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Title

GEOCHEMICAL DATA REPORT FOR WELL 6506/12-3

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Abstract

92 samples from the cored interval in well 6506/12-3 have been analysed by Iatroscan (TCL-FID).
5 samples were analysed by GC-FID and GC/MS, and one sample was analysed for stable carbon isotope.

NOT INCLUDED IN WELL TRADE.

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Key Words

6506/12-3, geochemistry, Iatroscan, GC-FID, GC/MS, isotope

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1 Objectives

The objective of this study was to characterise the extractable hydrocarbons in 92 core samples from well 6506/12-3.

2 General well information

The well was drilled by Statoil as operator of licence 094 from 2.3.85 to 17.7.85 and reached a total depth of 4360 mRKB. The KB of the rig was 22 metres and the water depth was 301 metres.

3 Samples and analytical scheme

92 samples were picked from the cored interval in August 1991. All samples were analysed by Iatroscan (TLC-FID), and the saturated hydrocarbon fractions of 5 samples were analysed by GC-FID and GC/MS, and 1 sample was analysed for stable isotope.

4 Vitrinite reflectance

No samples were analysed.

5 TOC and Rock Eval

No samples were analysed.

6 Iatroscan (TLC-FID)

92 samples were analysed, and the results are tabulated in Table 1.

7 GC-FID

The saturated hydrocarbon fractions from 5 samples were analysed by Saga Petroleum a.s.. The GC-FID chromatograms are shown in figure 1.

8 GC/MS

The GC/MS analyses were performed by Saga Petroleum a.s. The saturated hydrocarbon fractions from the samples were analysed by GC/MS and the mass chromatograms for m/z 191, 177, 217 and 218 are shown in figure 2. Selected biological marker parameters manually measured by Saga are given in table 2.

9 Stable carbon isotopes

1 sample was analysed by IFE and the result is given in table 3.

Table 1.

SAGLAB RESULTS MANAGEMENT : EXTRACTION ANALYSIS RESULTS in mg/g Rock

Data for Well 6506/12-3

Page 1

Type	St.Depth	En.Depth	Weight (g)	EOM mg/g Rock	EOM mg/g TOC	Sat (mg/g)	Aro (mg/g)	NSO (mg/g)	Asph (mg/g)	Polars (mg/g)	TOC (%)	M/I
CCP	3836.50	3836.50		7.10		5.64	1.33		0.01	0.13		I
CCP	3837.50	3837.50		4.81		3.28	1.25		0.16	0.12		I
CCP	3838.50	3838.50		5.76		4.27	1.37		0.01	0.12		I
CCP	3839.50	3839.50		3.58		2.58	0.89		0.01	0.09		I
CCP	3840.50	3840.50		2.83		2.13	0.56		0.06	0.09		I
CCP	3841.50	3841.50		1.85		1.45	0.35		0.00	0.05		I
CCP	3842.50	3842.50		4.07		3.12	0.81		0.02	0.11		I
CCP	3843.50	3843.50		0.02		0.00	0.00		0.00	0.02		I
CCP	3844.50	3844.50		1.32		1.09	0.20		0.00	0.03		I
CCP	3845.50	3845.50		1.33		1.14	0.14		0.01	0.04		I
CCP	3846.00	3846.00		2.20		1.85	0.31		0.00	0.05		I
CCP	3847.00	3847.00		1.13		1.09	0.00		0.01	0.03		I
CCP	3848.00	3848.00		1.10		0.91	0.14		0.01	0.04		I
CCP	3849.00	3849.00		1.72		1.42	0.25		0.00	0.04		I
CCP	3850.00	3850.00		1.30		1.10	0.17		0.00	0.03		I

92 Analyses selected ..., from the following search criteria:

Nat: NOR, Well: 6506/12-3, Depth
between: 0.000 and 99999.990 m,
MPLC: I

SAGLAB RESULTS MANAGEMENT : EXTRACTION ANALYSIS RESULTS in mg/g Rock

Data for Well 6506/12-3

Page 2

Type	St.Depth	En.Depth	Weight (g)	EOM mg/g Rock	EOM mg/g TOC	Sat (mg/g)	Aro (mg/g)	NSO (mg/g)	Asph (mg/g)	Polars (mg/g)	TOC (%)	M/I
CCP	3851.00	3851.00		0.94		0.08	0.12		0.01	0.03		I
CCP	3852.00	3852.00		1.10		0.91	0.16		0.00	0.03		I
CCP	3853.00	3853.00		1.19		0.99	0.15		0.00	0.04		I
CCP	3854.00	3854.00		0.12		0.06	0.00		0.01	0.02		I
CCP	3855.00	3855.00		0.74		0.73	0.00		0.00	0.01		I
CCP	3856.50	3856.50		1.03		0.90	0.06		0.04	0.03		I
CCP	3857.50	3857.50		1.99		1.66	0.27		0.01	0.05		I
CCP	3858.50	3858.50		1.84		1.49	0.31		0.00	0.04		I
CCP	3859.50	3859.50		0.90		0.77	0.09		0.01	0.03		I
CCP	3860.50	3860.50		1.16		0.88	0.22		0.04	0.03		I
CCP	3861.50	3861.50		0.92		0.69	0.18		0.03	0.03		I
CCP	3862.50	3862.50		1.30		1.01	0.25		0.01	0.03		I
CCP	3864.10	3864.10		2.58		2.14	0.30		0.04	0.10		I
CCP	3865.50	3865.50		0.80		0.73	0.01		0.02	0.04		I
CCP	3866.50	3866.50		1.91		1.52	0.35		0.01	0.03		I

92 Analyses selected ..., from the following search criteria:

Nat: NOR, Well: 6506/12-3, Depth
between: 0.000 and 99999.990 m,
MPLC: I

SAGLAB RESULTS MANAGEMENT : EXTRACTION ANALYSIS RESULTS in mg/g Rock

Data for Well 6506/12-3

Page 3

Type	St.Depth	En.Depth	Weight (g)	EOM mg/g Rock	EOM mg/g TOC	Sat (mg/g)	Aro (mg/g)	NSO (mg/g)	Asph (mg/g)	Polars (mg/g)	TOC (%)	M/I
CCP	3867.50	3867.50		1.72		1.41	0.26		0.01	0.03		I
CCP	3868.50	3868.50		2.01		1.62	0.35		0.00	0.04		I
CCP	3869.50	3869.50		6.17		4.28	1.82		0.01	0.06		I
CCP	3870.50	3870.50		1.86		1.51	0.31		0.01	0.03		I
CCP	3871.50	3871.50		1.43		1.11	0.27		0.02	0.03		I
CCP	3872.50	3872.50		1.10		0.84	0.24		0.00	0.02		I
CCP	3873.50	3873.50		2.49		2.00	0.42		0.05	0.03		I
CCP	3874.50	3874.50		2.53		2.06	0.41		0.02	0.04		I
CCP	3875.50	3875.50		1.92		1.46	0.39		0.02	0.04		I
CCP	3876.50	3876.50		2.27		1.96	0.19		0.08	0.05		I
CCP	3877.50	3877.50		2.06		1.53	0.46		0.03	0.04		I
CCP	3878.50	3878.50		1.88		1.52	0.29		0.02	0.04		I
CCP	3880.60	3880.60		1.24		1.01	0.20		0.01	0.02		I
CCP	3882.50	3882.50		1.91		1.51	0.34		0.02	0.04		I
CCP	3884.50	3884.50		3.32		2.61	0.64		0.01	0.05		I

92 Analyzes selected ..., from the following search criteria:

Nat: NOR, Well: 6506/12-3, Depth
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MPLC: I

SAGLAB RESULTS MANAGEMENT : EXTRACTION ANALYSIS RESULTS in mg/g Rock

Data for Well 6506/12-3

Page 4

Type	St.Depth	En.Depth	Weight (g)	EOM mg/g Rock	EOM mg/g TOC	Sat (mg/g)	Aro (mg/g)	NSO (mg/g)	Asph (mg/g)	Polars (mg/g)	TOC (%)	M/I
CCP	3886.50	3886.50		4.12		3.20	0.87		0.01	0.05		I
CCP	3888.50	3888.50		6.57		4.75	1.68		0.06	0.07		I
CCP	3890.50	3890.50		3.98		3.07	0.82		0.03	0.05		I
CCP	3892.50	3892.50		3.16		2.43	0.66		0.01	0.06		I
CCP	3894.50	3894.50		7.95		5.71	2.13		0.02	0.09		I
CCP	3896.50	3896.50		3.11		2.44	0.59		0.02	0.06		I
CCP	3898.50	3898.50		3.29		2.52	0.69		0.02	0.06		I
CCP	3900.50	3900.50		3.73		2.87	0.80		0.01	0.05		I
CCP	3902.50	3902.50		2.69		2.04	0.58		0.03	0.05		I
CCP	3904.50	3904.50		4.23		3.46	0.71		0.01	0.05		I
CCP	3906.50	3906.50		0.07		0.06	0.00		0.00	0.01		I
CCP	3908.50	3908.50		0.06		0.06	0.00		0.00	0.01		I
CCP	3910.40	3910.50		0.05		0.04	0.00	0.01	0.00			I
CCP	3910.50	3910.50		0.05		0.04	0.00		0.00	0.01		I
CCP	3912.50	3912.50		0.05		0.04	0.00		0.00	0.01		I

92 Analyses selected ..., from the following search criteria:

Mat: NOR, Well: 6506/12-3, Depth
between: 0.000 and 99999.990 m,
MPLC: I

SAGLAB RESULTS MANAGEMENT : EXTRACTION ANALYSIS RESULTS in mg/g Rock

Data for Well 6506/12-3

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Type	St.Depth	En.Depth	Weight (g)	EOM mg/g Rock	EOM mg/g TOC	Sat (mg/g)	Aro (mg/g)	NSO (mg/g)	Asph (mg/g)	Polars (mg/g)	TOC (%)	M/I
CCP	3966.50	3966.50		0.63		0.62	0.00		0.00	0.01		I
CCP	3968.40	3968.40		0.86		0.80	0.04		0.00	0.01		I
CCP	3970.50	3970.50		1.05		1.02	0.00		0.01	0.01		I
CCP	3972.50	3972.50		0.34		0.24	0.07		0.01	0.03		I
CCP	3974.50	3974.50		0.76		0.65	0.10		0.00	0.02		I
CCP	3976.50	3976.50		0.85		0.72	0.12		0.00	0.01		I
CCP	3978.50	3978.50		0.05		0.04	0.00		0.00	0.01		I
CCP	3980.50	3980.50		1.83		1.74	0.08		0.00	0.01		I
CCP	3982.50	3982.50		0.77		0.62	0.12		0.01	0.02		I
CCP	3984.60	3984.60		0.65		0.65	0.00		0.00	0.00		I
CCP	3986.50	3986.50		0.85		0.85	0.00		0.00	0.00		I
CCP	3988.50	3988.50		1.20		1.20	0.00		0.00	0.00		I
CCP	3990.50	3990.50		0.57		0.57	0.00		0.00	0.00		I
CCP	3992.50	3992.50		0.85		0.82	0.00		0.00	0.02		I
CCP	3994.50	3994.50		1.06		1.04	0.00		0.00	0.02		I

92 Analyses selected ..., from the following search criteria:

Nat: NOR, Well: 6506/12-3, Depth

between: 0.000 and 99999.990 m,

MPLC: I

SAGLAB RESULTS MANAGEMENT : EXTRACTION ANALYSIS RESULTS in mg/g Rock

Data for Well 6506/12-3

Page 7

Type	St.Depth	En.Depth	Weight (g)	EOM mg/g Rock	EOM mg/g TOC	Sat (mg/g)	Aro (mg/g)	NSO (mg/g)	Asph (mg/g)	Polars (mg/g)	TOC (%)	M/I
CCP	3996.50	3996.50		0.70		0.61	0.05		0.02	0.02		I
CCP	3998.50	3998.50		0.16		0.13	0.00		0.01	0.02		I
Averages this Well:				1.68	0.00	1.32	0.31	0.01	0.01	0.03	0.00	
Averages all Wells:				1.68	0.00	1.32	0.31	0.01	0.01	0.03	0.00	

92 Analyses selected ..., from the following search criteria:

Nat: MOR, Well: 6506/12-3, Depth

between: 0.000 and 99999.990 m,

MPLC: I

Table 2.

0 well	1	2 nat	3 formation	4	5 upper depth	6 lower depth	7 sample type	8 Ts/Tm
1 6506/12-3	6506/12-3	nor		saga_sept92	3836.50		ccp	1.378049
2 6506/12-3	6506/12-3	nor		saga_sept92	3869.50		ccp	1.410256
3 6506/12-3	6506/12-3	nor		saga_sept92	3894.50		ccp	1.461538
4 6506/12-3	6506/12-3	nor		saga_sept92	3956.45		ccp	1.833333
5 6506/12-3	6506/12-3	nor		saga_dec92	3956.45		ccp	1.438596

0 well	9 Z/C	10 Z/Z+E	11 X/E	12 X/X+D	13 E/E+F	14 22S	15 a/a+j	16 20S
1 6506/12-3	0.392857	0.181518	0.250000	0.794872	0.876325	59.235669	0.798701	0.568182
2 6506/12-3	0.357143	0.171233	0.256198	0.775000	0.864286	57.446809	0.805369	0.584615
3 6506/12-3	0.415385	0.184615	0.255765	0.772152	0.868852	56.410256	0.810169	0.574297
4 6506/12-3	0.264151	0.127273	0.364583	0.833333	0.880734	56.000000	0.832258	0.564516
5 6506/12-3	0.163121	0.100000	0.198068	0.602941	0.848361	57.009346	0.843284	0.536585

0 well	17 bbS 217	18 %C27 abbS	19 %C28 abbS	20 %C29 abbS
1 6506/12-3	0.577600	33.099210	31.782265	35.118525
2 6506/12-3	0.554795	33.020638	31.894934	35.084428
3 6506/12-3	0.578680	30.849220	34.142114	35.008666
4 6506/12-3	0.590759	31.672598	32.562278	35.765125
5 6506/12-3	0.590000	32.779097	32.541568	34.679335

Table 3.

Data from file 64ISOF.ASK

0	1 WELL NAME	2 NATIONALITY	3	4 SAMPLE NAME	5 UPPER DEPTH	6 LOWER DEPTH	7 SAMPLE TYPE	8 LITHOLOGI
1 ife	6506/12-3	nor	feb_93	GARN	3869.50	3869.60	ccp	sst

0	9 EOM	10 SAT	11 ARO	12 NSO	13 ASPH
1 ife	-29.60	-28.70			

SAGLAB RESULTS MANAGEMENT : EXTRACTION ANALYSIS RESULTS in mg/g Rock

Data for Well 6506/12-3

Page 5

Type	St.Depth	En.Depth	Weight (g)	EOM mg/g Rock	EOM mg/g TOC	Sat (mg/g)	Aro (mg/g)	NSO (mg/g)	Asph (mg/g)	Polars (mg/g)	TOC (%)	M/I
CCP	3914.50	3914.50		0.06		0.05	0.00		0.00	0.01		I
CCP	3916.50	3916.50		0.08		0.07	0.00		0.00	0.01		I
CCP	3918.50	3918.50		0.17		0.05	0.10		0.01	0.01		I
CCP	3920.50	3920.50		0.14		0.06	0.07		0.00	0.02		I
CCP	3922.50	3922.50		0.28		0.13	0.10		0.01	0.03		I
CCP	3924.50	3924.50		0.38		0.12	0.20		0.00	0.05		I
CCP	3949.50	3949.50		0.08		0.07	0.00		0.00	0.01		I
CCP	3951.50	3951.50		0.73		0.57	0.13		0.01	0.02		I
CCP	3952.50	3952.50		0.11		0.00	0.09		0.00	0.02		I
CCP	3954.50	3954.50		1.03		0.83	0.18		0.01	0.01		I
CCP	3956.45	3956.45		1.35		1.15	0.14		0.01	0.05		I
CCP	3958.50	3958.50		0.70		0.62	0.06		0.01	0.01		I
CCP	3960.50	3960.50		0.17		0.07	0.09		0.00	0.01		I
CCP	3962.50	3962.50		0.54		0.44	0.10		0.00	0.00		I
CCP	3964.50	3964.50		0.03		0.00	0.00		0.01	0.02		I

92 Analyses selected ..., from the following search criteria:

Nat: MOR, Well: 6506/12-3, Depth

between: 0.000 and 99999.990 m,

MPLC: I