RFT REPORT

7120/10-1

The Schlumberger RFT was run on September 4-5, 1984 to take 22 pressures (including 2 re-sets) and one sample at 1573.9 m RKB. The pressures were obtained throughout the Middle and Lower Jurassic sandstone section in the interval 1570 - 1989.3 m RKB.

The plot of the RFT pressure data indicates the presence of one single acquifer pressure system. There were no signs of any hydrocarbon accumulation from these data. The approximate saltwater gradient of the acquifer is 8.98 ppg or .467 psi/foot.

Most of the pressures indicated fair to excellent permeability.

Pressure reading No 12 at 1685 m RKB did not have any formation pressure build-up. A re-set was made in the same interval one meter lower (1686 m) and a fair permeability was indicated. Pressure reading No 21 showed an erroneously high shut-in formation pressure of 3824 psi. The re-set 0.2 meter higher recorded a normal gradient value.

The RFT was equipped with a lower 2 3/4 gal. and an upper 1 gal. chamber. After completing the pressure tests the tool was pulled back up the hole into casing to re-calibrate the sensitive pressure sensor and to cool the tool. The pre-test was taken at 1573.9 indicating good perm. The 2 3/4 gal. chamber which was opened first was filled in 10 minutes. The one gal. chamber was thereafter filled in 6 minutes. About 10 liters of mud filtrate was recovered from the 2 3/4 gal. chamber and 4 liters from the one gal. chamber. The fluids from both chambers had a Rw of .30 ohms resistivity and 16,000 ppm of chlorides. There were no gas, odor, no taste nor any indication of hydrocarbons in these fluid samples.

EXXON PRODUCTION RESEARCH COMPANY

WELL 7120/10-1, NORWAY
HYDROCARBON SOURCE ANALYSES

R. E. Metter

Basin Exploration Division

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EPR.68ES.85

WELL 7120/10-1, NORWAY: HYDROCARBON SOURCE ANALYSES

R. E. Metter

SUMMARY AND CONCLUSIONS

Twenty-four canned cuttings samples and eight sidewall cores representing the interval 1330 - 2000 meters were analyzed routinely for hydrocarbon source characteristics, as requested in a September 3, 1984 Telex from K. N. Gulstene of Esso Europe. The analytical results are presented here in Tables 1 - 7 and in Figures 1 - 10.

In addition, three sandstone core chips from 1572.4 - 1583.3 meters were examined for signs of oil staining, but we found none.

PROCEDURES

1. C_1 - C_4 - Twenty-four canned cuttings samples were analyzed (Table 1). Compositions and concentrations of hydrocarbon gases in the air spaces above the cuttings in the sample cans were determined by gas chromatography. Similar data were obtained on gases released from standard mixtures of cuttings and tap water after two minutes of agitation in a Waring blender. Combined results on the "air space gas" plus the "cuttings gas" were calculated for each sample. The data were plotted graphically to show vertical variations in total gas (C_1 - C_4) and a graphical plot was also made of the percent "wet gas" in total gas (Figure 1).

2. C_4 - C_7 and T.O.C. - While still wet, chips were "picked" from all 24 cuttings samples for further analyses (Table 2). We attempted to pick chips of reasonably uniform fine-grained lithologies from the heterogeneous mixtures of cuttings in the original samples. Our routine gas chromatographic procedures were used for determining their light gasoline (C_4 - C_7) content. The total organic carbon was determined with a commercial Leco Carbon Determinator after carbonate was first removed from the samples by use of HCl. Eight sidewall core samples were also analyzed along with the cuttings. These results are given in Tables 2, 3, and 7, and they are plotted graphically in Figure 1.

3. Visual kerogen - Visual kerogen characteristics by transmitted light were determined on 21 of the samples (Table 4). Determinations were made with a palynological microscope utilizing transmitted light through dispersed organic matter on standard slide mounts. The organic matter was separated from the samples by removing rock matrix materials with HF and HCl. The descriptions were based on "Staplin" nomenclature. In Table 4 many of the kerogens are shown to contain "indeterminate fines". Chemical and lithologic data were used to aid in making our "Best Guesses" as to what the fines probably include.

4. Heavy (C_{15+}) Hydrocarbons - Three gross cuttings samples were analyzed for C_{15+} compounds. The samples were Soxhlet-extracted with a 9:1 benzene-methanol mixture. After the extracts were deasphaltened with excess pentane, their pentane-solubles were analyzed by liquid column chromatography (Table 5). Gas chromatograms were obtained for the heavy saturate fractions (Figures 8 - 10). Two of the pentane-soluble fractions were too small for liquid chromatography (Table 5) and these two were analyzed by gas chromatography (Figures 4, 6). Three sandstone core samples were also extracted to test for possible staining, but only traces of soluble matter were found (Table 6).

5. Vitrinite R_o - Six samples were analyzed for vitrinite reflectance (Figures 2 through 7). Whole-rock fragments in epoxy plug mounts were used for the measurements. Four were done by Geo-Strat Inc. and two by I. S. Wilson at EPR.

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TABLE 1A

C1-C4 HYDROCARBON ANALYSES - AIR SPACE AT TOP OF CANS

SPL NO	R	DEPTH	METHANE C1	ETHANE C2	PROPANE C3	IBUTANE IC4	NBUTANE C4	WET C2-C4	TOTAL C1-C4	WET/TOTAL PERCENT	TOTAL GAS M	E	P	IB	NB	WET GAS E	P	IB	NB
			GAS CONCENTRATION (VOLUME GAS PER MILLION VOLUMES CUTTINGS)								GAS COMPOSITION (PERCENT)								
79122A	0	1330	235.72	105.55	115.99	33.66	14.41	269.61	505.33	53.3532	46.	21.	23.	7.	3.	39.	44.	12.	5.
79122B	0	1360	1451.04	201.79	59.88	13.83	5.17	280.67	1731.71	16.2076	84.	12.	3.	1.	0.	72.	21.	5.	2.
79122C	0	1390	1.58	0.17	0.05	0.0	0.0	0.22	1.80	12.2221	88.	9.	3.	0.	0.	77.	23.	0.	0.
79122D	0	1420	3720.95	597.45	490.42	141.90	102.57	1332.33	5053.28	26.3657	73.	12.	10.	3.	2.	44.	37.	11.	8.
79122E	0	1450	5227.80	790.89	517.18	123.39	97.78	1529.23	6757.03	22.6317	77.	12.	8.	2.	1.	52.	34.	8.	6.
79122F	0	1480	4000.32	1360.49	633.15	142.99	91.92	2228.54	6228.86	35.7777	65.	22.	10.	2.	1.	62.	28.	6.	4.
79122G	0	1510	5235.89	1870.84	688.28	109.91	63.21	2732.23	7968.12	34.2895	66.	23.	9.	1.	1.	69.	25.	4.	2.
79122H	0	1540	13877.30	4528.00	1283.00	163.28	89.82	6064.09	19941.39	30.4096	70.	23.	6.	1.	0.	75.	21.	3.	1.
79122I	0	1570	20697.56	3791.04	1082.40	137.25	84.66	5095.34	25792.90	19.7548	80.	15.	4.	1.	0.	74.	21.	3.	2.
79122J	0	1600	7892.53	940.94	305.98	51.06	30.79	1328.76	9221.29	14.4097	86.	10.	3.	1.	0.	71.	23.	4.	2.
79122K	0	1630	13931.08	1897.77	990.83	115.60	110.90	3115.09	17046.17	18.2744	81.	11.	6.	1.	1.	60.	32.	4.	4.
79122L	0	1660	6424.60	1906.46	939.69	133.00	126.42	3105.56	9530.16	32.5867	68.	20.	10.	1.	1.	62.	30.	4.	4.
79122M	0	1690	56959.89	6700.79	2321.60	323.84	240.19	9586.36	66546.25	14.4056	87.	10.	3.	0.	0.	70.	24.	3.	3.
79122N	0	1720	42334.51	7730.75	2200.71	322.31	185.06	10438.82	52773.33	19.7805	80.	15.	4.	1.	0.	74.	21.	3.	2.
79122O	0	1750	78.93	16.78	0.0	0.0	0.0	16.78	95.71	17.5321	82.	18.	0.	0.	0.	100.	0.	0.	0.
79122P	0	1780	43871.91	3097.60	669.00	89.28	42.41	3898.28	47770.19	8.1605	93.	6.	1.	0.	0.	80.	17.	2.	1.
79122Q	0	1810	18547.65	1536.61	415.62	62.68	34.29	2049.20	20596.84	9.9491	91.	7.	2.	0.	0.	75.	20.	3.	2.
79122R	0	1840	10202.47	826.59	230.40	35.35	20.37	1112.70	11315.17	9.8337	91.	7.	2.	0.	0.	74.	21.	3.	2.
79122S	0	1870	18701.03	1155.27	599.52	26.28	12.31	1793.38	20494.40	8.7506	91.	6.	3.	0.	0.	65.	33.	1.	1.
79122T	0	1900	15114.18	1077.94	242.41	32.93	13.88	1367.15	16481.33	8.2952	92.	7.	1.	0.	0.	79.	18.	2.	1.
79123A	0	1930	9588.66	390.33	61.50	0.0	0.0	451.83	10040.48	4.5001	95.	4.	1.	0.	0.	86.	14.	0.	0.
79123B	0	1960	9179.99	1012.20	229.05	31.57	13.61	1286.42	10466.41	12.2910	88.	10.	2.	0.	0.	79.	19.	2.	1.
79123C	0	1990	3881.28	340.75	82.45	12.68	5.67	441.54	4322.82	10.2143	90.	8.	2.	0.	0.	77.	19.	3.	1.
79123D	0	2000	44655.03	4899.02	1722.57	307.92	180.24	7109.74	51764.77	13.7347	87.	9.	3.	1.	0.	69.	24.	4.	3.

B = CUTTINGS NOT ANALYZED *C* = AIR SPACE GAS NOT RUN *BC* = NO ANALYSES RUN

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TABLE 1B

C1-C4 HYDROCARBON ANALYSES - CUTTINGS ONLY

SPL NO	R	DEPTH	METHANE C1	ETHANE C2	PROPANE C3	IBUTANE IC4	NBUTANE C4	WET C2-C4	TOTAL C1-C4	WET/TOTAL PERCENT	TOTAL GAS M	E	P	IB	NB	WET GAS E	P	IB	NB
79122A	0	1330	715.50	45.08	113.34	36.89	25.55	220.86	936.36	23.5870	76.	5.	12.	4.	3.	20.	51.	17.	12.
79122B	0	1360	1280.10	327.22	322.14	98.32	76.17	823.85	2103.95	39.1573	60.	16.	15.	5.	4.	40.	39.	12.	9.
79122C	0	1390	1827.00	364.12	228.32	51.25	42.66	686.35	2513.35	27.3082	73.	14.	9.	2.	2.	54.	33.	7.	6.
79122D	0	1420	809.25	179.62	457.20	155.34	176.98	969.14	1778.39	54.4953	45.	10.	26.	9.	10.	19.	47.	16.	18.
79122E	0	1450	1836.00	928.50	1485.56	389.70	455.96	3259.71	5095.71	63.9697	36.	18.	29.	8.	9.	28.	46.	12.	14.
79122F	0	1480	6149.99	3219.75	2874.37	561.15	605.47	7260.73	13410.72	54.1413	46.	24.	21.	4.	5.	44.	40.	8.	8.
79122G	0	1510	20744.94	7245.00	3497.06	436.81	390.15	11569.02	32313.95	35.8019	65.	22.	11.	1.	1.	63.	30.	4.	3.
79122H	0	1540	19829.95	10057.49	4477.50	469.35	395.21	15399.54	35229.49	43.7121	56.	29.	13.	1.	1.	65.	29.	3.	3.
79122I	0	1570	7897.49	6209.25	3451.50	401.31	360.79	10422.85	18320.34	56.8922	43.	34.	19.	2.	2.	60.	33.	4.	3.
79122J	0	1600	4172.99	1836.00	1245.94	201.24	210.50	3493.68	7666.66	45.5697	54.	24.	16.	3.	3.	52.	36.	6.	6.
79122K	0	1630	1861.50	732.75	821.81	113.08	179.04	1846.68	3708.18	49.8002	50.	20.	22.	3.	5.	40.	44.	6.	10.
79122L	0	1660	1597.50	1131.75	1146.37	182.02	279.58	2739.72	4337.22	63.1676	38.	26.	26.	4.	6.	41.	42.	7.	10.
79122M	0	1690	6190.49	2879.25	2135.81	296.55	400.61	5712.21	11902.70	47.9909	53.	24.	18.	2.	3.	51.	37.	5.	7.
79122N	0	1720	20384.94	5405.25	3159.56	444.78	519.75	9529.34	29914.27	31.8555	68.	18.	11.	1.	2.	57.	33.	5.	5.
79122O	0	1750	23669.93	8302.49	3916.12	523.35	489.37	13231.32	36901.25	35.8560	65.	22.	11.	1.	1.	62.	30.	4.	4.
79122P	0	1780	17474.96	4689.75	1936.68	243.18	241.65	7111.26	24586.21	28.9238	71.	19.	8.	1.	1.	67.	27.	3.	3.
79122Q	0	1810	11279.98	3588.00	1884.94	285.39	309.42	6067.74	17347.72	34.9772	64.	21.	11.	2.	2.	59.	31.	5.	5.
79122R	0	1840	6643.49	2332.50	1491.75	245.34	274.83	4344.42	10987.91	39.5382	60.	21.	14.	2.	3.	54.	34.	6.	6.
79122S	0	1870	27059.94	6382.50	2346.19	273.24	241.38	9243.30	36303.24	25.4614	74.	18.	6.	1.	1.	69.	25.	3.	3.
79122T	0	1900	15269.97	3183.00	1253.81	156.51	144.72	4738.04	20008.00	23.6807	76.	16.	6.	1.	1.	68.	26.	3.	3.
79123A	0	1930	29204.94	6744.75	1986.18	212.76	160.55	9104.23	38309.17	23.7652	76.	18.	5.	1.	0.	74.	22.	2.	2.
79123B	0	1960	6428.99	1342.50	512.38	66.15	59.06	1980.09	8409.07	23.5470	76.	16.	6.	1.	1.	68.	26.	3.	3.
79123C	0	1990	3092.99	653.92	284.51	39.45	36.31	1014.19	4107.18	24.6930	75.	16.	7.	1.	1.	64.	28.	4.	4.
79123D	0	2000	2888.39	398.40	237.60	37.12	37.08	710.20	3598.59	19.7355	80.	11.	7.	1.	1.	57.	33.	5.	5.

GAS CONCENTRATION (VOLUME GAS PER MILLION VOLUMES CUTTINGS)

GAS COMPOSITION (PERCENT)

B = CUTTINGS NOT ANALYZED *C* = AIR SPACE GAS NOT RUN *BC* = NO ANALYSES RUN

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TABLE 1C

C1-C4 HYDROCARBON ANALYSES - CUTTINGS AND AIR SPACE

GAS CONCENTRATION (VOLUME GAS PER MILLION VOLUMES CUTTINGS)

GAS COMPOSITION (PERCENT)

SPL NO	R	DEPTH	METHANE C1	ETHANE C2	PROPANE C3	IBUTANE IC4	NBUTANE C4	WET C2-C4	TOTAL C1-C4	WET/TOTAL PERCENT	TOTAL GAS M E P IB NB	WET GAS E P IB NB
79122A	0	1330	951.22	150.63	229.33	70.55	39.96	490.47	1441.69	34.0204	66.10.16. 5. 3.	31.47.14. 8.
79122B	0	1360	2731.14	529.01	382.02	112.15	81.34	1104.52	3835.66	28.7961	71.14.10. 3. 2.	48.35.10. 7.
79122C	0	1390	1828.58	364.29	228.37	51.25	42.66	686.57	2515.15	27.2974	73.14. 9. 2. 2.	54.33. 7. 6.
79122D	0	1420	4530.20	777.07	947.62	297.24	279.55	2301.47	6831.67	33.6883	67.11.14. 4. 4.	34.41.13.12.
79122E	0	1450	7063.80	1719.39	2002.74	513.09	553.74	4788.95	11852.74	40.4037	59.15.17. 4. 5.	36.41.11.12.
79122F	0	1480	10150.30	4580.24	3507.52	704.14	697.39	9489.28	19639.59	48.3171	51.23.18. 4. 4.	49.37. 7. 7.
79122G	0	1510	25990.82	9115.84	4185.34	546.72	453.36	14301.25	40282.07	35.5027	65.23.10. 1. 1.	64.29. 4. 3.
79122H	0	1540	33707.25	14585.49	5760.50	632.63	485.03	21463.64	55170.88	38.9039	62.26.10. 1. 1.	68.27. 3. 2.
79122I	0	1570	28595.05	10000.29	4533.90	538.56	445.45	15518.19	44113.24	35.1781	65.23.10. 1. 1.	65.29. 3. 3.
79122J	0	1600	12065.52	2776.94	1551.92	252.30	241.29	4822.44	16887.95	28.5555	73.16. 9. 1. 1.	58.32. 5. 5.
79122K	0	1630	15792.58	2630.52	1812.64	228.68	289.94	4961.77	20754.35	23.9071	76.13. 9. 1. 1.	52.37. 5. 6.
79122L	0	1660	8022.10	3038.21	2086.06	315.02	406.00	5845.28	13867.38	42.1513	58.22.15. 2. 3.	52.36. 5. 7.
79122M	0	1690	63150.38	9580.04	4457.41	620.39	640.80	15298.58	78448.94	19.5013	80.12. 6. 1. 1.	63.29. 4. 4.
79122N	0	1720	62719.45	13136.00	5360.27	767.09	704.81	19968.16	82687.56	24.1489	76.16. 6. 1. 1.	65.27. 4. 4.
79122O	0	1750	23748.86	8319.27	3916.12	523.35	489.37	13248.10	36996.96	35.8086	65.22.11. 1. 1.	62.30. 4. 4.
79122P	0	1780	61346.86	7787.35	2605.68	332.46	284.06	11009.54	72356.38	15.2157	85.11. 4. 0. 0.	70.24. 3. 3.
79122Q	0	1810	29827.63	5124.61	2300.56	348.07	343.71	8116.94	37944.56	21.3916	78.14. 6. 1. 1.	64.28. 4. 4.
79122R	0	1840	16845.96	3159.09	1722.15	280.69	295.20	5457.12	22303.08	24.4680	76.14. 8. 1. 1.	58.32. 5. 5.
79122S	0	1870	45760.96	7537.77	2945.71	299.52	253.69	11036.68	56797.64	19.4316	81.13. 5. 1. 0.	68.27. 3. 2.
79122T	0	1900	30384.15	4260.94	1496.22	189.44	158.60	6105.19	36489.34	16.7314	83.12. 4. 1. 0.	69.25. 3. 3.
79123A	0	1930	38793.59	7135.08	2047.68	212.76	160.55	9556.06	48349.66	19.7645	81.15. 4. 0. 0.	75.21. 2. 2.
79123B	0	1960	15608.98	2354.70	741.43	97.72	72.67	3266.51	18875.48	17.3055	83.12. 4. 1. 0.	72.23. 3. 2.
79123C	0	1990	6974.27	994.67	366.96	52.13	41.98	1455.73	8430.00	17.2684	83.12. 4. 1. 0.	68.25. 4. 3.
79123D	0	2000	47543.41	5297.42	1960.17	345.04	217.32	7819.94	55363.36	14.1248	85.10. 4. 1. 0.	68.25. 4. 3.

B = CUTTINGS NOT ANALYZED *C* = AIR SPACE GAS NOT RUN *BC* = NO ANALYSES RUN

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TABLE 1D

CUTTINGS GAS SUMMARY

SAMPLE NO.	DEPTH	TOTAL C1-C4	% WET	% C3+	C3+/C1	C2/C1
79122A	1330	1442.	34.	24.	0.36	0.16
79122B	1360	3836.	29.	15.	0.21	0.19
79122C	1390	2515.	27.	13.	0.18	0.20
79122D	1420	6832.	33.	22.	0.34	0.17
79122E	1450	11853.	41.	26.	0.43	0.24
79122F	1480	19640.	49.	26.	0.48	0.45
79122G	1510	40282.	35.	12.	0.20	0.35
79122H	1540	55171.	38.	12.	0.20	0.43
79122I	1570	44113.	35.	12.	0.19	0.35
79122J	1600	16888.	27.	11.	0.17	0.23
79122K	1630	20754.	24.	11.	0.15	0.17
79122L	1660	13867.	42.	20.	0.35	0.38
79122M	1690	78449.	20.	8.	0.09	0.15
79122N	1720	82688.	24.	8.	0.11	0.21
79122O	1750	36997.	35.	13.	0.21	0.35
79122P	1780	72356.	15.	4.	0.05	0.13
79122Q	1810	37945.	22.	8.	0.10	0.17
79122R	1840	22303.	24.	10.	0.14	0.19
79122S	1870	56798.	19.	6.	0.08	0.16
79122T	1900	36489.	17.	5.	0.06	0.14
79123A	1930	48350.	19.	4.	0.06	0.18
79123B	1960	18875.	17.	5.	0.06	0.15
79123C	1990	8430.	17.	5.	0.07	0.14
79123D	2000	55363.	15.	5.	0.05	0.11

Table 2 - Sample Descriptions 7120/10-1

Depth (meters)	EPR No.	SW Core No.	Gross Lithology	GSA Color Code	Total Organic Carbon (%)
1330	79122-A		Claystone, dk. greenish gray	5 G 4/1	1.83
1360	-B		Claystone, dk. gray	N3	2.06
1390	-C		As above	N3	1.87
1420	-D		50% as above; 50% yellowish gray sandstone	N3; 5 Y 8/1	2.39
1450	-E		Claystone, dk. gray; traces cement ?	N3	4.05
1453	79134-A*	37	Claystone, dk. greenish gray, carbonaceous	5 GY 4/1	6.12
1473	-B*	35	As above	5 GY 4/1	7.68
1480	79122-F		Claystone, dk. gray	N3	1.93
1499	79134-C*	33	Claystone, dk. greenish gray, carbonaceous	5 GY 4/1	7.74
1510	79122-G		Claystone and shale, dusky yellowish brown, micromicaceous	10 YR 2/2	6.71
1532	79134-D*	31	Claystone, brownish black, carbonaceous	5 YR 2/1	13.10
1540	79122-H		Claystone, dk. gray, micromicaceous	N3	7.55
1570	-I		As above	N3	8.24
1572.4	79079-A**		Sandstone	-	-
1574.6	-B**		Sandstone	-	-
1583.3	-C**		Sandstone	-	-
1600	79122-J		Claystone, greenish black, micromic.	5 GY 2/1	4.41

Depth (meters)	EPR No.	SW Core No.	Gross Lithology	GSA Color Code	Total Organic Carbon (%)
1630	79122-K		Sandstone pinkish gray to lt. brownish gray, calc.	5 YR 8/1 - 6/1	.44
1660	-L		Sandstone, pinkish gray, calc.	5 YR 8/1	.38
1690	-M		Sandstone, lt. greenish gray	5 G 8/1	.64
1720	-N		Coal and greenish black claystone (coal?)	5 GY 2/1	37.75
1750	-O		Coal, claystone, black (coal?)	N1	19.18
1780	-P		Sandstone, lt. greenish gray	5 G 8/1	.66
1810	-Q		As above	5 G 8/1	.26
1840	-R		As above, plus 50% lt. greenish gray claystone	5 G 8/1	.18
1868	79134-E*	14	Claystone, greenish black, carbonaceous (coal)	5 G 2/1	27.38
1870	79122-S		Claystone, dk. greenish gray	5 G 4/1	8.16
1880	79134-F*	13	Siltstone, pinkish gray	5 YR 8/1	.18
1900	79122-T		Claystone, dk. greenish gray, micromic.	5 G 4/1	7.26
1930	79123-A		Claystone, greenish black, traces sand	5 G 2/1	11.21
1960	-B		Claystone, greenish black	5 G 2/1	8.72
1970	79134-G*	5	Claystone, dk. greenish gray	5 G 4/1	1.63
1975	-H*	4	As above	5 G 4/1	.45
1990	79123-C		Claystone, greenish gray, and 50% lt. greenish gray sandstone	5 G 6/1; 5 G 8/1	.62
2000	-D		Claystone, grayish green; 30% lt. greenish gray sandstone	10 G 4/2	.43

* Sidewall Core

** Standard Core

Table 3 - Light Gasolines (C_4 - C_7)
(Fry, Sikirica)

Depth (meters)	EPR No.	T.O.C. (%)	C_4 - C_7 (ppm)	Correlation Ratios				
				C1/C2	A/D2	C1/D2	CH/MCP	n-P/i-Pent.
1330	79122-A	1.83	2.5	.71	7.51	5.54	.34	.87
1360	-B	2.06	2.6	.71	8.83	5.52	.39	.65
1390	-C	1.87	9.0	.70	4.58	4.78	.38	2.26
1420	-D	2.39	10.2	.18	2.39	1.90	.10	2.30
1450	-E	4.05	52.2	.25	3.18	3.98	.09	.63
1453*	79134-A	6.12	50.9	.27	2.75	3.01	.09	.75
1473*	-B	7.68	54.4	.22	2.82	2.54	.08	.78
1480	79122-F	1.93	30.1	.36	3.48	5.45	.13	.62
1499*	79134-C	7.74	66.0	.40	3.30	4.36	.12	.73
1510	79122-G	6.71	69.1	.29	3.63	4.16	.10	.71
1532*	79134-D	13.10	71.0	.33	3.79	4.18	.12	.76
1540	79122-H	7.55	110.	.37	3.78	4.97	.13	.71
1570	-I	8.24	133.	.37	3.53	4.71	.13	.67
1572.4**	79079-A	-	.0	-	-	-	-	-
1574.6**	-B	-	.0	-	-	-	-	-
1583.3**	-C	-	.0	-	-	-	-	-
1600	79122-J	4.41	59.4	.34	3.53	4.87	.13	.62
1630	-K	.44	6.2	.89	2.57	5.95	.50	.86
1660	-L	.38	4.3	1.10	3.16	6.44	.50	.96
1690	-M	.64	15.3	1.08	3.48	8.52	.51	.99

Depth (meters)	EPR No.	T.O.C. (%)	$C_4 - C_7$ (ppm)	Correlation Ratios				
				C1/C2	A/D2	C1/D2	CH/MCP	n-P/i-Pent.
1720	79122-N	37.75	567.	1.28	4.85	14.32	.63	.72
1750	-O	19.18	390.	1.25	8.82	22.17	.57	.72
1780	-P	.66	14.6	1.04	3.99	10.36	.52	.80
1810	-Q	.26	3.1	.85	4.89	10.00	.38	.77
1840	-R	.18	4.8	.82	5.05	10.60	.37	.70
1868*	79134-E	27.38	58.8	.88	5.80	11.31	.34	.86
1870	79122-S	8.16	67.6	.34	3.07	4.82	.14	1.13
1880*	79134-F	.18	.7	1.07	4.80	8.69	.27	.53
1900	79122-T	7.26	61.0	.30	2.86	4.21	.12	1.19
1930	79123-A	11.21	81.2	.51	4.11	7.43	.24	.64
1960	-B	8.72	99.9	.39	4.35	6.39	.13	.67
1970*	79134-G	1.63	2.1	3.09	10.19	10.36	1.83	.0
1975*	-H	.45	.5	23.70	11.82	9.00	-	2.67
1990	79123-C	.62	9.8	.35	2.64	3.32	.12	.71
2000	-D	.43	4.8	.47	2.77	3.41	.16	.84

Table 4 - Visual Kerogen - 7120/10-1
(Morgan)

Depth (meters)	EPR No.	T.O.C. (%)	Kerogen Alteration (TAI)	Confidence in TAI (10 max.)	Types of Kerogen (%) **					
					Al?	Al	IF	H	W	C
1330	79122-A	1.83	1+	5	-	-	10(H)	-	80	10
1420	-D	2.39	1+	5	10	70	10(W)	tr	tr	tr
1453*	79134-A	6.12	1+	4	10	50	20(Al,W)	tr	10	tr
1473*	-B	7.68	1+	5	20	50	10(W)	-	10	10
1480	79122-F	1.93	1+	3	10	10	20(W,C)	-	50	tr
1499*	79134-C	7.74	2-	3	30	40	10(Al)	tr	10	tr
1510	79122-G	6.71	2-	3	40	20	10(Al)	tr	20	tr
1532*	79134-D	13.10	2-	3	40	40	tr	tr	10	tr
1570	79122-I	8.24	2-	3	20	50	20(W)	-	tr	tr
1630	-K	.44	2-	4	-	10	-	tr	80	10
1660	-L	.38	2-	3	-	tr	-	10	80	10
1720	-N	37.75	2-	3	10	tr	tr	-	80	-
1750	-O	19.18	2-(?)	2	tr	tr	-	-	90	-
1780	-P	.66	2-	3	10	60	10(H)	tr	10	tr
1810	-Q	.26	2-	3	tr	tr	tr	10	70	10
1868*	79134-E	27.38	1+	3	-	-	tr(W)	tr	80	10
1870	79122-S	8.17	2-	3	30	30	10(Al)	tr	20	tr
1900	-T	7.26	2-	3	20	30	10(Al)	tr	30	tr
1930	79123-A	11.21	2-	3	20	50	tr	-	20	tr
1970*	79134-G	1.63	2-	3	-	-	-	tr	90	10
2000	79123-D	.43	2	3	30	30	10(Al)	tr	20	tr

* Sidewall Core

** Al - Algal
H - Herbaceous
W - Woody
C - Coaly
tr - trace
IF - Indeterminate Fines
(W,H) - Best guess as to IF (Metter)

Table 5 - Vitrinite Reflectance
(Wilson; GeoStrat)

Depth (m.)	EPR No.	Population	No. of Counts	Ro Min	Ro Max	Ro Av.
1453	79134-A†	1	15	.34	.54	.42**
		2	39	.55	.99	.76
1510	79122-G	1	2	.37	.37	.37
		2	45	.61	1.09	.84
1532	79134-D†	1	31	.33	.49	.41**
		2, 3	32	.50	.93	.72
1600	79122-J	1	41	.23	.51	.34**
		2	9	.82	1.07	.94
1868	79134-E†	1	48	.37	.64	.52**
		2	20	.66	.99	.85
1970	79134-G†	Total	53	.44	1.04	.73**
		1	19	.44	.64	.55
		2 + 3	34	.67	1.04	.83

* See Figs. 2 to 7 for details and histograms

** Populations we estimate to be representative of the actual maturity. Others may be reworked materials.

† Analyzed by GeoStrat; other two by Wilson

Table 6 - Heavy Hydrocarbons (C_{15+})
(L. J. Scott)

Depth (meters)	1330	1510	1572.4*	1574.6*	1583.3*	1600
EPR No.	79122-A	79122-G	79079-A	79079-B	79079-C	79122-J
Total Organic Carbon (%)	1.52	6.88	-	-	-	4.46
Soluble Organic Matter (ppm)	201	3430	42	31	33	1667
Asphaltenes (ppm)	110	2226	22	12	14	942
Composition of S.O.M. (%)						
Saturates **	11.4	3.5	-	-	-	5.8
Aromatics	10.9	12.0	-	-	-	13.8
Eluted NSO's	22.9	19.2	-	-	-	23.8
Noneluted NSO's	-	.4	-	-	-	-
Asphaltenes	54.7	64.9	52.4	38.7	42.4	56.5
Hydrocarbons						
ppm of rock	45	531	-	-	-	328
% of T.O.C.	.3	.8	-	-	-	.7
Sats./Aroms.	1.1	.3	-	-	-	.4

* Sandstone samples extracted to investigate possible staining. Pentane-soluble material was insufficient for further analysis by liquid chromatography.

** See Figs. 8 - 10 for gas chromatograms

791220 OFF. NORWAY, ESSO NO.1 7128/10, 1330 M

	TOTAL PPB	NORM PERCENT		TOTAL PPB	NORM PERCENT
METHANE	0.0		1T3-DMCP	69.7	2.84
ETHANE	0.0		1T2-DMCP	44.8	1.79
PROPANE	0.0		3-EPENT	0.0	0.0
IBUTANE	32.8	1.33	224-TMP	0.0	0.0
NBUTANE	58.1	2.37	NHEPTANE	181.3	7.37
IPENTANE	377.3	15.39	1C2-DMCP	5.5	0.23
NPENTANE	327.3	13.31	MCH	151.7	6.17
22-DMB	6.6	0.27			
CPENTANE	48.6	1.98			
23-DMB	51.1	2.08			
2-MP	272.8	11.09			
3-MP	80.3	3.27			
MHEXANE	208.5	8.48			
MCP	238.8	9.68			
22-DMP	0.0	0.0			
24-DMP	11.3	0.46			
223-TMB	3.2	0.13			
CHEXANE	81.2	3.30			
33-DMP ,	0.0	0.0			
11-DMCP	0.0	0.0			
2-MHEX ,	54.5	2.22			
23-DMP ,	53.4	2.17			
3-MHEX ,	51.9	2.11			
1C3-DMCP	49.1	2.00			

	TOTALS PPB	NORM PERCENT	SIG COMP RATIOS	
ALL COMP	2458.		C1/C2	0.71
GASOLINE	2458.		A /D2	7.51
NAPHTHENES	686.	27.90	C1/D2	5.54
C6-7	1203.	48.95	CH/MCP	0.34
			PENT/IPENT,	0.87

791228 OFF. NORWAY, ESSO NO.1 7128/10, 1360 M

	TOTAL PPB	NORM PERCENT		TOTAL PPB	NORM PERCENT
METHANE	0.0		1T3-DMCP	26.0	1.05
ETHANE	0.0		1T2-DMCP	32.4	1.29
PROPANE	0.0		3-EPENT	0.0	0.0
IBUTANE	134.7	5.27	224-TMP	0.0	0.0
NBUTANE	319.9	12.53	NHEPTANE	123.8	4.85
IPENTANE	511.5	20.03	1C2-DMCP	0.0	0.0
NPENTANE	332.2	13.01	MCH	78.0	3.05
22-DMB	6.9	0.27			
CPENTANE	46.0	1.80			
23-DMB	44.2	1.73			
2-MP	237.0	9.28			
3-MP	69.7	2.73			
MHEXANE	182.3	7.14			
MCP	179.4	7.03			
22-DMP	0.0	0.0			
24-DMP	8.1	0.32			
223-TMB	1.8	0.07			
CHEXANE	69.4	2.72			
33-DMP ,	0.0	0.0			
11-DMCP	0.0	0.0			
2-MHEX ,	43.8	1.71			
23-DMP ,	38.8	1.52			
3-MHEX ,	34.7	1.36			
1C3-DMCP	32.1	1.26			

	TOTALS PPB	NORM PERCENT	SIG COMP RATIOS	
ALL COMP	2554.		C1/C2	0.71
GASOLINE	2554.		A /D2	8.83
NAPHTHENES	464.	18.18	C1/D2	5.52
C6-7	852.	33.35	CH/MCP	0.39
			PENT/IPENT,	0.65

791220 OFF. NORWAY, ESSO NO.1 7128/10, 1390 M

	TOTAL PPB	NORM PERCENT		TOTAL PPB	NORM PERCENT
METHANE	0.0		1T3-DMCP	154.3	1.72
ETHANE	0.0		1T2-DMCP	352.5	3.92
PROPANE	0.0		3-EPENT	0.0	0.0
IBUTANE	68.4	0.76	224-TMP	0.0	0.0
NBUTANE	89.9	0.99	NHEPTANE	526.1	5.85
IPENTANE	495.4	5.51	1C2-DMCP	29.6	0.33
NPENTANE	1119.0	12.45	MCH	680.4	7.56
22-DMB	81.2	0.90			
CPENTANE	143.9	1.60			
23-DMB	178.9	1.99			
2-MP	932.9	10.37			
3-MP	513.8	5.71			
MHEXANE	856.9	9.53			
MCP	1349.5	15.00			
22-DMP	0.0	0.0			
24-DMP	37.0	0.41			
223-TMB	11.9	0.13			
CHEXANE	516.0	5.74			
33-DMP ,	0.0	0.0			
11-DMCP	0.0	0.0			
2-MHEX ,	244.9	2.72			
23-DMP ,	152.3	1.69			
3-MHEX ,	301.7	3.35			
1C3-DMCP	159.1	1.77			

	TOTALS PPB	NORM PERCENT	SIG COMP RATIOS	
ALL COMP	8995.		C1/C2	0.70
GASOLINE	8995.		A /D2	4.58
NAPHTHENES	3385.	37.63	C1/D2	4.78
C6-7	5372.	59.72	CH/MCP	0.38
			PENT/IPENT,	2.26

791220 OFF. NORWAY, ESSO NO.1 7128/10, 1420 M

	TOTAL PPB	NORM PERCENT		TOTAL PPB	NORM PERCENT
METHANE	0.0		1T3-DMCP	378.9	3.72
ETHANE	0.0		1T2-DMCP	789.9	7.76
PROPANE	0.0		3-EPENT	0.0	0.0
IBUTANE	98.5	0.97	224-TMP	0.0	0.0
NBUTANE	245.3	2.41	NHEPTANE	299.3	2.94
IPENTANE	525.4	5.16	1C2-DMCP	43.9	0.43
NPENTANE	1210.3	11.90	MCH	328.7	3.23
22-DMB	17.9	0.18			
CPENTANE	186.1	1.83			
23-DMB	116.4	1.14			
2-MP	881.8	8.67			
3-MP	615.9	6.05			
MHEXANE	623.7	6.13			
MCP	2479.7	24.38			
22-DMP	0.0	0.0			
24-DMP	21.7	0.21			
223-TMB	2.7	0.03			
CHEXANE	238.3	2.34			
33-DMP ,	0.0	0.0			
11-DMCP	0.0	0.0			
2-MHEX ,	159.9	1.57			
23-DMP ,	129.5	1.27			
3-MHEX ,	382.1	3.76			
1C3-DMCP	406.7	4.00			

	TOTALS PPB	NORM PERCENT	SIG COMP RATIOS	
ALL COMP	10172.		C1/C2	0.18
GASOLINE	10172.		A /D2	2.39
NAPHTHENES	4852.	47.70	C1/D2	1.90
C6-7	6275.	61.68	CH/MCP	0.10
			PENT/IPENT,	2.30

Table 7 - Detailed Light Gasoline Analyses
(See Table 3 for Summary)

79122E OFF. NORWAY, ESSO NO.1 7129/10, 1458 M

	TOTAL PPB	NORM PERCENT		TOTAL PPB	NORM PERCENT
METHANE	0.0		1T3-DMCP	1461.4	2.80
ETHANE	0.0		1T2-DMCP	3636.3	6.96
PROPANE	1903.7		3-EPENT	0.0	0.0
IBUTANE	2743.9	9.26	224-TMP	0.0	0.0
NBUTANE	5022.8	9.62	NHEPTANE	1374.5	2.63
IPENTANE	6713.0	12.86	1C2-DMCP	664.8	1.27
NPENTANE	4206.2	8.05	MCH	2814.2	5.39
22-DMB	28.2	0.05			
CPENTANE	1754.8	3.36			
23-DMB	145.4	0.28			
2-MP	2619.6	5.02			
3-MP	2254.3	4.32			
MHEXANE	2109.0	4.04			
MCP	9578.8	18.34			
22-DMP	0.0	0.0			
24-DMP	82.1	0.16			
223-TMB	5.9	0.02			
CHEXANE	857.3	1.64			
33-DMP ,	0.0	0.0			
11-DMCP	0.0	0.0			
2-MHEX ,	697.7	1.34			
23-DMP ,	461.6	0.88			
3-MHEX ,	1097.0	2.10			
1C3-DMCP	1883.2	3.61			

	TOTALS PPB	NORM PERCENT	SIG COMP RATIOS	
ALL COMP	34115.		C1/C2	0.25
GASOLINE	52211.		A /D2	3.18
NAPHTHENES	22649.	43.38	C1/D2	3.98
C6-7	28725.	91.19	CH/MCP	0.09
			PENT/IPENT,	0.63

79134A OFF NORWAY 7128/10,1453M.

	TOTAL PPB	NORM PERCENT		TOTAL PPB	NORM PERCENT
METHANE	0.0		1T3-DMCP	1922.1	3.78
ETHANE	0.0		1T2-DMCP	4941.7	9.71
PROPANE	720.8		3-EPENT	0.0	0.0
IBUTANE	1111.7	2.18	224-TMP	0.0	0.0
NBUTANE	2441.8	4.80	NHEPTANE	2194.6	4.31
IPENTANE	4547.7	8.93	1C2-DMCP	871.0	1.71
NPENTANE	3425.9	6.73	MCH	3557.7	6.99
22-DMB	11.0	0.02			
CPENTANE	518.5	1.02			
23-DMB	347.3	0.68			
2-MP	3754.6	7.37			
3-MP	2406.8	4.73			
MHEXANE	2597.9	5.10			
MCP	9374.8	18.41			
22-DMP	0.0	0.0			
24-DMP	118.6	0.23			
223-TMB	14.4	0.03			
CHEXANE	878.7	1.73			
33-DMP ,	0.0	0.0			
11-DMCP	0.0	0.0			
2-MHEX ,	814.0	1.60			
23-DMP ,	815.4	1.60			
3-MHEX ,	1742.9	3.42			
1C3-DMCP	2501.0	4.91			

	TOTALS PPB	NORM PERCENT	SIG COMP RATIOS	
ALL COMP	51630.		C1/C2	0.27
GASOLINE	50999.		A /D2	2.75
NAPHTHENES	24565.	48.25	C1/D2	3.01
C6-7	32344.	63.53	CH/MCP	0.09
			PENT/IPENT,	0.75

79134B OFF NORWAY 7128/10,1473M.

	TOTAL PPB	NORM PERCENT		TOTAL PPB	NORM PERCENT
METHANE	0.0		1T3-DMCP	1802.1	3.31
ETHANE	0.0		1T2-DMCP	4464.3	8.20
PROPANE	822.1		3-EPENT	0.0	0.0
IBUTANE	1369.6	2.52	224-TMP	0.0	0.0
NBUTANE	2993.6	5.50	NHEPTANE	1876.3	3.45
IPENTANE	5556.4	10.21	1C2-DMCP	597.7	1.10
NPENTANE	4359.2	8.01	MCH	2581.9	4.74
22-DMB	15.9	0.03			
CPENTANE	678.6	1.25			
23-DMB	409.2	0.75			
2-MP	4500.9	8.27			
3-MP	2819.2	5.18			
MHEXANE	2909.3	5.35			
MCP	10827.9	19.89			
22-DMP	0.0	0.0			
24-DMP	91.0	0.17			
223-TMB	9.4	0.02			
CHEXANE	917.0	1.68			
33-DMP ,	0.0	0.0			
11-DMCP	0.0	0.0			
2-MHEX ,	825.2	1.52			
23-DMP ,	815.6	1.50			
3-MHEX ,	1695.6	3.12			
1C3-DMCP	2308.4	4.24			

	TOTALS PPB	NORM PERCENT	SIG COMP RATIOS	
ALL COMP	55250.		C1/C2	0.22
GASOLINE	54428.		A /D2	2.62
NAPHTHENES	24178.	44.42	C1/D2	2.54
C6-7	31726.	58.29	CH/MCP	0.08
			PENT/IPENT,	0.78

79122F OFF. NORWAY, ESSO NO.1 7126/10, 1488 M

	TOTAL PPB	NORM PERCENT		TOTAL PPB	NORM PERCENT
METHANE	0.0		1T3-DMCP	801.9	2.66
ETHANE	0.0		1T2-DMCP	1962.8	6.51
PROPANE	1923.6		3-EPENT	0.0	0.0
IBUTANE	1996.9	6.62	224-TMP	0.0	0.0
NBUTANE	3336.4	11.07	NHEPTANE	911.2	3.02
IPENTANE	3728.9	12.37	1C2-DMCP	498.0	1.65
NPENTANE	2321.9	7.70	MCH	2187.4	7.26
22-DMB	34.7	0.12			
CPENTANE	1028.7	3.41			
23-DMB	76.8	0.25			
2-MP	1319.8	4.38			
3-MP	1071.5	3.55			
MHEXANE	1140.4	3.78			
MCP	4703.0	15.86			
22-DMP	0.0	0.0			
24-DMP	42.2	0.14			
223-TMB	6.5	0.02			
CHEXANE	620.2	2.06			
33-DMP ,	0.0	0.0			
11-DMCP	0.0	0.0			
2-MHEX ,	407.4	1.35			
23-DMP ,	275.1	0.91			
3-MHEX ,	581.4	1.95			
1C3-DMCP	1008.7	3.35			

	TOTALS PPB	NORM PERCENT	SIG COMP RATIOS	
ALL COMP	32073.		C1/C2	0.36
GASOLINE	30149.		A /D2	3.48
NAPHTHENES	12690.	42.75	C1/D2	5.45
C6-7	15233.	59.53	CH/MCP	0.13
			PENT/IPENT,	0.62

79134C OFF NORWAY 7120/10,1499M.

	TOTAL PPB	NORM PERCENT		TOTAL PPB	NORM PERCENT
METHANE	0.0		1T3-DMCP	2294.2	3.40
ETHANE	0.0		1T2-DMCP	5890.4	7.72
PROPANE	1047.8		3-EPENT	0.0	0.0
IBUTANE	2578.7	3.91	224-TMP	0.0	0.0
NBUTANE	4206.5	6.36	NHEPTANE	3247.2	4.92
IPENTANE	6273.5	9.51	1C2-DMCP	1256.9	1.91
NPENTANE	4599.3	6.97	MCH	6383.7	9.68
22-DMB	18.3	0.03			
CPENTANE	649.0	0.98			
23-DMB	443.5	0.67			
2-MP	4787.9	7.26			
3-MP	2471.1	3.75			
MHEXANE	3374.3	5.12			
MCP	10019.8	15.19			
22-DMP	0.0	0.0			
24-DMP	115.1	0.17			
223-TMB	4.6	0.01			
CHEXANE	1205.4	1.83			
33-DMP ,	0.0	0.0			
11-DMCP	0.0	0.0			
2-MHEX ,	1148.1	1.74			
23-DMP ,	872.6	1.32			
3-MHEX ,	2004.4	3.04			
1C3-DMCP	2923.3	4.43			

	TOTALS PPB	NORM PERCENT	SIG COMP RATIOS	
ALL COMP	67016.		C1/C2	0.40
GASOLINE	65968.		A /D2	3.30
NAPHTHENES	29823.	45.21	C1/D2	4.36
C6-7	39940.	60.54	CH/MCP	0.12
			PENT/IPENT,	0.73

79122G OFF. NORWAY, ESSO NO.1 7129/10, 1510 M

	TOTAL PPB	NORM PERCENT		TOTAL PPB	NORM PERCENT
METHANE	0.0		1T3-DMCP	1740.8	2.52
ETHANE	1259.9		1T2-DMCP	3875.2	5.61
PROPANE	6131.7		3-EPENT	0.0	0.0
IBUTANE	4708.5	6.82	224-TMP	0.0	0.0
NBUTANE	8250.0	11.94	NHEPTANE	2011.6	2.91
IPENTANE	8727.9	12.63	1C2-DMCP	725.2	1.05
NPENTANE	6222.9	9.01	MCH	3871.7	5.60
22-DMB	18.1	0.03			
CPENTANE	2358.8	3.41			
23-DMB	153.3	0.22			
2-MP	3597.0	5.21			
3-MP	2527.8	3.66			
MHEXANE	3014.5	4.36			
MCP	11023.9	15.96			
22-DMP	0.0	0.0			
24-DMP	74.9	0.11			
223-TMB	6.5	0.01			
CHEXANE	1135.7	1.64			
33-DMP ,	0.0	0.0			
11-DMCP	0.0	0.0			
2-MHEX ,	746.2	1.08			
23-DMP ,	648.9	0.94			
3-MHEX ,	1383.4	2.00			
1C3-DMCP	2262.4	3.27			

	TOTALS PPB	NORM PERCENT	SIG COMP RATIOS	
ALL COMP	76476.		C1/C2	0.29
GASOLINE	69084.		A /D2	3.63
NAPHTHENES	26994.	39.07	C1/D2	4.16
C6-7	32521.	47.07	CH/MCP	0.10
			PENT/IPENT,	0.71

791340 OFF NORWAY 7120/10,1532M.

	TOTAL PPB	NORM PERCENT		TOTAL PPB	NORM PERCENT
METHANE	0.0		1T3-DMCP	2197.3	3.89
ETHANE	0.0		1T2-DMCP	4417.8	6.22
PROPANE	1728.5		3-EPENT	0.0	0.0
IBUTANE	2619.2	3.69	224-TMP	0.0	0.0
NBUTANE	4864.0	6.85	NHEPTANE	2811.4	3.96
IPENTANE	7531.4	10.61	1C2-DMCP	721.6	1.02
NPENTANE	5689.8	8.01	MCH	4918.4	6.93
22-DMB	31.0	0.04			
CPENTANE	984.4	1.39			
23-DMB	599.2	0.84			
2-MP	5957.9	8.39			
3-MP	2885.7	4.06			
NHEXANE	4019.3	5.66			
MCP	12494.2	17.59			
22-DMP	0.0	0.0			
24-DMP	117.0	0.16			
223-TMB	6.3	0.01			
CHEXANE	1498.6	2.11			
33-DMP	0.0	0.0			
11-DMCP	0.0	0.0			
2-MHEX	1109.8	1.56			
23-DMP	924.6	1.30			
3-MHEX	1800.7	2.54			
1C3-DMCP	2819.9	3.97			

	TOTALS PPB	NORM PERCENT	SIG COMP RATIOS	
ALL COMP	72743.		C1/C2	0.33
GASOLINE	71015.		A /D2	3.79
NAPHTHENES	30048.	42.31	C1/D2	4.10
C6-7	39652.	56.12	CH/MCP	0.12
			PENT/IPENT,	0.76

79122H OFF. NORWAY, ESSO NO.1 7128/10, 1540 M

	TOTAL PPB	NORM PERCENT		TOTAL PPB	NORM PERCENT
METHANE	0.0		1T3-DMCP	2835.8	2.58
ETHANE	0.0		1T2-DMCP	6282.1	5.71
PROPANE	13150.9		3-EPENT	0.0	0.0
IBUTANE	8461.2	7.69	224-TMP	0.0	0.0
NBUTANE	13618.4	12.38	NHEPTANE	3714.4	3.38
IPENTANE	12888.6	11.71	1C2-DMCP	1376.3	1.25
NPENTANE	9098.8	8.27	MCH	7848.8	7.13
22-DMB	44.8	0.04			
CPENTANE	3484.3	3.17			
23-DMB	241.8	0.22			
2-MP	5532.9	5.03			
3-MP	3634.1	3.30			
NHEXANE	4765.6	4.33			
MCP	15887.3	14.44			
22-DMP	0.0	0.0			
24-DMP	120.7	0.11			
223-TMB	8.3	0.01			
CHEXANE	2842.8	1.86			
33-DMP	0.0	0.0			
11-DMCP	0.0	0.0			
2-MHEX	1268.2	1.15			
23-DMP	1053.6	0.96			
3-MHEX	2245.3	2.04			
1C3-DMCP	3580.8	3.25			

	TOTALS PPB	NORM PERCENT	SIG COMP RATIOS	
ALL COMP	123185.		C1/C2	0.37
GASOLINE	110034.		A /D2	3.78
NAPHTHENES	43337.	39.38	C1/D2	4.97
C6-7	53028.	48.19	CH/MCP	0.13
			PENT/IPENT,	0.71

79122I OFF. NORWAY, ESSO NO.1 7128/10, 1570 M

	TOTAL PPB	NORM PERCENT		TOTAL PPB	NORM PERCENT
METHANE	0.0		1T3-DMCP	3338.5	2.52
ETHANE	0.0		1T2-DMCP	7220.6	5.44
PROPANE	6551.6		3-EPENT	0.0	0.0
IBUTANE	10593.8	7.98	224-TMP	0.0	0.0
NBUTANE	16238.7	12.24	NHEPTANE	5075.8	3.82
IPENTANE	16505.4	12.44	1C2-DMCP	1514.6	1.14
NPENTANE	10976.5	8.27	MCH	9692.4	6.55
22-DMB	48.0	0.04			
CPENTANE	4436.6	3.34			
23-DMB	304.1	0.23			
2-MP	7017.8	5.29			
3-MP	4588.6	3.46			
NHEXANE	5411.7	4.08			
MCP	18166.4	13.69			
22-DMP	0.0	0.0			
24-DMP	1414.0	1.07			
223-TMB	12.1	0.01			
CHEXANE	2436.1	1.84			
33-DMP	0.0	0.0			
11-DMCP	0.0	0.0			
2-MHEX	1548.1	1.17			
23-DMP	1299.3	0.98			
3-MHEX	2688.7	2.03			
1C3-DMCP	4147.0	3.13			

	TOTALS PPB	NORM PERCENT	SIG COMP RATIOS	
ALL COMP	139226.		C1/C2	0.37
GASOLINE	132674.		A /D2	3.53
NAPHTHENES	49952.	37.65	C1/D2	4.71
C6-7	61965.	46.70	CH/MCP	0.13
			PENT/IPENT,	0.67

79122J OFF. NORWAY, ESSO NO.1 7128/10, 1600 M

	TOTAL PPB	NORM PERCENT		TOTAL PPB	NORM PERCENT
METHANE	0.0		1T3-DMCP	1548.5	2.61
ETHANE	0.0		1T2-DMCP	3339.4	5.56
PROPANE	922.0		3-EPENT	0.0	0.0
IBUTANE	4182.2	7.04	224-TMP	0.0	0.0
NBUTANE	6634.1	11.17	NHEPTANE	1741.3	2.93
IPENTANE	7605.8	12.81	1C2-DMCP	759.8	1.28
NPENTANE	4727.6	7.96	MCH	3916.6	6.59
22-DMB	56.8	0.10			
CPENTANE	1925.5	3.24			
23-DMB	165.6	0.28			
2-MP	2915.0	4.91			
3-MP	2236.7	3.77			
NHEXANE	2444.5	4.12			
MCP	9244.1	15.56			
22-DMP	9.0	0.0			
24-DMP	81.4	0.14			
223-TMB	8.4	0.01			
CHEXANE	1228.9	2.07			
33-DMP	0.0	0.0			
11-DMCP	0.0	0.0			
2-MHEX	629.0	1.06			
23-DMP	601.5	1.01			
3-MHEX	1186.6	2.00			
1C3-DMCP	2011.8	3.39			

	TOTALS PPB	NORM PERCENT	SIG COMP RATIOS	
ALL COMP	60314.		C1/C2	0.34
GASOLINE	59392.		A /D2	3.53
NAPHTHENES	24175.	40.79	C1/D2	4.87
C6-7	28942.	48.73	CH/MCP	0.13
			PENT/IPENT,	0.62

79122K OFF. NORWAY, ESSO NO.1 7129/10, 1630 M

	TOTAL PPB	NORM PERCENT		TOTAL PPB	NORM PERCENT
METHANE	0.0		1T3-DMCP	152.8	2.45
ETHANE	0.0		1T2-DMCP	323.4	5.19
PROPANE	239.9		3-EPENT	0.0	0.0
IBUTANE	185.2	2.97	224-TMP	0.0	0.0
NBUTANE	478.1	7.68	NHEPTANE	282.3	4.53
IPENTANE	534.4	8.58	1C2-DMCP	35.7	0.57
NPENTANE	460.3	7.39	MCH	826.2	13.17
22-DMB	7.4	0.12			
CPENTANE	225.0	3.61			
23-DMB	14.1	0.23			
2-MP	276.3	4.44			
3-MP	222.1	3.57			
NHEXANE	313.3	5.03			
MCP	872.3	14.01			
22-DMP	0.0	0.0			
24-DMP	10.3	0.16			
223-TMB	0.0	0.0			
CHEXANE	433.6	6.96			
33-DMP	0.0	0.0			
11-DMCP	0.0	0.0			
2-MHEX	123.2	1.98			
23-DMP	60.2	0.96			
3-MHEX	231.5	3.72			
1C3-DMCP	164.8	2.65			

	TOTALS PPB	NORM PERCENT	SIG COMP RATIOS	
ALL COMP	6467.		C1/C2	0.89
GASOLINE	6227.		A /D2	2.57
NAPHTHENES	3028.	48.62	C1/D2	5.95
C6-7	3824.	61.41	CH/MCP	0.50
			PENT/IPENT,	0.86

79122L OFF. NORWAY, ESSO NO.1 7128/10, 1660 M

	TOTAL PPB	NORM PERCENT		TOTAL PPB	NORM PERCENT
METHANE	0.0		1T3-DMCP	81.5	1.89
ETHANE	0.0		1T2-DMCP	167.5	3.89
PROPANE	0.0		3-EPENT	0.0	0.0
IBUTANE	147.9	3.43	224-TMP	0.0	0.0
NBUTANE	349.7	8.12	NHEPTANE	188.6	4.38
IPENTANE	415.0	9.64	1C2-DMCP	16.3	0.38
NPENTANE	397.3	9.23	MCH	586.4	13.62
22-DMB	10.4	0.24			
CPENTANE	121.1	2.81			
23-DMB	17.3	0.40			
2-MP	223.4	5.19			
3-MP	174.0	4.04			
NHEXANE	271.9	6.32			
MCP	503.2	11.69			
22-DMP	0.0	0.0			
24-DMP	9.3	0.22			
223-TMB	0.0	0.0			
CHEXANE	249.6	5.80			
33-DMP	0.0	0.0			
11-DMCP	0.0	0.0			
2-MHEX	104.2	2.42			
23-DMP	40.1	0.93			
3-MHEX	145.9	3.39			
1C3-DMCP	85.3	1.98			

	TOTALS PPB	NORM PERCENT	SIG COMP RATIOS	
ALL COMP	4306.		C1/C2	1.10
GASOLINE	4306.		A /D2	3.16
NAPHTHENES	1811.	42.06	C1/D2	6.44
C6-7	2450.	56.90	CH/MCP	0.50
			PENT/IPENT,	0.96

79122M OFF. NORWAY, ESSO NO.1 7120/10, 1690 M

	TOTAL PPB	NORM PERCENT		TOTAL PPB	NORM PERCENT
METHANE	0.0		1T3-DMCP	347.1	2.27
ETHANE	0.0		1T2-DMCP	732.4	4.79
PROPANE	652.0		3-EPENT	0.0	0.0
IBUTANE	550.4	3.60	224-TMP	0.0	0.0
NBUTANE	1086.9	7.11	NHEPTANE	557.3	3.65
IPENTANE	1312.4	8.59	1C2-DMCP	76.3	0.50
NPENTANE	1299.6	8.51	MCH	2417.2	15.82
22-DMB	42.9	0.28			
CPENTANE	187.4	1.23			
23-DMB	136.0	0.90			
2-MP	986.7	6.46			
3-MP	602.0	3.95			
NHEXANE	918.5	6.01			
MCP	1821.3	11.92			
22-DMP	0.0	0.0			
24-DMP	25.2	0.17			
223-TMB	6.0	0.04			
CHEXANE	935.6	6.12			
33-DMP ,	0.0	0.0			
11-DMCP	0.0	0.0			
2-MHEX ,	263.1	1.72			
23-DMP ,	177.7	1.16			
3-MHEX ,	424.2	2.78			
1C3-DMCP	369.7	2.42			

	TOTALS PPB	NORM PERCENT	SIG COMP RATIOS	
ALL COMP	15931.		C1/C2	1.08
GASOLINE	15270.		A /D2	3.40
NAPHTHENES	6887.	45.08	C1/D2	0.52
C6-7	9073.	59.38	CH/MCP	0.51
			PENT/IPENT,	0.99

791220 OFF. NORWAY, ESSO NO.1 7120/10, 1750 M

	TOTAL PPB	NORM PERCENT		TOTAL PPB	NORM PERCENT
METHANE	0.0		1T3-DMCP	8121.4	2.08
ETHANE	0.0		1T2-DMCP	14449.0	3.71
PROPANE	1030.0		3-EPENT	0.0	0.0
IBUTANE	2979.4	0.76	224-TMP	0.0	0.0
NBUTANE	10905.2	2.80	NHEPTANE	10916.6	2.80
IPENTANE	48414.0	12.42	1C2-DMCP	0.0	0.0
NPENTANE	34970.4	8.97	MCH	66419.7	17.04
22-DMB	1868.3	0.48			
CPENTANE	6263.1	1.61			
23-DMB	2603.8	0.67			
2-MP	33526.3	8.60			
3-MP	17493.7	4.49			
NHEXANE	28953.2	7.43			
MCP	52023.7	13.35			
22-DMP	0.0	0.0			
24-DMP	442.4	0.11			
223-TMB	140.2	0.04			
CHEXANE	29838.7	7.66			
33-DMP ,	0.0	0.0			
11-DMCP	0.0	0.0			
2-MHEX ,	3934.1	1.01			
23-DMP ,	5251.1	1.35			
3-MHEX ,	4519.2	1.16			
1C3-DMCP	5740.3	1.47			

	TOTALS PPB	NORM PERCENT	SIG COMP RATIOS	
ALL COMP	390813.		C1/C2	1.25
GASOLINE	389783.		A /D2	8.82
NAPHTHENES	182864.	46.91	C1/D2	22.17
C6-7	230757.	59.20	CH/MCP	0.57
			PENT/IPENT,	0.72

791220 OFF. NORWAY, ESSO NO.1 7120/10, 1810 M

	TOTAL PPB	NORM PERCENT		TOTAL PPB	NORM PERCENT
METHANE	0.0		1T3-DMCP	61.6	1.90
ETHANE	0.0		1T2-DMCP	118.0	3.76
PROPANE	159.3		3-EPENT	0.0	0.0
IBUTANE	215.5	6.86	224-TMP	0.0	0.0
NBUTANE	336.1	10.70	NHEPTANE	61.9	1.97
IPENTANE	421.4	13.41	1C2-DMCP	9.0	0.29
NPENTANE	323.9	10.31	MCH	330.6	10.52
22-DMB	9.9	0.31			
CPENTANE	31.2	0.99			
23-DMB	29.1	0.93			
2-MP	202.7	6.45			
3-MP	125.2	3.99			
NHEXANE	185.6	5.91			
MCP	349.3	11.12			
22-DMP	0.0	0.0			
24-DMP	3.0	0.09			
223-TMB	0.0	0.0			
CHEXANE	131.5	4.19			
33-DMP ,	0.0	0.0			
11-DMCP	0.0	0.0			
2-MHEX ,	49.7	1.58			
23-DMP ,	25.5	0.81			
3-MHEX ,	51.9	1.65			
1C3-DMCP	66.6	2.12			

	TOTALS PPB	NORM PERCENT	SIG COMP RATIOS	
ALL COMP	3331.		C1/C2	0.85
GASOLINE	3141.		A /D2	4.84
NAPHTHENES	1093.	34.95	C1/D2	13.03
C6-7	1447.	46.05	CH/MCP	0.35
			PENT/IPENT,	0.77

79122N OFF. NORWAY, ESSO NO.1 7120/10, 1720 M

	TOTAL PPB	NORM PERCENT		TOTAL PPB	NORM PERCENT
METHANE	0.0		1T3-DMCP	14428.1	2.55
ETHANE	0.0		1T2-DMCP	27918.3	4.93
PROPANE	5026.2		3-EPENT	0.0	0.0
IBUTANE	20060.6	3.54	224-TMP	0.0	0.0
NBUTANE	35308.2	6.23	NHEPTANE	19107.5	3.37
IPENTANE	49547.1	8.74	1C2-DMCP	2574.4	0.45
NPENTANE	35486.4	6.26	MCH	106341.5	18.77
22-DMB	1999.4	0.35			
CPENTANE	18199.0	3.21			
23-DMB	1683.7	0.30			
2-MP	26466.4	4.67			
3-MP	20735.1	3.66			
NHEXANE	34109.6	6.02			
MCP	68137.6	12.03			
22-DMP	0.0	0.0			
24-DMP	5078.3	0.90			
223-TMB	1365.1	0.24			
CHEXANE	42733.4	7.54			
33-DMP ,	0.0	0.0			
11-DMCP	0.0	0.0			
2-MHEX ,	7980.6	1.41			
23-DMP ,	6819.6	1.20			
3-MHEX ,	10978.9	1.94			
1C3-DMCP	9584.1	1.69			

	TOTALS PPB	NORM PERCENT	SIG COMP RATIOS	
ALL COMP	571657.		C1/C2	1.28
GASOLINE	566631.		A /D2	4.05
NAPHTHENES	289913.	51.16	C1/D2	14.32
C6-7	357146.	63.03	CH/MCP	0.63
			PENT/IPENT,	0.72

79122P OFF. NORWAY, ESSO NO.1 7120/10, 1780 M

	TOTAL PPB	NORM PERCENT		TOTAL PPB	NORM PERCENT
METHANE	0.0		1T3-DMCP	337.1	2.31
ETHANE	0.0		1T2-DMCP	666.7	4.57
PROPANE	0.0		3-EPENT	0.0	0.0
IBUTANE	620.5	4.25	224-TMP	0.0	0.0
NBUTANE	920.4	6.31	NHEPTANE	358.9	2.46
IPENTANE	1561.7	10.70	1C2-DMCP	148.0	1.01
NPENTANE	1247.5	8.55	MCH	2265.0	15.52
22-DMB	58.7	0.40			
CPENTANE	152.7	1.04			
23-DMB	143.9	0.99			
2-MP	915.7	6.29			
3-MP	577.1	3.95			
NHEXANE	932.6	6.39			
MCP	1730.1	11.85			
22-DMP	0.0	0.0			
24-DMP	19.5	0.13			
223-TMB	6.7	0.05			
CHEXANE	898.7	6.15			
33-DMP ,	0.0	0.0			
11-DMCP	0.0	0.0			
2-MHEX ,	191.0	1.31			
23-DMP ,	161.3	1.10			
3-MHEX ,	323.5	2.22			
1C3-DMCP	356.2	2.44			

	TOTALS PPB	NORM PERCENT	SIG COMP RATIOS	
ALL COMP	14596.		C1/C2	1.06
GASOLINE	14596.		A /D2	3.99
NAPHTHENES	6553.	44.90	C1/D2	10.36
C6-7	8395.	57.52	CH/MCP	0.52
			PENT/IPENT,	0.80

79122R OFF. NORWAY, ESSO NO.1 7120/10, 1540 M

	TOTAL PPB	NORM PERCENT		TOTAL PPB	NORM PERCENT
METHANE	0.0		1T3-DMCP	126.9	2.65
ETHANE	0.0		1T2-DMCP	132.2	2.76
PROPANE	0.0		3-EPENT	0.0	0.0
IBUTANE	119.9	2.49	224-TMP	0.0	0.0
NBUTANE	614.9	12.86	NHEPTANE	77.1	1.61
IPENTANE	721.6	15.09	1C2-DMCP	15.5	0.32
NPENTANE	507.9	10.62	MCH	500.9	10.45
22-DMB	14.7	0.31			
CPENTANE	53.5	1.12			
23-DMB	43.5	1.01			
2-MP	323.3	6.37			
3-MP	190.9	3.99			
NHEXANE	237.1	6.31			
MCP	563.5	11.78			
22-DMP	0.0	0.0			
24-DMP	5.4	0.11			
223-TMB	0.0	0.0			
CHEXANE	206.6	4.32			
33-DMP ,	0.0	0.0			
11-DMCP	0.0	0.0			
2-MHEX ,	57.4	1.20			
23-DMP ,	41.6	0.87			
3-MHEX ,	72.1	1.51			
1C3-DMCP	98.3	2.06			

	TOTALS PPB	NORM PERCENT	SIG COMP RATIOS	
ALL COMP	4781.		C1/C2	0.92
GASOLINE	4781.		A /D2	3.35
NAPHTHENES	1695.	35.45	C1/D2	10.63
C6-7	2182.	45.64	CH/MCP	0.37
			PENT/IPENT,	0.70

79134E OFF NORWAY 7120/10, 1860M.

	TOTAL PPB	NORM PERCENT		TOTAL PPB	NORM PERCENT
METHANE	0.0		1T3-DMCP	1144.2	1.95
ETHANE	0.0		1T2-DMCP	2561.2	4.36
PROPANE	1337.7		3-EPENT	0.0	0.0
IBUTANE	2822.1	4.80	224-TMP	0.0	0.0
NBUTANE	7501.6	12.76	NHEPTANE	2380.3	4.05
IPENTANE	6490.0	11.04	1C2-DMCP	563.9	0.96
NPENTANE	5608.6	9.54	MCH	7709.2	13.11
22-DMB	57.3	0.10			
CPENTANE	877.3	1.49			
23-DMB	484.3	0.82			
2-MP	3829.8	6.51			
3-MP	1632.4	2.78			
NHEXANE	3019.2	5.13			
MCP	6235.4	10.60			
22-DMP	0.0	0.0			
24-DMP	74.6	0.13			
223-TMB	6.0	0.01			
CHEXANE	2116.7	3.60			
33-DMP ,	0.0	0.0			
11-DMCP	0.0	0.0			
2-MHEX ,	698.3	1.19			
23-DMP ,	594.2	1.01			
3-MHEX ,	930.4	1.58			
1C3-DMCP	1468.0	2.50			

	TOTALS PPB	NORM PERCENT	SIG COMP RATIOS	
ALL COMP	60142.		C1/C2	0.00
GASOLINE	58804.		A /D2	5.80
NAPHTHENES	22676.	38.56	C1/D2	11.31
C6-7	29501.	50.17	CH/MCP	0.34
			PENT/IPENT.	0.86

79134F OFF NORWAY 7120/10, 1880M.

	TOTAL PPB	NORM PERCENT		TOTAL PPB	NORM PERCENT
METHANE	0.0		1T3-DMCP	18.9	2.71
ETHANE	0.0		1T2-DMCP	33.2	4.76
PROPANE	46.7		3-EPENT	0.0	0.0
IBUTANE	30.0	4.31	224-TMP	0.0	0.0
NBUTANE	72.2	10.35	NHEPTANE	36.3	5.20
IPENTANE	70.1	10.05	1C2-DMCP	0.0	0.0
NPENTANE	37.5	5.37	MCH	112.5	16.13
22-DMB	0.0	0.0			
CPENTANE	7.2	1.04			
23-DMB	4.9	0.70			
2-MP	48.0	6.89			
3-MP	41.0	5.89			
NHEXANE	44.1	6.32			
MCP	80.0	11.48			
22-DMP	0.0	0.0			
24-DMP	1.0	0.14			
223-TMB	0.0	0.0			
CHEXANE	21.8	3.13			
33-DMP ,	0.0	0.0			
11-DMCP	0.0	0.0			
2-MHEX ,	11.0	1.58			
23-DMP ,	6.8	0.97			
3-MHEX ,	16.7	2.40			
1C3-DMCP	4.1	0.59			

	TOTALS PPB	NORM PERCENT	SIG COMP RATIOS	
ALL COMP	744.		C1/C2	1.07
GASOLINE	697.		A /D2	4.80
NAPHTHENES	278.	39.84	C1/D2	8.69
C6-7	386.	55.41	CH/MCP	0.27
			PENT/IPENT.	0.53

791230 OFF. NORWAY, ESSO NO.1 7120/10, 1930 M

	TOTAL PPB	NORM PERCENT		TOTAL PPB	NORM PERCENT
METHANE	0.0		1T3-DMCP	1850.9	2.28
ETHANE	0.0		1T2-DMCP	4211.7	5.19
PROPANE	8995.4		3-EPENT	0.0	0.0
IBUTANE	6257.0	7.71	224-TMP	0.0	0.0
NBUTANE	9551.6	11.77	NHEPTANE	2206.9	2.72
IPENTANE	10090.1	12.43	1C2-DMCP	927.3	1.14
NPENTANE	6426.6	7.91	MCH	7052.9	8.69
22-DMB	131.2	0.16			
CPENTANE	1096.1	1.35			
23-DMB	627.5	0.77			
2-MP	5054.7	6.23			
3-MP	2830.7	3.49			
NHEXANE	3613.8	4.45			
MCP	11050.1	13.61			
22-DMP	0.0	0.0			
24-DMP	95.6	0.12			
223-TMB	17.0	0.02			
CHEXANE	2624.5	3.23			
33-DMP ,	0.0	0.0			
11-DMCP	0.0	0.0			
2-MHEX ,	833.6	1.03			
23-DMP ,	769.7	0.95			
3-MHEX ,	1415.6	1.74			
1C3-DMCP	2442.3	3.01			

	TOTALS PPB	NORM PERCENT	SIG COMP RATIOS	
ALL COMP	90174.		C1/C2	0.51
GASOLINE	81179.		A /D2	5.11
NAPHTHENES	31256.	38.50	C1/D2	7.43
C6-7	39116.	48.19	CH/MCP	0.24
			PENT/IPENT,	0.64

791225 OFF. NORWAY, ESSO NO.1 7120/10, 1870 M

	TOTAL PPB	NORM PERCENT		TOTAL PPB	NORM PERCENT
METHANE	0.0		1T3-DMCP	2447.7	3.62
ETHANE	0.0		1T2-DMCP	6027.5	8.92
PROPANE	0.0		3-EPENT	0.0	0.0
IBUTANE	269.7	0.40	224-TMP	0.0	0.0
NBUTANE	812.0	1.20	NHEPTANE	2549.0	3.77
IPENTANE	5156.1	7.63	1C2-DMCP	1342.2	1.99
NPENTANE	5850.6	8.66	MCH	6229.8	9.22
22-DMB	44.2	0.07			
CPENTANE	1251.6	1.85			
23-DMB	559.7	0.83			
2-MP	5146.9	7.62			
3-MP	3361.2	4.98			
NHEXANE	3173.6	4.70			
MCP	13301.1	19.69			
22-DMP	0.0	0.0			
24-DMP	1247.5	1.85			
223-TMB	17.9	0.03			
CHEXANE	1876.0	2.78			
33-DMP ,	0.0	0.0			
11-DMCP	0.0	0.0			
2-MHEX ,	873.6	1.29			
23-DMP ,	901.7	1.33			
3-MHEX ,	1866.1	2.76			
1C3-DMCP	3245.1	4.80			

	TOTALS PPB	NORM PERCENT	SIG COMP RATIOS	
ALL COMP	67553.		C1/C2	0.36
GASOLINE	67553.		A /D2	3.07
NAPHTHENES	35719.	52.88	C1/D2	4.82
C6-7	45090.	66.75	CH/MCP	0.14
			PENT/IPENT,	1.13

791227 OFF. NORWAY, ESSO NO.1 7120/10, 1900 M

	TOTAL PPB	NORM PERCENT		TOTAL PPB	NORM PERCENT
METHANE	0.0		1T3-DMCP	2621.4	4.30
ETHANE	0.0		1T2-DMCP	6779.3	11.11
PROPANE	0.0		3-EPENT	0.0	0.0
IBUTANE	59.1	0.10	224-TMP	0.0	0.0
NBUTANE	261.1	0.43	NHEPTANE	2737.1	4.49
IPENTANE	1271.6	2.09	1C2-DMCP	1486.9	2.44
NPENTANE	1517.8	2.49	MCH	6139.0	10.07
22-DMB	20.5	0.03			
CPENTANE	817.7	1.34			
23-DMB	302.6	0.50			
2-MP	5219.1	8.56			
3-MP	3495.3	5.73			
NHEXANE	3207.3	5.26			
MCP	14270.5	23.40			
22-DMP	0.0	0.0			
24-DMP	1379.2	2.26			
223-TMB	13.5	0.02			
CHEXANE	1689.9	2.77			
33-DMP ,	0.0	0.0			
11-DMCP	0.0	0.0			
2-MHEX ,	917.9	1.51			
23-DMP ,	973.0	1.60			
3-MHEX ,	2079.1	3.41			
1C3-DMCP	3552.9	5.83			

	TOTALS PPB	NORM PERCENT	SIG COMP RATIOS	
ALL COMP	60990.		C1/C2	0.30
GASOLINE	60990.		A /D2	2.55
NAPHTHENES	37357.	61.25	C1/D2	6.21
C6-7	47846.	78.45	CH/MCP	0.12
			PENT/IPENT,	1.19

791238 OFF. NORWAY, ESSO NO.1 7120/10, 1960 M

	TOTAL PPB	NORM PERCENT		TOTAL PPB	NORM PERCENT
METHANE	0.0		1T3-DMCP	1071.7	1.07
ETHANE	0.0		1T2-DMCP	6258.0	6.26
PROPANE	10093.6		3-EPENT	0.0	0.0
IBUTANE	6995.3	7.00	224-TMP	0.0	0.0
NBUTANE	10991.0	11.00	NHEPTANE	3117.6	3.12
IPENTANE	12234.5	12.24	1C2-DMCP	762.4	0.76
NPENTANE	8155.4	8.16	MCH	8024.9	8.03
22-DMB	45.7	0.05			
CPENTANE	3355.0	3.36			
23-DMB	223.6	0.22			
2-MP	5167.9	5.17			
3-MP	3854.2	3.86			
NHEXANE	4255.5	4.26			
MCP	16355.9	16.36			
22-DMP	0.0	0.0			
24-DMP	50.5	0.05			
223-TMB	7.6	0.01			
CHEXANE	2059.7	2.06			
33-DMP ,	0.0	0.0			
11-DMCP	0.0	0.0			
2-MHEX ,	751.4	0.75			
23-DMP ,	1363.4	1.36			
3-MHEX ,	1695.6	1.70			
1C3-DMCP	3139.5	3.14			

	TOTALS PPB	NORM PERCENT	SIG COMP RATIOS	
ALL COMP	110051.		C1/C2	0.39
GASOLINE	99957.		A /D2	4.35
NAPHTHENES	61004.	61.03	C1/D2	6.39
C5-7	49899.	49.92	CH/MCP	0.13
			PENT/IPENT,	0.67

791346 OFF NORWAY 7120/10,1970R.

	TOTAL PPB	NORM PERCENT		TOTAL PPB	NORM PERCENT
METHANE	0.0		1T3-DMCP	6.8	0.33
ETHANE	0.0		1T2-DMCP	14.5	0.69
PROPANE	293.4		3-EPENT	0.0	0.0
IBUTANE	266.5	12.91	224-TMP	0.0	0.0
NBUTANE	398.6	19.31	MHEPTANE	61.8	2.99
IPENTANE	273.8	13.27	1C2-DMCP	0.0	0.0
NPENTANE	0.0	0.0	MCH	172.3	8.35
22-DMB	22.4	1.09			
CPENTANE	24.2	1.17			
23-DMB	29.9	1.45			
2-MP	147.7	7.16			
3-MP	79.2	3.84			
MHEXANE	259.5	12.58			
MCP	70.7	3.42			
22-DMP	0.0	0.0			
24-DMP	6.2	0.30			
223-TMB	1.7	0.08			
CHEXANE	129.1	6.26			
33-DMP	0.0	0.0			
11-DMCP	0.0	0.0			
2-MHEX	25.2	1.22			
23-DMP	28.7	1.39			
3-MHEX	31.5	1.53			
1C3-DMCP	11.6	0.56			

	TOTALS PPB	NORM PERCENT	SIG COMP RATIOS	
ALL COMP	2357.		C1/C2	3.09
GASOLINE	2064.		A /D2	10.19
NAPHTHENES	431.	20.89	C1/D2	18.36
C6-7	822.	39.81	CH/MCP	1.03
			PENT/IPENT,	0.0

791346 OFF NORWAY 7120/10,1975N.

	TOTAL PPB	NORM PERCENT		TOTAL PPB	NORM PERCENT
METHANE	0.0		1T3-DMCP	0.0	0.0
ETHANE	0.0		1T2-DMCP	2.7	0.49
PROPANE	49.7		3-EPENT	0.0	0.0
IBUTANE	43.2	9.21	224-TMP	0.0	0.0
NBUTANE	73.4	15.67	MHEPTANE	14.6	3.11
IPENTANE	42.1	8.99	1C2-DMCP	0.0	0.0
NPENTANE	112.3	23.96	MCH	34.0	7.25
22-DMB	7.2	1.68			
CPENTANE	1.7	0.36			
23-DMB	3.4	0.73			
2-MP	24.6	5.26			
3-MP	15.7	3.34			
MHEXANE	56.4	12.04			
MCP	0.0	0.0			
22-DMP	0.0	0.0			
24-DMP	12.0	2.56			
223-TMB	0.0	0.0			
CHEXANE	16.4	3.50			
33-DMP	0.0	0.0			
11-DMCP	0.0	0.0			
2-MHEX	3.6	0.78			
23-DMP	3.7	0.79			
3-MHEX	6.0	1.28			
1C3-DMCP	0.0	0.0			

	TOTALS PPB	NORM PERCENT	SIG COMP RATIOS	
ALL COMP	518.		C1/C2	23.70
GASOLINE	469.		A /D2	11.82
NAPHTHENES	54.	11.60	C1/D2	9.80
C6-7	149.	31.81	CH/MCP	199.99
			PENT/IPENT,	2.67

791235 OFF. NORWAY. ESSO NO.1 7120/10. 1990 R

	TOTAL PPB	NORM PERCENT		TOTAL PPB	NORM PERCENT
METHANE	0.0		1T3-DMCP	293.3	2.96
ETHANE	0.0		1T2-DMCP	605.3	6.10
PROPANE	0.0		3-EPENT	0.0	0.0
IBUTANE	595.2	6.03	224-TMP	0.0	0.0
NBUTANE	977.7	9.94	MHEPTANE	326.5	3.32
IPENTANE	1189.2	12.09	1C2-DMCP	101.8	1.06
NPENTANE	842.8	8.62	MCH	602.1	6.93
22-DMB	6.8	0.09			
CPENTANE	119.5	1.21			
23-DMB	71.1	0.10			
2-MP	621.7	6.32			
3-MP	358.4	3.93			
MHEXANE	465.5	4.74			
MCP	1510.9	15.35			
22-DMP	0.0	0.0			
24-DMP	13.5	0.14			
223-TMB	0.0	0.0			
CHEXANE	170.6	1.73			
33-DMP	0.0	0.0			
11-DMCP	0.0	0.0			
2-MHEX	139.2	1.41			
23-DMP	36.5	0.37			
3-MHEX	107.7	1.06			
1C3-DMCP	394.1	3.99			

	TOTALS PPB	NORM PERCENT	SIG COMP RATIOS	
ALL COMP	9440.		C1/C2	0.35
GASOLINE	9840.		A /D2	0.04
NAPHTHENES	3795.	38.57	C1/D2	3.32
C6-7	5017.	50.99	CH/MCP	3.12
			PENT/IPENT,	3.71

791239 OFF. NORWAY. ESSO NO.1 7120/10. 2003 R

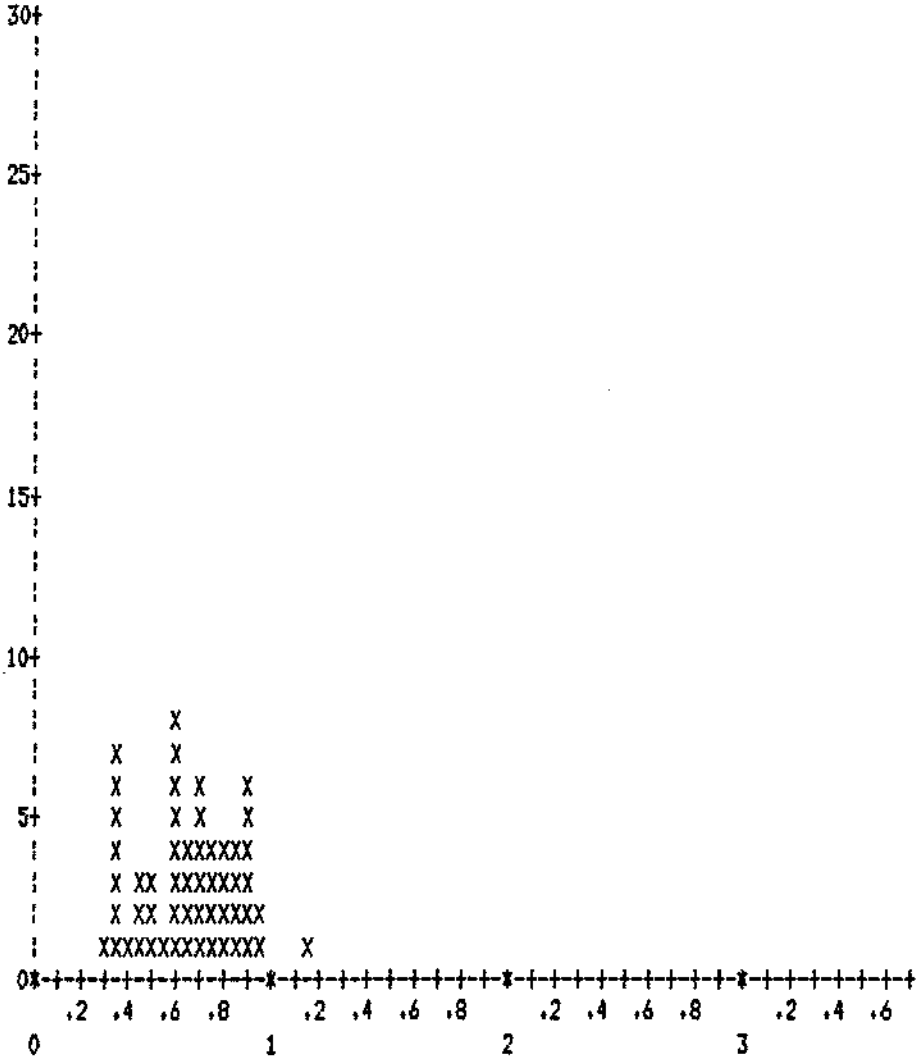
	TOTAL PPB	NORM PERCENT		TOTAL PPB	NORM PERCENT
METHANE	0.0		1T3-DMCP	148.0	3.11
ETHANE	0.0		1T2-DMCP	305.1	6.41
PROPANE	0.0		3-EPENT	0.0	0.0
IBUTANE	200.5	4.22	224-TMP	0.0	0.0
NBUTANE	367.2	7.71	MHEPTANE	214.2	4.50
IPENTANE	507.9	10.66	1C2-DMCP	34.0	0.71
NPENTANE	423.9	8.90	MCH	404.0	8.48
22-DMB	5.7	0.12			
CPENTANE	65.4	0.95			
23-DMB	39.7	0.83			
2-MP	314.8	6.61			
3-MP	196.5	4.13			
MHEXANE	283.1	5.94			
MCP	666.9	13.96			
22-DMP	0.0	0.0			
24-DMP	12.0	0.25			
223-TMB	0.0	0.01			
CHEXANE	107.3	2.26			
33-DMP	1.7	0.04			
11-DMCP	0.0	0.3			
2-MHEX	99.6	2.09			
23-DMP	34.6	1.15			
3-MHEX	179.6	3.77			
1C3-DMCP	154.7	3.25			

	TOTALS PPB	NORM PERCENT	SIG COMP RATIOS	
ALL COMP	4765.		C1/C2	0.67
GASOLINE	4761.		A /D2	1.77
NAPHTHENES	1864.	39.13	C1/D2	3.41
C6-7	2643.	55.01	CH/MCP	0.16
			PENT/IPENT,	0.84

CLIENT..... EXXON
FILE NAME..... E-630-1
DEPTH/SAMPLE NO.. 79134 A
TYPE OF SAMPLE..... SIDEWALL CORE
LOCATION..... UNKNOWN
DATE..... 10-29-84
ANALYST..... K. W. SCHWAB
NO. OF OBSERVATIONS. 55

STANDARD %Ro START: 1.02 FINISH: 1.02

REFLECTANCE DATA: MIN. 0.34 MAX. 1.17 AVG. 0.67 STD. DEV. 0.20



VITRINITE REFLECTANCE HISTOGRAM - %Ro

POP.# 1 TOTAL CTS. 15 MIN. 0.34 MAX. 0.54 AVG. 0.42 STD. DEV. 0.07

POP.# 2 TOTAL CTS. 39 MIN. 0.55 MAX. 0.99 AVG. 0.76 STD. DEV. 0.12

POP.# 3 TOTAL CTS. 1 MIN. 1.17 MAX. 1.17 AVG. 1.17 STD. DEV. 0.00

Figure 2 - Sidewall Core, 1453 meters

VITRINITE REFLECTANCE
11-27-84-ISW/REM

EPR # : 791220.. SAMPLE TYPE : CTGS..... DEPTH : 1510'.....

AGE : ..... COMPANY : EXXON..... WELL NAME/LOCATION : ESSO #1 7120/10-OFF.NORWAY

NOTATIONS: 'F':FIRST CYCLE VITRINITE 'L':LOW GREY 'X':VITRINITE
'S':SECOND CYCLE VITRINITE 'H':HIGH GREY 'E':EXINITE 'U':TO BE SPECIFIED

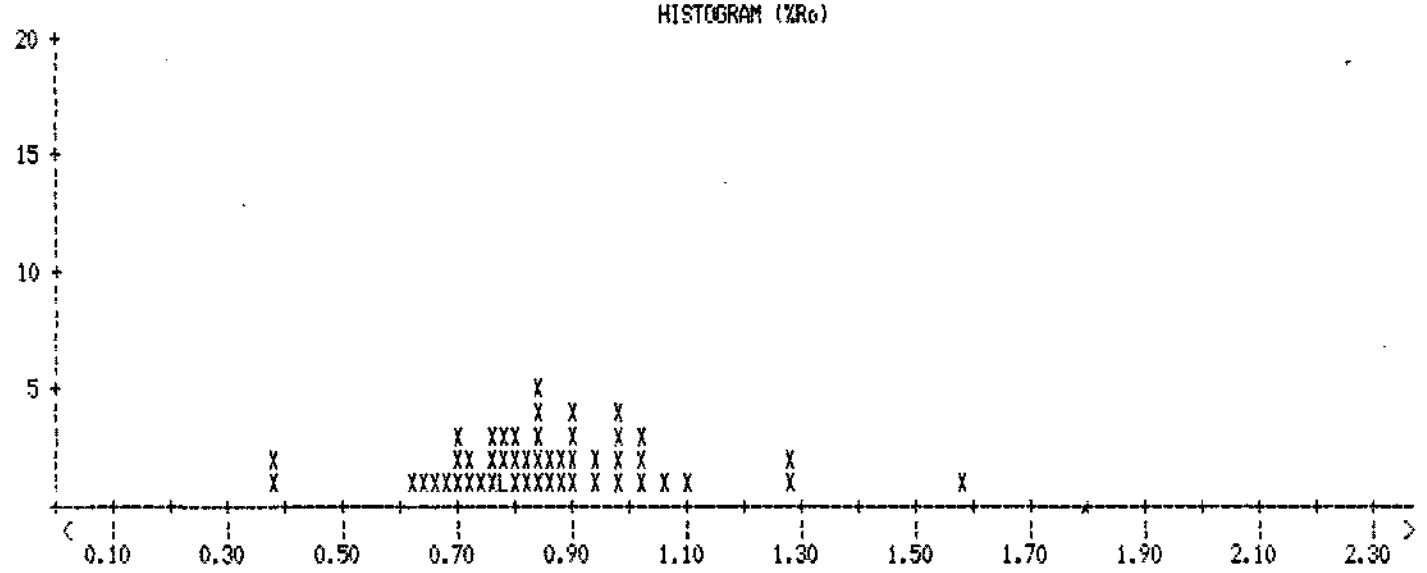
ORIGINAL DATA (%Ro)

1.28 X	0.99 X	0.84 X	0.94 X	0.75 X	0.98 X	0.80 X	0.37 X	1.58 X	0.86 X
0.75 X	1.01 X	0.78 L	0.83 X	0.66 X	0.70 X	0.82 X	1.09 X	0.77 X	1.27 X
0.86 X	0.74 X	0.94 X	0.84 X	0.76 X	0.89 X	0.78 X	0.71 X	0.80 X	0.83 X
0.37 X	0.73 X	0.84 X	0.97 X	0.80 X	0.87 X	1.01 X	0.63 X	0.87 X	0.69 X
0.61 X	0.98 X	0.69 X	0.81 X	0.90 X	0.89 X	1.02 X	0.89 X	1.05 X	0.68 X

DISPLAYED DATA (%Ro)

0.37 X	0.37 X	0.61 X	0.63 X	0.66 X	0.68 X	0.69 X	0.69 X	0.70 X	0.71 X
0.73 X	0.74 X	0.75 X	0.75 X	0.76 X	0.77 X	0.78 X	0.78 L	0.80 X	0.80 X
0.80 X	0.81 X	0.82 X	0.83 X	0.83 X	0.84 X	0.84 X	0.84 X	0.86 X	0.86 X
0.87 X	0.87 X	0.89 X	0.89 X	0.89 X	0.90 X	0.94 X	0.94 X	0.97 X	0.98 X
0.98 X	0.99 X	1.01 X	1.01 X	1.02 X	1.05 X	1.09 X	1.27 X	1.28 X	1.58 X

HISTOGRAM (%Ro)



POPULATION	NO. OF READINGS	RANGE	STD DEV	AVG	%Ro FOR LOM	RELIABILITY
1	2	0.37 - 0.37		0.37		
2	45	0.61 - 1.09	0.118	0.84	0.84	FAIR
3	3	1.27 - 1.58		1.38		

ABUNDANT VITRINITE PRESENT.
FLUORESCENCE-YELLOW TO BROWNISH GOLD EXINITE PRESENT.

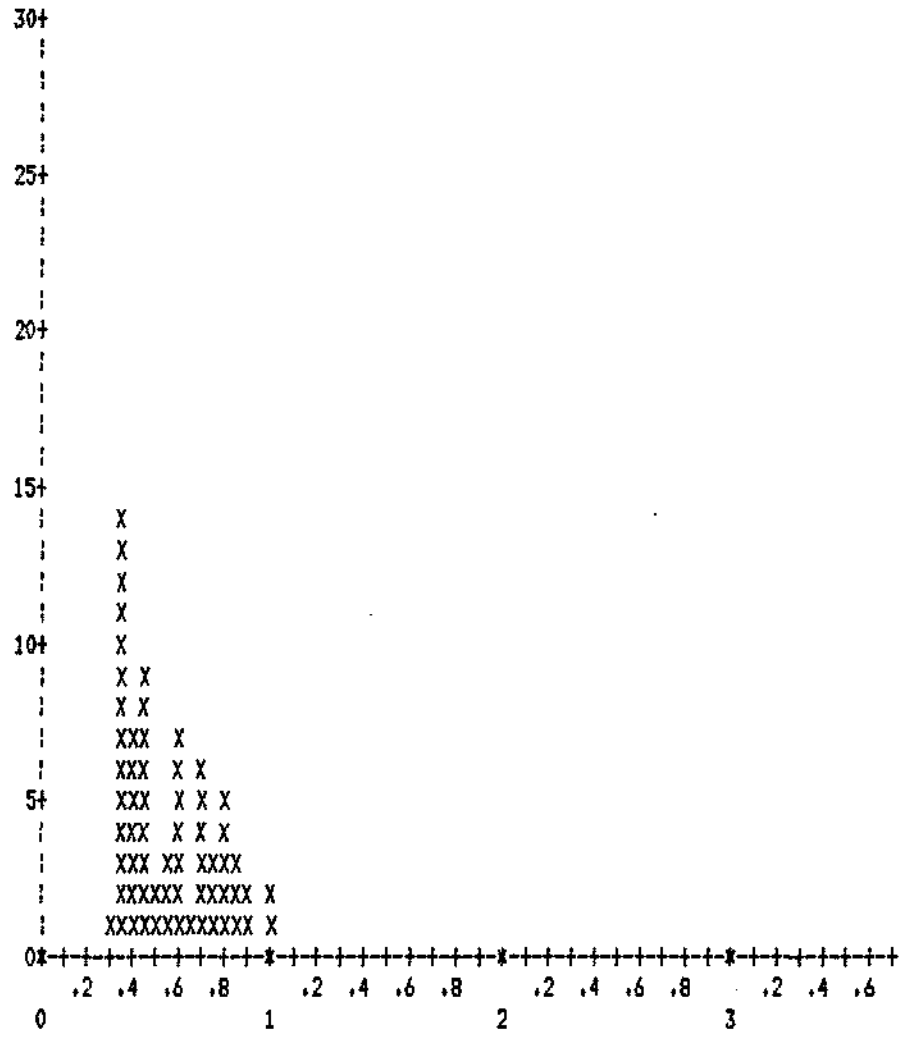
Figure 3 - Cuttings, 1510 meters

CLIENT..... EXXON
DEPTH/SAMPLE NO.. 79134 D
LOCATION..... UNKNOWN
ANALYST..... K. W. SCHWAB

FILE NAME..... E-630-2
TYPE OF SAMPLE..... SIDEWALL CORE
DATE..... 10-29-84
NO. OF OBSERVATIONS. 65

STANDARD ZRo START: 1.02 FINISH: 1.02

REFLECTANCE DATA: MIN. 0.33 MAX. 1.04 AVG. 0.58 STD. DEV. 0.19



VITRINITE REFLECTANCE HISTOGRAM - ZRo

POP.# 1 TOTAL CTS. 31 MIN. 0.33 MAX. 0.49 AVG. 0.41 STD. DEV. 0.04

POP.# 2 TOTAL CTS. 13 MIN. 0.50 MAX. 0.67 AVG. 0.60 STD. DEV. 0.05

POP.# 3 TOTAL CTS. 19 MIN. 0.70 MAX. 0.93 AVG. 0.80 STD. DEV. 0.07

POP.# 4 TOTAL CTS. 2 MIN. 1.00 MAX. 1.04 AVG. 1.02 STD. DEV. 0.03

Figure 4 - Sidewall Core, 1532 meters

VITRINITE REFLECTANCE
11-29-84-ISW/REM

EPR # : 79122J.. SAMPLE TYPE : CTGS..... DEPTH : 1600'.....

AGE : ..... COMPANY : EXXON..... WELL NAME/LOCATION : ESSO #1 7120/10-OFF.NORW

NOTATIONS: 'F':FIRST CYCLE VITRINITE 'L':LOW GREY 'X':VITRINITE
'S':SECOND CYCLE VITRINITE 'H':HIGH GREY 'E':EXINITE 'U':TO BE SPECIFIED

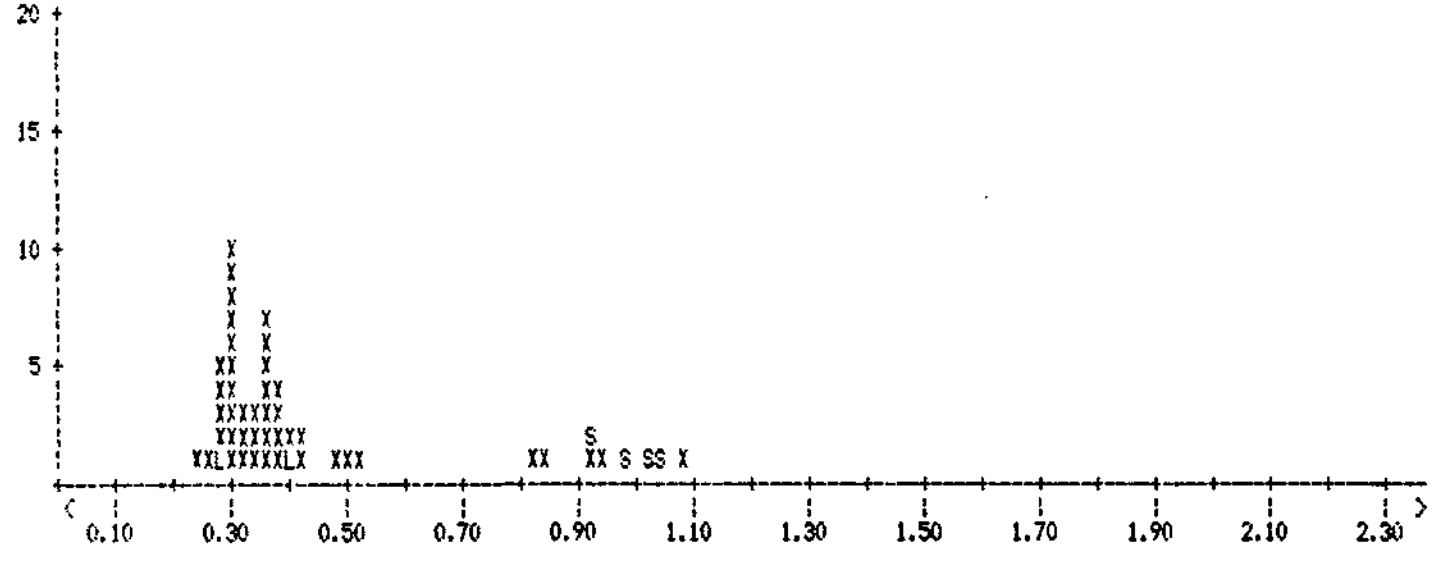
ORIGINAL DATA (%Ro)

0.30 X	0.31 X	0.38 X	0.39 X	0.29 X	0.36 X	0.35 X	0.30 X	0.41 X	0.30 X
0.27 L	0.30 X	0.34 X	0.31 X	0.35 X	0.28 X	0.26 X	0.41 X	0.83 X	0.82 X
0.36 X	0.30 X	0.94 X	0.40 L	0.35 X	0.28 X	0.47 X	1.01 S	0.91 S	0.51 X
1.03 S	0.97 S	0.30 X	0.91 X	0.33 X	0.28 X	0.34 X	0.23 X	0.35 X	0.29 X
0.38 X	1.07 X	0.35 X	0.27 X	0.30 X	0.50 X	0.30 X	0.32 X	0.37 X	0.37 X

DISPLAYED DATA (%Ro)

0.23 X	0.26 X	0.27 X	0.27 L	0.28 X	0.28 X	0.28 X	0.29 X	0.29 X	0.30 X
0.30 X	0.30 X	0.30 X	0.30 X	0.30 X	0.30 X	0.30 X	0.31 X	0.31 X	0.32 X
0.33 X	0.34 X	0.34 X	0.35 X	0.35 X	0.35 X	0.35 X	0.35 X	0.36 X	0.36 X
0.37 X	0.37 X	0.38 X	0.38 X	0.39 X	0.40 L	0.41 X	0.41 X	0.47 X	0.50 X
0.51 X	0.82 X	0.83 X	0.91 X	0.91 S	0.94 X	0.97 S	1.01 S	1.03 S	1.07 X

HISTOGRAM (%Ro)



POPULATION	NO. OF READINGS	RANGE	STD DEV	AVG	%Ro FOR LOM	RELIABILITY
1	41	0.23 - 0.51	0.062	0.34	0.34	GOOD
2	9	0.82 - 1.07	0.086	0.94		

Figure 5 - Cuttings, 1600 meters

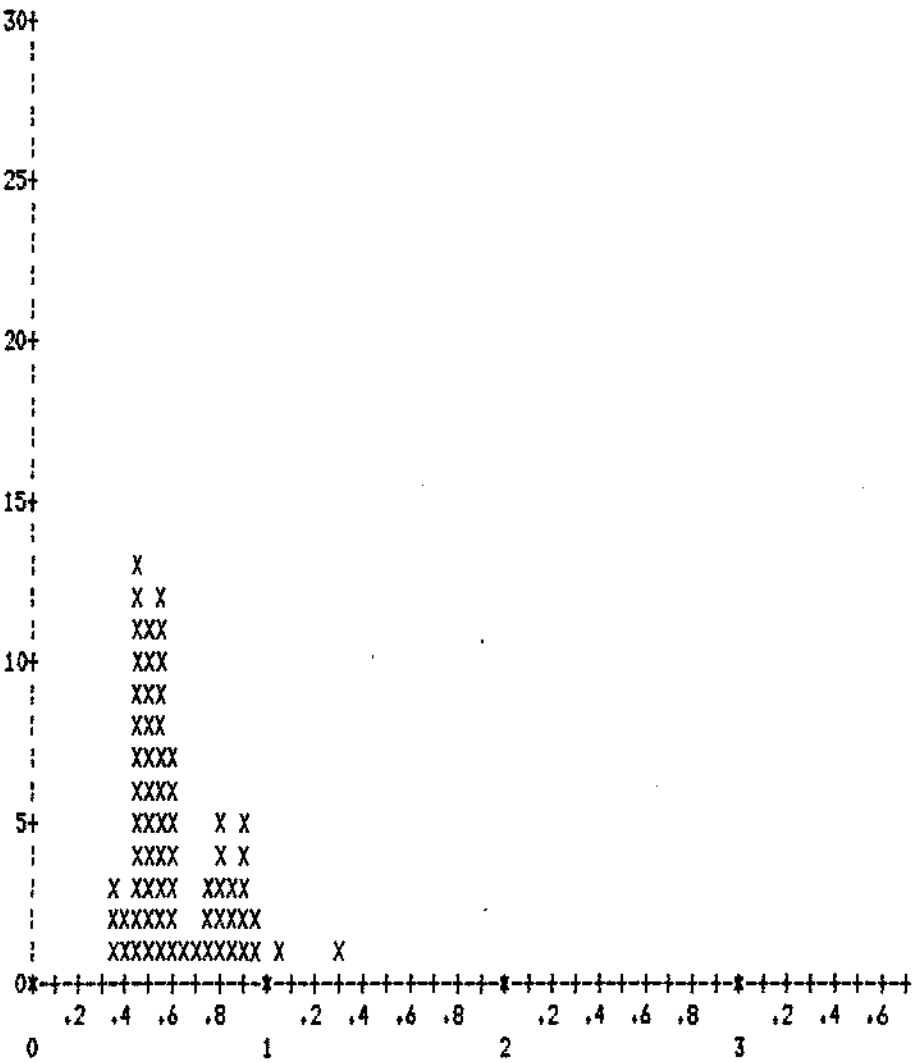
ABUNDANT VITRINITE PRESENT. FLUORESCENCE-BRIGHT YELLOW EXINITE AND CUTINITE PRESENT.

CLIENT..... EXXON
DEPTH/SAMPLE NO.. 79134 E
LOCATION..... UNKNOWN
ANALYST..... K. W. SCHWAB

FILE NAME..... E-630-3
TYPE OF SAMPLE..... SIDEWALL CORE
DATE..... 10-29-84
NO. OF OBSERVATIONS. 70

STANDARD %Ro START: 1.02 FINISH: 1.02

REFLECTANCE DATA: MIN. 0.37 MAX. 1.30 AVG. 0.63 STD. DEV. 0.19



VITRINITE REFLECTANCE HISTOGRAM - %Ro

POP.# 1 TOTAL CTS. 48 MIN. 0.37 MAX. 0.64 AVG. 0.52 STD. DEV. 0.07

POP.# 2 TOTAL CTS. 20 MIN. 0.66 MAX. 0.99 AVG. 0.85 STD. DEV. 0.09

POP.# 3 TOTAL CTS. 1 MIN. 1.07 MAX. 1.07 AVG. 1.07 STD. DEV. 0.00

POP.# 4 TOTAL CTS. 1 MIN. 1.30 MAX. 1.30 AVG. 1.30 STD. DEV. 0.00

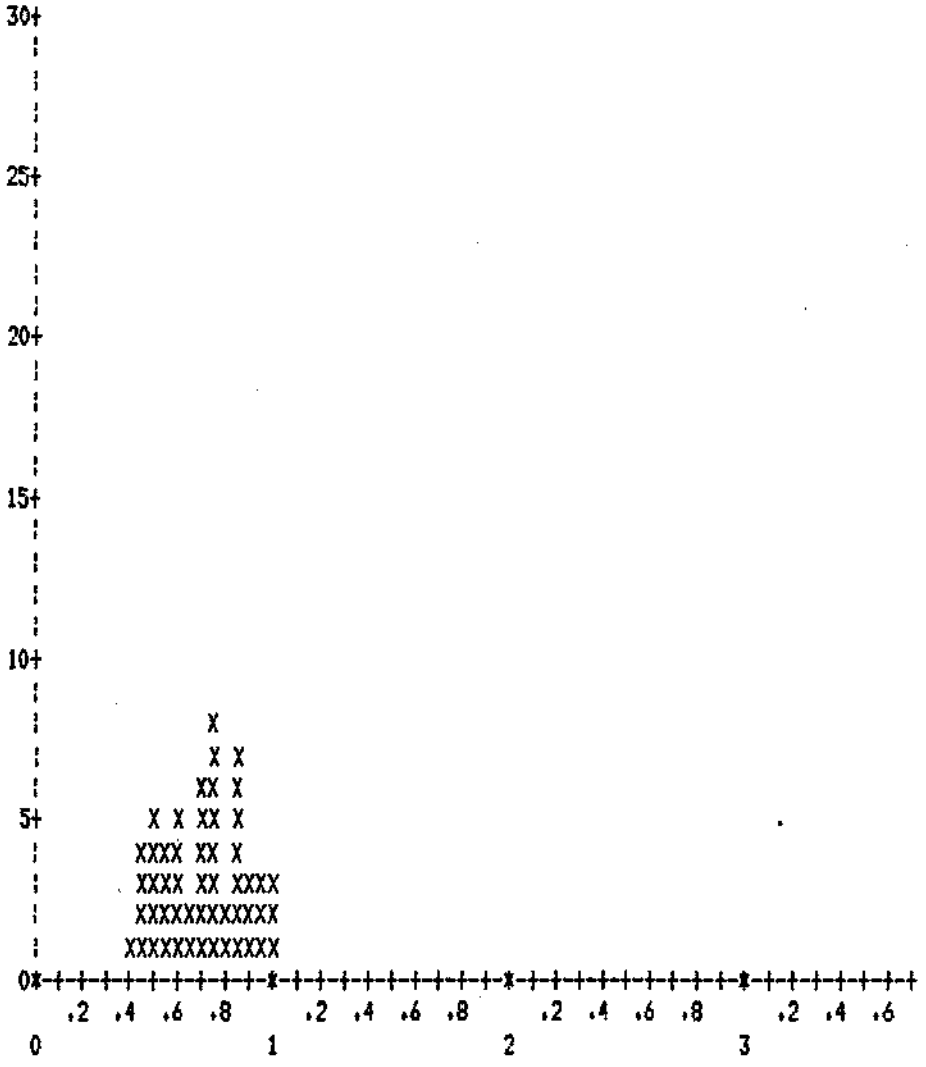
Figure 6 - Sidewall Core, 1868 meters

CLIENT..... EXXON
DEPTH/SAMPLE NO.. 79134 G
LOCATION..... UNKNOWN
ANALYST..... K. W. SCHWAB

FILE NAME..... E-630-4
TYPE OF SAMPLE..... SIDEWALL CORE
DATE..... 10-29-84
NO. OF OBSERVATIONS. 53

STANDARD %Ro START: 1.02 FINISH: 1.02

REFLECTANCE DATA: MIN. 0.44 MAX. 1.04 AVG. 0.73 STD. DEV. 0.17



VITRINITE REFLECTANCE HISTOGRAM - %Ro

POP.# 1 TOTAL CTS. 19 MIN. 0.44 MAX. 0.64 AVG. 0.55 STD. DEV. 0.07

POP.# 2 TOTAL CTS. 18 MIN. 0.67 MAX. 0.83 AVG. 0.75 STD. DEV. 0.05

POP.# 3 TOTAL CTS. 16 MIN. 0.85 MAX. 1.04 AVG. 0.93 STD. DEV. 0.06

Figure 7 - Sidewall Core, 1970 meters

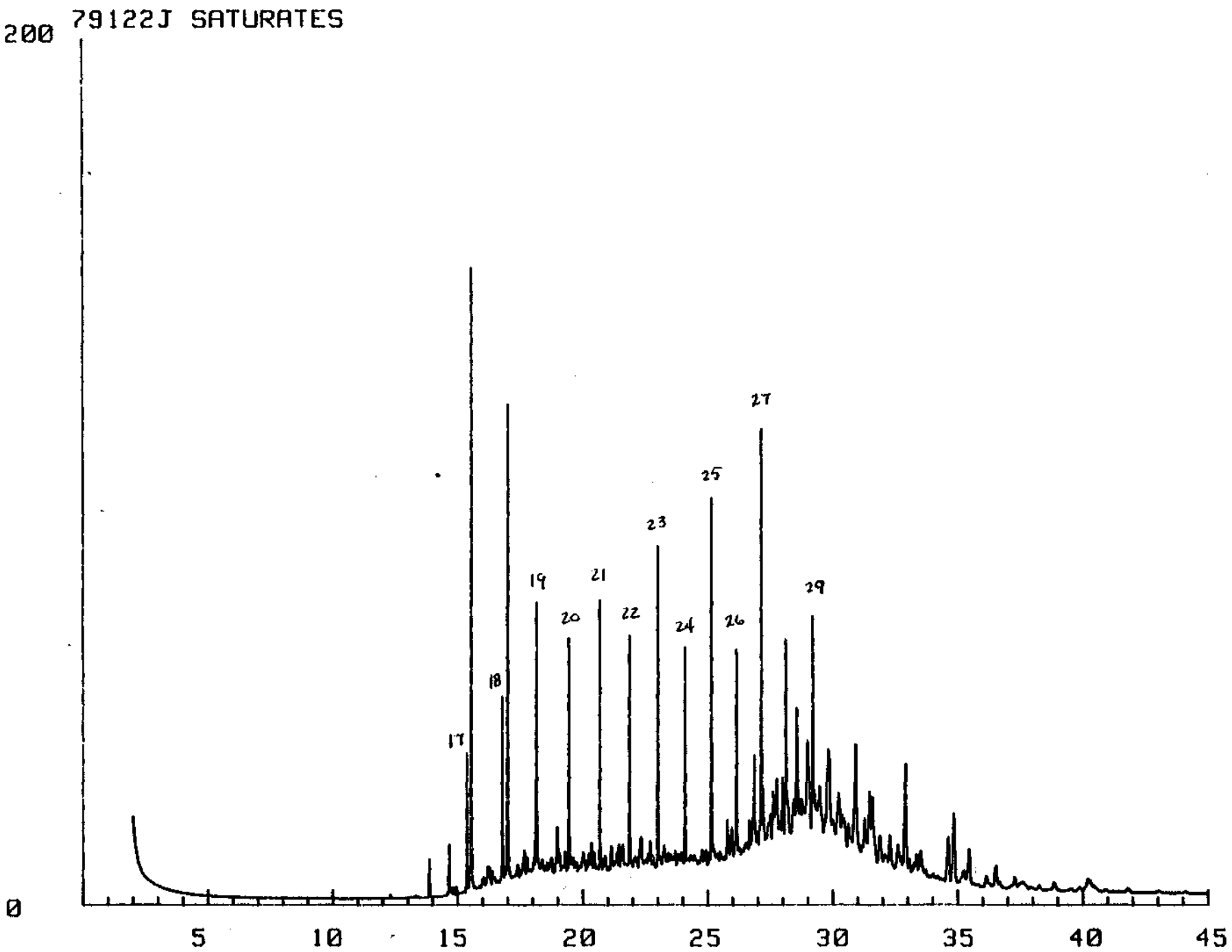


Figure 10 - Cuttings Extract, 1600 m.

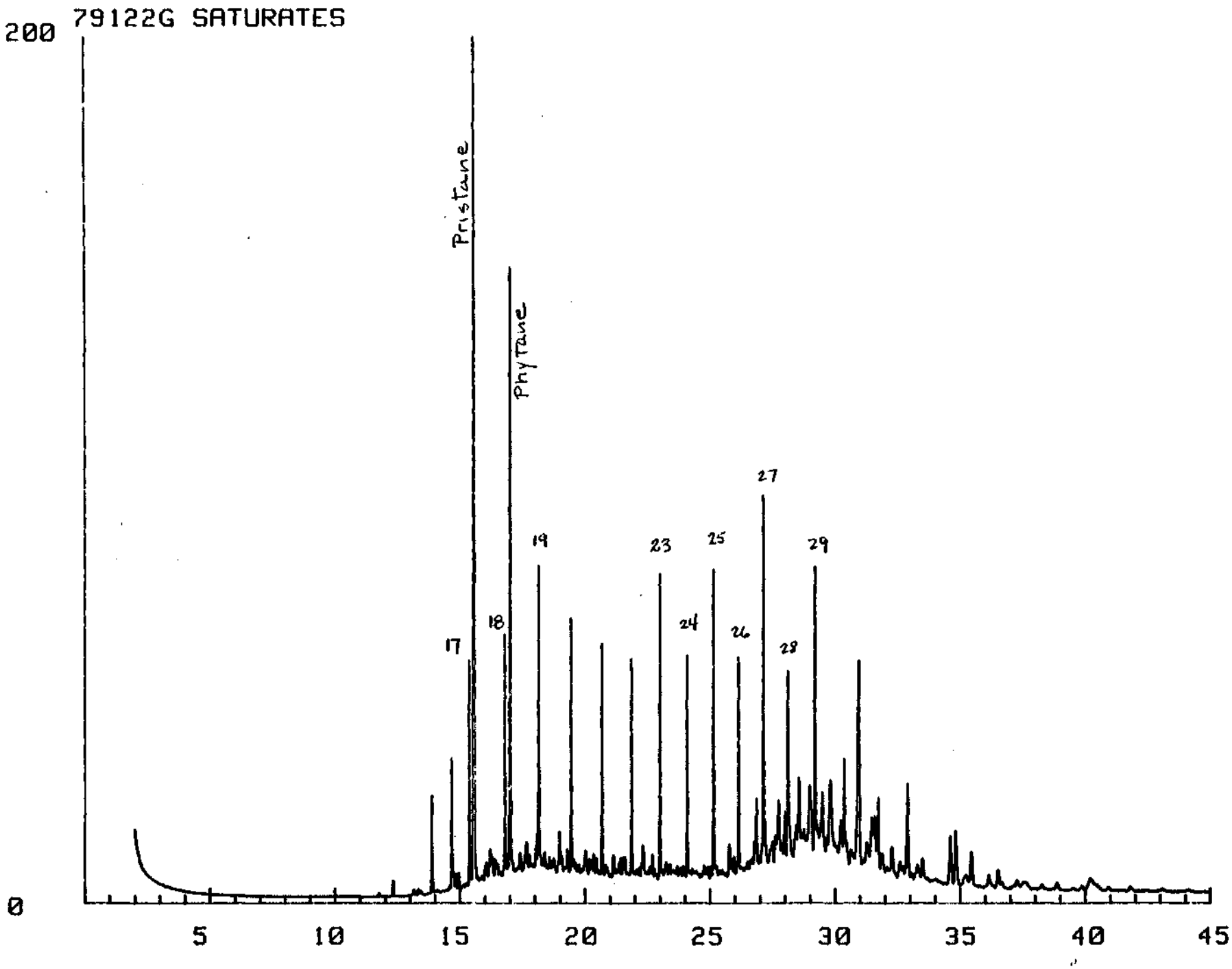


Figure 9 - Cuttings Extract, 1510 m.

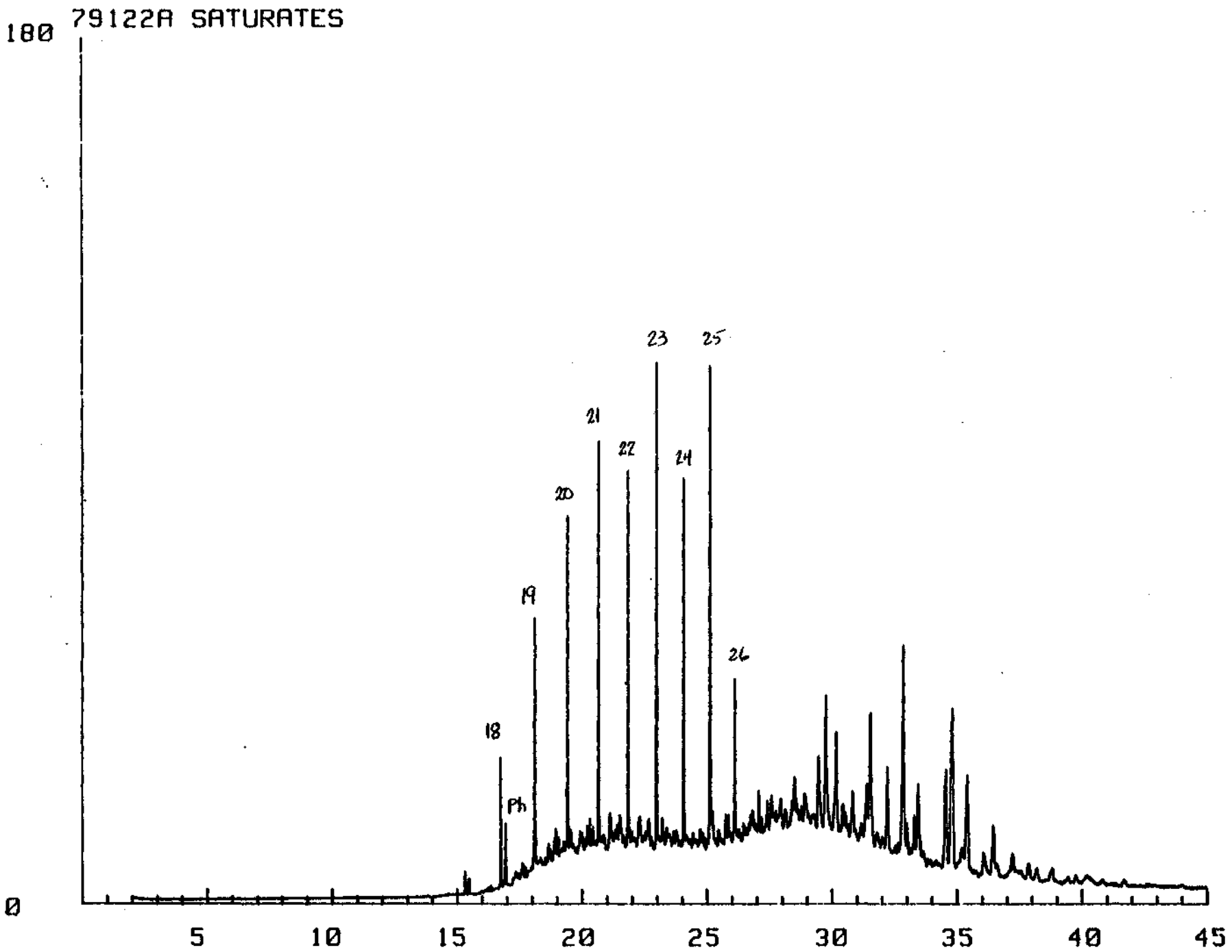


Figure 8 - Cuttings Extract, 1330 m.