

Vitrinite reflectance data of ditch cuttings from the Marathon Oil Company
Clam Gulch 1-X well

Received 14 October 1988

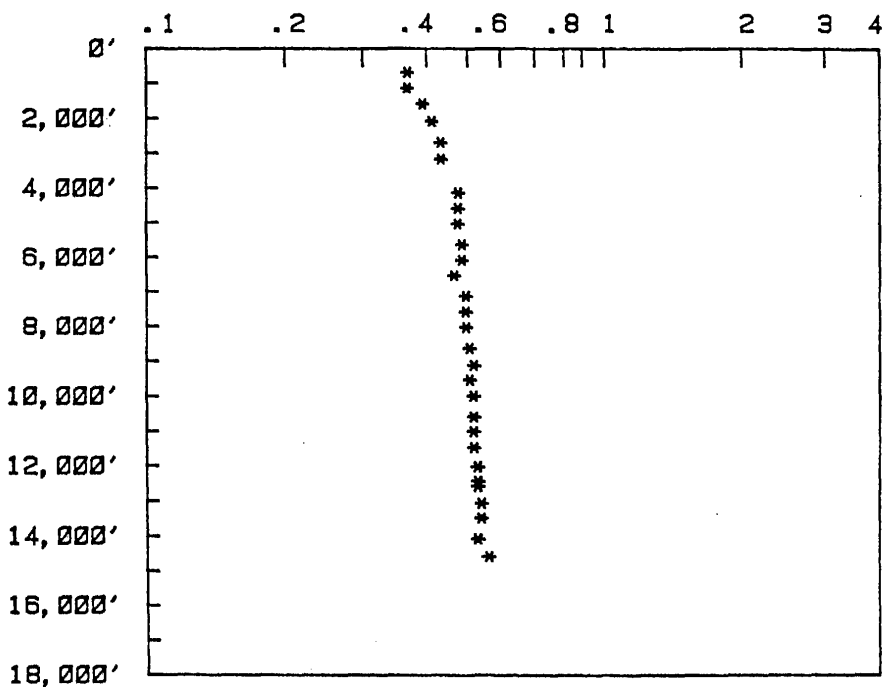
Total of 28 pages in report

Geologic Materials Center Data Report No. 94

Analysis Done —
By R. Makail

MARATHON CLAM GULCH#1

DEPTH	% REFL.
700	.38
1150	.38
1600	.41
2110	.43
2710	.45
3190	.45
4150	.49
4600	.49
5050	.49
5650	.50
6100	.50
6550	.48
7150	.51
7600	.51
8050	.51
8650	.52
9150	.53
9560	.53
10020	.53
10620	.53
11040	.53
11500	.53
12050	.54
12460	.54
12600	.54
13000	.55
13500	.55
14100	.54
14600	.57

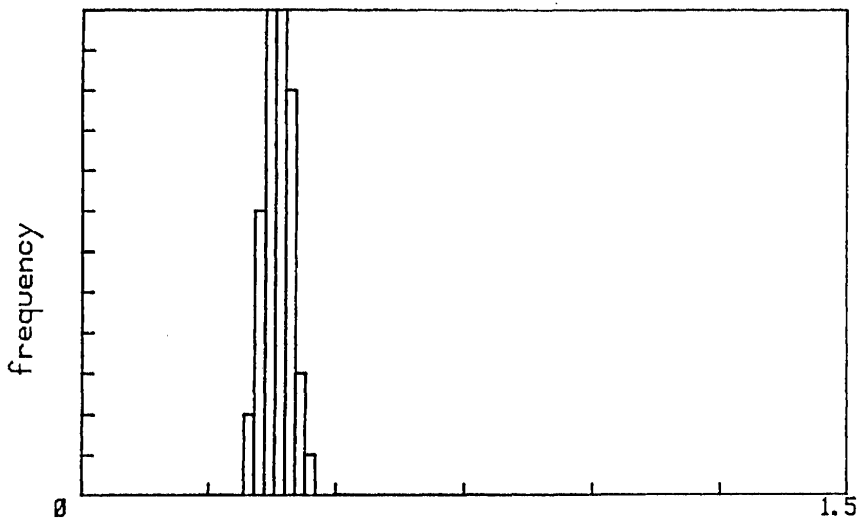


DEPTH vs REFLECTANCE

VITRINITE REFLECTANCE @ 546 nm

MARATHON CLAM GULCH#1
700-850 FT

DITCH SAMPLE



R_o VALUES

.33	.33	.34	.34	.34	.35
.35	.35	.35	.36	.36	.36
.36	.36	.36	.36	.36	.36
.37	.37	.37	.37	.37	.38
.38	.38	.38	.38	.38	.38
.39	.39	.39	.39	.39	.39
.4	.4	.4	.4	.4	.4
.4	.4	.4	.41	.42	.42
.42	.44				

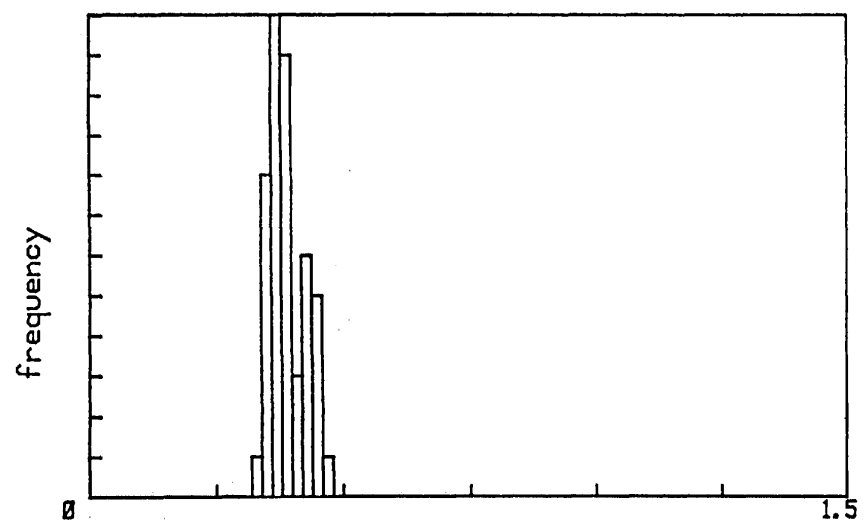
NO OF MEAS. = 50

AVE. REFL. .38

STD. DEV = .03

VITRINITE REFLECTANCE @ 546 nm

MARATHON CLAM GULCH#1 DITCH SAMPLE
 1150-1330 FT



R_o VALUES

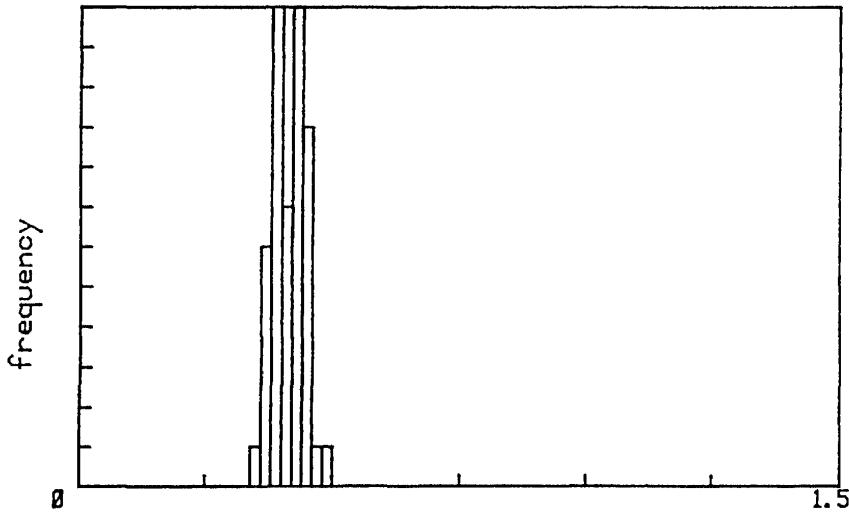
.33	.34	.34	.34	.34	.35
.35	.35	.35	.36	.36	.36
.36	.36	.36	.36	.36	.37
.37	.37	.37	.37	.37	.37
.38	.38	.38	.38	.38	.39
.39	.39	.39	.39	.39	.4
.41	.41	.42	.42	.42	.42
.43	.43	.44	.44	.44	.45
.45	.46				

NO OF MEAS. = 50
 AVE. REFL. .38
 STD. DEV = .03

VITRINITE REFLECTANCE @ 546 nm

MARATHON CLAM GULCH#1
1600-1750 FT

DITCH SAMPLE



R_o VALUES

.35	.36	.36	.37	.37	.37
.37	.38	.38	.38	.38	.38
.38	.39	.39	.39	.39	.39
.39	.39	.4	.4	.4	.4
.41	.41	.41	.42	.42	.42
.42	.42	.42	.43	.43	.43
.43	.43	.43	.44	.44	.44
.44	.44	.45	.45	.45	.45
.47	.49				

NO OF MEAS. = 50

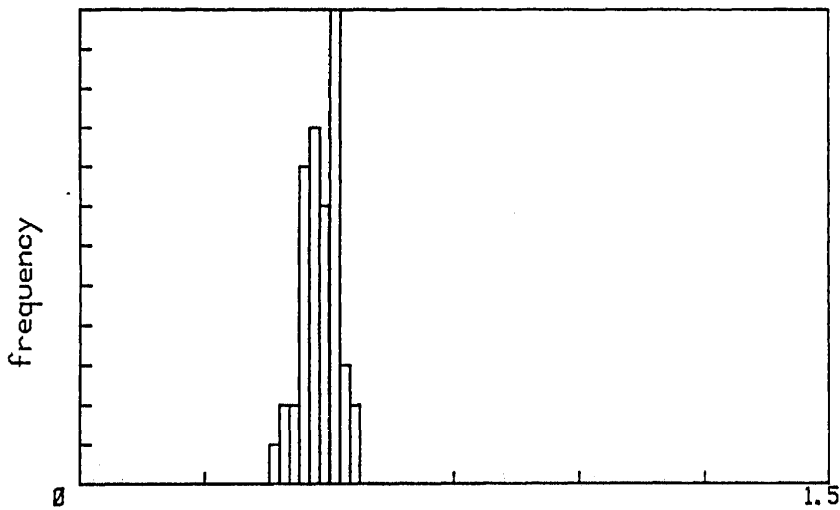
AVE. REFL. .41

STD. DEV = .03

VITRINITE REFLECTANCE @ 546 nm

MARATHON CLAM GULCH#1
3670-3850 FT

DITCH SAMPLE



R₀ VALUES

.38	.41	.41	.42	.43	.44
.44	.44	.45	.45	.45	.45
.45	.46	.46	.46	.46	.47
.47	.47	.47	.47	.48	.48
.48	.49	.49	.49	.49	.5
.5	.5	.5	.5	.5	.5
.5	.5	.5	.5	.51	.51
.51	.51	.51	.52	.52	.53
.54	.54				

NO OF MEAS. = 50

AVE. REFL. .48

STD. DEV = .03

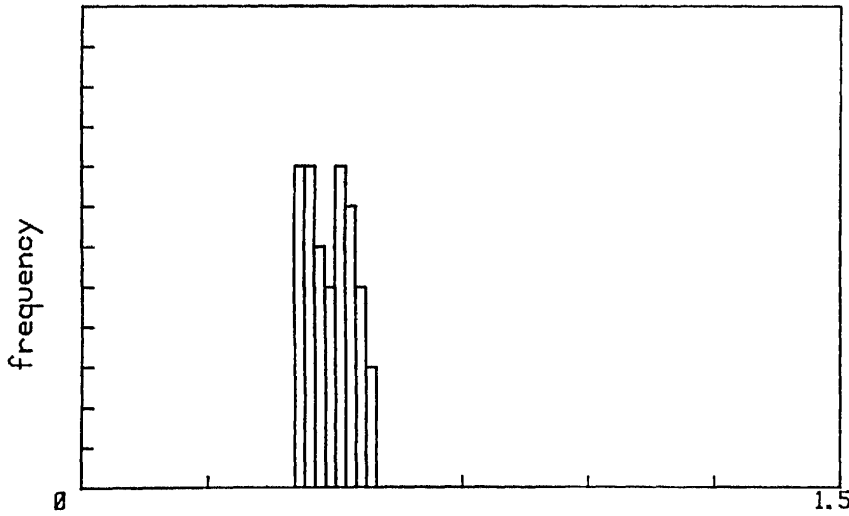
U S G E O L O G I C A L S U R V E Y

Open E/70

VITRINITE REFLECTANCE @ 546 nm

MARATHON CLAM GULCH#1
4150-4300 FT

DITCH SAMPLE



R₀ VALUES

.42	.42	.43	.43	.43	.43
.43	.43	.44	.44	.44	.44
.45	.45	.45	.45	.46	.46
.47	.47	.47	.47	.48	.48
.49	.49	.49	.5	.5	.51
.51	.51	.51	.51	.51	.52
.52	.52	.52	.52	.53	.53
.54	.55	.55	.55	.55	.56
.56	.56				

NO OF MEAS. = 50

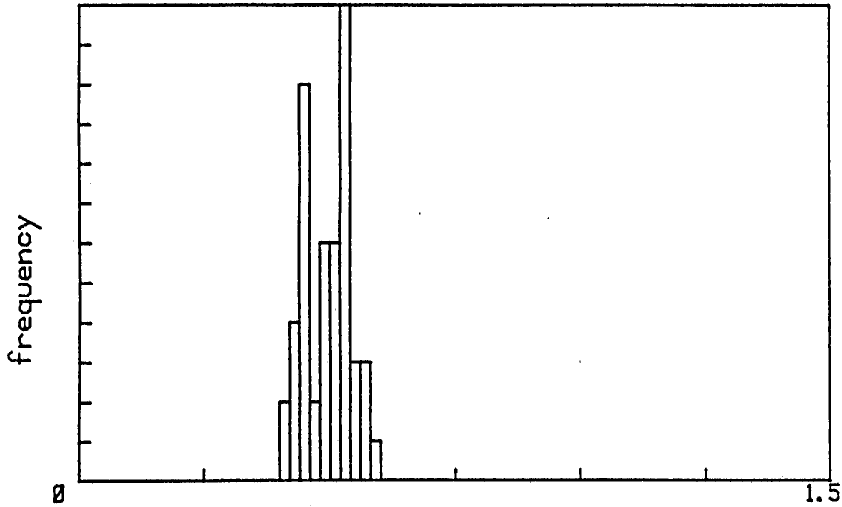
AVE. REFL. .49

STD. DEV = .04

VITRINITE REFLECTANCE @ 546 nm

MARATHON CLAM GULCH#1
4600-4750 FT

DITCH SAMPLE



R_o VALUES

.4	.41	.42	.42	.42	.43
.44	.44	.45	.45	.45	.45
.45	.45	.45	.45	.46	.47
.48	.48	.48	.48	.49	.49
.5	.5	.51	.51	.51	.51
.52	.52	.52	.52	.52	.52
.53	.53	.53	.53	.53	.53
.53	.54	.54	.54	.56	.57
.57	.58				

NO OF MEAS. = 50

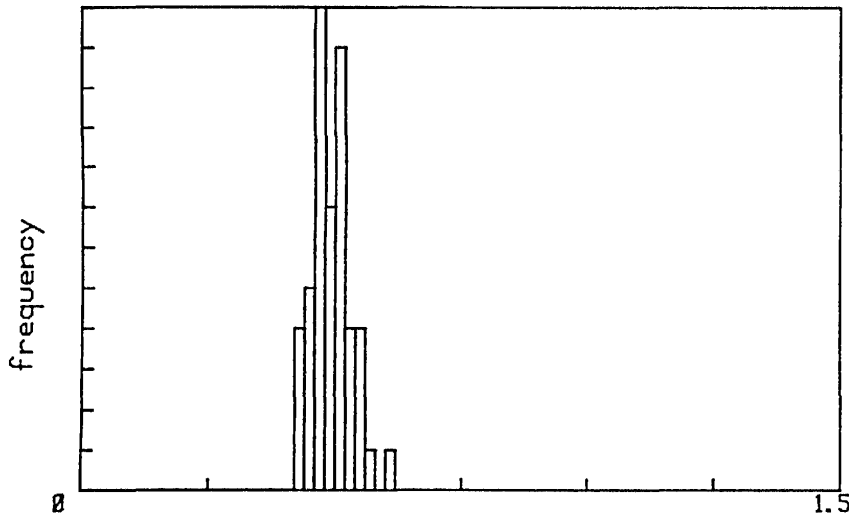
AVE. REFL. .49

STD. DEV = .05

VITRINITE REFLECTANCE @ 546 nm

MARATHON CLAM GULCH#1
5050-5200 FT

DITCH SAMPLE



R_o VALUES

.42	.43	.43	.43	.44	.44
.45	.45	.45	.46	.46	.46
.46	.46	.47	.47	.47	.47
.47	.47	.47	.47	.48	.48
.49	.49	.49	.49	.49	.5
.5	.5	.5	.5	.51	.51
.51	.51	.51	.51	.52	.53
.53	.53	.54	.54	.54	.54
.57	.61				

NO OF MEAS. = 50

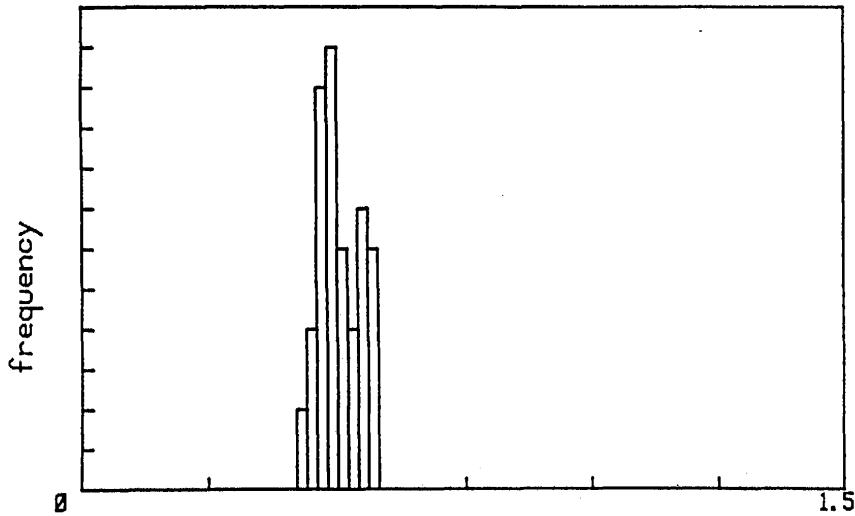
AVE. REFL. .49

STD. DEV = .04

VITRINITE REFLECTANCE @ 546 nm

MARATHON CLAM GULCH#1
5650-5800 FT

DITCH SAMPLE



R_o VALUES

.43	.43	.44	.44	.45	.45
.46	.46	.46	.46	.46	.46
.47	.47	.47	.47	.48	.48
.48	.48	.48	.48	.48	.48
.49	.49	.49	.5	.5	.5
.5	.5	.51	.52	.52	.53
.53	.54	.54	.54	.55	.55
.55	.55	.56	.56	.56	.57
.57	.57				

NO OF MEAS. = 50

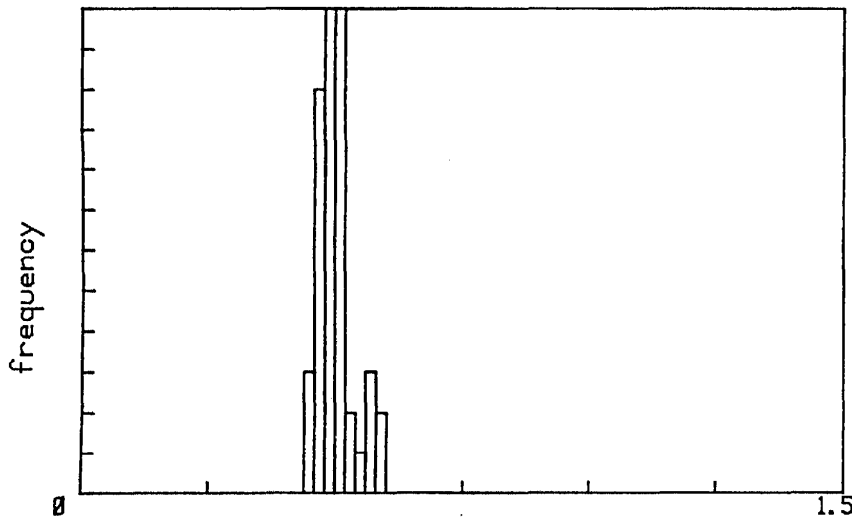
AVE. REFL. .5

STD. DEV = .04

VITRINITE REFLECTANCE @ 546 nm

MARATHON CLAM GULCH#1
6100-6250 FT

DITCH SAMPLE



R_o VALUES

.44	.45	.45	.46	.46	.46
.47	.47	.47	.47	.47	.47
.47	.48	.48	.48	.48	.48
.48	.49	.49	.49	.49	.49
.49	.49	.49	.49	.5	.5
.5	.5	.5	.51	.51	.51
.51	.51	.51	.51	.51	.51
.52	.52	.54	.56	.57	.57
.58	.59				

NO OF MEAS. = 50

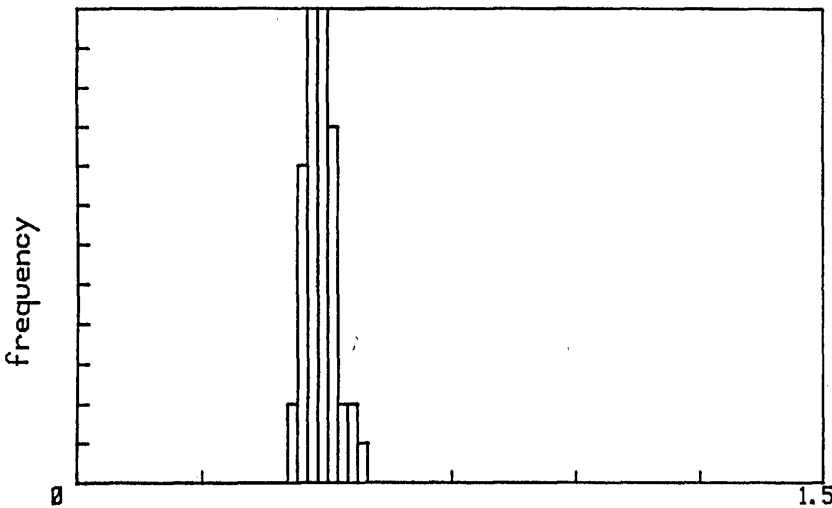
AVE. REFL. .5

STD. DEV = .03

VITRINITE REFLECTANCE @ 546 nm

MARATHON CLAM GULCH#1
6550-6700 FT

DITCH SAMPLE



R_o VALUES

.43	.43	.44	.44	.44	.44
.44	.44	.45	.45	.46	.46
.46	.46	.46	.47	.47	.47
.47	.47	.47	.47	.47	.47
.48	.48	.48	.48	.48	.48
.48	.48	.48	.49	.49	.49
.5	.5	.5	.5	.51	.51
.51	.51	.51	.52	.52	.55
.55	.57				

NO OF MEAS. = 50

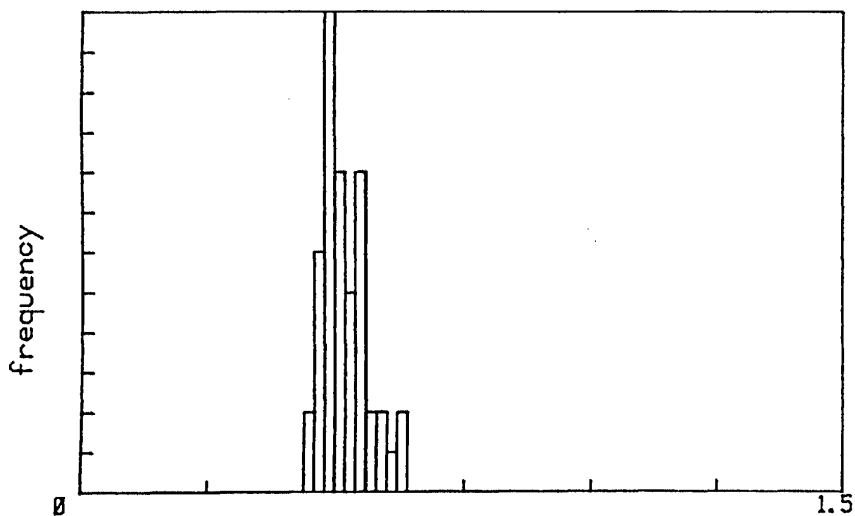
AVE. REFL. .48

STD. DEV = .03

VITRINITE REFLECTANCE @ 546 nm

MARATHON CLAM GULCH#1
7150-7300 FT

DITCH SAMPLE



R_o VALUES

.45	.45	.46	.46	.46	.47
.47	.47	.48	.48	.48	.48
.48	.48	.49	.49	.49	.49
.49	.49	.49	.49	.5	.5
.5	.5	.51	.51	.51	.51
.52	.52	.52	.53	.53	.54
.54	.54	.55	.55	.55	.55
.55	.57	.57	.59	.59	.6
.62	.63				

NO OF MEAS. = 50

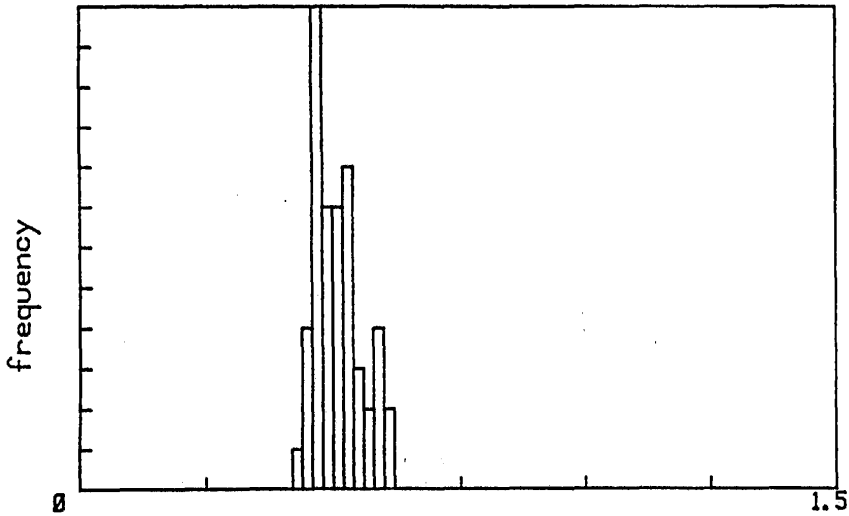
AVE. REFL. .51

STD. DEV = .04

VITRINITE REFLECTANCE @ 546 nm

MARATHON CLAM GULCH#1
7600-7750 FT

DITCH SAMPLE



R_o VALUES

.42	.44	.44	.45	.45	.46
.46	.46	.46	.47	.47	.47
.47	.47	.47	.47	.47	.48
.48	.49	.49	.49	.49	.49
.5	.5	.5	.51	.51	.51
.51	.52	.52	.52	.53	.53
.53	.53	.53	.54	.54	.54
.56	.57	.58	.58	.58	.59
.61	.61				

NO OF MEAS. = 50

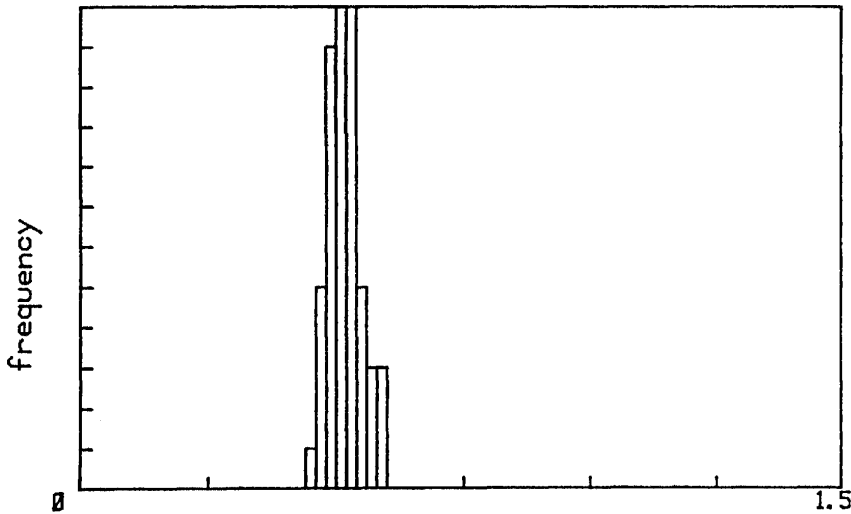
AVE. REFL. .51

STD. DEV = .05

VITRINITE REFLECTANCE @ 546 nm

MARATHON CLAM GULCH#1
8050-8200 FT

DITCH SAMPLE



R_o VALUES

.45	.46	.46	.47	.47	.47
.48	.48	.48	.48	.48	.48
.48	.49	.49	.49	.49	.5
.5	.5	.5	.5	.5	.5
.51	.51	.51	.51	.51	.52
.52	.52	.52	.52	.53	.53
.53	.53	.53	.53	.53	.53
.53	.53	.54	.54	.54	.54
.55	.56	.57	.57	.58	.58
.59					

NO OF MEAS. = 55

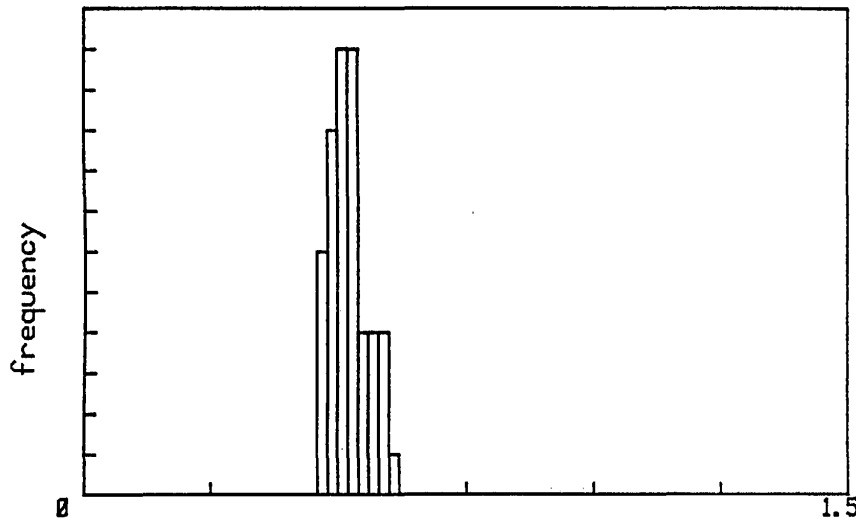
AVE. REFL. .51

STD. DEV = .03

VITRINITE REFLECTANCE @ 546 nm

MARATHON CLAM GULCH#1
8650-8800 FT

DITCH SAMPLE



R_o VALUES

.46	.46	.47	.47	.47	.47
.48	.48	.48	.48	.48	.49
.49	.49	.49	.5	.5	.5
.5	.5	.5	.5	.5	.51
.51	.51	.52	.52	.52	.52
.52	.52	.52	.53	.53	.53
.53	.54	.54	.55	.55	.56
.56	.56	.57	.58	.58	.59
.59	.6				

NO OF MEAS. = 50

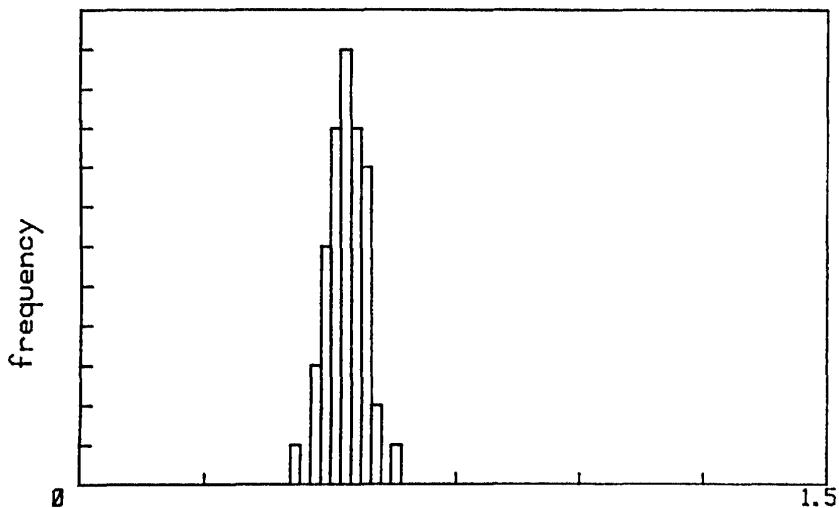
AVE. REFL. .52

STD. DEV = .04

VITRINITE REFLECTANCE @ 546 nm

MARATHON CLAM GULCH#1
9150-9350 FT

DITCH SAMPLE



R_o VALUES

.43	.46	.47	.47	.48	.48
.48	.49	.49	.49	.5	.5
.5	.5	.5	.51	.51	.51
.51	.52	.52	.52	.52	.52
.53	.53	.53	.53	.53	.53
.54	.54	.54	.54	.55	.55
.55	.55	.55	.56	.56	.56
.56	.57	.57	.57	.57	.58
.58	.62				

NO OF MEAS. = 50

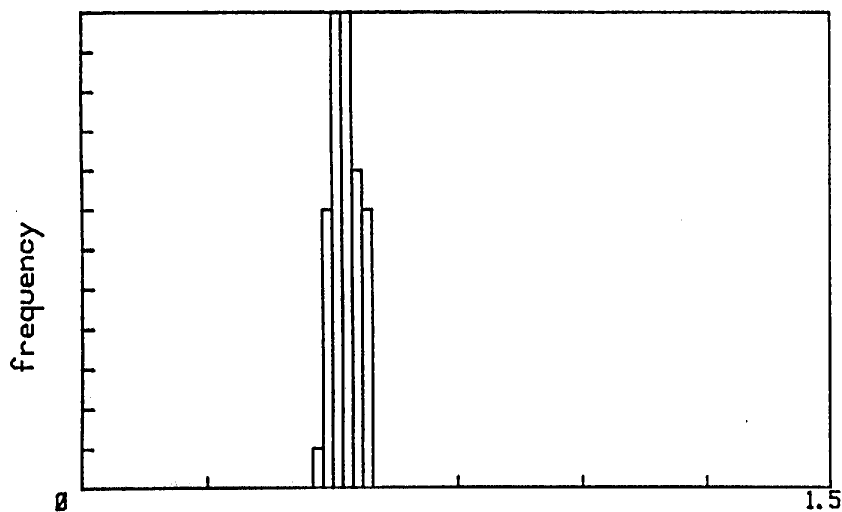
AVE. REFL. .53

STD. DEV = .04

VITRINITE REFLECTANCE @ 546 nm

MARATHON CLAM GULCH#1
9560-9760 FT

DITCH SAMPLE



R_o VALUES

.46	.48	.48	.48	.49	.49
.49	.49	.5	.5	.5	.5
.5	.51	.51	.51	.51	.51
.51	.51	.52	.52	.52	.52
.53	.53	.53	.53	.53	.53
.53	.53	.53	.53	.53	.54
.54	.54	.55	.55	.55	.55
.55	.56	.56	.56	.56	.57
.57	.57				

NO OF MEAS. = 50

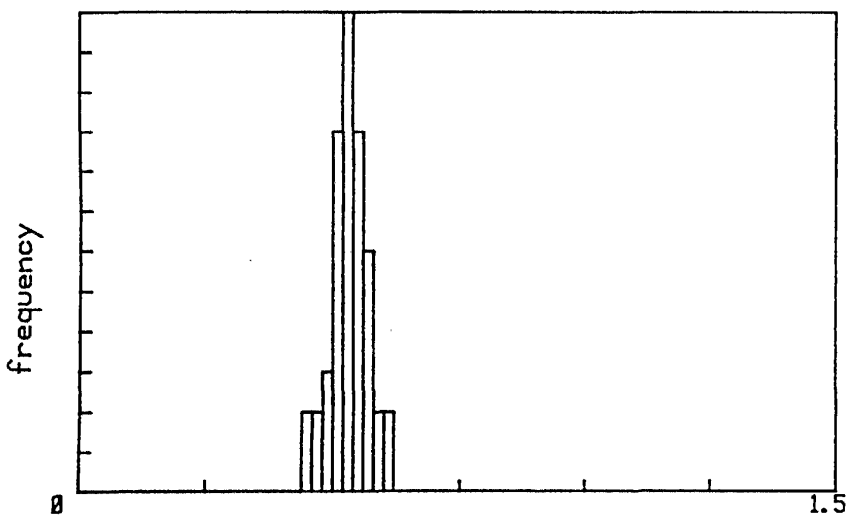
AVE. REFL. .52

STD. DEV = .03

VITRINITE REFLECTANCE @ 546 nm

MARATHON CLAM GULCH#1
10020-10300 FT

DITCH SAMPLE



R_o VALUES

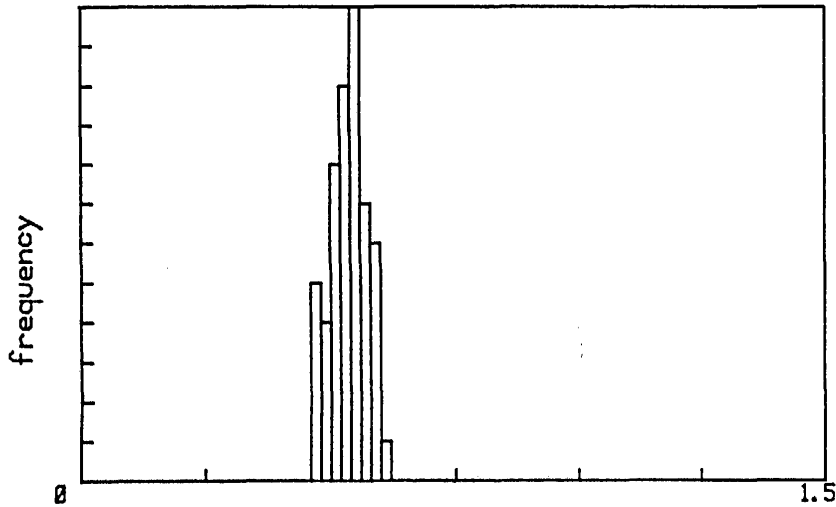
.44	.45	.46	.47	.48	.49
.49	.5	.5	.51	.51	.51
.51	.51	.51	.51	.52	.52
.52	.52	.52	.52	.52	.52
.52	.52	.53	.53	.53	.53
.53	.54	.54	.54	.54	.54
.54	.55	.55	.55	.56	.57
.57	.57	.57	.57	.58	.59
.6	.6				

NO OF MEAS. = 50
AVE. REFL. .53
STD. DEV = .04

VITRINITE REFLECTANCE @ 546 nm

MARATHON CLAM GULCH#1
10620-10830 FT

DITCH SAMPLE



R_o VALUES

.46	.47	.47	.47	.47	.48
.49	.49	.49	.5	.51	.51
.51	.51	.51	.51	.51	.52
.52	.52	.52	.52	.52	.52
.53	.53	.53	.54	.54	.54
.54	.54	.55	.55	.55	.55
.55	.55	.55	.55	.55	.56
.56	.56	.56	.57	.57	.57
.58	.58	.58	.58	.59	.59
.61					

NO OF MEAS. = 55

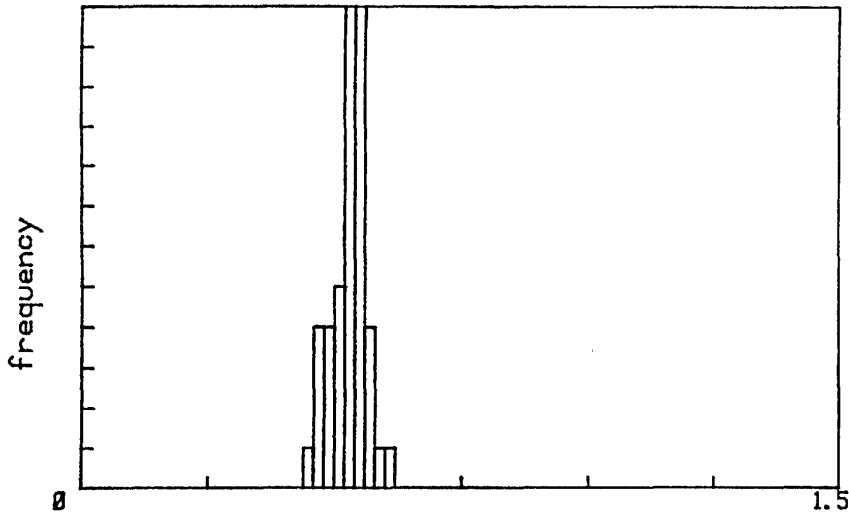
AVE. REFL. .53

STD. DEV = .04

VITRINITE REFLECTANCE @ 546 nm

MARATHON CLAM GULCH#1
11040-11240 FT

DITCH SAMPLE



R_o VALUES

.45	.46	.46	.47	.47	.48
.48	.49	.49	.5	.5	.51
.51	.51	.52	.52	.52	.52
.52	.52	.53	.53	.53	.53
.53	.53	.53	.53	.54	.54
.54	.54	.54	.54	.54	.54
.55	.55	.55	.55	.55	.55
.55	.55	.56	.56	.56	.56
.58	.6				

NO OF MEAS. = 50

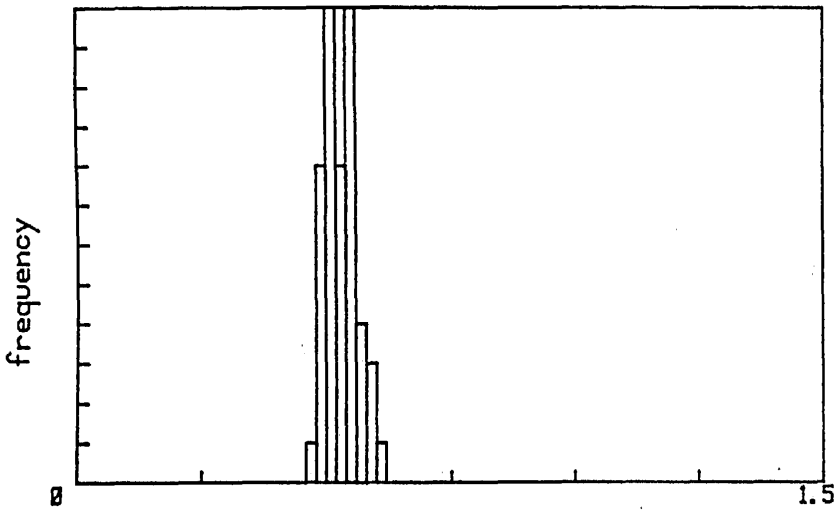
AVE. REFL. .53

STD. DEV = .03

VITRINITE REFLECTANCE @ 546 nm

MARATHON CLAM GULCH#1
11500-11700 FT

DITCH SAMPLE



R_o VALUES

.47	.48	.48	.48	.48	.48
.49	.49	.49	.5	.5	.5
.5	.5	.5	.5	.5	.51
.51	.51	.51	.51	.52	.52
.52	.52	.53	.53	.53	.53
.54	.54	.54	.54	.55	.55
.55	.55	.55	.55	.55	.55
.56	.57	.57	.57	.58	.58
.59	.6				

NO OF MEAS. = 50

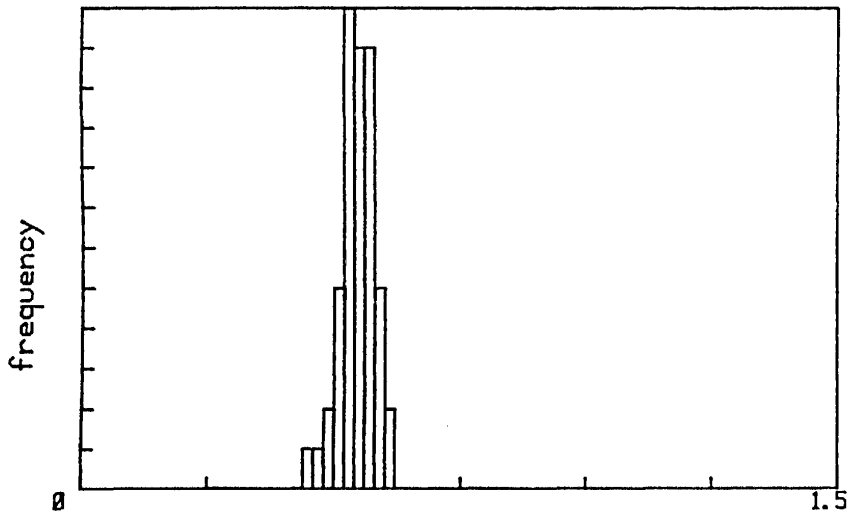
AVE. REFL. .53

STD. DEV = .03

VITRINITE REFLECTANCE @ 546 nm

MARATHON CLAM GULCH#1
12050-12300 FT

DITCH SAMPLE



R_o VALUES

.45	.47	.48	.48	.5	.5
.5	.51	.51	.52	.52	.52
.52	.52	.53	.53	.53	.53
.53	.53	.53	.54	.54	.54
.54	.54	.54	.54	.55	.55
.55	.55	.56	.56	.56	.56
.56	.56	.56	.56	.57	.57
.57	.58	.59	.59	.59	.59
.6	.61				

NO OF MEAS. = 50

AVE. REFL. .54

STD. DEV = .03

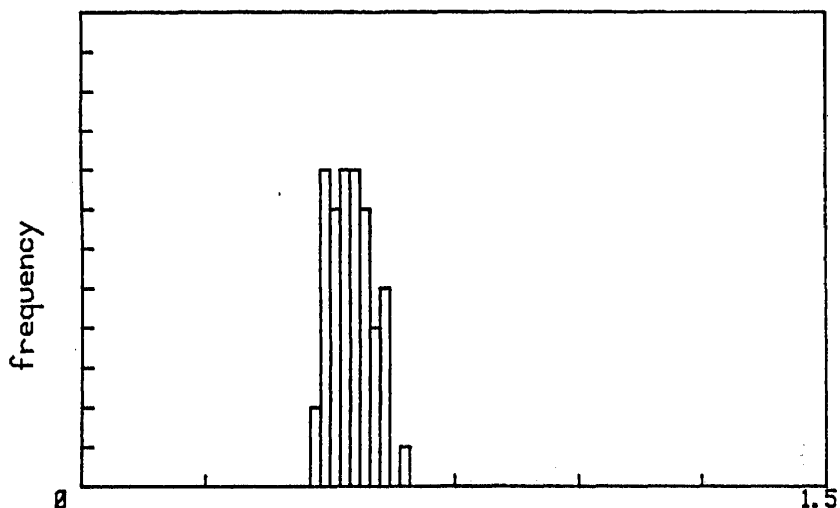
VITRINITE REFLECTANCE @ 546 nm

MARATHON CLAM GULCH#1
12460-12560 FT

DITCH SAMPLE

R₀ VALUES

.46	.47	.48	.48	.48	.48
.48	.48	.49	.49	.5	.5
.5	.51	.51	.51	.51	.52
.52	.52	.52	.53	.53	.53
.53	.54	.54	.54	.54	.54
.55	.55	.55	.56	.56	.56
.57	.57	.57	.57	.58	.59
.59	.59	.6	.6	.61	.61
.61	.64				



NO OF MEAS. = 50

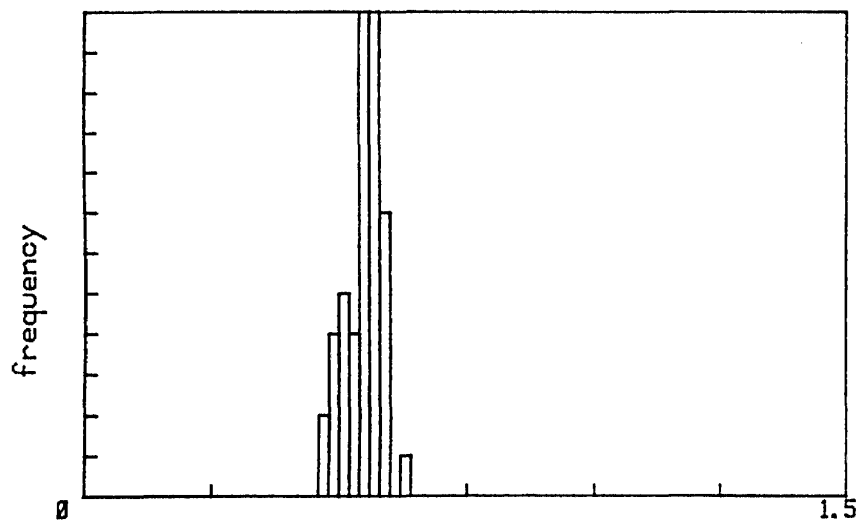
AVE. REFL. .54

STD. DEV = .04

VITRINITE REFLECTANCE @ 546 nm

MARATHON CLAM GULCH#1
12600-12800 FT

DITCH SAMPLE



R_o VALUES

.47	.47	.48	.49	.49	.49
.5	.51	.51	.51	.51	.52
.53	.53	.53	.54	.54	.54
.54	.54	.55	.55	.55	.55
.55	.55	.55	.55	.55	.56
.56	.56	.56	.56	.56	.56
.57	.57	.57	.57	.57	.57
.58	.58	.58	.58	.58	.58
.59	.62				

NO OF MEAS. = 50

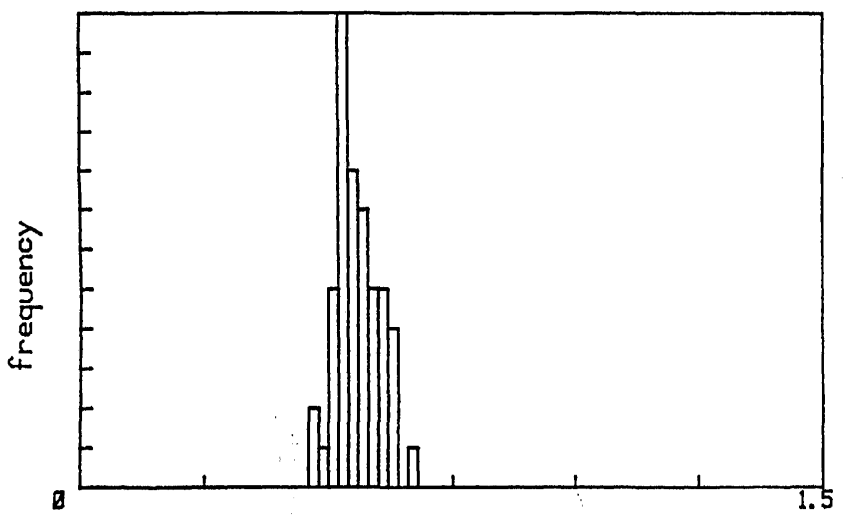
AVE. REFL. .54

STD. DEV = .03

VITRINITE REFLECTANCE @ 546 nm

MARATHON CLAM GULCH#1
13080-13180 FT

DITCH SAMPLE



R_o VALUES

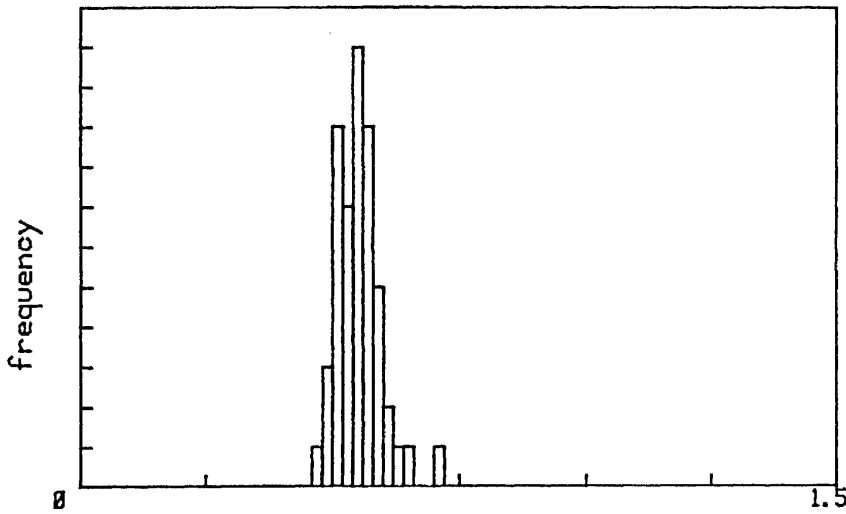
.47	.47	.49	.5	.5	.51
.51	.51	.52	.52	.52	.52
.53	.53	.53	.53	.53	.53
.53	.53	.54	.54	.54	.54
.54	.55	.55	.55	.56	.56
.57	.57	.57	.57	.57	.58
.58	.59	.59	.59	.6	.6
.61	.61	.61	.62	.62	.62
.63	.67				

NO OF MEAS. = 50
AVE. REFL. .55
STD. DEV = .04

VITRINITE REFLECTANCE @ 546 nm

MARATHON CLAM GULCH#1
13500-13600 FT

DITCH SAMPLE



R_o VALUES

.47	.48	.48	.49	.5	.5
.5	.5	.5	.51	.51	.51
.51	.52	.52	.52	.52	.53
.53	.53	.54	.54	.54	.54
.54	.55	.55	.55	.55	.55
.55	.56	.56	.56	.56	.56
.56	.56	.57	.57	.58	.58
.59	.59	.59	.6	.61	.63
.65	.71				

NO OF MEAS. = 50

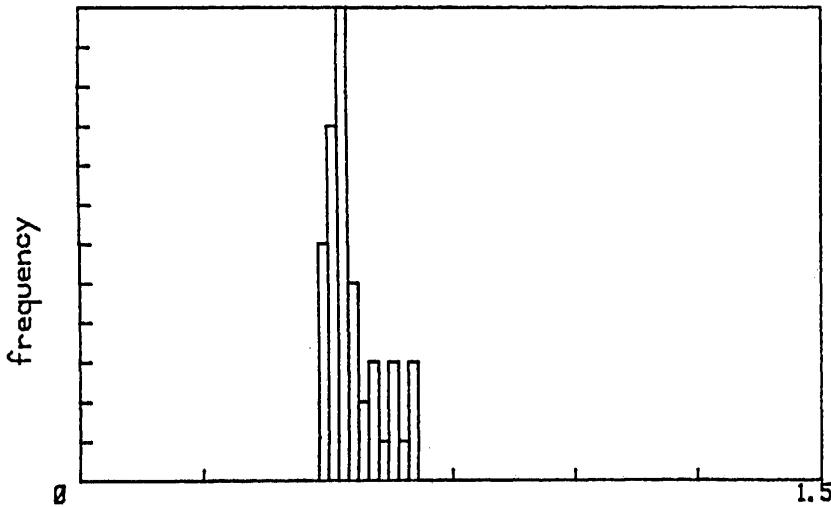
AVE. REFL. .55

STD. DEV = .05

VITRINITE REFLECTANCE @ 546 nm

MARATHON CLAM GULCH#1
14100-14220 FT

DITCH SAMPLE



R_o VALUES

.48	.48	.48	.49	.49	.49
.5	.5	.5	.5	.5	.51
.51	.51	.51	.52	.52	.52
.52	.52	.52	.52	.52	.52
.52	.53	.53	.53	.53	.53
.53	.53	.54	.55	.55	.55
.55	.56	.57	.58	.58	.59
.6	.62	.62	.63	.65	.66
.67	.67				

NO OF MEAS. = 50

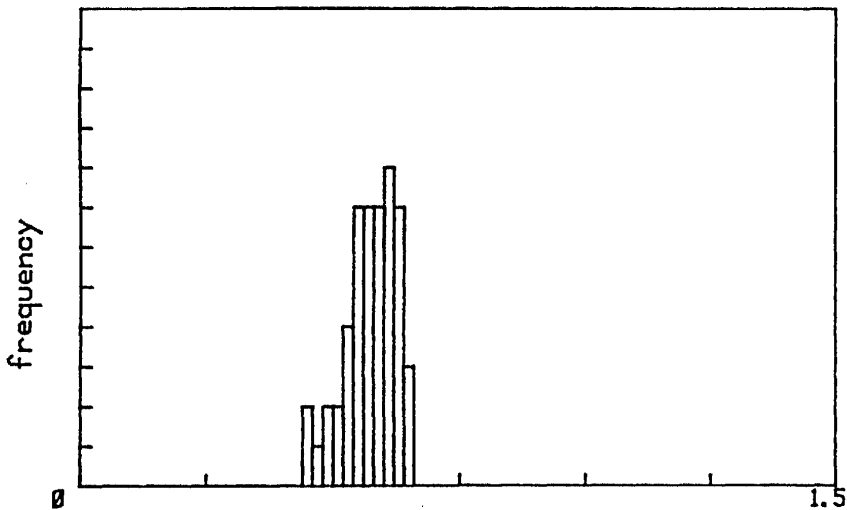
AVE. REFL. .54

STD. DEV = .05

VITRINITE REFLECTANCE @ 546 nm

MARATHON CLAM GULCH#1
14600-14800 FT

DITCH SAMPLE



R_o VALUES

.45	.45	.46	.48	.48	.5
.5	.52	.53	.53	.53	.54
.54	.55	.55	.55	.55	.55
.56	.56	.56	.57	.57	.57
.57	.58	.58	.59	.59	.59
.59	.59	.6	.6	.6	.6
.6	.6	.61	.61	.62	.62
.62	.62	.62	.62	.63	.64
.65	.65				

NO OF MEAS. = 50

AVE. REFL. .57

STD. DEV = .05