Total organic carbon, rock-eval pyrolysis, and vitrinite reflectance data of ditch cuttings from the Shell Western E & P Inc. OCS Y-0454-1 (Fern Prospect) well

Received 2 December 1988

Total of 7 pages in report

Geologic Materials Center Data Report No. 101

DATE: 10/28/88

TABLE 1 TOC AND ROCK-EVAL PYROLYSIS

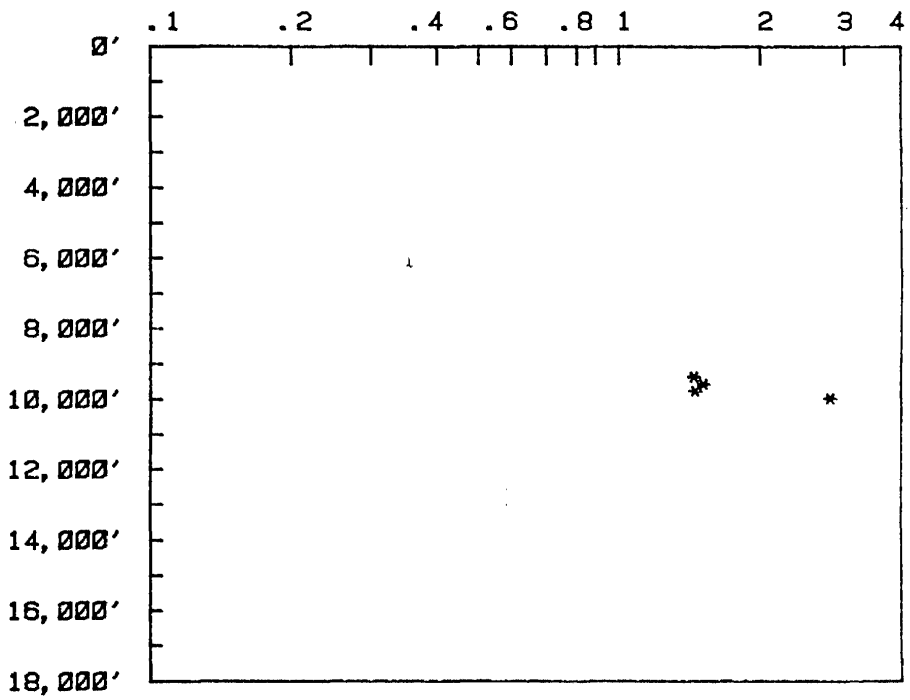
PROJECT: SHELL, OCS-Y-0454-1, BERING SEA, ALASKA
CHARGE NUMBER: WC070569

DEPTH OR OUTCROP NO.		S1 mg/g	S2 mg/g	S3 mg/g	TMAX C	TOC wt.%	HI	OI
8000-8100		0.22	1.23	0.33	524	4.63	26	7
8100-8200		0.18	0.74	0.13	566	3.96	18	3
8200-8300		0.23	1.44	0.09	552	5.50	26	1
8300-8400		0.16	0.50	0.16	534	2.17	23	7
8400-8500		0.17	0.73	0.06	529	3.13	23	1
8400-8500	D	0.17	0.75	0.06	538	3.08	24	1
8500-8600		0.21	0.83	0.03	550	4.09	20	1
8600-8700		0.18	0.46	0.01	522	3.85	11	1
8700-8800		0.16	0.28	0.04	450	2.73	10	1
8800-8900		0.18	0.26	0.03	403	2.12	12	1
8900-9000		0.13	0.20	0.00	455	1.31	15	-
9000-9100		0.16	0.32	0.06	522	1.93	16	3
9100-9200		0.09	0.08	0.00	383	0.70	11	-
9200-9300		0.30	0.17	0.00	336	2.55	6	-
9300-9400		0.27	0.11	0.06	300	1.75	6	3
9400-9500		0.32	0.18	0.04	324	2.39	7	1
9400-9500	D	0.32	0.16	0.04	300	2.42	6	1
9500-9600		0.22	0.11	0.00	307	1.26	8	-
9600-9700		0.28	0.14	0.11	359	1.28	10	8
9700-9800		0.13	0.09	0.06	349	0.56	16	10
9800-9900		0.18	0.14	0.08	300	0.89	15	8
9900-10000		0.14	0.13	0.05	322	0.71	18	7
10000-10100		0.12	0.06	0.02	300	0.45	13	4
10100-10200		0.20	0.19	0.18	357	0.67	28	26
10200-10280		0.23	0.11	0.02	293	0.55	20	3

D DUPLICATE FILE NAME
\- UNABLE TO CALCULATE VALUE

SHELL OCS YO-454#1

DEPTH	% REFL.
9380	1.47
9580	1.54
9780	1.48
9990	2.88

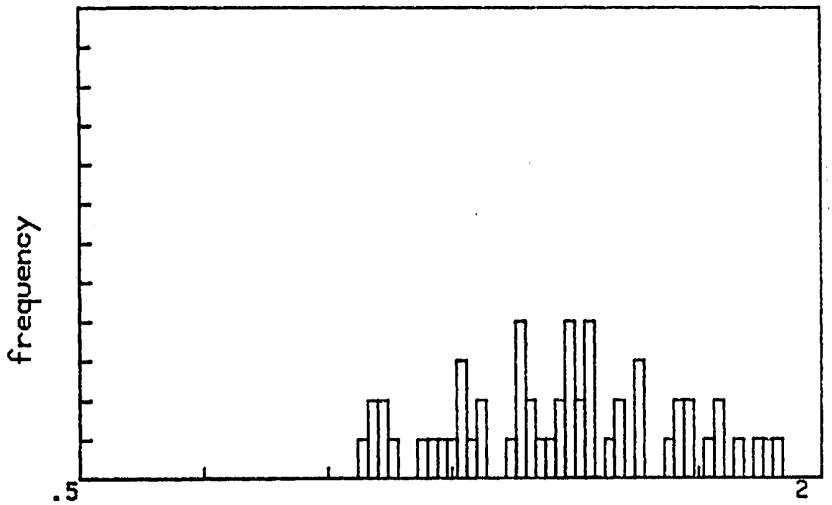


DEPTH vs REFLECTANCE

VITRINITE REFLECTANCE @ 546 nm

SHELL OCS YO-454#1
9380-9580 FT

DITCH SAMPLE



Ro VALUES

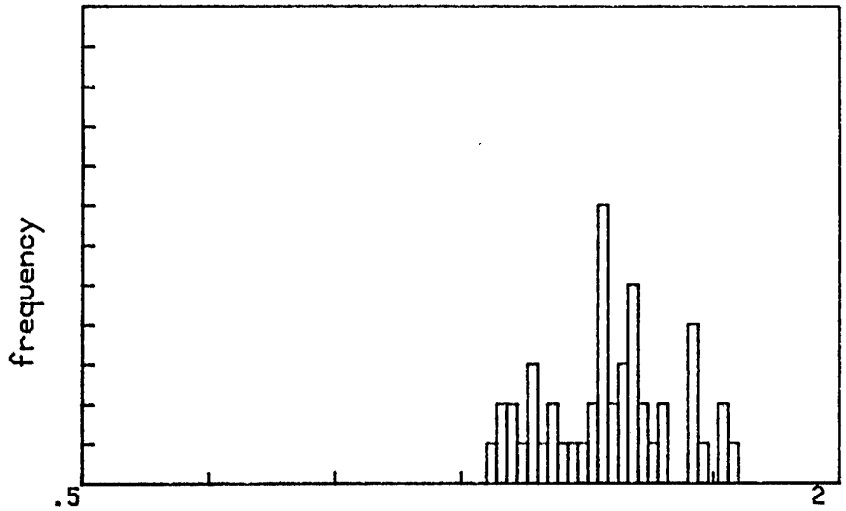
1.07	1.08	1.09	1.1	1.11	1.12
1.18	1.21	1.22	1.25	1.26	1.27
1.27	1.29	1.3	1.3	1.37	1.38
1.39	1.39	1.39	1.4	1.41	1.43
1.45	1.46	1.47	1.48	1.49	1.49
1.49	1.51	1.51	1.52	1.52	1.52
1.53	1.57	1.58	1.59	1.62	1.63
1.63	1.68	1.7	1.71	1.72	1.73
1.77	1.78	1.79	1.83	1.86	1.89
1.91					

NO OF MEAS. = 55
AVE. REFL. 1.47
STD. DEV = .22

VITRINITE REFLECTANCE @ 546 nm

SHELL OCS YO-454#1
9580 FT

DITCH SAMPLE



Ro VALUES

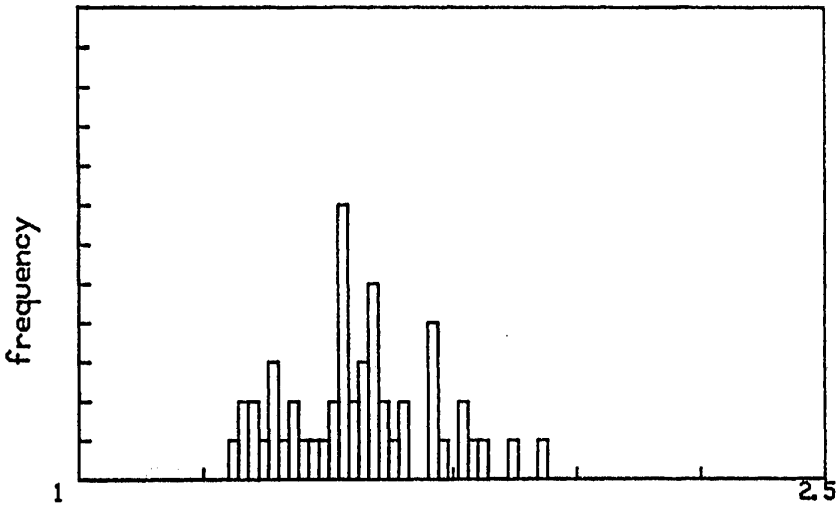
1.3	1.32	1.32	1.34	1.34	1.36
1.38	1.39	1.39	1.4	1.42	1.43
1.45	1.47	1.49	1.5	1.5	1.52
1.52	1.53	1.53	1.53	1.53	1.53
1.54	1.55	1.56	1.56	1.57	1.58
1.58	1.58	1.58	1.59	1.6	1.61
1.63	1.64	1.65	1.7	1.71	1.71
1.71	1.72	1.77	1.77	1.78	

NO OF MEAS. = 47
AVE. REFL. 1.54
STD. DEV = .13

VITRINITE REFLECTANCE @ 546 nm

SHELL OCS YO-454#1
9580-9780 FT

DITCH SAMPLE



Ro VALUES

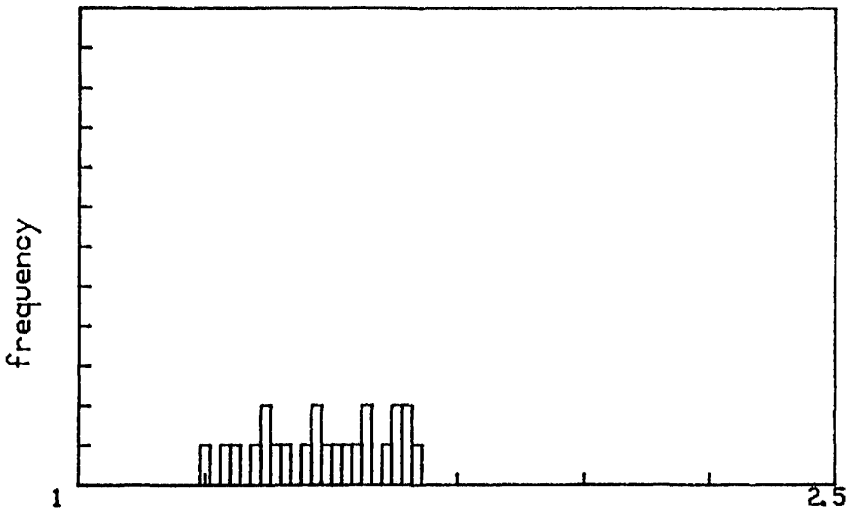
1.3	1.32	1.32	1.34	1.34	1.36
1.38	1.39	1.39	1.4	1.42	1.43
1.45	1.47	1.49	1.5	1.5	1.52
1.52	1.53	1.53	1.53	1.53	1.53
1.54	1.55	1.56	1.56	1.57	1.58
1.58	1.58	1.58	1.59	1.6	1.61
1.63	1.64	1.65	1.7	1.71	1.71
1.71	1.72	1.77	1.77	1.78	1.81
1.86	1.93				

NO OF MEAS. = 50
AVE. REFL. 1.56
STD. DEV = .15

VITRINITE REFLECTANCE @ 546 nm

SHELL OCS YO-454#1
9780-9980 FT

DITCH SAMPLE



Ro VALUES

1.24	1.28	1.31	1.35	1.36	1.37
1.38	1.41	1.44	1.47	1.47	1.48
1.5	1.53	1.55	1.56	1.57	1.6
1.62	1.63	1.64	1.65	1.67	

NO OF MEAS. = 23

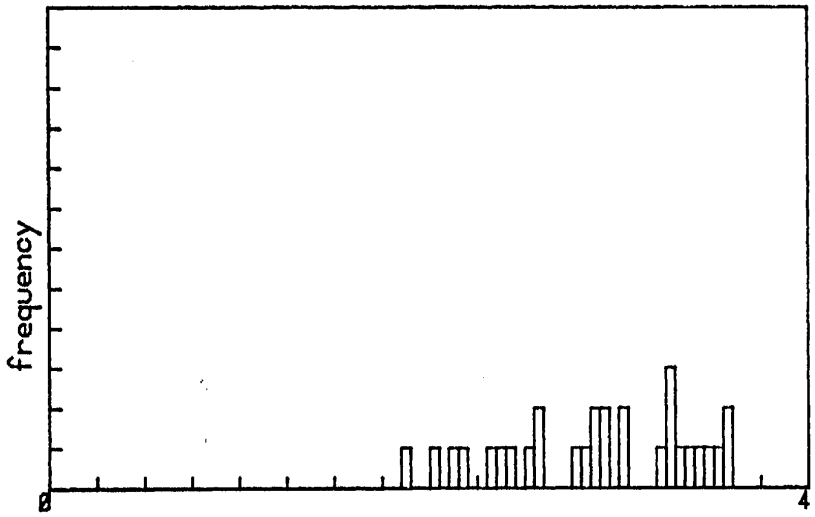
AVE. REFL. 1.48

STD. DEV = .13

VITRINITE REFLECTANCE @ 546 nm

SHELL OCS YO-454#1
9990-10280 FT

DITCH SAMPLE



Ro VALUES

1.88	2	2.12	2.16	2.3	2.39
2.44	2.52	2.57	2.58	2.75	2.81
2.85	2.87	2.92	2.93	3.01	3.02
3.23	3.25	3.25	3.29	3.33	3.38
3.41	3.45	3.54	3.56	3.57	

NO OF MEAS. = 29
AVE. REFL. 2.88
STD. DEV = .5