

EXXON POINT THOMPSON #3
SOURCE ROCK ANALYSIS

Data Report #17

9:00 FRIDAY, AUGUST 19, 1983

(DEPTH IN FEET)

P.J. Thompson
T.S. R839381 ROCKEVAL PYROLYSIS DATA

SAMPLE NO.	TOP OF ANALYZED INTERVAL	FORMATION OR AGE	TOTAL ORGANIC CARBON WTK (TOC)	PPM VOLATILE HYDROCARBONS (S1 X 1000)	VOL/ TOC	PPM GENERATED HYDROCARBONS (S2 X 1000)	GEN/ TOC	TEMP OF MAX GEN	VOL/ VOL + GEN
X-4622	830'		1.2	30	0.00	310	0.03	420	0.09
X-4623	1600		1.0	30	0.00	310	0.03	425	0.09
X-4624	1950		1.8	40	0.00	340	0.05	427	0.05
X-4625	2400		2.0	60	0.00	600	0.03	402	0.09
X-4626	3300		1.2	40	0.00	510	0.04	423	0.07
X-4627	4700		0.9	50	0.01	300	0.03	421	0.14
X-4628	5930		0.7	90	0.01	250	0.04	420	0.26
X-4629	6560		0.8	1710	0.21	2690	0.34	418	0.38
X-4630	6920		0.5	130	0.03	330	0.07	418	0.28
X-4631	7250		4.3	4130	0.10	8080	0.19	327	0.34
X-4632	8360		1.2	60	0.01	460	0.04	415	0.12
X-4633	8810		6.4	220	0.00	460	0.01	410	0.32
X-4634	9320		1.0	130	0.01	390	0.04	416	0.25
X-4635	9890		1.5	200	0.01	850	0.06	421	0.19
X-4636	10400		1.3	150	0.01	750	0.06	428	0.16
X-4637	10920		1.6	100	0.01	640	0.04	431	0.14
X-4638	11510		1.5	100	0.01	570	0.04	427	0.15
X-4639	12020		1.4	100	0.01	530	0.04	426	0.16
X-4640	12740		1.4	170	0.01	720	0.05	425	0.19
X-4641	13340		2.5	280	0.01	2730	0.11	422	0.09
X-4642	13730		2.9	450	0.02	3660	0.13	425	0.11
X-4643	14090		1.5	220	0.01	1180	0.08	425	0.16

R.J. Herwood

#02 OF 02

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A M O C O P R O D U C T I O N C O M P A N Y
R E S E A R C H C E N T E R

OFFICE DENVER DISTRICT FAR WEST
TECHNICAL SERVICE NUMBER 839361

SOURCE ROCK DATA
TABLE 3
DATE 08/31/63

SAMPLE NUMBER	FIELD NO. OR DEPTH FEET		DEUC. INSOL. AGE (TR)	TOTAL ORG. C. WT%	BITUMEN		SAT. HC		BITUMEN/IL ORG. C.	REMARKS
	TOP	BOTTOM			BBL/AF	PPM	BBL/AF	PPM		
STATE ALASKA COUNTY NORTH SLOPE WILL LOCATION SEC 34 TION R 23E WELL NAME EXXON LEASE PT. THOMPSON #3										
X-4622	830	1600	100	1.2	3	167				.02
X-4623	1600	1950	100	1.0	2	117				.01
X-4624	1950	2400	100	1.8	4	202				.01
X-4625	2400	3300	100	2.0	3	192				.01
X-4626	3300	4520	100	1.2	4	202				.02
X-4627	4700	5000	100	.9	3	177				.02
X-4628	5930	6500	100	.7	7	377				.03
X-4629	6500	6770	100	.8	117	6506	16	1001	.15	.06
X-4630	6920	7220	100	.5	14	707	3	142	.18	.15
X-4631	7250	8300	100	4.3	10	576				.01
X-4632	8360	8750	100	1.2	9	526				.03
X-4633	8810	9200	100	6.4	16	1027	7	399	.39	.02
X-4634	9320	9630	100	1.0	15	636	6	312	.37	.06
X-4635	9690	10370	100	1.5	18	1021				.07
X-4636	10400	10710	100	1.3	12	646	4	195	.30	.05
X-4637	10920	11400	100	1.6	11	623	3	151	.24	.04
X-4638	11510	12120	100	1.5	6	325	2	92	.28	.02
X-4639	12020	12710	100	1.4	10	536	3	146	.27	.04
X-4640	12740	13310	100	1.4	14	765	4	234	.30	.06

BBL/AF = (PPM X .00001)

A M O C O P R O D U C T I O N C O M P A N Y
R E S E A R C H C E N T E R

OFFICE DENVER DISTRICT FAR WEST
TECHNICAL SERVICE NUMBER 639361

SOURCE ROCK DATA
TABLE 3
DATE 08/31/65

SAMPLE NUMBER	FIELD NO. OR DEPTH FEET		GEOLOGICAL AGE	INSTRUMENT NO.	TOTAL ORG. C. WTK.	BITUMEN		SAT. HC.		BITUMEN/TL ORG. C.	REMARKS
	TOP	BOTTOM				DBL/AF	PPM	DBL/AF	PPM		
STATE ALASKA COUNTY NORTH SLOPE WELL LOCATION SEC34-T10N-R23E											DBL/AF = (PPM X .0100)
WELL NAME EXXON LEASE PT. TRUMPSUN #3											
X-4641	13340	13640	100		2.3	27	1475	7	409	.26	.06
X-4642	13730	13910	100		2.9	28	1562	7	390	.25	.06
X-4643	14000	14050	80		1.5	15	607				.05

A.M.O.C.O. PRODUCTION COMPANY
RESEARCH CENTER

OFFICE DENVER DISTRICT FAR WEST
TECHNICAL SERVICE NUMBER 639381

KERUGEN DATA
TABLE 4
DATE 06/31/63

SAMP NUMBER	FIELD NO. DEPTH FEET TOP**BOTTOM	OR	GEOL. AGE	NORM. ELEMENTAL ANALYSIS, WT.				ATOMIC RATIO O/C	ATOMIC RATIO H/C	VISUAL KERUGEN TYPE	VIT CARBON SCALE	REFLEC %R
				CARBON	HYDROGEN	OXYGEN	NITROGEN					
STATE	ALASKA	COUNTY	NORTH SLOPE	WELL LOCATION SECTION-K20E LEASE P1. TRUMPSON #3								
WELL NAME	EXXON											
X-4622	630		1600							STRUCTURED		.50
X-4623	1600		1950							MIXED		.59
X-4624	1950		2400							STRUCTURED		.52
X-4625	2400		3300							STRUCTURED		.51
X-4626	3300		4520							MIXED		.51
X-4627	4700		5000							MIXED		.50
X-4628	5930		6500							STRUCTURED		.48
X-4629	6560		6770							MIXED		.53
X-4630	6920		7220							MIXED		.57
X-4631	7250		6500							MIXED		.51
X-4632	8360		6750							MIXED		.52
X-4633	8810		5200							STRUCTURED		.52
X-4634	9320		5830							MIXED		.54
X-4635	9690		10370							MIXED		.60
X-4636	10400		10910							MIXED		.60
X-4637	10920		11400							MIXED		.70
X-4638	11510		12020							MIXED		.79
X-4639	12020		12710							MIXED		.65
X-4640	12740		13310							MIXED		.60

A M D C O P R O D U C T I O N C O M P A N Y
R E S E A R C H C E N T E R

OFFICE DENVER DISTRICT FAR WEST
TECHNICAL SERVICE NUMBER 639361

KERUGEN DATA
TABLE 4
DATE 10/31/83

LAB SAMPLE NUMBER	FIELD NO. OR DEPTH FEET TOP**BOTTOM	GEOLOGIC AGE	NORM. ELEMENTAL ANALYSIS, WT.				ATOMIC RATIO O/C	ATOMIC RATIO H/C	VISUAL KERUGEN TYPE	CARGON SCALE	REFLECT %RU
			CARBON	HYDROGEN	OXYGEN	NITROGEN					
STATE ALASKA COUNTY NORTH SCOPE WELL LOCATION SECTION-K2SE											
WELL NAME EXXON LEASE PT. THOMPSON #3											
X-4641	13340	13640							AMORPHOUS		0.90
X-4642	13730	13910							AMORPHOUS		0.07
X-4643	14000	14090							AMORPHOUS		0.92

(TABLE 5)

TECH/SERVICE	339331	WELL NAME	EXXON	STATE	ALASKA	COUNTY	NORTH	LEASE #1	THOMPSON #3	DATE	06/31/03		
LOCATION	SEC34-T10N-R23E												
SEG NO.	SAMPLE NO.	SAMPLE WT GRAMS	BITUMEN GRAMS	BITUMEN PPM	SAT HC GRAMS	SAT HC PPM	BIT-FREE URG-C	ARUM EAT GRAMS	INSUL RES %	TOTAL URG-C	SAT HC/ BITUMEN	SAT HC/ TOT-URG-C	BITUMEN/ TOT URG-C
1	X-4622	100.0	.01870	187			1.15	(.80)100.0		1.17			.02
2	X-4623	56.3	.00660	117			.99	(.80)100.0		1.00			.01
3	X-4624	35.6	.00720	202			1.61	(.80)100.0		1.63			.01
4	X-4625	65.8	.01265	192			1.93	(.80)100.0		1.95			.01
5	X-4626	100.0	.02025	202			1.17	(.80)100.0		1.19			.02
6	X-4627	84.1	.01135	177			.85	(.80)100.0		.87			.02
7	X-4628	23.3	.00830	377			.67	(.80)100.0		.71			.03
8	X-4629	16.0	.11715	6508	.01803	1001	.41	.03266(.80)100.0		.76	.15	.132	.66
9	X-4630	44.9	.03335	787	.00641	142	.45	.00791(.80)100.0		.53	.18	.027	.13
10	X-4631	15.3	.00865	578			4.24	(.80)100.0		4.30			.01
11	X-4632	24.5	.01290	526			1.10	(.80)100.0		1.15			.03
12	X-4633	25.9	.02660	1027	.01634	399	0.27	.00271(.80)100.0		0.37	.39	.000	.02
13	X-4634	32.3	.02700	835	.01010	312	.93	.00230(.80)100.0		1.01	.37	.034	.02
14	X-4635	11.9	.01215	1021			1.41	(.80)100.0		1.51			.07
15	X-4636	39.3	.02540	646	.00769	195	1.26	.00271(.80)100.0		1.32	.30	.013	.03
16	X-4637	36.7	.02290	623	.00935	151	1.54	.00217(.80)100.0		1.60	.24	.009	.04
17	X-4638	80.4	.02015	325	.00744	92	1.46	.00195(.80)100.0		1.51	.28	.000	.02
18	X-4639	100.0	.05360	536	.01466	140	1.32	.00543(.80)100.0		1.37	.27	.011	.04
19	X-4640	93.5	.07345	785	.02188	234	1.35	.00735(.80)100.0		1.41	.30	.017	.06
20	X-4641	86.2	.12715	1475	.03527	409	2.39	.02250(.80)100.0		2.54	.28	.016	.06
21	X-4642	53.0	.03365	1562	.02067	390	1.69	.01494(.80)100.0		1.85	.25	.014	.06
22	X-4643	24.9	.02010	807			1.41	(.80)100.0		1.49			.03

DEPTH FT (from TABLE 4)

1	830 - 1600
2	1600 - 1950
3	1950 - 2400
4	2400 - 2800
5	2800 - 3200
6	3200 - 3600
7	3600 - 4000
8	4000 - 4400
9	4400 - 4800
10	4800 - 5200
11	5200 - 5600
12	5600 - 6000
13	6000 - 6400
14	6400 - 6800
15	6800 - 7200
16	7200 - 7600
17	7600 - 8000
18	8000 - 8400
19	8400 - 8800
20	8800 - 9200
21	9200 - 9600
22	9600 - 10000

TABLE 6

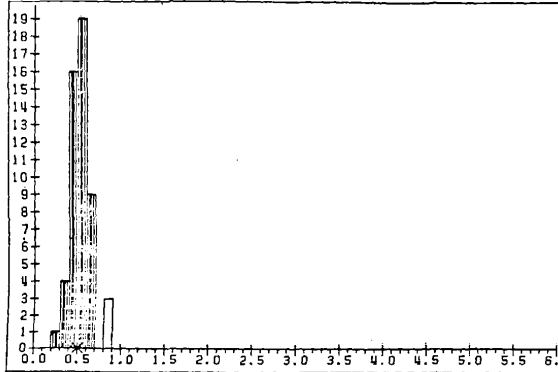
VITRINITE REFLECTANCE ANALYSIS

EXXON PT. THOMPSON NO.3; NORTH SLOPE, ALASKA

LOCALITY 9381

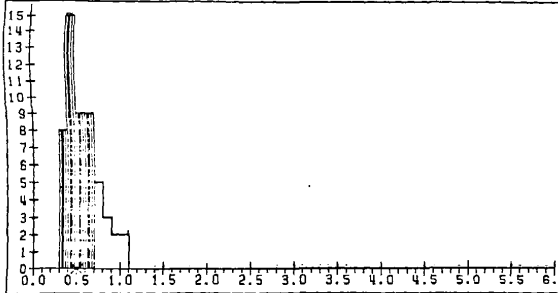
TECH SVC NO.9381

	<p>V-4622 630.00 -1600.00 FT AL CUTTINGS 8-31-83 KERO=STA FLUG NO</p> <table border="1"> <thead> <tr> <th>AVG. %R0</th> <th>MEDIAN</th> <th>S.DEV.</th> <th>POINTS</th> </tr> </thead> <tbody> <tr> <td>1) * 0.50</td> <td>0.48</td> <td>0.091</td> <td>44</td> </tr> </tbody> </table>	AVG. %R0	MEDIAN	S.DEV.	POINTS	1) * 0.50	0.48	0.091	44
AVG. %R0	MEDIAN	S.DEV.	POINTS						
1) * 0.50	0.48	0.091	44						
	<p>V-4623 1600.00 -1950.00 FT AL CUTTINGS 8-31-83 KERO=MIX FLUG YES</p> <table border="1"> <thead> <tr> <th>AVG. %R0</th> <th>MEDIAN</th> <th>S.DEV.</th> <th>POINTS</th> </tr> </thead> <tbody> <tr> <td>1) * 0.54</td> <td>0.55</td> <td>0.094</td> <td>48</td> </tr> </tbody> </table>	AVG. %R0	MEDIAN	S.DEV.	POINTS	1) * 0.54	0.55	0.094	48
AVG. %R0	MEDIAN	S.DEV.	POINTS						
1) * 0.54	0.55	0.094	48						
	<p>V-4624 1950.00 -2400.00 FT AL CUTTINGS 8-31-83 KERO=STA FLUG NO</p> <table border="1"> <thead> <tr> <th>AVG. %R0</th> <th>MEDIAN</th> <th>S.DEV.</th> <th>POINTS</th> </tr> </thead> <tbody> <tr> <td>1) * 0.52</td> <td>0.52</td> <td>0.082</td> <td>42</td> </tr> </tbody> </table>	AVG. %R0	MEDIAN	S.DEV.	POINTS	1) * 0.52	0.52	0.082	42
AVG. %R0	MEDIAN	S.DEV.	POINTS						
1) * 0.52	0.52	0.082	42						
	<p>V-4625 2400.00 -3300.00 FT AL CUTTINGS 8-31-83 KERO=STA FLUG NO</p> <table border="1"> <thead> <tr> <th>AVG. %R0</th> <th>MEDIAN</th> <th>S.DEV.</th> <th>POINTS</th> </tr> </thead> <tbody> <tr> <td>1) * 0.51</td> <td>0.53</td> <td>0.078</td> <td>48</td> </tr> </tbody> </table>	AVG. %R0	MEDIAN	S.DEV.	POINTS	1) * 0.51	0.53	0.078	48
AVG. %R0	MEDIAN	S.DEV.	POINTS						
1) * 0.51	0.53	0.078	48						



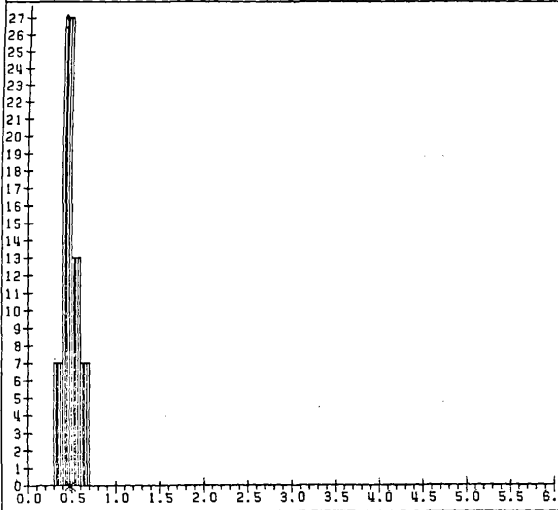
V-4626 3300.00 -4520.00 FT AL
 CUTTINGS 8-31-83
 KERO=MIX
 FLUO NO

AVG. X _{RD}	MEDIAN	S.DEV.	POINTS
1) * 0.51	0.52	0.084	48



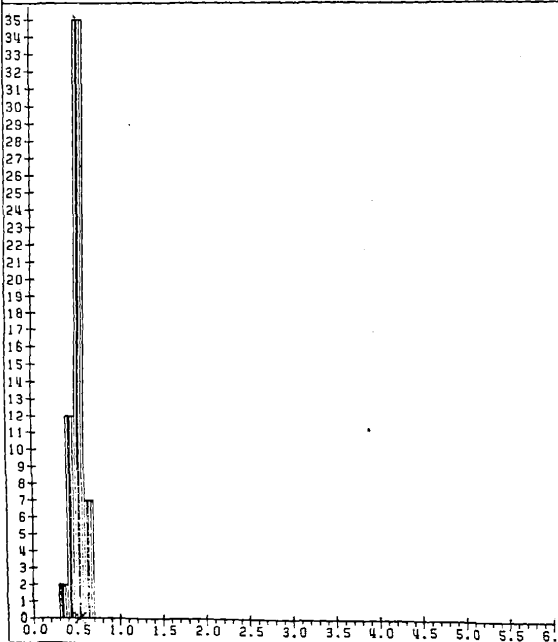
V-4627 4700.00 -5800.00 FT AL
 CUTTINGS 8-31-83
 KERO=MIX
 FLUO NO

AVG. X _{RD}	MEDIAN	S.DEV.	POINTS
1) * 0.50	0.48	0.104	41



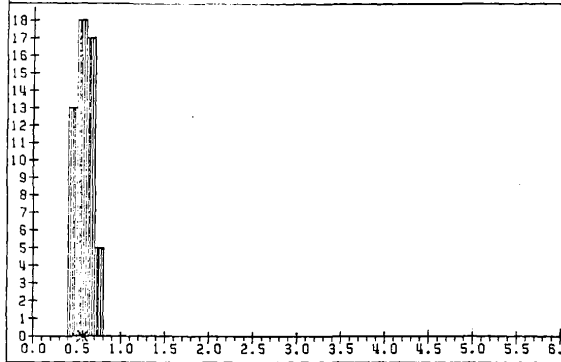
V-4628 5930.00 -6500.00 FT AL
 CUTTINGS 8-31-83
 KERO=STR
 FLUO NO

AVG. X _{RD}	MEDIAN	S.DEV.	POINTS
1) * 0.48	0.47	0.087	54



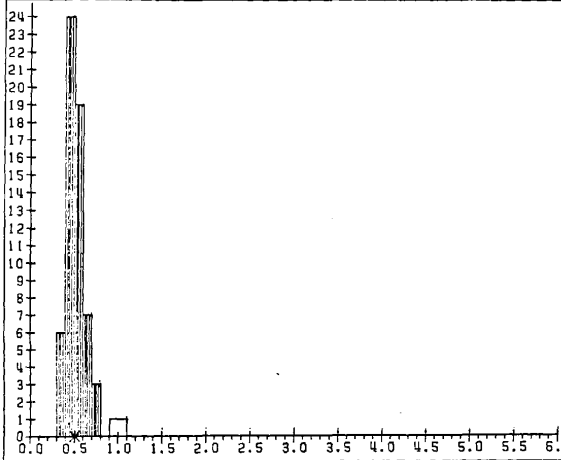
V-4629 6580.00 -6770.00 FT AL
 CUTTINGS 8-31-83
 KERO=MIX
 FLUO NO

AVG. X _{RD}	MEDIAN	S.DEV.	POINTS
1) * 0.53	0.54	0.088	56



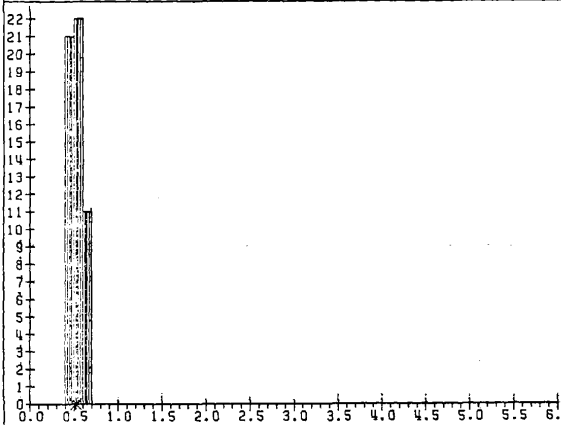
V-4630 6920.00 -7220.00 FT AL
 CUTTINGS 8-31-83
 KERO-MIX
 FLUD NO

AVG. XRD	MEDIAN	S.DEV.	POINTS
1) * 0.57	0.57	0.086	53



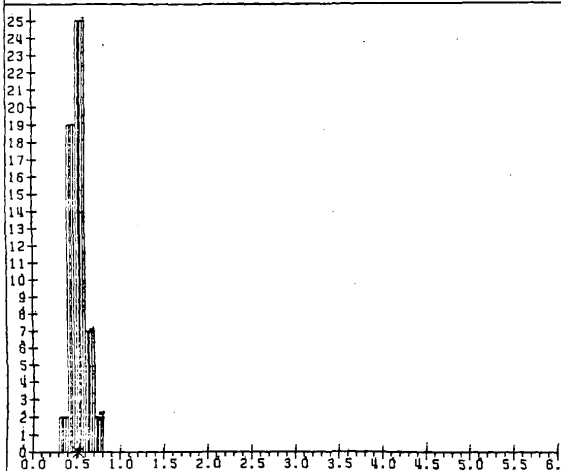
V-4631 7250.00 -8300.00 FT AL
 CUTTINGS 8-31-83
 KERO-MIX
 FLUD NO

AVG. XRD	MEDIAN	S.DEV.	POINTS
1) * 0.51	0.50	0.104	59



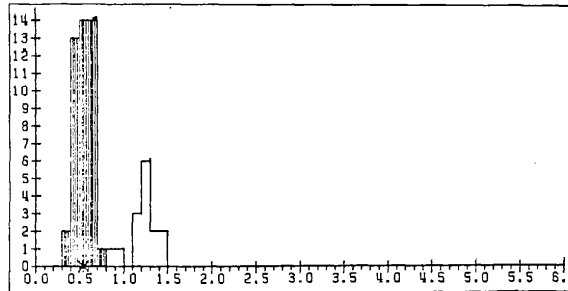
V-4632 8360.00 -8750.00 FT AL
 CUTTINGS 8-31-83
 KERO-MIX
 FLUD NO

AVG. XRD	MEDIAN	S.DEV.	POINTS
1) * 0.52	0.53	0.068	54

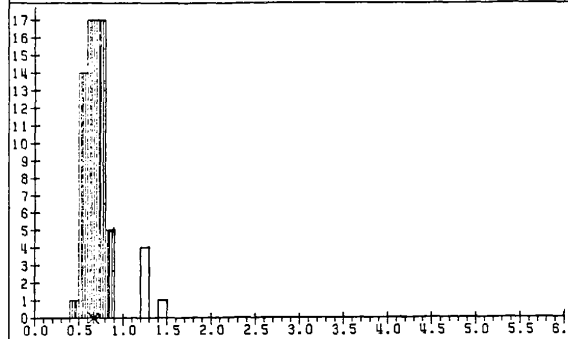


V-4633 8810.00 -9260.00 FT AL
 CUTTINGS 8-31-83
 KERO-STA
 FLUD NO

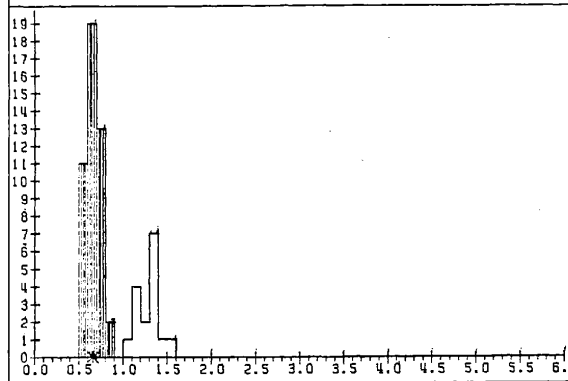
AVG. XRD	MEDIAN	S.DEV.	POINTS
1) * 0.52	0.52	0.080	55



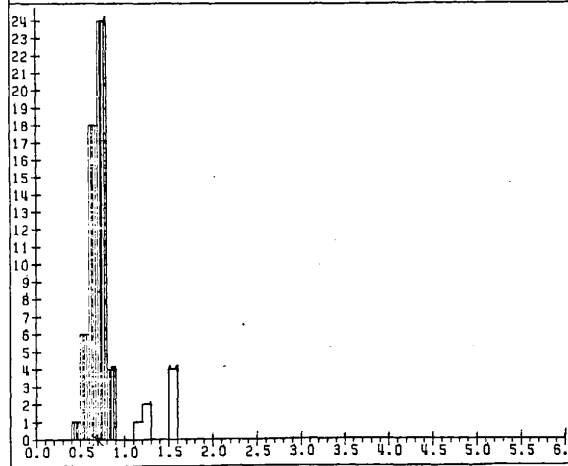
V-4634 9320.00-9830.00 Ft AL
 CUTTINGS 8-31-83
 KERD=MIX
 FLUID NO
 AVG. ZRD MEDIAN S.DEV. POINTS
 1) * 0.54 0.55 0.094 44



V-4635 9890.00-10370.00 Ft AL
 CUTTINGS 8-31-83
 KERD=MIX
 FLUID NO
 AVG. ZRD MEDIAN S.DEV. POINTS
 1) * 0.66 0.67 0.092 54

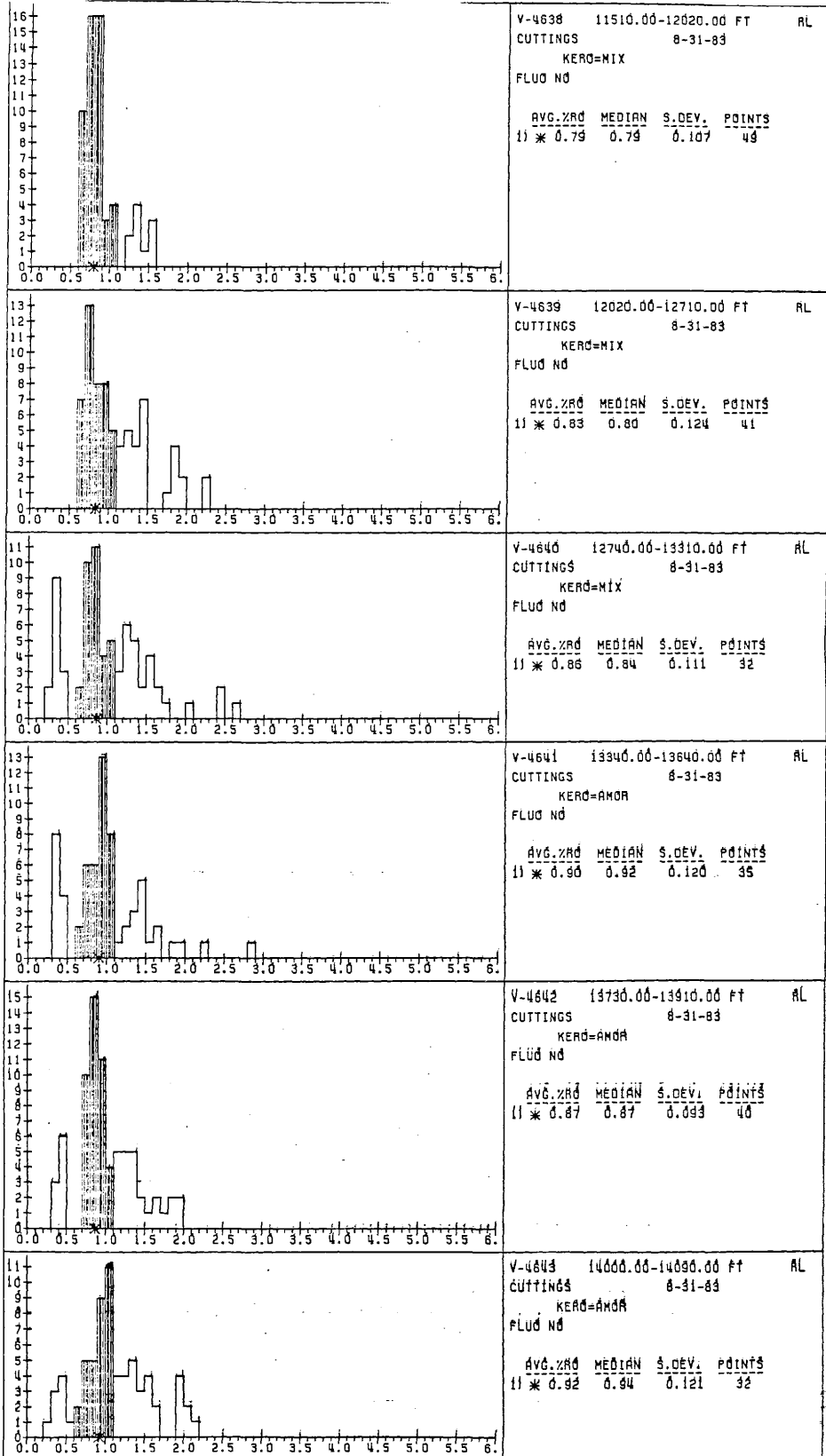


V-4636 10400.00-10910.00 Ft AL
 CUTTINGS 8-31-83
 KERD=MIX
 FLUID NO
 AVG. ZRD MEDIAN S.DEV. POINTS
 1) * 0.66 0.66 0.082 45



V-4637 10920.00-11480.00 Ft AL
 CUTTINGS 8-31-83
 KERD=MIX
 FLUID NO
 AVG. ZRD MEDIAN S.DEV. POINTS
 1) * 0.70 0.70 0.085 53

10



X-AXIS = PERCENT REFLECTANCE OF VITRINITE (Rd)

Y-AXIS = FREQUENCY

AVERAGE Rd FOR POP. 1 = 0.83