61.86	71.98	1.75	0.67	0.72	0.54	0.56	1.62	3.37	0009-1
4272.00	oil Dst.1	1.00	-	-	2.69	-	1.00	0.83	-	-	-	0044-0
4340.00	Sltst	0.73	-	-	1.42	-	1.00	0.80	-	-	-	0014-1
4425.00	Sh/Clst	0.74	-	-	1.64	-	1.00	0.71	-	-	-	0018-1
4640.00	Sltst	1.00	-	-	1.91	-	1.00	1.00	-	-	-	0020-1

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:  $r + s / t$

Depth unit of measure: m

<u>Depth</u>	<u>Lithology</u>	<u>Ratio1</u>	<u>Ratio2</u>	<u>Ratio3</u>	<u>Ratio4</u>	<u>Ratio5</u>	<u>Sample</u>
1060.00	Sltst	0.91	0.90	0.78	0.78	0.85	0001-1
1105.00	Sh/Clst	0.91	0.88	0.78	0.80	0.85	0006-1
1245.00	Sltst	1.00	1.00	1.00	1.00	1.00	0009-1
1272.00	oil Dst.1	1.00	1.00	1.00	1.00	1.00	0044-0
1340.00	Sltst	1.00	1.00	1.00	1.00	1.00	0014-1
1425.00	Sh/Clst	1.00	1.00	1.00	1.00	1.00	0018-1
1640.00	Sltst	1.00	1.00	1.00	1.00	1.00	0020-1

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 for Well NOCS 25/7-2

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>
4060.00	Sltst	0.79	0.60	0.55	0.46	0001-1
4105.00	Sh/Clst	0.79	0.60	0.52	0.45	0006-1
4245.00	Sltst	0.69	0.35	0.51	0.35	0009-1
4272.00	oil Dst.1	0.89	0.77	0.81	0.73	0044-0
4340.00	Sltst	0.54	-	0.17	0.11	0014-1
4425.00	Sh/Clst	0.64	-	0.28	0.18	0018-1
4640.00	Sltst	0.72	-	0.40	0.30	0020-1

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 for Well NOCS 25/7-2

Depth unit of measure: m

<u>Depth</u>	<u>Lithology</u>	<u>Ratio1</u>	<u>Ratio2</u>	<u>Sample</u>
4060.00	Sltst	0.42	0.90	0001-1
4105.00	Sh/Clst	0.43	0.93	0006-1
4245.00	Sltst	1.00	-	0009-1
4272.00	oil Dst.1	1.00	-	0044-0
4340.00	Sltst	1.00	-	0014-1
4425.00	Sh/Clst	1.00	-	0018-1
4640.00	Sltst	1.00	-	0020-1

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

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

Table 10F: Raw GCMS triterpane data (peak height) for Well NOCS 25/7-2

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												
4060.00	Sltst	84.17	70.35	31.69	31.18	18.21	99.07	3.96	23.15	48.35	0001-1									
		23.06	0.00	67.71	0.00	26.90	17.18	3.10	20.62											
		12.09	15.15	10.60	5.85	3.41	7.41	3.87												
4105.00	Sh/Clst	48.21	31.76	15.43	13.56	9.63	41.22	0.00	5.05	14.76	0006-1									
		9.81	0.00	15.74	3.18	4.69	3.55	0.00	3.55											
		1.91	1.98	1.38	1.74	1.17	2.62	1.08												
4245.00	Sltst	33.58	23.20	7.22	9.42	5.36	31.15	0.00	7.33	10.07	0009-1									
		32.43	0.00	9.56	0.00	3.58	4.65	3.10	3.43											
		1.95	0.00	0.00	0.00	0.00	0.00	0.00												
4272.00	oil Dst.1	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0044-0									
		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00										
		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00										
4340.00	Sltst	6.03	2.44	0.00	0.00	0.00	16.26	0.00	4.62	2.46	0014-1									
		17.99	0.00	2.20	0.00	0.00	0.00	0.00	0.00	0.00										
		0.00	0.00	0.00	0.00	0.00	0.00	0.00												

Table 10F: Raw GCMS triterpane data (peak height) for Well NOCS 25/7-2

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			
		4425.00	Sh/Clst	4.02 12.39 0.00	4.93 0.00	0.00 0.00	0.00 1.82 0.00	0.00 0.00 0.00	11.35 0.00 0.00	0.00 0.00 0.00	
4640.00	Sltst	3.13 6.26 0.00	3.52 0.00	0.00 0.00	0.00 2.15 0.00	0.00 0.00 0.00	6.36 0.00 0.00	0.00 0.00 0.00	1.73 0.00 0.00	0.00	0020-1

Table 10G: Raw GCMS sterane data (peak height) for Well NOCS 25/7-2

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							
4060.00	Sltst	132.41	36.69	81.44	48.38	20.21	16.35	29.36	17.10	9.58	0001-1		
		38.03	21.15	8.75	28.66	7.03	7.11	16.59	28.22				
		3.95	6.19	24.94	19.81	8.06							
4105.00	Sh/Clst	74.42	12.35	43.48	27.81	10.60	6.70	18.08	6.17	3.03	0006-1		
		21.07	9.21	4.37	13.95	3.64	0.00	5.81	7.33				
		0.00	2.53	5.92	6.44	3.15							
4245.00	Sltst	25.61	7.16	47.31	28.27	13.84	11.65	14.40	5.55	3.72	0009-1		
		24.98	5.99	1.89	19.31	4.94	0.00	8.68	3.53				
		0.00	3.52	3.87	3.44	2.17							
4272.00	oil Dst.1	5.19	1.25	6.34	3.59	1.06	1.30	2.72	0.00	0.00	0044-0		
		2.02	1.34	0.00	2.55	0.00	0.00	0.00	1.60				
		0.00	0.00	0.00	0.00	0.00							
4340.00	Sltst	8.20	2.33	10.11	5.84	3.12	2.02	3.57	2.35	2.00	0014-1		
		7.05	0.00	3.79	3.89	1.28	0.00	2.61	2.26				
		0.00	0.00	0.00	0.00	0.00							

Table 10G: Raw GCMS sterane data (peak height) for Well NOCS 25/7-2

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					
4425.00	Sh/Clst	6.38	2.11	9.14	5.02	2.87	2.34	3.75	1.19	0.00	0018-1
		0.00	5.92	2.21	3.22	4.60	0.00	0.00	1.31	1.63	
		0.00	0.00	0.00	0.00	0.00					
4640.00	Sltst	4.17	0.00	4.03	2.73	1.99	1.54	1.81	0.00	2.22	0020-1
		0.00	3.20	0.00	0.00	2.19	0.00	0.00	0.00	0.00	
		0.00	0.00	0.00	0.00	0.00					

Table 10H: Raw GCMS trioaromatic sterane data (peak height) for Well NOCS 25/7-2

Depth unit of measure: m

Depth	Lithology	a1	b1	c1	d1	e1	f1	g1	Sample
4060.00	Sltst	312.43	287.69	22.88	53.59	32.59	24.56	32.27	0001-1
4105.00	Sh/Clst	322.47	233.03	20.63	56.93	30.02	22.44	30.46	0006-1
4245.00	Sltst	38.52	22.57	0.00	0.00	0.00	0.00	0.00	0009-1
4272.00	oil Dst.1	33.26	28.71	0.00	0.00	0.00	0.00	0.00	0044-0
4340.00	Sltst	30.81	22.44	0.00	0.00	0.00	0.00	0.00	0014-1
4425.00	Sh/Clst	26.73	23.79	0.00	0.00	0.00	0.00	0.00	0018-1
4640.00	Sltst	12.53	7.06	0.00	0.00	0.00	0.00	0.00	0020-1

Table 10I: Raw GCMS monoaromatic sterane data (peak height) for Well NOCS 25/7-2

Depth unit of measure: m

Depth	Lithology	a1	b1	c1	d1	e1	f1	g1	h1	i1	Sample
4060.00	Sltst	74.04	29.89	13.30	12.64	20.07	19.14	41.13	9.79	3.63	0001-1
4105.00	Sh/Clst	70.47	28.20	7.42	16.17	18.72	20.16	46.26	8.13	2.45	0006-1
4245.00	Sltst	6.96	1.74	1.70	2.82	3.19	3.12	3.46	1.62	0.00	0009-1
4272.00	oil Dst.1	40.92	16.64	2.80	3.04	5.05	3.48	4.24	2.59	0.00	0044-0
4340.00	Sltst	3.94	0.00	1.54	1.71	3.30	9.49	16.23	1.05	0.00	0014-1
4425.00	Sh/Clst	8.85	0.00	0.00	3.22	4.97	13.46	18.20	0.00	0.00	0018-1
4640.00	Sltst	3.71	0.00	0.00	0.00	1.45	3.14	4.17	0.00	0.00	0020-1