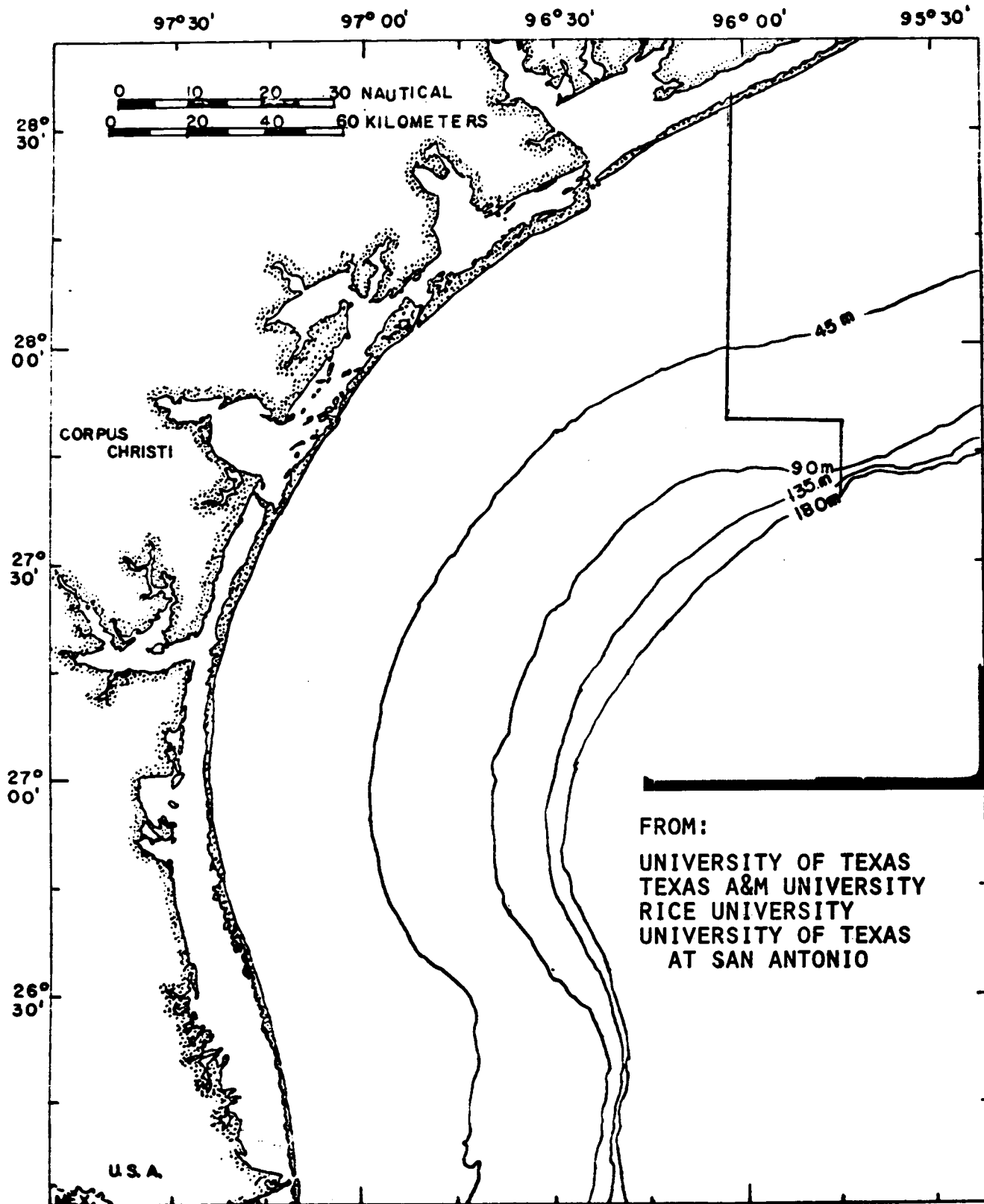


ENVIRONMENTAL STUDIES,
SOUTH TEXAS OUTER CONTINENTAL SHELF,
BIOLOGY AND CHEMISTRY

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ENVIRONMENTAL STUDIES,
SOUTH TEXAS OUTER CONTINENTAL SHELF,
BIOLOGY AND CHEMISTRY

Submitted to:

The Bureau of Land Management
Washington, D. C.

by

The University of Texas Marine Science Institute
Port Aransas Marine Laboratory
Port Aransas, Texas 78373

Acting for and on behalf of
A Consortium Program
Conducted by:

Rice University
Texas A&M University
The University of Texas

FINAL REPORT
1976 **VII**
VOLUME V
APPENDICES L, M, N
CONTRACT AA550-CT6-17

September 30, 1977

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SEDIMENT AND WATER

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HIGH-MOLECULAR-WEIGHT HYDROCARBONS
IN ZOOPLANKTON, SEDIMENT AND WATER

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FIGURE 1

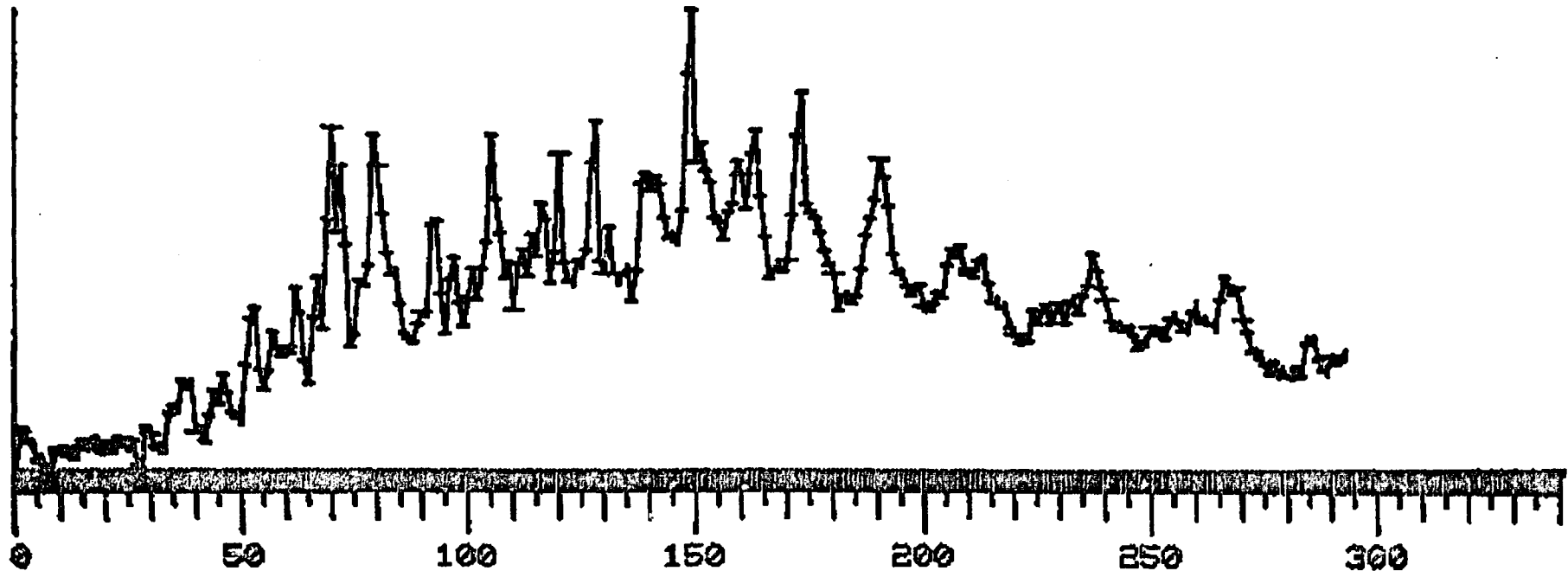
GC/MS ANALYSES OF SELECTED BLM SAMPLES

DPAW GC
GC ID BL 1 DATE 12/ 7/76
AQRATE 2 SCTIME 4 RESPUR 500
HIMASS 500 THRESH 2

AMPJ SED BENZ 4/II 12/7/76

#SCANS 300 HRDCPY YES
%SCALE 100 REZERO YES
BASE 23888*2** 1

Figure 1.1



SIGNFPK
 GC ID BL 1 DATE 12/ 7/76
 AGRATE 2 SCTIME 4 RESPUR 500
 HIMASS 500 THRESH 2

AMPJ SED BENZ 4/II 12/7/76

IGNORE 0, 0, 0, 0
 MILOUT 850 HRDCPY YES

Figure 1.1 Cont.'D

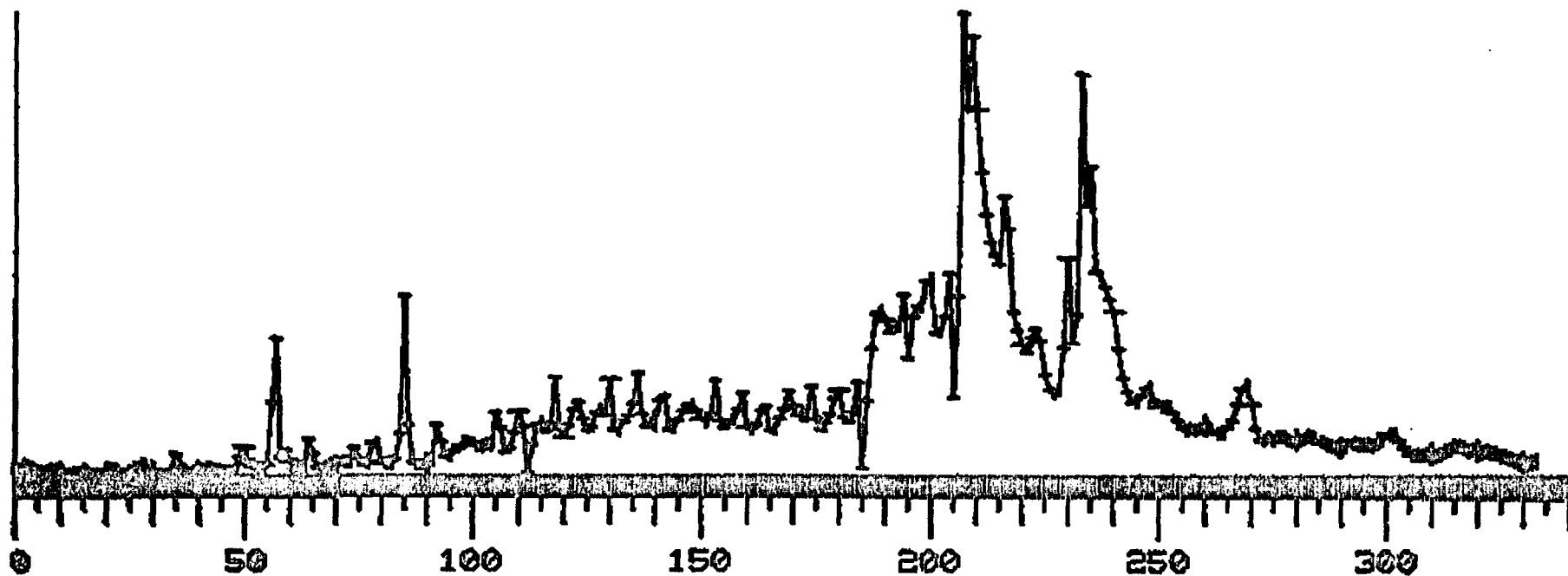
MASS	MAX INTN	FIRST OCCUR	SUM IONS *2** 5
43	1000	1	17864
45	1000	199	8134
57	1000	35	8291
85	1000	62	2394
41	1000	20	7139
178	1000	140	813
55	936	72	9565

DPAW GC
GC ID BL 2 DATE 12/13/76
AQRATE 2 SCTIME 4 RESPUR 500
HIMASS 500 THRESH 2

AMPJ SED HEXANE FRACTION 12/13/76

#SCANS 300 HRDCPY YES
%SCALE 100 REZERO YES
BASE 19667*2** 3

Figure 1.2



SIGNFPK
GC ID BL 2 DATE 12/13/76
AQRATE 2 SCTIME 4 RESPUR 500
HIMASS 500 THRESH 2

AMPJ SED HEXANE FRACTION 12/13/76

IGNORE 0, 0, 0, 0
MILOUT 850 HRDCPY YES

Figure 1.2 Cont.'d

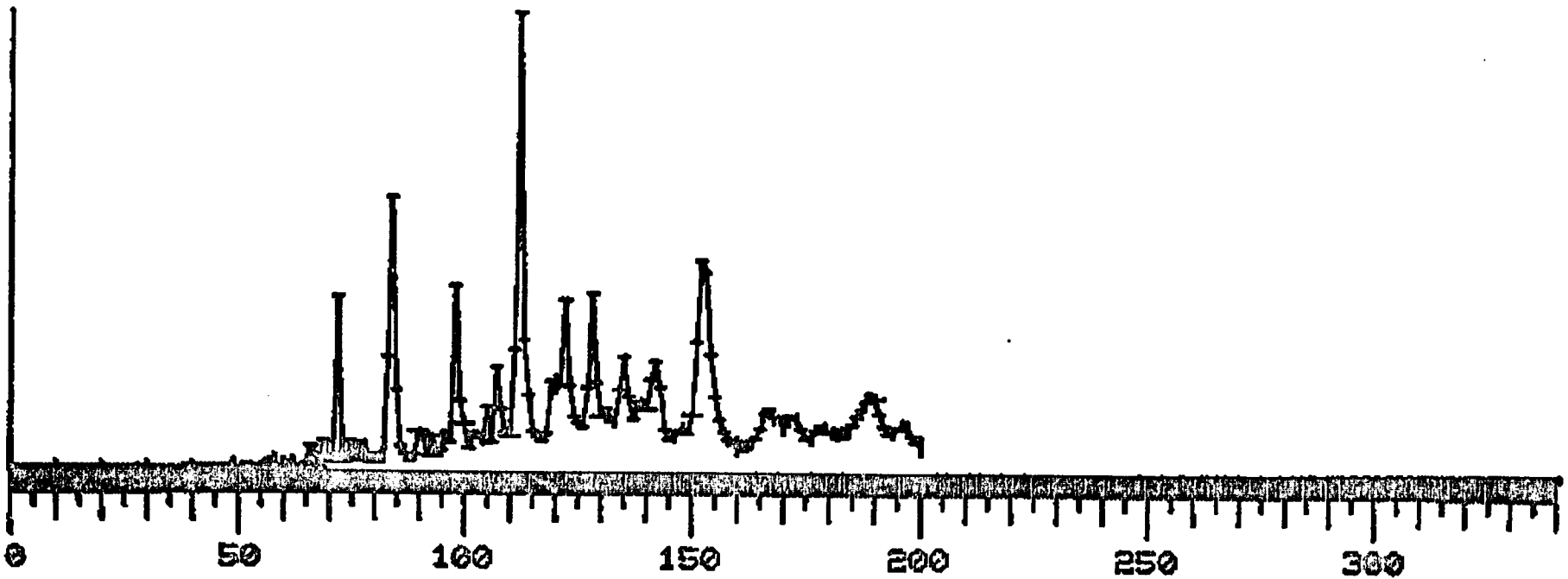
MASS	MAX INTN	FIRST OCCUR	SUM IONS *2** 5
41	1000	1	19766
43	1000	42	26692
55	1000	110	18816
57	1000	142	17171
69	1000	235	12531

DRAW GC
GC ID BL 3 DATE 12/16/76
AQRATE 2 SCTIME 4 RESPUR 500
HIMASS 500 THRESH 4

AMZS SED POOL BENZENE 12/16/76

#SCANS 300 HRDCPY YES
%SCALE 100 REZERO YES
BASE 26216*2** 1

Figure 1.3



SIGNFPK
 GC ID BL 3 DATE 12/16/76
 AGRATE 2 SCTIME 4 RESPUR 500
 HIMASS 500 THRESH 4

AMZS SED POOL BENZENE 12/16/76

IGNORE 0, 0, 0, 0
 MILOUT 850 HRDCPY YES

Figure 1.3 Cont.'d

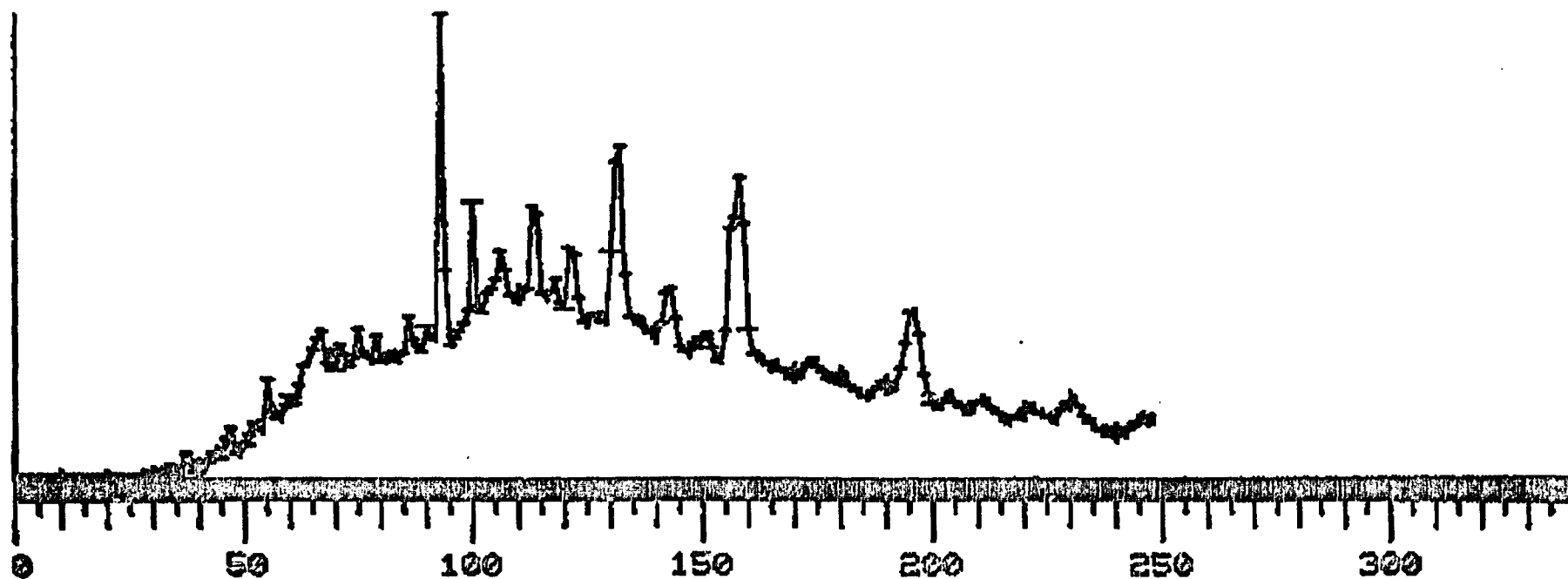
MASS	MAX INTN	FIRST OCCUR	SUM IONS *2** 1
41	1000	16	17994
43	1000	20	24261
55	1000	111	15480
69	1000	120	14979
85	1000	72	10341
178	1000	122	2706
215	1000	108	1734
255	1000	135	1175
202	1000	177	2576
185	926	113	2076
51	919	69	429
45	896	199	4777
192	877	133	1495

DRAW GC
GC ID BL 4 DATE 12/16/76
AQRATE 2 SCTIME 4 RESPWR 500
HIMASS 500 THRESH 4

ANFC SED S/III HEX 12/16/76

#SCANS 300 HRDCPY YES
%SCALE 100 REZERO YES
BASE 26881*2** 2

Figure 1.4



SIGNFPK

GC ID BL 4 DATE 12/16/76
AGRATE 2 SCTIME 4 RESPWR 500
HIMASS 500 THRESH 4

ANFC SED 5/III HEX 12/16/76

IGNORE 0, 0, 0, 0
MILOUT 850 HRDCPY YES

Figure 1.4 Cont.'d

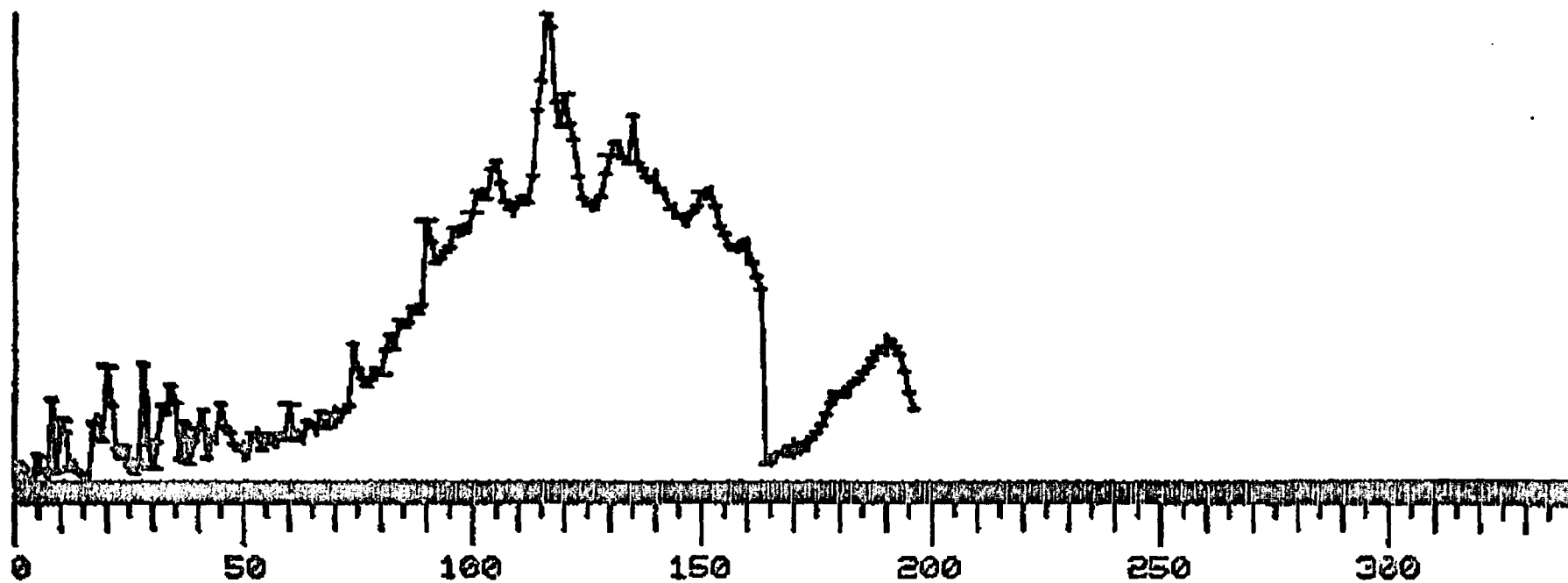
MASS	MAX INTN	FIRST OCCUR	SUM IONS *2** 4
41	1000	4	15669
43	1000	6	24552
57	1000	47	16689
55	1000	102	16717
69	1000	201	12825
45	872	241	2982

DRAW GC
GC ID BL 5 DATE 12/17/76
AQRATE 2 SOTIME 4 RESPWR 500
HIMASS 500 THRESH 4

ANFC SED 5/III BENZENE 12/17/76

#SCANS 300 HRDCPY YES
%SCALE 100 REZERO YES
BASE 23682*2** 4

Figure 1.5



SIGNFPK

GC ID BL 5 DATE 12/17/76
AQRATE 2 SCTIME 4 RESPWR 500
HIMASS 500 THRESH 4

ANFC SED 5/III BENZENE 12/17/76

IGNORE 0. 0. 0. 0
MILOUT 850 HRDCPY YES

Figure 1.5 Cont.'d

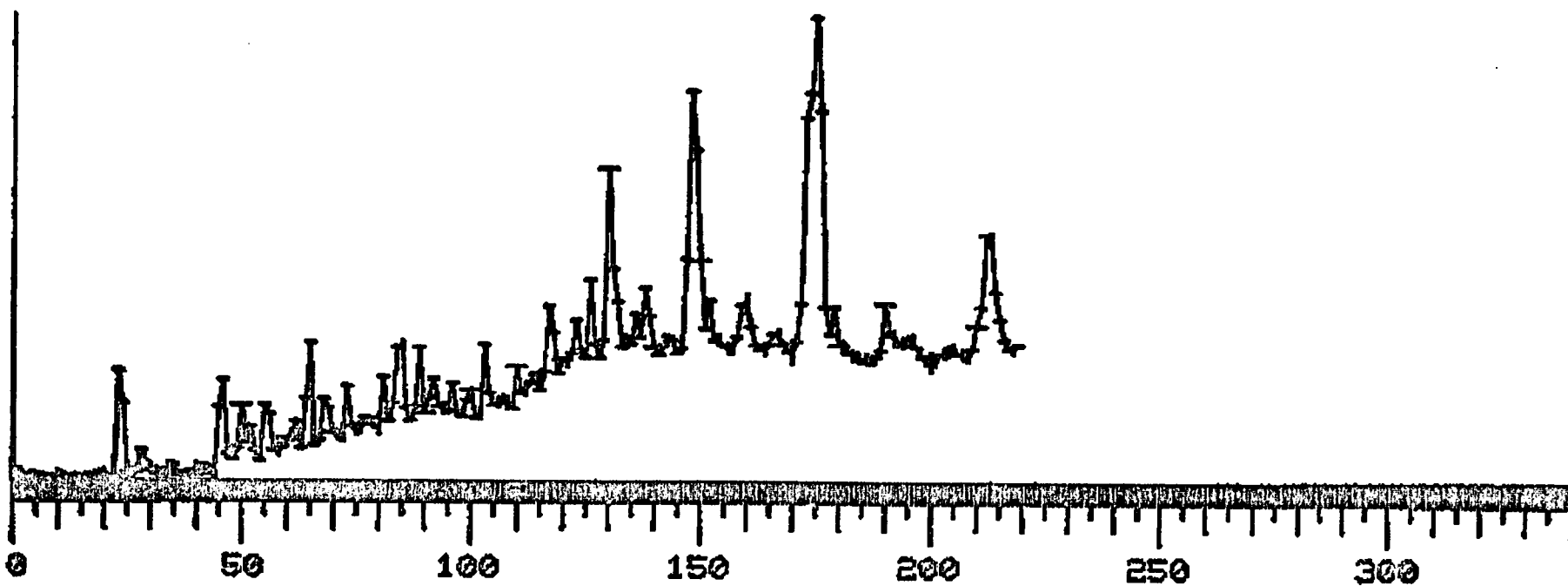
MASS	MAX INTN	FIRST OCCUR	SUM IONS *2** 6
41	1000	3	14106
43	1000	1	17485
45	1000	183	6606
55	1000	73	13147
57	1000	97	10859
69	1000	98	11800
81	1000	117	8247
85	1000	34	5350
204	1000	169	1757
178	1000	84	1249
202	1000	140	2192
218	1000	184	1956
95	856	182	6975

DRAW GC
GC ID BL 6 DATE 12/20/76
AORATE 2 SCTIME 4 RESPWR 500
HIMASS 500 THRESH 2

ANGS SED HEXANE 6/III 12/20/76

#SCANS 300 HRDCPY YES
%SCALE 100 REZERO YES
BASE 25739*2** 4

Figure 1.6



SIGNFPK

GC ID BL 6 DATE 12/20/76
ACRATE 2 SCTIME 4 RESPWR 500
HIMASS 500 THRESH 2

ANGS SED HEXANE 6/III 12/20/76

IGNORE 0. 0. 0. 0.
MILOUT 850 HRDCPY YES

Figure 1.6 Cont'd

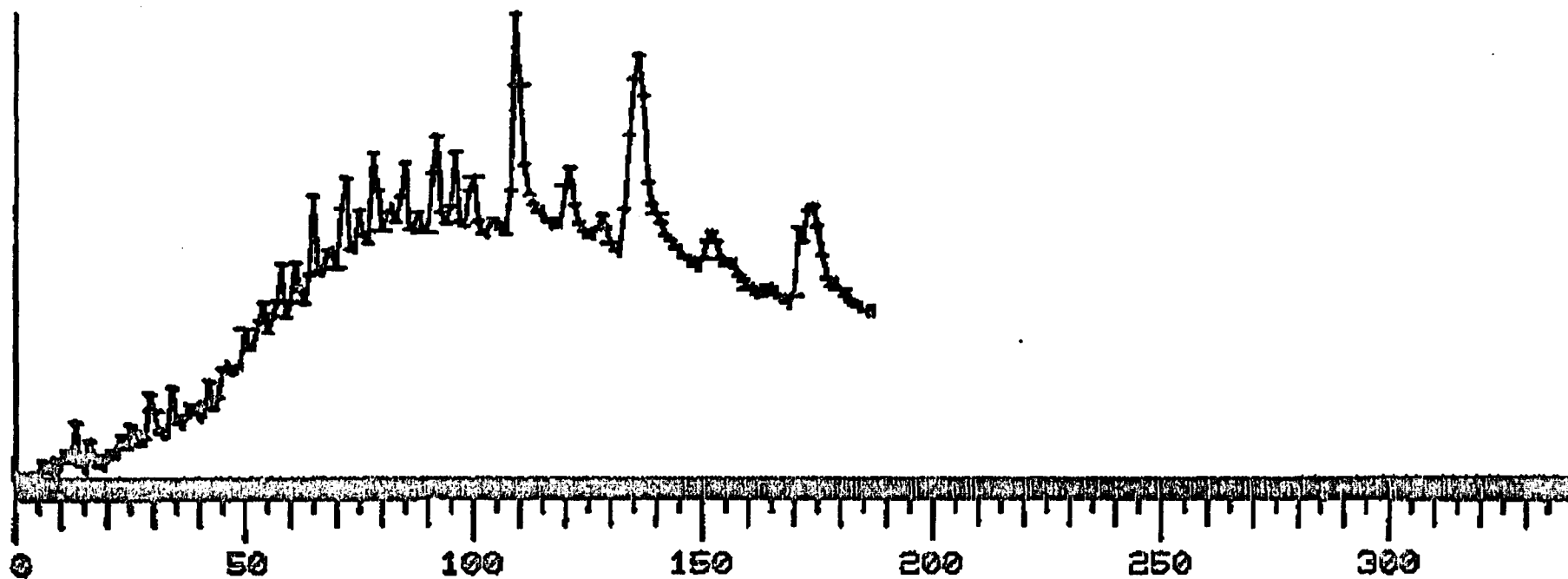
MASS	MAX INTN	FIRST OCCUR	SUM IONS *2** 6
41	1000	50	11069
43	1000	4	22027
55	1000	79	15317
57	1000	1	23813
69	1000	148	12623
71	1000	150	12496
85	1000	89	8901
97	1000	136	7261
111	1000	118	4717

DRAW GC
GC ID BL 7 DATE 12/20/76
AQRATE 2 SCTIME 4 RESPUR 500
HIMASS 500 THRESH 2

ALQY SED HEXANE 12/20/76

#SCANS 300 HRDCPY YES
%SCALE 100 REZERO YES
BASE 18040*2** 4

Figure 1.7



SIGNFPK
 GC ID BL 7 DATE 12/20/76
 AORATE 2 SOTIME 4 RESPWR 500
 HIMASS 500 THRESH 2

ALQY SED HEXANE 12/20/76

IGNORE 0, 0, 0, 0
 MILOUT 850 HRDCPY YES

Figure 1.7 Cont.'d

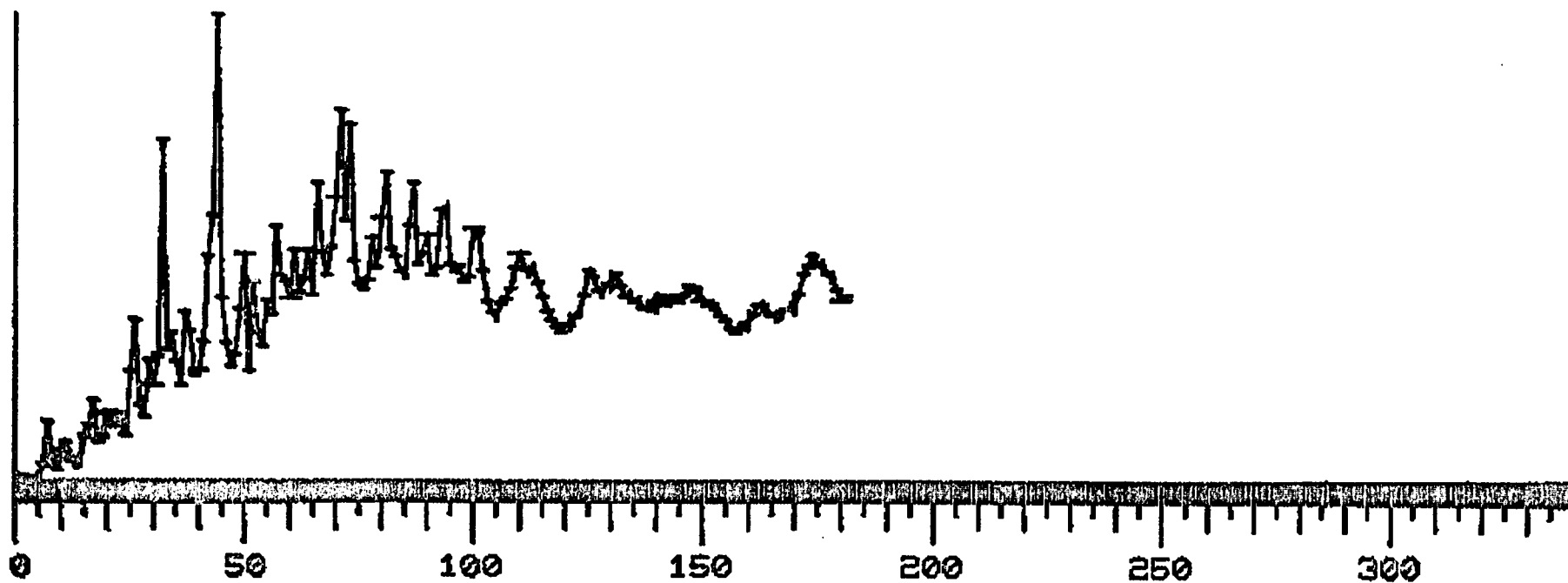
MASS	MAX INTN	FIRST OCCUR	SUM IONS *2** 6
41	1000	28	13478
43	1000	1	23761
55	1000	53	18623
57	1000	2	24242
71	984	136	13296
69	904	184	14956

DRAW GC
GC ID BL 8 DATE 12/20/76
AQRATE 2 SCTIME 4 RESPUR 500
HIMASS 500 THRESH 2

ANGS SED BENZENE 12/20/76

#SCANS 300 HRDCPY YES
%SCALE 100 REZERO YES
BASE 28241*2** 2

Figure 1.8



SIGNFPK

GC ID BL 8 DATE 12/20/76
AORATE 2 SCTIME 4 RESPWR 500
HIMASS 500 THRESH 2

ANGS SED BENZENE 12/20/76

IGNORE 0. 0. 0. 0.
MILOUT 850 HRDCPY YES

Figure 1.8 Cont.'d

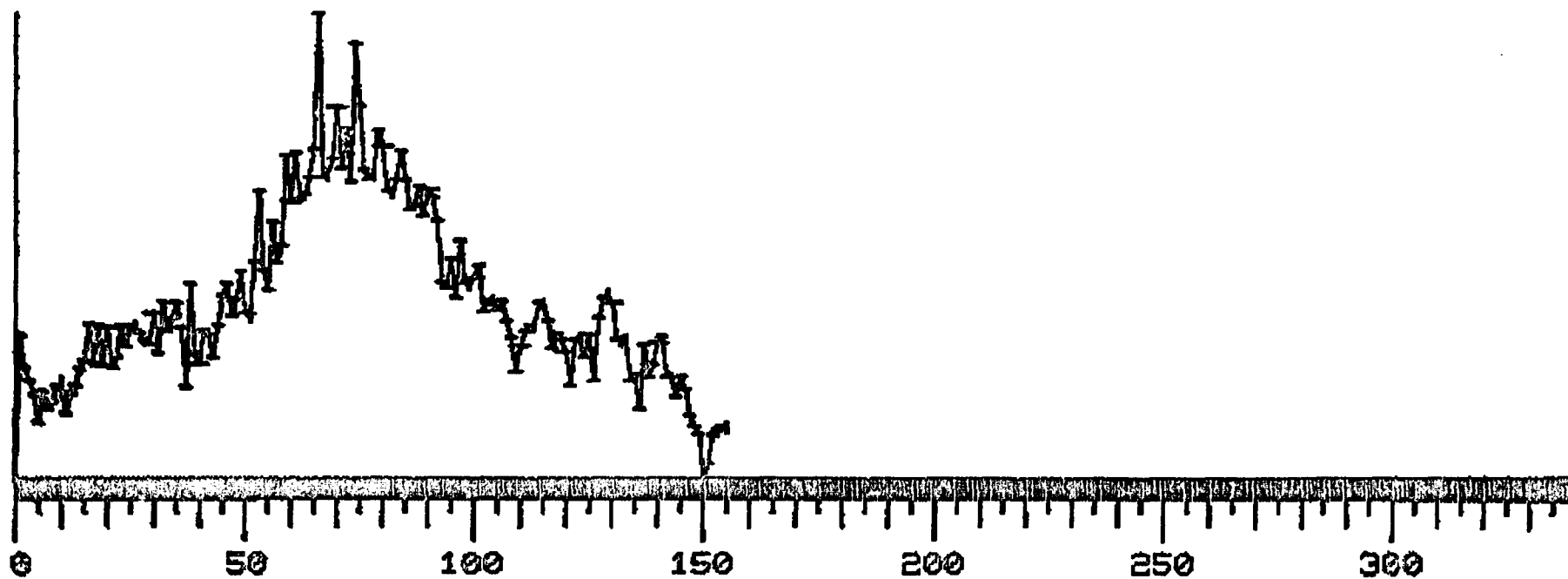
MASS	MAX INTN	FIRST OCCUR	SUM IONS *2** 5
41	1000	9	10719
43	1000	1	16940
55	1000	69	11293
57	1000	15	11062
85	1000	31	6281
205	1000	19	771
255	1000	93	635
45	966	157	4877
69	900	157	8334

DRAW GC
GC ID BL 9 DATE 12/23/76
AORATE 2 SOTIME 4 RESPUR 500
HIMASS 500 THRESH 1

ANRP SED BENZENE 12/23/76

#SCANS 300 HRDCPY YES
%SCALE 100 REZERO YES
BASE 2508*2** 0

Figure 1.9



SIGNFPK
 GC ID BL 9 DATE 12/23/76
 AGRATE 2 SCTIME 4 RESPWR 500
 HIMASS 500 THRESH 1

ANRP SED BENZENE 12/23/76

IGNORE 0, 0, 0, 0
 MILOUT 850 HRDCPY YES

Figure 1.9 Cont.'d

MASS MAX FIRST SUM
 INTN OCCUR IONS *2** 0

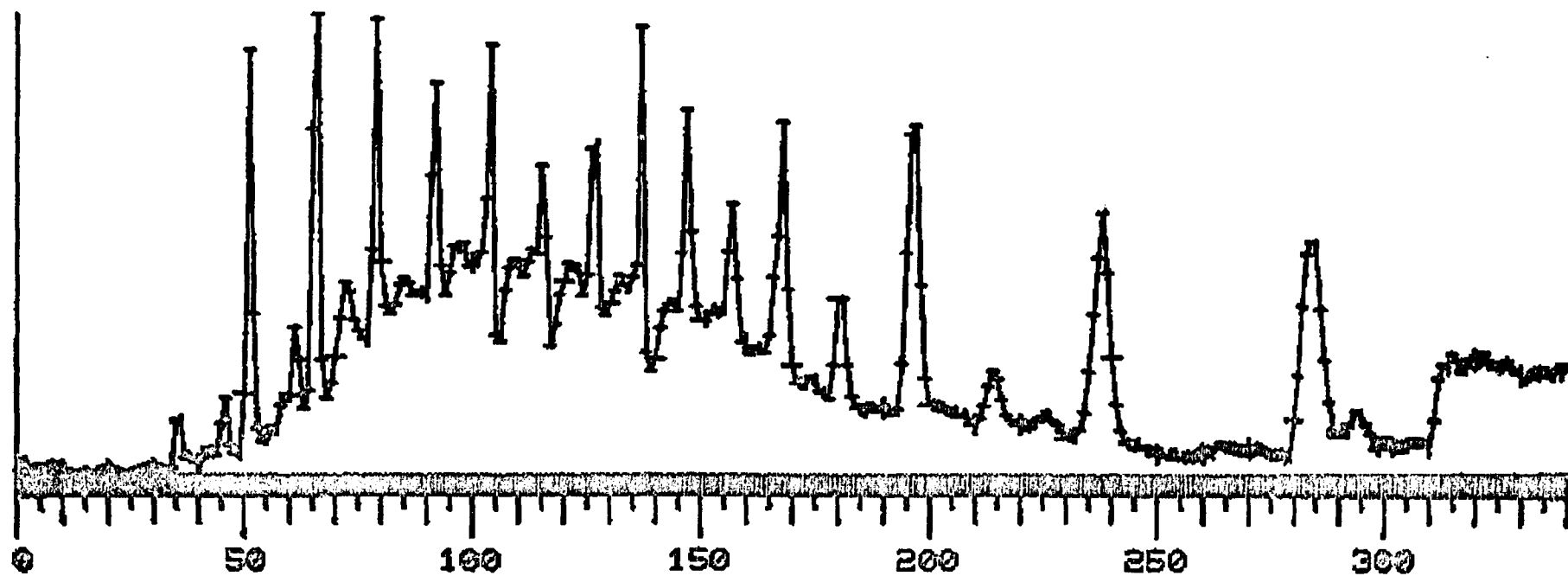
41	1000	2	5675	78	962	5	566
42	1000	16	1911	73	957	9	796
43	1000	3	6904	54	941	145	854
44	1000	1	1498	59	906	23	1000
45	1000	124	2200	46	905	146	779
55	1000	61	3881	58	903	41	986
57	1000	5	3849	71	903	41	1923
85	1000	35	1369	83	903	41	1603
192	1000	95	772	52	900	13	628
207	1000	109	935	112	900	27	576
56	1000	6	1584	50	875	154	654
67	1000	7	1268	141	875	3	954
220	1000	128	731	205	865	119	679
202	1000	141	647				
149	1000	132	564				
206	1000	110	749				
189	967	120	877				

DRAW GC
GC ID BL 10 DATE 12/23/76
AQRATE 4 SCTIME 2 RESPWR 500
HIMASS 500 THRESH 2

ANRP SED HEXANE 12/23/76

#SCANS 300 HRDCPY YES
%SCALE 100 REZERO YES
BASE 19668*2** 1

Figure 1.10



SIGNFPK

GC ID BL 10 DATE 12/23/76
AORATE 4 SCTIME 2 RESPUR 500
HIMASS 500 THRESH 2

ANRP SED HEXANE 12/23/76

IGNORE 0, 0, 0, 0
MILOUT 850 HRDCPY YES

Figure 1.10 Cont.'d

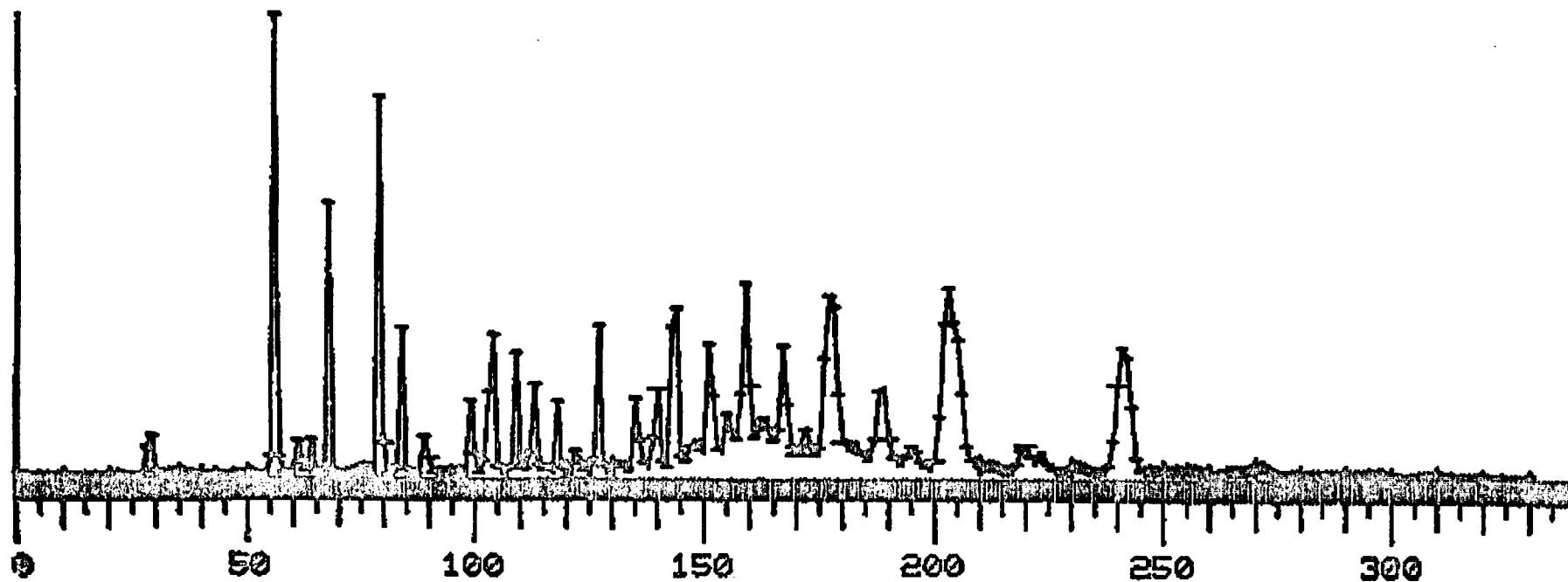
MASS	MAX INTN	FIRST OCCUR	SUM IONS *2** 3
41	1000	9	19125
42	1000	311	3950
43	1000	1	29160
54	1000	330	1388
55	1000	133	17878
57	1000	2	26525
69	1000	246	12672
83	1000	279	8775
81	1000	274	7745
45	1000	328	1153
149	1000	166	4155
71	951	116	15432
95	938	310	7540

DRAW GC
GC ID BL 11 DATE 1/18/77
AQRATE 2 SCTIME 4 RESPWR 500
HIMASS 500 THRESH 2

ANMJ SED HEXANE 3/IV 1/18/77

#SCANS 300 HRDCPY YES
%SCALE 100 REZERO YES
BASE 29675*2** 2

Figure 1.11



SIGNFPK

GC ID BL 11 DATE 1/18/77
AQRATE 2 SCTIME 4 RESPWR 500
HIMASS 500 THRESH 2

ANMJ SED HEXANE 3/IV 1/18/77

IGNORE 0, 0, 0, 0
MILOUT 850 HRDCPY YES

Figure 1.11 Cont.'d

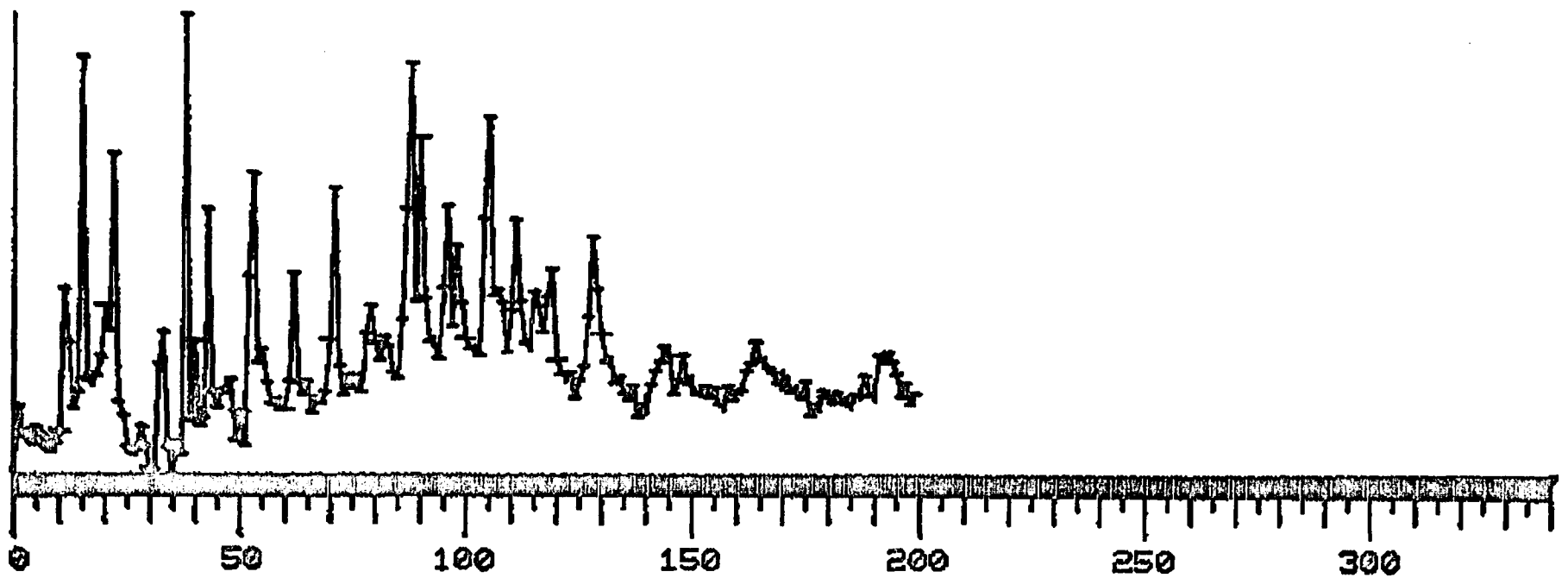
MASS	MAX INTN	FIRST OCCUR	SUM IONS *2** 3
41	1000	11	15270
43	1000	1	28736
55	1000	157	14829
57	1000	2	28416
69	1000	290	10910
53	1000	5	1019
95	1000	285	5108
45	1000	309	1535
110	1000	255	1245
59	1000	47	236
395	908	22	27
191	880	272	649

DRAW GC
GC ID BL 12 DATE 1/18/77
AQRATE 2 SCTIME 4 RESPUR 500
HIMASS 500 THRESH 2

ANMJ SED BENZENE 3/IV 1/18/77

#SCANS 300 HRDCPY YES
%SCALE 100 REZERO YES
BASE 2277*2** 0

Figure 1.12



SIGNFPK
 GC ID BL 12 DATE 1/18/77
 AGRATE 2 SCTIME 4 RESPWR 500
 HIMASS 500 THRESH 2

ANMJ SED BENZENE 3/IV 1/18/77

IGNORE 0, 0, 0, 0
 MILOUT 850 HRDCPY YES

Figure 1.12 Cont.'d

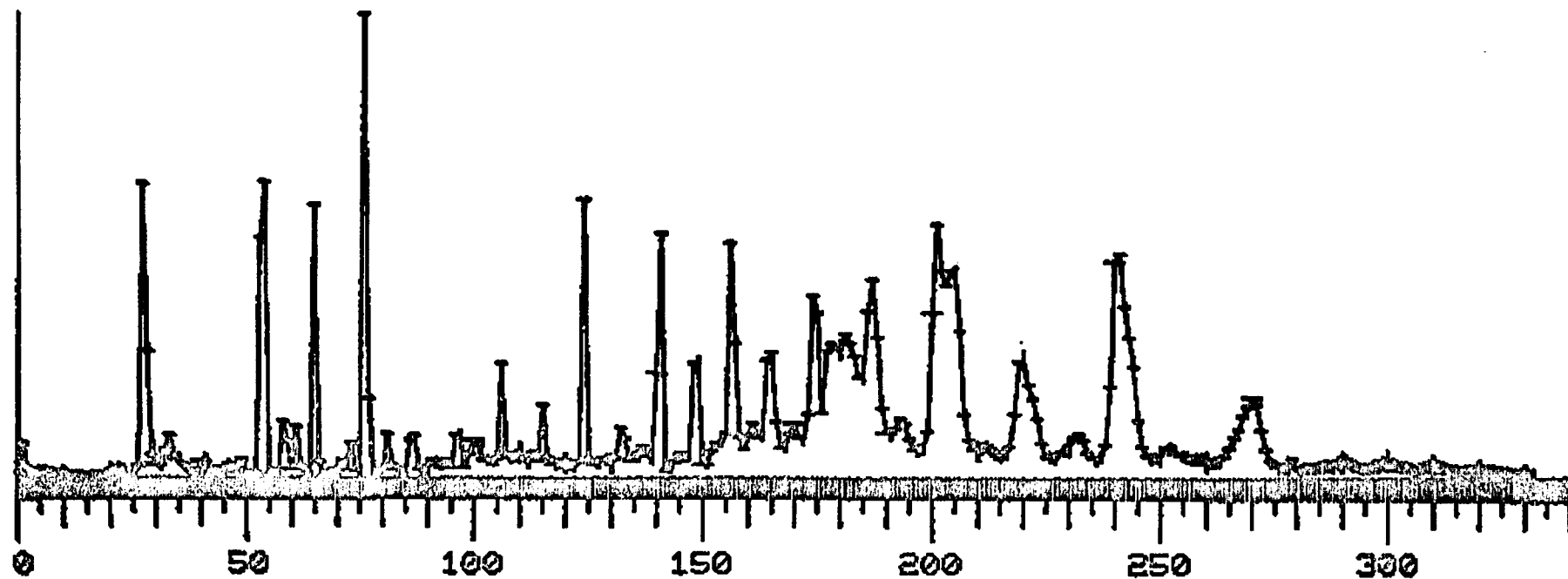
MASS	MAX INTN	FIRST OCCUR	SUM IONS *2** 0
41	1000	25	9036
43	1000	3	13025
45	1000	171	2351
55	1000	34	6849
57	1000	1	7307
69	1000	138	4231
85	1000	40	1479
155	1000	2	280
175	1000	5	72
413	1000	15	270
202	1000	172	182
71	933	29	3742

DRAW GC
GC ID BL 13 DATE 1/18/77
AQRATE 2 SCTIME 4 RESPWR 500
HIMASS 500 THRESH 2

AMNS SED HEXANE 3/II 1/18/77

#SCANS 300 HRDCPY YES
%SCALE 100 REZERO YES
BASE 18225*2** 2

Figure 1.13



SIGNFPK
 GC ID BL 13 DATE 1/18/77
 AGRATE 2 SCTIME 4 RESPUR 500
 HIMASS 500 THRESH 2

AMNS SED HEXANE 3/II 1/18/77

IGNORE 0, 0, 0, 0
 MILOUT 850 HRDCPY YES

Figure 1.13 Cont.'d

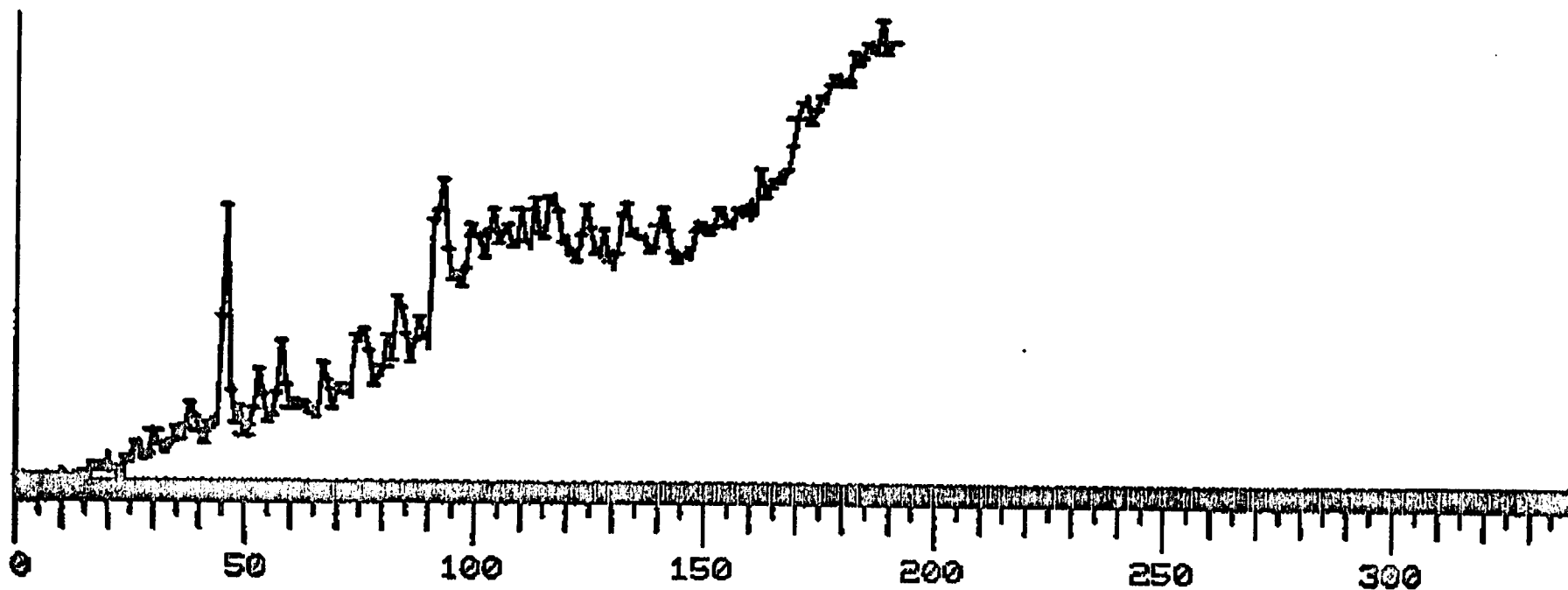
MASS	MAX INTN	FIRST OCCUR	SUM IONS *2** 4
41	1000	6	9543
43	1000	2	18026
57	1000	1	14992
63	1000	279	31
69	966	273	5652
55	964	288	8341

DRAW GC
GC ID BL 14 DATE 1/20/77
AQRATE 2 SCTIME 4 RESPWR 500
HIMASS 500 THRESH 2

AMNS SED BENZENE 1/20/77

#SCANS 300 HRDCPY YES
%SCALE 100 REZERO YES
BASE 16031*2** 5

Figure 1.14



SIGNFPK

GC ID BL 14 DATE 1/20/77
AQRATE 2 SCTIME 4 RESPWR 500
HIMASS 500 THRESH 2

AMNS SED BENZENE 1/20/77

IGNORE 0. 0. 0. 0.
MILOUT 850 HRDCPY YES

Figure 1.14 Cont.'d

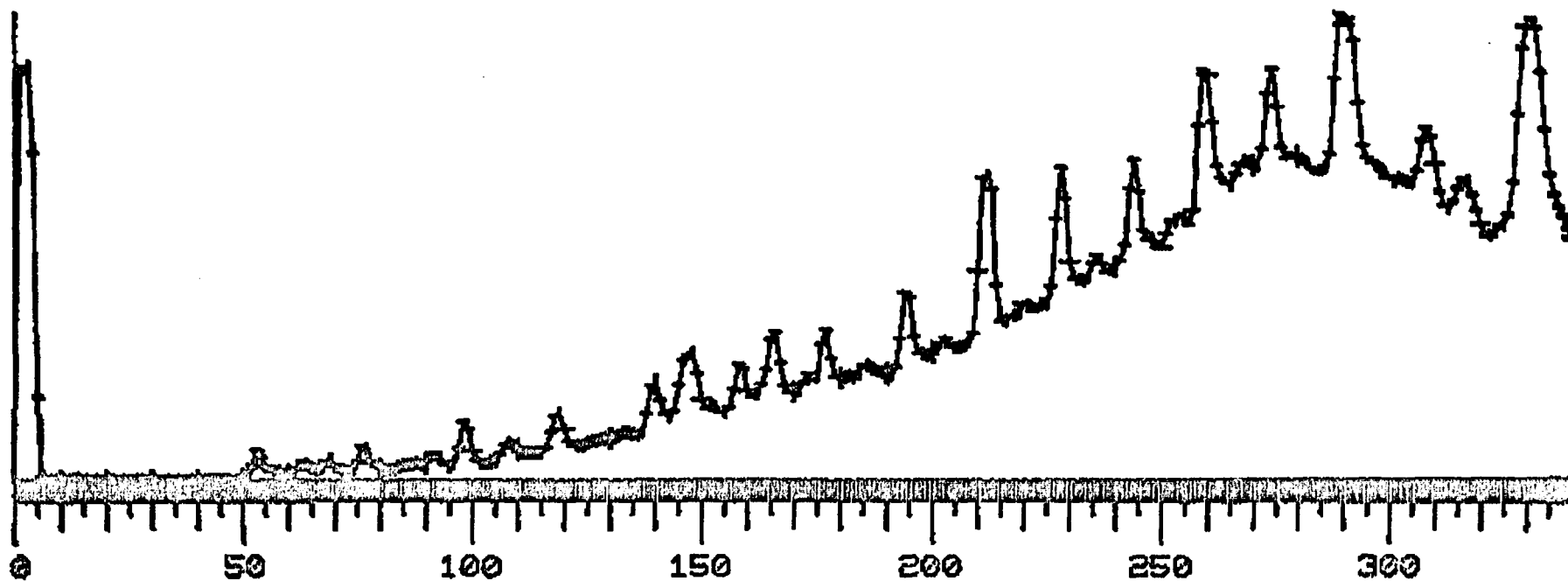
MASS	MAX INTN	FIRST OCCUR	SUM IONS *2** 6
41	1000	51	17508
43	1000	23	29814
45	1000	129	17753
55	1000	89	21531
57	1000	1	25177
85	1000	45	9144
95	1000	133	12306
178	1000	103	1887
205	1000	30	2160
185	1000	92	1887
111	999	74	7145
69	904	95	16060
83	901	92	12909

DRAW GC
GC ID BL 15 DATE 1/25/77
AQRATE 4 SCTIME 2 RESPWR 500
HIMASS 500 THRESH 1

AMXR HEXANE SED 1/III 1/25/77

#SCANS 300 HRDCPY YES
%SCALE 100 REZERO YES
BASE 16744*2** 6

Figure 1.15



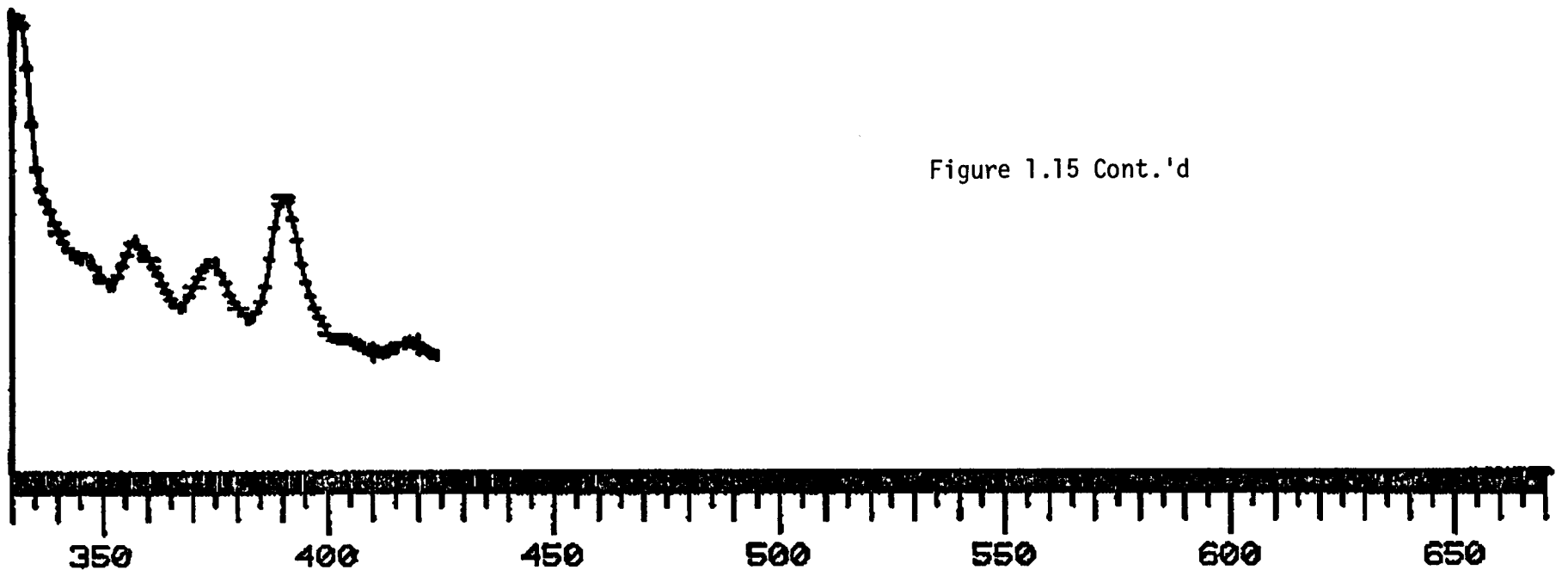


Figure 1.15 Cont.'d

SIGNFPK
 GC ID BL 15 DATE 1/25/77
 AGRATE 4 SCTIME 2 RESPWR 500
 HIMASS 500 THRESH 1

AMXR HEXANE SED 1/III 1/25/77

IGNORE 0, 0, 0, 0
 MILOUT 850 HRDCPY YES

Figure 1.15 Cont.'d

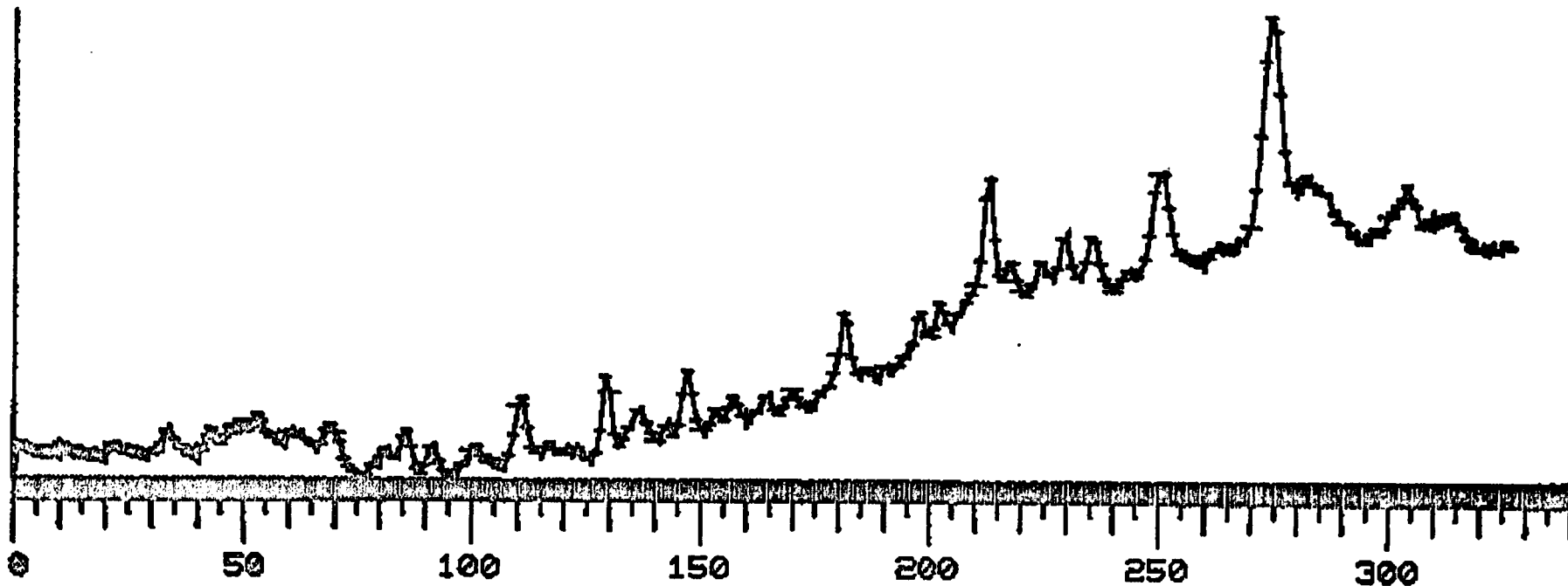
MASS	MAX INTN	FIRST OCCUR	SUM IONS *2** 8
41	1000	13	13283
43	1000	10	16391
55	1000	103	15414
57	1000	6	15656
69	1000	1	14091
149	1000	254	4608
205	1000	117	2036
95	979	323	11621
83	966	284	11336
81	946	315	11384
71	915	331	11514
247	910	141	1258

AQRATE 4 SCTIME 2 RESPWR 500
HIMASS 500 THRESH 2

AMXR SED BENZENE 1/III 1/25/77

#SCANS 300 HRDCPY YES
%SCALE 100 REZERO YES
BASE 30207*2** 1

Figure 1.16



SIGNFPK
 GC ID BL 16 DATE 1/25/77
 AGRATE 4 SCTIME 2 RESPWR 500
 HIMASS 500 THRESH 2

AMXR SED BENZENE 1/III 1/25/77

IGNORE 0, 0, 0, 0
 MILOUT 850 HRDCPY YES

Figure 1.16 Cont.'d

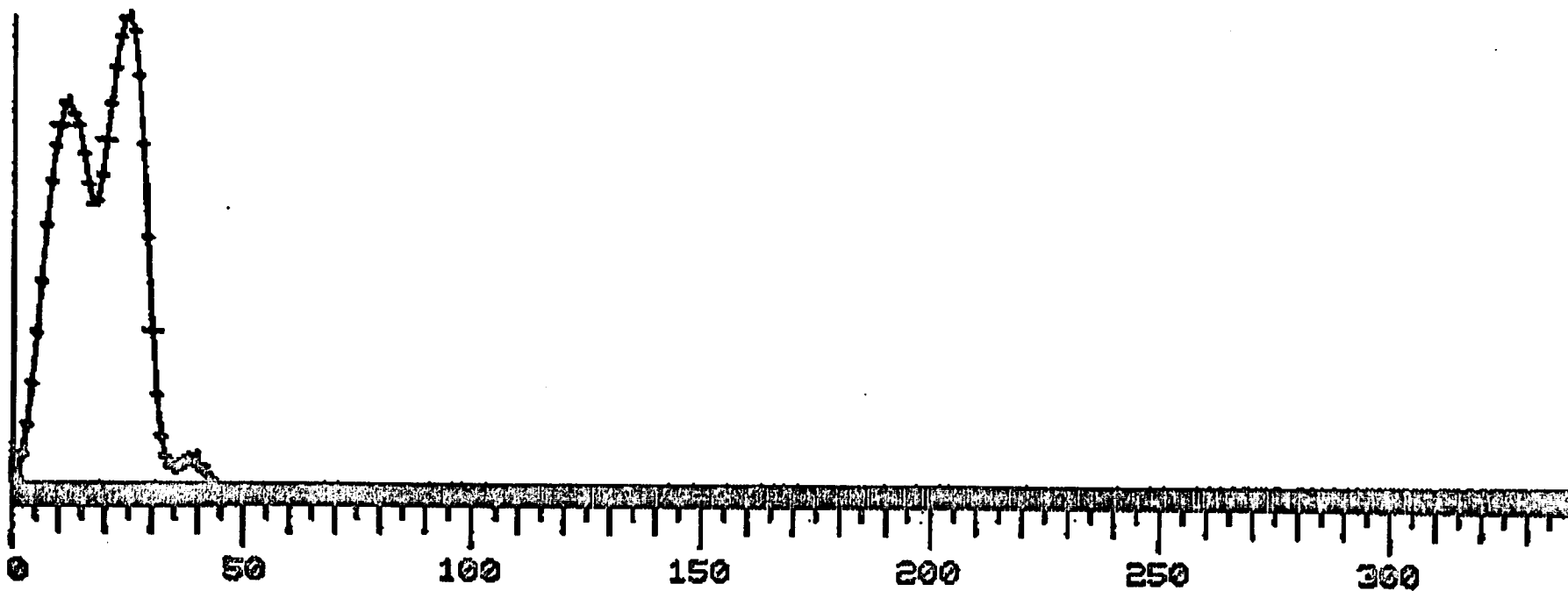
MASS	MAX INTN	FIRST OCCUR	SUM IONS *2** 4
41	1000	19	17511
43	1000	1	25258
45	1000	260	13847
55	1000	172	17929
57	1000	3	16585
69	1000	252	13251
85	1000	85	4722
205	1000	53	1444
149	903	274	2481

DRAW GC
GC ID BL 17 DATE 1/26/77
AQRATE 2 SCTIME 4 RESPWR 500
HIMASS 500 THRESH 2

AMXR SED BENZENE HIGH END BL016

#SCANS 300 HRCOPY YES
%SCALE 100 REZERO YES
BASE 22315*2** 5

Figure 1.17



SIGNFPK
 GC ID BL 17 DATE 1/26/77
 AGRATE 2 SCTIME 4 RESPUR 500
 HIMASS 500 THRESH 2

AMXR SED BENZENE HIGH END BL016

IGNORE 0, 0, 0, 0
 MILOUT 850 HRDCPY YES

Figure 1.17 Cont.'d

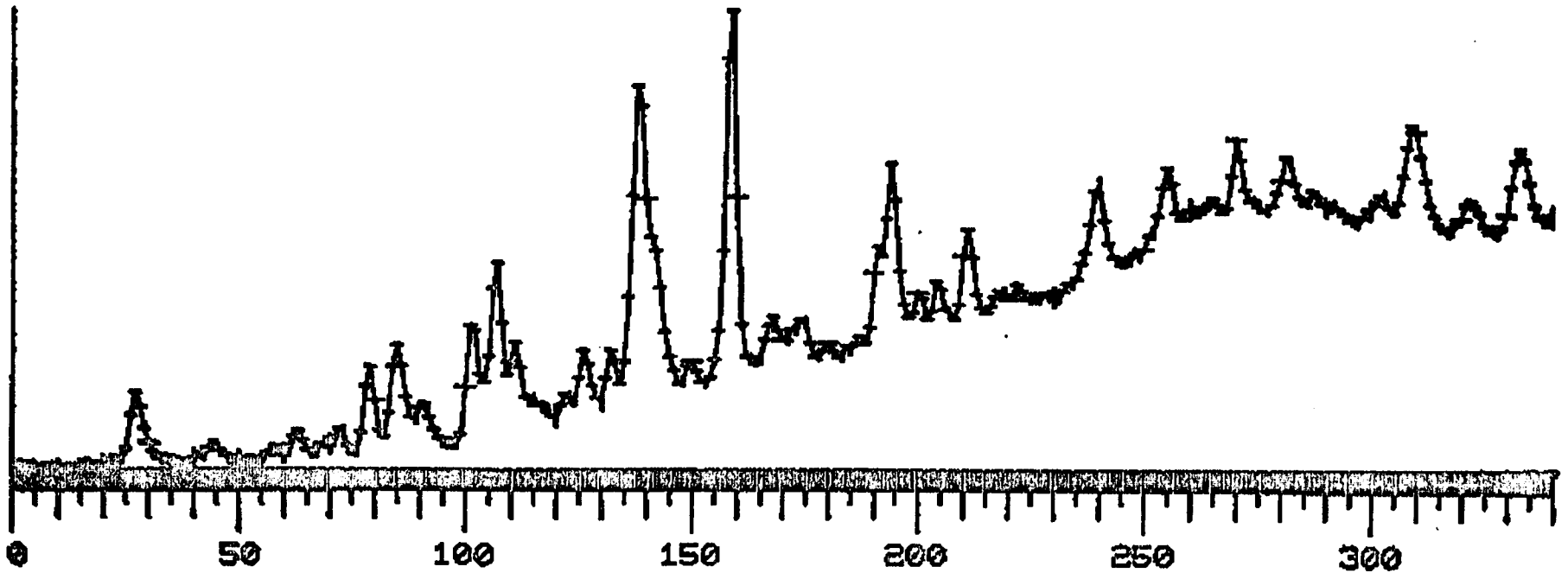
MASS	MAX INTN	FIRST OCCUR	SUM IONS *2** 5
45	1000	1	17352
204	1000	7	14344
218	1000	19	15436

DRAW GC
GC ID BL 19 DATE 1/28/77
AGRATE 4 SCTIME 2 RESPWR 500
HIMASS 500 THRESH 2

AMCL SED BENZ 3/I 1/28/77

#SCANS 300 HRDCPY YES
%SCALE 100 REZERO YES
BASE 20376*2** 3

Figure 1.18



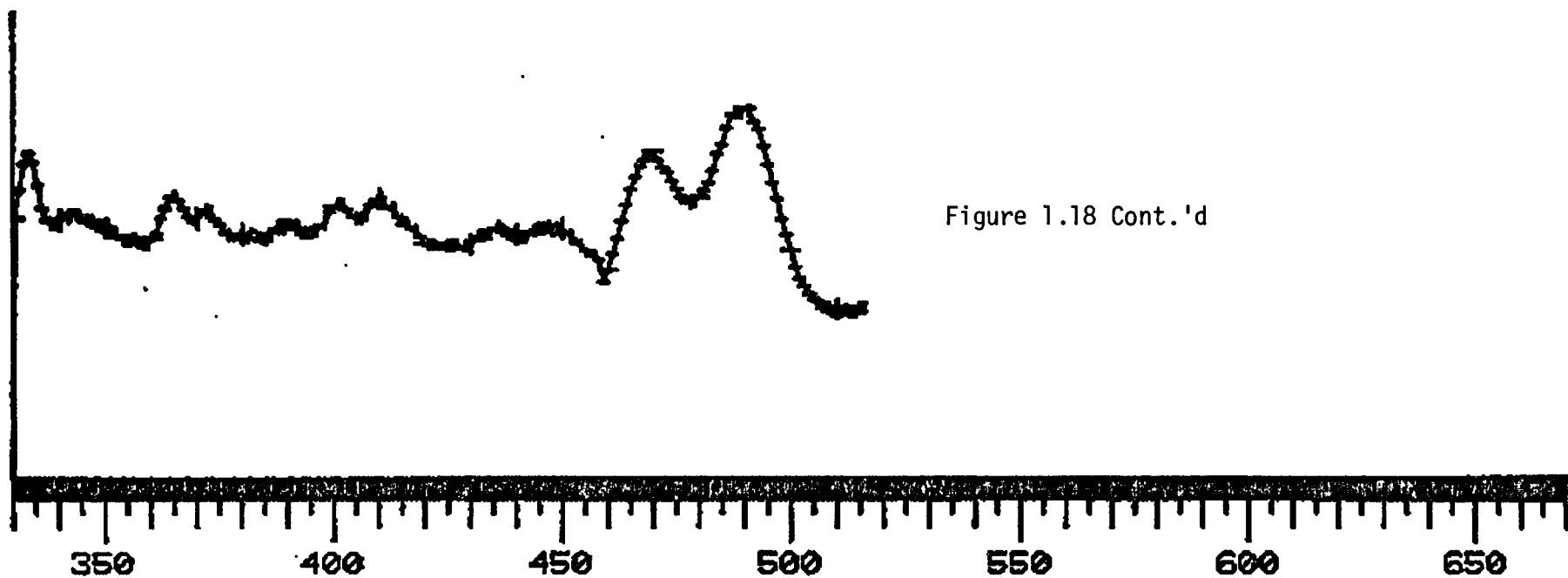


Figure 1.18 Cont.'d

SIGNFPK

GC ID BL 19 DATE 1/28/77
AQRATE 4 SCTIME 2 RESPUJ 500
HIMASS 500 THRESH 2

AMCL SED BENZ 3/I 1/28/77

Figure 1.18 Cont.'d

IGNORE 0, 0, 0, 0
MILOUT 850 HRDCPY YES

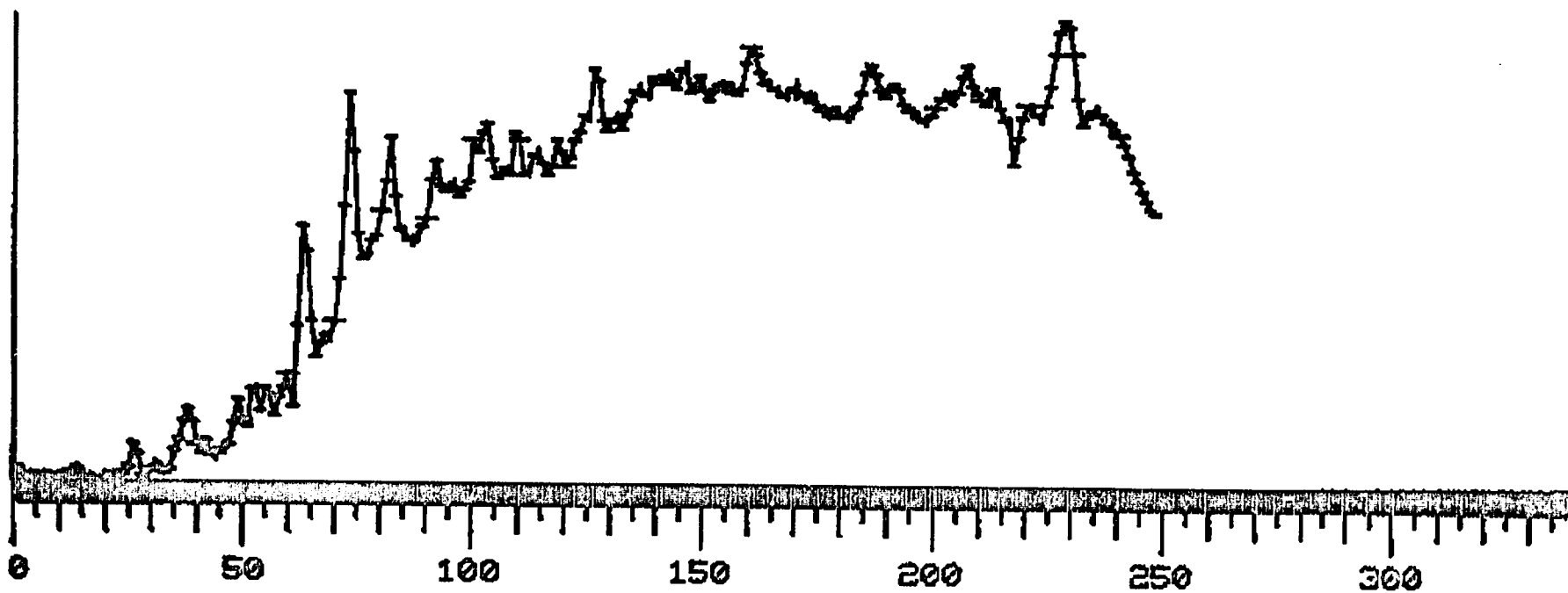
MASS	MAX INTN	FIRST OCCUR	SUM IONS X2XX 6	SEQUEN	159	PAGE	2
41	1000	5	17792	231	960	207	1247
43	1000	2	25640	141	892	138	3233
45	1000	380	14920	85	883	80	5658
55	1000	158	17447				
57	1000	4	13748				
69	1000	25	14067				
83	1000	89	7793				
91	1000	142	8300				
105	1000	1	5450				
152	1000	168	1825				
202	1000	343	2056				
156	1000	138	2809				
149	1000	333	2201				
178	1000	254	1754				
205	1000	110	1946				
218	992	492	2117				
81	970	118	8813				

DPAW GC
GC ID BL 20 DATE 2/ 1/77
AQRATE 2 SCTIME 4 RESPWR 500
HIMASS 500 THRESH 8

ALYQ SED BENZENE 2/1/77

#SCANS 300 HRDCPY YES
%SCALE 100 REZERO YES
BASE 25985*2** 6

Figure 1.19



SIGNFPK
 GC ID BL 20 DATE 2/ 1/77
 AGRATE 2 SCTIME 4 RESPWR 500
 HIMASS 500 THRESH 8

ALYQ SED BENZENE 2/1/77

IGNORE 0, 0, 0, 0
 MILOUT 850 HRDCPY YES

Figure 1.19 Cont.'d

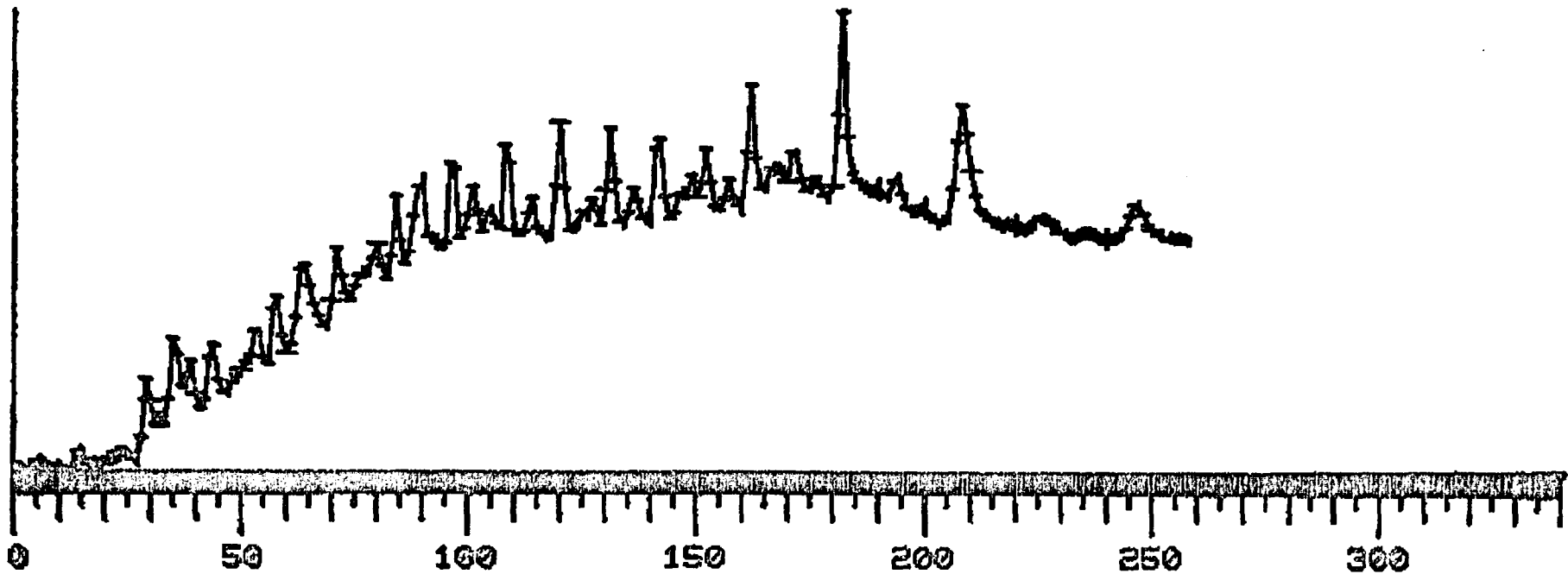
MASS	MAX INTN	FIRST OCCUR	SUM IONS *2** 8				
43	1000	1	26217				
45	1000	244	8004	192	919	152	3312
55	1000	73	17711	316	916	232	2905
85	1000	62	10656	69	901	71	15571
111	1000	101	7447	81	875	72	11892
149	1000	130	6404	95	873	72	12234
152	1000	79	4120	205	863	42	5528
178	1000	136	3704				
202	1000	191	4354				
231	1000	74	3517				
218	1000	242	4221				
204	1000	218	5204				
41	989	210	18939				
228	983	243	2317				
239	969	171	3368				
189	953	240	5544				
57	940	38	17864				

DRAW GC
GC ID BL 20 DATE 2/ 9/77
AORATE 2 SCTIME 4 RESPUR 500
HIMASS 500 THRESH 8

AMRA SED HEX 5/II 2/9/77

#SCANS 300 HRDCPY YES
%SCALE 100 REZERO YES
BASE 30339*2** 6

Figure 1.20



SIGNFPK
 GC ID BL 20 DATE 2/ 9/77
 AORATE 2 SCTIME 4 RESPUR 500
 HIMASS 500 THRESH 8

AMRA SED HEX 5/II 2/9/77

IGNORE 0. 0. 0. 0
 MILOUT 850 HRDCPY YES

Figure 1.20 Cont.'d

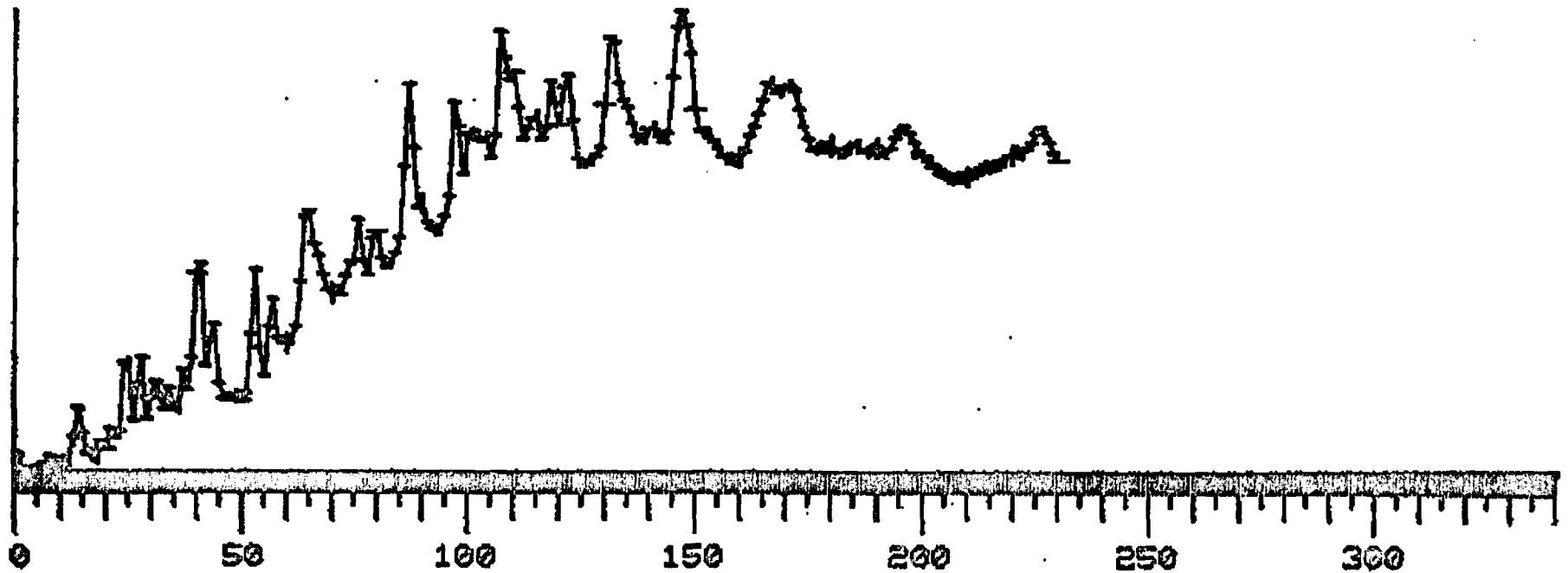
MASS	MAX INTN	FIRST OCCUR	SUM IONS X2X 8
41	1000	9	20543
43	1000	4	27255
55	1000	101	22070
57	1000	1	28719
69	961	99	20597
97	940	64	18900
83	922	89	18574
71	918	54	23033
95	917	101	16334

DPAW GC
GC ID BL 22 DATE 2/ 9/77
AQRATE 2 SCTIME 4 RESPUR 500
HIMASS 500 THRESH 8

AMRA SED BENZENE 5/II 2/9/77

#SCANS 300 HRDCPY YES
%SCALE 100 REZERO YES
BASE 29763*2** 5

Figure 1.21



SIGNFPK
 GC ID BL 22 DATE 2/ 9/77
 AORATE 2 SCTIME 4 RESPUR 500
 HIMASS 500 THRESH 8

AMRA SED BENZENE S/II 2/9/77

IGNORE 0, 0, 0, 0
 MILOUT 850 HRDCPY YES

Figure 1.21 Cont.'d

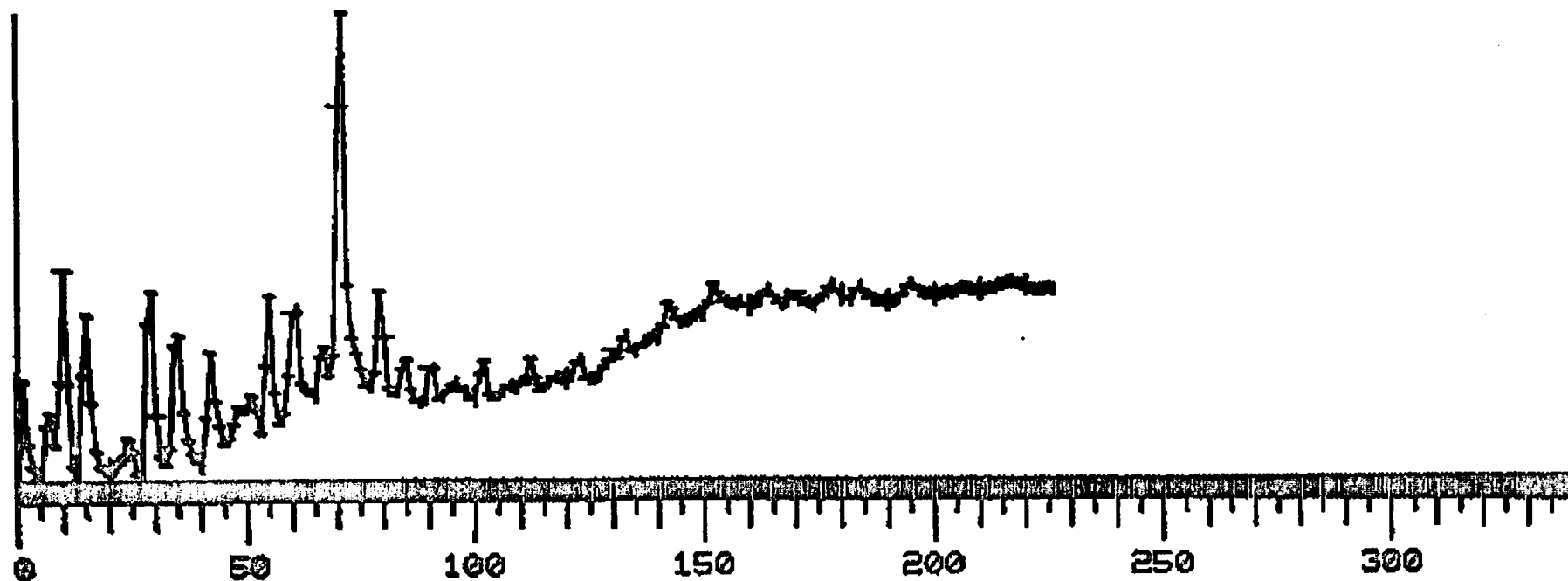
MASS	MAX INTN	FIRST OCCUR	SUM IONS *2** 8
43	1000	1	17916
45	1000	155	11091
55	1000	87	11756
57	1000	3	13317
85	1000	24	6368
149	1000	145	3274
178	1000	97	1793
202	1000	154	1742
192	1000	114	1936
41	998	3	11361
97	990	87	8023
185	987	88	1340
71	887	40	9555

DPAW GC
GC ID BL 23 DATE 2/10/77
AQRATE 2 SCTIME 4 RESPUR 500
HIMASS 500 THRESH 8

AQUV ZPL HEX 2/10/77

#SCANS 300 HRDCPY YES
%SCALE 100 REZERO YES
BASE 15007*2** 5

Figure 1.22



SIGNFPK

GC ID BL 23 DATE 2/10/77
AGRATE 2 SCTIME 4 RESPUR 500
HIMASS 500 THRESH 8

AQUU ZPL HEX 2/10/77

IGNORE 0, 0, 0, 0
MILOUT 850 HRDCPY YES

Figure 1.22 Cont.'d

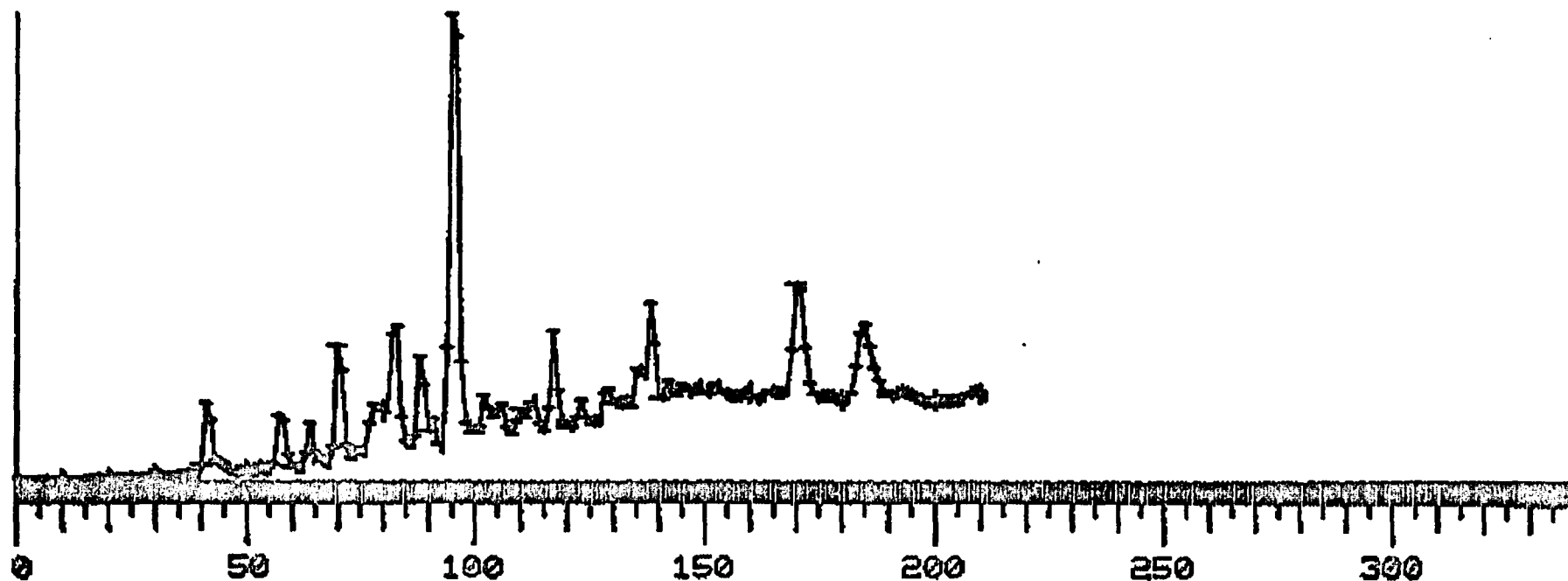
MASS	MAX INTN	FIRST OCCUR	SUM IONS *2** 7
43	1000	7	21230
45	1000	121	20285
55	1000	69	13701
57	1000	1	17280
69	1000	70	10391
83	975	71	7709
71	875	10	10321
41	868	93	12555

DRAW GC
GC ID BL 24 DATE 2/10/77
AGRATE 2 SCTIME 4 RESPWR 500
HIMASS 500 THRESH 8

AGWV ZPL BEN 2/10/77

#SCANS 300 HRDCPY YES
%SCALE 100 REZERO YES
BASE 18593*2** 6

Figure 1.23



SIGNFPK

GC ID BL 24 DATE 2/10/77
AQRATE 2 SCTIME 4 RESPWR 500
HIMASS 500 THRESH 8

AQUU ZPL BEN 2/10/77

IGNORE 0, 0, 0, 0
MILOUT 850 HRDCPY YES

Figure 1.23 Cont.'d

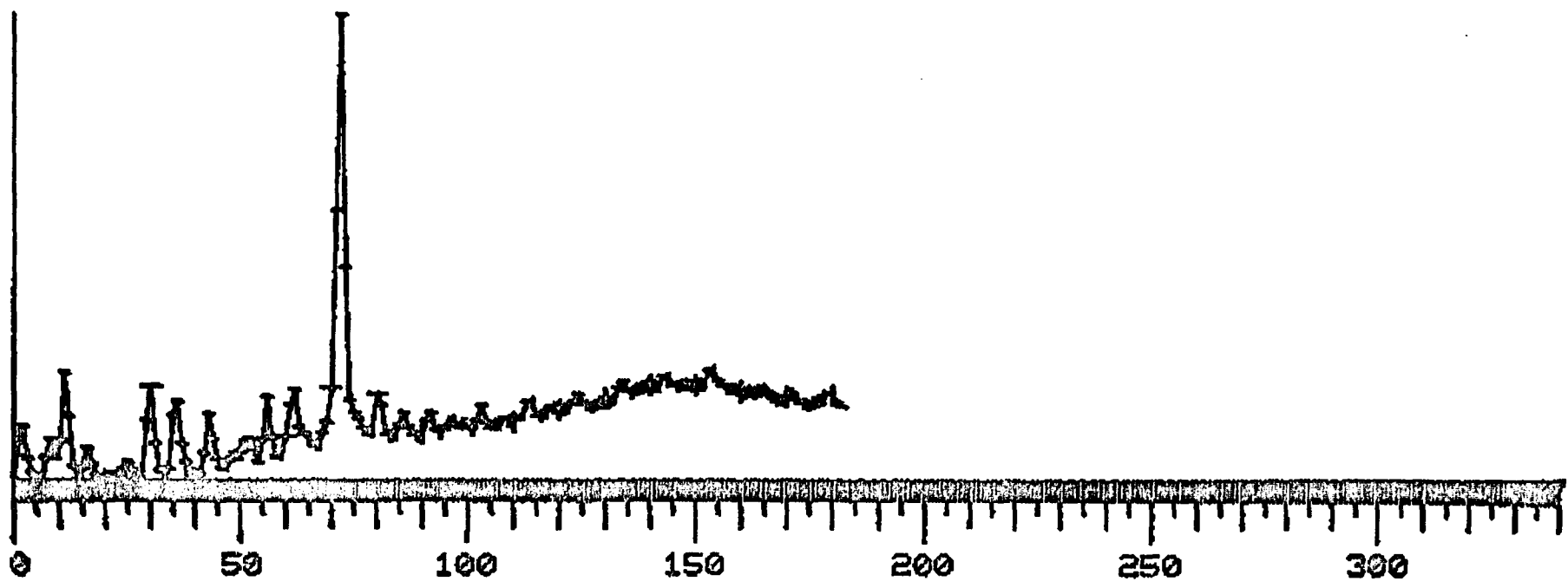
MASS	MAX INTN	FIRST OCCUR	SUM IONS *2** 7
41	1000	63	12401
43	1000	3	16361
45	1000	115	18947
55	1000	128	10115
57	1000	1	10890
69	1000	64	8959
74	1000	80	1177
79	1000	88	4008
149	1000	130	2551
205	1000	41	1405
219	1000	110	704
178	986	136	1080

DRAW GC
GC ID BL 25 DATE 2/10/77
AQRATE 2 SCTIME 4 RESPUR 500
HIMASS 500 THRESH 8

AQWL ZPL HEX 2/10/77 BL25

#SCANS 300 HRDCPY YES
%SCALE 100 REZERO YES
BASE 22896*2** 6

Figure 1.24



SIGNFPK
 GC ID BL 25 DATE 2/10/77
 AQRATE 2 SCTIME 4 RESPWR 500
 HIMASS 500 THRESH 8

AQWL ZPL HEX 2/10/77 BL25

IGNORE 0, 0, 0, 0
 MILOUT 850 HRDCPY YES

Figure 1.24 Cont.'d

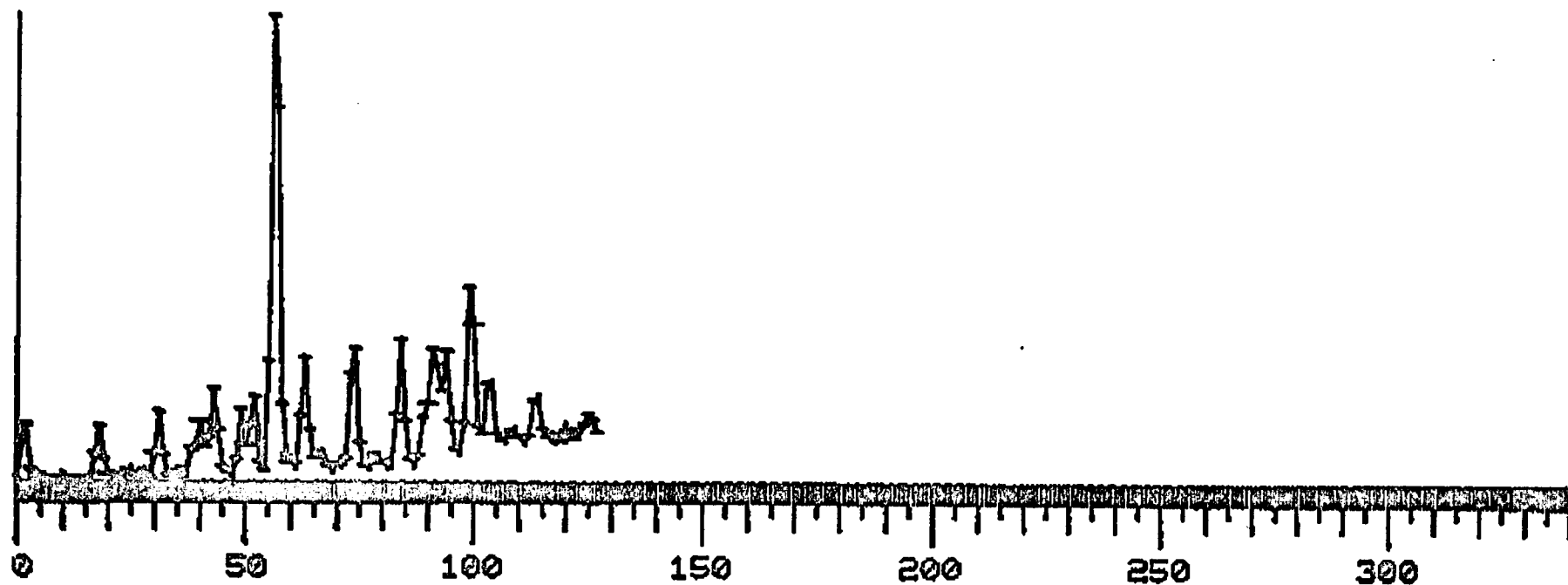
MASS	MAX INTN	FIRST OCCUR	SUM IONS *2** 7
43	1000	35	23669
45	1000	150	9236
55	1000	74	19031
57	1000	1	24197
69	1000	70	15411
83	986	73	12100
71	913	12	15771
41	893	35	16018
81	857	70	9460
95	851	70	8982

DRAW GC
GC ID BL 26 DATE 2/10/77
AQRATE 2 SCTIME 4 RESPWR 500
HIMASS 500 THRESH 8

AQWL ZPL BEN 2/10/77 BL26

#SCANS 300 HRDCPY YES
%SCALE 100 REZERO YES
BASE 24137*2** 6

Figure 1.25



SIGNFPK
 GC ID BL 26 DATE 2/10/77
 AQRATE 2 SCTIME 4 RESPUR 500
 HIMASS 500 THRESH 8

AQWL ZPL BEN 2/10/77 BL26

IGNORE 0, 0, 0, 0
 MILOUT 850 HRDCPY YES

Figure 1.25 Cont.'d

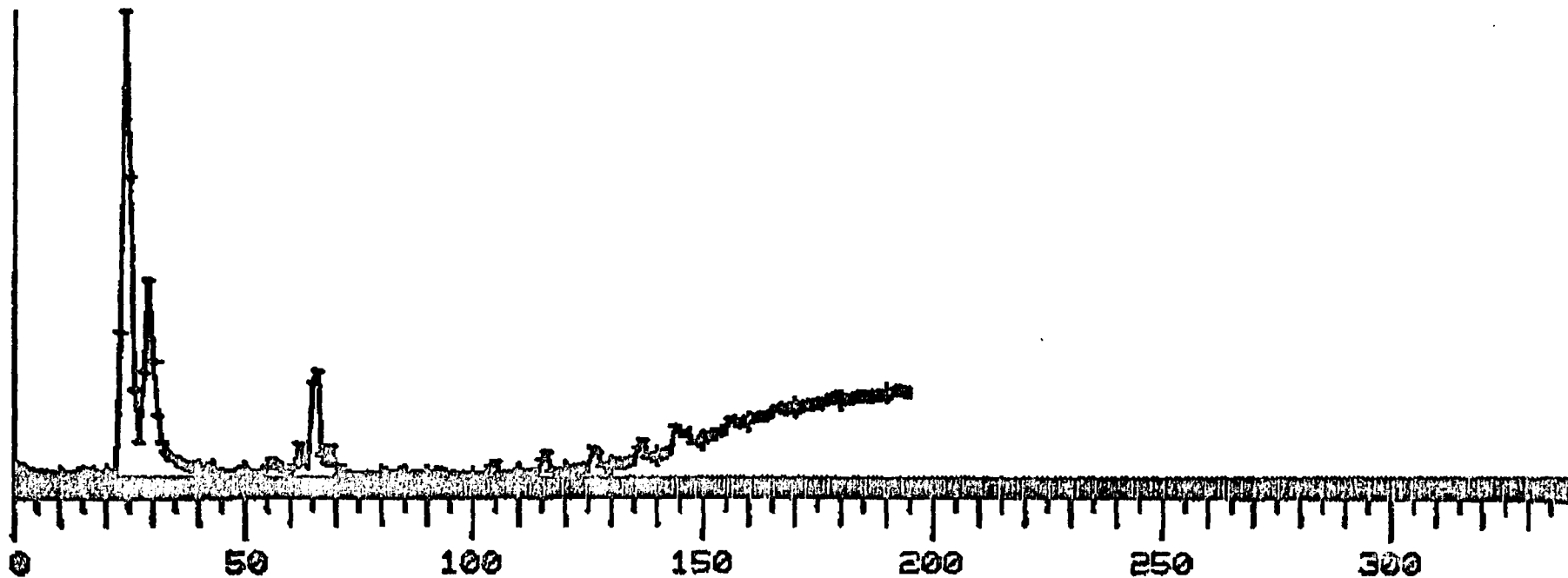
MASS	MAX INTN	FIRST OCCUR	SUM IONS *2** 6
41	1000	47	18735
43	1000	4	23526
45	1000	69	17664
57	1000	5	20969
69	1000	32	13033
71	1000	74	12482
79	1000	49	5870
149	1000	90	4656
205	1000	1	2525
219	1000	71	474
55	958	89	15328

DRAW GC
GC ID BL 27 DATE 2/11/77
AQRATE 2 SCTIME 4 RESPUR 500
HIMASS 500 THRESH 8

ALWK ZPL ~~SEN~~^{HEX} 2/11/77 BL27

#SCANS 300 HRDCPY YES
%SCALE 100 REZERO YES
BASE 18772*2** 5

Figure 1.26



SIGNFPK
 GC ID BL 27 DATE 2/11/77
 AGRATE 2 SCTIME 4 RESPUR 500
 HIMASS 500 THRESH 8
 AUWK ZPL ~~850~~ ^{HEX} 2/11/77 BL27

Figure 1.26 Cont.'d

IGNORE 0, 0, 0, 0
 MILOUT 850 HRDCPY YES

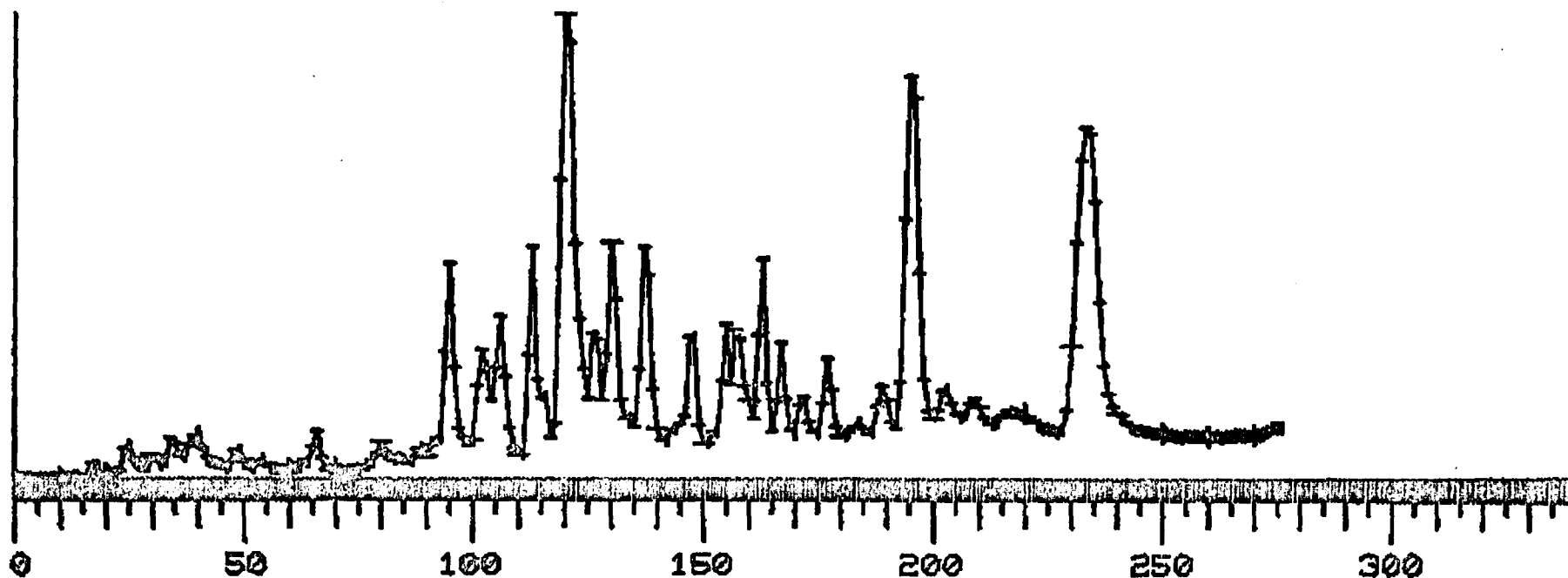
MASS	MAX INTN	FIRST OCCUR	SUM IONS *2** 6
43	1000	3	16146
45	1000	6	25864
57	1000	1	11796
81	1000	66	2428
82	1000	69	1511
149	1000	144	908
71	896	25	7781

DRAW GC
GC ID BL 28 DATE 2/11/77
AQRATE 2 SCTIME 4 RESPUR 500
HIMASS 500 THRESH 8

AUWK ZPL BEN 2/II 2/11/77 BL28

#SCANS 300 HRDCPY YES
%SCALE 100 REZERO YES
BASE 30895*2** 6

Figure 1.27



SIGNFPK
 GC ID BL 28 DATE 2/11/77
 AQFATE 2 SCTIME 4 RESPLR 500
 HIMASS 500 THRESH 8

AUWK ZPL BEN 2/II 2/11/77 BL28

IGNORE 0, 0, 0, 0
 MILOUT 850 HRDCPY YES

Figure 1.27 Cont.'d

MASS MAX FIRST SUM
 INTN OCCUR IONS *2** 7

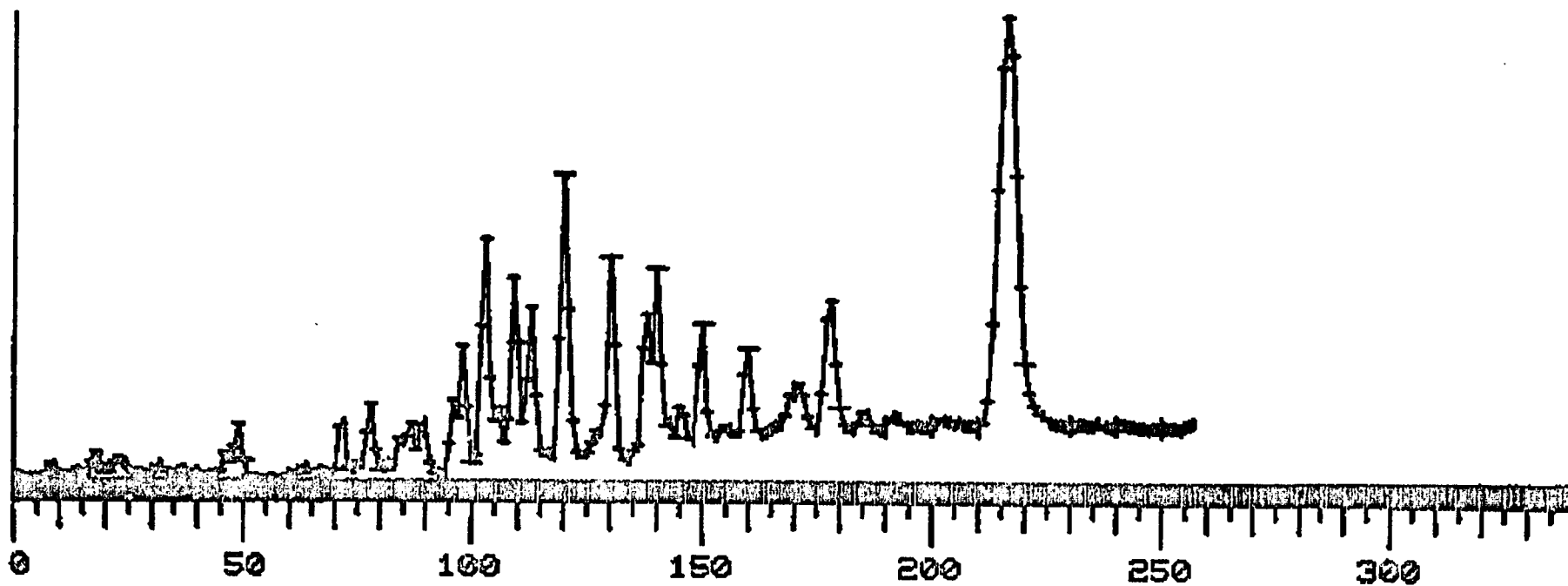
41	1000	52	26056	205	1000	65	2874
43	1000	59	26554	247	1000	63	418
45	1000	150	25206	117	994	37	6673
55	1000	123	18644	174	964	40	1962
57	1000	8	22939	80	935	106	5078
58	1000	97	5968	168	913	81	1046
69	1000	64	20797	145	884	53	3557
79	1000	106	10403	67	876	123	11166
85	1000	87	7037	81	867	101	13370
104	1000	16	7594				
105	1000	1	10208				
118	1000	30	3938				
131	1000	48	5154				
149	1000	154	11392				
167	1000	80	1903				
178	1000	159	2112				
202	1000	216	2838				

DRAW GC
GC ID BL 29 DATE 2/11/77
AORATE 2 SCTIME 4 RESPWR 500
HIMASS 500 THRESH 8

UYC ZPL BEN 3/II '76 2/11/77 BL29

#SCANS 300 HRDCPY YES
%SCALE 100 REZERO YES
BASE 20825*2** 6

Figure 1.28



SJGNFPK
 GC ID BL 29 DATE 2/11/77
 AGRATE 2 SCTIME 4 RESPWR 500
 HIMASS 500 THRESH 8

UYC ZPL BEN 3/II '76 2/11/77 BL29

IGNORE 0. 0. 0. 0.
 MILOUT 850 HRDCPY YES

Figure 1.28 Cont.'d

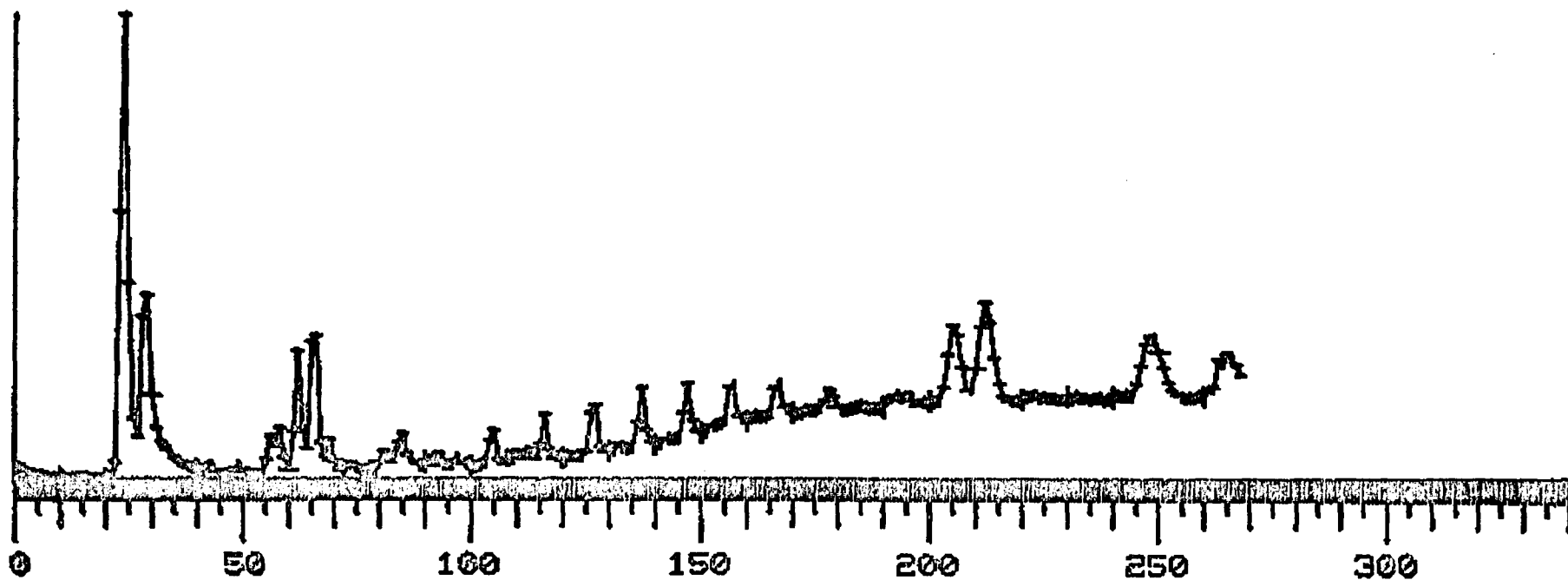
MASS	MAX INTN	FIRST OCCUR	SUM IONS *2** 7				
41	1000	16	16640	231	1000	111	512
43	1000	4	21025	174	935	31	629
45	1000	93	25418	167	932	76	792
55	1000	105	11396	117	931	20	3325
57	1000	15	17978	71	882	150	9300
69	1000	70	12045				
72	1000	34	3607				
79	1000	102	3559				
104	1000	1	4381				
118	1000	21	1553				
131	1000	31	2305				
149	1000	137	8215				
168	1000	64	553				
191	1000	96	1168				
205	1000	48	1914				
247	1000	46	476				
263	1000	219	3318				

DRAW GC
GC ID BL 30 DATE 2/11/77
AQRATE 2 SCTIME 4 RESPWR 500
HIMASS 500 THRESH 8

BL30 ALIYC ZPL HEX

#SCANS 300 HRDCPY YES
%SCALE 100 REZERO YES
BASE 24947*2** 5

Figure 1.29



SIGNFPK
 GC ID BL 30 DATE 2/11/77
 AORATE 2 SOTIME 4 RESPWR 500
 HIMASS 500 THRESH 8

BL30 ALLC ZPL HEX

IGNORE 0, 0, 0, 0
 MILOUT 850 HRDCPY YES

Figure 1.29 Cont.'d

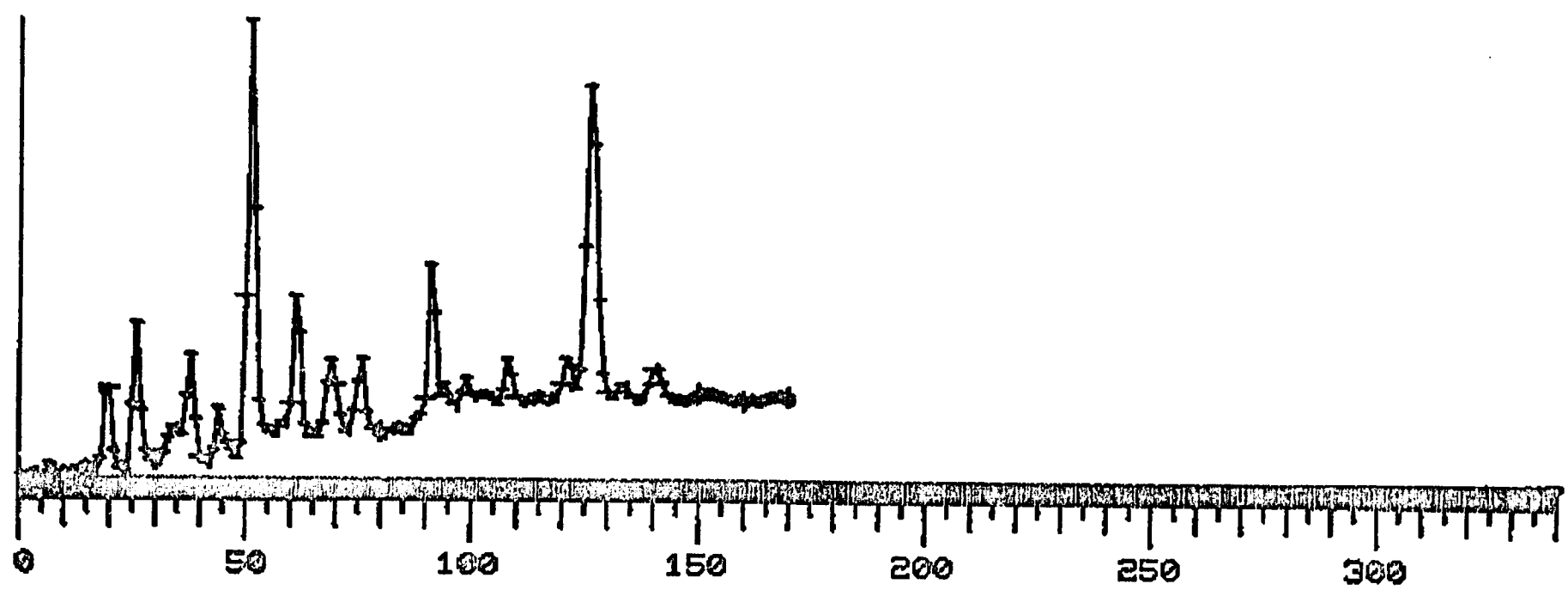
MASS	MAX INTN	FIRST OCCUR	SUM IONS *2** 7
43	1000	4	19406
45	1000	101	27324
55	1000	84	9348
57	1000	1	14326
69	1000	85	6738
71	1000	24	8783
81	1000	63	4065
82	1000	69	2862
95	985	66	3617
41	944	66	9894
83	926	85	4757
68	904	66	2211

DRAW GC
GC ID BL 31 DATE 2/14/77
AQRATE 2 SCTIME 4 RESPWR 500
HIMASS 500 THRESH 8

QFQ ZPL BEN 2/14/77 BL31

#SCANS 300 HRDCPY YES
%SCALE 100 REZERO YES
BASE 30204*2** 5

Figure 1.30



SIGNFPK
 GC ID BL 31 DATE 2/14/77
 AORATE 2 SCTIME 4 RESPLR 500
 HIMASS 500 THRESH 8

QFQ ZPL BEN 2/14/77 BL31

IGNORE 0, 0, 0, 0
 MILOUT 850 HRDCPY YES

Figure 1.30 Cont.'d

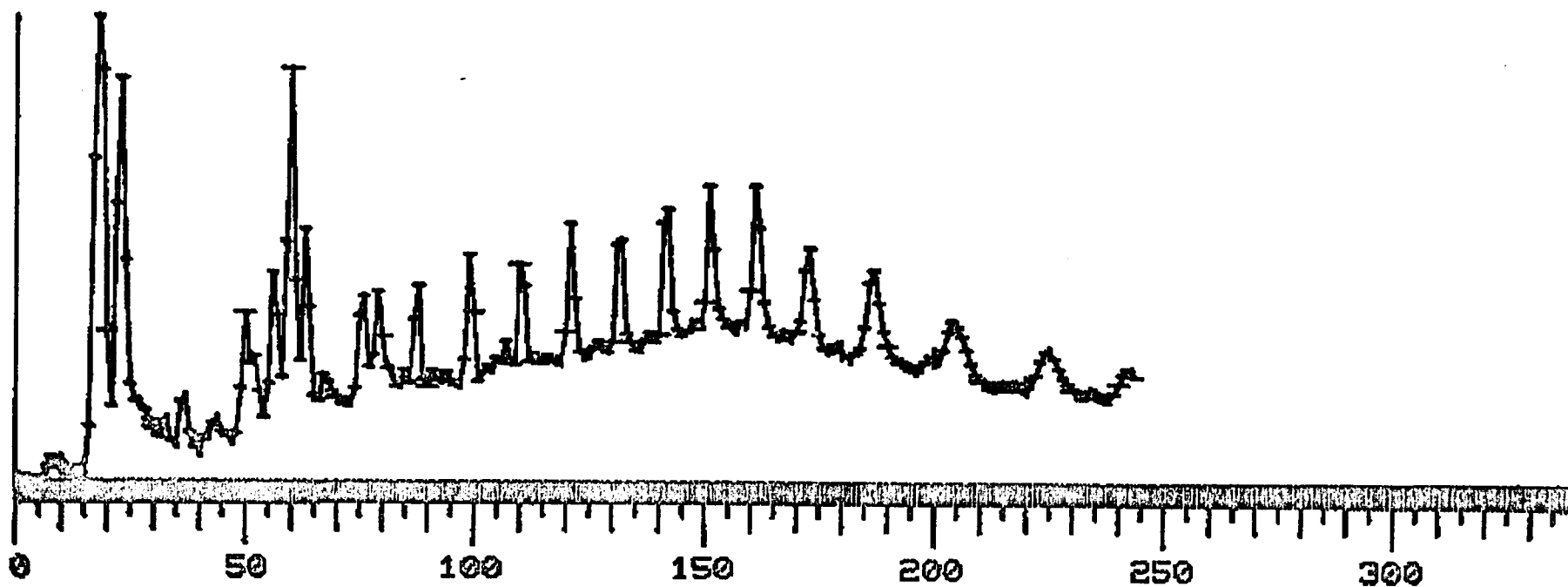
MASS	MAX INTN	FIRST OCCUR	SUM IONS *2** 7
41	1000	30	10478
43	1000	1	11211
45	1000	73	16487
55	1000	55	7721
69	1000	18	10555
79	1000	44	3828
57	998	27	5941
74	922	59	677
58	882	28	2715

DRAW GC
GC ID BL 32 DATE 2/14/77
AQRATE 2 SCTIME 4 RESPUR 500
HIMASS 500 THRESH 8

QFQ ZPL HEX 2/14/77 BL32

#SCANS 300 HRDCPY YES
%SCALE 100 REZERO YES
BASE 26630*2** 6

Figure 1.31



SIGNFFK
 GC ID BL 32 DATE 2/14/77
 AGRATE 2 SCTIME 4 RESPWR 500
 HIMASS 500 THRESH 8

QFQ ZPL HEX 2/14/77 BL32

IGNORE 0, 0, 0, 0
 MILOUT 850 HRDCPY YES

Figure 1.31 Cont.'d

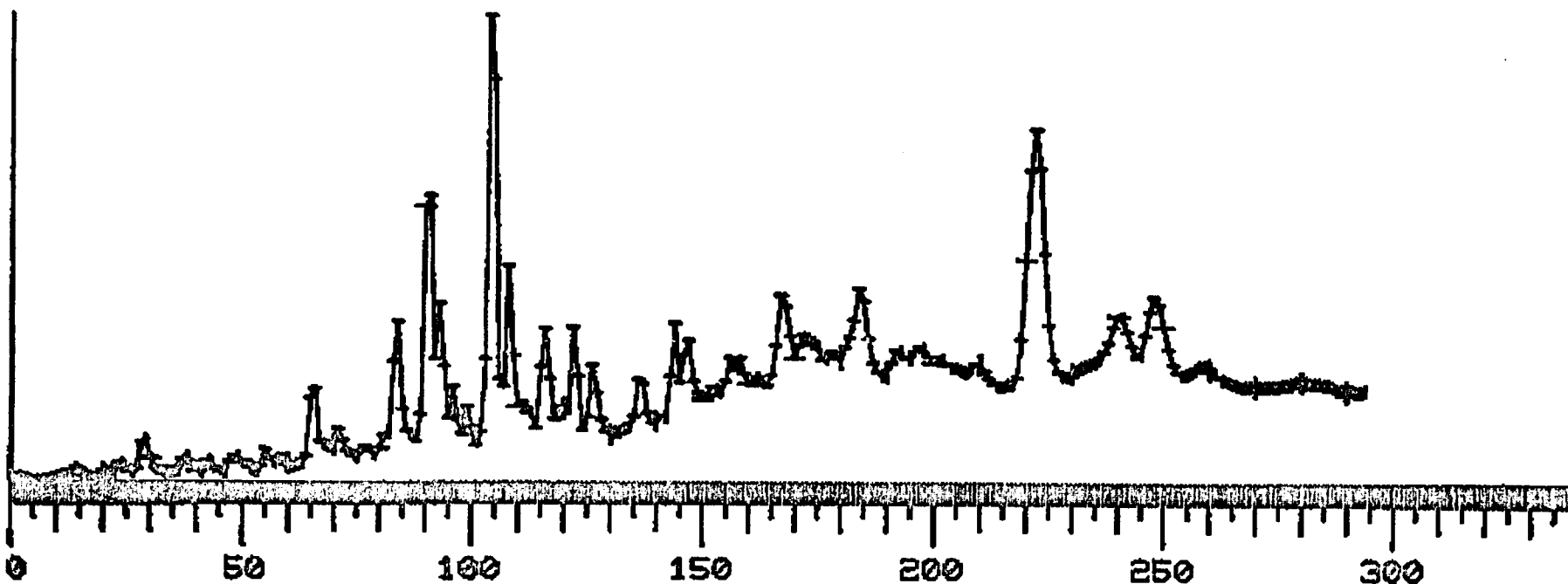
MASS	MAX INTN	FIRST OCCUR	SUM IONS *2** 8
43	1000	22	27827
45	1000	192	11378
55	1000	78	20285
57	1000	1	29477
69	1000	79	17391
81	1000	60	10823
82	980	60	7115
68	940	60	4576
71	938	19	22132
83	912	80	14441
95	884	60	10380

DRAW GC
GC ID BL 33 DATE 2/14/77
AQRATE 2 SCTIME 4 RESPWR 500
HIMASS 500 THRESH 8

AQHF ZPL BEN 1/II 2/14/77 BL33

#SCANS 300 HRDCPY YES
%SCALE 100 REZERO YES
BASE 15886*2** 6

Figure 1.32



SIGNFPK
 GC ID BL 33 DATE 2/14/77
 AGRATE 2 SCTIME 4 RESPWR 500
 HIMASS 500 THRESH 8

AQHF ZPL BEN 1/II 2/14/77 BL33

IGNORE 0. 0. 0. 0
 MILOUT 850 HRDCPY YES

Figure 1.32 Cont.'d

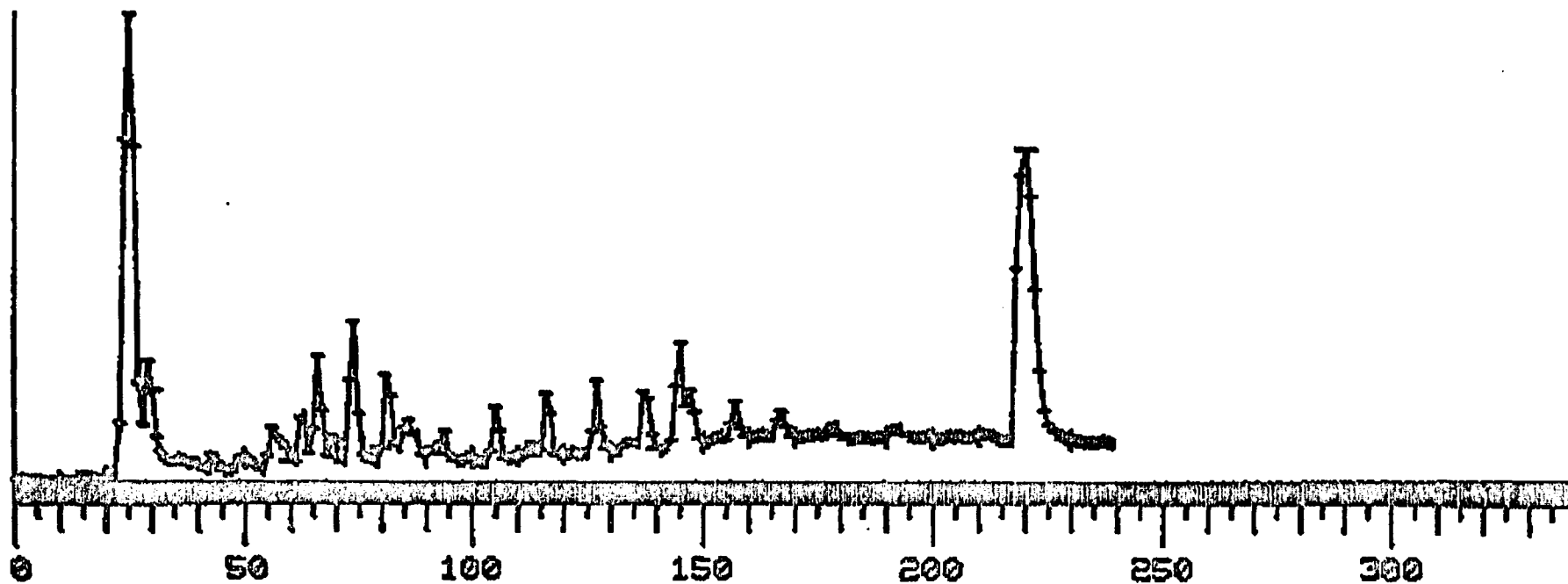
MASS	MAX INTN	FIRST OCCUR	SUM IONS *2** 8
43	1000	2	17197
45	1000	160	14382
57	1000	1	12193
69	1000	183	8024
74	1000	93	1829
85	1000	76	4029
88	1000	90	2150
101	1000	104	1975
123	1000	66	1944
149	1000	143	2872
205	1000	55	536

DRAW GC
GC ID BL 35 DATE 2/15/77
AQRATE 2 SCTIME 4 RESPUR 500
HIMASS 500 THRESH 8

QHF ZPL HEX 2/15/77 BL35

Figure 1.33

#SCANS 300 HRDCPY YES
%SCALE 100 REZERO YES
BASE 25952*2** 6



SIGNFPK
 GC ID BL 35 DATE 2/15/77
 AGRATE 2 SCTIME 4 RESPUR 500
 HIMASS 500 THRESH 8

QHF ZPL HEX 2/15/77 BL35

IGNORE 0, 0, 0, 0
 MILOUT 850 HRDCPY YES

Figure 1.33 Cont.'d

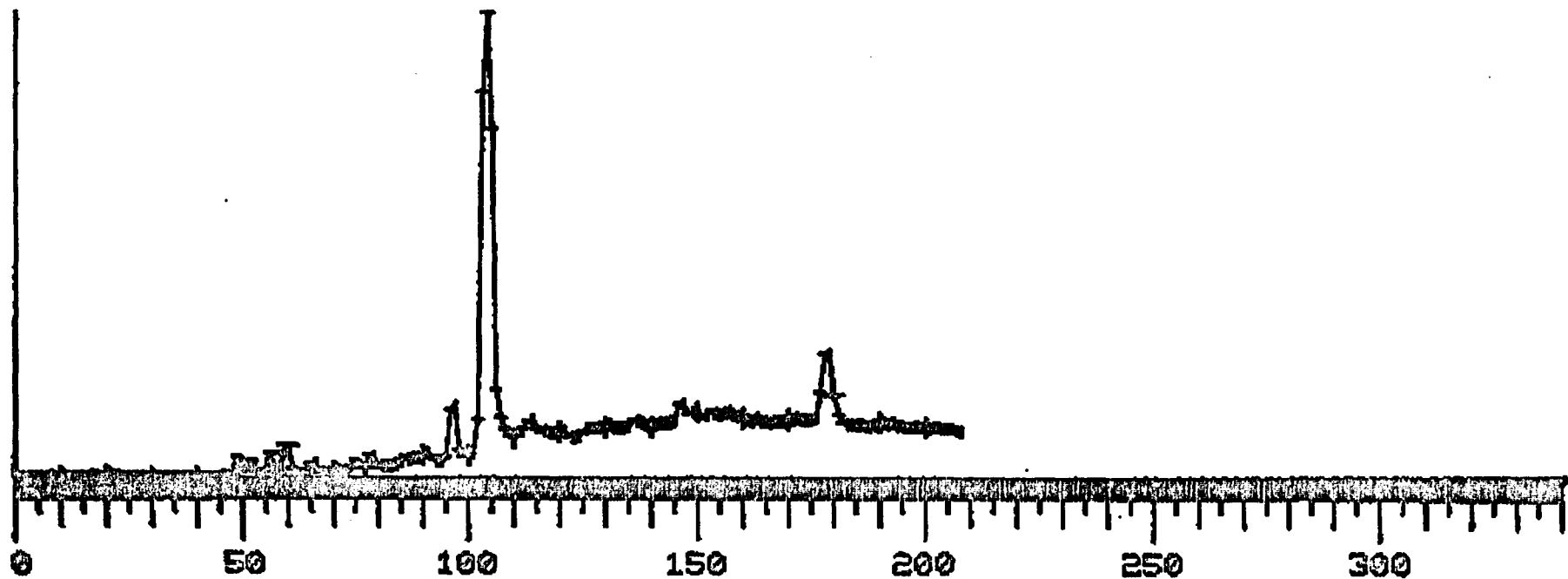
MASS	MAX INTN	FIRST OCCUR	SUM IONS *2** 7
43	1000	7	27481
45	1000	149	21516
55	1000	114	17432
57	1000	1	26709
69	1000	74	13234
81	1000	67	7193
83	1000	82	9827
109	1000	86	4106
149	1000	144	6679
71	954	24	16829
41	924	12	18394
82	895	66	3935
205	890	55	1361
68	877	66	2938

DRAW GC
GC ID BL 37 DATE 2/15/77
AQRATE 2 SCTIME 4 RESPUR 500
HIMASS 500 THRESH 8

AQUJ ZPL BEN REPEAT OF BL36 2/15/77 BL037

#SCANS 300 HRDCPY YES
%SCALE 100 REZERO YES
BASE 16524*2** ?

Figure 1.34



SIGNFPK
 GC ID BL 37 DATE 2/15/77
 AGRATE 2 SCTIME 4 RESPWR 500
 HIMASS 500 THRESH 8

AQUJ ZPL BEN REPEAT OF BL36 2/15/77 BL037

IGNORE 0, 0, 0, 0
 MILOUT 850 HRDCPY YES

Figure 1.34 Cont.'d

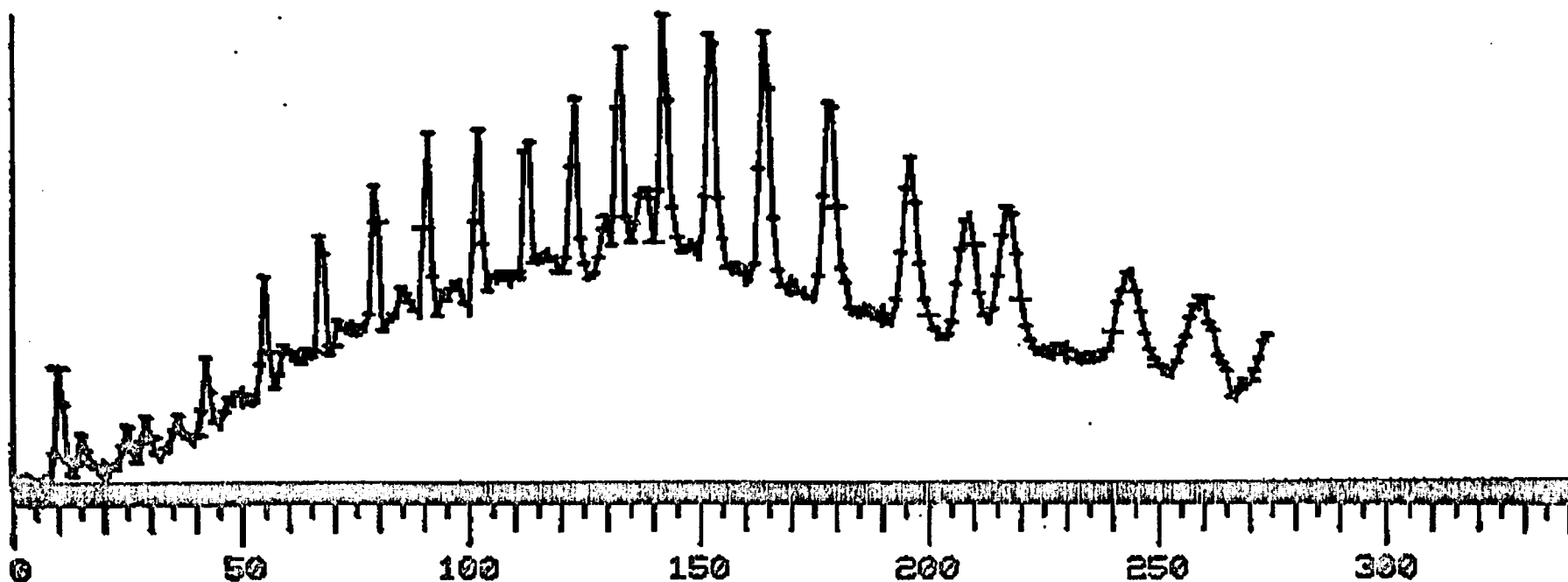
MASS	MAX INTN	FIRST OCCUR	SUM IONS *2** 6				
41	1000	14	24069				
43	1000	11	26189	74	942	88	1086
45	1000	133	27320	133	937	105	13180
57	1000	1	16006	55	934	103	17506
68	1000	52	3959	82	871	60	4237
69	1000	146	13731				
79	1000	97	9473				
81	1000	60	10075				
85	1000	70	3391				
91	1000	104	11202				
95	1000	105	8585				
105	1000	108	12921				
119	1000	92	15916				
159	1000	21	2257				
160	1000	20	4587				
206	1000	48	2031				
67	963	105	9678				

DRAW GC
GC ID BL 38 DATE 2/16/77
AQRATE 2 SCTIME 4 RESPWR 500
HIMASS 500 THRESH 8

AGUJ ZPL HEX 2/16/77 BL038

#SCANS 300 HRDCPY YES
%SCALE 100 REZERO YES
BASE 23363*2** 6

Figure 1.35



SIGNFPK
 GC ID BL 38 DATE 2/16/77
 AGRATE 2 SCTIME 4 RESPWR 500
 HIMASS 500 THRESH 8

AQUJ ZPL HEX 2/16/77 BL038

IGNORE 0, 0, 0, 0
 MILOUT 850 HRDCPY YES

Figure 1.35 Cont.'d

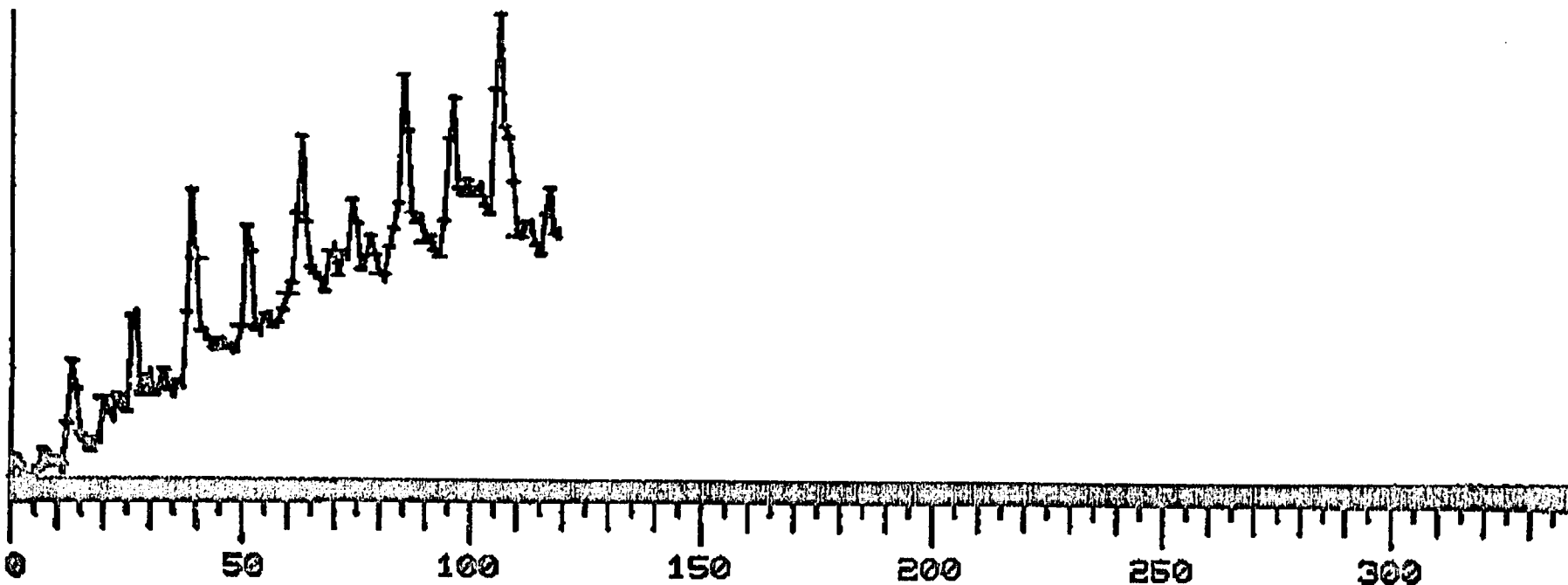
MASS	MAX INTN	FIRST OCCUR	SUM IONS *2** 9
43	1000	46	16713
45	1000	182	7186
55	1000	85	11401
57	1000	1	18355
69	1000	228	9599
71	1000	71	14007
85	1000	103	10710
149	1000	130	1583
263	1000	209	491

DRAW GC
GC ID BL 40 DATE 2/16/77
AQRATE 2 SCTIME 4 RESPLR 500
HIMASS 500 THRESH 8

AMFZ SED BEN 2/16/77 BL040

Figure 1.36

#SCANS 300 HRDCPY YES
%SCALE 100 REZERO YES
BASE 24169X2** 6



SIGNFPK
 GC ID BL 40 DATE 2/16/77
 AGRATE 2 SCTIME 4 RESPWR 500
 HIMASS 500 THRESH 8

AMFZ SED BEN 2/16/77 BL040

IGNORE 0. 0. 0. 0.
 MILOUT 850 HRDCPY YES

Figure 1.36 Cont.'d

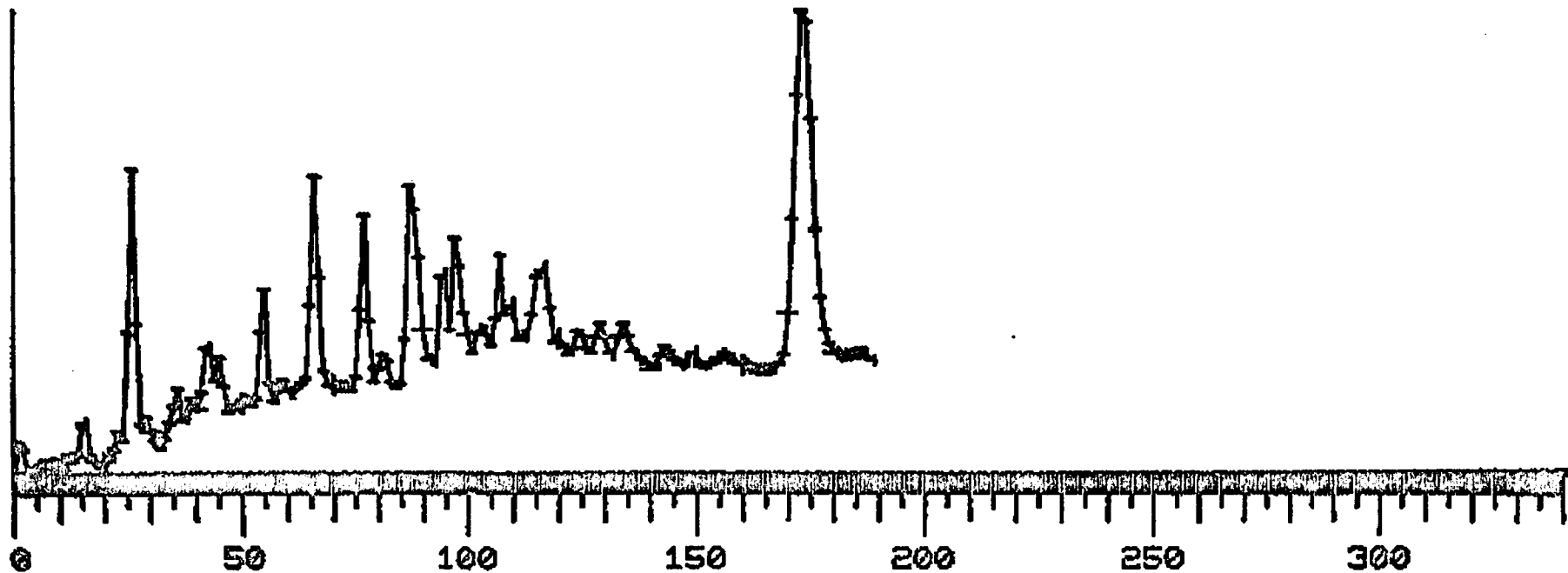
MASS	MAX INTN	FIRST OCCUR	SUM IONS *2** 7
41	1000	81	18434
43	1000	1	24118
55	1000	65	18912
57	1000	25	19091
69	1000	89	15695
71	1000	39	15391
85	1000	23	10231
97	1000	38	13164
165	1000	74	6879
178	1000	96	4208
192	1000	107	3423
205	1000	2	1568
45	925	115	7498

DRAW GC
GC ID BL 42 DATE 2/21/77
AQRATE 2 SCTIME 4 RESPWR 500
HIMASS 500 THRESH 8

ANRN SED BENZENE 6/IV 2/21/77

#SCANS 300 HRDCPY YES
%SCALE 100 REZERO YES
BASE 15533*2** 5

Figure 1.37



SIGNFPK

GC ID BL 42 DATE 2/21/77
AQRATE 2 SCTIME 4 RESPWR 500
HIMASS 500 THRESH 8

ANRN SED BENZENE 6/IV 2/21/77

IGNORE 0, 0, 0, 0
MILOUT 850 HRDCPY YES

Figure 1.37 Cont.'d

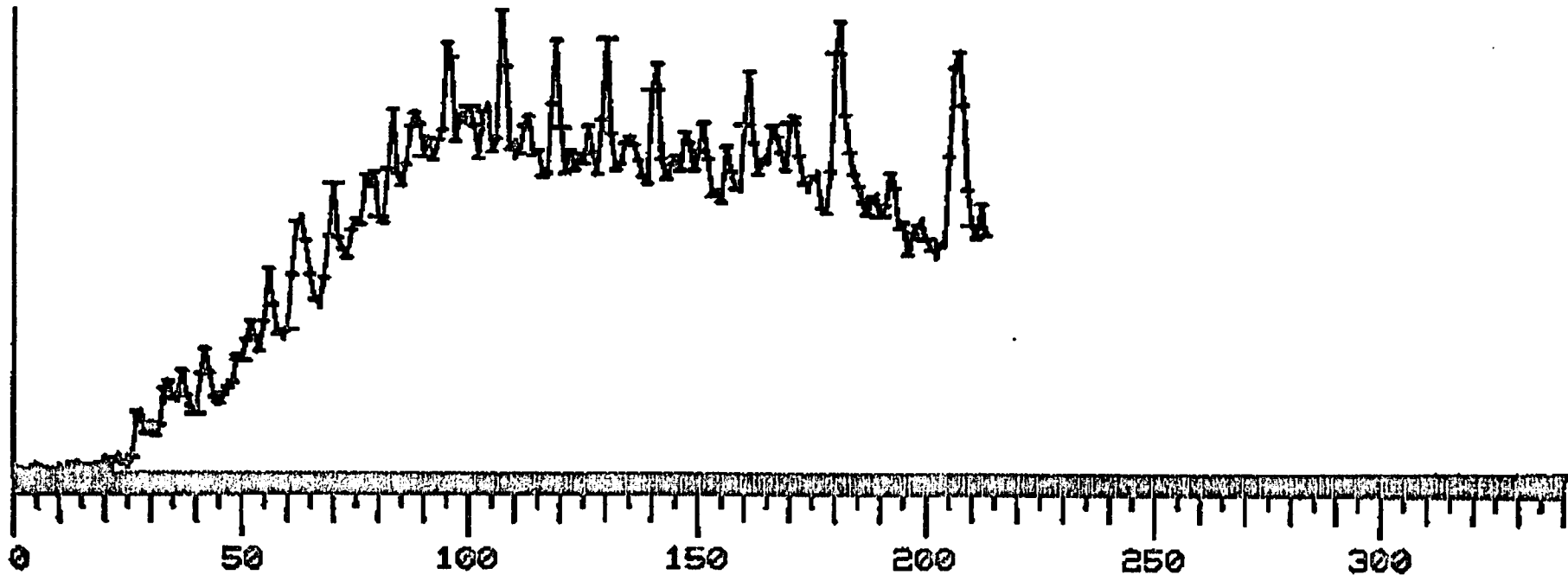
MASS	MAX INTN	FIRST OCCUR	SUM IONS *2** 6
41	1000	37	19615
43	1000	6	27238
45	1000	111	19998
55	1000	89	17688
57	1000	1	20470
85	1000	25	10190
149	1000	94	7223
178	1000	100	1854
215	1000	80	1495
255	1000	115	1291
205	873	5	1739

DRAW GC
GC ID BL 39 DATE 2/16/77
AORATE 2 SCTIME 4 RESPUR 500
HIMASS 500 THRESH 8

AMFZ SED HEX 2/16/77 BL39

#SCANS 300 HRDCPY YES
%SCALE 100 REZERO YES
BASE 16489*2** 7

Figure 1.38



SIGNFPK

GC ID BL 39 DATE 2/16/77
AQRATE 2 SCTIME 4 RESPWR 500
HIMASS 500 THRESH 8

AMFZ SED HEX 2/16/77 BL39

IGNORE 0, 0, 0, 0
MILOUT 850 HRDCPY YES

Figure 1.38 Cont.'d

MASS MAX FIRST SUM
INTN OCCUR IONS *2** 9

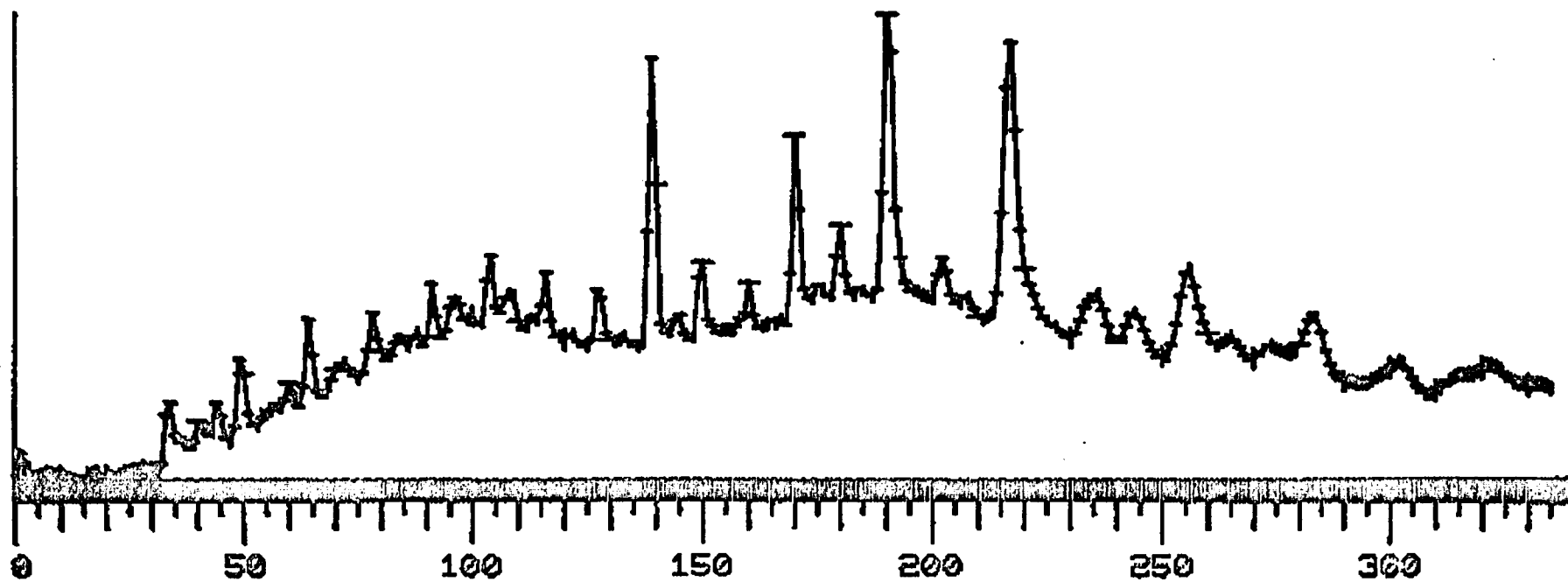
41	1000	37	12706	105	1000	131	2729
42	1000	134	4019	109	1000	86	7355
43	1000	1	16935	111	1000	92	8504
55	1000	47	14748	123	1000	201	6073
56	1000	41	8180	125	1000	199	6129
57	1000	2	17540	139	1000	183	3510
67	1000	176	7228	149	1000	212	3266
69	1000	52	13046	112	956	123	3458
70	1000	91	7486	127	922	146	4006
71	1000	38	14076	119	915	128	2614
81	1000	80	8850	110	892	95	3949
83	1000	79	11549	165	851	176	3005
85	1000	27	12191	126	850	120	2802
91	1000	90	2750				
95	1000	112	9618				
97	1000	35	11326				
99	1000	93	6488				

DRAW GC
GC ID BL 43 DATE 2/21/77
AQRATE 2 SCTIME 4 RESPUR 500
HIMASS 500 THRESH 8

ANRN SED HEXANE 6/IV 2/21/77

#SCANS 300 HRDCPY YES
%SCALE 100 REZERO YES
BASE 29767*2** 6

Figure 1.39



SIGNFPK

GC ID BL 43 DATE 2/21/77
AQRATE 2 SCTIME 4 RESPUR 500
HIMASS 500 THRESH 8

ANRN SED HEXANE 6/IV 2/21/77

IGNORE 0, 0, 0, 0
MILOUT 850 HRDCPY YES

Figure 1.39 Cont.'d

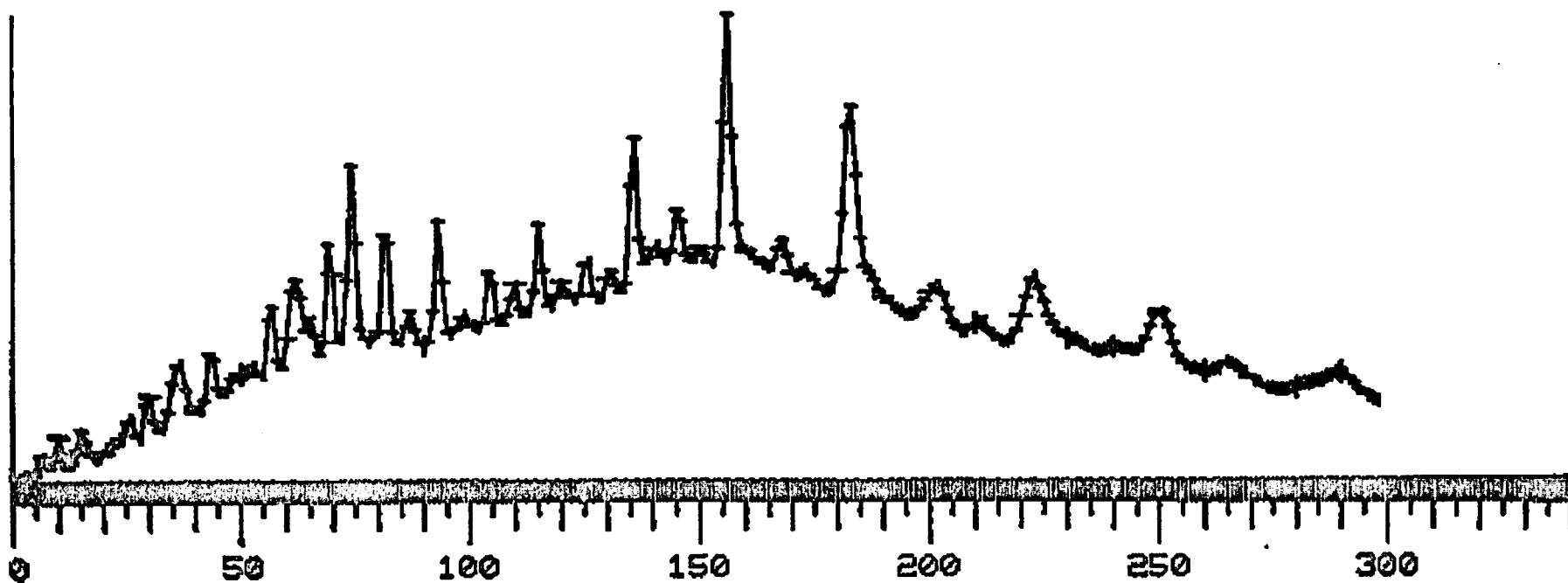
MASS	MAX INTN	FIRST OCCUR	SUM IONS *2** 9
43	1000	164	17074
45	1000	268	7054
55	1000	89	14105
57	1000	1	16787
69	978	243	12554
41	933	88	12381
95	906	244	9878
81	879	243	9725
71	877	139	12321
83	877	96	10269

DRAW GC
GC ID BL 44 DATE 2/22/77
AQRATE 2 SCTIME 4 RESPWR 500
HIMASS 500 THRESH 8

AMLN SED HEX 2/II 2/22/77

#SCANS 300 HRDCPY YES
%SCALE 100 REZERO YES
BASE 21611*2** 6

Figure 1.40



SIGNFPK
 GC ID BL 44 DATE 2/22/77
 AGRATE 2 SCTIME 4 RESPWR 500
 HIMASS 500 THRESH 8

AMLN SED HEX 2/II 2/22/77

IGNORE 0, 0, 0, 0
 MILOUT 850 HRDCPY YES

Figure 1.40 Cont.'d

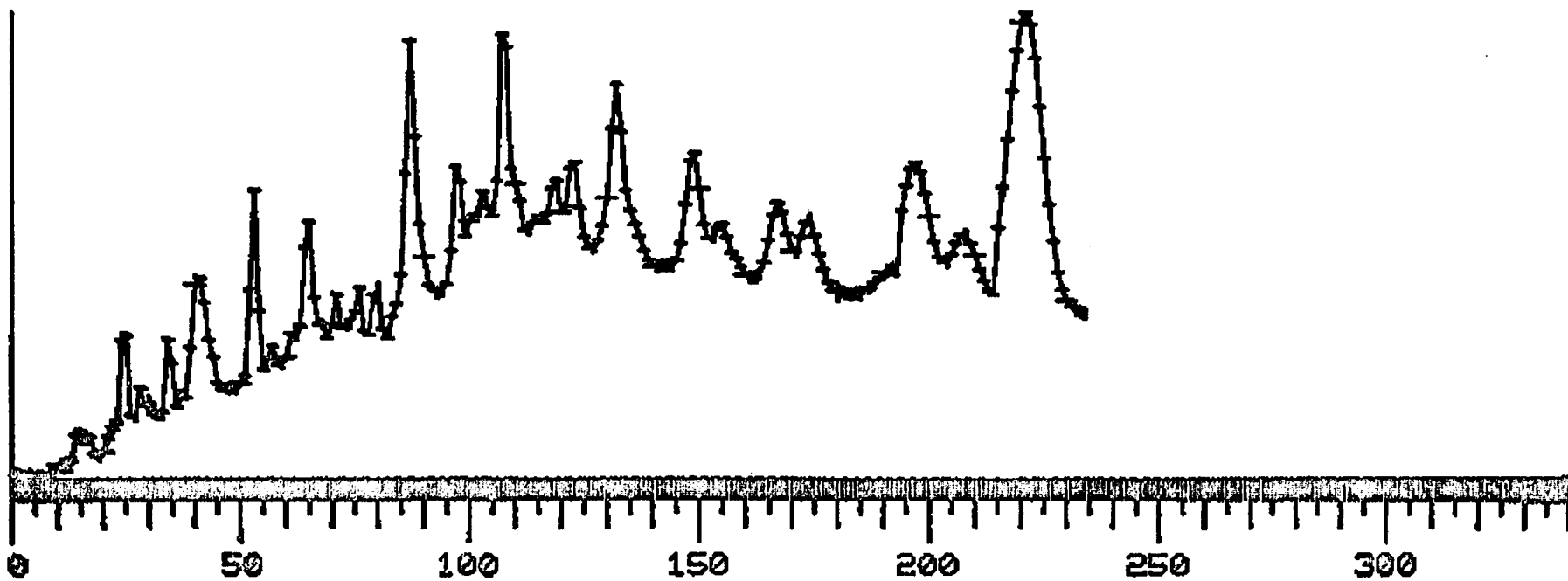
MASS	MAX INTN	FIRST OCCUR	SUM IONS *2** 8
43	1000	114	24112
45	1000	233	11208
55	1000	64	21364
57	1000	1	24126
69	954	64	19286
83	895	62	15610
41	891	73	16913
95	891	74	15636
81	865	74	15116

DRAW GC
GC ID BL 45 DATE 2/22/77
AGRATE 2 SCTIME 4 RESPWR 500
HIMASS 500 THRESH 8

AMLN SED BENZ 2/II 2/22/77

#SCANS 300 HRDCPY YES
%SCALE 100 REZERO YES
BASE 22984*2** 5

Cont.'d 1.41



SIGNFPK
 GC ID BL 45 DATE 2/22/77
 AGRATE 2 SCTIME 4 RESPWR 500
 HIMASS 500 THRESH 8

AMLN SED BENZ 2/II 2/22/77

IGNORE 0, 0, 0, 0
 MILOUT 850 HRDCPY YES

Figure 1.41 Cont.'d

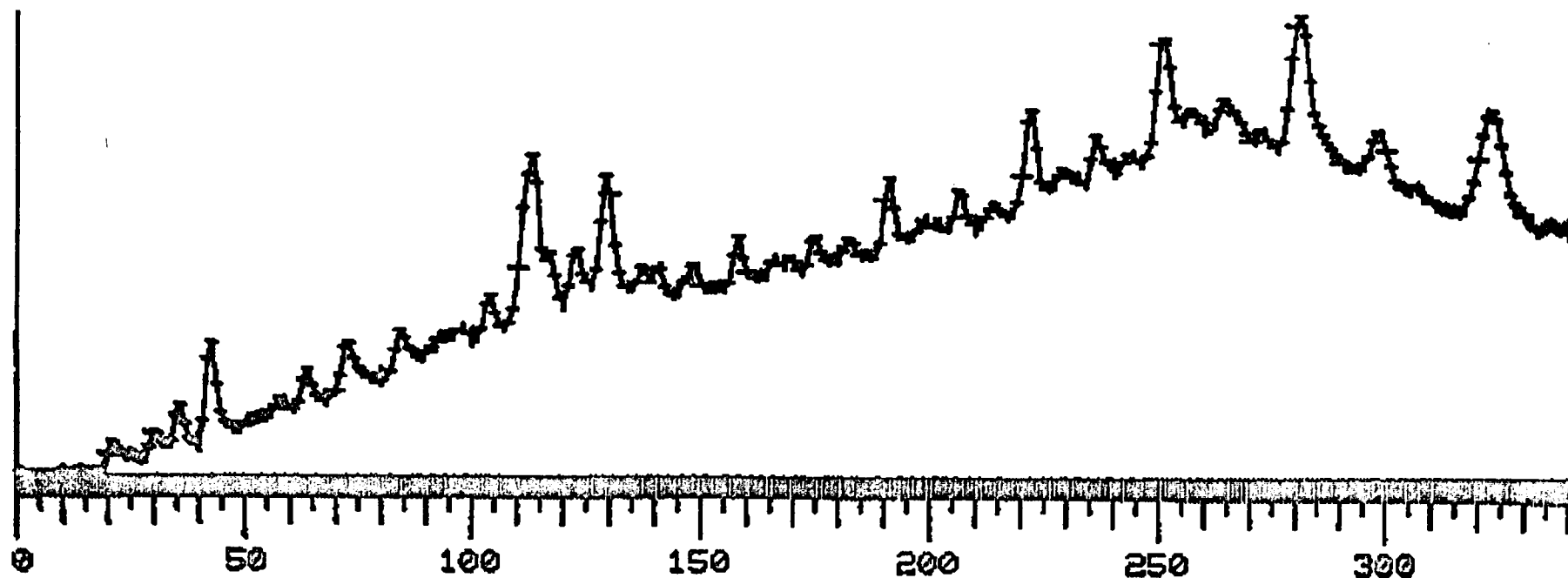
MASS	MAX INTN	FIRST OCCUR	SUM IONS *2** 7
43	1000	2	29213
45	1000	140	19969
55	1000	87	22276
57	1000	1	21353
74	1000	42	5179
85	1000	24	8938
204	1000	220	2749
149	986	149	3477
178	961	98	2043
41	932	12	18862
101	868	53	3950
202	867	156	2019

DRAW GC
GC ID BL 46 DATE 2/28/77
AQRATE 2 SCTIME 4 RESPWR 500
HIMASS 500 THRESH 8

AMJP-SED-HEX 1/II COMP 2/28/77 BL046

#SCANS 300 HRDCPY YES
%SCALE 100 REZERO YES
BASE 25670*2** 6

Figure 1.42



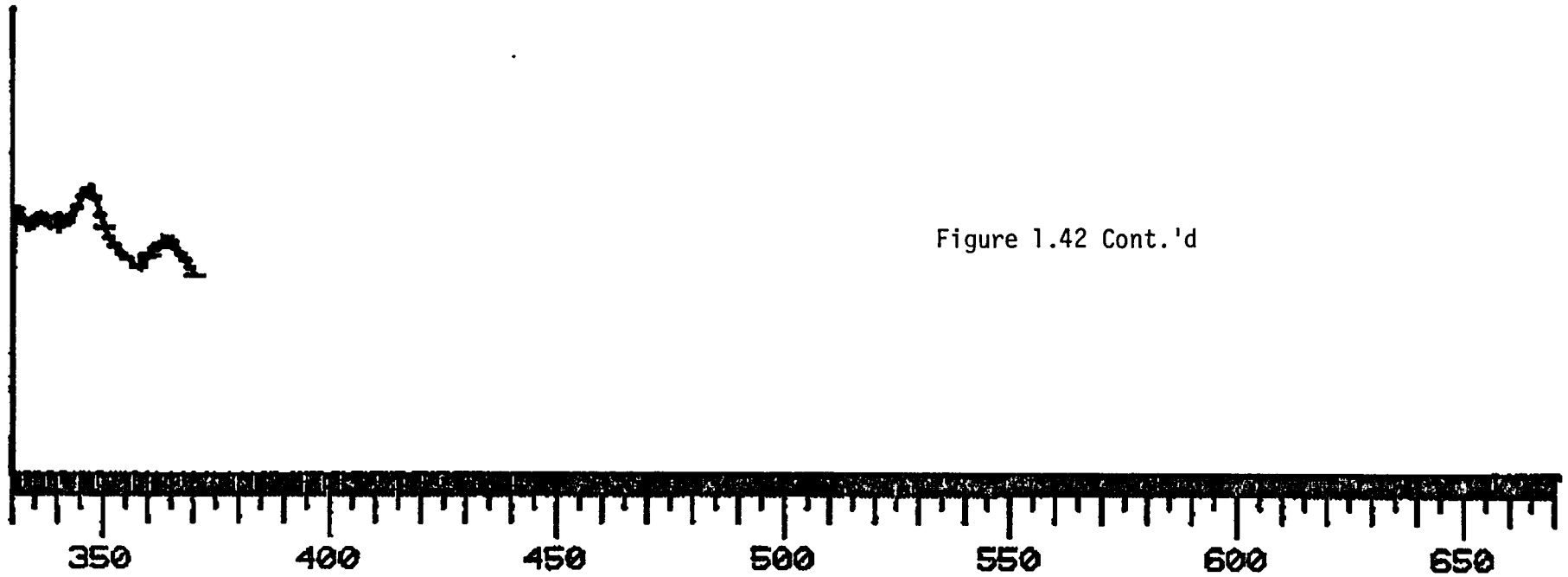


Figure 1.42 Cont.'d

SIGNFPK

GC ID BL 46 DATE 2/28/77
AQRATE 2 SCTIME 4 RESPWR 500
HIMASS 500 THRESH 8

AMJP-SED-HEX 1/II COMP 2/28/77 BL046

IGNORE 0, 0, 0, 0
MILOUT 850 HRDCPY YES

Figure 1.42 Cont.'d

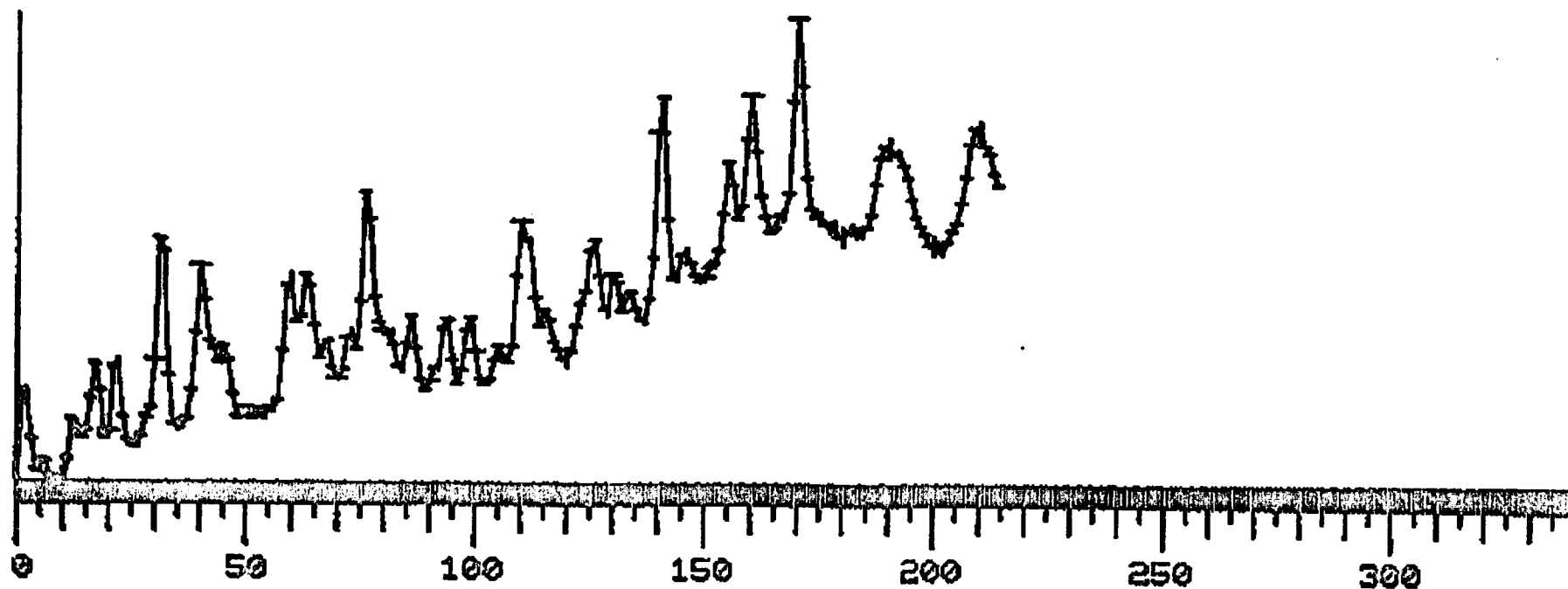
MASS	MAX INTN	FIRST OCCUR	SUM IONS *2** 9
43	1000	71	19584
55	1000	89	17563
57	1000	1	20313
69	1000	113	16221
95	950	364	13637
45	947	368	5443
41	923	134	14891
81	919	364	13167
111	906	170	10771
71	885	281	15600
83	863	109	13957
109	862	132	11425
191	857	364	3632

DRAW GC
GC ID BL 47 DATE 2/28/77
AQRATE 2 SCTIME 4 RESPWR 500
HIMASS 500 THRESH 8

AMJP-SED-BEN COMP 1/II 2/28/77 BL047

#SCANS 300 HRDCPY YES
%SCALE 100 REZERO YES
BASE 14321*2** 5

Figure 1.43



SIGNFPK
 GC ID BL 47 DATE 2/28/77
 AGRATE 2 SCTIME 4 RESPUR 500
 HIMASS 500 THRESH 8

AMJP-SED-BEN COMP 1/II 2/28/77 BL047

IGNORE 0, 0, 0, 0
 MILOUT 850 HRDCPY YES

Figure 1.43 Cont.'d

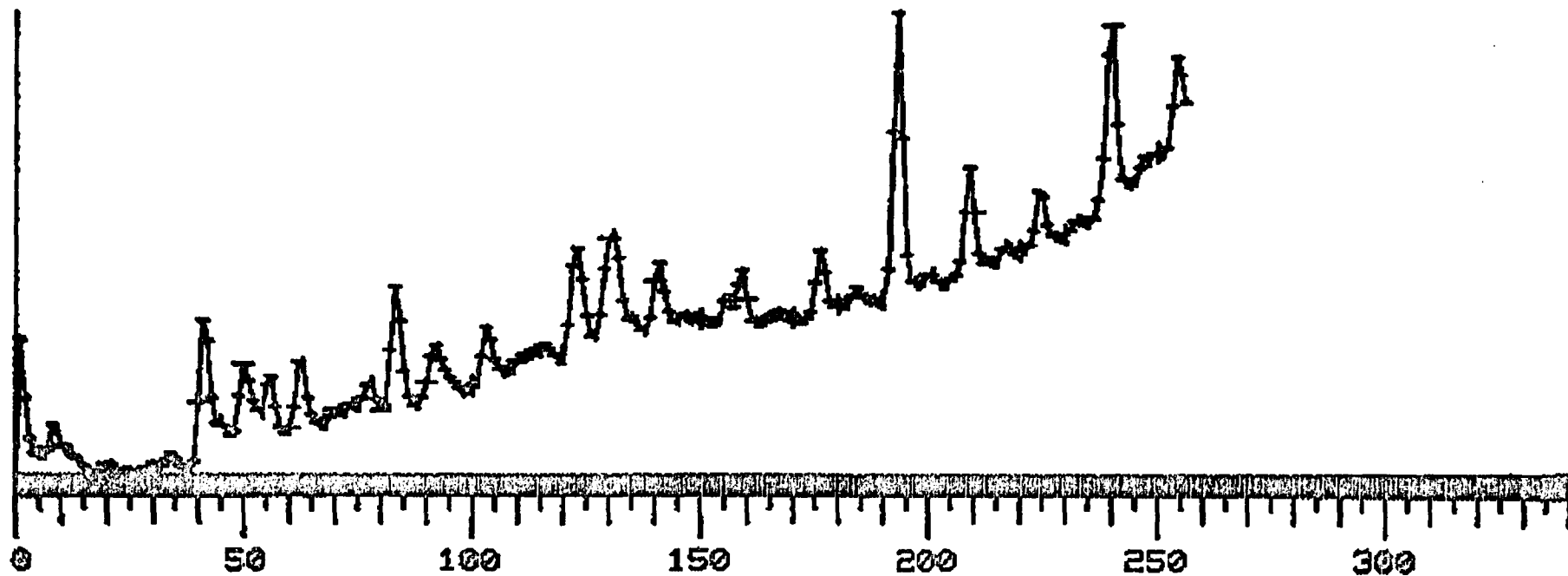
MASS	MAX INTN	FIRST OCCUR	SUM IONS *2** 7
43	1000	1	22368
45	1000	177	10917
55	1000	112	15960
57	1000	115	14498
85	1000	16	6080
152	1000	38	2110
178	1000	122	1827
202	1000	211	2168
74	938	43	2028
41	923	32	15328

DRAW GC
GC ID BL 48 DATE 2/28/77
AQRATE 2 SCTIME 4 RESPUR 500
HIMASS 500 THRESH 8

AMCL-SED-HEX 3/I 2/28/77 BL048

#SCANS 300 HRDCPY YES
%SCALE 100 REZERO YES
BASE 19688*2** 5

Figure 1.44



SIGNFPK
 GC ID BL 48 DATE 2/28/77
 AGRATE 2 SCTIME 4 RESPUR 500
 HIMASS 500 THRESH 8

AMCL-SED-HEX 3/I 2/28/77 BL048

IGNORE 0, 0, 0, 0
 MILOUT 850 HRDCPY YES

Figure 1.44 Cont.'d

MASS MAX FIRST SUM
 INTN OCCUR IONS *2** C
 *GO

IGNORED
 ?

*GO

IGNORED

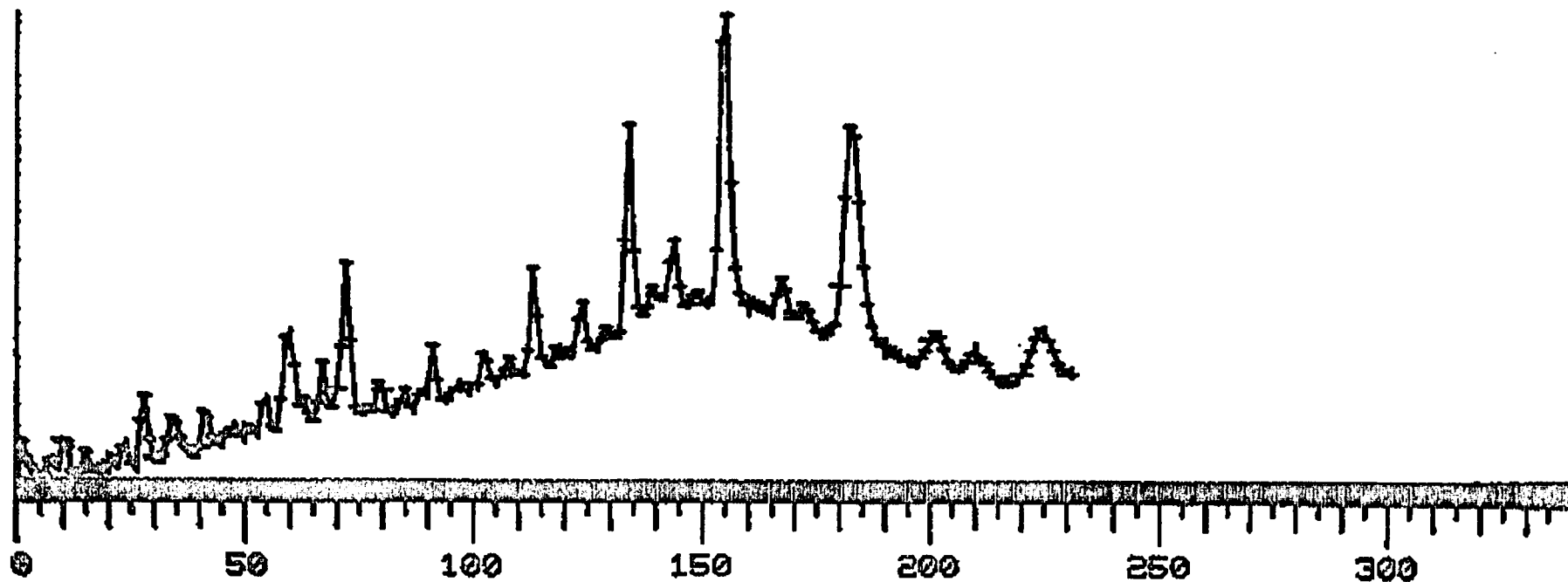
43	1000	207	28874
55	1000	118	24830
57	1000	1	31681
248	1000	124	1241
69	993	132	20971
83	863	130	16295
41	862	108	22114

DRAW GC
GC ID BL 49 DATE 3/ 3/77
AQRATE 2 SOTIME 4 RESPWR 500
HIMASS 500 THRESH .8

AMZS-SED-HEX 3/3/77 BL049

#SCANS 300 HRDCPY YES
%SCALE 100 REZERO YES
BASE 15658*2** 5

Figure 1.45



SIGNFPK
 GC ID BL 49 DATE 3/ 3/77
 AGRATE 2 SCTIME 4 RESPUR 500
 HIMASS 500 THRESH 8

AMZS-SED-HEX 3/3/77 BL049

IGNORE 0, 0, 0, 0
 MILOUT 850 HRDCPY YES

Figure 1.45 Cont.'d

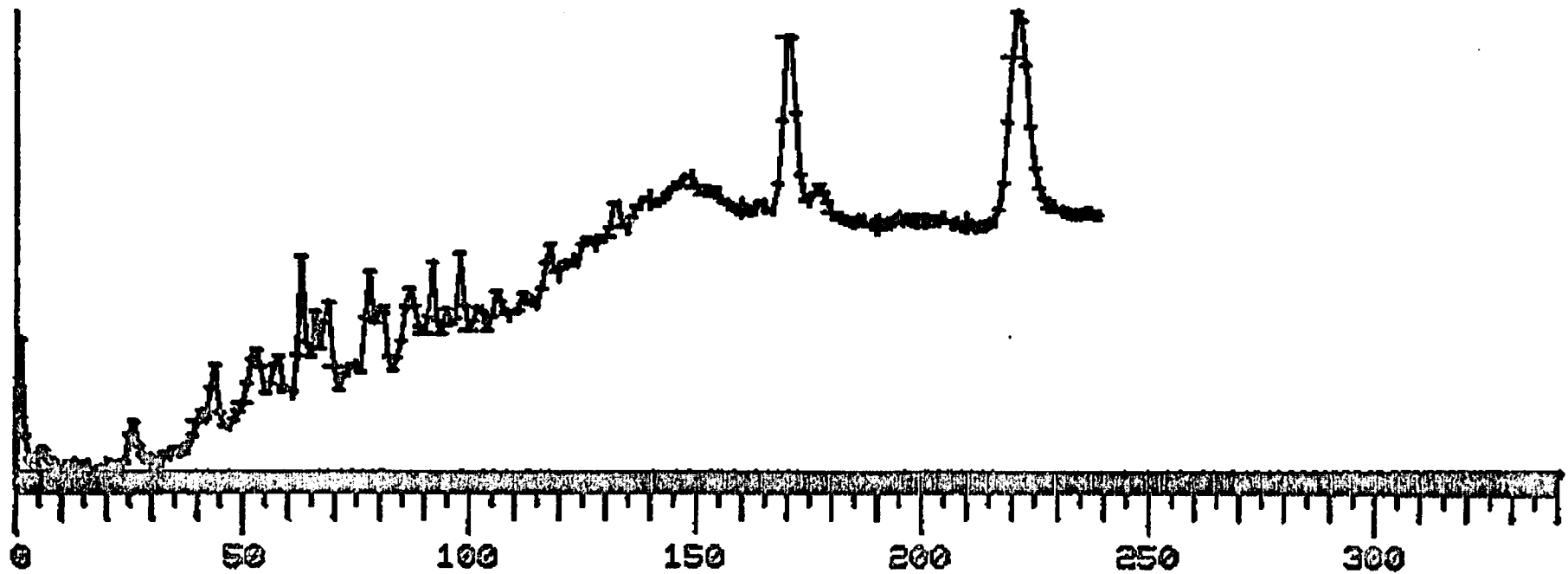
MASS	MAX INTN	FIRST OCCUR	SUM IONS *2** 7
43	1000	33	20857
45	1000	147	14338
55	1000	51	16231
57	1000	1	18807
191	1000	89	1514
69	975	59	13205
41	948	39	13795

DRAW GC
GC ID BL 50 DATE 3/ 3/77
AQRATE 2 SCTIME 4 RESPUR 500
HIMASS 500 THRESH 8

AKXJ-ZPL-BEN 3/3/77 BL050

#SCANS 300 HRDCPY YES
%SCALE 100 REZERO YES
BASE 16477*2** 3

Figure 1.46



SIGNFPK
 GC ID BL 50 DATE 3/ 3/77
 AORATE 2 SCTIME 4 RESPWR 500
 HIMASS 500 THRESH 8

AKXJ-ZPL-BEN 3/3/77 BL050

IGNORE 0, 0, 0, 0
 MILOLIT 850 HRDCPY YES

Figure 1.46: Cont.'d

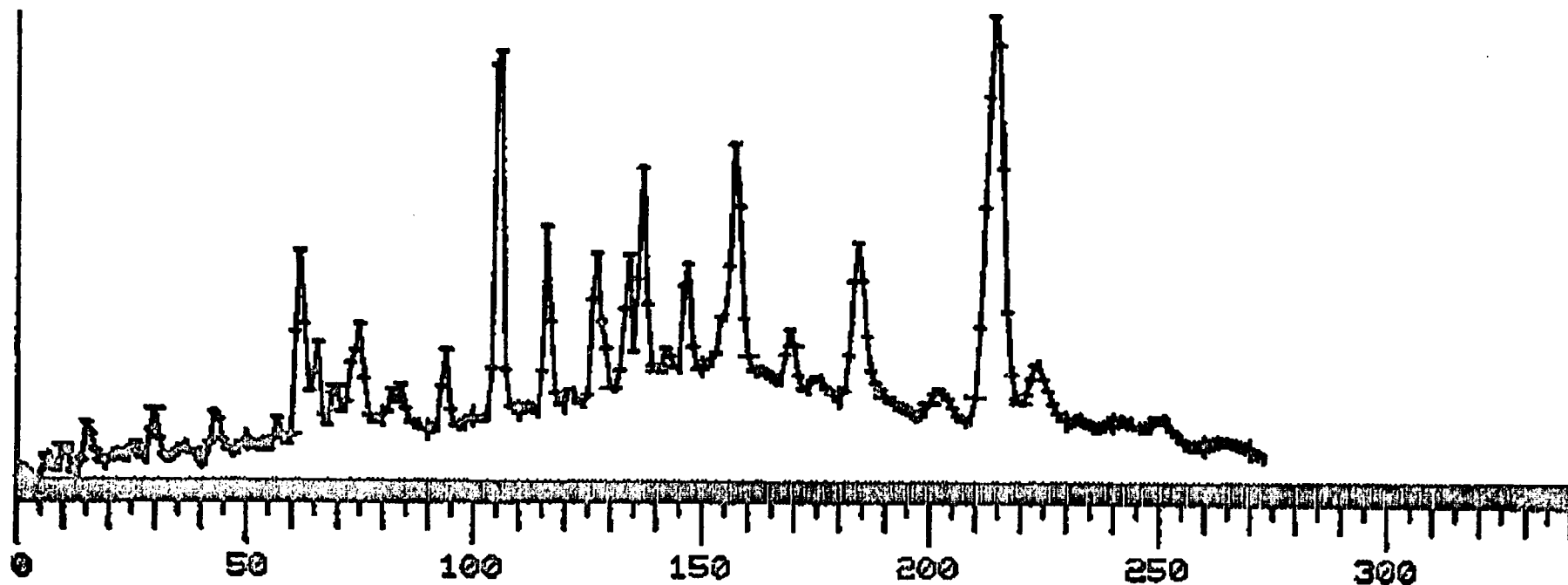
MASS	MAX INTN	FIRST OCCUR	SUM IONS	*2** 6
43	1000	4	16055	
45	1000	94	31063	
57	1000	1	8881	
74	1000	63	871	
127	948	98	1251	

DRAW GC
GC ID BL 55 DATE 3/25/77
AQRATE 2 SCTIME 4 RESPWR 500
HIMASS 500 THRESH 8

ASIS-SED-H HX BL055 3-25-77

#SCANS 300 HRDCPY YES
%SCALE 100 REZERO YES
BASE 29781*2** 5

Figure 1.47



SIGNFPK
 GC ID BL 55 DATE 3/25/77
 AORATE 2 SCTIME 4 RESPWR 500
 HIMASS 500 THRESH 8

ASIS--SED--H HX BL055 3-25-77

IGNORE 0, 0, 0, 0
 MILOUT 850 HRDCPY YES

Figure 1.47 Cont.'d

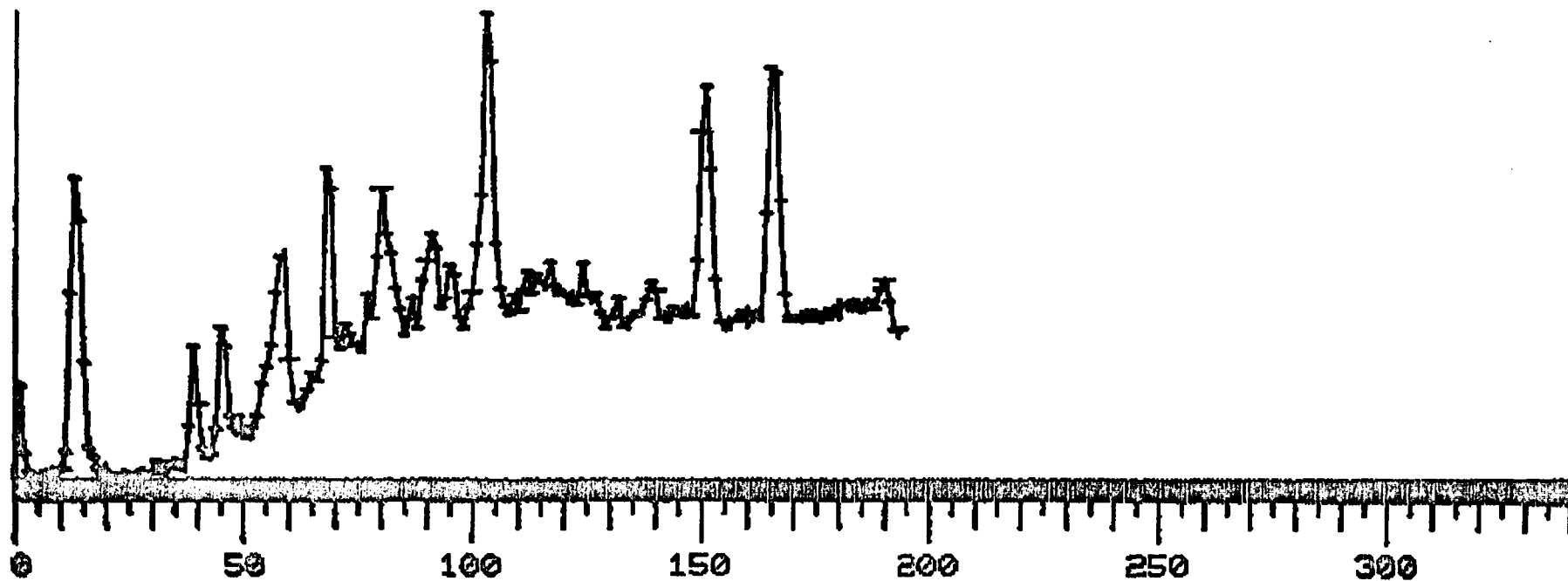
MASS	MAX INTN	FIRST OCCUR	SUM IONS *2** 7
41	1000	84	22047
43	1000	22	30998
45	1000	234	10679
55	1000	72	22606
57	1000	1	30381
69	1000	73	18538
149	1000	133	6590
255	1000	154	735
83	861	62	13121

DRAW GC
GC ID BL 56 DATE 3/25/77
AORATE 2 SOTIME 4 RESPWR 500
HIMASS 500 THRESH 8

ASIS-SED-BZ BL056 3-25-77

#SCANS 300 HRDCPY YES
%SCALE 100 REZERO YES
BASE 20401*2** 3

Figure 1.48



SIGNFPK
 GC ID BL 56 DATE 3/25/77
 AQRATE 2 SCTIME 4 RESPWR 500
 HIMASS 500 THRESH 8

ASIS-SED-BZ BL056 3-25-77

IGNORE 0, 0, 0, 0
 MILOUT 850 HRDCPY YES

Figure 1.48 Cont.'d

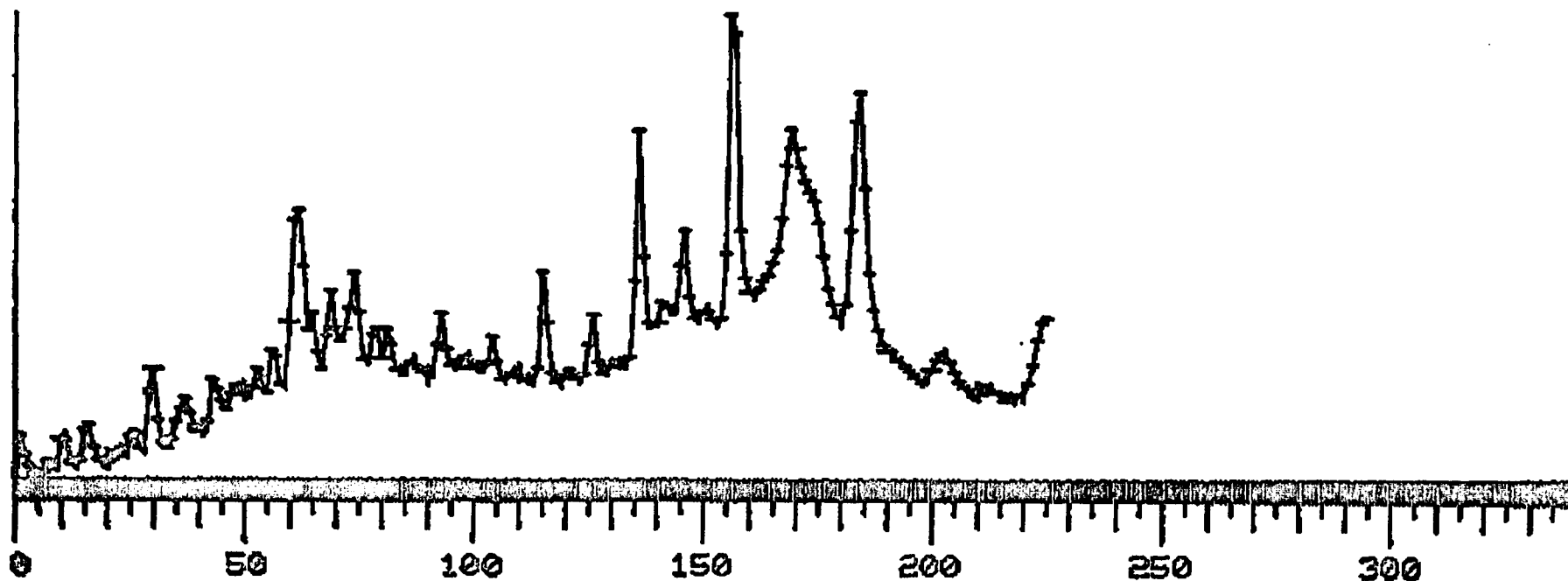
MASS	MAX INTN	FIRST OCCUR	SUM IONS *2** 5
43	1000	2	30425
45	1000	8	24511
55	1000	103	16265
57	1000	1	18309
69	1000	150	13454
85	1000	38	8352
155	1000	14	2484
205	1000	17	616
149	1000	109	3614
41	958	99	19633
215	942	101	1182
74	914	57	2091

DRAW GC
GC ID BL 57 DATE 3/25/77
AQRATE 2 SCTIME 4 RESPWR 500
HIMASS 500 THRESH 8

ATAJ-SED-HX BL057 3-25-77

#SCANS 300 HRDCPY YES
%SCALE 100 REZERO YES
BASE 25944*2** 3

Figure 1.49



SIGNFPK
 GC ID BL 57 DATE 3/25/77
 AGRATE 2 SCTIME 4 RESPWR 500
 HIMASS 500 THRESH 8

ATAJ-SED-HX BL057 3-25-77

IGNORE 0, 0, 0, 0
 MILOUT 850 HRDCPY YES

Figure 1.49 Cont.'d

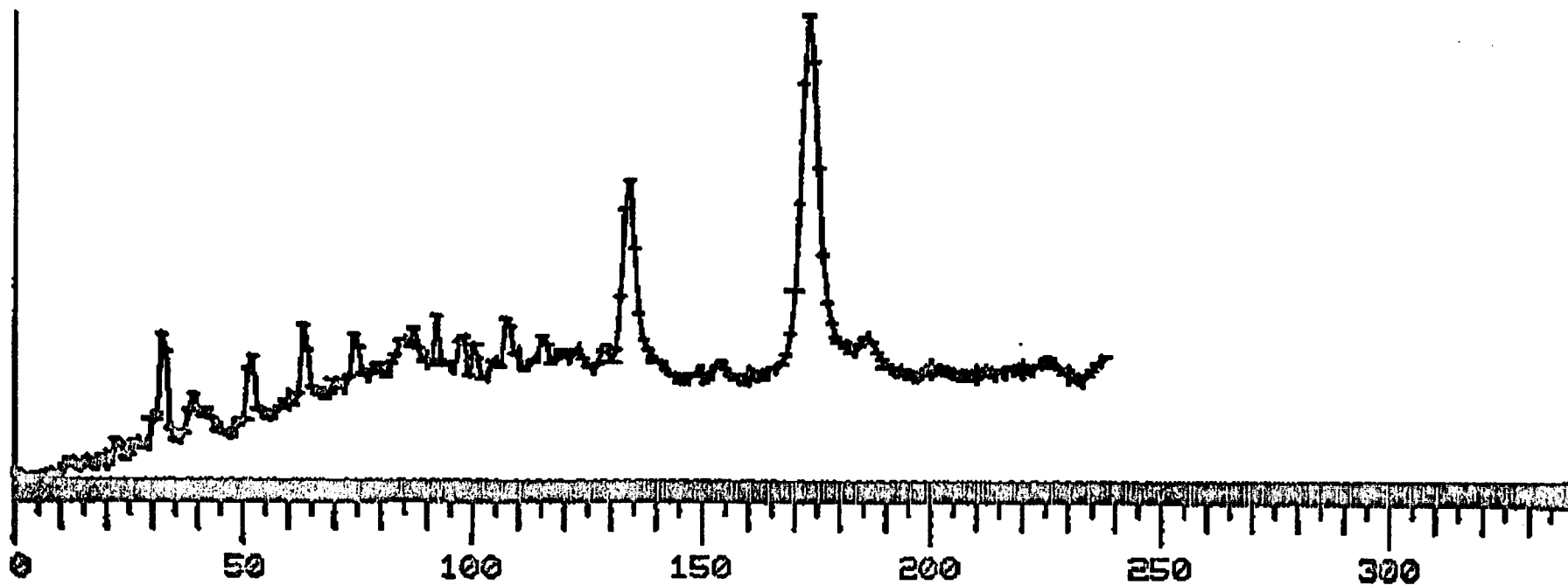
MASS	MAX INTN	FIRST OCCUR	SUM IONS *2** 6
43	1000	8	20503
45	1000	174	9877
55	1000	66	14567
57	1000	1	17151
41	974	47	13444
69	928	62	11486

DRAW GC
GC ID BL 58 DATE 3/25/77
AGRATE 2 SCTIME 4 RESPUR 500
HIMASS 500 THRESH 8

ATAJ-SED-BZ BL058 3-25-77

#SCANS 300 HRDCPY YES
%SCALE 100 REZERO YES
BASE 20715*2** 3

Figure 1.50



SIGNFPK
 GC ID BL 58 DATE 3/25/77
 AGRATE 2 SCTIME 4 RESPWR 500
 HIMASS 500 THRESH 8

ATAJ-SED-BZ BL058 3-25-77

IGNORE 0, 0, 0, 0
 MILOUT 850 HRDCPY YES

Figure 1.50 Cont.'d

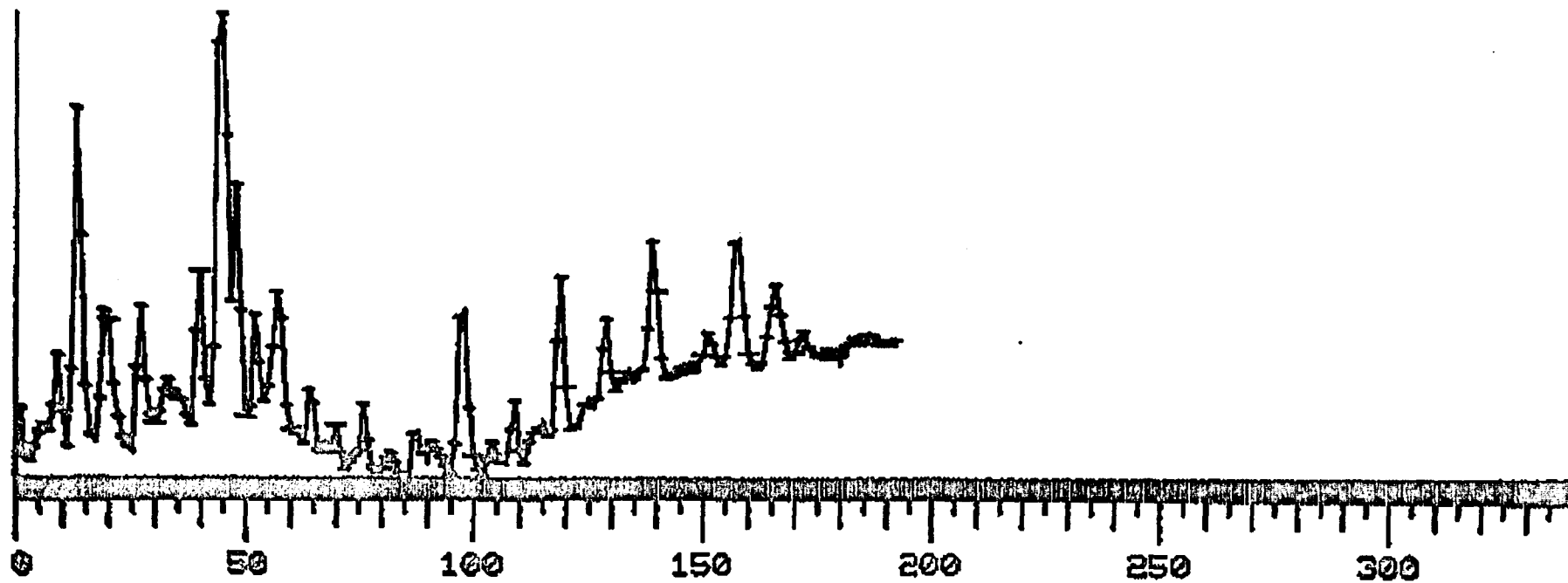
MASS	MAX INTN	FIRST OCCUR	SUM IONS *2** 5
41	1000	5	14530
43	1000	2	20087
45	1000	9	29488
55	1000	32	11439
69	1000	98	11472
85	1000	22	2914
149	1000	91	5309
205	1000	1	1069
167	892	28	890
57	880	74	11784

DRAW GC
GC ID BL 60 DATE 3/29/77
AQRATE 2 SCTIME 4 RESPWR 500
HIMASS 500 THRESH 8

ANOC-SED-IX 4/IV BL060 3-29-77

#SCANS 300 HRDCPY YES
%SCALE 100 REZERO YES
BASE 20262*2** 2

Figure 1.51



SJGMFFK
 GC ID BL 60 DATE 3/29/77
 AQRATE 2 SCTIME 4 RESPUR 500
 HIMASS 500 THRESH 8

ANOG-SED-HX 4/IV BLO60 3-29-77

Figure 1.51 Cont.'d

IGNORE 0, 0, 0, 0
 MILOUT 850 HRDCPY YES

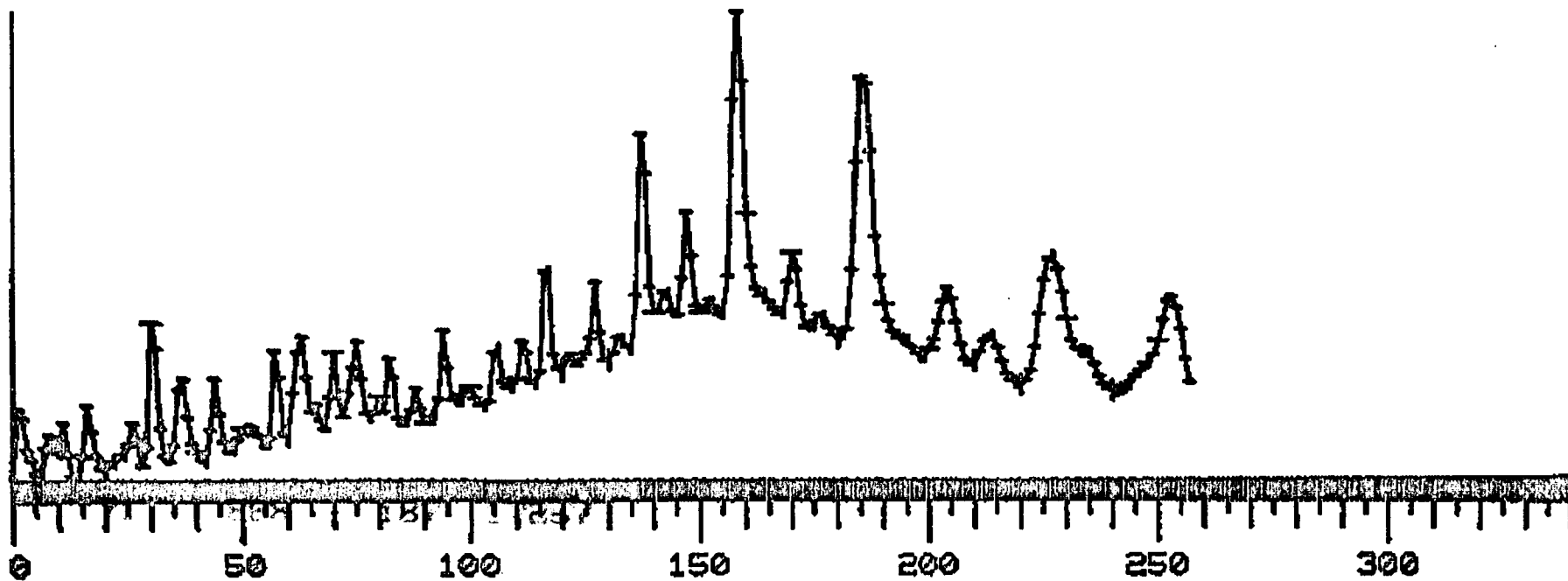
MASS	MAX INTN	FIRST OCCUR	SUM IONS *2** 5
43	1000	5	21060
45	1000	85	28807
55	1000	37	12903
57	1000	1	16145
69	993	45	10273
41	963	54	12427

DRAW GC
GC ID BL 61 DATE 3/29/77
AQRATE 2 SCTIME 4 RESPWR 500
HIMASS 500 THRESH 8

ANMK-SED-HX 3/IV BLO61 3-29-77

#SCANS 300 HRDCPY YES
%SCALE 100 REZERO YES
BASE 17914*2** 5

Figure 1.52



SIGNFPK
 GC ID BL 61 DATE 3/29/77
 AQRATE 2 SCTIME 4 RESPWR 500
 HIMASS 500 THRESH 8

ANMK-SED-HX 3/IV BL061 3-29-77

IGNORE 0, 0, 0, 0
 MILOUT 850 HRDCPY YES

Figure 1.52 Cont.'d

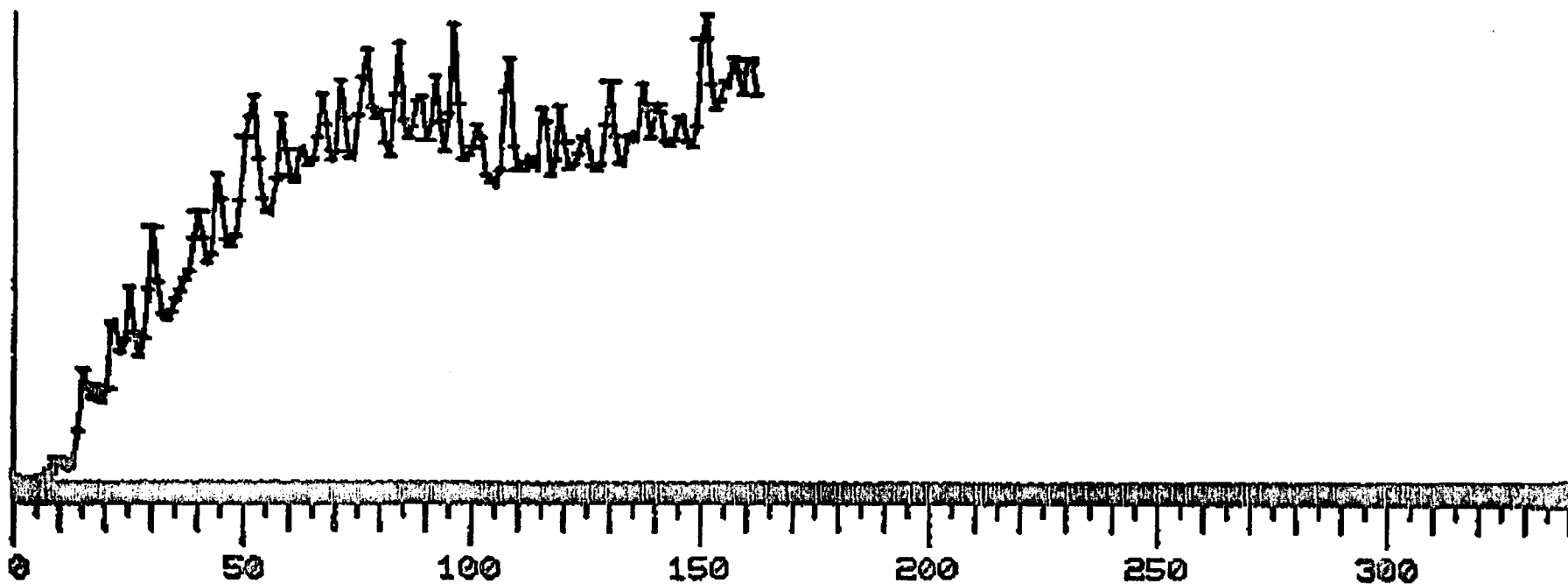
MASS	MAX INTN	FIRST OCCUR	SUM IONS *2** 7
43	1000	36	25406
45	1000	179	12159
55	1000	66	19470
57	1000	1	25744
69	969	74	16159
71	868	187	17257

DRAW GC
GC ID BL 62 DATE 3/29/77
AQRATE 2 SCTIME 4 RESPUR 500
HIMASS 500 THRESH 8

AMFX-SED-HX 5/I BL062 3-29-77

#SCANS 300 HRDCPY YES
%SCALE 100 REZERO YES
BASE B6051*2** 5

Figure 1.53



FILE

SIGNFPK

GC ID BL 62 DATE 3/29/77
AQRATE 2 SCTIME 4 RESPUR 500
HIMASS 500 THRESH 8

AMFX-SED-HX S/I . BL062 3-29-77

IGNORE 0, 0, 0, 0
MILOUT 850 HRDCPY YES

Figure 1.53 Cont.'d

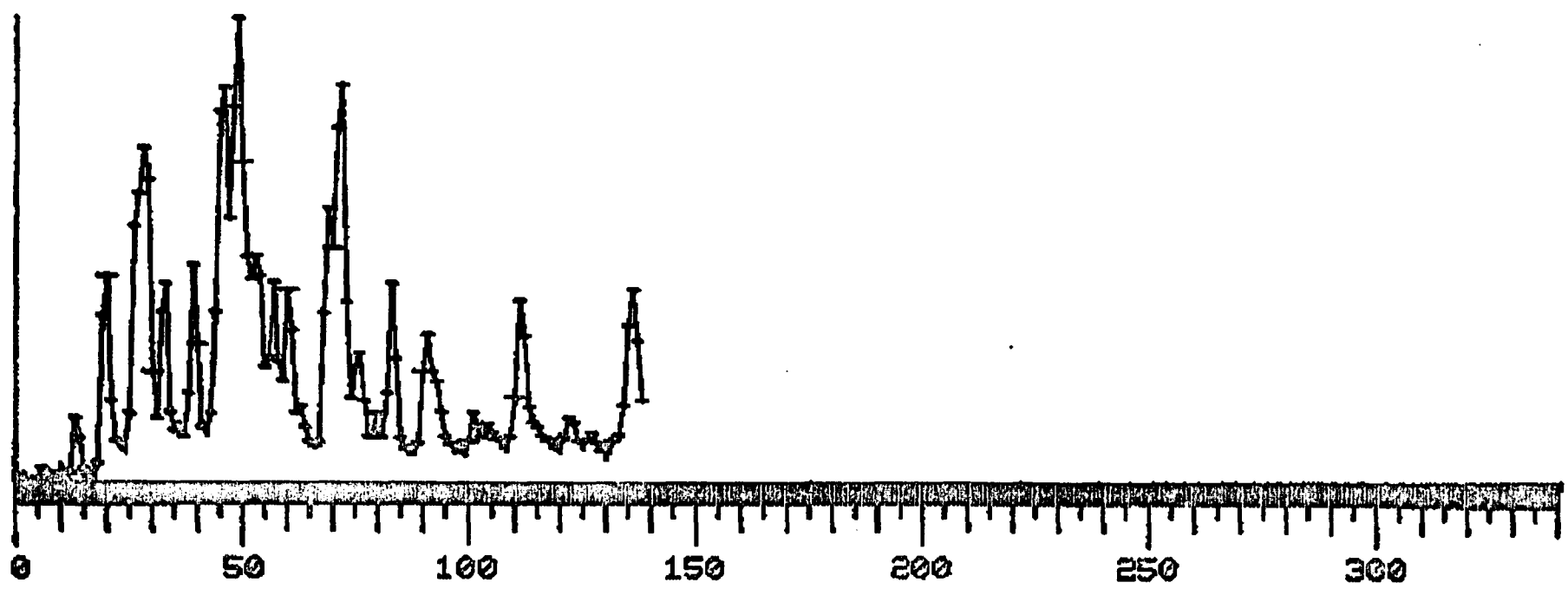
MASS	MAX INTN	FIRST OCCUR	SUM IONS *2** 8
43	1000	51	16431
57	1000	1	18573
55	986	88	13891
41	902	52	12929
69	888	87	12437
71	867	123	14246

DRAW GC
GC ID BL 63 DATE 3/31/77
AQRATE 2 SCTIME 4 RESPUR 500
HIMASS 500 THRESH 8

AMPI-SED-BZ 4/II BL063 3-31-77

Figure 1.54

#SCANS 300 HRDCPY YES
%SCALE 100 REZERO YES
BASE 19889*2** 6



SIGNFPK
 GC ID BL 63 DATE 3/31/77
 AORATE 2 SCTIME 4 RESPWR 500
 HIMASS 500 THRESH 8

AMPI-SED-BZ 4/II BL063 3-31-77

IGNORE 0, 0, 0, 0
 MILOUT 850 HRDCPY YES

Figure 1.54 Cont.'d

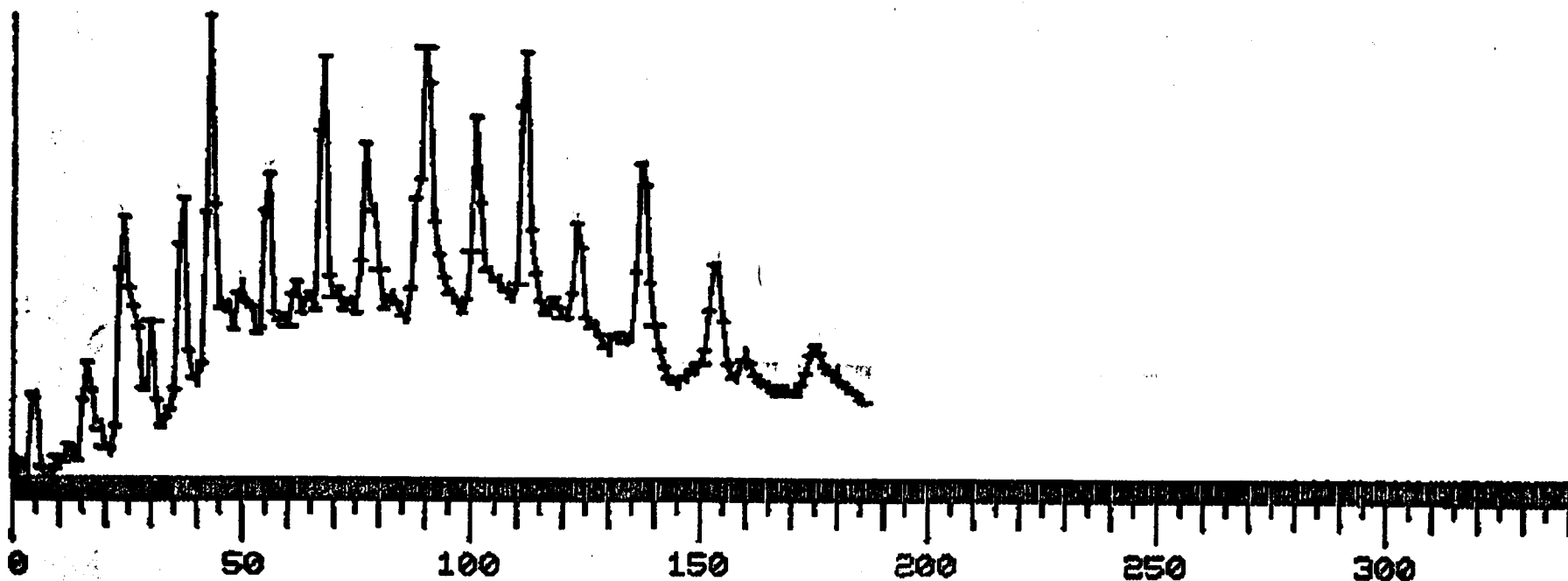
MASS	MAX INTN	FIRST OCCUR	SUM IONS *2** 7
43	1000	3	19968
45	1000	107	5545
55	1000	61	15578
57	1000	3	13338
73	1000	9	2744
74	1000	1	20719
205	1000	6	324
178	985	102	614
87	934	137	16942
41	891	82	14191

DRAW GC
GC ID BL 64 DATE 3/31/77
AQRATE 2 SCTIME 4 RESPUR 500
HIMASS 500 THRESH 8

ANTH-SED-BZ 7/IV BL064 3-31-77

#SCANS 300 HRDCPY YES
%SCALE 100 REZERO YES
BASE 17100*2** 4

Figure 1.55



SIGNFPK

GC ID BL 64 DATE 3/31/77
AORATE 2 SCTIME 4 RESPUR 500
HIMASS 500 THRESH 8

ANTH-SED-BZ 7/IV BL064 3-31-77

IGNORE 0, 0, 0, 0
MILOUT 850 HRDCPY YES

Figure 1.55 Cont.'d

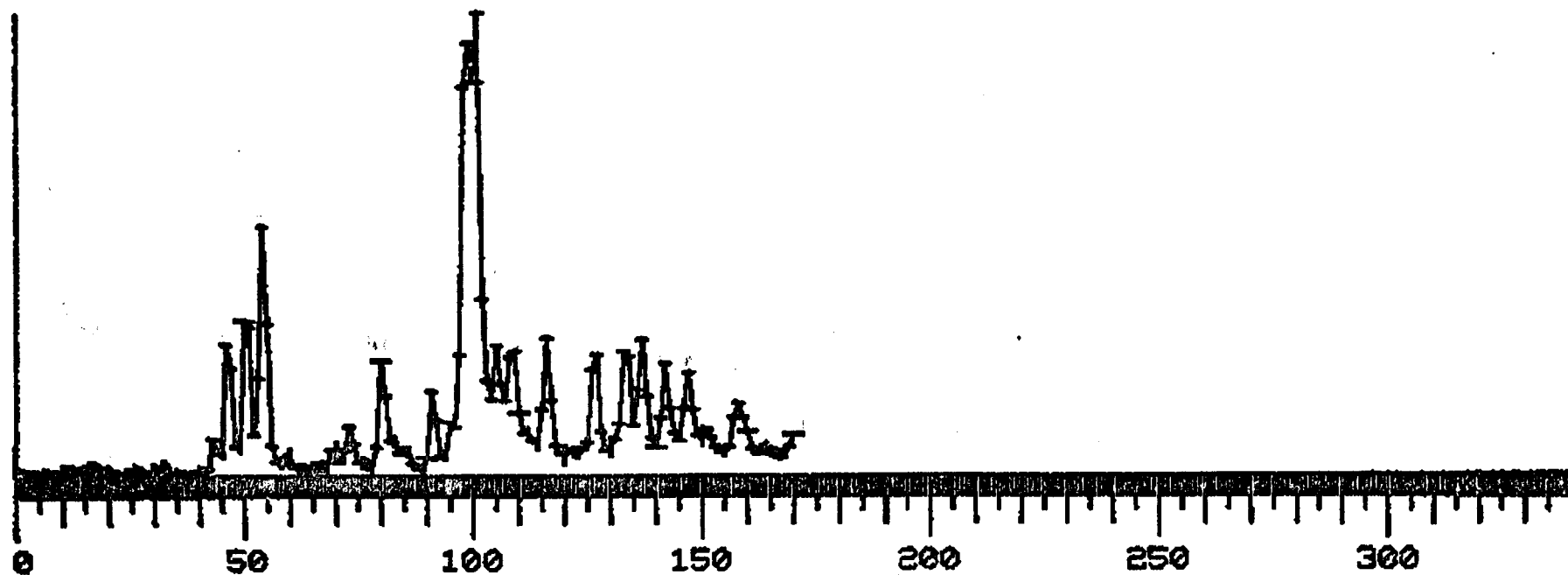
MASS	MAX INTN	FIRST OCCUR	SUM IONS *2** 6
43	1000	2	21948
45	1000	81	24882
55	1000	88	13794
57	1000	1	12531
85	1000	26	3789
156	1000	23	3076
178	1000	102	2257
205	1000	4	1930
41	981	59	15011
97	924	77	7937
145	898	40	3783
141	876	23	3592

DRAW GC
GC ID BL 66 DATE 4/ 1/77
AGRATE 2 SCTIME 4 RESPUR 500
HIMASS 500 THRESH 8

AUSG-ZPL-BZ BL066 4-1-77

#SCANS 300 HRDCPY YES
%SCALE 100 REZERO YES
BASE 20799*2** 6

Figure 1.56



SIGNFFK

GC ID BL 66 DATE 4/ 1/77
AORATE 2 SCTIME 4 RESPUR 500
HIMASS 500 THRESH 8

AVSG-ZPL-BZ BL066 4-1-77

IGNORE 0, 0, 0, 0
MILOUT 850 HRDCPY YES

Figure 1.56 Cont.'d

MASS MAX FIRST SUM
INTN OCCUR IONS *2** 6

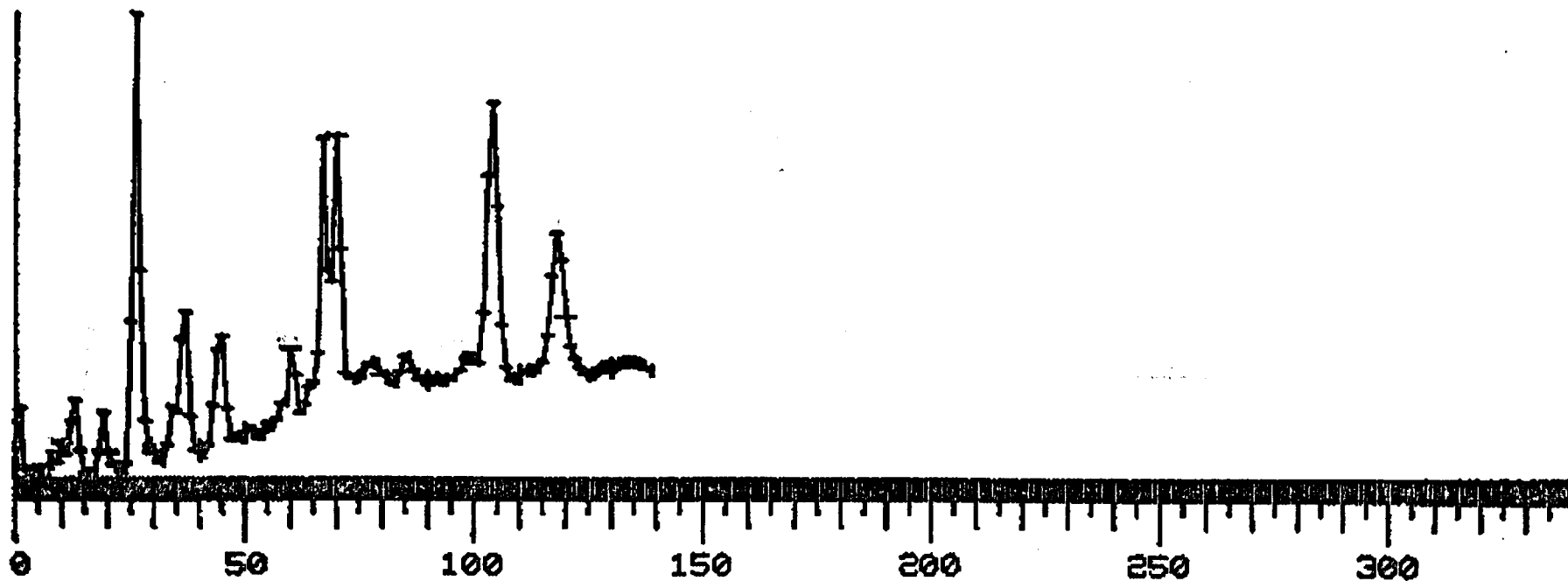
41	1000	62	22658	67	926	108	11784
43	1000	31	22241	117	894	12	5261
45	1000	1	13329	71	862	127	12390
57	1000	48	19616	95	861	51	8814
68	1000	46	5992	174	858	26	1160
69	1000	85	12914				
79	1000	91	12878				
81	1000	51	9992				
82	1000	52	6563				
85	1000	64	7857				
104	1000	11	3322				
118	1000	15	2642				
131	1000	26	4091				
149	1000	132	4095				
205	1000	42	1479				
167	990	71	1004				
91	955	113	10284				

DRAW GC
GC ID BL 67 DATE 4/ 1/77
AQRATE 2 SCTIME 4 RESPWR 500
HIMASS 500 THRESH 8

AGQY-ZPL-BZ 3/III BL067 4-1-77

#SCANS 300 HRDCPY YES
%SCALE 100 REZERO YES
BASE 15254*2** 4

Figure 1.57



SIGNFPK

GC ID BL 67 DATE 4/ 1/77
AGRATE 2 SCTIME 4 RESPUR 500
HIMASS 500 THRESH 8

AGQY-ZPL-BZ 3/III BL067 4-1-77

IGNORE 0, 0, 0, 0
MILOUT 850 HRDCPY YES

Figure 1.57 Cont.'d

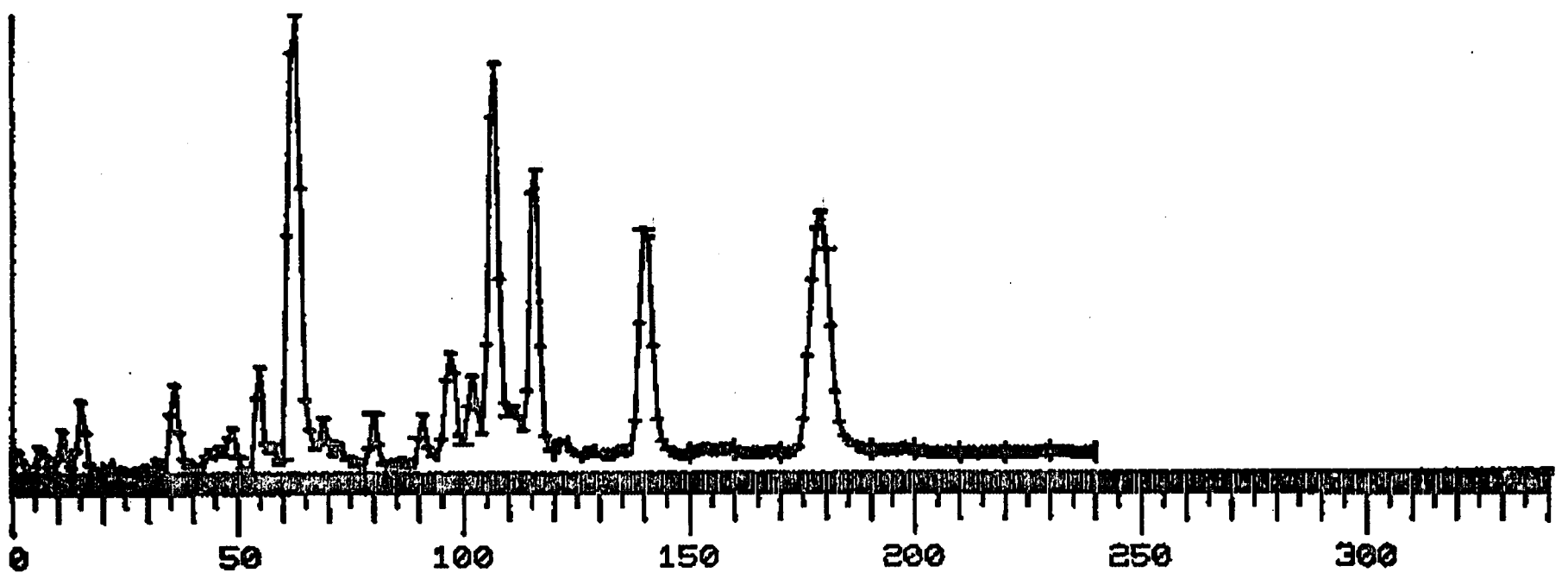
MASS	MAX INTN	FIRST OCCUR	SUM IONS *2** 6
41	1000	25	6741
43	1000	10	8419
45	1000	2	18026
69	1000	1	6223
79	1000	26	2595
149	1000	118	1622
191	1000	19	649
231	1000	35	317
74	940	10	701

DRAW GC
GC ID BL 68 DATE 4/ 1/77
AQRATE 2 SOTIME 4 RESPWR 500
HIMASS 500 THRESH 8

AQEA-SED-BZ BL068 4-1-77

#SCANS 300 HRDCPY YES
%SCALE 100 REZERO YES
BASE 18305*2** 6

Figure 1.58



SIGNFPK
 GC ID BL 68 DATE 4/ 1/77
 AGRATE 2 SCTIME 4 RESPUR 500
 HIMASS 500 THRESH 8

AGEA-SED-BZ BLO68 4-1-77

IGNORE 0, 0, 0, 0
 MILOUT 850 HRDCPY YES

Figure 1.58 Cont.'d

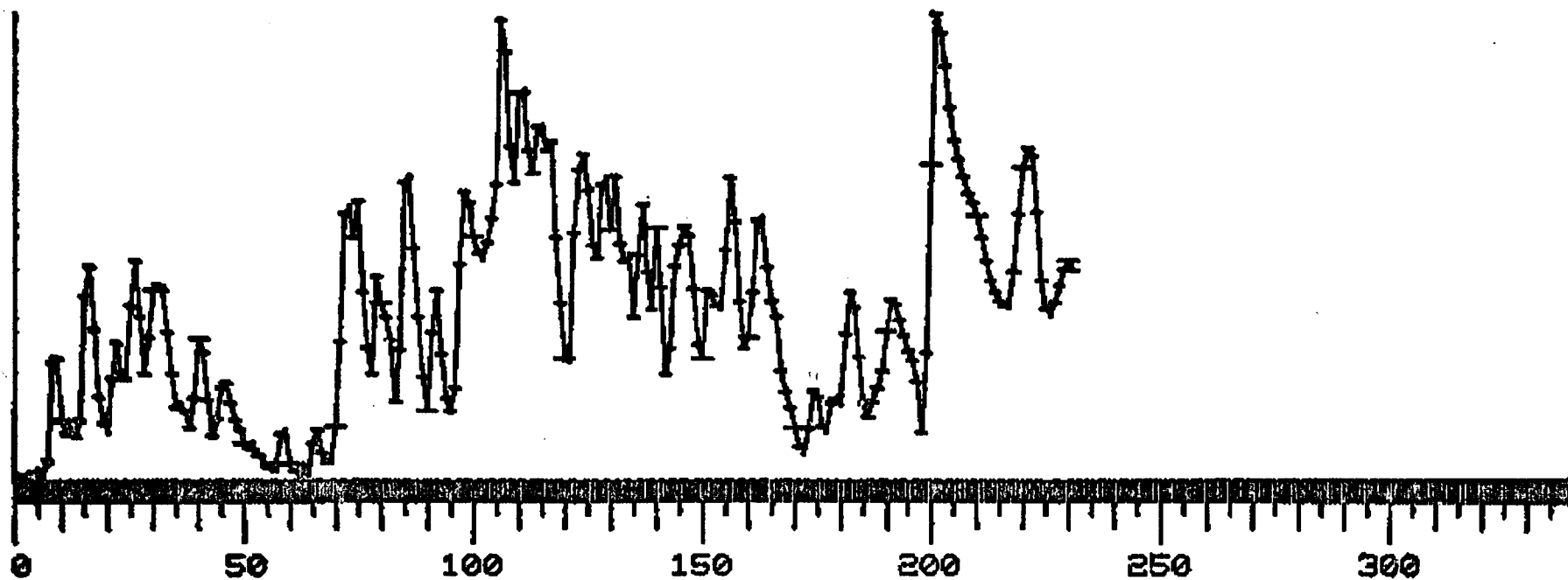
MASS	MAX INTN	FIRST OCCUR	SUM IONS *2** 7
41	1000	31	11780
43	1000	4	10603
45	1000	26	17034
57	1000	58	7813
69	1000	36	9974
79	1000	54	4734
81	1000	15	6659
119	1000	102	3726
149	1000	97	6054
205	1000	1	1122
82	928	11	2729
68	907	6	2472
74	895	46	666
55	885	96	7592
85	865	27	1652

DRAW GC
GC ID BL 69 DATE 4/ 1/77
AQRATE 2 SCTIME 4 RESPUR 500
HIMASS 500 THRESH 8

AGDT-ZPL-BZ BL069 4-1-77

#SCANS 300 HRDCPY YES
%SCALE 100 REZERO YES
BASE 16225*2** 7

Figure 1.59



SIGNFPK

GC ID BL 69 DATE 4/ 1/77
AORATE 2 SCTIME 4 RESPUR 500
HIMASS 500 THRESH 8

AGDT-ZPL-BZ BL069 4-1-77

IGNORE 0, 0, 0, 0
MILOUT 850 HRDCPY YES

Figure 1.59 Cont.'d

MASS	MAX INTN	FIRST OCCUR	SUM IONS *2** 8	SEQUEN	196	PAGE	2
41	1000	57	23337	81	952	133	12300
43	1000	56	22952	129	944	33	7603
55	1000	106	22265	57	925	143	14066
67	1000	131	15538	188	924	46	1252
74	1000	44	19878	80	881	182	8097
79	1000	137	14219	160	873	28	3605
104	1000	7	8301	145	866	45	5881
105	1000	1	11741				
117	1000	4	10491				
118	1000	21	7505				
131	1000	41	8644				
143	1000	48	8021				
174	1000	40	3554				
156	1000	68	628				
87	973	123	15764				
91	964	214	15236				
119	958	4	8582				

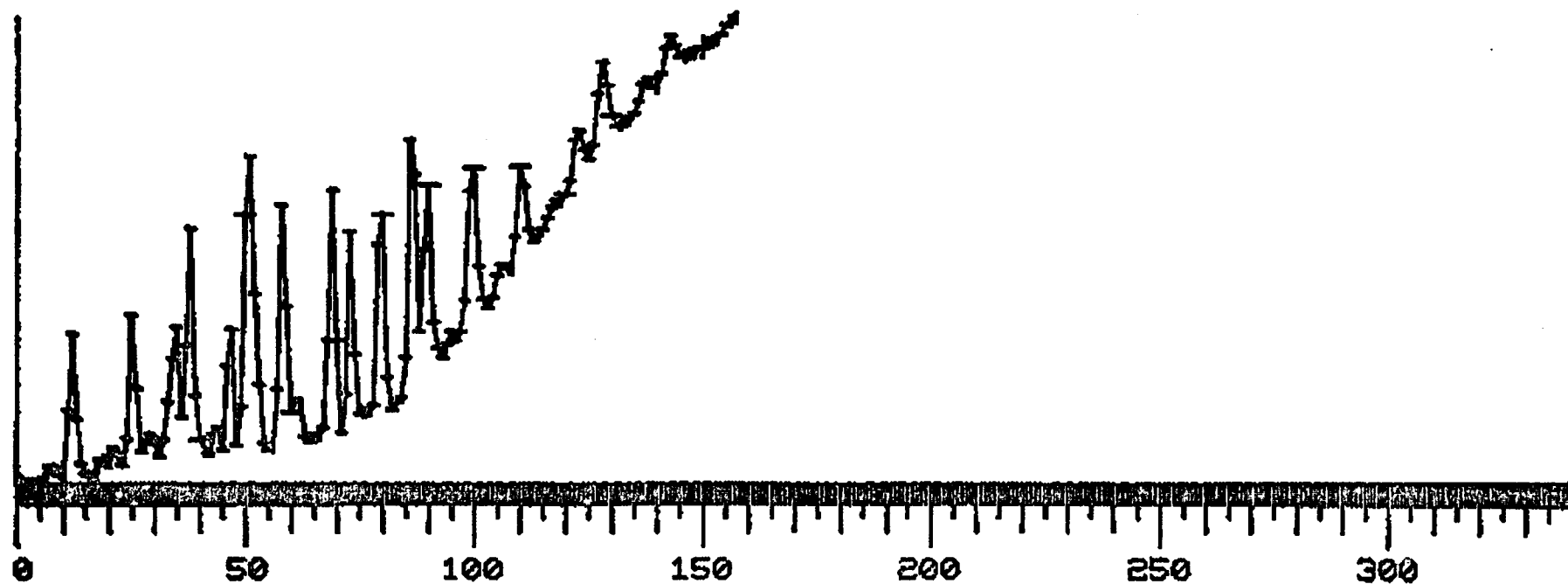
DRAW GC

GC ID BL 73 DATE 4/ 4/77
AQRATE 2 SCTIME 4 RESPWR 500
HIMASS 500 THRESH 8

AQQN-ZPL-BENZ BL073 4-4-77

#SCANS 300 HRDCPY YES
%SCALE 100 REZERO YES
BASE 24879*2** 4

Figure 1.60



SIGNPK
 GC ID BL 73 DATE 4/ 4/77
 AGRATE 2 .SCTIME 4 RESPUR 500
 HIMASS 500 THRESH 8

AGQN-ZPL-BENZ BL073 4-4-77

IGNORE 0, 0, 0, 0
 MILOUT 850 HRDCPY YES

Figure 1.60 Cont.'d

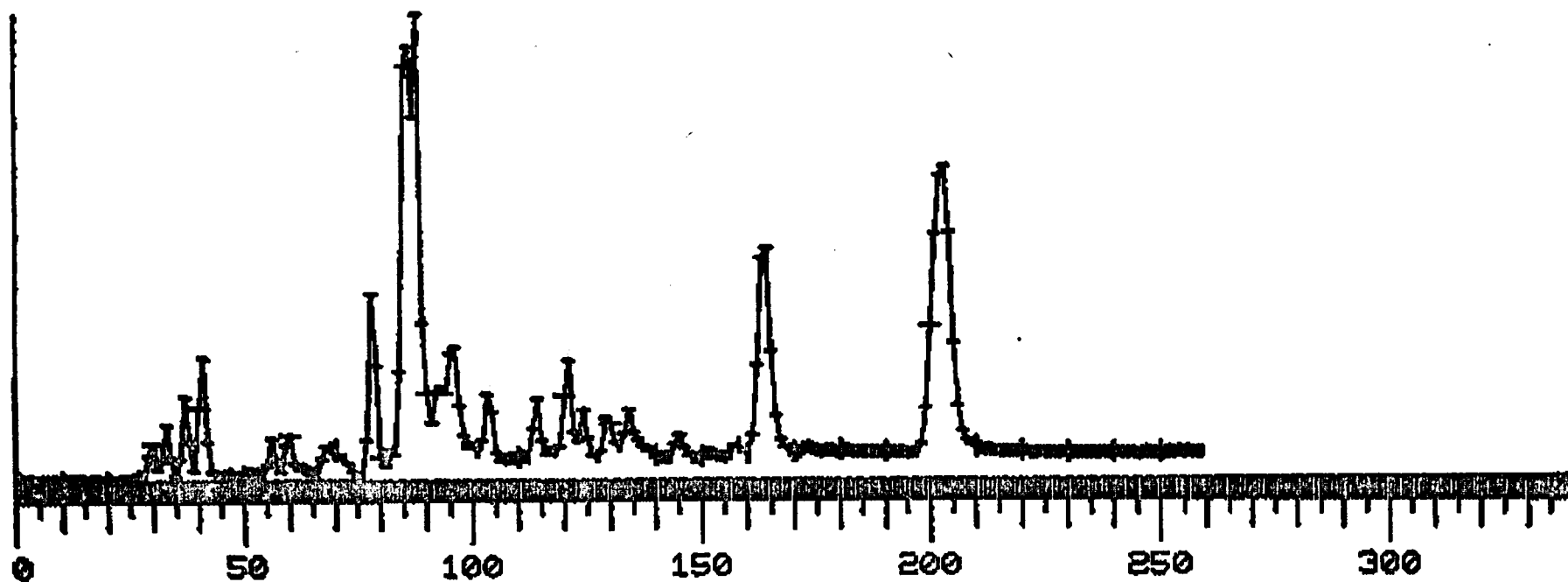
MASS	MAX INTN	FIRST OCCUR	SUM IONS *2** 6
41	1000	43	19005
43	1000	7	28274
45	1000	1	20598
57	1000	19	23593
74	1000	35	2441
79	1000	51	10077
149	1000	85	4542
55	981	52	18962
87	884	73	5687

DRAW GC
GC ID BL 74 DATE 4/ 4/77
AQRATE 2 SCTIME 4 RESPUR 500
HIMASS 500 THRESH 8

AQVK-ZPL-BZ BL074 4-4-77

#SCANS 300 HRDCPY YES
%SCALE 100 REZERO YES
BASE 20238*2** 6

Figure 1:61



SIGNFPK

GC ID BL 74 DATE 4/ 4/77
AQRATE 2 .SCTIME 4 RESPUR 500
HIMASS 500 THRESH 8

AGUK-ZPL-BZ BL074 4-4-77

IGNORE 0, 0, 0, 0
MILOUT 850 HRDCPY YES

Figure 1.61 Cont.'d

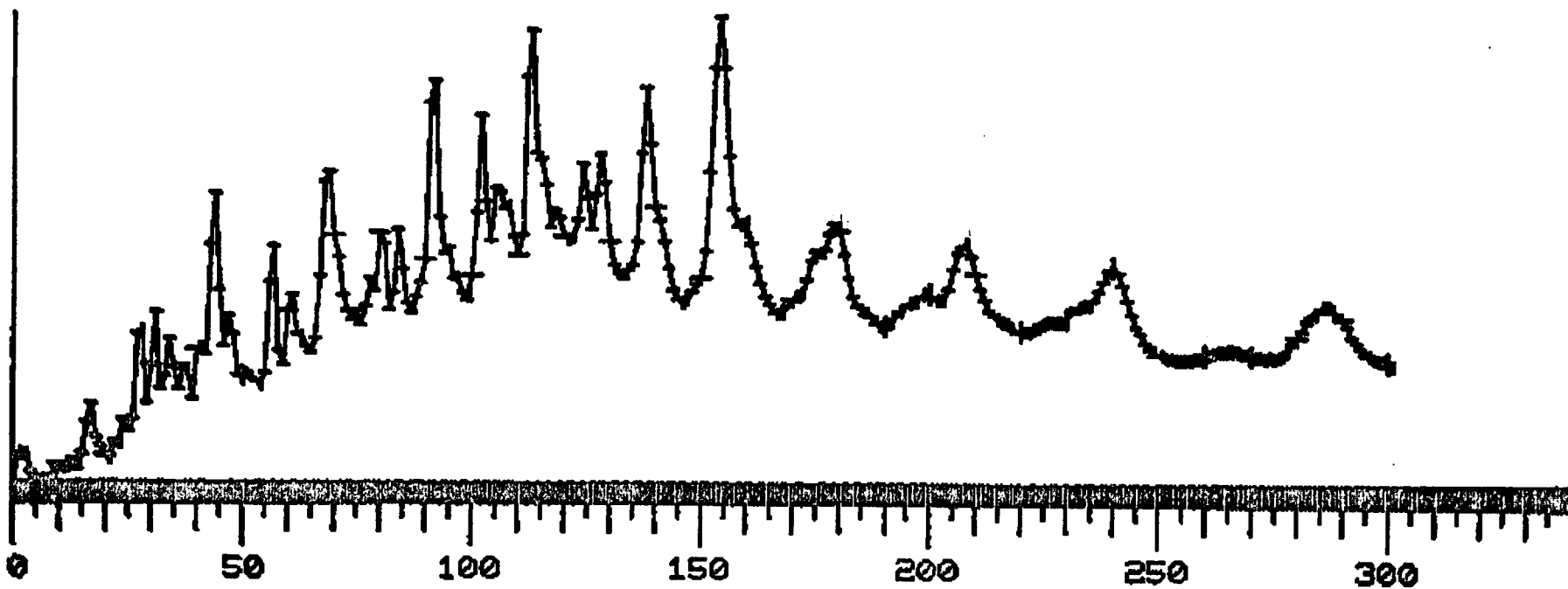
MASS	MAX INTN	FIRST OCCUR	SUM IONS *2** 6	SEQUEN	200	PAGE	2
41	1000	21	26247	253	903	64	473
43	1000	3	24222	221	899	51	647
45	1000	126	24136	55	886	60	17698
57	1000	8	19551	91	858	99	10983
68	1000	33	5675				
69	1000	129	15159				
73	1000	51	5381				
79	1000	56	13250				
81	1000	37	11050				
85	1000	52	4708				
149	1000	120	11361				
159	1000	1	2184				
205	1000	29	2433				
247	1000	27	236				
67	956	96	12577				
74	952	69	1664				
82	931	37	5253				

DRAW GC
GC ID BL 75 DATE 4/ 4/77
AGRATE 2 SCTIME 4 RESPWR 500
HIMASS 500 THRESH 8

AMRA-SED-BZ BL075 LOW ION VOLT 4-4-77

#SCANS 300 HRDCPY YES
%SCALE 100 REZERO YES
BASE 18916*2** 5

Figure 1.61



SIGNFPK
 GC ID BL 75 DATE 4/ 4/77
 AGRATE 2 SCTIME 4 RESPWR 500
 HIMASS 500 THRESH 8

AMRA-SED-BZ BL075 LOW ION VOLT 4-4-77

IGNORE 0, 0, 0, 0
 MILOUT 850 HRDCPY YES

Figure 1.62: Cont.'d

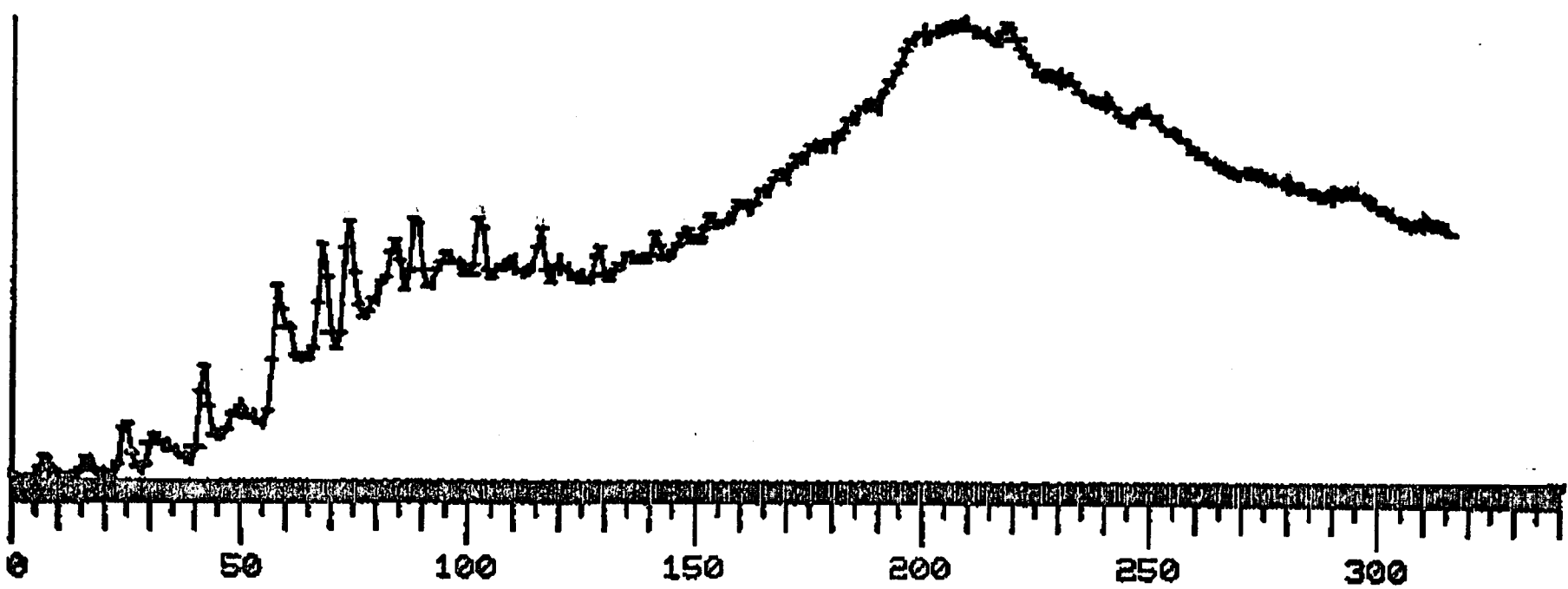
MASS	MAX INTN	FIRST OCCUR	SUM IONS *2** 7
43	1000	4	31779
45	1000	165	19353
55	1000	93	21132
57	1000	1	25757
85	1000	26	11625
149	1000	152	4046
178	1000	102	2214
202	1000	160	2762
206	1000	132	1764
192	1000	119	2036
97	987	92	12941
71	879	44	18891

DRAW GC
GC ID BL 77 DATE 5/26/77
AQRATE 2 SCTIME 4 RESPWR 500
HIMASS 500 THRESH 8

BDST SED HEX POST-RIG 5/26/77

#SCANS 300 HRDCPY YES
%SCALE 100 REZERO YES
BASE 22471*2** 5

Figure 1.63



SIGNFPK

GC ID BL 77 DATE 5/26/77
AGRATE 2 SCTIME 4 RESPUR 500
HIMASS 500 THRESH 8

BDST SED HEX POST-RIG 5/26/77

IGNORE 0, 0, 0, 0
MILOUT 850 HRDCPY YES

Figure 1.63 Cont.'d

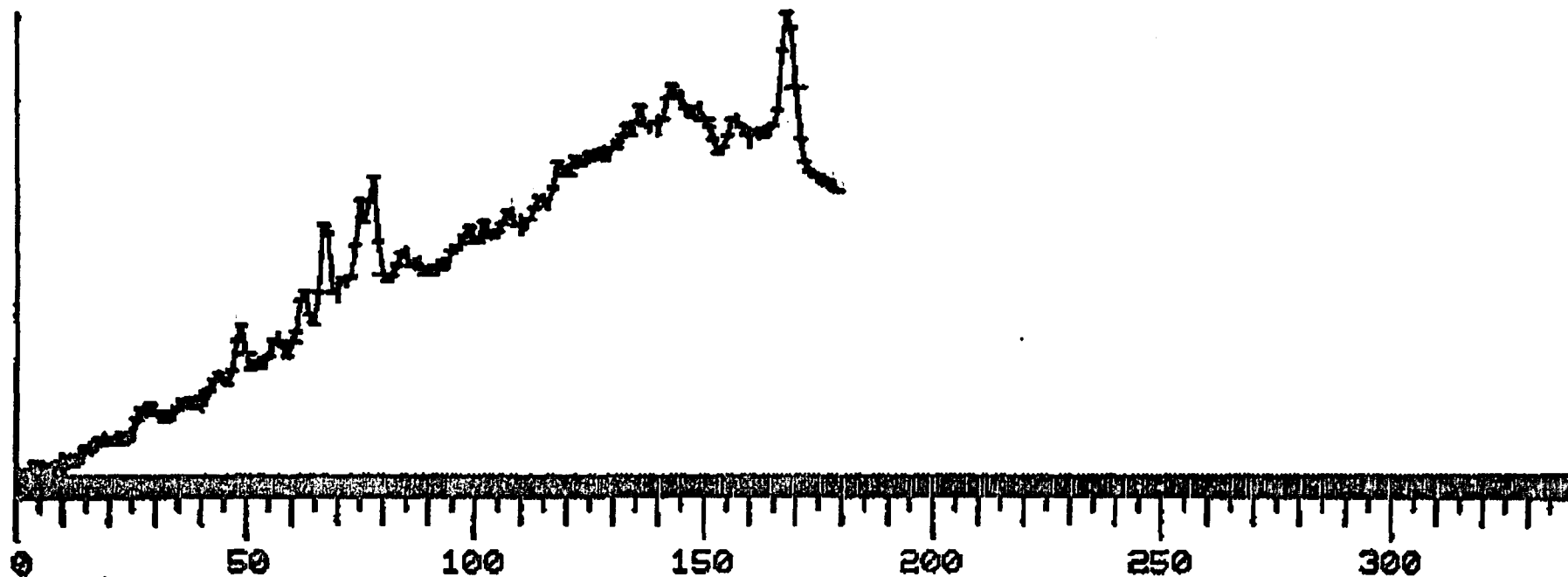
MASS	MAX INTN	FIRST OCCUR	SUM IONS *2** 8
43	1000	3	24860
45	1000	307	8888
57	1000	1	23515
41	981	2	19236
55	979	107	19822
69	921	105	16669

DRAW GC
GC ID AA 6 DATE 4/28/77
AQRATE 2 SCTIME 4 RESPWR 500
HIMASS 500 THRESH 3

BLM INTERCALIB. STD SEDIMENT 1B-2

#SCANS 300 HRDCPY YES
%SCALE 100 REZERO YES
BASE 22035*2** 6

Figure 1.64



SIGNFPK
 GC ID AA 6 DATE 4/23/77
 AGRATE 2 SCTIME 4 RESPUR 500
 HIMASS 500 THRESH 8

BLM INTERCALIB. STD SEDIMENT 1B-2

IGNORE 0, 0, 0, 0
 MILOUT 850 HRDCPY YES

Figure 1.64 Cont.'d

MASS	MAX INTN	FIRST OCCUR	SUM IONS *2** 7	SEQUEN	210	PAGE	2
41	1000	6	19380	173	1000	36	8369
43	1000	2	20120	178	1000	132	5501
45	1000	151	12963	179	1000	119	6987
55	1000	77	16571	192	1000	144	3724
57	1000	1	14284	206	1000	162	3292
69	1000	117	14248	246	1000	167	2592
74	1000	75	3029	318	1000	168	1637
105	1000	28	12284	182	982	74	3818
119	1000	11	16615	183	978	93	7823
141	1000	52	10408	195	966	113	6872
145	1000	19	14680	193	948	134	6082
155	1000	56	11652	168	943	61	3701
156	1000	44	8008	133	940	27	13141
159	1000	3	12530	181	931	97	6543
165	1000	107	9301	194	922	120	3564
169	1000	73	10799	143	909	42	12899
170	1000	62	7304	157	906	43	12597
				316	878	169	1462

TABLE 1

ZOOPLANKTON HIGH-MOLECULAR-WEIGHT HYDROCARBON GLC ANALYSES

TABLE 1.1

HEAVY HYDROCARBON ANALYSIS - STOCS - 1976

SAMPLE TYPE : ZPL
 SAMPLE CODE : AGDC PERIOD : WINTER
 LOCATION : STATION - 1 LINE -I

HEXANE ELUATE		BENZENE ELUATE	
RETENTION INDEX	CONCENTRATION (UG./G.)	RETENTION INDEX	CONCENTRATION (UG./G.)
1500	11.80000	2335	4.67000
1670	18.00000	2354	.27200
1700	2.89000		
1780	.78000		
1800	.58000		
1900	16.10000		
1950	.71000		
2000	.03000		
2100	.08000		
2200	.35000		
2300	.07000		
2400	.14000		
2500	.18000		
2600	.05000		
2700	.06000		
2800	.02000		
2900	.02000		
3599	4.44000		
TOTAL	56.30000	TOTAL	4.94200
TOTAL NON-SAPONIFIABLE CONC. (MG./G.) = .03			

TABLE 1.2

HEAVY HYDROCARBON ANALYSIS - STUCCS - 1976

SAMPLE TYPE : ZPL

SAMPLE CODE : AGDF

PERIOD : WINTER

LOCATION : STATION - 3 LINE -1

HEXANE ELUATE

BENZENE ELUATE

RETENTION INDEX	CONCENTRATION (UG./G.)	RETENTION INDEX	CONCENTRATION (UG./G.)
1500	.03990	2349	49.90000
1600	.00150	2431	112.00000
1670	1.11000	3397	27.50000
1700	.14300	3420	12.80000
1780	.00150	3478	12.20000
1800	.02900	3630	125.00000
1900	.04730	3960	355.00000
1984	.05180		
2000	.00530		
2100	.00680		
2200	.02000		
3599	.10300		
TOTAL	1.55910	TOTAL	694.40000
TOTAL NON-SAPONIFIABLE CONC. (MG./G.) = .03			

TABLE 1.3

HEAVY HYDROCARBON ANALYSIS - STOCS - 1976

SAMPLE TYPE : ZPL
 SAMPLE CODE : AGDH
 LOCATION : STATION - 3 LINE -I PERIOD : WINTER

HEXANE ELUATE

BENZENE ELUATE

RETENTION INDEX	CONCENTRATION (UG./G.)	RETENTION INDEX	CONCENTRATION (UG./G.)
1500	21.40000	2224	10.00000
1600	.09700	2321	12.50000
1670	56.10000	2365	25.20000
1700	17.10000	2450	18.10000
1780	1.02000	2750	18.90000
1800	1.86000	3556	32.30000
1900	2.35000	4000	299.00000
1980	13.10000	4150	21.30000
2000	4.96000		
2100	1.99000		
2200	2.14000		
2300	1.82000		
2400	1.40000		
2500	2.52000		
2600	2.44000		
2700	2.71000		
2800	2.40000		
2900	2.90000		
3000	1.90000		
3100	2.05000		
3200	1.03000		
3300	.98100		
3400	2.37000		
3500	2.09000		
3599	20.70000		
TOTAL	169.42800	TOTAL	437.30000

TOTAL NON-SAPONIFIABLE CONC. (MG./G.) = .19

TABLE 1.4

HEAVY HYDROCARBON ANALYSIS - STOCS - 1976

SAMPLE TYPE : ZPL

SAMPLE CODE : AKXJ

PERIOD : SPRING

LOCATION : STATION - 1 LINE -I

HEXANE ELUATE

BENZENE ELUATE

RETENTION INDEX	CONCENTRATION (UG./G.)	RETENTION INDEX	CONCENTRATION (UG./G.)
1500	10.10000	2120	6.13000
1600	6.14000	2140	4.64000
1638	65.10000	2340	46.40000
1670	286.00000	2438	5.24000
1700	75.70000	2762	5.32000
1780	1.58000	3052	18.40000
1800	3.26000	3365	8.25000
1842	124.00000	3620	49.50000
1900	9.13000		
1953	29.30000		
2000	1.09000		
2046	106.00000		
2100	1.53000		
2200	1.81000		
2247	65.80000		
2300	1.51000		
2347	29.00000		
2440	39.50000		
2554	32.40000		
2662	19.80000		
2746	35.90000		
2852	11.00000		
2939	31.40000		
3052	4.50000		
3139	45.80000		
3200	6.14000		
TOTAL	1043.49000	TOTAL	143.88000

TOTAL NON-SAPONIFIABLE CONC. (MG./G.) = .06

TABLE 1.5

HEAVY HYDROCARBON ANALYSIS - STUCCS - 1976

SAMPLE TYPE : ZPL
 SAMPLE CODE : ALTD PERIOD : SPRING
 LOCATION : STATION - 1 LINE -I

HEXANE ELUATE		BENZENE ELUATE	
RETENTION INDEX	CONCENTRATION (UG./G.)	RETENTION INDEX	CONCENTRATION (UG./G.)
1500	.44500	2345	80.20000
1600	.34500	2770	1.81000
1650	3.66000	3055	9.27000
-1670	14.50000	3149	3.01000
1700	4.79000	3480	2.57000
-1780	.21300	3608	24.80000
1800	.41400		
1842	15.80000		
1900	1.05000		
1975	4.27000		
2000	.38700		
2046	15.90000		
2100	1.38000		
2200	5.62000		
2253	9.92000		
2300	4.85000		
2400	2.81000		
2453	5.61000		
2500	.81900		
2657	2.87000		
2700	.10900		
2900	.21300		
3100	.11200		
3148	7.83000		
3200	.03400		
TOTAL	103.95100	TOTAL	121.66000
TOTAL NON-SAPONIFIABLE CONC. (MG./G.) = .03			

TABLE 1.6

HEAVY HYDROCARBON ANALYSIS - STUCCS - 1976

SAMPLE TYPE : ZPL

SAMPLE CODE : ASWD

PERIOD : SPRING

LOCATION : STATION --0 LINE - I

HEXANE ELUATE

BENZENE ELUATE

RETENTION INDEX	CONCENTRATION (UG./G.)	RETENTION INDEX	CONCENTRATION (UG./G.)
1670	3.99000	2127	8.70000
1700	1.60000	2347	24.70000
1847	3.07000	3005	20.60000
2045	6.49000		
2100	.04000		
2200	.15900		
2250	4.84000		
2303	.34400		
2400	.53200		
2450	2.60000		
2500	1.23000		
2600	1.91000		
2700	4.59000		
2800	8.92000		
2900	13.70000		
3000	11.90000		
3100	14.20000		
3141	23.20000		
3200	7.69000		
TOTAL	111.00500	TOTAL	54.00000

TOTAL NON-SAPONIFIABLE CONC. (MG./G.) = .01

TABLE 1.7

HEAVY HYDROCARBON ANALYSIS - STUCCS - 1976

SAMPLE TYPE : ZPL
 SAMPLE CODE : AKZM PERIOD : SPRING
 LOCATION : STATION - 2 LINE -I

HEXANE ELUATE		BENZENE ELUATE	
RETENTION INDEX	CONCENTRATION (UG./G.)	RETENTION INDEX	CONCENTRATION (UG./G.)
1670	2.60000		
1700	1.70000		
1859	3.60000		
1900	.50000		
1950	1.10000		
1972	.80000		
2000	.50000		
2040	7.10000		
2100	.90000		
2162	2.80000		
2200	.80000		
2243	5.60000		
2349	1.50000		
2447	2.80000		
2547	1.60000		
2647	1.40000		
2742	1.70000		
2849	.90000		
2937	1.70000		
3029	.70000		
TOTAL	40.30000	TOTAL	0
TOTAL NON-SAPONIFIABLE CONC. (MG./G.) = .03			

TABLE 1.10

HEAVY HYDROCARBON ANALYSIS - STOCS - 1976

SAMPLE TYPE : ZPL

SAMPLE CODE : AQVK

PERIOD : FALL

LOCATION : STATION - 1 LINE -I

HEXANE ELUATE

BENZENE ELUATE

RETENTION INDEX	CONCENTRATION (UG./G.)	RETENTION INDEX	CONCENTRATION (UG./G.)
1400	3.29000	1921	1.96000
1441	.94500	1951	3.42000
1500	.22700	1980	5.97000
1600	1.63000	2092	1.92000
1644	.79000	2128	2.76000
1670	27.30000	2280	9.93000
1700	9.80000	2358	348.00000
1780	.04120	2434	14.10000
1800	1.02000	2508	6.00000
1847	.58100	2763	1.96000
1900	1.34000	3020	21.90000
1950	.71200		
1978	1.01000		
2000	.71500		
2047	.41500		
2100	.37700		
2141	.91900		
2200	.67300		
2300	.52700		
2400	.76000		
2500	.93900		
2600	1.16000		
2700	1.22000		
2800	1.13000		
2900	2.42000		
3000	1.88000		
3100	3.47000		
3200	2.44000		
3300	5.49000		
3400	4.56000		
3500	5.31000		
TOTAL	83.09120	TOTAL	417.92000

TOTAL NON-SAPONIFIABLE CONC. (MG./G.) = .02

TABLE 1.11

HEAVY HYDROCARBON ANALYSIS - STOCS - 1976

SAMPLE TYPE : ZPL
 SAMPLE CODE : AQCO
 LOCATION : STATION - 1 LINE -I

PERIOD : FALL

HEXANE ELUATE		BENZENE ELUATE	
RETENTION INDEX	CONCENTRATION (UG./G.)	RETENTION INDEX	CONCENTRATION (UG./G.)
1600	.02920	1924	.18500
1670	2.48000	2022	.44400
1700	.78200	2139	.47200
1780	.01000	2200	.24800
1800	.70200	2237	.13200
1846	.35000	2340	1.78000
1900	.46700	2683	1.02000
2000	.51300	3132	.35300
2047	.50000		
2100	.02930		
2152	.74300		
2200	.13800		
2300	.04940		
2700	.18800		
2800	.23200		
2900	.55900		
3000	.60500		
3100	.80000		
3200	.77000		
3300	1.80000		
3400	2.11000		
3600	4.62000		
TOTAL	18.47690	TOTAL	4.63400
TOTAL NON-SAPONIFIABLE CONC. (MG./G.) =			.14

TABLE 1.12

HEAVY HYDROCARBON ANALYSIS - STOCS - 1976

SAMPLE TYPE : ZPL

SAMPLE CODE : AQEA

PERIOD : FALL

LOCATION : STATION - 2 LINE -I

HEXANE ELUATE

BENZENE ELUATE

RETENTION INDEX	CONCENTRATION (UG./G.)	RETENTION INDEX	CONCENTRATION (UG./G.)
1500	.15500	1926	1.29000
1600	.13300	1956	2.14000
1670	18.60000	1985	3.58000
1700	2.79000	2133	4.80000
1780	.03730	2241	3.86000
1800	.11800	2293	6.25000
1900	2.50000	2362	156.00000
1951	.66600	2667	4.56000
1976	2.21000	2726	3.40000
2000	.66600	2765	72.70000
2036	.84100	2839	32.70000
2069	.22100	3020	40.30000
2100	.18200		
2130	2.58000		
2200	.14500		
2273	.07880		
2300	.07450		
2400	.23800		
2500	.17200		
2600	.18400		
2700	.34200		
2800	.19400		
2900	.37200		
3000	.30700		
3100	.45500		
TOTAL	34.26160	TOTAL	331.58000
TOTAL NON-SAPONIFIABLE CONC. (MG./G.) =			.04

TABLE 1.13

HEAVY HYDROCARBON ANALYSIS - STOCS - 1976

SAMPLE TYPE : ZPL

SAMPLE CODE : AQFQ

PERIOD : FALL

LOCATION : STATION - 3 LINE -I

HEXANE ELUATE

BENZENE ELUATE

RETENTION INDEX	CONCENTRATION (UG./G.)	RETENTION INDEX	CONCENTRATION (UG./G.)
1500	7.65000	2081	3.14000
1600	1.26000	2136	4.37000
1670	52.50000	2267	4.77000
1700	29.00000	2299	1.65000
1780	1.15000	2355	19.10000
1800	2.68000	2444	3.60000
1900	5.08000	2521	4.13000
1950	6.75000	2596	4.91000
1979	15.20000	2741	10.80000
2000	7.19000	3020	19.20000
2100	6.14000		
2135	8.64000		
2200	7.58000		
2300	7.98000		
2400	10.30000		
2500	10.80000		
2600	12.30000		
2700	15.50000		
2800	13.40000		
2900	14.80000		
3000	9.15000		
3100	7.80000		
3200	7.31000		
3300	5.45000		
TOTAL	265.61000	TOTAL	75.67000

TOTAL NON-SAPONIFIABLE CONC. (MG./G.) = .04

TABLE 1.14

HEAVY HYDROCARBON ANALYSIS - STUCCS - 1976

SAMPLE TYPE : ZPL

SAMPLE CODE : AVSG

PERIOD : DECEMBER

LOCATION : STATION - 2 LINE -I

HEXANE ELUATE

BENZENE ELUATE

RETENTION INDEX	CONCENTRATION (UG./G.)	RETENTION INDEX	CONCENTRATION (UG./G.)
1400	.69000	1609	.25500
1500	.73800	1685	.41300
1600	2.37000	1922	2.87000
1647	.91400	1953	3.80000
1670	5.66000	1982	6.32000
1700	3.72000	2032	.78400
1780	.03900	2134	1.02000
1800	1.41000	2199	1.87000
1848	.66600	2293	1.54000
1900	.76100	2368	166.00000
2000	.51600	2444	5.25000
2050	.40200	2721	1.33000
2100	.02440	3022	2.37000
2131	.77100		
2200	.05550		
2300	.01750		
2400	.30600		
2500	.46300		
2600	.57500		
2700	.90300		
2800	1.05000		
2900	1.21000		
3000	1.04000		
3100	.93800		
3200	.58000		
TOTAL	25.82540	TOTAL	193.82200

TOTAL NON-SAPONIFIABLE CONC. (MG./G.) = .02

HEAVY HYDROCARBON ORGANICS - STUCCS - 1976

SAMPLE TYPE : ZIL
 SAMPLE CODE : AVSE PERIOD : DECEMBER
 LOCATION : STATION # 2 PI

HEXANE ELUATE

BENZENE ELUATE

RETENTION INDEX	CONCENTRATION (UG./G.)	RETENTION INDEX	CONCENTRATION (UG./G.)
1500	.49000	1597	.38100
1600	.85000	1775	.30100
1648	.34400	1892	.82800
1670	4.63000	2021	.44900
1700	2.92000	2115	.68700
1780	.11900	2188	.70100
1800	.77100	2280	1.06000
1849	.47100	2357	114.00000
1900	.40500	2428	3.59000
1957	.17900	2740	1.02000
1983	.29000	3002	1.86000
2000	.23500		
2055	.41700		
2100	.09100		
2133	.83900		
2200	.11300		
2257	.12500		
2300	.06200		
2400	.06000		
2500	.07900		
2600	.06000		
2700	.10000		
2800	.05000		
2900	.19000		
3000	.04700		
3100	.24000		
3175	.25500		
TOTAL	14.45000	TOTAL	124.87700

TOTAL NON-SATURATED (A+B) P.C. (MG./G.) = .01

TABLE 1.16

HEAVY HYDROCARBON ANALYSIS - STOCS - 1976

SAMPLE TYPE : ZPL

SAMPLE CODE : AVSJ

PERIOD : DECEMBER

LOCATION : STATION - 2 LINE -I

HEXANE ELUATE

BENZENE ELUATE

RETENTION INDEX	CONCENTRATION (UG./G.)	RETENTION INDEX	CONCENTRATION (UG./G.)
1600	.66800	1924	.93200
1648	.28100	1954	1.33000
1670	1.88000	1983	2.23000
1700	1.20000	2035	.41700
1780	.07180	2140	.76500
1800	.51700	2200	2.93000
1848	.27600	2296	.42100
1900	.26600	2359	55.40000
2000	.20400	3027	.44400
2048	.39100		
2100	.11800		
2132	.23200		
2151	.29600		
2200	.06290		
2300	.06760		
2400	.09680		
2500	.29600		
2600	.08310		
2700	.39500		
2800	.17200		
2900	.62800		
3000	.07840		
3100	.68300		
3200	.02420		
3300	.12800		
TOTAL	9.11580	TOTAL	64.86900

TOTAL NON-SAPONIFIABLE CONC. (MG./G.) = .01

TABLE 1:17

HEAVY HYDROCARBON ANALYSIS - STUCCS - 1976

SAMPLE TYPE : ZPL
 SAMPLE CODE : AGDJ
 LOCATION : STATION - 1 LINE -II PERIOD : WINTER

HEXANE ELUATE		BENZENE ELUATE	
RETENTION INDEX	CONCENTRATION (UG./G.)	RETENTION INDEX	CONCENTRATION (UG./G.)
1500	1.71000	1978	.59000
1600	.58000	2188	1.66000
1670	96.00000	2338	32.80000
1700	64.50000		
1800	3.83000		
1900	45.90000		
1960	2.45000		
2000	.57000		
2100	.64000		
2200	4.05000		
3599	32.20000		
TOTAL	252.43000	TOTAL	35.05000
TOTAL NON-SAPONIFIABLE CONC. (MG./G.) = .02			

TABLE 1.18

HEAVY HYDROCARBON ANALYSIS - STOCS - 1976

SAMPLE TYPE : ZPL

SAMPLE CODE : AGDL

PERIOD : WINTER

LOCATION : STATION - 2 LINE -11

HEXANE ELUATE

BENZENE ELUATE

RETENTION INDEX	CONCENTRATION (UG./G.)	RETENTION INDEX	CONCENTRATION (UG./G.)
1500	51.90000	1982	1040.00000
1600	34.60000	2206	3920.00000
1670	456.00000	2232	927.00000
1700	115.00000	2410	1030.00000
1780	54.80000	2440	1180.00000
1800	106.00000	2811	1250.00000
1900	170.00000	3056	4430.00000
1982	66.40000	3940	5050.00000
2000	137.00000		
2100	159.00000		
2200	242.00000		
2300	244.00000		
2400	286.00000		
2500	302.00000		
2600	299.00000		
2700	382.00000		
2800	342.00000		
2900	346.00000		
3000	301.00000		
3100	278.00000		
3200	178.00000		
3300	90.20000		
3400	46.40000		
3500	43.60000		
3599	728.00000		
3600	12.80000		
3700	26.90000		
3800	18.70000		
TOTAL	5517.30000	TOTAL	18827.00000

TOTAL NON-SAPONIFIABLE CONC. (MG./G.) = .46

TABLE 1.19

HEAVY HYDROCARBON ANALYSIS - STUCS - 1976

SAMPLE TYPE : ZPL

SAMPLE CODE : AGDN

PERIOD : WINTER

LOCATION : STATION - 3 LINE -II

HEXANE ELUATE

BENZENE ELUATE

RETENTION INDEX	CONCENTRATION (UG./G.)	RETENTION INDEX	CONCENTRATION (UG./G.)
1500	1.90000	2215	39.40000
1670	53.10000	2312	47.40000
1700	13.20000	2356	95.60000
1780	6.29000	2450	66.20000
1800	19.60000	2740	69.10000
1900	25.50000	3550	118.00000
1977	1.34000	3990	1060.00000
2000	.42000	4100	182.00000
2100	6.14000		
2200	14.00000		
3599	39.00000		
TOTAL	180.49000	TOTAL	1677.70000
TOTAL NON-SAPONIFIABLE CONC. (MG./G.) = .04			

TABLE 1.20

HEAVY HYDROCARBON ANALYSIS - STUCCS - 1976

SAMPLE TYPE : ZPL

SAMPLE CODE : AJLV

PERIOD : MARCH

LOCATION : STATION - 1 LINE -II

HEXANE ELUATE

BENZENE ELUATE

RETENTION INDEX	CONCENTRATION (UG./G.)	RETENTION INDEX	CONCENTRATION (UG./G.)
1670	.05150	2133	4.20000
1700	.09650	2341	120.00000
1780	.00740	3061	12.60000
1800	.00050		
1900	.11300		
3599	.03980		
TOTAL	.30870	TOTAL	136.80000
TOTAL NON-SAPONIFIABLE CONC. (MG./G.) = .02			

TABLE 1.21

HEAVY HYDROCARBON ANALYSIS - STOCS - 1976

SAMPLE TYPE : ZPL
 SAMPLE CODE : AJNS PERIOD : MARCH
 LOCATION : STATION - 2 LINE -II

HEXANE ELUATE

BENZENE ELUATE

RETENTION INDEX	CONCENTRATION (UG./G.)	RETENTION INDEX	CONCENTRATION (UG./G.)
1500	18.10000	2010	457.00000
1600	12.20000	2243	1600.00000
1670	160.00000	2257	422.00000
1700	26.40000	2438	428.00000
1780	9.72000	2453	397.00000
1800	23.30000	2800	431.00000
1900	32.00000	3058	1160.00000
1976	9.81000	3733	887.00000
2000	31.20000	4160	2020.00000
2100	40.40000		
2200	42.30000		
2300	57.90000		
2400	68.90000		
2500	87.90000		
2600	105.00000		
2700	123.00000		
2800	114.00000		
2900	119.00000		
3000	99.80000		
3100	89.50000		
3200	72.20000		
3300	58.60000		
3400	40.70000		
3500	33.10000		
3599	157.00000		
3600	26.80000		
3700	33.10000		
3800	28.60000		
TOTAL	1720.53000	TOTAL	7802.00000

TOTAL NON-SAPONIFIABLE CONC. (MG./G.) = .51

TABLE 1.22

HEAVY HYDROCARBON ANALYSIS - STOCS - 1976

SAMPLE TYPE : ZPL

SAMPLE CODE : AJQC

PERIOD : MARCH

LOCATION : STATION - 3 LINE -II

HEXANE ELUATE

BENZENE ELUATE

RETENTION INDEX	CONCENTRATION (UG./G.)	RETENTION INDEX	CONCENTRATION (UG./G.)
1500	2.76000	2068	3.52000
1600	.38000	2144	6.42000
1670	17.80000	2441	4.20000
1700	9.46000	2769	33.80000
1780	.40000	3059	5.60000
1800	.66000		
1900	1.14000		
1975	3.64000		
2000	1.29000		
2100	1.24000		
2200	1.26000		
2300	.96000		
2400	.94000		
2500	1.23000		
2600	1.51000		
2700	1.31000		
2800	1.20000		
2900	1.96000		
3000	1.74000		
3100	1.67000		
3200	1.40000		
3300	1.91000		
3400	.34000		
3500	.74000		
3599	13.50000		
3600	.87000		
3700	.74000		
TOTAL	72.05000	TOTAL	53.54000

TOTAL NON-SAPONIFIABLE CONC. (MG./G.) = .01

TABLE 1.23

HEAVY HYDROCARBON ANALYSIS - STOCS - 1976

SAMPLE TYPE : ZPL
 SAMPLE CODE : AKEU PERIOD : APRIL
 LOCATION : STATION - 1 LINE -II

HEXANE ELUATE

BENZENE ELUATE

RETENTION INDEX	CONCENTRATION (UG./G.)	RETENTION INDEX	CONCENTRATION (UG./G.)
1780	.50000	1996	669.00000
2400	.08000	2223	2110.00000
2530	.08000	2423	711.00000
2850	.02000	2800	2020.00000
		3052	4530.00000
TOTAL	.68000	TOTAL	10040.00000

TOTAL NON-SAPONIFIABLE CONC. (MG./G.) = .25

TABLE 1.24

HEAVY HYDROCARBON ANALYSIS - STOCS - 1976

SAMPLE TYPE : ZPL

SAMPLE CODE : AKGX

PERIOD : APRIL

LOCATION : STATION - 2 LINE -II

HEXANE ELUATE

BENZENE ELUATE

RETENTION INDEX	CONCENTRATION (UG./G.)	RETENTION INDEX	CONCENTRATION (UG./G.)
1670	6.56000	1998	517.00000
1700	.13400	2243	3050.00000
2147	1.19000	2250	610.00000
2227	1.38000	2439	1180.00000
2253	1.07000	2454	650.00000
2360	1.51000	2815	2760.00000
2380	3.53000	3038	3370.00000
2562	1.79000		
2592	5.66000		
2623	2.96000		
2792	2.41000		
2826	5.38000		
3070	3.21000		
TOTAL	36.78400	TOTAL	12137.00000

TOTAL NON-SAPONIFIABLE CONC. (MG./G.) = .57

TABLE 1.25

HEAVY HYDROCARBON ANALYSIS - STOCS - 1976

SAMPLE TYPE : ZPL
 SAMPLE CODE : AKJJ
 LOCATION : STATION - 3 LINE -II

PERIOD : APRIL

HEXANE ELUATE		BENZENE ELUATE	
RETENTION INDEX	CONCENTRATION (UG./G.)	RETENTION INDEX	CONCENTRATION (UG./G.)
1500	.53100	1987	164.00000
1600	.21400	2199	477.00000
1670	27.80000	2216	157.00000
1700	6.81000	2396	142.00000
1780	.27300	2416	151.00000
1800	.78800	2779	259.00000
1900	1.66000	3035	850.00000
1975	1.38000	3618	303.00000
2000	.95700	3890	808.00000
2100	.96500		
2200	2.12000		
3599	21.10000		
TOTAL	64.59800	TOTAL	3311.00000
TOTAL NON-SAPONIFIABLE CONC. (MG./G.) = .55			

TABLE 1.26

HEAVY HYDROCARBON ANALYSIS - STOCS - 1976

SAMPLE TYPE : ZPL
 SAMPLE CODE : ALDC PERIOD : SPRING
 LOCATION : STATION - 1 LINE -II

HEXANE ELUATE

BENZENE ELUATE

RETENTION INDEX	CONCENTRATION (UG./G.)	RETENTION INDEX	CONCENTRATION (UG./G.)
1500	1.37000	1840	126.00000
1536	3.53000	2061	735.00000
1557	9.18000	2250	372.00000
1693	4.02000	2610	325.00000
1887	4.88000	2846	1000.00000
1900	.13000		
1950	1.71000		
2000	.42900		
2045	2.10000		
2100	.50300		
2200	.29300		
2300	.22200		
2400	.65900		
2500	.75200		
2600	.80500		
2700	2.91000		
2800	.07100		
TOTAL	33.56400	TOTAL	2558.00000

TOTAL NON-SAPONIFIABLE CONC. (MG./G.) = .05

TABLE 1.27

HEAVY HYDROCARBON ANALYSIS - STUCS - 1976

SAMPLE TYPE : ZPL

SAMPLE CODE : ALDF

PERIOD : SPRING

LOCATION : STATION - 1 LINE -II

HEXANE ELUATE

BENZENE ELUATE

RETENTION INDEX	CONCENTRATION (UG./G.)	RETENTION INDEX	CONCENTRATION (UG./G.)
1500	1.84000	1879	899.00000
1600	.23000	2100	4710.00000
1646	2.73000	2294	2180.00000
1670	4.26000	2312	825.00000
1700	4.16000	2640	1040.00000
1841	4.65000	2880	4070.00000
2052	5.30000		
2250	2.73000		
2450	1.64000		
2660	.81300		
TOTAL	28.35300	TOTAL	13724.00000

TOTAL NON-SAPONIFIABLE CONC. (MG./G.) = .08

TABLE 1.28

HEAVY HYDROCARBON ANALYSIS - STUCCS - 1976

SAMPLE TYPE : ZPL
 SAMPLE CODE : ALTF PERIOD : SPRING
 LOCATION : STATION - 1 LINE -II

HEXANE ELUATE

BENZENE ELUATE

RETENTION INDEX	CONCENTRATION (UG./G.)	RETENTION INDEX	CONCENTRATION (UG./G.)
1700	.67600	2121	.72600
1854	.22100	2334	.85700
1900	.97800	3126	.45800
2070	.76400	3540	.45100
2100	.57100	3645	.31300
2149	.96500		
2170	.58000		
2261	.87100		
2462	.63800		
TOTAL	6.26400	TOTAL	2.80500
TOTAL NON-SAPONIFIABLE CONC. (MG./G.) =		.01	

TABLE 1.29

HEAVY HYDROCARBON ANALYSIS - STUCCS - 1976

SAMPLE TYPE : ZPL
 SAMPLE CODE : ALEU PERIOD : SPRING
 LOCATION : STATION - 2 LINE -II

HEXANE ELUATE		BENZENE ELUATE	
RETENTION INDEX	CONCENTRATION (UG./G.)	RETENTION INDEX	CONCENTRATION (UG./G.)
1500	7.29000	2209	.32500
1600	.71300	2408	.20700
1636	6.94000	2826	.10500
1670	16.50000	3052	.02500
1700	19.80000	3130	.23400
1854	12.90000	3522	.41000
1962	1.46000		
1986	.33100		
2052	8.81000		
2250	4.54000		
2352	.79500		
2454	2.04000		
2562	.99800		
2662	.79100		
2754	.83400		
2861	.26200		
2957	.98900		
3061	.22900		
3148	.59600		
TOTAL	86.81800	TOTAL	1.30600
TOTAL NON-SAPONIFIABLE CONC. (MG./G.) =		.03	

TABLE 1.30

HEAVY HYDROCARBON ANALYSIS - STOCS - 1976

SAMPLE TYPE : ZPL

SAMPLE CODE : ALGP

PERIOD : SPRING

LOCATION : STATION - 3 LINE -II

HEXANE ELUATE

BENZENE ELUATE

RETENTION INDEX	CONCENTRATION (UG./G.)	RETENTION INDEX	CONCENTRATION (UG./G.)
1670	.15000	2212	.34400
1700	.76000	2337	1.55000
1980	.05870	3008	.40600
2100	.03300	3052	1.06000
2200	.14100	3209	1.39000
2300	.13600		
2400	.27900		
2500	.34900		
2600	.32200		
2700	.40100		
2800	.35400		
2900	.23500		
3000	.14800		
3100	.13700		
TOTAL	3.50370	TOTAL	4.75000
TOTAL NON-SAPONIFIABLE CONC. (MG./G.) =		.01	

TABLE 1.31

HEAVY HYDROCARBON ANALYSIS - STOCS - 1976

SAMPLE TYPE : ZPL
 SAMPLE CODE : AOCJ
 LOCATION : STATION - 1 LINE -II

PERIOD : JULY

HEXANE ELUATE		BENZENE ELUATE	
RETENTION INDEX	CONCENTRATION (UG./G.)	RETENTION INDEX	CONCENTRATION (UG./G.)
1500	3.65000	2019	54.50000
1600	2.19000	2120	25.50000
1670	52.70000	2229	480.00000
1700	1.85000	2257	24.90000
1800	1.57000	2328	113.00000
2000	1.54000	2434	303.00000
2148	2.80000	2459	152.00000
2379	19.90000	2645	9030.00000
2590	17.40000	3084	52.40000
2620	4.85000		
2752	10.40000		
2831	242.00000		
2958	6.36000		
2995	8.11000		
3076	5.29000		
3184	5.69000		
3307	6.97000		
3467	8.65000		
TOTAL	401.92000	TOTAL	10235.30000
TOTAL NON-SAPONIFIABLE CONC. (MG./G.) = .30			

TABLE 1.32

HEAVY HYDROCARBON ANALYSIS - STUCCS - 1976

SAMPLE TYPE : ZPL

SAMPLE CODE : AOCK

PERIOD : JULY

LOCATION : STATION - 1 LINE -II

HEXANE ELUATE

BENZENE ELUATE

RETENTION INDEX	CONCENTRATION (UG./G.)	RETENTION INDEX	CONCENTRATION (UG./G.)
1500	.36300	2115	.55800
1600	.31400	2140	.36800
1670	13.90000	2336	1.25000
1700	1.19000	2439	.44500
1800	.52500	2516	.44500
1900	.66100	2771	.19000
1949	.73700	3051	1.22000
1974	.86000	3511	.42300
2000	.57100	3930	.57200
2057	.73900		
2100	.62400		
2200	1.24000		
2300	.06700		
2500	.37500		
2600	.21800		
2700	.26800		
2800	.50800		
2900	.49400		
3000	.32400		
3100	.26500		
3588	.44200		
TOTAL	24.72500	TOTAL	5.47100
TOTAL NON-SAPONIFIABLE CONC. (MG./G.) =			.04

TABLE 1.33

HEAVY HYDROCARBON ANALYSIS - STUCS - 1976

SAMPLE TYPE : ZPL
 SAMPLE CODE : AUCL PERIOD : JULY
 LOCATION : STATION - 1 LINE -II

HEXANE ELUATE

BENZENE ELUATE

RETENTION INDEX	CONCENTRATION (UG./G.)	RETENTION INDEX	CONCENTRATION (UG./G.)
1500	3.87000	2015	253.00000
1670	28.80000	2117	77.90000
2385	2.44000	2225	1070.00000
2599	3.07000	2252	135.00000
		2326	135.00000
		2429	478.00000
		2453	353.00000
		3031	163.00000
TOTAL	38.18000	TOTAL	2664.90000
TOTAL NON-SAPONIFIABLE CONC. (MG./G.) = .31			

TABLE 1.34

HEAVY HYDROCARBON ANALYSIS - STOCS - 1976

SAMPLE TYPE : ZPL

SAMPLE CODE : AOCM

PERIOD : JULY

LOCATION : STATION - 1 LINE -II

HEXANE ELUATE

BENZENE ELUATE

RETENTION INDEX	CONCENTRATION (UG./G.)	RETENTION INDEX	CONCENTRATION (UG./G.)
1670	10.20000	2015	.57300
1813	.29000	2114	2.39000
1900	.87100	2226	.63600
1963	.33800	2334	3.49000
1981	.18000	2438	1.02000
2000	.19700	2514	.89200
2050	.63200	3050	3.06000
2100	.38500		
2171	.44600		
2200	1.39000		
2300	.08000		
2400	.06900		
2500	.30200		
2600	.26800		
2700	.30600		
2800	.27100		
2900	.32200		
3000	.29000		
3100	.19200		
3200	.05400		
3300	.06900		
3356	.23500		
3428	.26800		
3500	.25000		
TOTAL	17.90500	TOTAL	12.06100
TOTAL NON-SAPONIFIABLE CONC. (MG./G.) = .03			

TABLE 1.35

HEAVY HYDROCARBON ANALYSIS - STOCS - 1976

SAMPLE TYPE : ZPL

SAMPLE CODE : ADEL

PERIOD : JULY

LOCATION : STATION - 2 LINE -II

HEXANE ELUATE

BENZENE ELUATE

RETENTION INDEX	CONCENTRATION (UG./G.)	RETENTION INDEX	CONCENTRATION (UG./G.)
1670	1.13000	2114	5.05000
1700	.04000	2339	9.24000
1941	.19800	2438	2.33000
1965	.93000	2513	2.05000
1994	.87200	3052	14.20000
2120	.35200		
2101	.12100		
2216	.09550		
2311	.25900		
2359	.15700		
3183	.36400		
3302	2.52000		
3413	.47100		
3753	.67300		
TOTAL	8.18250	TOTAL	32.87000
TOTAL NON-SAPONIFIABLE CONC. (MG./G.) = .05			

TABLE 1.36

HEAVY HYDROCARBON ANALYSIS - STOCS - 1976

SAMPLE TYPE : ZPL

SAMPLE CODE : ADEM

PERIOD : JULY

LOCATION : STATION - 2 LINE -II

HEXANE ELUATE

BENZENE ELUATE

RETENTION INDEX	CONCENTRATION (UG./G.)	RETENTION INDEX	CONCENTRATION (UG./G.)
1500	5.62000	2008	.47400
1600	1.30000	2100	1.92000
1644	.37300	2318	.76600
1670	25.00000	2431	.63000
1700	6.24000	2500	.60000
1743	1.96000	3044	2.13000
1780	.25700	3113	1.27000
1800	2.74000	3313	2.25000
1845	1.83000		
1900	2.50000		
1919	2.09000		
1949	4.28000		
1976	3.26000		
2000	2.77000		
2052	3.05000		
2100	2.80000		
2148	2.27000		
2200	4.76000		
2300	.74100		
2351	.92200		
2370	.43300		
2400	.56500		
2435	1.55000		
2500	.23100		
2600	.31100		
2700	.65800		
2800	.11400		
2890	1.13000		
3064	.37300		
3335	3.29000		
3442	.77400		
3528	.95000		
TOTAL	85.20200	TOTAL	10.04600

TOTAL NON-SAPONIFIABLE CONC. (MG./G.) = .03

TABLE 1.37

HEAVY HYDROCARBON ANALYSIS - STOCS - 1976

SAMPLE TYPE : ZPL

SAMPLE CODE : ADEG

PERIOD : JULY

LOCATION : STATION - 2 LINE -II

HEXANE ELUATE		BENZENE ELUATE	
RETENTION INDEX	CONCENTRATION (UG./G.)	RETENTION INDEX	CONCENTRATION (UG./G.)
1670	11.30000	2332	.40000
1700	2.84000	2439	.11300
1780	.12800	3052	.10500
1800	.13100	3252	.37500
1900	.51300		
1950	1.33000		
1975	.71500		
2000	.23800		
2100	.20700		
2200	.74700		
2300	.44300		
2400	.22400		
2500	.40100		
2600	.40600		
2700	.57300		
2800	.77000		
2900	1.52000		
3000	1.37000		
3100	1.84000		
3200	2.43000		
3300	2.05000		
3400	7.63000		
3500	1.09000		
3600	6.47000		
3700	2.97000		
3800	3.11000		
3900	.88000		
TOTAL	52.74000	TOTAL	.99300
TOTAL NON-SAPONIFIABLE CONC. (MG./G.) = .05			

TABLE 1.38

HEAVY HYDROCARBON ANALYSIS - STUCCS - 1976

SAMPLE TYPE : ZPL

SAMPLE CODE : A0GB

PERIOD : JULY

LOCATION : STATION - 3 LINE -II

HEXANE ELUATE

BENZENE ELUATE

RETENTION INDEX	CONCENTRATION (UG./G.)	RETENTION INDEX	CONCENTRATION (UG./G.)
1600	2.47000	1843	.42000
1670	4.13000	2014	.28200
1700	7.46000	2107	1.20000
1780	1.56000	2216	.36100
1800	4.55000	2318	1.07000
1900	5.11000	3304	.42900
1975	1.54000		
2000	5.09000		
2100	5.70000		
2200	6.39000		
2300	4.12000		
2400	4.20000		
2500	4.60000		
2600	4.78000		
2700	4.80000		
2800	4.82000		
2900	5.48000		
3000	5.23000		
3100	5.42000		
3200	5.02000		
3300	4.70000		
3400	6.26000		
3500	8.36000		
3600	6.75000		
3700	10.60000		
3800	9.95000		
3900	5.77000		
4000	7.00000		
TOTAL	152.12000	TOTAL	3.76800
TOTAL NON-SAPONIFIABLE CONC. (MG./G.) =			.04

TABLE 1.39

HEAVY HYDROCARBON ANALYSIS - STUCCS - 1976

SAMPLE TYPE : ZPL

SAMPLE CODE : APEO

PERIOD : AUGUST

LOCATION : STATION - 1 LINE -II

HEXANE ELUATE

BENZENE ELUATE

RETENTION INDEX	CONCENTRATION (UG./G.)	RETENTION INDEX	CONCENTRATION (UG./G.)
1400	.57700	2148	.69200
1500	1.55000	2314	1.06000
1600	2.07000	2366	3.00000
1648	1.00000	2455	1.87000
1670	68.00000	2533	6.59000
1700	1.97000	3081	9.70000
1800	2.56000	3188	.88900
1851	.98900		
1900	2.17000		
1931	1.74000		
1967	4.64000		
2000	5.06000		
2014	1.97000		
2100	.48300		
2200	4.03000		
2220	2.00000		
2300	.18900		
2400	.06000		
2422	1.32000		
2900	.44800		
3000	.33000		
3100	.41400		
3300	.09900		
3400	.31100		
3500	.34600		
3600	.31200		
3700	.76000		
TOTAL	105.40400	TOTAL	24.40100
TOTAL NON-SAPONIFIABLE CONC. (MG./G.) =			.01

TABLE 1.40

HEAVY HYDROCARBON ANALYSIS - STUCCS - 1976

SAMPLE TYPE : ZPL

SAMPLE CODE : APEW

PERIOD : AUGUST

LOCATION : STATION - 1 LINE -II

HEXANE ELUATE

BENZENE ELUATE

RETENTION INDEX	CONCENTRATION (UG./G.)	RETENTION INDEX	CONCENTRATION (UG./G.)
1400	.41000	2321	8.00000
1500	1.68000	2520	7.38000
1600	.67600	3079	11.30000
1670	72.60000	3228	5.63000
1700	.83600	3455	16.30000
1731	.83800	3507	8.72000
1800	.60800	3790	18.30000
1851	.26900	3860	63.60000
1900	.41100	4380	115.00000
1924	1.30000	4540	8.50000
1950	3.77000		
2000	4.76000		
2100	.14600		
2200	1.14000		
2300	.52700		
2600	.10700		
2700	.15400		
2900	.78900		
3000	.08600		
3100	.28200		
3200	.18000		
TOTAL	91.57500	TOTAL	262.73000

TOTAL NON-SAPONIFIABLE CONC. (MG./G.) = .03

TABLE 1.41

HEAVY HYDROCARBON ANALYSIS - STUCCS - 1976

SAMPLE TYPE : ZPL

SAMPLE CODE : APER

PERIOD : AUGUST

LOCATION : STATION - 1 LINE -II

HEXANE ELUATE

BENZENE ELUATE

RETENTION INDEX	CONCENTRATION (UG./G.)	RETENTION INDEX	CONCENTRATION (UG./G.)
1400	.62000	2228	5.18000
1446	.25000	2325	4.38000
1500	.36400	2365	3.94000
1600	.64400	2433	5.84000
1661	.34700	2456	3.41000
1670	62.70000	2532	7.50000
1700	.77200	3003	8.54000
1731	.69000	3790	2.50000
1800	.64800	3800	4.50000
1851	.29900	4360	17.20000
1900	.59200		
1928	1.41000		
1960	3.70000		
2000	5.54000		
2060	.19500		
2100	.18000		
2200	1.36000		
2300	.07500		
3200	.12800		
3403	.26700		
3493	.27100		
3623	.11400		
3750	.28200		
TOTAL	81.44800	TOTAL	62.99000

TOTAL NON-SAPONIFIABLE CONC. (MG./G.) = .05

TABLE 1.42

HEAVY HYDROCARBON ANALYSIS - STOCS - 1976

SAMPLE TYPE : ZPL

SAMPLE CODE : APIA

PERIOD : AUGUST

LOCATION : STATION - 2 LINE -II

HEXANE ELUATE

BENZENE ELUATE

RETENTION INDEX	CONCENTRATION (UG./G.)	RETENTION INDEX	CONCENTRATION (UG./G.)
1400	1.59000	1928	.41500
1500	2.71000	2352	3.05000
1600	3.03000	2777	.38000
1670	12.00000	2809	.33200
1700	5.45000	2913	.45700
1780	1.10000	3036	.47500
1800	4.65000	3074	.30200
1900	3.62000		
1954	3.89000		
2000	2.71000		
2100	2.04000		
2200	2.65000		
2300	1.44000		
2400	1.57000		
2500	1.91000		
2600	1.85000		
2700	1.85000		
2800	1.62000		
2900	1.73000		
3000	1.59000		
3100	1.04000		
3200	1.56000		
3300	1.47000		
3400	1.19000		
3500	.98000		
3600	1.40000		
3700	1.50000		
3800	1.80000		
3900	1.20000		
TOTAL	71.74000	TOTAL	5.41700
TOTAL NON-SAPONIFIABLE CONC. (MG./G.) =		.02	

TABLE 1.43

HEAVY HYDROCARBON ANALYSIS - STUCCS - 1976

SAMPLE TYPE : ZPL

SAMPLE CODE : APIB

PERIOD : AUGUST

LOCATION : STATION - 2 LINE -II

HEXANE ELUATE

BENZENE ELUATE

RETENTION INDEX	CONCENTRATION (UG./G.)	RETENTION INDEX	CONCENTRATION (UG./G.)
1400	.29100	2125	1.32000
1443	.36500	2244	.71500
1500	1.09000	2343	3.97000
1600	1.33000	3151	1.59000
1640	.95200	3210	.12800
1670	39.50000		
1700	7.42000		
1746	5.00000		
1780	3.05000		
1800	5.91000		
1900	8.20000		
1922	5.90000		
1952	10.60000		
1981	6.01000		
2000	8.77000		
2050	15.10000		
2100	12.00000		
2200	14.30000		
2300	8.78000		
2400	6.97000		
2500	11.20000		
2600	15.70000		
2700	20.70000		
2800	25.50000		
2900	27.30000		
3000	28.60000		
3100	31.10000		
3200	29.90000		
3300	26.10000		
3400	20.80000		

TABLE 1.43 Cont.'d

3500	25.30000		
3600	27.40000		
3700	30.70000		
3800	30.10000		
3900	21.80000		
4000	18.50000		
4100	13.40000		
4200	11.80000		
TOTAL	577.43800	TOTAL	7.72300
TOTAL NON-SAPONIFIABLE CONC. (MG./G.) =			.01

TABLE 1.44

HEAVY HYDROCARBON ANALYSIS - STUCCS - 1976

SAMPLE TYPE : ZPL

SAMPLE CODE : APGD

PERIOD : August Monthly

LOCATION : STATION -- 2 LINE - II

HEXANE ELUATE		BENZENE ELUATE	
RETENTION INDEX	CONCENTRATION (UG./G.)	RETENTION INDEX	CONCENTRATION (UG./G.)
1400	2.120000	2311	2.740000
1500	.362000	2363	9.200000
1600	4.270000	2452	2.770000
1670	32.000000	3048	3.770000
1700	7.860000	3076	19.200000
1780	3.150000	3161	4.270000
1800	7.700000	3373	4.830000
1900	7.820000	3650	4.830000
1965	9.060000	3780	12.300000
2000	5.450000	3850	5.980000
2013	8.660000		
2100	9.020000		
2200	11.900000		
2300	10.000000		
2400	13.900000		
2500	17.000000		
2600	16.900000		
2700	16.200000		
2800	17.200000		
2900	19.000000		
3000	15.300000		
3100	19.800000		
3200	19.000000		
3300	19.600000		
3400	18.300000		
3500	23.600000		
3600	28.400000		
3700	31.800000		
3800	34.400000		
3900	28.000000		
4000	26.900000		
4100	16.000000		
4200	14.000000		
TOTAL	516.672000	TOTAL	69.890000

TOTAL NON-SAPONIFIABLE CONC. (MG./G.) = .02

TABLE 1.45

HEAVY HYDROCARBON ANALYSIS - STUCCS - 1976

SAMPLE TYPE : ZPL

SAMPLE CODE : APHT

PERIOD : AUGUST

LOCATION : STATION - 3 LINE - II

HEXANE ELUATE

BENZENE ELUATE

RETENTION INDEX	CONCENTRATION (UG./G.)	RETENTION INDEX	CONCENTRATION (UG./G.)
1400	3.52000	1900	13.30000
1447	1.12000	2100	13.20000
1500	2.49000	2207	52.70000
1600	5.93000	2300	15.90000
1647	3.22000	2340	16.70000
1670	89.00000	2408	20.30000
1700	5.50000	2430	27.00000
1780	.47600	3047	26.50000
1800	7.22000	3064	20.20000
1851	3.73000		
1900	5.90000		
1926	2.18000		
1955	4.14000		
1983	3.09000		
2000	1.30000		
2070	2.13000		
2100	1.43000		
2200	3.98000		
2300	.63100		
2400	.56900		
2500	.76400		
2600	.75400		
2700	.82500		
2800	.80000		
2900	.81900		
3000	.74000		
3100	.64900		
3200	.44900		
3300	.46100		
3400	.71800		
3500	.86000		
3600	.89000		
3700	1.58000		
TOTAL	157.92500	TOTAL	205.80000

TOTAL NON-SAPONIFIABLE CONC. (MG./G.) = .02

TABLE 1.46

HEAVY HYDROCARBON ANALYSIS - STUCCS - 1976

SAMPLE TYPE : ZPL
 SAMPLE CODE : AQHF PERIOD : FALL
 LOCATION : STATION - 1 LINE -11

HEXANE ELUATE		BENZENE ELUATE	
RETENTION INDEX	CONCENTRATION (UG./G.)	RETENTION INDEX	CONCENTRATION (UG./G.)
1600	.05650	2010	.89900
1670	24.30000	2138	1.09000
1700	3.74000	2190	1.90000
1780	.02000	2217	.72800
1800	.14100	2310	2.77000
1900	.31000	2350	.56500
1944	.69300	2414	1.01000
1969	.01200	2484	.35900
2000	.23000	3336	2.78000
2059	1.62000		
2113	1.01000		
2140	.43300		
2200	.10900		
2300	.09470		
2400	.12700		
2500	.21400		
2600	.24300		
2700	.05200		
2800	.05810		
2900	.25500		
3000	.09960		
3100	.29000		
TOTAL	34.11650	TOTAL	12.18100
TOTAL NON-SAPONIFIABLE CONC. (MG./G.) =			.05

TABLE 1.47

HEAVY HYDROCARBON ANALYSIS - STDCS - 1976

SAMPLE TYPE : ZPL

SAMPLE CODE : AQVY

PERIOD : FALL

LOCATION : STATION - 1 LINE -II

HEXANE ELUATE

BENZENE ELUATE

RETENTION INDEX	CONCENTRATION (UG./G.)	RETENTION INDEX	CONCENTRATION (UG./G.)
1670	12.50000	2012	90.00000
1700	1.19000	2229	919.00000
1780	.04640	2254	216.00000
1800	.05020	2318	210.00000
1900	.35500	2353	131.00000
1924	.18500	2432	372.00000
1953	.57400	2460	298.00000
1982	1.47000	2667	70.20000
2028	1.47000	2825	108.00000
2100	1.03000	3050	335.00000
2136	.70800		
2163	.35400		
2200	.54100		
2300	.09180		
2382	.15600		
2400	.07740		
2500	.07030		
2600	.08650		
2624	.18000		
2700	.20200		
2800	.11300		
2900	.15500		
3000	.06850		
3100	.14700		
TOTAL	21.82110	TOTAL	2749.20000

TOTAL NON-SAPONIFIABLE CONC. (MG./G.) = .12

TABLE 1.48

HEAVY HYDROCARBON ANALYSIS - STOCS - 1976

SAMPLE TYPE : ZPL

SAMPLE CODE : AQVZ

PERIOD : FALL

LOCATION : STATION - 1 LINE -II

HEXANE ELUATE -----		BENZENE ELUATE -----	
RETENTION INDEX -----	CONCENTRATION (UG./G.) -----	RETENTION INDEX -----	CONCENTRATION (UG./G.) -----
1600	.45700	2129	.41000
1640	.29200	2240	.51800
1670	22.20000	2298	.29400
1700	2.38000	2359	5.02000
1780	.34600	2435	.33300
1800	.38400	3039	3.48000
1850	.32800	3612	.07910
1900	.40900		
1920	.28800		
1955	.80800		
1985	2.06000		
2033	1.98000		
2100	1.26000		
2135	.79700		
2163	.42900		
2200	.42900		
2300	.10500		
2400	.15200		
2500	.17700		
TOTAL	35.28100	TOTAL	10.13410
TOTAL NON-SAPONIFIABLE CONC. (MG./G.) = .04			

TABLE 1.49

HEAVY HYDROCARBON ANALYSIS - STUCCS - 1976

SAMPLE TYPE : ZPL

SAMPLE CODE : AQIR

PERIOD : FALL

LOCATION : STATION - 2 LINE -II

HEXANE ELUATE

BENZENE ELUATE

RETENTION INDEX	CONCENTRATION (UG./G.)	RETENTION INDEX	CONCENTRATION (UG./G.)
1600	1.54000	1919	5.32000
1670	26.30000	2140	2.16000
1700	9.48000	2198	10.90000
1700	.83100	2316	35.80000
1800	3.56000	2365	27.10000
1847	1.92000	3264	45.50000
1900	4.54000	3773	12.50000
1955	3.52000		
2000	2.00000		
2031	3.58000		
2085	4.98000		
2100	3.41000		
2124	6.85000		
2200	3.24000		
2300	3.51000		
2400	3.31000		
2500	4.04000		
2600	4.04000		
2700	7.35000		
2800	5.18000		
2900	10.20000		
3000	9.62000		
3100	5.01000		
TOTAL	128.61100	TOTAL	139.28000
TOTAL NON-SAPONIFIABLE CONC. (UG./G.) =		.26	

TABLE 1.50

HEAVY HYDROCARBON ANALYSIS - STOCS - 1976

SAMPLE TYPE : ZPL
 SAMPLE CODE : AQKH PERIOD : FALL
 LOCATION : STATION - 3 LINE - II

HEXANE ELUATE

BENZENE ELUATE

RETENTION INDEX	CONCENTRATION (UG./G.)	RETENTION INDEX	CONCENTRATION (UG./G.)
1500	2.46000	2053	1.22000
1600	.20300	2127	.79300
1670	11.30000	2253	.43000
1700	1.22000	2307	11.10000
1780	.16300	2423	1.94000
1800	.32500	2500	1.44000
1900	.30600	2554	2.37000
1925	.10200	3033	10.40000
1954	.30700	3418	3.37000
1983	.55400	3473	1.11000
2000	.14400		
2100	.21800		
2200	.25200		
2300	.27800		
2400	.16300		
2500	.17900		
2600	.17100		
2700	.17500		
2800	.16900		
2900	.18600		
3000	.14100		
3100	.18600		
3200	.27500		
TOTAL	19.07700	TOTAL	34.17300
TOTAL NON-SAPONIFIABLE CONC. (MG./G.) =		.03	

TABLE 1.51

HEAVY HYDROCARBON ANALYSIS - STUCCS - 1976

SAMPLE TYPE : ZPL

SAMPLE CODE : AUUV

PERIOD : NOVEMBER

LOCATION : STATION - 1 LINE -II

HEXANE ELUATE

BENZENE ELUATE

RETENTION INDEX	CONCENTRATION (UG./G.)	RETENTION INDEX	CONCENTRATION (UG./G.)
1400	107.00000	2005	58.30000
1500	25.50000	2105	12.00000
1600	3.94000	2133	14.10000
1670	49.10000	2220	337.00000
1700	82.20000	2243	51.30000
1780	3.96000	2315	21.80000
1800	1.28000	2353	66.20000
1900	3.82000	2416	113.00000
1976	12.70000	2427	74.10000
2000	2.62000	2465	20.20000
2021	2.71000	2672	68.80000
2147	11.70000		
2368	95.10000		
2552	47.20000		
2604	16.40000		
2712	32.00000		
2810	4.95000		
2877	399.00000		
3017	60.60000		
3112	58.30000		
3154	70.50000		
TOTAL	1090.58000	TOTAL	836.80000

TOTAL NON-SAPONIFIABLE CONC. (MG./G.) = .20

TABLE 1.52

HEAVY HYDROCARBON ANALYSIS - STUCCS - 1976

SAMPLE TYPE : ZPL

SAMPLE CODE : AUUX

PERIOD : NOVEMBER

LOCATION : STATION - 1 LINE -II

HEXANE ELUATE

BENZENE ELUATE

RETENTION INDEX	CONCENTRATION (UG./G.)	RETENTION INDEX	CONCENTRATION (UG./G.)
1400	4.41000	2030	1.60000
1500	16.90000	2132	8.07000
1600	2.68000	2210	2.87000
1645	.71400	2238	1.59000
1670	36.90000	2290	2.84000
1700	42.00000	2355	51.30000
1747	.75100	2433	4.57000
1800	1.07000	2497	2.04000
1850	.50400	2797	1.43000
1900	.77600	3046	17.70000
1954	1.35000		
1985	4.00000		
2000	.98300		
2100	.07800		
2114	.30200		
2162	.38400		
2200	.24600		
2300	.05070		
2400	.09690		
TOTAL	116.20360	TOTAL	94.01000
TOTAL NON-SAPONIFIABLE CONC. (MG./G.) = .02			

TABLE 1.53

HEAVY HYDROCARBON ANALYSIS - STUCCS - 1976

SAMPLE TYPE : ZPL

SAMPLE CODE : AUUY

PERIOD : NOVEMBER

LOCATION : STATION - 1 LINE -II

HEXANE ELUATE

BENZENE ELUATE

RETENTION INDEX	CONCENTRATION (UG./G.)	RETENTION INDEX	CONCENTRATION (UG./G.)
1500	44.70000	1917	2.40000
1600	6.40000	2138	1.28000
1670	81.00000	2302	.77400
1730	205.00000	2361	20.20000
1800	1.54000	2456	.51300
1900	2.25000	2639	.33000
1980	2.86000	3032	6.23000
TOTAL	343.75000	TOTAL	31.72700

TOTAL NON-SAPONIFIABLE CONC. (MG./G.) = .02

TABLE 1.54

HEAVY HYDROCARBON ANALYSIS - STUCCS - 1976

SAMPLE TYPE : ZPL

SAMPLE CODE : AUWM

PERIOD : NOVEMBER

LOCATION : STATION - 2 LINE -II

HEXANE ELUATE

BENZENE ELUATE

RETENTION INDEX	CONCENTRATION (UG./G.)	RETENTION INDEX	CONCENTRATION (UG./G.)
1400	.84600	1712	1.15000
1500	2.84000	1905	.95200
1600	2.49000	2031	1.49000
1645	1.03000	2132	13.20000
1670	46.20000	2232	3.69000
1700	24.00000	2292	3.65000
1730	.13900	2358	47.00000
1800	2.10000	2439	5.70000
1850	.42600	2512	4.59000
1900	.45900	2584	1.20000
1943	.78700	2756	2.43000
1983	5.64000	3024	9.09000
2000	.32400		
2051	.16300		
2100	.14600		
2134	.29300		
2200	.37800		
2300	.17200		
2400	.08690		
2500	.25400		
2600	.00470		
2700	.24100		
2800	.08300		
2900	.28800		
3000	.27000		
3063	.37100		
3100	.22000		
TOTAL	90.33160	TOTAL	94.14200

TOTAL NON-SAPONIFIABLE CONC. (MG./G.) = .06

TABLE 1.55

HEAVY HYDROCARBON ANALYSIS - STUCCS - 1976

SAMPLE TYPE : ZPL

SAMPLE CODE : AUNN

PERIOD : NOVEMBER

LOCATION : STATION - 2 LINE -II

HEXANE ELUATE

BENZENE ELUATE

RETENTION INDEX	CONCENTRATION (UG./G.)	RETENTION INDEX	CONCENTRATION (UG./G.)
1400	4.61000	1613	.90400
1444	1.83000	1690	1.65000
1460	.72400	1729	1.77000
1500	6.60000	1793	.63600
1600	1.95000	2042	1.07000
1645	.58200	2135	2.57000
1670	25.00000	2197	1.12000
1700	14.40000	2239	1.51000
1780	.46400	2300	2.49000
1800	.80800	2365	35.90000
1850	.31300	2447	2.14000
1900	.47300	2517	1.17000
1924	.34400	2739	1.33000
1950	1.47000	3002	6.95000
1977	3.56000		
2000	1.51000		
2100	.16900		
2200	.15200		
2300	.10700		
2400	.11600		
2500	.12600		
2600	.10300		
2700	.22900		
2800	.20500		
2900	.31700		
3000	.23000		
3100	.26300		
TOTAL	66.65700	TOTAL	61.21000

TOTAL NON-SAPONIFIABLE CONC. (MG./G.) = .04

TABLE 1.56

HEAVY HYDROCARBON ANALYSIS - STUCCS - 1976

SAMPLE TYPE : ZPL

SAMPLE CODE : AUYC

PERIOD : NOVEMBER

LOCATION : STATION - 3 LINE -II

HEXANE ELUATE		BENZENE ELUATE	
RETENTION INDEX	CONCENTRATION (UG./G.)	RETENTION INDEX	CONCENTRATION (UG./G.)
1500	4.50000	1606	.48500
1600	.23500	1682	.22700
1670	17.00000	2075	.70600
1700	8.81000	2122	1.07000
1800	.05540	2184	.40600
1900	.40400	2226	.64600
1921	.40600	2285	1.16000
1947	1.08000	2349	6.07000
1975	2.68000	2433	2.97000
2300	.14200	2511	1.86000
2100	.05850	2758	1.06000
2146	.58700	2967	.65900
2200	.04830	3018	5.81000
2300	.41200		
2400	.32600		
2500	.62300		
2600	.60200		
2700	.70300		
2800	.52300		
2900	.40000		
3000	.20000		
3100	.09190		
3144	.04640		
3193	3.31000		
3247	3.37000		
3317	3.41000		
3655	3.51000		
TOTAL	54.51950	TOTAL	23.18900
TOTAL NON-SAPONIFIABLE CONC. (MG./G.) =			.06

TABLE 1.57

HEAVY HYDROCARBON ANALYSIS - STUCCS - 1976

SAMPLE TYPE : ZPL

SAMPLE CODE : AVTZ

PERIOD : DECEMBER

LOCATION : STATION - 2 LINE -II

HEXANE ELUATE

BENZENE ELUATE

RETENTION INDEX	CONCENTRATION (UG./G.)	RETENTION INDEX	CONCENTRATION (UG./G.)
1500	2.25000	1922	2.38000
1600	2.80000	1951	2.60000
1670	34.70000	1981	5.06000
1700	26.70000	2133	3.20000
1800	1.90000	2190	3.43000
1849	.85300	2278	4.15000
1900	3.07000	2347	194.00000
1949	1.84000	2439	7.10000
1978	1.80000	2668	4.09000
2000	1.50000	2760	27.80000
2044	1.23000	3018	25.00000
2100	.35000	3556	9.42000
2134	2.13000		
2200	.11100		
2300	.15500		
2400	.47600		
2500	.51500		
2600	.14600		
2700	.18400		
2800	.07950		
2900	.16700		
TOTAL	82.83650	TOTAL	288.23000

TOTAL NON-SAPONIFIABLE CONC. (MG./G.) = .13

TABLE 1.58

HEAVY HYDROCARBON ANALYSIS - STUCCS - 1976

SAMPLE TYPE : ZPL
 SAMPLE CODE : AVUB PERIOD : DECEMBER
 LOCATION : STATION - 2 LINE -II

HEXANE ELUATE

BENZENE ELUATE

RETENTION INDEX	CONCENTRATION (UG./G.)	RETENTION INDEX	CONCENTRATION (UG./G.)
1400	5.07000	1907	1.98000
1500	5.25000	1925	1.83000
1600	11.90000	1955	1.94000
1645	4.82000	1984	3.25000
1670	29.30000	2031	4.41000
1700	32.90000	2135	4.51000
1780	.89100	2204	1.82000
1800	6.56000	2244	2.23000
1848	3.22000	2296	1.45000
1900	4.24000	2358	88.40000
1952	1.07000	2763	8.60000
1983	.43900	3024	4.96000
2000	1.63000		
2050	2.19000		
2100	.74700		
2134	1.06000		
2155	.50200		
2200	1.13000		
2300	.44900		
2353	.78500		
2400	.99700		
2500	.55700		
2600	.36700		
2700	.78000		
2800	1.00000		
2900	1.71000		
3000	1.75000		
3100	2.20000		
TOTAL	123.51400	TOTAL	125.44000

TOTAL NON-SAPONIFIABLE CONC. (MG./G.) = .01

TABLE 1.59

HEAVY HYDROCARBON ANALYSIS - STUCCS - 1976

SAMPLE TYPE : ZPL

SAMPLE CODE : AVUC

PERIOD : DECEMBER

LOCATION : STATION - 2 LINE -II

HEXANE ELUATE

BENZENE ELUATE

RETENTION INDEX	CONCENTRATION (UG./G.)	RETENTION INDEX	CONCENTRATION (UG./G.)
1400	6.88000	1888	3.71000
1500	11.60000	1953	1.88000
1600	7.56000	1982	3.70000
1646	2.83000	2128	4.61000
1670	33.90000	2199	1.90000
1700	28.10000	2281	2.19000
1780	.10100	2343	133.00000
1800	3.23000	2440	5.13000
1849	2.27000	2701	17.00000
1900	2.01000	3020	14.30000
1950	1.42000		
1979	1.56000		
2000	1.25000		
2044	1.44000		
2100	.09900		
2151	3.13000		
2200	.12300		
2253	1.31000		
2300	.15100		
2400	1.09000		
2500	.60700		
2600	.28000		
2700	.30300		
2800	.20000		
2900	.23400		
TOTAL	111.60000	TOTAL	187.50000

TOTAL NON-SAPONIFIABLE CONC. (MG./G.) = .01

TABLE 1.60

HEAVY HYDROCARBON ANALYSIS - STJCS - 1976

SAMPLE TYPE : ZPL

SAMPLE CODE : AVVV

PERIOD : DECEMBER

LOCATION : STATION - 3 LINE -II

HEXANE ELUATE		BENZENE ELUATE	
RETENTION INDEX	CONCENTRATION (UG./G.)	RETENTION INDEX	CONCENTRATION (UG./G.)
1400	1.01000	1907	2.11000
1500	0.74000	2082	2.09000
1600	1.92000	2134	11.00000
1646	.83700	2210	17.30000
1670	64.10000	2212	17.20000
1700	8.33000	2356	69.10000
1749	.56900	2442	17.90000
1780	.08700	2741	4.29000
1800	.93200	3020	17.30000
1849	.79500		
1900	1.83000		
1921	.62400		
1949	3.51000		
1970	7.11000		
2000	1.50000		
2041	1.52000		
2100	1.23000		
2139	3.13000		
2164	2.53000		
2200	2.97000		
TOTAL	111.87400	TOTAL	158.29000

TOTAL NON-SAPONIFIABLE CONC. (MG./G.) = .06

TABLE 1.61

HEAVY HYDROCARBON ANALYSIS - STUCCS - 1976

SAMPLE TYPE : ZPL

SAMPLE CODE : AGDP

PERIOD : WINTER

LOCATION : STATION - 1 LINE -III

HEXANE ELUATE

BENZENE ELUATE

RETENTION INDEX	CONCENTRATION (UG./G.)	RETENTION INDEX	CONCENTRATION (UG./G.)
1500	5.79000	2127	31.70000
1600	.19200	2197	9.35000
1670	78.00000	2347	92.30000
1700	129.00000	3050	4.65000
1780	4.95000		
1800	4.78000		
1900	90.80000		
1950	.61200		
2000	.38100		
2100	.28800		
2200	1.95000		
3599	25.40000		
TOTAL	342.14300	TOTAL	138.00000
TOTAL NON-SAPONIFIABLE CONC. (MG./G.) =		.03	

TABLE 1.62

HEAVY HYDROCARBON ANALYSIS - STUCCS - 1976

SAMPLE TYPE : ZPL
 SAMPLE CODE : AGDR PERIOD : WINTER
 LOCATION : STATION - 2 LINE -III

HEXANE ELUATE		BENZENE ELUATE	
RETENTION INDEX	CONCENTRATION (UG./G.)	RETENTION INDEX	CONCENTRATION (UG./G.)
1500	.58700	2005	1220.00000
1670	5.22000	2224	4430.00000
1740	.96400	2250	1110.00000
1981	.86300	2430	1460.00000
2135	1.21000	2450	1510.00000
2356	4.05000	2811	1670.00000
2570	2.62000	3067	5400.00000
2811	.57100	3533	1830.00000
3056	.68800	3950	7100.00000
3154	.46400		
TOTAL	17.23700	TOTAL	25790.00000
TOTAL NON-SAPONIFIABLE CONC. (MG./G.) = .34			

TABLE 1.63

HEAVY HYDROCARBON ANALYSIS - STUCCS - 1976

SAMPLE TYPE : ZPL

SAMPLE CODE : AGDT

PERIOD : WINTER

LOCATION : STATION - 3 LINE -III

HEXANE ELUATE

BENZENE ELUATE

RETENTION INDEX	CONCENTRATION (UG./G.)	RETENTION INDEX	CONCENTRATION (UG./G.)
1640	.66200		
1670	2.07000		
1700	.35600		
3599	1.58000		
TOTAL	4.66800	TOTAL	0
TOTAL NON-SAPONIFIABLE CONC. (MG./G.) =			.53

TABLE 1.64

HEAVY HYDROCARBON ANALYSIS - STOCS - 1976

SAMPLE TYPE : ZPL
 SAMPLE CODE : ALIM PERIOD : SPRING
 LOCATION : STATION - 1 LINE -III

HEXANE ELUATE		BENZENE ELUATE	
RETENTION INDEX	CONCENTRATION (UG./G.)	RETENTION INDEX	CONCENTRATION (UG./G.)
1460	2.28000	1896	18.00000
1470	18.10000	2127	3.77000
1600	1.60000	2236	2.43000
1632	21.00000	2345	10.50000
1670	12.80000	3061	2.45000
1700	36.70000	3148	4.06000
1700	.10000		
1800	.60000		
1842	25.40000		
1930	.58100		
1953	4.21000		
2000	.34100		
2046	18.40000		
2100	.70700		
2200	2.75000		
2257	11.20000		
2300	5.99000		
2350	5.55000		
2400	4.27000		
2450	6.78000		
2500	1.85000		
2550	5.46000		
2600	.63400		
2654	76.10000		
2747	5.32000		
2800	.13400		
2854	1.53000		
2900	.44000		
3100	.40500		
3148	3.44000		
TOTAL	279.97000	TOTAL	41.21000

TOTAL NON-SAPONIFIABLE CONC. (MG./G.) = .02

TABLE 1.65

HEAVY HYDROCARBON ANALYSIS - STUCCS - 1976

SAMPLE TYPE : ZPL

SAMPLE CODE : ALTJ

PERIOD : SPRING

LOCATION : STATION - 1 LINE -III

HEXANE ELUATE

BENZENE ELUATE

RETENTION INDEX	CONCENTRATION (UG./G.)	RETENTION INDEX	CONCENTRATION (UG./G.)
1449	3.94000	1896	22.40000
1520	14.10000	2127	3.34000
1600	1.59000	2345	6.33000
1643	27.60000	3061	11.90000
1670	22.60000	3148	3.07000
1700	16.30000		
1760	.14900		
1800	.73600		
1848	30.30000		
1900	1.16000		
2000	.19900		
2052	22.10000		
2100	.06700		
2160	11.10000		
2200	1.40000		
2257	14.60000		
2300	1.16000		
2400	.95800		
2500	.06600		
3430	.70600		
TOTAL	170.79100	TOTAL	47.84000

TOTAL NON-SAPONIFIABLE CONC. (MG./G.) = .05

TABLE 1.66

HEAVY HYDROCARBON ANALYSIS - STUCCS - 1976

SAMPLE TYPE : ZPL

SAMPLE CODE : ASWE

PERIOD : Spring-rep to LTJ

LOCATION : STATION --1 LINE -III

HEXANE ELUATE

BENZENE ELUATE

RETENTION INDEX	CONCENTRATION (UG./G.)	RETENTION INDEX	CONCENTRATION (UG./G.)
1500	23.20000	2127	10.20000
1630	.58600	2144	4.74000
1643	3.17000	2206	3.66000
1670	12.30000	2232	5.58000
1700	23.60000	2347	15.00000
1780	.08600	3047	15.80000
1800	.05900		
1847	4.00000		
1900	.37200		
1954	.80000		
1982	1.30000		
2053	3.61000		
2153	3.17000		
2171	6.85000		
2250	2.25000		
2300	.26700		
2354	.91000		
2449	1.28000		
2500	.05200		
2550	1.31000		
2600	.02700		
2650	.80000		
2700	.27800		
2733	1.68000		
2800	.35300		
2900	.48200		
2927	2.66000		
3159	5.33000		
3200	.83300		
TOTAL	101.61500	TOTAL	54.98000

TOTAL NON-SAPONIFIABLE CONC. (MG./G.) = .04

TABLE 1.67

HEAVY HYDROCARBON ANALYSIS - STOCS - 1976

SAMPLE TYPE : ZPL

SAMPLE CODE : ALKC

PERIOD : SPRING

LOCATION : STATION - 2 LINE -III

HEXANE ELUATE

BENZENE ELUATE

RETENTION INDEX	CONCENTRATION (UG./G.)	RETENTION INDEX	CONCENTRATION (UG./G.)
1500	1.26000	2120	5.78000
1600	.35600	2209	2.67000
1641	.56200	2339	4.82000
1670	7.65000	3070	6.28000
1700	28.90000		
1800	.17300		
1837	2.24000		
1952	1.55000		
1978	1.17000		
2044	2.44000		
2147	1.08000		
2164	1.19000		
2240	1.13000		
2452	.68500		
2900	.63100		
3200	2.72000		
3230	.81900		
3285	2.52000		
3301	2.37000		
TOTAL	59.44000	TOTAL	19.47000

TOTAL NON-SAPONIFIABLE CONC. (MG./G.) = .03

TABLE 1.68

HEAVY HYDROCARBON ANALYSIS - STUCCS - 1976

SAMPLE TYPE : ZPL
 SAMPLE CODE : ALLU PERIOD : SPRING
 LOCATION : STATION - 3 LINE - III

HEXANE ELUATE

BENZENE ELUATE

RETENTION INDEX	CONCENTRATION (UG./G.)	RETENTION INDEX	CONCENTRATION (UG./G.)
1500	.04650	1701	10.30000
1600	.02060	2031	371.00000
1670	2.82000	2076	47.80000
1700	19.00000	2126	91.40000
1700	.05100	2260	1770.00000
1800	.21300	2342	160.00000
1844	.35300	2464	676.00000
1900	.41200	2486	448.00000
1940	.74300	2609	142.00000
1974	.84300	2840	72.70000
2000	.41400		
2040	.67000		
2100	.66000		
2147	.44200		
2200	.44100		
2300	.45200		
2400	.39700		
2500	.45200		
2600	.36300		
2700	.45500		
2800	.27300		
2900	.54700		
3100	.36500		
3200	1.11000		
3270	1.12000		
3540	2.67000		
3630	2.70000		
TOTAL	38.03990	TOTAL	3789.20000

TOTAL NON-SAPONIFIABLE CONC. (MG./G.) = .08

TABLE 1.69

HEAVY HYDROCARBON ANALYSIS - STDCS - 1976

SAMPLE TYPE : ZPL

SAMPLE CODE : AQLW

PERIOD : FALL

LOCATION : STATION - 1 LINE -III

HEXANE ELUATE

BENZENE ELUATE

RETENTION INDEX	CONCENTRATION (UG./G.)	RETENTION INDEX	CONCENTRATION (UG./G.)
1600	.27400	2299	1.84000
1670	1.29000	2395	3.35000
1740	.35200	2477	4.22000
1780	.11700	2558	4.43000
1800	.67800	2635	5.44000
1851	.26100	2708	3.29000
1900	.73400	2783	2.39000
2000	.25000	3200	2.10000
2053	.11000		
2100	.17600		
2129	.66400		
2200	.22300		
2300	.28300		
2400	.75900		
2500	.37900		
2600	.28600		
2700	.60800		
2800	.31400		
2900	.59400		
3000	.28300		
3100	.53600		
3200	.04170		
3300	.07180		
TOTAL	9.28450	TOTAL	27.46000
TOTAL NON-SAPONIFIABLE CONC. (MG./G.) = .00			

TABLE 1.70

HEAVY HYDROCARBON ANALYSIS - STUCCS - 1976

SAMPLE TYPE : ZPL
 SAMPLE CODE : AQWK
 LOCATION : STATION - 1 LINE -III
 PERIOD : FALL

HEXANE ELUATE		BENZENE ELUATE	
RETENTION INDEX	CONCENTRATION (UG./G.)	RETENTION INDEX	CONCENTRATION (UG./G.)
1670	.33400	2018	.53200
1700	.06300	2082	.21600
1800	.13100	2187	.33800
1842	.07300	2227	.35700
1900	.25600	2273	.37300
2000	.09600	2333	5.80000
2047	.12800	2554	.19000
2100	.03900	3148	.73500
2140	2.35000		
2200	.13900		
2300	.14000		
2400	.11800		
2500	.08700		
2600	.04900		
2700	.06200		
2800	.04200		
2900	.05400		
3000	.01800		
3100	.04100		
3155	.02600		
3370	.13400		
TOTAL	4.38000	TOTAL	8.54100
TOTAL NON-SAPONIFIABLE CONC. (MG./G.) = .01			

TABLE 1.71

HEAVY HYDROCARBON ANALYSIS - STUCCS - 1976

SAMPLE TYPE : ZPL

SAMPLE CODE : ANWL

PERIOD : FALL

LOCATION : STATION - 1 LINE -III

HEXANE ELUATE

BENZENE ELUATE

RETENTION INDEX	CONCENTRATION (UG./G.)	RETENTION INDEX	CONCENTRATION (UG./G.)
1400	.12900	1925	1.30000
1600	1.44000	2048	1.39000
1644	.70200	2234	2.44000
1670	1.24000	2310	2.01000
1700	.40000	2372	20.40000
1769	.25100	2765	18.60000
1780	.05100	3037	.07900
1800	1.46000		
1845	1.10000		
1900	.76400		
2000	.70600		
2045	.88400		
2100	.04600		
2139	7.74000		
2200	.46500		
2251	.17900		
2300	.12400		
2400	.10300		
2500	10.10000		
2600	.06900		
2700	.07800		
2800	.05200		
2900	.15000		
3000	.01200		
3100	.04900		
TOTAL	28.29400	TOTAL	52.21900

TOTAL NON-SAPONIFIABLE CONC. (MG./G.) = .01

TABLE 1.72

HEAVY HYDROCARBON ANALYSIS - STOCS - 1976

SAMPLE TYPE : ZPL

SAMPLE CODE : AQNI

PERIOD : FALL

LOCATION : STATION - 2 LINE -III

HEXANE ELUATE		BENZENE ELUATE	
RETENTION INDEX	CONCENTRATION (UG./G.)	RETENTION INDEX	CONCENTRATION (UG./G.)
1640	.25100	2340	.41800
1645	.10000	2361	.71800
1670	1.45000	2398	.48800
1700	.31900	2491	.64700
1800	.20100	2583	.52700
1846	.10200	2672	.69200
1900	.06700	2764	.54700
2000	.07700	2881	.58400
2059	.07300	2975	.57300
2100	.02600	3089	.61300
2149	1.19000	3188	.75500
2200	.15400		
2300	.15600		
2400	.23100		
2500	.36400		
2600	.45600		
2700	.53000		
2800	.47900		
2900	.52000		
3000	.27200		
3057	.23800		
3100	.19700		
3159	.03800		
3200	.07200		
3300	.02900		
TOTAL	7.59700	TOTAL	6.56200
TOTAL NON-SAPONIFIABLE CONC. (MG./G.) =			.01

TABLE 1.73

HEAVY HYDROCARBON ANALYSIS - STUCCS - 1976

SAMPLE TYPE : ZPL

SAMPLE CODE : AQOY

PERIOD : FALL

LOCATION : STATION - 3 LINE -III

HEXANE ELUATE

BENZENE ELUATE

RETENTION INDEX	CONCENTRATION (UG./G.)	RETENTION INDEX	CONCENTRATION (UG./G.)
1500	1.78000	2145	5.07000
1600	.74900	2249	5.45000
1670	18.60000	2308	2.02000
1700	5.24000	2367	15.40000
1780	.18000	2457	4.45000
1800	.81100	2543	2.44000
1850	.43000	2710	1.31000
1900	.88400	2798	9.15000
1923	.99200	2814	10.40000
1955	2.09000	3091	44.50000
1985	3.05000	3225	13.30000
2000	.42100		
2100	.47000		
2132	7.61000		
2200	.99800		
2300	.48000		
2400	.21100		
2500	.44900		
2600	.24200		
TOTAL	45.66700	TOTAL	113.49000

TOTAL NON-SAPONIFIABLE CONC. (MG./G.) = .03

TABLE 1.74

HEAVY HYDROCARBON ANALYSIS - STUCCS - 1976

SAMPLE TYPE : ZPL
 SAMPLE CODE : AGEZ PERIOD : WINTER
 LOCATION : STATION - 1 LINE -IV

HEXANE ELUATE

BENZENE ELUATE

RETENTION INDEX	CONCENTRATION (UG./G.)	RETENTION INDEX	CONCENTRATION (UG./G.)
1500	1.12000	2014	3.19000
1670	53.10000	2114	11.70000
1700	31.20000	2280	2.08000
1780	1.22000	2331	63.50000
1800	.60200	3061	5.22000
1900	25.60000	3320	2.55000
1950	.96200	3660	4.94000
2000	.02400		
2100	.02800		
2200	3.23000		
3599	9.01000		
TOTAL	126.09600	TOTAL	93.18000
TOTAL NON-SAPONIFIABLE CONC. (MG./G.) = .03			

TABLE 1.75

HEAVY HYDROCARBON ANALYSIS - STUCCS - 1976

SAMPLE TYPE : ZPL

SAMPLE CODE : AGGP

PERIOD : WINTER

LOCATION : STATION - 2 LINE -IV

HEXANE ELUATE

BENZENE ELUATE

RETENTION INDEX	CONCENTRATION (UG./G.)	RETENTION INDEX	CONCENTRATION (UG./G.)
1538	6.02000		
1584	12.20000		
1652	7.06000		
1693	2.45000		
2374	5.22000		
2502	6.34000		
2800	1.07000		
3052	7.20000		
3200	2.19000		
3505	1.13000		
TOTAL	56.88000	TOTAL	0
TOTAL NON-SAPONIFIABLE CONC. (MG./G.) =		.65	

TABLE 1.76

HEAVY HYDROCARBON ANALYSIS - STUCCS - 1976

SAMPLE TYPE : ZPL
 SAMPLE CODE : AGDA PERIOD : WINTER
 LOCATION : STATION - 3 LINE -IV

HEXANE ELUATE

BENZENE ELUATE

RETENTION INDEX	CONCENTRATION (UG./G.)	RETENTION INDEX	CONCENTRATION (UG./G.)
1500	11.60000	2314	9.98000
1600	.77000	2374	148.00000
1670	83.40000	2467	7.76000
1700	50.20000	3067	7.83000
1840	2.02000		
1900	2.55000		
1970	25.00000		
2000	1.08000		
2100	1.49000		
2200	5.73000		
2300	2.94000		
2400	.07000		
3599	35.80000		
TOTAL	222.65000	TOTAL	173.57000
TOTAL NON-SAPONIFIABLE CONC. (MG./G.) = .03			

TABLE 1.77

HEAVY HYDROCARBON ANALYSIS - STOCS - 1976

SAMPLE TYPE : ZPL

SAMPLE CODE : ALNR

PERIOD : SPRING

LOCATION : STATION - 1 LINE -IV

HEXANE ELUATE

BENZENE ELUATE

RETENTION INDEX	CONCENTRATION (UG./G.)	RETENTION INDEX	CONCENTRATION (UG./G.)
1500	3.54000	1583	19.50000
1600	1.72000	2002	25.60000
1700	174.00000	2213	119.00000
1780	.09200	2233	28.10000
1800	.90200	2313	55.80000
1842	1.62000	2415	47.60000
1900	.19100	2439	60.40000
1974	1.84000	3061	51.10000
2000	.23600	3661	78.90000
2100	.55000	3970	178.00000
2200	.23600		
2300	.95900		
2400	.25100		
2500	1.01000		
2600	1.19000		
2700	.92900		
2800	.83400		
2900	.77400		
3000	1.94000		
3100	1.13000		
3200	1.04000		
TOTAL	194.98400	TOTAL	664.00000

TOTAL NON-SAPONIFIABLE CONC. (MG./G.) = .09

TABLE 1.78

HEAVY HYDROCARBON ANALYSIS - STUCCS - 1976

SAMPLE TYPE : ZPL
 SAMPLE CODE : ALPG
 LOCATION : STATION - 2 LINE -IV PERIOD : SPRING

HEXANE ELUATE		BENZENE ELUATE	
RETENTION INDEX	CONCENTRATION (UG./G.)	RETENTION INDEX	CONCENTRATION (UG./G.)
1670	.76100	2128	.76600
1760	.44800	2338	.79300
1839	.68600	2987	3.17000
2045	.74900		
2250	.48000		
2445	.19100		
2550	.11700		
TOTAL	5.37200	TOTAL	4.72900
TOTAL NON-SAPONIFIABLE CONC. (MG./G.) = .01			

TABLE 1.79

HEAVY HYDROCARBON ANALYSIS - STOCS - 1976

SAMPLE TYPE : ZPL

SAMPLE CODE : ALGY

PERIOD : SPRING

LOCATION : STATION - 3 LINE -IV

HEXANE ELUATE

BENZENE ELUATE

RETENTION INDEX	CONCENTRATION (UG./G.)	RETENTION INDEX	CONCENTRATION (UG./G.)
1670	1.52000	2195	2.02000
1700	19.10000	2423	2.56000
1800	.19300	3052	3.13000
1857	.55400	3626	12.00000
1900	.17200	3920	14.00000
1936	.33100		
2000	.02700		
2052	1.37000		
2100	.24800		
2143	.45600		
2200	.19100		
2247	.67400		
2300	.40100		
2400	.34700		
2500	.49100		
2600	.82500		
2700	.62200		
2800	.60000		
2900	1.05000		
3000	.80800		
3100	.84400		
3200	.56900		
3300	.06000		
TOTAL	32.05300	TOTAL	33.71000

TOTAL NON-SAPONIFIABLE CONC. (MG./G.) = .03

TABLE 1.80

HEAVY HYDROCARBON ANALYSIS - STUCCS - 1976

SAMPLE TYPE : ZPL

SAMPLE CODE : AQGN

PERIOD : FALL

LOCATION : STATION - 1 LINE -IV

HEXANE ELUATE

BENZENE ELUATE

RETENTION INDEX	CONCENTRATION (UG./G.)	RETENTION INDEX	CONCENTRATION (UG./G.)
1600	.07800	2040	7.29000
1648	.03200	2146	7.97000
1670	.32300	2253	12.00000
1700	.33500	2304	8.46000
1780	.02600	2364	19.50000
1800	.25200	2402	10.90000
1847	.11900	2494	15.10000
1900	.31900	2551	9.57000
2000	.26400	2582	15.80000
2053	.18600	2671	22.20000
2100	.36400	2749	8.57000
2140	.67700	2830	6.12000
2200	.47900	3300	35.30000
2300	.46200		
2400	.41600		
2500	.25100		
2600	.20100		
2700	.23500		
2800	.15900		
2900	.17800		
3000	.08900		
3100	.15200		
3155	.13000		
3200	.04200		
3300	.06500		
3373	.04300		
TOTAL	5.87700	TOTAL	178.78000

TOTAL NON-SAPONIFIABLE CONC. (UG./G.) = .01

TABLE 1.81

HEAVY HYDROCARBON ANALYSIS - STUCCS - 1976

SAMPLE TYPE : ZPL

SAMPLE CODE : AQWV

PERIOD : FALL

LOCATION : STATION - 1 LINE -IV

HEXANE ELUATE

BENZENE ELUATE

RETENTION INDEX	CONCENTRATION (UG./G.)	RETENTION INDEX	CONCENTRATION (UG./G.)
1400	1.04000	1882	.59400
1500	1.01000	2018	.25400
1600	3.32000	2127	.33800
1644	1.75000	2167	.25400
1670	1.87000	2227	.33400
1700	2.79000	2267	.29100
1771	.35100	2327	2.74000
1780	.17600	2539	.21500
1800	2.65000	2754	.34900
1845	1.89000	3055	1.24000
1900	1.31000	3146	.40800
1981	.59800		
2000	1.18000		
2045	1.35000		
2100	.56700		
2130	4.60000		
2200	.73500		
2251	.21000		
2300	.29600		
2400	.36900		
2500	.42000		
2600	.23800		
2700	.17600		
2800	.33600		
2900	.48100		
3000	.28100		
3100	.29000		
3200	.46700		
TOTAL	30.77100	TOTAL	7.01700
TOTAL NON-SAPONIFIABLE CONC. (MG./G.) =		.00	

TABLE 1.82

HEAVY HYDROCARBON ANALYSIS - STUCCS - 1976

SAMPLE TYPE : ZPL
 SAMPLE CODE : ANWW PERIOD : FALL
 LOCATION : STATION - 1 LINE -IV

HEXANE ELUATE

BENZENE ELUATE

RETENTION INDEX	CONCENTRATION (UG./G.)	RETENTION INDEX	CONCENTRATION (UG./G.)
1600	1.93000	2127	1.74000
1643	.27500	2297	2.12000
1670	2.39000	2480	4.50000
1700	1.72000	2575	4.04000
1800	1.64000	2607	4.22000
1839	.89200	2752	1.56000
1900	1.72000	2908	3.17000
2000	.93900		
2100	1.15000		
2140	7.70000		
2200	.94500		
2300	.42700		
2400	.69100		
2500	.74800		
2600	1.30000		
2700	1.35000		
2800	1.70000		
2900	2.02000		
3000	2.07000		
3100	2.05000		
3200	1.08000		
3300	1.42000		
3400	.80200		
3500	.65500		
TOTAL	39.67400	TOTAL	21.35000
TOTAL NON-SAPONIFIABLE CONC. (UG./G.) =		.01	

TABLE 1.83

HEAVY HYDROCARBON ANALYSIS - STUCCS - 1976

SAMPLE TYPE : ZPL

SAMPLE CODE : AQRZ

PERIOD : FALL

LOCATION : STATION - 2 LINE -IV

HEXANE ELUATE

BENZENE ELUATE

RETENTION INDEX	CONCENTRATION (UG./G.)	RETENTION INDEX	CONCENTRATION (UG./G.)
1600	.03300	2041	1.64000
1670	4.08000	2146	5.99000
1700	.40000	2222	1.85000
1780	.01800	2254	1.21000
1800	.10200	2365	6.99000
1847	.02800	2447	1.40000
1900	.15000	2993	1.07000
1922	.03200	3118	.64500
1950	.10100		
1978	.04300		
2000	.13800		
2050	.05400		
2100	.19900		
2150	.03100		
2200	.19700		
2300	.24700		
2400	.24700		
2500	.26500		
2600	.31200		
2700	.37300		
2800	.34800		
2900	.33700		
3000	.27000		
3100	.22000		
3200	.16200		
3300	.14000		
3382	.07200		
3400	.09400		
3500	.08700		
TOTAL	8.78000	TOTAL	20.79500

TOTAL NON-SAPONIFIABLE CONC. (MG./G.) = .12

TABLE 1.84

HEAVY HYDROCARBON ANALYSIS - STUCCS - 1976

SAMPLE TYPE : ZPL

SAMPLE CODE : ANTP

PERIOD : FALL

LOCATION : STATION - 3 LINE -IV

HEXANE ELUATE		BENZENE ELUATE	
RETENTION INDEX	CONCENTRATION (UG./G.)	RETENTION INDEX	CONCENTRATION (UG./G.)
1400	.05000	1892	.33300
1500	.12300	2158	1.37000
1600	.35000	2201	.46300
1656	.21200	2282	.43200
1670	5.09000	2343	5.22000
1700	.43200	2438	.92800
1780	.00400	2520	.44000
1800	.22800	3057	21.60000
1847	.20400	3157	.59700
1900	.08100	3416	.54400
1910	.12500	4300	1.52000
1947	.37600		
1977	.35800		
2000	.07900		
2047	.24900		
2100	.16400		
2147	.09700		
2200	.10700		
2300	.14300		
2400	.08400		
2500	.09600		
2600	.10600		
2700	.10600		
2800	.10700		
2900	.14600		
3000	.08500		
3100	.08600		
3200	.01300		
3210	.04000		
3300	.04400		
3347	.58400		
3400	.07100		
TOTAL	10.04000	TOTAL	33.44700
TOTAL NON-SAPONIFIABLE CONC. (MG./G.) = .00			

TABLE 2

ZOOPLANKTON RATIOS OF INDIVIDUAL HYDROCARBONS AND AVERAGE
OEP VALUES

Explanation of Table 2:

Column 1 Code = unique sample identifier
Column 2 Locat. = station/transect
Column 3 PR/PH = Pristane/phytane ratio
Column 4 PR/C-17 = Pristane/C-17 ratio
Column 5 PH/C-18 = Phytane/C-18 ratio
Column 6 OEP = Odd-Even Preference indice value

TABLE 2

HEAVY HYDROCARBON ANALYSES - STCS - 1976

SAMPLE TYPE : ZPL						PERIOD : WINTER					
CODE	LOCAT.	PR / PH	PR/C-17	PH/C-18	DEP	CODE	LOCAT.	PR / PH	PR/C-17	PH/C-18	DEP
AGDC	1 / I	23.01	6.21	1.34	9.55	AGDC	1 / I	23.01	6.21	1.34	9.55
AGDF	3 / I	737.33	7.73	.45	4.45	AGDF	3 / I	737.33	7.73	.45	4.45
AGDH	3 / I	55.15	3.29	.55	2.18	AGDH	3 / I	55.15	3.29	.55	2.18
AGDJ	1 / II	n	1.49	n	19.69	AGDJ	1 / II	n	1.49	n	19.69
AGDL	2 / II	8.32	3.96	.52	1.18	AGDL	2 / II	8.32	3.96	.52	1.18
AGDN	3 / II	8.44	4.02	.32	3.50	AGDN	3 / II	8.44	4.02	.32	3.50
AGDP	1 / III	15.76	.69	1.03	36.74	AGDP	1 / III	15.76	.69	1.03	36.74
AGDR	2 / III	n	5.41	n	n	AGDR	2 / III	n	5.41	n	n
AGDT	3 / III	n	5.81	n	n	AGDT	3 / III	n	5.81	n	n
AGEZ	1 / IV	43.37	1.70	2.03	25.79	AGEZ	1 / IV	43.37	1.70	2.03	25.79
AGGP	2 / IV	n	n	n	n	AGGP	2 / IV	n	n	n	n
AGDA	3 / IV	n	1.66	n	8.48	AGDA	3 / IV	n	1.66	n	8.48
SAMPLE TYPE : ZPL						PERIOD : MARCH					
CODE	LOCAT.	PR / PH	PR/C-17	PH/C-18	DEP	CODE	LOCAT.	PR / PH	PR/C-17	PH/C-18	DEP
AJLV	1 / II	6.96	.53	14.80	n	AJLV	1 / II	6.96	.53	14.80	n
AJMS	2 / II	16.43	6.06	.42	1.11	AJMS	2 / II	16.43	6.06	.42	1.11
AJOC	3 / II	44.50	1.88	.61	2.32	AJOC	3 / II	44.50	1.88	.61	2.32
SAMPLE TYPE : ZPL						PERIOD : APRIL					
CODE	LOCAT.	PR / PH	PR/C-17	PH/C-18	DEP	CODE	LOCAT.	PR / PH	PR/C-17	PH/C-18	DEP
AKJU	3 / II	101.68	4.08	.35	5.06	AKJU	3 / II	101.68	4.08	.35	5.06
AKGX	2 / II	n	48.82	n	n	AKGX	2 / II	n	48.82	n	n
AKEU	1 / II	n	n	n	n	AKEU	1 / II	n	n	n	n

TABLE 2 Cont.'d

HEAVY HYDROCARBON ANALYSES - STOCS - 1976

SAMPLE TYPE : ZPL

PERIOD : SPRING

CODE	LOCAT.	PR / PH	PR/C-17	PH/C-18	OEP
AKXJ	1 / I	181.78	3.78	.48	7.64
ALTD	1 / I	67.85	3.02	.51	3.49
AKZM	2 / I	0	1.53	0	0
ALBF	3 / I	10.43	.05	.30	7.07
ALDC	1 / II	0	0	0	1.28
ALDF	1 / II	0	1.02	0	0
ALTF	1 / II	0	0	0	0
ALEU	2 / II	0	.83	0	0
ALGP	3 / II	0	.20	0	1.04
ALIM	1 / III	118.33	.35	.18	6.19
ALTJ	1 / III	151.91	1.39	.20	4.68
ALKC	2 / III	0	.26	0	0
ALLU	3 / III	54.50	.15	.24	17.03
ALNR	1 / IV	0	0	.10	17.92
ALPG	2 / IV	0	1.56	0	0
ALNY	3 / IV	0	.08	0	3.13

SAMPLE TYPE : ZPL

PERIOD : JULY

CODE	LOCAT.	PR / PH	PR/C-17	PH/C-18	OEP
AOCJ	1 / II	0	28.43	0	0
AOCK	1 / II	0	11.63	0	1.44
AOCL	1 / II	0	0	0	0
AOCM	1 / II	0	0	0	.91
ADEG	2 / II	88.05	3.97	.98	1.01
ADEL	2 / II	0	28.14	0	0
ADE4	2 / II	97.27	4.00	.09	1.06
AOGH	3 / II	2.66	.55	.34	1.05

SAMPLE TYPE : ZPL

PERIOD : AUGUST

CODE	LOCAT.	PR / PH	PR/C-17	PH/C-18	OEP
APER	1 / II	0	0	0	0
APER	1 / II	0	81.18	0	.47
APHT	3 / II	187.01	16.18	.07	.93

TABLE 2 Cont.'d

HEAVY HYDROCARBON ANALYSES - STOCS - 1976

SAMPLE TYPE : ZPL

PERIOD : FALL

CODE	LOCAT.	PR / PH	PR/C-17	PH/C-18	DEP
----	-----	-----	-----	-----	-----
AQCO	1 / I	248.03	3.17	.01	.64
AQVJ	1 / I	4.32	3.16	.66	1.04
AQVK	1 / I	663.38	2.79	.04	1.85
AQEA	2 / I	497.73	6.65	.32	3.97
AQFN	3 / I	45.53	1.81	.43	2.09
AQHF	1 / II	1181.66	6.52	.15	14.19
AQVY	1 / II	269.13	10.53	.92	1.41
AQVZ	1 / II	64.11	9.34	.90	0
AQIR	2 / II	31.63	2.77	.23	1.45
AQKH	3 / II	69.17	9.25	.50	1.57
AQLW	1 / III	11.08	3.67	.17	1.43
AQAK	1 / III	0	5.30	0	1.23
AQWL	1 / III	24.39	3.11	.03	20.96
AQNI	2 / III	0	4.54	0	.95
AQOY	3 / III	102.89	3.54	.22	2.07
AQRV	1 / IV	12.42	.96	.10	1.26
AQWV	1 / IV	10.62	.67	.07	.89
AQWV	1 / IV	0	1.39	0	1.10
AQRZ	2 / IV	226.83	10.21	.18	1.22
AQTP	3 / IV	1272.50	11.78	.02	1.32

SAMPLE TYPE : ZPL

PERIOD : NOVEMBER

CODE	LOCAT.	PR / PH	PR/C-17	PH/C-18	DEP
----	-----	-----	-----	-----	-----
AUUV	1 / II	12.39	.60	3.10	17.49
AUIX	1 / II	0	.93	0	7.50
AUUY	1 / II	0	.40	0	40.22
AUNK	2 / II	42.30	2.06	1.27	2.92
AUW4	2 / II	331.74	1.92	.07	2.96
AUWV	2 / II	53.82	1.74	.58	2.30
AUYC	3 / II	0	1.94	0	10.22

SAMPLE TYPE : ZPL

PERIOD : DECEMBER

CODE	LOCAT.	PR / PH	PR/C-17	PH/C-18	DEP
----	-----	-----	-----	-----	-----
AVSG	2 / I	145.03	1.52	.03	.95
AVSI	2 / I	38.94	1.59	.15	1.66
AVSJ	2 / I	26.25	1.58	.14	3.33
AVTZ	2 / II	0	1.30	0	2.50
AVU3	2 / II	32.87	.89	.14	1.32
AVUC	2 / II	336.62	1.21	.03	1.61
AVVV	3 / II	730.56	7.70	.09	3.40

FIGURE 2

ZOOPLANKTON ODD-EVEN PREFERENCE INDICE (OEP) VALUES

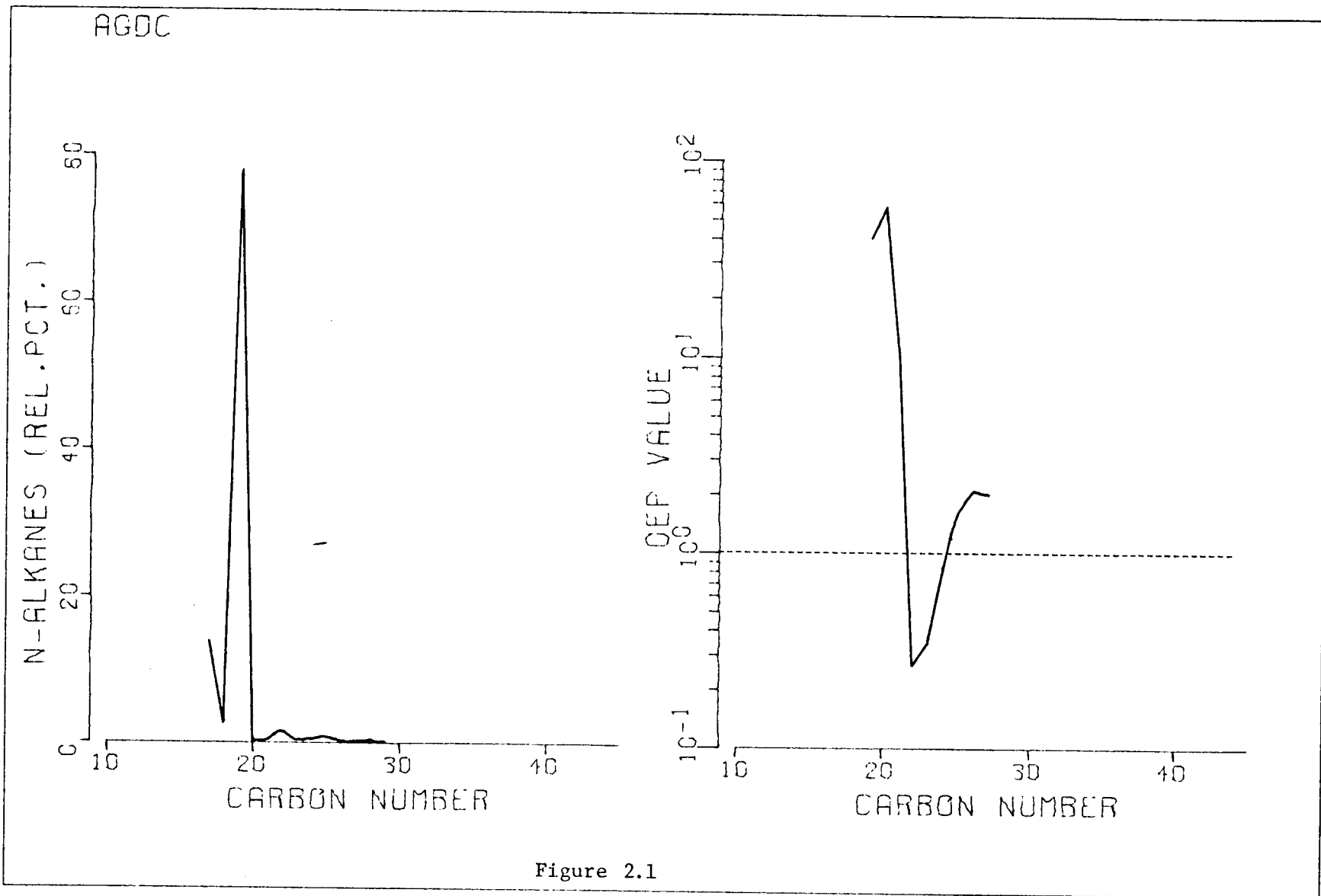


Figure 2.1

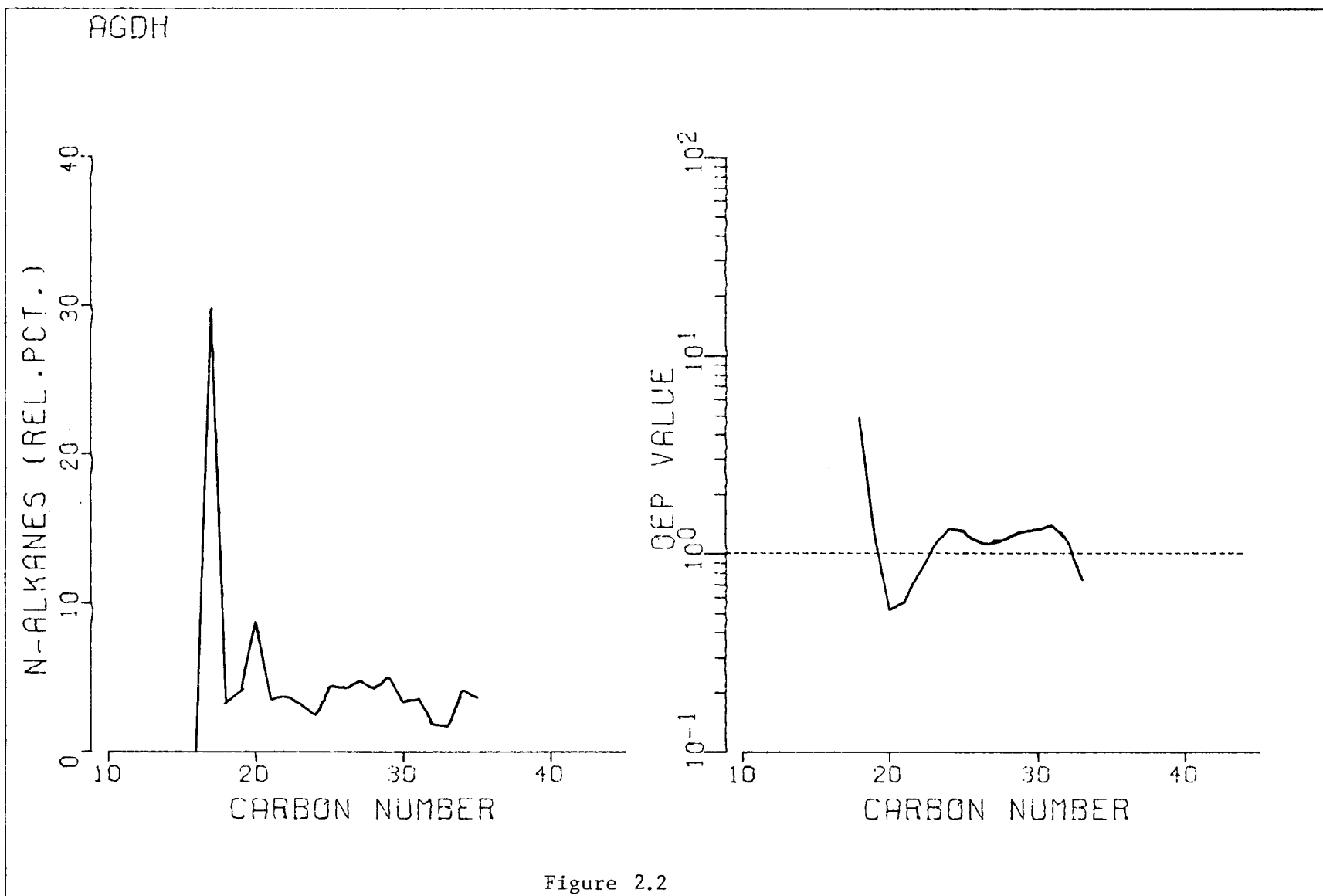


Figure 2.2

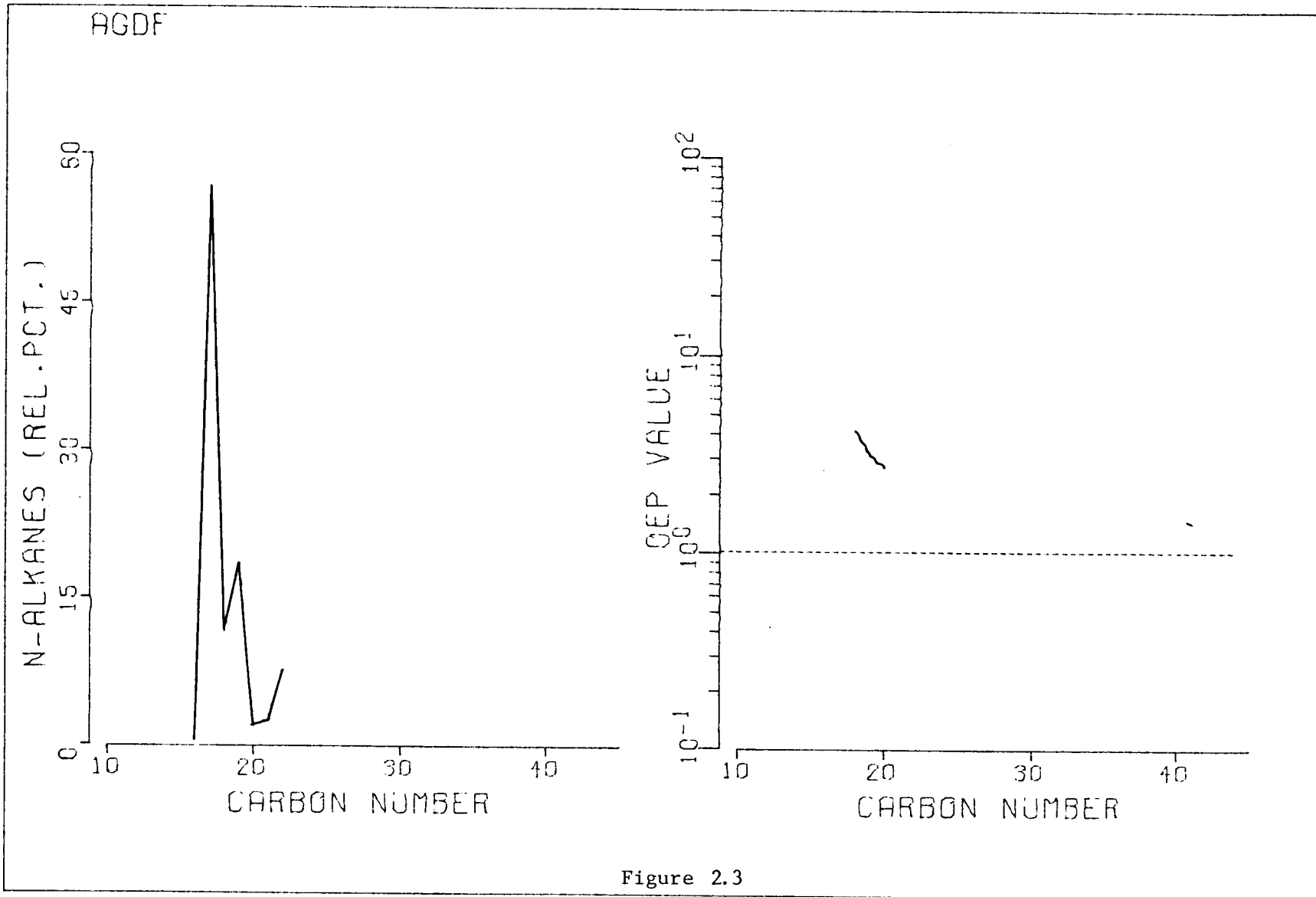


Figure 2.3

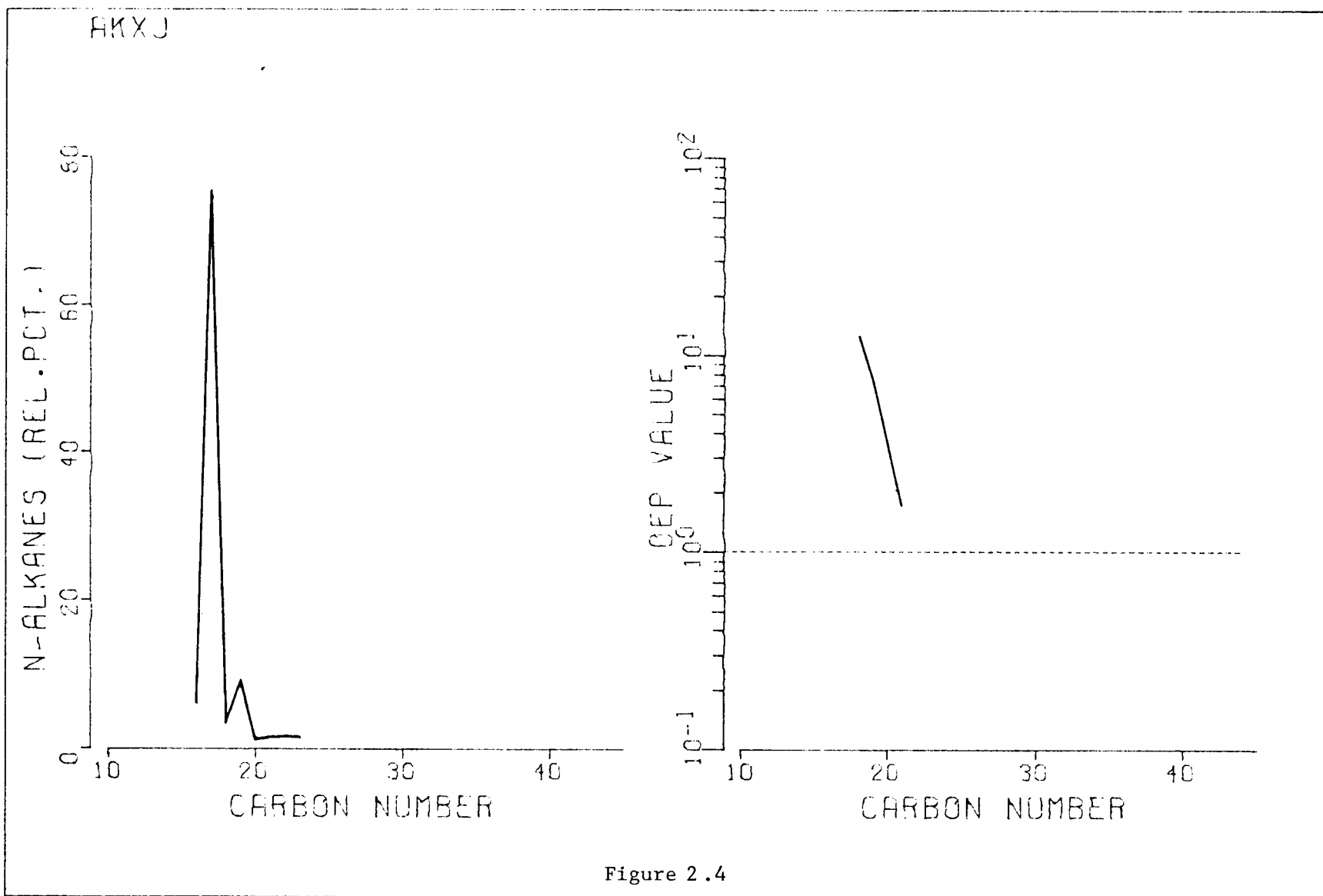


Figure 2.4

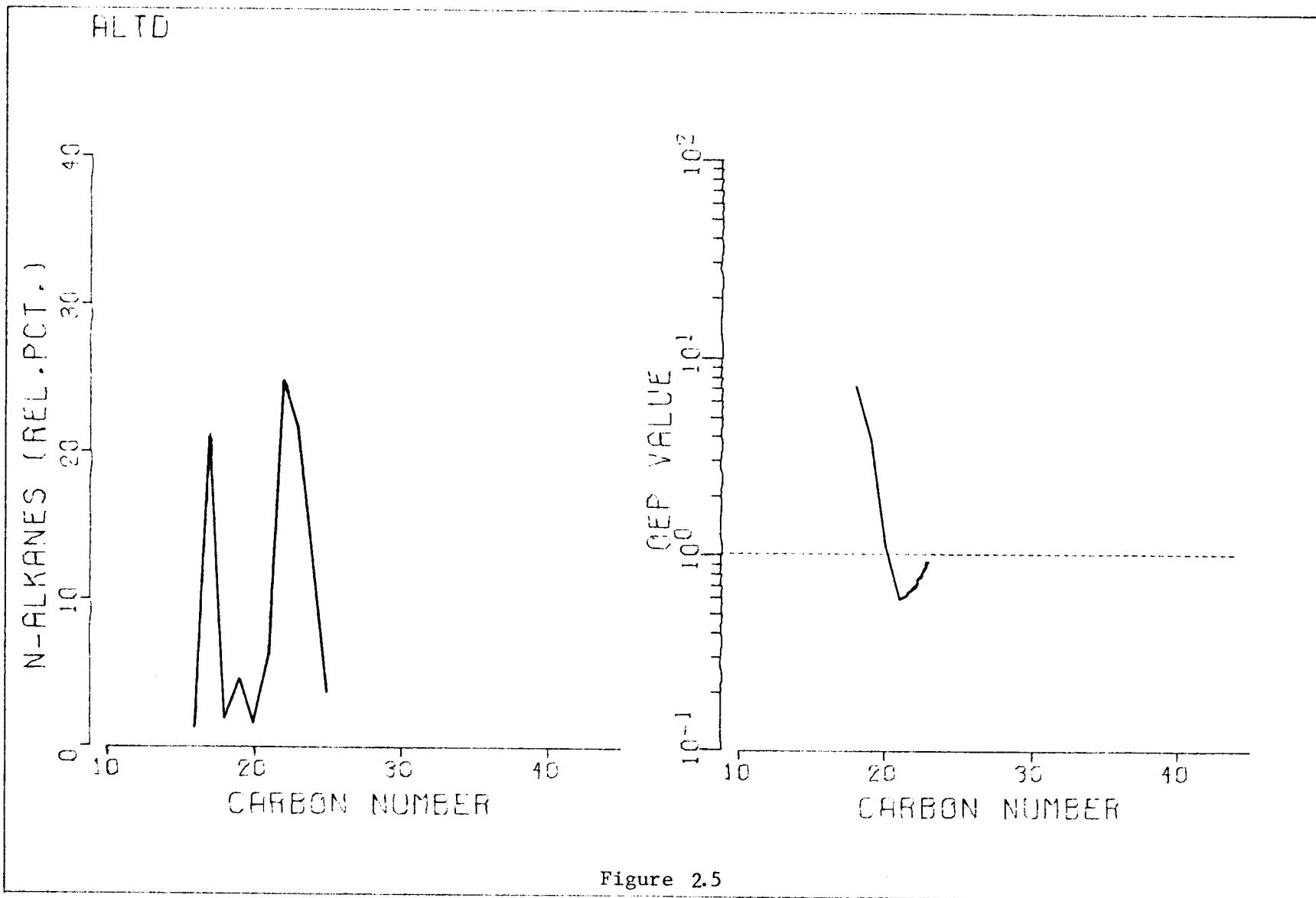


Figure 2.5

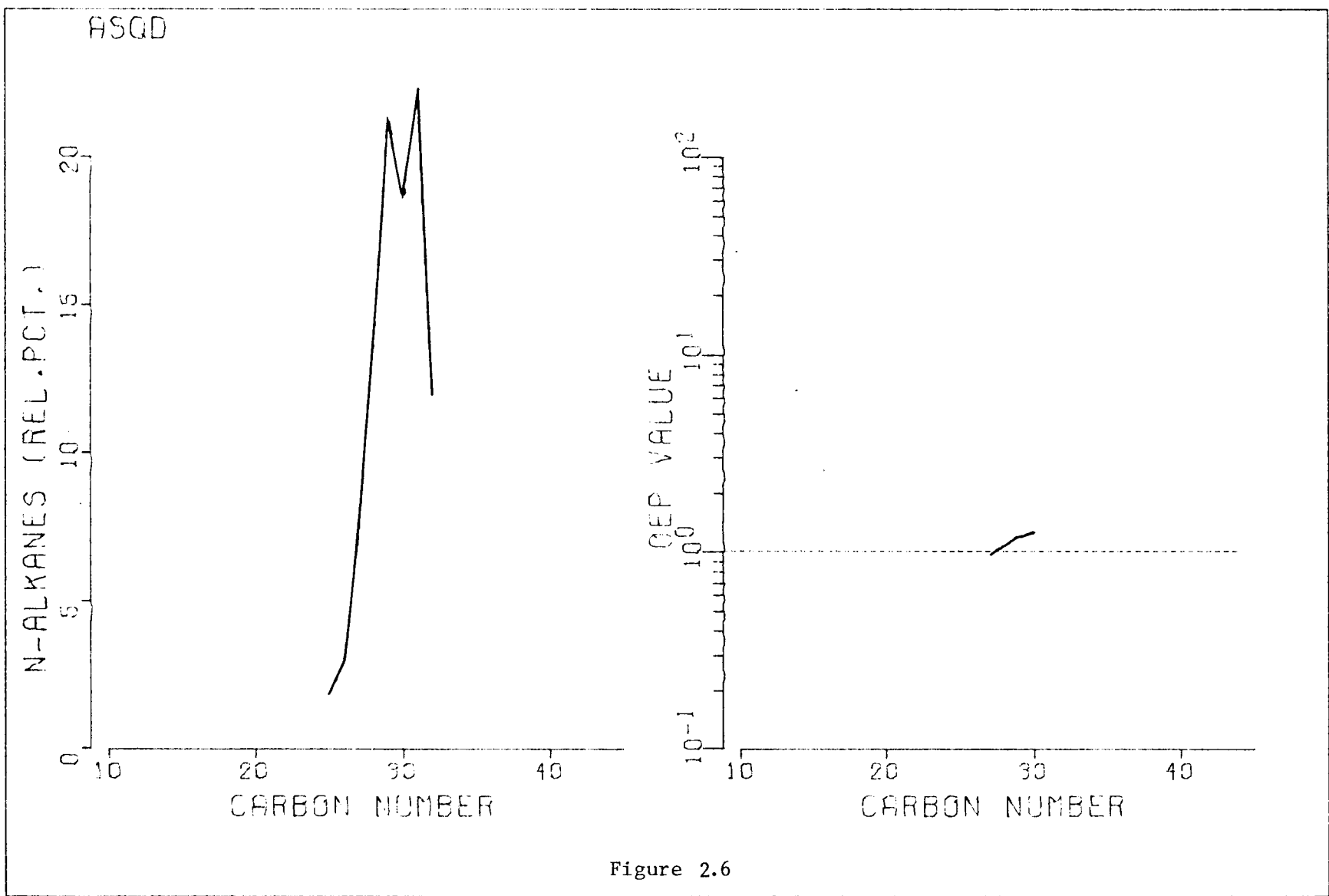
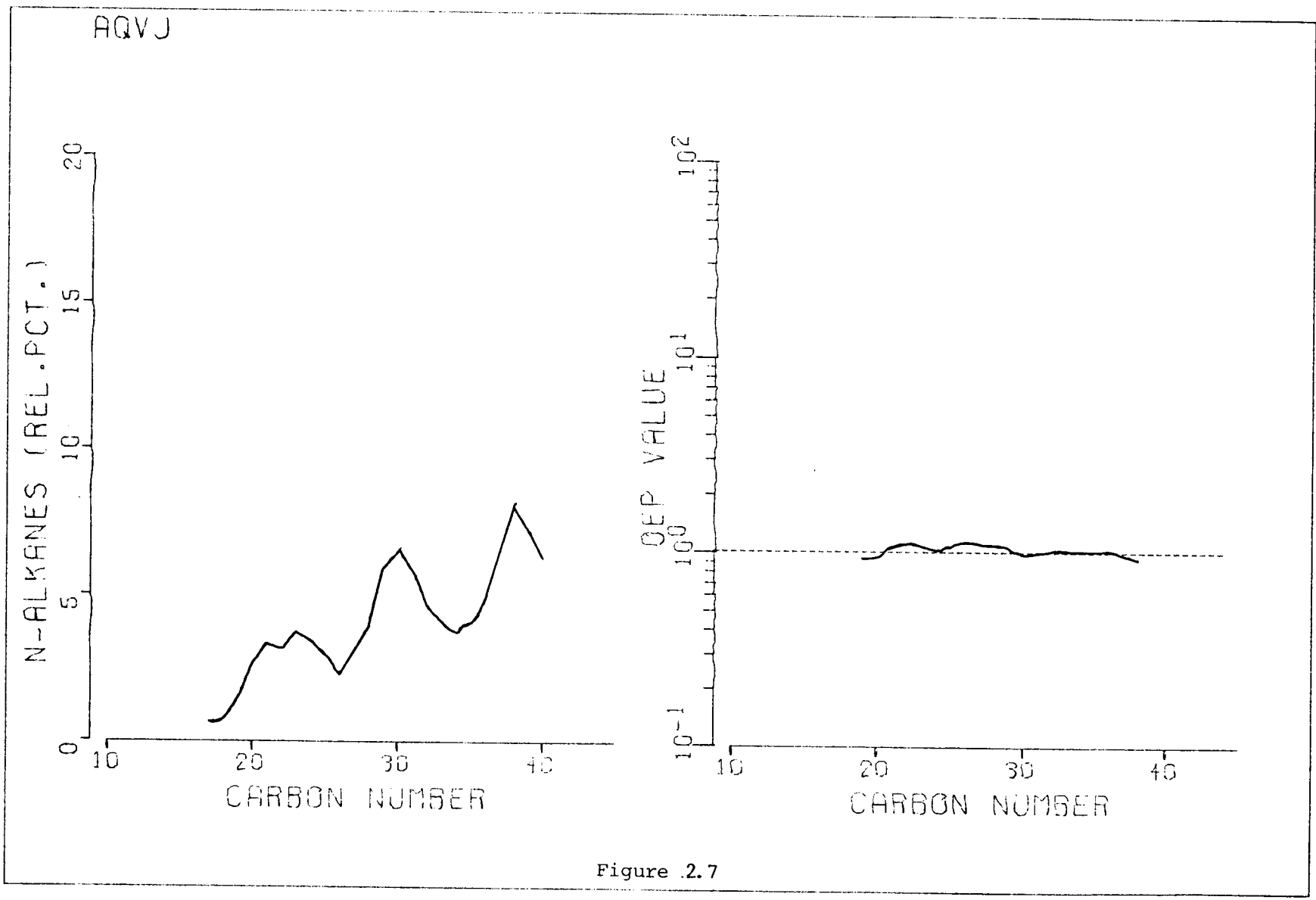


Figure 2.6



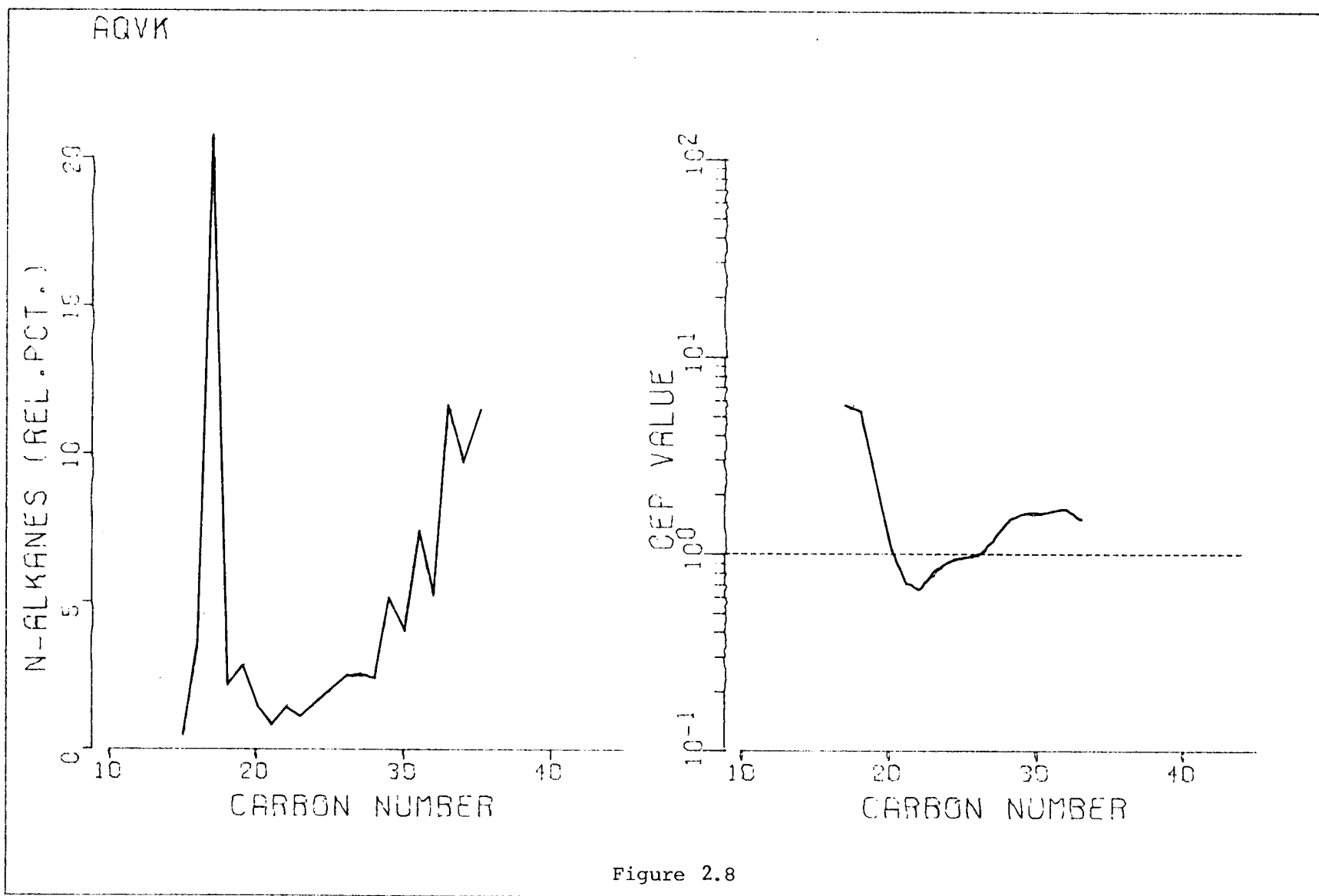


Figure 2.8

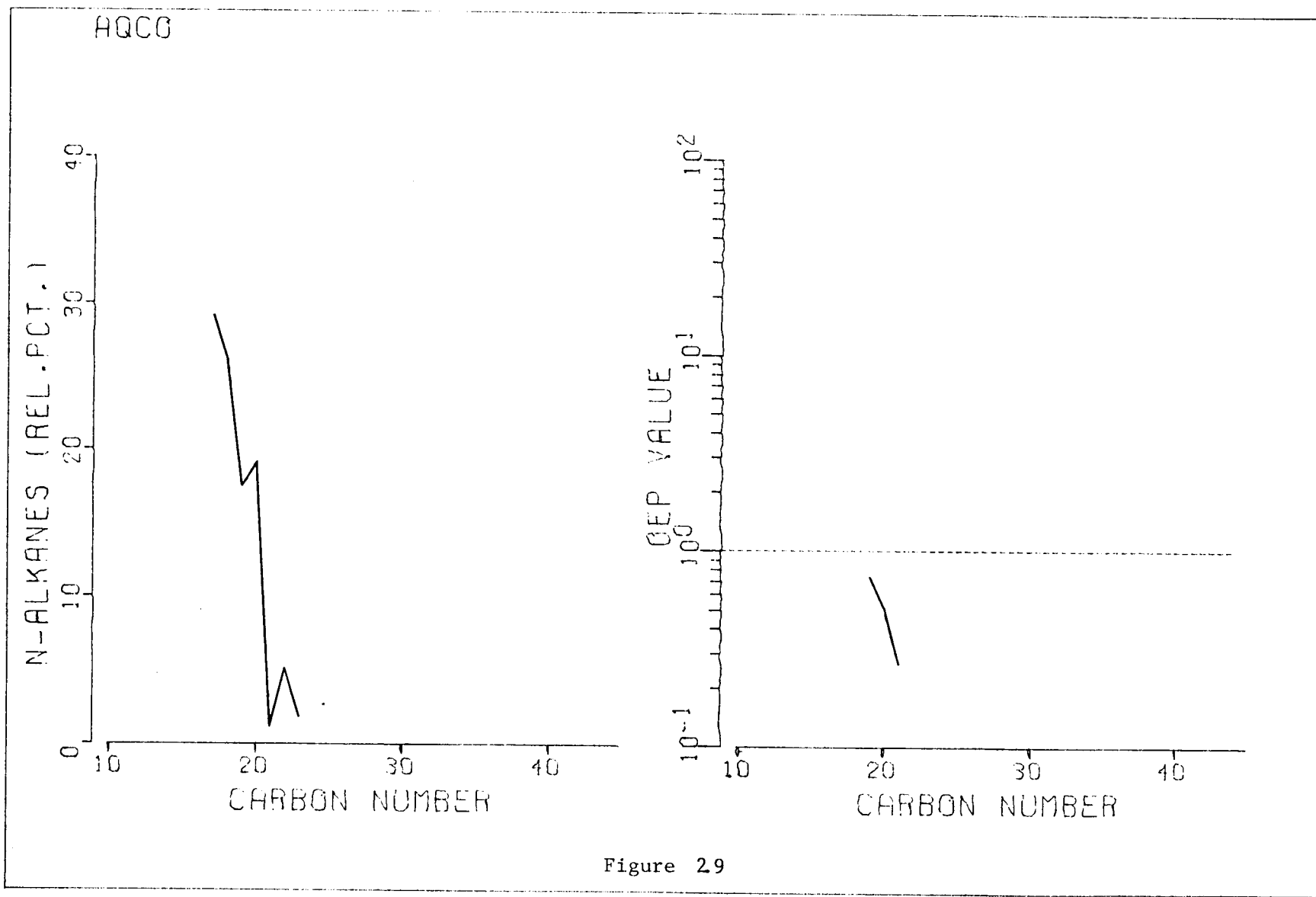
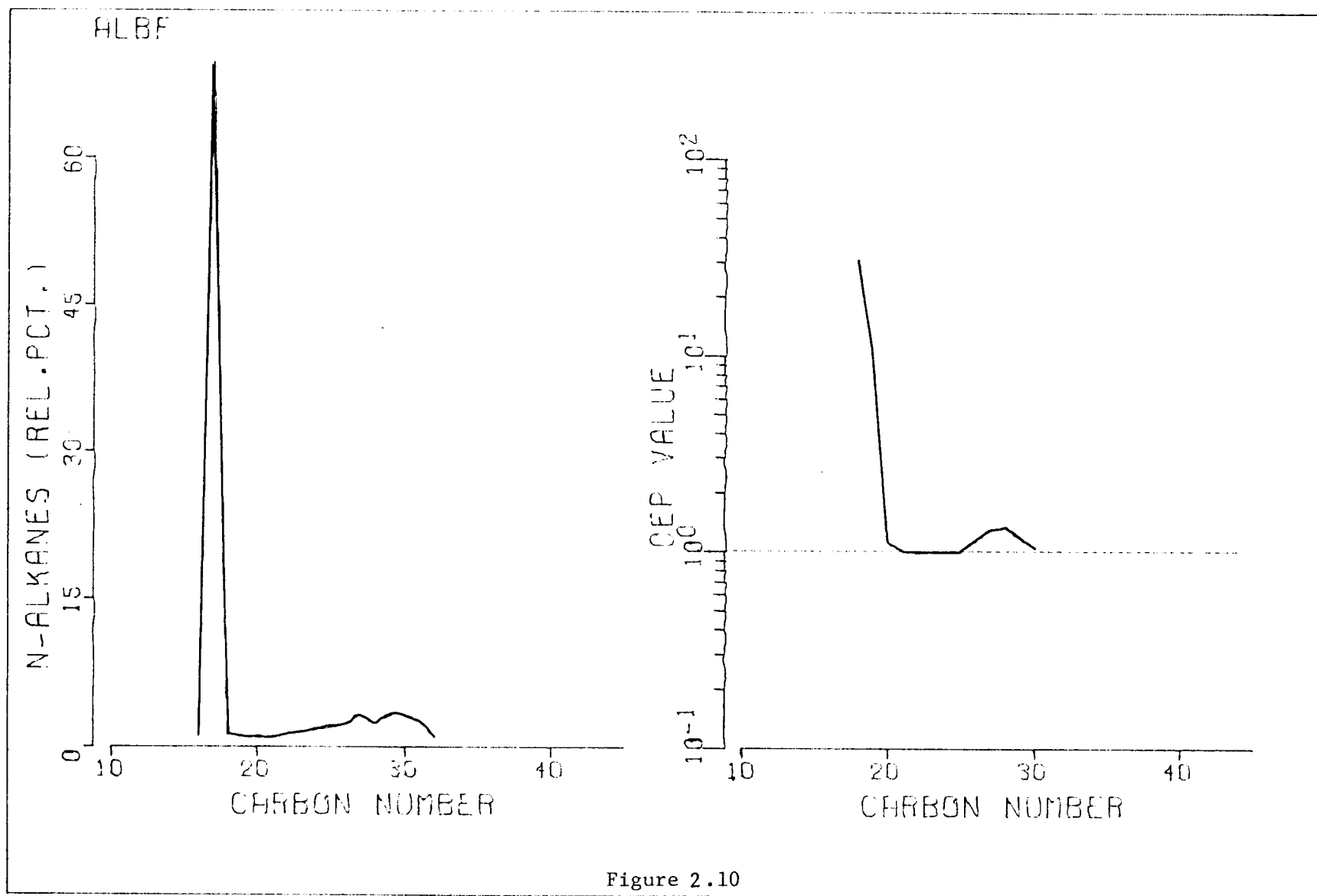


Figure 29



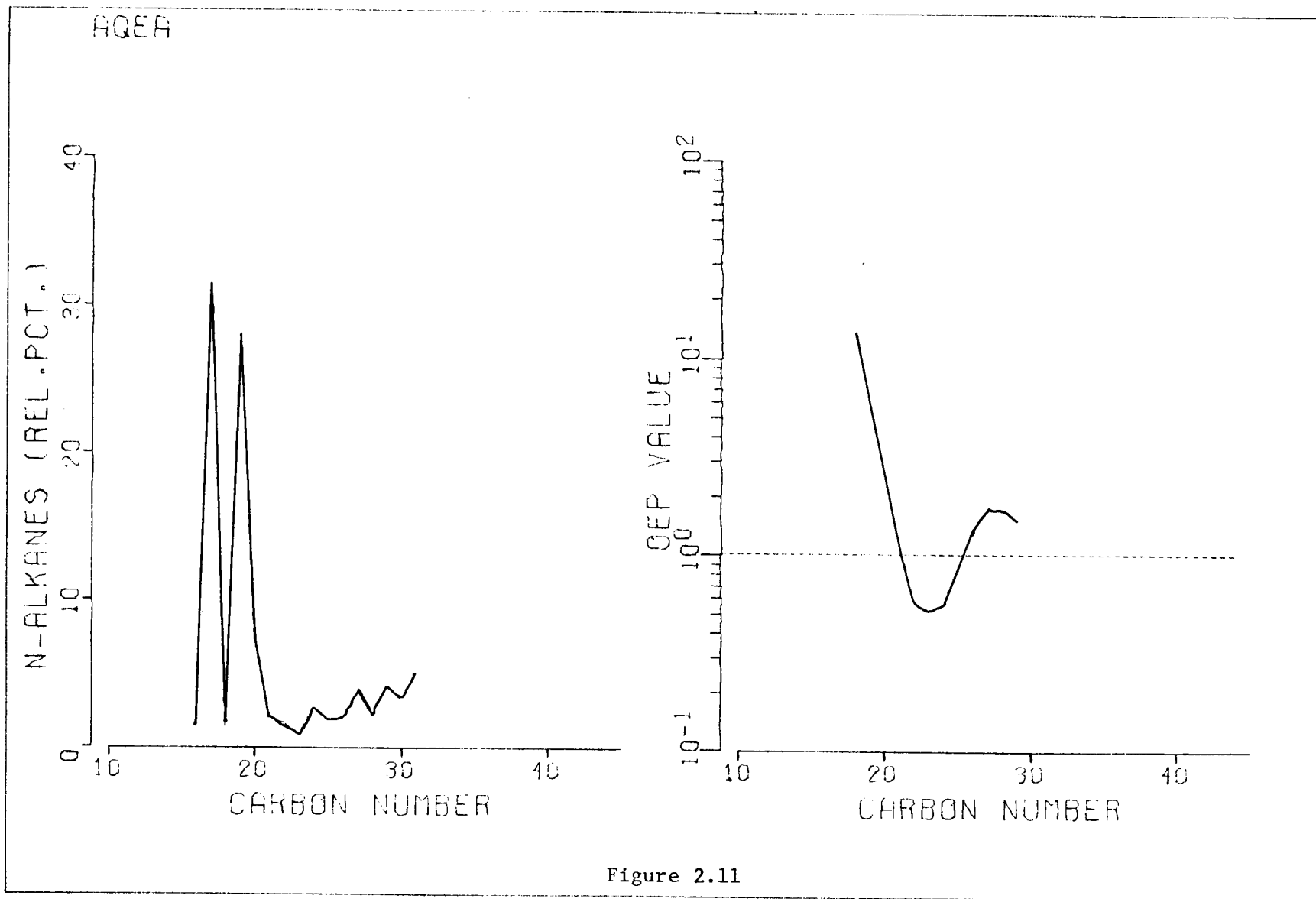


Figure 2.11

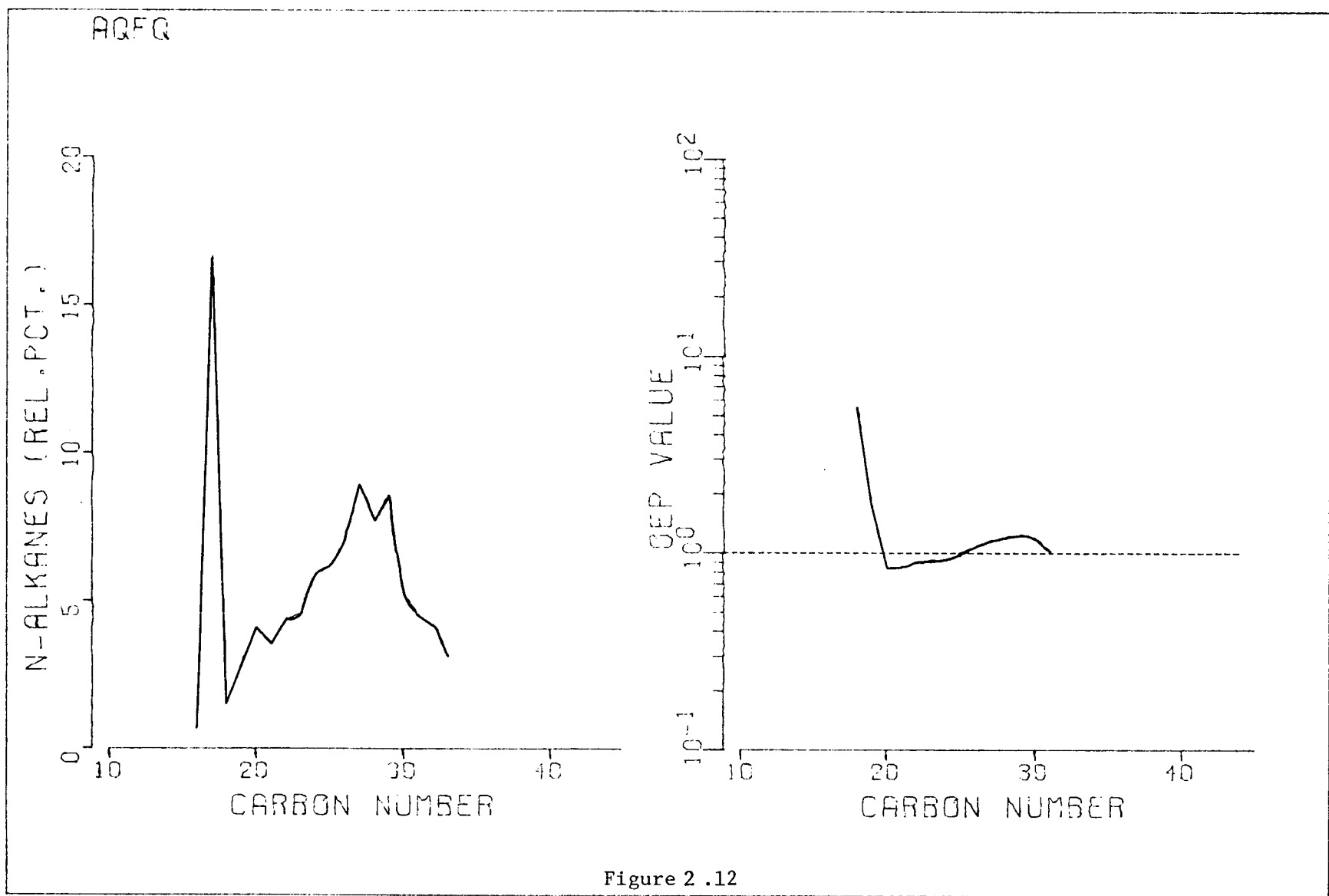


Figure 2 .12

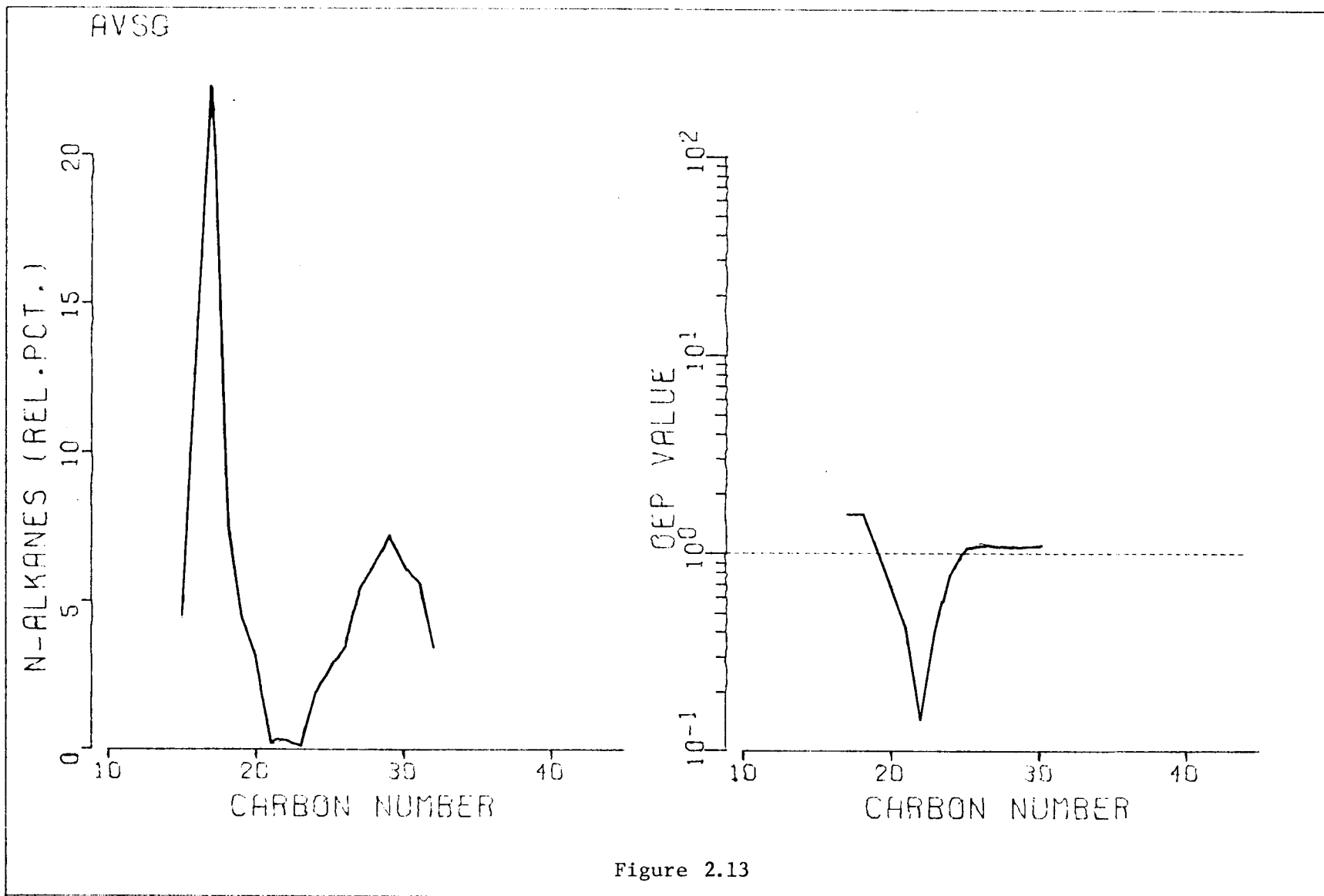


Figure 2.13

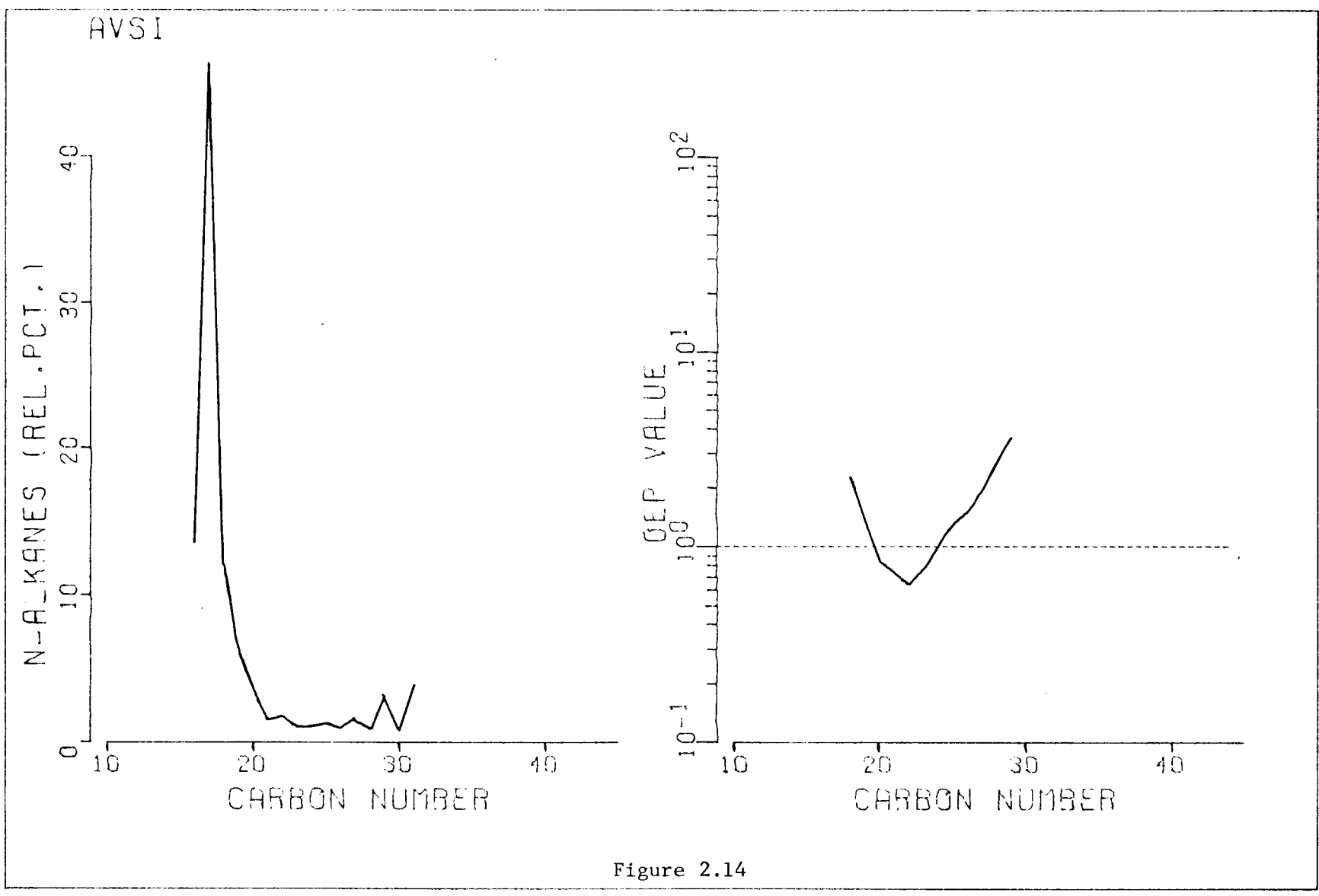


Figure 2.14

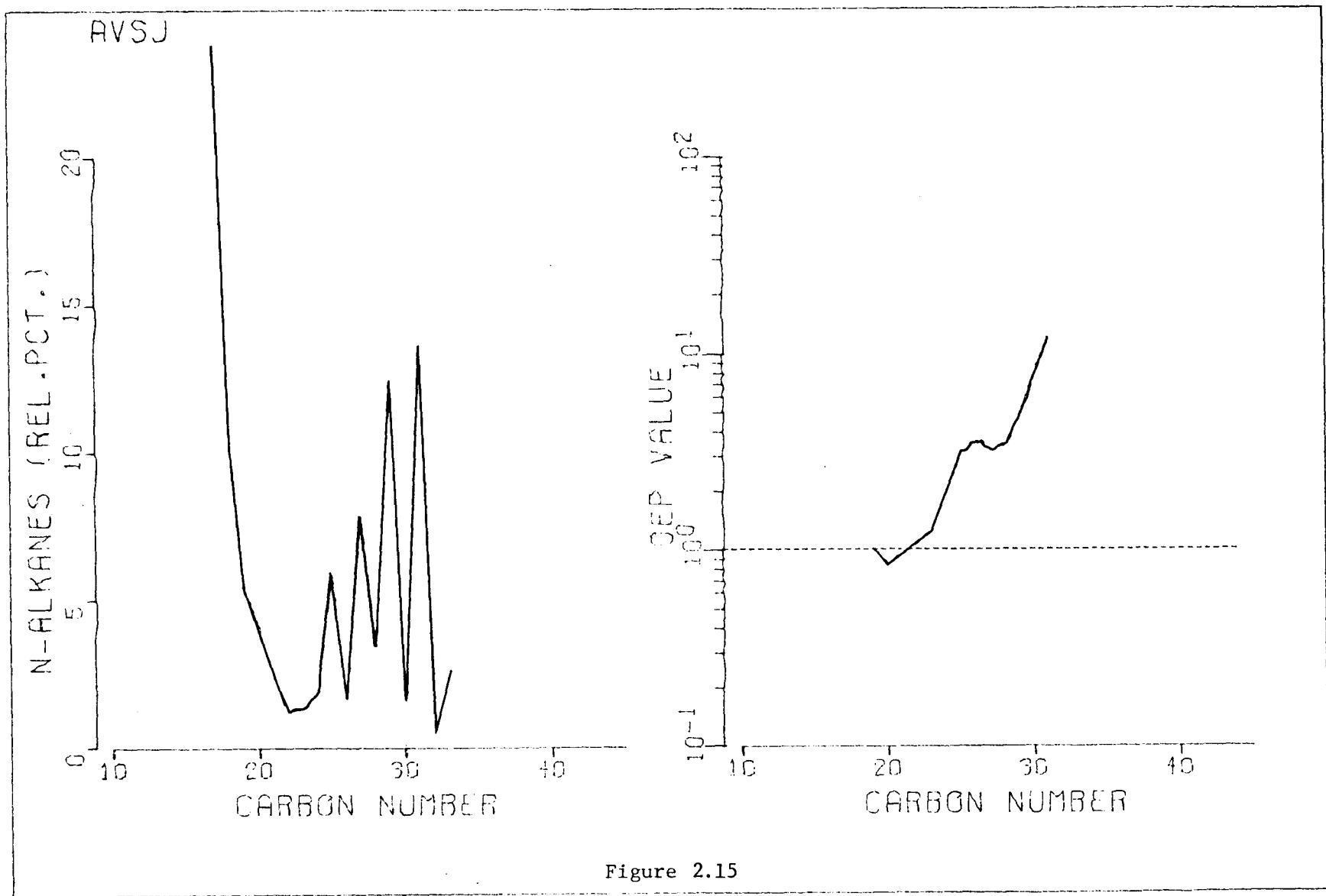
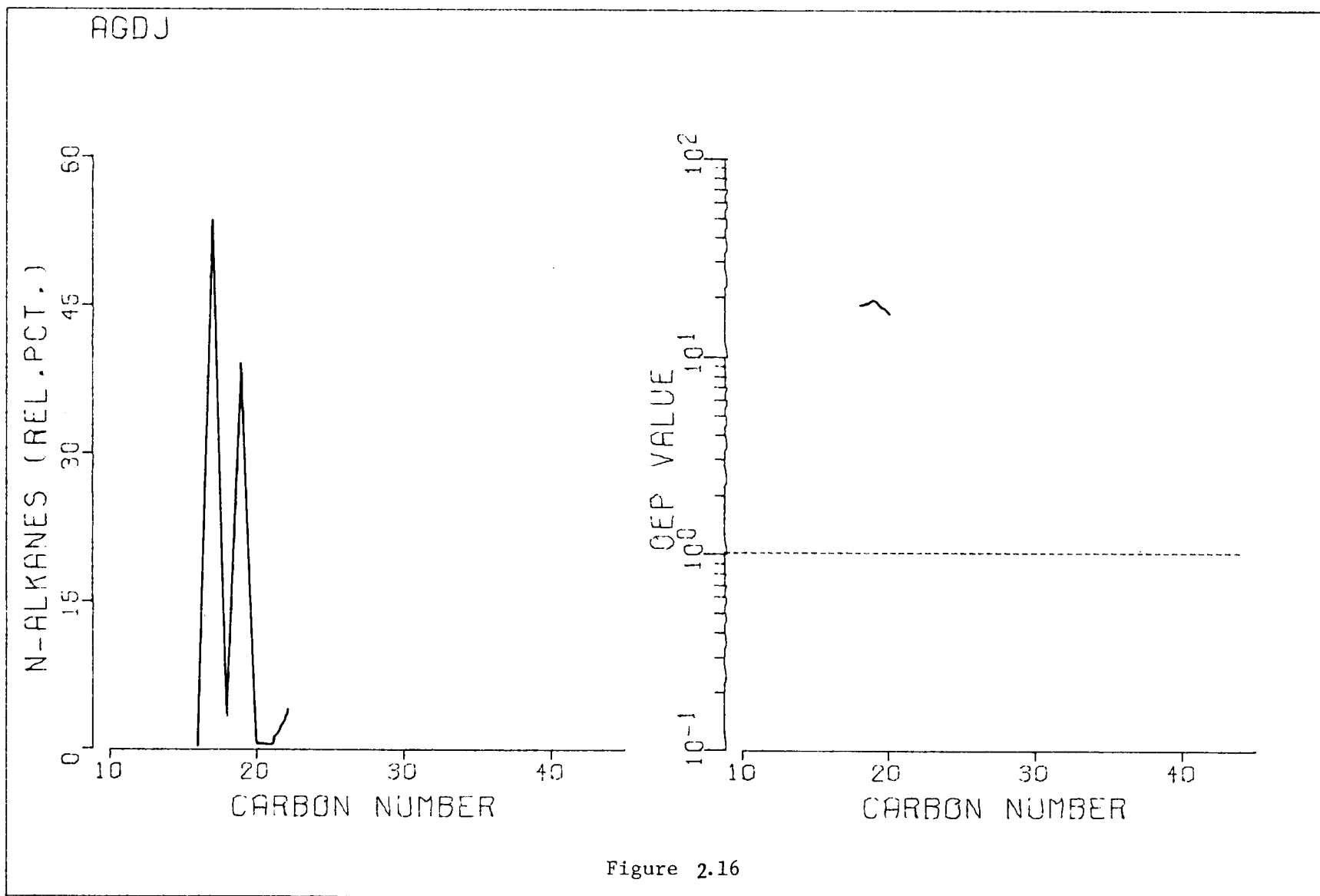


Figure 2.15



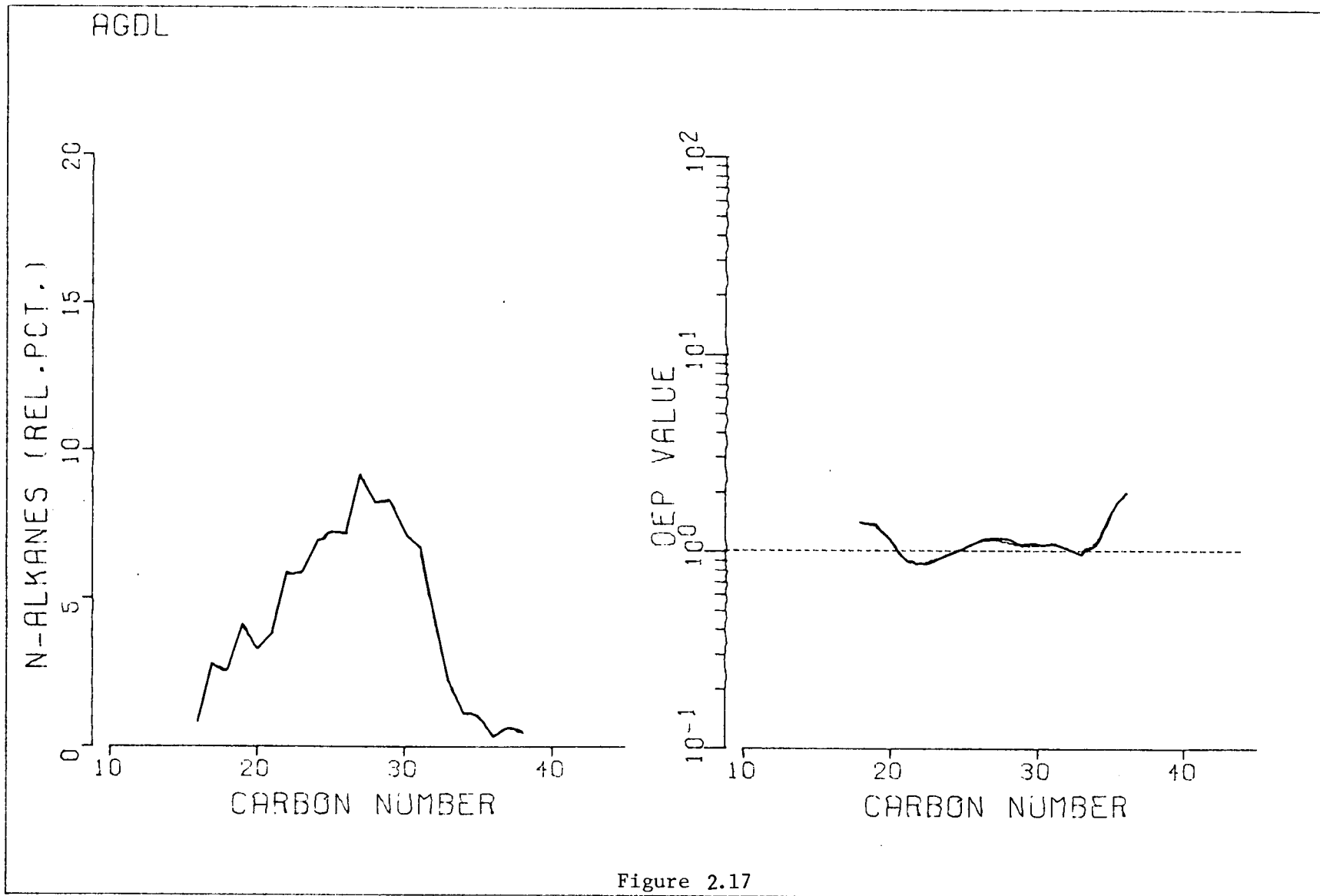
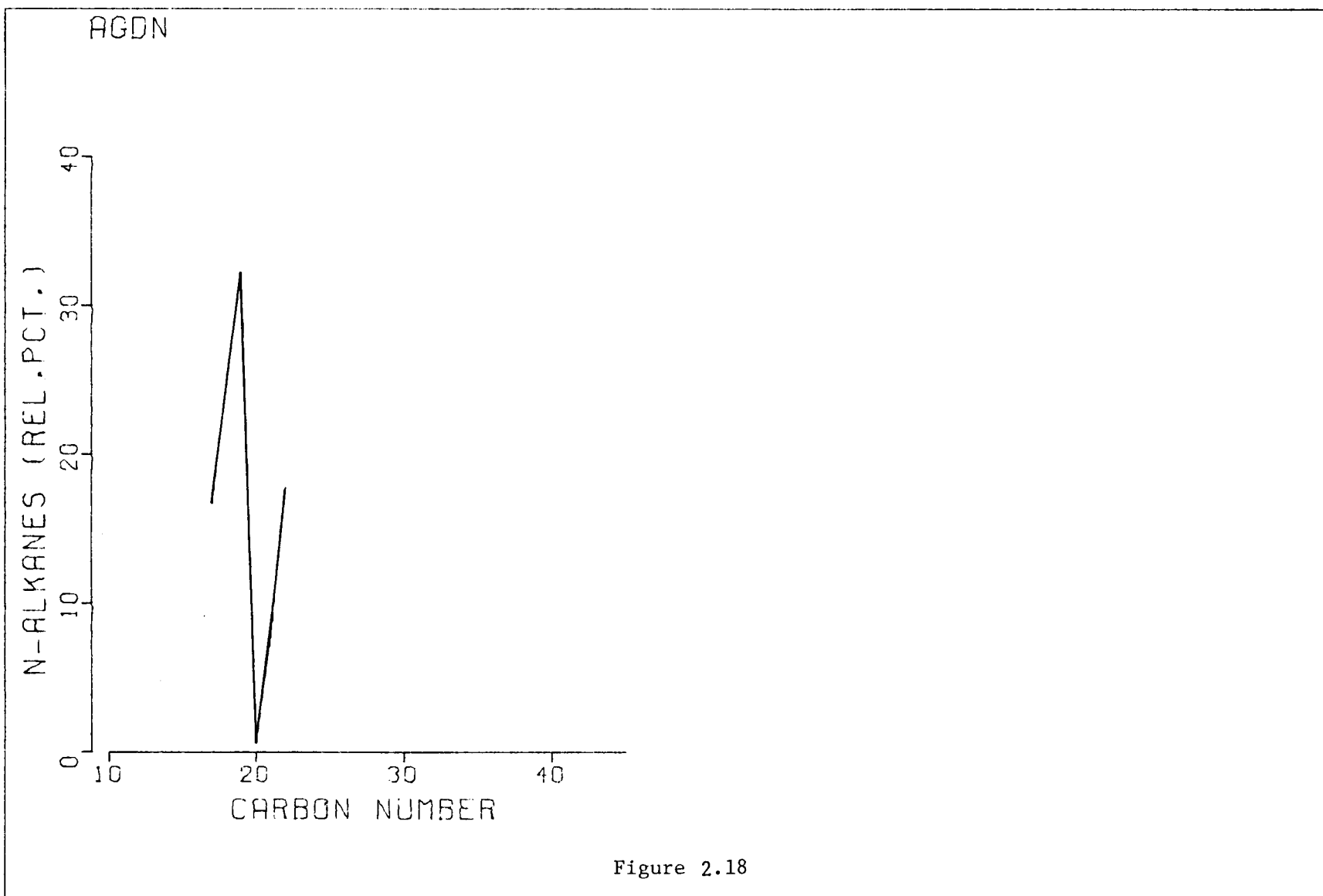


Figure 2.17



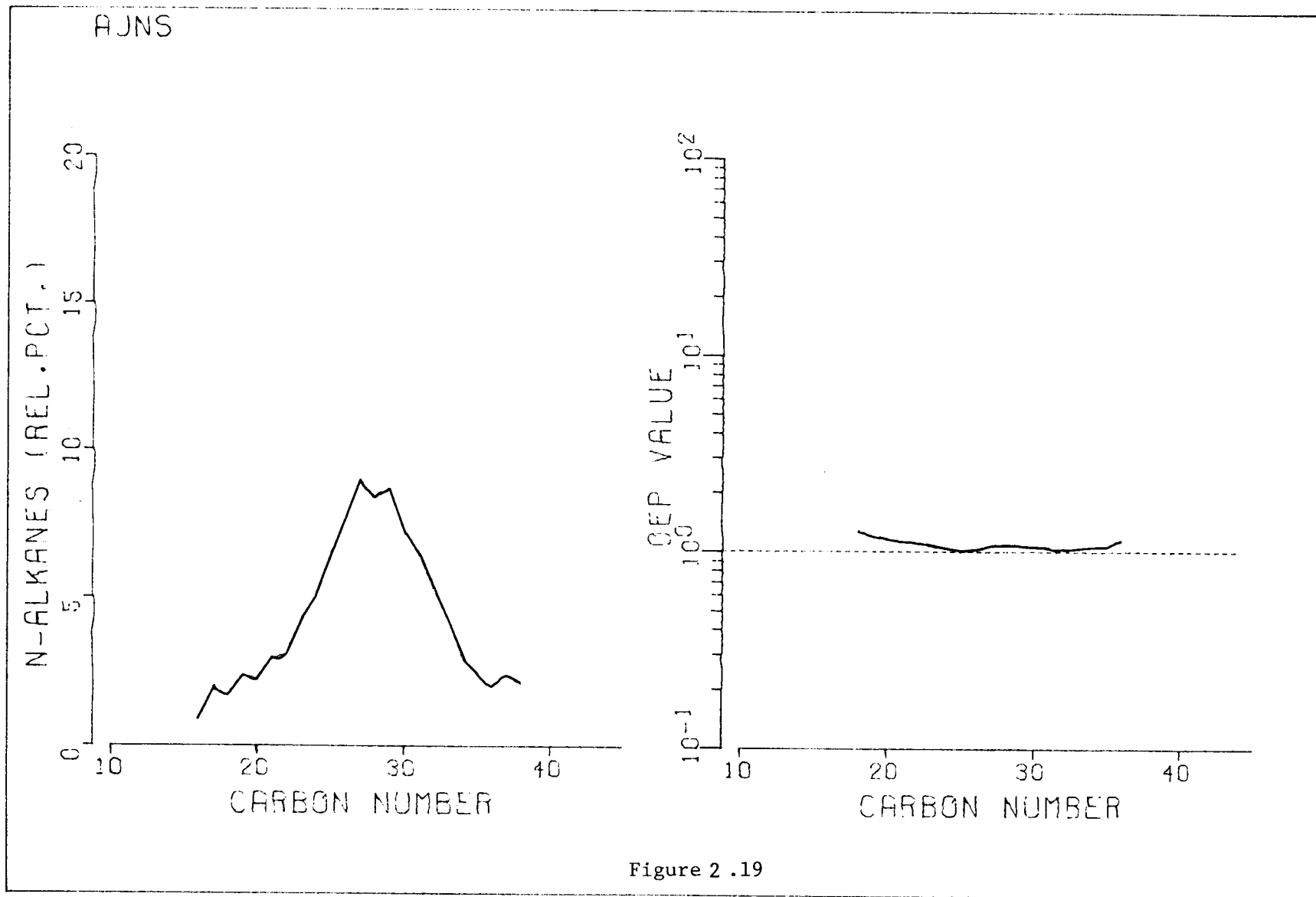


Figure 2 .19

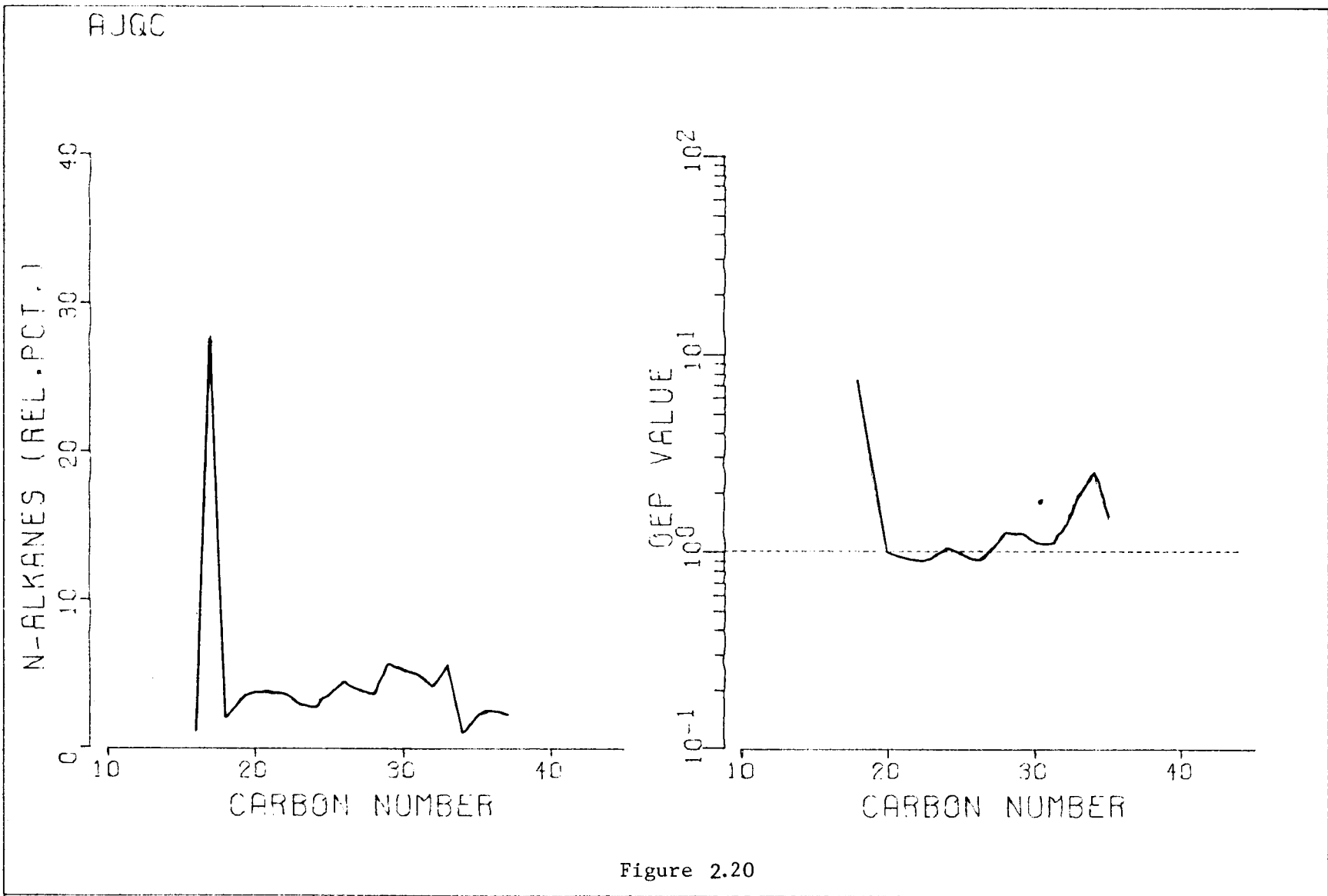


Figure 2.20

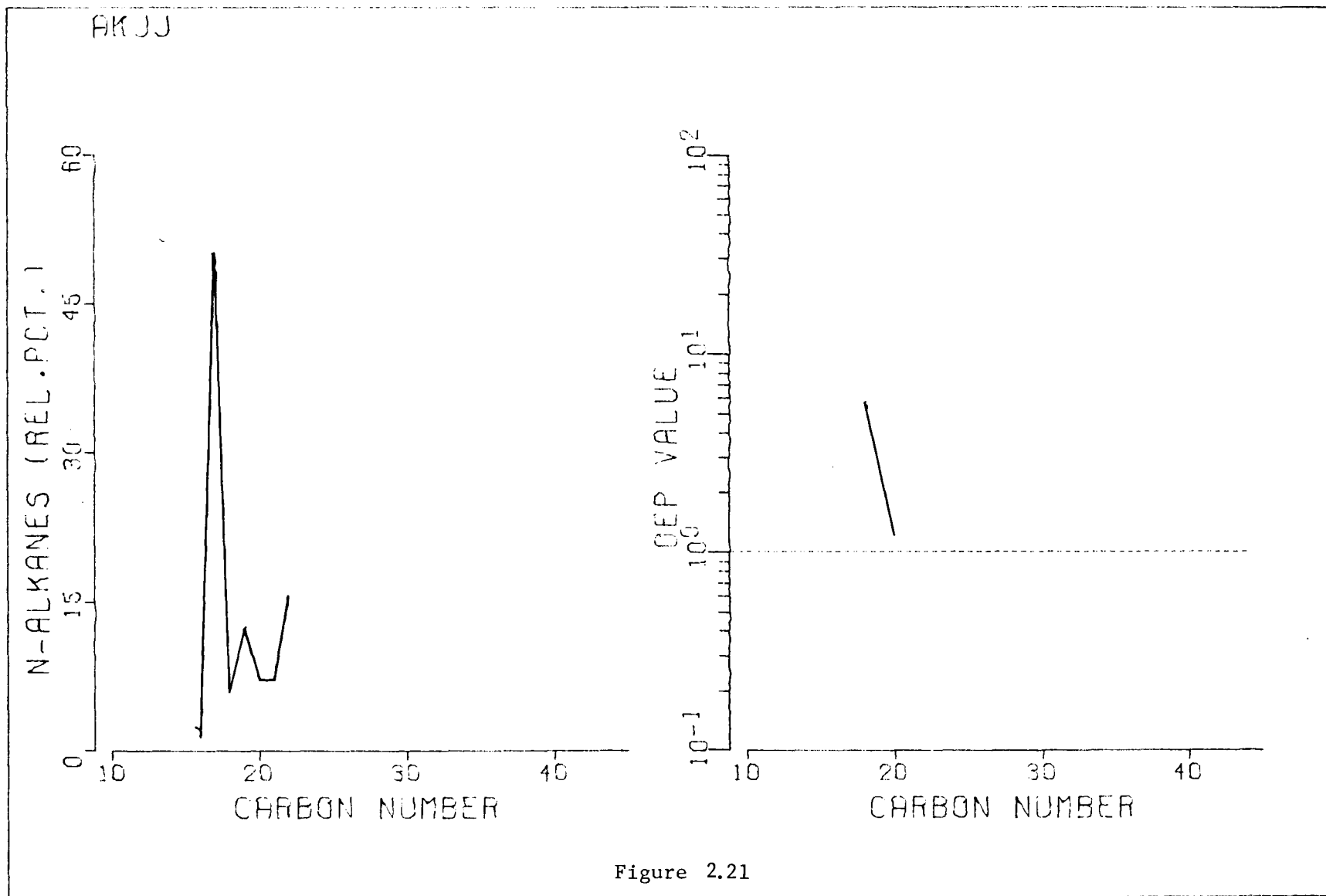


Figure 2.21

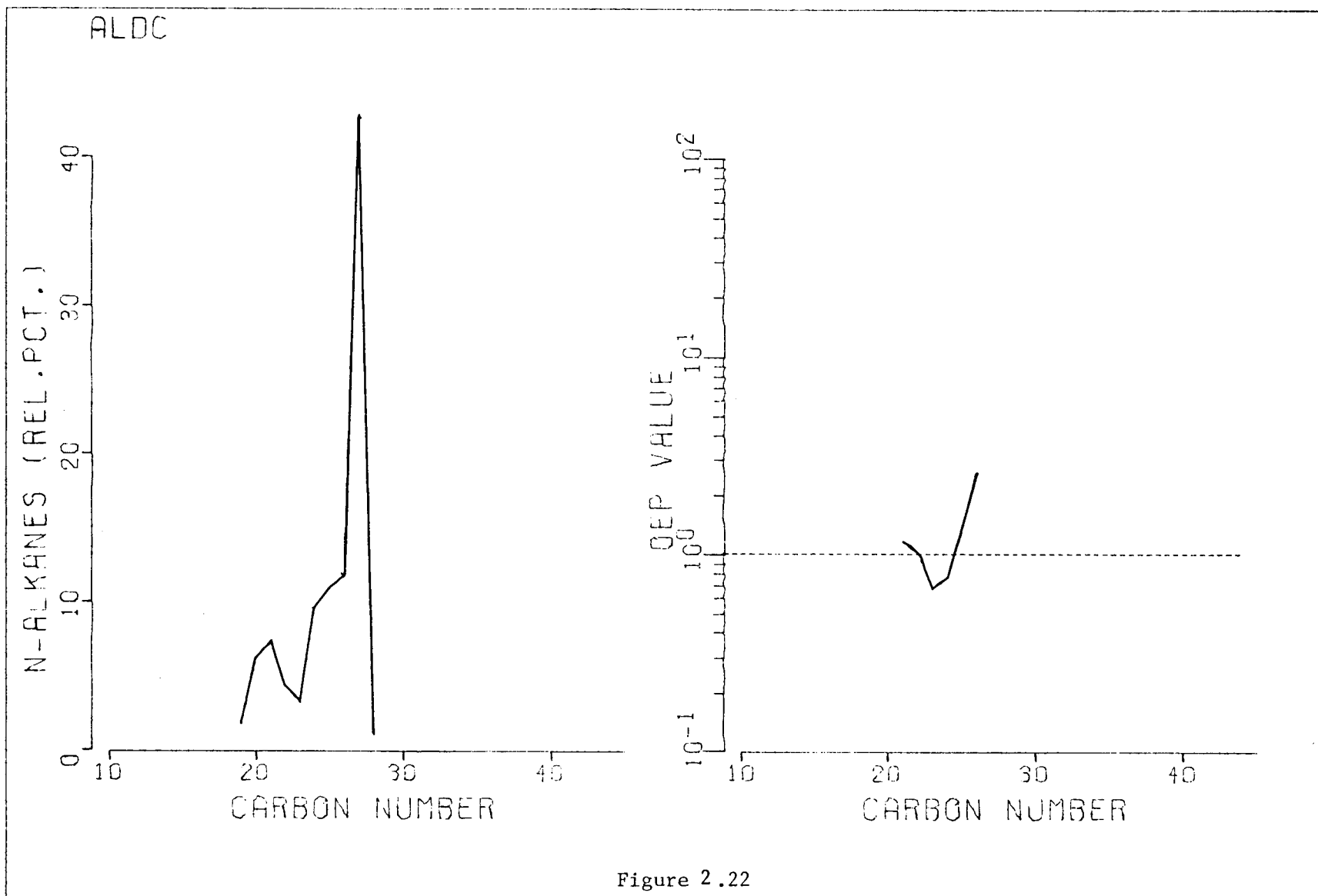


Figure 2.22

ALGP

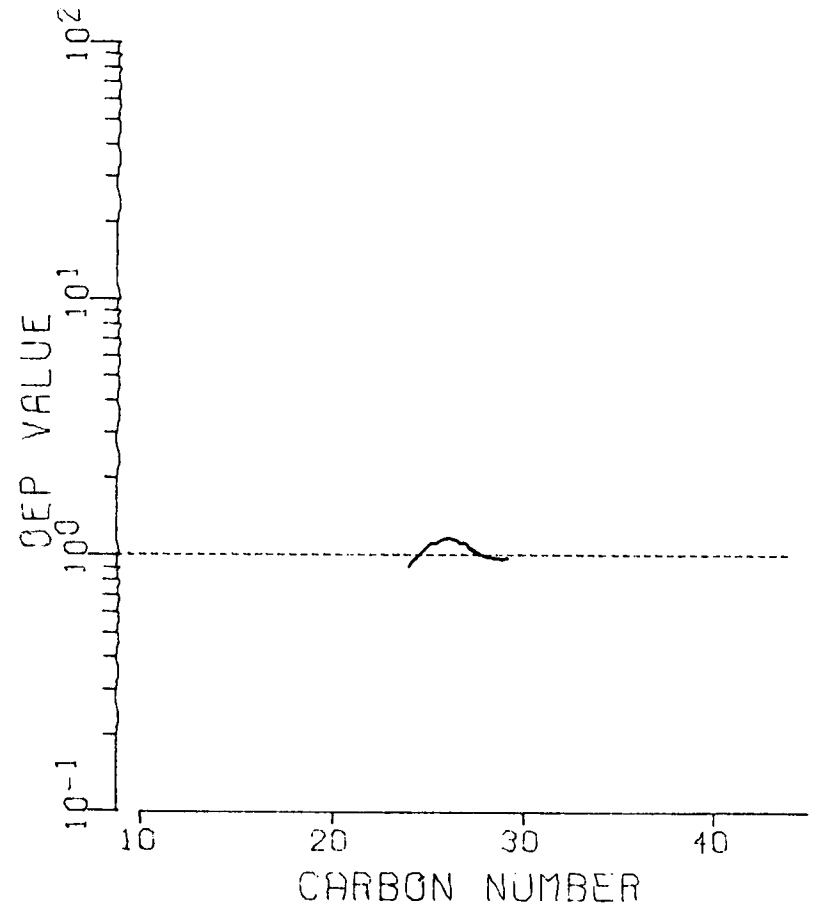
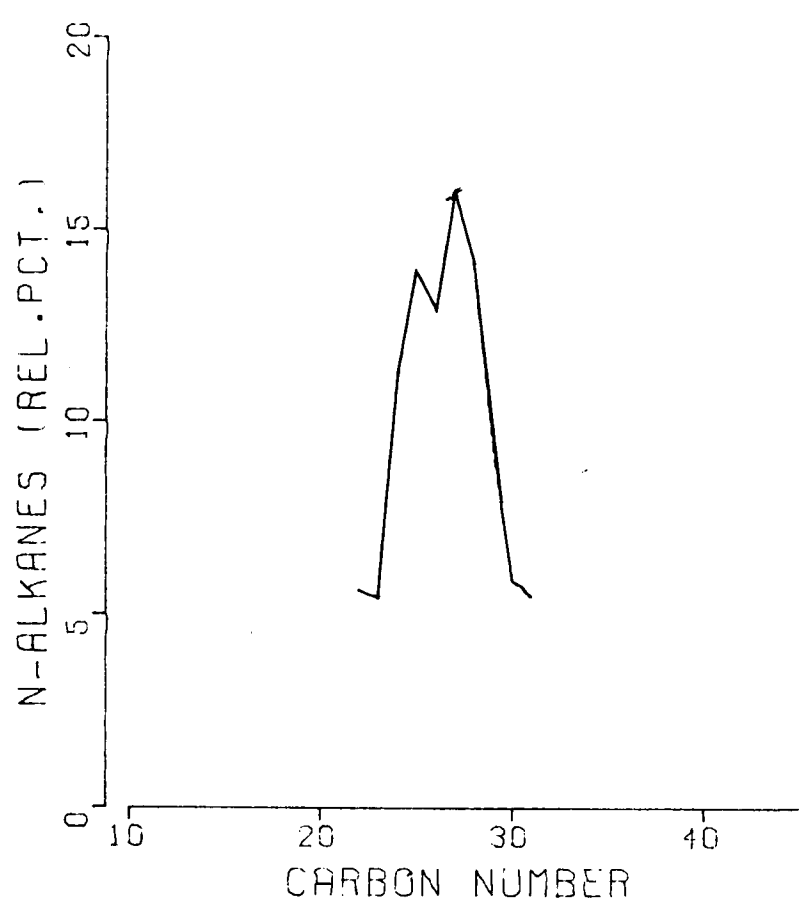
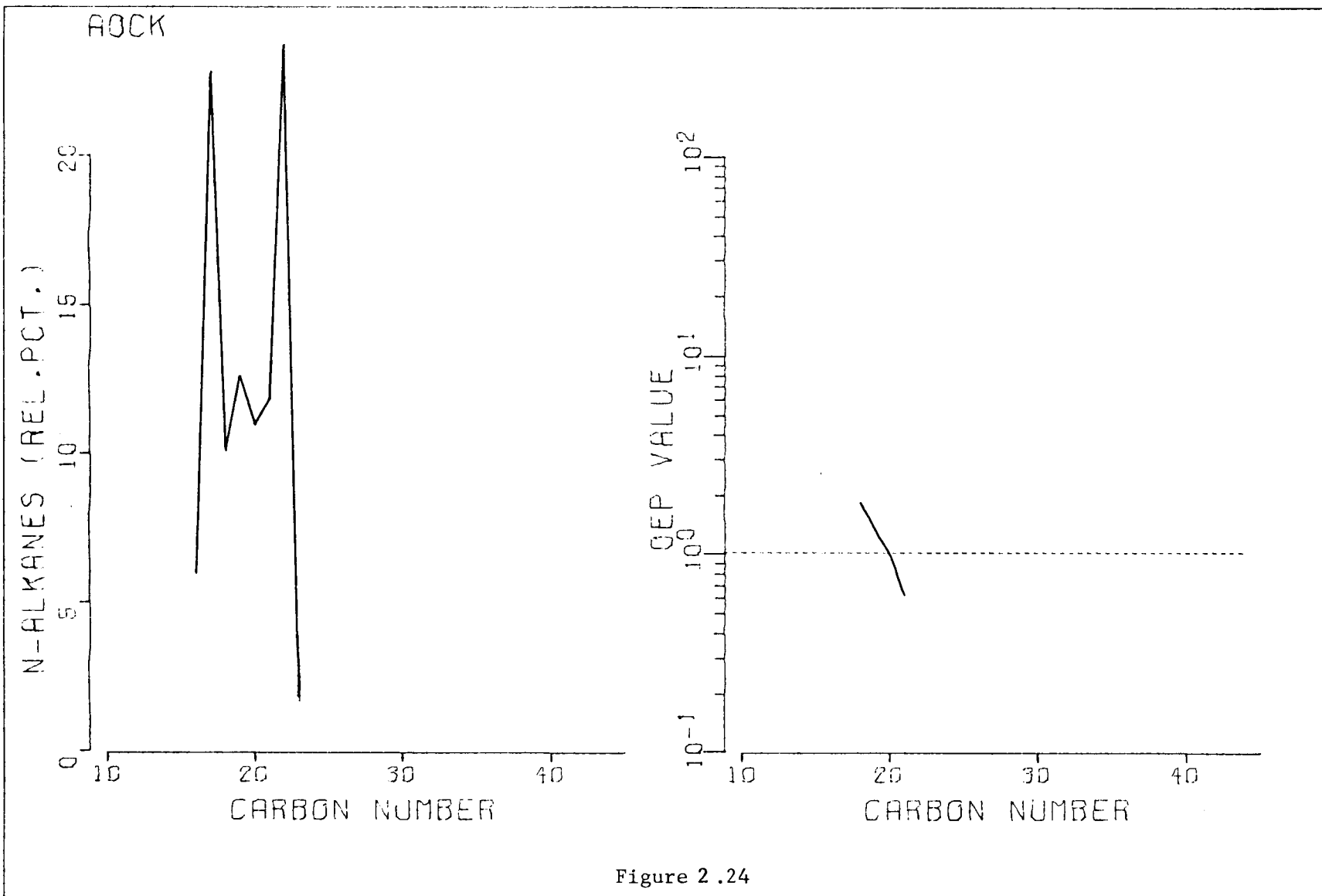


Figure 2.23



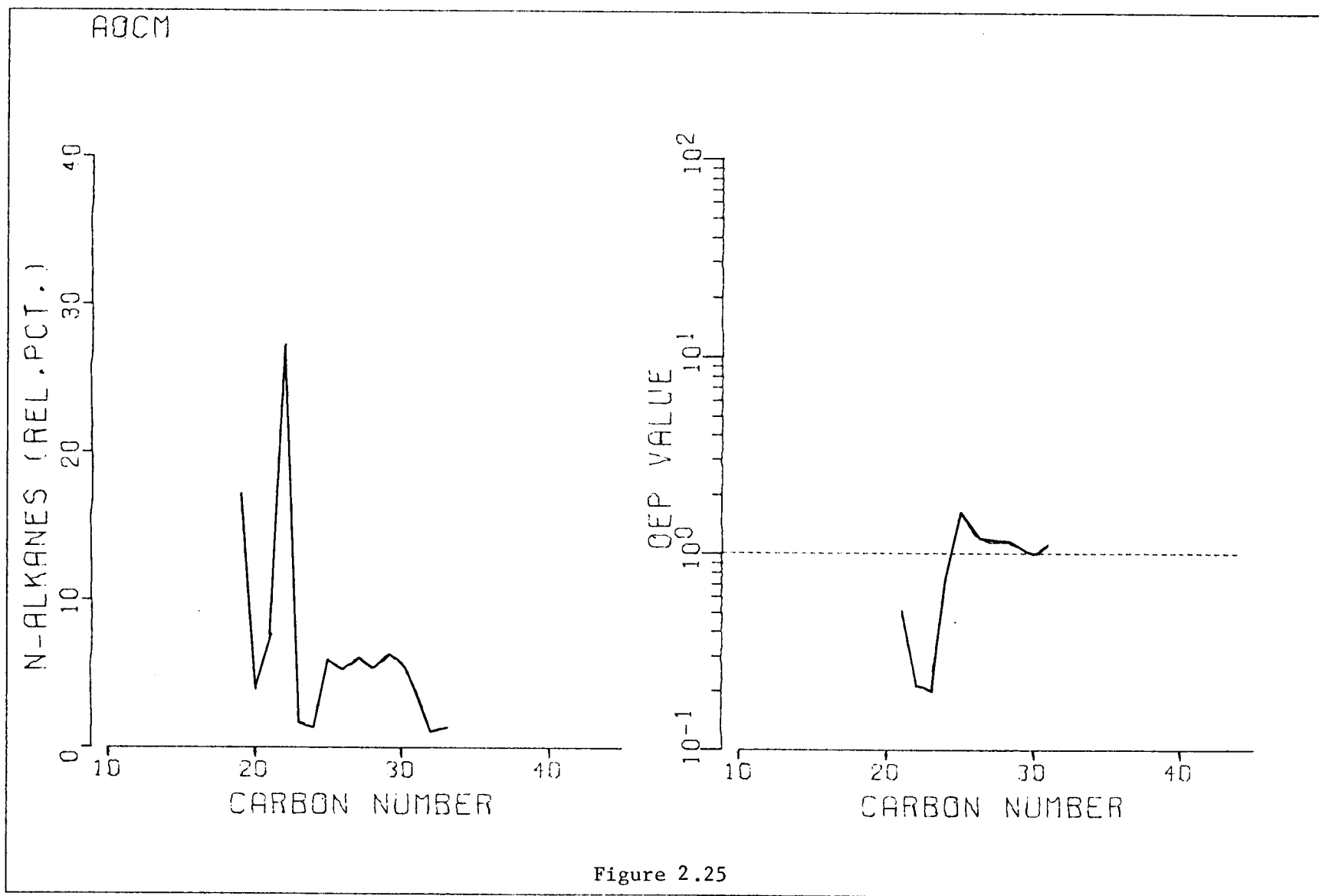


Figure 2.25

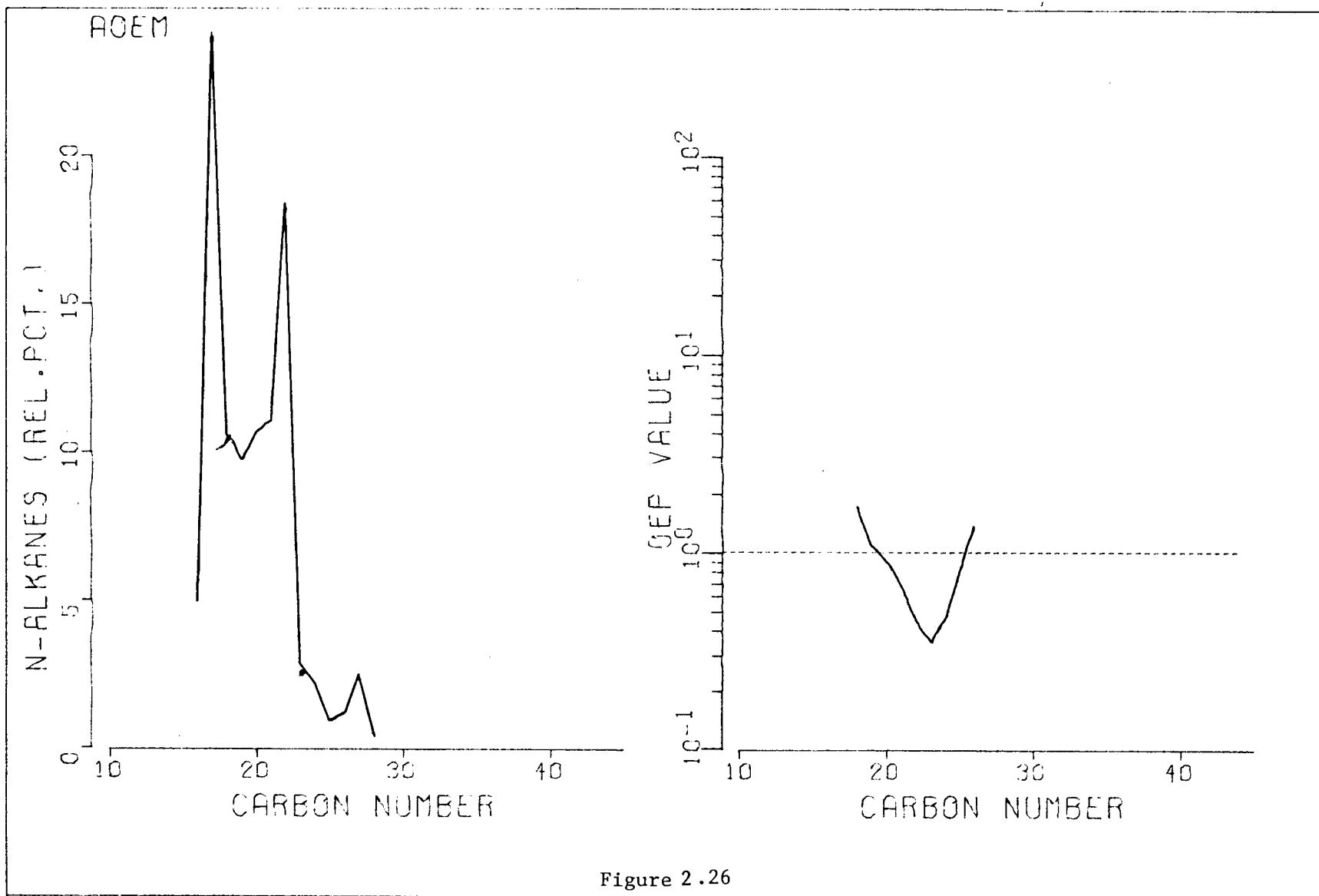


Figure 2.26

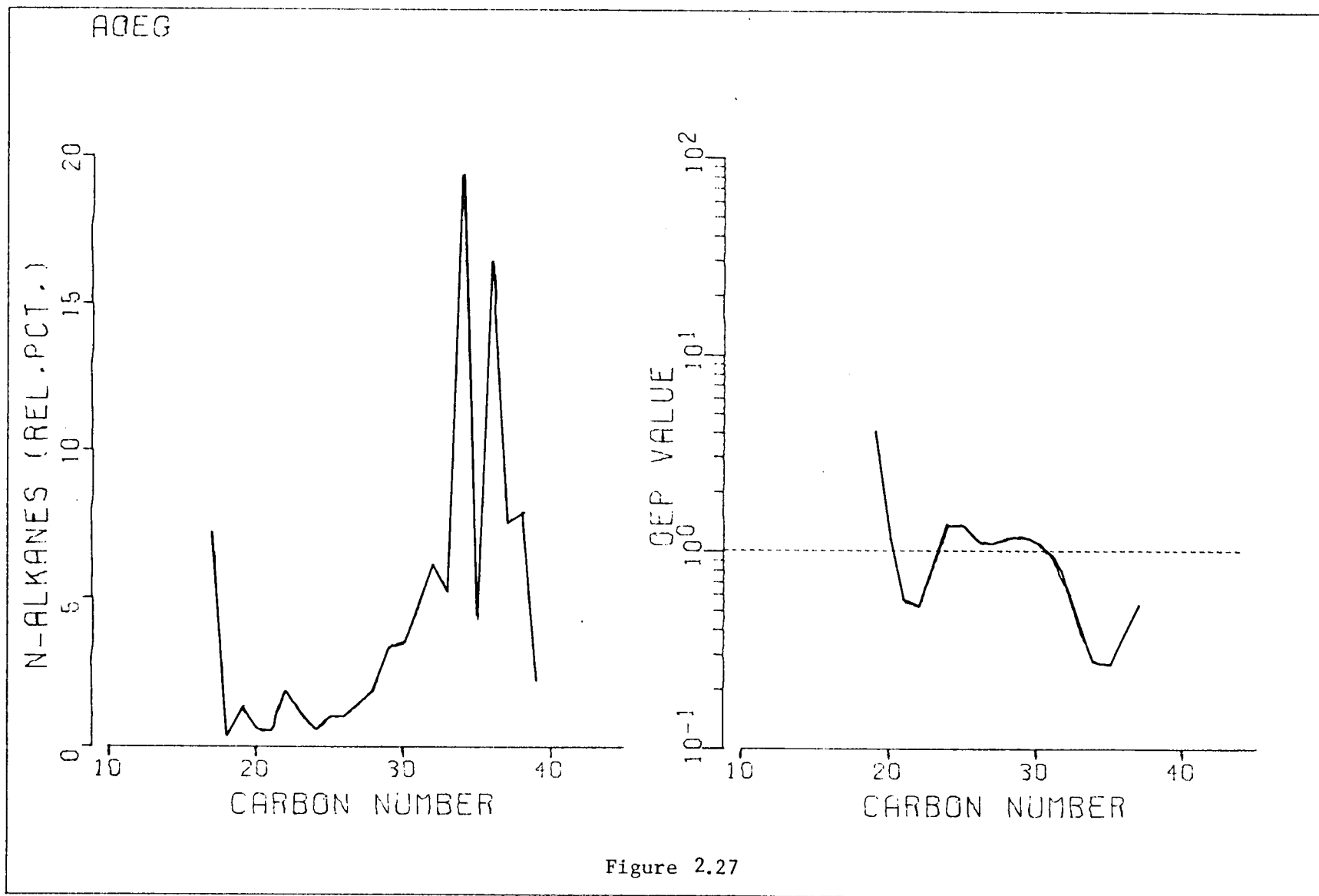


Figure 2.27

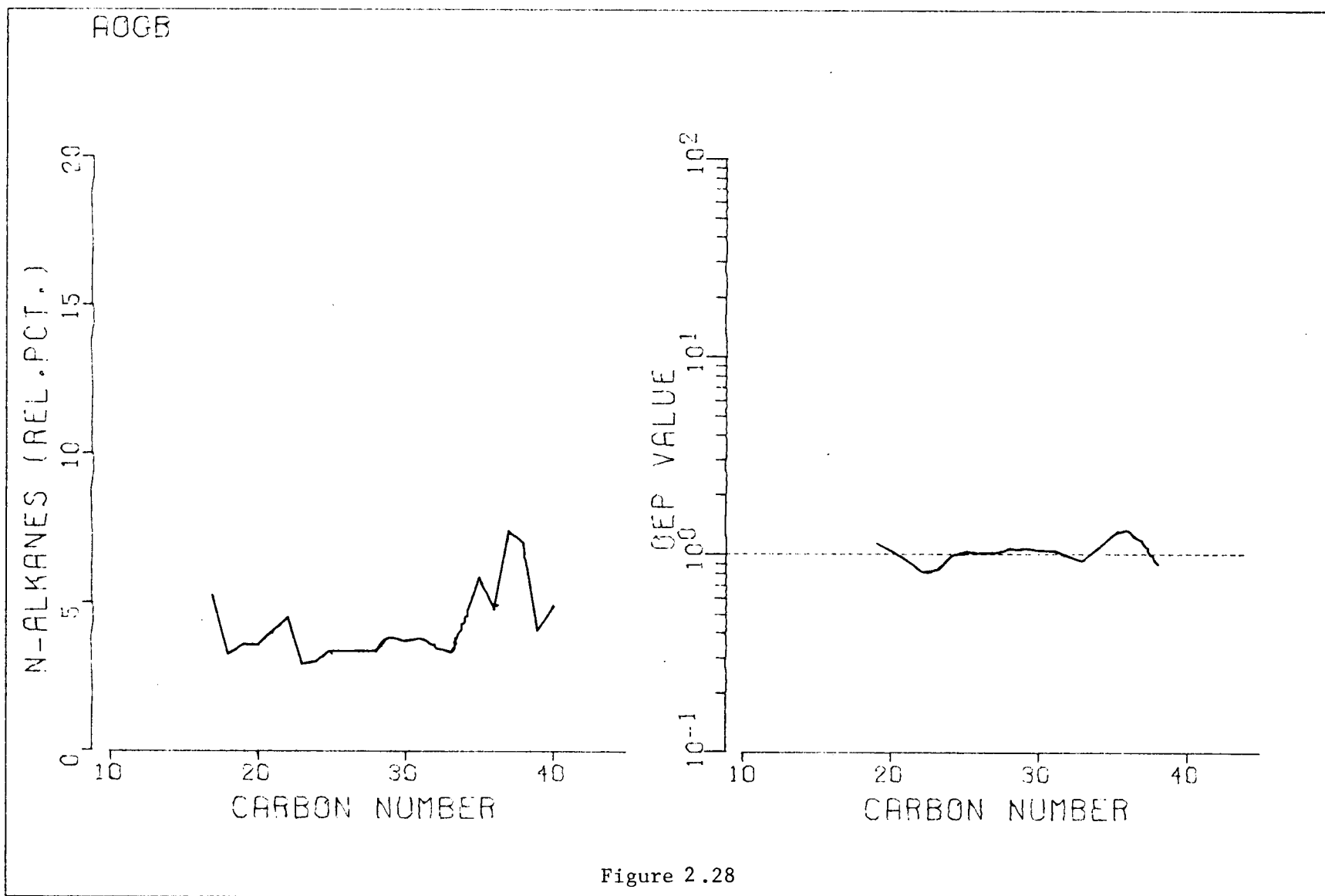


Figure 2.28

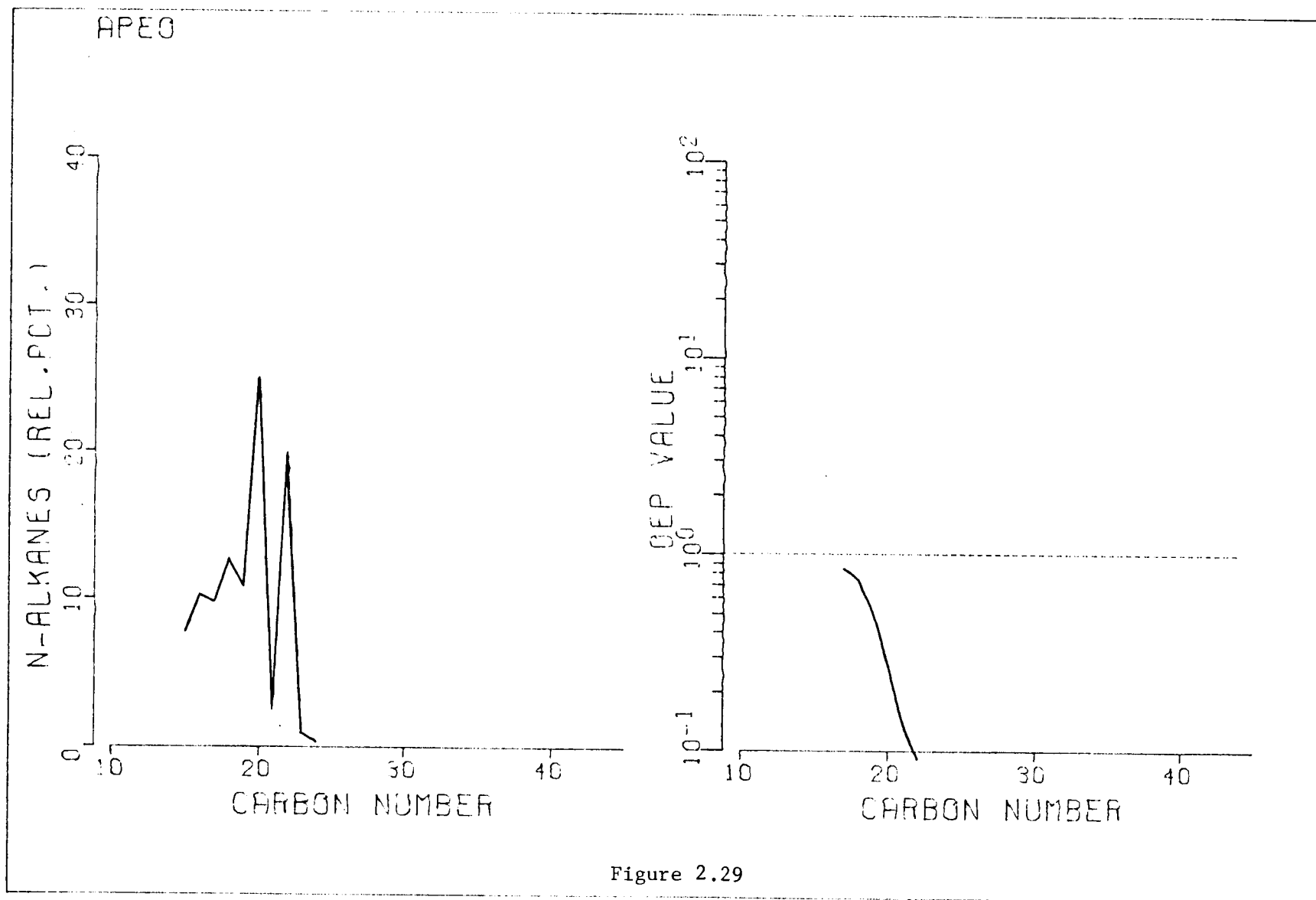


Figure 2.29

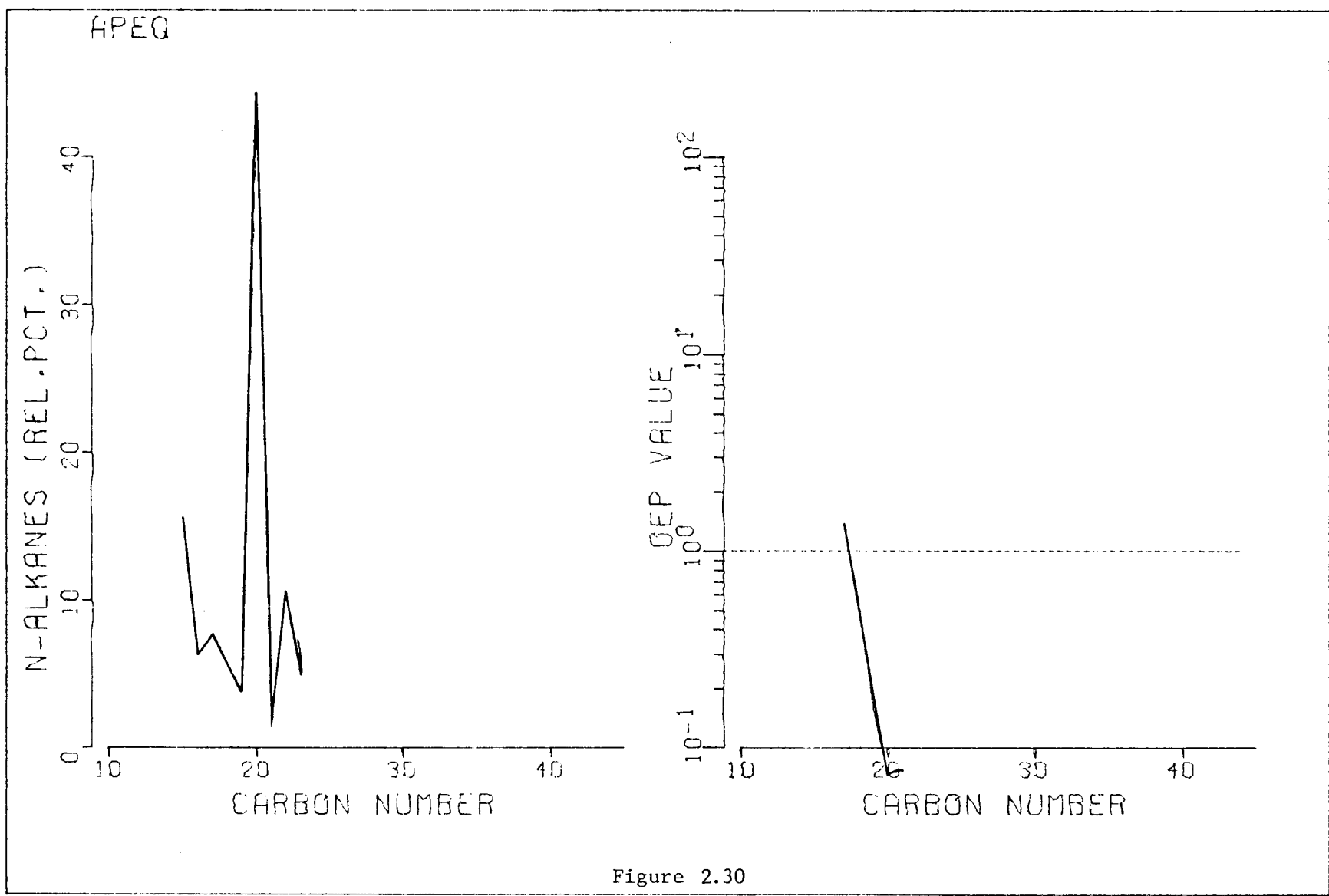


Figure 2.30

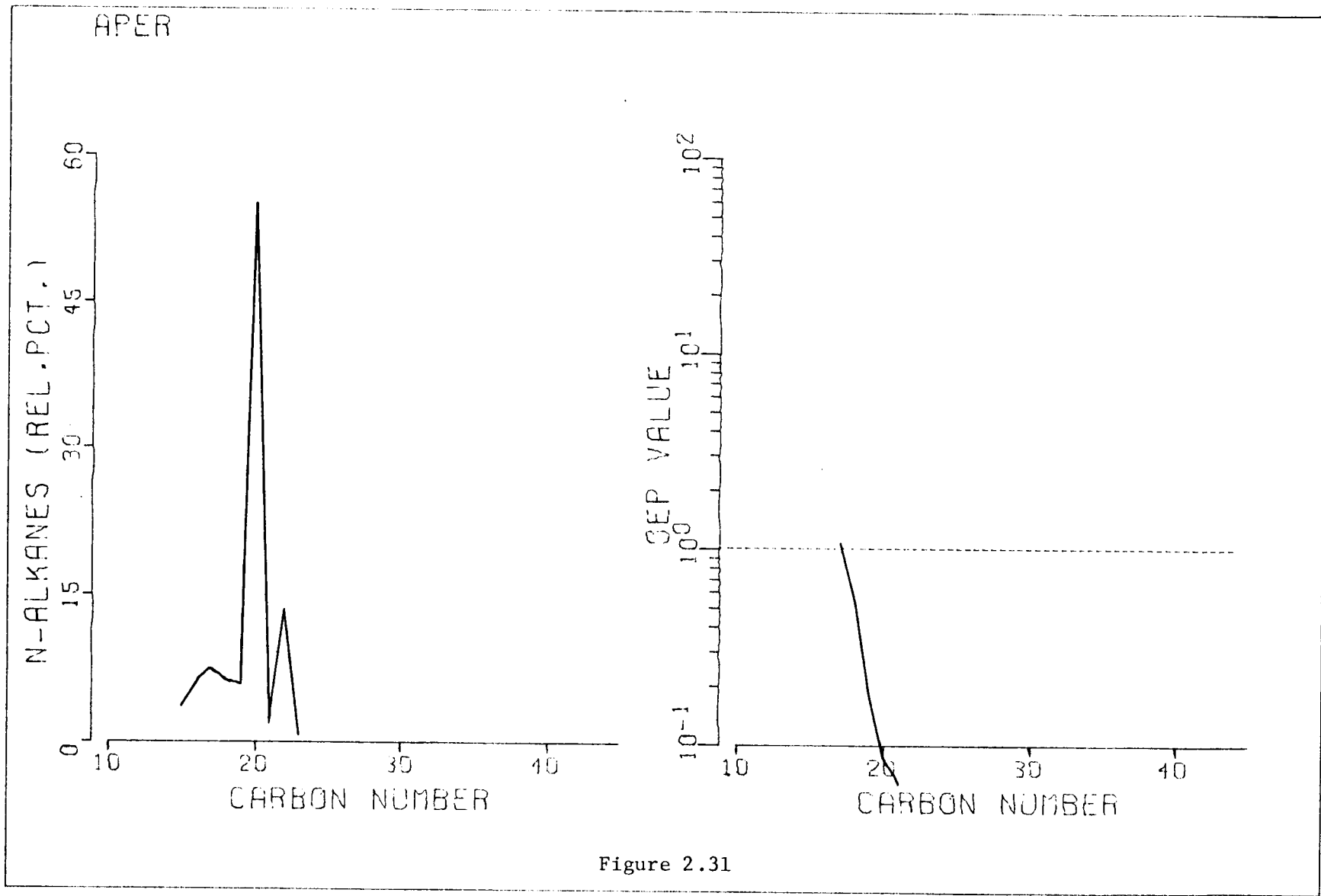


Figure 2.31

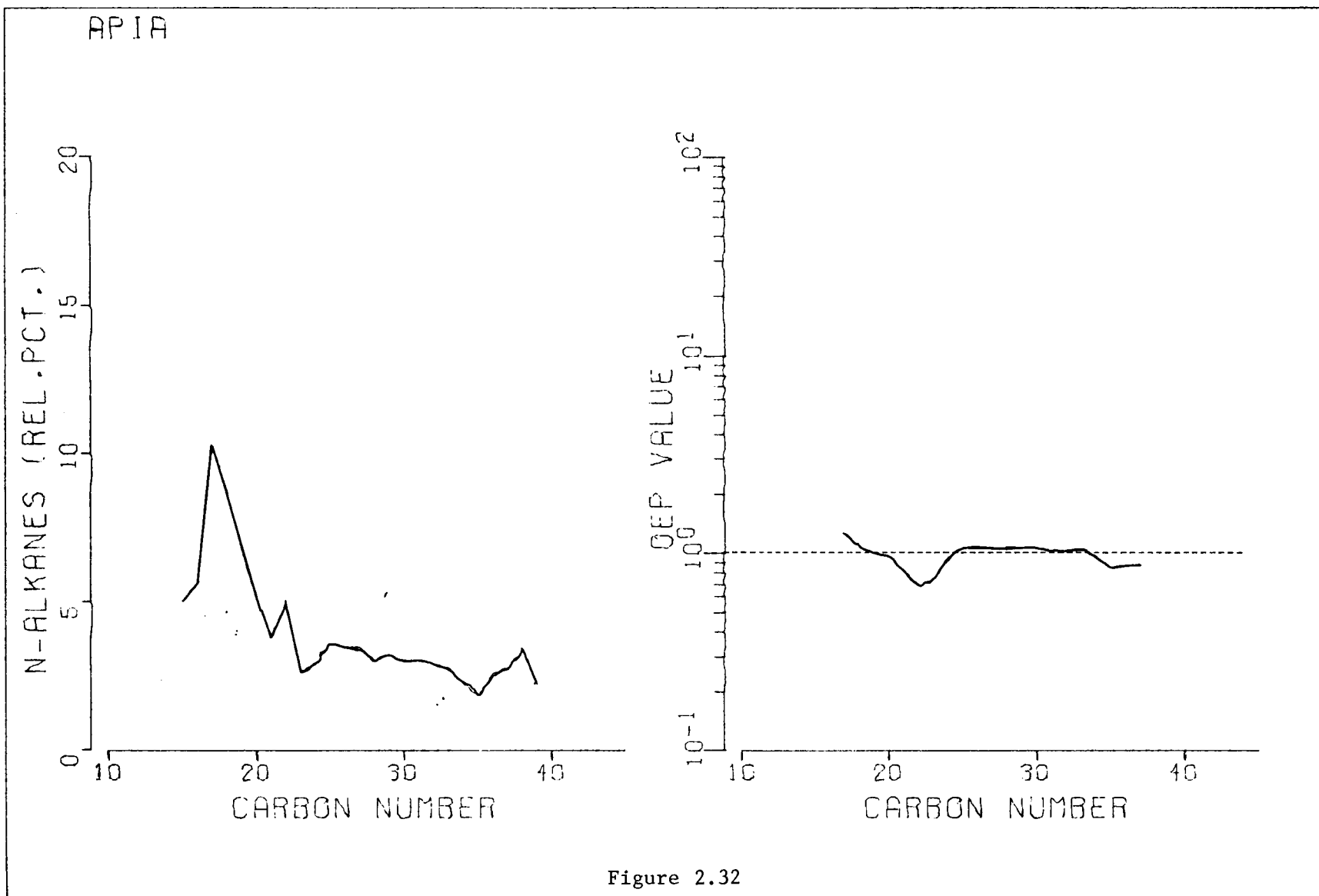


Figure 2.32

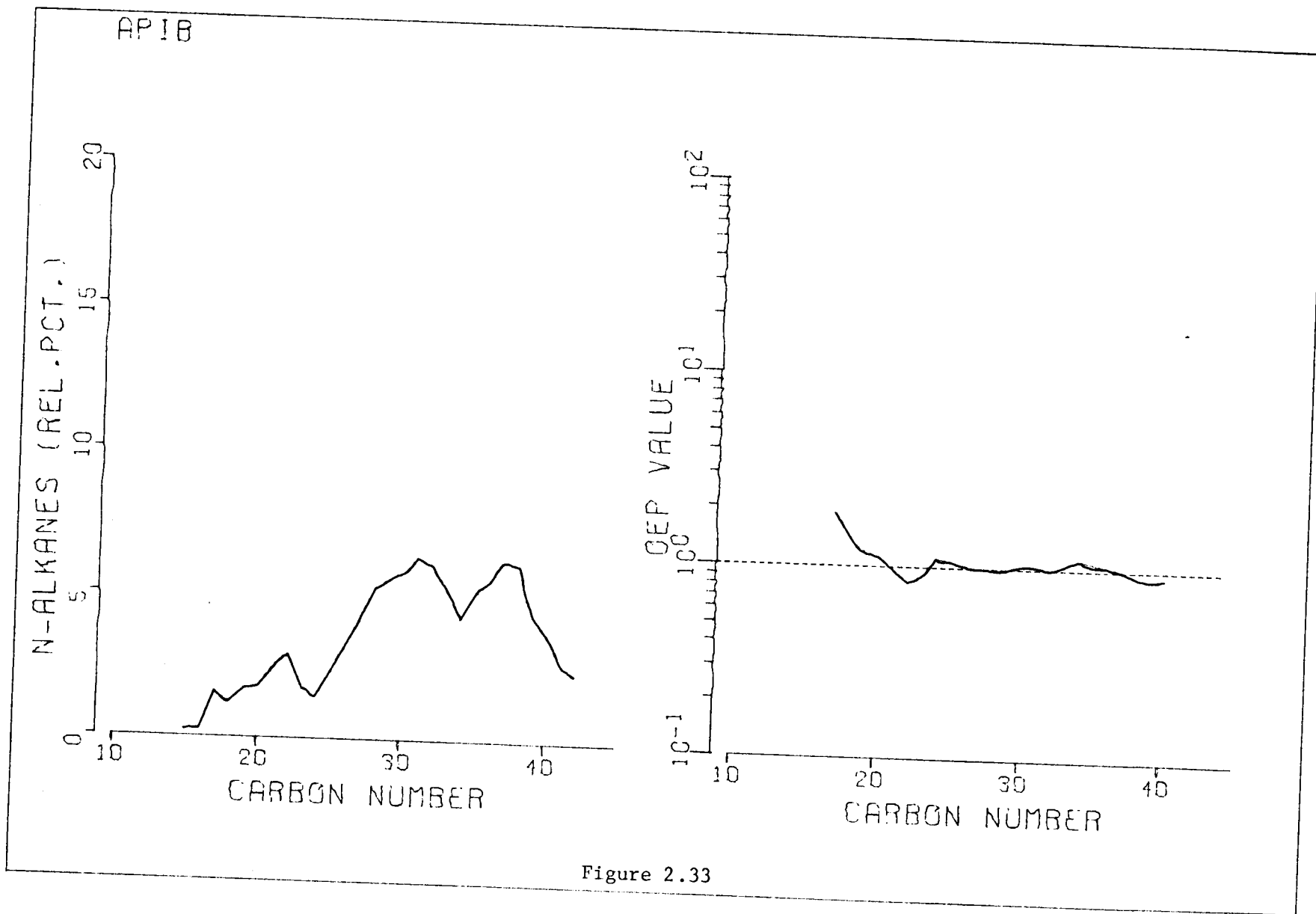


Figure 2.33

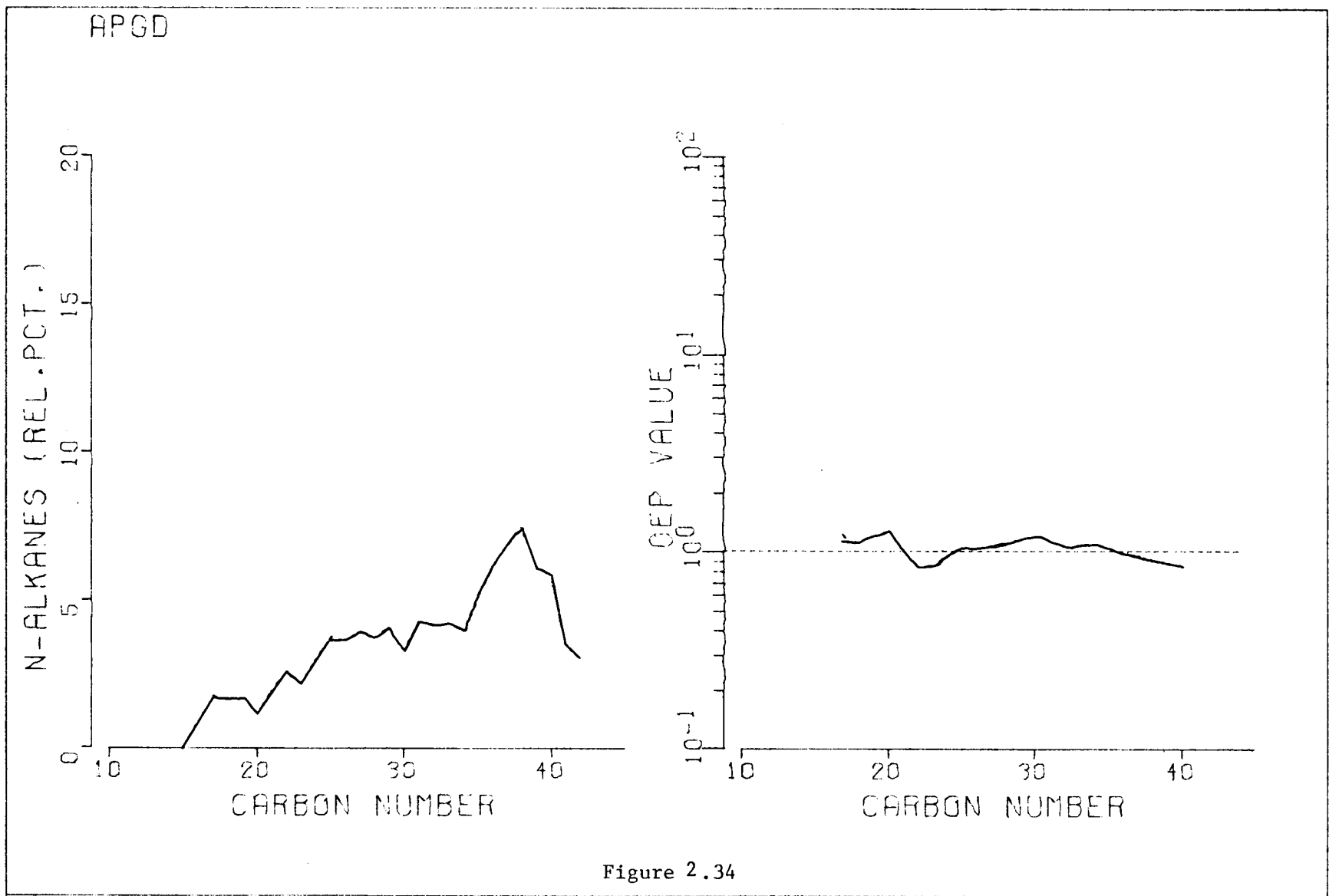


Figure 2.34

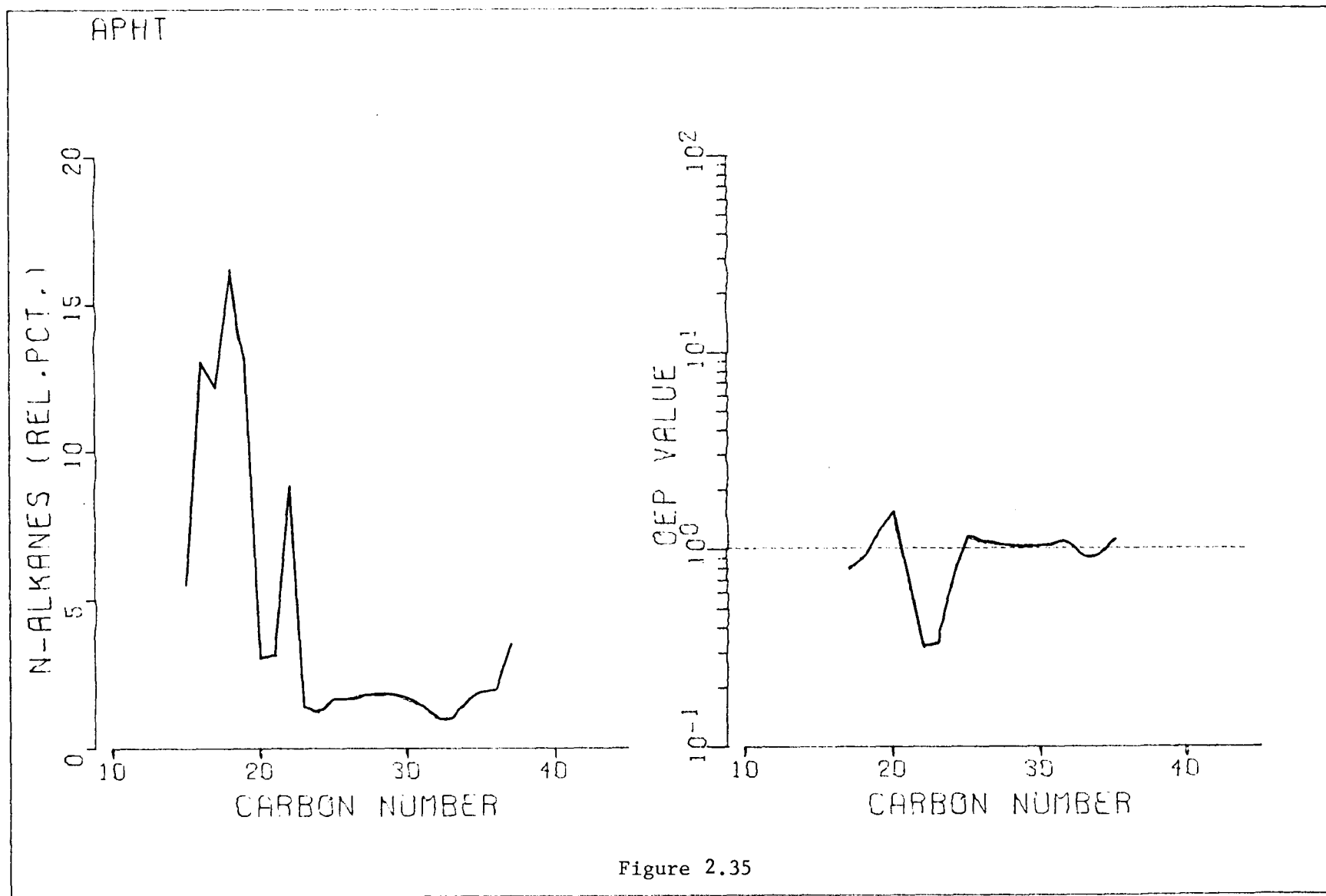


Figure 2.35

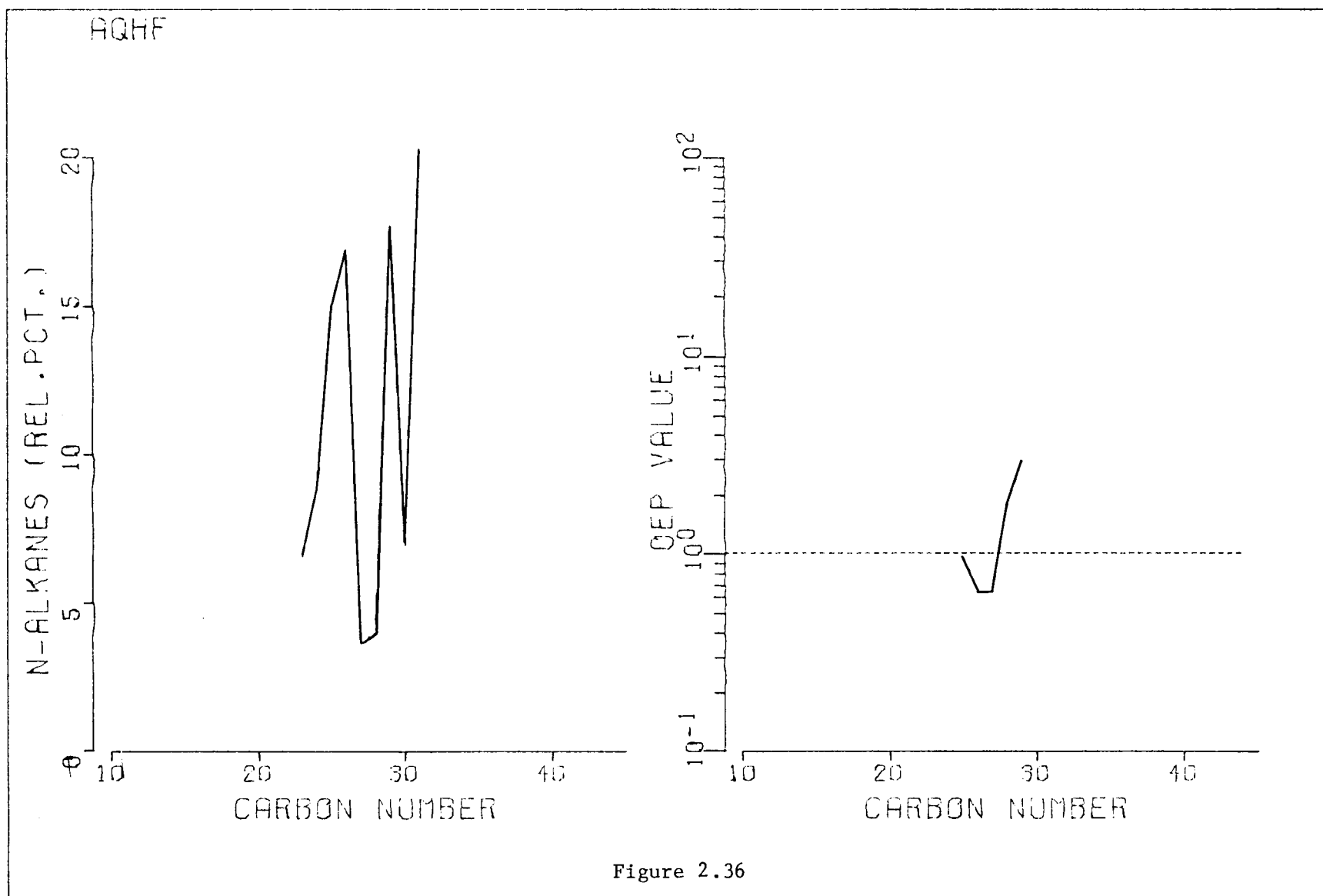


Figure 2.36

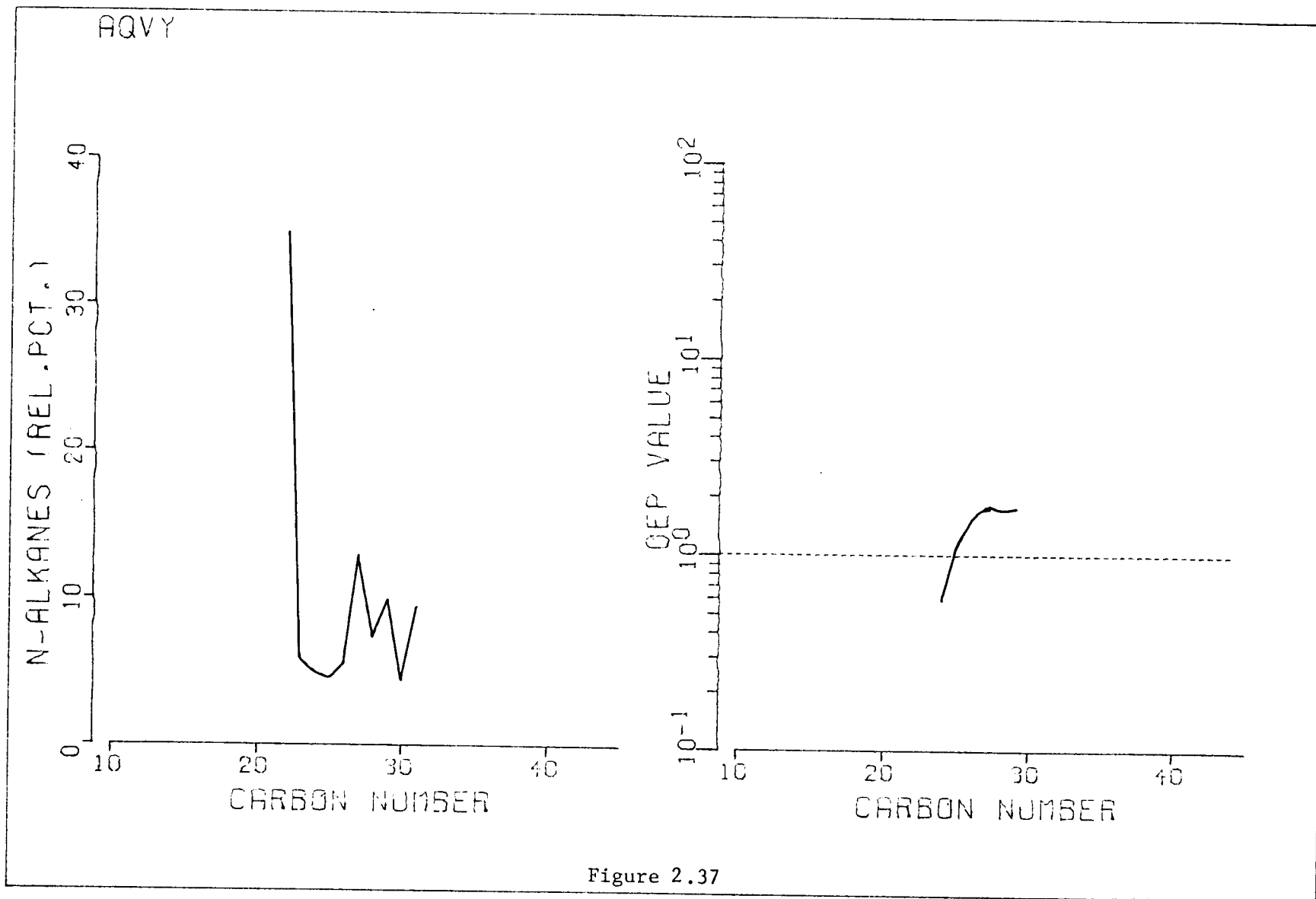


Figure 2.37

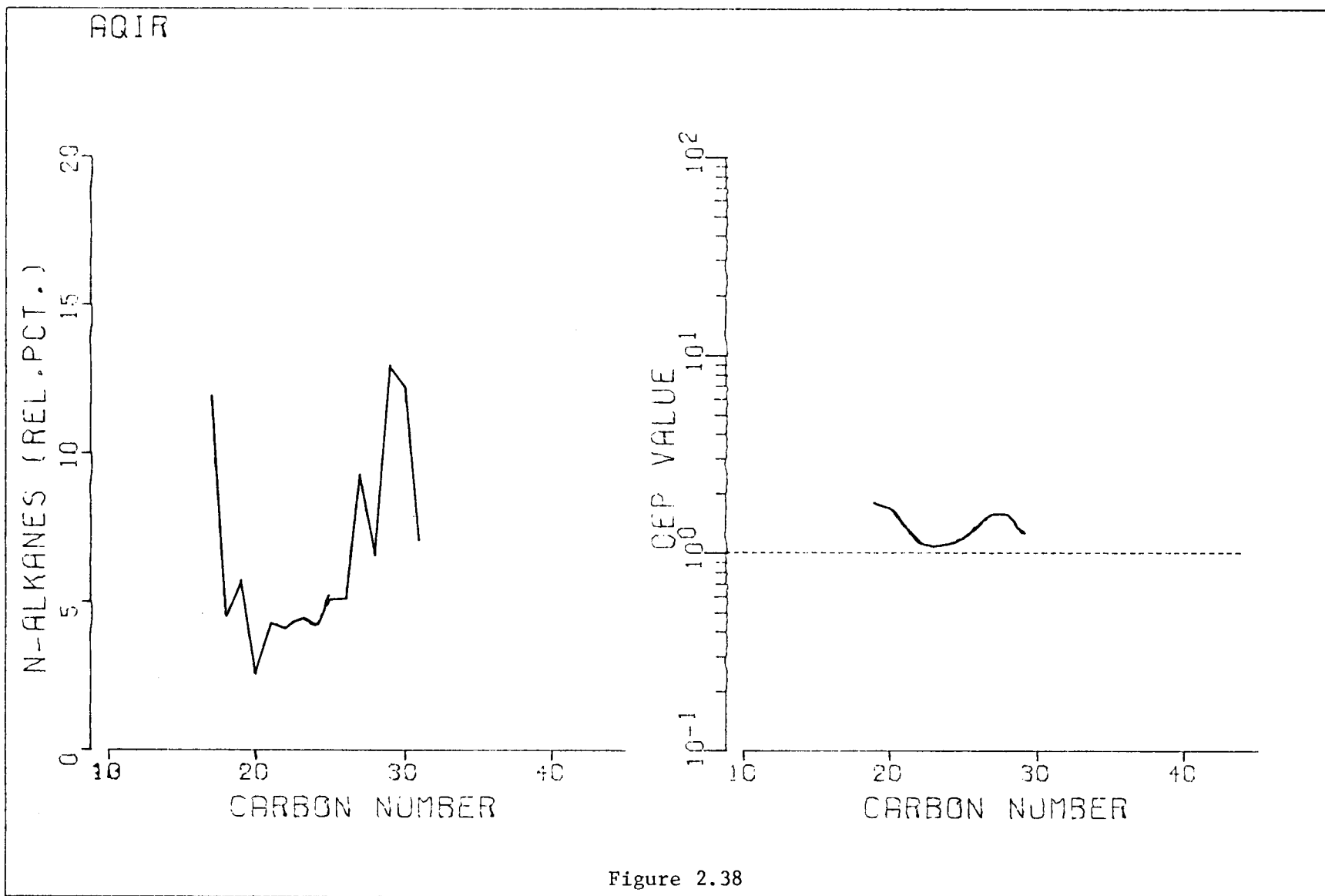


Figure 2.38

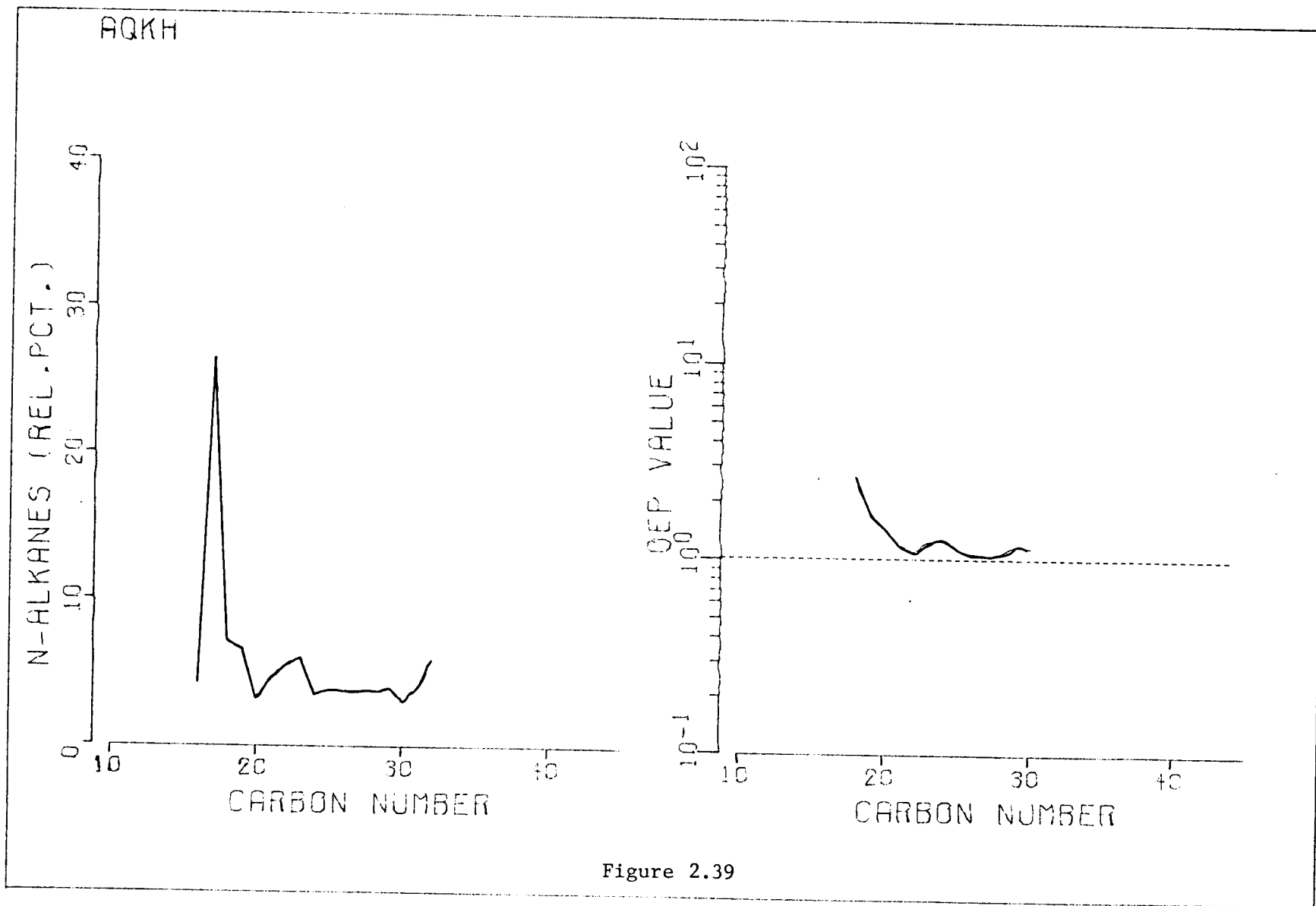


Figure 2.39

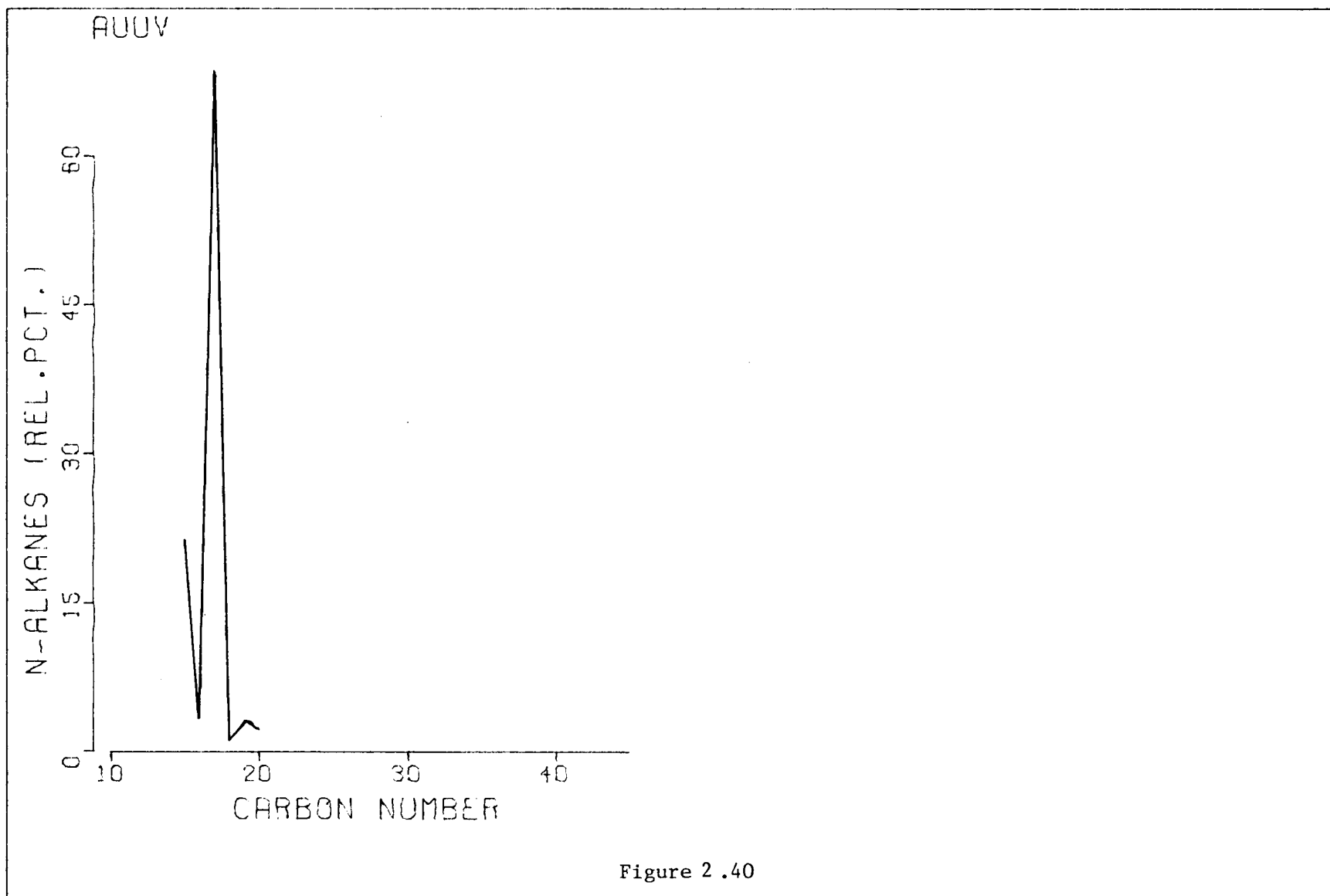


Figure 2.40

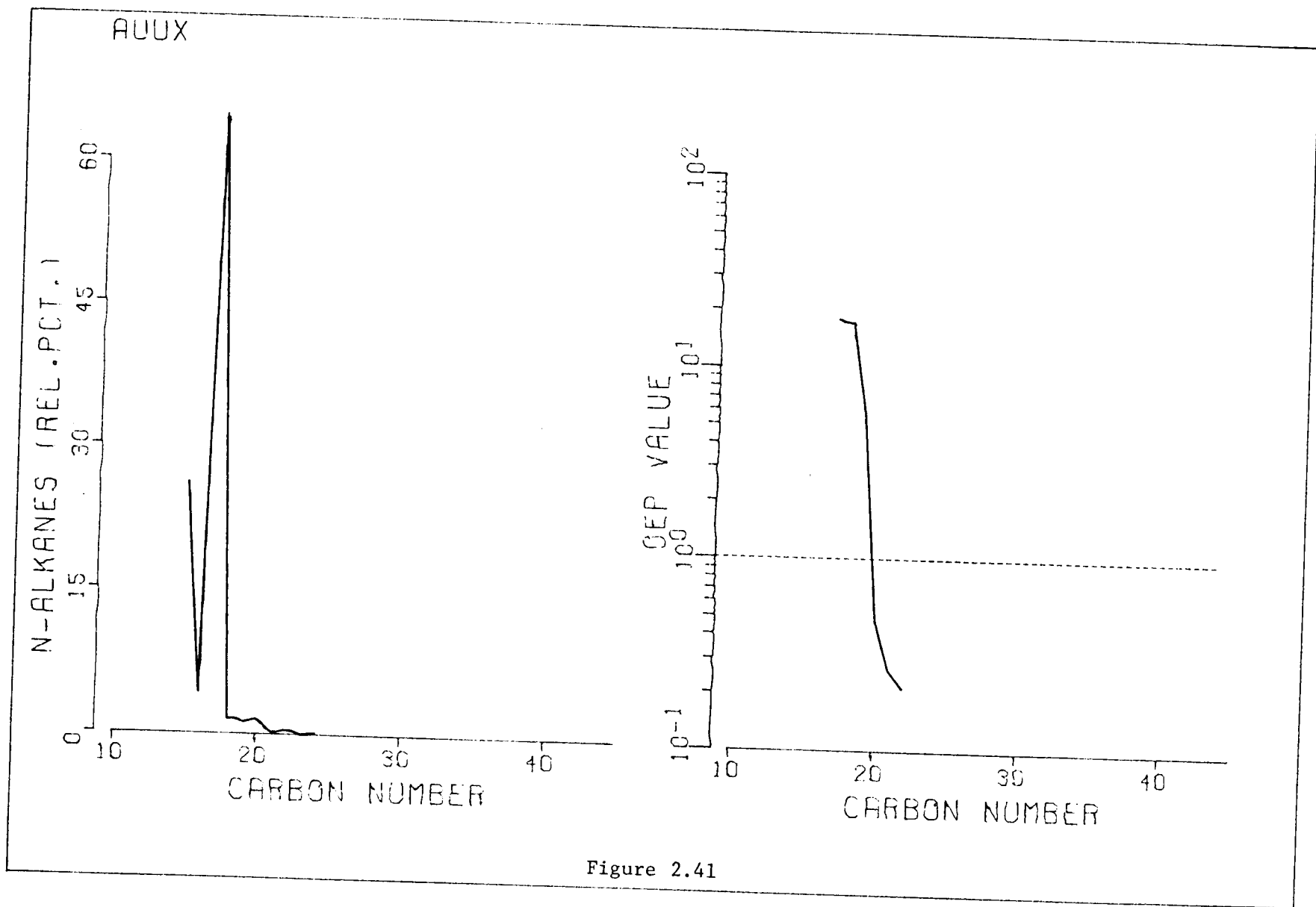


Figure 2.41

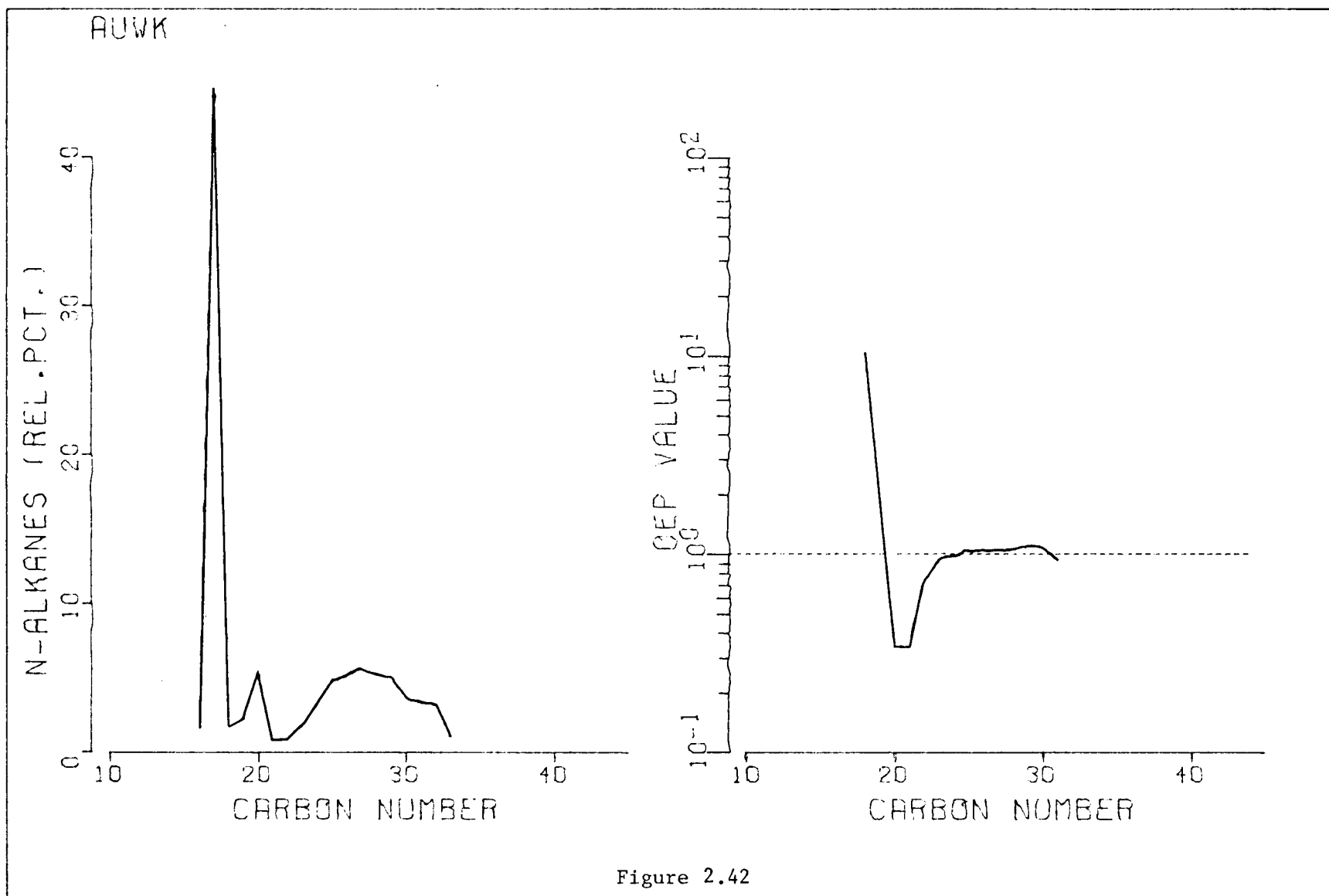


Figure 2.42

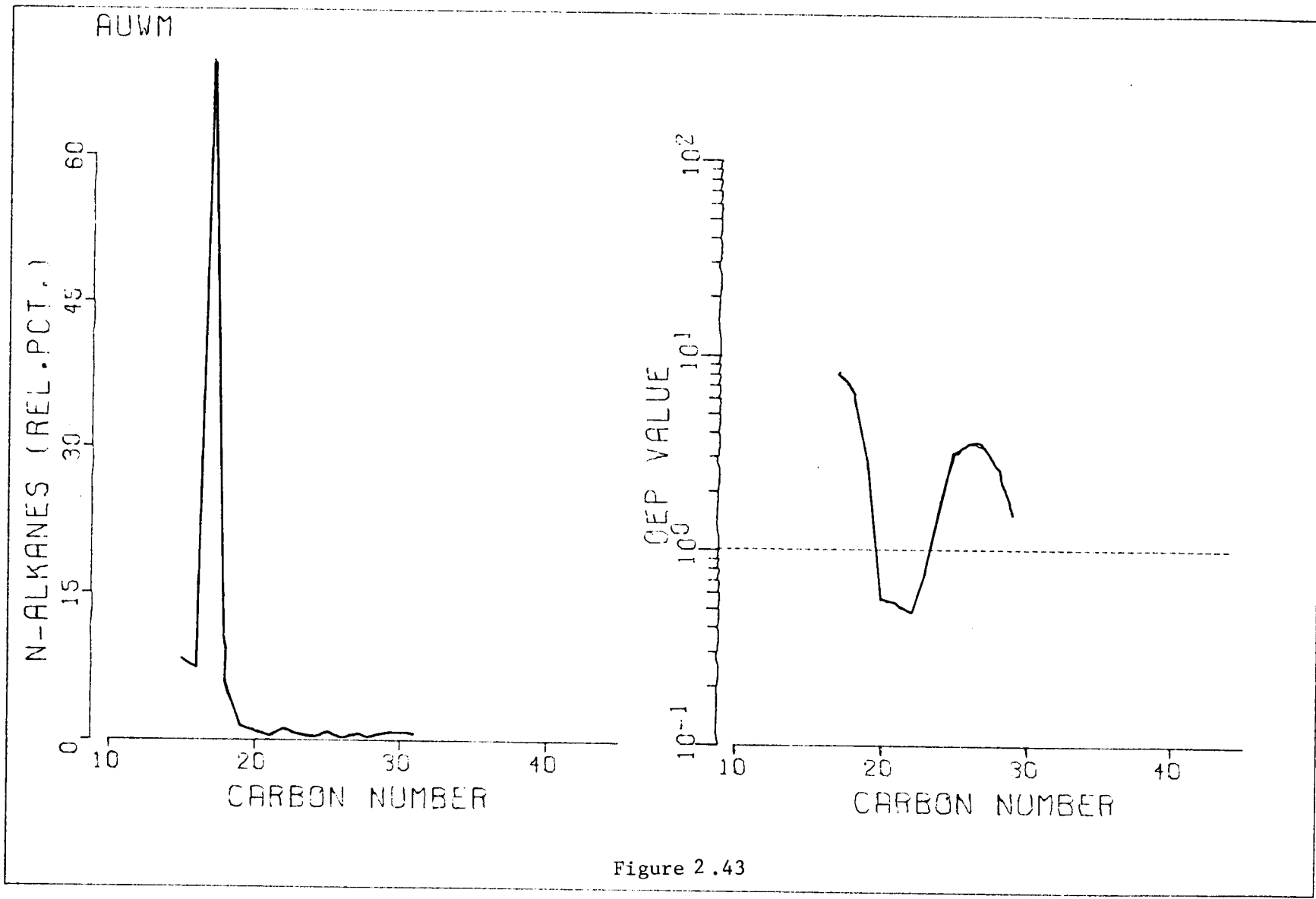
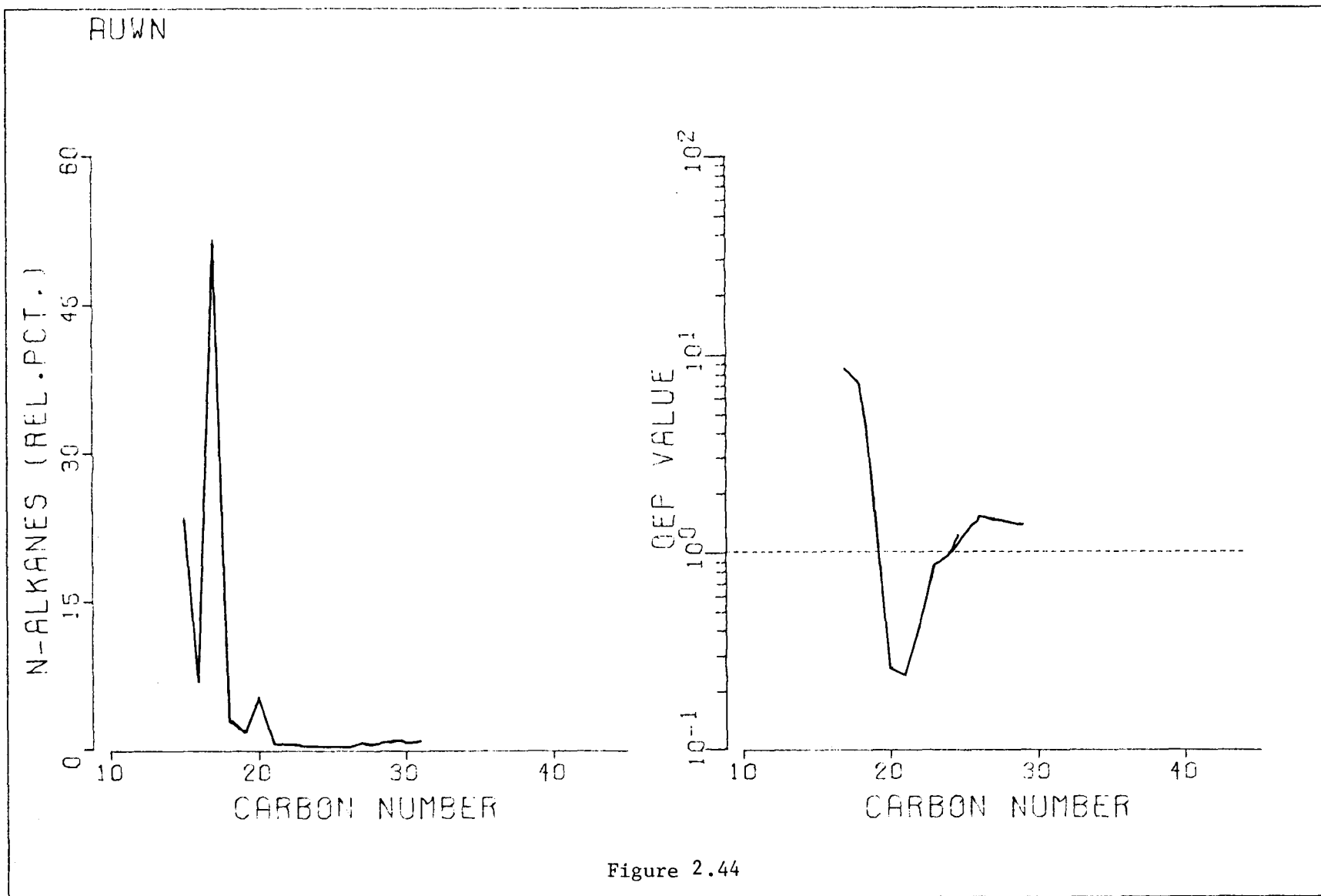
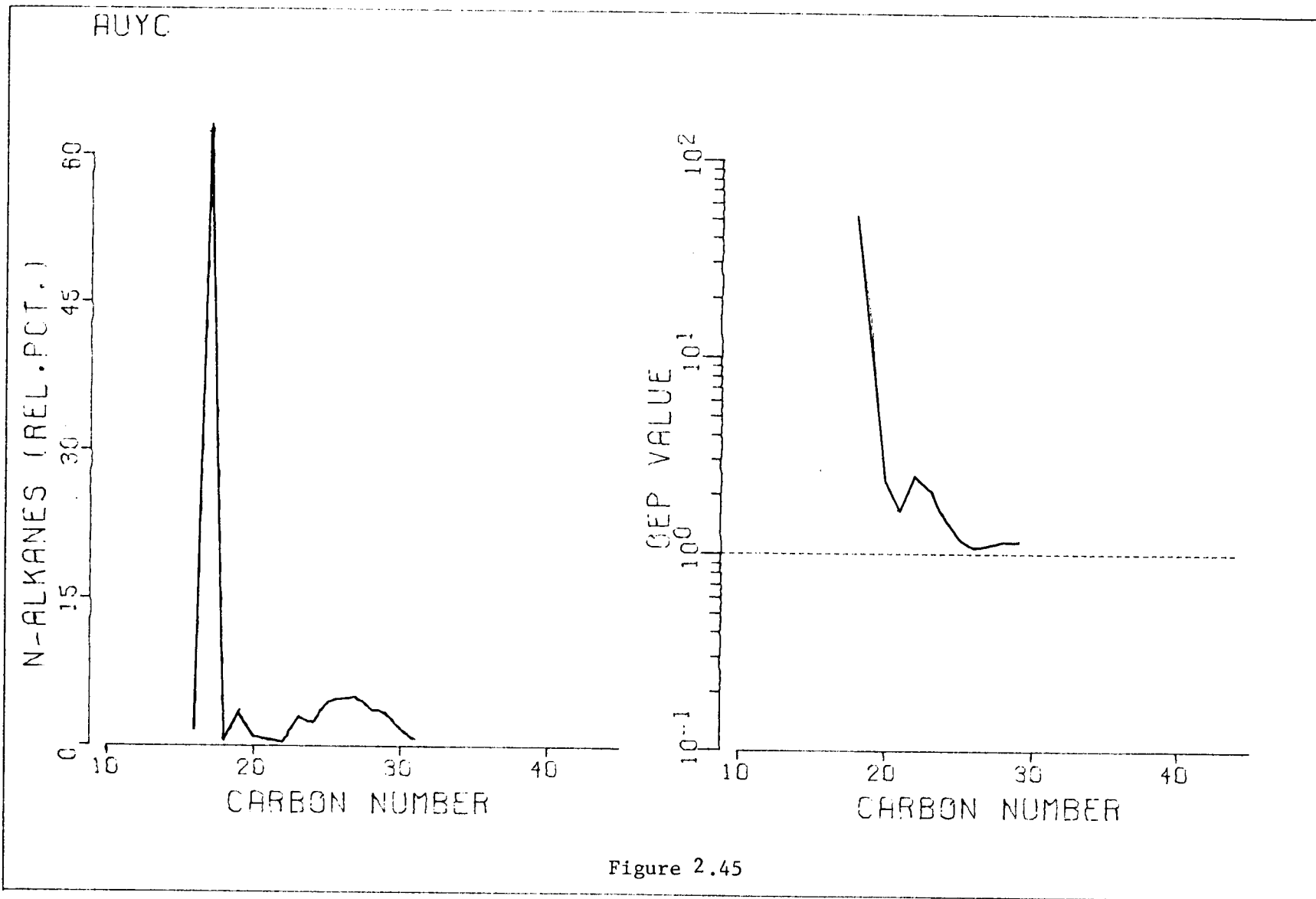
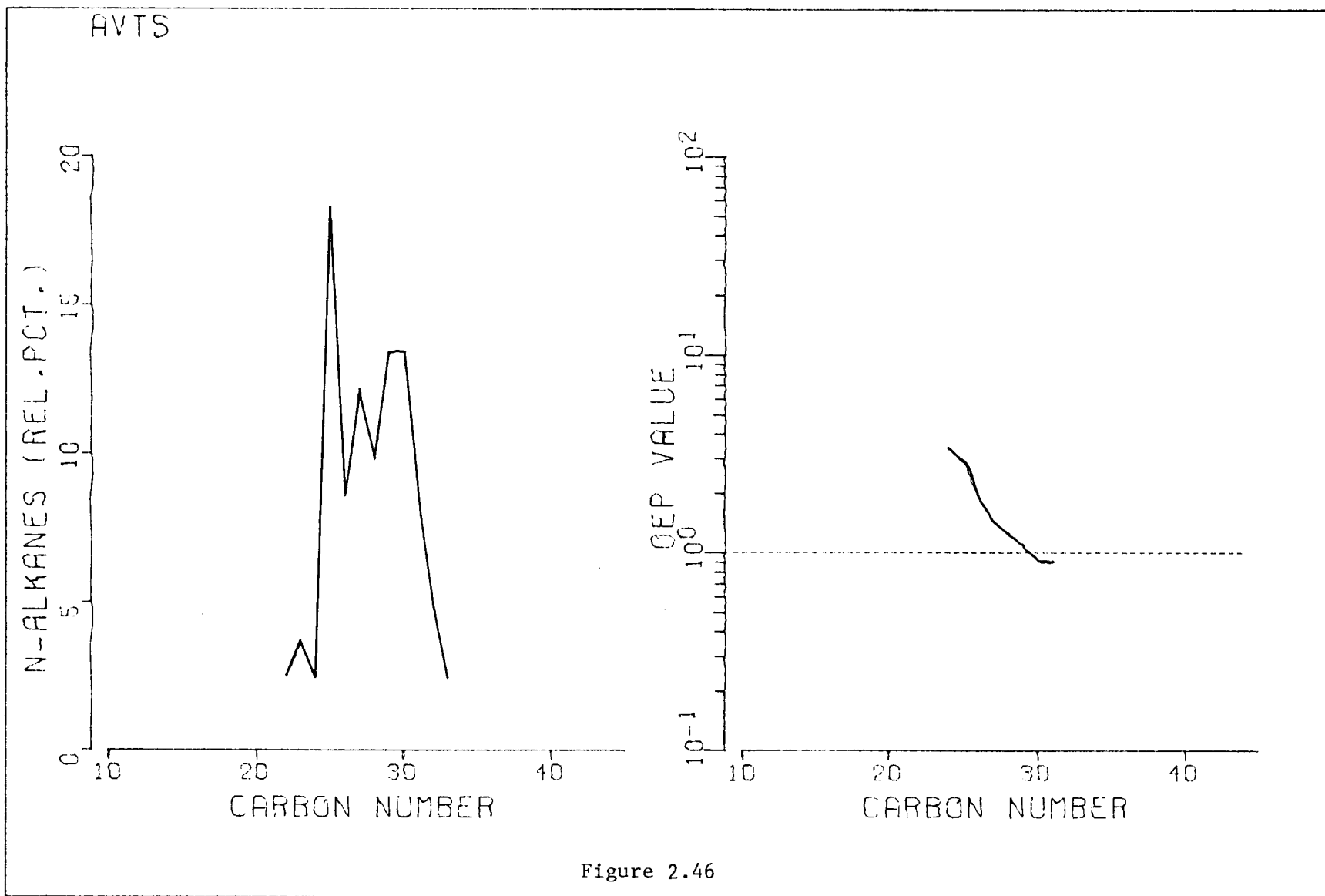


Figure 2.43







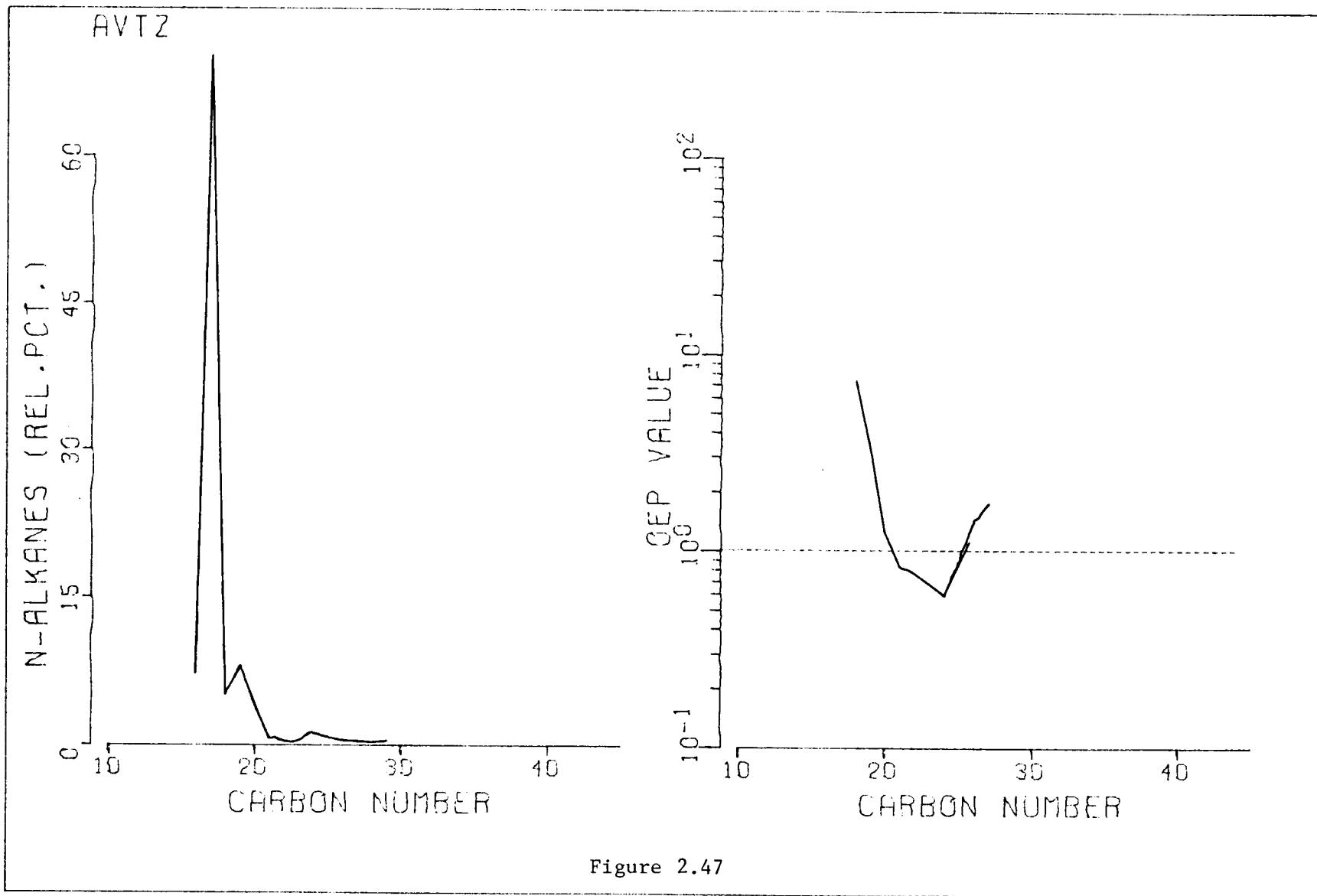


Figure 2.47

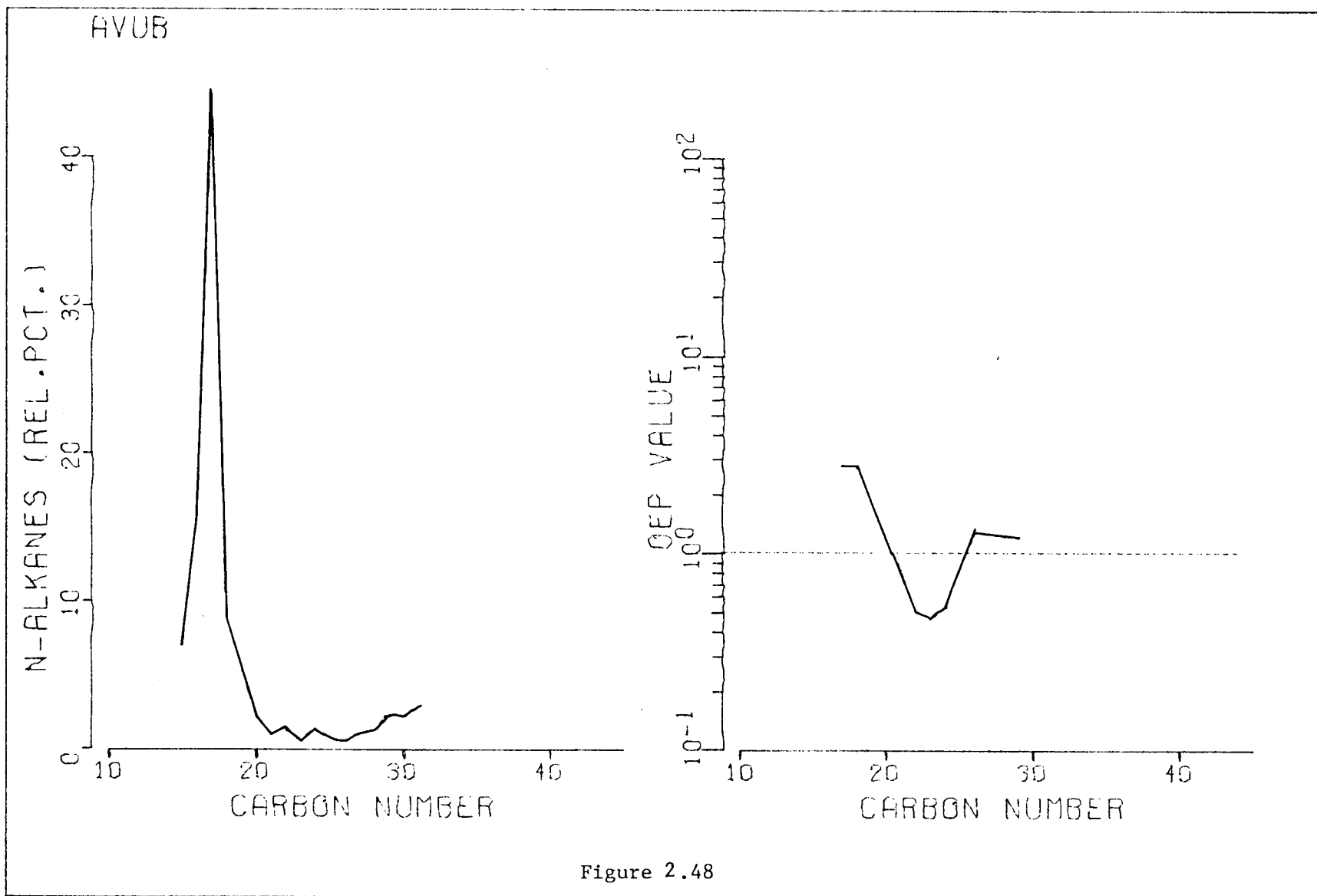


Figure 2.48

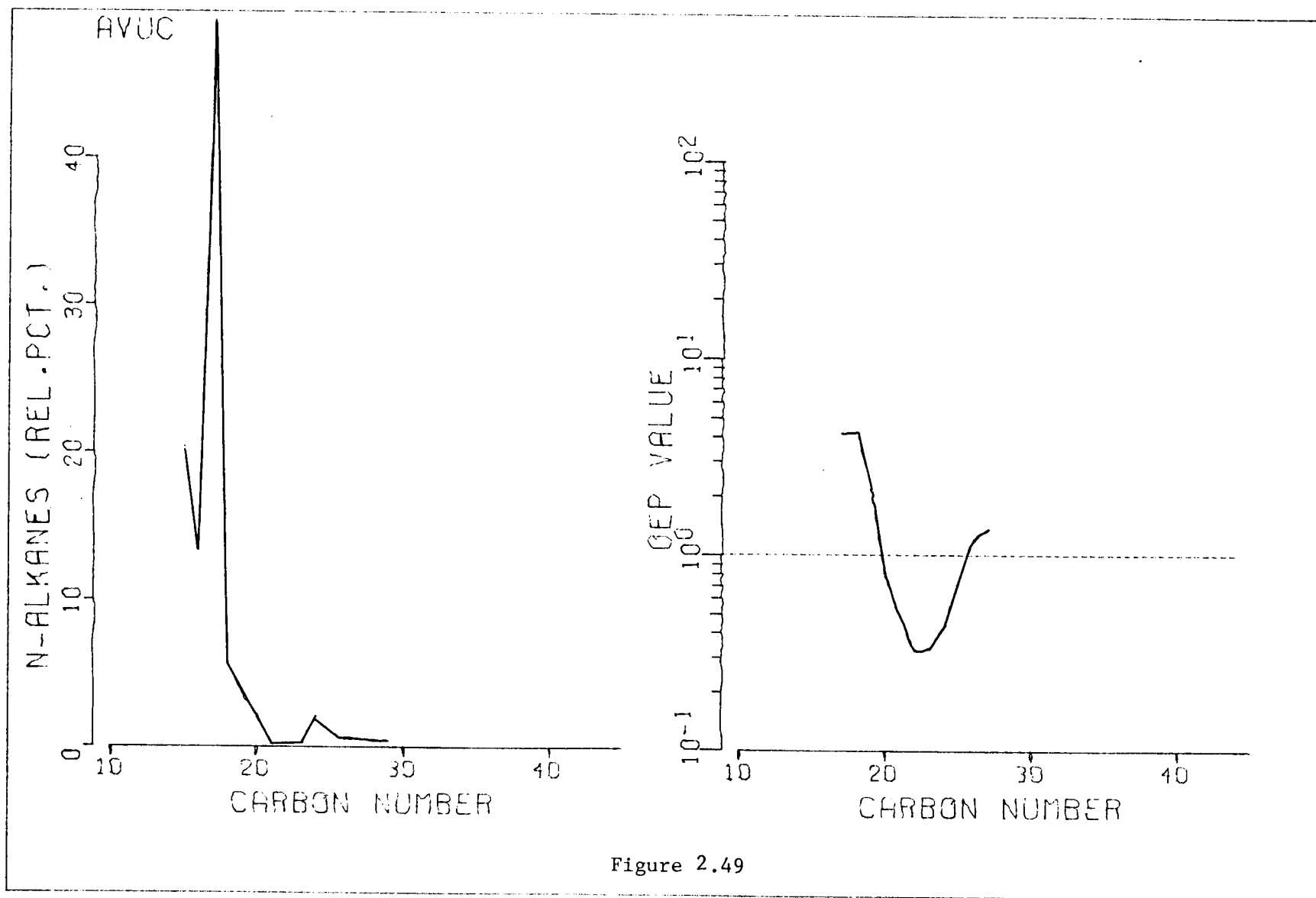
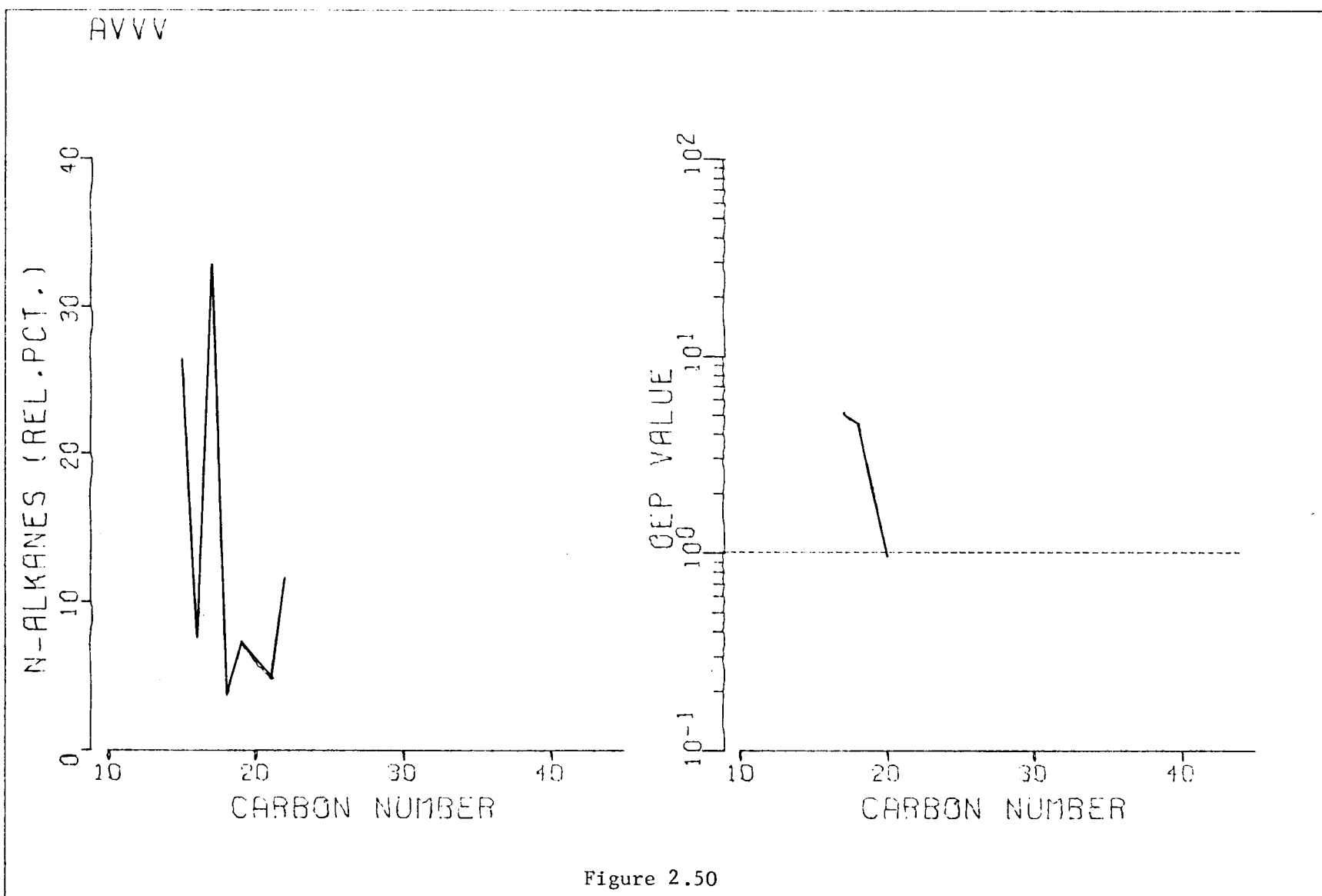


Figure 2.49



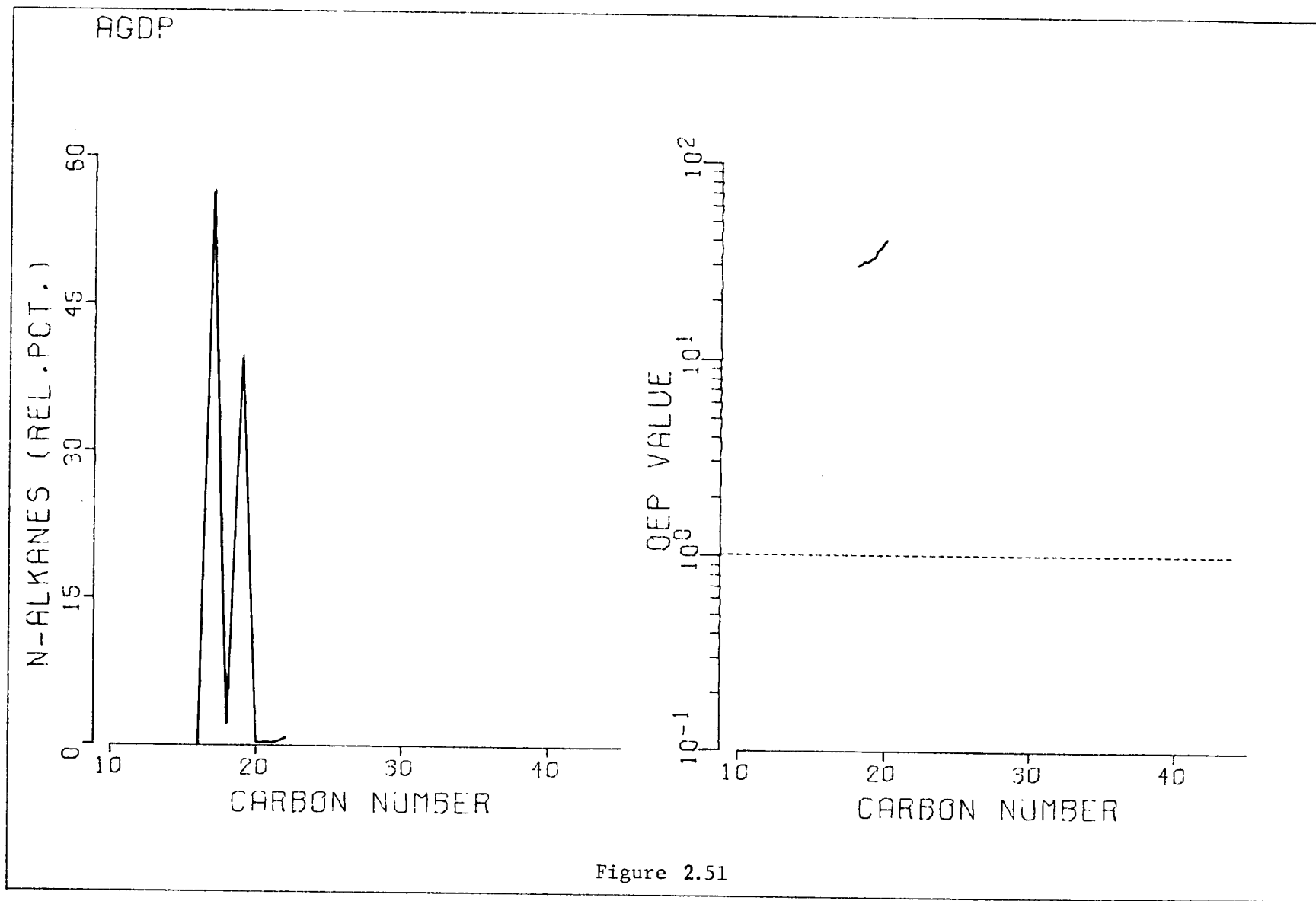


Figure 2.51

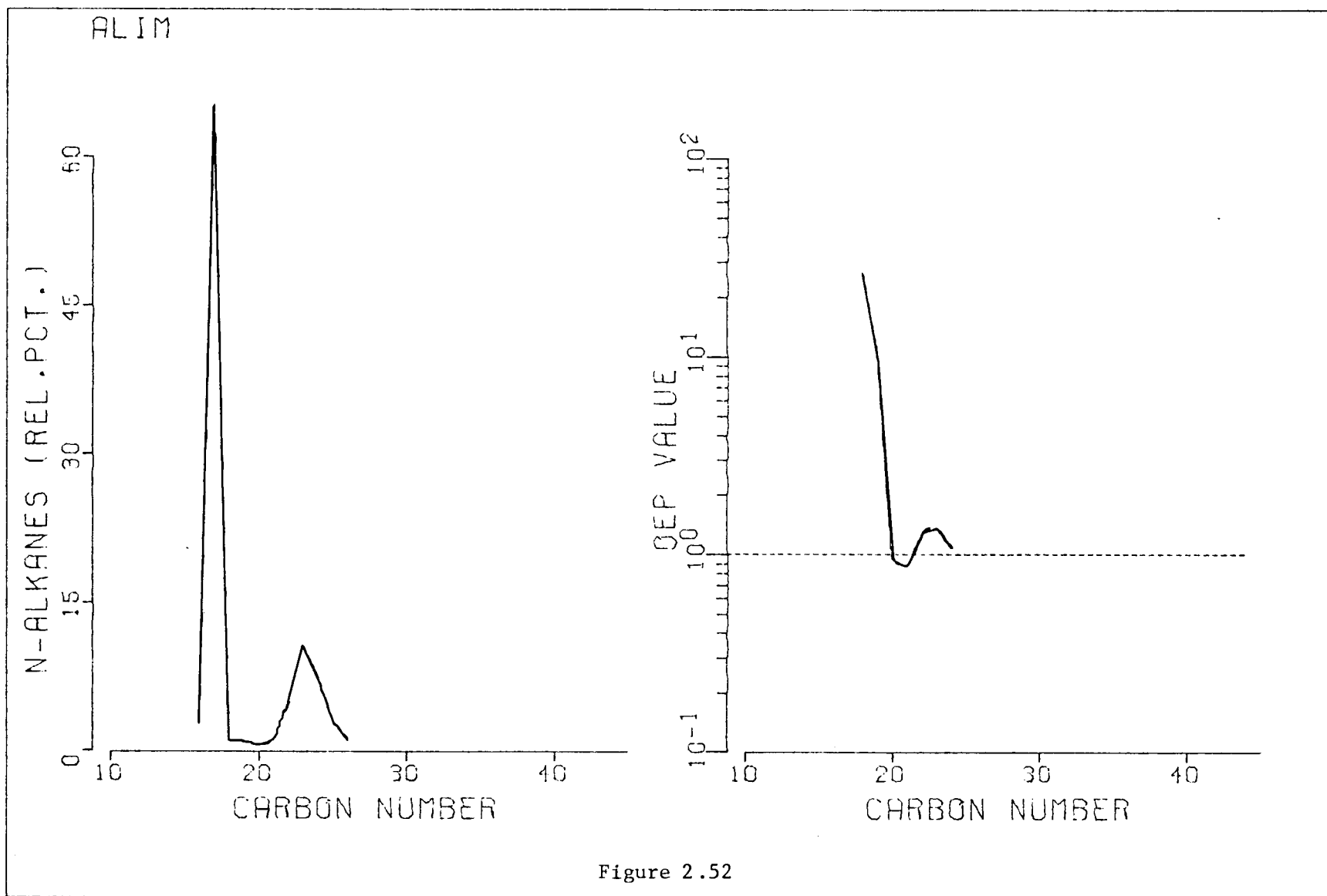


Figure 2.52

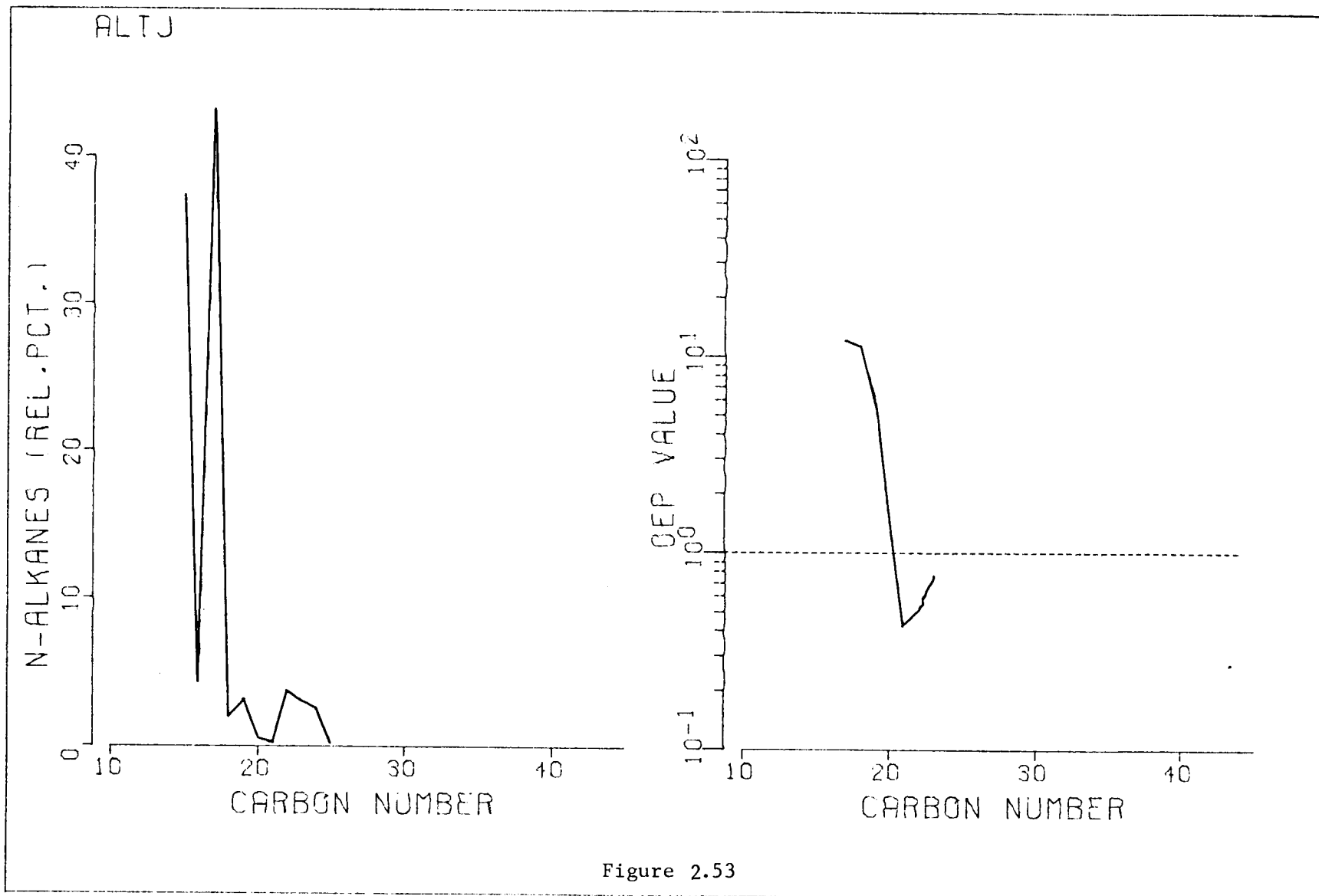
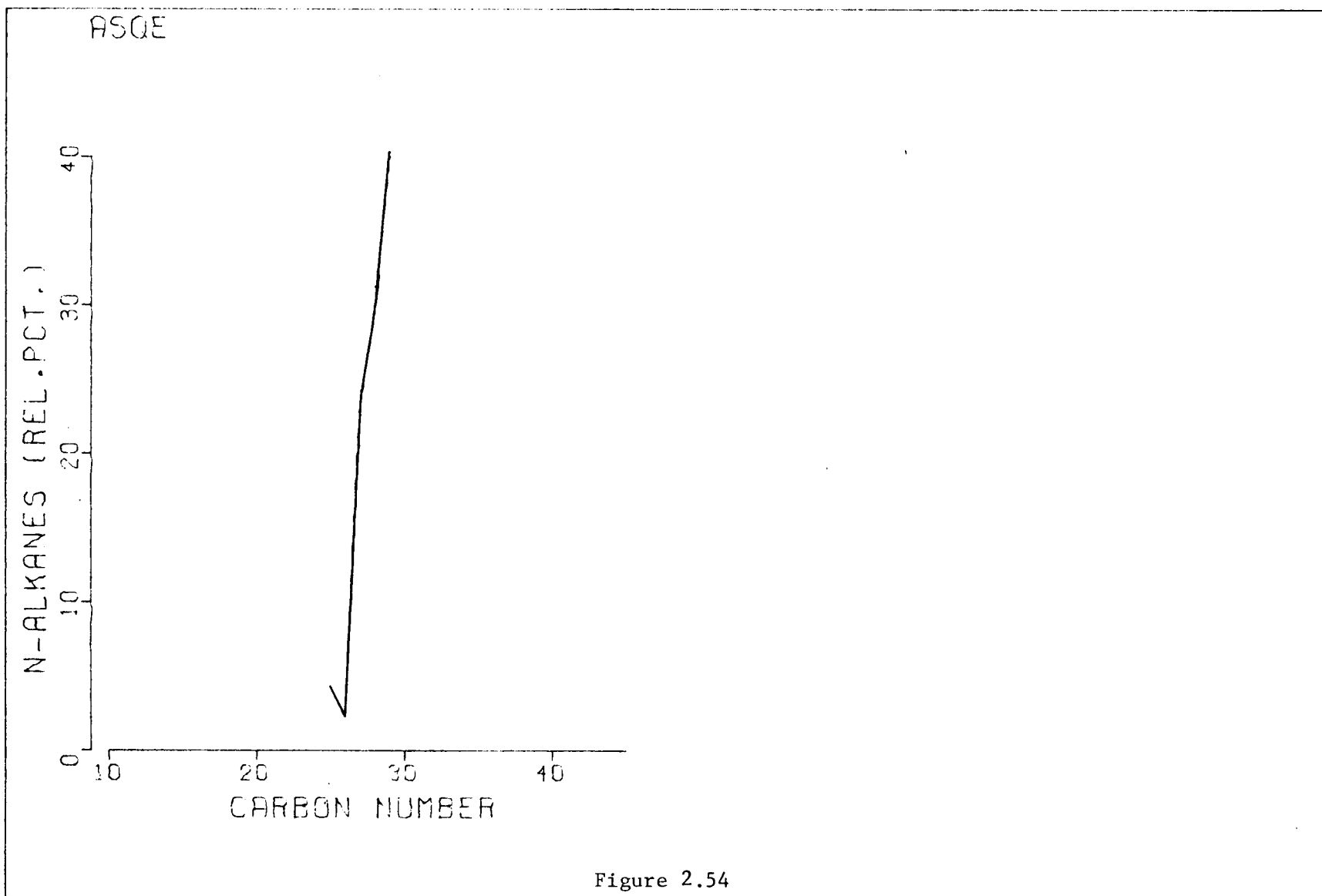


Figure 2.53



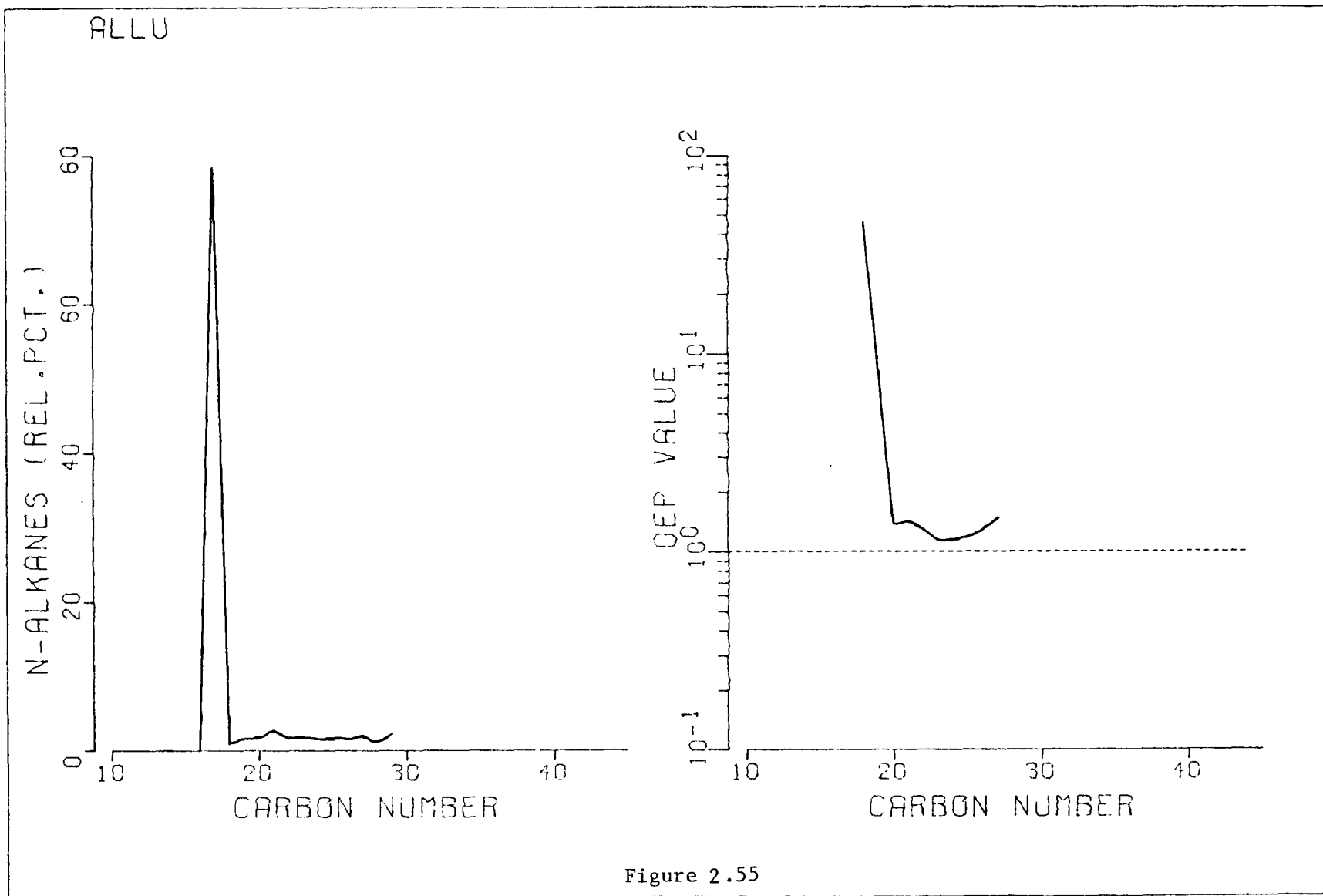


Figure 2.55

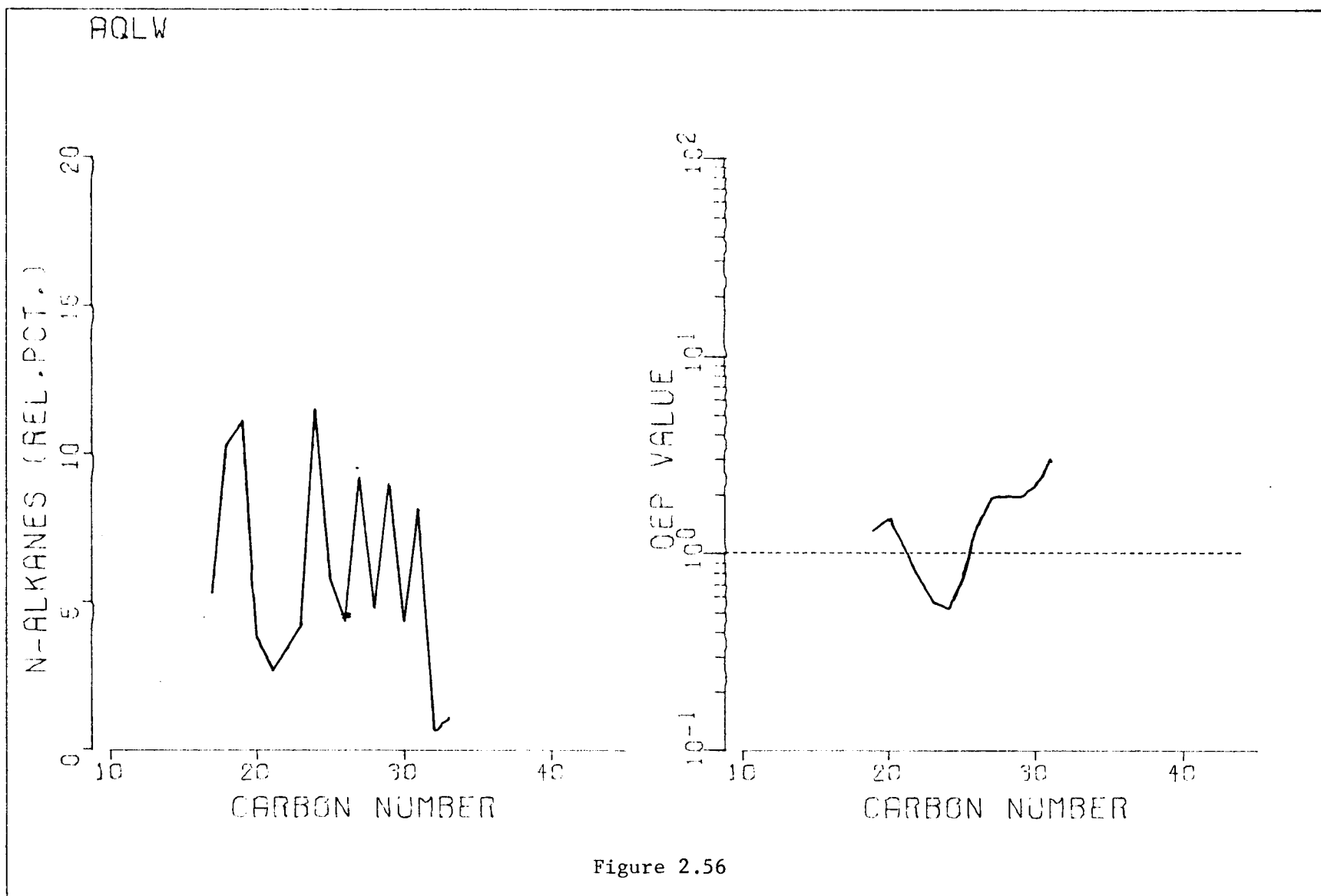


Figure 2.56

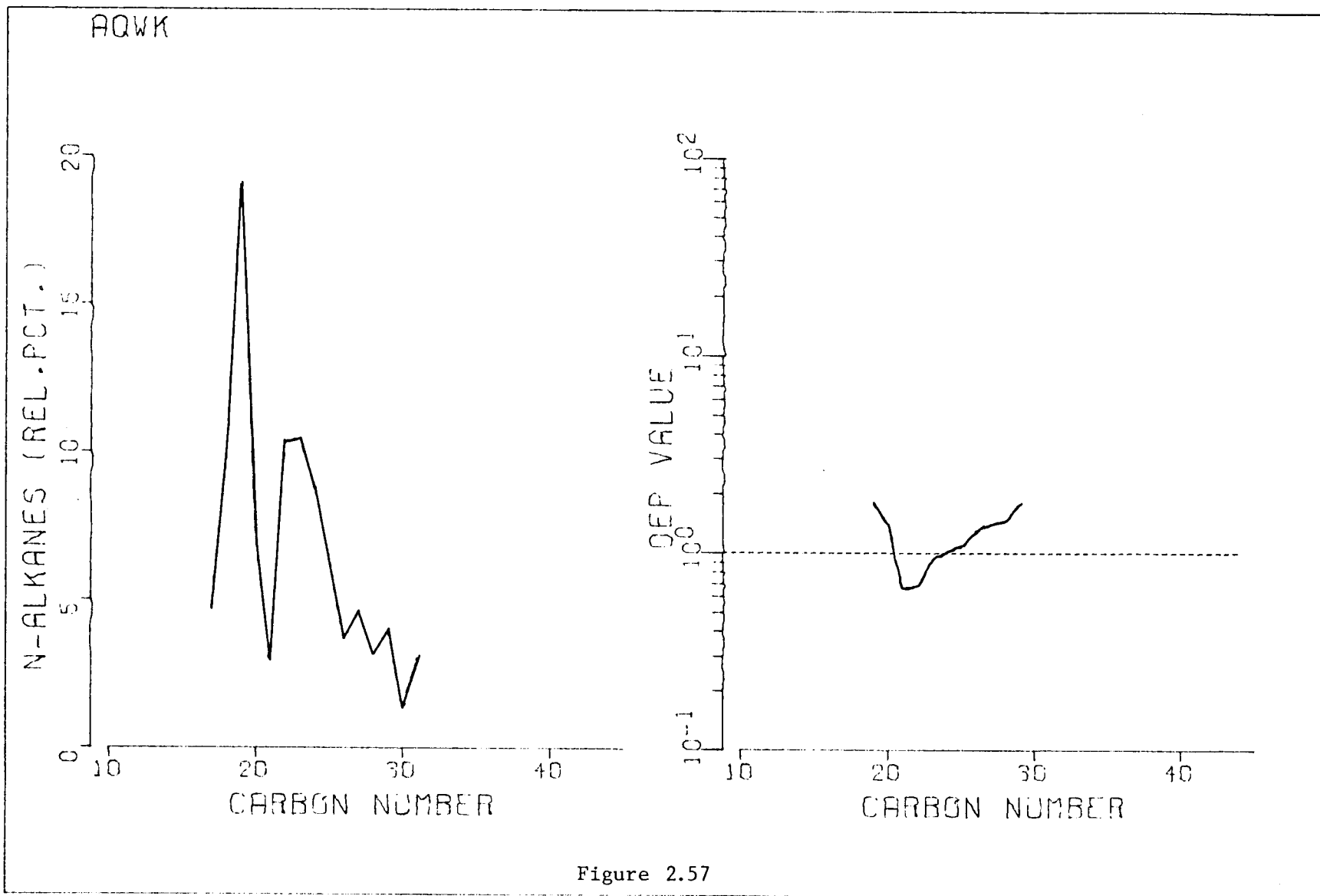


Figure 2.57

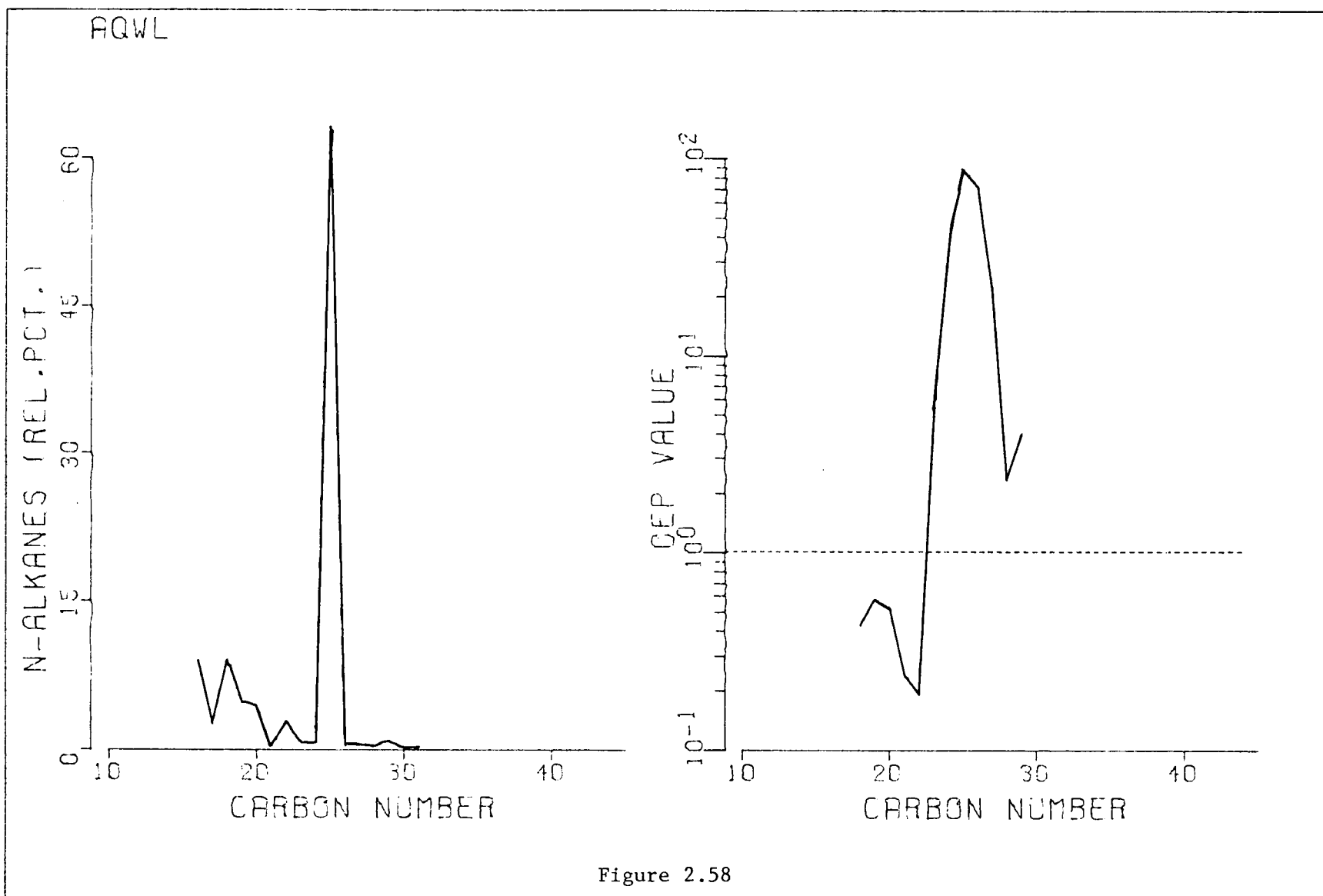


Figure 2.58

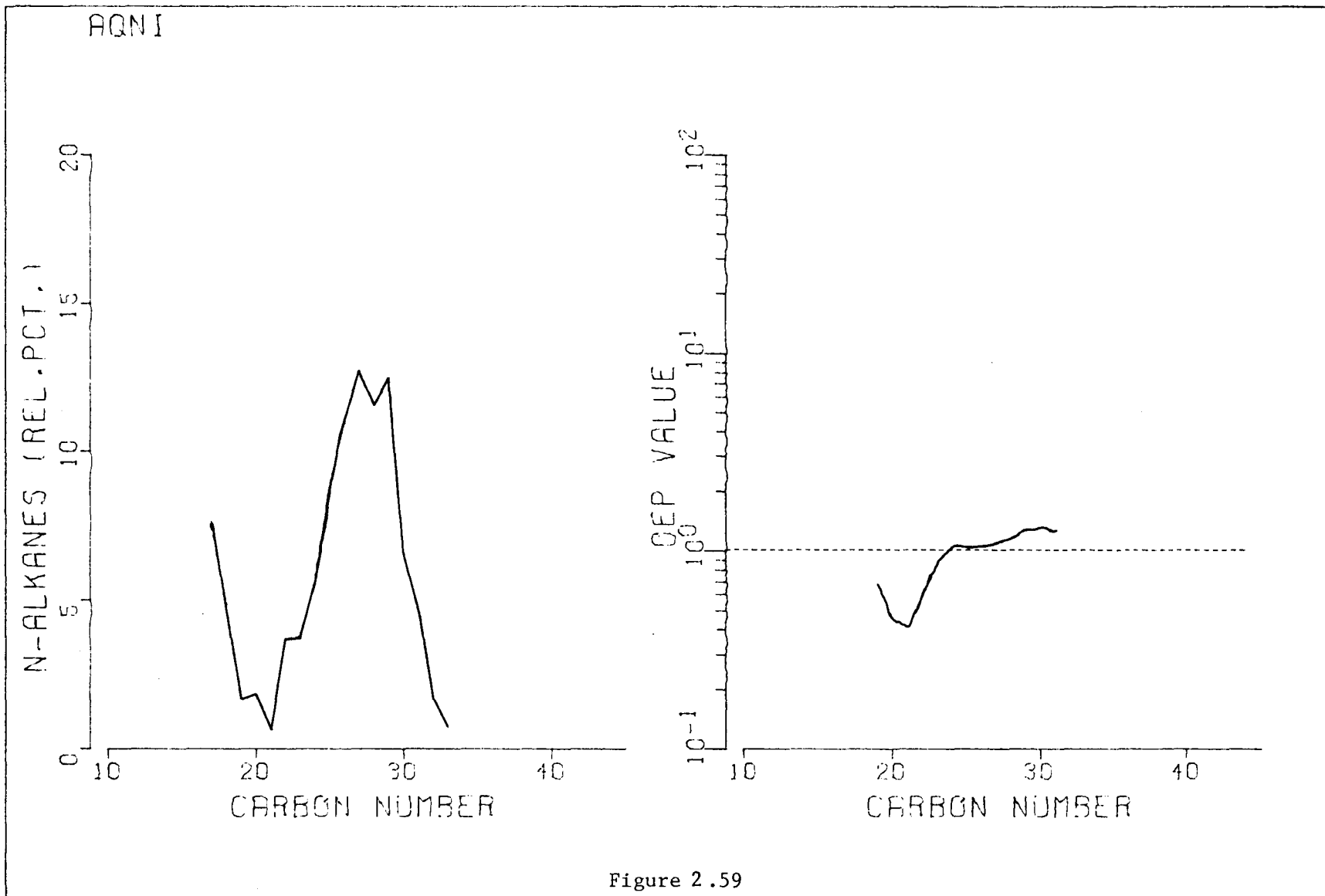


Figure 2.59

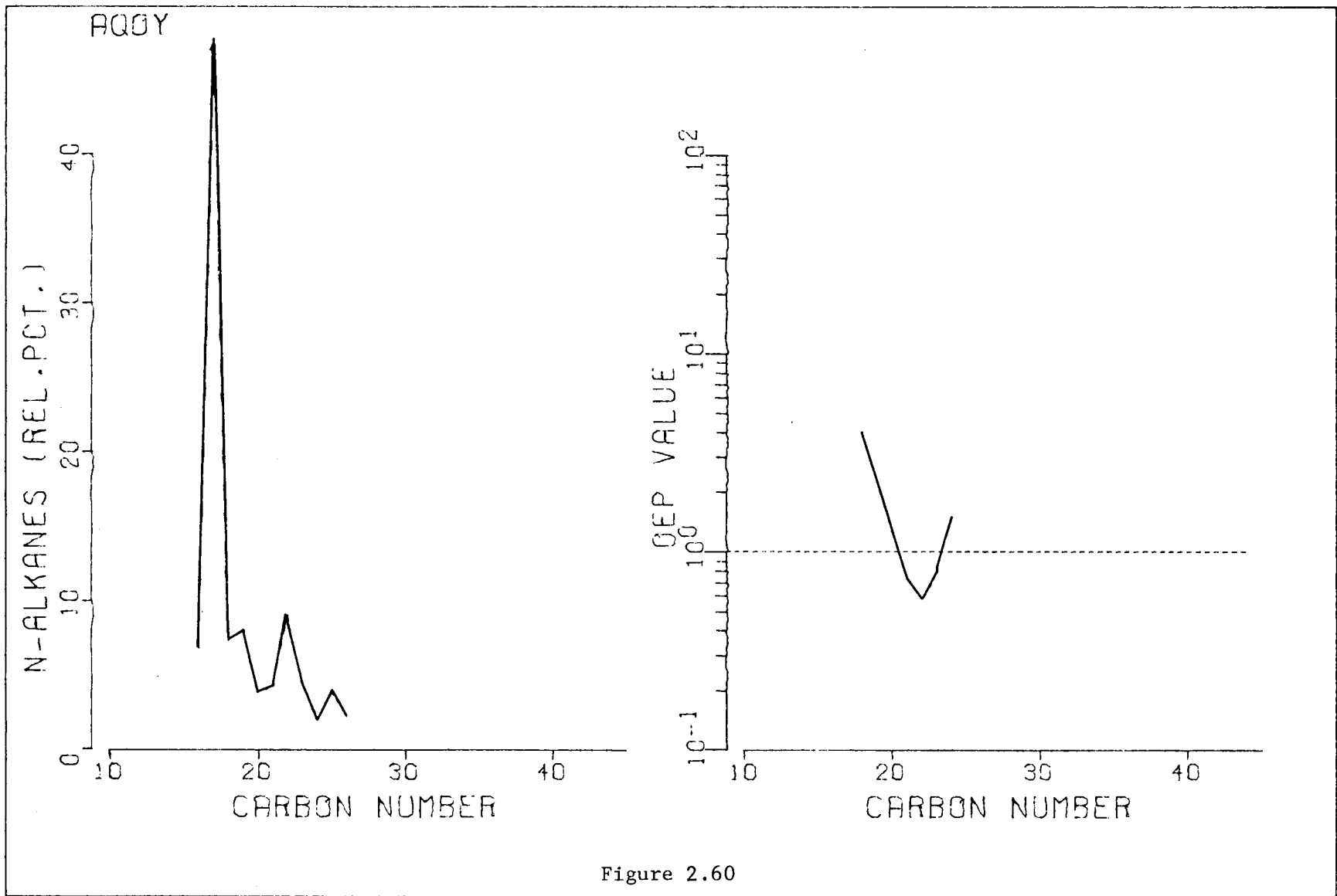
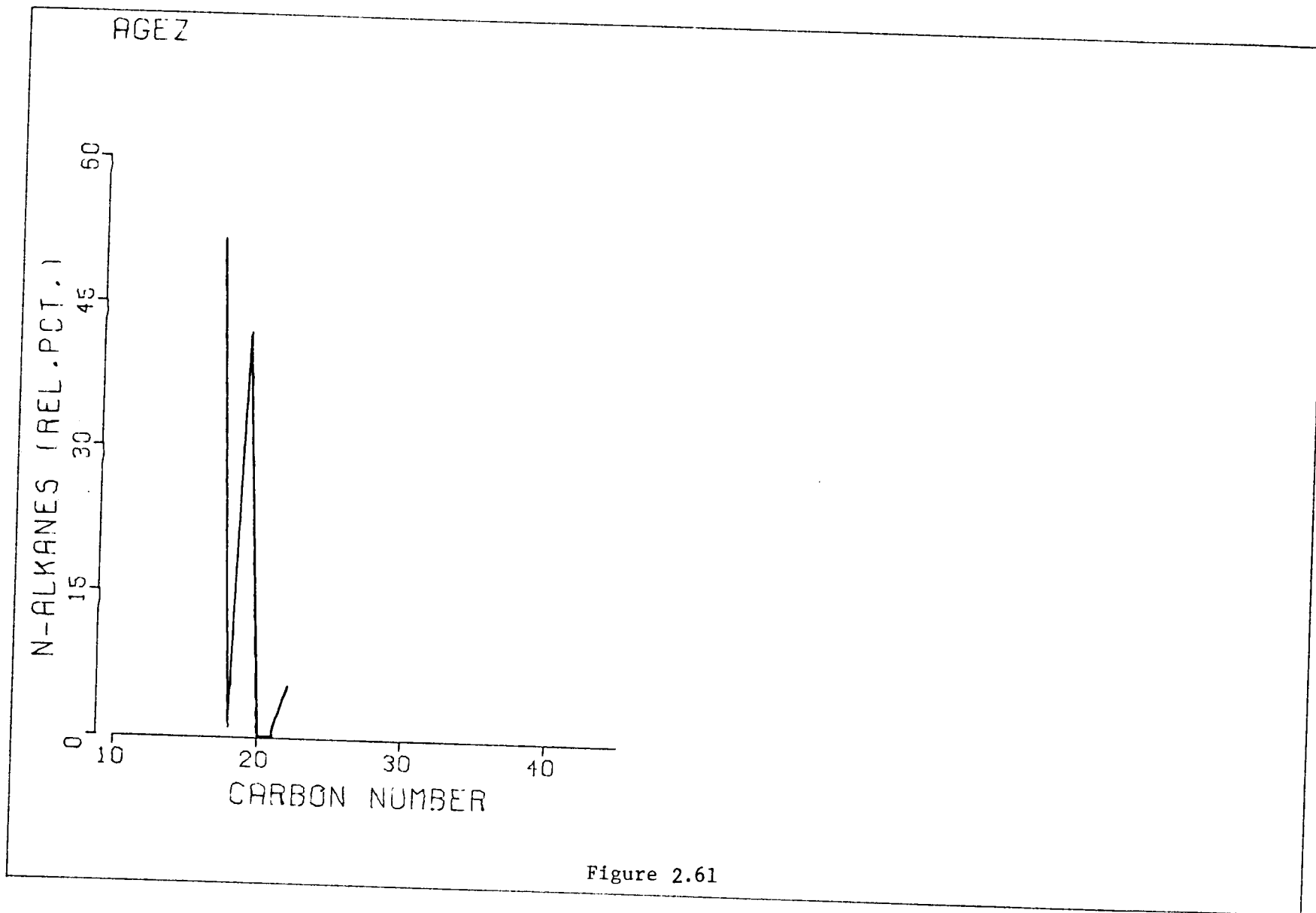


Figure 2.60



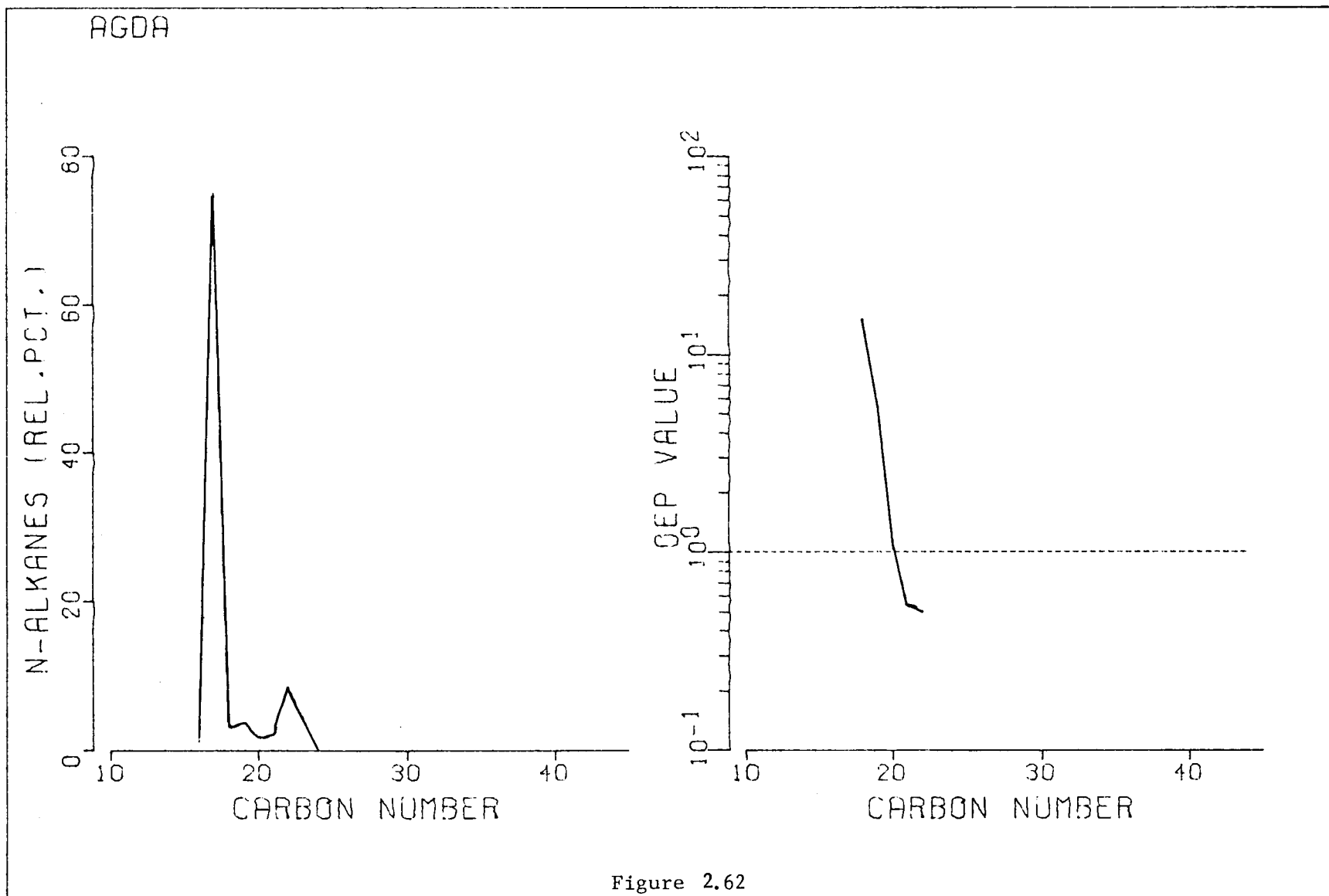


Figure 2.62

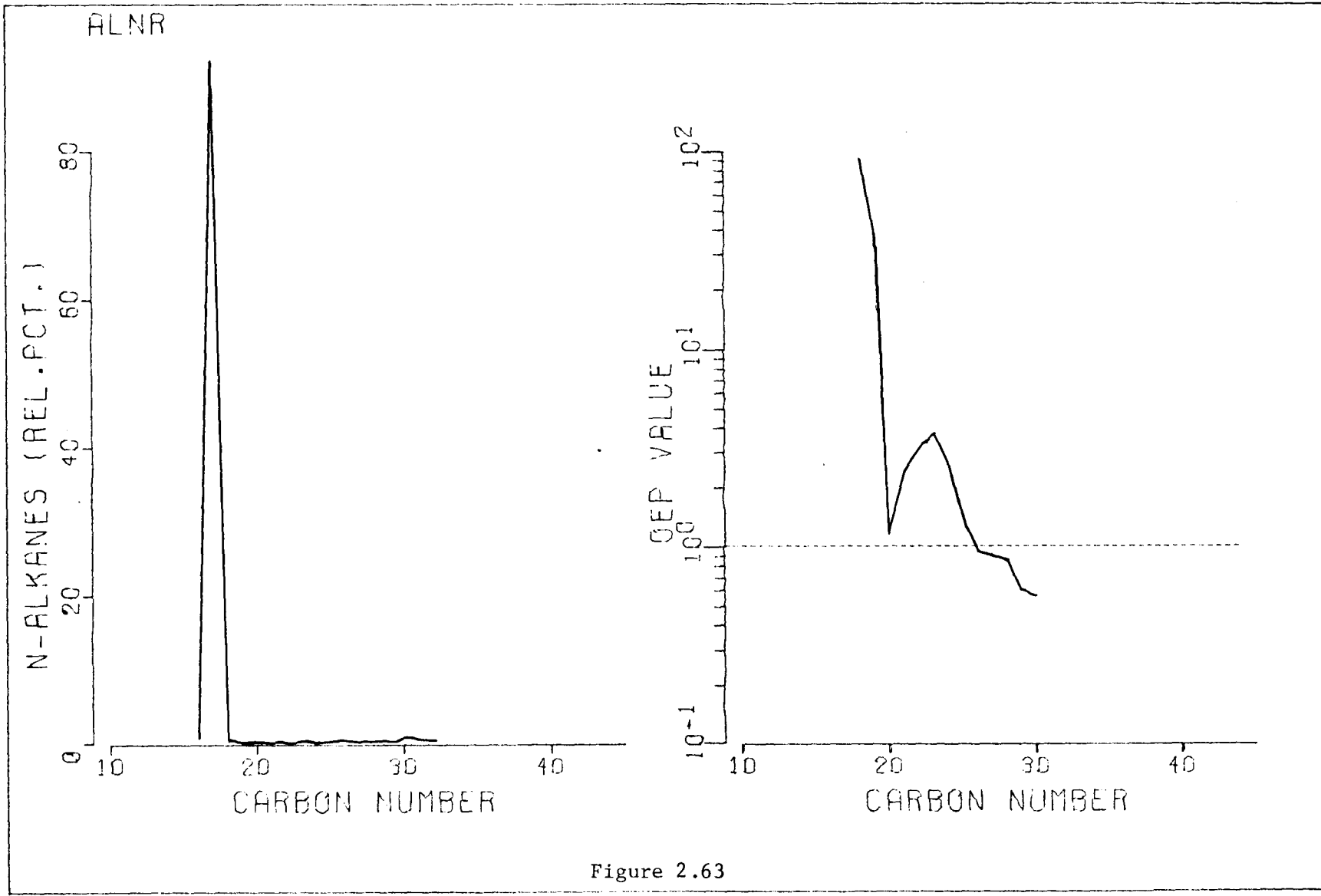


Figure 2.63

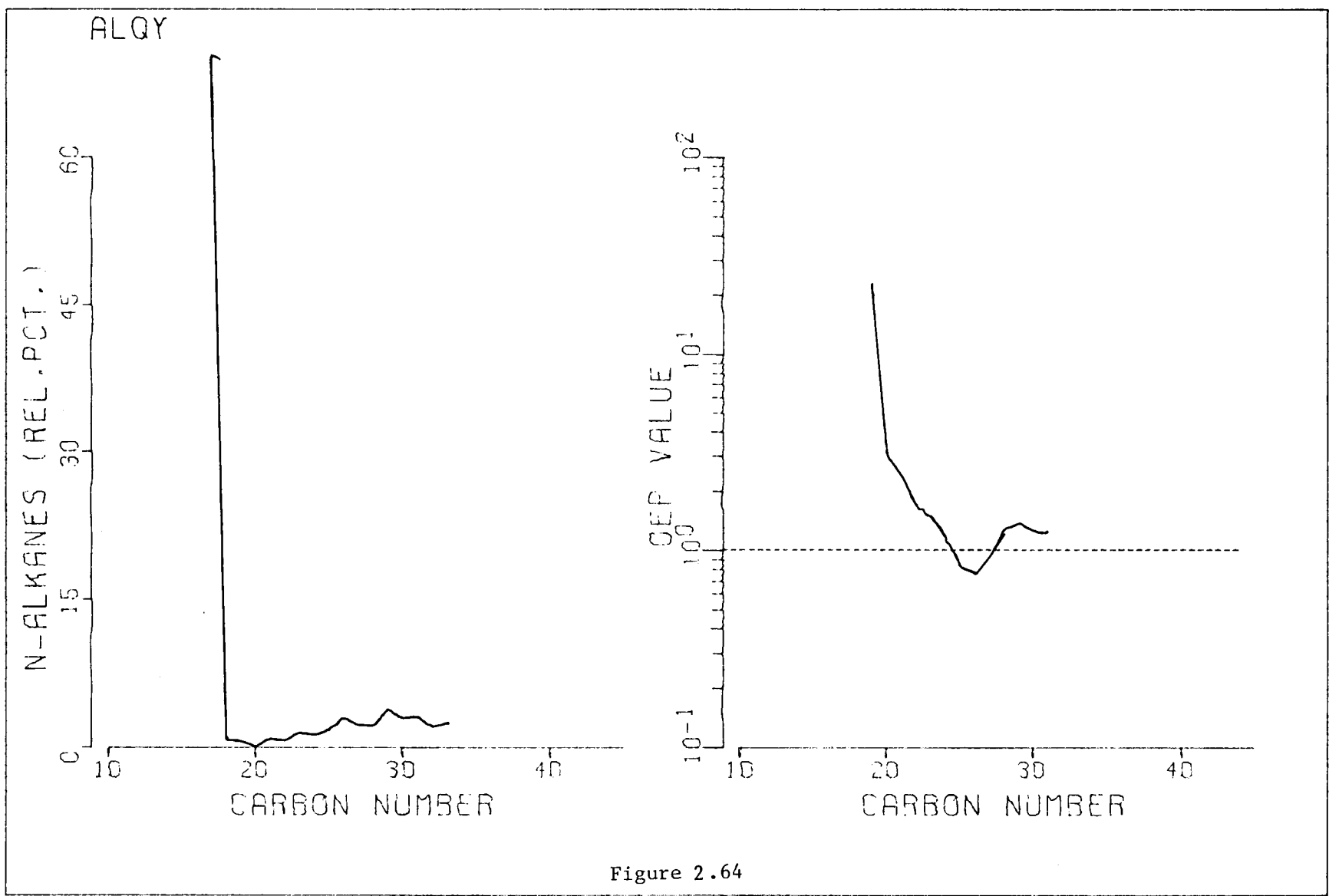


Figure 2.64

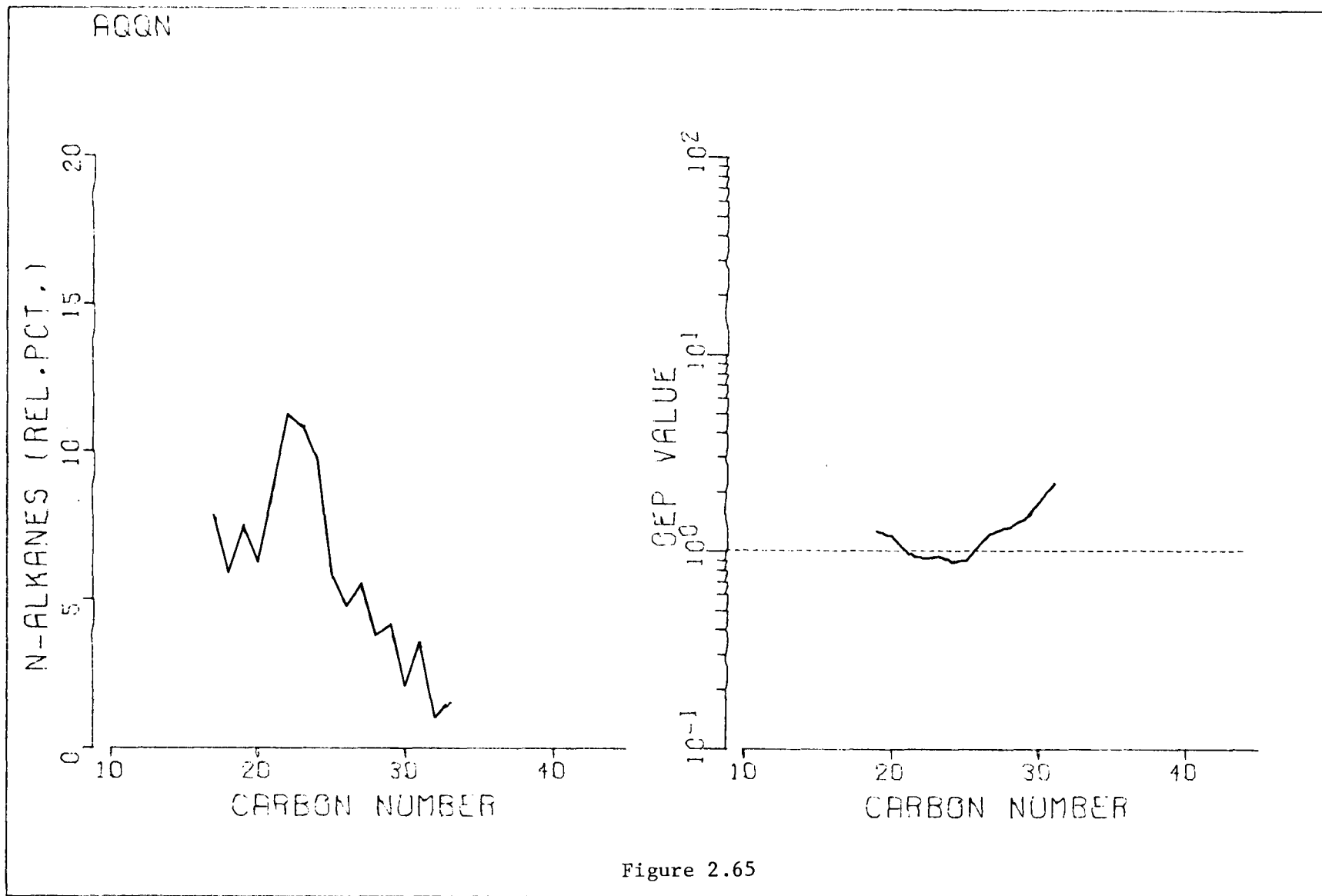


Figure 2.65

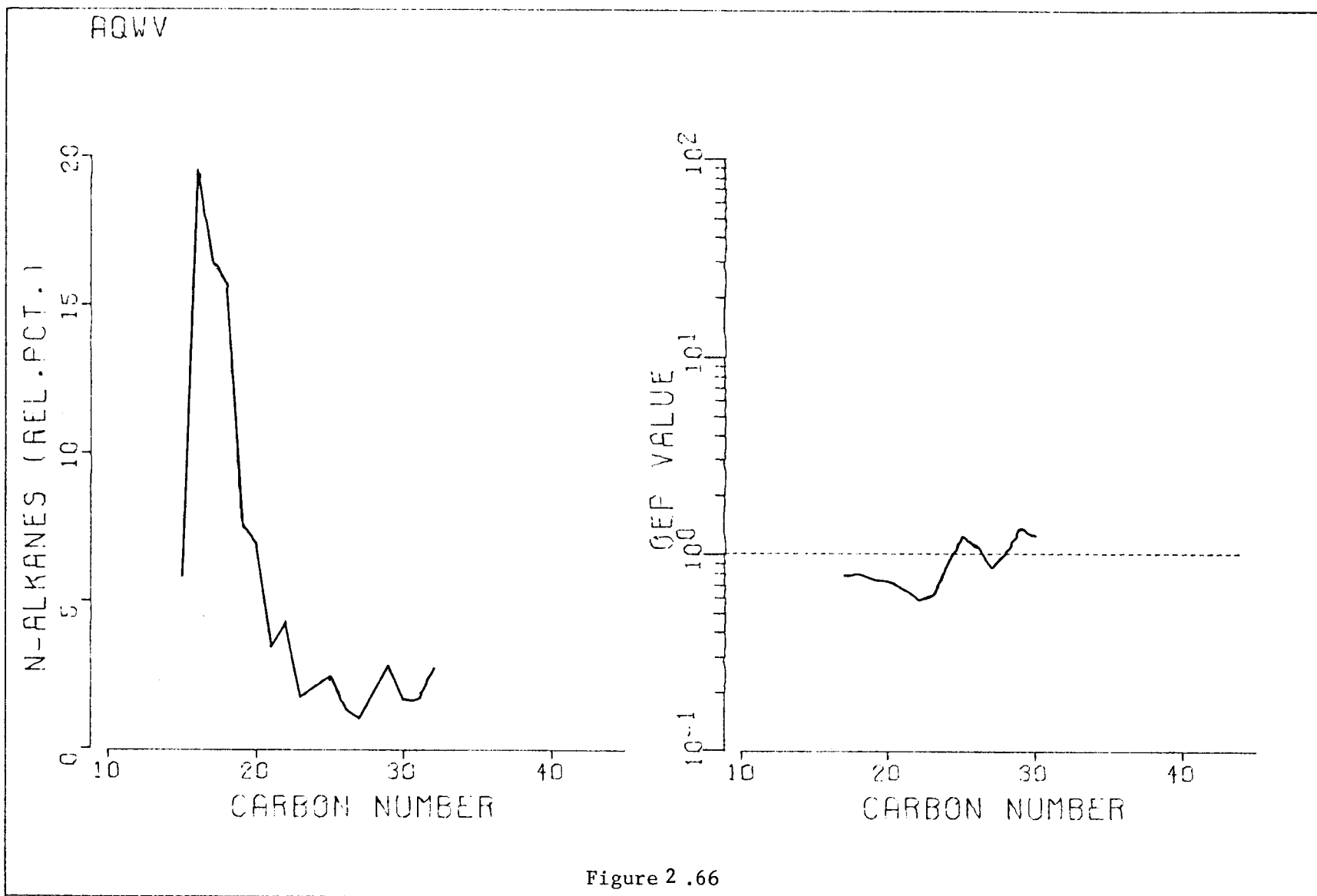


Figure 2.66

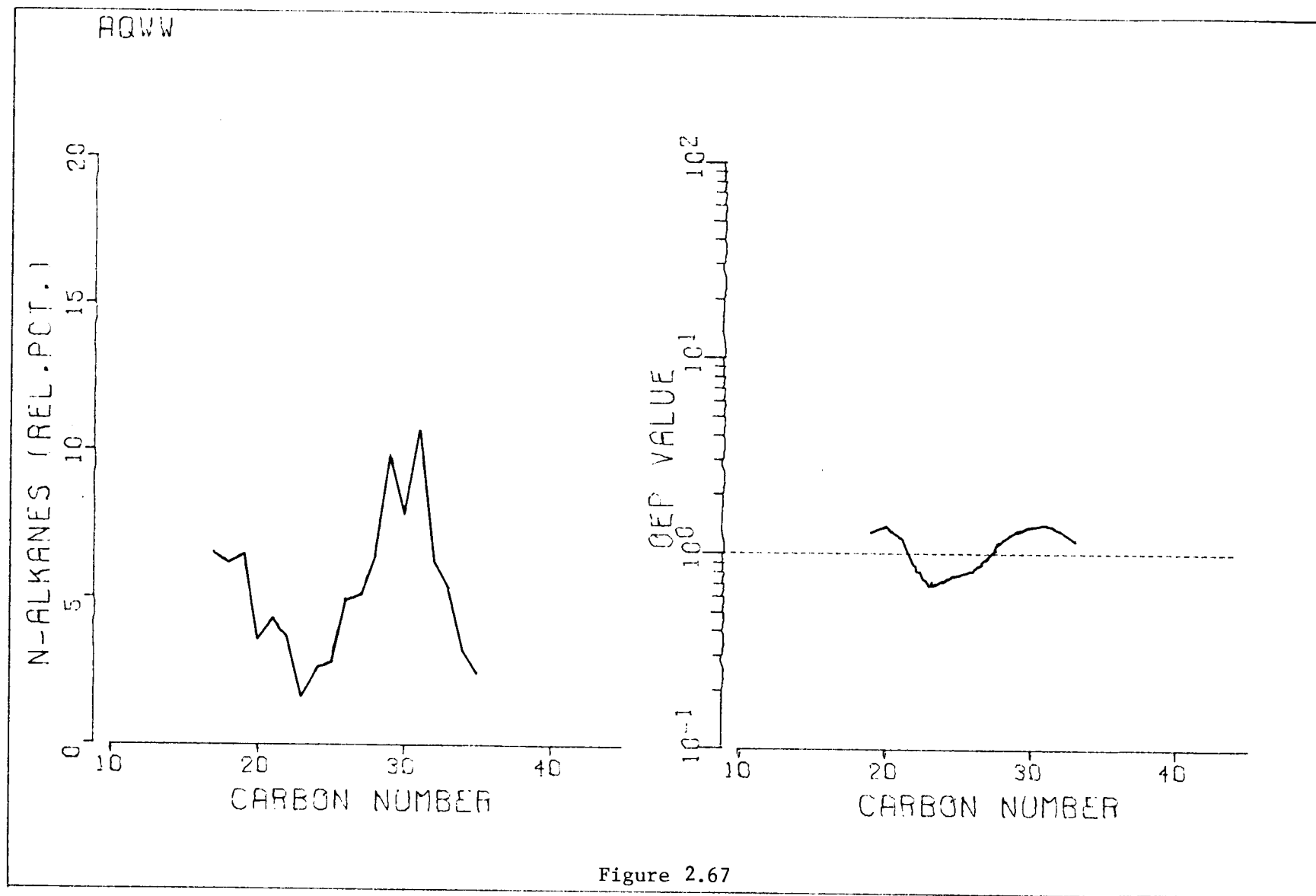
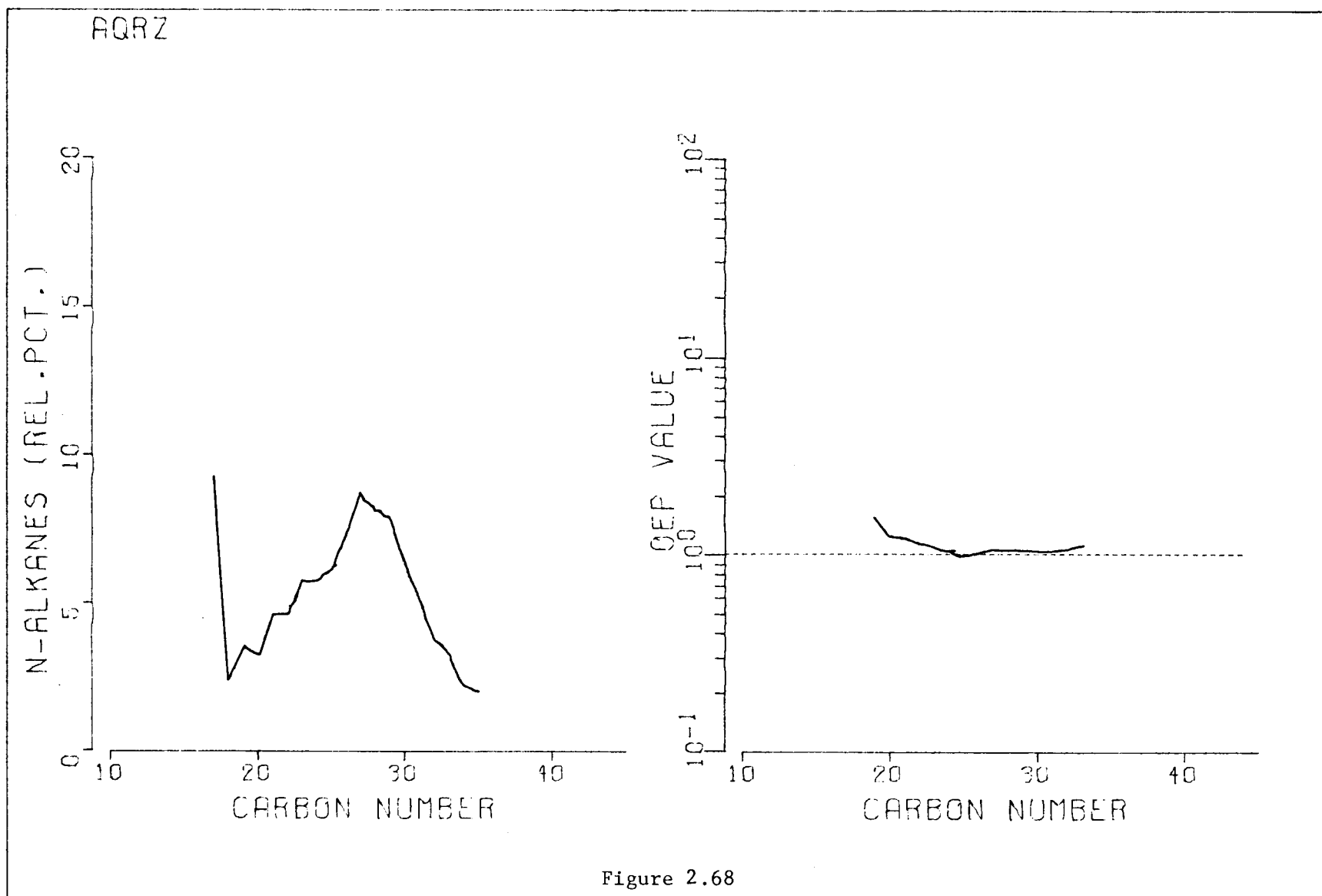


Figure 2.67



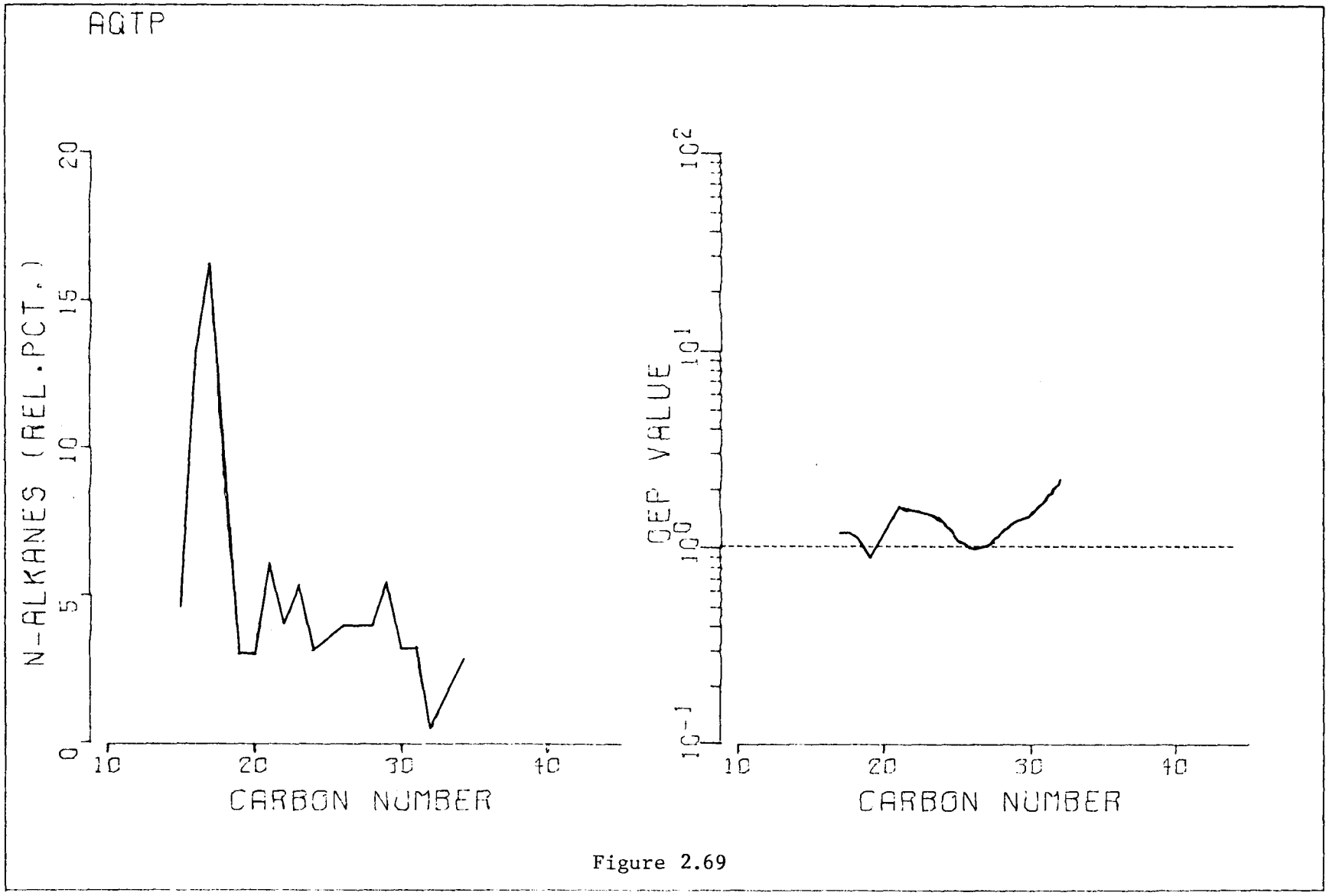


Figure 2.69

TABLE 3

WATER-DISSOLVED HIGH-MOLECULAR-WEIGHT HYDROCARBON GLC ANALYSES

TABLE 3.1

HEAVY HYDROCARBON ANALYSIS - STUCS - 1976

SAMPLE TYPE : DIS

SAMPLE CODE : AGLZ

PERIOD : WINTER

LOCATION : STATION - 1 LINE -I

HEXANE ELUATE

BENZENE ELUATE

RETENTION INDEX	CONCENTRATION (UG./G.)	RETENTION INDEX	CONCENTRATION (UG./G.)
2000	.00390	1930	.03240
2100	.00260	2040	.02940
2200	.00260	2140	.06940
3100	.00210	2350	.03020
3200	.00100	2380	.13900
3300	.00220	2450	.02090
3400	.00300	3100	.01920
3500	.00320		
3600	.00250		
TOTAL	.02250	TOTAL	.34050

TABLE 3.2

HEAVY HYDROCARBON ANALYSIS - STOCS - 1976

SAMPLE TYPE : DIS

SAMPLE CODE : AGNP

PERIOD : WINTER

LOCATION : STATION - 2 LINE -I

HEXANE ELUATE

BENZENE ELUATE

RETENTION INDEX	CONCENTRATION (UG./G.)	RETENTION INDEX	CONCENTRATION (UG./G.)
1800	.55200	1580	.37000
2000	.32000	1590	.76200
2100	.15400	1630	.35700
2200	.15100	2650	242.00000
2300	.12300	2730	.57100
2400	.19600	2880	4.38000
2500	.18600	2990	2.06000
2600	.17500	3110	31.50000
		3190	106.00000
		3220	83.90000
TOTAL	1.85700	TOTAL	471.90000

TABLE 3.3

HEAVY HYDROCARBON ANALYSIS - STOCS - 1976

SAMPLE TYPE : DIS
 SAMPLE CODE : AGPI
 LOCATION : STATION - 3 LINE -I
 PERIOD : WINTER

HEXANE ELUATE		BENZENE ELUATE	
RETENTION INDEX	CONCENTRATION (UG./G.)	RETENTION INDEX	CONCENTRATION (UG./G.)
-----	-----	-----	-----
1800	.19100	2400	.00634
2000	.08050	2790	.00365
2100	.03470	3090	.08210
2200	.03820		
2300	.03200		
2400	.04920		
2500	.04600		
2600	.04640		
TOTAL	.51800	TOTAL	.09209

TABLE 3.4

HEAVY HYDROCARBON ANALYSIS - STUCS - 1976

SAMPLE TYPE : DIS

SAMPLE CODE : AGRL

PERIOD : WINTER

LOCATION : STATION - 1 LINE -II

HEXANE ELUATE

BENZENE ELUATE

RETENTION INDEX	CONCENTRATION (UG./G.)	RETENTION INDEX	CONCENTRATION (UG./G.)
2600	.00875	2520	.00030
2700	.00158	2730	.00041
2800	.00246	2810	.00365
3000	.00081	3180	.02350
3200	.01800		
TOTAL	.03160	TOTAL	.02786

TABLE 3.5

HEAVY HYDROCARBON ANALYSIS - STOCS - 1976

SAMPLE TYPE : DIS
 SAMPLE CODE : AGTC PERIOD : WINTER
 LOCATION : STATION - 2 LINE -II

HEXANE ELUATE		BENZENE ELUATE	
RETENTION INDEX	CONCENTRATION (UG./G.)	RETENTION INDEX	CONCENTRATION (UG./G.)
2100	.00186	2470	.00408
2200	.00086	2590	.00225
2300	.00232	2790	.00694
2400	.00148	3110	.07920
2500	.00148		
2600	.00104		
2700	.00250		
2800	.00219		
2850	.00113		
2900	.00271		
3000	.00347		
3100	.00303		
3200	.00201		
3300	.00190		
3400	.00095		
TOTAL	.02693	TOTAL	.09247

TABLE 3.6

HEAVY HYDROCARBON ANALYSIS - STUCCS - 1976

SAMPLE TYPE : DIS

SAMPLE CODE : AGUW

PERIOD : WINTER

LOCATION : STATION - 3 LINE -II

HEXANE ELUATE

BENZENE ELUATE

RETENTION INDEX	CONCENTRATION (UG./G.)	RETENTION INDEX	CONCENTRATION (UG./G.)
2100	.00204	2662	.00497
2200	.00158	2794	.00789
2300	.00174	3050	.72600
2400	.00114	3115	.06410
2500	.00072	3464	.02730
2600	.00102	3791	.06430
2700	.00135		
TOTAL	.00959	TOTAL	.89456

TABLE 3.7

HEAVY HYDROCARBON ANALYSIS - STUCCS - 1976

SAMPLE TYPE : DIS
 SAMPLE CODE : AGWZ
 LOCATION : STATION - 1 LINE -III
 PERIOD : WINTER

HEXANE ELUATE		BENZENE ELUATE	
RETENTION INDEX	CONCENTRATION (UG./G.)	RETENTION INDEX	CONCENTRATION (UG./G.)
1600	.00004	2240	.00157
1670	.00004	2290	.00205
1700	.00004	2450	.00246
1780	.00004	2620	.00101
1800	.00004	2700	.00228
1900	.00120	3110	.00401
2000	.00136	3210	.00120
2100	.00208		
2200	.00224		
2300	.00280		
2400	.00304		
2500	.00280		
2600	.00336		
2700	.00408		
2800	.00416		
2900	.00696		
3000	.00848		
3100	.01030		
3200	.00864		
3300	.00784		
3400	.00432		
3500	.00304		
3600	.00232		
TOTAL	.07930	TOTAL	.01458

TABLE 3.8

HEAVY HYDROCARBON ANALYSIS - STUCCS - 1976

SAMPLE TYPE : DIS

SAMPLE CODE : AGYQ

PERIOD : WINTER

LOCATION : STATION - 2 LINE -III

HEXANE ELUATE

BENZENE ELUATE

RETENTION INDEX	CONCENTRATION (UG./G.)	RETENTION INDEX	CONCENTRATION (UG./G.)
1760	.00036	2100	.00642
1800	.00064	2200	.01140
1900	.00105	2300	.02320
2000	.00116	2400	.03230
2100	.00076	2500	.04080
2200	.00078	2600	.04000
2300	.00305	2700	.03170
2400	.00078	2800	.01480
2500	.00124	2900	.01330
2600	.00196	3000	.00834
2700	.00051	3100	.01020
2800	.00053	3200	.01150
2900	.00551	3300	.00807
3000	.00342		
3100	.00374		
3200	.00453		
3300	.00238		
TOTAL	.03240	TOTAL	.25203

TABLE 3.9

HEAVY HYDROCARBON ANALYSIS - STOCS - 1976

SAMPLE TYPE : DIS
 SAMPLE CODE : AGAL
 LOCATION : STATION - 3 LINE -III PERIOD : WINTER

HEXANE ELUATE		BENZENE ELUATE	
RETENTION INDEX	CONCENTRATION (UG./G.)	RETENTION INDEX	CONCENTRATION (UG./G.)
1600	.00451	2200	.00516
1660	.00375	2300	.00518
1770	.00212	2400	.00814
1800	.01210	2500	.01120
1900	.02090	2600	.01560
2000	.01750	2700	.01180
2100	.00769	2800	.01250
2140	.01220	2900	.00681
2200	.02140	3000	.00717
2300	.00469	3100	.00860
2400	.01770	3200	.00816
2500	.01130	3300	.00350
2600	.02130	3400	.00795
2700	.02360		
2800	.03430		
2900	.01570		
3000	.03680		
3100	.02320		
3200	.01150		
TOTAL	.30226	TOTAL	.11177

TABLE 3.10

HEAVY HYDROCARBON ANALYSIS - STOCS - 1976

SAMPLE TYPE : DIS

SAMPLE CODE : AGJV

PERIOD : WINTER

LOCATION : STATION - 1 LINE -IV

HEXANE ELUATE

BENZENE ELUATE

RETENTION INDEX	CONCENTRATION (UG./G.)	RETENTION INDEX	CONCENTRATION (UG./G.)
1600	.00014	2410	.00543
1670	.00280	2420	.00114
1700	.00420	2510	.00468
1780	.00014	2610	.00408
1800	.00308	2620	.00345
1900	.00280	2710	.00298
2000	.00014	2790	.00323
2100	.00014	2880	.00751
2200	.02690	2900	.00491
2300	.00014		
2400	.01060		
2500	.00392		
2600	.00924		
2700	.02020		
2800	.02860		
2900	.04140		
3000	.03420		
3100	.03300		
3200	.01760		
3300	.01400		
3400	.00756		
3500	.00980		
3600	.00616		
TOTAL	.27676	TOTAL	.03741

TABLE 3.11

HEAVY HYDROCARBON ANALYSIS - STOCS - 1976

SAMPLE TYPE : DIS
 SAMPLE CODE : AGGA PERIOD : WINTER
 LOCATION : STATION - 2 LINE -IV

HEXANE ELUATE		BENZENE ELUATE	
RETENTION INDEX	CONCENTRATION (UG./G.)	RETENTION INDEX	CONCENTRATION (UG./G.)
1600	.00875	1960	.01600
1667	.00459	2130	.03620
1700	.01290	2380	.00249
1780	.02410	2690	.01250
1800	.03490	3090	.00307
1900	.05340	3210	.00400
2000	.05010		
2200	.05820		
2300	.03650		
2400	.05890		
2500	.06670		
2600	.22000		
2700	.03740		
2800	.01600		
2900	.04700		
3000	.00952		
3100	.03260		
3100	.07020		
3200	.03570		
3300	.02400		
3400	.04010		
3500	.09780		
TOTAL	1.04536	TOTAL	.07426

TABLE 3.12

HEAVY HYDROCARBON ANALYSIS - STOCS - 1976

SAMPLE TYPE : DIS

SAMPLE CODE : AGIB

PERIOD : WINTER

LOCATION : STATION - 3 LINE -IV

HEXANE ELUATE

BENZENE ELUATE

RETENTION INDEX	CONCENTRATION (UG./G.)	RETENTION INDEX	CONCENTRATION (UG./G.)
1700	.00132	2087	.48900
1800	.00267	2204	.34600
1900	.00807	2230	.43400
2000	.00457	2252	1.48000
2100	.01930	2351	.11300
2200	.04860	2400	.61300
2300	.05540	2480	4.25000
2400	.06260	2613	.18400
2500	.01540	2647	.28500
2600	.03510		
2700	.01130		
2800	.00849		
2900	.00781		
3000	.00512		
3100	.00499		
3200	.03570		
TOTAL	.32644	TOTAL	8.19400

TABLE 3.13

HEAVY HYDROCARBON ANALYSIS - STOCS - 1976

SAMPLE TYPE : DIS
 SAMPLE CODE : AJKE PERIOD : MARCH
 LOCATION : STATION - 1 LINE -II

HEXANE ELUATE		BENZENE ELUATE	
RETENTION INDEX	CONCENTRATION (UG./G.)	RETENTION INDEX	CONCENTRATION (UG./G.)
-----	-----	-----	-----
1550	.01140	1821	.03940
1600	.02790	2009	.23500
1670	.00298	2047	1.06000
1700	.00200	2197	4.17000
1720	.06980	2292	8.31000
1800	.00039	2473	1.19000
2000	.03170	2577	.40200
2200	.00104	2624	.78300
2800	.01130	2773	2.19000
		3068	.83000
TOTAL	.15851	TOTAL	19.20940

TABLE 3.14

HEAVY HYDROCARBON ANALYSIS - STUCCS - 1976

SAMPLE TYPE : DIS
 SAMPLE CODE : AJNX PERIOD : MARCH
 LOCATION : STATION - 3 LINE -II

HEXANE ELUATE		BENZENE ELUATE	
RETENTION INDEX	CONCENTRATION (UG./G.)	RETENTION INDEX	CONCENTRATION (UG./G.)
-----	-----	-----	-----
2200	.00300	1500	.18400
2600	.00320	1700	.00295
		2000	.10900
		2100	.05350
		2170	.06060
		2300	.23600
		2900	.01560
TOTAL	.00620	TOTAL	.66165

TABLE 3.15

HEAVY HYDROCARBON ANALYSIS - STUCCS - 1976

SAMPLE TYPE : DIS
 SAMPLE CODE : AJMA PERIOD : MARCH
 LOCATION : STATION - 2 LINE -II

HEXANE ELUATE -----		BENZENE ELUATE -----	
RETENTION INDEX -----	CONCENTRATION (UG./G.) -----	RETENTION INDEX -----	CONCENTRATION (UG./G.) -----
1550	.00167	1820	.00162
1670	.00034	2120	.00192
1700	.00012	2140	.00861
1800	.00003	2470	.004970
2100	.00001	2580	.01550
		2610	.00791
		2870	.02410
		3250	.01050
TOTAL	.00217	TOTAL	.11986

TABLE 3.16

HEAVY HYDROCARBON ANALYSIS - STOCS - 1976

SAMPLE TYPE : DIS

SAMPLE CODE : AKDF

PERIOD : APRIL

LOCATION : STATION - 1 LINE -II

HEXANE ELUATE

BENZENE ELUATE

RETENTION INDEX	CONCENTRATION (UG./G.)	RETENTION INDEX	CONCENTRATION (UG./G.)
2100	.00150	1820	8.99000
2200	.00200	2100	11.80000
2300	.00120	2170	18.10000
2400	.00100	2300	1.14000
2500	.02200	2800	.58700
2600	.00200		
2700	.00420		
2800	.00210		
2900	.00240		
TOTAL	.03840	TOTAL	40.61700

TABLE 3.17

HEAVY HYDROCARBON ANALYSIS - STUCCS - 1976

SAMPLE TYPE : DIS
 SAMPLE CODE : AKFG PERIOD : APRIL
 LOCATION : STATION - 2 LINE -II

HEXANE ELUATE		BENZENE ELUATE	
RETENTION INDEX	CONCENTRATION (UG./G.)	RETENTION INDEX	CONCENTRATION (UG./G.)
2000	.00450	2062	4.01000
2100	.00210	2123	4.04000
2200	.00320	2300	34.40000
2300	.00200	2495	.32300
2400	.00210	2646	.21200
2500	.00620	3229	.98500
2600	.00310		
2700	.00330		
2800	.00320		
TOTAL	.02970	TOTAL	43.97000

TABLE 3.18

HEAVY HYDROCARBON ANALYSIS - STOCS - 1976

SAMPLE TYPE : DIS

SAMPLE CODE : AKHF

PERIOD : APRIL

LOCATION : STATION - 3 LINE -II

HEXANE ELUATE

BENZENE ELUATE

RETENTION INDEX	CONCENTRATION (UG./G.)	RETENTION INDEX	CONCENTRATION (UG./G.)
2100	.00130	2090	.04120
2200	.00100	2460	.01280
2300	.00100	2490	.05510
2400	.02000	2580	.07440
2500	.00200	2680	.05030
2600	.00450	2780	.04280
2700	.00150	2870	.03300
2800	.00140	3000	.02430
2900	.00140	3100	.03410
3000	.00200	3200	.10600
3100	.00100		
3200	.01400		
TOTAL	.05110	TOTAL	.47400

TABLE 3.19

HEAVY HYDROCARBON ANALYSIS - STOCS - 1976

SAMPLE TYPE : DIS

SAMPLE CODE : AKXB

PERIOD : SPRING

LOCATION : STATION - 1 LINE -I

HEXANE ELUATE		BENZENE ELUATE	
RETENTION INDEX	CONCENTRATION (UG./G.)	RETENTION INDEX	CONCENTRATION (UG./G.)
1700	.00007	1520	.24300
1800	.00007	1667	.06070
1900	.00007	1821	.18100
2000	.00182	1844	.01910
2100	.00338	2011	.07930
2200	.00481	2022	.07240
2300	.00572		
2400	.00611		
2500	.00923		
2600	.00767		
2700	.00962		
2800	.01010		
2900	.01260		
3000	.01180		
3100	.01550		
3200	.00754		
3300	.00676		
3400	.00559		
3500	.00455		
3600	.00598		
TOTAL	.12899	TOTAL	.65550

TABLE 3.20

HEAVY HYDROCARBON ANALYSIS - STOCS - 1976

SAMPLE TYPE : DIS
 SAMPLE CODE : AKZE PERIOD : SPRING
 LOCATION : STATION - 2 LINE -I

HEXANE ELUATE

BENZENE ELUATE

RETENTION INDEX	CONCENTRATION (UG./G.)	RETENTION INDEX	CONCENTRATION (UG./G.)
1900	.00246	2308	.00256
2000	.00294	2512	.00267
2100	.00381	2825	.00246
2200	.00522	3067	.10500
2300	.00276		
2400	.00228		
2500	.00276		
2600	.00291		
2700	.00282		
2800	.00123		
2900	.00078		
3000	.00002		
TOTAL	.02999	TOTAL	.11269

TABLE 3.21

HEAVY HYDROCARBON ANALYSIS - STUCCS - 1976

SAMPLE TYPE : DIS
 SAMPLE CODE : ALAX
 LOCATION : STATION - 3 LINE -1

PERIOD : SPRING

HEXANE ELUATE		BENZENE ELUATE	
RETENTION INDEX	CONCENTRATION (UG./G.)	RETENTION INDEX	CONCENTRATION (UG./G.)
1700	.00550	1580	.05200
1800	.00200	1620	.05310
1900	.00150	1650	.02320
2000	.01100	1677	.05520
2100	.01450	1710	.05000
2200	.01300	1720	.06040
2300	.00800	1770	.02570
2400	.00650	1780	.06650
2500	.00200	1820	.02280
2600	.00200	1860	.43400
2700	.00200	1940	.01920
2800	.00600	2010	.03520
2900	.00150	2040	.00070
3000	.00200	2090	.01130
3100	.00450	2120	.00847
TOTAL	.08200	TOTAL	.99777

TABLE 3.22

HEAVY HYDROCARBON ANALYSIS - STUCCS - 1976

SAMPLE TYPE : DIS
 SAMPLE CODE : ANZZ PERIOD : SPRING
 LOCATION : STATION - 3 LINE -I

HEXANE ELUATE

BENZENE ELUATE

RETENTION INDEX	CONCENTRATION (UG./G.)	RETENTION INDEX	CONCENTRATION (UG./G.)
1660	.00450	1650	.48700
1700	.00320	1770	.61700
1770	.00360	1820	.43900
1800	.00320	1885	.17000
1900	.00310	1892	.32200
2000	.00290	1904	.16600
2100	.00220	1914	.30800
2200	.00270	1923	.17700
2300	.00180		
2400	.00160		
2500	.00100		
2600	.00120		
2900	.00310		
3000	.00150		
3100	.00140		
3200	.00120		
TOTAL	.03820	TOTAL	2.68600

TABLE 3.23

HEAVY HYDROCARBON ANALYSIS - STUCCS - 1976

SAMPLE TYPE : DIS

SAMPLE CODE : ADAB

PERIOD : SPRING

LOCATION : STATION - 3 LINE -I

HEXANE ELUATE		BENZENE ELUATE	
RETENTION INDEX	CONCENTRATION (UG./G.)	RETENTION INDEX	CONCENTRATION (UG./G.)
1600	.00049	2255	.00706
1667	.00181	2321	.00658
1700	.00079	2800	.00492
1780	.00112	2950	.00611
1800	.00141	3050	.01220
1900	.00076	3085	.00808
2000	.00145	3130	.01020
2100	.00094	3207	.01060
2200	.00146	3215	.03440
2300	.00116		
2400	.00133		
TOTAL	.01272	TOTAL	.10015

TABLE 3.24

HEAVY HYDROCARBON ANALYSIS - STUCS - 1976

SAMPLE TYPE : DIS
 SAMPLE CODE : ALCU PERIOD : SPRING
 LOCATION : STATION - 1 LINE -II

HEXANE ELUATE

BENZENE ELUATE

RETENTION INDEX	CONCENTRATION (UG./G.)	RETENTION INDEX	CONCENTRATION (UG./G.)
1600	.00226	2514	.04920
1660	.00042	2780	.04720
1800	.00452	3100	.15600
1930	.00288	3216	1.20000
2060	.00364	3308	.13800
2200	.00241	3358	.34300
2260	.00240	3542	.14600
2300	.00445		
2400	.00714		
2500	.00850		
2560	.00541		
2600	.00882		
2700	.04460		
2800	.00731		
2900	.00649		
3000	.00451		
3100	.00373		
3200	.00342		
TOTAL	.12291	TOTAL	2.07940

TABLE 3.25

HEAVY HYDROCARBON ANALYSIS - STUCCS - 1976

SAMPLE TYPE : DIS
 SAMPLE CODE : ALEM PERIOD : SPRING
 LOCATION : STATION - 2 LINE -II

HEXANE ELUATE		BENZENE ELUATE	
RETENTION INDEX	CONCENTRATION (UG./G.)	RETENTION INDEX	CONCENTRATION (UG./G.)
-----	-----	-----	-----
1800	.00033	1610	.17600
1900	.00025	1640	.18200
2000	.00029	1810	.24800
2300	.00136	1830	.52700
		1890	1.06000
		1910	.47900
		1940	1.30000
		1970	.52900
		2020	1.08000
TOTAL	.00223	TOTAL	5.58100

TABLE 3.26

HEAVY HYDROCARBON ANALYSIS - STUCS - 1976

SAMPLE TYPE : DIS
 SAMPLE CODE : ALGH PERIOD : SPRING
 LOCATION : STATION - 3 LINE -II

HEXANE ELUATE		BENZENE ELUATE	
RETENTION INDEX	CONCENTRATION (UG./G.)	RETENTION INDEX	CONCENTRATION (UG./G.)
2491	.02100	1817	.00591
2675	.87100	1888	.09050
2800	.68400	2078	.00838
2931	1.09000	2089	.16900
3073	.86100	2178	.02100
3256	.90100	2211	.33700
		2678	.04730
		2833	.00875
TOTAL	4.42800	TOTAL	.68784

TABLE 3.27

HEAVY HYDROCARBON ANALYSIS - STUCCS - 1976

SAMPLE TYPE : DIS
 SAMPLE CODE : ANZW PERIOD : SPRING
 LOCATION : STATION - 3 LINE -II

HEXANE ELUATE

BENZENE ELUATE

RETENTION INDEX	CONCENTRATION (UG./G.)	RETENTION INDEX	CONCENTRATION (UG./G.)
2800	.00240	2450	.00500
2900	.00193	3080	.11600
3000	.00221	3190	.03970
3100	.00148		
3200	.00191		
3300	.00188		
3367	.00467		
3400	.00239		
3500	.00266		
TOTAL	.02153	TOTAL	.16070

TABLE 3.28

HEAVY HYDROCARBON ANALYSIS - STOCS - 1976

SAMPLE TYPE : DIS

SAMPLE CODE : ANZY

PERIOD : SPRING

LOCATION : STATION - 3 LINE -II

HEXANE ELUATE

BENZENE ELUATE

RETENTION INDEX	CONCENTRATION (UG./G.)	RETENTION INDEX	CONCENTRATION (UG./G.)
2700	.00398	2179	.01050
2800	.05090	2200	.01020
2900	.06310	2242	.00373
2962	.16100	2400	.05240
3000	.44700	2550	.00695
3061	.29600	2693	.02270
3100	.40000	2914	.02080
3200	.37800	2993	5.40000
3300	.35500		
3400	.23900		
3500	.19400		
3600	.10200		
3700	.10300		
TOTAL	2.79298	TOTAL	5.52728

TABLE 3.29

HEAVY HYDROCARBON ANALYSIS - STUCS - 1976

SAMPLE TYPE : DIS

SAMPLE CODE : ALIE

PERIOD : SPRING

LOCATION : STATION - 1 LINE -III

HEXANE ELUATE

BENZENE ELUATE

RETENTION INDEX	CONCENTRATION (UG./G.)	RETENTION INDEX	CONCENTRATION (UG./G.)
2100	.00240	1790	.02400
2200	.00280	1870	.00300
2300	.00380	1950	.00350
2400	.00140	2080	.00100
2500	.00160	2450	.00100
2600	.00200	2540	.00120
2700	.00240		
2800	.00270		
2900	.00300		
3000	.00260		
3100	.00160		
3200	.00300		
3300	.00230		
3400	.00250		
TOTAL	.03410	TOTAL	.03370

TABLE 3.30

HEAVY HYDROCARBON ANALYSIS - STUCCS - 1976

SAMPLE TYPE : DIS
 SAMPLE CODE : ALJU PERIOD : SPRING
 LOCATION : STATION - 2 LINE -III

HEXANE ELUATE

BENZENE ELUATE

RETENTION INDEX	CONCENTRATION (UG./G.)	RETENTION INDEX	CONCENTRATION (UG./G.)
1800	.00125	2120	.02230
1900	.00208	2340	.03020
2000	.00251	3190	.03620
2100	.00149		
2200	.00109		
2300	.00068		
2400	.00076		
2500	.00110		
2600	.00106		
TOTAL	.01202	TOTAL	.08870

TABLE 3.31

HEAVY HYDROCARBON ANALYSIS - STOCS - 1976

SAMPLE TYPE : DIS
 SAMPLE CODE : ALLM PERIOD : SPRING
 LOCATION : STATION - 3 LINE -III

HEXANE ELUATE		BENZENE ELUATE	
RETENTION INDEX	CONCENTRATION (UG./G.)	RETENTION INDEX	CONCENTRATION (UG./G.)
-----	-----	-----	-----
1967	.00598	1800	.00141
2000	.02720	1900	.00040
2100	.05480	2000	.00032
2200	.07140	2100	.00057
2300	.00398	2200	.00097
2400	.07930	2400	.00136
2500	.00592	2600	.00242
2600	.12700		
2700	.06290		
2800	.06400		
2900	.04330		
3000	.03450		
3100	.02360		
3200	.16300		
3300	.01290		
3400	.01020		
3500	.01000		
TOTAL	.79998	TOTAL	.00745

TABLE 3.32

HEAVY HYDROCARBON ANALYSIS - STOCS - 1976

SAMPLE TYPE : DIS
 SAMPLE CODE : AOAC
 LOCATION : STATION - 3 LINE -III

PERIOD : SPRING

HEXANE ELUATE

BENZENE ELUATE

RETENTION INDEX	CONCENTRATION (UG./G.)	RETENTION INDEX	CONCENTRATION (UG./G.)
1800	.00091	1950	.01600
1900	.00066	2162	.00242
2000	.00129	2973	.01160
2100	.00082		
2200	.00062		
2300	.00096		
2400	.00106		
2500	.00103		
2600	.00145		
2700	.00613		
2800	.00755		
TOTAL	.02248	TOTAL	.03002

TABLE 3.33

HEAVY HYDROCARBON ANALYSIS - STICS - 1976

SAMPLE TYPE : DIS
 SAMPLE CODE : A0AE PERIOD : SPRING
 LOCATION : STATION - 3 LINE -III

HEXANE ELUATE

BENZENE ELUATE

RETENTION INDEX	CONCENTRATION (UG./G.)	RETENTION INDEX	CONCENTRATION (UG./G.)
1900	.02690	1786	.02180
2000	.02920	1921	.16200
2200	.03510	2550	.58200
2300	.03870	2642	.01510
2500	.04620	2707	.01500
2600	.05100	2793	.12600
2700	.05650	2900	.15300
TOTAL	.28360	TOTAL	1.07490

TABLE 3.34

HEAVY HYDROCARBON ANALYSIS - STUCS - 1976

SAMPLE TYPE : DIS
 SAMPLE CODE : ALNJ PERIOD : SPRING
 LOCATION : STATION - 1 LINE -IV

HEXANE ELUATE

BENZENE ELUATE

RETENTION INDEX	CONCENTRATION (UG./G.)	RETENTION INDEX	CONCENTRATION (UG./G.)
2020	.03810	3160	.11300
2150	.10400	3250	.01890
2210	.06970		
2260	.10400		
2350	.18900		
2510	.14200		
2650	.08680		
TOTAL	.73360	TOTAL	.13190

TABLE 3.35

HEAVY HYDROCARBON ANALYSIS - STUCCS - 1976

SAMPLE TYPE : DIS
 SAMPLE CODE : ALOY PERIOD : SPRING
 LOCATION : STATION - 2 LINE -IV

HEXANE ELUATE

BENZENE ELUATE

RETENTION INDEX	CONCENTRATION (UG./G.)	RETENTION INDEX	CONCENTRATION (UG./G.)
1610	.00090	1610	.67500
1670	.00456	1652	.47300
1700	.01280	1685	.58300
1780	.00150	1762	.32800
1800	.00822	1815	.40500
1900	.00756	1855	3.01000
2000	.00258		
2100	.00318		
2200	.00270		
2300	.00258		
2400	.00168		
2500	.00180		
2600	.00210		
2700	.00228		
2800	.00168		
2900	.00120		
3000	.00060		
3100	.00120		
3200	.00078		
TOTAL	.05990	TOTAL	5.47400

TABLE 3.36

HEAVY HYDROCARBON ANALYSIS - STOCS - 1976

SAMPLE TYPE : DIS
 SAMPLE CODE : ALQG PERIOD : SPRING
 LOCATION : STATION - 3 LINE -IV

HEXANE ELUATE

BENZENE ELUATE

RETENTION INDEX	CONCENTRATION (UG./G.)	RETENTION INDEX	CONCENTRATION (UG./G.)
1600	.00003	2030	.00519
1670	.00003	2040	.01110
1700	.00175	2060	.00991
1780	.00003	2170	.02410
1800	.00245	2220	.01320
1900	.00435	2290	.02160
2000	.00145	2310	.01320
2100	.00160	2350	.01790
2200	.00305	3110	.03110
2300	.00290		
2400	.00345		
2500	.00360		
2600	.00420		
2700	.00450		
2800	.00360		
2900	.00435		
3000	.00260		
3100	.00275		
3200	.00200		
3300	.00145		
3400	.00003		
3500	.00003		
3600	.00003		
TOTAL	.05023	TOTAL	.14730

TABLE 3.37

HEAVY HYDROCARBON ANALYSIS - STOCS - 1976

SAMPLE TYPE : DIS

SAMPLE CODE : AOCC

PERIOD : JULY

LOCATION : STATION - 1 LINE -II

HEXANE ELUATE		BENZENE ELUATE	
RETENTION INDEX	CONCENTRATION (UG./G.)	RETENTION INDEX	CONCENTRATION (UG./G.)
-----	-----	-----	-----
1600	.00220	1590	.00569
1660	.00230	1667	.02980
1700	.00720	1800	.00880
1800	.01170	1833	.00747
1900	.01280	1883	.01170
2000	.00710		
2100	.00360		
2200	.02310		
2300	.00230		
2400	.00170		
2500	.00120		
2600	.00110		
2700	.00160		
2900	.00140		
3000	.00300		
3100	.00250		
3200	.00260		
3300	.00350		
3400	.00430		
3500	.00700		
3600	.00280		
TOTAL	.10500	TOTAL	.06346

TABLE 3.38

HEAVY HYDROCARBON ANALYSIS - STUCCS - 1976

SAMPLE TYPE : DIS

SAMPLE CODE : A00Z

PERIOD : JULY

LOCATION : STATION - 2 LINE -II

HEXANE ELUATE

BENZENE ELUATE

RETENTION INDEX	CONCENTRATION (UG./G.)	RETENTION INDEX	CONCENTRATION (UG./G.)
1800	.000950	2120	.00103
1900	.001150	2240	.00133
2000	.000750	2380	.00339
2100	.00280	2533	.00183
2200	.003000	2560	.00124
2300	.00170		
2400	.00080		
2900	.00270		
3100	.00230		
3200	.00200		
3300	.00590		
3400	.00970		
3500	.01050		
TOTAL	.09750	TOTAL	.00882

TABLE 3.39

HEAVY HYDROCARBON ANALYSIS - STUCCS - 1976

SAMPLE TYPE : DIS

SAMPLE CODE : AOEI

PERIOD : JULY

LOCATION : STATION - 3 LINE -II

HEXANE ELUATE

BENZENE ELUATE

RETENTION INDEX	CONCENTRATION (UG./G.)	RETENTION INDEX	CONCENTRATION (UG./G.)
1700	.00340	1845	.01860
1800	.00850	1867	.00901
1900	.01260	1920	.00912
2000	.00800	2000	.01120
2100	.00420	2410	.00901
2200	.03270	2610	.00832
2300	.00220		
2400	.00170		
3100	.00270		
3200	.00260		
3300	.00450		
3400	.00630		
3500	.00910		
TOTAL	.09850	TOTAL	.06526

TABLE 3.40

HEAVY HYDROCARBON ANALYSIS - STUCS - 1976

SAMPLE TYPE : DIS
 SAMPLE CODE : ADEK PERIOD : JULY
 LOCATION : STATION - 3 LINE -II

HEXANE ELUATE

BENZENE ELUATE

RETENTION INDEX	CONCENTRATION (UG./G.)	RETENTION INDEX	CONCENTRATION (UG./G.)
1830	.00078	1940	.39000
1950	.00101	1970	.36000
1975	.00519	2060	.42600
2040	.00118	2080	2.00000
2080	.00123	2100	.44600
2310	.01200	2130	.48700
2400	.00118	2160	.39600
2475	.00073	2290	.89000
		2310	.41000
		2410	.46200
		2480	.62900
TOTAL	.02330	TOTAL	6.89600

TABLE 3.41

HEAVY HYDROCARBON ANALYSIS - STOCS - 1976

SAMPLE TYPE : DIS

SAMPLE CODE : ADFU

PERIOD : JULY

LOCATION : STATION - 3 LINE -II

HEXANE ELUATE

BENZENE ELUATE

RETENTION INDEX	CONCENTRATION (UG./G.)	RETENTION INDEX	CONCENTRATION (UG./G.)
1800	.01000	1893	4.98000
1900	.01230	2121	.40100
2100	.00700	2142	.14900
2100	.00340	2156	.26300
2200	.03000		
2300	.00180		
2400	.00120		
2900	.00390		
3000	.00190		
3200	.00230		
3300	.00320		
3400	.00400		
3500	.00800		
TOTAL	.09040	TOTAL	5.79300

TABLE 3.42

HEAVY HYDROCARBON ANALYSIS - STOCS - 1976

SAMPLE TYPE : DIS

SAMPLE CODE : APEH

PERIOD : AUGUST

LOCATION : STATION - 1 LINE -II

HEXANE ELUATE

BENZENE ELUATE

RETENTION INDEX	CONCENTRATION (UG./G.)	RETENTION INDEX	CONCENTRATION (UG./G.)
1800	.00180	1640	.19000
1900	.00313	1663	.18300
2000	.00226	1710	.19600
2100	.00220	1833	.18600
2200	.01940	1922	.16900
2850	.00019	2011	.17200
3000	.00204	2128	1.23000
3100	.00133	2194	.22300
3200	.00207	2256	.14000
3300	.00367	2600	.20800
3400	.00545	2639	.44200
3500	.00625		
TOTAL	.04979	TOTAL	3.33900

TABLE 3.43

HEAVY HYDROCARBON ANALYSIS - STUCCS - 1976

SAMPLE TYPE : DIS

SAMPLE CODE : APFW

PERIOD : AUGUST

LOCATION : STATION - 2 LINE -II

HEXANE ELUATE		BENZENE ELUATE	
RETENTION INDEX	CONCENTRATION (UG./G.)	RETENTION INDEX	CONCENTRATION (UG./G.)
1600	.00160	1871	.00110
1700	.00580	2023	.00130
1800	.01090	2163	.00460
1900	.01360	2223	.00090
2000	.00750	2370	.01310
2100	.00360	2623	.00130
2200	.03200	3132	.02410
2300	.00200	3265	.00350
2400	.00140		
2500	.00220		
2600	.00200		
2700	.00230		
2800	.00400		
2900	.00470		
3000	.00650		
TOTAL	.10010	TOTAL	.04990

TABLE 3.44

HEAVY HYDROCARBON ANALYSIS - STOCS - 1976

SAMPLE TYPE : DIS
 SAMPLE CODE : APHM PERIOD : AUGUST
 LOCATION : STATION - 3 LINE -II

HEXANE ELUATE		BENZENE ELUATE	
RETENTION INDEX	CONCENTRATION (UG./G.)	RETENTION INDEX	CONCENTRATION (UG./G.)
-----	-----	-----	-----
1700	.00370	2596	.41100
1800	.00860	2623	.00993
1900	.01340	2662	.00520
2000	.00640	2743	.00362
2100	.00300	2793	.00386
2200	.02900	3055	.00976
2300	.00230	3115	1.69000
2400	.00110	3464	.01480
2500	.00240	3791	.01250
3100	.00120		
3200	.00360		
3300	.00310		
3400	.00490		
3500	.00570		
3600	.00880		
3700	.00180		
TOTAL	.09900	TOTAL	2.22067

TABLE 3.45

HEAVY HYDROCARBON ANALYSIS - STUCCS - 1976

SAMPLE TYPE : DIS
 SAMPLE CODE : AQCH PERIOD : FALL
 LOCATION : STATION - 1 LINE -I

HEXANE ELUATE		BENZENE ELUATE	
RETENTION INDEX	CONCENTRATION (UG./G.)	RETENTION INDEX	CONCENTRATION (UG./G.)
1600	.00007	2260	.00283
1670	.00154	2330	.00429
1700	.00574	2680	.00406
1780	.00084	2700	.00543
1800	.00462	2810	.00571
1900	.00840	2940	.01060
2000	.00322	2980	.00821
2100	.00350	2990	.02650
2200	.01480	3100	.03030
2300	.00700	3200	.01300
2400	.00784	3300	.00868
2500	.00840	3410	.01460
2600	.00924		
2700	.01080		
2800	.00952		
2900	.01150		
3000	.00756		
3100	.00840		
3200	.00602		
3300	.00574		
3400	.00196		
3500	.00168		
3600	.00014		
TOTAL	.13853	TOTAL	.13421

TABLE 3.46

HEAVY HYDROCARBON ANALYSIS - STDCS - 1976

SAMPLE TYPE : DIS

SAMPLE CODE : AQDT

PERIOD : FALL

LOCATION : STATION - 2 LINE -I

HEXANE ELUATE

BENZENE ELUATE

RETENTION INDEX	CONCENTRATION (UG./G.)	RETENTION INDEX	CONCENTRATION (UG./G.)
2100	.00042	2420	.00032
2200	.00079	2820	.00090
2400	.00110	3010	.00401
2500	.00134	3050	.00298
2600	.00125	3130	.01430
		3190	.02350
		3230	.01850
		3410	.09070
TOTAL	.00490	TOTAL	.15521

TABLE 3.47

HEAVY HYDROCARBON ANALYSIS - STUCCS - 1976

SAMPLE TYPE : DIS
 SAMPLE CODE : AQFJ PERIOD : FALL
 LOCATION : STATION - 3 LINE -I

HEXANE ELUATE		BENZENE ELUATE	
RETENTION INDEX	CONCENTRATION (UG./G.)	RETENTION INDEX	CONCENTRATION (UG./G.)
1780	.00001	2010	.00034
1800	.00001	2410	.00040
1900	.00094	2610	.00044
2000	.00112	3420	.00209
2100	.00074		
2200	.00150		
2300	.00244		
2400	.00206		
2500	.00194		
2600	.00168		
2700	.00188		
2800	.00158		
2900	.00112		
3000	.00074		
3100	.00094		
3200	.00132		
3300	.00001		
TOTAL	.02003	TOTAL	.00327

TABLE 3.48

HEAVY HYDROCARBON ANALYSIS - STUCCS - 1976

SAMPLE TYPE : DIS

SAMPLE CODE : AUGY

PERIOD : FALL

LOCATION : STATION - 1 LINE -II

HEXANE ELUATE

BENZENE ELUATE

RETENTION INDEX	CONCENTRATION (UG./G.)	RETENTION INDEX	CONCENTRATION (UG./G.)
2100	.00074	2210	.00138
2200	.00096	2420	.00351
2300	.00084	2820	.00451
2500	.00121	3040	.00557
2600	.00100	3200	.25400
2700	.00180		
2800	.00078		
2900	.00149		
3000	.00120		
3100	.00140		
3200	.00045		
TOTAL	.01187	TOTAL	.26897

TABLE 3.49

HEAVY HYDROCARBON ANALYSIS - STOCS - 1976

SAMPLE TYPE : DIS
 SAMPLE CODE : AQIK
 LOCATION : STATION - 2 LINE -II
 PERIOD : FALL

HEXANE ELUATE -----		BENZENE ELUATE -----	
RETENTION INDEX -----	CONCENTRATION (UG./G.) -----	RETENTION INDEX -----	CONCENTRATION (UG./G.) -----
1800	.00030	2520	.02800
1900	.00040	2690	.04850
2000	.00050	2800	.03240
2100	.00060	3090	.06660
2200	.00090	3205	7.00000
2300	.00060		
2400	.00080		
2500	.00110		
2600	.00100		
2700	.00220		
2800	.00450		
2900	.00490		
3000	.00470		
3100	.00440		
3200	.00210		
3300	.00240		
3400	.00080		
3500	.00040		
TOTAL	.03260	TOTAL	7.17550

TABLE 3.50

HEAVY HYDROCARBON ANALYSIS - STUCCS - 1976

SAMPLE TYPE : DIS
 SAMPLE CODE : AQKA PERIOD : FALL
 LOCATION : STATION - 3 LINE -II

HEXANE ELUATE		BENZENE ELUATE	
RETENTION INDEX	CONCENTRATION (UG./G.)	RETENTION INDEX	CONCENTRATION (UG./G.)
2400	.01260	2810	.00125
2500	.00207	3030	.004750
2600	.00521	3170	.004970
2700	.00319	3250	.02990
2800	.00306		
2900	.00478		
3000	.00667		
3100	.00233		
3200	.00306		
TOTAL	.04297	TOTAL	.12835

TABLE 3.51

HEAVY HYDROCARBON ANALYSIS - STUCCS - 1976

SAMPLE TYPE : DIS

SAMPLE CODE : AQWG

PERIOD : FALL

LOCATION : STATION - 3 LINE -II

HEXANE ELUATE

BENZENE ELUATE

RETENTION INDEX	CONCENTRATION (UG./G.)	RETENTION INDEX	CONCENTRATION (UG./G.)
1400	.00025	2110	.00740
1500	.00028	2390	.00872
1600	.00032	2590	.01040
1700	.00028	2670	.00703
1770	.00026	2790	.02080
1800	.00190	2910	.00971
1900	.00037	3000	.02790
2000	.00054	3080	.30900
2100	.00066	3180	44.40000
2200	.00082		
2300	.00162		
2400	.00092		
2500	.00163		
2600	.00142		
2700	.00035		
2800	.00031		
2900	.00103		
TOTAL	.01300	TOTAL	44.80096

TABLE 3.52

HEAVY HYDROCARBON ANALYSIS - STDCS - 1976

SAMPLE TYPE : DIS

SAMPLE CODE : AQWI

PERIOD : FALL

LOCATION : STATION - 3 LINE -II

HEXANE ELUATE

BENZENE ELUATE

RETENTION INDEX	CONCENTRATION (UG./G.)	RETENTION INDEX	CONCENTRATION (UG./G.)
1670	.00060	3190	.22100
1700	.00060		
1780	.00030		
1800	.00080		
1900	.00050		
2000	.00050		
2100	.00030		
2200	.00040		
2300	.00040		
2400	.00040		
2500	.00110		
2600	.00110		
2700	.00170		
2800	.00240		
2900	.00430		
3000	.00420		
3100	.00340		
3200	.00210		
3300	.00240		
3400	.00040		
3500	.00040		
TOTAL	.02830	TOTAL	.22100

TABLE 3.53

HEAVY HYDROCARBON ANALYSIS - STUCCS - 1976

SAMPLE TYPE : DIS
 SAMPLE CODE : AQLP
 LOCATION : STATION - 1 LINE -III PERIOD : FALL

HEXANE ELUATE		BENZENE ELUATE	
RETENTION INDEX	CONCENTRATION (UG./G.)	RETENTION INDEX	CONCENTRATION (UG./G.)
1500	.00207	2450	.00048
1600	.00034	2560	.00074
1670	.00031	2660	.00119
1700	.00089	3090	.00597
1780	.00019	3450	.00292
1800	.00066	3510	.00974
1900	.00476	3560	.00634
2000	.00099		
2100	.00167		
2200	.00552		
2300	.02210		
2400	.04380		
2500	.05780		
2600	.05950		
2700	.14100		
2800	.03900		
2900	.03460		
3000	.02710		
3100	.03200		
3200	.04040		
3300	.19100		
3400	.01590		
3500	.01030		
3600	.00682		
TOTAL	.73872	TOTAL	.02738

TABLE 3.54

HEAVY HYDROCARBON ANALYSIS - STOCS - 1976

SAMPLE TYPE : DIS

SAMPLE CODE : AQNB

PERIOD : FALL

LOCATION : STATION - 2 LINE -III

HEXANE ELUATE

BENZENE ELUATE

RETENTION INDEX	CONCENTRATION (UG./G.)	RETENTION INDEX	CONCENTRATION (UG./G.)
1670	.00300	2690	.11000
1700	.00240	2800	.09010
1780	.00130	3125	.10700
1800	.00290	3205	24.10000
1900	.00290		
2000	.00160		
2100	.00240		
2200	.002800		
2300	.00260		
2400	.00290		
2500	.00410		
2600	.00440		
2700	.00470		
2800	.00500		
2900	.00540		
3000	.00510		
3100	.00520		
3200	.00350		
3300	.00280		
3400	.00150		
3500	.00080		
TOTAL	.09250	TOTAL	24.40710

TABLE 3.55

HEAVY HYDROCARBON ANALYSIS - STUCCS - 1976

SAMPLE TYPE : DIS
 SAMPLE CODE : AQOR PERIOD : FALL
 LOCATION : STATION - 3 LINE -III

HEXANE ELUATE		BENZENE ELUATE	
RETENTION INDEX	CONCENTRATION (UG./G.)	RETENTION INDEX	CONCENTRATION (UG./G.)
2410	.00032	2050	.06120
2520	.00037	2210	.06380
2640	.00037	3190	.10800
3040	.00301	3250	14.00000
3130	.00332		
TOTAL	.00739	TOTAL	14.23300

TABLE 3.56

HEAVY HYDROCARBON ANALYSIS - STOCS - 1976

SAMPLE TYPE : DIS

SAMPLE CODE : AQWR

PERIOD : FALL

LOCATION : STATION - 3 LINE -III

HEXANE ELUATE

BENZENE ELUATE

RETENTION INDEX	CONCENTRATION (UG./G.)	RETENTION INDEX	CONCENTRATION (UG./G.)
1670	.00090	2780	.00117
1700	.00060	2850	.00136
1780	.00050	2920	.00017
1800	.00080	3200	.01450
1900	.00060		
2000	.00060		
2100	.00070		
2200	.00210		
2300	.00180		
2400	.00180		
2500	.00200		
2600	.00110		
2700	.00300		
2800	.00410		
2900	.00470		
3000	.00530		
3100	.00540		
3200	.00190		
3300	.00130		
3400	.00050		
TOTAL	.03970	TOTAL	.01720

TABLE 3.57

HEAVY HYDROCARBON ANALYSIS - STUCCS - 1976

SAMPLE TYPE : DIS
 SAMPLE CODE : AQWT
 LOCATION : STATION - 3 LINE -III
 PERIOD : FALL

HEXANE ELUATE		BENZENE ELUATE	
RETENTION INDEX	CONCENTRATION (UG./G.)	RETENTION INDEX	CONCENTRATION (UG./G.)
2100	.00050	2150	.00931
2200	.00180	2200	.00251
2300	.00080	3100	.46400
2400	.00090		
2500	.00110		
2600	.00100		
2700	.00140		
2800	.00150		
2900	.00380		
3000	.00190		
3100	.00160		
3200	.00070		
3300	.00100		
3400	.00150		
TOTAL	.01950	TOTAL	.47582

TABLE 3.58

HEAVY HYDROCARBON ANALYSIS - STOCS - 1976

SAMPLE TYPE : DIS

SAMPLE CODE : AQNG

PERIOD : FALL

LOCATION : STATION - 1 LINE -IV

HEXANE ELUATE

BENZENE ELUATE

RETENTION INDEX	CONCENTRATION (UG./G.)	RETENTION INDEX	CONCENTRATION (UG./G.)
1670	.00032	2060	.00207
1700	.00058	2260	.00115
1780	.00044	2320	.00048
1800	.00062	2380	.00080
1900	.00095	2430	.00171
2000	.00139	2520	.00306
2100	.00122	2720	.00481
2200	.00249	2830	.00360
2300	.00208	2910	.00320
2400	.00194	3090	.00789
2500	.00232	3190	.03430
2600	.00246		
2700	.00142		
2800	.00116		
2900	.00159		
3100	.00181		
3200	.00135		
3300	.00097		
TOTAL	.02511	TOTAL	.06307

TABLE 3.59

HEAVY HYDROCARBON ANALYSIS - STOCS - 1976

SAMPLE TYPE : DIS
 SAMPLE CODE : AQRS
 LOCATION : STATION - 2 LINE -IV PERIOD : FALL

HEXANE ELUATE		BENZENE ELUATE	
RETENTION INDEX	CONCENTRATION (UG./G.)	RETENTION INDEX	CONCENTRATION (UG./G.)
1500	.00053	2050	.01750
1600	.00062	2200	.03460
1600	.00294	2820	.12700
1700	.00103	3125	.10900
1780	.00061	3250	11.70000
1800	.00084		
1900	.00214		
2000	.00169		
2040	.00333		
2100	.00126		
2200	.01750		
2300	.00153		
2400	.00317		
2500	.00490		
2550	.00790		
2600	.00072		
2700	.00765		
2800	.00747		
2900	.00461		
3000	.00238		
3100	.00319		
3200	.00192		
3300	.00257		
TOTAL	.08050	TOTAL	11.98810

TABLE 3.60

HEAVY HYDROCARBON ANALYSIS - STUCCS - 1976

SAMPLE TYPE : DIS

SAMPLE CODE : ANTI

PERIOD : FALL

LOCATION : STATION - 3 LINE -IV

HEXANE ELUATE

BENZENE ELUATE

RETENTION INDEX	CONCENTRATION (UG./G.)	RETENTION INDEX	CONCENTRATION (UG./G.)
1670	.00120	2200	.03790
1700	.00100	2690	.02630
1780	.00020	2800	.02580
1800	.00100	3250	50.80000
1900	.00050		
2000	.00050		
2100	.00050		
2200	.00060		
2300	.00170		
2400	.00110		
2500	.00400		
2600	.00190		
2700	.00110		
2800	.00220		
2900	.00290		
3000	.00370		
3100	.00410		
3200	.00150		
3300	.00100		
3400	.00040		
TOTAL	.03110	TOTAL	50.89000

TABLE 3.61

HEAVY HYDROCARBON ANALYSIS - STUCCS - 1976

SAMPLE TYPE : DIS
 SAMPLE CODE : AQXE PERIOD : FALL
 LOCATION : STATION - 3 LINE -IV

HEXANE ELUATE -----		BENZENE ELUATE -----	
RETENTION INDEX -----	CONCENTRATION (UG./G.) -----	RETENTION INDEX -----	CONCENTRATION (UG./G.) -----
1670	.00030	2170	.00209
1700	.00050	2800	.00357
1800	.00030	3070	.03190
1900	.00030		
2000	.00030		
2100	.00040		
2200	.00050		
2300	.00050		
2400	.00110		
2500	.00180		
2600	.00240		
2700	.00440		
2800	.00620		
2900	.00830		
3000	.00970		
3100	.00480		
3200	.00470		
3300	.00420		
3400	.00150		
3500	.00080		
TOTAL	.05300	TOTAL	.03756

TABLE 3.62

HEAVY HYDROCARBON ANALYSIS - STOCS - 1976

SAMPLE TYPE : DIS

SAMPLE CODE : AQXG

PERIOD : FALL

LOCATION : STATION - 3 LINE -IV

HEXANE ELUATE

BENZENE ELUATE

RETENTION INDEX	CONCENTRATION (UG./G.)	RETENTION INDEX	CONCENTRATION (UG./G.)
1670	.00010	2050	.03680
1700	.00010	2200	.01280
1780	.00010	3125	.02380
1800	.00020	3210	3.22000
1900	.00030		
2000	.00030		
2100	.00040		
2200	.00110		
2300	.00070		
2400	.00060		
2500	.00060		
2600	.00100		
2700	.00270		
2800	.00580		
2900	.01190		
3000	.01680		
3100	.02230		
3200	.01500		
3300	.01120		
3400	.00550		
3500	.00400		
TOTAL	.10070	TOTAL	3.29340

TABLE 3.63

HEAVY HYDROCARBON ANALYSIS - STUOS - 1976

SAMPLE TYPE : DIS

SAMPLE CODE : A000

PERIOD : NOVEMBER

LOCATION : STATION - 1 LINE -II

HEXANE ELUATE

BENZENE ELUATE

RETENTION INDEX	CONCENTRATION (UG./G.)	RETENTION INDEX	CONCENTRATION (UG./G.)
1600	.00071	2690	.06640
1640	.00102	3210	.94800
1670	.00355		
1700	.00220		
1780	.00694		
1800	.00445		
1900	.00748		
2000	.01250		
2030	.07040		
2100	.01130		
2200	.03190		
2300	.01940		
2400	.01090		
2420	.01650		
2500	.01530		
2530	.01780		
2600	.02280		
TOTAL	.25515	TOTAL	1.01440

TABLE 3.64

HEAVY HYDROCARBON ANALYSIS - STUCCS - 1976

SAMPLE TYPE : DIS
 SAMPLE CODE : AUYF PERIOD : NOVEMBER
 LOCATION : STATION - 1 LINE -II

HEXANE ELUATE

BENZENE ELUATE

RETENTION INDEX	CONCENTRATION (UG./G.)	RETENTION INDEX	CONCENTRATION (UG./G.)
2200	.00200	2190	.05800
2300	.00588	2415	.01870
2400	.01240	2510	.02650
2500	.01820	2690	.17400
2600	.01820	3125	.45900
2700	.02350	3350	7.56000
2800	.02010		
2900	.01550		
3000	.01500		
3100	.01010		
3200	.00402		
3300	.00200		
TOTAL	.14690	TOTAL	8.29620

TABLE 3.65

HEAVY HYDROCARBON ANALYSIS - STUCCS - 1976

SAMPLE TYPE : DIS

SAMPLE CODE : AUZH

PERIOD : NOVEMBER

LOCATION : STATION - 1 LINE -II

HEXANE ELUATE		BENZENE ELUATE	
RETENTION INDEX	CONCENTRATION (UG./G.)	RETENTION INDEX	CONCENTRATION (UG./G.)
1670	.00391	2510	.02940
1700	.00180	2690	.11500
1780	.00132	3205	.47000
1840	.00436	3320	.06440
1860	.00169		
1900	.00200		
2000	.02310		
2100	.00034		
2200	.20400		
2300	.00376		
2400	.00537		
2450	.00338		
2500	.01290		
2600	.01880		
2700	.01480		
2800	.01180		
2900	.01040		
3000	.00908		
3100	.01010		
3190	.46800		
TOTAL	.81091	TOTAL	.67880

TABLE 3.66

HEAVY HYDROCARBON ANALYSIS - STUCCS - 1976

SAMPLE TYPE : DIS

SAMPLE CODE : AUND

PERIOD : NOVEMBER

LOCATION : STATION - 2 LINE -II

HEXANE ELUATE

BENZENE ELUATE

RETENTION INDEX	CONCENTRATION (UG./G.)	RETENTION INDEX	CONCENTRATION (UG./G.)
1600	.00030	1460	.001730
1670	.00060	2040	.00936
1700	.00050	2300	.03270
1780	.00030	2540	.01230
1800	.00110	2690	.02350
1900	.00160	2960	.00812
2000	.00160	3120	.16500
2100	.00180	3260	24.10000
2200	.00260		
2300	.00350		
2400	.00430		
2500	.00550		
2600	.00560		
2700	.00720		
2800	.01050		
2900	.01180		
3000	.01260		
3100	.01080		
3200	.00670		
3300	.00480		
3400	.00150		
3500	.00080		
TOTAL	.09600	TOTAL	24.36828

TABLE 3.67

HEAVY HYDROCARBON ANALYSIS - STUCCS - 1976

SAMPLE TYPE : DIS
 SAMPLE CODE : AUXV PERIOD : NOVEMBER
 LOCATION : STATION - 3 LINE -II

HEXANE ELUATE		BENZENE ELUATE	
RETENTION INDEX	CONCENTRATION (UG./G.)	RETENTION INDEX	CONCENTRATION (UG./G.)
2100	.00063	2200	.00378
2140	.00053	2300	.01930
2200	.00050	2400	.03700
2300	.00052	2500	.04970
2320	.00068	2600	.05550
2400	.00046	2640	.02690
2500	.00083	2700	.05070
2600	.00090	2800	.04440
2700	.00102	2900	.03210
2800	.00106	3000	.02460
2900	.00129	3030	.04290
3000	.00097	3120	8.64000
3100	.00152	3190	.02200
3110	.00223	3300	.01100
3200	.00107	3350	.02420
3300	.00056	3400	.03880
3400	.00048		
TOTAL	.01525	TOTAL	9.32268

TABLE 3.68

HEAVY HYDROCARBON ANALYSIS - STOCS - 1976

SAMPLE TYPE : DIS

SAMPLE CODE : AVRZ

PERIOD : DECEMBER

LOCATION : STATION - 1 LINE - II

HEXANE ELUATE

BENZENE ELUATE

RETENTION INDEX	CONCENTRATION (UG./G.)	RETENTION INDEX	CONCENTRATION (UG./G.)
1670	.00050	2510	.02970
1700	.00040	2690	.39100
1780	.00040	3125	.01450
1800	.00050	3205	1.05000
1900	.00050		
2000	.00050		
2100	.00050		
2200	.00080		
2300	.00050		
2400	.00070		
2500	.00320		
2600	.00100		
2700	.00250		
2800	.00460		
2900	.00500		
3000	.00700		
3100	.00850		
3200	.00640		
3300	.00600		
3400	.00280		
3500	.00210		
TOTAL	.05440	TOTAL	1.48520

TABLE 3.69

HEAVY HYDROCARBON ANALYSIS - STUCCS - 1976

SAMPLE TYPE : DIS

SAMPLE CODE : AVTS

PERIOD : DECEMBER

LOCATION : STATION - 2 LINE -II

HEXANE ELUATE		BENZENE ELUATE	
RETENTION INDEX	CONCENTRATION (UG./G.)	RETENTION INDEX	CONCENTRATION (UG./G.)
2100	.00020	2690	.03480
2200	.00020	3125	.01060
2300	.00030	3205	1.34000
2400	.00020		
2500	.00150		
2600	.00070		
2700	.00100		
2800	.00080		
2900	.00110		
3000	.00110		
3100	.00070		
3200	.00040		
3300	.00020		
TOTAL	.00840	TOTAL	1.38540

TABLE 3.70

HEAVY HYDROCARBON ANALYSIS - STOCS - 1976

SAMPLE TYPE : DIS
 SAMPLE CODE : AVVO PERIOD : DECEMBER
 LOCATION : STATION - 3 LINE -II

HEXANE ELUATE		BENZENE ELUATE	
RETENTION INDEX	CONCENTRATION (UG./G.)	RETENTION INDEX	CONCENTRATION (UG./G.)
-----	-----	-----	-----
2700	.00044	2690	.02920
2800	.00238	3090	.03890
2900	.00728	3210	3.84000
3000	.01370	3290	.04480
3100	.02710		
3200	.01910		
3300	.01500		
3400	.00764		
3500	.00210		
3600	.00076		
3700	.00070		
TOTAL	.09620	TOTAL	3.95290

TABLE 3.71

HEAVY HYDROCARBON ANALYSIS - STOCS - 1976

SAMPLE TYPE : DIS

SAMPLE CODE : AVVY

PERIOD : DECEMBER

LOCATION : STATION - 3 LINE -II

HEXANE ELUATE

BENZENE ELUATE

RETENTION INDEX	CONCENTRATION (UG./G.)	RETENTION INDEX	CONCENTRATION (UG./G.)
1900	.00040	2050	.000947
2000	.00040	2690	.16500
2100	.00050	3125	.02480
2200	.00080	3205	2.16000
2300	.00080		
2400	.00100		
2500	.00400		
2600	.00110		
2700	.00360		
2800	.00260		
2900	.00400		
3000	.00420		
3100	.00470		
3200	.00430		
3300	.00450		
3400	.00160		
3500	.00040		
TOTAL	.03890	TOTAL	2.35927

TABLE 3.72

HEAVY HYDROCARBON ANALYSIS - STUCCS - 1976

SAMPLE TYPE : DIS
 SAMPLE CODE : AVWA PERIOD : DECEMBER
 LOCATION : STATION - 3 LINE -II

HEXANE ELUATE

BENZENE ELUATE

RETENTION INDEX	CONCENTRATION (UG./G.)	RETENTION INDEX	CONCENTRATION (UG./G.)
1670	.01810	2050	.01600
1700	.00900	2200	.02630
1780	.01020	2690	.22900
1800	.01520	3090	.22300
1900	.00250	3210	27.20000
2000	.00250	3290	.43100
2100	.00750		
2200	.02790		
2300	.02570		
2400	.02620		
2500	.03490		
2600	.03040		
2700	.04290		
2800	.06240		
2900	.09290		
3000	.09380		
3100	.10100		
3200	.08880		
3300	.10500		
3400	.11800		
3500	.12400		
TOTAL	1.03890	TOTAL	28.12530

TABLE 4

WATER-PARTICULATE HIGH-MOLECULAR-WEIGHT HYDROCARBON GLC ANALYSES

TABLE 4.1

HEAVY HYDROCARBON ANALYSIS - STOCS - 1976

SAMPLE TYPE : PAR

SAMPLE CODE : AGMA

PERIOD : WINTER

LOCATION : STATION - 1 LINE - I

HEXANE ELUATE

BENZENE ELUATE

RETENTION INDEX	CONCENTRATION (UG./G.)	RETENTION INDEX	CONCENTRATION (UG./G.)
1780	.00016	2633	266.00000
1800	.00116	2700	.67100
1900	.00248	2818	3.24000
2000	.00196	2944	.47600
2100	.00124	3100	88.40000
2200	.01120	3200	61.30000
2300	.00148		
2400	.00148		
2500	.00196		
2600	.00184		
2700	.00148		
2800	.00136		
2900	.00164		
3000	.00002		
3100	.00116		
3200	.00002		
3300	.00048		
3400	.00112		
3500	.00104		
3600	.00252		
3700	.00296		
TOTAL	.03876	TOTAL	420.08700

TABLE 4.2

HEAVY HYDROCARBON ANALYSIS - STOCS - 1976

SAMPLE TYPE : PAR
 SAMPLE CODE : AGNQ
 LOCATION : STATION - 2 LINE -I PERIOD : WINTER

HEXANE ELUATE		BENZENE ELUATE	
RETENTION INDEX	CONCENTRATION (UG./G.)	RETENTION INDEX	CONCENTRATION (UG./G.)
1670	.00016	2650	129.00000
1700	.00088	2730	.45800
1780	.00032	2880	2.91000
1800	.00336	2990	2.12000
1900	.00512	3110	19.50000
2000	.00328	3190	60.70000
2100	.00176	3220	49.40000
2200	.01930		
2300	.00104		
2400	.00088		
2500	.00264		
2600	.00152		
2700	.00184		
2800	.00249		
2900	.00528		
3000	.00400		
3100	.00440		
3200	.00192		
3300	.00240		
3400	.00168		
3500	.00280		
3600	.00608		
3700	.00576		
TOTAL	.07891	TOTAL	264.08800

TABLE 4.3

HEAVY HYDROCARBON ANALYSIS - STOCS - 1976

SAMPLE TYPE : PAR

SAMPLE CODE : AGPJ

PERIOD : WINTER

LOCATION : STATION - 3 LINE - I

HEXANE ELUATE

BENZENE ELUATE

RETENTION INDEX	CONCENTRATION (UG./G.)	RETENTION INDEX	CONCENTRATION (UG./G.)
1670	.00133	2490	.01580
1700	.00210	2690	.00143
1780	.00056	2790	.00297
1800	.00413	3160	.00189
1900	.00602		
2000	.00364		
2100	.00231		
2200	.01850		
2300	.00154		
2400	.00105		
2500	.00259		
2600	.00182		
2700	.00224		
2800	.00175		
2900	.00322		
3000	.00133		
3100	.00189		
3200	.00004		
3300	.00112		
3400	.00196		
3500	.00147		
3600	.00423		
3700	.00434		
TOTAL	.06915	TOTAL	.02209

TABLE 4.4

HEAVY HYDROCARBON ANALYSIS - STUCCS - 1976

SAMPLE TYPE : PAR

SAMPLE CODE : AKXC

PERIOD : SPRING

LOCATION : STATION - 1 LINE -1

HEXANE ELUATE		BENZENE ELUATE	
RETENTION INDEX	CONCENTRATION (UG./G.)	RETENTION INDEX	CONCENTRATION (UG./G.)
2000	.00001	2508	.01080
2100	.00001	2567	.01360
2200	.00001	2633	.01220
2300	.00001	3308	.01240
2400	.00026	3633	.03490
2500	.00052		
2600	.00080		
2700	.00182		
2800	.00290		
2900	.00394		
3000	.00394		
3200	.00158		
3300	.00106		
3400	.00001		
TOTAL	.01687	TOTAL	.08390

TABLE 4.5

HEAVY HYDROCARBON ANALYSIS - STOCS - 1976

SAMPLE TYPE : PAR

SAMPLE CODE : AKZF

PERIOD : SPRING

LOCATION : STATION - 2 LINE -1

HEXANE ELUATE

BENZENE ELUATE

RETENTION INDEX	CONCENTRATION (UG./G.)	RETENTION INDEX	CONCENTRATION (UG./G.)
2300	.00001	1820	.00525
2400	.00001	2140	.00250
2500	.00043	2310	.00620
2600	.00064	2420	.00245
2700	.00085	3080	.00326
2800	.00138		
2900	.00202		
3000	.00149		
3100	.00138		
3200	.00074		
3300	.00043		
3400	.00064		
3500	.00001		
TOTAL	.01003	TOTAL	.01966

TABLE 4.6

HEAVY HYDROCARBON ANALYSIS - STUCCS - 1976

SAMPLE TYPE : PAR

SAMPLE CODE : ALAY

PERIOD : SPRING

LOCATION : STATION - 3 LINE - I

HEXANE ELUATE -----		BENZENE ELUATE -----	
RETENTION INDEX -----	CONCENTRATION (UG./G.) -----	RETENTION INDEX -----	CONCENTRATION (UG./G.) -----
2500	.00001	2400	.00107
2600	.00001	2517	.00324
2700	.00047	2584	.00370
2800	.00043	3217	.00139
2900	.00107	3333	.00925
3000	.00128	3642	.00696
3100	.00214		
3200	.00171		
3300	.00169		
3400	.00086		
3500	.00032		
TOTAL	.00999	TOTAL	.02561

TABLE 4.7

HEAVY HYDROCARBON ANALYSIS - STUCCS - 1976

SAMPLE TYPE : PAR
 SAMPLE CODE : A0AA PERIOD : SPRING
 LOCATION : STATION - 3 LINE -I

HEXANE ELUATE		BENZENE ELUATE	
RETENTION INDEX	CONCENTRATION (UG./G.)	RETENTION INDEX	CONCENTRATION (UG./G.)
1800	.00092	2408	.01750
1900	.00131	2508	.25600
2000	.00052	2600	.06320
2100	.00029	2675	.06590
2200	.00026	2750	.03890
2300	.00105	3067	.36500
2400	.00066		
2500	.00029		
2600	.00034		
2700	.00026		
2800	.00039		
2900	.00052		
3000	.00039		
3100	.00105		
3200	.00105		
3300	.00039		
3400	.00029		
3500	.00001		
TOTAL	.00999	TOTAL	.80650

TABLE 4.8

HEAVY HYDROCARBON ANALYSIS - STUCCS - 1976

SAMPLE TYPE : PAR
 SAMPLE CODE : AQCG
 LOCATION : STATION - 1 LINE - I
 PERIOD : FALL

HEXANE ELUATE

BENZENE ELUATE

RETENTION INDEX	CONCENTRATION (UG./G.)	RETENTION INDEX	CONCENTRATION (UG./G.)
1500	.03330	2150	.02440
1600	.03970	3060	.02870
1618	.02650	3140	.03780
1670	.07950		
1700	.09370		
1780	.01600		
1800	.03510		
1856	.01860		
1900	.03540		
2000	.02750		
2100	.01670		
2138	.02540		
2200	.00776		
2300	.00638		
2400	.00505		
2500	.00437		
2600	.00503		
2700	.00783		
2800	.00326		
2900	.02340		
3000	.03400		
3100	.03780		
3200	.01200		
3300	.00702		
TOTAL	.60330	TOTAL	.09090

TABLE 4.9

HEAVY HYDROCARBON ANALYSIS - STOCS - 1976

SAMPLE TYPE : PAR

SAMPLE CODE : AGDS

PERIOD : FALL

LOCATION : STATION - 2 LINE -I

HEXANE ELUATE

BENZENE ELUATE

RETENTION INDEX	CONCENTRATION (UG./G.)	RETENTION INDEX	CONCENTRATION (UG./G.)
1670	.00204	3170	.03750
1700	.00102		
1780	.00034		
1800	.00101		
1900	.00134		
2000	.00101		
2100	.00101		
2200	.00354		
2300	.00172		
2400	.00296		
2500	.00355		
2600	.00220		
2700	.00319		
2800	.00467		
2900	.01020		
3000	.01650		
3100	.01890		
3200	.01680		
3300	.01270		
3400	.01150		
3500	.00387		
3600	.00224		
TOTAL	.12251	TOTAL	.03750

TABLE 4.10

HEAVY HYDROCARBON ANALYSIS - STUCCS - 1976

SAMPLE TYPE : PAR
 SAMPLE CODE : AQFI
 LOCATION : STATION - 3 LINE - I

PERIOD : FALL

HEXANE ELUATE

BENZENE ELUATE

RETENTION INDEX	CONCENTRATION (UG./G.)	RETENTION INDEX	CONCENTRATION (UG./G.)
1670	.00006	3070	.02780
1700	.00006		
1780	.00006		
1800	.00029		
1900	.00024		
2000	.00018		
2100	.00018		
2200	.00012		
2300	.00019		
2400	.00025		
2500	.00026		
2600	.00032		
2700	.00069		
2800	.00063		
2900	.00251		
3000	.00273		
3100	.00281		
3200	.00168		
3300	.00211		
3400	.00046		
TOTAL	.01583	TOTAL	.02780

TABLE 4.11

HEAVY HYDROCARBON ANALYSIS - STUCCS - 1976

SAMPLE TYPE : PAR

SAMPLE CODE : ANGX

PERIOD : FALL

LOCATION : STATION - 1 LINE -II

HEXANE ELUATE

BENZENE ELUATE

RETENTION INDEX	CONCENTRATION (UG./G.)	RETENTION INDEX	CONCENTRATION (UG./G.)
1500	.01840	2130	.00423
1670	.00092	2230	.00653
1700	.00577	2380	.01800
1800	.00087	3070	.03040
1900	.00274	3190	.01300
2000	.00016		
2096	.12000		
2200	.00041		
2300	.00056		
2400	.00055		
2500	.00084		
2600	.00079		
2700	.00267		
2800	.00452		
2900	.01010		
3000	.01250		
3100	.02130		
3200	.00895		
3300	.00789		
3400	.00429		
3500	.00246		
3600	.00167		
TOTAL	.22836	TOTAL	.07216

TABLE 4.12

HEAVY HYDROCARBON ANALYSIS - STOCS - 1976

SAMPLE TYPE : PAR

SAMPLE CODE : AGRM

PERIOD : WINTER

LOCATION : STATION - 1 LINE -II

HEXANE ELUATE

BENZENE ELUATE

RETENTION INDEX	CONCENTRATION (UG./G.)	RETENTION INDEX	CONCENTRATION (UG./G.)
1670	.00022	2379	.54000
1700	.00121	2550	.11000
1700	.00033	2987	.12300
1800	.00253	3147	.87500
1900	.00374		
2000	.00275		
2100	.00165		
2200	.01460		
2300	.00165		
2400	.00165		
2500	.00253		
2600	.00297		
2700	.00462		
2800	.00671		
2900	.01070		
3000	.01060		
3100	.01200		
3200	.00671		
3300	.00528		
3400	.00132		
3500	.00242		
3600	.00594		
3700	.00627		
TOTAL	.10840	TOTAL	1.64800

TABLE 4.13

HEAVY HYDROCARBON ANALYSIS - STOCS - 1976

SAMPLE TYPE : PAR
 SAMPLE CODE : AGTD PERIOD : WINTER
 LOCATION : STATION - 2 LINE -II

HEXANE ELUATE		BENZENE ELUATE	
RETENTION INDEX	CONCENTRATION (UG./G.)	RETENTION INDEX	CONCENTRATION (UG./G.)
1670	.00224	2470	.02020
1700	.00320	2590	.02630
1780	.00128	2790	.04340
1800	.00544	3110	.10100
1900	.00640		
2000	.00384		
2100	.00192		
2200	.02740		
2300	.00128		
2400	.00112		
2500	.00304		
2600	.00224		
2700	.00288		
2800	.00608		
2900	.01300		
3000	.01630		
3100	.02160		
3200	.01500		
3300	.01070		
3400	.00448		
3500	.00528		
3600	.00352		
TOTAL	.15824	TOTAL	.19090

TABLE 4.14

HEAVY HYDROCARBON ANALYSIS - STUCCS - 1976

SAMPLE TYPE : PAR

SAMPLE CODE : AGUX

PERIOD : WINTER

LOCATION : STATION - 3 LINE -II

HEXANE ELUATE

BENZENE ELUATE

RETENTION INDEX	CONCENTRATION (UG./G.)	RETENTION INDEX	CONCENTRATION (UG./G.)
1670	.00027	2654	.01930
1700	.00108	2750	.01120
1780	.00018	3185	.56500
1800	.00333		
1900	.00459		
2000	.00423		
2100	.00198		
2200	.02610		
2300	.00144		
2400	.00126		
2500	.00313		
2600	.00207		
2700	.00225		
2800	.00288		
2900	.00585		
3000	.00414		
3100	.00540		
3200	.00225		
3300	.00225		
3400	.00153		
3500	.00225		
3600	.00432		
3700	.00378		
TOTAL	.08656	TOTAL	.59550

TABLE 4.15

HEAVY HYDROCARBON ANALYSIS - STUCS - 1976

SAMPLE TYPE : PAR

SAMPLE CODE : AJKF

PERIOD : MARCH

LOCATION : STATION - 1 LINE -II

HEXANE ELUATE

BENZENE ELUATE

RETENTION INDEX	CONCENTRATION (UG./G.)	RETENTION INDEX	CONCENTRATION (UG./G.)
2000	.00015	2000	.41200
2100	.00015	2200	1.64000
2200	.00464	2220	.85300
2300	.00522	2400	.25100
2400	.00841	2420	.31000
2500	.00522	2800	.34300
2600	.00638	3140	25.40000
2700	.00986		
2800	.01890		
2900	.03390		
3000	.03540		
3100	.05070		
3200	.03740		
3300	.03260		
3400	.01740		
3500	.00870		
3600	.00841		
3700	.00464		
TOTAL	.28828	TOTAL	29.20900

TABLE 4.16

HEAVY HYDROCARBON ANALYSIS - STOCS - 1976

SAMPLE TYPE : PAR
 SAMPLE CODE : AJMB PERIOD : MARCH
 LOCATION : STATION - 2 LINE -II

HEXANE ELUATE

BENZENE ELUATE

RETENTION INDEX	CONCENTRATION (UG./G.)	RETENTION INDEX	CONCENTRATION (UG./G.)
2200	.00006	2000	.06400
2300	.00006	2200	.28400
2400	.00012	2220	.04980
2500	.00012	2300	.00129
2600	.00348	2400	.07800
2700	.00588	2420	.00668
2800	.01600	2800	.19100
2900	.02080	3020	.00121
3000	.01580	3120	.10500
3100	.02410		
3200	.01420		
3300	.01200		
3400	.00264		
3500	.00312		
3600	.00006		
TOTAL	.11844	TOTAL	.78098

TABLE 4.17

HEAVY HYDROCARBON ANALYSIS - STOCS - 1976

SAMPLE TYPE : PAR

SAMPLE CODE : AJNZ

PERIOD : MARCH

LOCATION : STATION - 3 LINE -II

HEXANE ELUATE

BENZENE ELUATE

RETENTION INDEX	CONCENTRATION (UG./G.)	RETENTION INDEX	CONCENTRATION (UG./G.)
2100	.00308	2000	.03480
2200	.00572	2200	.31500
2300	.00616	2220	.05470
2400	.00539	2300	.01150
2500	.00462	2400	.09660
2600	.00385	2420	.05840
2700	.00539	2600	.01190
2800	.00649	2800	.01460
2900	.01070	3020	.02390
3000	.01140	3130	.10100
3100	.01450		
3200	.01140		
3300	.00990		
3400	.00462		
3500	.00308		
3600	.00154		
3700	.00231		
TOTAL	.11015	TOTAL	.72240

TABLE 4.18

HEAVY HYDROCARBON ANALYSIS - STOCS - 1976

SAMPLE TYPE : PAR

SAMPLE CODE : AKDG

PERIOD : APRIL

LOCATION : STATION - 1 LINE -II

HEXANE ELUATE

BENZENE ELUATE

RETENTION INDEX	CONCENTRATION (UG./G.)	RETENTION INDEX	CONCENTRATION (UG./G.)
2000	.00011	2000	.14000
2100	.00011	2200	.04200
2200	.00063	2220	.47600
2300	.00147	2300	.03990
2400	.00168	2320	.03680
2500	.00105	2400	.08580
2600	.00252	2420	.26000
2700	.00525	2800	.09710
2800	.01580	3020	.03560
2900	.01910	3130	.09260
3000	.02620		
3100	.03720		
3200	.03210		
3300	.02710		
3400	.01490		
3500	.01430		
3600	.00567		
3700	.00441		
TOTAL	.20960	TOTAL	2.10780

TABLE 4.19

HEAVY HYDROCARBON ANALYSIS - STOCS - 1976

SAMPLE TYPE : PAR

SAMPLE CODE : AKFH

PERIOD : APRIL

LOCATION : STATION - 2 LINE -II

HEXANE ELUATE

BENZENE ELUATE

RETENTION INDEX	CONCENTRATION (UG./G.)	RETENTION INDEX	CONCENTRATION (UG./G.)
1900	.00004	2000	.02300
2000	.00045	2200	.34100
2100	.00315	2220	.17500
2200	.00441	2400	.07740
2300	.00558	2800	.08830
2400	.00387	3130	.01480
2500	.00207		
2600	.00180		
2700	.00576		
2800	.00747		
2900	.00810		
3000	.00864		
3100	.01580		
3200	.01050		
3300	.00747		
3400	.00180		
3500	.00270		
3600	.00045		
TOTAL	.09006	TOTAL	.71950

TABLE 4.20

HEAVY HYDROCARBON ANALYSIS - STUCCS - 1976

SAMPLE TYPE : PAR

SAMPLE CODE : AKHG

PERIOD : APRIL

LOCATION : STATION - 3 LINE -II

HEXANE ELUATE

BENZENE ELUATE

RETENTION INDEX	CONCENTRATION (UG./G.)	RETENTION INDEX	CONCENTRATION (UG./G.)
2300	.00003	1890	.09440
2400	.00003	2000	.02520
2500	.00003	2200	.10900
2600	.00006	2220	.03410
2700	.00162	2400	.02340
2800	.00216	2420	.01500
2900	.00780	3130	.08830
3000	.00576		
3100	.01570		
3200	.00960		
3300	.01060		
3400	.00216		
3500	.00252		
3600	.00132		
TOTAL	.05939	TOTAL	.38940

TABLE 4.21

HEAVY HYDROCARBON ANALYSIS - STOCS - 1976

SAMPLE TYPE : PAR
 SAMPLE CODE : ALCV PERIOD : SPRING
 LOCATION : STATION - 1 LINE -II

HEXANE ELUATE

BENZENE ELUATE

RETENTION INDEX	CONCENTRATION (UG./G.)	RETENTION INDEX	CONCENTRATION (UG./G.)
2100	.00008	1992	.00407
2200	.00204	2217	.00590
2300	.00629	2300	.00693
2400	.01580	2492	.00648
2500	.02010	2584	.90700
2600	.01870	2717	.18100
2700	.01770	2825	.00992
2800	.02670	3067	.19900
2900	.01630	3167	.11900
3000	.01000		
3100	.01040		
3200	.00884		
3300	.01210		
3500	.00289		
3600	.00170		
TOTAL	.16964	TOTAL	1.43930

TABLE 4.22

HEAVY HYDROCARBON ANALYSIS - STUCS - 1976

SAMPLE TYPE : PAR
 SAMPLE CODE : ALEN PERIOD : SPRING
 LOCATION : STATION - 2 LINE -II

HEXANE ELUATE

BENZENE ELUATE

RETENTION INDEX	CONCENTRATION (UG./G.)	RETENTION INDEX	CONCENTRATION (UG./G.)
2100	.00002	2125	.00219
2200	.00048	2208	.00782
2300	.00030	2300	.00753
2400	.00078	2442	.00408
2500	.00126	2808	.00267
2600	.00156	2825	.01230
2700	.00297	3067	.05550
2800	.00375		
2900	.00516		
3000	.00453		
3100	.00405		
3200	.00249		
3300	.00108		
3400	.00156		
3500	.00002		
TOTAL	.03001	TOTAL	.09209

TABLE 4.23

HEAVY HYDROCARBON ANALYSIS - STUCCS - 1976

SAMPLE TYPE : PAR
 SAMPLE CODE : ALGI PERIOD : SPRING
 LOCATION : STATION - 3 LINE -II

HEXANE ELUATE

BENZENE ELUATE

RETENTION INDEX	CONCENTRATION (UG./G.)	RETENTION INDEX	CONCENTRATION (UG./G.)
2200	.00001	2567	.000631
2300	.00001	2633	.001570
2400	.00050	2892	.000734
2500	.00039	3292	.000565
2600	.00024	3325	.00299
2700	.00050	3650	.10800
2800	.00098		
2900	.00107		
3000	.00098		
3100	.00219		
3200	.00146		
3300	.00122		
3400	.00050		
3500	.00001		
TOTAL	.01006	TOTAL	.14599

TABLE 4.24

HEAVY HYDROCARBON ANALYSIS - STOCS - 1976

SAMPLE TYPE : PAR
 SAMPLE CODE : ANZX PERIOD : SPRING
 LOCATION : STATION - 3 LINE -II

HEXANE ELUATE

BENZENE ELUATE

RETENTION INDEX	CONCENTRATION (UG./G.)	RETENTION INDEX	CONCENTRATION (UG./G.)
2100	.00001	1910	.00026
2200	.00011	2320	.00127
2400	.00035	2410	.00363
2500	.00057	2880	.00567
2600	.00052	3170	.00499
2700	.00079		
2800	.00102		
2900	.00138		
3000	.00126		
3100	.00147		
3200	.00110		
3300	.00087		
3400	.00041		
3500	.00001		
TOTAL	.00967	TOTAL	.01582

TABLE 4.25

HEAVY HYDROCARBON ANALYSIS - STUCS - 1976

SAMPLE TYPE : PAR

SAMPLE CODE : AUCB

PERIOD : JULY

LOCATION : STATION - 1 LINE -II

HEXANE ELUATE

BENZENE ELUATE

RETENTION INDEX	CONCENTRATION (UG./G.)	RETENTION INDEX	CONCENTRATION (UG./G.)
1600	.01890	2374	.00038
1670	.01500	2486	.00199
1700	.02750	2595	.00166
1780	.00608	2703	.00078
1800	.02340	2734	1.18000
1900	.01730	2813	.01990
2000	.01180	2890	.06510
2100	.01090		
2200	.07260		
2300	.01340		
2400	.01410		
2500	.00672		
2600	.00480		
2700	.00640		
2800	.00672		
2900	.00960		
3000	.01090		
3100	.01500		
3200	.01120		
3300	.01020		
3400	.00544		
3500	.00448		
3600	.00320		
TOTAL	.32564	TOTAL	1.26981

TABLE 4.26

HEAVY HYDROCARBON ANALYSIS - STOCS - 1976

SAMPLE TYPE : PAR
 SAMPLE CODE : ADDY
 LOCATION : STATION - 2 LINE -II

PERIOD : JULY

HEXANE ELUATE -----		BENZENE ELUATE -----	
RETENTION INDEX -----	CONCENTRATION (UG./G.) -----	RETENTION INDEX -----	CONCENTRATION (UG./G.) -----
1600	.00240	2982	.00261
1670	.00008	3033	.00207
1700	.00870	3050	.01200
1780	.00008		
1800	.01630		
1900	.02040		
2000	.01120		
2100	.00540		
2200	.04800		
2300	.00300		
2400	.00210		
2500	.00008		
2600	.00008		
2700	.00008		
2800	.00008		
2900	.00008		
3000	.00330		
3100	.00300		
3200	.00345		
3300	.00600		
3400	.00705		
3500	.00975		
3600	.00008		
TOTAL	.15069	TOTAL	.01668

TABLE 4.27

HEAVY HYDROCARBON ANALYSIS - STOCS - 1976

SAMPLE TYPE : PAR

SAMPLE CODE : AOEH

PERIOD : JULY

LOCATION : STATION - 3 LINE -II

HEXANE ELUATE

BENZENE ELUATE

RETENTION INDEX	CONCENTRATION (UG./G.)	RETENTION INDEX	CONCENTRATION (UG./G.)
1600	.00180	2920	.00255
1670	.00006	2960	.00327
1700	.00240	3008	.00859
1780	.00006	3120	.00361
1800	.01070		
1900	.01550		
2000	.00864		
2100	.00396		
2200	.03610		
2300	.00336		
2400	.00216		
2500	.00204		
2600	.00132		
2700	.00006		
2800	.00006		
2900	.00006		
3000	.00216		
3100	.00492		
3200	.00348		
3300	.00660		
3400	.00552		
3500	.00744		
3600	.00144		
TOTAL	.11984	TOTAL	.01802

TABLE 4.28

HEAVY HYDROCARBON ANALYSIS - STUCCS - 1976

SAMPLE TYPE : PAR
 SAMPLE CODE : ADFT
 LOCATION : STATION - 3 LINE -II PERIOD : JULY

HEXANE ELUATE		BENZENE ELUATE	
RETENTION INDEX	CONCENTRATION (UG./G.)	RETENTION INDEX	CONCENTRATION (UG./G.)
1600	.00008	1880	.00024
1670	.00008	2040	.00458
1700	.00555	2500	.00221
1780	.00008	2950	.00872
1800	.01290	3070	.00303
1900	.02010	3260	.00048
2000	.00960		
2100	.00450		
2200	.04480		
2300	.00345		
2400	.00165		
2500	.00360		
2600	.00008		
2700	.00008		
2800	.00008		
2900	.00008		
3000	.00180		
3100	.00540		
3200	.00465		
3300	.00735		
3400	.00855		
3500	.01320		
3600	.00270		
TOTAL	.15036	TOTAL	.01926

TABLE 4.29

HEAVY HYDROCARBON ANALYSIS - STUCCS - 1976

SAMPLE TYPE : PAR

SAMPLE CODE : APEG

PERIOD : AUGUST

LOCATION : STATION - 1 LINE -II

HEXANE ELUATE

BENZENE ELUATE

RETENTION INDEX	CONCENTRATION (UG./G.)	RETENTION INDEX	CONCENTRATION (UG./G.)
1600	.00400	2486	.02090
1670	.00440	2662	.04830
1700	.01370	2714	.00615
1780	.03230	3176	.03050
1800	.00230	3216	.07730
1900	.02240	3360	.03670
2000	.01350	3550	.06250
2100	.00680	3840	.10500
2200	.04430		
2300	.00440		
2400	.00320		
2500	.00010		
2600	.00010		
2700	.00010		
2800	.00010		
2900	.00010		
3000	.00010		
3100	.00475		
3200	.00494		
3300	.00665		
3400	.00817		
3500	.01330		
3600	.00532		
TOTAL	.19503	TOTAL	.38735

TABLE 4.30

HEAVY HYDROCARBON ANALYSIS - STOCS - 1976

SAMPLE TYPE : PAR
 SAMPLE CODE : APFV
 LOCATION : STATION - 2 LINE -II
 PERIOD : AUGUST

HEXANE ELUATE -----		BENZENE ELUATE -----	
RETENTION INDEX -----	CONCENTRATION (UG./G.) -----	RETENTION INDEX -----	CONCENTRATION (UG./G.) -----
1600	.00077	2100	.00133
1670	.00004	2250	.00142
1700	.00238	2290	.00178
1780	.00004	2470	.01920
1800	.00665	2650	.00926
1900	.00805	2970	.04580
2000	.00525	3080	.00439
2100	.00196		
2200	.02140		
2300	.00119		
2400	.00056		
2500	.00004		
2600	.00004		
2700	.00004		
2800	.00004		
2900	.00004		
3000	.00004		
3100	.00161		
3200	.00140		
3300	.00413		
3400	.00679		
3500	.00735		
3600	.00004		
TOTAL	.06985	TOTAL	.08318

TABLE 4.31

HEAVY HYDROCARBON ANALYSIS - STUCCS - 1976

SAMPLE TYPE : PAR

SAMPLE CODE : APHL

PERIOD : AUGUST

LOCATION : STATION - 3 LINE -II

HEXANE ELUATE

BENZENE ELUATE

RETENTION INDEX	CONCENTRATION (UG./G.)	RETENTION INDEX	CONCENTRATION (UG./G.)
1600	.00090	2080	.00059
1670	.00008	2250	.00054
1730	.00510	2488	.00119
1780	.00008	2625	.01120
1800	.01270	2726	.01380
1900	.01890		
2000	.01200		
2100	.00630		
2200	.04910		
2300	.00330		
2400	.00255		
2500	.00008		
2600	.00008		
2700	.00008		
2800	.00008		
2900	.00008		
3000	.00008		
3100	.00405		
3200	.00390		
3300	.00675		
3400	.00945		
3500	.01360		
3600	.00008		
TOTAL	.14932	TOTAL	.02732

TABLE 4.32

HEAVY HYDROCARBON ANALYSIS - STOCS - 1976

SAMPLE TYPE : PAR
 SAMPLE CODE : APHV PERIOD : AUGUST
 LOCATION : STATION - 3 LINE -II

HEXANE ELUATE

BENZENE ELUATE

RETENTION INDEX	CONCENTRATION (UG./G.)	RETENTION INDEX	CONCENTRATION (UG./G.)
1600	.00154	1660	.01160
1670	.00007	1800	.01570
1700	.00728	2030	.00017
1780	.00007	2050	.02120
1800	.01430	2400	.00106
1900	.01720	2450	.00125
2000	.00980	2500	.00151
2100	.00476	2570	.03080
2200	.04310	2600	.00336
2300	.00252	2770	.01070
2400	.00168	2810	.00364
2500	.00007	3030	.00141
2600	.00007	3210	.00373
2700	.00007		
2800	.00007		
2900	.00546		
3000	.00266		
3100	.00434		
3200	.00322		
3300	.00448		
3400	.00630		
3500	.01120		
3600	.00007		
TOTAL	.14033	TOTAL	.10613

TABLE 4.33

HEAVY HYDROCARBON ANALYSIS - STUCCS - 1976

SAMPLE TYPE : DIS
 SAMPLE CODE : APHY PERIOD : AUGUST
 LOCATION : STATION - 3 LINE -II

HEXANE ELUATE

BENZENE ELUATE

RETENTION INDEX	CONCENTRATION (UG./G.)	RETENTION INDEX	CONCENTRATION (UG./G.)
		1680	.00600
		2480	.00973
		2660	.00616
		3010	.00513
TOTAL	0	TOTAL	.02702

TABLE 4.34

HEAVY HYDROCARBON ANALYSIS - STOCS - 1976

SAMPLE TYPE : DIS
 SAMPLE CODE : APHW PERIOD : AUGUST
 LOCATION : STATION - 3 LINE -II

HEXANE ELUATE

BENZENE ELUATE

RETENTION INDEX	CONCENTRATION (UG./G.)	RETENTION INDEX	CONCENTRATION (UG./G.)
2400	.01300	2660	.00395
2500	.00690	3216	.02900
2600	.00663	3550	.02360
2700	.00833	3840	.02880
2800	.00968		
2900	.00956		
3000	.00611		
3100	.01020		
3200	.01090		
3300	.01230		
TOTAL	.09361	TOTAL	.08535

TABLE 4.35

HEAVY HYDROCARBON ANALYSIS - STOCS - 1976

SAMPLE TYPE : PAR
 SAMPLE CODE : APHX PERIOD : AUGUST
 LOCATION : STATION - 3 LINE -II

HEXANE ELUATE

BENZENE ELUATE

RETENTION INDEX	CONCENTRATION (UG./G.)	RETENTION INDEX	CONCENTRATION (UG./G.)
2200	.00018	2100	.12900
2500	.00005	2210	.18900
2600	.00007	2250	.08540
2800	.00008	2290	.02350
2900	.00010	2340	.04080
3000	.00017	3070	.03340
3100	.00159	3090	.02850
3200	.00061		
TOTAL	.00285	TOTAL	.52960

TABLE 4.36

HEAVY HYDROCARBON ANALYSIS - STUCS - 1976

SAMPLE TYPE : PAR

SAMPLE CODE : AQIJ

PERIOD : FALL

LOCATION : STATION - 2 LINE -II

HEXANE ELUATE

BENZENE ELUATE

RETENTION INDEX	CONCENTRATION (UG./G.)	RETENTION INDEX	CONCENTRATION (UG./G.)
2600	.00018	2790	.00302
2700	.00055	3070	.01360
2800	.00102		
2900	.00352		
3000	.00489		
3100	.00557		
3200	.00491		
3300	.00460		
3400	.00268		
3500	.00164		
3600	.00056		
TOTAL	.03012	TOTAL	.01662

TABLE 4.37

HEAVY HYDROCARBON ANALYSIS - STOCS - 1976

SAMPLE TYPE : PAR
 SAMPLE CODE : AJJZ
 LOCATION : STATION - 3 LINE -II PERIOD : FALL

HEXANE ELUATE

BENZENE ELUATE

RETENTION INDEX	CONCENTRATION (UG./G.)	RETENTION INDEX	CONCENTRATION (UG./G.)
1670	.00068	2300	.00802
1700	.00034	2400	.01360
1800	.00034	2500	.01370
1900	.00034	2600	.01240
2000	.00034	2700	.01310
2100	.00054	2730	.03840
2200	.00239	2800	.00912
2300	.00261	3100	.02380
2400	.00426	3300	.06030
2500	.00505		
2600	.00310		
2700	.00355		
2800	.00599		
2900	.01120		
3000	.01040		
3100	.01080		
3200	.00657		
3300	.00393		
3400	.00309		
3500	.00081		
TOTAL	.07633	TOTAL	.19244

TABLE 4.38

HEAVY HYDROCARBON ANALYSIS - STUCCS - 1976

SAMPLE TYPE : PAR
 SAMPLE CODE : AQWF PERIOD : FALL
 LOCATION : STATION - 3 LINE -II

HEXANE ELUATE

BENZENE ELUATE

RETENTION INDEX	CONCENTRATION (UG./G.)	RETENTION INDEX	CONCENTRATION (UG./G.)
1670	.00011	3050	.00692
1700	.00011	3180	.00396
1800	.00011		
2700	.00071		
2800	.00076		
2900	.00223		
3000	.00161		
3100	.00304		
3200	.00155		
3300	.00171		
3400	.00080		
3500	.00027		
TOTAL	.01301	TOTAL	.01088

TABLE 4.39

HEAVY HYDROCARBON ANALYSIS - STUCCS - 1976

SAMPLE TYPE : PAR

SAMPLE CODE : AQWH

PERIOD : FALL

LOCATION : STATION - 3 LINE -II

HEXANE ELUATE

BENZENE ELUATE

RETENTION INDEX	CONCENTRATION (UG./G.)	RETENTION INDEX	CONCENTRATION (UG./G.)
1660	.00271	2010	.00037
1700	.00288	2410	.00068
1770	.00468	2610	.00185
1800	.00530	3420	.00378
1900	.00602		
2000	.00617		
2100	.01270		
2200	.02430		
2300	.03170		
2400	.04140		
2500	.03630		
2600	.03920		
2700	.06110		
2800	.06380		
2900	.04630		
3000	.05730		
3100	.04430		
3200	.08270		
3300	.03370		
3400	.03090		
TOTAL	.63346	TOTAL	.00668

TABLE 4.40

HEAVY HYDROCARBON ANALYSIS - STUCS - 1976

SAMPLE TYPE : PAR

SAMPLE CODE : AUUN

PERIOD : NOVEMBER

LOCATION : STATION - 1 LINE -II

HEXANE ELUATE

BENZENE ELUATE

RETENTION INDEX	CONCENTRATION (UG./G.)	RETENTION INDEX	CONCENTRATION (UG./G.)
1800	.00695	2015	.06470
2200	.00300	2250	.21200
2300	.01330	2450	.09070
2400	.02420	2820	.03100
2500	.03080	3080	.09480
2630	.05600		
2700	.03180		
2800	.02830		
2900	.02390		
3100	.02410		
3200	.32000		
TOTAL	.56295	TOTAL	.51320

TABLE 4.41

HEAVY HYDROCARBON ANALYSIS - STUCCS - 1976

SAMPLE TYPE : PAR
SAMPLE CODE : AUYE PERIOD : NOVEMBER
LOCATION : STATION - 1 LINE -II

HEXANE ELUATE		BENZENE ELUATE	
RETENTION INDEX	CONCENTRATION (UG./G.)	RETENTION INDEX	CONCENTRATION (UG./G.)
2830	.02040	2880	.25100
TOTAL	.02040	TOTAL	.25100

TABLE 4.42

HEAVY HYDROCARBON ANALYSIS - STUCCS - 1976

SAMPLE TYPE : PAR

SAMPLE CODE : AUYG

PERIOD : NOVEMBER

LOCATION : STATION - 1 LINE -II

HEXANE ELUATE

BENZENE ELUATE

RETENTION INDEX	CONCENTRATION (UG./G.)	RETENTION INDEX	CONCENTRATION (UG./G.)
2630	.00130	2200	.15900
2730	.00134	2220	.07510
2830	.00087	2410	.06040
2930	.00299	2450	.10400
		2800	.09830
		3070	.24800
		3170	.05740
TOTAL	.00650	TOTAL	.80220

TABLE 4.43

HEAVY HYDROCARBON ANALYSIS - STOCS - 1976

SAMPLE TYPE : PAR
 SAMPLE CODE : AUWC PERIOD : NOVEMBER
 LOCATION : STATION - 2 LINE -II

HEXANE ELUATE

BENZENE ELUATE

RETENTION INDEX	CONCENTRATION (UG./G.)	RETENTION INDEX	CONCENTRATION (UG./G.)
-----	-----	-----	-----
3070	.00502	2010	.00012
		2610	.00035
TOTAL	.00502	TOTAL	.00047

TABLE 4.44

HEAVY HYDROCARBON ANALYSIS - STOCS - 1976

SAMPLE TYPE : PAR

SAMPLE CODE : AUXU

PERIOD : NOVEMBER

LOCATION : STATION - 3 LINE -II

HEXANE ELUATE

BENZENE ELUATE

RETENTION INDEX	CONCENTRATION (UG./G.)	RETENTION INDEX	CONCENTRATION (UG./G.)
1660	.00018	2695	.09970
1700	.00022	2815	1.18000
1780	.00014	3230	.31100
1800	.00016	3315	.24600
1900	.00148		
2000	.00072		
2100	.00108		
2200	.00200		
2300	.00151		
2400	.00409		
2500	.00375		
2600	.01530		
2620	.01770		
2700	.00313		
2730	.00296		
2800	.00357		
2860	1.26000		
3130	.00774		
3170	.06880		
3200	.01640		
3260	.22000		
3340	.06080		
TOTAL	1.69173	TOTAL	1.83670

TABLE 4.45

HEAVY HYDROCARBON ANALYSIS - STUCCS - 1976

SAMPLE TYPE : PAR
 SAMPLE CODE : AVRY PERIOD : DECEMBER
 LOCATION : STATION - 1 LINE - II

HEXANE ELUATE		BENZENE ELUATE	
RETENTION INDEX	CONCENTRATION (UG./G.)	RETENTION INDEX	CONCENTRATION (UG./G.)
1870	.00281	2015	.01140
2260	.00151	2205	.09440
2300	.00139	2240	.06890
2400	.00405	2350	.02340
2500	.00395	2410	.01120
2600	.00166	2435	.06000
2700	.00115	2820	.00685
2800	.00060	3070	.01360
2900	.00052	3180	.01880
2950	.00106	3210	.02490
3000	.00112		
3080	.00124		
3100	.00183		
3200	.00144		
TOTAL	.02433	TOTAL	.33345

TABLE 4.46

HEAVY HYDROCARBON ANALYSIS - STOCS - 1976

SAMPLE TYPE : PAR

SAMPLE CODE : AVTR

PERIOD : DECEMBER

LOCATION : STATION - 2 LINE -II

HEXANE ELUATE

BENZENE ELUATE

RETENTION INDEX	CONCENTRATION (UG./G.)	RETENTION INDEX	CONCENTRATION (UG./G.)
1880	.01500	3160	.06150
2130	.11600		
2200	.01130		
2300	.05050		
2400	.09340		
2500	.11500		
2600	.11900		
2700	.09520		
2800	.07880		
2900	.05800		
3000	.03180		
3100	.02260		
3200	.71000		
TOTAL	1.51660	TOTAL	.06150

TABLE 4.47

HEAVY HYDROCARBON ANALYSIS - STUCCS - 1976

SAMPLE TYPE : PAR
 SAMPLE CODE : AVVN PERIOD : DECEMBER
 LOCATION : STATION - 3 LINE -II

HEXANE ELUATE

BENZENE ELUATE

RETENTION INDEX	CONCENTRATION (UG./G.)	RETENTION INDEX	CONCENTRATION (UG./G.)
1670	.00118	2215	.02280
1700	.00096	2240	.01280
1780	.00108	2390	.00786
1800	.00097	2460	.02300
1900	.00108		
2000	.00033		
2100	.00033		
2700	.00214		
2800	.00072		
2900	.00736		
3000	.00598		
3100	.01140		
3200	.00155		
3300	.00263		
3400	.00080		
3500	.00109		
TOTAL	.03960	TOTAL	.06640

TABLE 4.48

HEAVY HYDROCARBON ANALYSIS - STUCCS - 1976

SAMPLE TYPE : PAR
 SAMPLE CODE : AVVX
 LOCATION : STATION - 3 LINE -II PERIOD : DECEMBER

HEXANE ELUATE

BENZENE ELUATE

RETENTION INDEX	CONCENTRATION (UG./G.)	RETENTION INDEX	CONCENTRATION (UG./G.)
2700	.00335	2200	.03670
2800	.00366	2300	.03750
2900	.00488	2400	.07940
3000	.00381	2500	.09350
3100	.00803	2600	.10300
3180	.00629	2700	.54400
3200	.01130	2800	.08530
3300	.01380	2900	.06190
3400	.01150	3000	.03070
		3100	.01290
		3180	.29400
		3200	.33200
TOTAL	.06662	TOTAL	1.71090

TABLE 4.49

HEAVY HYDROCARBON ANALYSIS - STUCCS - 1976

SAMPLE TYPE : PAR
 SAMPLE CODE : AVVZ
 LOCATION : STATION - 3 LINE -II PERIOD : DECEMBER

HEXANE ELUATE

BENZENE ELUATE

RETENTION INDEX	CONCENTRATION (UG./G.)	RETENTION INDEX	CONCENTRATION (UG./G.)
2600	.00030	2005	.03380
2700	.00080	2215	.22800
2800	.00230	2240	.11200
2900	.00480	2425	.08530
3000	.00480	2460	.14900
3100	.00520		
3200	.00340		
3300	.00250		
3400	.00250		
3500	.00340		
3600	.00210		
TOTAL	.03210	TOTAL	.60810

TABLE 4.50

HEAVY HYDROCARBON ANALYSIS - STUCCS - 1976

SAMPLE TYPE : PAR
 SAMPLE CODE : AGXA PERIOD : WINTER
 LOCATION : STATION - 1 LINE -III

HEXANE ELUATE

BENZENE ELUATE

RETENTION INDEX	CONCENTRATION (UG./G.)	RETENTION INDEX	CONCENTRATION (UG./G.)
1670	.00171	2380	.00590
1700	.00342	2420	.00236
1780	.00095	2810	.00166
1800	.00570	2830	.01480
1900	.00684		
2000	.00418		
2100	.00095		
2200	.02360		
2300	.00152		
2400	.00114		
2500	.00418		
2600	.00209		
2700	.00361		
2800	.00760		
2900	.01750		
3000	.02110		
3100	.02740		
3200	.01840		
3300	.01350		
3400	.00551		
3500	.00209		
3600	.00570		
3700	.00931		
TOTAL	.18800	TOTAL	.02472

TABLE 4.51

HEAVY HYDROCARBON ANALYSIS - STUCS - 1976

SAMPLE TYPE : PAR
 SAMPLE CODE : AGYR PERIOD : WINTER
 LOCATION : STATION - 2 LINE -III

HEXANE ELUATE		BENZENE ELUATE	
RETENTION INDEX	CONCENTRATION (UG./G.)	RETENTION INDEX	CONCENTRATION (UG./G.)
1670	.00056	2350	.00669
1700	.00184	2587	.04380
1780	.00040	2650	.01050
1840	.00368	2781	.03960
1900	.00448	3084	.04000
2000	.00280		
2100	.00112		
2200	.01590		
2300	.00112		
2400	.00096		
2500	.00280		
2600	.00208		
2700	.00152		
2800	.00160		
2900	.00472		
3000	.00448		
3100	.00584		
3200	.00320		
3300	.00272		
3400	.00144		
3500	.00232		
3600	.00624		
3700	.00664		
TOTAL	.07846	TOTAL	.14059

TABLE 4.52

HEAVY HYDROCARBON ANALYSIS - STUCCS - 1976

SAMPLE TYPE : PAR
 SAMPLE CODE : AGJA PERIOD : WINTER
 LOCATION : STATION - 1 LINE -IV

HEXANE ELUATE		BENZENE ELUATE	
RETENTION INDEX	CONCENTRATION (UG./G.)	RETENTION INDEX	CONCENTRATION (UG./G.)
1670	.00042	2080	.00104
1700	.00252	2460	.00520
1780	.00042	2700	.00041
1800	.00483	2710	.00121
1900	.00609	2980	.00069
2000	.00371	3010	.00445
2100	.00140	3070	1.42000
2200	.01870		
2300	.00160		
2400	.00126		
2500	.00231		
2600	.00126		
2700	.00175		
2800	.00112		
2900	.00301		
3000	.00175		
3100	.00203		
3200	.00004		
3300	.00126		
3400	.00147		
3500	.00175		
3600	.00574		
3700	.00546		
TOTAL	.06998	TOTAL	1.43300

TABLE 4.53

HEAVY HYDROCARBON ANALYSIS - STUCCS - 1976

SAMPLE TYPE : PAR
 SAMPLE CODE : AGGK PERIOD : WINTER
 LOCATION : STATION - 2 LINE -IV

HEXANE ELUATE

BENZENE ELUATE

RETENTION INDEX	CONCENTRATION (UG./G.)	RETENTION INDEX	CONCENTRATION (UG./G.)
1670	.00039	2460	.00364
1700	.00221	2490	.02650
1780	.00039	2640	.00255
1800	.00429	2790	.01330
1900	.00572	3090	.03580
2000	.00416	3230	.00141
2100	.00455		
2200	.02350		
2300	.00624		
2400	.00559		
2500	.00663		
2600	.00689		
2700	.00845		
2800	.00832		
2900	.00936		
3000	.00598		
3100	.00715		
3200	.00312		
3300	.00273		
3400	.00130		
3500	.00182		
3600	.00273		
3700	.00676		
TOTAL	.12828	TOTAL	.08320

TABLE 4.54

HEAVY HYDROCARBON ANALYSIS - STOCS - 1976

SAMPLE TYPE : PAR
 SAMPLE CODE : AGAM PERIOD : WINTER
 LOCATION : STATION - 3 LINE -III

HEXANE ELUATE

BENZENE ELUATE

RETENTION INDEX	CONCENTRATION (UG./G.)	RETENTION INDEX	CONCENTRATION (UG./G.)
1670	.00040	2400	.03620
1700	.00300	2555	.00583
1780	.00070	2767	.00656
1800	.00510	3007	.01550
1900	.00650	3167	.00655
2000	.00410		
2100	.00200		
2200	.02160		
2300	.00140		
2400	.00120		
2500	.00290		
2600	.00280		
2700	.00220		
2800	.00280		
2900	.00620		
3000	.00550		
3100	.00600		
3200	.00260		
3300	.00300		
3400	.00240		
3500	.00270		
3600	.00590		
3700	.00780		
TOTAL	.09880	TOTAL	.07064

TABLE 4.55

HEAVY HYDROCARBON ANALYSIS - STOCS - 1976

SAMPLE TYPE : PAR
 SAMPLE CODE : ALIF PERIOD : SPRING
 LOCATION : STATION - 1 LINE -III

HEXANE ELUATE

BENZENE ELUATE

RETENTION INDEX	CONCENTRATION (UG./G.)	RETENTION INDEX	CONCENTRATION (UG./G.)
1900	.00119	2208	.01810
2000	.00004	2300	.02840
2100	.00004	2792	.02120
2200	.00070	2833	.00421
2300	.00441	3067	.02130
2400	.00084		
2500	.00126		
2600	.00196		
2700	.00462		
2800	.00735		
2900	.00931		
3000	.00875		
3100	.01050		
3200	.00728		
3300	.00621		
3400	.00273		
3500	.00112		
3600	.00161		
TOTAL	.06992	TOTAL	.09321

TABLE 4.56

HEAVY HYDROCARBON ANALYSIS - SIOCS - 1976

SAMPLE TYPE : PAR
 SAMPLE CODE : ALJV PERIOD : SPRING
 LOCATION : STATION - 2 LINE -III

HEXANE ELUATE		BENZENE ELUATE	
RETENTION INDEX	CONCENTRATION (UG./G.)	RETENTION INDEX	CONCENTRATION (UG./G.)
2200	.00002	2550	.00411
2300	.00002	2575	.02860
2400	.00093	2633	.02350
2500	.00240	3267	.00785
2600	.00267	3642	.04280
2700	.00321		
2800	.00375		
2900	.00489		
3000	.00441		
3100	.00333		
3200	.00174		
3300	.00108		
3400	.00159		
3500	.00002		
3600	.00002		
TOTAL	.03008	TOTAL	.10686

TABLE 4.57

HEAVY HYDROCARBON ANALYSIS - STOCS - 1976

SAMPLE TYPE : PAR

SAMPLE CODE : ALLN

PERIOD : SPRING

LOCATION : STATION - 3 LINE -III

HEXANE ELUATE

BENZENE ELUATE

RETENTION INDEX	CONCENTRATION (UG./G.)	RETENTION INDEX	CONCENTRATION (UG./G.)
2500	.00001	2408	.00181
2600	.00001	2525	.00345
2700	.00035	2592	.01030
2800	.00053	2642	.00438
2900	.00105	3292	.00243
3000	.00175	3325	.01490
3100	.00203	3642	.00988
3200	.00210		
3300	.00140		
3400	.00069		
3500	.00001		
TOTAL	.00993	TOTAL	.04715

TABLE 4.58

HEAVY HYDROCARBON ANALYSIS - STUCS - 1976

SAMPLE TYPE : PAR
 SAMPLE CODE : AOAD PERIOD : SPRING
 LOCATION : STATION - 3 LINE -III

HEXANE ELUATE		BENZENE ELUATE	
RETENTION INDEX	CONCENTRATION (UG./G.)	RETENTION INDEX	CONCENTRATION (UG./G.)
2200	.04160	2493	.01520
2300	.07120	2529	.00569
2400	.13400	2564	.01100
2500	.09980	2900	.18600
2550	.03120	3007	18.50000
2600	.07990		
2700	.08590		
2800	.05970		
2900	.10600		
3000	.04660		
3045	.08580		
3100	.04330		
3200	.04350		
3300	.04040		
3400	.03720		
3500	.03390		
TOTAL	1.04000	TOTAL	18.71789

TABLE 4.59

HEAVY HYDROCARBON ANALYSIS - STOCS - 1976

SAMPLE TYPE : PAR
 SAMPLE CODE : AGLU PERIOD : FALL
 LOCATION : STATION - 1 LINE -III

HEXANE ELUATE

BENZENE ELUATE

RETENTION INDEX	CONCENTRATION (UG./G.)	RETENTION INDEX	CONCENTRATION (UG./G.)
1500	.00054	3070	.01690
1670	.00021		
1700	.00331		
1800	.00011		
1900	.00014		
2000	.00234		
2050	.01700		
2100	.00036		
2150	.00144		
2200	.01270		
2700	.00012		
2800	.00018		
2900	.00074		
3000	.00037		
3100	.00038		
3200	.00026		
3300	.00072		
3400	.00040		
TOTAL	.04132	TOTAL	.01690

TABLE 4.60

HEAVY HYDROCARBON ANALYSIS - STOCS - 1976

SAMPLE TYPE : PAR
 SAMPLE CODE : AQNA PERIOD : FALL
 LOCATION : STATION - 2 LINE -III

HEXANE ELUATE -----		BENZENE ELUATE -----	
RETENTION INDEX -----	CONCENTRATION (UG./G.) -----	RETENTION INDEX -----	CONCENTRATION (UG./G.) -----
1700	.00011	2010	.00023
1900	.00011	2410	.00024
2700	.00024	2610	.00038
2800	.00019	3420	.00221
2900	.00074		
3000	.00100		
3100	.00089		
3200	.00077		
3300	.00105		
3400	.00054		
3500	.00027		
TOTAL	.00591	TOTAL	.00306

TABLE 4.61

HEAVY HYDROCARBON ANALYSIS - STUCCS - 1976

SAMPLE TYPE : PAR
 SAMPLE CODE : AQ06 PERIOD : FALL
 LOCATION : STATION - 3 LINE -III

HEXANE ELUATE

BENZENE ELUATE

RETENTION INDEX	CONCENTRATION (UG./G.)	RETENTION INDEX	CONCENTRATION (UG./G.)
2200	.00006	3070	.01730
2300	.00006	3180	.02790
2400	.00006		
2500	.00006		
2600	.00012		
2700	.00034		
2800	.00038		
2900	.00110		
3000	.00168		
3100	.00146		
3200	.00129		
3300	.00131		
3400	.00067		
3600	.00028		
TOTAL	.00887	TOTAL	.04520

TABLE 4.62

HEAVY HYDROCARBON ANALYSIS - STOCS - 1976

SAMPLE TYPE : PAR
 SAMPLE CODE : AQWQ PERIOD : FALL
 LOCATION : STATION - 3 LINE -III

HEXANE ELUATE -----		BENZENE ELUATE -----	
RETENTION INDEX -----	CONCENTRATION (UG./G.) -----	RETENTION INDEX -----	CONCENTRATION (UG./G.) -----
2300	.00023	2800	.00142
2400	.00023	3070	.00768
2500	.00023		
2600	.00023		
2700	.00071		
2800	.00036		
2900	.00098		
3000	.00075		
3100	.00025		
TOTAL	.00397	TOTAL	.00910

TABLE 4.63

HEAVY HYDROCARBON ANALYSIS - STOCS - 1976

SAMPLE TYPE : PAR
 SAMPLE CODE : AQWS PERIOD : FALL
 LOCATION : STATION - 3 LINE -III

HEXANE ELUATE

BENZENE ELUATE

RETENTION INDEX	CONCENTRATION (UG./G.)	RETENTION INDEX	CONCENTRATION (UG./G.)
1500	.00207	2010	.00090
1600	.00034	2410	.00211
1670	.00031	2610	.00129
1700	.00089	2630	.00086
1780	.00019		
1800	.00066		
1900	.00476		
2000	.00099		
2100	.00167		
2200	.00552		
2300	.00904		
2400	.04380		
2500	.05780		
2600	.05950		
2700	.14100		
2800	.03900		
2875	.00119		
2900	.03460		
2975	.00534		
3000	.00704		
3057	.01620		
3100	.03200		
3169	.01810		
3200	.04040		
3300	.19100		
3400	.01590		
3445	.00337		
3500	.01030		
3600	.00682		
TOTAL	.74980	TOTAL	.00516

TABLE 4.64

HEAVY HYDROCARBON ANALYSIS - STOCS - 1976

SAMPLE TYPE : PAR
 SAMPLE CODE : AGIC PERIOD : WINTER
 LOCATION : STATION - 3 LINE -IV

HEXANE ELUATE

BENZENE ELUATE

RETENTION INDEX	CONCENTRATION (UG./G.)	RETENTION INDEX	CONCENTRATION (UG./G.)
1670	.00078	2480	.00361
1700	.00299	2520	.01150
1780	.00052	2710	.00530
1800	.00507	2820	.01640
1900	.00624	3030	.01040
2000	.00377	3290	.00389
2100	.00273		
2200	.01990		
2300	.00130		
2400	.00078		
2500	.00312		
2600	.00221		
2700	.00780		
2800	.00819		
2900	.00845		
3000	.00884		
3100	.01040		
3200	.00676		
3300	.00494		
3400	.00234		
3500	.00312		
3600	.00715		
3700	.00715		
TOTAL	.12455	TOTAL	.05110

TABLE 4.65

HEAVY HYDROCARBON ANALYSIS - STICS - 1976

SAMPLE TYPE : PAR

SAMPLE CODE : ALNK

PERIOD : SPRING

LOCATION : STATION - 1 LINE -IV

HEXANE ELUATE

BENZENE ELUATE

RETENTION INDEX	CONCENTRATION (UG./G.)	RETENTION INDEX	CONCENTRATION (UG./G.)
1900	.00004	2200	.00918
2000	.00004	2300	.00601
2100	.00098	2800	.00667
2200	.00112	3017	.00932
2300	.00098	3067	2.65000
2400	.00112		
2500	.00245		
2600	.00287		
2700	.00581		
2800	.00826		
2900	.01160		
3000	.01070		
3100	.00910		
3200	.00553		
3300	.00413		
3400	.00301		
3500	.00245		
TOTAL	.07019	TOTAL	2.68118

TABLE 4.66

HEAVY HYDROCARBON ANALYSIS - STUCS - 1976

SAMPLE TYPE : PAR
 SAMPLE CODE : ALUZ PERIOD : SPRING
 LOCATION : STATION - 2 LINE -IV

HEXANE ELUATE		BENZENE ELUATE	
RETENTION INDEX	CONCENTRATION (UG./G.)	RETENTION INDEX	CONCENTRATION (UG./G.)
1900	.00002	2108	.00266
2000	.00039	2192	.00538
2100	.00072	2292	.00958
2200	.00030	2492	.01390
2300	.00051	2550	.00659
2400	.00051	2550	.01550
2500	.00114	2708	.00531
2600	.00153	2808	.01870
2700	.00342	3067	.04270
2800	.00315		
2900	.00630		
3000	.00378		
3100	.00429		
3200	.00153		
3300	.00102		
3400	.00153		
3500	.00002		
TOTAL	.03016	TOTAL	.12032

TABLE 4.67

HEAVY HYDROCARBON ANALYSIS - STUCCS - 1976

SAMPLE TYPE : PAR
 SAMPLE CODE : ALQR PERIOD : SPRING
 LOCATION : STATION - 3 LINE -IV

HEXANE ELUATE		BENZENE ELUATE	
RETENTION INDEX	CONCENTRATION (UG./G.)	RETENTION INDEX	CONCENTRATION (UG./G.)
2200	.00001	2408	.00212
2300	.00141	2525	.00287
2400	.00001	2584	.01370
2500	.00028	2633	.00363
2600	.00018	2992	.00527
2700	.00212	3292	.00257
2800	.00025	3325	.03470
2900	.00043	3642	.02550
3000	.00063		
3100	.00109		
3200	.00137		
3300	.00141		
3400	.00039		
3500	.00036		
TOTAL	.00994	TOTAL	.09036

TABLE 4.68

HEAVY HYDROCARBON ANALYSIS - STUCCS - 1976

SAMPLE TYPE : PAR
 SAMPLE CODE : ANQF PERIOD : FALL
 LOCATION : STATION - 1 LINE -IV

HEXANE ELUATE

BENZENE ELUATE

RETENTION INDEX	CONCENTRATION (UG./G.)	RETENTION INDEX	CONCENTRATION (UG./G.)
1530	.00476	3070	.02160
1600	.00475	3180	.00465
1670	.00068	3290	.01580
1700	.00068		
1800	.00067		
1900	.00087		
2000	.00108		
2100	.00123		
2200	.00098		
2300	.00082		
2400	.00147		
2500	.00198		
2600	.00169		
2700	.00288		
2800	.00382		
2900	.00673		
3000	.00954		
3100	.01070		
3200	.00828		
3300	.00588		
3400	.00321		
TOTAL	.06870	TOTAL	.04205

TABLE 4.69

HEAVY HYDROCARBON ANALYSIS - STUCS - 1976

SAMPLE TYPE : PAR
 SAMPLE CODE : AQRR PERIOD : FALL
 LOCATION : STATION - 2 LINE -IV

HEXANE ELUATE		BENZENE ELUATE	
RETENTION INDEX	CONCENTRATION (UG./G.)	RETENTION INDEX	CONCENTRATION (UG./G.)
1670	.00119	2855	.03210
1700	.00085	3070	.02910
1780	.00027		
1800	.00067		
1900	.00067		
2000	.00067		
2100	.00085		
2200	.00103		
2300	.00069		
2400	.00035		
2500	.00091		
2600	.00037		
2700	.00077		
2800	.00120		
2900	.00373		
3000	.00474		
3100	.00539		
3200	.00376		
3300	.00295		
3400	.00206		
3500	.00108		
TOTAL	.03420	TOTAL	.06120

TABLE 4.70

HEAVY HYDROCARBON ANALYSIS - STUCS - 1976

SAMPLE TYPE : PAR
 SAMPLE CODE : AQTH PERIOD : FALL
 LOCATION : STATION - 3 LINE -IV

HEXANE ELUATE		BENZENE ELUATE	
RETENTION INDEX	CONCENTRATION (UG./G.)	RETENTION INDEX	CONCENTRATION (UG./G.)
-----	-----	-----	-----
1500	.00005	1880	.00207
1600	.00016	2180	.00144
1700	.00016	3070	.05860
1800	.00043		
1900	.00005		
2700	.00048		
2800	.00042		
2900	.00110		
3000	.00100		
3100	.00057		
3200	.00065		
3300	.00039		
3400	.00027		
TOTAL	.00573	TOTAL	.06211

TABLE 4.71

HEAVY HYDROCARBON ANALYSIS - STOCS - 1976

SAMPLE TYPE : PAR

SAMPLE CODE : AQXD

PERIOD : FALL

LOCATION : STATION - 3 LINE -IV

HEXANE ELUATE

BENZENE ELUATE

RETENTION INDEX	CONCENTRATION (UG./G.)	RETENTION INDEX	CONCENTRATION (UG./G.)
1670	.00085	3070	.14900
2200	.00103		
2300	.00087		
2400	.00053		
2500	.00091		
2600	.00037		
2700	.00058		
2800	.00100		
2900	.00166		
3000	.00194		
3100	.00225		
3200	.00188		
3300	.00147		
3400	.00412		
TOTAL	.01946	TOTAL	.14900

TABLE 4.72

HEAVY HYDROCARBON ANALYSIS - STOCS - 1976

SAMPLE TYPE : PAR

SAMPLE CODE : AQXF

PERIOD : FALL

LOCATION : STATION - 3 LINE -IV

HEXANE ELUATE		BENZENE ELUATE	
RETENTION INDEX	CONCENTRATION (UG./G.)	RETENTION INDEX	CONCENTRATION (UG./G.)
1600	.00051	2050	.04450
1670	.00119	3205	.16500
1700	.00068		
1780	.00050		
1800	.00118		
1980	.00121		
2000	.00118		
2100	.00068		
2200	.00103		
2300	.00087		
2400	.00089		
2500	.00267		
2600	.00117		
2700	.00263		
2800	.00389		
2900	.00874		
3000	.01040		
3100	.01350		
3200	.01320		
3300	.01520		
3400	.01540		
3500	.00860		
3600	.00538		
TOTAL	.11070	TOTAL	.20950

TABLE 5

WATER-PARTICULATE-RATIOS OF INDIVIDUAL HYDROCARBONS
AND AVERAGE OEP VALUES

Explanation of Table 5:

Column 1 Code = unique sample identifier
Column 2 Locat. = station/transect
Column 3 PR/PH = Pristane/Phytane ratio
Column 4 PR/C-17 = Pristane/C-17 ratio
Column 5 PH/C-18 = Phytane/C-18 ratio
Column 6 OEP = Odd-Even Preference indice value

TABLE 5

HEAVY HYDROCARBON ANALYSES - STUCCS - 1976

SAMPLE TYPE : PAR

PERIOD : WINTER

CODE	LUCAT.	PR / PH	PR/C-17	PH/C-18	OEP
----	-----	-----	-----	-----	-----
AGMA	1 / I	0	0	.14	5.02
AGND	2 / I	.50	.18	.10	1.07
AGPJ	3 / I	2.37	.63	.14	1.30
AGRM	1 / II	.67	.18	.13	.96
AGTD	2 / II	1.75	.70	.24	.93
AGUX	3 / II	1.50	.25	.05	1.03
AGXA	1 / III	1.80	.50	.17	.98
AGYR	2 / III	1.40	.30	.11	1.00
AGAM	3 / III	.57	.13	.14	.95
AGJA	1 / IV	1.00	.17	.09	1.35
AGGK	2 / IV	1.00	.18	.09	1.06
AGIC	3 / IV	1.50	.26	.10	1.04

SAMPLE TYPE : PAR

PERIOD : MARCH

CODE	LUCAT.	PR / PH	PR/C-17	PH/C-18	OEP
----	-----	-----	-----	-----	-----
AJKF	1 / II	0	0	0	.99
AJMB	2 / II	0	0	0	1.09
AJNZ	3 / II	0	0	0	1.15

SAMPLE TYPE : PAR

PERIOD : APRIL

CODE	LUCAT.	PR / PH	PR/C-17	PH/C-18	OEP
----	-----	-----	-----	-----	-----
AKDG	1 / II	0	0	0	1.01
AKFH	2 / II	0	0	0	1.26
AKHG	3 / II	0	0	0	2.31

TABLE 5 Cont.'d

HEAVY HYDROCARBON ANALYSES - STUCCS - 1976

SAMPLE TYPE : PAR

PERIOD : SPRING

CODE	LUCAT.	PR / PH	PR/C-17	PH/C-18	UEP
AKXC	1 / I	0	0	0	.87
AKZF	2 / I	0	0	0	1.09
ALAY	3 / I	0	0	0	1.46
AJAA	3 / I	0	0	0	1.21
ALCV	1 / II	0	0	0	.94
ALEN	2 / II	0	0	0	1.01
ALGI	3 / II	0	0	0	1.13
ANZX	3 / II	0	0	0	1.13
ALIF	1 / III	0	0	0	1.77
ALJV	2 / III	0	0	0	1.00
ALLN	3 / III	0	0	0	1.04
AUAD	3 / III	0	0	0	1.20
ALNK	1 / IV	0	0	0	1.16
ALUZ	2 / IV	0	0	0	1.49
ALGR	3 / IV	0	0	0	5.96

SAMPLE TYPE : PAR

PERIOD : JULY

CODE	LUCAT.	PR / PH	PR/C-17	PH/C-18	UEP
AGCB	1 / II	2.47	.55	.26	.91
AODY	2 / II	1.00	.01	.00	.64
AQEH	3 / II	1.00	.02	.01	.85
AQFT	3 / II	1.00	.01	.01	1.72

SAMPLE TYPE : PAR

PERIOD : AUGUST

CODE	LUCAT.	PR / PH	PR/C-17	PH/C-18	UEP
APEG	1 / II	.14	.32	14.04	1.60
APFV	2 / II	1.00	.02	.01	1.30
APHL	3 / II	1.00	.02	.01	1.35
APHV	3 / II	1.00	.01	.00	1.93
APHX	3 / II	0	0	0	0

TABLE 5 Cont.'d

HEAVY HYDROCARBON ANALYSES - STOCS - 1976

SAMPLE TYPE : PAR

PERIOD : FALL

CODE	LOCAT.	PR / PH	PR/C-17	PH/C-18	OEP
AQCG	1 / I	4.98	.85	.46	1.42
AQDS	2 / I	6.00	2.00	.34	.93
AQFI	3 / I	1.00	1.00	.21	1.28
AQGX	1 / II	0	.16	0	1.40
AQIJ	2 / II	0	0	0	1.16
AQJZ	3 / II	0	2.00	0	1.01
AQWF	3 / II	0	1.00	0	1.65
AQWH	3 / II	0	0	0	.90
AQLD	1 / III	0	.06	0	.07
AQNA	2 / III	0	0	0	1.16
AQUQ	3 / III	0	0	0	1.14
AGWQ	3 / III	0	0	0	1.84
AGWS	3 / III	1.63	.35	.29	2.53
AQWF	1 / IV	0	1.00	0	1.10
AGRR	2 / IV	4.41	1.40	.40	1.30
ANTH	3 / IV	0	0	0	.45
ANXD	3 / IV	0	0	0	1.26
AXXF	3 / IV	2.38	1.75	.42	1.35

SAMPLE TYPE : PAR

PERIOD : NOVEMBER

CODE	LOCAT.	PR / PH	PR/C-17	PH/C-18	OEP
AUUN	1 / II	0	0	0	0
AUYE	1 / II	0	0	0	0
AUYG	1 / II	0	0	0	0
AUWC	2 / II	0	0	0	0
AUXU	3 / II	0	0	.88	.96

SAMPLE TYPE : PAR

PERIOD : DECEMBER

CODE	LOCAT.	PR / PH	PR/C-17	PH/C-18	OEP
AVRY	2 / I	0	0	0	1.13
AVTR	2 / II	0	0	0	.88
AVVV	3 / II	1.09	1.23	1.11	1.49
AVVX	3 / II	0	0	0	1.22
AVVZ	3 / II	0	0	0	1.14

FIGURE 3

WATER-PARTICULATE-ODD-EVEN PREFERENCE INDICE (OEP) VALUES

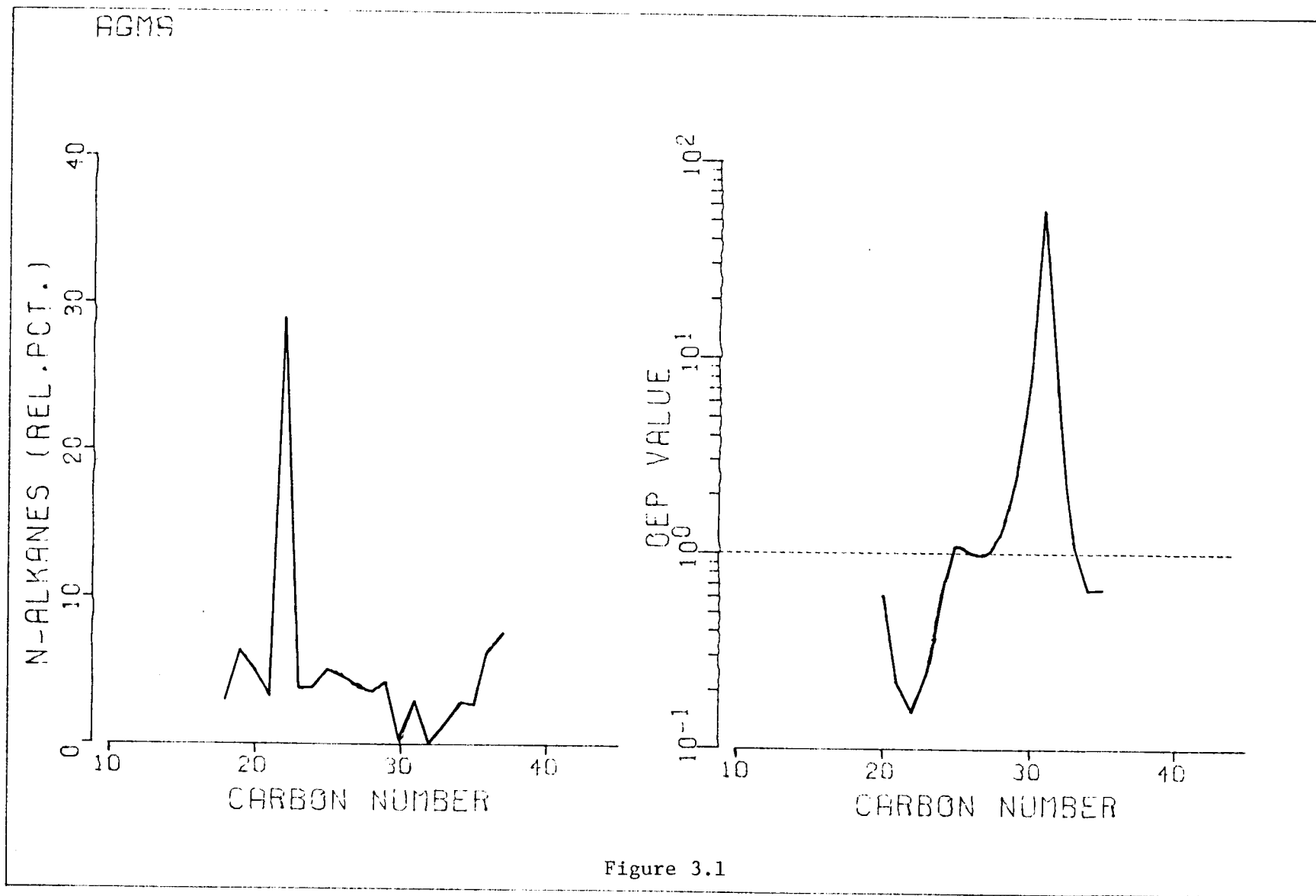


Figure 3.1

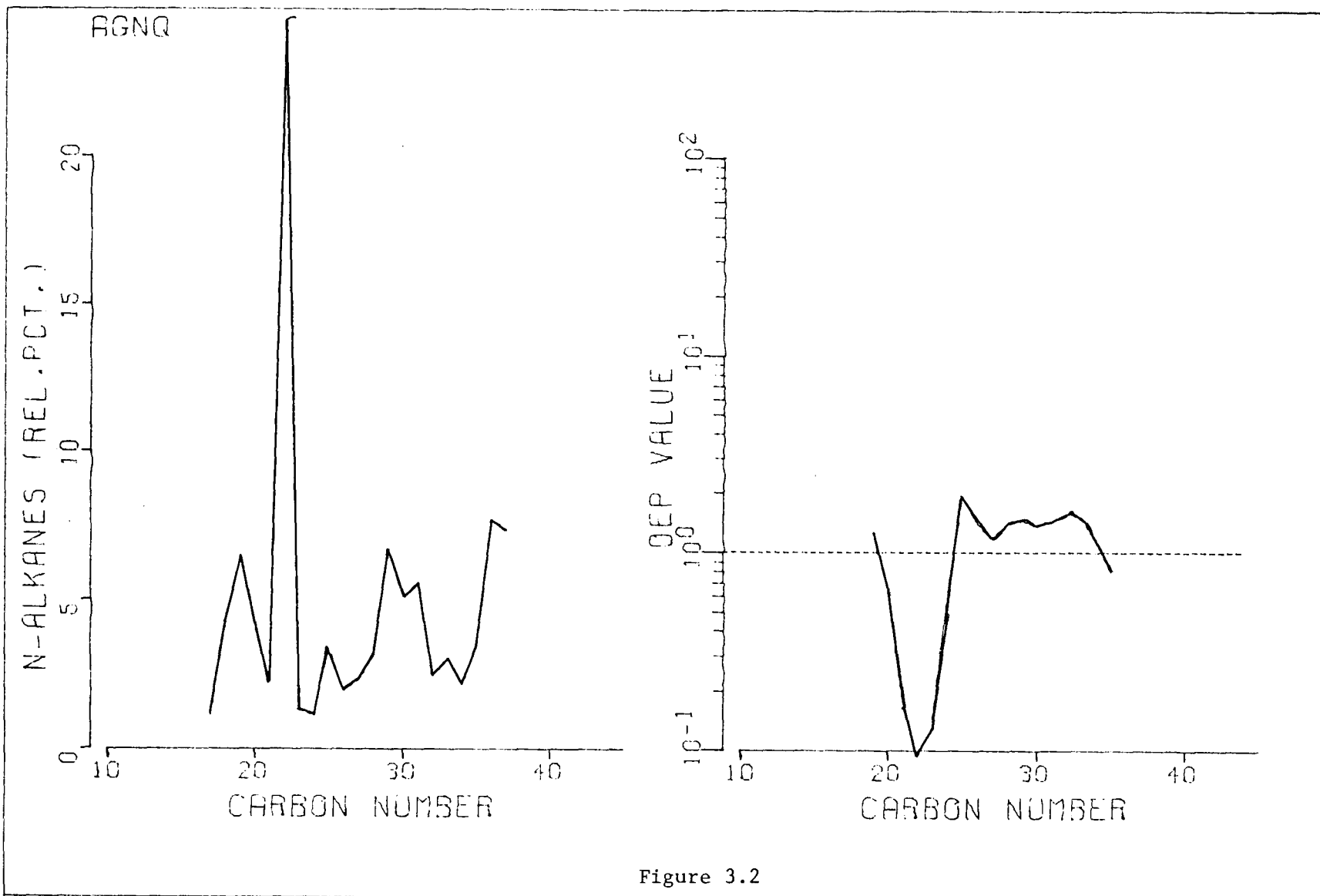


Figure 3.2

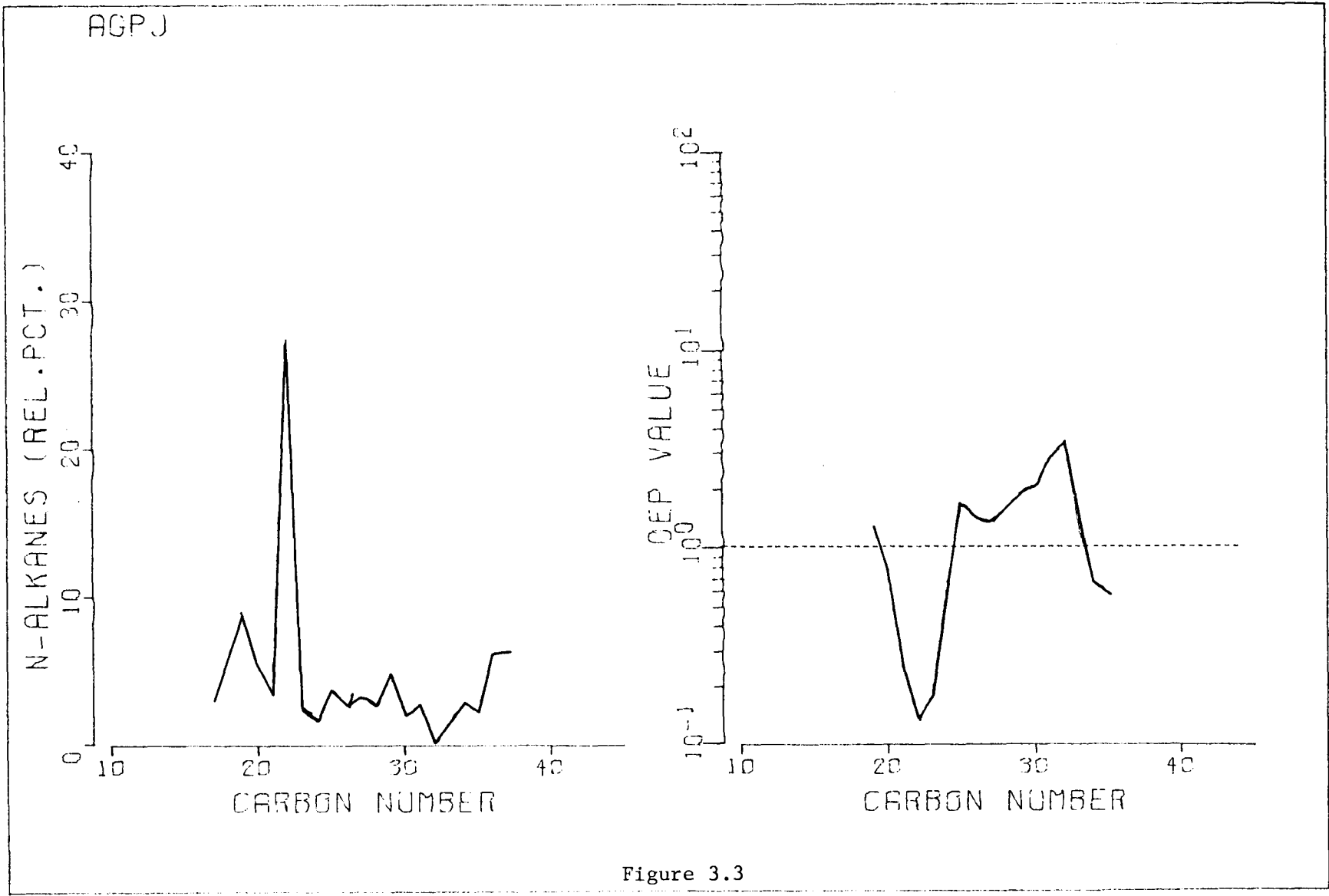


Figure 3.3

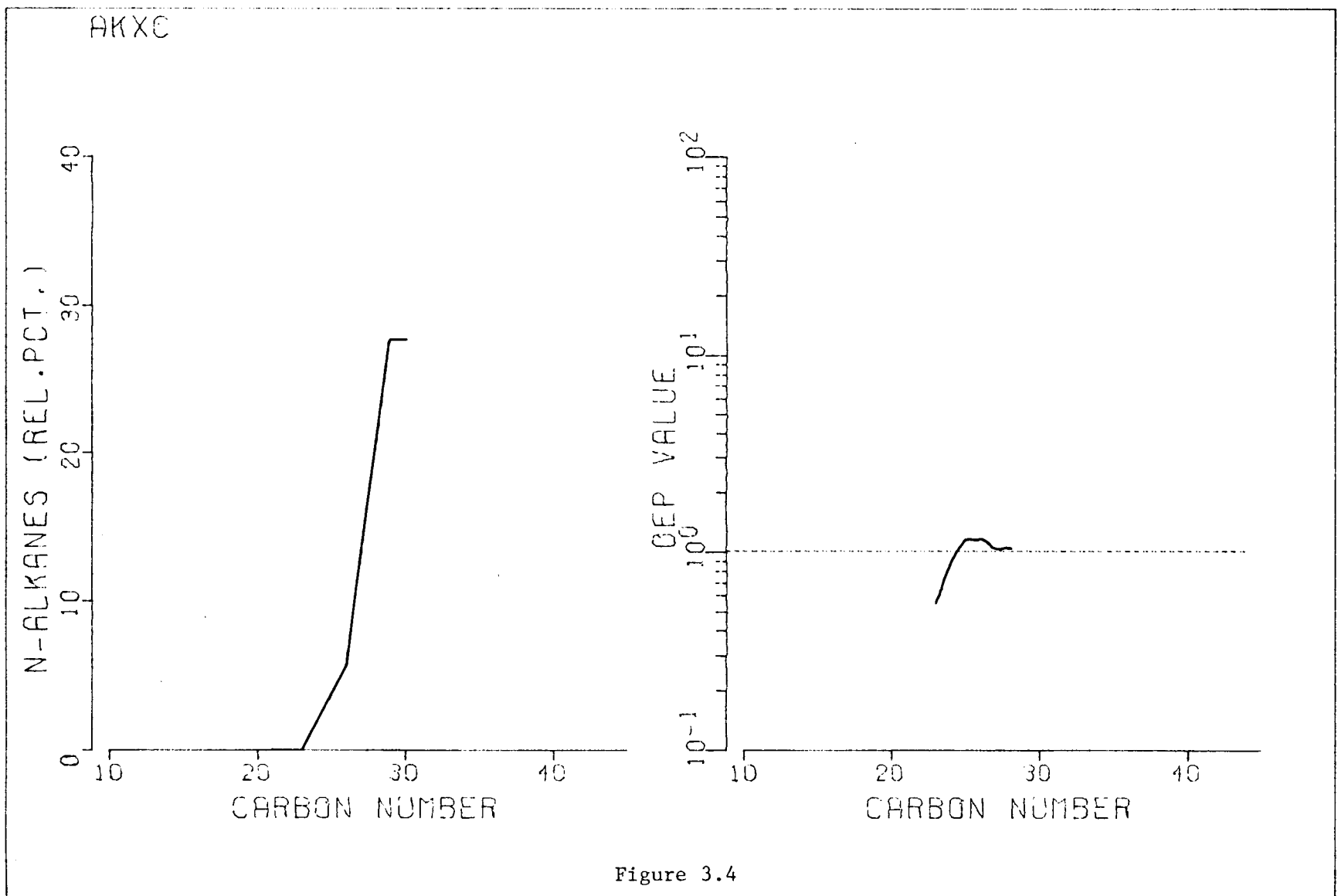


Figure 3.4

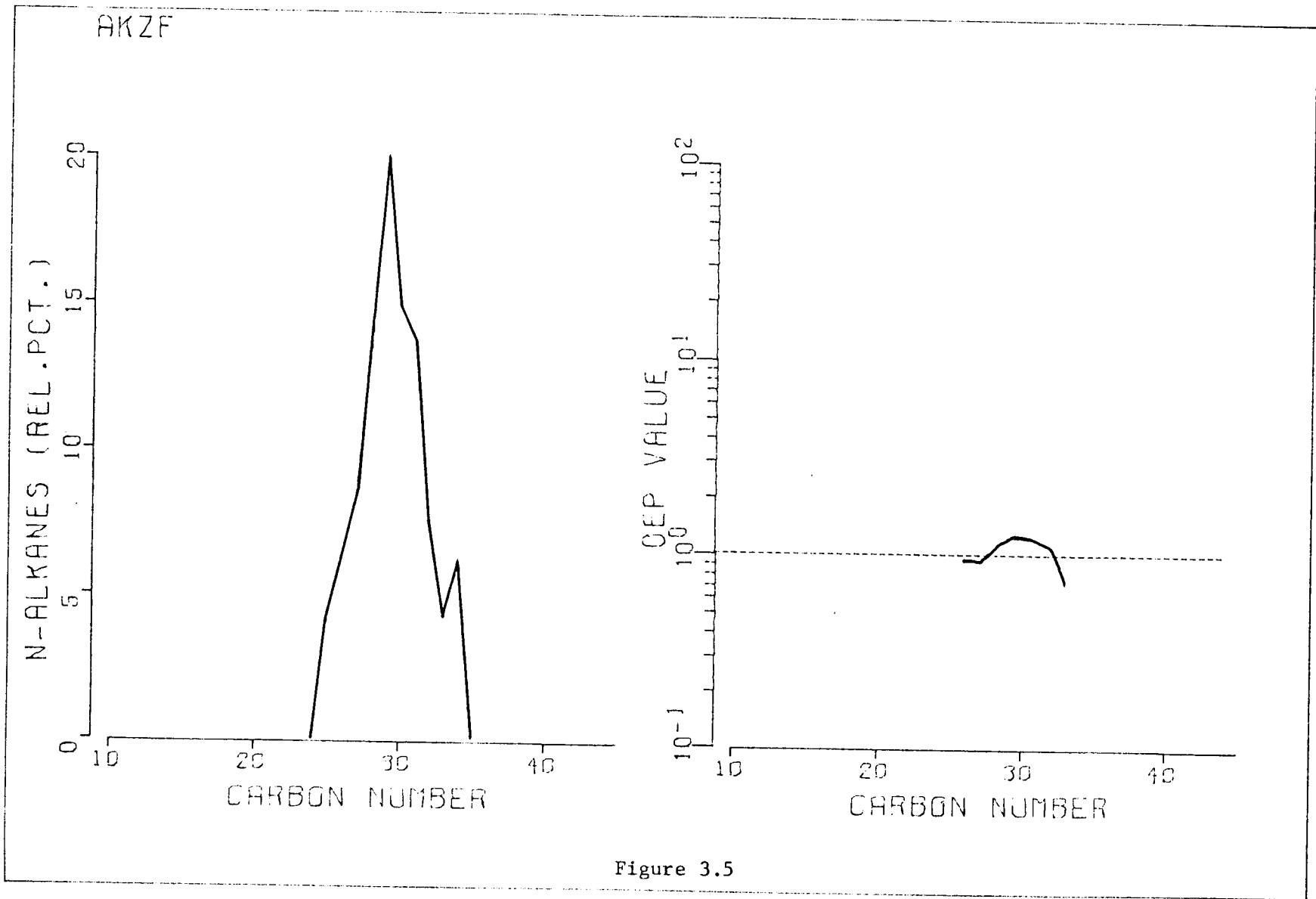


Figure 3.5

ALAY

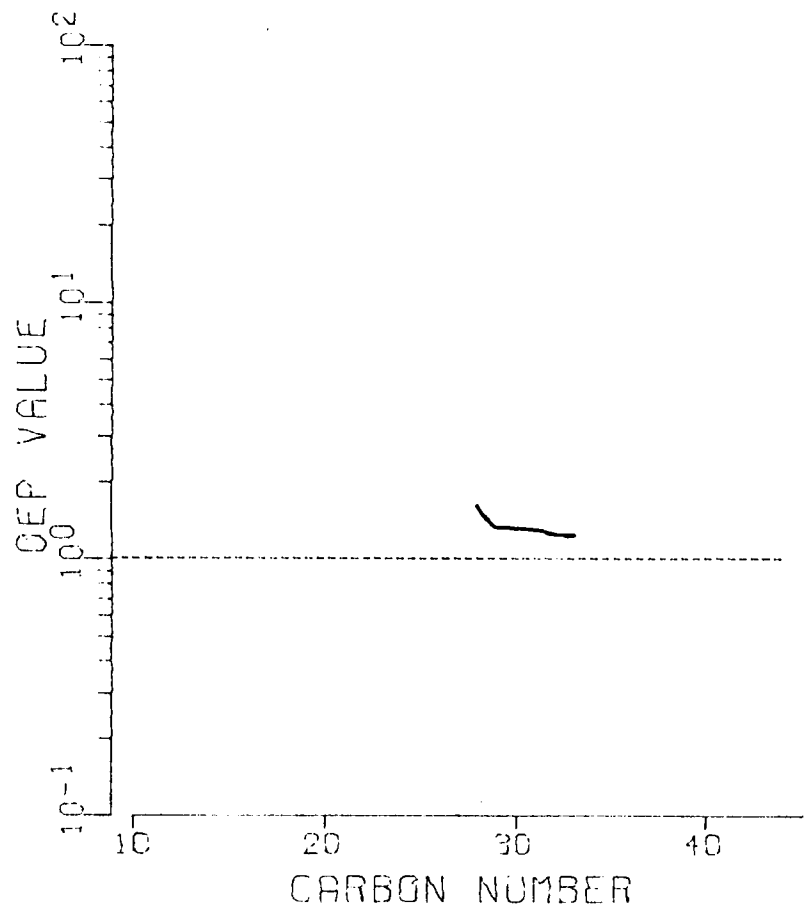
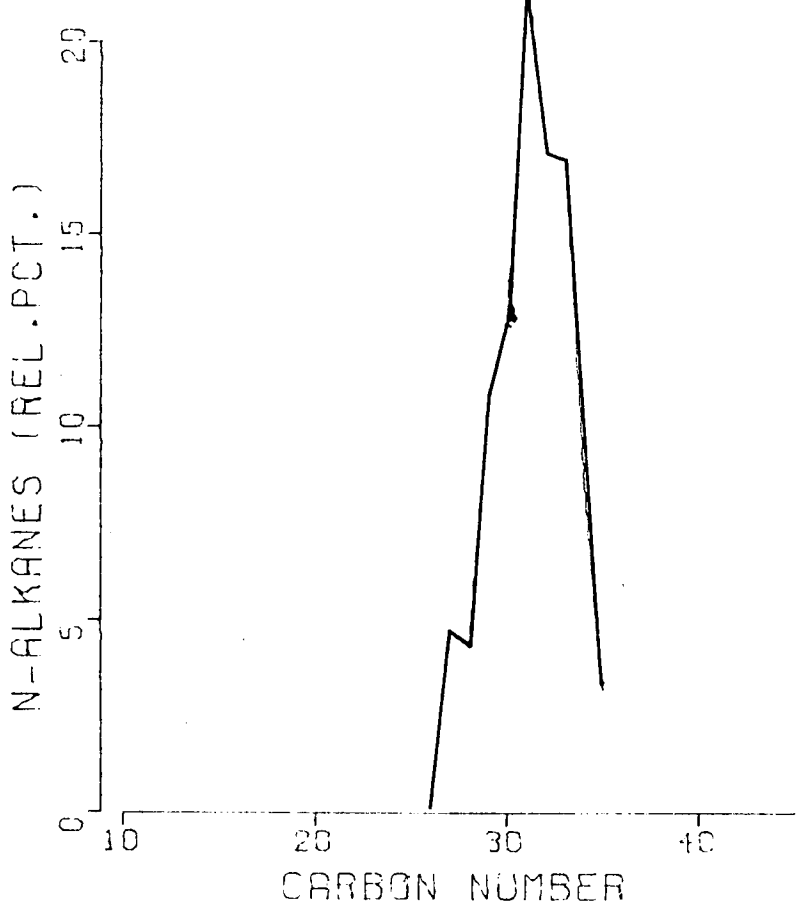


Figure 3.6

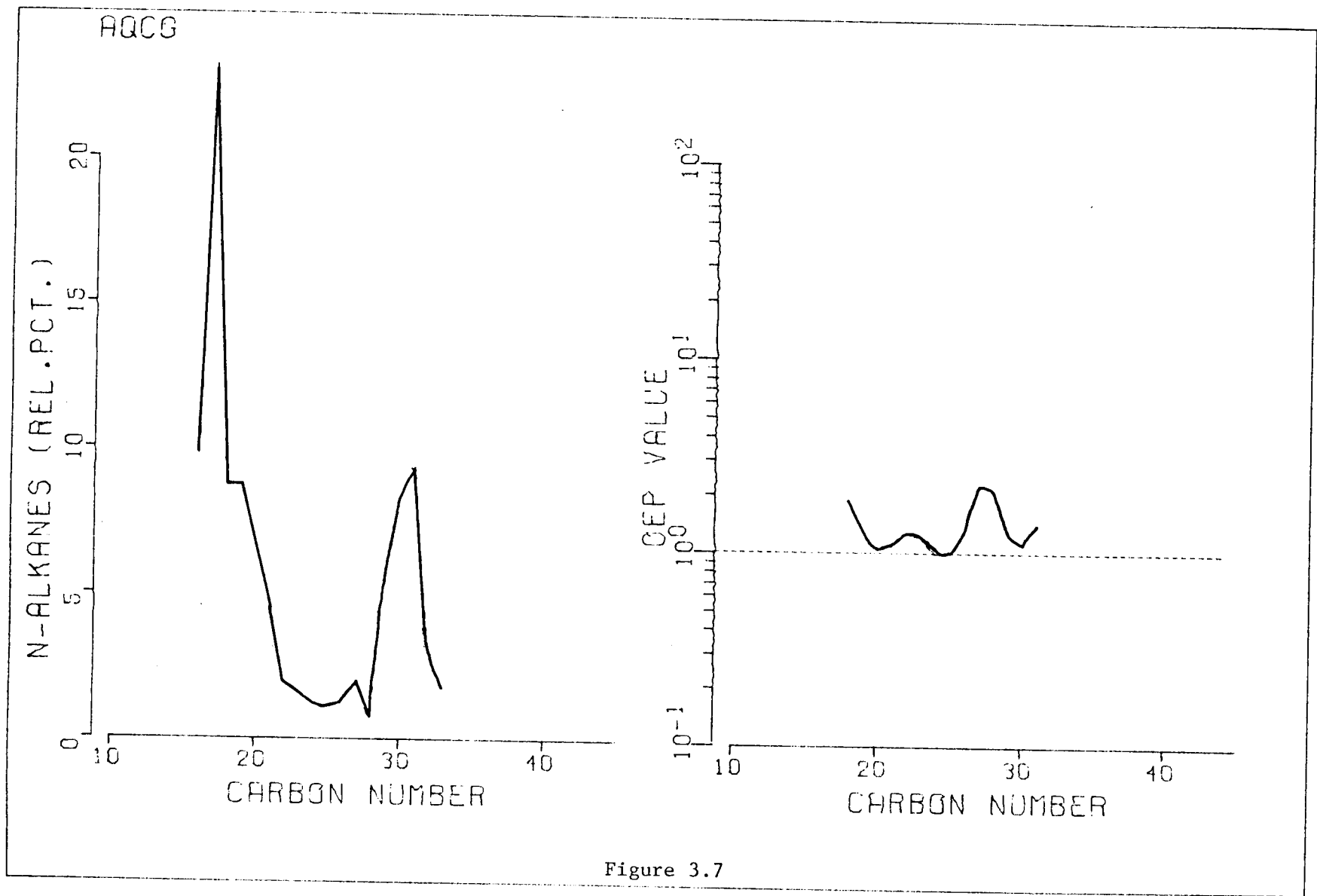
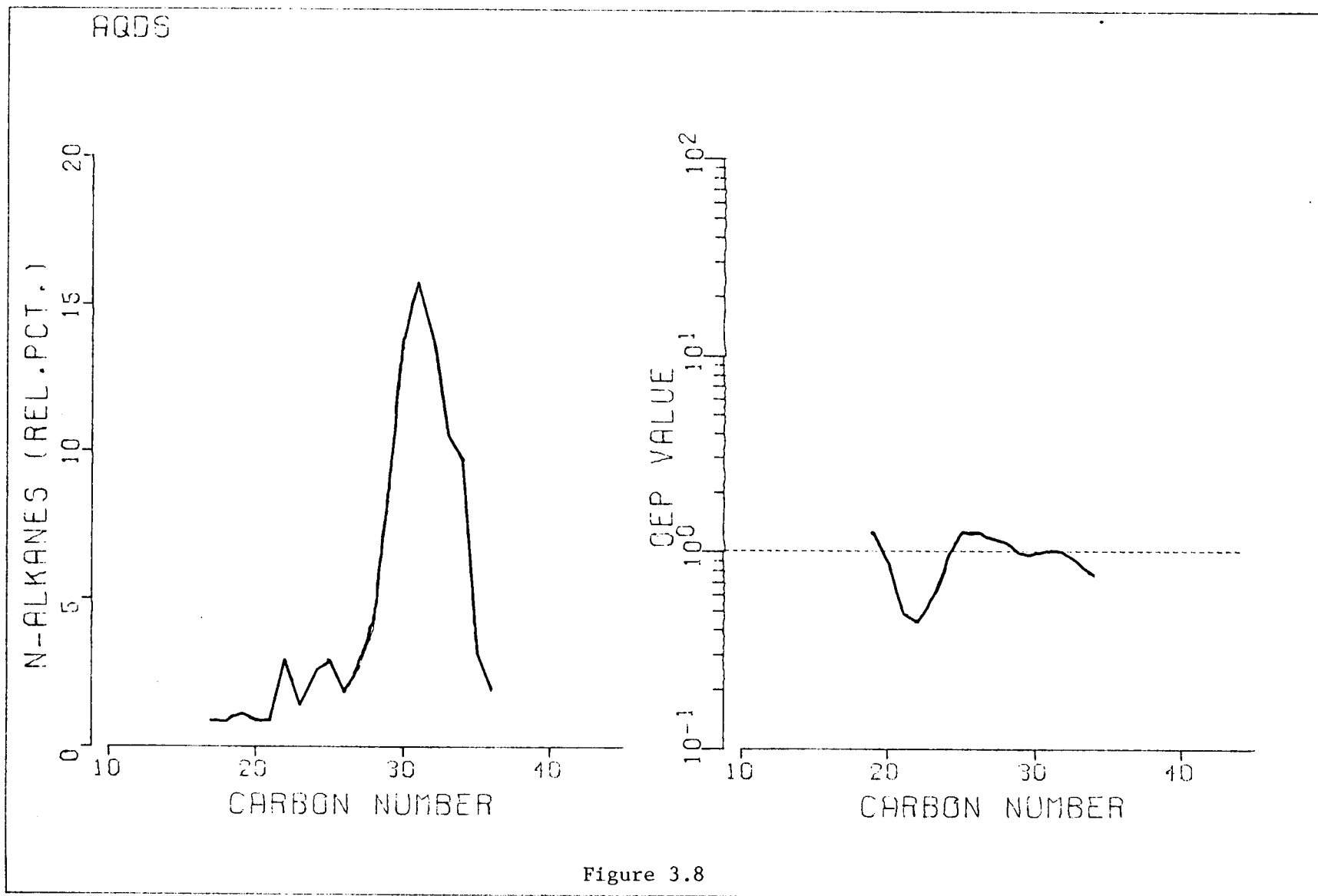


Figure 3.7



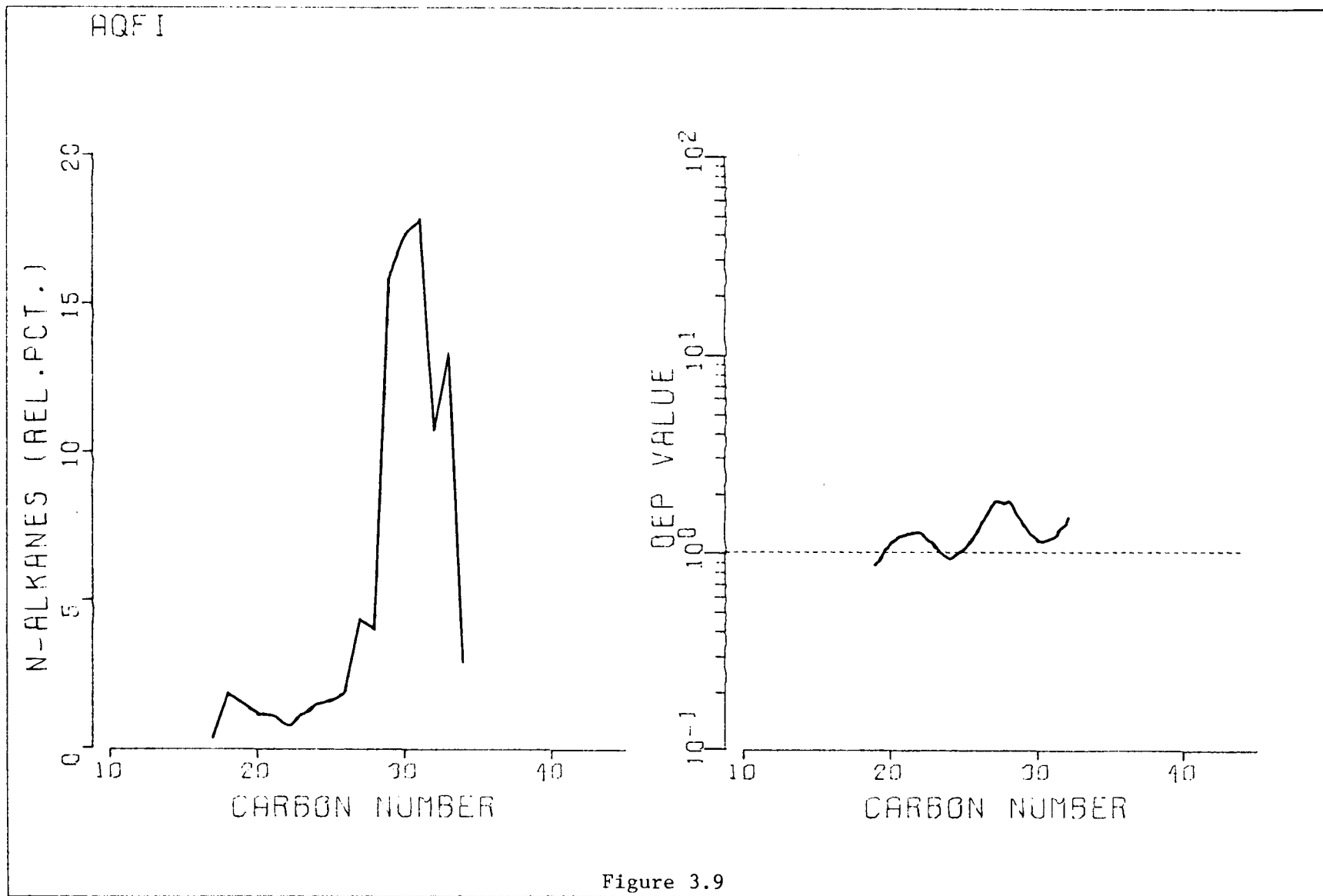


Figure 3.9

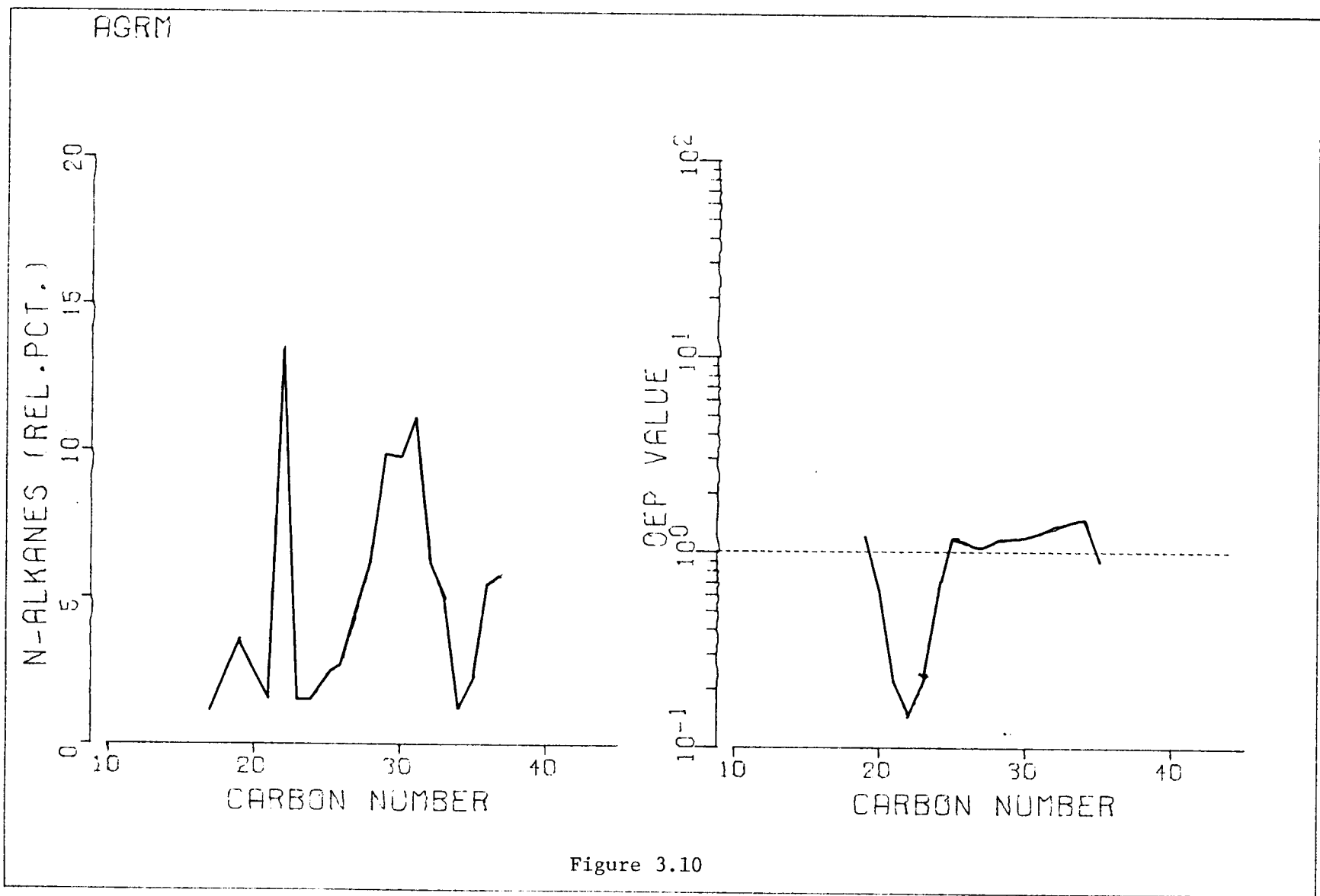


Figure 3.10

AGTD

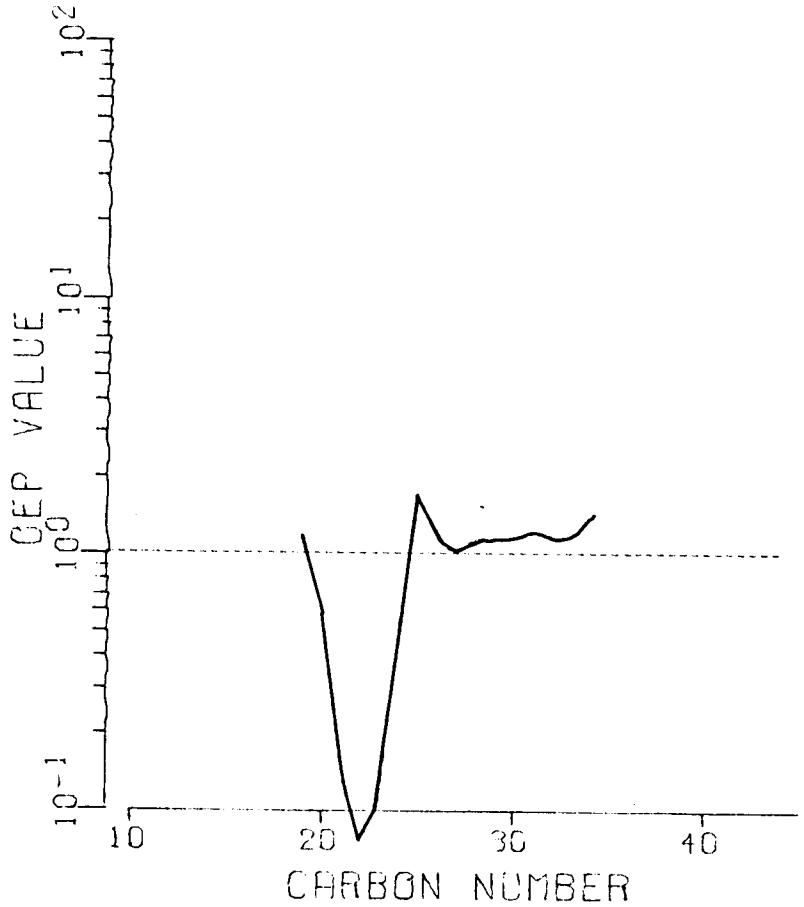
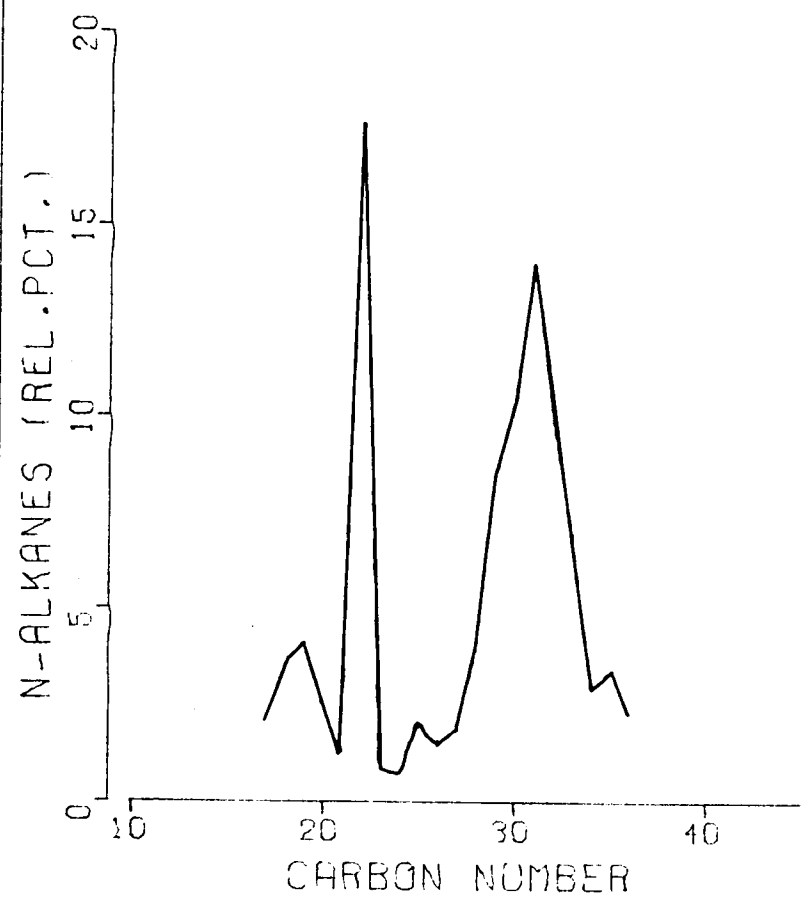


Figure 3.11

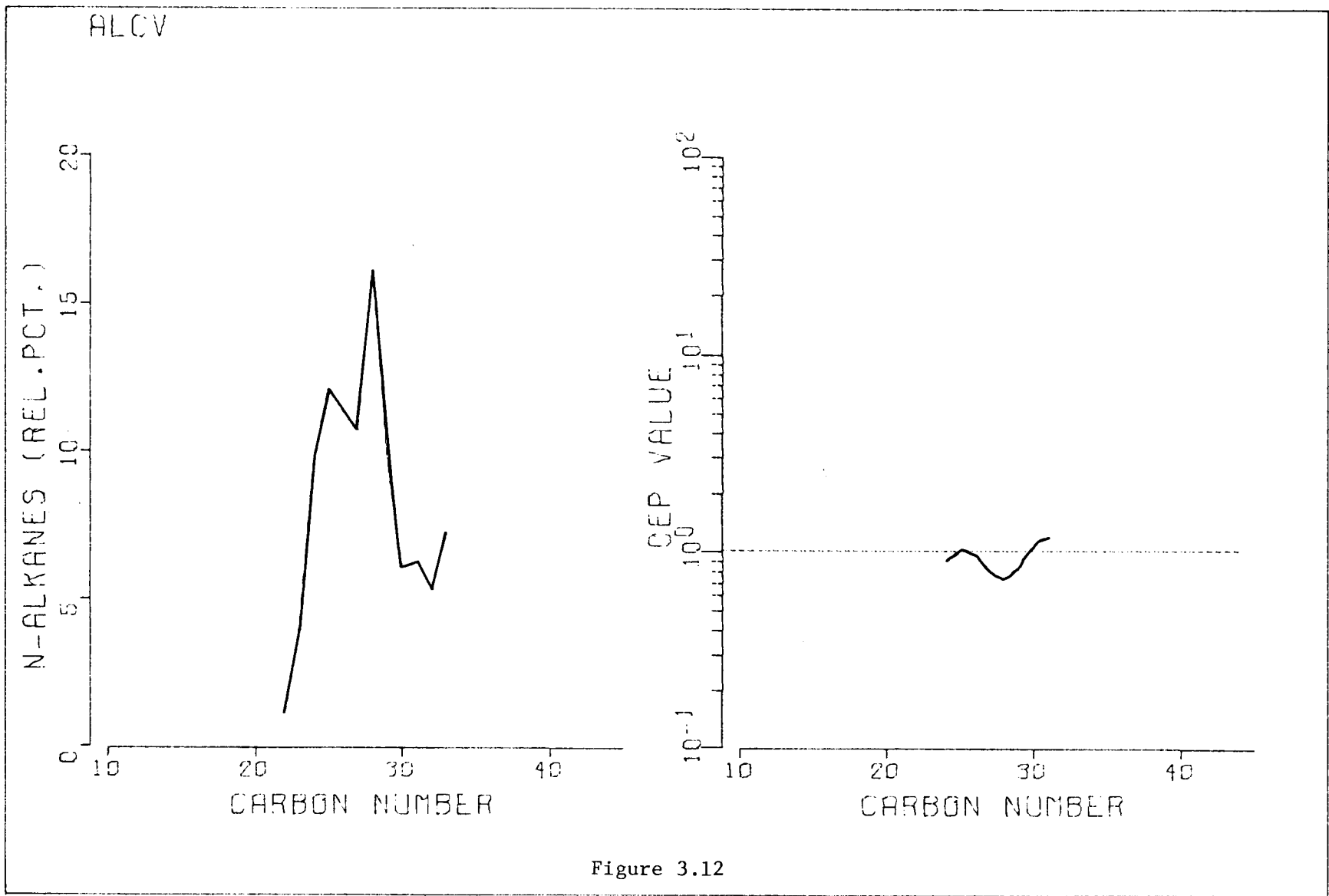


Figure 3.12

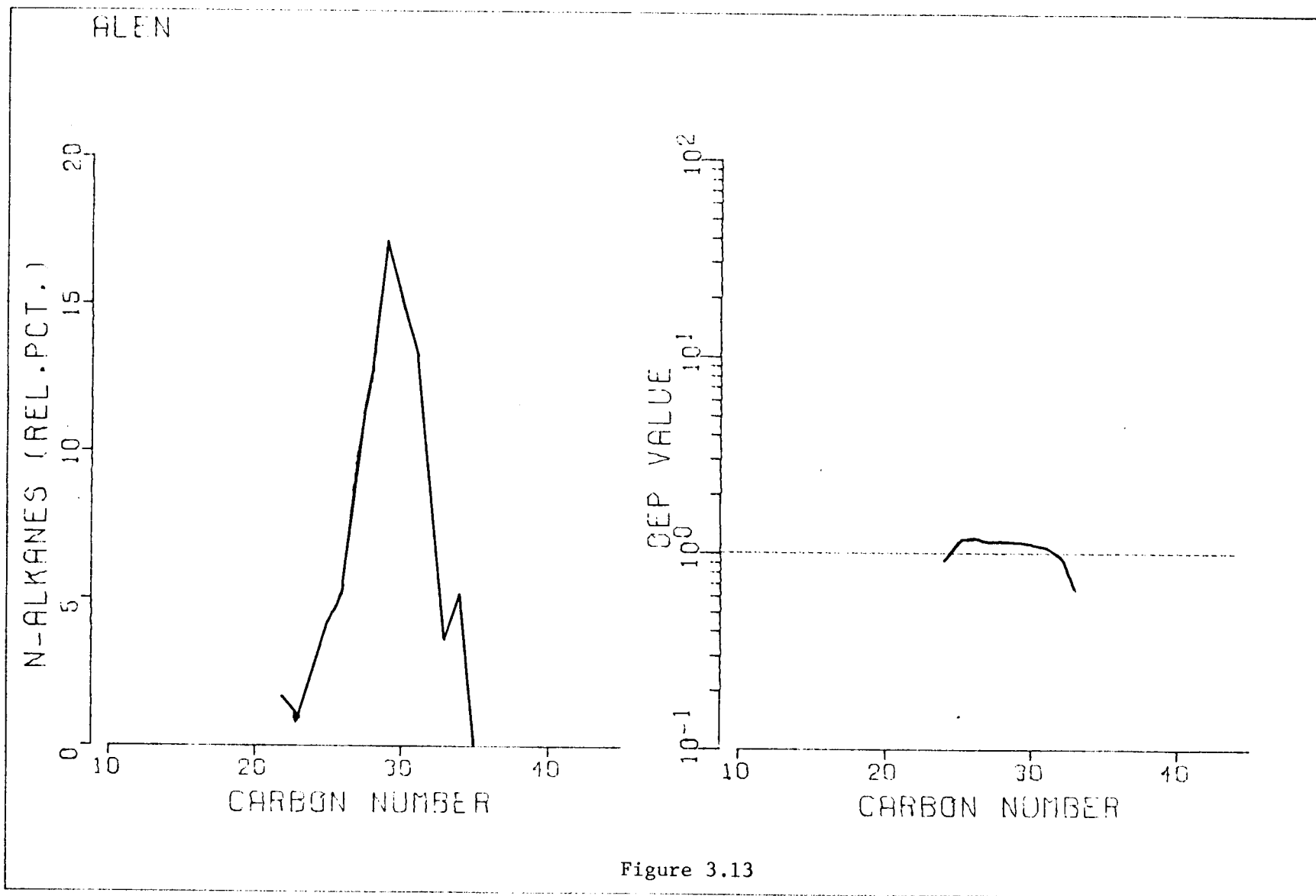


Figure 3.13

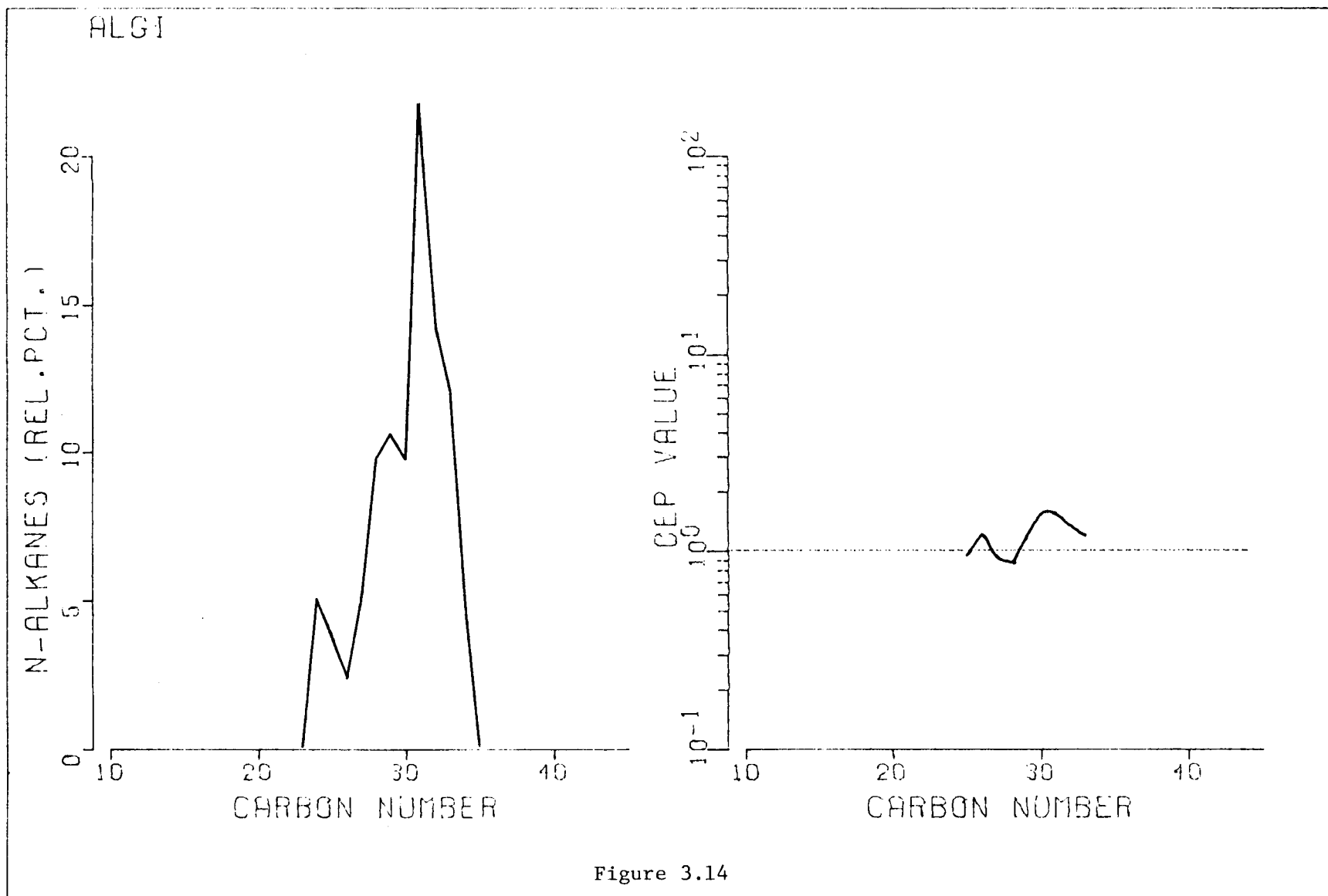


Figure 3.14

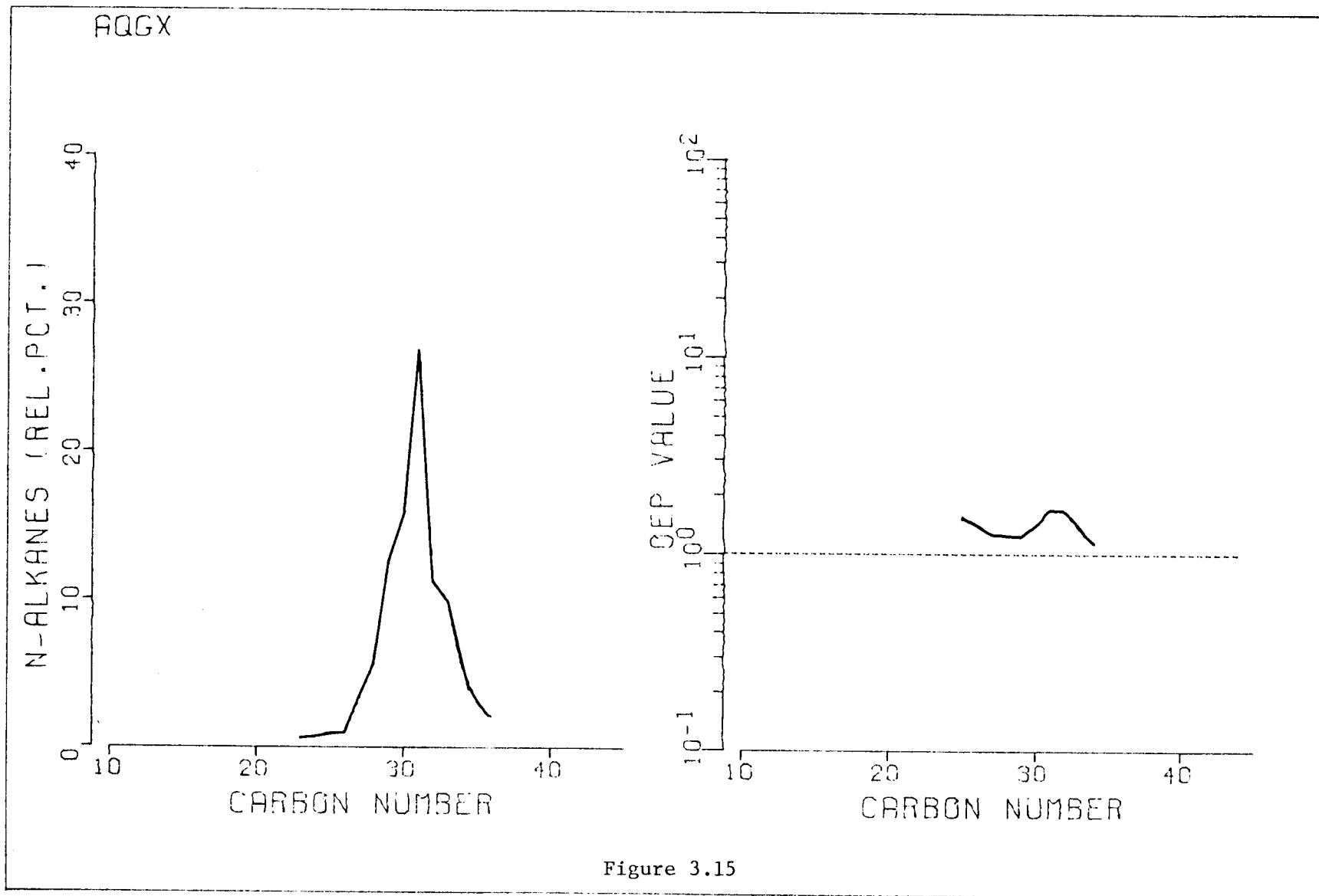


Figure 3.15

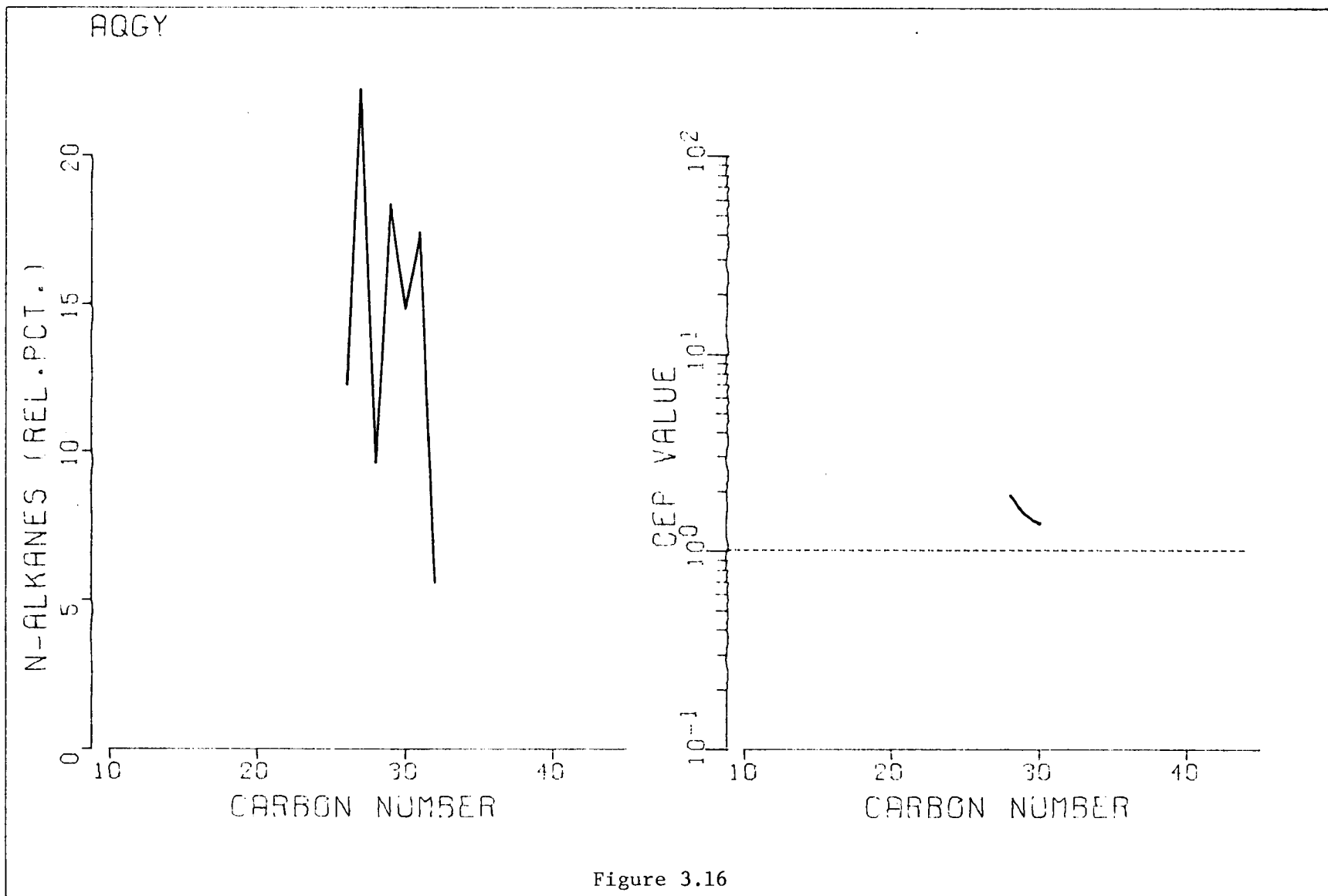


Figure 3.16

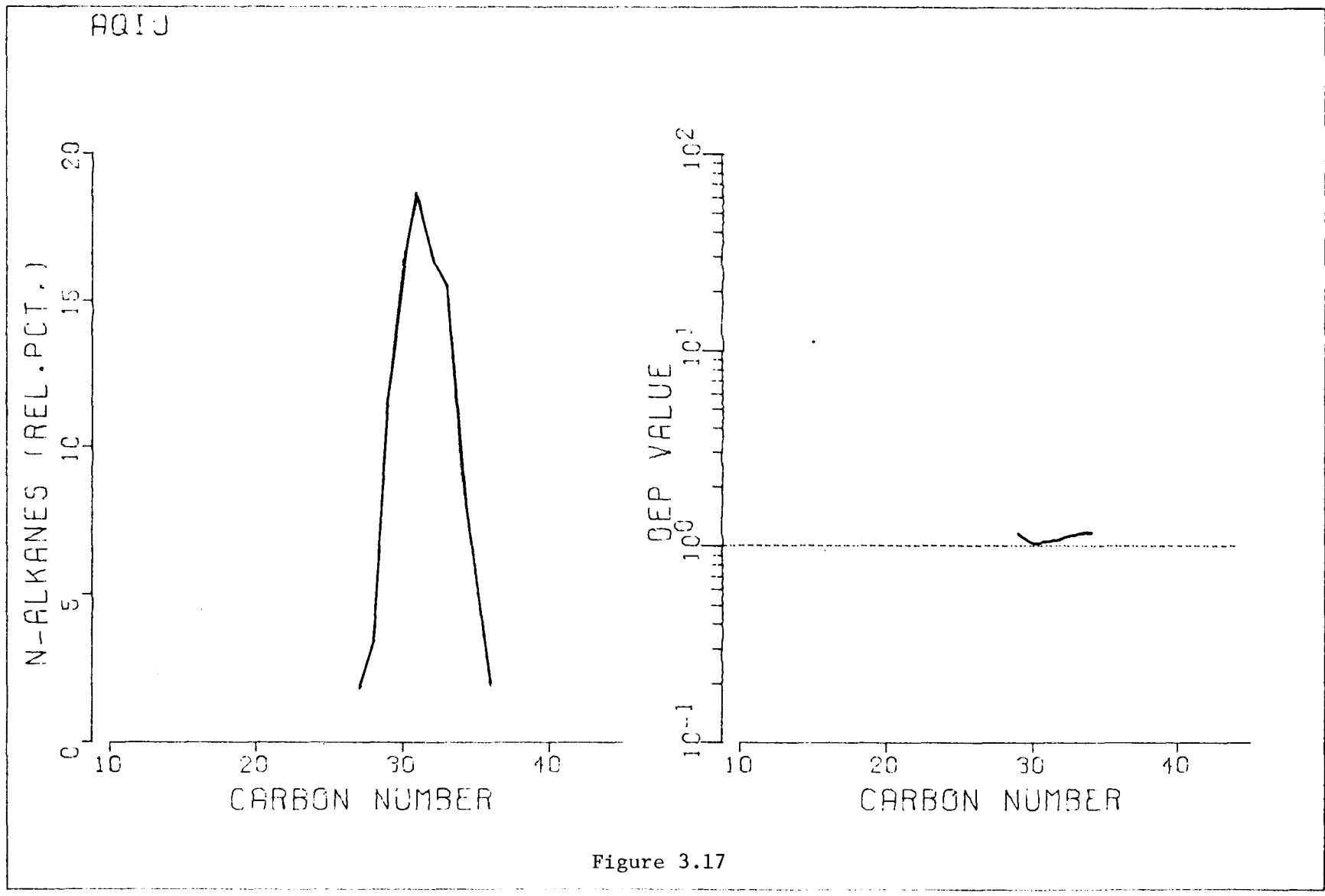


Figure 3.17

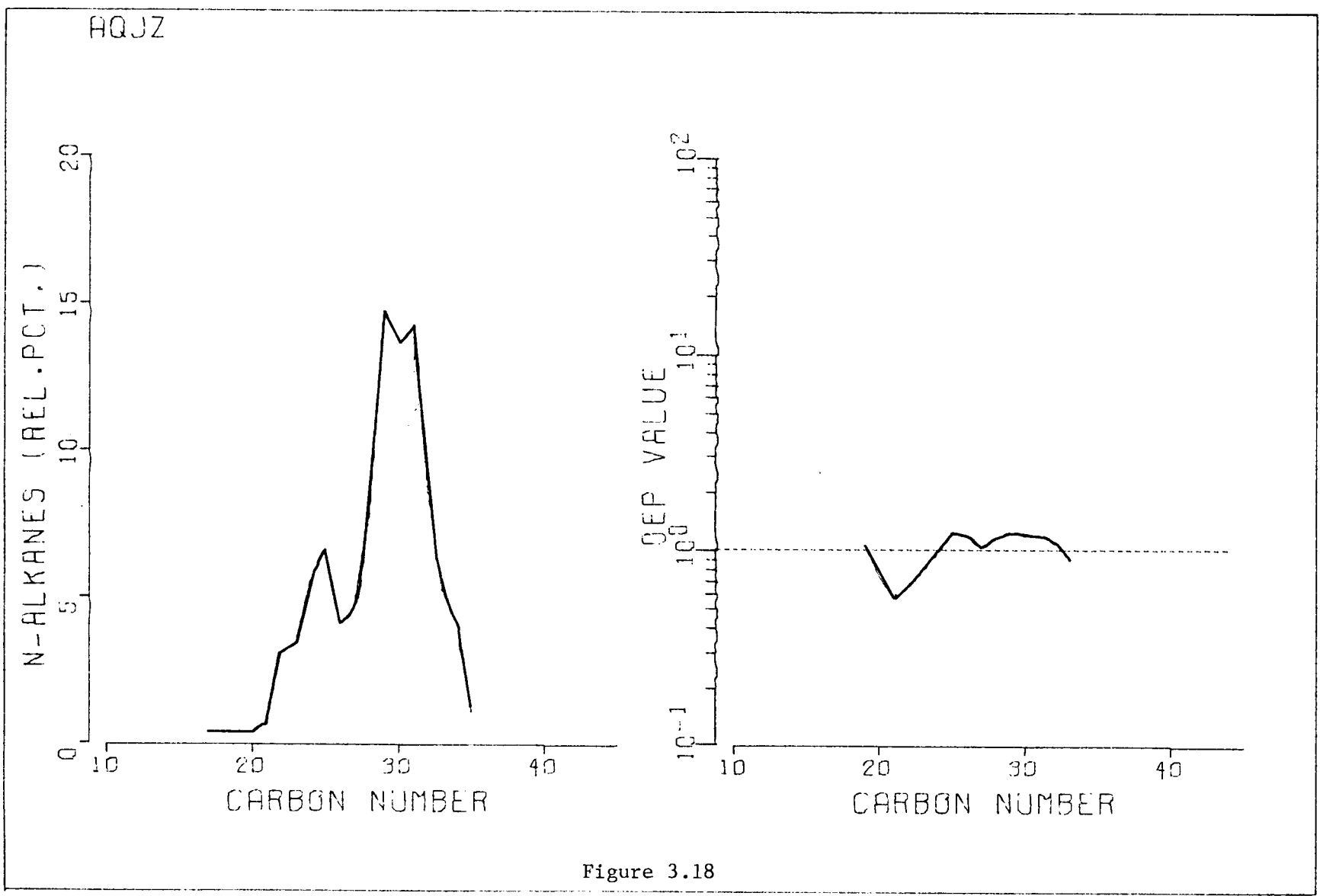


Figure 3.18

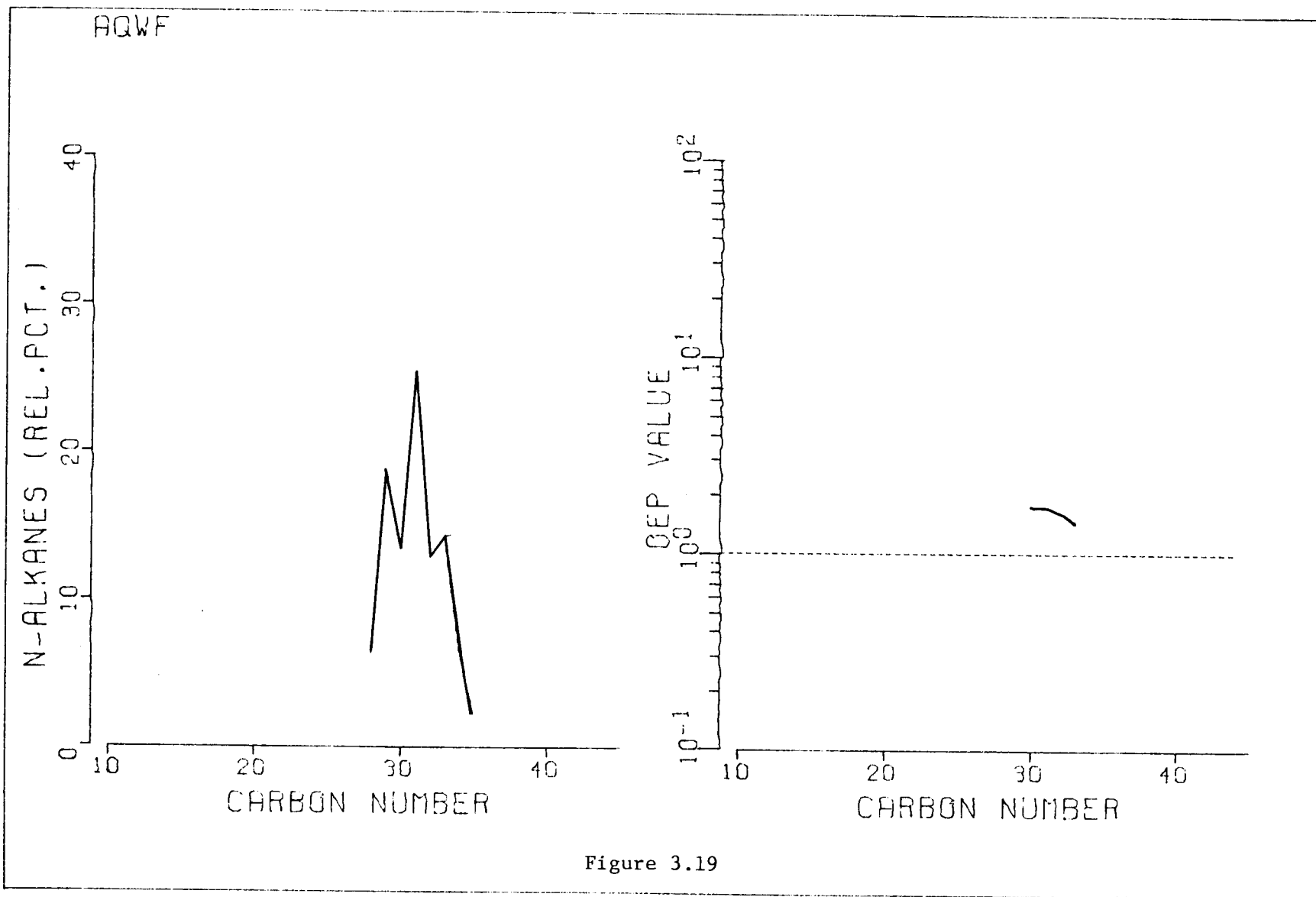


Figure 3.19

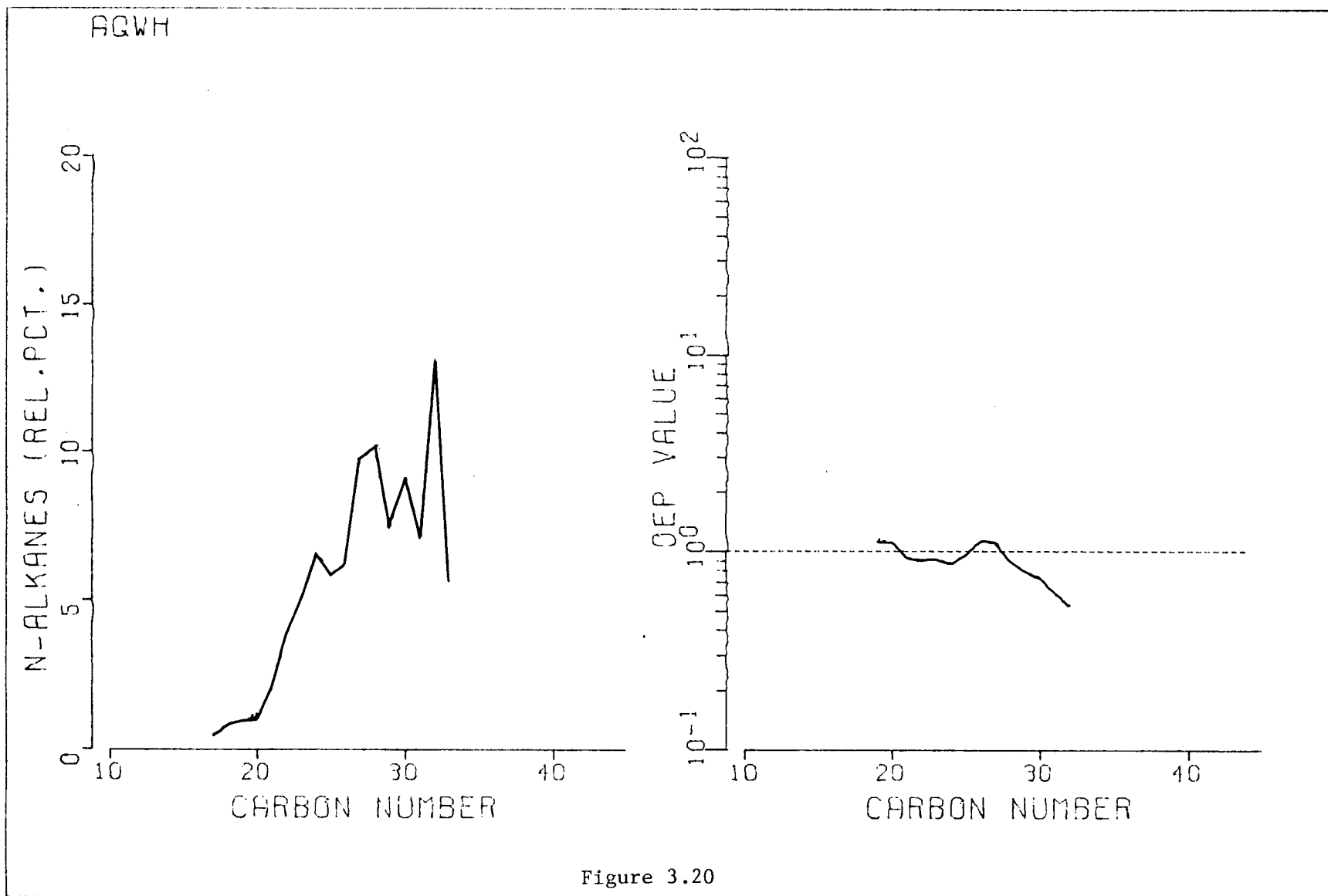


Figure 3.20

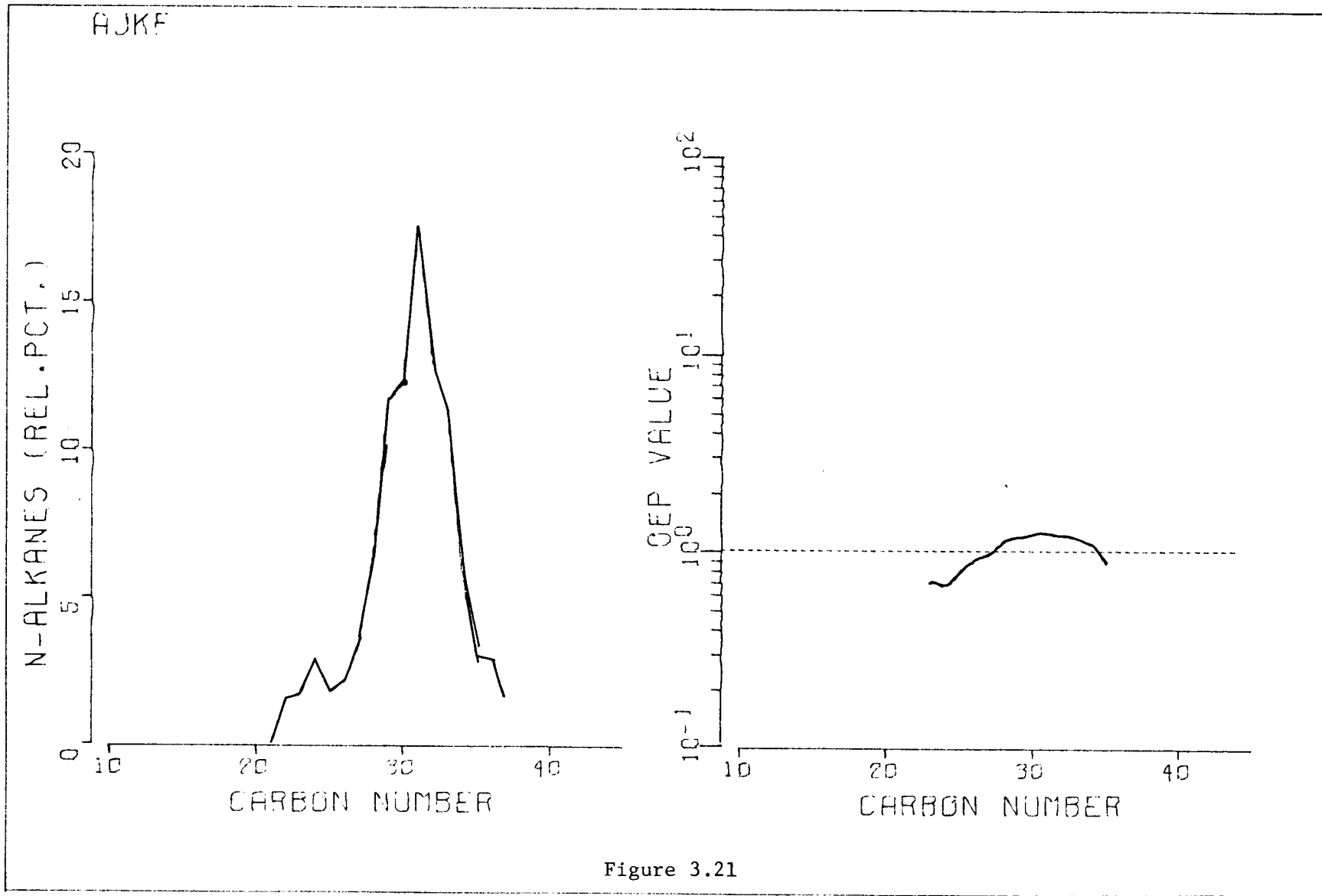


Figure 3.21

AJMB

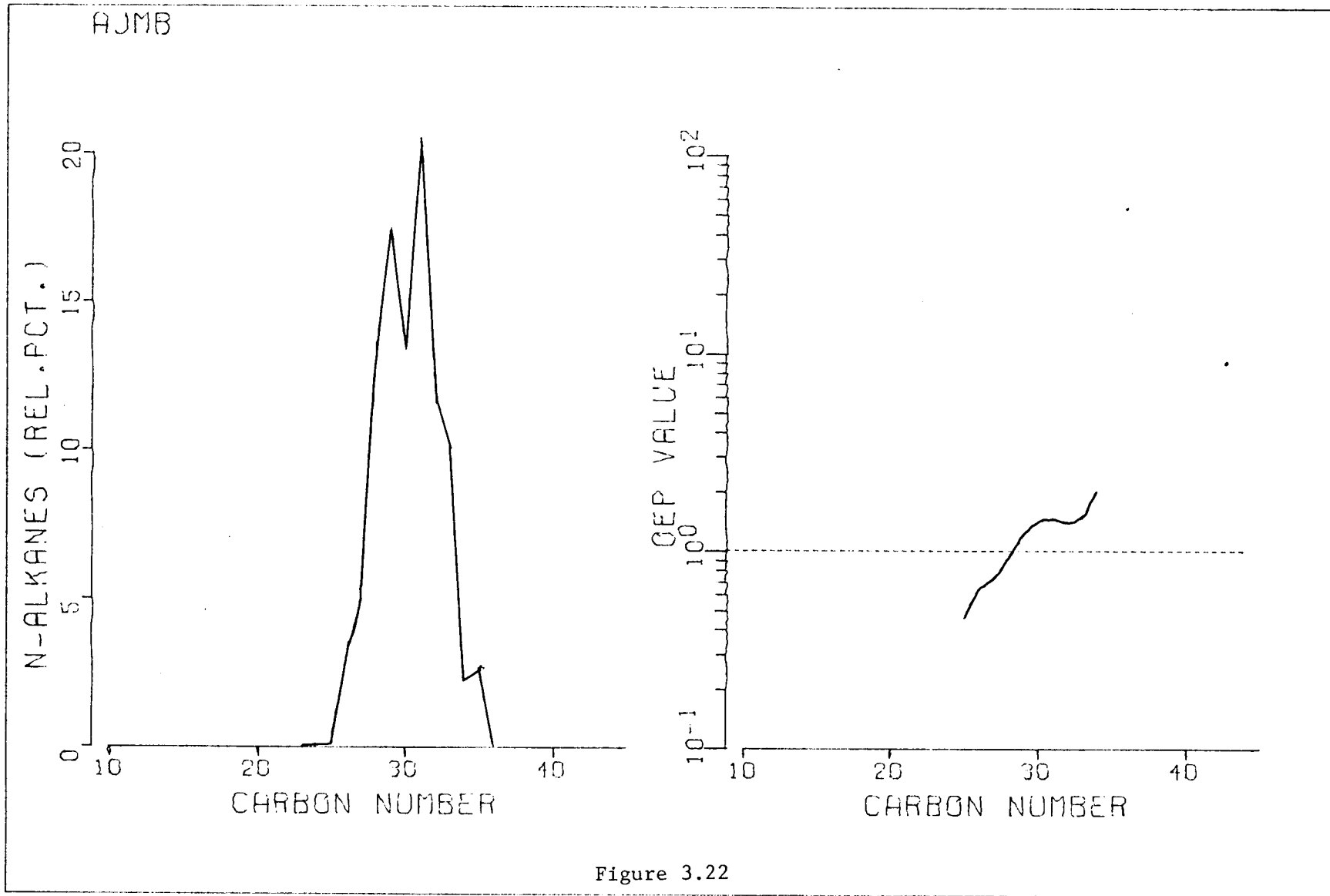


Figure 3.22

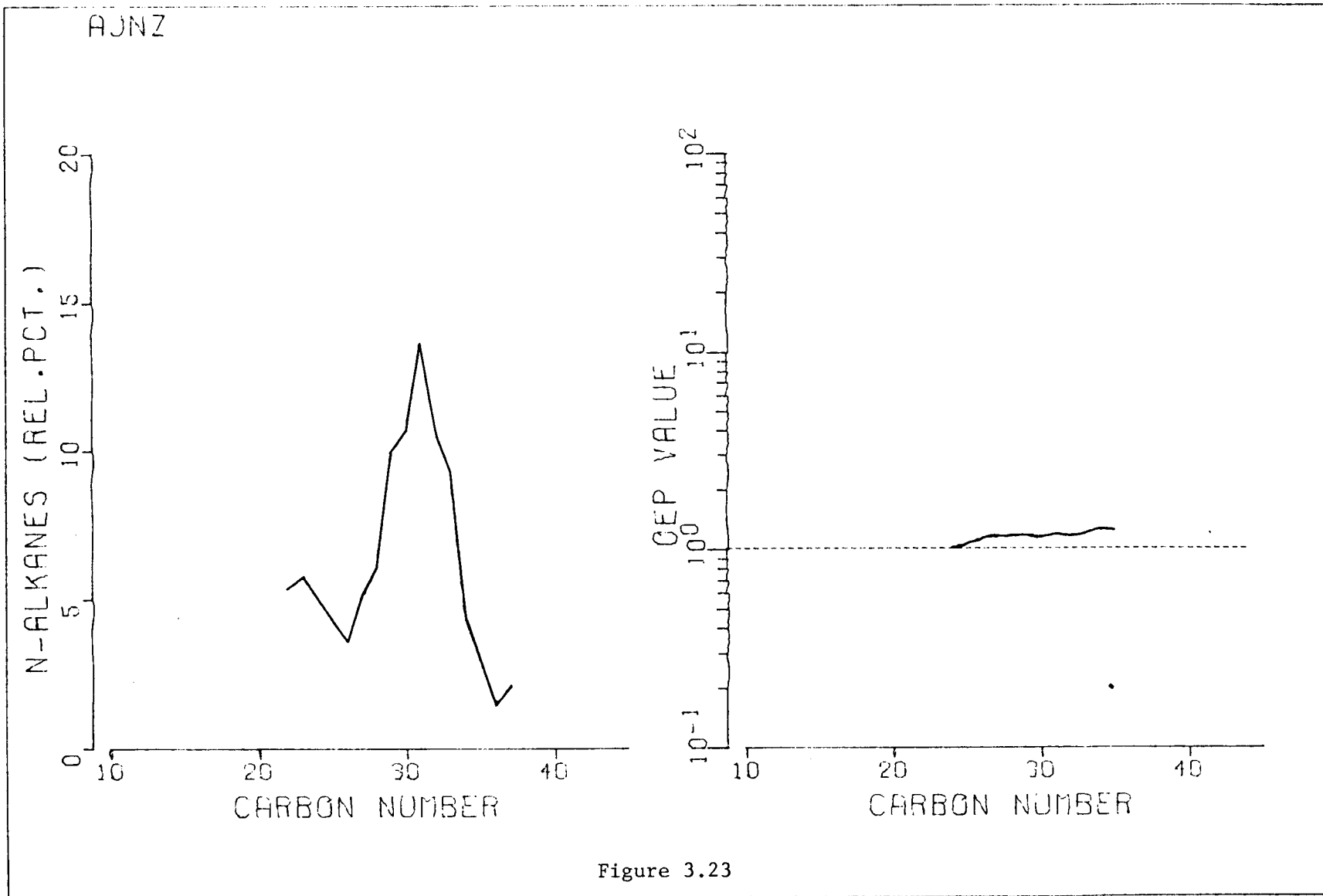


Figure 3.23

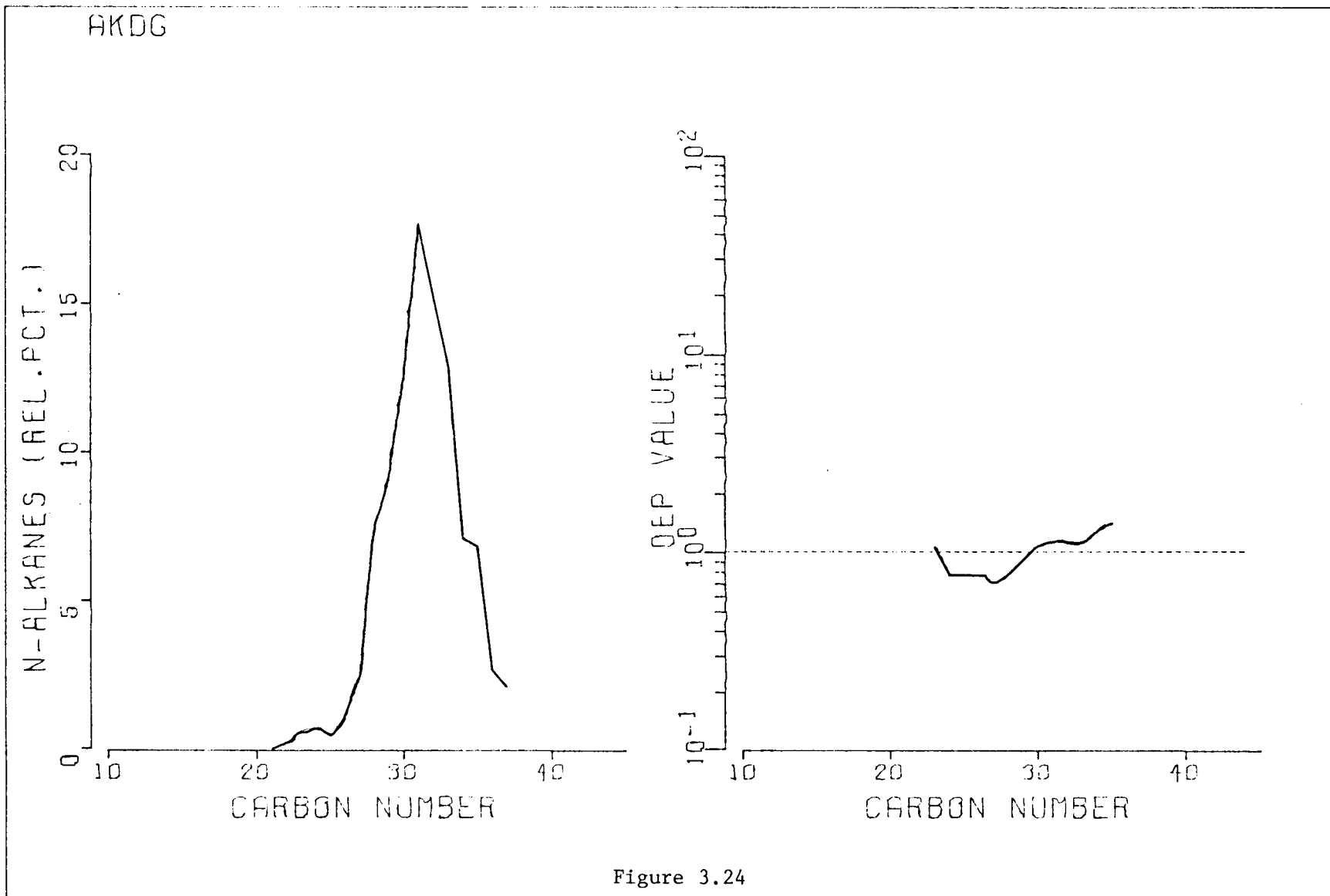


Figure 3.24

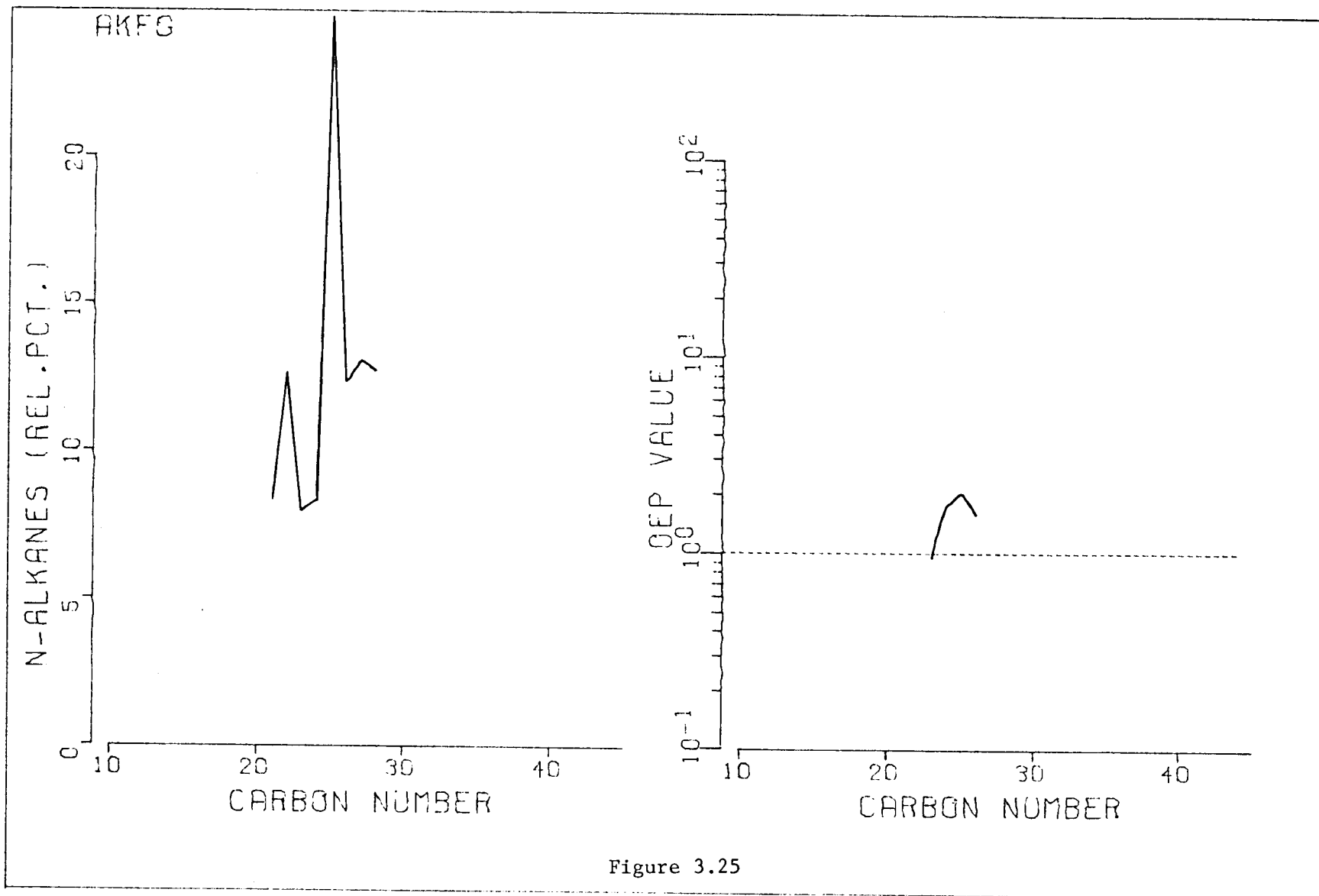


Figure 3.25

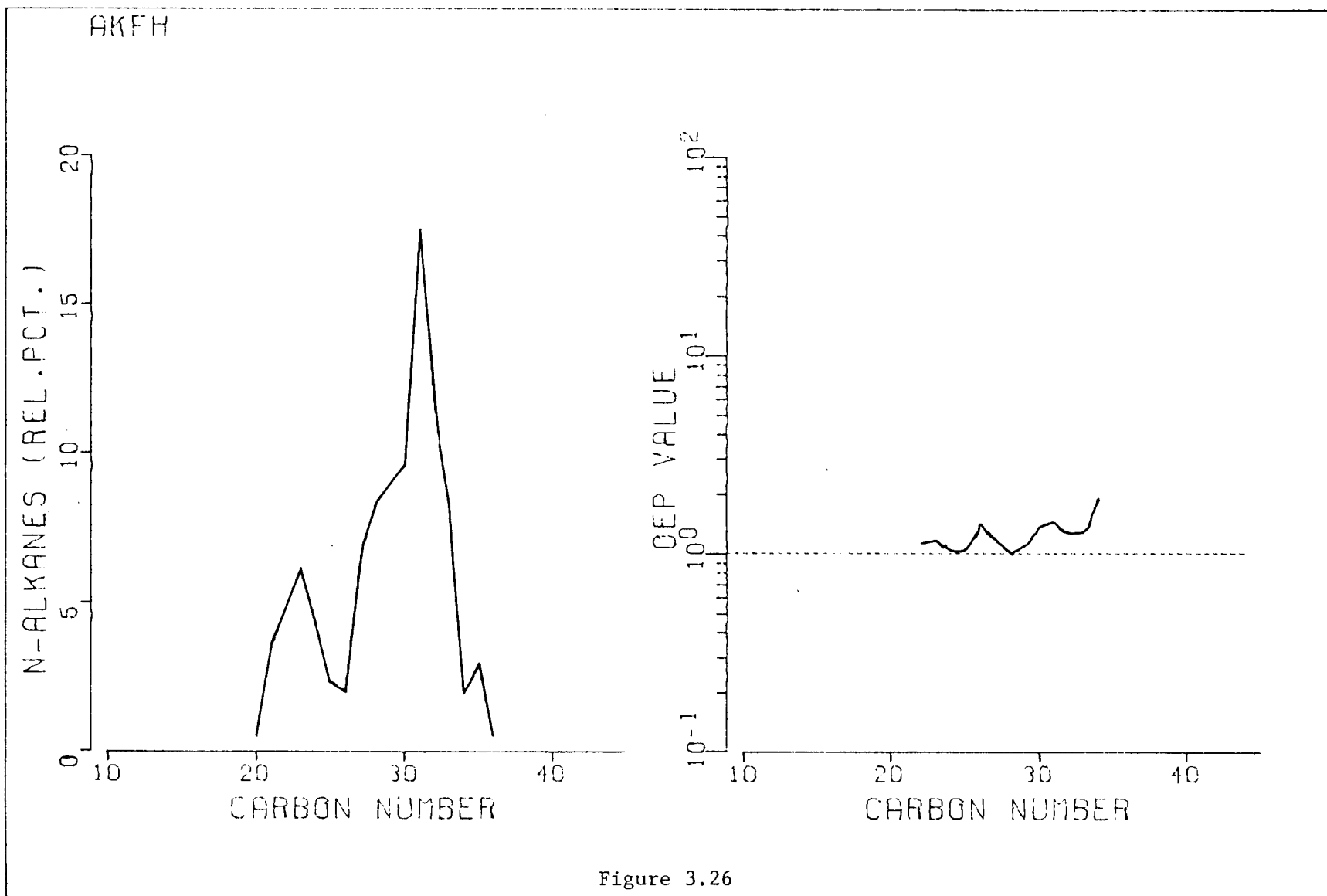


Figure 3.26

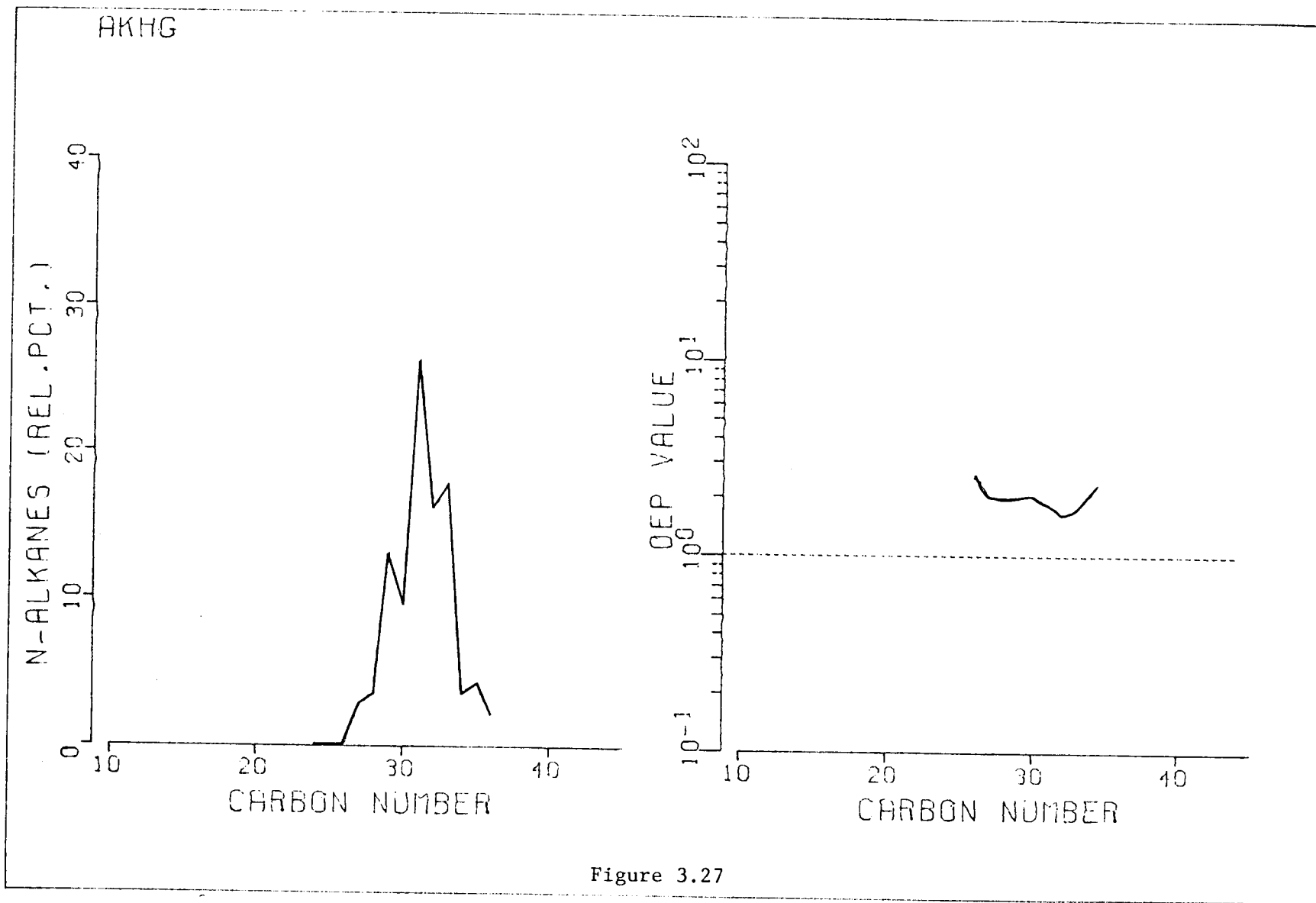
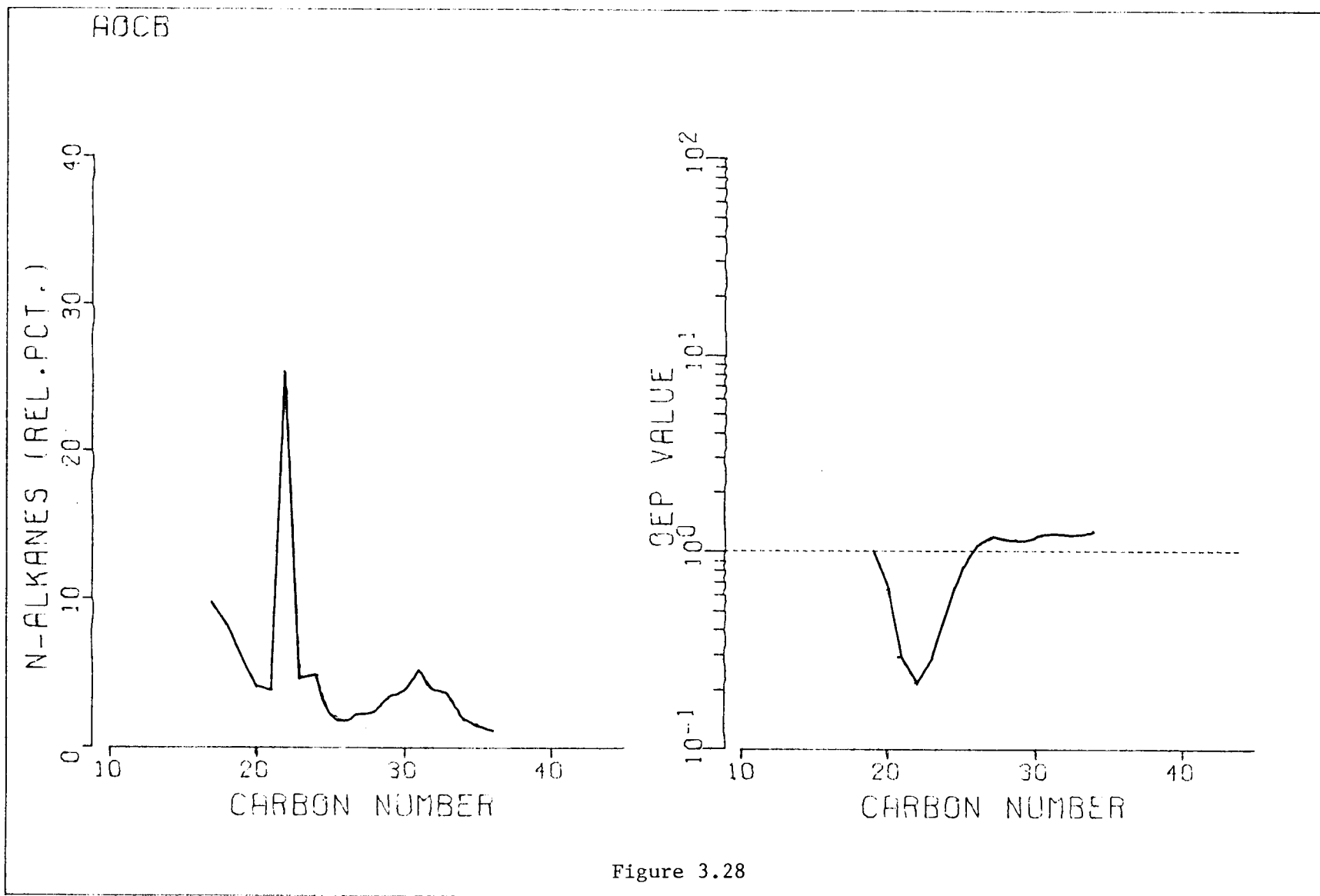


Figure 3.27



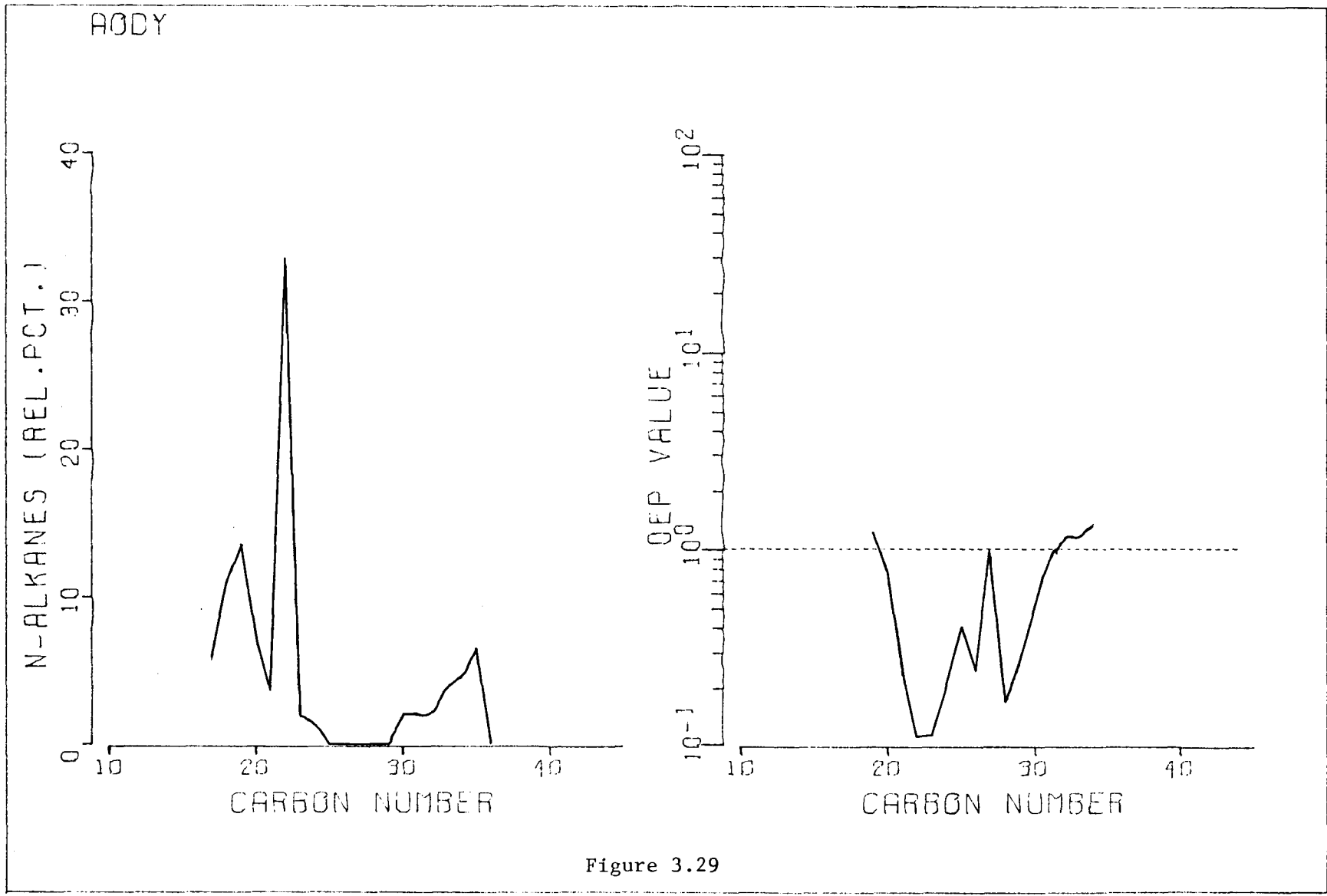
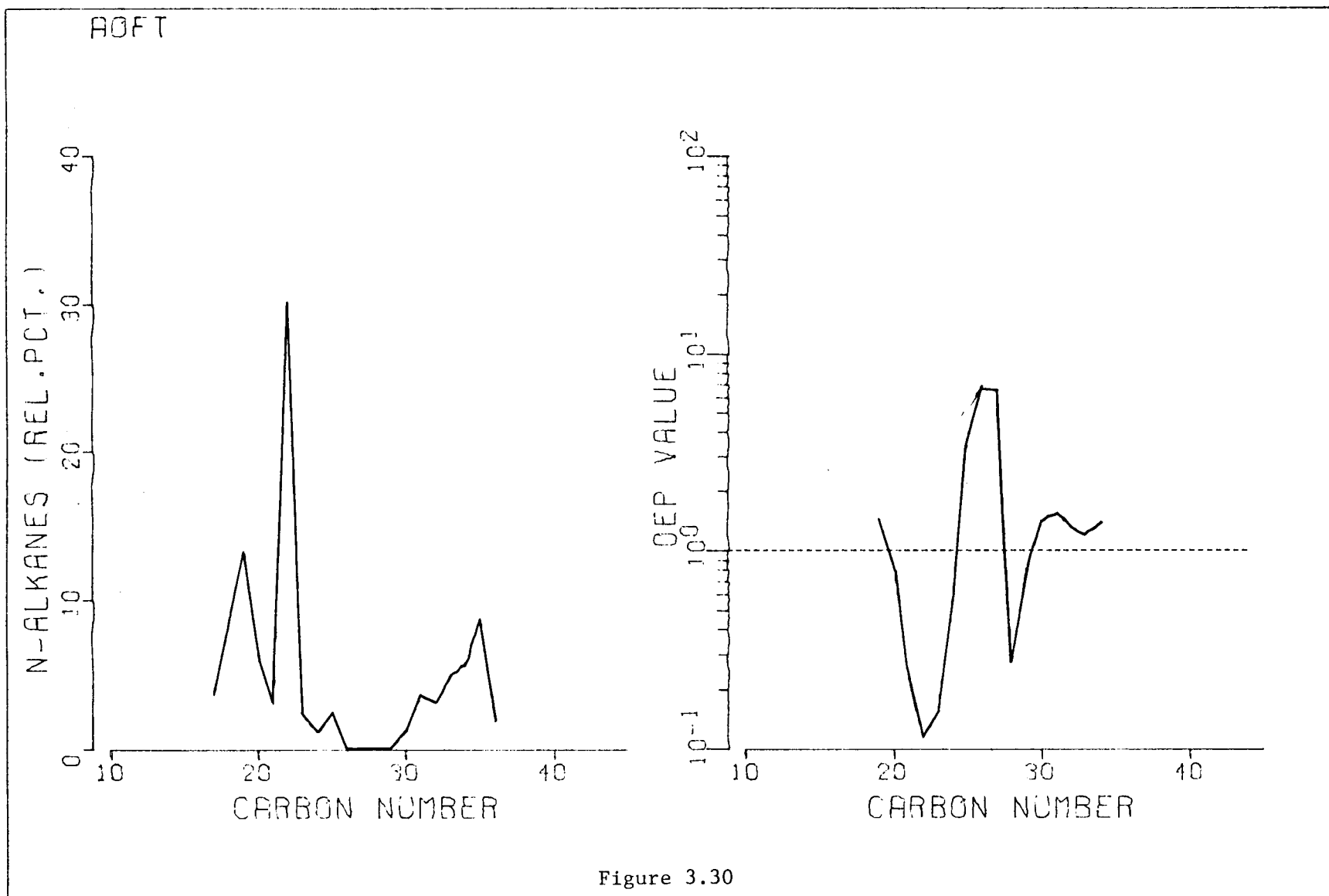


Figure 3.29



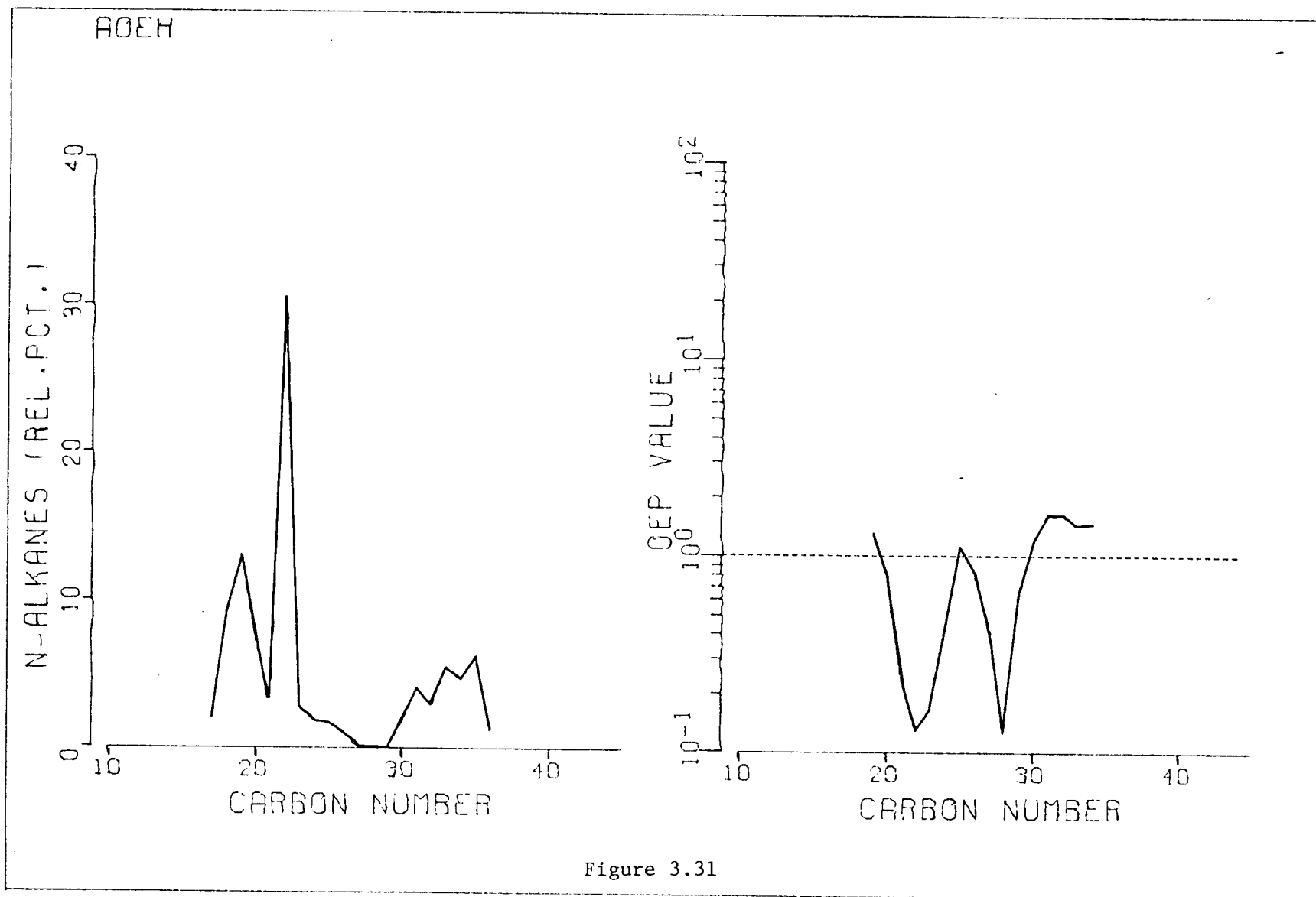


Figure 3.31

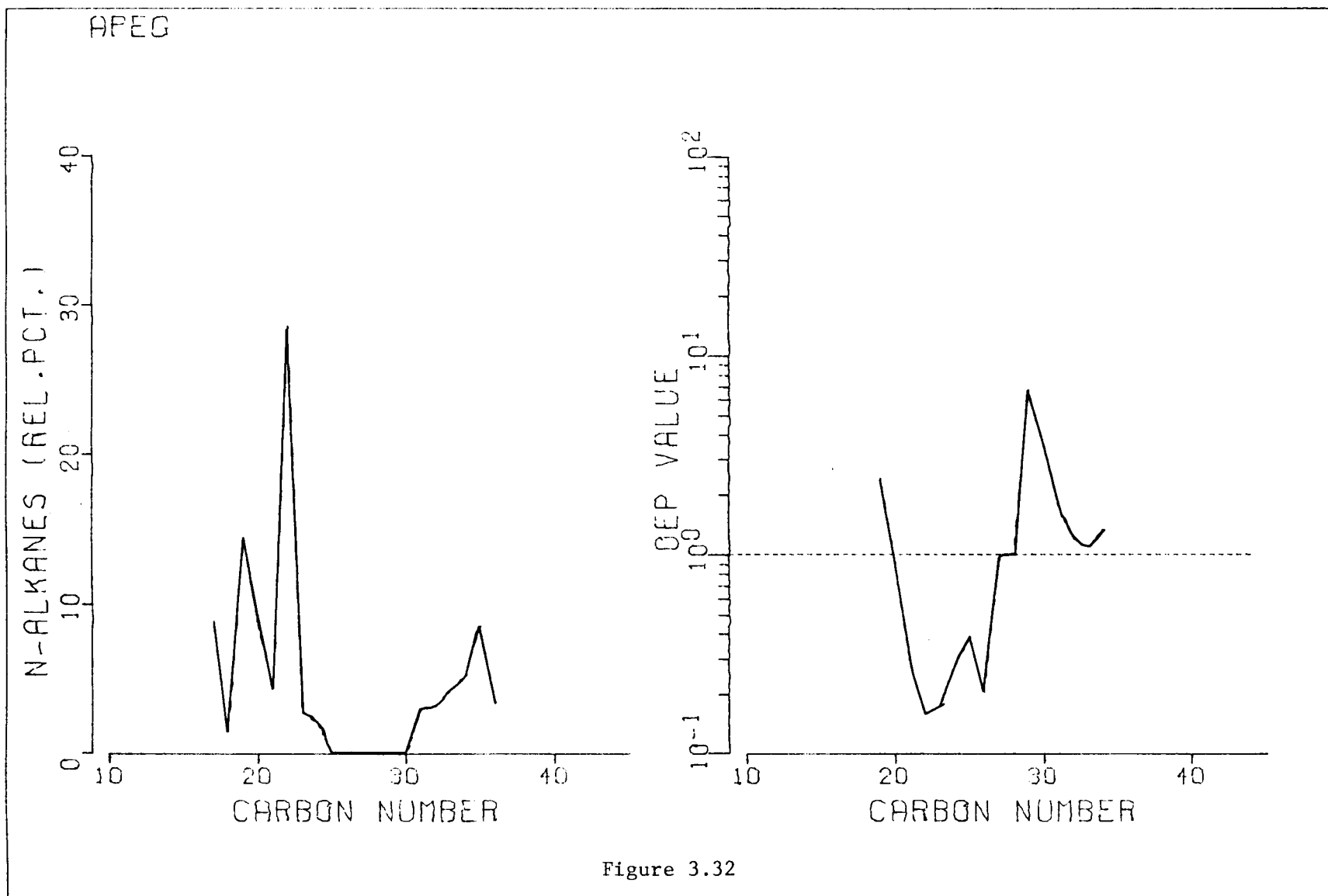


Figure 3.32

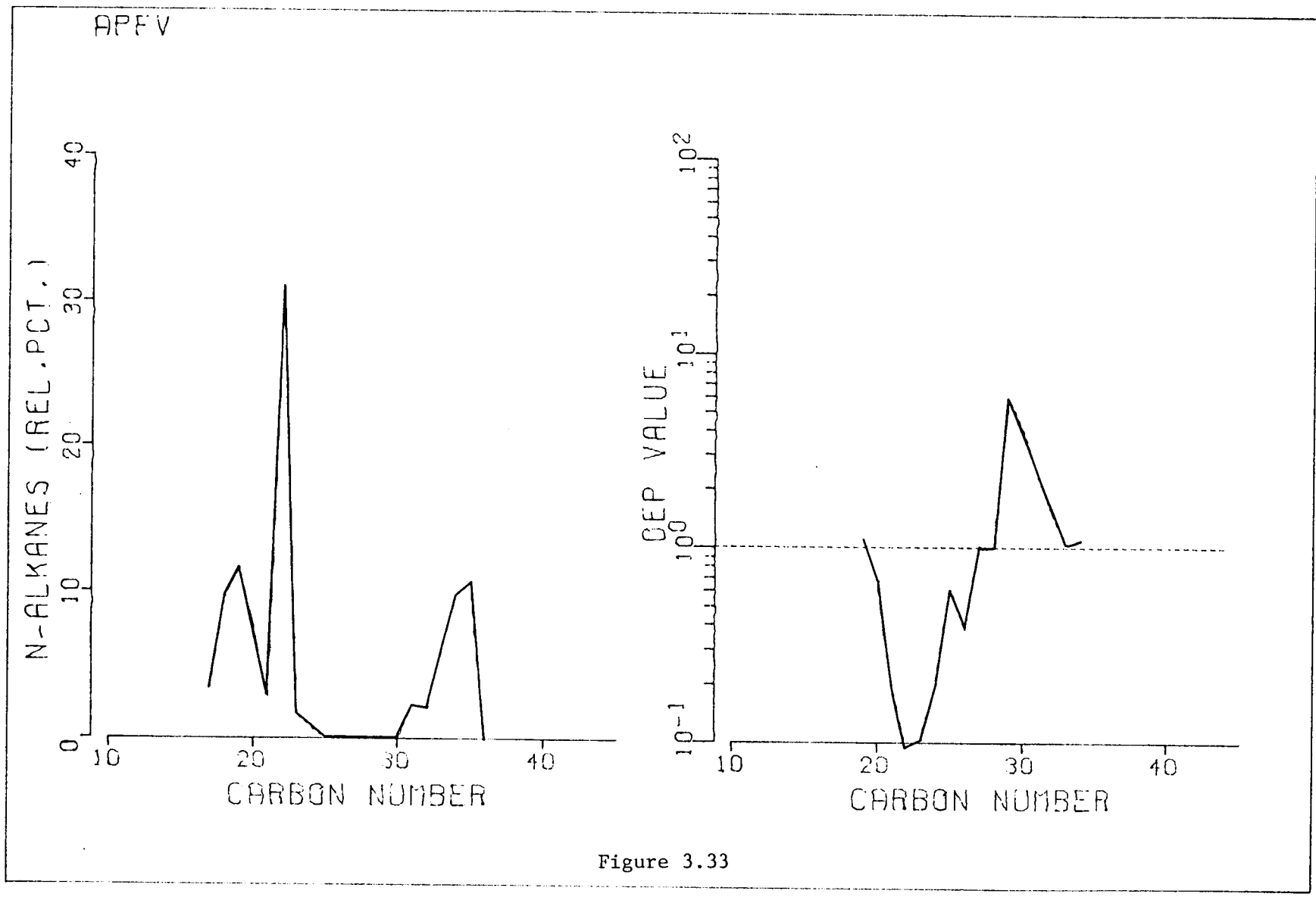


Figure 3.33

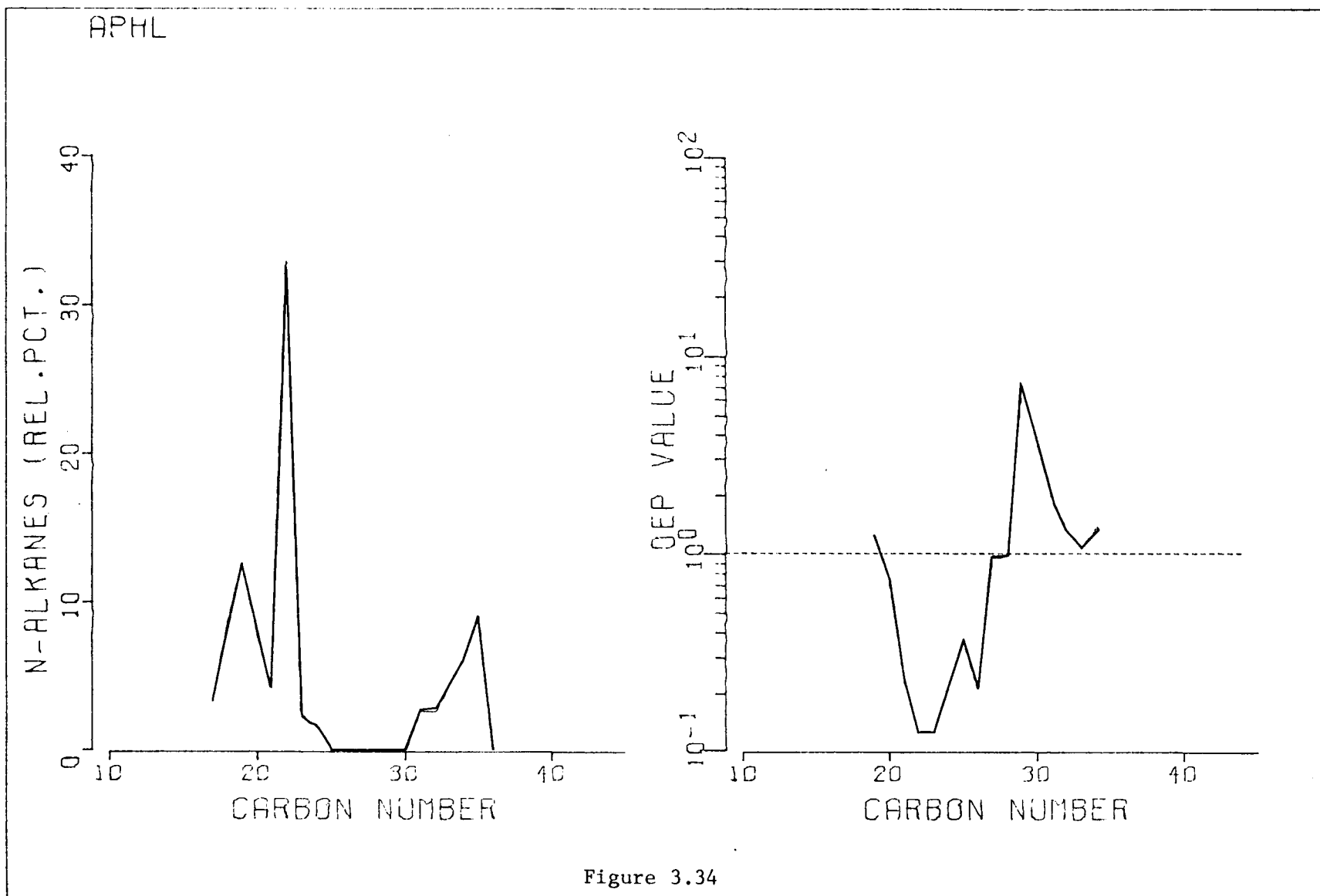


Figure 3.34

APHV

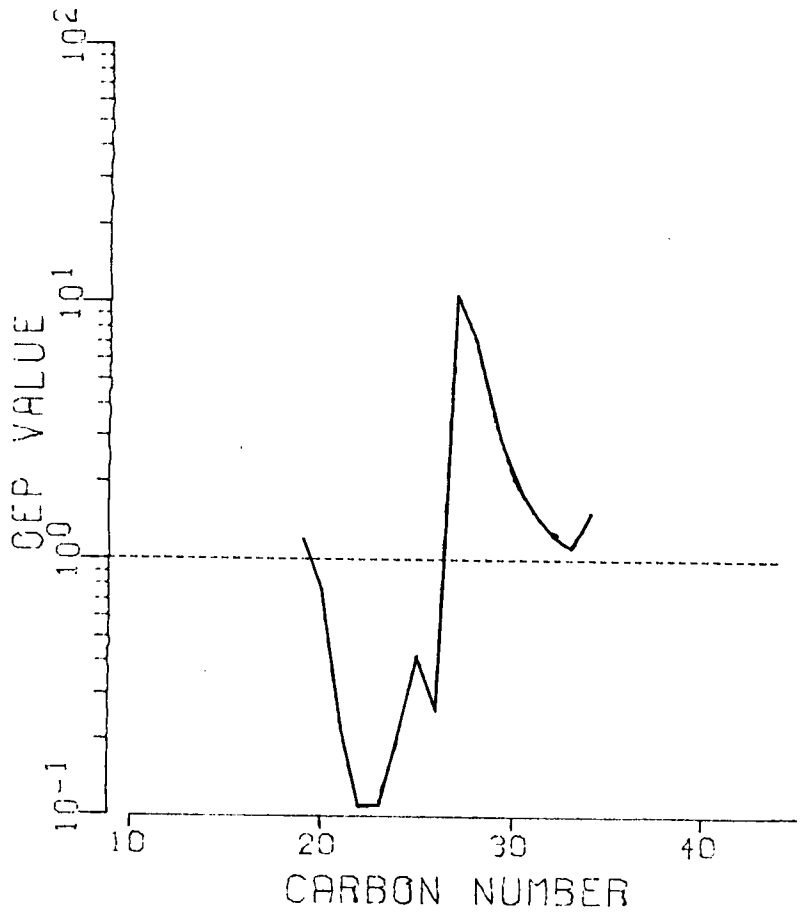
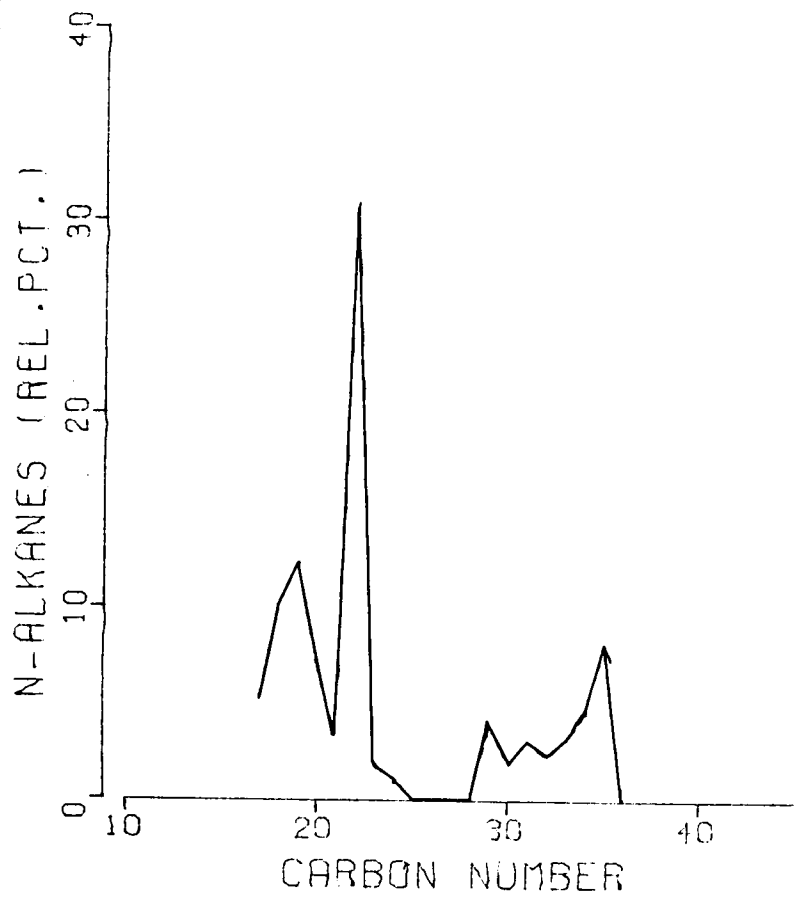


Figure 3.35

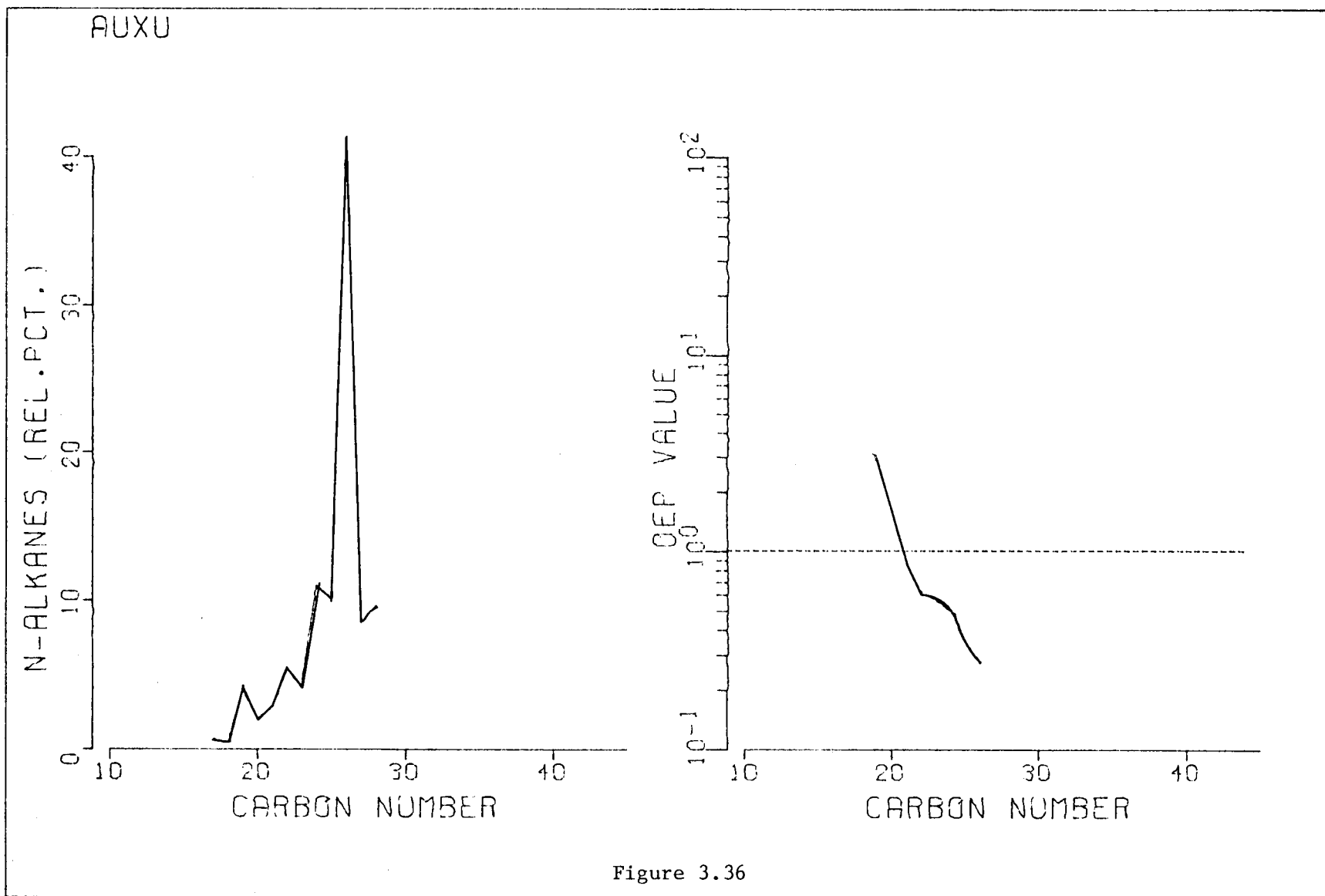


Figure 3.36

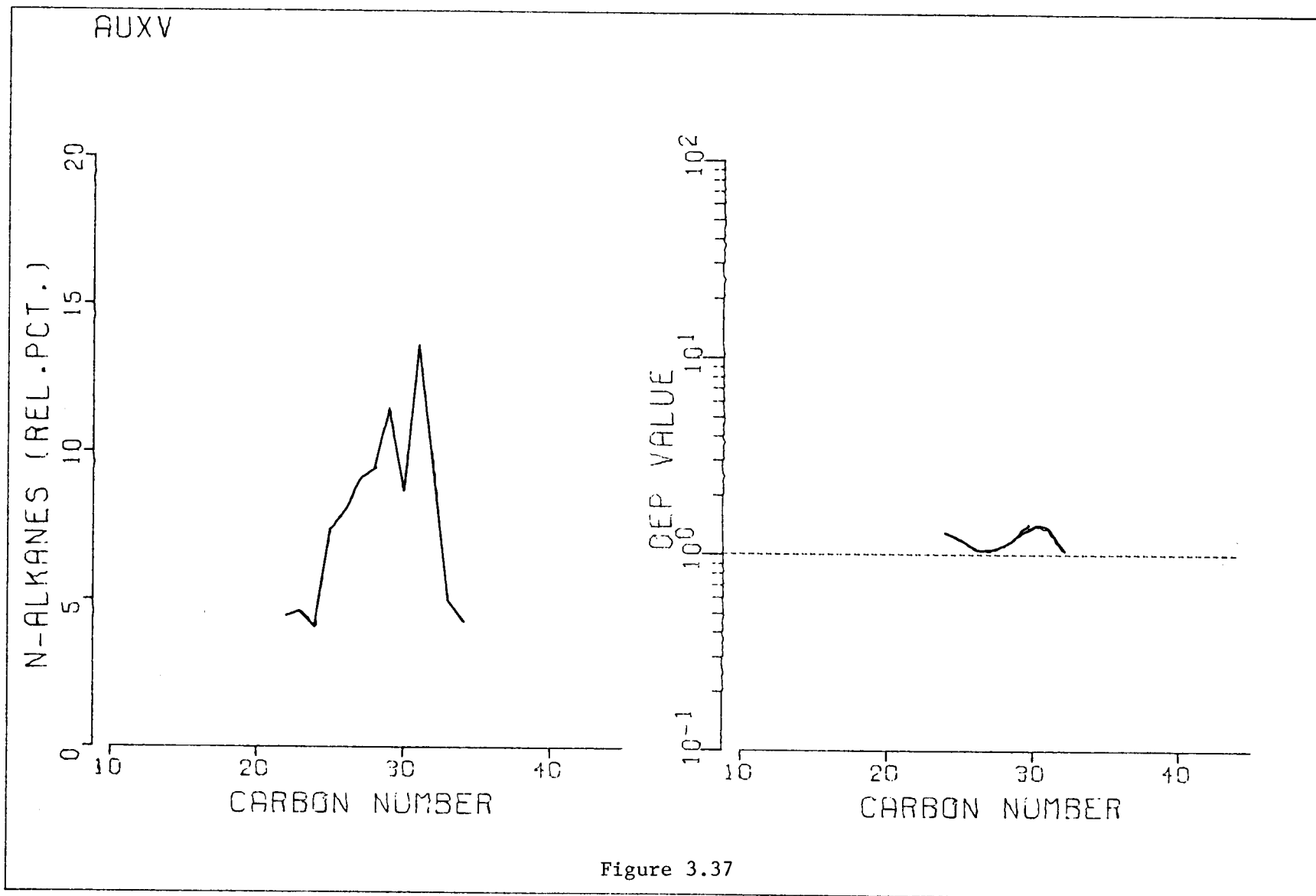
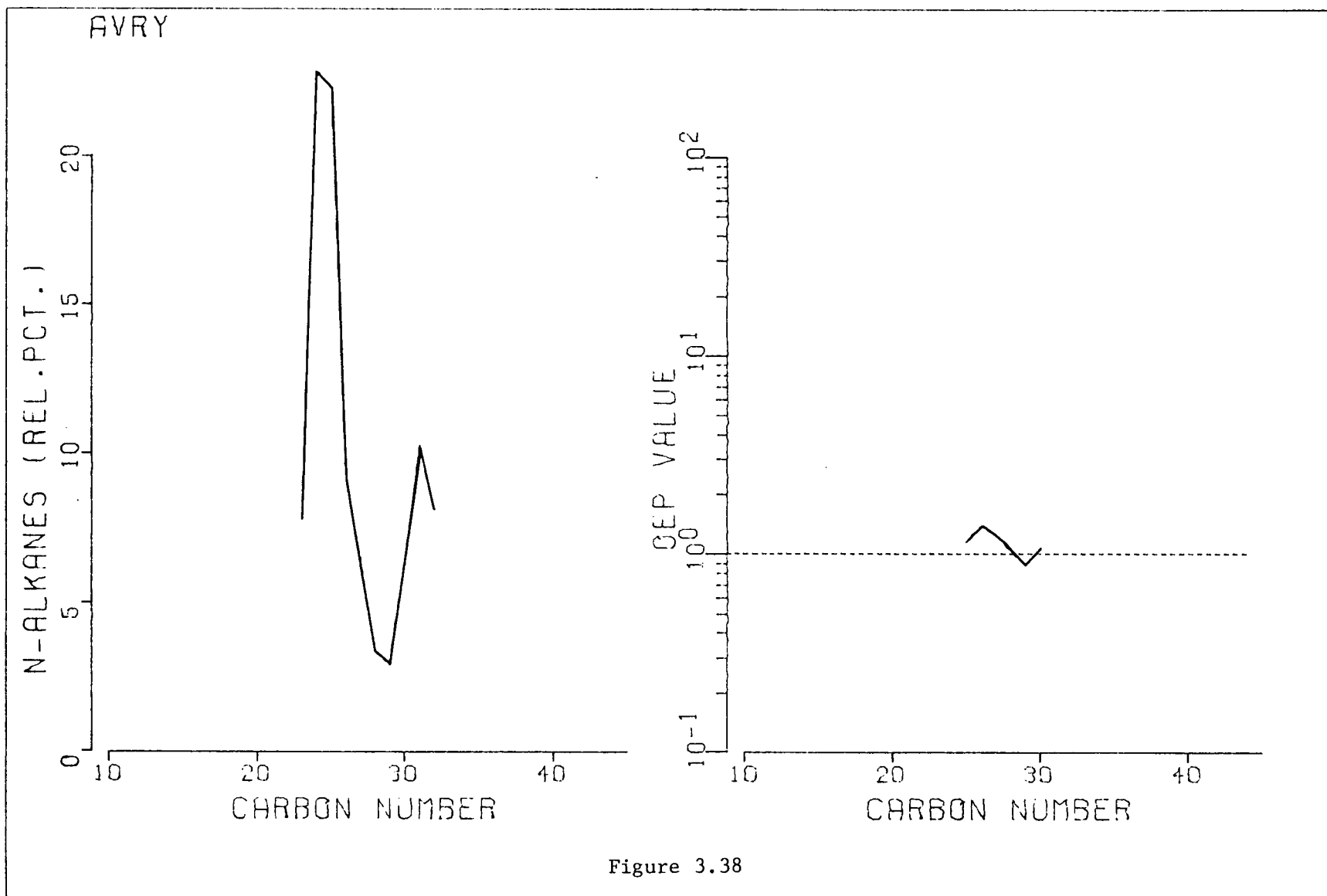


Figure 3.37



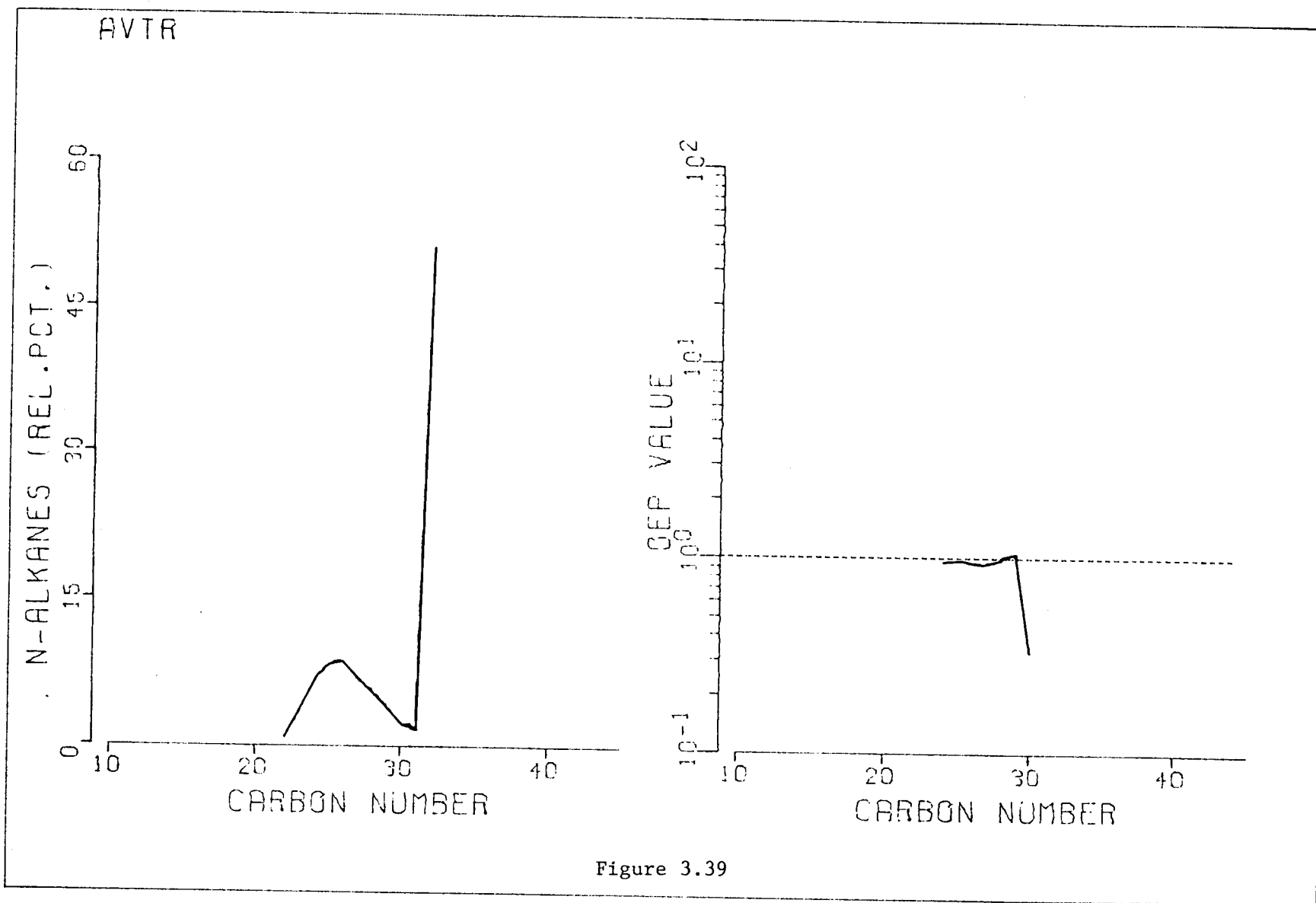
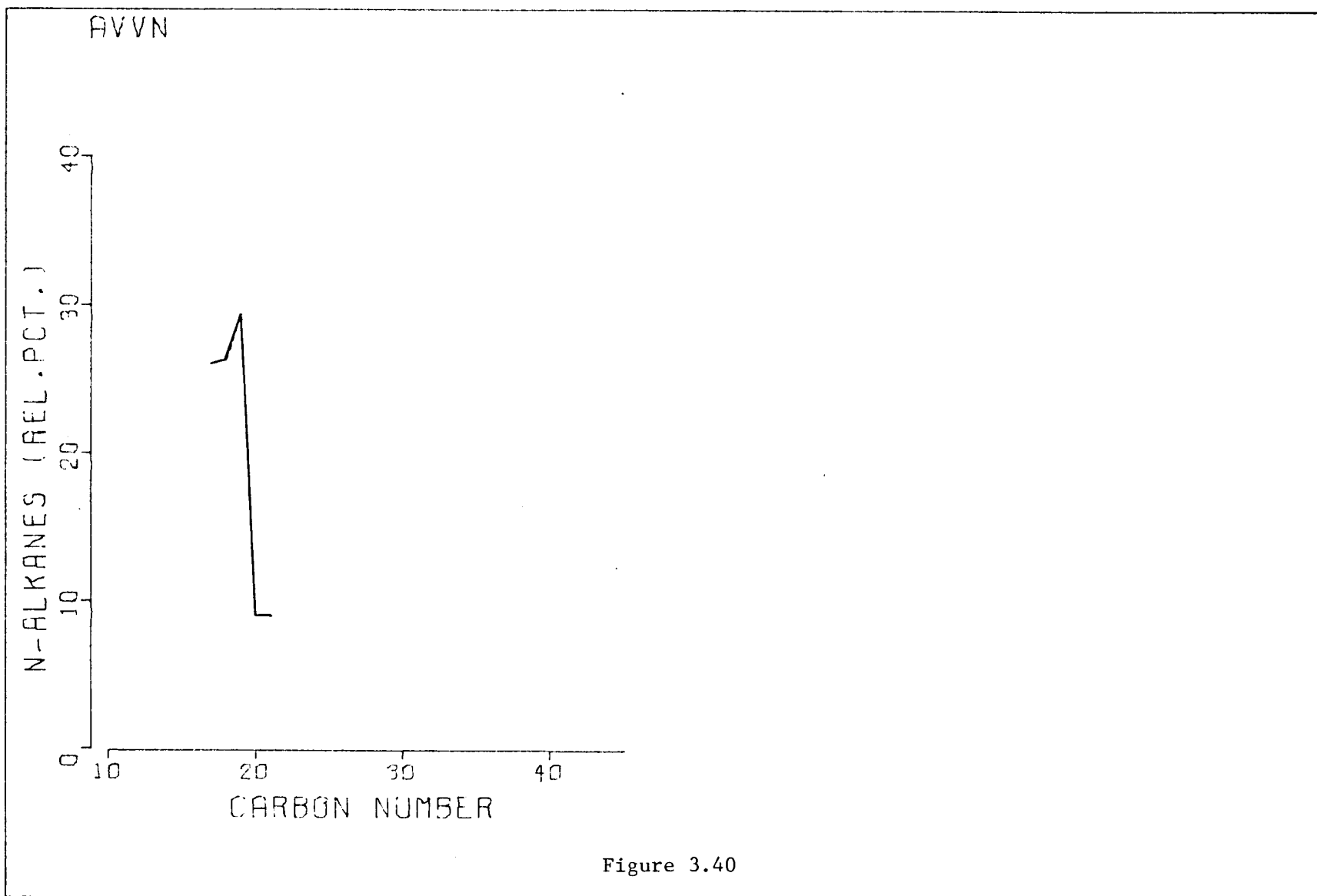


Figure 3.39



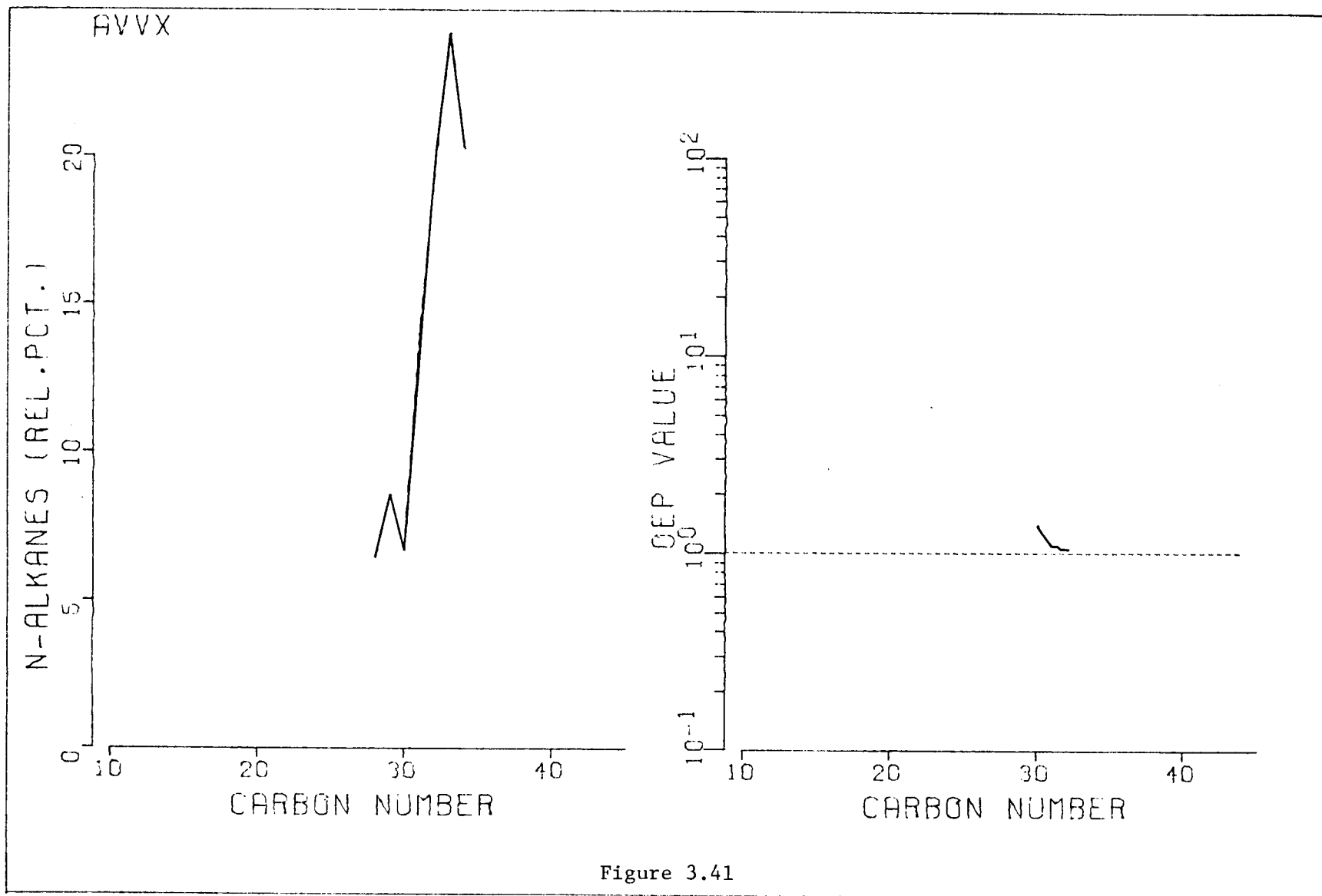


Figure 3.41

AVVZ

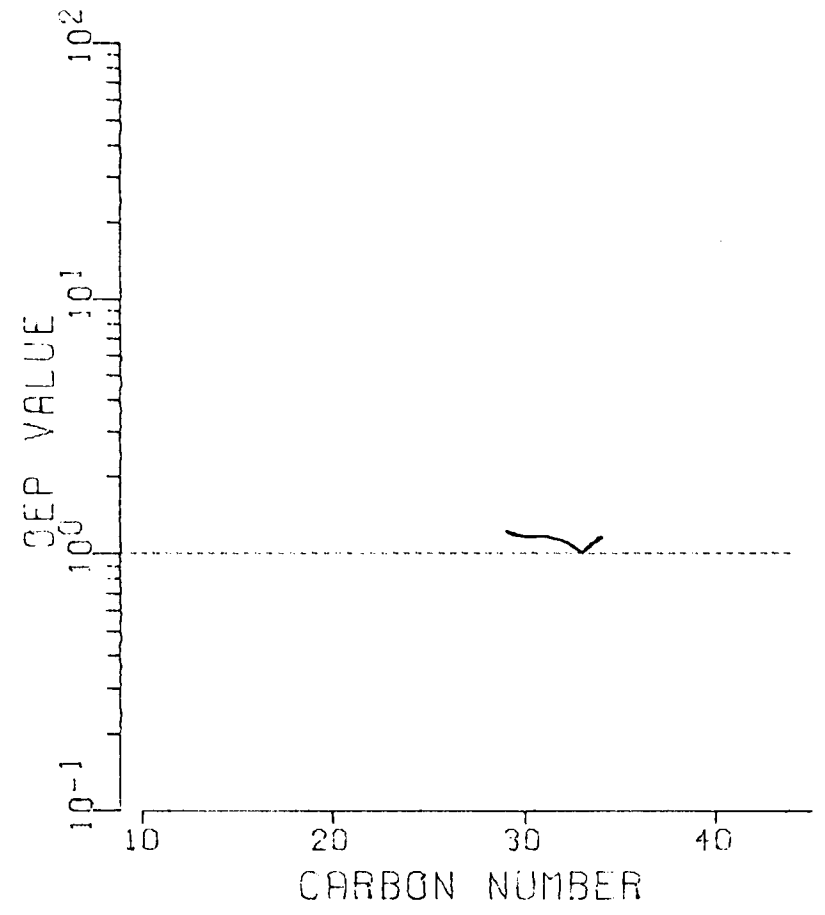
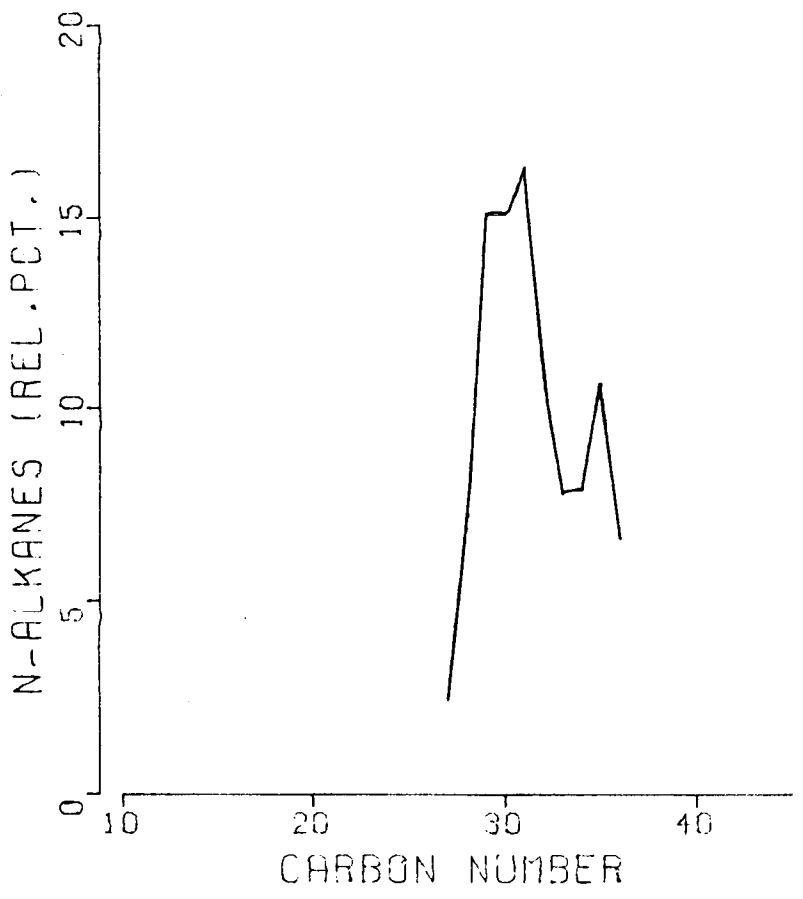


Figure 3.42

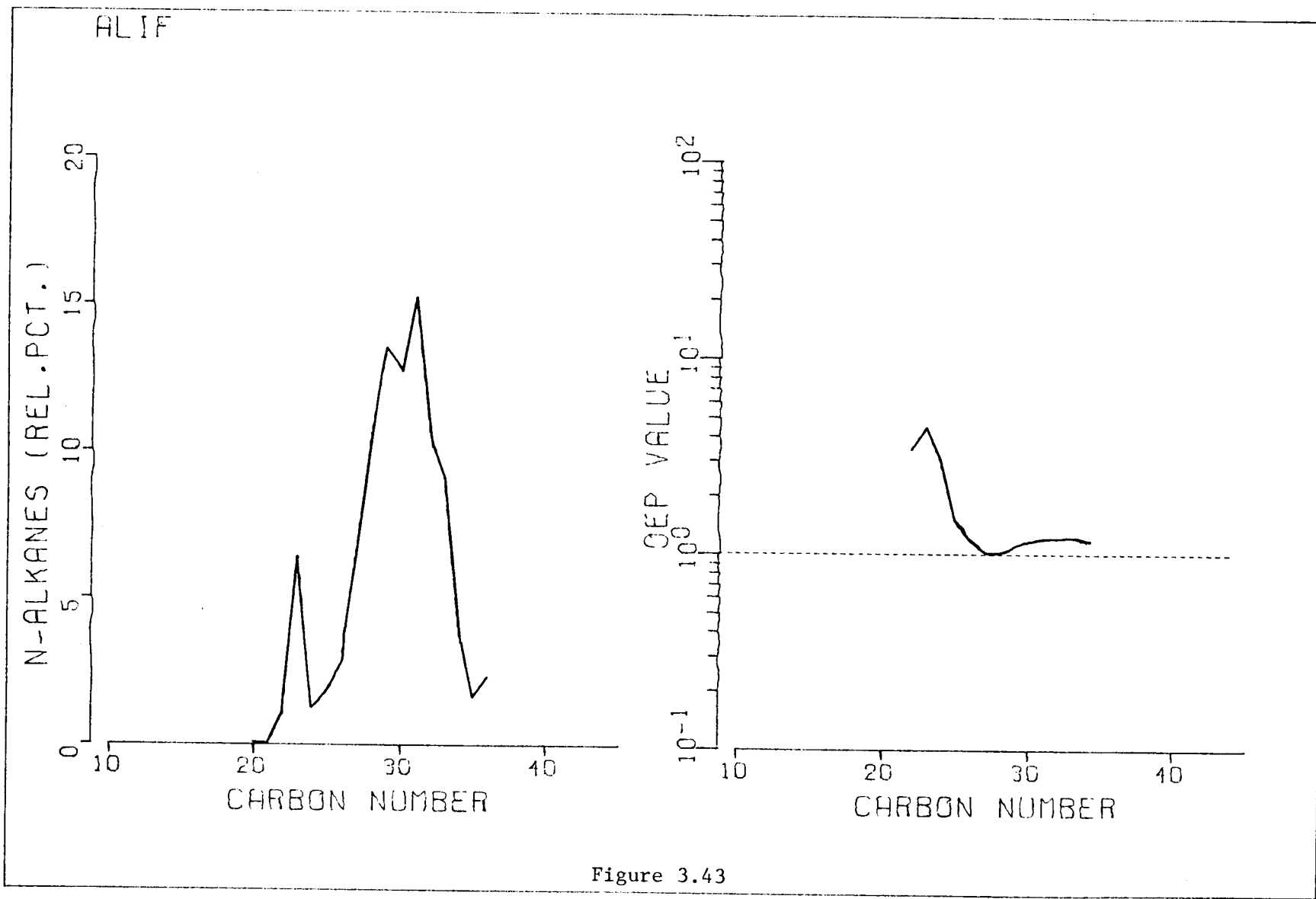


Figure 3.43

AGAR

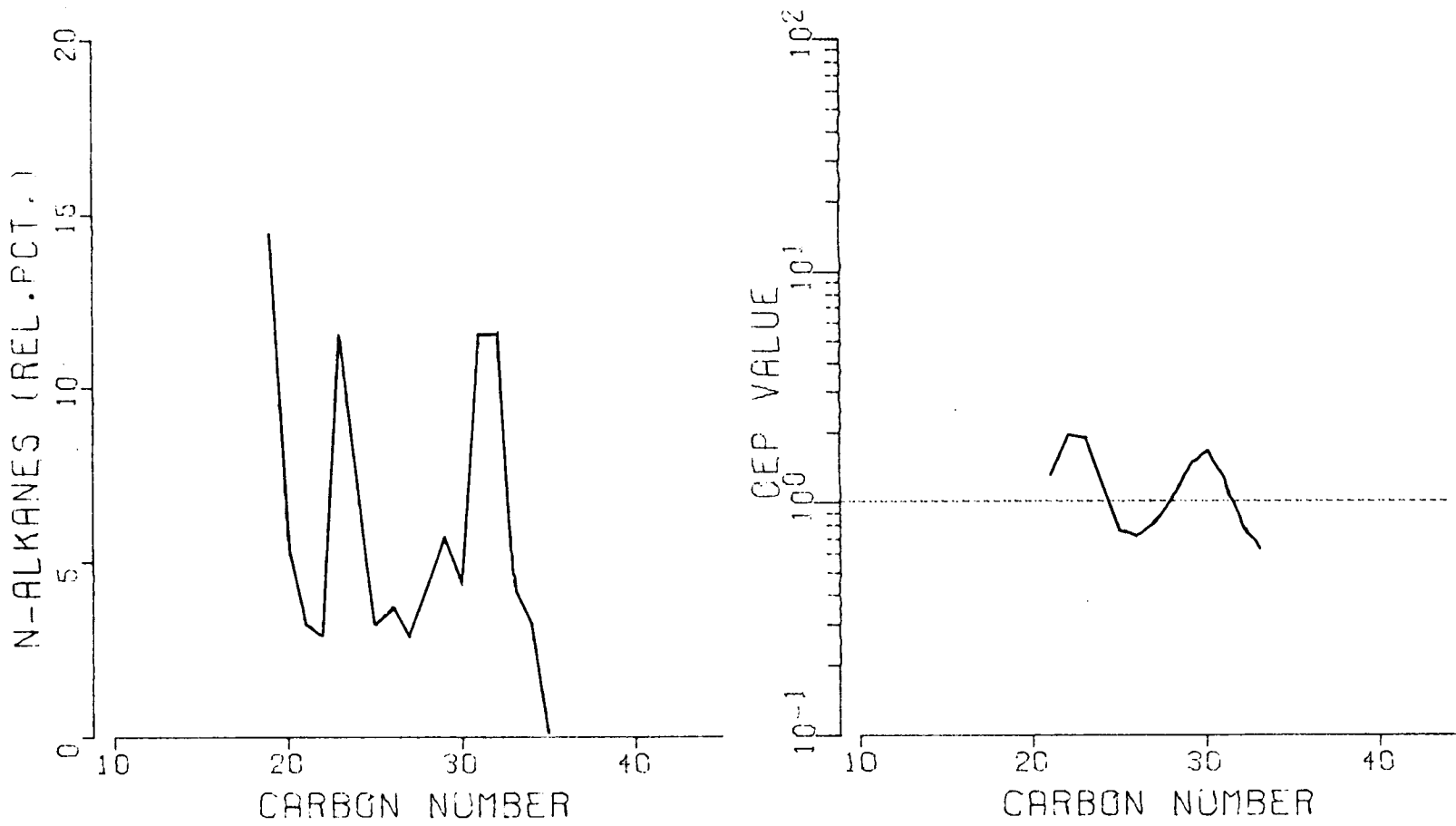


Figure 3.44

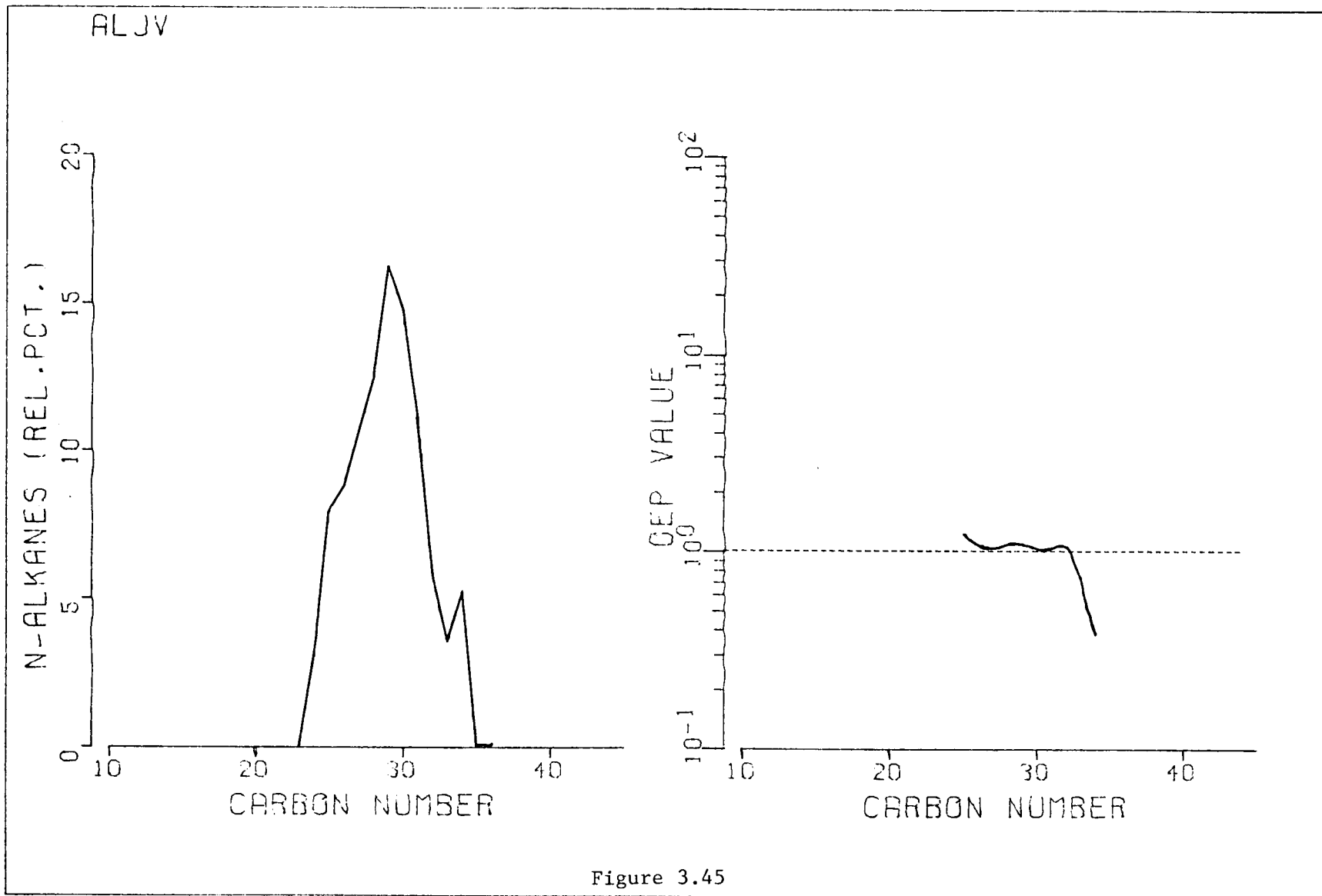


Figure 3.45

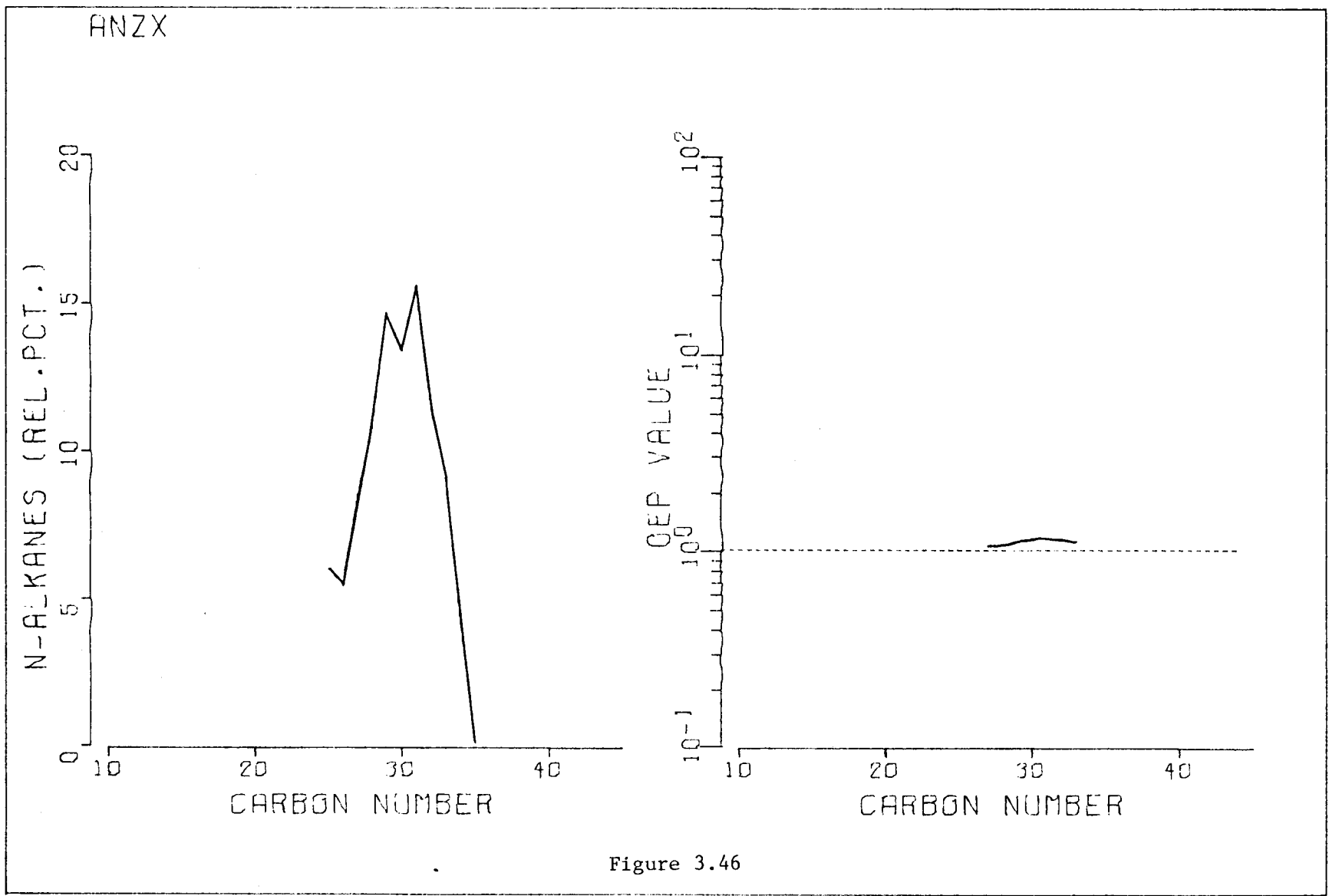


Figure 3.46

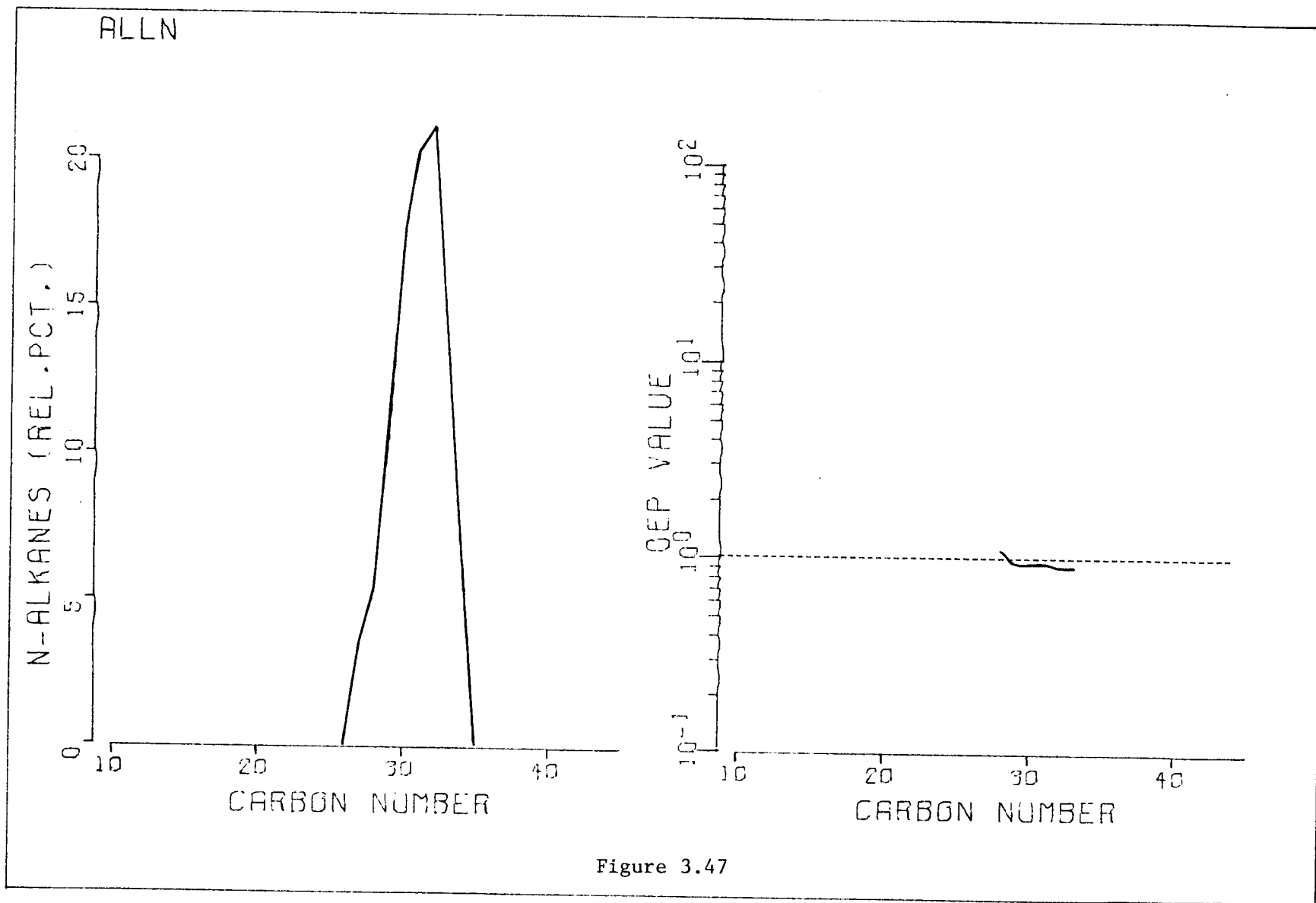


Figure 3.47

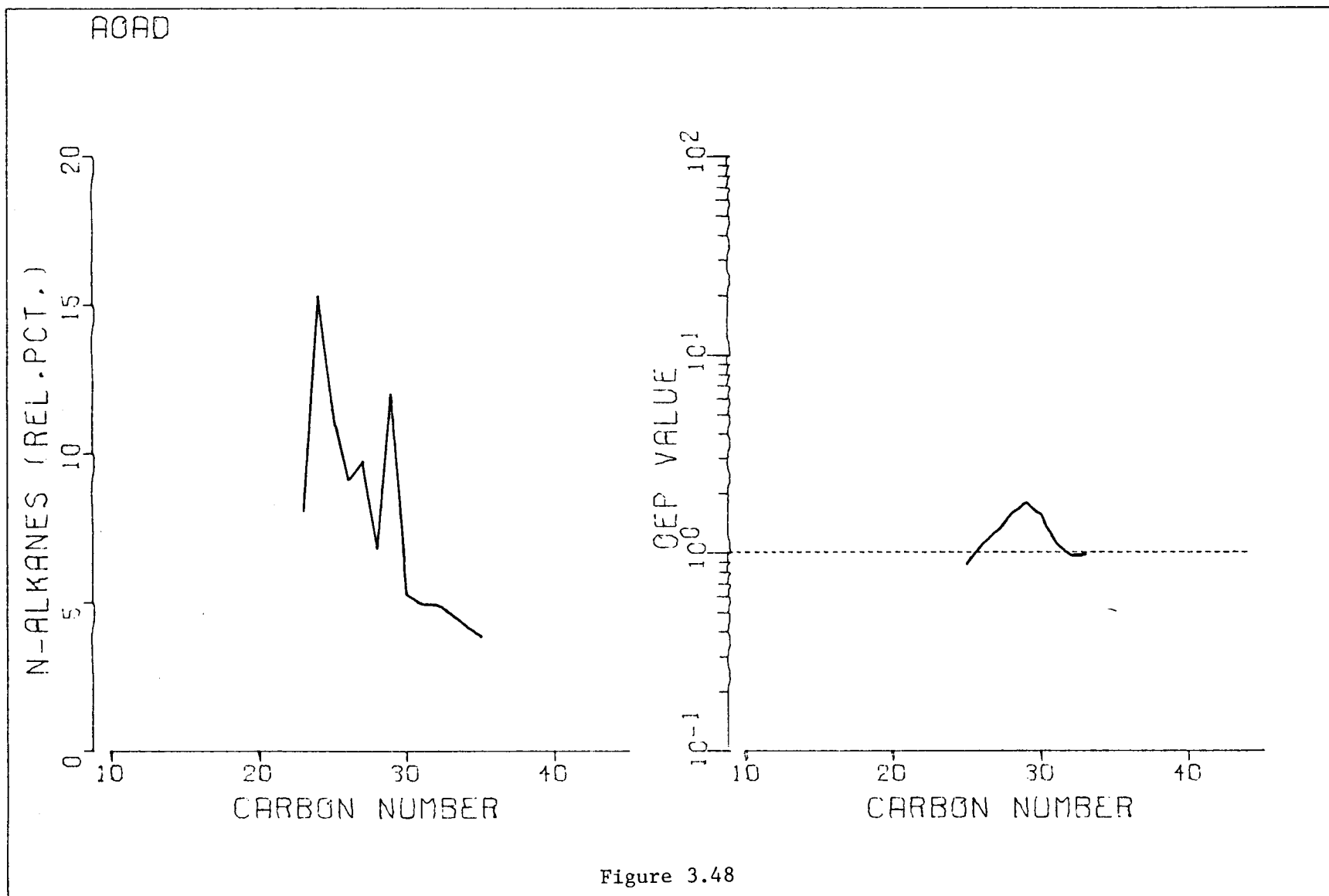


Figure 3.48

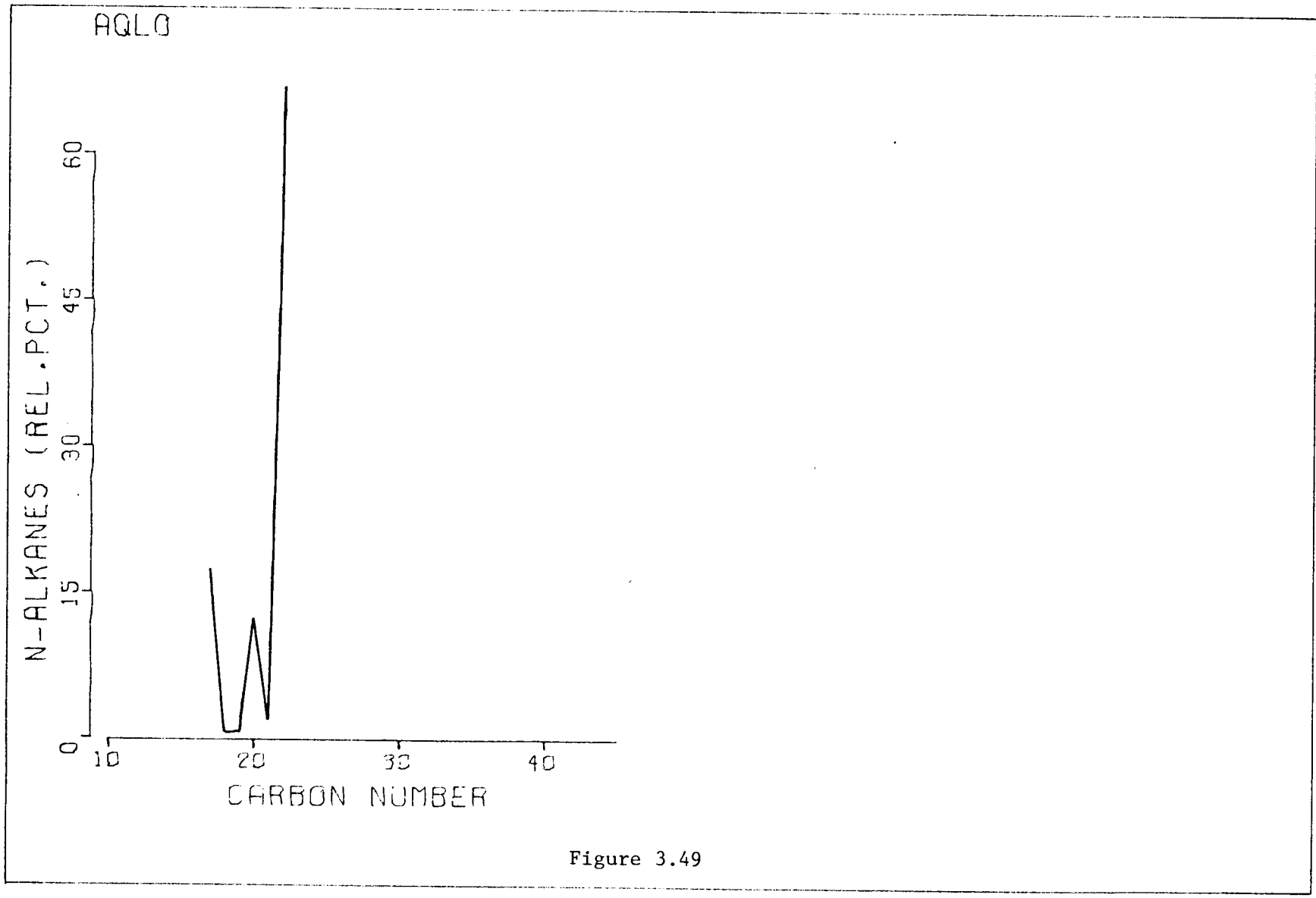


Figure 3.49

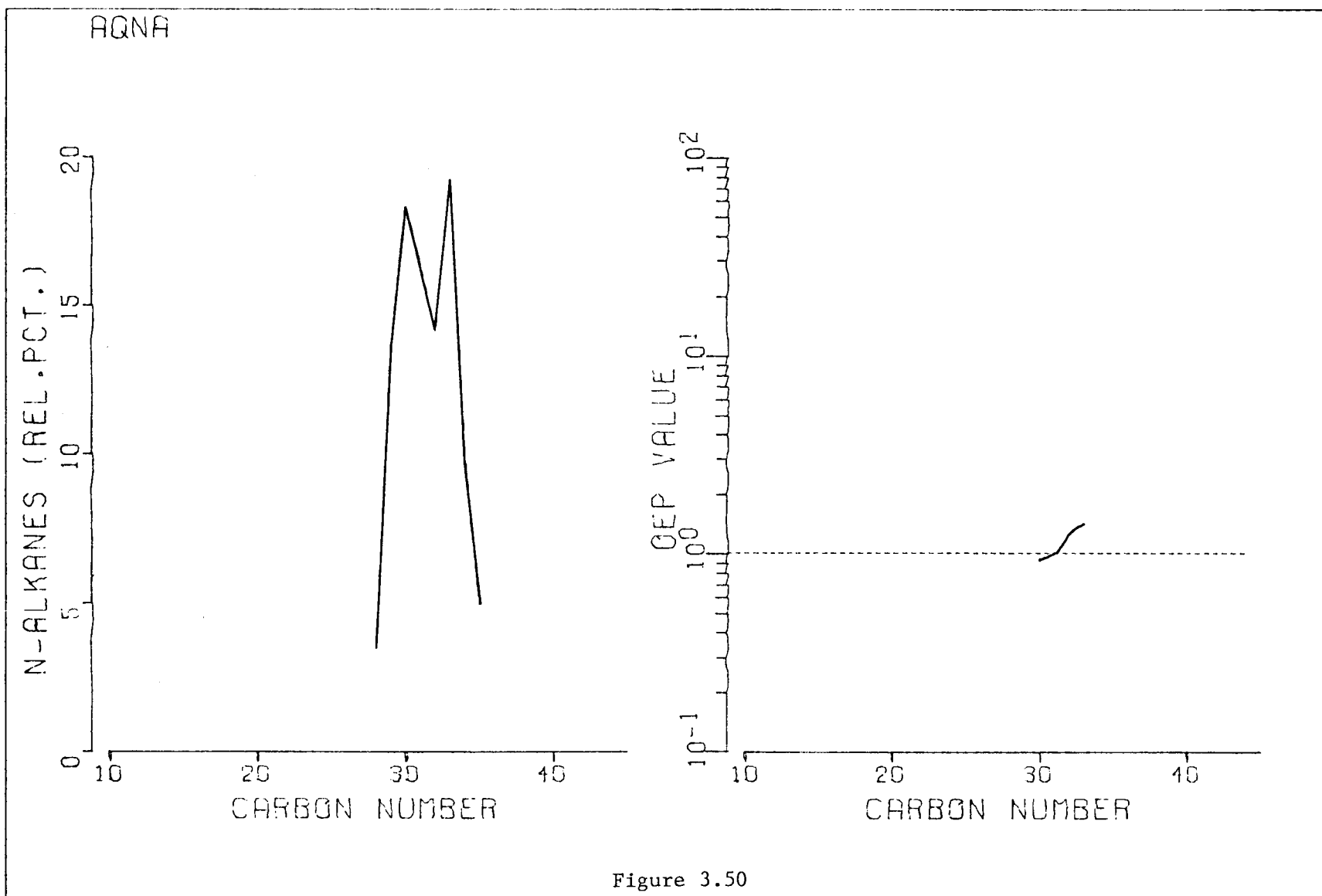


Figure 3.50

AQWQ

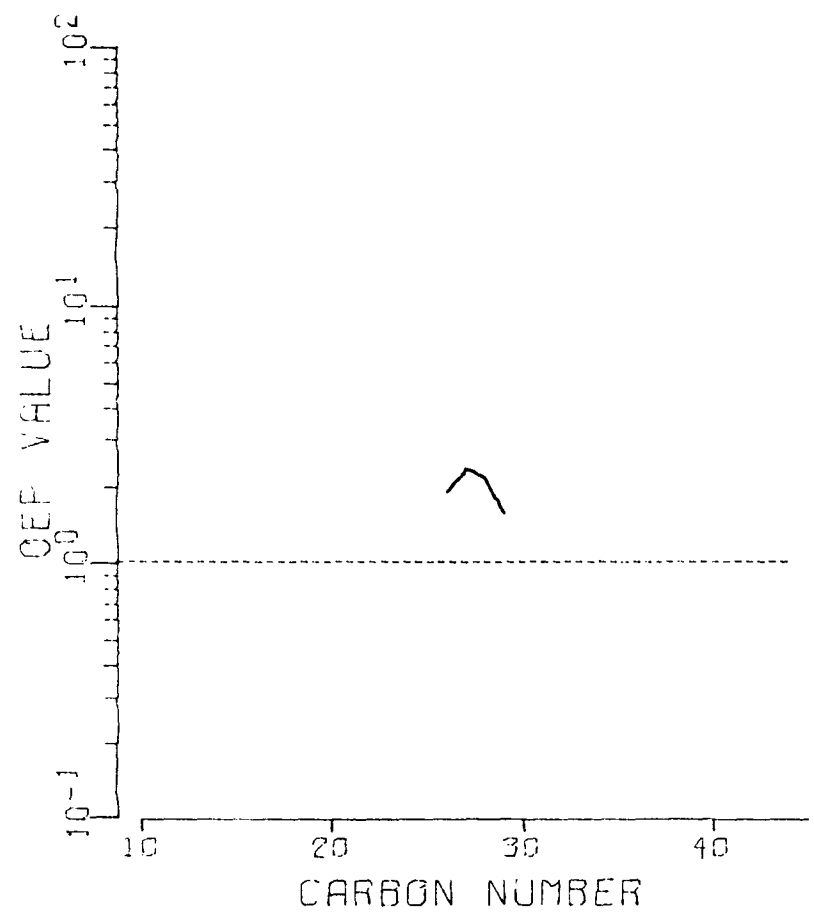
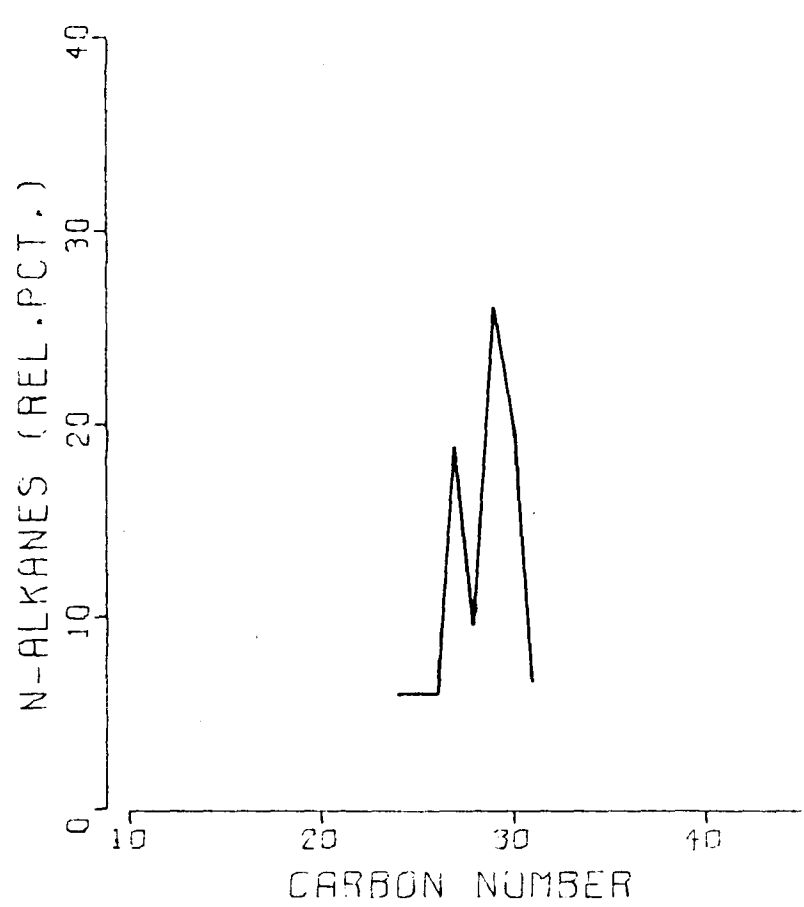


Figure 3.51

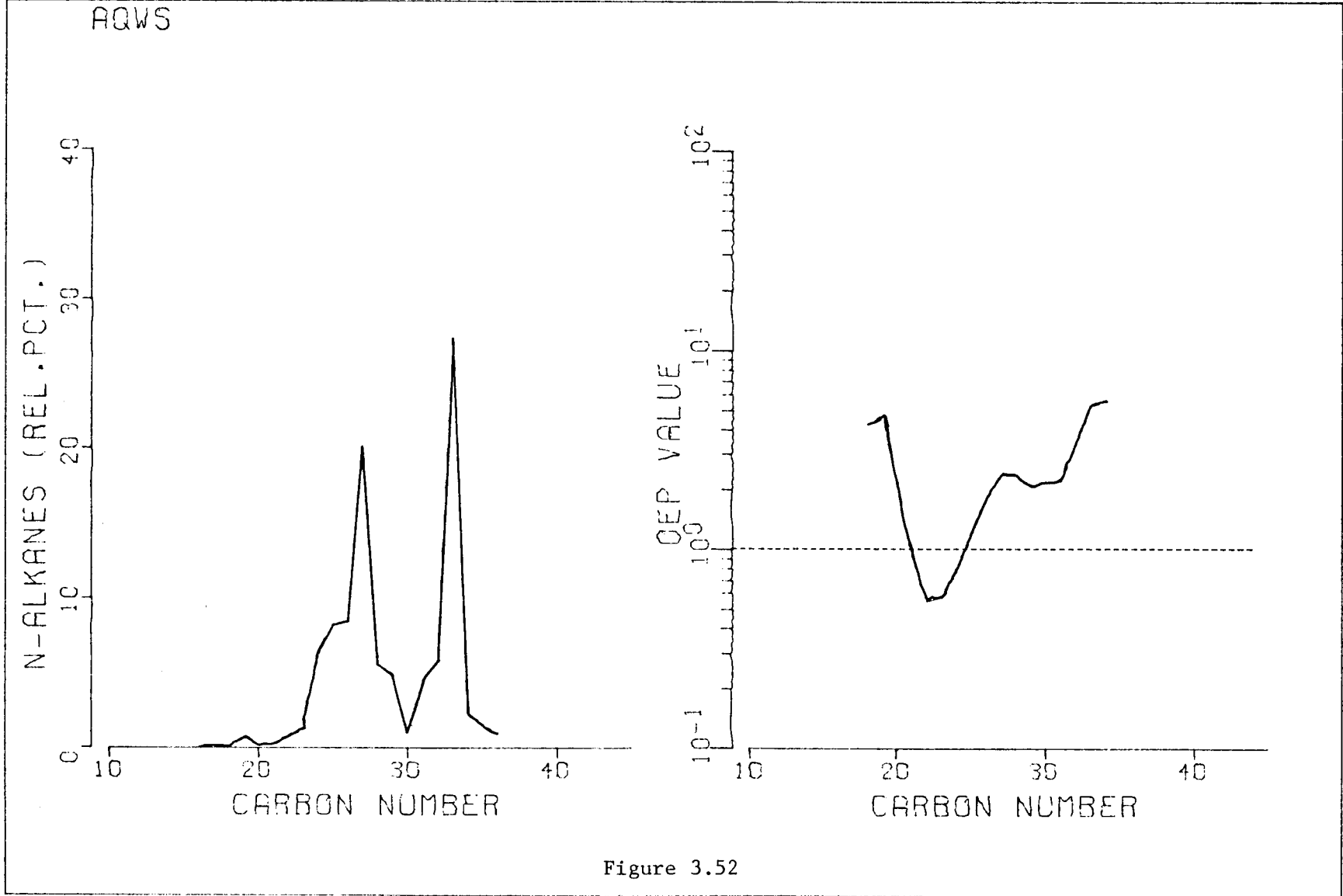
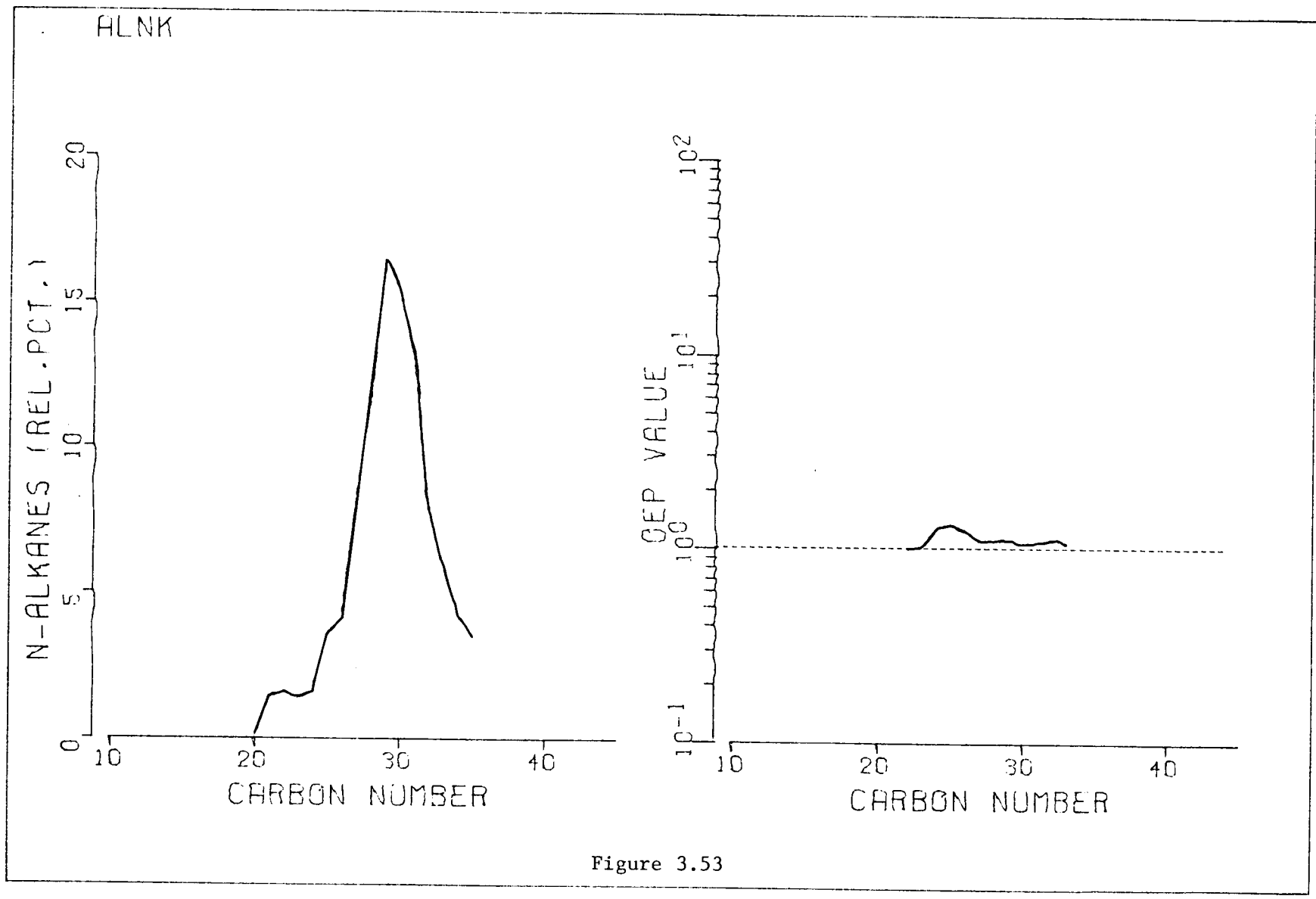


Figure 3.52



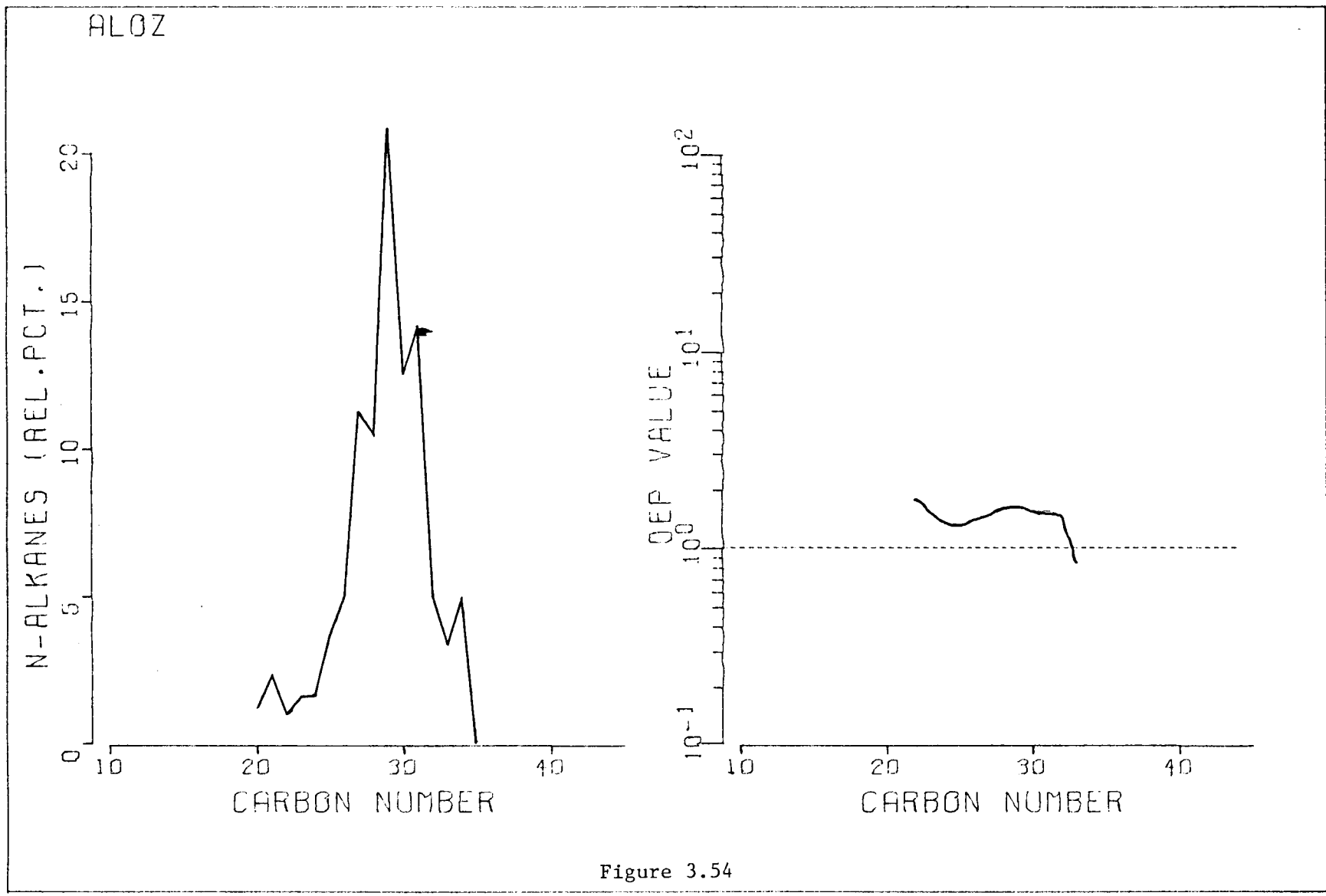


Figure 3.54

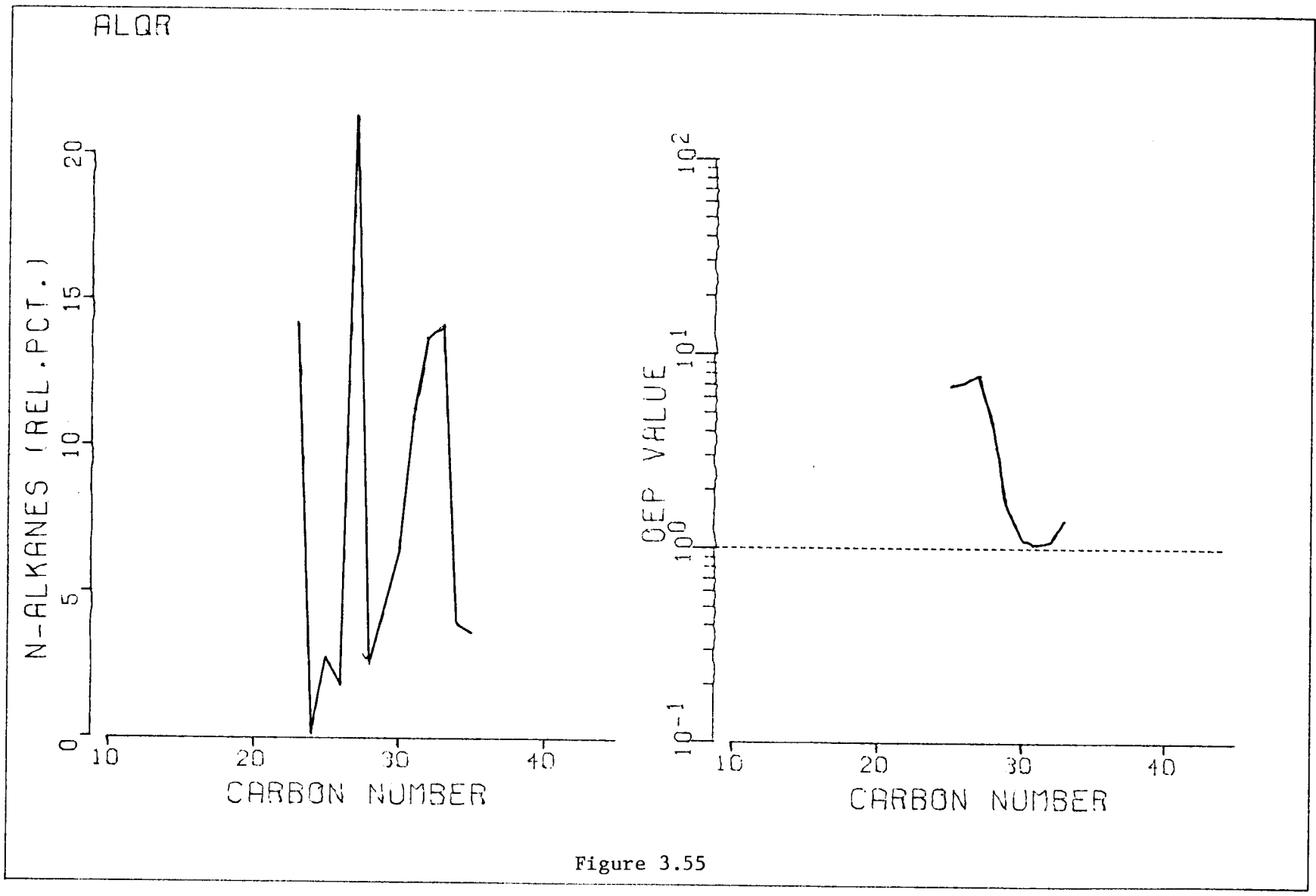


Figure 3.55

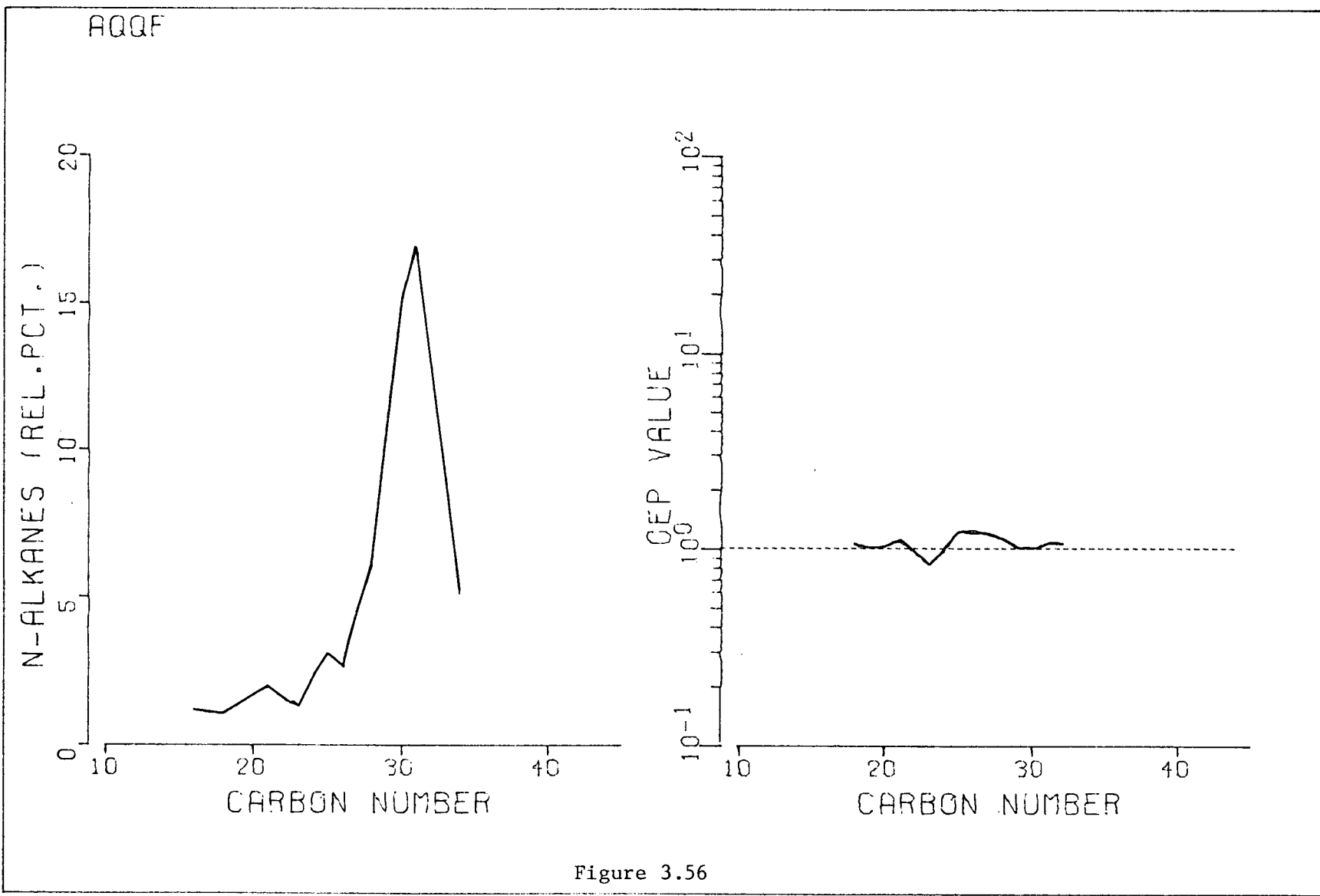


Figure 3.56

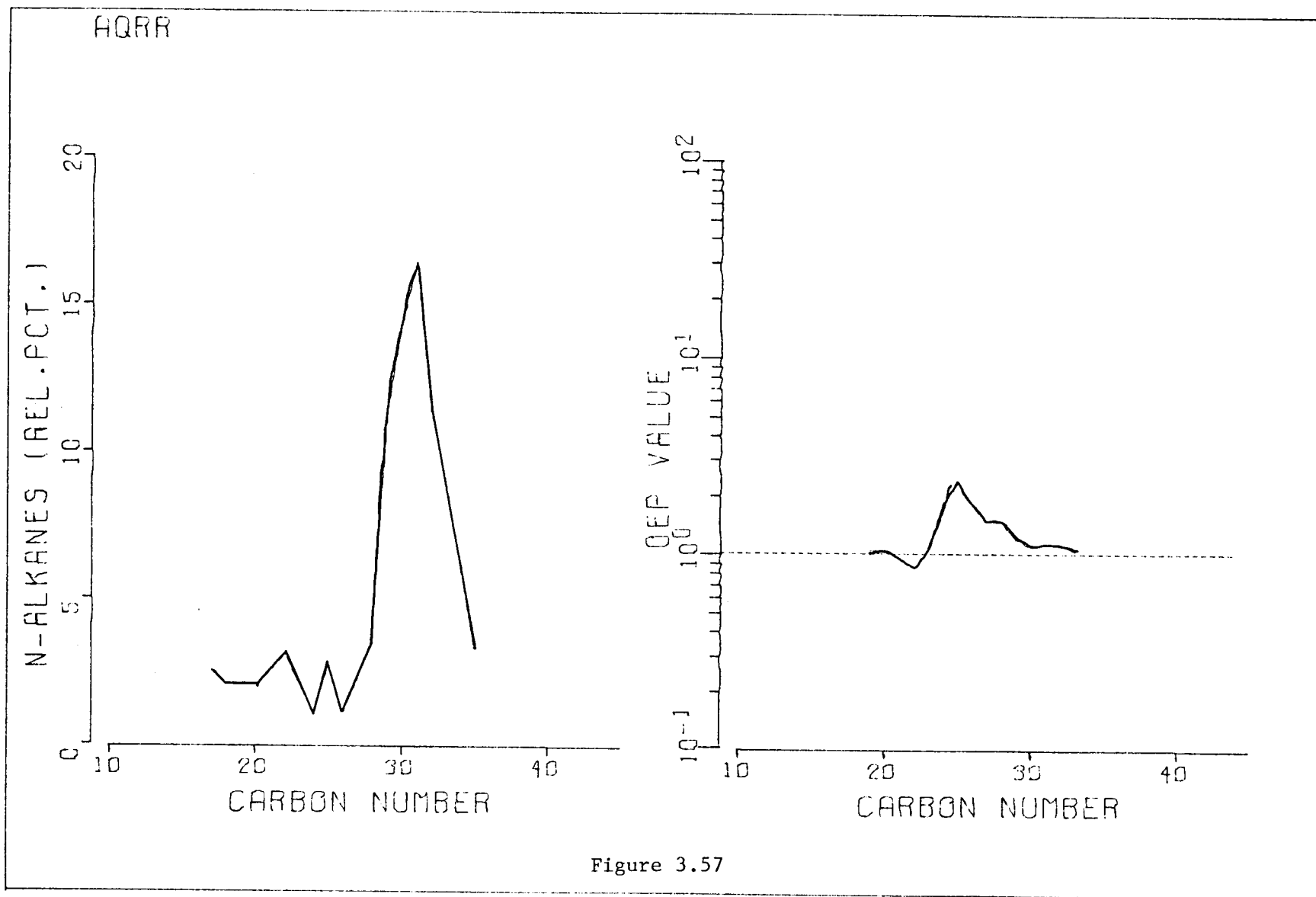


Figure 3.57

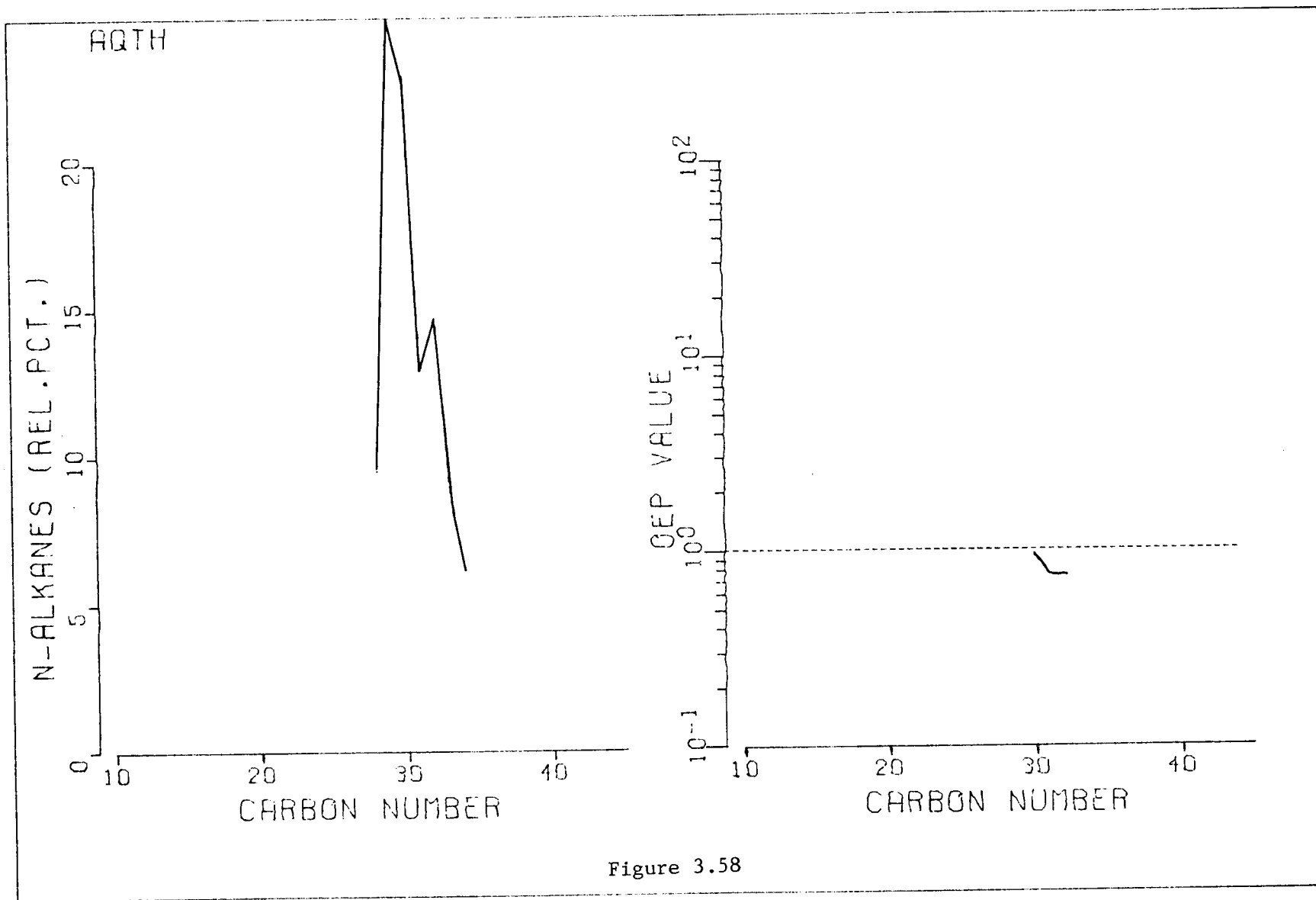


Figure 3.58

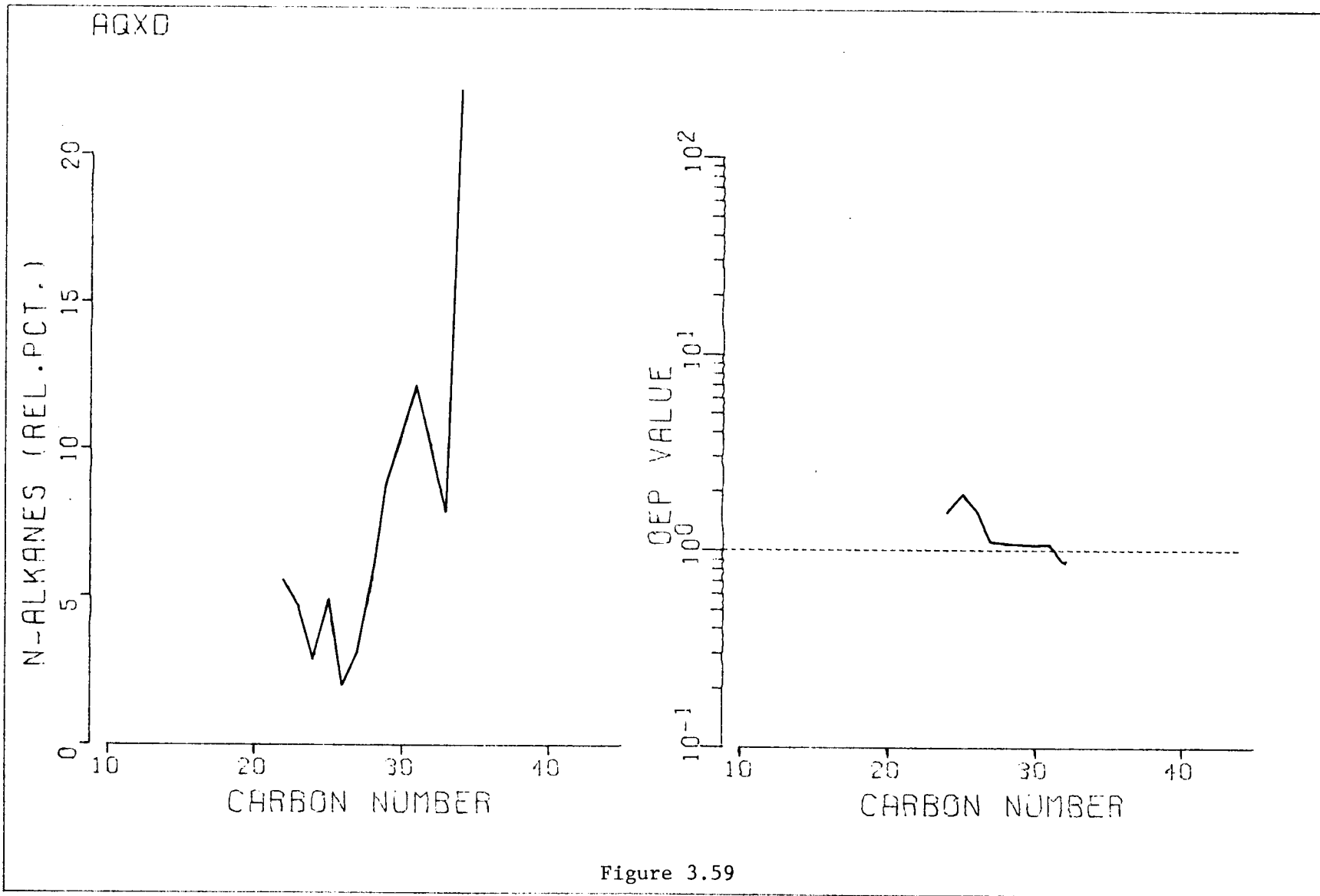


Figure 3.59

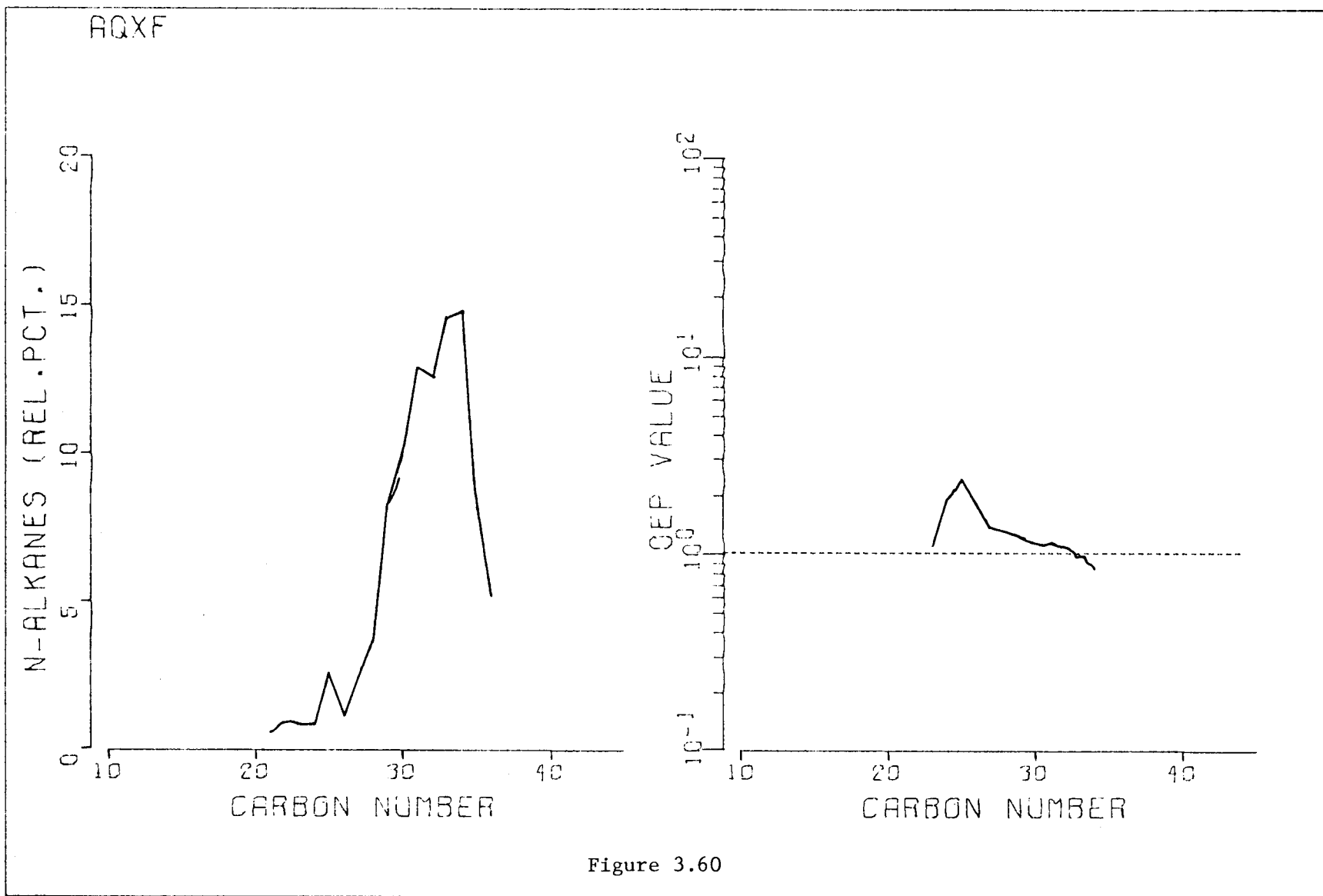


Figure 3.60

TABLE 6

WATER-DISSOLVED-RATIOS OF INDIVIDUAL HYDROCARBONS
AND AVERAGE OEP VALUES

Explanation of Table 6:

Column 1 Code = unique sample identifier
Column 2 Locat. = station/transect
Column 3 PR/PH = Pristane/Phytane ratio
Column 4 PR/C-18 = Pristane/C-17 ratio
Column 5 PH/C-17 = Phytane/C-18 ratio
Column 6 OEP = Odd-Even Preference indice value

TABLE 6

HEAVY HYDROCARBON ANALYSES - STOCS - 1976

SAMPLE TYPE : DIS

PERIOD : WINTER

CODE	LOCAT.	PR / PH	PR/C-17	PH/C-18	DEP
----	-----	-----	-----	-----	-----
AGLZ	1 / I	0	0	0	1.00
AGNP	2 / I	0	0	0	.80
AGPI	3 / I	0	0	0	.80
AGRL	1 / II	0	0	0	0
AGTC	2 / II	0	0	0	1.30
AGUN	3 / II	0	0	0	1.04
AGWZ	1 / III	1.00	1.00	1.00	1.27
AGYU	2 / III	0	0	0	1.66
AGAL	3 / III	0	0	0	.59
AGJV	1 / IV	20.00	.67	.05	.89
AGGA	2 / IV	0	0	.69	.99
AGIB	3 / IV	0	0	0	.91

SAMPLE TYPE : DIS

PERIOD : MARCH

CODE	LOCAT.	PR / PH	PR/C-17	PH/C-18	DEP
----	-----	-----	-----	-----	-----
AJKE	1 / II	0	1.49	0	0
AJMA	2 / II	0	2.83	0	0
AJNX	3 / II	0	0	0	0

SAMPLE TYPE : DIS

PERIOD : APRIL

CODE	LOCAT.	PR / PH	PR/C-17	PH/C-18	DEP
----	-----	-----	-----	-----	-----
AKDF	1 / II	0	0	0	6.65
AKFG	2 / II	0	0	0	1.39
AKHF	3 / II	0	0	0	.39

TABLE 6 Cont.'d

HEAVY HYDROCARBON ANALYSES - STUCS - 1976

SAMPLE TYPE : DIS

PERIOD : SPRING

CODE	LOCAT.	PR / PH	PR/C-17	PH/C-18	OEP
AKXB	1 / I	0	0	0	1.11
AKZE	2 / I	0	0	0	1.02
ALAX	3 / I	0	0	33.23	.68
ANZZ	3 / I	0	0	0	.85
AOAB	3 / I	0	0	.79	.62
ALCU	1 / II	0	0	0	2.37
ALEM	2 / II	0	0	0	0
ALGH	3 / II	0	0	0	0
ANZW	3 / II	0	0	0	.82
ANZY	3 / II	0	0	0	.90
ALIE	1 / III	0	0	0	1.07
ALJU	2 / III	0	0	0	.90
ALLM	3 / III	0	0	0	.37
AOAC	3 / III	0	0	0	1.10
AOAE	3 / III	0	0	0	0
ALNJ	1 / IV	0	0	0	0
ALOY	2 / IV	3.04	.36	.18	1.27
ALWQ	3 / IV	1.00	.02	.01	1.30

SAMPLE TYPE : DIS

PERIOD : JULY

CODE	LOCAT.	PR / PH	PR/C-17	PH/C-18	OEP
AUCC	1 / II	0	0	0	.63
AUDZ	2 / II	0	0	0	.32
AUEI	3 / II	0	0	0	.60
AUEK	3 / II	0	0	0	0
AUFU	3 / II	0	0	0	.36

SAMPLE TYPE : DIS

PERIOD : AUGUST

CODE	LOCAT.	PR / PH	PR/C-17	PH/C-18	OEP
APEH	1 / II	0	0	0	.61
APFW	2 / II	0	0	0	.73
APHM	3 / II	0	0	0	.57
APHW	3 / II	0	0	0	1.13
APHY	3 / II	0	0	0	0

TABLE 6 Cont.'d

HEAVY HYDROCARBON ANALYSES - STUCCS - 1976

SAMPLE TYPE : DIS

PERIOD : FALL

CODE	LOCAT.	PR / PH	PR/C-17	PH/C-18	UEP
----	-----	-----	-----	-----	-----
AQCH	1 / I	1.83	.27	.18	1.17
AQDT	2 / I	0	0	0	0
AQFJ	3 / I	0	0	1.00	1.02
AQGY	1 / II	0	0	0	1.61
AQIK	2 / II	0	0	0	1.07
AQKA	3 / II	0	0	0	.76
AQNG	3 / II	0	0	0	1.07
AQNI	3 / II	2.00	1.00	.38	1.15
AQLP	1 / III	1.63	.35	.29	2.47
AQNB	2 / III	2.31	1.25	.45	.63
AQOR	3 / III	0	0	0	0
AQWR	3 / III	1.80	1.50	.63	1.08
AQWT	3 / III	0	0	0	1.32
AQWG	1 / IV	.73	.55	.71	.86
AQRS	2 / IV	0	0	.73	1.25
AQTI	3 / IV	6.00	1.20	.20	1.39
AQXE	3 / IV	0	.60	0	.98
AQXG	3 / IV	1.00	1.00	.50	1.00

SAMPLE TYPE : DIS

PERIOD : NOVEMBER

CODE	LOCAT.	PR / PH	PR/C-17	PH/C-18	UEP
----	-----	-----	-----	-----	-----
AUUD	1 / II	.51	1.61	1.56	.80
AUYF	1 / II	0	0	0	1.04
AUYH	1 / II	2.96	2.17	.30	.48
AUWD	2 / II	2.00	1.20	.27	1.03
AUXV	3 / II	0	0	0	1.20

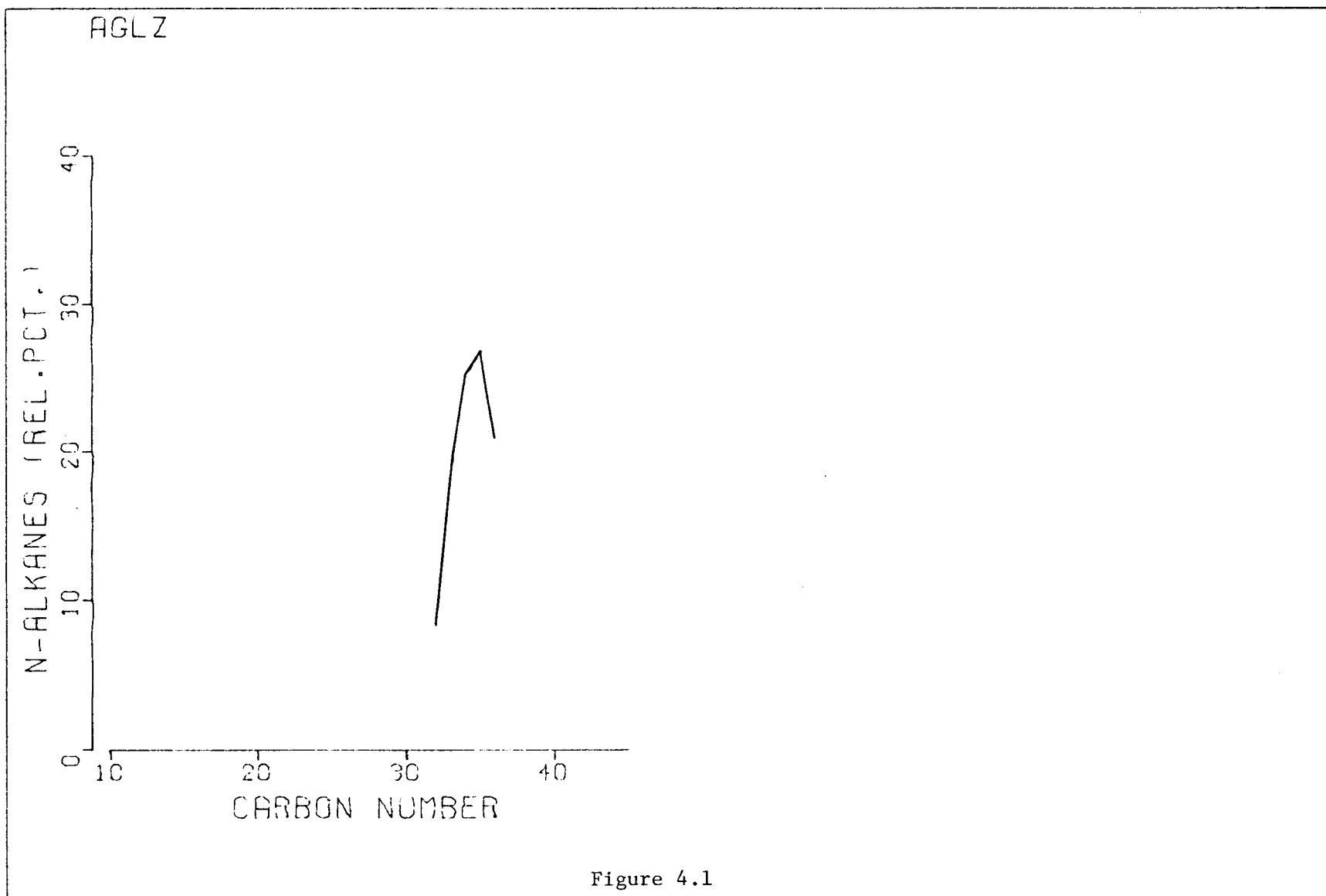
SAMPLE TYPE : DIS

PERIOD : DECEMBER

CODE	LOCAT.	PR / PH	PR/C-17	PH/C-18	UEP
----	-----	-----	-----	-----	-----
AVRZ	2 / I	1.25	1.25	.80	1.31
AVTS	2 / II	0	0	0	1.78
AVVU	3 / II	0	0	0	1.15
AVVY	3 / II	0	0	0	1.63
AVWA	3 / II	1.77	2.01	.67	.96

FIGURE 4

WATER-DISSOLVED-ODD-EVEN PREFERENCE INDICE (OEP) VALUES



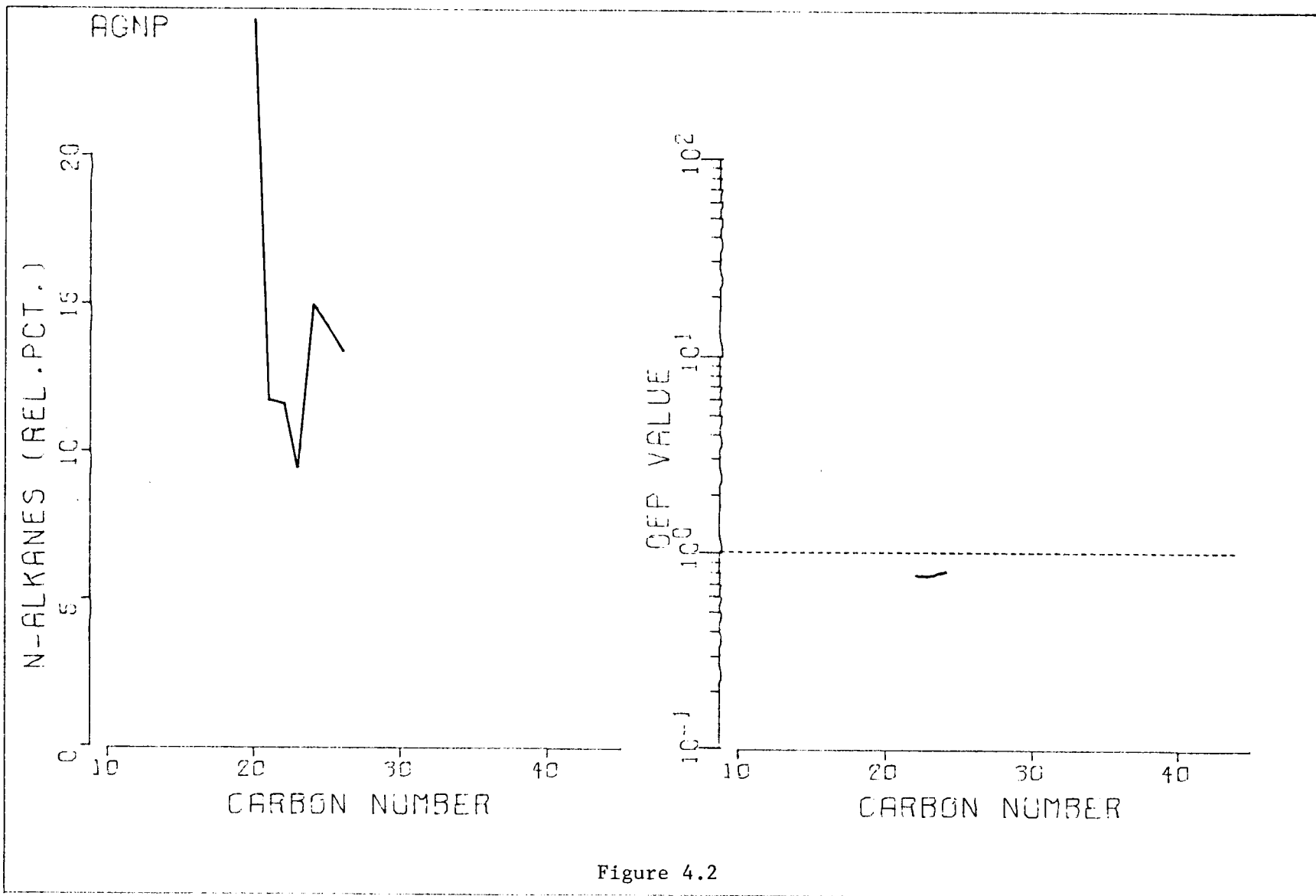
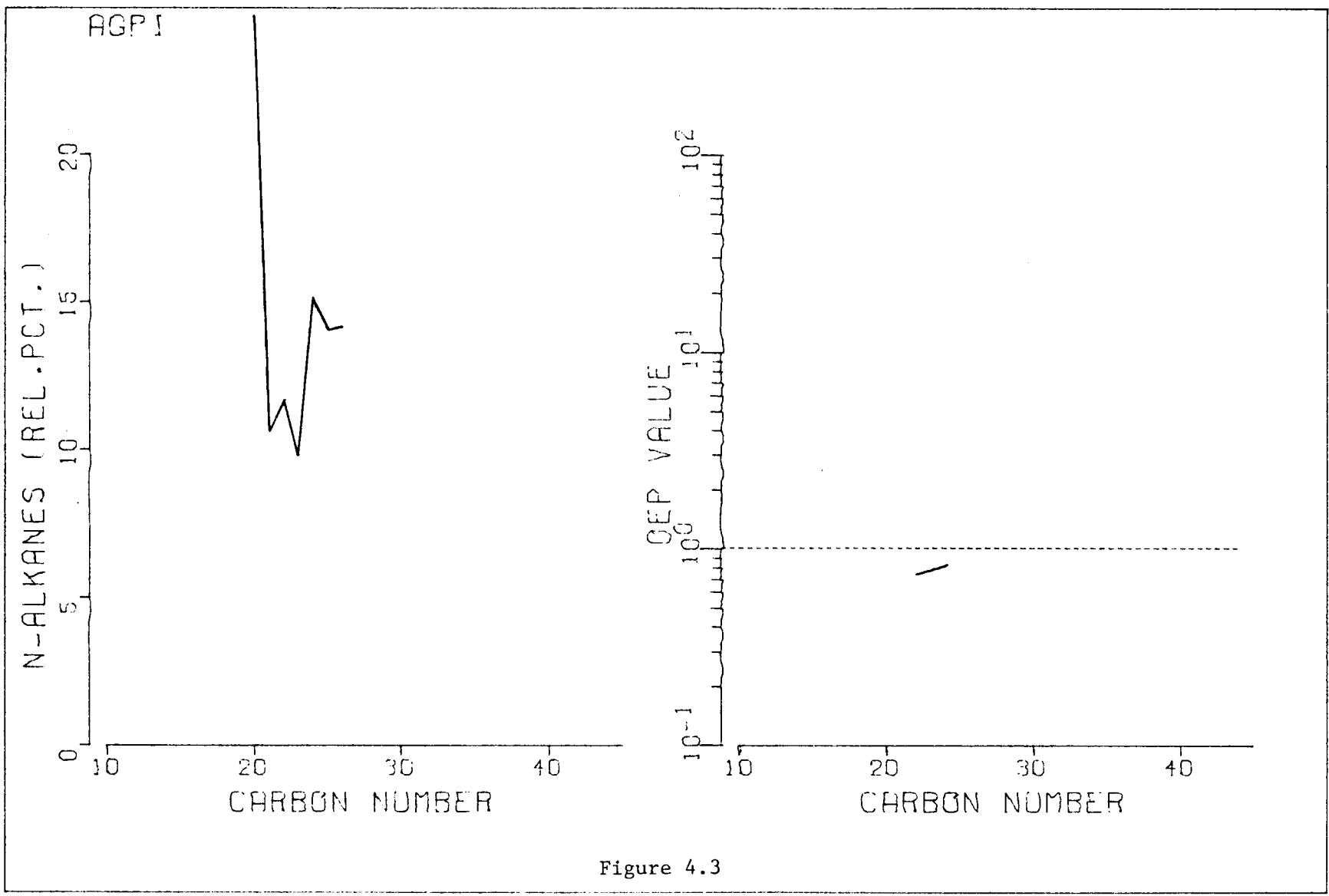


Figure 4.2



AKXB

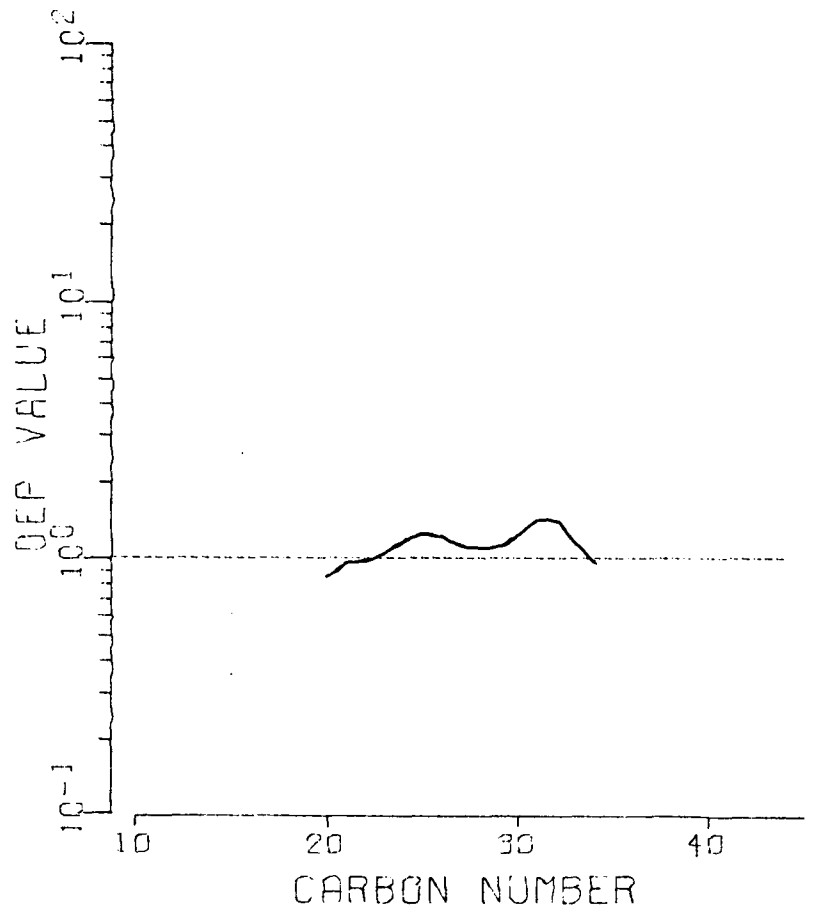
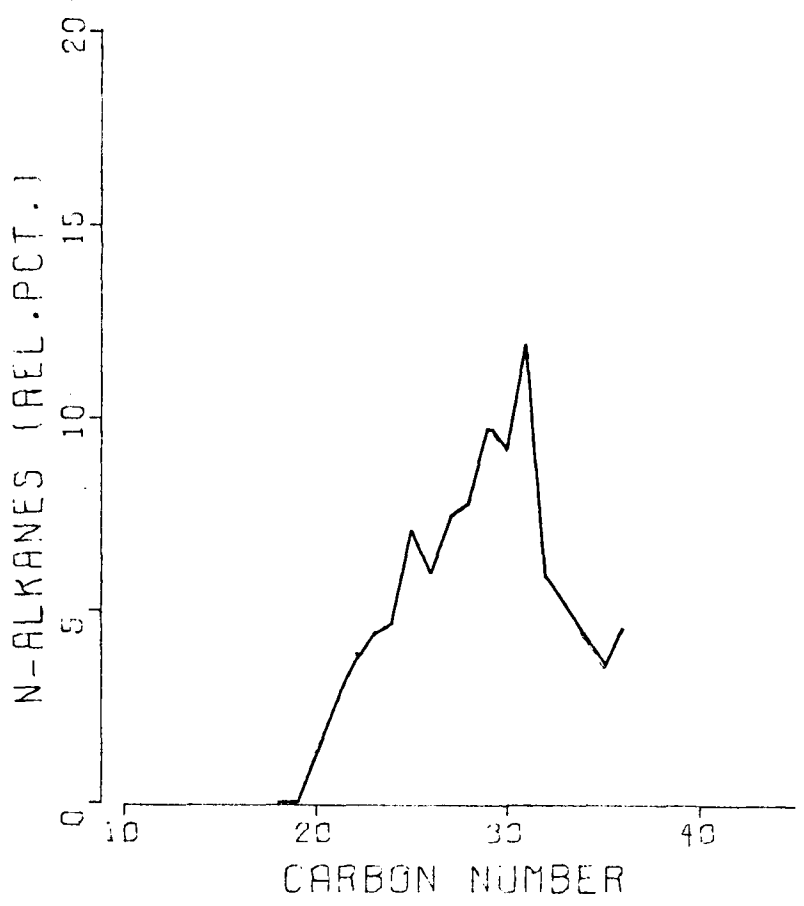


Figure 4.4

AKZE

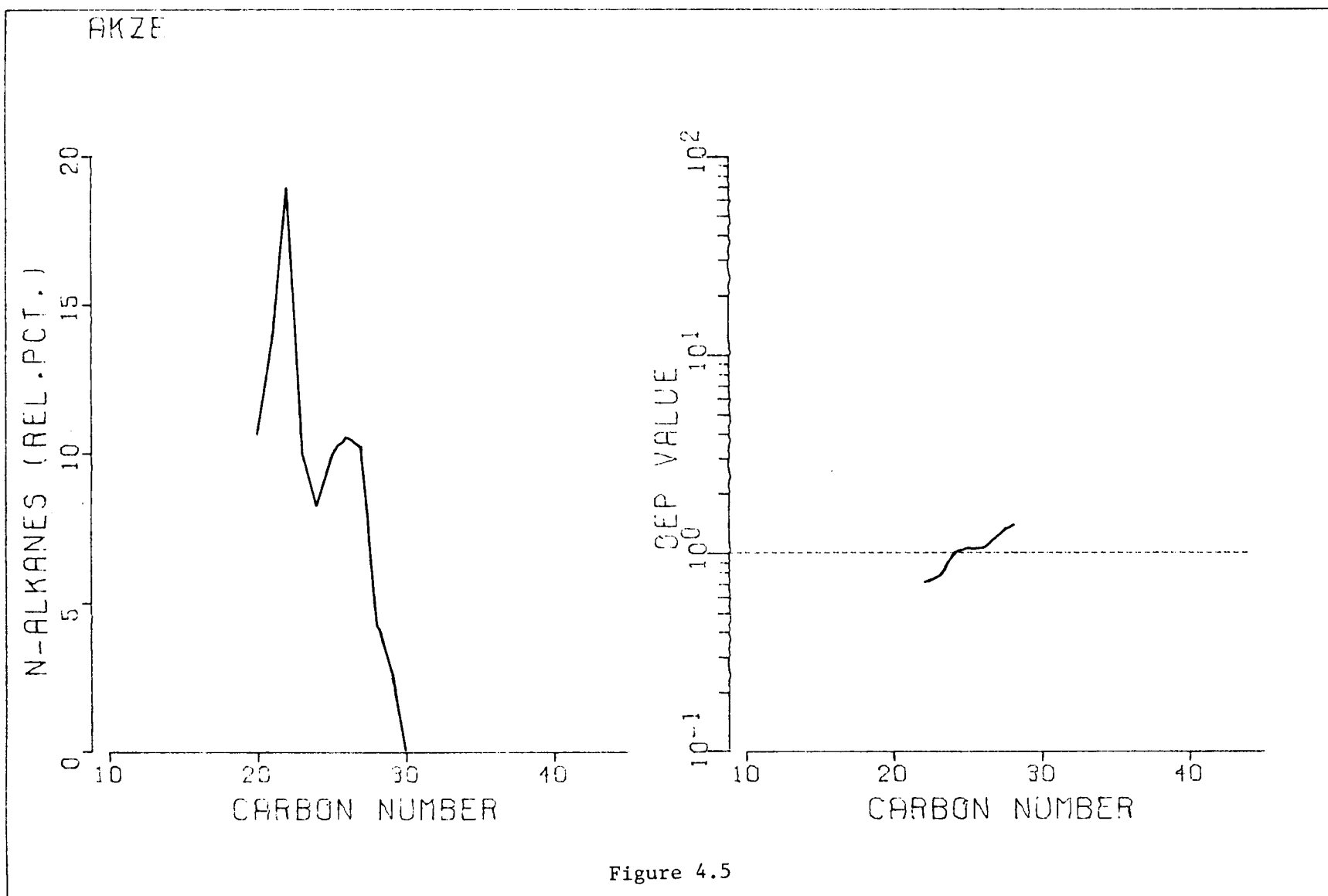


Figure 4.5

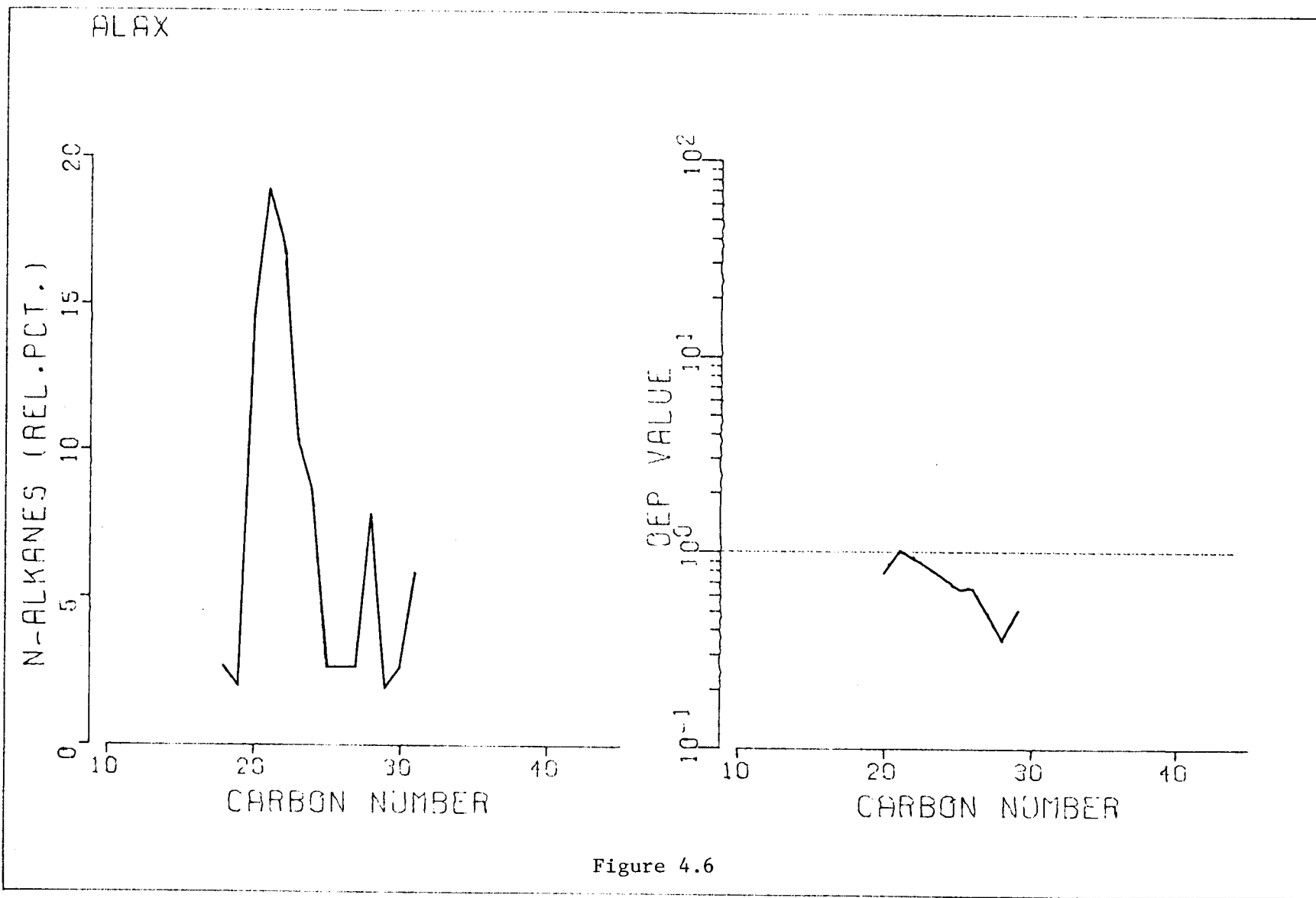


Figure 4.6

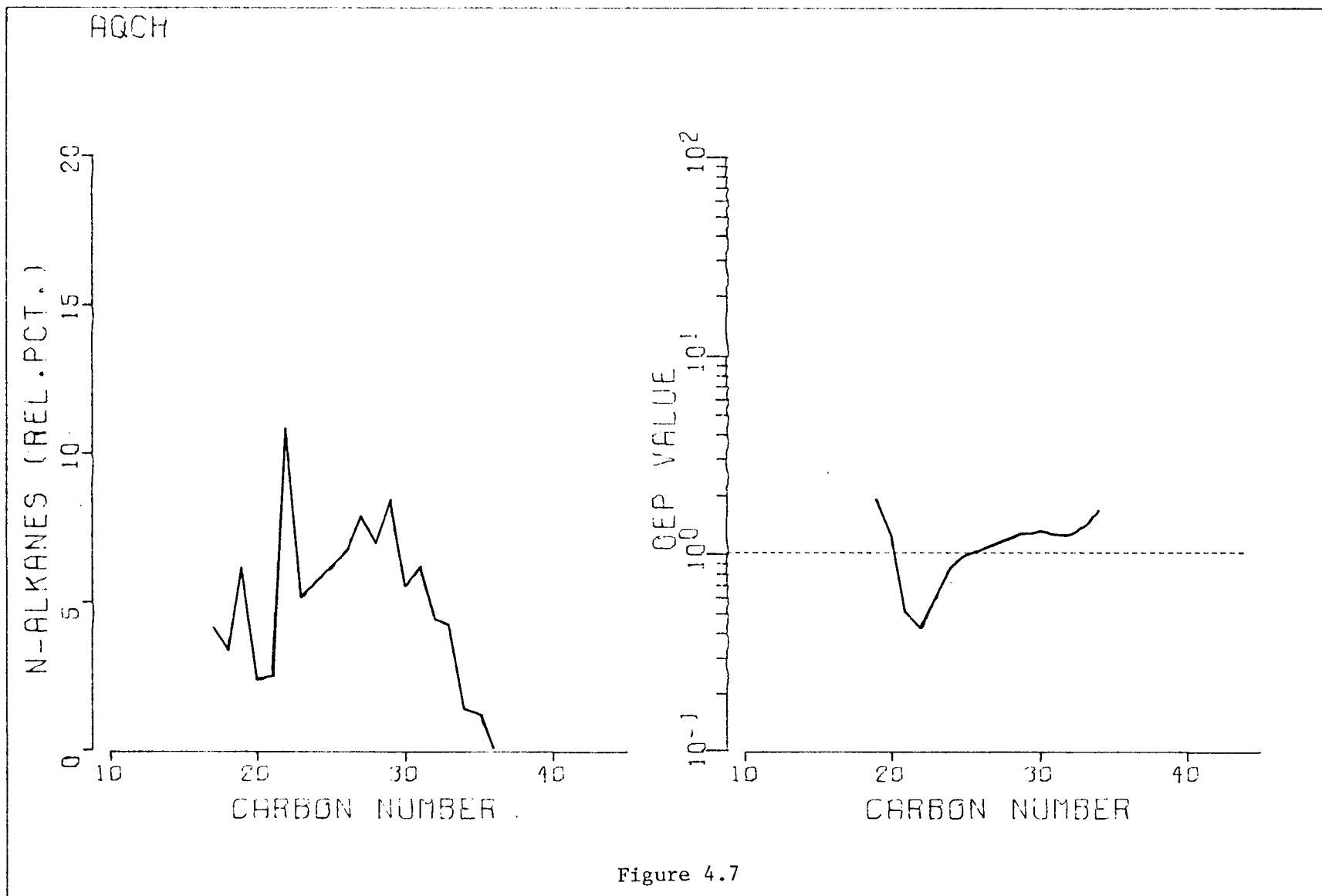


Figure 4.7

AQFJ

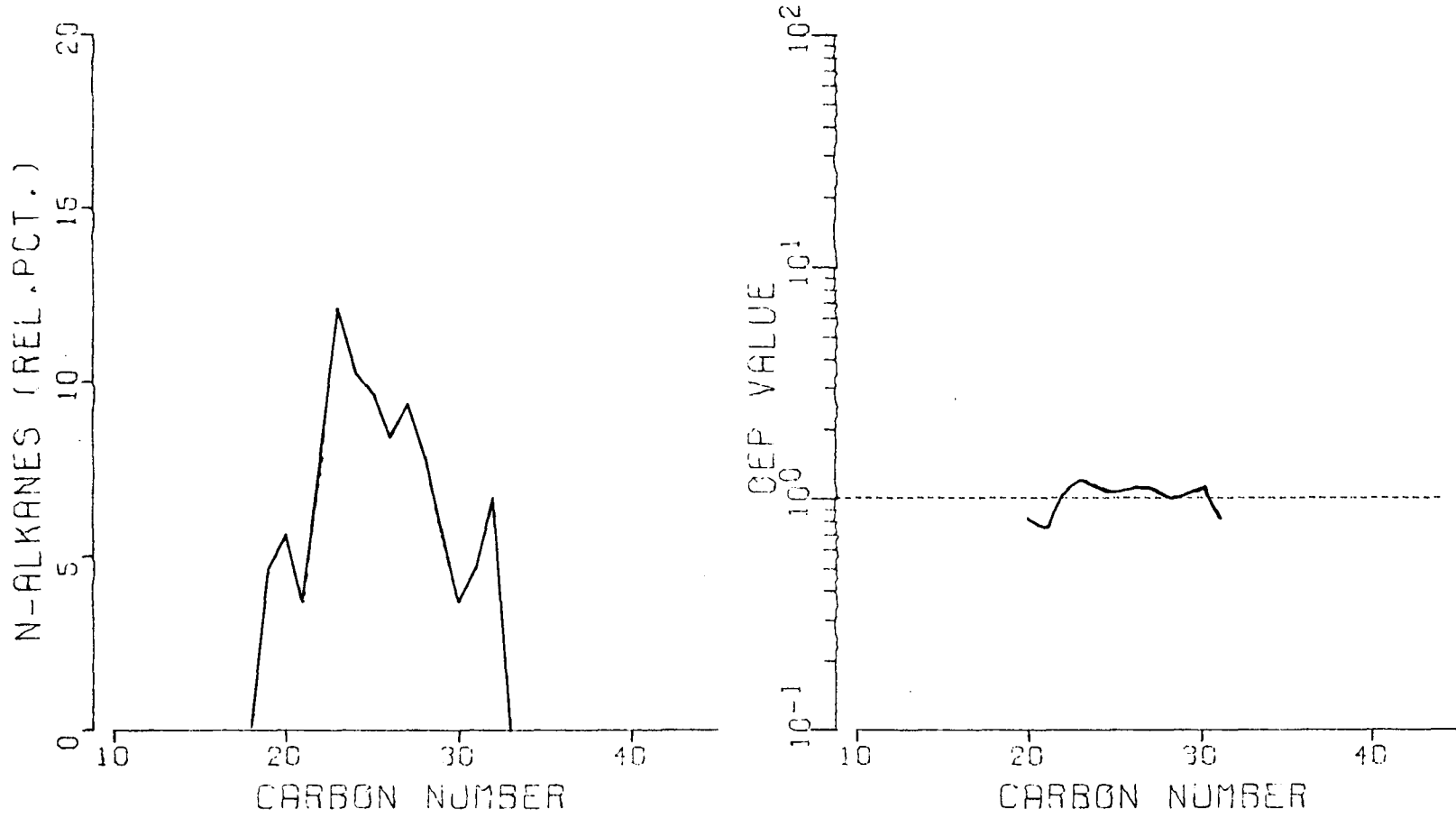
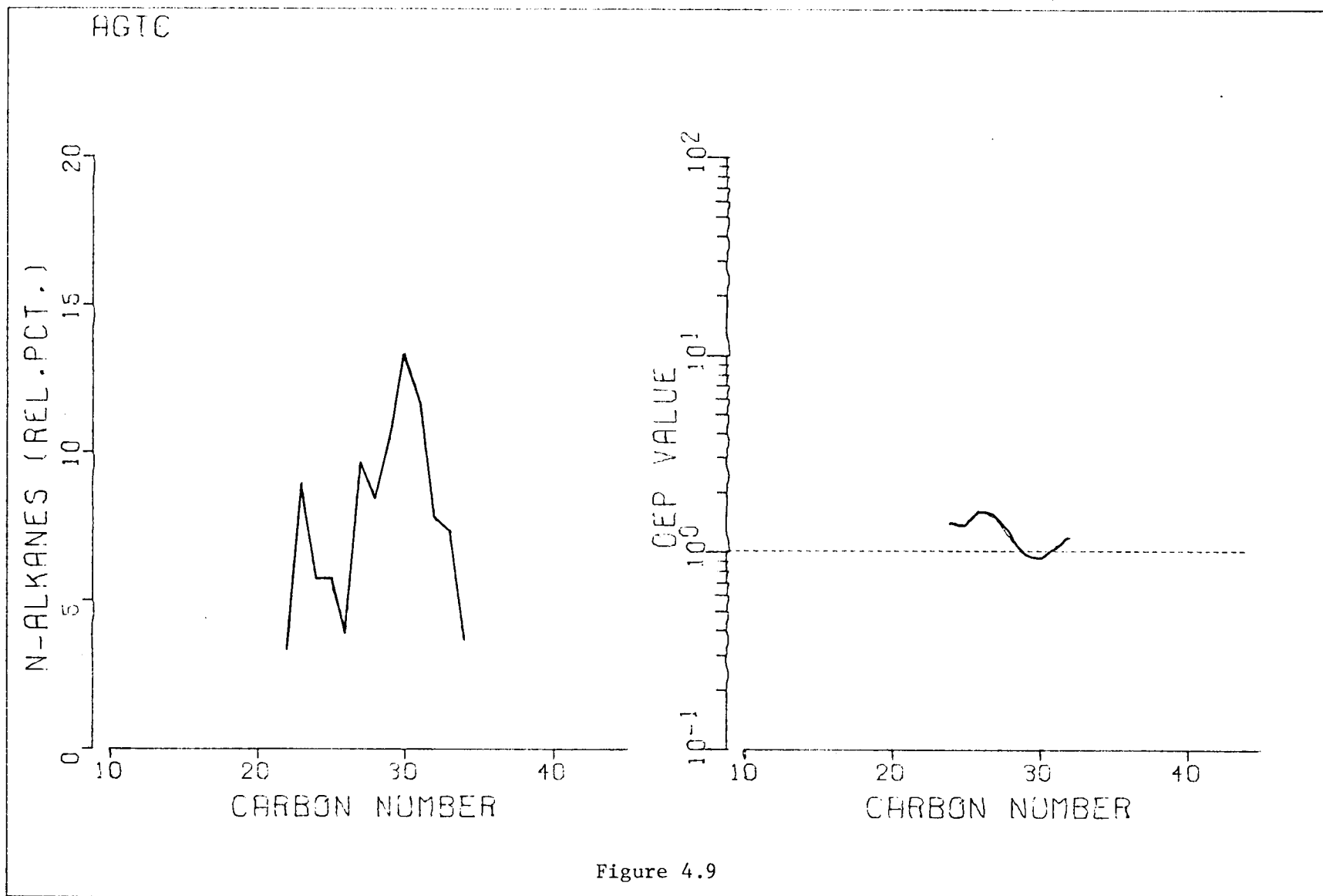
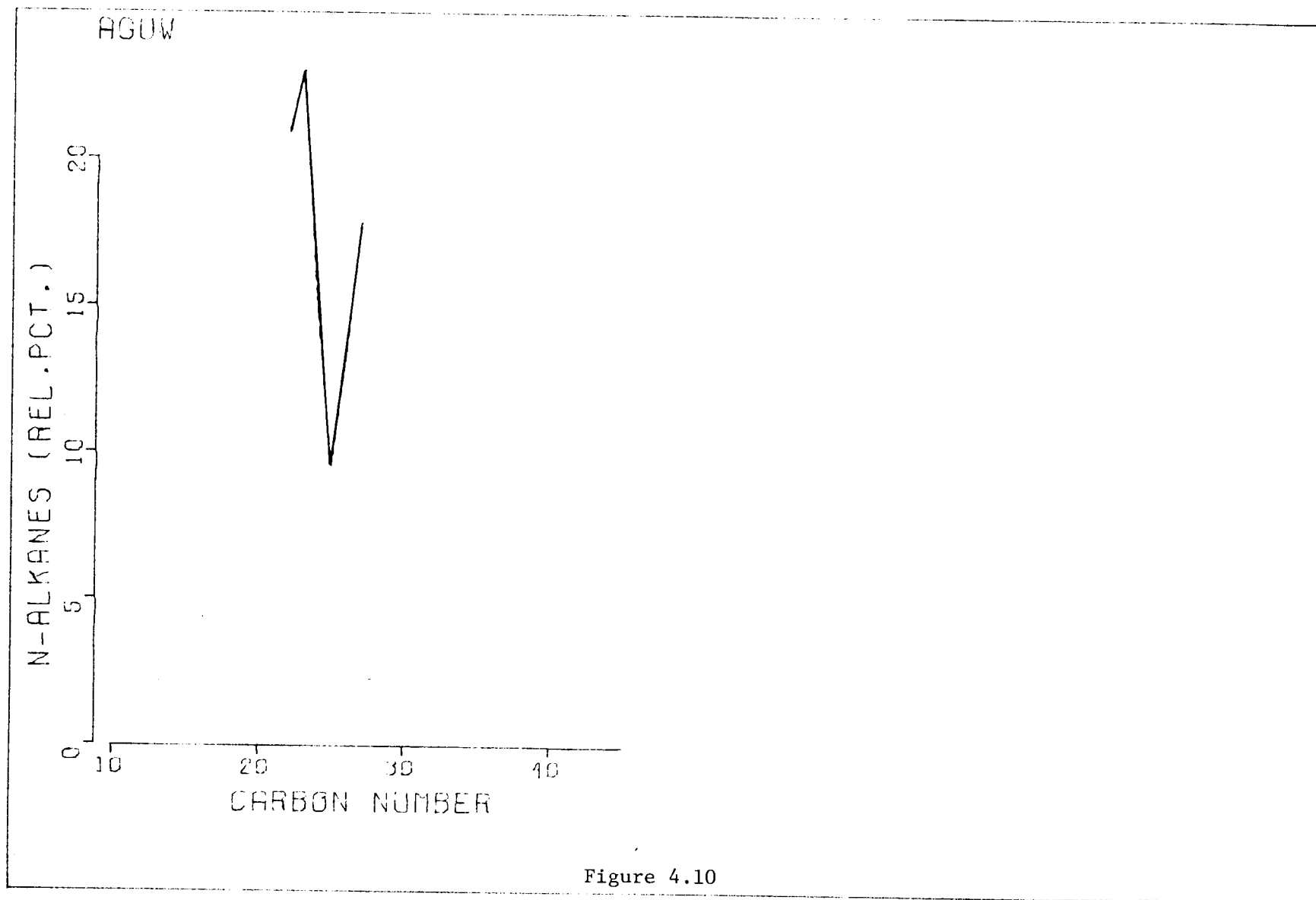
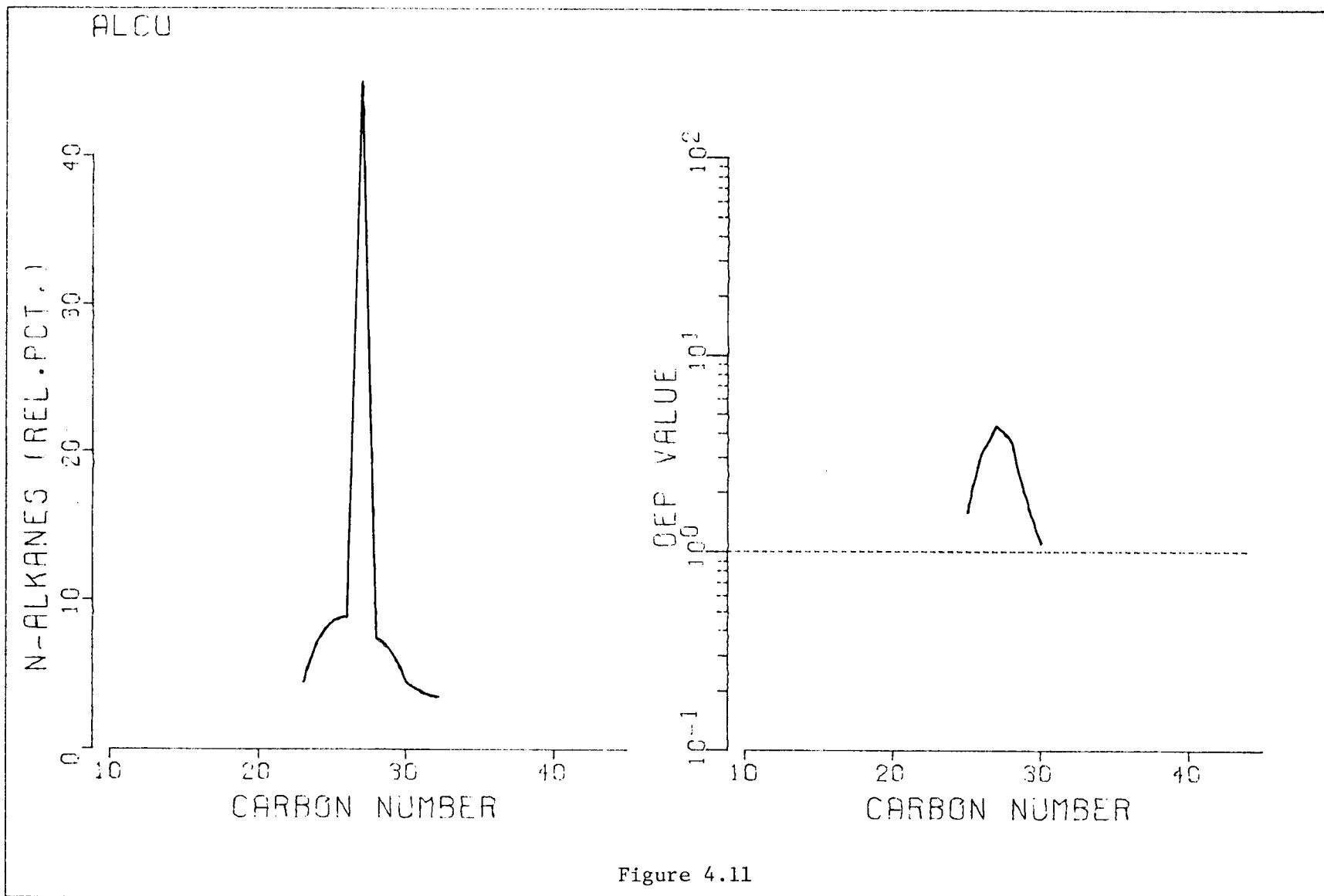


Figure 4.8







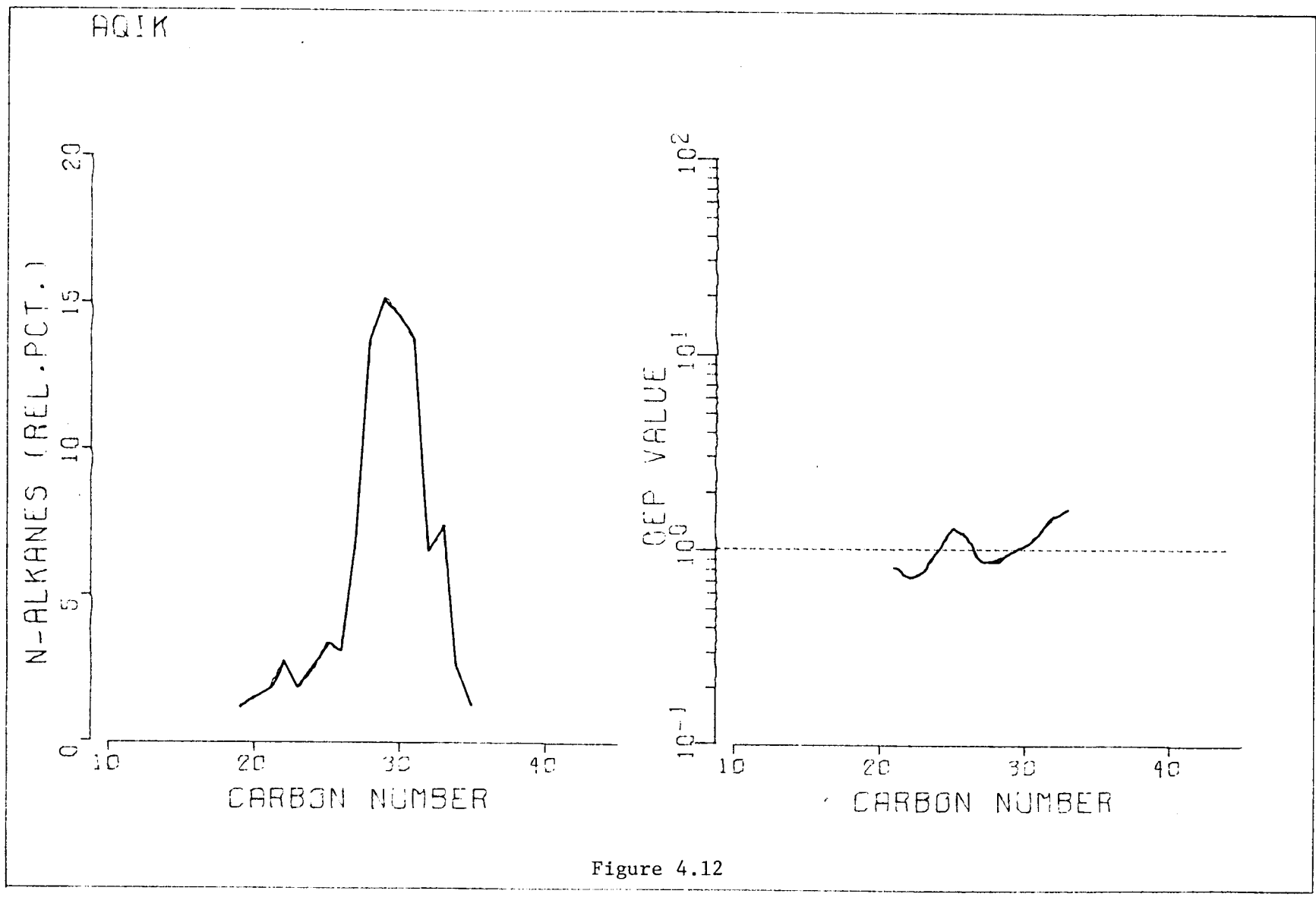


Figure 4.12

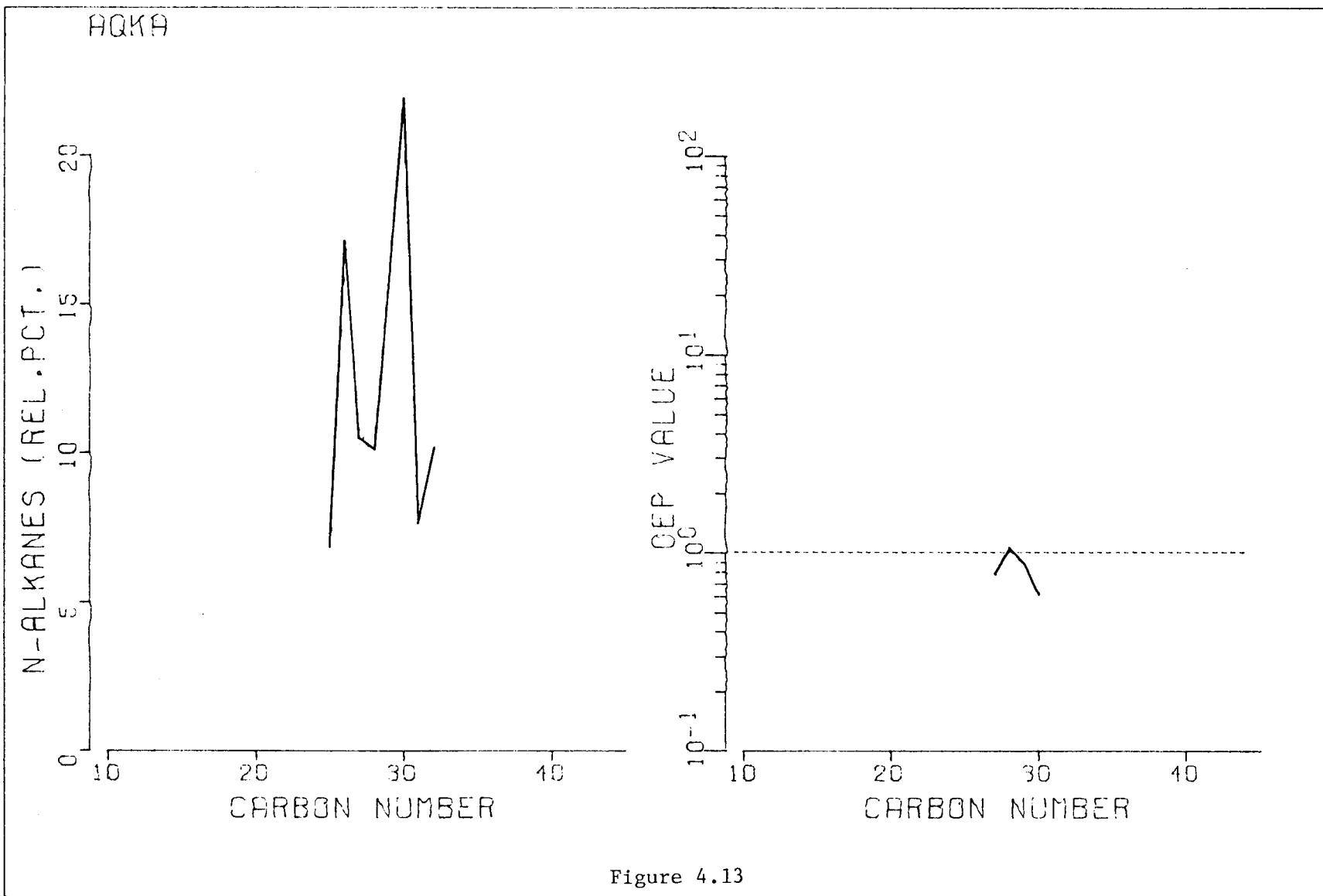


Figure 4.13

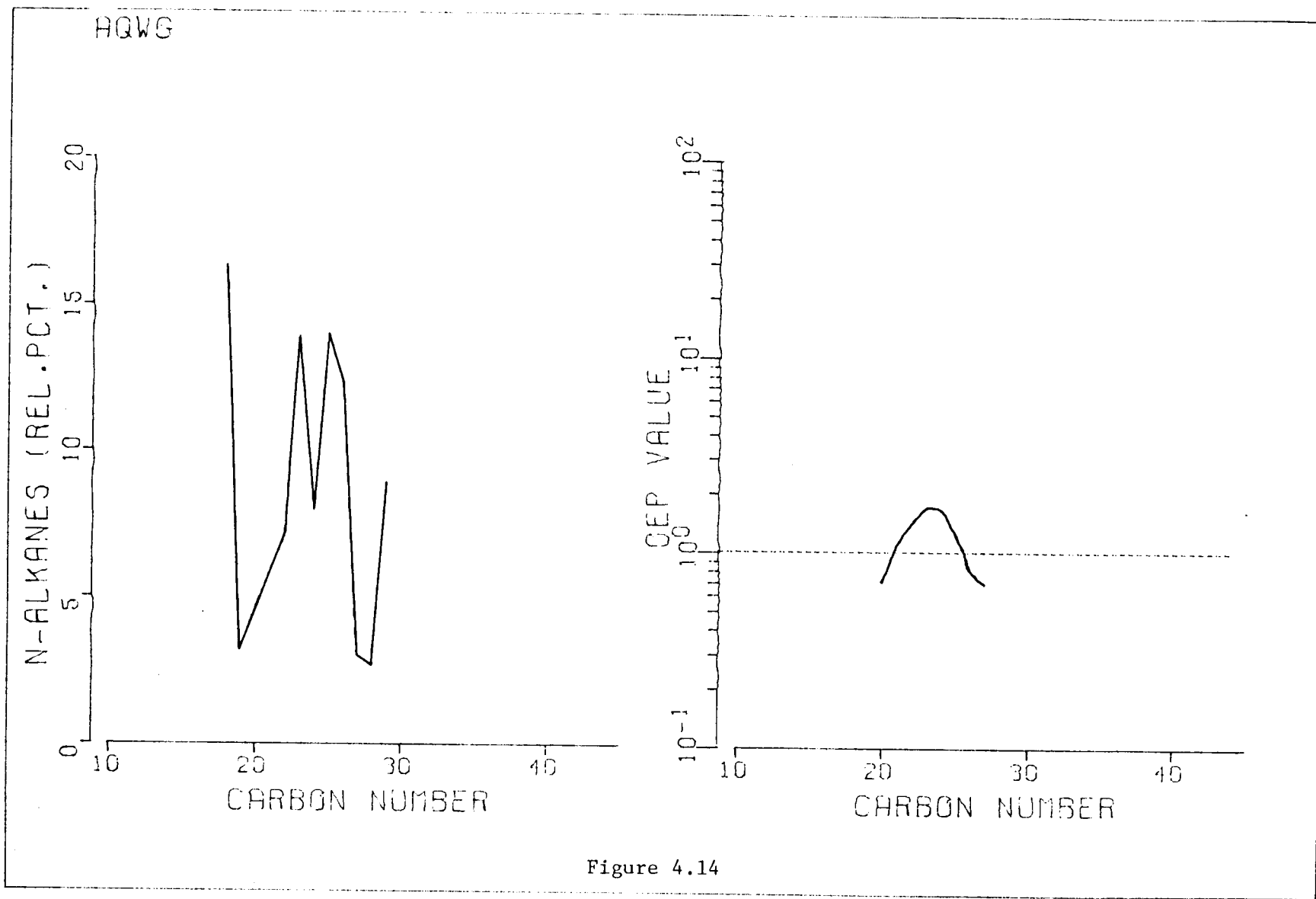


Figure 4.14

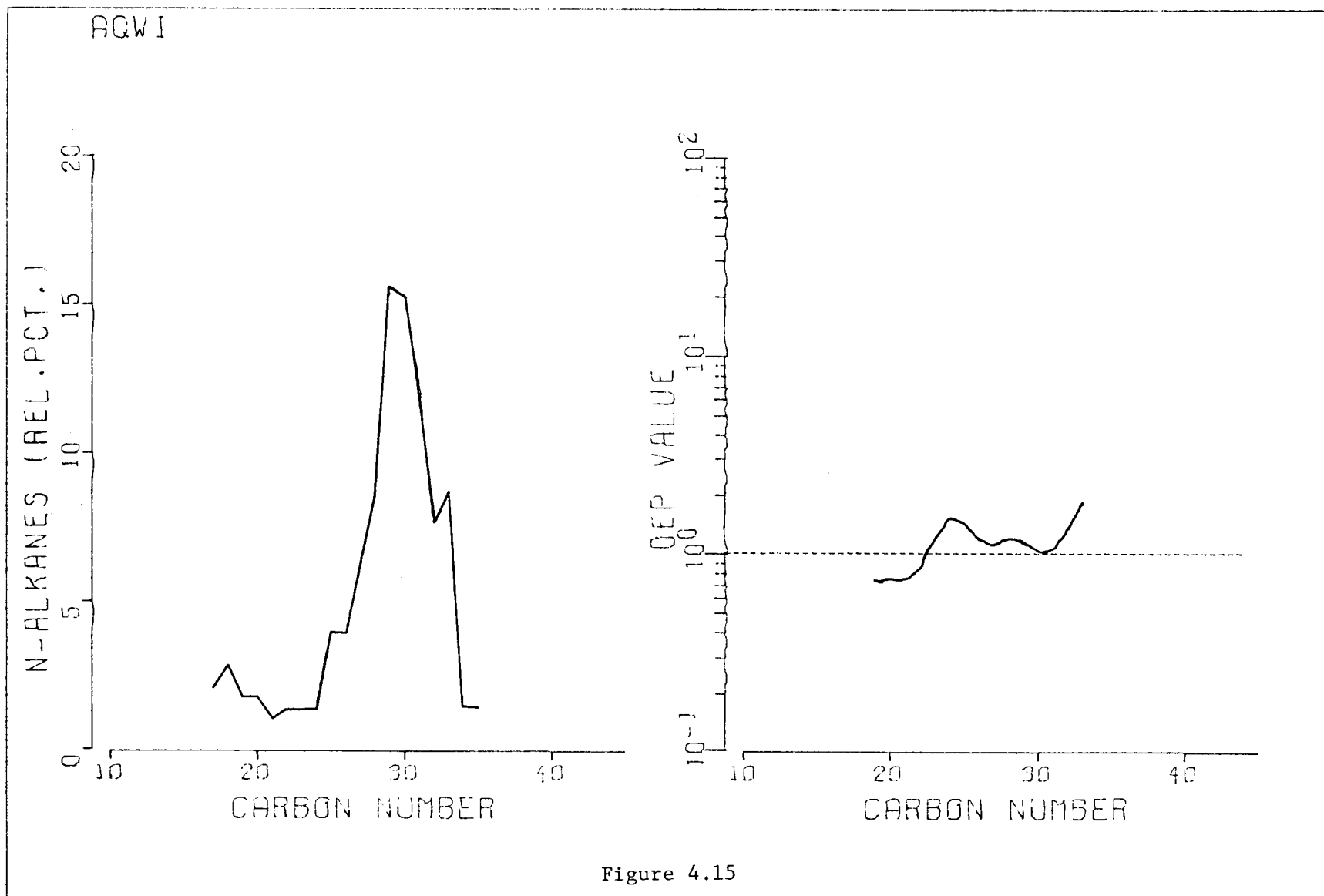


Figure 4.15

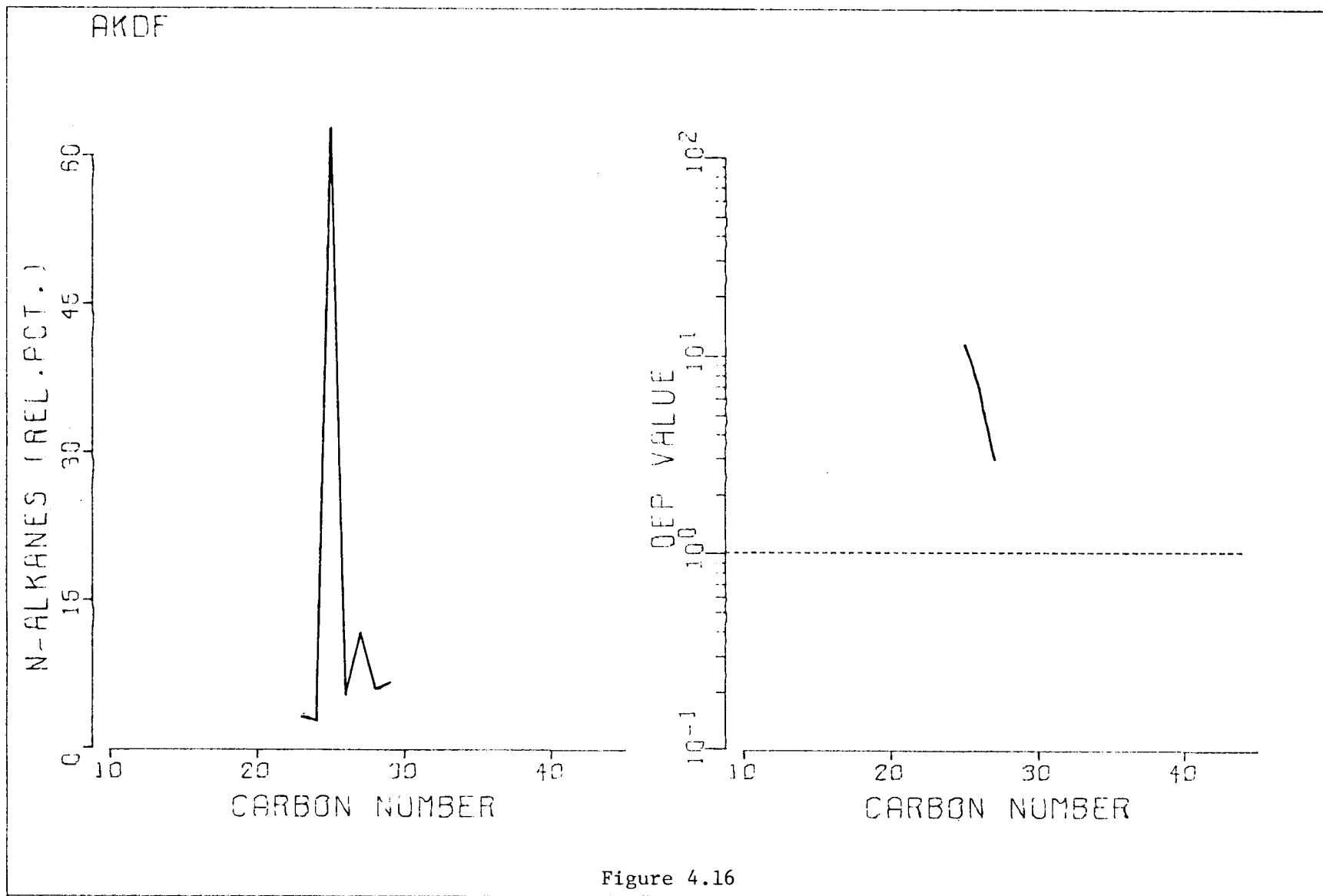


Figure 4.16

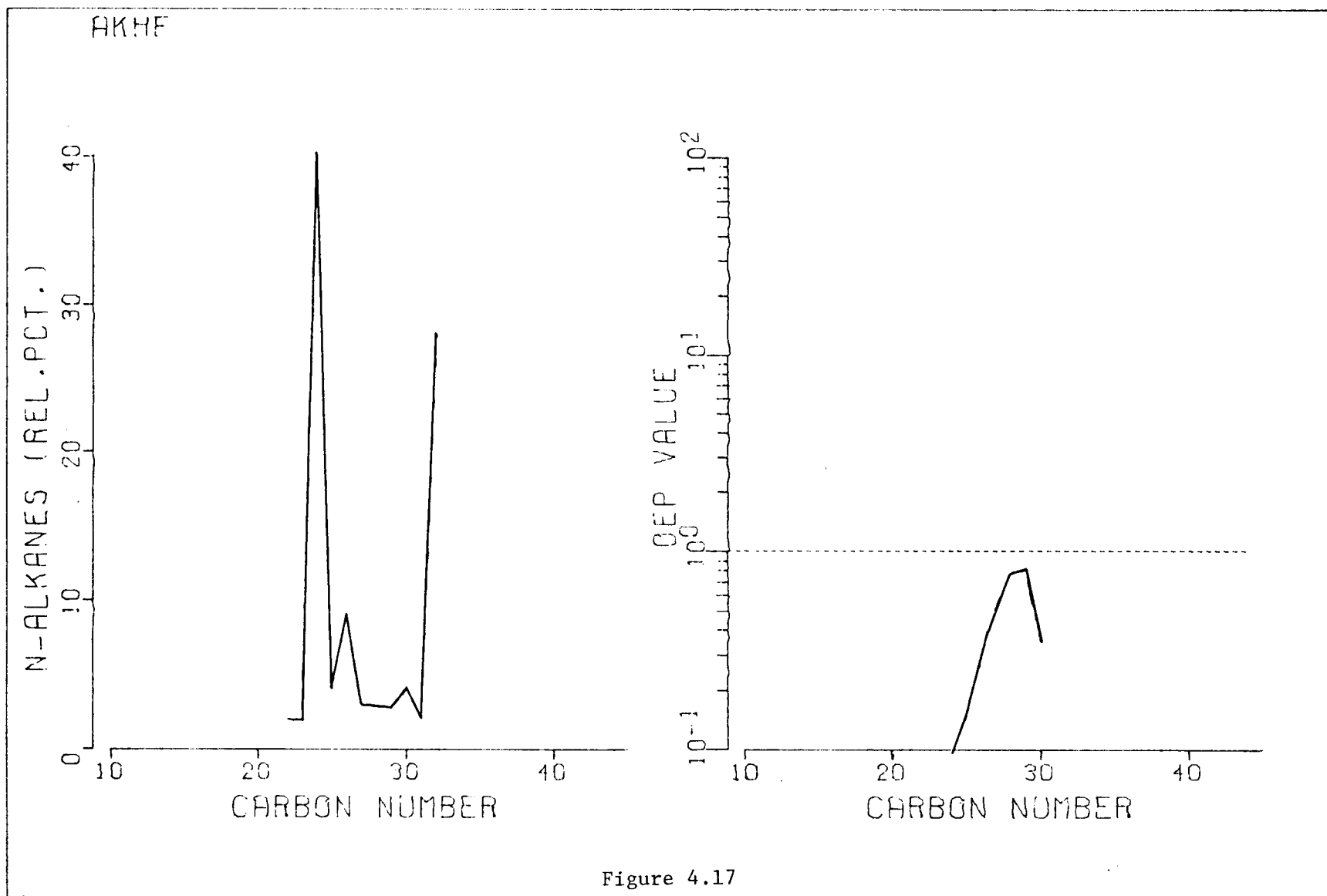


Figure 4.17

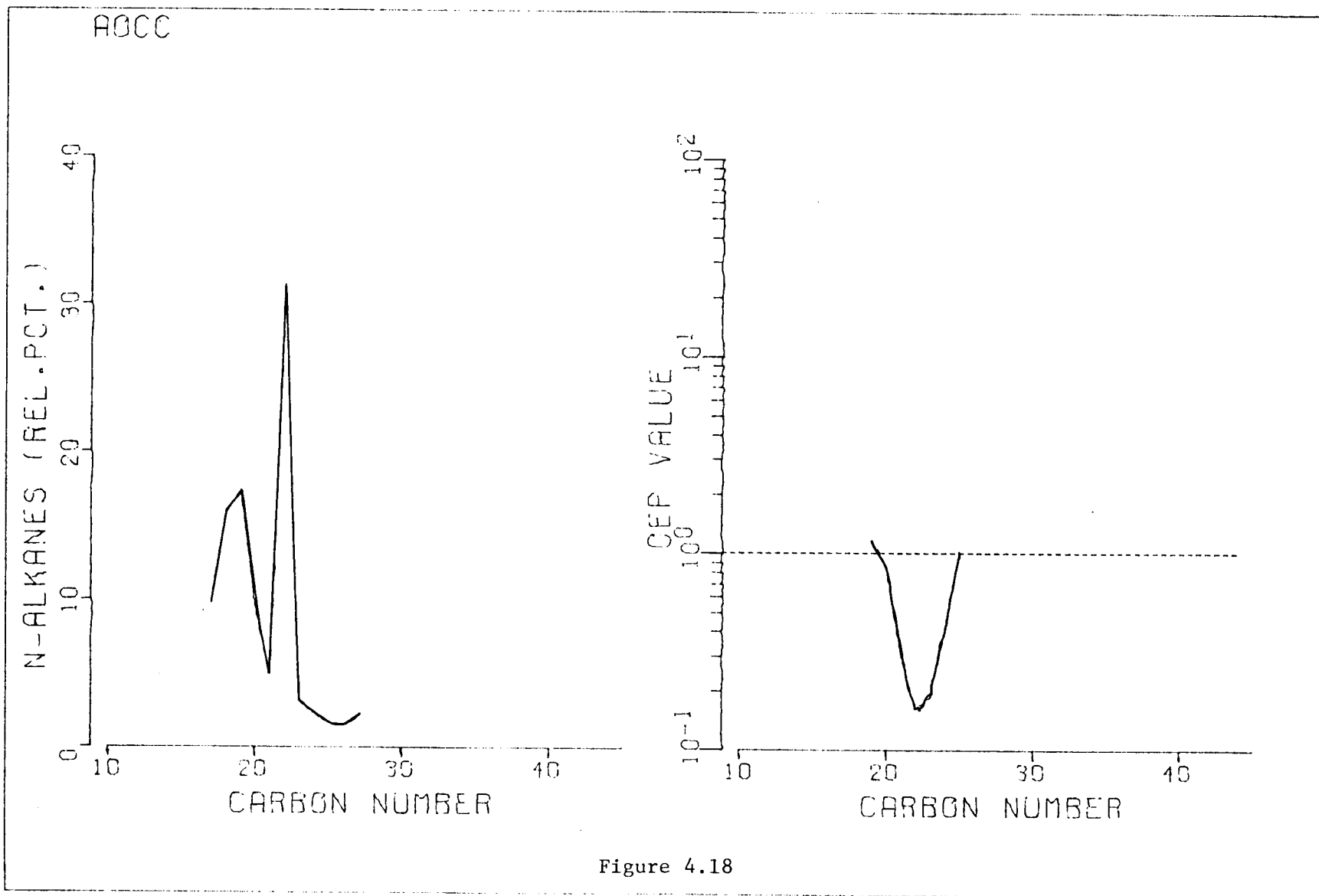
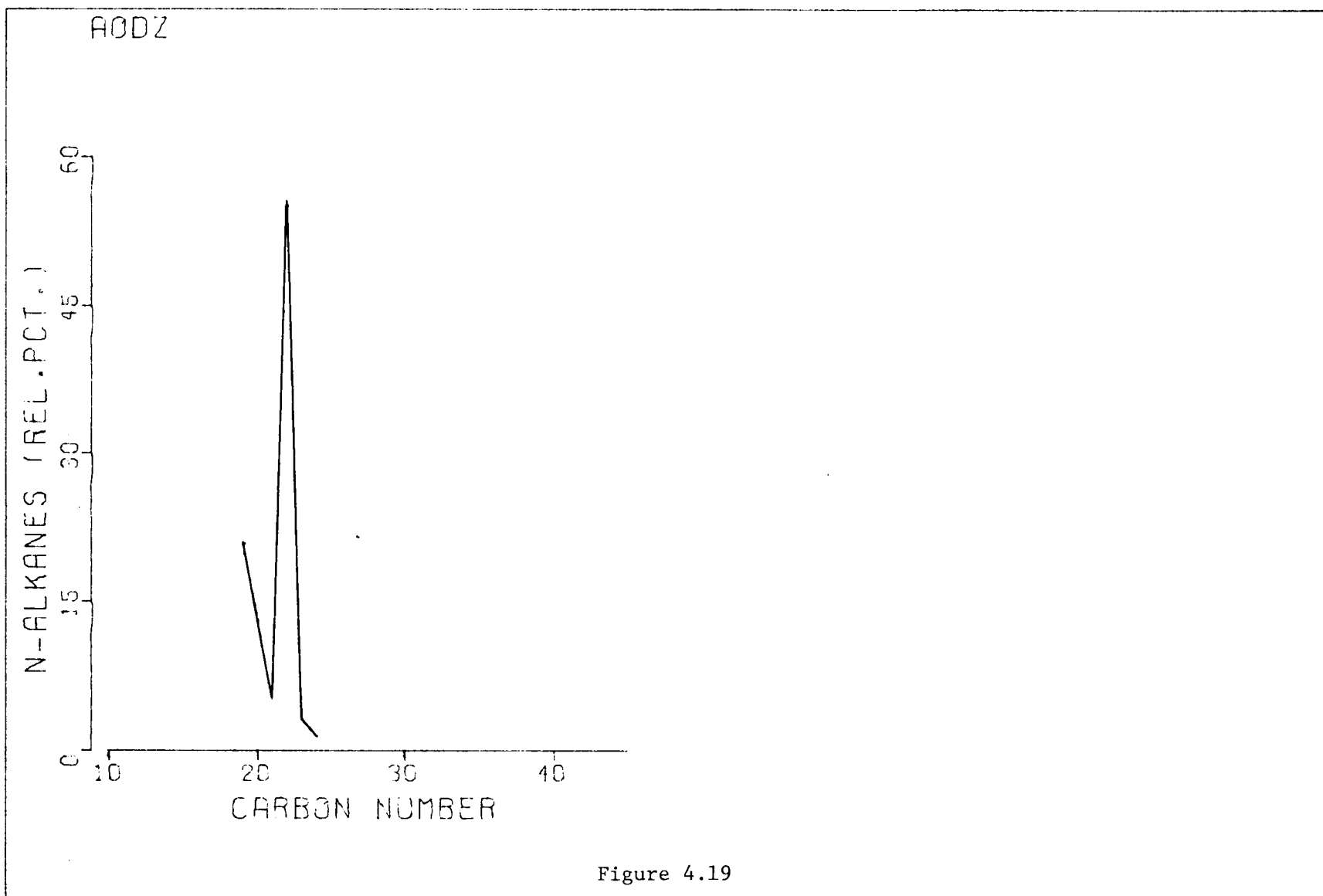
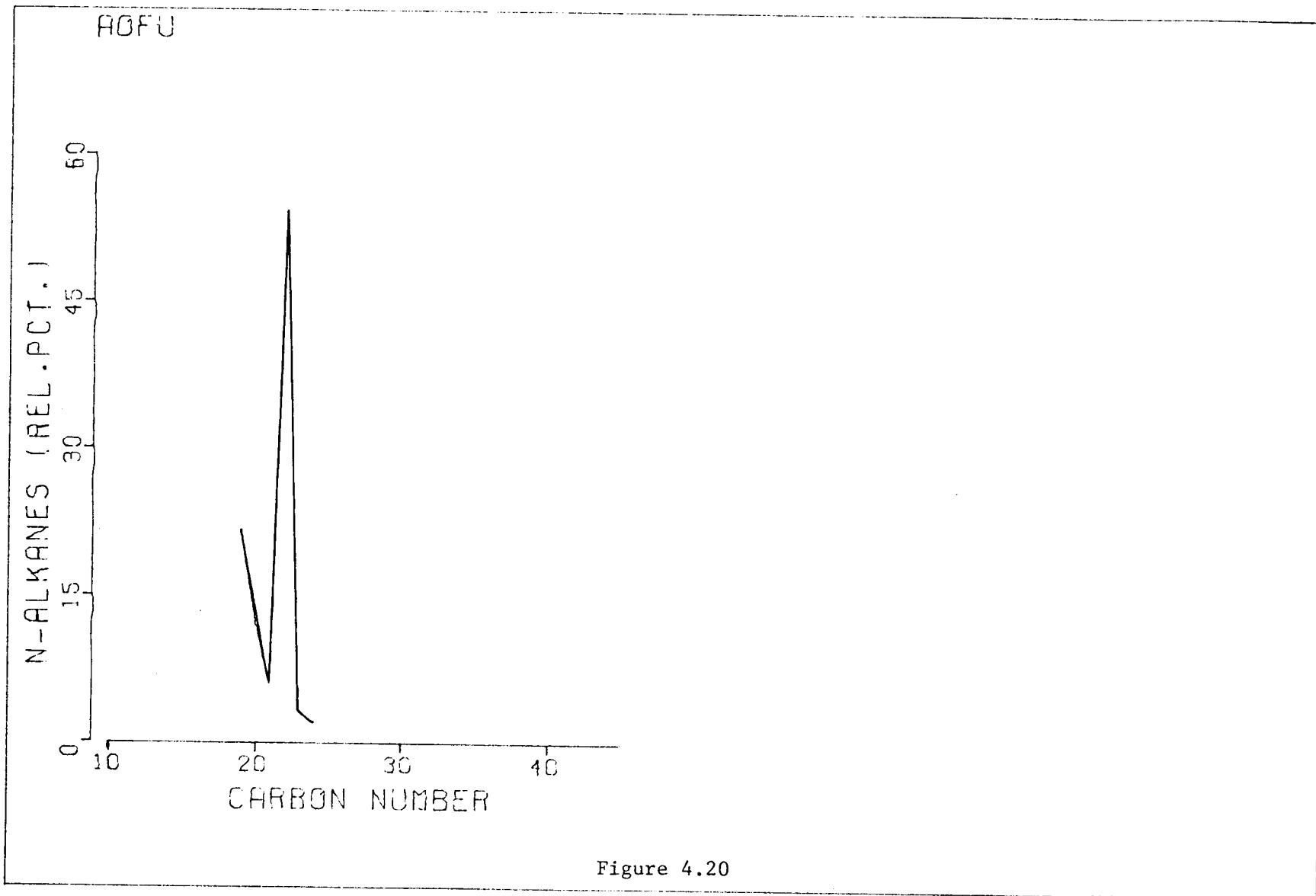


Figure 4.18





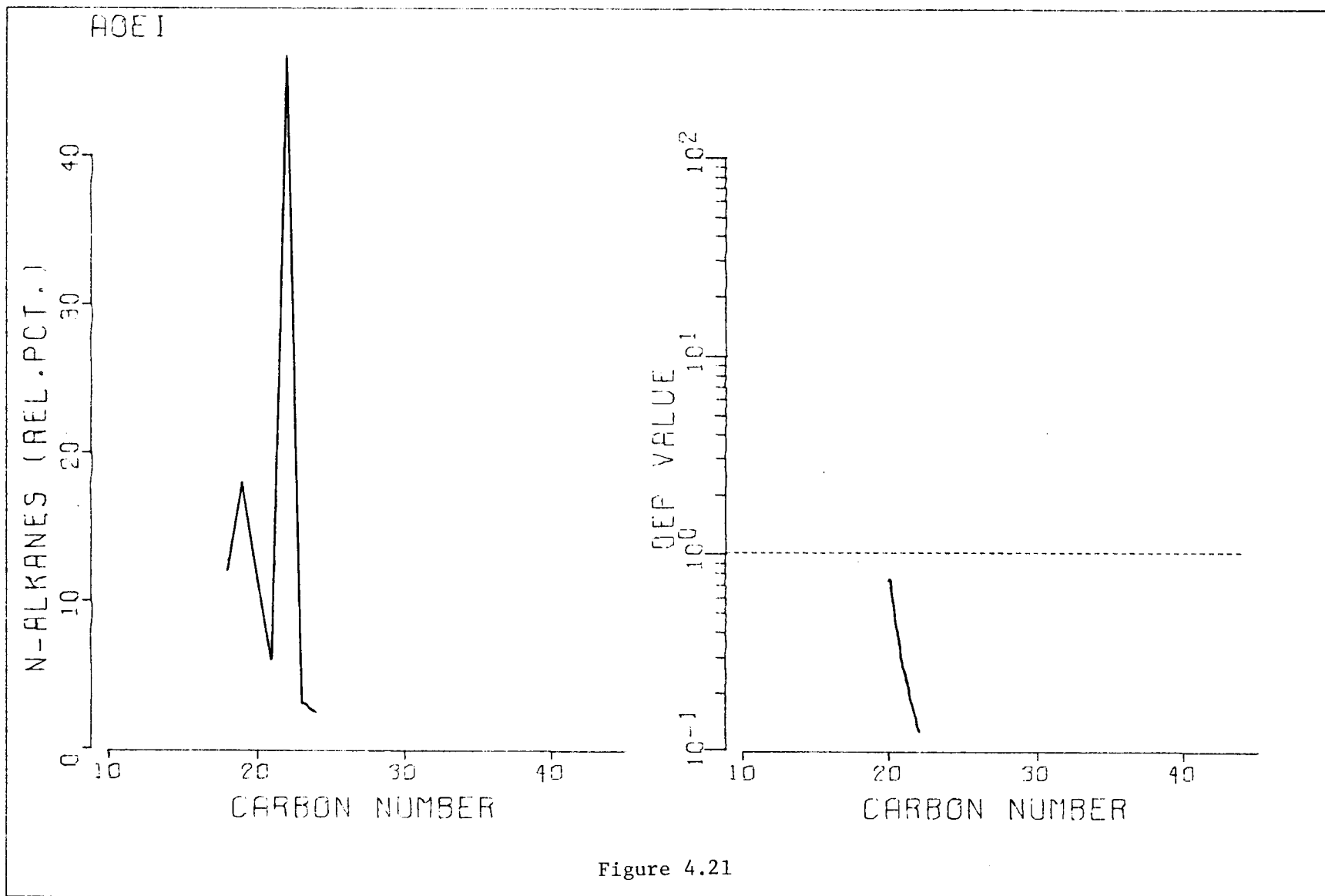


Figure 4.21

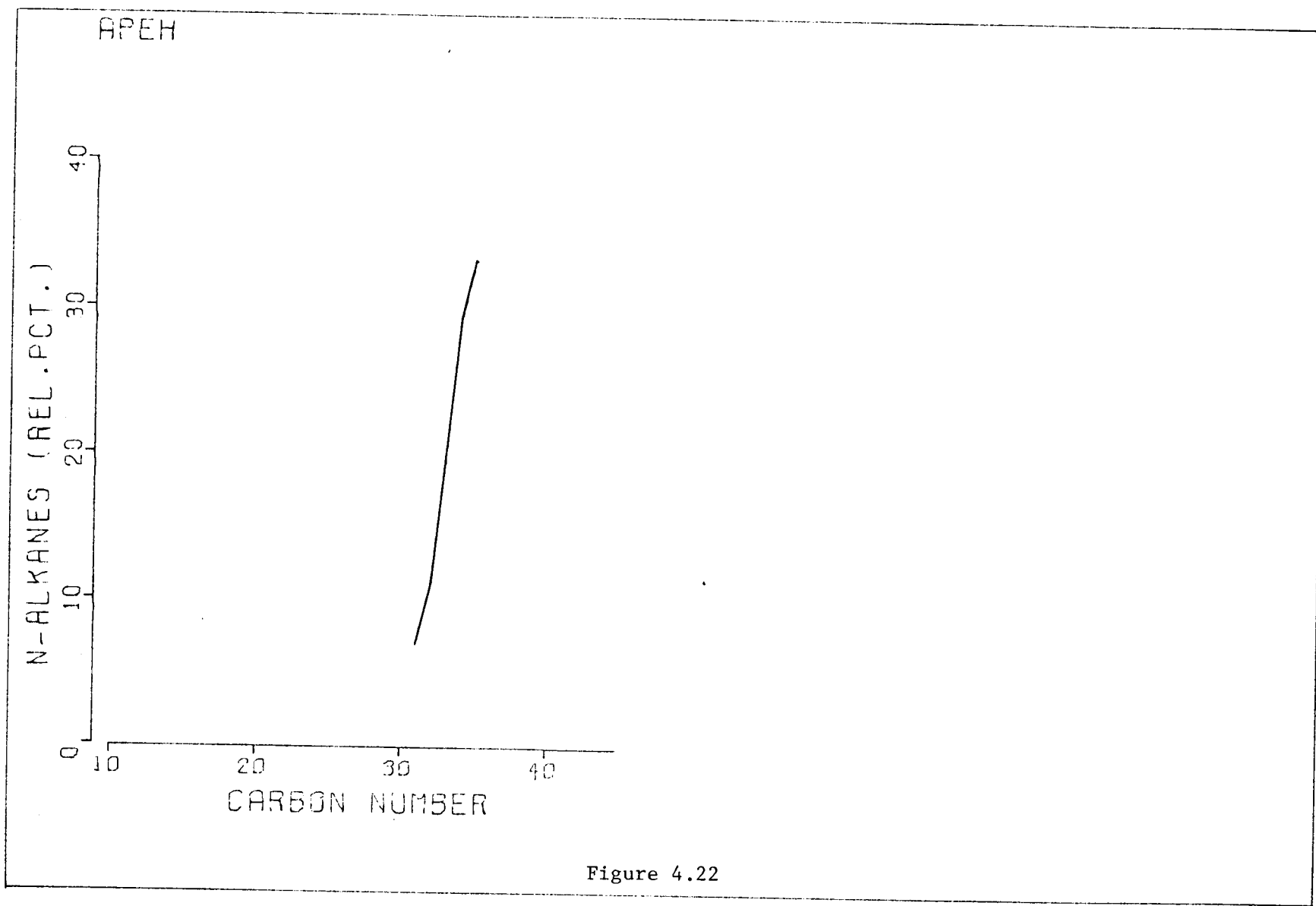
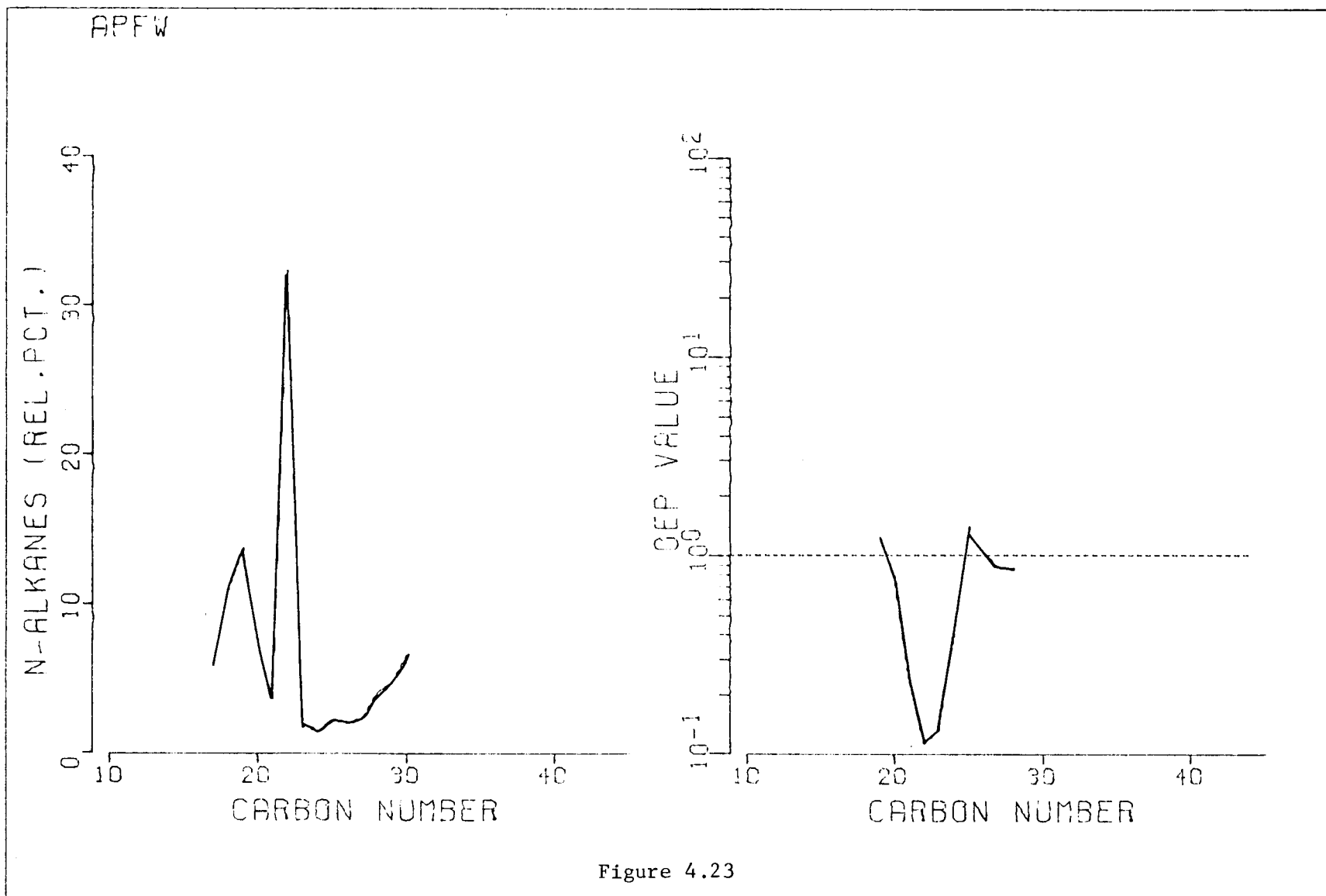


Figure 4.22



APHM

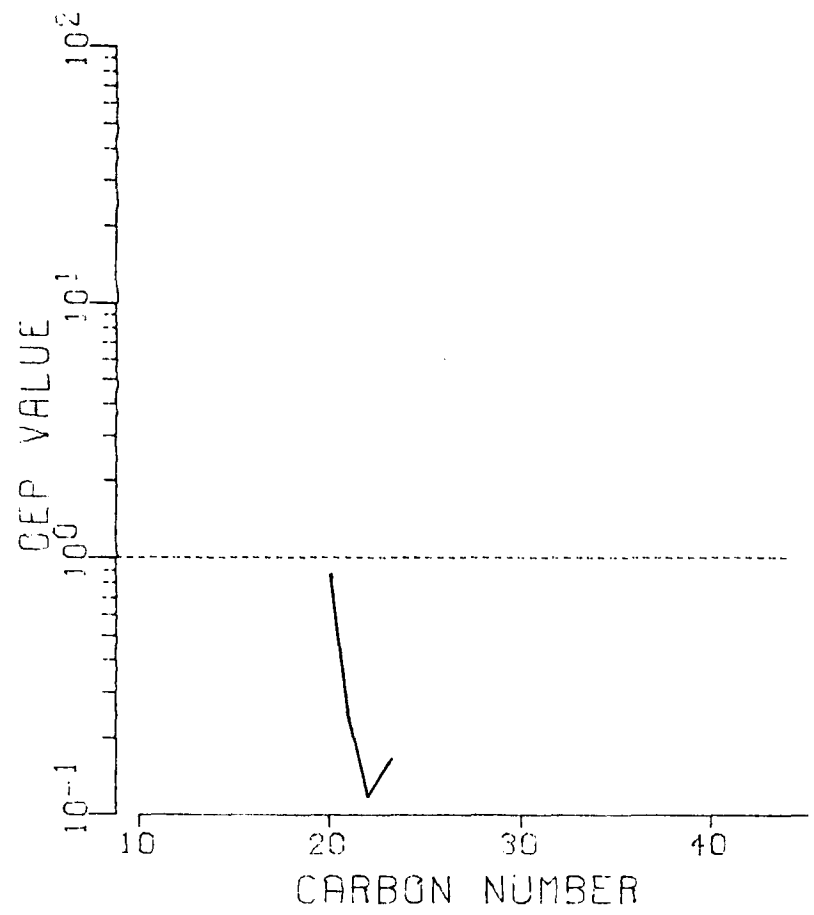
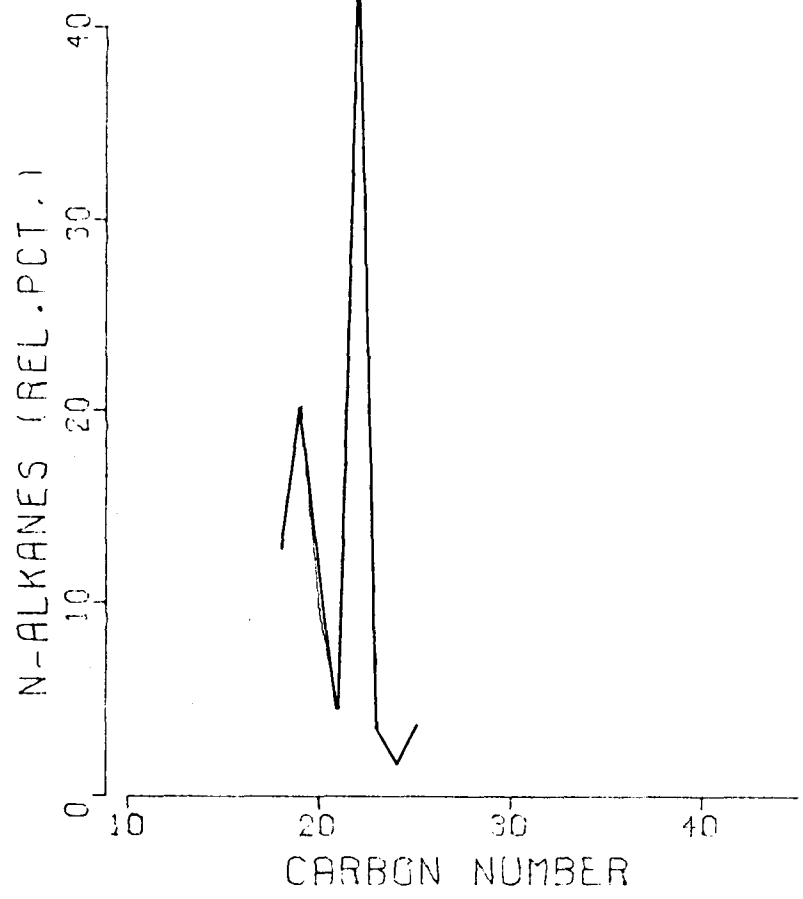


Figure 4.24

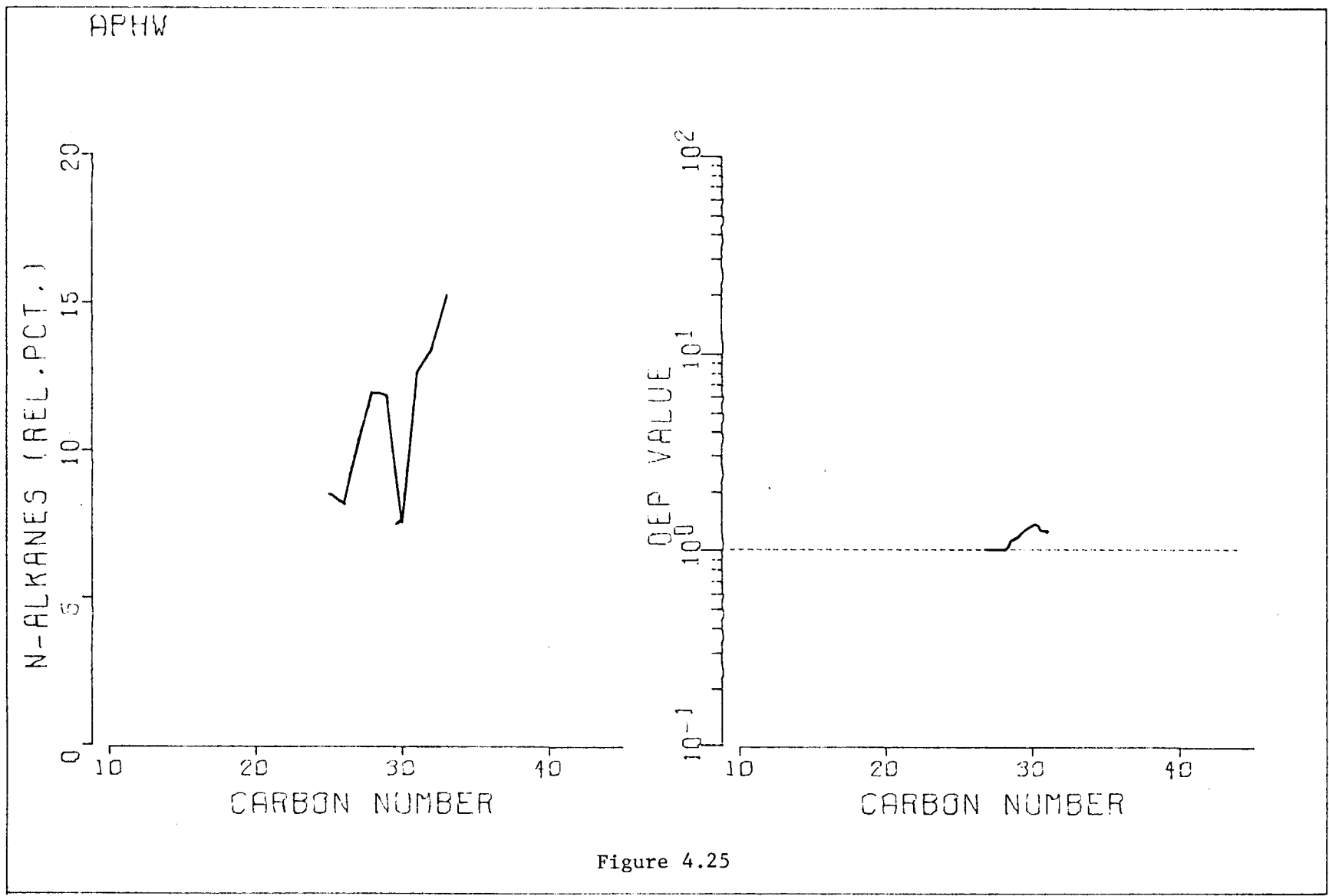


Figure 4.25

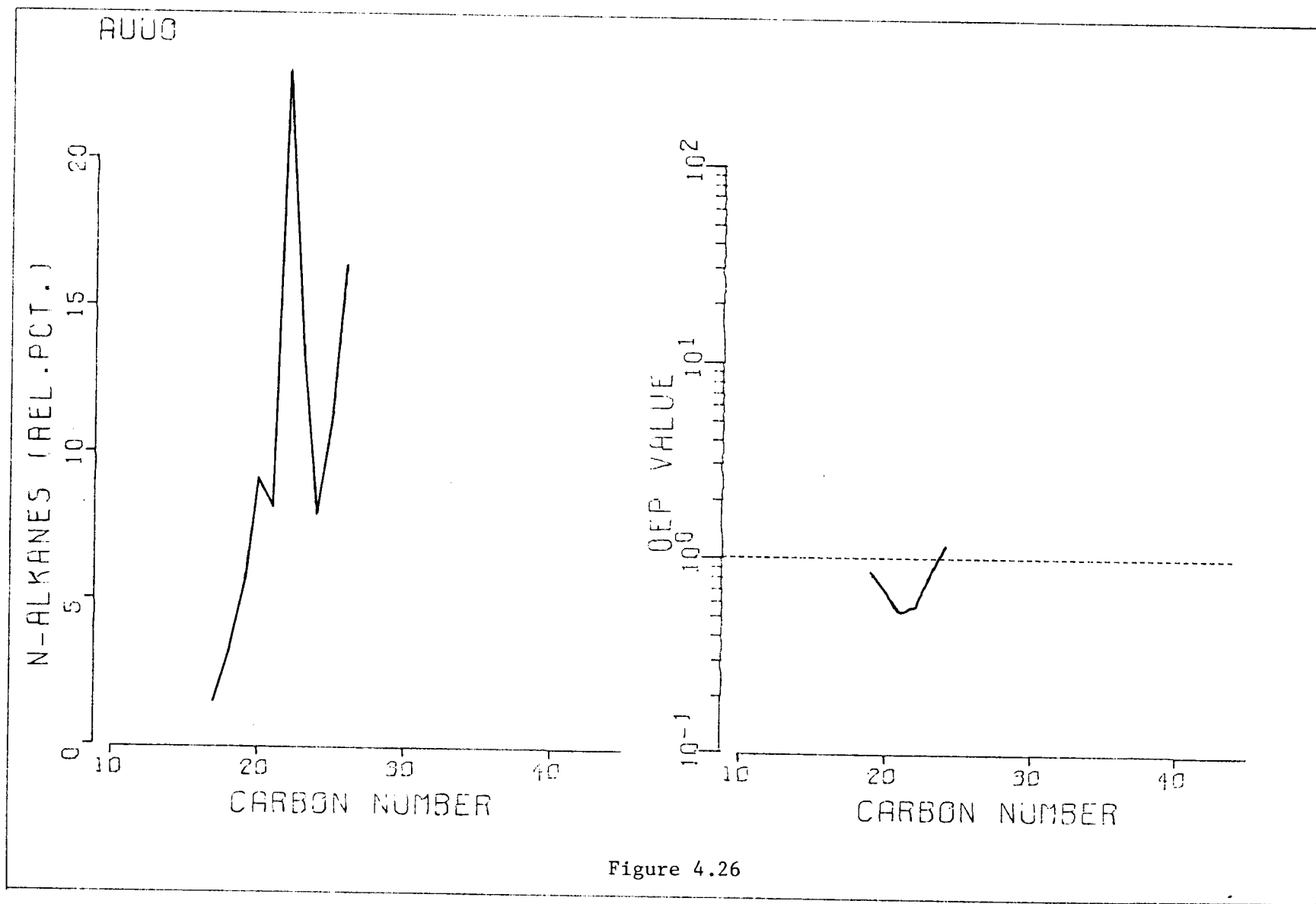


Figure 4.26

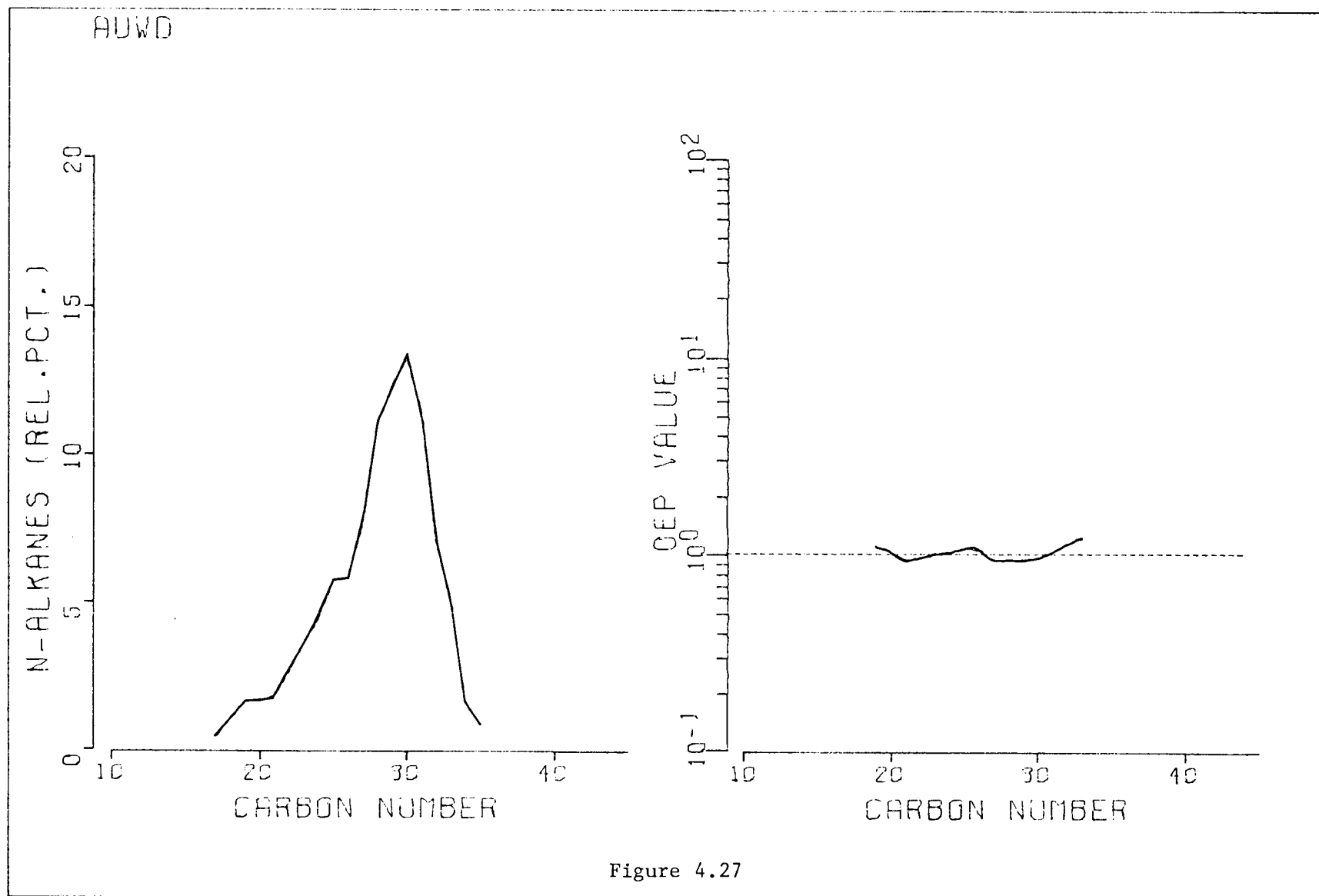


Figure 4.27

AUYF

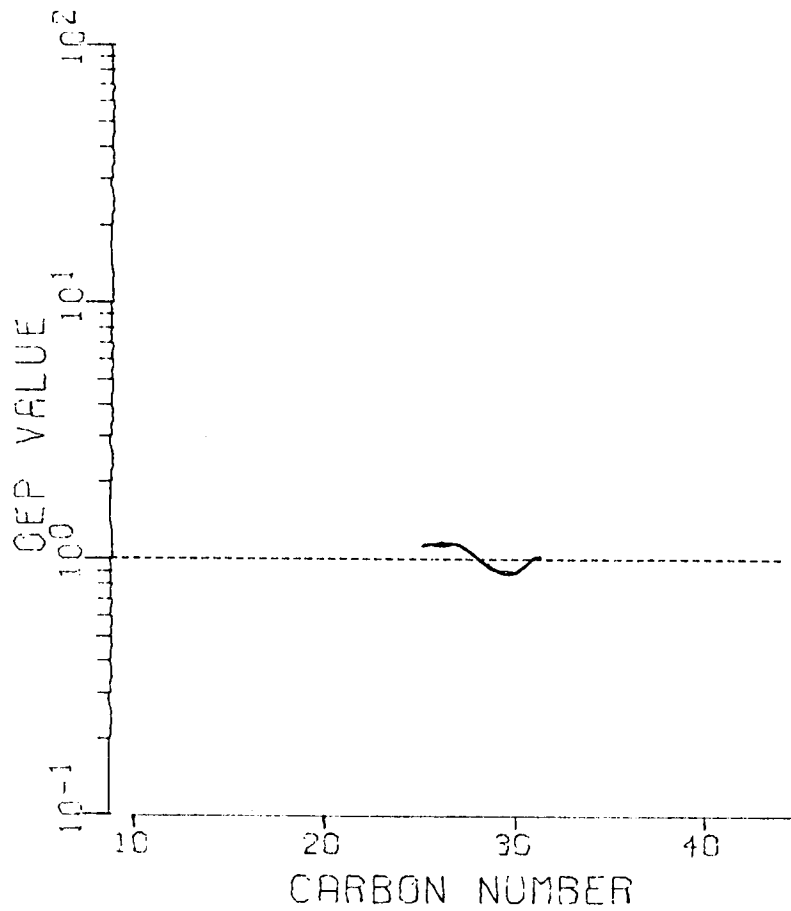
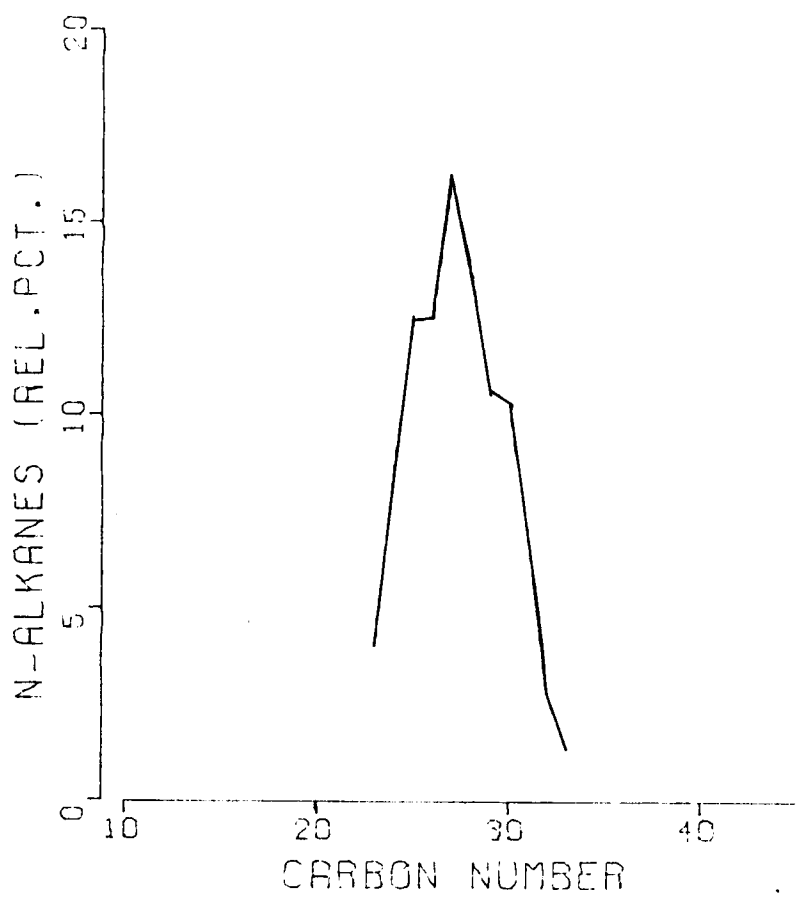


Figure 4.28

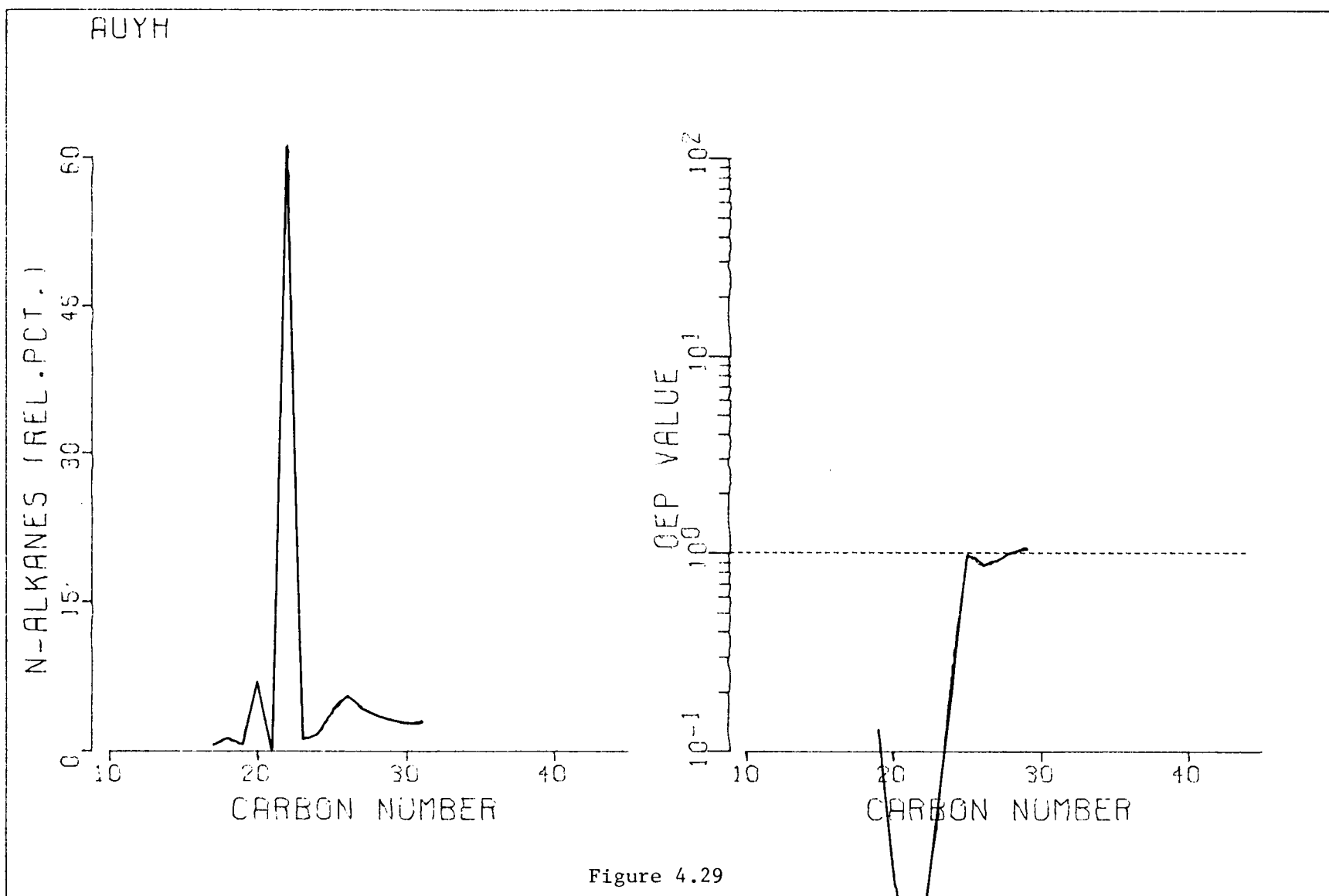


Figure 4.29

AVRZ

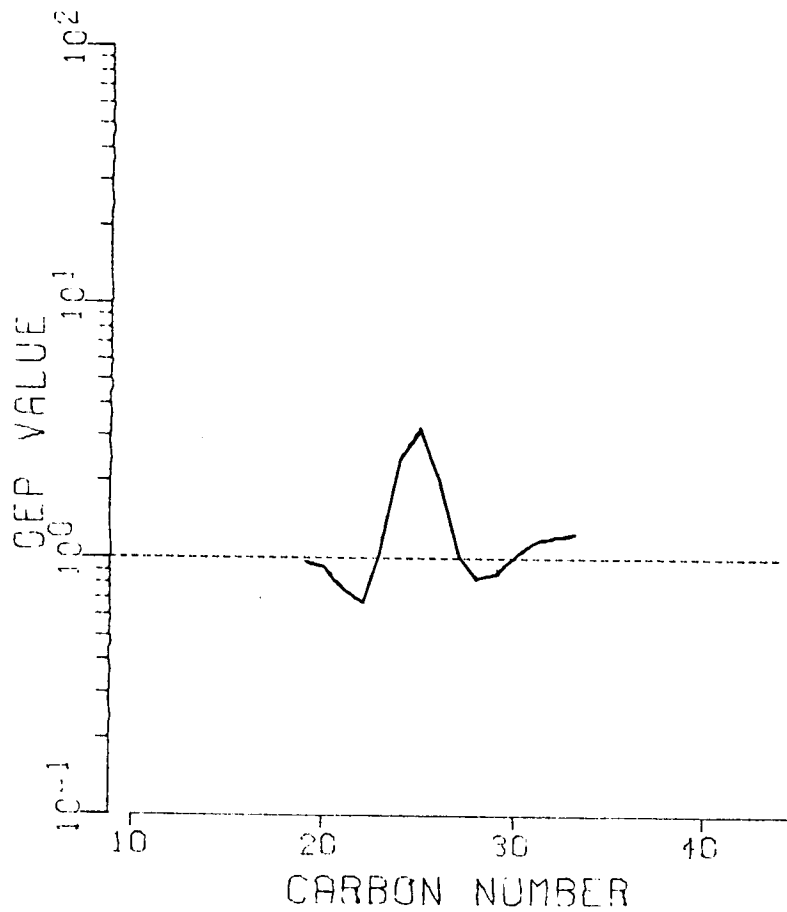
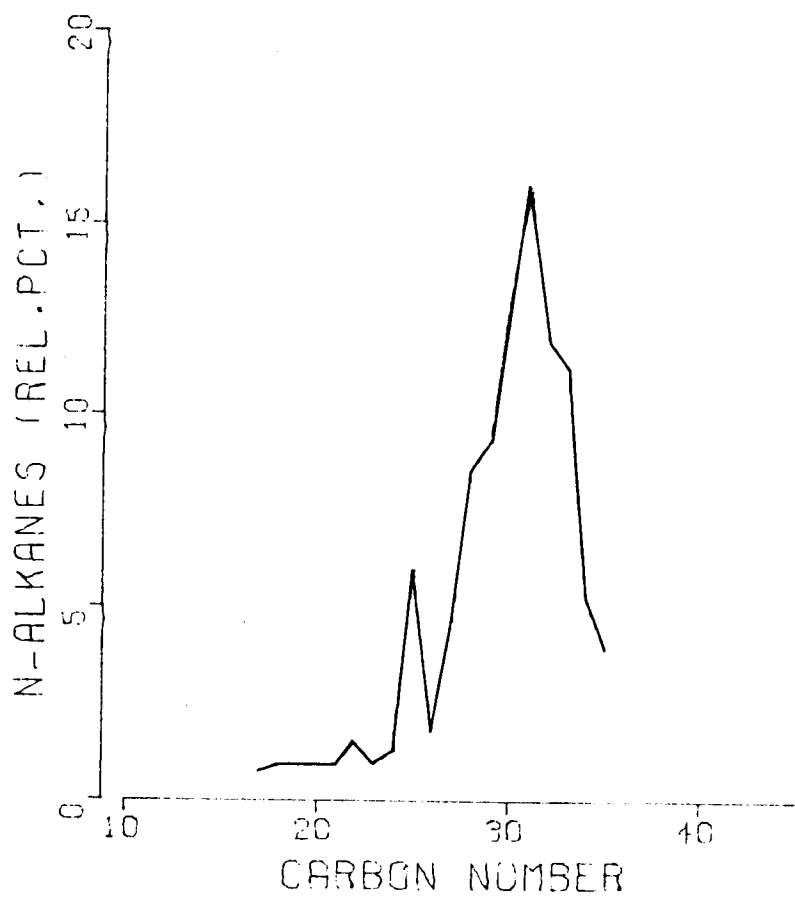
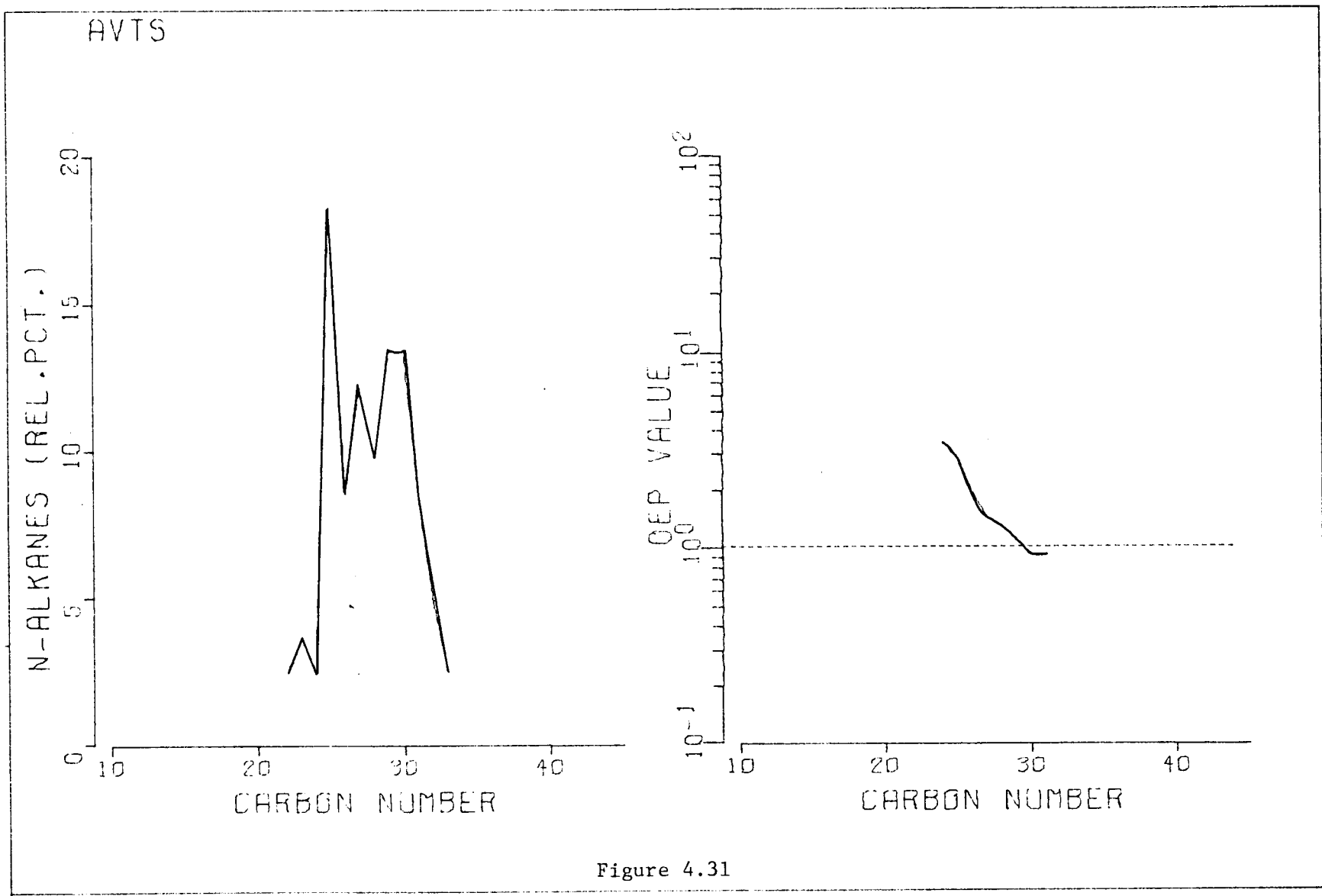


Figure 4.30



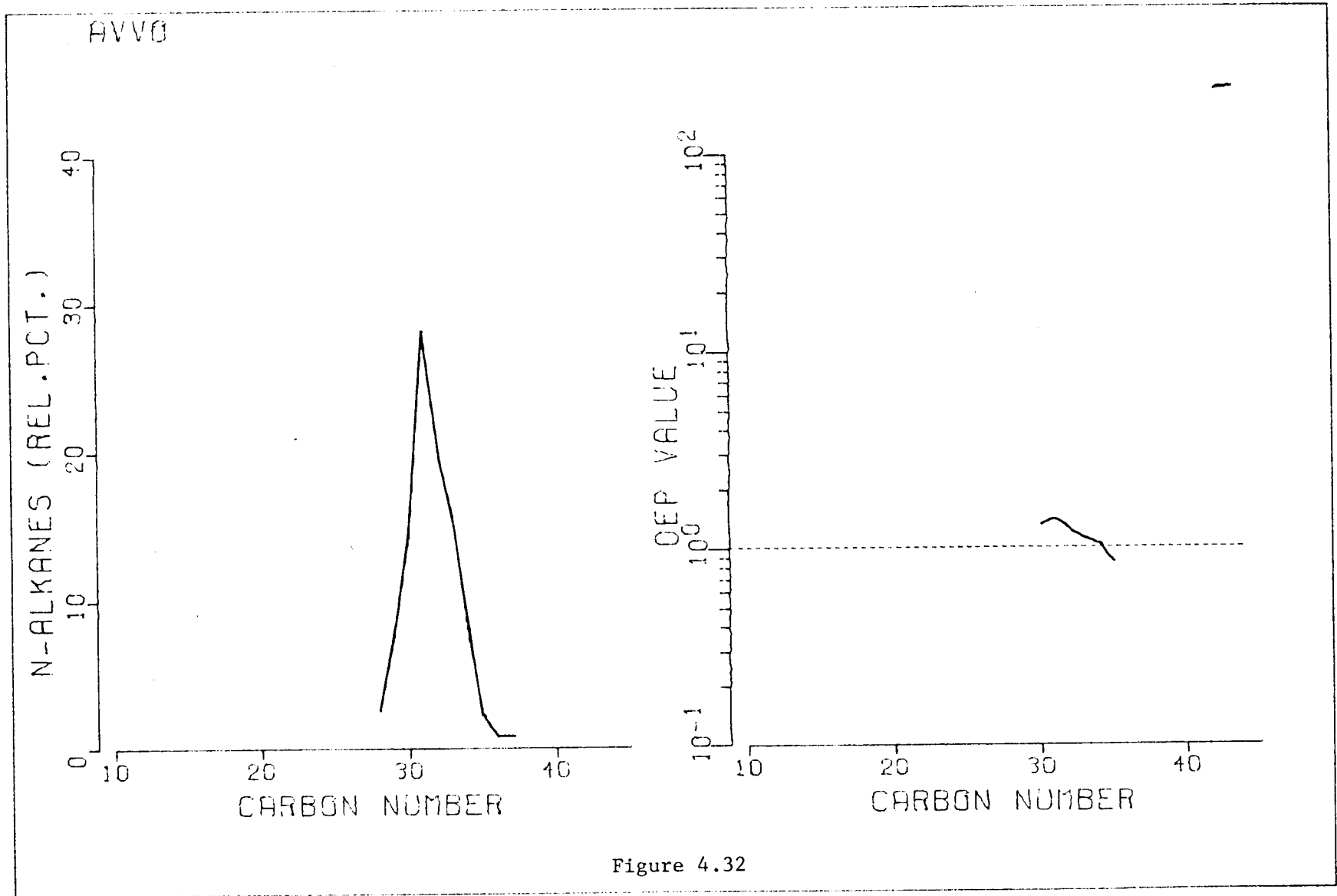


Figure 4.32

AVVY

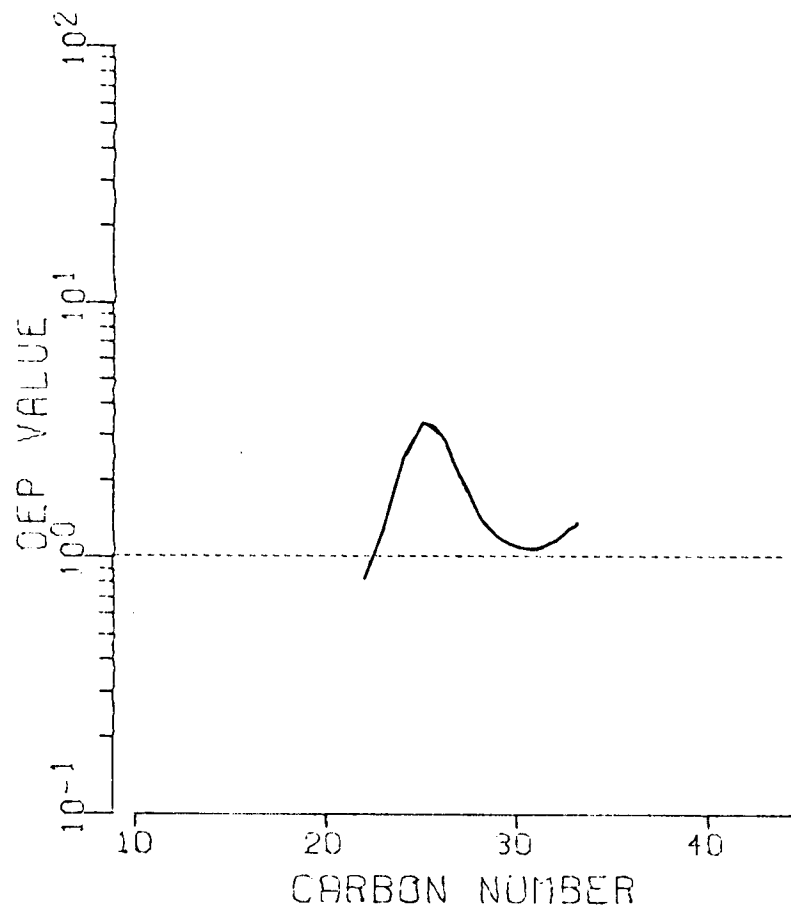
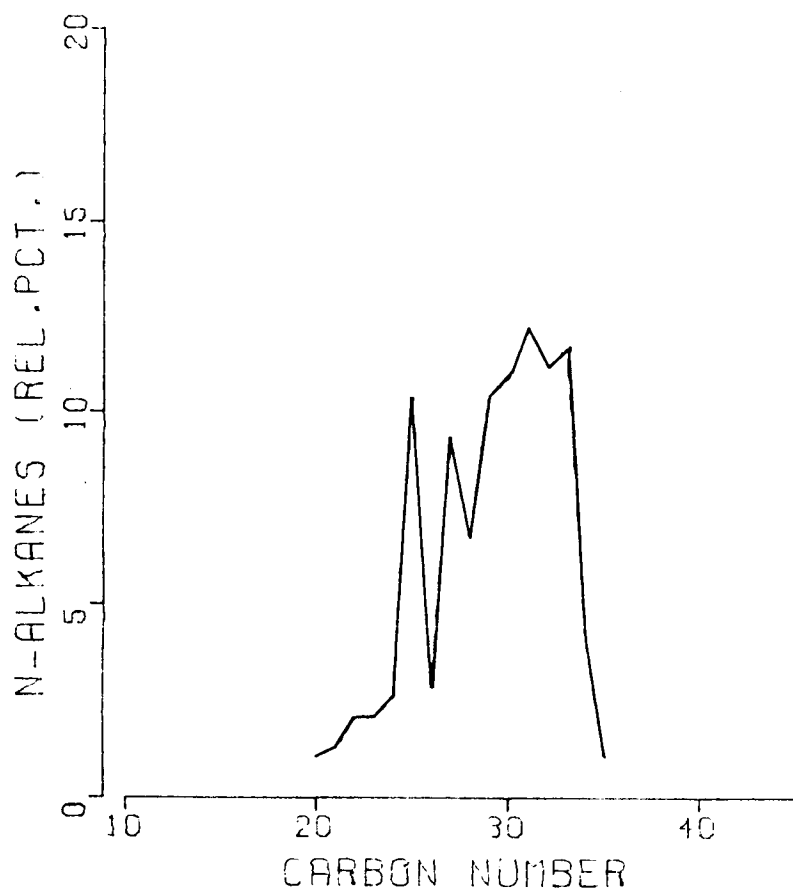


Figure 4.33

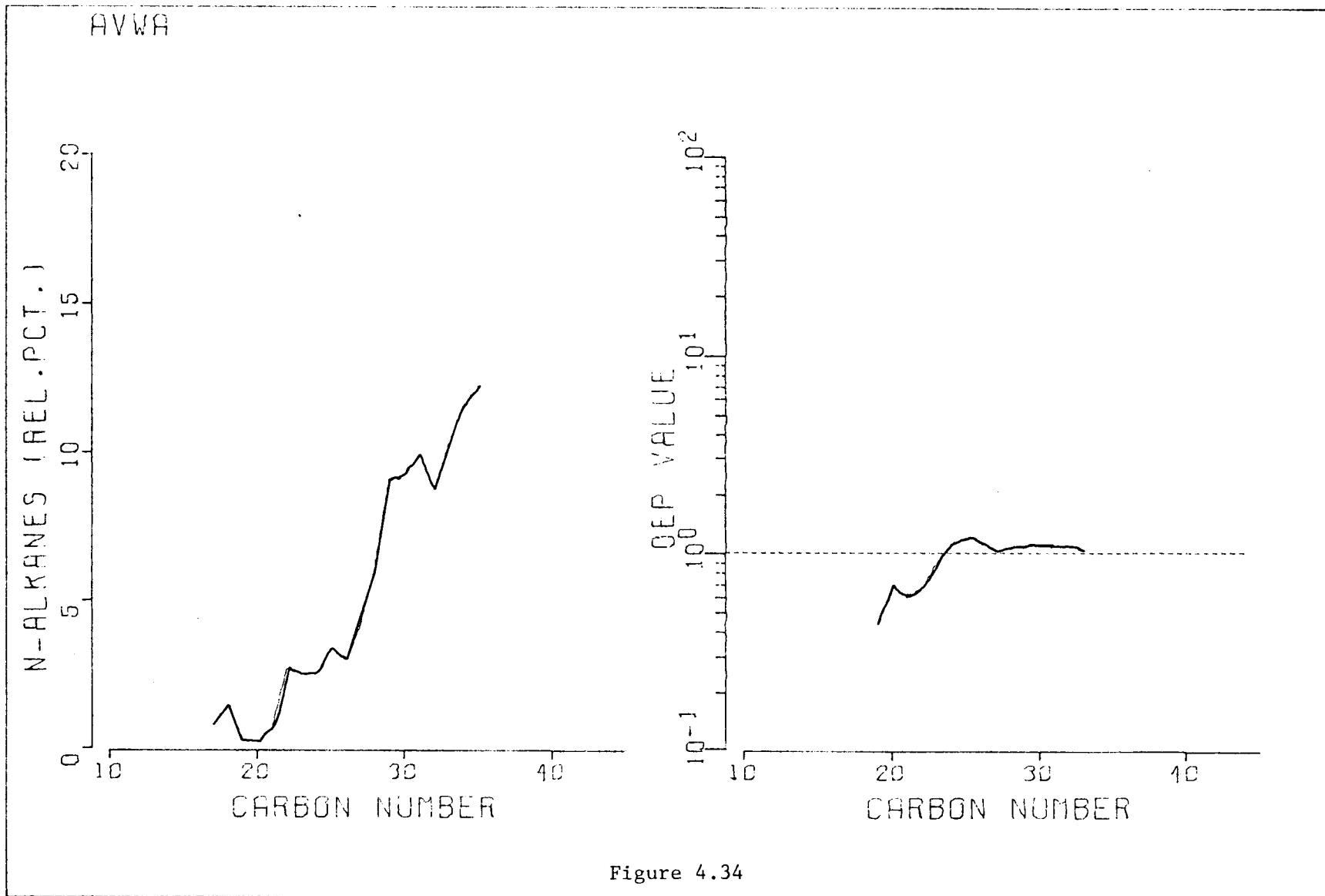


Figure 4.34

AGWZ

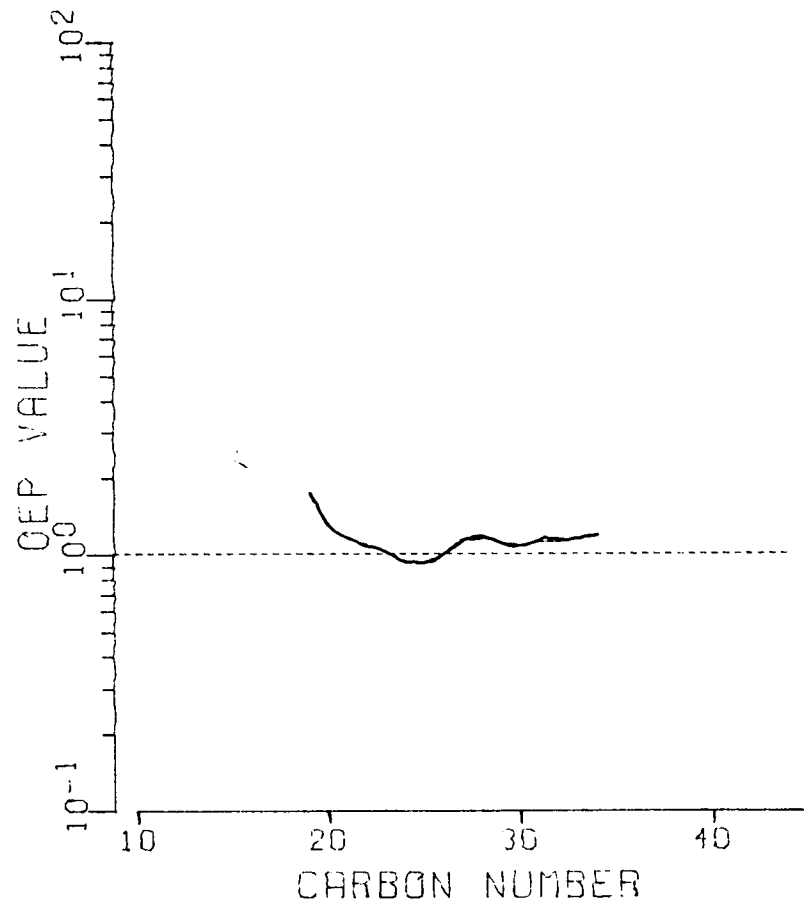
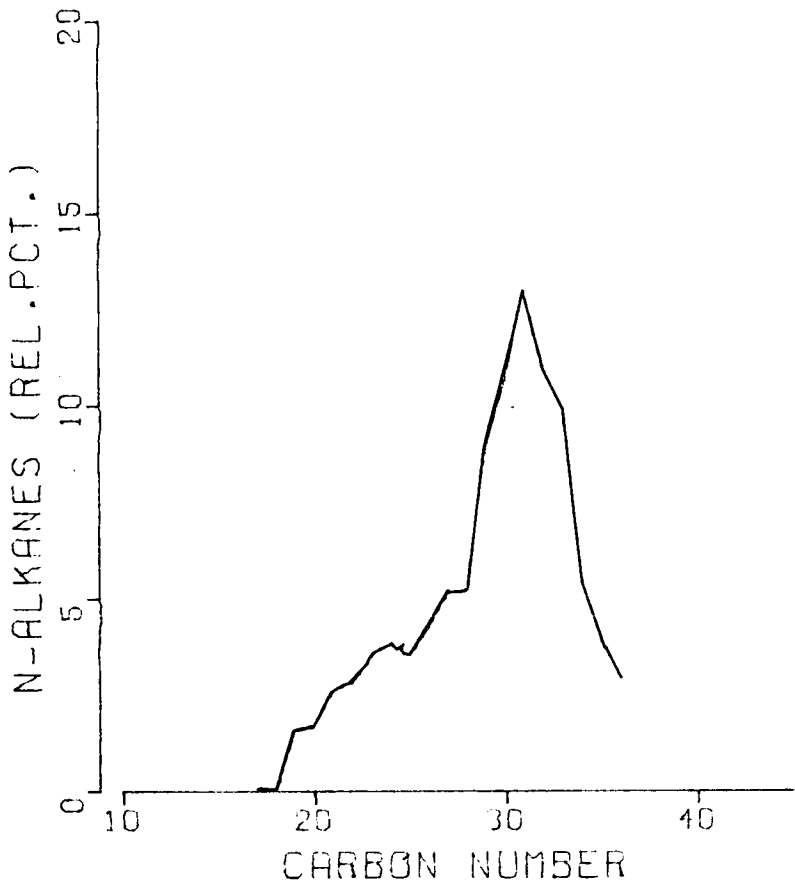


Figure 4.35

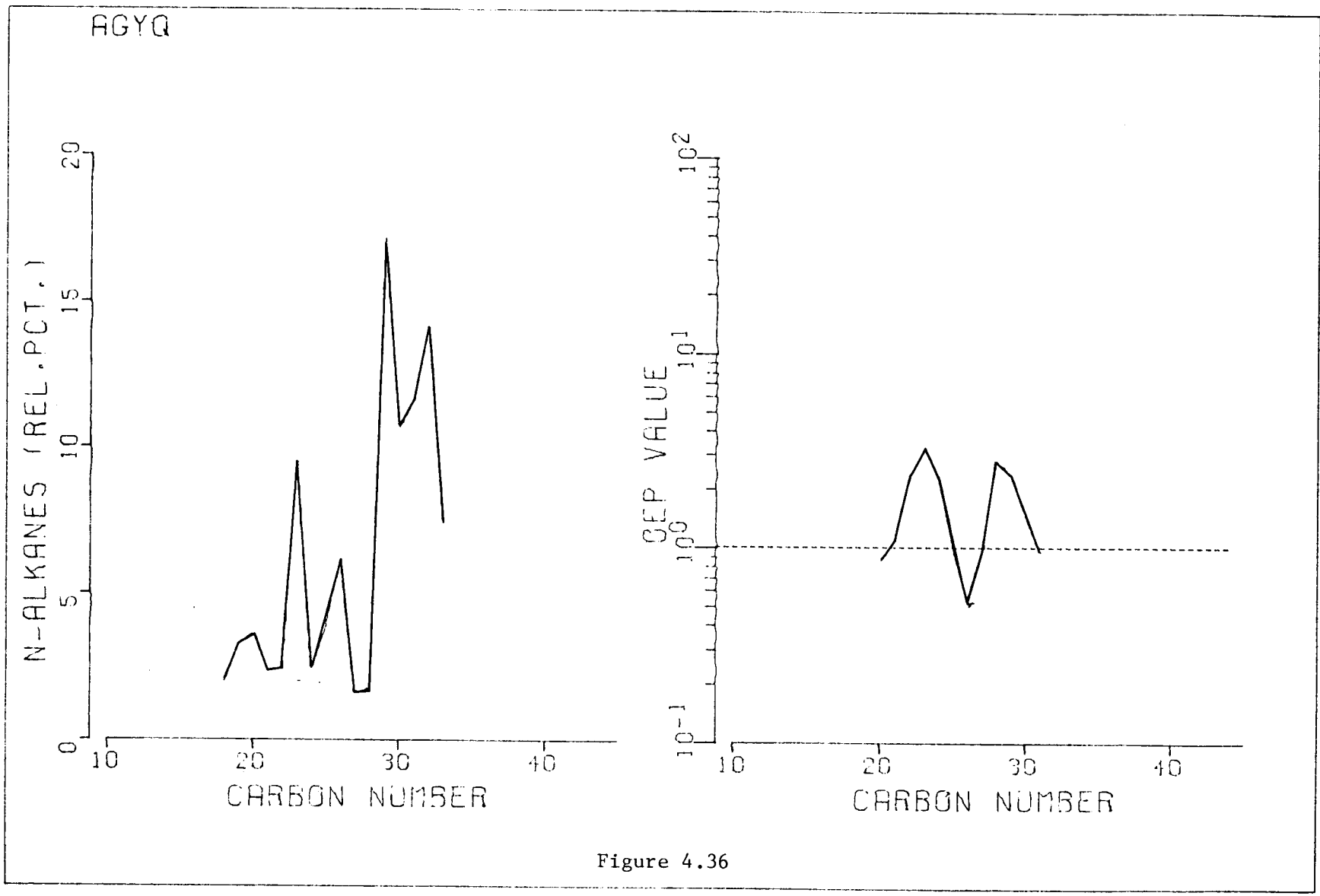


Figure 4.36

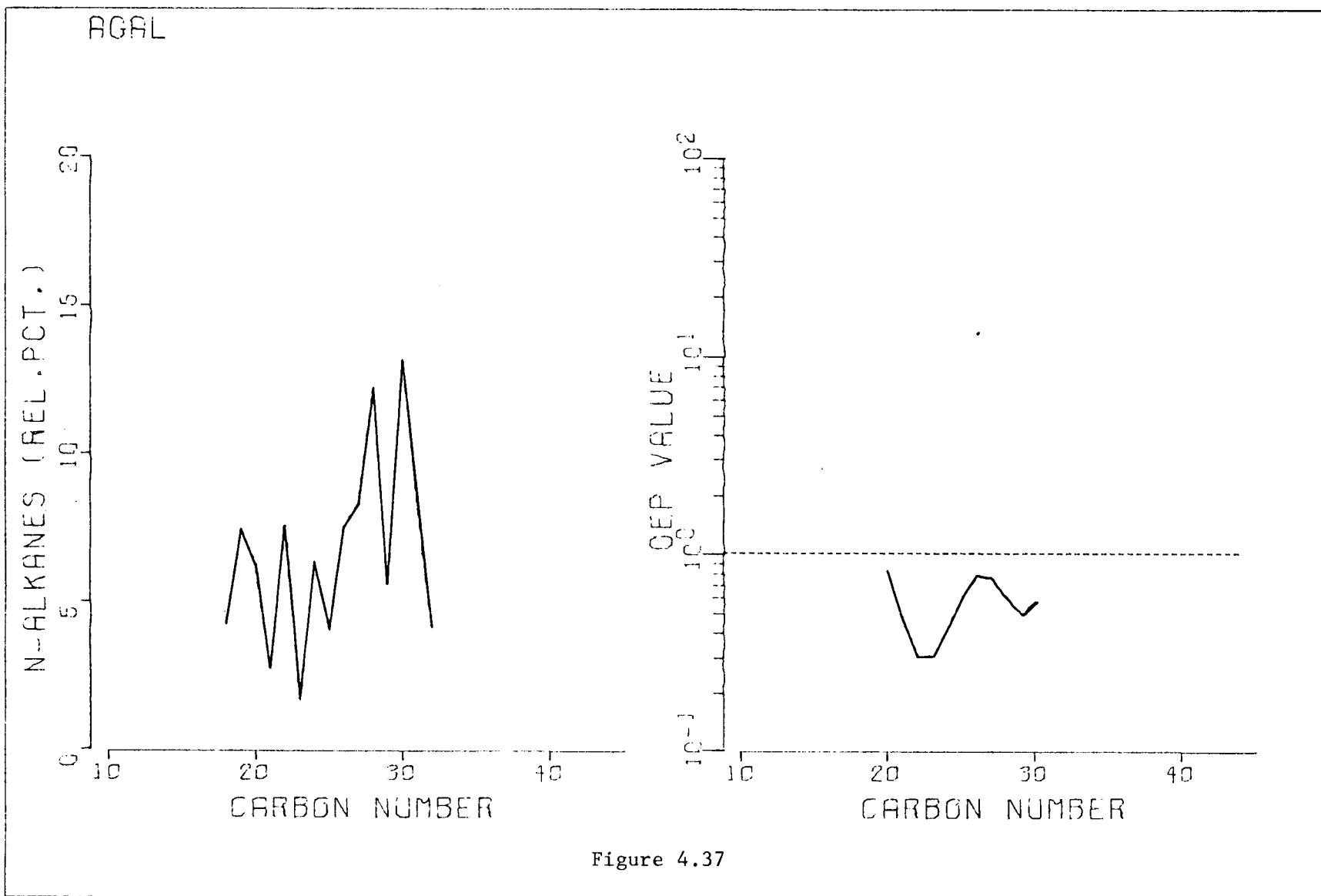


Figure 4.37

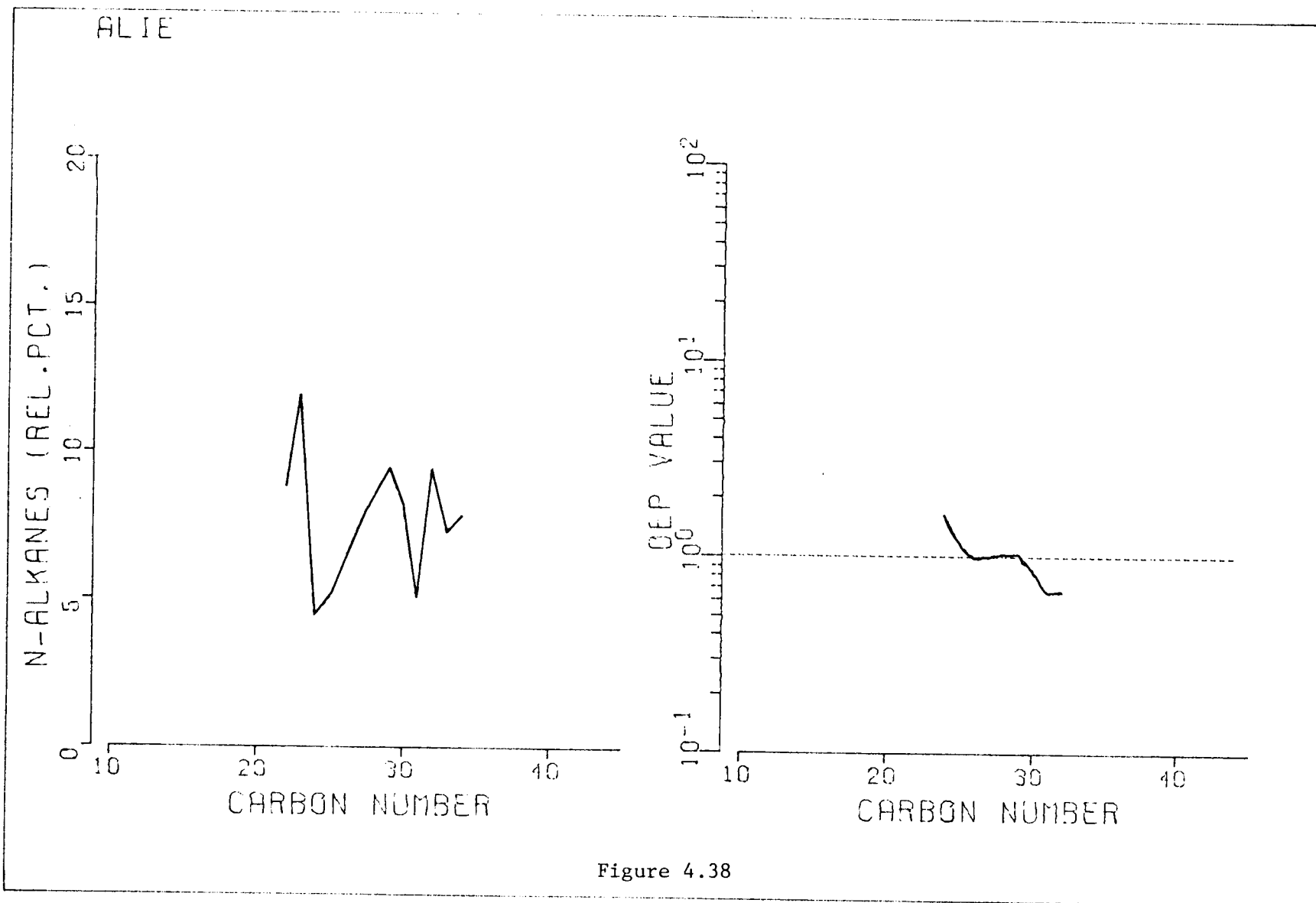


Figure 4.38

ANZZ

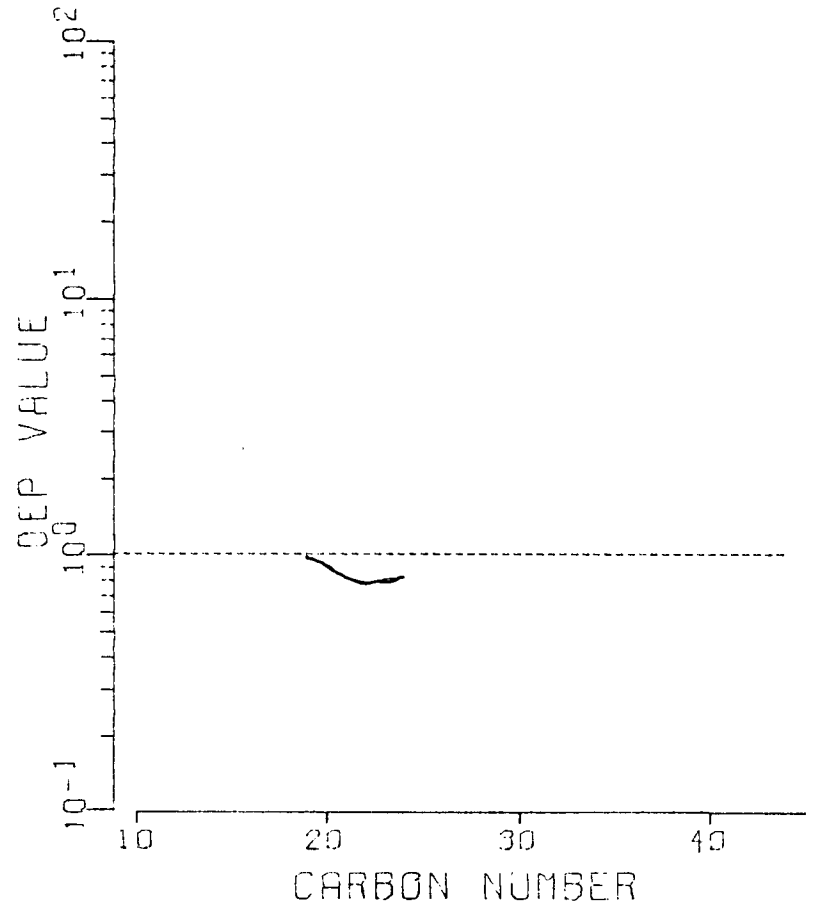
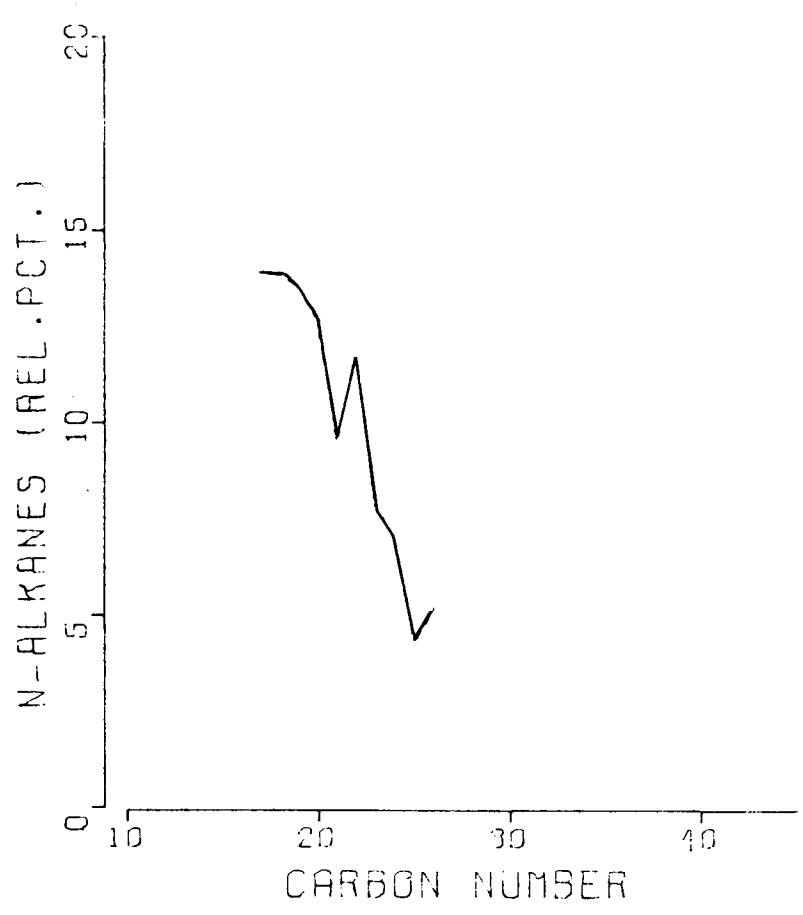


Figure 4.39

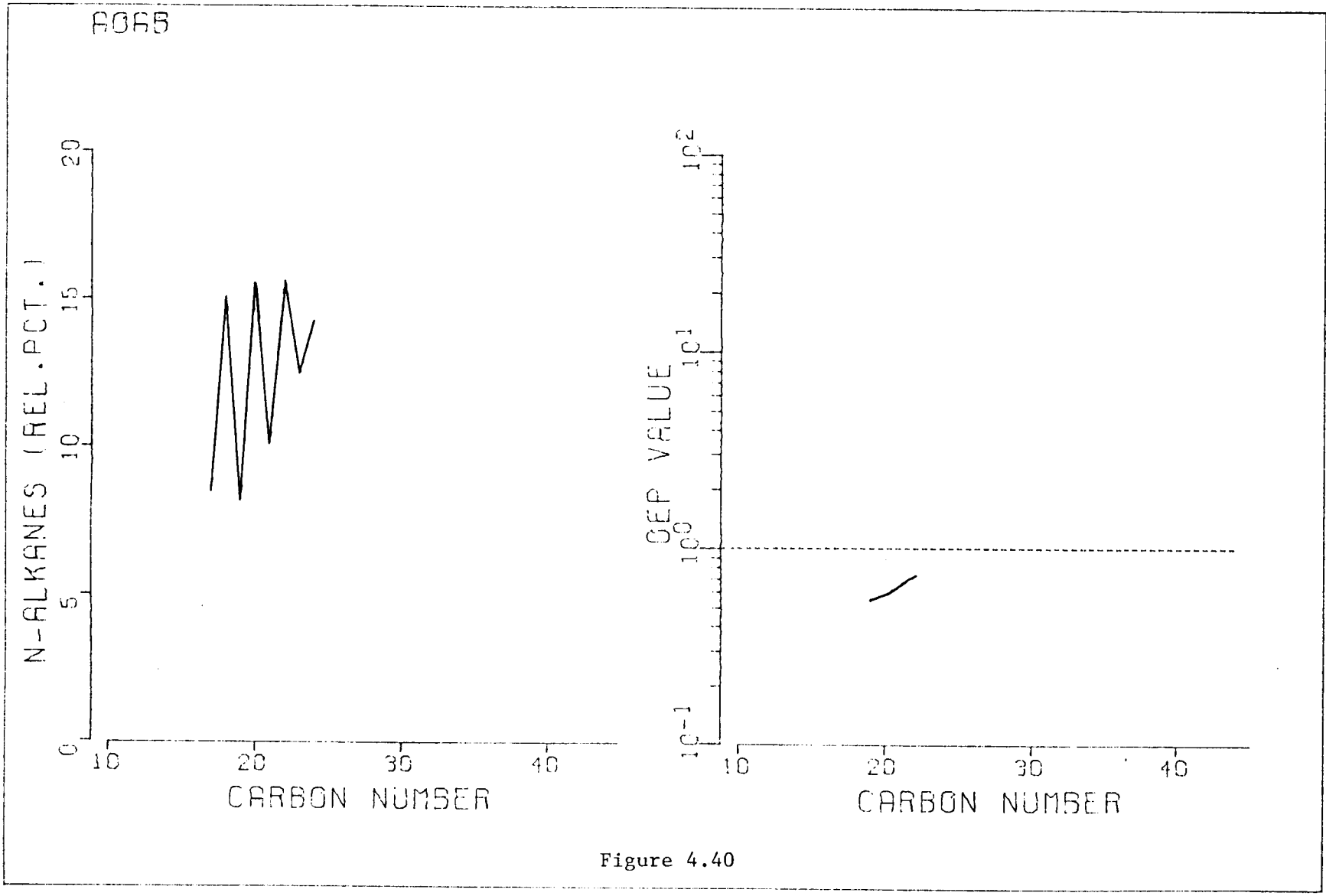


Figure 4.40

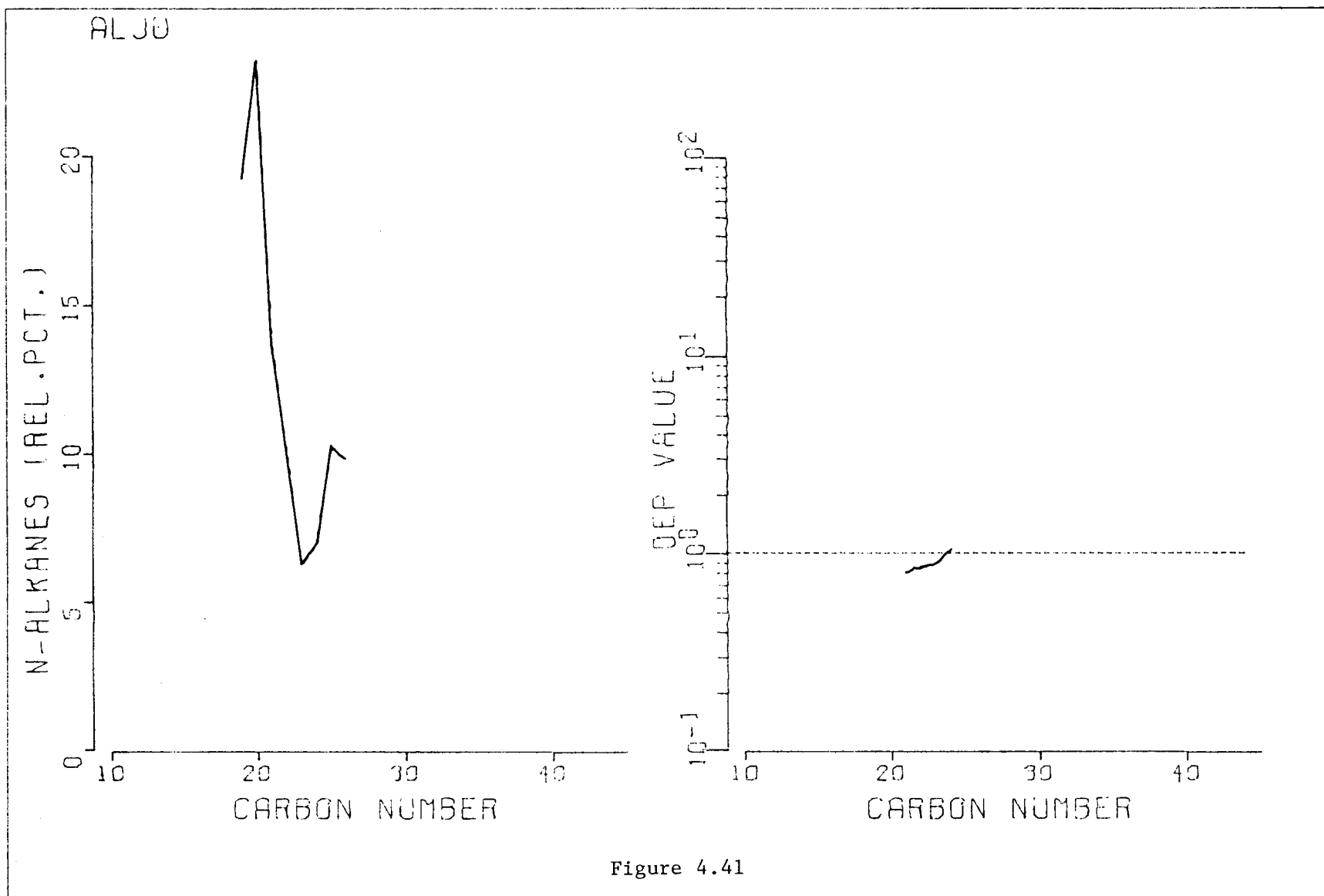


Figure 4.41

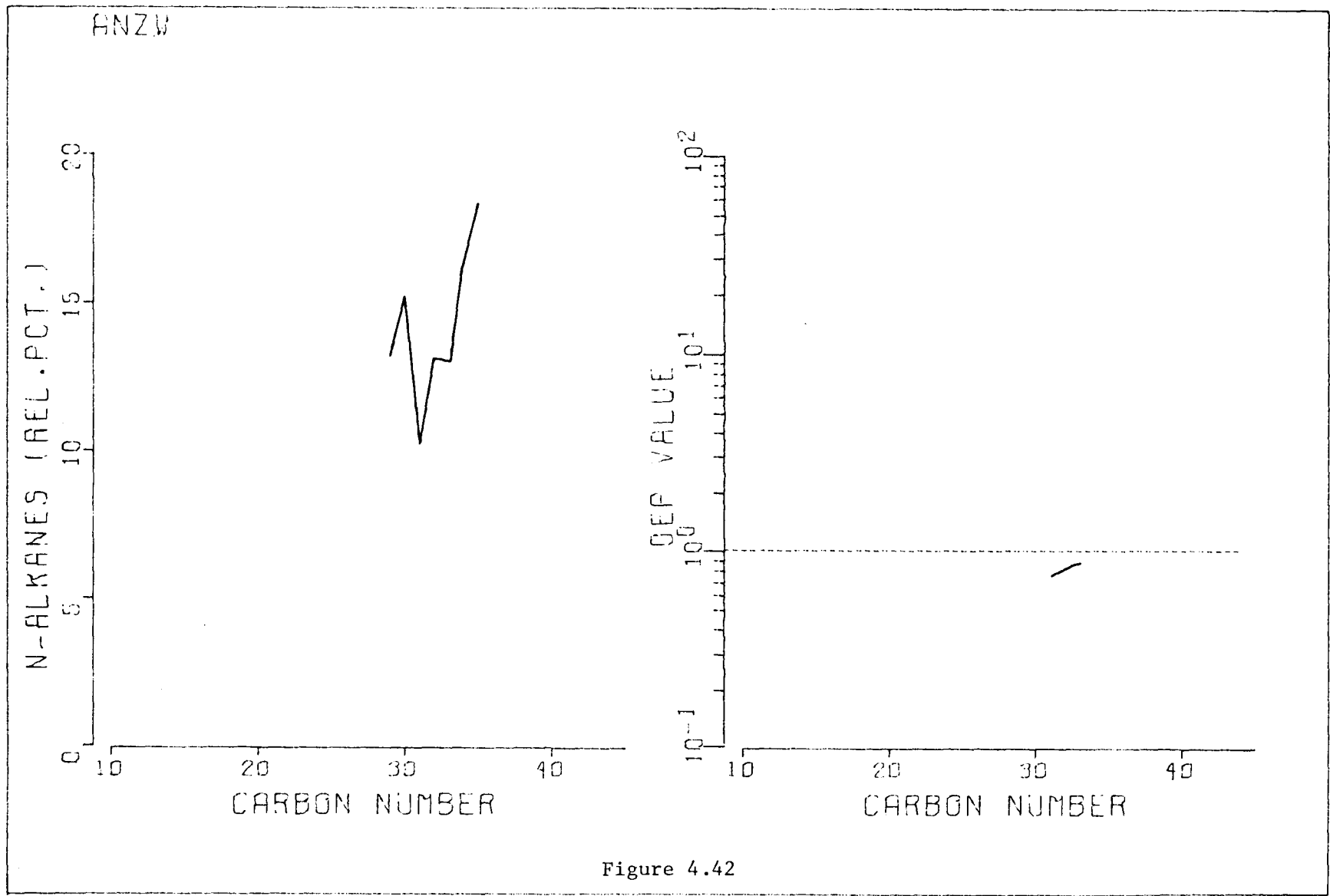


Figure 4.42

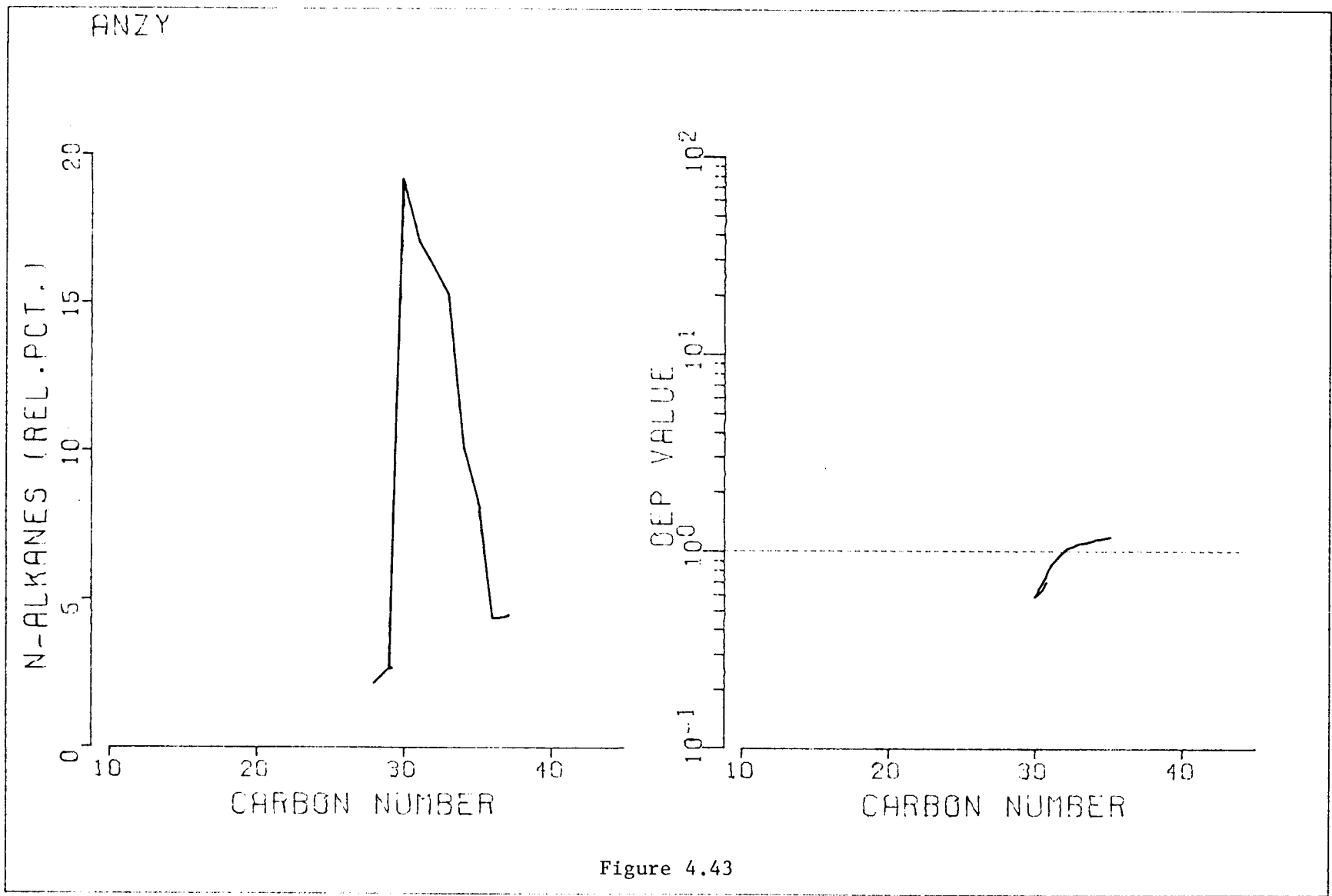
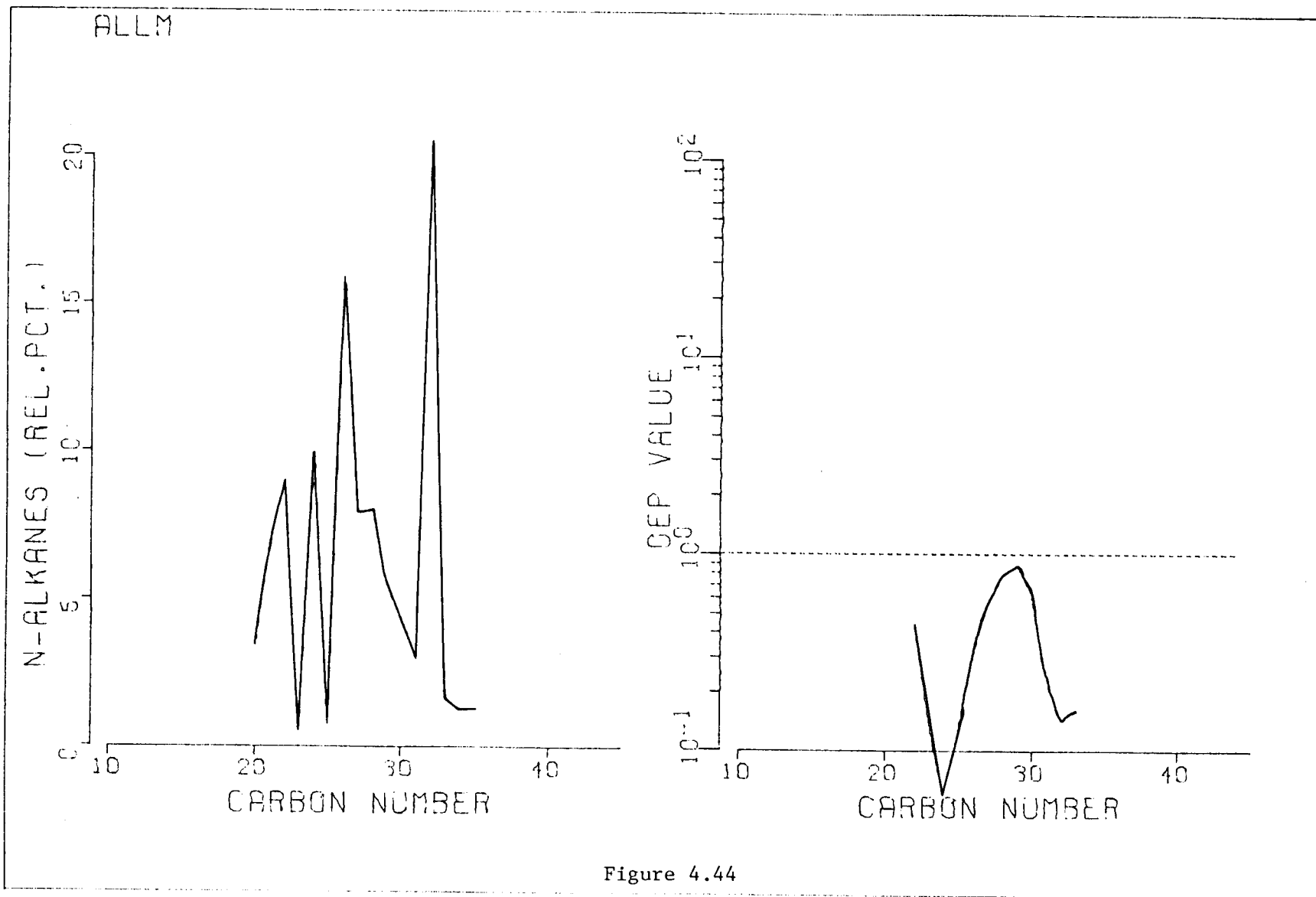


Figure 4.43



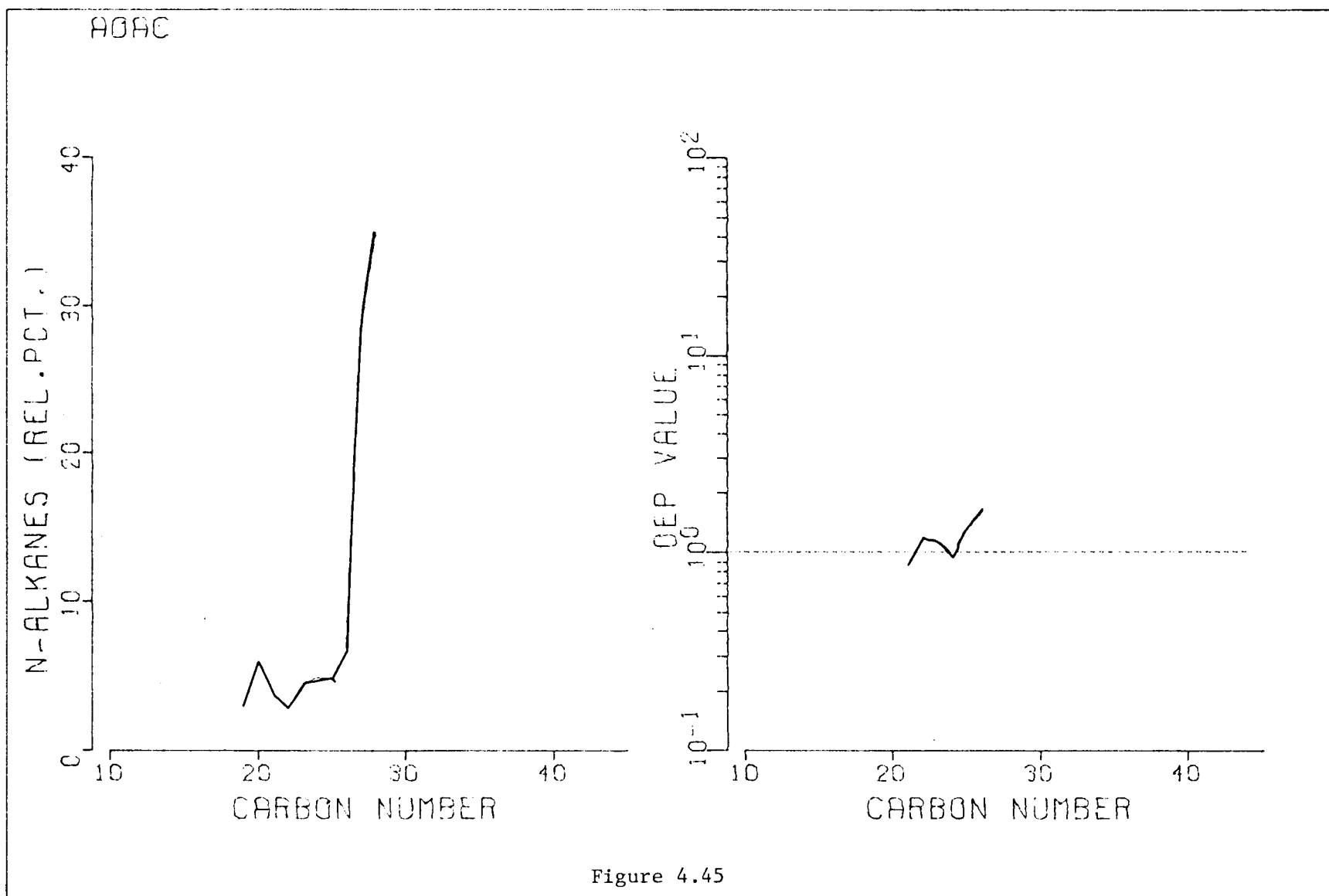


Figure 4.45

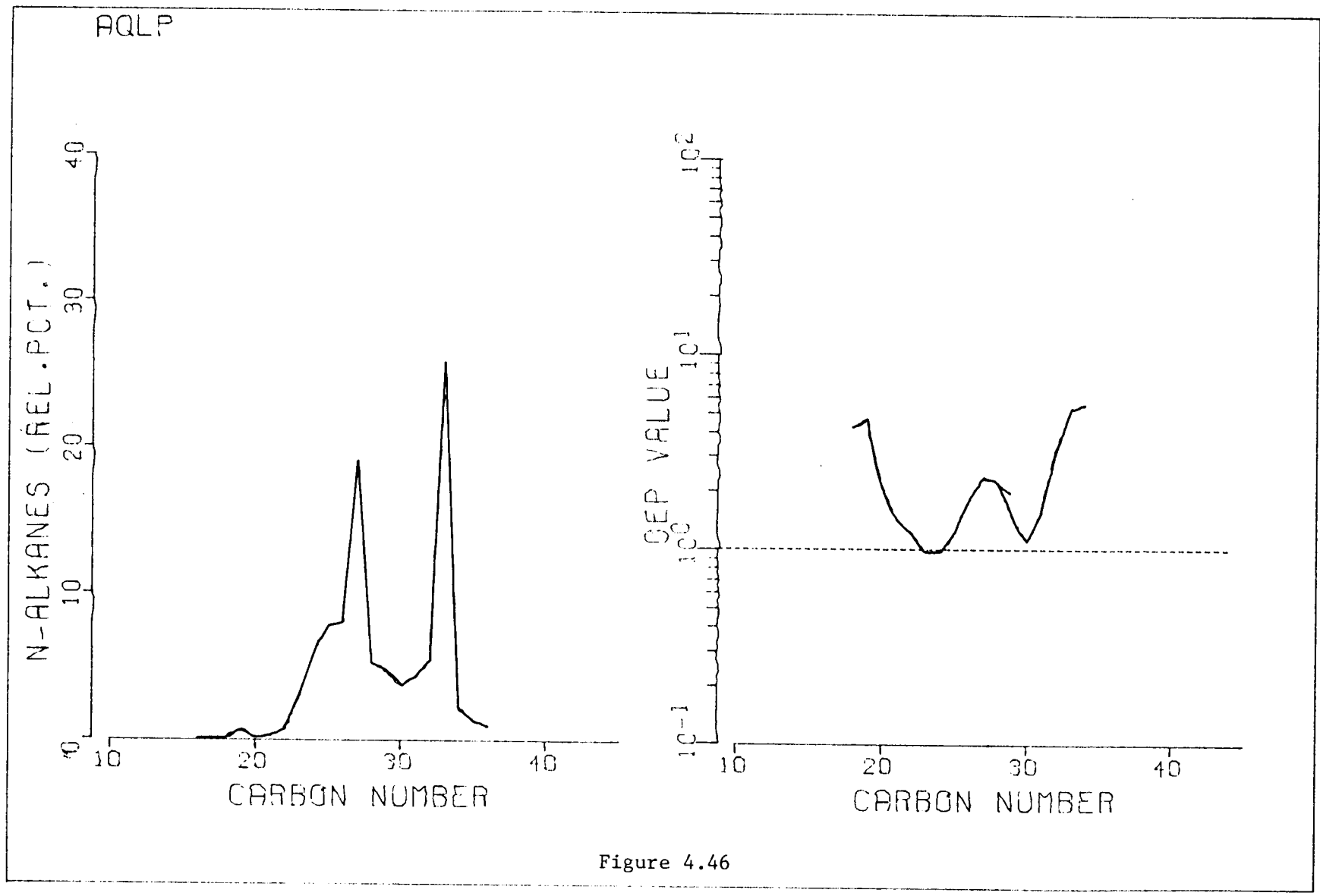


Figure 4.46

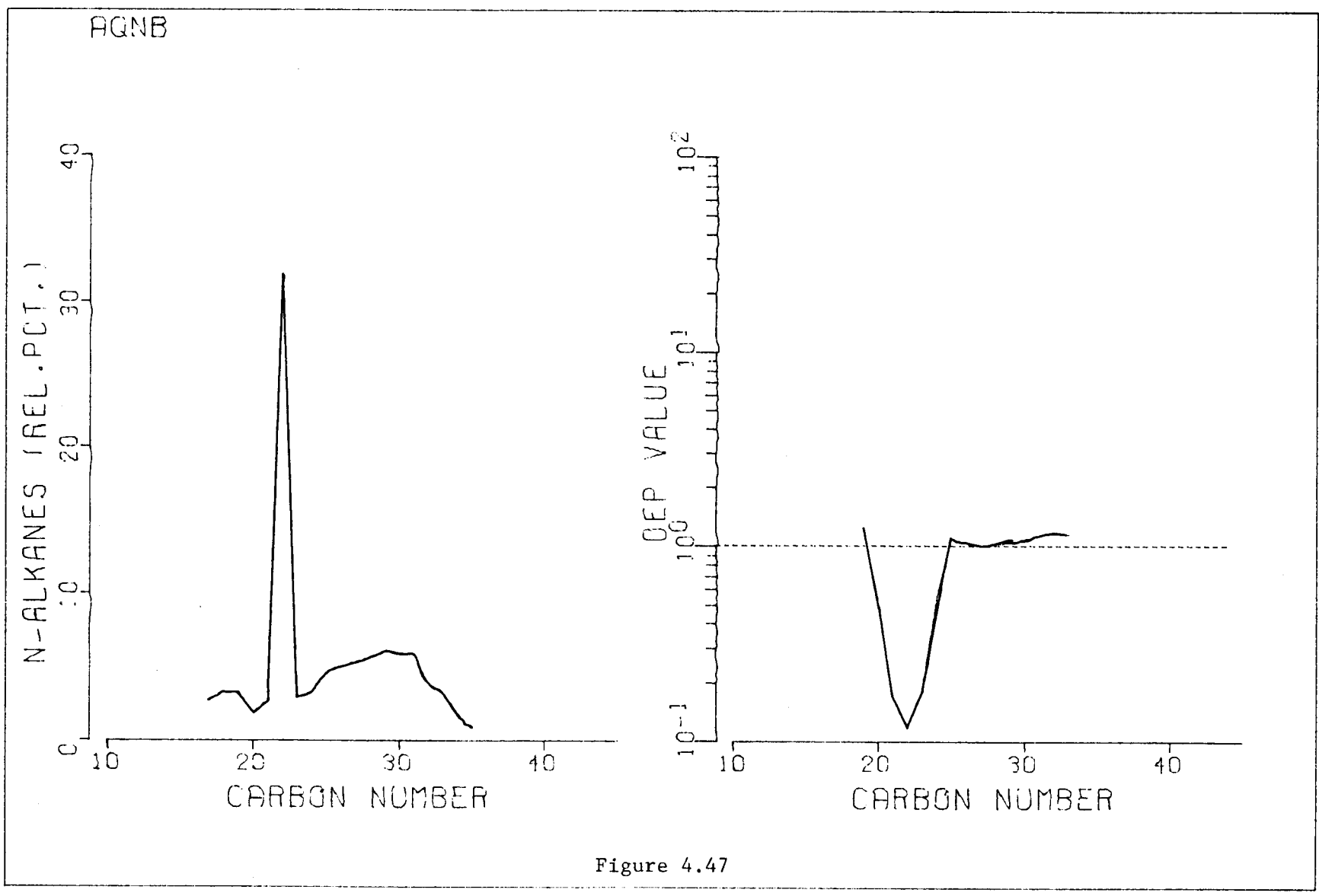


Figure 4.47

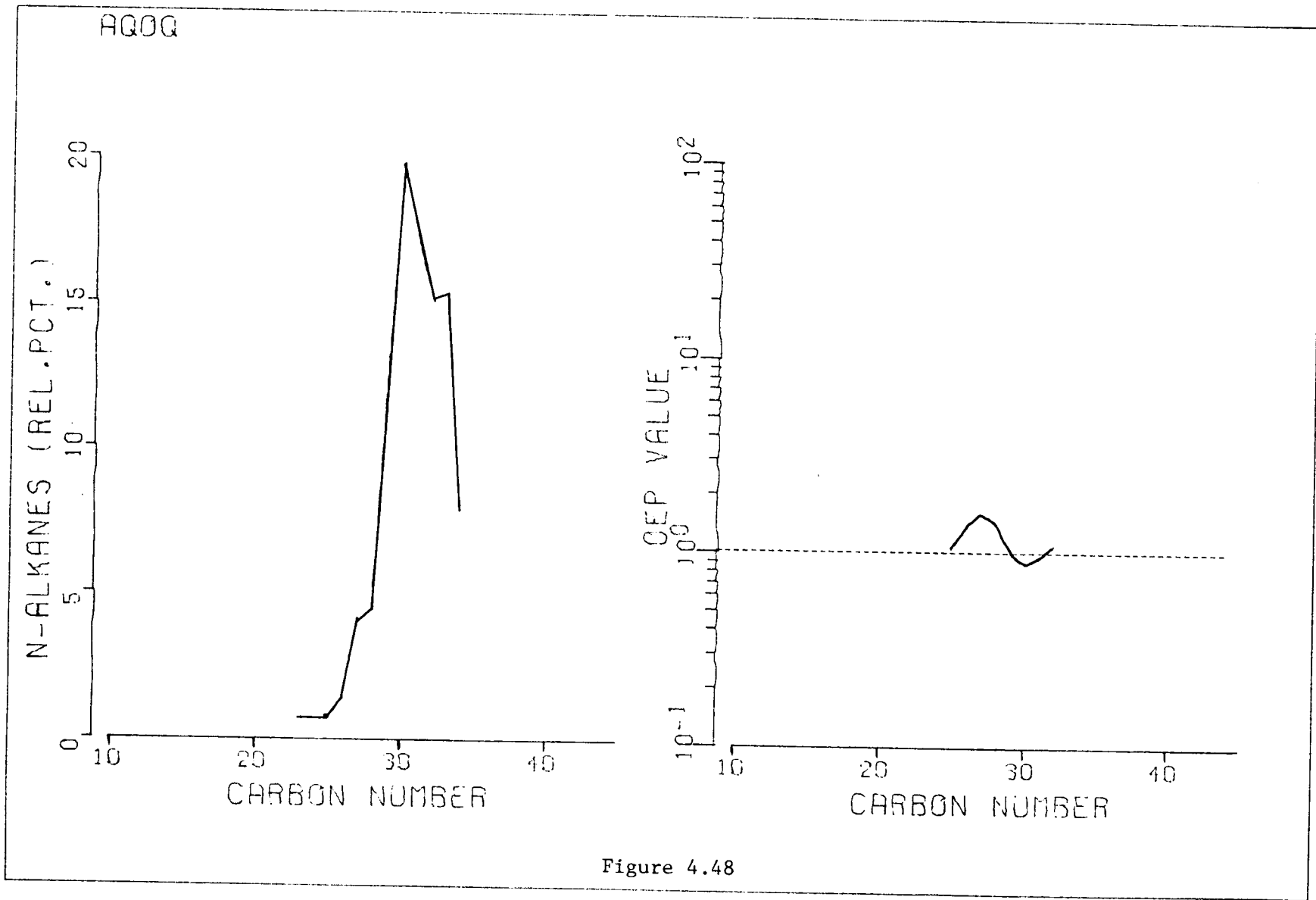
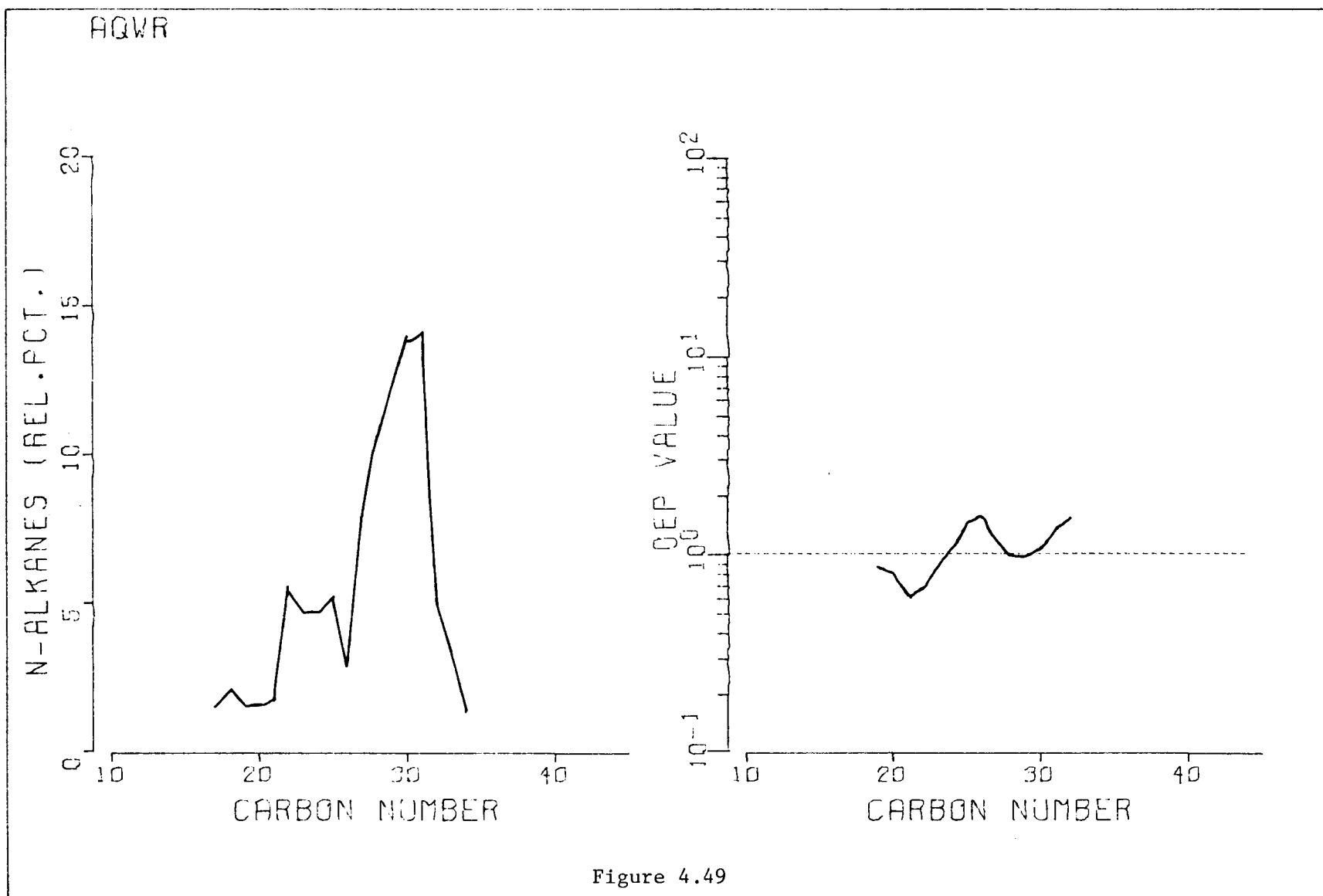


Figure 4.48



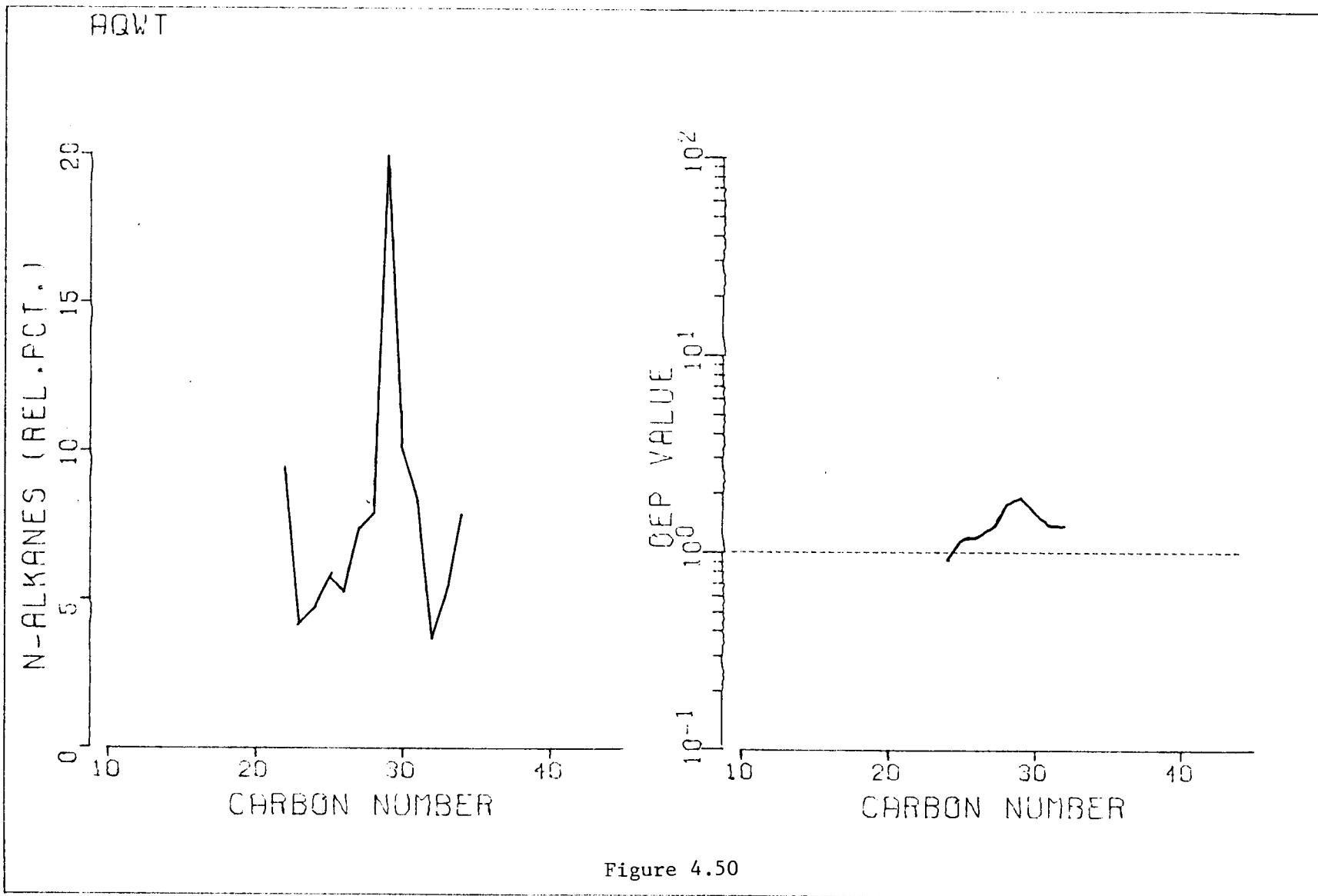


Figure 4.50

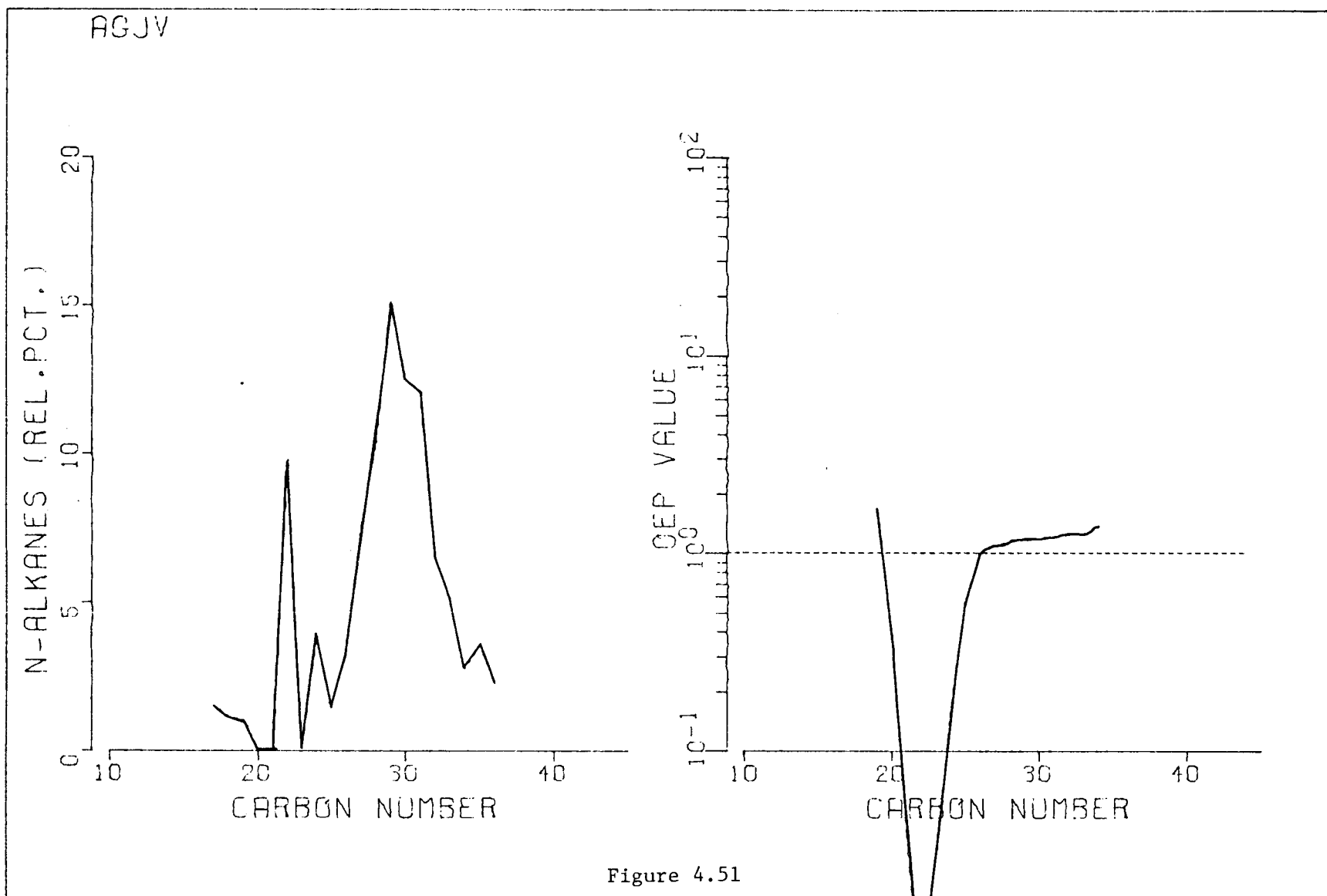


Figure 4.51

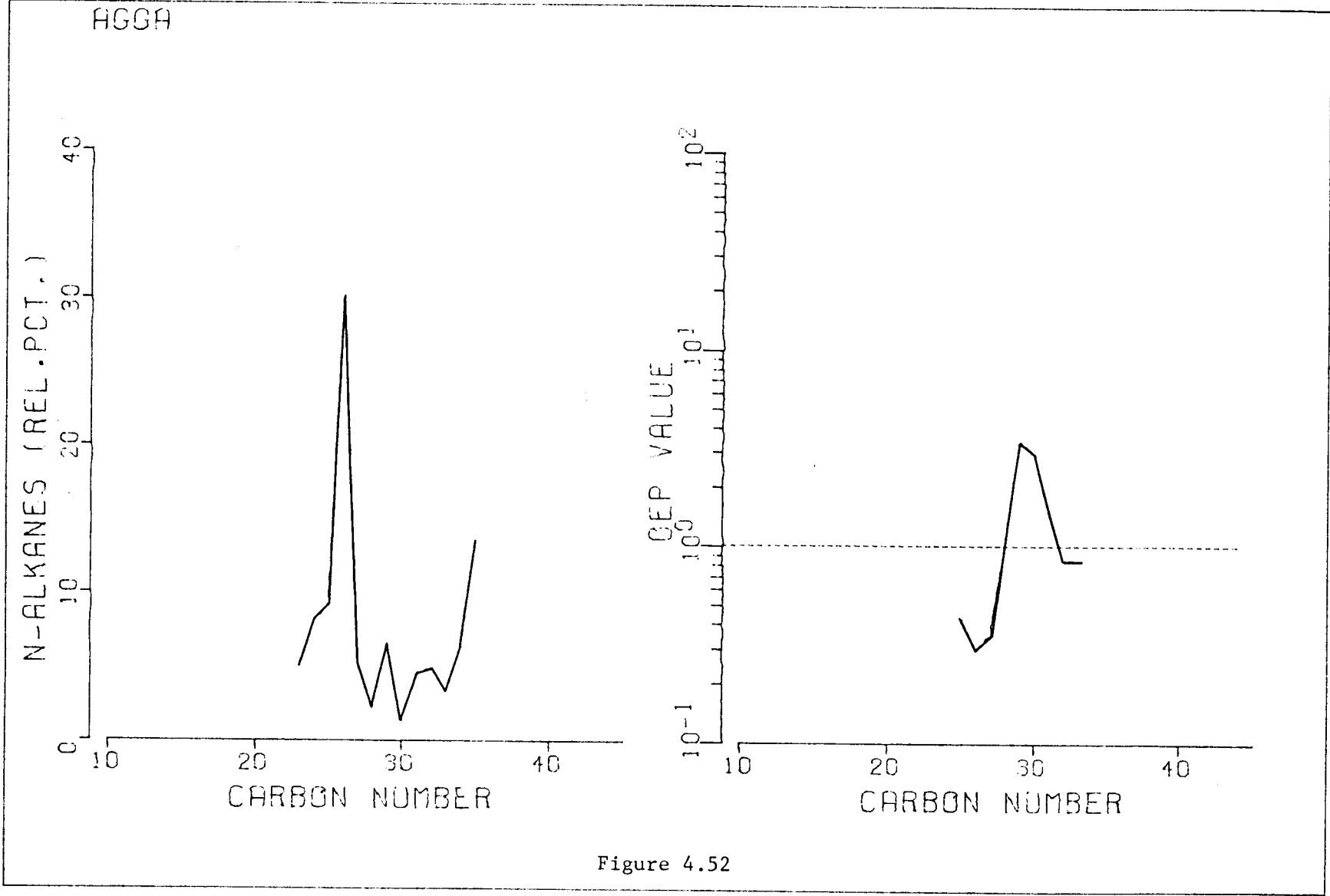
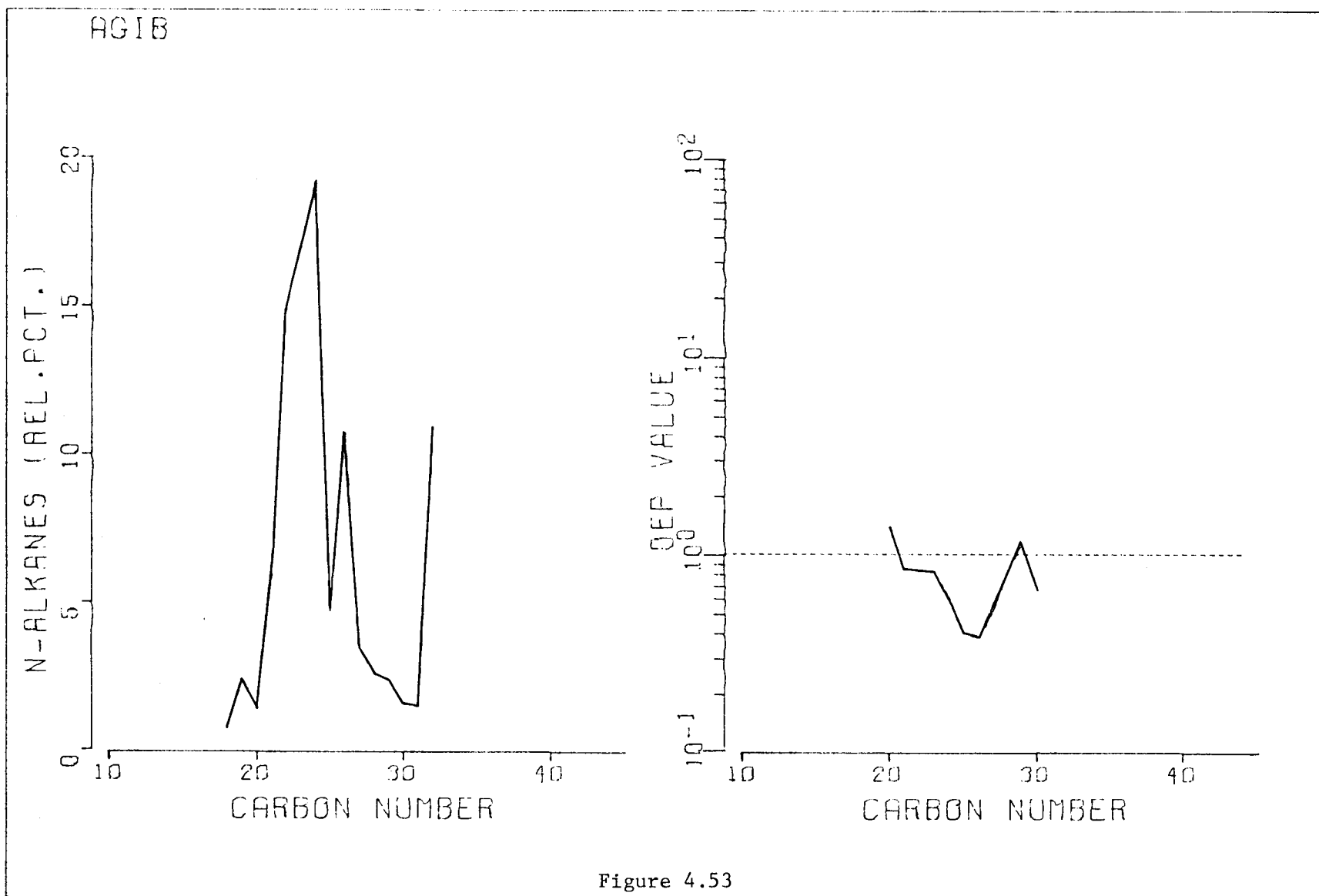


Figure 4.52



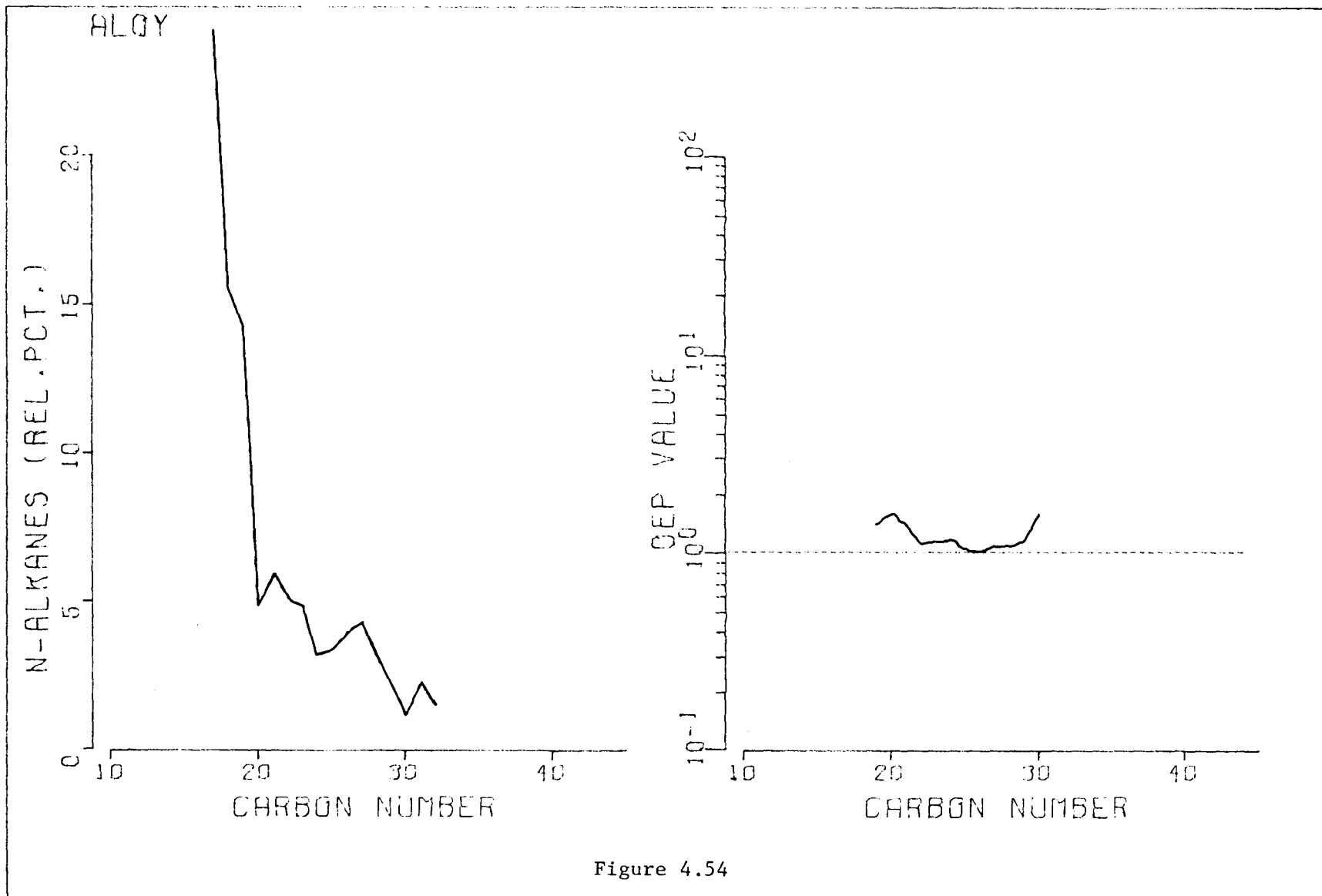
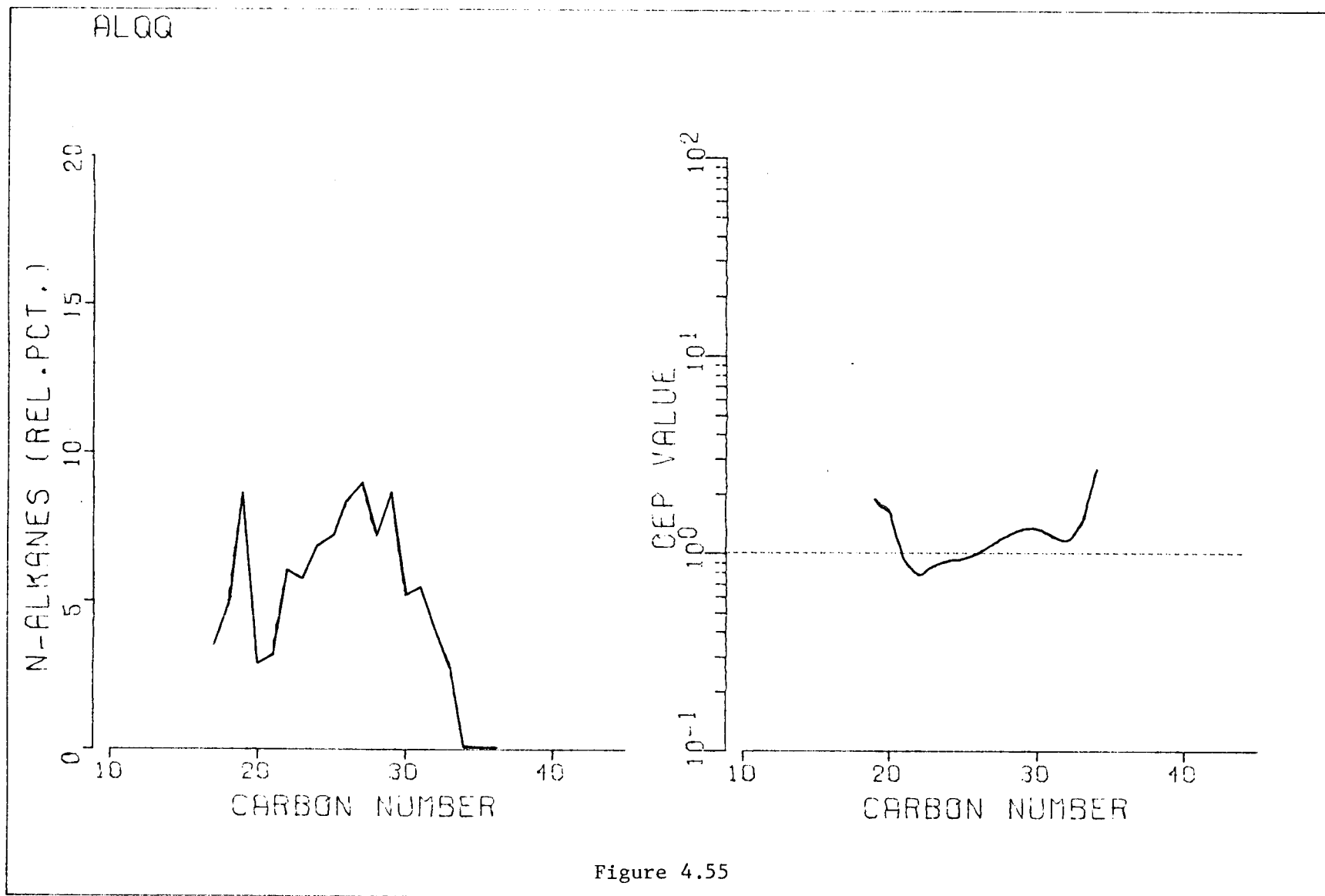


Figure 4.54



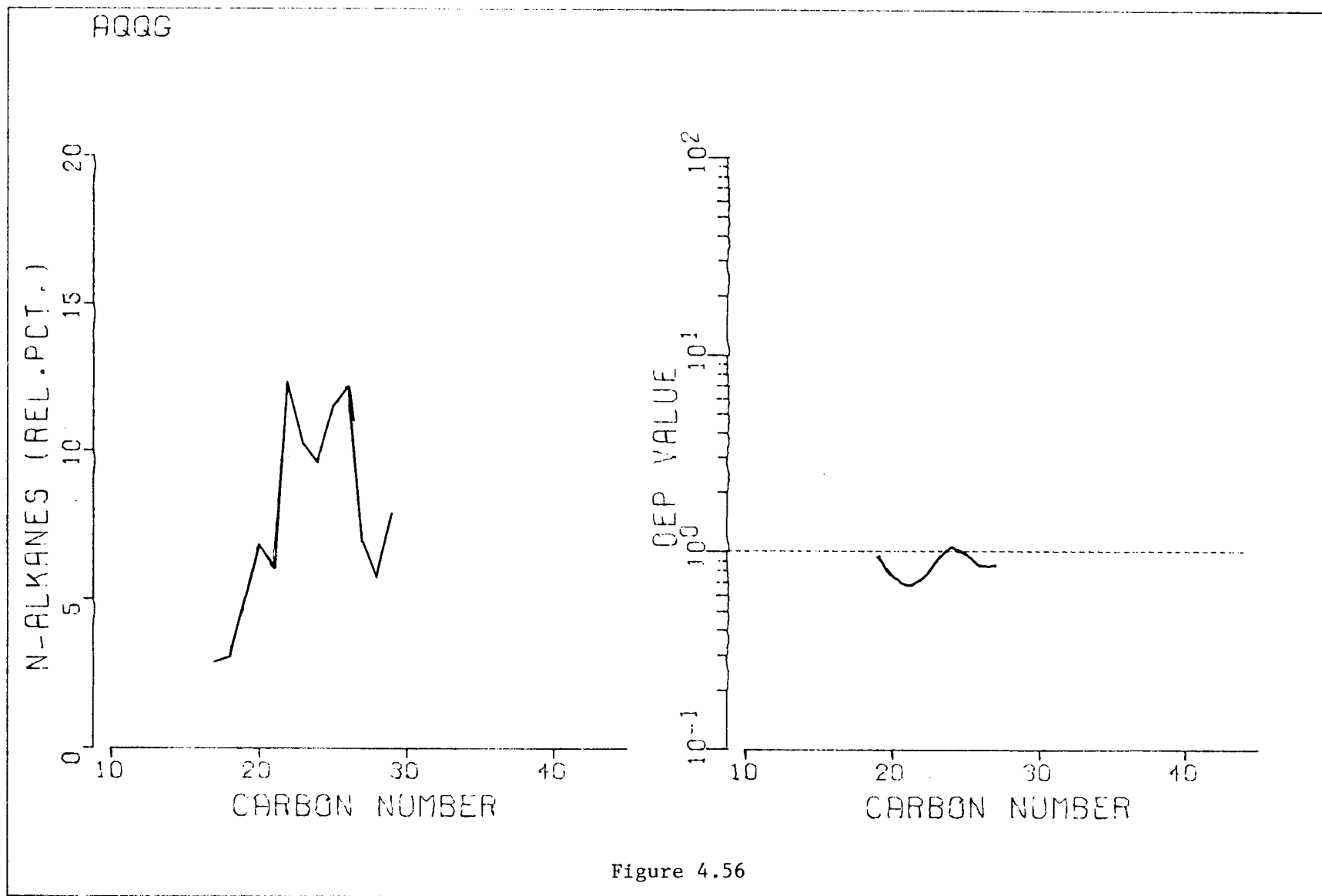


Figure 4.56

AQRS

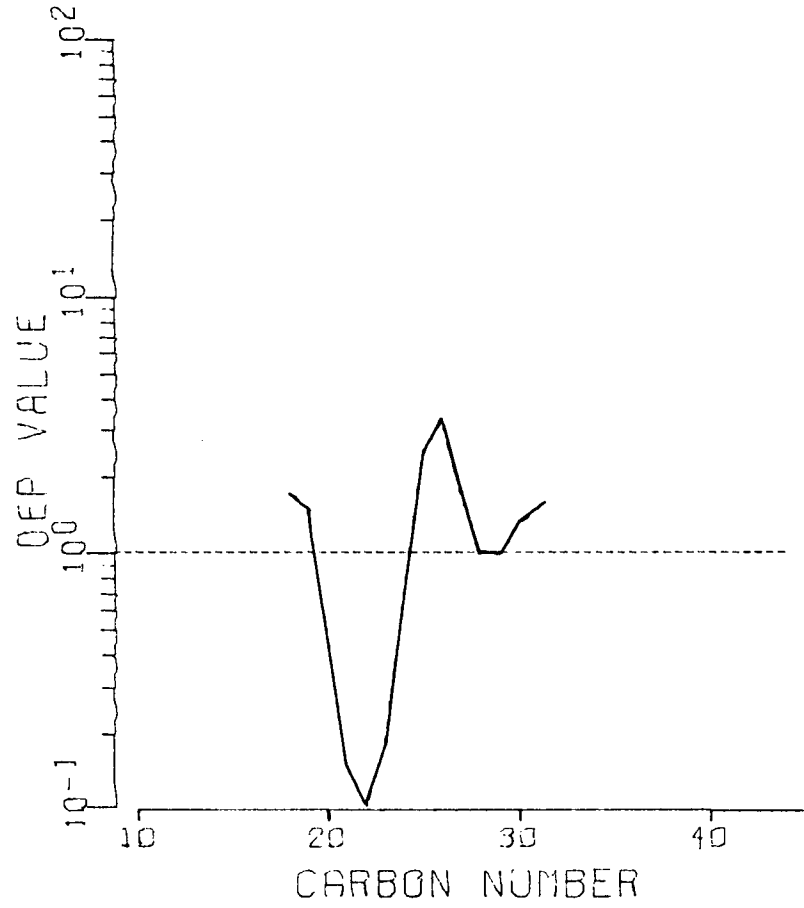
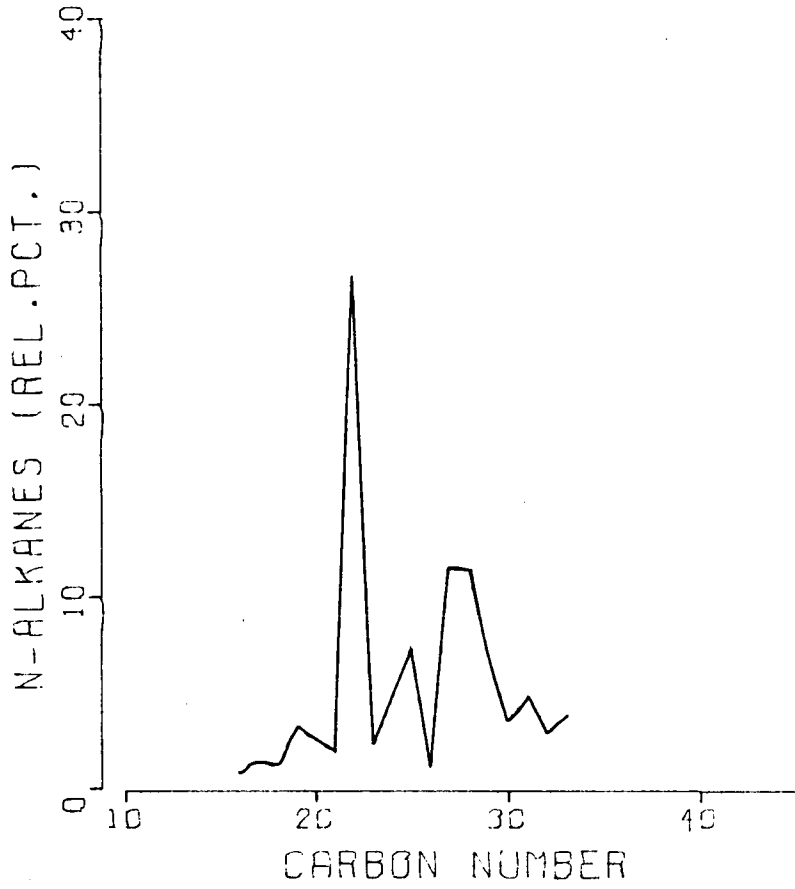


Figure 4.57

RQTJ

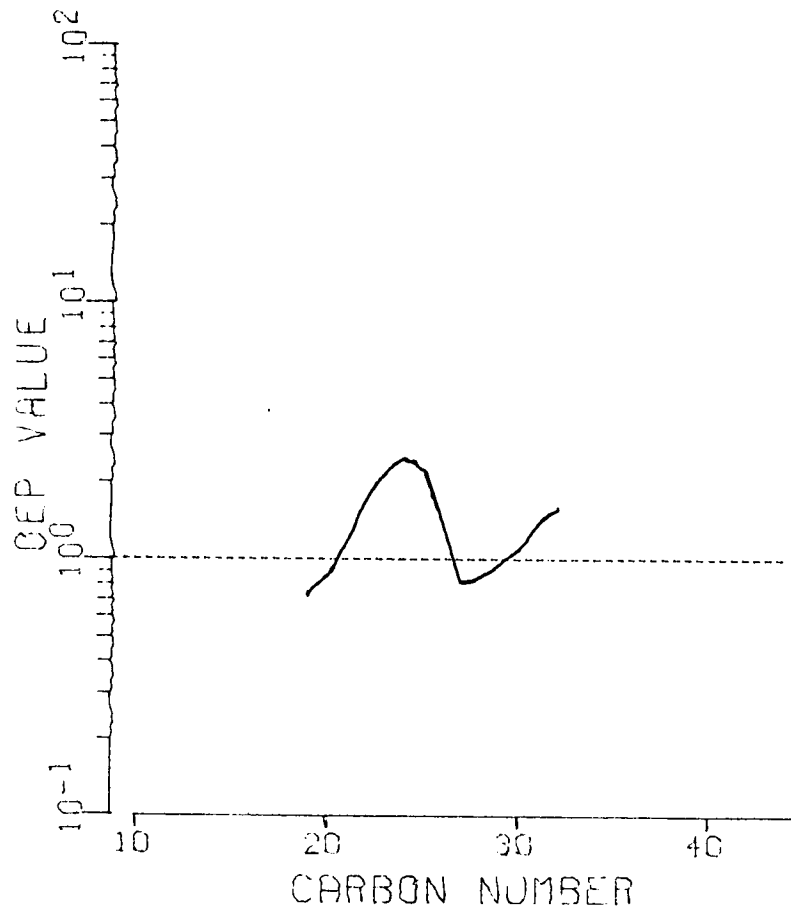
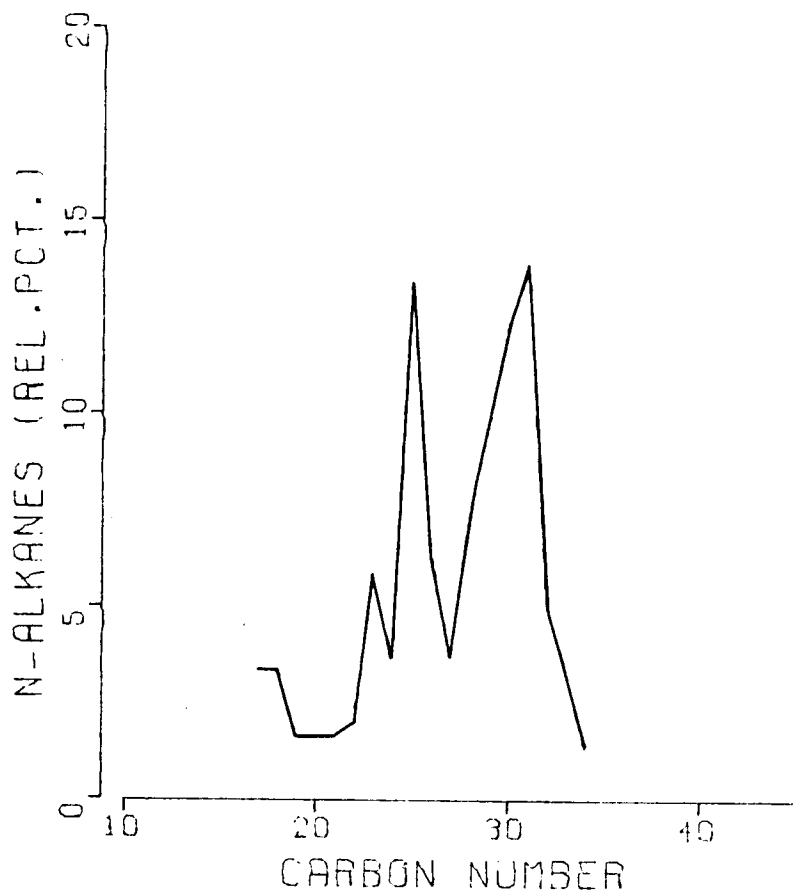


Figure 4.58

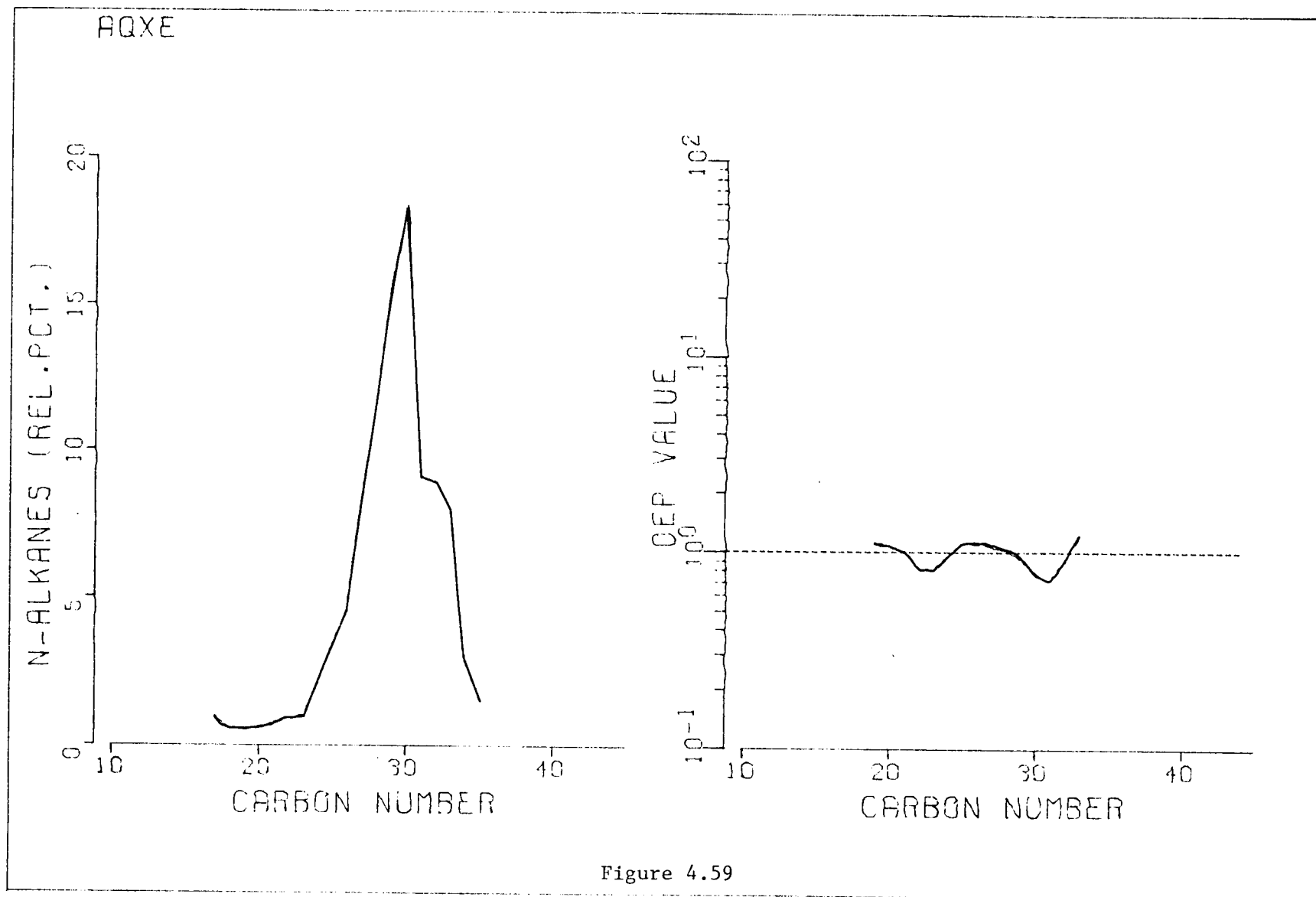


Figure 4.59

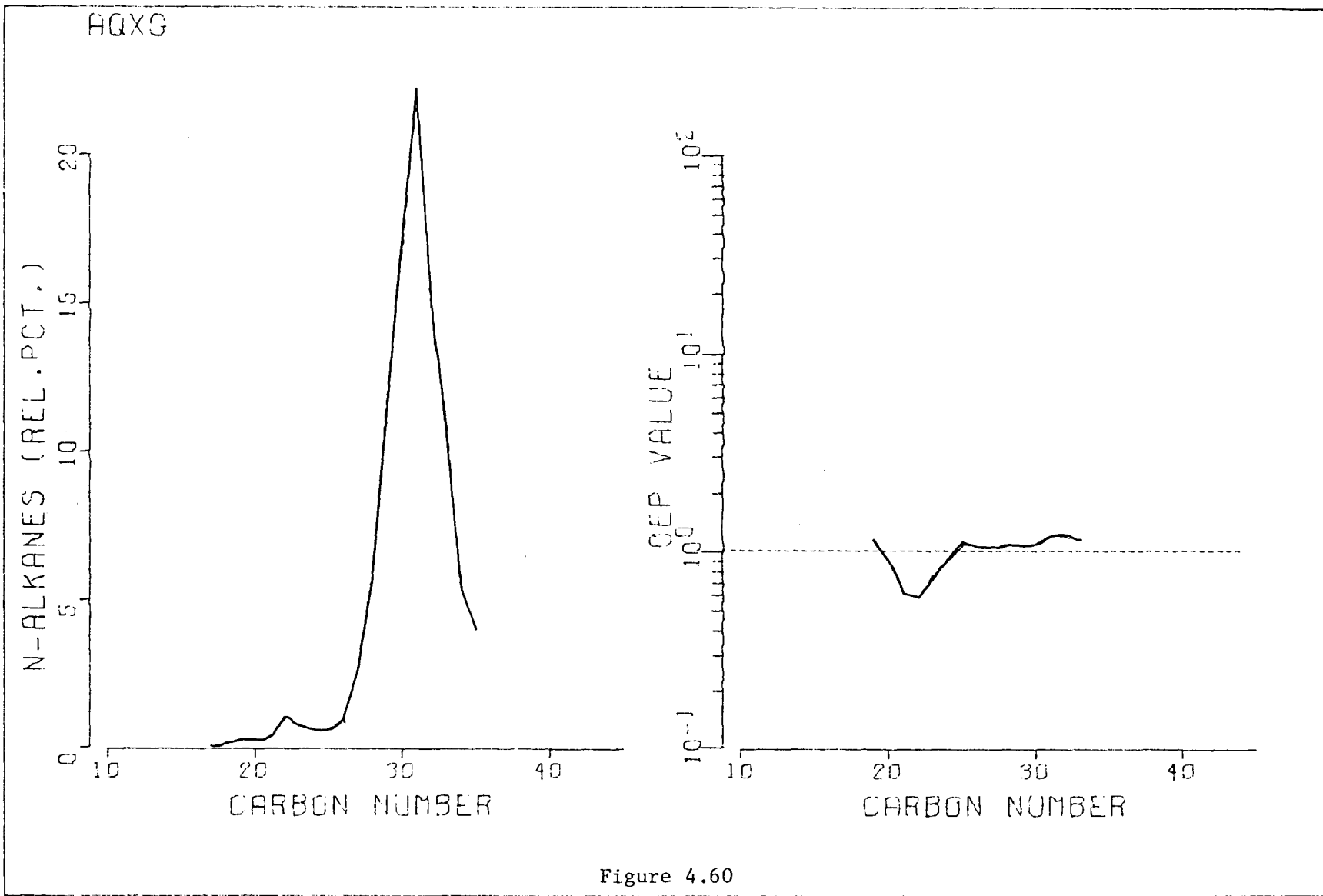


TABLE 7

HIGH-MOLECULAR-WEIGHT HYDROCARBON GLC ANALYSES

TABLE 7.1

HEAVY HYDROCARBON ANALYSIS - STUCCS - 1976

SAMPLE TYPE : SED
 SAMPLE CODE : AHAP PERIOD : WINTER
 LOCATION : STATION - 1 LINE -I

HEXANE ELUATE		BENZENE ELUATE	
RETENTION INDEX	CONCENTRATION (UG./G.)	RETENTION INDEX	CONCENTRATION (UG./G.)
1670	.00340	2155	.32800
1700	.00250	3000	2.30000
1780	.00090		
1800	.00370		
1900	.00530		
2000	.00330		
2100	.00410		
2200	.01180		
2300	.01780		
2400	.01340		
2500	.01470		
2600	.01320		
2700	.02710		
2800	.05300		
2900	.10200		
3000	.04290		
3100	.13000		
3200	.01030		
3300	.13300		
TOTAL	.59240	TOTAL	2.62800
TOTAL NON-SAPONIFIABLE CONC. (MG./G.) =		.01	

TABLE 7.2

HEAVY HYDROCARBON ANALYSIS - STUCCS - 1976

SAMPLE TYPE : SED
 SAMPLE CODE : AHCK PERIOD : WINTER
 LOCATION : STATION - 2 LINE -I

HEXANE ELUATE

BENZENE ELUATE

RETENTION INDEX	CONCENTRATION (UG./G.)	RETENTION INDEX	CONCENTRATION (UG./G.)
1600	.00680	1669	.08830
1670	.00340	1697	.09060
1700	.00420	1766	.13200
1780	.00280	2000	.14700
1800	.00510	2085	.27600
1900	.01020	2580	.23300
2000	.00590		
2100	.01980		
2200	.00830		
2300	.03200		
2400	.05570		
2500	.07320		
2600	.00760		
2700	.08490		
2800	.05600		
2900	.11000		
3000	.03920		
3100	.09930		
3200	.04320		
3300	.05130		
TOTAL	.71950	TOTAL	.96690
TOTAL NON-SAPONIFIABLE CONC. (MG./G.) = .07			

TABLE 7.3

HEAVY HYDROCARBON ANALYSIS - STUCCS - 1976

SAMPLE TYPE : SED
 SAMPLE CODE : AHDT
 LOCATION : STATION - 3 LINE - I

PERIOD : WINTER

HEXANE ELUATE		BENZENE ELUATE	
RETENTION INDEX	CONCENTRATION (UG./G.)	RETENTION INDEX	CONCENTRATION (UG./G.)
1500	.00590	1877	.00350
1600	.00320	2100	.00220
1640	.02970	2175	.00200
1670	.00430	2708	.01470
1700	.00630	3000	.02330
1780	.00450		
1800	.00590		
1840	.03450		
1900	.00710		
2000	.00730		
2100	.00930		
2200	.01250		
2300	.01390		
2400	.01650		
2500	.01630		
2600	.01450		
2700	.01960		
2800	.01480		
2900	.03810		
3000	.01750		
3100	.04030		
3200	.00420		
TOTAL	.32620	TOTAL	.04570
TOTAL NON-SAPONIFIABLE CONC. (MG./G.) =			.04

TABLE 7.4

HEAVY HYDROCARBON ANALYSIS - STUCCS - 1976

SAMPLE TYPE : SED

SAMPLE CODE : AHFA

PERIOD : WINTER

LOCATION : STATION - 4 LINE -I

HEXANE ELUATE

BENZENE ELUATE

RETENTION INDEX	CONCENTRATION (UG./G.)	RETENTION INDEX	CONCENTRATION (UG./G.)
1600	.00180	2065	.00350
1700	.00610	2148	.00410
1800	.00530	2216	.00280
1900	.00670	2631	.00390
2000	.00700	3040	.00460
2100	.01050	3800	.11700
2200	.01030		
2300	.01440		
2400	.01390		
2500	.01470		
2600	.00960		
2700	.01540		
2800	.00630		
2900	.03210		
3000	.00840		
TOTAL	.16250	TOTAL	.13590
TOTAL NON-SAPONIFIABLE CONC. (MG./G.) =		.02	

TABLE 7.5

HEAVY HYDROCARBON ANALYSIS - SFOCS - 1976

SAMPLE TYPE : SED
 SAMPLE CODE : AHGA PERIOD : WINTER
 LOCATION : STATION - 5 LINE -1

HEXANE ELUATE		BENZENE ELUATE	
RETENTION INDEX	CONCENTRATION (UG./G.)	RETENTION INDEX	CONCENTRATION (UG./G.)
1600	.02930	1890	.05220
1700	.04050	2076	.04070
1800	.08890	2339	.03950
1900	.07500	3007	.02560
2000	.04140	3287	.10300
2100	.11100		
2200	.07220		
2300	.04770		
2400	.09270		
2500	.06190		
2600	.08930		
TOTAL	.74990	TOTAL	.26100
TOTAL NON-SAPONIFIABLE CONC. (MG./G.) =		.04	

TABLE 7.6

HEAVY HYDROCARBON ANALYSIS - STUCCS - 1976

SAMPLE TYPE : SED

SAMPLE CODE : AHHA

PERIOD : WINTER

LOCATION : STATION - 6 LINE - I

HEXANE ELUATE

BENZENE ELUATE

RETENTION INDEX	CONCENTRATION (UG./G.)	RETENTION INDEX	CONCENTRATION (UG./G.)
1600	.00270	1804	.00820
1670	.00250	1906	.01040
1700	.00410	2088	.01100
1700	.00150	2195	.00770
1800	.00370	2408	.00680
1900	.00420		
2000	.00430		
2100	.00530		
2200	.00790		
2300	.00920		
2400	.00940		
2500	.01070		
2600	.00910		
2700	.01110		
2800	.00740		
2900	.03480		
3000	.01530		
3100	.04060		
3200	.00790		
3300	.04110		
TOTAL	.23280	TOTAL	.04410
TOTAL NON-SAPONIFIABLE CONC. (MG./G.) = .02			

TABLE 7.7

HEAVY HYDROCARBON ANALYSIS - STUCCS - 1976

SAMPLE TYPE : SED

SAMPLE CODE : ALYM

PERIOD : SPRING

LOCATION : STATION - 1 LINE - I

HEXANE ELUATE		BENZENE ELUATE	
RETENTION INDEX	CONCENTRATION (UG./G.)	RETENTION INDEX	CONCENTRATION (UG./G.)
1500	.00930	2646	.00010
1600	.01730	2800	.00010
1670	.00400	3104	.00020
1700	.00180	3191	.00030
1700	.00160	3365	.00010
1800	.00830	3609	.00010
1853	.00480	3680	.00040
2000	.00280		
2047	.00430		
2100	.00110		
2147	.00350		
2200	.00140		
2300	.00250		
2400	.00210		
2500	.00370		
2600	.00330		
2700	.00890		
2800	.00470		
2900	.01950		
3000	.00410		
3100	.02250		
3200	.00400		
3300	.00980		
3400	.00250		
3500	.00330		
3600	.00230		
TOTAL	.15340	TOTAL	.00130
TOTAL NON-SAPONIFIABLE CONC. (MG./G.) =			.00

TABLE 7.8

HEAVY HYDROCARBON ANALYSIS - STUCCS - 1976

SAMPLE TYPE : SED

SAMPLE CODE : ALYN

PERIOD : SPRING

LOCATION : STATION - 1 LINE - I

HEXANE ELUATE

BENZENE ELUATE

RETENTION INDEX	CONCENTRATION (UG./G.)	RETENTION INDEX	CONCENTRATION (UG./G.)
1670	.04560	2077	.01290
1700	.01630	2140	.01270
1780	.00540	2446	.02880
1800	.02270	2654	.02760
1853	.00380	2762	.02120
1900	.00920	2853	.01660
2000	.00330	3075	.05270
2050	.20200	3175	.03000
2100	.02470	3250	.03080
2153	.08500	3292	.02570
2200	.00390	3350	.02550
2300	.02690	3525	.02300
2400	.01010	4080	.32400
2500	.02100		
2600	.00790		
2700	.04770		
2800	.02090		
2900	.11000		
3000	.01390		
3100	.11100		
3200	.00620		
3300	.08700		
3500	.01960		
TOTAL	.90470	TOTAL	.63150
TOTAL NON-SAPONIFIABLE CONC. (MG./G.) =		.03	

TABLE 7.9

HEAVY HYDROCARBON ANALYSIS - STUCCS - 1976

SAMPLE TYPE : SED
 SAMPLE CODE : ALYU
 LOCATION : STATION - 1 LINE -I
 PERIOD : SPRING

HEXANE ELUATE		BENZENE ELUATE	
RETENTION INDEX	CONCENTRATION (UG./G.)	RETENTION INDEX	CONCENTRATION (UG./G.)
1600	.05130	2063	.00030
1670	.02230	2209	.00020
1700	.02420	2311	.00020
1780	.00250	2322	.00020
1840	.01030	2515	.00020
1900	.00600	2631	.00030
2000	.00200	2840	.00040
2044	.11600	3087	.00030
2069	.04410	3174	.00040
2100	.01660	3650	.00240
2157	.00340	4070	.00020
2200	.00100		
2300	.02440		
2400	.01820		
2500	.03440		
2600	.01960		
2700	.05060		
2800	.02230		
2900	.12600		
3000	.02970		
3100	.13800		
3200	.01080		
3300	.07100		
3400	.01500		
3500	.03390		
TOTAL	.98760	TOTAL	.00510
TOTAL NON-SAPONIFIABLE CONC. (MG./G.) = .02			

TABLE 7.10

HEAVY HYDROCARBON ANALYSIS - STOCS - 1976

SAMPLE TYPE : SED

SAMPLE CODE : ALYP

PERIOD : SPRING

LOCATION : STATION - 1 LINE - I

HEXANE ELUATE

BENZENE ELUATE

RETENTION INDEX	CONCENTRATION (UG./G.)	RETENTION INDEX	CONCENTRATION (UG./G.)
1600	.01800	2002	.00020
1670	.03390	2325	.00020
1700	.01360	2393	.00020
1780	.00120	2631	.00020
1800	.01770	2792	.00040
1850	.03030	3102	.00030
1900	.00590	3102	.00030
2000	.01040	3680	.00210
2047	.13700		
2100	.01430		
2150	.05050		
2200	.00160		
2253	.01410		
2300	.01460		
2400	.00060		
2421	.01920		
2500	.02040		
2500	.00910		
2700	.03560		
2800	.01500		
2900	.07700		
3000	.01710		
3100	.09390		
3200	.00360		
3300	.04390		
3400	.01290		
3500	.02540		
TOTAL	.75080	TOTAL	.00390
TOTAL NON-SAPONIFIABLE CONC. (MG./G.) =			.02

TABLE 7.11

HEAVY HYDROCARBON ANALYSIS - STUCCS - 1976

SAMPLE TYPE : SED

SAMPLE CODE : ALYU

PERIOD : SPRING

LOCATION : STATION - 1 LINE - I

HEXANE ELUATE		BENZENE ELUATE	
RETENTION INDEX	CONCENTRATION (UG./G.)	RETENTION INDEX	CONCENTRATION (UG./G.)
1644	.00100	2067	.01050
1670	.00690	2148	.21400
1740	.00550	2225	.00760
1840	.02760	2640	.01940
1842	.02980	3244	.02780
1900	.01900		
1974	.03250		
2000	.03100		
2066	.14900		
2100	.06030		
2143	.09780		
2200	.05730		
2247	.00290		
2300	.07100		
2400	.06450		
2500	.36970		
2600	.06120		
2700	.08630		
2800	.06780		
2900	.15400		
3000	.03290		
3100	.13000		
3200	.01520		
3300	.05720		
3400	.00700		
TOTAL	1.33740	TOTAL	.27890
TOTAL NON-SAPONIFIABLE CONC. (MG./G.) =			.03

TABLE 7.12

HEAVY HYDROCARBON ANALYSIS - STUCCS - 1976

SAMPLE TYPE : SED

SAMPLE CODE : AMAM

PERIOD : SPRING

LOCATION : STATION - 2 LINE - I

HEXANE ELUATE

BENZENE ELUATE

RETENTION INDEX	CONCENTRATION (UG./G.)	RETENTION INDEX	CONCENTRATION (UG./G.)
1840	.00040	2202	.06720
1844	.00010	2637	.02220
1900	.00020	2673	.00050
2000	.00020	2904	.01350
2047	.00010	3203	.01030
2100	.00020	3400	.01210
2147	.00070	3536	.01350
2240	.00030	3709	.01200
2300	.00040	3909	.02300
2400	.00030	4110	.01200
2500	.00060		
2640	.00040		
2700	.00110		
2800	.00040		
2900	.00100		
3000	.00020		
3100	.00170		
3200	.00020		
3300	.00080		
3300	.00040		
3400	.00030		
3500	.00050		
TOTAL	.01130	TOTAL	.28430

TOTAL NON-SAPONIFIABLE CONC. (MG./G.) = .03

TABLE 7.13

HEAVY HYDROCARBON ANALYSIS - STUCS - 1976

SAMPLE TYPE : SED

SAMPLE CODE : AMAN

PERIOD : SPRING

LOCATION : STATION - 2 LINE -1

HEXANE ELUATE

BENZENE ELUATE

RETENTION INDEX	CONCENTRATION (UG./G.)	RETENTION INDEX	CONCENTRATION (UG./G.)
1670	.00110	2062	.00020
1700	.00500	2141	.00030
1780	.00090	2168	.00040
1800	.00550	2592	.00020
1841	.01120	2792	.00010
1900	.00340	3111	.00020
1975	.00500	3690	.00180
2000	.00280		
2047	.00430		
2073	.00640		
2100	.00670		
2144	.00250		
2200	.00180		
2300	.00140		
2400	.00110		
2500	.00210		
2600	.00120		
2700	.00530		
2800	.00190		
2900	.01390		
3000	.00340		
3100	.02240		
3200	.00130		
3300	.02060		
3373	.01020		
3500	.01170		
TOTAL	.15310	TOTAL	.00320

TOTAL NON-SAPONIFIABLE CONC. (MG./G.) = .01

TABLE 7.14

HEAVY HYDROCARBON ANALYSIS - STUCCS - 1976

SAMPLE TYPE : SED

SAMPLE CODE : AMAO

PERIOD : SPRING

LOCATION : STATION - 2 LINE - I

HEXANE ELUATE

BENZENE ELUATE

RETENTION INDEX	CONCENTRATION (UG./G.)	RETENTION INDEX	CONCENTRATION (UG./G.)
1800	.00580	2148	.00350
1900	.00560	2408	.00130
1987	.00490	2623	.00180
2000	.00540	2639	.00110
2060	.02350	3052	.00210
2100	.01620	3226	.00430
2147	.00630	3700	.02530
2200	.00260		
2300	.00480		
2400	.00190		
2500	.00690		
2600	.00350		
2700	.01630		
2800	.00490		
2900	.03230		
3000	.00750		
3100	.04070		
3200	.00290		
3300	.02750		
3400	.02560		
3540	.01350		
TOTAL	.25880	TOTAL	.03940

TOTAL NON-SAPONIFIABLE CONC. (MG./G.) = .02

TABLE 7.15

HEAVY HYDROCARBON ANALYSIS - STUCCS - 1976

SAMPLE TYPE : SED

SAMPLE CODE : AMAP

PERIOD : SPRING

LOCATION : STATION - 2 LINE -1

HEXANE ELUATE

BENZENE ELUATE

RETENTION INDEX	CONCENTRATION (UG./G.)	RETENTION INDEX	CONCENTRATION (UG./G.)
1500	.00930	2025	.00360
1600	.01060	2074	.00510
1670	.01700	2101	.00720
1700	.00670	2235	.00200
1780	.00320	2644	.00220
1800	.00530		
1850	.00790		
1900	.00420		
2000	.00360		
2054	.01530		
2100	.00760		
2160	.00620		
2200	.01240		
2259	.00730		
2300	.02000		
2400	.02620		
2500	.03200		
2600	.02540		
2700	.03010		
2800	.01800		
2900	.05070		
3000	.01610		
3100	.05450		
TOTAL	.40160	TOTAL	.02070
TOTAL NON-SAPONIFIABLE CONC. (MG./G.) =		.09	

TABLE 7.16

HEAVY HYDROCARBON ANALYSIS - STUCCS - 1976

SAMPLE TYPE : SED

SAMPLE CODE : AMAQ

PERIOD : SPRING

LOCATION : STATION - 2 LINE - I

HEXANE ELUATE		BENZENE ELUATE	
RETENTION INDEX	CONCENTRATION (UG./G.)	RETENTION INDEX	CONCENTRATION (UG./G.)
1800	.00080	2203	.00450
1838	.00150	2426	.00470
1900	.00040	2673	.00040
1973	.00010	3173	.00300
2000	.00060	3225	.00400
2044	.00200	3332	.00130
2100	.00080	4130	.01890
2140	.00110		
2200	.00060		
2243	.00170		
2300	.00050		
2400	.00050		
2443	.00180		
2500	.00080		
2600	.00060		
2640	.00090		
2700	.00200		
2800	.00070		
2900	.00370		
3000	.00060		
3100	.00400		
3200	.00060		
3300	.00170		
3360	.00120		
3410	.00080		
3500	.00110		
TOTAL	.03110	TOTAL	.03680
TOTAL NON-SAPONIFIABLE CONC. (MG./G.) =		.00	

TABLE 7.17

HEAVY HYDROCARBON ANALYSIS - STUCCS - 1976

SAMPLE TYPE : SED

SAMPLE CODE : AMCJ

PERIOD : SPRING

LOCATION : STATION - 3 LINE - I

HEXANE ELUATE

BENZENE ELUATE

RETENTION INDEX	CONCENTRATION (UG./G.)	RETENTION INDEX	CONCENTRATION (UG./G.)
1400	.04160	1894	.00110
1450	.02550	2029	.00330
1500	.01890	2193	.00150
1600	.01950	2287	.00140
1670	.01800	2723	.00130
1700	.02930	2841	.00170
1780	.00730	2991	.00150
1800	.01420	3920	.00590
1852	.00390		
1900	.00810		
2000	.01090		
2100	.01180		
2200	.00860		
2300	.00640		
2400	.00430		
2401	.03070		
2500	.00450		
2600	.00210		
2700	.01010		
2800	.00440		
2900	.03390		
3000	.00520		
3100	.05070		
3200	.00960		
3300	.03240		
TOTAL	.41190	TOTAL	.01750

TOTAL NON-SAPONIFIABLE CONC. (MG./G.) = .05

TABLE 7.18

HEAVY HYDROCARBON ANALYSIS - STUCCS - 1976

SAMPLE TYPE : SED

SAMPLE CODE : AMCK

PERIOD : SPRING

LOCATION : STATION - 3 LINE - I

HEXANE ELUATE

BENZENE ELUATE

RETENTION INDEX	CONCENTRATION (UG./G.)	RETENTION INDEX	CONCENTRATION (UG./G.)
1600	.01130	1870	.00640
1643	.00310	1976	.00650
1670	.00310	2076	.00500
1700	.01520	2100	.00750
1780	.00150	2307	.00530
1800	.01290	2608	.00670
1847	.00480	2708	.01200
1858	.00300	2809	.01950
1900	.00970	3036	.01530
2000	.00670	3236	.00920
2050	.00450	3800	.02710
2100	.00540		
2200	.00350		
2300	.00400		
2400	.00280		
2500	.00700		
2600	.00200		
2700	.01470		
2800	.00450		
2900	.03230		
3000	.00420		
3100	.04070		
3200	.00300		
3230	.00170		
3300	.02200		
TOTAL	.22500	TOTAL	.12050
TOTAL NON-SAPONIFIABLE CONC. (MG./G.) =		.01	

TABLE 7.19

HEAVY HYDROCARBON ANALYSIS - STUCCS - 1976

SAMPLE TYPE : SED

SAMPLE CODE : AMCL

PERIOD : SPRING

LOCATION : STATION - 3 LINE - I

HEXANE ELUATE

BENZENE ELUATE

RETENTION INDEX	CONCENTRATION (UG./G.)	RETENTION INDEX	CONCENTRATION (UG./G.)
1600	.01610	1672	.00130
1649	.00670	1891	.00170
1670	.00170	2025	.00910
1700	.00730	2156	.00350
1780	.00110	2313	.01250
1800	.01540	2332	.00220
1848	.00640	2432	.00130
1900	.00720	3063	.00670
2000	.01240	3850	.00920
2018	.00210	3900	.01100
2047	.00620		
2065	.00310		
2100	.00770		
2194	.00180		
2200	.00530		
2300	.00870		
2400	.00600		
2401	.04640		
2500	.01700		
2600	.00850		
2700	.03850		
2800	.01140		
2900	.07540		
3000	.01290		
3050	.00610		
3100	.08430		
3200	.00590		
3230	.00320		
3300	.06370		
TOTAL	.49130	TOTAL	.05850

TOTAL NON-SAPONIFIABLE CONC. (MG./G.) = .02

TABLE 7.20

HEAVY HYDROCARBON ANALYSIS - STUCS - 1976

SAMPLE TYPE : SED

SAMPLE CODE : AMCM

PERIOD : SPRING

LOCATION : STATION - 3 LINE - I

HEXANE ELUATE

BENZENE ELUATE

RETENTION INDEX	CONCENTRATION (UG./G.)	RETENTION INDEX	CONCENTRATION (UG./G.)
1660	.00490	2018	.00370
1643	.00340	2200	.01330
1670	.00330	2400	.00550
1700	.00970	2423	.00720
1780	.00340	2615	.00510
1800	.01160	2817	.00530
1875	.00660	3026	.00950
1900	.01130	3227	.00670
2000	.00630	3427	.00430
2058	.00720		
2100	.00790		
2146	.00650		
2200	.01030		
2300	.00960		
2400	.01070		
2401	.00640		
2500	.01420		
2600	.01200		
2700	.03000		
2800	.01330		
2900	.00530		
3000	.01290		
3023	.00580		
3100	.00640		
3135	.01540		
3200	.01090		
3224	.01680		
3300	.03490		
TOTAL	.46300	TOTAL	.06060
TOTAL NON-SAPONIFIABLE CONC. (MG./G.) =		.02	

TABLE 7.21

HEAVY HYDROCARBON ANALYSIS - STUCCS - 1976

SAMPLE TYPE : SED

SAMPLE CODE : AMCN

PERIOD : SPRING

LOCATION : STATION - 3 LINE -1

HEXANE ELUATE		BENZENE ELUATE	
RETENTION INDEX	CONCENTRATION (UG./G.)	RETENTION INDEX	CONCENTRATION (UG./G.)
1400	.02070	1871	.00170
1566	.00270	2300	.00240
1600	.01620	2393	.00330
1639	.00810	2500	.00520
1670	.00120	2600	.00570
1700	.00390	2646	.00900
1741	.00150	2700	.00440
1769	.00210	2800	.00400
1800	.01100	2900	.00260
1840	.00490	3000	.00190
1867	.00200	3227	.05530
1900	.00200		
2000	.00460		
2044	.00200		
2100	.00240		
2144	.00100		
2200	.00230		
2257	.00220		
2300	.00200		
2400	.00250		
2401	.00100		
2500	.00420		
2600	.00200		
2700	.00900		
2800	.00370		
2900	.01900		
3000	.00320		
3036	.00110		
3100	.02320		
3200	.00500		
3244	.00140		
3300	.01500		
TOTAL	.20930	TOTAL	.09550
TOTAL NON-SAPONIFIABLE CONC. (MG./G.) = .00			

TABLE 7.22

HEAVY HYDROCARBON ANALYSIS - STDCS - 1976

SAMPLE TYPE : SED

SAMPLE CODE : AMPJ

PERIOD : SPRING

LOCATION : STATION --4 LINE - II

HEXANE ELUATE

BENZENE ELUATE

RETENTION INDEX	CONCENTRATION (UG./G.)	RETENTION INDEX	CONCENTRATION (UG./G.)
1600	.00640	1984	.00450
1639	.03090	2114	.00480
1670	.00160	2149	.00590
1700	.01080	2191	.00530
1780	.00200	2446	.00580
1800	.00650	2826	.02050
1841	.04970	3130	.02620
1900	.01670	3235	.00790
1969	.01310	3730	.13100
2000	.01250		
2047	.05970		
2100	.01410		
2147	.02970		
2200	.02230		
2253	.02060		
2300	.01870		
2400	.01150		
2500	.01360		
2600	.00790		
2700	.02370		
2800	.00970		
2900	.05250		
3000	.01220		
3100	.05860		
3200	.00890		
3300	.03350		
3400	.02250		
3500	.00990		
TOTAL	.57980	TOTAL	.21190
TOTAL NON-SAPONIFIABLE CONC. (MG./G.) =			.02

TABLE 7.23

HEAVY HYDROCARBON ANALYSIS - STUCCS - 1976

SAMPLE TYPE : SED

SAMPLE CODE : AMED

PERIOD : SPRING

LOCATION : STATION - 4 LINE - I

HEXANE ELUATE

BENZENE ELUATE

RETENTION INDEX	CONCENTRATION (UG./G.)	RETENTION INDEX	CONCENTRATION (UG./G.)
		2013	.01530
		2020	.10700
		2247	.02520
		2320	.02020
		2452	.02300
		2600	.01700
		2660	.03350
		2820	.06240
		2893	.03430
		3077	.03520
		4140	.13800
TOTAL		TOTAL	.51110
TOTAL NON-SAPONIFIABLE CONC. (UG./G.) =			.01

TABLE 7.24

HEAVY HYDROCARBON ANALYSIS - STOCS - 1976

SAMPLE TYPE : SED

SAMPLE CODE : AMEE

PERIOD : SPRING

LOCATION : STATION - 4 LINE -1

HEXANE ELUATE

BENZENE ELUATE

RETENTION INDEX	CONCENTRATION (UG./G.)	RETENTION INDEX	CONCENTRATION (UG./G.)
1653	.00100	2064	.00050
1670	.00050	2009	.00010
1700	.00090	3104	.00020
1780	.00030	3191	.00040
1800	.00110	3700	.00330
1838	.00200		
1900	.00110		
2000	.00100		
2040	.00190		
2073	.00710		
2100	.00200		
2147	.00320		
2200	.00000		
2300	.00100		
2400	.00060		
2500	.00220		
2600	.00130		
2700	.00420		
2800	.00180		
2900	.00920		
3000	.00230		
3100	.01230		
3200	.00050		
3300	.00710		
3400	.00040		
TOTAL	.06720	TOTAL	.00450

TOTAL NON-SAPONIFIABLE CONC. (MG./G.) = .01

TABLE 7.25

HEAVY HYDROCARBON ANALYSIS - STUCCS - 1976

SAMPLE TYPE : SED

SAMPLE CODE : AMEF

PERIOD : SPRING

LOCATION : STATION - 4 LINE - I

HEXANE ELUATE		BENZENE ELUATE	
RETENTION INDEX	CONCENTRATION (UG./G.)	RETENTION INDEX	CONCENTRATION (UG./G.)
1670	.00160	2069	.04020
1730	.00120	2168	.04840
1800	.00040	2310	.02940
1841	.00380	2646	.02110
1900	.00180	3235	.06260
1968	.00310	3740	.40700
2000	.00300		
2063	.02670		
2100	.00130		
2147	.00340		
2200	.00400		
2300	.00640		
2400	.00490		
2500	.00390		
2600	.00190		
2700	.00680		
2800	.00200		
2900	.01230		
3000	.00170		
3100	.01690		
3200	.00070		
3300	.00840		
TOTAL	.11680	TOTAL	.60870
TOTAL NON-SAPONIFIABLE CONC. (MG./G.) = .03			

TABLE 7.26

HEAVY HYDROCARBON ANALYSIS - STUCCS - 1976

SAMPLE TYPE : SED

SAMPLE CODE : AMEG

PERIOD : SPRING

LOCATION : STATION - 4 LINE -I

HEXANE ELUATE

BENZENE ELUATE

RETENTION INDEX	CONCENTRATION (UG./G.)	RETENTION INDEX	CONCENTRATION (UG./G.)
1670	.00030	2077	.000620
1700	.00040	2113	.00360
1780	.00010	2153	.00570
1800	.00030	2213	.01610
1830	.00050	2340	.00300
1900	.00020	2415	.00750
2000	.00040	2609	.00430
2047	.00040	3078	.00420
2100	.00040	3278	.01170
2147	.00040	3383	.01030
2200	.00020	4140	.15600
2247	.00020		
2300	.00020		
2400	.00010		
2450	.00010		
2500	.00030		
2600	.00010		
2700	.00050		
2800	.00010		
2900	.00110		
3000	.00020		
3100	.00120		
3200	.00010		
3300	.00050		
3500	.00030		
TOTAL	.00860	TOTAL	.22860

TOTAL NON-SAPONIFIABLE CONC. (MG./G.) = .01

TABLE 7.27

HEAVY HYDROCARBON ANALYSIS - STUCCS - 1976

SAMPLE TYPE : SED

SAMPLE CODE : AMEH

PERIOD : SPRING

LOCATION : STATION - 4 LINE -I

HEXANE ELUATE		BENZENE ELUATE	
RETENTION INDEX	CONCENTRATION (UG./G.)	RETENTION INDEX	CONCENTRATION (UG./G.)
1777	.00170	2071	.01290
1780	.00090	2158	.00500
1800	.00320	2215	.01460
1841	.00200	2331	.01160
1900	.00190	2365	.00840
2000	.00290	2495	.00300
2040	.00220		
2100	.00350		
2147	.00300		
2200	.00480		
2300	.00840		
2400	.01180		
2500	.01190		
2600	.00980		
2700	.00940		
2800	.00500		
2900	.00950		
3000	.00270		
3100	.00830		
3200	.00100		
3300	.00430		
3400	.00180		
3500	.00210		
TOTAL	.11330	TOTAL	.05550
TOTAL NON-SAPONIFIABLE CONC. (MG./G.) =		.02	

TABLE 7.28

HEAVY HYDROCARBON ANALYSIS - STUCCS - 1976

SAMPLE TYPE : SED

SAMPLE CODE : AMFX

PERIOD : SPRING

LOCATION : STATION - 5 LINE -I

HEXANE ELUATE

BENZENE ELUATE

RETENTION INDEX	CONCENTRATION (UG./G.)	RETENTION INDEX	CONCENTRATION (UG./G.)
1633	.00840	2082	.01140
1649	.01290	2189	.00850
1670	.00290	2415	.02850
1700	.01050	2445	.01900
1780	.00400	2679	.01230
1800	.00700	3770	.05800
1841	.02010		
1900	.01510		
1959	.00920		
2000	.00800		
2047	.03290		
2100	.01200		
2200	.01470		
2300	.01400		
2400	.00630		
2500	.00630		
2600	.00550		
2700	.01410		
2800	.00640		
2900	.02000		
3000	.00440		
3100	.03410		
3200	.00740		
3300	.02090		
3400	.02140		
TOTAL	.33510	TOTAL	.13770

TOTAL NON-SAPONIFIABLE CONC. (MG./G.) = .02

TABLE 7.29

HEAVY HYDROCARBON ANALYSIS - STUCCS - 1976

SAMPLE TYPE : SED

SAMPLE CODE : AMFY

PERIOD : SPRING

LOCATION : STATION - 5 LINE - I

HEXANE ELUATE

BENZENE ELUATE

RETENTION INDEX	CONCENTRATION (UG./G.)	RETENTION INDEX	CONCENTRATION (UG./G.)
1600	.02210	2069	.00380
1639	.06770	2189	.00330
1670	.00330	2401	.00440
1700	.01700	3740	.00370
1730	.02060		
1800	.01670		
1841	.11500		
1900	.02860		
2000	.02990		
2044	.08130		
2100	.03170		
2200	.03510		
2247	.04050		
2300	.03390		
2400	.02080		
2500	.02540		
2600	.00990		
2700	.03710		
2800	.01450		
2900	.07530		
3000	.01000		
3100	.06820		
3200	.00300		
3300	.04260		
3400	.03430		
TOTAL	.88450	TOTAL	.01520
TOTAL NON-SAPONIFIABLE CONC. (MG./G.) =			.02

TABLE 7.30

HEAVY HYDROCARBON ANALYSIS - STUCCS - 1976

SAMPLE TYPE : SED
 SAMPLE CODE : AMFZ PERIOD : SPRING
 LOCATION : STATION - 5 LINE -I

HEXANE ELUATE

BENZENE ELUATE

RETENTION INDEX	CONCENTRATION (UG./G.)	RETENTION INDEX	CONCENTRATION (UG./G.)
1600	.01550	2184	.01540
1642	.02760	2400	.01040
1670	.00700	2615	.01840
1700	.01840	2817	.02150
1780	.00270	3035	.01490
1800	.01650	3139	.01560
1844	.05160	3357	.01340
1900	.03370	3443	.02750
2000	.03260	3643	.04200
2100	.03950		
2200	.03590		
2300	.03540		
2400	.01520		
2500	.01870		
2600	.01050		
2700	.02100		
2800	.00510		
2900	.05420		
3100	.04710		
3200	.00280		
TOTAL	.49100	TOTAL	.17910
TOTAL NON-SAPONIFIABLE CONC. (MG./G.) =		.03	

TABLE 7.31

HEAVY HYDROCARBON ANALYSIS - STOCS - 1976

SAMPLE TYPE : SED

SAMPLE CODE : AMGA

PERIOD : SPRING

LOCATION : STATION - 5 LINE - I

HEXANE ELUATE

BENZENE ELUATE

RETENTION INDEX	CONCENTRATION (UG./G.)	RETENTION INDEX	CONCENTRATION (UG./G.)
1600	.00500	2175	.02580
1670	.00390	2485	.01100
1700	.01060	2692	.01260
1780	.00010	2792	.01030
1790	.00010	3217	.01770
1800	.01620	3348	.02250
1841	.04130	3730	.10900
1900	.03120		
1968	.05130		
2000	.02510		
2044	.05250		
2100	.04070		
2167	.02400		
2200	.03570		
2300	.03120		
2304	.03120		
2400	.01510		
2500	.01400		
2600	.00890		
2700	.02020		
2800	.01120		
2900	.05580		
3000	.00330		
3100	.05040		
3200	.01170		
TOTAL	.60270	TOTAL	.20890

TOTAL NON-SAPONIFIABLE CONC. (MG./G.) = .03

TABLE 7.32

HEAVY HYDROCARBON ANALYSIS - STDCS - 1976

SAMPLE TYPE : SED

SAMPLE CODE : AMGB

PERIOD : SPRING

LOCATION : STATION - 5 LINE - I

HEXANE ELUATE

BENZENE ELUATE

RETENTION INDEX	CONCENTRATION (UG./G.)	RETENTION INDEX	CONCENTRATION (UG./G.)
1600	.03660	1969	.00040
1649	.01940	2063	.00060
1670	.01190	2148	.00050
1700	.03600	2209	.00040
1780	.01620	2604	.00070
1800	.04090	2809	.00080
1863	.04100	3017	.00050
1900	.02320	3104	.00090
2000	.01610	3348	.00050
2053	.03980	3680	.00590
2075	.01960		
2100	.02800		
2183	.03180		
2200	.01170		
2300	.04100		
2400	.02820		
2500	.07100		
2600	.05100		
2700	.12000		
2800	.05200		
2900	.23200		
3000	.04500		
3100	.25500		
3256	.02480		
3300	.12200		
3371	.03960		
3400	.01680		
3470	.02960		
3500	.06740		
TOTAL	1.56760	TOTAL	.01120
TOTAL NON-SAPONIFIABLE CONC. (MG./G.) =			.03

TABLE 7.33

HEAVY HYDROCARBON ANALYSIS - STUCCS - 1976

SAMPLE TYPE : SED
 SAMPLE CODE : AMHR PERIOD : SPRING
 LOCATION : STATION - 6 LINE -1

HEXANE ELUATE		BENZENE ELUATE	
RETENTION INDEX	CONCENTRATION (UG./G.)	RETENTION INDEX	CONCENTRATION (UG./G.)
1670	.00810	2175	.00280
1700	.01540	2298	.00170
1700	.02790	2485	.00270
1800	.05180	2654	.00210
1900	.06430	2769	.00240
2000	.05950	2817	.00450
2100	.07520	3000	.00420
2200	.08720	3122	.00300
2300	.09130	3357	.00410
2400	.09950	3700	.11300
2500	.09490		
2600	.07030		
2700	.08260		
2800	.03950		
2900	.13300		
3000	.03180		
3100	.15500		
3200	.01900		
3300	.09060		
3400	.02120		
TOTAL	1.32410	TOTAL	.14050
TOTAL NON-SAPONIFIABLE CONC. (MG./G.) = .05			

TABLE 7.34

HEAVY HYDROCARBON ANALYSIS - STUCS - 1976

SAMPLE TYPE : Sed

SAMPLE CODE : AMHS

PERIOD : Spring

LOCATION : STATION -- 6 LINE - I

HEXANE ELUATE

BENZENE ELUATE

RETENTION INDEX	CONCENTRATION (UG./G.)	RETENTION INDEX	CONCENTRATION (UG./G.)
1600	.00530	1892	.00040
1641	.00790	2076	.00050
1670	.00110	2182	.00100
1700	.00310	2492	.00070
1780	.00200	2817	.00070
1800	.00420	3130	.00120
1830	.01870	3700	.00610
1900	.00700		
2000	.00670		
2047	.01630		
2100	.00880		
2200	.01030		
2300	.01470		
2400	.01500		
2500	.01570		
2600	.01110		
2700	.01080		
2800	.00580		
2900	.02090		
3000	.00550		
3100	.03350		
3200	.00020		
3300	.02280		
3400	.02240		
3500	.00040		
TOTAL	.28220	TOTAL	.01060

TOTAL NON-SAPONIFIABLE CONC. (MG./G.) = .02

TABLE 7.35

HEAVY HYDROCARBON ANALYSIS - STUCCS - 1976

SAMPLE TYPE : SED
 SAMPLE CODE : AMHT
 LOCATION : STATION - 6 LINE -I

PERIOD : SPRING

HEXANE ELUATE		BENZENE ELUATE	
RETENTION INDEX	CONCENTRATION (UG./G.)	RETENTION INDEX	CONCENTRATION (UG./G.)
1700	.00010	1858	.00010
1800	.00010	2003	.00010
1838	.00010	2168	.00020
1900	.00010	2800	.00010
2000	.00010	3104	.00010
2040	.00010	3183	.00010
2100	.00010	3339	.00010
2144	.00010	3520	.00010
2200	.00010	3640	.00030
2243	.00010		
2300	.00010		
2400	.00010		
2443	.00010		
2500	.00010		
2600	.00010		
2700	.00020		
2800	.00010		
2900	.00040		
3000	.00010		
3100	.00050		
3155	.00010		
3200	.00010		
3300	.00020		
3300	.00020		
3410	.00010		
3500	.00010		
3600	.00010		
TOTAL	.00370	TOTAL	.00120
TOTAL NON-SAPONIFIABLE CONC. (MG./G.) = .01			

TABLE 7.36

HEAVY HYDROCARBON ANALYSIS - STUCS - 1976

SAMPLE TYPE : SED
 SAMPLE CODE : AMHU PERIOD : SPRING
 LOCATION : STATION - 6 LINE -I

HEXANE ELUATE

BENZENE ELUATE

RETENTION INDEX	CONCENTRATION (UG./G.)	RETENTION INDEX	CONCENTRATION (UG./G.)
1628	.01090	1880	.00010
1650	.00910	2003	.00010
1670	.00330	2108	.00020
1700	.00420	2298	.00010
1780	.00130	2809	.00010
1800	.00620	3017	.00010
1847	.00410	3330	.00010
1900	.01090	3670	.00060
2000	.01260		
2053	.01130		
2100	.01640		
2200	.01970		
2300	.02020		
2400	.02530		
2500	.02110		
2600	.01390		
2700	.01510		
2800	.00530		
2900	.02080		
3000	.00390		
3100	.02240		
3300	.01740		
3380	.01510		
TOTAL	.29650	TOTAL	.00140
TOTAL NON-SAPONIFIABLE CONC. (MG./G.) = .03			

TABLE 7.37

HEAVY HYDROCARBON ANALYSIS - STOCS - 1976

SAMPLE TYPE : SED

SAMPLE CODE : AMHV

PERIOD : SPRING

LOCATION : STATION - 6 LINE -I

HEXANE ELUATE		BENZENE ELUATE	
RETENTION INDEX	CONCENTRATION (UG./G.)	RETENTION INDEX	CONCENTRATION (UG./G.)
1641	.00040	2063	.00010
1700	.00060	2168	.00010
1780	.00080	2379	.00010
1800	.00050	2478	.00010
1838	.00050	2596	.00010
1900	.00010	2809	.00020
2000	.00020	3017	.00010
2047	.00070	3113	.00010
2100	.00010	3139	.00010
2147	.00070	3670	.00020
2200	.00020		
2240	.00040		
2300	.00020		
2400	.00010		
2440	.00020		
2500	.00030		
2600	.00010		
2700	.00070		
2800	.00020		
2900	.00140		
3000	.00020		
3100	.00150		
3200	.00010		
3300	.00060		
3355	.00060		
3400	.00020		
3500	.00030		
TOTAL	.01190	TOTAL	.00120
TOTAL NON-SAPONIFIABLE CONC. (MG./G.) =			.01

TABLE 7.38

HEAVY HYDROCARBON ANALYSIS - STUCCS - 1976

SAMPLE TYPE : SED
 SAMPLE CODE : AQYZ PERIOD : FALL
 LOCATION : STATION - 1 LINE -I

HEXANE ELUATE

BENZENE ELUATE

RETENTION INDEX	CONCENTRATION (UG./G.)	RETENTION INDEX	CONCENTRATION (UG./G.)
1500	.02740	1603	.03240
1548	.03160	1655	.09670
1600	.02700	1733	.13000
1670	.00900	1762	.09800
1700	.00910	1842	.05470
1800	.02590	2095	.05120
1900	.02390	2139	.05540
2000	.01920	2215	.15900
2069	.30200	2780	.09550
2100	.01840	2881	.05220
2140	.06100	3037	.05170
2200	.02330	3205	.13600
2300	.02500		
2400	.02720		
2401	.09660		
2500	.05450		
2600	.03150		
2700	.07890		
2800	.03520		
2900	.19800		
3000	.06060		
3100	.28000		
3200	.06180		
3300	.18500		
3400	.09690		
3447	.08340		
3500	.04150		
TOTAL	1.93390	TOTAL	1.01280
TOTAL NON-SAPONIFIABLE CONC. (MG./G.) =			.03

TABLE 7.39

HEAVY HYDROCARBON ANALYSIS - STOCS - 1976

SAMPLE TYPE : SED
 SAMPLE CODE : ARAG PERIOD : FALL
 LOCATION : STATION -- 2 LINE - I

HEXANE ELUATE

BENZENE ELUATE

RETENTION INDEX	CONCENTRATION (UG./G.)	RETENTION INDEX	CONCENTRATION (UG./G.)
1600	.02320	2150	.07520
1645	.00710	2703	.06620
1670	.00770	2831	.01990
1700	.01460	2850	.01560
1780	.00540	3015	.01400
1800	.02170	3189	.07810
1852	.00820	3530	.02830
1900	.00880		
2000	.02680		
2046	.12700		
2100	.02390		
2133	.01830		
2200	.00320		
2300	.02050		
2400	.01870		
2401	.10400		
2500	.03760		
2600	.01720		
2700	.08730		
2800	.02650		
2900	.17300		
3000	.01910		
3100	.18800		
3200	.02180		
3300	.06290		
TOTAL	1.07250	TOTAL	.29730

TOTAL NON-SAPONIFIABLE CONC. (MG./G.) = .02

TABLE 7.40

HEAVY HYDROCARBON ANALYSIS - STUCCS - 1976

SAMPLE TYPE : SED

SAMPLE CODE : ARCT

PERIOD : FALL

LOCATION : STATION - 3 LINE -1

HEXANE ELUATE

BENZENE ELUATE

RETENTION INDEX	CONCENTRATION (UG./G.)	RETENTION INDEX	CONCENTRATION (UG./G.)
1600	.03020	2041	.00620
1639	.00710	2133	.00780
1670	.00500	2229	.00680
1700	.00830	2347	.00750
1780	.00220	2496	.00770
1800	.03690	2688	.00890
1839	.00810	2800	.00720
1900	.01610	3009	.01040
2000	.01640	3720	.01790
2062	.02030	3840	.05170
2100	.01830		
2147	.00440		
2200	.01360		
2300	.01850		
2400	.01690		
2401	.11900		
2500	.02840		
2600	.02070		
2700	.06600		
2800	.02630		
2900	.15700		
3000	.02860		
3100	.20500		
3200	.06120		
3256	.00830		
3300	.08830		
3400	.11000		
3500	.05530		
TOTAL	1.19640	TOTAL	.13210

TOTAL NON-SAPONIFIABLE CONC. (MG./G.) = .02

TABLE 7.41

HEAVY HYDROCARBON ANALYSIS - STOCS - 1976

SAMPLE TYPE : CHG
 SAMPLE CODE : AREK
 LOCATION : STATION - 4 LINE -1
 PERIOD : FALL

HEXANE ELUATE		BENZENE ELUATE	
RETENTION INDEX	CONCENTRATION (UG./G.)	RETENTION INDEX	CONCENTRATION (UG./G.)
1600	.00480	2071	.00670
1670	.00440	2147	.02260
1700	.00960	2393	.00320
1780	.00330	2638	.00340
1800	.01110	2817	.00540
1848	.00450	2852	.00810
1900	.00710	3043	.03490
2000	.00690	3174	.00820
2056	.06170	3235	.01580
2100	.02060	3278	.01130
2200	.00970	3360	.00600
2300	.02070	3430	.00550
2400	.01750	3830	.16300
2500	.01250		
2600	.00590		
2700	.04020		
2800	.01950		
2900	.008670		
3000	.01600		
3100	.009700		
3200	.00750		
3300	.04410		
TOTAL	.51130	TOTAL	.29410
TOTAL NON-SAPONIFIABLE CONC. (MG./G.) =		.02	

TABLE 7.42

HEAVY HYDROCARBON ANALYSIS - STOCS - 1976

SAMPLE TYPE : SED

SAMPLE CODE : ARGB

PERIOD : FALL

LOCATION : STATION - 5 LINE - I

HEXANE ELUATE

BENZENE ELUATE

RETENTION INDEX	CONCENTRATION (UG./G.)	RETENTION INDEX	CONCENTRATION (UG./G.)
1600	.03100	2008	.01080
1700	.00420	2110	.00280
1800	.01540	2141	.00280
1842	.01060	2218	.01260
1900	.00600	2361	.00540
2000	.00780	2432	.00310
2100	.00490	2651	.00720
2200	.00890	2851	.00950
2300	.00880	2914	.00520
2400	.01160	3015	.04090
2401	.06030	3183	.01300
2500	.02330	3980	.06230
2600	.01560		
2700	.04640		
2800	.02620		
2900	.08520		
3000	.03200		
3100	.09540		
3200	.02980		
3300	.03470		
3400	.10300		
3800	.47800		
TOTAL	1.13990	TOTAL	.17858
TOTAL NON-SAPONIFIABLE CONC. (MG./G.) =			.02

TABLE 7.43

HEAVY HYDROCARBON ANALYSIS - STOCS - 1976

SAMPLE TYPE : SED

SAMPLE CODE : ARHS

PERIOD : FALL

LOCATION : STATION - 6 LINE -1

HEXANE ELUATE		BENZENE ELUATE	
RETENTION INDEX	CONCENTRATION (UG./G.)	RETENTION INDEX	CONCENTRATION (UG./G.)
1600	.02940	2059	.01320
1639	.00960	2167	.01320
1670	.00500	2367	.01560
1700	.00670	2592	.01910
1780	.00100	2704	.02330
1800	.02800	2800	.02500
1839	.00480	2827	.02600
1900	.01160	3027	.07140
2000	.00890	3218	.04150
2062	.01740	3409	.02360
2100	.00980	3750	.07000
2147	.00630		
2200	.00740		
2300	.01320		
2400	.00890		
2401	.00350		
2500	.01940		
2600	.01070		
2700	.03750		
2800	.01490		
2900	.07000		
3000	.01770		
3100	.09590		
3200	.03430		
3250	.00350		
3300	.04030		
3345	.01010		
3400	.07600		
3457	.01900		
3730	.02750		
TOTAL	.74130	TOTAL	.34270
TOTAL NON-SAPONIFIABLE CONC. (MG./G.) =			.02

TABLE 7.44

HEAVY HYDROCARBON ANALYSIS - STUCCS - 1976

SAMPLE TYPE : SED
 SAMPLE CODE : AHIH PERIOD : WINTER
 LOCATION : STATION - 1 LINE -II

HEXANE ELUATE

BENZENE ELUATE

RETENTION INDEX	CONCENTRATION (UG./G.)	RETENTION INDEX	CONCENTRATION (UG./G.)
1900	.00270	2148	.02220
2000	.00320	2195	.02110
2100	.00720	2525	.02900
2200	.01050	3157	.06810
2300	.02460	3252	.08710
2400	.01430	3800	.54300
2500	.03550		
2600	.02510		
2700	.06590		
2800	.03640		
2900	.16200		
3000	.05390		
3100	.31700		
3200	.06910		
3300	.22100		
TOTAL	1.04840	TOTAL	.77130
TOTAL NON-SAPONIFIABLE CONC. (MG./G.) =		.02	

TABLE 7.45

HEAVY HYDROCARBON ANALYSIS - STDCS - 1976

SAMPLE TYPE : SED
 SAMPLE CODE : AHKC PERIOD : WINTER
 LOCATION : STATION - 2 LINE -II

HEXANE ELUATE		BENZENE ELUATE	
RETENTION INDEX	CONCENTRATION (UG./G.)	RETENTION INDEX	CONCENTRATION (UG./G.)
2000	.00090	2543	.00200
2100	.00220	2913	.01830
2200	.00170	3044	.00840
2300	.00100	3139	.01950
2400	.00070		
2500	.00230		
2600	.00070		
2700	.00220		
2800	.00110		
2900	.00560		
3000	.00650		
3100	.00890		
3150	.00800		
3200	.00690		
3300	.00850		
3400	.00070		
3500	.00060		
3599	.00920		
TOTAL	.07430	TOTAL	.10820
TOTAL NON-SAPONIFIABLE CONC. (MG./G.) = .00			

TABLE 7.46

HEAVY HYDROCARBON ANALYSIS - STUCCS - 1976

SAMPLE TYPE : SED
 SAMPLE CODE : AHLN PERIOD : WINTER
 LOCATION : STATION - 3 LINE -II

HEXANE ELUATE

BENZENE ELUATE

RETENTION INDEX	CONCENTRATION (UG./G.)	RETENTION INDEX	CONCENTRATION (UG./G.)
1670	.00070	2120	.01440
1700	.00380	3770	.06400
1780	.00480		
1800	.00960		
1900	.01180		
2000	.01640		
2100	.02020		
2200	.03090		
2300	.03300		
2400	.03650		
2500	.02870		
2600	.03700		
2700	.01440		
2800	.07520		
2900	.02130		
3000	.07480		
3100	.00230		
TOTAL	.42140	TOTAL	.07840
TOTAL NON-SAPONIFIABLE CONC. (MG./G.) =		.02	

TABLE 7.47

HEAVY HYDROCARBON ANALYSIS - STUCCS - 1976

SAMPLE TYPE : SED
 SAMPLE CODE : AHMR PERIOD : WINTER
 LOCATION : STATION - 4 LINE -II

HEXANE ELUATE

BENZENE ELUATE

RETENTION INDEX	CONCENTRATION (UG./G.)	RETENTION INDEX	CONCENTRATION (UG./G.)
1500	.00500	1768	.16300
1600	.00840	1866	.05350
1642	.00890	1920	.07250
1670	.00760	1938	.09560
1700	.01920	2064	.20500
1730	.00990	2267	.17000
1800	.01560	2287	.06000
1844	.15700		
1900	.02060		
2000	.02200		
2050	.17300		
2100	.03440		
2144	.18900		
2200	.03350		
2300	.05550		
2400	.06350		
2500	.07340		
2600	.04490		
2700	.09110		
2800	.02990		
2900	.16600		
3000	.03080		
3100	.20800		
TOTAL	1.54420	TOTAL	.87960

TOTAL NON-SAPONIFIABLE CONC. (MG./G.) = .02

TABLE 7.48

HEAVY HYDROCARBON ANALYSIS - STUCCS - 1976

SAMPLE TYPE : SED
 SAMPLE CODE : AH0A PERIOD : WINTER
 LOCATION : STATION - 5 LINE -II

HEXANE ELUATE

BENZENE ELUATE

RETENTION INDEX	CONCENTRATION (UG./G.)	RETENTION INDEX	CONCENTRATION (UG./G.)
1500	.00500	2141	.03130
1600	.00810	2189	.01280
1670	.00500	2400	.01450
1700	.00960	2619	.02920
1780	.00330	3244	.02650
1800	.00770	3800	.09030
1900	.01000		
2000	.00150		
2100	.02440		
2200	.02900		
2300	.03980		
2400	.03460		
2500	.03950		
2600	.02040		
2700	.03700		
2800	.01600		
2900	.07060		
3000	.01130		
3100	.05830		
3200	.01340		
3300	.02350		
3400	.04440		
TOTAL	.51840	TOTAL	.20460
TOTAL NON-SAPONIFIABLE CONC. (MG./G.) =		.01	

TABLE 7.49

HEAVY HYDROCARBON ANALYSIS - STOCS - 1976

SAMPLE TYPE : SED
 SAMPLE CODE : A4PN PERIOD : WINTER
 LOCATION : STATION - 6 LINE -II

HEXANE ELUATE		BENZENE ELUATE	
RETENTION INDEX	CONCENTRATION (UG./G.)	RETENTION INDEX	CONCENTRATION (UG./G.)
1600	.00420	1709	.01750
1642	.03490	1806	.01400
1670	.00400	1890	.03220
1700	.00840	1998	.04720
1730	.00430	2094	.05510
1800	.00790	2657	.05460
1841	.09130	3800	.05210
1900	.01010		
2000	.01560		
2044	.00650		
2100	.03160		
2147	.03200		
2200	.02610		
2247	.02000		
2300	.03910		
2400	.02740		
2450	.04670		
2500	.04610		
2600	.01300		
2700	.03420		
2800	.01940		
2900	.08810		
3000	.00140		
3100	.08700		
3200	.02400		
3300	.06130		
TOTAL	.91060	TOTAL	.27270
TOTAL NON-SAPONIFIABLE CONC. (MG./G.) =		.01	

TABLE 7.50

HEAVY HYDROCARBON ANALYSIS - STUCCS - 1976

SAMPLE TYPE : SED

SAMPLE CODE : AMJL

PERIOD : SPRING

LOCATION : STATION - 1 LINE -II

HEXANE ELUATE

BENZENE ELUATE

RETENTION INDEX	CONCENTRATION (UG./G.)	RETENTION INDEX	CONCENTRATION (UG./G.)
1624	.00460	2148	.01280
1647	.01250	2222	.03180
1670	.00470	2309	.01530
1700	.00270	2449	.01430
1750	.00120	2482	.01610
1800	.00530	2587	.01620
1838	.00940	3154	.02070
1900	.00710	3247	.02720
2000	.00480		
2073	.01000		
2100	.00410		
2147	.00860		
2200	.00570		
2300	.00470		
2400	.00280		
2500	.00310		
2600	.00200		
2700	.00440		
2800	.00210		
2900	.01160		
3000	.00330		
3100	.02020		
3200	.00100		
3300	.01410		
3500	.01020		
TOTAL	.16020	TOTAL	.15440

TOTAL NON-SAPONIFIABLE CONC. (MG./G.) = .01

TABLE 7.51

HEAVY HYDROCARBON ANALYSIS - STOCS - 1976

SAMPLE TYPE : SED

SAMPLE CODE : AMJM

PERIOD : SPRING

LOCATION : STATION - 1 LINE -II

HEXANE ELUATE		BENZENE ELUATE	
RETENTION INDEX	CONCENTRATION (UG./G.)	RETENTION INDEX	CONCENTRATION (UG./G.)
1700	.00170	2332	.00070
1800	.00510	3113	.00050
1900	.01120	3348	.00070
2000	.01350	3540	.00080
2100	.05140	3700	.01070
2200	.05400	4200	.00110
2300	.05190		
2400	.04720		
2500	.07300		
2600	.06230		
2700	.10700		
2800	.07830		
2900	.15000		
3000	.10700		
3100	.16300		
3200	.09700		
3300	.14400		
3400	.08900		
TOTAL	1.30720	TOTAL	.01450
TOTAL NON-SAPONIFIABLE CONC. (MG./G.) =		.02	

TABLE 7.52

HEAVY HYDROCARBON ANALYSIS - STUCCS - 1976

SAMPLE TYPE : SED

SAMPLE CODE : AMJN

PERIOD : SPRING

LOCATION : STATION - 1 LINE -II

HEXANE ELUATE		BENZENE ELUATE	
RETENTION INDEX	CONCENTRATION (UG./G.)	RETENTION INDEX	CONCENTRATION (UG./G.)
1600	.01380	2069	.00640
1647	.02480	2230	.01050
1670	.01510	2446	.00690
1700	.04190	2692	.00750
1780	.05190	3139	.01240
1800	.04620	3235	.02320
1847	.12700	3757	.34800
1900	.13300		
1971	.14300		
2000	.12100		
2060	.20800		
2100	.16300		
2147	.22000		
2200	.20600		
2300	.33400		
2400	.26500		
2500	.28400		
2600	.15200		
2700	.39700		
2800	.17600		
2900	.83900		
3000	.14000		
3100	1.13000		
3200	.17600		
3300	.72300		
3400	.24800		
3500	.12200		
3600	.03150		
TOTAL	6.53420	TOTAL	.41490
TOTAL NON-SAPONIFIABLE CONC. (MG./G.) =			.02

TABLE 7.53

HEAVY HYDROCARBON ANALYSIS - STUCS - 1976

SAMPLE TYPE : SED
 SAMPLE CODE : AMJD PERIOD : SPRING
 LOCATION : STATION - 1 LINE -II

HEXANE ELUATE		BENZENE ELUATE	
RETENTION INDEX	CONCENTRATION (UG./G.)	RETENTION INDEX	CONCENTRATION (UG./G.)
1644	.00890	2148	.01540
1670	.00590	2182	.01620
1700	.00880	2332	.03400
1780	.00690	2408	.01220
1800	.01290	2546	.02750
1841	.02390	3130	.02750
1900	.02250	3220	.00650
2000	.01730	3740	.00200
2067	.13000		
2100	.04300		
2147	.07610		
2200	.02370		
2300	.04710		
2400	.01790		
2500	.01410		
2600	.00470		
2700	.02300		
2800	.00780		
2900	.04590		
3000	.00310		
3100	.05980		
3200	.00260		
3300	.03100		
3400	.01860		
TOTAL	.66150	TOTAL	.54130
TOTAL NON-SAPONIFIABLE CONC. (MG./G.) =		.02	

TABLE 7.54

HEAVY HYDROCARBON ANALYSIS - STUCCS - 1976

SAMPLE TYPE : SED

SAMPLE CODE : AMJP

PERIOD : SPRING

LOCATION : STATION - 1 LINE -II

HEXANE ELUATE

BENZENE ELUATE

RETENTION INDEX	CONCENTRATION (UG./G.)	RETENTION INDEX	CONCENTRATION (UG./G.)
1670	.00020	1965	.00230
1700	.00150	2063	.00220
1800	.00020	2141	.00530
1830	.00050	2631	.00610
1900	.00050	2809	.00630
1973	.00040	3044	.00870
2000	.00040	3217	.01140
2073	.00200	3417	.00750
2100	.00020	3700	.10500
2140	.00070		
2200	.00040		
2300	.00050		
2420	.00040		
2500	.00080		
2600	.00050		
2700	.00180		
2800	.00060		
2900	.00420		
3000	.00090		
3100	.00460		
3155	.00040		
3200	.00030		
3300	.00250		
3350	.00040		
3410	.00110		
3500	.00120		
3630	.00070		
TOTAL	.02790	TOTAL	.15480
TOTAL NON-SAPONIFIABLE CONC. (MG./G.) =			.02

TABLE 7.55

HEAVY HYDROCARBON ANALYSIS - STUCS - 1976

SAMPLE TYPE : SED

SAMPLE CODE : AMLN

PERIOD : SPRING

LOCATION : STATION - 2 LINE -II

HEXANE ELUATE

BENZENE ELUATE

RETENTION INDEX	CONCENTRATION (UG./G.)	RETENTION INDEX	CONCENTRATION (UG./G.)
1644	.00800	2067	.00950
1670	.00160	2418	.00070
1700	.00420	2816	.00540
1780	.00030	3004	.00860
1820	.00560	3119	.01350
1847	.01860	3236	.00280
1900	.01370	3480	.01310
2000	.01240	3930	.12700
2050	.02850		
2100	.02150		
2147	.03430		
2200	.02250		
2300	.02230		
2400	.00940		
2500	.01480		
2600	.00680		
2700	.02360		
2800	.00850		
2900	.05750		
3000	.01080		
3100	.06440		
3200	.01330		
3300	.03710		
3400	.02700		
TOTAL	.46670	TOTAL	.15060
TOTAL NON-SAPONIFIABLE CONC. (UG./G.) =			.02

TABLE 7.56

HEAVY HYDROCARBON ANALYSIS - STUCCS - 1976

SAMPLE TYPE : SED

SAMPLE CODE : AMLU

PERIOD : SPRING

LOCATION : STATION - 2 LINE -II

HEXANE ELUATE

BENZENE ELUATE

RETENTION INDEX	CONCENTRATION (UG./G.)	RETENTION INDEX	CONCENTRATION (UG./G.)
1600	.00460	2077	.00200
1639	.01580	2196	.00310
1670	.00110	2311	.00250
1700	.00430	2631	.00510
1780	.00220	2692	.00280
1800	.00400	3148	.00660
1841	.02510	3244	.00370
1900	.00810	3770	.01530
1969	.01160		
2000	.00650		
2050	.02650		
2100	.00880		
2200	.00030		
2300	.00850		
2400	.00430		
2500	.00540		
2600	.00350		
2700	.00890		
2800	.00430		
2900	.02050		
3000	.00250		
3100	.02140		
3200	.00250		
3300	.01270		
3400	.00830		
TOTAL	.22970	TOTAL	.04110

TOTAL NON-SAPONIFIABLE CONC. (MG./G.) = .01

TABLE 7.57

HEAVY HYDROCARBON ANALYSIS - STOCS - 1976

SAMPLE TYPE : SED

SAMPLE CODE : AMLP

PERIOD : SPRING

LOCATION : STATION - 2 LINE -II

HEXANE ELUATE

BENZENE ELUATE

RETENTION INDEX	CONCENTRATION (UG./G.)	RETENTION INDEX	CONCENTRATION (UG./G.)
1657	.00190	2148	.01570
1670	.00030	2182	.00590
1700	.00080	2615	.01130
1750	.00040	3130	.00670
1800	.00130	3217	.00660
1841	.00620	3722	.06360
1900	.00300		
2000	.00310		
2050	.01110		
2100	.00870		
2147	.00760		
2200	.00560		
2300	.00870		
2400	.01000		
2500	.01130		
2600	.00790		
2700	.01090		
2800	.00500		
2900	.01570		
3000	.00480		
3100	.01880		
3200	.00220		
3300	.01480		
3382	.01050		
3500	.00720		
TOTAL	.17780	TOTAL	.10980

TOTAL NON-SAPONIFIABLE CONC. (MG./G.) = .05

TABLE 7.58

HEAVY HYDROCARBON ANALYSIS - STOCS - 1976

SAMPLE TYPE : SED
 SAMPLE CODE : AMLQ PERIOD : SPRING
 LOCATION : STATION - 2 LINE -II

HEXANE ELUATE		BENZENE ELUATE	
RETENTION INDEX	CONCENTRATION (UG./G.)	RETENTION INDEX	CONCENTRATION (UG./G.)
1670	.00020	2134	.00090
1700	.00050	2182	.00080
1700	.00030	2600	.00220
1800	.00080	2623	.00080
1841	.00060	2800	.00190
1900	.00060	3009	.00080
2000	.00040	3209	.00160
2060	.00300	3690	.00630
2100	.00220		
2140	.00240		
2200	.00040		
2300	.00060		
2400	.00060		
2500	.00150		
2600	.00090		
2700	.00310		
2800	.00100		
2900	.00590		
3000	.00130		
3100	.00060		
3200	.00130		
3300	.00480		
3361	.00390		
3500	.00230		
TOTAL	.04520	TOTAL	.01530
TOTAL NON-SAPONIFIABLE CONC. (MG./G.) =		.04	

TABLE 7.59

HEAVY HYDROCARBON ANALYSIS - STUCCS - 1976

SAMPLE TYPE : SED

SAMPLE CODE : AMLR

PERIOD : SPRING

LOCATION : STATION - 2 LINE -II

HEXANE ELUATE

BENZENE ELUATE

RETENTION INDEX	CONCENTRATION (UG./G.)	RETENTION INDEX	CONCENTRATION (UG./G.)
1600	.00090	2063	.00030
1650	.00020	2141	.00030
1670	.00010	2600	.00080
1700	.00060	3104	.00060
1780	.00010	3191	.00030
1800	.00080	3530	.00030
1841	.00090		
1900	.00070		
2000	.00050		
2063	.00230		
2100	.00170		
2140	.00190		
2200	.00040		
2300	.00060		
2400	.00060		
2500	.00130		
2600	.00070		
2700	.00240		
2800	.00090		
2900	.00440		
3000	.00090		
3100	.00510		
3200	.00080		
3300	.00370		
3370	.00220		
3500	.00180		
TOTAL	.03650	TOTAL	.00260

TOTAL NON-SAPONIFIABLE CONC. (MG./G.) = .03

TABLE 7.60

HEAVY HYDROCARBON ANALYSIS - STOCS - 1976

SAMPLE TYPE : SED
 SAMPLE CODE : AMNO PERIOD : SPRING
 LOCATION : STATION - 3 LINE -II

HEXANE ELUATE

BENZENE ELUATE

RETENTION INDEX	CONCENTRATION (UG./G.)	RETENTION INDEX	CONCENTRATION (UG./G.)
1400	.00020	2071	.00230
1500	.00010	2207	.00160
1600	.00340	2293	.00210
1644	.00110	2431	.00220
1670	.00100	2777	.00120
1700	.00420	2823	.00300
1780	.00070	2983	.00090
1800	.00400	3400	.00150
1850	.00220	4030	.00720
1900	.00250		
2000	.00190		
2044	.00210		
2100	.00210		
2133	.00100		
2187	.00060		
2200	.00110		
2300	.00310		
2400	.00220		
2500	.00500		
2600	.00230		
2700	.01190		
2800	.00320		
2900	.02360		
3000	.00310		
3100	.02910		
3200	.00240		
3240	.00180		
3300	.01590		
3302	.00790		
3405	.00130		
3500	.00140		
3555	.00230		
TOTAL	.14470	TOTAL	.02200
TOTAL NON-SAPONIFIABLE CONC. (MG./G.) =			.02

TABLE 7.61

HEAVY HYDROCARBON ANALYSIS - STUCCS - 1976

SAMPLE TYPE : SED
 SAMPLE CODE : AMNW PERIOD : SPRING
 LOCATION : STATION - 3 LINE -II

HEXANE ELUATE

BENZENE ELUATE

RETENTION INDEX	CONCENTRATION (UG./G.)	RETENTION INDEX	CONCENTRATION (UG./G.)
1400	.01210	2120	.00070
1441	.00390	2193	.00110
1500	.00510	2414	.00120
1508	.00900	2415	.00160
1600	.06020	2615	.00120
1643	.03910	2833	.00100
1670	.01780	2867	.00140
1700	.05140	3033	.00160
1700	.01410	3382	.00280
1800	.09080	3445	.00140
1845	.08130	3950	.00880
1900	.06850		
2000	.09220		
2047	.12600		
2079	.04750		
2100	.09280		
2140	.10200		
2200	.09680		
2300	.04750		
2400	.02680		
2500	.02240		
2600	.00670		
2700	.03220		
2800	.01920		
2900	.06370		
3000	.00930		
3100	.07150		
3200	.00790		
3225	.00490		
3300	.04790		
3433	.00320		
3500	.01740		
3584	.00700		
TOTAL	1.36820	TOTAL	.02280

TOTAL NON-SAPONIFIABLE CONC. (MG./G.) = .03

TABLE 7.62

HEAVY HYDROCARBON ANALYSIS - STUCCS - 1976

SAMPLE TYPE : SED

SAMPLE CODE : AMNP

PERIOD : SPRING

LOCATION : STATION - 3 LINE -II

HEXANE ELUATE

BENZENE ELUATE

RETENTION INDEX	CONCENTRATION (UG./G.)	RETENTION INDEX	CONCENTRATION (UG./G.)
1400	.05690	2020	.02470
1449	.03630	2327	.00810
1500	.03100	2400	.00760
1600	.04870	2615	.00620
1635	.02070	2740	.00800
1670	.02620	2817	.00850
1700	.03400	3017	.01440
1780	.00630	3104	.00930
1800	.01570	3191	.01030
1900	.00850	3357	.01050
2000	.00910	3790	.04220
2100	.01450		
2200	.01320		
2300	.01580		
2400	.01510		
2441	.07800		
2500	.02040		
2600	.01340		
2700	.03770		
2800	.01500		
2900	.11200		
3000	.02200		
3100	.14400		
3200	.00790		
3300	.07070		
TOTAL	.87230	TOTAL	.14980

TOTAL NON-SAPONIFIABLE CONC. (MG./G.) = .02

TABLE 7.63

HEAVY HYDROCARBON ANALYSIS - STUCCS - 1976

SAMPLE TYPE : SED

SAMPLE CODE : AMNR

PERIOD : SPRING

LOCATION : STATION - 3 LINE -II

HEXANE ELUATE

BENZENE ELUATE

RETENTION INDEX	CONCENTRATION (UG./G.)	RETENTION INDEX	CONCENTRATION (UG./G.)
1600	.00980	2009	.01050
1640	.00390	2088	.01100
1670	.00320	2112	.00430
1700	.01450	2222	.01440
1750	.00170	2328	.00630
1800	.01180	2436	.01660
1900	.01040	2685	.01160
2000	.00830	2941	.00790
2100	.01350	3260	.05290
2200	.00840		
2300	.01040		
2400	.00700		
2401	.05220		
2500	.01190		
2600	.00550		
2700	.02530		
2800	.00780		
2900	.05300		
3000	.00650		
3100	.06330		
3200	.00480		
3230	.00220		
3300	.03740		
TOTAL	.37200	TOTAL	.13550

TOTAL NON-SAPONIFIABLE CONC. (MG./G.) = .01

TABLE 7.64

HEAVY HYDROCARBON ANALYSIS - STUCCS - 1976

SAMPLE TYPE : SED

SAMPLE CODE : AMNS

PERIOD : SPRING

LOCATION : STATION - 3 LINE -II

HEXANE ELUATE

BENZENE ELUATE

RETENTION INDEX	CONCENTRATION (UG./G.)	RETENTION INDEX	CONCENTRATION (UG./G.)
1400	.10400	2059	.02340
1500	.00680	2173	.00640
1600	.00390	2608	.01410
1649	.02340	3043	.01090
1700	.02740	3243	.00600
1780	.00360	3357	.02280
1800	.03620	3565	.00710
1853	.01130	3800	.15100
1900	.01370		
2000	.01420		
2100	.01300		
2200	.00770		
2300	.02060		
2400	.01420		
2500	.03600		
2600	.01730		
2700	.09290		
2800	.02980		
2900	.22200		
3000	.02400		
3100	.26100		
3200	.01380		
3300	.09030		
TOTAL	1.15590	TOTAL	.22250

TOTAL NON-SAPONIFIABLE CONC. (MG./G.) = .01

TABLE 7.65

HEAVY HYDROCARBON ANALYSIS - STUCCS - 1976

SAMPLE TYPE : SED

SAMPLE CODE : AMPI

PERIOD : SPRING

LOCATION : STATION - 4 LINE - II

HEXANE ELUATE

BENZENE ELUATE

RETENTION INDEX	CONCENTRATION (UG./G.)	RETENTION INDEX	CONCENTRATION (UG./G.)
1653	.05240	1990	.15600
1670	.05010	2045	.23300
1700	.05450	2057	.23700
1730	.05030	2080	.12100
1800	.07570	2190	.68900
1841	.11400	2230	.30700
1900	.10300	2400	.11800
2000	.09300	2423	.20400
2100	.12500		
2140	.10100		
2200	.10800		
2300	.06290		
2400	.02040		
2500	.03370		
2600	.02300		
2700	.06100		
2800	.02640		
2900	.17600		
3000	.05150		
3100	.32400		
3200	.03740		
3300	.22500		
3400	.06840		
3500	.19000		
TOTAL	2.23270	TOTAL	2.06500

TOTAL NON-SAPONIFIABLE CONC. (MG./G.) = .02

TABLE 7.66

HEAVY HYDROCARBON ANALYSIS - STDCS - 1976

SAMPLE TYPE : SED

SAMPLE CODE : AMPK

PERIOD : SPRING

LOCATION : STATION - 4 LINE -II

HEXANE ELUATE

BENZENE ELUATE

RETENTION INDEX	CONCENTRATION (UG./G.)	RETENTION INDEX	CONCENTRATION (UG./G.)
1700	.00370	2069	.01510
1780	.01220	2148	.01020
1800	.01220	2393	.01230
1844	.06090	2646	.02830
1900	.03130	2844	.01410
1909	.07040	3748	.14300
2000	.02720		
2044	.10800		
2100	.08400		
2200	.03900		
2300	.04770		
2400	.02940		
2500	.04560		
2600	.03430		
2700	.07610		
2800	.04430		
2900	.14200		
3000	.03550		
3100	.15100		
3200	.01930		
3300	.09920		
3400	.10400		
TOTAL	1.27730	TOTAL	.22300
TOTAL NON-SAPONIFIABLE CONC. (MG./G.) =			.03

TABLE 7.67

HEAVY HYDROCARBON ANALYSIS - STUCCS - 1976

SAMPLE TYPE : SED
 SAMPLE CODE : AMPL PERIOD : SPRING
 LOCATION : STATION - 4 LINE -11

HEXANE ELUATE		BENZENE ELUATE	
RETENTION INDEX	CONCENTRATION (UG./G.)	RETENTION INDEX	CONCENTRATION (UG./G.)
1661	.00680	2148	.05490
1670	.01200	2305	.07520
1700	.01690	2332	.05540
1700	.00640	2439	.05500
1800	.01200	2508	.05950
1841	.01660	2546	.09840
1900	.03070	2677	.08480
2000	.03930	2835	.08780
2050	.03110	3740	.29900
2100	.02380		
2200	.02990		
2300	.02520		
2400	.01440		
2500	.01470		
2600	.00550		
2700	.01040		
2800	.00090		
2900	.04250		
3000	.06410		
3100	.04950		
3200	.00200		
3300	.02820		
TOTAL	.43870	TOTAL	.87000
TOTAL NON-SAPONIFIABLE CONC. (MG./G.) =		.14	

TABLE 7.68

HEAVY HYDROCARBON ANALYSIS - STUCS - 1976

SAMPLE TYPE : SED
 SAMPLE CODE : AMPM PERIOD : SPRING
 LOCATION : STATION - 4 LINE -II

HEXANE ELUATE

BENZENE ELUATE

RETENTION INDEX	CONCENTRATION (UG./G.)	RETENTION INDEX	CONCENTRATION (UG./G.)
1635	.00170	2073	.02240
1700	.00400	2153	.01840
1770	.00260	2202	.09440
1780	.00130	2317	.04640
1800	.00350	2739	.01950
1844	.00440	3220	.11800
1900	.00440	3325	.05240
2000	.00260	4110	.23800
2100	.00380		
2200	.00320		
2300	.00210		
2400	.00130		
2500	.00280		
2600	.00180		
2700	.00080		
2800	.00200		
2900	.01450		
3000	.00480		
3100	.02390		
3200	.00370		
3300	.02150		
3400	.00440		
3500	.01470		
3600	.00590		
TOTAL	.14150	TOTAL	.60950
TOTAL NON-SAPONIFIABLE CONC. (MG./G.) =			.03

TABLE 7.69

HEAVY HYDROCARBON ANALYSIS - STUCCS - 1976

SAMPLE TYPE : SED
 SAMPLE CODE : AMRA PERIOD : SPRING
 LOCATION : STATION - 5 LINE -II

HEXANE ELUATE		BENZENE ELUATE	
RETENTION INDEX	CONCENTRATION (UG./G.)	RETENTION INDEX	CONCENTRATION (UG./G.)
1500	.00730	2082	.00320
1600	.01800	2200	.00580
1639	.03600	2415	.00450
1670	.00700	2631	.00500
1700	.01450	3157	.02040
1780	.00150	3800	.07480
1800	.01300		
1900	.02040		
2000	.01090		
2100	.01560		
2200	.02200		
2300	.02810		
2400	.02270		
2500	.02130		
2600	.00900		
2700	.01950		
2800	.00860		
2900	.04320		
3000	.00620		
3100	.05120		
3200	.00780		
3300	.03330		
3400	.00440		
TOTAL	.42910	TOTAL	.11370
TOTAL NON-SAPONIFIABLE CONC. (MG./G.) = .02			

TABLE 7.70

HEAVY HYDROCARBON ANALYSIS - STUCCS - 1976

SAMPLE TYPE : SED

SAMPLE CODE : AMR6

PERIOD : SPRING

LOCATION : STATION - 5 LINE -II

HEXANE ELUATE

BENZENE ELUATE

RETENTION INDEX	CONCENTRATION (UG./G.)	RETENTION INDEX	CONCENTRATION (UG./G.)
1600	.03050	2052	.05240
1670	.01430	2182	.06090
1700	.03140	2298	.03070
1780	.01300	2008	.07130
1800	.04350	2801	.05370
1900	.02170	3017	.05570
2000	.01860	3217	.06610
2100	.02490	3730	.19700
2150	.00180		
2200	.01750		
2300	.02340		
2400	.01910		
2500	.04380		
2600	.02300		
2700	.00590		
2800	.03250		
2900	.10300		
3000	.02920		
3100	.17500		
3200	.01550		
3300	.07170		
3400	.02100		
3500	.05170		
3600	.01050		
TOTAL	.98390	TOTAL	.58780
TOTAL NON-SAPONIFIABLE CONC. (MG./G.) =			.01

TABLE 7.71

HEAVY HYDROCARBON ANALYSIS - STUCS - 1976

SAMPLE TYPE : SED

SAMPLE CODE : AMRC

PERIOD : SPRING

LOCATION : STATION - 5 LINE -II

HEXANE ELUATE		BENZENE ELUATE	
RETENTION INDEX	CONCENTRATION (UG./G.)	RETENTION INDEX	CONCENTRATION (UG./G.)
1612	.00080	2063	.00010
1653	.00060	2167	.00010
1780	.00010	2600	.00040
1800	.00060	2800	.00020
1836	.00200	3104	.00040
1900	.00060	3191	.00020
2000	.00000	3340	.00020
2040	.00140	3530	.00030
2060	.00040	3080	.00270
2100	.00000		
2140	.00180		
2200	.00050		
2243	.00090		
2300	.00050		
2400	.00040		
2450	.00050		
2500	.00090		
2600	.00050		
2700	.00200		
2800	.00060		
2900	.00340		
3000	.00080		
3100	.00360		
3200	.00040		
3300	.00250		
3351	.00200		
3500	.00100		
TOTAL	.03000	TOTAL	.00460
TOTAL NON-SAPONIFIABLE CONC. (MG./G.) =		.01	

TABLE 7.72

HEAVY HYDROCARBON ANALYSIS - STUCS - 1976

SAMPLE TYPE : SED

SAMPLE CODE : AMRD

PERIOD : SPRING

LOCATION : STATION - 5 LINE -II

HEXANE ELUATE

BENZENE ELUATE

RETENTION INDEX	CONCENTRATION (UG./G.)	RETENTION INDEX	CONCENTRATION (UG./G.)
1600	.03220	2050	.00120
1650	.01520	2167	.00050
1670	.00700	2196	.00080
1700	.02790	2592	.00080
1780	.00810	2800	.00080
1800	.04330	3087	.00070
1851	.04050	3600	.00420
1900	.03380		
2000	.02840		
2052	.07440		
2100	.04290		
2150	.04010		
2200	.01960		
2300	.06380		
2400	.04080		
2500	.09420		
2600	.08150		
2700	.18800		
2800	.07150		
2900	.36400		
3000	.05000		
3100	.36100		
3200	.02730		
3255	.01680		
3300	.17400		
3372	.05430		
3400	.00670		
TOTAL	2.01520	TOTAL	.00900

TOTAL NON-SAPONIFIABLE CONC. (MG./G.) = .07

TABLE 7.73

HEAVY HYDROCARBON ANALYSIS - STUCCS - 1976

SAMPLE TYPE : SED
 SAMPLE CODE : AMRE PERIOD : SPRING
 LOCATION : STATION - 5 LINE -11

HEXANE ELUATE		BENZENE ELUATE	
RETENTION INDEX	CONCENTRATION (UG./G.)	RETENTION INDEX	CONCENTRATION (UG./G.)
1600	.03050	1975	.00020
1670	.01430	2075	.00030
1700	.03140	2182	.00010
1780	.01360	2223	.00020
1800	.04350	2615	.00040
1900	.02170	2809	.00040
2000	.01860	3017	.00010
2100	.02490	3043	.00010
2150	.00180	3322	.00020
2200	.01750	3670	.00070
2300	.02340		
2400	.01910		
2500	.04380		
2600	.02300		
2700	.08590		
2800	.03250		
2900	.16300		
3000	.02920		
3100	.17500		
3200	.01550		
3300	.07170		
3400	.02180		
3500	.05170		
3600	.01050		
TOTAL	.96390	TOTAL	.00270
TOTAL NON-SAPONIFIABLE CONC. (MG./G.) =			.03

TABLE 7.74

HEAVY HYDROCARBON ANALYSIS - STUCCS - 1976

SAMPLE TYPE : SED

SAMPLE CODE : AMSS

PERIOD : SPRING

LOCATION : STATION - 6 LINE -II

HEXANE ELUATE

BENZENE ELUATE

RETENTION INDEX	CONCENTRATION (UG./G.)	RETENTION INDEX	CONCENTRATION (UG./G.)
1600	.00730	2017	.00210
1670	.00120	2200	.00490
1700	.00520	2300	.00250
1700	.00060	2700	.00280
1800	.00430	2900	.00780
1850	.00200	3100	.00910
1900	.00300	3300	.00760
2000	.00200	3400	.00380
2050	.00100	3473	.00300
2100	.00210	3904	.01060
2150	.00350		
2200	.00270		
2300	.00530		
2400	.00550		
2500	.00830		
2600	.00600		
2700	.01440		
2800	.00800		
2900	.02260		
3000	.00600		
3100	.02420		
3200	.00490		
3230	.00220		
3300	.01260		
3300	.00370		
3400	.00220		
3500	.00110		
3600	.00290		
TOTAL	.10620	TOTAL	.05420

TOTAL NON-SAPONIFIABLE CONC. (MG./G.) = .03

TABLE 7.75

HEAVY HYDROCARBON ANALYSIS - STUCCS - 1976

SAMPLE TYPE : SED

SAMPLE CODE : AMST

PERIOD : SPRING

LOCATION : STATION - 6 LINE -11

HEXANE ELUATE

BENZENE ELUATE

RETENTION INDEX	CONCENTRATION (UG./G.)	RETENTION INDEX	CONCENTRATION (UG./G.)
1600	.00250	1994	.00080
1643	.00240	2094	.00100
1670	.00180	2200	.00340
1700	.00870	2293	.00210
1730	.00120	2313	.00120
1800	.00940	2423	.00260
1853	.00420	2639	.00160
1900	.00580	2844	.00160
2000	.00470	3061	.00130
2050	.00220	3165	.00190
2100	.00470	3980	.01030
2150	.00180		
2200	.00300		
2300	.00510		
2400	.00370		
2500	.00640		
2600	.00400		
2700	.01320		
2800	.00050		
2900	.02360		
3000	.00600		
3050	.00110		
3100	.02690		
3200	.00430		
3240	.00000		
3300	.01380		
3302	.00450		
3400	.00000		
3500	.00220		
3545	.00180		
TOTAL	.17050	TOTAL	.02780

TOTAL NON-SAPONIFIABLE CONC. (MG./G.) = .03

TABLE 7.76

HEAVY HYDROCARBON ANALYSIS - STCCS - 1976

SAMPLE TYPE : SED
 SAMPLE CODE : AMSU PERIOD : SPRING
 LOCATION : STATION - 6 LINE -II

HEXANE ELUATE

BENZENE ELUATE

RETENTION INDEX	CONCENTRATION (UG./G.)	RETENTION INDEX	CONCENTRATION (UG./G.)
1400	.00070	2105	.00360
1600	.00210	2193	.00280
1640	.00070	2336	.00290
1670	.00020	2901	.00580
1700	.00000	3204	.00260
1750	.00010	3404	.00220
1800	.00170	3540	.00170
1840	.00310	3710	.00200
1900	.00050	3920	.00410
2000	.00430	4130	.00830
2050	.00390		
2100	.00190		
2200	.00140		
2257	.00150		
2300	.00550		
2400	.00170		
2500	.00560		
2600	.00210		
2700	.01190		
2800	.00360		
2900	.02620		
3000	.00290		
3100	.02800		
3200	.00150		
3257	.00130		
3300	.01130		
3400	.00120		
3500	.00290		
TOTAL	.12800	TOTAL	.03600

TOTAL NON-SAPONIFIABLE CONC. (MG./G.) = .03

TABLE 7.77

HEAVY HYDROCARBON ANALYSIS - STOCS - 1970

SAMPLE TYPE : SED
 SAMPLE CODE : AMSV PERIOD : SPRING
 LOCATION : STATION - 6 LINE -II

HEXANE ELUATE		BENZENE ELUATE	
RETENTION INDEX	CONCENTRATION (UG./G.)	RETENTION INDEX	CONCENTRATION (UG./G.)
1500	.00470	2187	.00810
1650	.00110	2492	.00350
1670	.00170	2700	.00150
1700	.00490	2867	.00290
1780	.00080	3044	.00100
1800	.00430	3148	.00350
1850	.00290	3940	.01030
1900	.00210		
2000	.00160		
2050	.00170		
2100	.00120		
2150	.00180		
2200	.00070		
2300	.00170		
2400	.00110		
2500	.00400		
2600	.00150		
2700	.00850		
2800	.00330		
2900	.02020		
3000	.00210		
3100	.02740		
3200	.00240		
3220	.00610		
3300	.01360		
3400	.01250		
3500	.00960		
TOTAL	.14350	TOTAL	.03080
TOTAL NON-SAPONIFIABLE CONC. (MG./G.) =		.02	

TABLE 7.78

HEAVY HYDROCARBON ANALYSIS - STOCS - 1976

SAMPLE TYPE : SED

SAMPLE CODE : AMS4

PERIOD : SPRING

LOCATION : STATION - 6 LINE -II

HEXANE ELUATE

BENZENE ELUATE

RETENTION INDEX	CONCENTRATION (UG./G.)	RETENTION INDEX	CONCENTRATION (UG./G.)
1400	.00300	2071	.00720
1600	.01250	2180	.00640
1670	.00580	2393	.00840
1700	.01520	2592	.00630
1780	.01030	2817	.01240
1800	.01990	2852	.03060
1855	.00430	3043	.03240
1900	.01090	3235	.01790
2000	.00760	3360	.01310
2040	.01430	3800	.09240
2100	.01010		
2136	.00580		
2155	.02180		
2200	.00720		
2300	.01250		
2400	.01200		
2401	.09640		
2500	.02440		
2600	.01350		
2700	.05680		
2800	.02260		
2900	.11300		
3000	.01070		
3100	.11800		
3200	.00640		
3300	.08310		
TOTAL	.72410	TOTAL	.22710

TOTAL NON-SAPONIFIABLE CONC. (MG./G.) = .01

TABLE 7.79

HEAVY HYDROCARBON ANALYSIS - STUCCS - 1976

SAMPLE TYPE : SED

SAMPLE CODE : ARJT

PERIOD : FALL

LOCATION : STATION - 1 LINE -II

HEXANE ELUATE

BENZENE ELUATE

RETENTION INDEX	CONCENTRATION (UG./G.)	RETENTION INDEX	CONCENTRATION (UG./G.)
1600	.05620	2130	.07320
1670	.01220	2150	.06610
1700	.02580	2340	.01250
1780	.00310	2631	.02460
1800	.03730	2769	.01320
1853	.01320	3279	.06170
1900	.01200		
2000	.02330		
2047	.11100		
2065	.02230		
2100	.01510		
2138	.00070		
2200	.00750		
2300	.01760		
2400	.01000		
2500	.03200		
2600	.02030		
2700	.07050		
2800	.02710		
2900	.13800		
3000	.02030		
3100	.18700		
TOTAL	.86930	TOTAL	.25130

TOTAL NON-SAPONIFIABLE CONC. (MG./G.) = .02

TABLE 7.80

HEAVY HYDROCARBON ANALYSIS - STOCS - 1976

SAMPLE TYPE : SED
 SAMPLE CODE : ARLT PERIOD : FALL
 LOCATION : STATION - 2 LINE -II

HEXANE ELUATE

BENZENE ELUATE

RETENTION INDEX	CONCENTRATION (UG./G.)	RETENTION INDEX	CONCENTRATION (UG./G.)
1600	.04180	2059	.01600
1636	.00880	2133	.05920
1670	.00480	2167	.02810
1700	.00800	2380	.01440
1800	.03800	2531	.01630
1839	.01750	2600	.03300
1900	.01570	2023	.01780
2000	.01190	2700	.01620
2062	.06470	2715	.01890
2100	.03580	2800	.02910
2140	.01030	2827	.02910
2200	.01040	3036	.09510
2300	.01400	3427	.02390
2400	.01300	3770	.25400
2401	.06150		
2500	.03340		
2600	.01730		
2700	.04890		
2800	.02310		
2900	.11800		
3000	.02420		
3100	.14200		
3200	.04490		
3300	.06470		
3400	.09270		
3500	.04280		
TOTAL	1.02940	TOTAL	.65110

TOTAL NON-SAPONIFIABLE CONC. (MG./G.) = .01

TABLE 7.81

HEAVY HYDROCARBON ANALYSIS - STUCCS - 1976

SAMPLE TYPE : SED

SAMPLE CODE : ARNS

PERIOD : FALL

LOCATION : STATION - 3 LINE -II

HEXANE ELUATE

BENZENE ELUATE

RETENTION INDEX	CONCENTRATION (UG./G.)	RETENTION INDEX	CONCENTRATION (UG./G.)
1400	.00770	1965	.01350
1440	.00190	2065	.01580
1500	.00180	2173	.02210
1600	.01830	2387	.01560
1650	.00860	2408	.01760
1670	.01010	2600	.02690
1700	.02600	2809	.02270
1780	.01890	2836	.04850
1800	.02460	3027	.03570
1900	.01260	3227	.01790
2000	.00700	3560	.10000
2040	.01540		
2100	.00800		
2200	.00540		
2300	.01520		
2400	.01640		
2500	.03450		
2600	.03000		
2700	.07180		
2800	.04540		
2900	.12300		
3000	.03310		
3100	.12700		
3200	.01090		
3500	.05910		
TOTAL	.73330	TOTAL	.33630

TOTAL NON-SAPONIFIABLE CONC. (MG./G.) = .01

TABLE 7.82

HEAVY HYDROCARBON ANALYSIS - STUCCS - 1976

SAMPLE TYPE : SED

SAMPLE CODE : ARPI

PERIOD : FALL

LOCATION : STATION - 4 LINE -II

HEXANE ELUATE

BENZENE ELUATE

RETENTION INDEX	CONCENTRATION (UG./G.)	RETENTION INDEX	CONCENTRATION (UG./G.)
1600	.03180	2115	.04730
1630	.00890	2631	.02640
1670	.01090	2809	.03370
1700	.01350	3036	.09210
1780	.01140	3227	.05900
1800	.04350	3291	.06230
1900	.03240	3418	.02890
2000	.01430	3770	.43600
2075	.06540		
2100	.01180		
2147	.04020		
2200	.01750		
2300	.01570		
2400	.01610		
2401	.07770		
2500	.02940		
2600	.01730		
2700	.06470		
2800	.02770		
2900	.15000		
3000	.03370		
3100	.18100		
3200	.05790		
3300	.10400		
3400	.11500		
3453	.05110		
3500	.02520		
TOTAL	1.27610	TOTAL	.76570

TOTAL NON-SAPONIFIABLE CONC. (MG./G.) = .02

TABLE 7.83

HEAVY HYDROCARBON ANALYSIS - STOCS - 1976

SAMPLE TYPE : SED
 SAMPLE CODE : ARGR PERIOD : FALL
 LOCATION : STATION - 5 LINE -II

HEXANE ELUATE

BENZENE ELUATE

RETENTION INDEX	CONCENTRATION (UG./G.)	RETENTION INDEX	CONCENTRATION (UG./G.)
1600	.02080	1664	.03220
1670	.00670	1718	.01790
1700	.01560	1905	.03110
1780	.00560	2000	.01830
1800	.05030	2065	.02100
1839	.01390	2147	.03200
1900	.02180	2380	.01900
2000	.02200	2600	.03220
2069	.03210	2700	.02590
2100	.01730	3027	.02870
2200	.02000	3770	.19000
2300	.01640		
2400	.01700		
2401	.11100		
2500	.03400		
2600	.01030		
2700	.05930		
2800	.01940		
2900	.12800		
3000	.02410		
3100	.15000		
3200	.03370		
3300	.07490		
3400	.09810		
3500	.02310		
3600	.01420		
TOTAL	1.05420	TOTAL	.45430

TOTAL NON-SAPONIFIABLE CONC. (MG./G.) = .02

TABLE 7.84

HEAVY HYDROCARBON ANALYSIS - STUCCS - 1976

SAMPLE TYPE : SED

SAMPLE CODE : ARSB

PERIOD : FALL

LOCATION : STATION - 6 LINE -II

HEXANE ELUATE

BENZENE ELUATE

RETENTION INDEX	CONCENTRATION (UG./G.)	RETENTION INDEX	CONCENTRATION (UG./G.)
1600	.02610	1624	.01530
1639	.00490	1699	.03110
1670	.00190	1742	.02430
1700	.00890	1803	.01510
1800	.02700	2091	.04010
1839	.00660	2172	.02730
1900	.00440	2638	.03110
2000	.01320	2905	.09600
2100	.01280	3024	.05710
2200	.01330		
2300	.01880		
2400	.01550		
2401	.10800		
2500	.03420		
2600	.01800		
2700	.06840		
2800	.02050		
2900	.14900		
3000	.03310		
3100	.20100		
3200	.05020		
3256	.00730		
3300	.09300		
3355	.00510		
3400	.15800		
3450	.06490		
3500	.01020		
3600	.02220		
TOTAL	1.21110	TOTAL	.33740
TOTAL NON-SAPONIFIABLE CONC. (MG./G.) =			.02

TABLE 7.85

HEAVY HYDROCARBON ANALYSIS - STUCCS - 1976

SAMPLE TYPE : SED
 SAMPLE CODE : AIAC PERIOD : WINTER
 LOCATION : STATION - 2 LINE -III

HEXANE ELUATE		BENZENE ELUATE	
RETENTION INDEX	CONCENTRATION (UG./G.)	RETENTION INDEX	CONCENTRATION (UG./G.)
1900	.00830	2070	.02680
2000	.01020	2140	.03770
2100	.02890	3000	.25600
2200	.03190		
2300	.04350		
2400	.04620		
2500	.05980		
2600	.05530		
2700	.13100		
2800	.07840		
2900	.23000		
3000	.14300		
3100	.45300		
3200	.13500		
3300	.41500		
TOTAL	1.86350	TOTAL	.32450
TOTAL NON-SAPONIFIABLE CONC. (MG./G.) = .02			

TABLE 7.86

HEAVY HYDROCARBON ANALYSIS - STUCCS - 1976

SAMPLE TYPE : SED

SAMPLE CODE : AIBY

PERIOD : WINTER

LOCATION : STATION - 3 LINE -III

HEXANE ELUATE

BENZENE ELUATE

RETENTION INDEX	CONCENTRATION (UG./G.)	RETENTION INDEX	CONCENTRATION (UG./G.)
2000	.00940	2065	.00010
2100	.02290	2100	.00080
2200	.03640	2216	.00083
2300	.05780	2792	.00190
2400	.07390	3009	.00010
2500	.11000	3700	.00120
2600	.08140		
2700	.16400		
2800	.08990		
2900	.48500		
3000	.11700		
3100	.68100		
3200	.25400		
3300	.92700		
TOTAL	3.10970	TOTAL	.00490
TOTAL NON-SAPONIFIABLE CONC. (MG./G.) = .02			

TABLE 7.87

HEAVY HYDROCARBON ANALYSIS - STUCCS - 1976

SAMPLE TYPE : SED
 SAMPLE CODE : AIDU
 LOCATION : STATION - 4 LINE -III PERIOD : WINTER

HEXANE ELUATE		BENZENE ELUATE	
RETENTION INDEX	CONCENTRATION (UG./G.)	RETENTION INDEX	CONCENTRATION (UG./G.)
1500	.00160	1774	.00510
1600	.00350	1859	.00320
1670	.00430	2121	.00770
1700	.00450	2196	.00510
1780	.00180		
1800	.00370		
1900	.00740		
2000	.00800		
2100	.01990		
2200	.01150		
2300	.02100		
2400	.01350		
2500	.01920		
2600	.00880		
2700	.01540		
2800	.00400		
2900	.02500		
3000	.00680		
3100	.02360		
3200	.01940		
3300	.02440		
TOTAL	.24730	TOTAL	.02110
TOTAL NON-SAPONIFIABLE CONC. (MG./G.) =		.02	

TABLE 7.88

HEAVY HYDROCARBON ANALYSIS - STUCCS - 1976

SAMPLE TYPE : SED
 SAMPLE CODE : AIHE PERIOD : WINTER
 LOCATION : STATION - 6 LINE -III

HEXANE ELUATE		BENZENE ELUATE	
RETENTION INDEX	CONCENTRATION (UG./G.)	RETENTION INDEX	CONCENTRATION (UG./G.)
1800	.00260	1914	.00590
1900	.00490	2460	.00950
2000	.00680	2520	.02670
2100	.00690	2566	.00920
2200	.01920		
2300	.01980		
2400	.02220		
2500	.02630		
2600	.01650		
2700	.01870		
2800	.01270		
2900	.03340		
3000	.00880		
3100	.04870		
3200	.00500		
3300	.03080		
3400	.00240		
3500	.01710		
TOTAL	.30280	TOTAL	.05130
TOTAL NON-SAPONIFIABLE CONC. (MG./G.) =		.00	

TABLE 7.89

HEAVY HYDROCARBON ANALYSIS - STUCCS - 1976

SAMPLE TYPE : SED

SAMPLE CODE : ANXR

PERIOD : SPRING

LOCATION : STATION - 1 LINE - III

HEXANE ELUATE

BENZENE ELUATE

RETENTION INDEX	CONCENTRATION (UG./G.)	RETENTION INDEX	CONCENTRATION (UG./G.)
1400	.00170	1970	.00060
1500	.00010	2016	.00350
1600	.00340	2185	.00080
1643	.00190	2021	.00130
1670	.00060	3047	.00450
1700	.00230	3141	.00280
1780	.00050	3366	.00630
1800	.00320	3438	.00560
1844	.00140	3830	.01690
1879	.00070	3880	.01980
1900	.00140	4400	.00350
2000	.00340		
2018	.00410		
2100	.00340		
2145	.00440		
2200	.00190		
2300	.00220		
2400	.00280		
2441	.00620		
2500	.00390		
2500	.00340		
2700	.00800		
2800	.00440		
2900	.00270		
3000	.00410		
3100	.00250		
3200	.00380		
3300	.01290		
3400	.00100		
3432	.00050		
3500	.00690		
3580	.00340		
TOTAL	.14620	TOTAL	.00560

TOTAL NON-SAPONIFIABLE CONC. (MG./G.) = .08

TABLE 7.90

HEAVY HYDROCARBON ANALYSIS - STUCCS - 1976

SAMPLE TYPE : SED

SAMPLE CODE : AMXU

PERIOD : SPRING

LOCATION : STATION - 1 LINE -III

HEXANE ELUATE

BENZENE ELUATE

RETENTION INDEX	CONCENTRATION (UG./G.)	RETENTION INDEX	CONCENTRATION (UG./G.)
1660	.00080	2071	.00900
1670	.00350	2180	.00370
1700	.01940	2267	.00370
1760	.00120	2991	.00290
1800	.01160	3209	.01030
1900	.01090	3304	.00820
2000	.00100	3980	.17100
2037	.16400		
2100	.01030		
2155	.10700		
2200	.00170		
2300	.01050		
2400	.00850		
2500	.04320		
2600	.01320		
2700	.10000		
2800	.01520		
2900	.15200		
3000	.01690		
3100	.20800		
3200	.01190		
3300	.11300		
TOTAL	1.02380	TOTAL	.20880
TOTAL NON-SAPONIFIABLE CONC. (MG./G.) = .02			

TABLE 7.91

HEAVY HYDROCARBON ANALYSIS - STUCCS - 1976

SAMPLE TYPE : SED
 SAMPLE CODE : AMXP PERIOD : SPRING
 LOCATION : STATION - 1 LINE -III

HEXANE ELUATE		BENZENE ELUATE	
RETENTION INDEX	CONCENTRATION (UG./G.)	RETENTION INDEX	CONCENTRATION (UG./G.)
1400	.01110	2069	.01130
1444	.00260	2121	.01210
1500	.00230	2230	.01250
1600	.01450	2437	.00840
1670	.00110	2983	.01470
1700	.00450	3396	.03310
1780	.00130	3520	.02760
1800	.00510	4080	.00630
1850	.00280		
1900	.00360		
2000	.00220		
2050	.01910		
2100	.00550		
2147	.01950		
2200	.00140		
2300	.00060		
2400	.00530		
2500	.01000		
2600	.00560		
2700	.02470		
2800	.01030		
2900	.05140		
3000	.00900		
3100	.05820		
3200	.00420		
3300	.02860		
3500	.00520		
TOTAL	.30670	TOTAL	.20600
TOTAL NON-SAPONIFIABLE CONC. (MG./G.) =			.08

TABLE 7.92

HEAVY HYDROCARBON ANALYSIS - STDCS - 1976

SAMPLE TYPE : SED
 SAMPLE CODE : AMXW PERIOD : SPRING
 LOCATION : STATION - 1 LINE -III

HEXANE ELUATE

BENZENE ELUATE

RETENTION INDEX	CONCENTRATION (UG./G.)	RETENTION INDEX	CONCENTRATION (UG./G.)
1600	.00450	2006	.00500
1670	.00140	2053	.00260
1700	.00200	2127	.01510
1700	.00060	2160	.00590
1800	.00290	2615	.00580
1900	.00290	2715	.00350
2000	.00200	3020	.01040
2050	.00860	3140	.00310
2200	.00450	3217	.00580
2100	.00220	3339	.01730
2147	.00140	3820	.09380
2200	.00350		
2300	.00470		
2400	.00410		
2401	.01510		
2500	.00790		
2600	.00470		
2700	.01930		
2800	.00000		
2900	.03750		
3000	.00500		
3100	.00300		
3200	.00620		
3300	.02220		
TOTAL	.21380	TOTAL	.16830
TOTAL NON-SAPONIFIABLE CONC. (MG./G.) =		.02	

TABLE 7.93

HEAVY HYDROCARBON ANALYSIS - STOCS - 1976

SAMPLE TYPE : SED

SAMPLE CODE : AMXS

PERIOD : SPRING

LOCATION : STATION - 1 LINE -III

HEXANE ELUATE		BENZENE ELUATE	
RETENTION INDEX	CONCENTRATION (UG./G.)	RETENTION INDEX	CONCENTRATION (UG./G.)
1400	.01500	2059	.01090
1500	.00300	2293	.00320
1600	.01110	2922	.00380
1650	.00330	3017	.00560
1670	.00300	3061	.00430
1700	.00960	3243	.00930
1780	.00200	3722	.00450
1800	.01100		
1851	.00340		
1900	.00400		
2000	.00530		
2100	.00580		
2200	.00990		
2300	.00460		
2400	.00300		
2401	.02340		
2500	.00530		
2600	.00310		
2700	.01410		
2800	.00400		
2900	.02760		
3000	.00470		
3100	.03790		
3200	.00310		
3300	.01200		
TOTAL	.23240	TOTAL	.07760
TOTAL NON-SAPONIFIABLE CONC. (MG./G.) =		.01	

TABLE 7.94

HEAVY HYDROCARBON ANALYSIS - STUCCS - 1976

SAMPLE TYPE : SED

SAMPLE CODE : AMZP

PERIOD : SPRING

LOCATION : STATION - 2 LINE -III

HEXANE ELUATE		BENZENE ELUATE	
RETENTION INDEX	CONCENTRATION (UG./G.)	RETENTION INDEX	CONCENTRATION (UG./G.)
1400	.01000	2082	.00350
1500	.00120	2167	.00450
1600	.01760	2415	.00400
1650	.00630	2639	.00540
1670	.00330	2833	.00330
1700	.01260	2875	.00440
1780	.00130	3023	.00500
1800	.01420	3391	.01630
1900	.00780	3455	.01020
2000	.00060	3500	.00850
2046	.01330	3955	.07410
2079	.00200		
2100	.00800		
2146	.01000		
2200	.00360		
2200	.00630		
2300	.01210		
2400	.01150		
2500	.02210		
2600	.01430		
2700	.04910		
2800	.01900		
2900	.09090		
3000	.01920		
3100	.12100		
3200	.01100		
3233	.00940		
3300	.02550		
3500	.02660		
3530	.01950		
3640	.01950		
TOTAL	.00760	TOTAL	.13920
TOTAL NON-SAPONIFIABLE CONC. (MG./G.) =			.17

TABLE 7.95

HEAVY HYDROCARBON ANALYSIS - STOCS - 1976

SAMPLE TYPE : SED

SAMPLE CODE : AM20

PERIOD : SPRING

LOCATION : STATION - 2 LINE -III

HEXANE ELUATE		BENZENE ELUATE	
RETENTION INDEX	CONCENTRATION (UG./G.)	RETENTION INDEX	CONCENTRATION (UG./G.)
1780	.00010	1963	.00030
1800	.00010	2063	.00030
1900	.00010	2168	.00050
2000	.00010	2250	.00030
2050	.00010	2380	.00050
2100	.00020	2792	.00090
2147	.00040	3009	.00050
2200	.00010	3339	.00030
2300	.00020	3660	.00060
2400	.00010		
2500	.00030		
2600	.00020		
2700	.00060		
2800	.00020		
2900	.00120		
3000	.00020		
3100	.00130		
3155	.00010		
3200	.00020		
3300	.00070		
3350	.00050		
3420	.00030		
3500	.00040		
TOTAL	.00770	TOTAL	.00420
TOTAL NON-SAPONIFIABLE CONCL. (MG./G.) =			.02

TABLE 7.96

HEAVY HYDROCARBON ANALYSIS - STUCCS - 1976

SAMPLE TYPE : SED
 SAMPLE CODE : AMZG PERIOD : SPRING
 LOCATION : STATION - 2 LINE -III

HEXANE ELUATE

BENZENE ELUATE

RETENTION INDEX	CONCENTRATION (UG./G.)	RETENTION INDEX	CONCENTRATION (UG./G.)
1400	.02910	2140	.00590
1500	.00580	2015	.00410
1600	.03280	2825	.00480
1650	.01430	3035	.00380
1670	.00630	3130	.01990
1700	.01830	3287	.00530
1780	.03320	3357	.00420
1844	.01130	3820	.04240
1900	.01300	3860	.01170
2000	.01650		
2053	.00970		
2100	.01330		
2140	.00590		
2200	.01170		
2300	.01400		
2400	.01460		
2401	.05360		
2500	.02560		
2600	.01770		
2700	.05250		
2800	.02050		
2900	.06810		
3000	.01950		
3100	.07260		
3200	.01980		
3300	.05010		
TOTAL	.65580	TOTAL	.10210
TOTAL NON-SAPONIFIABLE CONC. (MG./G.) = .02			

TABLE 7.97

HEAVY HYDROCARBON ANALYSIS - STCCS - 1976

SAMPLE TYPE : SED

SAMPLE CODE : AMZR

PERIOD : SPRING

LOCATION : STATION - 2 LINE -III

HEXANE ELUATE		BENZENE ELUATE	
RETENTION INDEX	CONCENTRATION (UG./G.)	RETENTION INDEX	CONCENTRATION (UG./G.)
1400	.03440	1894	.00220
1447	.00810	1906	.00210
1500	.00250	2173	.00610
1500	.03290	2207	.00230
1548	.01810	2293	.00700
1670	.00640	2431	.00880
1700	.01820	2639	.00260
1700	.00620	2642	.00180
1800	.01890	3104	.03610
1850	.01060	3209	.00230
1900	.00000	3391	.00200
2000	.00440	3950	.03390
2040	.00440		
2100	.00480		
2153	.00600		
2200	.00320		
2300	.00540		
2400	.00430		
2500	.00930		
2600	.00510		
2700	.01920		
2800	.00650		
2900	.05900		
3000	.00600		
3100	.00050		
3200	.00410		
3300	.02950		
TOTAL	.41510	TOTAL	.10780
TOTAL NON-SAPONIFIABLE CONC. (MG./G.) =			.02

TABLE 7.98

HEAVY HYDROCARBON ANALYSIS - STUCCS - 1976

SAMPLE TYPE : SED
 SAMPLE CODE : AMZS PERIOD : SPRING
 LOCATION : STATION - 2 LINE - III

HEXANE ELUATE		BENZENE ELUATE	
RETENTION INDEX	CONCENTRATION (UG./G.)	RETENTION INDEX	CONCENTRATION (UG./G.)
1400	.03950	2071	.01080
1500	.00540	2233	.02250
1600	.04980	2430	.01120
1670	.02420	2641	.02530
1700	.12100	2650	.02340
1780	.00720	3007	.04980
1800	.02990	3203	.00240
1850	.01530	4070	.43700
1900	.01320		
2000	.00440		
2050	.09310		
2100	.02320		
2100	.04330		
2200	.00800		
2300	.04140		
2400	.01840		
2500	.04410		
2600	.01240		
2700	.08570		
2800	.02330		
2900	.16200		
3000	.01420		
3100	.20000		
TOTAL	1.07900	TOTAL	.58240
TOTAL NON-SAPONIFIABLE CONC. (MG./G.) = .06			

TABLE 7.99

HEAVY HYDROCARBON ANALYSIS - STUCCS - 1976

SAMPLE TYPE : SED

SAMPLE CODE : ANBU

PERIOD : SPRING

LOCATION : STATION - 3 LINE -III

HEXANE ELUATE		BENZENE ELUATE	
RETENTION INDEX	CONCENTRATION (UG./G.)	RETENTION INDEX	CONCENTRATION (UG./G.)
1500	.01570	1910	.00050
1670	.00860	2048	.00030
1700	.01290	2121	.00070
1780	.00280	2203	.00040
1800	.02570	2334	.00070
1850	.01350	2538	.00080
1900	.00840	2949	.00100
2000	.00800	3054	.00110
2053	.01960	3272	.00130
2100	.00620	3369	.00150
2153	.01110	3750	.00530
2200	.00380		
2253	.00370		
2300	.00650		
2400	.00450		
2457	.00570		
2500	.01420		
2600	.00890		
2700	.03010		
2800	.01360		
2900	.00510		
3000	.01090		
3073	.00850		
3100	.06000		
3200	.00360		
3204	.00850		
3300	.04270		
3400	.00800		
3404	.00850		
3500	.02080		
TOTAL	.47010	TOTAL	.01300
TOTAL NON-SAPONIFIABLE CONC. (MG./G.) = .02			

TABLE 7.100

HEAVY HYDROCARBON ANALYSIS - STUCCS - 1976

SAMPLE TYPE : SED

SAMPLE CODE : ANBL

PERIOD : SPRING

LOCATION : STATION - 3 LINE -III

HEXANE ELUATE

BENZENE ELUATE

RETENTION INDEX	CONCENTRATION (UG./G.)	RETENTION INDEX	CONCENTRATION (UG./G.)
1600	.02770	2634	.02750
1670	.01210	2844	.01840
1700	.03840	3096	.04520
1780	.00770	3165	.01820
1800	.04330	3270	.03100
1884	.02960	3520	.02700
1900	.03880	4010	.05280
2000	.00910		
2038	.06120		
2100	.02010		
2147	.09280		
2200	.01000		
2300	.01670		
2400	.01670		
2500	.02860		
2600	.01040		
2700	.07760		
2800	.03060		
2900	.19600		
3000	.02400		
3100	.22200		
3200	.02060		
3300	.13700		
3400	.00300		
3500	.06280		
TOTAL	1.24280	TOTAL	.22010
TOTAL NON-SAPONIFIABLE CONC. (MG./G.) =			.03

TABLE 7.101

HEAVY HYDROCARBON ANALYSIS - STJCS - 1976

SAMPLE TYPE : SED
 SAMPLE CODE : ANEM PERIOD : SPRING
 LOCATION : STATION - 3 LINE -III

HEXANE ELUATE		BENZENE ELUATE	
RETENTION INDEX	CONCENTRATION (UG./G.)	RETENTION INDEX	CONCENTRATION (UG./G.)
1440	.00950	1773	.00350
1500	.00120	1800	.00290
1640	.02570	1922	.01120
1651	.00390	2083	.01300
1670	.00490	2161	.00370
1700	.03150	3185	.01030
1750	.00840		
1800	.03080		
1852	.01090		
1900	.01410		
2000	.01000		
2100	.01200		
2200	.00780		
2300	.00420		
2400	.00650		
2401	.02350		
2500	.00900		
2600	.01450		
2700	.04020		
2800	.00470		
2900	.09500		
3000	.01020		
3100	.11400		
TOTAL	.49850	TOTAL	.04460
TOTAL NON-SAPONIFIABLE CONC. (MG./G.) =		.01	

TABLE 7.102

HEAVY HYDROCARBON ANALYSIS - STUCCS - 1976

SAMPLE TYPE : SED

SAMPLE CODE : ANBN

PERIOD : SPRING

LOCATION : STATION - 3 LINE -III

HEXANE ELUATE

BENZENE ELUATE

RETENTION INDEX	CONCENTRATION (UG./G.)	RETENTION INDEX	CONCENTRATION (UG./G.)
1640	.00460	1762	.00620
1670	.00120	1800	.00790
1700	.01030	2140	.00340
1750	.00080	2230	.00400
1800	.01170	2303	.00310
1900	.01080	2434	.00820
2000	.00840	2522	.00610
2046	.01660	2644	.01560
2100	.00120	2843	.01450
2147	.01710	2930	.01910
2200	.01230		
2300	.00390		
2400	.00450		
2500	.01320		
2600	.01090		
2700	.02720		
2800	.01190		
2900	.04410		
3000	.00900		
3052	.00370		
3100	.04530		
3200	.00220		
3300	.01700		
3408	.00260		
3532	.00910		
3646	.00710		
TOTAL	.30670	TOTAL	.08810

TOTAL NON-SAPONIFIABLE CONC. (MG./G.) = .03

TABLE 7.103

HEAVY HYDROCARBON ANALYSIS - STOCS - 1976

SAMPLE TYPE : SED

SAMPLE CODE : ANBP

PERIOD : SPRING

LOCATION : STATION - 3 LINE -III

HEXANE ELUATE		BENZENE ELUATE	
RETENTION INDEX	CONCENTRATION (UG./G.)	RETENTION INDEX	CONCENTRATION (UG./G.)
1600	.00200	2133	.01150
1646	.00070	2700	.01480
1670	.00110	2800	.01730
1700	.00390	2900	.03380
1780	.00060	3000	.03450
1800	.00330	3100	.05360
1860	.00280	3218	.01000
1900	.00370	3291	.03420
2000	.00410	3355	.02620
2047	.00450	3400	.05420
2100	.00280	3780	.10600
2144	.00180		
2200	.00300		
2300	.00480		
2400	.06880		
2500	.00740		
2500	.00010		
2700	.01210		
2800	.00440		
2900	.01930		
3000	.00340		
3100	.02290		
3200	.00210		
3204	.00140		
3300	.01180		
3359	.00290		
3400	.00390		
3500	.01310		
3507	.00270		
3700	.00370		
3900	.00180		
TOTAL	.22750	TOTAL	.40270
TOTAL NON-SAPONIFIABLE CONC. (MG./G.) =			.04

TABLE 7.104

HEAVY HYDROCARBON ANALYSIS - STOCS - 1976

SAMPLE TYPE : SED

SAMPLE CODE : ANDF

PERIOD : SPRING

LOCATION : STATION - 4 LINE -III

HEXANE ELUATE

BENZENE ELUATE

RETENTION INDEX	CONCENTRATION (UG./G.)	RETENTION INDEX	CONCENTRATION (UG./G.)
1500	.00110	1888	.00070
1600	.00330	2024	.00430
1645	.00040	2147	.00080
1659	.00040	2220	.00210
1670	.00090	2340	.00040
1700	.00410	2367	.00060
1780	.00060	2531	.00090
1800	.00270	2592	.00090
1842	.00090	2870	.00450
1900	.00190	3052	.00470
1947	.00070	3313	.00090
2000	.00100	3443	.00160
2050	.00380	3840	.00300
2063	.00320		
2081	.00120		
2100	.00220		
2144	.00120		
2200	.00030		
2300	.00070		
2400	.00040		
2401	.00090		
2404	.00020		
2500	.00090		
2600	.00040		
2700	.00100		
2800	.00030		
2900	.00210		
3000	.00040		
3100	.00260		
3200	.00050		
3220	.00010		
3300	.00120		
3400	.00090		
TOTAL	.05130	TOTAL	.02540

TOTAL NON-SAPONIFIABLE CONC. (MG./G.) = .01

TABLE 7.105

HEAVY HYDROCARBON ANALYSIS - STUCCS - 1976

SAMPLE TYPE : SED
 SAMPLE CODE : ANDG PERIOD : SPRING
 LOCATION : STATION - 4 LINE -III

HEXANE ELUATE

BENZENE ELUATE

RETENTION INDEX	CONCENTRATION (UG./G.)	RETENTION INDEX	CONCENTRATION (UG./G.)
1600	.00310	1858	.00100
1642	.00060	2024	.00130
1670	.00080	2147	.00230
1700	.00330	2220	.00330
1750	.00030	2273	.00170
1800	.00340	2400	.00150
1844	.00040	2431	.00320
1900	.00150	2558	.00240
2000	.00110	3052	.00930
2050	.00300	3455	.00080
2063	.00200	3526	.00580
2081	.00050		
2100	.00160		
2147	.00160		
2200	.00090		
2273	.00050		
2300	.00130		
2400	.00190		
2401	.01230		
2500	.00290		
2600	.00360		
2700	.00540		
2800	.00470		
2900	.00770		
3000	.00370		
3100	.00620		
3200	.00130		
3220	.00030		
3300	.00260		
TOTAL	.07850	TOTAL	.03260

TOTAL NON-SAPONIFIABLE CONC. (MG./G.) = .01

TABLE 7.106

HEAVY HYDROCARBON ANALYSIS - STOCS - 1976

SAMPLE TYPE : SED

SAMPLE CODE : ANDH

PERIOD : SPRING

LOCATION : STATION - 4 LINE -III

HEXANE ELUATE

BENZENE ELUATE

RETENTION INDEX	CONCENTRATION (UG./G.)	RETENTION INDEX	CONCENTRATION (UG./G.)
1600	.01200	1679	.00160
1640	.00840	2069	.00200
1670	.00690	2117	.00300
1700	.01620	2145	.00270
1780	.00580	2284	.00340
1800	.01740	2310	.00330
1849	.01340	2409	.00350
1900	.00970	2499	.00360
2000	.00740	2877	.00470
2045	.02550	3049	.00420
2100	.00680	3152	.00380
2149	.02200	3326	.00320
2200	.00160	3494	.00420
2225	.02200	4000	.01410
2300	.00230		
2400	.00040		
2500	.00210		
2600	.00070		
2700	.00580		
2800	.00190		
2900	.01580		
3000	.00160		
3100	.01140		
3200	.00130		
3300	.00750		
TOTAL	.22790	TOTAL	.05730

TOTAL NON-SAPONIFIABLE CONC. (UG./G.) = .05

TABLE 7.107

HEAVY HYDROCARBON ANALYSIS - STUCCS - 1976

SAMPLE TYPE : SED

SAMPLE CODE : ANDI

PERIOD : SPRING

LOCATION : STATION - 4 LINE -III

HEXANE ELUATE

BENZENE ELUATE

RETENTION INDEX	CONCENTRATION (UG./G.)	RETENTION INDEX	CONCENTRATION (UG./G.)
1500	.00620	2018	.00350
1641	.00320	2140	.00290
1667	.00220	2207	.00150
1670	.00310	2393	.00110
1700	.00920	2852	.00230
1741	.00320	3035	.00620
1780	.00270	3226	.00230
1800	.01040	3296	.00230
1843	.00060	3426	.00140
1870	.00360	3830	.01870
1900	.01040		
2000	.00800		
2063	.01820		
2100	.01780		
2143	.01450		
2200	.01070		
2300	.00320		
2400	.00250		
2401	.02150		
2500	.00340		
2600	.00180		
2700	.00470		
2800	.00180		
2900	.01050		
3000	.00140		
3100	.01100		
3200	.00160		
3300	.00590		
TOTAL	.19870	TOTAL	.04220
TOTAL NON-SAPONIFIABLE CONC. (MG./G.) =		.01	

TABLE 7.108

HEAVY HYDROCARBON ANALYSIS - STOCS - 1976

SAMPLE TYPE : SED

SAMPLE CODE : ANDJ

PERIOD : SPRING

LOCATION : STATION - 4 LINE -III

HEXANE ELUATE

BENZENE ELUATE

RETENTION INDEX	CONCENTRATION (UG./G.)	RETENTION INDEX	CONCENTRATION (UG./G.)
1600	.00860	2229	.00420
1647	.00220	2293	.00120
1670	.00080	2348	.00110
1700	.00350	2642	.00140
1700	.00120	2836	.00170
1800	.00560	2898	.00230
1850	.00680	3060	.00760
1900	.00100	3520	.00060
2000	.00170	4080	.00220
2050	.01220		
2100	.00120		
2150	.00220		
2200	.00020		
2247	.00150		
2300	.00220		
2400	.00020		
2454	.00180		
2500	.00020		
2600	.00020		
2654	.00060		
2700	.00150		
2800	.00020		
2900	.00240		
3000	.00010		
3100	.00270		
3200	.00010		
3264	.00020		
3300	.00120		
3500	.00050		
TOTAL	.06280	TOTAL	.02230

TOTAL NON-SAPONIFIABLE CONC. (MG./G.) = .00

TABLE 7.109

HEAVY HYDROCARBON ANALYSIS - STUCCS - 1976

SAMPLE TYPE : SED
 SAMPLE CODE : ANEZ PERIOD : SPRING
 LOCATION : STATION - S LINE -III

HEXANE ELUATE		BENZENE ELUATE	
RETENTION INDEX	CONCENTRATION (UG./G.)	RETENTION INDEX	CONCENTRATION (UG./G.)
1640	.01620	2133	.00640
1670	.00970	2287	.00330
1760	.02390	2393	.00350
1780	.01400	2608	.00350
1840	.02280	2809	.00390
1930	.02310	2845	.00260
2000	.01480	3045	.01370
2056	.07360	3236	.01120
2088	.01650	3364	.00610
2100	.01560	3840	.09050
2147	.07710		
2200	.01740		
2300	.03740		
2400	.03210		
2401	.12000		
2500	.06710		
2600	.04810		
2700	.11800		
2800	.05740		
2900	.23700		
3000	.04780		
3100	.28000		
3200	.06080		
3240	.01590		
3300	.13400		
TOTAL	1.58030	TOTAL	.14470
TOTAL NON-SAPONIFIABLE CONC. (MG./G.) =			.04

TABLE 7.110

HEAVY HYDROCARBON ANALYSIS - STUCCS - 1976

SAMPLE TYPE : SED

SAMPLE CODE : ANFA

PERIOD : SPRING

LOCATION : STATION - 5 LINE -III

HEXANE ELUATE

BENZENE ELUATE

RETENTION INDEX	CONCENTRATION (UG./G.)	RETENTION INDEX	CONCENTRATION (UG./G.)
1440	.01520	2167	.00390
1448	.00650	2207	.00500
1500	.00920	2380	.00410
1572	.00480	2000	.00580
1600	.01910	2025	.00530
1674	.00880	2009	.00900
1700	.01900	2030	.00440
1700	.00440	3045	.02260
1800	.01460	3230	.01220
1900	.00670	3304	.00600
2000	.00510	3430	.01160
2045	.02910	3040	.10500
2100	.01240		
2154	.03650		
2200	.00440		
2300	.01030		
2400	.00770		
2401	.07040		
2500	.02520		
2600	.01120		
2700	.05140		
2800	.01530		
2900	.11600		
3000	.01180		
3100	.15900		
3200	.01290		
3300	.06240		
TOTAL	.75220	TOTAL	.19490

TOTAL NON-SAPONIFIABLE CONC. (MG./G.) = .03

TABLE 7.111

HEAVY HYDROCARBON ANALYSIS - STOCS - 1976

SAMPLE TYPE : SED

SAMPLE CODE : ANFB

PERIOD : SPRING

LOCATION : STATION - 5 LINE -III

HEXANE ELUATE

BENZENE ELUATE

RETENTION INDEX	CONCENTRATION (UG./G.)	RETENTION INDEX	CONCENTRATION (UG./G.)
1500	.01700	2018	.01620
1640	.01020	2140	.00770
1670	.00640	2052	.00370
1700	.01730	3043	.01660
1780	.00420	3165	.00680
1800	.02000	3235	.00820
1900	.01450	3030	.12500
2000	.03810		
2062	.06800		
2100	.02240		
2143	.05450		
2174	.01430		
2200	.01900		
2300	.02100		
2400	.02040		
2441	.05830		
2500	.03270		
2600	.02100		
2700	.06150		
2800	.02420		
2900	.12800		
3000	.02220		
3100	.16000		
3200	.02460		
3300	.07870		
3400	.03800		
TOTAL	.99950	TOTAL	.18420

TOTAL NON-SAPONIFIABLE CONC. (MG./G.) = .03

TABLE 7.112

HEAVY HYDROCARBON ANALYSIS - STOCS - 1976

SAMPLE TYPE : SED
 SAMPLE CODE : ANFC PERIOD : SPRING
 LOCATION : STATION - 5 LINE -III

HEXANE ELUATE		BENZENE ELUATE	
RETENTION INDEX	CONCENTRATION (UG./G.)	RETENTION INDEX	CONCENTRATION (UG./G.)
		1865	.02860
		2018	.01760
		2826	.02170
		3052	.04370
		3243	.03090
		4810	.54300
		4840	.31100
TOTAL	0	TOTAL	.99650
TOTAL NON-SAPONIFIABLE CONC. (MG./G.) =			.02

TABLE 7.113

HEAVY HYDROCARBON ANALYSIS - STOCS - 1976

SAMPLE TYPE : SED

SAMPLE CODE : ANFD

PERIOD : SPRING

LOCATION : STATION - 5 LINE - III

HEXANE ELUATE

BENZENE ELUATE

RETENTION INDEX	CONCENTRATION (UG./G.)	RETENTION INDEX	CONCENTRATION (UG./G.)
1600	.01720	2035	.00210
1670	.01290	2077	.00170
1700	.14600	2293	.00080
1780	.00720	3217	.00230
1800	.01350	3313	.00210
1900	.00630	3450	.00090
2000	.00490	3910	.04330
2035	.00690		
2100	.00990		
2155	.01150		
2200	.01150		
2300	.01630		
2400	.01510		
2500	.02430		
2600	.01790		
2700	.03760		
2800	.01930		
2900	.10000		
3000	.01560		
3100	.12700		
3180	.09980		
3200	.01590		
3300	.05900		
TOTAL	.79760	TOTAL	.05320

TOTAL NON-SAPONIFIABLE CONC. (MG./G.) = .01

TABLE 7.114

HEAVY HYDROCARBON ANALYSIS - STUCCS - 1976

SAMPLE TYPE : SED

SAMPLE CODE : ANGS

PERIOD : SPRING

LOCATION : STATION - 6 LINE -III

HEXANE ELUATE

BENZENE ELUATE

RETENTION INDEX	CONCENTRATION (UG./G.)	RETENTION INDEX	CONCENTRATION (UG./G.)
1400	.01580	2071	.01220
1444	.00520	2213	.00430
1500	.00210	2235	.00370
1600	.01820	2431	.00330
1646	.00870	2577	.00380
1670	.00320	2646	.01120
1700	.01100	2685	.00490
1780	.00640	2850	.00890
1800	.01390	2908	.00840
1848	.01090	2983	.00560
1900	.00670	3392	.00870
2000	.00440	4067	.14900
2050	.00930		
2100	.00400		
2150	.00370		
2200	.00220		
2300	.00510		
2400	.00270		
2500	.00790		
2600	.00420		
2700	.01900		
2800	.00610		
2900	.04350		
3000	.00780		
3100	.00330		
3200	.00720		
3249	.00590		
3300	.02450		
3375	.00820		
3400	.00160		
3500	.00690		
TOTAL	.36040	TOTAL	.22400

TOTAL NON-SAPONIFIABLE CONC. (MG./G.) = .01

TABLE 7.115

HEAVY HYDROCARBON ANALYSIS - STUCCS - 1976

SAMPLE TYPE : SED

SAMPLE CODE : ANGT

PERIOD : SPRING

LOCATION : STATION - 6 LINE -III

HEXANE ELUATE		BENZENE ELUATE	
RETENTION INDEX	CONCENTRATION (UG./G.)	RETENTION INDEX	CONCENTRATION (UG./G.)
1400	.04370	1991	.00290
1441	.01660	2072	.00280
1540	.00670	2095	.00270
1600	.05010	2211	.01050
1644	.04430	2416	.00870
1670	.02740	2559	.00720
1700	.06960	2731	.00600
1700	.02570	2839	.00730
1800	.00520	2891	.01640
1846	.10800	3396	.01170
1900	.06840	4070	.03960
2000	.03030		
2040	.04210		
2100	.02740		
2148	.00280		
2200	.01340		
2249	.00950		
2279	.01280		
2300	.01190		
2400	.01040		
2500	.02310		
2600	.01240		
2700	.05470		
2800	.02320		
2900	.12100		
3000	.02460		
3100	.14800		
3200	.02460		
3300	.09400		
3352	.01890		
3375	.02300		
3400	.00560		
3451	.04370		
3500	.02310		
TOTAL	1.27420	TOTAL	.11580

TOTAL NON-SAPONIFIABLE CONC. (MG./G.) = .01

TABLE 7.116

HEAVY HYDROCARBON ANALYSIS - STUCS - 1976

SAMPLE TYPE : SED
 SAMPLE CODE : ANGR PERIOD : SPRING
 LOCATION : STATION - 6 LINE -III

HEXANE ELUATE

BENZENE ELUATE

RETENTION INDEX	CONCENTRATION (UG./G.)	RETENTION INDEX	CONCENTRATION (UG./G.)
1600	.01100		
1669	.00530		
1670	.00380		
1700	.00630		
1780	.00020		
1800	.00540		
1858	.00310		
1900	.00220		
2000	.00200		
2047	.00970		
2082	.00060		
2100	.00240		
2144	.01400		
2200	.00120		
2300	.00810		
2400	.00330		
2500	.01420		
2600	.00660		
2700	.03800		
2800	.01720		
2900	.09520		
3000	.01350		
3055	.00440		
3100	.16300		
3200	.01280		
3236	.00590		
3300	.12300		
3400	.01590		
3500	.07160		
TOTAL	.65990	TOTAL	.4

TOTAL NON-SAPONIFIABLE CONC. (MG./G.) = .43

TABLE 7.117

HEAVY HYDROCARBON ANALYSIS - STOCS - 1976

SAMPLE TYPE : SED

SAMPLE CODE : ANGU

PERIOD : SPRING

LOCATION : STATION - 6 LINE -III

HEXANE ELUATE

BENZENE ELUATE

RETENTION INDEX	CONCENTRATION (UG./G.)	RETENTION INDEX	CONCENTRATION (UG./G.)
1600	.00100	1800	.00050
1670	.00030	1900	.00190
1700	.00170	2000	.00010
1780	.00020	2100	.00040
1800	.00150	2144	.00100
1900	.00300	2163	.00460
2000	.00100	2200	.00210
2047	.00150	2300	.00100
2082	.00020	2400	.00250
2100	.00280	2500	.00350
2144	.00200	2600	.00490
2200	.00290	2700	.00690
2300	.00130	2800	.00720
2400	.00110	2900	.00750
2500	.00330	3000	.00580
2600	.00140	3054	.00170
2700	.00600	3100	.00580
2800	.00270	3155	.00400
2900	.01370	3200	.00500
3000	.00270	3300	.00550
3055	.00040	3400	.00120
3100	.01760	3480	.00110
3200	.00230	3500	.00030
3236	.00020	3870	.01970
3300	.01060		
3350	.00090		
3300	.00030		
3400	.00040		
3450	.00210		
3500	.00410		
3500	.00210		
3600	.00100		
TOTAL	.09290	TOTAL	.09420

TOTAL NON-SAPONIFIABLE CONC. (MG./G.) = .18

TABLE 7.118

HEAVY HYDROCARBON ANALYSIS - STOCS - 1976

SAMPLE TYPE : SED

SAMPLE CODE : ANGV

PERIOD : SPRING

LOCATION : STATION - 6 LINE -III

HEXANE ELUATE

BENZENE ELUATE

RETENTION INDEX	CONCENTRATION (UG./G.)	RETENTION INDEX	CONCENTRATION (UG./G.)
1600	.00200	2173	.00320
1670	.00210	2393	.00580
1700	.00330	2608	.00440
1780	.00140	2818	.00630
1800	.00720	2855	.00890
1861	.00680	3045	.01730
1900	.00570	3245	.00800
2000	.00290	3445	.00770
2065	.01170	3850	.05680
2100	.00310		
2144	.01040		
2200	.01630		
2300	.00800		
2400	.00520		
2500	.01470		
2600	.00790		
2700	.02970		
2800	.01500		
2900	.00970		
3000	.01820		
3100	.00840		
3200	.02270		
3300	.04930		
3400	.03870		
TOTAL	.44180	TOTAL	.11840

TOTAL NON-SAPONIFIABLE CONC. (MG./G.) = .02

TABLE 7.119

HEAVY HYDROCARBON ANALYSIS - STOCS - 1976

SAMPLE TYPE : SED
 SAMPLE CODE : ASBU PERIOD : FALL
 LOCATION : STATION - 6 LINE -III

HEXANE ELUATE

BENZENE ELUATE

RETENTION INDEX	CONCENTRATION (UG./G.)	RETENTION INDEX	CONCENTRATION (UG./G.)
1600	.01640	1959	.02240
1639	.00610	2065	.01920
1670	.00670	2173	.02290
1700	.03330	2827	.06540
1780	.00380	3027	.05790
1800	.03320	3418	.02860
1900	.02270	3760	.23600
2000	.01470	4020	.17400
2063	.01450		
2100	.01470		
2140	.02730		
2200	.02020		
2300	.02350		
2400	.01880		
2500	.04750		
2600	.03950		
2700	.11200		
2800	.03910		
2900	.18100		
3000	.03840		
3100	.19500		
3200	.05100		
3300	.12500		
3400	.14400		
TOTAL	1.22900	TOTAL	.02640

TOTAL NON-SAPONIFIABLE CONC. (MG./G.) = .01

TABLE 7.120

HEAVY HYDROCARBON ANALYSIS - STUCS - 1976

SAMPLE TYPE : SED

SAMPLE CODE : ARTM

PERIOD : FALL

LOCATION : STATION - 1 LINE -III

HEXANE ELUATE

BENZENE ELUATE

RETENTION INDEX	CONCENTRATION (UG./G.)	RETENTION INDEX	CONCENTRATION (UG./G.)
1400	.00800	2120	.03530
1500	.00370	2287	.03440
1600	.03260	2809	.04140
1670	.02120	2843	.13900
1700	.05500	3235	.05130
1780	.00570	3304	.05860
1800	.03360	3357	.07990
1900	.02200	3426	.14500
2000	.03110	3800	.57200
2044	.12700	3900	.24700
2100	.03920		
2154	.09510		
2200	.03060		
2300	.06670		
2400	.06720		
2401	.15300		
2500	.01200		
2600	.11000		
2700	.19000		
2800	.11300		
2900	.28600		
3000	.13200		
3100	.32200		
3200	.06200		
3300	.17200		
TOTAL	2.19130	TOTAL	1.40390
TOTAL NON-SAPONIFIABLE CONC. (MG./G.) = .02			

TABLE 7.121

HEAVY HYDROCARBON ANALYSIS - STUGS - 1976

SAMPLE TYPE : SED
 SAMPLE CODE : ARVK PERIOD : FALL
 LOCATION : STATION - 2 LINE -III

HEXANE ELUATE

BENZENE ELUATE

RETENTION INDEX	CONCENTRATION (UG./G.)	RETENTION INDEX	CONCENTRATION (UG./G.)
1600	.00550	1933	.00710
1670	.00840	2167	.01180
1700	.00560	2326	.00410
1780	.00350	2659	.01850
1800	.01980	2933	.06230
1900	.00500	2992	.03780
2000	.00850	3075	.12500
2044	.04080	3192	.12600
2100	.00630	3333	.05780
2200	.00410		
2300	.00940		
2400	.00790		
2500	.02790		
2600	.01340		
2700	.04960		
2800	.01570		
2900	.08620		
3000	.01200		
3100	.08810		
3200	.00440		
3300	.02640		

TOTAL .44850 TOTAL .45040

TOTAL NON-SAPONIFIABLE CONC. (MG./G.) = .02

TABLE 7.122

HEAVY HYDROCARBON ANALYSIS - STOCS - 1976

SAMPLE TYPE : SED

SAMPLE CODE : ARXM

PERIOD : FALL

LOCATION : STATION - 3 LINE -III

HEXANE ELUATE

BENZENE ELUATE

RETENTION INDEX	CONCENTRATION (UG./G.)	RETENTION INDEX	CONCENTRATION (UG./G.)
1400	.00490	2153	.02220
1500	.00200	2615	.01100
1600	.00920	2826	.02220
1650	.00300	2861	.02140
1670	.00240	3012	.05440
1700	.00650	3243	.02120
1780	.00200	3610	.18100
1800	.00910		
1850	.00300		
1900	.00320		
2000	.00450		
2030	.00140		
2048	.00160		
2100	.00430		
2200	.00320		
2300	.00360		
2400	.00280		
2500	.00580		
2600	.00310		
2700	.01680		
2800	.00520		
2900	.03460		
3000	.00380		
3100	.03840		
3200	.00220		
3300	.00430		
TOTAL	.18090	TOTAL	.33340

TOTAL NON-SAPONIFIABLE CONC. (MG./G.) = .02

TABLE 7.123

HEAVY HYDROCARBON ANALYSIS - STOCS - 1976

SAMPLE TYPE : SED
 SAMPLE CODE : ARZC
 LOCATION : STATION - 4 LINE -III PERIOD : FALL

HEXANE ELUATE

BENZENE ELUATE

RETENTION INDEX	CONCENTRATION (UG./G.)	RETENTION INDEX	CONCENTRATION (UG./G.)
1640	.00370	1559	.02980
1670	.00220	1614	.05330
1700	.01060	1659	.01380
1780	.00130	1691	.04660
1800	.01620	1727	.04610
1855	.00510	1786	.02660
1900	.00570	2039	.01150
2000	.00810	2147	.01750
2038	.08320	2160	.03190
2069	.03410	2247	.01050
2100	.00840	2654	.01680
2200	.00230	3067	.04070
2300	.00650		
2400	.00300		
2500	.00690		
2600	.00290		
2700	.01400		
2800	.00350		
2900	.02790		
3000	.00530		
3100	.03500		
3200	.00180		
3300	.01120		
TOTAL	.29950	TOTAL	.34510
TOTAL NON-SAPONIFIABLE CONC. (MG./G.) =		.01	

TABLE 7.124

HEAVY HYDROCARBON ANALYSIS - STUCCS - 1976

SAMPLE TYPE : SED

SAMPLE CODE : ASAL

PERIOD : FALL

LOCATION : STATION - 5 LINE -III

HEXANE ELUATE

BENZENE ELUATE

RETENTION INDEX	CONCENTRATION (UG./G.)	RETENTION INDEX	CONCENTRATION (UG./G.)
1600	.01500	2140	.17100
1670	.01280	2173	.05210
1700	.02410	2631	.02700
1780	.00380	2800	.04970
1800	.02900	2836	.06140
1900	.02120	3036	.18700
2000	.01360	3173	.07770
2063	.07290	3227	.06020
2100	.02390	3273	.04880
2140	.03190	3291	.05140
2200	.03020	3410	.08190
2300	.03240	3770	.59400
2400	.02260		
2500	.06120		
2600	.04020		
2700	.15700		
2800	.05380		
2900	.23800		
3000	.06550		
3100	.29600		
3200	.05920		
3300	.21500		
TOTAL	1.52730	TOTAL	1.50220
TOTAL NON-SAPONIFIABLE CONC. (MG./G.) =		.02	

TABLE 7.125

HEAVY HYDROCARBON ANALYSIS - STUCCS - 1976

SAMPLE TYPE : SED
 SAMPLE CODE : AIIW PERIOD : WINTER
 LOCATION : STATION - 1 LINE -IV

HEXANE ELUATE		BENZENE ELUATE	
RETENTION INDEX	CONCENTRATION (UG./G.)	RETENTION INDEX	CONCENTRATION (UG./G.)
1600	.00290	1774	.01010
1670	.00570	2053	.01690
1700	.00920	2209	.00870
1780	.00480	2393	.00460
1800	.01180	3149	.01330
1900	.01080	3242	.01330
2000	.00960	3880	.09720
2100	.01210		
2200	.02350		
2300	.01370		
2400	.02380		
2500	.03140		
2600	.02090		
2700	.03310		
2800	.01890		
2900	.07940		
3000	.03800		
3100	.11200		
3200	.02360		
3300	.10400		
3400	.06000		
TOTAL	.64920	TOTAL	.16410
TOTAL NON-SAPONIFIABLE CONC. (UG./G.) =			.02

TABLE 7.126

HEAVY HYDROCARBON ANALYSIS - STUCCS - 1976

SAMPLE TYPE : SED

SAMPLE CODE : AILD

PERIOD : WINTER

LOCATION : STATION - 2 LINE -IV

HEXANE ELUATE

BENZENE ELUATE

RETENTION INDEX	CONCENTRATION (UG./G.)	RETENTION INDEX	CONCENTRATION (UG./G.)
1700	.00270	2071	.01410
1800	.00190	2717	.01260
1900	.00190	2996	.00620
2000	.00220	3183	.01180
2100	.00440	3268	.02150
2200	.00450	3900	.04940
2300	.00520		
2400	.01330		
2500	.02010		
2600	.00890		
2700	.02800		
2800	.00630		
2900	.06050		
3000	.01500		
3100	.00280		
3200	.02030		
3300	.03630		
TOTAL	.31490	TOTAL	.11560
TOTAL NON-SAPONIFIABLE CONC. (MG./G.) =		.02	

TABLE 7.127

HEAVY HYDROCARBON ANALYSIS - STUCS - 1976

SAMPLE TYPE : SED

SAMPLE CODE : AIMS

PERIOD : WINTER

LOCATION : STATION - 3 LINE -IV

HEXANE ELUATE

BENZENE ELUATE

RETENTION INDEX	CONCENTRATION (UG./G.)	RETENTION INDEX	CONCENTRATION (UG./G.)
2000	.01970	1593	.31300
2100	.09880	1669	.48500
2200	.05740	1697	.79900
2300	.00280	1766	.35600
2400	.02730	2008	.42700
2500	.04080	2092	.64400
2600	.03740	2590	.54000
2700	.03880		
2800	.02620		
2900	.03560		
3000	.00760		
3100	.04230		
3200	.00230		
3300	.00240		
TOTAL	.43940	TOTAL	3.57000
TOTAL NON-SAPONIFIABLE CONC. (MG./G.) =		.03	

TABLE 7.128

HEAVY HYDROCARBON ANALYSIS - STUCCS - 1976

SAMPLE TYPE : SED
 SAMPLE CODE : AIUG PERIOD : WINTER
 LOCATION : STATION - 4 LINE -IV

HEXANE ELUATE

BENZENE ELUATE

RETENTION INDEX	CONCENTRATION (UG./G.)	RETENTION INDEX	CONCENTRATION (UG./G.)
1500	.00060	1627	.03010
1600	.00160	1714	.02080
1670	.00130	1890	.00580
1700	.00410	2022	.01620
1780	.00090	3700	.01260
1800	.00410		
1900	.00530		
2000	.00480		
2100	.00410		
2200	.01110		
2300	.01130		
2400	.01760		
2500	.02290		
2600	.02040		
2700	.01800		
2800	.01320		
2900	.02110		
3000	.00900		
3100	.01500		
3200	.00580		
3300	.01050		
TOTAL	.20350	TOTAL	.08550
TOTAL NON-SAPONIFIABLE CONC. (MG./G.) =		.01	

TABLE 7.129

HEAVY HYDROCARBON ANALYSIS - STUCS - 1976

SAMPLE TYPE : SED

SAMPLE CODE : AIQI

PERIOD : WINTER

LOCATION : STATION - 5 LINE -IV

HEXANE ELUATE

BENZENE ELUATE

RETENTION INDEX	CONCENTRATION (UG./G.)	RETENTION INDEX	CONCENTRATION (UG./G.)
1900	.00330	2133	.00140
2000	.00360	2649	.00910
2100	.00870	2725	.00910
2200	.00790	3001	.02900
2300	.01910	3104	.04040
2400	.02910	3200	.04070
2500	.02930	3760	.02460
2600	.01550		
2700	.01960		
2800	.00650		
2900	.03060		
3000	.00360		
3100	.02940		
3200	.00260		
3300	.01900		
3400	.00070		
3500	.01070		
TOTAL	.24000	TOTAL	.15430
TOTAL NON-SAPONIFIABLE CONC. (MG./G.) =		.00	

TABLE 7.130

HEAVY HYDROCARBON ANALYSIS - STUCCS - 1976

SAMPLE TYPE : SED

SAMPLE CODE : AIRZ

PERIOD : WINTER

LOCATION : STATION - 6 LINE -IV

HEXANE ELUATE

BENZENE ELUATE

RETENTION INDEX	CONCENTRATION (UG./G.)	RETENTION INDEX	CONCENTRATION (UG./G.)
1670	.00300	2069	.00140
1700	.00350	2206	.00100
1800	.00030	2590	.00430
1900	.00360	3063	.01450
2000	.00250		
2100	.00640		
2200	.01110		
2300	.01950		
2400	.03040		
2500	.03350		
2600	.03130		
2700	.04370		
2800	.03720		
2900	.11000		
3000	.00140		
3100	.06500		
3200	.02390		
3300	.04340		
TOTAL	.46970	TOTAL	.02120
TOTAL NON-SAPONIFIABLE CONC. (MG./G.) =		.01	

TABLE 7.131

HEAVY HYDROCARBON ANALYSIS - STUCCS - 1976

SAMPLE TYPE : SED
 SAMPLE CODE : AIUA
 LOCATION : STATION - 7 LINE -IV PERIOD : WINTER

HEXANE ELUATE		BENZENE ELUATE	
RETENTION INDEX	CONCENTRATION (UG./G.)	RETENTION INDEX	CONCENTRATION (UG./G.)
1900	.02150	1531	1.05000
2000	.01160	1593	2.26000
2100	.00430	1662	2.18000
2200	.03010	1690	1.07000
2300	.03070	1705	1.01000
2400	.05510	1759	.64800
2500	.00840	2000	.43300
2600	.08850		
2700	.10800		
2800	.08180		
2900	.14800		
3000	.07920		
TOTAL	.75320	TOTAL	8.65100
TOTAL NON-SAPONIFIABLE CONC. (MG./G.) = .02			

TABLE 7.132

HEAVY HYDROCARBON ANALYSIS - STUCCS - 1976

SAMPLE TYPE : SED

SAMPLE CODE : ANIP

PERIOD : SPRING

LOCATION : STATION - 1 LINE -IV

HEXANE ELUATE

BENZENE ELUATE

RETENTION INDEX	CONCENTRATION (UG./G.)	RETENTION INDEX	CONCENTRATION (UG./G.)
1600	.01960	1783	.00510
1653	.00360	1871	.00380
1670	.00580	1985	.00790
1700	.00970	2233	.00780
1780	.00300	2431	.00240
1800	.01400	2646	.00210
1850	.00980	2685	.00160
1900	.00680	2842	.00420
2000	.00410	2908	.00370
2038	.01210	2983	.00250
2050	.02500	3258	.00720
2100	.00520	4070	.00790
2150	.01240		
2200	.00060		
2253	.00150		
2300	.01000		
2400	.00390		
2500	.00930		
2600	.00340		
2700	.01680		
2800	.00650		
2900	.03750		
3000	.00500		
3100	.04510		
3200	.00300		
3300	.02640		
3400	.00560		
3500	.02140		
TOTAL	.32890	TOTAL	.12620

TOTAL NON-SAPONIFIABLE CONC. (MG./G.) = .01

TABLE 7.133

HEAVY HYDROCARBON ANALYSIS - STOCS - 1976

SAMPLE TYPE : SED
 SAMPLE CODE : ANIO PERIOD : SPRING
 LOCATION : STATION - 1 LINE -IV

HEXANE ELUATE		BENZENE ELUATE	
RETENTION INDEX	CONCENTRATION (UG./G.)	RETENTION INDEX	CONCENTRATION (UG./G.)
1600	.00630	2065	.00430
1643	.00140	2147	.00010
1670	.00080	2423	.00260
1700	.00280	2861	.00850
1745	.00050	2922	.00390
1780	.00060	3052	.01670
1800	.00380	3243	.01230
1847	.00160	3304	.02610
1900	.00220	3374	.04710
2000	.00200	3810	.12500
2053	.00870		
2052	.00210		
2100	.00350		
2200	.00130		
2300	.00200		
2400	.00220		
2401	.01340		
2500	.00410		
2600	.00330		
2700	.00770		
2800	.00390		
2900	.01470		
3000	.00360		
3100	.01580		
3200	.00280		
3220	.00110		
3300	.00760		
3400	.00260		
3500	.00300		
3600	.00390		
3700	.00260		
TOTAL	.13190	TOTAL	.24680
TOTAL NON-SAPONIFIABLE CONC. (MG./G.) =		.12	

TABLE 7.134

HEAVY HYDROCARBON ANALYSIS - STOCS - 1976

SAMPLE TYPE : SED

SAMPLE CODE : ANIN

PERIOD : SPRING

LOCATION : STATION - 1 LINE -IV

HEXANE ELUATE

BENZENE ELUATE

RETENTION INDEX	CONCENTRATION (UG./G.)	RETENTION INDEX	CONCENTRATION (UG./G.)
1600	.00350	1806	.00600
1670	.00320	2071	.00390
1700	.00970	3182	.00710
1780	.00200	3291	.00680
1800	.00840	3364	.00400
1900	.00550	3545	.01920
2000	.00470	3730	.01130
2033	.00960	3790	.00610
2100	.00630	4080	.04010
2150	.00500		
2200	.00500		
2300	.00630		
2400	.00500		
2500	.00910		
2600	.00570		
2700	.02120		
2800	.00910		
2900	.02210		
3000	.00620		
3100	.02070		
3200	.00620		
3300	.01970		
TOTAL	.19480	TOTAL	.16450
TOTAL NON-SAPONIFIABLE CONC. (MG./G.) =		.01	

TABLE 7.135

HEAVY HYDROCARBON ANALYSIS - STUCCS - 1976

SAMPLE TYPE : SED

SAMPLE CODE : ANIM

PERIOD : SPRING

LOCATION : STATION - 1 LINE -IV

HEXANE ELUATE		BENZENE ELUATE	
RETENTION INDEX	CONCENTRATION (UG./G.)	RETENTION INDEX	CONCENTRATION (UG./G.)
1660	.00610	1795	.00040
1650	.00080	1894	.00030
1670	.00050	2173	.00110
1700	.00190	2405	.00150
1780	.00020	3017	.00130
1800	.00180	3083	.00110
1900	.00130	3209	.00160
2000	.00040	3246	.00180
2044	.00880	3345	.00820
2075	.00090	3420	.01010
2100	.00160	3900	.11500
2150	.00770		
2200	.00020		
2300	.00220		
2400	.00150		
2500	.00460		
2600	.00270		
2700	.01050		
2800	.00500		
2900	.01580		
3000	.00320		
3058	.00090		
3100	.01990		
3200	.00190		
3240	.00070		
3300	.00890		
3373	.00140		
3500	.00200		
TOTAL	.11340	TOTAL	.14240
TOTAL NON-SAPONIFIABLE CONC. (MG./G.) =		.03	

TABLE 7.136

HEAVY HYDROCARBON ANALYSIS - STUCCS - 1976

SAMPLE TYPE : SED

SAMPLE CODE : ANIL

PERIOD : SPRING

LOCATION : STATION - 1 LINE -IV

HEXANE ELUATE

BENZENE ELUATE

RETENTION INDEX	CONCENTRATION (UG./G.)	RETENTION INDEX	CONCENTRATION (UG./G.)
1600	.01400	1785	.00130
1644	.00860	1875	.00230
1670	.00650	2063	.00320
1700	.01460	2221	.00340
1780	.00990	2278	.00250
1800	.02410	2409	.00180
1850	.01830	2873	.00190
1900	.01230	3054	.00210
2000	.01780	3184	.00160
2047	.03310	3284	.00130
2079	.00550	3322	.00160
2100	.01070	3486	.00260
2152	.01780	3990	.02970
2200	.00550		
2300	.00700		
2400	.00740		
2500	.01160		
2600	.00580		
2700	.01740		
2800	.00690		
2900	.03220		
3000	.00010		
3100	.03800		
3200	.00490		
3227	.00280		
3300	.02270		
3370	.00620		
3442	.00490		
3500	.00830		
3594	.00560		
TOTAL	.38970	TOTAL	.05530

TOTAL NON-SAPONIFIABLE CONC. (MG./G.) = .11

TABLE 7.137

HEAVY HYDROCARBON ANALYSIS - STOCS - 1976

SAMPLE TYPE : SED

SAMPLE CODE : ANKN

PERIOD : SPRING

LOCATION : STATION - 2 LINE -IV

HEXANE ELUATE

BENZENE ELUATE

RETENTION INDEX	CONCENTRATION (UG./G.)	RETENTION INDEX	CONCENTRATION (UG./G.)
1400	.01250	1879	.00300
1450	.00380	2071	.02520
1500	.00280	2201	.02340
1600	.02270	2233	.03530
1609	.01000	2348	.01580
1670	.00500	2562	.02730
1700	.01940	2900	.04610
1780	.00870	2987	.02300
1800	.01800	3217	.02680
1850	.00960	3420	.03550
1900	.00930	4120	.07950
2000	.00500		
2052	.01200		
2100	.00610		
2151	.00610		
2200	.00270		
2300	.01350		
2400	.00570		
2500	.01240		
2600	.00700		
2700	.03010		
2800	.00900		
2900	.06240		
3000	.01000		
3100	.06350		
3200	.00530		
3250	.00300		
3300	.03420		
3372	.00980		
3400	.00290		
3454	.00190		
3500	.01240		
TOTAL	.43900	TOTAL	.34090

TOTAL NON-SAPONIFIABLE CONC. (MG./G.) = .04

TABLE 7.138

HEAVY HYDROCARBON ANALYSIS - STUCCS - 1976

SAMPLE TYPE : SED

SAMPLE CODE : ANKP

PERIOD : SPRING

LOCATION : STATION - 2 LINE -IV

HEXANE ELUATE

BENZENE ELUATE

RETENTION INDEX	CONCENTRATION (UG./G.)	RETENTION INDEX	CONCENTRATION (UG./G.)
1600	.02630	2070	.01650
1670	.01270	2234	.02160
1700	.01560	2413	.00730
1780	.00300	2637	.01050
1800	.01840	2906	.01400
1850	.00570		
1900	.00620		
2000	.00590		
2100	.00450		
2150	.00600		
2200	.00170		
2300	.00680		
2400	.00230		
2457	.00360		
2500	.01170		
2600	.00280		
2700	.02450		
2800	.00650		
2900	.05100		
3000	.00770		
3100	.05770		
3200	.00250		
3300	.03200		
3400	.00390		
3500	.02360		
TOTAL	.54260	TOTAL	.06990

TOTAL NON-SAPONIFIABLE CONC. (MG./G.) = .02

TABLE 7.139

HEAVY HYDROCARBON ANALYSIS - STOCS - 1976

SAMPLE TYPE : SED

SAMPLE CODE : ANKO

PERIOD : SPRING

LOCATION : STATION - 2 LINE -IV

HEXANE ELUATE

BENZENE ELUATE

RETENTION INDEX	CONCENTRATION (UG./G.)	RETENTION INDEX	CONCENTRATION (UG./G.)
1600	.01970	2029	.00190
1640	.00940	2071	.00130
1666	.00390	2153	.00310
1670	.00410	2592	.00170
1700	.01400	2623	.00080
1780	.00310	2861	.00370
1800	.01430	3052	.00820
1900	.00880	3365	.00210
2000	.00470	3435	.00450
2001	.02300	3840	.03920
2090	.01010		
2100	.01460		
2143	.01920		
2200	.00610		
2300	.01010		
2400	.01020		
2401	.05070		
2500	.01930		
2600	.01460		
2700	.03420		
2800	.01310		
2900	.07330		
3000	.01050		
3100	.07720		
3200	.02270		
3300	.04760		
TOTAL	.53870	TOTAL	.06650

TOTAL NON-SAPONIFIABLE CONC. (MG./G.) = .02

TABLE 7.140

HEAVY HYDROCARBON ANALYSIS - STOCS - 1976

SAMPLE TYPE : SED

SAMPLE CODE : ANKM

PERIOD : SPRING

LOCATION : STATION - 2 LINE -IV

HEXANE ELUATE

BENZENE ELUATE

RETENTION INDEX	CONCENTRATION (UG./G.)	RETENTION INDEX	CONCENTRATION (UG./G.)
1600	.00360	2068	.00080
1646	.00110	2144	.00200
1670	.00040	3046	.00270
1700	.00210	3880	.00550
1750	.00040	3920	.00110
1800	.00310		
1844	.00240		
1900	.00260		
2000	.00250		
2047	.00130		
2100	.00250		
2200	.00250		
2300	.00140		
2400	.00830		
2500	.00190		
2600	.00100		
2700	.00410		
2800	.00130		
2900	.00890		
3000	.00160		
3100	.01060		
3200	.00090		
3230	.00030		
3300	.00590		
3400	.00070		
3500	.00510		
3600	.00180		
TOTAL	.07830	TOTAL	.01210
TOTAL NON-SAPONIFIABLE CONC. (MG./G.) =		.01	

TABLE 7.141

HEAVY HYDROCARBON ANALYSIS - STUCCS - 1976

SAMPLE TYPE : SED
 SAMPLE CODE : ANKL PERIOD : SPRING
 LOCATION : STATION - 2 LINE -IV

HEXANE ELUATE

BENZENE ELUATE

RETENTION INDEX	CONCENTRATION (UG./G.)	RETENTION INDEX	CONCENTRATION (UG./G.)
1600	.00360	2047	.00540
1670	.00190	2120	.00190
1700	.00630	2380	.00210
1743	.00150	2600	.00230
1780	.00200	2835	.00180
1800	.01210	3026	.01200
1843	.00480	3348	.01250
1900	.00970	3417	.00240
1972	.00350	3820	.03910
2000	.01070		
2061	.00770		
2100	.01370		
2144	.00680		
2200	.01220		
2300	.01300		
2400	.01620		
2401	.00810		
2500	.02220		
2600	.02070		
2700	.04890		
2800	.02550		
2900	.10700		
3000	.03040		
3100	.10100		
3200	.02380		
3248	.00700		
3300	.05970		
3342	.02270		
3400	.05670		
TOTAL	.71940	TOTAL	.07950

TOTAL NON-SAPONIFIABLE CONC. (MG./G.) = .02

TABLE 7.142

HEAVY HYDROCARBON ANALYSIS - STUCCS - 1976

SAMPLE TYPE : SED

SAMPLE CODE : ANMM

PERIOD : SPRING

LOCATION : STATION - 3 LINE -IV

HEXANE ELUATE

BENZENE ELUATE

RETENTION INDEX	CONCENTRATION (UG./G.)	RETENTION INDEX	CONCENTRATION (UG./G.)
1600	.10000	2073	.03050
1670	.01290	2127	.06340
1700	.01460	2202	.04670
1780	.00480	2235	.05220
1800	.01950	2500	.11200
1850	.01060	2711	.05420
1900	.00650	2901	.12100
2000	.00560	3070	.07790
2053	.00550	3101	.05000
2100	.00630	3290	.08260
2153	.00200	3403	.08320
2200	.00140	3536	.04600
2300	.01540	4110	.21300
2400	.00460		
2462	.00900		
2500	.01260		
2600	.00510		
2700	.03390		
2800	.01150		
2900	.06790		
3000	.00800		
3100	.07810		
3200	.00370		
3264	.01070		
3300	.03700		
3400	.01720		
3464	.00530		
3500	.03260		
TOTAL	.54230	TOTAL	1.03270
TOTAL NON-SAPONIFIABLE CONC. (MG./G.) = .14			

TABLE 7.143

HEAVY HYDROCARBON ANALYSIS - STOCS - 1976

SAMPLE TYPE : SED

SAMPLE CODE : ANML

PERIOD : SPRING

LOCATION : STATION - 3 LINE -IV

HEXANE ELUATE

BENZENE ELUATE

RETENTION INDEX	CONCENTRATION (UG./G.)	RETENTION INDEX	CONCENTRATION (UG./G.)
1400	.01060	1882	.00090
1500	.00050	2018	.00520
1600	.01750	2393	.00060
1639	.01150	2754	.00090
1670	.00420	2852	.00330
1700	.01270	3043	.01120
1741	.00310	3235	.00470
1780	.00250	3420	.00210
1800	.01430	3826	.02870
1841	.00390		
1900	.00730		
2000	.00590		
2061	.01270		
2100	.01320		
2143	.01240		
2200	.00570		
2300	.00830		
2400	.00690		
2401	.04470		
2500	.01460		
2600	.00820		
2700	.02830		
2800	.01210		
2900	.05520		
3000	.00960		
3100	.00700		
3200	.02570		
3254	.00870		
3300	.04290		
3350	.01640		
3400	.05140		
3500	.02280		
TOTAL	.56080	TOTAL	.05760
TOTAL NON-SAPONIFIABLE CONC. (MG./G.) =		.01	

TABLE 7.144

HEAVY HYDROCARBON ANALYSIS - STUCCS - 1976

SAMPLE TYPE : SED

SAMPLE CODE : ANMK

PERIOD : SPRING

LOCATION : STATION - 3 LINE -IV

HEXANE ELUATE

BENZENE ELUATE

RETENTION INDEX	CONCENTRATION (UG./G.)	RETENTION INDEX	CONCENTRATION (UG./G.)
1400	.01940	2198	.00920
1441	.00670	2284	.01160
1500	.00190	2415	.01270
1575	.00610	2610	.01050
1600	.05910	2730	.01290
1643	.04240	2878	.02960
1670	.02270	3052	.02290
1700	.05100	3191	.02160
1700	.01800	3270	.02260
1800	.08840	3383	.02880
1845	.07850	3506	.02530
1900	.06550	3665	.02220
2000	.06270	4010	.09300
2046	.08750		
2100	.06650		
2140	.07460		
2200	.06950		
2300	.05470		
2400	.04490		
2500	.07320		
2600	.05970		
2700	.13300		
2800	.07290		
2900	.13200		
3000	.07250		
3100	.33500		
3200	.04650		
3200	.04890		
3255	.05950		
3300	.14600		
3357	.05090		
3367	.09390		
3431	.13700		
3500	.05600		
TOTAL	2.43910	TOTAL	.32230
TOTAL NON-SAPONIFIABLE CONC. (MG./G.) =			.04

TABLE 7.145

HEAVY HYDROCARBON ANALYSIS - STUCCS - 1976

SAMPLE TYPE : SED

SAMPLE CODE : ANMJ

PERIOD : SPRING

LOCATION : STATION - 3 LINE -IV

HEXANE ELUATE		BENZENE ELUATE	
RETENTION INDEX	CONCENTRATION (UG./G.)	RETENTION INDEX	CONCENTRATION (UG./G.)
1400	.02920	2000	.01200
1445	.01070	2100	.00860
1500	.00440	2207	.01420
1509	.00470	2300	.01470
1600	.03870	2420	.01610
1646	.02390	2646	.01690
1670	.01330	2841	.02330
1700	.01040	3058	.04620
1700	.00550	3250	.01550
1800	.00810	4070	.12100
1849	.00920		
1900	.00590		
2000	.00440		
2049	.00880		
2100	.00440		
2151	.00370		
2200	.00260		
2254	.00180		
2300	.00650		
2400	.00300		
2500	.00900		
2600	.00450		
2700	.02050		
2800	.00690		
2900	.04380		
3000	.00710		
3100	.05750		
3200	.00680		
3249	.00500		
3300	.02580		
3300	.00840		
3400	.00160		
3500	.00790		
TOTAL	.40380	TOTAL	.28930
TOTAL NON-SAPONIFIABLE CONC. (MG./G.) =		.02	

TABLE 7.146

HEAVY HYDROCARBON ANALYSIS - STOCS - 1976

SAMPLE TYPE : SED

SAMPLE CODE : ANMI

PERIOD : SPRING

LOCATION : STATION - 3 LINE -IV

HEXANE ELUATE

BENZENE ELUATE

RETENTION INDEX	CONCENTRATION (UG./G.)	RETENTION INDEX	CONCENTRATION (UG./G.)
1600	.02050	1994	.01350
1670	.01170	2167	.00470
1700	.04000	2317	.00470
1780	.00810	2600	.00550
1800	.03910	2800	.00440
1900	.02860	2836	.00920
2000	.02130	3036	.01590
2053	.01690	3227	.00780
2100	.02500	3355	.01240
2147	.02090	3427	.01000
2200	.02030	3827	.04320
2300	.02490		
2400	.02490		
2401	.07450		
2500	.04640		
2600	.03010		
2700	.06220		
2800	.03930		
2900	.09700		
3000	.04000		
3100	.14200		
3200	.07130		
3260	.01570		
3300	.07840		
TOTAL	1.01710	TOTAL	.13130

TOTAL NON-SAPONIFIABLE CONC. (MG./G.) = .02

TABLE 7.147

HEAVY HYDROCARBON ANALYSIS - STOCS - 1976

SAMPLE TYPE : SED
 SAMPLE CODE : ANOG PERIOD : SPRING
 LOCATION : STATION - 4 LINE -IV

HEXANE ELUATE

BENZENE ELUATE

RETENTION INDEX	CONCENTRATION (UG./G.)	RETENTION INDEX	CONCENTRATION (UG./G.)
1600	.00180	1794	.00230
1643	.00100	1887	.00160
1663	.00040	2006	.00030
1670	.00070	2141	.00050
1700	.00200	2224	.00040
1743	.00040	2331	.00040
1780	.00050	2625	.00060
1800	.00260	2859	.00180
1843	.00150	3221	.00130
1900	.00110	3830	.00390
2000	.00140		
2057	.00040		
2080	.00160		
2100	.00130		
2144	.00120		
2200	.00060		
2300	.00060		
2400	.00060		
2489	.00090		
2500	.00130		
2600	.00100		
2700	.00280		
2800	.00150		
2900	.00430		
3000	.00170		
3040	.00590		
3100	.00550		
3200	.00200		
3300	.00340		
3400	.00140		
3434	.00190		
3500	.00130		
TOTAL	.05060	TOTAL	.01310

TOTAL NON-SAPONIFIABLE CONC. (MG./G.) = .11

TABLE 7.148

HEAVY HYDROCARBON ANALYSIS - STUCCS - 1976

SAMPLE TYPE : SED

SAMPLE CODE : ANUF

PERIOD : SPRING

LOCATION : STATION - 4 LINE - IV

HEXANE ELUATE

BENZENE ELUATE

RETENTION INDEX	CONCENTRATION (UG./G.)	RETENTION INDEX	CONCENTRATION (UG./G.)
1600	.00490	1787	.04790
1648	.00210	1876	.01560
1670	.00610	2368	.00840
1700	.00720	2227	.00810
1750	.00060	2632	.01040
1800	.00980	2880	.01010
1849	.00600	4000	.03640
1900	.00530		
2000	.00610		
2040	.01500		
2070	.00170		
2100	.00630		
2149	.00480		
2200	.00300		
2300	.00310		
2400	.00200		
2500	.00480		
2600	.00260		
2700	.01040		
2800	.00390		
2900	.00450		
3000	.00450		
3100	.02430		
3141	.00550		
3200	.00400		
3300	.01380		
3377	.00710		
3529	.00630		
TOTAL	.17570	TOTAL	.13690
TOTAL NON-SAPONIFIABLE CONC. (MG./G.) =			.02

TABLE 7.149

HEAVY HYDROCARBON ANALYSIS - STOCS - 1976

SAMPLE TYPE : SED

SAMPLE CODE : ANOE

PERIOD : SPRING

LOCATION : STATION - 4 LINE -IV

HEXANE ELUATE

BENZENE ELUATE

RETENTION INDEX	CONCENTRATION (UG./G.)	RETENTION INDEX	CONCENTRATION (UG./G.)
1400	.00290	1800	.00480
1500	.00260	1900	.00460
1600	.01120	2024	.00730
1639	.00130	2153	.00570
1670	.00140	2297	.00610
1700	.00510	2438	.00450
1739	.00090	2870	.00720
1780	.00060	3070	.01710
1800	.00440	3840	.00540
1840	.00090		
1900	.00240		
2000	.00170		
2061	.00530		
2089	.00100		
2100	.00120		
2142	.00200		
2200	.00170		
2300	.00240		
2400	.00370		
2401	.01150		
2500	.00500		
2600	.00590		
2700	.00840		
2800	.00730		
2900	.01050		
3000	.00220		
3100	.00700		
3200	.00210		
3300	.00240		
TOTAL	.11500	TOTAL	.06270

TOTAL NON-SAPONIFIABLE CONC. (UG./G.) = .06

TABLE 7.150

HEAVY HYDROCARBON ANALYSIS - STUCCS - 1976

SAMPLE TYPE : SED

SAMPLE CODE : ANOD

PERIOD : SPRING

LOCATION : STATION - 4 LINE -IV

HEXANE ELUATE

BENZENE ELUATE

RETENTION INDEX	CONCENTRATION (UG./G.)	RETENTION INDEX	CONCENTRATION (UG./G.)
1600	.00040	1784	.00230
1670	.00120	1865	.00210
1700	.00490	2059	.00460
1780	.00150	2113	.00250
1800	.00400	2187	.00230
1856	.00070	2220	.00240
1900	.00330	2333	.00120
2000	.00360	2615	.00070
2044	.00150	2723	.00080
2175	.00090	2887	.00100
2100	.00450	3970	.00200
2200	.00280		
2300	.00250		
2400	.00160		
2500	.00140		
2600	.00090		
2700	.00240		
2800	.00090		
2900	.00500		
3000	.00070		
3100	.00550		
3136	.00060		
3200	.00030		
3300	.00300		
3373	.00170		
3527	.00090		

TOTAL	.05670	TOTAL	.02190
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TOTAL NON-SAPONIFIABLE CONC. (MG./G.) =	.02
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TABLE 7.151

HEAVY HYDROCARBON ANALYSIS - STOCS - 1976

SAMPLE TYPE : SED

SAMPLE CODE : ANPY

PERIOD : SPRING

LOCATION : STATION - 5 LINE -IV

HEXANE ELUATE

BENZENE ELUATE

RETENTION INDEX	CONCENTRATION (UG./G.)	RETENTION INDEX	CONCENTRATION (UG./G.)
1400	.07270	1934	.01020
1445	.04160	2078	.01450
1500	.01940	2115	.04500
1600	.04960	2165	.00710
1648	.02800	2240	.00810
1670	.02460	2327	.00520
1700	.04340	2585	.00430
1780	.03590	3045	.01430
1800	.04800		
1851	.01930		
1900	.02040		
2000	.01580		
2048	.04110		
2100	.03700		
2152	.04050		
2200	.01290		
2340	.03000		
2400	.01230		
2401	.10200		
2500	.03240		
2600	.01200		
2700	.00890		
2800	.03130		
2900	.10700		
3000	.04270		
3100	.22500		
3200	.00500		
TOTAL	1.36040	TOTAL	.10870

TOTAL NON-SAPONIFIABLE CONC. (MG./G.) = .02

TABLE 7.152

HEAVY HYDROCARBON ANALYSIS - STOCS - 1976

SAMPLE TYPE : SED

SAMPLE CODE : ANPX

PERIOD : SPRING

LOCATION : STATION - 5 LINE -IV

HEXANE ELUATE

BENZENE ELUATE

RETENTION INDEX	CONCENTRATION (UG./G.)	RETENTION INDEX	CONCENTRATION (UG./G.)
1400	.03510	2065	.00790
1500	.00550	2140	.02290
1600	.02360	3023	.02730
1649	.01390	3138	.01400
1670	.01260	3290	.02630
1700	.02310	3480	.01230
1780	.01130	3690	.11200
1800	.02310	3720	.04530
1859	.01200		
1900	.01120		
2000	.01410		
2047	.01880		
2100	.02390		
2200	.01780		
2300	.02700		
2400	.01760		
2401	.06480		
2500	.02210		
2600	.01760		
2700	.04270		
2800	.02210		
2900	.08370		
3000	.01110		
3100	.10700		
3200	.00190		
3300	.05110		
TOTAL	.71490	TOTAL	.26800

TOTAL NON-SAPONIFIABLE CONC. (MG./G.) = .02

TABLE 7.153

HEAVY HYDROCARBON ANALYSIS - STOCS - 1976

SAMPLE TYPE : SED
 SAMPLE CODE : ANPW PERIOD : SPRING
 LOCATION : STATION - 5 LINE -IV

HEXANE ELUATE		BENZENE ELUATE	
RETENTION INDEX	CONCENTRATION (UG./G.)	RETENTION INDEX	CONCENTRATION (UG./G.)
1600	.00150	2059	.00120
1645	.00050	2333	.00170
1670	.00020	2393	.00160
1700	.00060	2500	.00140
1780	.00010	2600	.00150
1800	.00220	2700	.00200
1842	.00100	3130	.00390
1900	.00100	3840	.02020
2000	.00170		
2050	.00410		
2069	.00210		
2100	.00090		
2144	.00290		
2200	.00210		
2300	.00230		
2400	.00230		
2401	.01210		
2500	.00400		
2600	.00240		
2700	.00860		
2800	.00380		
2900	.01660		
3000	.00360		
3100	.01810		
3200	.00320		
3300	.00850		
TOTAL	.10640	TOTAL	.03350
TOTAL NON-SAPONIFIABLE CONC. (MG./G.) =			.03

TABLE 7.154

HEAVY HYDROCARBON ANALYSIS - STUCCS - 1976

SAMPLE TYPE : SED

SAMPLE CODE : ANPV

PERIOD : SPRING

LOCATION : STATION - S LINE -IV

HEXANE ELUATEBENZENE ELUATE

<u>RETENTION INDEX</u>	<u>CONCENTRATION (UG./G.)</u>	<u>RETENTION INDEX</u>	<u>CONCENTRATION (UG./G.)</u>
1500	.00370	2035	.00590
1600	.01470	2280	.00110
1641	.00840	2754	.00080
1670	.01150	3061	.00540
1700	.02320	3391	.00270
1780	.00600	3455	.00110
1800	.01930	3950	.01650
1900	.01360	4000	.00850
2000	.00690		
2064	.04400		
2090	.01090		
2100	.01460		
2143	.05100		
2165	.00670		
2200	.01390		
2300	.01760		
2400	.01990		
2401	.09820		
2500	.03280		
2600	.02500		
2700	.06440		
2800	.03590		
2900	.13800		
3000	.03620		
3100	.12200		
3200	.01750		
3233	.03850		
3500	.06420		
TOTAL	.95880	TOTAL	.04200
TOTAL NON-SAPONIFIABLE CONC. (MG./G.) =			.02

TABLE 7.155

HEAVY HYDROCARBON ANALYSIS - STUCCS - 1976

SAMPLE TYPE : SED
 SAMPLE CODE : ANPU PERIOD : SPRING
 LOCATION : STATION - 5 LINE -IV

HEXANE ELUATE		BENZENE ELUATE	
RETENTION INDEX	CONCENTRATION (UG./G.)	RETENTION INDEX	CONCENTRATION (UG./G.)
1600	.00200	1896	.00250
1648	.00080	1947	.00140
1670	.00050	2032	.00110
1700	.00180	2108	.02560
1780	.00020	2178	.01500
1800	.00190	2426	.00910
1900	.00100	2463	.00270
2000	.00140	2736	.00320
2047	.00140	2972	.01400
2100	.00140		
2144	.00060		
2200	.00100		
2300	.00180		
2400	.00140		
2401	.00790		
2500	.00290		
2600	.00170		
2700	.00460		
2800	.00100		
2900	.00920		
3000	.00160		
3100	.01100		
3200	.00190		
3300	.00700		
3360	.00140		
3450	.00050		
3500	.00030		
3600	.00090		
TOTAL	.06970	TOTAL	.07490
TOTAL NON-SAPONIFIABLE CONC. (MG./G.) =			.11

TABLE 7.156

HEAVY HYDROCARBON ANALYSIS - STOC3 - 1976

SAMPLE TYPE : SED

SAMPLE CODE : ANRP

PERIOD : SPRING

LOCATION : STATION - 6 LINE -IV

HEXANE ELUATE

BENZENE ELUATE

RETENTION INDEX	CONCENTRATION (UG./G.)	RETENTION INDEX	CONCENTRATION (UG./G.)
1400	.00730	2005	.00560
1500	.00300	2173	.00870
1600	.02260	2307	.01120
1640	.00800	2600	.00580
1670	.01000	2700	.00990
1700	.03330	2800	.01730
1780	.00600	3109	.00950
1800	.02870	3127	.01150
1900	.02880	3182	.00900
2000	.03980	3355	.00990
2100	.05900	3790	.05510
2200	.05000	3830	.07780
2300	.03120		
2400	.01220		
2401	.05030		
2500	.01500		
2600	.00980		
2700	.02370		
2800	.01100		
2900	.05800		
3000	.00890		
3100	.06420		
3200	.01920		
3300	.04080		
3400	.02710		
TOTAL	.66950	TOTAL	.23130

TOTAL NON-SAPONIFIABLE CONC. (UG./G.) = .02

TABLE 7.157

HEAVY HYDROCARBON ANALYSIS - STUCCS - 1976

SAMPLE TYPE : SED
 SAMPLE CODE : ANRG PERIOD : SPRING
 LOCATION : STATION - 6 LINE -IV

HEXANE ELUATE		BENZENE ELUATE	
RETENTION INDEX	CONCENTRATION (UG./G.)	RETENTION INDEX	CONCENTRATION (UG./G.)
1630	.00090	2021	.00070
1646	.00030	2138	.00120
1670	.00010	2253	.00170
1700	.00080	2984	.00600
1730	.00010	3079	.00290
1800	.00180	3569	.00110
1847	.00060	3654	.00160
1900	.00070	3850	.00920
2000	.00130	3900	.00300
2050	.00060		
2100	.00150		
2200	.00120		
2300	.00090		
2400	.00080		
2401	.00260		
2500	.00060		
2600	.00040		
2700	.00120		
2800	.00030		
2900	.00290		
3000	.00040		
3100	.00350		
3200	.00020		
3300	.00120		
3367	.00020		
3455	.00030		
3518	.00050		
TOTAL	.02590	TOTAL	.02680
TOTAL NON-SAPONIFIABLE CONC. (MG./G.) =			.001

TABLE 7.158

HEAVY HYDROCARBON ANALYSIS - STUCCS - 1976

SAMPLE TYPE : SED

SAMPLE CODE : ANRU

PERIOD : SPRING

LOCATION : STATION - 6 LINE -IV

HEXANE ELUATE

BENZENE ELUATE

RETENTION INDEX	CONCENTRATION (UG./G.)	RETENTION INDEX	CONCENTRATION (UG./G.)
1600	.00220	2610	.00050
1646	.00100	2821	.00040
1670	.00040	3038	.00090
1700	.00160	3140	.00110
1780	.00010	3830	.00610
1800	.02110	3990	.00040
1847	.00000		
1900	.00100		
2000	.00130		
2047	.00150		
2100	.00130		
2147	.00060		
2200	.00140		
2300	.00130		
2400	.00140		
2401	.00650		
2500	.00180		
2600	.00130		
2700	.00140		
2800	.00250		
2900	.00840		
3000	.00200		
3100	.00870		
3146	.00010		
3200	.00110		
3230	.00010		
3300	.00430		
3370	.00060		
3400	.00190		
3500	.00110		
3600	.00140		
TOTAL	.08020	TOTAL	.00940

TOTAL NON-SAPONIFIABLE CONC. (MG./G.) = .01

TABLE 7.159

HEAVY HYDROCARBON ANALYSIS - STOCS - 1976

SAMPLE TYPE : SED
 SAMPLE CODE : ANRN PERIOD : SPRING
 LOCATION : STATION - 6 LINE -IV

HEXANE ELUATE		BENZENE ELUATE	
RETENTION INDEX	CONCENTRATION (UG./G.)	RETENTION INDEX	CONCENTRATION (UG./G.)
1400	.00690	2070	.00750
1500	.00520	2400	.00390
1600	.01640	2870	.00310
1639	.00420	3061	.00440
1670	.00470	3843	.01520
1700	.01700		
1700	.00250		
1800	.01550		
1900	.01110		
2000	.00970		
2100	.01160		
2143	.00700		
2200	.01000		
2300	.00920		
2400	.00880		
2401	.04090		
2500	.01240		
2600	.00850		
2700	.02670		
2800	.01050		
2900	.04040		
3000	.00930		
3100	.04690		
3200	.00650		
3300	.02150		
3339	.00380		
3400	.02060		
TOTAL	.39440	TOTAL	.03410
TOTAL NON-SAPONIFIABLE CONC. (MG./G.) =			.04

TABLE 7.160

HEAVY HYDROCARBON ANALYSIS - STUCCS - 1976

SAMPLE TYPE : SED

SAMPLE CODE : ANRM

PERIOD : SPRING

LOCATION : STATION - 6 LINE - IV

HEXANE ELUATE

BENZENE ELUATE

RETENTION INDEX	CONCENTRATION (UG./G.)	RETENTION INDEX	CONCENTRATION (UG./G.)
1400	.00060	1888	.00130
1442	.00010	2024	.00230
1600	.00210	2140	.00140
1641	.00150	2187	.00110
1662	.00040	2340	.00090
1670	.00070	3052	.00180
1700	.00220	3140	.00180
1743	.00030	3373	.00160
1780	.00050	3930	.00100
1800	.00290		
1843	.00180		
1900	.00240		
2000	.00390		
2100	.00600		
2200	.00400		
2340	.00360		
2400	.00280		
2401	.00750		
2500	.00290		
2600	.00170		
2700	.00450		
2800	.00200		
2900	.00100		
3000	.00200		
3100	.00250		
3200	.00170		
3221	.00140		
3300	.00630		
3400	.00300		
3436	.00470		
3500	.00330		
3570	.00070		
TOTAL	.10130	TOTAL	.01280

TOTAL NON-SAPONIFIABLE CONC. (MG./G.) = .02

TABLE 7.161

HEAVY HYDROCARBON ANALYSIS - STOCS - 1976

SAMPLE TYPE : SED

SAMPLE CODE : ANTI

PERIOD : SPRING

LOCATION : STATION - 7 LINE -IV

HEXANE ELUATE

BENZENE ELUATE

RETENTION INDEX	CONCENTRATION (UG./G.)	RETENTION INDEX	CONCENTRATION (UG./G.)
1600	.00490	2029	.01600
1643	.00180	2193	.00390
1670	.00140	2313	.00430
1700	.00580	2408	.00460
1780	.00080	2623	.00550
1800	.00510	3043	.00490
1900	.00470	3113	.00510
2000	.00850	3139	.00500
2050	.00430	3365	.00520
2100	.01310	3830	.01410
2147	.00290	3870	.01420
2200	.01330		
2300	.00920		
2400	.00700		
2401	.02530		
2500	.00820		
2500	.00480		
2700	.01010		
2800	.00550		
2900	.03380		
3000	.00530		
3100	.04120		
3200	.00540		
3220	.00510		
3300	.01520		
3400	.00260		
3500	.00800		
3600	.00850		
TOTAL	.26780	TOTAL	.08280

TOTAL NON-SAPONIFIABLE CONC. (MG./G.) = .02

TABLE 7.162

HEAVY HYDROCARBON ANALYSIS - STUCCS - 1976

SAMPLE TYPE : SED

SAMPLE CODE : ANTH

PERIOD : SPRING

LOCATION : STATION - 7 LINE -IV

HEXANE ELUATE

BENZENE ELUATE

RETENTION INDEX	CONCENTRATION (UG./G.)	RETENTION INDEX	CONCENTRATION (UG./G.)
1400	.03360	2022	.07380
1440	.01940	2207	.08520
1500	.01580	2320	.08050
1600	.03410	2423	.08820
1650	.00940	2646	.17800
1670	.01210	2754	.09700
1700	.02730	2804	.17100
1780	.00580	3100	.21200
1800	.02060	3300	.11200
1900	.01220	3427	.11800
2000	.01550	3509	.23300
2100	.02000	3930	.31800
2200	.01480		
2300	.01280		
2400	.01110		
2401	.07070		
2500	.01590		
2600	.00950		
2700	.03270		
2800	.01300		
2900	.09820		
3000	.00980		
3100	.11700		
3200	.00970		
3300	.06670		
TOTAL	.70770	TOTAL	1.76670
TOTAL NON-SAPONIFIABLE CONC. (MG./G.) = .00			

TABLE 7.163

HEAVY HYDROCARBON ANALYSIS - STUCCS - 1976

SAMPLE TYPE : SED

SAMPLE CODE : ANTG

PERIOD : SPRING

LOCATION : STATION - 7 LINE -IV

HEXANE ELUATE		BENZENE ELUATE	
RETENTION INDEX	CONCENTRATION (UG./G.)	RETENTION INDEX	CONCENTRATION (UG./G.)
1500	.00050	2071	.01150
1600	.00240	2423	.00520
1627	.00030	2492	.00630
1659	.00050	2615	.01060
1670	.00110	2700	.00630
1700	.00500	2913	.00570
1780	.00080	3104	.01160
1800	.00300	3304	.02490
1858	.00230	3357	.01170
1900	.00270	3800	.13800
1953	.00040		
2000	.00160		
2047	.00160		
2100	.00260		
2147	.00220		
2200	.00190		
2227	.00110		
2300	.00340		
2400	.00290		
2500	.00600		
2600	.00390		
2700	.01180		
2800	.00540		
2900	.01950		
3000	.00510		
3055	.00100		
3100	.02260		
3200	.00290		
3230	.00100		
3300	.00080		
3400	.00480		
3500	.00830		
3567	.00330		
3700	.00130		
3900	.00130		
TOTAL	.13550	TOTAL	.23180

TOTAL NON-SAPONIFIABLE CONC. (MG./G.) = .03

TABLE 7.164

HEAVY HYDROCARBON ANALYSIS - STUCCS - 1976

SAMPLE TYPE : SED

SAMPLE CODE : ANTF

PERIOD : SPRING

LOCATION : STATION - 7 LINE -IV

HEXANE ELUATE

BENZENE ELUATE

RETENTION INDEX	CONCENTRATION (UG./G.)	RETENTION INDEX	CONCENTRATION (UG./G.)
1600	.00930	2022	.00150
1644	.00170	2147	.00080
1670	.00020	2762	.00050
1700	.00200	2867	.00100
1742	.00050	3052	.00340
1780	.00010	3255	.00070
1800	.00320	3900	.00770
1847	.00120		
1900	.00130		
1947	.00060		
2000	.00120		
2050	.00270		
2100	.00100		
2144	.00060		
2200	.00120		
2300	.00210		
2400	.00160		
2401	.00990		
2500	.00330		
2600	.00190		
2700	.00700		
2800	.00250		
2900	.01580		
3000	.00240		
3100	.01800		
3200	.00230		
3220	.00280		
3300	.00710		
3356	.00110		
3400	.00150		
3440	.00550		
3500	.00520		
3560	.00100		
TOTAL	.11780	TOTAL	.01560
TOTAL NON-SAPONIFIABLE CONC. (MG./G.) =			.00

TABLE 7.165

HEAVY HYDROCARBON ANALYSIS - STUCCS - 1976

SAMPLE TYPE : SED

SAMPLE CODE : ANTE

PERIOD : SPRING

LOCATION : STATION - 7 LINE -1V

HEXANE ELUATE

BENZENE ELUATE

RETENTION INDEX	CONCENTRATION (UG./G.)	RETENTION INDEX	CONCENTRATION (UG./G.)
1600	.01240	1777	.00380
1670	.00720	1884	.00530
1700	.02360	1990	.00720
1780	.00640	2232	.01450
1800	.02630	2413	.01880
1900	.01820	2632	.01770
2000	.00990	2840	.02640
2044	.03490	3063	.07880
2100	.01390	3393	.03330
2138	.01300	3521	.03620
2150	.02040	4080	.05430
2175	.00380		
2200	.00280		
2300	.01010		
2400	.00730		
2464	.00730		
2500	.02620		
2600	.00870		
2700	.05980		
2800	.02190		
2900	.14100		
3000	.02240		
3100	.14600		
3200	.01390		
3260	.02720		
3300	.10200		
3400	.00430		
3464	.00960		
3500	.07230		
TOTAL	.87880	TOTAL	.29630
TOTAL NON-SAPONIFIABLE CONC. (MG./G.) =			.02

TABLE 7.166

HEAVY HYDROCARBON ANALYSIS - STUCCS - 1976

SAMPLE TYPE : SED

SAMPLE CODE : ASDF

PERIOD : FALL

LOCATION : STATION - 1 LINE -IV

HEXANE ELUATE

BENZENE ELUATE

RETENTION INDEX	CONCENTRATION (UG./G.)	RETENTION INDEX	CONCENTRATION (UG./G.)
1670	.00060	2059	.00120
1700	.00200	2193	.00210
1780	.00180	2213	.00230
1800	.00430	2293	.00290
1900	.00280	2400	.00150
2000	.00100	2431	.00110
2029	.00250	2855	.00380
2043	.00170	3052	.00850
2100	.00160	3304	.00150
2159	.00160	3435	.00170
2200	.00070	3820	.01570
2300	.00160		
2400	.00120		
2401	.01760		
2500	.00230		
2600	.00180		
2700	.00430		
2800	.00210		
2900	.00820		
3000	.00150		
3100	.01170		
3200	.00080		
3300	.00050		
TOTAL	.08020	TOTAL	.04230
TOTAL NON-SAPONIFIABLE CONC. (MG./G.) =		.01	

TABLE 7.167

HEAVY HYDROCARBON ANALYSIS - STOCS - 1976

SAMPLE TYPE : SED
 SAMPLE CODE : ASFC PERIOD : FALL
 LOCATION : STATION - 2 LINE -IV

HEXANE ELUATE		BENZENE ELUATE	
RETENTION INDEX	CONCENTRATION (UG./G.)	RETENTION INDEX	CONCENTRATION (UG./G.)
1600	.02910	2070	.00820
1666	.01270	2160	.01360
1670	.00650	2662	.04780
1700	.01930	2858	.01260
1780	.02010	3075	.04920
1800	.04230	3200	.00950
1849	.02700	3333	.00450
1900	.01710	4400	.38700
2000	.02520		
2051	.04660		
2072	.01560		
2100	.02410		
2135	.02100		
2160	.01810		
2200	.03650		
2300	.05270		
2400	.06200		
2500	.08070		
2600	.05740		
2700	.06370		
2800	.02090		
2900	.12600		
3000	.01330		
3100	.14600		
TOTAL	.98410	TOTAL	.53240
TOTAL NON-SAPONIFIABLE CONC. (MG./G.) = .02			

TABLE 7.168

HEAVY HYDROCARBON ANALYSIS - SIOCS - 1976

SAMPLE TYPE : SED

SAMPLE CODE : ASHB

PERIOD : FALL

LOCATION : STATION - 3 LINE -IV

HEXANE ELUATE

BENZENE ELUATE

RETENTION INDEX	CONCENTRATION (UG./G.)	RETENTION INDEX	CONCENTRATION (UG./G.)
1600	.00530	1882	.00420
1670	.00320	1982	.00470
1700	.00750	2071	.00540
1780	.00360	2147	.01080
1800	.00780	2187	.00530
1852	.00310	2515	.00490
1900	.00260	2817	.00830
2000	.00340	2852	.02060
2051	.00390	3043	.03360
2100	.00330	3235	.01210
2200	.00260	3357	.01280
2300	.00250	3800	.07350
2400	.00180		
2500	.00380		
2600	.00210		
2700	.01020		
2800	.00300		
2900	.02960		
3000	.00510		
3100	.03360		
3200	.00310		
3300	.01430		
TOTAL	.15540	TOTAL	.19620

TOTAL NON-SAPONIFIABLE CONC. (MG./G.) = .01

TABLE 7.169

HEAVY HYDROCARBON ANALYSIS - STUCCS - 1976

SAMPLE TYPE : SED
 SAMPLE CODE : ASIS PERIOD : FALL
 LOCATION : STATION - 4 LINE -IV

HEXANE ELUATE

BENZENE ELUATE

RETENTION INDEX	CONCENTRATION (UG./G.)	RETENTION INDEX	CONCENTRATION (UG./G.)
1600	.00680	1880	78.90000
1670	.00320	2155	.00330
1700	.01020	2257	.00630
1780	.00250	2304	.00450
1800	.01000	2433	.00490
1895	.00220	2462	.00460
1900	.00490	2767	.01020
2000	.00320	3558	.03800
2035	.00900	3740	.02730
2068	.00530		
2100	.00450		
2134	.00390		
2155	.00810		
2200	.00230		
2230	.00420		
2300	.00300		
2400	.00260		
2401	.03370		
2500	.00600		
2600	.00290		
2645	.00500		
2700	.01100		
2800	.00540		
2900	.02500		
2940	.01120		
3000	.00430		
3100	.02000		
3200	.00200		
3300	.01500		
TOTAL	.23500	TOTAL	78.99910

TOTAL NON-SAPONIFIABLE CONC. (MG./G.) = .01

TABLE 7.170

HEAVY HYDROCARBON ANALYSIS - STUCS - 1976

SAMPLE TYPE : SED

SAMPLE CODE : ASKC

PERIOD : FALL

LOCATION : STATION - 5 LINE -IV

HEXANE ELUATE

BENZENE ELUATE

RETENTION INDEX	CONCENTRATION (UG./G.)	RETENTION INDEX	CONCENTRATION (UG./G.)
1600	.01480	1635	.03050
1670	.01580	2136	.05610
1700	.02600	2327	.06220
1800	.01830	3027	.25700
1900	.00900	3218	.05770
2000	.01040	3291	.08490
2069	.03790	3332	.08330
2100	.03000	3409	.12800
2140	.01380	3445	.13000
2200	.00920	3740	.94600
2300	.01370	4260	.09570
2400	.01120		
2500	.02560		
2600	.01570		
2700	.05020		
2800	.02890		
2900	.10400		
3000	.02970		
3100	.13900		
3200	.03540		
3300	.07990		
3350	.01110		
3400	.09180		
3447	.03180		
3500	.02210		
3600	.01570		
TOTAL	.89100	TOTAL	1.91140
TOTAL NON-SAPONIFIABLE CONC. (MG./G.) =		.02	

TABLE 7.171

HEAVY HYDROCARBON ANALYSIS - STUCCS - 1976

SAMPLE TYPE : SED

SAMPLE CODE : ASLM

PERIOD : FALL

LOCATION : STATION - 6 LINE -IV

HEXANE ELUATE

BENZENE ELUATE

RETENTION INDEX	CONCENTRATION (UG./G.)	RETENTION INDEX	CONCENTRATION (UG./G.)
1600	.01130	2136	.01300
1670	.00670	2738	.01130
1700	.02030	2818	.02180
1780	.00220	3018	.15800
1800	.02250	3218	.04020
1900	.00900	3282	.04860
2000	.00380	3345	.02310
2069	.02080	3400	.06140
2100	.01240	3730	.29300
2140	.01880		
2200	.00890		
2300	.01850		
2400	.00930		
2500	.02990		
2600	.02340		
2700	.06650		
2800	.03450		
2900	.15600		
3000	.04090		
3100	.18400		
3200	.06590		
3300	.09550		
TOTAL	.86110	TOTAL	.67040
TOTAL NON-SAPONIFIABLE CONC. (MG./G.) =		.01	

TABLE 7.172

HEAVY HYDROCARBON ANALYSIS - STUCCS - 1976

SAMPLE TYPE : SED

SAMPLE CODE : ASMW

PERIOD : FALL

LOCATION : STATION - 7 LINE -IV

HEXANE ELUATE

BENZENE ELUATE

RETENTION INDEX	CONCENTRATION (UG./G.)	RETENTION INDEX	CONCENTRATION (UG./G.)
1400	.02020	1627	.04000
1600	.05670	1700	.04140
1655	.01200	1736	.04360
1670	.01310	2050	.02400
1700	.03150	2147	.02630
1780	.00350	2166	.02150
1800	.04080	2652	.03210
1853	.01330	2778	.04600
1900	.01620	2858	.05200
2000	.01210	2925	.04180
2053	.02320	3075	.31500
2100	.01240		
2175	.00550		
2200	.00530		
2300	.01900		
2400	.01340		
2500	.02070		
2600	.02160		
2700	.06240		
2800	.02070		
2900	.13900		
3000	.07180		
3100	.24900		
3200	.02750		
3300	.08370		
TOTAL	1.00260	TOTAL	.68370

TOTAL NON-SAPONIFIABLE CONC. (MG./G.) = .02

TABLE 7.173

HEAVY HYDROCARBON ANALYSIS - STOCS - 1976

SAMPLE TYPE : SED

SAMPLE CODE : AFH2

PERIOD : TOPO HIGH

LOCATION : STATION --0 LINE -

HEXANE ELUATE

BENZENE ELUATE

RETENTION INDEX	CONCENTRATION (UG./G.)	RETENTION INDEX	CONCENTRATION (UG./G.)
1400	.00220	1998	.00240
1500	.00160	2044	.00140
1600	.00190	2225	.00410
1617	.00080	2257	.00130
1670	.00220	2317	.00100
1700	.00330	2429	.00180
1780	.00090	2460	.00210
1800	.00240	2570	.00200
1900	.00120	2633	.00220
2000	.00100	2830	.00240
2045	.00250	3012	.00320
2100	.00100		
2200	.00070		
2300	.00130		
2400	.00070		
2500	.00170		
2600	.00100		
2700	.00440		
2800	.00190		
2900	.01030		
3000	.00190		
3100	.01250		
3200	.00100		
3300	.00440		
TOTAL	.06280	TOTAL	.02450
TOTAL NON-SAPONIFIABLE CONC. (MG./G.) =		.01	

TABLE 7.174

HEAVY HYDROCARBON ANALYSIS - STUCCS - 1976

SAMPLE TYPE : SED

SAMPLE CODE : AFB3

PERIOD : TOPO HIGH

LOCATION : STATION --- LINE -

HEXANE ELUATE

BENZENE ELUATE

RETENTION INDEX	CONCENTRATION (UG./G.)	RETENTION INDEX	CONCENTRATION (UG./G.)
1600	.000469	1769	.000120
1670	.000105	1808	.000080
1700	.000258	1920	.000070
1780	.000050	1992	.000100
1800	.000160	2068	.000090
1852	.000054	2148	.000160
1900	.000049	2238	.000460
1953	.000039	2311	.000300
2000	.000039	2353	.000080
2042	.000144	3028	.001120
2100	.000038		
2162	.000043		
2200	.000044		
2300	.000025		
2400	.000025		
2500	.000027		
2600	.000022		
2700	.000060		
2800	.000044		
2900	.000135		
3000	.000044		
3100	.000235		
3200	.000042		
3300	.000255		
TOTAL	.002406	TOTAL	.002580

TOTAL NON-SAPONIFIABLE CONC. (MG./G.) = .00

TABLE 7.175

HEAVY HYDROCARBON ANALYSIS - STUCCS - 1976

SAMPLE TYPE : SED

SAMPLE CODE : AGB1

PERIOD : TOPO HIGH

LOCATION : STATION --0 LINE -

HEXANE ELUATE

BENZENE ELUATE

RETENTION INDEX	CONCENTRATION (UG./G.)	RETENTION INDEX	CONCENTRATION (UG./G.)
1600	.00749	1910	.00233
1670	.00151	2042	.00091
1700	.00374	2313	.00057
1780	.00108	2300	.00066
1800	.00311	2421	.00069
1851	.00128	2500	.00076
1900	.00094	2828	.00110
2000	.00099	3026	.01350
2053	.00167		
2100	.00061		
2200	.00069		
2300	.00080		
2400	.00059		
2500	.00091		
2600	.00059		
2700	.00227		
2800	.00095		
2900	.00355		
3000	.00110		
3100	.00042		
3200	.00126		
3300	.00794		
TOTAL	.05155	TOTAL	.02052
TOTAL NON-SAPONIFIABLE CONC. (MG./G.) =			.01

TABLE 7.176

HEAVY HYDROCARBON ANALYSIS - STUCCS - 1976

SAMPLE TYPE : SED

SAMPLE CODE : AGB2

PERIOD : TOPO HIGH

LOCATION : STATION --0 LINE -

HEXANE ELUATE

BENZENE ELUATE

RETENTION INDEX	CONCENTRATION (UG./G.)	RETENTION INDEX	CONCENTRATION (UG./G.)
1400	.02560	1850	.00710
1500	.00830	1903	.00630
1600	.02840	2012	.00550
1670	.01300	2041	.03680
1700	.02560	2129	.00610
1780	.00830	2163	.00530
1800	.02000	2228	.01430
1854	.00400	2270	.01100
1900	.01520	2641	.01920
1957	.00480	2764	.02200
2000	.01010	3192	.09100
2035	.02700		
2100	.01630		
2200	.00550		
2300	.02610		
2400	.01440		
2500	.04350		
2600	.02800		
2700	.00960		
2800	.02000		
2900	.12000		
3000	.01440		
3100	.14400		
3200	.00780		
3300	.07600		
TOTAL	.78190	TOTAL	.22520
TOTAL NON-SAPONIFIABLE CONC. (MG./G.) =			.02

TABLE 7.177

HEAVY HYDROCARBON ANALYSIS - STUCCS - 1976

SAMPLE TYPE : SED

SAMPLE CODE : AG63

PERIOD : TOPO HIGH

LOCATION : STATION --0 LINE -

HEXANE ELUATE

BENZENE ELUATE

RETENTION INDEX	CONCENTRATION (UG./G.)	RETENTION INDEX	CONCENTRATION (UG./G.)
1400	.00165	1679	.03830
1500	.00107	2051	.00840
1600	.00155	2190	.01300
1670	.00100		
1700	.00120		
1780	.00041		
1800	.00088		
1900	.00039		
2000	.00032		
2100	.00032		
2200	.00020		
2300	.00066		
2400	.00078		
2401	.00465		
2500	.00134		
2600	.00178		
2700	.00551		
2800	.00369		
2900	.00918		
3000	.00387		
3100	.01420		
3200	.00490		
3300	.01340		
TOTAL	.07313	TOTAL	.05970
TOTAL NON-SAPONIFIABLE CONC. (MG./G.) =		.02	

TABLE 7.178

HEAVY HYDROCARBON ANALYSIS - STOCS - 1976

SAMPLE TYPE : SED

SAMPLE CODE : AGB4

PERIOD : TOPO HIGH

LOCATION : STATION --0 LINE -

HEXANE ELUATE

BENZENE ELUATE

RETENTION INDEX	CONCENTRATION (UG./G.)	RETENTION INDEX	CONCENTRATION (UG./G.)
1600	.00320	1775	.00270
1670	.00390	1926	.00140
1700	.00600	1958	.00210
1780	.00270	2156	.00560
1800	.00590	2228	.00180
1852	.00140	2362	.00090
1900	.00170	2431	.00100
2000	.00130		
2038	.00270		
2100	.00100		
2200	.00090		
2300	.00110		
2400	.00070		
2401	.02520		
2500	.00080		
2600	.00060		
2700	.00260		
2800	.00100		
2900	.00460		
3000	.00120		
3100	.00800		
3200	.00130		
3300	.00530		
TOTAL	.08310	TOTAL	.01550
TOTAL NON-SAPONIFIABLE CONC. (UG./G.) =		.00	

TABLE 7.179

HEAVY HYDROCARBON ANALYSIS - STOCS - 1976

SAMPLE TYPE : SED

SAMPLE CODE : AH81

PERIOD : TOPO HIGH

LOCATION : STATION --0 LINE -

HEXANE ELUATE

BENZENE ELUATE

RETENTION INDEX	CONCENTRATION (UG./G.)	RETENTION INDEX	CONCENTRATION (UG./G.)
1400	.01180	1916	.00088
1500	.00160	2037	.00092
1600	.00480	2219	.00083
1670	.00130	2312	.00143
1700	.00490	2425	.00061
1780	.00090	2478	.00064
1800	.00390	2560	.00061
1851	.00140		
1900	.00110		
2000	.00120		
2051	.00160		
2100	.00060		
2200	.00120		
2300	.00090		
2400	.00050		
2500	.00120		
2600	.00080		
2700	.00340		
2800	.00140		
2900	.00920		
3000	.00190		
3100	.01240		
3200	.00230		
3300	.00790		
TOTAL	.07020	TOTAL	.00592
TOTAL NON-SAPONIFIABLE CONC. (MG./G.) =		.01	

TABLE 7.180

HEAVY HYDROCARBON ANALYSIS - STOCS - 1976

SAMPLE TYPE : SED

SAMPLE CODE : AMB4

PERIOD : TOPO HIGH

LOCATION : STATION --0 LINE -

HEXANE ELUATE

BENZENE ELUATE

RETENTION INDEX	CONCENTRATION (UG./G.)	RETENTION INDEX	CONCENTRATION (UG./G.)
1600	.07370	2147	.05150
1650	.01160	2193	.01950
1670	.01320	2307	.01590
1700	.05900	2347	.01130
1780	.00400	2408	.01350
1800	.05380	2562	.02210
1850	.01500	2638	.07780
1900	.03480	2769	.04650
2000	.03690	2975	.04890
2042	.08080	3050	.18700
2100	.02150	3175	.08060
2150	.04820	3283	.17700
2200	.00670	3417	.13700
2300	.03490	4180	.45200
2400	.01730		
2500	.03480		
2600	.01010		
2700	.00450		
2800	.02620		
2900	.17000		
3000	.02500		
3100	.18200		
3200	.00060		
3250	.01120		
3300	.07270		
3400	.05120		
3500	.02090		
TOTAL	1.22720	TOTAL	1.34060

TOTAL NON-SAPONIFIABLE CONC. (MG./G.) = .01

TABLE 7.181

HEAVY HYDROCARBON ANALYSIS - STUCCS - 1976

SAMPLE TYPE : SED

SAMPLE CODE : ASB1

PERIOD : TOPO HIGH

LOCATION : STATION --0 LINE -

HEXANE ELUATE		BENZENE ELUATE	
RETENTION INDEX	CONCENTRATION (UG./G.)	RETENTION INDEX	CONCENTRATION (UG./G.)
1600	.00384	1767	.00540
1670	.00550	2064	.00563
1700	.00396	2224	.00412
1780	.00122	2311	.00160
1800	.00272	2420	.00181
1853	.00097	2449	.00139
1900	.00112	2610	.00225
1926	.00169	2824	.00484
1956	.00142	3005	.00971
2000	.00115		
2036	.00551		
2100	.00133		
2200	.00151		
2300	.00217		
2400	.00127		
2500	.00178		
2600	.00149		
2700	.00644		
2800	.00259		
2900	.01230		
3000	.00180		
3100	.01430		
3200	.00224		
3300	.00988		
TOTAL	.08820	TOTAL	.03615
TOTAL NON-SAPONIFIABLE CONC. (MG./G.) =			.01

TABLE 7.182

HEAVY HYDROCARBON ANALYSIS - STUCCS - 1976

SAMPLE TYPE : SED

SAMPLE CODE : ASB2

PERIOD : TOPO HIGH

LOCATION : STATION --0 LINE -

HEXANE ELUATE

BENZENE ELUATE

RETENTION INDEX	CONCENTRATION (UG./G.)	RETENTION INDEX	CONCENTRATION (UG./G.)
1400	.00390	2017	.00990
1500	.011400	2224	.03520
1600	.01040	2255	.00920
1670	.01190	2318	.00760
1700	.02080	2427	.01210
1780	.00500	2458	.01470
1800	.01390	2569	.00900
1900	.00690	2630	.02130
2000	.00390	2829	.03300
2040	.00850	3012	.05410
2100	.00670		
2132	.00210		
2159	.01160		
2200	.00370		
2300	.00710		
2400	.00400		
2500	.01180		
2600	.00820		
2700	.04340		
2800	.01790		
2900	.09750		
3000	.01940		
3100	.15000		
3200	.02500		
3300	.09790		
TOTAL	.60670	TOTAL	.20610

TOTAL NON-SAPONIFIABLE CONC. (MG./G.) = .02

TABLE 7.183

HEAVY HYDROCARBON ANALYSIS - STUCCS - 1976

SAMPLE TYPE : SED

SAMPLE CODE : ASB3

PERIOD : TOPO HIGH

LOCATION : STATION --0 LINE -

HEXANE ELUATE

BENZENE ELUATE

RETENTION INDEX	CONCENTRATION (UG./G.)	RETENTION INDEX	CONCENTRATION (UG./G.)
1600	.001540	1962	.00640
1670	.00620	2057	.00570
1700	.00950	2317	.00110
1780	.00200	2767	.00220
1800	.01200	2832	.00150
1900	.00590	3027	.00950
2000	.00250		
2100	.00550		
2200	.00340		
2300	.00870		
2400	.01460		
2500	.02440		
2600	.01280		
2700	.03550		
2800	.02630		
2900	.04570		
3000	.00640		
3100	.05530		
TOTAL	.29210	TOTAL	.02640

TOTAL NON-SAPONIFIABLE CONC. (MG./G.) = .35

TABLE 7.184

HEAVY HYDROCARBON ANALYSIS - STUCCS - 1976

SAMPLE TYPE : SED

SAMPLE CODE : ASB4

PERIOD : TOPO HIGH

LOCATION : STATION --M LINE -

HEXANE ELUATE

BENZENE ELUATE

RETENTION INDEX	CONCENTRATION (UG./G.)	RETENTION INDEX	CONCENTRATION (UG./G.)
1640	.01930	2042	.06940
1670	.00660	2157	.00750
1700	.01600	2244	.00740
1780	.00460	2368	.00590
1800	.01340	2576	.00920
1855	.00320	2645	.01780
1920	.00860	3038	.05230
1958	.00520		
2000	.00610		
2030	.02160		
2100	.01010		
2132	.00480		
2159	.01540		
2200	.00410		
2300	.01360		
2400	.00860		
2500	.02430		
2600	.01450		
2700	.04470		
2800	.01290		
TOTAL	.25760	TOTAL	.16950
TOTAL NON-SAPONIFIABLE CONC. (MG./G.) =			.01

TABLE 7.185

HEAVY HYDROCARBON ANALYSIS - STDCS - 1976

SAMPLE TYPE : SED

SAMPLE CODE : AUB1

PERIOD : TOPO HIGH

LOCATION : STATION --W LINE -

HEXANE ELUATE		BENZENE ELUATE	
RETENTION INDEX	CONCENTRATION (UG./G.)	RETENTION INDEX	CONCENTRATION (UG./G.)
1600	.00610	1768	.01050
1670	.00490	1855	.00090
1700	.01270	2040	.00190
1780	.01220	2070	.00070
1800	.01970	2101	.00130
1854	.00960	2316	.00060
1900	.00840	2361	.00060
2000	.00410	2485	.00100
2036	.00850	2571	.00070
2100	.00270		
2200	.00110		
2300	.00500		
2400	.00150		
2401	.05520		
2500	.00370		
2600	.00200		
2700	.01230		
2800	.00250		
2900	.01880		
3000	.00170		
3100	.02100		
3200	.00460		
3300	.01130		
TOTAL	.23020	TOTAL	.01820
TOTAL NON-SAPONIFIABLE CONC. (MG./G.) =			.01

TABLE 7.186

HEAVY HYDROCARBON ANALYSIS - STUCCS - 1976

SAMPLE TYPE : SED

SAMPLE CODE : AUB2

PERIOD : TOPO HIGH

LOCATION : STATION --0 LINE -

HEXANE ELUATE

BENZENE ELUATE

RETENTION INDEX	CONCENTRATION (UG./G.)	RETENTION INDEX	CONCENTRATION (UG./G.)
1400	.00033	1831	.00338
1447	.00272	1995	.00156
1500	.00095	2041	.00467
1600	.00292	2255	.00095
1670	.00096	2285	.00064
1700	.00290	3029	.00725
1780	.00071		
1800	.00227		
1852	.00080		
1900	.00068		
1952	.00052		
2000	.00068		
2038	.00114		
2100	.00062		
2200	.00068		
2300	.00064		
2400	.00047		
2401	.01040		
2500	.00035		
2600	.00024		
2700	.00128		
2800	.00055		
2900	.00176		
3000	.00039		
3100	.00322		
3200	.00046		
3300	.00316		
TOTAL	.04780	TOTAL	.01845
TOTAL NON-SAPONIFIABLE CONC. (MG./G.) =			.00

TABLE 7.187

HEAVY HYDROCARBON ANALYSIS - STUCCS - 1976

SAMPLE TYPE : SED

SAMPLE CODE : AUB3

PERIOD : TOPO HIGH

LOCATION : STATION --W LINE -

HEXANE ELUATE		BENZENE ELUATE	
RETENTION INDEX	CONCENTRATION (UG./G.)	RETENTION INDEX	CONCENTRATION (UG./G.)
1400	.33100	2106	.01060
1500	.76300	2307	.01080
1600	1.14000	2746	.01490
1622	.35000	2850	.07930
1670	.89700	2900	.09910
1700	1.62000	3008	.20700
1750	.50000	3125	.12000
1800	1.80000	3150	.15000
1850	.69600	3333	.12300
1900	1.86000		
2000	1.81000		
2100	1.98000		
2200	1.80000		
2300	1.52000		
2400	1.39000		
2500	1.59000		
2600	1.29000		
2700	1.20000		
2800	1.12000		
2900	1.12000		
3000	.86200		
3100	1.23000		
3200	1.00000		
3300	.88800		
3400	.65700		
TOTAL	29.47400	TOTAL	.81470
TOTAL NON-SAPONIFIABLE CONC. (MG./G.) =			.08

TABLE 7.188

HEAVY HYDROCARBON ANALYSIS - STUCCS - 1976

SAMPLE TYPE : SED

SAMPLE CODE : A084

PERIOD : TOPO HIGH

LOCATION : STATION --0 LINE -

HEXANE ELUATE

BENZENE ELUATE

RETENTION INDEX	CONCENTRATION (UG./G.)	RETENTION INDEX	CONCENTRATION (UG./G.)
1600	.03480	1711	.00350
1670	.02080	1772	.01020
1700	.03170	1852	.00400
1780	.01240	1925	.01130
1800	.03870	1964	.00230
1852	.01940	2213	.01670
1900	.01340	2322	.00940
2000	.01050	2779	.01070
2036	.01730	2959	.00240
2100	.00680	3034	.02580
2200	.00440		
2300	.00640		
2400	.00350		
2500	.00920		
2600	.00470		
2700	.01940		
2800	.00340		
2900	.03010		
3000	.01490		
3100	.04040		
3200	.01140		
3300	.02980		
TOTAL	.38340	TOTAL	.09630
TOTAL NON-SAPONIFIABLE CONC. (MG./G.) =			.01

TABLE 7.189

HEAVY HYDROCARBON ANALYSIS - STUCCS - 1976

SAMPLE TYPE : SED

SAMPLE CODE : AF61

PERIOD : TOPO HIGH

LOCATION : STATION --- LINE -

HEXANE ELUATE

BENZENE ELUATE

RETENTION INDEX	CONCENTRATION (UG./G.)	RETENTION INDEX	CONCENTRATION (UG./G.)
1400	.00580	1770	.03230
1500	.00240	1850	.00970
1600	.00220	2010	.02410
1670	.00210	2060	.03910
1700	.00250	2110	.01090
1700	.00090	2220	.02740
1800	.00230	2250	.05950
1900	.00110	2320	.00860
1925	.00150	2350	.01100
1950	.00090	2420	.01460
2000	.00070	2450	.03470
2100	.00140	2500	.00910
2200	.00100	2700	.00970
2300	.00140	2820	.00760
2400	.00100		
2500	.00230		
2600	.00150		
2700	.00070		
2800	.00200		
2900	.01440		
3000	.00250		
3100	.01500		
3200	.00160		
3300	.00090		
TOTAL	.08010	TOTAL	.29850
TOTAL NON-SAPONIFIABLE CONC. (MG./G.) =			.01

TABLE 7.190

HEAVY HYDROCARBON ANALYSIS - STUCCS - 1976

SAMPLE TYPE : SED

SAMPLE CODE : AS1B

PERIOD : TOPO HIGH

LOCATION : STATION --0 LINE -

HEXANE ELUATE

BENZENE ELUATE

RETENTION INDEX	CONCENTRATION (UG./G.)	RETENTION INDEX	CONCENTRATION (UG./G.)
1400	.13700	1772	.06670
1439	.04530	1804	.02550
1500	.13000	1863	.05710
1600	.14200	1906	.03110
1670	.18000	1960	.02640
1700	.23200	2227	.02830
1780	.06450	2433	.01010
1800	.24000	2460	.02420
1851	.03880		
1900	.18100		
2000	.15600		
2100	.14500		
2200	.13300		
2300	.12100		
2400	.10900		
2500	.09600		
2600	.08410		
2700	.10700		
2800	.07280		
2900	.09660		
3000	.06470		
3100	.11700		
3200	.05730		
3300	.06530		
TOTAL	2.81200	TOTAL	.26940

TOTAL NON-SAPONIFIABLE CONC. (MG./G.) = .03

TABLE 8

SEDIMENT RATIOS OF INDIVIDUAL HYDROCARBONS
AND AVERAGE OEP VALUES

Explanation of Table 8:

Column 1 Code = unique sample identifier
Column 2 Locat. = station/transect
Column 3 PR/PH = Pristane/Phytane ratio
Column 4 PR/C-17 = Pristane/C-17 ratio
Column 5 PH/C-18 = Phytane/C-18 ratio
Column 6 OEP = Odd-Even Preference indice value

TABLE 8

HEAVY HYDROCARBON ANALYSES - STOCS - 1976

SAMPLE TYPE : SED

PERIOD : WINTER

CODE	LOCAT.	PR / PH	PR/C-17	PH/C-18	SEP
AHAP	1 / I	3.78	1.36	.24	1.63
AHCK	2 / I	1.21	.81	.55	2.19
AHDT	3 / I	.96	.68	.76	1.35
AHFA	4 / I	0	0	0	1.52
AHGA	5 / I	0	0	0	1.13
AHHA	6 / I	1.67	.61	.41	1.65
AHII	1 / II	0	0	0	2.64
AHIC	2 / II	0	0	0	1.92
AHLN	3 / II	.15	.18	.50	.68
AHMR	4 / II	.77	.40	.63	1.93
AHQA	5 / II	1.52	.52	.43	2.58
AHPN	6 / II	.93	.48	.54	3.53
AJAC	2 / III	0	0	0	1.82
AJBY	3 / III	0	0	0	2.50
AJDU	4 / III	2.39	.96	.49	2.16
AJHE	6 / III	0	0	0	2.91
AJIN	1 / IV	1.19	.62	.41	1.73
AJLO	2 / IV	0	0	0	2.73
AJMS	3 / IV	0	0	0	2.09
AJNQ	4 / IV	1.44	.32	.22	1.23
AJNI	5 / IV	0	0	0	4.45
AJRZ	6 / IV	0	.86	0	2.69
AJUA	7 / IV	0	0	0	1.05

TABLE 8 Cont.'d

HEAVY HYDROCARBON ANALYSES - STOCS - 1976

SAMPLE TYPE : SED

PERIOD : SPRING

CODE	LOCAT.	PR / PH	PR/C-17	PH/C-18	DEP
-----	-----	-----	-----	-----	-----
ALYM	1 / I	2.54	2.22	.19	3.41
ALYN	1 / I	8.44	2.84	.24	4.69
ALYO	1 / I	8.92	.92	.15	3.88
ALYP	1 / I	28.25	2.49	.47	3.81
ALYQ	1 / I	"	1.25	"	2.45
AMAM	2 / I	"	"	"	3.37
AMAN	2 / I	1.22	.22	.16	3.41
AMAO	2 / I	"	"	"	4.25
AMAP	2 / I	5.31	2.54	.64	1.41
AMAQ	2 / I	"	"	"	2.94
AMCJ	3 / I	2.47	.61	.51	2.77
AMCK	3 / I	2.47	.24	.12	3.61
AMCL	3 / I	1.55	.23	.07	3.49
AMCM	3 / I	.97	.34	.29	2.13
AMCN	3 / I	"	.31	"	2.55
AMED	4 / I	"	"	"	"
AMEE	4 / I	1.67	.56	.27	3.96
AMEF	4 / I	"	1.33	"	3.52
AMEG	4 / J	3.44	.75	.33	3.73
AMEH	4 / I	"	"	.28	1.64
AMFX	5 / I	.63	.28	.61	2.67
AMFY	5 / I	.16	.19	1.23	3.35
AMFZ	5 / I	2.59	.38	.16	1.58
AMGA	5 / I	39.44	.37	.21	2.87
AMGB	5 / I	.73	.33	.44	2.16
AMHR	6 / I	.29	.53	.54	2.34
AMHT	6 / I	"	"	1.44	2.14
AMHU	6 / I	2.54	.79	.21	1.62
AMHV	6 / I	"	"	1.64	4.44
AMJL	1 / II	3.92	1.74	.23	2.63
AMJM	1 / II	"	"	.33	1.44
AMJN	1 / II	.29	.36	1.12	2.81
AMJO	1 / II	.86	.67	.53	5.46
AMJP	1 / II	"	.13	"	2.94
AMLV	2 / II	5.33	.38	.45	2.92
AMLU	2 / II	.54	.26	.55	3.45
AMLP	2 / II	.75	.38	.31	2.15
AMLQ	2 / II	.67	.44	.38	3.31
AMLR	2 / II	1.44	.17	.13	2.92
AMNO	3 / II	1.43	.24	.17	3.73
AMNP	3 / II	4.16	.77	.44	2.64

TABLE 8 Cont.'d

HEAVY HYDROCARBON ANALYSES - STOCS - 1976

SAMPLE TYPE : SED

PERIOD : SPRING

CODE	LOCAT.	PR / PH	PR/C-17	PH/C-18	DEP
----	-----	-----	-----	-----	-----
AMNQ	3 / II	1.26	.35	.16	2.69
AMNR	3 / II	1.88	.22	.14	3.63
AMNS	3 / II	0	0	.10	3.54
AMPI	4 / II	1.00	.92	.66	2.99
AMPK	4 / II	0	0	1.00	2.55
AMPL	4 / II	1.88	.71	.53	3.72
AMPM	4 / II	0	0	.37	2.97
AMRA	5 / II	4.67	.48	.11	2.73
AMRB	5 / II	1.05	.46	.31	3.13
AMRC	5 / II	0	0	.17	2.87
AMRD	5 / II	.96	.28	.19	3.37
AMRE	5 / II	1.05	.46	.31	3.13
AMSS	6 / II	2.00	.23	.14	2.11
AMST	6 / II	1.50	.21	.13	2.53
AMSU	6 / II	2.00	.25	.06	5.33
AMSV	6 / II	2.13	.35	.19	3.90
AMSW	6 / II	.56	.38	.52	3.20
AMXD	1 / III	2.92	.19	.10	6.07
AMXP	1 / III	.85	.24	.25	2.87
AMXD	1 / III	2.33	.70	.21	2.88
AMXR	1 / III	1.20	.26	.16	2.43
AMXS	1 / III	1.07	.31	.25	2.57
AMZD	2 / III	0	0	1.00	3.33
AMZP	2 / III	2.54	.26	.09	2.50
AMZQ	2 / III	.19	.34	0	2.37
AMZR	2 / III	1.03	.35	.33	3.67
AMZS	2 / III	3.36	.20	.24	3.58
ANBL	3 / III	1.57	.32	.18	4.43
ANBM	3 / III	.58	.16	2.90	2.83
ANBN	3 / III	1.50	.12	.10	2.22
ANBO	3 / III	3.07	.67	.11	3.56
ANBP	3 / III	1.83	.28	.18	2.13
ANDF	4 / III	1.50	.22	.22	3.11
ANDG	4 / III	2.67	.24	.09	1.35
ANDH	4 / III	1.19	.43	.33	4.24
ANDI	4 / III	1.15	.34	.26	2.84
ANDJ	4 / III	.67	.23	.21	7.86
ANEZ	5 / III	.69	.41	.61	2.34
ANFA	5 / III	2.00	.44	.30	3.87
ANFB	5 / III	1.52	.37	.21	2.62
ANFC	5 / III	0	0	0	0

TABLE 8 Cont.'d

HEAVY HYDROCARBON ANALYSES - STDCS - 1976

SAMPLE TYPE : SED

PERIOD : SPRING

CODE	LOCAT.	PR / PH	PR/C-17	PH/C-18	OEP
----	-----	-----	-----	-----	-----
ANFD	5 / III	1.79	.09	.53	3.14
ANGR	6 / III	19.00	.60	.04	4.72
ANGS	6 / III	.50	.27	.46	3.63
ANGT	6 / III	1.07	.39	4.94	3.24
ANGU	6 / III	1.50	.18	.40	3.52
ANGV	6 / III	1.50	.64	.19	2.14
ANIL	1 / IV	.66	.45	.41	2.26
ANIM	1 / IV	2.50	.26	.11	3.37
ANIN	1 / IV	1.60	.33	.24	1.98
ANIO	1 / IV	1.33	.29	.16	2.25
ANIP	1 / IV	1.93	.60	.21	4.50
ANKL	2 / IV	.95	.30	.17	1.92
ANKM	2 / IV	1.00	.19	.13	3.46
ANKN	2 / IV	.67	.34	.47	3.72
ANKO	2 / IV	1.32	.29	.22	2.70
ANKP	2 / IV	4.23	.81	.16	5.32
ANMI	3 / IV	1.44	.29	.21	1.73
ANMJ	3 / IV	2.42	1.28	.68	3.34
ANMK	3 / IV	1.26	.45	.20	1.57
ANML	3 / IV	1.68	.33	.17	2.18
ANMM	3 / IV	2.69	.88	.25	4.68
ANND	4 / IV	.80	.24	.38	3.03
ANNE	4 / IV	2.33	.27	.13	1.28
ANOF	4 / IV	10.17	.85	.06	2.01
ANOG	4 / IV	1.40	.35	.19	1.78
ANPU	5 / IV	2.50	.28	.11	2.66
ANPV	5 / IV	1.92	.50	.31	2.02
ANPA	5 / IV	2.00	.33	.05	2.14
ANPX	5 / IV	1.12	.55	.49	2.91
ANPY	5 / IV	.69	.57	.75	2.66
ANRM	6 / IV	1.40	.32	.17	2.52
ANRN	6 / IV	1.88	.28	.16	2.26
ANRO	6 / IV	4.00	.25	.00	1.92
ANRP	6 / IV	1.67	.30	.21	2.24
ANRD	6 / IV	1.00	.13	.06	3.31
ANTE	7 / IV	1.13	.31	.24	4.60
ANTF	7 / IV	2.00	.10	.03	3.14
ANTG	7 / IV	1.38	.22	.27	2.28
ANTH	7 / IV	2.09	.44	.28	3.23
ANTI	7 / IV	1.75	.24	.16	3.06

TABLE 8 Cont.'d

HEAVY HYDROCARBON ANALYSES - STOCS - 1976

SAMPLE TYPE : SED

PERIOD : FALL

CODE	LOCAT.	PR / PH	PR/C-17	PH/C-18	OEP
AQYZ	1 / I	0	.99	0	2.12
ARCT	3 / I	2.27	.60	.06	2.32
AREK	4 / I	1.33	.46	.30	2.86
ARGB	5 / I	0	0	0	1.61
ARHS	6 / I	5.00	.75	.04	2.18
ARJT	1 / II	3.94	.47	.08	2.22
ARLT	2 / II	0	.60	0	2.42
ARNS	3 / II	.53	.39	.77	1.92
ARPI	4 / II	.96	.81	.26	2.22
ARQR	5 / II	1.20	.43	.11	2.33
ARSR	6 / II	0	.21	0	2.16
ARTM	1 / III	3.72	.39	.17	1.43
ARVK	2 / III	2.40	1.50	.18	3.22
ARXM	3 / III	1.20	.37	.22	3.23
ARZC	4 / III	1.69	.21	.08	3.52
ASAL	5 / III	3.37	.53	.13	2.32
ASHU	6 / III	1.76	.20	.11	2.29
ASDF	1 / IV	.33	.30	.42	3.03
ASFC	2 / IV	.32	.34	.48	2.40
ASHH	3 / IV	.89	.43	.46	3.20
ASIS	4 / IV	1.28	.31	.25	2.80
ASKC	5 / IV	0	.61	0	2.22
ASLM	6 / IV	3.05	.33	.10	2.30
ASMW	7 / IV	3.74	.32	.09	2.37

FIGURE 5

SEDIMENT ODD-EVEN PREFERENCE INDICE (OEP) VALUES

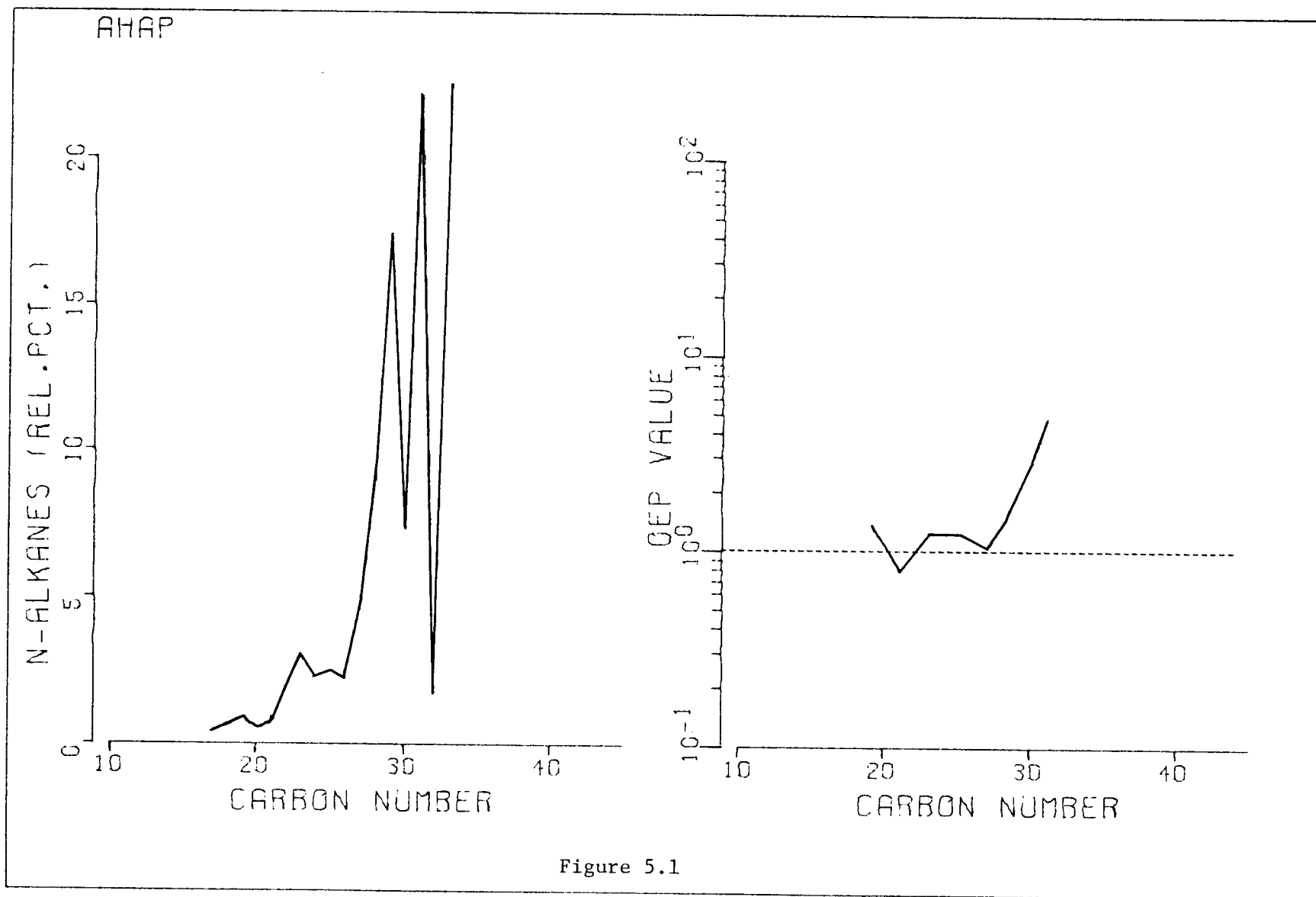


Figure 5.1

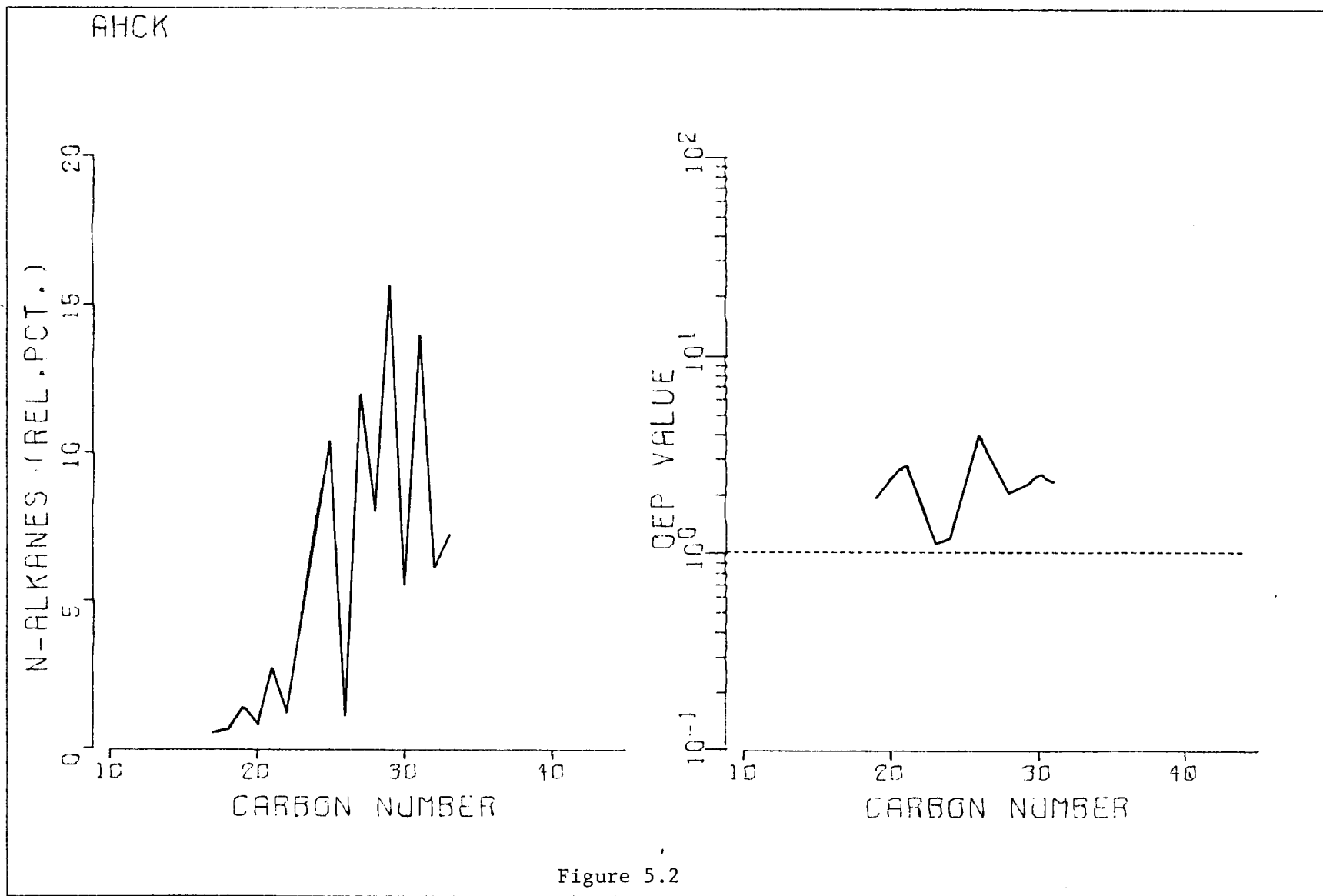


Figure 5.2

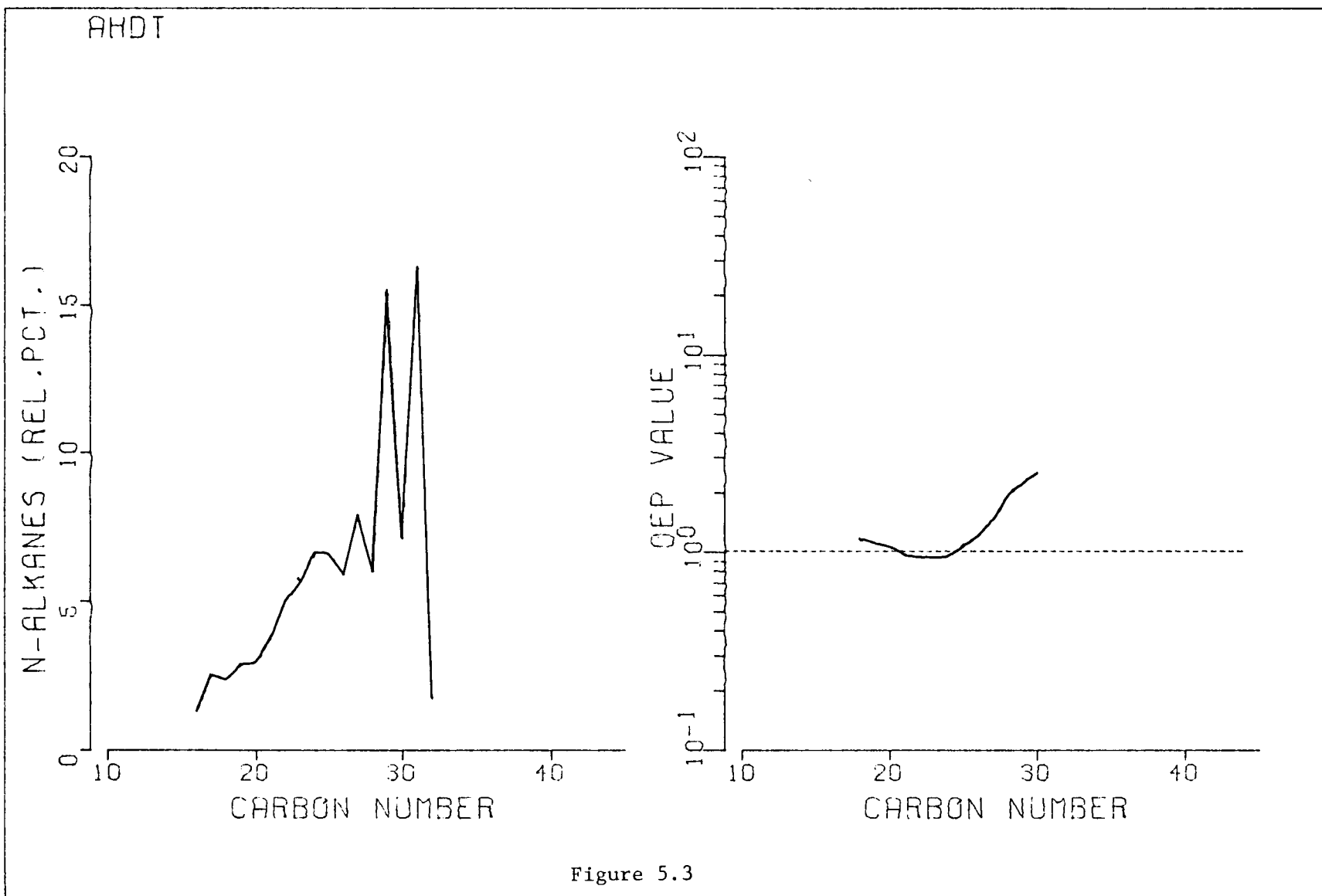
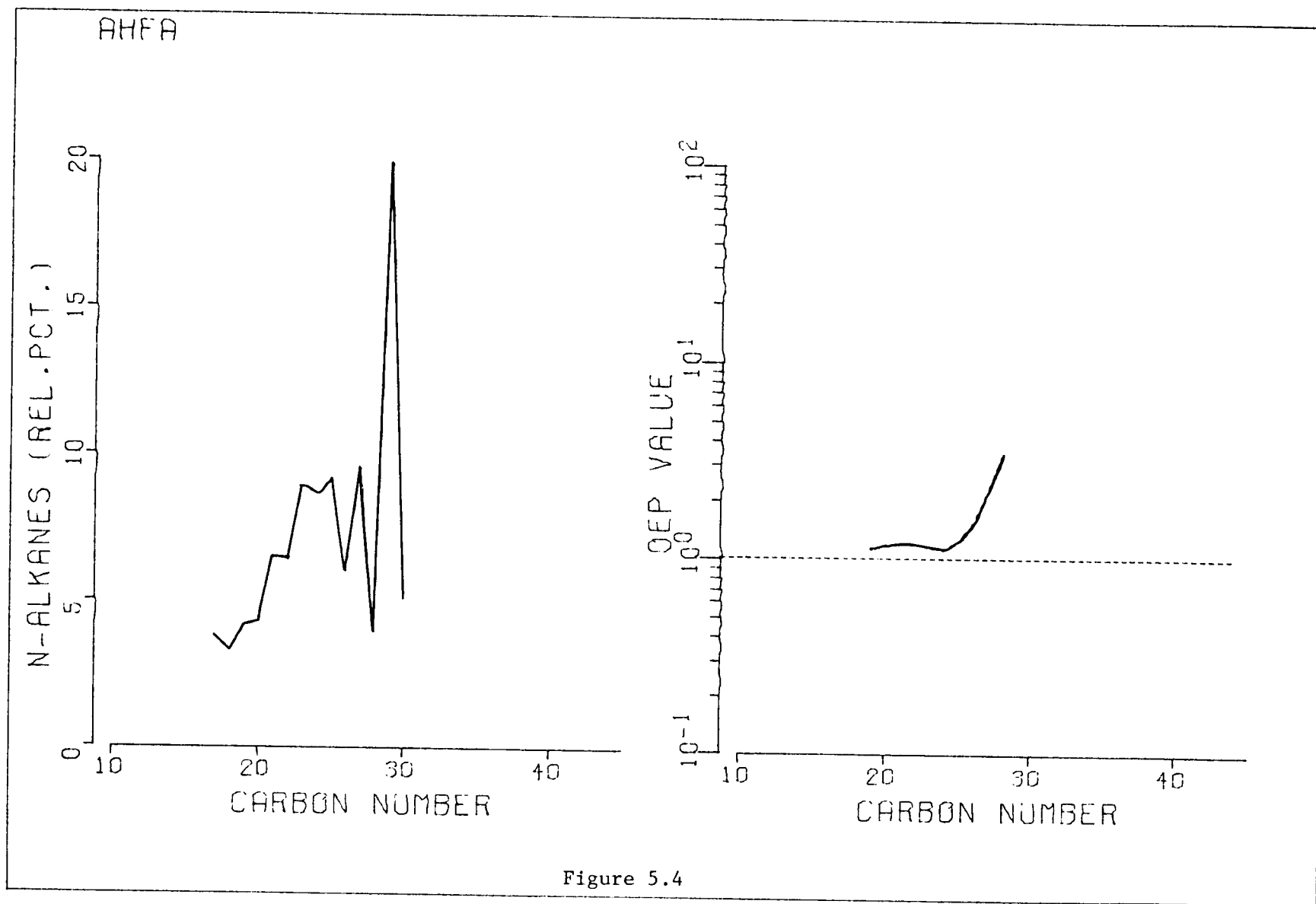


Figure 5.3



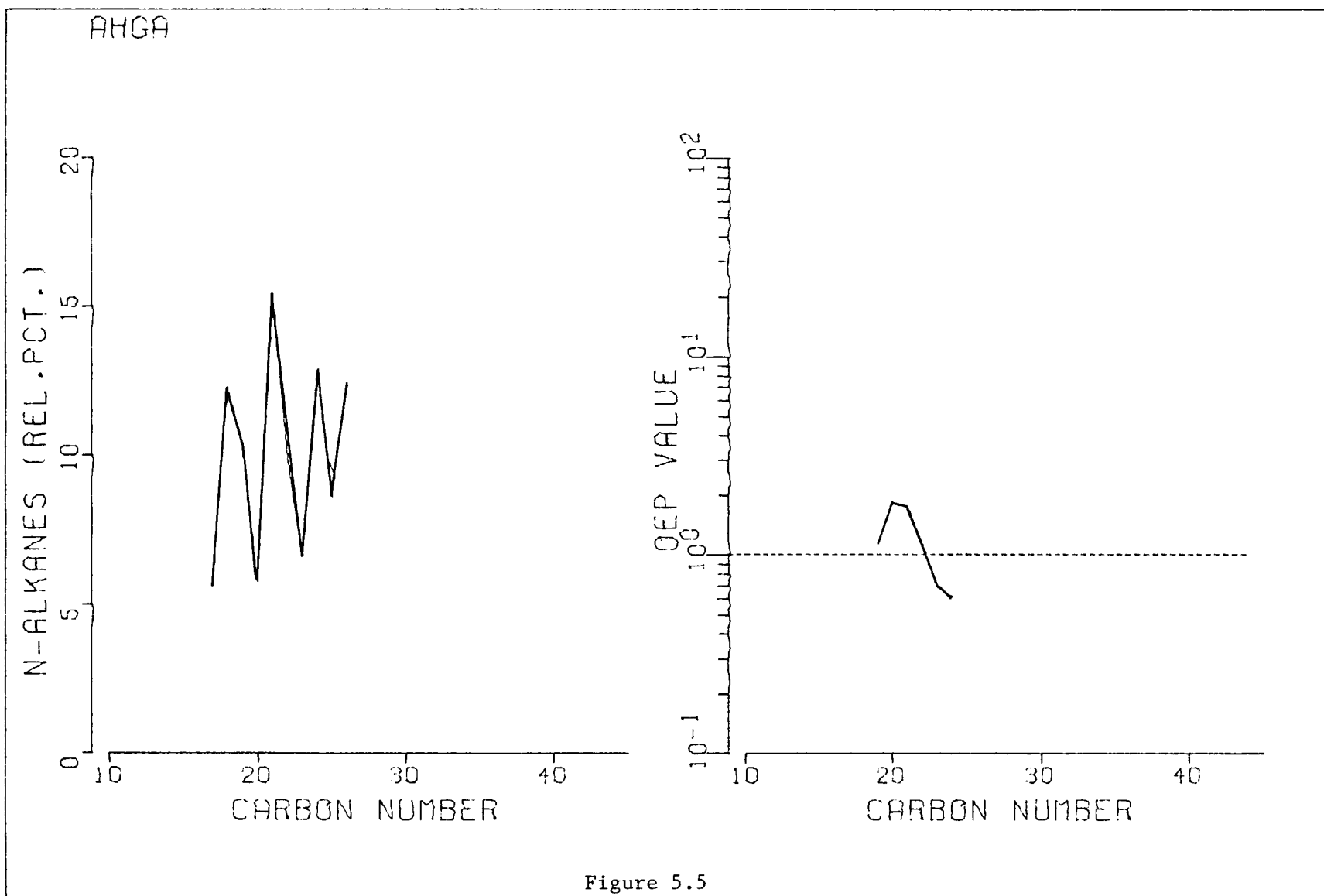


Figure 5.5

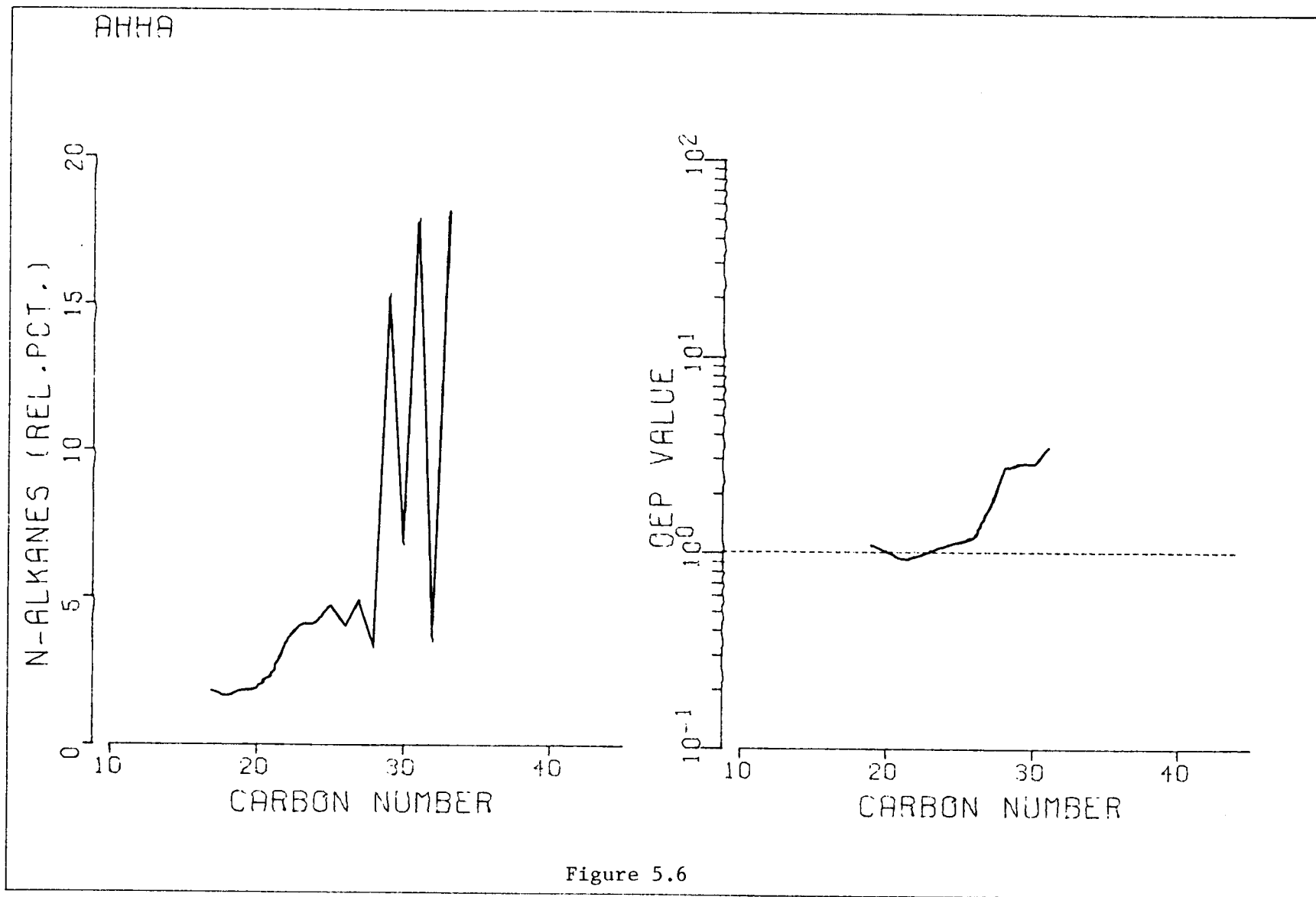


Figure 5.6

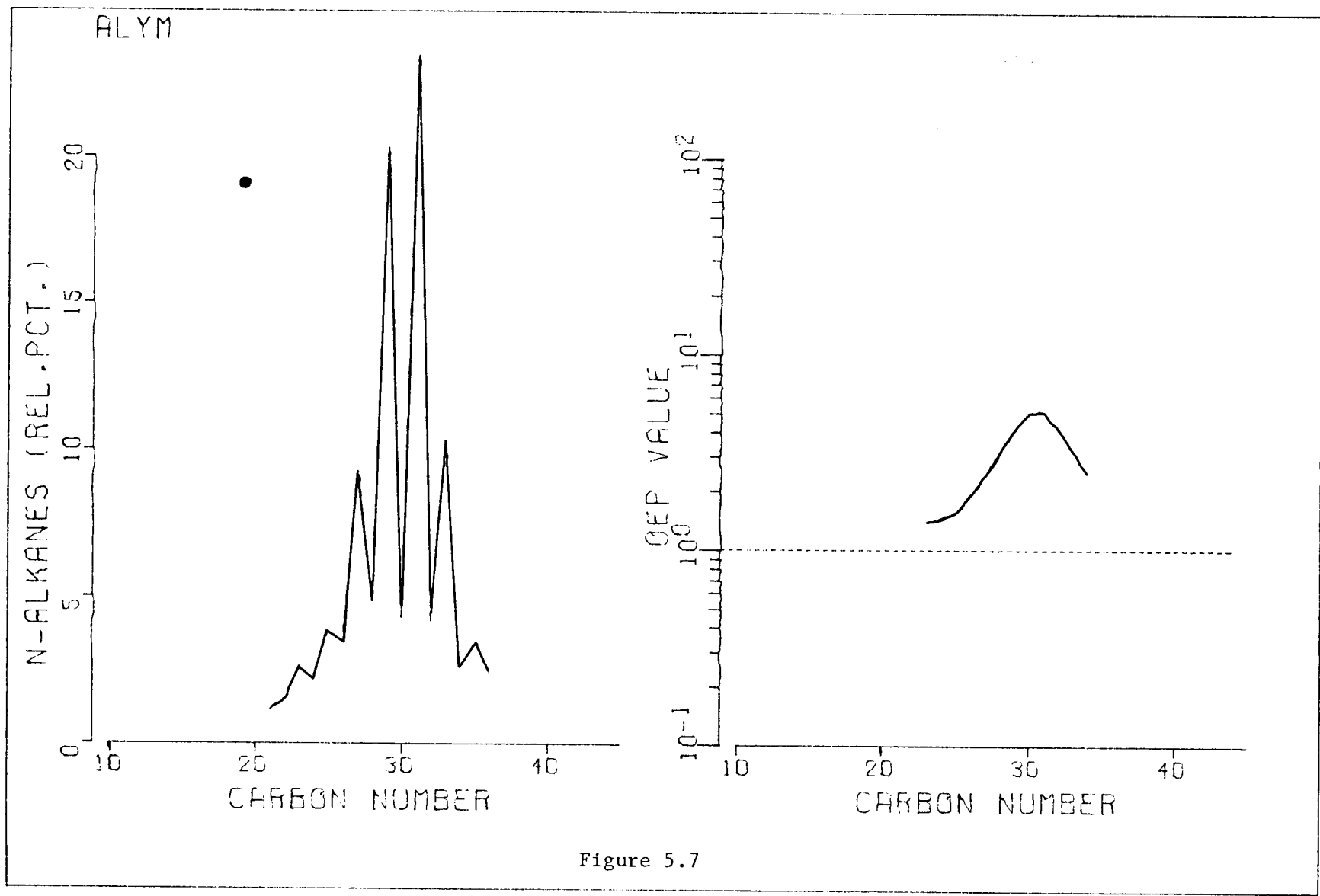


Figure 5.7

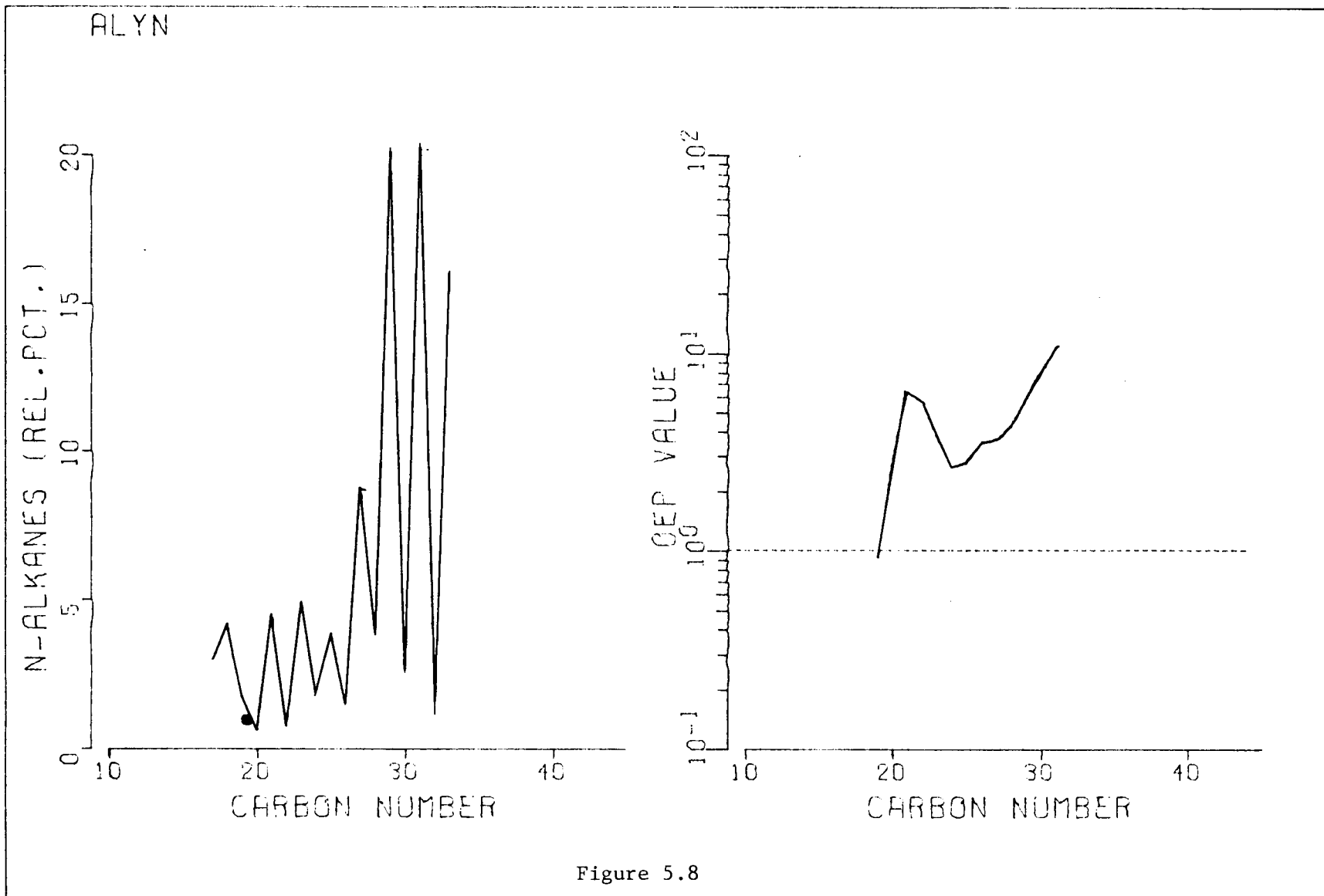


Figure 5.8

ALYO

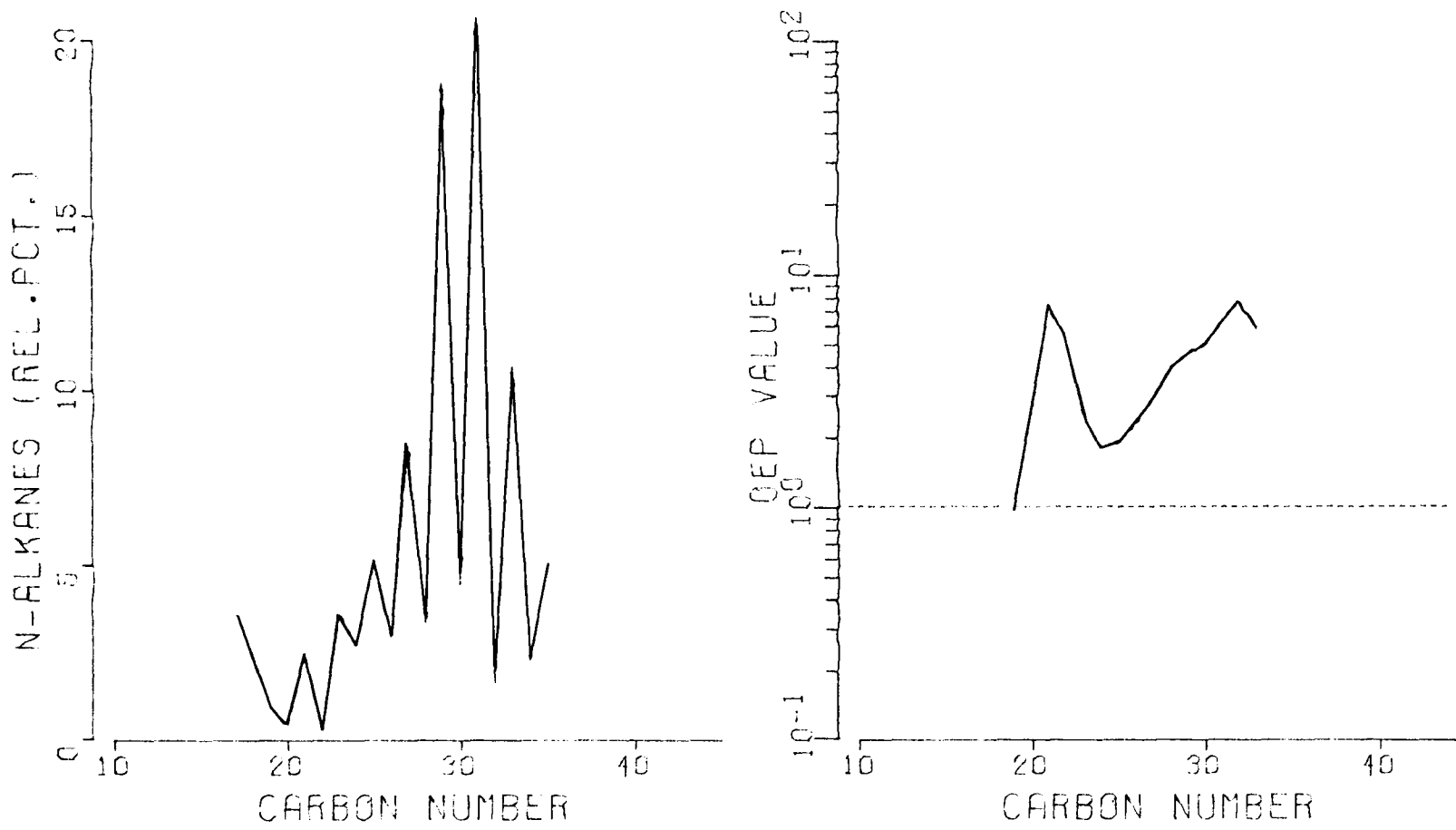


Figure 5.9

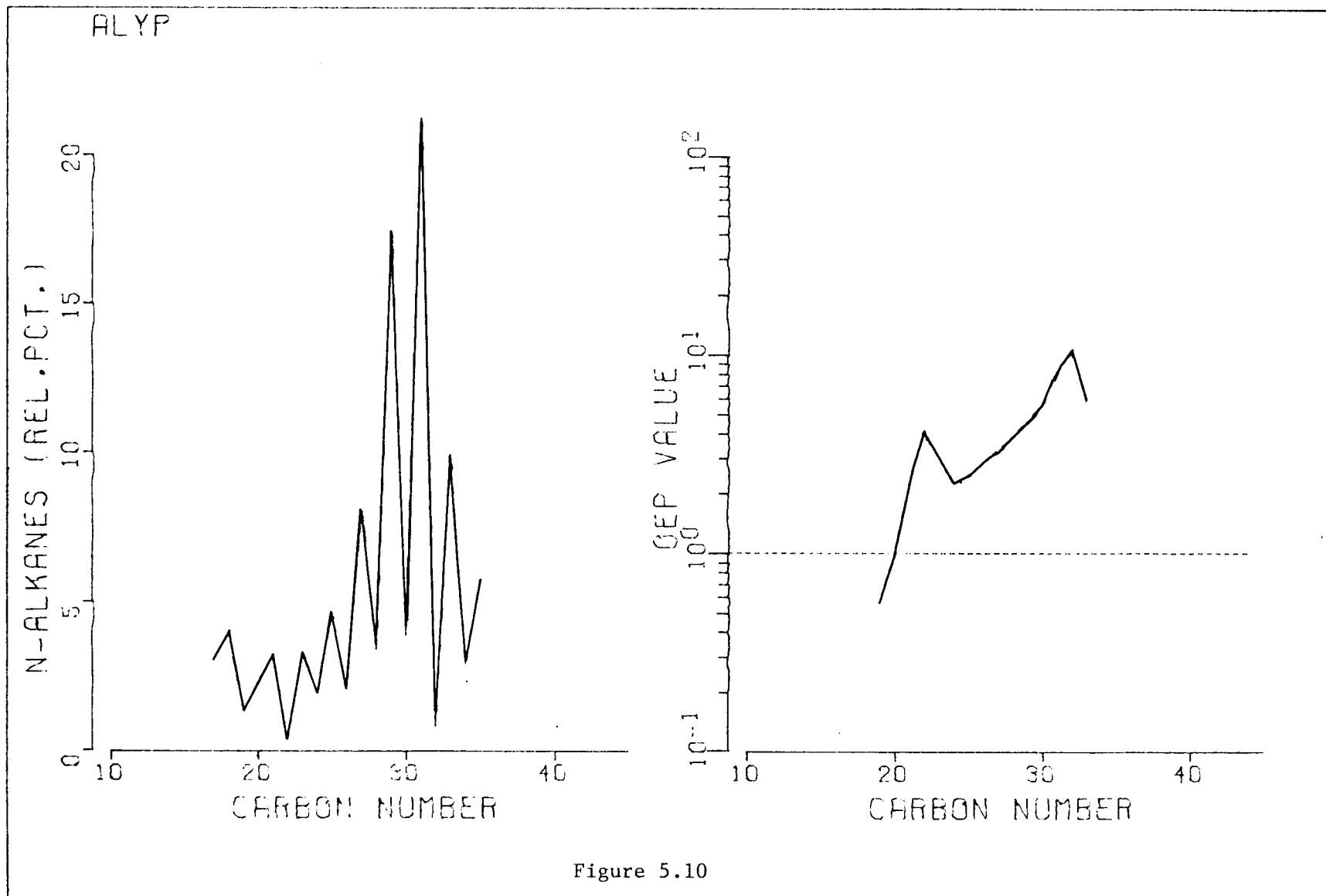


Figure 5.10

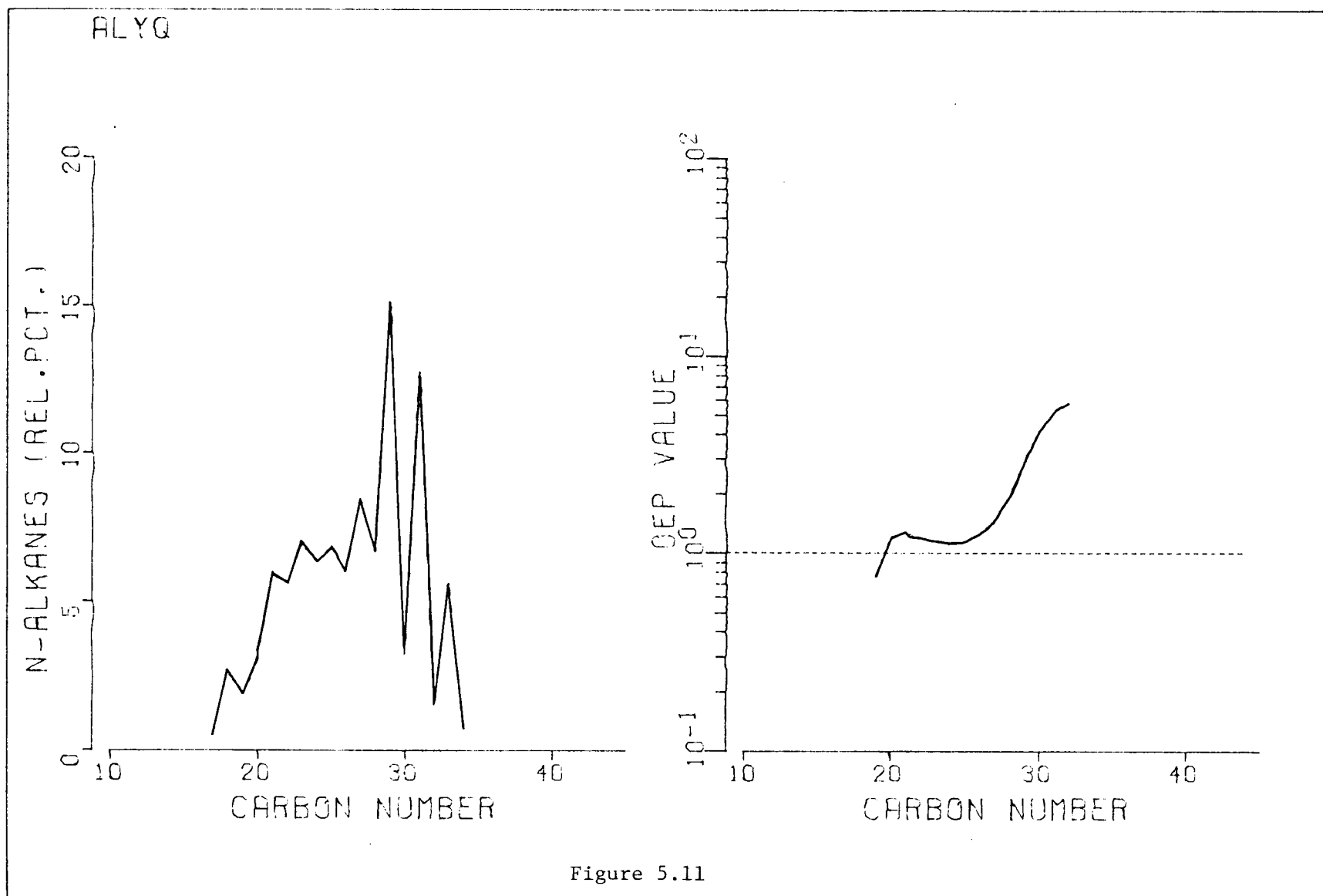
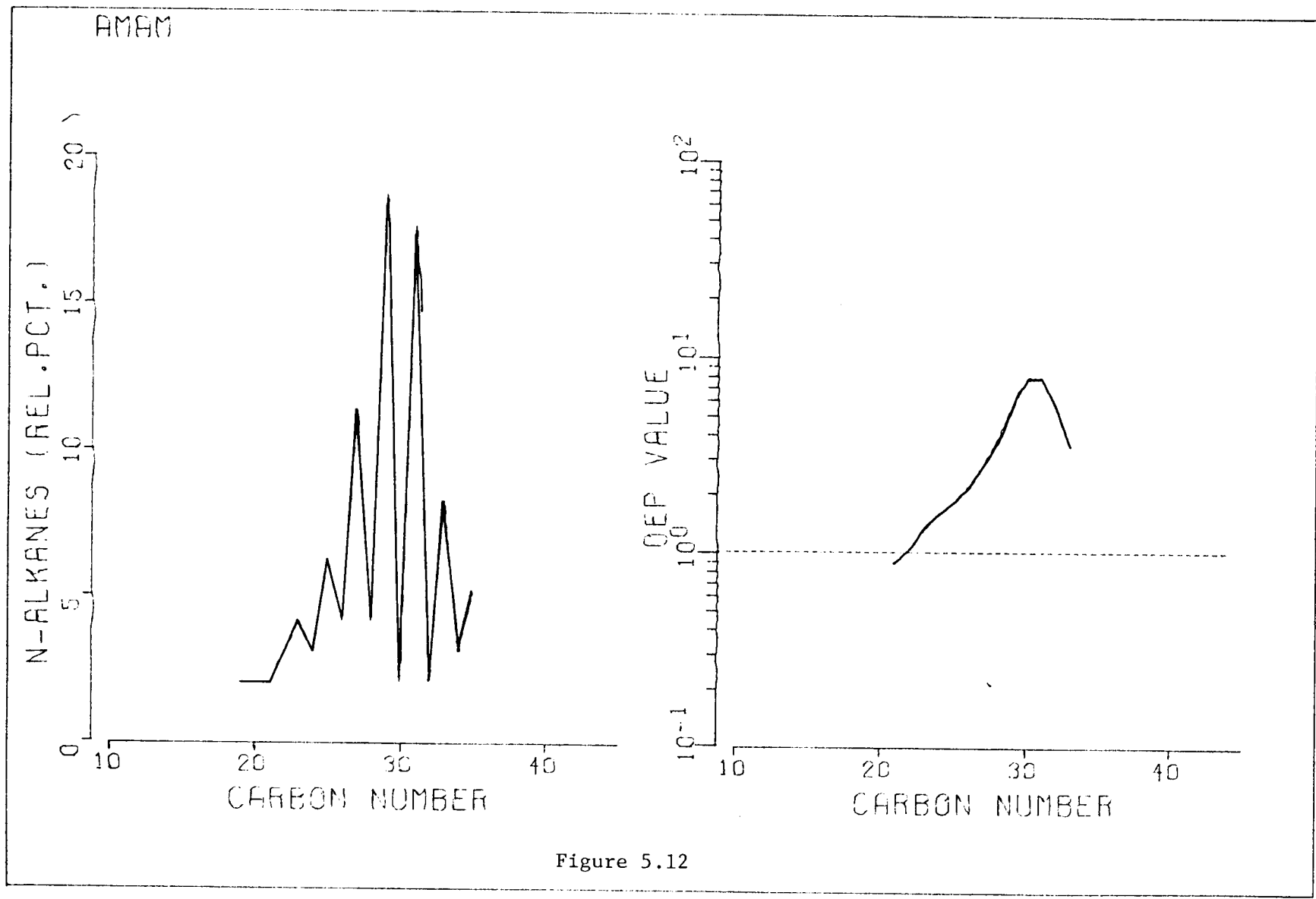


Figure 5.11



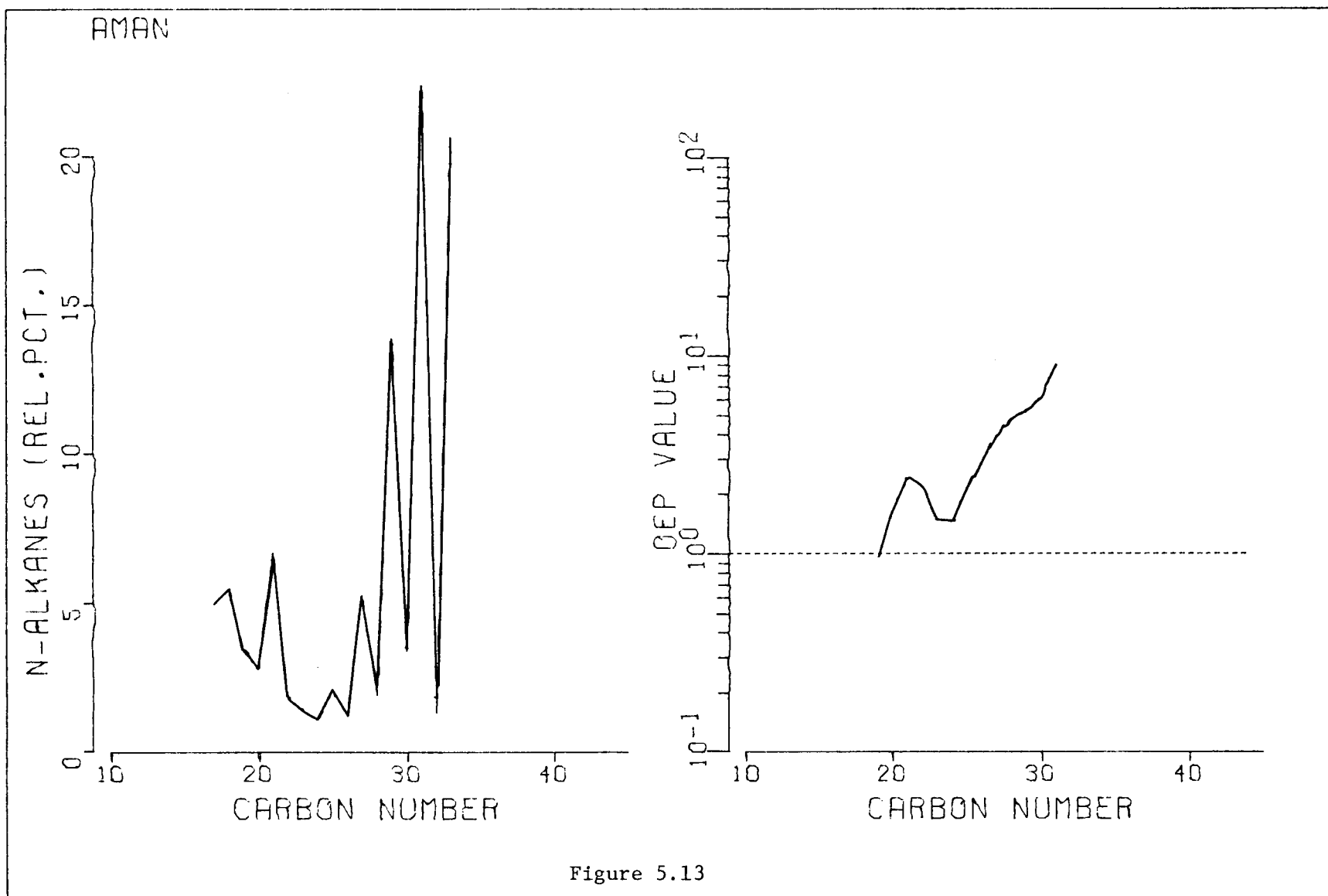


Figure 5.13

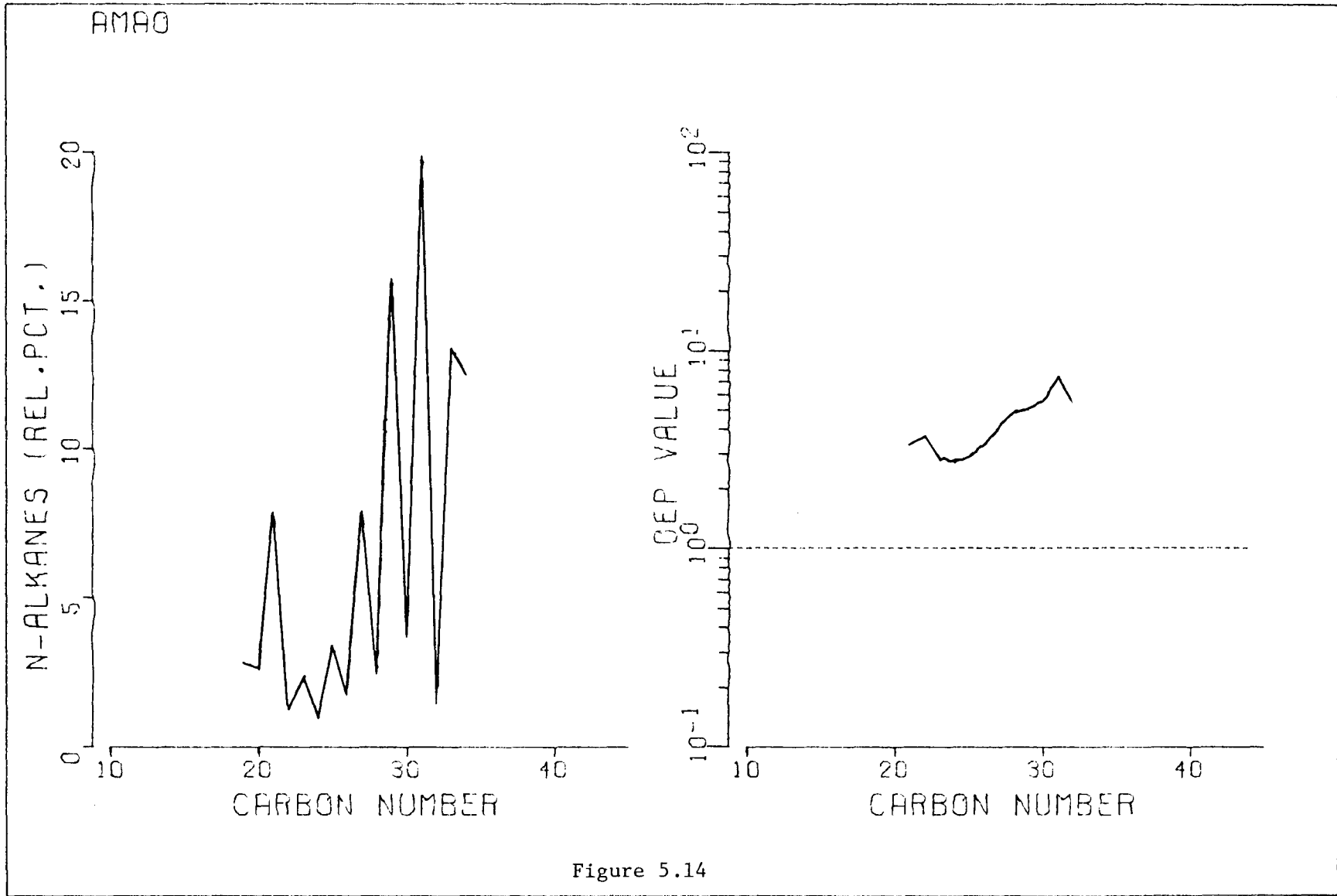


Figure 5.14

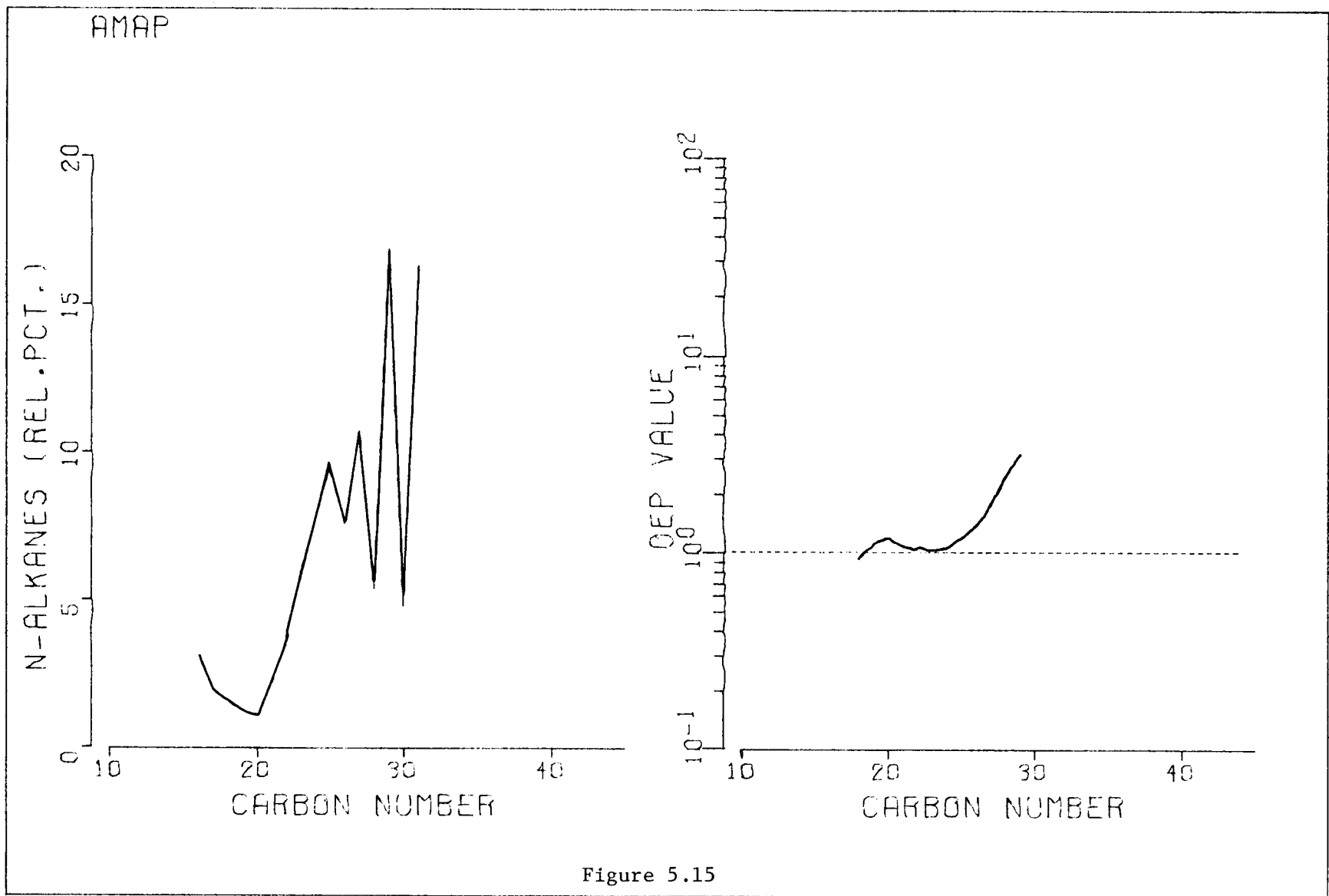


Figure 5.15

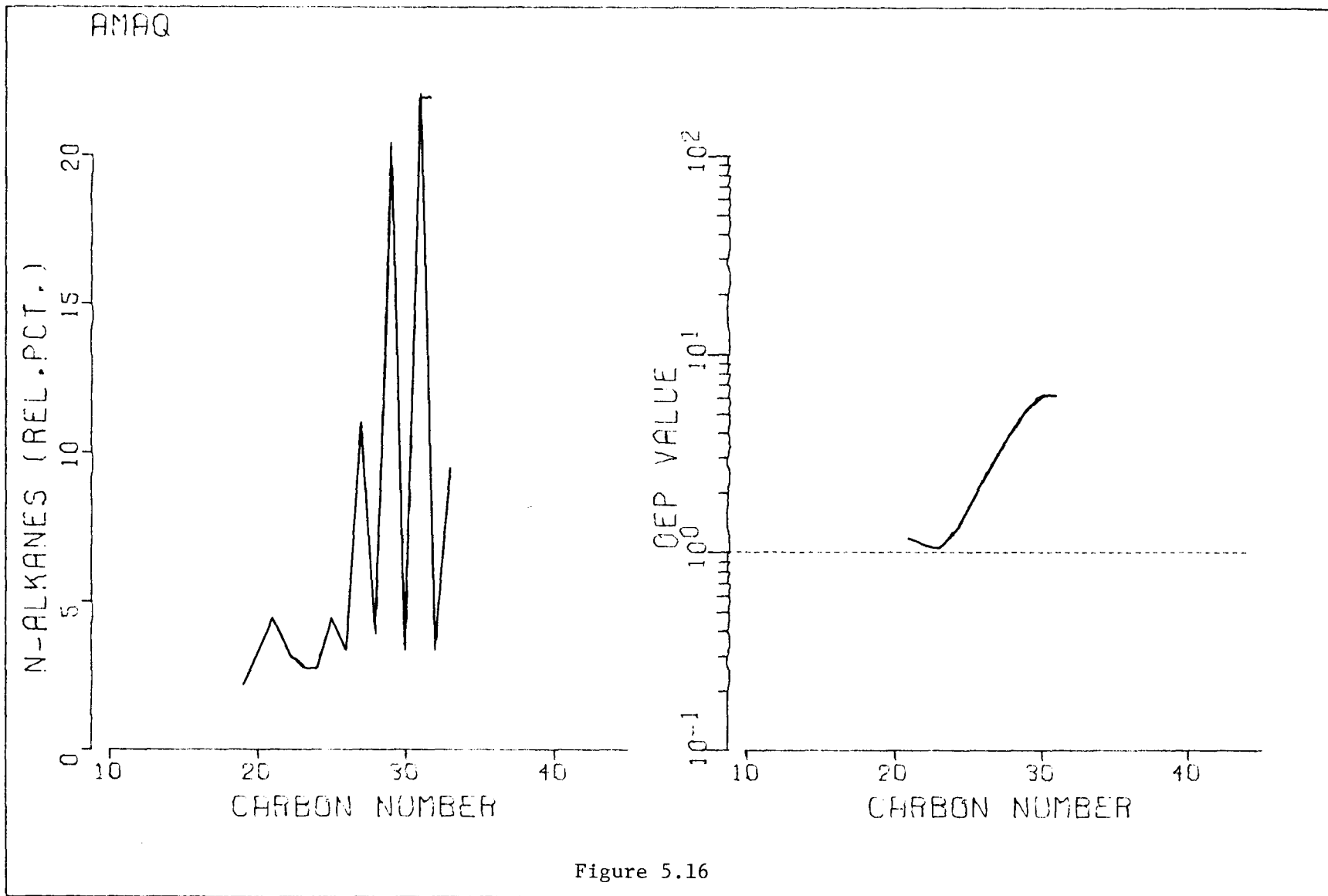


Figure 5.16

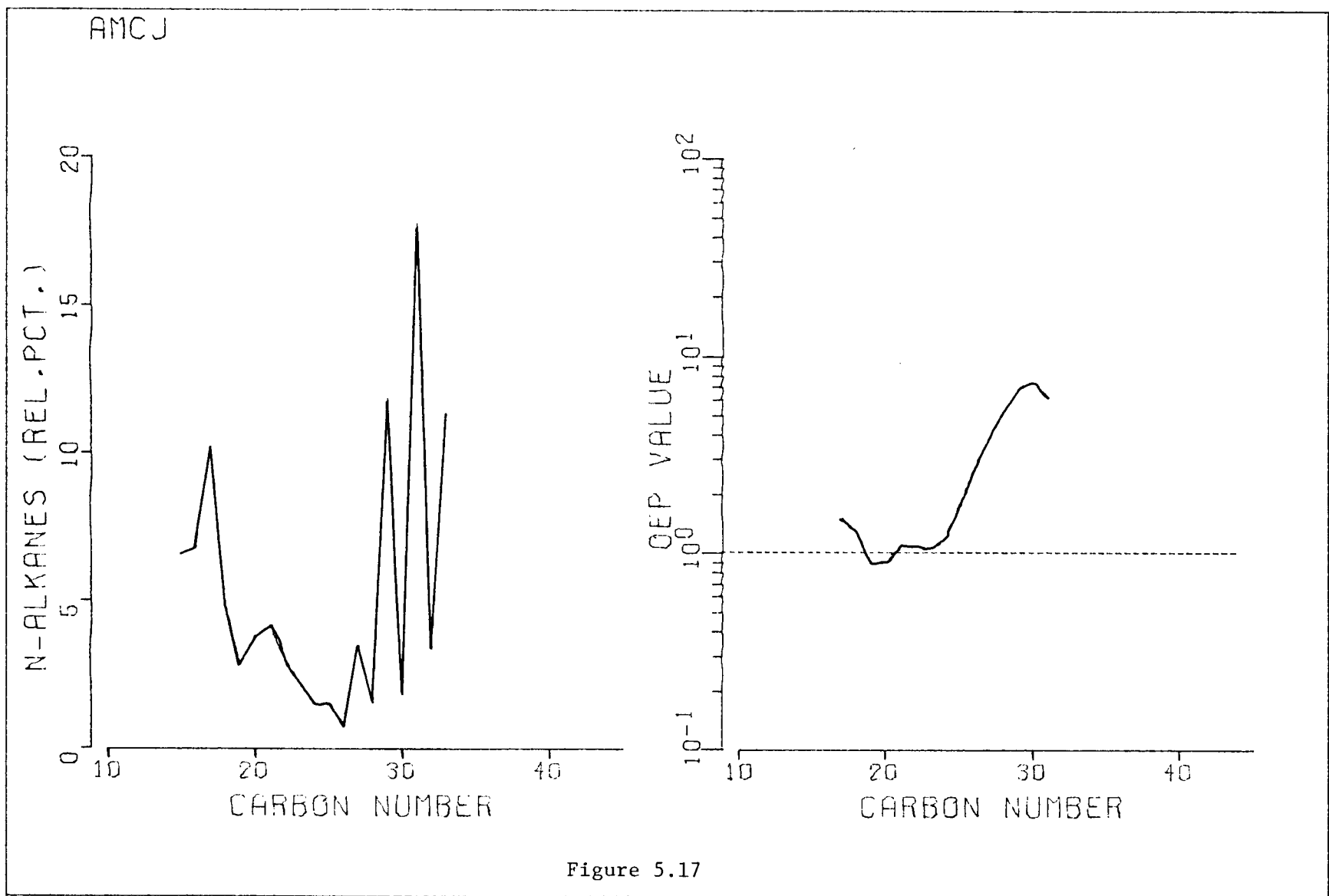
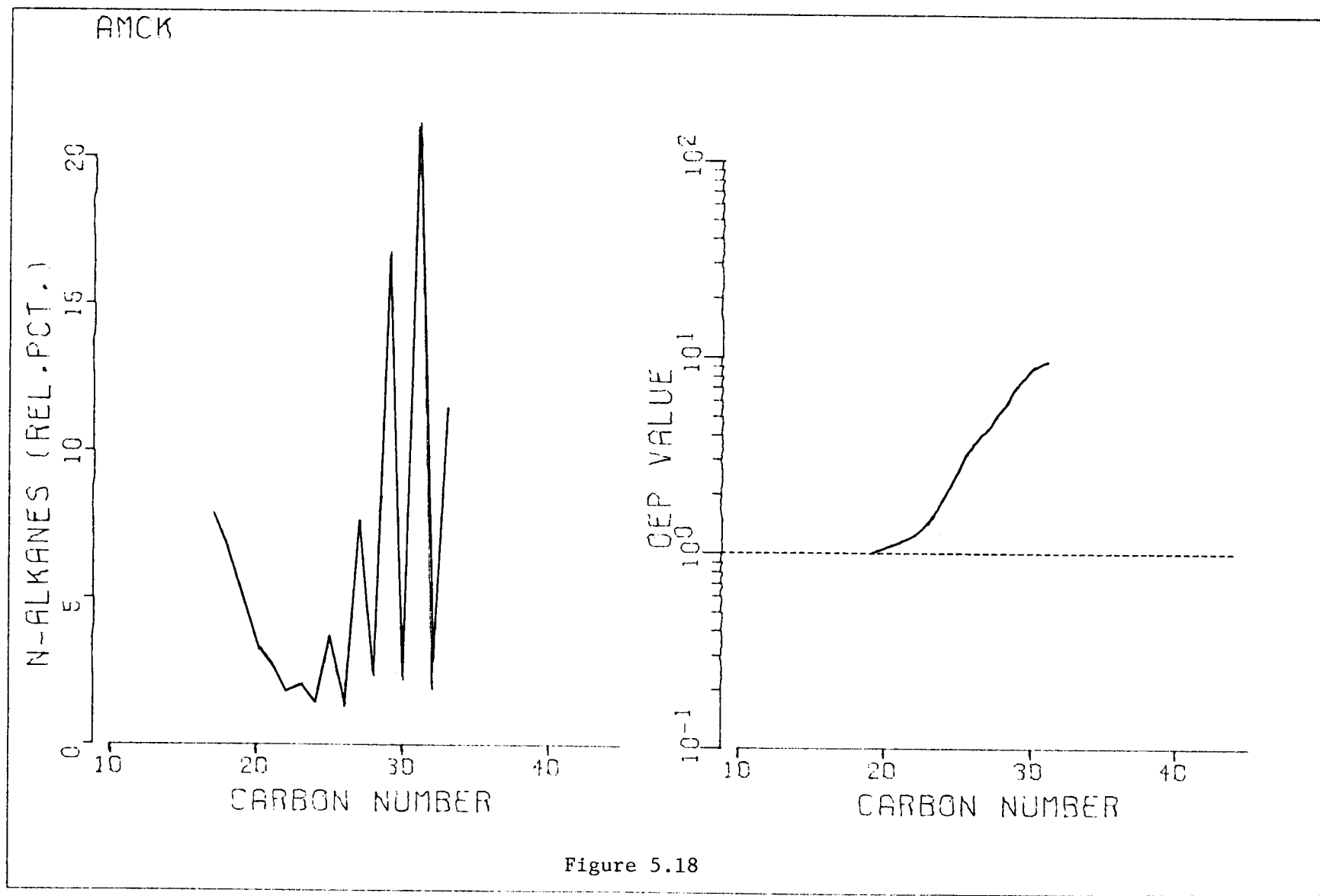
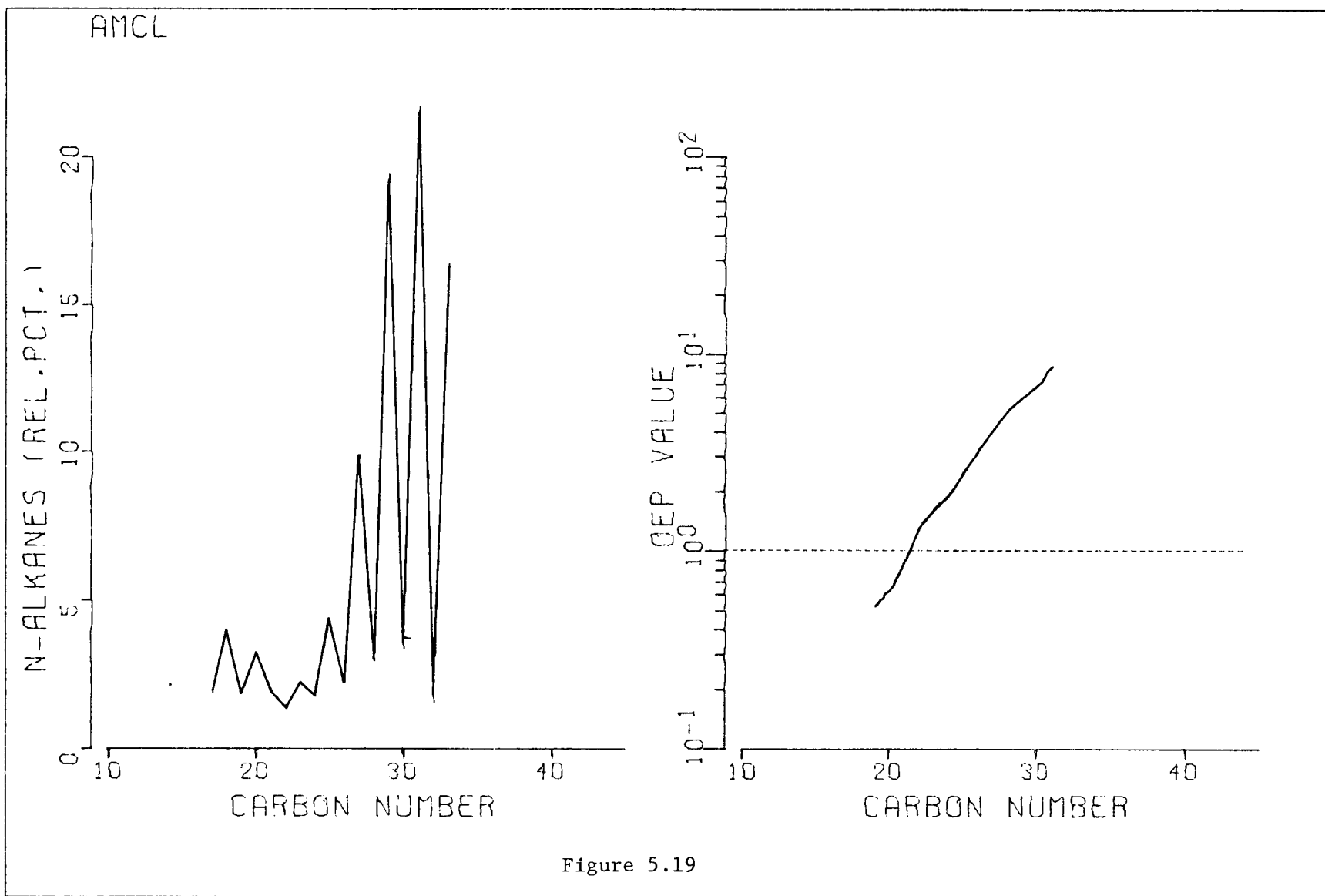


Figure 5.17





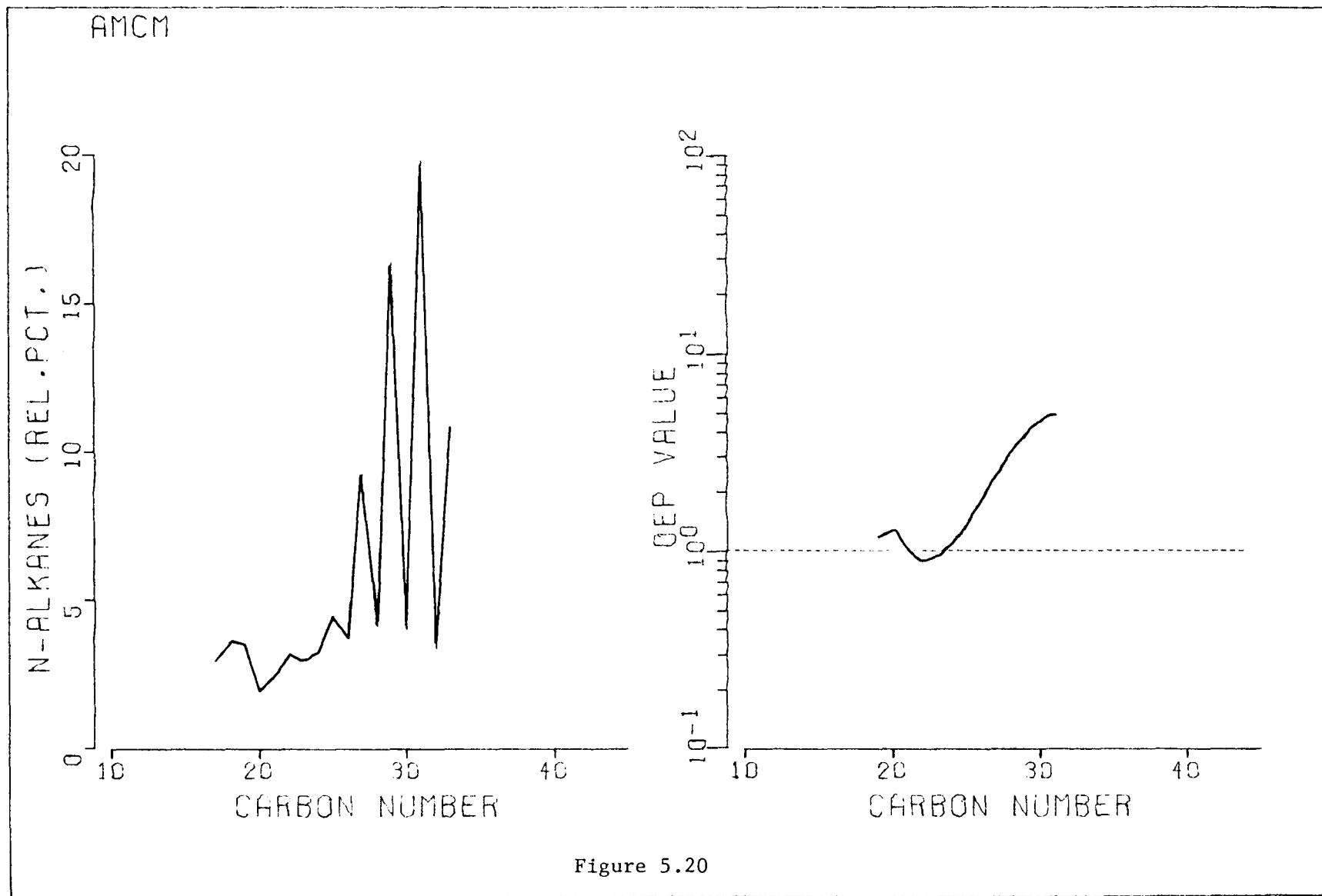


Figure 5.20

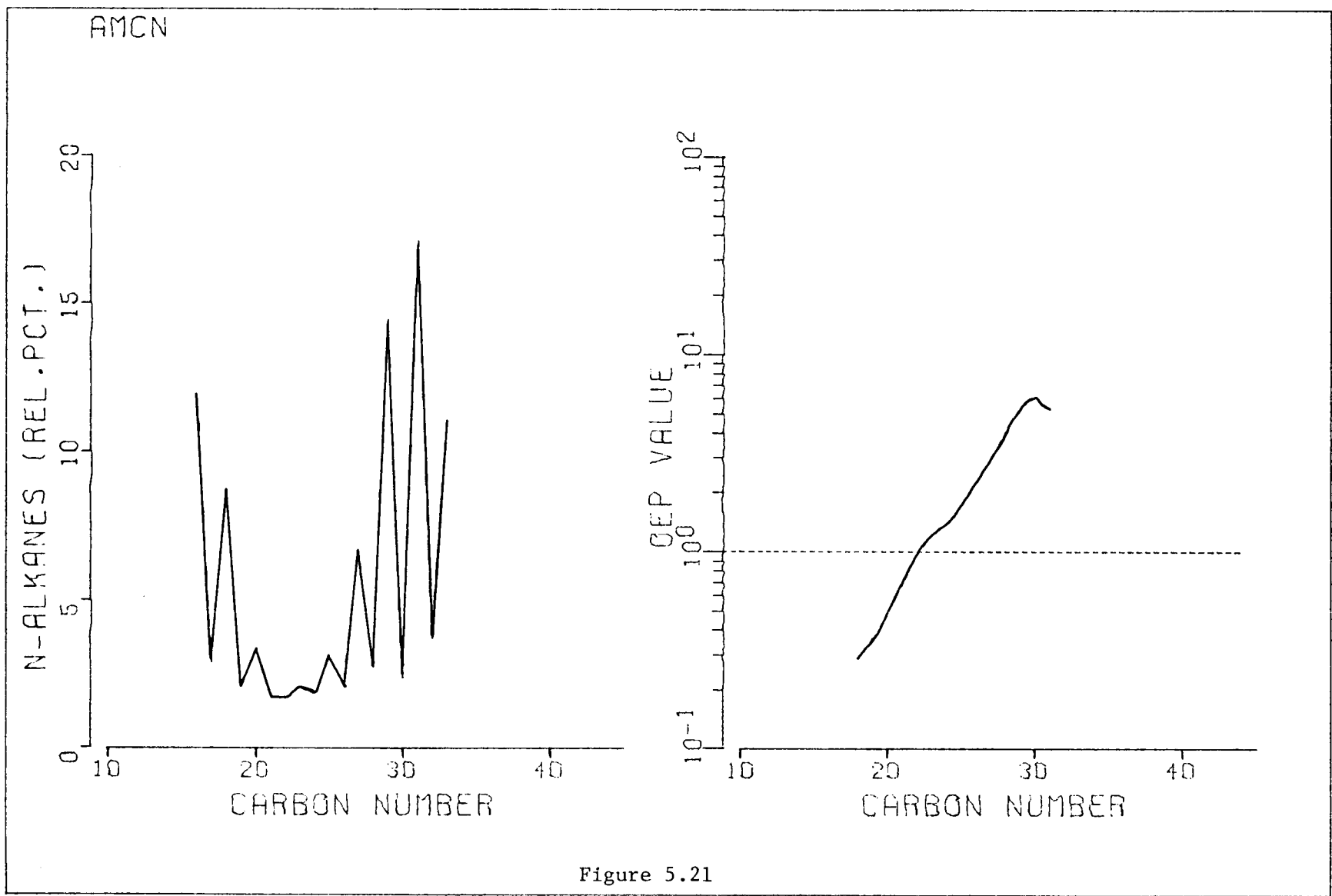
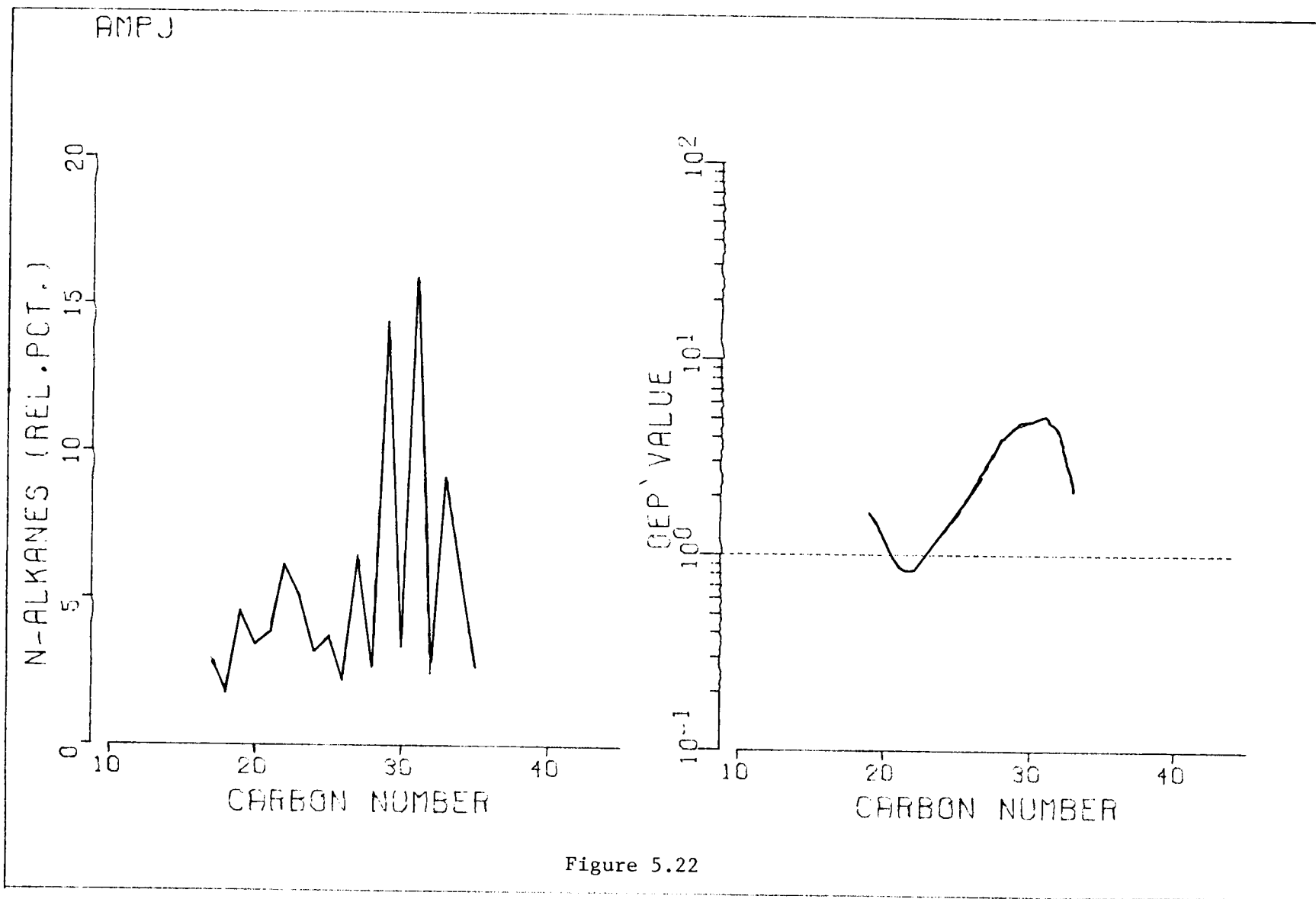


Figure 5.21



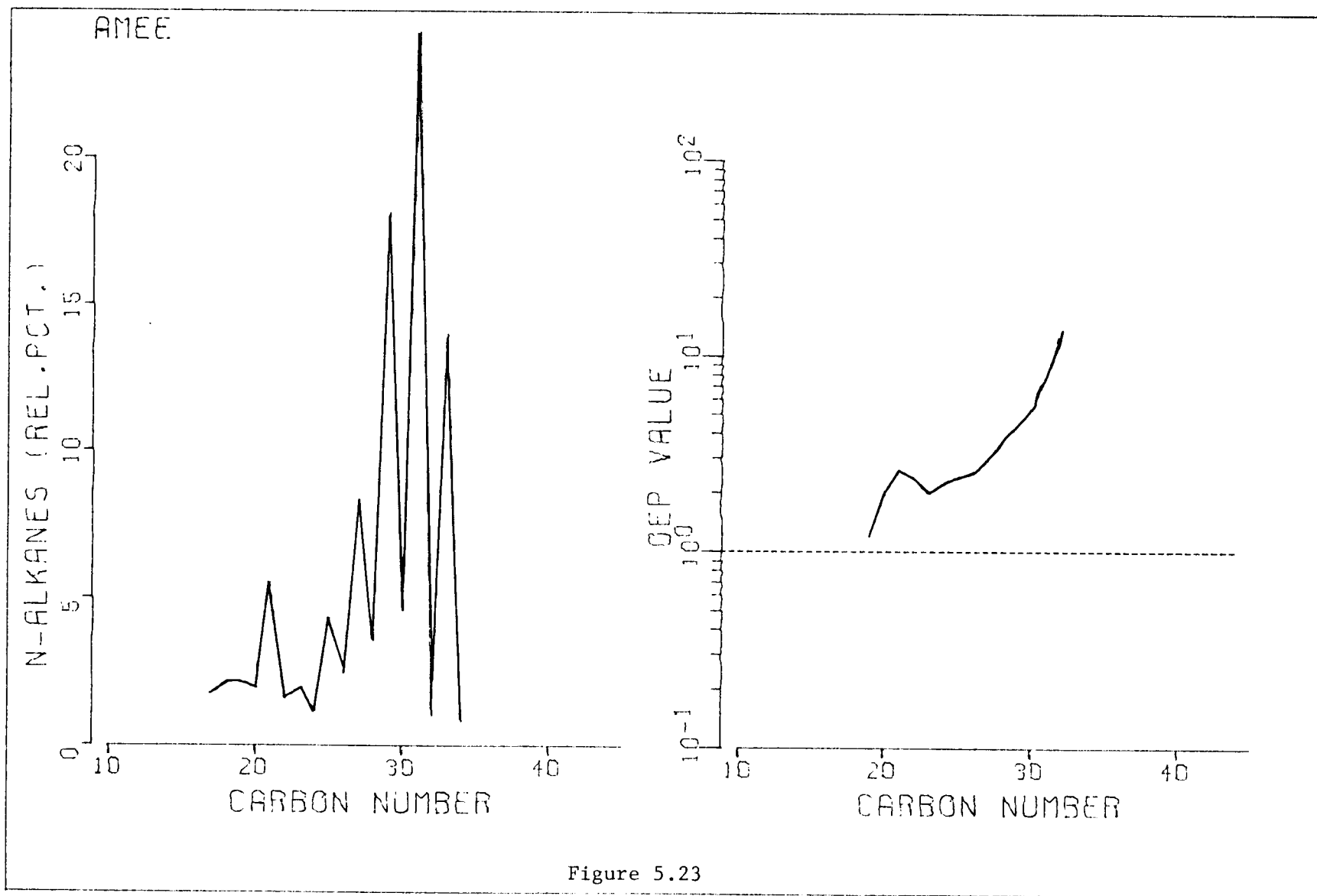


Figure 5.23

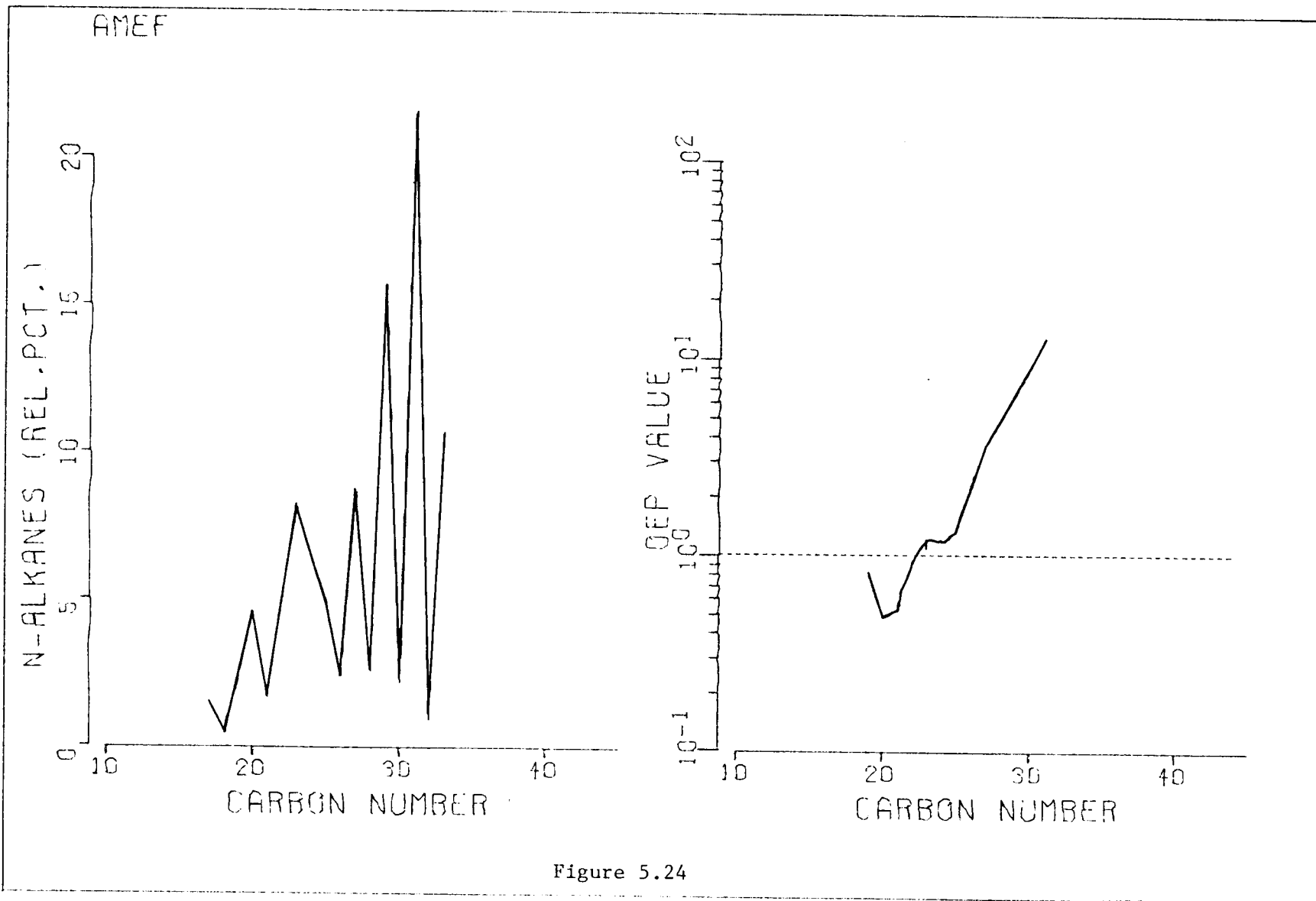


Figure 5.24

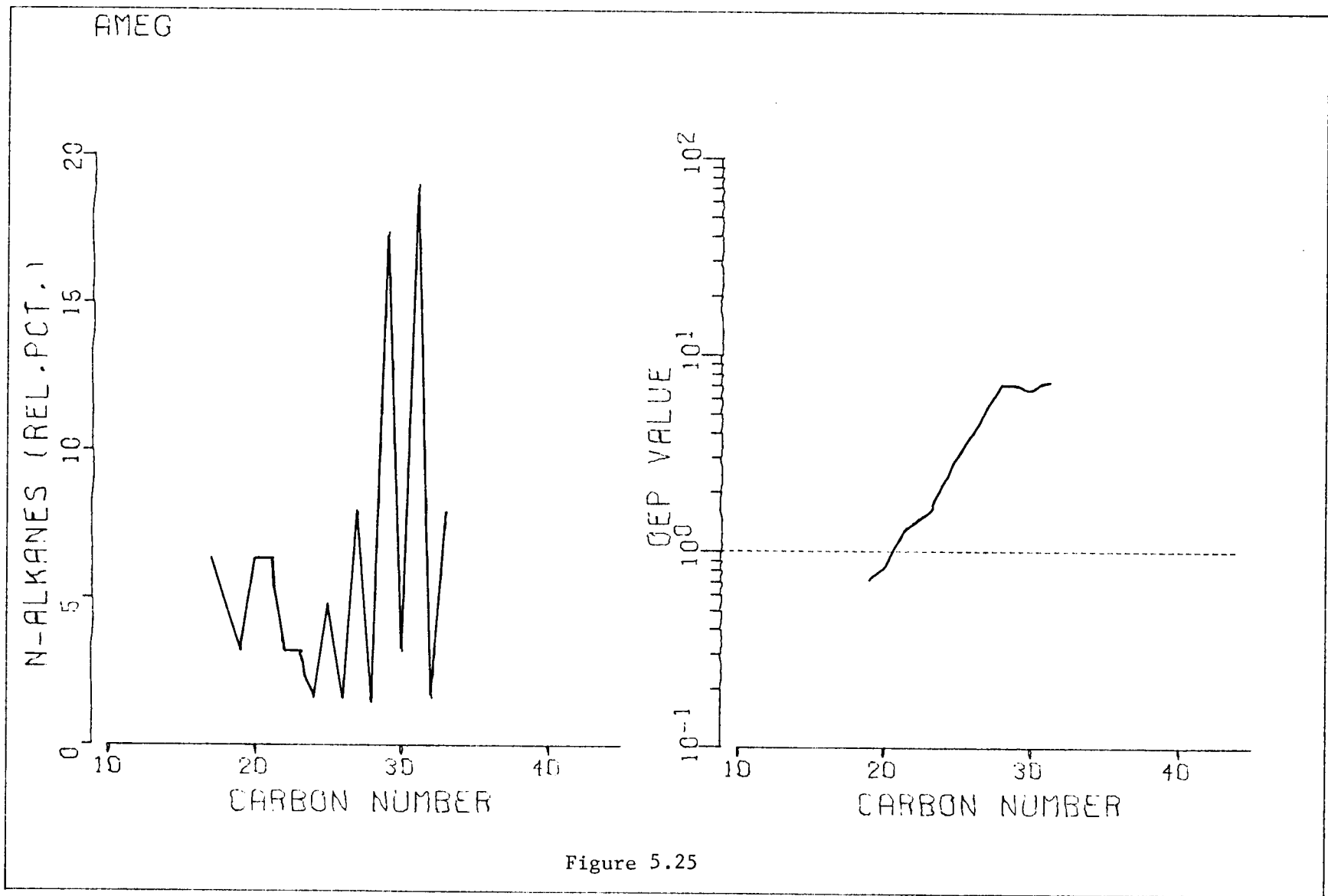


Figure 5.25

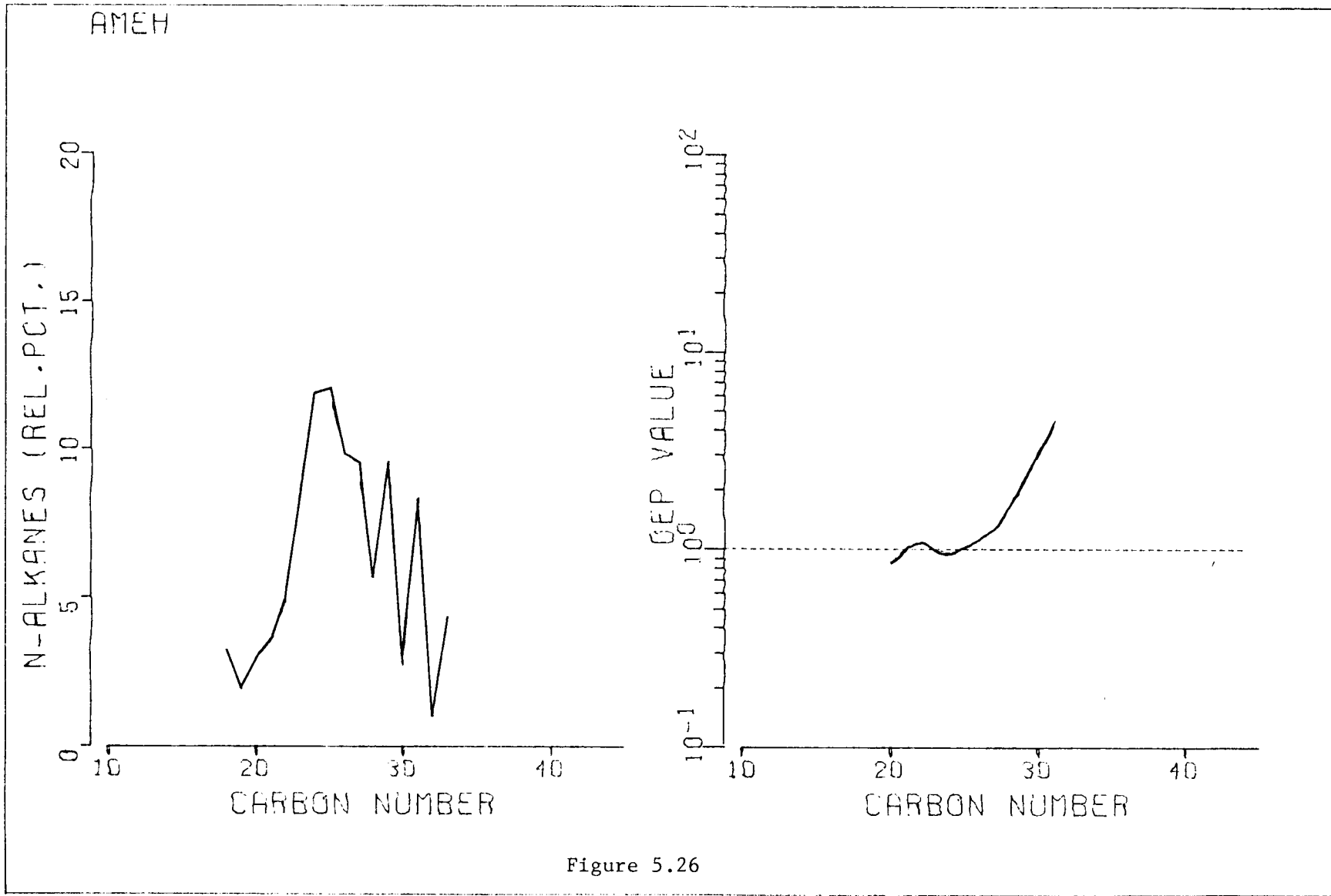


Figure 5.26

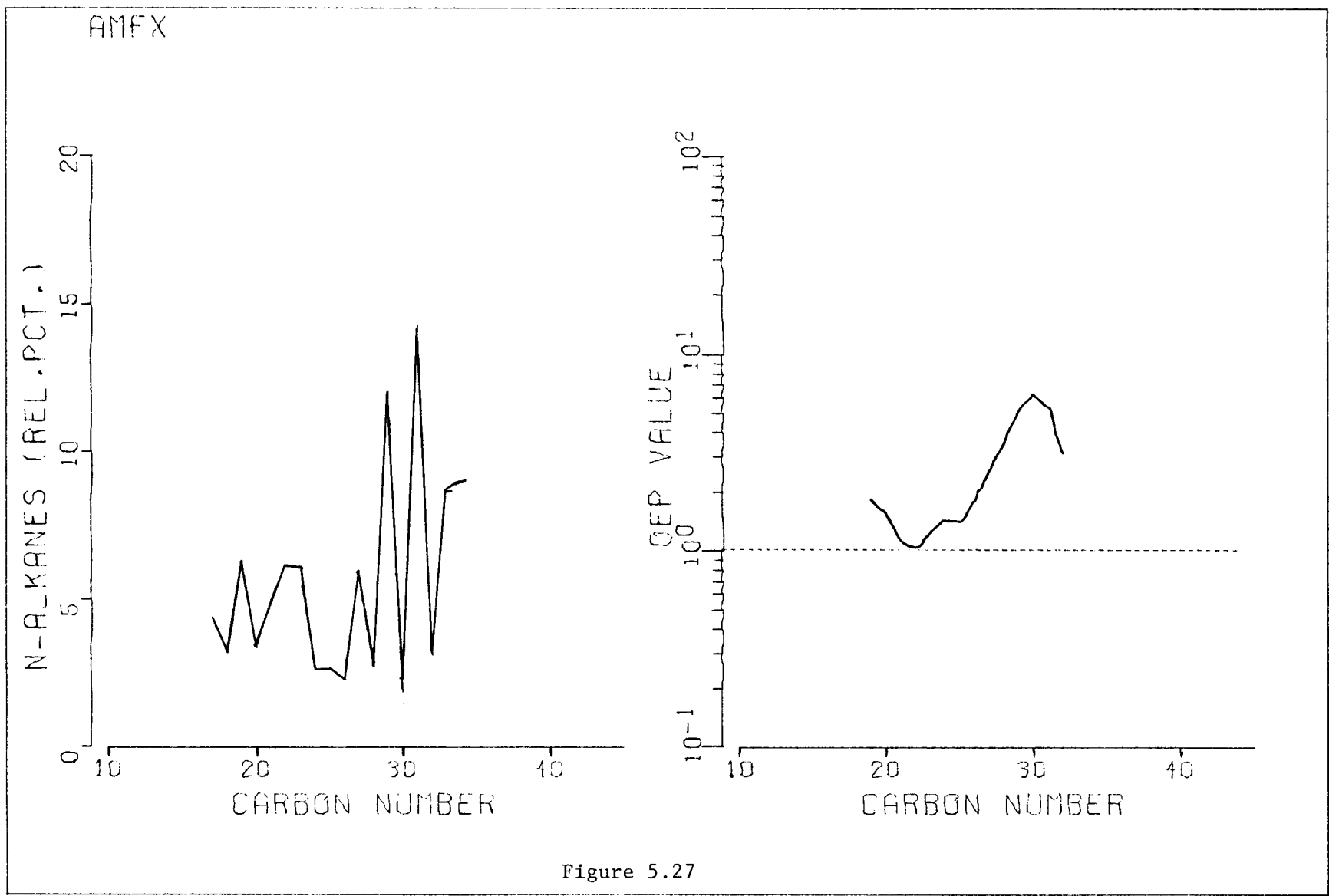


Figure 5.27

AMFY

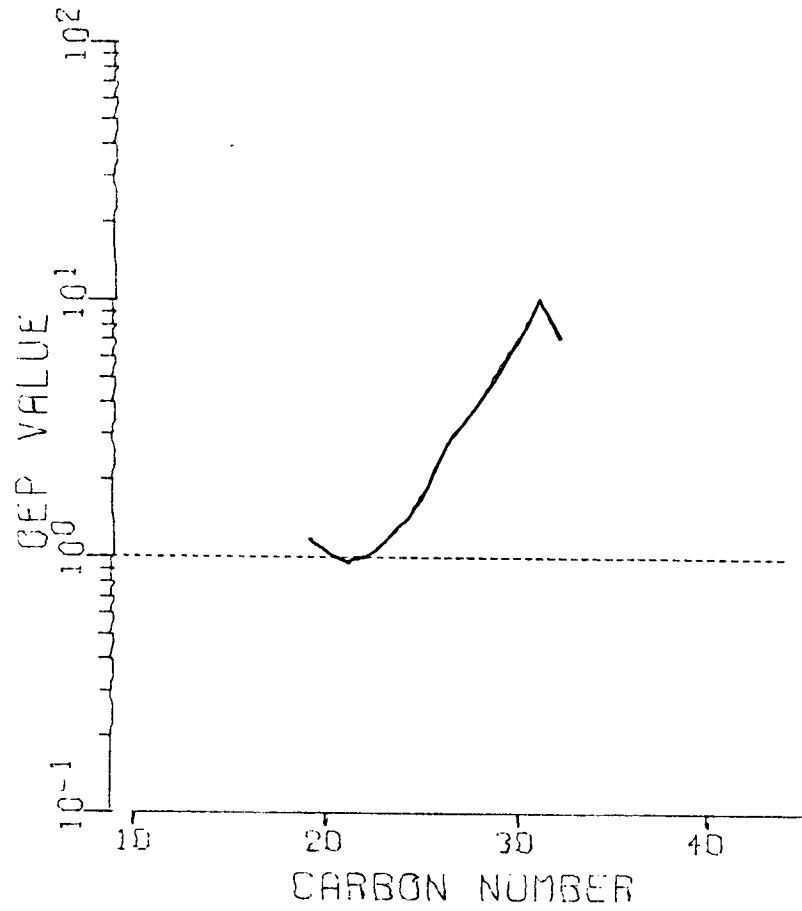
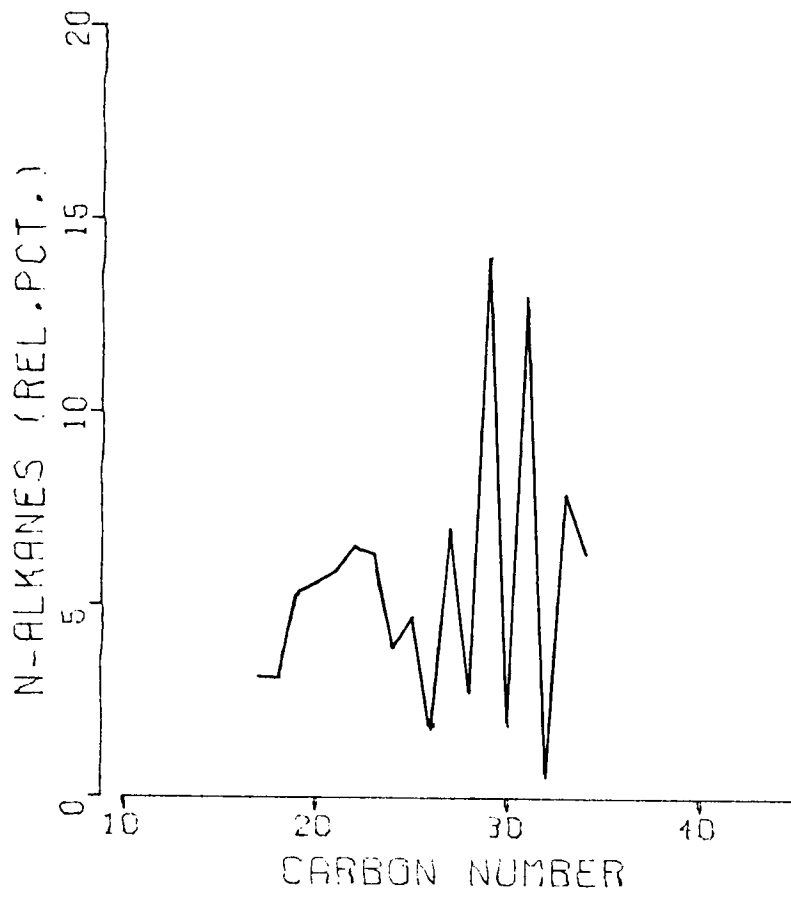


Figure 5.28

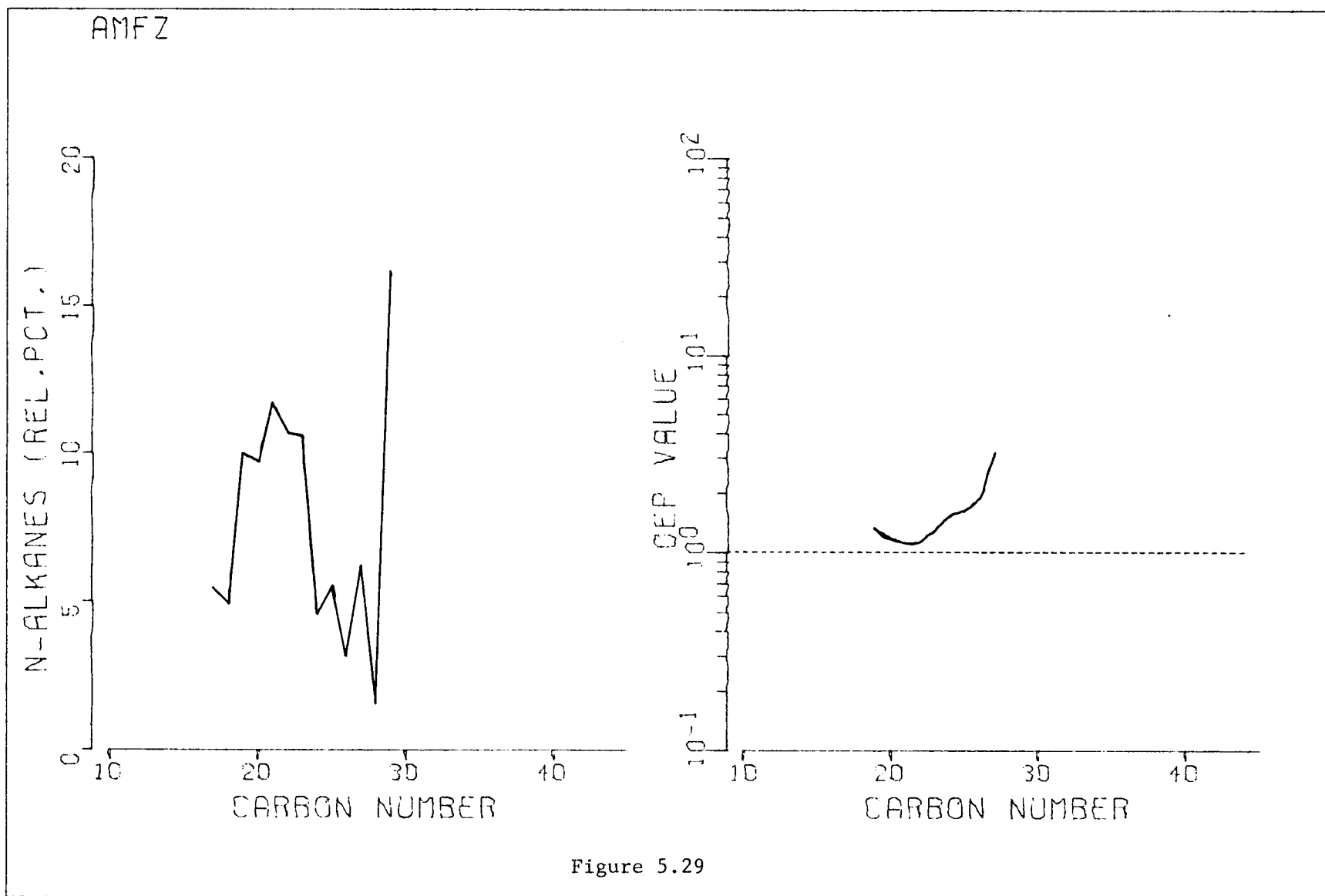


Figure 5.29

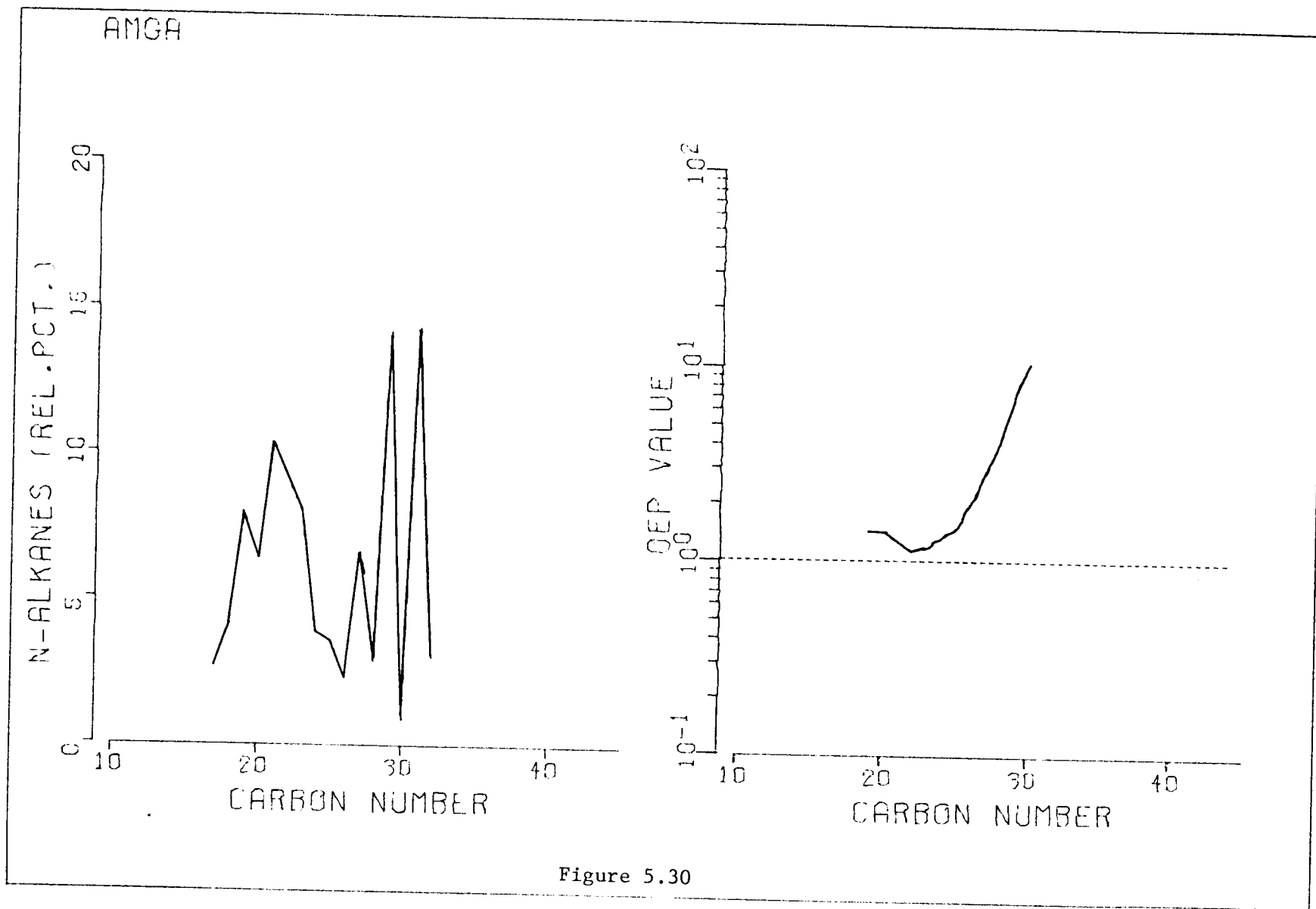


Figure 5.30

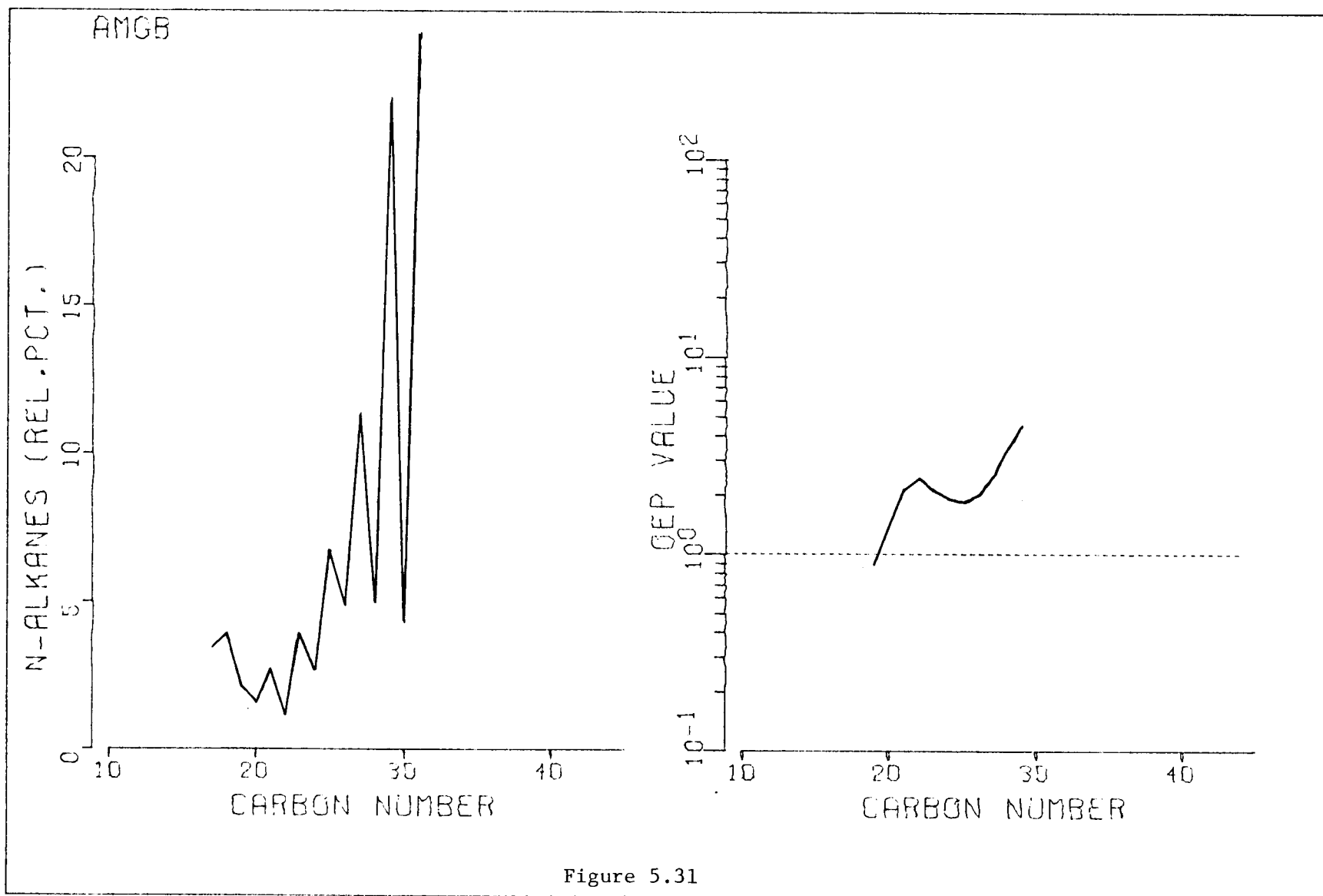


Figure 5.31

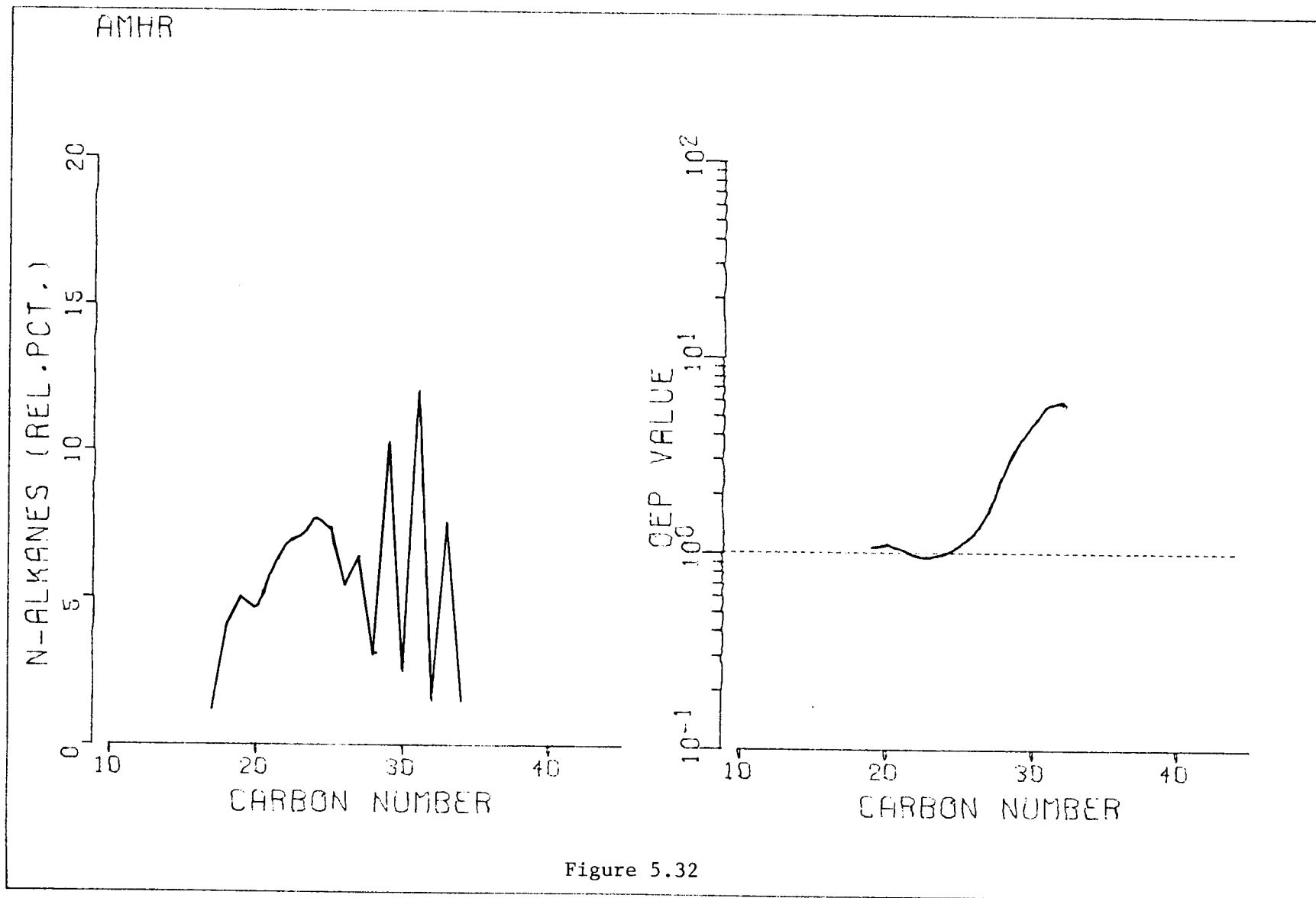


Figure 5.32

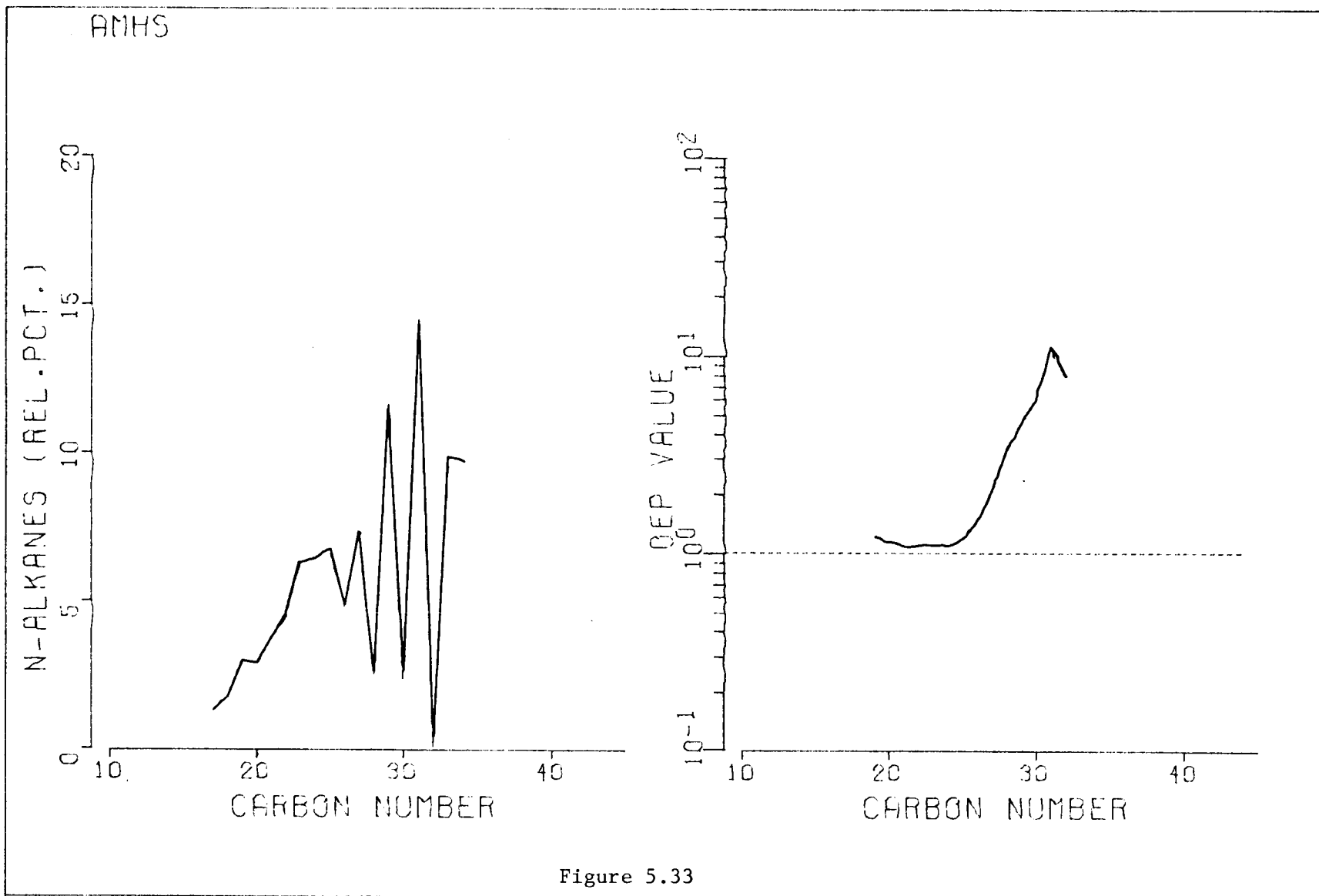


Figure 5.33

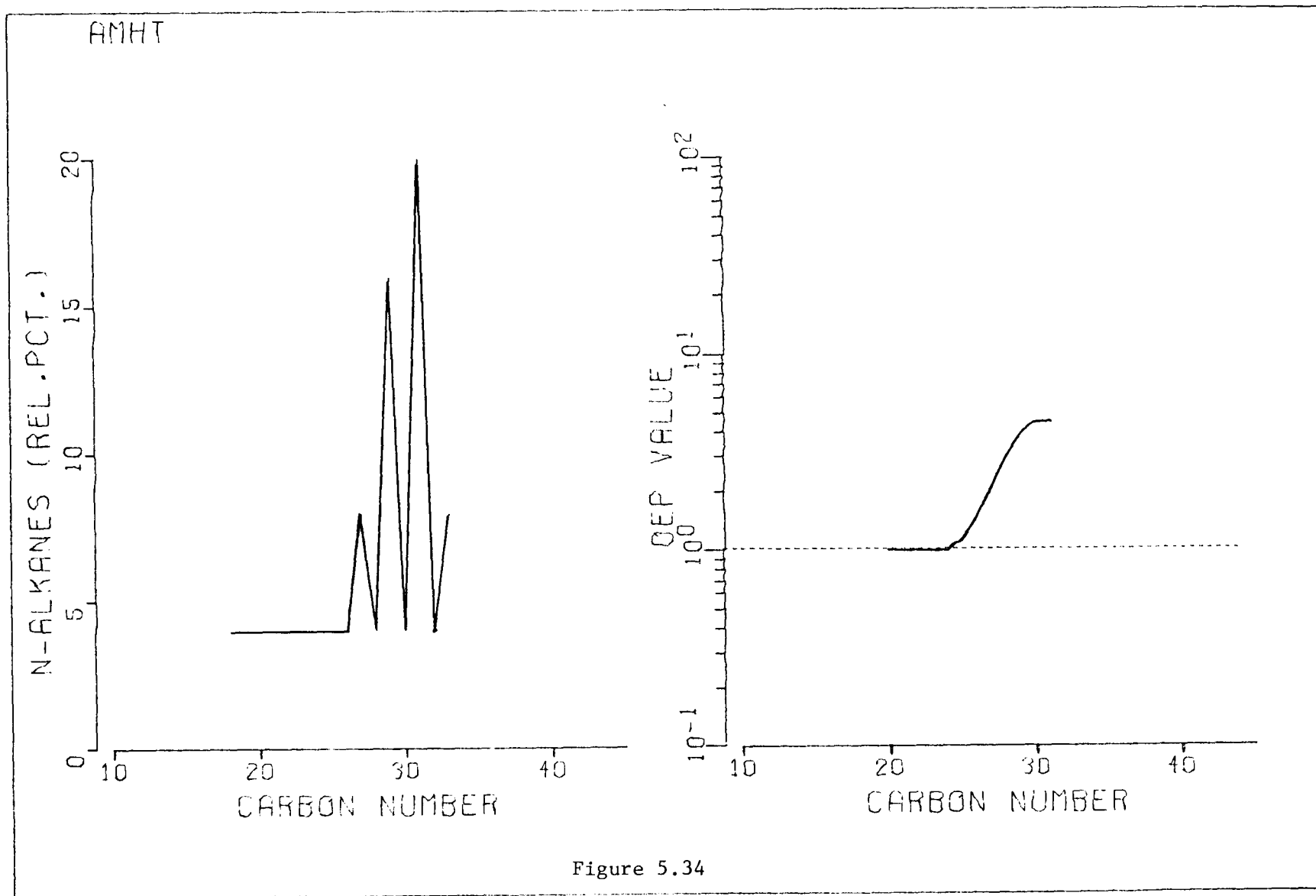


Figure 5.34

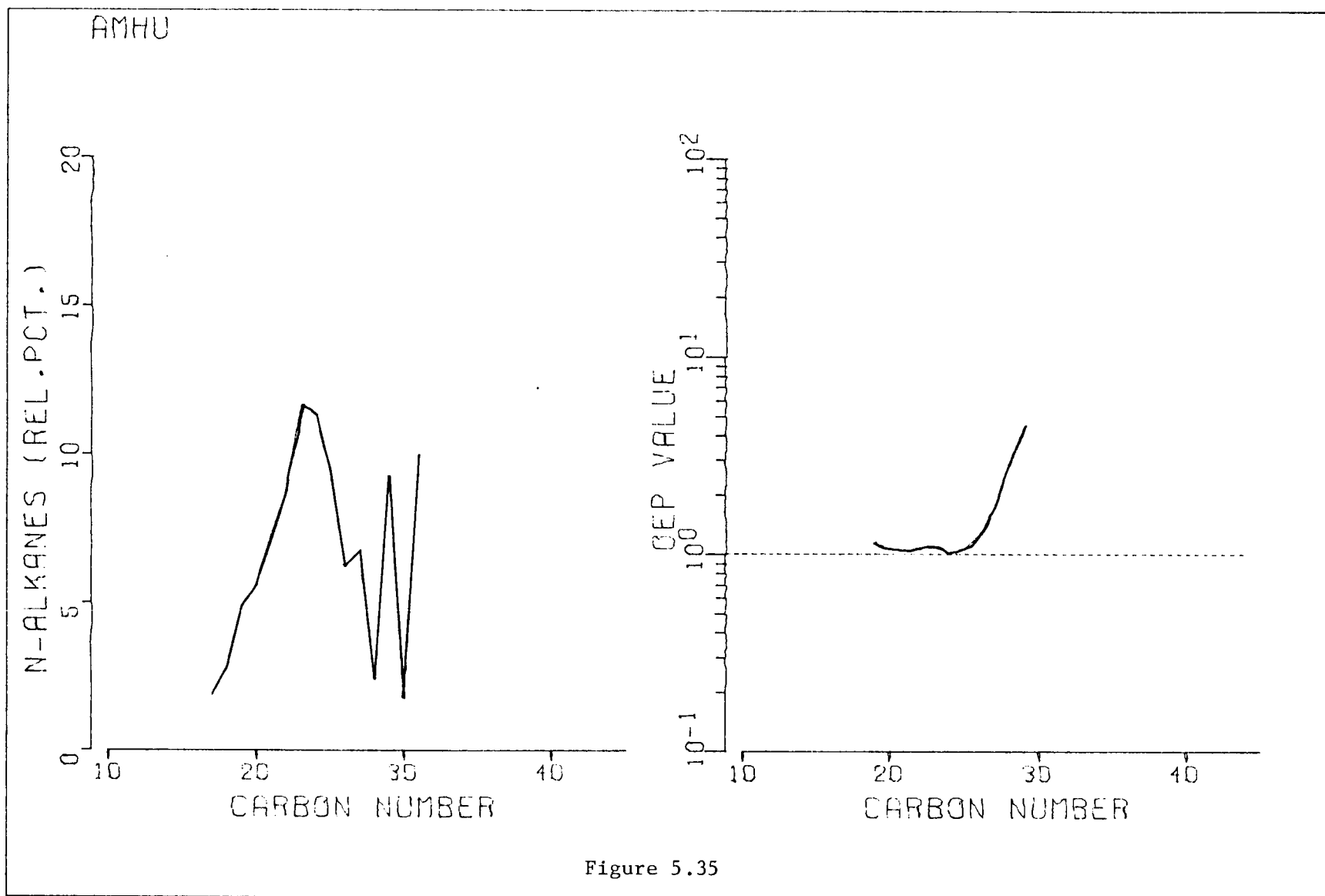


Figure 5.35

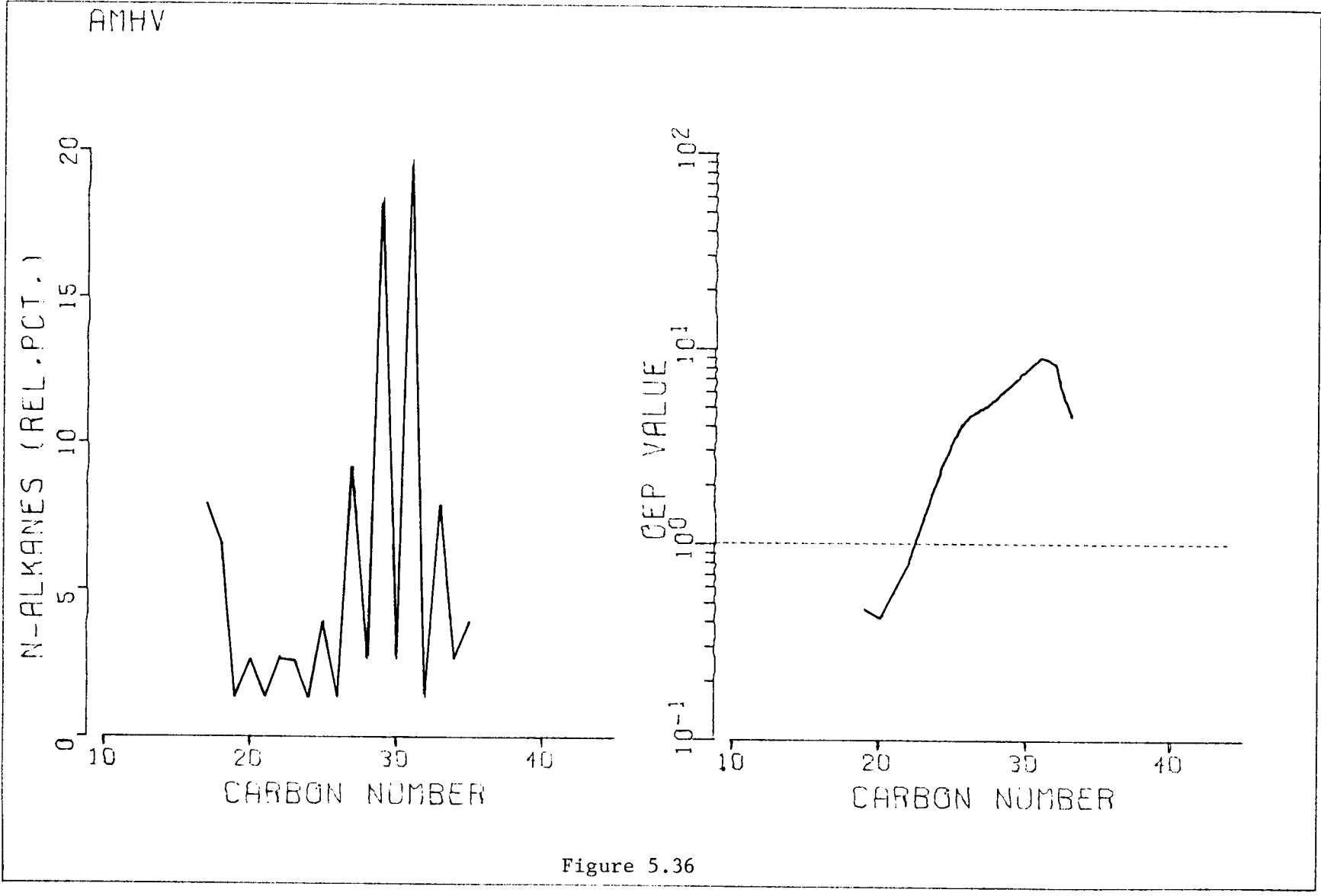


Figure 5.36

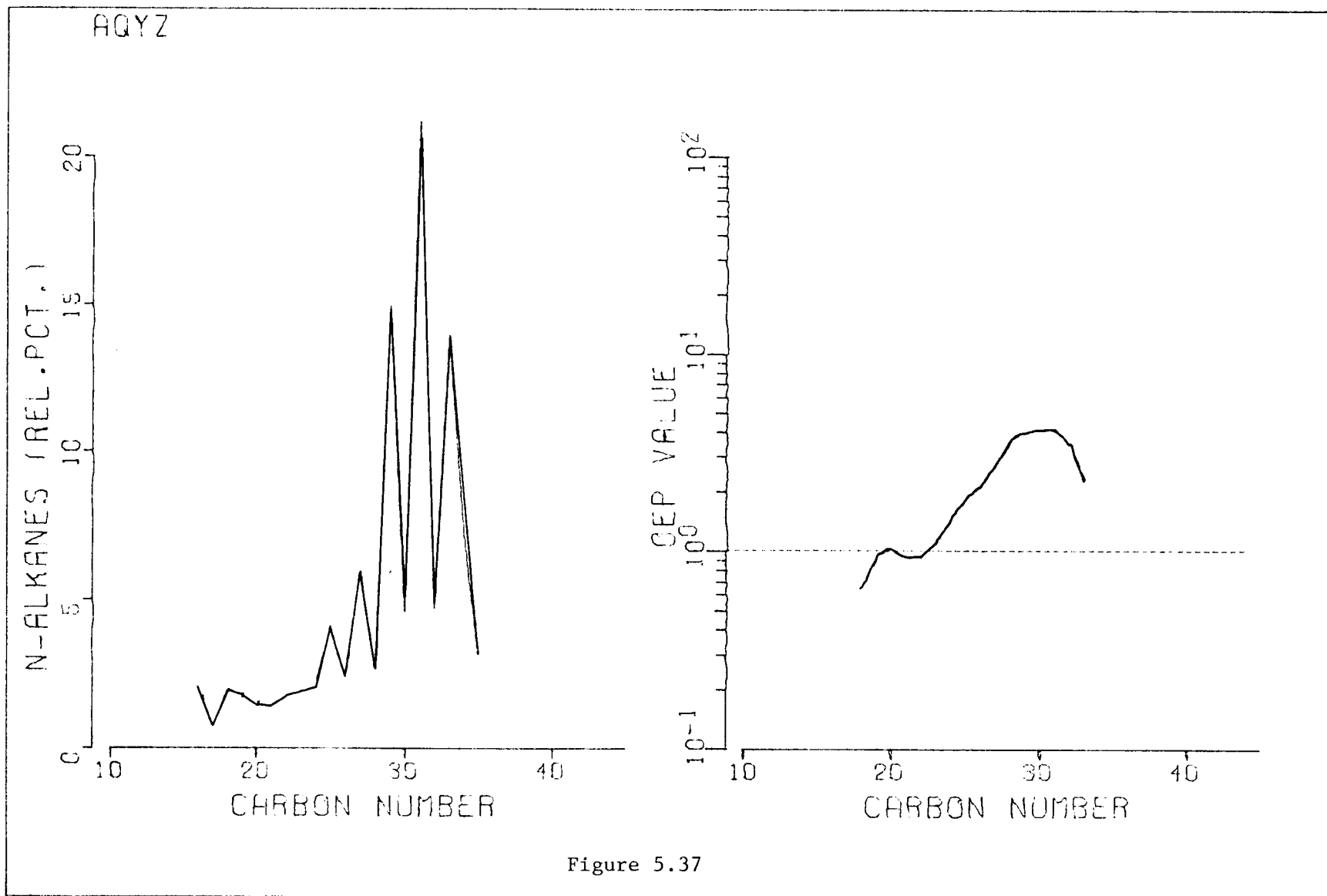


Figure 5.37

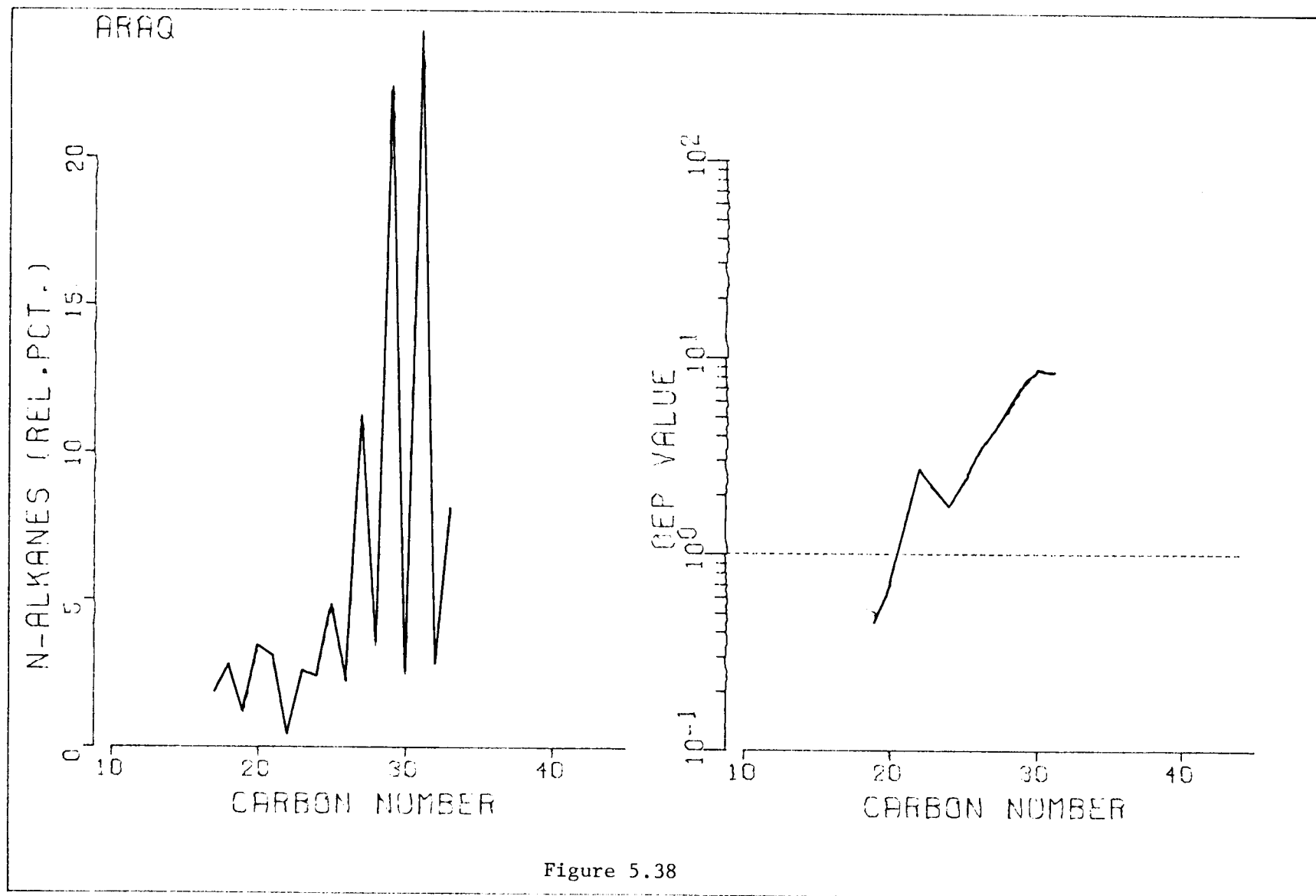


Figure 5.38

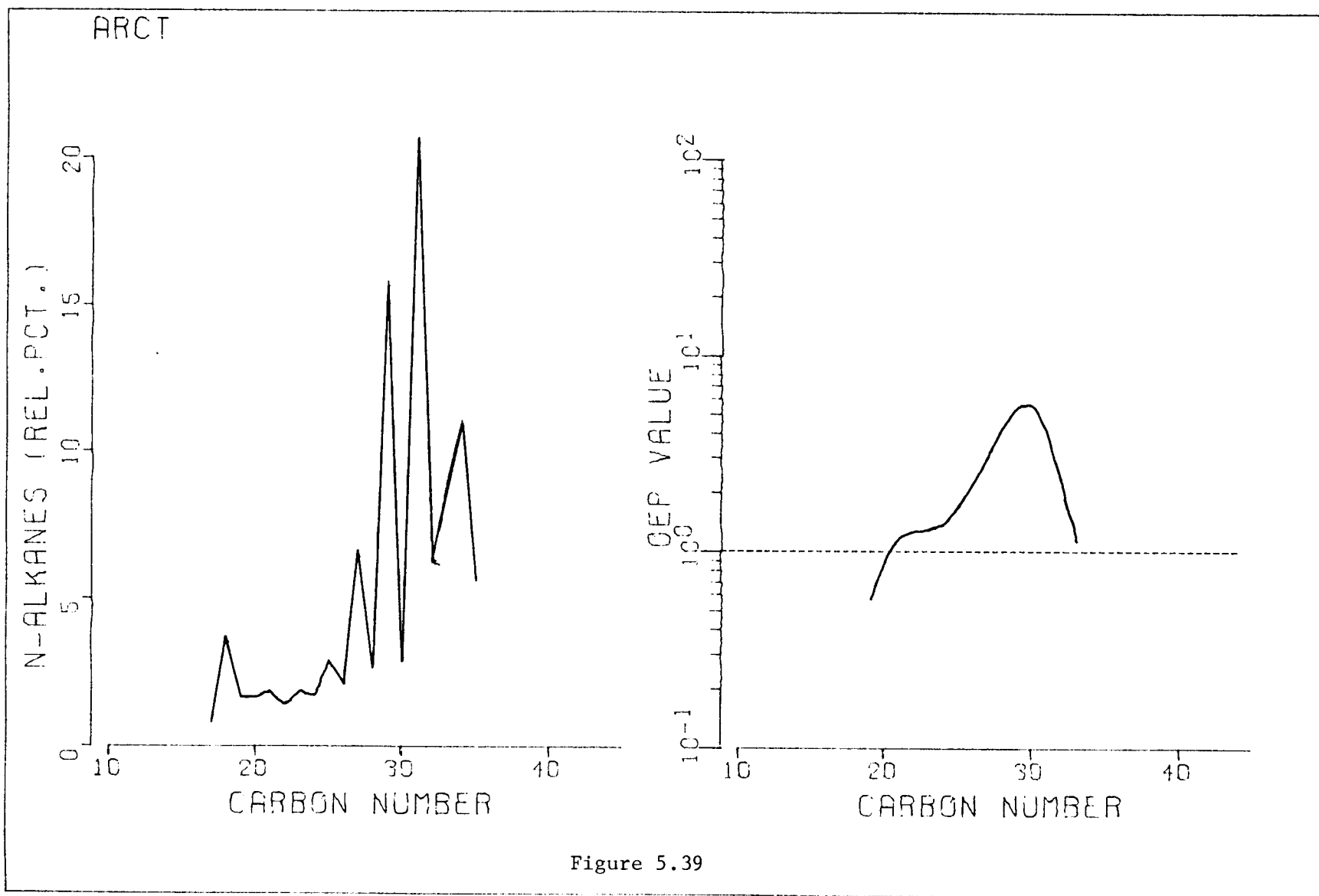


Figure 5.39

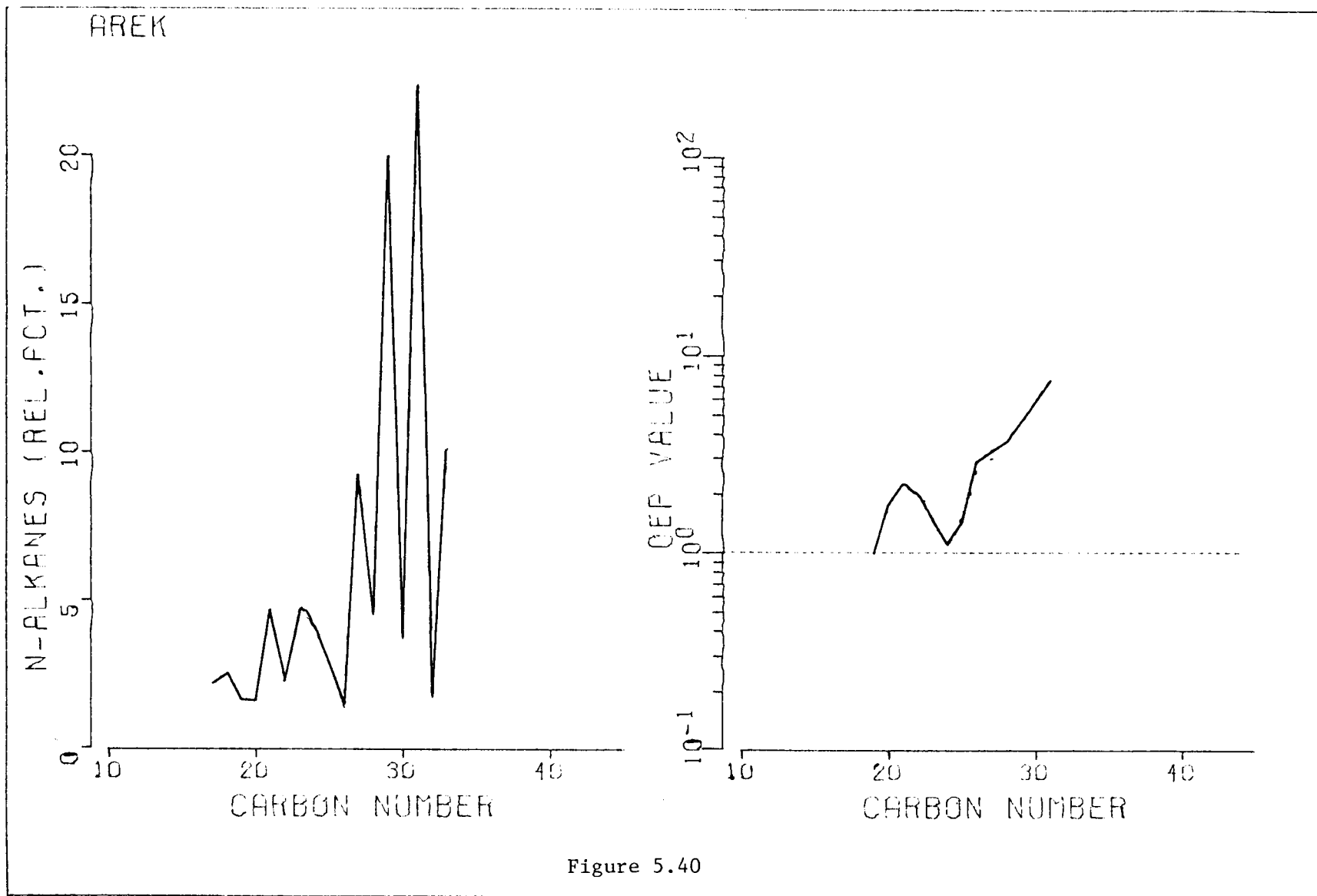
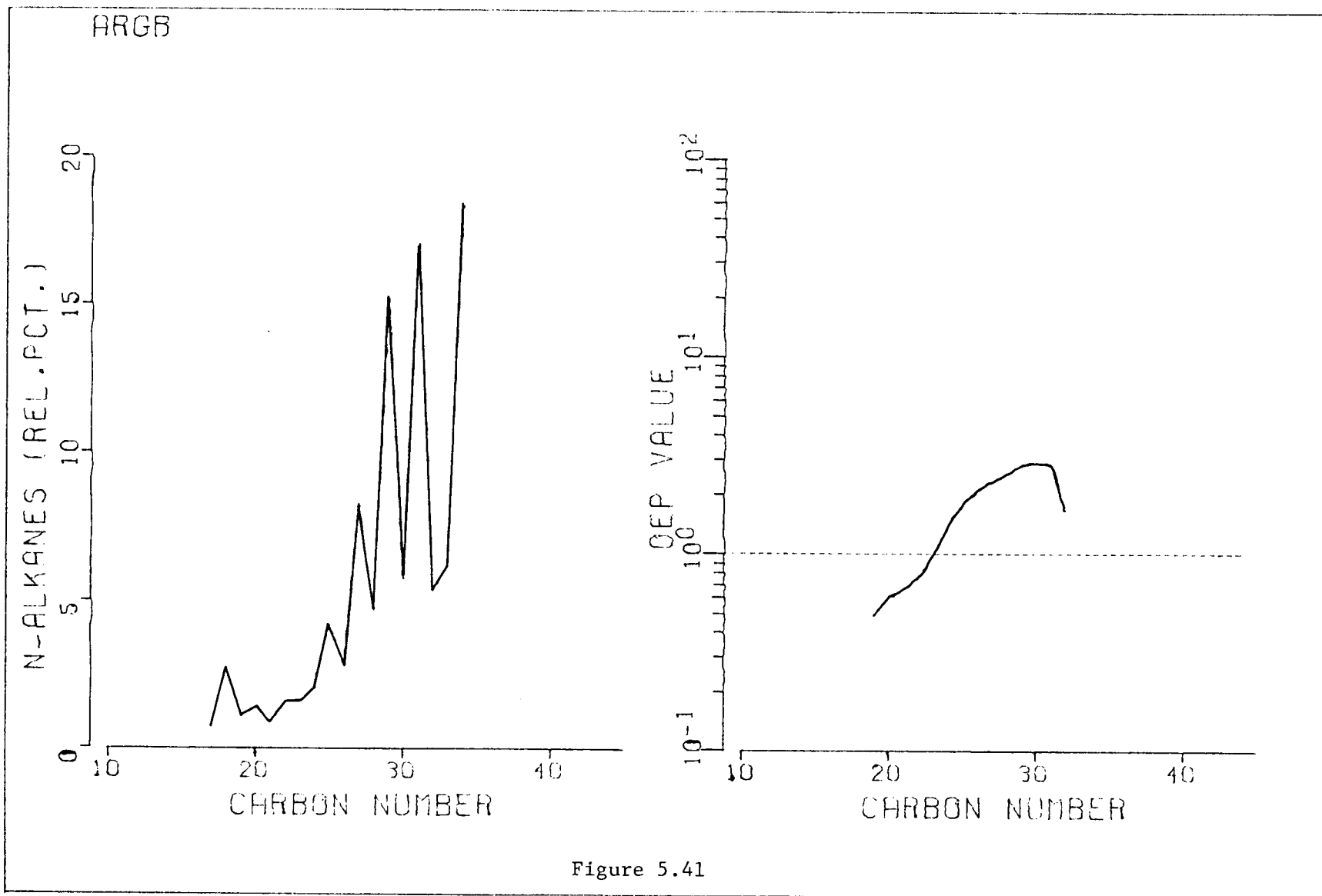


Figure 5.40



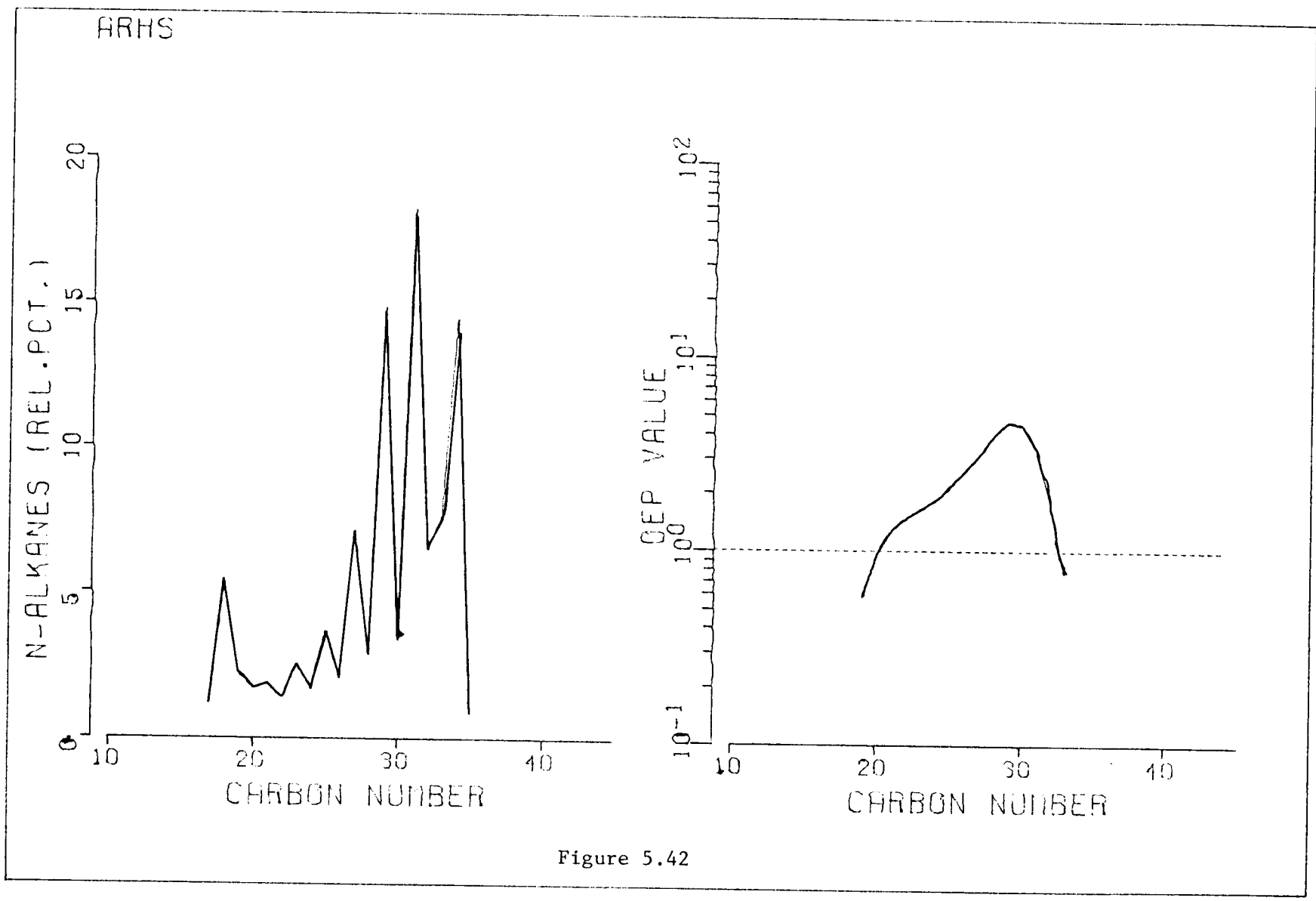


Figure 5.42

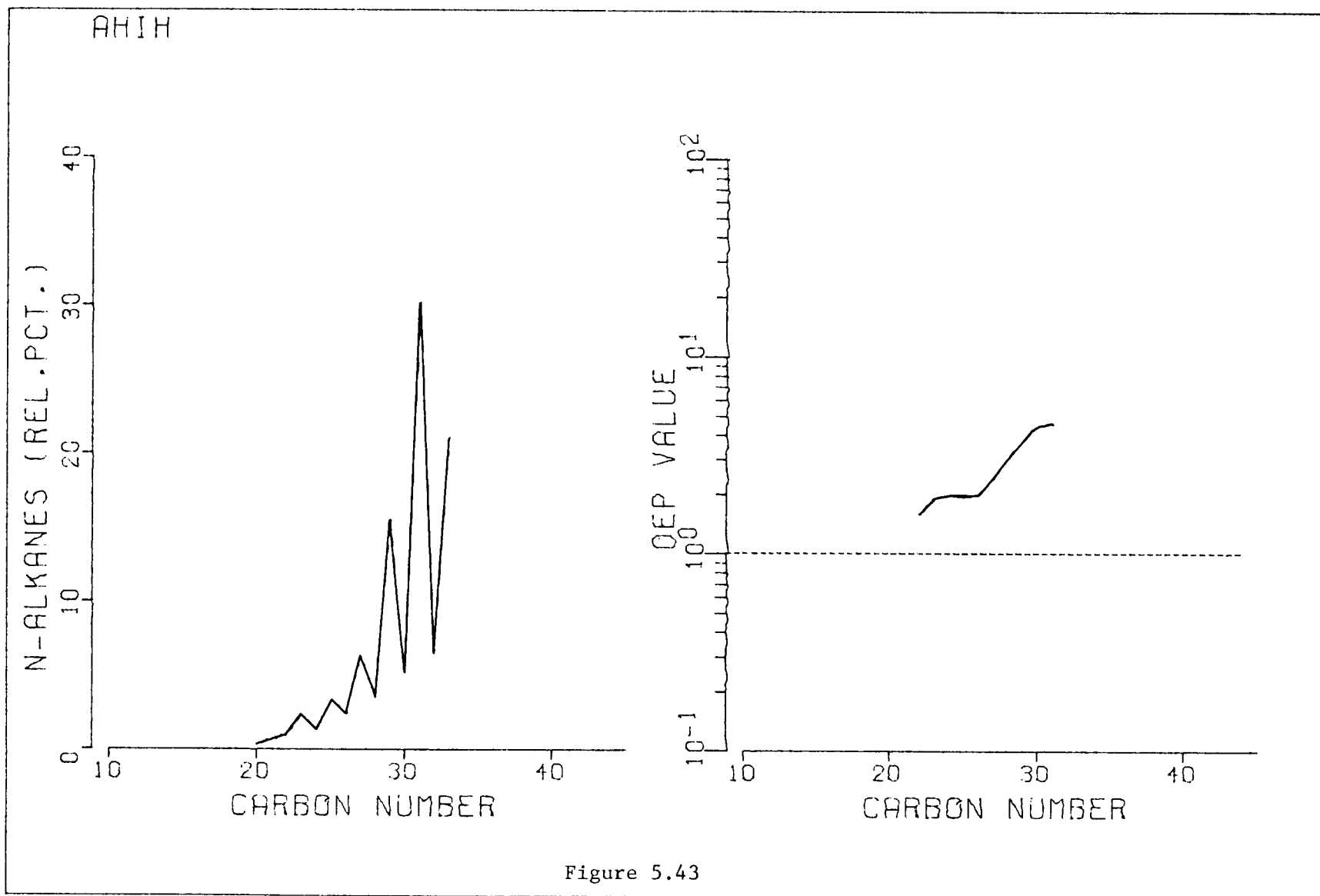


Figure 5.43

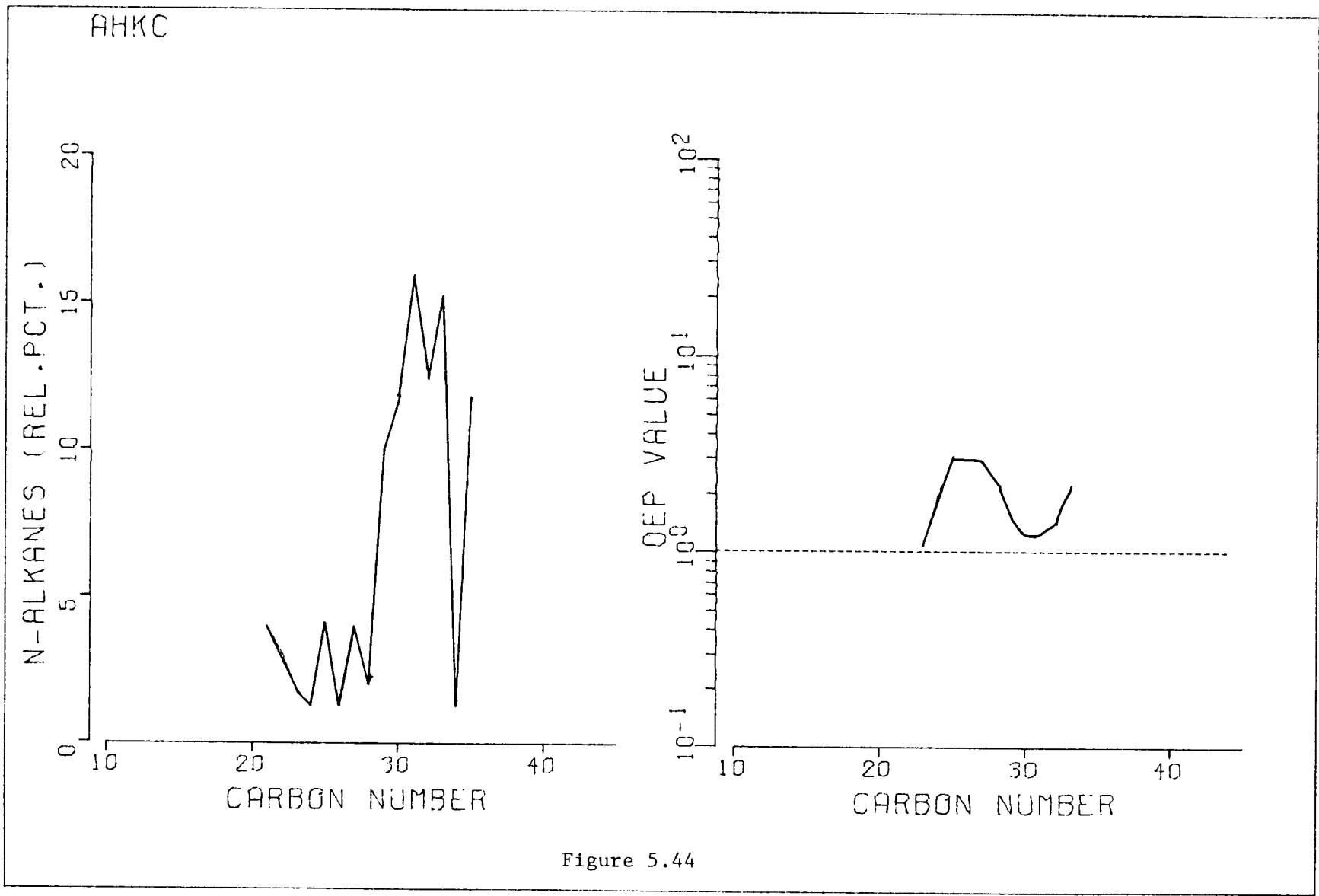


Figure 5.44

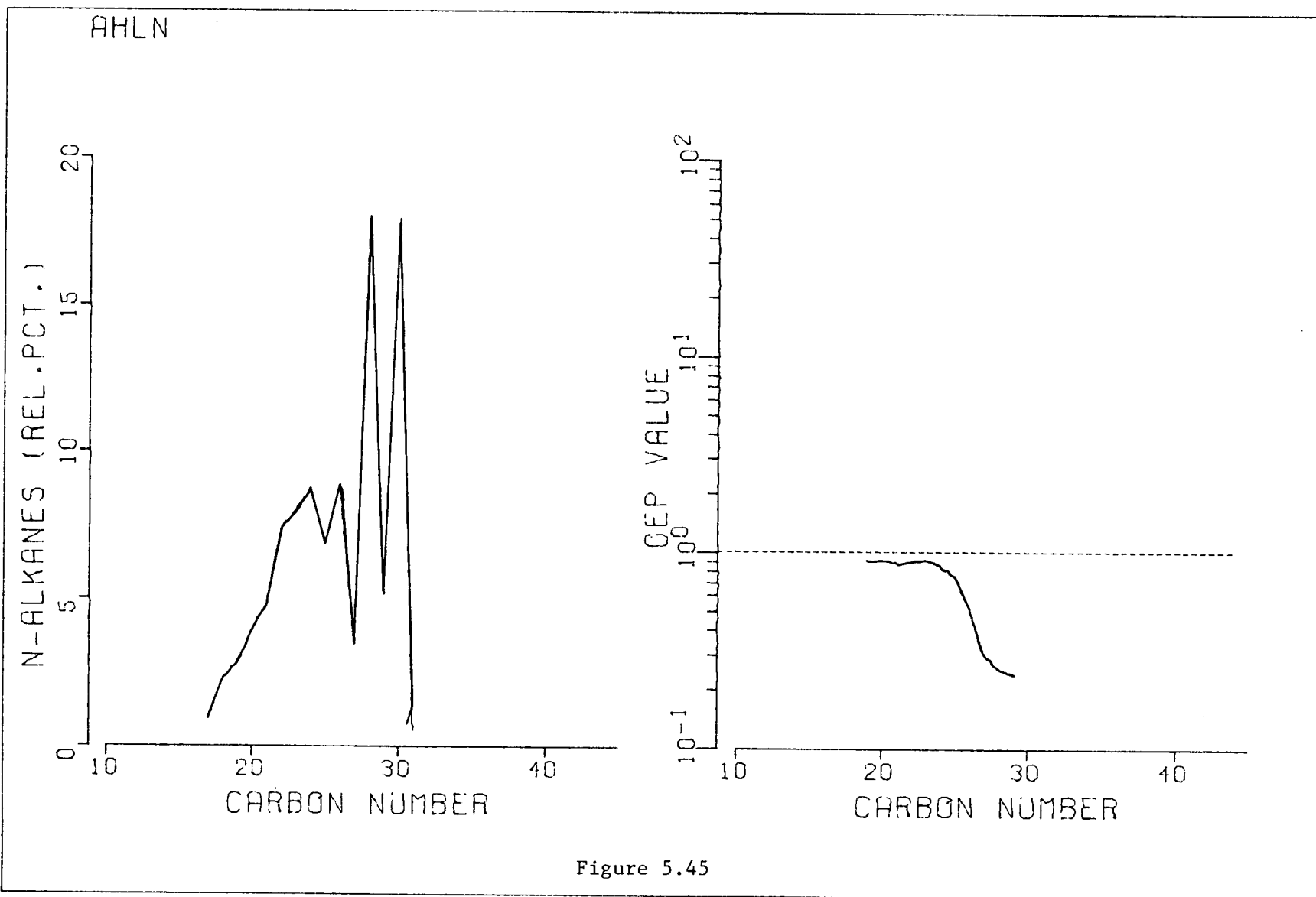


Figure 5.45

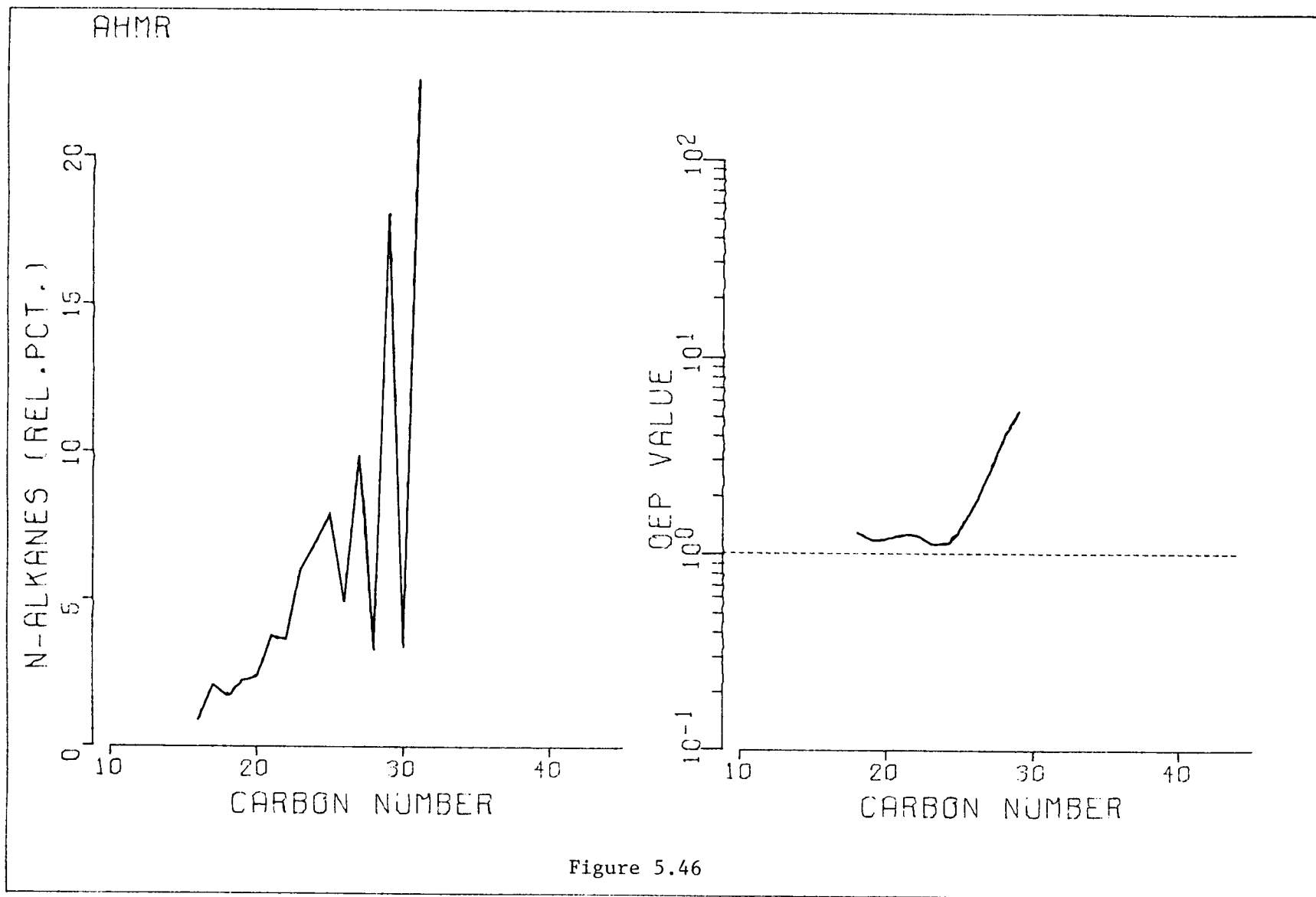


Figure 5.46

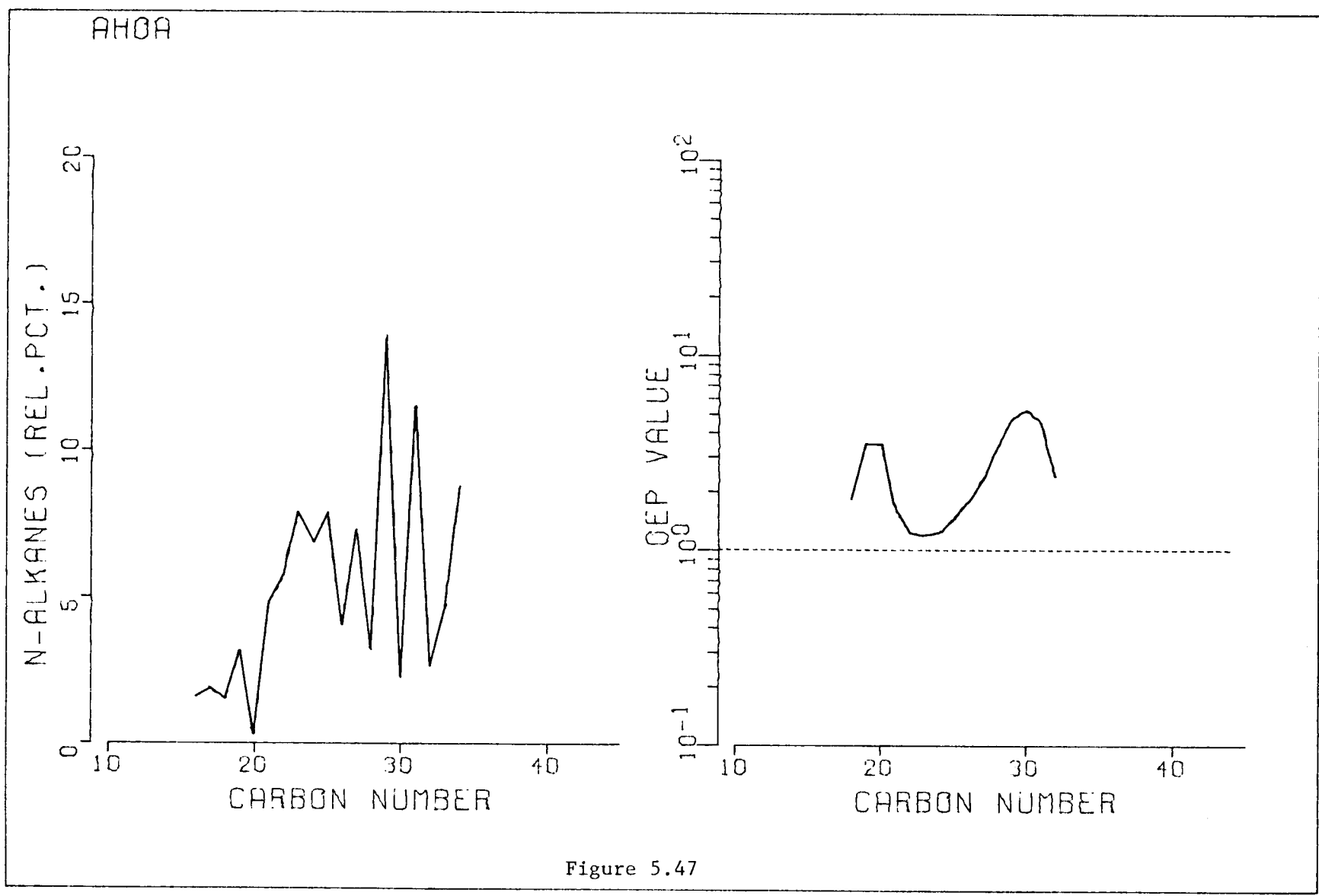


Figure 5.47

AHPN

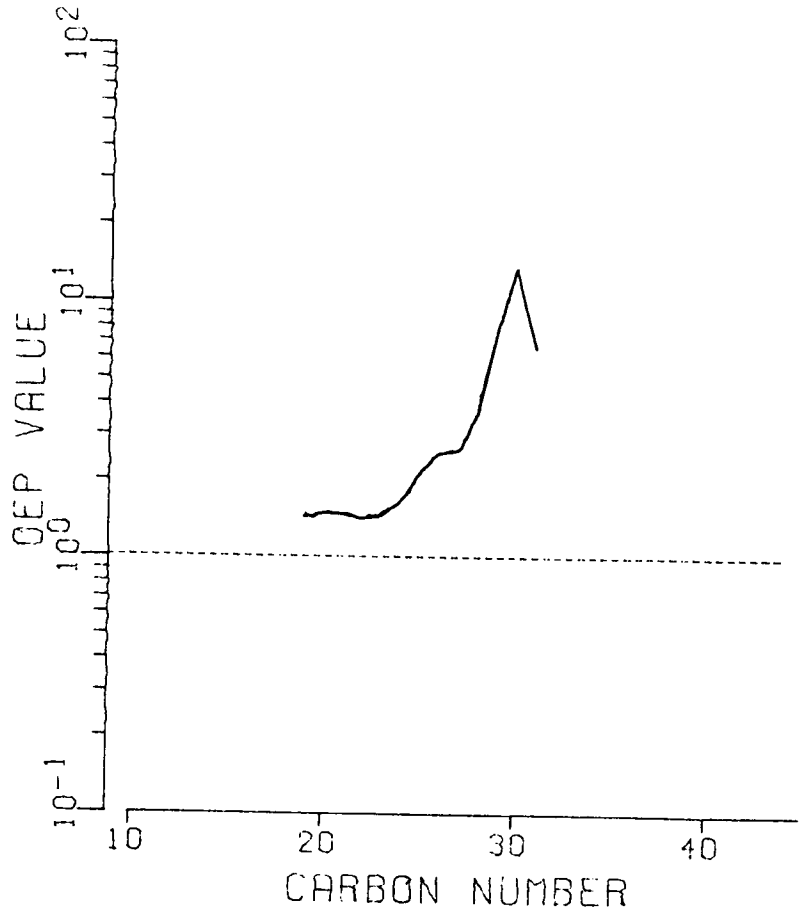
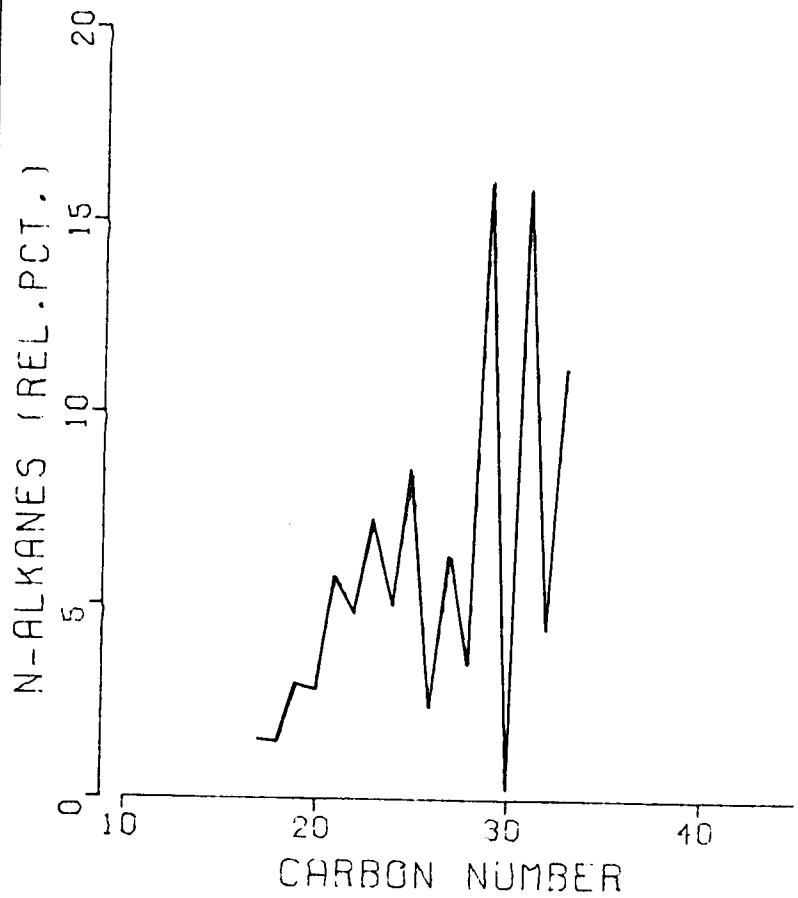


Figure 5.48

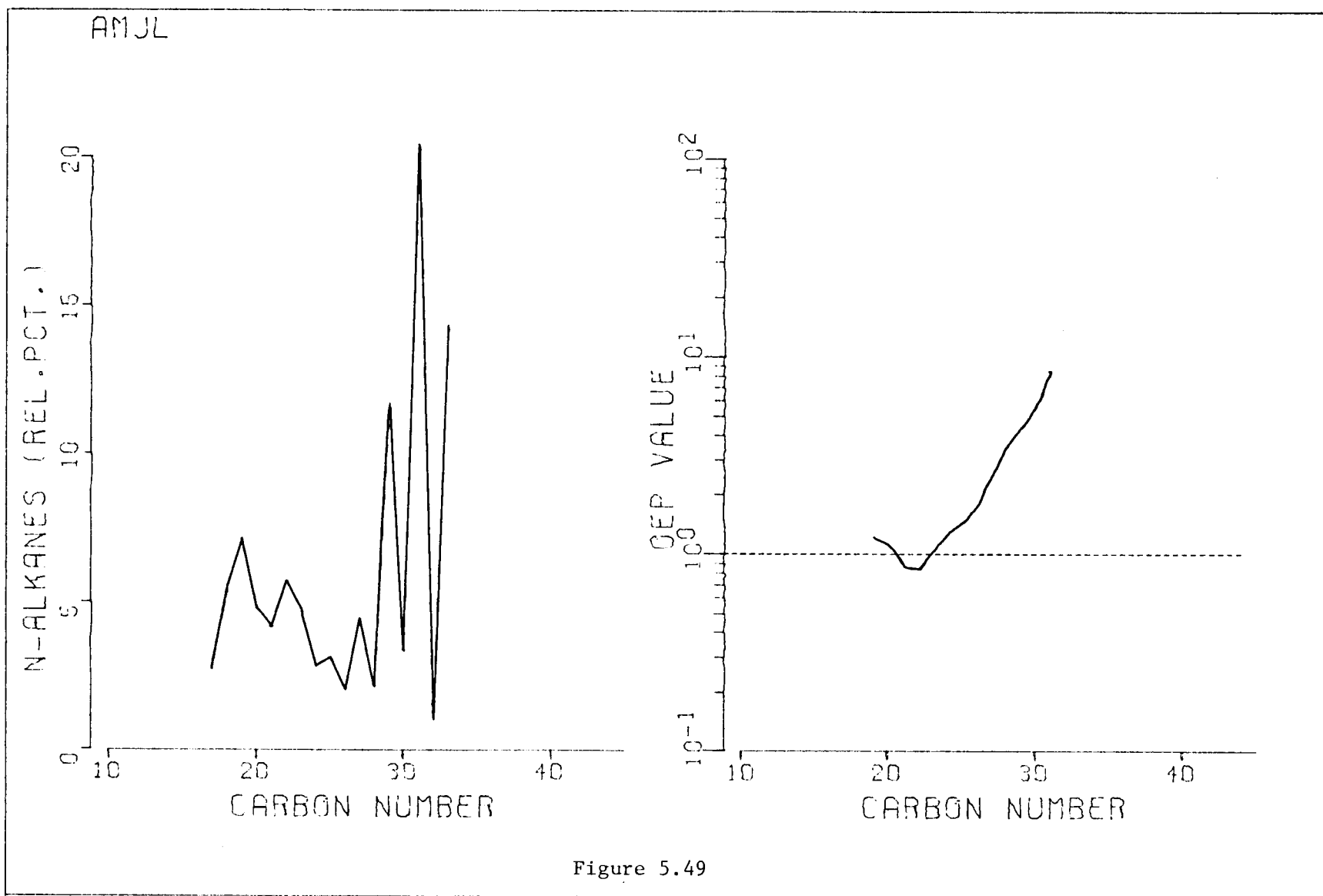


Figure 5.49

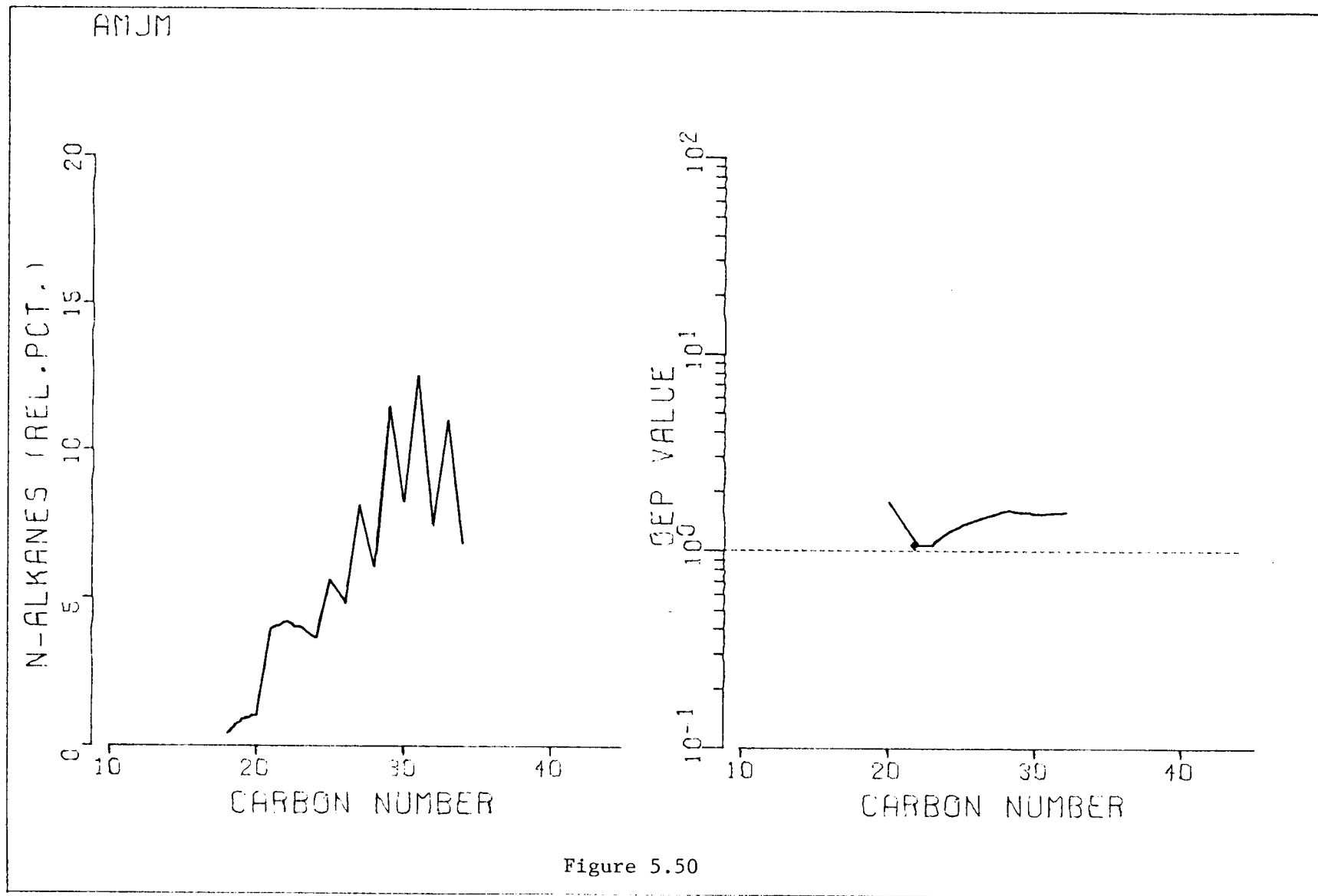


Figure 5.50

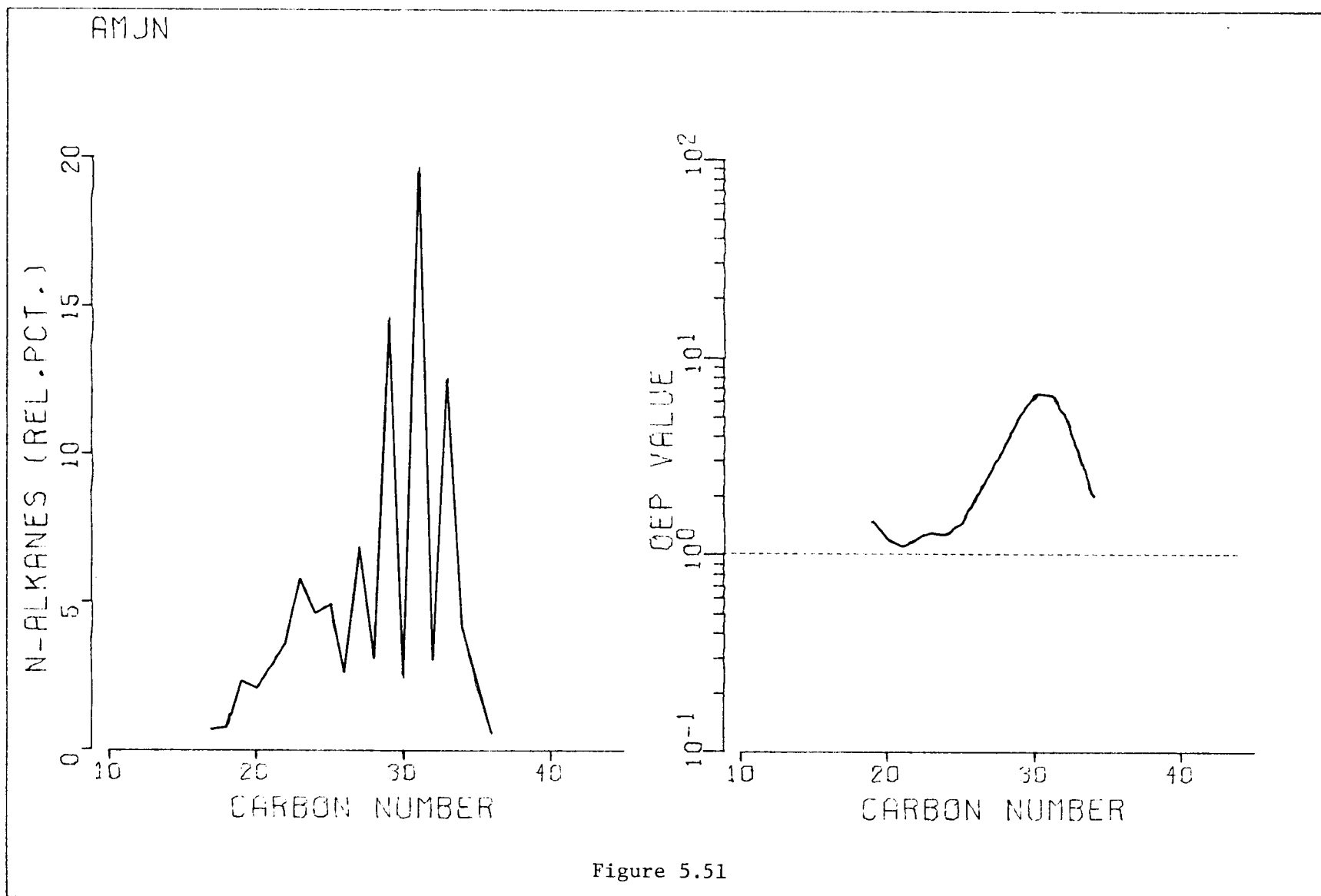


Figure 5.51

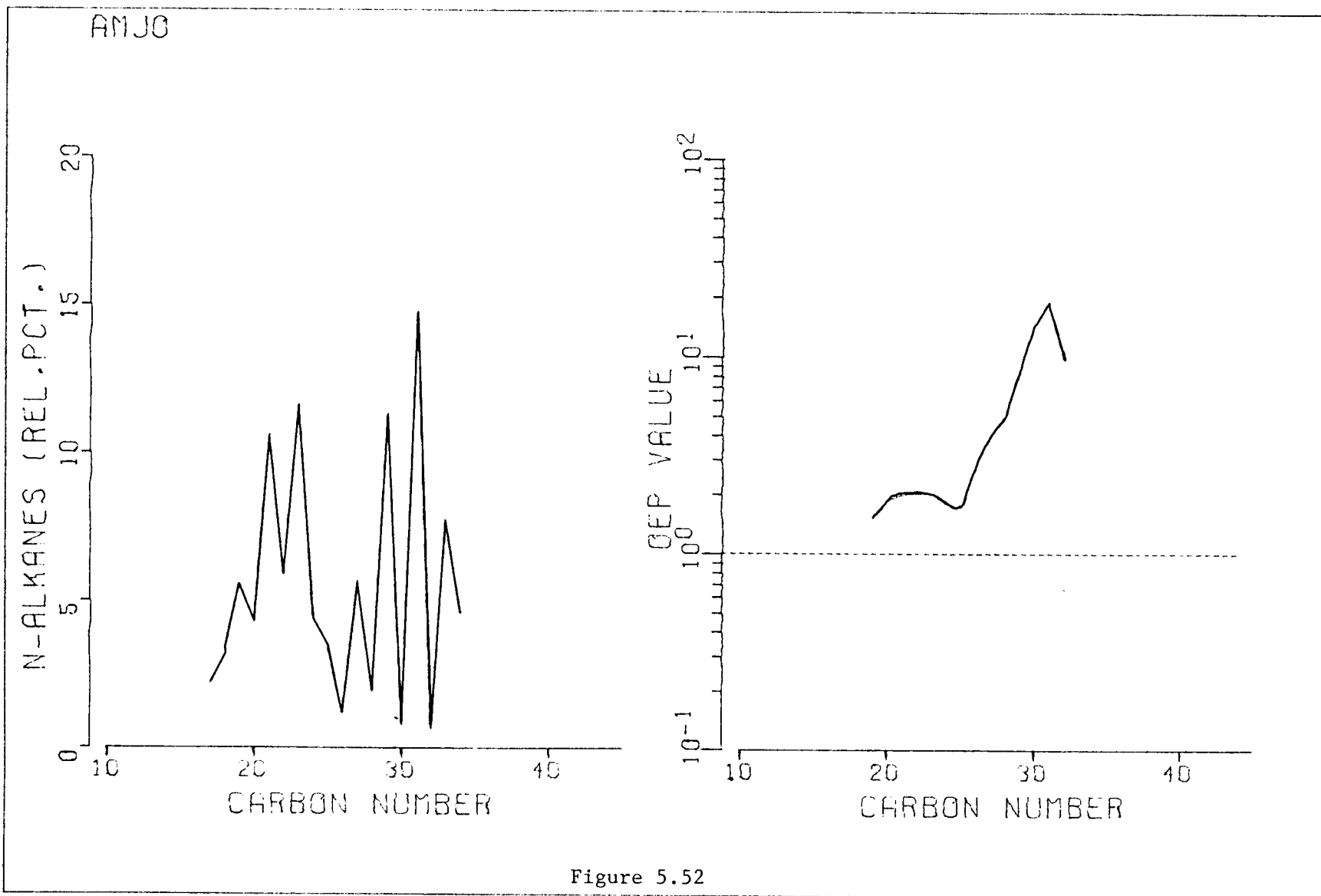


Figure 5.52

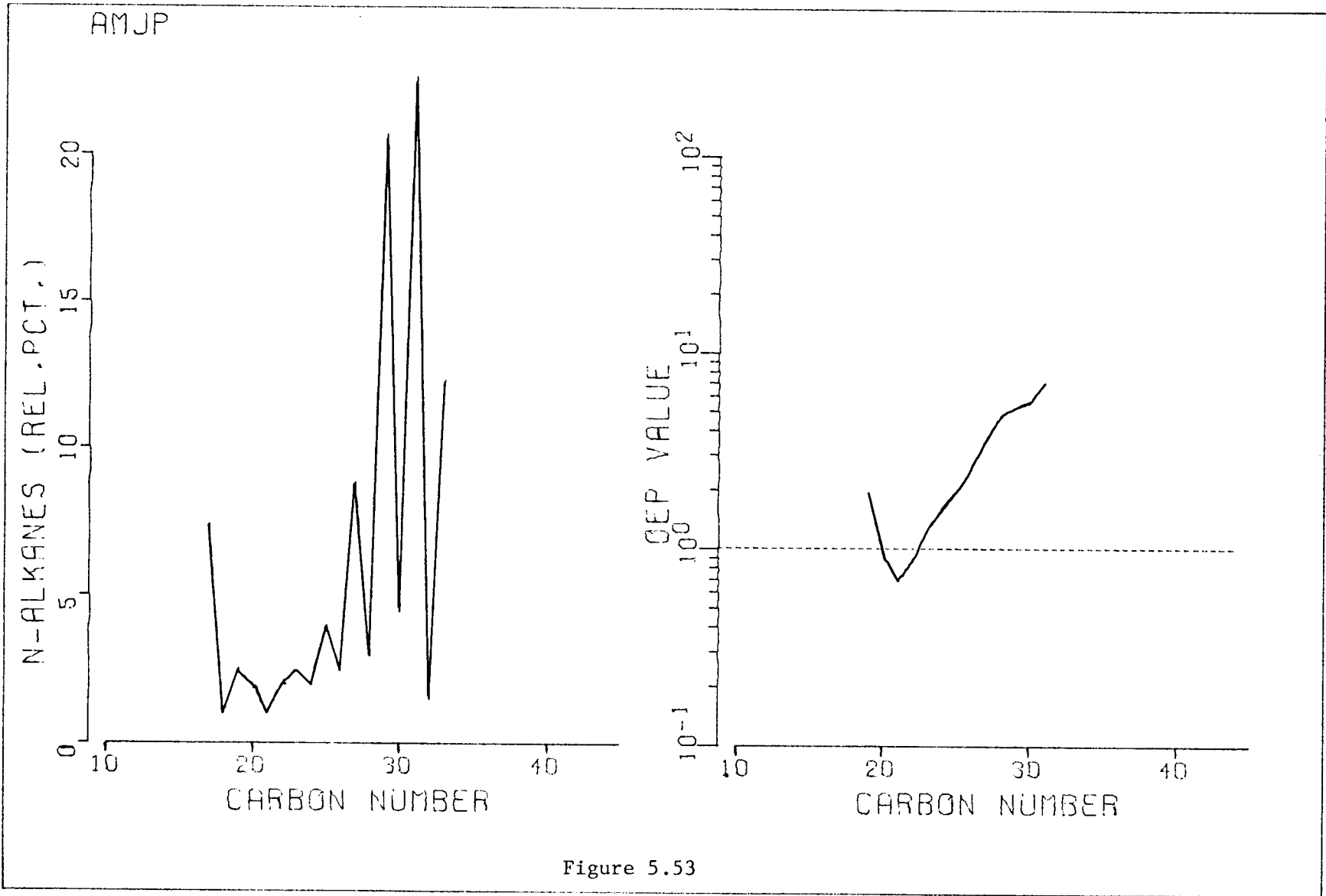


Figure 5.53

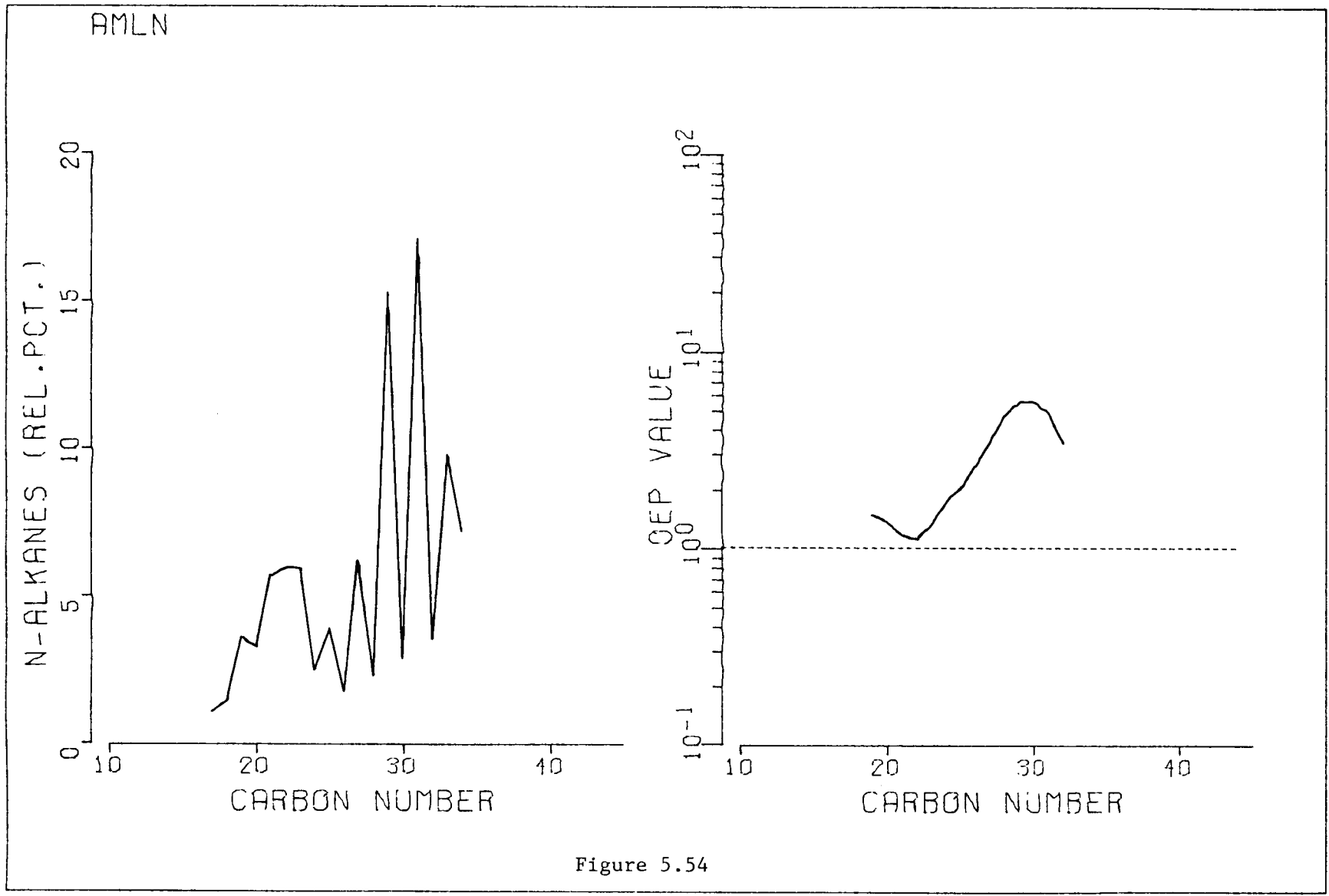


Figure 5.54

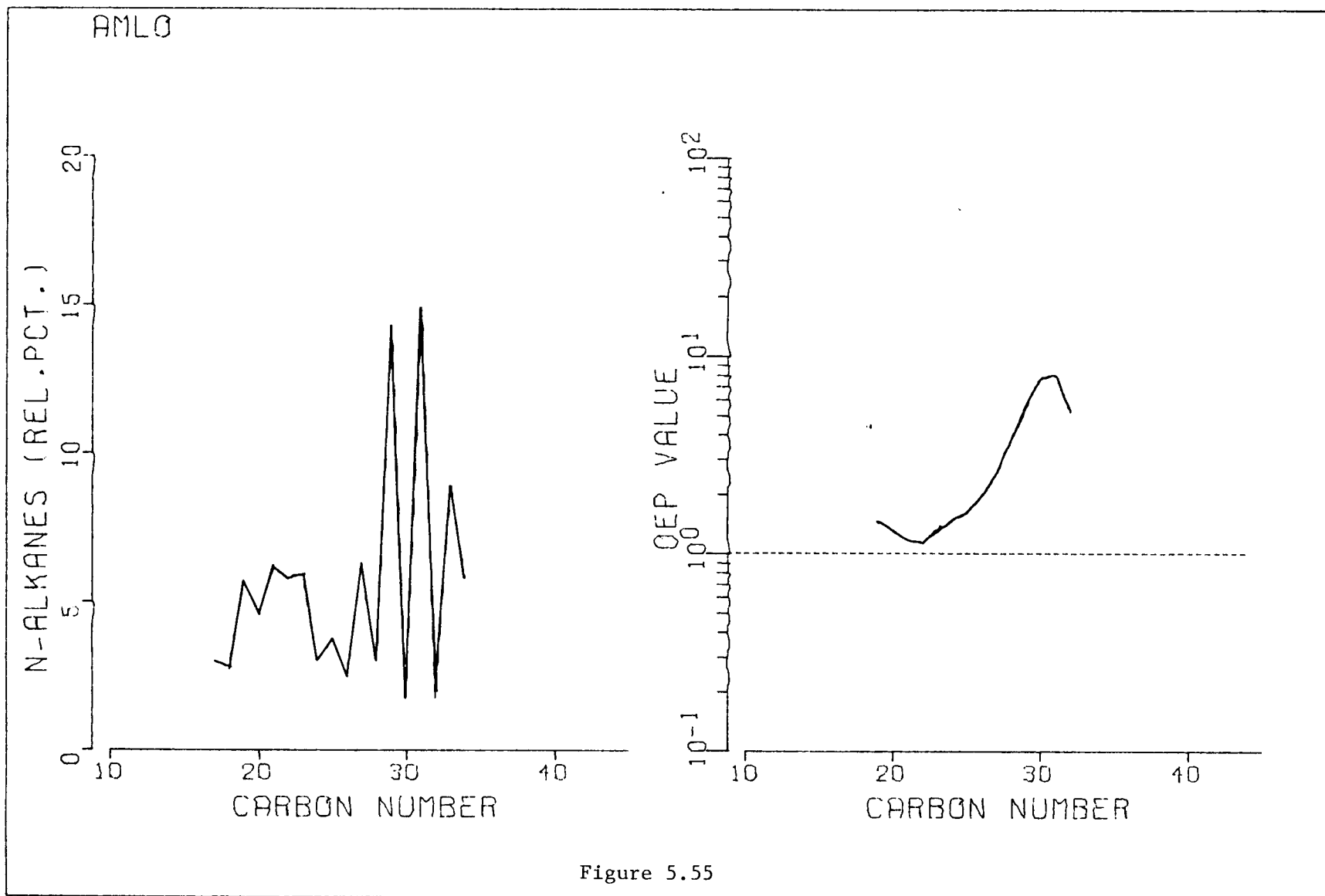


Figure 5.55

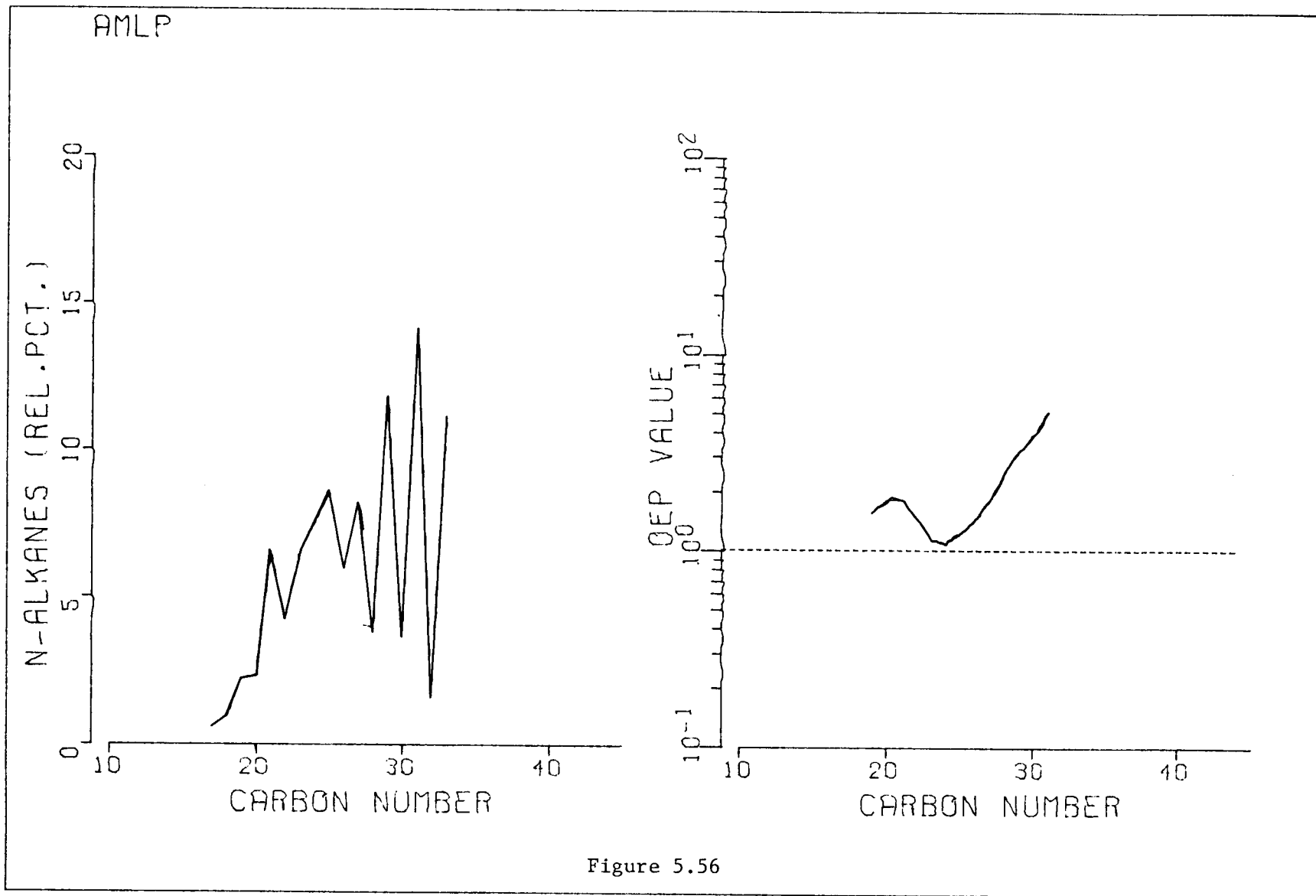


Figure 5.56

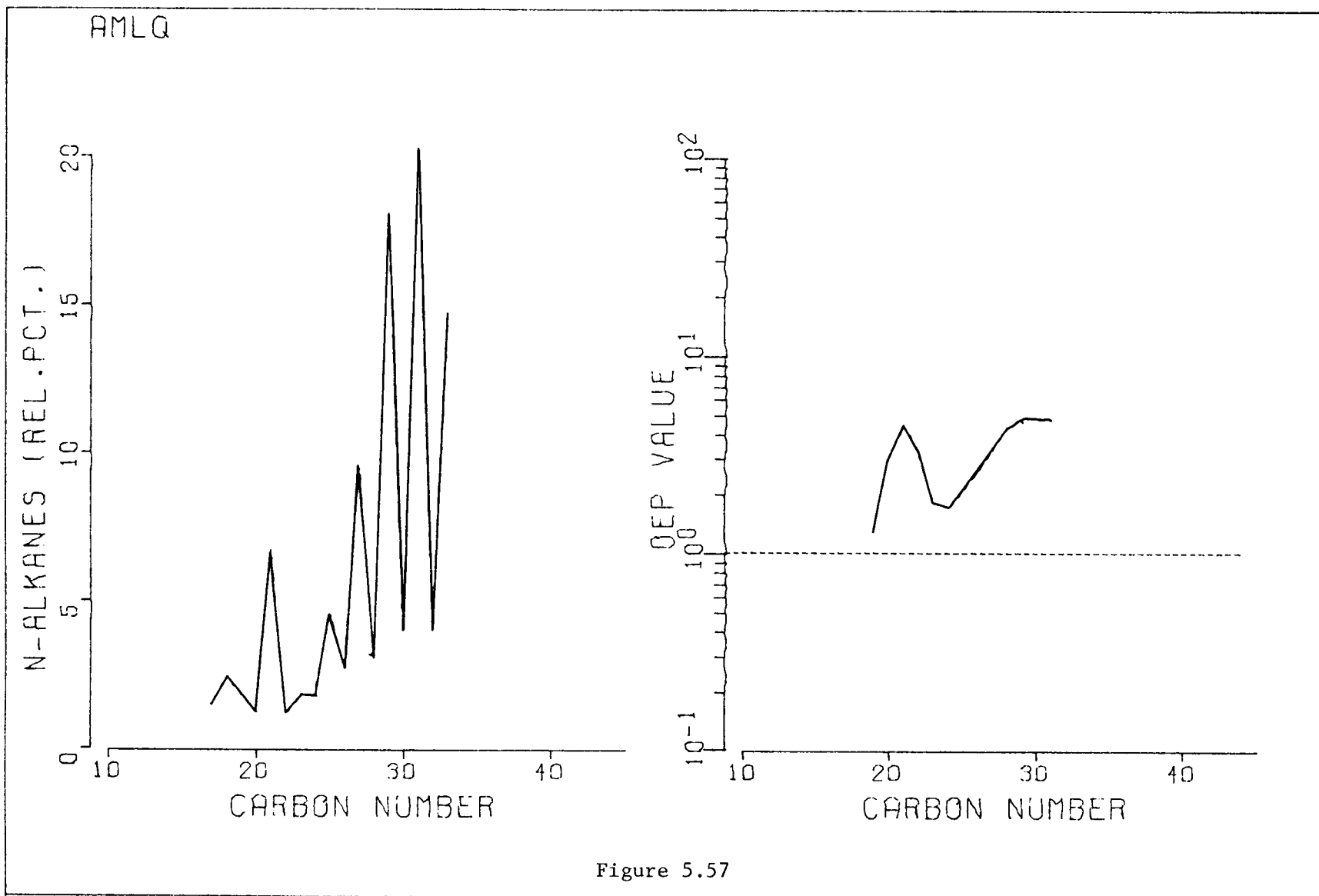


Figure 5.57

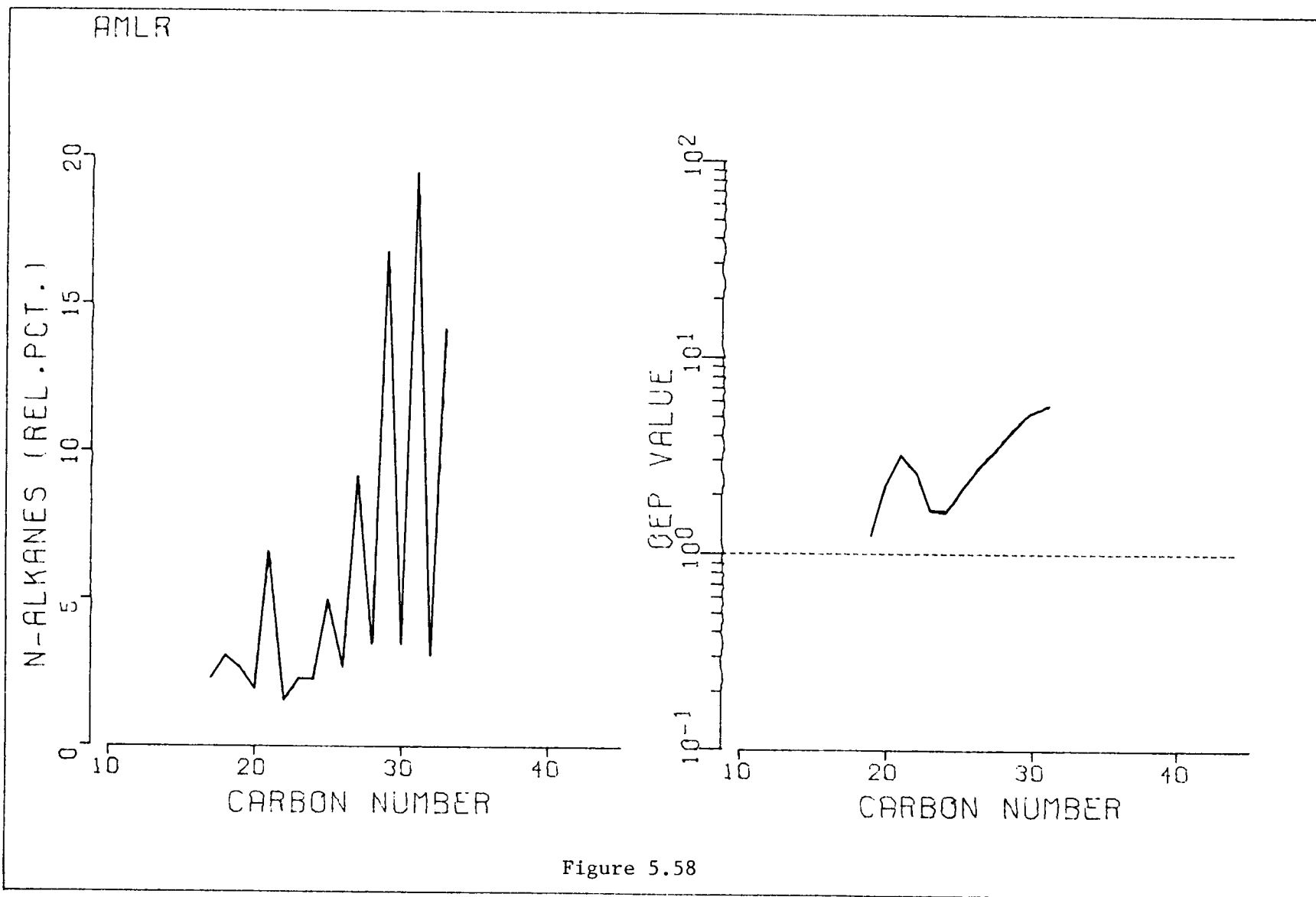


Figure 5.58

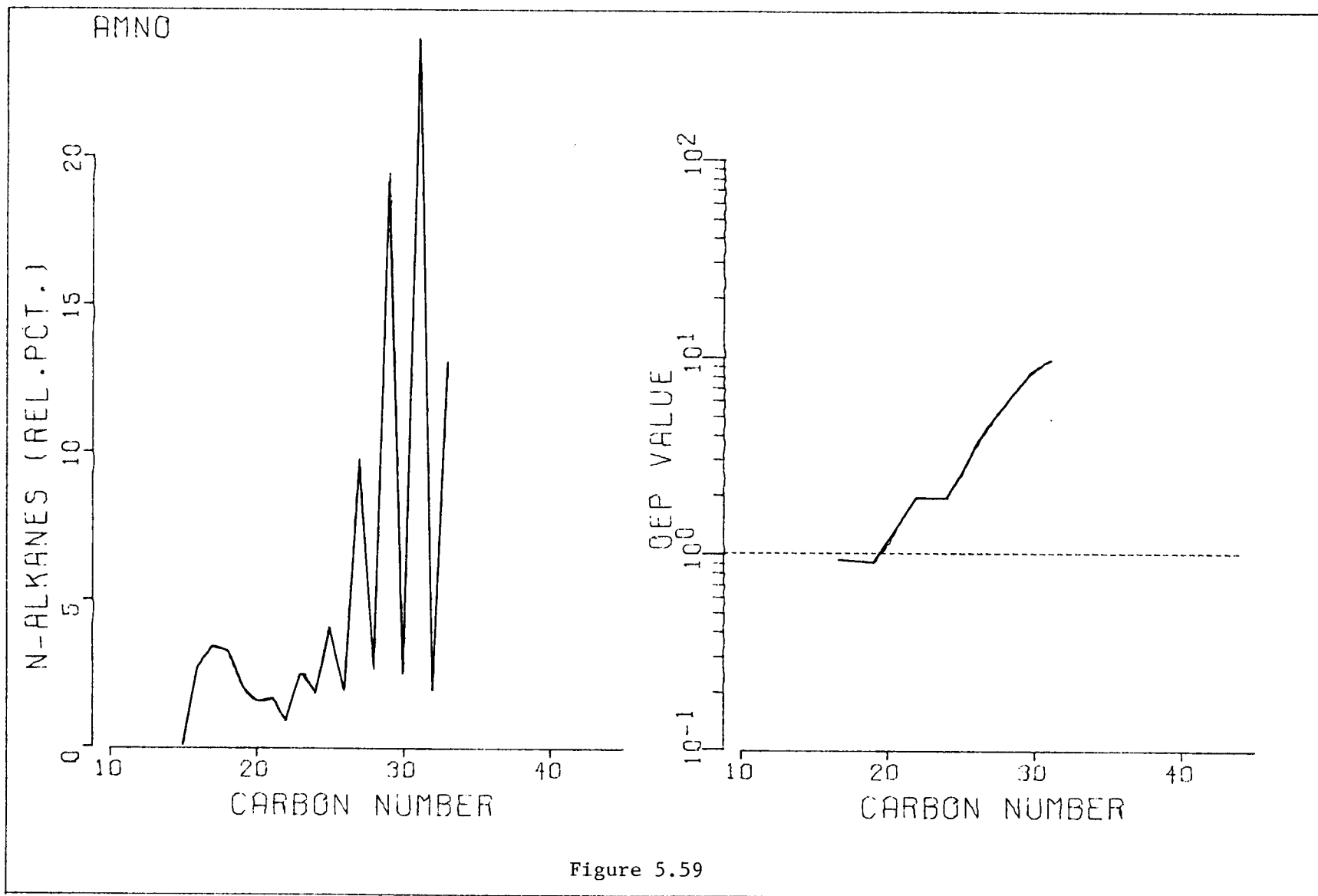


Figure 5.59

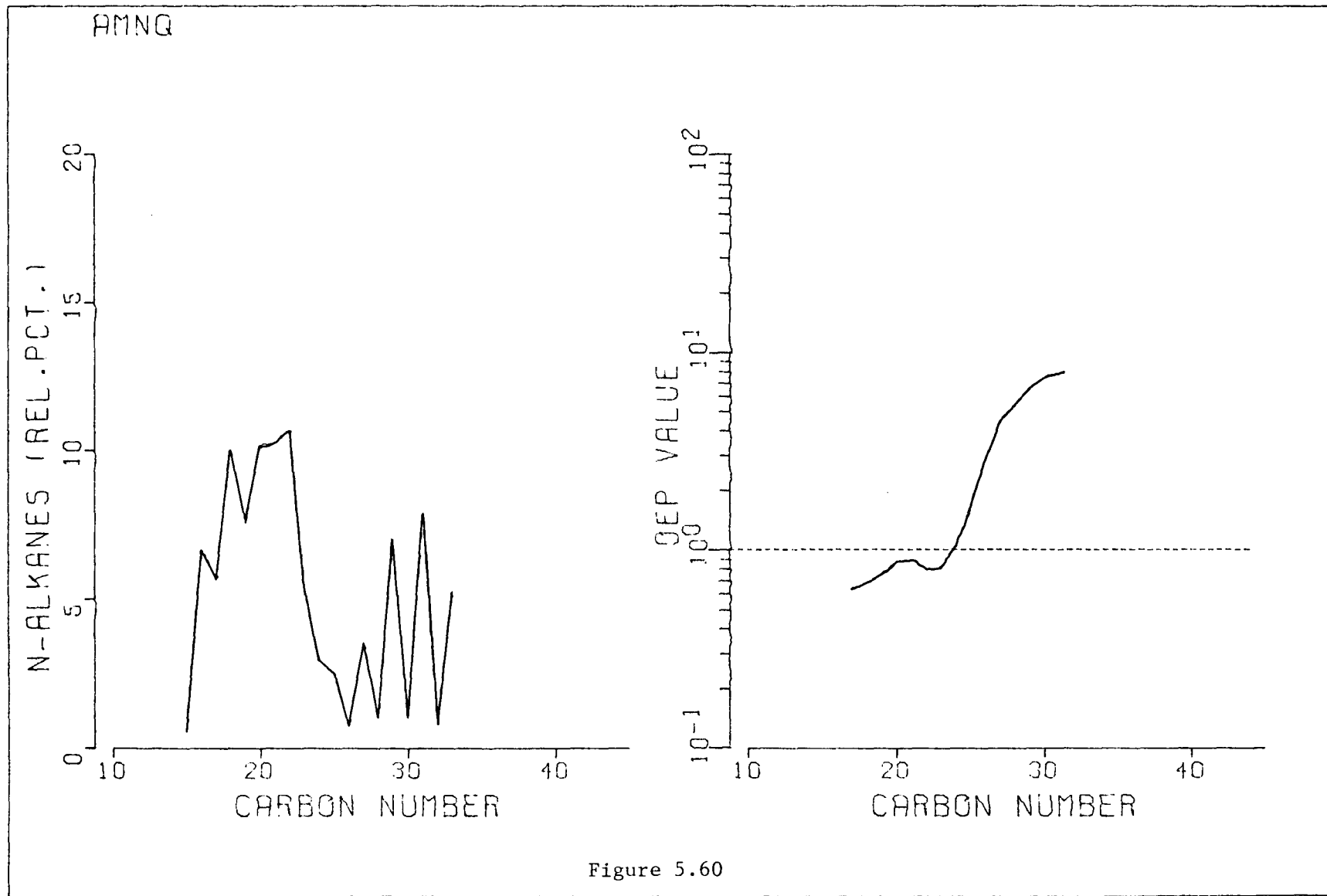


Figure 5.60

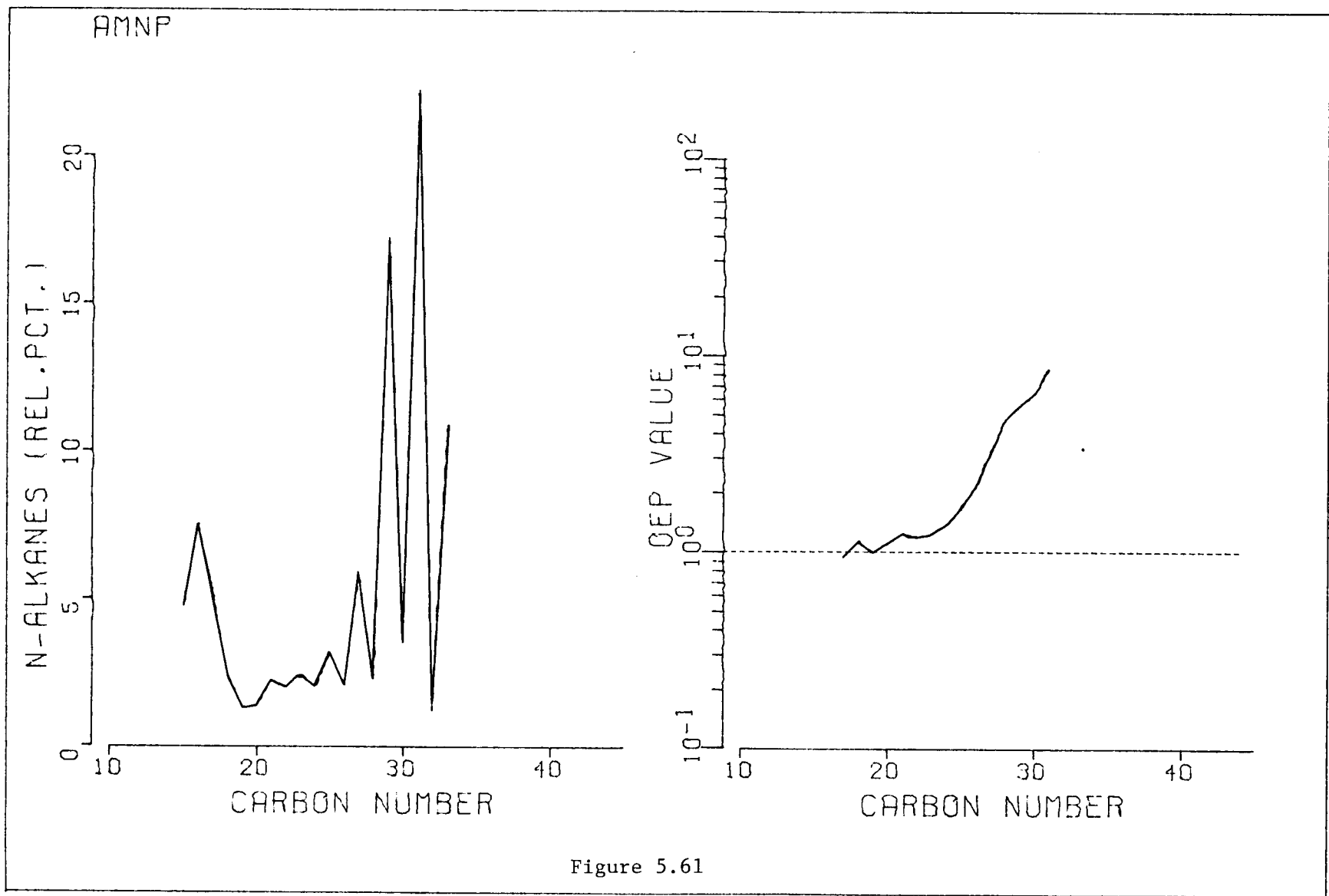


Figure 5.61

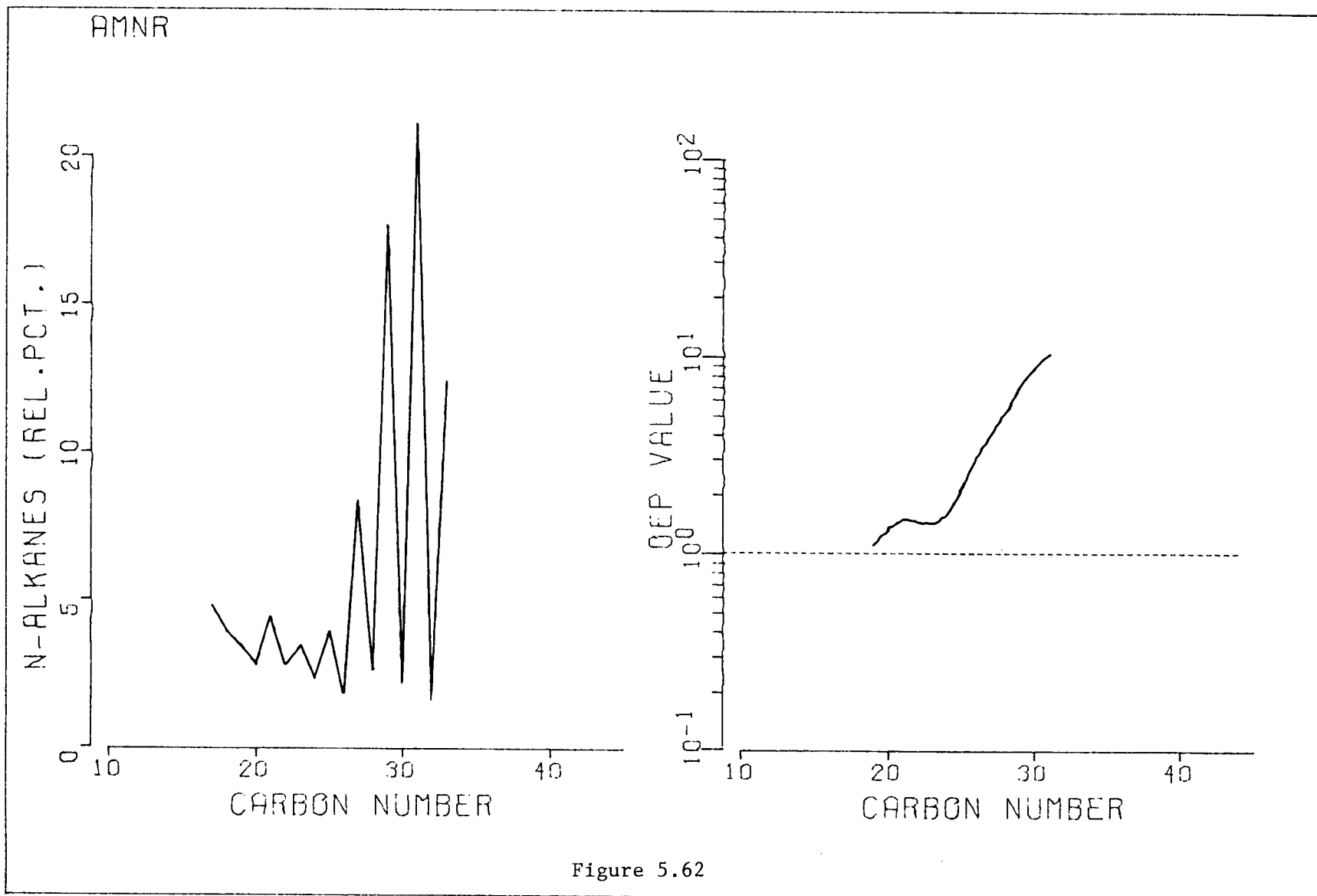


Figure 5.62

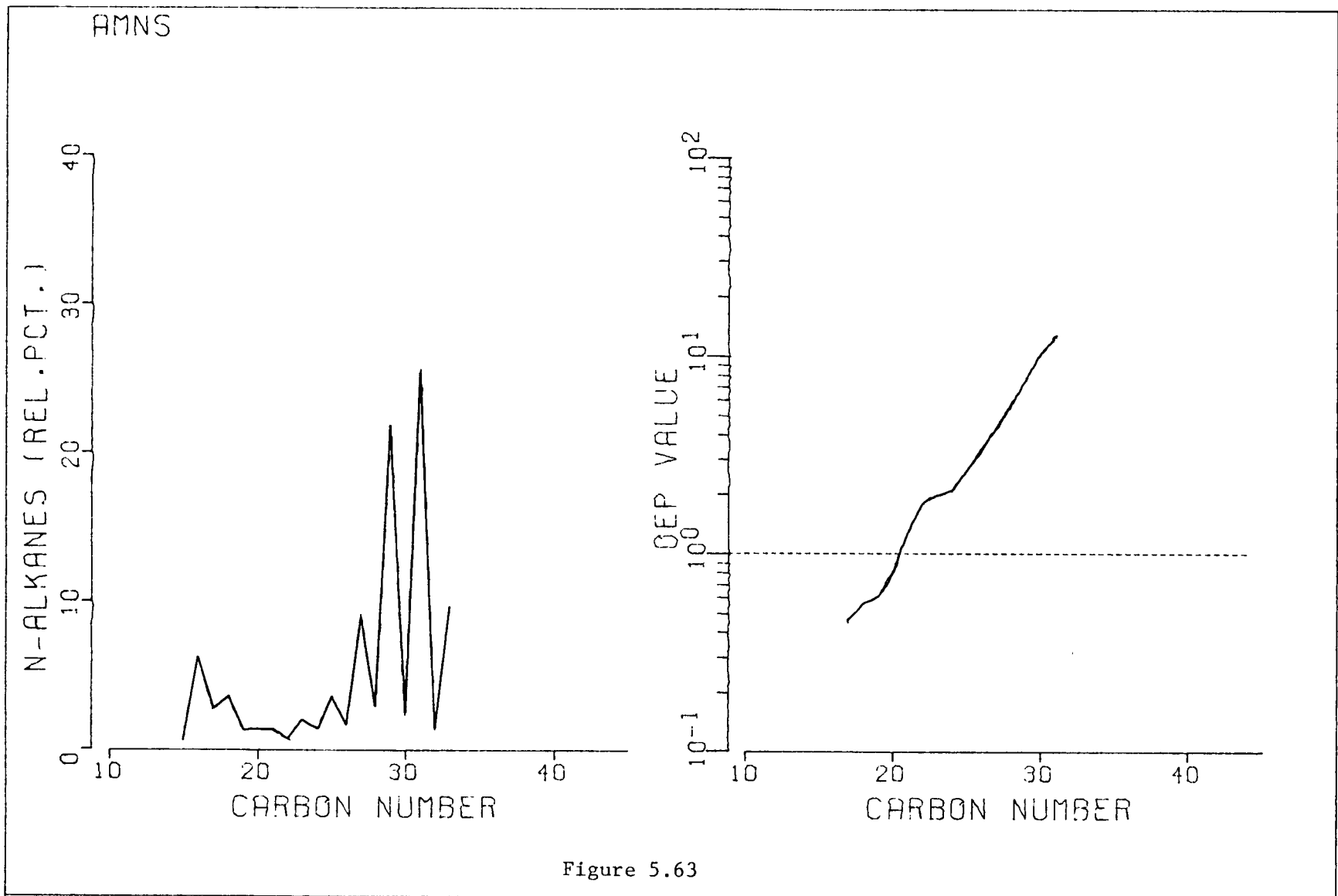


Figure 5.63

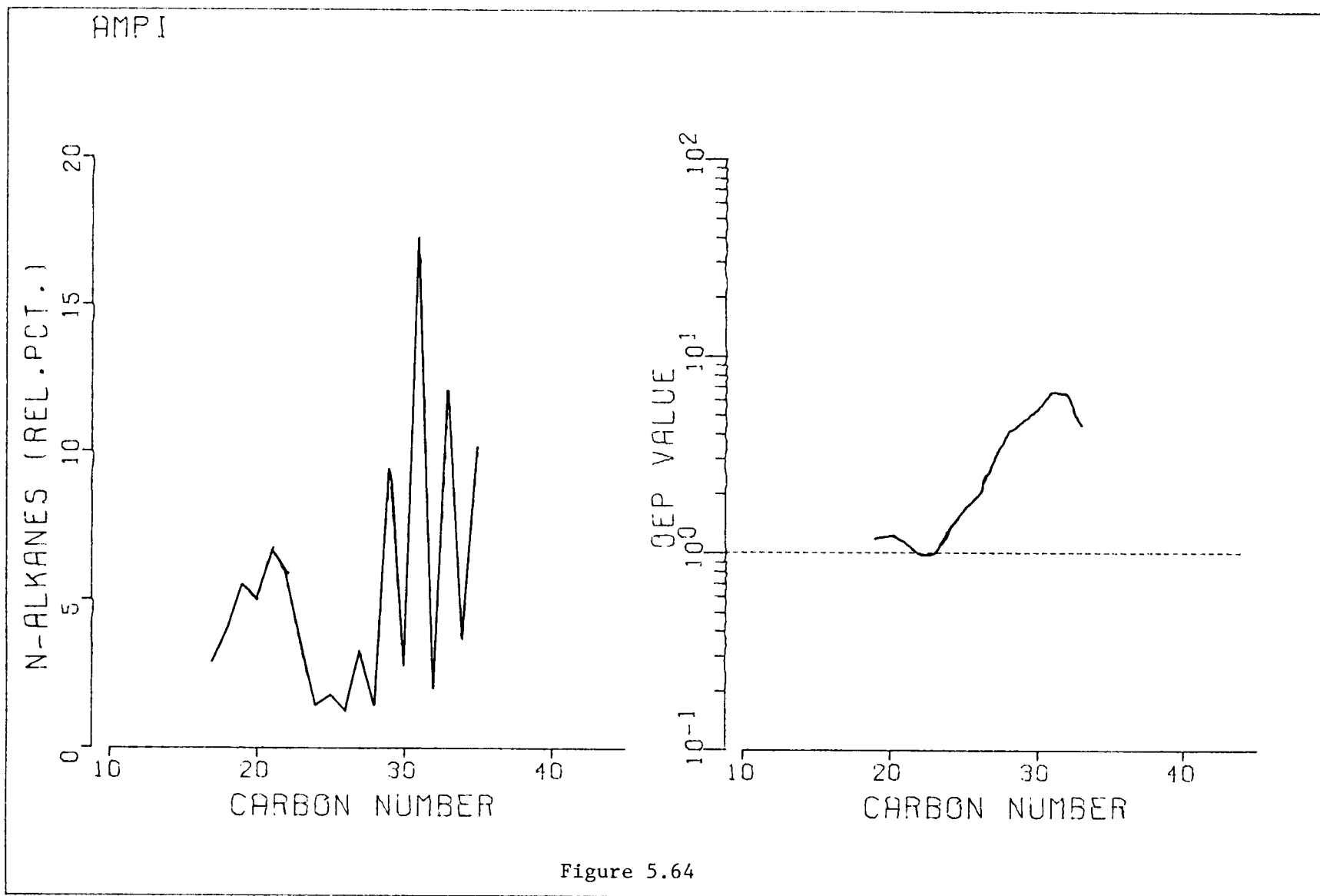


Figure 5.64

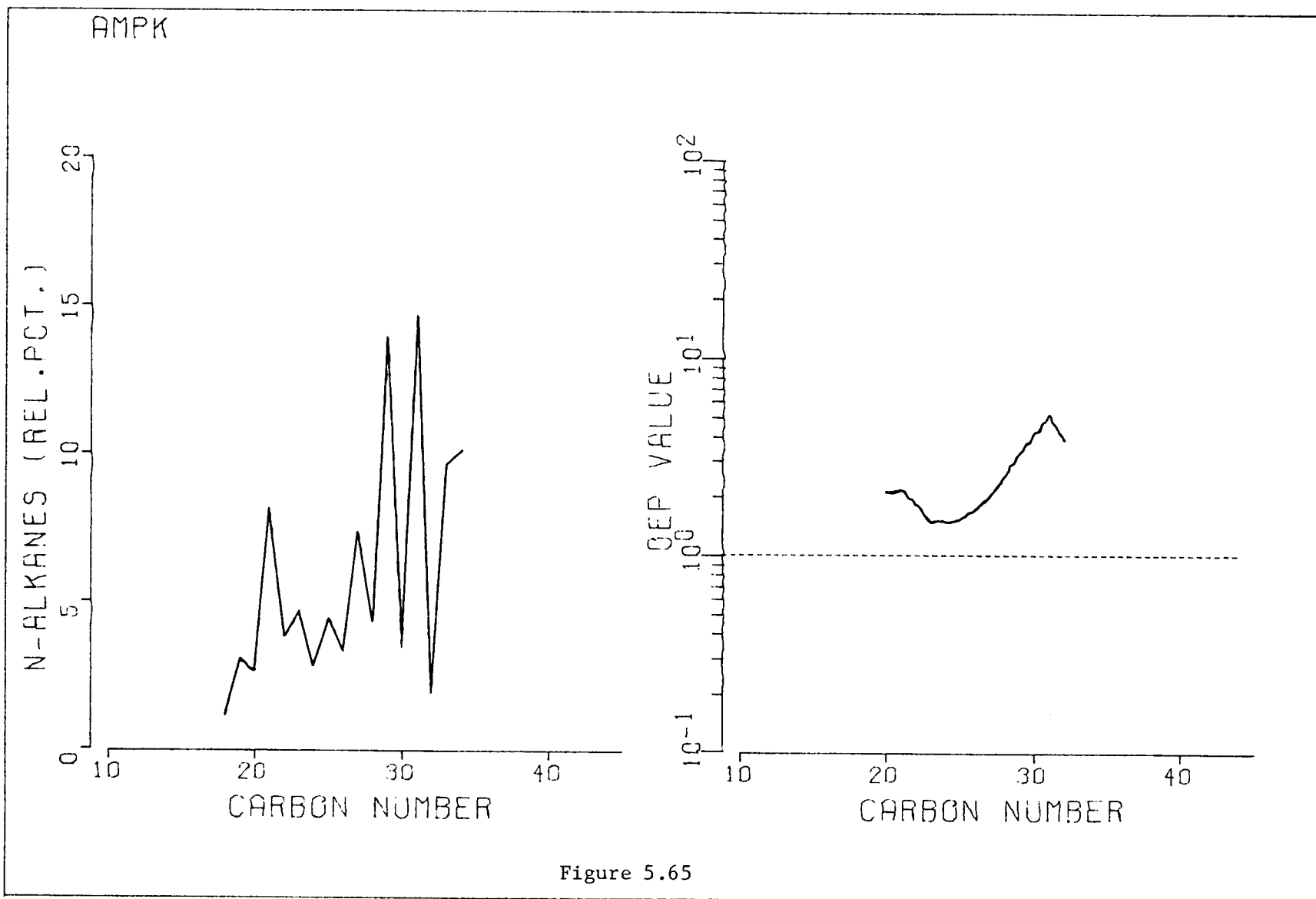
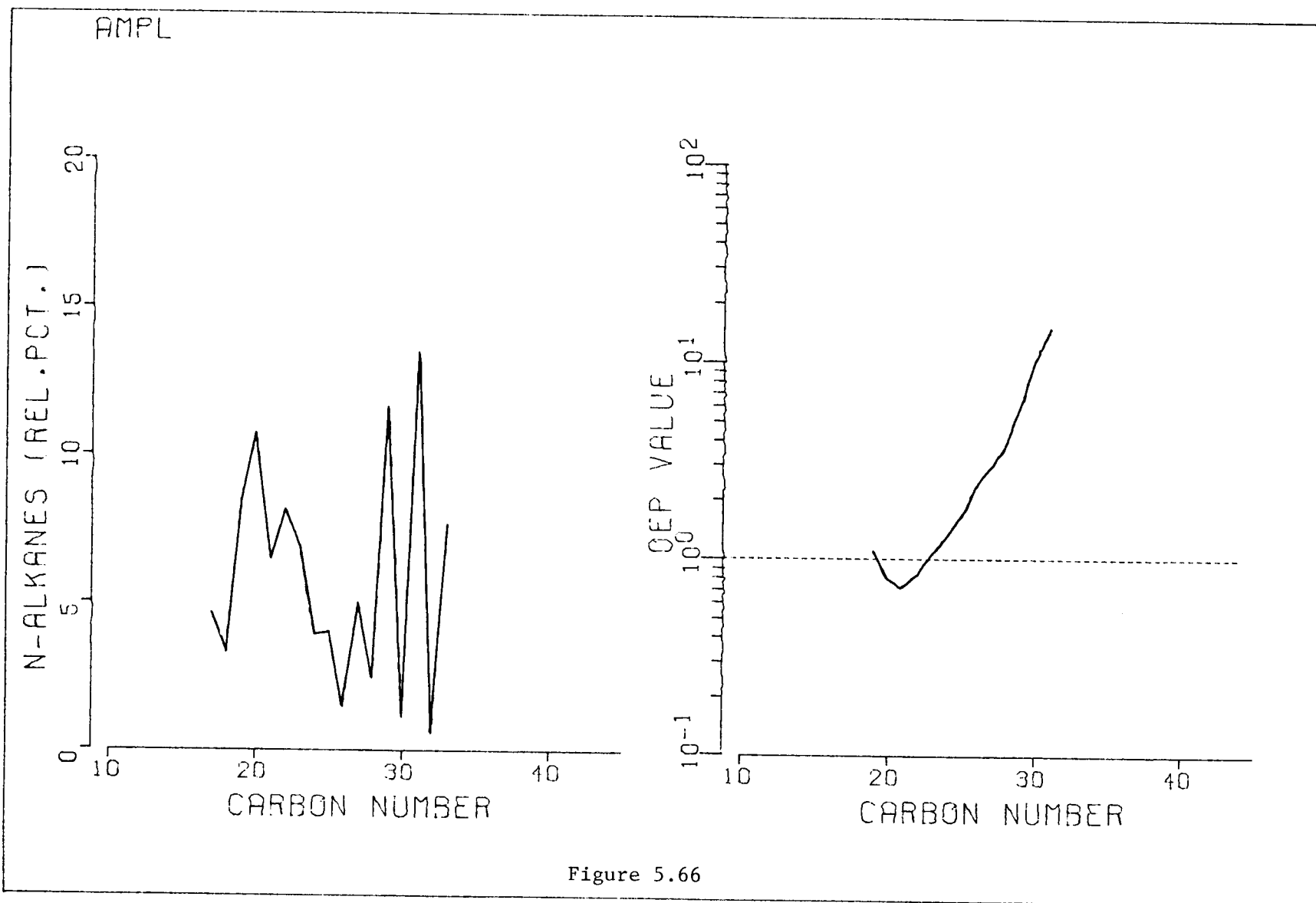
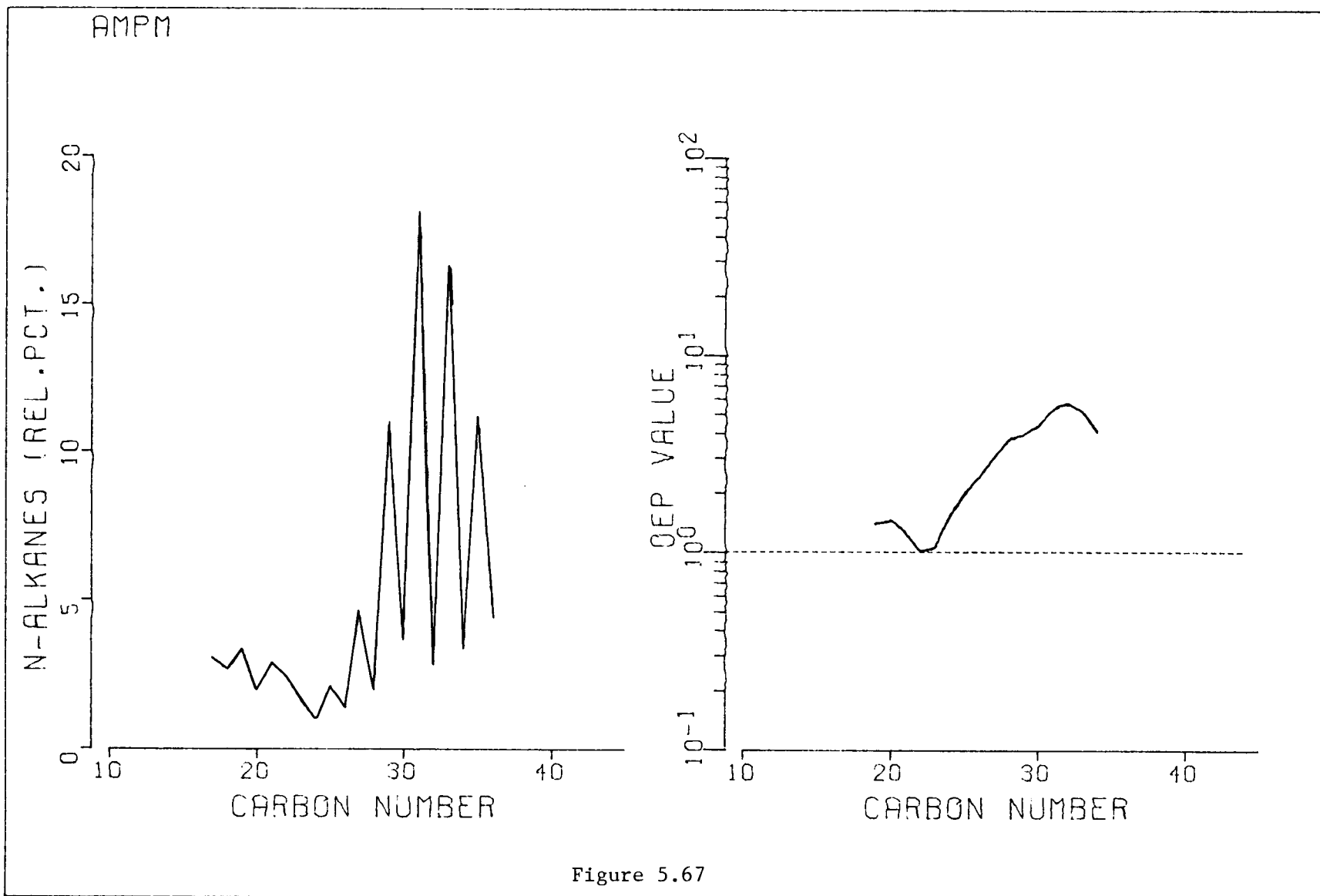


Figure 5.65





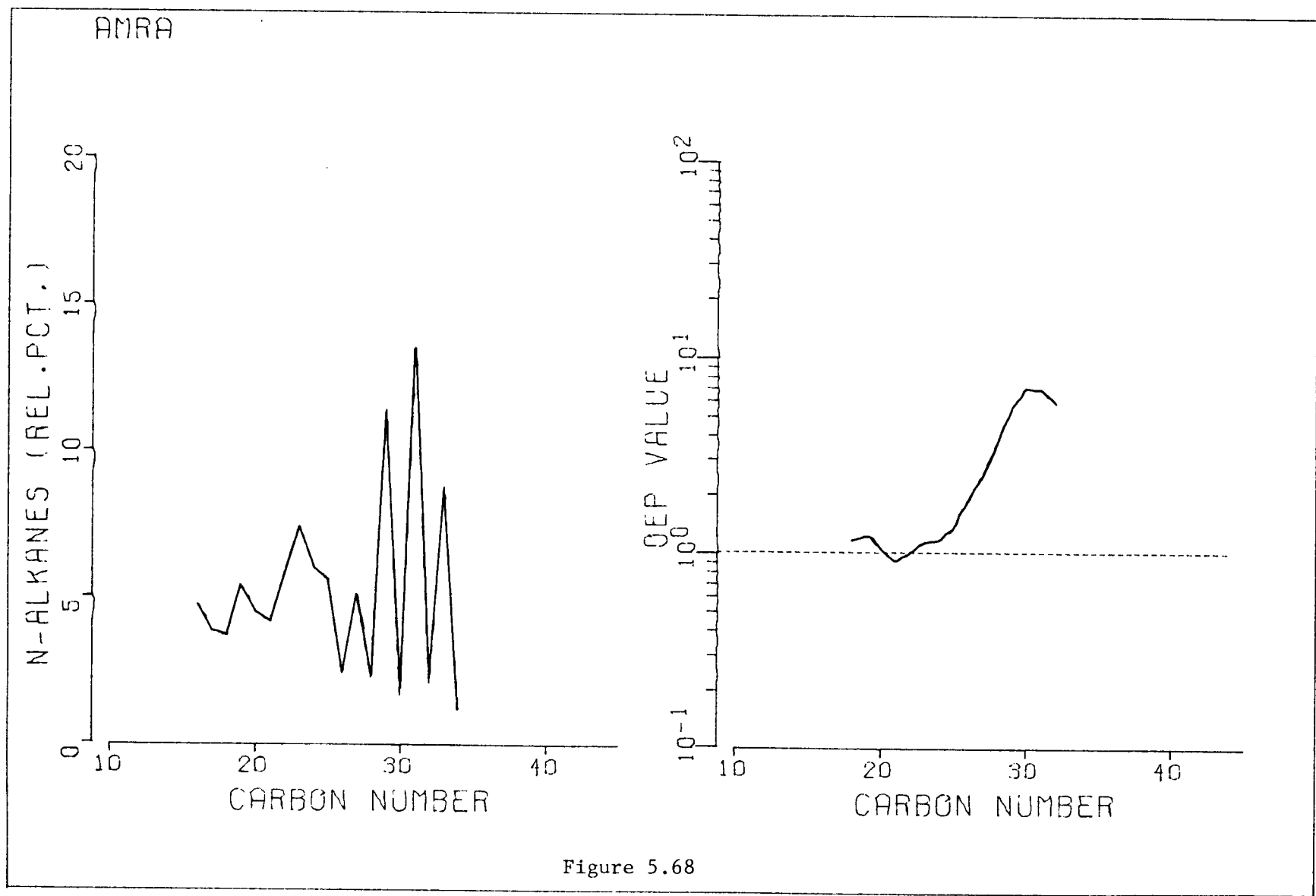


Figure 5.68

AMRB

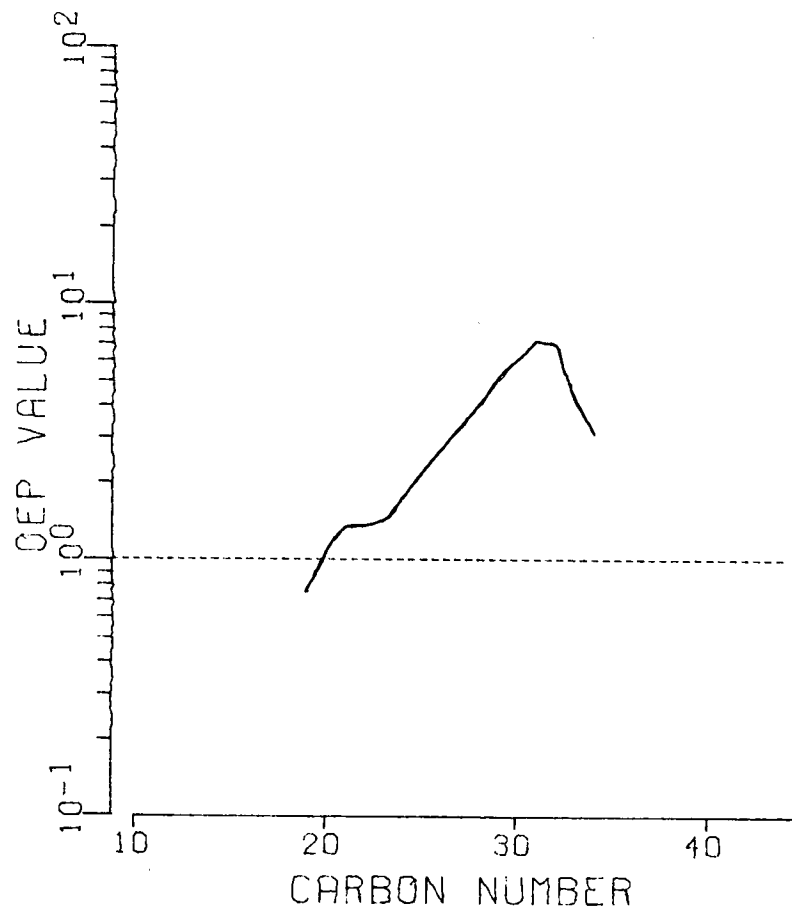
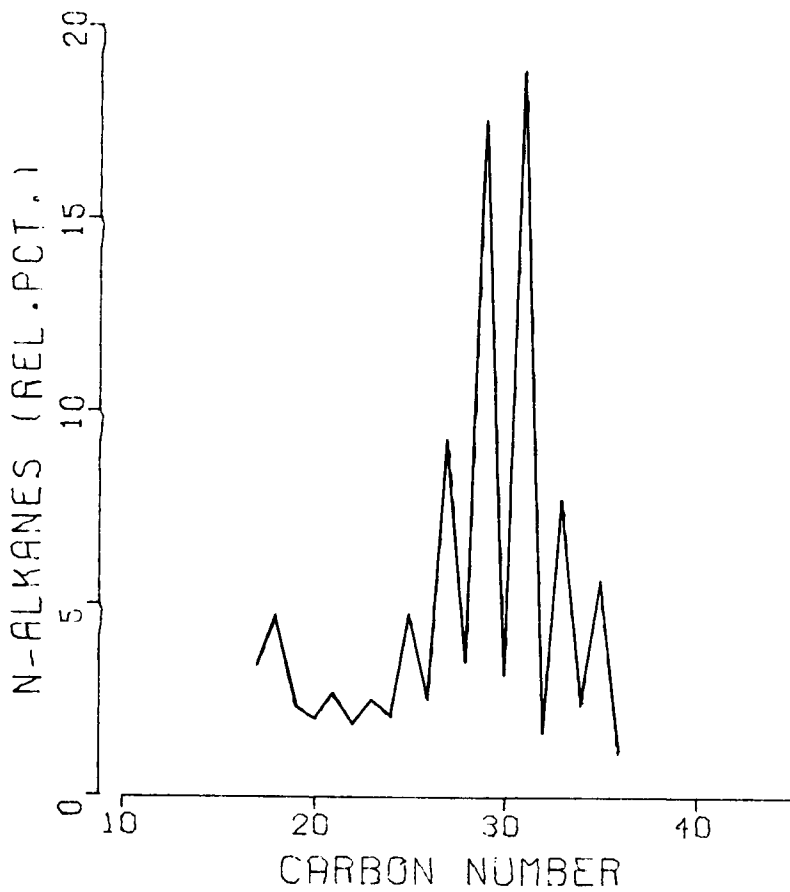
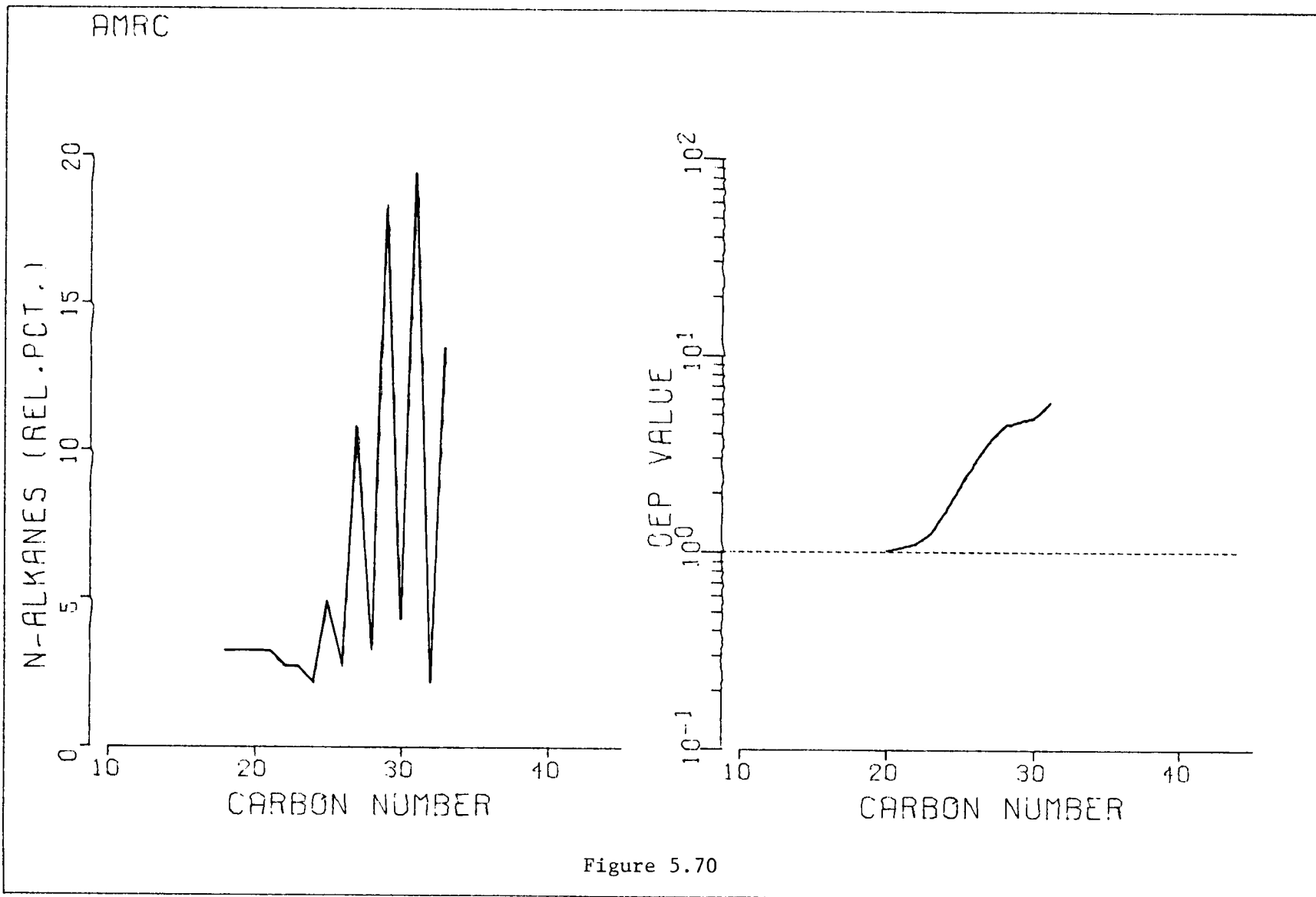


Figure 5.69



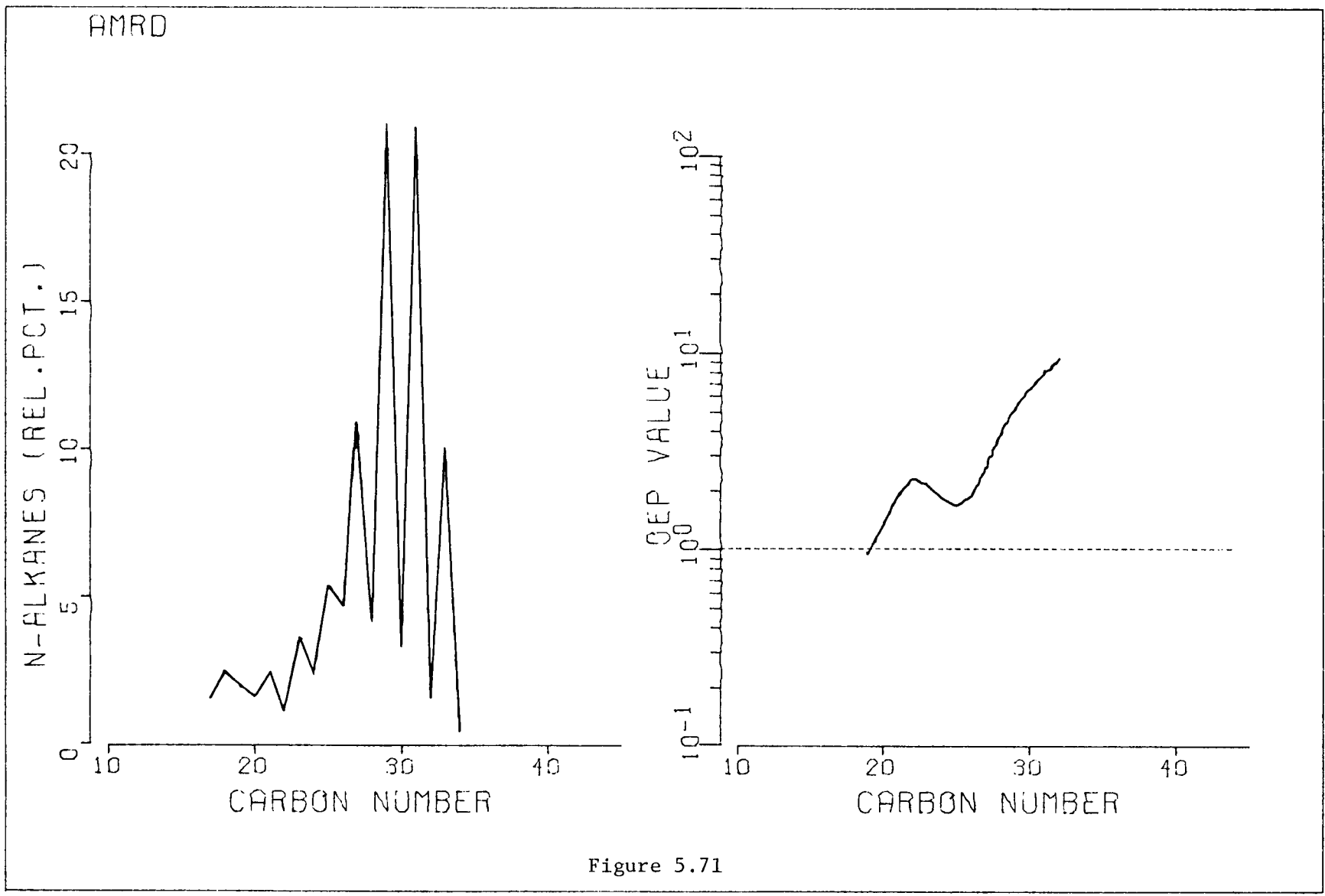


Figure 5.71

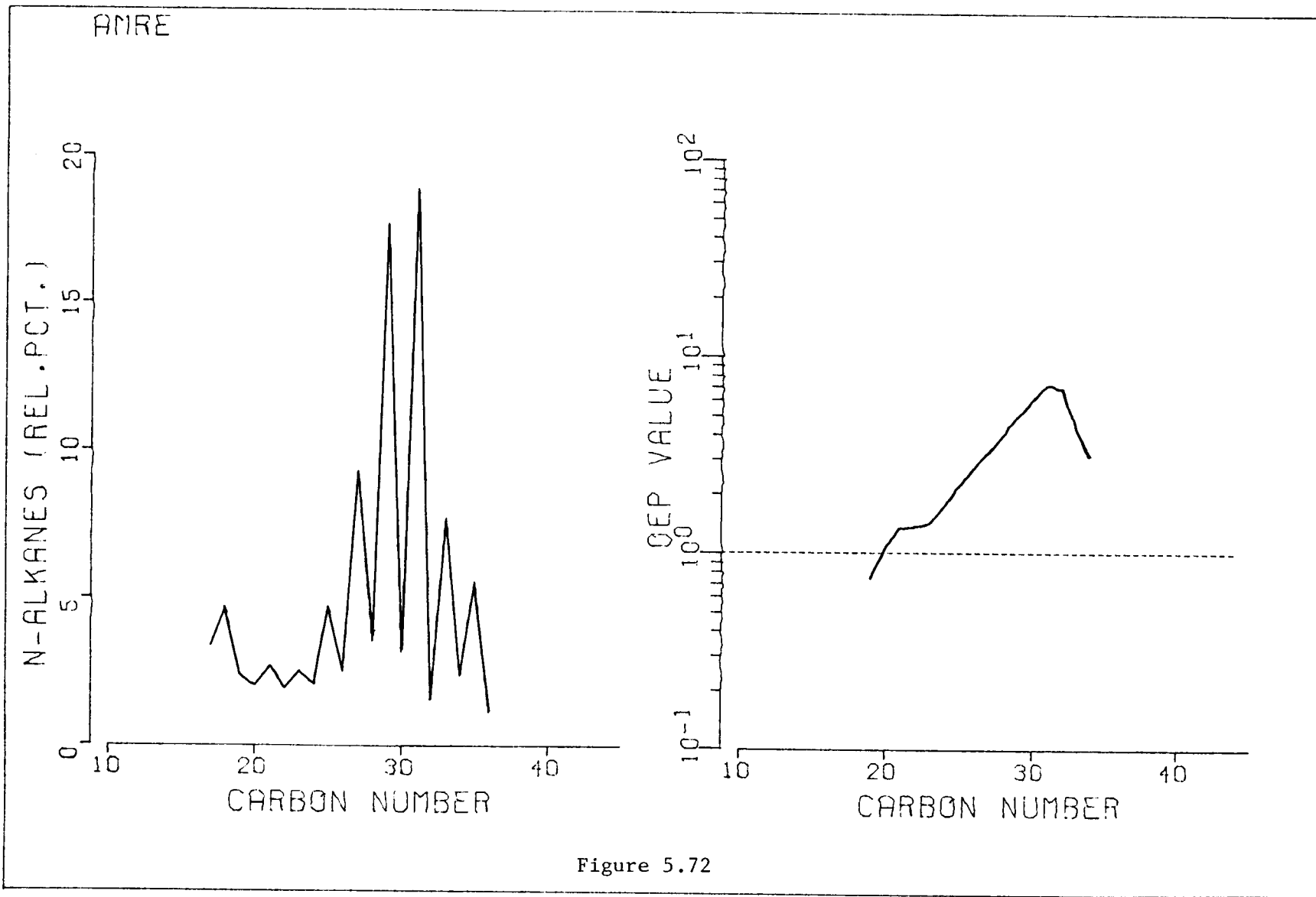


Figure 5.72

AMSS

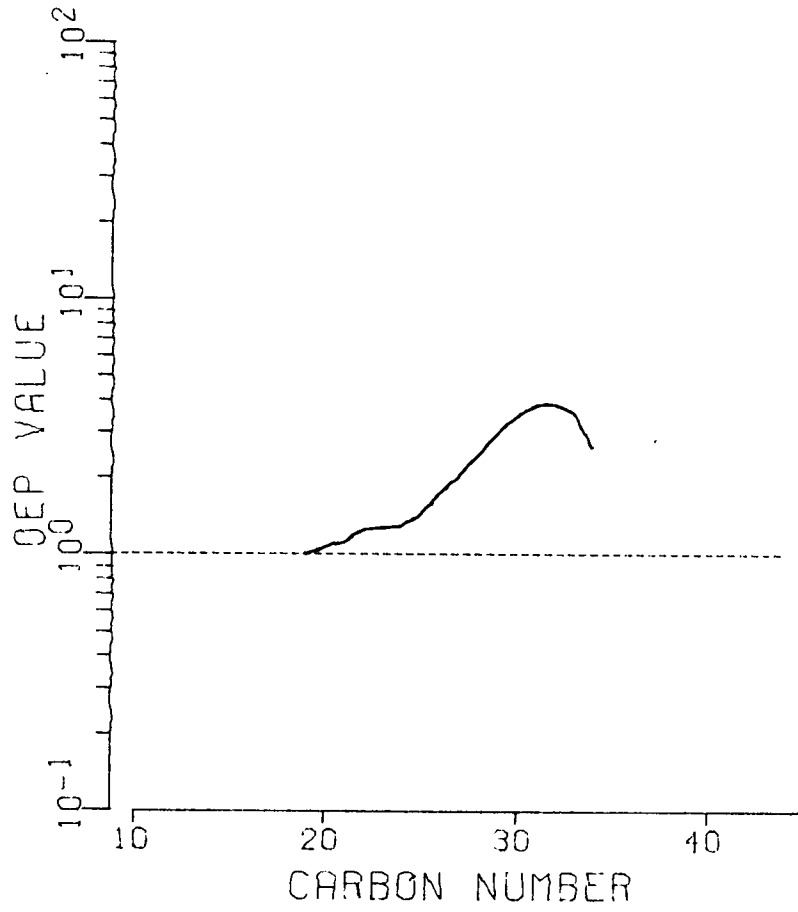
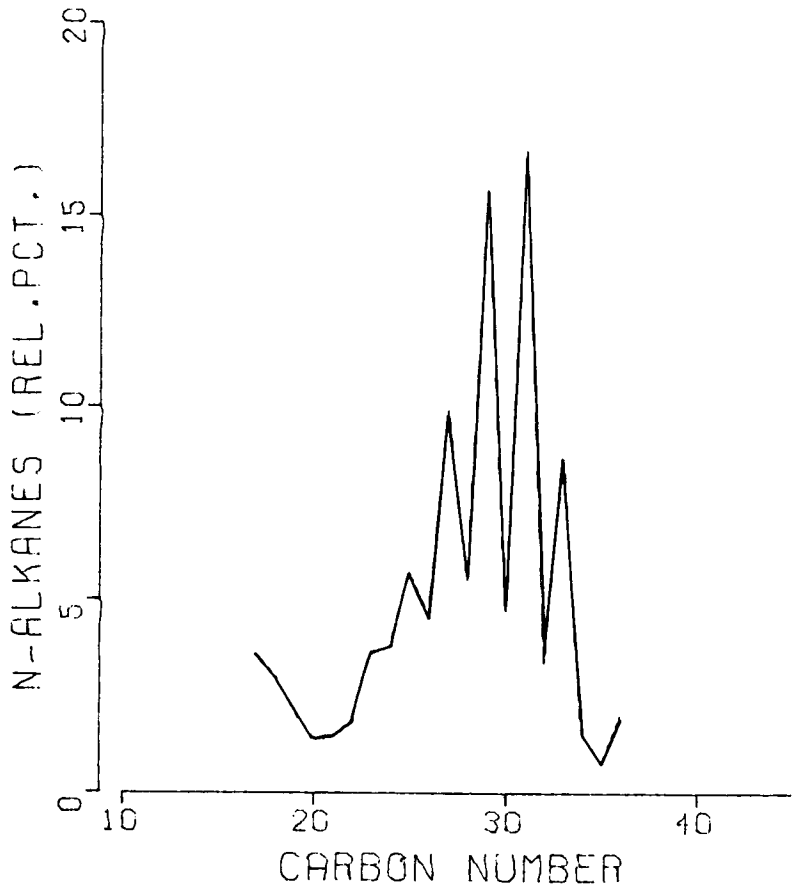


Figure 5.73

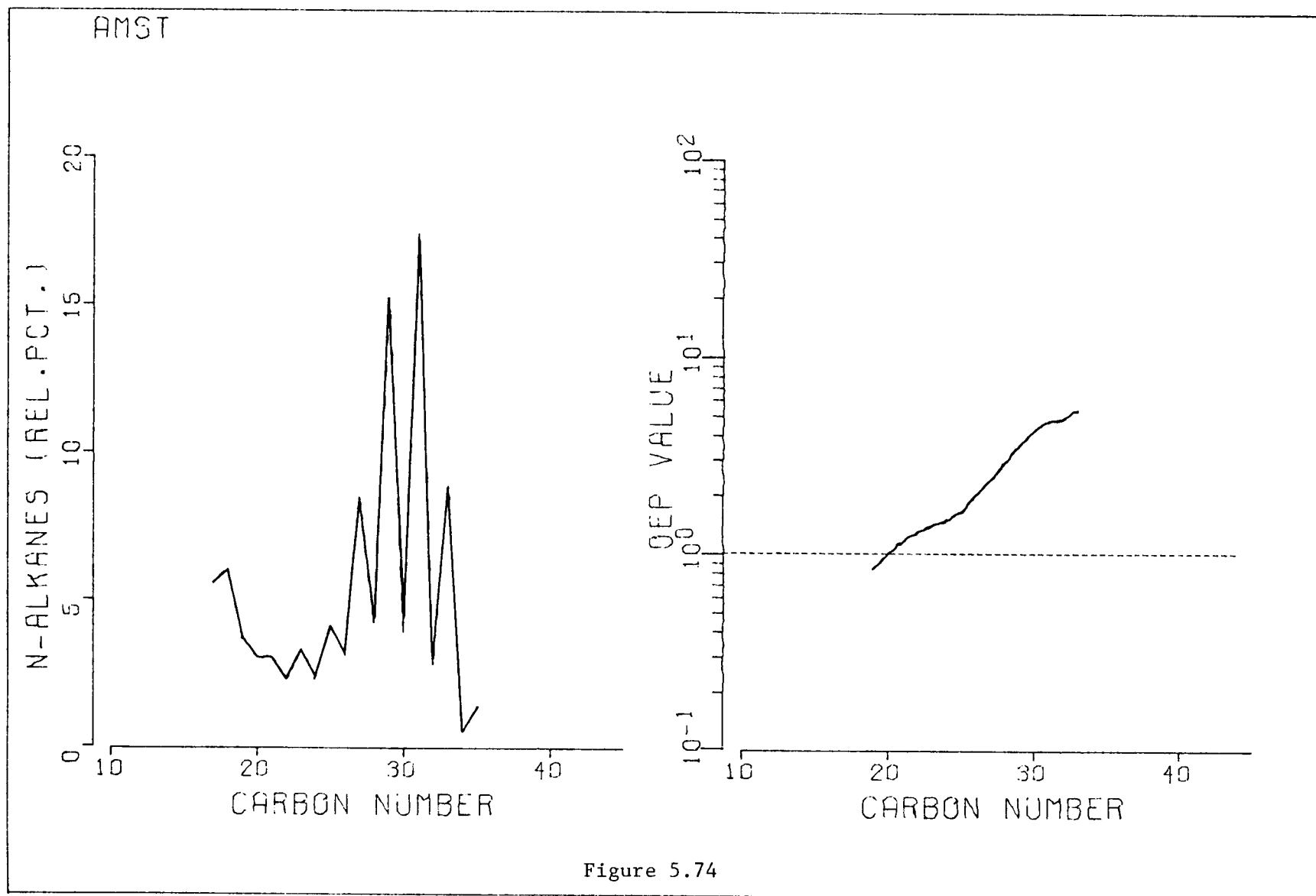
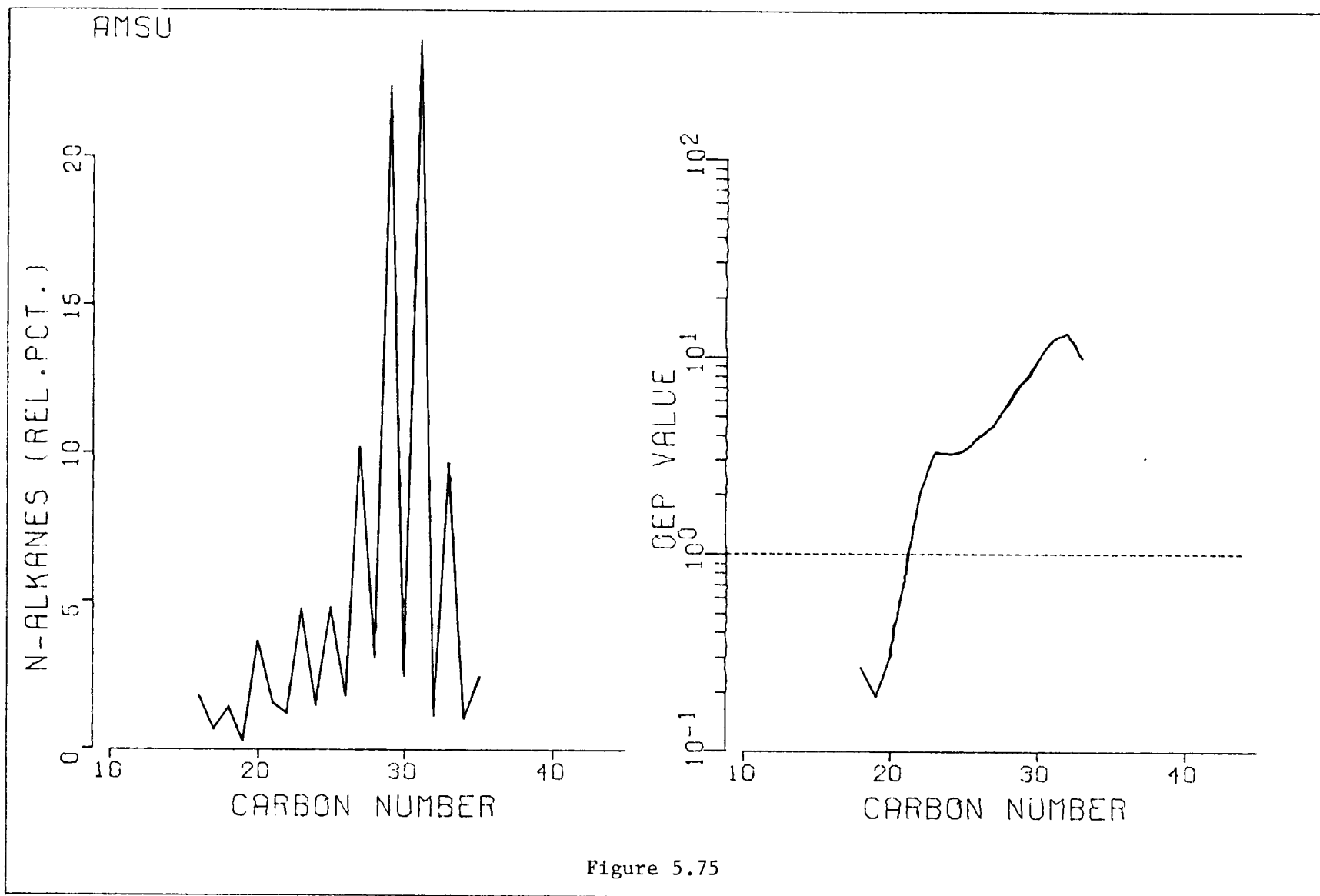


Figure 5.74



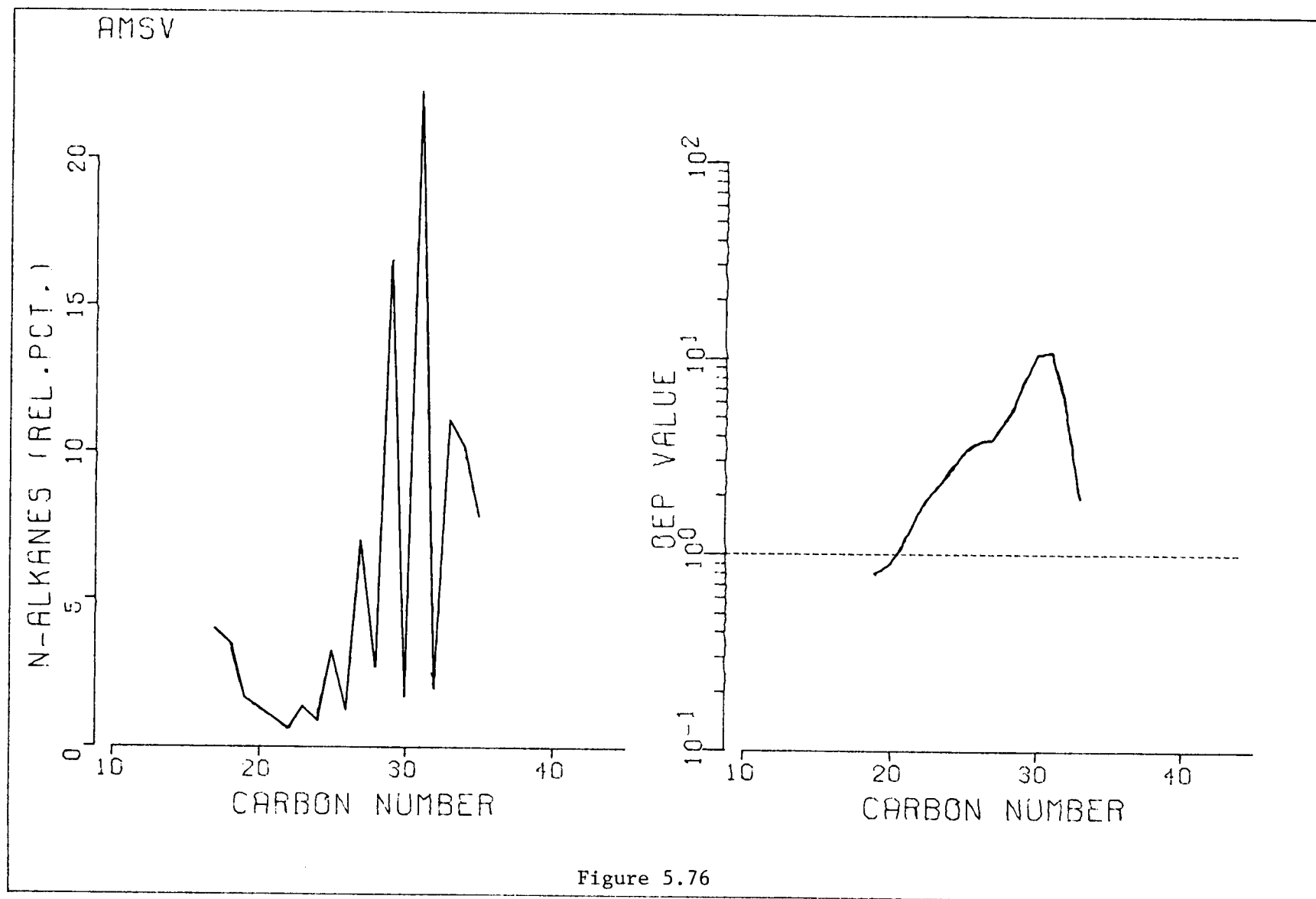
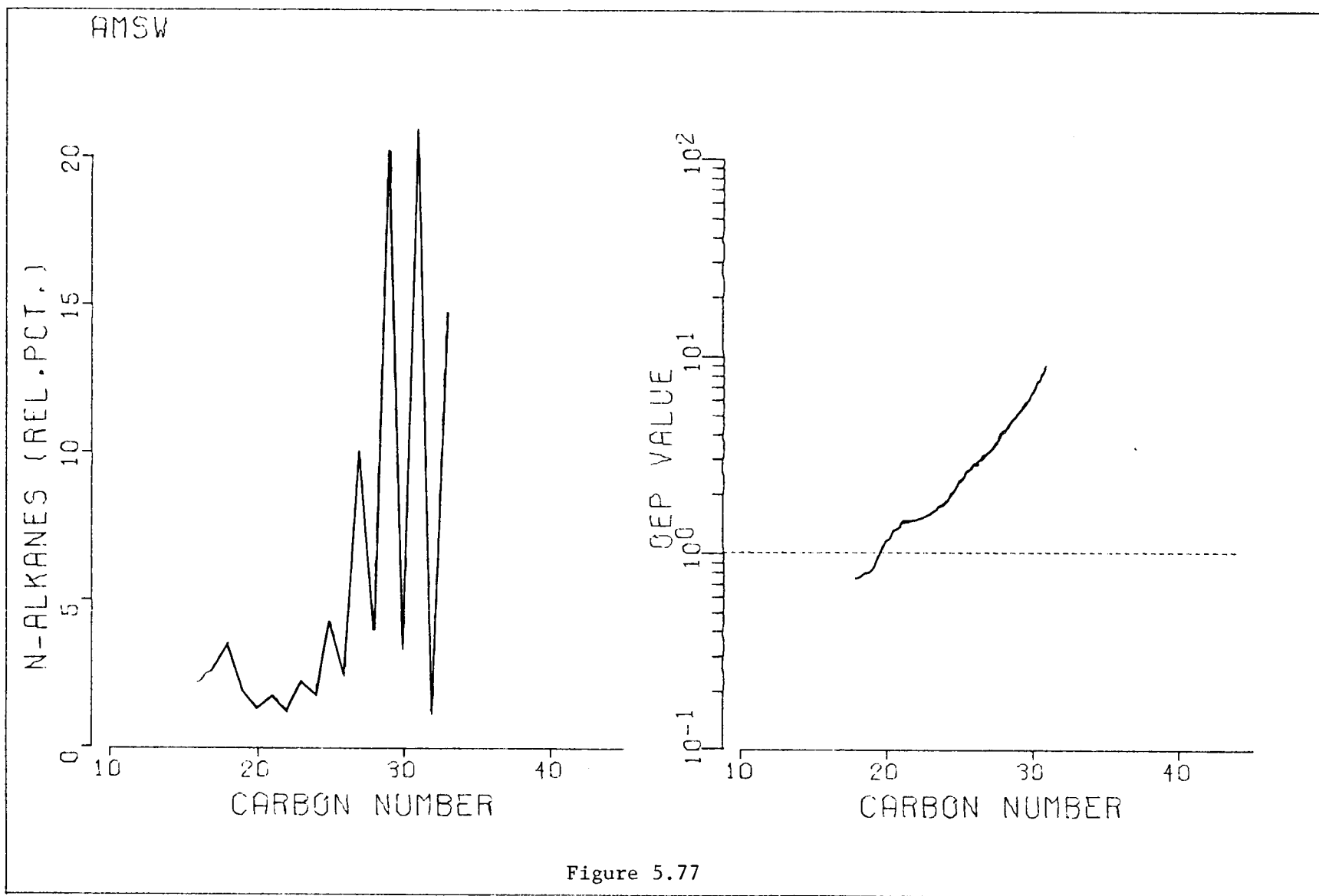


Figure 5.76



ARJT

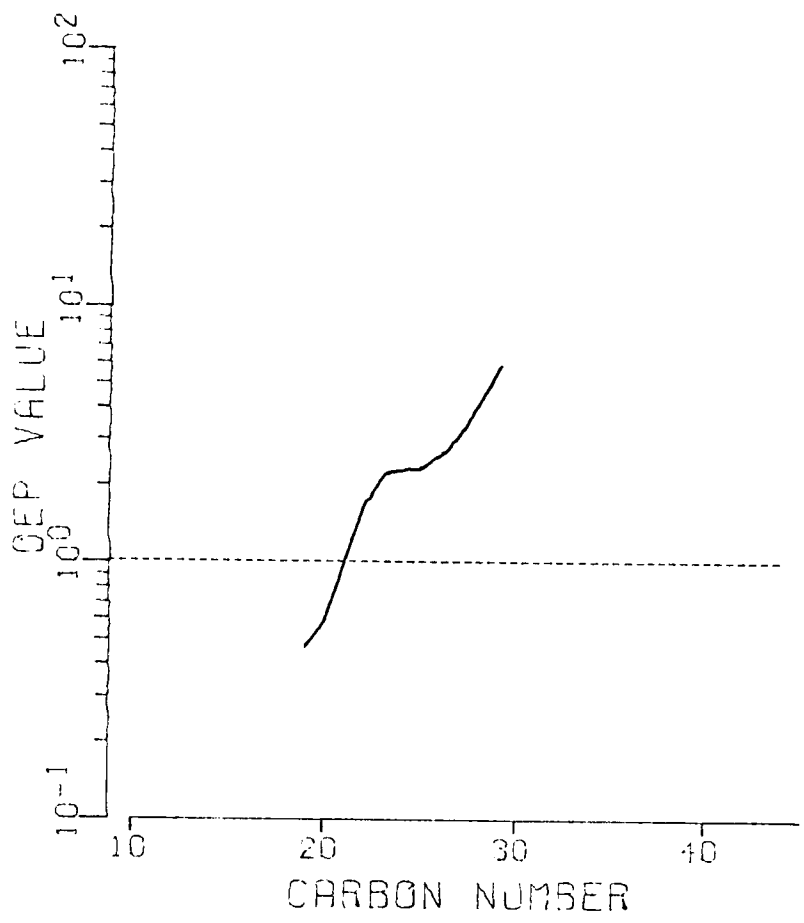
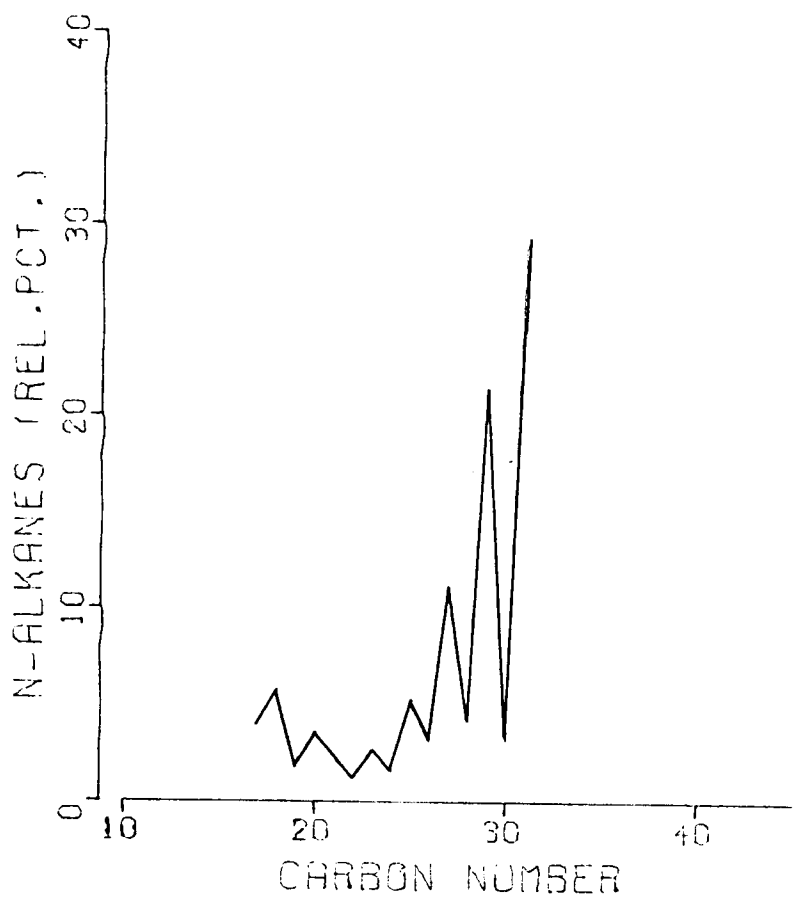


Figure 5.78

ARLT

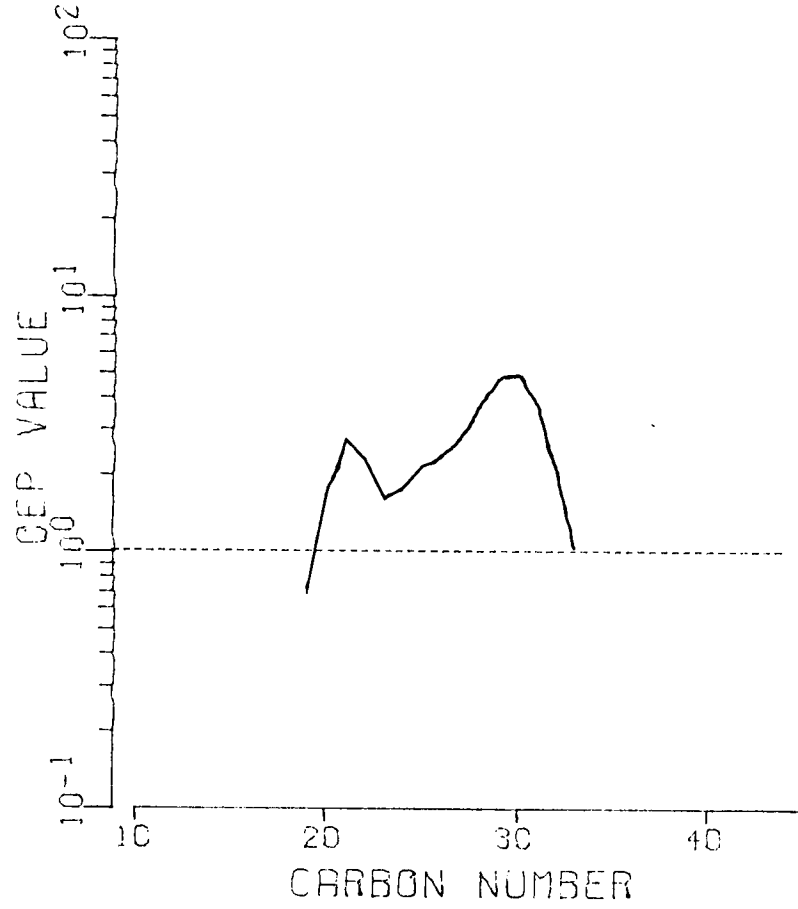
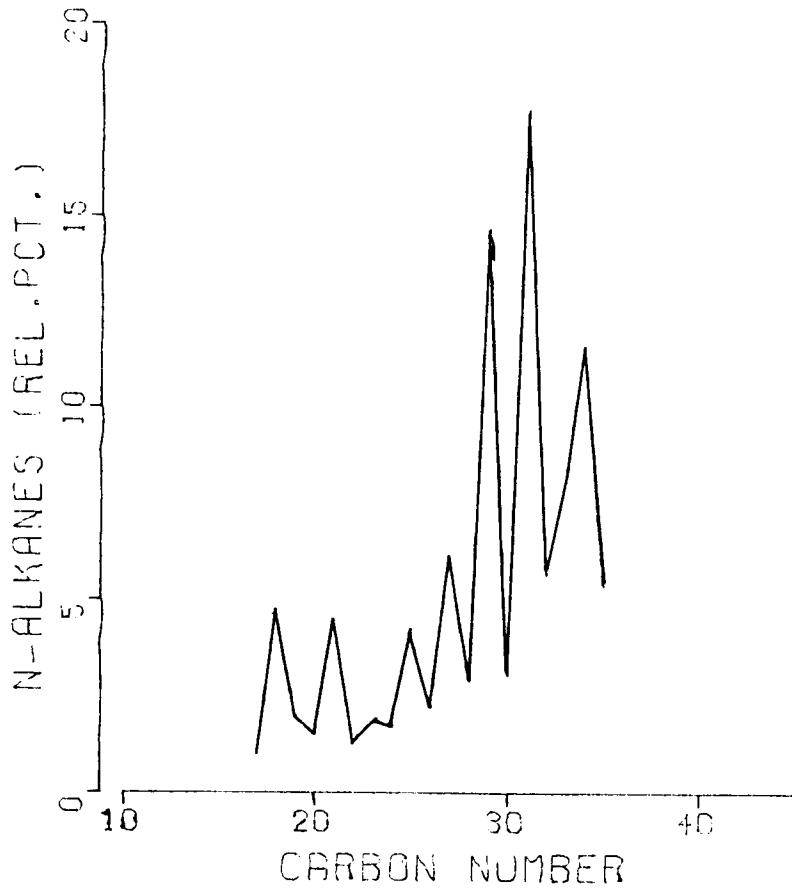


Figure 5.79

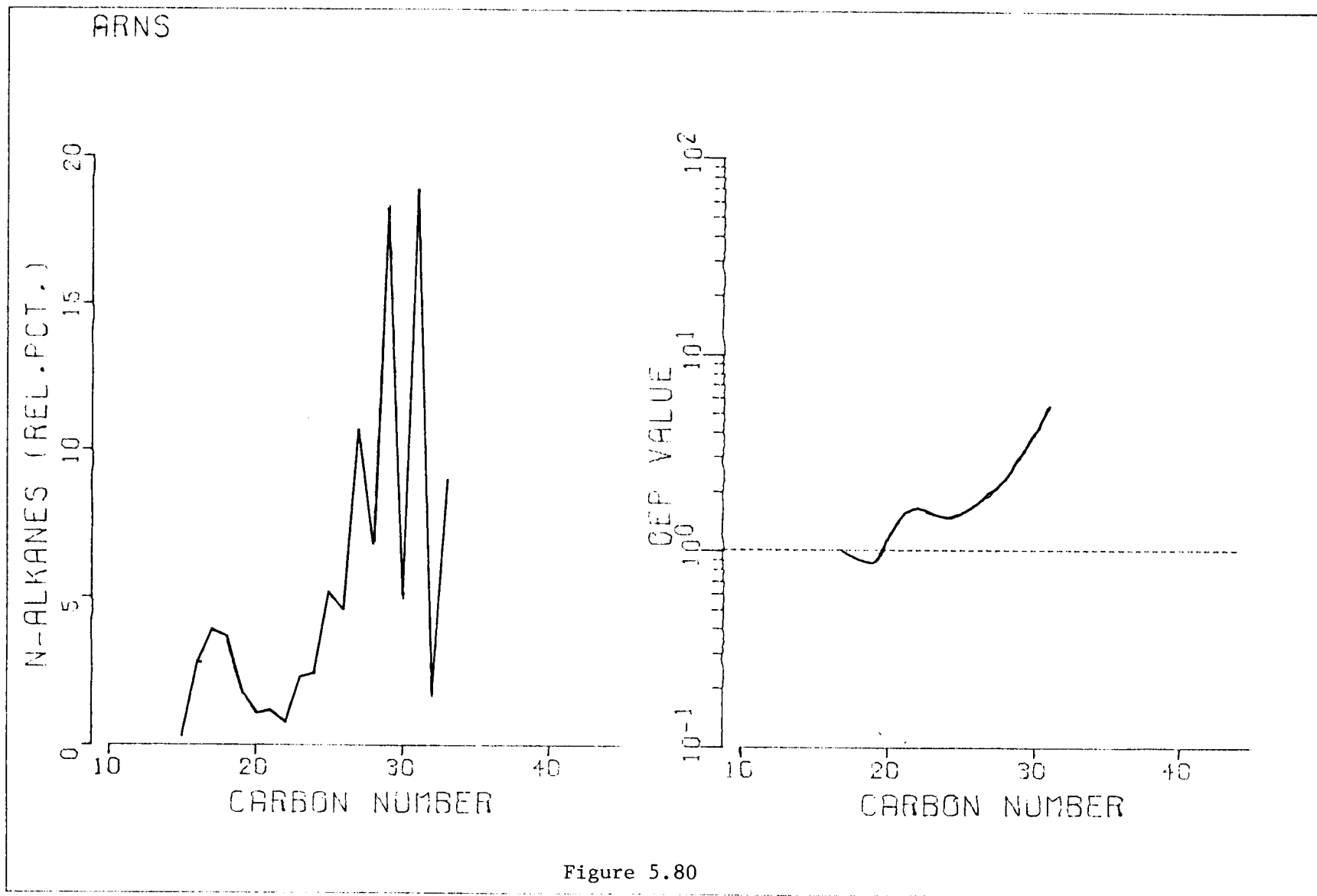


Figure 5.80

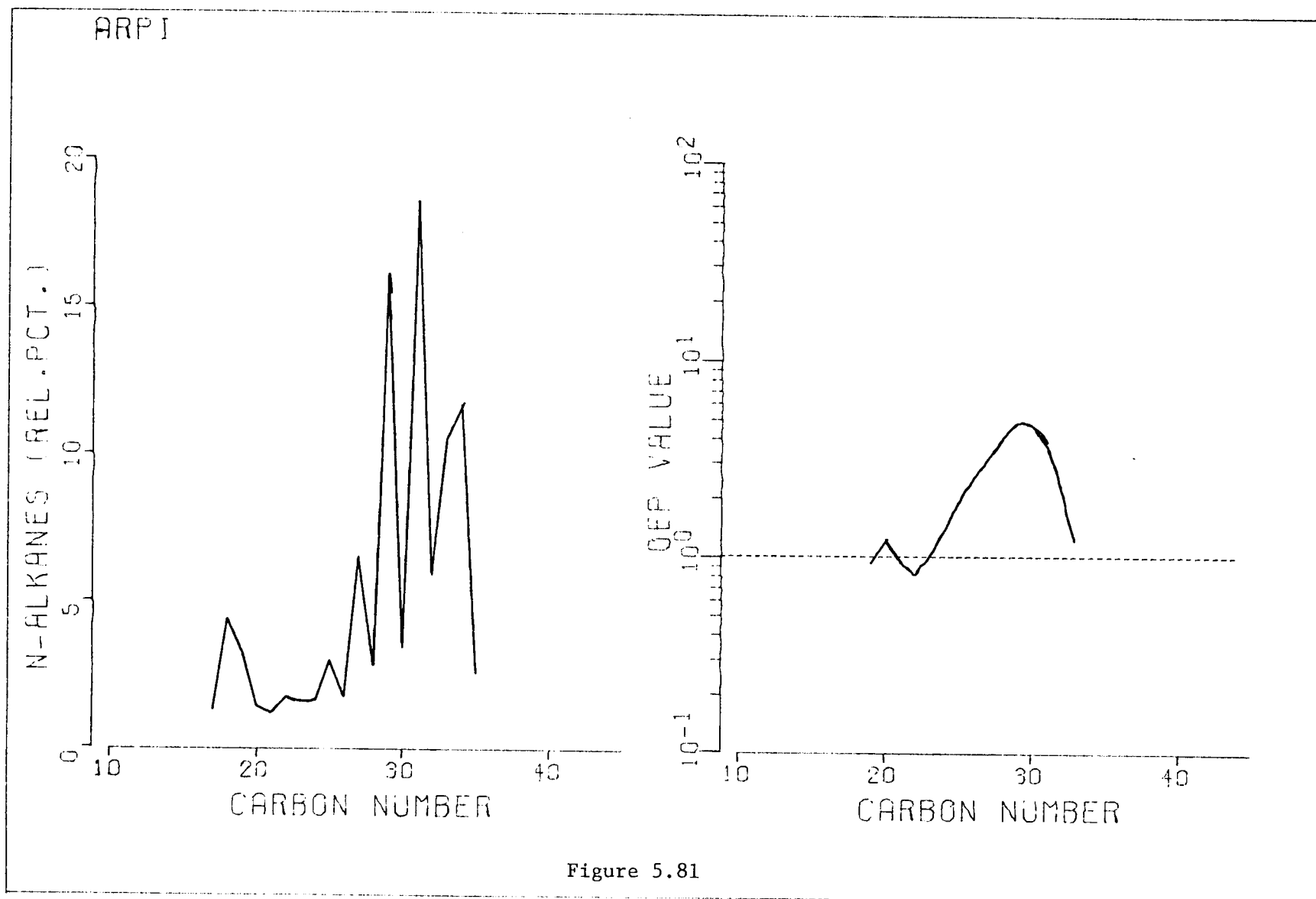


Figure 5.81

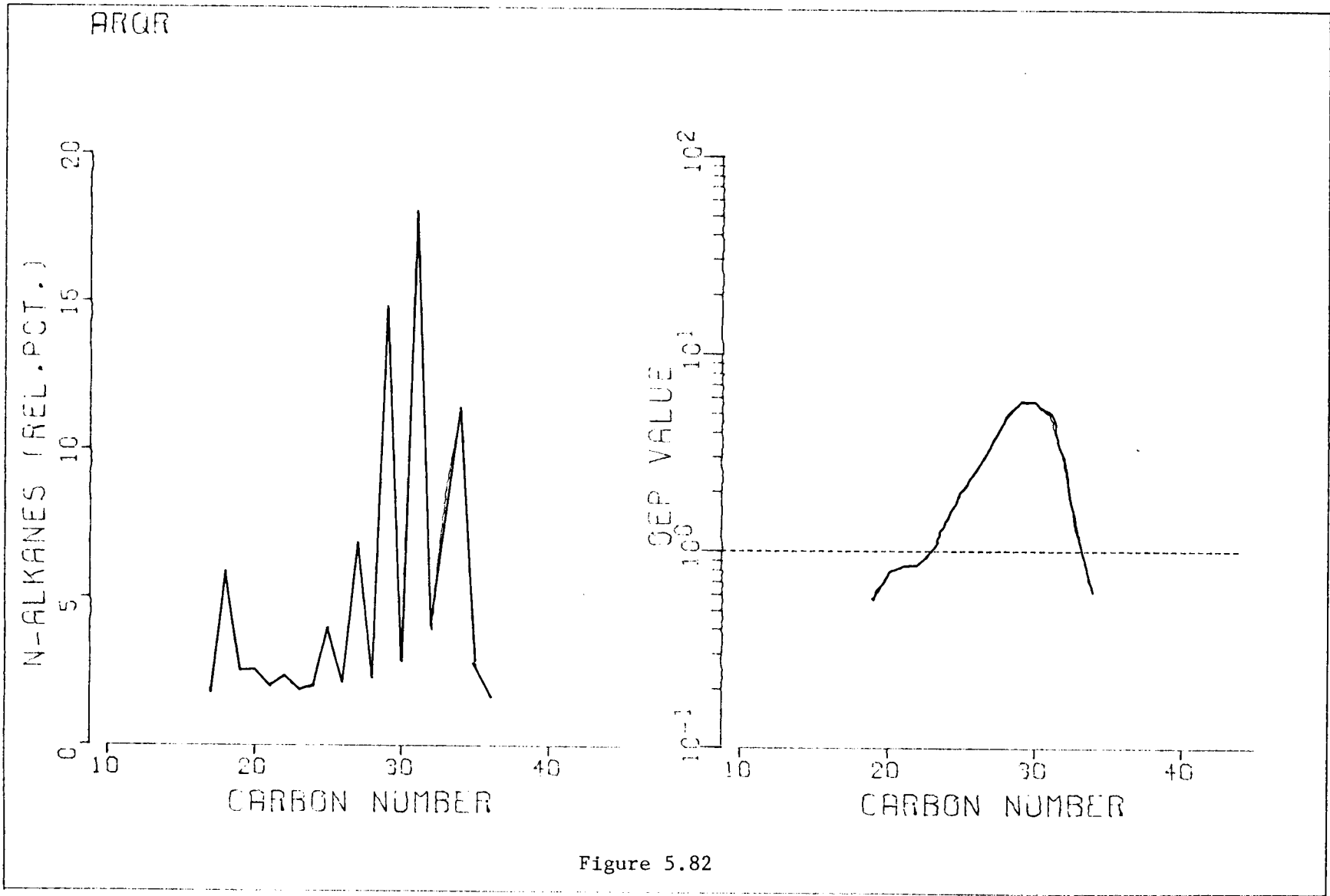


Figure 5.82

ARSB

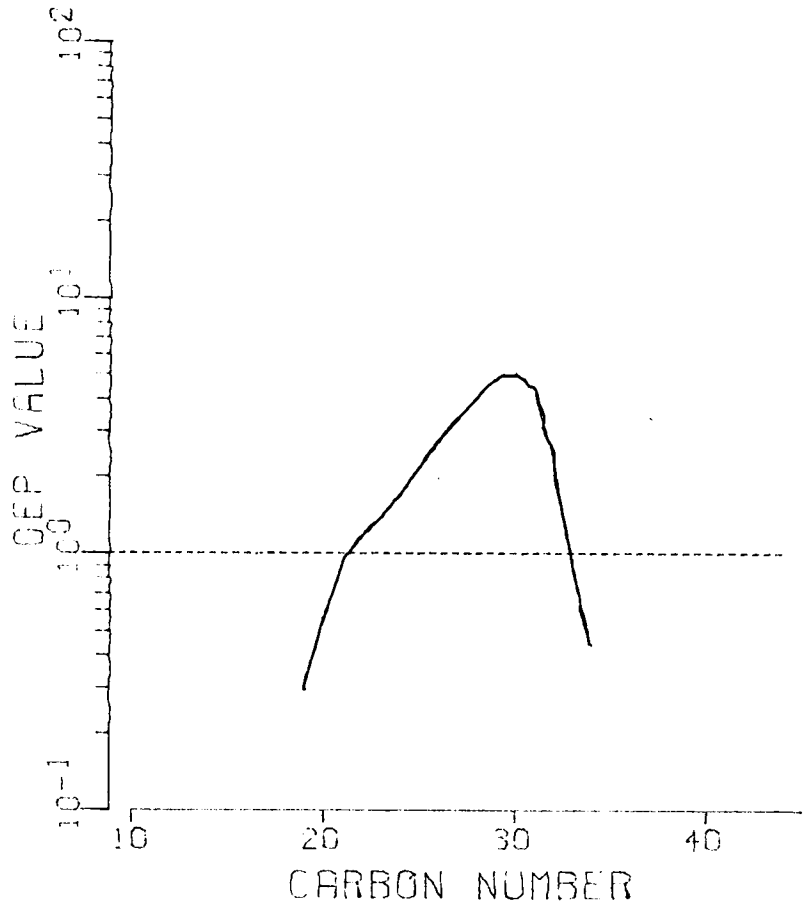
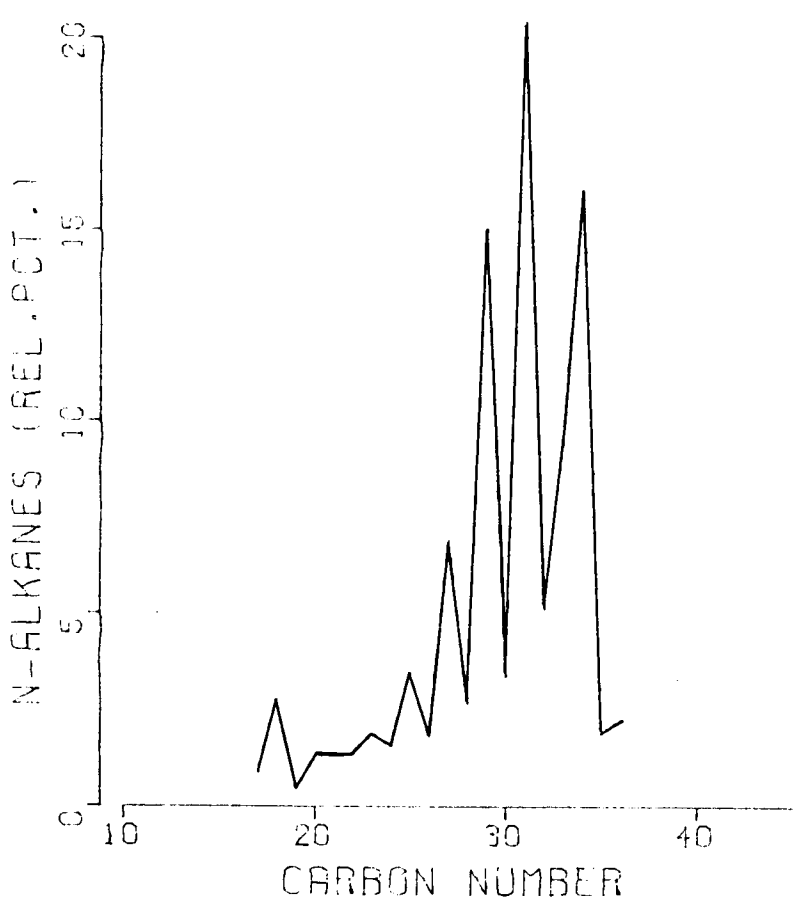


Figure 5.83

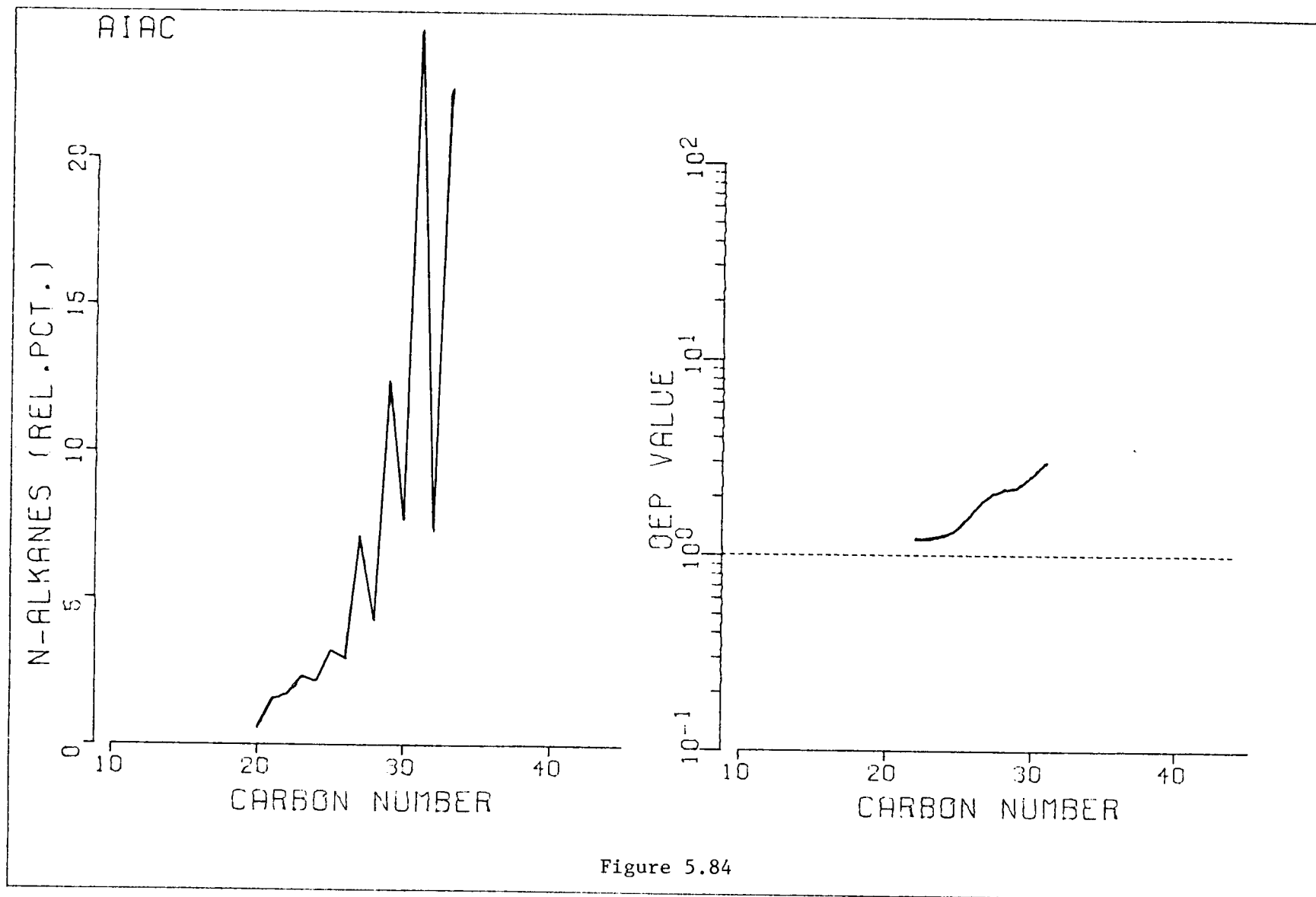
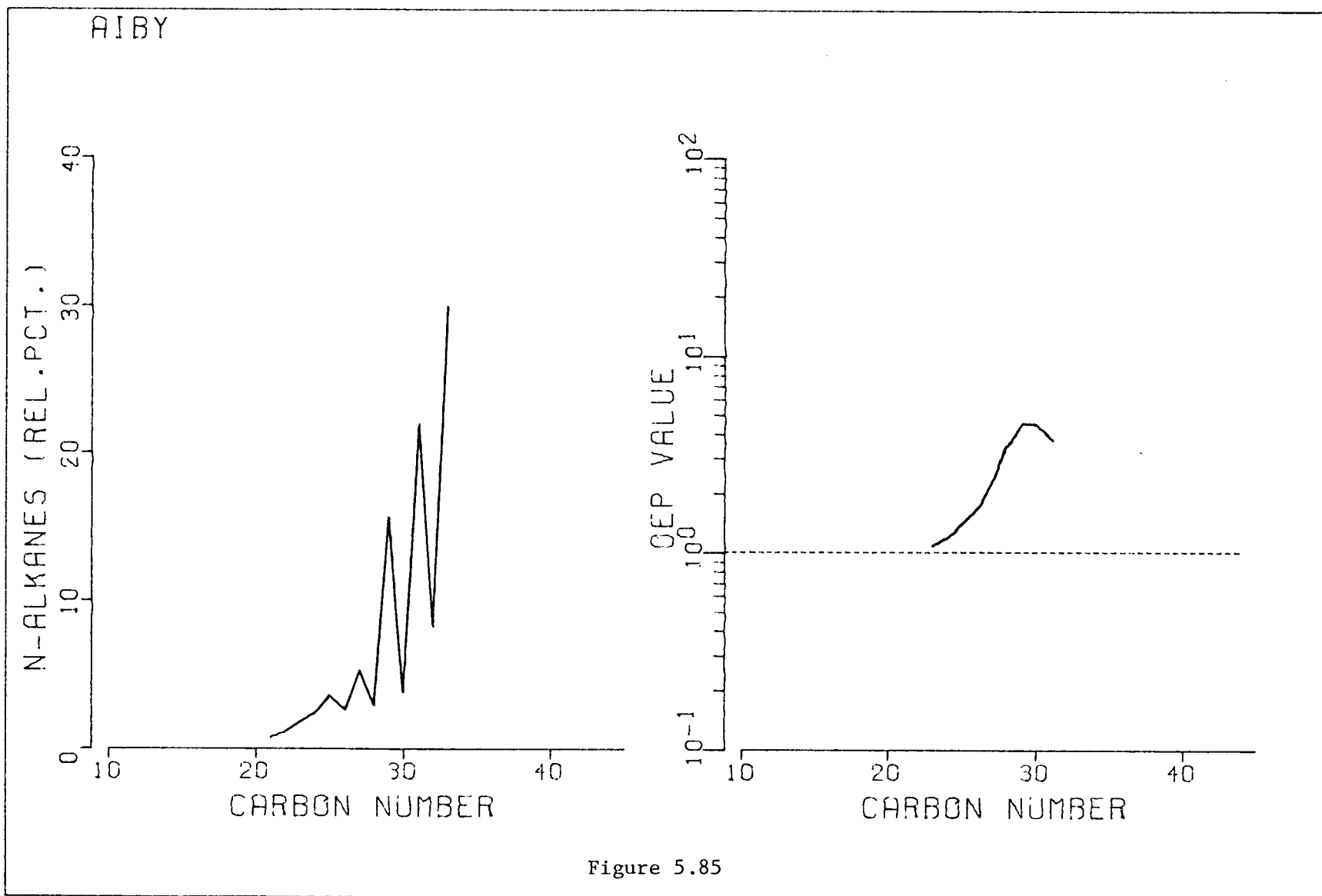
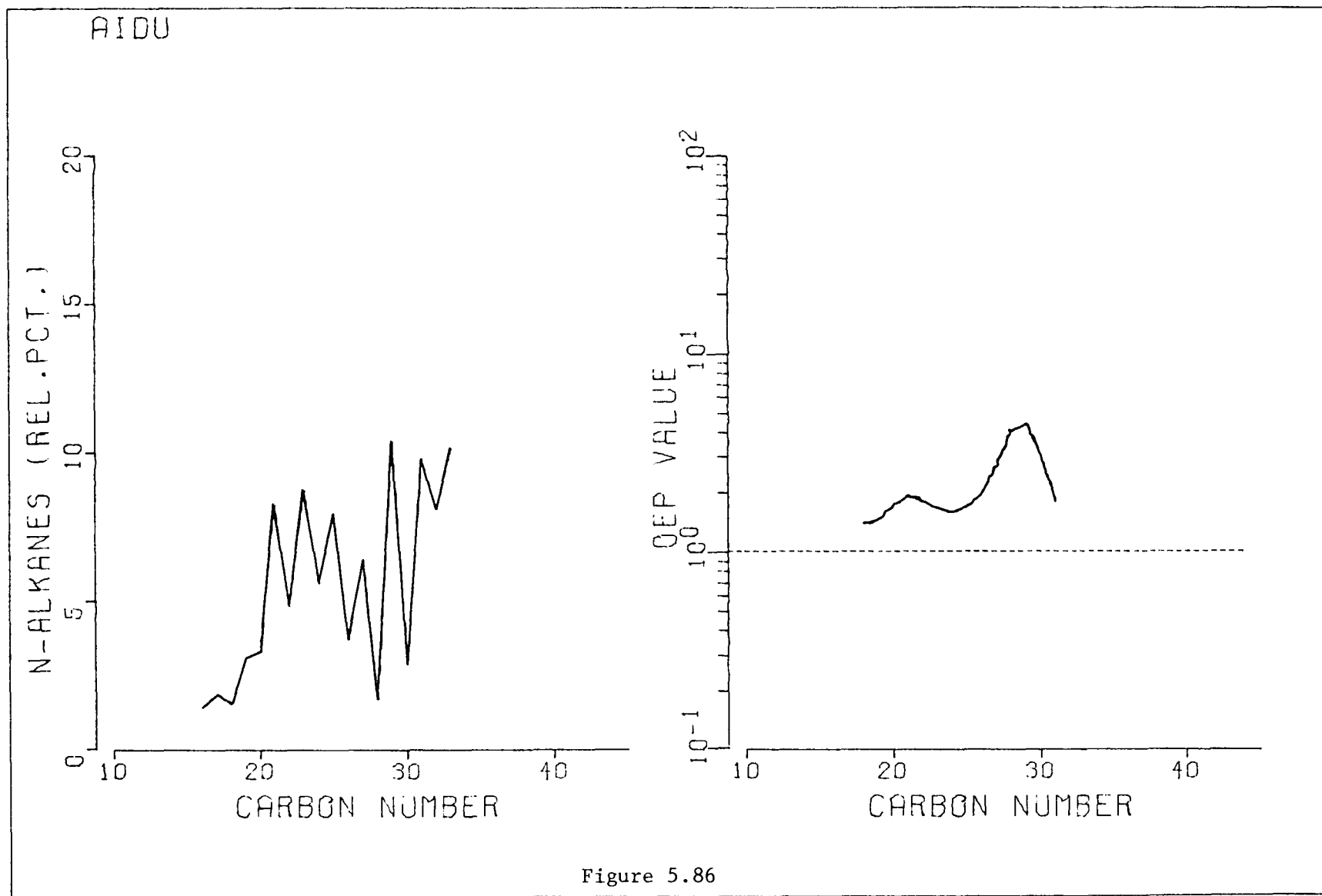


Figure 5.84





RIHE

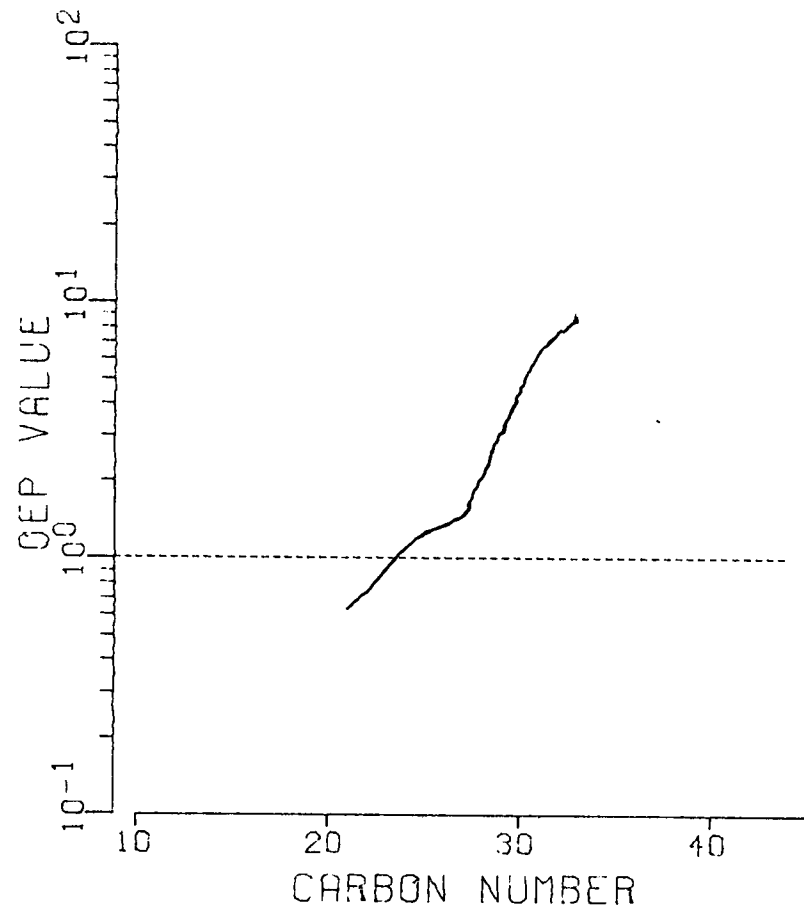
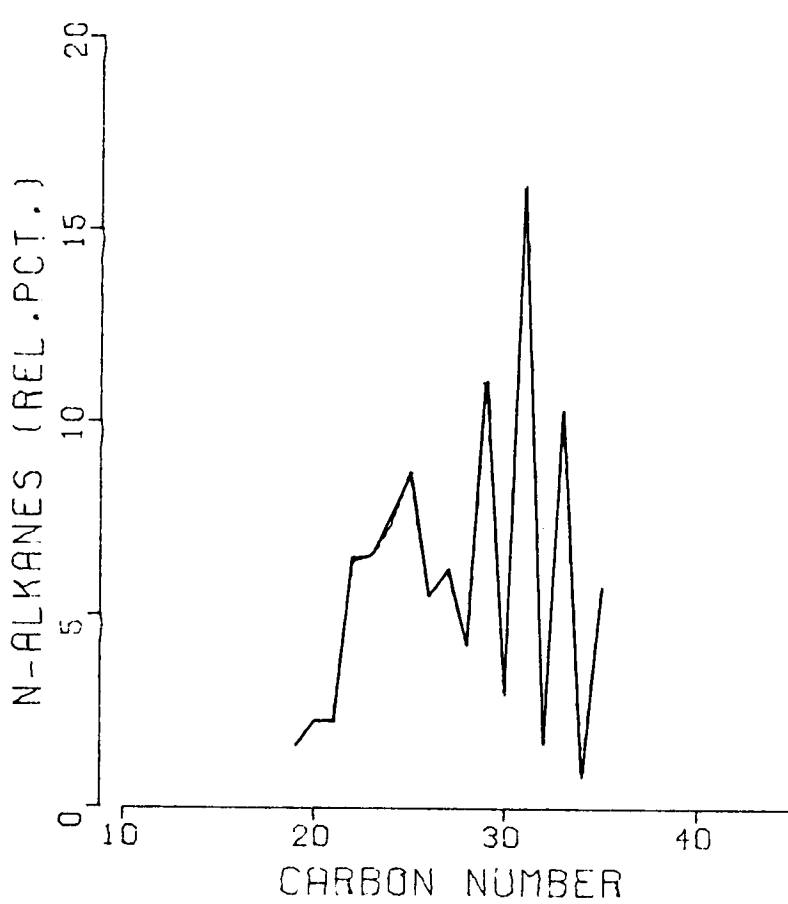


Figure 5.87

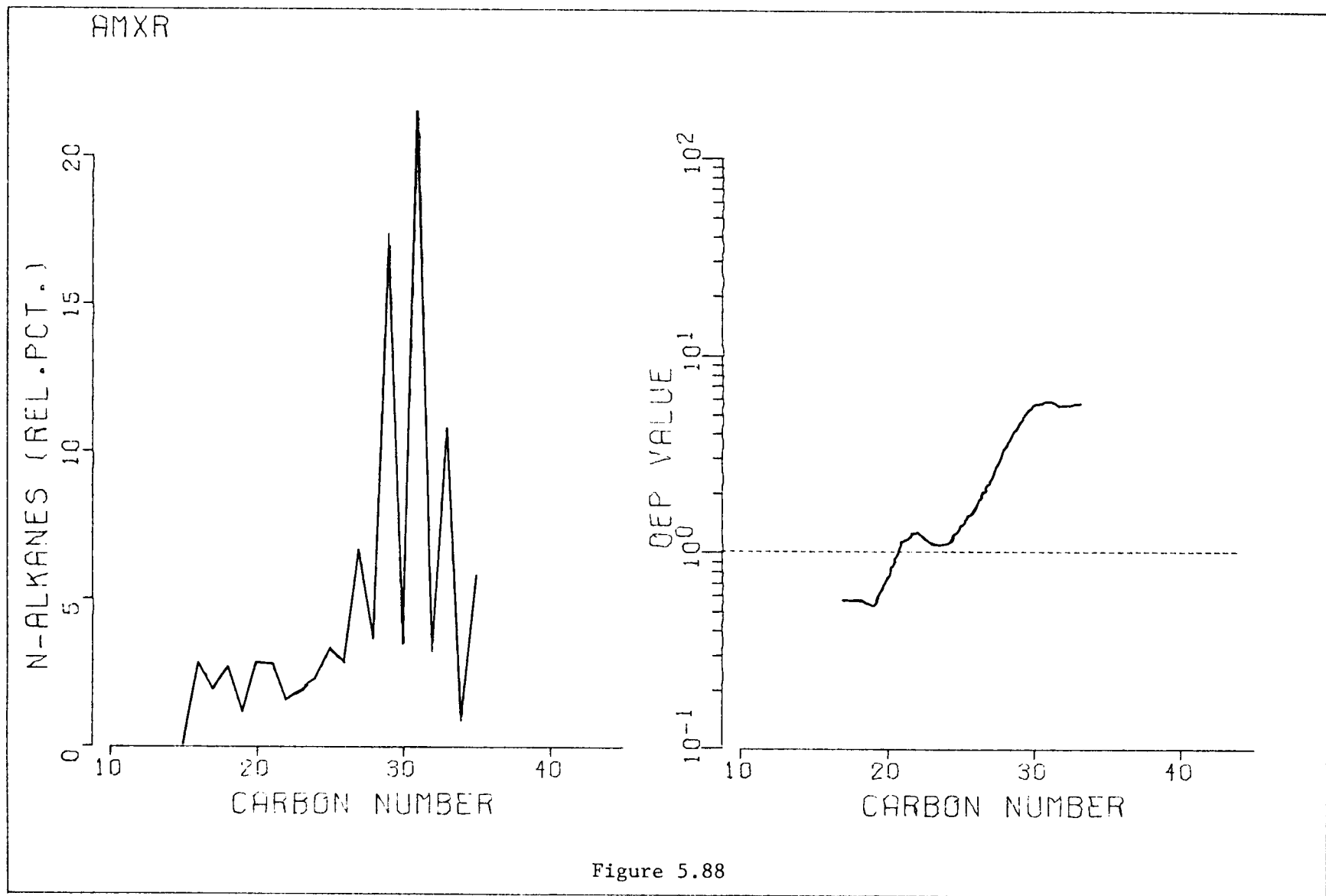


Figure 5.88

AMXO

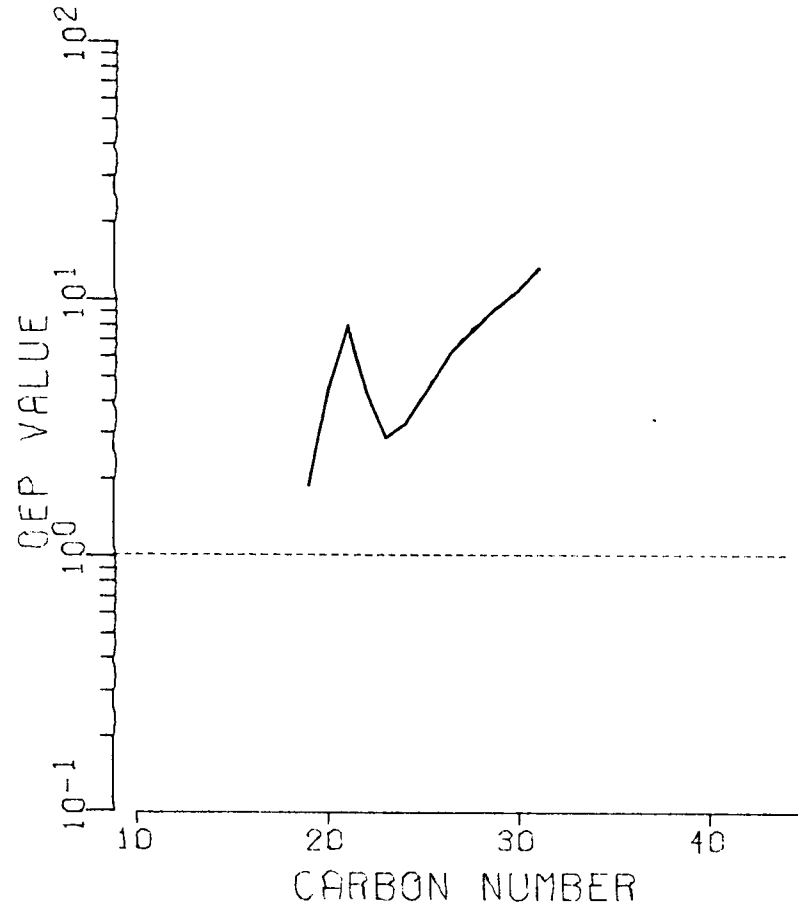
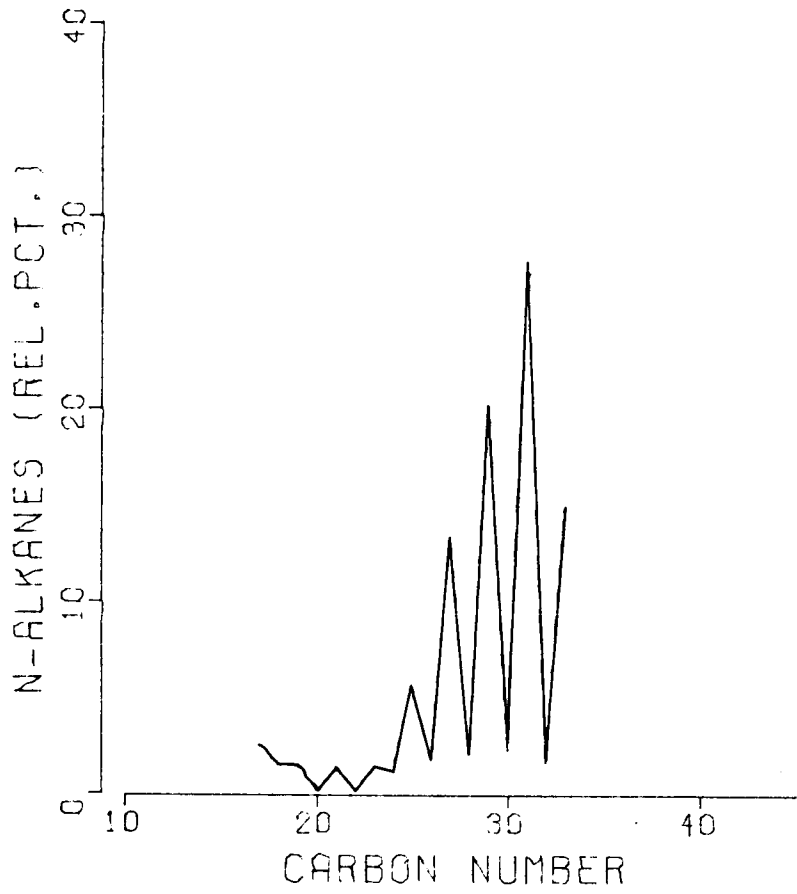


Figure 5.89

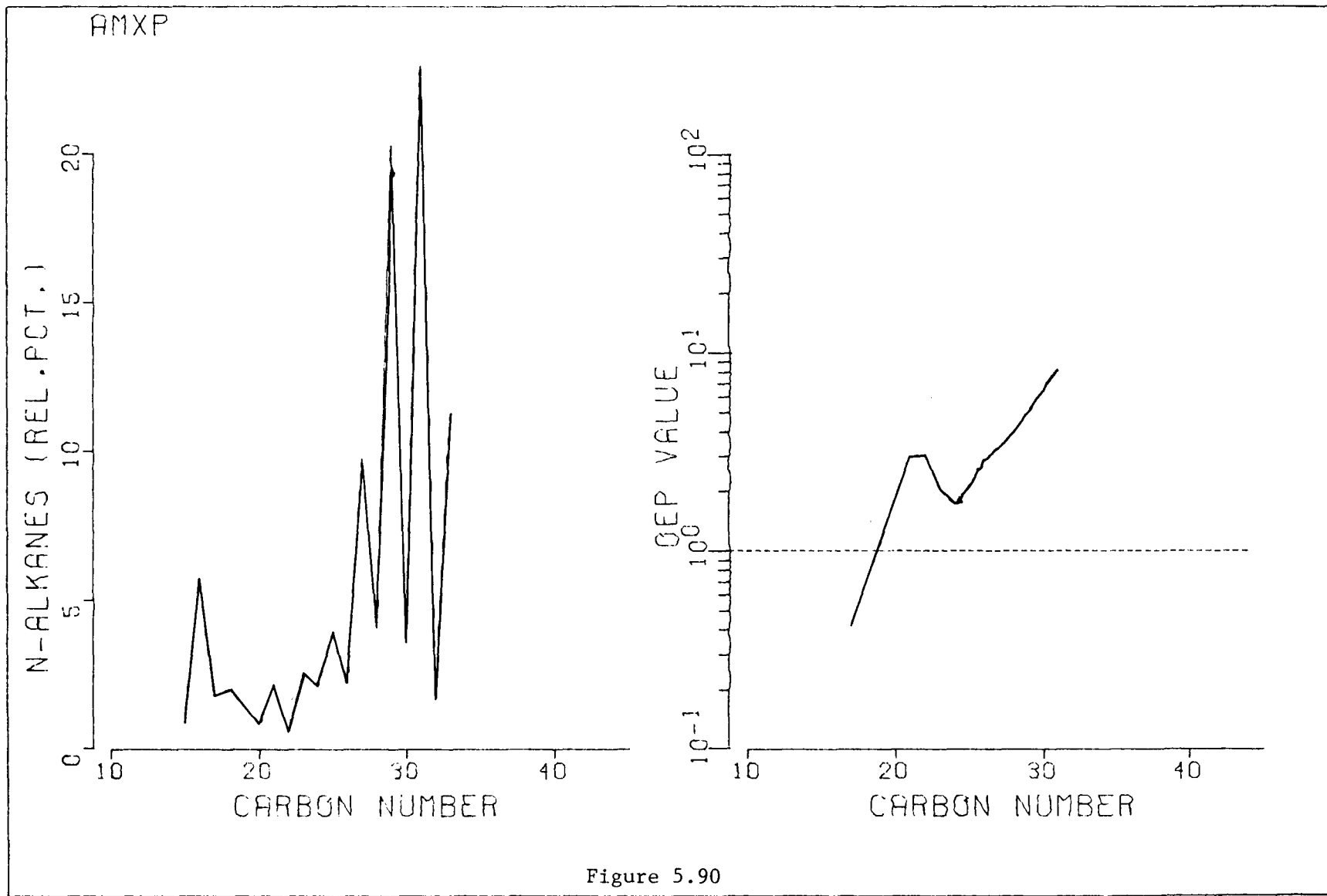
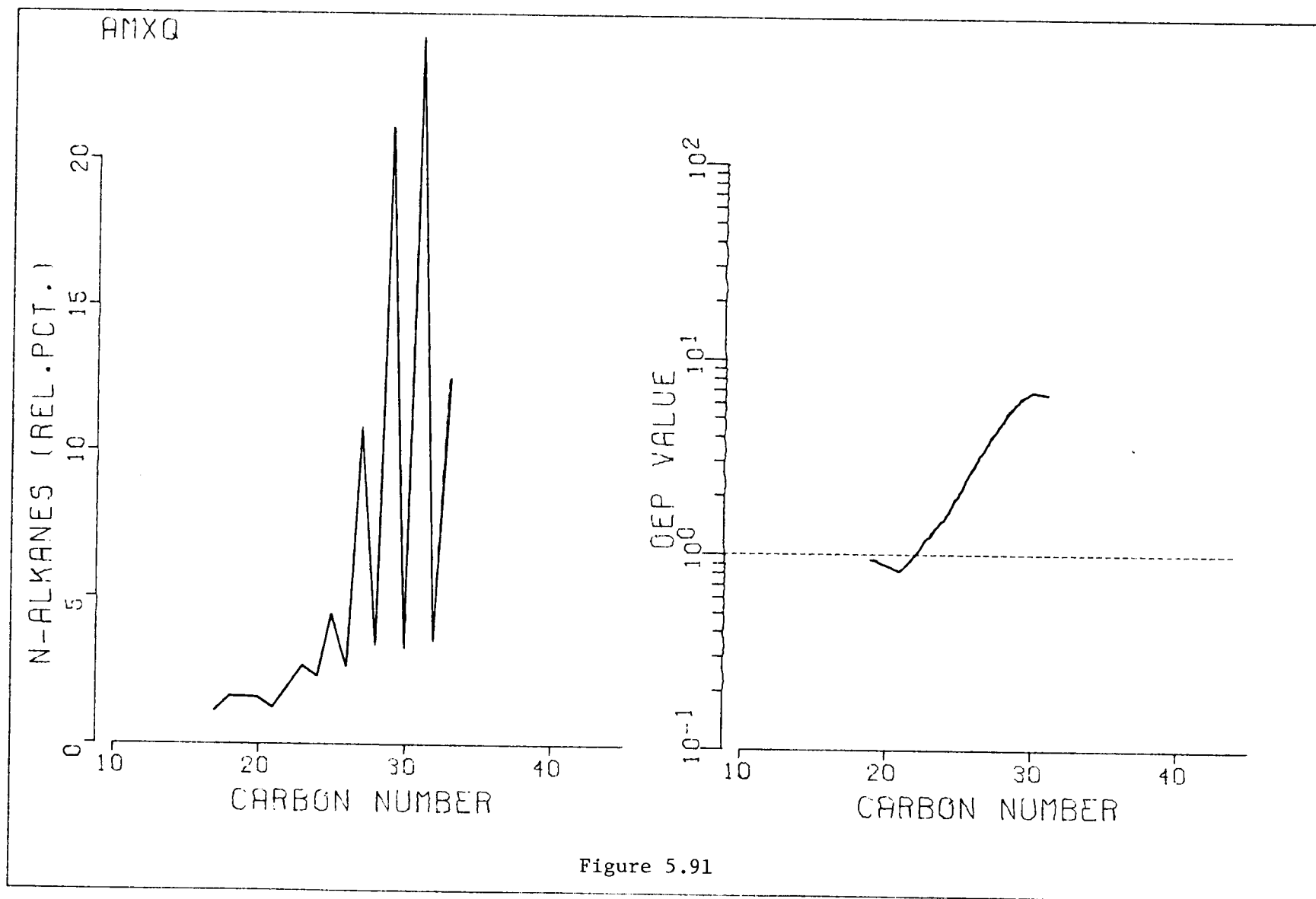


Figure 5.90



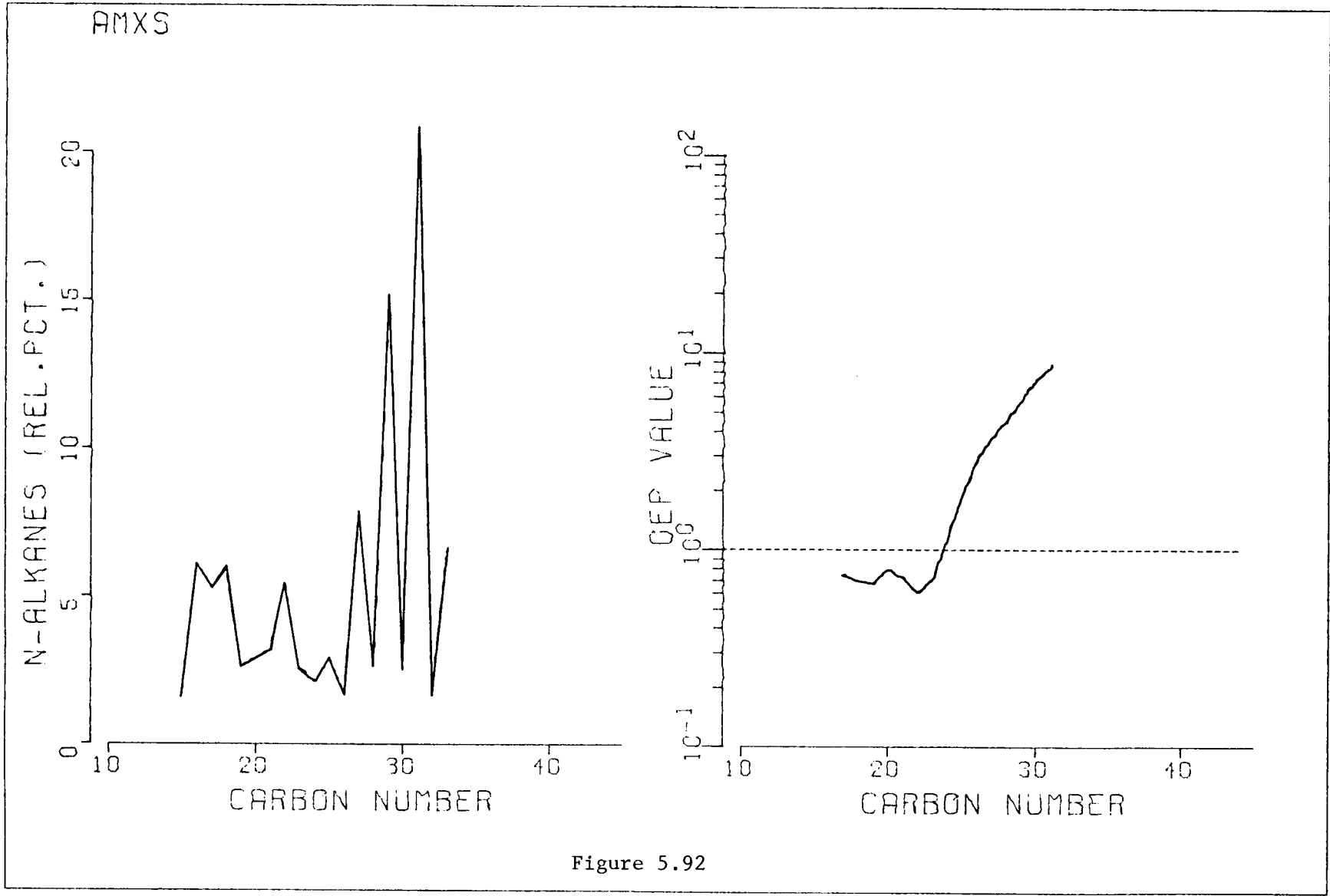


Figure 5.92

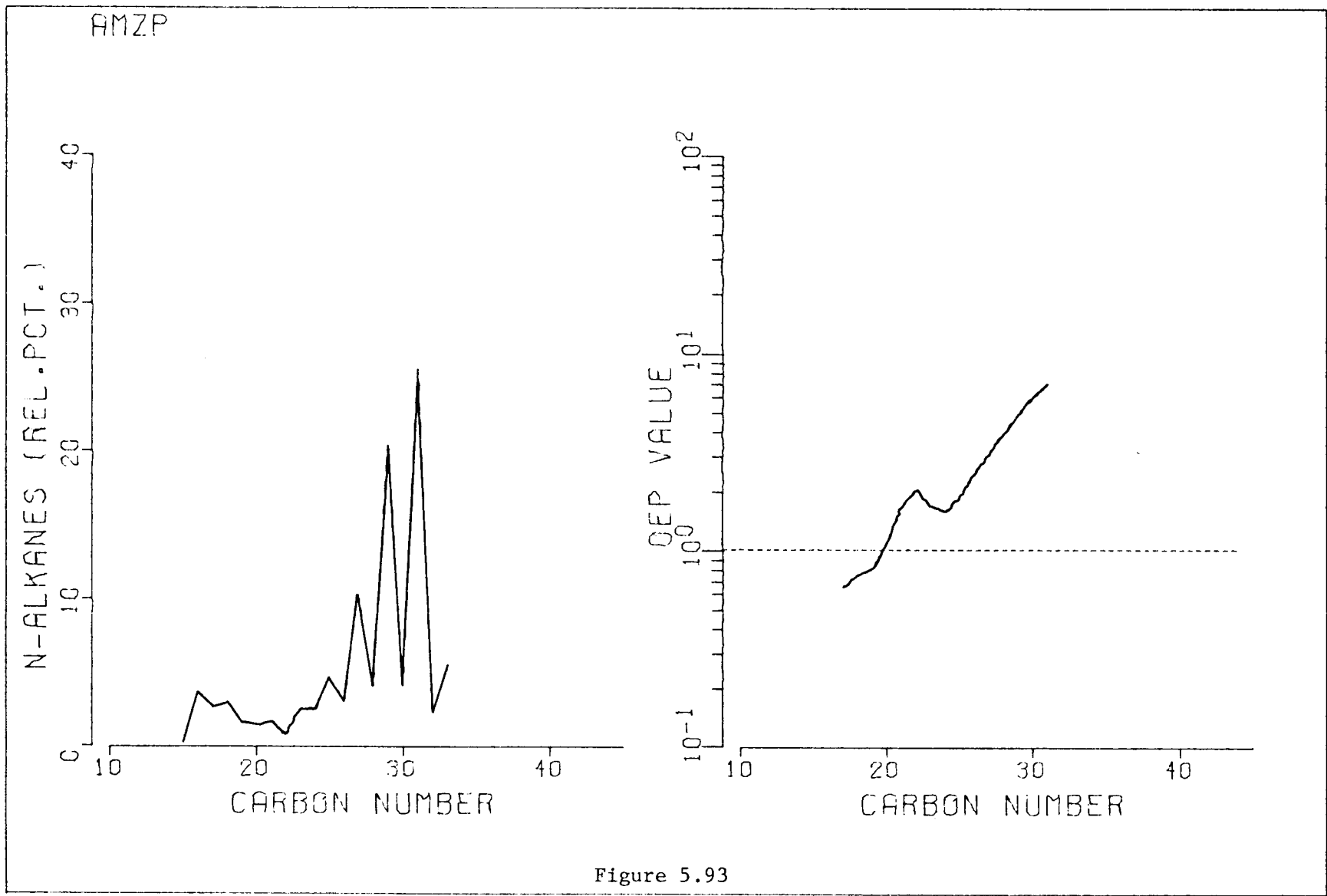


Figure 5.93

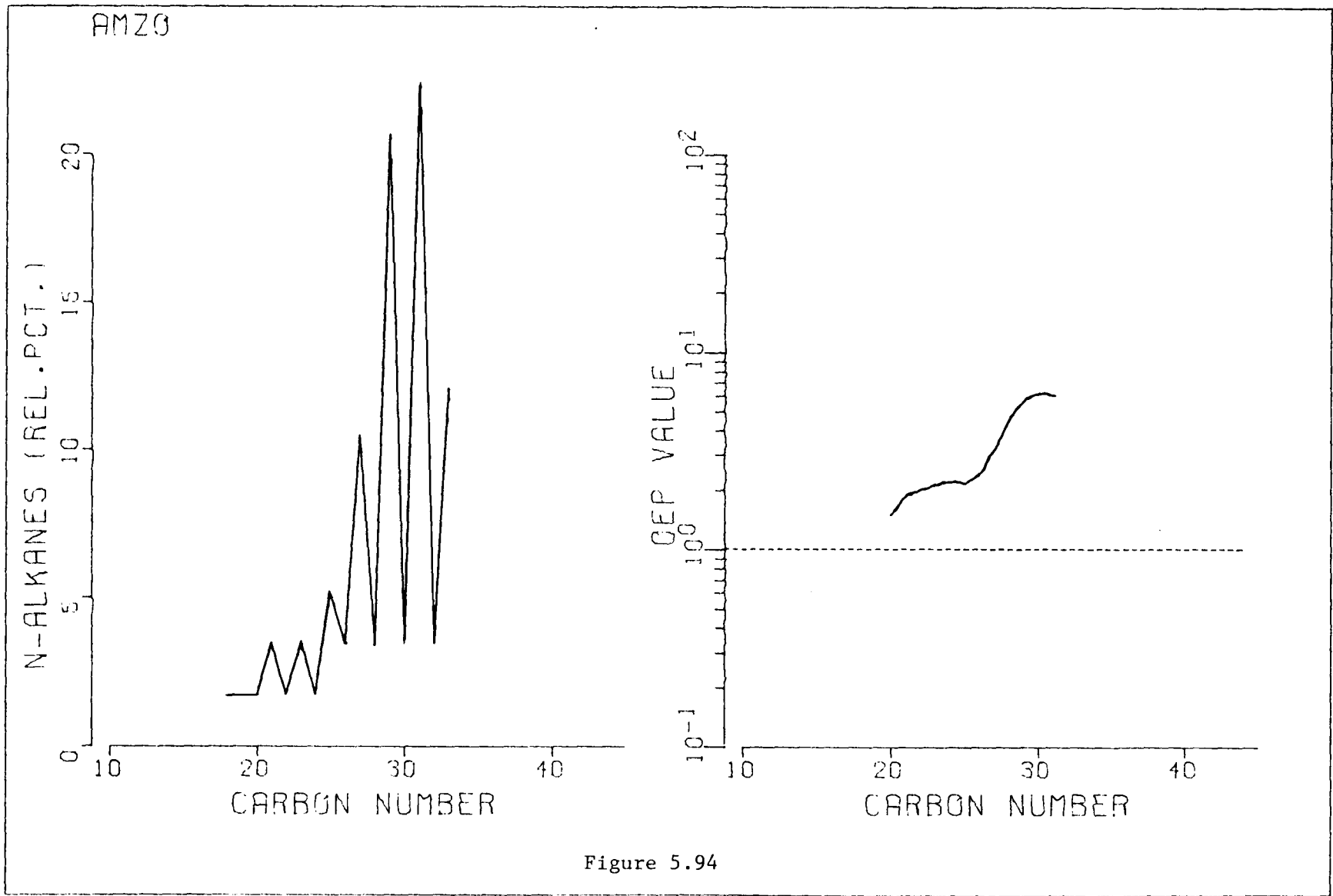


Figure 5.94

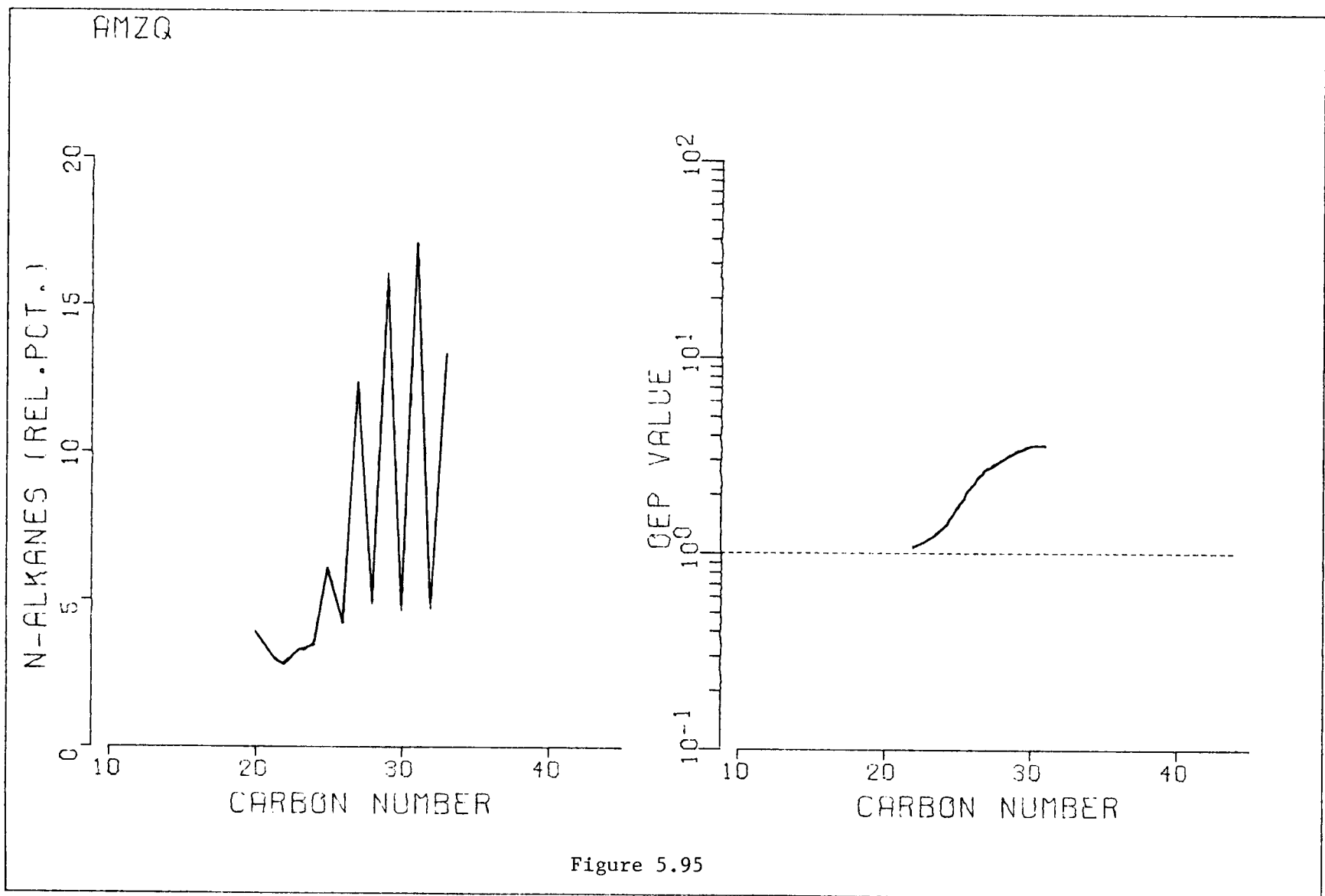


Figure 5.95

AMZR

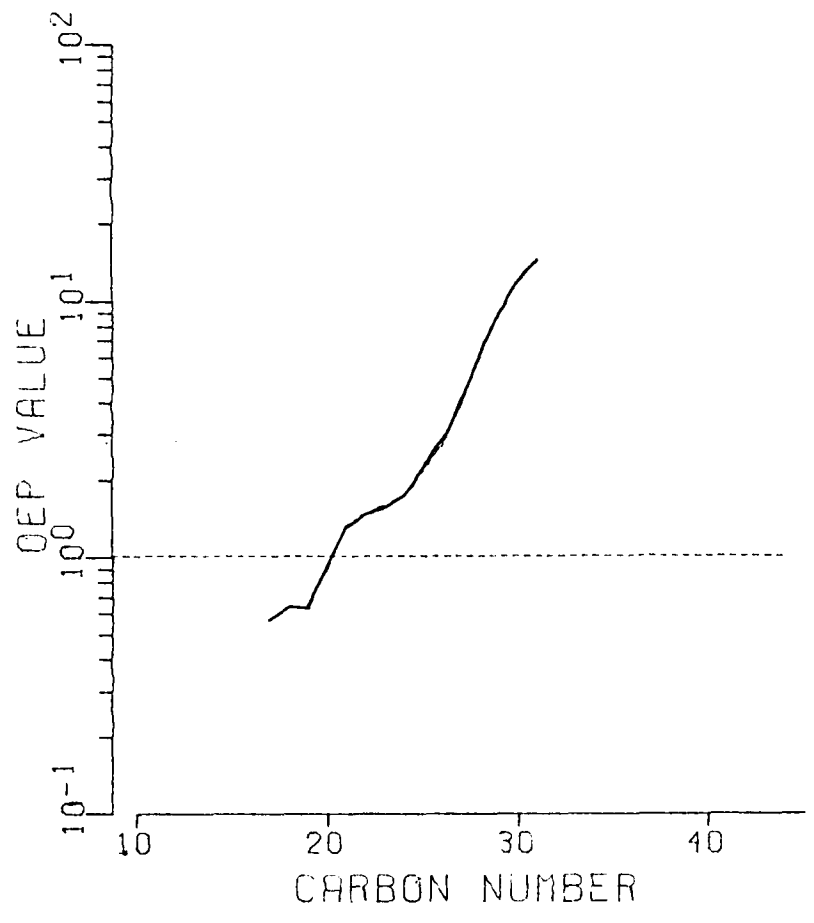
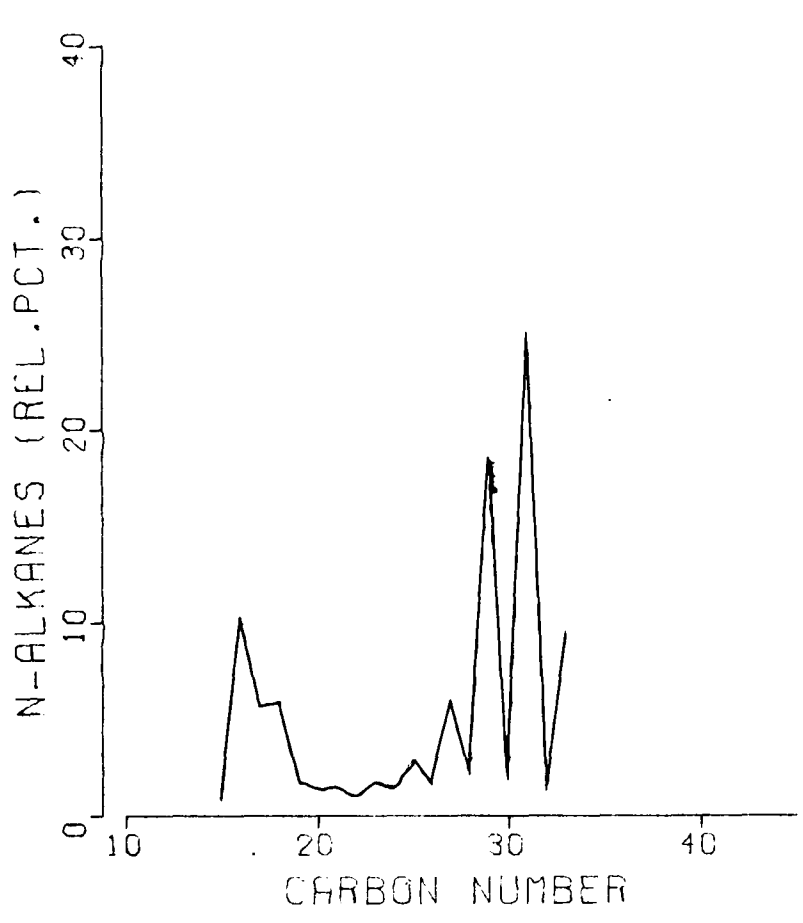


Figure 5.96

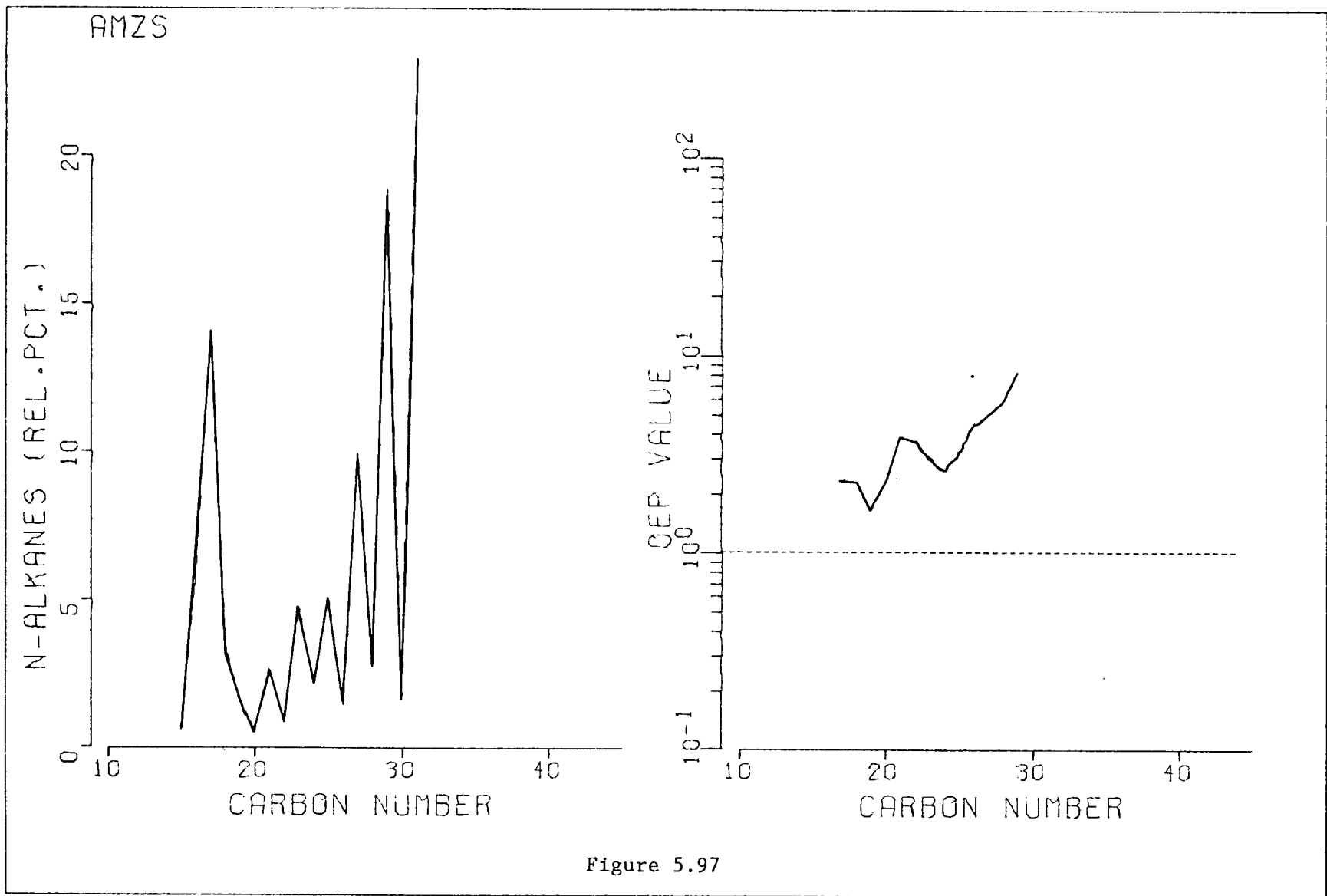


Figure 5.97

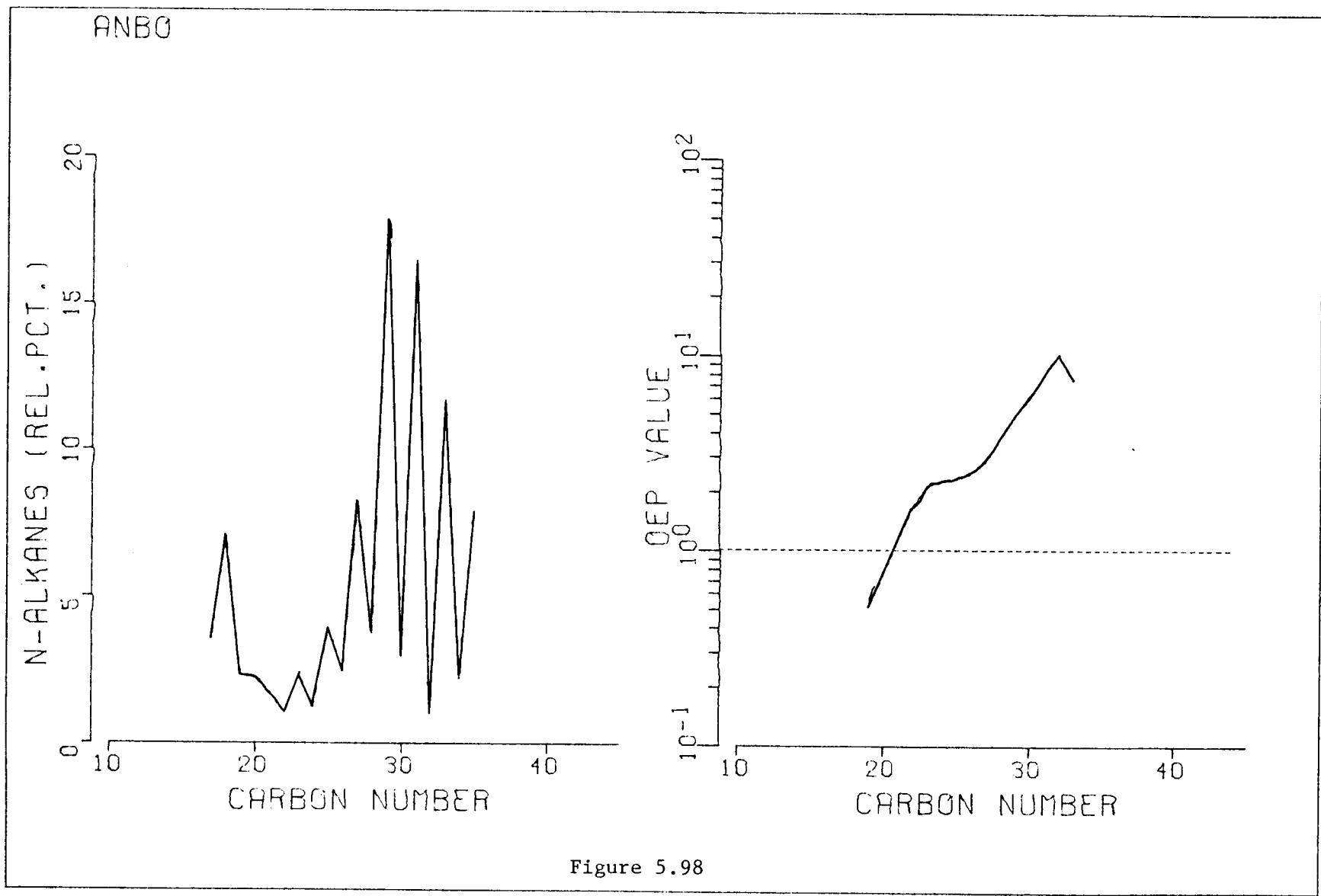


Figure 5.98

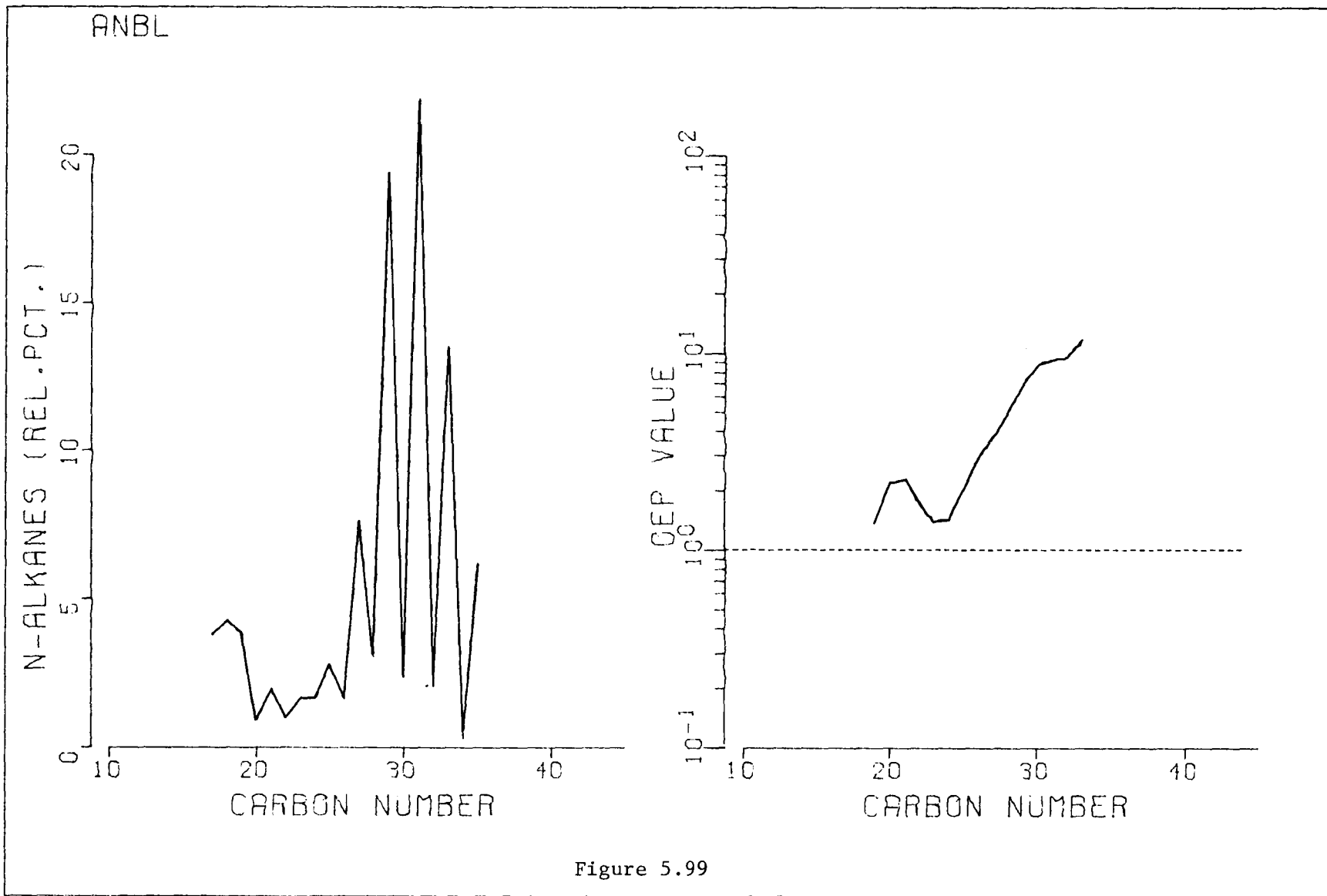


Figure 5.99

ANBM

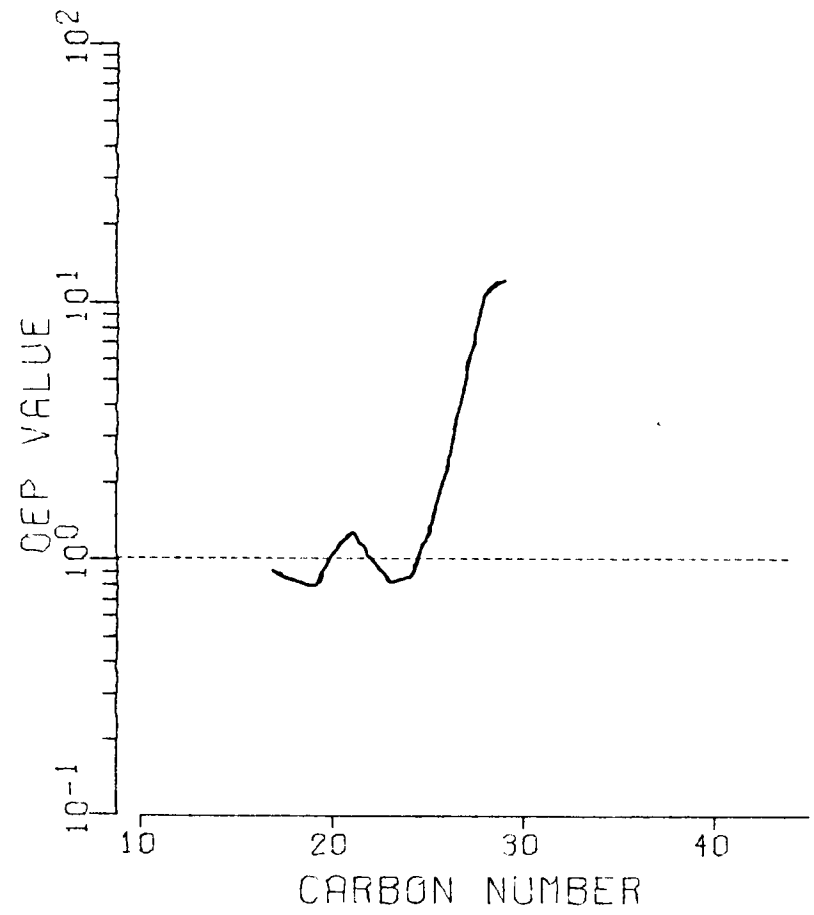
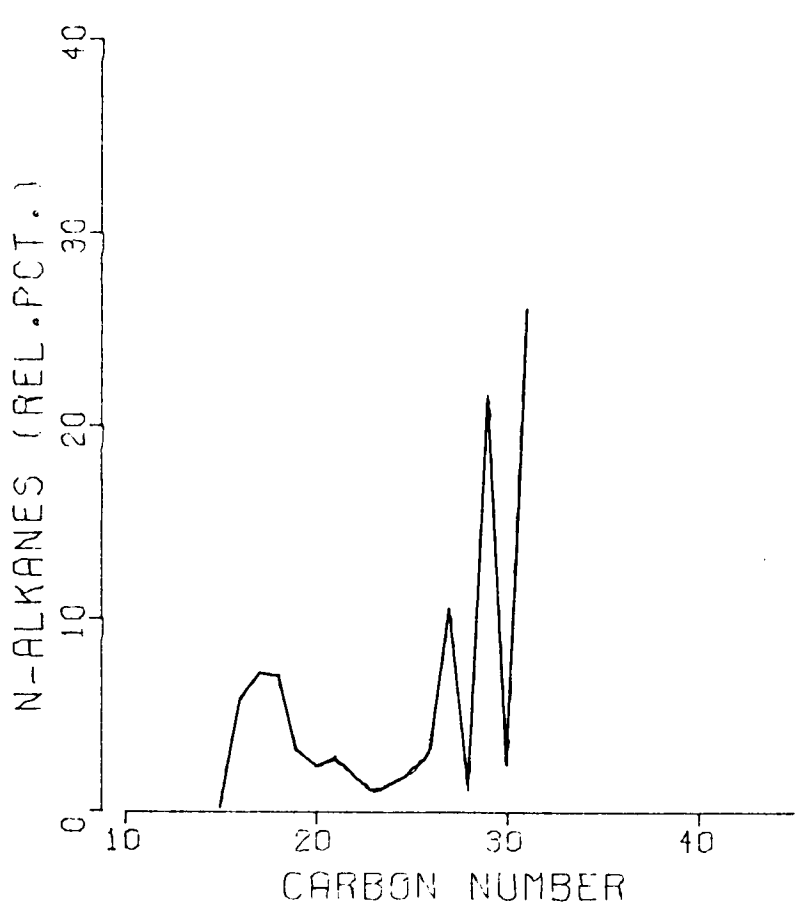


Figure 5.100

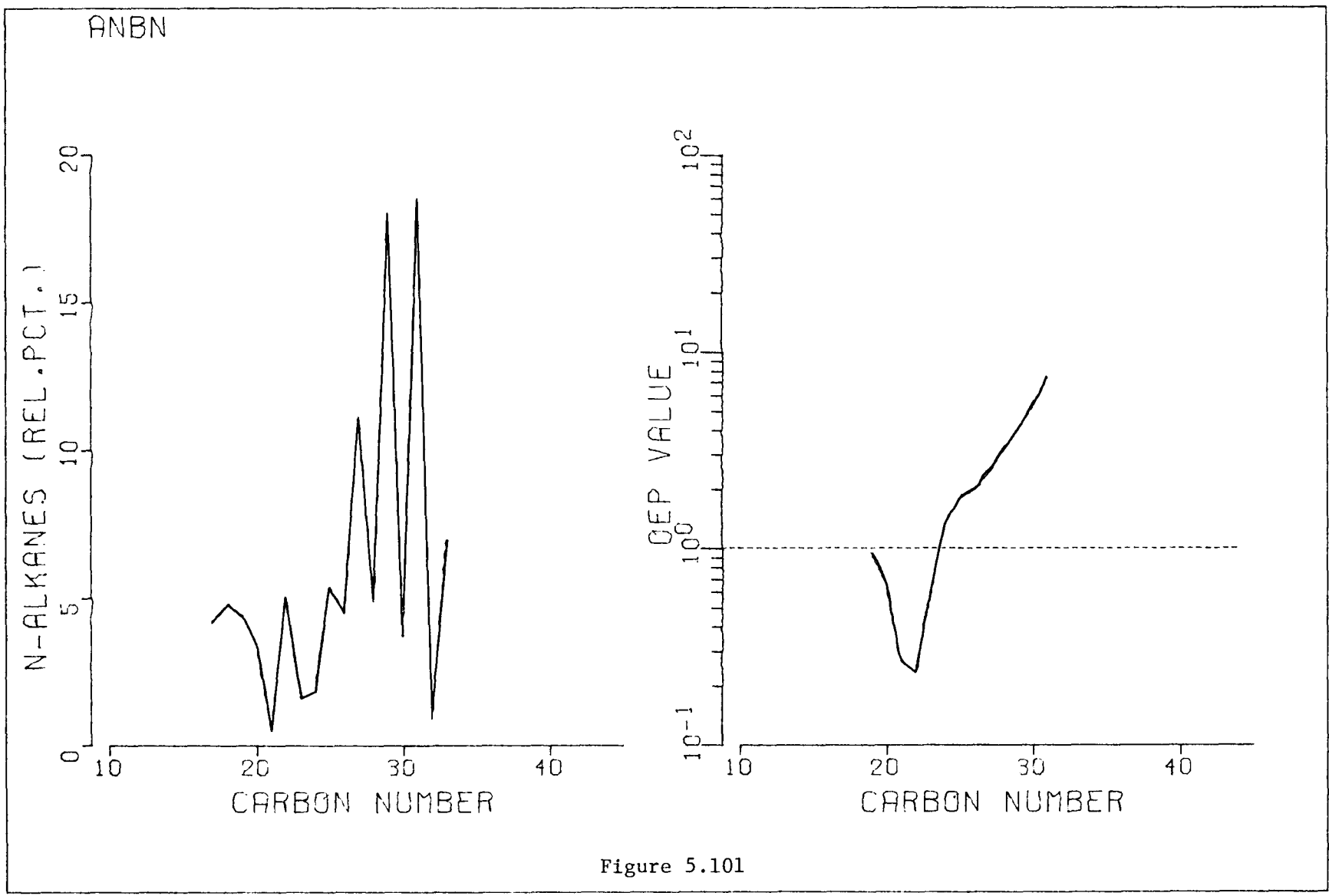


Figure 5.101

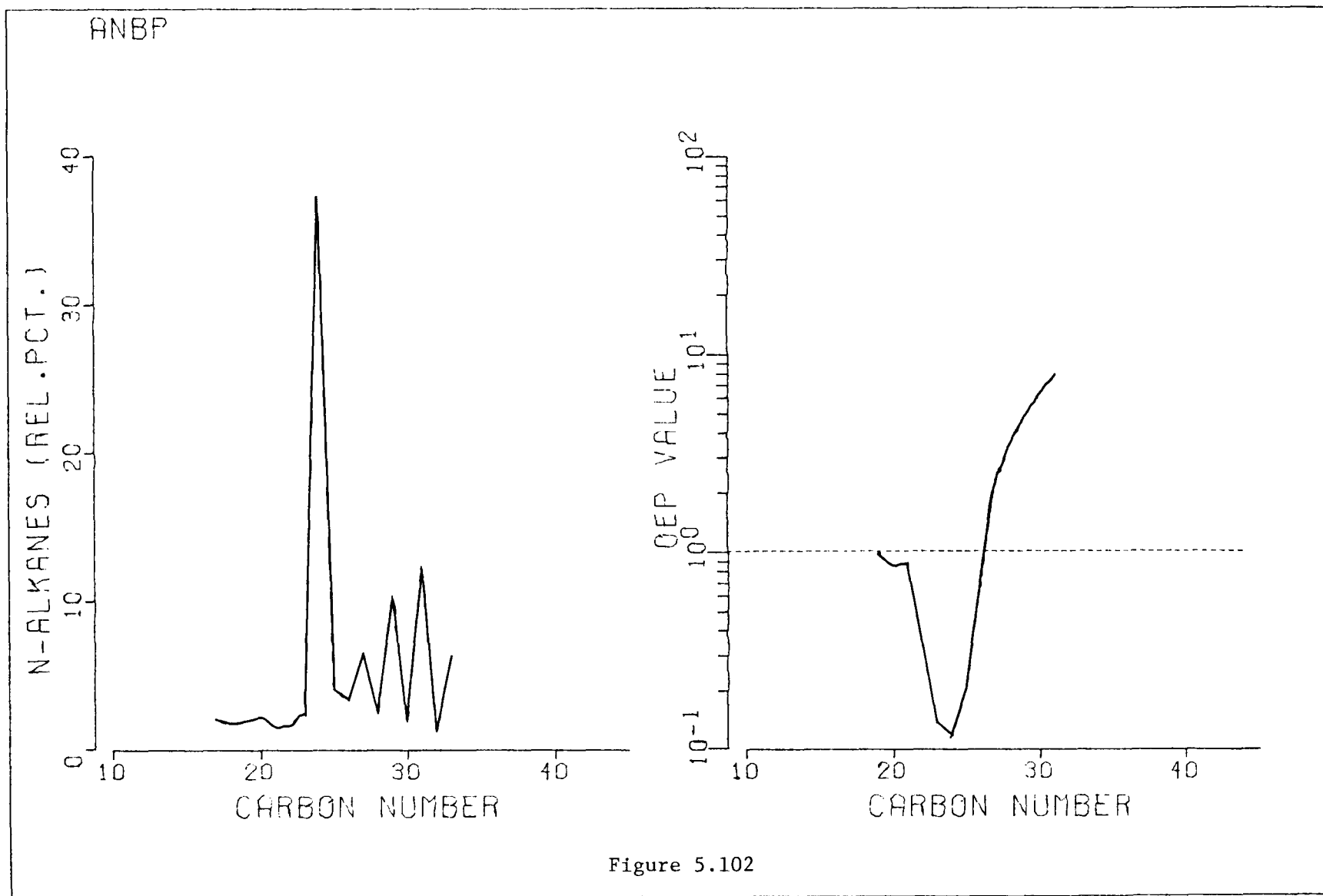
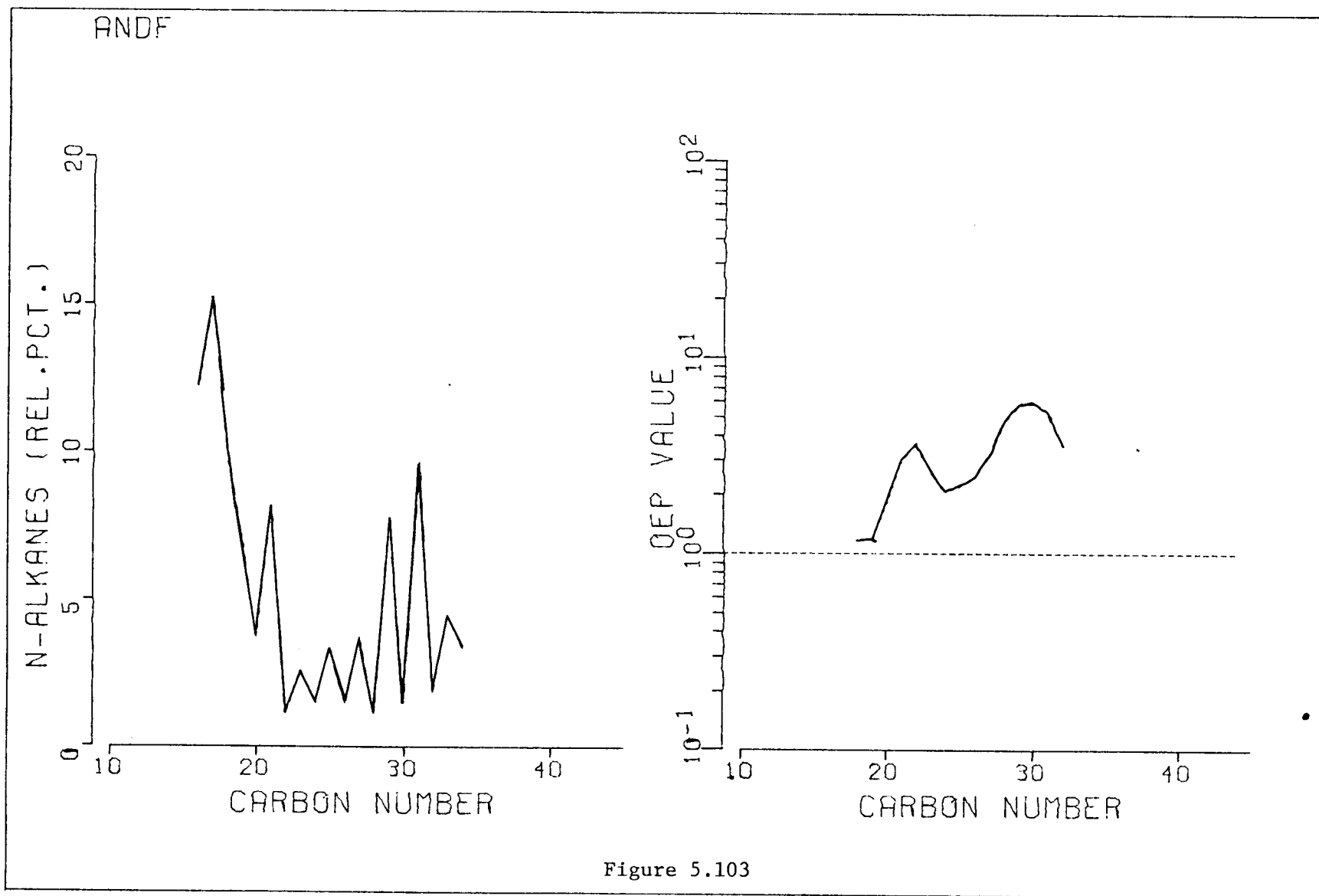


Figure 5.102



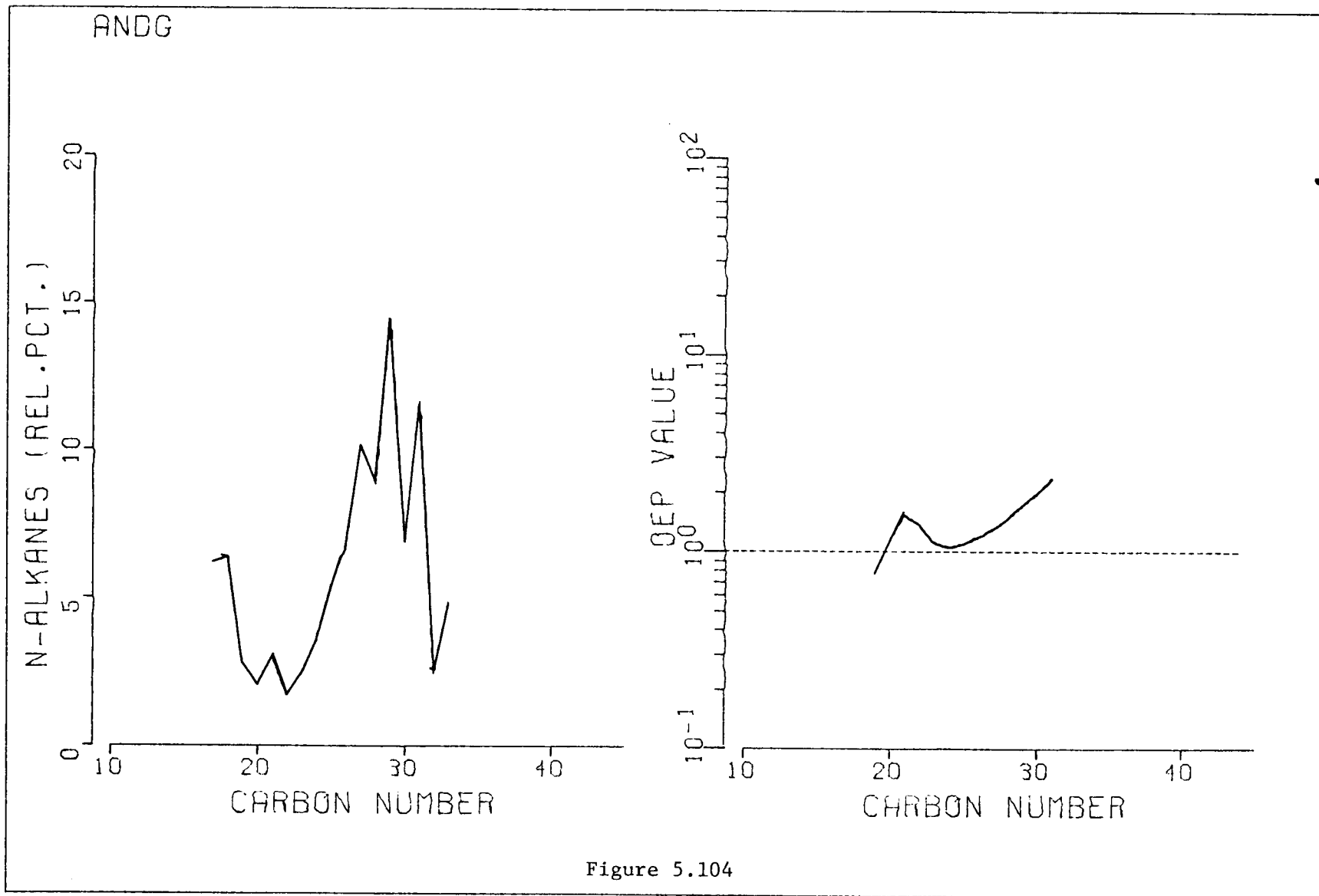


Figure 5.104

ANDH

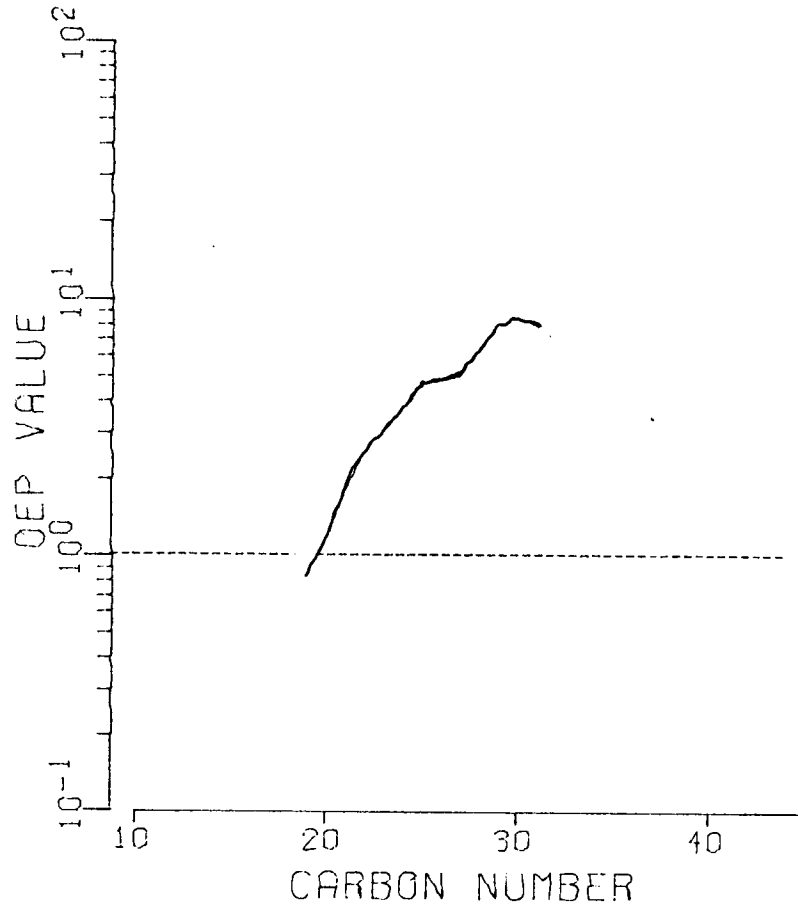
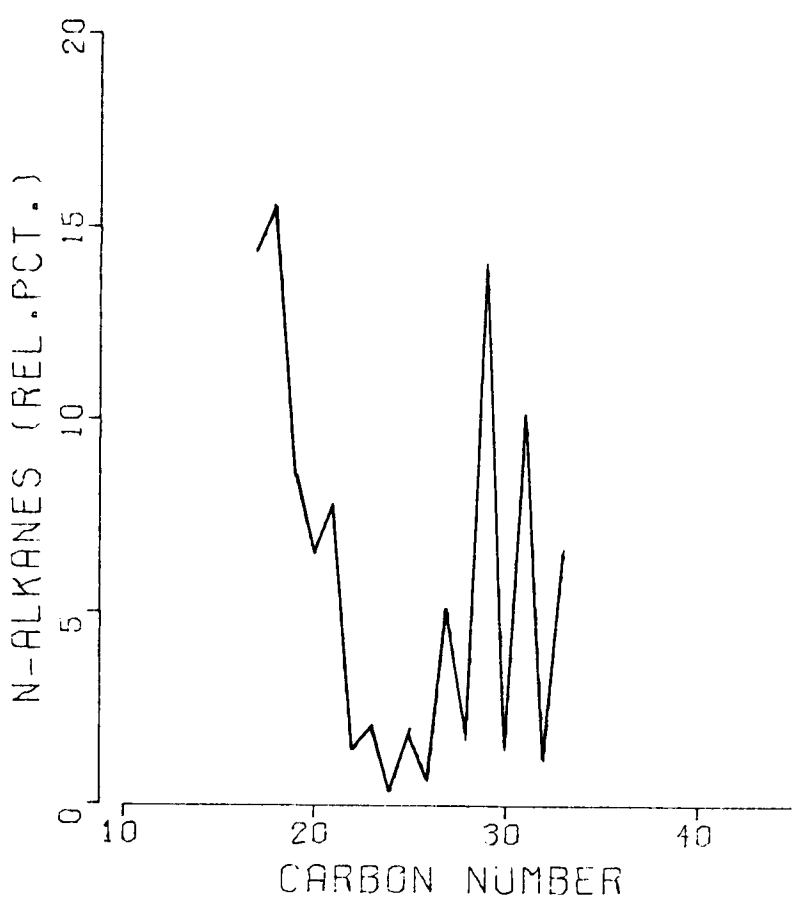


Figure 5.105

AND I

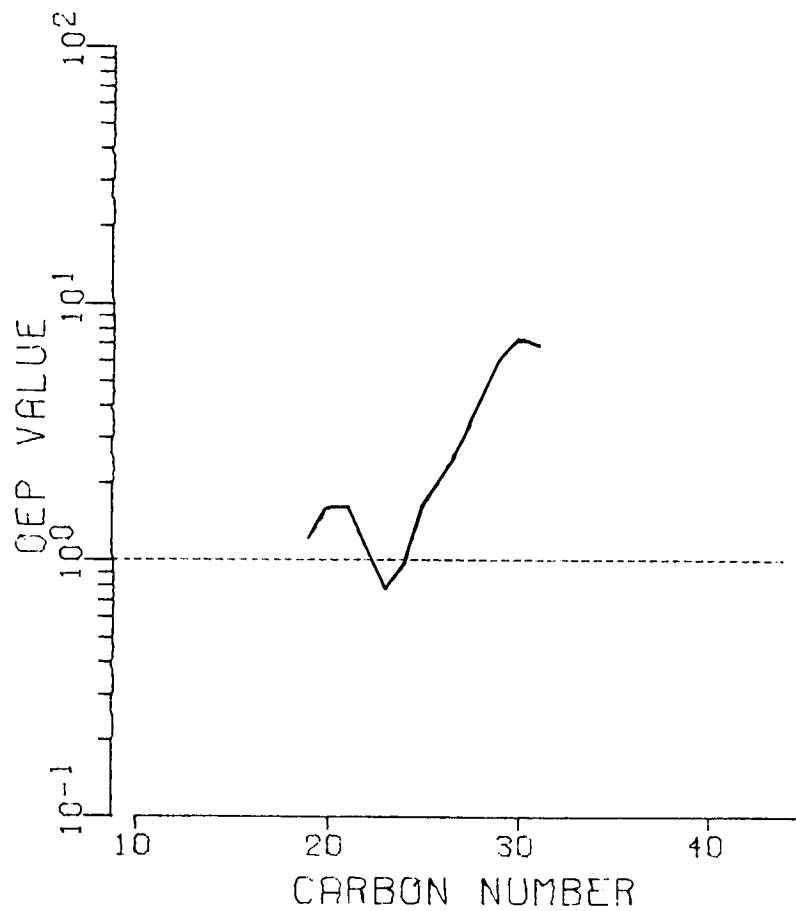
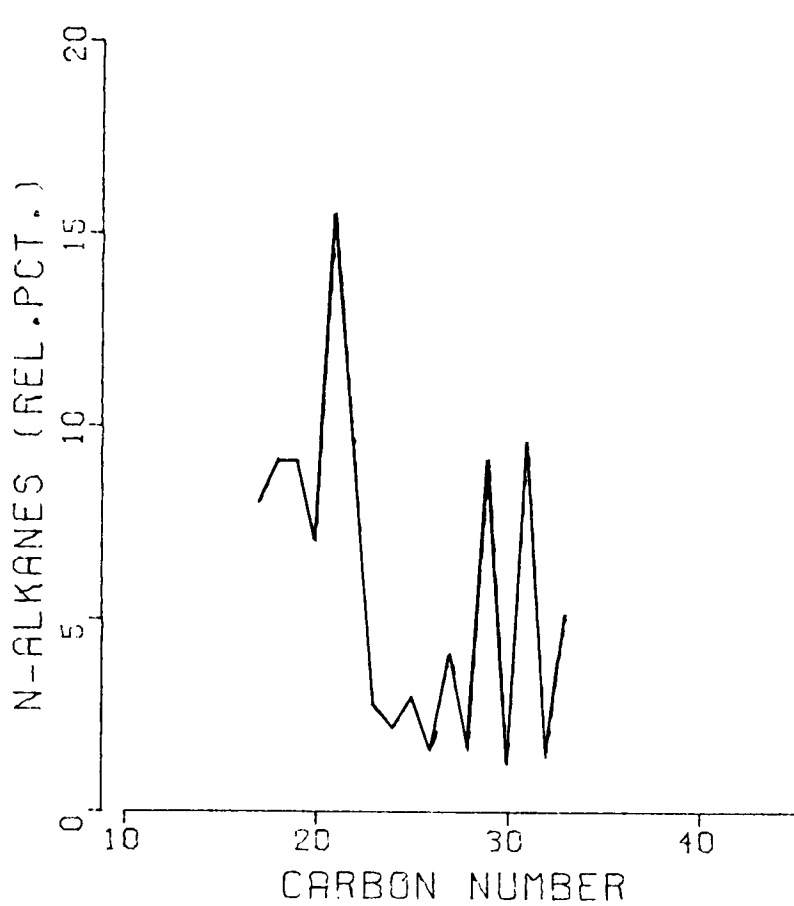


Figure 5.106

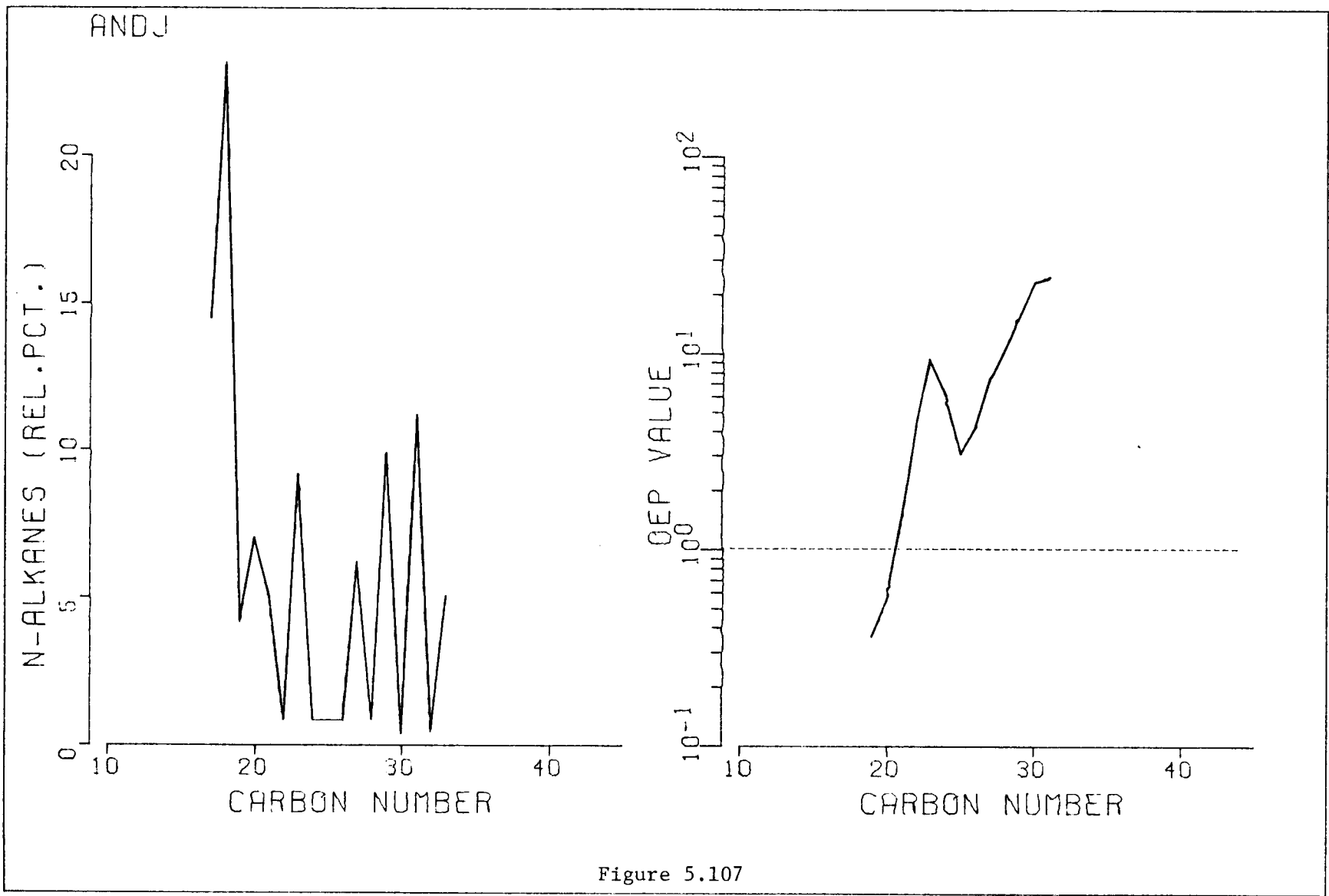


Figure 5.107

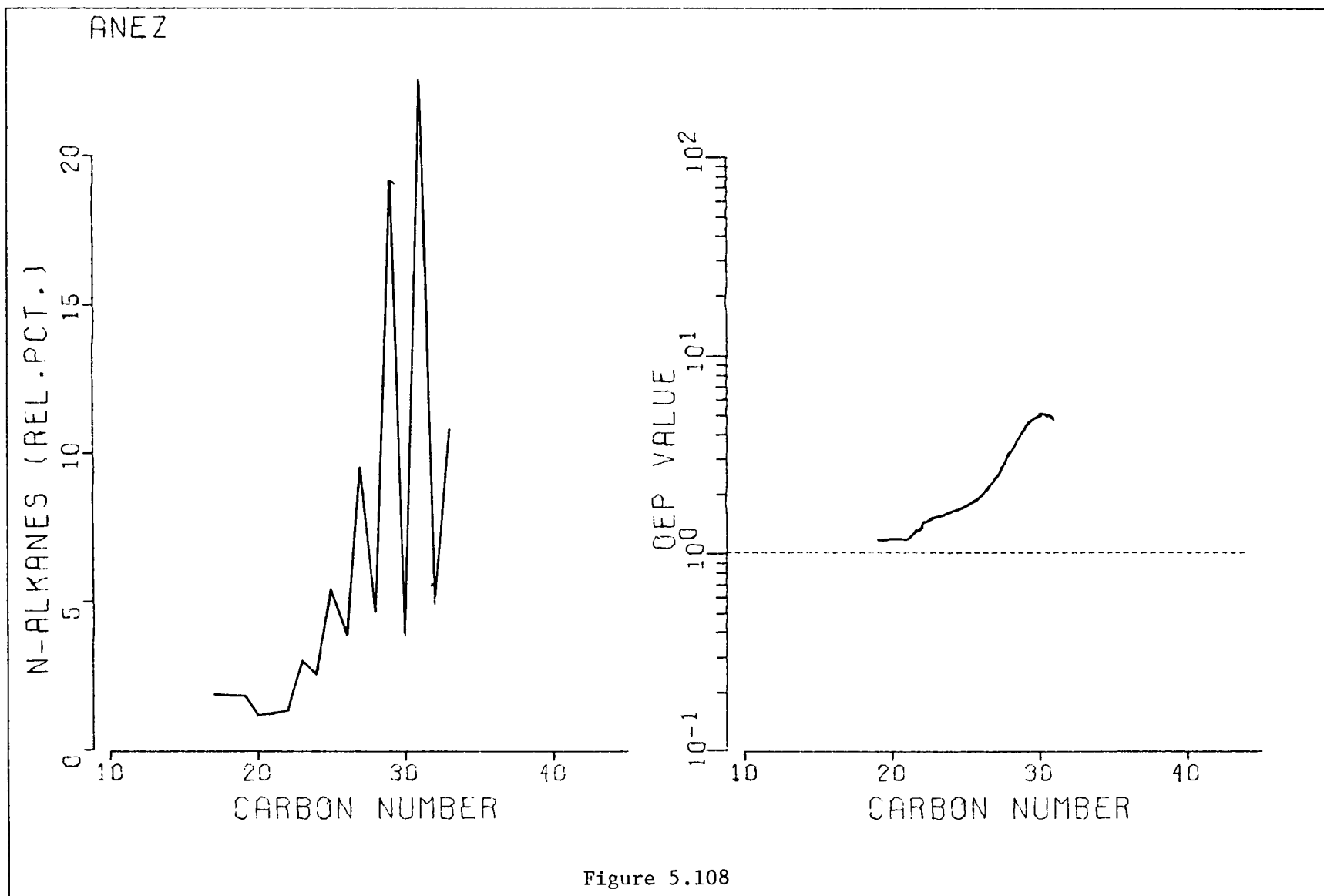


Figure 5.108

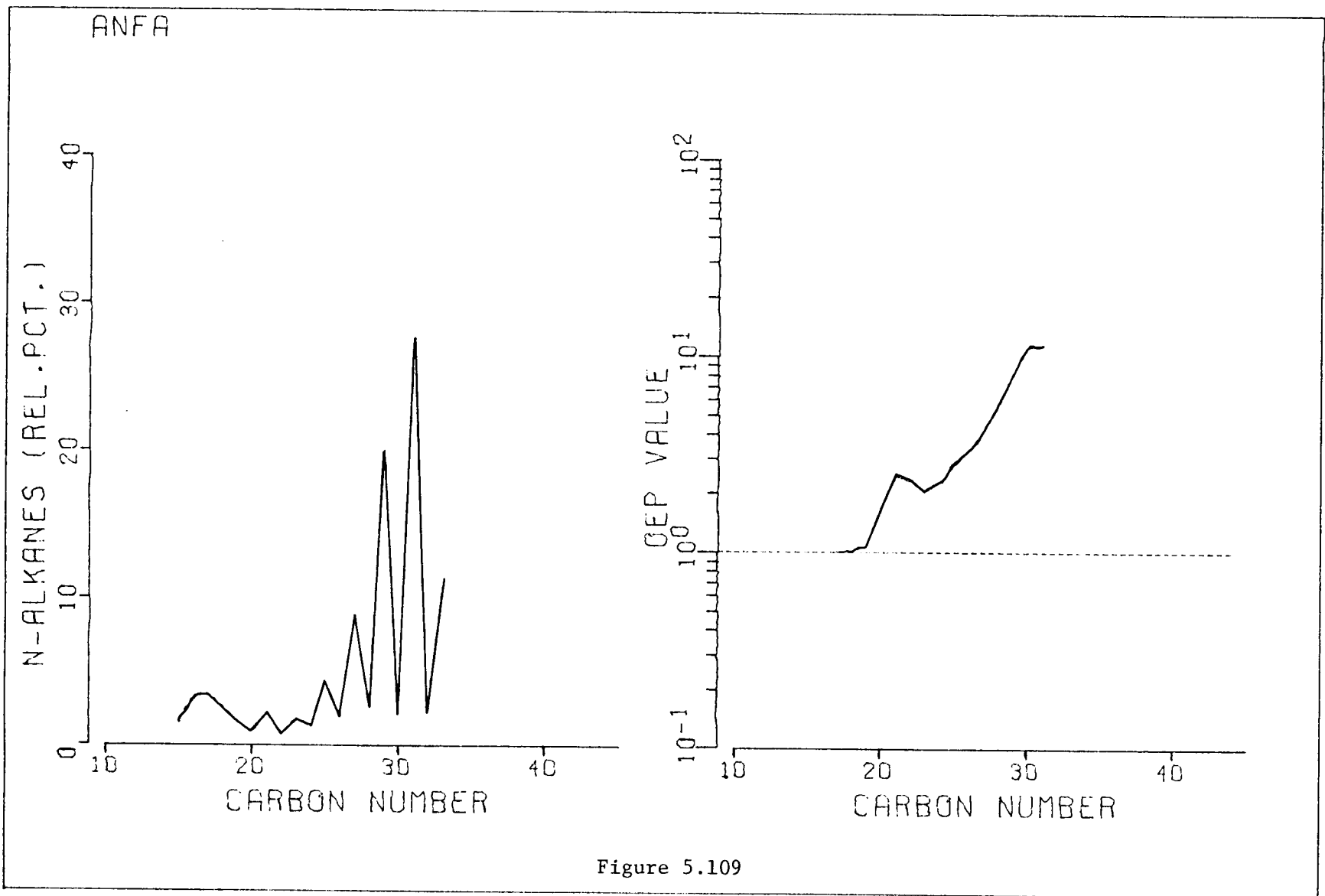


Figure 5.109

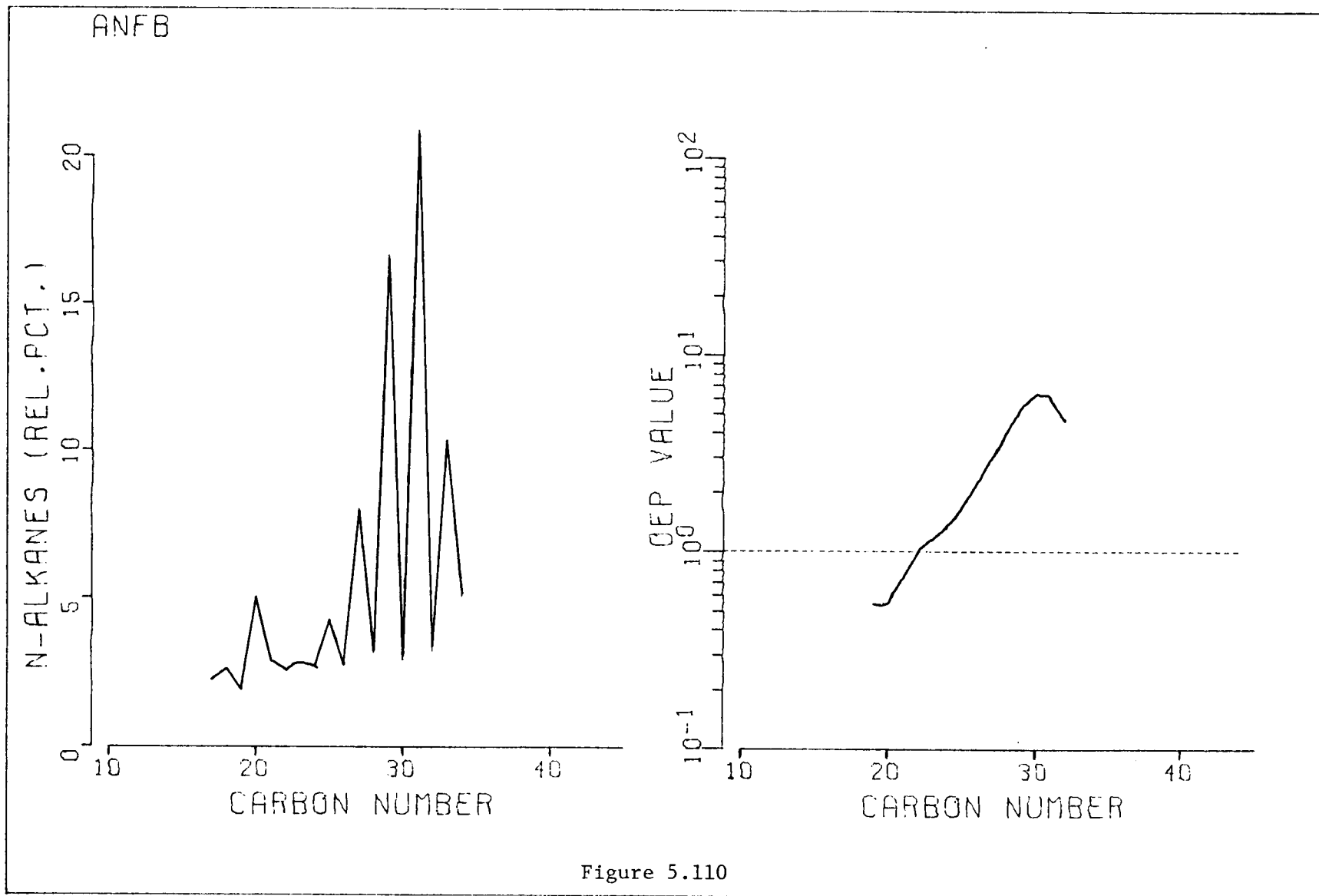


Figure 5.110

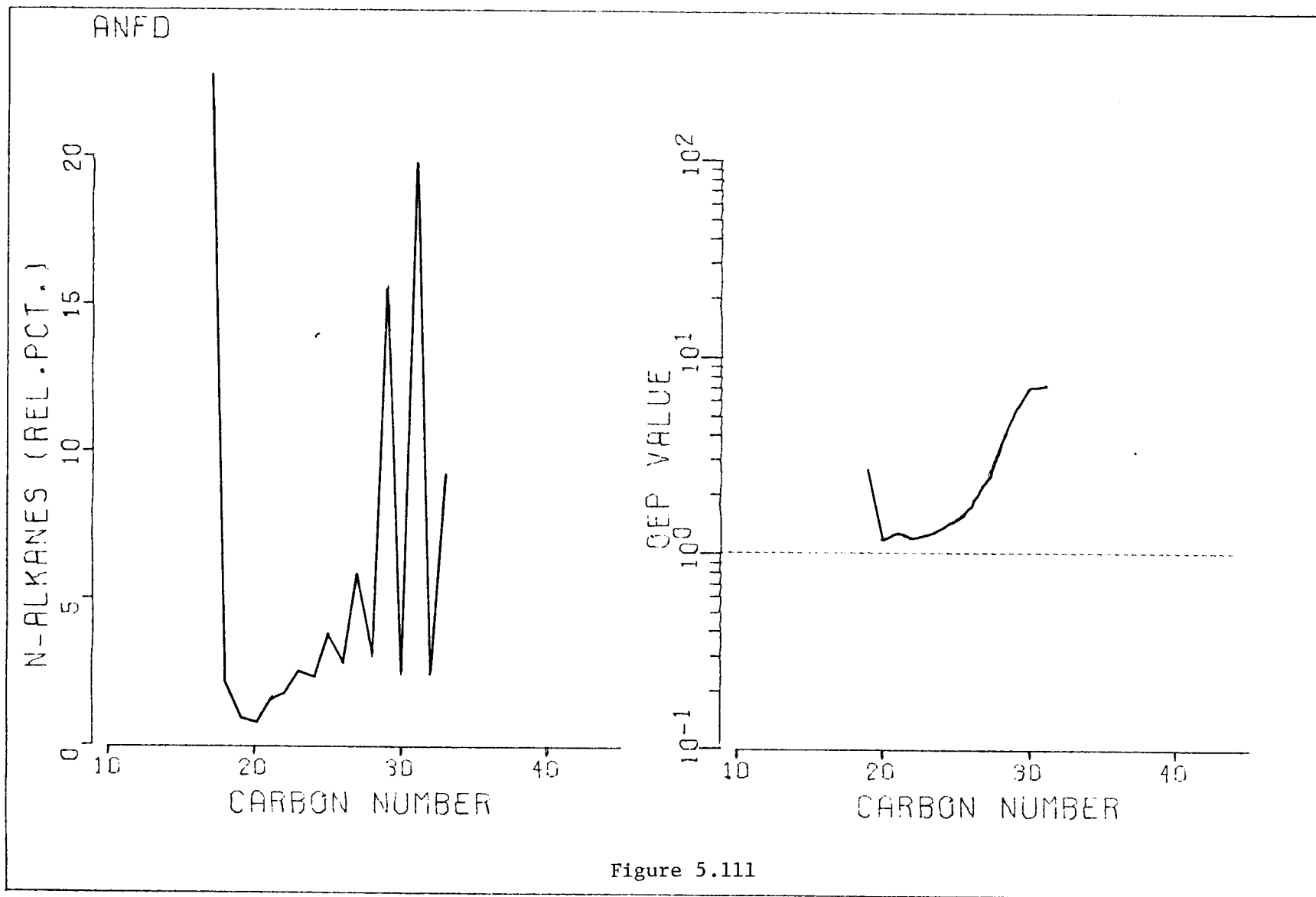


Figure 5.111

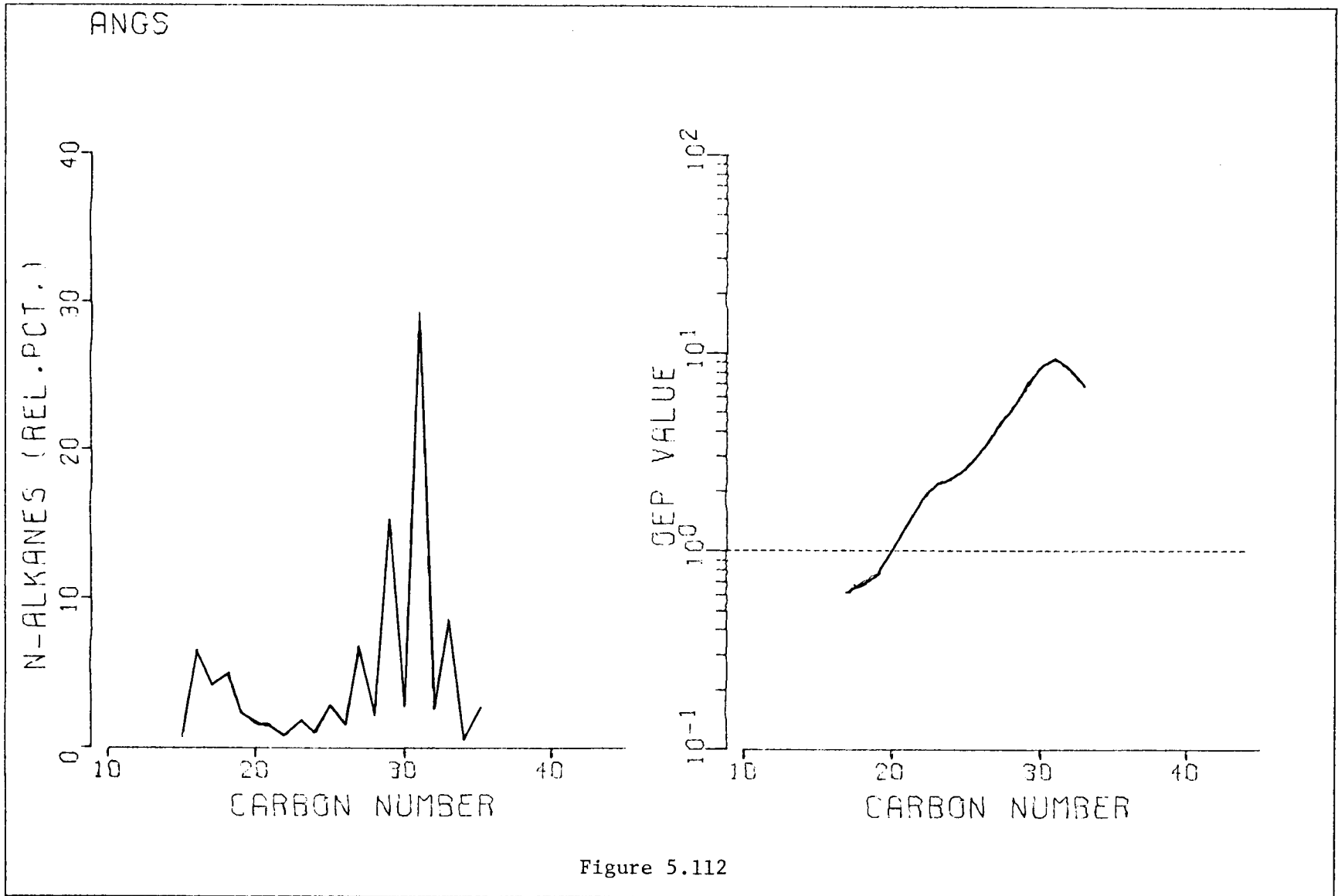
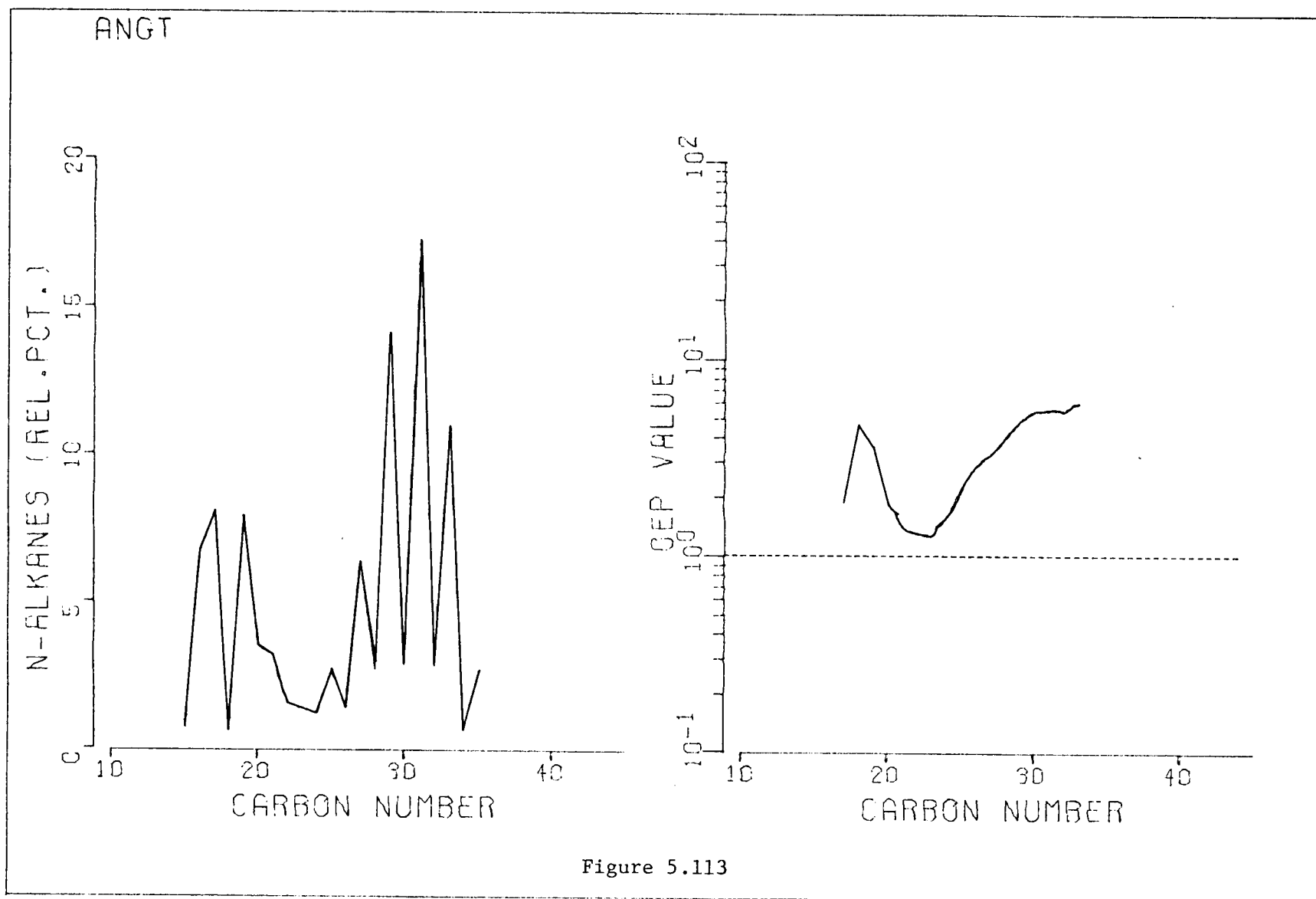


Figure 5.112



ANGR

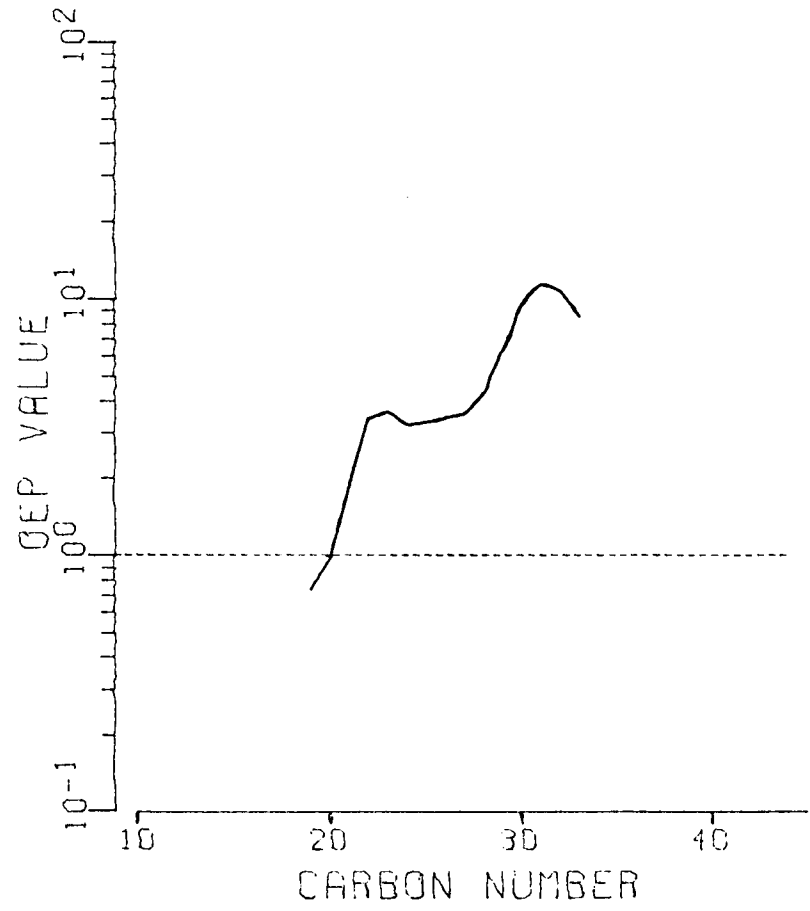
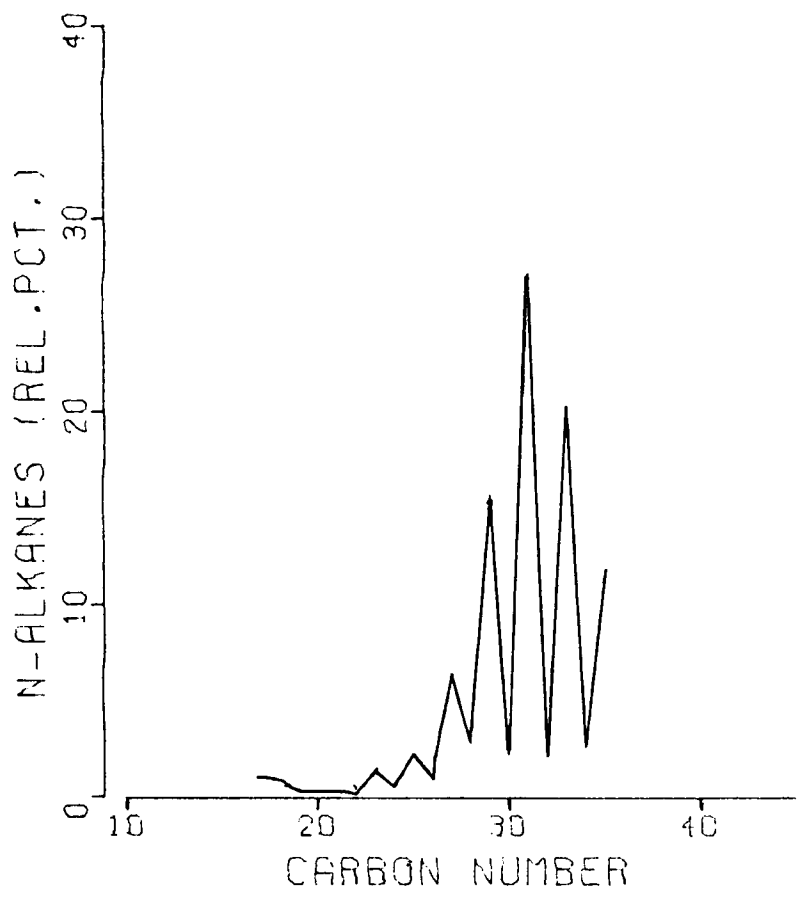
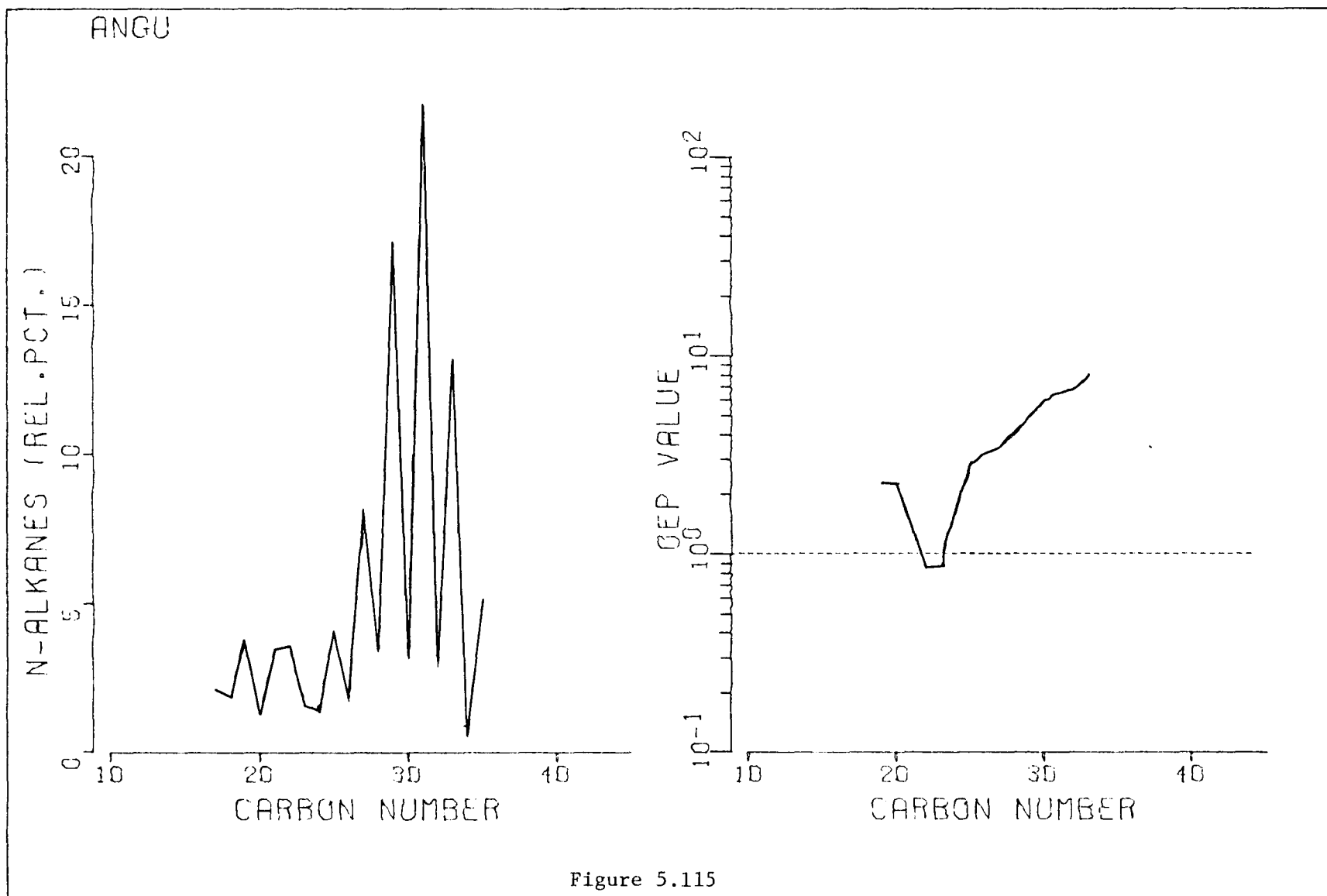
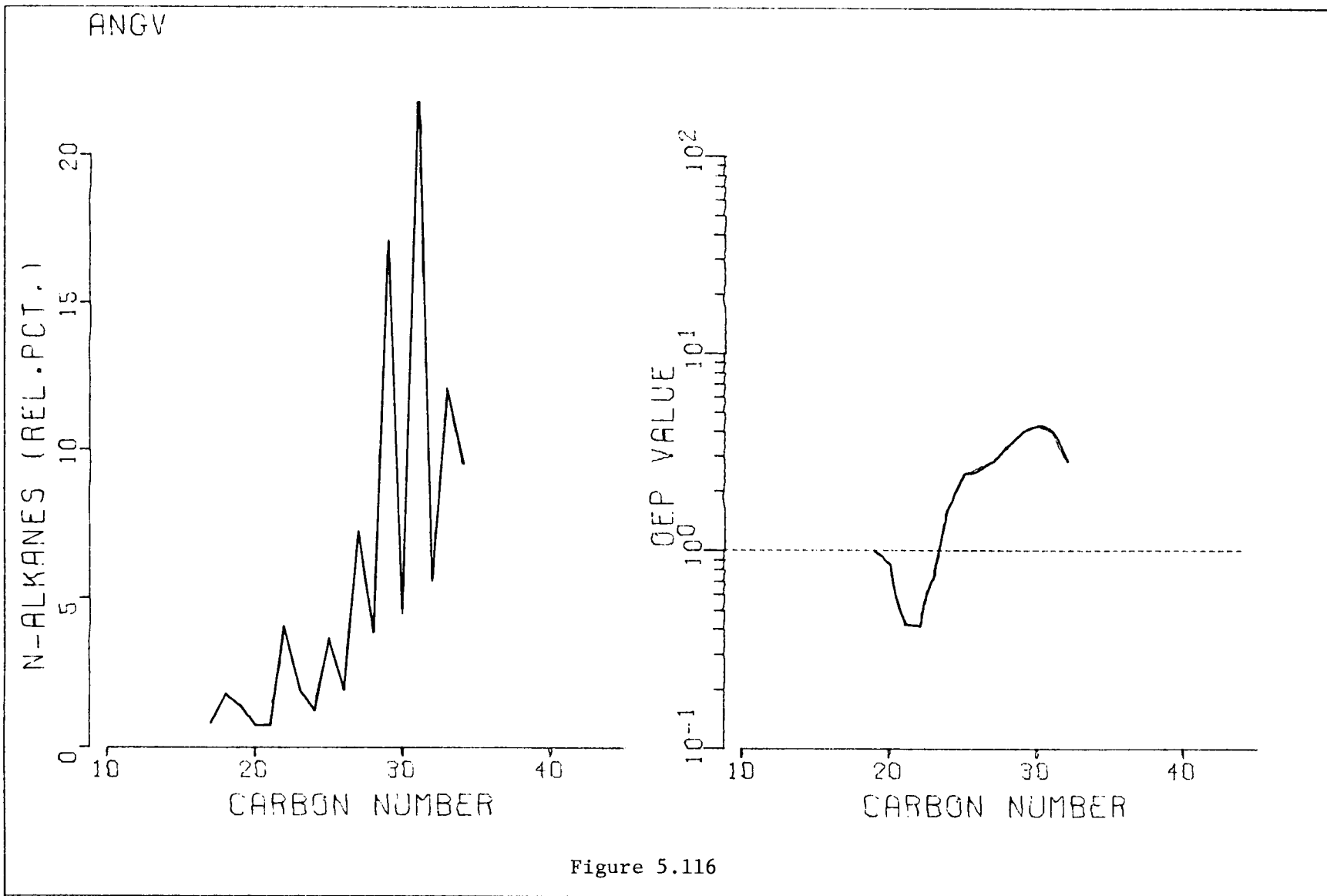
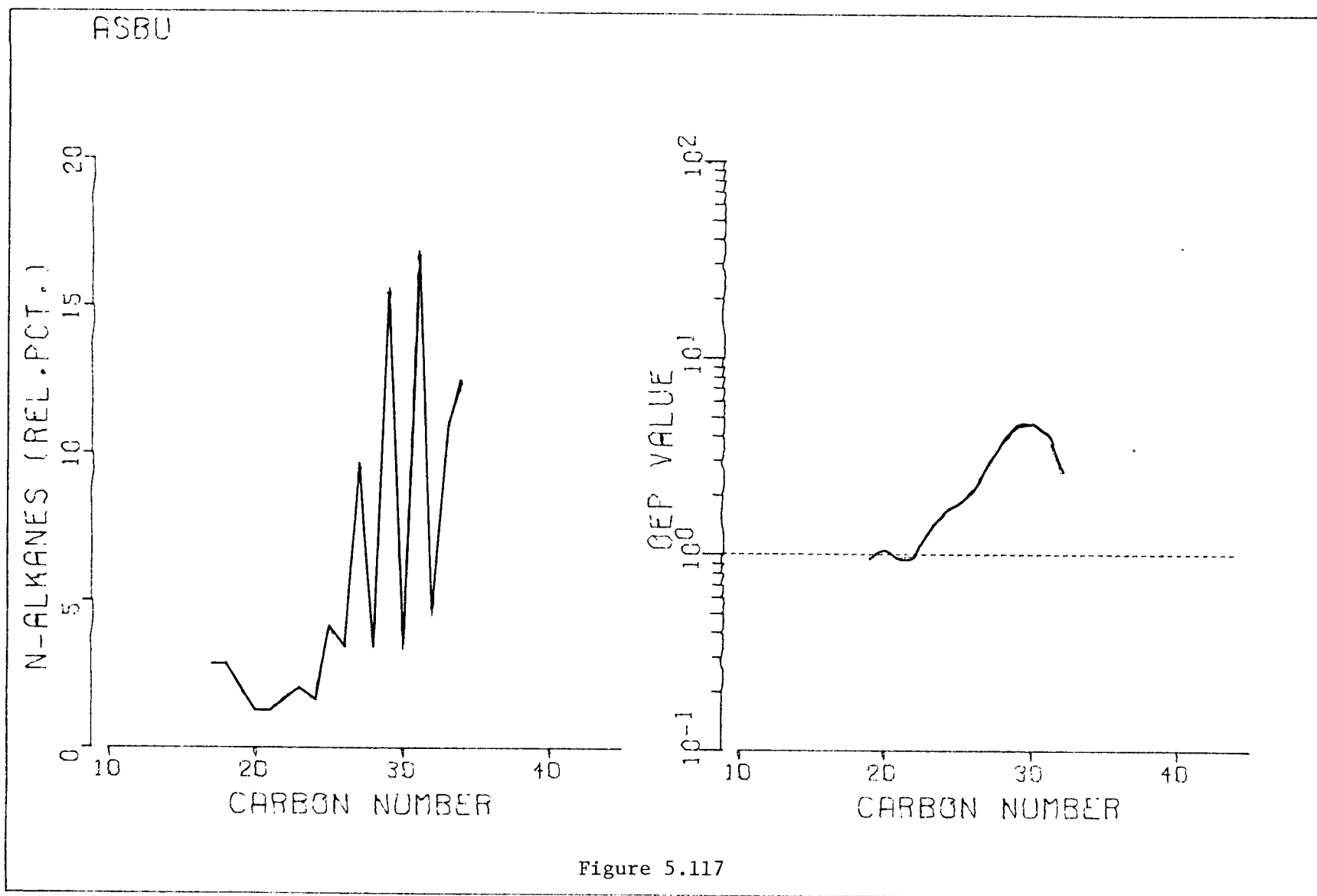


Figure 5.114







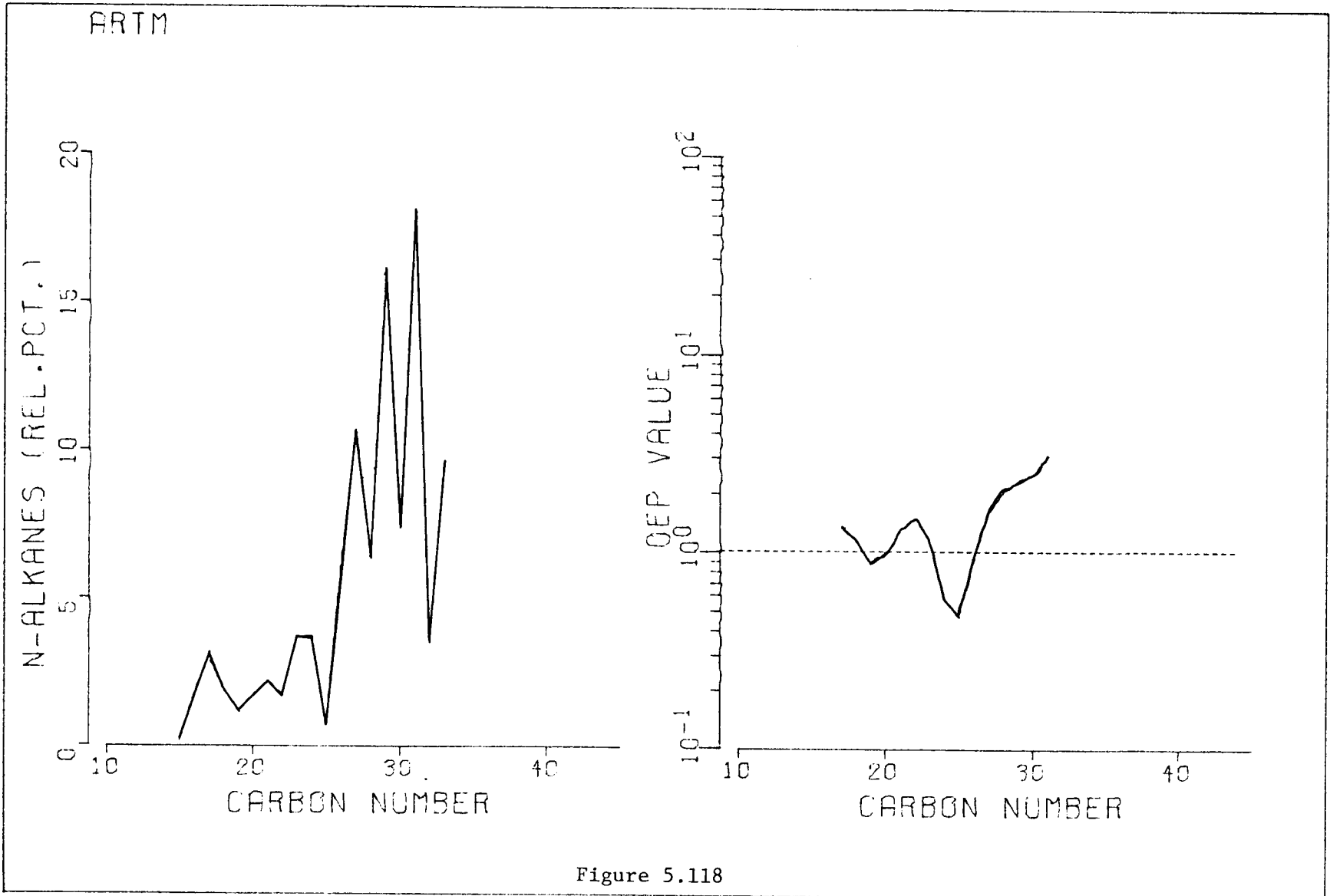


Figure 5.118

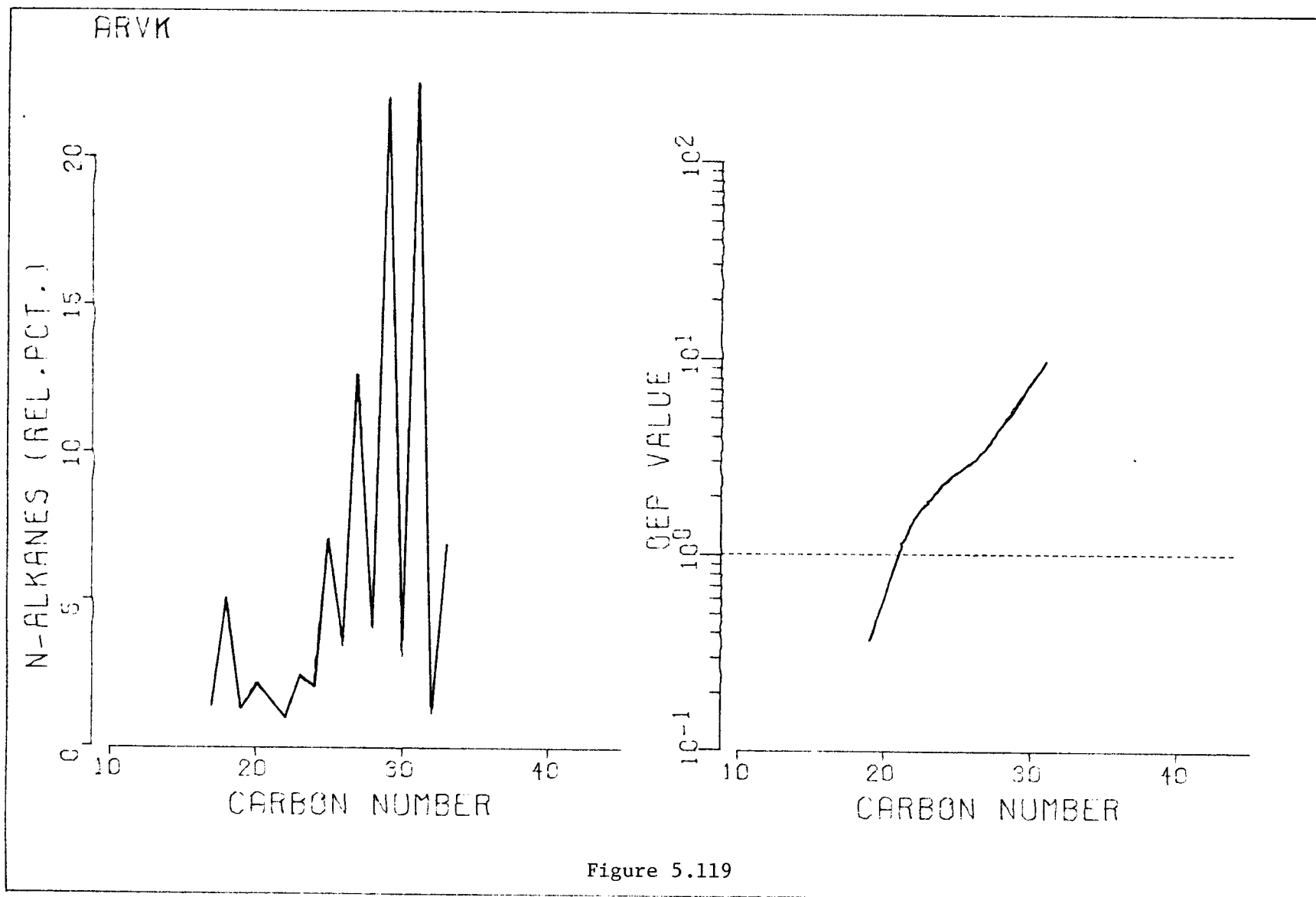


Figure 5.119

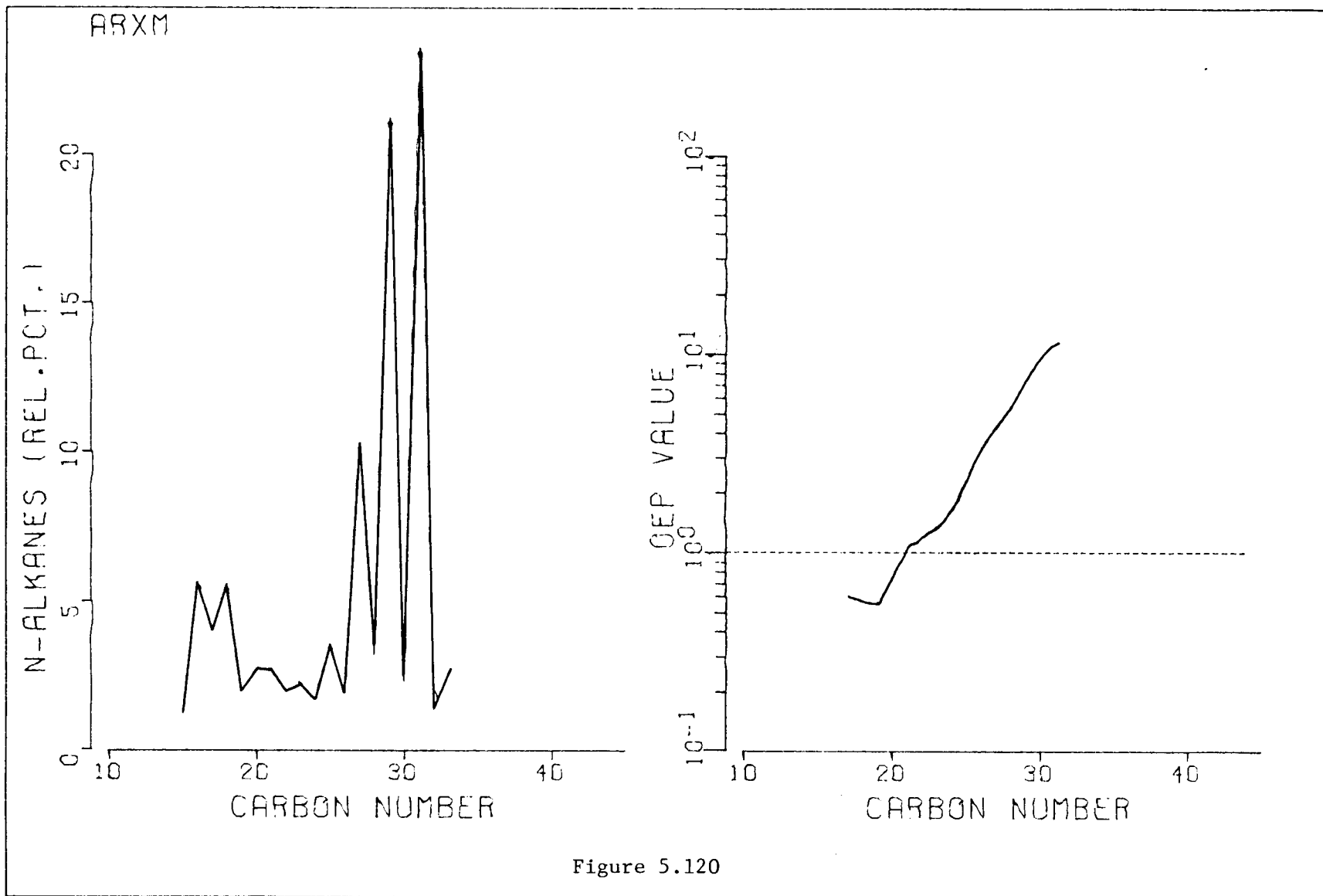
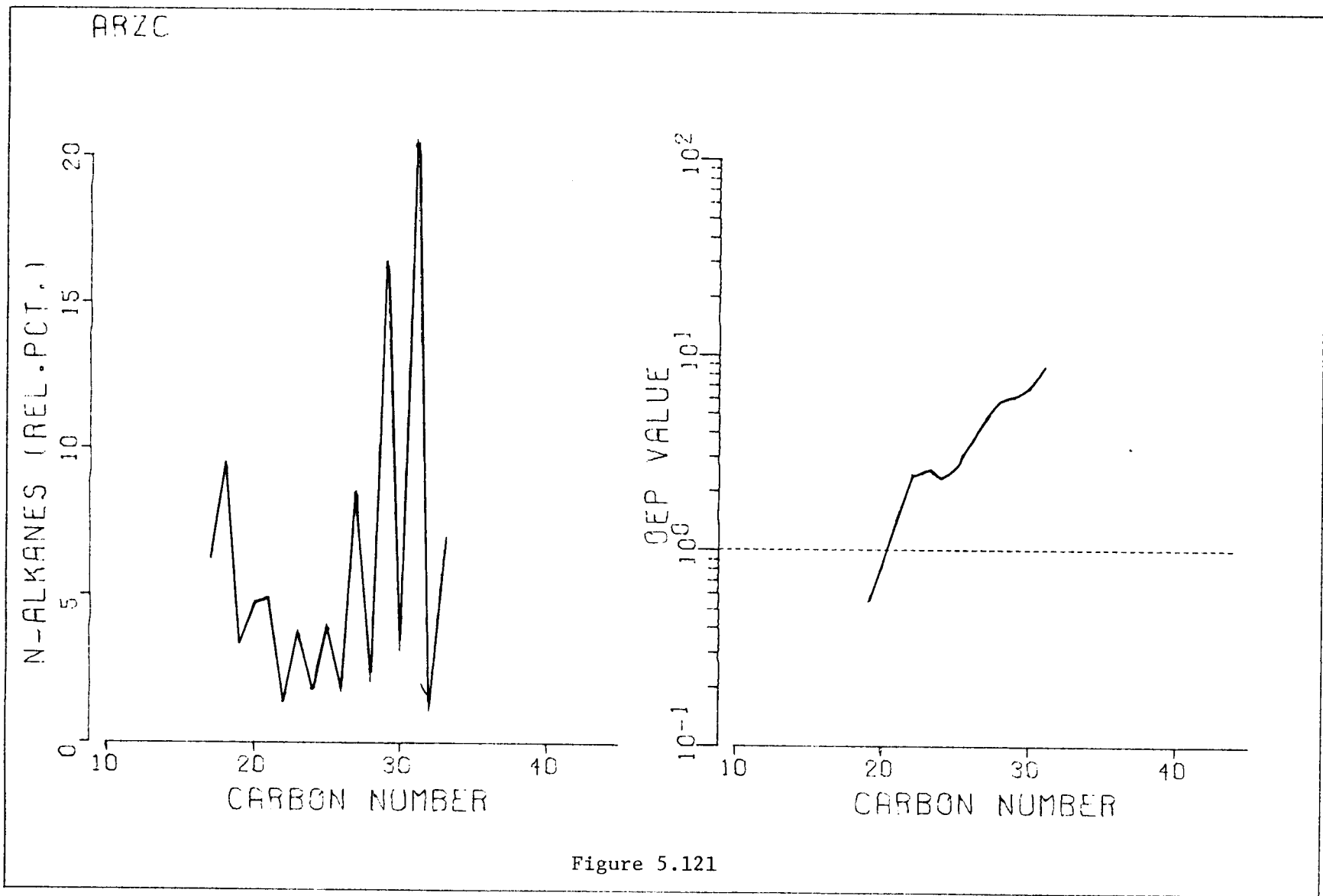


Figure 5.120



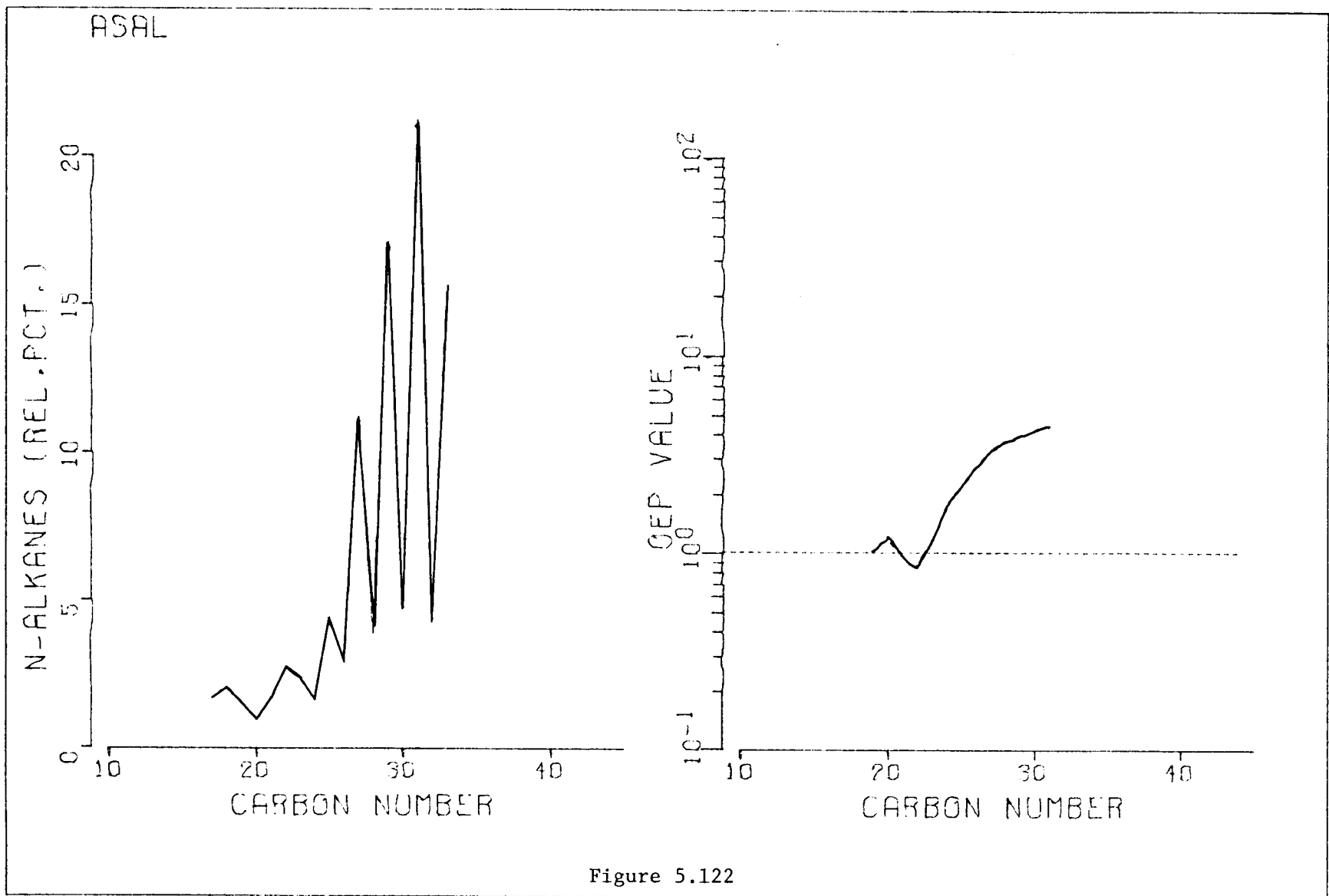
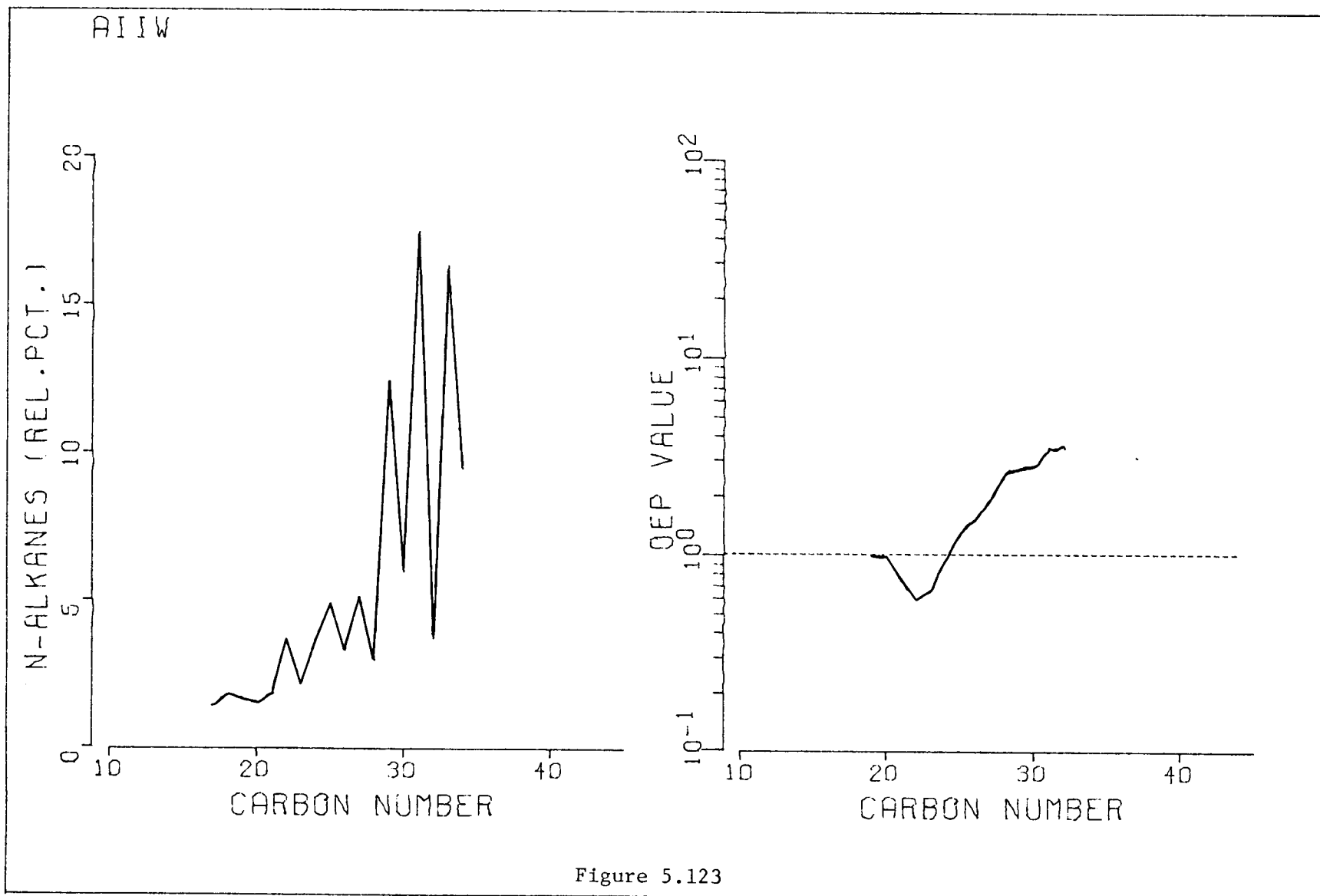


Figure 5.122



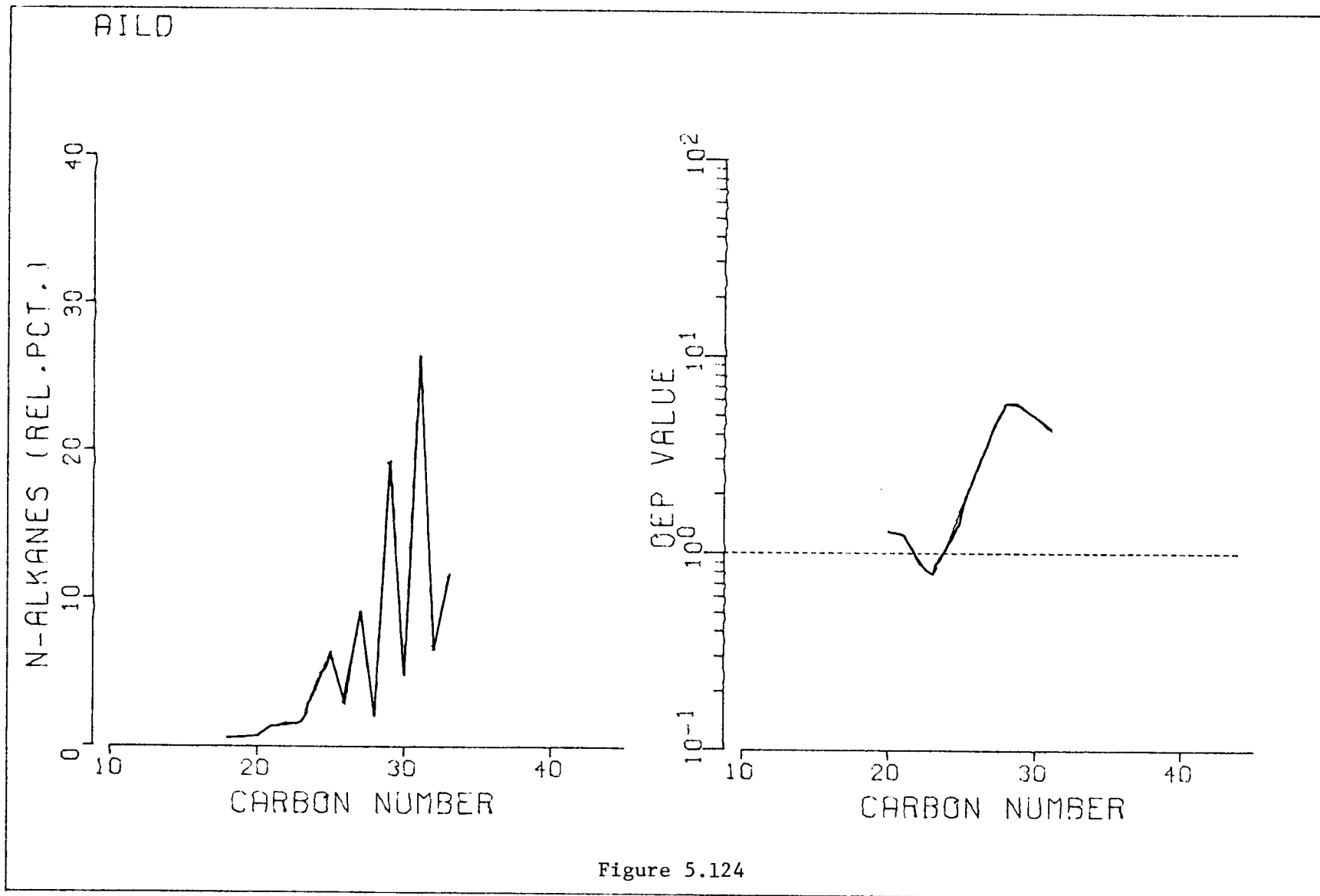


Figure 5.124

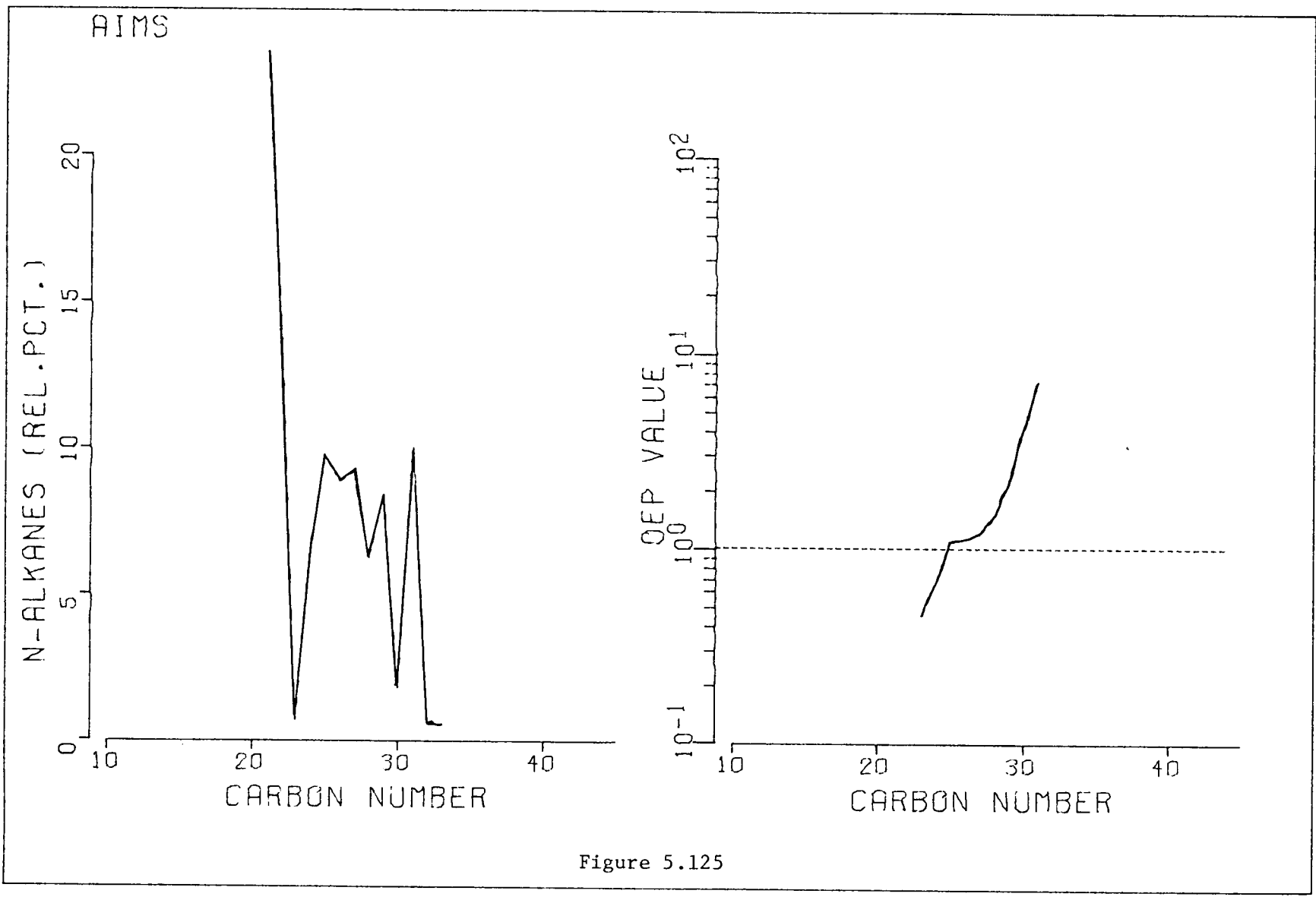


Figure 5.125

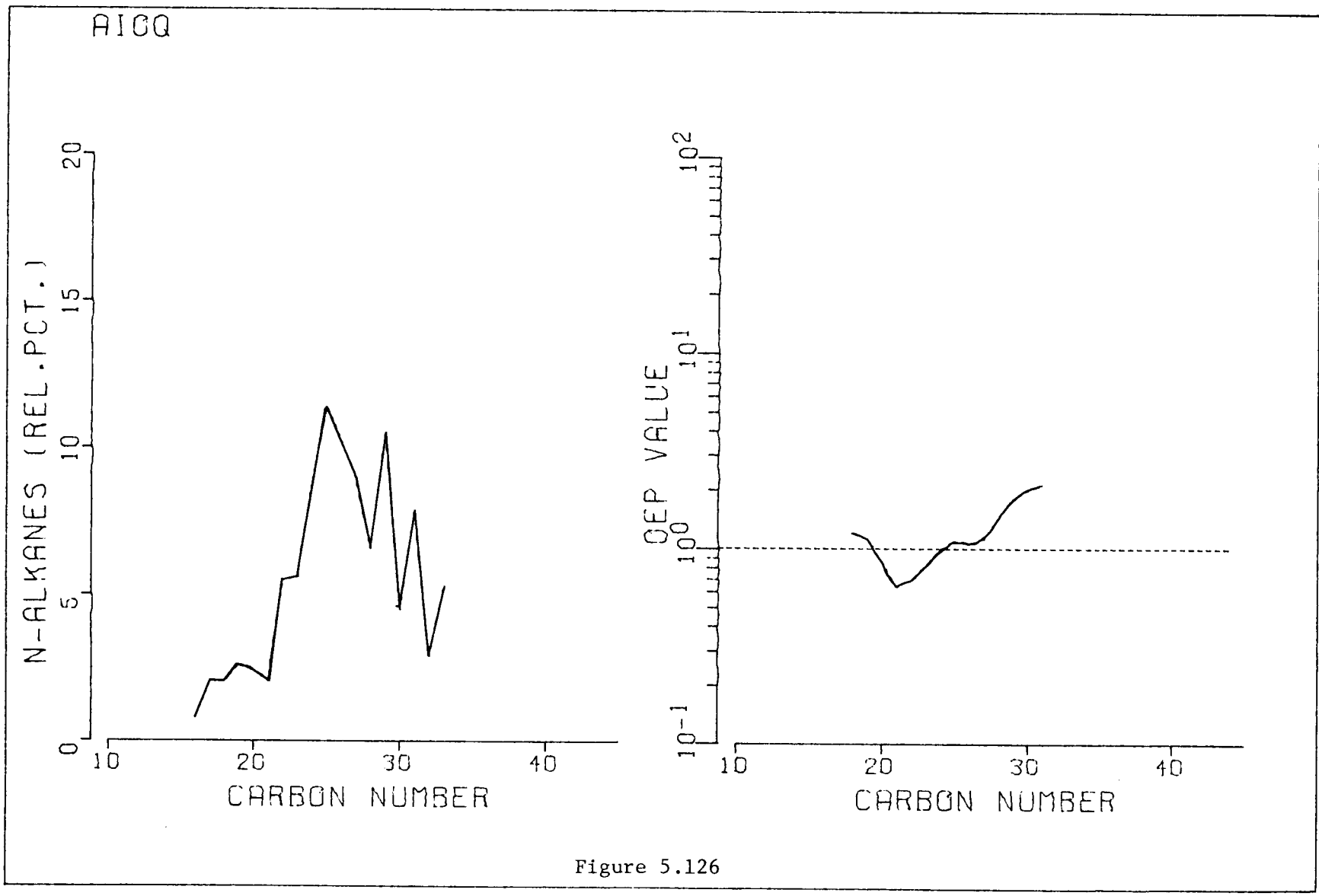


Figure 5.126

AIQI

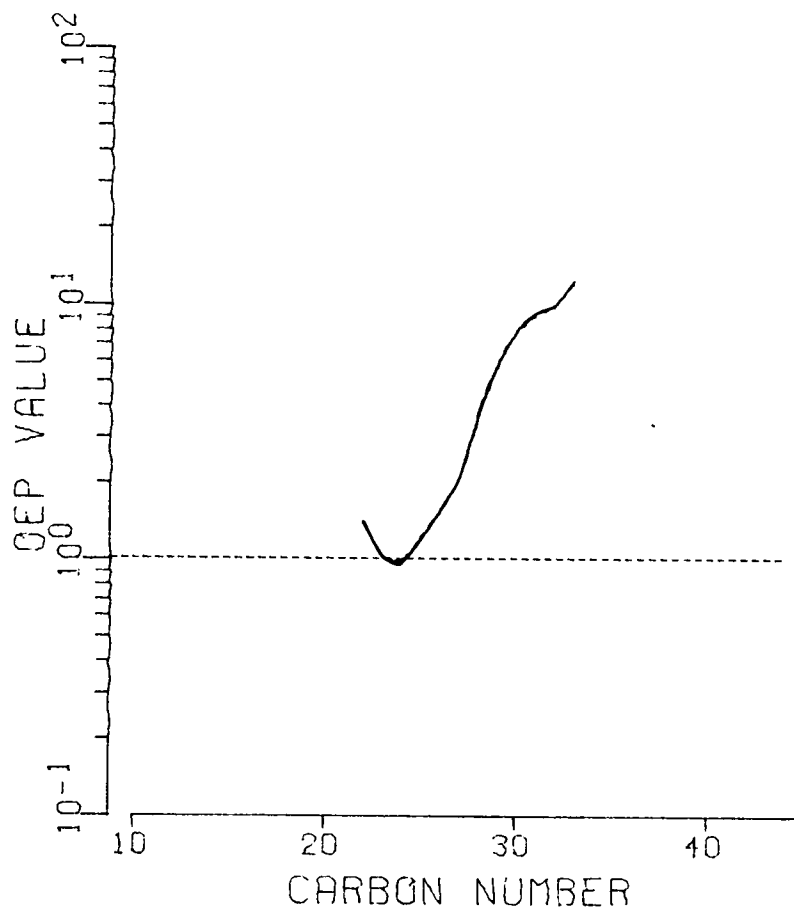
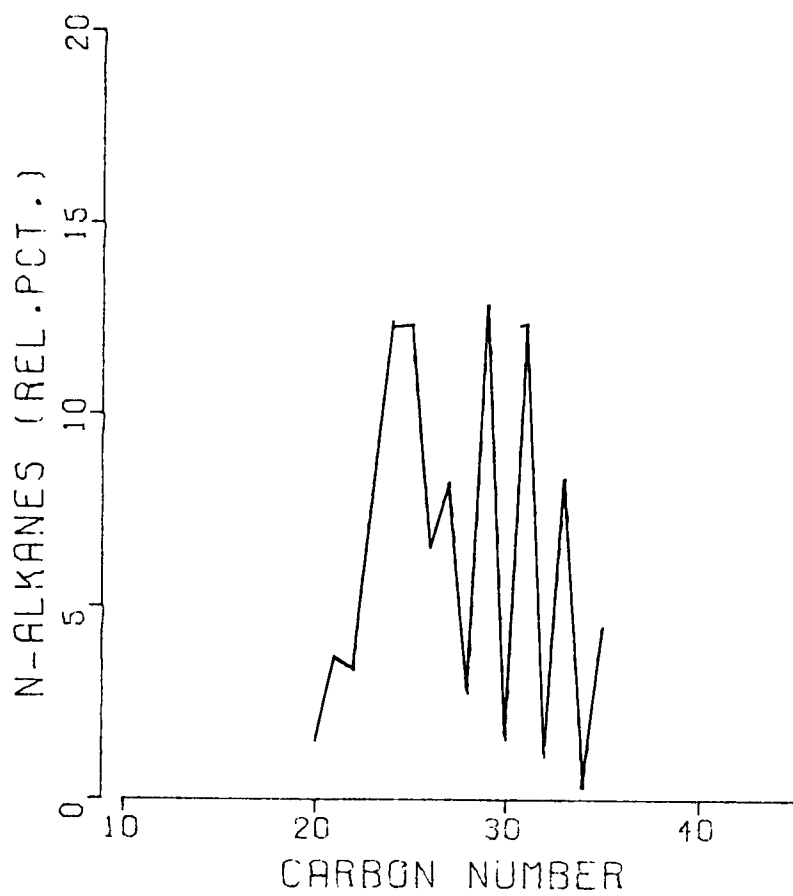


Figure 5.127

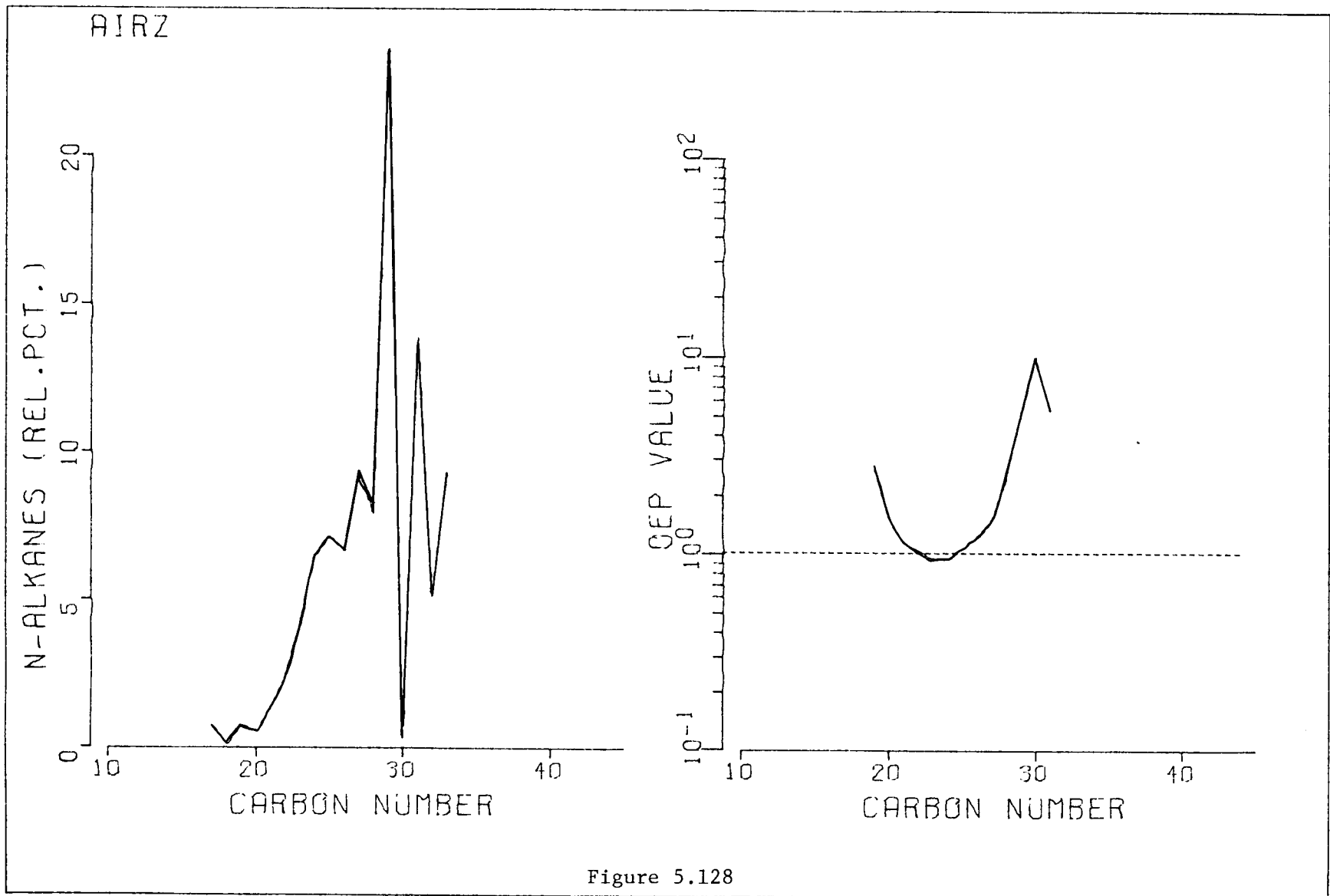


Figure 5.128

ANIP

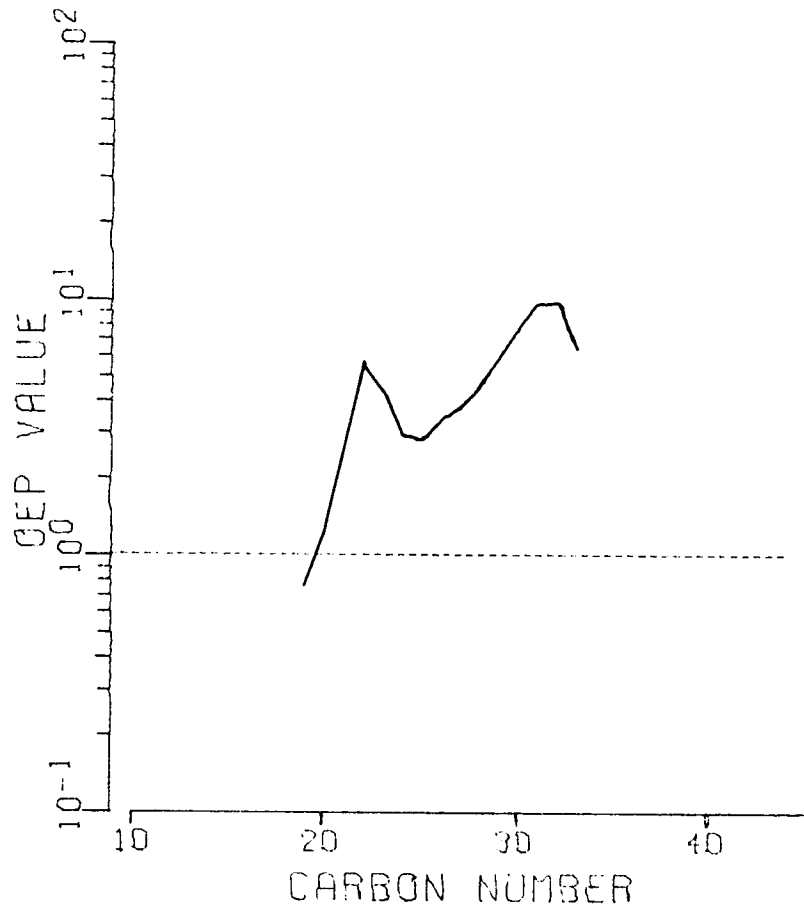
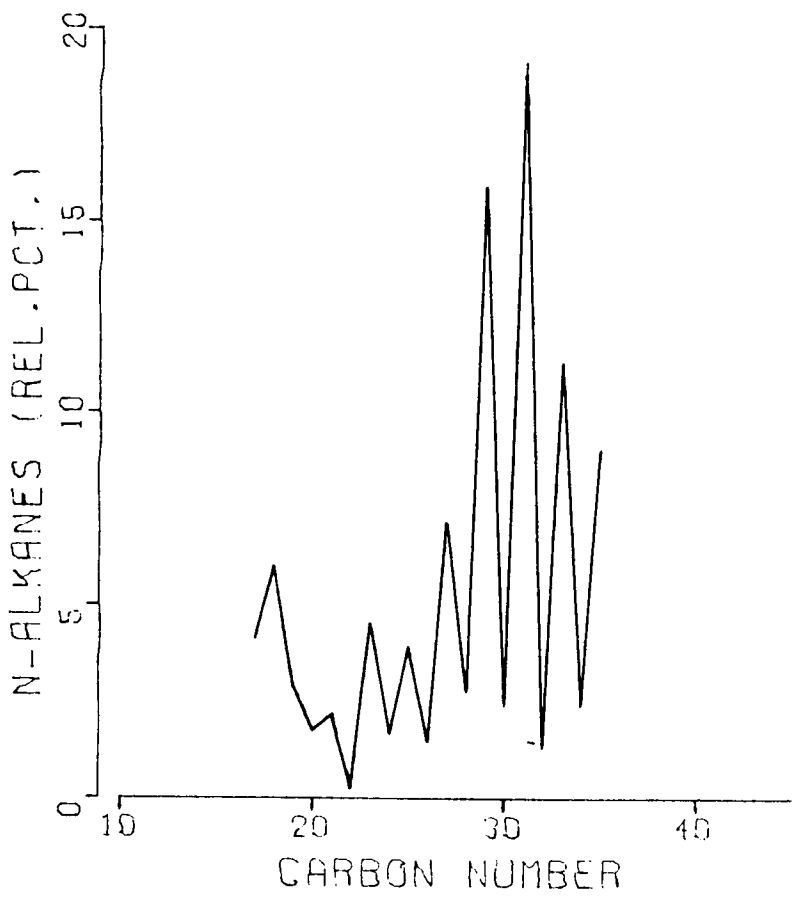
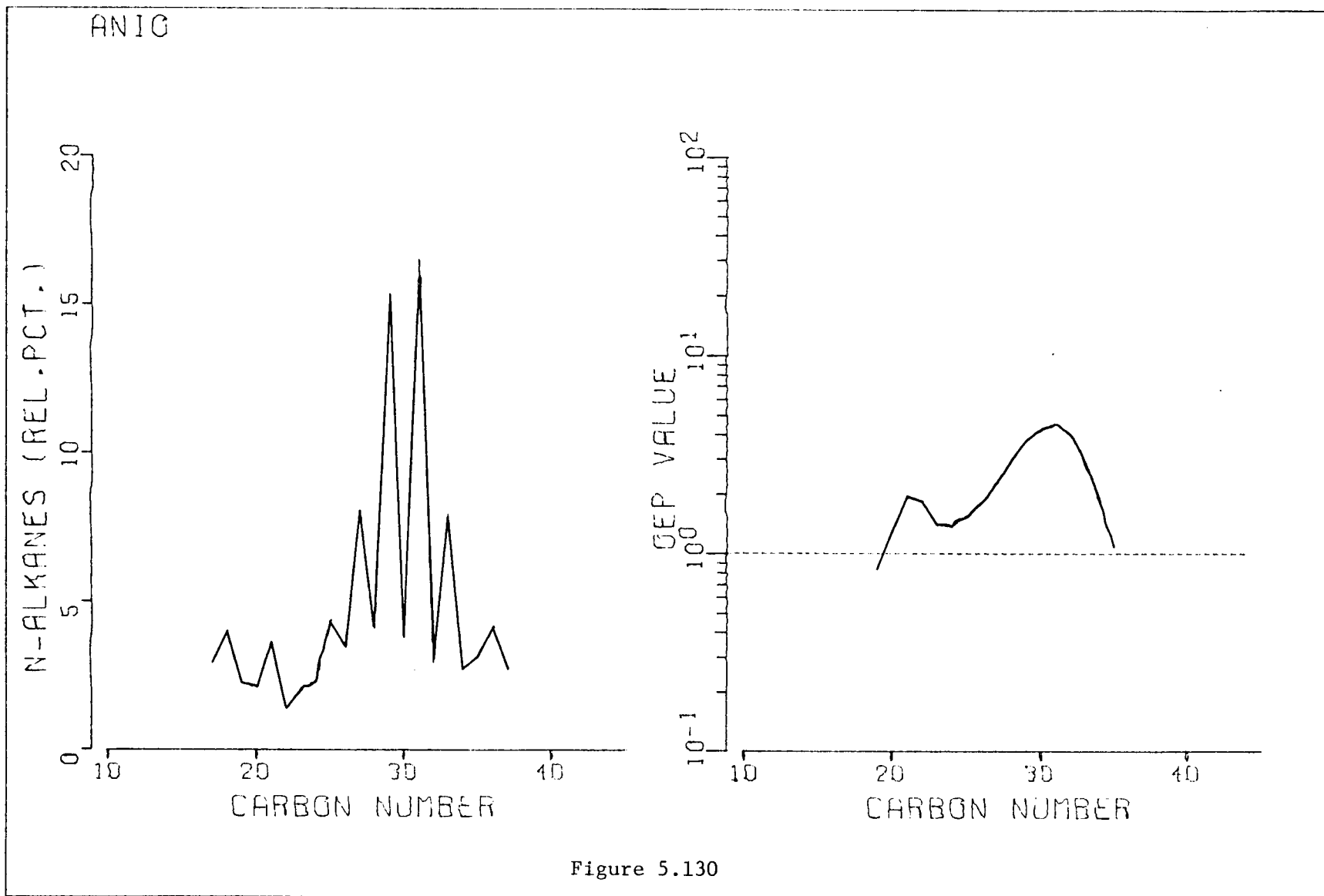


Figure 5.129



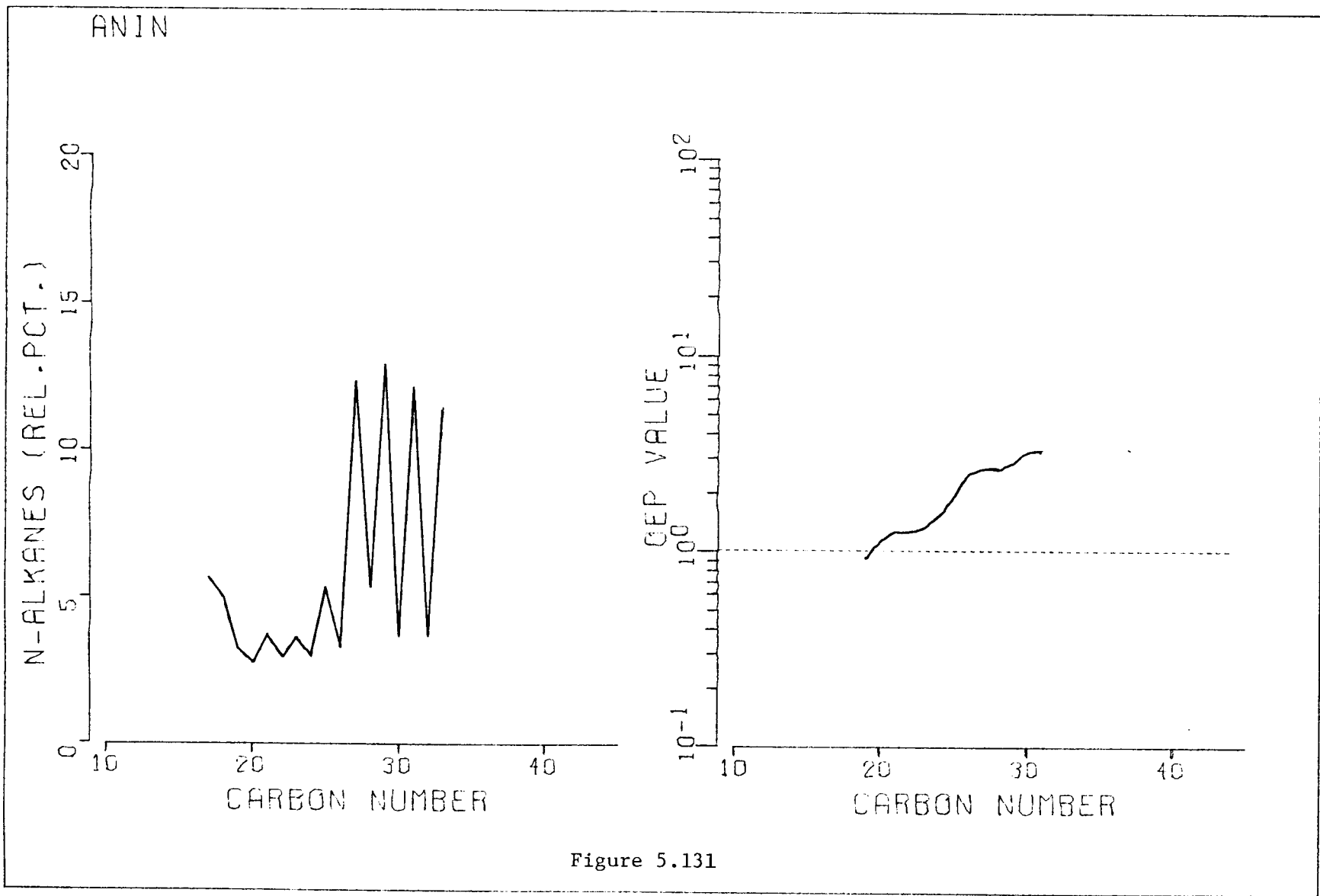


Figure 5.131

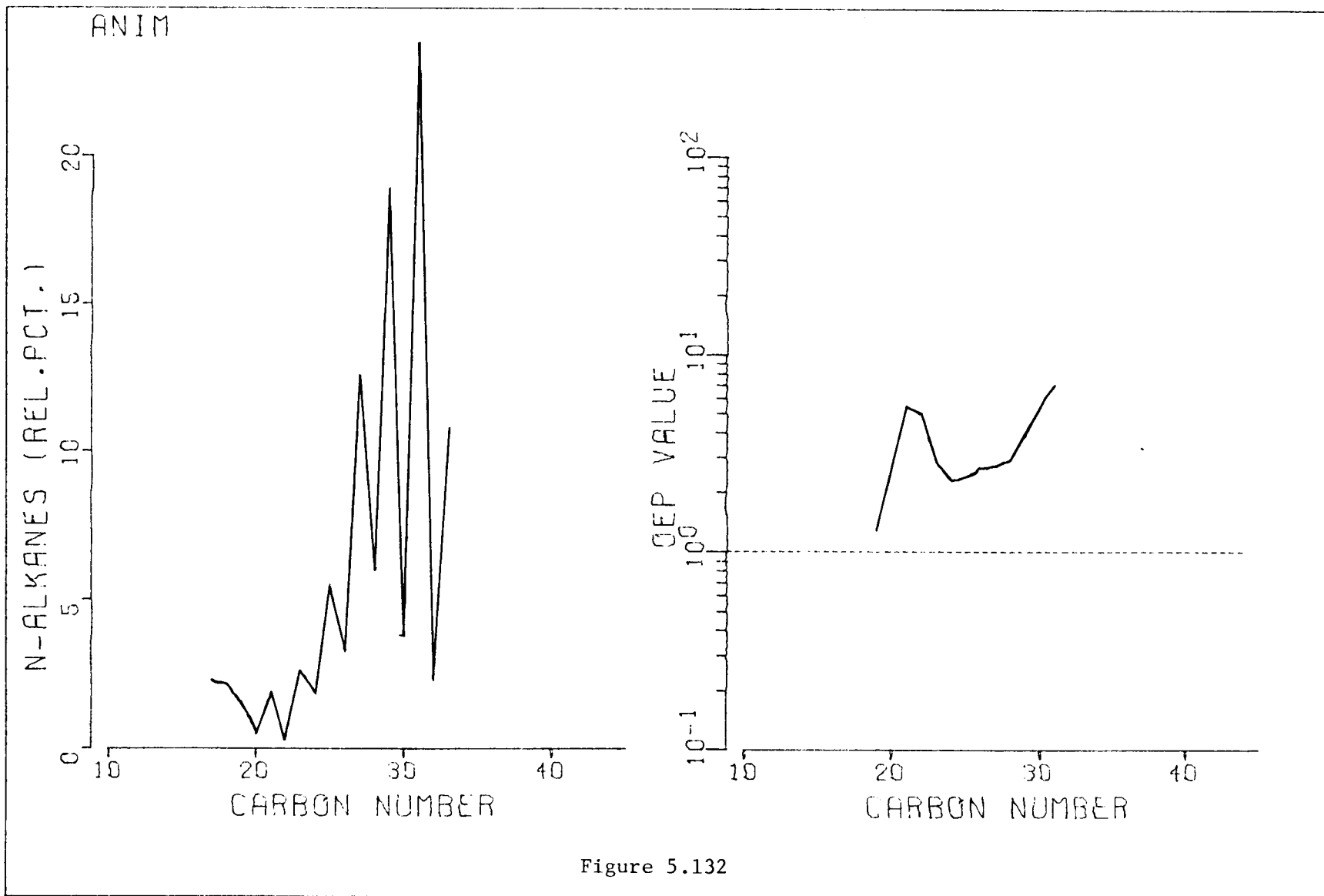


Figure 5.132

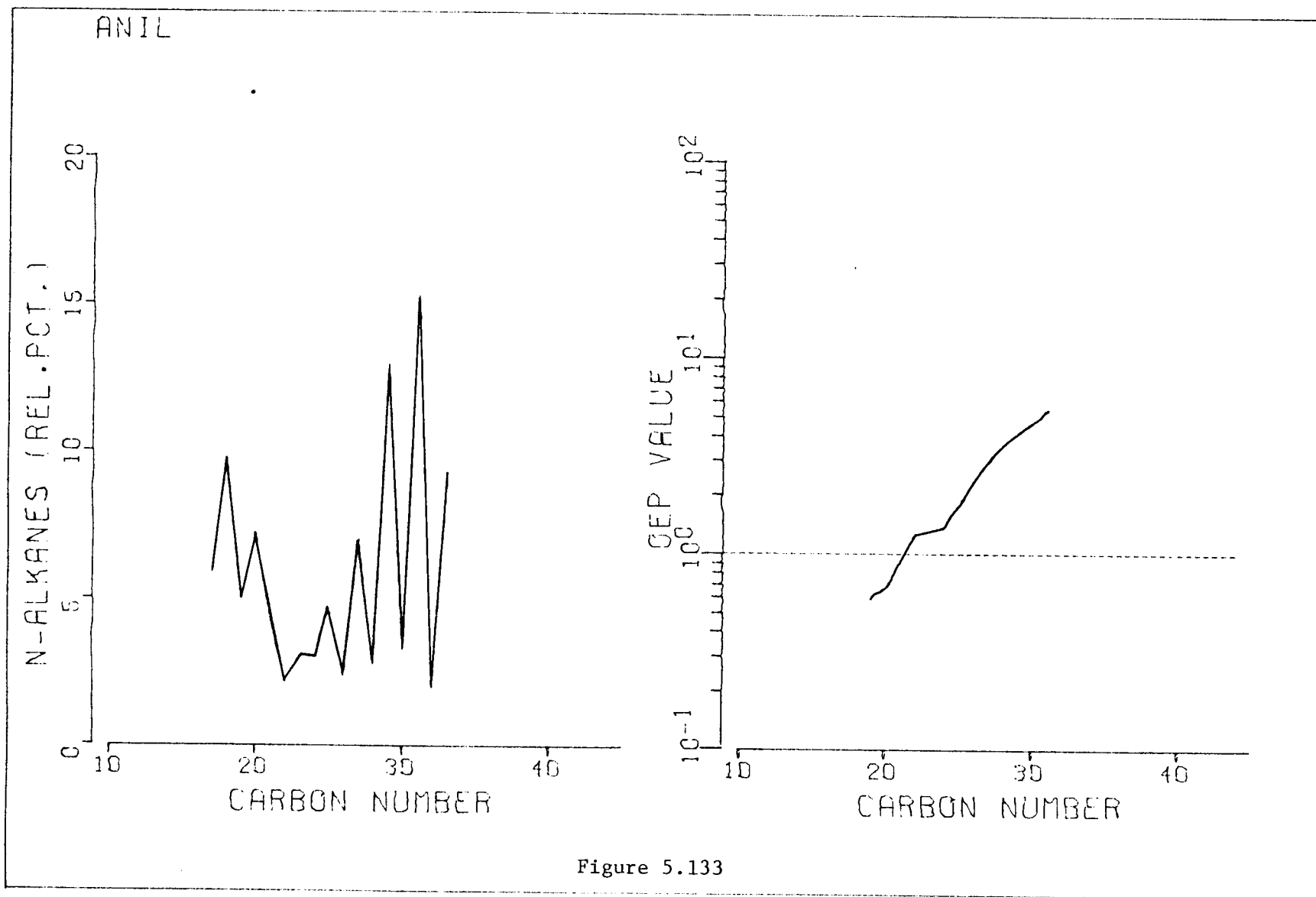


Figure 5.133

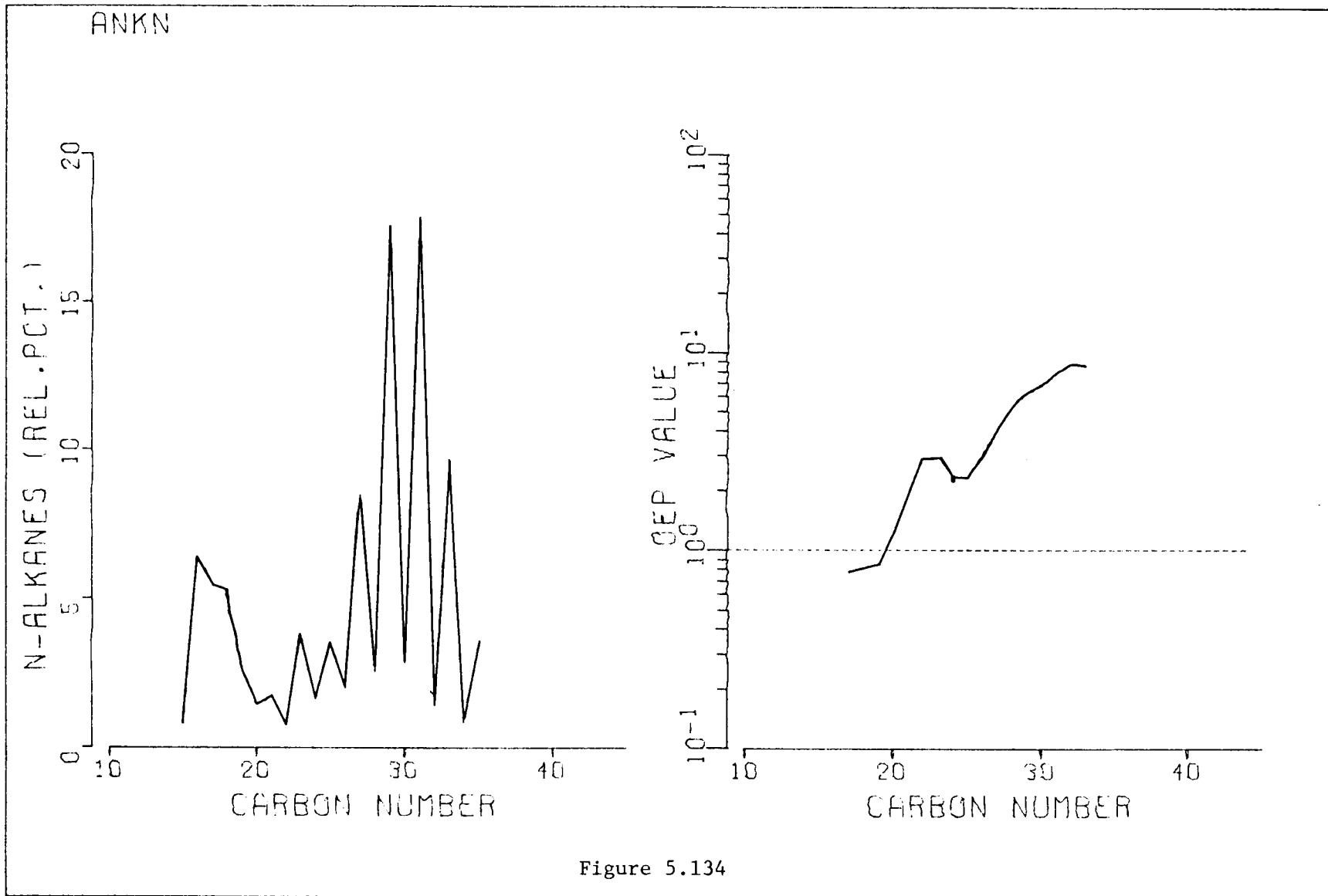


Figure 5.134

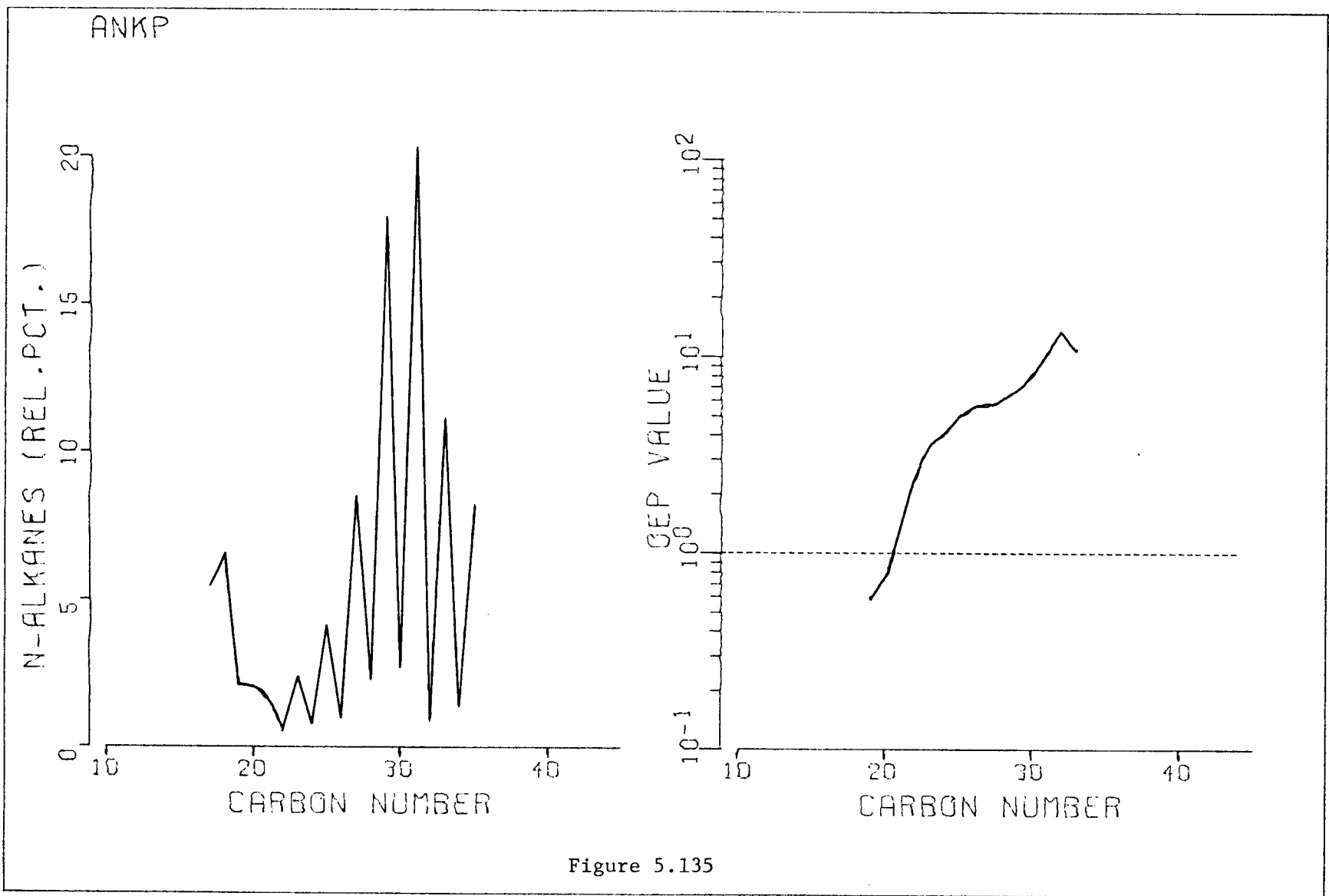


Figure 5.135

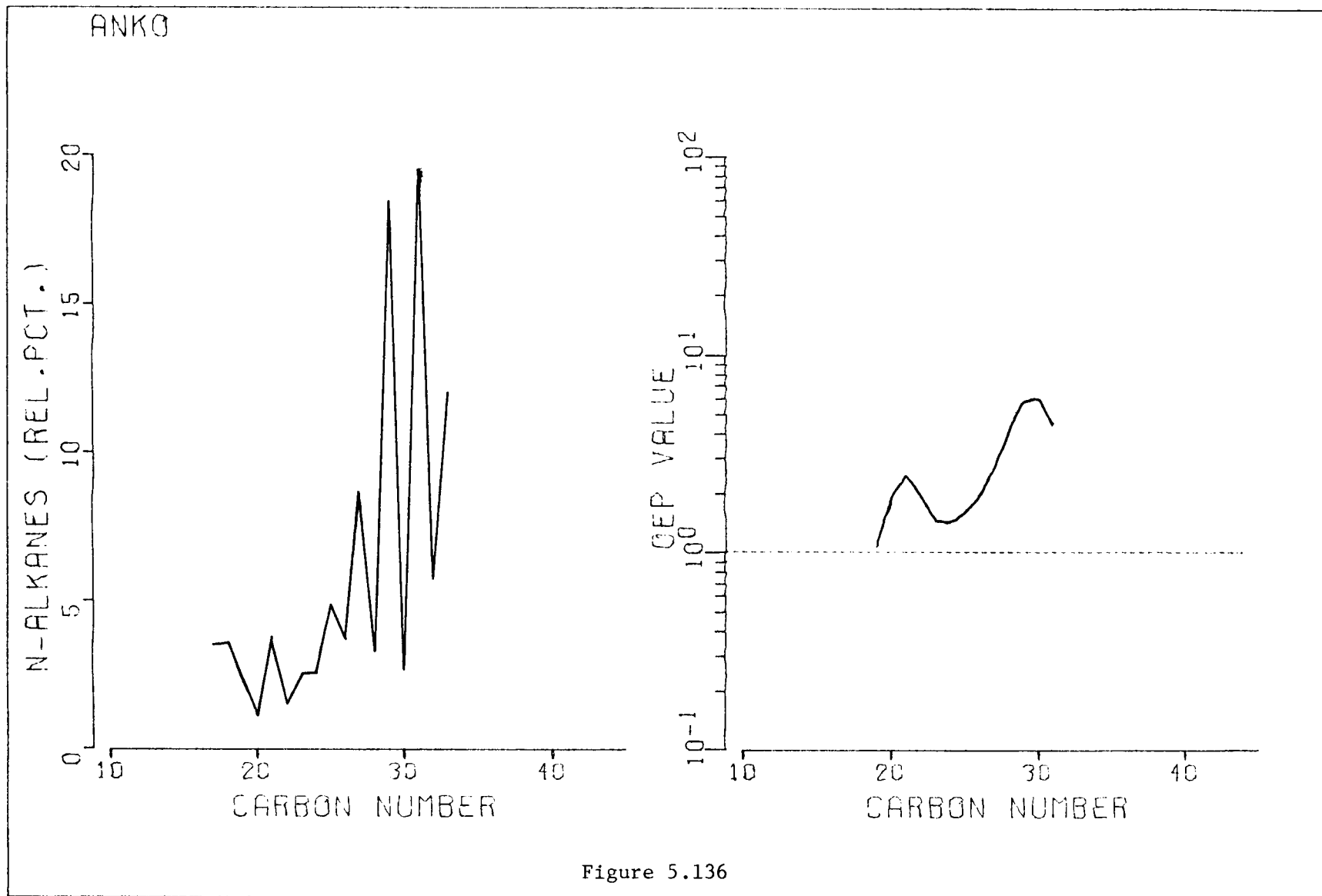


Figure 5.136

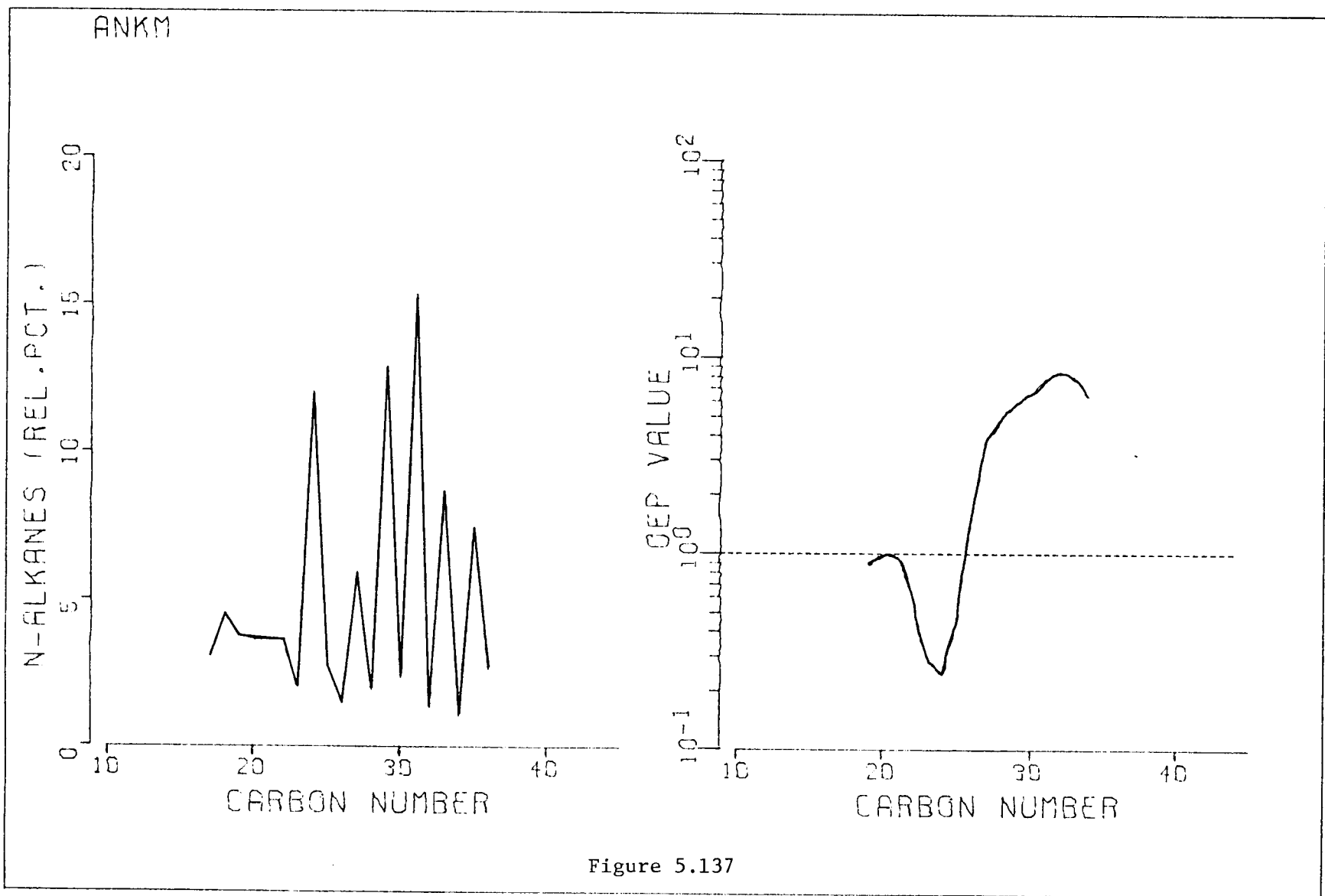


Figure 5.137

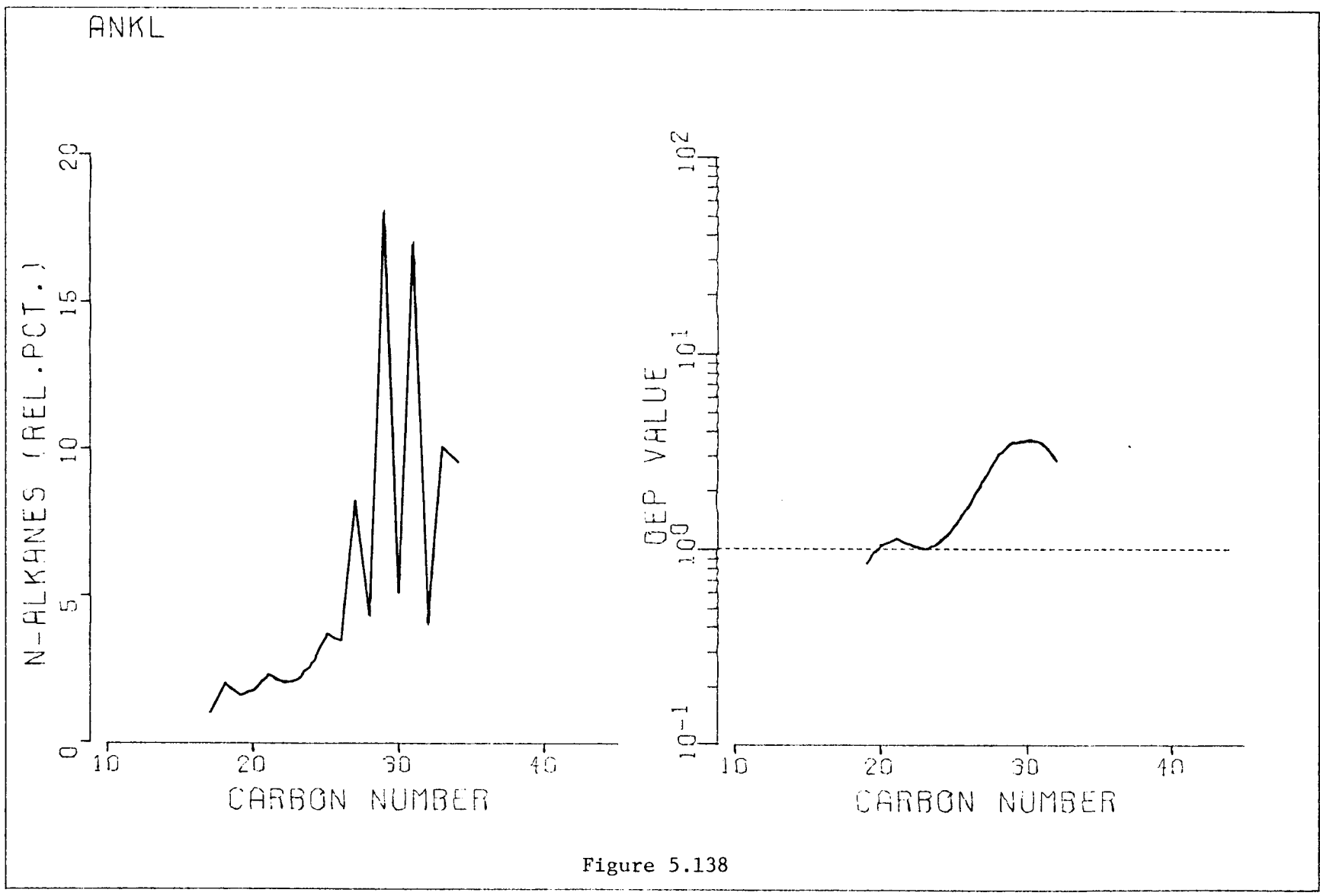
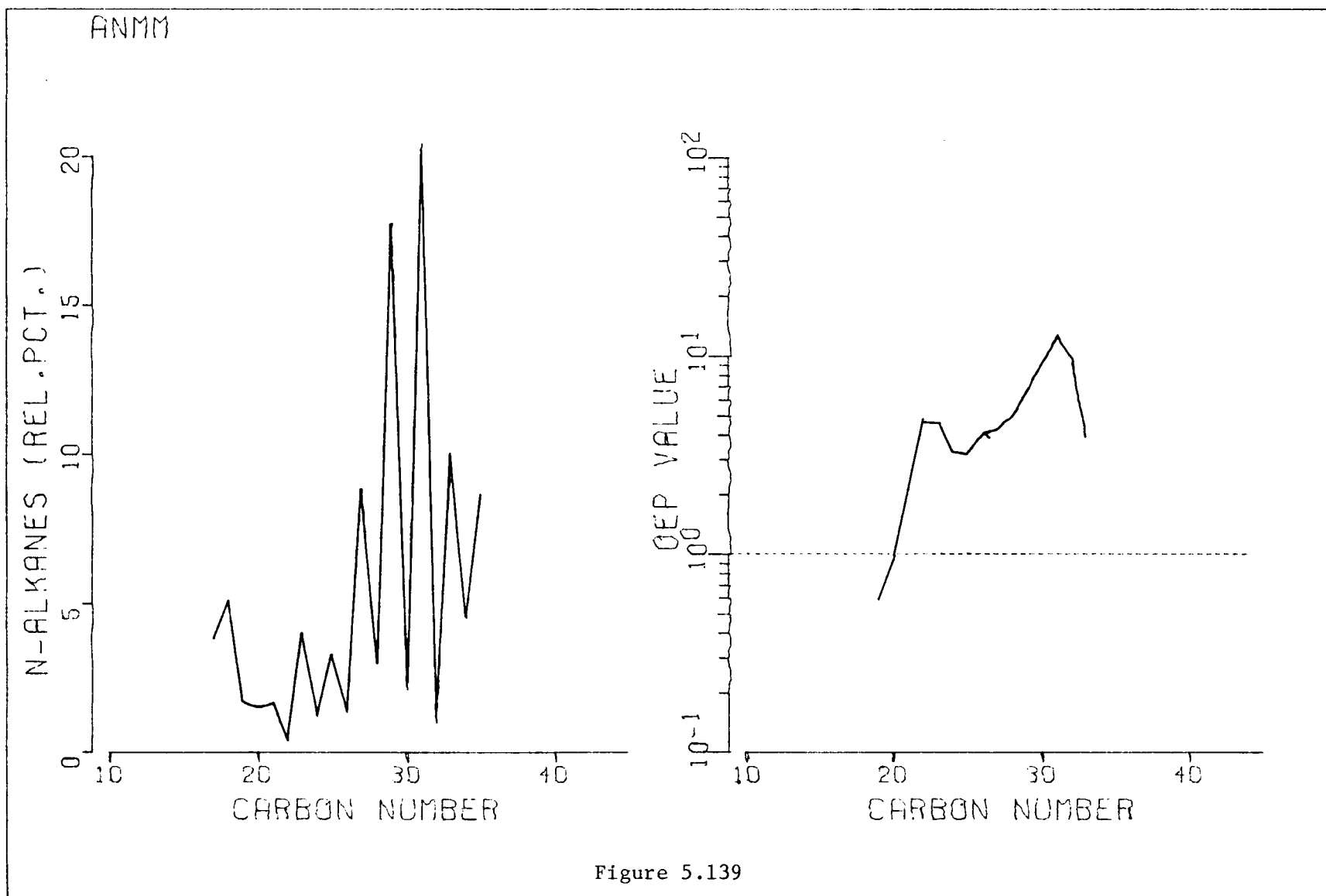


Figure 5.138



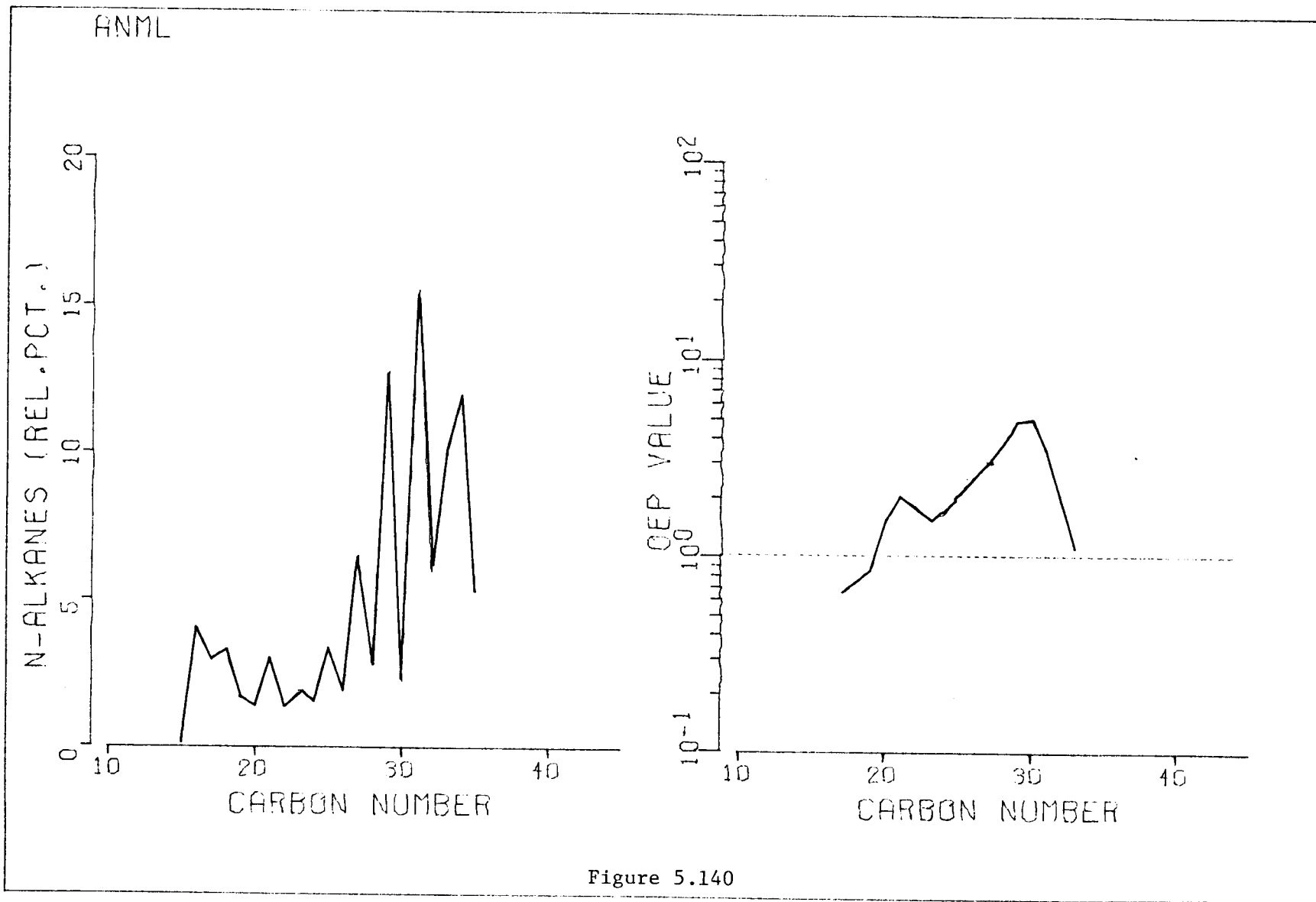


Figure 5.140

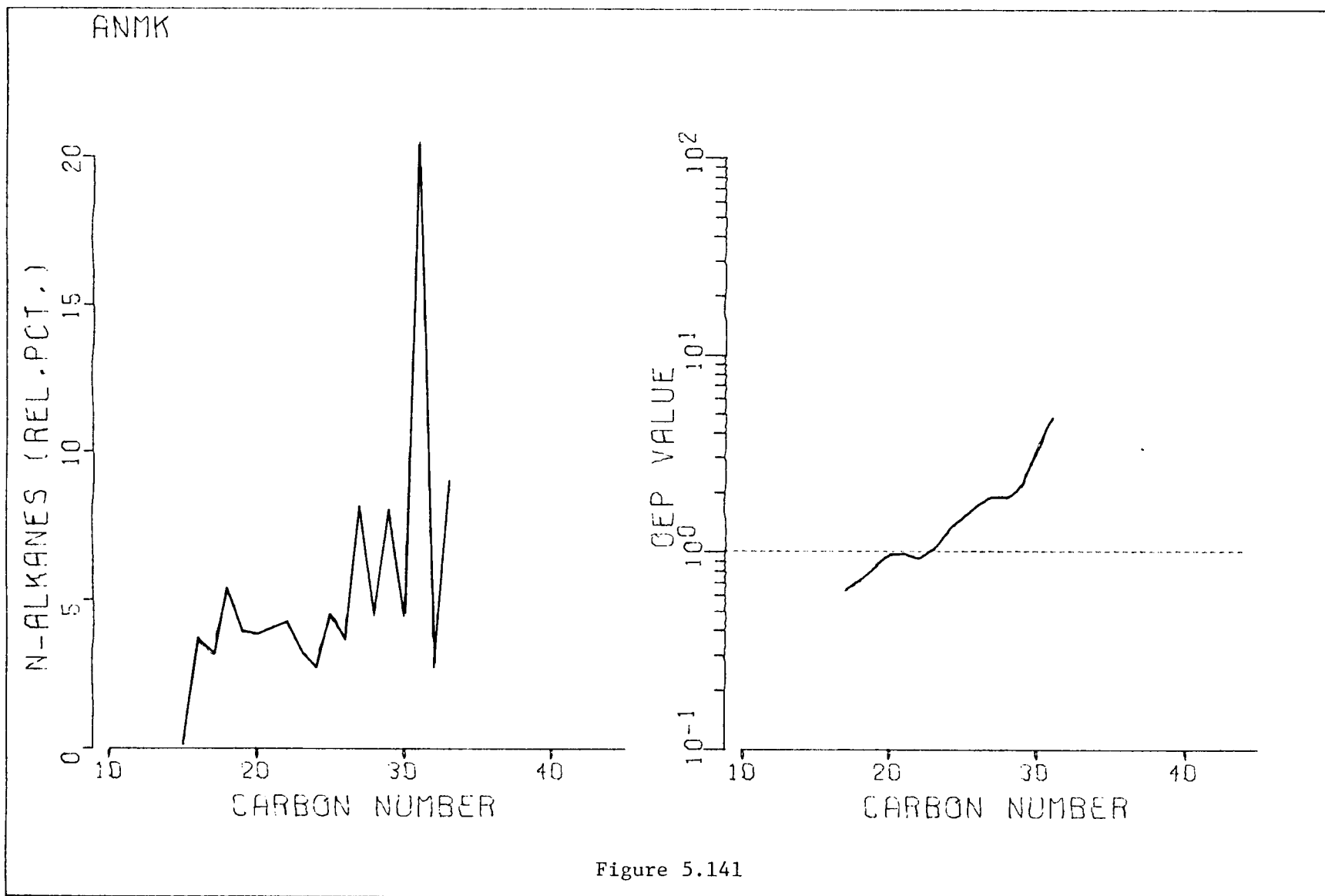


Figure 5.141

ANMJ

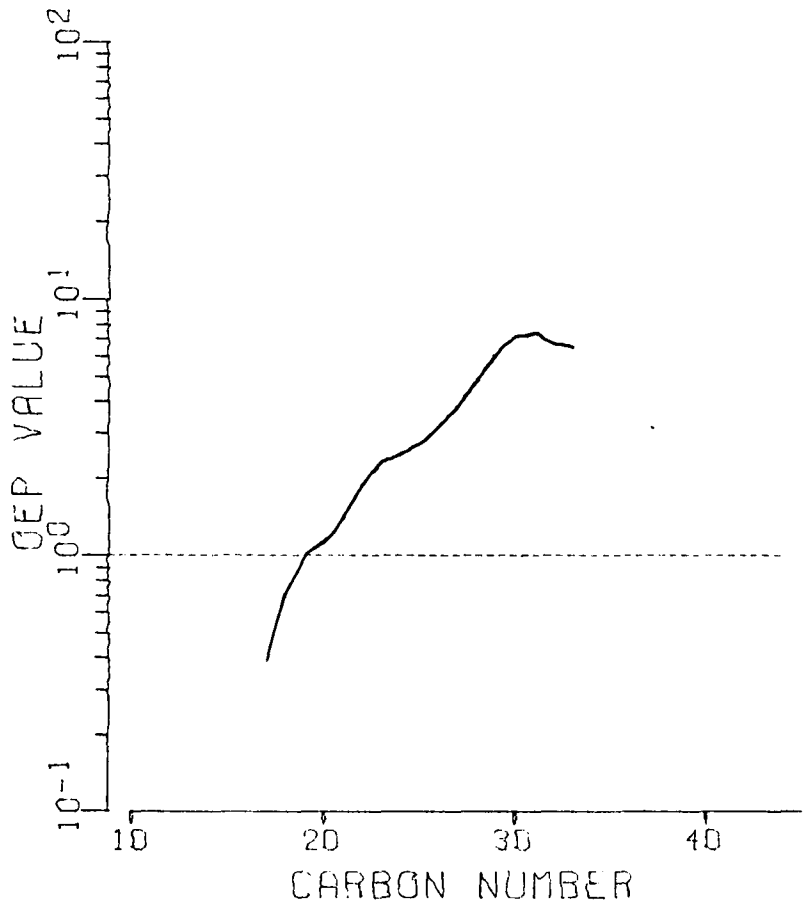
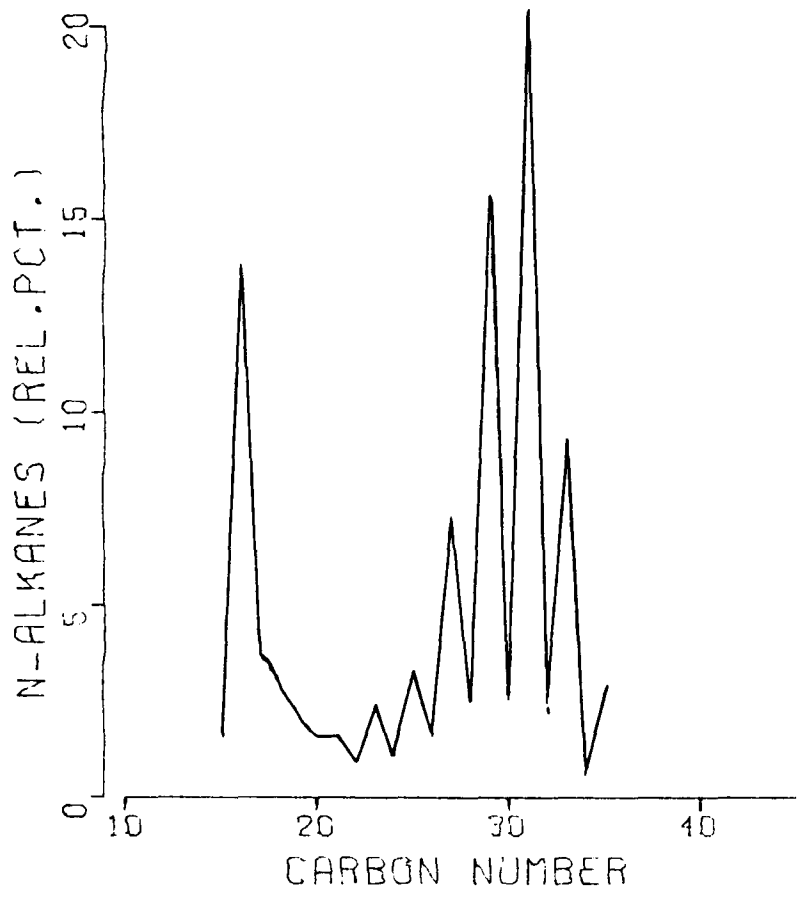


Figure 5.142

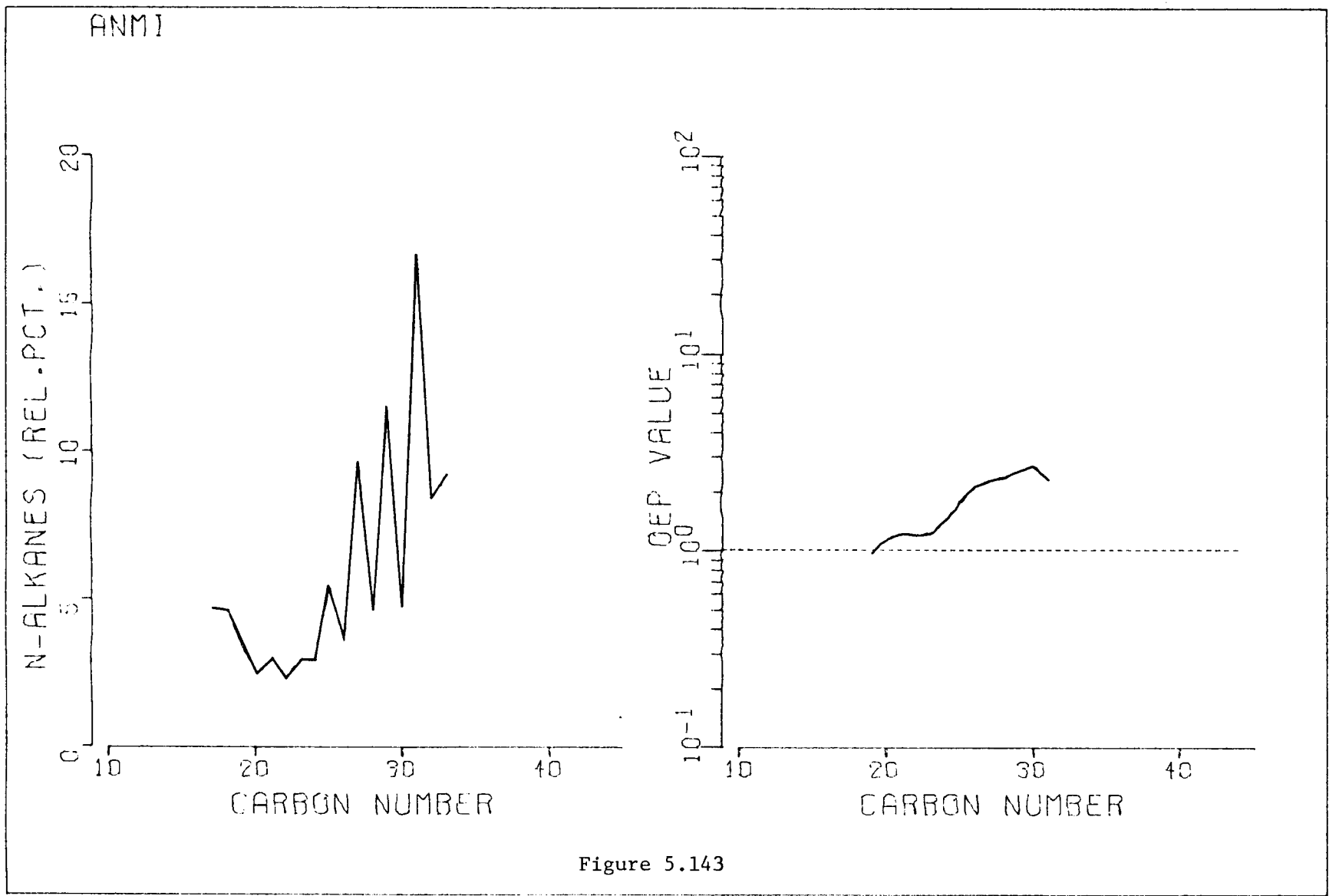


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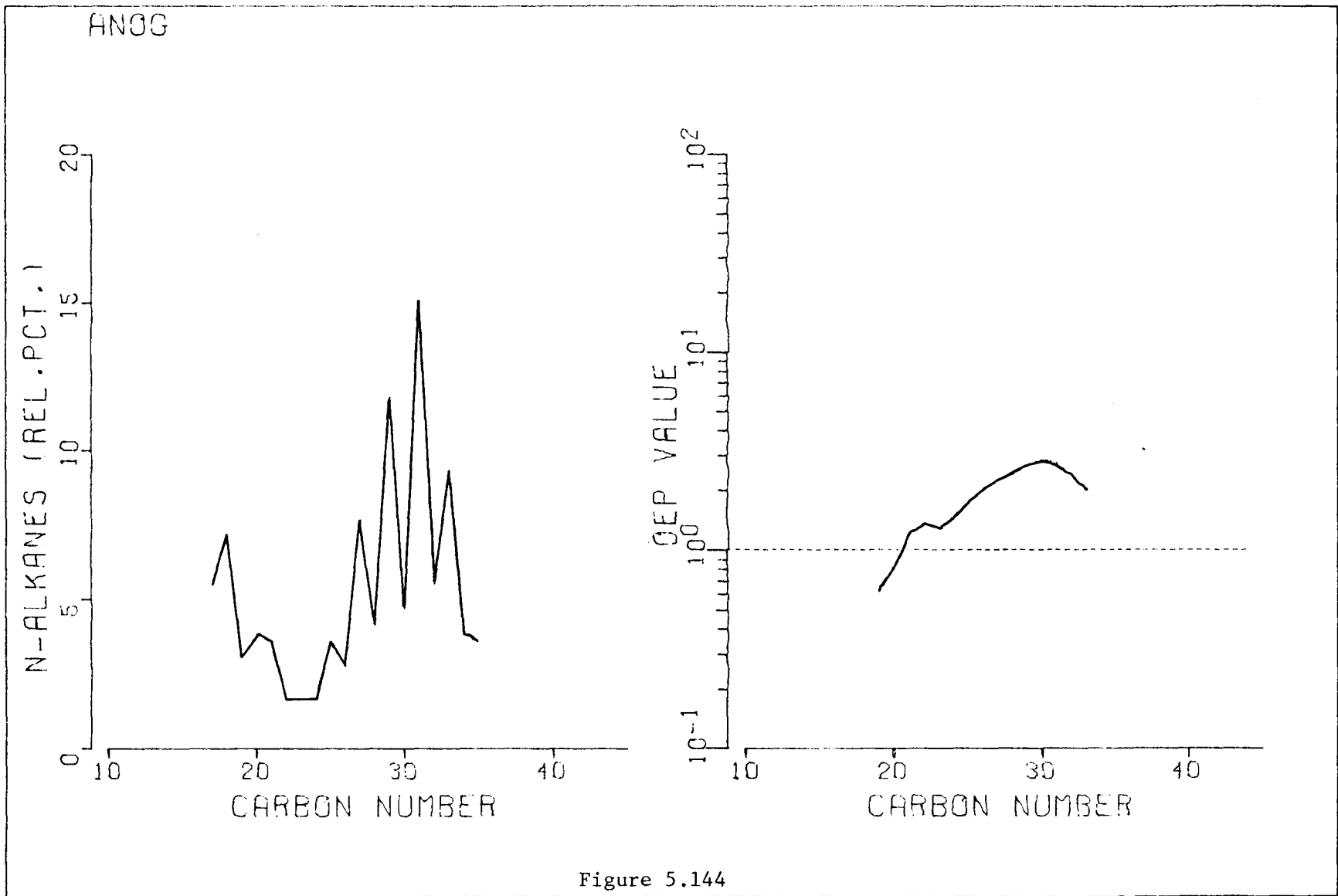


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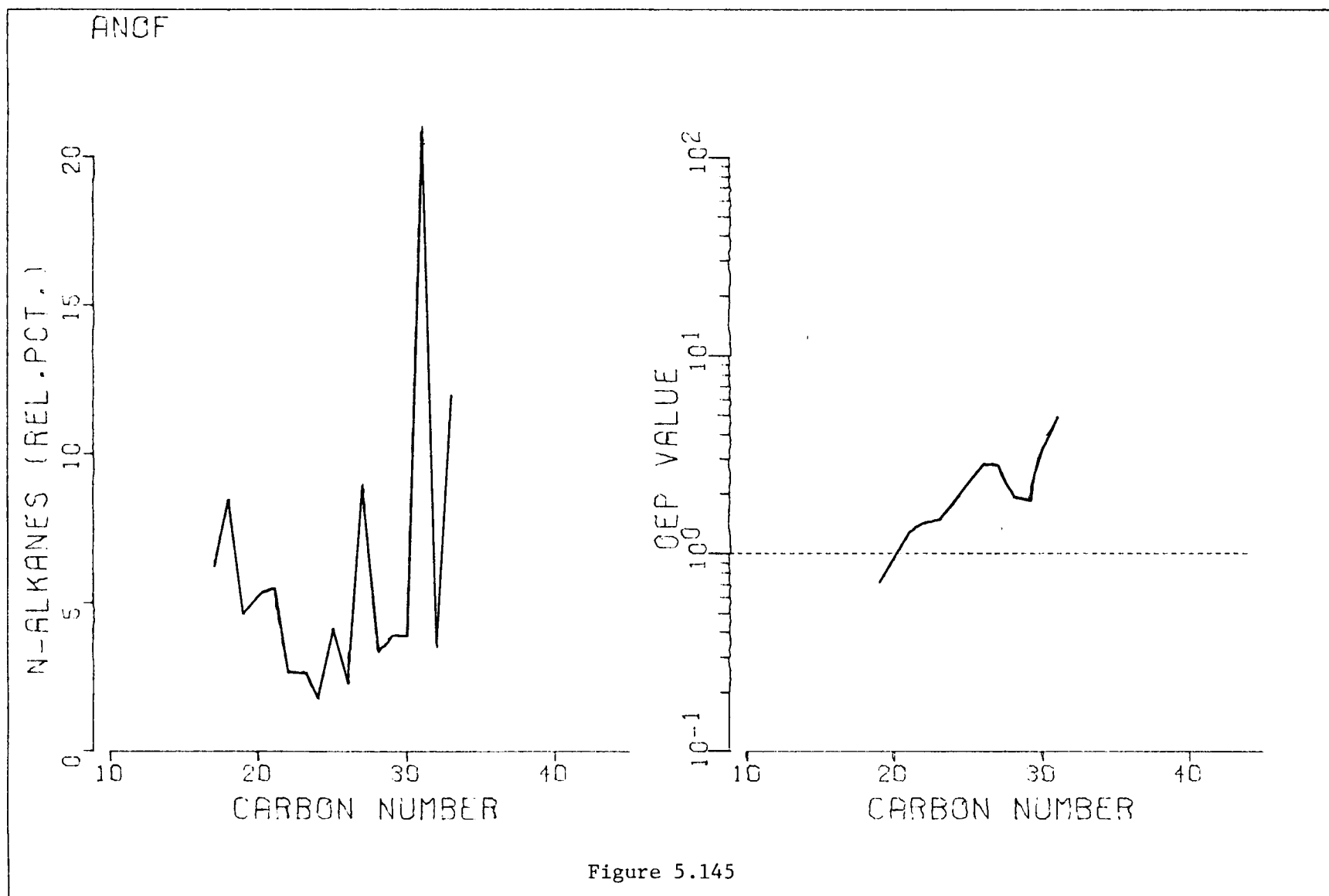


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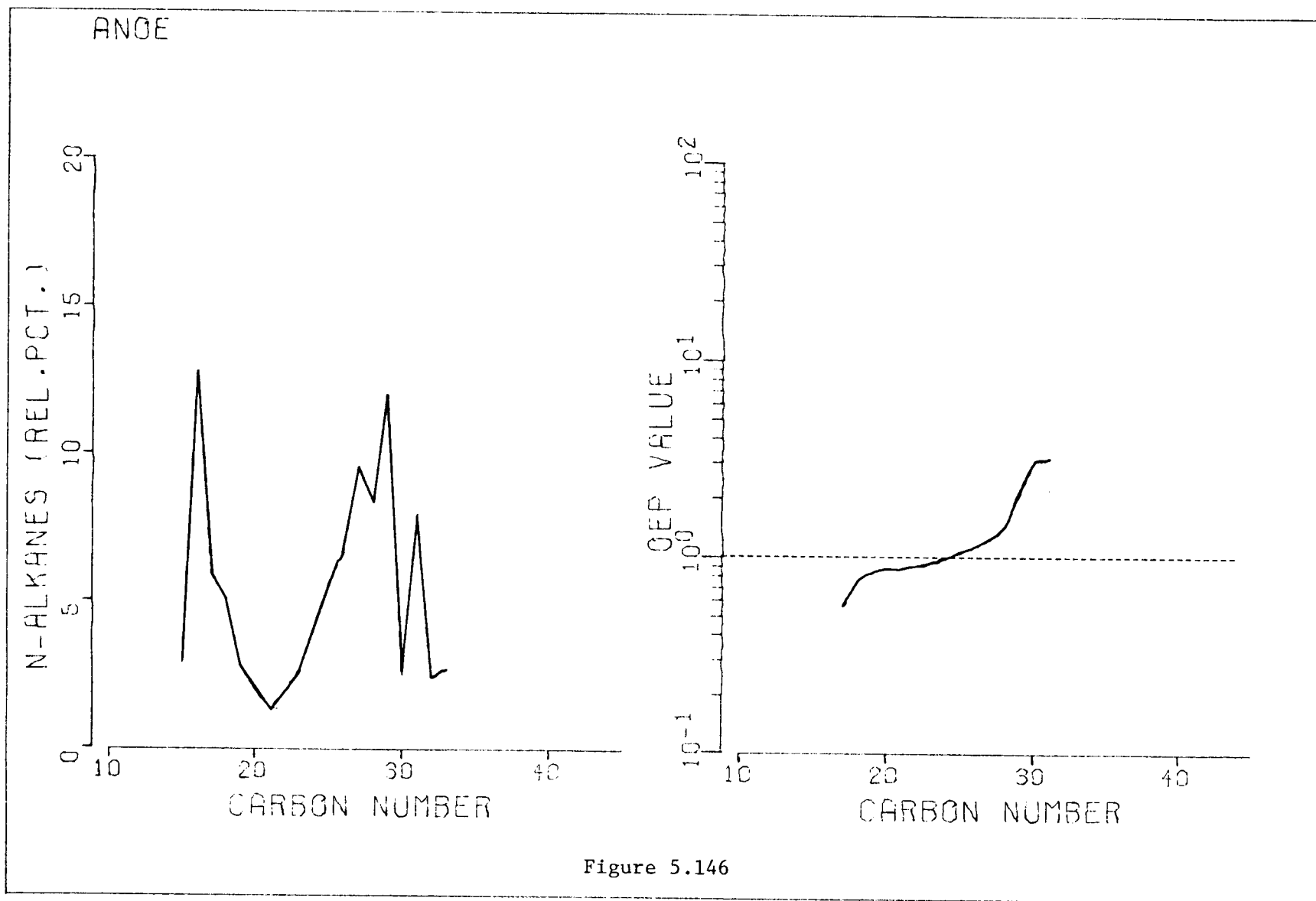
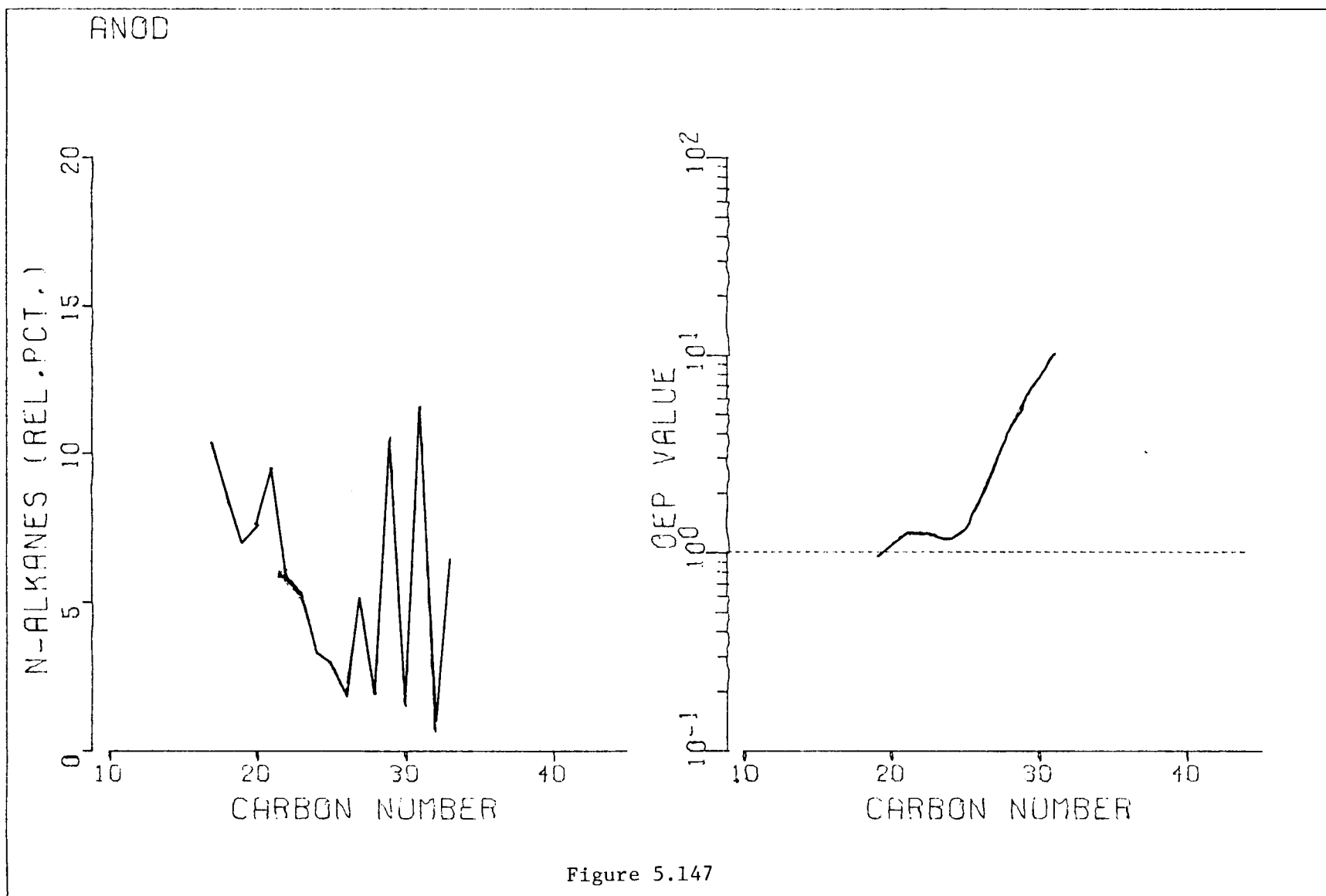


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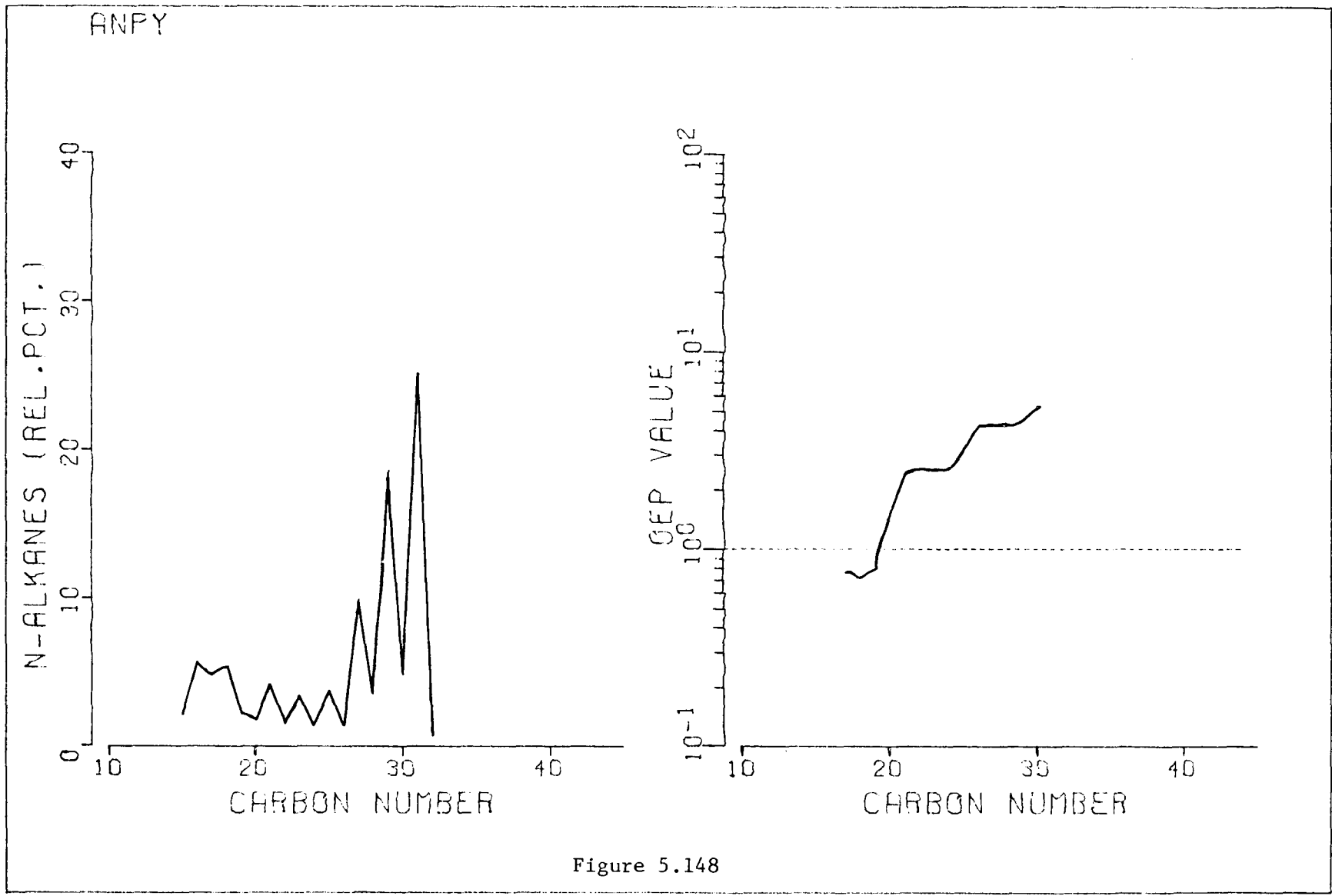


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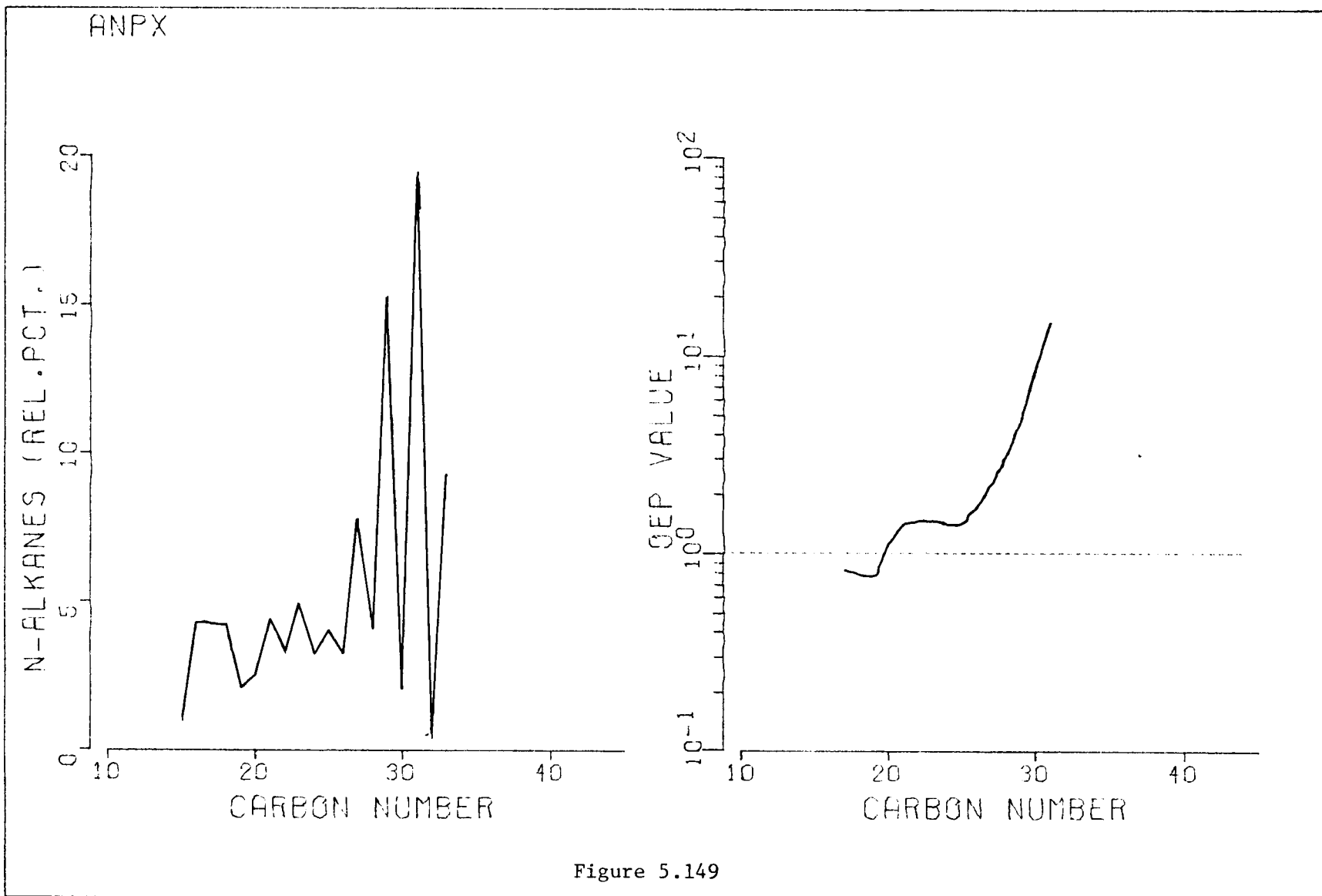


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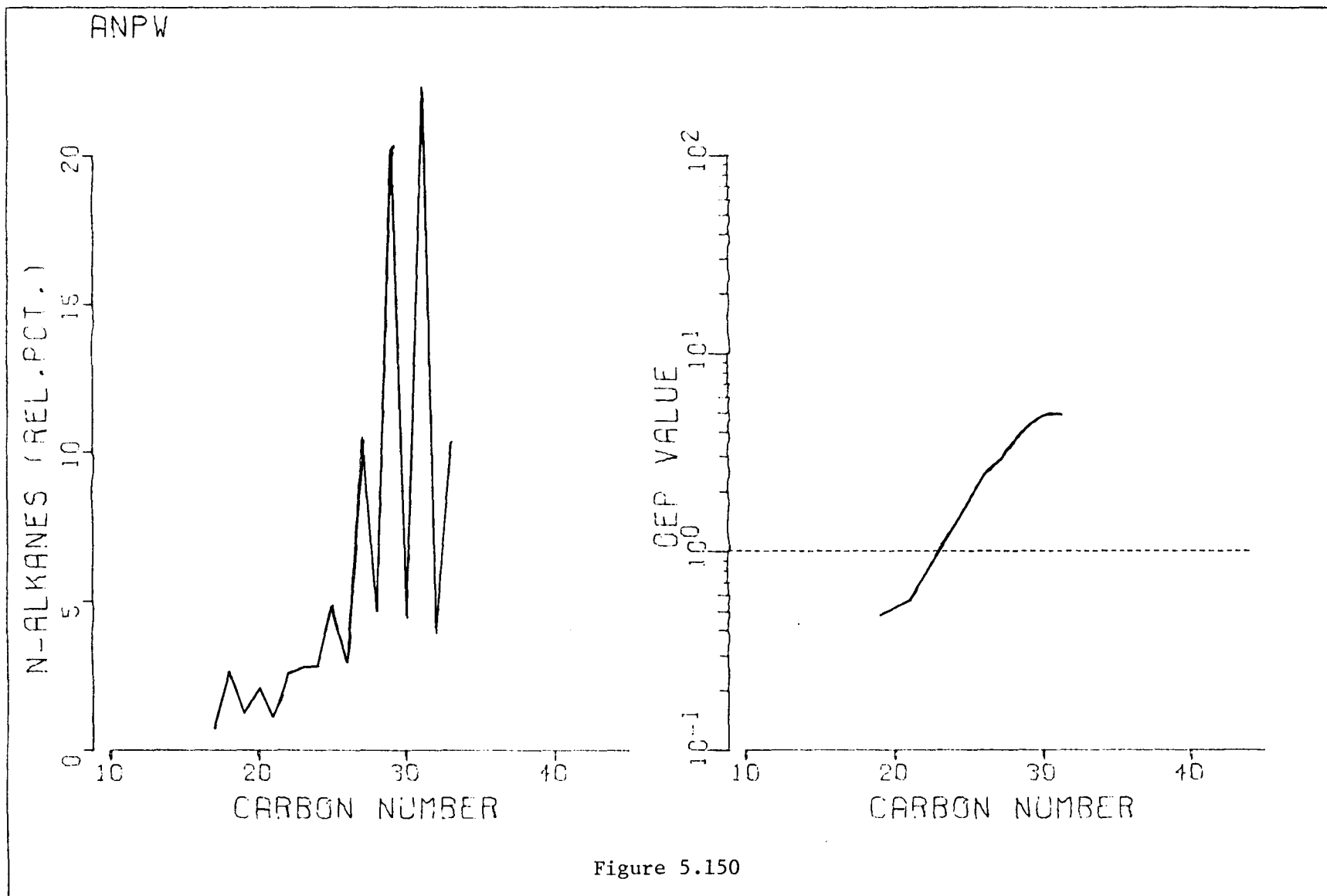


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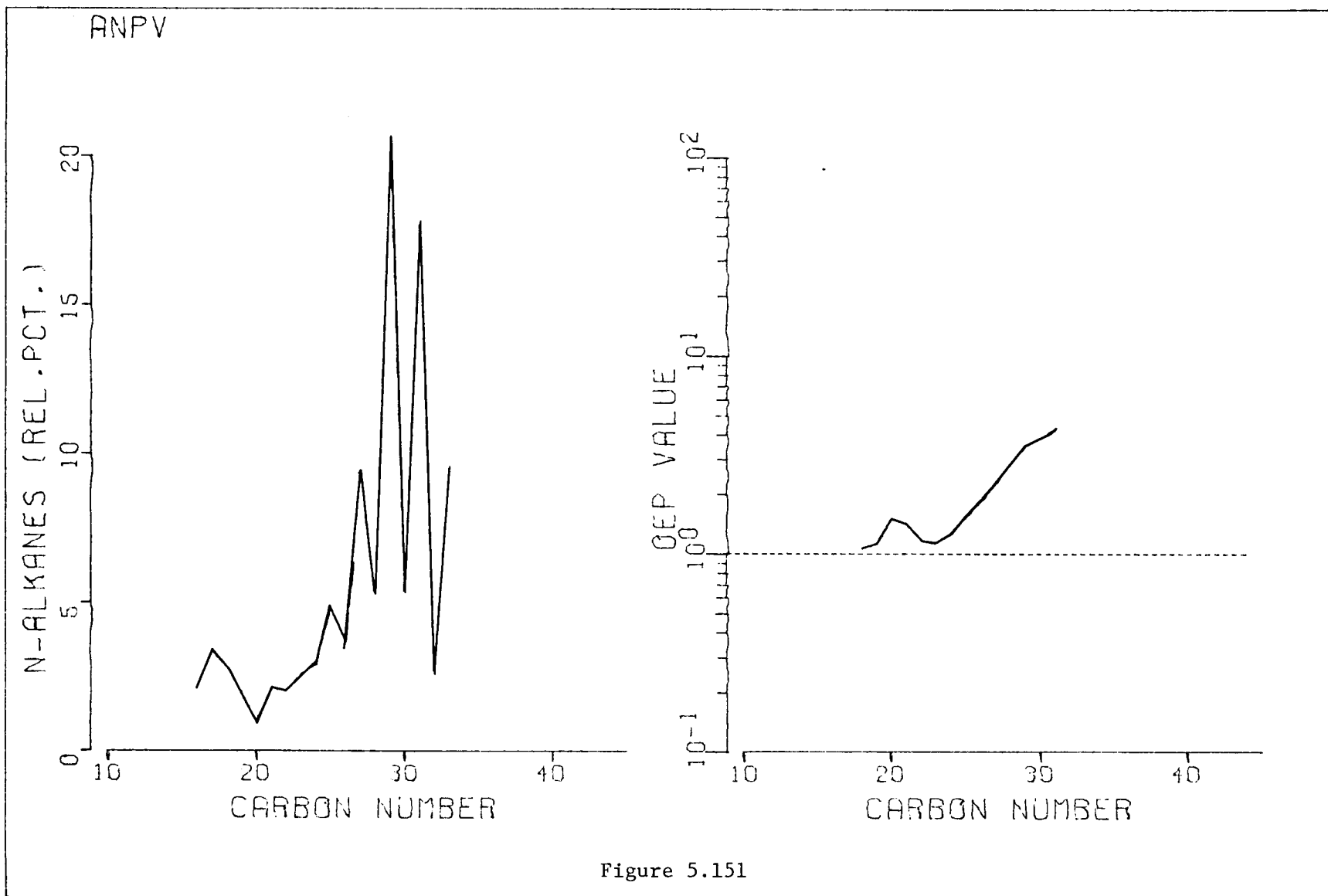


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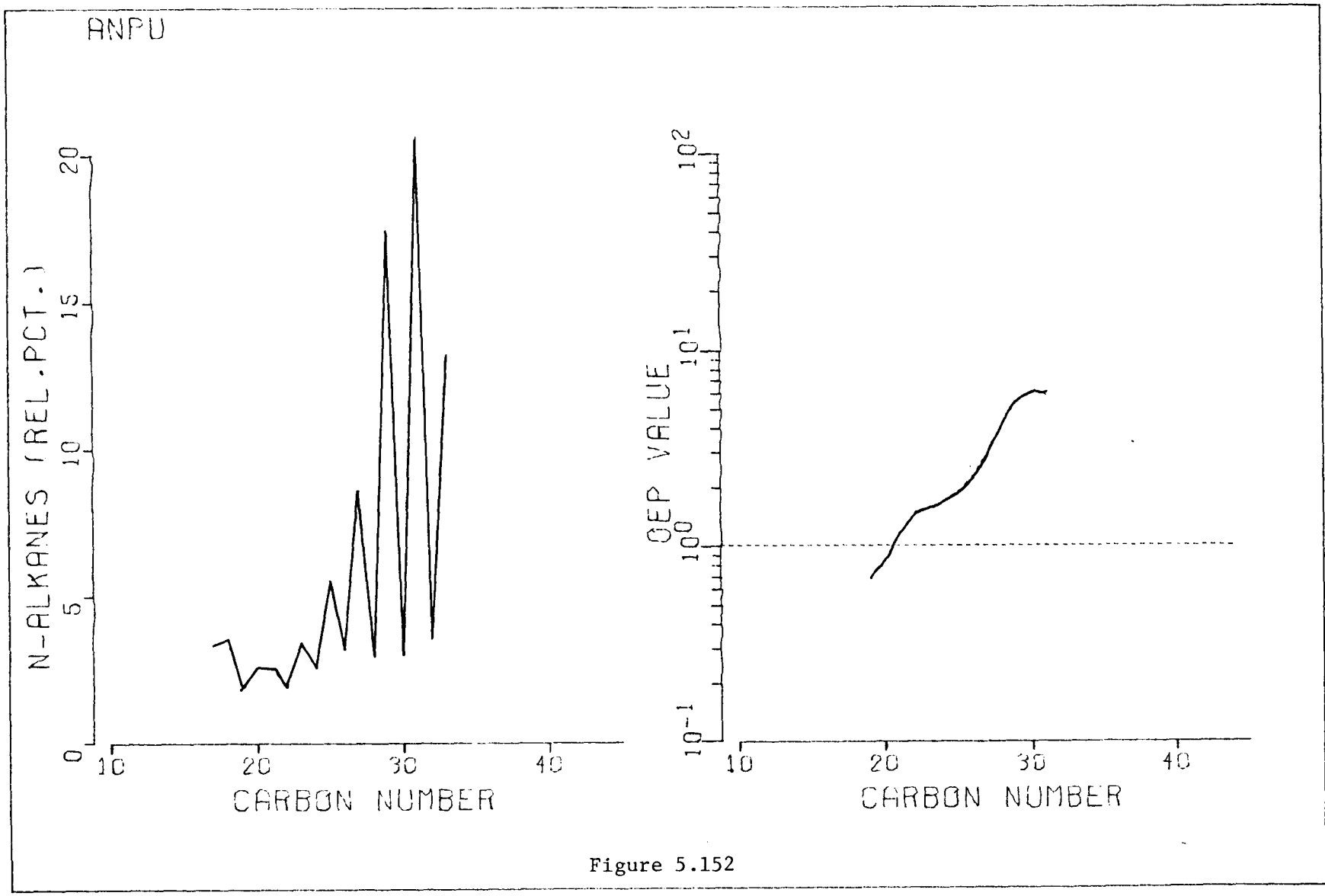


Figure 5.152

ANRP

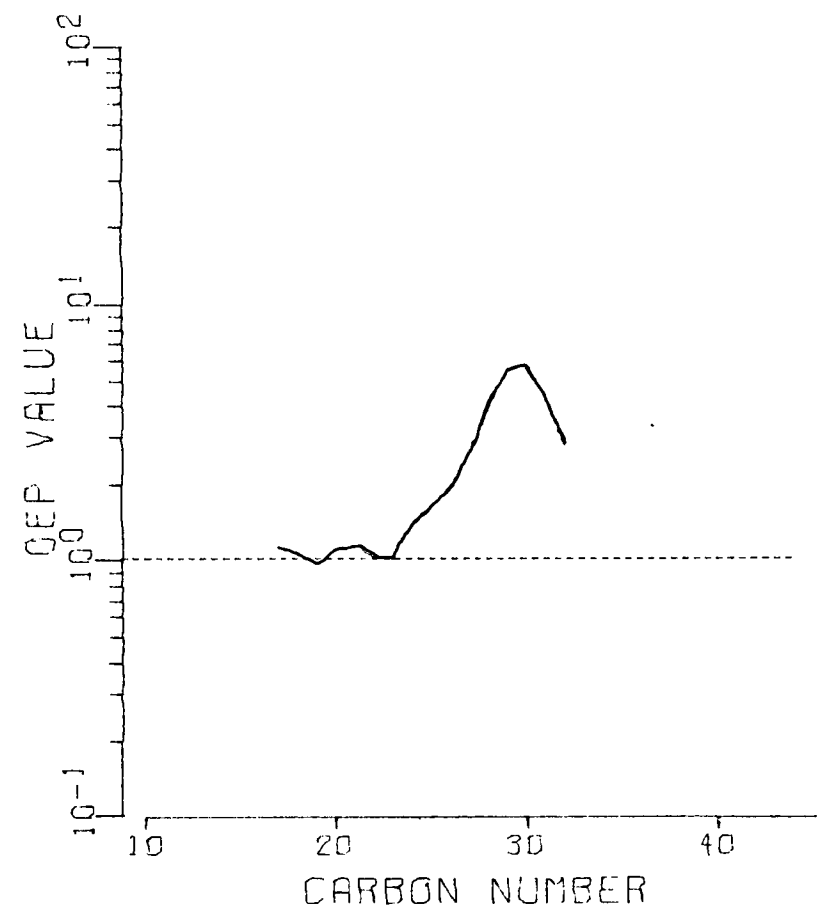
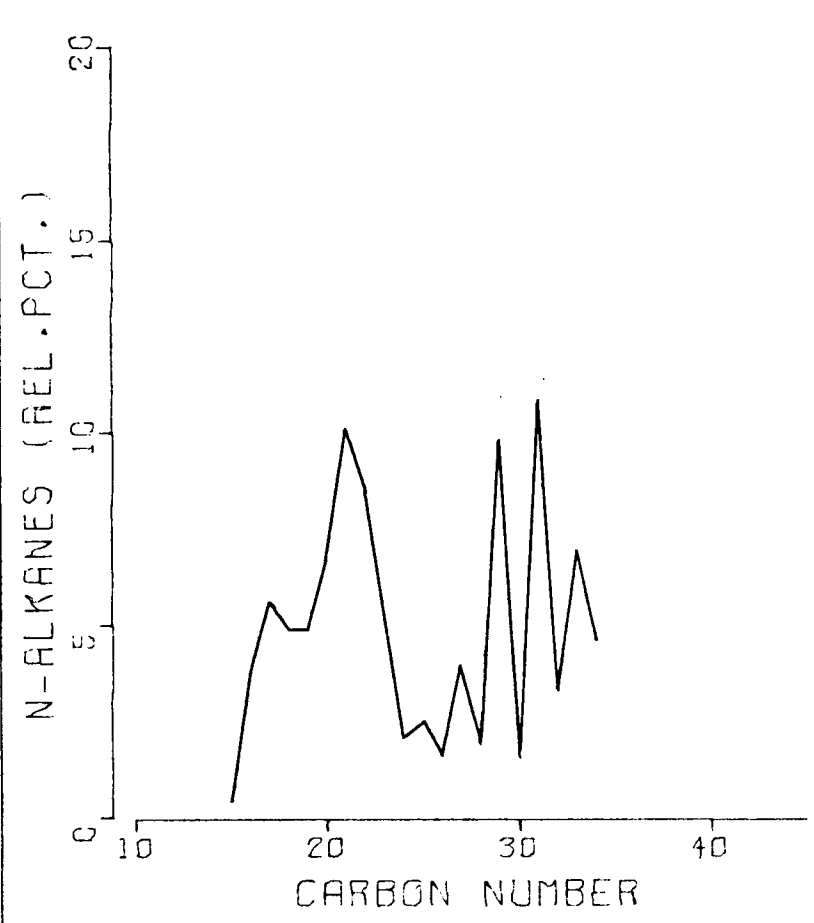


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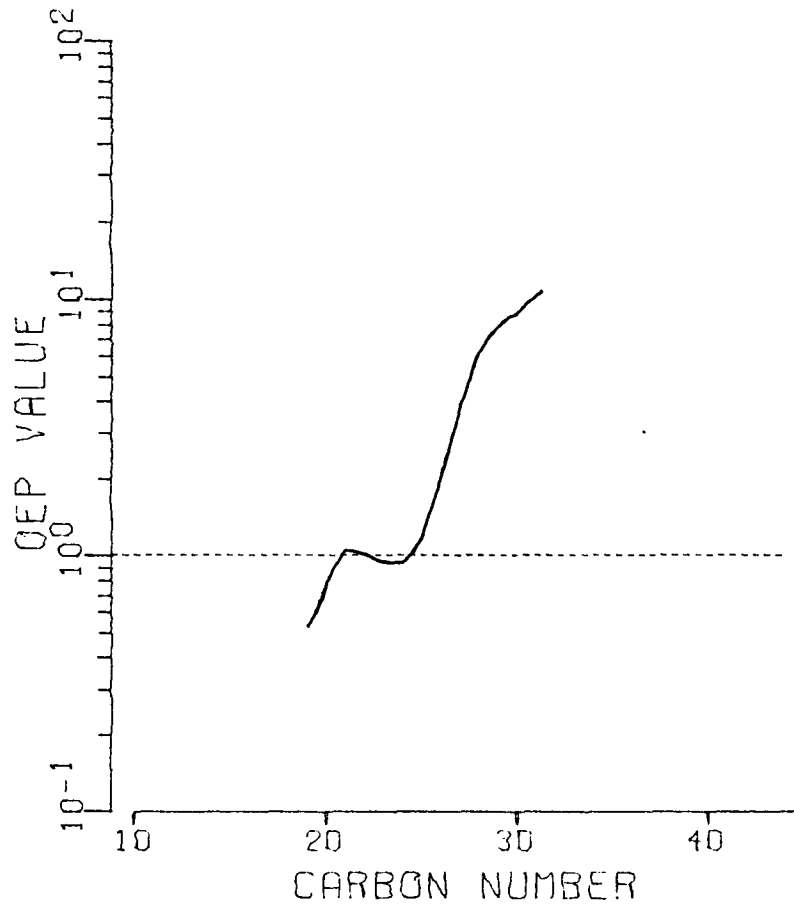
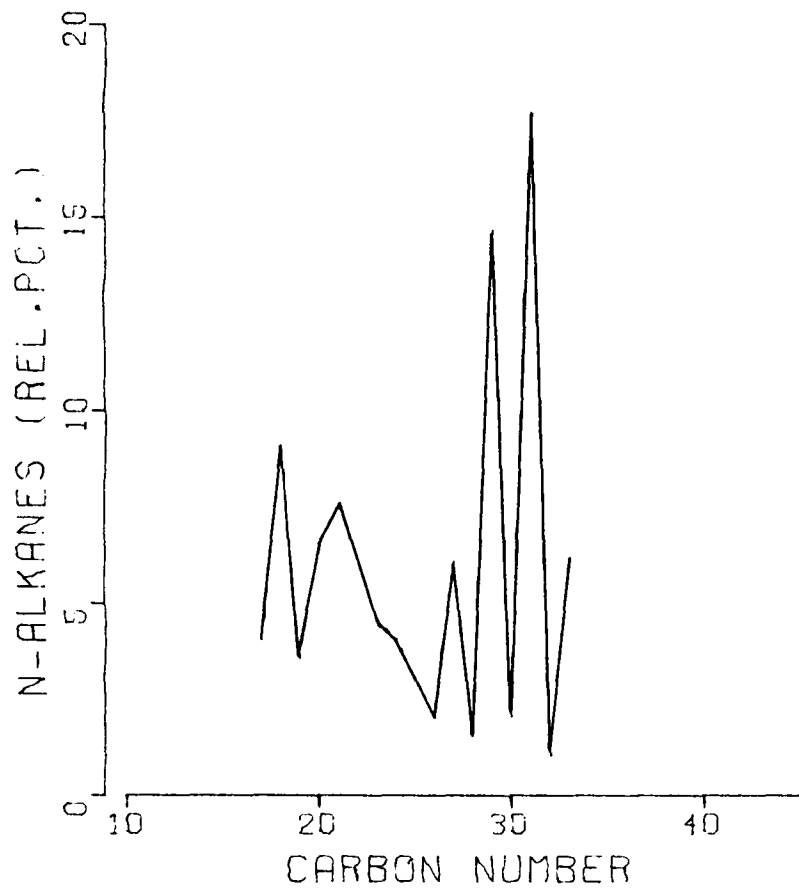


Figure 5.154

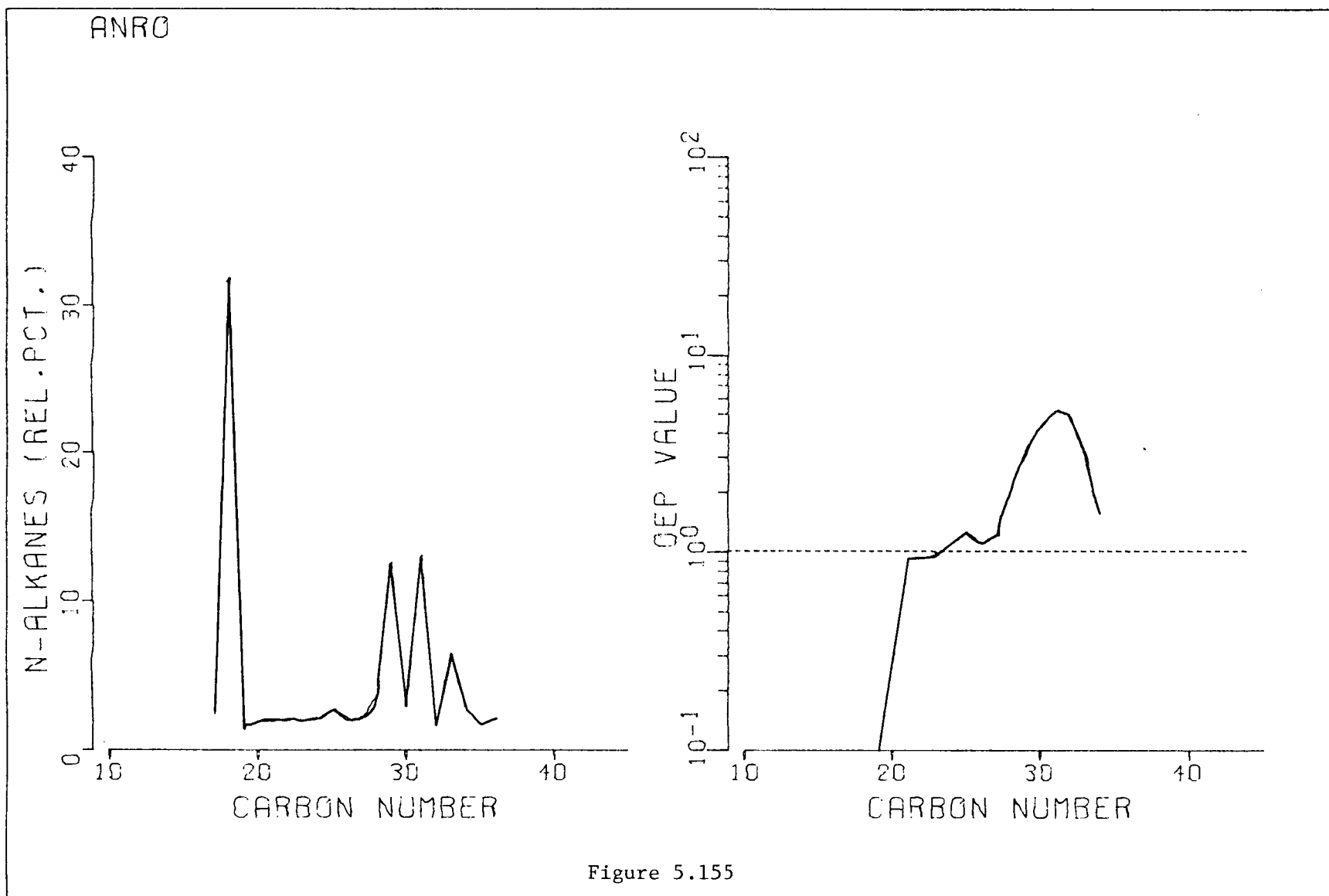


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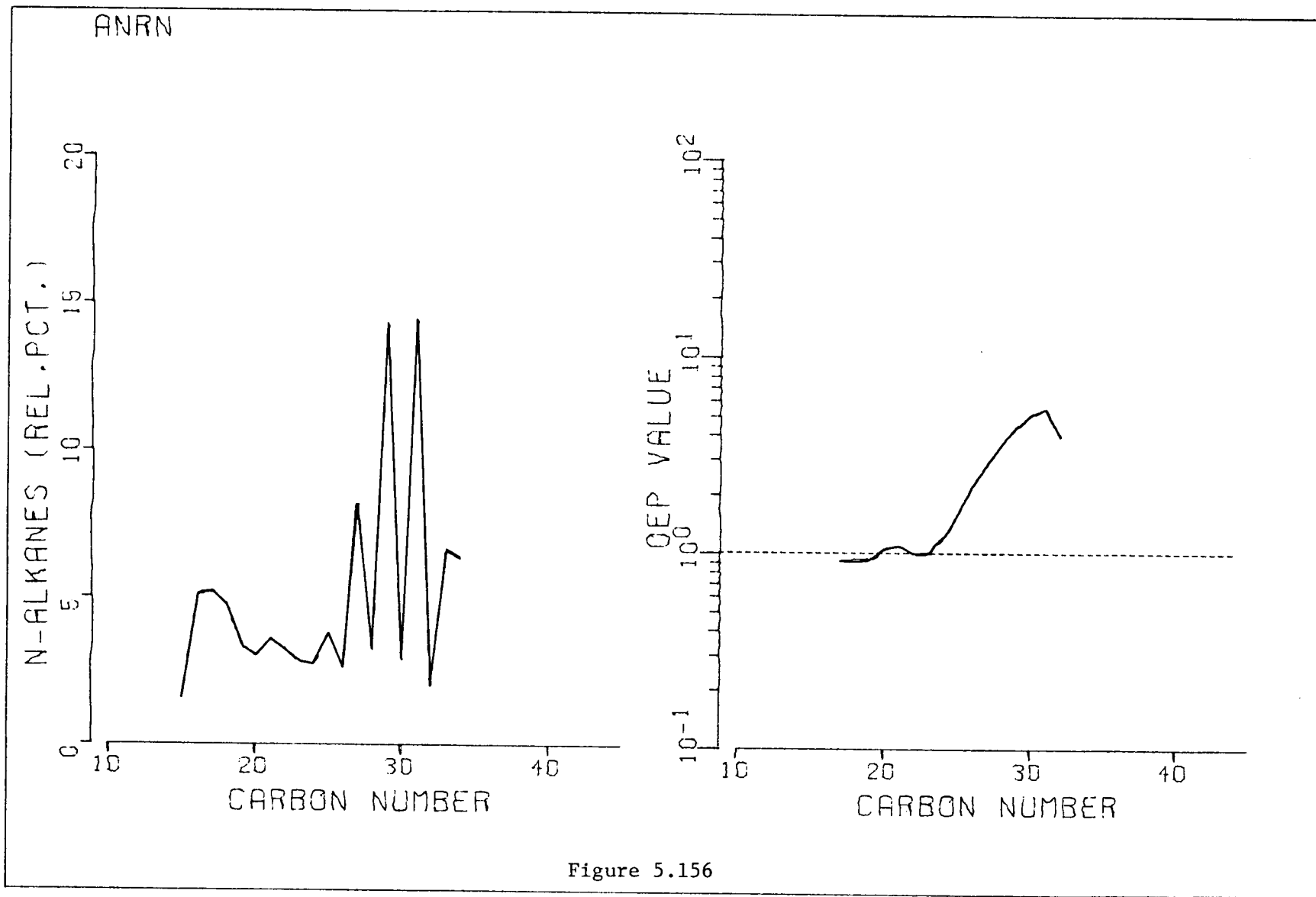


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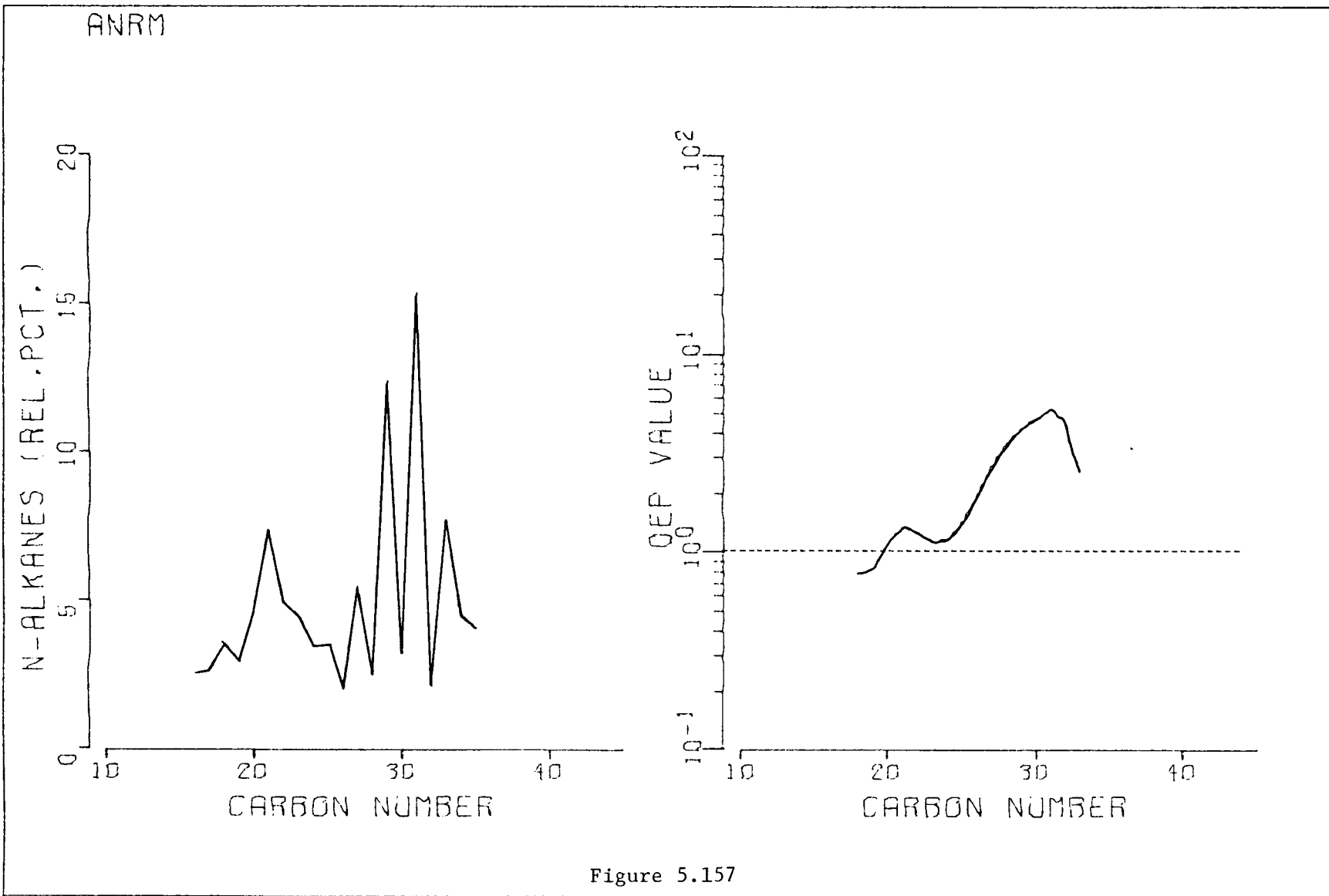


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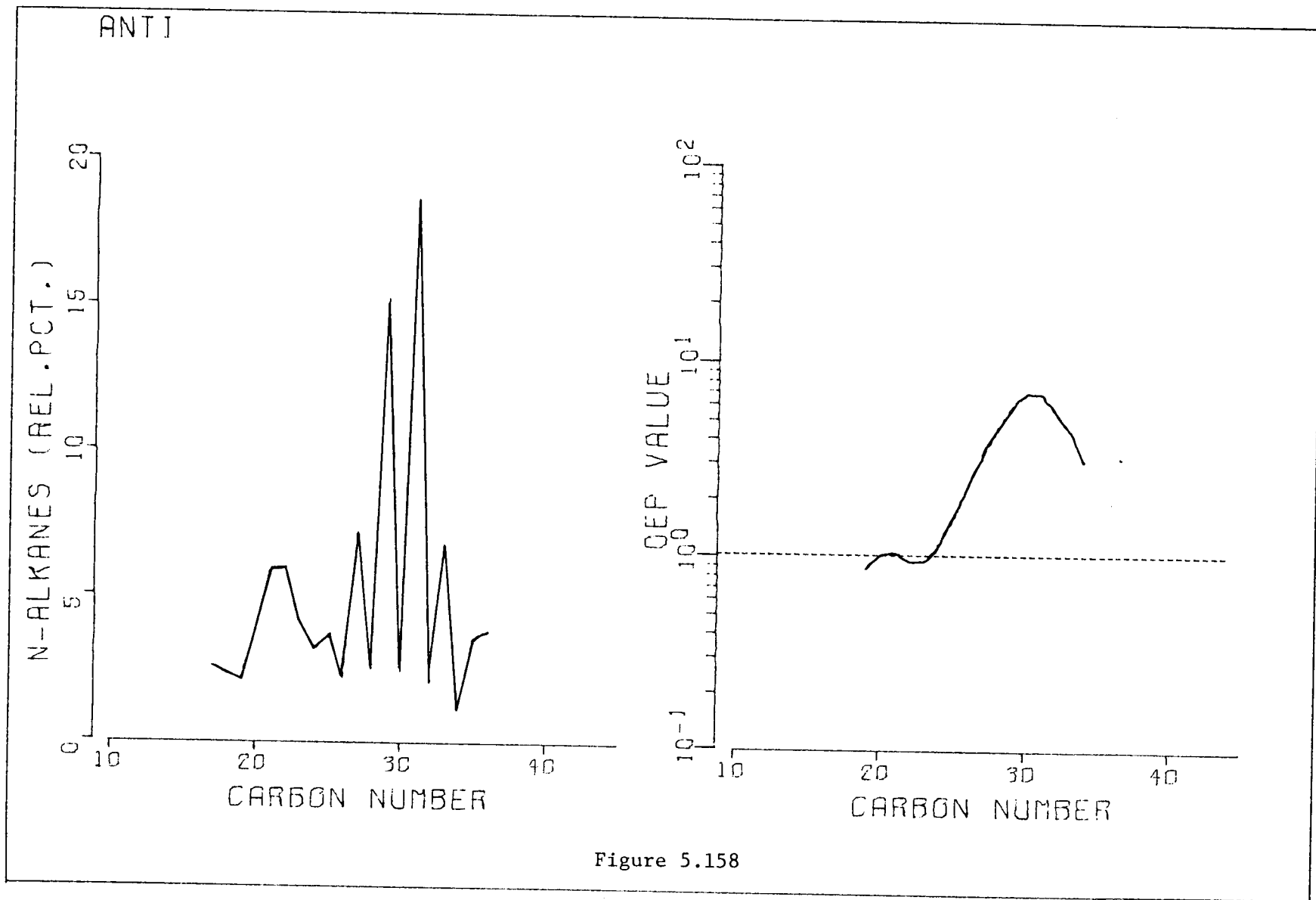


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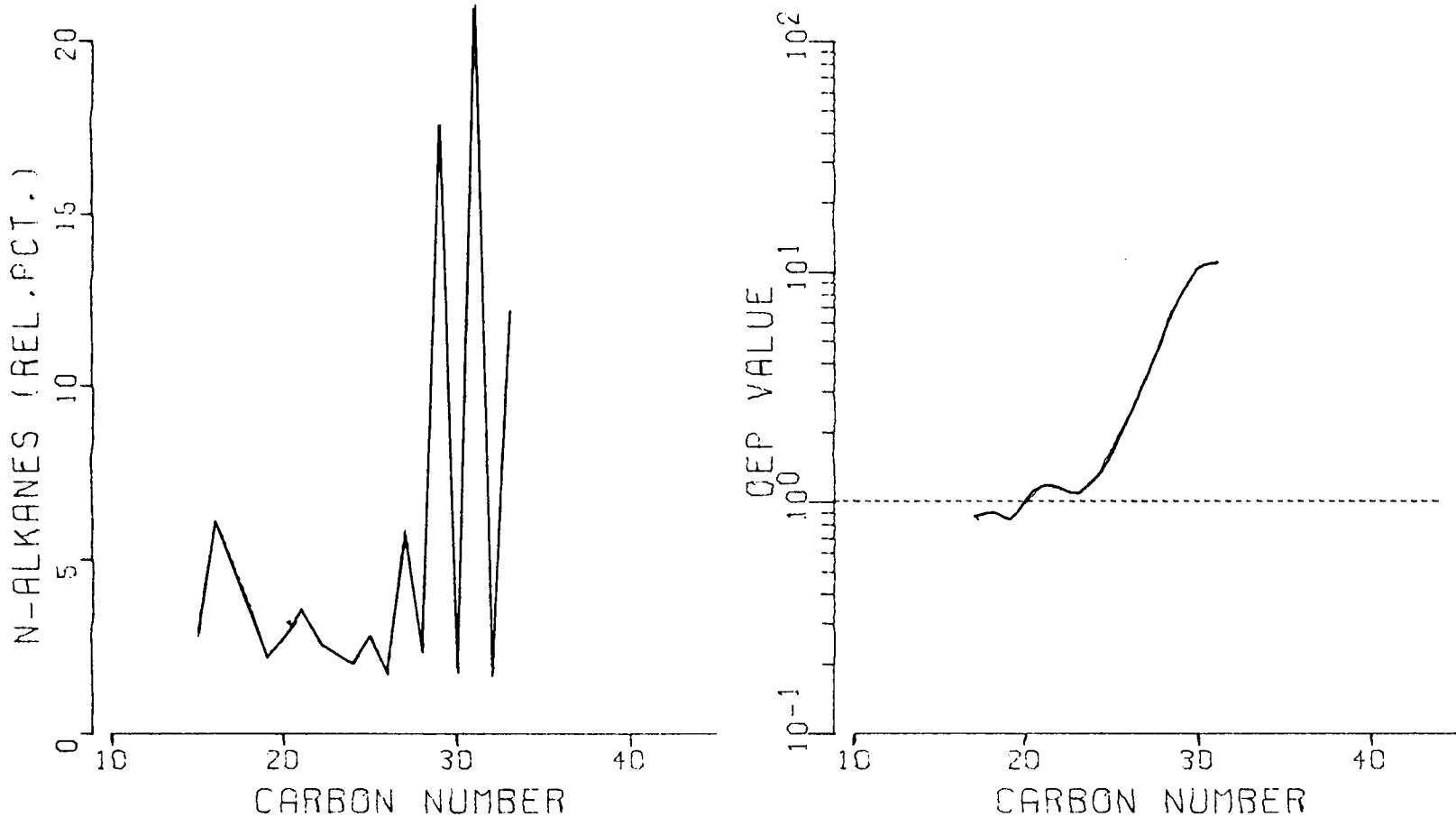


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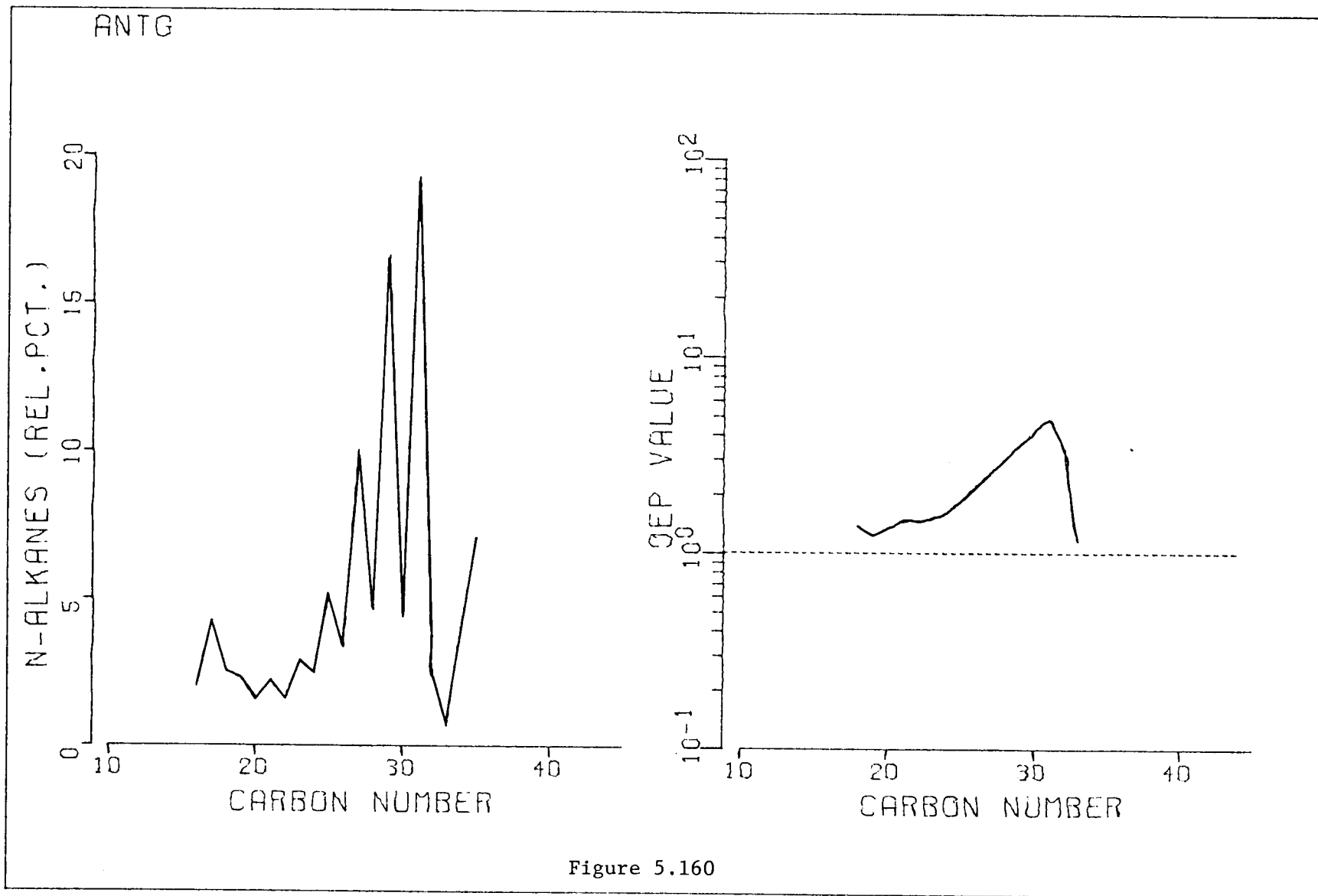
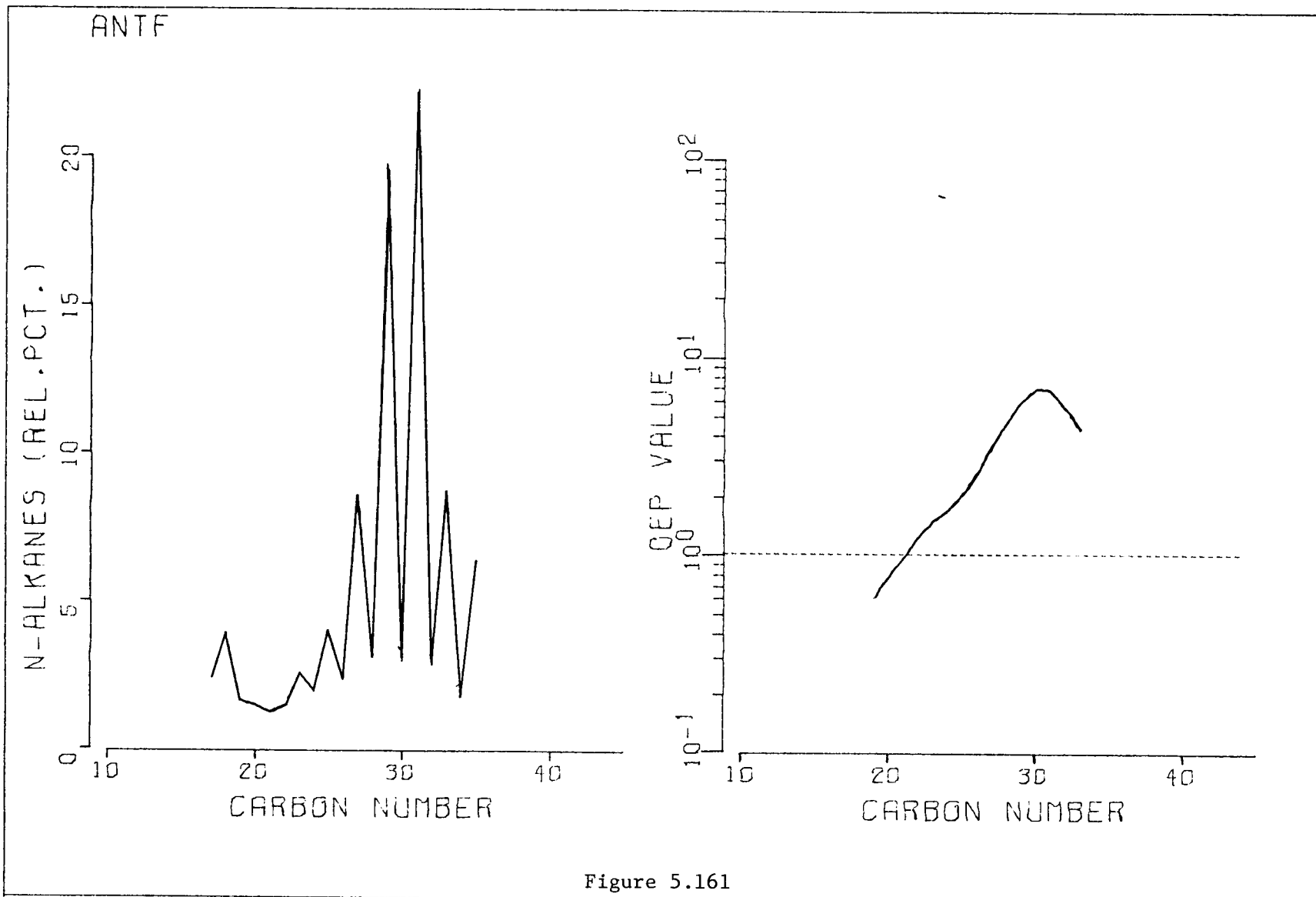


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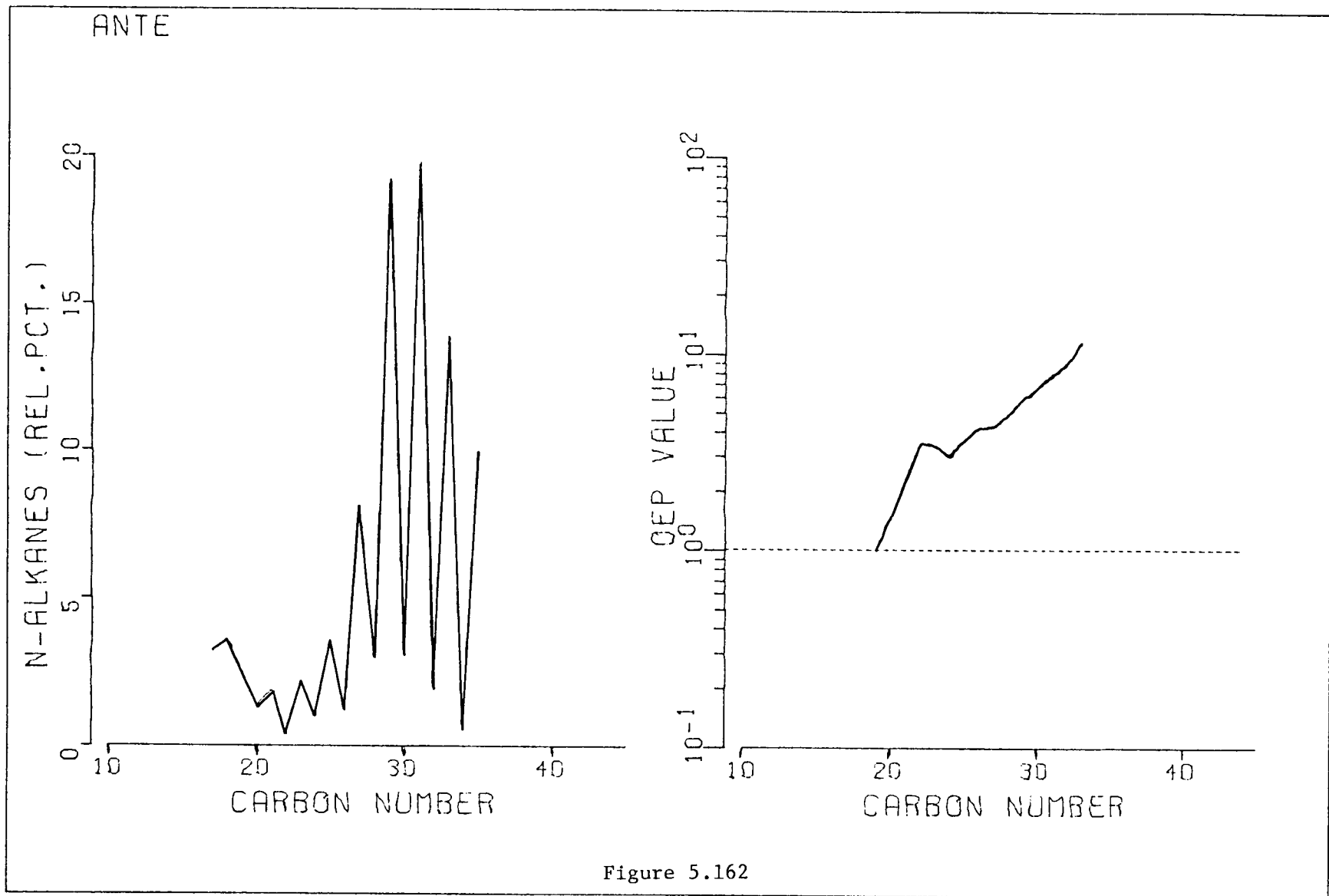


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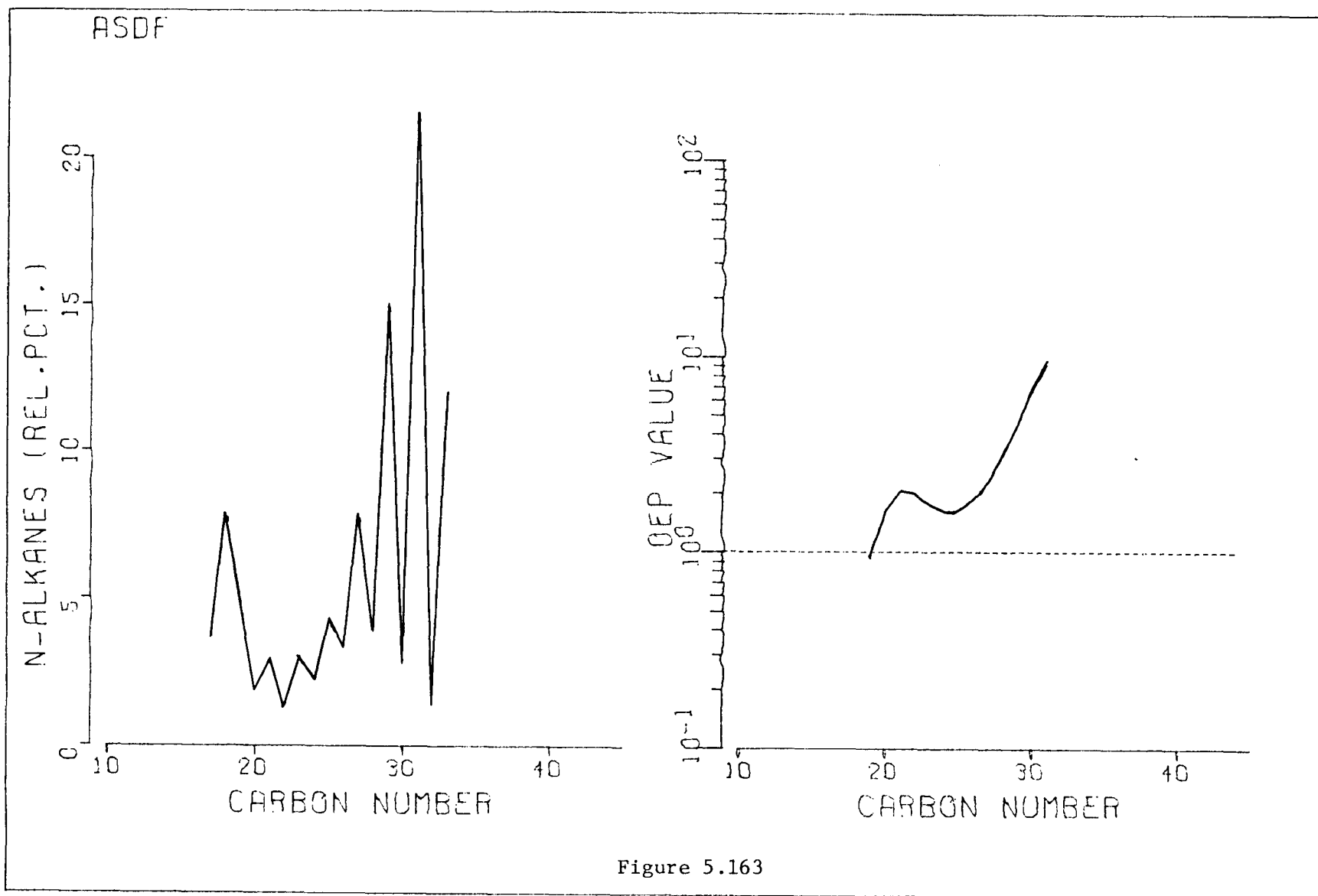


Figure 5.163

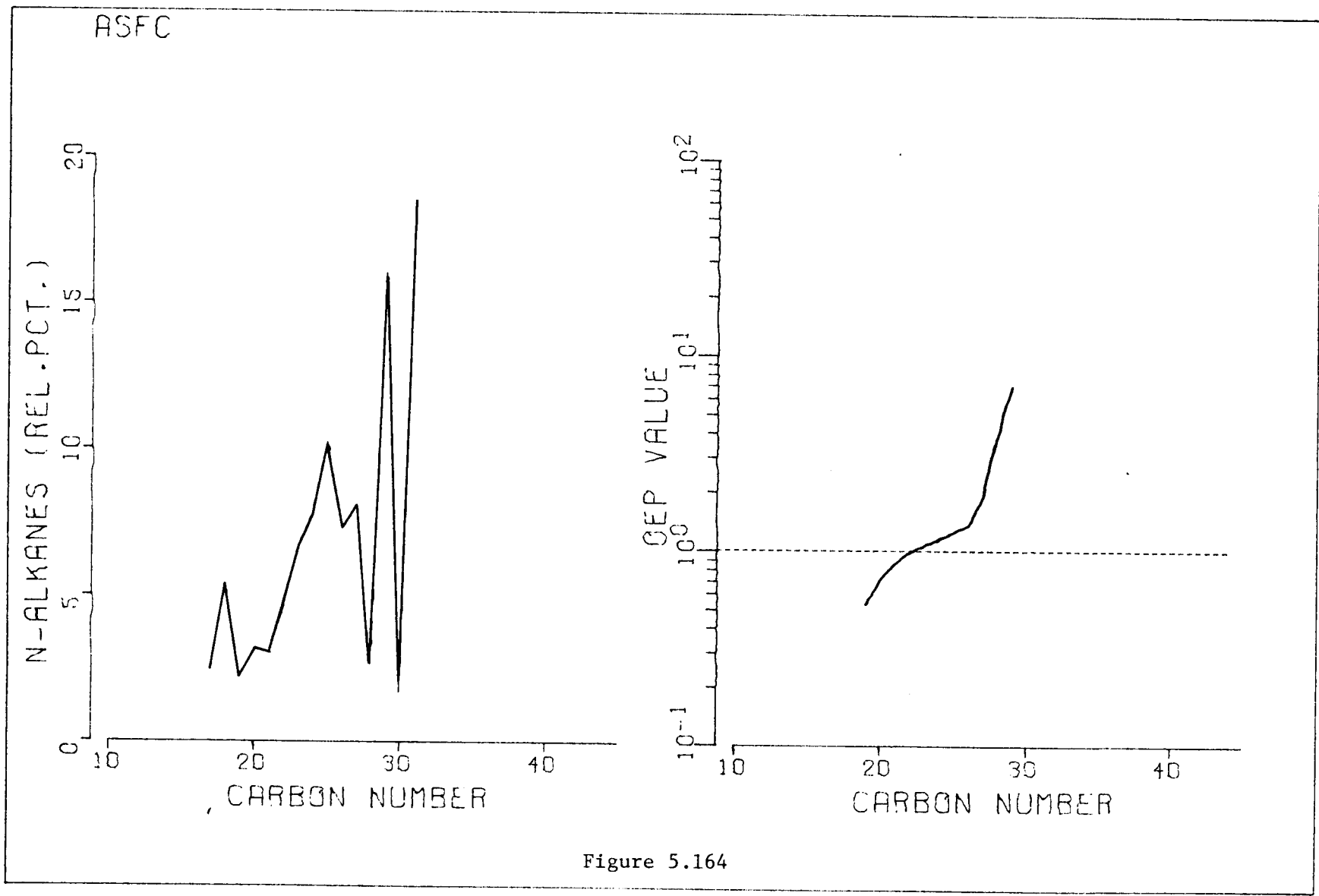
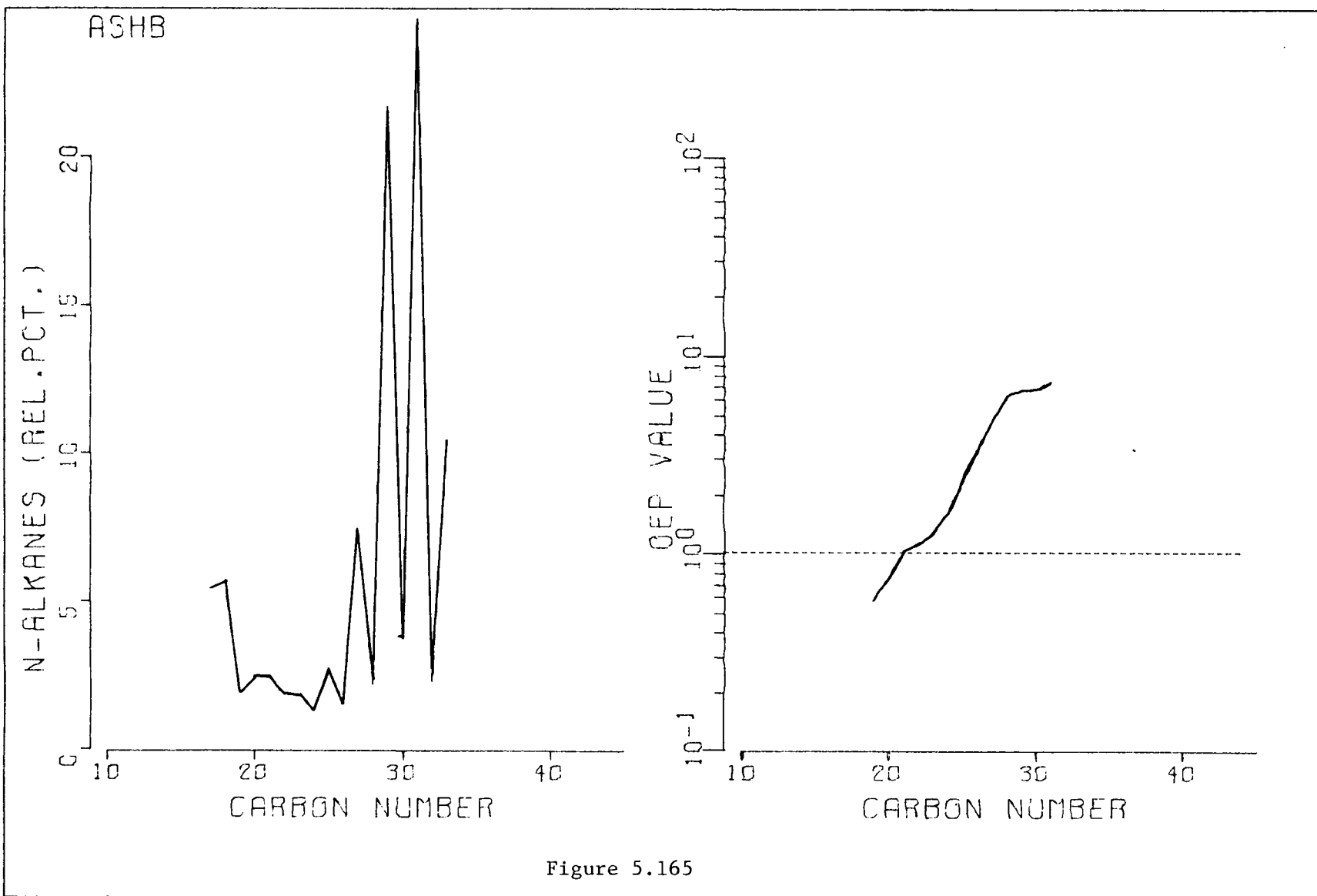


Figure 5.164



AS15

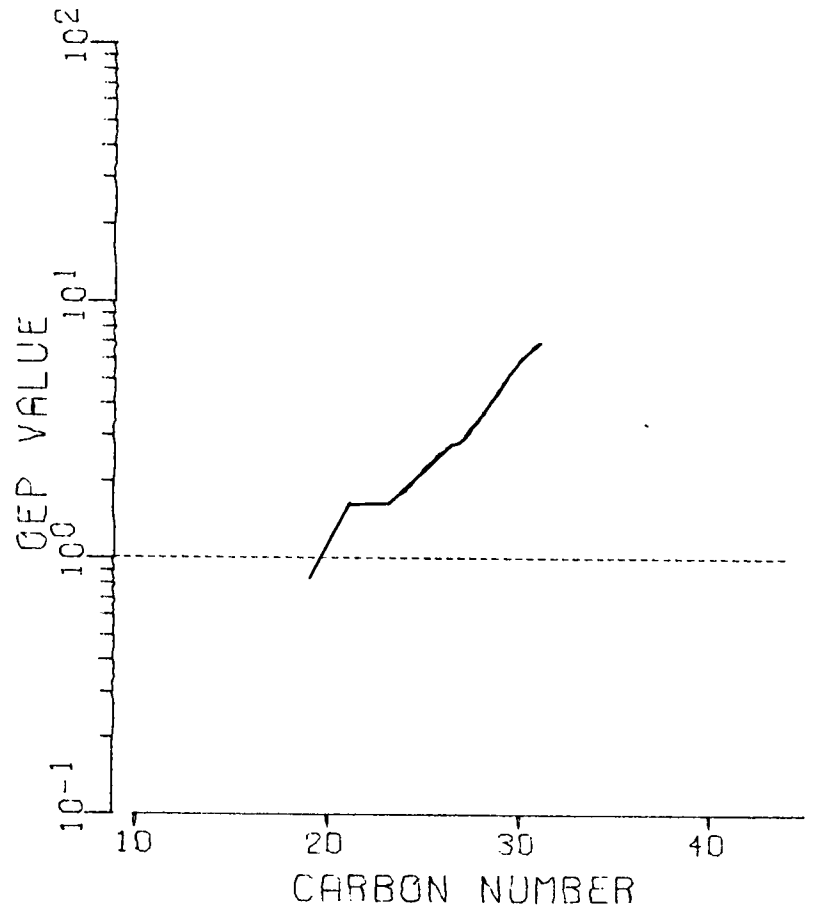
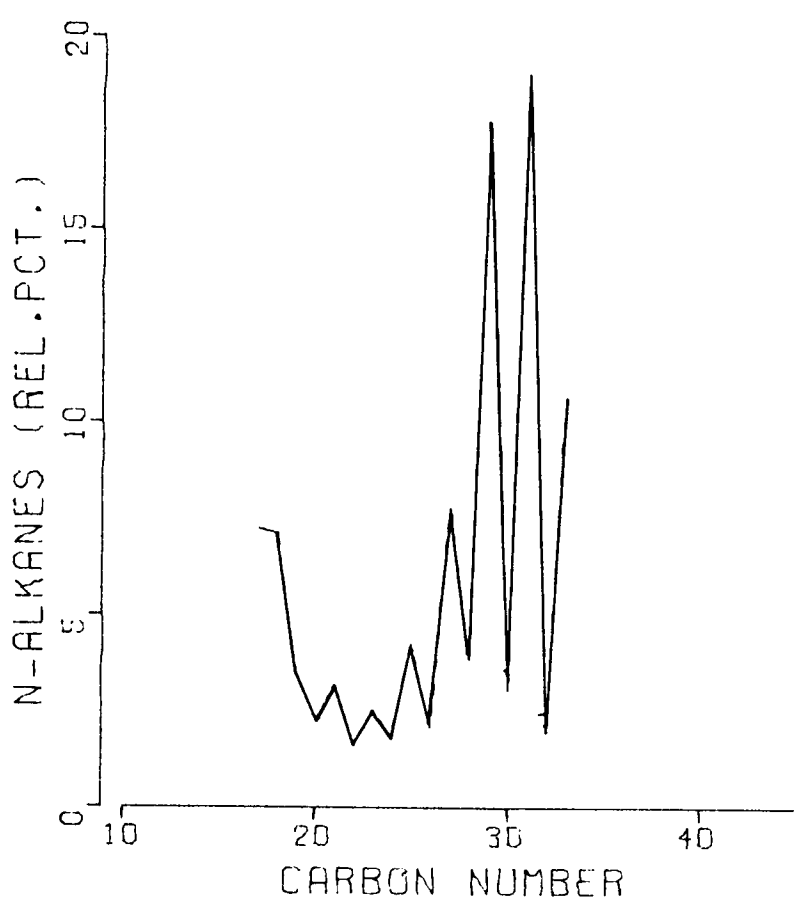


Figure 5.166

ASKC

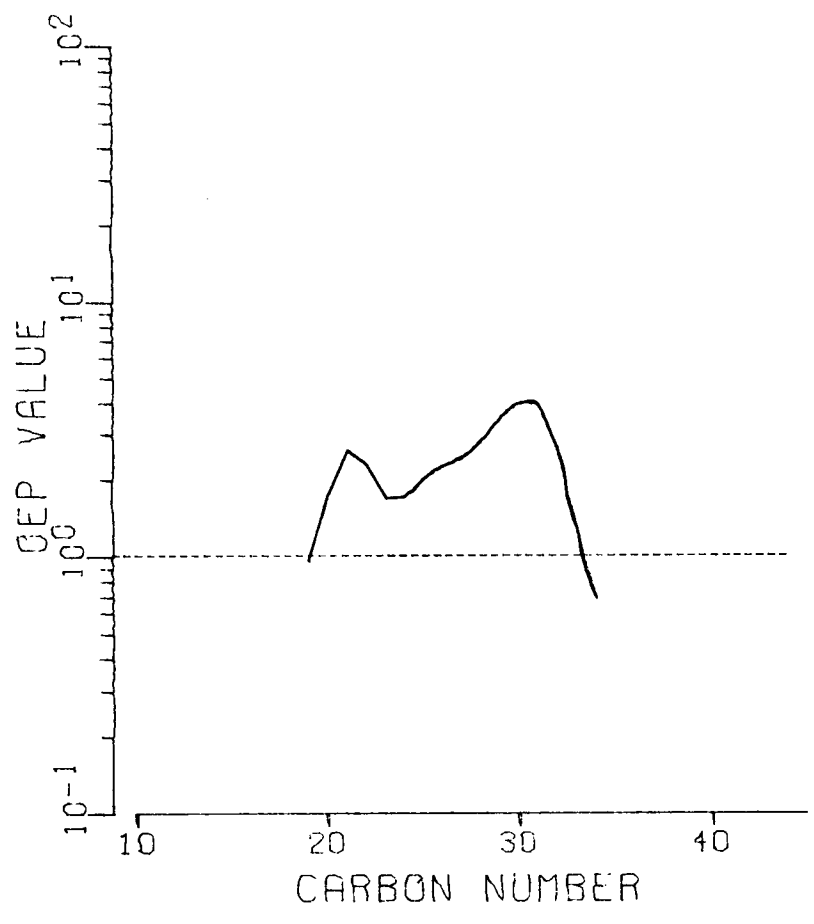
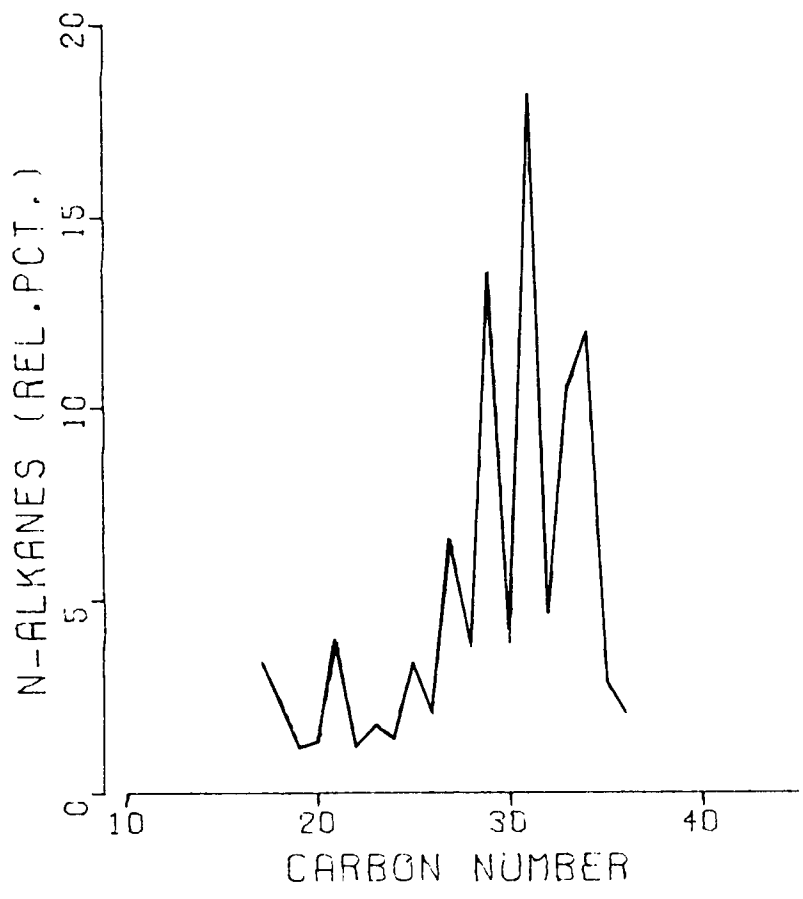


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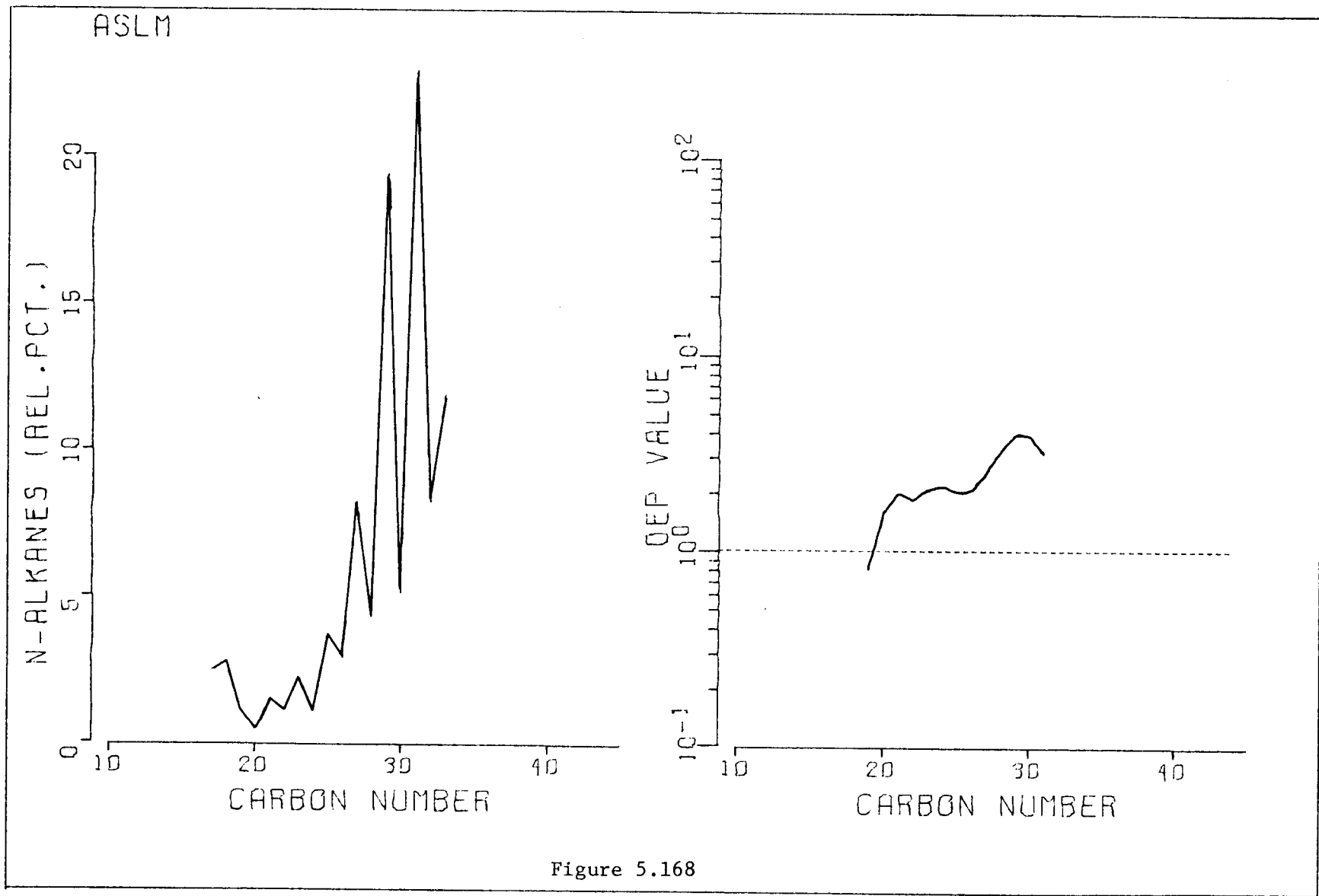


Figure 5.168

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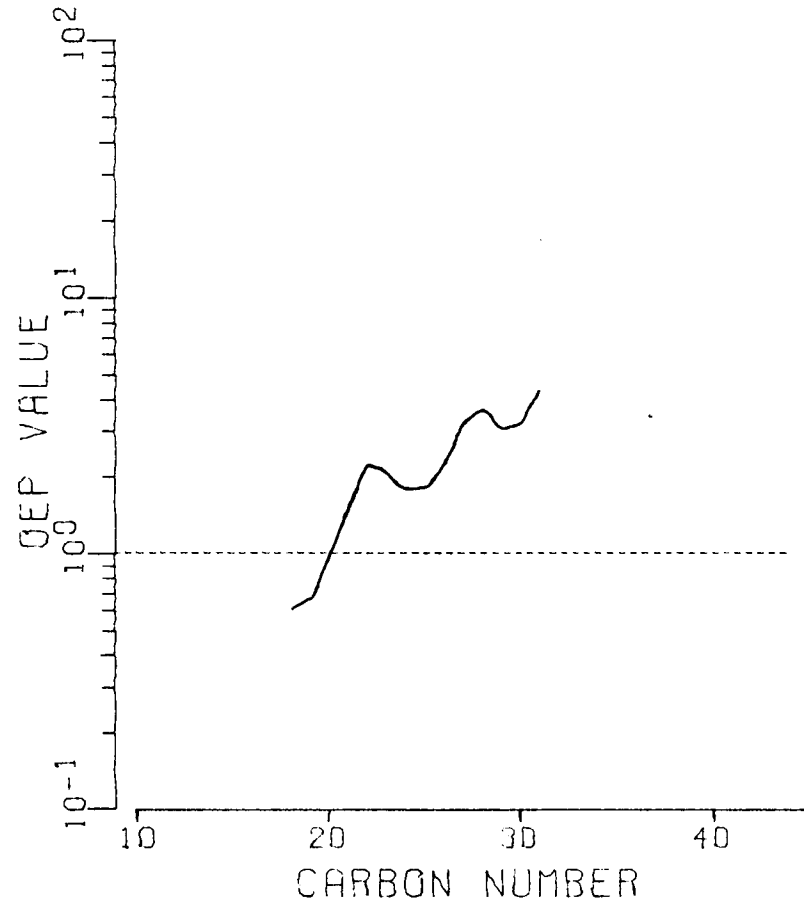
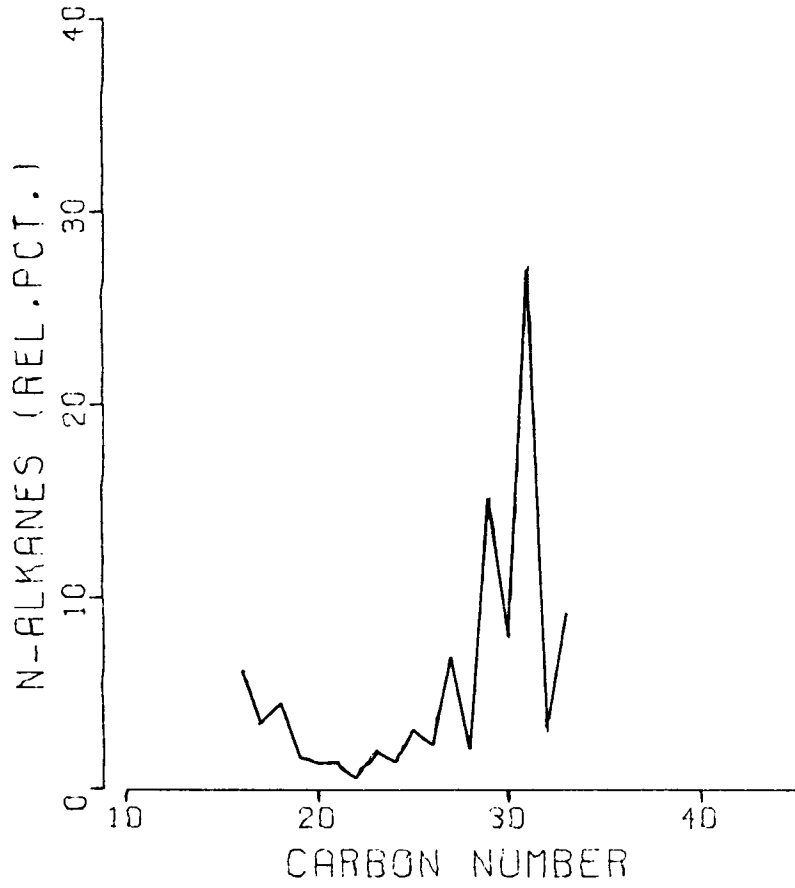


Figure 5.169

AUB1

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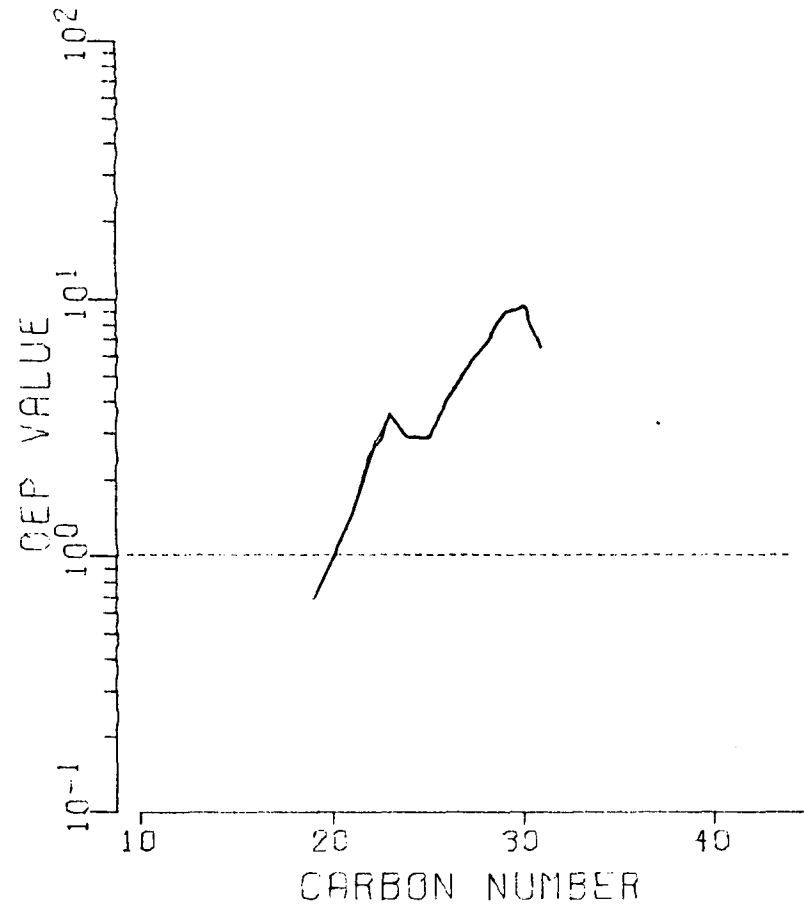
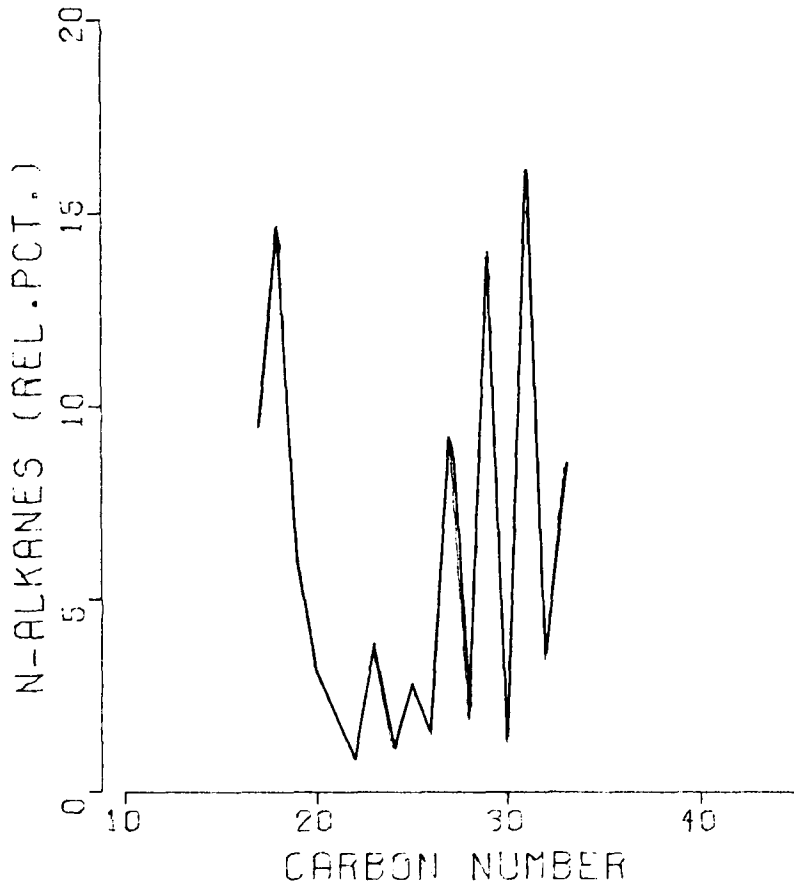
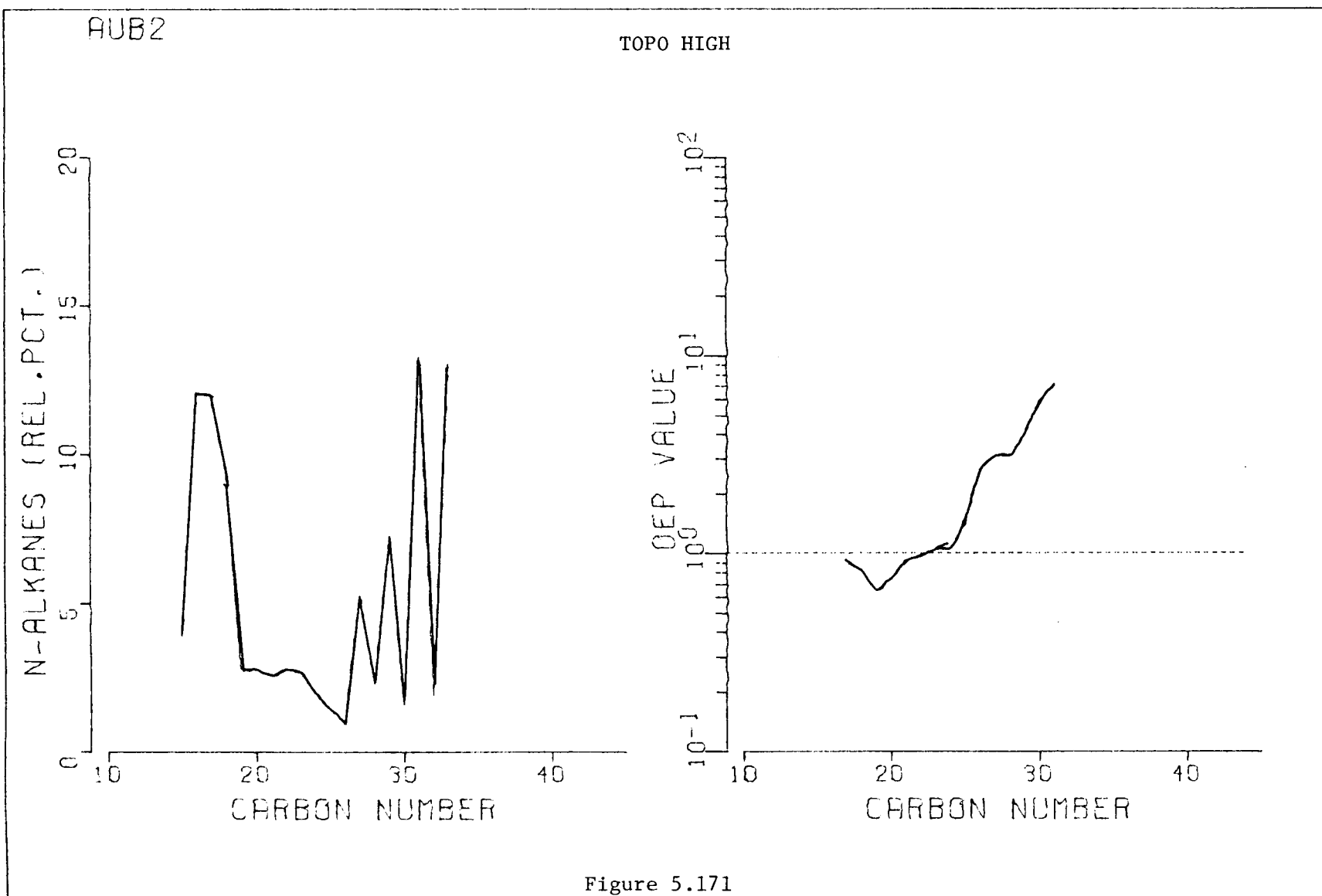


Figure 5.170



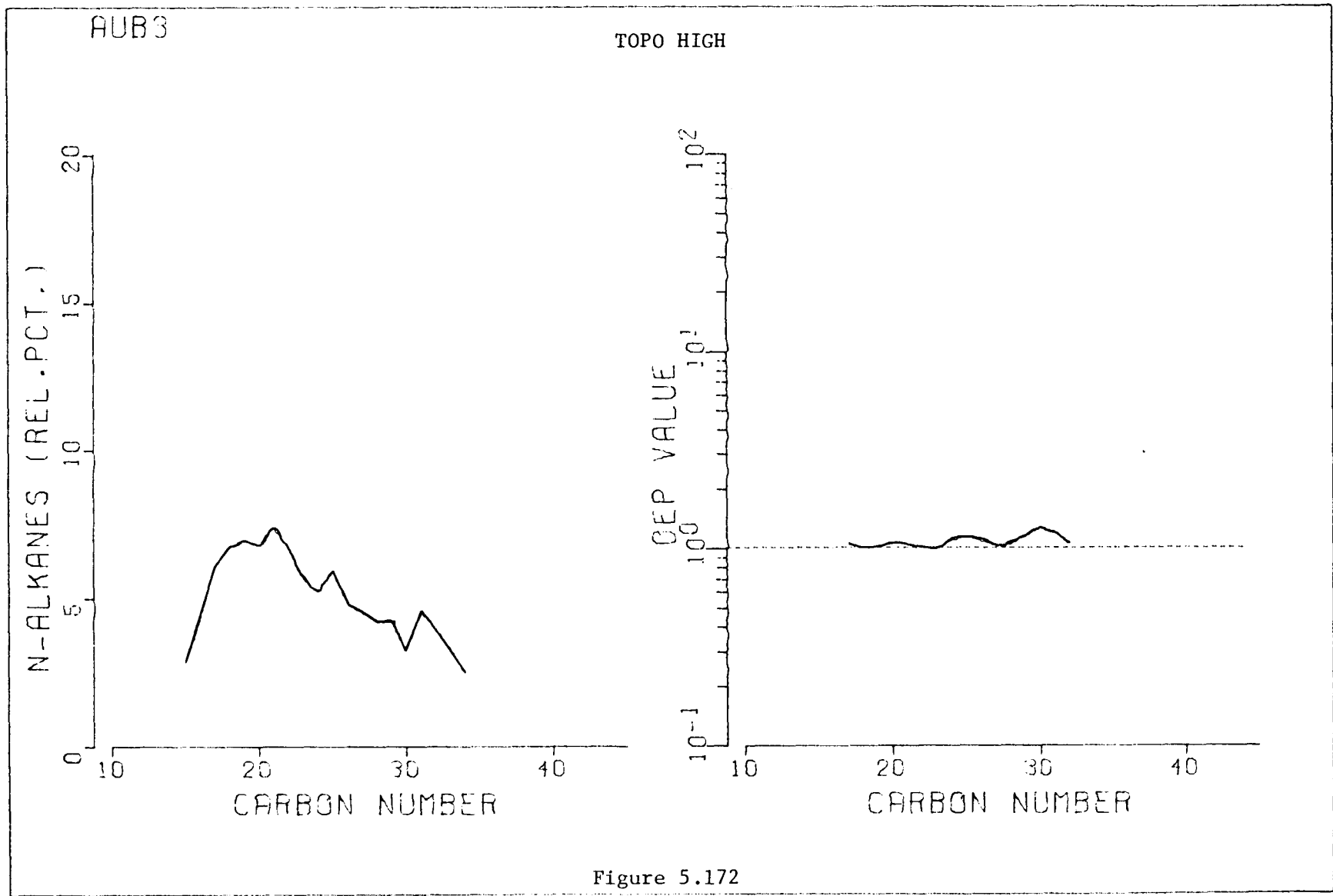


Figure 5.172

AUB4

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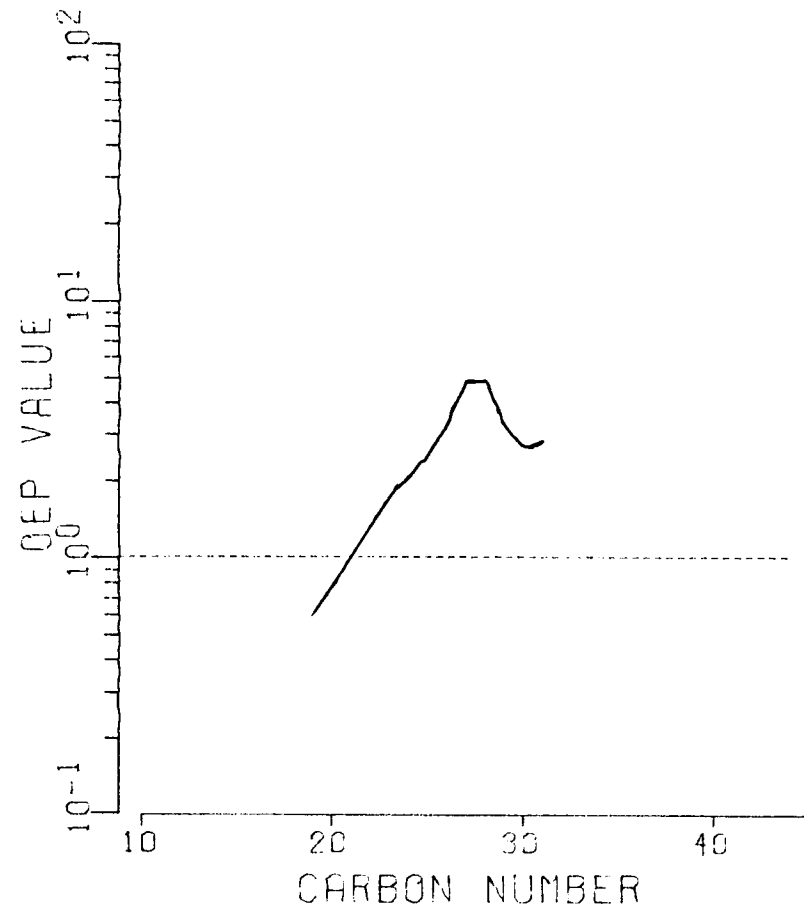
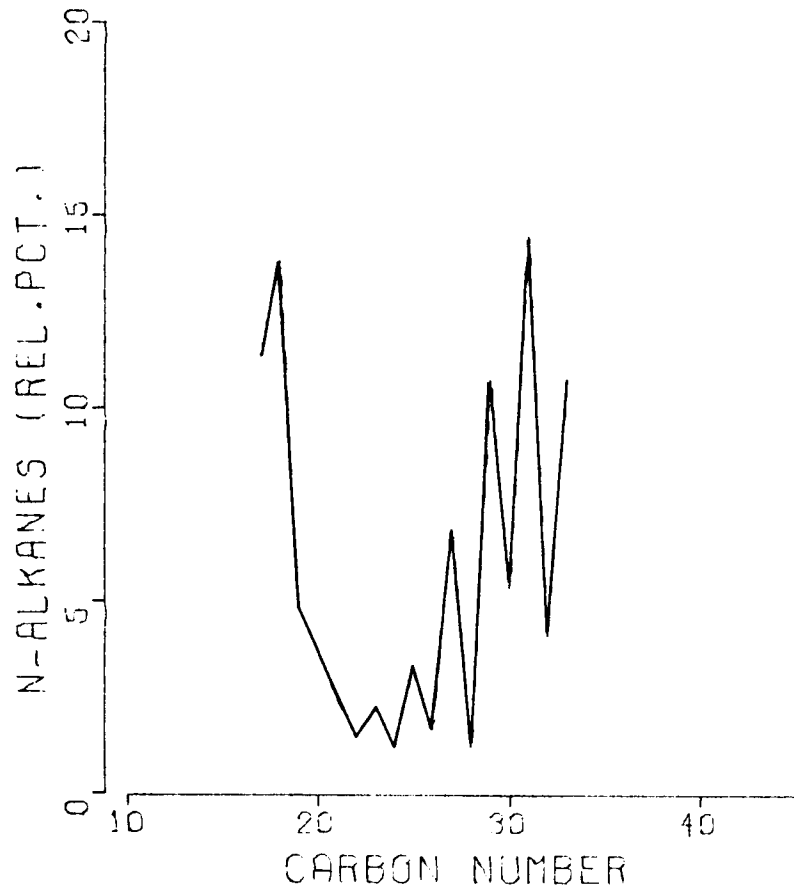


Figure 5.173

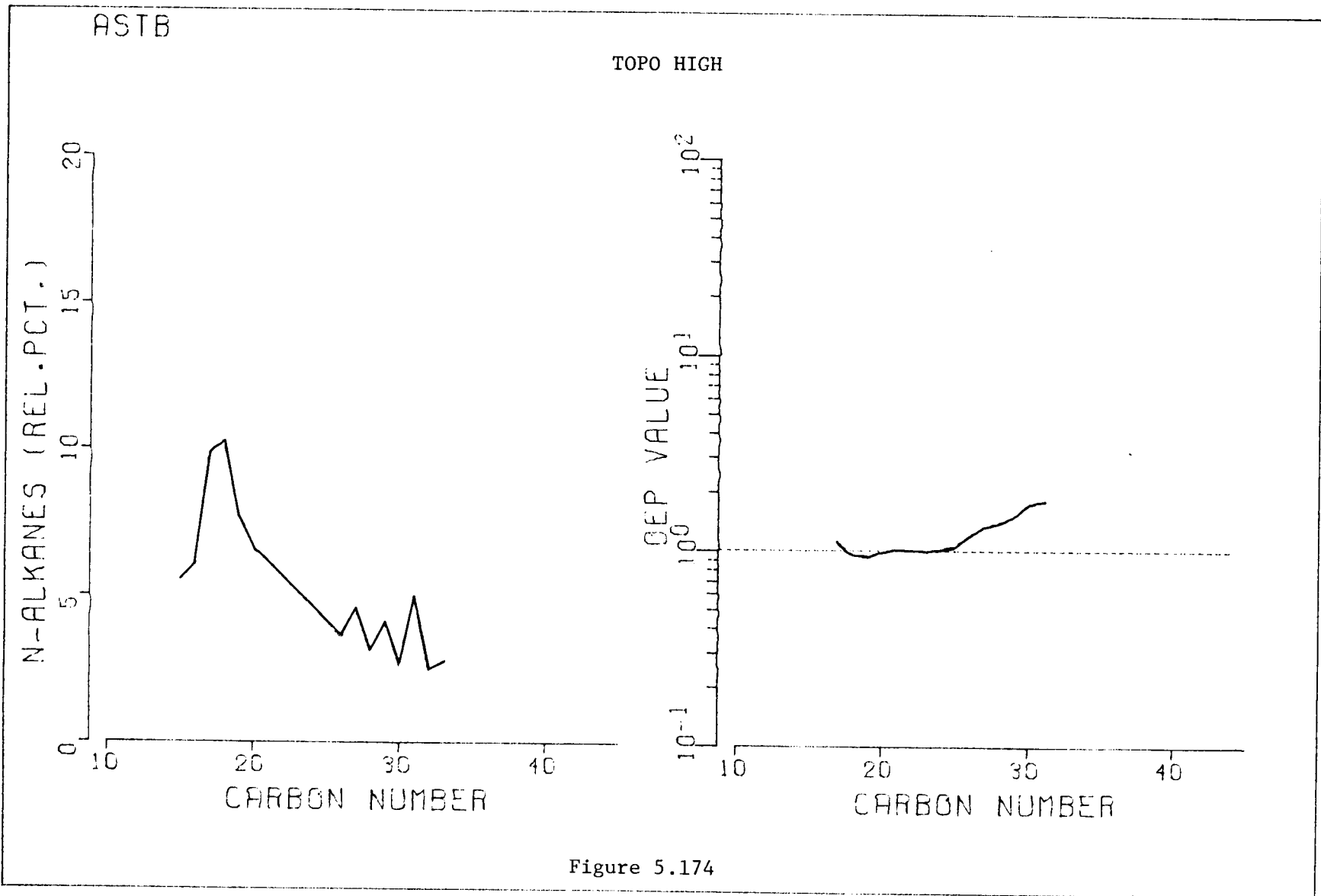


Figure 5.174

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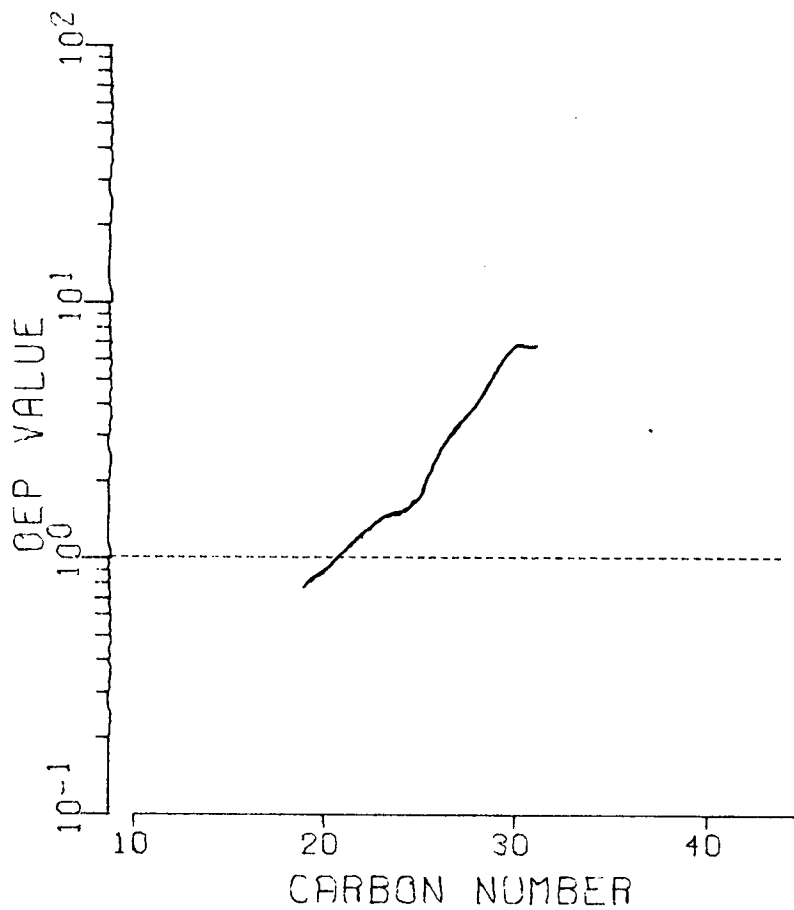
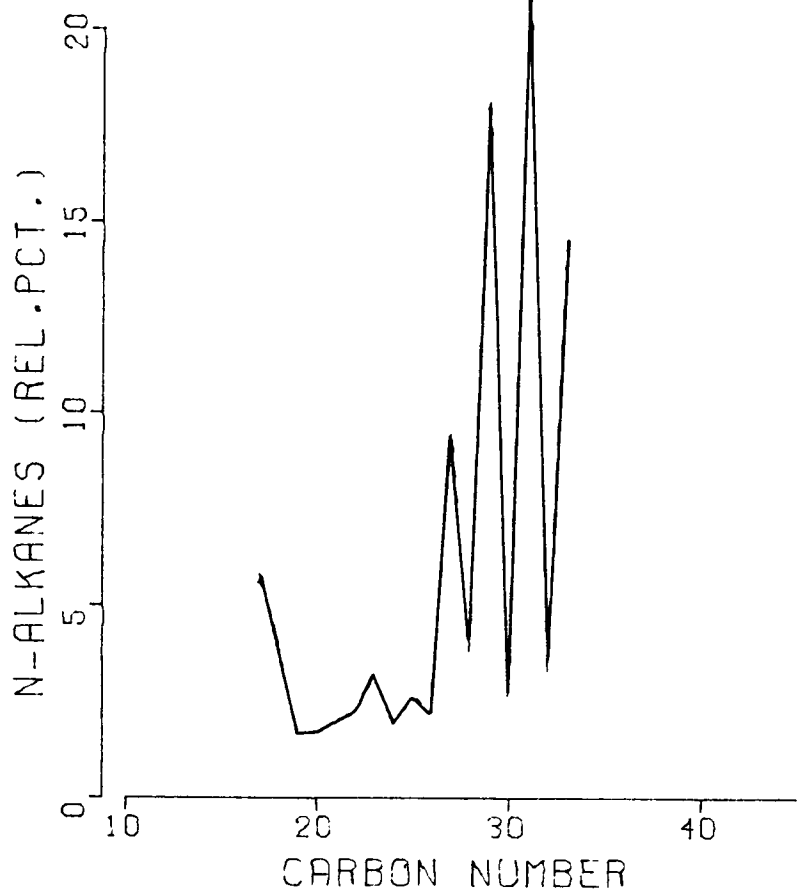


Figure 5.175

ASB2

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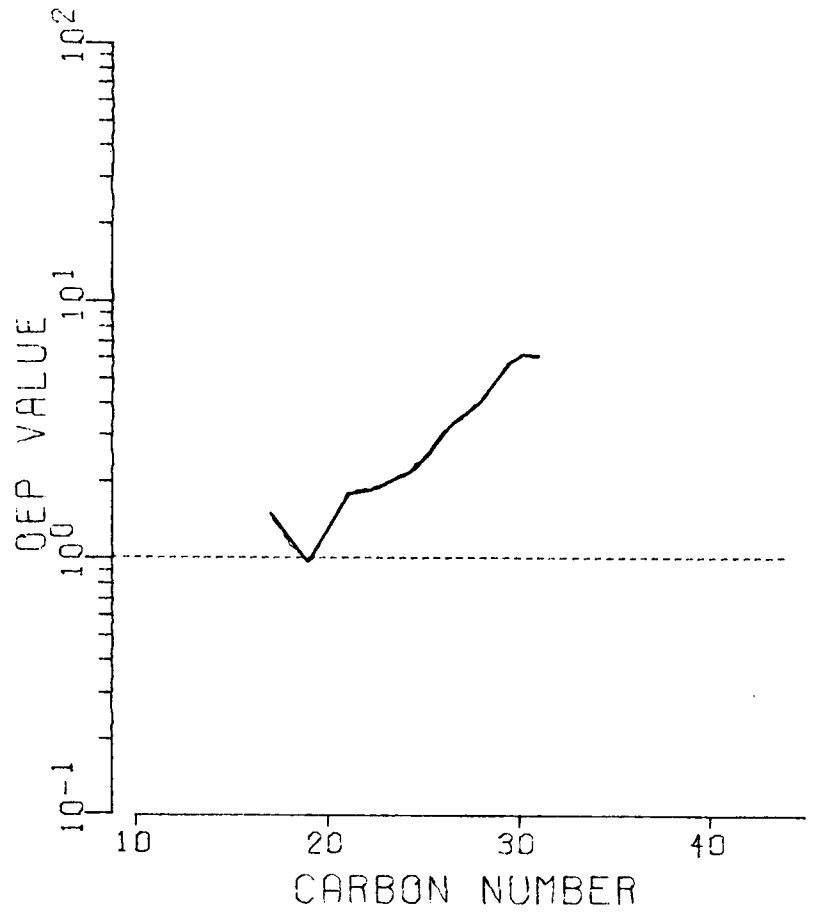
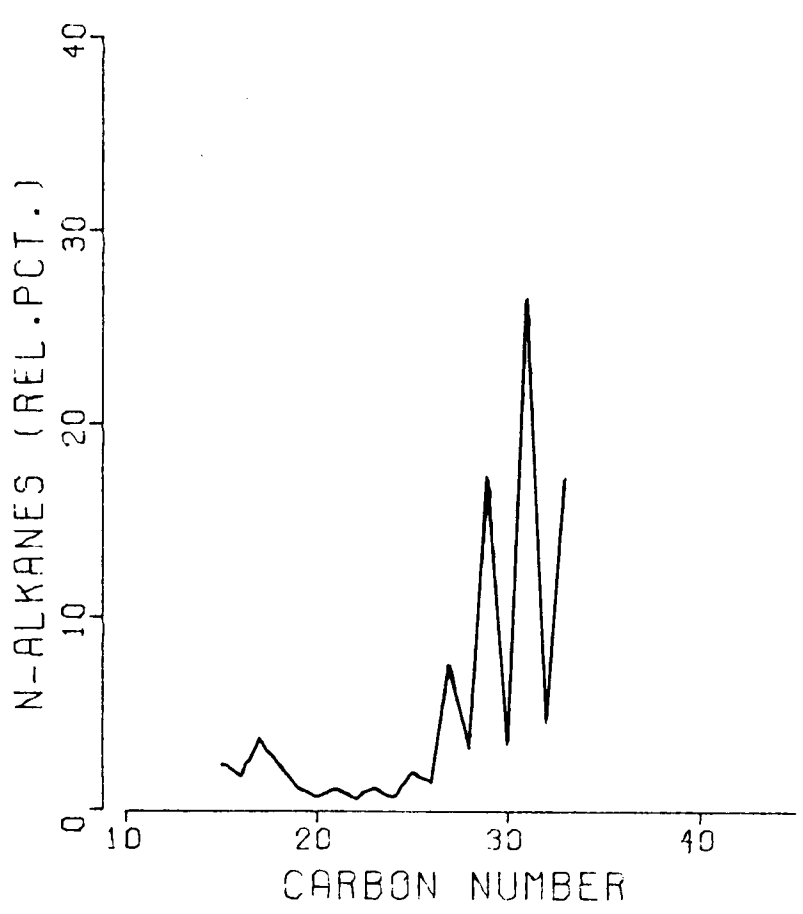


Figure 5.176

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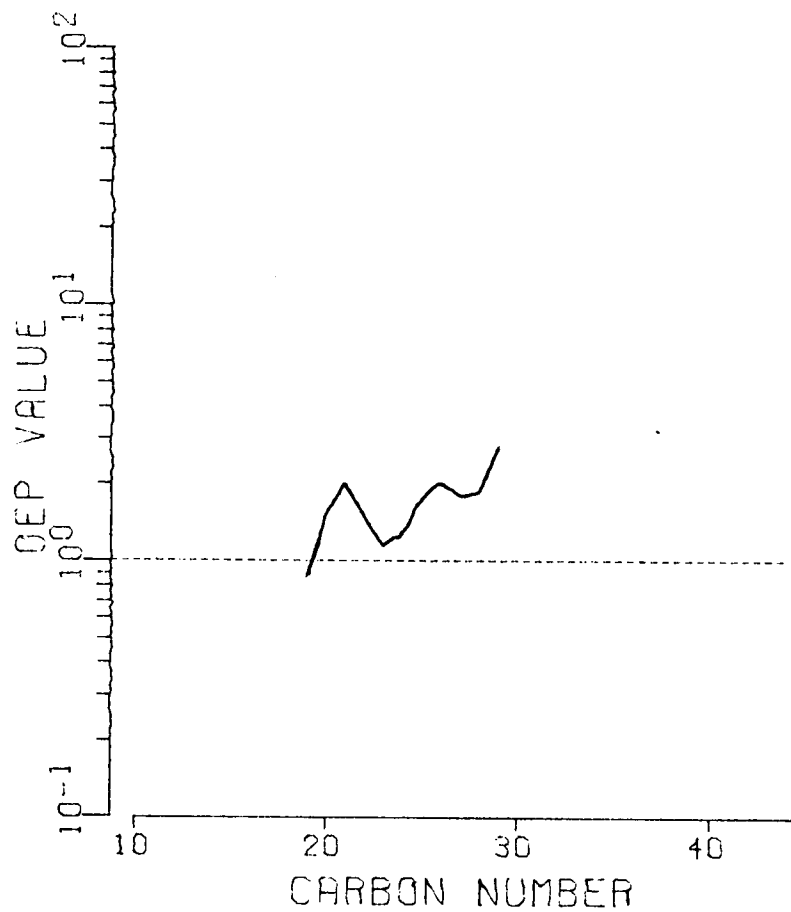
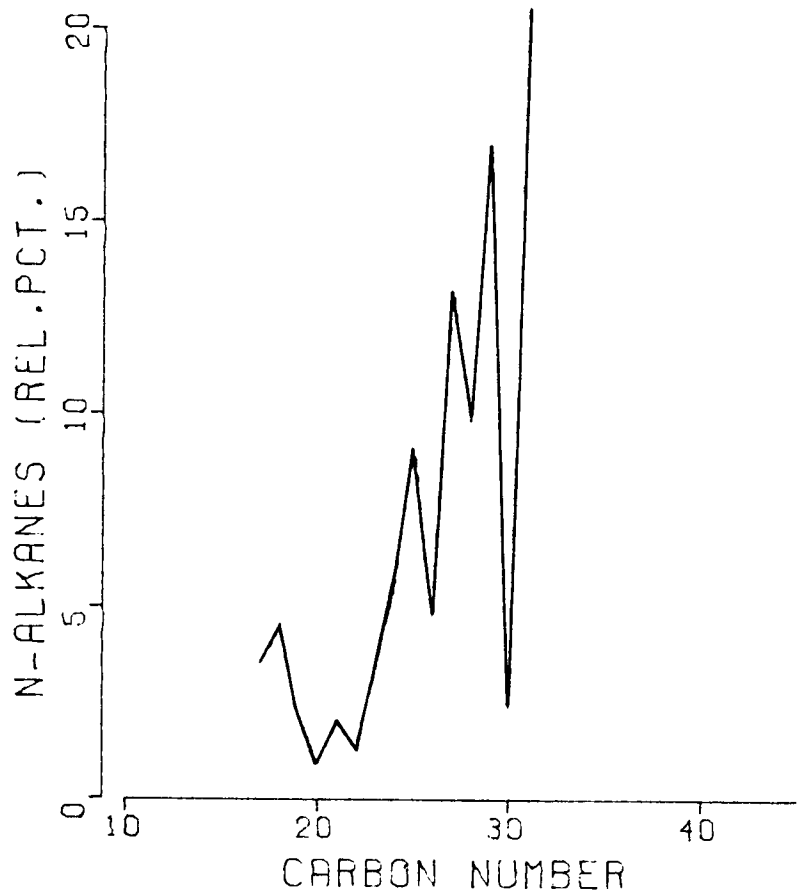


Figure 5.177

ASB4

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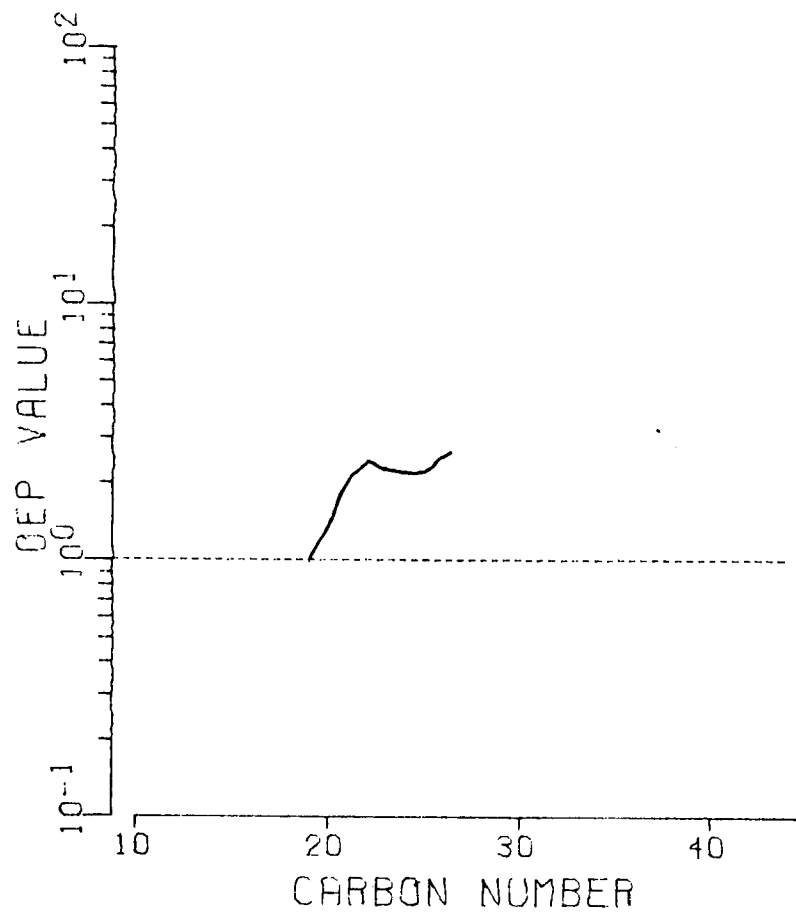
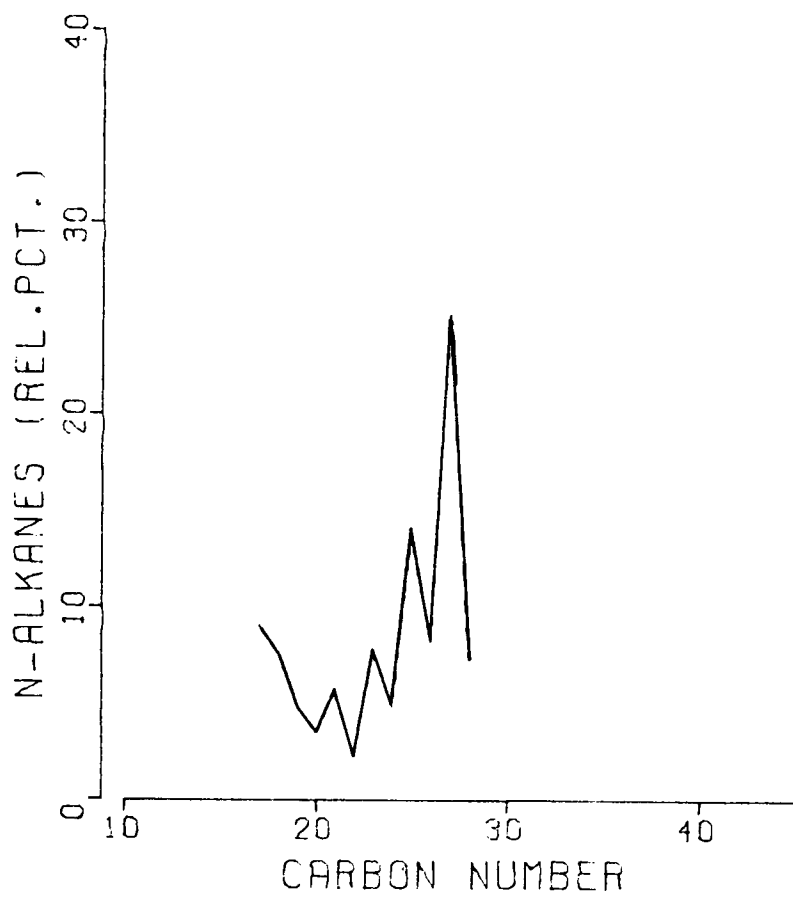


Figure 5.178

AH31

TOPO HIGH

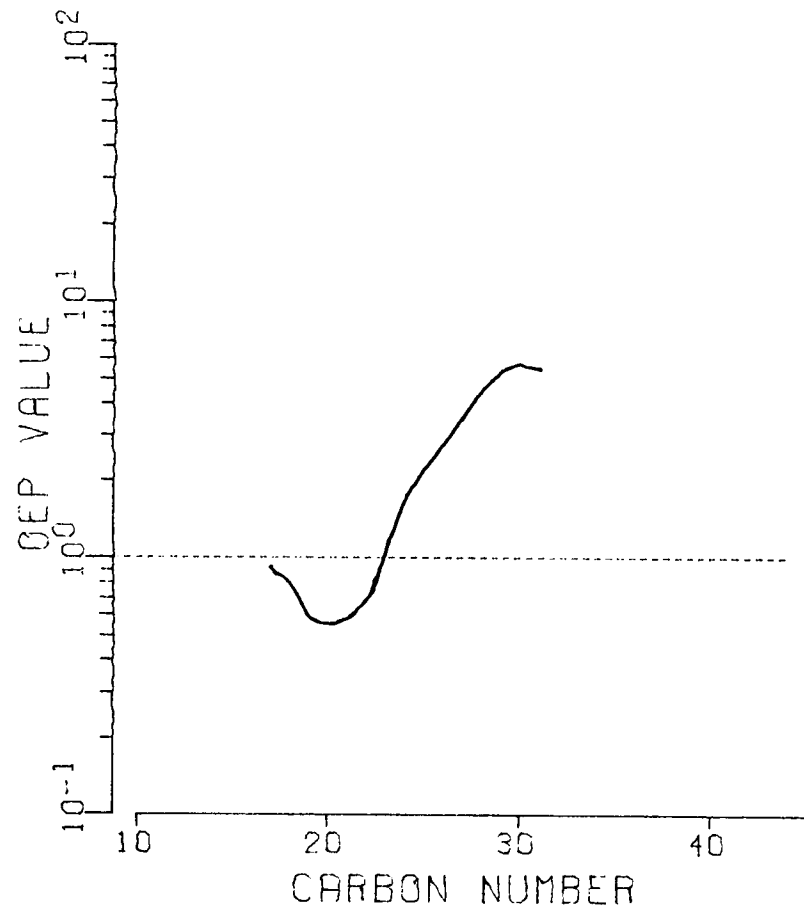
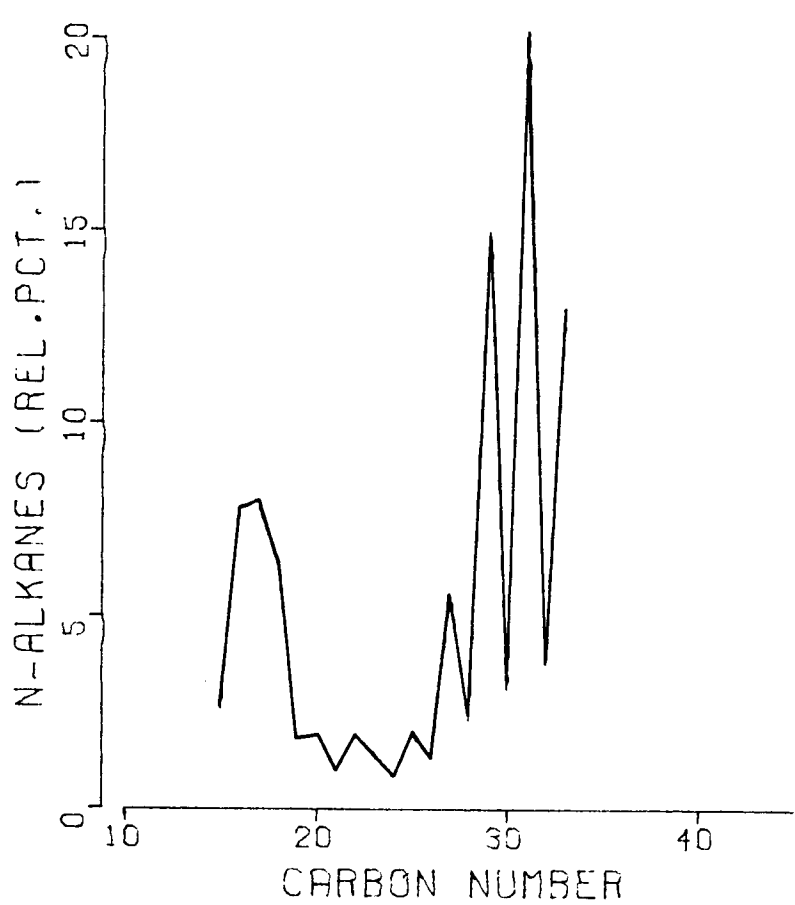


Figure 5.179

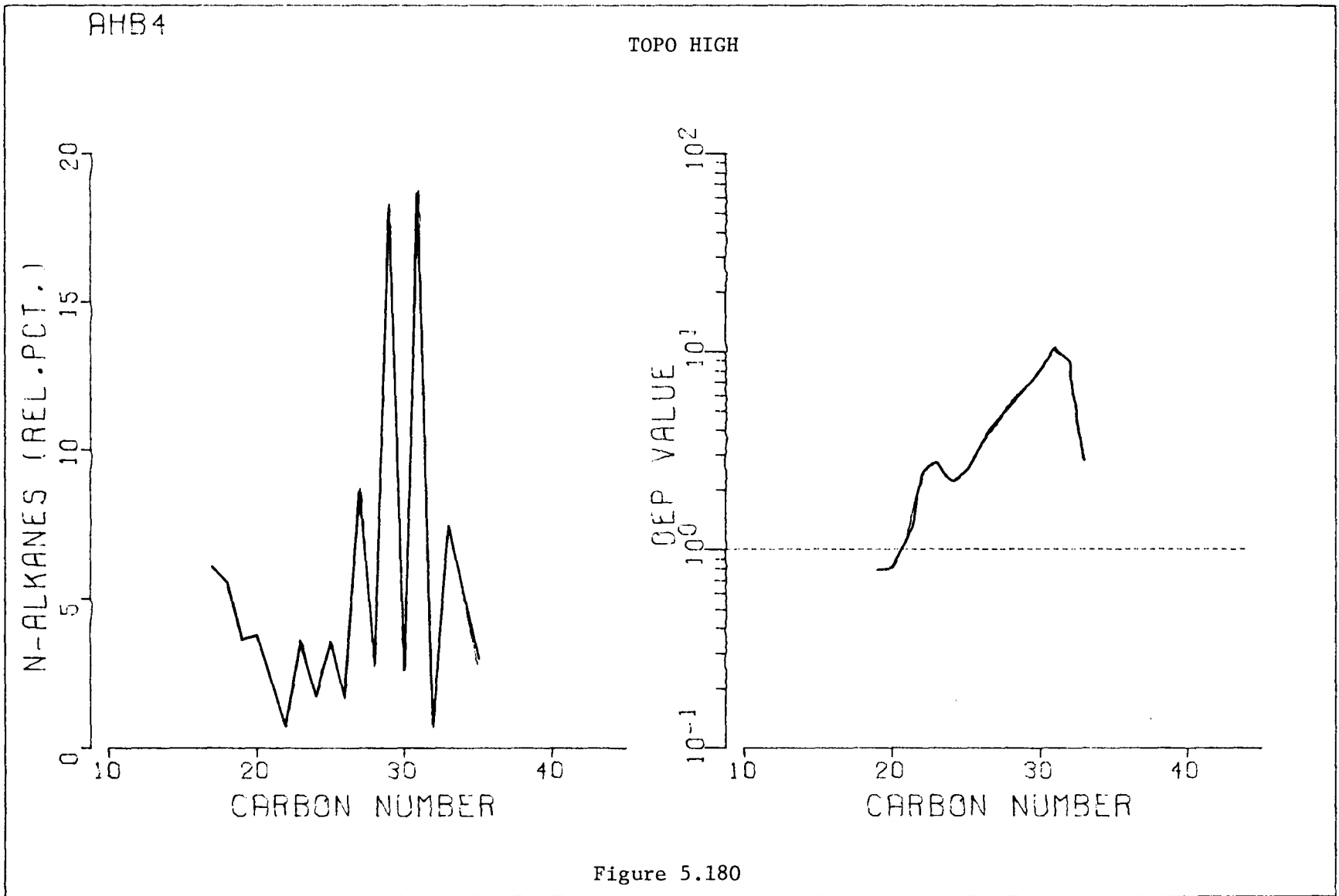


Figure 5.180

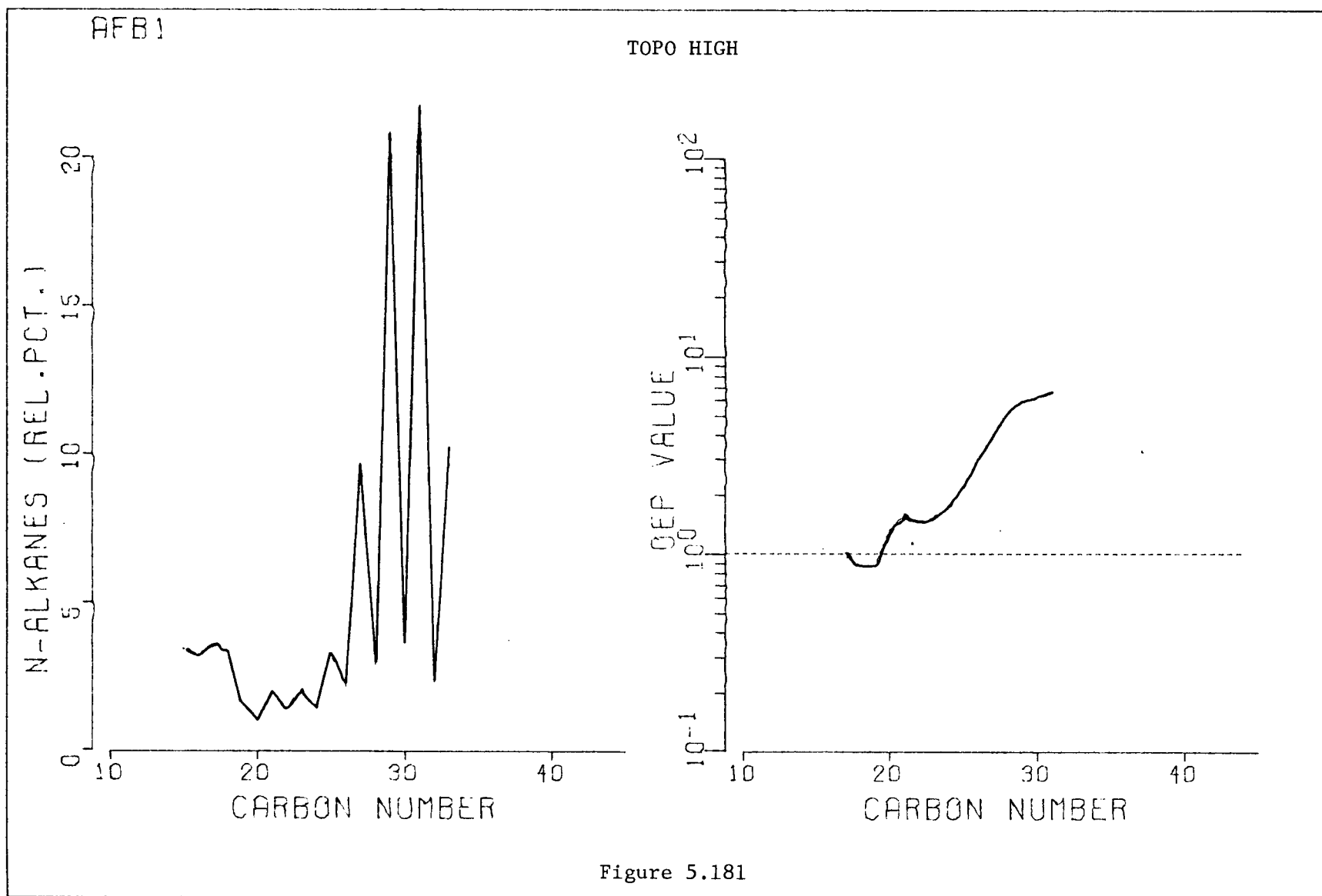


Figure 5.181

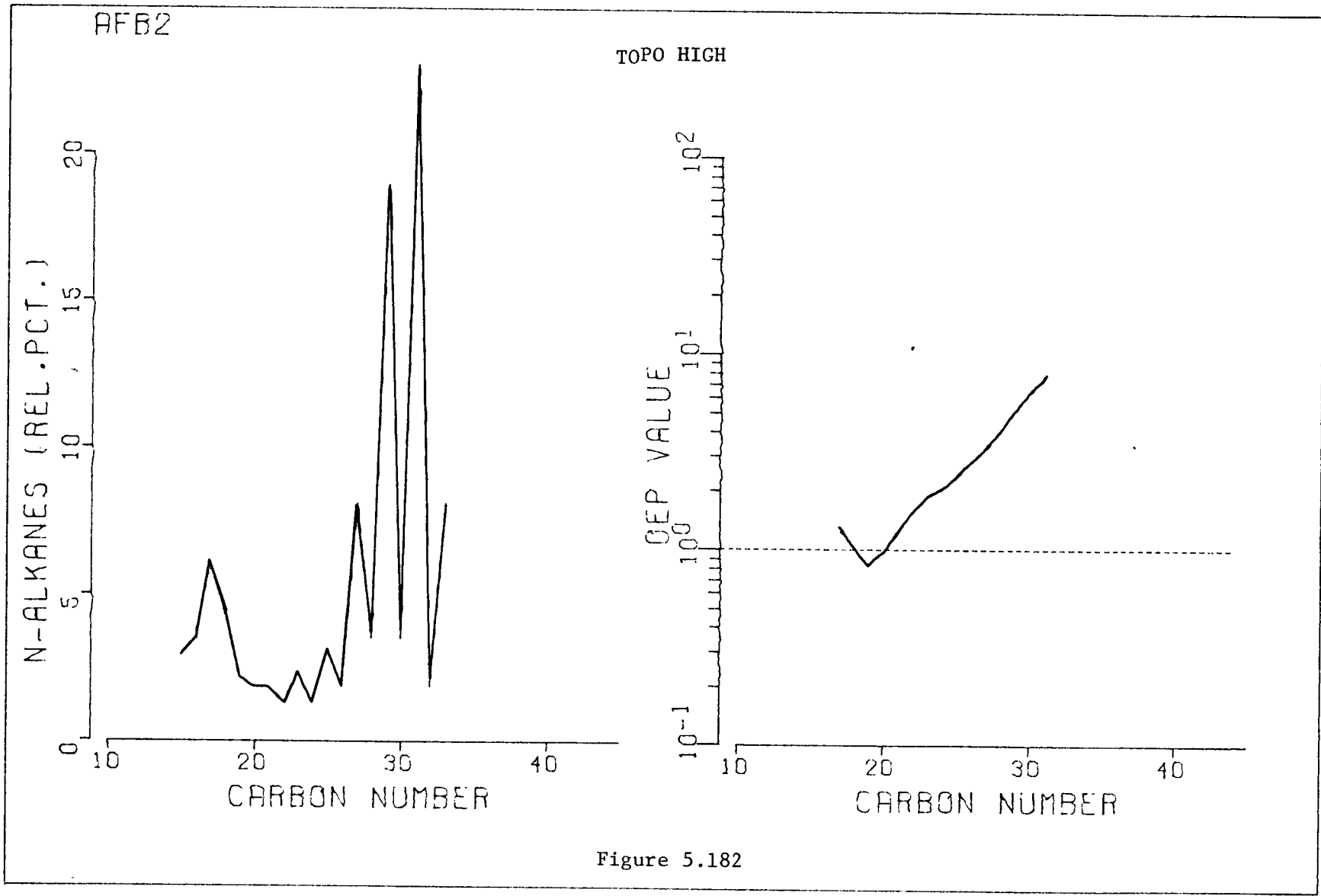


Figure 5.182

AFB3

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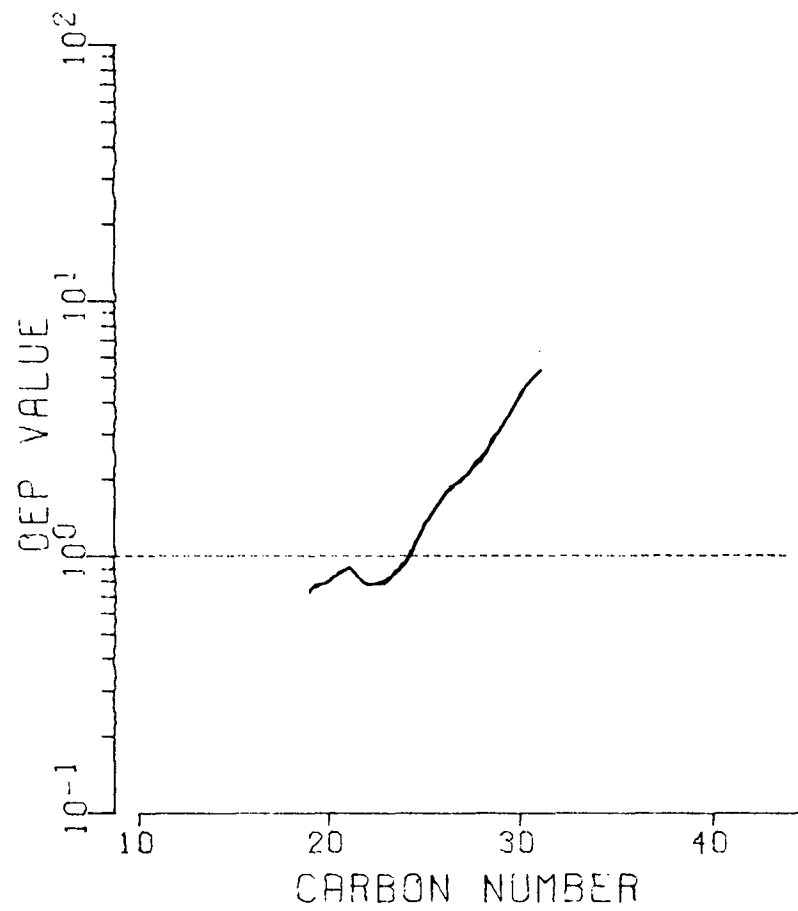
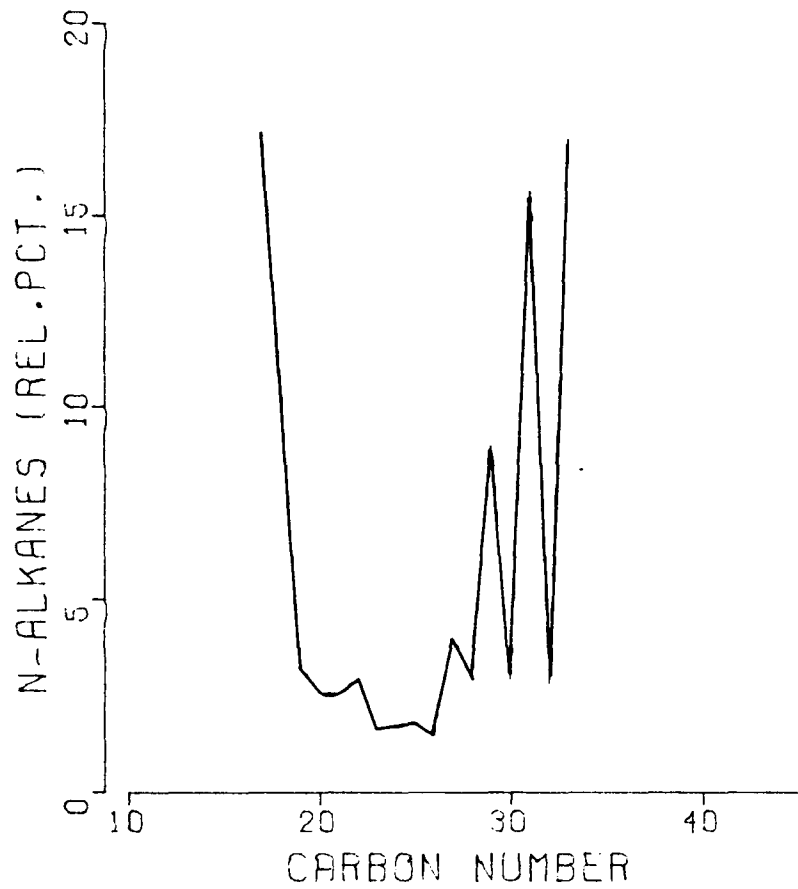


Figure 5.183

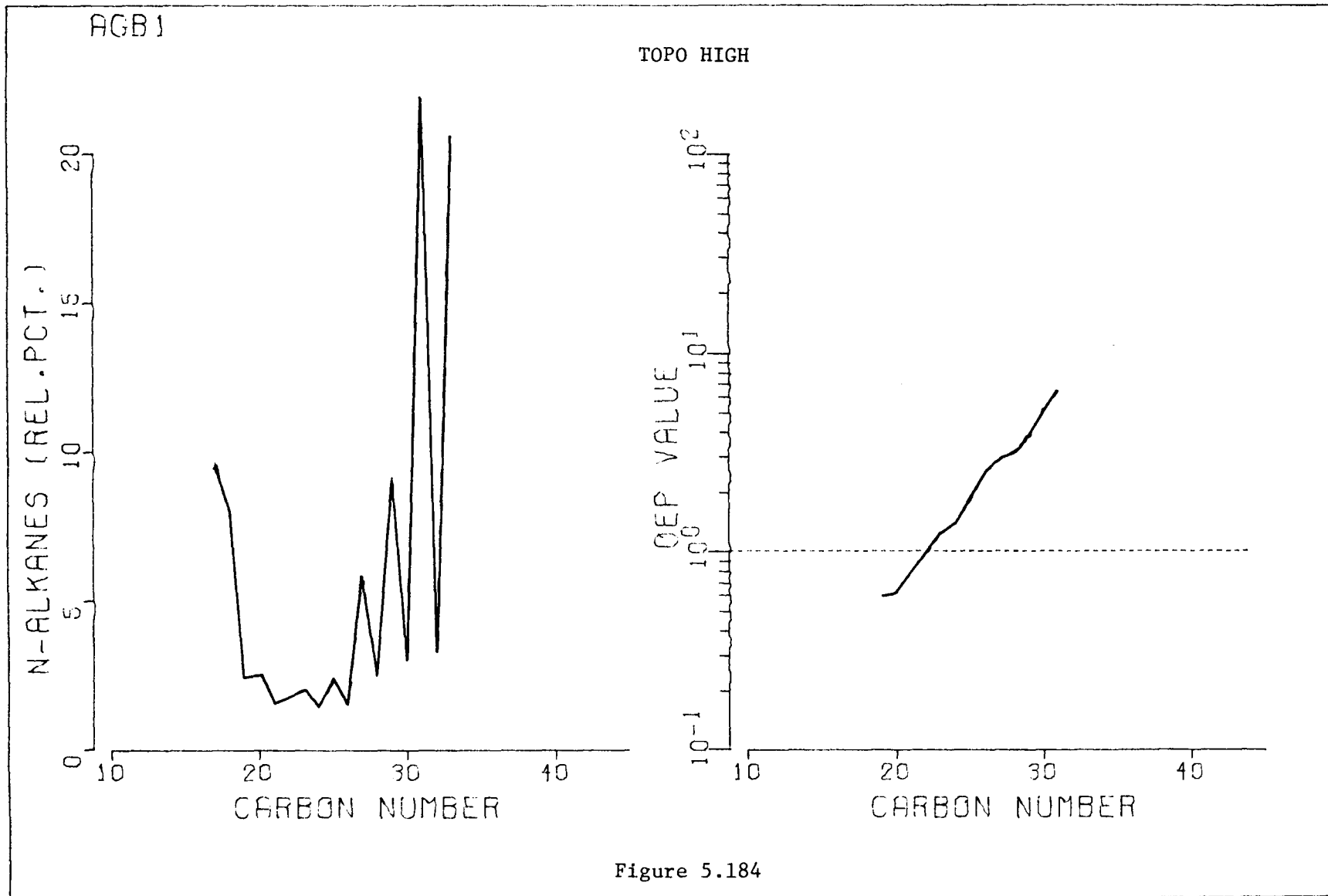


Figure 5.184

AGB2

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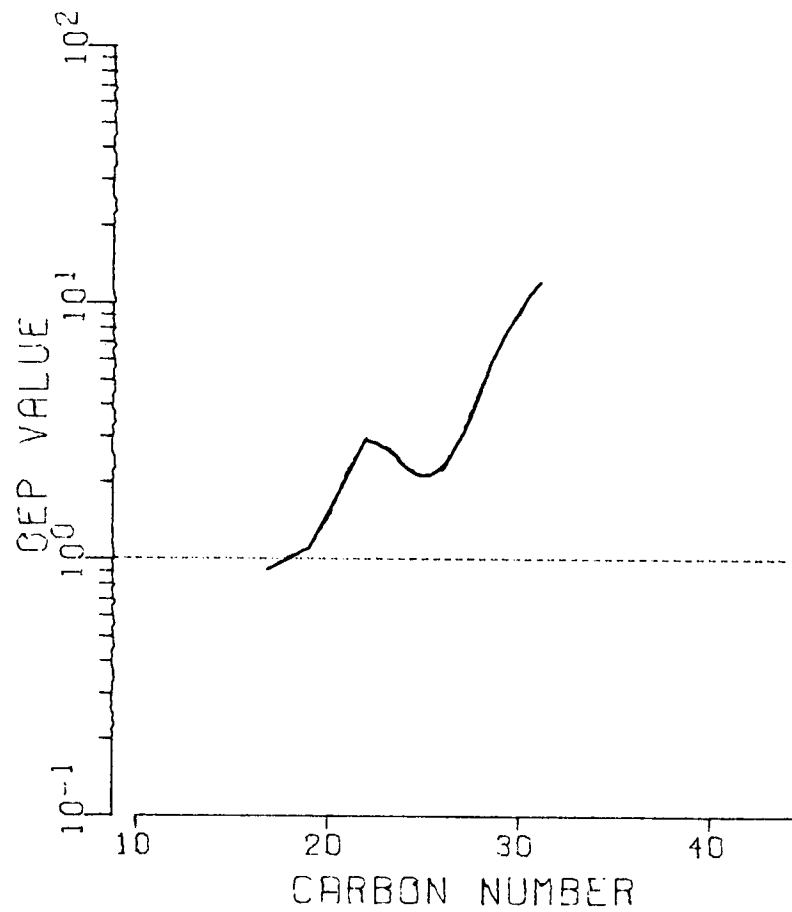
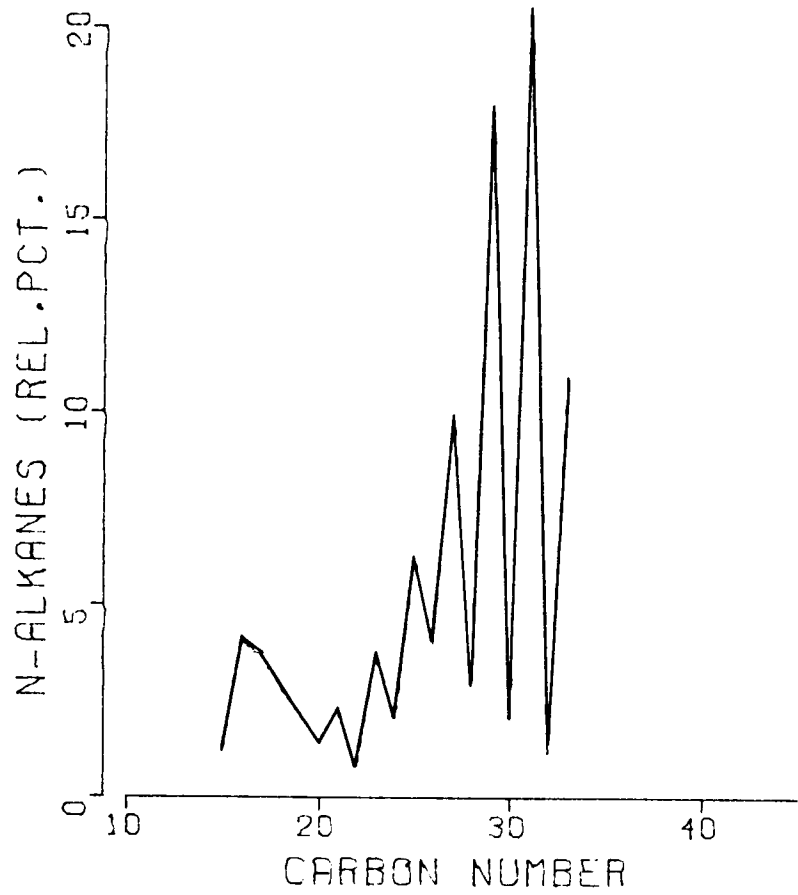
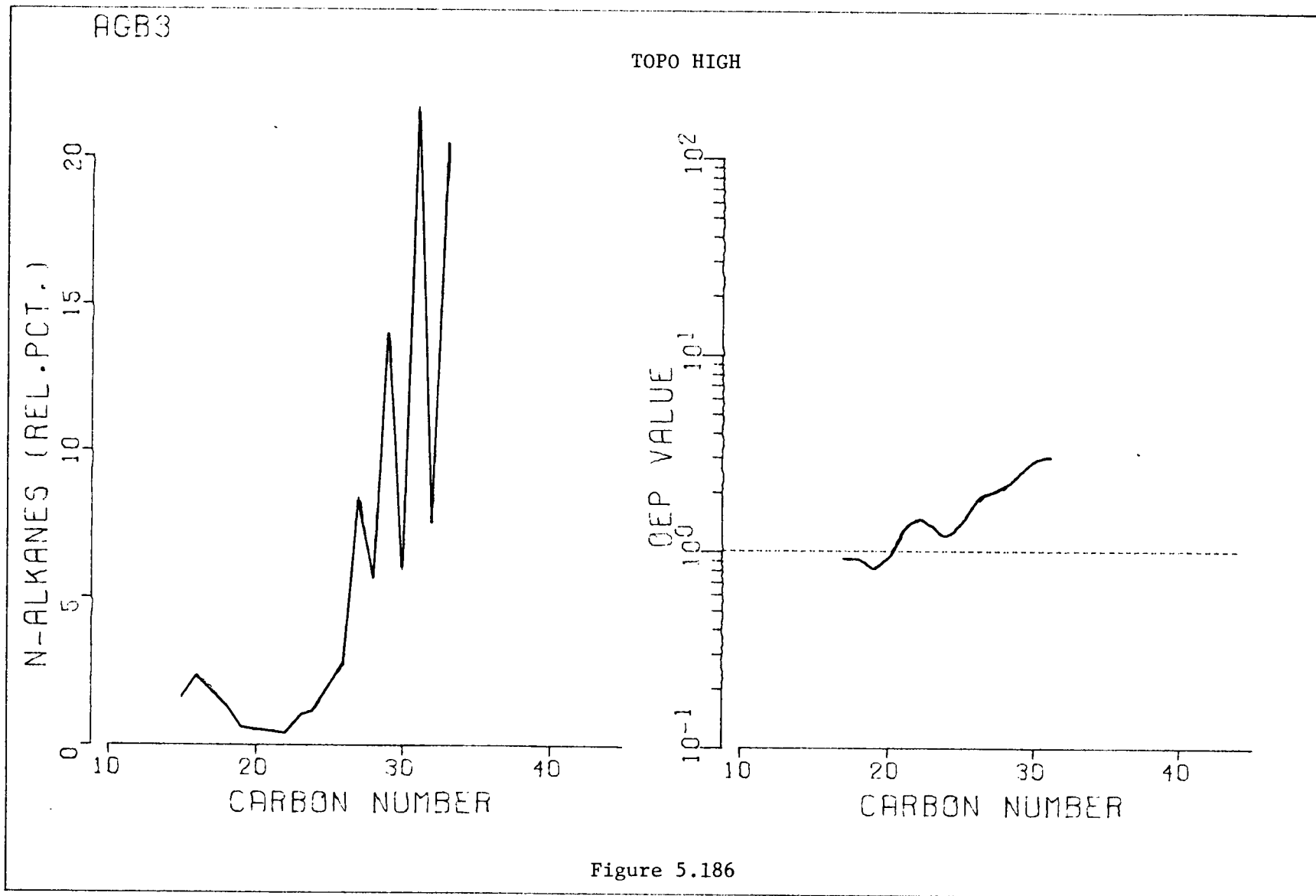


Figure 5.185



AGB4

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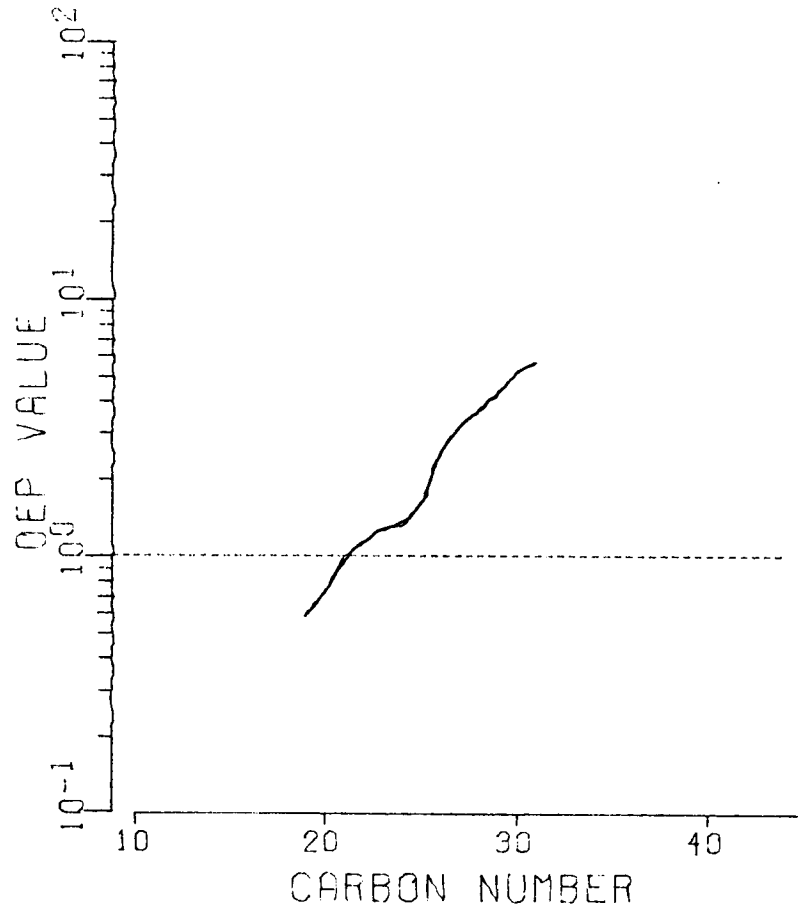
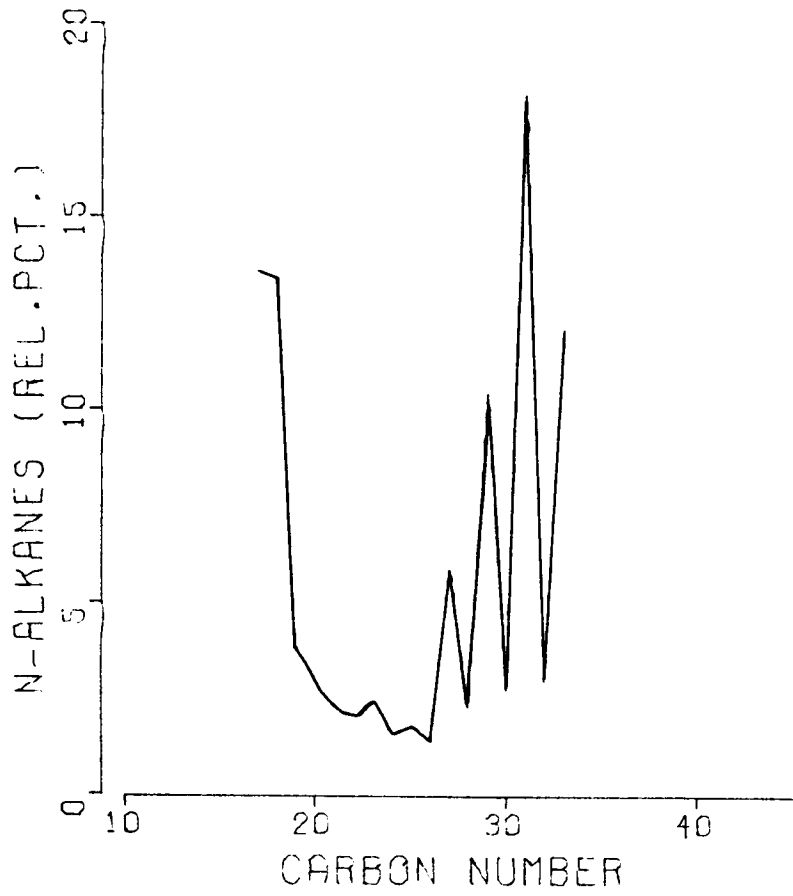


Figure 5.187

REPORT 1

A brief comparison between chloroform extraction and toluene extraction of water soluble petroleum components.

Submitted to the Bureau of Land Management
Hydrocarbon Methodology Committee

Kenneth Winters and Patrick Parker
University of Texas
Marine Science Institute
Port Aransas Marine Laboratory
Port Aransas, Texas 78373

Introduction

This exercise was undertaken to compare the extraction efficiency of toluene with that of chloroform for water soluble petroleum derived aromatic compounds. The two solvents were compared on the basis of separatory funnel extractions under as nearly identical conditions as possible i.e., equal volumes, equal times of operations and equal concentration methods. Test solutions to be extracted were prepared by equilibration of distilled water with a #2 fuel oil for 24 hr prior to extraction. The composition and concentration of this solution has been previously studied.

It is recognized by these investigators, and indeed an important consideration, that a separatory funnel extraction as was employed in this work does not test the capability of a solvent to completely (99.9%) extract a given compound from water. Such an extraction procedure is rather a one point measurement of the rate of extraction of the compound by a solvent.

Experimental

American Petroleum Institute standard #2 fuel oil (400 ml) was layered above distilled water (3.2 l) and gently stirred by means of a Teflon covered stir bar for 24h. Two 1.5 l samples were then removed through a stopcock at the base of the bottle which had been sealed with aluminum foil. One 1.5 l sample was extracted three times with 75 ml chloroform (3 x 75 ml), the other with toluene (3 x 75 ml). Solvent was added to the funnel,

shaken for two minutes, allowed to settle for two minutes, then removed. The combined extract of a solvent was concentrated to 1 ml on a hot plate at 40°C with a stream of filtered air. Chloroform in the chloroform extract was largely replaced with benzene for gas chromatography by addition of 1 ml of benzene followed by reconcentration to 1 ml. Three samples were extracted with each solvent.

Gas chromatographic analysis took place on 1/8" x 6' columns of 5% FFAP on 80/100 mesh Gas Chrom Q programmed from 60 to 270°C at 6°C/min. Carrier gas was helium with a flow rate of about 20 ml/min. Peak areas were determined by an Infotronics model 204 electronic integrator. One extract of each solvent was also analyzed by computer supported combined GC-MS to confirm the identification of major components.

Results and Discussion

Analyses of water soluble fractions (WSF) of the API and other #2 fuel oils prepared by the same method used in this study have been previously reported (Winters et al., 1976, Nicol et al., 1977). Dr. Scott Warner has also analyzed a similarly prepared WSF from the API fuel oil (Anderson et al., 1974). A chromatogram of API WSF on similar FFAP columns which gave slightly better resolution than the columns used in this study is given in Figure 1. The identification and concentration of components is given in Table 1. The chromatogram of Figure 1 and data of Table 1 was derived from an extract prepared by continuous liquid-liquid extraction of API WSF using benzene as the solvent. Chromatograms of extracts from the present study are given in Figures 2, 3 and 4.

The letters which identify peaks in Figure 2 correlate with those in Figure 1 and Table 1. The chromatograms in Figures 2,3 and 4 are directly comparable i.e. they represent equal extract and injection volumes and the same attenuation of the gas chromatograph. Table 2 contains the average integration values for duplicate analyses of the three separate extractions and an average value for the three extractions. Peaks were chosen for comparison in Table 2 on the basis of peak shape and baseline stability, hence reproducibility of integration values.

The data appear to indicate that under the conditions of extraction used in this study there is very little difference in the extraction efficiency of the two solvents. Toluene appears to extract even the more polar compounds such as phenols as well as chloroform despite the relatively short extraction time and minimal (three) solvent changes. It is also noteworthy that the toluene extracts were concentrated under similar conditions to chloroform extracts without substantially larger loss of volatile alkyl benzenes.

References

Anderson, J. W., J. M. Neff, B. A. Cox, H. E. Tatem and G. M.

Hightower, "Characteristics of Dispersions and Water-Soluble Extracts of Crude and Refined Oils and Their Toxicity to Estuarine Crustaceans and Fish" *Marine Biology* 27: 75-88, 1974.

Nicol, J. A. C., W. H. Donahue, R. Wang and K. Winters, "Chemical Composition and Effects of Water Extracts of Petroleum on Sand Dollar Eggs" *Marine Biology*, In press, 1977.

Winters, K., R. O'Donnell, J. C. Batterton and C. Van Baalen,
"Water-Soluble Components of Four Fuel Oils: Chemical
Characterization and Effects on Growth of Microalgae"
Marine Biology 36: 269-276, 1976.

Table 1. Identification and concentration of major components of the water soluble fraction from A.P.I. No. 2 fuel oil

Peak	Major Components	ppm	(mg/l)	Minor Components
A	m+p Xylene ¹	.20		
A	Ethylbenzene			
B	o-Xylene	.18		
C	C ₃ -Benzene ²	.11		
D	1,2,4 Trimethylbenzene	.22		
E	C ₃ -Benzene	.16		
F	Indan	.18		
F	C ₄ -Benzene			
G	C ₄ -Benzene	.04		
G	C ₅ -Benzene			
H	Methylindan	.03		
I	Methylindan	.16		Dimethylindan
J	Methylindan	.06		Dimethylindan
K	Naphthalene	.87		
L	Benzothiophene	.14		
L	o-Toluidine			
M	2-Methylnaphthalene	.51		
M	m-Toluidine	.10		
N	1-Methylnaphthalene	.36		
O	2,6 Dimethylphenol	.10		
O	Methylbenzothiophene			
P	Dimethylnaphthalene	.12		
P	C ₃ -Phenol	.23		
Q	Dimethylnaphthalenes	.23		
R	o-Cresol			
R	2,4,6 Trimethylphenol	.54		
S	Dimethylnaphthalene	.07		Trimethylphenol
T	2,4 + 2,5 Dimethylphenols			
T	m+p-cresols	1.33		Trimethylnaphthalene
U	2,3 Dimethylphenol	.46		Trimethylnaphthalene
U	C ₃ -Phenol	.63		Trimethylnaphthalene
V	3,5 Dimethylphenol			
V	C ₃ -Phenol	.63		Trimethylnaphthalene
W	3,4 Dimethylphenol	.39		Trimethylnaphthalene
W	C ₃ -Phenol	.05		
X	C ₃ -Phenol	.12		
Y	Indole			
Y	Methylindole	.07		
Z	Methylindole	.20		
Z,	Dimethylindole			
A,	Perinaphthenone			

¹Components within a given peak are listed in order of decreasing concentration. The value reported is the combined concentration.

²C₃-indicates 3 alkyl carbon atoms present in undetermined chain length, i.e. trimethyl or methyl ethyl.

Table 2. Electronic integration data for selected aromatic hydrocarbons extracted by chloroform or toluene

Peak	Identification	Chloroform	Toluene
B	o-Xylene	2131	2232
		2123	2091
		<u>2065</u>	<u>1991</u>
		Av. <u>2106</u>	<u>2105</u>
C	C ₃ -Benzene	1328	1364
		1315	1261
		<u>1278</u>	<u>1103</u>
		Av. <u>1307</u>	<u>1243</u>
D	1,2,4 Trimethyl Benzene	2459	2730
		2391	2691
		<u>2309</u>	<u>2339</u>
		Av. <u>2386</u>	<u>2587</u>
K	Naphthalene	9869	9856
		9608	9362
		<u>9470</u>	<u>8335</u>
		Av. <u>9649</u>	<u>9184</u>
M	2-Methyl Naphthalene	5205	6764
		5132	6592
		<u>5015</u>	<u>6221</u>
		Av. <u>5117</u>	<u>6526</u>

Figure 1.

Water solubles from API #2 fuel oil

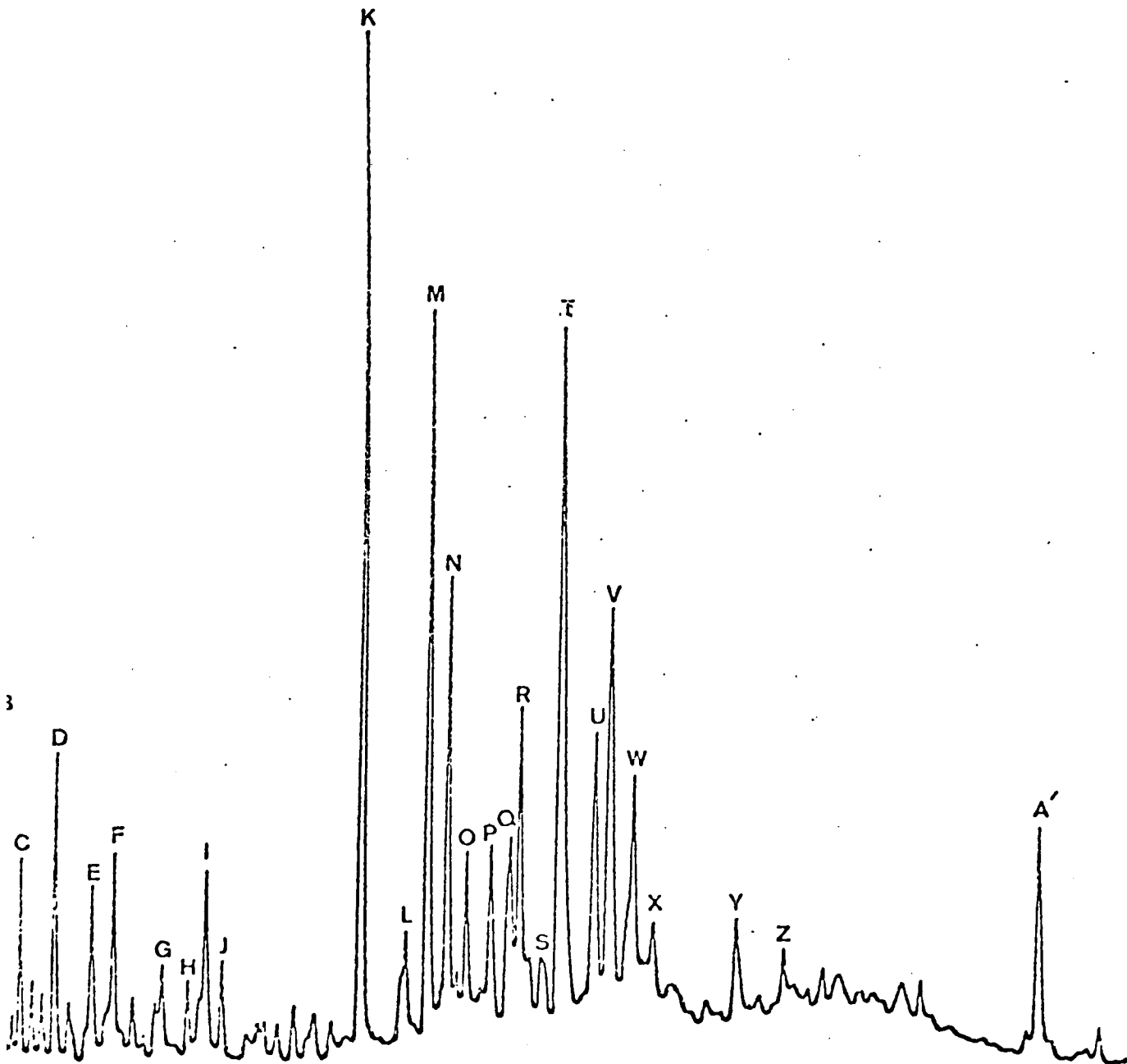


Figure 2. Chloroform extract A

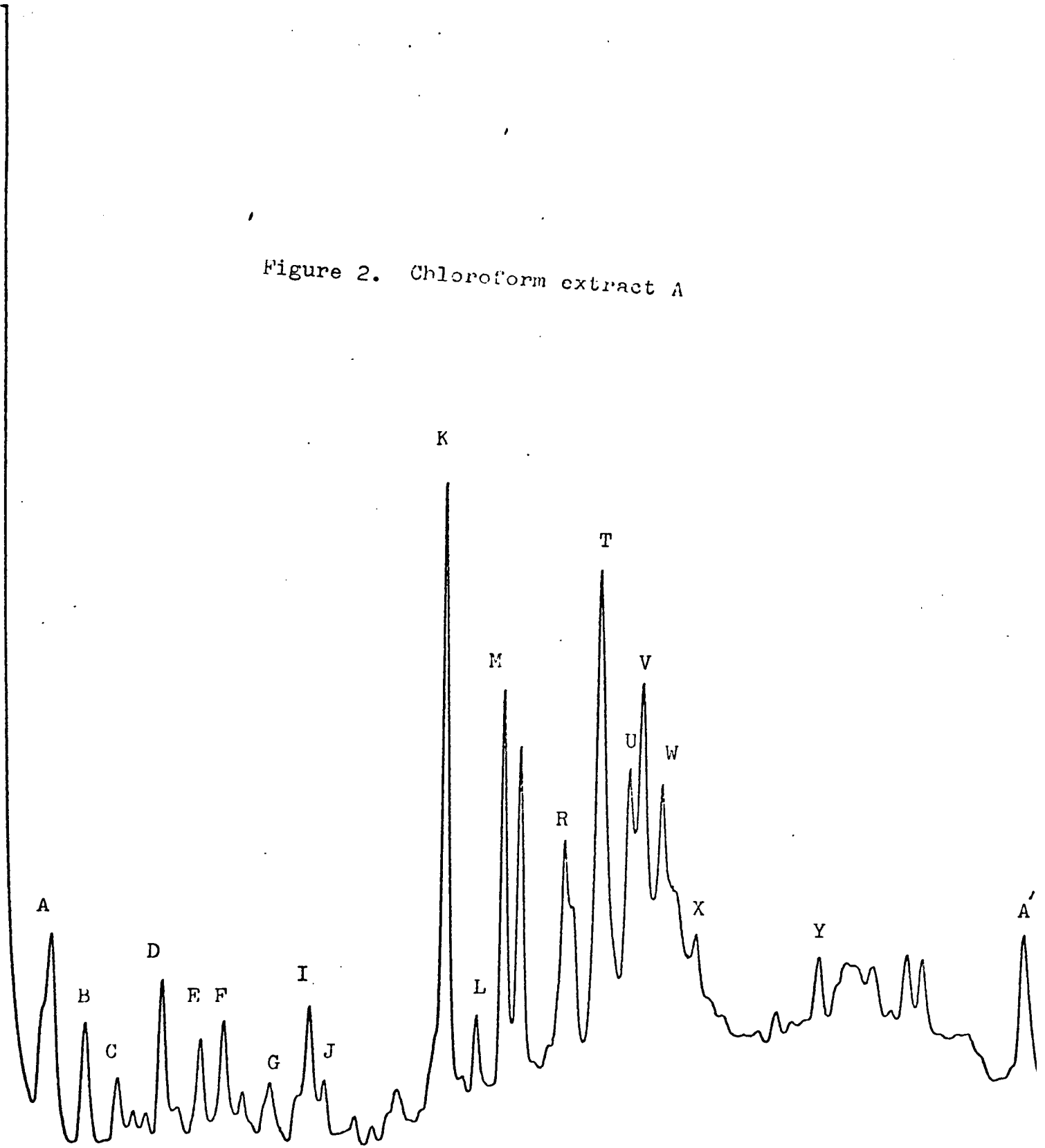
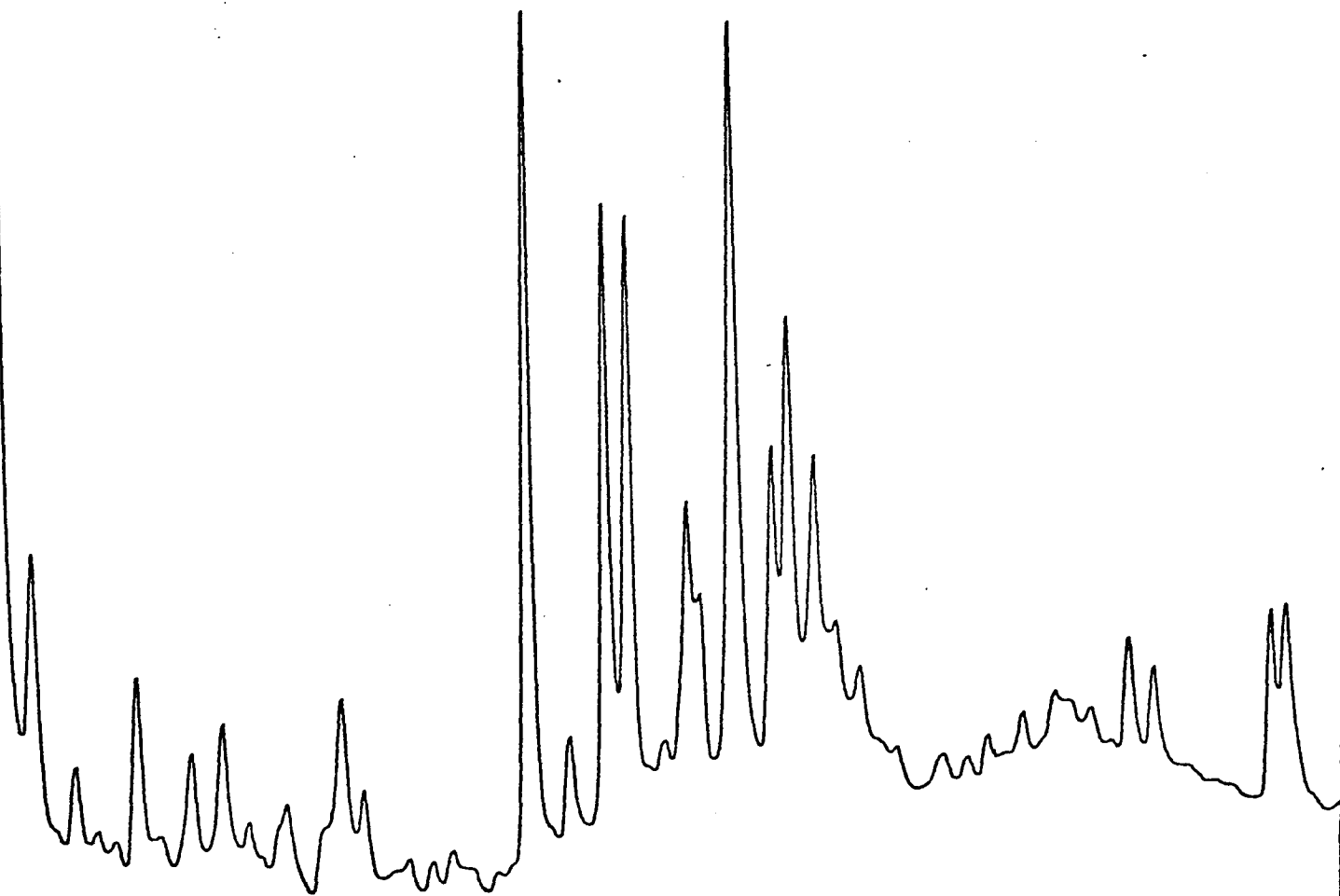
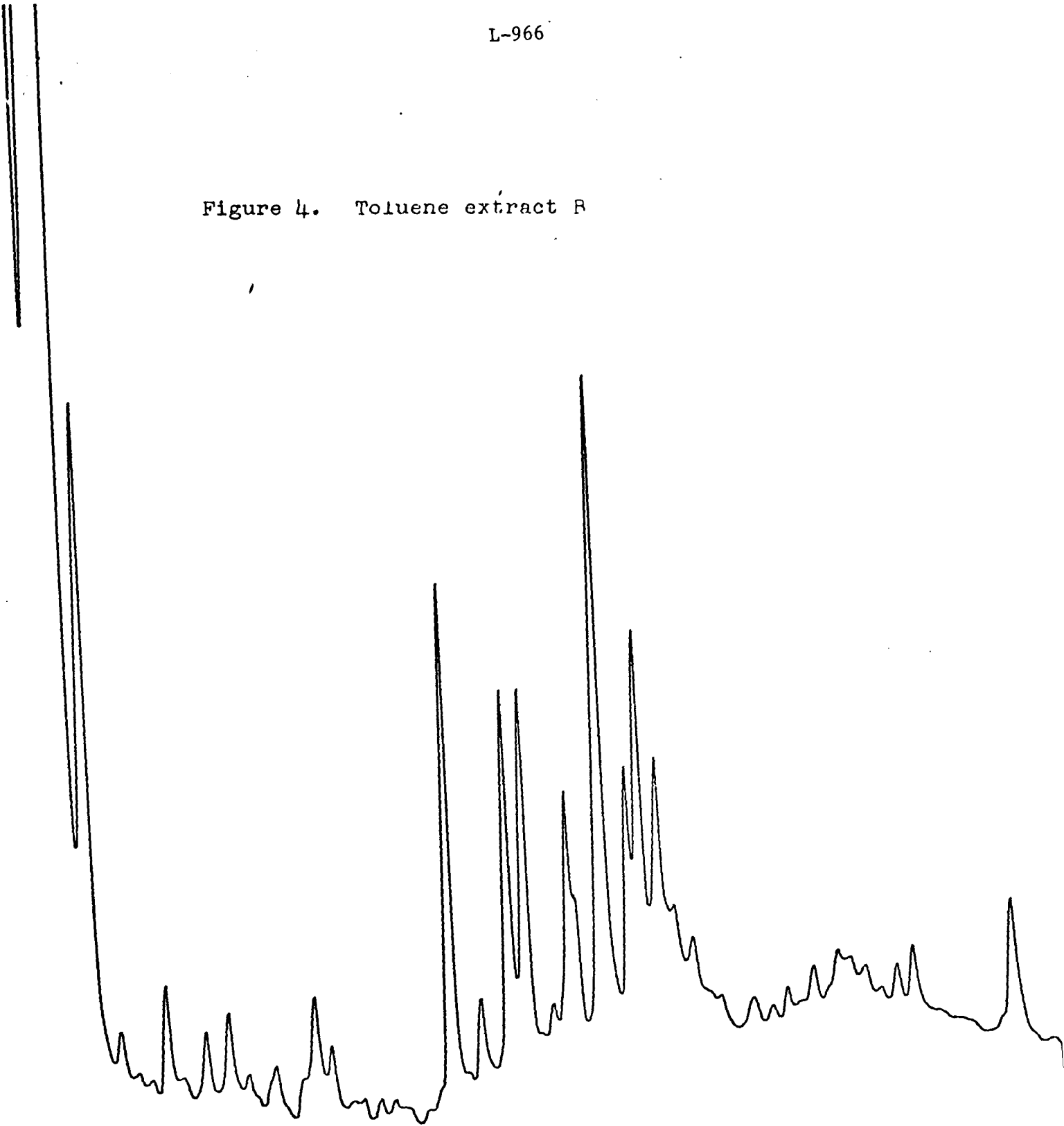


Figure 3. Toluene extract A



L-966

Figure 4. Toluene extract B



L-967

REPORT 2

RESULTS OF INTER-COMPARISON OF HYDROCARBON IN
ALASKAN SEDIMENTS SUPPLIED BY
NATIONAL BUREAU OF STANDARDS

Four NBS sediment samples were analyzed for hydrocarbon content as part of an intercomparison study. We are sending the calculated results along with raw data, and at your request we have compiled specific items of data and results for purposes of intercomparison. Since there is some confusion inherent in describing results and procedures, we would like to comment briefly on each item requested for intercalibration.

(1) Total hydrocarbons in the GC elution range is taken to be the sum of the calculated peak amounts for both the aliphatic and aromatic eluates. The GC elution range has been reported as the range of compounds seen in each individual sample and not our limits of detection.

(2) Total extractable hydrocarbons is reported as the weight of extract carried over after saponification, i.e. the non-saponifiable compounds.

(3) In sample H-16 we detected trace amounts of pristane and phytane but could only give upper limits, and thus no ratio was obtained.

(4) Because of the small amount of sample H-16, it was not weighed before freeze-drying, and so percentage water could not be calculated.

(5) The aromatic hydrocarbons are identified by their retention indices since we have just begun routine GC-MS work-ups on our samples. We will try to identify these compounds as soon as possible and send the results to you.

(6) & (7) Again, we have just begun working with the GC-MS and will analyze the samples concerned for PAH content. The results will be sent to you as soon as they are available.

At this point we will briefly describe the analysis methodology used

for the four NBS samples. Samples are stored in freezers until their work-up. The sample is thawed at room temperature, weighed and then spread onto a stainless steel tray for freeze-drying. Usually four samples are freeze-dried at one time - approximately 24 hours are required. The sample is then reweighed and put into a 2-l. round bottomed flask.

A mixture (450 ml) of toluene and methanol (3:7) is added to the sample which is then refluxed on a steam bath for 7 hours. The solvent mixture is then filtered off and set aside. Another 450 ml of toluene-methanol mixture is added and the sample again refluxed for 7 hours. The solvent mixture is filtered and added to the first extraction mixture. A final rinse of the sample is accomplished using 100 ml of hexane and heating for 1 hour. The hexane is filtered off and added to the toluene-methanol extraction mixture. The entire extraction mixture is rotovaped under partial vacuum to reduce the volume to about 200 ml.

The sample is saponified with 100 ml of saponification mixture (15 g KOH, 200 ml H₂O, 500 ml MeOH, and 500 ml toluene). The sample is refluxed for 4 hours to insure complete saponification. Non-hydrocarbons such as fatty acids should now be water soluble while the hydrocarbons will not be water soluble. The hydrocarbons are removed from the saponified mixture using three rinsings of 70 ml hexane in a 500 ml separatory funnel. The hexane portion is reduced in volume to about 5-10 ml with a rotovap. The extract is then transferred to a 2 ml vial and brought to dryness on a hot-plate using a small stream of filtered nitrogen as a purge. A weight is then obtained for the "total extractable hydrocarbons".

The sample is then separated into aliphatic and aromatic components by running it on a 1 x 20 ml column packed with alumina for the upper third and silica gel for the lower two thirds. The aliphatic hydrocarbons are eluted off using 50 ml of hexane. The aromatic hydrocarbons are eluted off with 50 ml of benzene. Both eluates are reduced in volume on the hot-plate with the nitrogen purge, then transferred to 2 ml vials and reduced to dryness. Weights are then obtained for the aliphatic and aromatic hydrocarbons. The samples are then put into solution using hexane at a ratio of about 100 μ l per 1 mg sample.

The GC is programmed to run at 6°C/min. from 70°C to 270°C. The column is packed with 5% FFAP on 80-100 mesh Gas Chrome Q. Each sample is compared to a standard (nC₁₆, nC₁₈, nC₂₁, nC₂₄, nC₂₈, nC₃₂, pristane and phytane) run on the same day. By matching retention times we are able to identify the normal aliphatics. Other compounds are identified by their retention indices.

In order to calculate the amounts of each compound we first used the peak areas of the standard to correct for daily variation in the GC response factors. Then using this correction and considering: the attenuations of the standard and sample GC, concentration of the sample divided by the amount of injection, dry weight of the sample, and the area of the peak we calculate the amount of the compound.

$$AR(C)(att.)/g \text{ dry weight} = \mu\text{g/g}$$

A = Area of sample peak

R = Response factor determined from standard (μ g)

C = Concentration of sample/amount injected

att.= Attenuation of sample/attenuation of standard

dry weight of samples is expressed in grams.

At this point the calculated values to compare pristane/phytane ratios, pristane/17, phytane/18, 17/18, and OEP (Odd-Even Preference) values are studied to distinguish between oil contaminated samples and "pristine" samples.

An examination of the four samples shows: H-16 gave a low yield of hydrocarbons most of which were in the range of nC₁₈ to nC₂₄ (not typical of oil contamination which usually has a much wider range going up to nC₃₅ and above). Only trace pristane and phytane were present.

H-32 again showed a light range between nC₁₆ to nC₂₅. Pristane and phytane were of low concentrations and very nearly equal.

K-3 gave considerably higher concentrations of hydrocarbons with a range of nC₁₆ to nC₃₁ predominating. Very little odd to even preference was evident indicating possible oil contamination. Pristane was present at a much higher level than phytane

K-19 had moderate concentrations of hydrocarbons but a wide range primarily from nC₁₆ to nC₂₉. Here again pristane stands out as being much greater than phytane. This sample appears relatively less contaminated than K-3 but the wide range without appreciable odd-even preference indicates some oil present.

NBS Sample H-16

- (1) Total hydrocarbons in the GC elution range = .0159 $\mu\text{g/g}$
 (as determined by summing the calculated amounts for the
 GC peaks of the aliphatic and aromatic elutions)
 Range: nC₁₆ to C₃₅
- (2) Total extractable (non-saponifiable) hydrocarbons = 3.12 $\mu\text{g/g}$
- (3) Pristane/phytane ratio = unknown
 Amount of pristane = < .0001 $\mu\text{g/g}$
 Amount of phytane = < .0001 $\mu\text{g/g}$
- (4) % water not determined
- (5) Most Abundant Compounds

<u>Compound</u>	<u>Aliphatic</u>		<u>Aromatic</u>	
	<u>Amount</u>	<u>Retention Index</u>	<u>Amount</u>	<u>Retention Index</u>
nC ₁₈	.0014 $\mu\text{g/g}$	24.92	.0015 $\mu\text{g/g}$	
nC ₁₉	.0011 $\mu\text{g/g}$	31.56	.0012 $\mu\text{g/g}$	
nC ₂₀	.0013 $\mu\text{g/g}$	33.30	.0018 $\mu\text{g/g}$	

- (6) Total PAH concentration not yet determined
- (7) Identity of most abundant PAH not yet determined

NBS Sample H-32

- (1) Total hydrocarbons in the GC elution range = .0341 $\mu\text{g/g}$
 (as determined by summing the calculated amounts for the
 GC peaks of the aliphatic and aromatic elutions)

Range: nC₁₆ to nC₃₃

- (2) Total extractable (non-saponifiable) hydrocarbons = 7.92 $\mu\text{g/g}$

- (3) Pristane/phytane ratio = 1.67

Amount of pristane = .0005 $\mu\text{g/g}$

Amount of phytane = .0003 $\mu\text{g/g}$

- (4) % water = 4.79%

- (5) Most Abundant Compounds

<u>Compound</u>	<u>Aliphatic</u>		<u>Aromatic</u>	
	<u>Amount</u>	<u>Retention Index</u>	<u>Amount</u>	<u>Retention Index</u>
nC ₂₀	.0033 $\mu\text{g/g}$	27.15	.0004 $\mu\text{g/g}$	
nC ₂₁	.0047 $\mu\text{g/g}$	28.58	.0005 $\mu\text{g/g}$	
nC ₂₂	.0045 $\mu\text{g/g}$	32.82	.0006 $\mu\text{g/g}$	

- (6) Total PAH concentration not yet determined

- (7) Identity of most abundant PAH not yet determined

NBS Sample K-3

- (1) Total hydrocarbons in the GC elution range = .210 $\mu\text{g/g}$
 (as determined by summing the calculated amounts for the
 GC peaks of the aliphatic and aromatic elutions)
 Range: C₁₄ to C₃₅
- (2) Total extractable (non-saponifiable) hydrocarbons = 109 $\mu\text{g/g}$
- (3) Pristane/phytane ratio = 3.71
 Amount of pristane = .0089 $\mu\text{g/g}$
 Amount of phytane = .0024 $\mu\text{g/g}$
- (4) % water = 26.3%

(5) Most Abundant Compounds

	Aliphatic		Aromatic	
<u>Compound</u>	<u>Amount</u>	<u>Retention Index</u>	<u>Amount</u>	
nC ₂₀	.0137 $\mu\text{g/g}$	27.08	.0021 $\mu\text{g/g}$	
nC ₂₁	.0199 $\mu\text{g/g}$	28.35	.0025 $\mu\text{g/g}$	
nC ₂₂	.0187 $\mu\text{g/g}$	31.48	.0029 $\mu\text{g/g}$	

- (6) Total PAH concentration not yet determined
- (7) Identity of most abundant PAH not yet determined

NBS Sample K-19

- (1) Total hydrocarbons in the GC elution range = .0536 $\mu\text{g/g}$
 (as determined by summing the calculated amounts for the
 GC peaks of the aliphatic and aromatic elutions)

Range: nC₁₅ to nC₃₃

- (2) Total extractable (non-saponifiable) hydrocarbons = 10.73 $\mu\text{g/g}$

- (3) Pristane/phytane ratio = 2.38

Amount of pristane = .0019 $\mu\text{g/g}$

Amount of phytane = .0008 $\mu\text{g/g}$

- (4) % water = 21.30%

- (5) Most Abundant Compounds

	Aliphatic		Aromatic	
<u>Compound</u>	<u>Amount</u>	<u>Retention Index</u>	<u>Amount</u>	
nC ₂₀	.0039 $\mu\text{g/g}$	27.15	.0007 $\mu\text{g/g}$	
nC ₂₁	.0041 $\mu\text{g/g}$	28.33	.0007 $\mu\text{g/g}$	
nC ₂₂	.0043 $\mu\text{g/g}$	29.83	.0008 $\mu\text{g/g}$	

- (6) Total PAH concentration not yet determined

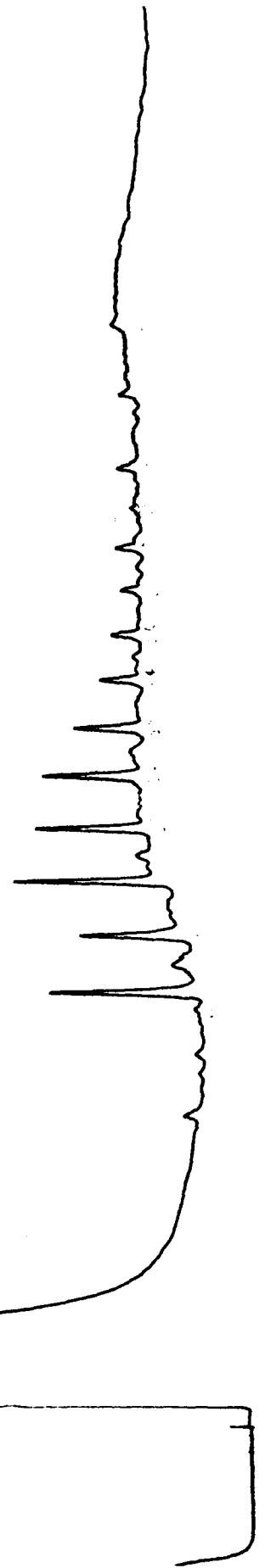
- (7) Identity of most abundant PAH not yet determined

NBS Sample H-16

Weight of dry sample = 320.3 g
 Weight of wet sample = unknown
 Weight of total extract = .00100 g
 Weight of hexane eluate = not measurable
 Weight of benzene eluate = not measurable
 Total amount of peaks from hexane eluate = .0089 $\mu\text{g/g}$
 Total amount of peaks from benzene eluate = .0070 $\mu\text{g/g}$

<u>Compounds In Hexane Eluate</u>				<u>Compounds In Benzene Eluate</u>	
Retention Index	$\mu\text{g/g}$	Retention Index	$\mu\text{g/g}$	Retention Index	$\mu\text{g/g}$
16	.0001	22	.0007	24.92	.0015
Pr	Tr	23	.0008	27.08	.0008
17	.0001	24	.0006	27.92	.0002
Ph	Tr	25	.0003	30.61	.0011
18	.0014	26	.0003	31.56	.0012
18.53	.0004	27	.0003	33.30	.0018
19	.0011	28	.0001	34.46	<u>.0004</u>
20	.0013	29	.0002		
20.5	.0002	31	<u>.0001</u>	Total	.0070
21	.0009				
		Total	.0089		

L-977



H-16 Sed-Hex

ex-Sed 2(50) x16 10/12/76

L-978



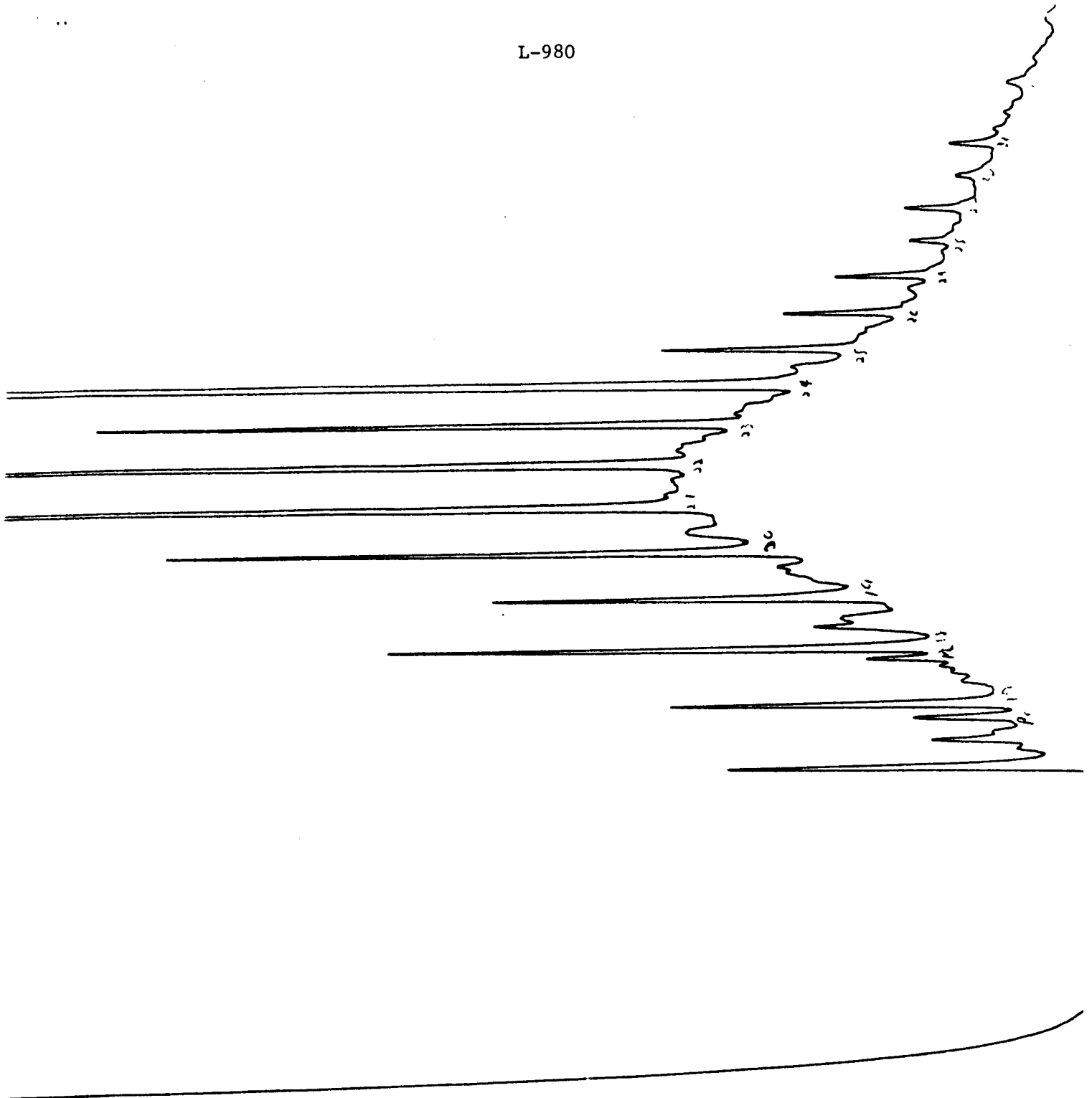
H-16 Sed - Ben

NBS Sample H-32

Weight of dry sample = 246.3 g
 Weight of wet sample = 258.7 g
 Weight of total extract = .00195 g
 Weight of hexane eluate = .00051 g
 Weight of benzene eluate = .00034 g
 Total amount of peaks from hexane eluate = .0315 $\mu\text{g/g}$
 Total amount of peaks from benzene eluate = .0026 $\mu\text{g/g}$

<u>Compounds In Hexane Eluate</u>				<u>Compounds In Benzene Eluate</u>	
Retention Index	$\mu\text{g/g}$	Retention Index	$\mu\text{g/g}$	Retention Index	$\mu\text{g/g}$
16	.0019	22	.0045	18.61	.0003
16.5	.0004	23	.0029	27.15	.0004
Pr	.0005	24	.0019	28.17	.0004
17	.0018	25	.0009	28.58	.0005
Ph	.0003	26	.0006	29.75	.0004
18	.0025	27	.0004	32.82	<u>.0006</u>
18.47	.0008	28	.0002		
18.63	.0001	29	.0003	Total	.0026
19	.0023	30	.0001		
20	.0033	31	.0003		
20.47	.0007	33	<u>.0001</u>		
21	.0047				
		Total	.0315		

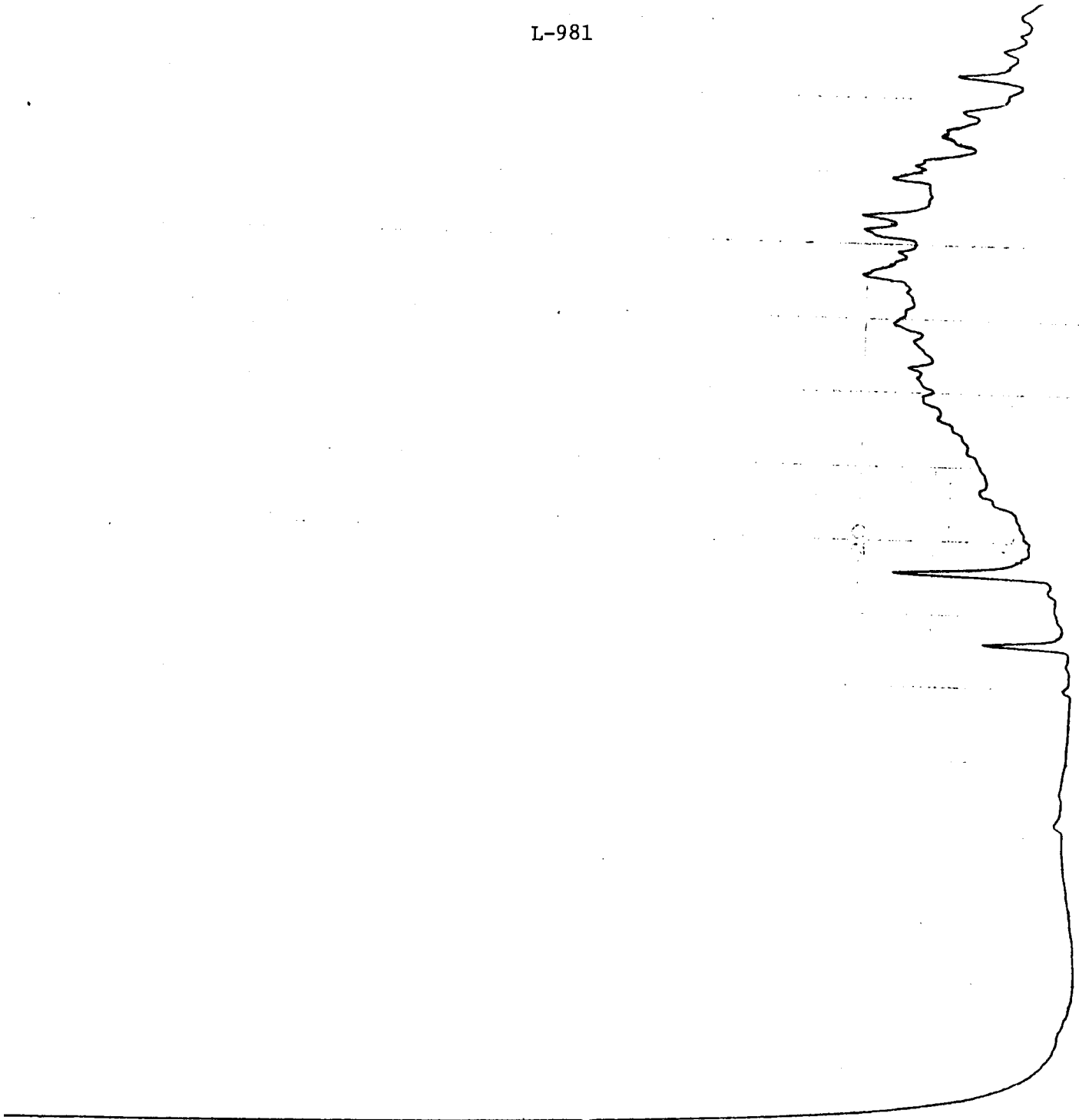
L-980



H-32 Sed - Hex

3ml/30 box at 16 NOV 4 1976

L-981



H-32 Sed - Ben

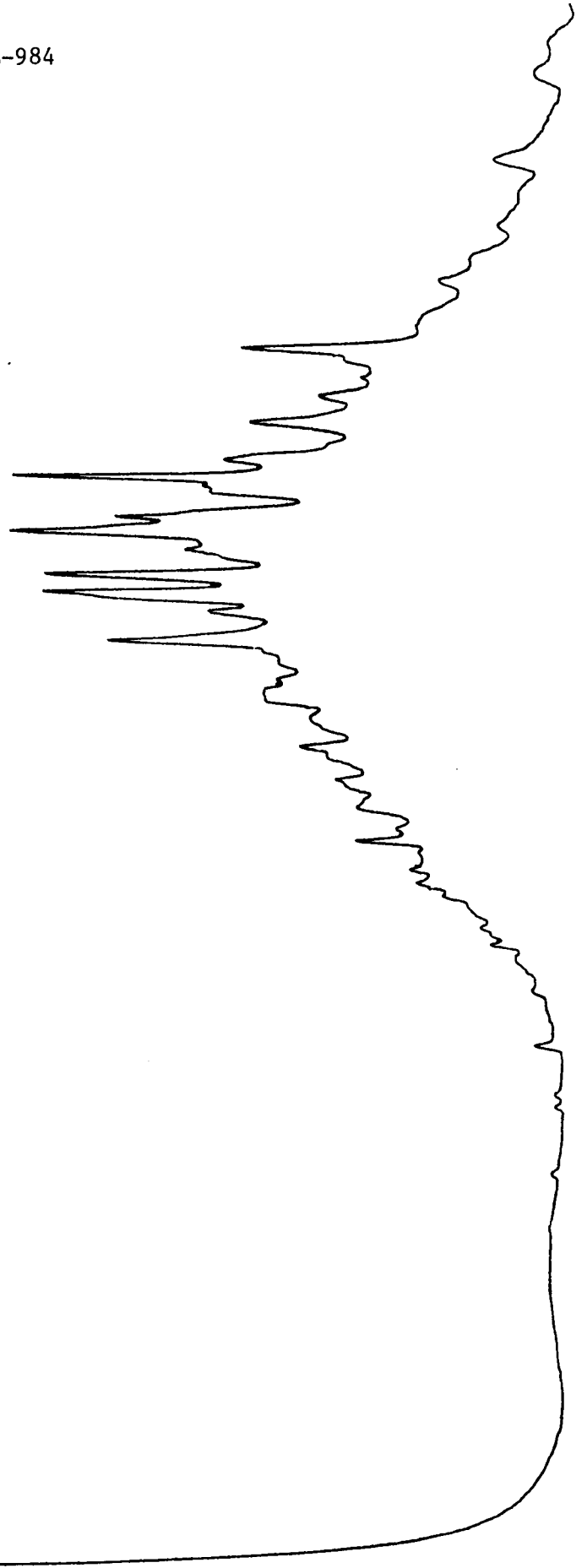
37 341 of 50 at 16 Nov 58

NBS Sample K-3

Weight of dry sample = 209.7 g
 Weight of wet sample = 284.5 g
 Weight of total extract = .02294 g
 Weight of hexane eluate = .00163 g
 Weight of benzene eluate = .00089 g
 Total amount of peaks from hexane eluate = .1959 $\mu\text{g/g}$
 Total amount of peaks from benzene eluate = .0136 $\mu\text{g/g}$

<u>Compounds In Hexane Eluate</u>				<u>Compounds in Benzene Eluate</u>	
Retention Index	$\mu\text{g/g}$	Retention Index	$\mu\text{g/g}$	Retention Index	$\mu\text{g/g}$
14	.0012	21	.0199	27.08	.0021
14.30	.0014	22	.0187	28.35	.0025
15	.0047	23	.0121	28.75	.0014
16	.0088	24	.0097	29.91	.0021
16.30	.0028	25	.0090	31.48	.0029
16.44	.0019	26	.0075	33.0	.0014
Pr	.0089	27	.0083	35.09	<u>.0012</u>
17	.0082	28	.0058		
Ph	.0024	29	.0074	Total	.0136
18	.0093	30	.0040		
18.47	.0018	31	.0051		
18.63	.0008	32	.0016		
19	.0110	33	.0031		
19.56	.0016	34	.0009		
20	.0137	35	<u>.0010</u>		
20.38	.0033				
		Total	.1959		

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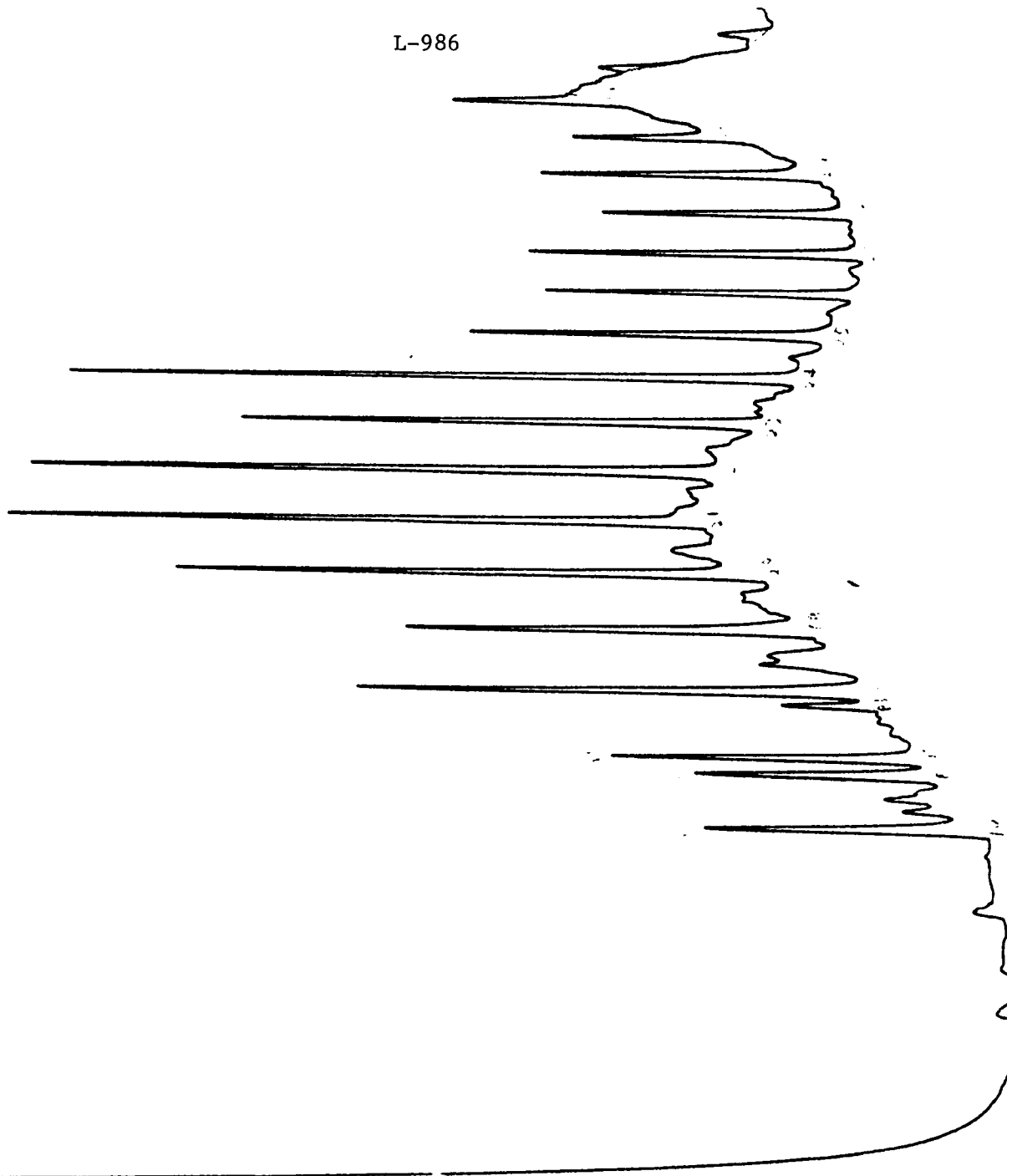
K-3 Sed - Ben

NBS Sample K-19

Weight of dry sample = 309.3 g
 Weight of wet sample = 393 g
 Weight of total extract = .00332 g
 Weight of hexane eluate = .00176 g
 Weight of benzene eluate = .00195 g
 Total amount of peaks from hexane eluate = .0494 $\mu\text{g/g}$
 Total amount of peaks from benzene eluate = .0042 $\mu\text{g/g}$

<u>Compounds In Hexane Eluate</u>				<u>Compounds In Benzene Eluate</u>	
Retention Index	$\mu\text{g/g}$	Retention Index	$\mu\text{g/g}$	Retention Index	$\mu\text{g/g}$
15	.0004	22	.0043	18.82	.0007
16	.0022	23	.0032	27.15	.0007
16.27	.0004	24	.0028	28.33	.0007
16.46	.0003	25	.0024	28.75	.0005
Pr	.0019	26	.0021	29.83	.0008
17	.0024	27	.0007	30.54	.0004
Ph	.0008	28	.0020	33.0	<u>.0004</u>
18	.0032	29	.0029		
18.44	.0009	30	.0013	Total	.0042
18.61	.0001	31	.0012		
19	.0032	32	.0004		
20	.0039	33	<u>.0004</u>		
21	.0041				
		Total	.0494		

L-986



K-19 - Sed - Hex

EX 3ml of 100 at 16 OCT 29'76

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L-987



K-19 - 3ml of 100 Ben NOV 1 at 16

L-988

REPORT 3

HYDROCARBON IN SPIKED SANTA BARBARA SEDIMENT
AN INTER-COMPARISON SAMPLE



THE UNIVERSITY OF TEXAS
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Mr. James Cimato
U.S. Department of Interior
Bureau of Land Management
Room 2453
18th and C Streets
Washington, D.C.
20240

May 5, 1977

Dear Jim,

The enclosed analyses of the Kaplan supplied Santa Barbara sediment plus petroleum sample is submitted in lieu of a report on the March 7-11 New Orleans meeting of the Hydrocarbon Methodology Review Group.

The sample was useful and the results were in line with my own ideas as to the yields of materials (recovery) from sediment.

As matters now stand I plan to attend the ASTM meeting in Minnesota in June for the HCMRG.

Well Jim if we ever have a North Sea type blow out in S. Texas we will sure be glad we did these baseline studies.

Sincerely yours,

A handwritten signature in cursive script that reads "Pat Parker".

Patrick L. Parker, P.I.
Professor of Chemistry and
marine Studies

L-990

Report on Hydrocarbons isolated from
Santa Barbara Sediment with S. La. Crude Oil (Kaplan).

by

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May 6, 1977

TABLE 1

Saturated Hydrocarbons Isolated from Santa Barbara Sediment
Spiked with API S. La. Crude Oil (Kaplan). microgram/gram

<u>Retention Index</u>	<u>Sub sample 1-A-t</u>	<u>Sub sample 1-B-t</u>
15.00	6.0	7.9
16.00	4.7	6.2
16.67 - pristane	6.4	5.5
17.00	7.0	9.5
17.80 - phytane	1.3	1.6
18.00	7.4	6.9
19.00	6.4	6.5
20.00	3.3	4.7
21.00	3.1	3.0
22.00	2.9	2.6
23.00	2.9	2.4
24.00	4.9	2.4
25.00	3.4	1.8
26.00	4.1	1.3
27.00	4.8	1.6
28.00	2.5	1.0
29.00	4.2	1.7
30.00	1.9	1.0
31.00	4.8	2.1
32.00	2.8	1.7
33.00	1.0	0.55
34.00	1.6	1.4
Total Saturated Hydrocarbons *	<u>87.4</u>	<u>73.3</u>

* This sample was not saponified.

L-994
TABLE 2

Saturated Hydrocarbons Isolated from Santa Barbara Sediment
Spiked with API S. La. Crude Oil (Kaplan). microgram/gram

Retention Index	Sub-sample 1-A-4	Sub-sample 1-B-4
15.00	2.4	1.6
16.00	4.1	1.5
16.6 - Pristane	4.7	1.2
17.00	5.6	1.6
17.8 - Phytane	2.7	.9
18.00	5.5	1.5
18.63	2.0	.4
19.00	4.6	1.2
20.00	2.5	.8
21.00	2.1	.6
22.00	1.8	.5
23.00	1.9	.5
24.00	1.7	.4
25.00	1.7	.8
26.00	1.6	.3
27.00	1.7	.3
28.00	1.2	.2
29.00	1.9	.3
30.00	1.2	.3
30.62	0.9	.1
31.00	1.1	.2
Total Saturated Hydrocarbons *	52.9	18.6

* This sample was saponified

Table 3

1-A SUBSAMPLE - PLP - KAPLANS SAMPLE

NO. OF CARBONS	REL. WT. PCNT.	SMOOTH WT. PCNT.	DEP VALUE
15	7.561		
16	5.900		
17	8.756	8.047	1.123
18	9.259	8.294	1.022
19	8.014	7.152	1.129
20	4.177	5.335	1.252
21	3.850	4.116	1.121
22	3.585	3.875	.949
23	3.699	4.323	.783
24	6.114	4.843	.707
25	4.328	5.042	.795
26	5.120	5.096	1.043
27	6.076	4.927	1.403
28	3.082	4.454	1.738
29	5.233	4.096	1.980
30	2.415	4.143	2.142
31	6.064	4.160	1.802
32	3.522	3.415	1.134
33	1.195		
34	2.051		

DEP = 1.505

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Table 4

1-B SUBSAMPLE - FLP - KAPLAN'S SAMPLE

NO. OF CARBONS	REL. WT. PCNT.	SMOOTH WT. PCNT.	DEP VALUE
15	11.919		
16	9.279		
17	14.333	11.658	1.372
18	10.350	10.928	1.230
19	9.777	9.195	1.116
20	7.031	7.125	1.018
21	4.602	5.311	.934
22	3.953	4.209	.961
23	3.651	3.710	.967
24	3.591	3.297	.921
25	2.670	2.773	.998
26	1.961	2.345	1.223
27	2.489	2.133	1.448
28	1.524	2.059	1.600
29	2.580	2.096	1.711
30	1.569	2.290	1.710
31	3.199	2.450	1.362
32	2.580	2.205	.841
33	.830		
34	2.112		

$\overline{\Phi P} = 1.362$

{

- .998
- 1.223
- 1.448
- 1.600
- 1.711
- 1.710
- 1.362
- .841

Table 5

Major Aromatic Hydrocarbons Isolated from Santa Barbara Sediment
Spiked with S. La. Crude (Kaplan).

Mass	Aromatics > .2 $\mu\text{g/g}$		Aromatics < .2 $\mu\text{g/g}$
156	C ₂ Naphthalenes	178	Phenanthrene
170	C ₃ Naphthalenes	184	Anthracene ⁺
192	Methyl Phenanthrenes and Anthracenes	198	Dibenzothiophene
		212	Methyl Dibenzothiophenes
182	Dimethylbiphenyls	180	C ₂ Dibenzothiophenes
196	Trimethylbiphenyls	194	Methylfluorenes
316	P,P' DDE	184	C ₂ - Fluorenes
		198	C ₄ Naphthalenes
			C ₅ Naphthalenes
			Methylbiphenyls

Figure 2

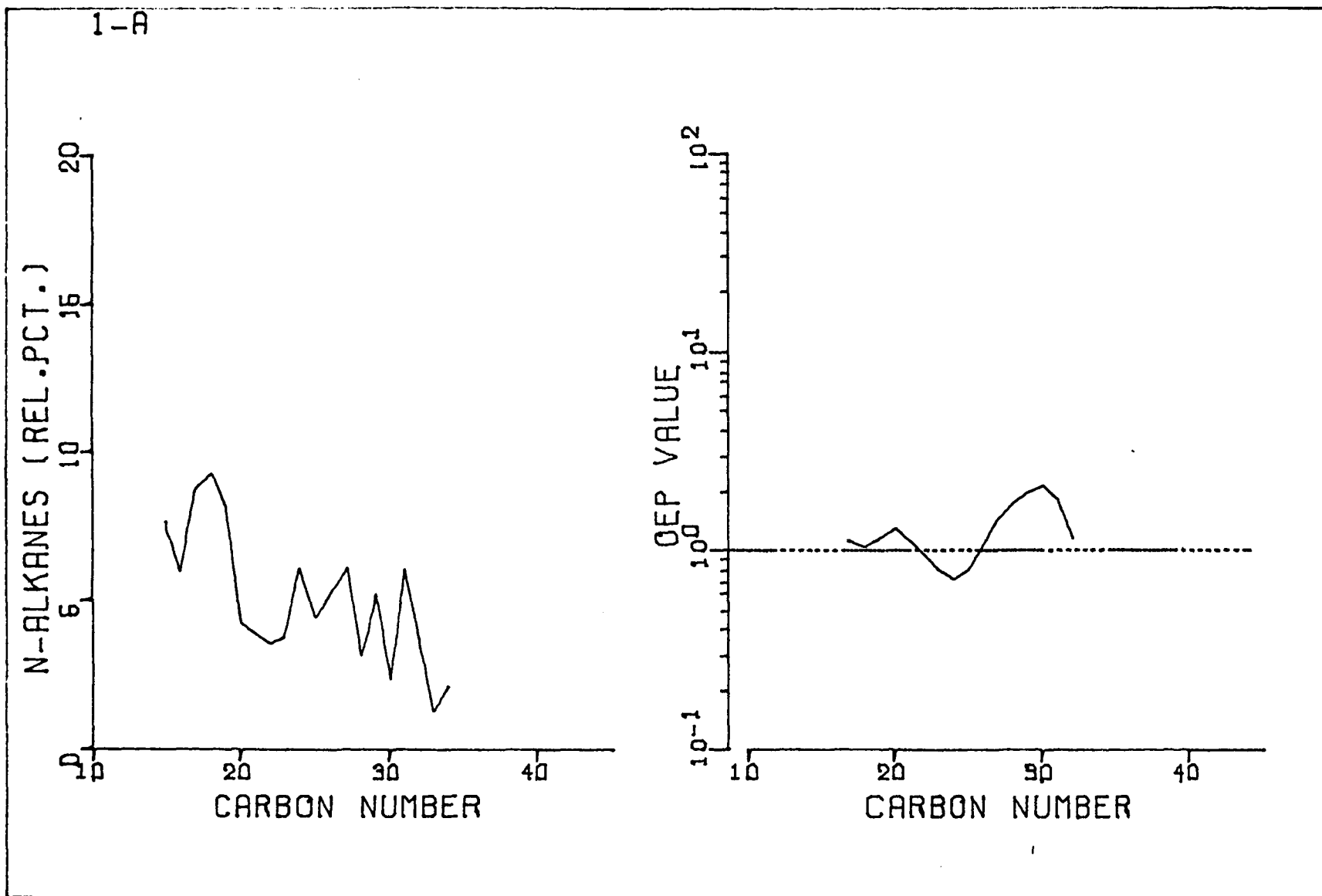
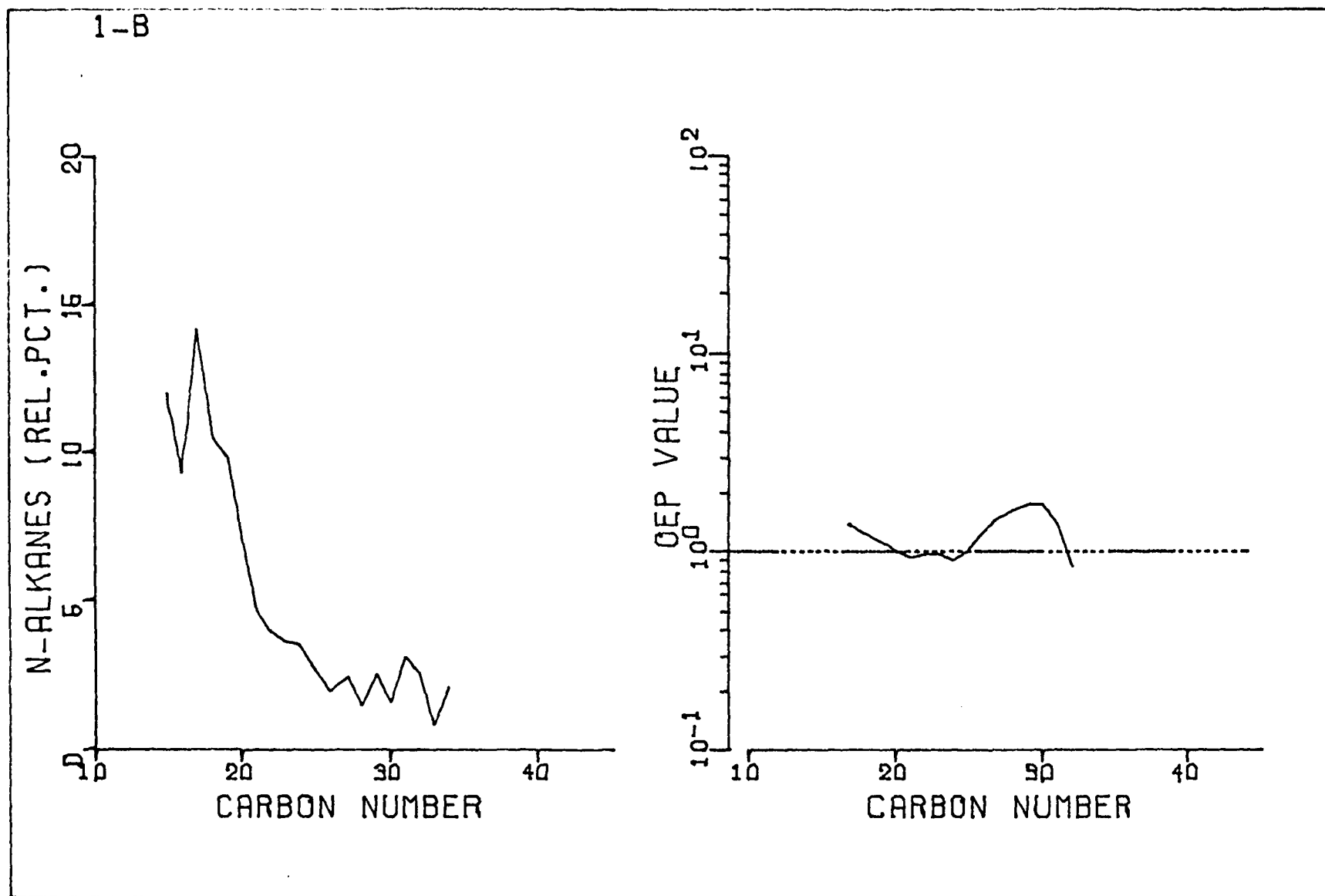
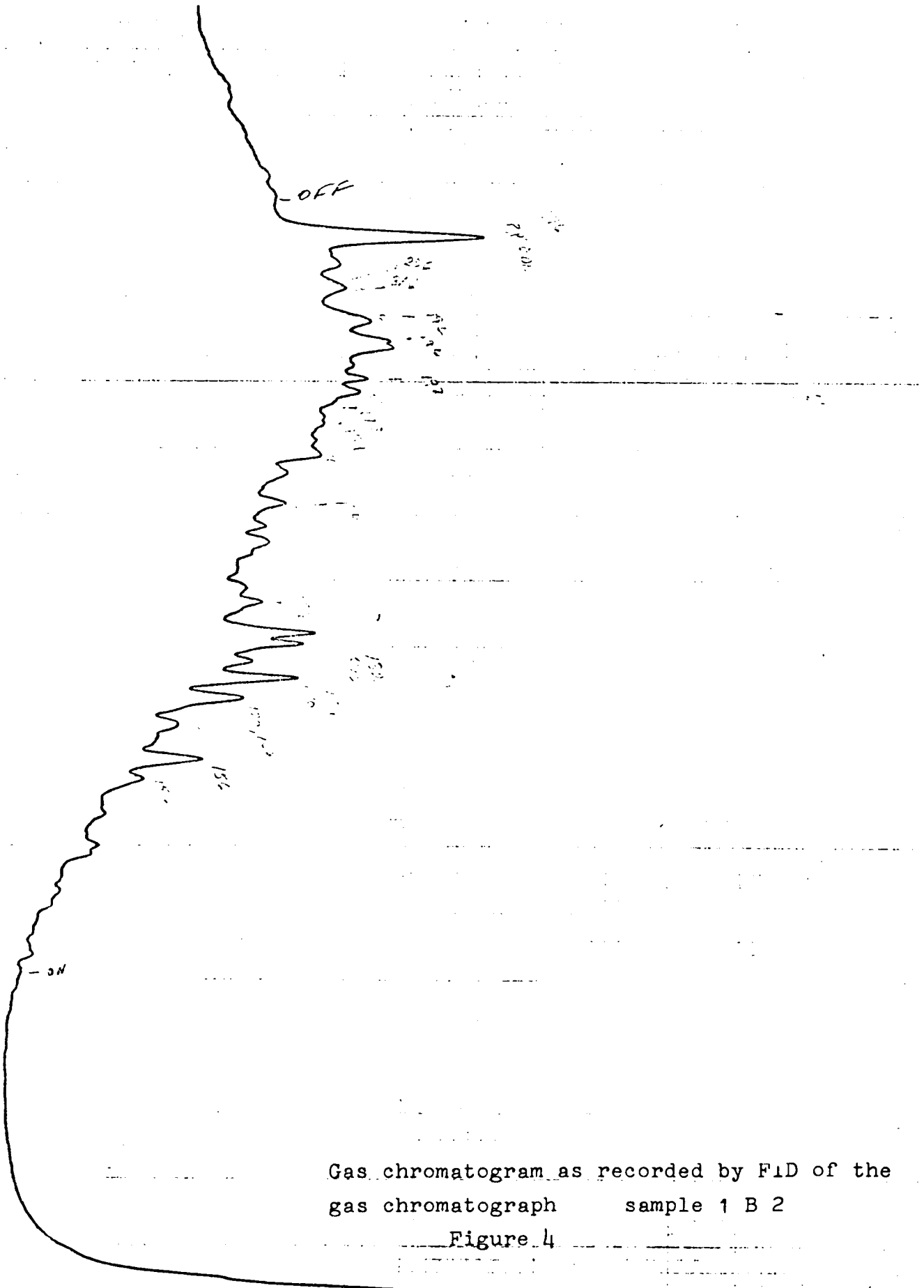


Figure 3



L-1001



Gas chromatogram as recorded by FID of the
gas chromatograph sample 1 B 2

Figure 4

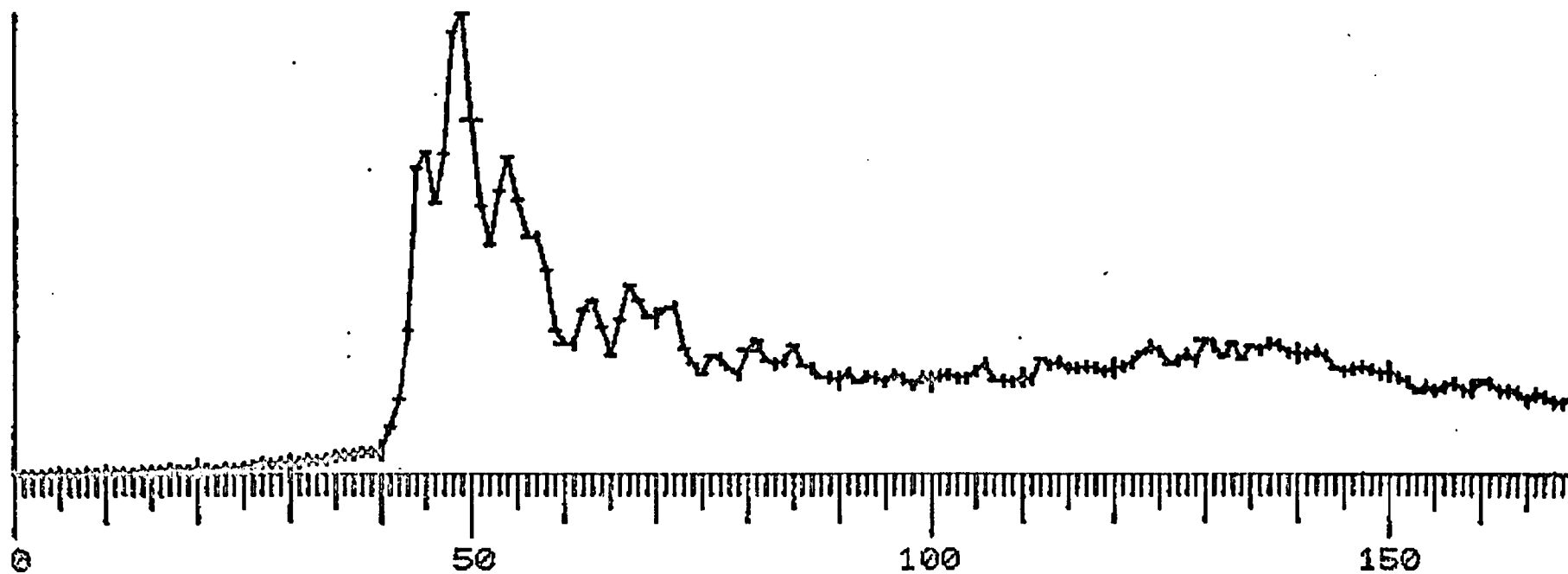
DPAW MC
GC ID AA 6 DATE 4/28/77
AQRATE 2 SCTIME 4 RESPWR 500
HIMASS 500 THRESH 8

BLM INTERCALIB. STD SEDIMENT 1B-2

MASSES 156, 0, 0, 0
#SCANS 165 HRDCPY NO
%SCALE 100 REZERO YES
BASE 25795*2** 0

Mass chromatogram of mass 156, C₂-naphthalenes

Figure 6

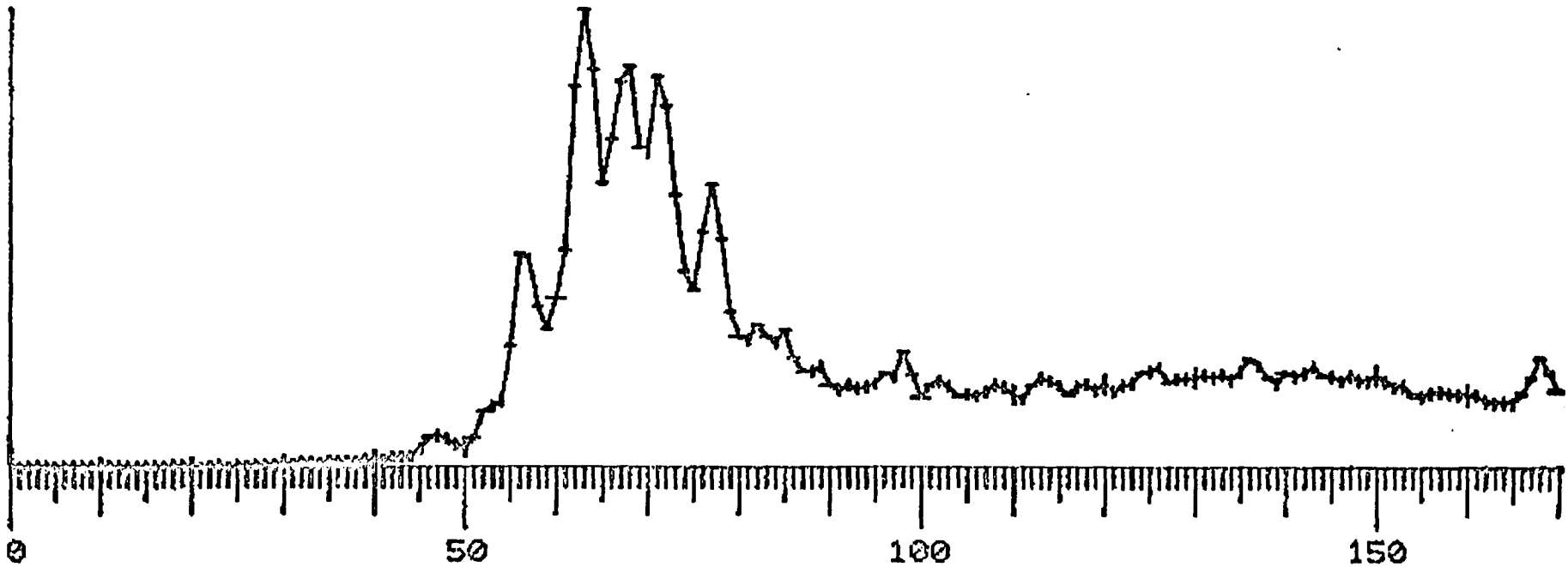


DPAW MC
GC ID AA 6 DATE 4/28/77
AQRATE 2 SCTIME 4 RESPUR 500
HIMASS 500 THRESH 8

ELM INTERCALIB. STD SEDIMENT 1B-2

MASSSES 170, 0, 0, 0
#SCANS 165 HRDCPY NO
%SCALE 100 REZERO YES
BASE 26677*2** 0

Mass chromatogram of mass 170, C₃- naphthalenes
/ Figure 7



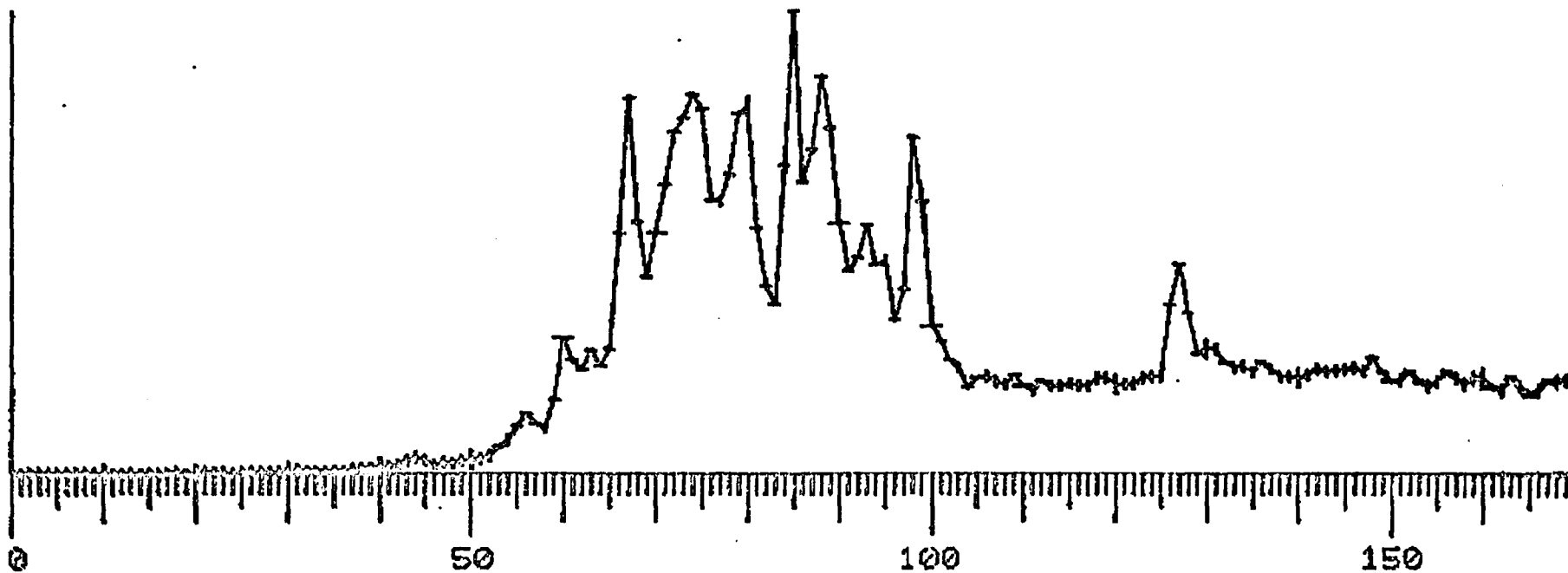
GC ID AA 6 DATE 4/28/77
AQDATE 2 SCTIME 4 RESPWR 500
HIMASS 500 THRESH 8

ELM INTERCALIB. STD SEDIMENT 1B-2

MASSES 184, 0, 0, 0
#SCANS 165 HRDCPY NO
%SCALE 100 REZERO YES
BASE 17238*2** 0

Mass chromatogram of mass 184, C₄- naphthalenes + dibenzothiophene

Figure 8



L-1005

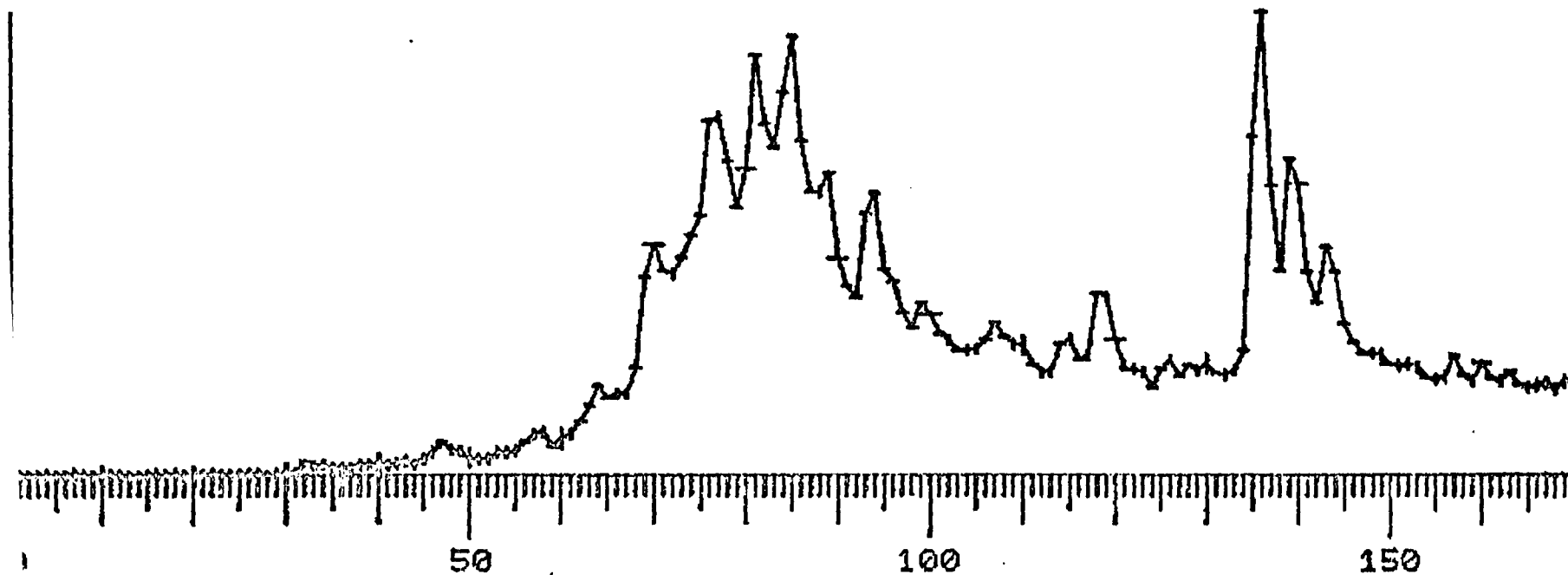
DPAW MC
GC ID AA 6 DATE 4/28/77
AOPATE 2 SCTIME 4 RESPWR 500
HIMASS 500 THRESH 8

BLM INTERCALIB. STD SEDIMENT 1B-2

MASSES 198, 0, 0, 0
#SCANS 165 HRDCPY NO
%SCALE 100 REZERO YES
BASE 11437*2** 0

Mass chromatogram of mass 198, C₅-naphthalenes + methyldibenzothiophenes

Figure 9



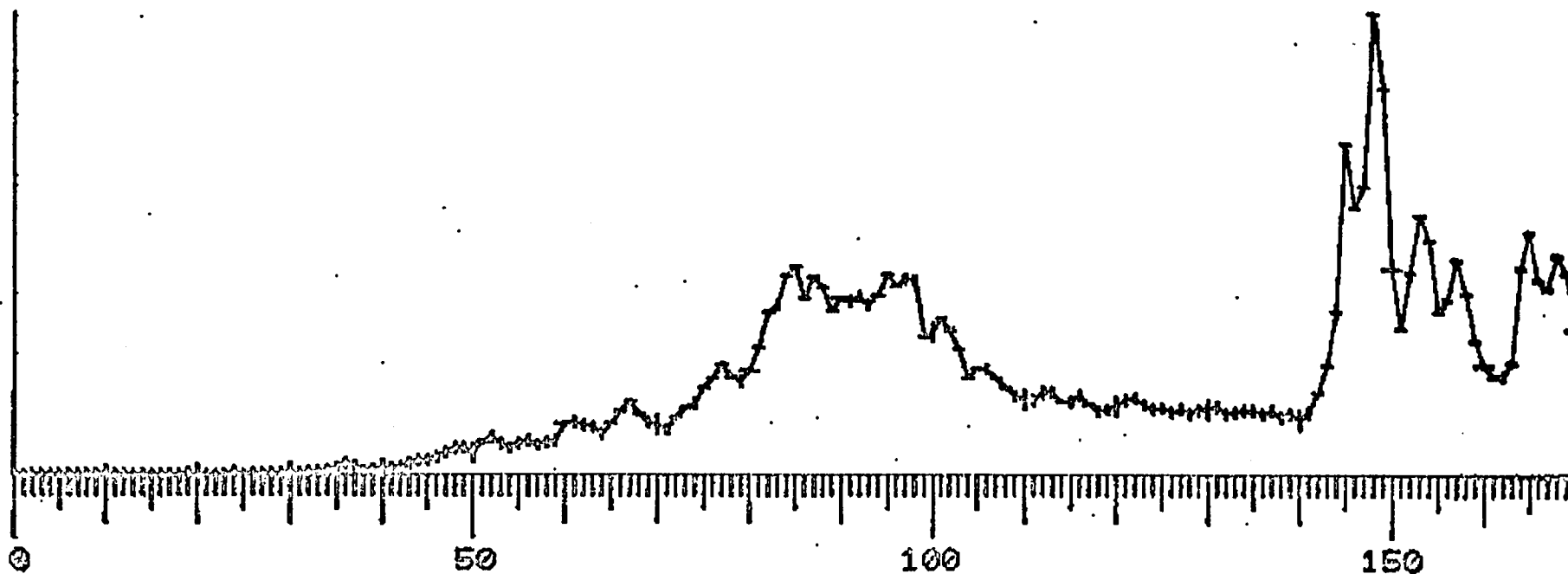
DRAW MC
GC ID AA 6 DATE 4/28/77
AQRATE 2 SCTIME 4 RESPWR 500
HIMASS 500 THRESH 8

BLM INTERCALIB. STD SEDIMENT 1B-2

MASSES 212, 0, 0, 0
#SCANS 165 HRDCPY NO
%SCALE 100 REZERO YES
BASE 13815*2** 0

Mass chromatogram of mass 212, C₂ - dibenzothiophenes

Figure 10



L-1007

SEQUEN 73 PAGE 1

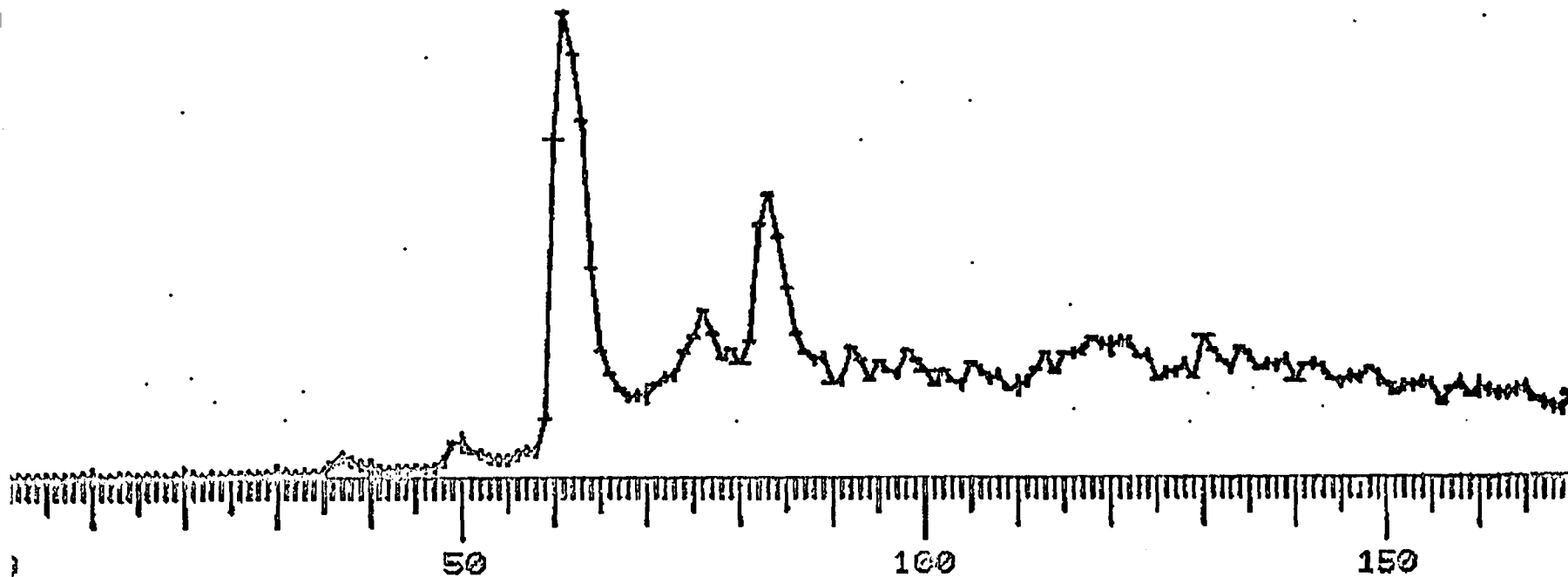
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GC ID AA 6 DATE 4/28/77
AQRATE 2 SCTIME 4 RESPUR 500
HIMASS 500 THRESH 8

BLM INTERCALIB. STD SEDIMENT 1B-2

MASS 168, 0, 0, 0
#SCANS 165 HRDCPY NO
%SCALE 100 REZERO YES
BASE 14835*2** 0

Mass chromatogram of mass 168, methylbiphenyls + methylacenaphthenes

Figure 11



L-1008

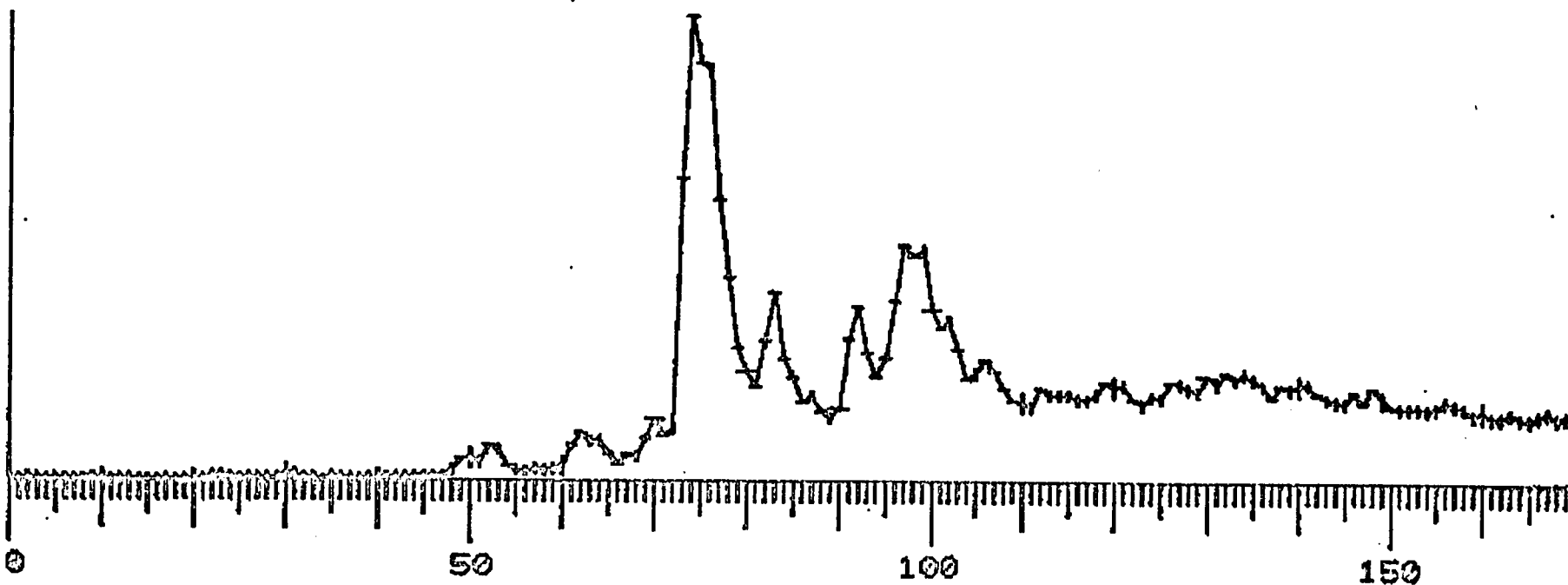
DRAW MC
GC ID AA 6 DATE 4/28/77
AQRATE 2 SCTIME 4 RESPWR 500
HIMASS 500 THRESH 8

BLM INTERCALIB. STD SEDIMENT 1B-2

MASSES 182, 0, 0, 0
#SCANS 165 HRDCPY NO
%SCALE 100 REZERO YES
BASE 18068*2** 0

Mass chromatogram of mass 182, C₂ - biphenyls + C₂ - acenaphthenes

Figure 12



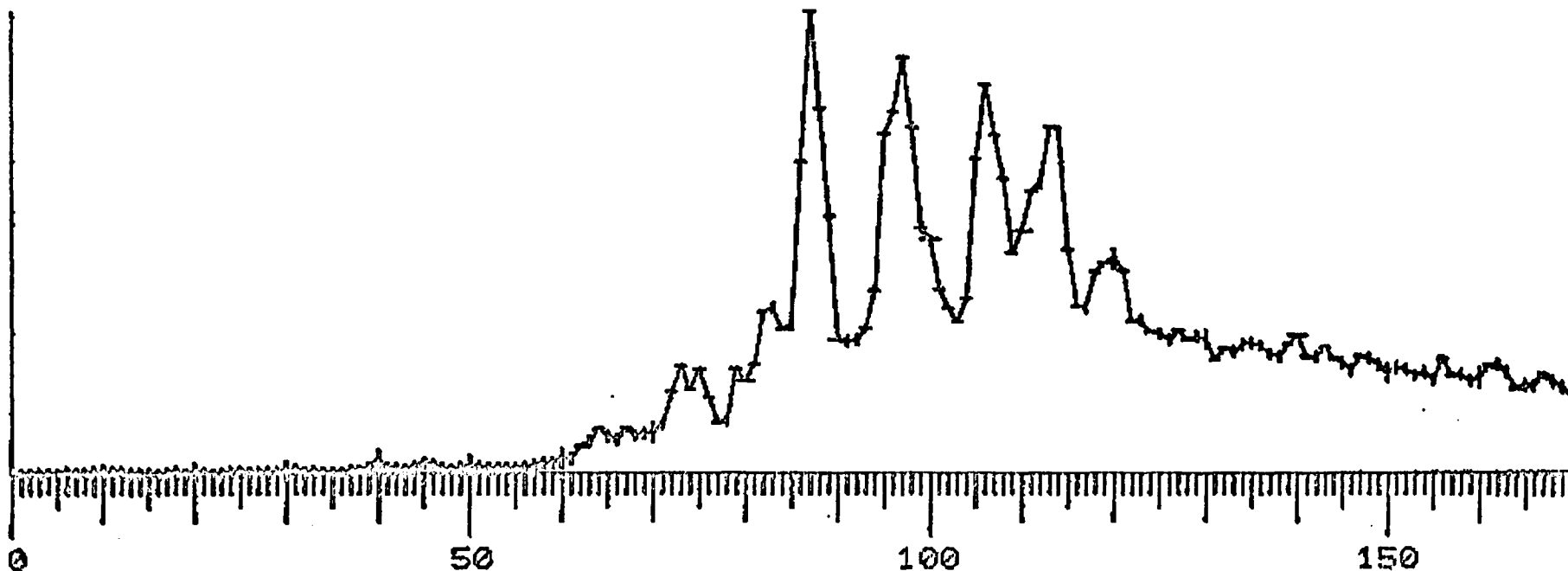
DPAW MC
GC ID AA 6 DATE 4/28/77
AQRATE 2 SCTIME 4 RESPWR 500
HIMASS 500 THRESH 8

BLM INTERCALIB. STD SEDIMENT 1B-2

MASSES 196, 0, 0, 0
#SCANS 165 HRDCPY NO
%SCALE 100 REZERO YES
BASE 12512*2** 0

Mass chromatogram of mass 196, C₃ - biphenyls + C₃ - acenaphthenes

Figure 13



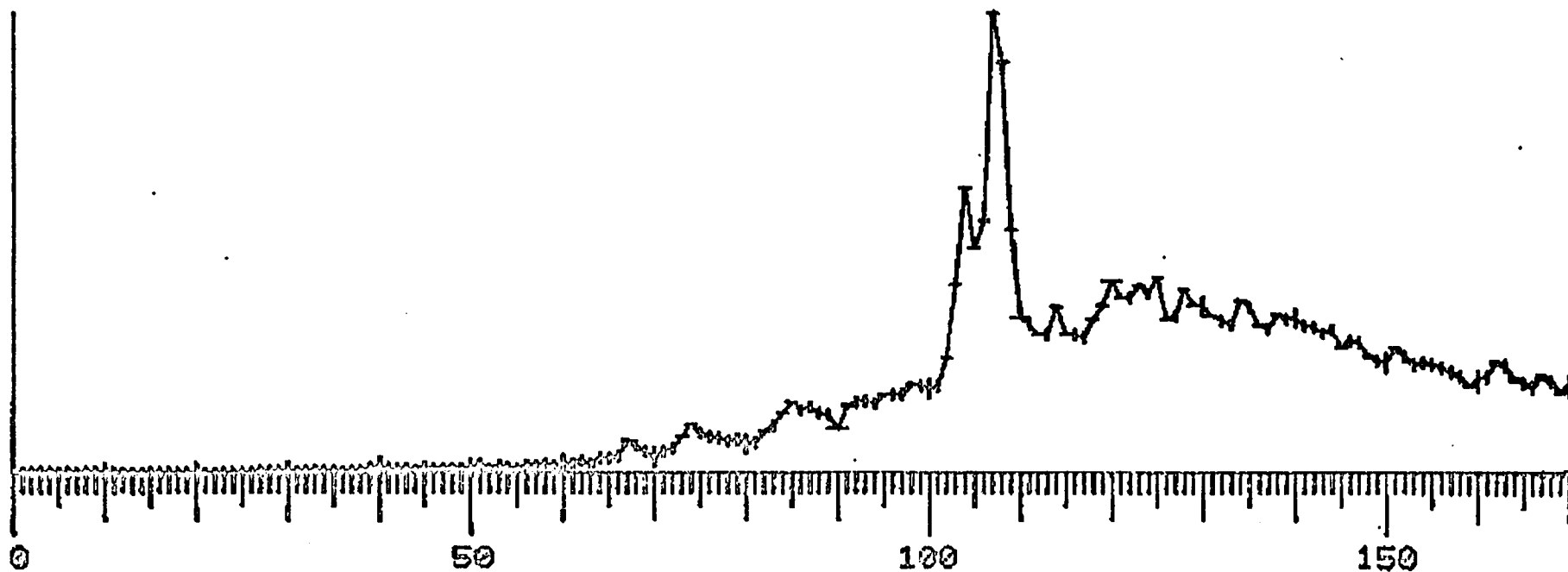
DPAW MC
GC ID AA 6 DATE 4/28/77
AOPATE 2 SCTIME 4 RESPWR 500
HIMASS 500 THRESH 8

BLM INTERCALIB. STD SEDIMENT 1B-2

MASSES 180, 0, 0, 0
#SCANS 165 HRDCPY NO
%SCALE 100 REZERO YES
BASE 15293*2** 0

Mass chromatogram of mass 180, methylfluorene's

Figure 14



SEQUEN 75 PAGE 1

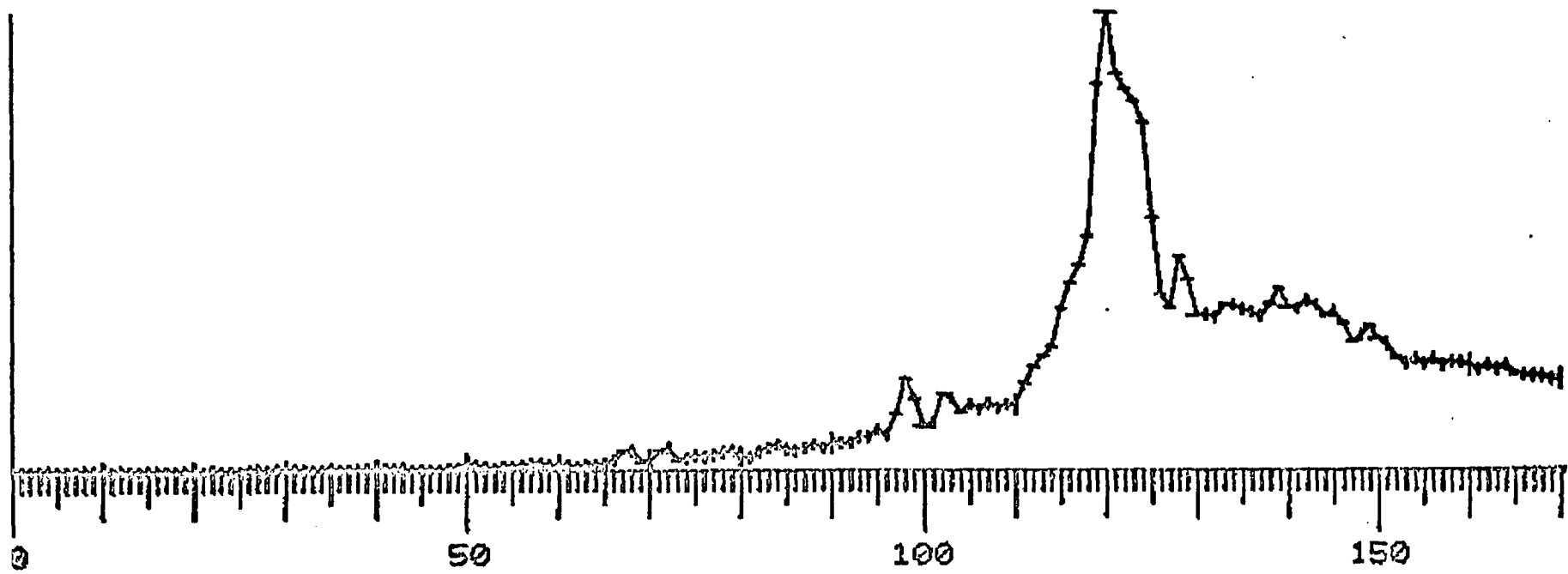
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GC ID AA 6 DATE 4/28/77
AQRATE 2 SCTIME 4 RESPUR 500
HIMASS 500 THRESH 8

BLM INTERCALIB. STD SEDIMENT 1B-2

MASSSES 194, 0, 0, 0
#SCANS 165 HRDCPY NO
%SCALE 100 REZERO YES
BASE 16895*2** 0

Mass chromatogram of mass 194, C₂ - fluorenes

Figure 15



L-1012

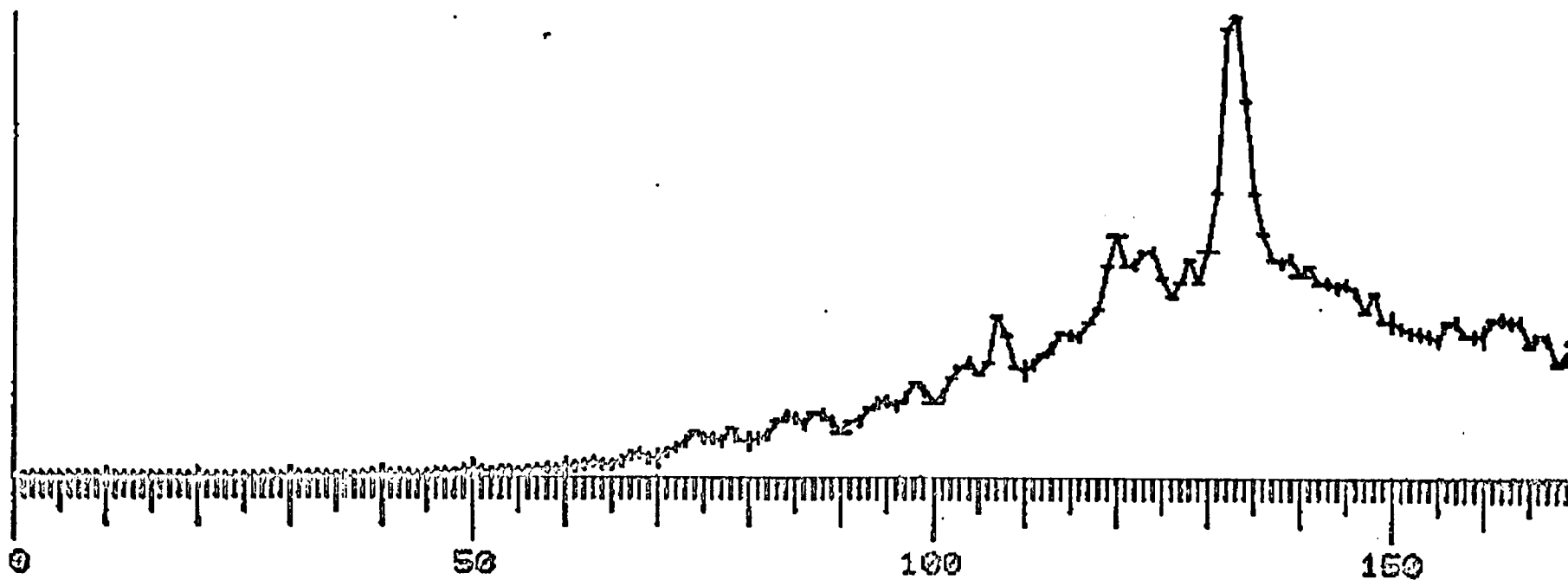
DPAW MC
GC ID AA 6 DATE 4/28/77
AQRATE 2 SCTIME 4 RESPWR 500
HIMASS 500 THRESH 8

BLM INTERCALIB. STD SEDIMENT 1B-2

MASS 178, 0, 0, 0
#SCANS 165 HRDCPY NO
%SCALE 100 REZERO YES
BASE 20765*2** 0

Mass chromatogram of mass 178, phenanthrene + anthracene

Figure 16



L-1013

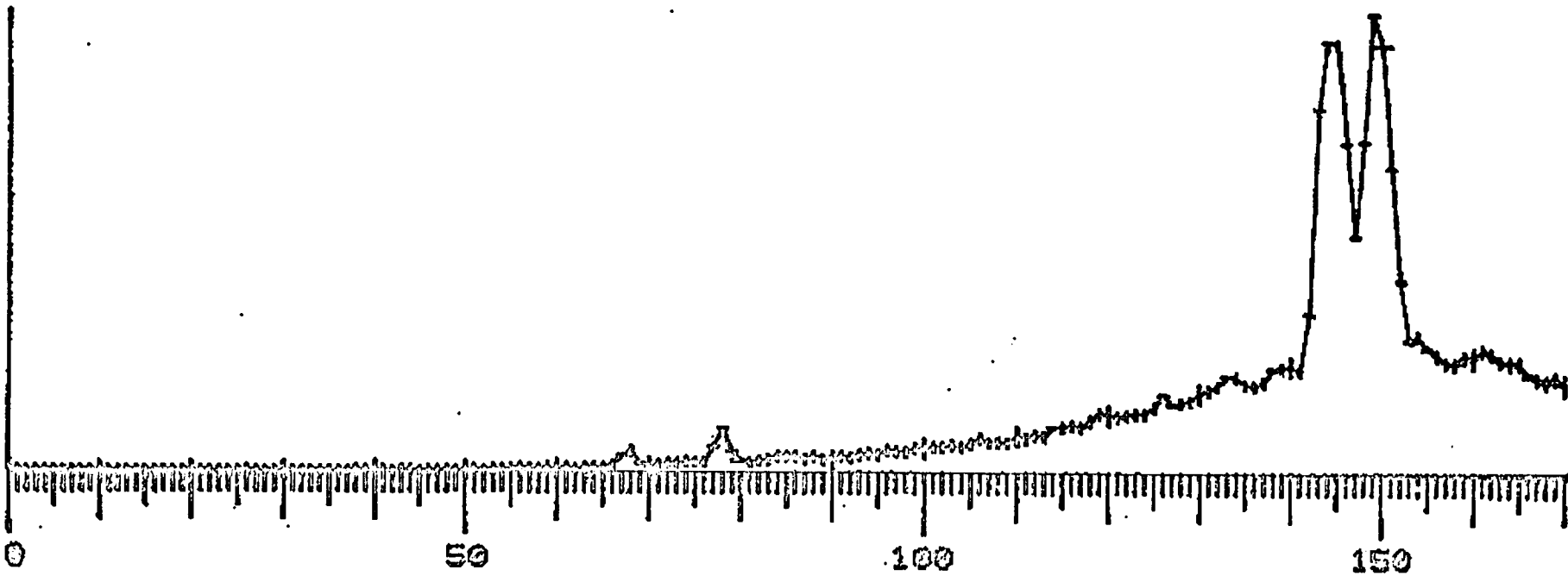
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GC ID AA 6 DATE 4/28/77
AQRATE 2 SCTIME 4 RESPWR 500
HIMASS 500 THRESH 8

BLM INTERCALIB. STD SEDIMENT 1B-2

MASSSES 192, 0, 0, 0
#SCANS 165 HRDCPY NO
%SCALE 100 REZERO YES
BASE 22807*2** 0

Mass chromatogram of mass 192, methylphenanthrenes + methylanthracenes

Figure 17



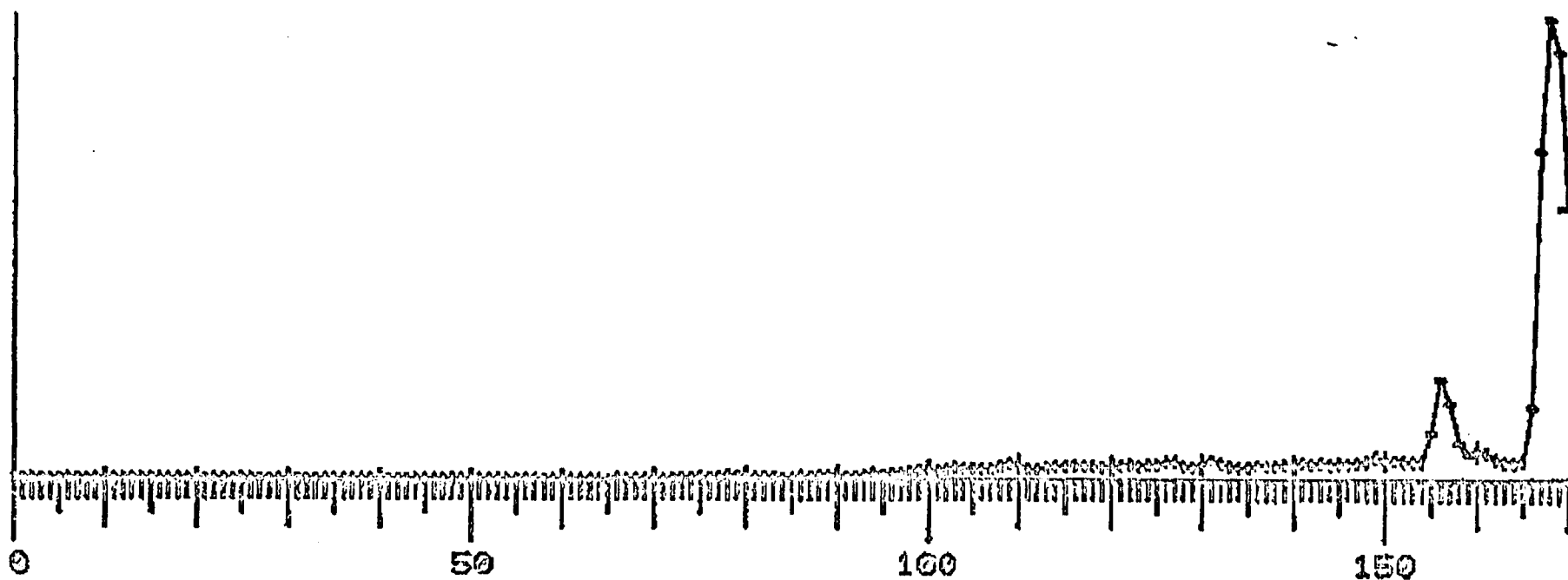
DRAW MC
GC ID AA 6 DATE 4/28/77
AQRATE 2 SCTIME 4 RESPWR 500
HIMASS 500 THRESH 8

BLM INTERCALIB. STD SEDIMENT 1B-2

MASS 316, 0, 0, 0
#SCANS 165 HRDCPY NO
%SCALE 100 REZERO YES
BASE 26952*2** 0

Mass chromatogram of mass 316, P P¹DDE

Figure 18



L-1015

REPORT 4

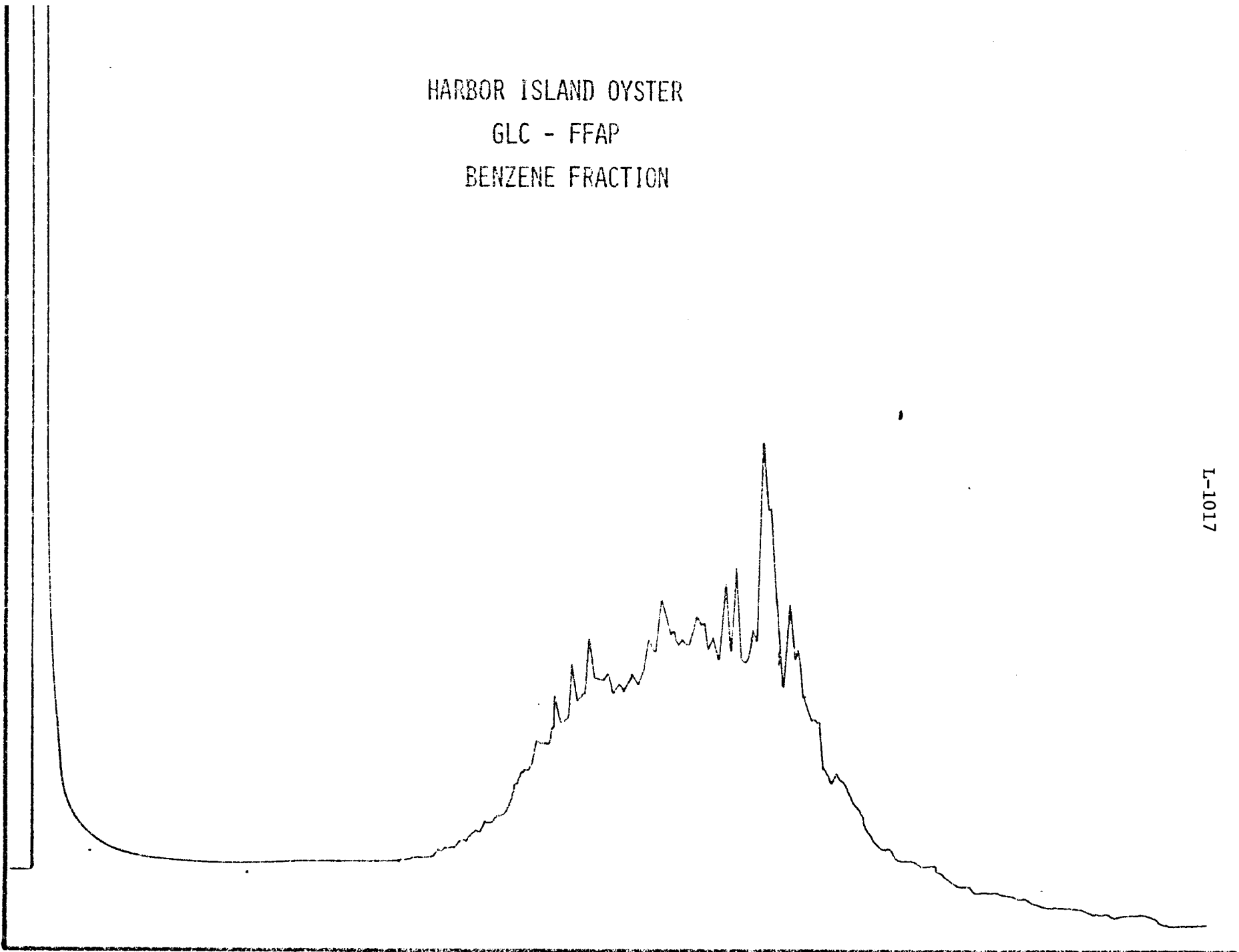
INTERCALIBRATION MATERIAL-HARBOR ISLAND OYSTER SAMPLE

An oyster sample was collected in Redfish Bay, Texas near Port Aransas for intercalibration. This sample is very useful because it has been contaminated with crude oil by a pipeline rupture. The sample is seen to contain a full suite of n-paraffins and several aromatics. The sample was processed using the method of Dr. Giam (BLM Attachment A) for tissue. Samples of the freeze-dried tissue were supplied to Dr. C. S. Giam (TAMU) and Dr. John Farrington (WHOI).

Dr. Farrington's analytical results are qualitatively and quantitatively comparable to our own. Dr. Giam will process the sample as time permits.

HARBOR ISLAND OYSTER
GLC - FFAP
BENZENE FRACTION

PEAK INTENSITY



RETENTION TIME

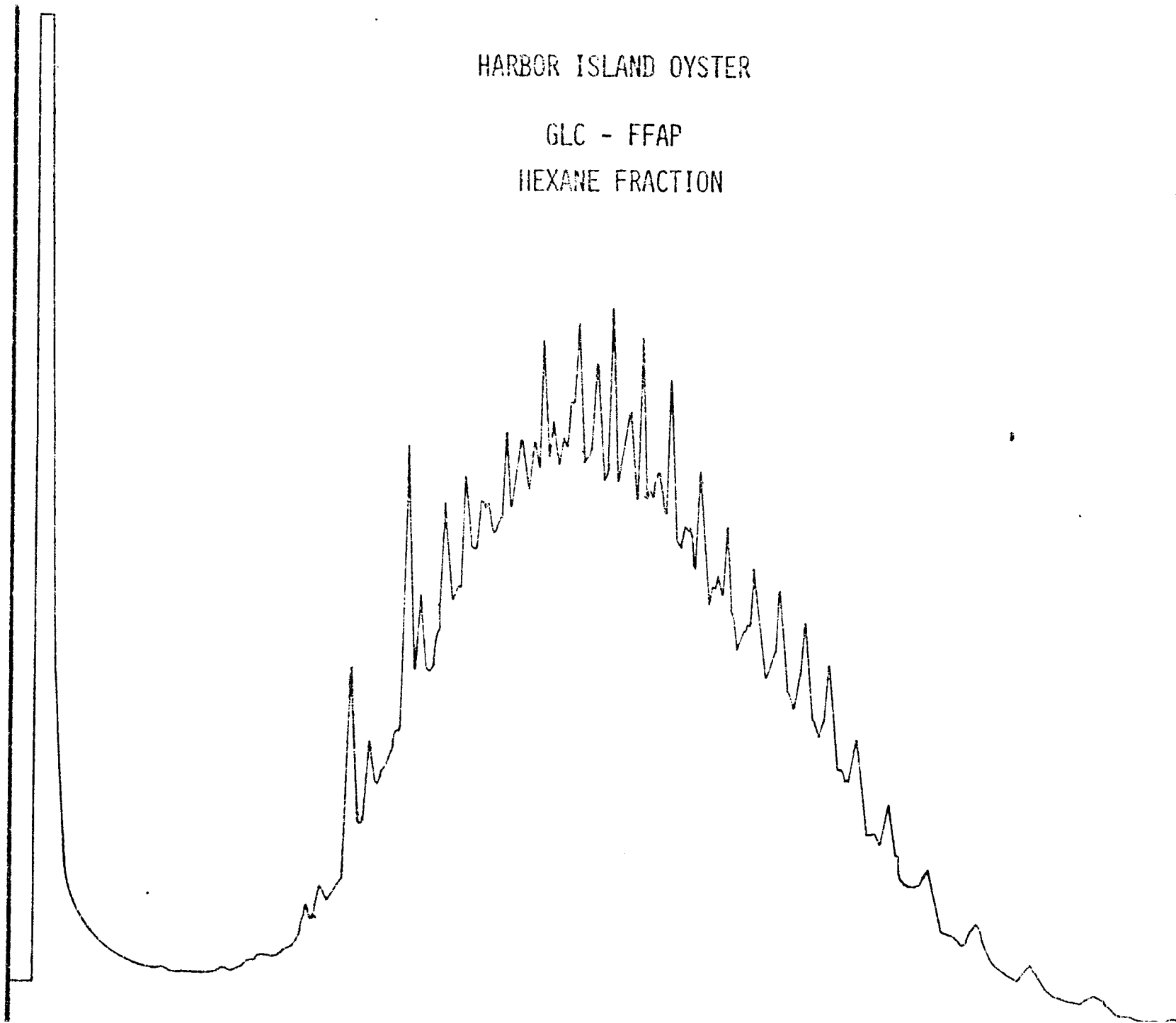
L-1017

HARBOR ISLAND OYSTER

GLC - FFAP

HEXANE FRACTION

PEAK INTENSITY



L-1018

APPENDIX M

HEAVY MOLECULAR WEIGHT HYDROCARBONS IN MACROEPIFAUNA AND MACRONEKTON

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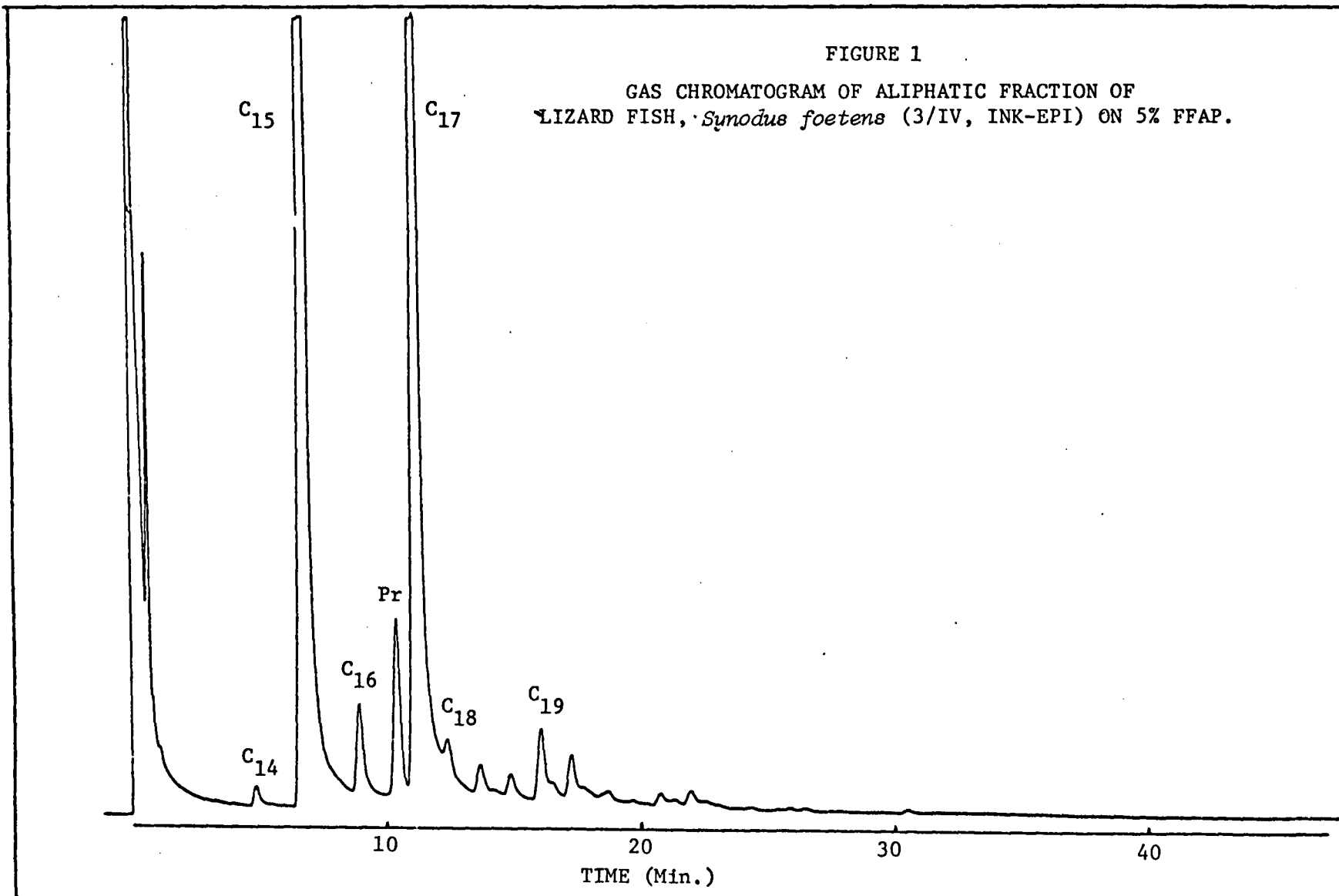


FIGURE 2

GAS CHROMATOGRAM OF BENZENE FRACTION OF LIZARD FISH,
Synodus foetens (3/IV, INK-EPI) on 5% FFAP.

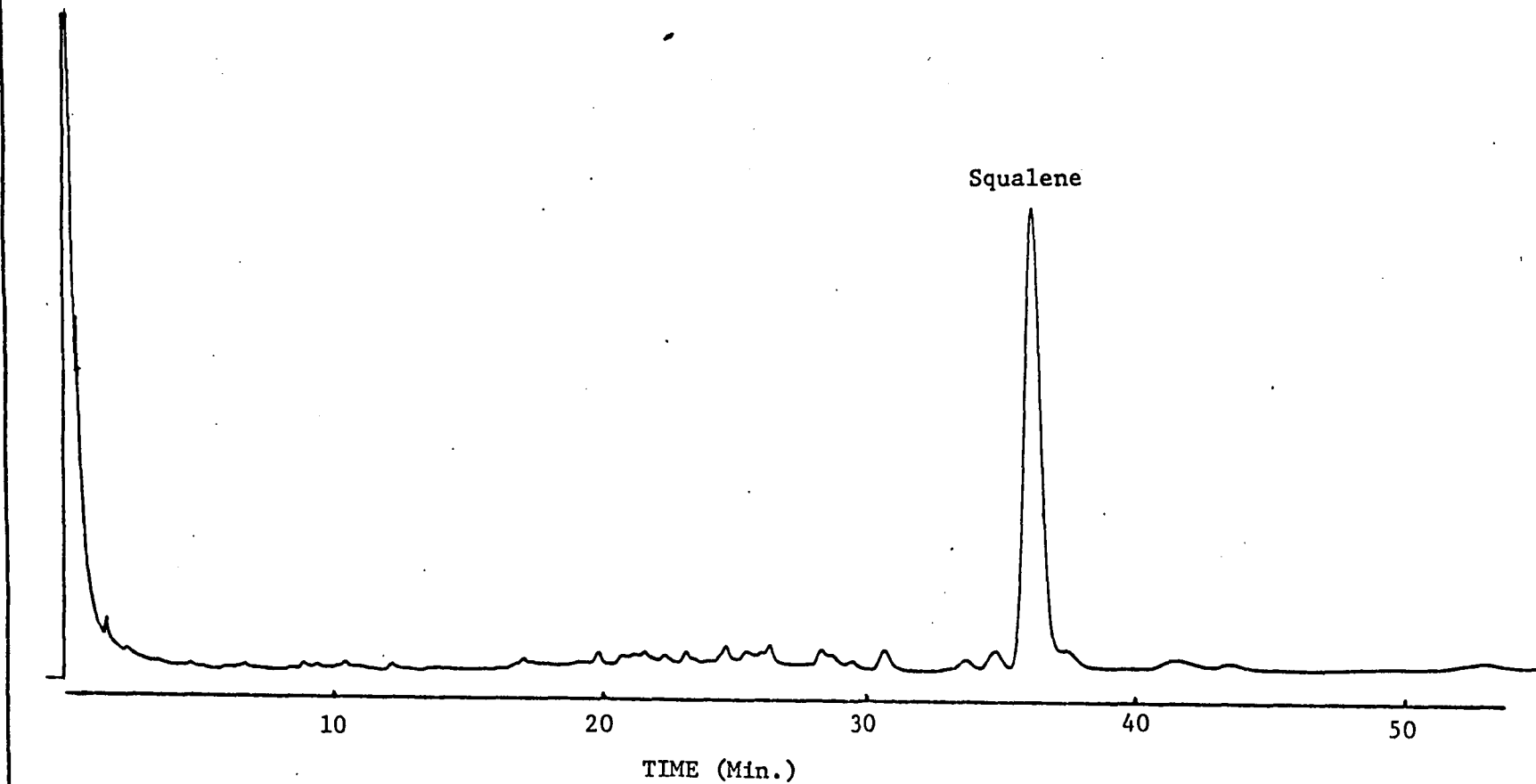


FIGURE 3

ELECTRON IMPACT MASS SPECTRUM OF COMPONENT IN SAMPLE 3/IV, INK-EPI -
COMPOUND IS IDENTIFIED AS C₁₄ HYDROCARBON.

(See Figure 1 for Gas Chromatogram)

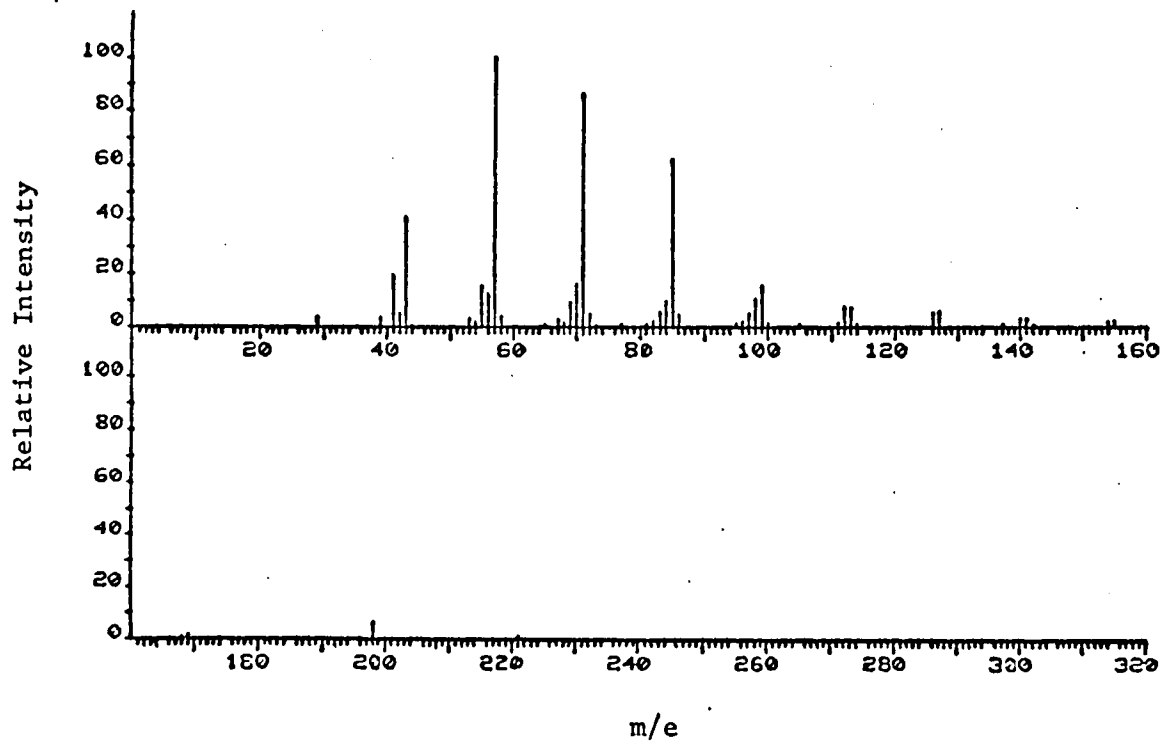


FIGURE 4

ELECTRON IMPACT MASS SPECTRUM OF COMPONENT IN SAMPLE 3/IV, INK-EPI -
COMPOUND IS IDENTIFIED AS C₁₅ HYDROCARBON.

(See Figure 1 for Gas Chromatogram)

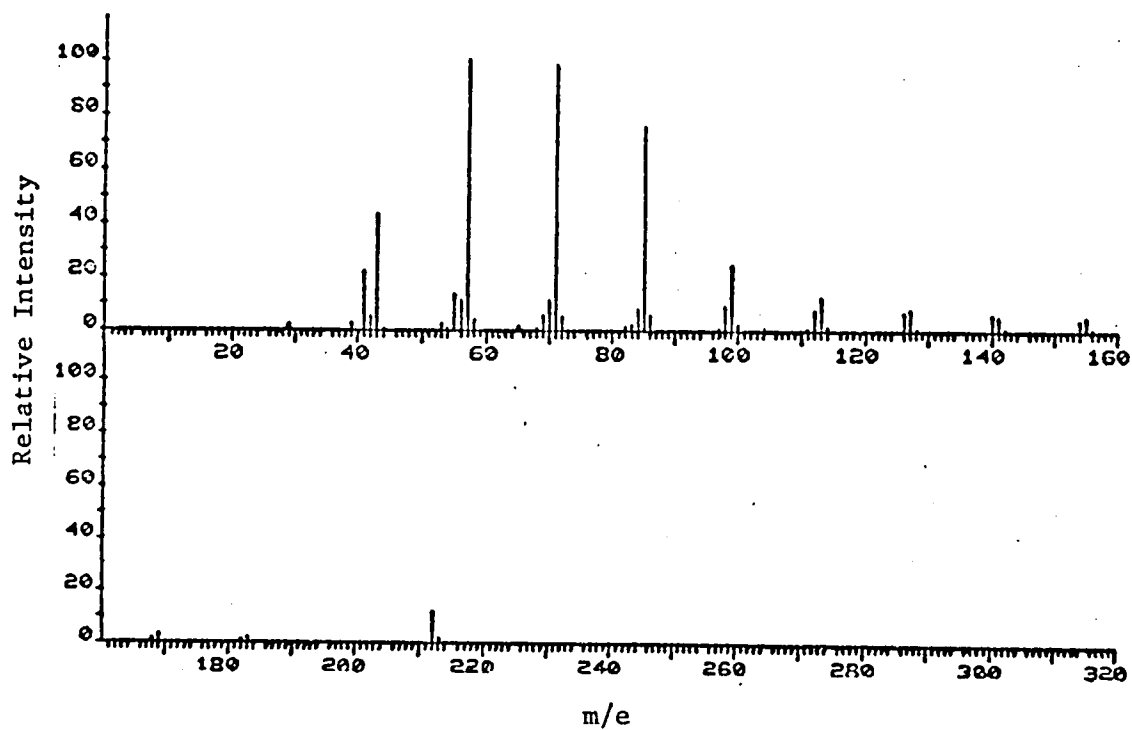


FIGURE 5

ELECTRON IMPACT MASS SPECTRUM OF COMPONENT IN SAMPLE 3/IV, INK-EPI -
COMPOUND IS IDENTIFIED AS C₁₆ HYDROCARBON.

(See Figure 1 for Gas Chromatogram)

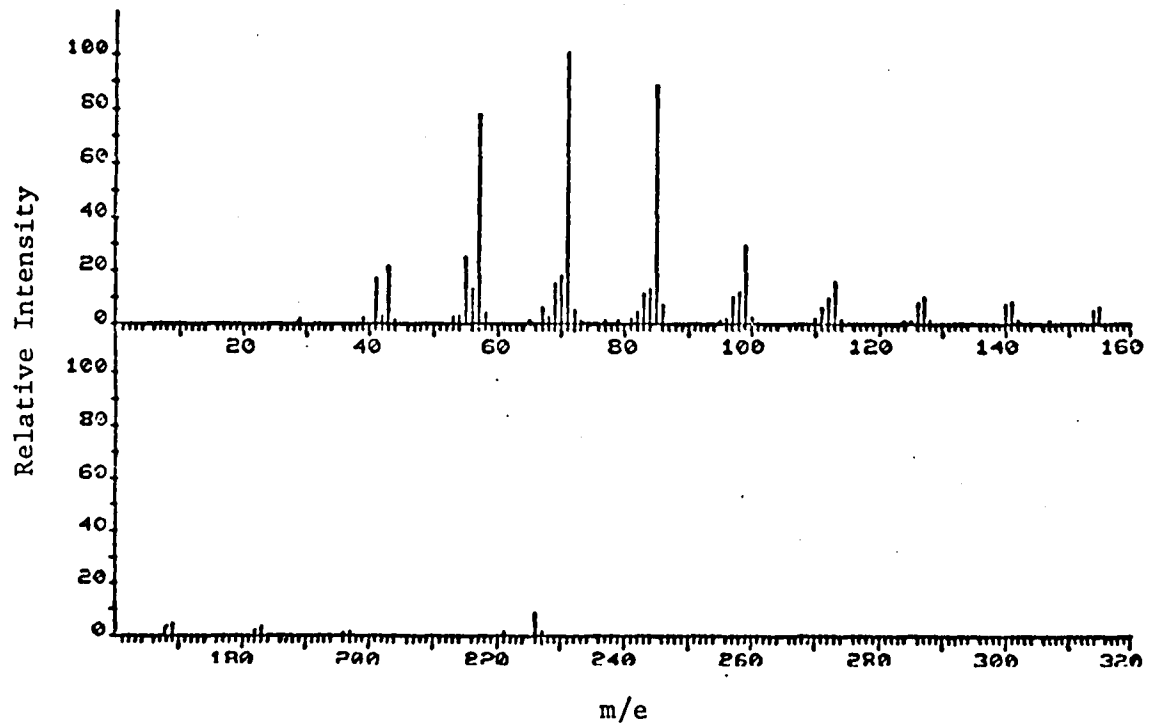


FIGURE 6

ELECTRON IMPACT MASS SPECTRUM OF COMPONENT IN SAMPLE 3/IV, INK-EPI -
COMPOUND IS IDENTIFIED AS PRISTANE.

(See Figure 1 for Gas Chromatogram)

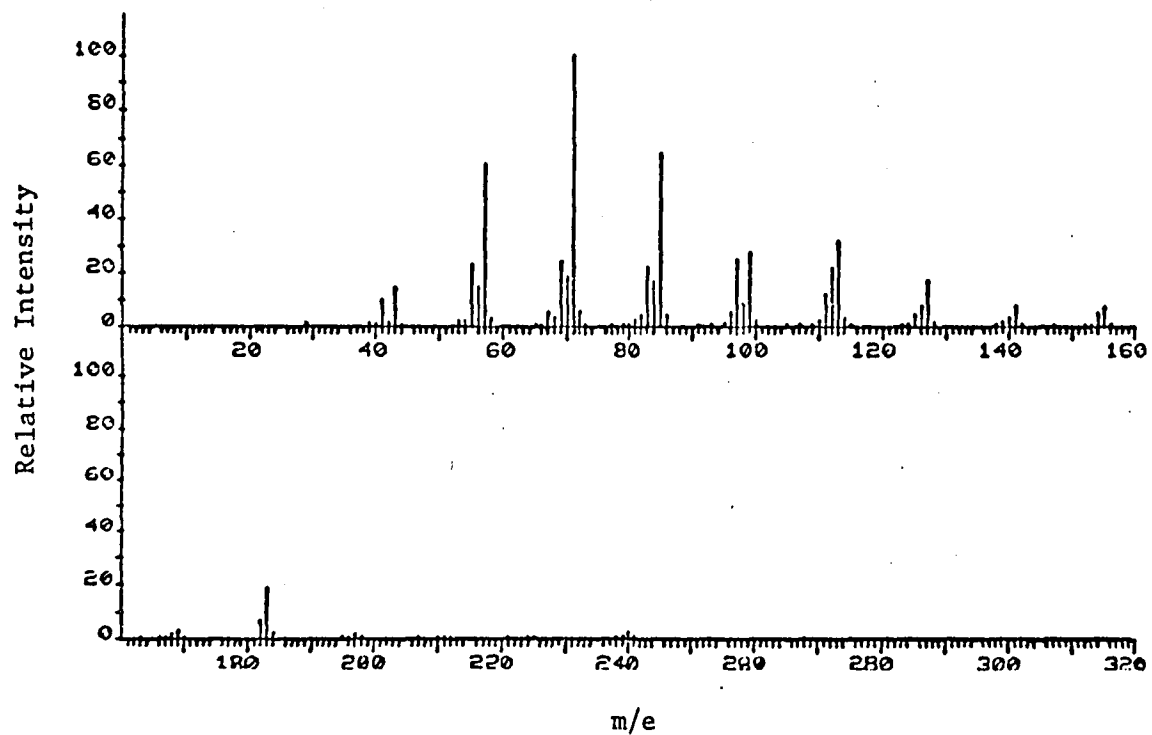


FIGURE 7

ELECTRON IMPACT MASS SPECTRUM OF COMPONENT IN SAMPLE 3/IV, INK-EPI -
COMPOUND IS IDENTIFIED AS C₁₇ HYDROCARBON.

(See Figure 1 for Gas Chromatogram)

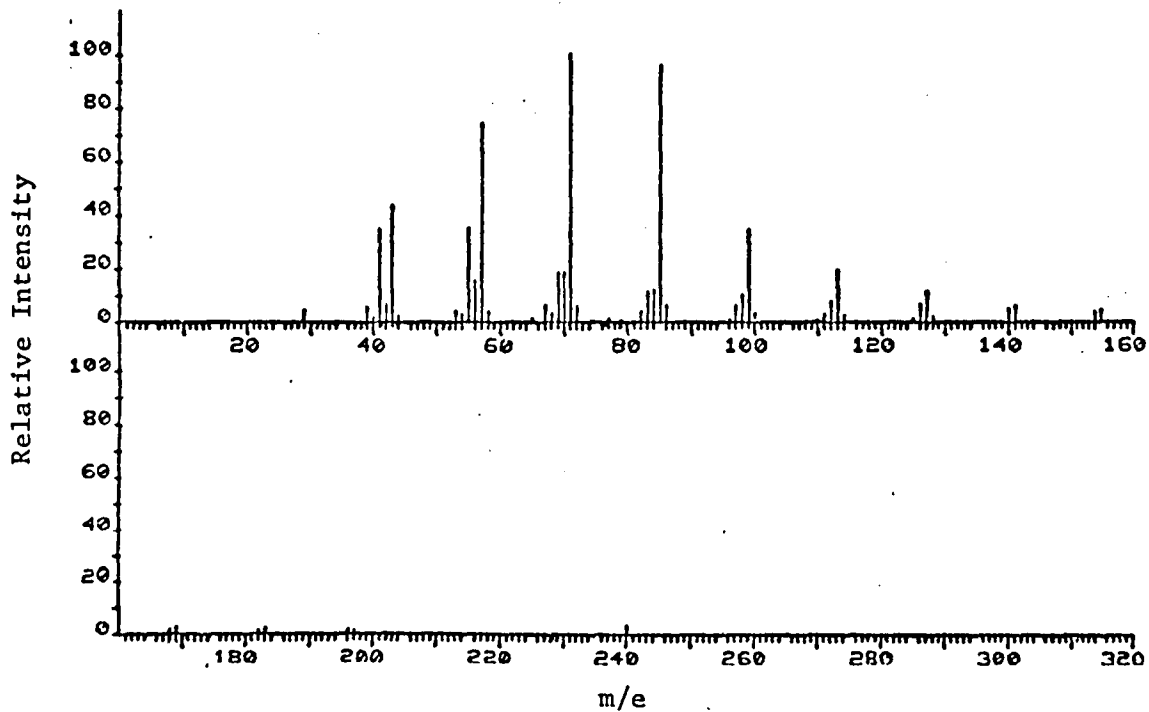


FIGURE 8

ELECTRON IMPACT MASS SPECTRUM OF COMPONENT IN SAMPLE 3/IV, INK-EPI -
COMPOUND IS IDENTIFIED AS C₁₈ HYDROCARBON.

(See Figure 1 for Gas Chromatogram)

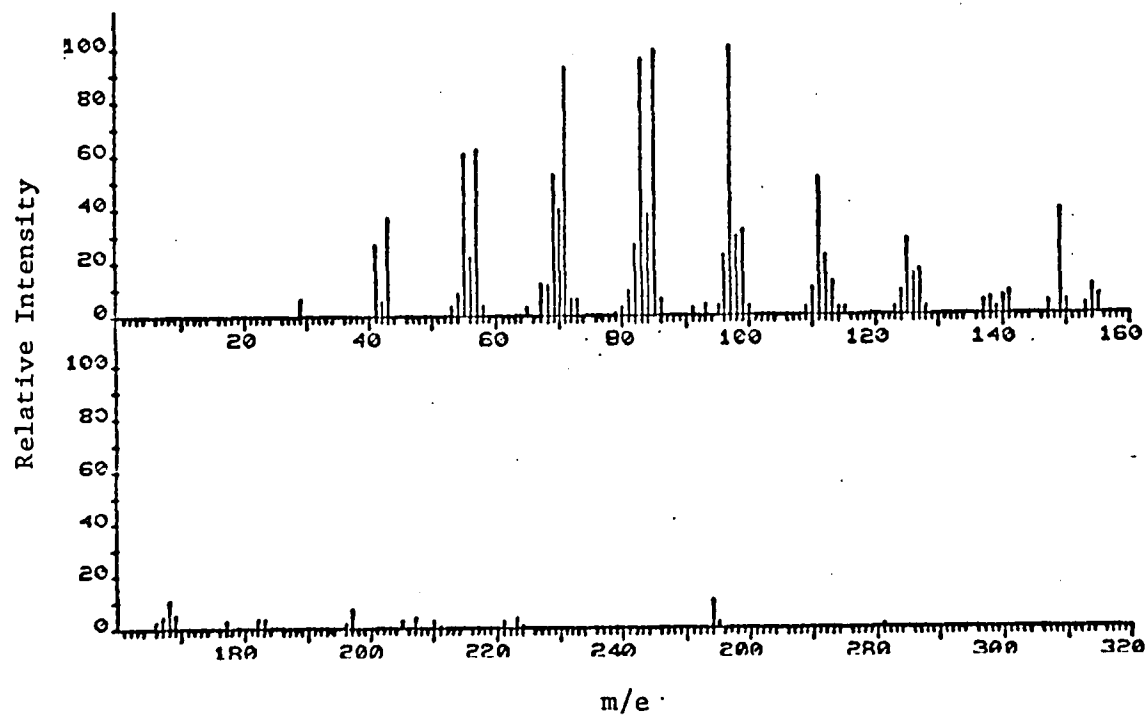


FIGURE 9

ELECTRON IMPACT MASS SPECTRUM OF COMPONENT IN SAMPLE 3/IV, INK-EPI -
COMPOUND IS IDENTIFIED AS C₁₉ HYDROCARBON.

(See Figure 1 for Gas Chromatogram)

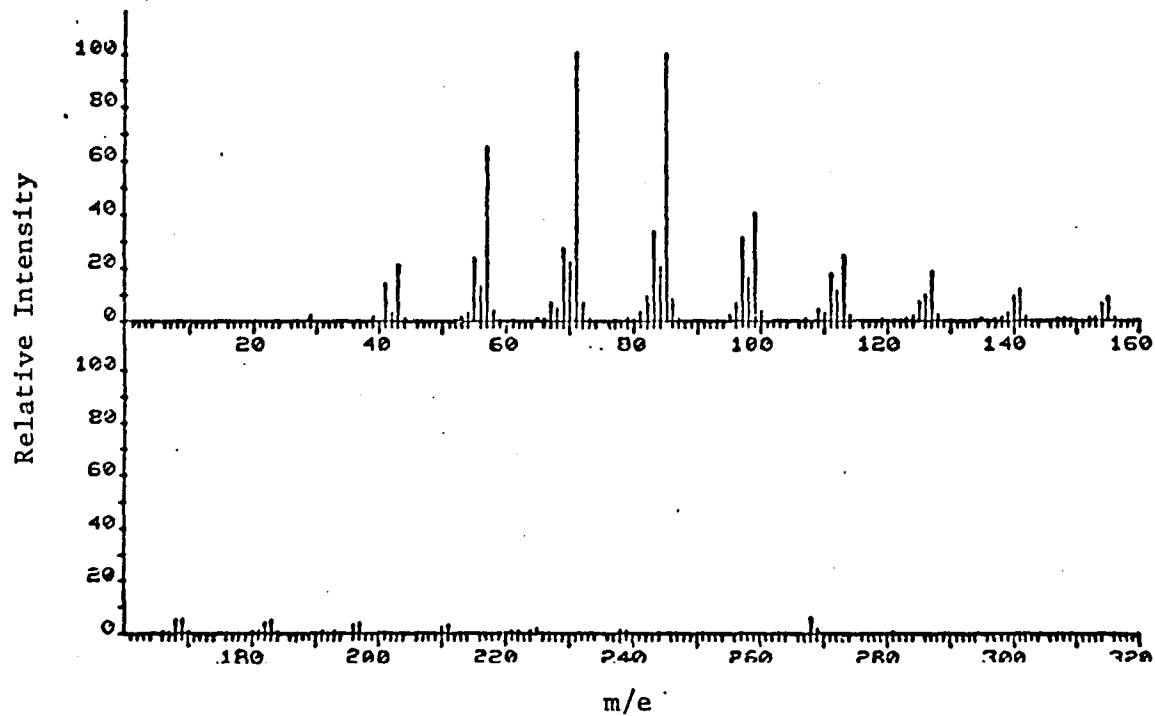


FIGURE 10

ELECTRON IMPACT MASS SPECTRUM OF COMPONENT IN SAMPLE 3/IV, INK-EPI -
COMPOUND IS IDENTIFIED AS C₂₁ HYDROCARBON.

(See Figure 1 for Gas Chromatogram)

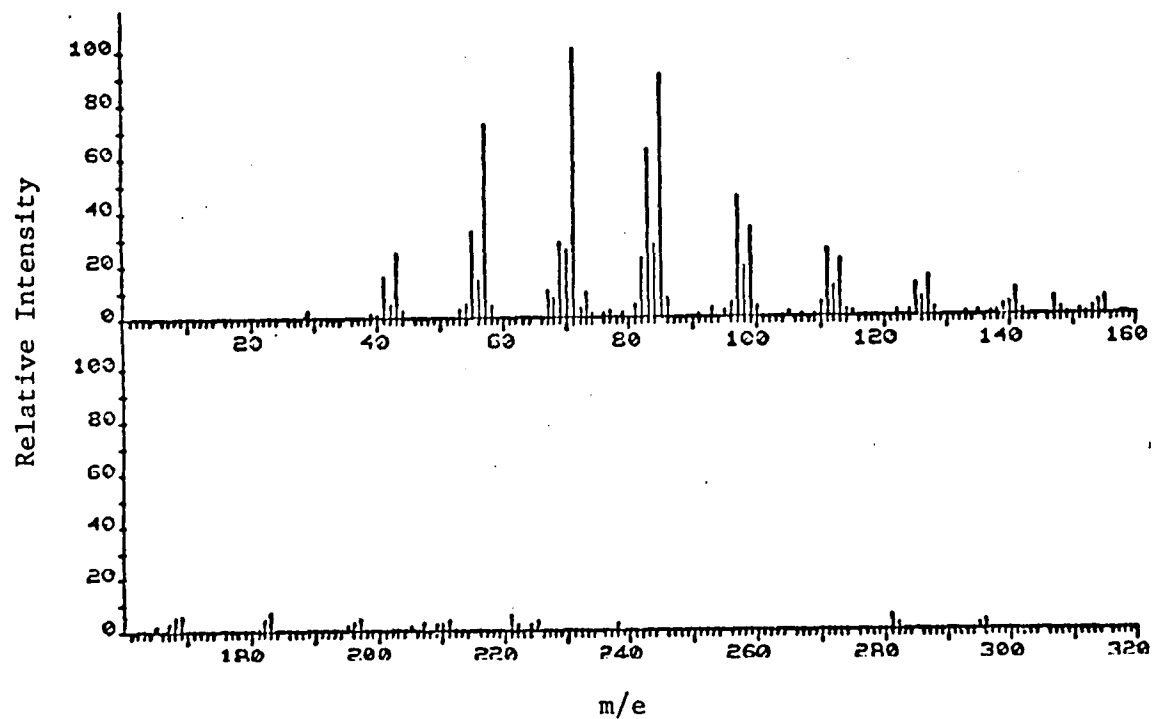
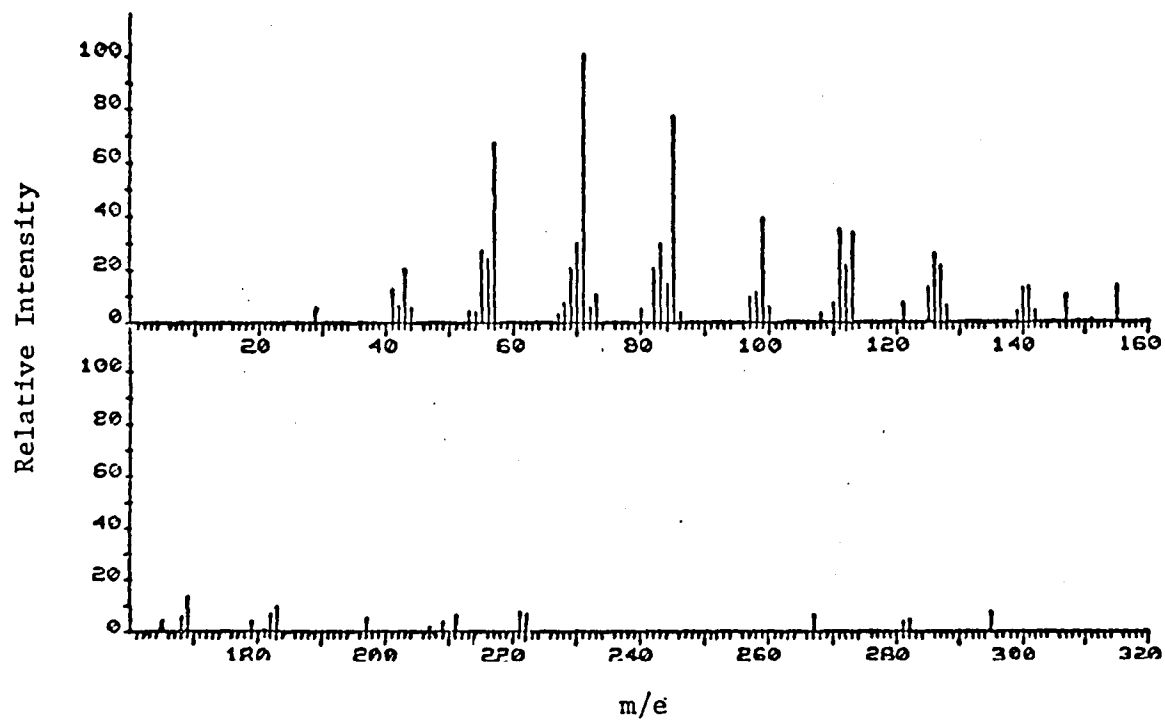


FIGURE 11

ELECTRON IMPACT MASS SPECTRUM OF COMPONENT IN SAMPLE 3/IV, INK-EPI -
COMPOUND IS IDENTIFIED AS C₂₂ HYDROCARBON.

(See Figure 1 for Gas Chromatogram)



M-17

FIGURE 12

ELECTRON IMPACT MASS SPECTRUM OF COMPONENT IN SAMPLE 3/IV, INK-EPI -
COMPOUND IS IDENTIFIED AS SQUALENE.

(See Figure 1. for Gas Chromatogram)

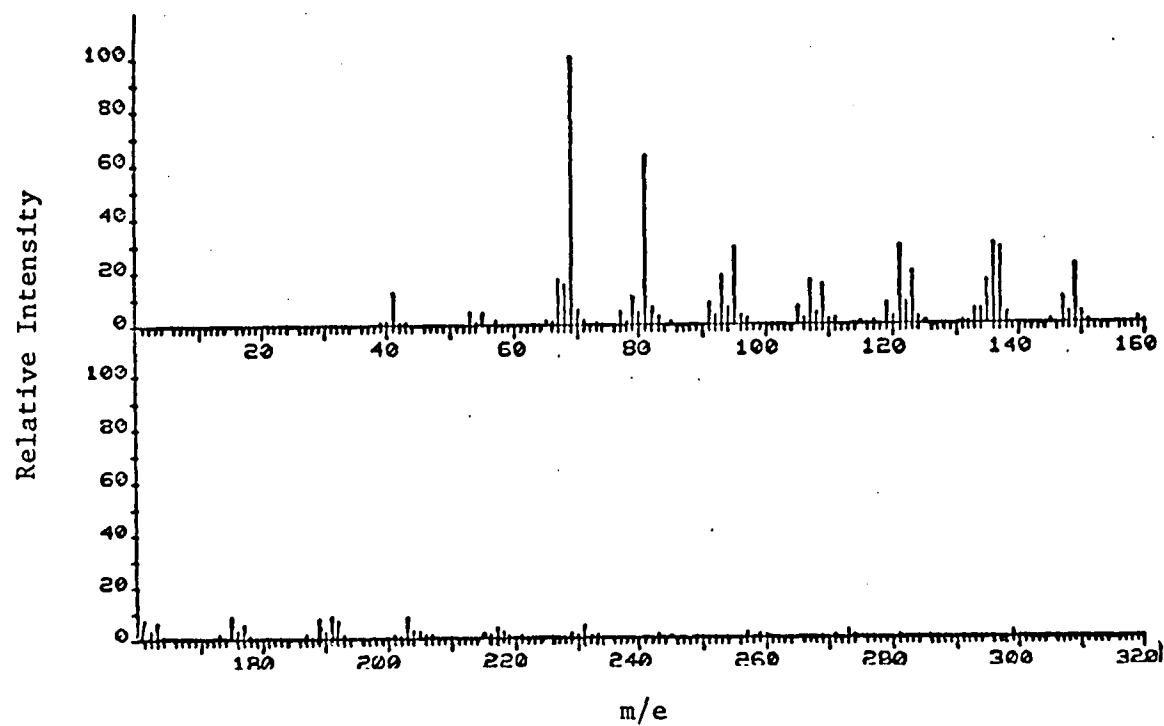


TABLE 1
 CONCENTRATIONS OF ALKANES¹ IN SEASONAL MACROEPIFAUNA
 FROM THE SOUTH TEXAS OCS (WINTER 1976)

<u>Station/ Transect</u>	<u>Code</u>	<u>Species</u>	<u>Sample Wt. (g)</u>	<u>Conc. in ppm ($\mu\text{g/g}$ dry wt.)</u>
1/I	HBO-EPI	Silver seatrout <u>Cynoscion nothus</u>	101.1	1.74
1/I	HBO-EPI	White shrimp <u>Penaeus setiferus</u>	80.4	0.02
1/I	HBO-EPI	Tongue fish <u>Symphurus plaguisa</u>	104.2	0.02
1/I	HBO-EPI	Mantis shrimp <u>Squilla empusa</u>	100.8	0.04
2/I	HDA-EPI	Lizard fish <u>Synodus foetens</u>	100.9	2.93
2/I	HDA-EPI	Longspine porgy <u>Stenotomus caprinus</u>	100.4	0.27
2/I	HDA-EPI	Black ear bass <u>Serranus atrobranchus</u>	103.1	0.29
2/I	HDA-EPI	Rock shrimp <u>Sicyonia dorsalis</u>	6.9	— ^a
1/II	HJE-EPI	Silver seatrout <u>Cynoscion nothus</u>	108.8	7.38
1/II	HJE-EPI	Squid <u>Loligo pealei</u>	102.2	0.46
1/II	HJE-EPI	White shrimp <u>Penaeus setiferus</u>	68.6	0.11
1/II	HJE-EPI	Rough scad <u>Trachurus lathami</u>	98.7	0.56
2/II	HKR-EPI	Longspine porgy <u>Stenotomus caprinus</u>	97.7	8.58

TABLE 1 CONT'D

<u>Station/ Transect</u>	<u>Code</u>	<u>Species</u>	<u>Sample Wt. (g)</u>	<u>Conc. in ppm ($\mu\text{g/g}$ dry wt.)</u>
2/II	HKR-EPI	Black ear bass <u>Serranus</u> <u>atrobranchus</u>	103.5	0.31
2/II	HKR-EPI	Lizard fish <u>Synodus foetens</u>	103.1	0.34
2/II	HKR-EPI	Shoal flounder <u>Syacium gunteri</u>	100.0	0.66
3/II	HMD-EPI	Mexican sea robin <u>Prionotus paralatus</u>	99.9	0.01
3/II	HMD-EPI	Black ear bass <u>Serranus</u> <u>atrobranchus</u>	97.1	0.01
3/II	HMD-EPI	Wenchman <u>Pristipomoides</u> <u>aquilonaris</u>	81.6	0.66
3/II	HMD-EPI	Sash flounder <u>Trichopsetta</u> <u>ventralis</u>	86.5	0.01
1/III	HUS-EPI	Rough scad <u>Trachurus lathami</u>	100.2	1.51
1/III	HUS-EPI	Lizard fish <u>Synodus foetens</u>	103.0	5.45
1/III	HUS-EPI	Squid <u>Loligo pealei</u>	100.0	0.18
1/III	HUS-EPI	Gulf kingfish <u>Menticirrhus</u> <u>americana</u>	101.7	0.56
2/III	IAU-EPI	Dwarf goat fish <u>Upeneus parvus</u>	102.3	0.87
2/III	IAU-EPI	Rough Scad <u>Trachurus lathami</u>	63.7	34.45

TABLE 1 CONT'D

<u>Station/ Transect</u>	<u>Code</u>	<u>Species</u>	<u>Sample Wt. (g)</u>	<u>Conc. in ppm ($\mu\text{g/g}$ dry wt.)</u>
2/III	IAU-EPI	Black ear bass <u>Serranus</u> <u>atrobranchus</u>	71.3	0.51
3/III	ICR-EPI	Wenchman <u>Pristipomoides</u> <u>aquilonaris</u>	90.7	0.53
3/III	ICR-EPI	Brown shrimp <u>Penaeus aztecus</u>	81.7	0.02
3/III	ICR-EPI	Sash flounder <u>Trichopsetta</u> <u>ventralis</u>	81.9	0.36
1/IV	IJW-EPI	Rough scad <u>Trachurus lathami</u>	100.0	0.37
1/IV	IJW-EPI	Lizard fish <u>Synodus foetens</u>	101.4	2.87
1/IV	IJW-EPI	Squid <u>Loligo pealei</u>	96.2	0.30
1/IV	IJW-EPI	Shoal flounder <u>Syacium gunteri</u>	94.2	1.41
2/IV	INL-EPI	Dwarf goatfish <u>Upeneus parvus</u>	96.5	7.68
2/IV	INL-EPI	Black ear bass <u>Serranus</u> <u>atrobranchus</u>	50.0	0.49
2/IV	INL-EPI	Wenchman <u>Pristipomoides</u> <u>aquilonaris</u>	100.0	1.69
2/IV	INL-EPI	Squid <u>Loligo pealei</u>	87.7	0.50
3/IV	INK-EPI	Dwarf goat fish <u>Upeneus parvus</u>	101.0	11.84

TABLE 1 CONT'D

<u>Station/ Transect</u>	<u>Code</u>	<u>Species</u>	<u>Sample Wt. (g)</u>	<u>Conc. in ppm ($\mu\text{g/g}$ dry wt.)</u>
3/IV	INK-EPI	Wenchman <u>Pristipomoides</u> <u>aquilonaris</u>	93.3	3.33
3/IV	INK-EPI	Lizard fish <u>Synodus foetens</u>	100.7	48.27
3/IV	INK-EPI	Peppermint shrimp <u>Parapandalus sp.</u>	98.4	0.93

¹Total Alkanes includes total paraffins, pristane and phytane

^a- = below limits of quantitation of hydrocarbons, less than 0.001 $\mu\text{g/g}$.

TABLE 2

ORGANS AND INDIVIDUALS ANALYZED
IN SEASONAL MACROEPIFAUNA (WINTER 1976)

<u>Station/ Transect</u>	<u>Code</u>	<u>Species</u>	<u>Organ Used^a</u>	<u># of Individuals</u>
1/I	HBO-EPI	Silver seatrout <u>Cynoscion nothus</u>	W	16
1/I	HBO-EPI	White shrimp <u>Penaeus setiferus</u>	M	6
1/I	HBO-EPI	Tongue fish <u>Symphurus plaguisa</u>	M	5
1/I	HBO-EPI	Mantis shrimp <u>Squilla empusa</u>	M	13
2/I	HDA-EPI	Lizard fish <u>Synodus foetens</u>	M	2
2/I	HDA-EPI	Longspine porgy <u>Stenotomus caprinus</u>	M	3
2/I	HDA-EPI	Black ear bass <u>Serranus atrobranchus</u>	W	9
2/I	HDA-EPI	Rock shrimp <u>Sicyonia dorsalis</u>	M	5
1/II	HJE-EPI	Silver seatrout <u>Cynoscion nothus</u>	M	4
1/II	HJE-EPI	Squid <u>Loligo pealei</u>	W-p	7
1/II	HJE-EPI	White shrimp <u>Penaeus setiferus</u>	M	3
1/II	HJE-EPI	Rough scad <u>Trachurus lathami</u>	M	5
2/II	HKR-EPI	Longspine porgy <u>Stenotomus caprinus</u>	M	2

TABLE 2 CONT'D

<u>Station/ Transect</u>	<u>Code</u>	<u>Species</u>	<u>Organ Used^a</u>	<u># of Individuals</u>
2/II	HKR-EPI	Black ear bass <u>Serranus</u> <u>atrobranchus</u>	W	12
2/II	HKR-EPI	Lizard fish <u>Synodus foetens</u>	M	2
2/II	HKR-EPI	Shoal flounder <u>Syacium gunteri</u>	M	6
3/II	HMD-EPI	Mexican sea robin <u>Prionotus paralatus</u>	M	3
3/II	HMD-EPI	Black ear bass <u>Serranus</u> <u>atrobranchus</u>	M	5
3/II	HMD-EPI	Wenchman <u>Pristipomoides</u> <u>aquilonaris</u>	M	2
3/II	HMD-EPI	Sash flounder <u>Trichopsetta</u> <u>ventralis</u>	M	4
1/III	HUS-EPI	Rough scad <u>Trachurus lathami</u>	M	3
1/III	HUS-EPI	Lizard fish <u>Synodus foetens</u>	M	3
1/III	HUS-EPI	Squid <u>Loligo pealei</u>	W-p	5
1/III	HUS-EPI	Gulf kingfish <u>Menticirrhus</u> <u>americana</u>	M	1
2/III	IAU-EPI	Dwarf goat fish <u>Upeneus parvus</u>	M	3
2/III	IAU-EPI	Rough Scad <u>Trachurus lathami</u>	M	8

TABLE 2 CONT'D

<u>Station/ Transect</u>	<u>Code</u>	<u>Species</u>	<u>Organ Used^a</u>	<u># of Individuals</u>
2/III	IAU-EPI	Black ear bass <u>Serranus</u> <u>atrobranchus</u>	M	6
3/III	ICR-EPI	Wenchman <u>Pristipomoides</u> <u>aquilonaris</u>	M	2
3/III	ICR-EPI	Brown shrimp <u>Penaeus aztecus</u>	M	3
3/III	ICR-EPI	Sash flounder <u>Trichopsetta</u> <u>ventralis</u>	M	3
1/IV	IJW-EPI	Rough scad <u>Trachurus lathami</u>	M	4
1/IV	IJW-EPI	Lizard fish <u>Synodus foetens</u>	M	4
1/IV	IJW-EPI	Squid <u>Loligo pealei</u>	W-p	6
1/IV	IJW-EPI	Shoal flounder <u>Syacium gunteri</u>	M	3
2/IV	INL-EPI	Dwarf goatfish <u>Upeneus parvus</u>	M	3
2/IV	INL-EPI	Black ear bass <u>Serranus</u> <u>atrobranchus</u>	M	5
2/IV	INL-EPI	Wenchman <u>Pristipomoides</u> <u>aquilonaris</u>	M	6
2/IV	INL-EPI	Squid <u>Loligo pealei</u>	W-p	9
3/IV	INK-EPI	Dwarf goat fish <u>Upeneus parvus</u>	M	4

TABLE 2 CONT'D

<u>Station/ Transect</u>	<u>Code</u>	<u>Species</u>	<u>Organ Used^a</u>	<u># of Individuals</u>
3/IV	INK-EPI	Wenchman <u>Pristipomoides</u> <u>aquilonaris</u>	M	2
3/IV	INK-EPI	Lizard fish <u>Synodus foetens</u>	M	1
3/IV	INK-EPI	Peppermint shrimp <u>Parapandalus sp.</u>	W	61

^aW = whole fish; M = muscle only; W-p = whole less pen.

TABLE 3

PERCENT DISTRIBUTION OF n-PARAFFINS IN SEASONAL MACROEPIFAUNA
FROM THE SOUTH TEXAS OCS (WINTER 1976)

STATION	1/I	1/I	1/I	1/I	2/I	2/I	2/I	2/I	1/II
SAMPLE CODE ^a	HBO	HBO	HBO	HBO	HDA	HDA	HDA	HDA	HJE
CARBON NO.									
14	-	-	-	-	-	3.8	3.5	-	0.8
15	39.5	-	75.0	50.0	12.5	16.9	55.4	-	25.4
16	2.3	-	-	-	2.3	3.8	8.9	-	4.8
17	44.2	100.0	25.0	25.0	65.6	22.6	21.4	-	38.2
18	2.3	-	-	-	2.8	3.8	3.6	-	3.6
19	11.7	-	-	-	3.9	5.7	3.6	-	5.4
20	-	-	-	-	1.8	-	-	-	3.1
21	-	-	-	25.0	.8	1.9	1.8	-	4.2
22	-	-	-	-	7.6	-	-	-	1.9
23	-	-	-	-	1.4	3.8	-	-	2.0
24	-	-	-	-	.8	-	-	-	-
25	-	-	-	-	.5	11.3	-	-	.5
26	-	-	-	-	-	-	-	-	.4
27	-	-	-	-	-	3.8	1.8	-	1.2
28	-	-	-	-	-	-	-	-	1.7
29	-	-	-	-	-	22.6	-	-	3.9
30	-	-	-	-	-	-	-	-	2.5
31	-	-	-	-	-	-	-	-	.4
32	-	-	-	-	-	-	-	-	-
n-paraffin (ppm)	0.41	0.02	0.02	0.02	2.88	0.17	0.20	-	4.12
Pristane (ppm)	1.33	-	-	0.02	0.05	0.10	0.09	-	3.14
Phytane (ppm)	-	-	-	-	-	-	-	-	0.12
Pr/Py	-	-	-	-	-	-	-	-	26.2
Pr/C ₁₇	7.4	0.3	-	4.0	0.03	2.5	2.3	-	2.0
Py/C ₁₈	-	-	-	-	-	-	-	-	0.8
CPI ₁₄₋₂₀	20.7	-	-	-	14.0	5.0	5.7	-	6.8
CPI ₂₀₋₃₂	-	-	-	-	0.3	-	-	-	1.6
Total Alkanes	1.74	0.02	0.02	0.04	2.93	0.27	0.29	-	7.38

TABLE 3 CONT'D

STATION	1/II	1/II	1/II	2/II	2/II	2/II	2/II	3/II	3/II
SAMPLE CODE	HJE	HJE	HJE	HKR	HKR	HKR	HKR	HMD	HMD
CARBON NO.									
14	-	5.9	-	-	-	-	1.8	-	-
15	12.8	64.7	100.0	0.2	17.3	7.3	5.5	-	-
16	-	11.8	-	-	1.2	2.1	0.6	-	-
17	8.5	17.6	-	0.6	3.7	56.8	1.2	-	-
18	-	-	-	0.1	-	2.1	-	-	-
19	2.1	-	-	0.2	-	10.5	-	-	-
20	-	-	-	7.4	-	-	0.6	-	-
21	-	-	-	2.9	-	1.1	11.5	-	-
22	-	-	-	38.4	-	-	9.1	-	-
23	-	-	-	10.2	-	-	7.9	-	-
24	2.1	-	-	27.5	-	-	4.2	-	-
25	2.1	-	-	5.3	1.2	1.1	6.7	-	-
26	8.5	-	-	0.4	3.7	2.1	1.2	-	-
27	10.6	-	-	3.1	7.4	3.2	6.1	-	-
28	10.6	-	-	1.0	9.9	4.2	3.6	-	-
29	8.5	-	-	1.7	11.1	2.1	6.7	-	-
30	27.8	-	-	1.0	34.6	5.3	3.6	-	-
31	6.4	-	-	-	9.9	2.1	10.9	-	-
32	-	-	-	-	-	-	18.8	-	-
<hr/>									
n-paraffin (ppm)	0.15	0.07	0.03	8.36	0.29	0.33	0.63	-	-
Pristane (ppm)	0.31	0.04	0.53	0.21	0.02	0.01	0.03	-	-
Phytane (ppm)	-	-	-	0.01	-	-	-	0.01	0.01
Pr/Py	-	-	-	21.0	-	-	-	-	-
Pr/C ₁₇	31.0	4.0	-	4.2	2.0	0.1	3.0	-	-
Py/C ₁₈	-	-	-	1.3	-	-	-	-	-
CPI ₁₄₋₂₀	-	5.8	-	5.1	17.5	17.8	4.2	-	-
CPI ₂₀₋₃₂	0.6	-	-	0.3	0.6	0.8	1.7	-	-
Total Alkanes	0.46	0.11	0.56	8.58	0.31	0.34	0.66	0.01	0.01

TABLE 3 CONT'D

STATION	3/II	3/II	1/III	1/III	1/III	1/III	2/III	2/III
SAMPLE CODE	HMD	HMD	HUS	HUS	HUS	HUS	IAU	IAU
CARBON NO.								
14	-	-	-	-	-	-	-	0.8
15	15.2	-	31.0	31.1	35.7	2.5	24.5	65.5
16	3.0	-	2.3	1.4	-	-	5.1	3.7
17	81.8	-	20.7	66.1	42.9	8.2	38.8	18.4
18	-	-	1.1	1.4	-	0.8	4.1	4.2
19	-	-	8.1	-	14.3	3.3	8.2	2.0
20	-	-	-	-	-	-	9.2	1.4
21	-	-	1.1	-	-	0.8	4.1	0.6
22	-	-	-	-	-	-	3.0	0.1
23	-	-	1.1	-	-	-	3.0	0.2
24	-	-	3.5	-	-	-	-	0.1
25	-	-	17.3	-	7.1	6.6	-	0.3
26	-	-	6.9	-	-	2.5	-	0.2
27	-	-	2.3	-	-	13.1	-	0.3
28	-	-	-	-	-	11.5	-	0.4
29	-	-	4.6	-	-	50.7	-	0.9
30	-	-	-	-	-	-	-	0.5
31	-	-	-	-	-	-	-	0.2
32	-	-	-	-	-	-	-	0.2
n-paraffin (ppm)	0.13	-	0.36	5.40	0.04	0.46	0.33	8.07
Pristane (ppm)	0.53	0.01	1.15	0.05	0.14	0.10	0.52	26.38
Phytane (ppm)	-	-	-	-	-	-	0.02	-
Pr/Py	-	-	-	-	-	-	26.0	-
Pr/C ₁₇	4.8	-	16.4	-	7.0	2.5	4.0	17.8
Py/C ₁₈	-	-	-	-	-	-	2.0	-
CPI ₁₄₋₂₀	32.3	-	17.6	34.7	-	17.5	5.8	9.6
CPI ₂₀₋₃₂	-	-	2.5	-	-	5.1	1.5	1.3
Total Alkanes	0.66	0.01	1.51	5.45	0.18	0.56	0.87	34.45

TABLE 3 CONT'D

STATION	2/III	3/III	3/III	3/III	1/IV	1/IV	1/IV	1/IV	2/IV
SAMPLE CODE	IAU	ICR	ICR	ICR	IJW	IJW	IJW	IJW	INL
CARBON NO.									
14	-	-	33.3	-	-	0.3	-	-	1.5
15	13.3	31.6	66.7	79.4	50.0	36.7	12.5	10.8	65.8
16	1.9	3.5	-	2.9	-	2.3	-	1.0	8.4
17	4.8	64.9	-	17.7	16.7	53.4	25.0	4.1	13.2
18	1.0	-	-	-	-	1.4	-	0.5	2.8
19	1.0	-	-	-	-	5.4	12.5	1.6	1.6
20	17.1	-	-	-	-	0.3	-	0.5	0.1
21	-	-	-	-	-	0.1	-	0.5	0.5
22	-	-	-	-	-	-	-	-	-
23	-	-	-	-	8.3	-	6.2	0.5	-
24	-	-	-	-	-	-	6.3	0.5	-
25	-	-	-	-	-	-	-	0.5	-
26	7.6	-	-	-	-	-	6.3	1.0	0.1
27	7.6	-	-	-	16.7	-	12.5	2.6	0.8
28	26.7	-	-	-	8.3	0.1	-	2.1	2.0
29	5.7	-	-	-	-	-	18.7	19.1	3.2
30	9.5	-	-	-	-	-	-	38.2	-
31	3.8	-	-	-	-	-	-	16.5	-
32	-	-	-	-	-	-	-	-	-
<u>n</u> -paraffin (ppm)	0.44	0.27	0.01	0.15	0.06	2.78	0.07	0.83	5.85
Pristane (ppm)	0.07	0.26	0.01	0.21	0.31	0.09	0.23	0.57	1.83
Phytane (ppm)	-	-	-	-	-	-	-	0.01	-
Pr/Py	-	-	-	-	-	-	-	57.0	-
Pr/C ₁₇	3.5	1.4	-	7.0	31.0	0.1	11.5	19.0	2.4
Py/C ₁₈	-	-	-	-	-	-	-	2.5	-
CPI ₁₄₋₂₀	3.8	27.6	-	33.5	-	23.9	-	9.6	6.7
CPI ₂₀₋₃₂	0.3	-	-	-	3.0	0.6	3.0	0.9	2.1
Total Alkanes	0.51	0.53	0.02	0.36	0.37	2.87	0.30	1.41	7.68

TABLE 3 CONT'D

STATION	2/IV	2/IV	2/IV	3/IV	3/IV	3/IV	3/IV
SAMPLE CODE	INL	INL	INL	INK	INK	INK	INK
CARBON NO.							
14	-	-	1.2	1.0	1.1	0.4	-
15	21.3	29.9	72.0	73.8	72.0	59.3	2.0
16	2.2	2.4	3.7	6.1	5.7	3.5	-
17	5.1	11.2	17.1	14.8	16.3	32.5	2.5
18	0.7	1.4	2.4	1.9	0.1	1.6	0.5
19	1.5	3.8	3.6	2.4	0.6	2.2	0.5
20	0.7	0.9	-	-	-	-	-
21	2.2	0.9	-	-	1.0	0.3	0.5
22	2.2	1.4	-	-	0.3	0.1	0.5
23	2.2	0.9	-	-	0.4	0.1	1.0
24	1.5	1.4	-	-	0.3	-	1.5
25	1.5	0.9	-	-	-	-	2.0
26	2.2	0.9	-	-	0.3	-	2.5
27	1.5	0.5	-	-	0.6	0.1	3.4
28	1.5	1.9	-	-	-	-	4.0
29	1.5	2.8	-	-	1.0	0.1	14.8
30	11.0	6.6	-	-	0.3	-	48.0
31	24.3	11.2	-	-	-	-	16.3
32	16.9	21.0	-	-	-	-	-
<u>n-paraffin (ppm)</u>	0.46	0.98	0.32	9.73	2.77	46.22	0.85
Pristane (ppm)	0.03	0.70	0.18	2.11	0.56	2.05	0.08
Phytane (ppm)	-	0.01	-	-	-	-	-
Pr/Py	-	70.0	-	-	-	-	-
Pr/C ₁₇	1.5	6.4	3.6	1.5	1.2	0.1	4.0
Py/C ₁₈	-	1.0	-	-	-	-	-
CPI ₁₄₋₂₀	8.7	10.7	14.0	10.7	14.1	17.8	10.0
CPI ₂₀₋₃₂	1.3	0.9	-	-	2.5	6.0	0.7
Total Alkanes	0.49	1.69	0.50	11.84	3.33	48.27	0.93

^aThe code and order of samples correspond to Table 7.

TABLE 4
 CONCENTRATIONS OF ALKANES¹ IN SEASONAL MACROEPIFAUNA
 FROM THE SOUTH TEXAS OCS (SPRING 1976)

<u>Station/ Transect</u>	<u>Code</u>	<u>Species</u>	<u>Sample Wt. (g)</u>	<u>Conc. in ppm ($\mu\text{g/g}$ dry wt.)</u>
1/I	LYV	Atlantic bumper <u>Chloroscombrus chrysurus</u>	99.5	20.93
1/I	LYW	Silver seatrout <u>Cynoscion nothus</u>	90.7	9.32
1/I	LYX	Squid <u>Loligunculus brevi</u>	95.3	0.33
1/I	LZB	Atlantic bumper <u>Chloroscombrus chrysurus</u>	102.1	22.28
1/I	LZC	Squid <u>Loligunculus brevi</u>	92.6	0.35
2/I	MAV	Rough scad <u>Trachurus lathami</u>	96.6	12.37
2/I	MAW	Squid <u>Loligo pealei</u>	99.7	0.36
2/I	MAX	Butter fish <u>Peprilus burti</u>	103.0	26.73
3/I	MCS	Mexican sea robin <u>Prionotus paralatus</u>	77.9	0.07
3/I	MCT	Longspined porgy <u>Stenotomus caprinus</u>	98.2	0.51
3/I	MCU	Wenchman <u>Pristipomoides aquilonaris</u>	90.0	0.81
1/II	MJU	Atlantic bumper <u>Chloroscombrus chrysurus</u>	100.0	20.69
1/II	MJV	Rough scad <u>Trachurus lathami</u>	96.4	12.26
1/II	MJW	Squid <u>Loligo pealei</u>	100.3	0.17
1/II	MKD	Rough scad <u>Trachurus lathami</u>	99.2	17.45

TABLE 4 CONT'D

<u>Station/ Transect</u>	<u>Code</u>	<u>Species</u>	<u>Sample Wt. (g)</u>	<u>Conc. in ppm ($\mu\text{g/g}$ dry wt.)</u>
1/II	MKE	Squid <u>Loligo pealei</u>	88.4	1.02
2/II	MLW	Brown shrimp <u>Penaeus aztecus</u>	79.1	0.04
2/II	MLX	Lizard fish <u>Synodus foetens</u>	97.2	1.71
2/II	MLY	Broken back shrimp <u>Solenocera vioscai</u>	31.6	0.32
3/II	MNX	Butter fish <u>Peprilus burti</u>	116.1	7.16
3/II	MNY	Wenchman <u>Pristipomoides aquilonaris</u>	123.3	1.73
3/II	MNZ	Longspined scorpion fish <u>Pontinus longispinus</u>	103.0	0.04
1/III	MXX	Squid <u>Loligo pealei</u>	85.1	1.04
1/III	MYX	Dwarf goat fish <u>Upeneus parvus</u>	88.3	2.16
1/III	MXZ	Rough scad <u>Trachurus lathami</u>	105.5	7.86
1/III	MYE	Rough scad <u>Trachurus lathami</u>	93.2	8.22
1/III	MYF	Dwarf goat fish <u>Upeneus parvus</u>	61.6	3.06
2/III	MZX	Rough scad <u>Trachurus lathami</u>	106.7	7.87
2/III	MZY	Dwarf goat fish <u>Upeneus parvus</u>	105.1	0.21
2/III	MZZ	Squid <u>Loligo pealei</u>	102.9	1.58

TABLE 4 CONT'D

<u>Station/ Transect</u>	<u>Code</u>	<u>Species</u>	<u>Sample Wt. (g)</u>	<u>Conc. in ppm (ug/g dry wt.)</u>
3/III	NBU	Mexican sea robin <u>Prionotus paralatus</u>	80.0	0.13
3/III	NBV	Longspined porgy <u>Stenotomus caprinus</u>	79.0	0.20
3/III	NBW	Wenchman <u>Pristipomoides aquilonaris</u>	107.0	0.73
1/IV	NIU	Squid <u>Loligo pealei</u>	104.3	— ²
1/IV	NIV	Rough scad <u>Trachurus lathami</u>	93.8	0.01
1/IV	NIW	Dwarf goat fish <u>Upeneus parvus</u>	75.7	9.87
1/IV	NJB	Rough scad <u>Trachurus lathami</u>	76.4	0.05
1/IV	NJC	Dwarf goat fish <u>Upeneus parvus</u>	81.0	0.05
2/IV	NKU	Wenchman <u>Pristipomoides aquilonaris</u>	89.9	0.47
2/IV	NKV	Rough scad <u>Trachurus lathami</u>	100.9	23.57
2/IV	NKW	Dwarf goat fish <u>Upeneus parvus</u>	87.3	4.39
3/IV	NMR	Wenchman <u>Pristipomoides aquilonaris</u>	118.1	0.35
3/IV	NMS	Rough scad <u>Trachurus lathami</u>	102.6	5.15
3/IV	NMT	Dwarf goat fish <u>Upeneus parvus</u>	103.8	3.68

¹Total alkanes includes total paraffins, pristane, and phytane.

TABLE 5

ORGANS AND INDIVIDUALS ANALYZED
IN SEASONAL MACROEPIFAUNA (SPRING 1976)

<u>Station/ Transect</u>	<u>Code</u>	<u>Species</u>	<u>Organ Used^a</u>	<u># of Individuals</u>
1/I	LYV	Atlantic bumper <u>Chloroscombrus chrysurus</u>	M	7
1/I	LYW	Silver seatrout <u>Cynoscion nothus</u>	M	3
1/I	LYX	Squid <u>Loligunculus brevi</u>	W-p	20
1/I	LZB	Atlantic bumper <u>Chloroscombrus chrysurus</u>	M	10
1/I	LZC	Squid <u>Loligunculus brevi</u>	W-p	23
2/I	MAV	Rough scad <u>Trachurus lathami</u>	M	7
2/I	MAW	Squid <u>Loligo pealei</u>	W-p	10
2/I	MAX	Butter fish <u>Peprilus burti</u>	M	5
3/I	MCS	Mexican sea robin <u>Prionotus paralatus</u>	M	5
3/I	MCT	Longspined porgy <u>Stenotomus caprinus</u>	M	5
3/I	MCU	Wenchman <u>Pristipomoides aquilonaris</u>	M	5
1/II	MJU	Atlantic bumper <u>Chloroscombrus chrysurus</u>	M	6
1/II	MJV	Rough scad <u>Trachurus lathami</u>	M	5
1/II	MJW	Squid <u>Loligo pealei</u>	W-p	5
1/II	MKU	Rough scad <u>Trachurus lathami</u>	M	5

TABLE 5 CONT'D

<u>Station/ Transect</u>	<u>Code</u>	<u>Species</u>	<u>Organ Used^a</u>	<u># of Individuals</u>
1/II	MKE	Squid <u>Loligo pealei</u>	W-p	5
2/II	MLW	Brown shrimp <u>Penaeus aztecus</u>	M	5
2/II	MLX	Lizard fish <u>Synodus foetens</u>	M	5
2/II	MLY	Broken back shrimp <u>Solenocera vioscai</u>	M	20
3/II	MNX	Butter fish <u>Peprilus burti</u>	M	6
3/II	MNY	Wenchman <u>Pristipomoides aquilonaris</u>	M	6
3/II	MNZ	Longspined scorpion fish <u>Pontinus longispinus</u>	M	2
1/III	MXX	Squid <u>Loligo pealei</u>	W-p	5
1/III	MXY	Dwarf goat fish <u>Upeneus parvus</u>	M	7
1/III	MXZ	Rough scad <u>Trachurus lathami</u>	M	9
1/III	MYE	Rough scad <u>Trachurus lathami</u>	M	9
1/III	MYF	Dwarf goat fish <u>Upeneus parvus</u>	M	7
2/III	MZX	Rough scad <u>Trachurus lathami</u>	M	6
2/III	MZY	Dwarf goat fish <u>Upeneus parvus</u>	M	5
2/III	MZZ	Squid <u>Loligo pealei</u>	W-p	5

TABLE 5 CONT'D

<u>Station/ Transect</u>	<u>Code</u>	<u>Species</u>	<u>Organ Used^a</u>	<u># of Individuals</u>
3/III	NBU	Mexican sea robin <u>Prionotus paralatus</u>	M	4
3/III	NBV	Longspined porgy <u>Stenotomus caprinus</u>	M	2
3/III	NBW	Wenchman <u>Pristipomoides aquilonaris</u>	M	5
1/IV	NIU	Squid <u>Loligo pealei</u>	W-p	6
1/IV	NIV	Rough scad <u>Trachurus lathami</u>	M	8
1/IV	NIW	Dwarf goat fish <u>Upeneus parvus</u>	M	5
1/IV	NJB	Rough scad <u>Trachurus lathami</u>	M	8
1/IV	NJC	Dwarf goat fish <u>Upeneus parvus</u>	M	5
2/IV	NKU	Wenchman <u>Pristipomoides aquilonaris</u>	M	5
2/IV	NKV	Rough scad <u>Trachurus lathami</u>	M	5
2/IV	NKW	Dwarf goat fish <u>Upeneus parvus</u>	M	5
3/IV	NMR	Wenchman <u>Pristipomoides aquilonaris</u>	M	4
3/IV	NMS	Rough scad <u>Trachurus lathami</u>	M	5
3/IV	NMT	Dwarf goat fish <u>Upeneus parvus</u>	M	3

^aW = whole fish; M = muscle only; W-p = whole less pen.

TABLE 6

PERCENT DISTRIBUTION OF n-PARAFFINS IN SEASONAL MACROEPIFAUNA
FROM THE SOUTH TEXAS OCS (SPRING 1976)

STATION SAMPLE CODE ^a CARBON NO.	1/I LYV	1/I LYW	1/I LYX	1/I LZB	1/I LZC	2/I MAV	2/I MAW
14	0.8	-	-	5.5	-	4.1	-
15	48.3	64.5	33.8	32.2	32.3	64.4	42.0
16	5.1	4.2	1.4	12.0	4.4	3.7	2.0
17	36.3	26.2	45.1	42.9	54.4	19.3	47.0
18	4.0	1.1	-	4.4	-	1.1	-
19	3.3	1.7	8.5	1.6	5.9	1.3	5.0
20	0.6	0.1	1.4	-	-	0.6	1.0
21	0.5	0.4	2.8	0.7	1.5	0.8	2.0
22	0.2	0.1	2.8	-	-	0.5	-
23	0.4	0.3	2.8	0.3	-	1.0	1.0
24	0.2	0.2	-	-	-	0.8	-
25	0.2	0.2	-	0.2	-	0.8	-
26	0.1	0.2	-	0.2	-	0.5	-
27	-	0.4	1.4	-	1.5	0.6	-
28	-	0.4	-	-	-	0.4	-
29	-	-	-	-	-	-	-
30	-	-	-	-	-	0.1	-
31	-	-	-	-	-	-	-
32	-	-	-	-	-	-	-
<u>n-paraffins (ppm)</u>	4.47	5.66	0.07	2.54	0.07	5.14	0.10
Pristane (ppm)	16.46	3.66	0.26	19.74	0.28	7.11	0.26
Phytane (ppm)	-	-	-	-	-	0.12	-
Pr/Py	-	-	-	-	-	59.3	-
Pr/C ₁₇	10.2	2.5	8.7	18.1	7.0	7.2	5.2
Py/C ₁₈	-	-	-	-	-	2.0	-
CPI ₁₄₋₂₀	9.0	17.3	46.8	4.1	21.1	12.7	39.2
CPI ₂₀₋₃₂	1.6	1.4	2.1	6.0	-	1.3	-
Total alkanes	20.93	9.32	0.33	22.28	0.35	12.37	0.36

TABLE 6 CONT'D

STATION SAMPLE CODE CARBON NO.	2/I MAX	3/I MCS	3/I MCT	3/I MCU	1/II MJU	1/II MJV	1/II MJW
14	-	-	-	-	-	3.1	-
15	38.7	1.9	20.9	40.2	55.4	67.4	23.5
16	2.7	-	5.7	3.9	6.6	4.2	-
17	45.0	7.6	42.4	48.2	27.2	20.7	47.1
18	3.6	1.9	3.2	1.8	5.3	1.3	-
19	5.3	-	2.5	1.4	3.4	0.8	11.8
20	1.9	-	0.6	-	0.5	0.3	2.9
21	1.1	1.9	1.3	-	0.4	0.3	2.9
22	0.2	-	5.7	-	0.1	0.2	-
23	1.0	11.3	2.5	-	0.4	0.5	5.9
24	0.1	1.9	1.9	-	0.1	0.3	5.9
25	0.1	41.4	13.3	-	0.2	0.3	-
26	-	-	-	-	0.1	0.2	-
27	0.2	32.1	-	4.5	0.2	0.3	-
28	0.1	-	-	-	0.1	0.1	-
29	-	-	-	-	-	-	-
30	-	-	-	-	-	-	-
31	-	-	-	-	-	-	-
32	-	-	-	-	-	-	-
<u>n-paraffins (ppm)</u>	11.62	0.05	0.16	0.52	7.12	5.25	0.03
Pristane (ppm)	14.82	0.02	0.35	0.29	13.57	7.01	0.14
Phytane (ppm)	0.29	-	-	-	-	-	-
Pr/Py	51.1	-	-	-	-	-	-
Pr/C ₁₇	2.8	5.0	5.0	1.2	7.0	6.4	14.0
Py/C ₁₈	0.7	-	-	-	-	-	-
CPI ₁₄₋₂₀	12.5	5.0	7.2	15.8	7.1	12.8	-
CPI ₂₀₋₃₂	3.5	45.6	2.2	-	2.2	1.5	1.3
Total alkanes	26.73	0.07	0.51	0.81	20.69	12.26	0.17

TABLE 6 CONT'D

STATION	1/II	1/II	2/II	2/II	2/II	3/II	3/II
SAMPLE CODE	MKD	MKE	MLW	MLX	MLY	MNX	MNY
CARBON NO.							
14	-	-	-	0.3	-	2.0	0.6
15	70.5	30.8	13.6	64.7	4.4	63.8	69.5
16	2.2	1.3	-	2.8	-	6.1	2.9
17	22.1	44.2	-	28.3	-	23.0	25.3
18	0.9	1.3	-	0.6	-	2.0	0.7
19	1.1	5.4	-	2.4	-	1.8	1.0
20	0.3	1.8	-	0.1	-	-	-
21	0.6	4.9	-	0.1	-	0.3	-
22	0.3	2.7	-	0.1	3.8	0.1	-
23	0.5	4.5	11.4	0.1	9.2	0.5	-
24	0.3	2.7	27.3	0.1	13.6	-	-
25	0.3	-	36.4	0.1	20.6	0.4	-
26	0.3	0.4	9.0	0.1	16.8	-	-
27	0.4	-	2.3	0.1	17.1	-	-
28	0.2	-	-	0.1	14.5	-	-
29	-	-	-	-	-	-	-
30	-	-	-	-	-	-	-
31	-	-	-	-	-	-	-
32	-	-	-	-	-	-	-
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n-paraffins (ppm)	6.32	0.22	0.04	1.66	0.32	3.95	1.35
Pristane (ppm)	11.05	0.80	-	0.05	-	3.13	0.38
Phytane (ppm)	0.08	-	-	-	-	0.08	-
Pr/Py	138.1	-	-	-	-	39.1	-
Pr/C ₁₇	7.9	8.0	-	-	-	3.4	1.1
Py/C ₁₈	1.3	-	-	-	-	1.0	-
CPI ₁₄₋₂₀	28.9	24.6	-	26.5	-	9.9	24.7
CPI ₂₀₋₃₂	1.5	1.4	1.4	0.9	1.0	12.0	-
Total alkanes	17.45	1.02	0.04	1.71	0.32	7.16	1.73

TABLE 6 CONT'D

STATION	3/II	1/III	1/III	1/III	1/III	1/III	2/III
SAMPLE CODE	MNZ	MXX	MYX	MXZ	MYE	MYF	MZX
CARBON NO.							
14	-	-	-	2.8	4.6	0.3	3.7
15	16.7	35.6	51.6	80.7	75.5	76.9	83.4
16	-	1.5	2.7	1.9	2.5	1.7	2.1
17	66.6	52.9	31.1	12.7	13.1	17.6	9.5
18	16.7	1.1	1.9	0.6	0.5	0.6	0.7
19	-	5.0	2.9	0.6	0.7	1.6	0.3
20	-	-	2.1	-	-	0.3	-
21	-	3.1	3.2	0.2	0.3	0.5	0.1
22	-	-	1.0	0.1	2.2	-	-
23	-	0.8	1.8	0.3	0.4	0.4	0.1
24	-	-	0.4	-	0.1	-	-
25	-	-	0.4	-	-	0.1	0.1
26	-	-	-	-	-	-	-
27	-	-	0.9	-	0.1	-	-
28	-	-	-	-	-	-	-
29	-	-	-	-	-	-	-
30	-	-	-	-	-	-	-
31	-	-	-	-	-	-	-
32	-	-	-	-	-	-	-
<u>n-paraffins (ppm)</u>	0.01	0.26	1.02	3.26	3.21	2.17	3.49
Pristane (ppm)	0.03	0.78	1.11	4.60	5.01	0.87	4.33
Phytane (ppm)	-	-	0.03	-	-	0.02	0.05
Pr/Py	-	-	37.0	-	-	43.5	86.6
Pr/C ₁₇	4.5	5.6	3.5	11.2	11.9	2.3	13.1
Py/C ₁₈	-	-	1.5	-	-	2.0	2.5
CPI ₁₄₋₂₀	5.0	36.0	15.7	27.7	20.8	37.0	23.8
CPI ₂₀₋₃₂	-	-	3.2	5.0	0.4	-	-
Total alkanes	0.04	1.04	2.16	7.86	8.22	3.06	7.87

TABLE 6 CONT'D

STATION	2/III	2/III	3/III	3/III	3/III	1/IV	1/IV
SAMPLE CODE	MZY	MZZ	NBU	NBV	NBW	NIU	NIV
CARBON NO.							
14	0.6	0.7	-	1.9	-	-	-
15	81.6	70.5	23.6	50.1	40.5	-	-
16	3.6	1.4	6.9	9.6	4.3	-	-
17	13.6	26.2	61.2	36.5	52.3	-	-
18	0.6	0.6	6.9	1.9	1.7	-	-
19	-	0.3	1.4	-	1.2	-	-
20	-	-	-	-	-	-	-
21	-	-	-	-	-	-	21.4
22	-	-	-	-	-	-	-
23	-	0.3	-	-	-	-	64.3
24	-	-	-	-	-	-	14.3
25	-	-	-	-	-	-	-
26	-	-	-	-	-	-	-
27	-	-	-	-	-	-	-
28	-	-	-	-	-	-	-
29	-	-	-	-	-	-	-
30	-	-	-	-	-	-	-
31	-	-	-	-	-	-	-
32	-	-	-	-	-	-	-
<u>n-paraffins (ppm)</u>	0.17	0.67	0.07	0.05	0.42	0.00	0.01
Pristane (ppm)	0.04	0.89	0.06	0.15	0.31	-	-
Phytane (ppm)	-	0.02	-	-	-	-	-
Pr/Py	-	37.3	-	-	-	-	-
Pr/C ₁₇	2.0	4.9	1.5	7.5	1.4	-	-
Py/C ₁₈	-	5.0	-	-	-	-	-
CPI ₁₄₋₂₀	21.3	42.2	6.3	7.0	15.7	-	-
CPI ₂₀₋₃₂	-	-	-	-	-	-	6.0
Total alkanes	0.21	1.58	0.13	0.20	0.73	0.00	0.01

TABLE 6 CONT'D

STATION	1/IV	1/IV	1/IV	2/IV	2/IV	2/IV	3/IV
SAMPLE CODE	NIW	NJB	HJC	NKU	NKV	NKW	NMR
CARBON NO.							
14	1.1	-	-	0.9	2.9	1.1	-
15	82.9	-	-	85.1	83.4	86.7	58.8
16	2.4	-	-	2.3	2.3	1.7	3.8
17	12.0	3.8	-	11.4	9.6	9.9	36.4
18	0.3	-	-	0.3	0.6	0.3	0.5
19	0.7	3.8	13.5	-	0.4	0.3	0.5
20	0.1	-	7.7	-	-	-	-
21	0.3	3.8	28.8	-	0.3	-	-
22	0.1	7.7	15.4	-	-	-	-
23	0.1	30.8	26.9	-	0.3	-	-
24	-	15.4	5.8	-	-	-	-
25	-	7.7	1.9	-	0.1	-	-
26	-	19.3	-	-	-	-	-
27	-	7.7	-	-	0.1	-	-
28	-	-	-	-	-	-	-
29	-	-	-	-	-	-	-
30	-	-	-	-	-	-	-
31	-	-	-	-	-	-	-
32	-	-	-	-	-	-	-
<u>n-paraffins (ppm)</u>	8.06	0.03	0.05	0.34	7.19	3.19	0.21
Pristane (ppm)	1.78	0.02	-	0.13	16.31	1.19	0.14
Phytane (ppm)	0.03	-	-	-	0.07	0.01	-
Pr/Py	59.3	-	-	-	233.0	119.0	-
Pr/C ₁₇	1.8	20.0	-	3.3	23.6	3.7	1.8
Py/C ₁₈	1.5	-	-	-	1.8	1.0	-
CPI ₁₄₋₂₀	29.7	-	-	32.3	24.2	39.9	22.3
CPI ₂₀₋₃₂	3.0	1.2	2.4	-	-	-	-
Total alkanes	9.87	0.05	0.05	0.47	23.57	4.39	0.35

TABLE 6 CONT'D

STATION	3/IV	3/IV
SAMPLE CODE	NMS	NMT
CARBON NO.		
14	2.8	1.3
15	82.0	88.9
16	1.4	1.7
17	11.8	7.4
18	0.8	0.2
19	0.5	0.2
20	0.1	-
21	0.4	0.2
22	-	-
23	0.2	0.1
24	-	-
25	-	-
26	-	-
27	-	-
28	-	-
29	-	-
30	-	-
31	-	-
32	-	-
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n-paraffins (ppm)	2.22	3.35
Pristane (ppm)	2.88	0.33
Phytane (ppm)	0.05	-
Pr/Py	57.6	-
Pr/C ₁₇	11.1	1.3
Py/C ₁₈	2.5	-
CPI ₁₄₋₂₀	29.9	40.5
CPI ₂₀₋₃₂	-	-
Total alkanes	5.15	3.68

^a The code and order of samples correspond to Table 10.

TABLE 7
 CONCENTRATIONS OF ALKANES¹ IN SEASONAL MACROEPIFAUNA
 FROM THE SOUTH TEXAS OCS (SUMMER/FALL 1976)

<u>Station/ Transect</u>	<u>Code</u>	<u>Species</u>	<u>Sample Wt. (g)</u>	<u>Conc. in ppm ($\mu\text{g/g}$ dry wt.)</u>
1/I	QZE	Atlantic bumper <u>Chloroscombrus</u> <u>chrysurus</u>	113.1	46.91
1/I	QZF	Atlantic croaker <u>Micropogon undulatus</u>	116.6	1.24
1/I	QZG	Squid <u>Loligo pealei</u>	81.4	0.08
2/I	RAV	Longspined porgy <u>Stenotomus caprinus</u>	82.6	0.80
2/I	RAW	Butter fish <u>Peprilus burti</u>	117.9	27.31
2/I	RAX	Squid <u>Loligo pealei</u>	73.7	0.09
3/I	RCY	Wenchman <u>Pristipomoides</u> <u>aquilonaris</u>	111.5	0.44
3/I	RCZ	Blackear bass <u>Serranus atrobranchus</u>	90.7	0.09
3/I	RDA	Longspined porgy <u>Stenotomus caprinus</u>	98.3	0.95
1/II	RJY	Squid <u>Loligunculus brevi</u>	41.6	0.74
1/II	RJZ	Brown shrimp <u>Penaeus aztecus</u>	59.1	0.08
1/II	RKA	Shoal flounder <u>Syacium gunteri</u>	51.7	0.46
2/II	RLY	Brown shrimp <u>Penaeus aztecus</u>	52.8	- ^a
2/II	RLZ	Shoal flounder <u>Syacium gunteri</u>	80.4	0.04

TABLE 7 CONT'D

<u>Station/ Transect</u>	<u>Code</u>	<u>Species</u>	<u>Sample Wt. (g)</u>	<u>Conc. in ppm (ug/g dry wt.)</u>
2/II	RMA	Blackear bass <u>Serranus atrobranchus</u>	89.5	-
3/II	RNX	Longspined porgy <u>Stenotomus caprinus</u>	109.7	0.05
3/II	RNY	Squid <u>Loligo pealei</u>	98.3	0.34
3/II	RNZ	Wenchman <u>Pristipomoides aquilonaris</u>	99.2	0.76
3/II	WMM	Wenchman <u>Pristipomoides aquilonaris</u>	98.3	0.80
1/III	RTR	Atlantic croaker <u>Micropogon undulatus</u>	106.6	0.34
1/III	RTS	Threadfin <u>Polydactylus octonemus</u>	105.9	9.39
1/III	RTU	Brown shrimp <u>Penaeus aztecus</u>	48.1	0.07
2/III	RVP	Atlantic bumper <u>Chloroscombrus chrysurus</u>	93.0	26.14
2/III	RVQ	Brown shrimp <u>Penaeus aztecus</u>	93.9	0.02
2/III	RVR	Dwarf goat fish <u>Upeneus parvus</u>	94.1	3.30
3/III	RXR	Wenchman <u>Pristipomoides aquilonaris</u>	93.9	1.88
3/III	RXS	Longspined porgy <u>Stenotomus caprinus</u>	108.3	0.02

TABLE 7 CONT'D

<u>Station/ Transect</u>	<u>Code</u>	<u>Species</u>	<u>Sample Wt. (g)</u>	<u>Conc. in ppm ($\mu\text{g/g}$ dry wt.)</u>
3/III	RXT	Blackear bass <u>Serranus atrobranchus</u>	89.5	-
1/IV	SDK	Brown shrimp <u>Penaeus aztecus</u>	59.2	0.02
1/IV	SDL	Pinfish <u>Lagodon rhomboides</u>	138.1	0.12
1/IV	SDM	Atlantic croaker <u>Micropogon undulatus</u>	125.9	0.07
1/IV	SDO	Brown shrimp <u>Penaeus aztecus</u>	74.9	-
2/IV	SFH	Brown shrimp <u>Penaeus aztecus</u>	90.2	-
2/IV	SFI	Blackear bass <u>Serranus atrobranchus</u>	84.7	0.02
2/IV	SFJ	Dwarf goat fish <u>Upeneus parvus</u>	87.4	0.28
3/IV	SHG	Brown shrimp <u>Penaeus aztecus</u>	164.4	-
3/IV	SHH	Longspined porgy <u>Stenotomus caprinus</u>	131.0	0.34
3/IV	SHI	Wenchman <u>Pristipomoides aquilonaris</u>	107.8	2.74

¹Total Alkanes includes total paraffins, pristane and phytane

^a - = below limits of quantitation of hydrocarbons, less than .01 $\mu\text{g/g}$.

TABLE 8

ORGANS AND INDIVIDUALS ANALYZED
IN SEASONAL MACROEPIFAUNA (SUMMER/FALL 1976)

<u>Station/ Transect</u>	<u>Code</u>	<u>Species</u>	<u>Organ Used^a</u>	<u># of Individuals</u>
1/I	QZE	Atlantic bumper <u>Chloroscombrus</u> <u>chrysurus</u>	M	5
1/I	QZF	Atlantic croaker <u>Micropogon undulatus</u>	M	4
1/I	QZG	Squid <u>Loligo pealei</u>	W-p	5
2/I	RAV	Longspined porgy <u>Stenotomus caprinus</u>	W	5
2/I	RAW	Butter fish <u>Peprilus burti</u>	M	5
2/I	RAX	Squid <u>Loligo pealei</u>	W-p-h	3
3/I	RCY	Wenchman <u>Pristipomoides</u> <u>aquilonaris</u>	W	5
3/I	RCZ	Blackear bass <u>Serranus atrobranchus</u>	W	5
3/I	RDA	Longspined porgy <u>Stenotomus caprinus</u>	M	5
1/II	RJY	Squid <u>Loligunculus brevi</u>	W-p	4
1/II	RJZ	Brown shrimp <u>Penaeus aztecus</u>	M	5
1/II	RKA	Shoal flounder <u>Syacium gunteri</u>	W-t	5
2/II	RLY	Brown shrimp <u>Penaeus aztecus</u>	M	5
2/II	RLZ	Shoal flounder <u>Syacium gunteri</u>	M	5

TABLE 8 CONT'D

<u>Station/ Transect</u>	<u>Code</u>	<u>Species</u>	<u>Organ Used^a</u>	<u># of Individuals</u>
2/II	RMA	Blackear bass <u>Serranus atrobranchus</u>	W-t	5
3/II	RNX	Longspined porgy <u>Stenotomus caprinus</u>	M	5
3/II	RNY	Squid <u>Loligo pealei</u>	W-p-h	5
3/II	RNZ	Wenchman <u>Pristipomoides aquilonaris</u>	M	5
3/II	WMM	Wenchman <u>Pristipomoides aquilonaris</u>	M	9
1/III	RTR	Atlantic croaker <u>Micropogon undulatus</u>	M	5
1/III	RTS	Threadfin <u>Polydactylus octonemus</u>	M	5
1/III	RTU	Brown shrimp <u>Penacus aztecus</u>	M	5
2/III	RVP	Atlantic bumper <u>Chloroscombrus chrysurus</u>	M	5
2/III	RVQ	Brown shrimp <u>Penaeus aztecus</u>	M	5
2/III	RVR	Dwarf goat fish <u>Upeneus parvus</u>	M	5
3/III	RXR	Wenchman <u>Pristipomoides aquilonaris</u>	M	3
3/III	RXS	Longspined porgy <u>Stenotomus caprinus</u>	M	5

TABLE 8 CONT'D

<u>Station/ Transect</u>	<u>Code</u>	<u>Species</u>	<u>Organ Used^a</u>	<u># of Individuals</u>
3/III	RXT	Blackear bass <u>Serranus atrobranchus</u>	W	5
1/IV	SDK	Brown shrimp <u>Penaeus aztecus</u>	M	5
1/IV	SDL	Pinfish <u>Lagodon rhomboides</u>	W-t	5
1/IV	SDM	Atlantic croaker <u>Micropogon undulatus</u>	M	4
1/IV	SDO	Brown shrimp <u>Penaeus aztecus</u>	M	5
2/IV	SFH	Brown shrimp <u>Penaeus aztecus</u>	M	5
2/IV	SFI	Blackear bass <u>Serranus atrobranchus</u>	M	5
2/IV	SFJ	Dwarf goat fish <u>Upeneus parvus</u>	M	5
3/IV	SHG	Brown shrimp <u>Penaeus aztecus</u>	M	5
3/IV	SHH	Longspined porgy <u>Stenotomus caprinus</u>	M	5
3/IV	SHI	Wenchman <u>Pristipomoides aquilonaris</u>	M	5

^aW = whole fish; M = muscle only; W-p = whole less pen; -h = less head
-t = less tail.

TABLE 9

PERCENT DISTRIBUTION OF n-PARAFFINS IN SEASONAL MACROEPIFAUNA
FROM THE SOUTH TEXAS OCS (SUMMER/FALL 1976)

STATION	1/I	1/I	1/I	2/I	2/I	2/I	3/I	3/I
SAMPLE CODE ^a	QZE	QZF	QZG	RAV	RAW	RAX	RCY	RCZ
CARBON NO.								
14	-	-	-	-	-	-	-	-
15	61.7	4.9	-	18.0	70.0	-	14.7	32.2
16	-	1.9	-	7.1	8.0	-	5.8	13.6
17	29.0	14.9	-	18.3	13.3	100.0	67.1	44.0
18	2.3	1.7	-	5.7	2.0	-	4.9	10.2
19	4.6	2.2	100.0	4.4	1.3	-	4.9	-
20	0.9	-	-	2.5	0.3	-	-	-
21	0.8	1.4	-	3.5	0.7	-	2.6	-
22	0.3	1.3	-	4.1	1.0	-	-	-
23	0.2	1.6	-	4.9	1.3	-	-	-
24	0.1	1.8	-	4.9	0.7	-	-	-
25	0.1	2.0	-	5.9	-	-	-	-
26	-	2.3	-	3.3	-	-	-	-
27	-	12.6	-	8.7	0.2	-	-	-
28	-	6.4	-	8.7	-	-	-	-
29	-	39.0	-	-	1.2	-	-	-
30	-	6.0	-	-	-	-	-	-
31	-	-	-	-	-	-	-	-
32	-	-	-	-	-	-	-	-
n-paraffins (ppm)	19.97	1.04	0.01	0.37	17.62	0.02	0.23	0.06
Pristane (ppm)	26.94	0.20	0.07	0.43	9.69	0.07	0.21	0.03
Phytane (ppm)	-	-	-	-	-	-	-	-
Pr/Py	-	-	-	-	-	-	-	-
Pr/C ₁₇	4.7	1.3	-	6.1	4.1	3.5	1.4	1.0
Py/C ₁₈	-	-	-	-	-	-	-	-
CPI ₁₈	-	-	-	-	-	-	-	-
CPI ₁₄₋₂₀	35.6	6.1	-	2.9	8.3	-	8.1	3.2
CPI ₂₀₋₃₂	1.8	3.2	-	1.0	1.9	-	-	-
Total Alkanes	46.91	1.24	0.08	0.80	27.31	0.09	0.44	0.09

TABLE 9 CONT'D

STATION	3/I	1/II	1/II	1/II	2/II	2/II	2/II	3/II
SAMPLE CODE	RDA	RJY	RJZ	RKA	RLY	RLZ	RMA	RNX
CARBON NO.								
14	-	-	-	-	-	-	-	-
15	13.6	-	-	-	-	-	-	-
16	3.7	-	-	-	-	-	-	-
17	24.6	100.0	-	-	-	100.0	-	-
18	2.0	-	-	-	-	-	-	-
19	2.3	-	-	-	-	-	-	-
20	-	-	-	-	-	-	-	-
21	2.7	-	-	-	-	-	-	-
22	1.4	-	-	-	-	-	-	-
23	4.9	-	-	-	-	-	-	-
24	1.9	-	-	-	-	-	-	-
25	2.5	-	-	-	-	-	-	-
26	1.4	-	-	-	-	-	-	-
27	4.9	-	-	-	-	-	-	-
28	2.5	-	-	-	-	-	-	-
29	14.0	-	-	-	-	-	-	-
30	4.7	-	-	-	-	-	-	-
31	12.9	-	-	-	-	-	-	-
32	-	-	-	-	-	-	-	-
<u>n-paraffins (ppm)</u>	0.49	0.06	-	-	-	0.04	-	-
Pristane (ppm)	0.46	0.68	0.08	0.46	-	-	-	0.05
Phytane (ppm)	-	-	-	-	-	-	-	-
Pr/Py	-	-	-	-	-	-	-	-
Pr/C ₁₇	3.8	11.3	-	-	-	-	-	-
Py/C ₁₈	-	-	-	-	-	-	-	-
CPI ₁₄₋₂₀	7.1	-	-	-	-	-	-	-
CPI ₂₀₋₃₂	3.5	-	-	-	-	-	-	-
Total Alkanes	0.95	0.74	0.08	0.46	-	0.04	-	0.05

TABLE 9 CONT'D

STATION	3/II	3/II	3/II	1/III	1/III	1/III	2/III	2/III
SAMPLE CODE	RNY	RNZ	WMM	RTR	RTS	RTU	RVP	RVQ
CARBON NO.								
14	-	-	-	-	-	-	-	-
15	53.5	74.3	74.0	20.2	57.6	-	74.8	-
16	-	-	-	6.6	2.3	-	1.6	-
17	46.5	25.7	26.0	58.5	30.8	70.0	17.3	54.6
18	-	-	-	4.4	1.0	30.0	0.9	45.4
19	-	-	-	7.0	5.0	-	2.4	-
20	-	-	-	-	0.4	-	0.3	-
21	-	-	-	3.3	0.6	-	0.6	-
22	-	-	-	-	0.4	-	0.2	-
23	-	-	-	-	0.7	-	0.7	-
24	-	-	-	-	0.4	-	0.1	-
25	-	-	-	-	0.5	-	0.2	-
26	-	-	-	-	0.3	-	0.1	-
27	-	-	-	-	-	-	0.2	-
28	-	-	-	-	-	-	0.1	-
29	-	-	-	-	-	-	0.4	-
30	-	-	-	-	-	-	-	-
31	-	-	-	-	-	-	0.1	-
32	-	-	-	-	-	-	-	-
n-paraffins (ppm)	0.24	0.48	0.50	0.18	4.10	0.05	15.17	0.01
Pristane (ppm)	0.10	0.28	0.30	0.15	5.29	0.02	10.89	0.01
Phytane (ppm)	-	-	-	0.01	-	-	0.08	-
Pr/Py	-	-	-	15.0	-	-	136.1	-
Pr/C ₁₇	0.9	2.3	2.3	1.4	4.2	0.5	4.2	2.0
Py/C ₁₈	-	-	-	1.0	-	-	0.6	-
CPI ₁₄₋₂₀	-	-	-	7.8	26.8	2.3	35.8	1.2
CPI ₂₀₋₃₂	-	-	-	-	1.4	-	3.6	-
Total Alkanes	0.34	0.76	0.80	0.34	9.39	0.07	26.14	0.02

TABLE 9 CONT'D

STATION	2/III	3/III	3/III	3/III	1/IV	1/IV	1/IV	1/IV
SAMPLE CODE	RVR	RXR	RXS	RXT	SDK	SDL	SDM	SDO
CARBON NO.								
14	-	-	-	-	-	-	-	-
15	81.2	60.0	-	-	-	49.0	57.1	-
16	2.6	2.7	-	-	25.0	12.2	-	-
17	10.8	30.1	-	-	50.0	38.8	42.9	-
18	0.8	1.3	-	-	25.0	-	-	-
19	1.0	1.7	-	-	-	-	-	-
20	0.3	-	-	-	-	-	-	-
21	1.0	0.4	-	-	-	-	-	-
22	0.2	-	-	-	-	-	-	-
23	1.1	0.6	-	-	-	-	-	-
24	0.4	0.6	-	-	-	-	-	-
25	0.6	0.7	-	-	-	-	-	-
26	-	-	-	-	-	-	-	-
27	-	0.3	-	-	-	-	-	-
28	-	1.6	-	-	-	-	-	-
29	-	-	-	-	-	-	-	-
30	-	-	-	-	-	-	-	-
31	-	-	-	-	-	-	-	-
32	-	-	-	-	-	-	-	-
n-paraffins (ppm)	2.38	1.45	-	-	0.02	0.05	0.04	-
Pristane (ppm)	0.92	0.43	0.02	-	-	0.06	0.03	-
Phytane (ppm)	-	-	-	-	-	0.01	-	-
Pr/Py	-	-	-	-	-	6.0	-	-
Pr/C ₁₇	3.5	1.0	-	-	-	3.0	1.5	-
Py/C ₁₈	-	-	-	-	-	-	-	-
CPI ₁₄₋₂₀	26.2	23.0	-	-	1.0	7.2	-	-
CPI ₂₀₋₃₂	3.8	0.9	-	-	-	-	-	-
Total Alkanes	3.30	1.88	0.02	-	0.02	0.12	0.07	-

TABLE 9 CONT'D

STATION	2/IV	2/IV	2/IV	3/IV	3/IV	3/IV
SAMPLE CODE	SFH	SFI	SFJ	SHG	SHH	SHI
CARBON NO.						
14	-	-	-	-	-	-
15	-	-	7.4	-	34.0	72.8
16	-	-	6.5	-	2.5	1.9
17	-	100.0	56.5	-	13.9	14.2
18	-	-	9.3	-	-	0.7
19	-	-	6.5	-	-	0.8
20	-	-	-	-	-	-
21	-	-	-	-	-	0.3
22	-	-	-	-	-	-
23	-	-	5.5	-	2.4	0.5
24	-	-	-	-	2.9	0.3
25	-	-	-	-	4.1	0.6
26	-	-	-	-	2.9	0.5
27	-	-	-	-	6.6	0.8
28	-	-	8.3	-	9.0	1.2
29	-	-	-	-	9.4	0.8
30	-	-	-	-	2.5	0.9
31	-	-	-	-	9.8	0.3
32	-	-	-	-	-	3.4
<u>n-paraffins (ppm)</u>	-	0.01	0.11	-	0.24	2.07
Pristane (ppm)	-	0.01	0.17	-	0.10	0.67
Phytane (ppm)	-	-	-	-	-	-
Pr/Py	-	-	-	-	-	-
Pr/C ₁₇	-	1.0	2.8	-	3.3	2.3
Py/C ₁₈	-	-	-	-	-	-
CPI ₁₄₋₂₀	-	-	4.5	-	19.2	33.8
CPI ₂₀₋₃₂	-	-	0.7	-	1.9	0.8
Total Alkanes	-	0.02	0.28	-	0.34	2.74

^aThe code and order of samples correspond to Table 13.

TABLE 10
 CONCENTRATIONS OF ALKANES¹ IN SEASONAL MACROEPIFAUNA
 FROM THE SOUTH TEXAS OCS (SUMMER/FALL, REPLICATE 1976).

<u>Station/ Transect</u>	<u>Code</u>	<u>Species</u>	<u>Sample Wt. (g)</u>	<u>Conc. in ppm ($\mu\text{g/g}$ dry wt.)</u>
2/I	RBH	Butter fish <u>Peprilus burti</u>	108.1	29.54
2/I	RBI	Butter fish <u>Peprilus burti</u>	104.3	29.52
1/II	VLV	Squid <u>Loligunculus brevi</u>	40.7	- ^a
1/II	VLW	Squid <u>Loligunculus brevi</u>	55.1	0.71
1/II	VLX	Brown shrimp <u>Penaeus aztecus</u>	44.9	0.01
1/II	VLY	Brown shrimp <u>Penaeus aztecus</u>	43.6	-
1/II	VLZ	Shoal flounder <u>Syacium gunteri</u>	80.9	-
1/II	VMA	Shoal flounder <u>Syacium gunteri</u>	71.4	0.08
2/II	RMD	Brown shrimp <u>Penaeus aztecus</u>	66.6	-
2/II	RME	Brown shrimp <u>Penaeus aztecus</u>	95.8	-
2/II	VMH	Shoal flounder <u>Syacium gunteri</u>	83.3	0.28
2/II	VMI	Shoal flounder <u>Syacium gunteri</u>	57.2	0.18
2/II	VMJ	Blackear bass <u>Serranus atrobranchus</u>	64.3	0.29
2/II	VMK	Blackear bass <u>Serranus atrobranchus</u>	41.5	0.54
3/II	VMP	Longspined porgy <u>Stenotomus caprinus</u>	90.0	0.05

TABLE 10 CONT'D

<u>Station/ Transect</u>	<u>Code</u>	<u>Species</u>	<u>Sample Wt. (g)</u>	<u>Conc. in ppm ($\mu\text{g/g}$ dry wt.)</u>
3/II	VMQ	Longspined porgy <u>Stenotomus caprinus</u>	78.6	0.23
3/II	VMR	Squid <u>Loligo pealei</u>	127.6	0.10
3/II	VMS	Squid <u>Loligo pealei</u>	98.6	0.35
3/II	VMT	Wenchman <u>Pristipomoides aquilonaris</u>	63.1	1.35
3/II	VMU	Wenchman <u>Pristipomoides aquilonaris</u>	71.1	0.58
2/III	RVV	Dwarf goat fish <u>Upeneus parvus</u>	99.0	3.23
2/III	RVX	Dwarf goat fish <u>Upeneus parvus</u>	101.9	3.37
2/IV	SFO	Blackear bass <u>Serranus atrobranchus</u>	89.7	0.80
2/IV	SFP	Blackear bass <u>Serranus atrobranchus</u>	87.9	0.75

¹Total Alkanes includes total paraffins, pristane and phytane.

^a- = below limits of quantitation of hydrocarbons, less than .01 $\mu\text{g/g}$.

TABLE 11

ORGANS AND INDIVIDUALS ANALYZED
IN SEASONAL MACROEPIFAUNA (SUMMER/FALL REPLICATE 1976)

<u>Station/ Transect</u>	<u>Code</u>	<u>Species</u>	<u>Organ Used^a</u>	<u># of Individuals</u>
2/I	RBH	Butter fish <u>Peprilus burti</u>	M	5
2/I	RBI	Butter fish <u>Peprilus burti</u>	M	5
1/II	VLV	Squid <u>Loligunculus brevi</u>	W-p	4
1/II	VLW	Squid <u>Loligunculus brevi</u>	W-p	5
1/II	VLX	Brown shrimp <u>Penaeus aztecus</u>	M	5
1/II	VLY	Brown shrimp <u>Penaeus aztecus</u>	M	5
1/II	VLZ	Shoal flounder <u>Syacium gunteri</u>	M	5
1/II	VMA	Shoal flounder <u>Syacium gunteri</u>	M	5
2/II	RND	Brown shrimp <u>Penaeus aztecus</u>	M	5
2/II	RME	Brown shrimp <u>Penaeus aztecus</u>	M	5
2/II	VMH	Shoal flounder <u>Syacium gunteri</u>	W-t	5
2/II	VMI	Shoal flounder <u>Syacium gunteri</u>	W-t	5
2/II	VMJ	Blackear bass <u>Serranus atrobranchus</u>	W-t	5
2/II	VMK	Blackear bass <u>Serranus atrobranchus</u>	W-t	5
3/II	VMP	Longspined porgy <u>Stenotomus caprinus</u>	M	5

TABLE 11 CONT'D

<u>Station/ Transect</u>	<u>Code</u>	<u>Species</u>	<u>Organ Used^a</u>	<u># of Individuals</u>
3/II	VMQ	Longspined porgy <u>Stenotomus caprinus</u>	M	5
3/II	VMR	Squid <u>Loligo pealei</u>	W-p-h	5
3/II	VMS	Squid <u>Loligo pealei</u>	W-p-h	5
3/II	VMT	Wenchman <u>Pristipomoides aquilonaris</u>	M	5
3/II	VMU	Wenchman <u>Pristipomoides aquilonaris</u>	M	5
2/III	RVV	Dwarf goat fish <u>Upeneus parvus</u>	M	5
2/III	RVX	Dwarf goat fish <u>Upeneus parvus</u>	M	5
2/IV	SFO	Blackear bass <u>Serranus atrobranchus</u>	W	5
2/IV	SFP	Blackear bass <u>Serranus atrobranchus</u>	W	5

^aM = muscle only; W = whole fish; W-p = whole less pen; -t = less tail;
-h = less head.

TABLE 12

PERCENT DISTRIBUTION OF n -PARAFFINS IN SEASONAL MACROEPIFAUNA
FROM THE SOUTH TEXAS OCS (SUMMER/FALL REPLICATES, 1976)

STATION	2/I	2/I	1/II	1/II	1/II	1/II	1/II	1/II
SAMPLE CODE ^a	RBH	RBI	VLV	VLW	VLX	VLY	VLZ	VMA
CARBON NO.								
14	-	-	-	-	-	-	-	-
15	69.2	69.9	-	-	100.0	-	-	-
16	4.8	3.7	-	-	-	-	-	-
17	17.3	16.7	-	100.0	-	-	-	100.0
18	2.2	1.6	-	-	-	-	-	-
19	2.6	2.4	-	-	-	-	-	-
20	0.8	0.4	-	-	-	-	-	-
21	1.1	0.8	-	-	-	-	-	-
22	0.2	0.2	-	-	-	-	-	-
23	0.8	1.1	-	-	-	-	-	-
24	0.1	1.1	-	-	-	-	-	-
25	0.2	0.5	-	-	-	-	-	-
26	0.1	0.1	-	-	-	-	-	-
27	0.2	0.1	-	-	-	-	-	-
28	0.1	1.1	-	-	-	-	-	-
29	0.1	0.3	-	-	-	-	-	-
30	0.1	-	-	-	-	-	-	-
31	0.1	-	-	-	-	-	-	-
32	-	-	-	-	-	-	-	-
n -paraffins (ppm)	16.00	17.17	-	0.06	0.01	-	-	0.08
Pristane (ppm)	13.54	12.35	-	0.65	-	-	-	-
Phytane (ppm)	-	-	-	-	-	-	-	-
Pr/Py	-	-	-	-	-	-	-	-
Pr/C ₁₇	4.9	4.3	-	-	-	-	-	-
Py/C ₁₈	-	-	-	10.8	-	-	-	-
CPI ₁₄₋₂₀	12.1	16.2	-	-	-	-	-	-
CPI ₂₀₋₃₂	3.0	1.0	-	-	-	-	-	-
Total Alkanes	29.54	29.52	-	0.71	0.01	-	-	0.08

TABLE 12 CONT'D

STATION	2/II	2/II	2/II	2/II	2/II	2/II	3/II	3/II
SAMPLE CODE	RMD	RME	VMH	VMI	VMJ	VMK	VMP	VMQ
CARBON NO.								
14	-	-	-	-	-	-	-	-
15	-	-	-	-	100.0	96.4	100.0	-
16	-	-	-	-	-	-	-	-
17	-	-	-	-	-	3.6	-	100.0
18	-	-	-	-	-	-	-	-
19	-	-	-	-	-	-	-	-
20	-	-	-	-	-	-	-	-
21	-	-	-	-	-	-	-	-
22	-	-	-	-	-	-	-	-
23	-	-	-	-	-	-	-	-
24	-	-	-	-	-	-	-	-
25	-	-	-	-	-	-	-	-
26	-	-	-	-	-	-	-	-
27	-	-	-	-	-	-	-	-
28	-	-	-	-	-	-	-	-
29	-	-	-	-	-	-	-	-
30	-	-	-	-	-	-	-	-
31	-	-	-	-	-	-	-	-
32	-	-	-	-	-	-	-	-
<hr/>								
n-paraffins (ppm)	-	-	-	-	0.06	0.28	0.01	0.02
Pristane (ppm)	-	-	0.28	0.18	0.23	0.26	0.04	0.21
Phytane (ppm)	-	-	-	-	-	-	-	-
Pr/Py	-	-	-	-	-	-	-	-
Pr/C ₁₇	-	-	-	-	-	26.0	-	10.5
Py/C ₁₈	-	-	-	-	-	-	-	-
CPI ₁₄₋₂₀	-	-	-	-	-	-	-	-
CPI ₂₀₋₃₂	-	-	-	-	-	-	-	-
Total Alkanes	-	-	0.28	0.18	0.29	0.54	0.05	0.23

TABLE 12 CONT'D

STATION	3/II	3/II	3/II	3/II	2/III	2/III	2/IV	2/IV
SAMPLE CODE	VMR	VMS	VMT	VMU	RVV	RVX	SFO	SFP
CARBON NO.								
14	-	-	-	-	-	-	-	-
15	-	39.4	66.9	66.5	81.0	85.9	43.9	38.6
16	-	-	0.5	-	1.9	1.3	3.2	3.3
17	100.0	60.6	32.6	33.5	7.9	6.0	10.4	9.3
18	-	-	-	-	0.4	0.4	1.7	1.6
19	-	-	-	-	0.8	0.7	1.5	1.6
20	-	-	-	-	-	-	0.9	0.9
21	-	-	-	-	0.8	0.7	1.6	0.9
22	-	-	-	-	-	0.2	1.0	0.9
23	-	-	-	-	1.1	1.0	2.3	2.6
24	-	-	-	-	0.8	0.3	1.9	2.6
25	-	-	-	-	0.8	0.6	2.6	4.2
26	-	-	-	-	0.8	0.3	2.0	3.3
27	-	-	-	-	1.2	1.1	4.1	5.1
28	-	-	-	-	1.3	0.4	2.6	5.8
29	-	-	-	-	1.2	0.4	4.2	7.5
30	-	-	-	-	-	0.2	4.4	0.9
31	-	-	-	-	-	0.5	11.7	10.9
32	-	-	-	-	-	-	-	-
n-paraffins (ppm)	0.04	0.22	0.96	0.37	2.60	2.48	0.69	0.55
Pristane (ppm)	0.06	0.13	0.39	0.21	0.63	0.89	0.11	0.20
Phytane (ppm)	-	-	-	-	-	-	-	-
Pr/Py	-	-	-	-	-	-	-	-
Pr/C ₁₇	1.5	1.0	1.3	1.8	3.0	5.9	1.6	4.0
Py/C ₁₈	-	-	-	-	-	-	-	-
CPI ₁₄₋₂₀	-	-	199.0	-	39.0	54.5	10.5	9.3
CPI ₂₀₋₃₂	-	-	-	-	1.8	3.1	2.2	2.2
Total Alkanes	0.10	0.35	1.35	0.58	3.23	3.37	0.80	0.75

^aThe code and order of samples correspond to Table 16.

TABLE 13

CONCENTRATIONS OF ALKANES¹ IN SEASONAL MACRONEKTON
FROM SOUTH TEXAS OCS (WINTER 1976)

<u>Station/ Transect</u>	<u>Code</u>	<u>Species</u>	<u>Sample Wt. (g)</u>	<u>Conc. in ppm ($\mu\text{g/g}$ dry wt.)</u>
Southern Bank	JJH-MNK	Red snapper <u>Lutjanus</u> <u>campechanus</u>	102.1	0.03
Southern Bank	JJJ-MNK	Vermilion snapper <u>Rhomboplites</u> <u>aurorubens</u>	100.0	0.65
Southern Bank	JJJ-MNK	Vermilion snapper <u>Rhomboplites</u> <u>aurorubens</u>	8.9	- ^a
Southern Bank	JJK-MNK	Vermilion snapper <u>Rhomboplites</u> <u>aurorubens</u>	98.7	0.86
Southern Bank	JJL-MNK	Red snapper <u>Lutjanus</u> <u>campechanus</u>	100.0	7.40
Southern Bank	JJL-MNK gill	Red snapper <u>Lutjanus campechanus</u>	8.2	3.58
Southern Bank	JJL-MNK liver	Red snapper <u>Lutjanus campechanus</u>	1.0	16.66
Hospital Rock	JJM-MNK	Species Unidentified	100.0	8.15
Hospital Rock	JJN-MNK	Vermilion snapper <u>Rhomboplites</u> <u>aurorubens</u>	92.4	0.42
Hospital Rock	JJO-MNK	Vermilion snapper <u>Rhomboplites</u> <u>aurorubens</u>	100.0	2.50

¹Total Alkanes includes total paraffins, pristane and phytane

^a - = below detection limit of 0.001 $\mu\text{g/g}$

TABLE 14
 ORGANS AND INDIVIDUALS ANALYZED
 IN SEASONAL MACRONEKTON (WINTER 1976)

<u>Station/ Transect</u>	<u>Code</u>	<u>Species</u>	<u>Organ Used^a</u>	<u># of Individuals</u>
Southern Bank	JJH-MNK	Red snapper <u>Lutjanus</u> <u>campechanus</u>	M	1
Southern Bank	JJJ-MNK	Vermilion snapper <u>Rhomboplites</u> <u>aurorubens</u>	M	1
Southern Bank	JJJ-MNK	Vermilion snapper <u>Rhomboplites</u> <u>aurorubens</u>	G	2
Southern Bank	JJK-MNK	Vermilion snapper <u>Rhomboplites</u> <u>aurorubens</u>	M	1
Southern Bank	JJL-MNK	Red snapper <u>Lutjanus</u> <u>campechanus</u>	M	1
Southern Bank	JJL-MNK gill	Red snapper <u>Lutjanus campechanus</u>	G	2
Southern Bank	JJL-MNK liver	Red snapper <u>Lutjanus campechanus</u>	L	1
Hospital Rock	JJM-MNK	Species Unidentified	M	1
Hospital Rock	JJN-MNK	Vermilion snapper <u>Rhomboplites</u> <u>aurorubens</u>	M	1
Hospital Rock	JJO-MNK	Vermilion snapper <u>Rhomboplites</u> <u>aurorubens</u>	M	1

^aM = muscle only; G = gill; L = liver.

TABLE 15

PERCENT DISTRIBUTION OF n-PARAFFINS IN SEASONAL MACRONEKTON
FROM THE SOUTH TEXAS OCS (WINTER 1976)

STATION	Southern Bank	Southern Bank	Southern Bank	Southern Bank	Southern Bank
SAMPLE CODE	JJJ	JJJ-G	JJK	JJL	JJL-G
CARBON NO.					
14	3.3	-	-	2.1	3.1
15	86.3	-	85.2	77.3	26.0
16	2.6	-	3.3	3.9	10.4
17	6.8	-	11.5	10.7	55.3
18	0.5	-	-	1.2	-
19	0.5	-	-	0.9	-
20	-	-	-	0.7	-
21	-	-	-	0.8	-
22	-	-	-	0.8	-
23	-	-	-	0.9	-
24	-	-	-	0.7	-
25	-	-	-	-	-
26	-	-	-	-	0.5
27	-	-	-	-	0.5
28	-	-	-	-	3.5
29	-	-	-	-	-
30	-	-	-	-	0.7
31	-	-	-	-	-
32	-	-	-	-	-
<u>n-paraffin (ppm)</u>	0.50	-	0.49	6.37	2.33
Pristane (ppm)	0.15	-	0.37	0.97	1.25
Phytane (ppm)	-	-	-	0.06	-
Pr/Py	-	-	-	16.2	-
Pr/C ₁₇	5.0	-	6.2	1.4	1.0
Py/C ₁₈	-	-	-	0.8	-
CPI ₁₄₋₂₀	22.4	-	29.3	13.8	6.9
CPI ₂₀₋₃₂	-	-	-	1.0	0.1
Total Alkanes	0.65	-	0.86	7.40	3.58

TABLE 15 CONT'D

STATION	Southern Bank	Hospital Rock	Hospital Rock	Hospital Rock	Southern Bank
SAMPLE CODE	JJL-L	JJM	JJN	JJO	JJH
CARBON NO.					
14	0.9	0.3	2.0	7.9	-
15	72.3	2.9	77.7	74.9	-
16	4.9	3.2	2.0	2.2	100.0
17	21.9	82.1	12.2	7.9	-
18	-	5.3	-	0.8	-
19	-	4.4	-	1.1	-
20	-	0.5	-	2.2	-
21	-	0.5	-	1.1	-
22	-	0.1	-	0.5	-
23	-	0.5	4.1	0.8	-
24	-	0.1	-	-	-
25	-	0.1	2.0	0.3	-
26	-	-	-	0.3	-
27	-	-	-	-	-
28	-	-	-	-	-
29	-	-	-	-	-
30	-	-	-	-	-
31	-	-	-	-	-
32	-	-	-	-	-
n-paraffin (ppm)	10.93	7.90	0.24	1.30	0.02
Pristane (ppm)	5.73	0.08	0.18	1.18	0.01
Phytane (ppm)	-	0.17	-	0.02	-
Pr/Py	-	0.5	-	59.0	0.5
Pr/C ₁₇	2.4	-	6.0	11.8	-
Py/C ₁₈	-	0.4	-	2.0	-
CPI ₁₄₋₂₀	17.7	10.1	33.7	11.9	-
CPI ₂₀₋₃₂	-	3.5	-	1.7	-
Total Alkanes	16.66	8.15	0.42	2.50	0.03

^aThe code and order of samples correspond to Table 19.

TABLE 16

CONCENTRATION OF ALKANES¹ IN SEASONAL MACRONEKTON FROM
SOUTH TEXAS OCS (SPRING 1976)

<u>Station/ Transect</u>	<u>Code</u>	<u>Species</u>	<u>Sample Wt. (g)</u>	<u>Conc. in ppm (µg/g dry wt.)</u>
Southern Bank	OOW-M	Vermilion snapper <u>Rhomboplites aurorubens</u>	94.8	2.22
	OOW-L		3.2	0.49
	OOW-G		7.5	0.33
Southern Bank	OOX-M	Vermilion snapper <u>Rhomboplites aurorubens</u>	99.0	4.90
	OOX-L		1.6	3.85
	OOX-G		4.9	0.23
Southern Bank	OOY-M	Vermilion snapper <u>Rhomboplites aurorubens</u>	100.2	0.23
	OOY-L		1.9	6.26
	OOY-G		5.9	0.75
Southern Bank	OOZ-M	Vermilion snapper <u>Rhomboplites aurorubens</u>	103.2	0.24
	OOZ-L		1.4	2.10
	OOZ-G		8.7	0.25

¹Total alkanes includes total paraffins, pristane, and phytane.

TABLE 17

ORGANS AND INDIVIDUALS ANALYZED
IN SEASONAL MACRONEKTON (SPRING 1976)

<u>Station/ Transect</u>	<u>Code</u>	<u>Species</u>	<u>Organ Used^a</u>	<u># of Individuals</u>
Southern Bank	00W-M	Vermilion snapper <u>Rhomboplites aurorubens</u>	M	1
	00W-L		L	1
	00W-G		G	2
Southern Bank	00X-M	Vermilion snapper <u>Rhomboplites aurorubens</u>	M	1
	00X-L		L	1
	00X-G		G	2
Southern Bank	00Y-M	Vermilion snapper <u>Rhomboplites aurorubens</u>	M	1
	00Y-L		L	1
	00Y-G		G	2
Southern Bank	00Z-M	Vermilion snapper <u>Rhomboplites aurorubens</u>	M	1
	00Z-L		L	1
	00Z-G		G	2

^aM = muscle only; L = liver; G = gill.

TABLE 18

PERCENT DISTRIBUTION OF n -PARAFFINS IN SEASONAL MACRONEKTON
FROM THE SOUTH TEXAS OCS (SPRING 1976)

STATION SAMPLE CODE ^a CARBON NO.	Southern Bank OOW-M	Southern Bank OOW-L	Southern Bank OOW-G	Southern Bank OOX-M
14	0.6	-	-	0.5
15	85.1	-	-	86.8
16	2.1	-	-	2.0
17	9.9	-	-	8.5
18	0.3	-	-	0.1
19	0.4	-	4.5	0.3
20	0.1	-	7.8	-
21	0.3	-	14.0	0.3
22	0.1	-	-	0.2
23	0.5	19.6	10.0	0.4
24	0.4	37.9	16.8	0.3
25	0.1	42.5	10.6	0.2
26	-	-	15.1	0.3
27	0.1	-	21.2	0.1
28	-	-	-	-
29	-	-	-	-
30	-	-	-	-
31	-	-	-	-
32	-	-	-	-
<u>n-paraffins (ppm)</u>	1.54	0.17	0.18	3.47
Pristane (ppm)	0.68	0.32	0.15	1.43
Phytane (ppm)	-	-	-	-
Pr/Py	-	-	-	-
Pr/C ₁₇	4.5	-	-	4.9
Py/C ₁₈	-	-	-	-
CPI ₁₄₋₂₀	35.0	-	-	41.2
CPI ₂₀₋₃₂	1.8	1.6	1.6	1.3
Total alkanes	2.22	0.49	0.33	4.90

TABLE 18 CONT'D

STATION	Southern Bank	Southern Bank	Southern Bank	Southern Bank
SAMPLE CODE	OOX-L	OOX-G	OOY-M	OOY-L
CARBON NO.				
14	-	-	-	-
15	47.6	71.7	34.0	18.5
16	-	-	-	-
17	-	-	34.0	5.0
18	-	-	-	-
19	-	-	2.0	1.6
20	-	-	-	-
21	3.3	6.6	4.0	5.2
22	4.0	-	-	6.1
23	6.6	14.2	12.0	19.0
24	14.5	7.5	4.0	9.6
25	8.0	-	-	13.7
26	7.8	-	2.0	9.0
27	8.2	-	4.0	9.5
28	-	-	-	2.8
29	-	-	-	-
30	-	-	4.0	-
31	-	-	-	-
32	-	-	-	-
<u>n-paraffins (ppm)</u>	1.43	0.23	0.05	2.90
Pristane (ppm)	2.42	-	0.18	3.36
Phytane (ppm)	-	-	-	-
Pr/Py	-	-	-	-
Pr/C ₁₇	-	-	9.0	22.4
Py/C ₁₈	-	-	-	-
CPI ₁₄₋₂₀	-	-	-	-
CPI ₂₀₋₃₂	1.0	2.8	2.0	1.7
Total alkanes	3.85	0.23	0.23	6.26

TABLE 18 CONT'D

STATION	Southern Bank	Southern Bank	Southern Bank	Southern Bank
SAMPLE CODE	00Y-G	00Z-M	00Z-L	00Z-G
CARBON NO.				
14	-	-	-	-
15	100.0	17.2	73.7	69.1
16	-	-	-	-
17	-	25.9	-	-
18	-	1.7	-	-
19	-	6.9	-	8.3
20	-	5.3	3.7	-
21	-	6.9	4.8	-
22	-	8.6	-	-
23	-	17.2	13.6	22.6
24	-	10.3	4.2	-
25	-	-	-	-
26	-	-	-	-
27	-	-	-	-
28	-	-	-	-
29	-	-	-	-
30	-	-	-	-
31	-	-	-	-
32	-	-	-	-
<u>n-paraffins (ppm)</u>	0.28	0.06	0.93	0.08
Pristane (ppm)	0.47	0.18	1.17	0.17
Phytane (ppm)	-	-	-	-
Pr/Py	-	-	-	-
Pr/C ₁₇	-	9.0	-	-
Py/C ₁₈	-	-	-	-
CPI ₁₄₋₂₀	-	18.3	-	-
CPI ₂₀₋₃₂	-	1.1	3.4	-
Total alkanes	0.75	0.24	2.10	0.25

^aThe code and order of samples correspond to Table 22.

TABLE 19

CONCENTRATION OF ALKANES¹ IN SEASONAL MACRONEKTON FROM THE
SOUTH TEXAS OCS (FALL 1976)

<u>Station/ Transect</u>	<u>Code</u>	<u>Species</u>	<u>Sample Wt. (g)</u>	<u>Conc. in ppm ($\mu\text{g/g}$ dry wt.)</u>
Hospital Rock	USV-M	Vermilion Snapper <u>Rhomboplites</u> <u>aurorubens</u>	45.7	1.08
	USV-L		0.4	10.24
	USV-G		4.3	7.08
Hospital Rock	USW→USX-M	Red snapper <u>Lutjanus</u> <u>campechanus</u>	107.3	0.25
	USW→USX-L		9.8	8.48
	USW→USX-G		16.7	8.16
Southern Bank	USY→UTA-M	Red snapper <u>Lutjanus</u> <u>campechanus</u>	97.9	1.05
	USY→UTA-L		11.5	7.96
	USY→UTA-G		22.9	4.53

¹Total alkanes includes total paraffins, pristane, and phytane.

TABLE 20

ORGANS AND INDIVIDUALS ANALYZED
IN SEASONAL MACRONEKTON (FALL 1976)

<u>Station/ Transect</u>	<u>Code</u>	<u>Species</u>	<u>Organ Used^a</u>	<u># of Individuals</u>
Hospital Rock	USV-M	Vermilion Snapper <u>Rhomboplites</u> <u>aurorubens</u>	M	1
	USV-L		L	1
	USV-G		G	2
Hospital Rock	USW→USX-M	Red snapper <u>Lutjanus</u> <u>campechanus</u>	M	2
	USW→USX-L		L	2
	USW→USX-G		G	4
Southern Bank	USY→UTA-M	Red snapper <u>Lutjanus</u> <u>campechanus</u>	M	3
	USY→UTA-L		L	3
	USY→UTA-G		G	6

^aM = muscle only; L = liver; G = gill.

TABLE 21

PERCENT DISTRIBUTION OF n-PARAFFINS IN SEASONAL MACRONEKTON
FROM THE SOUTH TEXAS OCS (FALL 1976)

STATION SAMPLE CODE ^a CARBON NO.	Hospital Rock USV-M	Hospital Rock USV-L	Hospital Rock USV-G	Hospital Rock USW+USX-M
14	0.6	-	-	-
15	43.3	37.3	12.0	54.2
16	4.3	16.6	4.0	4.8
17	18.8	30.0	13.9	39.2
18	4.5	2.7	13.1	1.2
19	2.6	-	13.8	0.6
20	0.9	-	8.4	-
21	-	-	8.2	-
22	3.7	13.4	6.3	-
23	16.2	-	14.7	-
24	1.7	-	5.6	-
25	-	-	-	-
26	3.4	-	-	-
27	-	-	-	-
28	-	-	-	-
29	-	-	-	-
30	-	-	-	-
31	-	-	-	-
32	-	-	-	-
<u>n</u> -paraffins (ppm)	0.35	3.44	4.02	0.17
Pristane (ppm)	0.73	6.80	2.93	0.08
Phytane (ppm)	-	-	0.13	-
Pr/Py	-	-	22.5	-
Pr/C ₁₇	10.4	6.6	5.2	1.1
Py/C ₁₈	-	-	0.3	-
CPI ₁₄₋₂₀	6.8	3.5	1.9	15.7
CPI ₂₀₋₃₂	1.8	-	1.5	-
Total alkanes	1.08	10.24	7.08	0.25

TABLE 21 CONT'D

STATION	Hospital Rock	Hospital Rock	Southern Bank	Southern Bank
SAMPLE CODE	USW→USX-L	USW→USX-G	USY→UTA-M.	USY→UTA-L
CARBON NO.				
14	0.8	1.3	-	-
15	80.7	79.8	80.1	72.5
16	3.1	2.3	3.1	3.0
17	14.7	15.9	15.2	22.7
18	0.5	0.4	0.8	0.3
19	0.2	0.3	0.3	0.2
20	-	-	-	-
21	-	-	-	-
22	-	-	0.5	-
23	-	-	-	1.3
24	-	-	-	-
25	-	-	-	-
26	-	-	-	-
27	-	-	-	-
28	-	-	-	-
29	-	-	-	-
30	-	-	-	-
31	-	-	-	-
32	-	-	-	-
<u>n</u> -paraffins (ppm)	7.19	6.94	0.93	6.49
Pristane (ppm)	1.29	1.22	0.12	1.47
Phytane (ppm)	-	-	-	-
Pr/Py	-	-	-	-
Pr/C ₁₇	1.2	1.1	0.9	1.0
Py/C ₁₈	-	-	-	-
CPI ₁₄₋₂₀	24.1	29.8	24.5	28.9
CPI ₂₀₋₃₂	-	-	-	-
Total alkanes	8.48	8.16	1.05	7.96

TABLE 21 CONT'D

STATION	Southern Bank
SAMPLE CODE	USY→UTA-G
CARBON NO.	
14	-
15	79.2
16	2.7
17	16.8
18	0.1
19	0.2
20	-
21	-
22	-
23	1.0
24	-
25	-
26	-
27	-
28	-
29	-
30	-
31	-
32	-
<hr/>	
n-paraffins (ppm)	3.84
Pristane (ppm)	0.69
Phytane (ppm)	-
Pr/Py	-
Pr/C ₁₇	1.1
Py/C ₁₈	-
CPI ₁₄₋₂₀	34.4
CPI ₂₀₋₃₂	-
Total alkanes	4.53

^aThe code and order of samples correspond to Table 25.

TABLE 22

CONCENTRATIONS OF ALKANES¹ IN MONTHLY MACRONEKTON FROM THE
SOUTH TEXAS OCS (MARCH, 1976).

<u>Station/ Transect</u>	<u>Code</u>	<u>Species</u>	<u>Sample Wt. (g)</u>	<u>Conc. in ppm ($\mu\text{g/g}$ dry wt)</u>
Hospital Rock	KCM-M ^a	Red snapper <u>Lutjanus</u> <u>campechanus</u>	99.8	0.08
	KCM-L		4.6	5.67
	KCM-G		36.6	0.39
Hospital Rock	KCO-M	Vermilion snapper <u>Rhomboplites</u> <u>aurorubens</u>	103.0	0.30
	KCO-L		1.7	2.33
	KCO-G		7.7	0.12
Hospital Rock	KCQ-M	Squirrel fish <u>Holocentrus</u> <u>rufus</u>	83.4	3.70
	KCQ-L		1.7	290.71
	KCQ-G		13.8	18.91
Southern Bank	KCS-M	Vermilion snapper <u>Rhomboplites</u> <u>aurorubens</u>	96.3	1.20
	KCS-L		5.7	4.19
	KCS-G		15.6	4.54
Southern Bank	KCU-M	Red snapper <u>Lutjanus</u> <u>campechanus</u>	77.7	0.19
	KCU-L		4.8	3.39
	KCU-G		14.3	0.11

TABLE 22 CONT'D

<u>Station/ Transect</u>	<u>Code</u>	<u>Species</u>	<u>Sample Wt. (g)</u>	<u>Conc. in ppm (ug/g dry wt.)</u>
Southern Bank	KCW-M	Squirrel fish <u>Holocentrus</u> <u>rufus</u>	77.7	2.68
	KCW-L		4.9	15.83
	KCW-G		5.9	2.03

¹Total Alkanes includes total paraffins, pristane & phytane

^aM designates Muscle; L designates liver, and G designates gill

TABLE 23

ORGANS AND INDIVIDUALS ANALYZED
IN MONTHLY MACRONEKTON (MARCH 1976)

<u>Station/ Transect</u>	<u>Code</u>	<u>Species</u>	<u>Organ Used^a</u>	<u># of Individuals</u>
Hospital Rock	KCM-M	Red snapper <u>Lutjanus</u> <u>campechanus</u>	M	7
	KCM-L		L	7
	KCM-G		G	14
Hospital Rock	KCO-M	Vermilion snapper <u>Rhomboplites</u> <u>aurorubens</u>	M	1
	KCO-L		L	1
	KCO-G		G	2
Hospital Rock	KCQ-M	Squirrel fish <u>Holocentrus</u> <u>rufus</u>	M	2
	KCQ-L		L	2
	KCQ-G		G	4
Southern Bank	KCS-M	Vermilion snapper <u>Rhomboplites</u> <u>aurorubens</u>	M	7
	KCS-L		L	7
	KCS-G		G	14
Southern Bank	KCU-M	Red snapper <u>Lutjanus</u> <u>campechanus</u>	M	1
	KCU-L		L	1
	KCU-G		G	2

TABLE 23 CONT'D

<u>Station/ Transect</u>	<u>Code</u>	<u>Species</u>	<u>Organ Used^a</u>	<u># of Individuals</u>
Southern Bank	KCW-M	Squirrel fish <u>Holocentrus</u> <u>rufus</u>	M	1
	KCW-L		L	1
	KCW-G		G	2

^aM = muscle only; L = liver; G = gill.

TABLE 24

 PERCENT DISTRIBUTION OF n-PARAFFINS IN MONTHLY MACRONEKTON
 FROM THE SOUTH TEXAS OCS (MARCH 1976)

STATION SAMPLE CODE ^a CARBON NO.	Hospital Rock KCM-M	Hospital Rock KCM-L	Hospital Rock KCM-G	Hospital Rock KCO-M	Hospital Rock KCO-L
14	-	-	-	-	-
15	-	29.2	17.3	35.7	100.0
16	-	1.2	-	-	-
17	100.0	8.8	75.9	64.3	-
18	-	-	-	-	-
19	-	-	-	-	-
20	-	-	-	-	-
21	-	-	-	-	-
22	-	-	-	-	-
23	-	4.8	-	-	-
24	-	-	-	-	-
25	-	-	-	-	-
26	-	0.9	-	-	-
27	-	2.8	-	-	-
28	-	5.5	3.4	-	-
29	-	46.8	-	-	-
30	-	-	3.4	-	-
31	-	-	-	-	-
32	-	-	-	-	-
<u>n-paraffin (ppm)</u>	0.01	3.68	0.14	0.06	0.07
Pristane (ppm)	0.07	1.99	0.25	0.24	2.26
Phytane (ppm)	-	-	-	-	-
Pr/Py	-	-	-	-	-
Pr/C ₁₇	7.0	6.2	2.3	6.0	-
Py/C ₁₈	-	-	-	-	-
CPI ₁₄₋₂₀	-	31.7	-	-	-
CPI ₂₀₋₃₂	-	8.5	-	-	-
Total Alkanes	0.08	5.67	0.39	0.30	2.33

M-77

TABLE 24 CONT'D

STATION	Hospital Rock	Hospital Rock	Hospital Rock	Hospital Rock	Southern Bank
SAMPLE CODE	KCO-G	KCQ-M	KCQ-L	KCQ-G	KCS-M
CARBON NO.					
14	-	-	0.1	-	1.8
15	-	-	0.4	0.6	79.8
16	-	-	1.6	1.7	4.0
17	-	92.8	74.3	90.6	9.4
18	-	7.2	7.0	7.1	-
19	-	-	7.6	-	-
20	-	-	0.2	-	-
21	-	-	8.8	-	1.4
22	-	-	-	-	-
23	-	-	-	-	-
24	-	-	-	-	-
25	-	-	-	-	-
26	-	-	-	-	-
27	-	-	-	-	-
28	-	-	-	-	3.6
29	-	-	-	-	-
30	-	-	-	-	-
31	-	-	-	-	-
32	-	-	-	-	-
<u>n-paraffin (ppm)</u>	-	3.70	290.71	18.01	0.88
Pristane (ppm)	0.12	-	-	-	0.32
Phytane (ppm)	-	-	-	0.90	-
Pr/Py	-	-	-	-	-
Pr/C ₁₇	-	-	-	-	4.0
Py/C ₁₈	-	-	-	0.7	-
CPI ₁₄₋₂₀	-	12.9	9.4	10.4	18.8
CPI ₂₀₋₃₂	-	-	-	-	0.4
Total Alkanes	0.12	3.70	290.71	18.91	1.20

TABLE 24 CONT'D

STATION	Southern Bank	Southern Bank	Southern Bank	Southern Bank	Southern Bank
SAMPLE CODE	KCS-L	KCS-G	KCU-M	KCU-L	KCU-G
CARBON NO.					
14	-	0.4	-	-	-
15	72.1	82.8	-	11.0	-
16	-	2.1	14.3	3.7	-
17	25.9	14.6	85.7	85.3	-
18	-	-	-	-	-
19	-	-	-	-	-
20	-	-	-	-	-
21	-	-	-	-	-
22	-	-	-	-	-
23	-	-	-	-	-
24	-	-	-	-	-
25	-	-	-	-	-
26	-	-	-	-	-
27	-	-	-	-	-
28	-	-	-	-	-
29	2.0	0.1	-	-	-
30	-	-	-	-	-
31	-	-	-	-	-
32	-	-	-	-	-
<u>n</u> -paraffin (ppm)	1.59	2.84	0.06	0.74	-
Pristane (ppm)	2.60	1.70	0.13	2.52	0.11
Phytane (ppm)	-	-	-	0.13	-
Pr/Py	-	-	-	19.4	-
Pr/C ₁₇	6.3	4.2	2.6	4.0	-
Py/C ₁₈	-	-	-	-	-
CPI ₁₄₋₂₀	-	42.7	6.0	26.0	-
CPI ₂₀₋₃₂	-	-	-	-	-
Total Alkanes	4.19	4.54	0.19	3.39	0.11

TABLE 24 CONT'D

STATION	Southern Bank	Southern Bank	Southern Bank
SAMPLE CODE	KCW-M	KCW-L	KCW-G
CARBON NO.			
14	-	0.3	-
15	9.9	2.4	-
16	3.7	1.7	-
17	72.1	44.0	100.0
18	4.1	1.4	-
19	5.9	3.9	-
20	-	-	-
21	2.3	0.3	-
22	-	-	-
23	2.0	8.5	-
24	-	-	-
25	-	10.8	-
26	-	1.5	-
27	-	-	-
28	-	7.1	-
29	-	18.1	-
30	-	-	-
31	-	-	-
32	-	-	-
<u>n-paraffin (ppm)</u>	2.41	14.83	1.91
Pristane (ppm)	0.27	1.00	0.12
Phytane (ppm)	-	-	-
Pr/Py	-	-	-
Pr/C ₁₇	0.2	0.2	0.1
Py/C ₁₈	-	-	-
CPI ₁₄₋₂₀	11.3	15.5	-
CPI ₂₀₋₃₂	-	4.4	-
Total Alkanes	2.68	15.83	2.03

^aThe code and order of samples correspond to Table 28.

TABLE 25
 CONCENTRATIONS OF ALKANES¹ IN MONTHLY MACRONEKTON FROM THE
 SOUTH TEXAS OCS (APRIL, 1976).

<u>Station/ Transect</u>	<u>Code</u>	<u>Species</u>	<u>Sample Wt. (g)</u>	<u>Conc. in ppm ($\mu\text{g/g}$ dry wt.)</u>
Southern Bank	KVC-M ^a	Vermilion snapper <u>Rhomboplites</u> <u>aurorubens</u>	95.3	3.34
	KVC-L		4.4	13.12
	KVC-G		19.4	1.68
Southern Bank	KVD-M	Red snapper <u>Lutjanus</u> <u>campechanus</u>	97.5	0.19
	KVD-L		4.4	7.14
	KVD-G		16.9	0.85
Hospital Rock	KVE-M	Red snapper <u>Lutjanus</u> <u>campechanus</u>	89.2	0.03
	KVE-L		4.4	2.45
	KVE-G		11.1	- ^b
Hospital Rock	KVF-M	Squirrel fish <u>Holocentrus</u> <u>rufus</u>	60.3	7.44
	KVF-L		3.0	144.49
	KVF-G		6.0	2.93

¹Total Alkanes includes total paraffins, pristane and phytane.

^aM designates Muscle; L designates liver and G designates gill.

^b - = below detection limit of 0.001 $\mu\text{g/g}$

TABLE 26

ORGANS AND INDIVIDUALS ANALYZED
IN MONTHLY MACRONEKTON (APRIL 1976)

<u>Station/ Transect</u>	<u>Code</u>	<u>Species</u>	<u>Organ Used^a</u>	<u># of Individuals</u>
Southern Bank	KVC-M	Vermilion snapper <u>Rhomboplites</u> <u>aurorubens</u>	M	7
	KVC-L		L	7
	KVC-G		G	14
Southern Bank	KVD-M	Red snapper <u>Lutjanus</u> <u>campechanus</u>	M	4
	KVD-L		L	4
	KVD-G		G	8
Hospital Rock	KVE-M	Red snapper <u>Lutjanus</u> <u>campechanus</u>	M	2
	KVE-L		L	2
	KVE-G		G	4
Hospital Rock	KVF-M	Squirrel fish <u>Holocentrus</u> <u>rufus</u>	M	1
	KVF-L		L	1
	KVF-G		G	2

^aM = muscle only; L = liver; G = gill.

TABLE 27

PERCENT DISTRIBUTION OF n-PARAFFINS IN MONTHLY MACRONEKTON
FROM THE SOUTH TEXAS OCS (APRIL 1976)

STATION SAMPLE CODE ^a CARBON NO.	Southern Bank KVC-M	Southern Bank KVC-L	Southern Bank KVC-G	Southern Bank KVD-M	Southern Bank KVD-L
14	0.2	-	-	-	-
15	82.8	97.8	25.4	-	0.7
16	3.7	2.2	1.4	-	-
17	13.3	-	73.2	100.0	94.8
18	-	-	-	-	-
19	-	-	-	-	-
20	-	-	-	-	-
21	-	-	-	-	-
22	-	-	-	-	-
23	-	-	-	-	-
24	-	-	-	-	-
25	-	-	-	-	-
26	-	-	-	-	-
27	-	-	-	-	4.5
28	-	-	-	-	-
29	-	-	-	-	-
30	-	-	-	-	-
31	-	-	-	-	-
32	-	-	-	-	-
<u>n-paraffins (ppm)</u>	1.99	0.99	0.31	0.08	2.41
Pristane	1.35	12.13	1.37	0.11	4.51
Phytane	-	-	-	-	0.22
Pr/Py	-	-	-	-	20.5
Pr/C ₁₇	5.2	-	6.0	1.4	2.0
Py/C ₁₈	-	-	-	-	-
CPI ₁₄₋₂₀	25.3	44.5	70.4	-	-
CPI ₂₀₋₃₂	-	-	-	-	-
Total Alkanes	3.34	13.12	1.68	0.19	7.14

TABLE 27 CONT'D

STATION	Southern Bank	Hospital Rock	Hospital Rock	Hospital Rock	Hospital Rock
SAMPLE CODE	KVD-G	KVE-M	KVE-L	KVE-G	KVF-M
CARBON NO.					
14	-	-	-	-	-
15	26.0	-	5.7	-	2.6
16	11.5	-	-	-	2.7
17	62.5	25.0	94.3	-	86.7
18	-	-	-	-	5.5
19	-	-	-	-	2.1
20	-	-	-	-	-
21	-	-	-	-	-
22	-	-	-	-	-
23	-	-	-	-	-
24	-	-	-	-	-
25	-	-	-	-	-
26	-	-	-	-	-
27	-	75.0	-	-	0.4
28	-	-	-	-	-
29	-	-	-	-	-
30	-	-	-	-	-
31	-	-	-	-	-
32	-	-	-	-	-
<u>n</u> -paraffins (ppm)	0.47	0.02	0.63	-	7.44
Pristane (ppm)	0.38	0.01	1.82	-	-
Phytane (ppm)	-	-	-	-	-
Pr/Py	-	-	-	-	-
Pr/C ₁₇	1.3	1.0	3.1	-	-
Py/C ₁₈	-	-	-	-	-
CPI ₁₄₋₂₀	7.7	-	-	-	11.2
CPI ₂₀₋₃₂	-	-	-	-	-
Total Alkanes	0.85	0.03	2.45	-	7.44

TABLE 27 CONT'D

STATION	Hospital Rock	Hospital Rock
SAMPLE CODE	KVF-L	KVF-G
CARBON NO.		
14	-	-
15	1.1	-
16	2.2	-
17	86.7	100.0
18	5.4	-
19	4.4	-
20	-	-
21	0.2	-
22	-	-
23	-	-
24	-	-
25	-	-
26	-	-
27	-	-
28	-	-
29	-	-
30	-	-
31	-	-
32	-	-
<hr/>		
n-paraffins (ppm)	126.67	2.93
Pristane (ppm)	17.82	-
Phytane (ppm)	-	-
Pr/Py	-	-
Pr/C ₁₇	0.2	-
Py/C ₁₈	-	-
CPI ₁₄₋₂₀	12.1	-
CPI ₂₀₋₃₂	-	-
Total Alkanes	144.49	2.93

^aThe code and order of samples correspond to Table 31.

TABLE 28
 CONCENTRATION OF ALKANES¹ IN MONTHLY MACRONEKTON
 FROM THE SOUTH TEXAS OCS (JULY, 1976).

<u>Station/ Transect</u>	<u>Code</u>	<u>Species</u>	<u>Sample Wt. (g)</u>	<u>Conc. in ppm ($\mu\text{g/g}$ drv wt.)</u>
Southern Bank	OSI \rightarrow OSN-M ^a	Vermilion snapper	96.1	4.38
	OSI \rightarrow OSN-L ^b	<u>Rhomboplites</u> <u>aurorubens</u>	2.5	35.85
	OSI \rightarrow OSN-G		8.3	30.62
Southern Bank	OSO \rightarrow OSS-M	Red snapper	99.5	1.36
	OSO \rightarrow OSS-L	<u>Lutjanus campechanus</u>	12.4	43.80
	OSO \rightarrow OSS-G		49.3	20.01
Hospital Rock	OTE \rightarrow OTI-M	Red snapper	101.7	0.59
	OTE \rightarrow OTI-L	<u>Lutjanus campechanus</u>	4.2	18.21
	OTE \rightarrow OTI-G		18.8	3.15
Hospital Rock	OTJ \rightarrow OTM-M	Vermilion snapper	93.5	2.12
	OTJ \rightarrow OTM-L	<u>Rhomboplites</u> <u>aurorubens</u>	7.2	24.68
	OTJ \rightarrow OTM-G		25.3	14.52

¹Total Alkanes include total paraffins, pristane and phytane.

^aAs in the previous report, -M, -L, -G, indicates muscle, liver and gill respectively. OSI \rightarrow OSN stands for samples OSI to OSN, i.e., the pooling of 6 samples - OSI, OSJ, OSK, OSL, OSM, and OSN - into one sample for analysis.

^bThis sample is a composite of 5 rather than 6 samples of liver. The liver sample, OSM-L was noticed in pooling because the organ was outside the body and it might have been contaminated.

TABLE 29
 ORGANS AND INDIVIDUALS ANALYZED
 IN MONTHLY MACRONEKTON (JULY 1976)

<u>Station/ Transect</u>	<u>Code</u>	<u>Species</u>	<u>Organ Used^a</u>	<u># of Individuals</u>
Southern Bank	OSI → OSN-M ^a	Vermilion snapper	M	6
	OSI → OSN-L ^b	<u>Rhomboplites</u> <u>aurorubens</u>	L	5
	OSI → OSN-G		G	12
Southern Bank	OSO → OSS-M	Red snapper <u>Lutjanus campechanus</u>	M	5
	OSO → OSS-L		L	5
	OSO → OSS-G		G	10
Hospital Rock	OTE → OTI-M	Red snapper <u>Lutjanus campechanus</u>	M	5
	OTE → OTI-L		L	5
	OTE → OTI-G		G	10
Hospital Rock	OTJ → OTM-M	Vermilion snapper <u>Rhomboplites</u> <u>aurorubens</u>	M	4
	OTJ → OTM-L		L	4
	OTJ → OTM-G		G	8

^aAs in the previous report, -M, -L, -G, indicates muscle, liver and gill respectively. OSI → OSN stands for samples OSI to OSN, i.e., the pooling of 6 samples - OSI, OSJ, OSK, OSL, OSM, and OSN - into one sample for analysis.

^bThis sample is a composite of 5 rather than 6 samples of liver. The liver sample, OSM-L was noticed in pooling because the organ was outside the body and it might have been contaminated.

TABLE 30

PERCENT DISTRIBUTION OF n -PARAFFINS IN MONTHLY MACRONEKTON
FROM THE SOUTH TEXAS OCS (JULY 1976)

STATION SAMPLE CODE ^a CARBON NO.	Southern Bank OSO → OSS-L	Southern Bank OSO → OSS-G	Hospital Rock OTE → OTI-M	Hospital Rock OTE → OTI-L	Hospital Rock OTE → OTI-G
14	2.9	2.4	-	0.2	-
15	72.5	78.3	65.2	68.3	39.9
16	2.3	5.0	2.2	2.2	3.2
17	19.6	13.0	29.3	25.5	54.7
18	0.8	0.7	1.1	0.8	0.1
19	0.6	0.4	1.6	0.8	2.0
20	-	0.1	0.2	-	0.1
21	0.1	-	0.4	0.3	-
22	-	-	-	-	-
23	0.5	0.1	-	0.6	-
24	0.2	-	-	0.2	-
25	0.3	-	-	0.4	-
26	0.1	-	-	0.5	-
27	0.1	-	-	0.2	-
28	-	-	-	-	-
29	-	-	-	-	-
30	-	-	-	-	-
31	-	-	-	-	-
32	-	-	-	-	-
<u>n-paraffins (ppm)</u>	30.80	15.22	0.45	13.33	2.02
Pristane (ppm)	12.78	4.79	0.14	4.78	1.13
Phytane (ppm)	0.22	-	-	0.10	-
Pr/Py	58.1	-	-	47.8	-
Pr/C ₁₇	2.1	2.4	1.1	1.4	1.0
Py/C ₁₈	0.9	-	-	0.9	-
CPI ₁₄₋₂₀	22.7	13.6	28.3	30.6	28.8
CPI ₂₀₋₃₂	3.3	-	-	2.1	-
Total Alkanes	43.80	20.01	0.59	18.21	3.15

TABLE 30 CONT'D

STATION	Southern Bank	Southern Bank	Southern Bank	Southern Bank	Southern Bank
SAMPLE CODE	OSI → OSN-M	OSI → OSN-L	OSI → OSN-G	OSM-L	OSO → OSS-M
CARBON NO.					
14	0.9	0.5	0.6	0.2	0.4
15	91.8	94.6	89.2	92.9	74.9
16	1.6	1.2	2.6	1.4	2.6
17	5.2	2.8	7.0	3.4	20.9
18	0.1	0.2	0.4	-	0.8
19	-	-	0.2	-	0.4
20	-	-	-	-	-
21	-	-	-	-	-
22	-	-	-	-	-
23	-	0.2	-	0.8	-
24	0.2	-	-	-	-
25	-	0.5	-	1.3	-
26	0.1	-	-	-	-
27	0.1	-	-	-	-
28	-	-	-	-	-
29	-	-	-	-	-
30	-	-	-	-	-
31	-	-	-	-	-
32	-	-	-	-	-
<u>n-paraffins (ppm)</u>	3.69	29.93	23.98	33.84	0.97
Pristane (ppm)	0.69	5.92	6.64	8.82	0.39
Phytane (ppm)	-	-	-	-	-
Pr/Py	-	-	-	-	-
Pr/C ₁₇	3.6	7.1	4.0	7.7	2.0
Py/C ₁₈	-	-	-	-	-
CPI ₁₄₋₂₀	47.2	60.4	29.5	64.5	26.8
CPI ₂₀₋₃₂	0.3	-	-	-	-
Total Alkanes	4.38	35.85	30.62	42.66	1.36

TABLE 30 CONT'D

STATION	Hospital Rock	Hospital Rock	Hospital Rock
SAMPLE CODE	OTJ + OTM-M	OTJ + OTM-L	OTJ + OTM-G
CARBON NO.			
14	0.3	0.5	1.9
15	92.5	93.7	92.1
16	2.4	2.2	2.3
17	4.2	3.3	3.6
18	0.4	0.3	0.1
19	0.1	-	-
20	0.1	-	-
21	-	-	-
22	-	-	-
23	-	-	-
24	-	-	-
25	-	-	-
26	-	-	-
27	-	-	-
28	-	-	-
29	-	-	-
30	-	-	-
31	-	-	-
32	-	-	-
<u>n-paraffins (ppm)</u>	1.81	21.78	12.66
Pristane (ppm)	0.31	3.08	1.86
Phytane (ppm)	-	-	-
Pr/Py	-	-	-
Pr/C ₁₇	3.9	4.3	4.0
Py/C ₁₈	-	-	-
CPI ₁₄₋₂₀	32.3	35.6	31.1
CPI ₂₀₋₃₂	-	-	-
Total Alkanes	2.12	24.86	14.52

^aThe code and order of samples correspond to Table 34.

TABLE 31

CONCENTRATION OF ALKANES¹ IN MONTHLY MACRONEKTON FROM THE
SOUTH TEXAS OCS (AUGUST 1976)

<u>Station/ Transect</u>	<u>Code</u>	<u>Species</u>	<u>Sample Wt. (g)</u>	<u>Conc. in ppm ($\mu\text{g/g}$ dry wt.)</u>
Southern Bank	QXM→N-M	Vermilion snapper <u>Rhomboplites aurorubens</u>	87.5	4.01
	QXM→N-L		3.4	10.09
	QXM→N-G		13.5	6.39
Hospital Rock	QXO→P-M	Red snapper <u>Lutjanus campechanus</u>	95.8	0.80
	QXO→P-L		3.1	4.47
	QXO→P-G		7.6	0.81

¹Total alkanes includes total paraffins, pristane, and phytane.

TABLE 32

ORGANS AND INDIVIDUALS ANALYZED
IN MONTHLY MACRONEKTON (AUGUST '76)

<u>Station/ Transect</u>	<u>Code</u>	<u>Species</u>	<u>Organ Used^a</u>	<u># of Individuals</u>
Southern Bank	QXM→N-M	Vermilion snapper <u>Rhomboplites aurorubens</u>	M	2
	QXM→N-L		L	2
	QXM→N-G		G	4
Hospital Rock	QXO→P-M	Red snapper <u>Lutjanus campechanus</u>	M	2
	QXO→P-L		L	2
	QXO→P-G		G	4

^aM = muscle only; L = liver; G = gill.

TABLE 33

PERCENT DISTRIBUTION OF *n*-PARAFFINS IN MONTHLY MACRONEKTON
FROM THE SOUTH TEXAS OCS (AUGUST 1976)

STATION SAMPLE CODE ^a CARBON NO.	Southern Bank QXM+QXN-M	Southern Bank QXM+QXN-L	Southern Bank QXM+QXN-G	Hospital Rock QXO+QXP-M
14	3.4	2.9	1.4	0.6
15	89.3	84.4	85.5	76.0
16	1.1	3.1	1.9	3.0
17	5.9	5.1	10.4	19.6
18	0.2	0.6	0.3	0.6
19	0.1	-	0.1	0.2
20	-	-	-	-
21	-	-	-	-
22	-	-	-	-
23	-	-	0.4	-
24	-	-	-	-
25	-	2.4	-	-
26	-	-	-	-
27	-	1.5	-	-
28	-	-	-	-
29	-	-	-	-
30	-	-	-	-
31	-	-	-	-
32	-	-	-	-
<u><i>n</i>-paraffins (ppm)</u>	3.18	7.45	4.25	0.54
Pristane (ppm)	0.83	2.64	2.14	0.26
Phytane (ppm)	-	-	-	-
Pr/Py	-	-	-	-
Pr/C ₁₇	4.4	7.0	4.9	2.4
Py/C ₁₈	-	-	-	-
CPI ₁₈	46.8	18.9	35.2	24.7
CPI ₁₄₋₂₀	-	-	-	-
CPI ₂₀₋₃₂	-	-	-	-
Total alkanes	4.01	10.09	6.39	0.80

TABLE 33 CONT'D

STATION SAMPLE CODE CARBON NO.	Hospital Rock QXO→QXP-L	Hospital Rock QXO→QXP-G
14	-	-
15	83.5	45.6
16	3.7	6.2
17	12.8	34.1
18	-	0.9
19	-	-
20	-	-
21	-	-
22	-	-
23	-	13.2
24	-	-
25	-	-
26	-	-
27	-	-
28	-	-
29	-	-
30	-	-
31	-	-
32	-	-
<u>n-paraffins (ppm)</u>	3.23	0.54
Pristane (ppm)	1.24	0.27
Phytane (ppm)	-	-
Pr/Py	-	-
Pr/C ₁₇	3.0	1.5
Py/C ₁₈	-	-
CPI ₁₄₋₂₀	26.0	11.2
CPI ₂₀₋₃₂	-	-
Total alkanes	4.47	0.81

^aThe code and order of samples correspond to Table 37.

TABLE 34

CONCENTRATION OF ALKANES¹ IN MONTHLY MACRONEKTON
FROM THE SOUTH TEXAS OCS (NOVEMBER, 1976)

<u>Station/ Transect</u>	<u>Code</u>	<u>Species</u>	<u>Sample Wt. (g)</u>	<u>Conc. in ppm ($\mu\text{g/g}$ dry wt.)</u>
Southern Bank Z	ZTO→ZTS-M ^a	Red snapper <u>Lutjanus campechanus</u>	100.1	0.45
	ZTO→ZTS-L		13.7	7.40
	ZTO→ZTS-G		56.3	9.73
Southern Bank Z	ZTT-M	Vermilion snapper <u>Rhomboplites aurorubens</u>	75.1	0.27
	ZTT-L		0.6	0.57
	ZTT-G		3.2	4.13

¹ Total Alkanes includes total paraffins, pristane and phytane.

^a M = muscle, L = liver, G = gill

TABLE 35

ORGANS AND INDIVIDUALS ANALYZED
IN MONTHLY MACRONEKTON (NOV. 1976)

<u>Station/ Transect</u>	<u>Code</u>	<u>Species</u>	<u>Organ Used^a</u>	<u># of Individuals</u>
Southern Bank Z	ZTO→ZTS-M	Red snapper <u>Lutjanus campechanus</u>	M	5
	ZTO→ZTS-L		L	5
	ZTO→ZTS-G		G	10
Southern Bank Z	ZTT-M	Vermilion snapper <u>Rhomboplites aurorubens</u>	M	1
	ZTT-L		L	1
	ZTT-G		G	2

^a M = muscle, L = liver, G = gill

TABLE 36

PERCENT DISTRIBUTION OF n -PARAFFINS IN MONTHLY MACRONEKTON
FROM THE SOUTH TEXAS OCS (NOVEMBER 1976)

STATION SAMPLE CODE ^a CARBON NO.	Southern Bank 2 ZTO→ZTS-M	Southern Bank 2 ZTO→ZTS-L	Southern Bank 2 ZTO→ZTS-G	Southern Bank 2 ZTT-M
14	-	-	-	-
15	63.7	60.2	64.9	100.0
16	3.4	4.2	5.6	-
17	32.9	34.9	23.0	-
18	-	0.6	2.7	-
19	-	0.1	1.8	-
20	-	-	0.2	-
21	-	-	0.3	-
22	-	-	0.1	-
23	-	-	0.2	-
24	-	-	0.2	-
25	-	-	0.3	-
26	-	-	0.1	-
27	-	-	0.3	-
28	-	-	0.2	-
29	-	-	-	-
30	-	-	0.1	-
31	-	-	-	-
32	-	-	-	-
n -paraffins (ppm)	0.35	6.17	8.06	0.01
Pristane (ppm)	0.10	1.23	1.67	0.26
Phytane (ppm)	-	-	-	-
Pr/Py	-	-	-	-
Pr/C ₁₇	0.8	0.6	0.9	-
Py/C ₁₈	-	-	-	-
CPI ₁₈	-	-	-	-
CPI ₁₄₋₂₀	28.4	19.8	10.7	-
CPI ₂₀₋₃₂	-	-	1.4	-
Total Alkanes	0.45	7.40	9.73	0.27

M-97

TABLE 36 CONT'D

STATION	Southern Bank 2	Southern Bank 2
SAMPLE CODE	ZTT-L	ZTT-G
CARBON NO.		
14	-	-
15	-	-
16	-	-
17	-	88.6
18	-	6.9
19	-	4.5
20	-	-
21	-	-
22	-	-
23	-	-
24	-	-
25	-	-
26	-	-
27	-	-
28	-	-
29	-	-
30	-	-
31	-	-
32	-	-
n-paraffins (ppm)	-	0.38
Pristane (ppm)	0.57	3.75
Phytane (ppm)	-	-
Pr/Py	-	-
Pr/C ₁₇	-	11.0
Py/C ₁₈	-	-
CPI ₁₄₋₂₀	-	13.5
CPI ₂₀₋₃₂	-	-
Total Alkanes	0.57	4.13

^aThe code and order of samples correspond to Table 40.

TABLE 37

GC-MS ANALYSIS OF MAJOR COMPONENTS IN SAMPLES
FROM SOUTH TEXAS OCS STUDY (1976)

Sample Identification: HJE-1/II/1
Fraction Type: Aliphatic
Date: 5/18/76
File Reference Number: 9010, 8500
Cartridge Reference Number: 4
Column: 6', 3% apiezon

Compounds Identified

n-pentadecane	C ₁₅
n-hexadecane	C ₁₆
Pristane	
n-heptadecane	C ₁₇
n-octadecane	C ₁₈
n-nonadecane	C ₁₉
n-pentacosane	C ₂₅
n-hexacosane	C ₂₆
n-heptacosane	C ₂₇
n-octacosane	C ₂₈
n-nonacosane	C ₂₉
n-triacontane	C ₃₀

TABLE 37 CONT'D

Sample Identification: IAU-2/III/3
Fraction Type: Aliphatic
Date: 5/18/76
File Reference Number: 9009, 8501
Cartridge Reference Number: 4
Column: 6', 3% apiezon

Compounds Identified

n-pentadecane	C ₁₅
n-Hexadecane	C ₁₆
Pristane	
n-nonadecane	C ₁₉
n-hexacosane	C ₂₆
n-heptacosane	C ₂₇

Sample Identification: INK-3/IV/3
Fraction Type: Aliphatic
Date: 5/19/76
File Reference Number: 9002, 8503
Cartridge Reference Number: 4
Column: 6', 3% apiezon

Compounds Identified

n-tetradecane	C ₁₄
n-pentadecane	C ₁₅
n-hexadecane	C ₁₆
Pristane	
n-heptadecane	C ₁₇
n-octadecane	C ₁₈
n-nonadecane	C ₁₉
n-uncosane	C ₂₁
n-docosane	C ₂₂

TABLE 37 CONT'D

Sample Identification: BLM-LYV
Fraction Type: Aliphatic
Date: 8/19/76
File Reference Number: 7503
Cartridge Reference Number: 3
Column: 1176B

Compounds Identifiedn-pentadecane C₁₅n-heptadecane C₁₇

Pristane

Sample Identification: BLM-LZB
Fraction Type: Aliphatic
Date: 8/19/76
File Reference Number: 7504
Cartridge Reference Number: 3
Column: 1176B

Compounds Identifiedn-pentadecane C₁₅

Pristane

Sample Identification: BLM-MAV
Fraction Type: Aliphatic
Date: 12/6/76
File Reference Number: 12061, 12074
Cartridge Reference Number: 11
Column: 1176F

Compounds Identifiedn-pentadecane C₁₅

Pristane

TABLE 37 CONT'D

Sample Identification: BLM-MAX
Fraction Type: Aliphatic
Date: 12/4/76
File Reference Number: 12057, 12070
Cartridge Reference Number: 11
Column: 1176F

Compounds Identified

n-pentadecane C₁₅
n-heptadecane C₁₇
Pristane
n-nonadecane C₁₉

Sample Identification: BLM-MJU
Fraction Type: Aliphatic
Date: 12/3/76
File Reference Number: 12051, 12064
Cartridge Reference Number: 11
Column: 1176F

Compounds Identified

n-pentadecane C₁₅
Pristane

Sample Identification: BLM-MJV
Fraction Type: Aliphatic
Date: 8/18/76
File Reference Number: 7023
Cartridge Reference Number: 8
Column: 1176B

Compounds Identified

n-pentadecane C₁₅
n-heptadecane C₁₇
Pristane

TABLE 37 CONT'D

Sample Identification: BLM-MKD
Fraction Type: Aliphatic
Date: 12/3/76
File Reference Number: 12055, 12068
Cartridge Reference Number: 11
Column: 1176F

Compounds Identifiedn-pentadecane C₁₅n-heptadecane C₁₇

Pristane

Sample Identification: BLM-MKE
Fraction Type: Aliphatic
Date: 8/24/76
File Reference Number: 6
Column: 1176B

Compounds Identified

Pristane

n-docosane C₂₂n-tricosane C₂₃n-tetracosane C₂₄n-hexacosane C₂₆

Sample Identification: BLM-MNX
Fraction Type: Aliphatic
Date: 12/4/76
File Reference Number: 12058, 12071
Cartridge Reference Number: 11
Column: 1176F

Compounds Identifiedn-pentadecane C₁₅n-heptadecane C₁₇

Pristane

TABLE 37. CONT'D

Sample Identification: BLM-MNY
Fraction Type: Aliphatic
Date: 12/6/76
File Reference Number: 12060, 12073
Cartridge Reference Number: 11
Column: 1176F

Compounds Identifiedn-pentadecane C₁₅n-hexadecane C₁₆

Pristane

Sample Identification: BLM-MXX
Fraction Type: Aliphatic
Date: 8/25/76
File Reference Number: 7010
Cartridge Reference Number: 6

Compounds Identified

Pristane

Sample Identification: BLM-MXY
Fraction Type: Aliphatic
Date: 8/25/76
File Reference Number: 7008
Cartridge Reference Number: 6
Column: 1176B

Compounds Identifiedn-pentadecane C₁₅n-heptadecane C₁₇

Pristane

TABLE 37 CONT'D

Sample Identification: BLM-MXZ
Fraction Type: Aliphatic
Date: 8/18/76
File Reference Number: 7002
Cartridge Reference Number: 3
Column: 1176B

Compounds Identifiedn-tetradecane C₁₄n-pentadecane C₁₅n-heptadecane C₁₇

Pristane

Sample Identification: BLM-MYE
Fraction Type: Aliphatic
Date: 8/25/76
File Reference Number: 7007
Cartridge Reference Number: 6
Column: 1176B

Compounds Identifiedn-tetradecane C₁₄n-pentadecane C₁₅n-heptadecane C₁₇

Pristane

Sample Identification: BLM-MYF
Fraction Type: Aliphatic
Date: 8/26/76
File Reference Number: 7011
Cartridge Reference Number: 6

Compounds Identifiedn-pentadecane C₁₅n-heptadecane C₁₇

Pristane

TABLE 37. CONT'D

Sample Identification: BLM-MZX
Fraction Type: Aliphatic
Date: 12/6/76
File Reference Number: 12062, 12075
Cartridge Reference Number: 11
Column: 1176F

Compounds Identified

n-pentadecane C₁₅

Pristane

Sample Identification: BLM-NKV
Fraction Type: Aliphatic
Date: 12/3/76
File Reference Number: 12053, 12066
Cartridge Reference Number: 11
Column: 1176F

Compounds Identified

n-pentadecane C₁₅

Pristane

n-tricosane C₂₃

n-pentadecane C₂₅

n-heptadecane C₂₇

Sample Identification: BLM-NKW
Fraction Type: Aliphatic
Date: 12/6/76
File Reference Number: 12063, 12076
Cartridge Reference Number: 11

Compounds Identified

Pristane

TABLE 37 CONT'D

Sample Identification: BLM-NMS
Fraction Type: Aliphatic
Date: 12/3/76
File Reference Number: 12056, 12069
Cartridge Reference Number: 11
Column: 1176F

Compounds Identified

n-pentadecane C₁₅

Pristane

Sample Identification: BLM-OOW-M
Fraction Type: Aliphatic
Date: 8/20/76
File Reference Number: 7006
Cartridge Reference Number: 6
Column: 1176B

Compounds Identified

n-pentadecane C₁₅

n-heptadecane C₁₇

Pristane

Tricosane C₂₃

Tetracosane C₂₄

Pentacosane C₂₅

Heptacosane C₂₇

TABLE 37 CONT'D

Sample Identification: HBO-1/I/1
Fraction Type: Aromatic
Date: 5/19/76
File Reference Number: 9014, 9023
Cartridge Reference Number: 5
Column: 6', 3% apiezon

Compounds Identified

Squalene

Sample Identification: HBO-1/I/3
Fraction Type: Aromatic
Date: 5/19/76
File Reference Number: 9019
Cartridge Reference Number: 5
Column: 6', 3% apiezon

Compounds Identified

Squalene

Sample Identification: INK-3/IV/3
Fraction Type: Aromatic
Date: 5/20/76
File Reference Number: 9021, 9024
Cartridge Reference Number: 5
Column: 6', 3% apiezon

Compounds Identified

Squalene

Sample Identification: BLM-JJL
Fraction Type: Aromatic
Date: 5/20/76
File Reference Number: 9020
Cartridge Reference Number: 5
Column: 6', 3% apiezon

Compounds Identified

Squalene

TABLE 37 CONT'D

Sample Identification: BLM-OOW-M
Fraction Type: Aromatic
Date: 8/29/76
File Reference Number: 7018
Cartridge Reference Number: 7
Column: 1176B

Compounds Identified

No Peaks

Sample Identification: BLM-OOW-L
Fraction Type: Aromatic
Date: 8/30/76
File Reference Number: 7020
Cartridge Reference Number: 8
Column: 1176B

Compounds Identified

No Peaks

Sample Identification: BLM-OOX-M
Fraction Type: Aromatic
Date: 8/29/76
File Reference Number: 7017
Cartridge Reference Number: 7
Column: 1176B

Compounds Identified

No Peaks

Sample Identification: BLM-OOX-L
Fraction Type: Aromatic
Date: 8/30/76
File Reference Number: 7021
Cartridge Reference Number: 8

Compounds Identified

No Peaks

TABLE 37 CONT'D

Sample Identification: BLM-OOX-G
Fraction Type: Aromatic
Date: 8/27/76
File Reference Number: 7016
Cartridge Reference Number: 7
Column: 1176B

Compounds Identified

No Peaks

Sample Identification: BLM-OTE-M
Fraction Type: Aromatic
Date: 8/30/76
File Reference Number: 7022
Cartridge Reference Number: 8

Compounds Identified

Squalene

Sample Identification: BLM-OTE-L
Fraction Type: Aromatic
Date: 8/29/76
File Reference Number: 7019
Cartridge Reference Number: 8
Column: 1176B

Compounds Identified

Squalene

Sample Identification: BLM-OTE-G
Fraction Type: Aromatic
Date: 8/27/76
File Reference Number: 7014
Cartridge Reference Number: 7
Column: 1176B

Compounds Identified

Squalene

TABLE 37 CONT'D

Sample Identification: BLM-QZE
Fraction Type: Aliphatic
Date: 2/7/77
File Reference Number: 23005
Cartridge Reference Number: 17
Column: 30 M, OV-101, #1176B

Compounds Identified

n-pentadecane C₁₅
n-heptadecane C₁₇
pristane
n-eicosane C₂₀

Sample Identification: BLM-RBH
Fraction Type: Aliphatic
Date: 2/7/77
File Reference Number: 23004
Cartridge Reference Number: 17
Column: 30 M, OV-101, #1176B

Compounds Identified

n-pentadecane C₁₅
n-heptadecane C₁₇
pristane

Sample Identification: BLM-RBI
Fraction Type: Aliphatic
Date: 2/8/77
File Reference Number: 23011
Cartridge Reference Number: 17
Column: 30 M, OV-101, #1176B

Compounds Identified

n-pentadecane C₁₅
n-hexadecane C₁₆
n-heptadecane C₁₇
pristane
n-nonadecane C₁₉

TABLE 37 CONT'D

Sample Identification: BLM-RTS
Fraction Type: Aliphatic
Date: 2/8/77
File Reference Number: 23010
Cartridge Reference Number: 17
Column: 30 M, OV-101, #1176B

Compounds Identifiedn-pentadecane C₁₅n-heptadecane C₁₇

pristane

n-nonadecane C₁₉

Sample Identification: BLM-RVP
Fraction Type: Aliphatic
Date: 2/9/77
File Reference Number: 23012
Cartridge Reference Number: 17
Column: 30 M, OV-101, #1176B

Compounds Identifiedn-pentadecane C₁₅n-hexadecane C₁₆n-heptadecane C₁₇

pristane

n-nonadecane C₁₉

Sample Identification: BLM-TBG
Fraction Type: Aliphatic
Date: 2/7/77
File Reference Number: 23001
Cartridge Reference Number: 17
Column: 30 M, OV-101, #1176B

Compounds Identifiedn-pentadecane C₁₅n-heptadecane C₁₇

pristane

TABLE 37 CONT'D

Sample Identification: BLM-MNK
Fraction Type: Aromatic
Date: 1/3/77
File Reference Number: 16077, 16095
Cartridge Reference Number: 15
Column: 30 M, OV-101, #1176F

Compounds Identified

Squalene

Sample Identification: BLM-MNX
Fraction Type: Aromatic
Date: 12/21/76
File Reference Number: 16053, 16067
Cartridge Reference Number: 13
Column: 30 M, OV-101, #1176F

Compounds Identified

Squalene

Sample Identification: BLM-NBV
Fraction Type: Aromatic
Date: 1/2/77
File Reference Number: 16074, 16093
Cartridge Reference Number: 15
Column: 30 M, OV-101, #1176F

Compounds Identified

Squalene

Sample Identification: BLM-NBW
Fraction Type: Aromatic
Date: 1/2/77
File Reference Number: 16059, 16083
Cartridge Reference Number: 14
Column: 6', 3% Apiezon

Compounds Identified

Squalene

TABLE 37 CONT'D

Sample Identification: BLM-NMS
Fraction Type: Aromatic
Date: 1/3/77
File Reference Number: 16079, 16098
Cartridge Reference Number: 15
Column: 30 M, OV-101, #1176F

Compounds Identified

Squalene

Sample Identification: BLM-TPC-G
Fraction Type: Aromatic
Date: 1/2/77
File Reference Number: 16070, 16087
Cartridge Reference Number: 14
Column: 30 M, OV-101, #1176F

Compounds Identified

Squalene

Sample Identification: BLM-TPM-M
Fraction Type: Aromatic
Date: 1/2/77
File Reference Number: 16058
Cartridge Reference Number: 14
Column: 30 M, OV-101, #1176F

Compounds Identified

Squalene

Sample Identification: BLM-TPM-L
Fraction Type: Aromatic
Date: 1/3/77
File Reference Number: 16076, 16094
Cartridge Reference Number: 15
Column: 30 M, OV-101, #1176F

Compounds Identified

Squalene

TABLE 37 CONT'D

Sample Identification: BLM-TPM-G
Fraction Type: Aromatic
Date: 1/2/77
File Reference Number: 16071, 16089
Cartridge Reference Number: 14
Column: 30 M, OV-101, #1176F

Compounds Identified

Squalene

Sample Identification: BLM-TPS-M
Fraction Type: Aromatic
Date: 1/2/77
File Reference Number: 16073, 16092
Cartridge Reference Number: 15
Column: 6', 3% Apiezon

Compounds Identified

Squalene

Sample Identification: BLM-TPS-L
Fraction Type: Aromatic
Date: 1/3/77
File Reference Number: 16061, 16100
Cartridge Reference Number: 16
Column: 30 M, OV-101, #1176F

Compounds Identified

Squalene

Sample Identification: BLM-TPS-G
Fraction Type: Aromatic
Date: 1/2/77
File Reference Number: 16057, 16082
Cartridge Reference Number: 14
Column: 30 M, OV-101, #1176F

Compounds Identified

No Peaks

TABLE 37 CONT'D

Sample Identification: BLM-RTR
Fraction Type: Aromatic
Date: 2/8/77
File Reference Number: 23007
Cartridge Reference Number: 17
Column: 30 M, OV-101, #1176B

Compounds Identified

Squalene

Sample Identification: BLM-RTS
Fraction Type: Aromatic
Date: 2/8/77
File Reference Number: 23009
Cartridge Reference Number: 17
Column: 30 M, OV-101, #1176B

Compounds Identified

Squalene

Sample Identification: BLM-SDL
Fraction Type: Aromatic
Date: 2/8/77
File Reference Number: 23008
Cartridge Reference Number: 17
Column: 30 M, OV-101, #1176B

Compounds Identified

Squalene

Sample Identification: BLM-SDM
Fraction Type: Aromatic
Date: 2/7/77
File Reference Number: 23006
Cartridge Reference Number: 17
Column: 30 M, OV-101, #1176B

Compounds Identified

Squalene

TABLE 37 CONT'D

Sample Identification: BLM-TBF
Fraction Type: Aromatic
Date: 2/7/77
File Reference Number: 23000
Cartridge Reference Number: 17
Column: 30, OV-101, #1176B

Compounds Identified

Squalene

Sample Identification: BLM-TBG
Fraction Type: Aromatic
Date: 2/7/77
File Reference Number: 23002
Cartridge Reference Number: 17
Column: 30 M, OV-101, #1176B

Compounds Identified

Squalene

Sample Identification: BLM-USY-M
Fraction Type: Aromatic
Date: 1/3/77
File Reference Number: 16075, 16096
Cartridge Reference Number: 15
Column: 30 M, OV-101, #1176F

Compounds Identified

Squalene

Sample Identification: BLM-USY-L
Fraction Type: Aromatic
Date: 1/2/77
File Reference Number: 16072, 16091
Cartridge Reference Number: 14
Column: 30 M, OV-101, #1176F

Compounds Identified

Squalene

M-118
TABLE 37. CONT'D

Sample Identification: BLM-JCJ-Ship Lube
Fraction Type: Aliphatic
Date: 12/22/76
File Reference Number: 16055, 16069
Cartridge Reference Number: 13
Column: 30 M, OV-101, #1176F

Compounds Identified

Sample results showed a mound of resolved components ranging from C-20 to C-35 with a few small peak spikes atop this mound. Spectra were complex due to overlapping and identifications were not possible.

Sample Identification: BLM-JCJ-Lube
Fraction Type: Aromatic
Date: 1/7/77
File Reference Number: 16081
Cartridge Reference Number: 10
Column: 30 M, OV-101, #1176F

Compounds Identified

Sample contained a number of small peaks that were not well resolved. Identification was not possible due to overlapping spectra.

Sample Identification: BLM-JCK-Fuel Oil
Fraction Type: Aliphatic
Date: 1/7/77
File Reference Number: 16080, 16090
Cartridge Reference Number: 10
Column: 30 M, OV-101, #1176F

*
Compounds Identified

n-undecane

hexylcyclohexane

n-dodecane

5-methyldodecane

6-tetradecene

octylcyclohexane

TABLE 37 CONT'D

4-methyltridecane
n-tetradecane
nonacyclohexane
3-methyltetradecane
n-pentadecane
decylcyclohexane
5-methylpentadecane
n-hexadecane
3-methylhexadecane
n-heptadecane
pristane
n-octadecane
phytane
n-nonadecane
n-eicosane
n-uncosane
n-docosane
n-tricosane

* Compounds assigned to fit spectra, however, standards would need to be run for positive identification.

Sample Identification: BLM-JCK-Fuel Oil
Fraction Type: Aromatic
Date: 1/25/77
File Reference Number: 16085, 16086
Cartridge Reference Number: 16
Column: 30 M, OV-101, #1176F

* Compounds Identified

diethylbenzene

TABLE 37 CONT'D

diethylbenzene
dimethylethylbenzene
ethylpropylbenzene
dimethylpropylbenzene
trimethylethylbenzene
trimethylethylbenzene
methyltetrahydronaphthalene
dimethylisobutylbenzene
methylnaphthalene
methylnaphthalene
1,1,4,5-tetramethyl(2,3-dihydroindene)
biphenyl
ethylnaphthalene
dimethylnaphthalene
dimethylnaphthalene
dimethylnaphthalene
dimethylnaphthalene + tetramethylindene
methylbiphenyl
isopropylnaphthalene
isopropylnaphthalene
methylethylnaphthalene
methylethylnaphthalene
methylethylnaphthalene
methylisopropylnaphthalene
methylisopropylnaphthalene
dimethylisopropylnaphthalene

M-121

TABLE 37 CONT'D

methylisopropylnaphthalene

di-p-totylmethane

methylphenanthrene

ethylanthracene

* Compounds assigned to fit spectra, however, standard would need to be run for positive identification.

Sample Identification: BLM-JCL-OBW (oil bilge water)

Fraction Type: Aliphatic

Date: 1/4/77

File Reference Number: 16062, 16101

Cartridge Reference Number: 16

Column: 30 M, OV-101, #1176F

* Compounds Identified

3-methyldodecane

n-tridecane

tetradecene

tetradecene

methyltridecane

n-tetradecane

nonylcyclohexane

3-methyltetradecane

pentadecene & pentadecadiene

n-pentadecane

decylcyclohexane

hexadecane

3-methylpentadecane

hexadecene & hexadecadiene

n-hexadecane

3-methylhexadecane

heptadecene

TABLE 37 CONT'D

heptadecene

heptadecene

n-heptadecane

pristane

dodecylcyclohexane

n-octadecane

phytane

tridecylcyclohexane

5-methyloctadecane

n-nonadecane

tetradecylcyclohexane

n-eicosane

n-uneicosane

n-docosane

n-tricosane

n-tetracosane

*Compounds assigned to fit spectra, however, standards would need to be run for positive identification.

APPENDIX N

TRACE METALS IN EPIFAUNA, ZOOPLANKTON AND MACRONEKTON

List of Tables

<u>Table</u>		<u>Page</u>
1	Raw Data Tabulation; BLM-STOCS Study; 1976 Trace Metals Project	N-2
2	Trace Metals Content of Shipboard Contaminants	N-17

EXPLANATION OF TABLE 1

1. BLM:

Unique 3 letter or 3 letter/1 digit sample codes were assigned by STOCS study technical personnel at University of Texas Marine Science Laboratory, Port Aransas. Unique 2 letter and 2 letter/1 digit sample codes were assigned locally to macronekton and oysters collected as part of the Topographic High Study.

2. Genus Species:

Complete genus and species name and common name for all samples in the order they appear in Table 1 are listed below. Suffixes on macronekton samples indicate flesh (F), liver (L) or gill (G) tissue.

<u>Callinectes similis</u>	Blue crab
<u>Chloroscombrus chrysurus</u>	Atlantic bumper
<u>Cynoscion arenarius</u>	Sand trout
<u>Gonioplectrus hispanus</u>	Fish
<u>Holocentrus rufus</u>	Squirrel fish
<u>Larimus fasciatus</u>	Banded drum
<u>Leiostomus xanthurus</u>	Spot
<u>Loligo pealei</u>	Squid
<u>Loliguncula brevis</u>	Squid
<u>Lutjanus campechanus</u>	Red snapper
<u>Micropogon undulatus</u>	Atlantic croaker
<u>Parpandalus sp.</u>	Peppermint shrimp
<u>Penaeus aztecus</u>	Brown shrimp
<u>Penaeus setiferus</u>	White shrimp
<u>Peprilus burti</u>	Butter fish
<u>Polydactylus octonemus</u>	Threadfin
<u>Prionotus paralatus</u>	Mexican sea robin

<u>Pristipomoides aquilonaris</u>	Wenchman
<u>Rhomboplites aurorubens</u>	Vermilion snapper
<u>Serranus astrobranchus</u>	Blackear bass
<u>Solenocera vioscai</u>	Broken back shrimp
<u>Spondylus americanus</u>	Spiny oyster
<u>Squilla empusa</u>	Mantis shrimp
<u>Stenotomus caprinus</u>	Longspine porgy
<u>Syacium gunteri</u>	Shoal flounder
<u>Synodus foetens</u>	Inshore lizardfish
<u>Trachurus lathami</u>	Rough scad
<u>Trichopsetta ventralis</u>	Sash flounder
<u>Upeneus parvus</u>	Dwarf goatfish
ZPL	Zooplankton

3. Station/Transect:

A. Numbered stations (eg. 1/I, etc.) 3 each on 4 different transects. See beginning of this report for exact position and depth information.

B. Bank Stations (all are Station #1, except HR is #5)

SB	Southern Bank	27° 26.8'N	96° 31.3W
HR	Hospital Rock	27° 32.1'N	96° 28.3N
EF	East Flower Garden	27° 54.6N	93° 38.2W
ST	Stetson Bank	28° 10.'N	94° 18.1'W
FB	Twenty-eight Fathom Bank	27° 56.0'N	93° 25.6'W
UB	Unnamed Bank	27° 54.1'N	93° 27.2'W

4. Season:

WIN = Winter

January - February 1976

MAR = March

APR = April

SPR = Spring	May - June 1976
JUL = July	
AUG = August	
SUM = Summer	September - October 1976
NOV = November	
TOP = Topographic High Study	September - October 1976

5. DRY WT = Sample dry weight in grams.

6. Cd, Cr, Cu, Fe, Na, Pb, V, Zn, Al, Ca:

Concentration of each metal in mgms/Kgm - parts per million
(ppm) dry weight.

7. Moisture:

Percentage of wet weight lost during freeze-drying to a
constant dry weight. To convert from dry weight to wet weight
concentrations, multiply dry weight concentration by $[(100-\text{moisture})/100]$.

TABLE 1. RAW DATA TABULATION BLM STOCS STUDY 1976 TRACE METALS PROJECT

BLM	GENUS	SPFCIES	STATION	TRANSECT	SEASON	DRYWT	CD	CR	CU	FE	NI	PB	V	ZN	AL	CA	MOISTURE
RAT	C	SIMILIS	2	I	SUM	1.085	.74	.37	126.	139.	1.4	.17		78.			76.6
LYS	C	CHRYSURUS	1	I	SPR	1.844	.03	.03	2.0	11.	.46	.06	<.1	39.	43.	640.	79.6
QZC	C	CHRYSURUS	1	I	SUM	1.345	.01	<.03	1.1	7.	<.08	.14	3.2	17.	44.	<10600.	77.8
RVD	C	CHRYSURUS	2	III	SUM	1.318	.03	<.03	.8	5.	<.08	<.01	.3	14.	24.	<160.	78.7
RVY	C	CHRYSURUS	2	III	SUM	0.974	.03	<.04	.7	3.	<.08	<.02		14.			81.0
RVZ	C	CHRYSURUS	2	III	SUM	1.164	.07	<.03	.7	5.	<.09	.01	<.1	18.	28.	<180.	80.2
HBM4	C	ARENARIUM	1	I	WIN	2.506	.03	.11	1.2	8.	<.05	.10	<.1	18.	25.	500.	78.7
RJX	C	ARENARIUM	1	II	SUM	1.278	<.01	.03	1.3	5.	<.08	.11	.2	17.	25.	330.	79.5
VMF	C	ARENARIUM	1	II	SUM	1.062	<.01	.09	1.4	5.	<.11	.05	<.1	20.	33.	<12000.	79.6
VMG	C	ARENARIUM	1	II	SUM	0.830	<.01	<.05	1.2	4.	<.14	.06	<.1	17.	78.	470.	80.3
NBT	G	HISPANUS	3	III	SPR	2.463	<.01	<.01	.8	5.	<.06	.03	<.1	14.	16.	380.	80.1
KVJ	H	RUFUS F	HR		APR	2.910	.01	<.01	.8	8.	.07	<.01	<.1	13.	17.	1000.	76.4
KVJ	H	RUFUS L	HR		APR	1.700	5.3	<.02	28.	600.	.43	.47		650.			60.1
KVJ	H	RUFUS G	HR		APR	1.320	.29	.05	3.2	92.	.47	.45		84.			69.5
QZD	L	FASCIATUS	1	I	SUM	1.240	<.01	<.03	.8	5.	.10	.02	.3	14.	26.	<180.	80.0
RLX	L	XANTHURUS	2	II	SUM	1.221	<.01	<.03	2.	12.	<.09	.05	.2	34.	19.	640.	79.8
VMN	L	XANTHURUS	2	II	SUM	1.435	<.01	<.03	1.	6.	<.07	.10	.3	25.	22.	360.	79.6
VMD	L	XANTHURUS	2	II	SUM	1.445	<.01	<.03	2.	12.	<.07	<.04	<.1	31.	19.	<130.	77.3
HCZ3	L	PEALEI	2	I	WIN	1.598	.28	<.02	52.	4.	.15	.07	.3	38.	30.	630.	75.1
HJG2	L	PEALEI	1	II	WIN	2.068	.26	<.01	28.	2.	.46	.21	<.1	45.	34.	<210.	75.7
HUT3	L	PEALEI	1	III	WIN	2.393	.08	<.02	11.	3.	<.06	.22	<.1	43.	44.	780.	76.1
IAT2	L	PEALEI	2	III	WIN	2.055	.07	<.03	7.3	10.	.13	.07		39.			77.8
IJY2	L	PEALEI	1	IV	WIN	2.082	.10	<.02	7.3	3.	.12	.16	.4	42.	50.	<160.	75.5
MAT	L	PEALEI	2	I	SPR	1.993	.42	.02	9.1	17.	<.10	.06	<.1	46.	13.	540.	75.7
MJS	L	PEALEI	1	II	SPR	2.163	.70	<.02	14.	3.	.29	.36		52.			76.1
MXU	L	PEALEI	1	III	SPR	1.970	.07	<.02	13.	4.	.31	.17	.1	52.	28.	740.	75.2
MZW	L	PEALEI	2	III	SPR	1.869	.07	.06	7.1	2.	<.08	.16	<.2	34.	16.	<530.	76.9
NIT	L	PEALEI	1	IV	SPR	2.220	.05	.06	5.4	1.	<.05	.06	<.1	46.	4.	150.	74.6

TABLE 1. RAW DATA TABULATION ELM STCCS STUDY 1976 TRACE METALS PROJECT

BLM	GENUS	SPECIES	STATION	TRANSECT	SEASON	DRYWT	CD	CR	CU	FE	NI	PB	V	ZN	AL	CA	MOISTURE	
QZB	L	PEALEI	1	I	SUM	1.220	.05	<.03	8.4	2.	<.06	.02	.7	54.	42.	580.	76.8	
RCW	L	PEALEI	3	I	SUM	1.360	.06	<.03	5.8	4.	<.07	<.01	<.1	67.	38.	<160.	77.5	
HKS2	L	BREVIS	2	II	WIN	2.002	.37	.05	9.6	13.	.21	.13	.3	43.	47.	600.	77.2	
LYU	L	BREVIS	1	I	SFR	1.587	.48	.03	56.	3.	<.11	.07	<.1	54.	29.	800.	77.5	
JJE	L	CAMPECHANUS	F	SE	WIN	2.512	.02	.03	.5	5.	<.05	.06	.2	11.	27.	<150.	79.4	
JJP	L	CAMPECHANUS	F	HR	WIN	2.765	<.01	<.01	.8	6.	<.05	.03	<.1	11.	24.	<120.	78.4	
HKS3	L	CAMPECHANUS	F	2	II	WIN	2.377	.01	<.02	.9	10.	.10	.04	.3	11.	40.	840.	80.3
KCN	L	CAMPECHANUS	F	FR	MAR	2.667	<.01	.01	.6	5.	<.05	.04	<.1	10.	23.	620.	78.6	
KCV	L	CAMPECHANUS	F	SB	MAR	2.850	.02	.03	.7	6.	.07	.04	<.1	12.	15.	430.	77.7	
KVH	L	CAMPECHANUS	F	SE	APR	2.710	<.01	.03	.6	14.	<.04	.04	<.1	48.	27.	510.	77.5	
KVI	L	CAMPECHANUS	F	HR	APR	2.615	<.01	.05	.6	5.	<.06	.02	.1	12.	22.	350.	78.1	
OSZ	L	CAMPECHANUS	F	SB	JUL	2.662	<.01	.04	.6	4.	<.05	.04	<.1	11.	20.	<26000.	77.8	
OTO	L	CAMPECHANUS	F	HR	JUL	2.676	<.01	.02	.3	6.	<.03	<.02	<.1	11.	20.	570.	78.2	
QXK	L	CAMPECHANUS	F	HR	AUG	2.720	<.01	<.01	.8	4.	<.07	.03	<.5	10.	26.	860.	77.9	
UTE	L	CAMPECHANUS	F	SE	SUM	1.320	<.01	<.03	1.3	4.	<.06	<.01	.2	9.	23.	460.	78.2	
UTC	L	CAMPECHANUS	F	HR	SUM	1.280	<.01	.05	1.2	4.	<.07	.03	<.2	6.	121.	<10000.	78.5	
ER	L	CAMPECHANUS	F	EF	TOP	2.666	<.01	.02	.9	3.	<.08	<.05	.3	10.	27.	<8800.	76.0	
SR	L	CAMPECHANUS	F	ST	TCP	2.751	<.01	<.05	.6	5.	<.05	.03		10.			77.2	
TR	L	CAMPECHANUS	F	FB	TOP	2.787	<.01	.02	.9	3.	.06	<.04	.2	12.	27.	<9500.	77.0	
UR	L	CAMPECHANUS	F	UE	TOP	1.370	<.01	<.03	1.4	4.	<.06	<.01	.3	7.	26.	<9700.	76.9	
ZTI	L	CAMPECHANUS	F	SE	NOV	1.342	<.01	<.04	.7	3.	<.08	<.01	<.1	2.	34.	560.	77.8	
JJE	L	CAMPECHANUS	L	SB	WIN	1.337	1.7	.04	20.	440.	.18	.44		120.			76.6	
JJP	L	CAMPECHANUS	L	HR	WIN	0.818	1.1	<.04	70.	470.	<.20	.24		115.			74.0	
KCN	L	CAMPECHANUS	L	FR	MAR	2.344	1.1	.05	11.	680.	<.05	.27	.5	96.	20.	<55000.	74.7	
KCV	L	CAMPECHANUS	L	SB	MAR	0.683	.72	<.07	4.4	59.	<.25	<.02		65.			67.0	
KVH	L	CAMPECHANUS	L	SE	APR	1.406	1.5	.06	10.	450.	<.08	.22		94.			76.0	
KVI	L	CAMPECHANUS	L	FR	APR	0.556	2.2	<.06	16.	1040.	<.17	.27		119.			75.2	
OSZ	L	CAMPECHANUS	L	SB	JUL	1.015	1.4	<.04	17.	250.	<.07	.11	<.5	110.	33.	1900.	70.9	

TABLE 1. FAW DATA TAEULATION ELM STECS STUDY 1976 TRACE METALS PROJECT

BLM	GENUS	SPECIES	STATION	TRANSECT	SEASON	DRYWT	CD	CR	CU	FE	NI	PB	V	ZN	AL	CA	MOISTURE	
OTO	L	CAMPECHANUS	L	HR	JUL	0.903	1.4	<.04	16.	580.	<.08	.27	1.7	140.	290.	1600.	74.3	
OXX	L	CAMPECHANUS	L	HR	AUG	0.975	.92	<.04	7.7	280.	<.08	.08	.2	76.	21.	420.	69.4	
UTE	L	CAMPECHANUS	L	SB	SUM	0.961	1.8	.09	10.	500.	<.11	.24	<.3	147.	36.	<75000.	69.4	
UTC	L	CAMPECHANUS	L	HR	SUM	0.402	2.4	<.06	15.	1020.	<.26	.29	<1.2	231.	160.	41000.	75.2	
ER	L	CAMPECHANUS	L	EF	TOP	0.902	3.5	<.04	35.	1070.	<.08	.19	1.2	120.	62.	<58000.	72.7	
SR	L	CAMPECHANUS	L	ST	TCP	1.583	3.2	.03	21.	400.	<.11	.19	.4	130.	20.	340.	73.0	
TR	L	CAMPECHANUS	L	FE	TOP	1.000	2.0	.04	27.	520.	<.10	.13	<.3	120.	31.	<67000.	78.3	
UR	L	CAMPECHANUS	L	UE	TOP	1.042	2.6	<.04	26.	380.	<.09	.10	<26.	136.	<490.	<180000	72.5	
ZTI	L	CAMPECHANUS	L	SB	NCV	0.608	2.2	<.04	17.	350.	<.15	.21	<.3	140.	26.	<98000.	76.6	
JJE	L	CAMPECHANUS	G	SE	WIN	2.365	1.2	.11	2.2	100.	.18	.34		55.			76.0	
JJP	L	CAMPECHANUS	G	FR	WIN	2.616	.07	.17	1.3	47.	.32	.34		68.			76.1	
KCN	L	CAMPECHANUS	G	HR	MAR	2.243	.14	.08	.9	68.	.36	.24	<.3	45.	38.	70000.	75.1	
KCV	L	CAMPECHANUS	G	SE	MAR	1.760	.71	.08	1.7	130.	.61	.30		68.			70.8	
KVH	L	CAMPECHANUS	G	SE	APR	3.307	.59	.23	1.2	61.	.35	.38	.7	60.	180.	120000.	72.6	
KVI	L	CAMPECHANUS	G	HR	APR	1.348	.07	.09	3.0	160.	.54	.22	.6	65.	250.	140000.	74.4	
OSZ	L	CAMPECHANUS	G	SE	JUL	2.133	.30	.06	2.0	130.	.32	.93	<.4	63.	42.	93000.	74.0	
OTO	L	CAMPECHANUS	G	FR	JUL	2.105	.18	.05	1.3	77.	.41	.42	<.3	69.	43.	55000.	76.3	
OXX	L	CAMPECHANUS	G	HR	AUG	1.791	.05	.04	2.5	140.	.56	.46	.7	68.	40.	100000.	76.8	
UTE	L	CAMPECHANUS	G	SE	SUM	0.771	.09	.05	.5	150.	.71	.88		140.			73.5	
UTC	L	CAMPECHANUS	G	FR	SUM	0.571	.42	.16	2.1	120.	.80	4.5		115.			74.2	
ER	L	CAMPECHANUS	G	EF	TOP	1.150	.07	.09	2.6	72.	.72	1.3	<.4	56.	57.	100000.	73.2	
SR	L	CAMPECHANUS	G	ST	TOP	2.153	.08	.12	1.5	110.	.33	1.2	<.5	65.	62.	116000.	75.4	
TR	L	CAMPECHANUS	G	FE	TOP	1.053	.07	.26	3.5	85.	.51	.71	<.3	58.	42.	78000.	69.2	
UR	L	CAMPECHANUS	G	UB	TCP	1.212	.43	.06	10.	90.	.47	2.1	<.3	63.	50.	98000.	72.6	
ZTI	L	CAMPECHANUS	G	SE	NCV	0.931	.07	<.04	1.5	100.	.49	.39		61.			73.1	
RTP	M	UNCULATUS		1	III	SLM	1.223	<.01	.05	1.3	10.	.10	.02	<.1	12.	38.	<170.	80.5
SDI	M	UNDULATUS		1	IV	SLM	1.205	<.01	.03	1.4	6.	<.09	.10	.2	10.	26.	460.	79.9
INL4		PARPANDALUS		3	IV	WIN	2.562	.04	.03	.2	9.	.20	.07	.6	45.	53.	6900.	78.3

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TABLE 1. RAW DATA TABULATION BLM STOCS STUDY 1976 TRACE METALS PROJECT

BLM	GENUS	SPECIES	STATION	TRANSECT	SEASON	DRYWT	CD	CR	CU	FE	NI	PB	V	ZN	AL	CA	MOISTURE
HC22	P	AZTECUS	2	I	WIN	2.111	.06	<.02	33.	1.	.17	.06	.6	52.	32.	760.	74.9
HKS1	P	AZTECUS	2	II	WIN	2.067	.06	.05	31.	12.	.31	.09	<.1	52.	34.	1100.	76.4
INM1	P	AZTECUS	2	IV	WIN	2.034	.07	.02	29.	3.	.30	.14	.4	59.	26.	440.	76.1
WJR	P	AZTECUS	1	II	SPR	2.215	.09	.02	19.	4.	.13	.13	.3	51.	36.	2500.	77.5
MLT	P	AZTECUS	2	II	SPR	2.819	.03	.04	29.	4.	.08	.14	<.1	54.	14.	790.	76.6
NMQ	P	AZTECUS	3	IV	SPR	2.325	.17	.08	32.	4.	.30	.06	.2	55.	18.	1040.	76.3
RVN	P	AZTECUS	2	III	SUM	1.240	.07	.03	37.	2.	<.08	<.01	<.1	67.	25.	970.	79.3
SDJ	P	AZTECUS	1	IV	SUM	1.270	.02	<.03	28.	1.	<.08	<.01	.4	68.	27.	890.	75.3
SHE	P	AZTECUS	3	IV	SUM	1.470	.11	<.03	28.	<2.	<.07	<.01	<.1	60.	31.	<140.	76.0
HBM2	P	SETIFERUS	1	I	WIN	2.390	.04	.02	22.	5.	.20	.13	<.1	51.	27.	1100.	75.8
HJG3	P	SETIFERUS	1	II	WIN	2.028	.05	<.02	29.	3.	.08	.15	<.1	56.	29.	1000.	75.6
RJW	P	SETIFERUS	1	II	SUM	1.300	.04	<.03	28.	3.	.09	.08	<.1	66.	24.	470.	79.1
VMB	P	SETIFERUS	1	II	SUM	1.420	.02	<.03	28.	2.	.09	.07	<.1	66.	33.	2400.	76.8
VMC	P	SETIFERUS	1	II	SUM	1.400	.03	<.02	28.	.5	.08	.22	.4	70.	32.	2000.	76.8
MNW	P	EURTI	3	II	SPR	2.744	.07	<.02	1.3	6.	.27	.20		20.			77.6
RAS	P	EURTI	2	I	SUM	1.100	.15	<.03	.9	6.	<.07	.02	.3	17.	27.	660.	82.6
RBF	P	EURTI	2	I	SUM	1.153	.03	<.03	.6	5.	<.07	.02	.3	15.	19.	740.	82.0
RBG	P	EURTI	2	I	SUM	0.855	.12	<.05	.6	8.	<.09	.05	<.1	8.	18.	620.	81.8
LYT	P	OCTONEMUS	1	I	SPR	1.770	.02	.03	1.7	7.	<.07	.19	<.1	19.	15.	520.	80.2
FTO	P	OCTONEMUS	1	III	SUM	1.415	<.01	<.03	1.2	5.	<.07	.01	.3	12.	19.	650.	77.3
ICQ2	P	PARALATUS	3	III	WIN	2.310	<.01	<.02	.6	3.	.08	.10	<.1	16.	19.	783.	79.5
MCQ	P	PARALATUS	3	I	SPR	1.667	.01	<.06	.8	5.	<.08	.03	<.1	13.	17.	730.	79.8
HMC1	P	AQUILONARIS	3	II	WIN	2.603	.04	.02	1.0	7.	<.05	.03	.2	14.	27.	490.	79.1
ICQ1	P	AQUILONARIS	3	III	WIN	2.618	.02	.03	.7	7.	<.05	.03	<.1	16.	29.	610.	77.8
INM3	P	AQUILONARIS	2	IV	WIN	2.026	.07	.02	.9	6.	.11	.05		14.			82.4
INL2	P	AQUILONARIS	3	IV	WIN	2.552	.03	.09	1.1	3.	<.05	.05	<.1	14.	20.	<110.	79.4
MCR	P	AQUILONARIS	3	I	SPR	2.482	.06	.11	.7	6.	<.05	.03	<.1	11.	30.	410.	79.4
MNV	P	AQUILONARIS	3	II	SPR	2.565	.04	.24	.9	4.	<.06	.10	<.1	13.	16.	500.	79.1

TABLE 1. RAW DATA TABULATION BLM STGCS STUDY 1976 TRACE METALS PROJECT

BLM	GENUS	SPECIES	STATION	TRANSECT	SEASON	DRYWT	CD	CR	CU	FE	NI	PB	V	ZN	AL	CA	MOISTURE
NBR	P	AQUILONARIS	3	III	SPR	2.468	<.01	.04	.8	2.	<.07	.04	<.1	14.	26.	450.	75.8
NKS	P	AQUILONARIS	2	IV	SPR	2.321	.07	<.02	.7	2.	<.07	.05	<.1	15.	18.	420.	81.0
NMD	P	AQUILONARIS	3	IV	SPR	2.544	.01	<.01	1.0	6.	.07	.08	.1	12.	16.	500.	78.9
RCV	P	AQUILONARIS	3	I	SUM	1.090	<.01	<.04	2.9	2.	<.07	.02	.2	14.	24.	<5500.	82.0
RNW	P	AQUILONARIS	3	II	SUM	1.160	<.01	<.03	2.7	3.	<.08	<.01	.2	6.	30.	<11000.	81.1
WML	P	AQUILONARIS	3	II	SUM	1.130	<.01	<.03	1.4	2.	<.08	<.01	.2	6.	25.	490.	81.2
WMM	P	AQUILONARIS	3	II	SUM	1.470	.01	<.03	1.2	3.	<.07	.02	.2	9.	20.	<150.	81.0
WMN	P	AQUILONARIS	3	II	SUM	0.962	<.01	<.04	1.6	1.	<.08	.04	.2	2.	22.	<160.	80.3
WMO	P	AQUILONARIS	3	II	SUM	1.240	<.01	<.03	1.3	4.	<.07	.01	.2	3.	20.	<140.	83.1
WMP	P	AQUILONARIS	3	II	SUM	1.540	<.01	<.02	1.5	4.	<.06	<.01	.2	7.	38.	<170.	80.8
WMQ	P	AQUILONARIS	3	II	SUM	0.857	<.01	<.04	1.9	5.	<.09	.07	.3	1.	56.	650.	81.9
WMR	P	AQUILONARIS	3	II	SUM	1.190	<.01	<.03	1.7	7.	<.07	.02		2.			82.5
WMS	P	AQUILONARIS	3	II	SUM	0.978	<.01	<.04	1.6	4.	<.09	.03	<.1	2.	28.	850.	81.0
WMT	P	AQUILONARIS	3	II	SUM	1.140	<.01	<.03	1.2	2.	<.08	<.01	<.1	4.	25.	470.	80.5
WMU	P	AQUILONARIS	3	II	SUM	1.370	<.01	<.03	1.1	3.	<.07	<.01	.4	5.	32.	670.	80.7
WMV	P	AQUILONARIS	3	II	SUM	1.460	<.02	<.03	1.3	3.	<.07	.03	.2	8.	23.	550.	80.6
WMW	P	AQUILONARIS	3	II	SUM	1.580	<.02	<.03	1.0	4.	<.06	.02	.4	6.	46.	550.	80.5
WMX	P	AQUILONARIS	3	II	SUM	1.520	<.01	<.02	1.2	3.	<.07	.04	.3	5.	21.	<8000.	79.9
RXQ	P	AQUILONARIS	3	III	SUM	1.190	<.01	<.03	1.2	2.	<.08	.04	.2	2.	20.	595.	79.5
SHD	P	AQUILONARIS	3	IV	SUM	1.280	.01	<.03	1.2	1.8	<.07	.05	.4	10.	26.	<140.	80.4
VMZ	P	AQUILONARIS	3	II	SUM	1.150	<.01	<.03	1.7	5.3	<.08	<.01	.6	6.	48.	1700.	81.2
VNA	P	AQUILONARIS	3	II	SUM	1.300	.01	<.03	1.7	3.7	0.2	.08	<.1	9.	37.	830.	79.1
JJI	R	AURORUBENS	F	SE	WIN	2.531	.03	.02	1.0	7.	<.06	.06		13.			79.0
KCT	R	AURORUBENS	F	SE	MAR	2.868	.02	.07	1.4	9.	<.04	.04	<.1	13.	11.	<340.	77.1
KCP	R	AURORUBENS	F	FR	MAR	2.791	.02	.05	.8	8.	<.06	<.01	<.1	12.	16.	560.	77.8
KVG	R	AURORUBENS	F	SE	APR	2.872	<.01	.01	1.0	12.	<.06	.03	<.1	12.	15.	320.	76.7
OPA	R	AURORUBENS	F	SE	SPR	2.759	<.01	<.01	.8	6.	<.05	.01	<.1	11.	19.	330.	76.6
OST	R	AURORUBENS	F	SE	JUL	2.809	.01	<.01	.9	4.	<.05	.02	<.2	11.	18.	<50000.	77.0

TABLE 1. RAW DATA TABULATION BLM STOCS STUDY 1976 TRACE METALS PROJECT

BLM	GENUS	SPECIES	STATION	TRANSECT	SEASON	DRYWT	CD	CR	CU	FE	NI	PB	V	ZN	AL	CA	MOISTURE
OTT	R	AURORUBENS	F	HR	JUL	2.808	.01	<.01	1.0	10.	<.03	.07	<.2	11.	19.	2300.	77.4
QXI	R	AURORUBENS	F	SB	AUG	2.762	.01	.02	.9	5.	<.06	.03	<.1	9.	18.	170.	77.4
UTB	R	AURORUBENS	F	HR	SUM	1.240	.02	<.03	1.3	5.	<.07	<.01	.3	4.	27.	<10000.	78.4
EV	R	AURORUBENS	F	EF	TCP	2.681	.01	.06	.9	6.	<.03	.03	<.1	10.	22.	840.	77.4
SV	R	AURORUBENS	F	ST	TOP	2.990	.02	.02	.9	5.	<.03	.03	<.1	12.	21.	1500.	76.7
TV	R	AURORUBENS	F	FB	TOP	2.625	<.01	.03	1.1	11.	.04	.04	<.1	30.	28.	<110.	78.2
UV	R	AURORUBENS	F	UB	TOP	2.510	.01	.04	.9	4.	<.07	.03	<.1	11.	36.	<9000.	77.3
ZTN	R	AURORUBENS	F	SB	NOV	1.363	<.01	<.02	.8	4.	<.07	<.01	.4	1.	27.	<11000.	78.2
JJI	R	AURORUBENS	L	SB	WIN	0.758	3.8	.09	8.0	290.	<.16	.24		99.			65.1
KCT	R	AURORUBENS	L	SB	MAR	1.239	6.9	.11	21.	550.	.21	.23	.74	210.	17.	770.	73.5
KCP	R	AURORUBENS	L	HR	MAR	0.152	15.	<.16	9.4	1410.	<.97	.54		152.			79.8
KVG	R	AURORUBENS	L	SB	APR	2.195	2.1	.03	10.	1380.	.17	.25		170.			75.1
OTT	R	AURORUBENS	L	HR	JUL	0.895	11.	<.04	13.5	1140.	.22	.43	4.9	460.	46.	780.	73.2
QXI	R	AURORUBENS	L	SE	AUG	0.461	16.	<.08	16.	1800.	<.16	.31		180.			75.4
UTB	R	AURORUBENS	L	HR	SUM	0.124	18.	<.20	18.	3220.	<.81	1.3	3.5	850.	80.	<260000	81.1
EV	R	AURORUBENS	L	EF	TOP	0.816	27.	.07	64.	790.	.48	.66	4.8	1340	27.	720.	76.1
SV	R	AURORUBENS	L	ST	TOP	0.890	13.	.22	25.	860.	<.08	.45	.9	1040	20.	<46000.	74.7
TV	R	AURORUBENS	L	FB	TOP	0.907	35.	<.03	45.	1490.	.53	1.7	8.2	770.	30.	<89000.	76.8
UV	R	AURORUBENS	L	UB	TOP	0.962	9.8	<.05	21.	1090.	.25	.55	3.2	360.	44.	<106000	77.3
ZTN	R	AURORUBENS	L	SB	NOV	0.302	15.	<.08	116.	1430.	<.29	.75	1.5	1030	44.	<95000.	74.8
JJI	R	AURORUBENS	G	SE	WIN	0.796	4.0	.24	1.8	53.	.55	4.8		89.			79.6
KCT	R	AURORUBENS	G	SB	MAR	2.279	5.0	.16	2.6	280.	.37	.90	.74	76.	17.	770.	74.8
KCP	R	AURORUBENS	G	HR	MAR	0.704	.51	.10	1.8	205.	.51	.7		76.			76.1
KVG	R	AURORUBENS	G	SB	APR	2.880	.72	.11	1.3	240.	.33	.9	1.2	73.	67.	64600.	75.7
OPA	R	AURORUBENS	G	SB	SPR	1.337	2.7	.16	3.7	151.	.30	.8	4.3	75.	170.	110000.	73.0
OST	R	AURORUBENS	G	SB	JUL	1.344	.79	.05	6.9	170.	.45	1.1	2.4	69.	90.	96000.	74.0
OTT	R	AURORUBENS	G	HR	JUL	1.417	.72	.28	3.8	140.	.54	1.4	5.9	80.	220.	12700.	75.4
QXI	R	AURORUBENS	G	SB	AUG	0.535	.18	<.08	1.7	120.	.53	1.5		79.			77.1

TABLE 1. RAW DATA TAEULATICA ELM STOCS STUDY 1976 TRACE METALS PROJECT

BLM	GENUS	SPECIES	STATION	TRANSECT	SEASON	DRYWT	CD	CR	CU	FE	NI	PB	V	ZN	AL	CA	MOISTURE
UTB	R	AURORUBENS	G	HR	SUM	0.147	.62	<.26	2.5	360.	.75	7.7		320.			76.7
EV	R	AURORUEENS	G	EF	TOP	1.654	1.1	.1E	3.3	190.	.57	2.6	8.7	97.	<44.	28000.	76.8
SV	R	AURORUBENS	G	ST	TOP	1.557	.09	.11	2.2	160.	.48	1.2	6.5	79.	650.	24000.	76.5
TV	R	AURORUEENS	G	FB	TOP	1.016	.08	<.04	2.4	120.	.52	1.4	3.3	68.	57.	92000.	74.9
UV	R	AURORUEENS	G	UB	TOP	1.842	2.6	.0E	1.4	150.	.48	1.2	1.1	90.	34.	52000.	76.0
ZTN	R	AURORUBENS	G	SB	NOV	0.658	1.6	<.04	12.	130.	.42	.9	1.4	65.	34.	50000.	74.6
HCZ4	S	ASTROBRANCHUS	2	I	WIN	2.305	.03	.02	.7	5.	.08	.02	<.1	11.	32.	900.	81.7
HMC3	S	ASTROBRANCHUS	3	II	WIN	2.297	.02	.04	.6	5.	.07	.06		10.			81.0
IAT4	S	ASTROBRANCHUS	2	III	WIN	2.328	.01	.02	.6	4.	.09	.02	.4	9.	30.	1100.	82.0
IJY3	S	ASTROBRANCHUS	1	IV	WIN	2.338	.02	<.02	.8	5.	.12	.07		16.			80.9
INM4	S	ASTROBRANCHUS	2	IV	WIN	2.188	.02	<.06	.6	<2.	.09	.09	<.1	12.	20.	730.	81.8
RCX	S	ASTROBRANCHUS	3	I	SUM	0.979	<.01	<.04	1.0	2.	<.09	<.02	<.1	6.	24.	1300.	81.1
RNU	S	ASTROBRANCHUS	3	II	SUM	1.130	<.01	<.03	.8	2.	<.07	<.01	.3	6.	26.	650.	81.1
VMV	S	ASTROBRANCHUS	3	II	SUM	1.270	.01	<.03	.7	1.	<.07	.12	<.1	7.	30.	1600.	80.2
VMW	S	ASTROBRANCHUS	3	II	SUM	1.100	<.01	<.03	.8	2.	<.09	<.01	.4	8.	41.	1000.	81.0
RVM	S	ASTROBRANCHUS	2	III	SUM	1.290	<.01	<.03	1.2	2.	<.07	.01	<.1	6.	27.	1300.	79.0
RXP	S	ASTROBRANCHUS	3	III	SUM	0.966	<.01	<.04	1.4	2.	<.09	.03	<.1	2.	20.	730.	78.0
MLU	S	VIOSCAI	2	II	SPR	2.109	.11	.04	16.	8.	.49	.05	.5	58.	29.	2500.	77.8
RLV	S	VIOSCAI	2	II	SUM	0.454	.13	<.09	18.	6.	.33	<.01	<.2	68.	35.	3700.	83.0
RMF	S	VIOSCAI	2	II	SUM	0.468	.12	.05	16.	5.	.46	<.04	.7	63.	34.	4500.	82.9
RMG	S	VIOSCAI	2	II	SUM	0.533	.38	<.07	15.	6.	.41	<.04	4.0	130.	200.	<2100.	80.2
ES1	S	AMERICANUS	EF	TOP	0.928	31.	1.7	126.	49.	44.	11.3	4.3	240.	4E.	3400.		89.2
ES2	S	AMERICANUS	EF	TOP	1.039	79.	4.6	72.	56.	50.	4.6	6.0	185.	83.	2300.		86.2
ES3	S	AMERICANUS	EF	TOP	0.964	40.	2.7	64.	35.	46.	4.2	8.6	350.	104.	3050.		85.4
SS1	S	AMERICANUS	ST	TOP	0.667	13.	1.0	12.	280.	37.	2.2	31.	210.	5800.	7E00.		87.8
SS2	S	AMERICANUS	ST	TOP	1.139	16.	1.5	21.	50.	20.	1.6	1.5	260.	17.	1600.		84.7
SS3	S	AMERICANUS	ST	TOP	0.944	21.	1.0	25.	150.	37.	3.1	5.5	150.	140.	6150.		86.7
TS1	S	AMERICANUS	FB	TOP	1.362	52.	1.9	12.	90.	92.	5.8	<6.9	350.	<5E0.	<5E0.		80.2

TABLE 1. RAW DATA TABULATION BLM STOCS STUDY 1976 TRACE METALS PROJECT

BLM	GENUS	SPECIES	STATION	TRANSECT	SEASON	DRYWT	CD	CR	CU	FE	NI	PB	V	ZN	AL	CA	MOISTURE
TS2	S	AMERICANUS	FE		TOP	0.993	29.	2.2	<14.	78.	44.	2.6	12.	<63.	236.	4880.	86.6
TS3	S	AMERICANUS	FB		TOP	0.752	19.	1.4	9.4	63.	54.	6.9	9.3	130.	100.	6940.	87.3
OS1	S	AMERICANUS	SB		TOP	1.102	17.	2.0	3.6	185.	34.	.94	8.7	105.	60.	1740.	87.4
OS2	S	AMERICANUS	SE		TOP	0.942	11.	6.8	2.0	120.	30.	.65	8.7	9.	187.	2730.	87.3
OS3	S	AMERICANUS	SB		TOP	1.178	21.	1.8	3.8	140.	35.	1.7	7.3	140.	35.	1240.	86.0
HS1	S	AMERICANUS	FR		TOP	1.575	32.	2.4	13.	350.	29.	1.1	13.	70.	51.	2770.	88.1
HS2	S	AMERICANUS	HR		TOP	1.301	24.	5.7	11.	210.	35.	1.3	14.	120.	48.	1980.	89.1
HS3	S	AMERICANUS	HR		TOP	0.885	15.	2.5	3.4	170.	28.	1.3	5.0	130.	44.	2440.	87.0
HBM3	S	EMPLSA	1	I	WIN	2.045	5.4	0.1	91.	18.	.93	.21	1.1	110.	130.	7840.	81.2
HCZ1	S	CAPRINUS	2	I	WIN	2.313	.04	.02	1.2	6.	.10	.09	.2	15.	26.	590.	79.0
MCP	S	CAPRINUS	3	I	SPR	2.655	.02	.02	0.9	4.	.07	.07	<.1	14.	22.	1150.	78.3
MNU	S	CAPRINUS	3	II	SPR	2.576	.02	.03	0.8	6.	<.07	.08	<.2	14.	57.	560.	78.8
NBS	S	CAPRINUS	3	III	SPR	1.683	.02	<.02	0.9	5.	.16	.14	.2	15.	13.	350.	79.9
SFG	S	CAPRINUS	2	IV	SLM	1.041	<.01	<.04	0.8	3.	<.10	.03	.4	10.	26.	1600.	79.1
SHF	S	CAPRINUS	3	IV	SUM	1.267	<.01	<.03	0.9	3.	<.08	.01		6.			79.5
RNV	S	CAPRINUS	3	II	SUM	1.261	<.01	<.03	0.8	2.	.13	.01	.5	9.	27.	1400.	79.1
VMX	S	CAPRINUS	3	II	SUM	1.246	<.01	<.03	1.1	8.	<.08	.03	.2	9.	23.	410.	79.0
VMY	S	CAPRINUS	3	II	SUM	1.305	<.01	<.03	0.6	4.	<.08	.02	<.1	6.	28.	460.	78.8
RJV	S	GLNTERI	1	II	SUM	1.042	<.01	<.04	0.8	4.	<.10	.02	.2	6.	24.	640.	78.6
VMD	S	GLNTERI	1	II	SUM	0.950	<.01	<.04	0.7	4.	<.10	<.02	<.1	5.	35.	700.	78.8
VME	S	GLNTERI	1	II	SLM	0.763	<.01	<.05	0.7	4.	<.13	.04	<.1	4.	26.	550	78.5
RLW	S	GLNTERI	2	II	SUM	0.759	<.01	<.05	0.7	4.	<.13	<.03	<.1	3.	30.	660.	81.6
VML	S	GLNTERI	2	II	SUM	0.437	<.01	<.09	0.8	3.	<.15	<.05	<.1	<12.	28.	620.	81.4
VMM	S	GLNTERI	2	II	SLM	0.716	<.01	<.05	0.7	3.	<.14	<.02	<.2	5.	40.	1100.	82.4
RTO	S	GLNTERI	1	III	SUM	1.071	<.01	<.04	0.6	4.	<.09	<.03	.2	10.	24.	670.	80.2
SDH	S	GLNTERI	1	IV	SUM	1.250	<.01	<.03	0.4	2.	<.08	.01	.2	8.	31.	580.	81.1
HMC4	S	FOETENS	3	II	WIN	1.320	<.01	<.03	1.3	4.	<.07	.04	.2	8.	23.	1500.	76.8
HUT2	S	FOETENS	1	III	WIN	2.502	.03	<.02	0.7	4.	<.05	.06	.27	14.	29.	840.	79.1

TABLE 1. RAW DATA TABULATION BLM STOCS STUDY 1976 TRACE METALS PROJECT

BLM	GENUS	SPECIES	STATION	TRANSECT	SEASON	DRYWT	CD	CR	CU	FE	NI	PB	V	ZN	AL	CA	MOISTURE
IAT1	S	FOETENS	2	III	WIN	2.624	.01	.03	0.8	6.	<.05	.03	<.1	13.	31.	1100.	77.1
ICQ3	S	FOETENS	3	III	WIN	2.867	.01	<.01	0.7	8.	<.04	.12	<.1	10.	26.	1300.	76.5
MAU	S	FOETENS	2	I	SPR	2.674	<.01	.05	0.7	3.	<.05	.04	<.1	14.	13.1	610.	76.7
MLV	S	FOETENS	2	II	SPR	2.557	.01	<.01	0.6	2.	<.08	.07	<.1	18.	14.4	150.	79.0
MZV	S	FOETENS	2	III	SPR	2.668	.02	.02	0.6	3.	<.06	.47	<.1	17.	16.8	1200.	77.9
SFE	S	FOETENS	2	IV	SUM	1.450	<.01	<.03	1.3	2.	<.05	.05	.2	10.	21.	460.	76.0
SFM	S	FOETENS	2	IV	SUM	1.320	<.01	<.03	1.5	2.	<.06	.01	.2	6.	24.	890.	78.9
SFN	S	FOETENS	2	IV	SUM	1.400	<.01	<.03	1.1	2.	<.06	.09	<.1	7.	30.	1100.	77.2
HJG4	T	LATHAMI	1	II	WIN	2.424	.07	<.02	2.3	20.	.08	.06	<.1	18.	30.	740.	80.0
HUT1	T	LATHAMI	1	III	WIN	2.548	.09	.03	2.1	17.	.08	.13	.2	22.	23.	990.	79.5
IAT3	T	LATHAMI	2	III	WIN	2.416	.10	.21	3.6	17.	.41	.06	<.2	29.	30.	1020.	79.5
IJY1	T	LATHAMI	1	IV	WIN	1.556	.09	<.04	2.5	25.	<.08	.03	<.1	24.	32.	1010.	82.1
MAS	T	LATHAMI	2	I	SPR	2.478	.04	<.01	2.3	11.	.07	.05	<.1	22.	12.7	620.	79.3
MJT	T	LATHAMI	1	II	SPR	2.484	.03	<.01	1.7	8.	.08	.06	<.1	19.	15.2	560.	78.6
MXV	T	LATHAMI	1	III	SPR	1.850	.03	.05	2.0	10.	<.08	.08	<.1	23.	10.4	500.	79.6
MZU	T	LATHAMI	2	III	SPR	1.563	.02	<.02	1.7	7.	.26	.09	<.1	17.	20.	310.	78.4
NIS	T	LATHAMI	1	IV	SPR	1.477	.02	.03	2.4	14.	<.12	.08	<.1	22.	14.4	570.	80.6
NKR	T	LATHAMI	2	IV	SPR	1.978	.03	<.01	2.0	6.	<.07	.17	<.1	16.	12.	750.	78.5
NMP	T	LATHAMI	3	IV	SPR	2.727	.02	.05	.5	7.	.16	.09	<.1	16.	14.	460.	77.8
RAU	T	LATHAMI	2	I	SUM	1.200	.02	<.03	2.4	8.	<.08	<.03	.2	26.	25.	950.	80.0
RXD	T	VENTRALIS	3	III	SUM	0.946	<.01	<.04	1.7	3.	.13	.02	.3	7.	29.	2400.	81.6
INL1	U	PARVUS	3	IV	WIN	2.447	.02	.16	1.1	6.	<.07	.07	<.1	14.	16.	560.	78.5
MXW	U	PARVUS	1	III	SPR	1.947	<.03	.03	1.7	6.	.23	.24		16.			78.1
NIR	U	PARVUS	1	IV	SPR	1.506	.03	.04	1.3	12.	.16	.05	<.1	16.	22.	1010.	79.7
NKT	U	PARVUS	2	IV	SPR	1.976	.01	<.01	1.2	6.	<.09	.01	<.2	14.	45.	600.	81.6
SFF	U	PARVUS	2	IV	SUM	1.351	<.01	<.03	1.1	5.	<.07	<.02	<.1	10.	18.	860.	78.1
GDE		ZPL	1	I	WIN	0.083	.82	3.2	18.	3900.	3.0	36.	40.	9.	18600	13500.	86.6
GDG		ZFL	2	I	WIN	0.192	2.7	2.3	13.	1260.	2.4	21.	22.	95.	2880.	12300.	90.4

TABLE 1. RAW DATA TABLLATION BLM STOCS STLDY 1976 TRACE METALS PROJECT

BLM	GENUS	SPECIES	STATION	TRANSECT	SEASON	DRYWT	CD	CR	CU	FE	NI	PB	V	ZN	AL	CA	MOISTURE
GDI		ZPL	3	I	WIN	0.601	2.8	1.8	15.	580.	5.0	7.9	3.5	120.	880.	22000.	87.1
GDK		ZPL	1	II	WIN	0.031	1.3	6.5	34.	4680.	4.6	320.	43.	180.	9500.	15500.	90.5
GDM		ZFL	2	II	WIN	0.199	2.4	3.0	19.	730.	1.9	46.	4.9	160.	840.	8200.	89.8
GDO		ZPL	3	II	WIN	0.744	3.7	1.0	26.	300.	5.1	64.	<1.5	170.	240.	45000.	85.4
GDO		ZPL	1	III	WIN	0.361	1.2	10.7	54.	6180.	7.8	37.	130.	250.	12600	18200.	90.2
GDS		ZFL	2	III	WIN	0.636	4.8	2.8	18.	1380.	6.0	5.4	13.	190.	2080.	25000.	89.4
GDU		ZPL	3	III	WIN	0.533	3.3	1.6	14.	810.	3.9	4.8	4.6	120.	1510.	25000.	85.3
GFA		ZFL	1	IV	WIN	0.166	.90	8.6	33.	6580.	10.7	16.	30.	450.	4330.	9500.	90.1
GGO		ZFL	2	IV	WIN	1.127	1.6	3.8	17.	670.	3.5	2.4	17.	160.	5590.	44000.	87.0
GDB		ZPL	3	IV	WIN	0.562	4.5	.59	12.	120.	5.5	<.5	8.	110.	450.	43000.	91.4
KXK		ZPL	1	I	SPR	0.012	1.7	4.1	<100.	3310.	8.2	16.	17.	53.	5140.	28000.	89.2
LTC		ZFL	1	I	SPR	0.111	1.7	3.4	19.	4250.	5.2	7.2	15.	95.	4700.	38000.	88.9
KXF		ZPL	1	I	SPR	0.067	1.9	7.1	22.	4730.	8.9	9.9	19.	91.	4870.	25000.	90.4
KZN		ZPL	2	I	SPR	0.302	1.9	14.1	13.	3570.	2.2	130.	<5.	86.	1300.	4400.	93.5
LTE		ZFL	2	I	SPR	0.008	2.6	<3.1	<100.	<100.	<12.1	<1.0	2.8	16.	270.	35000.	90.2
NWA		ZPL	2	I	SPR	0.141	3.5	8.1	9.6	140.	3.1	74.	<1.	52.	200.	35000.	90.0
LBG		ZPL	3	I	SPR	0.144	4.2	.40	38.	140.	5.2	4.7	6.1	110.	100.	24000.	91.2
LDD		ZPL	1	II	SPR	0.406	4.7	1.3	22.	470.	2.3	6.1	.4	125.	12.2	<0000.	90.0
LTG		ZPL	1	II	SPR	0.144	3.4	13.8	16.	360.	2.8	72.	2.5	110.	230.	35000.	90.4
NWB		ZPL	1	II	SPR	0.121	2.4	.68	18.	34.	2.6	5.8	3.1	87.	200.	28000.	90.6
LEV		ZPL	2	II	SPR	0.292	2.4	.49	15.	300.	2.0	1.0	<2.	110.	210.	45000.	90.6
LTH		ZPL	2	II	SPR	0.191	5.7	2.5	10.	20.	2.6	4.1	<.7	100.	76.	<16000.	89.4
NWC		ZPL	2	II	SPR	0.005	5.4	<5.7	279.	23.	27.8	1.1	2.2	110.	300.	45000.	91.2
LGO		ZPL	3	II	SPR	0.131	5.4	.29	18.	42.	7.3	.76	14.	42.	98.	16000.	89.8
LIN		ZPL	1	III	SPR	0.377	2.0	.63	8.1	240.	1.9	1.9	5.0	76.	870.	103000.	87.9
LTI		ZPL	1	III	SPR	0.046	2.2	2.0	16.	1060.	3.1	12.	4.1	120.	1030.	60000.	90.5
NWE		ZPL	1	III	SPR	0.273	1.5	7.7	17.	920.	2.0	46.	16.	130.	3200.	97000.	88.9
LKD		ZFL	2	III	SPR	0.313	3.0	5.0	17.	1520.	3.7	25.	7.4	140.	1780.	37000.	90.1

TABLE 1. RAW DATA TABULATION BLM STCCS STUDY 1976 TRACE METALS PROJECT

BLM	GENUS	SPECIES	STATION	TRANSECT	SEASON	DRYWT	CD	CR	CU	FE	NI	PB	V	ZN	AL	CA	MOISTURE
NWD		ZPL	2	III	SPR	0.098	3.5	3.7	20.	1260.	3.4	13.	5.8	95.	1490.	74000.	91.1
NWF		ZPL	2	III	SPR	0.006	3.1	<4.5	<221.	550.	17.6	12.	3.2	88.	1270.	32000.	90.6
LLV		ZPL	3	III	SPR	0.200	4.2	4.4	4020.	1000.	3.7	30.	3.5	1280	280.	33000.	92.0
LNS		ZPL	1	IV	SPR	0.373	3.6	3.4	13.	280.	5.5	8.8	5.8	83.	720.	25000.	89.2
NWG		ZPL	1	IV	SPR	1.000	4.1	1.1	13.	500.	6.0	1.2	6.5	140.	1057.	<157.	88.0
LTK		ZPL	1	IV	SPR	0.571	4.4	.47	10.	200.	4.4	.81	5.0	76.	550.	21300.	88.4
LPH		ZPL	2	IV	SPR	0.317	4.5	1.0	16.	87.	2.1	3.5	2.3	94.	160.	43300.	88.6
LOZ		ZPL	3	IV	SPR	0.016	4.4	1.0	10.	115.	5.1	1.2	24.	94.	1500.	43000.	90.7
CCP		ZPL	1	I	SUM	0.262	.75	5.0	14.	10050	11.5	12.		41.			88.4
QVL		ZPL	1	I	SUM	0.143	.64	9.0	13.	9740.	10.6	21.		<39.			91.5
QVM		ZPL	1	I	SUM	0.061	.98	22.3	23.	13290	11.7	25.		100.			91.0
QEB		ZPL	2	I	SUM	0.153	4.0	.37	12.	100.	2.0	1.4		64.			88.0
QVU		ZPL	2	I	SUM	0.002	5.0	<8.2	<410.	<820.	<33.	<1.	1.2	6.	140.	16000.	88.6
QVV		ZPL	2	I	SUM	0.003	4.8	<5.9	<300.	150.	<24.	<1.	<2.	<120	220.	22000.	89.2
GFR		ZPL	3	I	SUM	0.049	3.5	.69	16.	130.	7.3	3.2	<1.	160.	950.	<70000.	92.4
QHG		ZPL	1	II	SUM	0.507	2.9	3.1	15.	1540.	2.2	1.3	12.	39.	5080.	35000.	87.2
QIS		ZPL	2	II	SUM	0.056	4.3	<4.6	13.	110.	4.2	1.0		120.			89.4
QWC		ZPL	2	II	SUM	0.009	2.2	<1.9	5.	47.	<7.5	1.3	<2.	22.	220.	69000.	86.4
QWD		ZPL	2	II	SUM	0.073	3.8	.64	12.	110.	3.7	1.7		110.			89.4
QKI		ZPL	3	II	SUM	0.021	6.2	2.1	20.	1000.	18.4	12.		96.			93.1
QLX		ZPL	1	III	SUM	0.312	.64	8.1	12.	8140.	8.6	13.		32.			90.7
QWN		ZPL	1	III	SUM	0.267	.87	6.9	12.	5200.	4.5	8.1	42.	32.	17000	67000.	89.0
QWO		ZPL	1	III	SUM	0.195	.77	3.9	9.5	2040.	1.6	1.5		<28.			89.2
QNJ		ZPL	2	III	SUM	0.375	1.5	7.8	11.	6500.	8.4	13.		36.			88.9
QWY		ZPL	2	III	SUM	0.026	2.3	10.0	20.	6600.	8.3	13.	68.	87.	29000	28000.	90.2
QWZ		ZPL	2	III	SUM	0.272	1.9	8.8	15.	4610.	11.9	15.		61.			89.6
QOZ		ZPL	3	III	SUM	0.291	3.8	1.2	15.	340.	4.0	2.6		74.			90.3
QOO		ZPL	1	IV	SUM	0.070	.89	6.7	13.	3590.	3.8	8.9	<26.	110.	9100.	<42000.	93.9

TABLE 1. RAW DATA TABULATION ELM STDCS STUDY 1976 TRACE METALS PROJECT

BLM	GENUS	SPECIES	STATION	TRANSECT	SEASON	DRYWT	CD	CR	CU	FE	NI	PB	V	ZN	AL	CA	MOISTURE
QSA		ZPL	2	IV	SUM	0.314	2.9	.14	11.	24.	3.8	.76	<2.	58.	100.	10400.	86.5
QXB		ZPL	2	IV	SUM	0.359	2.8	.11	14.	29.	2.9	.56	<1.	9.	80.	27000.	85.4
QXC		ZPL	2	IV	SUM	0.231	3.1	<1.3	11.	29.	3.9	.65		130.			88.5
QTQ		ZPL	3	IV	SUM	0.482	2.5	.24	14.	93.	3.2	1.5	<1.	79.	200.	35000.	89.8

TABLE 2

TRACE METALS CONTENT OF SHIPBOARD CONTAMINANTS

Sample Type	Sample Code	Concentration (ppm) ¹						
		Cd	Cr	Cu	Fe	Ni	Pb	Zn
paint chips	JCM	34	840	19	6680	3.5	90,400	140,000
lube oil	OSPFO	<0.01	1600	1.3	<0.1	0.54	<0.4	<0.5

¹ Paint chips, ppm dry weight; lube oil, ppm wet (liquid) weight.



The Department of the Interior Mission

As the Nation's principal conservation agency, the Department of the Interior has responsibility for most of our nationally owned public lands and natural resources. This includes fostering sound use of our land and water resources; protecting our fish, wildlife, and biological diversity; preserving the environmental and cultural values of our national parks and historical places; and providing for the enjoyment of life through outdoor recreation. The Department assesses our energy and mineral resources and works to ensure that their development is in the best interests of all our people by encouraging stewardship and citizen participation in their care. The Department also has a major responsibility for American Indian reservation communities and for people who live in island territories under U.S. administration.



The Minerals Management Service Mission

As a bureau of the Department of the Interior, the Minerals Management Service's (MMS) primary responsibilities are to manage the mineral resources located on the Nation's Outer Continental Shelf (OCS), collect revenue from the Federal OCS and onshore Federal and Indian lands, and distribute those revenues.

Moreover, in working to meet its responsibilities, the **Offshore Minerals Management Program** administers the OCS competitive leasing program and oversees the safe and environmentally sound exploration and production of our Nation's offshore natural gas, oil and other mineral resources. The MMS **Minerals Revenue Management** meets its responsibilities by ensuring the efficient, timely and accurate collection and disbursement of revenue from mineral leasing and production due to Indian tribes and allottees, States and the U.S. Treasury.

The MMS strives to fulfill its responsibilities through the general guiding principles of: (1) being responsive to the public's concerns and interests by maintaining a dialogue with all potentially affected parties and (2) carrying out its programs with an emphasis on working to enhance the quality of life for all Americans by lending MMS assistance and expertise to economic development and environmental protection.