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Report No. EPGs-DOM.1-87MPA

Vitrinite reflectance (Ro)
of dispersed organics
from
Elf
Hermine E-94

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Vitrinite reflectance (Ro) of dispersed organics from the Elf Hermine E-94G.S.C. Locality No: D38Location: 45°23'29.30"N, 54°29'54.71"WR.T. Elevation: 85'Water Depth: 271'Total Depth: 10720'Sample Interval: 1130-10720'Interval Studied: 1520-7910'Information Release: Dec. 31, 1973Depth Units: Feet referenced to R.T.

Vitrinite reflectance has been determined on 10 samples (16 attempted) (Table II) from Elf Hermine E-94, which was classified as a wildcat well and is located on the southern Grand Banks, approximately 277 km (172 mi) south-southwest of St. John's, Newfoundland.

Data acquisition and manipulation for this report utilized the Zeiss Photomultiplier III Zonax microcomputer system with improvements in software to provide a dynamic histogram display as readings are acquired. Sample preparation followed the procedures listed in Appendix I. The analysis of the well revealed the thermal maturation intervals given in Table I. Specific maturation levels as set out in this report were based on those of Dow (1977) with modified terminology (Appendix II).

Table I
Inferred Thermal Maturation Levels*

| | | | |
|------------------|------------|------|---|
| Seafloor-4066' | 0.23 - 0.4 | % Ro | immature |
| 4066-5360' | 0.4 - 0.5 | % Ro | immature approaching maturity |
| Lost at 5360' UC | 0.5 - 0.6 | % Ro | marginally mature |
| " | 0.6 | % Ro | onset of significant oil generation |
| " | 0.8 | % Ro | peak of oil generation |
| " | 1.0 | % Ro | onset of significant wet gas generation |
| " | 1.2 | % Ro | onset of significant dry gas generation |
| " | 1.35 | % Ro | oil floor |
| 5892' | 2.00 | % Ro | wet gas floor |
| (8122') | 3.00 | % Ro | dry gas floor |
| (10720') T.D. | 3.55 | % Ro | |

Note: () indicate depths extrapolated at 0.259 log Ro/km

* Maturation levels provided for all types of organic matter. Actual hydrocarbon products depend on type of organic matter present.

Remarks

The sample coverage of vitrinite reflectance data (Figure 1, Table II) was adequate over most of the well except for the section below 8055', which contains Windsor Group sediments, comprised mostly of salt (Wade, pers. comm.). Sample quality (i.e. the amount of measurable vitrinite) was poor and made interpretation difficult (Figure 2, Appendix I). The data were 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 be deceptively small for samples with very few readings.

The scatter in the vitrinite reflectance data (Figure 2, Appendix III) from Hermine E-94 made the determination of the representative population extremely difficult. In trying to resolve this problem a plot was developed which displays the raw data histograms at their respective depths, with the frequency classes shown on log Ro bases (Figure 2). With such a display, linear maturation trends in the well based on shifts in reflectance populations are demonstrated more clearly. Also it demonstrates the effects of caving, geology, casing points and other factors on the vitrinite reflectance populations. The plot is generated from raw data files transferred to the mainframe.

With this tool, and considering the major unconformities in the well, two maturation trends have been calculated for Hermine E-94. The upper trend extends from surface to the unconformity at 5364' and has a slope of 0.236 log Ro/km. The lower trend has a slope of 0.259 log Ro/km.

Calculations using Dow's (1977) method indicate that 7096' (2163 m) of section was eroded at the Avalon Unconformity and the maturation level at the erosional surface was 0.69 % Ro before its most recent burial.

The section between the unconformities is highlighted by significant populations of higher reflectance than the interpreted maturation trend through that section of the well. These higher reflectance populations occur immediately below the unconformity at 2730', which puts Early Eocene sediments directly over Maastrichtian rocks (Barss *et al.*, 1979) and is part of a regional Tertiary/Cretaceous Unconformity (McAlpine, pers. comm.). These populations in the Cretaceous section are most likely an expression of reworked organics from a different area than that which sourced the Tertiary section, since secondary higher reflectance populations are absent above 2730'. This situation of higher secondary (probably reworked) populations occurring immediately below this unconformity is also present in Emerillon C-56 (Avery, 1987) and in Tern A-86 and Puffin B-90 (Avery, 1985).

TAI data for Hermine E-94 (Bujak, pers. comm.) shows a maximum of 2-($\approx .44$ Ro) in the Mesozoics and ranges from 2 ($\approx .6$ Ro) to 2+ ($\approx .9$ Ro) in the Paleozoics. The maturation based on TAI is therefore similar above the Avalon Unconformity but significantly lower in the section below it.

The lithology strip plot (Figure 1) was produced directly from the E.P.G. LITHFILE database which extracts data from digitized CANSTRAT logs. Depth intervals were based on visually recognized major changes in lithology as seen in the standard CANSTRAT log.

Because of the major unconformity in Hermine E-94, the entire oil window has been lost and the maturity of the sediments jumps from 0.5 to 1.82 % Ro at 5364', which only leaves a section in the Paleozoics that is in a suitable thermal regime for generation of wet and dry gas.

References

Avery, M.P., 1987. Vitrinite reflectance (Ro) of dispersed organics from Elf et al. Emerillion C-56. Geological Survey of Canada, Open File report.


Avery, M.P. and Bell, J.S., 1985. Vitrinite reflectance measurements from the South Whale Basin, Grand Banks, Eastern Canada, and implications for hydrocarbon exploration: in Current Research, Part A, Geological Survey of Canada, Paper 85-1B, p. 51-57.

Barss, M.S., Bujak, J.P. and Williams, G.L., 1979. Palynological zonation and correlation of sixty-seven wells, eastern Canada. Geological Survey of Canada, Paper 78-24, 117 p.

Dow, W.G., 1977. Kerogen studies and geological interpretations. Journal of Geochemical Exploration, no. 7, p. 79-99.

Elf Oil Exploration and Production Canada Ltd., 1972. Well history report Elf Hermine E-94. Open File report, Department of Energy, Mines and Resources, Ottawa.

March 5, 1987


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Eastern Petroleum Geology Subdivision

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Table II

Summary of kerogen - based vitrinite reflectance

| Seq. # | Sample # | Depth in feet | Mean Ro (SD) non-rotated | Number of readings | |
|--------|----------|---------------|--------------------------|--------------------|--------|
| | | | | Total | Edited |
| 1 | K0379C | 1520-1550 | .25(±.06) | 43 | 32 |
| 2 | K0574A | 2110-2120 | .31(±.05) | 31 | 15 |
| 3 | K0575C | 4570-4580 | .48(±.06) | 75 | 23 |
| 4 | K0576A | 5090-5100 | .44(±.08) | 99 | 28 |
| 5 | K0379A | 5600-5630 | 1.77(±.09) | 66 | 13 |
| 6 | K0379B | 5800-5830 | 2.06(±.12) | 24 | 7 |
| 7 | K0576B | 6440-6450 | 2.28(±.14) | 68 | 18 |
| 8 | K0576C | 6900-6910 | 2.50(±.11) | 88 | 44 |
| 9 | K0577A | 7390-7400 | 2.65(±.13) | 99 | 29 |
| 10 | K0577B | 7900-7910 | 2.77(±.05) | 66 | 10 |

Table III

Formation Tops (Wade, pers. comm.)

| Formation | Depth |
|------------------------|------------|
| Banquereau | in casing |
| Tert/Cret UNCONFORMITY | 2730' |
| Wyandot equivalent | 2780' |
| Dawson Canyon | 3104' |
| Petrel Member | 4074-4408' |
| Logan Canyon | 4788' |
| Eider Member | 4788' |
| Avalon UNCONFORMITY | 5364' |
| Pictou Group | 5364' |
| Riversdale Group | 5610' |
| Canso Group | 6906' |
| Windsor Group | 7894' |
| - Salt | 8055' |
| T.D. | 10720' |

Table IV

Biostrat (Barss et al., 1979)

| Paly - Age | Depth Interval |
|-------------------|----------------|
| L. Miocene | 1100-1400' |
| M. Miocene | 1490-1580' |
| E. Miocene | 1670-1700' |
| M-L. Oligocene | 1760-1790' |
| E. Oligocene | 1850-2060' |
| L. Eocene | 2120-2510' |
| M. Eocene | 2570-2600' |
| E-M. Eocene | 2660-2780' |
| E. Eocene | 2840-2960' |
| Maastrichtian | 3020-3230' |
| Campanian | 3290-3330' |
| barren | 3390-3510' |
| L. Cretaceous | 3570-3780' |
| Coniacian | 3930-4050' |
| ?Turonian | 4110-4140' |
| Cenomanian | 4210-4250' |
| Albian | 4310-5040' |
| Aptian | 5200-?5400' |
| Westphalian | 5400-5800' |
| L-E. Westphalian | 5800-5830' |
| Viséan?-Namurian | 5830-7630' |
| assumed Paleozoic | 7630-10720' |

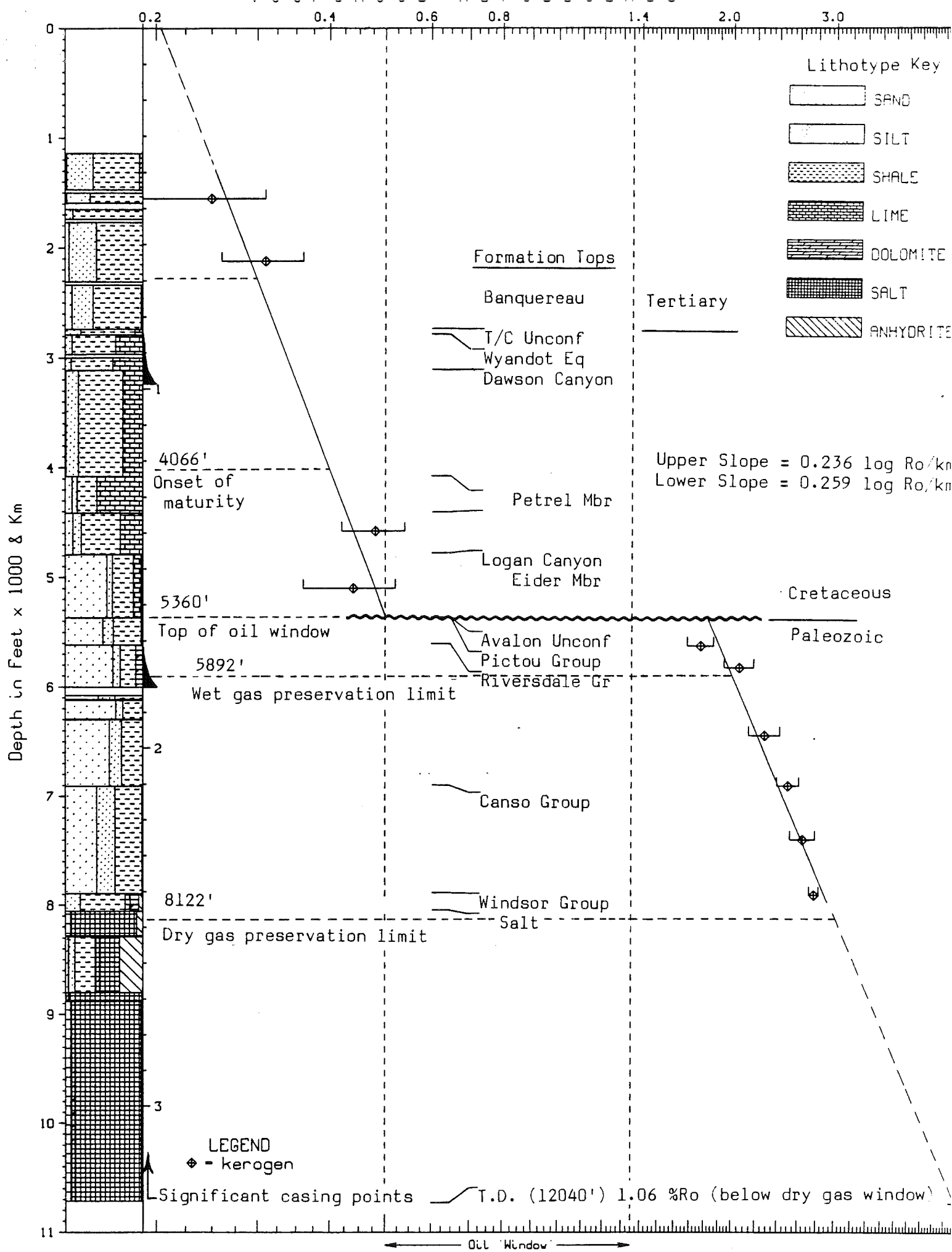


Fig. 1 Hermine E-94

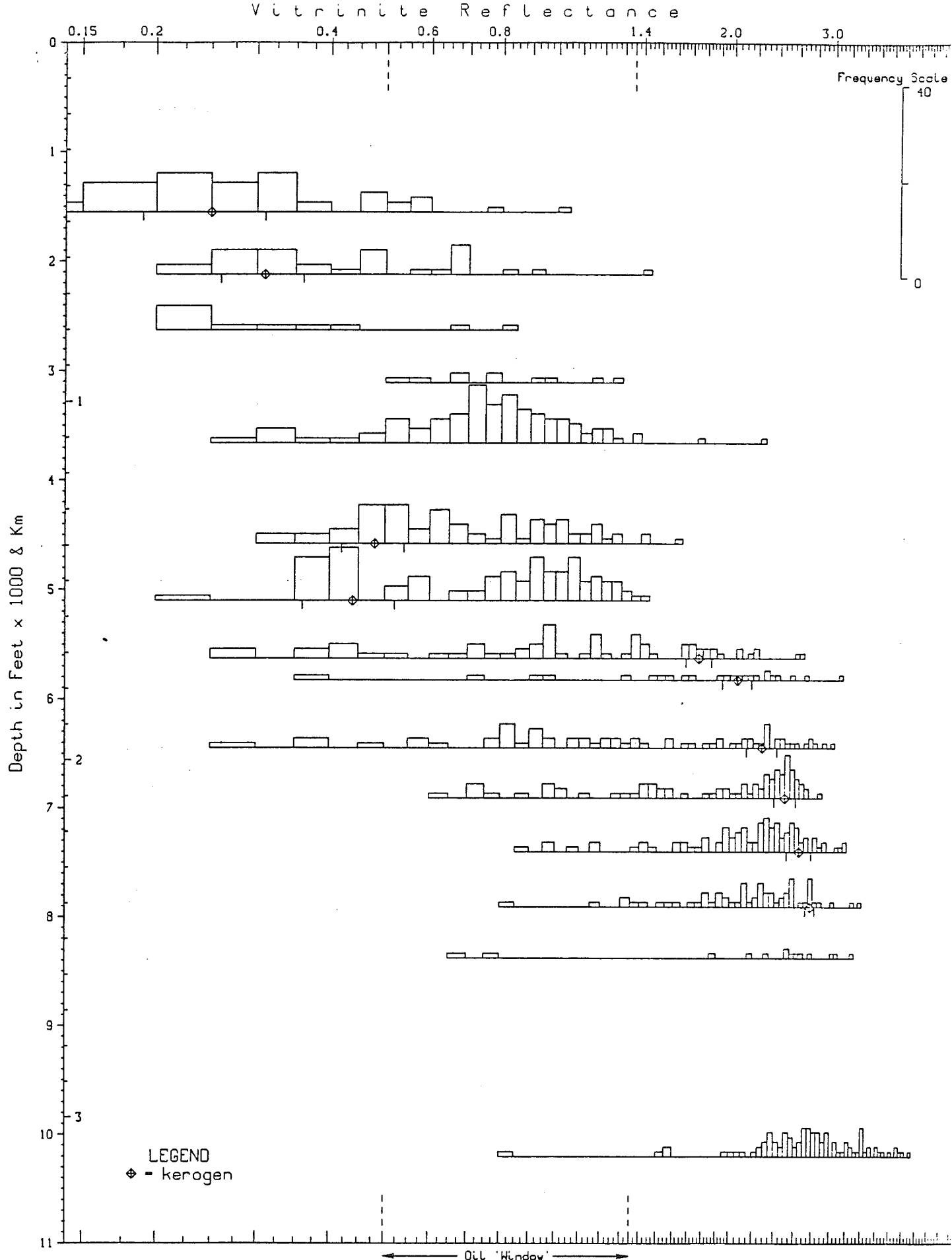


Fig. 2 Hermine E-94 <histograms>

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.

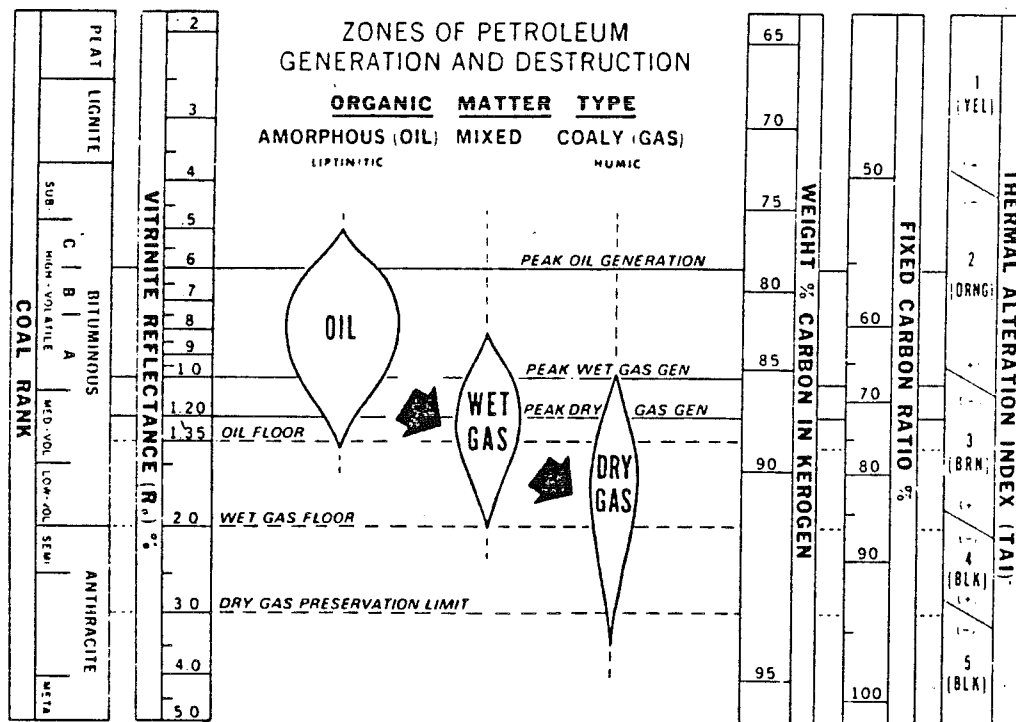
Freeze dried.

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 Ro is now used as the 'peak of oil generation' (Table I, Figure 1).

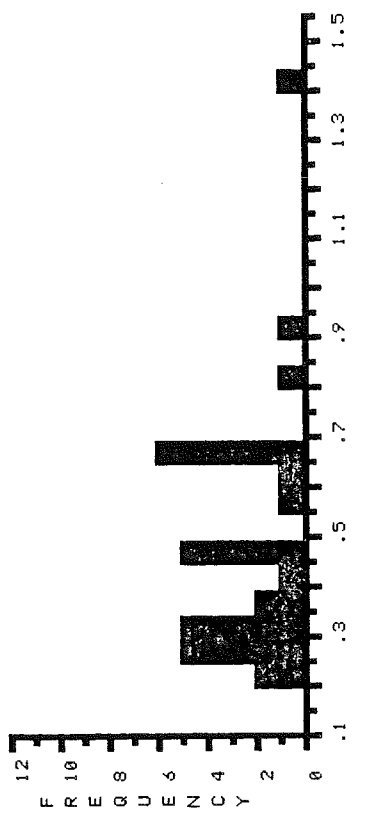
Appendix III
Sample Reports

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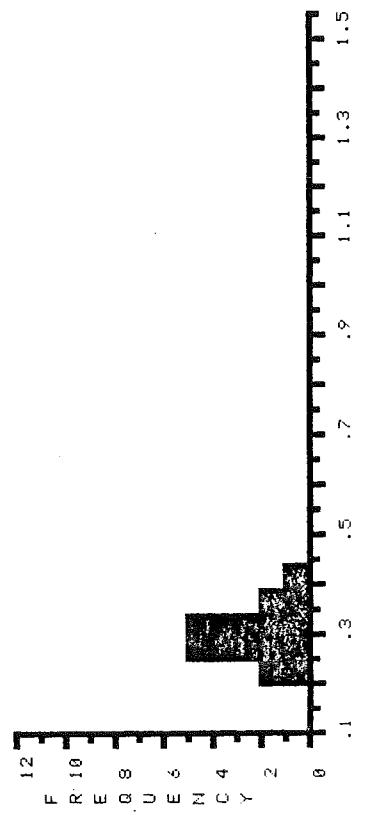
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|-----|------|------|------|------|------|------|------|------|------|------|
| ROW | | .23 | *.24 | *.28 | *.28 | *.28 | *.29 | *.29 | *.30 | *.31 |
| 1 | *.31 | *.32 | *.33 | *.36 | *.37 | *.41 | .46 | .46 | .47 | .48 |
| 2 | .49 | .59 | .64 | .66 | .66 | .67 | .67 | .68 | .69 | .80 |
| 3 | .94 | 1.41 | | | | | | | | |

MEAN STAND.DEV. PTS MIN MAX SUM
 TOTAL > .50 .25 31 1.41 15.37
 *EDIT > .31 .05 15 .23 .41 4.6

% REFLECTANCE



% REFLECTANCE ** EDITED **

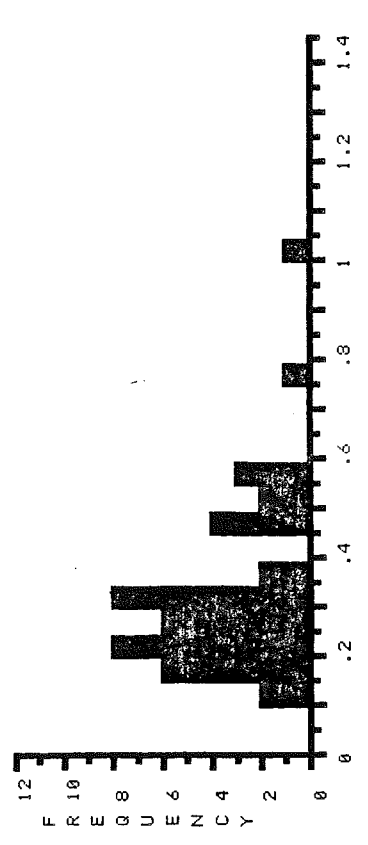


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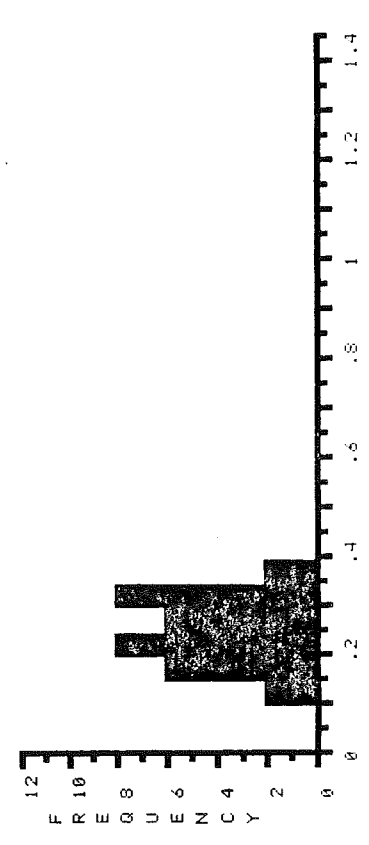
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|-----|------|------|------|------|------|------|------|------|------|------|
| ROW | | .13 | *.14 | *.15 | *.16 | *.17 | *.17 | *.18 | *.18 | *.20 |
| 1 | *.20 | *.21 | *.23 | *.23 | *.24 | *.24 | *.25 | *.25 | *.25 | *.27 |
| 2 | *.28 | *.28 | *.30 | *.30 | *.31 | *.31 | *.31 | *.31 | *.31 | *.32 |
| 3 | *.33 | *.33 | *.35 | .45 | .48 | .49 | .50 | .52 | .52 | .55 |
| 4 | .57 | .59 | .79 | 1.02 | | | | | | |

MEAN STAND.DEV. PTS MIN MAX SUM
 TOTAL > .33 .18 43 1.02 14.27
 *EDIT > .25 .06 32 .13 .35 7.86

% REFLECTANCE



% REFLECTANCE ** EDITED **



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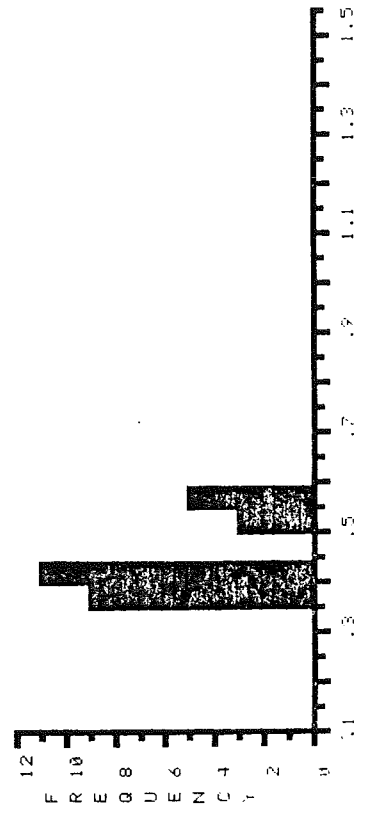
| COL | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 |
|-----|------|------|------|------|------|------|------|------|------|------|
| ROW | | .22 | *.35 | *.36 | *.36 | *.36 | *.37 | *.38 | *.38 | *.39 |
| 1 | *.39 | *.40 | *.40 | *.40 | *.40 | *.41 | *.41 | *.42 | *.42 | *.42 |
| 2 | *.43 | *.43 | *.53 | *.53 | *.53 | *.56 | *.56 | *.56 | *.57 | *.59 |
| 3 | .66 | .68 | .71 | .74 | .77 | .77 | .78 | .79 | .79 | .82 |
| 4 | .82 | .83 | .84 | .84 | .84 | .85 | .87 | .89 | .89 | .90 |
| 5 | .90 | .91 | .91 | .92 | .92 | .93 | .94 | .94 | .95 | .96 |
| 6 | .96 | .97 | .98 | .99 | 1.01 | 1.01 | 1.01 | 1.02 | 1.03 | 1.04 |
| 7 | 1.05 | 1.05 | 1.06 | 1.07 | 1.08 | 1.08 | 1.09 | 1.09 | 1.09 | 1.11 |
| 8 | 1.11 | 1.12 | 1.12 | 1.15 | 1.15 | 1.15 | 1.16 | 1.17 | 1.20 | 1.21 |
| 9 | 1.23 | 1.24 | 1.25 | 1.27 | 1.28 | 1.29 | 1.31 | 1.33 | 1.39 | 1.42 |

MEAN STAND.DEV. PTS MIN MAX SUM
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% REFLECTANCE



% REFLECTANCE ** EDITED **

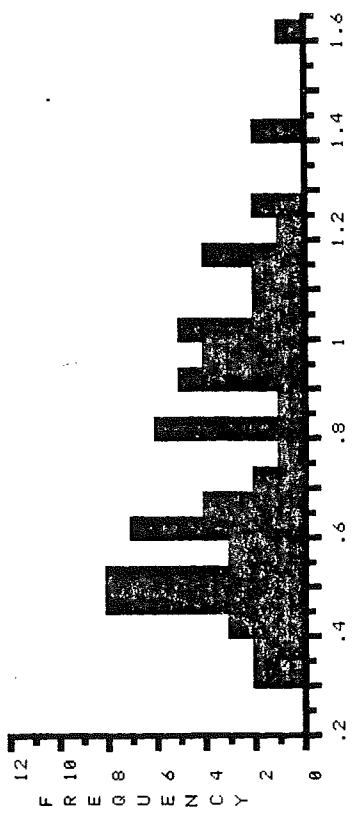


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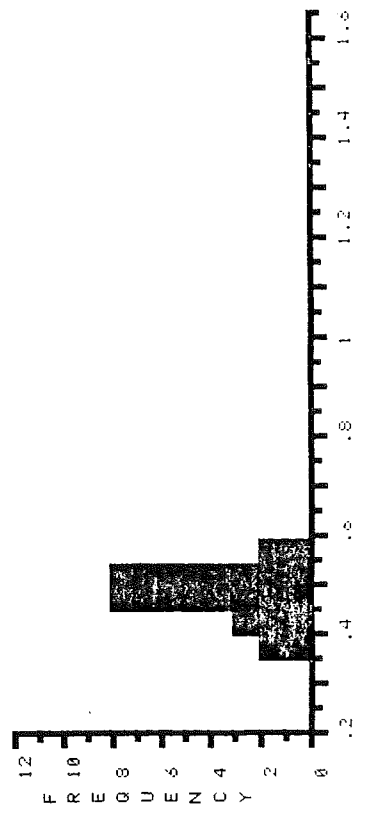
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|-----|------|------|------|------|------|------|------|------|------|------|
| ROW | | .30 | .32 | *.35 | *.36 | *.41 | *.42 | *.42 | *.45 | *.45 |
| 1 | *.45 | *.46 | *.46 | *.48 | *.48 | *.48 | *.51 | *.51 | *.52 | *.52 |
| 2 | *.53 | *.54 | *.54 | *.54 | *.55 | *.57 | .59 | .60 | .60 | .61 |
| 3 | .62 | .64 | .64 | .64 | .65 | .67 | .68 | .68 | .72 | .74 |
| 4 | .78 | .80 | .81 | .81 | .82 | .82 | .82 | .85 | .90 | .91 |
| 5 | .93 | .94 | .94 | .96 | .97 | .98 | .99 | 1.00 | 1.00 | 1.02 |
| 6 | 1.03 | 1.04 | 1.07 | 1.09 | 1.12 | 1.14 | 1.15 | 1.15 | 1.17 | 1.19 |
| 7 | 1.24 | 1.27 | 1.27 | 1.40 | 1.44 | 1.60 | | | | |

MEAN STAND.DEV. PTS MIN MAX SUM
 TOTAL > .77 .30 75 1.60 58.11
 *EDIT > .48 .06 23 .35 .57 11

% REFLECTANCE



% REFLECTANCE ** EDITED **

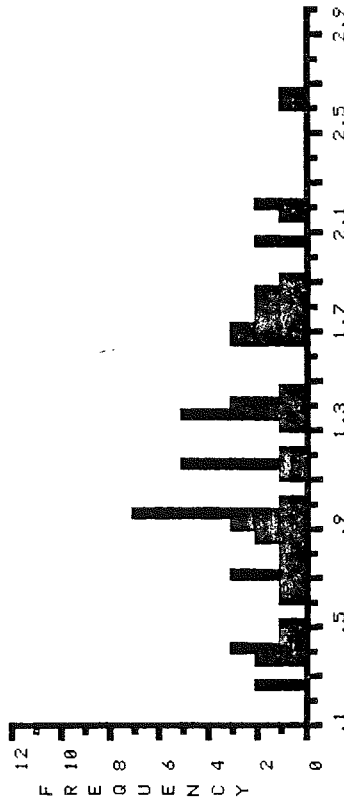


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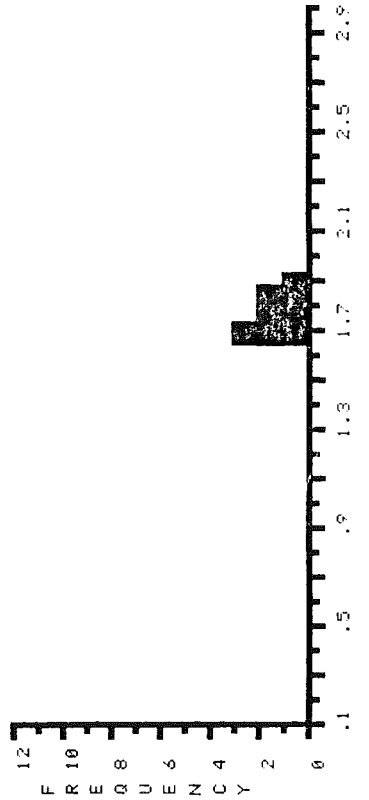
| COL | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 |
|-----|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| ROW | | .29 | .29 | .37 | .38 | .41 | .41 | .42 | .48 | .53 |
| 1 | .62 | .69 | .72 | .72 | .74 | .78 | .84 | .85 | .85 | .90 |
| 2 | .90 | .92 | .95 | .98 | .98 | .98 | .98 | .98 | .99 | 1.04 |
| 3 | 1.14 | 1.16 | 1.16 | 1.16 | 1.17 | 1.19 | 1.22 | 1.33 | 1.35 | 1.35 |
| 4 | 1.38 | 1.38 | 1.39 | 1.40 | 1.41 | 1.44 | 1.47 | 1.65 | 1.45 | 1.67 |
| 5 | *1.71 | *1.74 | *1.74 | *1.75 | *1.77 | *1.81 | *1.84 | *1.89 | *1.89 | *1.93 |
| 6 | 2.06 | 2.08 | 2.17 | 2.20 | 2.22 | 2.63 | 2.67 | | | |

MEAN STAND.DEV. PTS MIN MAX SUM
 TOTAL > 1.25 .58 66 .29 2.67 82.17
 *EDIT > 1.77 .09 13 1.65 1.93 23.04

% REFLECTANCE



% REFLECTANCE ** EDITED **

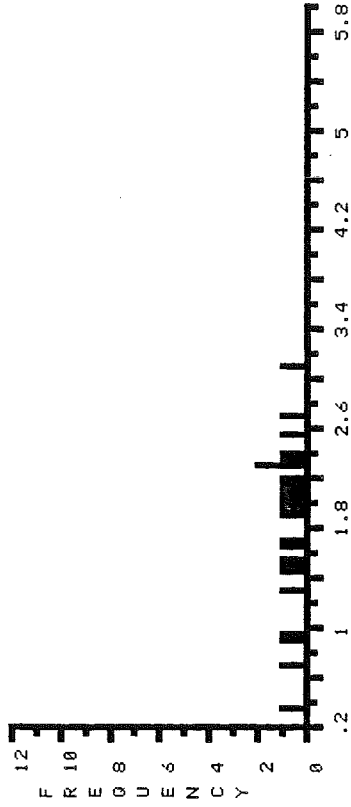


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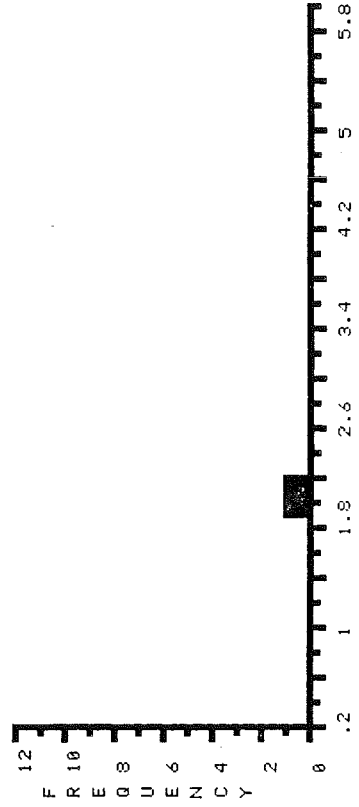
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|-----|------|-------|-------|-------|-------|-------|-------|-------|------|------|
| ROW | | .35 | .74 | .91 | .97 | 1.30 | 1.48 | 1.52 | 1.55 | 1.68 |
| 1 | 1.72 | *1.90 | *1.95 | *2.02 | *2.05 | *2.10 | *2.19 | *2.24 | 2.31 | 2.31 |
| 2 | 2.36 | 2.41 | 2.56 | 2.73 | 3.12 | | | | | |

MEAN STAND.DEV. PTS MIN MAX SUM
 TOTAL > 1.85 .66 24 .35 3.12 44.47
 *EDIT > 2.06 .12 7 1.90 2.24 14.45

% REFLECTANCE



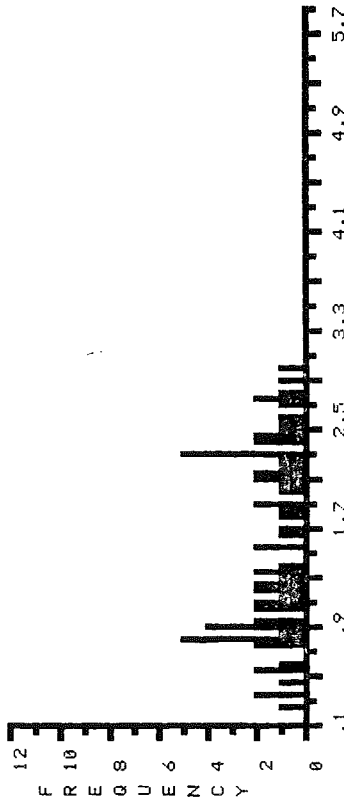
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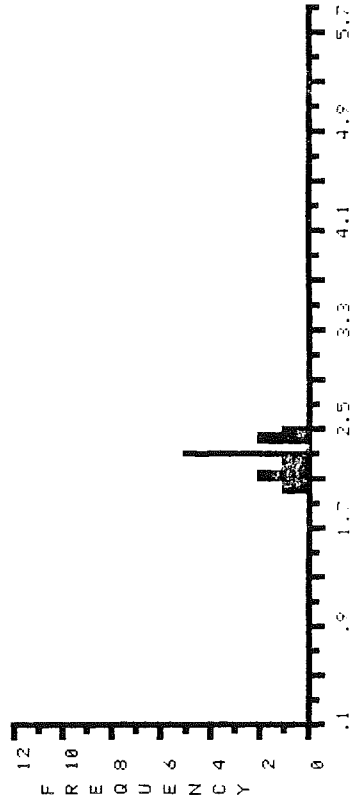
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| COL | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 |
|-------|-------|-------|-------|-------|-------|-------|-------|--------|-------|-------|
| ROW | | .28 | .36 | .37 | .48 | .57 | .59 | .64 | .76 | .78 |
| 1 | .81 | .82 | .82 | .83 | .84 | .89 | .91 | .91 | .93 | .94 |
| 2 | .95 | .98 | 1.06 | 1.09 | 1.12 | 1.13 | 1.16 | 1.20 | 1.24 | 1.28 |
| 3 | 1.28 | 1.31 | 1.35 | 1.36 | 1.41 | 1.57 | 1.57 | 1.68 | 1.74 | 1.82 |
| 4 | 1.89 | 1.90 | 1.94 | *2.01 | *2.09 | *2.14 | *2.14 | *2.15 | *2.19 | *2.24 |
| 5 | *2.27 | *2.31 | *2.32 | *2.32 | *2.33 | *2.42 | *2.42 | *2.43 | *2.46 | *2.47 |
| 6 | *2.51 | 2.59 | 2.64 | 2.73 | 2.77 | 2.78 | 2.84 | 2.92 | 3.01 | |
| TOTAL | > | 1.60 | .76 | .28 | .28 | .28 | 3.01 | 106.97 | | |
| *EDIT | > | 2.28 | .14 | 18 | 2.01 | 2.51 | 41.13 | | | |

MEAN STAND.DEV. PTS MIN MAX SUM



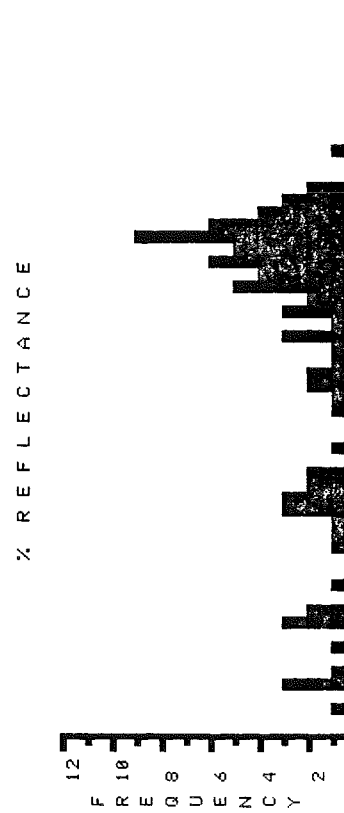
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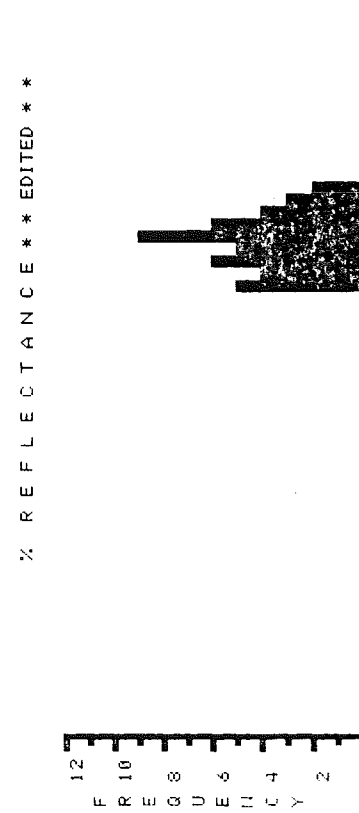
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| COL | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 |
|-------|-------|-------|-------|-------|-------|-------|--------|-------|-------|-------|
| ROW | | .64 | .70 | .71 | .73 | .78 | .86 | .95 | .97 | .98 |
| 1 | 1.03 | 1.04 | 1.11 | 1.29 | 1.33 | 1.36 | 1.40 | 1.41 | 1.43 | 1.45 |
| 2 | 1.46 | 1.49 | 1.51 | 1.52 | 1.57 | 1.58 | 1.66 | 1.80 | 1.86 | 1.90 |
| 3 | 1.92 | 1.95 | 1.99 | 2.02 | 2.07 | 2.11 | 2.13 | 2.14 | 2.18 | 2.21 |
| 4 | 2.21 | 2.23 | 2.25 | 2.28 | *2.30 | *2.31 | *2.33 | *2.33 | *2.34 | *2.38 |
| 5 | *2.39 | *2.39 | *2.39 | *2.40 | *2.40 | *2.42 | *2.42 | *2.44 | *2.44 | *2.45 |
| 6 | *2.45 | *2.45 | *2.48 | *2.49 | *2.50 | *2.50 | *2.52 | *2.52 | *2.52 | *2.53 |
| 7 | *2.53 | *2.53 | *2.54 | *2.55 | *2.55 | *2.56 | *2.58 | *2.58 | *2.58 | *2.60 |
| 8 | *2.61 | *2.63 | *2.64 | *2.66 | *2.66 | *2.68 | *2.71 | *2.73 | 2.87 | |
| TOTAL | > | 2.04 | .61 | 88 | .64 | 2.87 | 179.09 | | | |
| *EDIT | > | 2.50 | .11 | 44 | 2.30 | 2.73 | 110.01 | | | |

MEAN STAND.DEV. PTS MIN MAX SUM



% REFLECTANCE ** EDITED **



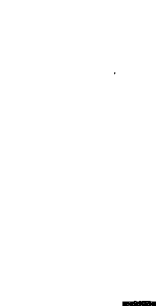
FILE >> K0577A DESCRIPTION FOLLOWS :
 DEPTH 7390-7480', HERMINE E-94, MPA, OCT-14-86

| COL | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 |
|-----|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| ROW | | .86 | .96 | .99 | 1.07 | 1.16 | 1.18 | 1.39 | 1.41 | 1.42 |
| 1 | 1.45 | 1.62 | 1.64 | 1.67 | 1.69 | 1.72 | 1.76 | 1.81 | 1.83 | 1.84 |
| 2 | 1.91 | 1.92 | 1.96 | 1.97 | 1.98 | 1.98 | 1.98 | 2.00 | 2.02 | 2.02 |
| 3 | 2.05 | 2.06 | 2.07 | 2.08 | 2.10 | 2.11 | 2.11 | 2.12 | 2.14 | 2.17 |
| 4 | 2.18 | 2.21 | 2.23 | 2.25 | 2.26 | 2.27 | 2.27 | 2.28 | 2.29 | 2.32 |
| 5 | 2.32 | 2.33 | 2.33 | 2.34 | 2.34 | 2.35 | 2.35 | 2.35 | 2.36 | 2.38 |
| 6 | 2.39 | 2.42 | 2.42 | 2.43 | 2.43 | 2.44 | 2.44 | 2.46 | 2.47 | 2.48 |
| 7 | *2.53 | *2.53 | *2.53 | *2.54 | *2.56 | *2.56 | *2.57 | *2.57 | *2.58 | *2.58 |
| 8 | *2.63 | *2.64 | *2.64 | *2.64 | *2.65 | *2.65 | *2.66 | *2.71 | *2.71 | *2.73 |
| 9 | *2.80 | *2.80 | *2.84 | *2.86 | *2.91 | *2.91 | 3.07 | 3.14 | 3.15 | 3.16 |

MEAN 2.23
 STAND.DEV. .49
 PTS 99
 MIN .86
 MAX 3.16
 SUM 220.41

*EDIT > 2.65

% REFLECTANCE



** REFLECTANCE ** EDITED **

FILE >> K0577B DESCRIPTION FOLLOWS :
 DEPTH 7980-7910', HERMINE E-94, MPA, OCT-14-86

| COL | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 |
|-----|-------|-------|-------|-------|------|------|------|------|------|------|
| ROW | | .83 | 1.18 | 1.34 | 1.34 | 1.35 | 1.42 | 1.52 | 1.55 | 1.60 |
| 1 | 1.73 | 1.79 | 1.81 | 1.81 | 1.82 | 1.87 | 1.94 | 1.94 | 1.94 | 1.97 |
| 2 | 1.97 | 2.00 | 2.07 | 2.10 | 2.11 | 2.13 | 2.13 | 2.14 | 2.19 | 2.21 |
| 3 | 2.24 | 2.25 | 2.27 | 2.27 | 2.29 | 2.29 | 2.30 | 2.33 | 2.34 | 2.36 |
| 4 | 2.38 | 2.39 | 2.41 | 2.47 | 2.49 | 2.50 | 2.51 | 2.54 | 2.55 | 2.56 |
| 5 | 2.57 | 2.58 | 2.58 | 2.59 | 2.65 | 2.74 | 2.75 | 2.76 | 2.77 | 2.77 |
| 6 | *2.77 | *2.78 | *2.82 | *2.86 | 3.04 | 3.26 | 3.35 | | | |

MEAN 2.23
 STAND.DEV. .50
 PTS 66
 MIN .83
 MAX 3.35
 SUM 147.18

*EDIT > 2.77

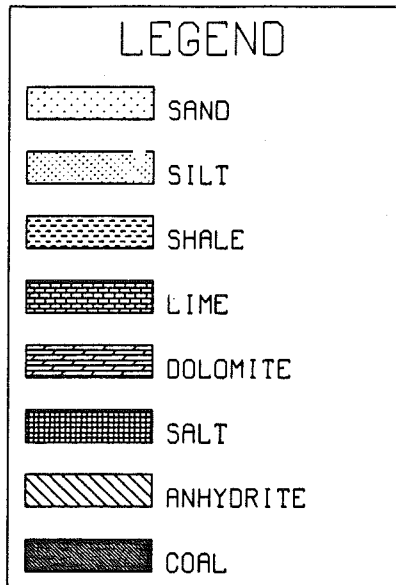
% REFLECTANCE



** REFLECTANCE ** EDITED **

ELF HERMINE E-94

E 37



1 10-36-18 THUR 12 MAR 1967 , BEDFORD INSTITUTE DISSPLA 9.0

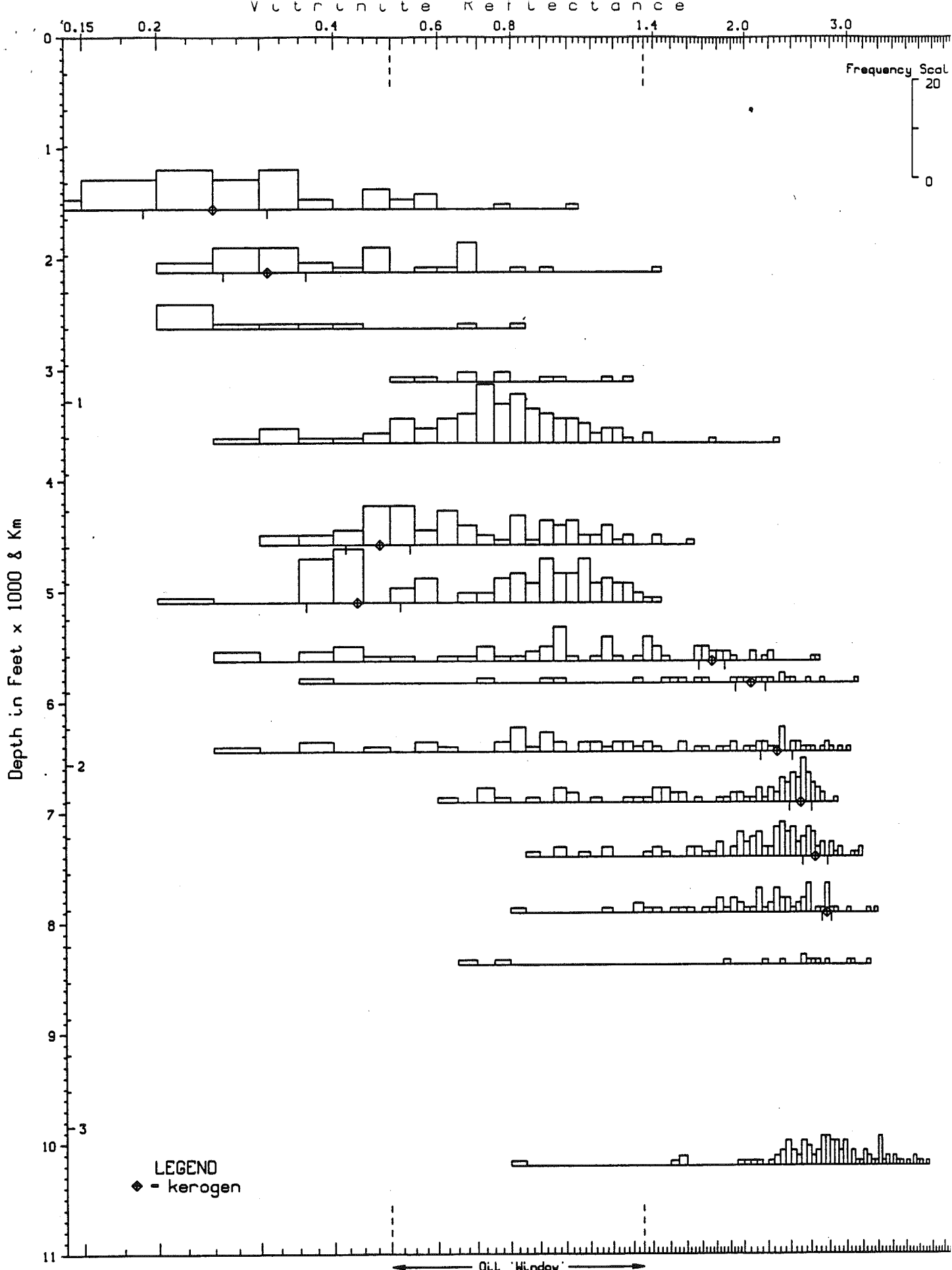


Fig. 2 Hermine E-94 <histograms>

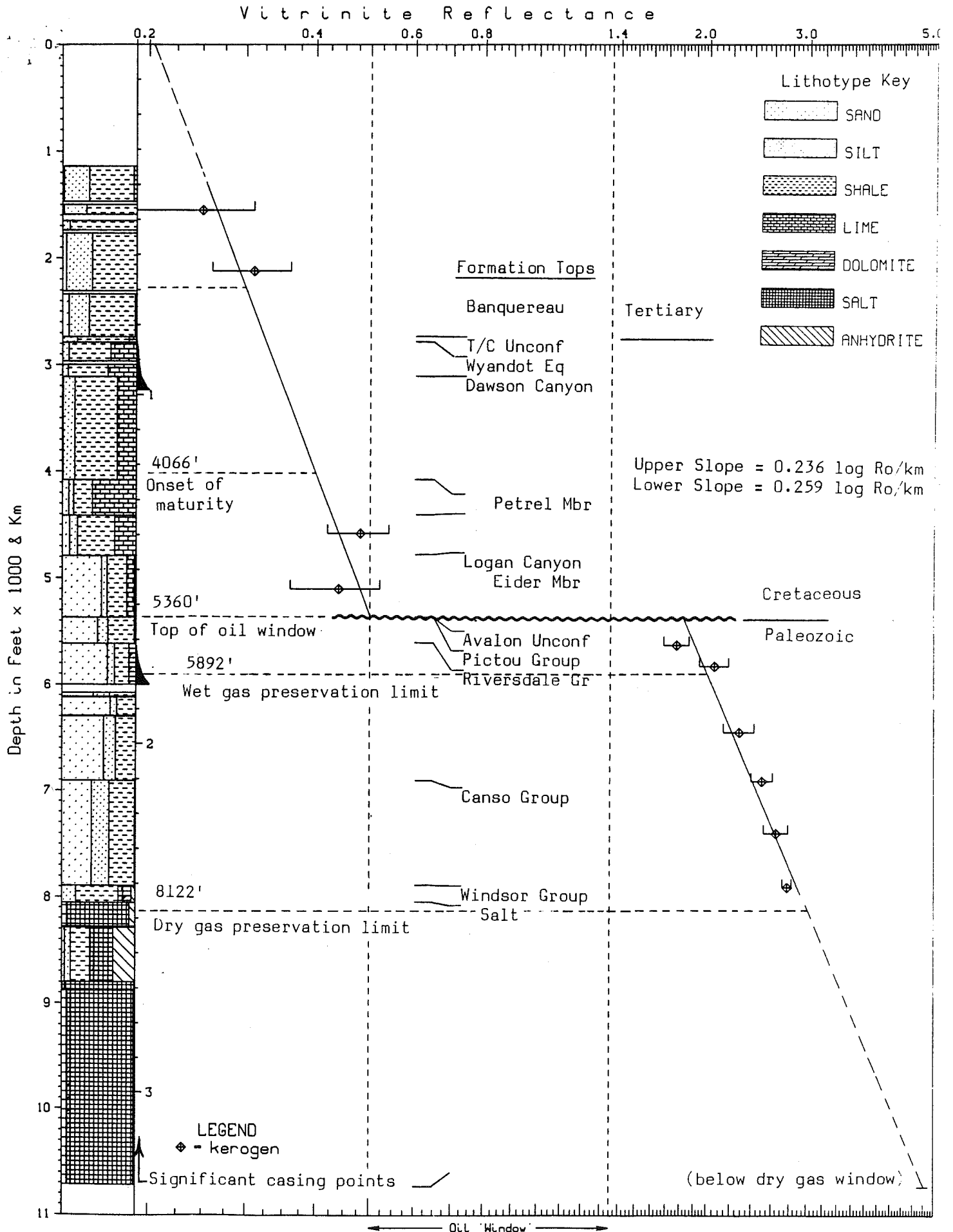


Fig. 1 Hermine E-94