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Report No. EPGS-DOM.4-87MPA

Vitrinite reflectance (Ro)
of dispersed organics
from
Husky-Bow Valley et al
Trave E-87

Eastern Petroleum Geology Subdivision
Atlantic Geoscience Centre, G.S.C., Dartmouth
August 13, 1987

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Remarks

There was ample sample coverage of vitrinite reflectance data (Figure I, Table II) over most of the section penetrated by Trave E-87. The data are plotted on a log Ro vs. linear depth scale and linear regression lines were calculated by the least squares method. The 'error bars' plotted on the maturation profile (Figure 1) indicate one standard deviation on either side of the mean and may appear deceptively small for samples with very few readings. The slope of the upper maturation line is 0.172 log/km and 0.280 log/km for the lower line.

Selection of the reflectance population which represented the true maturation of the sediments was significantly aided by our recently developed histogram display plot (Figure 2). This interpretation tool helps to reveal linear trends (populations) in the Ro data. It also demonstrates the effects of cavings, geology, casing points and other factors on the vitrinite reflectance populations.

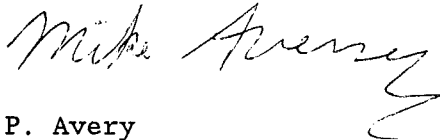
The lithology strip plot (Figure 1) was produced directly from the E.P.G. LITHFILE database which extracts data from digitized CANSTRAT logs.

The vitrinite reflectance data provides evidence that the thermal regime at Trave E-87 was suitable for the generation and preservation of hydrocarbons within the drilled section assuming potential source rocks and traps were present.

References

- Canada Oil and Gas Lands Administration, 1987. Offshore schedule of wells. Department of Energy, Mines and Resources, Ottawa.
- Dow, W.G., 1977. Kerogen studies and geological interpretations. Journal of Geochemical Exploration, no. 7, p. 77-99
- Husky-Bow Valley et al., 1984. Well history report Husky-Bow Valley et al. Trave E-87. Open File report, Department of Energy, Mines and Resources, Ottawa.

August 13, 1987



M.P. Avery
Eastern Petroleum Geology

MPA

c.c. K.D. McAlpine, E.P.G.S., Dartmouth
A.E. Jackson, E.P.G.S., Dartmouth
E.P.G.S. Files, Dartmouth
G.R. Campbell, COGLA, Ottawa
Central Technical Files, Ottawa
J.S. Bell, I.S.P.G., Calgary
L.R. Snowdon, I.S.P.G., Calgary
D. Skibo, I.S.P.G., Calgary
C. Beaumont, Dalhousie Univ., Halifax
D.F. Sherwin, CNOPB, St. John's

Table II

Summary of kerogen - based vitrinite reflectance

Seq. #	Sample #	Depths in meters	Mean Ro (SD) non-rotated	Number of Readings	
				Total	Edited
1	K0583A	920-930	.32(±.04)	26	16
2	K0583B	1040-1050	.34(±.02)	16	5
3	K0583C	1220-1230	.37(±.00)	6	1
4	K0584A	1370-1380	.34(±.05)	19	12
5	K0584B	1430-1440	.36(±.06)	24	18
6	K0584C	1520-1530	.37(±.05)	25	15
7	K0585A	1610-1620	.34(±.01)	10	3
8	K0585B	1700-1710	.41(±.03)	17	6
9	K0585C	1790-1800	.41(±.04)	16	8
10	K0586A	1880-1890	.49(±.09)	28	11
11	K0586B	1970-1980	.52(±.00)	13	1
12	K0586C	2060-2070	.49(±.04)	25	17
13	K0587A	2210-2220	.49(±.06)	25	18
14	K0587B	2330-2340	.65(±.05)	7	2
15	K0588C	2750-2760	.68(±.07)	19	11
16	K0589A	2870-2880	.76(±.07)	41	20
17	K0589B	2960-2970	.75(±.07)	63	26
18	K0589C	3050-3060	.84(±.04)	38	13
19	K0590A	3140-3150	.87(±.05)	43	8
20	K0590B	3230-3240	.98(±.09)	16	8
21	K0590C	3320-3330	.98(±.07)	60	23
22	K0591A	3410-3420	.99(±.10)	71	35
23	K0591B	3500-3510	1.01(±.08)	84	20
24	K0591C	3590-3600	1.12(±.04)	41	11
25	K0592A	3680-3690	1.32(±.08)	83	42
26	K0592B	3770-3780	1.48(±.13)	67	38
27	K0592C	3830-3840	1.55(±.10)	83	49
28	K0593A	3920-3930	1.67(±.10)	91	43
29	K0593B	3975-3985	1.56(±.08)	50	26

Note: All samples are kerogen concentrate type

Table III

Formation Tops (McAlpine, pers. comm.)*

Formation	Depth
Banquereau Fm	in casing
Paleocene U/C	2112m
S. Mara unit	2112m
Base Tertiary U/C	2145m
Hibernia Fm	2145m
Fortune Bay Fm	2520m
Jeanne d'Arc Fm	2737m
Kimmeridgian U/C	2850m?
Rankin Fm	2850m
Egret Mbr	3046-3165m
Voyager Fm	3775m
T.D.	3985m

* Preliminary stratigraphic picks.

Vitrinite Reflectance

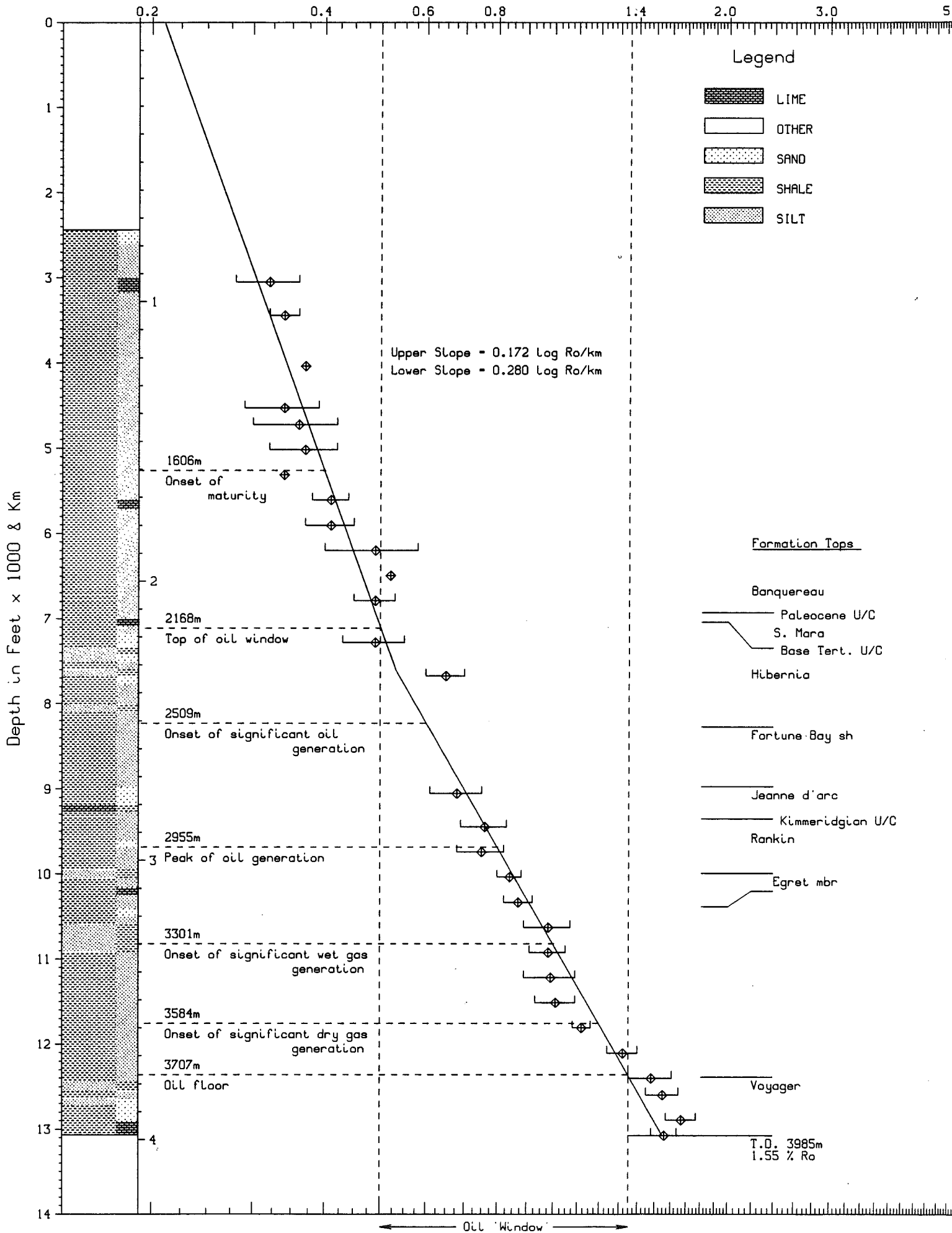


Fig. 1. Trace E-87

Vitrinite Reflectance

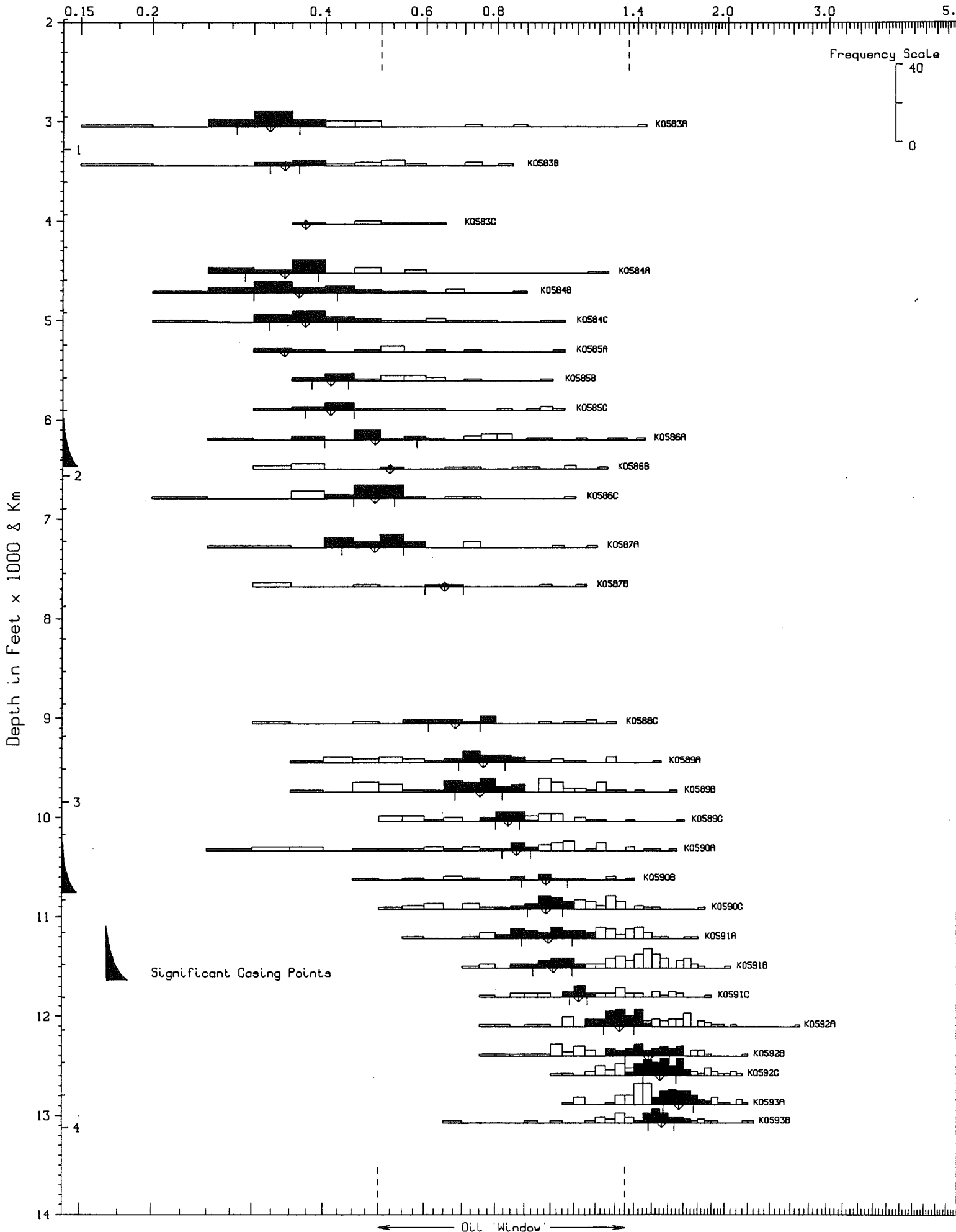


Fig. 2 Trave E-87 histograms

APPENDIX I

Sample Preparation Method

COGLA Lab preparation

Preliminary Wash

Samples dried in oven

Split: a. all of coarse to Petrology Lab

b. $\frac{1}{2}$ medium to Palynology Lab

c. rest of medium and all of fine combined for Micropaleo Lab

Split "b" is delivered to Palynology Lab and treated as follows:

PALYNOLOGY Lab preparation

20-30 grams placed in 250ml plastic beaker.

Add 10% HCl till reaction ceases (removes carbonates).

Washed (rinsed) 3 times.

Conc. HF overnight (removes silicates).

Washed (rinsed) 3 times.

Heated (60-65°C) conc. HCl (remove fluorides caused by HF).

Washed 3 times.

Then put into 15ml test tube with 4-5ml 4% Alconox.

Differential centrifuge at 1500rpm for 90 sec.

Decant.

Wash 3 times with centrifuging.

Float off organic fraction using 2.0 S.G. Znbr solution.

Centrifuge 1000rpm, 8 min.

Float fraction into second test tube.

Wash 3 times with centrifuging.

Kerogen smear slide made.

Remaining kerogen material delivered to Vitrinite Reflectance Lab.

VITRINITE REFLECTANCE Lab preparation

Excess water pipetted off.

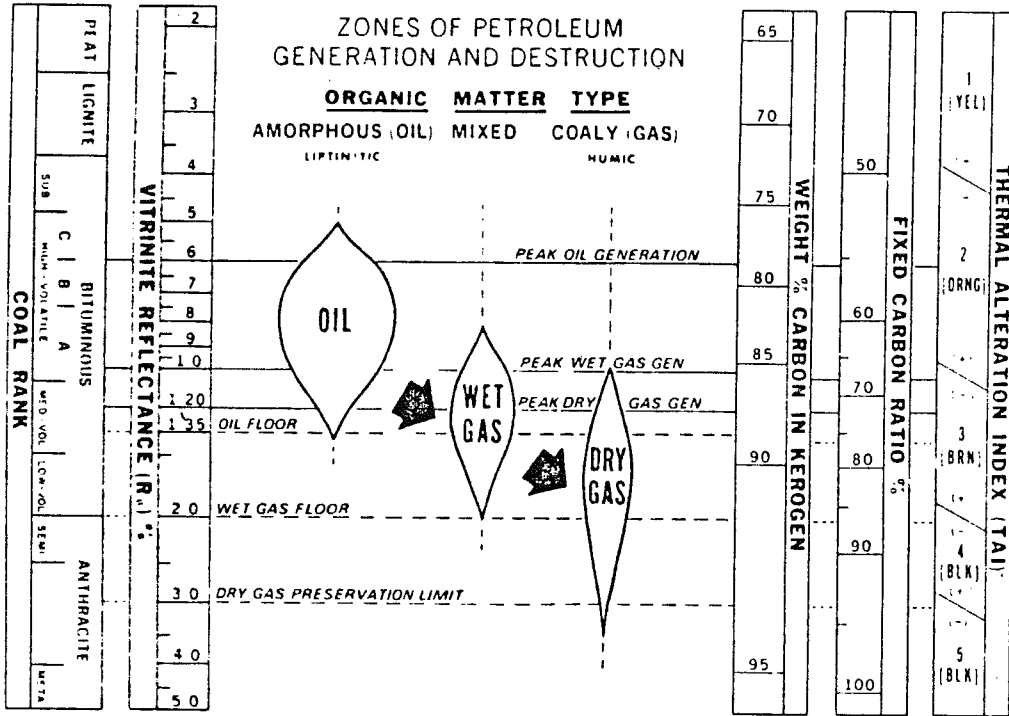
Freeze dried.

Mounted using epoxy resin (EPO-TEK 301) in predrilled plastic stubs.

Polished using modified coal petrology polishing methods.

Examined under oil lens at approximately 800x mag'n.

Appendix II (Dow,1977)



Note: For these reports, the terminology used to describe the various maturation levels has been modified. The 'peak' designation, as used in this figure, has been changed to 'onset of significant' and 0.8 R_v is now used as the 'peak of oil generation' (Table I, Figure 1).

Appendix III

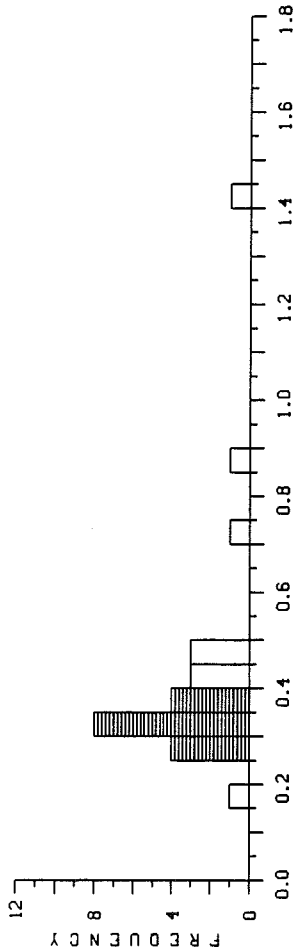
Sample Reports

K0583A,DEPTH 920-930M, TRAVE E-87

COL >	1	2	3	4	5	6	7	8	9	0
ROW	.19	.25<	.27<	.29<	.29<	.30<	.31<	.31<	.32<	.33<
1	.33<	.34<	.34<	.35<	.35<	.37<	.38<	.42	.42	.43
2	.45	.45	.49	.74	.88	1.42				

MEAN	STAND DEV	PTS	MIN	MAX	SUM
.42	.25	26	.19	1.42	11.02
TOTAL	.32	16	.25	.38	5.13
EDIT<					

REFLECTANCE HISTOGRAM

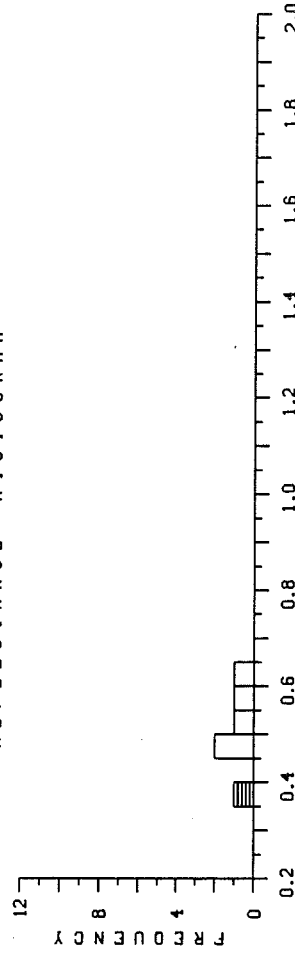


K0583C,DEPTH 1220-1230M, TRAVE E-87

COL >	1	2	3	4	5	6	7	8	9	0
ROW	.37<	.45	.46	.53	.56	.63				

MEAN	STAND DEV	PTS	MIN	MAX	SUM
.50	.09	6	.37	.63	3.00
TOTAL	.37	1	.37	.37	.37
EDIT<					

REFLECTANCE HISTOGRAM

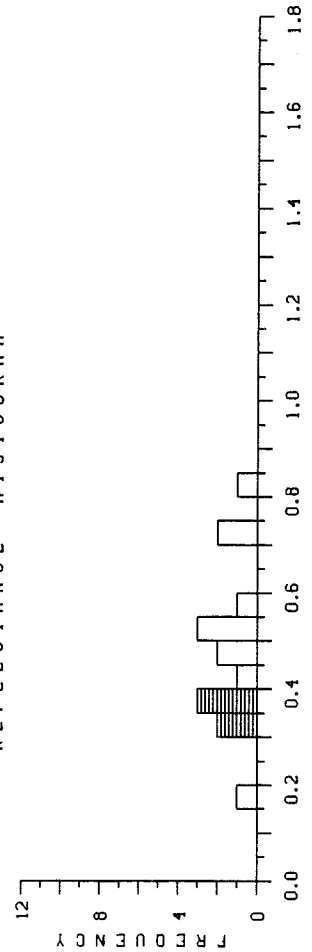


K0583B,DEPTH 1040-1050M, TRAVE E-87

COL >	1	2	3	4	5	6	7	8	9	0
ROW	.18	.32<	.33<	.35<	.36<	.36<	.44	.46	.46	.52
1	.52	.53	.57	.71	.72	.84				

MEAN	STAND DEV	PTS	MIN	MAX	SUM
.48	.17	16	.18	.84	7.67
TOTAL	.34	5	.32	.36	1.72
EDIT<					

REFLECTANCE HISTOGRAM

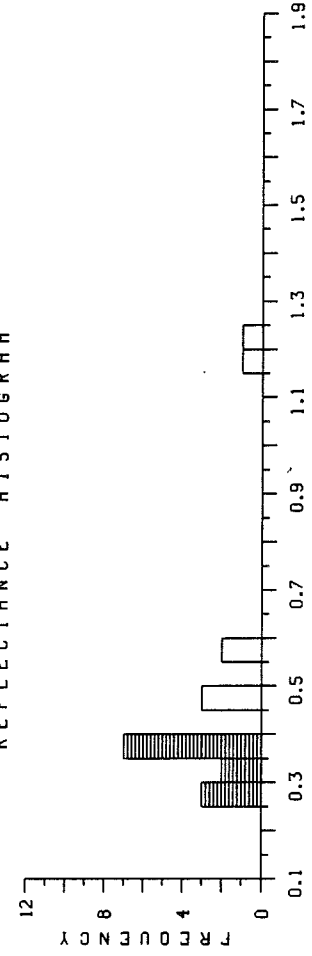


K0584A,DEPTH 1370-1380M, TRAVE E-87

COL >	1	2	3	4	5	6	7	8	9	0
ROW	.26<	.27<	.28<	.30<	.34<	.36<	.36<	.36<	.36<	.38<
1	.36<	.39<	.45	.46	.49	.57	.58	1.19	1.22	

MEAN	STAND DEV	PTS	MIN	MAX	SUM
.47	.27	19	.26	1.22	9.00
TOTAL	.34	12	.26	.39	4.04
EDIT<					

REFLECTANCE HISTOGRAM

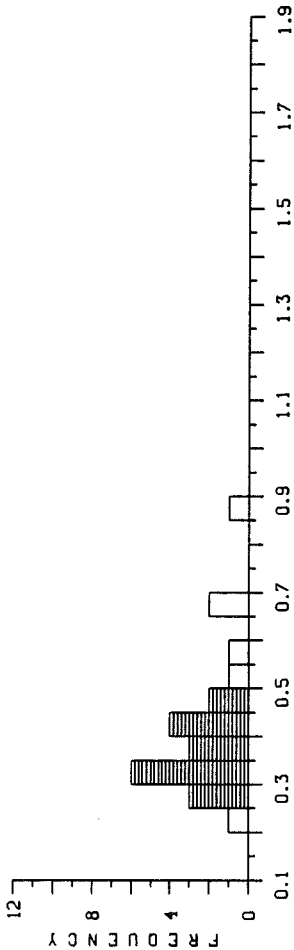


K0584B, DEPTH 1430-1440M, TRAVE E-87

COL >	1	2	3	4	5	6	7	8	9	0
ROW	.20	.26<	.27<	.28<	.31<	.32<	.33<	.34<	.34<	.34<
1	.36<	.36<	.38<	.40<	.41<	.42<	.43<	.45<	.47<	.54
2	.59	.66	.68	.68						

MEAN	STAND DEV	PTS	MIN	MAX	SUM
.42	.16	24	.20	.88	10.02
TOTAL	.36	18	.26	.47	6.47
EDIT<					

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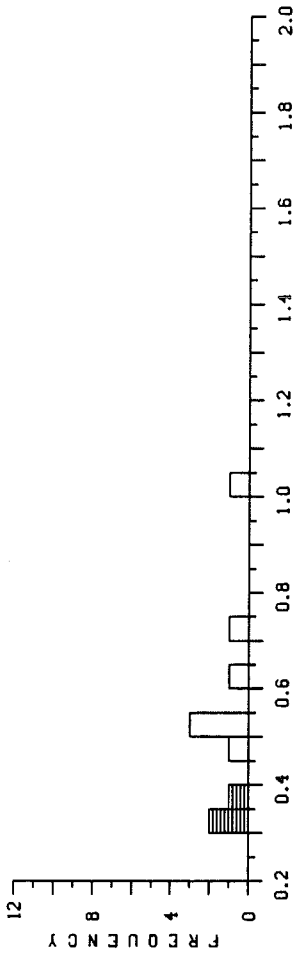


K0585A, DEPTH 1610-1620M, TRAVE E-87

COL >	1	2	3	4	5	6	7	8	9	0
ROW	.33<	.34<	.35<	.46	.50	.53	.54	.62	.74	1.01

MEAN	STAND DEV	PTS	MIN	MAX	SUM
.54	.21	10	.33	1.01	5.42
TOTAL	.34	3	.33	.35	1.02
EDIT<					

REFLECTANCE HISTOGRAM

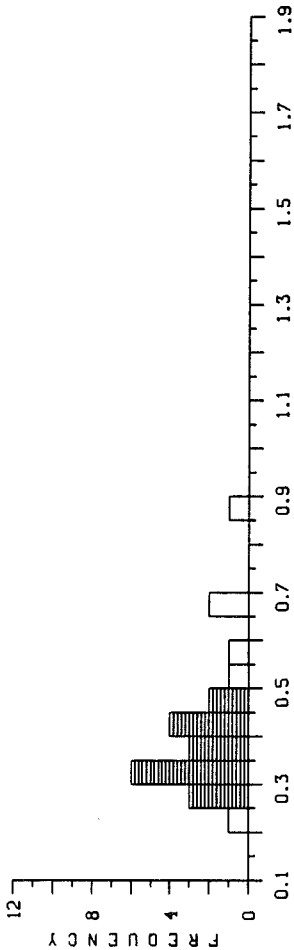


K0584C, DEPTH 1520-1530M, TRAVE E-87

COL >	1	2	3	4	5	6	7	8	9	0
ROW	.23	.31<	.31<	.32<	.33<	.35<	.35<	.36<	.36<	.37<
1	.38<	.40<	.42<	.42<	.45<	.48<	.53	.58	.63	.64
2	.68	.73	.76	.97	1.04					

MEAN	STAND DEV	PTS	MIN	MAX	SUM
.50	.21	25	.23	1.04	12.39
TOTAL	.37	15	.31	.48	5.60
EDIT<					

REFLECTANCE HISTOGRAM

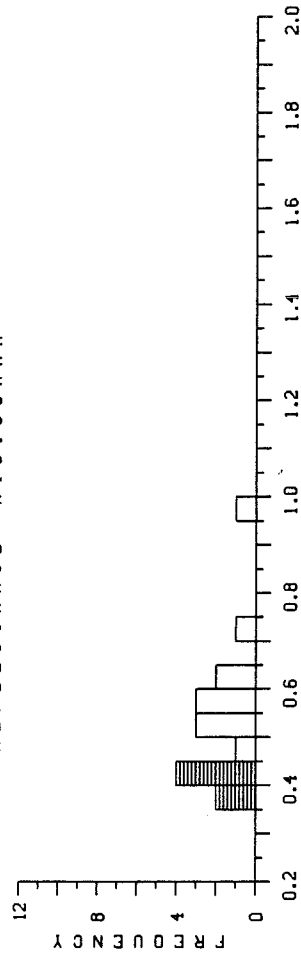


K0585B, DEPTH 1700-1710M, TRAVE E-87

COL >	1	2	3	4	5	6	7	8	9	0
ROW	.37<	.38<	.40<	.42<	.43<	.43<	.47	.50	.50	.53
1	.55	.55	.59	.60	.61	.72	.95			

MEAN	STAND DEV	PTS	MIN	MAX	SUM
.53	.14	17	.37	.95	9.00
TOTAL	.41	6	.37	.43	2.43
EDIT<					

REFLECTANCE HISTOGRAM

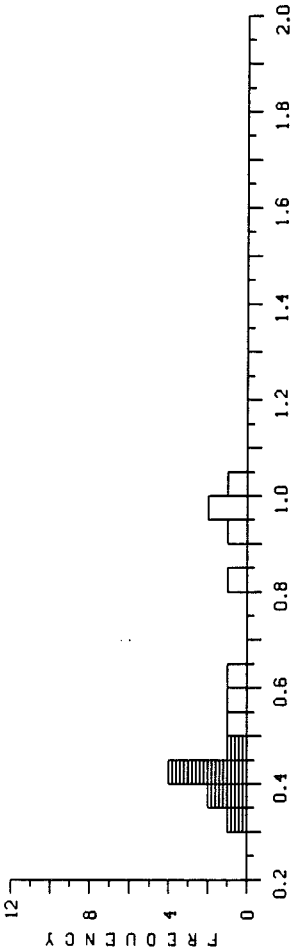


K0585C,DEPTH 1790-1800M, TRAVE E-87

COL >	1	2	3	4	5	6	7	8	9	0
ROH	.34<	.37<	.38<	.42<	.42<	.44<	.44<	.47<	.51	.58
1	.61	.80	.92	.96	.96	1.04				

MEAN	STAND DEV	PTS	MIN	MAX	SUM
TOTAL	.60	16	.34	1.04	9.66
EDIT<	.41	8	.34	.47	3.28

REFLECTANCE HISTOGRAM

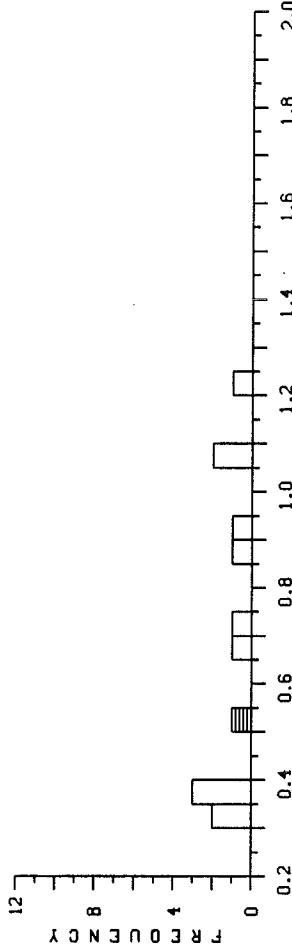


K0586B,DEPTH 1970-1980M, TRAVE E-87

COL >	1	2	3	4	5	6	7	8	9	0
ROH	.32	.33	.36	.37	.38	.52<	.66	.71	.89	.93
1	1.07	1.09	1.21							

MEAN	STAND DEV	PTS	MIN	MAX	SUM
TOTAL	.68	13	.32	1.21	8.84
EDIT<	.52	1	.52	.52	.52

REFLECTANCE HISTOGRAM

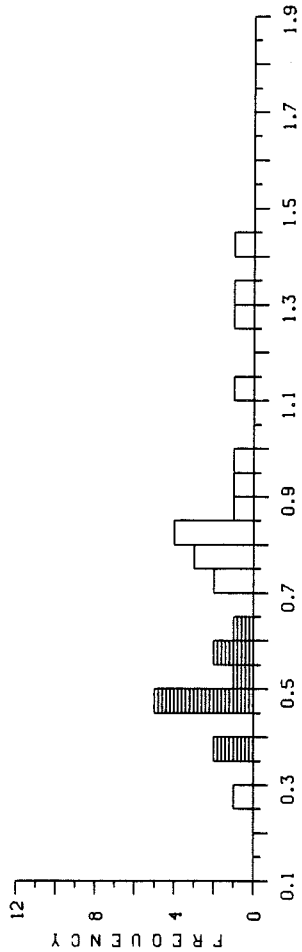


K0586A,DEPTH 1880-1890M, TRAVE E-87

COL >	1	2	3	4	5	6	7	8	9	0
ROH	.29	.36<	.38<	.45<	.45<	.46<	.47<	.48<	.54<	.59<
1	.59<	.64<	.72	.73	.78	.79	.79	.81	.83	.83
2	.84	.89	.92	.97	1.11	1.25	1.32	1.42		

MEAN	STAND DEV	PTS	MIN	MAX	SUM
TOTAL	.74	28	.29	1.42	20.72
EDIT<	.49	11	.38	.64	5.43

REFLECTANCE HISTOGRAM

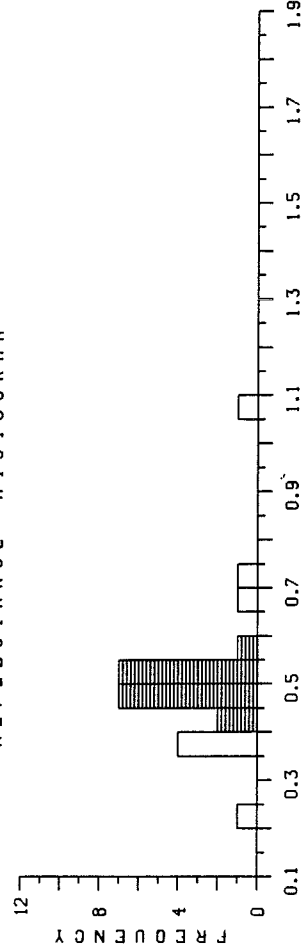


K0586C,DEPTH 2060-2070M, TRAVE E-87

COL >	1	2	3	4	5	6	7	8	9	0
ROH	.23	.36	.37	.38	.38	.40<	.43<	.46<	.47<	.47<
1	.48<	.48<	.49<	.49<	.50<	.51<	.51<	.52<	.52<	.53<
2	.54<	.58<	.68	.71	1.09					

MEAN	STAND DEV	PTS	MIN	MAX	SUM
TOTAL	.50	25	.23	1.09	12.56
EDIT<	.49	17	.40	.56	8.36

REFLECTANCE HISTOGRAM

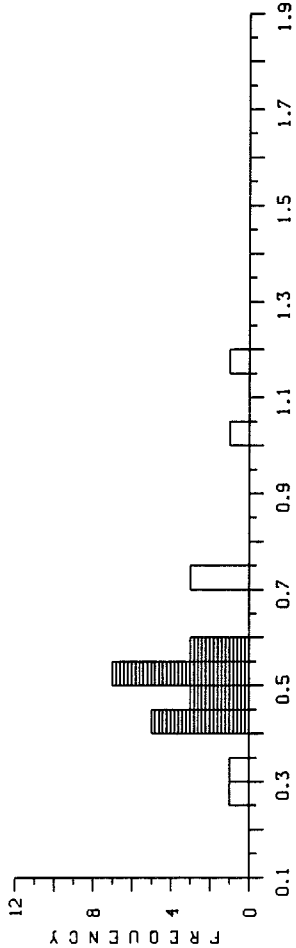


K0587A,DEPTH 2210-2220M, TRAVE E-87

COL >	1	2	3	4	5	6	7	8	9	0
ROW	.29	.30	.40<	.41<	.41<	.43<	.44<	.45<	.48<	.48<
1	.50<	.50<	.50<	.51<	.53<	.53<	.54<	.57<	.57<	.58<
2	.71	.71	.73	1.04	1.16					

MEAN	STAND DEV	PTS	MIN	MAX	SUM
TOTAL	.55	.20	.29	1.16	13.78
EDIT<	.49	.06	.40	.58	8.84

REFLECTANCE HISTOGRAM

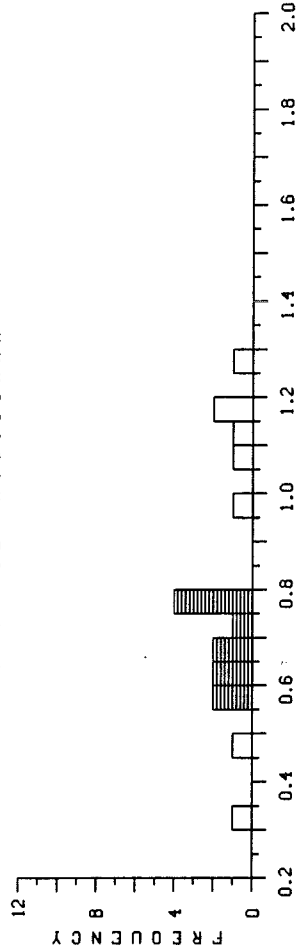


K0588C,DEPTH 2750-2760M, TRAVE E-87

COL >	1	2	3	4	5	6	7	8	9	0
ROW	.32	.46	.57<	.57<	.60<	.63<	.66<	.69<	.70<	.75<
1	.75<	.76<	.78<	.97	1.06	1.13	1.18	1.18	1.26	

MEAN	STAND DEV	PTS	MIN	MAX	SUM
TOTAL	.79	.27	.32	1.26	15.02
EDIT<	.68	.08	.57	.78	7.46

REFLECTANCE HISTOGRAM

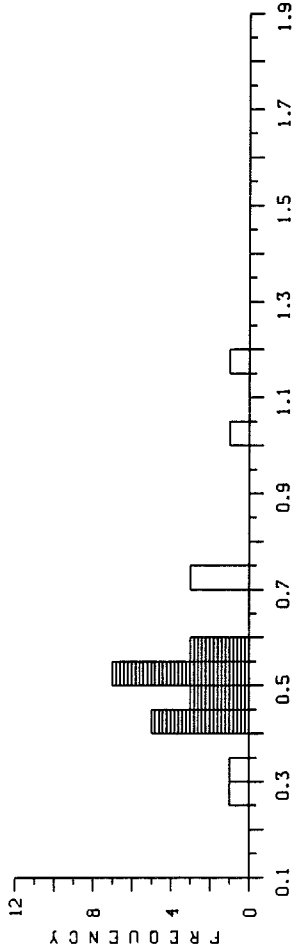


K0587B,DEPTH 2330-2340M, TRAVE E-87

COL >	1	2	3	4	5	6	7	8	9	0
ROW	.30	.33	.46	.61<	.68<	.97	1.11			
1	.50<	.50<	.50<	.51<	.53<	.54<	.57<	.57<	.58<	.58<
2	.71	.71	.73	1.04	1.16					

MEAN	STAND DEV	PTS	MIN	MAX	SUM
TOTAL	.64	.31	.30	1.11	4.46
EDIT<	.65	.05	.61	.68	1.29

REFLECTANCE HISTOGRAM

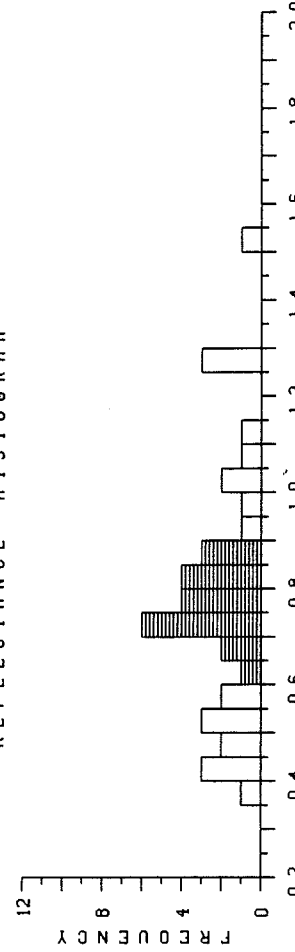


K0589A,DEPTH 2870-2880M, TRAVE E-87

COL >	1	2	3	4	5	6	7	8	9	0
ROW	.37	.41	.42	.44	.46	.47	.51	.53	.54	.56
1	.59	.63<	.65<	.66<	.70<	.70<	.72<	.73<	.74<	.74<
2	.75<	.75<	.76<	.76<	.80<	.81<	.82<	.82<	.85<	.86<
3	.88<	.93	.97	1.01	1.02	1.06	1.10	1.25	1.26	1.28
4	1.51									

MEAN	STAND DEV	PTS	MIN	MAX	SUM
TOTAL	.78	.26	.41	1.51	31.84
EDIT<	.76	.07	.63	.88	15.13

REFLECTANCE HISTOGRAM

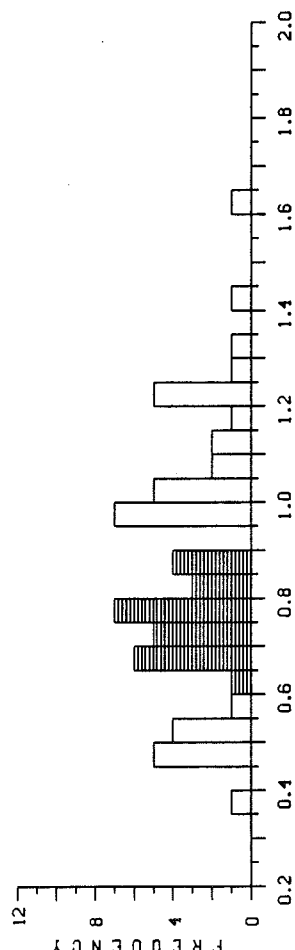


K0589B,DEPTH 2960-2970M,TRAVE E-87

COL >	1	2	3	4	5	6	7	8	9	0
ROW	.39	.46	.46	.47	.48	.48	.50	.53	.53	.54
1	.56	.64	.65	.67	.68	.68	.68	.70	.70	.71
2	.74	.74	.74	.75	.76	.76	.76	.78	.78	.79
3	.80	.80	.82	.85	.87	.88	.88	.95	.96	.96
4	.97	.97	.98	.98	1.01	1.02	1.02	1.03	1.03	1.08
5	1.08	1.13	1.13	1.17	1.21	1.21	1.22	1.23	1.24	1.28
6	1.30	1.42	1.61							

MEAN	STAND DEV	PTS	MIN	MAX	SUM
TOTAL	.86	63	.39	1.61	54.17
EDIT<	.75	26	.64	.88	19.58

REFLECTANCE HISTOGRAM

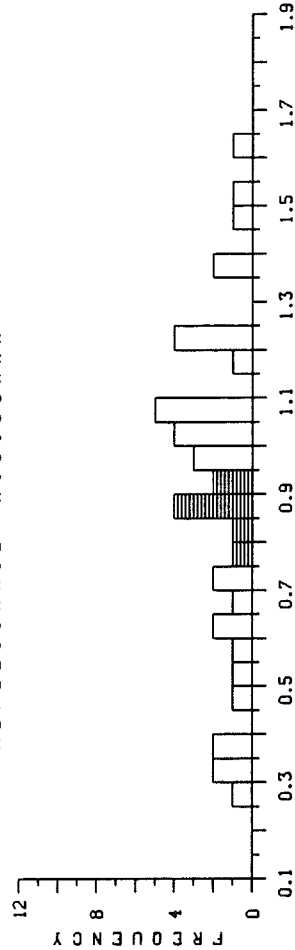


K0590A,DEPTH 3140-3150M,TRAVE E-87

COL >	1	2	3	4	5	6	7	8	9	0
ROW	.28	.32	.34	.37	.39	.49	.52	.55	.63	.64
1	.68	.70	.73	.79	.80	.85	.88	.88	.88	.92
2	.92	.96	.96	.97	1.01	1.02	1.04	1.04	1.05	1.05
3	1.05	1.06	1.09	1.15	1.20	1.21	1.21	1.24	1.35	1.39
4	1.45	1.54	1.60							

MEAN	STAND DEV	PTS	MIN	MAX	SUM
TOTAL	.91	43	.28	1.60	39.20
EDIT<	.87	8	.79	.92	6.92

REFLECTANCE HISTOGRAM

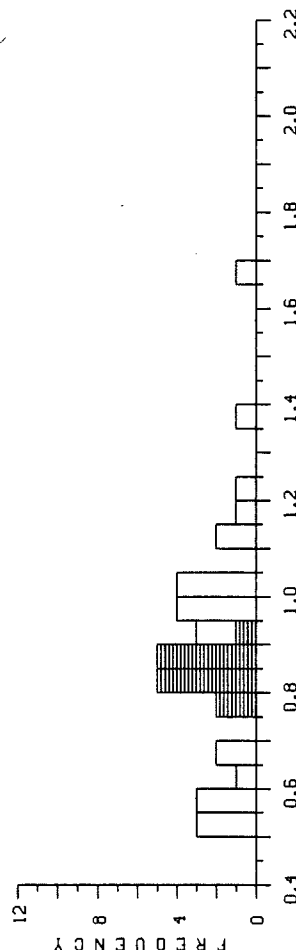


K0589C,DEPTH 3050-3060M,TRAVE E-87

COL >	1	2	3	4	5	6	7	8	9	0
ROW	.52	.53	.54	.55	.56	.57	.61	.66	.68	.78
1	.79	.80	.80	.81	.83	.84	.85	.85	.86	.88
2	.89	.90	.94	.94	.97	.97	.98	.98	1.01	1.02
3	1.03	1.04	1.10	1.14	1.15	1.23	1.37	1.65		

MEAN	STAND DEV	PTS	MIN	MAX	SUM
TOTAL	.88	38	.52	1.65	33.62
EDIT<	.84	13	.78	.90	10.88

REFLECTANCE HISTOGRAM

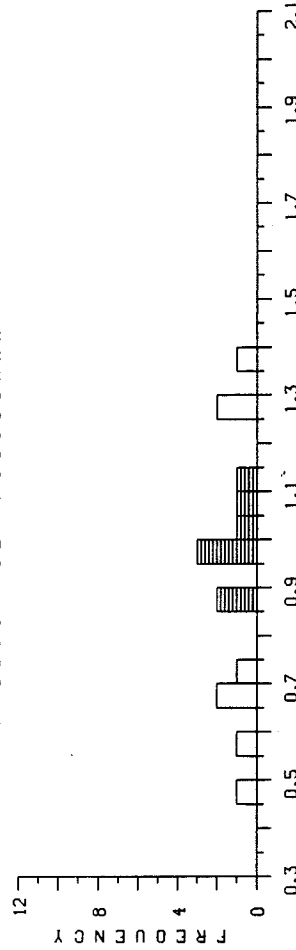


K0590B,DEPTH 3230-3240M,TRAVE E-87

COL >	1	2	3	4	5	6	7	8	9	0
ROW	.45	.56	.68	.69	.71	.86	.88	.95	.95	.96
1	1.01	1.09	1.10	1.27	1.29	1.36				

MEAN	STAND DEV	PTS	MIN	MAX	SUM
TOTAL	.93	16	.45	1.36	14.81
EDIT<	.98	8	.86	1.10	7.80

REFLECTANCE HISTOGRAM

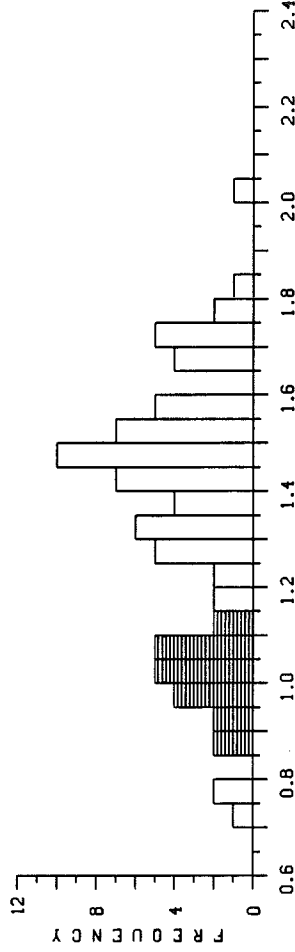


K0591B,DEPTH 3500-3510M, TRAVE E-87

COL >	1	2	3	4	5	6	7	8	9	0
ROW	.72	.75	.78	.88<	.89<	.92<	.92<	.95<	.97<	.98<
1	.98<	1.00<	1.01<	1.01<	1.03<	1.04<	1.05<	1.06<	1.07<	1.09<
2	1.09<	1.14<	1.14<	1.17	1.19	1.21	1.24	1.25	1.26	1.27
3	1.28	1.29	1.30	1.30	1.31	1.31	1.32	1.33	1.36	1.38
4	1.38	1.39	1.41	1.41	1.41	1.43	1.44	1.44	1.44	1.45
5	1.45	1.45	1.45	1.46	1.47	1.47	1.47	1.48	1.49	1.51
6	1.51	1.51	1.52	1.53	1.53	1.53	1.55	1.55	1.56	1.57
7	1.57	1.65	1.67	1.68	1.69	1.70	1.70	1.71	1.72	1.74
8	1.78	1.78	1.80	2.00						

MEAN	STAND DEV	PTS	MIN	MAX	SUM
TOTAL	1.34	.28	.72	2.00	112.69
EDIT<	1.01	.08	.88	1.14	20.23

REFLECTANCE HISTOGRAM

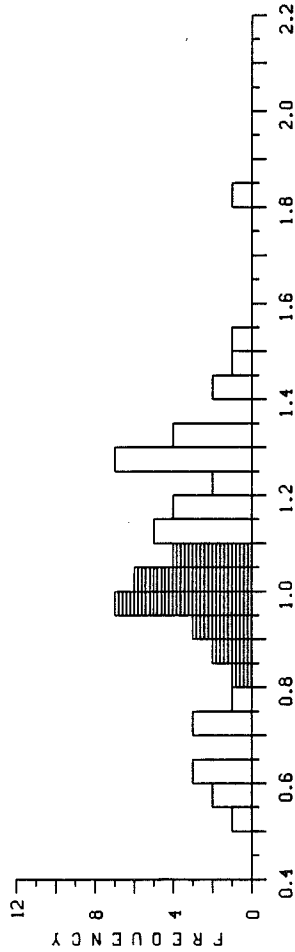


K0590C,DEPTH 3320-3330M, TRAVE E-87

COL >	1	2	3	4	5	6	7	8	9	0
ROW	.50	.55	.58	.60	.63	.64	.70	.74	.74	.79
1	.84<	.85<	.88<	.91<	.92<	.94<	.95<	.96<	.97<	.97<
2	.97<	.98<	.98<	1.00<	1.01<	1.01<	1.02<	1.03<	1.03<	1.05<
3	1.07<	1.07<	1.08<	1.10	1.11	1.11	1.13	1.13	1.15	1.16
4	1.17	1.17	1.21	1.23	1.25	1.26	1.26	1.27	1.27	1.29
5	1.29	1.30	1.30	1.32	1.33	1.44	1.44	1.48	1.51	1.84

MEAN	STAND DEV	PTS	MIN	MAX	SUM
TOTAL	1.06	.26	.50	1.84	63.48
EDIT<	.98	.07	.84	1.08	22.49

REFLECTANCE HISTOGRAM

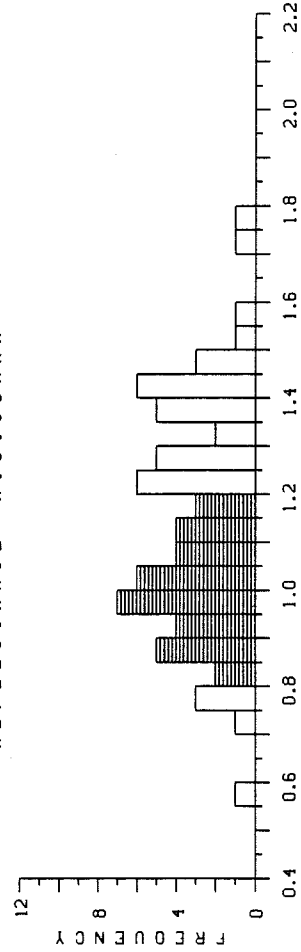


K0591A,DEPTH 3410-3420M, TRAVE E-87

COL >	1	2	3	4	5	6	7	8	9	0
ROW	.55	.73	.77	.77	.79	.81<	.83<	.85<	.88<	.88<
1	.89<	.89<	.90<	.90<	.91<	.93<	.95<	.95<	.95<	.96<
2	.98<	.98<	.99<	1.00<	1.01<	1.02<	1.02<	1.03<	1.04<	1.05<
3	1.05<	1.06<	1.07<	1.10<	1.12<	1.13<	1.15<	1.15<	1.15<	1.15<
4	1.21	1.22	1.22	1.23	1.23	1.24	1.25	1.27	1.28	1.29
5	1.29	1.30	1.32	1.36	1.37	1.38	1.38	1.39	1.40	1.41
6	1.41	1.42	1.43	1.44	1.46	1.47	1.49	1.54	1.58	1.72
7	1.79									

MEAN	STAND DEV	PTS	MIN	MAX	SUM
TOTAL	1.14	.25	.55	1.79	81.11
EDIT<	.99	.10	.81	1.15	34.71

REFLECTANCE HISTOGRAM

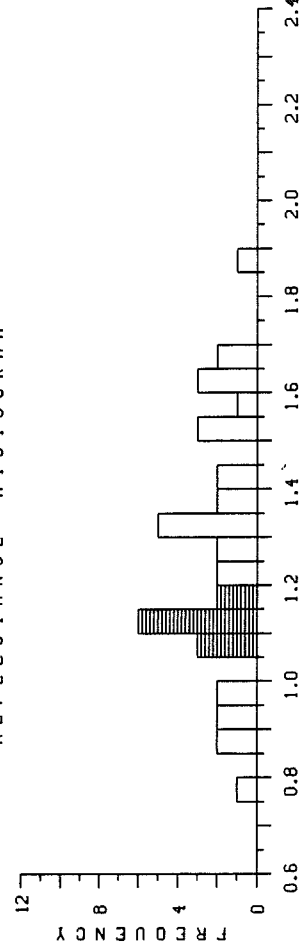


K0591C,DEPTH 3590-3600M, TRAVE E-87

COL >	1	2	3	4	5	6	7	8	9	0
ROW	.75	.86	.89	.92	.94	.98	.99	1.07<	1.07<	1.09<
1	1.11<	1.11<	1.11<	1.13<	1.14<	1.14<	1.18<	1.19<	1.21	1.22
2	1.25	1.25	1.31	1.32	1.32	1.33	1.33	1.36	1.37	1.42
3	1.44	1.50	1.50	1.53	1.56	1.60	1.61	1.63	1.65	1.68
4	1.87									

MEAN	STAND DEV	PTS	MIN	MAX	SUM
TOTAL	1.27	.26	.75	1.87	51.93
EDIT<	1.12	.04	1.07	1.19	12.34

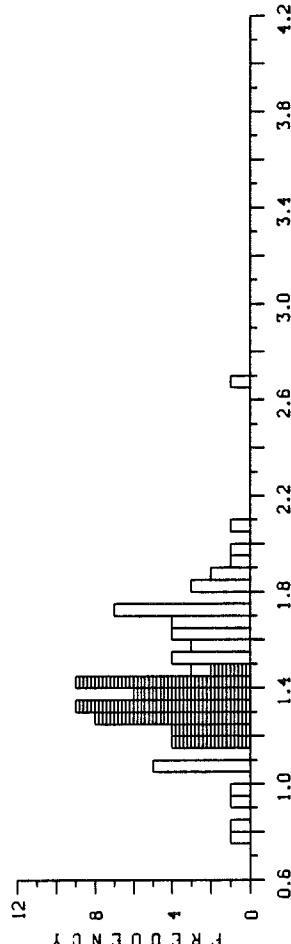
REFLECTANCE HISTOGRAM



K0592A,DEPTH 3680-3690M, TRAVE E-87

COL >	1	2	3	4	5	6	7	8	9	0
ROW	.77	.84	.92	.98	1.05	1.06	1.08	1.08	1.09	1.17<
1	1.17<	1.17<	1.19<	1.21<	1.22<	1.23<	1.24<	1.25<	1.25<	1.26<
2	1.27<	1.27<	1.27<	1.28<	1.28<	1.30<	1.32<	1.32<	1.32<	1.33<
3	1.34<	1.34<	1.34<	1.34<	1.35<	1.35<	1.37<	1.38<	1.39<	1.39<
4	1.40<	1.40<	1.40<	1.40<	1.41<	1.41<	1.43<	1.44<	1.44<	1.46<
5	1.47<	1.49	1.50	1.50	1.53	1.53	1.55	1.58	1.58	1.60
6	1.63	1.64	1.64	1.65	1.66	1.66	1.69	1.70	1.70	1.73
7	1.73	1.73	1.74	1.74	1.82	1.82	1.83	1.85	1.88	1.90
8	1.99	2.08	2.68							
MEAN	1.44	.29	.77	1.17	1.47	1.68	1.83	1.90	2.11	2.68
STAND DEV	1.32	.06	.42	1.17	1.47	1.68	1.83	1.90	2.11	2.68
TOTAL			83	83	83	83	83	83	83	83
EDIT<										

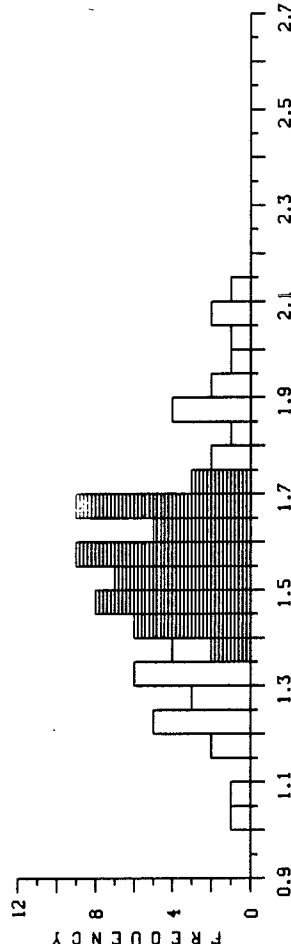
REFLECTANCE HISTOGRAM



K0592C,DEPTH 3830-3840M, TRAVE E-87

COL >	1	2	3	4	5	6	7	8	9	0
ROW	1.04	1.09	1.17	1.19	1.20	1.21	1.22	1.22	1.24	1.28
1	1.29	1.29	1.30	1.31	1.33	1.33	1.33	1.34	1.35	1.36
2	1.39<	1.39<	1.41<	1.41<	1.41<	1.43<	1.44<	1.44<	1.45<	1.45<
3	1.45<	1.45<	1.47<	1.47<	1.48<	1.49<	1.50<	1.51<	1.51<	1.52<
4	1.52<	1.53<	1.54<	1.56<	1.56<	1.56<	1.57<	1.57<	1.57<	1.57<
5	1.58<	1.59<	1.60<	1.62<	1.63<	1.63<	1.64<	1.65<	1.65<	1.66<
6	1.66<	1.67<	1.67<	1.68<	1.69<	1.69<	1.70<	1.71<	1.72<	1.76
7	1.76	1.80	1.86	1.86	1.86	1.87	1.92	1.94	1.95	2.00
8	2.09	2.09	2.11							
MEAN	1.54	.23	.83	1.04	1.21	1.28	1.43	1.57	1.72	2.00
STAND DEV	1.55	.10	.49	1.39	1.72	1.87	2.00	2.11	2.12	2.68
TOTAL			83	83	83	83	83	83	83	83
EDIT<										

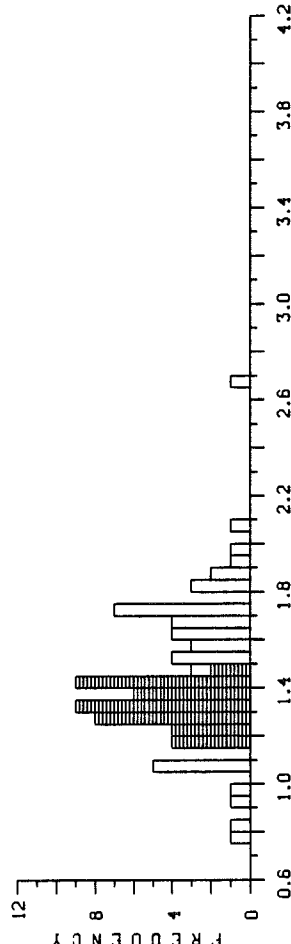
REFLECTANCE HISTOGRAM



K0592B,DEPTH 3770-3780M, TRAVE E-87

COL >	1	2	3	4	5	6	7	8	9	0
ROW	.78	.81	.87	.90	.99	1.01	1.02	1.03	1.03	1.04
1	1.04	1.07	1.09	1.10	1.10	1.10	1.14	1.14	1.17	1.17
2	1.19	1.25<	1.25<	1.28<	1.29<	1.30<	1.33<	1.35<	1.35<	1.35<
3	1.37<	1.39<	1.41<	1.42<	1.43<	1.43<	1.44<	1.44<	1.45<	1.48<
4	1.48<	1.51<	1.52<	1.52<	1.52<	1.55<	1.55<	1.56<	1.57<	1.58<
5	1.62<	1.63<	1.63<	1.64<	1.65<	1.65<	1.66<	1.67<	1.68<	1.77
6	1.78	1.78	1.81	1.81	1.82	1.89	2.16			
MEAN	1.38	.29	.78	1.16	1.47	1.68	1.83	1.90	2.11	2.68
STAND DEV	1.48	.13	.38	1.25	1.68	1.83	1.90	2.11	2.12	2.68
TOTAL			67	67	67	67	67	67	67	67
EDIT<										

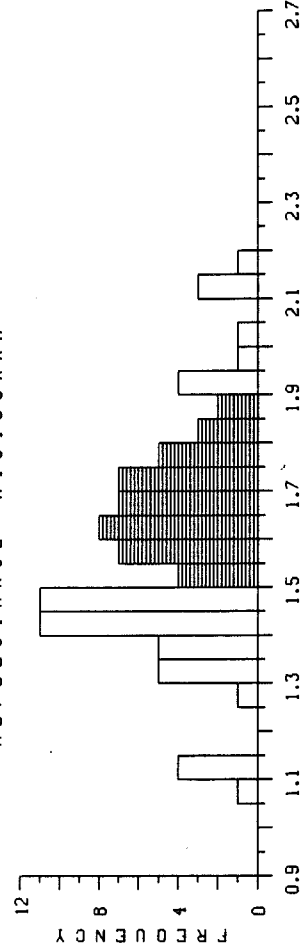
REFLECTANCE HISTOGRAM



K0593A,DEPTH 3920-3930M, TRAVE E-87

COL >	1	2	3	4	5	6	7	8	9	0
ROW	1.05	1.11	1.12	1.12	1.14	1.27	1.30	1.30	1.31	1.31
1	1.33	1.35	1.35	1.36	1.38	1.39	1.40	1.40	1.40	1.40
2	1.40	1.42	1.42	1.43	1.43	1.44	1.44	1.45	1.45	1.45
3	1.46	1.46	1.46	1.47	1.47	1.47	1.48	1.49	1.51<	1.52<
4	1.52<	1.52<	1.55<	1.56<	1.56<	1.57<	1.57<	1.57<	1.58<	1.60<
5	1.60<	1.62<	1.63<	1.63<	1.63<	1.63<	1.63<	1.65<	1.65<	1.66<
6	1.66<	1.67<	1.68<	1.69<	1.70<	1.70<	1.71<	1.73<	1.73<	1.73<
7	1.73	1.75	1.78	1.79	1.79	1.79	1.80	1.80	1.82	1.85
8	1.86	1.91	1.91	1.93	1.94	1.98	2.00	2.11	2.12	2.12
9	2.17									
MEAN	1.58	.24	.91	1.05	1.21	1.43	1.57	1.72	1.87	2.12
STAND DEV	1.67	.10	.43	1.51	1.86	2.12	2.12	2.12	2.12	2.68
TOTAL			91	91	91	91	91	91	91	91
EDIT<										

REFLECTANCE HISTOGRAM



K0593B,DEPTH 3975-3985M,IRRAVE E-87

COL >	1	2	3	4	5	6	7	8	9	0
ROW	.66	.90	1.04	1.18	1.21	1.21	1.24	1.27	1.27	1.31
1	1.32	1.33	1.34	1.34	1.36	1.38	1.39	1.42	1.45	1.45
2	1.46	1.47	1.49	1.50	1.50	1.52	1.53	1.54	1.54	1.54
3	1.55	1.56	1.57	1.58	1.59	1.60	1.60	1.61	1.66	1.67
4	1.68	1.70	1.71	1.78	1.83	1.84	1.86	1.92	2.15	2.20

	MEAN	STAND DEV	PTS	MIN	MAX	SUM
TOTAL	1.50	.27	50	.66	2.20	74.82
EDIT<	1.56	.08	26	1.42	1.71	40.49

REFLECTANCE HISTOGRAM

