

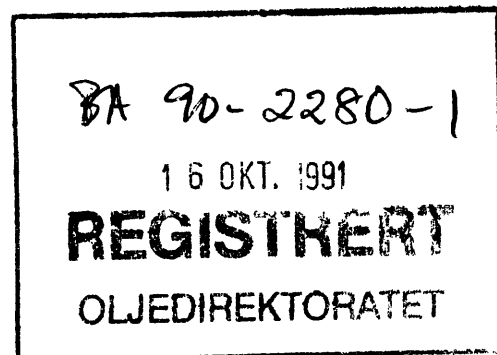
EXTENDED VITRINITE REFLECTANCE REPORT

BLOCKS 34, 35, 36 STUDY, AREA 2

**WELLS NOCS 33/5-2, 33/6-1,
33/9-10 and 34/4-3**

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INTRODUCTION

For four of the wells in Area 2 in the Block 34, 35, 35 Study it was found possible and desirable to extend the vitrinite reflectance data. Additional samples from the wells NOCS 33/5-2, 33/6-1, 33/9-10 and 34/4-3 were examined, all samples being from the Tertiary and Cretaceous sections of the wells. In this report the complete new vitrinite reflectance reports for all four wells are included. Table and figure numbers are as in the original reports.

Table 7 : Thermal Maturity Data for well NOCS 33/5-2

Depth unit of measure: m

Depth	Typ	Lithology	Vitrinite Reflectance (%)	Number of Readings	Standard Deviation	Spore Fluorescence Colour	SCI	T _{max} (°C)	Sample
1510.00	cut	bulk	0.43	12	0.05	3-4	-	-	0709-0B
1600.00	cut	bulk	0.39	20	0.06	3-4	-	-	0711-0B
1710.00	cut	bulk	0.40	3	0.05	3-4	-	-	0713-0B
1810.00	cut	bulk	0.39	4	0.04	3-4	-	-	0529-0B
1900.00	cut	bulk	0.42	2	0.07	3-4	-	-	0532-0B
2050.00	cut	bulk	0.36	4	0.02	3-4	-	-	0537-0B
2140.00	cut	bulk	0.50	2	0.01	3+4	-	-	0540-0B
2230.00	cut	bulk	0.40	2	0.00	3-4	-	-	0543-0B
2320.00	cut	bulk	NDP	-	-	5	-	-	0546-0B
2440.00	cut	bulk	0.49	1	0.00	4-5 (?)	-	-	0550-0B
2470.00	cut	Sh/Clst: ol gy to m gy	-	-	-	-	4.0-4.5	430	0551-1L
2650.00	cut	bulk	NDP	-	-	4-5 (?)	-	-	0557-0B
2860.00	cut	bulk	NDP	-	-	4-5 (?)	-	-	0564-0B
2950.00	cut	bulk	NDP	-	-	4-5 (?)	-	-	0567-0B

Table-7 : Thermal Maturity Data for well NOCS 33/5-2

Depth unit of measure: m

Depth	Typ	Lithology	Vitrinite Reflectance (%)	Number of Readings	Standard Deviation	Spore Fluorescence Colour	SCI	T _{max} (°C)	Sample
3250.00	cut	bulk	0.49	2	0.04	5 (?)	-	-	0577-0B
3325.00	cut	bulk	0.59	1	0.00	NDP	-	-	0580-0B
3325.00	cut	Sh/Clst: gy blk	-	-	-	-	NDP/6.0(??)	453	0580-1L
3548.00	cut	bulk	0.57	1	0.00	NDP	-	-	0588-0B
3907.00	cut	bulk	0.62	18	0.06	5-6	-	-	0595-0B
3907.00	cut	Sh/Clst: brn blk	-	-	-	-	6.5(??)	450	0595-3L
3945.00	cut	bulk	0.64	3	0.04	5-6 (?)	-	-	0600-0B
3952.00	cut	Sh/Clst: gy blk to brn blk	-	-	-	-	6.0-6.5(??)	442	0601-3L
3982.00	cut	bulk	0.63	10	0.07	5-6	-	-	0606-0B
3987.00	cut	Sh/Clst: gy blk to brn blk	-	-	-	-	6.0-6.5(??)	442	0607-3L
4045.00	cut	bulk	0.77	6	0.07	6 (?)	-	-	0616-0B
4050.00	cut	Sh/Clst: gy blk to drk gy	-	-	-	-	6.5-7.0	452	0617-3L
4110.00	cut	Sh/Clst: ol gy to drk gy	-	-	-	-	7.0	346	0627-1L
4117.00	cut	bulk	0.62	17	0.07	6	-	-	0628-0B

Table 7 : Thermal Maturity Data for well NOCS 33/5-2

Depth unit of measure: m

Depth	Typ Lithology	Vitrinite Reflectance (%)	Number of Readings	Standard Deviation	Spore Fluorescence Colour	SCI	T _{max} (°C)	Sample
4185.00	cut bulk	0.72	6	0.10	5-6 (?)	-	-	0637-0B
4185.00	cut Sh/Clst: gy blk	-	-	-	-	6.5-7.0	451	0637-4L
4222.00	cut bulk	0.72	8	0.04	6	-	-	0643-0B
4260.00	cut Sh/Clst: gy blk to drk gy	-	-	-	-	7.0	461	0651-3L
4312.00	cut Sh/Clst: m gy to gy blk	-	-	-	-	6.5-7.0	462	0661-1L
4325.00	cut bulk	0.79	3	0.05	5-6 (??)	-	-	0663-0B
4337.00	cut bulk	0.90	7	0.04	NDP	-	-	0665-0B
4375.00	cut Sltst : lt brn gy to brn gy to m drk gy	-	-	-	-	7.5-8.0	452	0670-1L
4412.00	cut bulk	0.88	9	0.04	6 (?)	-	-	0676-0B
4520.00	cut Sh/Clst: red brn	-	-	-	-	NDP	376	0694-3L

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 _{max} (°C)	Sample
1550.00	cut bulk	0.51	1	0.00	3+4	-	-	0184-0B
1750.00	cut bulk	0.39	3	0.03	NDP	-	-	0188-0B
1850.00	cut bulk	NDP	-	-	4	-	-	0190-0B
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

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 _{max} (°C)	Sample
3240.00	cut Sh/Clst: m gy	-	-	-	-	4.5-5.0	432	0114-2L
3535.00	cut bulk	0.53	2	0.02	4	-	-	0115-0B
3565.00	cut Sltst : dsk brn to dsk y brn	-	-	-	-	4.0-5.5	433	0120-4L
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 7 : Thermal Maturity Data for well NOCS 33/9-10

Depth unit of measure: m

Depth	Typ Lithology	Vitrinite Reflectance (%)	Number of Readings	Standard Deviation	Spore Fluorescence Colour	SCI	T _{max} (°C)	Sample
1550.00	cut bulk	NDP	-	-	NDP	-	-	0139-0B
1700.00	cut bulk	NDP	-	-	NDP	-	-	0142-0B
1850.00	cut bulk	0.33	21	0.03	NDP	-	-	0145-0B
1991.00	cut bulk	0.44	1	0.00	3-4	-	-	0004-0B
2111.00	cut bulk	0.43	6	0.05	4	-	-	0008-0B
2231.00	cut bulk	0.41	7	0.04	4+5	-	-	0012-0B
2348.00	cut bulk	0.45	4	0.05	3-4	-	-	0016-0B
2570.00	cut bulk	0.37	3	0.01	3-4	-	-	0023-0B
2630.00	cut Sh/Clst: ol gy to m gy	-	-	-	-	3.5-4.0(?)	413	0025-1L
2753.00	cut bulk	0.39	7	0.04	4	-	-	0029-0B
2810.00	cut bulk	0.41	2	0.06	4	-	-	0031-0B
2951.00	cut bulk	0.36	2	0.07	4	-	-	0035-0B
3101.00	cut bulk	NDP	-	-	0	-	-	0040-0B
3230.00	cut bulk	0.68	1	0.00	4	-	-	0045-0B

Table 7 : Thermal Maturity Data for well NOCS 33/9-10

Depth unit of measure: m

Depth	Typ	Lithology	Vitrinite Reflectance (%)	Number of Readings	Standard Deviation	Spore Fluorescence Colour	SCI	T _{max} (°C)	Sample
3266.00	cut	Sh/Clst: brn blk	-	-	-	-	4.5-5.0(?)	434	0051-4L
3290.00	cut	bulk	0.59	8	0.07	4+5	-	-	0055-0B
3320.00	cut	Sh/Clst: brn blk	-	-	-	-	4.0	427	0060-3L
3326.00	cut	bulk	0.60	12	0.06	0	-	-	0061-0B
3338.00	cut	Sh/Clst: brn blk	-	-	-	-	4.5-5.0	429	0063-3L
3422.00	cut	bulk	0.67	1	0.00	4	-	-	0075-0B
3443.00	cut	Sh/Clst: dsk y brn	-	-	-	-	4.5-5.0	438	0078-3L
3491.00	cut	Sh/Clst: m gy to drk gy	-	-	-	-	5.0	363	0086-1L
3509.00	cut	bulk	0.65	3	0.11	0	-	-	0089-0B
3539.00	cut	Sh/Clst: m gy to drk gy	-	-	-	-	NDP	338	0094-1L
3617.00	cut	bulk	0.67	4	0.03	5	-	-	0107-0B
3629.00	cut	Sh/Clst: m gy to drk gy	-	-	-	-	5.0	432	0109-1L
3707.00	cut	bulk	NDP	-	-	0	-	-	0122-0B

Table 7 : Thermal Maturity Data for well NOCS 34/4-3

Depth unit of measure: m

Depth	Typ	Lithology	Vitrinite Reflectance (%)	Number of Readings	Standard Deviation	Spore Fluorescence Colour	SCI	T _{max} (°C)	Sample
1570.00	cut	bulk	0.52	10	0.08	3	-	-	0271-0B
1740.00	cut	bulk	NDP	-	-	4	-	-	0275-0B
1890.00	cut	bulk	0.47	2	0.01	4	-	-	0046-0B
2040.00	cut	bulk	0.37	1	0.00	3-4	-	-	0051-0B
2140.00	cut	bulk	0.39	4	0.01	3-4	-	-	0054-0B
2230.00	cut	bulk	0.40	3	0.08	3-4	-	-	0057-0B
2500.00	cut	bulk	0.54	6	0.05	3+4	-	-	0064-0B
2650.00	cut	bulk	0.57	1	0.00	3-5	-	-	0069-0B
3060.00	cut	bulk	NDP	-	-	4	-	-	0082-0B
3270.00	cut	bulk	NDP	-	-	4	-	-	0089-0B
3452.00	cut	bulk	0.64	3	0.04	5	-	-	0095-0B
3533.00	cut	Sh/Clst: dsk y brn to ol blk	-	-	-	-	5.0-5.5(??)	434	0099-4L
3579.40	ccp	bulk	0.61	6	0.05	4	-	-	0249-0B
3579.40	ccp	Sh/Clst: drk gy	-	-	-	-	4.5-5.0	431	0249-1L

Table 7 : Thermal Maturity Data for well NOCS 34/4-3

Depth unit of measure: m

Depth	Typ Lithology	Vitrinite Reflectance (%)	Number of Readings	Standard Deviation	Spore Fluorescence Colour	SCI	T _{max} (°C)	Sample
3665.00	cut Sltst : gy blk	-	-	-	-	5.0-5.5	435	0121-4L
3689.00	cut bulk	NDP	-	-	NDP	-	-	0125-0B
3863.00	cut Sh/Clst: gy blk to dsk y brn	-	-	-	-	5.5	450	0153-5L
3899.00	cut bulk	0.71	7	0.02	5	-	-	0159-0B
3953.00	cut Sh/Clst: gy blk to dsk y brn	-	-	-	-	5.5-6.0	448	0167-2L
4001.00	cut bulk	0.78	13	0.02	5-6	-	-	0175-0B
4055.00	cut bulk	0.79	5	0.03	5-6	-	-	0184-0B
4061.00	cut Sh/Clst: gy blk to dsk y brn	-	-	-	-	5.5-6.0	452	0185-2L
4184.00	cut bulk	0.80	8	0.05	5	-	-	0205-0B
4214.00	cut Sltst : brn gy to dsk y brn	-	-	-	-	6.0	448	0209-2L
4250.00	cut Sltst : brn gy to dsk y brn	-	-	-	-	5.5-6.0	448	0213-2L
4274.00	cut Sltst : brn gy to dsk y brn	-	-	-	-	6.0-6.5	446	0217-2L
4313.00	cut Sltst : brn gy to dsk y brn	-	-	-	-	6.0	449	0222-2L
4319.00	cut bulk	0.84	9	0.02	5-6	-	-	0223-0B