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Saga Petroleum a.s.



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Title

GEOCHEMICAL DATA REPORT FOR WELL 6506/12-7

Authors(s)

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Abstract

66 samples from the cored interval in well 6506/12-7 have been analysed by Iatroscan (TCL-FID).
5 samples were analysed by GC-FID and GC/MS, and two samples were analysed for stable carbon isotope.

NOT INCLUDED IN WELL TRADE.

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Key Words

6506/12-7, 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 66 core samples from well 6506/12-7.

2 General well information

The well was drilled by Statoil as operator of licence 094 from 7.4.87 to 8.8.87 and reached a total depth of 4840 mRKB. The KB of the rig was 29 metres and the water depth was 267 metres.

3 Samples and analytical scheme

66 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 two samples were analysed for stable carbon isotope.

4 Vitrinite reflectance

No samples were analysed.

5 TOC and Rock Eval

No samples were analysed.

6 Iatroscan (TLC-FID)

66 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

Two samples were analysed by IFE and the results are given in table 3.

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

Data for Well 6506/12-7

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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	4053.20	4053.20		36.99		12.98	23.47		0.10	0.44		I
CCP	4427.50	4427.50		0.06		0.04	0.00		0.01	0.01		I
CCP	4428.60	4428.60		0.12		0.10	0.00		0.01	0.02		I
CCP	4429.50	4429.50		0.16		0.12	0.00		0.02	0.02		I
CCP	4430.50	4430.50		0.10		0.08	0.00		0.00	0.01		I
CCP	4431.50	4431.50		0.15		0.12	0.00		0.02	0.01		I
CCP	4432.50	4432.50		0.16		0.13	0.00		0.02	0.01		I
CCP	4433.50	4433.50		0.40		0.36	0.00		0.02	0.02		I
CCP	4434.50	4434.50		0.44		0.42	0.00		0.00	0.02		I
CCP	4435.50	4435.50		0.82		0.59	0.21		0.01	0.02		I
CCP	4436.50	4436.50		1.18		0.87	0.24		0.05	0.03		I
CCP	4437.50	4437.50		0.86		0.67	0.18		0.00	0.02		I
CCP	4438.50	4438.50		1.07		0.85	0.19		0.00	0.02		I
CCP	4467.50	4467.50		1.95		1.41	0.46		0.03	0.06		I
CCP	4467.90	4467.90		12.19		10.23	1.82		0.02	0.13		I

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

Mat: MOR, Well: 6506/12-7, Depth
between: 0.000 and 99999.990 m,
MPLC: I

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

Data for Well 6506/12-7

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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	4468.50	4468.50		5.05		4.15	0.80		0.03	0.08		I
CCP	4469.50	4469.50		3.22		2.69	0.45		0.04	0.04		I
CCP	4470.50	4470.50		0.98		0.58	0.37		0.01	0.03		I
CCP	4471.50	4471.50		0.29		0.17	0.11		0.00	0.01		I
CCP	4472.50	4472.50		0.25		0.14	0.09		0.00	0.02		I
CCP	4473.50	4473.50		1.86		1.66	0.15		0.03	0.03		I
CCP	4474.50	4474.50		2.16		1.94	0.17		0.00	0.04		I
CCP	4475.50	4475.50		0.95		0.64	0.28		0.01	0.03		I
CCP	4477.50	4477.50		0.89		0.83	0.05		0.01	0.01		I
CCP	4478.50	4478.50		1.04		0.08	0.21		0.05	0.03		I
CCP	4479.50	4479.50		0.34		0.10	0.09		0.12	0.02		I
CCP	4480.50	4480.50		0.68		0.57	0.09		0.00	0.01		I
CCP	4481.50	4481.50		0.59		0.44	0.13		0.01	0.02		I
CCP	4482.50	4482.50		0.40		0.03	0.06		0.01	0.01		I
CCP	4483.50	4483.50		0.35		0.24	0.09		0.01	0.02		I

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

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between: 0.000 and 99999.990 m,

MPLC: I

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

Data for Well 6506/12-7

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	4484.60	4484.60		1.06		1.02	0.00		0.02	0.01		I
CCP	4485.50	4485.50		0.72		0.61	0.08		0.00	0.02		I
CCP	4486.50	4486.50		0.61		0.46	0.12		0.01	0.02		I
CCP	4487.50	4487.50		0.75		0.56	0.14		0.03	0.03		I
CCP	4488.50	4488.50		0.90		0.71	0.15		0.01	0.02		I
CCP	4489.50	4489.50		0.66		0.44	0.17		0.01	0.05		I
CCP	4490.50	4490.50		0.16		0.05	0.08		0.01	0.02		I
CCP	4491.50	4491.50		0.15		0.05	0.07		0.01	0.01		I
CCP	4492.50	4492.50		0.63		0.57	0.05		0.00	0.01		I
CCP	4493.50	4493.50		0.40		0.30	0.09		0.00	0.02		I
CCP	4494.40	4494.40		0.33		0.25	0.07		0.00	0.01		I
CCP	4494.50	4494.50		1.44		0.07	1.23		0.02	0.13		I
CCP	4494.75	4494.75		0.31		0.25	0.06		0.00	0.01		I
CCP	4495.50	4495.50		0.17		0.16	0.00		0.00	0.01		I
CCP	4496.50	4496.50		0.20		0.19	0.00		0.00	0.01		I

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

Mat: MOR, Well: 6506/12-7, Depth

between: 0.000 and 99999.990 m,

MPLC: I

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

Data for Well 6506/12-7

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	4497.50	4497.50		0.31		0.26	0.01		0.04	0.01		I
CCP	4498.50	4498.50		0.43		0.33	0.08		0.01	0.01		I
CCP	4499.50	4499.50		0.37		0.25	0.08		0.03	0.02		I
CCP	4500.50	4500.50		0.52		0.40	0.10		0.00	0.02		I
CCP	4501.50	4501.50		0.99		0.13	0.82		0.01	0.04		I
CCP	4502.50	4502.50		0.97		0.83	0.12		0.00	0.02		I
CCP	4672.50	4672.50		0.33		0.22	0.08		0.02	0.01		I
CCP	4674.50	4674.50		0.58		0.38	0.17		0.00	0.02		I
CCP	4676.50	4676.50		1.01		0.46	0.48		0.03	0.04		I
CCP	4678.50	4678.50		0.60		0.36	0.21		0.00	0.02		I
CCP	4680.50	4680.50		1.55		1.20	0.32		0.01	0.03		I
CCP	4682.50	4682.50		1.48		1.06	0.39		0.01	0.03		I
CCP	4684.50	4684.50		2.73		1.09	1.52		0.06	0.06		I
CCP	4686.50	4686.50		1.05		0.53	0.47		0.02	0.03		I
CCP	4688.50	4688.50		0.79		0.39	0.37		0.00	0.03		I

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

Mat: MOR, Well: 6506/12-7, Depth
between: 0.000 and 99999.990 m,
NPLC: I

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

Data for Well 6506/12-7

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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	4690.50	4690.50		0.21		0.16	0.00		0.02	0.03		I
CCP	4692.50	4692.50		0.08		0.06	0.00		0.00	0.01		I
CCP	4694.50	4694.50		0.24		0.19	0.00		0.05	0.00		I
CCP	4696.50	4696.50		0.05		0.04	0.00		0.00	0.00		I
CCP	4698.50	4698.50		0.10		0.08	0.00		0.01	0.01		I
CCP	4699.50	4699.50		0.11		0.11	0.00		0.00	0.00		I
Averages this Well:				1.50	0.00	0.87	0.56	0.00	0.02	0.03	0.00	
Averages all Wells:				1.50	0.00	0.87	0.56	0.00	0.02	0.03	0.00	

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

Mat: MOR, Well: 6506/12-7, Depth
between: 0.000 and 99999.990 m,
MPLC: I

0 well	1	2 nat	3 formation	4	5 upper depth	6 lower depth	7 sample type	8 Ts/Tm
1 6506/12-7	6506/12-7	nor		saga_dec92	4436.5		ccp	2.012658
2 6506/12-7	6506/12-7	nor		saga_sept92	4467.9		ccp	
3 6506/12-7	6506/12-7	nor		saga_dec92	4468.5		ccp	0.955556
4 6507/12-7	6507/12-7	nor		saga_dec92	4474.5		ccp	2.333333
5 6506/12-7	6506/12-7	nor		saga_dec92	4684.5		ccp	0.771429

0 well	9 Z/C	10 Z/Z+E	11 X/E	12 X/X+D	13 E/E+F	14 22S	15 20S	16 q/Q+t 20s
1 6506/12-7	0.387597	0.204918	0.505155	0.859649	0.866071	56.910569	0.850498	0.587629
2 6506/12-7							0.733906	0.511811
3 6506/12-7	0.157143	0.104762	0.414894	0.722222	0.839286	55.000000	0.753247	0.505495
4 6507/12-7	0.353846	0.225490	1.088608	0.886598	0.814433	59.523810	0.851133	0.575758
5 6506/12-7	0.327869	0.170940	0.288660	0.717949	0.836207	60.000000	0.733333	0.490000

0 well	17 bbS 217	18 %C27 abbs	19 %C28 abbs	20 %C29 abbs
1 6506/12-7	0.597510	32.391714	31.826742	35.781544
2 6506/12-7	0.578073	33.175355	29.383886	37.440758
3 6506/12-7	0.556098	35.112360	32.022472	32.865169
4 6507/12-7	0.582278	30.970149	33.768657	35.261194
5 6506/12-7	0.553571	34.540390	29.247911	36.211699

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	6506/12-7	nor		feb_93	4474.50	4474.50	ccp	sst
2 ife	6506/12-7	nor		feb_93	4468.50	4468.50	ccp	sst

0	9 EOM	10 SAT	11 ARO	12 NSO	13 ASPH
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1 ife	-29.60				
2 ife	-25.80	-24.90			