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VITRINITE REFLECTANCE WELL 34/7-25S OFFSHORE NORWAY
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SUMMARY

Standard vitrinite refletance analysis is performed on 24 cuttings samples.

The work is done in accordance with the "The Norwegian Industry Guide to Organic Geochemical Analyses", Third Edition 1993.

DISTRIBUTION

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KEYWORDS

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1 Introduction

This section gives the results of vitrinite reflectance analysis of 24 cuttings samples covering the interval from 950 to 3235 mRKB in well 34/7-25S offshore Norway.

2 Material

Sample material

The material was provided as washed cuttings samples.

Geological information and casing points

No information on geology nor casing points were provided.

3 Analytical techniques

Preparation

The samples were treated with hydrochloric acid prior to further preparation. The aim was to avoid soft and expanding mineral phases in order to ensure good polishing quality and to concentrate the organic material.

The HF-residues were embedded in an epoxy resin to make briquettes. Theses were subsequently ground flat and polished using 0.25 micron diamond paste and magnesium oxide as the two final steps.

Analysis

The analytical equipment being used was a Zeiss MPM 03 photometer microscope equipped with an Epiplan-Neofluoar 40/0.90 oil objective. The sensitive measuring spot was kept constant for all the measurements at about 2.5 micron in diameter. The measurements were made through a green band pass filter (546 nm) and in oil immersion (refractive index 1.515 at 18 °C). The readings were made without a polariser and using a

stationary stage. This procedure is called measurement of random reflectance (%Rm). The photometer was calibrated daily against a standard of known reflectance (%Rm=0.588) and routinely checked against two other standards of significantly different reflectances (%Rm=0.879 and 1.696). A deviation from these values of less than ±0.01 %Rm and ±0.02 %Rm respectively is considered as acceptable. The calibration is routinely checked during the course of measuring, at least every hour. A deviation of less than ±0.005 %Rm is considered as acceptable.

For each sample up to 20 points were measured if possible, sometimes more, and quality ratings are given to various aspects which may affect the measurements. The aspects are: abundance of vitrinite, uncertainties in the identification of indigenous vitrinite, type of vitrinite, particle size, particle surface quality and abundance of pyrite.

Presentation of results

The raw data for the measurements are presented in the appendix for each sample both as tabulated data and histograms. A true vitrinite population is selected among the readings based on observations made while measuring, and an arithmetic mean value and standard deviation are calculated for this and eventual other populations. A quality rating is given to the interpreted true population. The results are listed in Table 1.

The results are presented as vitrinite reflectance versus depth plots on linear and semilogarithmic scales (Figure 1). A vitrinite reflectance depth trend is interpreted manually on the linear plot and transferred to the semilogarithmic plot. The interpreted trend is also listed in Table 2.

4 Results

Nearly all the samples proved to be very poor with regard to very low vitrinite content (low productivity). Moreover the samples have been difficult to handle with respect to identification of true vitrinite. Coaly mud additives and recycling of this contaminant in most of the samples have caused major problems in this respect.

Table 1 Vitrinite reflectance data

Well 34/7-25S

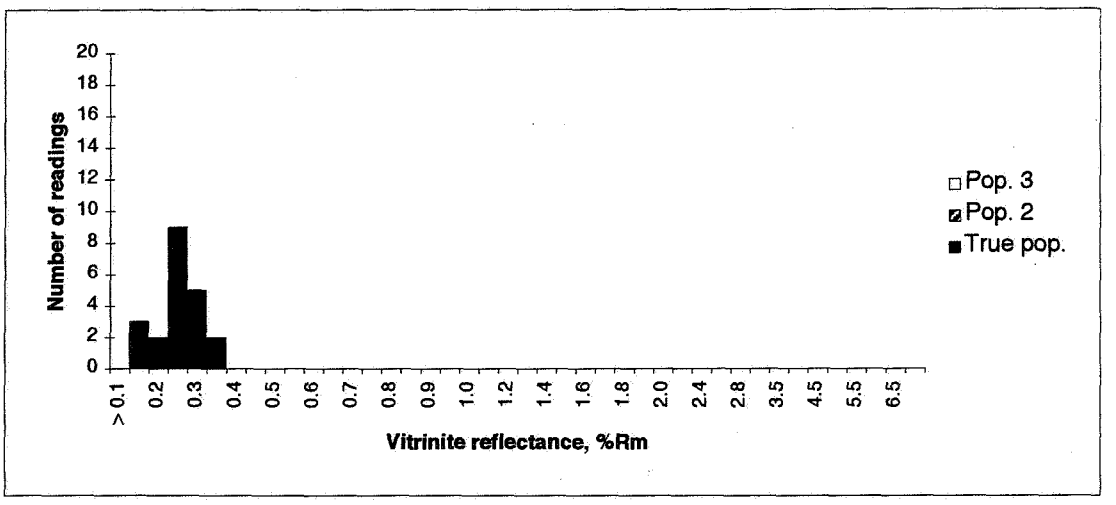
IFE no.	Depth mRKB	Well	Sample type	Lithology	%Rm	Std. Dev.	N	Quality	Preparation
961127	950.0	34/7-25S	cut	clst	0.28	0.05	21	M	HF
961128	1050.0	34/7-25S	cut	clst	0.28	0.05	18	M	HF
961129	1150.0	34/7-25S	cut	clst	0.25	0.03	20	M	HF
961130	1250.0	34/7-25S	cut	clst	0.26	0.04	20	M	HF
961131	1350.0	34/7-25S	cut	clst	0.22	0.06	20	P	HF
961132	1460.0	34/7-25S	cut	clst	0.25	0.04	18	P	HF
961133	1540.0	34/7-25S	cut	clst	0.26	0.03	15	P	HF
961134	1640.0	34/7-25S	cut	clst	0.26	0.03	15	P	HF
961135	1740.0	34/7-25S	cut	clst	0.24	0.04	5	P	HF
961136	1840.0	34/7-25S	cut	clst	0.27	0.04	10	P	HF
961137	1950.0	34/7-25S	cut	clst	0.21	0.04	8	P	HF
961138	2050.0	34/7-25S	cut	clst	0.25		1	P	HF
961139	2140.0	34/7-25S	cut	clst	0.21		1	P	HF
961140	2250.0	34/7-25S	cut	clst	0.30	0.06	4	P	HF
961141	2350.0	34/7-25S	cut	clst	0.38	0.02	2	P	HF
961142	2460.0	34/7-25S	cut	clst	0.35	0.04	10	P	HF
961143	2550.0	34/7-25S	cut	clst	0.46	0.10	22	P	HF
961144	2660.0	34/7-25S	cut	clst	0.38	0.04	6	P	HF
961145	2750.0	34/7-25S	cut	clst	0.57	0.11	18	P	HF
961146	2862.0	34/7-25S	cut	clst	0.59	0.12	13	P	HF
961147	2949.0	34/7-25S	cut	clst	0.63	0.07	8	P	HF
961148	3051.0	34/7-25S	cut	clst	0.54	0.14	21	P	HF
961149	3150.0	34/7-25S	cut	clst	0.76	0.07	12	P	HF
961150	3235.0	34/7-25S	cut	clst	0.69	0.07	30	M	HF

Legend

G	Good quality	**st**	Staining	**sst**	sandstone
M	Moderate quality	**Barren**	Barren of vitrinite	**slst**	siltstone
P	Poor quality	**HF**	HF-treated	**clst**	claystone
X	Not vitrinite	**Bulk**	Bulk rock	**cm**	carbominerite
A	Mud additive			**lst**	limestone

Vitrinite reflectance sample data sheet

IFE no.	Well	Depth, mRKB	Sample type	Lithology	Date of analysis
961127	**34/7-25S**	**950**	**cut**	**clst**	**7.11.1996**



% Rm readings	True pop.	Pop. 2	Pop. 3
Mean	**0.28**		
Std. Dev.	**0.05**		
1	0.163		
2	0.176		
3	0.196		
4	0.241		
5	0.243		
6	0.259		
7	0.268		
8	0.270		
9	0.270		
10	0.277		
11	0.278		
12	0.293		
13	0.293		
15	0.296		
14	0.304		
16	0.306		
17	0.306		
18	0.336		
19	0.338		
20	0.354		
21	0.372		
22			
23			
24			
25			
26			
27			
28			
29			
30			

Quality rating	
Abundance of vitrinite	o
Identification of vitrinite	o
Type of vitrinite	o
Particle size	-
Particle surface quality	o
Abundance of pyrite	o
Average quality	**M**

Legend to quality rating	
No effect on the readings	o
Possibly to low reading	-
Possibly to high readings	+
Good quality	G
Moderate quality	M
Poor quality	P
Not vitrinite	X
Mud additive	A

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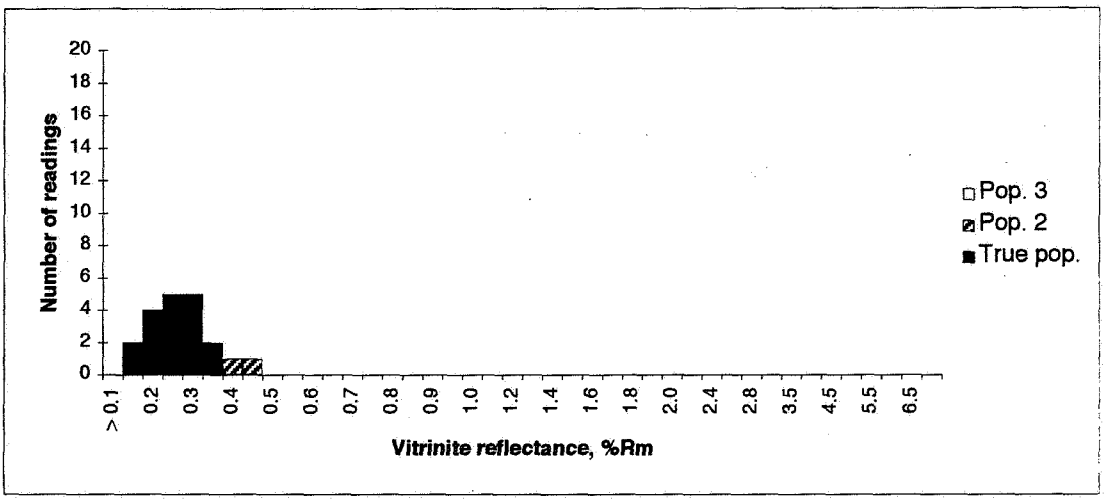
Vitrinite reflectance sample data sheet

IFE no.	Well	Depth, mRKB	Sample type	Lithology	Date of analysis
961128	**34/7-25S**	**1050**	**cut**	**clst**	**7.11.1996**



% Rm readings	*True pop.*	*Pop. 2*	*Pop. 3*
Mean	**0.28**	**0.46**	
Std. Dev.	**0.05**	**0.04**	
1	0.175	0.432	
2	0.180	0.483	
3	0.220		
4	0.223		
5	0.243		
6	0.244		
7	0.252		
8	0.275		
9	0.280		
10	0.288		
11	0.296		
12	0.301		
13	0.302		
15	0.310		
14	0.325		
16	0.340		
17	0.354		
18	0.361		
19			
20			
21			
22			
23			
24			
25			
26			
27			
28			
29			
30			

Quality rating	
Abundance of vitrinite	o
Identification of vitrinite	o
Type of vitrinite	o
Particle size	-
Particle surface quality	o
Abundance of pyrite	o
Average quality	**M**

Legend to quality rating	
No effect on the readings	o
Possibly to low reading	-
Possibly to high readings	+
Good quality	G
Moderate quality	M
Poor quality	P
Not vitrinite	X
Mud additive	A

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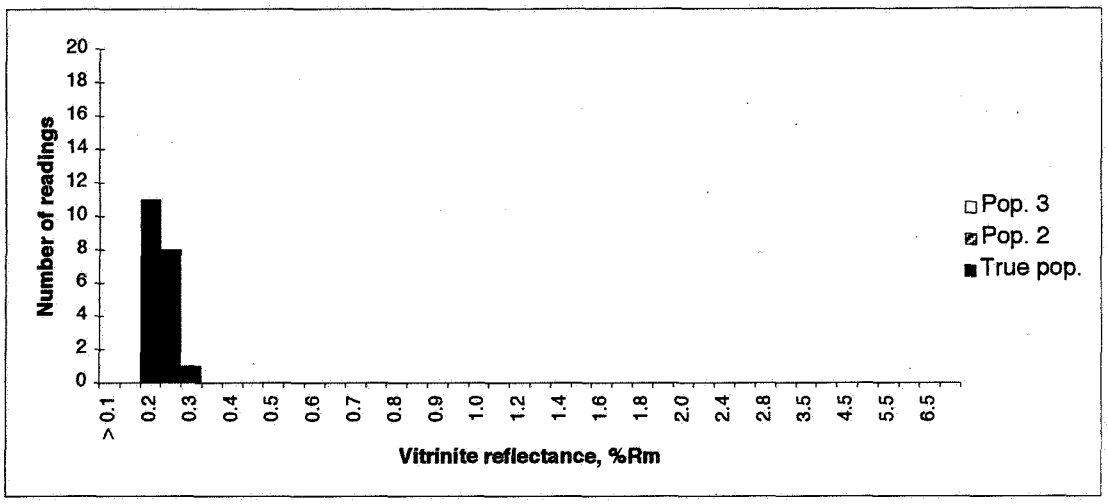
Vitrinite reflectance sample data sheet

IFE no.	Well	Depth, mRKB	Sample type	Lithology	Date of analysis
961129	**34/7-25S**	**1150**	**cut**	**clst**	**7.11.1996**



% Rm readings	True pop.	Pop. 2	Pop. 3
Mean	**0.25**		
Std. Dev.	**0.03**		
1	0.212		
2	0.218		
3	0.220		
4	0.222		
5	0.230		
6	0.230		
7	0.239		
8	0.239		
9	0.241		
10	0.241		
11	0.246		
12	0.254		
13	0.257		
14	0.270		
15	0.275		
16	0.275		
17	0.288		
18	0.289		
19	0.289		
20	0.333		
21			
22			
23			
24			
25			
26			
27			
28			
29			
30			

Quality rating	
Abundance of vitrinite	o
Identification of vitrinite	o
Type of vitrinite	o
Particle size	-
Particle surface quality	o
Abundance of pyrite	+
Average quality	**M**

Legend to quality rating	
No effect on the readings	o
Possibly to low reading	-
Possibly to high readings	+
Good quality	G
Moderate quality	M
Poor quality	P
Not vitrinite	X
Mud additive	A

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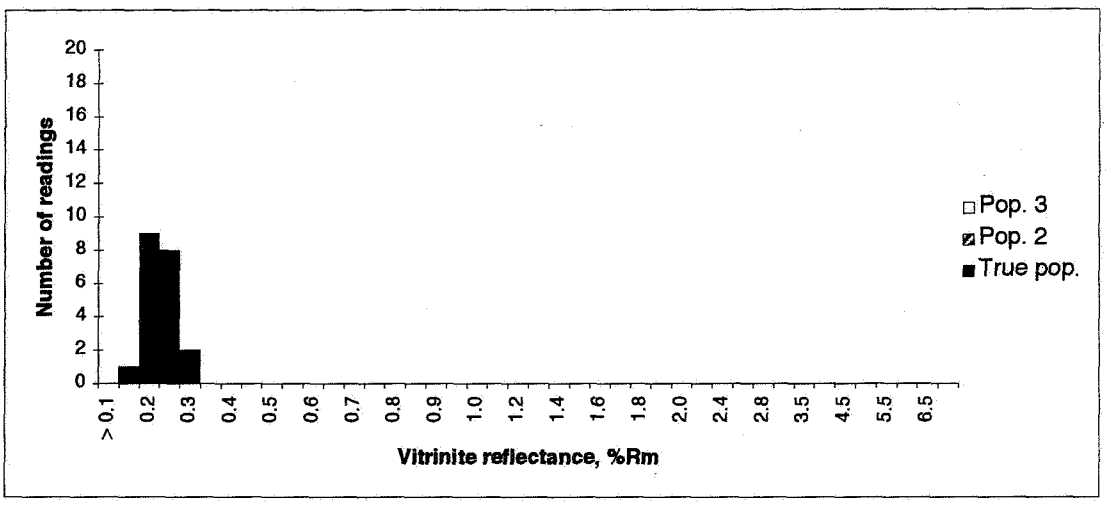
Vitrinite reflectance sample data sheet

IFE no.	Well	Depth, mRKB	Sample type	Lithology	Date of analysis
961130	**34/7-25S**	**1250**	**cut**	**clst**	**7.11.1996**



% Rm readings	True pop.	Pop. 2	Pop. 3
Mean	**0.26**		
Std. Dev.	**0.04**		
1	0.192		
2	0.209		
3	0.214		
4	0.220		
5	0.236		
6	0.241		
7	0.241		
8	0.241		
9	0.243		
10	0.249		
11	0.256		
12	0.264		
13	0.277		
15	0.285		
14	0.291		
16	0.293		
17	0.293		
18	0.296		
19	0.322		
20	0.327		
21			
22			
23			
24			
25			
26			
27			
28			
29			
30			

Quality rating	
Abundance of vitrinite	o
Identification of vitrinite	o
Type of vitrinite	o
Particle size	-
Particle surface quality	o
Abundance of pyrite	+
Average quality	**M**

Legend to quality rating	
No effect on the readings	o
Possibly to low reading	-
Possibly to high readings	+
Good quality	G
Moderate quality	M
Poor quality	P
Not vitrinite	X
Mud additive	A

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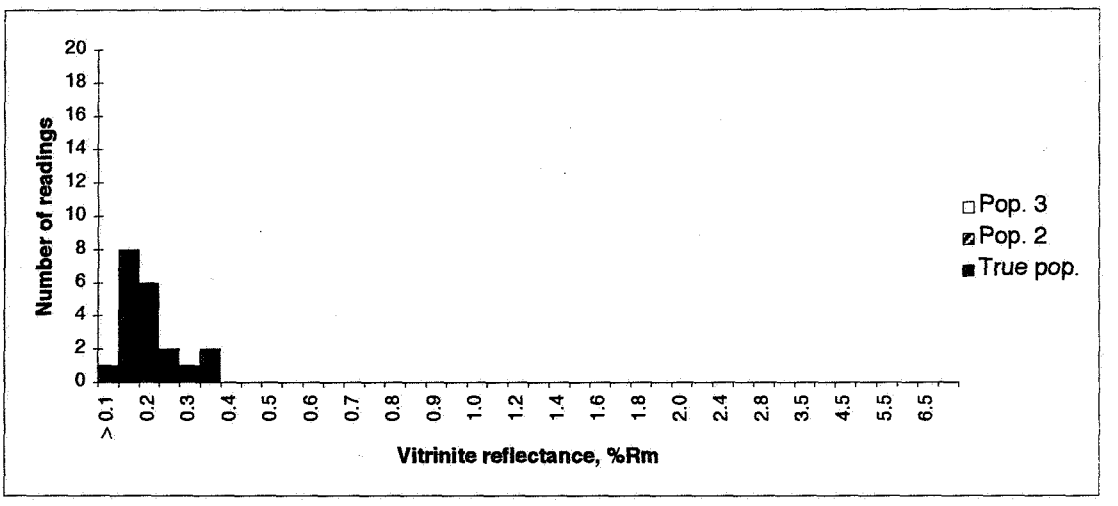
Vitrinite reflectance sample data sheet

IFE no.	Well	Depth, mRKB	Sample type	Lithology	Date of analysis
961131	**34/7-25S**	**1350**	**cut**	**clst**	**7.11.1996**



% Rm readings	True pop.	Pop. 2	Pop. 3
Mean	**0.22**		
Std. Dev.	**0.06**		
1	0.114		
2	0.151		
3	0.161		
4	0.178		
5	0.193		
6	0.195		
7	0.195		
8	0.196		
9	0.198		
10	0.200		
11	0.211		
12	0.211		
13	0.219		
15	0.227		
14	0.245		
16	0.253		
17	0.276		
18	0.321		
19	0.350		
20	0.365		
21			
22			
23			
24			
25			
26			
27			
28			
29			
30			

Quality rating	
Abundance of vitrinite	-
Identification of vitrinite	±
Type of vitrinite	-
Particle size	-
Particle surface quality	-
Abundance of pyrite	+
Average quality	**P**

Legend to quality rating	
No effect on the readings	o
Possibly to low reading	-
Possibly to high readings	+
Good quality	G
Moderate quality	M
Poor quality	P
Not vitrinite	X
Mud additive	A

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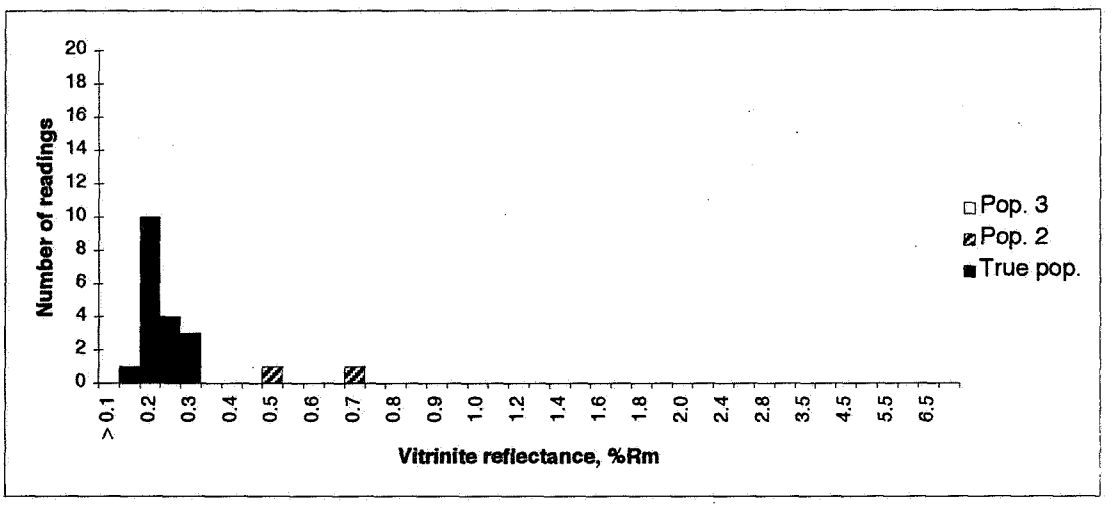
Vitrinite reflectance sample data sheet

IFE no.	Well	Depth, mRKB	Sample type	Lithology	Date of analysis
961132	**34/7-25S**	**1460**	**cut**	**clst**	**7.11.1996**



% Rm readings	True pop.	Pop. 2	Pop. 3
Mean	**0.25**	**0.62**	
Std. Dev.	**0.04**	**0.17**	
1	0.195	0.503	
2	0.203	0.740	
3	0.209		
4	0.211		
5	0.213		
6	0.217		
7	0.219		
8	0.227		
9	0.229		
10	0.245		
11	0.245		
12	0.255		
13	0.274		
15	0.276		
14	0.276		
16	0.302		
17	0.310		
18	0.325		
19			
20			
21			
22			
23			
24			
25			
26			
27			
28			
29			
30			

Quality rating	
Abundance of vitrinite	-
Identification of vitrinite	±
Type of vitrinite	-
Particle size	-
Particle surface quality	-
Abundance of pyrite	+
Average quality	**P**

Legend to quality rating	
No effect on the readings	o
Possibly to low reading	-
Possibly to high readings	+
Good quality	G
Moderate quality	M
Poor quality	P
Not vitrinite	X
Mud additive	A

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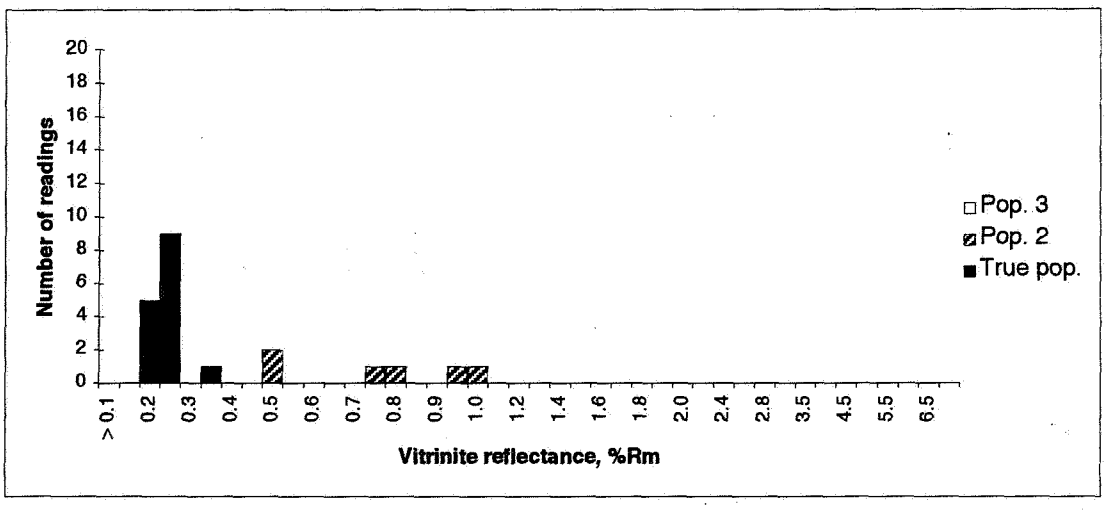
Vitrinite reflectance sample data sheet

IFE no.	Well	Depth, mRKB	Sample type	Lithology	Date of analysis
961133	**34/7-25S**	**1540**	**cut**	**clst**	**7.11.1996**



% Rm readings	True pop.	Pop. 2	Pop. 3
Mean	**0.26**	**0.79**	
Std. Dev.	**0.03**	**0.21**	
1	0.209	0.550	
2	0.211	0.568	
3	0.226	0.779	
4	0.238	0.800	
5	0.247	0.980	
6	0.253	1.050	
7	0.260		
8	0.260		
9	0.260		
10	0.261		
11	0.263		
12	0.263		
13	0.277		
14	0.289		
15	0.350		
16			
17			
18			
19			
20			
21			
22			
23			
24			
25			
26			
27			
28			
29			
30			

Quality rating	
Abundance of vitrinite	-
Identification of vitrinite	±
Type of vitrinite	-
Particle size	-
Particle surface quality	-
Abundance of pyrite	+
Average quality	**P**

Legend to quality rating	
No effect on the readings	o
Possibly to low reading	-
Possibly to high readings	+
Good quality	G
Moderate quality	M
Poor quality	P
Not vitrinite	X
Mud additive	A

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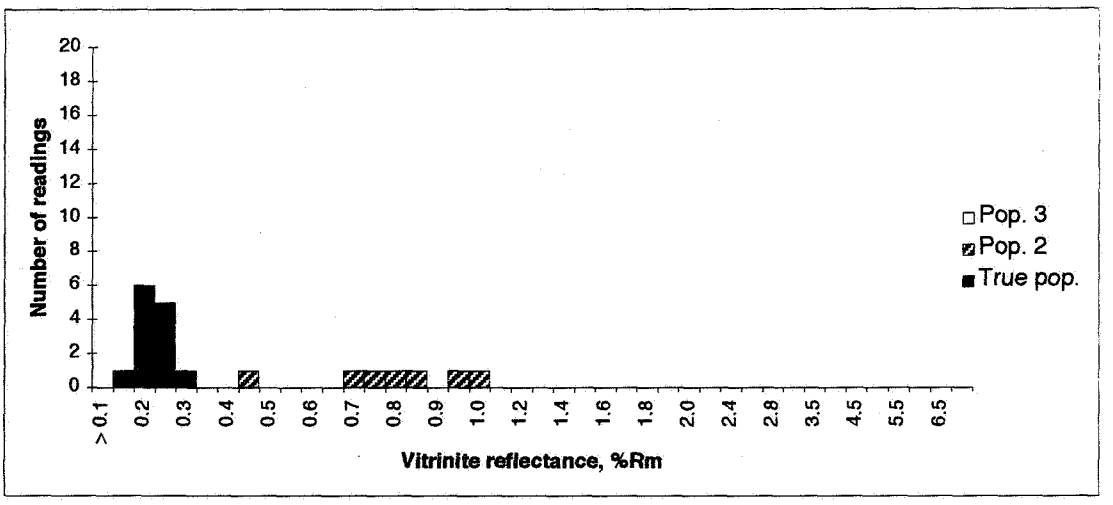
Vitrinite reflectance sample data sheet

IFE no.	Well	Depth, mRKB	Sample type	Lithology	Date of analysis
961134	**34/7-25S**	**1640**	**cut**	**clst**	**7.11.1996**



% Rm readings	*True pop.*	*Pop. 2*	*Pop. 3*
Mean	**0.26**	**0.79**	
Std. Dev.	**0.03**	**0.21**	
1	0.209	0.550	
2	0.211	0.568	
3	0.226	0.779	
4	0.238	0.800	
5	0.247	0.980	
6	0.253	1.050	
7	0.260		
8	0.260		
9	0.260		
10	0.261		
11	0.263		
12	0.263		
13	0.277		
14	0.289		
15	0.350		
16			
17			
18			
19			
20			
21			
22			
23			
24			
25			
26			
27			
28			
29			
30			

Quality rating	
Abundance of vitrinite	-
Identification of vitrinite	±
Type of vitrinite	-
Particle size	-
Particle surface quality	-
Abundance of pyrite	+
Average quality	**P**

Legend to quality rating	
No effect on the readings	o
Possibly to low reading	-
Possibly to high readings	+
Good quality	G
Moderate quality	M
Poor quality	P
Not vitrinite	X
Mud additive	A

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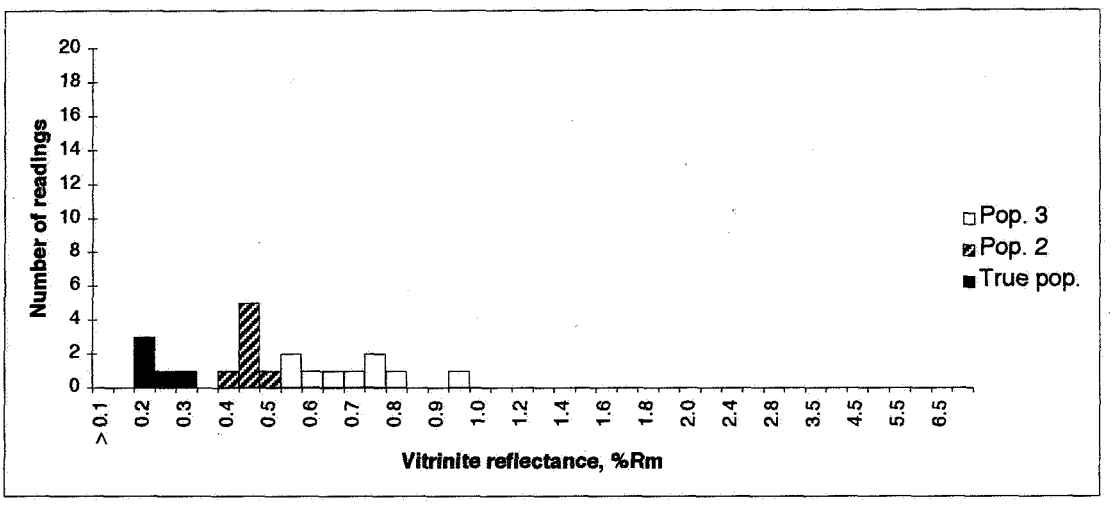
Vitrinite reflectance sample data sheet

IFE no.	Well	Depth, mRKB	Sample type	Lithology	Date of analysis
961135	**34/7-25S**	**1740**	**cut**	**clst**	**11.11.1996**



% Rm readings	True pop.	Pop. 2	Pop. 3
Mean	**0.24**	**0.48**	**0.72**
Std. Dev.	**0.04**	**0.03**	**0.13**
1	0.201	0.434	0.553
2	0.212	0.457	0.568
3	0.212	0.467	0.623
4	0.250	0.471	0.662
5	0.305	0.473	0.711
6		0.496	0.760
7		0.527	0.760
8			0.762
9			0.809
10			0.993
11			
12			
13			
14			
15			
16			
17			
18			
19			
20			
21			
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28			
29			
30			

Quality rating	
Abundance of vitrinite	-
Identification of vitrinite	±
Type of vitrinite	-
Particle size	-
Particle surface quality	-
Abundance of pyrite	+
Average quality	**P**

Legend to quality rating	
No effect on the readings	o
Possibly to low reading	-
Possibly to high readings	+
Good quality	G
Moderate quality	M
Poor quality	P
Not vitrinite	X
Mud additive	A

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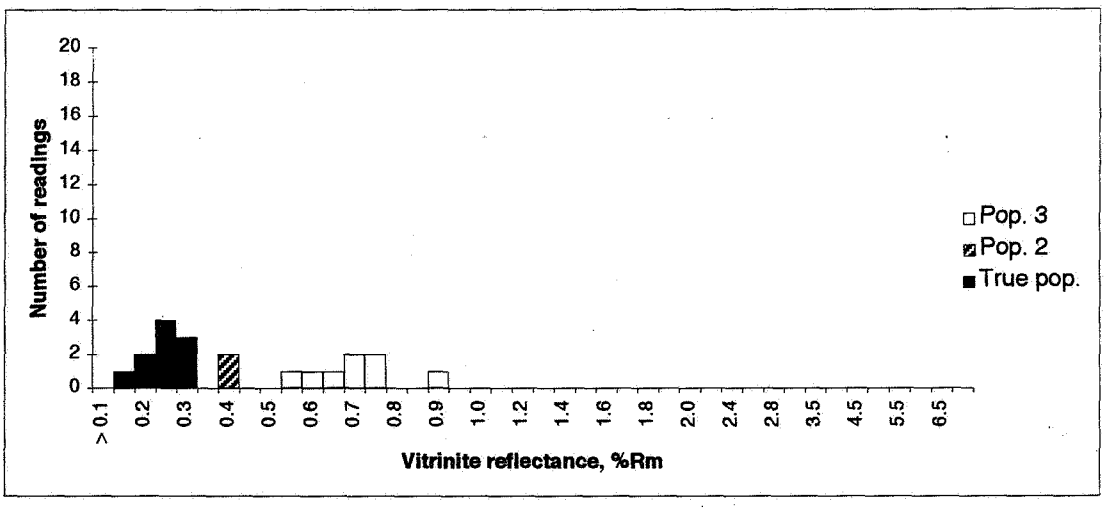
Vitrinite reflectance sample data sheet

IFE no.	Well	Depth, mRKB	Sample type	Lithology	Date of analysis
961136	**34/7-25S**	**1840**	**cut**	**clst**	**11.11.1996**



% Rm readings	True pop.	Pop. 2	Pop. 3
Mean	**0.27**	**0.41**	**0.73**
Std. Dev.	**0.04**	**0.00**	**0.11**
1	0.191	0.406	0.586
2	0.212	0.413	0.628
3	0.248		0.695
4	0.261		0.701
5	0.263		0.719
6	0.264		0.771
7	0.294		0.797
8	0.310		0.936
9	0.310		
10	0.318		
11			
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Quality rating	
Abundance of vitrinite	-
Identification of vitrinite	±
Type of vitrinite	-
Particle size	-
Particle surface quality	-
Abundance of pyrite	+
Average quality	**P**

Legend to quality rating	
No effect on the readings	o
Possibly to low reading	-
Possibly to high readings	+
Good quality	G
Moderate quality	M
Poor quality	P
Not vitrinite	X
Mud additive	A

Comments

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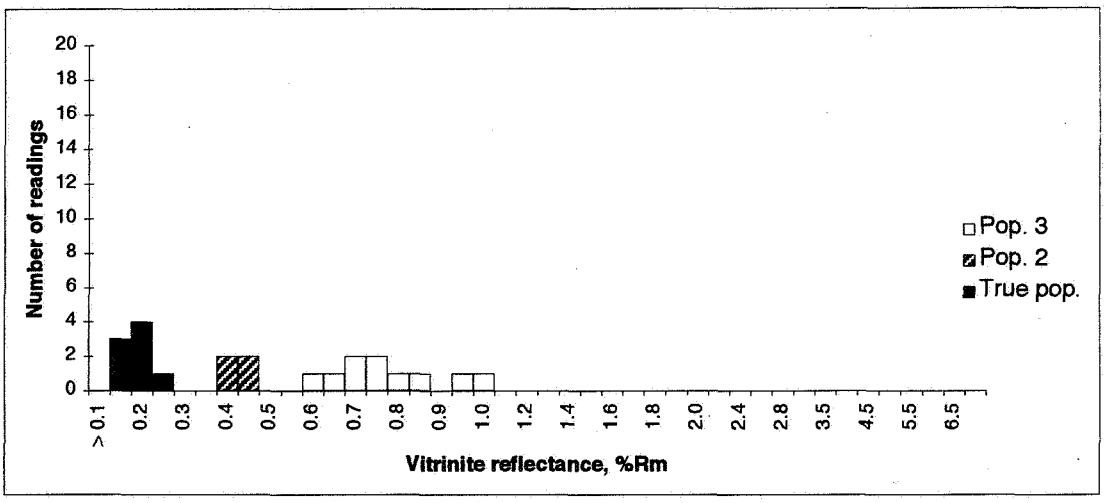
Vitrinite reflectance sample data sheet

IFE no.	Well	Depth, mRKB	Sample type	Lithology	Date of analysis
961137	**34/7-25S**	**1950**	**cut**	**clst**	**11.11.1996**



% Rm readings	True pop.	Pop. 2	Pop. 3
Mean	**0.21**	**0.47**	**0.82**
Std. Dev.	**0.04**	**0.03**	**0.13**
1	0.147	0.440	0.607
2	0.194	0.444	0.722
3	0.199	0.491	0.757
4	0.207	0.496	0.796
5	0.216		0.848
6	0.224		0.858
7	0.229		0.998
8	0.274		1.000
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11			
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29			
30			

Quality rating	
Abundance of vitrinite	-
Identification of vitrinite	-
Type of vitrinite	-
Particle size	-
Particle surface quality	-
Abundance of pyrite	+
Average quality	**P**

Legend to quality rating	
No effect on the readings	o
Possibly to low reading	-
Possibly to high readings	+
Good quality	G
Moderate quality	M
Poor quality	P
Not vitrinite	X
Mud additive	A

Comments

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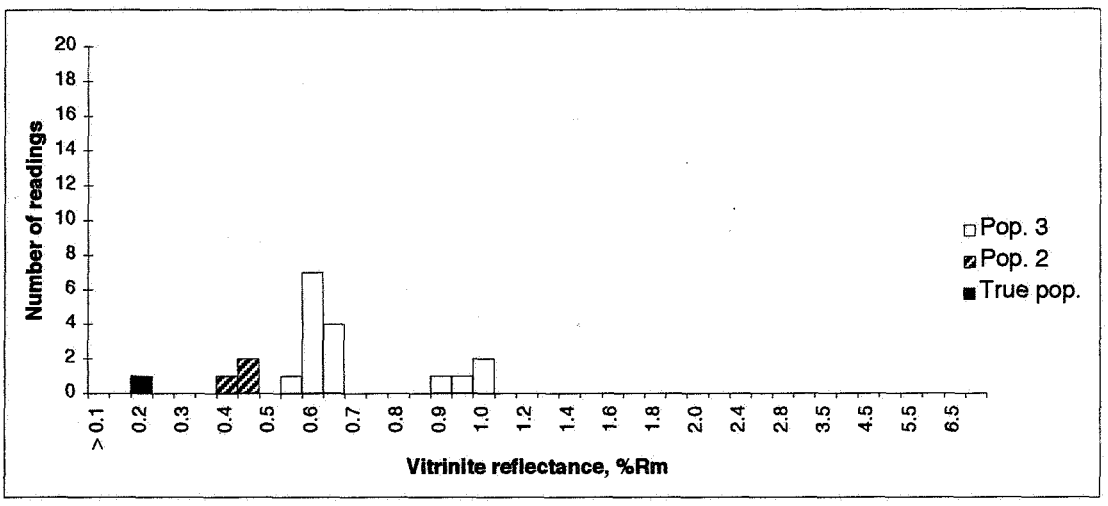
Vitrinite reflectance sample data sheet

IFE no.	Well	Depth, mRKB	Sample type	Lithology	Date of analysis
961138	**34/7-25S**	**2050**	**cut**	**clst**	**14.11.1996**



% Rm readings	True pop.	Pop. 2	Pop. 3
Mean	**0.25**	**0.46**	**0.76**
Std. Dev.		**0.03**	**0.21**
1	0.245	0.436	0.578
2		0.465	0.611
3		0.488	0.611
4			0.612
5			0.616
6			0.622
7			0.624
8			0.638
9			0.655
10			0.683
11			0.691
12			0.692
13			0.929
14			0.980
15			1.071
16			1.094
17			1.254
18			
19			
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28			
29			
30			

Quality rating	
Abundance of vitrinite	-
Identification of vitrinite	-
Type of vitrinite	-
Particle size	-
Particle surface quality	-
Abundance of pyrite	+
Average quality	**P**

Legend to quality rating	
No effect on the readings	o
Possibly to low reading	-
Possibly to high readings	+
Good quality	G
Moderate quality	M
Poor quality	P
Not vitrinite	X
Mud additive	A

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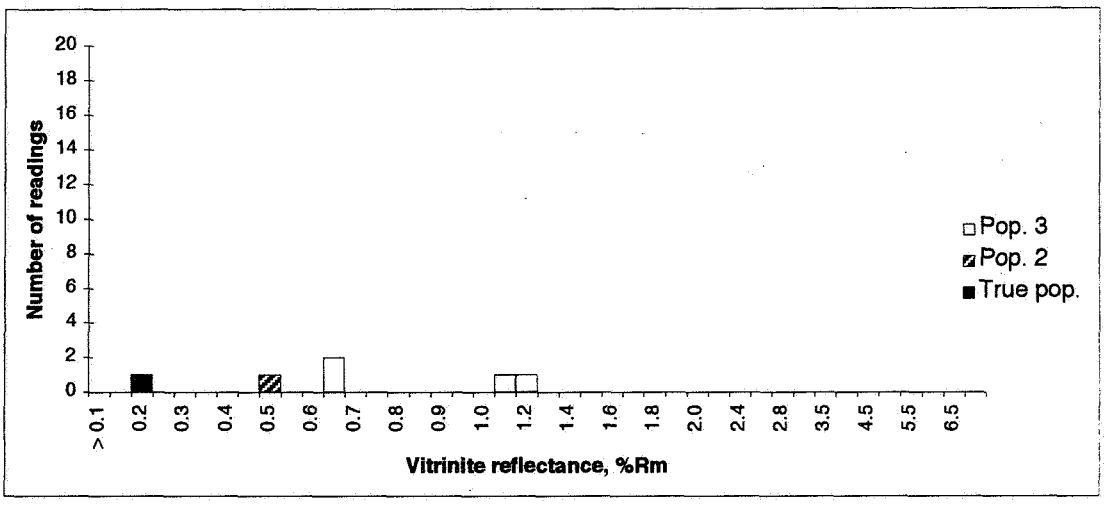
Vitrinite reflectance sample data sheet

IFE no.	Well	Depth, mRKB	Sample type	Lithology	Date of analysis
961139	**34/7-25S**	**2140**	***cut***	**clst**	**14.11.1996**



% Rm readings	True pop.	Pop. 2	Pop. 3
Mean	**0.21**	**0.50**	**0.94**
Std. Dev.			**0.31**
1	0.212	0.503	0.658
2			0.686
3			1.126
4			1.270
5			
6			
7			
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10			
11			
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Quality rating	
Abundance of vitrinite	-
Identification of vitrinite	-
Type of vitrinite	-
Particle size	-
Particle surface quality	-
Abundance of pyrite	+
Average quality	**P**

Legend to quality rating	
No effect on the readings	o
Possibly to low reading	-
Possibly to high readings	+
Good quality	G
Moderate quality	M
Poor quality	P
Not vitrinite	X
Mud additive	A

Comments

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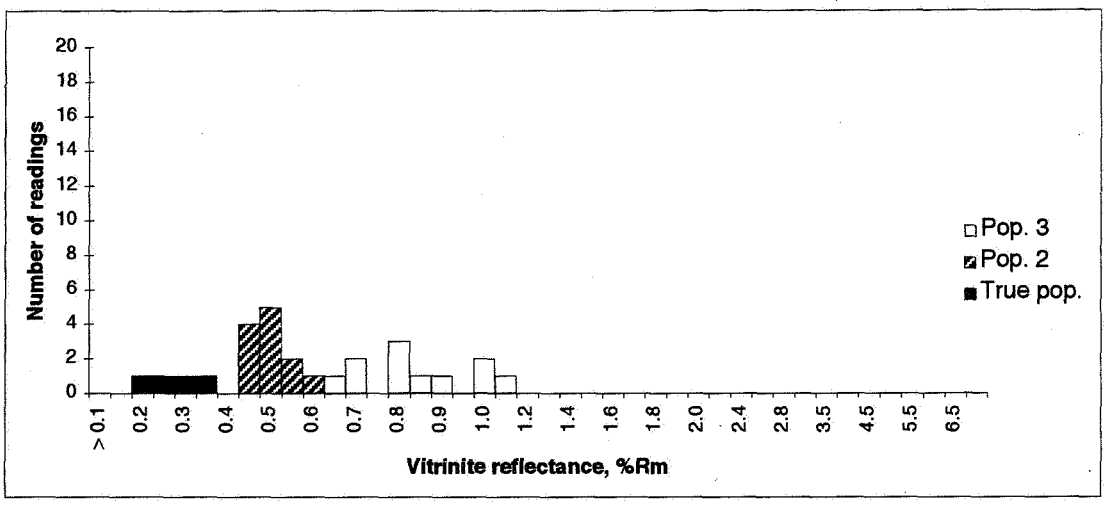
Vitrinite reflectance sample data sheet

IFE no.	Well	Depth, mRKB	Sample type	Lithology	Date of analysis
961140	**34/7-25S**	**2250**	**cut**	**clst**	**14.11.1996**



% Rm readings	True pop.	Pop. 2	Pop. 3
Mean	**0.30**	**0.52**	**0.88**
Std. Dev.	**0.06**	**0.06**	**0.16**
1	0.242	0.451	0.653
2	0.263	0.452	0.707
3	0.317	0.462	0.718
4	0.376	0.469	0.805
5		0.505	0.846
6		0.524	0.847
7		0.532	0.873
8		0.539	0.932
9		0.549	1.045
10		0.563	1.082
11		0.599	1.125
12		0.627	
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29			
30			

Quality rating	
Abundance of vitrinite	-
Identification of vitrinite	-
Type of vitrinite	±
Particle size	-
Particle surface quality	-
Abundance of pyrite	+
Average quality	**P**

Legend to quality rating	
No effect on the readings	o
Possibly to low reading	-
Possibly to high readings	+
Good quality	G
Moderate quality	M
Poor quality	P
Not vitrinite	X
Mud additive	A

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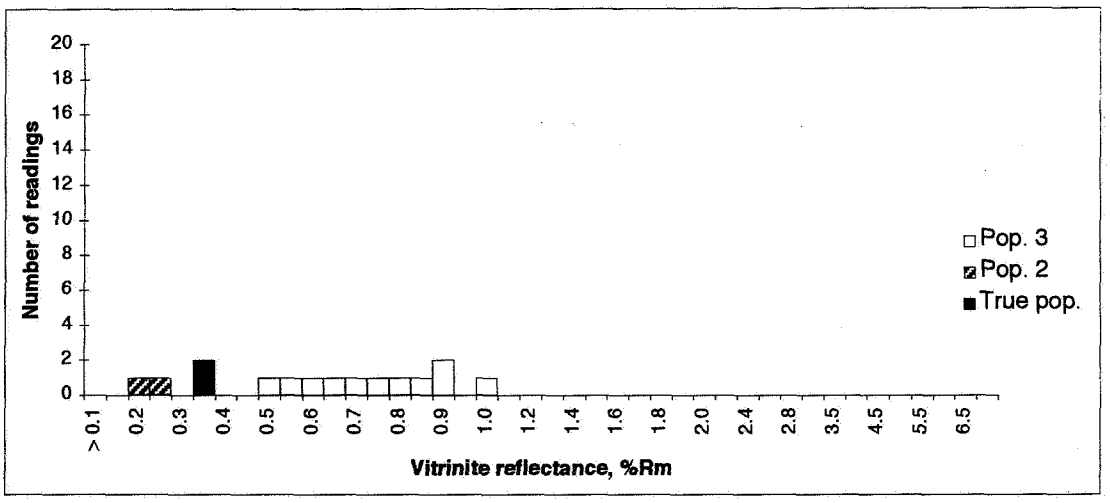
Vitrinite reflectance sample data sheet

IFE no.	Well	Depth, mRKB	Sample type	Lithology	Date of analysis
961141	**34/7-25S**	**2350**	**cut**	**clst**	**14.11.1996**



% Rm readings	True pop.	Pop. 2	Pop. 3
Mean	**0.38**	**0.24**	**0.77**
Std. Dev.	**0.02**	**0.03**	**0.17**
1	0.369	0.212	0.513
2	0.392	0.261	0.557
3			0.614
4			0.694
5			0.718
6			0.771
7			0.833
8			0.862
9			0.918
10			0.949
11			1.056
12			
13			
14			
15			
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29			
30			

Quality rating	
Abundance of vitrinite	-
Identification of vitrinite	±
Type of vitrinite	±
Particle size	-
Particle surface quality	-
Abundance of pyrite	+
Average quality	**P**

Legend to quality rating	
No effect on the readings	o
Possibly to low reading	-
Possibly to high readings	+
Good quality	G
Moderate quality	M
Poor quality	P
Not vitrinite	X
Mud additive	A

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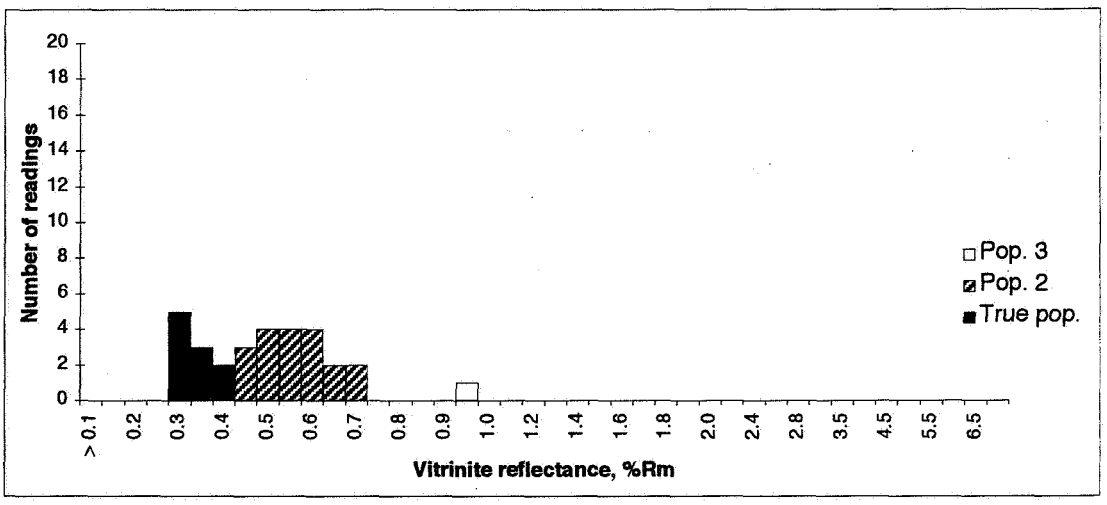
Vitrinite reflectance sample data sheet

IFE no.	Well	Depth, mRKB	Sample type	Lithology	Date of analysis
961142	**34/7-25S**	**2460**	**cut**	**clst**	**14.11.1996**



% Rm readings	True pop.	Pop. 2	Pop. 3
Mean	**0.35**	**0.58**	**0.96**
Std. Dev.	**0.04**	**0.07**	
1	0.310	0.472	0.963
2	0.310	0.478	
3	0.320	0.492	
4	0.327	0.501	
5	0.328	0.506	
6	0.363	0.539	
7	0.367	0.539	
8	0.379	0.550	
9	0.412	0.573	
10	0.430	0.589	
11		0.599	
12		0.606	
13		0.606	
14		0.612	
15		0.614	
16		0.653	
17		0.663	
18		0.712	
19		0.720	
20			
21			
22			
23			
24			
25			
26			
27			
28			
29			
30			

Quality rating	
Abundance of vitrinite	o
Identification of vitrinite	±
Type of vitrinite	+
Particle size	o
Particle surface quality	o
Abundance of pyrite	+
Average quality	**P**

Legend to quality rating	
No effect on the readings	o
Possibly to low reading	-
Possibly to high readings	+
Good quality	G
Moderate quality	M
Poor quality	P
Not vitrinite	X
Mud additive	A

Comments

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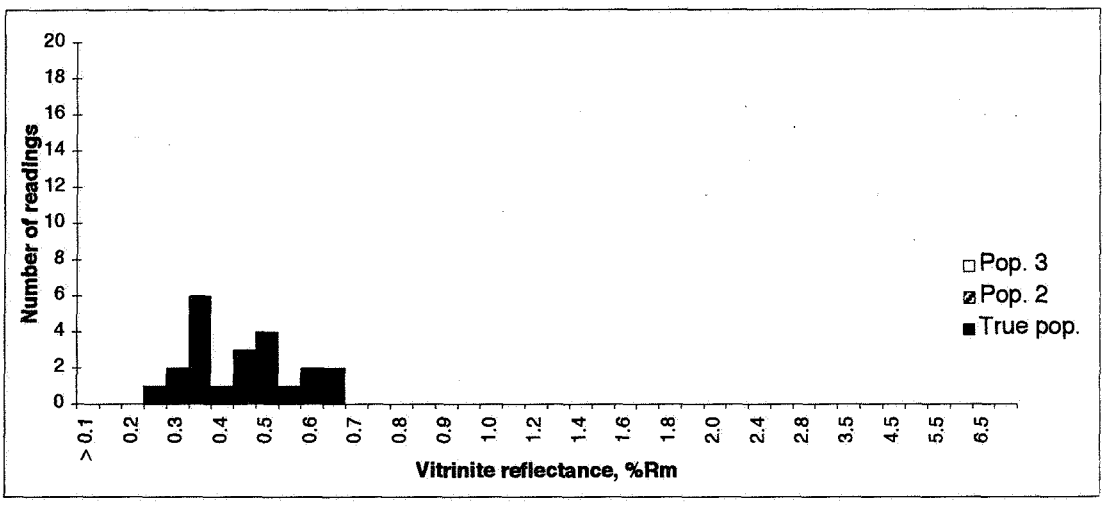
Vitrinite reflectance sample data sheet

IFE no.	Well	Depth, mRKB	Sample type	Lithology	Date of analysis
961143	**34/7-25S**	**2550**	**cut**	**clst**	**14.11.1996**



% Rm readings	True pop.	Pop. 2	Pop. 3
Mean	**0.46**		
Std. Dev.	**0.10**		
1	0.261		
2	0.307		
3	0.328		
4	0.345		
5	0.363		
6	0.376		
7	0.392		
8	0.392		
9	0.394		
10	0.439		
11	0.454		
12	0.454		
13	0.488		
14	0.505		
15	0.505		
16	0.534		
17	0.537		
18	0.555		
19	0.606		
20	0.617		
21	0.668		
22	0.696		
23			
24			
25			
26			
27			
28			
29			
30			

Quality rating	
Abundance of vitrinite	-
Identification of vitrinite	±
Type of vitrinite	±
Particle size	o
Particle surface quality	o
Abundance of pyrite	+
Average quality	**P**

Legend to quality rating	
No effect on the readings	o
Possibly to low reading	-
Possibly to high readings	+
Good quality	G
Moderate quality	M
Poor quality	P
Not vitrinite	X
Mud additive	A

Comments

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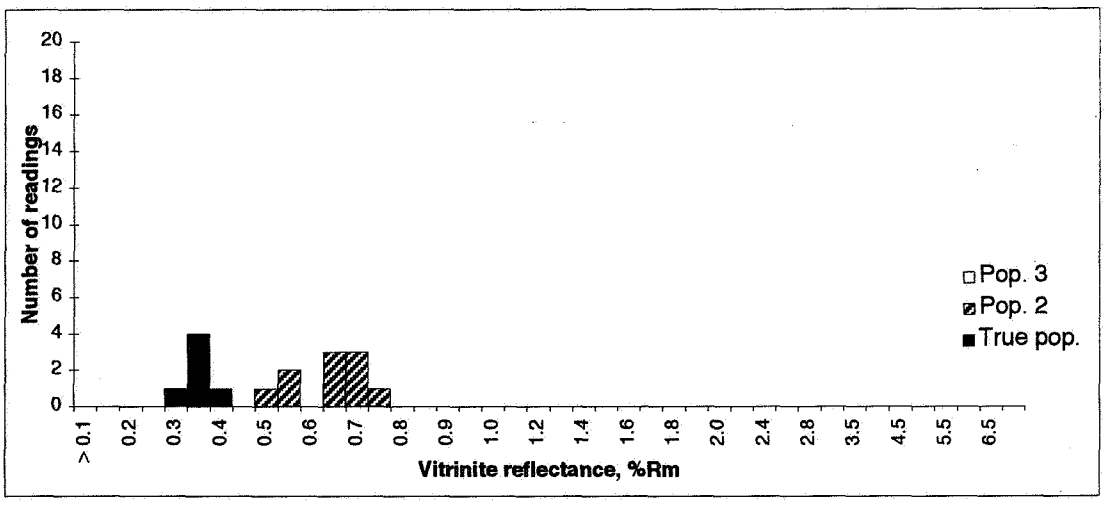
Vitrinite reflectance sample data sheet

IFE no.	Well	Depth, mRKB	Sample type	Lithology	Date of analysis
961144	**34/7-25S**	**2660**	**cut**	**clst**	**14.11.1996**



% Rm readings	True pop.	Pop. 2	Pop. 3
Mean	**0.38**	**0.67**	**0.97**
Std. Dev.	**0.04**	**0.08**	**0.12**
1	0.315	0.537	0.873
2	0.356	0.554	0.913
3	0.376	0.598	0.945
4	0.379	0.650	1.136
5	0.390	0.653	
6	0.439	0.692	
7		0.722	
8		0.735	
9		0.748	
10		0.771	
11			
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29			
30			

Quality rating	
Abundance of vitrinite	-
Identification of vitrinite	±
Type of vitrinite	±
Particle size	-
Particle surface quality	-
Abundance of pyrite	+
Average quality	**P**

Legend to quality rating	
No effect on the readings	o
Possibly to low reading	-
Possibly to high readings	+
Good quality	G
Moderate quality	M
Poor quality	P
Not vitrinite	X
Mud additive	A

Comments

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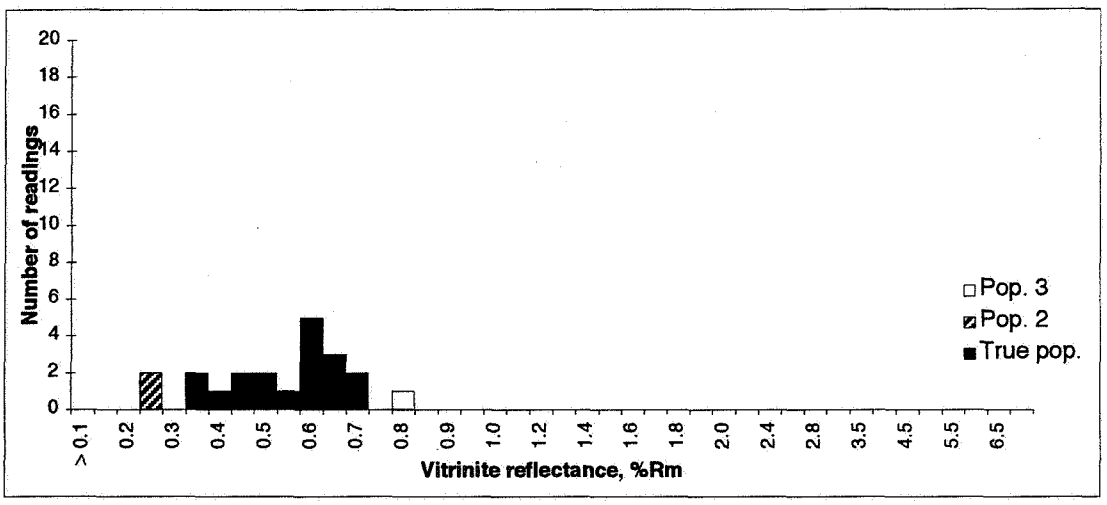
Vitrinite reflectance sample data sheet

IFE no.	Well	Depth, mRKB	Sample type	Lithology	Date of analysis
961145	**34/7-25S**	**2750**	**cut**	**clst**	**14.11.1996**



% Rm readings	True pop.	Pop. 2	Pop. 3
Mean	**0.57**	**0.29**	**0.85**
Std. Dev.	**0.11**	**0.01**	
1	0.387	0.278	0.854
2	0.392	0.292	
3	0.420		
4	0.464		
5	0.475		
6	0.511		
7	0.547		
8	0.554		
9	0.603		
10	0.606		
11	0.612		
12	0.620		
13	0.635		
14	0.684		
15	0.691		
16	0.697		
17	0.712		
18	0.722		
19			
20			
21			
22			
23			
24			
25			
26			
27			
28			
29			
30			

Quality rating	
Abundance of vitrinite	-
Identification of vitrinite	±
Type of vitrinite	±
Particle size	o
Particle surface quality	o
Abundance of pyrite	+
Average quality	**P**

Legend to quality rating	
No effect on the readings	o
Possibly to low reading	-
Possibly to high readings	+
Good quality	G
Moderate quality	M
Poor quality	P
Not vitrinite	X
Mud additive	A

Comments

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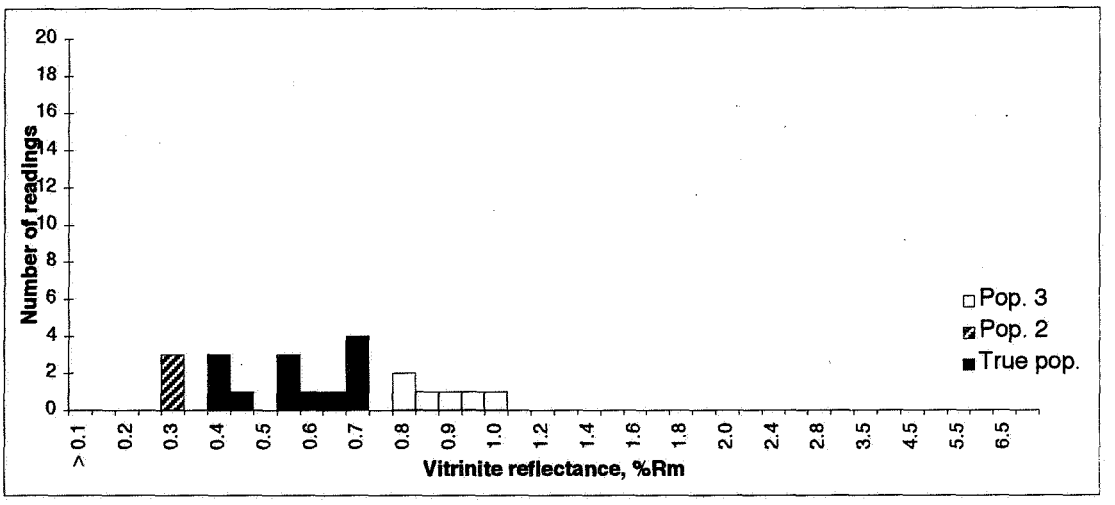
Vitrinite reflectance sample data sheet

IFE no.	Well	Depth, mRKB	Sample type	Lithology	Date of analysis
961146	**34/7-25S**	**2862**	**cut**	**clst**	**14.11.1996**



% Rm readings	True pop.	Pop. 2	Pop. 3
Mean	**0.59**	**0.33**	**0.90**
Std. Dev.	**0.12**	**0.01**	**0.08**
1	0.415	0.325	0.826
2	0.443	0.330	0.834
3	0.443	0.338	0.864
4	0.462		0.908
5	0.555		0.957
6	0.568		1.025
7	0.580		
8	0.606		
9	0.673		
10	0.709		
11	0.710		
12	0.718		
13	0.730		
14			
15			
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29			
30			

Quality rating	
Abundance of vitrinite	-
Identification of vitrinite	±
Type of vitrinite	±
Particle size	-
Particle surface quality	-
Abundance of pyrite	+
Average quality	**P**

Legend to quality rating	
No effect on the readings	o
Possibly to low reading	-
Possibly to high readings	+
Good quality	G
Moderate quality	M
Poor quality	P
Not vitrinite	X
Mud additive	A

Comments

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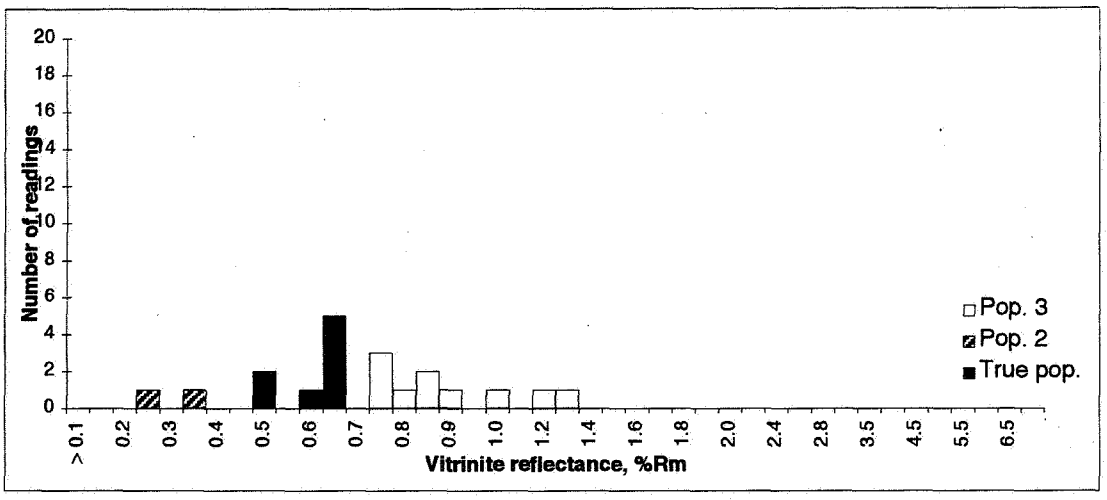
Vitrinite reflectance sample data sheet

IFE no.	Well	Depth, mRKB	Sample type	Lithology	Date of analysis
961147	**34/7-25S**	**2949**	**cut**	**clst**	**19.11.1996**



% Rm readings	True pop.	Pop. 2	Pop. 3
Mean	**0.63**	**0.33**	**0.94**
Std. Dev.	**0.07**	**0.06**	**0.20**
1	0.512	0.288	0.753
2	0.543	0.368	0.762
3	0.649		0.792
4	0.654		0.821
5	0.657		0.866
6	0.673		0.868
7	0.677		0.907
8	0.687		1.087
9			1.221
10			1.301
11			
12			
13			
14			
15			
16			
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18			
19			
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21			
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29			
30			

Quality rating	
Abundance of vitrinite	-
Identification of vitrinite	±
Type of vitrinite	±
Particle size	-
Particle surface quality	-
Abundance of pyrite	+
Average quality	**P**

Legend to quality rating	
No effect on the readings	*o*
Possibly to low reading	-
Possibly to high readings	+
Good quality	G
Moderate quality	M
Poor quality	P
Not vitrinite	X
Mud additive	A

Comments

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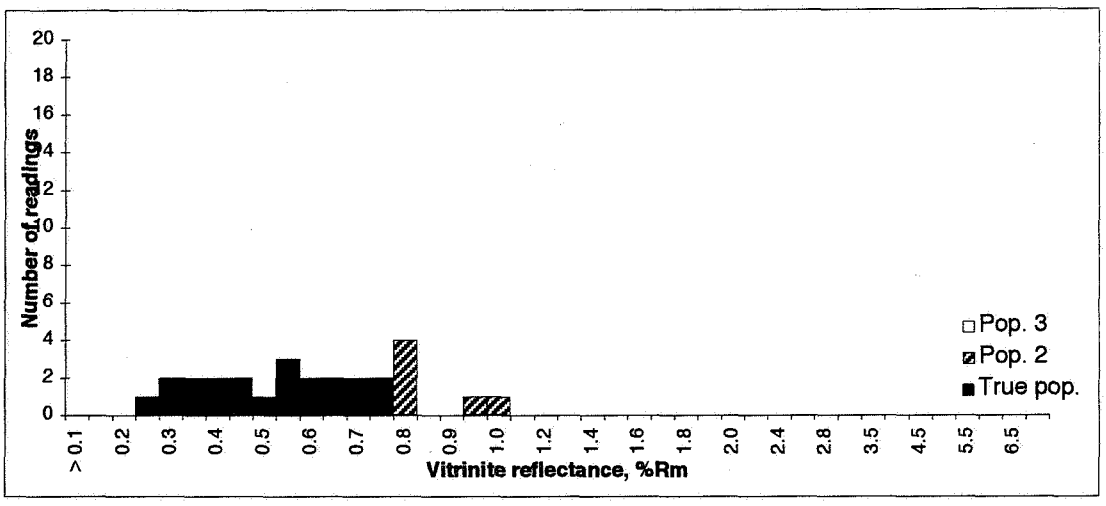
Vitrinite reflectance sample data sheet

IFE no.	Well	Depth, mRKB	Sample type	Lithology	Date of analysis
961148	**34/7-25S**	**3051**	**cut**	**clst**	**19.11.1996**



% Rm readings	True pop.	Pop. 2	Pop. 3
Mean	**0.54**	**0.88**	
Std. Dev.	**0.14**	**0.11**	
1	0.293	0.804	
2	0.321	0.808	
3	0.326	0.816	
4	0.356	0.819	
5	0.392	0.969	
6	0.435	1.051	
7	0.440		
8	0.474		
9	0.489		
10	0.519		
11	0.557		
12	0.574		
13	0.584		
14	0.614		
15	0.617		
16	0.650		
17	0.652		
18	0.700		
19	0.722		
20	0.779		
21	0.797		
22			
23			
24			
25			
26			
27			
28			
29			
30			

Quality rating	
Abundance of vitrinite	o
Identification of vitrinite	±
Type of vitrinite	o
Particle size	o
Particle surface quality	o
Abundance of pyrite	o
Average quality	**P**

Legend to quality rating	
No effect on the readings	o
Possibly to low reading	-
Possibly to high readings	+
Good quality	G
Moderate quality	M
Poor quality	P
Not vitrinite	X
Mud additive	A

Comments

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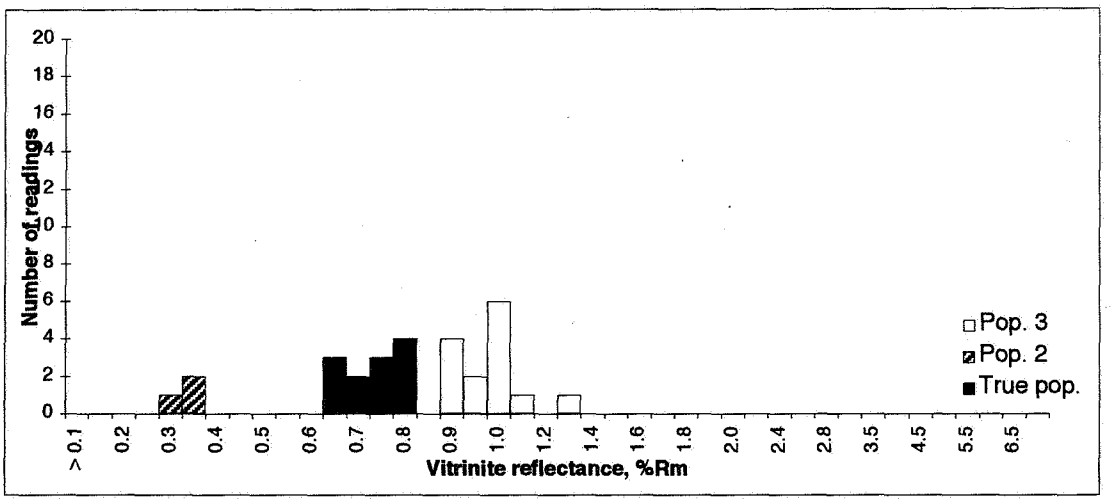
Vitrinite reflectance sample data sheet

IFE no.	Well	Depth, mRKB	Sample type	Lithology	Date of analysis
961149	**34/7-25S**	**3150**	**cut**	**clst**	**19.11.1996**



% Rm readings	True pop.	Pop. 2	Pop. 3
Mean	**0.76**	**0.38**	**1.03**
Std. Dev.	**0.07**	**0.03**	**0.11**
1	0.654	0.337	0.913
2	0.661	0.392	0.917
3	0.681	0.399	0.947
4	0.719		0.947
5	0.723		0.963
6	0.752		0.999
7	0.760		1.005
8	0.777		1.008
9	0.817		1.033
10	0.830		1.055
11	0.839		1.057
12	0.849		1.067
13			1.180
14			1.303
15			
16			
17			
18			
19			
20			
21			
22			
23			
24			
25			
26			
27			
28			
29			
30			

Quality rating	
Abundance of vitrinite	-
Identification of vitrinite	±
Type of vitrinite	o
Particle size	o
Particle surface quality	o
Abundance of pyrite	o
Average quality	**P**

Legend to quality rating	
No effect on the readings	o
Possibly to low reading	-
Possibly to high readings	+
Good quality	G
Moderate quality	M
Poor quality	P
Not vitrinite	X
Mud additive	A

Comments

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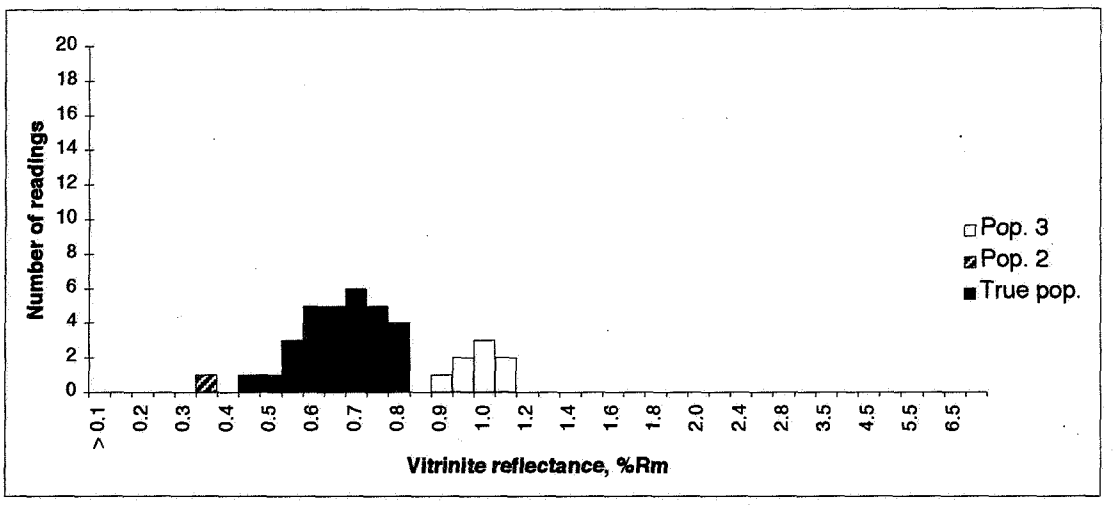
Vitrinite reflectance sample data sheet

IFE no.	Well	Depth, mRKB	Sample type	Lithology	Date of analysis
961150	**34/7-25S**	**3235**	**cut**	**clst**	**19.11.1996**



% Rm readings	True pop.	Pop. 2	Pop. 3
Mean	**0.69**	**0.36**	**1.03**
Std. Dev.	**0.07**		**0.08**
1	0.484	0.359	0.931
2	0.520		0.972
3	0.563		0.979
4	0.569		1.022
5	0.581		1.024
6	0.620		1.059
7	0.621		1.124
8	0.621		1.163
9	0.624		
10	0.627		
11	0.655		
12	0.659		
13	0.681		
14	0.685		
15	0.690		
16	0.701		
17	0.705		
18	0.709		
19	0.711		
20	0.720		
21	0.725		
22	0.756		
23	0.756		
24	0.786		
25	0.790		
26	0.795		
27	0.805		
28	0.816		
29	0.822		
30	0.823		

Quality rating	
Abundance of vitrinite	o
Identification of vitrinite	o
Type of vitrinite	+
Particle size	o
Particle surface quality	o
Abundance of pyrite	o
Average quality	**M**

Legend to quality rating	
No effect on the readings	o
Possibly to low reading	-
Possibly to high readings	+
Good quality	G
Moderate quality	M
Poor quality	P
Not vitrinite	X
Mud additive	A

Comments

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