Vitrinite reflectance data of cuttings from the Shell Oil Co. Kustatan River No. 1 well

Received 24 July 1989

Total of 9 pages in report

Geologic Materials Center Data Report No. 132

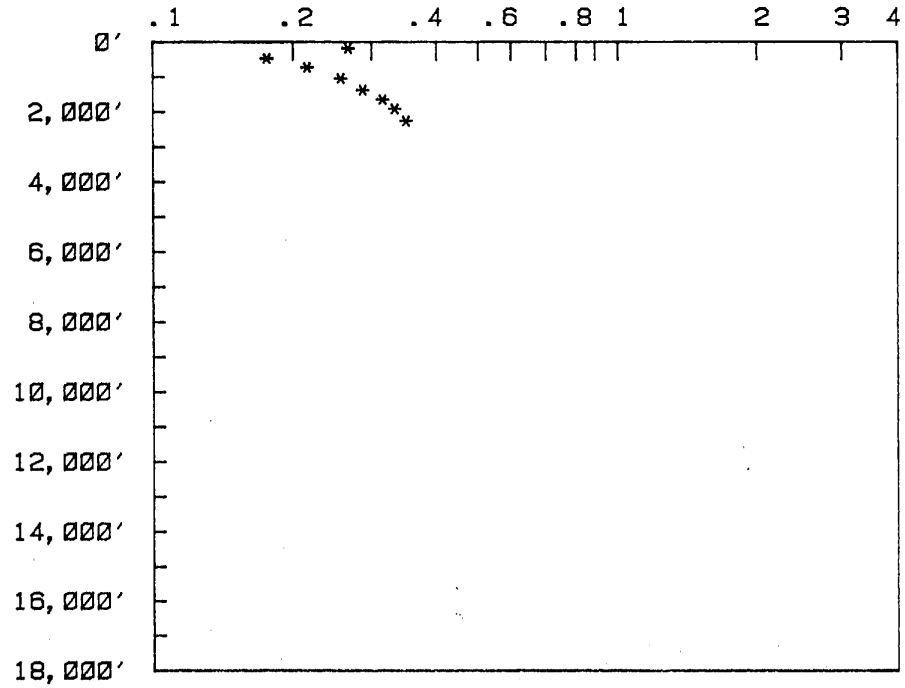
(9)

P000484

Data From — Tom Edison

SHELL KUSTATAN 17786#1

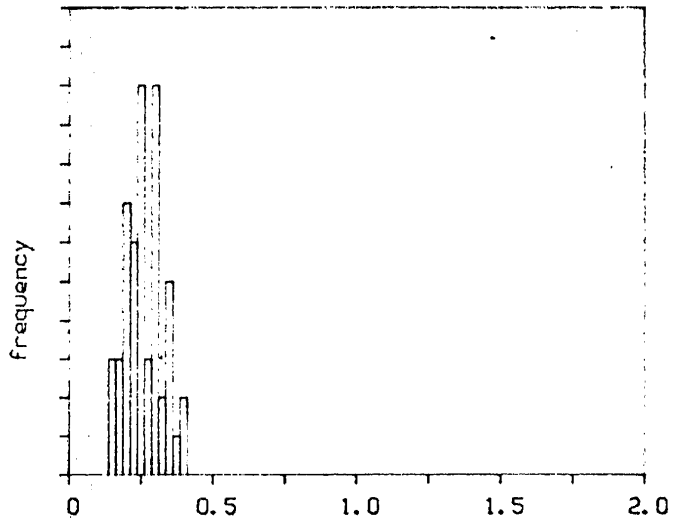
DEPTH	% REFL.
180	.27
480	.18
730	.22
1050	.26
1380	.29
1650	.32
1920	.34
2265	.36



DEPTH vs REFLECTANCE

PERCENT REFLECTANCE @ 546 nm

KUSTATAN RIVER 17786 #1
ALASKA DEPTH: 180-300 ft
PROJECT: SWEPI



NO OF MEAS. = 52
AVG. REFL. = .27 VITRINITE (HUMINITE)
STD. DEV. = .06

REFLECTANCE VALUES

.15	.17	.17	.19	.19	.19	.20
.20	.22	.22	.22	.22	.22	.23
.23	.23	.24	.24	.24	.25	.25
.25	.25	.26	.26	.27	.27	.27
.27	.28	.28	.29	.30	.30	.30
.30	.31	.31	.32	.32	.32	.32
.33	.34	.35	.35	.36	.37	.37
.39	.40	.42				

TAI: NO MICROSLIDE

FLUORESCENCE: VERY RARE (IN ONLY TWO PARTICLES)

COMMENTS: THIS IS A REFLECTOGRAM OF ALL MEASUREABLE PARTICLES, SEEMINGLY ALL VITRINITE (HUMINITE). ALL PARTICLES ARE SURROUNDED BY VERY FINE WHITE MINERAL MATTER (? "SILICA GEL"), WHICH MAY HAVE SLIGHTLY INCREASED THE REFLECTANCE READINGS OF THE ABUNDANT SMALL PARTICLES (AND VERY ABUNDANT) PRESENT. IF THE T.O.C. IS LOW, WHICH SEEMS LIKELY, THE PALEOENVIRONMENT OF DEPOSITION MAY HAVE BEEN MORE OXIC, WHICH COULD ALSO RESULT IN THE FORMATION OF A VITRINITE WITH SOMEWHAT HIGHER PERCENT REFLECTANCE VALUES. ALSO, SOME OF THE HIGHER REFLECTANCE VALUES MAY REPRESENT REDEPOSITED MATERIAL

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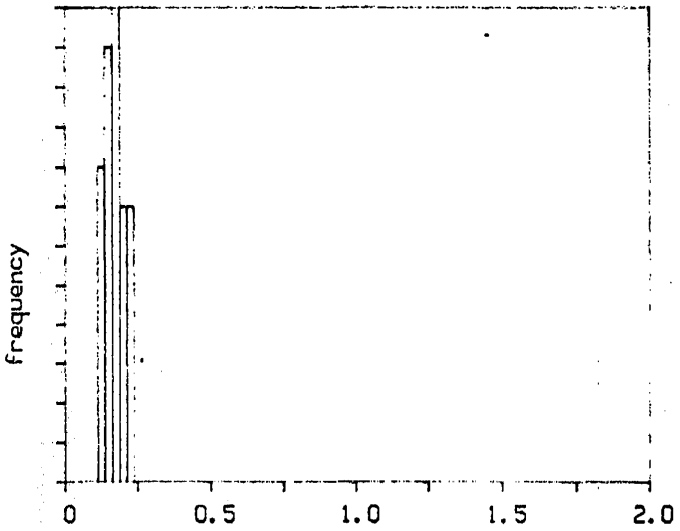
PERCENT REFLECTANCE @ 546 nm

KUSTATAN RIVER 17786 #1
ALASKA DEPTH: 480-560 ft
PROJECT: SWEPI



NO OF MEAS. = 46
AVG. REFL. = .18 VITRINITE (HUMINITE)
STD. DEV. = .03

REFLECTANCE VALUES

.13	.13	.14	.14	.14	.14	.14
.14	.15	.15	.15	.16	.16	.16
.16	.16	.17	.17	.17	.18	.18
.18	.19	.19	.19	.19	.19	.19
.19	.19	.19	.19	.20	.20	.20
.20	.20	.22	.22	.23	.23	.23
.23	.23	.24	.24			

TAI: NO MICROSLIDE
FLUORESCENCE: RARE BRIGHT TO MEDIUM YELLOW IN A FEW PARTICLES.

COMMENTS: PREDOMINANTLY VITRINITE, BUT EXINITE AND INERTINITE ALSO PRESENT, USUALLY WITHIN THE SAME "COALY" PARTICLES.

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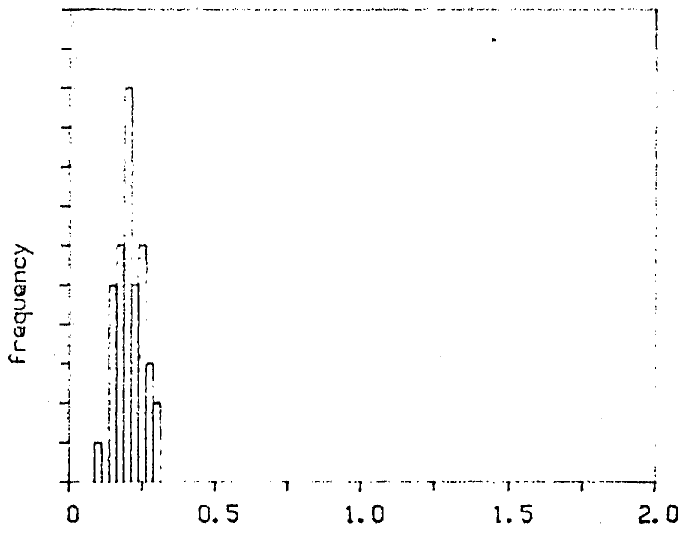
PERCENT REFLECTANCE @ 546 nm

KUSTATAN RIVER 17786 #1
ALASKA DEPTH: 730-840 ft
PROJECT: SWEPI



REFLECTANCE VALUES

.12	.15	.16	.17	.17	.17	.18
.18	.18	.18	.18	.19	.20	.21
.21	.21	.21	.22	.22	.22	.22
.22	.23	.23	.23	.23	.24	.25
.25	.26	.26	.27	.27	.28	.29
.29	.31	.32				

TAI: NO MICROSLIDE
FLUORESCENCE: RARE TO COMMON BRIGHT YELLOW TO DULL YELLOW-ORANGE

NO OF MEAS. = 38
AVG. REFL. = .22 (VITRINITE (HUMINITE))
STD. DEV. = .04

COMMENTS: PREDOMINANTLY VITRINITE, BUT EXINITE AND INERTINITE ALSO PRESENT, USUALLY WITHIN THE SAME "COALY" PARTICLES.

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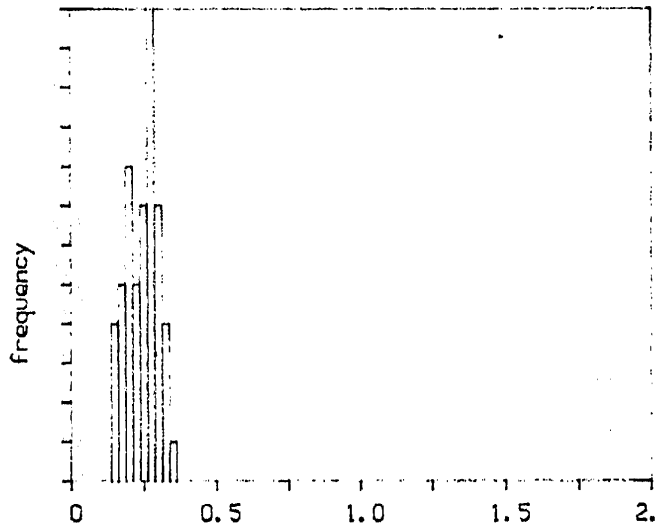
PERCENT REFLECTANCE @ 546 nm

KUSTATAN RIVER 17786 #1
ALASKA DEPTH: 1050-1140 ft
PROJECT: SWEPI



NO OF MEAS. = 54
AVG. REFL. = .26 VITRINITE (HUMINITE)
STD. DEV. = .05

REFLECTANCE VALUES

.16	.16	.17	.17	.18	.18	.18
.19	.19	.20	.20	.20	.21	.21
.22	.22	.22	.23	.23	.24	.24
.24	.25	.25	.26	.26	.27	.27
.27	.28	.28	.28	.28	.29	.29
.29	.29	.29	.29	.29	.29	.29
.30	.30	.30	.31	.31	.31	.32
.33	.33	.34	.34	.36		

TAI: NO MICROSLIDE

FLUORESCENCE: COMMON BRIGHT YELLOW TO DULL YELLOW-ORANGE

COMMENTS: PREDOMINANTLY VITRINITE, BUT EXINITE MORE PREVALENT HERE THAN IN OTHER SAMPLES IN THIS SERIES. SOME INERTINITE ALSO PRESENT. MIXTURES OF MACERALS USUALLY FOUND IN "COALY" PARTICLES.

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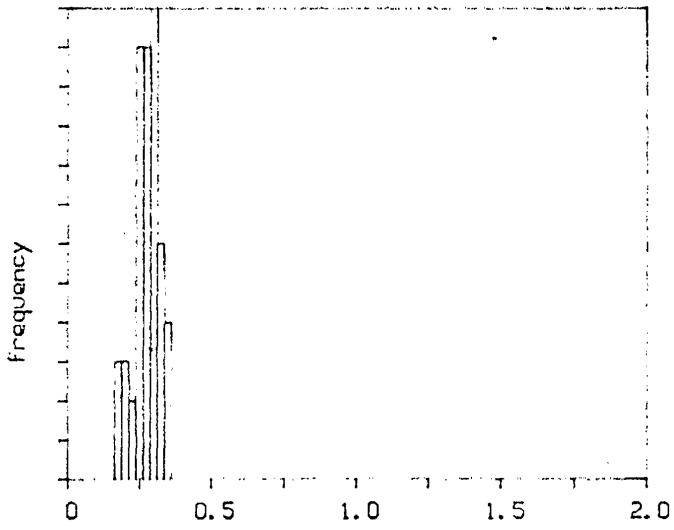
PERCENT REFLECTANCE @ 546 nm

KUSTATAN RIVER 17786 #1
ALASKA DEPTH: 1380-1470 ft
PROJECT: SWEPI



REFLECTANCE VALUES

.18	.19	.19	.21	.22	.22	.23
.23	.25	.25	.25	.25	.25	.25
.26	.26	.26	.27	.27	.28	.28
.28	.28	.28	.28	.28	.29	.29
.29	.29	.30	.30	.30	.31	.31
.31	.31	.31	.32	.32	.32	.32
.32	.32	.32	.33	.33	.33	.34
.34	.34	.35	.35	.36	.37	

TAI: NO MICROSLIDE

FLUORESCENCE: RARE TO COMMON BRIGHT YELLOW TO DULL YELLOW-ORANGE

NO OF MEAS. = 55
AVG. REFL. = .29 VITRINITE (HUMINITE)
STD. DEV. = .04
COMMENTS: PREDOMINANTLY VITRINITE; EXINITE AND INERTINITE ALSO PRESENT, USUALLY ALL AS MIXTURES IN "COALY" PARTICLES.

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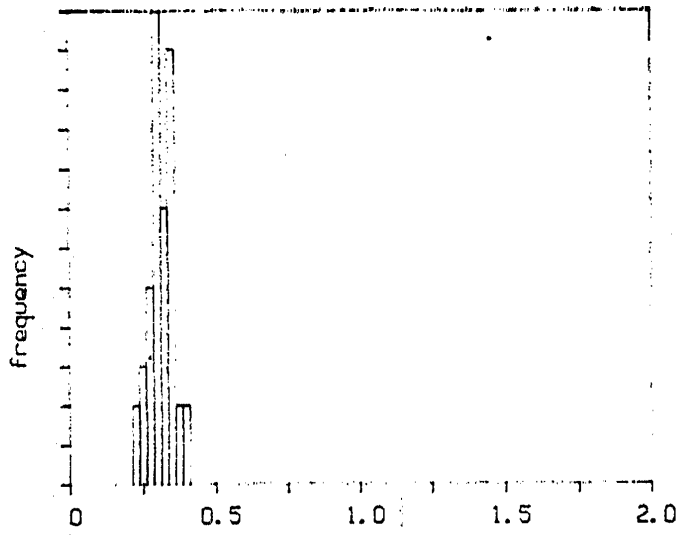
PERCENT REFLECTANCE @ 546 nm

KUSTATAN RIVER 17786 #1
ALASKA DEPTH: 1650-1740 ft
PROJECT: SWEPI



REFLECTANCE VALUES

.24	.24	.25	.27	.27	.28	.28
.29	.29	.29	.30	.30	.30	.30
.30	.30	.30	.31	.31	.31	.31
.31	.31	.32	.32	.32	.32	.33
.33	.34	.34	.34	.34	.34	.35
.35	.35	.35	.35	.35	.36	.36
.36	.37	.37	.38	.39	.42	.42

TAI; NO MICROSLIDE
FLUORESCENCE: RARE TO COMMON BRIGHT YELLOW TO DULL YELLOW-ORANGE.

NO OF MEAS. = 49
AVG. REFL. = .32 VITRINITE (HUMINITE)
STD. DEV. = .04

COMMENTS: PREDOMINANTLY VITRINITE; EXINITE AND INERTINITE ALSO PRESENT, USUALLY ALL AS MIXTURES IN "COALY" PARTICLES.

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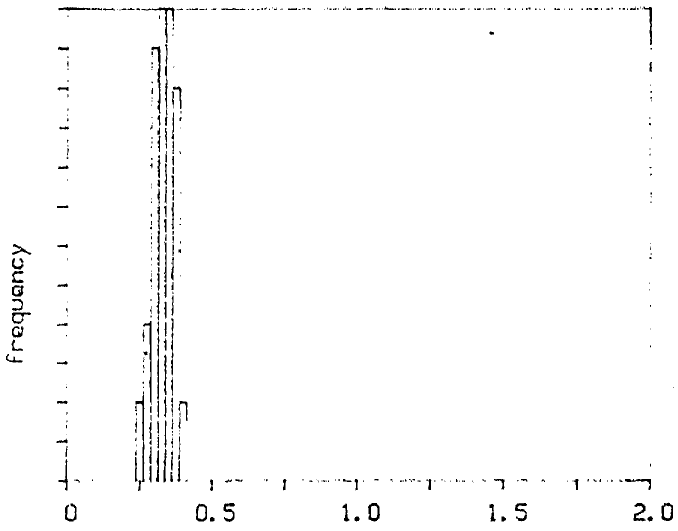
PERCENT REFLECTANCE @ 546 nm

KUSTATAN RIVER 17786 #1
ALASKA DEPTH: 1920-2010 ft
PROJECT: SWEPI



REFLECTANCE VALUES

.27	.27	.28	.28	.29	.29	.30
.30	.30	.31	.31	.31	.32	.32
.32	.32	.32	.33	.33	.33	.34
.34	.34	.34	.34	.34	.34	.34
.34	.35	.35	.35	.35	.36	.36
.36	.36	.36	.36	.36	.37	.38
.38	.38	.38	.39	.39	.39	.39
.39	.39	.42	.42			

TAI: NO MICROSLIDE
FLUORESCENCE: RARE BRIGHT YELLOW TO DULL YELLOW-ORANGE

NO OF MEAS. = 53
AVG. REFL. = .34 VITRINITE (HUMINITE)
STD. DEV. = .04

COMMENTS: PREDOMINANTLY VITRINITE; EXINITE AND INERTINITE PRESENT, USUALLY ALL AS MIXTURES IN "COALY" PARTICLES.

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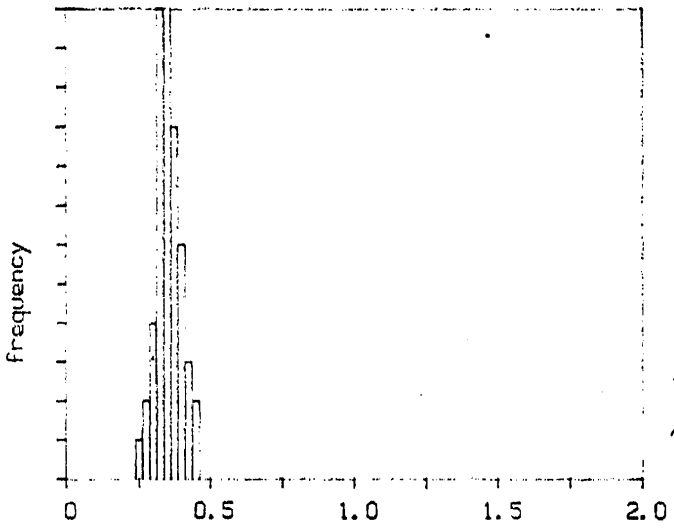
PERCENT REFLECTANCE @ 546 nm

KUSTATAN RIVER 17786 #1
ALASKA DEPTH: 2265-2340 ft
PROJECT: SWEPI



NO OF MEAS. = 55
AVG. REFL. = .36 VITRINITE (HUMINITE)
STD. DEV. = .04

REFLECTANCE VALUES

.27	.28	.28	.30	.31	.31	.32
.33	.33	.33	.33	.33	.34	.34
.34	.34	.34	.34	.34	.35	.35
.36	.36	.36	.36	.36	.36	.36
.37	.37	.37	.37	.37	.37	.37
.38	.38	.38	.38	.38	.38	.38
.39	.39	.40	.40	.40	.41	.41
.41	.43	.43	.44	.45	.47	

TAI: NO MICROSLIDE
FLUORESCENCE: RARE TO COMMON MOSTLY DULL YELLOW-ORANGE

COMMENTS: PREDOMINANTLY VITRINITE; EXINITE AND INERTINITE PRESENT, USUALLY ALL AS MIXTURES IN "COALY" PARTICLES.

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