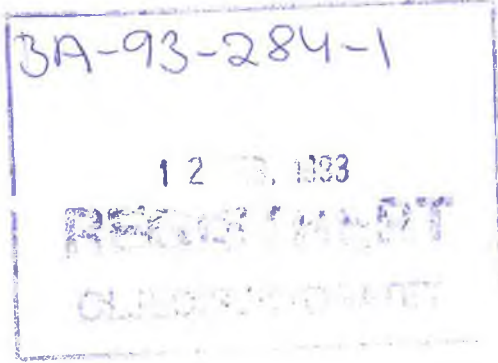
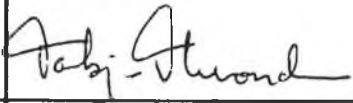
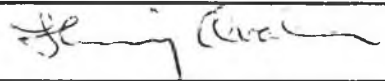


ADDRESS KJELLER HALDEN Boks 40, 2007 Kjeller N-1751 Halden, Norway TELEPHONE +47 6 806000 +47 9 183100 TELEX 74 573 energ n 76 335 energ n TELEFAX +47 6 811168		AVAILABILITY Private Confidential	
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	Torbjørn Throndsen	1993-01-26	
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APPROVED BY	Henning Qvale	1993-01-26	

1 Introduction

This report gives the result of vitrinite reflectance analyses performed on 25 samples from well 30/2-3 offshore Norway.

2 Material

The samples were provided from the client partly as core chips, sidewall cores and unwashed cuttings samples. No other information was supplied.

3 Analytical techniques

The cuttings samples were washed, inspected for contamination and treated with hydrochloric and hydrofluoric acid prior to further preparation in order to concentrate the organic matter and ensure good polishing quality. The core and sidewall core samples were not treated with hydrochloric or hydrochloric acid prior to further preparation. The sample material were embedded in an epoxy resin, ground flat and polished using 0.25 micron diamond paste and magnesium oxide as the two final steps. The polishing quality obtained was quite satisfactory.

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 about 2.5 micron in diameter, and the measurements were made through a green band pass filter (546 nm) and in oil immersion. The readings were made without a polarizer and using a stationary stage. On each sample at least 20 points were measured, if possible. A representative population was selected among the readings, and an arithmetic mean was calculated for this population.

4 Results

The vitrinite reflectance results are given in Table 1. Raw data with histograms for each sample are given in Appendix. Vitrinite reflectance versus depth plots on linear and log scales are given in Figure 1 and 2 respectively. A manually

interpreted vitrinite reflectance versus depth curve is shown in Figure 1 and transferred to Figure 2.

It has been possible to establish a reliable vitrinite reflectance versus depth profile, however, hydrocarbon staining and/or bitumen impregnated of the vitrinite has caused some difficulties, particularly in the middle of the profile. Staining and bitumen impregnation reduces the reflectivity and accordingly the precision of the actual part of the profile. However, three coal samples at great depth represent highly reliable and precise data points.

Table 1. Vitrinite reflectance data well 30/2-3

Sample code IFE	Sample depth, type m RKB	Sample lithology %Rm	Vitrinite reflectance \pm std (N)	Sample quality	Preparation
ST 1287	1363 swc	clst	0.34 \pm 0.04 (30)	-oooo	Bulk
ST 1288	1630 swc	clst	0.37 \pm 0.01 (6)	-oooo	Bulk
ST 1289	1858 cut	clst	0.38 \pm 0.05 (48)	ooo-o	HF
ST 1290	2057 swc	clst	0.45 (1)	-oo--	Bulk
ST 1291	2165 swc	clst	0.40 \pm 0.06 (8)	-oo--	Bulk
ST 1292	2360 cut	clst	0.46 \pm 0.05 (4)	-+o--	HF
		alt.	0.28 \pm 0.02 (6)		ST?
ST 1293	2450 cut	clst	0.45 \pm 0.04 (19)	-oo--	HF
ST 1294	2560 cut	clst	0.52 \pm 0.02 (12)	-oo-o	HF
		alt.	0.43 \pm 0.02 (3)		ST?
ST 1295	2660 cut	clst	0.46 \pm 0.04 (12)	-o---	ST? HF
ST 1296	2760 cut	clst	0.49 \pm 0.06 (7)	-o---	ST? HF
ST 1297	2850 cut	clst	0.54 \pm 0.06 (37)	oo-oo	ST? HF
ST 1298	2950 cut	clst	0.59 \pm 0.03 (18)	oo-o+	ST? HF
		alt.	0.46 \pm 0.05 (11)		ST?
ST 1299	3160 cut	clst	0.58 \pm 0.03 (25)	oo-oo	ST? HF
			0.48 \pm 0.03 (13)		ST?
ST 1300	3250 cut	clst	0.65 \pm 0.06 (18)	oo-oo	ST? HF
		alt.	0.48 \pm 0.03 (6)		ST?
ST 1301	3390 cut	clst	0.76 \pm 0.04 (11)	o+-o+	ST? HF
		alt.	0.57 \pm 0.09 (7)		ST? HF
ST 1302	3590 cut	clst	0.88 \pm 0.08 (15)	-o---	ST? HF
ST 1303	3675 cut	clst	0.93 \pm 0.10 (9)	-o---	ST? HF
		alt.	0.47 \pm 0.11 (26)		ST?
ST 1304	3761 swc	slst	0.97 \pm 0.02 (3)	-+---	ST? Bulk
		alt.	0.84 \pm 0.04 (3)		ST?
ST 1305	3824.4 core	coal	1.05 \pm 0.05 (29)	ooooo	Bulk
ST 1306	3868.3 core	coal	1.03 \pm 0.04 (28)	ooooo	Bulk
ST 1307	3929.3 core	coal	1.04 \pm 0.03 (29)	ooooo	Bulk
ST 1308	3987 cut	clst	1.05 \pm 0.04 (36)	oooo-	ST? HF
ST 1309	4095 cut	clst	1.09 \pm 0.03 (9)	oo-o-	ST? HF
ST 1310	4176 cut	clst	1.03 \pm 0.03 (9)	oo-o-	ST? HF
ST 1311	4290 cut	clst	1.09 \pm 0.03 (16)	oo-o-	ST? HF

LEGEND

cut: cuttings sample
swc: sidewall core sample
core: core sample

Rm : mean random reflectance in oil
Std: standard deviation
N : number of readings

clst: claystone
slst: siltstone
lst: limestone

M.A. : Lignitic mud additive
ST. : Oil staining/bitumen impregnation (reduces reflectivity)

CODE FOR DATA QUALITY

The sample quality is characterized by five items as follows:

ooooo

1 : abundance of vitrinite
2 : identification of vitrinite
3 : type of vitrinite
4 : particle size
5 : particle surface quality

+ : may give a too high vitrinite reflectance value
o : has no effect on the resulting vitrinite reflectance
- : may give a too low vitrinite reflectance value

An ideal sample is characterized as follows: ooooo

Figure 1. Vitrinite reflectance (linear scale) versus depth well 30/2-3.

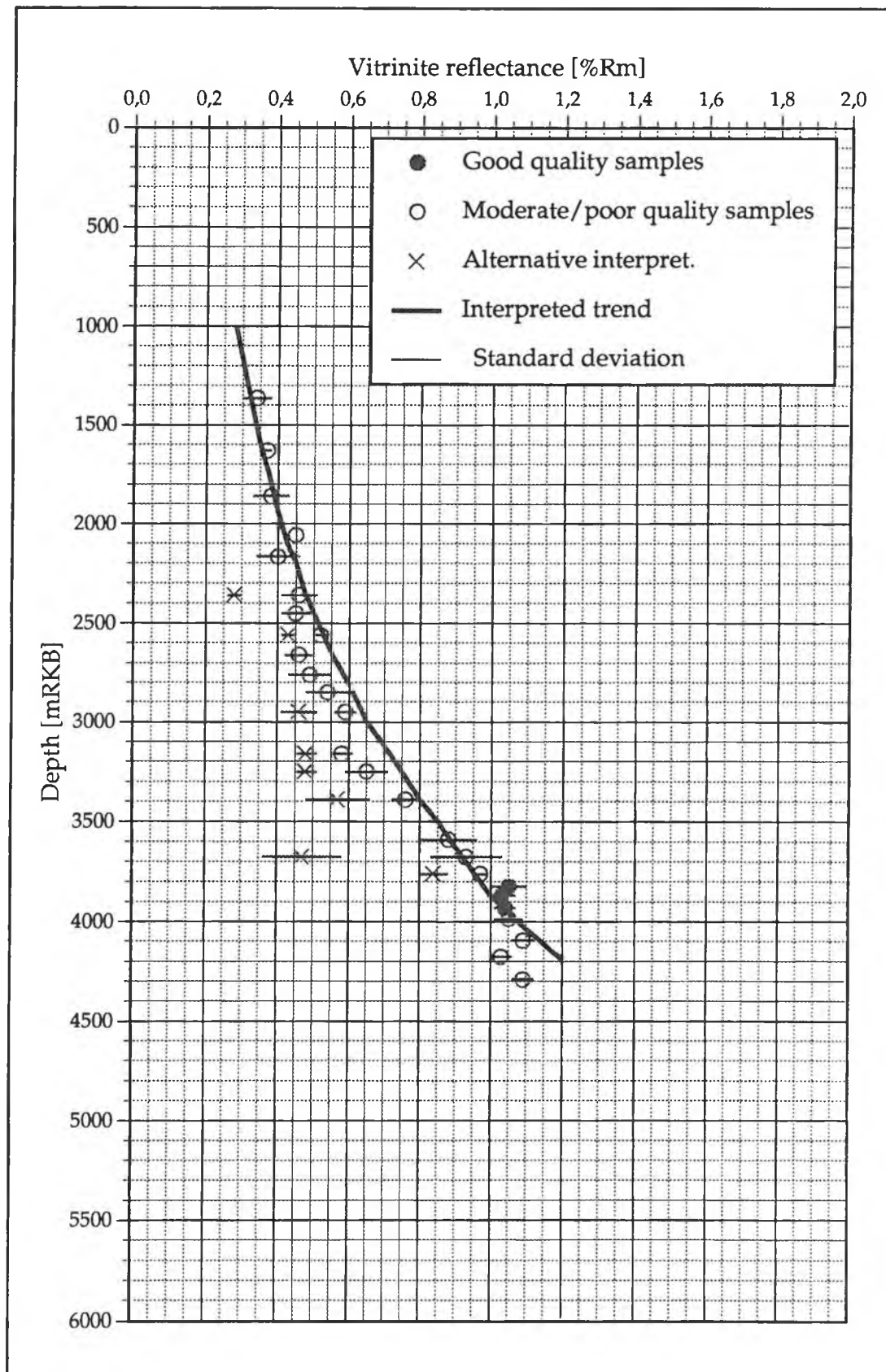
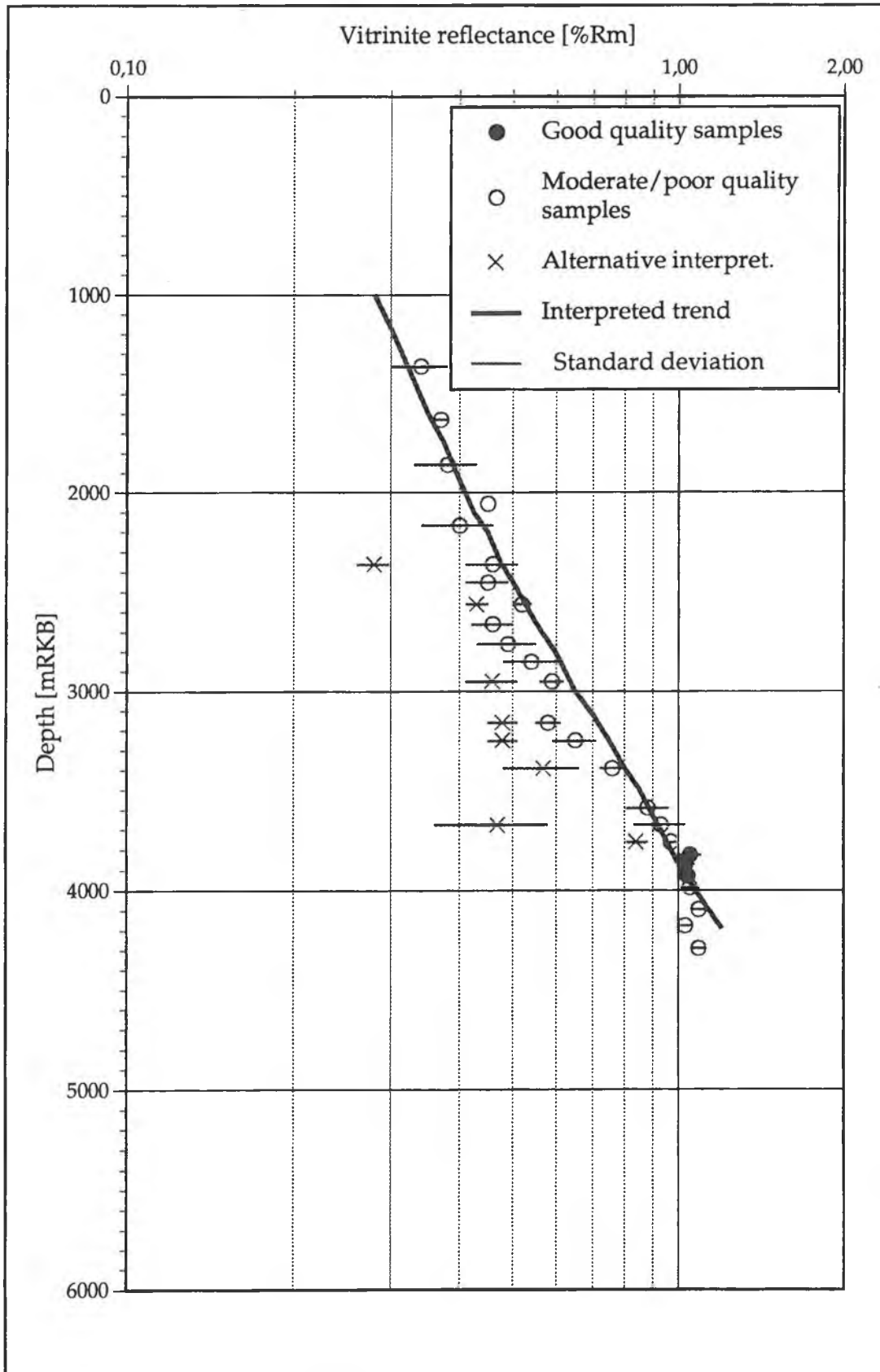
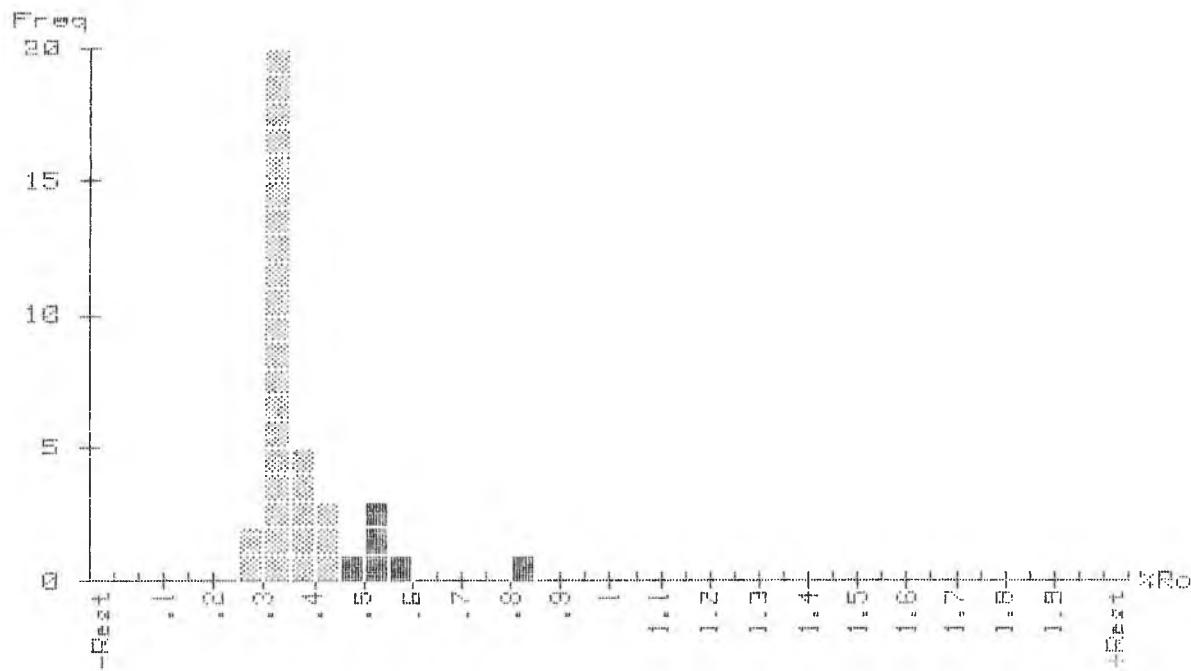


Figure 2. Vitrinite reflectance (log scale) versus depth, well 30/2-3.



Sample No.: 11287 | 1A1
 Well Name: 130/2-3 |
 Depth: 11363mRKBswc |
 Analyst: K. AASGAARD |
 Date: 112.1.93 |



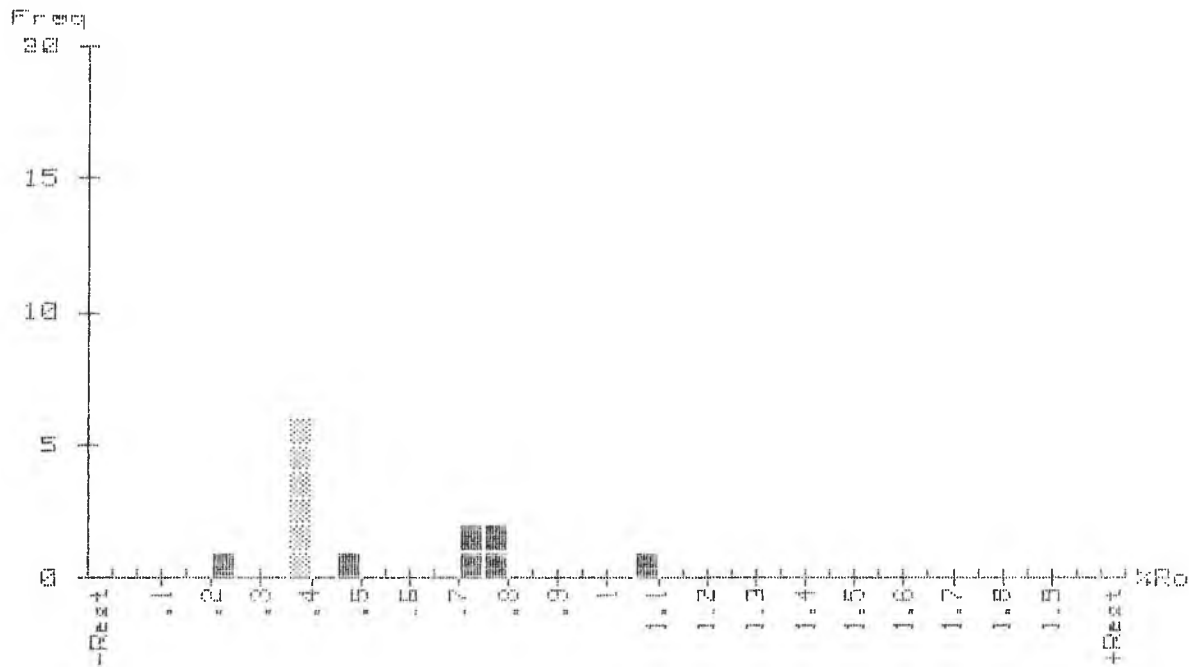
% Pop.	1	From	.25 to	.45	Mean=	.34	St.D=	.04	Total=	30
Pop. 2	From	.45 to	.60	Mean=	.53	St.D=	.03	Total=	5	
Pop. 3	From	.80 to	.95					Total=	0	

Sample No.: 11287 1 1A1
 Well Name: 130/2-3 |
 Depth: 11363mRKBswc |
 Analyst: 1K.AASGAARD |
 Date: 112.1.93 |

Channel: R1 ST 1287
 No. of Measurements: 36
 Mean: .381
 Standard Deviation: .105
 Coeff. of Variation: .2764

	1	2	3	4	5	6	7	8	9	10
0	.269	.299	.304	.306	.315	.315	.317	.320	.321	.32
10	.321	.324	.334	.335	.336	.339	.339	.340	.340	.34
20	.343	.348	.350	.359	.372	.385	.390	.401	.412	.43
30	.494	.527	.527	.539	.568	.815				

Sample No.: 11288 1 1A1
 Well Name: 130/2-3
 Depth: 11630mRKBswc
 Analyst: K.AASGAARD
 Date: 112.1.93



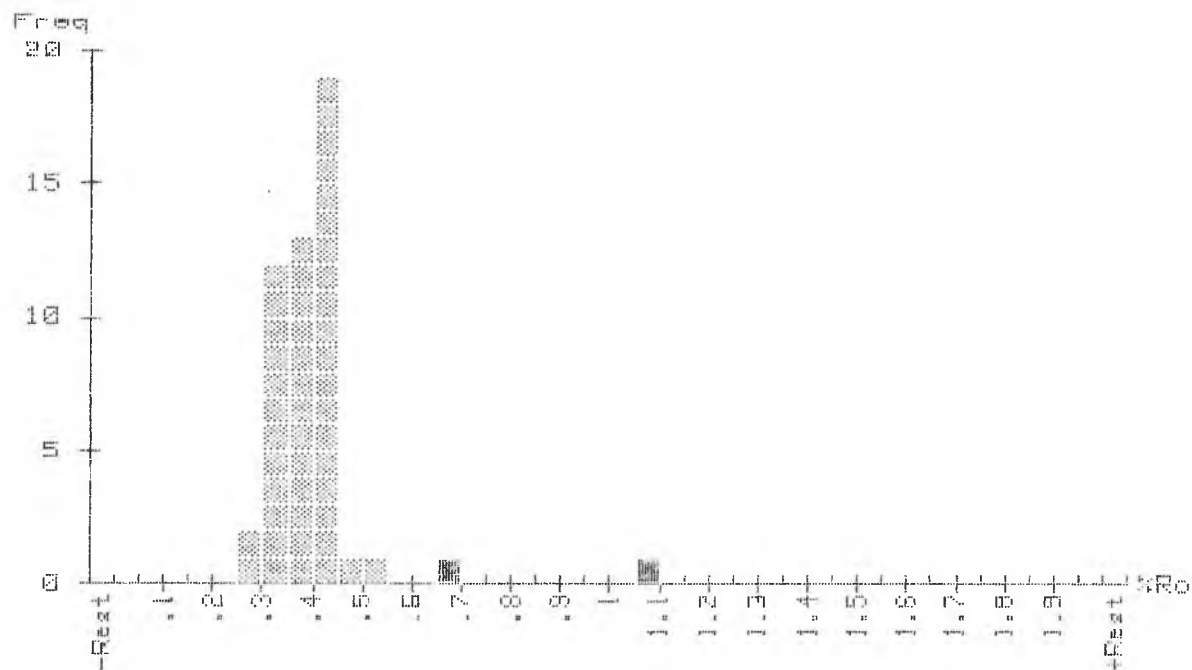
Pop.	From	to	Mean	St.D	Total
1	.20	.25			1
2	.35	.40	.37	.01	6
3	.45	.50			1
4	.70	.80	.74	.04	4
5	1.05	1.10			0

Sample No.: 11288 1 1A1
 Well Name: 130/2-3
 Depth: 11630mRKBswc
 Analyst: K. AASGAARD
 Date: 112.1.93

Channel: R2 ST 1288
 No. of Measurements: 13
 Mean: .540
 Standard Deviation: .246
 Coeff. of Variation: .4564

	1	2	3	4	5	6	7	8	9	10
0	.243	.354	.366	.368	.371	.377	.385	.499	.701	.720
10	.767	.781	1.085							

Sample No.: 11289 1 1A1
 Well Name: 130/2-3 |
 Depth: 11858mRKBcut |
 Analyst: K.AASGAARD |
 Date: 112.1.93 |



* Pop.	1	From	.25 to	.55	Mean=	.38	St.D=	.05	Total=	48
Pop.	2	From	.65 to	.70					Total=	1
Pop.	3	From	1.05 to	1.10					Total=	0

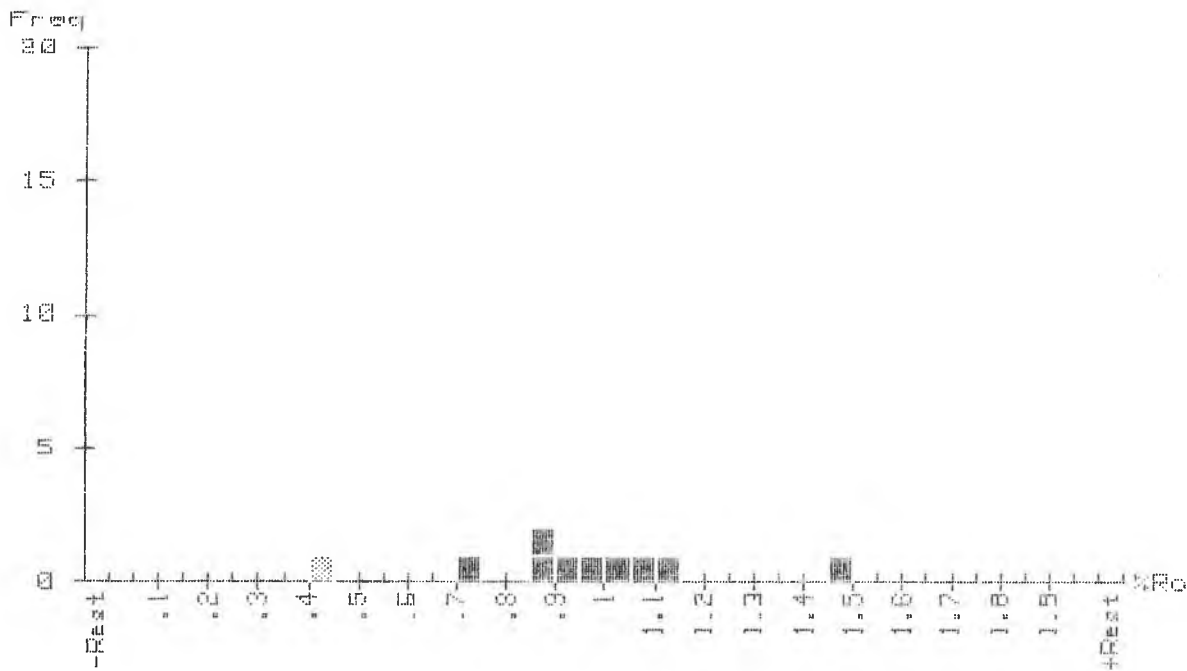
Sample No.: 11289 1 1A1
 Well Name: 130/2-3 11
 Depth: 11858mRKBcut 1
 Analyst: 1K.AASGAARD 1
 Date: 112.1.93 1

Channel: R3 ST 1289

No. of Measurements: 50
 Mean: .404
 Standard Deviation: .114
 Coeff. of Variation: .2827

	1	2	3	4	5	6	7	8	9	10
0	.272	.274	.322	.326	.326	.326	.329	.339	.339	.341
10	.344	.344	.345	.349	.359	.365	.365	.368	.368	.368
20	.379	.379	.379	.380	.391	.393	.395	.401	.404	.405
30	.408	.414	.415	.415	.420	.420	.420	.422	.422	.422
40	.430	.435	.435	.435	.441	.445	.494	.504	.582	1.061

Sample No.: 11290 1 1A1
 Well Name: 130/2-3
 Depth: 12057mRKEBWC
 Analyst: K. AASGAARD
 Date: 112.1.93



* Pop.	1	From	.40 to	.45			Total=	1
Pop.	2	From	.70 to	.75			Total=	1
Pop.	3	From	.85 to	1.15	Mean=	.98	St.D=	.10
Pop.	4	From	1.45 to	1.50			Total=	0

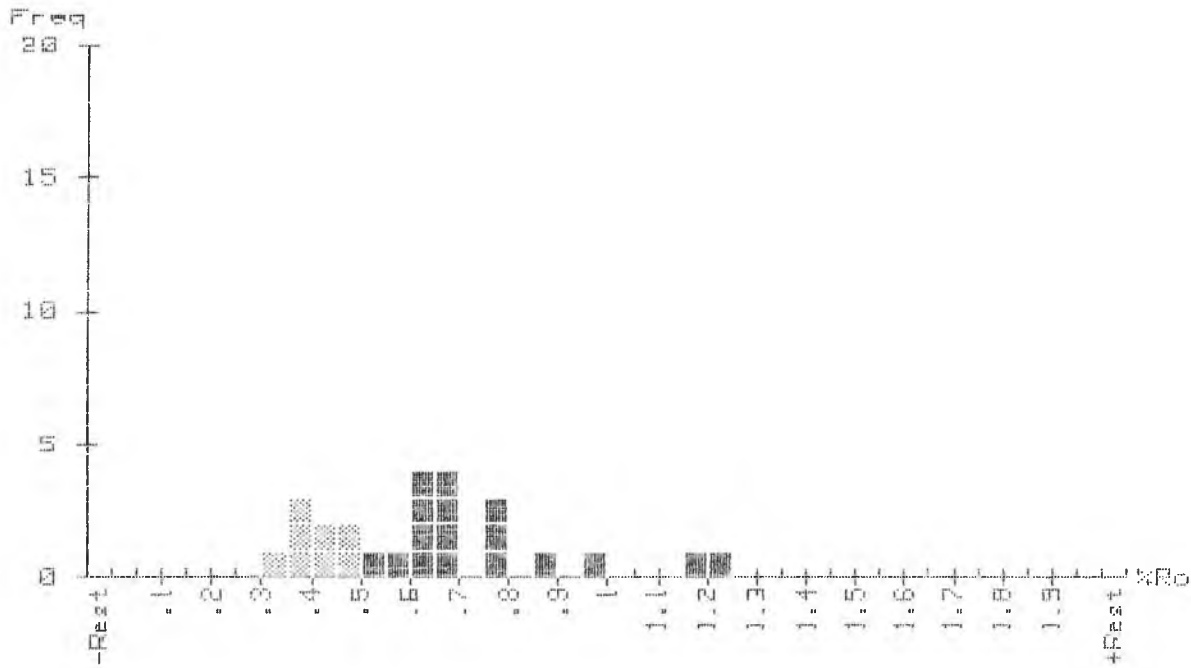
Sample No.: 11290 | 1A|
 Well Name: 130/2-3 |
 Depth: 12057mRKBswc |
 Analyst: 1K.AASGAARD |
 Date: 112.1.93 |

Channel: R4 ST 1290

No. of Measurements: 10
 Mean: .952
 Standard Deviation: .268
 Coeff. of Variation: .2813

	1	2	3	4	5	6	7	8	9	10
0	.437	.749	.863	.879	.909	.954	1.048	1.094	1.113	1.471

Sample No.: 11291 1 (A)
 Well Name: 130/2-3
 Depth: 12165mRKBswc
 Analyst: K.AASGAARD
 Date: 12.1.93



* Pop.	1	From	.30	to	.50	Mean=	.40	St.D=	.06	Total=	8
Pop.	2	From	.50	to	.70	Mean=	.63	St.D=	.04	Total=	10
Pop.	3	From	.75	to	1.00	Mean=	.83	St.D=	.08	Total=	5
Pop.	4	From	1.15	to	1.25	Mean=	1.21	St.D=	.05	Total=	2

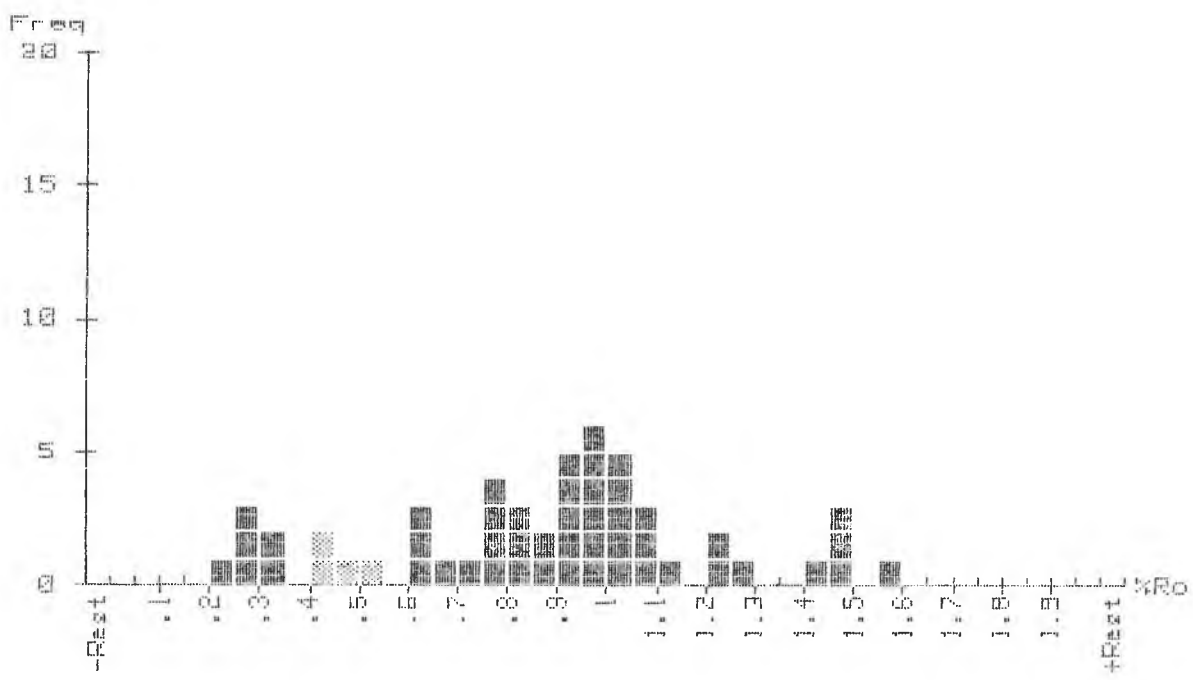
Sample No.: 11291 | 1A1
 Well Name: 130/2-3 |
 Depth: 12165mRKBawc |
 Analyst: K. AASGAARD |
 Date: 112.1.93 |

Channel: R1 ST 1291

No. of Measurements: 25
 Mean: .642
 Standard Deviation: .236
 Coeff. of Variation: .3674

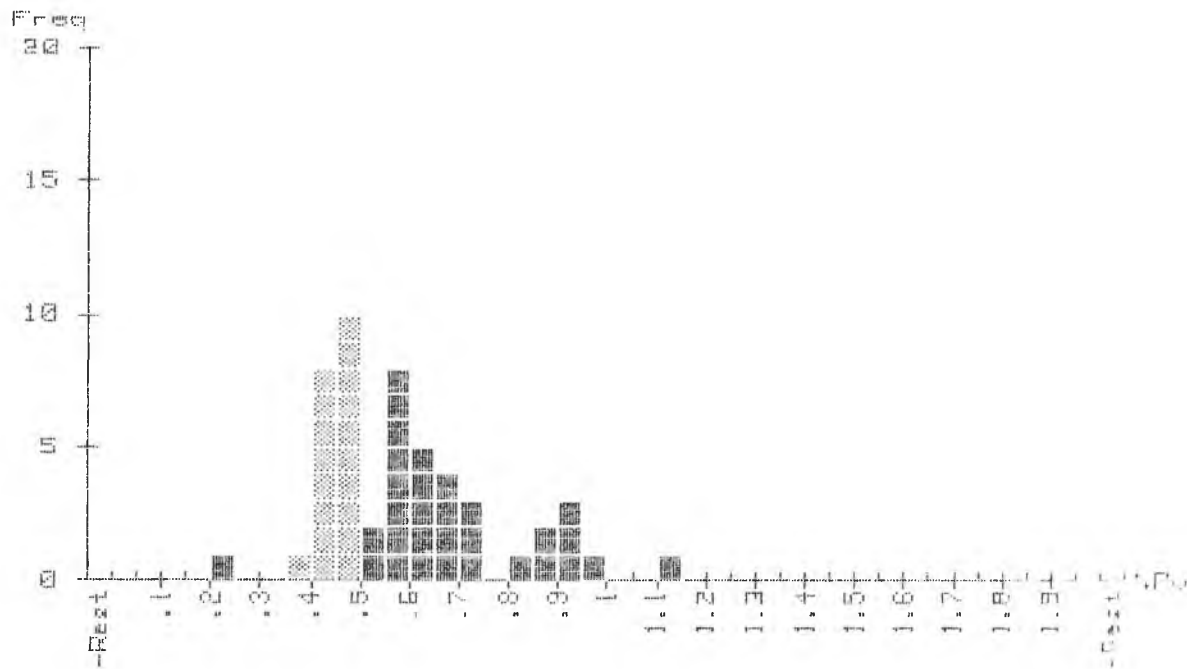
	1	2	3	4	5	6	7	8	9	10
0	.308	.367	.378	.395	.405	.422	.459	.492	.541	.574
10	.612	.613	.623	.630	.665	.669	.671	.675	.762	.761
20	.785	.861	.953	1.169	1.243					

Sample No.: 11292 | 1A1
 Well Name: 130/2-3 |
 Depth: 12360mRKB ~~unc~~ cut |
 Analyst: K. AASGAARD |
 Date: 112.1.93 |



Pop.	1	From	.20 to	.35	Mean=	.28	St.D=	.02	Total=	6
* Pop.	2	From	.40 to	.55	Mean=	.46	St.D=	.05	Total=	4
Pop.	3	From	.60 to	1.15	Mean=	.90	St.D=	.14	Total=	34
Pop.	4	From	1.20 to	1.30	Mean=	1.25	St.D=	.01	Total=	3
Pop.	5	From	1.40 to	1.60	Mean=	1.48	St.D=	.06	Total=	5

Sample No.: 11293 1 1A1
 Well Name: 130/2-3 1
 Depth: 12450mRKBcut 1
 Analyst: K. AASGAARD 1
 Date: 112.1.93 1



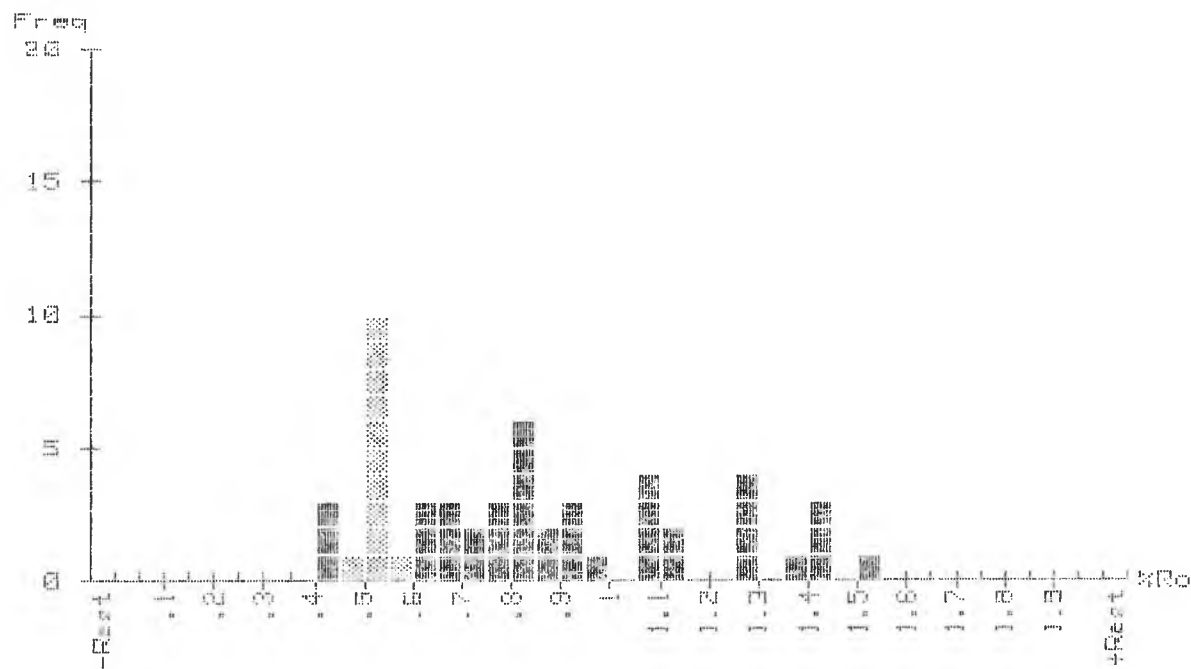
Pop.	From	To	Mean	St.D	Total
1	.20	.25			1
* 2	.35	.50	.45	.04	19
3	.50	.75	.61	.07	22
4	.80	1.00	.89	.05	7
5	1.10	1.15			0

Sample No.: 11293 1 1A1
 Well Name: 130/2-3
 Depth: 12450mRKBcut
 Analyst: K.AASGAARD
 Date: 112.1.93

Channel: R3 ST 1293
 No. of Measurements: 50
 Mean: .594
 Standard Deviation: .180
 Coeff. of Variation: .3025

	1	2	3	4	5	6	7	8	9	10
0	.249	.365	.401	.416	.420	.424	.435	.436	.438	.439
10	.450	.452	.453	.460	.466	.485	.495	.495	.495	.497
20	.503	.521	.552	.557	.558	.560	.560	.564	.570	.598
30	.601	.615	.625	.633	.638	.661	.671	.680	.691	.707
40	.710	.745	.811	.854	.893	.905	.912	.931	.951	1.133

Sample No.: 11294 1 1A1
 Well Name: 130/2-3
 Depth: 12560mRKBcut
 Analyst: K.AASGAARD
 Date: 14.1.91



Pop.	1	From	.40 to	.45	Mean=	.43	St.D=	.02	Total=	3
* Pop.	2	From	.45 to	.60	Mean=	.52	St.D=	.02	Total=	12
Pop.	3	From	.60 to	1.00	Mean=	.79	St.D=	.10	Total=	23
Pop.	4	From	1.05 to	1.15	Mean=	1.08	St.D=	.03	Total=	6
Pop.	5	From	1.25 to	1.55	Mean=	1.35	St.D=	.09	Total=	9

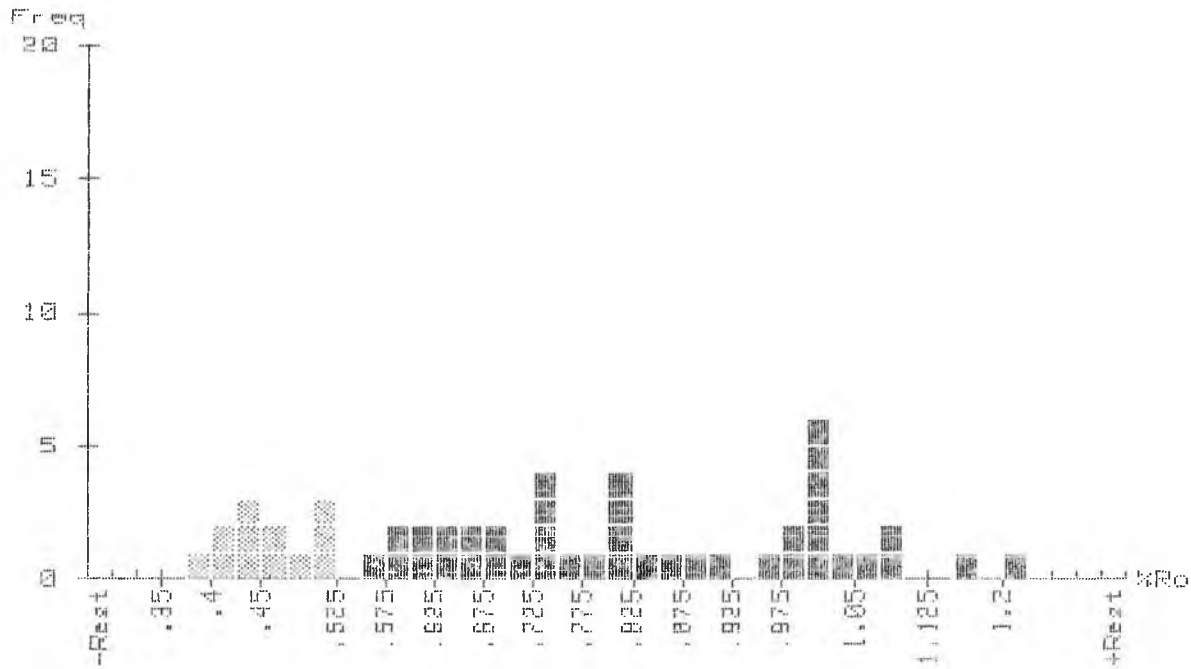
Sample No.: 11294 1 1A1
 Well Name: 130/2-3
 Depth: 12560mRKBcut
 Analyst: 1K. AASGAARD
 Date: 114.1.91

Channel: R1 ST 1294

No. of Measurements: 53
 Mean: .837
 Standard Deviation: .304
 Coeff. of Variation: .3636

	1	2	3	4	5	6	7	8	9	10
0	.412	.424	.445	.490	.507	.509	.510	.513	.515	.526
10	.526	.528	.530	.531	.583	.605	.624	.624	.674	.680
20	.696	.725	.745	.756	.788	.793	.810	.820	.826	.833
30	.835	.850	.867	.868	.909	.913	.927	.982	1.053	1.055
40	1.062	1.083	1.114	1.117	1.258	1.265	1.275	1.277	1.367	1.409
50	1.410	1.415	1.507							

Sample No.: 11295 1 1A)
 Well Name: 130/2-3
 Depth: 12660mRKBcut
 Analyst: K.AASGAARD
 Date: 14.1.91



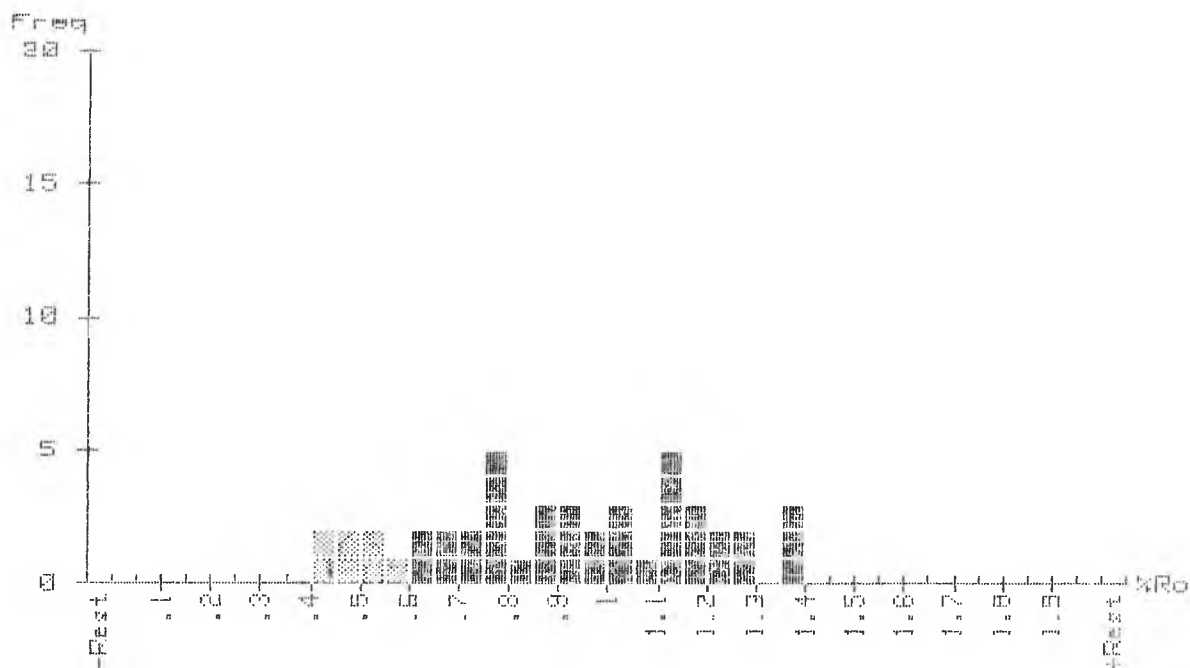
Pop.	From	To	Mean	St.D	Total
1	.38	.53	.46	.04	12
2	.55	.72	.63	.05	12
3	.72	.92	.81	.06	14
4	.95	1.10	1.02	.04	13
5	1.15	1.22	1.18	.04	2

Sample No.: 11295 1 1A1
 Well Name: 13072-3 |
 Depth: 12660mRKBcut |
 Analyst: 1K.AASGAARD |
 Date: 114.1.91 |

Channel: R2 ST 1295
 No. of Measurements: 53
 Mean: .755
 Standard Deviation: .227
 Coeff. of Variation: .3009

	1	2	3	4	5	6	7	8	9	10
0	.399	.401	.412	.428	.443	.449	.463	.468	.476	.500
10	.506	.523	.550	.582	.600	.613	.614	.626	.628	.650
20	.655	.680	.683	.708	.742	.743	.743	.746	.759	.786
30	.812	.821	.822	.824	.843	.858	.889	.903	.967	.981
40	.985	1.003	1.009	1.012	1.014	1.016	1.019	1.044	1.067	1.086
50	1.087	1.153	1.210							

Sample No.: 11296 | 1A1
 Well Name: 130/2-3 |
 Depth: 12760mRKBcut |
 Analyst: K. AASGAARD |
 Date: 14.1.91 |



Pop.	From	To	Mean	St.D	Total
* Pop. 1	From .40 to .60	Mean= .49	St.D= .06	Total= 7	
Pop. 2	From .60 to .85	Mean= .72	St.D= .07	Total= 12	
Pop. 3	From .85 to 1.10	Mean= .95	St.D= .07	Total= 12	
Pop. 4	From 1.10 to 1.30	Mean= 1.17	St.D= .06	Total= 12	
Pop. 5	From 1.35 to 1.40	Mean= 1.38	St.D= .02	Total= 3	

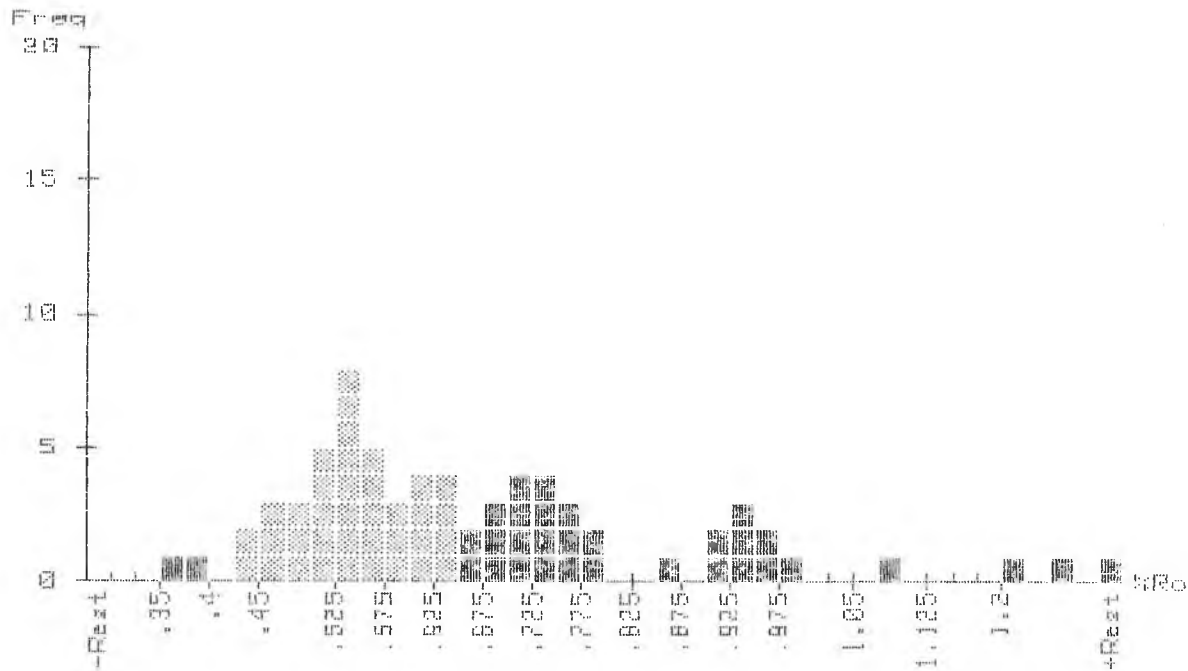
Sample No.: 11296 1 1A1
 Well Name: 130/2-3 |
 Depth: 12760mRKBcut |
 Analyst: 1K. AASGAARD |
 Date: 114.1.91 |

Channel: R3 ST 1296

No. of Measurements: 46
 Mean: .908
 Standard Deviation: .271
 Coeff. of Variation: .2986

	1	2	3	4	5	6	7	8	9	10
0	.406	.430	.476	.492	.520	.534	.578	.610	.633	.65
10	.696	.708	.728	.752	.755	.763	.797	.798	.803	.85
20	.871	.899	.903	.908	.930	.952	.987	1.011	1.022	1.02
30	1.074	1.103	1.109	1.111	1.133	1.134	1.163	1.168	1.187	1.20
40	1.215	1.273	1.283	1.363	1.369	1.394				

Sample No.: 11297 | 1A1
 Well Name: 130/2-3 |
 Depth: 12850mRKBcut |
 Analyst: 1K. AASGAARD |
 Date: 118.1.93 |



Pop.	From	To	Mean	St. D.	Total
1	.35	.40	.38	.01	2
2	.43	.65	.54	.06	37
3	.65	.80	.72	.04	18
4	.85	1.00	.94	.04	9
5	1.07	1.30	1.19	.09	3

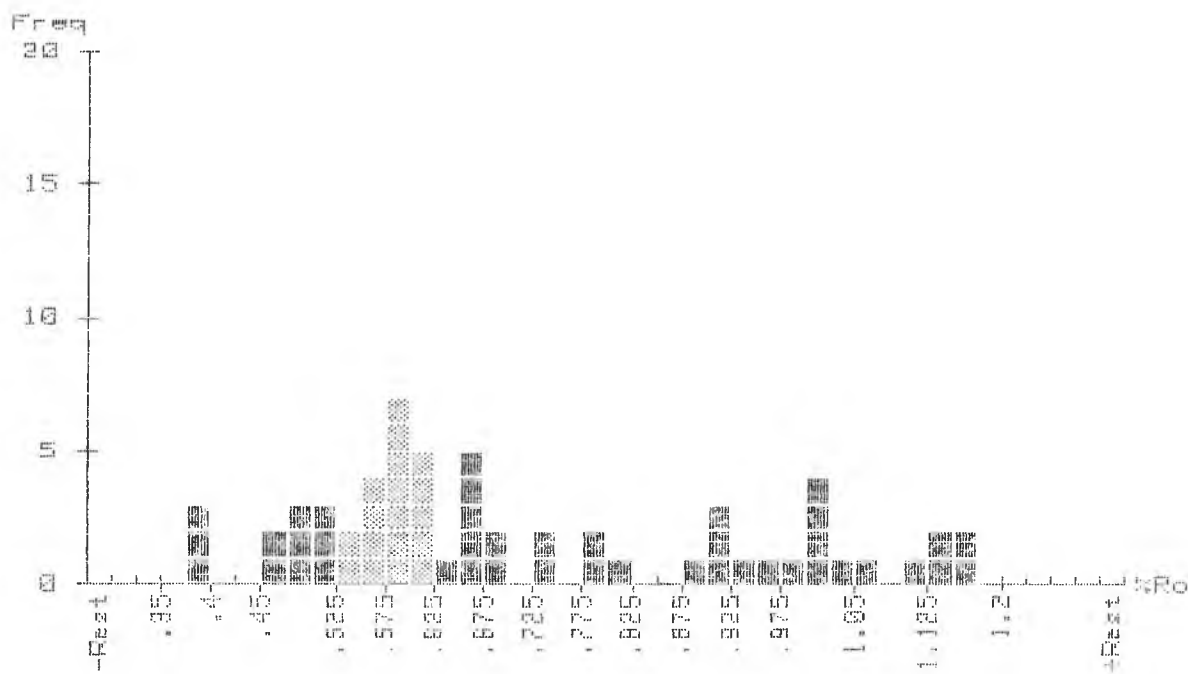
Sample No.: {1297 } {1A}
 Well Name: {30/2-3 }
 Depth: {2850mRKBcut }
 Analyst: {K. AASGAARD }
 Date: {18.1.93 }

Channel: R1 ST 1297

No. of Measurements: 70
 Mean: .675
 Standard Deviation: .202
 Coeff. of Variation: .2999

	1	2	3	4	5	6	7	8	9	10
0	.375	.385	.426	.442	.456	.465	.474	.482	.485	.500
10	.501	.503	.513	.522	.523	.533	.541	.544	.545	.549
20	.548	.549	.549	.550	.550	.550	.552	.566	.577	.578
30	.580	.600	.606	.611	.615	.633	.633	.637	.641	.654
40	.668	.677	.678	.698	.700	.708	.708	.709	.731	.741
50	.741	.743	.758	.766	.769	.785	.798	.867	.906	.924
60	.934	.935	.943	.963	.974	.991	1.083	1.206	1.266	1.310

Sample No.: 11298 1 1A1
 Well Name: 130/2-3
 Depth: 12950mRKBcut
 Analyst: K. AASGAARD
 Date: 18.1.93



Pop.	1	From	.38	to	.53	Mean=	.46	St.D=	.05	Total=	11
* Pop.	2	From	.53	to	.62	Mean=	.59	St.D=	.03	Total=	18
Pop.	3	From	.62	to	.82	Mean=	.71	St.D=	.06	Total=	13
Pop.	4	From	.87	to	1.17	Mean=	1.02	St.D=	.09	Total=	18

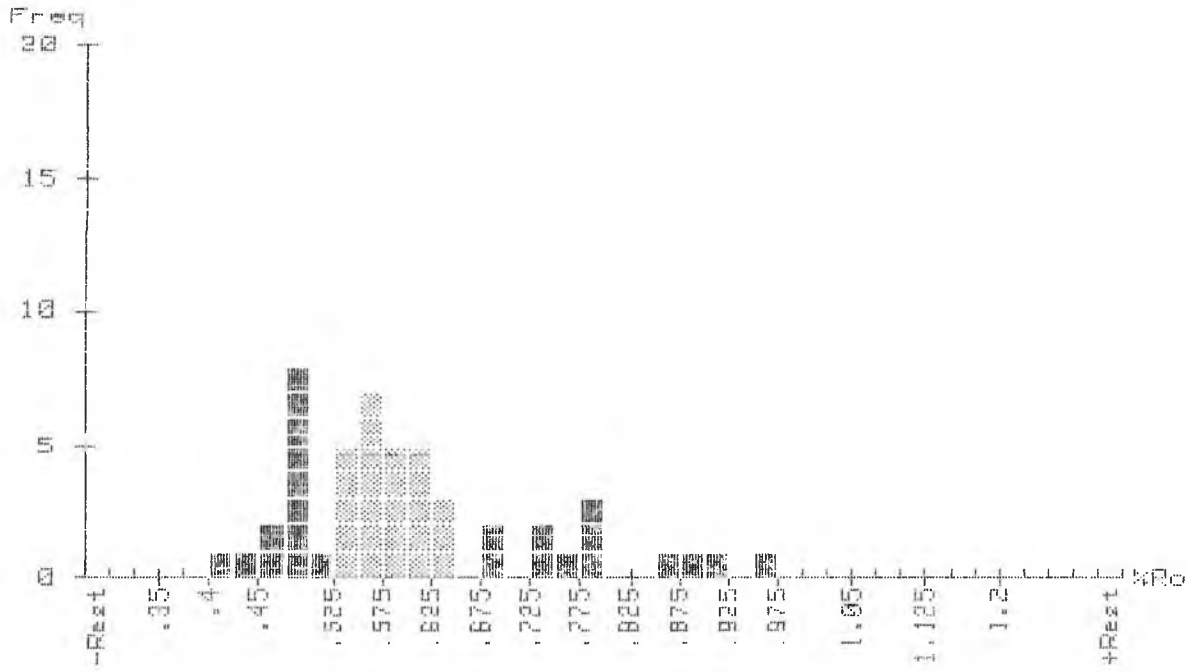
Sample No.: 11298 1 1A1
 Well Name: 130/2-3 |
 Depth: 12950mRKBcut |
 Analyst: K. AASGAARD |
 Date: 118.1.93 |

Channel: R2 ST 1298

No. of Measurements: 60
 Mean: .720
 Standard Deviation: .220
 Coeff. of Variation: .3060

	1	2	3	4	5	6	7	8	9	10
0	.393	.396	.398	.462	.472	.480	.484	.500	.506	.50
10	.510	.539	.546	.556	.560	.561	.573	.589	.591	.59
20	.594	.595	.597	.597	.606	.608	.613	.622	.622	.63
30	.659	.665	.666	.667	.671	.679	.683	.726	.750	.79
40	.799	.821	.882	.913	.915	.919	.945	.971	.985	1.00
50	1.003	1.006	1.007	1.037	1.054	1.111	1.129	1.142	1.160	1.16

Sample No.: 11299 1 1A)
 Well Name: 130/2-3
 Depth: 13160mRKBcut
 Analyst: K.AASGAARD
 Date: 118.1.93



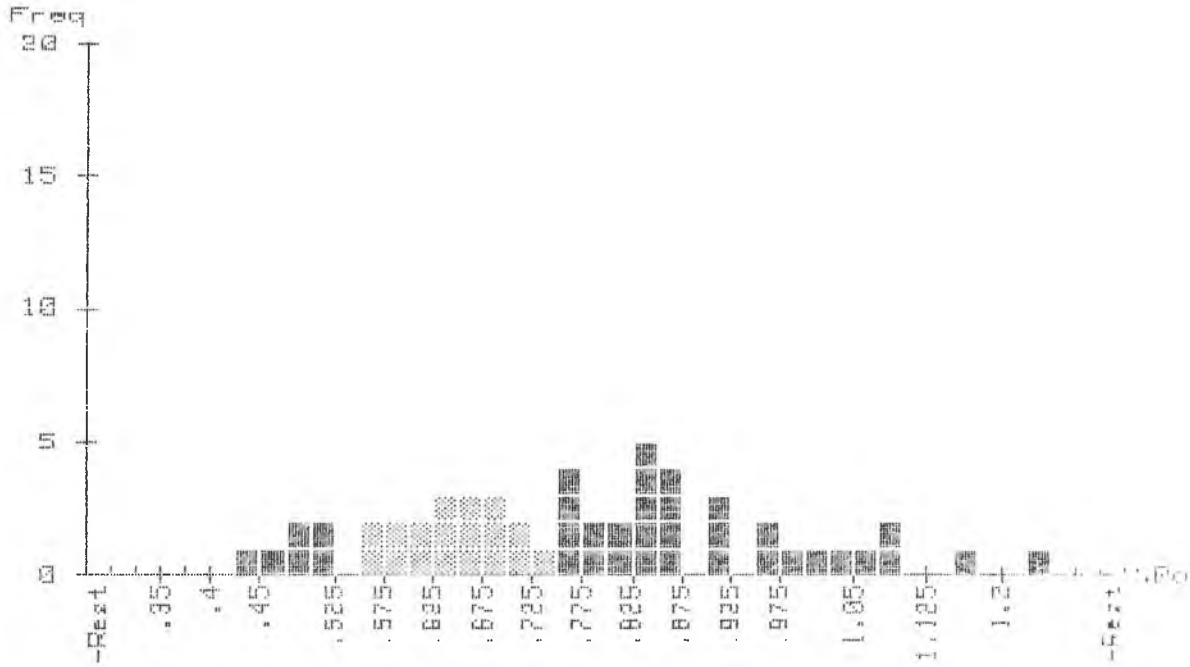
Pop.	From	to	Mean	St.D	Total
1	.40	.53	.48	.03	13
2	.53	.65	.58	.03	25
3	.68	.80	.75	.05	8
4	.85	.98	.91	.05	4

Sample No.: 11299 | 1A1
 Well Name: 13072-3 |
 Depth: 13160mRKBcut |
 Analyst: K.AASGAARD |
 Date: 18.1.93 |

Channel: R3 ST 1299
 No. of Measurements: 50
 Mean: .607
 Standard Deviation: .128
 Coeff. of Variation: .2103

	1	2	3	4	5	6	7	8	9	10
0	.425	.434	.457	.465	.488	.488	.488	.488	.488	.492
10	.493	.493	.520	.536	.536	.538	.548	.549	.561	.562
20	.562	.566	.567	.571	.571	.578	.580	.582	.582	.591
30	.606	.608	.613	.614	.623	.625	.626	.637	.680	.689
40	.729	.748	.754	.790	.794	.795	.865	.878	.909	.971

Sample No.: 11300 (1A)
 Well Name: 130/2-3
 Depth: 13250mRKBcut
 Analyst: K.AASGAARD
 Date: 118.1.93



Pop.	From	to	Mean	St.D	Total
1	.43	.53	.48	.03	6
* 2	.55	.75	.65	.06	18
3	.75	.87	.82	.04	17
4	.90	1.25	1.02	.10	13

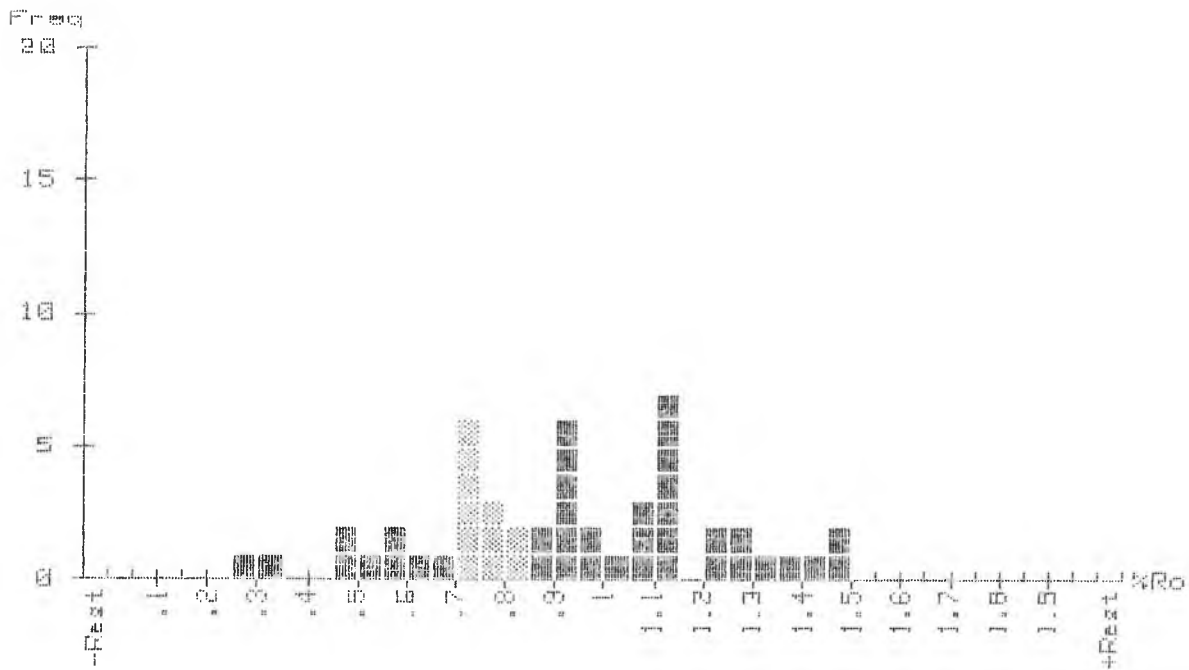
Sample No.: 11300 1 1A1
 Well Name: 130/2-3
 Depth: 13250mRKBcut
 Analyst: K.AASGAARD
 Date: 11B.1.93

Channel: R4 ST 1300

No. of Measurements: 54
 Mean: .774
 Standard Deviation: .188
 Coeff. of Variation: .2428

	1	2	3	4	5	6	7	8	9	10
0	.427	.461	.483	.489	.504	.514	.555	.555	.579	.591
10	.611	.615	.635	.639	.646	.653	.657	.659	.679	.686
20	.700	.707	.724	.749	.754	.763	.765	.767	.775	.789
30	.811	.812	.840	.844	.848	.849	.850	.861	.870	.873
40	.874	.901	.902	.906	.970	.970	.976	1.010	1.048	1.051
50	1.094	1.097	1.157	1.229						

Sample No.: 11301 1 1A1
 Well Name: 130/2-3
 Depth: 13390mRKBcut
 Analyst: K.AASGAARD
 Date: 121.1.93



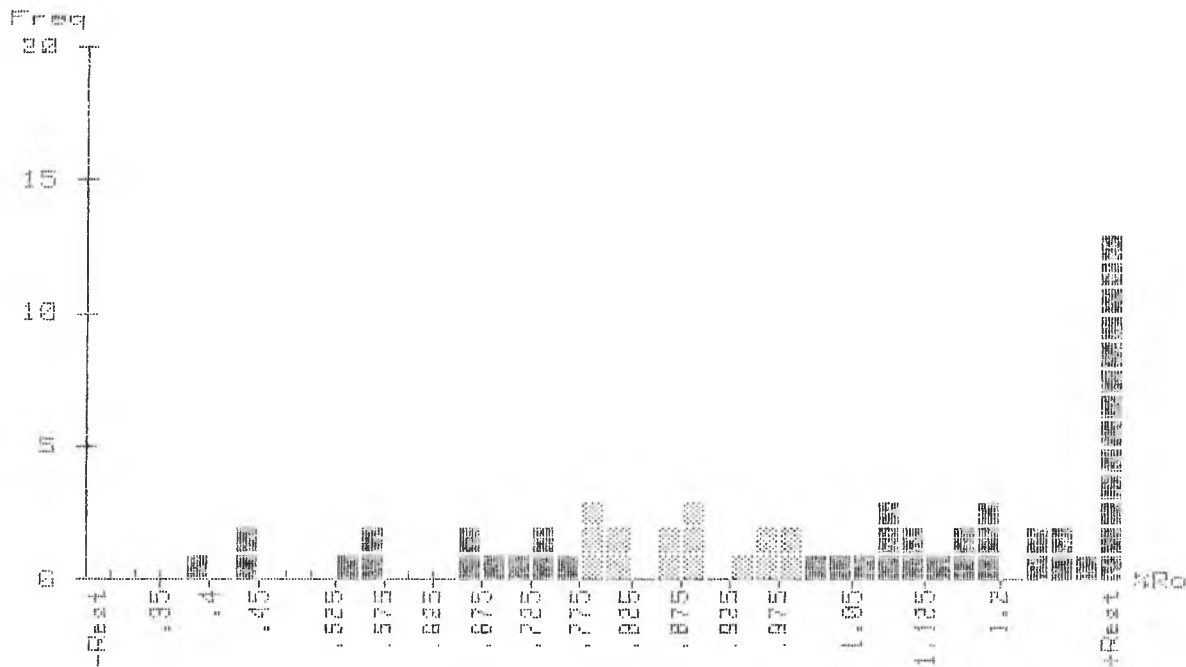
Pop.	From	to	Mean	St.D	Total
1	.25	.35	.30	.03	2
2	.45	.70	.57	.09	7
3	.70	.85	.76	.04	11
4	.85	1.00	.92	.05	10
5	1.00	1.50	1.22	.14	20

Sample No.: 11301 | 1A |
 Well Name: 130/2-3 |
 Depth: 13390mRKBcut |
 Analyst: H. AASGAARD |
 Date: 121.1.93 |

Channel: R2 ST 1301
 No. of Measurements: 50
 Mean: .928
 Standard Deviation: .291
 Coeff. of Variation: .3132

	1	2	3	4	5	6	7	8	9	10
0	.279	.325	.453	.461	.543	.576	.598	.647	.693	.706
10	.709	.728	.729	.735	.745	.762	.790	.793	.808	.820
20	.851	.858	.901	.903	.909	.914	.916	.930	.991	.994
30	1.018	1.081	1.090	1.099	1.109	1.117	1.121	1.130	1.143	1.147
40	1.149	1.201	1.240	1.271	1.299	1.317	1.355	1.434	1.492	1.495

Sample No.: 11302 1 1A1
 Well Name: 130/2-3
 Depth: 13590mRKBcut
 Analyst: K. AASGAARD
 Date: 120.1.93



Pop.	From	To	Mean	St.D	Total
1	.38	.77	.60	.13	13
* 2	.77	1.00	.88	.08	15
3	1.00	1.20	1.12	.06	14
4	1.22	1.30	1.26	.02	5

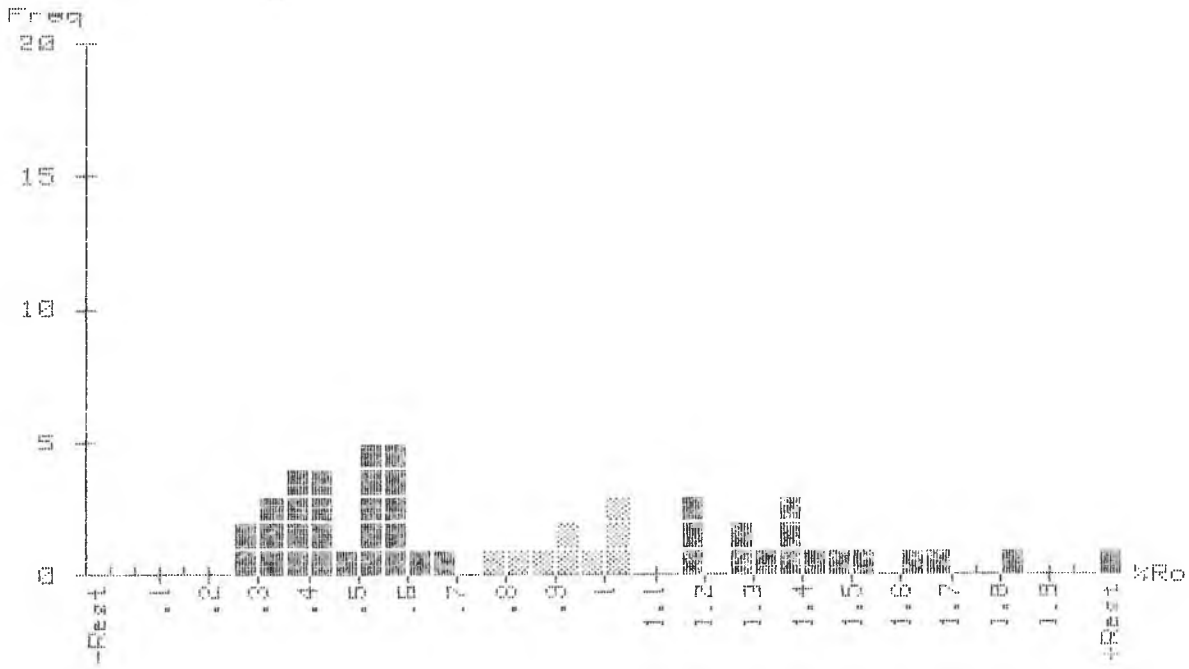
Sample No.: 11302 1 (A)
 Well Name: 130/2-3
 Depth: 13590mRKBcut
 Analyst: K.AASGAARD
 Date: 120.1.93

Channel: R1 ST 1302

No. of Measurements: 60
 Mean: 1.029
 Standard Deviation: .315
 Coeff. of Variation: .3059

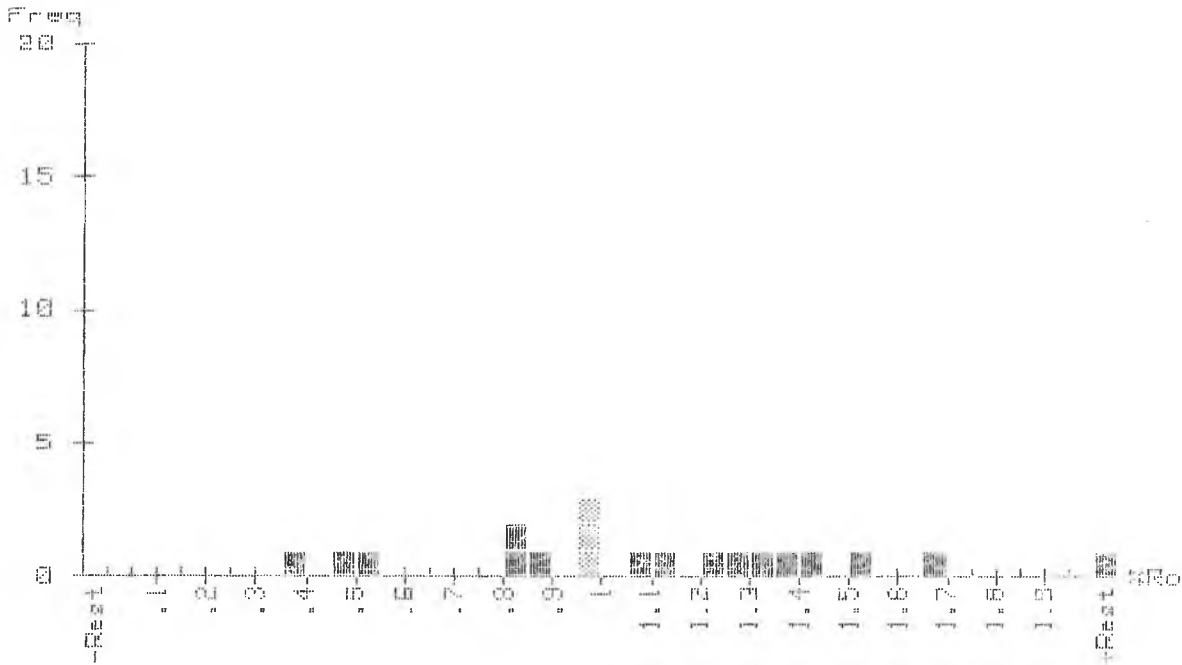
	1	2	3	4	5	6	7	8	9	10
0	.387	.431	.441	.547	.563	.567	.651	.659	.680	.70
10	.726	.735	.764	.777	.790	.797	.807	.812	.852	.860
20	.887	.887	.899	.930	.953	.967	.994	.997	1.012	1.040
30	1.055	1.088	1.091	1.096	1.103	1.123	1.141	1.161	1.167	1.170
40	1.183	1.193	1.238	1.242	1.255	1.269	1.283	1.308	1.333	1.340
50	1.345	1.354	1.389	1.394	1.407	1.411	1.462	1.538	1.707	1.780

Sample No.: 11303 1 1A1
 Well Name: 130/2-3
 Depth: 13675mRKBcut
 Analyst: K.AASGAARD
 Date: 120.1.93



Pop.	From	To	Mean	St.D	Total
1	.25	.70	.47	.11	36
* 2	.75	1.05	.93	.10	9
3	1.15	2.00	1.41	.19	15

Sample No.: 11304 1 1A1
 Well Name: 130/2-3
 Depth: 13761mRKBswc
 Analyst: K.AASGAARD
 Date: 120.1.93



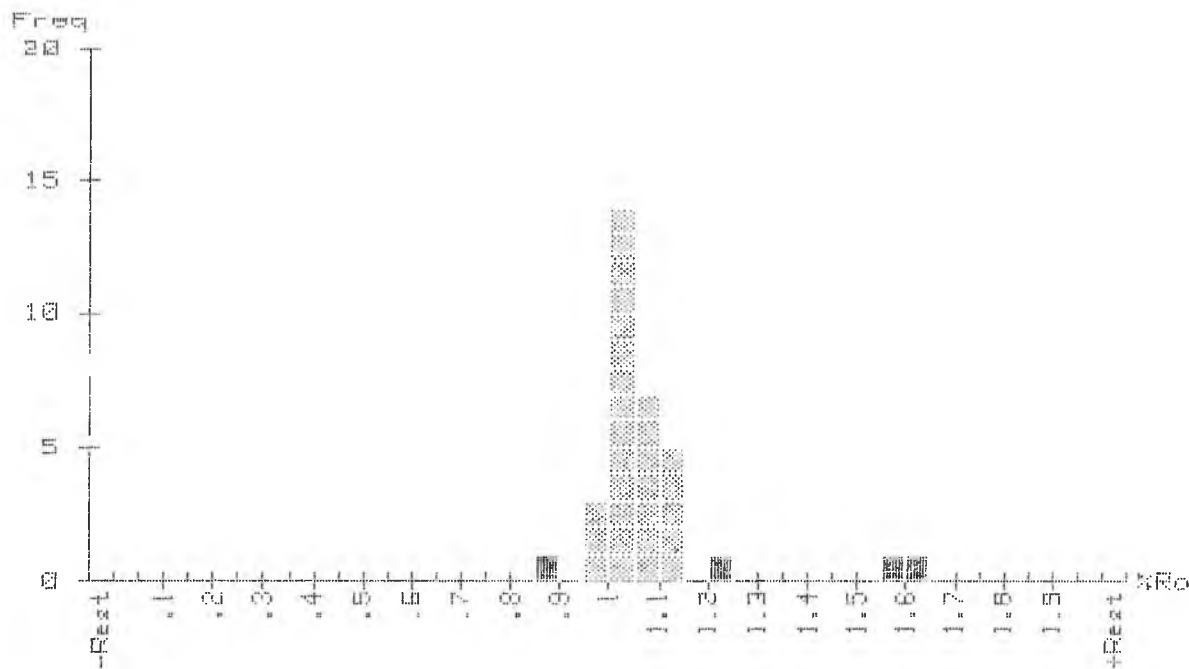
Pop.	From	To	Mean	St.D	Total
1	.35	.55	.47	.07	3
2	.80	.90	.84	.04	3
3	.95	1.00	.97	.02	3
4	1.05	2.00	1.34	.19	9

Sample No.: 11304 | 1A |
 Well Name: 130/2-3 |
 Depth: 13761mRKBswc |
 Analyst: K.AASGAARD |
 Date: 120.1.93 |

Channel: R3 ST 1304
 No. of Measurements: 19
 Mean: 1.106
 Standard Deviation: .428
 Coeff. of Variation: .3871

	1	2	3	4	5	6	7	8	9	10
0	.389	.488	.527	.810	.840	.884	.957	.963	.988	1.06
10	1.103	1.242	1.291	1.342	1.355	1.421	1.517	1.676	2.125	

Sample No.: 11305 1 1A1
 Well Name: 130/2-3
 Depth: 13824.37-39mRKBcore
 Analyst: IK.AASGAARD
 Date: 120.1.93



Pop.	From	To	Mean	St.D	Total
1	.85	.90			1
* 2	.95	1.15	1.05	.05	29
3	1.20	1.25			1
4	1.55	1.65	1.62	.03	2

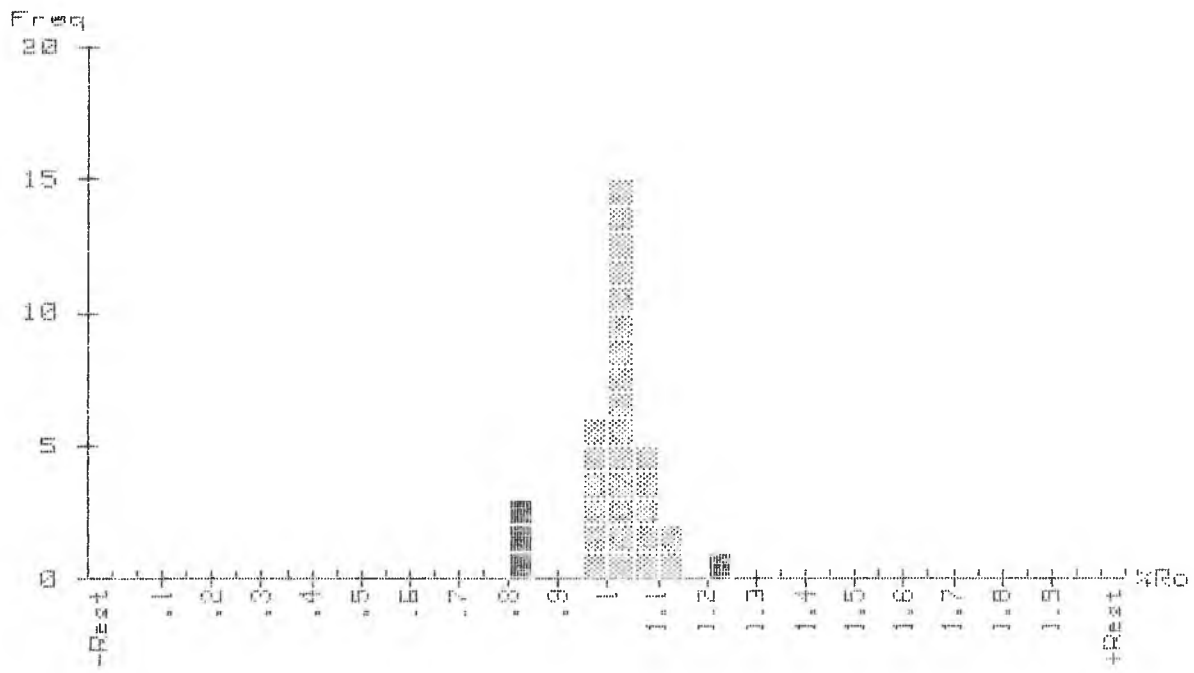
Sample No.: 11305 1 1A1
 Well Name: 130/2-3
 Depth: 13824.37-39mRKBcore
 Analyst: K. AASGAARD
 Date: 120.1.93

Channel: R4 ST 1305

No. of Measurements: 33
 Mean: 1.085
 Standard Deviation: .150
 Coeff. of Variation: .1384

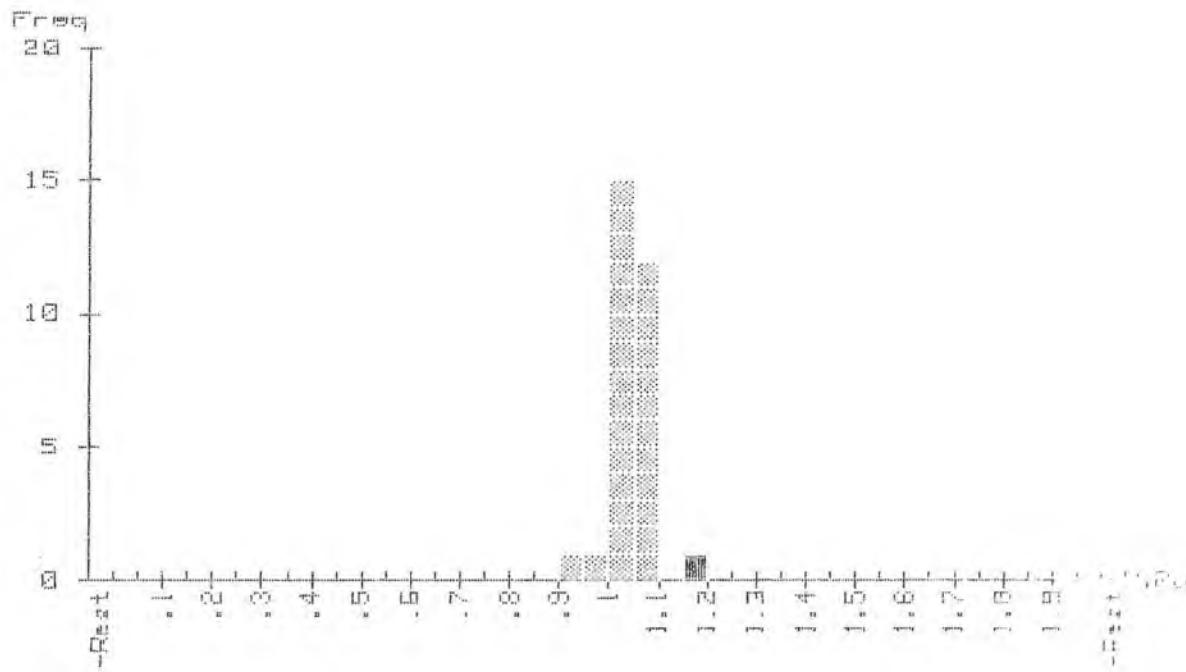
	1	2	3	4	5	6	7	8	9	10
0	.887	.954	.967	.991	1.000	1.005	1.006	1.012	1.020	1.025
10	1.032	1.034	1.034	1.037	1.040	1.044	1.045	1.050	1.052	1.055
20	1.073	1.081	1.089	1.097	1.098	1.102	1.112	1.135	1.138	1.145
30	1.208	1.591	1.640							

Sample No.: 11306 1 1A1
 Well Name: 130/2-3
 Depth: 13868.28-29mRKBcore
 Analyst: K. AASGAARD
 Date: 120.1.93



Pop.	From	To	Mean	St.D	Total
1	.80	.85	.82	0.00	3
* Pop. 2	.95	1.15	1.03	.04	28
Pop. 3	1.20	1.25			0

Sample No.: 11307 1 1A1
 Well Name: 130/2-3
 Depth: 13929.27-29mRKBcore
 Analyst: K.AABGAARD
 Date: 120.1.93



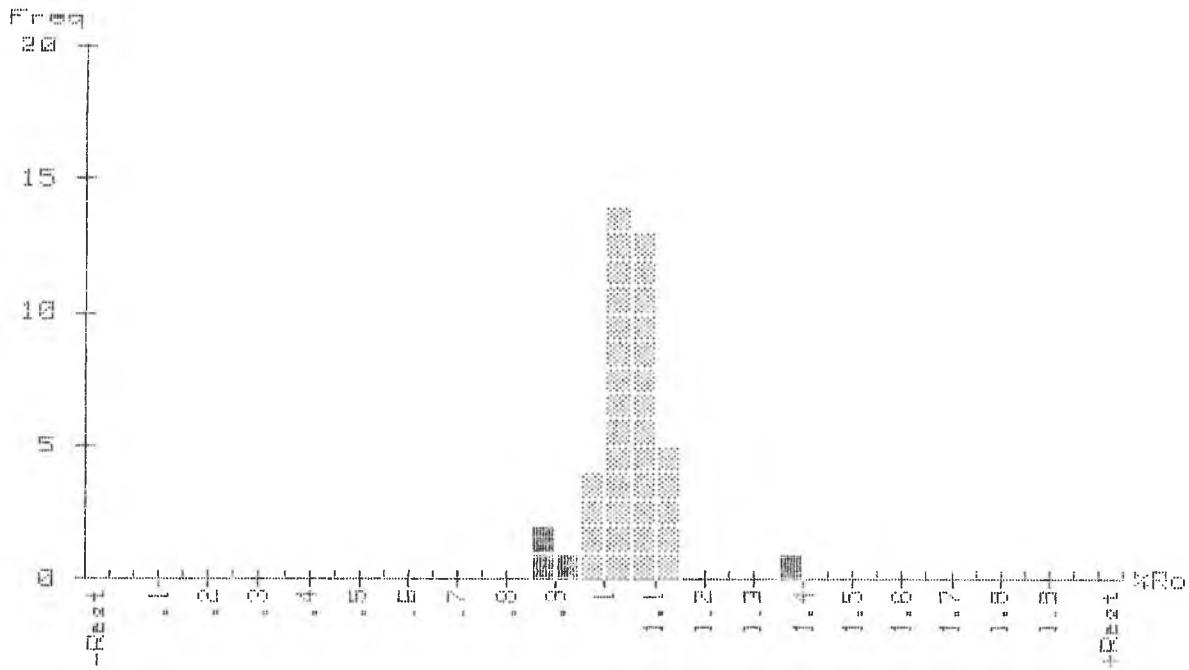
* Pop.	1	From	.90 to	1.10	Mean=	1.04	St.D=	.03	Total=	29
	2	From	1.15 to	1.20					total=	0

Sample No.: 11307 1 1A1
 Well Name: 130/2-3 |
 Depth: 13929.27-28mRKBcore |
 Analyst: 1K.AASGAARD |
 Date: 120.1.93 |

Channel: R2 ST 1307
 No. of Measurements: 30
 Mean: 1.043
 Standard Deviation: .039
 Coeff. of Variation: .0377

	1	2	3	4	5	6	7	8	9	10
0	.922	.994	1.005	1.009	1.015	1.017	1.021	1.025	1.029	1.029
10	1.029	1.030	1.038	1.040	1.047	1.047	1.049	1.053	1.055	1.055
20	1.057	1.058	1.063	1.067	1.069	1.071	1.072	1.076	1.088	1.165

Sample No.: 11308 1 1A1
 Well Name: 130/2-3
 Depth: 13987mRKB *see cut*
 Analyst: K. AASGAARD
 Date: 120.1.93



Pop.	From	To	Mean	St.D	Total
1	.85	.95	.90	.05	3
* 2	.95	1.15	1.05	.04	36
3	1.35	1.40			0

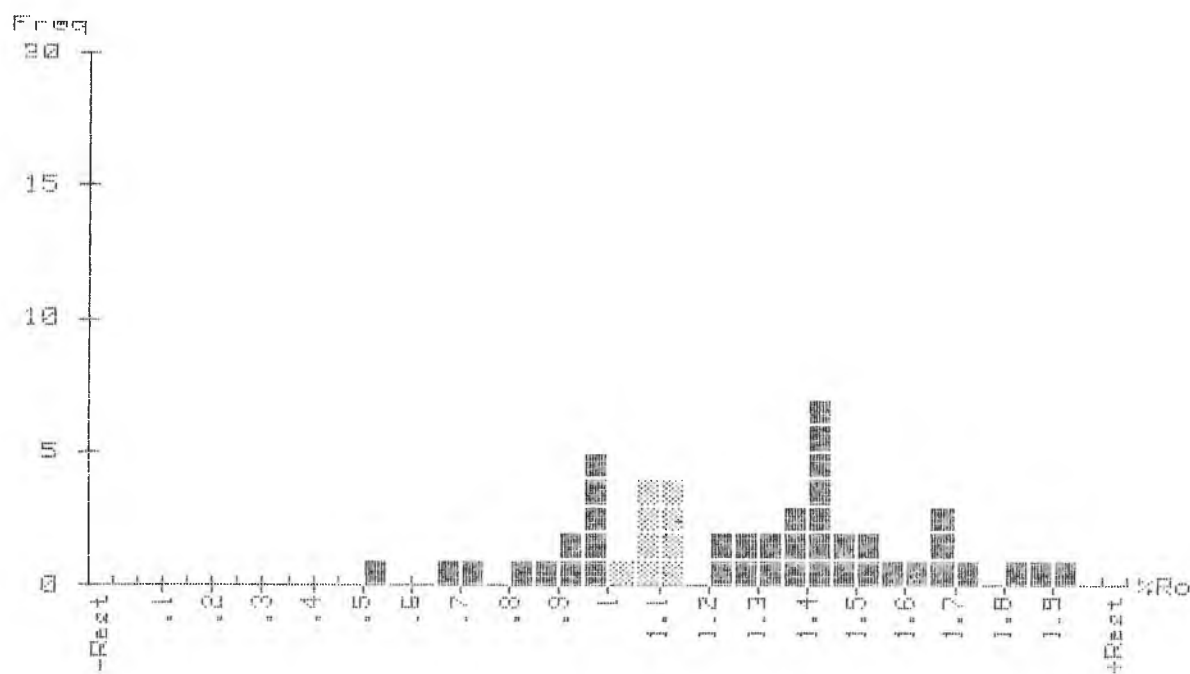
Sample No.: 11308 1 1A1
 Well Name: 130/2-3
 Depth: 13987mRKBswc
 Analyst: K. AASGAARD
 Date: 120.1.93

Channel: R3 ST 1308

No. of Measurements: 40
 Mean: 1.049
 Standard Deviation: .082
 Coeff. of Variation: .0778

	1	2	3	4	5	6	7	8	9	10
0	.858	.879	.949	.970	.983	.983	.998	1.001	1.004	1.016
10	1.017	1.021	1.023	1.023	1.026	1.028	1.029	1.039	1.039	1.049
20	1.048	1.057	1.058	1.060	1.064	1.069	1.072	1.077	1.078	1.079
30	1.085	1.087	1.090	1.095	1.111	1.117	1.124	1.127	1.128	1.394

Sample No.: 11309 1 (A)
 Well Name: 130/2-3
 Depth: 14095mRKB ~~Base~~ cut
 Analyst: K. AASGAARD
 Date: 120.1.93



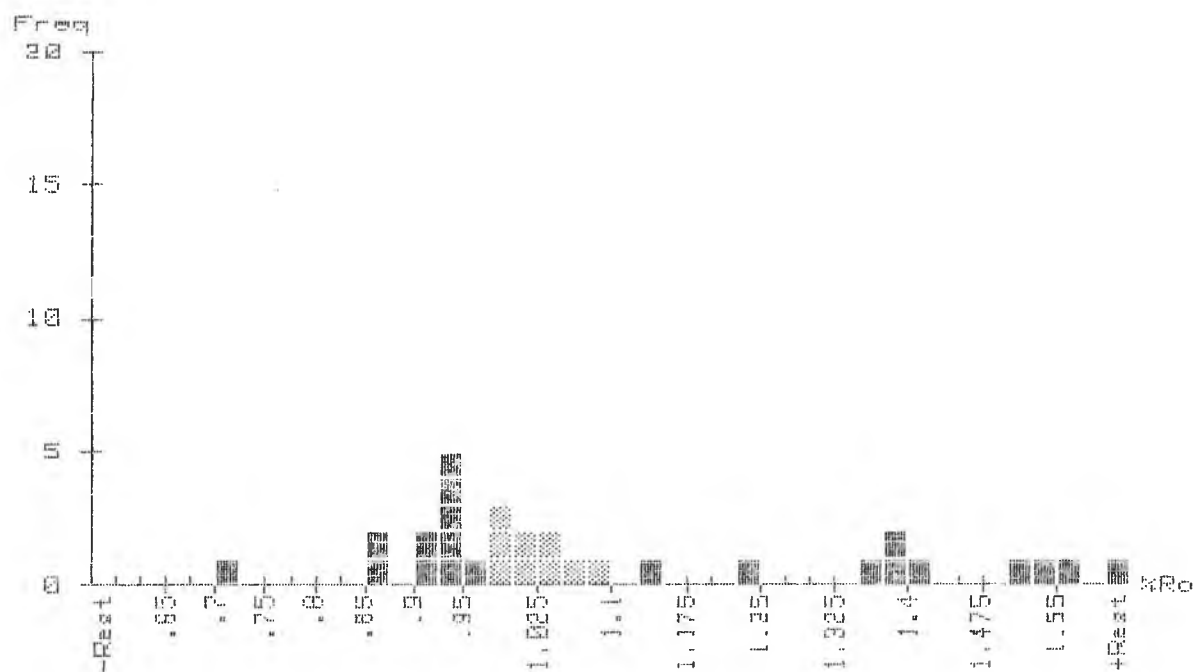
Pop. #	From	To	Mean	St.D	Total
1	.50	.75	.65	.09	3
2	.80	1.00	.93	.06	9
3	1.00	1.15	1.09	.03	9
4	1.20	1.55	1.39	.08	20
5	1.55	1.95	1.74	.12	9

Sample No.: 11309 | 1A1
 Well Name: 130/2-3 |
 Depth: 14095mRKBcore |
 Analyst: K.AASGAARD |
 Date: 120.1.93 |

Channel: R4 ST 1309
 No. of Measurements: 50
 Mean: 1.272
 Standard Deviation: .319
 Coeff. of Variation: .2509

	1	2	3	4	5	6	7	8	9	10
0	.547	.672	.734	.809	.865	.922	.941	.950	.961	.972
10	.989	.993	1.037	1.062	1.078	1.088	1.091	1.106	1.120	1.124
20	1.137	1.242	1.246	1.276	1.294	1.302	1.338	1.363	1.379	1.392
30	1.402	1.403	1.416	1.416	1.430	1.436	1.443	1.451	1.474	1.523
40	1.526	1.589	1.621	1.673	1.686	1.695	1.732	1.848	1.893	1.905

Sample No.: 11310 1 1A1
 Well Name: 130/2-3
 Depth: 1417.6mRKB ~~core~~ cut
 Analyst: K.AASGAARD
 Date: 120.1.93



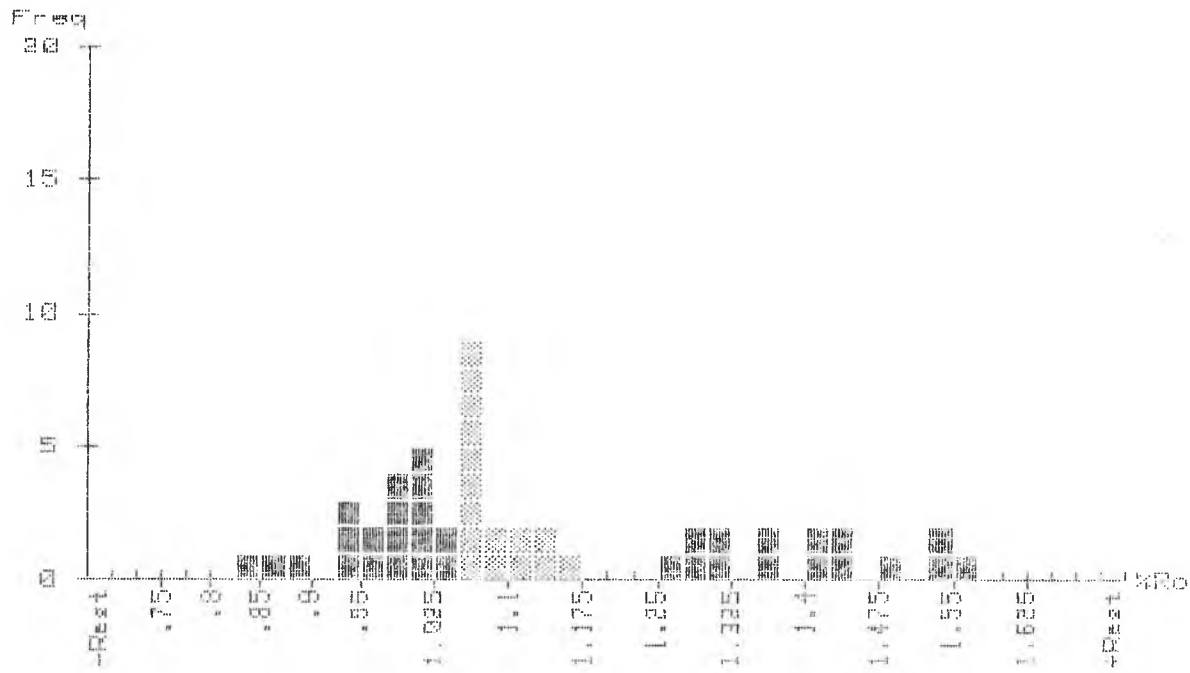
Pop.	From	to	Mean	St.D	Total
1	.70	.72			1
2	.85	.97	.92	.04	10
* 3	.97	1.10	1.03	.03	9
4	1.12	1.25	1.19	.07	2
5	1.35	1.60	1.45	.08	7

Sample No.: 11310 | 1A1
 Well Name: 130/2-3 |
 Depth: 14176mRKBcore |
 Analyst: K.AASGAARD |
 Date: 120.1.93 |

Channel: R1 ST 1310
 No. of Measurements: 30
 Mean: 1.110
 Standard Deviation: .244
 Coeff. of Variation: .2196

	1	2	3	4	5	6	7	8	9	10
0	.724	.851	.871	.900	.901	.926	.929	.942	.945	.948
10	.973	.987	.993	.996	1.008	1.019	1.044	1.045	1.071	1.081
20	1.138	1.239	1.370	1.379	1.390	1.405	1.525	1.574	1.555	1.611

Sample No.: 11311 1 1A1
 Well Name: 130/2-3
 Depth: 14290mRKBcut
 Analyst: K.AASGAARD
 Date: 121.1.93



Pop.	From	to	Mean	St.D	Total
1	.82	.90	.87	.02	3
2	.92	1.05	.99	.03	16
3	1.05	1.17	1.09	.03	16
4	1.25	1.32	1.29	.02	5
5	1.35	1.57	1.45	.08	10

Sample No.: 11311 | 1A |
 Well Name: 13072-3 |
 Depth: 14290mRKBcut |
 Analyst: K.AASGAARD |
 Date: 121.1.93 |

Channel: R1 ST 1311

No. of Measurements: 50
 Mean: 1.137
 Standard Deviation: .193
 Coeff. of Variation: .1695

	1	2	3	4	5	6	7	8	9	10
0	.850	.861	.891	.930	.930	.947	.957	.972	.976	.981
10	.995	1.000	1.004	1.005	1.009	1.013	1.016	1.025	1.044	1.051
20	1.057	1.058	1.059	1.060	1.061	1.070	1.071	1.074	1.091	1.091
30	1.113	1.124	1.128	1.147	1.154	1.271	1.281	1.284	1.307	1.321
40	1.352	1.360	1.405	1.413	1.434	1.445	1.481	1.529	1.544	1.570