1.2 Casing Summary

Size inch	Weight lbs/ft	Grade	Connection	Casing shoe mBDF	Comments
30"	310	X-52	SL-60	421	6 joints including wellhead joint
20"	133	X-56	E60MT	1210	Worked down 1201-1210 m, weight up 177 MT, weight down 138 MT. Wellhead housing confirmed engaged with 25 MT overpull.
9 5/8"	53.5	P-110	AMS	2919	Weight up 225 MT, weight down 200 MT. Seal assembly tested to 414 bar 22/09/97.

1.3 Mud

Section	Details
36" top hole:	Sea water with Bentonite Hi-Vis pills as required 1.20sg KCl mud left in hole for casing run
26" surface hole:	Sea water with Bentonite Hi-Vis/KCl pills as required 1.30sg KCl mud left in hole prior to running 20" casing
12.1/4" intermediate hole:	BARASILC (sodium silicate) mud at 1.25sg
8.1/2" production hole:	Initally BARASILC (sodium silicate) mud at 1.25sg, BARASILC depleted over 8.1/2" section to GEM (Glycol Enhanced Mud)
Abandonment:	1.25sg mud left in hole

4.8 Mud and circulating equipment

No.	Date	Lesson Learned	Measures / Comments
70	10/12	Mud treatment: If the centrifuges are not thoroughly flushed, residual Barasilc mud remains will be formed, which may cause damage to the machinery.	Correct flushing procedures to be followed.
69	9/12	Mud treatment: Impreg bits, particularly in time, produce progressively smaller and smaller cuttings to the point where they will go through the finest shaker screens. This leads to an increase in low gravity solids, and a corresponding increase in PV/YP.	Centrifuges to be on board and available for use. Mud company to be aware and take measures accordingly.
67	8/12	Mud treatment: Mud additive (Baranex) caused problems for Palynological analysis of cuttings. The mud additive coated the samples, and could not easily be removed.	The problem seems to be caused by the high rate of addition of this additive at one time
57	1/12	Mud treatment: Daily controlled dilution of new mud into existing Silicate mud allowed easy silicate depletion from the system, resulting in a basic KCl mud.	Ensure full lessons learned report obtained from Baroid to capture all valid points of managing a silicate mud system.
55	30/11	Mud treatment: Flushing the centrifuges result in water being returned to the mud pit system.	To be resolved prior to using a mud system that is sensitive to water additions.
53	27/11	Mud treatment: 210 mesh screens were installed to ensure that a high solids removal efficiency was maintained.	Order sufficient screen so that all shakers can be dressed with 210's.
		Mud treatment: Although the KCl content was maintained within the recommended range of 80 to 100 kg/m3, the cuttings became very soft and sticky below 1600 meters.	The KCl content was increased to 110 kg/m3 to solve the problem.
52 18	27/11 03/09	Pumps: Swab failures more frequent than what would be considered normal with Barasilc mud. Pumps: 10 x pump piston heads, 4 x liners and 2 x wash pipe assemblies have been changed out since the silicate mud was introduced to the system for the 12.1/4" pilot hole section.	Silicate content was increased from 50,000 mg/L to 60,000 mg/L. When the silicate level came down to the programmed level, which was 30,000-50,000 mg/L, the pump problems seemed to disappear. The first swabs were of a rubber type, but these were changed out with swabs used for oil based muds. These swabs seemed to last longer. On future wells the silicate level should be brought down to the programmed specification immediately if pump problems are experienced to avoid rig down time. No problems were observed with the 7" liners when drilling the Top hole section with seawater. No particular problems were observed with pumps or seals on Spekkhugger and Steinbit wells when using the siliacate mud system. 6 piston heads and samples of the brine and the formulated mud have been returned for independent analysis.
44	22/11	Pits: 120bbl seawater pumped into mud pit 2.	Better communication and awareness required.
42	21/11	Mud treatment: Mud losses over shakers.	Change to coarser shaker screens when circulating cold mud or getting bottoms up after trips. Plan ahead & expect for such an event.
36	22/11	Pumps:	Try to establish mud pump efficiency prior to

L-901

.4

External Service Report April 1997

SIEP 98.6048

EVALUATION OF SOURCE ROCK PROPERTIES OF SAMPLES FROM WELL 6510/02-01, NORWAY

by

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Sponsor: Norske Shell, Risavika

Period of work: February 1998 - April 1998

Investigation: 2354411

SHELL INTERNATIONAL EXPLORATION AND PRODUCTION B.V.,
RESEARCH AND TECHNICAL SERVICES, RIJSWIJK

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1. INTRODUCTION

At the request of EPXT1, Norske Shell, Risavika, Norway, a source rock screening has been carried out on a total of 51 samples from the well 6510/2-1 (Vega), Norway, (reference e-mail 16-02-98, telex order T97439). The suite comprises 44 cutting samples (interval 1224 - 4698m) and 7 core samples (3 from 1827.52 - 1835.9m and 3 from 2127.16 - 2139.6m). The source rock data of a previously set of 16 sidewall samples from the interval 1597.5 - 2288m, which was screened by Rock Eval analysis to determine suitable samples for extract analysis, is also included in this report.

The following sampled intervals were subjected to source rock analysis:

Depth interval	*Number of samples*	*No. of analyses TOC*	*REV*	*MAC/VR*
1224 - 1287m	2	2	2	1
1293 - 1314m	4	4	4	2
1320 - 1527m	8	8	8	4
1557 - 1649m	3	2	3	1
1656	1	1	1	
1758 - 1820m	5	5	5	2
1824 - 1937m	8	5	8	5
1959 - 2208m	14	10	14	8
2259 - 4698	22	20	10	4
Total	67	57	55	27

The purpose of the investigation was:

1. to detect the presence (or absence) of source rocks in the samples,
2. to determine the quality of the organic matter, as well as its distribution within the mineral matrix,
3. to establish the degree of organic metamorphism (level of maturity).

1. CONCLUSIONS

The samples from the deepest interval 2236 - 4698m
are contaminated with mud additives and did not reveal any source rock potential.

Depth	Type	Tr	TOC	S1	S2	S3	Tmax	HI	OI	PI	VRE	VR	MAC
1224	C		1.1	0.16	1.49	2.99	396	135	272	0.1			X
1287	C		0.7	0.13	0.67	3.3	375	96	471	0.16			
			0.9	*0.15*	*1.08*	*3.15*	*386*	*116*	*372*	*0.13*			
1293	C		1.8	0.25	2.56	2.72	403	142	151	0.09			
1302	C		4.4	0.92	10.27	2.89	410	233	66	0.08	0.27		X
1308	C		4.4	1.31	11.05	3.06	416	251	70	0.11	0.37		
1314	C		5.2	1.03	13.04	2.98	413	251	57	0.07	0.32		X
			4.0	*0.88*	*9.23*	*2.91*	*411*	*219*	*86*	*0.09*	*0.32*		
1320	C		4.8	0.9	9.49	3.15	416	198	66	0.09			X
1344	C		1.6	0.41	2.36	2.5	416	148	156	0.15			
1374	C		1.3	0.27	2.17	2.54	420	167	195	0.11			
1407	C		1.2	0.43	2.34	2.28	417	195	190	0.16			
1437	C		1.6	0.67	2.74	3.29	419	171	206	0.2			X
1467	C		2.1	0.53	2.59	2.3	424	123	110	0.17			
1497	C		2.3	0.6	3.08	2.56	419	134	111	0.16			X
1527	C		1.5	0.27	1.48	2.65	421	99	177	0.15			X
			2.1	*0.51*	*3.28*	*2.66*	*419*	*154*	*151*	*0.15*			
1557	C		1.3	0.23	1.58	2.8	405	122	215	0.13			
1597.5	S			0.07	0.48	0.54	530			0.13			
1649	S		11	2.21	28.18	3.04	413	256	28	0.07	0.32	0.33	X
			6.2	*0.84*	*10.08*	*2.13*	*449*	*189*	*122*	*0.11*	*0.32*		
1656	C		0.4	0.12	0.63	1.36	421	158	340	0.16			

Table 1

	Depth	Type	Tr	TOC	S1	S2	S3	Tmax	HI	OI	PI	VRE	VR	MAC
	1758	C		1.1	0.27	2.29	3.28	424	208	298	0.11	0.51		X
	1800.8	S	DC	0.2	0.3	1.39	0.81	494			0.18			
	1817.5	S	DC	0.3	0.27	1.56	1.45	516			0.15			
	1818	C	Pi	61.8	6.85	163.88	11.29	429	265	18	0.04		0.48	X
	1820	S	DC	0.2	0.27	1.59	1.48	522			0.15			
Average (ex. 1818)				*0.5*	*0.28*	*1.71*	*1.76*	*489*	*208*	*298*	*0.15*	*0.51*		
	1824	C		26.6	4	42	10.47	431	158	39	0.09	0.63	0.51	X
	1827.52	R		5.5	0.45	13.46	1.35	424	245	25	0.03	0.51		X
	1831.7	R		2.8	0.27	7.96	1.78	427	284	64	0.03	0.56		X
	1835.9	R		2.2	0.22	5.47	1.46	430	249	66	0.04	0.61		X
	1857	C		4.2	1.1	8.53	5.03	432	203	120	0.11	0.65		X
	1887	S			0.09	1.57	0.55	465			0.05			
	1929	S			0.14	1.11	2.01	540			0.11			
	1937	S			0.16	1.84	2.8	495			0.08			
Average				*8.3*	*0.80*	*10.24*	*3.18*	*456*	*228*	*63*	*0.07*	*0.59*		
	1959	C		2.8	0.58	4.97	4.91	428	178	175	0.1	0.58	0.45	X
	2018	S			0.17	1.92	1.53	428			0.08			
	2031.3	S			0.25	1.74	0.88	496			0.13			
	2058	C		7.2	1.41	16.02	3.38	428	223	47	0.08	0.58	0.44	X
	2104	S			0.06	0.94	2.67	503			0.06			
	2127.2	R		68.5	7.47	208.38	5.25	415	304	8	0.03	0.36	0.44	X
	2132.9	R		65.5	8.31	144.52	6.73	417	221	10	0.05	0.39	0.48	X
	2134	R		2.1	0.4	4.54	0.48	362	216	23	0.08			X
	2139.6	R		60.9	6.92	182.4	3.46	422	300	6	0.04	0.48	0.52	X
	2160	C		7.3	1.4	13.43	3.12	428	184	43	0.09	0.58	0.50	X
	2160.5	S	DC	0.7	0.99	2	3.11	414	285	444	0.33			
	2163.5	S	DC	2.2	0.37	3.82	0.67	423	103	30	0.09			
	2202	C		19.6	4.31	32.64	8.33	434	167	43	0.12	0.68	0.56	X
	2208	S			0.12	1.22	0.56	443			0.09			
Average				*23.7*	*2.34*	*44.18*	*3.22*	*432*	*218*	*83*	*0.10*	*0.52*		

Table 2

	Depth	Type	Tr	TOC	S1	S2	S3	Tmax	HI	OI	PI	VRE	VR	MAC
	2259	C		1.5	0.19	2.71	4.51	432	181	301	0.07	0.65		X
	2272	S			0.13	0.21	0.73	528			0.38			
	2288	S			0.12	1.16	1.01	504			0.09			
	2319	C		0.2	0.11	0.58	6.42	356	290	3210	0.16			
	2418	C		0.2										
	2616	C		0.1										
	2817	C		0.1										
	3018	C		0.2										
	3063	C		0.3										
	3165	C		0.5										
	3366	C		0.3										
	3465	C		0.5										
	3576	C		0.5										
	3678	C		0.3										
	3780	C		0.3										
	3978	C		0.4										
	4074	C		0.9	1.51	1.36	1.9	377	151	211	0.53			X
	4179	C		0.4	0.76	1	1.5	366	250	375	0.43			
	4278	C		0.7	0.93	1.88	2.28	373	269	326	0.33			
	4431	C		1.6	2.54	1.28	3.15	375	80	197	0.66			X
	4566	C		0.8	1.25	1.75	2.15	366	219	269	0.42			
	4698	C		0.9	1.17	1.25	2.46	365	139	273	0.48			X
Average				*0.5*	*0.87*	*1.32*	*2.61*	*404*	*197*	*645*	*0.36*	*0.65*		

C: Cutting sample
S: Sidewall sample
R: Core sample
DC: Extracted sample with di-Chloromethane
Pi Picked sample
TOC: Total amount of organic carbon (weight percentage)
S1: Amount of free hydrocarbons (mg/g of rock)
S2: Amount of hydrocarbons formed by breakdown of kerogen
S3: Amount of CO2 evolved during pyrolysis

Tmax: Relative maturity in degrees Celsius
HI: Hydrogen Index (source rock type)
OI: Oxygen Index
PI: Production Index
VRE: Vitrinite Reflectance Equivalent based on Tmax
VR Measured Vitrinite Reflectance
MAC: Maceral analysis

Depth	Sample Type	Comment
1224.00m (s 189913)	C	Sample slightly oxidised Contaminated COMMON CEMENT CONTAMINATION WHITE - LIGHT YELLOW FLUORESCENCE
1302.00m (s 189916)	C	Sample slightly oxidised Sample partly oxidised Desmocollinite grades into SOM associated with framboidal pyrite WHITE - LIGHT YELLOW FLUORESCENCE
1314.00m (s 189918)	C	Sample slightly oxidised Desmocollinite grades into SOM associated with framboidal pyrite WHITE - LIGHT YELLOW FLUORESCENCE
1320.00m (s 189919)	C	Sample slightly oxidised Sample partly oxidised Desmocollinite grades into SOM associated with framboidal pyrite Contaminated RARE CEMENT CONTAMINATION WHITE - LIGHT YELLOW FLUORESCENCE
1437.00m (s 189923)	C	Sample slightly oxidised WHITE - LIGHT YELLOW FLUORESCENCE
1497.00m (s 189925)	C	Sample slightly oxidised Sample partly oxidised Vitrinite grades into (semi-) fusinite WHITE/LIGHT YELLOW - YELLOW (OXIDATION) FLUORESCENCE
1527.00m (s 189926)	C	Sample slightly oxidised Vitrinite grades into (semi-) fusinite LIGHT YELLOW - YELLOW FLUORESCENCE IMMATURE
1649.00m (s 188726)	S	SAND ASSOCIATED WITH FLUORESCING (CELL STRUCTURE) TELINITE
1758.00m (s 189929)	C	Sample slightly oxidised Desmocollinite grades into SOM WHITE - LIGHT YELLOW FLUORESCENCE
1818.00m (s 189930)	C	Microscopically selected sample WHITE - LIGHT YELLOW FLUORESCENCE TELINITE WITH MINERAL INCLUSIONS
1824.00m (s 189931)	C	LOCALLY CANNEL COAL
1827.52m (s 189957)	R	Sample slightly oxidised WHITE - LIGHT YELLOW FLUORESCENCE MINERAL FLUORESCENCE

Figure 2c

Depth	Sample Type	Comment
1831.70m (s 189958)	R	Vitrinite grades into (semi-) fusinite WHITE - LIGHT YELLOW FLUORESCENCE
1835.90m (s 189959)	R	Vitrinite grades into (semi-) fusinite WHITE - LIGHT YELLOW FLUORESCENCE
1857.00m (s 189932)	C	WHITE - LIGHT YELLOW FLUORESCENCE
1959.00m (s 189933)	C	WHITE - LIGHT YELLOW FLUORESCENCE
2058.00m (s 189934)	C	Sample slightly oxidised RARE CANNEL COAL FRAGMENTS LIGHT YELLOW FLUORESCING LIPTINES
2127.16m (s 189960)	R	VERY WEAK BROWN PRIMARY FLUORESCING VITRINITE TELINITE WITH MINERAL INCLUSIONS
2132.90m (s 189961)	R	RARE FLUORINITE; NO FLUORESCENCE TELINITE WITH MINERAL INCLUSIONS
2134.00m (s 189962)	R	Vitrinite grades into (semi-) fusinite YELLOW/BROWN FLUORESCENCE (OXIDATION?)
2139.60m (s 189963)	R	WHITE FLUORESCENCE TELINITE / TELOCOLLINITE ASSOCIATED WITH MINERAL INCLUSIONS
2160.00m (s 189935)	C	LIGHT YELLOW - LIGHT BROWN FLUORESCENCE
2202.00m (s 189936)	C	Sample slightly oxidised PARTLY SPORINITE-RICH WHITE - LIGHT YELLOW FLUORESCENCE
2259.00m (s 189937)	C	LIGHT YELLOW - YELLOW FLUORESCENCE LARGE QUARTZ GRAINS
4074.00m (s 189951)	C	Sample partly oxidised Sample severely oxidised Contaminated FEW CEMENT FRAGMENTS + MINERAL FLUORESCENCE
4431.00m (s 189954)	C	Sample partly oxidised Sample severely oxidised Contaminated FEW MUD ADDITIVE CONTAMINATION (SOLTEX?) COMMON BIT-METAMORPHISM
4698.00m (s 189956)	C	Sample partly oxidised Contaminated FEW MUD ADDITIVE CONTAMINATION (SOLTEX?)

Figure 2d

2. ANALYSIS METHODS

a. The **total organic-carbon (TOC)** content is determined by combustion of the hydrochloric acid treated sample in an automatic Leco equipment. The organic-carbon values are reported in weight percent carbon (1% TOC means 1 g of organic carbon in 100 g of sediment).
By this method the amount of non-carbonate organic carbon is determined. In general a cut-off value of 1.0% organic carbon is used to separate source rocks and non-source rocks. In cutting samples and outcrop samples a cut-off value of 0.5% is maintained because of dilution effects in cutting samples and influence of oxidation in outcrop samples. However, the method cannot distinguish between postmature source rocks that were originally hydrogen-rich or hydrogen-poor. During diagenesis, part of the organic matter in the samples has been released (as CO_2, hydrocarbons, hetero-compounds). As a result of this process the organic-carbon content of a postmature source rock is lower than its original content in the immature stage.

b. The **Rock-Eval II (REV)** is used to calibrate the presence of hydrocarbons (S-1), the hydrocarbon-generation potential (S-2) and the amount of carbon dioxide (S-3) on those samples, of which the organic carbon determination indicated the presence of source-rock potential (Corg. >1.0%). Tmax is the temperature of maximum rate of S-2 hydrocarbon evolution. Hydrogen Index (HI) is a measure of the hydrocarbon generating potential remaining in the kerogen as opposed to that of the whole rock. The Oxygen Index (OI) is the ratio of the released carbon dioxide to organic carbon content and the Production Index (PI) is the ratio of the amount of hydrocarbons released in the first stage of heating to the total amount of hydrocarbons released and cracked during pyrolysis. Source-rock typing by Rock-Eval is based on hydrogen index and oxygen index. These two parameters are plotted in a modified Van Krevelen diagram.

Additional information on type and relative maturity may be obtained from the recorded Tmax. However, the type of source rock also influences Tmax. Therefore, the maturity trend is often obscured by changes in source rock type over longer intervals and maturity determination on Tmax alone can only be a very rough estimate.

c. **Incident-light microscopy** has been used to determine the maceral composition of source rocks by means of microscopy, using incident tungsten light with or without crossed nicols and by means of fluorescence microscopy using incident ultraviolet light. The microscopic classification is based on the different maceral association encountered in different source rocks.

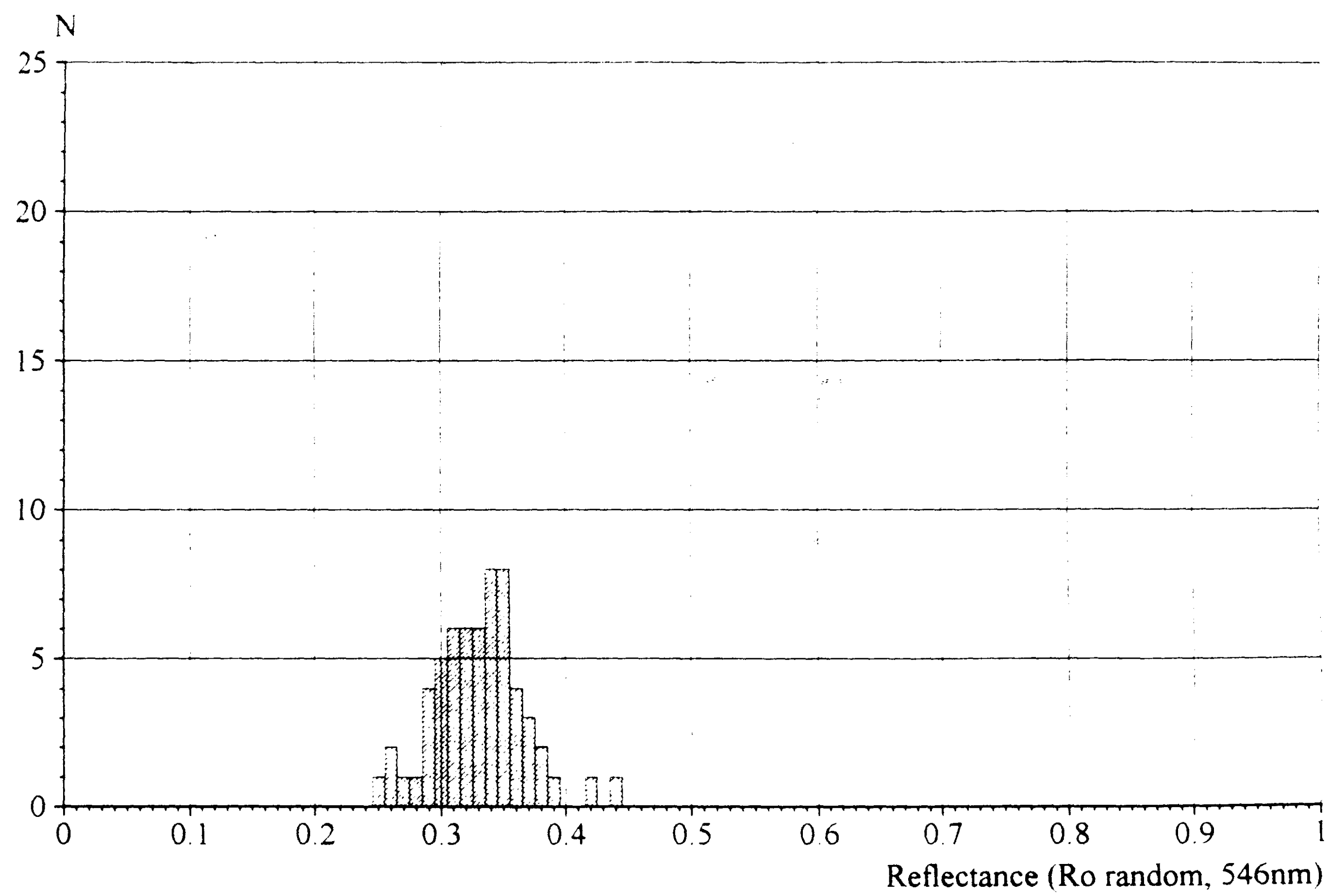
For each selected sample a semi-quantitative maceral description is given in terms of abundant, common, few and rare, indicating a visual estimation of the total organic and inorganic rock content. A visual percentage estimation is also given.

d. The **maturity** of source rocks is determined preferably by measuring the reflectance of vitrinite, the results of which are illustrated by histograms. The maturity is indicated in VR (vitrinite reflectance) or VRE (vitrinite reflectance equivalent) values. Reliable vitrinite reflectance data are of major importance in order to establish the maturity windows for hydrocarbon generation. Very important, therefore, are sample preparation and the identification of the suitable macerals. In RTS, vitrinite reflectance is measured by means of a Leitz Orthoplan microscope equipped with a photometer. This equipment is connected to a computer system. By convention, reflectance of telocollinite is used for maturity determination. Reflectance measurements on desmocollinite generally results in too low values and the results of reflectance measurements on telinite are either too low or too high. In the absence of vitrinite, the maturity or vitrinite reflectance equivalent (VRE) is derived mainly from the state of micrinisation of the SOM (Structureless Organic Matter), fluorescence colours of indigenous liptinites/exsudatinite and reflectance measurements carried out on solid hydrocarbons and graptolites. Fluorescence measurements of liptinites, especially Tasmanites- and Botryococcus-type algae can be used as a maturity tool as well.

Reflectance histogram

Country	*Norway*	Sample type	*Sidewall*
Well	*6510 02-01*	Sample/Order	*S188726 01*
Depth	*1649 m*	Analyst	*KMR*
Reference	*Derrick floor*	Date	*21-04-1998*

	Mean	Std	Min	Max	Mode	Measurements
Telinite	*0.33*	*0.04*	*0.25*	*0.44*	*0.34*	*60*



Comment:

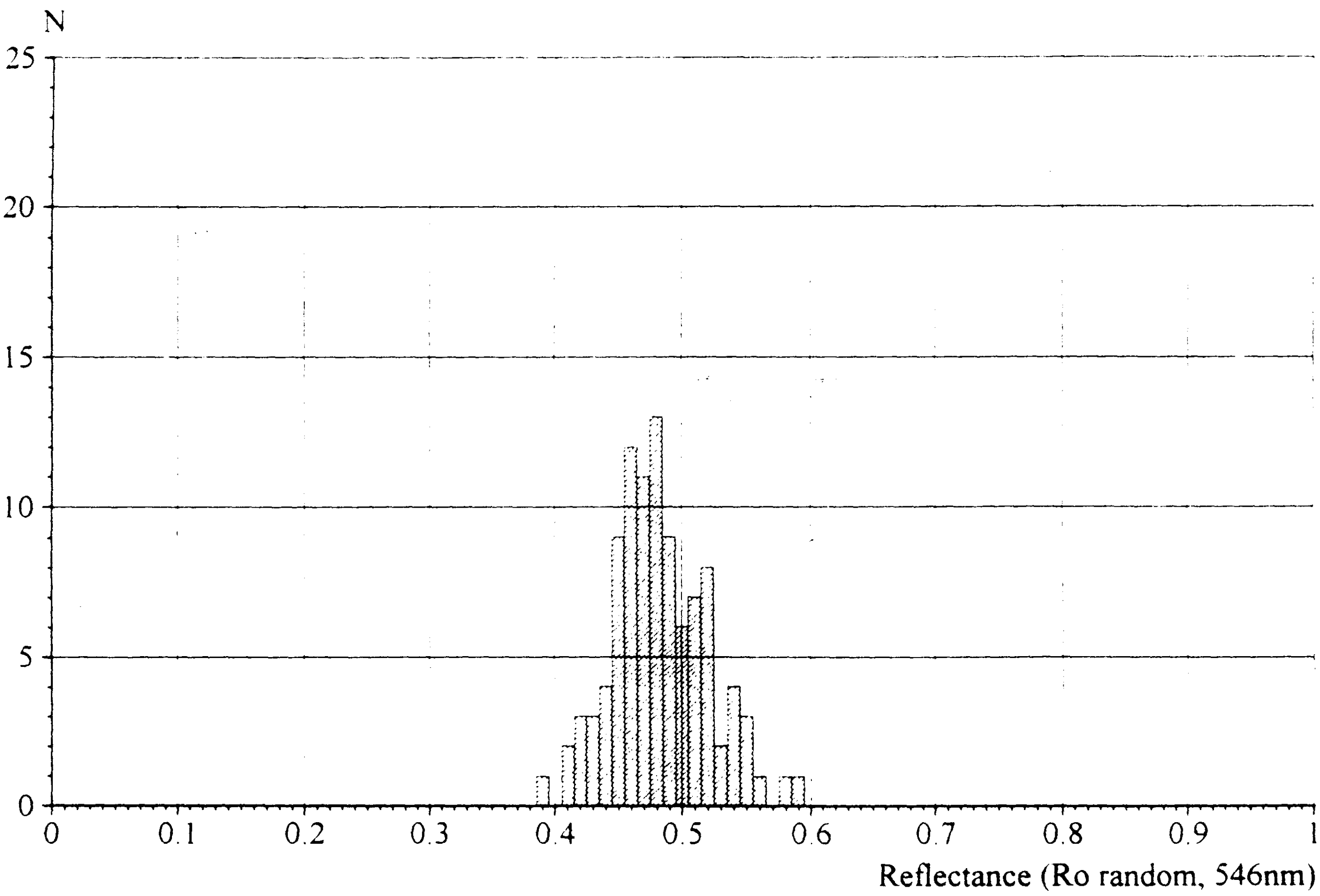
Sand associated with low mature, fluorescing (cell structure) Telinite

Figure 5

Reflectance histogram

Country	*Norway*	Sample type	*Cutting*
Well	*6510 02-01*	Sample/Order	*S189930 01*
Depth	*1818 m*	Analyst	*KMR*
Reference	*Derrick floor*	Date	*25-03-1998*

	Mean	Std	Min	Max	Mode	Measurements
Telinite	*0.48*	*0.04*	*0.39*	*0.59*	*0.48*	*100*



Comment:

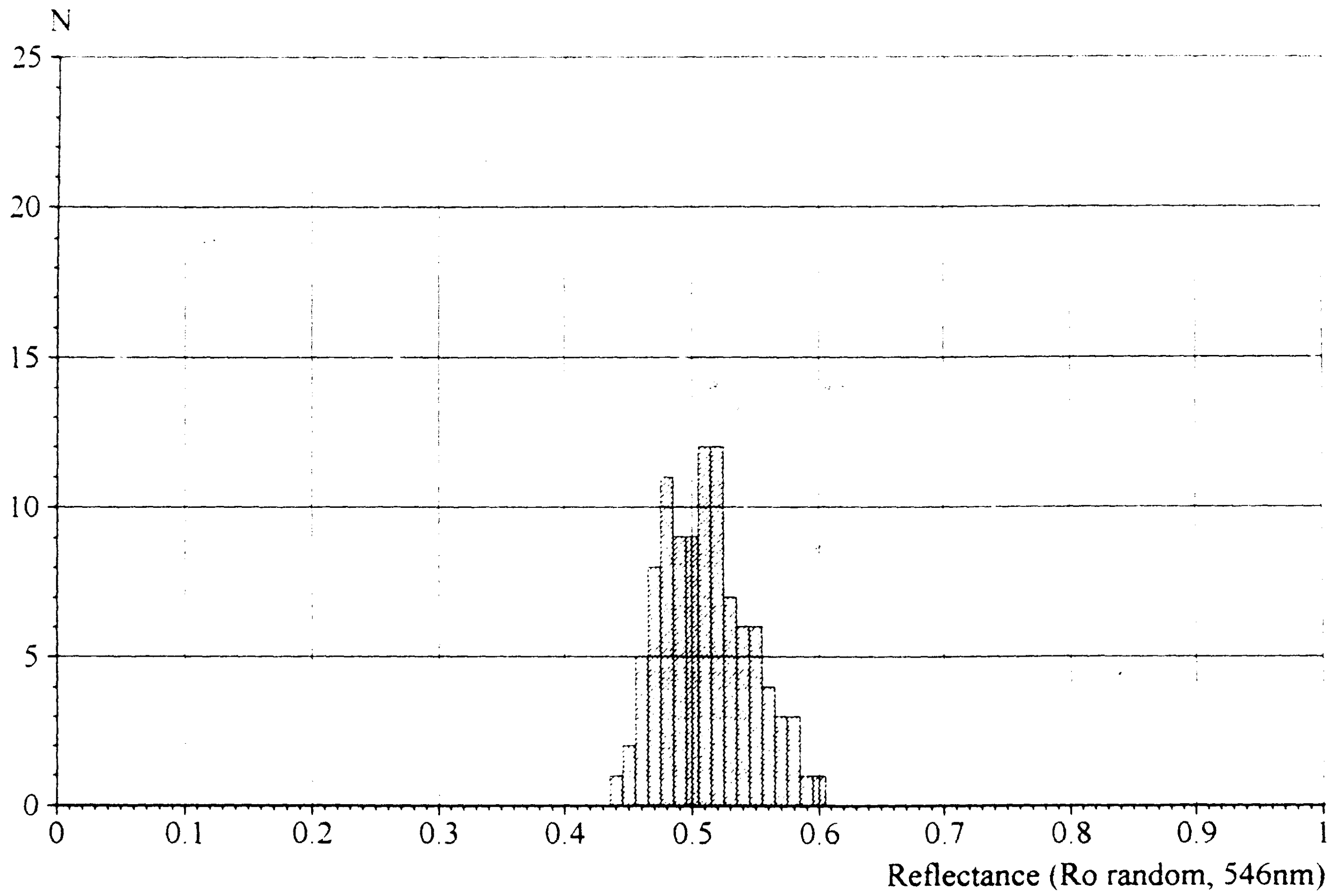
Telinite with some mineral inclusions

Figure 6

Reflectance histogram

Country	*Norway*	Sample type	*Cutting*
Well	*6510 02-01*	Sample/Order	*S189931 01*
Depth	*1824 m*	Analyst	*KMR*
Reference	*Derrick floor*	Date	*25-03-1998*

	Mean	Std	Min	Max	Mode	Measurements
Telinite	*0.51*	*0.04*	*0.44*	*0.6*	*0.51*	*100*



Comment:

Figure 7

Reflectance histogram

Country	*Norway*	Sample type	*Cutting*
Well	*6510 02-01*	Sample/Order	*S189933 01*
Depth	*1959 m*	Analyst	*KMR*
Reference	*Derrick floor*	Date	*25-03-1998*

	Mean	Std	Min	Max	Mode	Measurements
Desmocollinite/Telinite	*0.45*	*0.03*	*0.39*	*0.5*	*0.47*	*80*

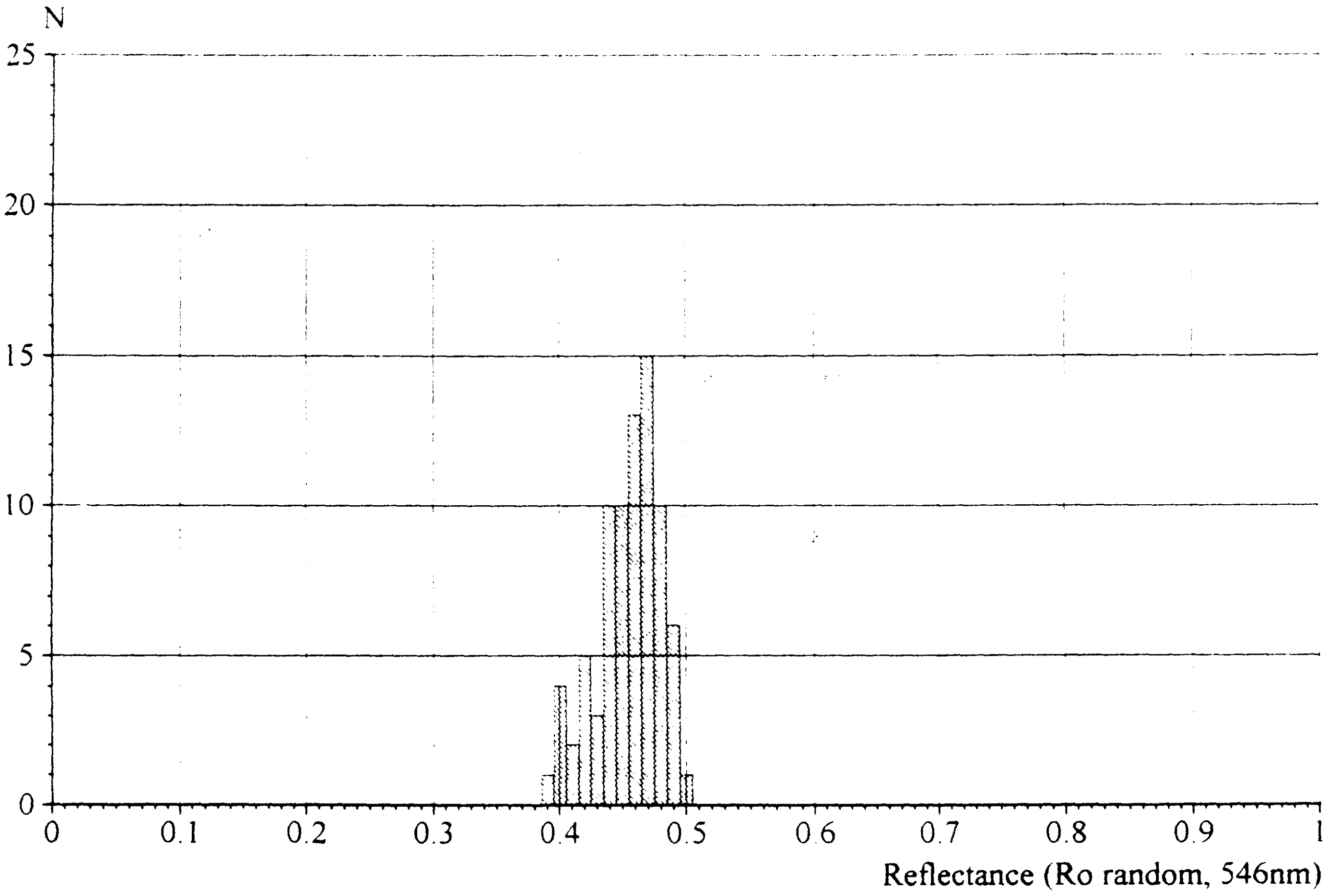


Figure 8

Reflectance histogram

Country	*Norway*	Sample type	*Cutting*
Well	*6510 02-01*	Sample/Order	*S189934 01*
Depth	*2058 m*	Analyst	*KMR*
Reference	*Derrick floor*	Date	*25-03-1998*

	Mean	Std	Min	Max	Mode	Measurements
Desmocollinite/Telinite	*0.44*	*0.04*	*0.37*	*0.51*	*0.44*	*100*

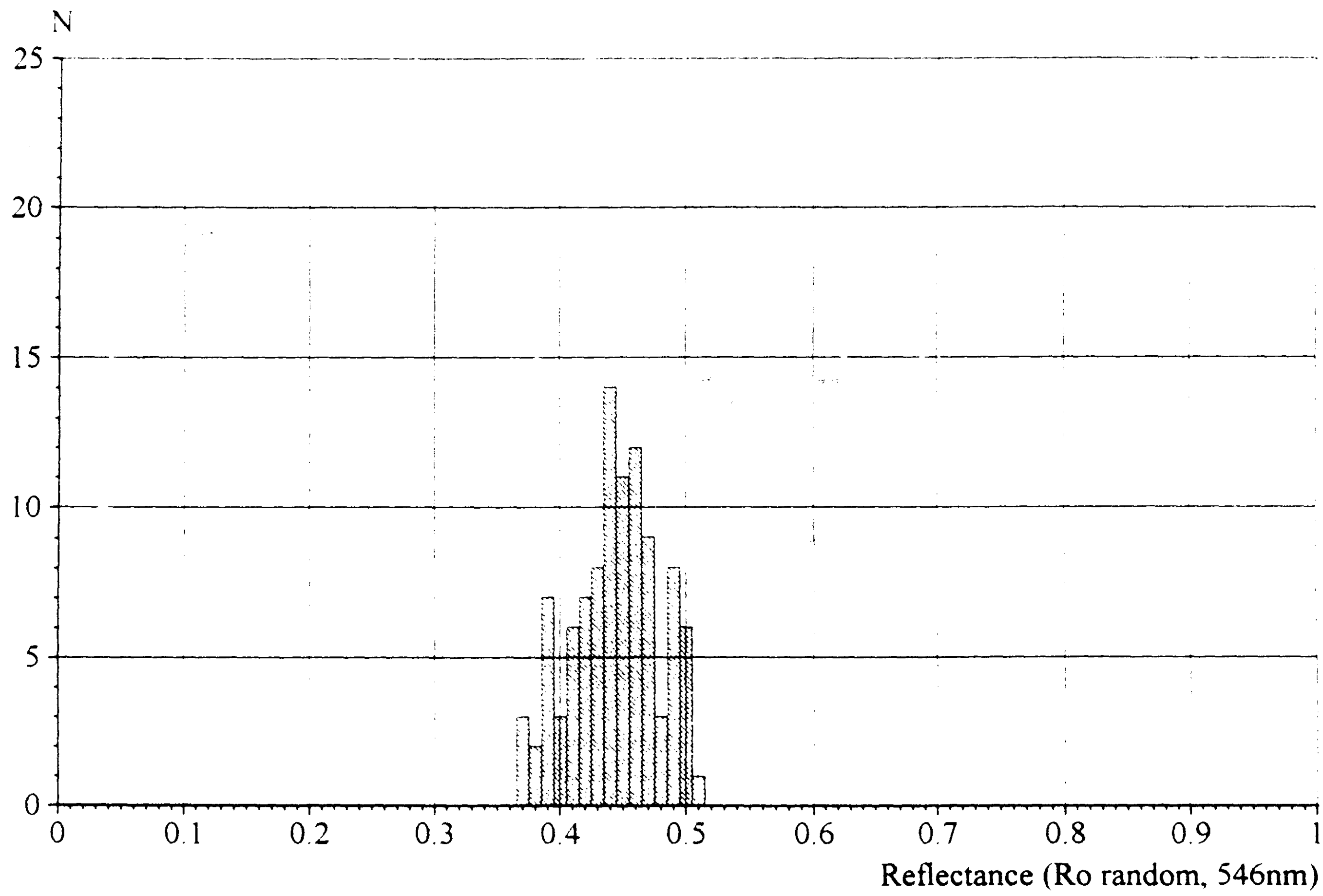
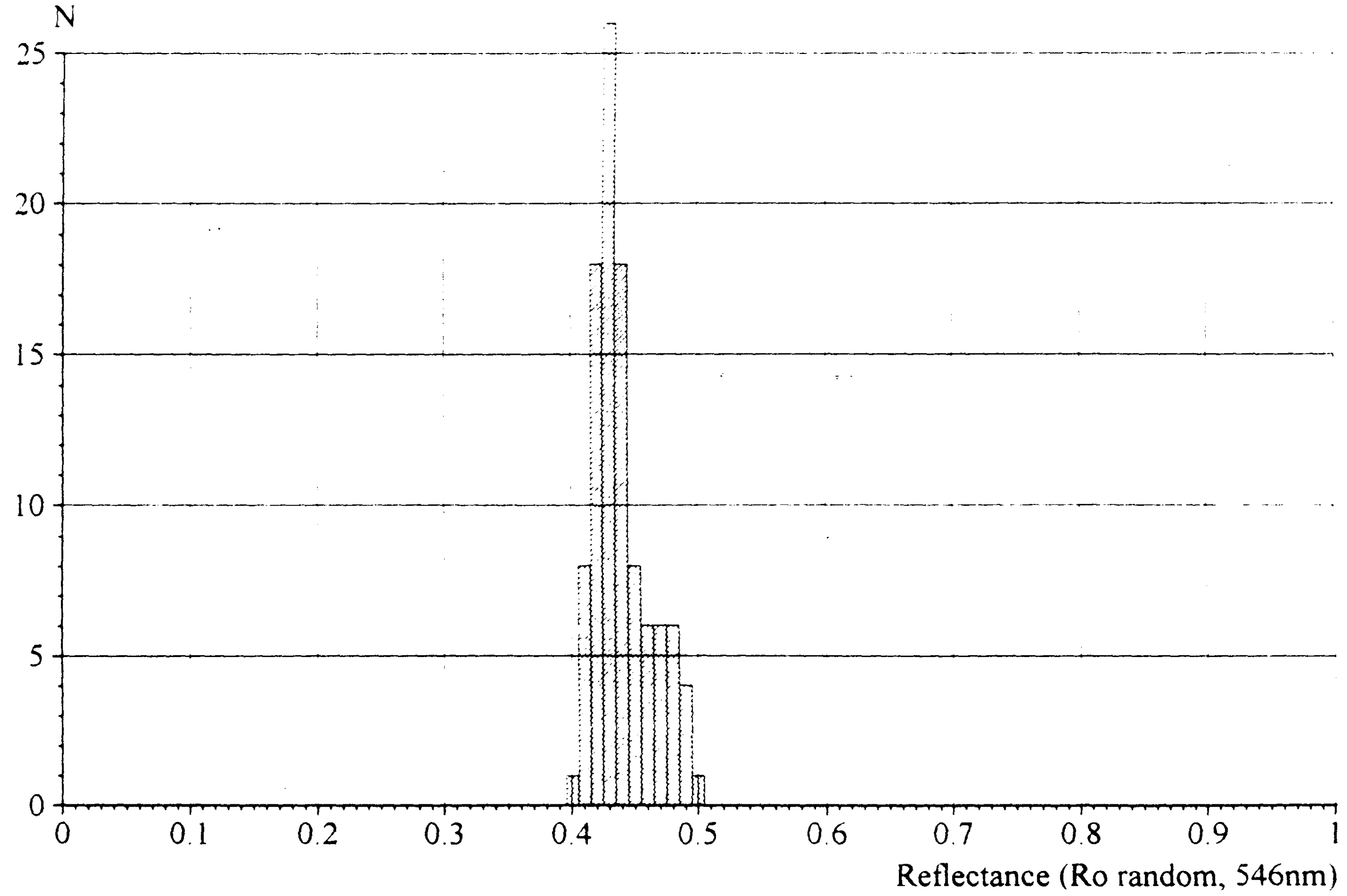


Figure 9

Reflectance histogram

Country	*Norway*	Sample type	*Core*
Well	*6510 02-01*	Sample Order	*S189960 01*
Depth	*2127.16 m*	Analyst	*KMR*
Reference	*Derrick floor*	Date	*25-03-1998*

	Mean	Std	Min	Max	Mode	Measurements
Telinite	*0.44*	*0.02*	*0.4*	*0.5*	*0.43*	*102*



Comment:

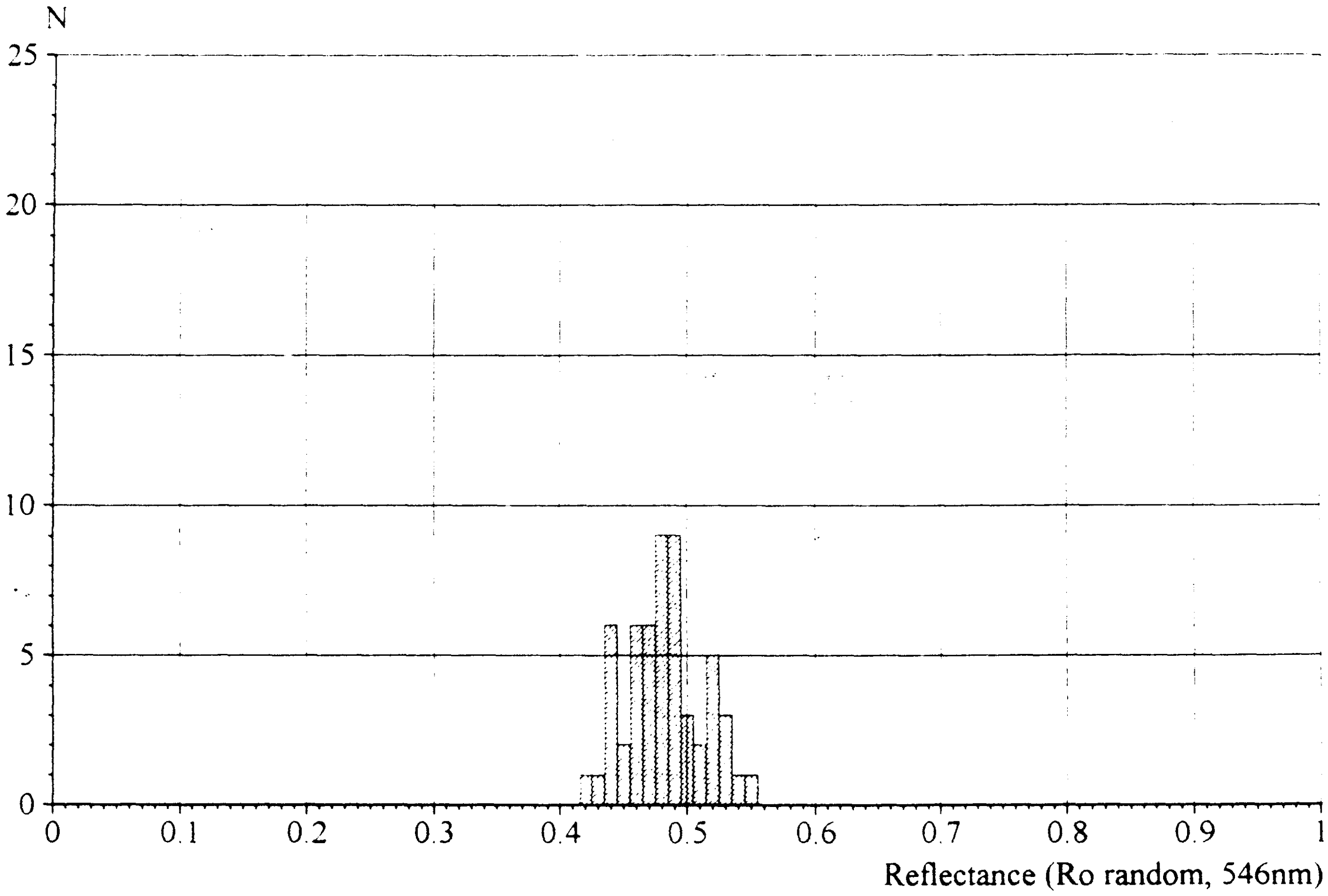
Telinite with weak brown primary fluorescence + Hydrogen index 300 => suppressed reflectance
mineral inclusions

Figure 10

Reflectance histogram

Country	*Norway*	Sample type	*Core*
Well	*6510 02-01*	Sample/Order	*S189961 01*
Depth	*2132.9 m*	Analyst	*KMR*
Reference	*Derrick floor*	Date	*25-03-1998*

	Mean	Std	Min	Max	Mode	Measurements
Telinite	*0.48*	*0.03*	*0.42*	*0.55*	*0.48*	*55*



Comment:

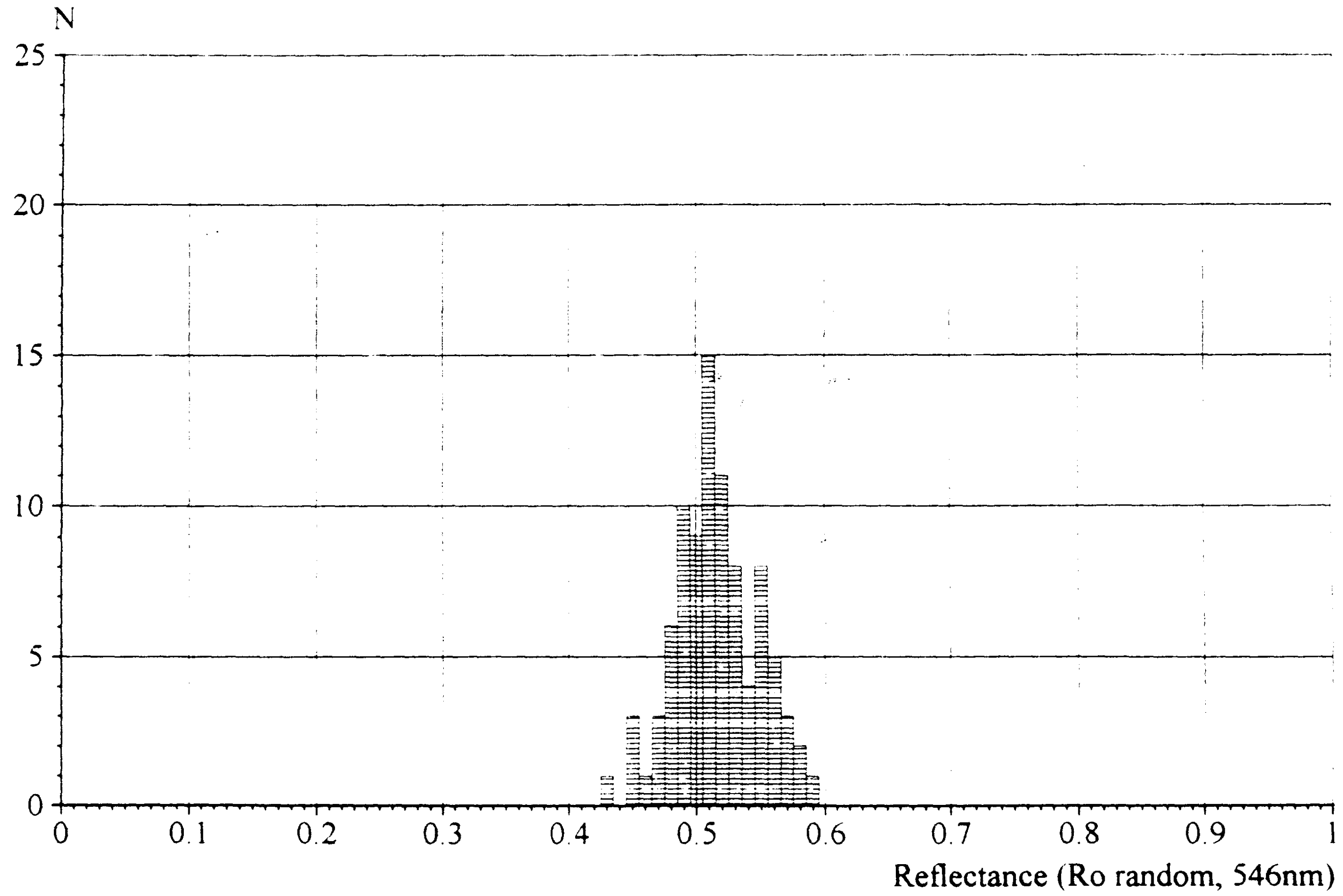
Telinite with abundant fine mineral inclusions

Figure 11

Reflectance histogram

Country	*Norway*	Sample type	*Core*
Well	*6510 02-01*	Sample/Order	*S189963 01*
Depth	*2139.6 m*	Analyst	*KMR*
Reference	*Derrick floor*	Date	*25-03-1998*

	Mean	Std	Min	Max	Mode	Measurements
Telinite/Telocollinite	*0.52*	*0.03*	*0.43*	*0.59*	*0.51*	*90*



Comment:

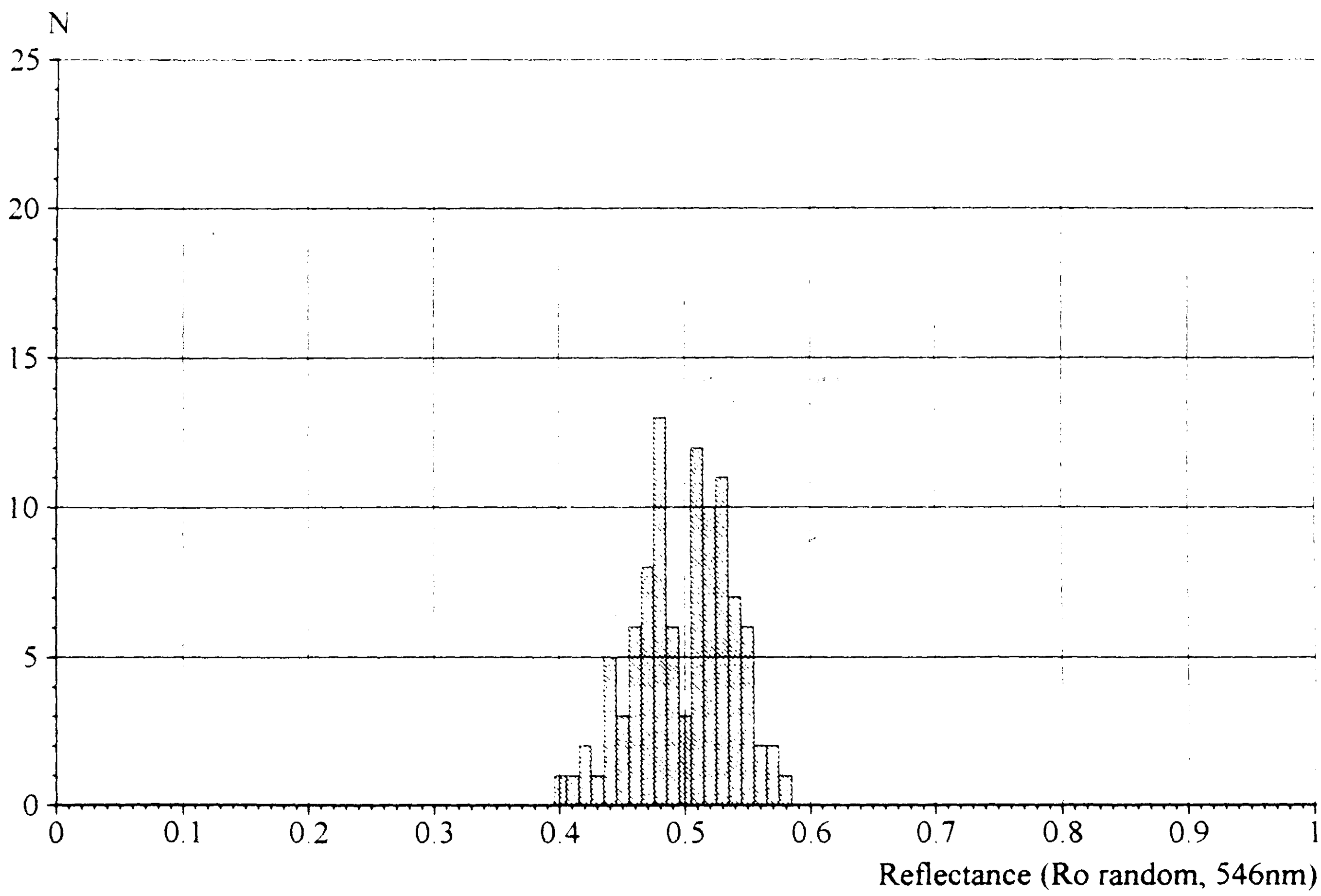
Telinite / Telocolinite associated with mineral inclusions

Figure 12

Reflectance histogram

Country	*Norway*	Sample type	*Cutting*
Well	*6510 02-01*	Sample/Order	*S189935 01*
Depth	*2160 m*	Analyst	*KMR*
Reference	*Derrick floor*	Date	*25-03-1998*

	Mean	Std	Min	Max	Mode	Measurements
Desmocollinite/Telinite	*0.5*	*0.04*	*0.4*	*0.58*	*0.48*	*100*



Comment:

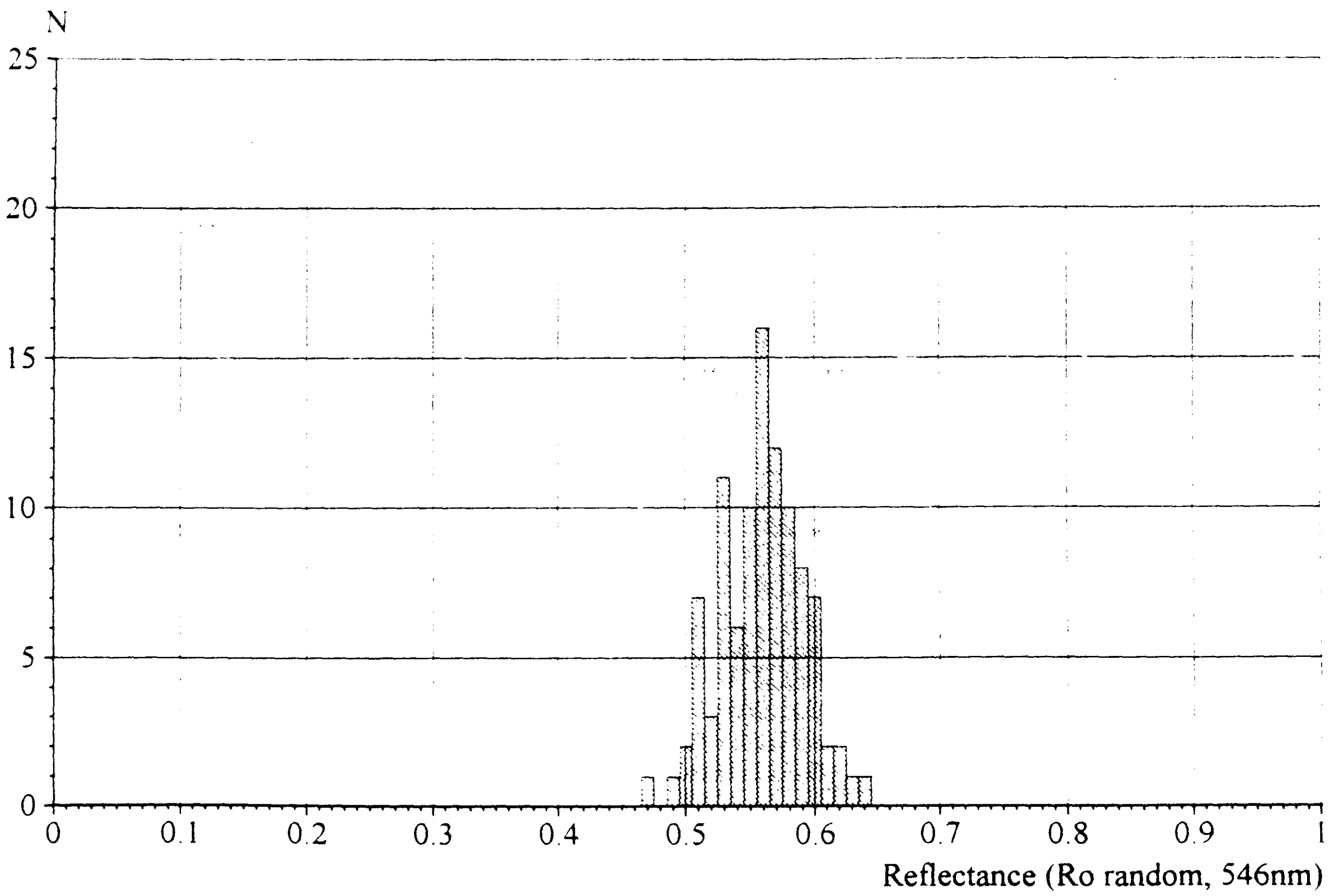
Desmocollinite / Telinite associated with some mineral inclusions

Figure 13

Reflectance histogram

Country	*Norway*	Sample type	*Cutting*
Well	*6510 02-01*	Sample/Order	*S189936 01*
Depth	*2202 m*	Analyst	*KMR*
Reference	*Derrick floor*	Date	*24-03-1998*

	Mean	Std	Min	Max	Mode	Measurements
Desmocollinite/Telinite	*0.56*	*0.03*	*0.47*	*0.64*	*0.56*	*100*



Comment:

Telinite / desmocollinite / telocollinite associated with some mineral matter

Figure 14