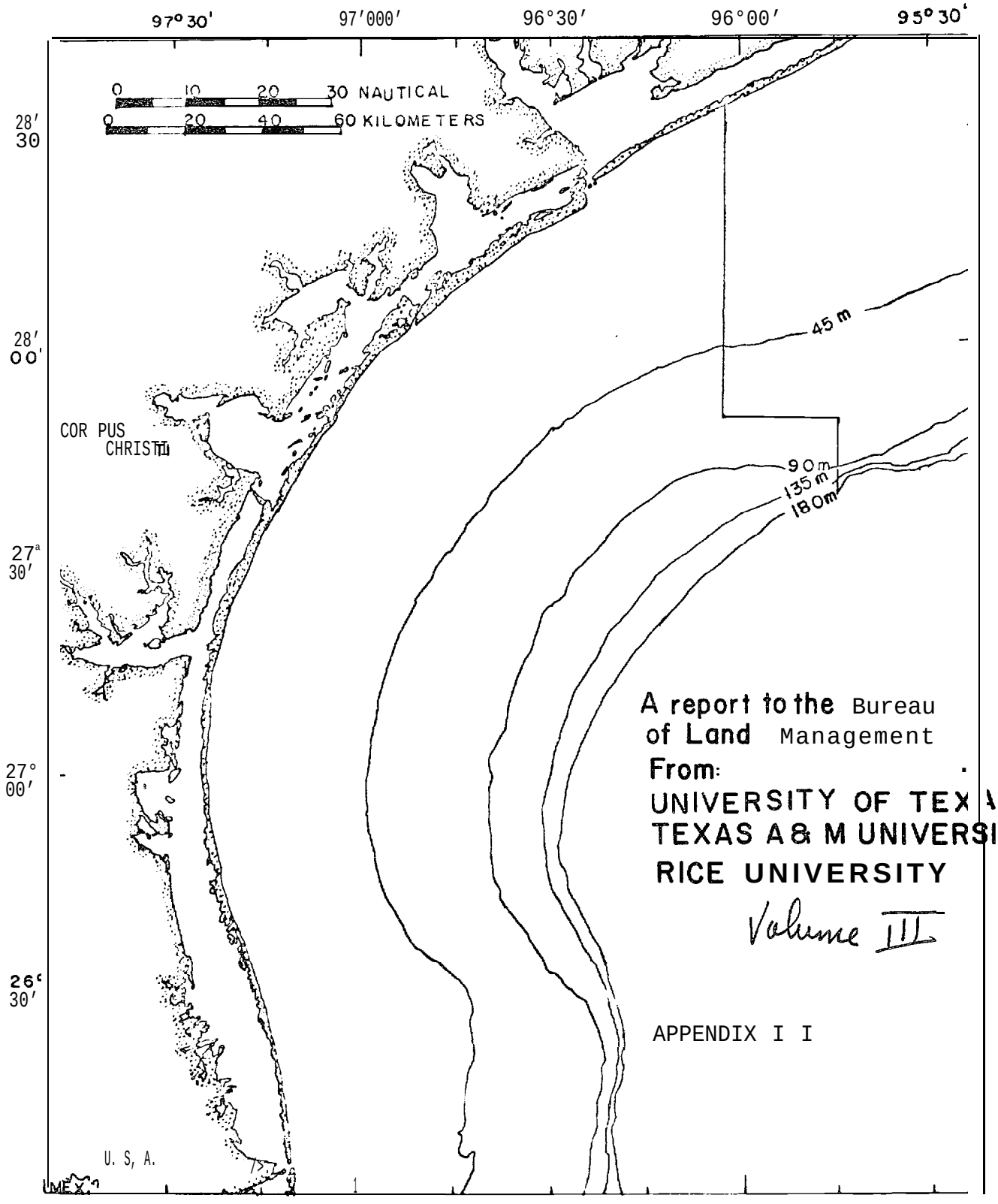
BL-6M96

ENVIRONMENTAL ASSESSMENT OF THE SOUTH TEXAS OUTER CONTINENTAL SHELF CHEMICAL AND BIOLOGICAL 'SURVEY COMPONENT

29124



A report to the Bureau of Land Management

From:

UNIVERSITY OF TEXAS

TEXAS A& M UNIVERSITY

RICE UNIVERSITY

Volume III

APPENDIX I I

3222

APPENDIX VII

SAMFLING DATA AND ZCOPLANKTON BIOMASS

APPENDIX VII-1

SAMPLING DATA AND ZOOPLANKTON BIOMASS

DECEMBER/JANUARY CRUISE

Transect	Station	Day or Night	Replicate No.	Sampling Depths (m	Date	Local Time	Volume of Water Filtered (m^3)	Displacement Vol. of Zoopl. ($\mu l/m^3$)	Dry Wt. of Zoopl. (mg/m^3)	Ash-free Dry Wt. of Zoopl. (mg/m^3)	Subsample Size
I	1	D	1	20-0	12/6	10:27-10:43	940.4	93.6	14.6	13.3	1/16
			2	20-0	12/6	10:44-11:01	885.9	113.8	14.5	13.4	1/16
		N	1	20-0	12/5	20:43-21:03	1105.4	140.4	17.0	15.5	1/16
			2	20-0	12/5	21:06-21:24	699.6	109.8	13.9	15.1	1/16
	2	D	1	35-o	12/5	13:43-13:59	983.6	151.3	16.8	15.2	1/16
			2	35-o	12/5	14:08-14:23	817.6	203.5	17.4	15.8	1/32
		N	1	34-o	12/4	19:12-19:27	897.3	99.9	13.7	12.1	1/16
			2	34-o	12/4	19:41-20:00	1005.9	149.5	16.7	14.5	1/16
	3	D	1	120-0	12/4	11:05-11:16	488.5	37.6	3.4	3.0	1/4
			2	125-0	12/4	11:21-11:32	507.9	36.2	3.9	3.3	1/4
		N	1	125-0	12/3	22:23-22:41	918.4	40.1	5.0	4.2	1/16
			2	125-0	12/3	22:42-22:58	809.0	91.0	5.6	4.7	1/16

Appendix VII-1(cont.)

II	1	D	1	19-0	12/17	13:58-14:19	301.5	360.9	54.4	45.7	1/32
			2	19-0	12/17	14:34-14:48	377.5	203.4	24.9	20.5	1/16
		N	1	20-0	12/17	21:23-21:37	448.4	210.5	24.4	20.5	1/8
			2	20-0	12/17	21:45-21:59	605.7	245.7	15.8	13.1	1/8
	2	D	1	49-o	1/9	14:20-14:32	460.7	69.5	11.6	10.3	1/8
			2	49-o	1/9	14:39-14:47	312.5	179.2	25.8	23.3	1/8
		N	1	35-o	12/18	01:03-01:17	740.4	166.4	9.7	7.7	1/8
			2	35-o	12/18	01:26-01:40	866.6	128.3	14.3	11.6	1/8
	3	D	1	90-0	12/12	14:29-14:57	332.4	89.1	7..7	7.3	1/4
			2	90-0	12/12	14:59-15:18	342.8	95.7	9.1	7.7	1/4
		N	1	55-o	12/11	22:05-22:22	221.6	198.6	22.3	19.4	1/4
			2	55-o	12/11	22:37-22:54	257.2	230.2	23.9	20.4	1/8
III	1	D	1	25-O	12/15	10:12-10:23	546.4	193.3	33.8	32.3	1/8
			2	25-O	12/15	10:32-10:48	516.8	182.7	29.0	27.6	1/8
		N	1	25-O	12/14	19:24-19:37	559.5	108.7	16.4	14.8	1/8
			2	25-O	12/14	19:47-20:04	638.7	120.2	15.5	14.0	1/8
	2	D	1	45-o	12/14	12:56-13:13	410.3	179.4	19.6	17.8	1/8
			2	35-o	12/14	13.26-13:38	297.7	172.0	20.8	18.3	1/8
		N	1	50-0	12/13	20:26-20:38	351.1	104.8	14.3	13.2	1/8
			2	50-0	12/13	20:47-20:59	352.7	133.8	14.5	12.4	1/8

Appendix VII-l (cont.)

	3	D	1	90-0	12/13	12:37-12:51	806.7	77.4	9.2	8.4	1/8
			2	90-0	12/13	12:53-13:10	641.1	134.8	12.0	10.6	1/8
		N	1	70-0	12/12	19:56-20:24	403.6	245.8	31.2	27.9	1/8
			2	60-0	12/12	20:17-20:43	1189.4	102.2	17.4	15.5	1/16
IV	1	D	1	25-O	1/22	12:16-12:24	527.2	133.5	19.4	17.3	1/16
			2	25-O	1/22	12:30-12:41	679.3	122.5	18.1	16.3	1/16
		N	1	20-0	1/21	21:12-21:23	691.8	129.5	17.3	15.0	1/16
			2	20-0	1/21	21:37-21:47	675.2	180.1	26.6	24.0	1/32
	2	D	1	48-O	1/24	14:19-14:33	894.5	114.5	17.6	15.6	1/32
			2	48-O	l/24	14:41-14:56	963.9	139.4	21.5	15.9	1/32
		N	1	40-0	1/24	22:15-22:30	1126.4	119.3	12.9	11.5	1/32
			2	42-O	1/24	22:36-22:52	882.3	148.7	14.9	13.2	1/32
	3	D	1	70-0	1/25	13:45-14:00	942.0	149.5	10.1	8.7	1/16
			2	70-0	1/2 5	14:08-14:22	844.0	117.5	14.8	13.3	1/16
		N	1	70-0	1/25	22:09-22:24	974.9	157.6	20.2	18.4	1/16
			2	60-"0	1/25	22:32-22:47	1133.4	124.2	17.7	16.2	1/16

APPENDIX VII-2

SAMPLING DATA AND ZOOPLANKTON BIOMASS

APRIL/MAY CRUISE

Transect	Station	Day or Night	Replicate No.	Sampling Depths (m)	Date	Local Time	Volume of Water Filtered (m^3)	Displacement Vol. of Zoopl. (ul/m^3)	Dry Wt. of Zoopl. (mg/m^3)	Ash-free Dry Wt. of Zoopl. (mg/m^3)	Subsample Size
I	1	D	1	17-0	5/6	14:08-14:22	583.5	702.0	75.2	71.4	1/64
			2	17-0	5/6	14:33-14:48	546.4	655.9	88.8	83.5	1/64
		N	1	18-20-0	5/6	21:01-21:14	447.2	601.1	98.5	91.6	1/64
			2	18-20-0	5/6	21:25-21:49	557.4	734.8	95.1	88.6	1/64
	2	D	1	30-0	5/6	11:07-11:19	711.1	166.5	12.7	11.6	1/16
			2	25-0	5/6	11:26-11:39	775.6	181.5	18.2	16.0	1/32
		N	1	40-0	5/6	23:41-23:56	608.1	599.9	43.3	39.1	1/32
			2	40-0	5/7	00:02-00:16	575.4	244.7	34.9	30.9	1/32
	3	D	1	90-0	5/6	08:17-08:30	980.6	78.3	8.1	7.2	1/16
			2	80-85-0	5/6	08:38-08:53	1097.5	43.7	6.6	5.6	1/16
		N	1	95-o	5/7	03:04-03:16	718.3	89.1	9.1	8.0	1/16
			2	70-75-0	5/7	03:22-03:37	959.5	86.7	12.4	11.3	1/16

Appendix VII-2 (cont.)

II	1	D	1	12-15-0	4/17	13:01-13:16	436.5	260.3	35.4	31.6	1/16
			2	20-0	4/17	13:30-13:42	405.9	189.2	20.7	17.9	1/16
		N	1	20-0	4/16	22:33-22:48	257.4	391.6	42.1	38.8	1/16
			2	20-0	4/16	22:59-23:14	315.0	427.4	52.2	46.1	1/32
	2	D	1	40-0	4/17	16:43-16:56	562.0	205.0	30.7	26.7	1/16
			2	40-45-0	4/17	17:22-17:35	657.3	277.5	33.9	29.7	1/32
		N	1	30-35-0	4/17	22:17-22:31	852.2	360.5	32.7	27.0	l/64
			2	30-35-0	4/17	22:38-22:53	773.0	289.8	43.0	35.4	1/64
	3	D	1	90-0	5/16	10:56-11:11	1072.6	34.3	4.0	3.6	1/16
			2	90-0	5/16	11:17-11:32	1102.0	52.3	4.6	4.1	1/16
		N	1	100-o	5/17	00:28-00:42	945.0	74.5	8.8	7.9	1/16
			2	100-o	5/17	00:46-01:01	919.4	90.5	10.6	9.4	1/16
III	1	D	1	21-0	5/14	11:50-12:05	360.1	373.2	38.5	33.8	1/32
			2	21-0	5/14	12:18-12:29	423.6	143.5	24.5	22.1	1/3 2
		N	1	21-0	5/13	23:14-23:28	345.9	198.9	24.8	23.0	1/16
			2	24-O	5/13	23:38-23:53	340.5	225.6	27.7	25.6	1/32
	2	D	1	64-O	5/15	11:22-11:36	706.6	58.9	6.3	5.6	1/16
			2	60-0	5/15	11:44-11:57	677.8	106.2	10.9	10.1	1/16
		N	1	53-o	5/15	00:09-00:22	865.8	99.8	11.5	10.5	1/32
			2	53-o	5/15	00:29-00:41	775.3	78.4	10.7	9.9	1/32
	3	D	1	87-O	5/16	13:25-13:39	939.0	42.6	5.3	4.7	1/6

Appendix VII-2 (cont.)

			2	75-o	5/16	13:43-13:56	1000.2	38.4	4.3	3.9	1/16
		N	1	105-0	5/15	23:56-00:11	813.2	51.1	7.6	6.9	1/16
			2	92-O	5/15	00:18-00:32	827.8	63.8	13.5	14.7	1/16
IV	1	D	1	22-o	5/1	12:38-12:52	339.6	772.6	53.5	48.6	1/64
			2	22-o	5/1	13:06-13:19	290.8	792.2	51.9	46.0	1/64
		N	1	27-O	5/1	22:07-22:19	357.1	537.7	49.2	41.9	1/32
			2	27-O	5/1	22:29-22:42	381.9	377.0	35.5	30.4	1/32
	2	D	1	50-0	5/2	13:30-13:44	660.8	184.0	15.3	13.6	1/16
			2	50-0	5/2	13:55-14:10	697.0	211.2	15.1	13.2	1/32
		N	1	30-35-0	5/2	02:45-02:59	645.9	411.2	44.5	37.7	1/32
			2	20-0	5/2	03:09-03:23	354.2	523.9	37.5	31.3	1/32
	3	D	1	70-75-0	4/30	11:42-11:56	615.2	78.0	7.4	6.6	1/16
			2	75-o	4/30	12:06-12:20	585.9	81.9	6.5	5.7	1/16
		N	1	80-85-0	4/29	23:28-23:42	581.4	99.0	14.9	13.3	1/16
			2	75-o	4/29	23:51-00:05	717.6	64.7	6.4	5.6	1/16

APPENDIX Vii-3

SAMPLING DATA AND ZOOPLANKTON BIOMASS

AUGUST/SEPTEMBER CRUISE

Transect	Station	Day or Night	Replicate No.	Sampling Depths (m)	Date	Local Time	Volume of Water Filtered (m^3)	Displacement Vol. of Zoopl. (ul/m^3)	Dry Wt. of Zoopl. (mg/m^3)	Ash-free Dry Wt. of Zoopl. (mg/m^3)	Subsample Size
I	1	D	1	19-20-0	8/27	11:30-11:40	448.3	182.0	20.2	17.8	1/8
			2	18-19-0	8/27	11:44-11:55	525.0	187.4	33.9	31.9	1/8
		N	1	15-0	8/26	23:20-23:30	438.0	288.6	114.1	106.3	1/8
			2	15-0	8/26	23:42-23:53	497.8	289.3	122.8	117.7	1/8
	2	D	1	44-o	8/27	15:58-15:09	401.0	101.7	11.6	10.3	1/8
			2	40-0	8/27	16:16-16:27	376.1	106.4	12.7	11.3	1/8
		N	1	46-0	8/27	23:55-00:05	446.5	141.5	18.2	15.0	1/8
			2	39-42-0	8/28	00:10-00:22	700.3	60.5	7.1	6.0	1/8
	3	D	1	122-0	9/29	16:21-16:35	687.1	40.8	5.3	4.7	1/8
			2	122-0	9/29	16:38-16:52	704.1	57.9	7.6	6.6	1/8
		N	1	116-0	9/30	02:36-02:49	853.7	70.3	10.4	8.8	1/8
			2	116-0	9/30	02:54-03:08	875.4	52.1	7.6	6.7	1/8

Appendix VII-3 (cont.)

II	1	D	1	21-0	9/4	10:19-10:24	87.0	524.1	54.8	41.8	1/8
			2	20-0	9/4	10:29-10:36	114.6	425.8	45.1	34.3	1/8
		N	1	20-23-0	9/4	22:31-22:40	232.1	313.6	71.0	62.7	1/8
			2	20-23-0	9/4	22:45-22:54	192.3	237.1	25.3	21.5	1/8
	2	D	1	46-0	9/5	11:07-11:18	590.1	74.6	9.3	8.3	1/8
			2	46-0	9/5	11:20-11:30	600.7	47.9	5.7	5.0	1/8
		N	1	54-o	9/5	22:53-23:06	728.3	86.8	12.3	10.5	1/8
			2	54-o	9/5	23:10-23:23	682.6	143.0	16.0	14.0	1/8
	3	D	1	110-126-0	9/6	15:46-16:00	548.8	46.6	6.5	5.8	1/8
			2	111-124-0	9/6	16:03-16:15	558.4	55.9	6.1	5.6	1/8
		N	1	119-0	9/6	22:38-22:49	448.6	41.0	5.9	5.5	1/8
			2	119-0	9/6	22:55-23:10	380.0	61.1	9.1	8.4	1/8
III	1	D	1	2,4-26-0	9/8	13:01-13:12	310.0	309.7	30.2	25.7	1/8
			2	24-26-0	9/8	13:17-13:31	236.4	412.9	32.4	27.2	1/8
		N	1	24-o	9/8	23:16-23:29	407.1	290.8	42.4	38.5	1/8
			2	24-o	9/8	23:34-23:46	405.0	138.3	23.6	20.7	1/8
	2	D	1	60-0	9/7	15:59-16:13	638.4	86.5	12.4	11.5	1/8
			2	60-0	9/7	16:19-16:32	590.4	79.9	9.2	8.5	1/8
		N	1	60-0	9/8	01:24-01:38	570.5	108.0	18.5	15.6	1/8
			2	60-0	9/8	01:44-01:56	616.7	149.2	21.4	17.9	1/8

Appendix VII-3(cont.)

	3	D	1	106-0	9/7	13:46-14:00	434.1	47.9	9.1	7.5	1/8
			2	106-0	9/7	14:03-14:17	368.3	65.2	10.8	9.8	1/8
		N	1	100-0	9/7	22:23-22:37	513.3	76.4	12.5	10.9	1/8
			2	100-0	9/7	22:43-22:52	311.7	89.8	15.4	14.0	1/8
IV	1	D	1	25-o	9/12	11:25-11:40	539.5	207.6	16.3	14.8	1/8
			2	25-o	9/12	11:47-12:01	482.2	466.2	28.4	24.9	1/8
		N	1	22-25-o	9/11	21:39-21:53	537.5	138.4	17.7	15.5	1/8
			2	22-o	9/11	22:00-22:12	369.4	298.9	26.9	23.3	1/8
	2	D	1	46-0	9/12	15:30-15:41	197.5	324.1	35.0	28.1	1/8
			2	38-43-0	9/12	15:47-15:58	546.4	213.8	19.6	16.0	1/8
		N	1	46-o	9/13	02:43-02:56	631.8	497.6	59.8	53.1	1/8
			2	44-o	9/13	03:02-03:13	593.1	437.0	38.4	33.4	1/8
	3	D	1	73-0	9/13	14:10-14:22	401.0	93.8	12.9	11.3	1/8
			2	73-o	9/13	14:28-14:42	414.8	162.0	20.1	14.8	1/8
		N	1	79-o	9/12	22:48-23:o2	698.7	40.1	5.8	5.2,	1/8
			2	79-o	9/12	23:05-23:18	474.5	37.1	5.6	5.2	1/8

APPENDIX VIII

SIZE OF SUBSAMPLE EXAMINED AND NUMBER OF ZOOPLANKTERS FOUND IN SUBSAMPLE

APPENDIX VIII

SIZE OF SUBSAMPLE EXAMINED AND NUMBER OF

ZOOPLANKTERS FOUND IN SUBSAMPLE

Transect	Station	Day or Night	Replicate No.	Dec. - Jan.		Apr. - May		Aug. - Sept.	
				Subsample Size	No. per Subsample	Subsample Size	No. per Subsample	Subsample Size	No. per Subsample
I	1	D	1	1/256	4294	1/2048	1920	1/128	2520
			2	1/512	2419	1/4096	1446	1/256	4164
		N	1	1/512	2054	1/4096	1099	1/256	6121
			2	1/512	994	1/2048	1600	1/1024	2177
	2	D	1	1/512	2384	1/256	1636	1/2 56	1846
			2	1/512	2056	1/256	1633	1/512	1239
		N	1	1/256	5405	1/1024	1293	1/256	2408
			2	1/512	1870	1/512	1176	1/512	1092
	3	D	1	1/256	660	1/256	2084	1/256	1609
			2	1/128	1239	1/256	1829	1/256	2461
		N	1	1/256	946	1/256	1639	1/256	2857
			2	1/256	1094	1/256	1585	1/256	3000
II	1	D	1	1/1024	1595	1/512	2198	1/'128	1722
			2	*1/512 1/256	258 2535	1/512	1071	1/128	1859
		N	1	1/1024	1031	1/1024	1423	1/512	2599
			2	1/1024	918	1/1024	1377	1/256	1263
	2	D	1	1/512	1147	1/512	4072	1/64	1970
			2	1/,512	1277	1/512	3591	1/128	1214
		N '	1	1/512	1932	1/512	1950	1/128	1804
			2	1/512	1683	1/1024	2687	1/256	2724

*The sampl was in two jars; each jar was examined separately.

Appendix VIII (cont.)

	3	D	1	1/128	1324	1/128	2707	1/128	2871
			2	1/64	2794	1/128	3131	1/256	1543
		N	1	1/256	1466	1/512	887	1/64	3509
			2	1/256	1499	1/512	1148	1/128	2158
[11	1	D	1	1/1024	1243	1/5 12	1872	1/256	1620
			2	1/512	2352	1/512	1366	1/256	1518
		N	1	1/512	2054	1/512	1862	1/512	2009
			2	1/1024	1401	1/512	1397	1/256	1753
	2	D	1	1/512	1984	1/128	1836	1/512	1400
			2	1/256	15.13	1/'256	2208	1/512	1214
		N	1	1/256	1786	1/256	2825	1/1024	1626
			2	1/256	1109	1/2 56	3134	1/512	2246
	3	D	1	1/256	1738	1/256	1501	1/256	1409
			2	1/256	1877	1/256	1469	1/256	1566
		N	1	1/512	1428	1/256	1978	1/512	1399
			2	1/512	1318	1/256	2425	1/256	1909
[v	1	D	1	1/1024	1o11	1/256	921	1/256	1551
			2	1/2048	973	1/512	668	1/256	2610
		N	1	1/1024	1114	1/512	1677	1/512	2004
			2	1/2048	948	1/512	1401	1/512	1525
	2	D	1	1/1024	997	1/128	2031	1/256	1996
			2	1/512	2037	1/512	2555	1/512	1773
		N	1	1/512	3114	1/256	1980	1/1024	4360
			2	1/512	2471	1/512	2363	1/1024	2588
	3	D	1	1/512	1726	1/256	2040	1/256	1563
			2	1/512	2004	1/256	1380	1/256	1592
		N	1	1/512	1698	1/256	3134	1/128	2572
			2	1/512	2323	1/2 56	1938	1/256	1048

APPENDIX IX

NUMERICAL ABUNDANCE OF ZOOPLANKTON PER M^3

APPENDIX IX - 1 - 1

NUMERICAL ABUNDANCE OF ZOOPLANKTON PER M^3

DECEMBER/JANUARY CRUISE - TRANSECT I

Station	1				2				3			
Day or Night	D	D	N	N	D	D	N	N	D	D	N	N
Replicate No.	1	2	1	2	1	2	1	2	1	2	1	2
No. of Zoopl. /m^3	L169	1398	951	727	1241	1287	1542	952	346	312	264	346
Copepoda	1000	1221	784	631	782	799	778	492	266	218	206	228
Others:	169	177	167	96	459′	488	764	46C	80	94	58	117
Cladocera												
Penilia	0.5	0	0.5	0.7	0	2.5	0.6	1.5	0	0	0	0
Ostracoda												
Euconchoecia	26.8	9.3	4.5	5.4	09.7	58.9	17s.5	361. 5	6.2	4.5	3.9	8.5
Conchoecia	0.3	0	0.5	0	1.0	0	3.4	1.5	,3.2	5.8	6.4	17.1
Mysidacea	0.3	0	0.9	0.7	4.7	2.5	0.9	. 0	0	0	0.6	0
Amphipoda	0.5	0	0	0.7	3.1	10.0	11.1	7.1	0.5	1.3	2.2	1.3
Euphausiacea	0.3	0	0	0	0	0	0.6	0.5	0.5	0.3	1.3	0.3
Lucifer	0.5	0	0	0	1.0	1.9	2.6	2′.:	0.5	0	(	0.3
Other crustacean:	3.0	5.2	0.5	0	3.6	25.7	11.4	13.7	7.3	1.3	2.(	4.7
Barnacle nauplii	0	.1.2	0	0.7	0	0	0	(	0	0	(	0
Decapod zoea	0.3	1.2	0.5	0	2.1	2.5	16.8	12.:	2.1	0.3	2.2	3.8
Decapod megalopa	0	0	0	0	0	0	0	(	0	0.3	0	0
Other crustacean larvae	2.7	5.2	2.3	0	17.2	11.3	7.1	5.:	0.5	0	(	0.3
Medusae	7.9	2.3	8.8	2.9	32.8	54.5	′59.9	20.4	8.9	3.5	2.!	3.5
Polychaeta	0	0.6	a	0	2.1	3.8	6.3	2.!	4.7	0.[	2.(	3.5
Mollusca	81.4	.26.6	′1.3	46.1	18.2	44.5	87.6	lo. ″	6.8	4.5	9.!	37.3
Chaetognatha	20.7	25.4	14.3	19.8	51.0	50.7	30.2	12.:	.1. C	1.6	.0.9	9.2
Larvacea	21.2	0	11.5	18.3	12.0	16.3	43.9	8.:	.3. 6	9.2	3.6	25.3
Doliolum	1.6	0	1.4	0.7	0.5	3.1	″3.1	(	4.2	0.8	1.1	1.9

APPENDIX IX-1-2

NUMERICAL ABUNDANCE OF ZOOPLANKTON PER M^3

DECEMBER/JANUARY CRUISE - TRANSECT II

Station	1				2				3			
Day or Night	D	D	N	N	D	D	N	N	D	D	N	N
Replicate No.	1	2	1	2	1	2	1	2	1	2	1	2
No. of Zoopl. /m^3	5417	2069	2354	1552	1275	2092	.599	994	510	522	1694	1492
Copepoda	483C	1809	2094	1226	890	1478	.336	739	368	365	1245	961
Others:	593	260	260	326	385	614	263	255	142	157	448	531
Cladocera Penilia	6.8	8.1	9.1	18.6	5.6	13.1	0.7	0	0	0	0	0
Ostracoda Euconchoecia	105.9	57.4	74.9	75.5	87.4	106.1	16.9	15.5	58.3	62.0	93.7	33.3
Conchoecia	a	2.7	6.9	0	2.2	0	.0	4.7	13.5	6.2	32.3	9.0
Mysidacea	0	0	0	3.4	1.1	4.9	0	0	0.4	0	1.2	0
Amphipoda	17.0	9.5	4.6	0	15.6	26.2	6.6	14.2	1.2	2.4	8.1	13.9
Euphausiacea	0	0	0	0	0	0	2.8	0.6	0.8	0.9	3.5	4.0
Lucifer	20.4	2.0	2.3	3.4	4.4	9.8	0.1	5.3	1.9	1.5	2.3	3.0
Other crustaceans	10.2	4.7	4.6	13.5	13.3	26.2	9.7	10.0	1.5	2.2	11.6	6.0
Decapod zoea	0	14.2	95.9	1.7	3.3	3.3	9.4	9.5	3.5	8.4	10.4	6.0
Decapod megalopa	0	0	0	0	0	0	0	0	0	0.4	0	0
Stomatopod larvae	0	0	0	0	0	0	6.2	0	0	0	0	0
Other crustacean larvae	0	0	0	0	1.1	1.6	0	1.2	0.4	1.3	0	0
us	0	12.2	4.6	16.9	13.3	8.2	2.8	4.1	2.7	6.0	18.5	22.9
Polychaeta	6.8	0.7	2.3	0	2.2	1.6	0	0.6	0.4	0.2	3.5	2.0
Mollusca	42.6	36.6	13.7	57.5	34.5	88.5	4.1	13.7	3.5	8.0	34.7	20.9
Chaetognatha	47.5	12.9	22.8	22.0	14.4	32.8	12.9	10.1	10.0	10.1	37.0	19.9
Larvacea	20.4	0	13.7	10.1	72.2	67.1	0.1	14.9	13.1	46.7	84.3	74.2
Doliolum	3.4	0	4.6	3.4	14.4	24.6	0.71	0.6	0.8	0.7	6.9	15.9

APPENDIX IX-l-3

NUMERICAL ABUNDANCE OF ZOOPLANKTON PER M^3

DECEMBER/JANUARY CRUISE - TRANSECT III

Station	1				2				3			
Day or Night	D	D	N	N	D	D	N	N	D	D	N	N
Replicate No.	1	2	1	2	1	2	1	2	1	2	1	2
No. of Zoopl./m^3	331	330	880	246	2476	1301	302	805	551	750	1812	567
Copepoda	183	268	687	054	2120	1100	086	613	394	574	976	365
Others:	148	62	193	192	356	201	216	192	158	176	836	203
Cladocera												
Penilia	5.6	1.0	1.8	1.6	0	0	0	0	0	0	0	0
Ostracoda												
Euconchoecia	8.8	3.5	3.3	0.6	39.1	23.7	5.4	9.6	1.7	0.1	70.9	47.1
Conchoecia	0	0	0	0	6.2	2.6	2.2	0	5.7	3.2	24.1	2.6
Mysidacea	0	0	0	0	0	0	0	0	0.3	0	1.3	0
Amphipoda	3.7	1.0	0.9	1.6	13.7	3.4	0.2	6.5	2.5	3.6	13.9	1.7
Euphausiacea	0	0	0	0	2.5	0	0.7	0.7	0.3	0.4	2.5	0.4
Lucifer	0	0	0	1.6	0	2.6	0.7	0	0.3	1.6	3.8	1.7
Other crustaceans	3.7	4.9	3.7	3.2	32.4	18.1	7.7	10.2	1.9	1.6	11.4	3.4
Decapod zoea	0	1.0	0	0	7.5	6.9	1.5	1.5	1.6	5.2	16.5	4.7
Decapod megalopa	0	0	0	0	1.2	0	0	0	0	0	1.3	0
Other crustacean larvae	0	0	0	0	1.2	0.9	1.5	0	1.3	0.4	5.1	0.9
Medusae	5.6	2.0	10.1	4.8	41.2	24.9	19.2	16.7	7.0	4.4	2.5	6.0
Polychaeta	0	0	1.8	0	1.2	0.9	0	0	1.6	0.8	0	0.4
Mollusca	31.9	11.9	18.4	12.1	34.9	29.2	12.6	16.7	11.4	15.6	92.6	5.2
Chaetognatha	11.2	6.9	17.4	33.7	17.9	22.4	15.7	11.6	15.2	11.2	36.8	9.9
Larvacea	17.5	17.8	13.8	12.8	46.2	49.9	19.9	35.6	14.0	15.1	52.0	18.1
Doliolum	0	2.0	1.8	0	11.2	15.5	8.7	2.9	3.1	2.8	1.3	0.9
Echinoderm larvae	0	0	0	0	0	0.9	0	0	0	0	0	0

APPENDIX IX-1-4

NUMERICAL ABUNDANCE OF ZOOPLANKTON PER M^3

DECEMBER/JANUARY CRUISE - TRANSECT IV

Station	1				2				3			
Day or Night	D	D	N	N	D	D	N	N	D	D	N	N
Replicate No.	1	2	1	2	1	2	1	2	1	2	1	2
No. of Zoopl./m^3	1964	1933	1649	2875	1141	1082	1415	1434	93a	1214	892	1049
Copepoda	1801	1665	1385	2627	885	933	1101	1119	703	931	687	856
Others:	163	268	264	248	256	149	315	315	235	284	205	193
Cladocera												
Penilia	7.8	11.1	13.7	9.1	29.8	31.9	64.1	26.1	8.2	12.7	9.4	9.0
Ostracoda												
Euconchoecia	53.0	12.2	15.7	29.7	23.4	12.5	10.2	18.3	30.7	77.5	12.1	33.5
Conchoecia	0	0	1.5	0	0	1.1	0	5.2	4.9	3.0	8.9	7.2
Mysidacea	0	0	0	0	0	0	0	0	0.5	0	0	0
Amphipoda	9.7	11.1	16.6	48.5	8.0	6.4	22.3	23.8	4.9	4.2	7.4	8.6
Euphausiacea	0	0	0	0	0	0	0.4	0	1.1	1.2	3.2	0.9
Luci fer	1.9	0	4.4	3.0	1.1	0	2.3	2.3	0	0.6	2.6	0.9
Other crustaceans	1.9	9.0	8.9	6.1	10.3	6.5	26.4	15.7	7.6	12.7	11.0	19.0
Barnacle nauplii	0	0	0	0	0	0	0.9	0	0.5	1.2	0	0
Decapod zoea	3.9	6.0	0	0	1.1	2.7	8.2	0.6	2.7	3.6	2.1	2.3
Decapod megalopa	0	0	0	0	0	0	0	0	0	0.6	0	0
Other crustacean larvae	0	0	0	0	0	0	0	0.6	1.1	1.2	2.6	1.8
Medusae	9.7	7.1	11.1	21.2	13.7	9.6	11.4	21.5	32.1	23.0	4.2	22.6
Polychaeta	1.9	6.0	4.4	0	1.1	1.1	0	1.7	0.5	0.6	3.2	0.5
Mollusca	11.1	1.2	15.9	03.1	11.4	8.5	25.0	37.7	11.4	9.7	3.6	55.1
Chaetognatha	1.7	9.2	4.8	9.1	27.5	9.1	20.5	27.9	17.4	21.2	8.9	9.0
Larvacea	7.5	5.1	2.6	12.1	25.2	8.5	19.1	23.2	7.6	4.9	1.6	15.4
Doliolum	3.9	0	4.4	6.1	3.4	1.1	3.6	10.4	3.8	5.5	4.2	7.2
Echinoderm larvae	0	0	0	0	0	0	0	0	0	0.6	0	0

APPENDIX 'IX-2-1

NUMERICAL ABUNDANCE OF ZOOPLANKTON PER M^3

APRIL/MAY CRUISE - TRANSECT I

Station	i				2				3			
Day or Night	D	D	N	N	D	D	N	N	D	D	N	N
Replicate No.	1	2	1	2	1	2	1	2	1	2	1	2
No. of Zoopl./m^3	6739	0840	0065	5879	589	539	2176	046	544	427	5%4	423
Copepoda	6378	9745	9186	5423	357	323	1514	771	365	274	354	277
Others:	361	1095	979	456	231	2:6	662	275	179	153	230	146
Cladocera												
Evadne	0	0	0	0	0.4	0	0	0.9	0.3	0	0.4	0.5
Ostracoda												
Euconchoecia	17.6	0	0	22.0	1.1	1.7	50.5	9.8	52.7	4.1	20.1	77.4
Conchoecia	0	0	0	0	0	0	0	0	1.0	0.2	8.9	4.3
other ostracods	0	0	0	0	0	0	0	0	0	0	7.1	0
Mysidacea	28.1	37.5	91.6	69.8	0	0	0	0	0	0	0	0.3
Amphipoda	0	15.0	9.2	7.3	6.8	3.0	85.9	0.5	2.6	2.3	5.7	4.0
Euphausiacea	0	0	0	0	0	0	0	0	0	0	1.1	0.3
Lucifer	7.0	0	9.2	3.7	5.0	3.6	8.4	0.9	0.3	0	0.4	0
Other crustaceans	0	0	64.1	25.7	0	0.7	5.1	0.9	0	0	0.4	0
Barnacle nauplii	10.5	52.5	9.2	18.4	0	0	0	0	0	0	0	0.8
Barnacle cypris	73.7	94.8	27.5	0	5.0	2.6	40.4	1.6	1.0	4.7	6.1	21
Other nauplii	3.5	0	0	0	8.1	32.3	35.4	6.0	0.8	0	0	0
Decapod zoea	45.6	67.5	36.6	11.0	9.4	8.3	20.2	5.3	0.5	0.7	0.7	0.5
Decapod megalopa	0	7.5	0	0	1.8	8.6	6.7	8.0	0	0.2	0.4	0.3
Stomatopod larvae	0	0	0	0	2.5	3.3	a.4	3.6	0	0.2	0.7	0.3
Other crustacean larvae	10.5	45.0	45.8	25.7	6.0	27.7	47.2	9.6	2.3	2.6	1.1	1.3
Medusae	0	0	0	3.7	0.6	29.7	42.1	1.1	29.8	.7.7	1.4	13.1
Polychaeta	0	0	27.5	18.4	1.1	0.3	6.7	0	3.1	0.2	1.4	0.8

Appendix IX-2-1 (cont.)

Mollusca	133.4	344.8	430.5	169.0	6.5	.2.2	.41.5	25.8	31.6	10.1	40.3	20.5
Chaetognatha	21.1	22.5	109.9	69.8	60.S	6.1	.41 5	62.3	19.3	21.7	21.0	10.9
Larvacea	3.5	0	9.2	3.7	9.7	1.3	3.4	1.8	5.0	6.8	8.6	4.0
Doliolum	3.5	0	0	3.7	26.6	4.8	18.5	16.9	29.0	0.5	3.6	0
Salpa	3.5	0	0	0	0	0	0	0	0	0.7	1.1	2.4
Echinoderm larvae	0	7.5	9.2	3.7	0	0	0	0	0	0	0.4	1.9
Others	0	0	0	0	0	0	0	0	0	0	0	0.5

APPENDIX IX-2-2

NUMERICAL ABUNDANCE OF ZOOPLANKTON PER M^3

APRIL/MAY CRUISE - TRANSECT II

Station	1								3			
Day or Night	D	D	N	N				N	D	D	N	N
Replicate No.	1	2	1	2				2	1	2	1	2
No. of Zoopl./m^3	2578	1351	5661	4476				3559	323	364	481	639
Copepoda	1368	88C	3624	2806				1249	276	299	364	552
Others:	1192	47]	2037	1670				2310	47	65	117	87
Cladocera												
Evadne	0	0	0	0				0	0.7	2.0	0.5	2.2
Ostracoda												
Euconchoecia	97.1	119.8	127.3	9.7				899.4	3.1	1.6	7.4	0
Conchoecia	0	0	0	0				0	3.3	0	3.8	0
Other ostracod	2.3	3.8	0	0				0	0	0	0	0
Mysidacea	0	1.3	4.0	9.7				4.0	0	0	0	0
Amphipoda	42.2	10.1	71.6	39.0				27.8	2.0	3.1	9.2	5.0
Euphausiacea	0	0	0	0				0	0	1.9	1.6	0
Lucifer	1.2	(	11.9	0				0	0	0.1	0.5	1.1
Other crustacean	0	0	4.0	0				0	0	0	0.5	0
Barnacle nauplii	70.1	44.1	5s.7	74.8				0	0.1	0.1	0	0
Barnacle cypris	74.5	12.6	119.4	29.3				66.2	1.1	1.7	3.3	11.7
Other nauplii	4.7	1.3	11:9	3.3				0	1.0	6.0	2.7	6.1
Decapod zoea	36.4	29.0	47.7	55.3				34.4	1.9	1.s	1.1	1.1
Decapod megalopa	0	0	4.0	0				0	1.7	1.3	1.1	0
Stomatopod larva	3.5	7.6	0	0				1.3	0.5	0.3	1.6	1.1
Other crustacean larvae	21.1	32.8	27.8	22.8				10.6	1.9	2.9	0.5	5.0
Medusae	2.3	3.8	19.9	3.3				2.6	5.4	0.4	8.7	8.9
Polychaeta	4.7	0	11.9	3.3				1.3	0.5	0.9	1.1	1.1

Appendix IX-2--2 (cont.)

Mollusca	363.6	135.0	1221.4	1293.9	1212.6	1416.9	131.0	165.7	8.0	4.4	6.0	**16.7**
Chaetognatha	41.1	42.9	139.2	78.0	179.5	124.6	91.9	79.5	14. 4"	11.6	14.6	15.0
Larvacea	22.3	22.7	143.2	48.8	32.8	30.4	4.2	15.9	1.4	12.0	16. s	6.7
Doliolum	**4.7**	3.8	11.9	"o	**0.9**	**3.1**	0	1.3	0.5	1.3	1.1	1.1
Salpa	0	0	**0**	0	0	0	0	0	"o	1.3	4.3	3.9
Others	0	" o	**4.0**	0	0	0	0.6	0	0	0.1	**0.5**	0

APPENDIX IX-2-3

NUMERICAL AWNDANCE OF ZOOPLANKTON PER M^3

APRIL/MAY CRUISE - TRANSECT III

Station Day or Night Replicate No.	1 D 1	D 2	N 1	N 2	2 D 1	D 2	N 1	N 2	3 D 1	D 2	N 1	N 2
No. of Zoopl. /m^3	2661	651	2756	2101	333	834	835	705	409	376	623	750
Copepoda	2309	398	2278	1729	233	678	441	352	297	285	404	388
Others:	353	2S3	478	372	100	156	394	353	112		219	362
Cladocera Evadne	0	0	0	0	0	1.5	5.0	1.0	1.6	1.3	0.3	1.2
Ostracoda Euconchoecia Conchoecia	46.9 0	0.6 0	5.9 0	12.0 0	0 0	0.4 0	02.8 0	35.7 0.7	4.6 2.4	1.0 1.3	0.5 3.1	30.0 2.2
Mysidacea	0	0	3.0	0	0	0.4	0.3	0	0	0	0	0
Amphipoda	49.8	4.7	93.2	11.3	1.6	1.1	0	4.0	4.4	2.3	7.9	3.7
Euphausiacea	0	0	0	0	0	0	0.9	0	0.8	0.5	0	0.3
Lucifer	4.3	2.4	5.9	16.5	0.7	0.4	0.3	0.7	0.8	1.0	0.3	0.6
other crustaceans	1.4	1.2	5.9	1.5	0	0.4	0	0	0.3	0	0	0
Barnacle nauplii	0	0	1.5	0	0	0	0.6	0	0	0	0	0.3
Barnacle cypris	2.8	0	1.5	0	2.4	0.4	32.2	24.1	0.8	1.3	9.7	21.4
Other nauplii	11.4	3.6	8.9	1.5	0.9	1.5	1.8	0.7	3.0	4.1	1.3	0.3
Decapod zoea	21.3	2.1	16.3	25.6	1.8	3.4	6.2	4.0	2.2	1.0	0	1.2
Decapod megalopa	0	2.4	0	1.5	0	0.4	0.3	0.3	0.8	0.3	0	0.6
Stomatopod larvae	4.3	4.8	4.4	3.0	1.1	2.6	2.7	3.0	0.3	0	0	0.3
Other crustacean larvae	19.9	5.7	31.1	18.0	3.8	4.9	9.5	10.6	3.3	1.3	3.8	2.5
Medusae	8.5	7.3	69.6	28.6	1.9	35.1	21.0	27.1	9.6	5.9	7.0	15.2
Polychaeta	2.8	1.2	1.5	0	1.6	0.4	5.6	2.6	1.4	0.5	0.6	0.6

Appendix IX-2-3 (cont.)

Mollusca	135.1	96.7	.39 .X	63.2	13.6	54.8	65.6	107.3	15.5	9.2	25.2	**3.1**
Chaetognatha	37.0	33.8	75.5	73.7	31.3	42.7	17.4	16.5	29.7	32.2	**31.2**	**13.0**
Larvacea	0	2.4	3.0	6.0	1.3	3.0	3.5	1.7	14.5	5.1	11.0	**1.2**
Doliolum	7.1	3.6	11.8	4.5	6.9	1.5	6.8	5.3	0	0.5	4.1	**1.5**
Salpa	**0**	0	0	1.5	0.5	1.5	11.2	7.6	4.9	1.8	1.9	**3.1**
Echinoderm larvae	0	0	0	0	0	0	0.3	0.3	1.1	0	0.3	**0**
Others	0	0	0	3.0	0.2	0	0	0	0	0	0	**0**

APPENDIX IX-2-4

NUMERICAL ABUNDANCE OF ZOOPLANKTON PER M^3

APRIL/MAY CRUISE - TRANSECT IV

Station	1				2				3			
Day or Night	D	D	N	N	D	D	N	N	D	D	N	N
Replicate No.	1	2	1	2	1	2	1	2	1	2	1	2
No. of Zoopl. /m^3	694	11?6	2404	1878	393	1877	785	3415	849	603	1380	691
Copepoda	289	526	1022	"838	162	851	206	633	625	'423	494	409
Others:	405	650	1382	1040	231	10?5	579	2782	224	180	886	
Cladocera												
Evadne	0	0	0	.0	0	o	c	0	0.4	0	0	0.4
Ostracoda												
Euconchoecia	44.2	81 .7	153.4	206 .4	'4.7	170.1	30.0	1537.9	38.7	'5.3	81.4	,1.4
Conchoecia	0	0	0	, 0	0.2	0	c	0	9.6	2.6	6.2	0.7
Other **ostracods**	0	0	0	0	0	0	14.3	0	0	0	0	0
Mysidacea	0.8	1.8	0	0	0.8	1.5	0.4	0	0	0.4	0.9	0.7
Amphipoda	44.5	73.9	77.4	38.9	9.1	58.8	22.2	205.2	21.2	'1.8	39.6	6.0
Euphausiacea	" o	0	0	0	0	0	c	0	0	2.2	2.6	1.1
Lucifer	0.8	8.6	5.7	4.0	0.6	2.9	2.8	5.8	0	0.4	.0.3	1.1
Other crustaceans	o	0	2.9	0	0	0	c	o	0	"o	0	0
Barnacle **nauplii**	0	0	11.5	20.1	0.2	0	c	1.4	0.8	0.4	0	0.7
Barnacle **cypris**	0.8	0	5.7	2.7	8.7	104 .3	17.8	150.3	35.4	'7.1	95 .3	5.0
Other **nauplii**	0	0	0	4.0	0	0	c	o	0.4	1.3	0	0
Decapod zoea	'4.5	7.0	24.4	17.4	4.8	33.1	3.2	20.2	3.7	4.8	11.0	6.1
Decapod megalopa	0.8	5.3	0	1.3	0	0.7	0.4	1.4	2.9	0	2.6	4.6
Stomatopod larvae	2.3	5.3	1.4	2.7	0.4	5.1	1.:	2.9	0.4	0.9	2.2	2.5
Other crustacean larvae	6.8	14.1	60.2	17.4	6.4	38.2	12.7	18.8	5.0	4.4	4.8	8.2
Medusae	3.0	3.5	74.6	49.6	.0.8	58.8	11.9	15.9	20.0	5.8	2.2	4.3
Polychaeta	0	3.5	67.4	20.1	0.8	9.5	2.4	28.9	0	1.7	0.9	1.1

Appendix .1X-2-4 (cont.)

Mollusca	15.8	47.5	536.6	537.5	43.6	94.7	51.8	656.2	9.5	24.5	10.1	66.4
Chaetognatha	20.3	45.8	53.1	33.5	17.2	87.4	13.5	31.8	6.6	8.7	16.3	23.5
Larvacea	0	3.5	15.8	12.1	0	8.1	0	13.0	3.7	20.1	4.4	14.3
Doliolum	58.8	46.1	163.4	72.4	13.0	41.1	24.2	91.1	4.2	7.0	5.3	13.6
Salpa	0	0	0	0	0	0	0.4	0	1.2	0	0	0
Echinoderm larvae	0	0	28.7	0	0	11.0	0	0	0	0	0	0
others	1.5	1.8	0	0	0.2	0	0	1.4	0.4	0	0	0

APPENDIX IX-3-1

NUMERICAL ABUNDANCE OF ZOOPLANKTON PER M^3

AUGUST/SEPTEMBER CRUISE - TRANSECT I

Station	1				2				3			
Day or Night	D	D	N	N	D	D	N	N	D	D	N	N
Replicate No.	1	2	1	2	1	2	1	2	1	2	1	2
No. of Zoopl./m^3	720	2030	3578	4478	1179	1687	1381	798	600	895	857	877
Copepoda	494	1564	1299	2923	735	1114	568	549	428	563	581	565
Others:	226	467	2279	1555	443	573	813	249	171	332	276	312
Cladocera												
Evadne	16.6	24.9	1043.3	53.0	1.3	2.7	0	0.7	3.4	2.5	3.0	5.3
Penilia	68.8	67.3	832.9	18.8	42.1	157.9	170.4	22.7	0.7	0	0	0
Ostracoda												
Euconchoecia	0	5.4	1.7	0	234.3	121.2	268.3	81.9	65.6	37.1	42.4	179.8
Conchoecia	0	0	0	0	0	0	0	0	5.2	11.3	18.0	12.0
other ostracods	0	0	0	0	0	0	0	0	0	0	0	0
Mysidacea	0	0	0.6	2.1	0	0	0	0	0	0	0	0
Amphipoda	5.1	10.2	14.6	37.0	10.9	10.9	31.5	4.4	1.5	5.1	4.2	2.3
Lucifer	14.8	30.2	99.4	26.3	40.2	53.1	14.3	8.0	0	0	0.3	0.6
Other crustaceans	0	0	0	2.1	0	0	0	9.5	0	0	0	0
Barnacle nauplii	0.3	0	0	0	0	0	0	0	0	0.4	0	0.3
Barnacle cypris	0	1.5	0	8.2	0	1.4	1.1	0	0	0	0.3	0.3
Other nauplii	3.7	7.8	5.3	8.2	1.9	0	0	0	0	0	0.3	0
Decapod zoea	9.1	50.7	5.3	41.1	33.8	35.4	21.2	32.9	0.4	0	0.9	0.3
Decaped megalopa	0.3	0.5	1.2	14.4	0	0	0	0	0.4	0	0.3	0
Decapod larvae	2.0	5.4	1.7	4.1	3.8	4.1	5.7	4.4	0.7	1.8	1.5	1.5
Stomatopod larvae	0.3	0	1.2	10.3	0	0	0	0	0.4	0	0	0
Other crustacean larvae	20.0	114.1	195.2	23.7	31.3	85.8	8.6	0	0.7	0.4	2.1	5.6
Medusae	0.9	1.5	1.2	2.1	8.9	20.4	6.9	11.0	12.3	19.6	5.4	11.4
Polychaeta	0	0	0.6	0	0	0	1.7	2.9	3.3	11.6	3.6	5.3

Appendix IX-3-1 (cont.)

Mollusca	32.0	44.4	4.7	67.9	10.9	16.3	28.1	12.5	11.2	25.8	33.6	23.4
Chaetognatha	47.4	100.0	52.6	109.0	19.8	38.1	29.8	24.9	16.0	33.1	15.0	15.2
Larvacea	4.3	2.9	13.4	20.6	3.8	10.9	20.1	19.0	28.7	5n.9	33.6	31.6
Doliolum	0	0	0	0	0	10.9	1.2	2.2	2.6	3.6	1.5	0.3
Salpa	0	0	0	0	0	0	3.4	0.7	9.7	14.2	4.2	7.6
Echinoderm larvae	0	0	0	0	0	4.1	0.6	7.3	6.0	8.0	5.1	9.4
Others	0	0	4.1	6.2	0	0	0	4.4	2.6	6.5	0.3	0

APPENDIX IX-3-2 .

NUMERICAL ABUNDANCE OF ZOOPLANKTON PERM^3

AUGUST/SEPTEMBER CRUISE - TRANSECT II

Station Day or Night Replicate No.	1 D 1	D 2	N 1	N 2	2 D 1	D 2	N 1	N 2	3 D 1	D 2	N 1	N 2
No. of Zoopl./m^3	2534	2076	5733	1681	214	259	317	1022	670	707	501	727
Copepoda	1916	1629	3547	1207	157	165	209	651	526	591	400	566
Others:	618	448	2186	474	57	93	108	370	144	117	101	161
Cladocera												
Evadne	36.8	16.7	26.5	9.3	0.8	1.9	0.5	3.7	3.0	10.5	2.0	3.7
Penilia	14.8	89.4	48.5	13.3	0.2	0.4	0.3	4.9	0	0	0.7	0
Ostracoda												
Euconchoecia	1.5	0	19.9	14.6	22.1	7.9	55.9	87.8	16.1	10.1	31.7	59.6
Conchoecia	0	0	0	0	0	0	0	0	8.2	4.6	3.3	4.4
Other ostracods	0	0	0	0	0	0	0.3	3.7	0	0	0	0
Mysidacea	0	0	15.4	0	0	0	0	0.4	0	0	0	0
Amphipoda	45.6	31.3	79.4	22.6	4.3	6.8	2.5	35.6	9.8	0	5.4	9.2
Lucifer	23.5	11.2	50.7	17.3	0.3	0.2	0.9	0.8	0	0.9	0.7	0
Other crustacean:	0	0	2.2	0	0	0	0.3	0	0	0	0	0
Barnacle nauplii	0	0	0	1.3	0	0	0	0	0	0	0	0
Barnacle cypris	0	0	2.2	1.3	0	0	0	1.5	42.0	0.9	0.3	0.7
Other nauplii	22.1	20.1	24.3	24.0	0	0	0	0	0	0	0	0
Decapod zoea	25.0	7.8	39.7	5.3	2.8	2.3	4.6	24.8	0.9	0.9	1.4	2.7
Decapod megalopa	5.9	4.5	2.2	5.3	0.9	1.9	2.5	1.9	0.2	0	0	0
Decapod larvae	19.1	13.4	130.2	43.9	0.7	1.5	1.9	7.9	3.0	0.9	4.3	0
Stomatopod larvae	2.9	0	0	0	0.1	0	0	0	0	0.5	0.1	0
Other crustacean larvae	32.4	10.1	46.3	33.3	0	0.2	3.7	7.5	0.7	0	0	4.0
Medusae	45.6	20.1	55.1	5.3	2.9	4.5	4.9	22.9	13.5	23.8	13.1	18.5
Polychaeta	1.5	0	6.6	1.3	0	0.6	0.5	2.3	0	0.5	9.0	6.4
Mollusca	58.8	20.1	294.9	81.1	1.7	10.7	8.1	122.6	21.7	23.8	9.6	14.8

Appendix IX- 3-2 (cont.)

Chaetognatha	97.1	15.0	302.2	78.5	15.2	21.5	18.1	30.7	11.7	13.7	10.4	17.2
Larvacea	70.6	78.2	37.5	14.6	4.6	31.8	2.3	4.5	12.4	22.0	8.3	16.8
Doliolum	13.2	10.0	2.2	1.3	0.2	0.4	0.7	6.7	0.7	2.7	0.7	1.3
Salpa	0	0	0	0	0	0	0	0	0	0.5	0	1.3
Echinoderm larvae	1.5	0	0	0	0	0	0	0	0.2	0.5	0	0
others	0	0	0	0	0	0.6	0	0	0	0	0.1	0

APPENDIX IX-3-3

NUMERICAL ABUNDANCE OF ZOOPLANKTON PER M^3

AUGUST/SEPTEMBER CRUISE - TRANSECT III

Station Day or Night Replicate No.	1 D 1	D 2	N 1	N 2	2 D 1	D 2	N 1	N 2	3 D 1	D 2	N 1	N 2
No. of Zoopl. /m^3	1338	1644	2527	1108	1123	1053	2919	1865	831	10E9	1396	15
Copepoda	957	1039	1824	700	974	908	1251	911	596	691	1107	11
Others:	381	605	703	408	148	145	166[	954	239	398	288	3
Cladocera												
Evadne	18.2	10.8	3.8	1.3	9.6	2.6	5.4	0.8	5.9	0.7	6.0	4
Penilia	8.3	3.2	10.1	3.8	0	0	0	0	0	0.7	4.0	
Ostracoda												
Euconchoecia	9.1	2.2	2.5	0.6	1.6	1.7	146. S	98.2	97.3	07.7	27. i	81
Conchoecia	0	0	0	0	0	0	0	0	7.7	7.6	1.0	0
Other ostracods	0	0	0	0	a	a	3.6	2.5	0	3.5	2.0	2
Mysidacea	0	0	0	0.6	a	0.9	0	0	0	0	0	
Amphipoda	32.2	26.0	30.2	5.1	4.0	1.7	12.6	2.5	13.6	9.0	6.0	35
Lucifer	14.9	17.3	35.2	35.4	4.0	0	5.4	0.8	0	0.7	1.0	2
Other crustaceans	0	0	0	7.6	0	0	0	0	0	0	0	
Barnacle nauplii	18.2	1.1	0	0	a	0	1.8	0	0	0	0	
Barnacle cypris	0	1.1	1.3	1.3	0.8	1.7	48.5	10.8	44.8	72.4	0	1
Other nauplii	39.6	55.2	5.0	3.2	0	0	0	0	0	0	0	
Decapod zoea	10.7	20.6	11.3	33.5	6.4	14.7	5.4	6.6	0	0.7	5.0	3.
Decapod megalopa	4.1	3.2	1.3	2.5	0	0	0	0	0	0	0	
Decapod larvae	18.2	14.1	0	0	1.6	0	0	0	0	0	0	
Stomatopod larvae	0.8	1.1	1.3	2.5	2.4	0	0	0	0	0	0	
Other crustacean larvae	16.5	64.2	05.6	08.1	0	2.6	16.1	6.6	5.9	6.3	4.0	6.
Medusae	10.7	13.0	2.5	19.6	5.6	10.4	19.7	26.6	10.6	13.2	24.9	11.
Polychaeta	8.3	0	2.5	1.9	1.6	0.9	7.2	2.5	0	0.7	2.0	0.
Mollusca	49.5	63.9	26.3	36.5	52.9	36.4	314.1	96.3	27.1	25.0	31.9	55.

Appendix IX-3-3 (cont.)

Chaetognatha	76.0	75.8	55.3	26.6	26.5	30.4	35.9	59.0	10.0	11.8	40.9	23.8
Larvacea	33.0	30.3	5.0	10.1	27.3	33.0	28.7	27.4	13.0	36.1	16.0	44.4
Doliolum	4.9	2.2	1.3	0	4.0	0	5.4	0.8	2.4	1.4	2.0	2.5
Salpa	4.9	0	1.3	3.8	0	0	1.8	3.3	1.2	0	1.0	1.6
Echinoderm larvae	0.8	0	0	0	0	0.9	0	5.0	0	0	0	0
Others	1.7	0	1.3	3.8	0	6.9	9.0	4.2	0	0	13.0	12.3

APPENDIX IX-3-4

NUMERICAL ABUNDANCE OF ZOOPLANKTON PER M^3

AUGUST/SEPTEMBER CRUISE - TRANSECT Iv

Station Day or Night Replicate No.	1 D 1	D 2	N 1	N 2	2 D 1	D 2	N 1	N 2	3 D 1	D 2	N 1	N 2
No. of Zoopl. /m^3	736	1386	1909	2114	2587	166	7067	4468	998	983	471	565
Copepoda	472	996	1037	1335	1177	677	2057	1342	823	791	378	455
others:	264	390	872	779	1410	985	5010	3127	175	192	94	111
Cladocera												
Evadne	2.8	2.1	3.8	11.1	1.3	0.9	1.6	0	4.5	0.6	0.7	1.1
Penilia	0.9	5.8	0	4.2	10.4	16.9	38.9	0	0	0	1.5	1.6
Ostracoda												
Euconchoecia	10.9	13.6	17.1	1.4	920.3	638.1	4220.5	2393.0	7.7	21.6	20.1	29.7
Other ostracods	0	0	0	0	0	1.9	0	0	0	0	0	0
Mysidacea	0	0	0	1.4	0	0	0	0	0	0	0	0
Amphipoda	15.7	24.9	48.6	31.9	38.9	34.7	79.4	38.0	8.9	3.7	1.5	2.2
Euphausiacea	0	0	0	0	0	0	0	0	0	0	0.2	0
Lucifer	10.9	4.8	5.7	13.9	0	5.6	14.6	10.4	5.1	1.3	1.5	3.2
Other crustaceans	0	0	0	5.5	0	0	0	0	0	0	0.2	0
Barnacle nauplii	0	0	0	0	0	0	0	0	0	0	0.2	0
Barnacle cypris	0	0	2.9	1.4	0	0	0	1.7	0.6	0	0	0
Other nauplii	5.7	1.1	3.8	4.2	16.8	0	0	0	0	0	0	0.5
Decapod zoea	25.1	12.2	22.9	23.6	67.4	9.4	8.1	15.5	13.4	14.8	2.9	4.9
Decapod megalopa	0.9	0	0	0	1.3	0.9	0	5.2	0.6	0.6	0	0
Decapod larvae	5.7	4.8	9.5	8.3	15.6	4.7	16.2	12.1	10.2	1.8	2.9	2.7
Stomatopod larvae	0.5	0.5	3.8	0	0	0	1.6	0	0	0.6	0	0.5
Other crustacean larvae	49.3	53.1	90.5	90.1	3.9	5.6	11.3	5.2	2.6	4.9	1.6	3.8
Medusae	15.7	11.7	10.5	9.7	29.8	6.6	30.8	46.6	17.9	27.8	9.0	11.9
Polychaeta	2.4	2.7	6.7	6.9	1.3	1.9	3.2	6.9	0.6	0	0.4	1.1
Mollusca	44.6	70.6	602.0	404.7	171.1	172.4	487.9	478.2	35.6	39.3	19.6	12.9

Appendix IX-3-4 (cont.)

Chaetognatha	49.8	48.3	31.4	36.0	63.5	30.9	58.4	53.5	34.5	51.2	9.5	12.9
Larvacea	13.3	27.6	9.5	109.5	64.0	40.3	30.8	27.6	24.3	19.1	15.6	14.6
Doliolum	2.4	3.7	1.0	4.2	2.6	4.7	4.9	8.6	1.9	3.7	0.9	2.2
Salpa	6,2	1.1	1.9	0	0	7.5	1.6	6.9	1.3	0.6	0.4	0.5
Echinoderm larvae	0	0.5	0	5.5	0	0	0	0	0	0	0	0
Others	1.4	0.5	0	5.5	1.3	1.9	0	17.3	1.3	0	4.9	4.3

APPENDIX X

PERCENTAGE COMPOSITION OF ZOOPLANKTON

APPENDIX X-l-1

PERCENTAGE COMPOSITION OF ZOOPLANKTON

DECEMBER/JANUARY CRUISE - TRANSECT I

Station Day or Night Replicate No.	I	D 2	N 1	N 2	2 D 1	1					1	N 2
Copepoda %	5.	87.3	82.4	86.7	63.1	62					78	66.0
Others %	.4.	12.7	17.5	13.3	36.9	37					21	34.0
Percentage Composition of Zooplankton other than Copepods (100%)												
Cladocera												
Penilia	O.	0	0.3	0.8	0	o						c
Ostracoda												
Euconchoecia	6.	5.5	8.6	6.1	67.4	53					24	7.8
Conchoecia	O.	0	0.6	0	0.3	0.					LO	14.5
Mysidacea	O.	0	0.6	0.8	1.0	O.					1	c
Amphipoda	O.	0	0	0.8	0.7	2.					3	1.1
Euphausiace a	O.	0	0	0	0						1	0.3
Lucifer	0.	0	0	0	0.3	O.						0.3
Other crustacean	1.	2.9	0.3	0	0.8	5.					3.	4.0
Barnacle nauplii		0	0	0.8	0							0
Other nauplii		0.7	0	0	0							0
Decapod zoea	0.	0.7	0.3	0	0.4	O.					3.	3.2
Decapod megalopa		0	0	0	0							0
Other crustacean larvae	1.	2.9	1.4	0	3.7	2.						0.3
Medusae	4.	1.3	5.2	3.0	7.1	Il.					4.	3.0
Polychaeta		0.3	0	0	0.4	o.					3.	3.0
Mollusca	B.	71.3	12.7	47.6	4.0	9.					.6.	31.7
Chaetognatha	2.	14.3	20.5	20.5	11.1	LO.					.8.	7.8
Larvacea	2.	0′	L8.8	18.9	2.6	3.					6.	21.5
Doliolum	1.	0	0.8	0.8	0.1′	0.					1.	1.6

APPENDIx X-1-2

PERCENTAGE COMPOSITION OF ZOOPLANKTON

DECEMBER/JANUARY CRUISE - TRANSECT II

Station	1				2				3			
Day or Night	D	D	N	N	D	D	N	N	D	D	N	N
Replicate No.	1	2	1	2	1	2	1	2	1	2	1	2
Copepoda %	9.3	87.4	38.9	79.(	69.[	70.[	83.6	74.4	72.1	69.9	73.5	64.4
Others %	0.7	12.6	11.1	21.(	30.:	29.4	16.4	25.5	27.9	30.1	26.5	35.6
Percentage Composition of Zooplankton other than Copepods (100%)												
Cladocera												
Penilia	1.2	3.2	3.5	5.8	1.4	2.1	0.3	c	0	0	0	0
Ostracoda												
Euconchoecia	2.6	60.2	28.9	53.9	48.6	33.6	36.8	37.4	48.2	39.'5	46.9	44.0
Conchoecia	0	1.1	2.6	0	0.6	0	0	1.9	9.5	3.9	3.6	1.7
Mysidacea	0	0	a	1.0	0.3	0.8	0	c	0.3	0	0.3	0
Amphipoda	2.9	3.2	1.8	0	4.0	4.3	6.3	9.5	0.8	1.5	1.8	2.6
Euphausiacea	0	0	0	"o	c	0	1.1	0.2	0.5	0.6	0.8	0.7
Lucifer	3.5	0.9	0.9	1.0	1.2	1.6	7.6	2.1	1.4	1.0	0.5	0.6
Other crustaceans	1.8	1.7	1.7	4.1	3.5	4.3	3.7	3.9	1.1	'1.4	2.6	1.1
Decapod zoea	0	5.8	6.8	0.5	0.9	0.5	7.4	3.7	2.4	5.4	2.3	1.1
Decapod megalopa	0	0	0	0	c	0	0	0	0	0.2	0	0
Stomatopod larvae	0	0	0	0	c	0	2.4	0	0	0	0	0
Other crustacean larvae	0	0	0	0	0.3	0.3	0	0.5	0.3	0.8	0	0
Medusae	0	4.9	1.7	5.2	3.5	1.3	1.1	1.6	1.9	3.8	4.1	4.3
Polychaeta	1.2	0.3	0.9	0	0.6	0.3	0	0.2	0.3	0.1	0.8	0.4
Mollusca	4.6	14.1	5.3	.7.6	9.0	.4.4	1.5	17.2	2.4	5.1	7.7	3.9
Chaetognatha	3.2	4.6	8.8	6.7	3.8	5.3	16.3	7.9	7.1	6.4	8.2	3.7
Larvacea	3.5	0	5.3	3.1	.8.7	17.2	15.3	13.7	23.3	29.7	18.8	32.8
Doliolum	).6	0	1.7	1.0	3.7	4.0	0.3	0.2	0.5	0.5	1.5	3.0

APPENDIX X-1-3

PERCENTAGE COMPOSITION OF ZOOPLANKTON

DECEMBER/JANUARY CRUISE - TRANSECT III

Station	1				2							
Day or Night	D	I	1	N	D	D	N	N				N
Replicate No.	1	2		2	1	2	1	2				2
Copepoda %	93.7	97,	89	91.4	85.6	84.5	83.4	76.1				64.3
Others %	6.3	2,	10	8.5	14.4	15.5	16.6	23.9				35.7
Percentage Composition of Zooplankton other than Copepods (100%)												
Cladocera												
Penilia	3.8	1.	1	0.8	0	0	0	0				0
Ostracoda												
Euconchoecia	32.9	22.	43	31.7	38.9	11.5	20.9	46.[				72.4
Conchoecia	0			0	1.8	1.3	1.0	0				1.3
Mysidacea	0			0	0	0	0	0				0
Amphipoda	2.5	1.	0.	0.8	3.9	1.7	4.7	3.4				0.8
Euphausiacea	0			0	0.7	0	0.3	0.4				0.2
Lucifer	0			0.8	0	1.3	0.3	0				0.8
Other crustaceans	2.5	7.	1.	1.7	9.1	9.0	12.8	5.3				1.7
Decapod zoea	0	1.		0	2.1	3.4	0.7	0.7				2.3
Decapod megalopa	0			0	0.4	0	0	0				0
Other crustacean larvae	0			0	0.4	0.4	0.7	0				0.4
Medusae	3.8	3.	10,	2.5	11.6	12.4	13.5	8.7				3.0
Polychaeta	0		0.	0	0.4	0.4	0	0				0.2
Mollusca	21.5	19.	19.	37.5	9.8	14.5	10.5	8.7				2.6
Chaetognatha	7.6	11.	9.	17.5	4.9	11.1	16.6	6.0				4.9
Larvacea	25.3	28.	12.	6.7	13.0	24.8	13.8	18.5				8.9
Doliolum	0	3.	1.	0	3.2	7.7	4.1	1.5				0.4
Echinoderm larvae	0			0	0	0.4	0	0				0

APPENDIX X-1-4

PERCENTAGE CONPOSITION OF ZOOPLANKTON

DECEMBER/JANUARY CRUISE - TRANSECT IV

Station	1				2				3			
Day or Night	D	D	N	N	D	D	N	N	D	D	N	N
Replicate No.	1	2	1	2	1	2	1	2	1	2	1	2
Copepoda %	92.0	90.0	14.0	91.4	77.5	86.2	77.8	78.0	74.9	76.6	77.1	11.6
Others %	8.0	9.9	.6.0	8.6	22.6	13.8	22.2	22.1	25.1	23.4	22.9	.8.4
Percentage Composition of Zooplankton other than Copepods (100%)												
Cladocera												
Penilia	4.8	7.9	9.0	3.7	.1.6	21.3	20.4	8.3	3.5	4.5	9.5	4.7
Ostracoda												
Euconchoecia	38.1	27.0	9.5	12.2	48.2	28.8	35.2	37.6	55.7	52.4	15.4	17.3
Conchoecia	0	0	0.6	0	0	0.7	0	1.7	2.1	1.1	4.4	3.7
Mysidacea	0	0	0	0	0	0	0	0	0.2	0	0	0
Amphipoda	6.0	7.9	.0.1	19.5	3.1	4.3	7.1	7.6	2.1	1.5	3.6	4.5
Euphausiacea	0	0	0	0	0	0	0	0	0.5	0.4	1.5	0.5
Lucifer	1.2	0	1.7	1.2	0.5	0	0.7	0.7	0	0.2	1.3	0.5
Other crustaceans	1.2	3.4	3.4	2.4	4.0	11.0	8.4	5.0	3.2	4.5	L0.3	9.8
Barnacle nauplii	0	0	0	0	0	0	0.3′	0	0.2	0.4	0	0
Decapod zoea	2.4	2.2	0	0	0.5	1.8	2.6,	0.2	1.2	1.3	1.0	1.2
Decapod megalopa	0	0	0	0	0	0	0	0	0	0.2	" 0	0
Other crustacean larvae	0	0	0	0	0	0	0	0.2	0.5	0.4	1.2	0.9
Medusae	6.0	,0.1	1.8	8.5	5.4	6.4	3.6	6.8	.3.6	8.1	.1.8	,1.7
Polychaeta	1.2	2.2	1.7	0	0.5	0.7	0	0.5	0.2	0.2	1.5	0.2
Mollusca	19.0	.9.1	2.6	41.5	4.5	5.7	8.0	12.0	4.8	3.4	21.3	28.6
Chaetognatha	7.1	.4.6	5.6	3.7	,0.7	.2.8	6.5	8.8	7.4	7.5	9.3	4.7
Larvacea	10.7	5.6	2.4	4.9	9.8	5.7	6.1	7.4	3.2	1.7	5.7	8.0
Doliolum	2.4	0	1.7	2.4	1.3	0.7	1.2	3.3	1.6	1.9	2.1	3.7
Echinoderm larvae	0	0	0	0	0	0	0	0	0	0.2	0	0

APPENDIX x-2-1

PERCENTAGE COMPOSITION OF ZOOPLANKTON

APRIL/MAY CRUISE - TRANSECT I

Station	1				2				3			
Day or Night	D	D	N	N	D	D	N	N	D	D	N	N
Replicate No.	1	2	1	2	1	2	1	2	1	2	1	2
Copepoda %	94.6	39.9	91.3	92.2	60.7	59.9	69.6	73.7	67.0	54.2	60.5	15.4
Others %	5.4	60.1	8.7	7.8	39.3	40.1	30.4	26.3	33.0	35.8	39.5	84.6
Percentage Composition of Zooplankton other than Copepods (100%)												
Cladocera												
Evadne	0	0	0	0	0.2	0	0	0.3	0.2	0	0.2	0.4
Ostracoda												
Euconchoecia	4.8	0	0	4.8	0.5	0.8	7.6	3.6	29.4	35.4	52.1	52.9
Conchoecia	0	0	0	0	0	0	0	0	0.6	0.1	3.9	2.9
Other ostracods	0	0	0	0	0	0	0	0	0	0	3.1	0
Mysidacea	7.8	3.4	10.4	15.3	0	0	0	0	0	0	0	0.2
Amphipoda	0	1.4	1.0	1.6	3.0	1.4	13.0	7.4	1.5	1.5	2.5	2.7
Euphausiacea	0	0	0	0	0	0	0	0	0	0	0.5	0.2
Lucifer	1.9	0	1.0	0.8	2.2	1.7	1.3	0.3	0.2	0	0.1	0
Other crustaceans	0	0	7.3	5.7	0	0.3	0.8	0.3	0	0	0.1	0
Barnacle nauplii	2.9	4.8	1.0	4.0	0	0	0	0	0	0	0	0.6
Barnacle cypris	20.4	15.2	3.2	0	2.2	1.2	6.1	4.2	0.6	3.0	2.6	1.5
Other nauplii	1.0	0	0	0	12.0	15.0	5.3	5.8	0.4	0	0	0
Decapod zoea	2.6	6.2	4.2	2.4	4.0	3.8	3.1	1.9	0.3	0.5	0.3	0.4
Decapod megalopa	0	0.7	0	0	0.8	4.0	1.0	2.9	0	0.1	0.1	0.2
Stomatopod larvae	0	0	0	0	1.1	1.5	1.3	1.3	0	0.1	0.3	0.2
Other crustacean larvae	2.9	4.1	5.2	5.7	15.6	12.8	7.1	21.7	1.3	1.7	0.5	0.9
Medusae	0	0	0	0.8	13.2	3.7	6.4	11.3	6.5	1.6	0.6	8.9
Polychaeta	0	0	3.1	4.0	0.5	0.2	1.0	0	1.7	0.2	0.6	0.6
Mollusca	36.9	41.5	49.0	37.1	2.8	5.6	11.4	9.4	7.6	46.3	7.5	4.0
Chaetognatha	5.8	2.1	12.5	15.3	26.3	25.9	21.4	22.7	10.8	14.2	9.1	7.5

Appendix X-2-1 (cont.)

Larvacea	1.0	0	1.0	0.8	4.2	0.6	0.5	0.7	2.8	4.4	3.7	2.7
Doliolum	1.0	0	0	0.8	11.5	11.4	2.8	6.1	16.2	0.3	1.6	0
Salpa	1.0	0	0	0	0	0	0	0	0	0.5	0.5	1.6
Echinoderm larvae	0	0.7	1.0	0.8	0	0	0	0	0	0	0.1	1.3
Others	0	0	0	0	0	0	0	0	0	0	0	0.4

APPENDIX X-2-2

PERCENTAGE COMPOSITION OF ZOOPLANKTON

APRIL/MAY CRUISE TRANSECT II

Station	1				2				3			
Day or Night	D	D	N	N	D	D	N	N	D	D	N	N
Replicate No.	1	2	1	2	1	2	1	2	1	2	1	2
Copepoda %	53.8	65.2	64.0	2.7	30.8	26.2	45.3	35.1	45.3	32.2	75.6	6.4
Others %	46.2	34.8	36.0	97.3	69.2	73.8	54.7	64.9	54.7	17.8	24.4	3.6
Percentage Composition of Zooplankton other than Copepods (100%)												
Cladocera												
Evadne	0	0	0	0	0	0	0	0	1.5	3.0	0.5	2.6
Ostracoda												
Euconchoecia	16.5	25.5	6.3	0.6	36.7	21.7	8.1	38.9	6.5	0	31.9	0
Conchoecia	0	0	0	0	0	0	0	0	7.0	2.5	3.2	0
Other ostracods	0.2	0.8	0	0	0	0	0	0	0	0	0	0
Mysidacea	0	0.3	0.2	0.6	0.3	0.2	0.4	0.2	0	0	0	0
Amphipoda	3.5	2.1	3.5	2.3	0.2	0.3	0.3	1.2	4.3	4.8	7.9	5.8
Euphausiacea	0	0	0	0	0	0	0	0	0	2.9	1.4	0
Lucifer	0.1	0	0.6	0	0.1	0.1	0.2	0	0	0.2	0.5	1.3
Other crustaceans	0	0	0.2	0	0	0	0	0	0	0	0.5	0
Barnacle nauplii	14.3	9.4	2.7	4.5	0	0	0.1	0	0.3	0.2	0	0
Barnacle cypris	23.0	2.7	5.9	1.8	5.8	0.2	3.8	2.9	2.3	2.7	2.8	3.5
Other nauplii	0.4	0.3	0.6	0.2	0	0.2	0	0	2.0	9.3	2.3	7.0
Decapod zoea	3.0	6.2	2.3	3.3	0.6	0.4	0.9	1.5	4.0	2.3	0.9	1.3
Decapod megalopa	0	0	0.2	0	0	0	0	0	3.5	2.0	0.9	1.3
Stomatopod larvae	0.3	1.6	0	0	0.1	0	0.2	0.1	1.0	0.5	1.4	1.3
Other crustacean larvae	1.8	7.0	1.4	1.4	0.6	0.3	0.1	0.5	4.0	4.5	0.5	4.5
Medusae	0.2	0.8	1.0	0.2	0.1	0.4	0.3	0.1	1.3	6.2	7.4	0.3
Polychaeta	0.4	0	0.6	0.2	0.1	0	0.1	0.1	1.0	1.4	0.9	1.3
Mollusca	30.5	18.7	50.0	7.4	17.2	18.6	0.4	10.5	16.8	6.8	5.1	9.2
Chaetognatha	3.4	9.1	6.8	4.7	7.0	6.0	4.3	3.4	10.4	7.9	2.5	7.2

Appendix X-2-2 (cont.)

Larvacea	1.9	4.8	7.0	2.9	1.3	1.5	0.7	0.6	3.0	18.5	14.3	7.7
Doliolum	0.4	0.8	0.6	0	0.1	0.2	0	0.1	1.0	2.0	0.9	1.3
Salpa	0	0	0	0	0	0	0	0	0	2.0	3.7	4.5
Others	0	0	0.2	0	0	0	0.1	0	0	0.2	0.5	0

APPENDIX X-2-3

PERCENTAGE COMPOSITION OF' ZOOPLANKTON

APRIL/MAY CRUISE - TRANSECT III

Station	1				2				3			
Day or Night	D	D	N	N	D	D	N	N	D	D	N	N
Replicate No.	1	2	1	2	1	2	1	2	1	2	1	2
Copepoda %	86.[illegible]	84.[illegible]	32.7	32.3	70.[illegible]	31.3	52.[illegible]	49.9	72.6	5.9	55.[illegible]	51.7
Others %	13.[illegible]	15.[illegible]	17.4	17.7	30.[illegible]	18.8	47.[illegible]	50.1	27.4	4.1	35.[illegible]	18.3
Percentage Composition of Zooplankton other than copepods 100%)												
Cladocera												
Evadne	(	(	c	c	(	1.0	1.[illegible]	0.3	1.5	1.4	0.1	0.3
Ostracoda												
Euconchoecia	13.[illegible]	8.1	1.2	3.2	c	0.2	51.5	38.4	4.1	1.1	32.3	24.8
Conchoecia	(	c	c	c	(	c	(	0.2	2.2	1.4	1.4	0.6
Mysidacea	(	c	0.6	0	c	0.2	0.1	c	0	c	c	0
Amphipoda	14.1	17.7	19.5	30.0	1.6	0.7	(	1.1	3.9	2.5	3.6	1.0
Euphausiacea	(	c	0	0	c	0	0.2	c	0.7	0.6	0	0.1
Lucifer	1.2	1.0	1.2	4.5	0.7	0.2	0.1	0.2	0.7	1.1	0.1	0.2
Other crustaceans	0.5	0.5	1.2	0.4	c	0.2	c	0	0.2	c	0	0
Barnacle nauplii	c	0	0.3	0	0	0	0.2	0	0	0	0	0.1
Barnacle cypris	0.8	0	0.3	0	2.4	0.2	8.2	6.8	0.7	1.4	.8.2	1.1
Other nauplii	3.2	1.4	1.9	0.4	0.9	1.0	0.5	0.2	2.7	4.5	0.6	0.1
Decapod zoea	6.0	4.8	3.4	6.9	1.8	2.3	1.6	1.1	2.0	1.1	0	0.3
Decapod megalopa	0	1.0	0	0.4	0	0.2	0.1	0.1	0.7	0.3	0	0.2
Decapod larvae	3.6	0	0	3.6	2.7	0	0	0	0	0	0	0
Stomatopod larvae	1.2	1.9	0.9	0.8	1.1	1.7	0.7	0.8	0.2	0	0	0.1
Other crustacean larvae	2.0	6.2	6.5	1.2	1.1	3.1	2.4	3.0	2.9	1.4	1.7	0.7
Medusae	2.4	2.9	4.6	7.7	2.0	2.5	5.3	7.7	7.5	3.5	7.8	4.2
Polychaeta	0.8	0.5	0.3	0	1.6	0.2	1.4	0.8	1.2	).6	0.3	0.2
Mollusca	8.3	8.3	9.1	7.0	3.6	5.0	6.7	0.4	3.9	).2	1.5	0.9
Chaetognatha	.0.5	3.4	5.8	9.8	1.5	7.3	4.4	4.7	6.5	5.6	4.3	3.6

Appendix X-2-3 (cont.)

Larvacea	0	1.0	0.6	1.6	1.3	1.9	0.9	0.5	.2.9	5.7	5.1	0.3
Doliolum	2.0	1.4	2.5	1.2	6.9	1.0	1.7	1.5	0	0.6	1.9	0.4
Salpa	0	0	0	0.4	0.5	1.0	2.8	2.2	4.4	2.0	0.9	0.9
Echinoderm larvae	0	0	0	0	0	0	0.1	0.1	1.0	0	0.1	0
Others	0	0	0	0.8	0.2	0	0	0	0	0	0	0

APPENDIX X-2-4

PERCENTAGE COMPOSITION OF ZOOPLANKTON

APRIL/MAY CRUISE - TRANSECT IV

Stat ion	1				2				3			
Day or Night	D	D	N	N	D	D	N	N	D	D	N	N
Replicate No.	1	2	1	2	1	2	1	2	"1	2	1	2
Copepoda %	41.;	55.2	7.5	55.4	58.8	54.(	73.8	11.5	26.4	29.8	54.2	80.9
Others %	58.3	44.8	2.5	44.6	41.2	45.4	26.2	18.5	73.6	70.2	35.8	19.1
Percentage Composition of Zooplankton other than Copepods (100%)												
Cladocera												
Evadne	c	c	(	0	0	(	0	0	0.2	0	0	0.1
Ostracoda												
Euconchoecia	60.3	13.4	1.1	19.8	40.9	45.8	51.8	55.3	17.2	14.1	9.2	4.6
Conchoecia	c	0	c	0	0.1	c	0	0	4.3	1.5	0.7	0.3
Other ostracods	c	0	c	0	0	c	2.5	0	0	0	c	0
Mysidacea	0.2	0.3	c	0	0.3	0.1	0.1	0	c	0.2	0.1	0.2
Amphipoda	11.0	.1.4	5.6	3.7	3.9	.5.7	3.8	7.4	9.5	12.2	4.5	2.7
Euphausiacea	0	0	c	0	0	c	0	"0	c	1.2	0.3	0.4
Lucifer	0.2	1.4	0.4	0.4	0.3	0.3	0.5	0	c	0.2	0.1	0.4
Other crustaceans	0	0	0.2	0	0	C	,0	"0	c	0	c	0
Barnacle nauplii	0	0	0.8	1.9	0.1	0	0	0.1	0.4	0.2	c	0.2
Barnacle cypris	0.2	0	0.4	0.3	12.4	10.2	3.1	5.4	.5.8	15.1	7.2	6.3
Other nauplii	0	0	0	0.4	0	0	0	0	0.2	0.7	0	0
Decapod zoea	1.1	1.1	1.8	1.7	2.1	3.2	0.6	0.7	1.7	2.7	1.2	2.1
Decapod megalopa	0.2	0.8	0	0.1	0	0.1	0.1	0.1	1.3	0	0.3	1.6
Decapod larvae	0.6	0.3	0	0	0	0	0	0	0	0	0	0
Stomatopod larvae	0.6	0.8	0.1	0.3	0.2	0.5	0.2	0.1	0.2	0.5	0.2	0.9
Other crustacean larvae	1.1	1.9	4.4	1.7	2.8	3.7	2.2	0.7	2.2	2.4	0.5	2.9
Medusae	0.7	0.5	5.4	4.8	4.7	5.8	2.0	0.6	8.9	14.3	0.2	5.1
Polychaeta	0	0.5	4.9	1.9	0.3	0.9	0.4	1.0	0	1.0	0.1	0.4
Mollusca	3.9	7.3	5.1	51.7	18.8	9.2	'6.2	3.6	.7.6	13.6	2.4	3.5

Appendix x-2-4 **(cont.)**

Chaetognatha	5.0	7.0	3.8	3.2	7.4	8.5	2.3	1.1	7.4	4.9	1.8	8.3
Larvacea	0	0.5	1.1	1.2	0	0.8	0	0.5	10.6	.1.2	0.5	5.1
Doliolum	14.5	22.5	**11.8**	7.0	5.6	4.0	4.2	3.3	1.9	3.9	0.6	4.8
Salpa	0	0	0	0	0	0	0.1	0	0.5	0	0	0
Echinoderm larvae	0	0	2.1	0	0	1.1	0	0	0	0	0	0
Others	0.4	0.3	0	0	0.2	0	0	0.1	0.2	0	0	0

APPENDIX x-3-1

PERCENTAGE COMPOSITION OF ZOOPLANKTON

AUGUST/SEPTEMBER CRUISE - TRANSECT I

Station	1				2				3			
Day or Night	D	D	N	N	D	D	N	N	D	D	N	N
Replicate No.	1	2	1	2	1	2	1	2	1	2	1	2
Copepoda %	8.7	77.0	36.3	65.3	62.4	66.0	41.1	68.8	71.4	62.9	57.8	54.4
Others %	1.3	23.0	63.7	34.7	37.6	34.0	58.9	31.2	28.6	37.1	32.2	15.6
Percentage Composition of Zooplankton other than (100%)												
Cladocera												
Evadne	7.3	5.3	45.8	16.3	0.3	0.5	(	0.3	2.0	0.8	1.1	1.7
Penilia	0.5	14.4	36.5	20.5	9.5	27.6	45.6	9.1	0.4	0	c	0
Ostracoda												
Euconchoecia	0	1.1	0.1	0	52.9	21.1	33.(	32.8	38.3	41.3	51.7	57.6
Conchoecia	0	0	c	0	0	c	(	c	3.0	3.4	6.5	3.8
Mysidacea	0	0	+	0.1	o	a	0	c	0	0	c	0
Amphipoda	2.3	2.2	0.6	2.4	2.4	1.9	3.9	1.8	0.9	1.5	1.5	0.7
Lucifer	6.6	6.5	4.4	14.6	9.1	9.3	1.8	3.2	0	0	0.1	0.2
Other crustacean	0	0	0	0.1	0	0	c	3.8	0	0	c	0
Barnacle nauplii	0.1	0	0	0	0	0	c	c	0	0.1	c	0.1
Barnacle cypris	0	0.3	0	0.5	0	0.2	0.1	0	0	0	0.1	0.1
Other nauplii	1.6	1.7	0.2	0.5	0.4	0	c	0	0	0	0.1	0
Decapod zoea	4.1	10.9	0.2	2.6	7.6	6.2	2.6	13.2	0.2	0	0.3	0.1
Decapod megalopa	0.1	0.1	0.1	0.9	0	0	c	0	0.2	0	0.1	0
Decapod larvae	0.9	1.1	0.1	0.3	0.9	0.7	0.7	1.8	0.4	0.5	0.5	0.5
Stomatopod larva	0.1	0	0.1	0.7	0	0	c	0	0.2	0	0	0
Other crustacean larvae	3.9	24.5	8.6	27.2	7.1	15.0	1.0	0	0.4	0.1	0.8	1.8
Medusae	0.4	0.3	0.1	0.1	2.0	3.6	0.8	4.4	7.2	5.9	2.0	3.7
Polychaeta	0	0	+	0	0	0	0.2	1.2	2.0	3.5	1.3	1.7
Mollusca	4.2	9.5	0.2	4.4	2.4	2.8	3.5	5.0	6.5	7.8	2.2	7.5
Chaetognatha	1.0	21.4	2.3	7.0	4.5	6.7	3.7	10.0	9.3	10.0	5.4	4.9

Appendix X-3-1 (cont.)

Larvacea	1.9	0.6	0.6	1.3	0.9	1.9	2.5	7.6	6.7	5.3	12.2	10.1
Doliolum	0	0	0	0	0	1.9	0.1	0.9	1.5	1.1	0.5	0.1
Salpa	0	0	0	0	0	0	0.4	0.3	5.7	4.3	1.5	2.4
Echinoderm larvae	0	0	0	0	0	0.7	0.1	2.9	3.5	2.4	1.9	3.0
Others	0	0	0.2	0.4	0	0	0	1.8	1.5	2.0	0.1	0

+ indicates % is less than 0.05.

APPENDIX X-3-2

PERCENTAGE COMPOSITION OF ZOOPLANKTON

AUGUST\SEPTEM8ER CRUISE - TRANSECT II

Station	1										
Day or Night	D	D						N			N
Replicate No.	1	2									
Copepoda %	75.[	78.4									
Others %	24.4	21.6									
Percentage Composition of Zooplankton other than Copepods (100%)											
Cladocera											
Evadne	6.(	3.7									
Penilia	18.6	20.0									
Ostracoda											
Euconchoecia	0.2	c									
Conchoecia	c	c									
Other ostracods	C	c									
Mysidacea	C	c									
Amphipoda	7.4	7.0									
Lucifer	3.8	2.5							8		
Other crustacean:	c	c									
Barnacle nauplii	c	c									
Barnacle cypris	c	c							8		
Other nauplii	3.6	4.5									
Decapod zoea	4.0	1.7									
Decapod megalopa	1.0	1.0									
Decapod larvae	3.1	3.0									
Stomatopod larvae	0.5	0									
Other crustacean larvae	5.2	2.2									
Medusae	7.4	4.5									
Polychaeta	0.2	0									
Mollusca	9.5	4.5									
Chaetognatha	15.7	25.7									

Appendix x-3-2 (cont.)

Larvacea	L1.4	17.5	1.7	3.1	8.0	4.0	2.1	1.2	8.6	18.8	8.2	,0.5
Doliolum	2.1	2.2	0.1	0.3	0.4	0.5	0.6	1.8	0.5	“2.3	0.7	0.8
Salpa	0	0	0	0	0	0	0	0	0	0.4	0	0.8
Echinoderm larvae	0.2	0	0	0	0	0	0	0	0.2	0.4	0	0
Others	0	0	0	0	0	0.7	0	0	0	0	0.1	0

APPENDIX X-3-3

PERCENTAGE COMPOSITION OF ZOOPLANKTON

AUGUST\SEPTEMBER CRUISE - TRANSECT III

Station	1				2				3			
Day or Night	D	D	N	N	D	D	N	N	D	D	N	N
Replicate No.	1	2	1	2	1	2	1	2	1	2	1	2
Copepoda %	71.5	63.2	72.2	63.2	86.8	36.2	42.9	48.6	71.2	53.5	79.3	75.1
Others %	28.4	36.8	27.8	36.8	13.2	13.8	57.1	51.2	28.8	36.5	20.7	24.9
Percentage Composition of Zooplankton other than Copepods (100%)												
Cladocera												
Evadne	4.8	1.8	0.5	0.3	6.5	1.8	0.3	0.1	2.5	0.2	2.1	1.3
Penilia	2.2	0.5	1.4	0.9	c	0	c	0	0	0.2	1.4	0
Ostracoda												
Euconchoecia	2.4	0.4	0.4	0.2	1.1	1.2	68.8	73.2	40.6	27.1	14.3	46.4
Conchoecia	c	0	0	c	0	o	c	0	3.2	1.9	0.3	0.2
Other ostracods	c	0	o	c	0	o	0.2	0.3	0	0.9	0.7	0.6
Mysidacea	c	0	o	0.2	0	0.6	c	0	0	0	0	0
Amphipoda	8.5	4.3	4.3	1.2	2.7	1.2	0.8	0.3	5.7	2.3	2.1	9.0
Lucifer	3.9	2.9	5.0	8.7	2.7	o	0.3	0.1	0	0.2	0.3	0.6
Other crustaceans	c	0	0	1.9	0	0	0	0	0	0	0	0
Barnacle nauplii	4.8	0.2	0	c	0	0	0.1	0	0	0	0	0
Barnacle cypris	0	0.2	0.2	0.3	0.5	1.2	2.9	1.1	18.7	13.4	0	0.4
Other nauplii	10.4	9.1	0.7	0.8	0	0	0	0	0	o	0	0
Decapod zoea	2.8	3.4	1.6	8.2	4.3	10.2	0.3	"0.7	0	0.2	1.7	0.8
Decapod megalopa	1.1	0.5	0.2	0.6	0	0	0	o	0	0	0	0
Decapod larvae	4.8	2.3	0	0	1.1	0	0	0	0	0	0	0
Stomatopod larvae	0.2	0.2	0.2	0.6	1.6	0	0	0	0	0	0	0
Other crustacean larvae	4.3	13.6	15.0	26.5	0	1.8	1.0	0.7	2.5	1.6	1.4	1.7
Medusae	2.8	2.1	0.4	4.8	3.8	7.2	1.2	2.8	4.4	3.3	8.7	2.9
Polychaeta	2.2	0	"0.4	0.5	1.1	0.6	0.4	0.3	0	0.2	0.7	0.2
Mollusca	13.0	10.6	50.6	33.5	35.7	25.1	18.8	10.1	11.3	6.3	1.1	14.1
Chaetognatha	20.0	12.5	7.9	6.5	17.8	21.0	2.2	6.2	4.2	2.9	4.2	6.2

Appendix x-3-3 (cont.)

Larvacea	8.7	5.0	0.7	2.5	18.4	22.7	1.7	2.9	5.4	9.1	5.5	11.3
Doliolum	1.3	0.4	0.2	0	2.7	0	0.3	0.1	1.0	0.3	0.7	0.6
Salpa	1.3	0	0.2	0.9	0	0	0.1	0.3	0.5	0	0.3	0.4
Echinoderm larvae	0.2	0	0	0	0	0.6	0	0.5	0	0	0	0
Others	0.4	0	0.2	0.9	0	4.8	0.5	0.4	0	0	4.5	3.2

APPENDIX X-3-4

PERCENTAGE COMPOSITION OF ZOOPLANKTON

AUGUST/SEPTEMBER CRUISE - TRANSECT IV

Station	1				2				3			
Day or Night	D	D	N	N	D	D	N	N	D	D	N	N
Replicate No.	1	2	1	2	1	2	1	2	1	2	1	2
Copepoda %	64.1	71.9	54.3	63.1	45.5	40.7	29.1	30.0	82.1	80.5	80.1	80.4
Others %	35.9	28.1	45*7	36.[	54.5	59.3	70.9	70.0	17.9	19.5	19.9	19.6
Percentage Composition of Zooplankton other than Copepods (100%)												
Cladocera												
Evadne	1.1	0.5	0.4	1.4	0.1	0.1	+	0	2.6	0.3	0.8	1.0
Penilia	0.4	1.5	0	0.5	0.7	1.7	0.8	0	0	0	1.6	1.5
Ostracoda												
Euconchoecia	4.1	29.2	2.0	0.7	65.3	64.8	84.2	76.5	4.4	11.3	21.5	26.8
Other ostracod	0	0	0	0	0	0.2	0	0	0	0	0	0
Mysidacea	0	0	0	0.2	0	0	0	0	0	0	0	0
Amphipoda	5.9	6.4	5.6	4.1	2.8	3.5	1.6	1.2	5.1	1.9	1.6	2.0
Euphausiacea	0	0	0	0	0	0	0	0	0	0	0.2	0
Lucifer	4.1	1.2	0.7	1.8	0	0.6	0.3	0.3	2.9	0.6	1.6	2.9
Other crustacean	0	0	0	0.7	0	0	0	0	0	0	0.2	0
Barnacle nauplii	0	0	0	0	0	0	0	0	0	0	0.2	0
Barnacle cypris	0	0	0.3	0.2	0	0	0	0.1	0.4	0	0	0
Other nauplii	2.2	0.3	0.4	0.5	1.2	0	0	0	0	0	0	0.5
Decapod zoea	9.5	3.1	2.6	3.0	4.8	1.0	0.2	0.5	7.7	7.7	3.1	4.4
Decapod megalopa	0.4	0	0	0	0.1	0.1	0	0.2	0.4	0.3	0	0
Decapod larvae	2.2	1.2	1.1	1.1	1.1	0.5	0.3	0.4	5.8	1.0	3.1	2.4
Stomatopod larvae	0.2	0.1	0.4	0	0	0	+	0	0	0.3	0	0.5
Other crustacean larvae	18.7	13.6	10.4	11.6	0.3	0.6	0.2	0.2	1.5	2.6	1.8	3.4
Medusae	5.9	3.0	1.2	1.2	2.1	0.7	0.6	1.5	0.2	14.5	9.6	10.7
Polychaeta	0.9	0.7	0.8	0.9	0.1	0.2	0.1	0.2	0.4	0	0.4	1.0
Mollusca	16.9	18.1	39.1	32.0	12.1	17.4	9.7	15.3	12.6	20.6	20.9	11.7
Chaetognatha	18.9	12.4	3.6	4.6	4.5	3.1	1.2	1.7	9.7	26.7	0.2	11.7

Appendix '-3-4 (cont.)

Larvacea	5.0	7.1	1.1	4.1	4.6	4.1	0.6	0.'9	13.9	10.0	L6.6	13.2
Doliolum	0.9	1.0	0.1	0.5	0.2	0.5	0.1	0.3	1.1	1.9	1.0	1.9
Salpa	2.3	0.3	0.2	0	0	0.8	+	0.2	0.7	0.3	0.4	0.5
Echinoderm larvae	0	0.1	0	0.7	0	0	o	0	0	0	0	0
Others	0.5	0.1	0	0.7	0.1	0.2	0	0.6	0.7	0	5.3	3.9

+ indicates % is less than 0.05.

APPENDIX XI

NUMERICAL ABUNDANCE OF COPEPODS PER M^3

APPENDIX XI-1

NUMERICAL ABUNDANCE OF COPEPODS PER M^3

DECEMBER/JANUARY CRUISE

Transect	Station	Day or Night	Replicate No.	No. of Copepods Per M^3	Calanoida Per M^3	Adult Females Per M^3	Adult Males Per M^3	Immature Per M^3	Cyclopoida Per M^3	Adult Females Per M^3	Adult Males Per M^3	Immature Per M^3	Harpacticoida Per M^3	Adult Females Per M^3	Adult Males Per M^3	Immature Per M^3
I	1	D	1	1000.4	637.3	338.1	36.5	262.7	361.8	148.6	208.8	4.4	1.4	1.4	0	0
		D	2	1220.6	906.8	475.1	91.9	339.8	311.5	124.3	183.8	3.5	2.3	2.3	0	0
		N	1	784.2	534.5	332.6	26.9	175.1	248.7	131.5	115.8	1.4	0.9	0.9	0	0
		N	2	630.9	445.7	314.0	23.4	108.3	184.4	94.4	86.4	3.7	0.7	0.7	0	0
	2	D	1	782.4	548.6	189.5	37.0	322.2	231.1	146.8	77.6	6.8	2.6	1.6	1.0	0
		D	2	799.1	589.3	221.1	57.6	310.6	207.3	156.6	45.1	5.6	2.5	2.5	0	0
		N	1	778.0	576.9	249.6	48.5	278.7	198.3	117.3	68.8	12.3	2.9	2.6	0.3	0
		N	2	492.2	301.8	86.0	37.7	178.1	182.7	79.4	95.2	8.1	7.6	6.6	0.5	0.5
	3	D	1	266.2	175.0	63.9	18.3	92.8	89.6	56.1	11.5	22.0	1.6	1.6	0	0
		D	2	217.7	137.6	44.9	10.6	82.2	78.9	47.9	9.8	21.2	1.3	1.0	0.3	0
		N	1	206.3	128.8	53.2	10.3	65.2	77.5	52.7	10.6	14.2	0	0	0	0
		N	2	228.5	131.0	47.1	14.6	69.3	95.6	67.7	6.0	21.8	1.9	1.0	1.0	0
I	1	D	1	1829.6	1109.6	1708.4	686.1	1715.2	501.1	332.8	176.6	91.7	18.8	108.7	0	10.2
		D	2	1808.7	1507.6	955.5	137.7	414.4	295.0	117.3	128.8	48.8	6.1	6.1	0	0
		N	1	2094.1	1813.2	1182.9	84.5	545.8	278.6	196.4	2.3	79.9	2.3	2.3	0	0

Appendix XI-1 (cont.)

	N	2	1225.7	669.5	265.4	99.7	304.3	546.1	202.9	311.1	32.1	.0.1	6.8	3.4	0
2	D	1	890.2	771.3	504.6	70.0	196.7	116.7	64.5	36.7	15.6	2.2	2.2	0	0
	D	2	1477.8	1184.6	648.8	165.5	370,3	285.1	186.8	77.0	21.3	8.2	6.6	1.6	0
	N	1	1336. 0	10BO .8	741.3	66.4	273.1	250.3	153.5	69.2	27.7	4.6	4.1	0.7	0
	N	2	739.1	525.8	"296.6	54.4	174.9	208.0	136.5	54.4	17.1	5.3	3.5	1.2	0.6
3	D	1	367.7	318.8	186.8	18.5	113.6	48.5	33.9	8.5	6.2	0.4,	0.4	0	0
	D	2	364.6	307.1	170.8	23.5	112.8	56.6	34.2	14.6	7.8	0.9	0.9	0	0
	N	1	1245.3	1028.2	549.9	73.9	404.3	210.3	146.7	33.5	30.0	6.9	6.9	0	0
	N	2	960.5	767. 4	400.1	82.6	284.7	190.1	145.3	19.9	24.9	3.0	'3.0	0	0
1	D	1	2183.3	1945.3	779.6	215.5	950.2	238.0	65.6	56.2	116.2	0	o	0	0
	D	2	2267.7	2031.0	962. 0	261.5	807.4	236.0	50.5	51.5	134.7	0	0	0	0
	N	1	1686.5	1278.4	396.2	123.5	758.6	408.1	124.5	122.6	161 .1	0	0	0	0
	N	2	2053.8	1633.7	546.7	351.1	735.9	418.4	155.5	126.7	136.3	1.6	1.6	0	0
2	D	1	2120.1	1574. e	899.7	116.1	559.0	540.3	320.7	108.6	111 .1	5.0	3.7	0	1.2
	D	2	1099.8	823.8	481.6	84.3	258.0	271.7	159.1	49.9	62.8	4.3	1.7	2.6	0
	N	1	1085.7	835.6	376.2	67.8	391.5	249.4	140.7	46.7	62.0	0.7	0.7	0	0
	N	2	612.6	490.7	235.2	26.9	228.6	121.2	,62.4	26.1	32.7	0.7	0.7	0	0
3	D	i	394.1	313.5	167.6	32.7	113.3	76.8	50. 5	14.0	12.4	3.8	2.9	1.0	0
	D	2	573.0	474.0	301.9	22.8	149.3	97.0	71.1	17.2	8.8	2.8	1.6	0	1.2
	N	1	975.5	719.3	341.2	121.8	256.2	249.9	201.7	43.1	5.1	6.3	3.8	2.5	0
	N	2	364.6	297.4	153.7	23.2	120.5	65.4	52.1	10.8	2.6	1.7	0.9	0.9	0

Appendix XI-l (-cent.)

IV	1	D	1	1800.4	1559.6	778.8	40.8	740.0	229.2	50.5	64.1	.14.6	11.7	5.8	5.8	0
		D	2	2665.2	2424.0	1160.8	102.5	1160.8	235.2	60.3	60.3	.14.6	6.0	6.0	0	0
		N	1	1385.5	1311.4	683.8	106.6	521.0	71.1	23.7	19.2	28.1	3.0	3.0	0	0
		N	2	2626,3	2542.0	1456. 0	182.0	903.9	81.9	18.2	27.3	36.4	3.0	3.0	0	0
	2	D	1	884.9	760.1	334.3	52.7	373.2	124.8	67.5	26.3	30.9	0	0	0	0
		D	2	932.8	806.9	364.4	47.3	395.2	125.4	74.9	32.4	18.1	0.5	0.5	0	0
		N	1	1100.9	914.1	357.3	52.7	504.1	181.4	107.7	43.2	30.5	5.5	3.2	0.9	1.4
		N	2	1118.8	.005.0	377.8	89.4	537.9	111.4	73.7	23.2	14.5	2.3	0.6	1.'7	0
	3	D	1	702.8	559. 8	204.9	44.6	310.4	138.6	100.6	25.0	13.0	4.3	.3.3	1.1	0
		D	2	930.6	721.9	273.6	51.6	396.7	205.6	136.5	35.2	34.0	3.0	1.8	1.2	0
		N	1	687.5	537.3	138.6	51.0	347.7	148.1	102.9	28.4	16.8	2.1	1.6	0.5	0
		N	2	856.5	721.4	243.0	39.8	438.6	133.7	76.8	36.1	20.8	1.4	1.4	0	0

APPENDIX XI-2

NUMERICAL ABUNDANCE OF COPEPODS PER M^3

APRIL/MAY CRUISE

Transect	Station	Day/Night	Replicate #	No. of Copepods Per M^3	Calanoida Per M^3	Adult Females Per M^3	Adult Males Per M^3	Immature Per M^3	Cyclopoida Per M^3	Adult Females Per M^3	Adult Males Per M^3	Immature Per M^3	Harpacti-coida/M^3	Adult Females Per M^3	Adult Males Per M^3	Immature Per M^3	Benthic
I	1	D	1	6377.8	6286.6	2316.7	2046.4	1923.5	87.8	14.0	56.2	17.6	3.5	.0	.0	0	3.5
		D	2	9745.2	9662.8	1827.6	2458.8	2376.3	75.0	30.0	30.0"	15.0	7.5	0"	0	0	7.5
		N	1	9186.1,	9112.8	1359.5	2591.9	2161.4	73.3	36.6	9.2	27.5	0	0	0	0	0
		N	2	5423.1	5276.2	2131. 0	1186.8	1958.3	139.6	29.4	99.2	11.0	7.3	0	0	0	7.3
	2	D	1	357.5	287.3	98.6	11.2	177:5	61.6	28.1	7.6	25.9	8.7	7.6	1.1	0	.0
		D	2	322.8	289.8	148.2	14.5	127.1	30.7	17.5	4.0	9.2	2.3	2.0	0.3	0	0
		N	1	1515.6	1374.2	774.7	97.7	501.8	129.7	55.6	53.9	20.2	1.8	5.1	0	0	6.7
		N	2	771.4	701.1	288.3	55.2	357.7	63.2	23.1	25.8	14.2	7.1	5.3	0	0.	1.8
	3	D	1	364.7	234.2	87.5	16.4	130.3	124.3	71.8	36.3	16.2	6.3	3.1	2.9	.3	0
		D	2	273.9	155.4	54.4	9.1	.91.9	114.5	80. 0	17.5	17.0	4.0	2.8	0.9	.2	0
		N	1	353.6	224.9	106 .2	15.3	103.4	125.1	74.1	32.8	18.2	3.6	1.8	1.4	.4	0
		N	2	276.7	175.6	94.7	12.5	68.,3	96.9	53.9	32.8	10.1	4.'3.	2.1	1.6	.5	0
I	1	D	1	1366.5	1013.5	660.4	122.0	231.1	373.0	42.2	41.9	.88.9	0	0	0	0	0
		D	2	880.5	523.5	386.0	44.2	93.4	355.7	20.2	29.9	05.6	1.3	1.3	0	0	0
		N	1	3624.5	3334.0	2192.2	266.6	875.3	286.5	95.5	91.5	99.5	4.0	0	0	0	4.0
		N	2	2805.5	2662. 5	1924.5	243.8	494.1	143.0	35.8	61.8	45.5	.0	0	0 "	0	0

Appendix XI-2(cont.)

	2	D	1	1143.4	789. 0	342.6	71.1	375.4	354.4	86.6	164.9	.02.9	0	0	0	0	0
		D	2	732.2	573.3	238.4	48.3	286.7	158.1	25.7	79.4	53.0	0.8	0.8	0	0	0
		N	1	530.5	395.3	198.3	48.7	148.4	135.2	40.2	,40.2	54.7	0	0	0	0	0
		N	2	1249.2	830.6	529.9	67.6	233.1	418.6	67.6	149.7	101. 3	0	0	0	0	0
	3	D	1	275.5	150.0	63.4	7.'0	79.6	116.0	70.5	24.1	21.4	9.5	5.4	1.8	2.4	0
		D	2	299.0	146.2	57.6	7.8	80.8	145.6	84.9	31.8	28.9	7.1	4.9	1.2	1.0	0
		N	1	363.5	266.0	117.0	23.3	125.7	95.9	66.6	20.6	8.7	1.6	1.1	0	0.5	0
		N	2	552.4	377.6	157.6	22.3	197.7	169.8	111.4	32.3	26.2	5.0	3.3	1.1	0.6	0
III	1	D	1	2308.9	861.6	301.4	68.2	491.9	427.4	176.3	327.4	.23.7	9.9	0	0	0	,9.9
		D	2	1398.3	529.4	217.5	29.0	282.8	855.7	327.5	164.1	64.0	3.3	0	0	0	,3.3
		N	1	2277.8	1456.4	583.1	167.2	706.0	817. 0	281.2	107 .0	.28.8	4.4	0	0	0	4.4
		N	2	1729.3	1254.1	210.5	124.8	918.8	472.2	165.4	252.6	54.1	3.0	0	0	0	3.0
	2	D	1	232.9	127.5	38.8	4.5	84.2	103.1	61.2	22.1	19.7	2.4	0.5	1.5	0.4	0
		D	2	677.6	464.2	275.4	32.1	156.7	210.0	169.2	20.4	20.4	3.4	3.0	0	0.4	0
		N	1	441.2	257.5	91.1	14.2	152.3	166.5	119.5	32.8	14.2	,7.1	2.7	4.1	0.3	0
		N	2	351.7	239.4	97.7	13.9	127.0	103.7	67.4	23.8	12.5	8.6	7.3	1.0	0.3	0
	3	D	1	297.2	173.7	72.8	9..5	91.3	115.9	59.7	26.7	29.4	7.6	4.6	2.2	0.8	0
		D	2	285."4	156.6	75.5	12.5	68.6	123.4	66.0	31. 0	26.4	5.4	2.8	2.3	0.3	0
		N	1	404.5	257.2	84.4	14.2	158.7	146.1	85.0	35.9	25.'2	1.3	1.3	0	0	0
		N	2	387.5	265.7	94.6	18.2	152.8	119.1	79.2	21.6	18.2	2.8	1.9	0	0	0.9
IV	1	D	1	289.4	190.7	55.0	27.9	107.8	98.7	11.3	40.7	46.7	0	0	0	0	0

Appendix XI-2 (cont.)

		D	2	526.3	345.0	84.5	47.5	213.0	181.3	31.7	96.8	52.8	0	0	0	0	0
		N	1	.022.3	673.9	365.6	77.4	230.8	348.4	48.7	32.3	67.4	0	0	0	0	0
		N	2	837.8	542.9	.309.7	40.2	193.0	293.6	52.3	13.1	28.2	1.3	0	0	0	1.3
	2	D	1	161.9	109.2	46.3	13.8	49.2	51.9	20.3	23.4	8.1	0.8	0.4	0	0	0.4
		D	2	%51. 3	625.8	325.4	66.1	234.3	221.1	90.3	97.7	33.1	4.4	3.7	0.7	0	0
		N	1	205.7	152.2	76.9	26.6	48.8	52.7	21.8	26.6	4.4	0,8	0.8	0	0	0
		N	2	633.1	503.0	274.6	70.8	157.5	130.1	53.5	67.9	8.7	0.	0	0	0	0
	3	D	1	624.6	487.7	268.4	38.7	180.6	134.4	82.0	32.0	20.4	2.5	2.5	0	0	0
		D	2	423.4	322.4	162.5	34.5	125.4	97.4	61.2	22.7	13.5	3.5	3.1	0	0.4	0
		N	1	493.6	381.7	176.1	50.2	155.4	108.7	61.6	34.3	12.8	3.1	2.2	0.9	0	0
		N	2	408.8	312.9	124.9	48.9	139.1	94.9	62.1	22.8	10.0	1.1	1.1	0	0	0

APPENDIX XI-3

NUMERICAL ABUNDANCE OF COPEPODS PER M^3

AUGUST/SEPTEMBER CRUISE

Transect	Station	Day/Night	Replicate #	No. of Copepods Per M^3	Calanoida Per M^3	Adult Females Per M^3	Adult Males Per M^3	Immature Per M^3	Cyclopoida Per M^3	Adult Females Per M^3	Adult Males Per M^3	Immature Per M^3	Harpacti-coida/M^3	Adult Females Per M^3	Adult Males Per M^3	Immature Per M^3	Benthic
I	1	D	1	494.0	424.9	243.8	26.8	154.2	68.8	30.0	32.5	6.3	0.3	0	0	0	.3
		D	2	1563.8	1374.6	838.7	112.6	423.2	188.2	61.9	106.3	20.0	1.0	0	1.0	0	0
		N	1	1298.7	1202.8	436.0	237.9	528.9	93.5	32.7	53.2	7.6	2.3	1.2	0.6	0	.6
		N	2	2923.1	2717.4	771.4	495.7	1450.2	203.6	67.9	121.4	14.4	2.1	2.1	0	0	0
	2	D	1	735.4	605.8	224.1	72.1	309.6	128.3	88.7	20.4	19.1	1.3	1.3	0	0	0
		D	2	1113.6	829.1	465.6	42.2	321.3	284.5	197.4	39.5	47.6	0	0	0	0	0
		N	1	567.6	460.4	161.7	36.7	262.0	106.1	70.5	16.6	18.9	1.1	0.6	0.6	0	0
		N	2	549.1	411.6	250.0	17.5	144. 0	136.0	108.9	17.5	9.5	1.5	0.7	0.7	0	0
	3	D	1	428.1	200.4	105.4	10.1	84.9	224.3	171.0	30.6	22.7	3.4	2.2	1.1	0	0
		D	2	562.8	252.0	135.6	10.9	105.4	306.5	242.5	38.5	25.5	4.4	2.9	1.5	0	0
		N	1	581. 2	349.9	177.2	11.4	161.3	223.7	.64.0	36.3	23.4	7.5	4.8	1.5	1.2	0
		N	2	565.3	347.1	195.9	17.0	134.2	212.9	.64.1	29.2	19.6	5.3	3.5	1.8	0	0
II	1	D	1	1915.6	1702.3	563.5	89.7	1049.0	208.9	79.4	92.7	36.8	4.4	1.5	0	0	.9
		D	2	1628.5	1419.6	634.4	177.6	607.6	202.2	78.2	98.3	25.7	6.7	1.1	0	0	.6
		N,	1	3547.2	3083.9	1980.9	172.1	930.9	445.6	.25.7	222 .8	97.1	17.6	8.8	8.8	0	0

Appendix X1-3 (cont.)

		N	2	1207.4	.030.4	607.0	62.6	360.0	174.4	53.2	82.5	38.6	2.7	1.3	1.3	0	0
	2	D	1	156.8	95.2	53′.8	14.4	27.0	61.2	42.6	4.3	14.2	0.4	0.2	0.2	0	0
		D	2	165.4	104.8	58.6	19.0	27.3	59.7	44.7	4.9	10.0	0.8	0.2	0.6	0	0
		N	1	209.0	149.2	88.0	13.0	48.2	59.6	42.5	10.0	7.0	0.2	0.2	0	0	0
		N	2	651.4	531.8	291.8	35.6	204.4	118.6	76.5	30.0	12.0	1.1	0.4	0.4	0	).4
	3	D	1	525.5	324.7	174.0	27.1	123.6	198.0	147.9	26.8	23.3	2.8	2.8	0	0	0
		D	2	590.5	355.3	214.1	,23.4	117. 8	233.3	175.6	31.2	26.6	1.8	0.9	0.9	0	0
		N	1	399.5	252.5	126.0	16.4	110.1	146.2	109.4	24.1	‘12.7	0.7	0.1	0.6	0	0
		N	2	566.2	385.0	252.6	20.5	111. 8	180.9	148.9	19.9	12.1	0.3	0.3	0	0	0
II	1	D	1	957.1	736.6	431.1	61.1	244.4	219.7	151.1	47.9	20.6	“0.8	0.8	0	0	0
		D	2	1038.5	872.8	345.4.	109.4	418.0	160.3	96.4	41.1	22.7	5.4	2.2	0	0	3.2
		N	1	1823.6	.749.4	698.0	303.1	748.:	72.9	27.7	35.2	10.1	1.3	0	0	0	1.3
		N	2	700.4	642.8	249.0	141.0	252.8	55.6	25.9	28.4	1.3	1.9	0	0	0	1.9
	2	D	1	974.4	662.5	411.4	29.7	221.:	308.8	197.3	40.1	71.4	3.2	2.4	0.8	0	0
		D	2	908.0	573.2	391.1	22.5	159.6	334.7	249.8	39.0	46.0	0	0	0	0	0
		N	1	1251.1	752.1	459.5	37.7	254.9	497.2	371.5	70.0	55.6	1.8	0	1.8	0	0
		N	2	910.8	644.3	411.8	27.4	205.1	266.5	191.8	47.3	27.4	0	0	0	0	0
	3	D	1	591.5	348.5	205.2	22.4	120. 9	243.0	173.4	31.3	38.3	0	0	0	0	0
		D	2	690.9	383.0	203.0	29.9	150.1	305.8	225.2	42.4	38.2	2.1	2.1	0	0	0
		N	1	1107.2	649.4	349.1	51.9	248.4	456.8	373.0	42.9	40.9	1.0	1.0	0	0	0
		N	2	1176.9	701.4	410.7	69.8	220.9	472.2	393.4	41.9	37.0	3.3	2.5	0.8	0	0

Appendix XI-3 (cont.)

Iv	1	D	1	471.7	392.4	226.3	42.2	123.8	78.3	56.9	14.2	7.1	0.9	0	0.5	0	0.5
		D	2	996.0	906.2	493.2	53.1	359.9	88.7	58.4	22.8	7.4	1.1	0.5	0	0.5	0
		N	1	1037.3	935.4	482.9	145.7	306.7	95.3	38.1	45.7	11.4	6.7	3.8	1.9	0	1.0
		N	2	1334.7	L243. 3	605.7	164.9	472.6	88.7	40.2	43.0	5.5	2.8	2.8	0	0	0
	2	D	1	1177.0	913.8	663.7	46.7	203.5	259.2	208.7	45.4	5.2	3.9	0	0	0	3.9
		D	2	676.5	423.5	211.8	29.o	182.7	253.0	201.5	36.5	15.0	0	0	0	0	0
		N	1	2056.7	L709.9	737.4	286.9	685.6	337.1	158.8	158.8	"19 .4	9.7	8.1	1.6	0	0
		N	2	1341.5	L094.6	540.4	186.5	367.7	245.2	139.8	95.0	10.4	1.7	1.7	0	0	0
	3	D	1	822.9	606.5	261. i	31.9	313.5	211.9	162.2	15.3	34.5	4.5	3.2	1.3	0	0
		D	2	790.6	589.4	342.5	19.7	227.1	200.6	133.9	39.5	27.2	0.6	0	0	0	0.6
		N	1	377.6	283.6	163.6	21.8	98.2	92.1	68.7	10.8	12.6	1.8	1.3	0.2	0.2	0.2
		N	2	454.8	349.6	202.9	20.5	126.2	104.7	72.3	14.6	17.8	0.5	0	0	0	0.5

APPENDIX XII

PERCENTAGE COMPOSITION OF COPEPODS

APPENDIX XII-1

PERCENTAGE COMPOSITION OF COPEPODS

DECEM13ER/JANUARY CRUISE

				PERCENTAGE COMPOSITION								
				Copepoda 100%			Calanoida 100%			Cyclopoda 100%		
Transect	Station	Day or Night	Replicate No.	Calanoida	Cyclopoida	Harpacticoida	Adult Females	Adult Males	Immature	Adult Females	Adult Males	Immature
I	1	D	1	63.7	36.2	0.1	53.0	5.7	41.2	41.1	57.7	1.2
			2	74.3	25.5	0.2	52.4	10.1	37.5	39.9	59.0	1.1
		N	1	68.2	31.7	0.1	62.2	5.0	32.8	52.9	46.6	0.6
			2	70.7	29.2	0.1	70.4	5.3	24.3	51.2	46.8	2.0
	2	D	1	70.1	29.6	0.3	34.5	6.7	58.7	63.5	33.6	2.9
			2	73.7	25.9	0.3	37.5	9.8	52.7	75.5	21.8	2.7
		N	1	74.2	25.5	0.4	43.3	8.4	48.3	59.1	34.7	6.2
			2	61.3	37.1	1.6	28.5	12.5	59.0	43.5	52.1	4.5
	3	D	1	65.7	33.7	0.6	36.5	10.5	53.0	62.6	12.9	24.6
			2	63.2	36.2	0.6	32.6	7.7	59.7	60.7	12.5	26.8

Appendix XII-1(Cont.)

		N	1	62.4	37.6	0	41.3	8.0	50.6	68.0	13.7	18.3
			2	57.3	41.8	0.8	36.0	11.1	52.9	70.9	6.3	22.8
II	1	D	1	85.1	12.4	2.5	41.5	16.7	41.7	55.4	29.4	15.2
			2	83.6	16.1	0.3	63.9	9.5	26.6	40.1	43.2	16.7
		N	1	86.6	13.3	0.1	65.2	4.7	30.1	70.5	0.8	28.7
			2	54.6	44.6	0.8	39.7	14.9	45.4	37.1	57.0	5.9
	2	D	1	86.6	13.1	0.3	65.4	9.1	25.5	55.2	31.4	13.3
			2	80.2	19.3	0.5	54.8	14.0	31.2	65.5	27.0	7.5
		N	1	80.9	18.7	0.4	68.6	.6.1	25.3	61.3	27.6	11.1
			2	71.1	28.1	0.7	56.4	10.3	33.3	65.6	26.1	8.2
	3	D	1	86.7	13.2	0.1	58.6	5.8	35.6	69.8	17.5	12.7
			2	84.2	15.5	0.3	55.6	7.7	36.7	60.4	25.7	13.9
		N	1	82.6	16.9	0.6	53.5	7.2	39.3	69.8	15.9	14.3
			2	79.9	19.8	0.3	52.1	10.8	37.1	76.4	10.5	13.1
III	1	D	1	89.1	10.9	0	40.0	11.1	48.8	27.6	23.6	48.8
			2	89.6	10.4	0	47.4	12.9	39.8	21.3	21.8	56.9
		N	1	75.8	24.2	0	31.0	9.7	59.3	30.5	30.0	39.5
			2	79.6	20.4	0.1	33.5	21.5	45.0	37.2	30.3	32.6
	2	D	1	74.3	25.5	0.2	57.1	7.4	35.5	59.4	20.1	20.5
			2	74.9	24.7	0.4	58.5	10.2	31.3	58.5	18.4	23.1

Appendix XII-1(Cont.)

		N	1	77.0	23.0	0.1	45.0	8.1	46.9	56.4	18.7	24.9
			2	80.1	19.8	0.1	47.9	5.5	46.6	51.5	21.6	27.0
	3	D	1	79.5	19.5	1.0	53.4	10.4	36.1	65.7	18.2	16.1
			2	82.6	16.9	0.5	63.7	4.8	31.5	73.3	17.7	9.1
		N	1	73.7	25.6	0.7	47.4	16.9	35.6	80.7	17.3	2.0
			2	81.6	17.9	0.5	51.7	7.8	40.5	79.6	16.5	4.0
IV	1	D	1	86.6	12.7	0.6	49.9	2.6	47.4	22.0	28.0	50.0
			2	91.0	8.8	0.2	47.9	4.2	47.9	25.6	25.6	48.7
		N	1	94.7	5.1	0.2	52.1	8.1	39.7	33.3	27.1	39.6
			2	96.8	3.1	0.1	57.3	7.2	35.6	22.2	33.3	44.4
	2	D	1	85.9	14.1	0	44.0	6.9	49.1	54.1	21.1	24.8
			2	86.5	13.4	0.1	45.2	5.9	49.0	59.8	25.9	14.4
		N	1	83.0	16.5	0.5	39.1	5.8	55.2	59.4	23.8	16.8
			2	89.8	10.0	0.2	37.6	8.9	53.5	60.1	23.4	16.5
	3	D	1	79.7	19.7	0.6	36.6	7.9	55.4	72.6	18.0	9.4
			2	77.6	22.1	0.3	37.9	7.1	55.0	66.4	17.1	16.5
		N	1	78.2	21.5	0.3	25.8	9.5	64.7	69.5	19.2	11.4
			2	84.2	15.6	0.2	33.7	5.5	60.8	57.4	27.0	15.5

APPENDIX XII-2

PERCENTAGE COMPOSITION OF COPEPODS

APRIL/MAY CRUISE

				PERCENTAGE COMPOSITION								
				Copepoda 100%			Calanoida 100%			Cyclopoda 100%		
Transect	Station	Day or Night	Replicate No.	Calanoida	Cyclopoida	Harpacticoida	Adult Females	Adult Males	Immature	Adult Females	Adult Males	Immature
I	1	D	1	98.6	1.4	0.1	36.8	32.6	30.6	16.0	64.0	20.0
			2	99.1	0.8	0.1	50.0	25.4	24.6	40.0	40.0	20.0
		N	1	99.2	0.8	0	47.8	28.4	23.7	50.0	12.5	37.5
			2	97.3	2.6	0.1	40.4	22.5	37.1	21.0	71.0	7.9
	2	D	1	80.4	17.2	2.4	34.3	3.9	61.8	45.6	12.3	42.1
			2	89.8	9.5	0.7	51.1	5.0	43.9	57.0	12.9	30.1
		N	1	90.8	8.5	0.8	56.4	7.1	36.5	42.9	41.6	15.6
			2	90.9	8.2	0.9	41.1	7.9	51.0	36.6	40.8	22.5
	3	D	1	64.2	34.1	1.7	37.3	7.0	55.6	57.8	29.2	13.0
			2	56.7	41.8	1.4	35.0	5.9	59.2	69.9	15.3	14.9

Appendix XII-2 (Cont.)

		N	1	63.6	35.4	1.0	47.2	6.8	46.0	59.3	26.2	14.5
			2	63.4	35.0	1.5	54.0	7.1	38.9	55.7	33.9	10.5
II	1	D	1	73.1	26.9	0	65.2	12.0	22.8	11.3	38.1	50.6
			2	59.5	40.4	0.1	73.7	8.4	17.8	5.7	36.5	57.8
		N	1	92.0	7.9	0.1	65.8	8.0	26.3	33.3	31.9	34.7
			2	94.9	5.1	0	72.3	9.2	18.6	25.0	43.2	31.8
	2	D	1	69.0	31.0	0	43.4	9.0	47.6	24.4	46.5	29.0
			2	78.3	21.6	0.1	41.6	8.4	50.0	16.3	50.2	33.5
		N	1	74.5	25.5	0	50.1	12.3	37.5	29.8	29.8	40.4
			2	66.6	33.4	0	64.0	8.2	27.8	16.2	36.0	47.8
	3	D	1	54.4	42.1	3.5	42.2	4.7	53.1	60.8	20.8	18.4
			2	48.9	48.7	2.4	39.4	5.3	55.3	58.3	21.9	19.9
		N	1	73.2	26.4	0.4	44.0	8.8	47.3	69.5	21.5	9.0
			2	68.3	30.7	0.9	41.7	5.9	52.4	65.6	19.0	15.4
111	1	D	1	37.3	61.8	0.9	35.0	7.9	57.1	33.4	58.0	8.7
			2	37.9	61.2	0.9	41.1	5.5	53.4	38.3	54.2	7.5
		N	1	63.9	35.9	0.2	40.0	11.5	48.5	34.4	49.8	15.8
			2	72.5	27.3	0.2	16.8	9.9	73.3	35.0	53.5	11.5
	2	D	1	54.7	44.2	1.0	30.4	3.6	66.1	59.4	21.4	19.2
			2	68.5	31.0	0.5	59.3	6.9	33.8	80.6	9.7	9.7

Appendix XII-z (Cont.)

		N	1	58.4	37.7	3.9	35.4	5.5	59.1	71.8	19.7	8.5
			2	68.1	29.5	2.4	40.8	5.8	53.4	65.0	22.9	12.1
	3	D	1	58.4	39.0	2.6	41.9	5.5	52.6	51.5	23.1	25.4
			2	54.9	43.2	1.9	48.2	8.0	43.8	53.5	25.1	21.4
		N	1	63.6	36.1	0.3	32.8	5.5	61.7	58.2	24.6	17.2
			2	68.6	30.7	0.7	35.6	6.9	57.5	66.5	18.2	15.3
IV	1	D	1	65.9	34.1	0	28.8	14.6	56.5	11.4	41.2	47.3
			2	65.6	34.4	0	24.5	13.8	61.7	17.5	53.4	29.1
		N	1	65.9	34.1	0	54.3	11.5	34.3	14.0	66.7	19.3
			2	64.8	35.0	0.2	57.0	7.4	35.6	17.8	72.6	9.6
	2	D	1	67.5	32.1	0.5	42.4	12.6	45.0	39.2	45.2	15.7
			2	73.5	26.0	0.5	52.0	10.6	37.4	40.9	44.2	15.0
		N	1	74.0	25.6	0.4	50.5	17.4	32.0	41.3	50.4	8.3
			2	79.4	20.5	0	54.6	14.1	31.3	41.1	52.2	6.7
	3	D	1	78.1	21.5	0.4	55.0	7.9	37.0	61.0	23.8	15.2
			2	76.2	23.0	0.8	50.4	10.7	38.9	62.8	23.3	13.9
		N	1	77.3	22.0	0.6	46.1	13.1	40.7	56.7	31.6	11.7
			2	76.5	23.2	0.3	39.9	15.6	44.5	65.4	24.1	10.5

APPENDIX XII-3

PERCENTAGE COMPOSITION OF COPEPODS

AUGUST/SEPTEM13ER CRUISE

				PERCENTAGE COMPOSITION								
				Copepoda 100%			Calanoida 100%			Cyclopoda 100%		
Transect	Station	Day or Night	Replicate No.	Calanoida	Cyclopoida	Harpacticoida	Adult Females	Adult Males	Immature	Adult Females	Adult Males	Immature
I	1	D	1	86.0	13.9	0.1	57.4	6.3	36.3	43.6	47.3	9.1
			2	87.9	12.0	0.1	61.0	8.2	30.8	32.9	56.5	10.6
		N	1	92.6	7.2	0.2	36.2	19.8	44.0	35.0	56.9	8.1
			2	93.0	7.0	0.1	28.4	18.2	53.4	33.3	59.6	7.1
	2	D	1	82.4	17.4	0.2	37.0	11.9	51.1	69.2	15.9	14.9
			2	74.4	25.6	0	56.2	5.1	38.8	69.4	13.9	16.7
		N	1	81.1	18.7	0.2	35.1	8.0	56.9	66.5	15.7	17.8
			2	75.0	24.8	0.3	60.7	4.3	35.0	80.1	12.9	7.0
	3	D	1	46.8	52.4	0.8	52.6	5.0	42.4	76.2	13.6	10.1
			2	44.8	54.5	0.8	53.8	4.3	41.8	79.1	12.6	8.3

Appendix XII-3 (Cont.)

		N	1	60.2	38.5	1.3	50.6	3.3	46.1	73.3	16.2	10.5
			2	61.4	37.7	0.9	56.4	4.9	38.7	77.1	13.7	9.2
II	1	D	1	88.9	10.9	0.2	33.1	5.3	61.6	38.0	44.4	17.6
			2	87.2	12.4	0.4	44.7	12.5	42.8	38.7	48.6	12.7
		N	1	86.9	12.6	0.5	64.2	5.6	30.2	28.2	50.0	21.8
			2	85.3	14.4	0.2	58.9	6.1	35.0	30.5	47.3	22.1
	2	D	1	60.7	39.0	0.3	56.5	15.1	28.4	69.7	7.1	23.2
			2	63.4	36.1	0.5	55.9	18.1	26.0	75.0	8.2	16.8
		N	1	71.4	28.5	0.1	59.0	8.7	32.3	71.4	16.8	11.8
			2	81.6	18.2	0.2	54.9	6.7	38.4	64.6	25.3	10.1
	3	D	1	61.8	37.7	0.5	53.6	8.3	38.1	74.7	13.5	11.8
			2	60.2	39.5	0.3	60.3	6.6	33.2	75.2	13.4	11.4
		N	1	63.2	36.6	0.2	49.9	6.5	43.6	74.8	16.5	8.7
			2	68.0	31.9	0.1	65.6	5.3	29.0	82.3	11.0	6.7
III	1	D	1	77.0	22.9	0.1	58.5	8.3	33.2	68.8	21.8	9.4
			2	84.0	15.4	0.5	39.6	12.5	47.9	60.1	25.7	14.2
		N	1	95.9	4.0	0.1	39.9	17.3	42.8	37.9	48.3	13.8
			2	91.8	7.9	0.3	38.7	21.9	39.3	46.6	51.1	2.3
	2	D	1	68.0	31.7	0.3	62.1	4.5	33.4	63.9	13.0	23.1
			2	63.2	36.8	0	68.2	3.9	27.8	74.5	11.7	13.8

Appendix XI I-3(cont.)

		N	1	60.1	39.7	0.1	61.1	5.0	33.9	74.7	14.1	11.2
			2	70.7	29.3	0	63.9	4.3	31.8	72.0	17.8	10.3
	3	D	1	58.9	41.1	0	58.9	6.4	34.7	71.4	12.9	15.8
			2	55.4	44.3	0.3	53.0	7.8	39.2	73.6	13.9	12.5
		N	1	58.6	41.3	0.1	53.8	8.0	38.2	81.7	9.4	9.0
			2	59.6	40.1	0.3	58.5	10.0	31.5	83.3	8.9	7.8
IV	1	D	1	83.2	16.6	0.2	57.7	10.8	31.6	72.7	18.2	9.1
			2	91.0	8.9	0.1	54.4	5.9	39.7	65.9	25.7	8.4
		N	1	90.2	9.2	0.6	51.6	15.6	32.8	40.0	48.0	12.0
			2	93.1	6.6	0.2	48.7	13.3	38.0	45.3	48.4	6.2
	2	D	1	77.6	22.0	0.3	72.6	5.1	22.3	80.5	17.5	2.0
			2	62.6	37.4	0	50.0	6.9	43.1	79.6	14.4	5.9
		N	1	83.1	16.4	0.5	43.1	16.8	40.1	47.1	47.1	5.7
			2	81.6	18.3	0.1	49.4	17.0	33.6	57.0	38.7	4.2
	3	D	1	73.7	25.8	0.5	43.0	5.3	51.7	76.5	7.2	16.3
			2	74.6	25.4	0.1	58.1	3.3	38.5	66.8	19.7	13.5
		N	1	75.1	24.4	0.5	57.7	7.7	34.6	74.6	11.7	13.7
			2	76.9	23.0	0.1	58.0	5.9	36.1	69.1	13.9	17.0

APPENDIX XIII

LIST OF COPEPOD SPECIES FOUND

APPENDIX XIII List of Copepod Species Found

Order CALANOIDA

Family Calanidae

1. Calanus tenuicornis Dana, 1849
2. Nannocalanus minor (Claus, 1863)
3. Neocalanus gracilis (Dana, 1849)
4. Neocalanus robustior (Giesbrecht, 1888)
5. Undinula vulgaris (Dana, 1849)

Family Eucalanidae

6. Eucalanus hyalinus Claus, 1866
7. E. monachus Giesbrecht, 1888
8. E. pileatus Giesbrecht, 1888
9. E. sewelli Fleminger, 1973
10. E. subtenuis Giesbrecht, 1892
11. Rhincalanus cornutus Dana, 1852
12. Mecynocera clausii I.C. Thompson, 1888

Family Paracalanidae

13. Acrocalanus andersoni Bowman, 1958
14. A. longicornis Giesbrecht, 1888
15. Paracalanus aculeatus Giesbrecht, 1888
16. P. crassirostris F. Dahl, 1894
17. P. denudatus Sewell, 1929
18. P. indicus (Wolfenden, 1905)
19. P. quasimoto Bowman, 1971
20. P. sp.
21. Calocalanus elegans Shmeleva, 1965
22. C. pavo Dana, 1849
23. C. pavoninus Farran, 1936
24. C. styliremis Giesbrecht, 1888
25. c. sp.1
26. c. sp.2
27. c. sp.3
28. c. sp.4
29. Ischnocalanus plumulosus (Claus, 1863)

Family Pseudocalanidae

30. Clausocalanus arcuicornis (Dana, 1849)
31. C. furcatus (Brady, 1883)
32. C. jobei Frost & Fleminger, 1968
33. C. mastigophorus (Claus, 1863)
34. C. parapergens Frost & Fleminger, 1968
35. C. paululus Farran, 1926
36. C. pergens Farran, 1926
37. Ctenocalanus vanus Giesbrecht, 1888

Appendix XIII (Cont.)

Family Aetideidae

38. Aetideus acutus Farran, 1929
39. A. giesbrechti Cleve, 1904
40. Bradyidius sp.1
41. B. sp.2
42. Chiridius subgracilis Park, 1975
43. Euchirella amoena Giesbrecht, 1888
44. E. messinensis (Claus, 1904)
45. E. pulchra (Lubbock, 1856)
46. E. rostrata (Claus, 1866)
47. E. splendens Vervoort, 1963
48. Gaetanus minor Farran, 1905
49. Paivella inaciae Vervoort, 1965
50. Undeuchaeta plumosa (Lubbock, 1856)

Family Euchaetidae

51. Euchaeta marina (prestandrea, 1833)
52. E. media Giesbrecht, 1888
53. E. paraconcinna Fleminger, 1957
54. E. pubera Sars, 1907
55. E. spinosa Giesbrecht, 1892

Family Phaennidae

56. Phaenna spinifera Claus, 1963
57. Xanthocalanus agilis Giesbrecht, 1892

Family Scolecithricidae

58. Lophothrix latipes (T. Scott, 1897)
59. Racovitzanus levis Tanaka, 1961
60. Scaphocalanus brevirostris Park, 1970
61. S. subcurtus Park, 1970
62. Scolecithricella ctenopus (Giesbrecht, 1888)
63. S. dentata (Giesbrecht, 1888)
64. S. tenuiserrata (Giesbrecht, 1892)
65. S. vittata (Giesbrecht, 1892)
66. Scolecithrix bradyi Giesbrecht, 1888
67. S. danae (Lubbock, 1856)

Family Tharybidae

68. Parundinella spinodenticula Fleminger, 1957

Family Stephidae

69. Stephos deichmannae Fleminger, 1957

Appendix XIII (Cont.)

Family Temoridae

70. Temora stylifera (Dana, 1849)
71. T. turbinata (Dana, 1849)
72. Temoropia mayumbaensis T. Scott, 1894

Family Metridiidae

73. Pleuromamma abdominalis (Lubbock, 1856)
74. P. gracilis (Claus, 1863)
75. P. piseki Farran, 1929
76. P. xiphias (Giesbrecht, 1889)

Family Centropagidae

77. Centropages caribbeanensis Park, 1970
78. C. hamatus (Lilljeborg, 1853)
79. C. velificatus De Oliveira, 1947

Family Pseudodiaptomidae

80. Pseudodiaptomus sp.1
81. P. sp.2

Family Lucicutiidae

82. Lucicutia clausi (Giesbrecht, 1889)
83. L. flavicornis (Claus, 1863)
84. L. gaussae Grice, 1963
85. L. gemina Farran, 1926
86. L. paraclausi Park, 1970

Family Heterorhabdidae

87. Heterorhabdus medianus Park, 1970
88. H. papilliger (Claus, 1863)
89. H. spinifer Park, 1970
90. H. spinifrons (Claus, 1963)

Family Augaptilidae

91. Haloptilus acutifrons (Giesbrecht, 1892)
92. H. austini Grice, 1959
93. H. longicornis (Claus, 1863)
94. H. ornatus (Giesbrecht, 1892)
95. H. paralongicirrus Park, 1970
96. H. spinicips (Giesbrecht, 1892)
97. Augaptilus longicaudatus (Claus, 1863)
98. A. megalurus Giesbrecht, 1889
99. Euaugaptilus hecticus (Giesbrecht, 1889)

Appendix XIII (Cont.)

Family Candaciidae

100. Candacia bipinnata Giesbrecht, 1892
101. C. curta (Dana, 1849)
102. C. longimana (Claus, 1863)
103. C. pachydactyla (Dana, 1849)
104. C. varicans (Giesbrecht, 1892)
105. Paracandacia bispinosa (Claus, 1863)
106. P. simplex (Giesbrecht, 1889)

Family Pontellidae

107. Calanopia americana F. Dahl, 1894 -
108. Anomalocera ornata Sutcliffe, 1949
109. Pontella meadii Wheeler, 1900
110. P. securifer Brady, 1883
111. Labidocera acutifrons (Dana, 1852)
112. L. aestiva Wheeler, 1901
113. L. scotti Giesbrecht, 1897
114. Pontellopsis villosa Brady, 1883
115. Pontellina plumata (Dana, 1849)

Family Acartiidae

116. Acartia danae Giesbrecht, 1889
117. A. lilljeborgii Giesbrecht, 1889
118. A. tonsa Dana, 1848

Order CYCLOPOIDA

Family Oithonidae

119. Oithona brevicornis Giesbrecht, 1892
120. 0. fallax Farran, 1913
121. 0. hamata Rosendorn, 1917
122. 0. hebes Giesbrecht, 1891
123. 0. nana Giesbrecht, 1892
124. 0. plumifera W. Baird, 1843
125. 0. robusta Giesbrecht, 1892
126. 0. setigera (Dana, 1852)
127. 0. similis Claus, 1863
128. 0. simplex Farran, 1913
129. 0. tenuis Rosendorn, 1917
130. 0. vivida Farran, 1913
131. 0. Sp.1
132. 0. sp.2
133. 0. sp.3
134. Paroithona pulls Farran, 1913
135. P. Sp.
136. Ratania flava Giesbrecht, 1892
137. Saphirella typica Wolfenden, 1906
138. s. Sp.

Appendix XIII (Cont.)

Family Oncaeidae

139. Oncaea conifers Giesbrecht, 1891
140. 0. dentipes Giesbrecht, 1892
141. 0. media Giesbrecht, 1892
142. 0. mediterranea Claus, 1863
143. 0. notopus Giesbrecht, 1891
144. 0. ornata Giesbrecht, 1891
145. 0. venusta Philippi 1843
146. 0. Sp.
147. Lubbockia squillimana Claus, 1863

Family Lichomolgidae

148. Lichomolgus sp.

Family Sapphirinidae

149. Sapphirina angusta Dana, 1852
150. S. auronitens Claus, 1863
151. S. maculosa Giesbrecht, 1892
152. S. metallina Dana, 1852
153. S. nigromaculata Claus, 1863
154. S. opalina Dana, 1852
155. S. ovatolanceolata Dana, 1852
156. Vettoria granulosa (Giesbrecht, 1891)
157. Corissa parva Farran, 1936
158. Copilia lata Giesbrecht, 1892
159. C. mirabilis Dana, 1852
160. C. quadrata Dana, 1852
161. C. vitrea (Haeckel, 1864)

Family Corycaeidae

162. Corycaeus americanus M. Wilson, 1949
163. C. amazonicus F. Dahl, 1894
164. C. clausi F. Dahl, 1894
165. C. flaccus Giesbrecht, 1891
166. C. furcifer Claus, 1863
167. C. giesbrechti F. Dahl, 1894
168. C. latus Dana, 1849
169. C. lautus Dana, 1852
170. C. limbatus Brady, 1883
171. C. minimus indicus M. Dahl, 1912
172. C. speciosus Dana, 1852
173. C. typicus (Kroyer, 1853)
174. Farranula gracilis (Dana, 1853)
175. F. rostrata (Claus, 1863) "

Appendix XIII (Cont.)

Order HARPACTICOIDA

Family Ectinosomidae

176. Microsetella norvegica (Boeck, 1864)
177. M. rosea (Dana, 1848)

Family Clytemnestridae

178. Clytemnestra rostrata Brady, 1883
179. C. scutellata Dana, 1848

Family Miraciidae

180. Miracia minor T. Scott, 1894

Family Macrosetellidae

181. Macrosetella gracilis (Dana, 1848)
182. Oculosetella gracilis (Dana, 1852)

APPENDIX XIV

NUMERICAL ABUNDANCE OF ADULT FEMALE COPEPODS PER M^3

APPENDIX xIV-1-1

NUMERICAL ABUNDANCE OF ADULT FEMALE COPEPODS PER M^3

DECEMBER/JANUARY CRUISE - TRANSECT I

Station	1				2				3			
Day or Night	D	D	N	N	D	D	N	N	D	D	N	N
Replicate No.	1	2	1	2	1	2	1	2	1	2	1	2
Total No. /m^3	187.(	599 .?	464.6	408.4	336.8′	379.5	366.:	171.0	121.5	93.2	105.9	115.[
CALANOIDA												
Acartia danae	(	a	0	,0	0.$	0	0.(	0.5	0	0	0	c
Acartia lilljeborgii	1.(	5.8	1.9	0	0	0	. (	0	0	0	0	(
Acartia tonsa	7.(	113.4	11.1	8.8	0.5	5.6	(	0	0	0	0	c
Acrocalanus andersoni	(	0	0	0	0	0	0.:	0	0	0	0.6	0.:
Acrocalanus longicornis	(	0	0	0	,0	0	(	0	0	0	0.3	0.:
Aetideus acutus	(	0	0	0	0.5	0	. 0.:	0	0	0.3	0.6	0.:
Calanopia americana	1.(	0.6	0	0	7.8	0	14.4	1.0	0.5	0	0.6	c
Calanus tenuicornis	(	0	0	0	0	0	0.(	0.5	0	0.3	0	0.:
Calocalanus pavo	c	0	0	0	0	0	0.9	0	0″. 5	0.3	0.6	c
Calocalanus pavoninus	c	0	0	0	0	0.6	0.:	2.5	2.7	1.3	0.3	2.5
Calocalanus styliremis	c	0	0	0	0.5	0	1.1	1.0	1.0	0	0.8	0.6
Calocalanus sp.4	c	0	0	0	0	0	0.:	1.0	2.1	1.0	1.4	0.9
Candacia curta	c	0	0	0	0.5	1.3	2.:	0	0	0	0	0
Candacia pachydactyla	c	0	0	- o	0	0	c	0	0	,,0	0.3	0
Centropages caribbeanensis	c	0	0	0	0	0	0	0	0.5	.0	0	0
Centropages velificatus	43.(	;30.1	8.3	6.6	11.6	8.1	3.1	2.6	0	0	0.6	0.6
Clausocalanus arcuicornis	0	0	0	0	0.5	0	0.3	0	0	2.0	0.6	0.6
Clausocalanus furcatus	8.4	4.0	0.5	3.7	21.4	30.2	70.9	20.9	35.7	20.9	23.1	20.6
Clausocalanus jobei	0	0	0	0	0	0.6	0.9	0,5	0	0.3	0.6	0

Appendix XIV-I-1 (cont.)

Clausocalanus mastigophorus	0	0	0	0	0	0	0	0	0	0	0.3	0
Clausocalanus parapergens	0	0	0	0	0	0.6	2.3	3.2	0.5	1.0	0.6	0
Clausocalanus paululus	0	0	0	0	0	0	0	0	1.0	1.5	0.6	0.3
Clausocalanus pergens	0	0	0	0	0	0	0	0	0	0	0.6	0
Ctenocalanus vanus	0	0	0	0	0.5	0	6.7	1.0	1.0	1.8	1.7	0.6
Eucalanus hyalinus	0	0	0	0	0	0	0	0	0	0.3	0	0
Eucalanus pileatus	24.8	16.8	16.2	9.5	22.4	28.8	17.7	1.0	0.5	0.3	0.9	0
Euchaeta marina	0.3	0	0	0	0	0	0.3	0	1.6	0	0.6	0
Euchaeta media	0	0	0	0	0	0	0	0	0	0.3	0.3	0
Euchaeta paraconcinna	0	0	0	0	1.6	0.6	0.6	0.5	0	1.0	1.1	0
Haloptilus acutifrons	0	0	0	0	0	0	0	0	0	0.3	0	0
Haloptilus longicornis	0	0	0	0	0	0	0	0	2.1	1.3	0.8	0.6
Heterorhabdus papilliger	0	0	0	0	0	0	0	0	0	0	0.3	0
Heterorhabdus spinifer	0	0	0	0	0	0	0	0	0	0.3	0	0.6
Labidocera aestiva	0	0.6	0	0	0	0	0	0	0	0	0	0
Lucicutia flavicornis	0	0	0	0	6.3	8.8	12.3	8.1	2.1	4.0	1.7	3.8
Lucicutia gaussae	0	0	0	0	0	0	0	0	0.5	0	0.8	0.3
Mecynocera clausi	0	0	0	0	0	0	0.3	0	0.5	1.8	0.6	1.9
Nannocalanus minor	0	0	0	0.7	0	0	1.7	0	1.6	0	1.4	0.6
Paivella inaciae	0	0	0	0	0	0	0	0	0.5	0	0.3	0
Paracalanus aculeatus	7.4	14.4	3.7	2.9	22.4	25.7	22.8	15.3	1.0	0.3	0.8	0.3
Paracalanus crassirostris	0	0.6	0	0	0	0	0	0	0	0	0	0
Paracalanus denudatus	0	0	0	0	0	0	0	0	0	0	0	0.9
Paracalanus indicus	123.5	45.2	80.1	225.4	72.9	83.9	54.8	17.8	1.7	0	2.5	2.2
Paracalanus quasimoto	97.7	22.6	206.6	54.9	15.1	12.5	23.7	2.6	0.5	0	0.3	0.9

Appendix XIV-l-1 (cont.)

Paracandacia bispinosa	0	0	0	0	0	0	0	0	0.5	0.5	0	0.3
Paracandacia simplex	0	0	0	0	0	0	0	0	0	0	1.1	0
Pleuromamma abdominalis	0	0	0	0	0	0	0	0	0.5	0	0.3	0.3
Pleuromamma gracilis	0	0	0	0	0	0	0.3	0	1.0	1.5	0.3	0.3
Pleuromamma piseki	0	0	0	0	0	0	0	0	0.5	0	0.3	0
Rhincalanus cornutus	0	0	0	0	0	0	0	0	0.5	0.3	0	0
Scaphocalanus brevirostris	0	0	0	0	0	0	0	0	0	0	0	0*3
Scaphocalanus subcurtus	0	0	0	0	0	0	0	0	0	0	C.3	0.3
Scolecithricella dentate	0	0	0	0	0	0.6	0	0	0	0.3	0.8	1.3
Scolecithricella tenuiserrata	0	0	0	0	0	0.6	1.1	1.0	0	0.8	0.6	0.3
Scolecithrix bradyi	0	0	0	0	0	0	0.3	0	0.5	0	0.6	0.3
Scolecithrix danae	0	0	0	0	0	0	0	0	0	0	0.3	0.3
Temora **stylifera**	4.6	1.7	1.9	0	1.6	8.1	1.4	4.6	0	0.3	0	0
Temora turbinata	17.2	18.5	2.3	1.5	3.1	4.4	5.7	0.5	1.0	0	0.3	0.6
Temoropia **mayumbaensis**	0	0	0	0	0	0	0	0	0	0.8	1.4	1.3
Undeuchaeta plumosa	0	0	0	0	0	0	0	0	0	0	0.3	0
Undinula vulgaris	0.3	1.2	0	0	0	0	0.6	0	0.5	0	0.3	0.6
CYCLOPOIDA												
Copilia mirabilis	0	0	0	0	0	0	0	0	0	0	0.6	0
Corycaeus amazonicus	48.7	26.6	52.8	43.2	4s.3	44.5	5.7	14.3	0	0.5	0.8	1.3
Corycaeus americanus	2.2	5.2	3.2	2.2	0.5	0.6	0	0.5	0	0	0	0
Corycaeus flaccus	0	0	0	0	0	0	0	0	0	0	0	0.3
Corycaeus furcifer	0	0	0	0	0	0	0	0	0	0.3	0	0
Corycaeus giesbrechti	92.3	B2.1	71.8	42.4	47.4	75.8	12.6	8.7	0.5	1.5	0.8	1.3
Corycaeus latus	0	0	0	0	0	0	0	0	0	0.3	0.6	0
Corycaeus limbatus	0	0	0	0	0	0	0	0	0.5	0	0.3	0.6

Appendix XIV-1-I (cont.)

Corycaeus minimus indicus	0	0	0	0	0	0	0	0	0	0	0.3	0
Corycaeus speciosus	0	0	0	0	0	0	0.9	0.5	0.5	0.3	1.7	1.3
Corycaeus typicus	0	0	0	0	0	0	0.3	0	0.5	0.5	0.3	0
Farranula gracilis	0	0	0	0	1.6	0	3.7	0	6.3	2.8	4.2	1.9
Lichomolgus sp.	0	0	0	0.7	0.6	0.7	0	0	0	0	0	0
Lubbockia squillimana	0	0	0	0	0	0	0.3	0.5	0.5	0.3	0	0.9
Oithona hamata	0	, 0	0	0	0	0	0	0	1.0	1.5	0.6	1.3
Oithona nana	0.3	2.3	1.9	2.9	0	0	0	0	Q	0	0	0
Oithona plumifera	1.1	4.6	0.9	1.5	28.6	15.0	38.8	32.1	26.2	26.0	20.3	25.0
Oithona robusta	0	0	0	0	0	0	0	0	1.6	0.8	0.8	1.6
Oithona setigera	0	0	0	0	1.0	1.3	0.3	3.1	5.8	8.6	6.1	10.8
Oithona tenuis	0	0	0	0	0.5	0.6	0	1.5	2.6	1.5	1.4	3.2
Oncaea conifera	0	0	0	0	1.3	1.9	1.1.4	2.5	0.5	0.8	1.7	0.9
Oncaea media	0	0	0	0	0	0	0	0	0	0	1.4	0.9
Oncaea mediterranea	0.3	0	0	0	9.9	8.1	15".4	7.2	4.7	0.8	4.2	5.4
Oncaea notopus	0	0	0	0	0	0	0	0.5	0	0	0	0
Oncaea venusta	3.8	3.5	0.9	1.5	9.9	8.8	25.7	8.1	4.7	1.5	6.7	11.4
HARPACTICOIDA												
Clytemnestra scutellata	0	0	0	0	0	0.6.	0.6	0.5	0.5	0	c	0
Macrosetella gracilis	0.3	0.6	0.5	0	0.5	0.6	1.7	4.6	1.0	1.0	0	0.6
Miracia minor	0	0	0	0	0	0	0	0	0	0	0	0.3
Oculosetella gracilis	0	0	0	0	0	0	0	0.3	0	0	0	0

APPENDIX XIV-l-2

NUMERICAL ABuNDANCE OF ADULT FEMALE COPEPODS PER M^3

DECEMBER/JANUARY CRUISE - TRANSECT II

Station	1				2				3			
Day or Night	D	D	N	N	D	D	N	N	D	D	N	N
Replicate No.	1	2	1	2	1	2	1	2	1	2	1	2
Total No./m^3	2048.0	1078.9	1381.6	171.7	571.2	138.9	195.5	435.4	220.3	205.9	703.5	548.4
CALANOIDA												
Acartia danae	0	0	0	0	1.1	1.6	0	1.2	0	0	1,2	1.0
Acartia tonsa	0	1.4	0	1.7	26.7	77.0	0	0	0	0	0	0
Acrocalanus andersoni	0	0	0	1.7	1.1	1.6	0.7	2.4	0.4	0.4	9.2	0
Acrocalanus longicornis	0	0	0	0	1.1	0	5.5	1.2	0.4	1.1	0	0
Aetideus acutus	0	0	0	0	1.1	1.6	0	0.6	0	0	1.2	0
Calanopia americana	6.8	0.7	6.9	11.8	3.3	4.9	6.2	4.1	2.7	3.0	2.3	7.0
Calanus tenuicornis	0	0.7	0	0	0	0	0	1.2	0.4	0.2	3.5	1.0
Calocalanus pavo	0	0	0	0	0	0	2.1	1.8	0.4	0.6	1.2	4.0
Calocalanus pavoninus	0	0	0	1.7	0	1.6	0	1.2	1.2	0.7	2.3	5.0
Calocalanus styliremis	0	0	0	0	0	1.6	1.4	0.6	1.2	0.6	3.5	1.0
Calocalanus sp.3	0	0	0	0	0	0	0	0	0	0.2	0	0
Calocalanus sp.4	0	0	2.3	0	1.1	0	0	0.6	0	0.2	2.3	0
Candacia curta	0	1.4	0	1.7	0	0	2.8	0	0	0.2	0	0
Centropages caribbeanensis	0	0	0	1.7	0	0	0	0	0	0	0	2.0
Centropages hamatus	0	0	0	0	1.1	4.9	0	0	0	0	0	0
Centropages velificatus	67.9	32.6	18.3	8.5	3.3	3.3	2.8	0	0.8	0.2	3.5	1.0

Appendix XIV-I-2 (cent,)

Clausocalanus arcuicornis	o	0	o	0	1.1	1.6	2.8	,2.4	1.9	0.6	4.6	1.0
Clausocalanus furcatus	42.7	51.5	43.4	32.1	72.2	73.7	318.1	.36.3	90.9	91.5	372.0	250.0
Clausocalanus jobei	0	0	0	0	1.1	4.9	0	0.6	0.8	0.2	0	0
Clausocalanus mastigophorus	0	0	0	0	0	0	0.7	0.6	0	0	0	0
Clausocalanus parapergens	0	0	0	0	0	0	0.7	0.6	0.4	0.2	4.6	3.0
Clausocalanus paululus	0	0	0	0	0	0	0	0	0	0.4	4.6	1.0
Ctenocalanus vanus	0	0	0	0	2.2	1.6	0.7	0.6	0.8	0.9	9.2	3.0
Eucalanus hyalinus	0	0	0	0	1.1	0	0	0	0	0	0	0
Eucalanus monachus	0	0	0	0	0	0	0	0	0	0	0	1.0
Eucalanus pileatus	91.7	"15.6	6.9	13.5	22.2	4.9	11.1	3.5	8.5	6.5	1.2	3.0
Eucalanus sewelli	0	0	0	0	1.1	0	0	0	0	0	0	0
Euchaeta màrina	c	0	0	0	1.1	3.3	1.4	0	1.2	0	1.2	0
Euchaeta paraconcinna	0	0	0	0	2.2	4.9	. 1.4	1.8	0.8	0.2	2.3	1.0
Haloptilus longicornis	0	0	0	0	0	0	0	0	1.2	0.7	0	0
Heterorhabdus papilliger	0	0	0	0	0	0	0	0	0.4	0	0	0
Ischnocalanus plumu-10SUS	0	0	0	0	0	0	.0	0	0	0.2	0	0
Labidocera aestiva	0	0	0	0	1.1	0	0	0	0	0	0	0
Lucicutia flavicornis	0	0.7	0	5.1	7.8	4.9	1.4	8.3	4.2	4.3	10.4	12.9
Lucicutia gaussae	0	0	0	0	0	Q	0.7	0.6	0	0.2	1.2	1.0
Lucicutia paraclausi	0	0	0	0	1.1	4.9	0.7	0	0	0	0	0
Mecynocera clausi	0	0	0	0	1.1	3.3	0	0.6	0	0	1.2	3.0
Nannocalanus minor	0	0	0	0	16.7	13.1	17.3	3.0	6.9	3.0	6.9	13.9
Neocalanus gracilis	0	0	0	0	0	0	0	0	0	0	1.2	0
Paivella inaciae	0	0	0	0	0	0	. 0	0	0.4	0	0	0
Paracalanus aculeatus	30.6	29.9	13.7	15.2	26.7	18.0	27.7	16.0	4.2	7.8	6.9	12.9
Paracalanus crassirostris	6.8	0.7	0	1.7	0	0	0	0	0	0	0	o

Appendix XIV-1-2 (cont.)

Paracalanus denudatus	0	0	0	0	2.,2	0	0	0	0	0	0	0
Paracalanus indicus	740.4	.83.1	97.4	01.4	68.9	16.3	46. 2	56.7	25.0	21.5,	68.1	37.8
Paracalanus quasimoto	264.9	88 .6	171.4	49.0	07.8	29.4	49.8	13.6	15.4	11.4	5.8	13.9
Paracandacia simplex	3.4	0	0	0	0	0	0	0	0	0.2	0	0
Parundinella spinodenticula	0	0	0	0	0	0	0	0	0	0.2	0	0
Pleuromamma abdominalis	0	0	0	0	0	0	0	0	0.4	0	0	0
Pleuromamma gracilis	0	0	0	0	0	0	0	0	1.2	0.7	1.2	1.0
Pleuromamma piseki	0	0	0	0	0	0	0.7	0	0.8	0.4	0	1.0
Pontellina pulmata	0	0	0	0	0	0	"0	0	0.4	0	0	0
Rhincalanus cornutus	0	0	0	0	0	0	0	0	0	0	1.2	0
Scaphocalanus brevirostris	0	0	0	0	0	0	0	0	0	0.2	1.2	0
Scolecithricella ctenopus "	0	0	0	0	0	0	0	0.6	0	0	0	1.0
Scolecithricella dentata	0	0	0	0	0	0	0	0	0.8	1.1	0	0
Scolecithricella tenuiserrata	0	0	0	0	0	0	0	0.6	0.8	.,0.2	0	0
Scolecithrix bradyi	0	0	0	0	0	0	0	0	0	0	1.2	0
Scolecithrix danae	0	0	0	0	0	0	0	1.2	0.8	0	0	0
Temora stylifera	27.2	6.1	2.3	8.5	4.4	13.1	10.4	5.9	2.3	2.1	1.2	0
Temora turbinata	326.0	42.1	20,6	10.1	20.0	52.4	27.7	26.6	7.3	7.1	8.1	16.9
Temoropia mayumbaensis	0	0	0	0	1.1	0	0	0	0.4	.0	3.5	0
Undinula vulgaris	0	0	0	0	1.1	0	0.7	0.6	1.5	1.9	1.2	0
CYCLOPOIDA												
Copilia lata	0	0	0	0	0	0	0.7	[illegible]	0	0	0	0
Copilia mirabilis	0	0	0	0	2.2	0	0.7	0.6	0	0.4	0	1.0
Corissa parva	0	0	0	0	0	' 0	0	0	0	0.2	0	0
Corycaeus amazonicus	37.4	31.2	79.9	87.9	16.7	14.7	5.5	10.6	1.9	1.1	5.8	1.0
Corycaeus americanus	3.4	4.1	9.1	6.8	0	0	0.7	0	0	0	1.2	0

Appendix XIV-l-2 (cont.)

Corycaeus giesbrechti	146.0	42.0	36.5	38.9	3.3	9.8	15.2	20.1	3.1	4.1	15.0	14.9
Corycaeus latus	3.4	0	0	0	0	0	1.4	0.6	0	0.2	1.2	0
Corycaeus lautus	0	0.7	0	0	0	0	0.7	0	0	0	0	0
Corycaeus limbatus	0	0	0	0	0	0	0	0	0.4	0	2.3	0
Corycaeus speciosus	3.4	2.0	2.3	0	0	3.3	0	1.2	0.8	0.7	8.1	0
Corycaeus typicus	0	0	0	0	1.1	0	0	0	0.4	0.4	1.2	0
Farranula gracilis	20.4	7.5	29.7	0	0	4.9	26.3	5.3	2.7	3.4	6.9	3.0
Lubbockia squillimana	0	0	0	1.7	1.1	0	0.7	0.6	0	0.4	0	1.0
Oithona brevicornis	0	0	0	0	0	0	0	0	0	0	1.2	0
Oithona hamata	0	0	0	0	0	0	0	0	0	0.2	0	0
Oithona nam	3.4	0.7	0	0	0	1.6	0	0	0	0	0	0
Oithona plumifera	3.4	5.4	20.6	37.2	13.3	50.8	8.3	15.4	3.1	2.4	39.3	21.9
Oithona robusta	0	0	0	1.7	1.1	1.6	0	0	0.8	0	0	0
Oithona setigera	0	0	0	0	6.7	1.6	0.7	0	1.9	2.2	3.5	5.0
Oithona tenuis	0	0	0	0	0	0	0	0.6	0	0.6	2.3	1.0
Oncaea conifers	0	0	0	0	0	1.6	0	3.5	0.4	0.6	5.8	5.0
Oncaea media	0	0	0	0	1.1	0	0	0	0	0	0	1.0
Oncaea mediterranea	3.4	9.5	6.9	13.5	7.8	50.8	6.9	17.1	1.2	1.9	6.9	10.9
Oncaea. venusta	108.7	12.9	11.4	15.2	10.0	45.9	82.3	60.8	17.3	15.5	46.2	79.6
Saphirella sp.	0	1.4	0	0	0	0	0	0	0	0	0	0
HARPACTICOIDA												
Clytemnestra scutellata	0	0.7	0	3.4	0	0	0.7	0	0	0	0	0
Macrosetella gracilis	6.8	5.4	2.3	0	2.2	3.3	3.5	2.4	0	0.9	5.8	3.0
Miracia minor	0	0	0	0	0	0	0	0	0	0	1.2	0

APPENDIX XIV-l-3

NUMERICAL ABUNDANCE OF ADULT FEMALE COPEPODS PER M^3

DECEMBER/JANUARY CRUISE - TRANSECT III

Station	1				2				'3			
Day or Night	D	D	N	N	D	D	N	N	D	D	N	N
Replicate No.	1	2	1	2	1	2	1	2	1	2	1	2
Total No. /m^3	343.:	012.	521.6	702.2	224.2	540.6	518.4	297.(	220.:	374.(	545.	206.6
CALANOIDA												
Acartia danae	"0	(	C	0	0	0	(	(	0.6	c		o
Acartia lilljeborgii	a	c	1.8	1.6	0	. 0	(	(	c	c		0
Acartia tonsa	"3.8	c	68.6	46.5	1.2	0	(	(	0	o		0
Acrocalanus andersoni	0	c	c	0	1.2	0	(	0.:	0	0.8		0.9
Acrocalanus longicornis	0	c	c	0	1.2	0	1.5	0.7	0	0.8		0.4
Calanopia americana	0	1.C	6.4	6.4	5.0	2.6	4.4	2.2	0.3	1.2	27.	2.1
Calanus tenuicornis	0	c	c	0	1.2	0	0	0	0.3	0		0
Calocalanus pavo	0	'C	c	0	10.0	0.9	5.8	2.9	1.3	0.6	1.	0
Calocalanus pavoninus	0	c	" c	0'	2.5	2.6	2.9	1.5	2.9	2.4		1.7
Calocalanus styliremis	0	c	C	O	8.7	3.4	3.7	3.6	2.2	2.4		2.6
Calocalanus sp.1	0	c	c	o	0	0	0.7	0.7	0	0		0
Calocalanus sp.4	0	' 'C	c	0"	0	0.9	1.5	0	1.0	0		0
Candacia curta	0	c	C	o	1.2	0.9	1.5	0.5	0	0.4	1.	0.9
Centropages caribbeanensis	0	c	c	0	1.2	0	.0	0	0.3	0		0
Centropages hamatus	0	1.C	C	0	0	0	0	0	0	0		0
Centropages velificatus	11.2	10.9	13.7	9.6	2.5	0.9	0.7	0	0	0	10.	0.9
Clausocalanus arcuicornis	O	C	0	O	3.7	2.6	3.7	0.7	1.3	1.6		0.4
Clausocalanus furcatus	7.5	12.9	20.1	4.8	61.4	14.8	18.7	,61.9	19.0	26.4	01.!	88.3

Appendix XIV-l-3 (cont.)

Clausocalanus jobei	0	1.0	0	0	5.0	0.9	0	2.2	0.6	0.8	2.5	0.9
Clausocalanus mastigophorus	Q	0	0	0	1.2	0	0	0	' o	0	0	0.9
Clausocalanus parapergens	0	0	0	0	1.2	0	2.2	o	0	0	5.1	1.3
Ctenocalanus vanus	O	0	0	0	0	0	0.7	1.5	0.6	0.4	"1.3	0
Eucalanus hyalinus	0	O	0	0	0	0	c	0	O	0.4	o	0
Eucalanus monachus	0	0	0	0	0	0	c	o	0	0.4	0	0
Eucalanus pileatus	56.2	47.6	32.0	41.7	10.0	14.6	10.2	1.5	"la	4.8	15.2	1.3
Eucalanus sewelli	.O	0	0	o	0	0	c	o	0.6	O	0	0
Euchaeta marina	0	0	0	0	0	1.7	c	0	1.C	0.4	0	0.,4
Euchaeta paraconcinna	0	0	0	0	2.5	0.9	c	o	0.3	0.8	3.8	0.9
Haloptilus longicornis	0	0	0	0	0	0	c	0.7	c	0.8	0	0
Heterorhabdus papilliger	O	0	0	0	0	0	c	o	0.3	0	0	0
Heterorhabdus spinifer	o	0	0	0	0	O	c	o	c	0.4	1.3	0
Ischnocalanus plumulosus	0	0	0	0	0	0.9	c	o	c	0	0	0
Labidocera aestiva	0	0	0	0	0	1.7	c	o	' c	" o	0	0
Lucicutia flavicornis	0	0	0.9	c	18.7	0.9	5.8	3.6	3.8	4.4	8.9	2.2
Lucicutia gaussae	0	0	0	c	0	0.9	0.7	o	1.3	0	0	0
Mecynocera clausi	0	0	, O	c	0	0	c	0.7	0.3	1.3	0	0
Nannocalanus minor	5.6	0	0	C	2.5	1.7	3.7	0 . 7	6.C	3.2	16.5	8.2
Neocalanus gracilis	0	0	0	a	0	0	c	o	0.3	0.8	0	0
Paivella inaciae	0	0	0	C	1.2	0	c	0	0'.6	0	1.3	0
Paracalanus aculeatus	11.2	3.0	52.2	19.2	43.7	22.4	18.2	13.8	4.1	11.2	11.4	4.7
Paracalanus denudatus	0	0	0	c	0	0	'c	0	c	0	0	0.4
Paracalanus indicus	35.5	269.5	128.1	234.1	36.2	37.0	12.4	20.3	5.7	21.2	41.9	21.5
Paracalanus quasimoto	88.6	577.6	65.0	165.1	3.7	11.2	1.5	0	0.3	3.6	24.1	2.6
Paracandacia bispinos	O	O	c	c	O	0	C	0	c	0.4	0	0

Appendix XIV-1-3 (cont.)

Paracandacia simplex	c	(	(	(	c	c	c	c	0.3	0.4	0	"0
Pleuromamma abdominalis	0	(	(	(	c	c	0	c	0.3	0	0	0
Pleuromamma gracilis	a	"(	0	(	c	c	0	a	0.6	0	1.3	0
Pleuromamma piseki	0	(	0	(	1.2	c	0	a	0.3	0	1.3	0
Scaphocalanus subcurtus	0	0	0	0	0	c	0	0	1.6	0	0	0
Scolecithricella dentata	0	c	0	0	0	c	0	0	0.3	0.4	0	0.4
Scolecithricella tenuiserrata	0	0	0	0	0	a	0	0.7	0	0	0	0
Scolecithrix bradyi	0	"c	0	0	0	0	0	0	0.3	0	0	0
Scolecithrix danae	0	c	0	0	0	0	1.5	0	' 0	1.2	0	0
Temora stylifera	1.9	2.0	0.9	0	1.2	2.6	7.3	0.7	0.6	1.6	0	3.4
Temora turbinata	6.2	35.7	6.4	17.6	69.9	24..1	67.1	12.3	5.4	5.2	50.7	4.7
Temoropia mayumbaensis	0	a	a	a	0	0	0	0	0.6	0	2.5	0.9
Undinula vulgaris	0	a	0	0	0	"0.9	0	0	1.0	0.8	10.2	0.9
CYCLOPOIDA												
Corycaeus amazonicus	1.9	5.9	42:1	59.3	13.7	4.3	2.9	2.2	1.3	2.4	5.1	0
Corycaeus americanus	1.9	2.0	.3.7	9.6	0	0	0	0	0	0	0	0.4
Corycaeus giesbrechti	0.0	37.6	40.3	51.3	42.4	13.8	13.1	7.3	2.2	4.0	17.8	5.2
Corycaeus latus	0	0	0	0	2.5	1.7	0.7	0	0	0.8	0	0
Corycaeus speciosus	0	0	0	0	6.2	0	0	0.7	0.3	0	2.5	0
Corycaeus typicus	0	0	0	0	1.2	0	0	0.7	0.6	0.4	0	0
Farranula gracilis	0	0	0.9	0	22.5	17.2	5.1	2.2	0.6	4.8	12.7	2.6
Lubbockia **squillimana**	0	0	0	0	0	0.9	0.7	0	1.9	0	0	0.4
Oithona nana	0	0	3.7	9.6	0	0	0.7	0	0	0	0	0
Oithona **plumifera**	1.2	1.0	11.9	20.8	18.7	7.7	15.3	3.6	14.6	11.6	2.5	7.3
Oithona robusta	0	0	0	0	0	0	0	0	0.3	0.4	0	0
Oithona setigera	0	0	0	0	0	0	0	0	3.5	4.0	3.8	2.6'
Oithona tenuis	0	0	0	0	0	0	0	0	0.6	0.4	0	0

Appendix XIV-1-3 (cont.)

Oncaea conifers	0	0	0	0	1.2	0	0.7	0.7	0	0.8	6.3	2.2
Oncaea media	0	0	.0	0	2.5	1.7	1.5	1.5	0.3	0	1.3	0
Oncaea mediterranea	5.6	0	4.6	0	26.2	15.5	17.5	12.3	2.9	5.6	7-6	3.0
Oncaea venusta	15.0	4.0	17.4	4.8	83.4	94.6	83.1	31.2	21.3	35.9	40.8	28.4
HARPACTICOIDA												
Clytemnestra scutellata	0	0	0	0	0	0	0.7	0.7	0.6	0	0	0
Macrosetella gracilis	0	.0	0.9	0	3.7	1.7	0	0	2.2	1.6	3.8	0.9

APPENDIX XIV-l-4

NUMERICAL ABUNDANCE OF ADULT FEMALE COPEPODS PER M^3

DECEMBER/JANUARY CRUISE - TRANSECT IV

Station	1				2				3			
Day or Night	D	D	N	N	D	D	N	N	D	D	N	N
Replicate No.	1	2	1	2	1	2	1	2	1	2	1	2
Total No. /m^3	33.2	224.1	10.5	474.2	00.7	39.8	67.3	52.1	308.2	10.1	241.6	320.3
CALANOIDA												
Acartia danae	0	0	0	0	0	0	0	0	0	0.6	1.6	0.5
Acartia tonsa	31.1	9.0	4.4	12.1	0	0	0.9	1.2	1.1	0	0	0.9
Acrocalanus andersoni	0	0	0	0	0	0.5	2.3	1.2	0	0.6	0.5	0.9
Acrocalanus longicornis	0	0	0	0	0	0.5	0	0	0.5	0	0.5	0
Aetideus acutus	0	0	0	0	1.1	0	0	0	0	0	0	0.5
Calanopia americana	0	9.0	0	0	3.4	0	4.5	4.6	1.6	0	0.5	0
Calanus tenuicornis	0	0	0	0	0	0	0.5	0	0	0	2.1	0.9
Calocalanus pavo	0	0	0	0	1.1	0.5	0	0	1.6	0.6	0.5	0.5
Calocalanus pavoninus	0	0	0	0	6.9	4.3	4.5	3.5	9.8	13.3	3.2	6.3
Calocalanus styliremis	0	0	1.5	0	6.9	3.7	8.6	8.1	8.2	6.7	4.7	6.3
Calocalanus sp.1	0	0	0	0	0	0.5	0	0	0	0	0	0
Calocalanus sp.4	0	0	0	0	2.3	1.1	2.3	0.6	0.5	1.8	3.2	0.9
Candacia curta	0	0	0	0	0	0	1.8	0.6	0.5	0	0	0.5
Centropages caribbeanensis	0	0	0	0	0	0	0	0.6	0	0	0	0
Centropages hamatue	7.8	0	4.5	3.0	0	0	0	0	0	0	0	0
Centropages velificatus	1.9	21.1	7.4	9.1	1.1	0.5	0.5	1.2	1.6	1.8	1.6	1.4
Clausocalanus arcuicornis	0	0	0	0	1.1	5.3	1.8	2.3	2.2	2.4	4.2	4.1

Appendix XIV-l-4 (cont.)

Clausocalanus furcatu	11.7	30.1	41.4	36.4	131.7	128.!	73.6	98.:	60.9	123.:	41.5	74.1
Clausocalanus jobei	1.9	3.0	c	0	c	0.!	1.4	1.″	1.1	1.8	1.6	3.6
Clausocalanus mastigophorus	0	0	c	0	0	1.6	0	(	1.6	1.8	0.5	2.3
Clausocalanus parapergens	0	0	c	0	2.3	(	3.2	2.9	0	3.0	3.2	5.4
Clausocalanus paululu	0	0	a	0	0	(	1.8	c	0	1.8	1.6	0.9
Clausocalanus pergens	0	0	0	0	0	(	0	c	0	c	0	0.5
Ctenocalanus vanus	0	3 0	o	0	0	0.5	4.1	2.9	0	c	8.4	3.2
Eucalanus monachus	0	0	0	0	0	0.5	0	c	0	.C	a	0.5
Eucalanus pileatus	1.9	9.0	1.5	9.1	3.4	3.2	10.5	4.6	8.7	4.3	2.1	6.8
Eucalanus sewelli	0	0	0	0	0	c	0	c	0	1.8	0	0
Euchaeta marina	0	0	0	0	0	2.1	0	0.6	4.9	3.0	0	0.5
Euchaeta paraconcinna	0	0	0	0	0	c	0.9	1.7	0.5	0.6	2.6	1.8
Haloptilus longicorni	0	0	0	0	0	c	0.9	0	0	0	0	0
Heterorhabdus spinife	0	0	0	0	0	c	0	a	0	0	0	0.5
Ischnocalanus plumulosus	0	0	0	0	0	0.5	0	0	0	0	0	0
Labidocera aestiva	0	0	0	0	0	c	0	0	0	0.6	0	0.9
Lucicutia flavicornis	0	0	1.5	0	2″.3	3.7	15.5	14.5	6.5	3.0	12.1	14.0
Lucicutia gaussae	0	0	0	0	0	1.1	0	0	0.5	0	0	0
Lucicutia paraclausi	1.9	3.0	0	0	0	0	0	0	0	0	0.5	0.5
Mecynocera clausi	0	0	0	0	4.6	0	0.9	0.6	1.6	0	2.6	0.9
Nannocalanus minor	0	0	0	3.0	9.2	20.2	4.5	13.9	7.6	6.7	4.2	10.8
Neocalanus gracilis	0	0	0	0	0	0	0	0	0	0.6	0	0
Paracalanus aculeatus	17.5	6.0	4.5	0	19.5	0.5	33.2	33.7	25.0	52.2	11.0	37.5
Paracalanus denudatus	0	0	0	0	0	0.5	0.9	0	0	0	0	0
Paracalanus indicus	409.8	624.1	293.1	540.1	100.7	103.6	42.3	19.0	23.9	14.0	9.5	22.1
Paracalanus quasimoto	275.8	434.2	309.4	122.0	32.1	44.1	21.4	53.4	0	0	1.1	3.2
Paracandacia bispinosa	1	1	0	0	0	0.5	0.5	0	0.5	0.6	0	0

Appendix XIV-L-4 (cont.)

Paracandacia simplex	(	o	(	(	(	(	0.5	0.6	0.5	0.6	c	0.9
Parundinella spinodenticula	(	cl	C	(	(	(	c	0	0	c	1.6	C
Pleuromamma abdominalis	c	o	(	C	c	C	c	0	0	1.2	c	C
Pleuromamma gracilis	C	0	C	(	C	0.5	c	0	0	c	0.5	0.9
Pontellopsis villosa	c	0	C	c	● C	0.5	c	0	· O	c	0	C
Rhincalanus cornutus	c	0	(	c	(	0.5	c	0	0	c	0	cl
Scaphocalanus subcurtus	c	0	C	c	c	c	0.5	0.6	O	c	C	O
Scolecithricella ctenopus	C	0	c	c	c	c	c	0	0	o	0	0.9
Scolecithricella dentata	c	0	c	c	c	0	C	0	0	0	0.5	0.5
Scolecithricella tenuiserrata.	c	0	a	c	c	a	0	1.2	0	C	0	0.9
Scolecithrix bradyi	a	0	o	a	C	C	0	0.6	0	0	0	0.5
Scolecithrix danae	9	0	0	C	C	0	0	0	2.7	0	0	0
Temora stylifera	9.7	0	3.0	9.1	3.4	5.8	2.3	0.6	$.4	3.0	1.1	5.4
Temora turbinata	7.8	9.0	14.8	12.1	0	27.6	10.5	2.3	23.4	17.6	7.4	17.6
Temoropia mayumbaensis	O	0	0	0	0	0	0	0	0	0	2.1	0
Undinula vulgaris	O	0	0	0	0	1.1	0.5	0	1.6	3.0	0	1.8
CYCLOPOIDA												
Copilia lata	O	0	0	0	0	0	0	0.6	0	0	0	0.5
Copilia mirabilis	0	0	0	0	0	0	0	0.6	0.5	0	0	0.5
Corycaeus amazonicus	9.7	3.0	4.5	3.0	11.5	10.6	10.0	9.3	7.6	7.3	6.8	7.2
Corycaeus americanus	13.6	6.0	1.5	0	3.4	1.1	0.9	0.6	0	0.6	1.6	1.8
Corycaeus clausi	0	0	0	0	0	0	0.5	0	0	O	0	0
Corycaeus flaccus	0	O	0	0	0	· O	0.5	0.6	0	1.2	0	0
Corycaeus giesbrechti	'1.9	9.0	1.5	0	1.1	1.1	1.8	1.2	1.6	1.2	1.1	3.6
Corycaeus latus	O	0	0	0	0	0.5	0.9	0	1.6	0.6	0	0

Appendix XIV-J,-4 (cent.)

Corycaeus lautus	0	c	c	c	0	0.5	c	c	c	0	0	0
Corycaeus limbatus	0	c	c	c	0	0.5	c	c	0	c	0	0
Corycaeus minimus indicus	0	c	c	c	0	c	c	0.6	0	0	0	0
Corycaeus speciosus	0	c	c	c	0	0.5	1.3	0.6	2.2	1.2	0.5	1.8
Corycaeus typicus	0	0	0	c	1.1	0	0.5	0.6	0	0	0	0
Farranula gracilis	0	0	1.5	c	6.9	11.7	10.5	3.5	2.7	2.4	3.7	5.9
Lubbockia squillimana	0	0	a	c	1.1	c	0.5	0.6	0	0.6	0.9	0
Oithona nana	0	9.0	3.0	0	0	0	0	0	0	0	0	0
Oithona plumifera	5.8	21.1	0	0	27.5	2.4.4	42.7	18.6	37.0	68.6	43.6	15.8
Oithona setigera	0	0	0	0	0	1.1	2.3	1.7	0.5	0	1.8	0
Oithona tenuis	0	0	0	0	0	1.1	1.4	0	0	0	2.1	0
Oithona sp.1	0	0	0	0	0	0	0	0	0	0	5.3	0
Oithona sp.2	0	0	0	0	0	0	0	0	0	0	0.5	0
Oncaea conifers	0	0	0	0	0	0.5	3.6	1.2	0	0.6	0.5	0.9
Oncaea media	0	0	0	0	0	0	0.9	1.2	1.6	1.2	1.6	1.4
Oncaea mediterranea	9.7	9.0	3.0	12.1	1.1	8.5	18.6	9.3	10.9	18.8	12.1	13.6
Oncaea venusta	7.8	3.0	8.9	3.0	12.6	10.1	10.9	22.1	34.2	31.6	20.0	23.5
Sapphirina opalina	1.9	0	0	0	1.1	1.6	0	1.2	0	0	0	0
Sapphirina ovatolanceolata	0	0	0	0	0	0.5	0	0	0	0	0	0
HARPACTICOIDA												
Clytemnestra scutellata	0	0	0	0	0	0	0.5	0.6	0.5	0.6	0.5	0
Macrosetella gracilis	3.9	3.0	0	0	0	0.5	1.8	0	2.2	1.2	1.1	1.4

APPENDIX XIV-2-1

NUMERICAL ABUNDANCE OF ADULT FEMALE COPEPODS PER M^3

APRIL/MAY CRUISE - TRANSECT I

Station	1				2				3			
Day or Night	D	D	N	N	D	D	N	N	D	D	N	N
Replicate No.	1	2	1	2	1	2	1	2	1	2	1	2
Total No./m^3	2330.7	1857.6	4396.1	2160.0	134.0	167.7	835.3	116.8	162.4	137.2	182.1	151.3
CALANOIDA												
Acartia danae	0	0	0	0	0	0	0	0	1.8	1.2	2.5	1.3
Acartia tonsa	1762.1	3763.2	3590.2	1510.1	33.1	107.3	53.9	52.5	0	0	0	0
Acrocalanus andersoni	0	0	0	0	0	0	0	0	1.3	0.5	1.1	0
Aetideue acutus	0	0	0	0	0	0	0	0	0	0.2	0.4	0
Bradyidus sp.1	0	0	0	0	0	0	1.7	0	0	0	0	0
Bradyidus sp.2	0	0	0	0	0	0	0	0	0	0	0	0.3
Calanopia americana	0	0	0	0	0	0	1.7	0.9	0.3	0	0	0.8
Calanus tenuicornis	0	0	0	0	0	0	0	0	0.5	0.7	1.1	0.3
Calocalanus pavo	0	0	0	0	1.4	1.0	3.4	1.8	1.3	1.4	2.8	1.6
Calocalanus pavoninus	0	0	0	0	0.4	0	1.7	0	2.1	0.7	2.8	1.1
Calocalanus styliremis	0	0	0	0	0.4	0	0	0	1.6	1.6	1.1	0.8
Calocalanus sp.2	0	0	0	0	0	0	0	0	0	0.2	0.4	0
Calocalanus sp.3	0	0	0	0	0	0	0	0	1.0	0.7	0.7	0.3
Calocalanus sp.4	0	0	0	0	0	0	0	0	1.3	0.2	0.7	0.3
Candácia curta	0	0	0	0	0	0	0	0	0.3	0.2	0	0
Candacia pachydactyla	0	0	0	0	0	0	0	0	0	0	0	0.3

Appendix XIV-2-1 (cont.)

Centropages velificatus	.4.	7.5	18.3	7.3	0.7	1.3	6.7	3.6	0		0.4	0
Clausocalanus arcuicornis		0	0	0	0	0	0	-0	1.6	0.	0	0.8
Clausocalanus furcatus	.7.	0	0	0	4.3	2.3	32.0	20.5	4.0	,3.	33.1	14.8
Clausocalanus jobei		a	0	0	0.7	0	1.7	0	1.8	1.	9.6	9.3
Clausocalanus parapergens		c	0	0	0	0	0	0	0.3	0.	1.1	0.3
Clausocalanus paululus		c	0	0	0	0	0	0	0		0.7	c
Clausocalanus pergens		c	0	0	0	0	0	0	0		1.[	0.8
Ctenocalanus vanus		c	0	0	0	0	0	0.9	3.1	1.	3.6	2.4
Eucalanus pileatus	14.	15.0	9.2	25.7	22.3	26.1	70.7	30.2	0.8	0.	0.4	1.1
Eucalanus sewelli		(	0	0	a	0.3	0	0	0	0	1.1	1.4
Euchaeta marina		(	0	0	0	c	c	0	1.3	1	1.1	1.1
Euchaeta paraconcinna		(	0	0	0	c	c	0	0	1	1.8	1.4
Haloptilus longicornis		.0	0	0	c	c	c	c	1.6	0	1.4	0.!
Ischnocalanus plumulosus		(	0	0	c	c	c	c	c	0	0.7	(
Labidocera aestiva	60,	52.!	27.5	55.1	0.4	c	3.4	c	0.3		0.'	(
Lucicutia flavicornis		(	0	0	(	c	c	0	1.3	0	2.8	4.
Lucicutia gaussae		(	0	0	0	(	[	(	0.5	0	0.4	(
Mecynocera clausi		(	c	0	0.4	(	(	0	4.4	5	6.4	2.
Nannocalanus minor	3	(	c	0	(	(	(	(	2.6	1	1.'	0.
Paracalanus aculeatus	14	22.	c	40.4	1.8	0.:	6.7	8.0	7.6	3	7.	4.
Paracalanus crassirostris	56	52.	36.6	18.4	(	(	(	(	(			
Paracalanus denudatus			i	0	(		(	(	0.!	0	1.	

Appendix XIV-1 (cont.)

Paracalanus indicus	249.2	97.2	58.7	19.7	13.3	5.9	404.	89.0	17.5	4.2	11.0	8.3
Paracalanus quasimoto	70.2	.94.9	00.7	.21.2	18.7	3.6	168 .	78.3	.3.7	4.7	1.1	0.8
Paracandacia bispinosa	0	0	0	0	0	0		0	0.3	0	0	0
Paracandacia simplex	0	0	0	0	0	0		0	0	0.5	0	0
Parundinella spinodenticula	0	0	0	0	0.4	0		0	0	0	0.4	0
Pleuromamma gracilis	0	0	0	0	0	0		0	0.3	0	0.4	0.8
Pleuromamma piseki	0	0	0	0	0	0		0	0	0	0	0.3
Pseudodiaptomus sp.2	3.5	0	0	0	0	0		0	0	0	0	0
Rhincalanus cornutus	0	0	0	0	0.4	0		0	0	0	0	0.3
Scolecithricella tenuiserrata	0	0	0	0	0	0		0	0.3	0.5	0.7	0.5
Scolecithrix danae	0	0	0	0	0	0		0	0.5	1.4	0	0
Temora stylifera	7.0	0	0	3.7	0	0	3.	1.8	1.6	1.9	0.7	1.1
Temora turbinata	24.6	22.5	18.3	29.4	0	0	15,	0.9	0	0	0	0
Temoropia mayumbaensis	0	0	0	0	0	0		0	0	0	0.4	0
CYCLOPOIDA												
Copilia lata	0	0	0	0	0	0		0	0	0	0	0.3
Copilia mirabilis	0	0	0	0	0	0		0	0.3	0	0	0
Corissa parva	0	0	0	0	0	0		0	0	0.2	0	0.3
Corycaeus amazonicus	3.5	0	0	0	0.4	0.3	3.	2.7	-0	0	1.1	0
Corycaeus americanus	10.5	22.5	9.2	14.7	3.6	3.0	23.	7.1	0	0	0	0
Corycaeus clausi	0	0	0	0	0	0.		0	0.5	0	1.1	0
Corycaeus giesbrechti	0	0	27.5	14.7	0.4	0		0	2.3	2.3	3.2	1.6
Corycaeus latus	0	0	0	0	0.4	0		0.9	9.3	0	0	0
Corycaeus lautus	0	0	0	0	0	0		0	0	0.2	0	0.3

Appendix 'XIV-2-1 <cont.)

Corycaeus speciosus	0	0	0	0	0	0	0	0.9	0.3	0.2	0.7	0
Farranula gracilis	0	0	0	0	6.5	2.3	0	3.6	11.5	6.1	6.4	2.4
Farranula rostrata	0	0	0	0	0	0	0	0	0.3	0.7	0.4	0.3
Lichomolgus Sp.	0	0	0	0	0	0	1.7	0	0	0	0	0
Lubbockia squillimana	0	0	0	0	0	0	0	0	0<8	0.7	0.4	1.1
Oithona fallax	0	0	0	0	0	0	0	0	0.3	0	0	0.3
Oithona nana	0	7.[illegible]	0	0	0.4	0	0	0	0	0	0	0
Oithona plumifera	0	0	0	0	13.0	11.6	20.6	5.3	21.1	30.8	10.3	13.6
Oithona robusta	0	0	0	Q	0	0	0	0	1.3	0.2	1.8	0.3
Oithona setigera	0	0	0	0	0.4	0	0	0	3.9	6.1	6.1	2.4
Oithona tenuis	0	0	0	0	2.9	0	0	c	1.0	3.0	1.8	1.1
Oithona sp.1	0	0	0	0	0	0	0	c	1.3	1.4	6.1	1.3
Oncaea conifera	0	0	0	0	0	0	0	c	0.3	0.7	0.4	1.9
Oncaea media	0	0	0	0	0	0	0	0.9	1.8	0.5	2.5	0.5
Oncaea mediterranea	0	0	0	0	0	0.3	0	0.9	20.6	23.1	25.7	21.6
Oncaea venusta	0	0	0	0	0.4	0	0	0.9	3.9	3.7	6.1	4.8
Sapphirina metallina	0	0	0	0	0	0	0	c	0	0	0.4	a
HARPACTICOIDA												
Clytemnestra scutellata	0	0	0	0	0.4	0	0	c	0.8	0.2	0.4	c
Macrosetella norvegica	0	0	0	0	6.5	2.0	3.4	5.3	1.8	2.3	1.4	2.1
Microsetella rosea	0	0	0	0	0.4	0	0	C	0	0	C	c
Oculosetella gracilis	0	0	0	0	0	0	0	c	0.5	0.2	c	0.5

APPENDIX XIV-2-2

NUMERICAL ABUNDANCE OF ADULT FEMALE COPEPODS PER M^3

APRIL/MAY CRUISE - TRANSECT II

Stat ion	1				2				3			
Day or Night	D	D	N	N	D	D	N	N	D	D	N	N
Replicate No.	1	2	1	2	1	2	1	2	1	2	1	2
Total No./m^3	02.6	07.5	2287.7	.960.3	429.1	264.8	138.5	97.4	139.3	147.4	.84.7	72.3
CALANOIDA												
Acartia danae	0	0	0	0	0	0.8	0	0	1.0	2.6	2.7	5.0
Acartia tonsa	1.2	6.3	83.5	71.5	1.8	0.8	0	4.0	0.1	0	0	0
Acrocalanus andersoni	0	0	0	0	0	0	0	0	0.5	0.8	1.1	0.6
Acrocalanus longicornis	0	0	0	0	0	0	0	0	0	0.2	0	0
Aetideus acutus	0	0	0	0	0	0	0	0	0	0	0	0.6
Calanopia americana	0	0	0	0	0	0.8	0	5.3	0	0	0	0
Calanus tenuicornis	0	0	0	0	0	0	0	0	0.4	0	1.6	2.2
Calocalanus pave	0	0	0	0	0	0	0	0	1.1	1.0	1.6	2.2
Calocalanus pavoninus	0	0	0	0	0	0	0	0	0.6	0.6	1.6	0.6
Calocalanus styliremis	0	0	0	0	0	0	0.6	0	0.6	2.9	2.7	2.8
Calocalanus sp.2	0	0	0	0	0	0	0	0	0.1	0.2	0.5	0
Calocalanus sp.3	0	0	0	0	0	0	0	0	0.7	0.5	0	1.1
Calocalanus sp.4	0	0	0	0	0	0	0	0	0	0.8	1.1	0
Candacia curta	0	0	0	0	0.9	0	0	0	0.1	0	0.5	0.6
Centropages velificatus	9.4	2.5	15.9	16.2	11.8	3.1	3.6	6.6	0.1	0.5	0.5	0

Appendix XIV-2-2 (cont.)

Clausocalanus arcuicornis	o	c	0	"(	(	(	0	c	1.1	1.C	0.5	c
Clausocalanus furcatus	7.0	15.1	11.9	(	9.1	7.C	6.0	18.6	32.8	20.8	32.5	36.7
Clausocalanus jobei	2.3	1.3	8.0	(	2.7	0.8	0.6	1.3	2.3	0.3	18.4	33.4
Clausocalanus parapergens	0	0	o	c	c	c	0	c	0	C	a	1.1
Ct·nocalanus vanus	0	0	o	c	1.8	0.8	0	c	1.3	0.7	11.4	26.2
Eucalanus hyalinus	0	0	o	c	c	c	0	C	0	0.1	C	C
Eucalanus monachus	0	0	o	c	c	c	0	c	a	0.2	C	0
Eucalanus pileatus	41.1	32.8	8.0	26.C	31.9	14.C	30.0	94.1	0.4	0:7	0	1.1
Eucalanus sewelli	0	O	o	c	c	G	0	C	0	0.1	0	0.6
Euchaeta marina	0	0	o	c	c	0	0	.C	0	0	0	1.1
Haloptilus longicornis	0	O	o	c	c	c	0	0	0.5	0.3	1.1	2.8
Ischnocalanus plumulosus	0	0	o	c	c	0	0	0	0.1	0.8	0.5	0.6
Labidocera aestiva	1.2	0	63.7	39.C	a	2.3	0	1.3	0	0	0	0
Lucicutia flavicornis	0	0	o	a	o	0	0	0	0.5	0.8	6.0	3.9
Lucicutia **gaussae**	0	0	o	c	C	0	0	0	0.1	1.2	0	1.1
Mecynocera **clausi**	0	0	o	0	O	0	0	0	5.0	6.6	3.3	10 .6
Nannocalanus minor	0	0	0	0	0	0	0.6	1.3	0	0	3.3	3.3
Neocalanus gracilis	0	0	0	C	0	0	0	0	0.2	0	0	0.6
Paivella inaciae	0	0	0	0	0	0	0	0	0	0	0.5	1.7
Paracalanus aculeatus	43.4	10.1	43.8	13.0	33.7	12.5	11.4	29.1	1.3	1.2	10.3	3.9
Paraclanus crassirostris	0	0	4.0	0	0	0	0	0	'0	0	0	0
Paracalanus denudatus	0	0	0	0	0	0	0	0	0.6	0.8	0	0
Paracalanus indicus	403.5	137.5	190 .7	842.0	15.4	.14.5	03.3	227.8	1.9	0.3	5.4	5.6
Paracalanus quas imoto	109.1	174.1	146.9	897.2	82.9	75.6	40.8	137.8	6.7	8.0	6.5	2.8

Appendix XIV-2-2 (cont.)

Paracandacia simplex	0	0	0	0	0	0	0	0	0.6	0.3	1.1	0
Parundinella spinodenticula	0	0	0	0	0	0	0	0	0	0	0	1.7
Rhincalanus cornutus	0	0	0	0	0	0	0.6	0	0.2	0.1	0	0
Scaphocalanus subcurtus	0	0	0	0	0	0	0	0	0	0	0	0.6
Scolecithricella dentata	0	0	0	0	0	0	0	0	0.1	0	0	0
Scolecithricella tenuiserrata	0	0	0	0	0	0	0	0	0.4	0.5	0.5	0
Scolecithrix dense	0	0	0	0	0	0	0	0	0.1	0	0	0
Temora stylifera	9.4	1.3	4.0	6.5	5.5	4.7	0.6	1.3	1.8	2.4	0	2.2
Temora turbinata	32.8	5.0	11.9	13.0	6.4	0.8	0	1.3	0.1	0	1.1	0.6
Temoropia mayumbaensis	0	0	0	0	0	0	0	0	0	0	0.5	0
CYCLOPOIDA												
Copilia lata	0	0	0	0	0	0	0	0	0.1	0	0	0
Copilia mirabilis	0	0	0	0	0	0	0	0	0.6	0.6	0	0.6
Copilia vitrea	0	0	0	0	0	0	0	0	0.1	0	0	0
Corissa parva	0	0	0	0	0	0	0	0	0.1	0	0.5	0
Corycaeus amazonicus	15.2	7.6	15.9	13.0	26.4	5.4	13.8	30.5	0.5	0.7	0.5	0.6
Corycaeus americanus	18.8	7.6	55.7	16.2	50.1	10.9	24.0	25.2	0.1	0.3	1.1	0
Corycaeus clausi	0	0	0	0	0	0	0	0	0.2	0.5	0	0
Corycaeus flaccus	0	0	0	0	0	0	0	0	0.2	0.1	0	0
Corycaeus giesbrechti	2.3	0	0	0	2.7	0.8	0	4.0	2.1	1.2	3.8	6.1
Corycaeus latus	0	0	0	0	0	0	0	0	0.6	0.1	0	1.1
Corycaeus lautus	0	0	0	0	0	0	0	0	0.2	0.2	0	0.6
Corycaeus limbatus	0	0	0	0	0	0	0	0	0.1	0.2	0.5	0
Corycaeus speciosus	0	0	0	0	0	0	0	0	0.6	0.2	0.5	0
Corycaeus typicus	0	0	0	0	0	0	0	0	0.1	0.3	0	0

Appendix XIV-2-2 (cont.)

Farranula gracilis	c			c	a	0	0	0	14.7	8.8	10.8	12.8
Farranula rostrata	c			c	0	0	0	0	0.2	0.5	0	c
Lichomolgus sp.	c			c	0	0	0.6	0	0	0	0	c
Lubbockia squillimana	c			a	0	0	0	0	0.1	0.9	1.1	0.6
Oithona fallax	c			c	0	u	0	0	0	0.2	0.5	1.1
Oithona nana	0			0	a	0	0	1.3	0	0	0	c
Oithona plumifera	3.5	1		0	2.7	3.1	0.6	1.3	6.8	11.3	6.5	8.9
Oithona robusta	c			a	0	0	0	0	0.6	00.6	1.1	c
Oithona setigera	o			a	0	0	0	0	4.1	3.7	3.3	6.7
Oithona tenuis	0			0	0	0	0	0	1.8	1.7	1.6	c
Oithona vivida	G			0	0	0	0	0	0	0.3	1.1	c
Oithona sp.1	a			0	0	0	0	0	5.5	1.5	2.2	1.7
Oncaea conifers	c	1		0	0	0	0	0	0.1	0.2	0.5	2.2
Oncaea media	0		4.	0	0	0	0	0	1.0	1.2	2.7	3.3
Oncaea mediterranea	0		8.	3.2	0.9	2.3	1.2	2.6	28.4	15.3	24.4	58.5
Oncaea venusta	2.3	2.	11.	3.2	3.6	3.1	0	2.6	1.0	3.2	3.8	5.6
Sapphirina auronitens	0			0	0	0	0	0	0	0.1	0	0.6
Sapphirina metallina	0			0	0	0	0	0	0.2	0.5	0	0
Sapphirina nigromaculata	0			0	0	0	0	0	0.2	0.1	0	0.6
Sapphirina ovatolanceolata	0			0	0	0	0	0	0	0.1	0	0
HARPACTICOIDA												
Clytemnestra scutellata	0	1.		0	0	0.8	0	0	0	0	0	0.6
Macrosetella gracilis	0			0	0	0	0	0	5.2	4.8	0.5	2.8
Microsetella rosea	0			0	0	0	0	0	0	0.1	0	0
Oculosetella gracilis	0			0	0	0	0	0	0.1	0	0.5	0

APPENDIX XIV-2-3

NUMERICAL ABUNDANCE OF ADULT FEMALE COPEPODS PER M^3

APRIL/NAY CRUISE - TRANSECT III

Station	1								3			
Day or Night	D	D	N				N	N	"D	D	N	N
Replicate No.	1	2	1					2	1	2	1	2
Total No./m^3	777.7	545.1	364.4					172.4	137.1	144.4	70.6	175.7
CALANOIDA												
Acartia danae	0	0	0					0.7	3.3	4.5	1.9	1.9
Acartia tonsa	61.1	20.6	20.7					4.9	0.5	0.8	1.3	5.3
Acrocalanus andersoni	0	0	0					0	0	0	0.3	0.6
Acrocalanus longicornis	0	0	0					0	0	0	0	0.3
Aetideus **acutus**	0	0	0					0.3	0.8	0	0.3	0
Calanopia americana	0	0	4.4					0.7	0	0	0.6	0.3
Calanus **tenuicornis**	0	0	0					0	0	0	1.3	0.9
Calocalanus pavo	1.4	0	0					1.7	3.3	3.8	1.3	3.1
Calocalanus pavoninus	0	0	0					1.0	1.1	0.8	0.6	0.6
Calocalanus styliremis	0	0	0					0	2.2	2.0	1.6	2.2
Calocalanus sp.1	0	0	0					0	0	0	0	0
Calocalanus sp.2	0	0	0					0	0.3	0.3	0.3	0.6
Calocalanus sp.3	0	0	0					0	0.3	0	0.9	0.6
Calocalanus sp.4	0	0	0					0	0	0.3	0	0.3
Candacia curta	0	0	0					0	0.3	0	0	0.3
Centropages **velificatus**	14.2	9.7	19.2					2.0	0	0	0.6	0.6

Appendix XIV- -3 (-cont.

Clausocalanus arcuicornis	0	0	0	0	0	0	1.2	0	0	0	0.6	0.3
Clausocalanus furcatus	2.8	0	0	1.5	6.2	76.3	4.1	3.6	37.1	34.0	22.0	29.7
Clausocalanus jobei	0	0	1.5	0	0.5	0	16.3	14.5	4.4	1.3	15.4	15.1
Clausocalanus parapergens	0	0	0	0	0	0	0	0	0	0	1.9	0.9
Clausocalanus pergens	0	0	0	0	0	0	0	0	0	0	0.6	0
Ctenocalanus vanus	0	0	0	0	0.2	0	0	1.3	1.9	0.5	8.5	4.9
Eucalanus pileatus	22.8	35.1	14.8	30.1	2.3	11.3	2.4	4.0	0	0.5	0	0.9
Eucalanus sewelli	0	0	0	0	0	u	0.6	0.3	0	0	0	0
Euchaeta paraconcinna	0	0	1.5	0	0.4	0.8	0.3	2.3	0	0	0.3	0.3
Haloptilus longicornis	0	0	0	0	0	0	0	0	0	0	0	0.3
Ischnocalanus plumulosus	0	0	0	0	0.4	0.4	1.2	1.3	0.5	0.3	0.3	0.3
Labidocera aestiva	8.5	2.4	0	3.0	0	0.4	0	0	0	0	0	0.3
Lucicutia flavicornis	0	0	0	0	0	0	1.2	1.0	0	0.3	4.7	1.9
Lucicutia gaussae	0	0	0	0	0	0	0	0	0	0	0	0.3
Lucicutia paraclausi	0	0	0	0	0	0	0.3	0	0	0	0.3	0.6
Mecynocera clausi	0	0	0	0	1.1	0.8	1.5	0.3	5.2	9.7	7.2	3.1
Nannocalanus minor	0	0	0	0	0.7	0.4	3.5	4.6	0	0	0.6	1.2
Paracalanus aculeatus	7.1	0	8.9	4.5	3.8	1.9	3.8	5.3	3.8	2.8	1.6	0.6
Paracalanus denudatus	0	0	0	0	0	0	0	0	0.5	0	0.3	0
Paracalanus indicus	18.5	23.0	247.2	34.6	4.5	42.7	16.6	17.5	2.4	2.0	3.8	7.1
Paracalanus quasimoto	132.2	103.9	227.9	36.1	11.2	29.9	12.4	28.1	2.4	4.3	2.8	5.9
Paracandacia simplex	0	0	0	0	0.4	0	0.3	0.7	0	0.5	0	1.5
Parundinella spinodenticula	0	0	0	0	0	0	0	0	0	0	0.6	0
Pseudodiaptomus sp.1	0	0	0	1.5	0	0	0	0	0	0	0	0

Appendix XIV-2-3 (cont.)

Scolecithricella tenuiserrata	c	c	c	a	o	0	0	(	c	0.3	0.6	0.6
Scolecithrix bradyi	c	c	a	0	0	0	0.3	c	c	0	c	c
Scolecithrix danae	c	c	0	0	0	0	0.9	c	c	0	c	c
Stephos deichmannae	o	o	0	0	0	0	0	c	c	0	c	0.3
Temora stylifera	8.5	9.7	5.9	19.5	1.3	5.3	4.7	1.7	2.4	5.9	0.9	0.6
Temora turbinata	24.2	13.3	31.1	43.6	0.2	0.8	0.6	c	c	0.3	c	a
Undinula vulgaris	0	0	0	0	0	0	0.3	c	c	0	c	0
CYCLOPOIDA												
Copilia lata	0	0	0	0	0	0	0	0	0	0.3	o	0.3
Copilia mirabilis	0	0	0	0	0	0	0	0.3	0.3	0.3	0	0
Copilia quadrata	0	0	0	0	0	0	0	0	0	0.3	0	0
Corycaeus amazonicus	79.1	00.3	58.4	09.8	1.1	3.0	12.4	10.9	1.4	0.3	0.6	0.3
Corycaeus americanus	90.1	13.9	30.6	36.1	0.2	1.1	1.5	2.3	0.8	0.8	0.6	0.6
Corycaeus clausi	0	0	0	0	0.2	0	0	0	0.3	0.3	0.3	0.6
Corycaeus flaccus	.0	0	0	0	0	0	0	0	0	0	0	0.3
Corycaeus giesbrechti	2.8	4.8	10.4	6.0	3.6	1.1	5.0	2.0	1.9	3.6	2.5	3.4
Corycaeus latus	1.4	0	0	0	0	2.3	0.3	0	0.3	0.3	0	0
Corycaeus lautus	0	0	0	0	0	0	0	0	0.5	0.8	0	0
Corycaeus limbatus	0	0	o	0	0	0	0	0	0	0.3	0	0
Corycaeus speciosus	0	0	0	0	0.4	0	2.4	1.3	0	0	0.3	0.9
Corycaeus typicus	0	0	0	0	0	0	0	0	0	0.3	0	0
Farranula gracilis	2.8	6.0	0	0	16.7	141.6	17.7	11.9	8.4	7.9.	5.7	4.0
Farranula rostrata	0	0	0	0	0	0	0	0	0.3	0.3	0.6	0
Lubbockia squillimana	0	0	1.5	0	0	0	0	0	0.3	0	0.6	0
Oithona fallax	0	o	0	0	0	0	0	0	0.3	0	0	0
Oithona nana	0	0	3.0	1.5	0	0	0	0	0	0	0	0
Oithona plumifera	0	0	0	0	16.7	9.4	10.6	4.0	9.3	13.8	18.9	21.6

Appendix XIV-2-3 (cent)

Oithona robusta	0	0	0	0	0	0	0	0	0.5	0	1.3	0
Oithona setigera	0	0	0	0	0.4	0.8	0	0	5.7	1.0	8.5	3.4
Oithona tenuis	0	0	0	0	1.3	0	0.3	0	2.7	2.8	2.5	1.2
Oithona sp.1	0	0	0	0	4.2	1.9	0	0	1.9	0.3	9.8	5.9
Oncaea conifers	0	0	0	0	0.5	0	1.8	2.0	0.5	0.3	2.5	0.9
Oncaea media	0	0	0	0	0.5	0.4	2.4	2.0	0.8	0.5	9.3	1.9
Oncaea mediterranea	0	0	0	4.5	14.9	6.0	54.7	25.4	20.7	29.4	25.8	30.3
Oncaea venusta	8.5	2.4	7.4	7.5	0.4	1.5	10.1	5.9	2.7	2.3	4.1	3.1
Sapphirina metallina	0	0	0	0	0	0	0	0	0	0	0	0.3
Sapphirina nigromaculata	1.4	0	0	0	0.4	0	0.3	0	0	0	0	0
Sapphirina opalina	0	0	0	0	0	0	0	0	0	0.3	0	0
HARPACTICOIDA												
Clytemnestra rostrata	0	0	0	0	0	0.4	0.3	0	0	0	0	0.6
Clytemnestra scutellata	0	0	0	0	0.5	0	0.3	0.3	0	0	0.3	0
Mac-ells gracilis	0	0	0	0	0	2.6	11.8	6.9	4.4	2.6	0.9	0.6
Microsetella rosea	0	0	0	0	0	0	0.3	0	0	0	0	0.3
Oculosetella gracilis	0	a	0	0	"0	0	0	0	0.3	0.3'	0	0.3

APPENDIX xIV-2-4

NUMERICAL ABUNDANCE OF ADULT FEMALE COPEPODS PER M^3

APRIL/MAY CRUISE - TRANSECT IV

Station	1				2"				"3			
Day or Night	D	D	N	N	D	D	N	N	D	D	N	N
Replicate No.	1	2	1	2	1"	2	1	2	1	2	1	2
Total No./m^3	66.	116.	114.	361.9	67.(	419.4	99,	328.1	352.9	226.8	240.0	.88. c
CALANOIDA												
Acartia danae				(	·· C	C		1.4	c	o	0.9	0
Acartia tonsa	2.	7.	14,	24.1	2.5	7.3	6.	5.8	2.1	1.7	2.2	1.1
Acrocalanus andersoni				C	(	c		C	0.8	0	0	0
Aetideus acutus				c	c	C		c	0.4	0	0	0.4
Calanopia americana				c	c	c		0	0	0	0.4	O
Calanus tenuicornis				c	c	c		0	0.8	0	0	0.4
Calocalanus pavo				c	c	c		2.9	2.9	0	0.9	2.1
Calocalanus pavoninus				c	c	0.7		0	0.4	0.4	0.4	1.1
Calocalanus styliremis				c	c	c		0	0.4	0	0	0
Calocalanus sp.1				c	c	C		0	0	0.4	0.4	0
Calocalanus sp.3				c	c	C		0	0.4	0	0	0.7
Candacia curta				o	a	o		0	O	0.9	0.9	0.7
Centropages verificatus	9.	14:	7.	4.0	2.5	11.0	2.	2.9	3.3	0	5.3	2.5
Clausocalanus arcuicornis				0	0	0		0	2.5	1.7	1.8	0
Clausocalanus furcatus		3.	1.	2.7	2.1	10.3		10.1	67.8	43.7	23.8	17.8

Appendix xIV-2-4 (cont.)

Clausocalanus jobei	0	0	1.4	0	9.9	94.0	7.1	13.0	94.9	57.2	25.5	23.5
Clausocalanus parapergens	0	0	0	0	0	0	0	0	2.9	1.7	0.9	0.4
Clausocalanus paululus	0	0	0	0	0	0	0	0	0	1.3	0	0
Clausocalanus pergens	0	0	0	0	0	0	0	0	0.4	0	0.4	0
Ctenocalanus vanue	0	0	0	0	1.7	5.8	0	0	29.5	11.4	4.0	10.3
Eucalanus pileatus	8.3	15.8	33.0	16.1	5.2	23.5	7.9	60.7	1.2	0	0.8	3.6
Euchaeta marina	0	0	0	0	0	0.7	0	1.4	0	0	0.4	0
Euchaeta paraconcinna	0	0	0	0	1.0	6.6	2.0	4.3	1.7	0.9	0	0.7
Ischnocalanus plumulosus	0	0	0	0	0	1.5	0	0	0.4	0	0	0
Labidocera aestiva	0	0	4.3	5.4	0.2	5.9	0.4	2.9	0	0	0.4	0.4
Lucicutia flavicornis	0	0	0	0	0	1.5	0.8	0	4.6	2.6	4.0	9.6
Lucicutia gaussae	0	0	0	0	0	0	0.4	0	0.4	0.4	0.4	0
Lucicutia paraclausi	0	0	0	0	0	0	0	0	0	0	0	1.1
Mecynocera clausi	0	0	0	0	0	0.7	0	0	3.7	0.9	2.2	1.1
Nannocalanus minor	0.7	0	0	0	1.9	10.3	4.4	11.6	13.3	6.1	4.4	14.3
Neocalanus gracilis	0	0	0	0	0	0	0	0	0	0	0	0.4
Paracalanus aculeatus	3.8	7.0	7.2	6.7	5.2	25.7	6.7	59.3	4.2	4.4	6.2	1.1
Paracalanus crassirostris	0	0	0	0	0.2	0	0	0	0	0	0	0
Paracalanus denudatus	0	0	0	0	0	0	0	0	0.8	0	0	0
Paracalanus indicus	2.3	5.3	12.2	159.5	8.1	88.9	26.9	31.8	6.2	5.7	32.6	18.6
Paracalanus quasimoto	3.8	7.0	44.4	56.3	1.0	2.9	1.2	5.8	7.9	8.7	7.0	1.4
Paracandacia simplex	0	0	0	0	0	0	0	0	1.7	0	0.9	1.1
Parundinella spinodenticula	0	0	0	0	0	0	0	0	0	0.9	40.9	5.4
Phaenna spini fera	0	0	0	0	0	0	0	0	0	0.4	0	0

Appendix xIv-2-4 (cont.)

Pleuromamma gracilis		(		(	(	c	(	(	0.4	0	(	c
Pleuromamma piseki		(		(	(	C	(	(	0.4	0.9	0.4	C
Rhincalanus cornutus		(		(	0.4	1.5	0.4	4.4	(	0	(	c
Scaphocalanus " subcurtus		(		(	(	0	(	(	1.2	0	c	c
Scolecithricella tenuiserrata	(	(		C	. C	0	(	(	. C	0.9	0.9	c
Scolecithrix bradyi	(	c		c	c	0	C	c	c	0	0.4	c
Scolecithrix danae	(	c		c	c	0	c	c	0.4	0.9	c	0.7
Stephos deichmannae	(	c		c	c	0	c	c	c	0	0.4	0
Temora stylifera	.3.(	21.1	15.	6.7	3.7	20.6	4.C	27.5	9.2	6.6	4.4	3.6
Temora turbinata	.1.:	3.5	24.	26.8	0.6	"5.9	5.5	28.9	0.8	1.3	0	0.7
Temoropia mayumbaensis	(	0		0	c	o	c	" c	0	0.4	0	0
Undinula vulgaris	(	0		1.3	G	0	o	o	0	0	0.4	0.4
CYCLOPOIDA												
Copilia lata	. C	0		0	o	0	0	0	0	0	0	0.4
Copilia mirabilis	C	0		0	0	0	0	0	´O	0	0	0.4
Corycaeus amazonicus	(	0	4.	4.0	1.5	11.7	2.8	2.9	2.1	3.5	6.2	7.8
Corycaeus americanus	7.5	15.8	37.	42.9	6.4	20.6	8.7	17.3	1.7	0.4	5.3	2.5
Corycaeus clausi	c	0		0	0	0.7	0	0	0.4	0.9	0.4	1.1
Corycaeus flaccus	c	0		0	0	0	0	0	0	0.4	0	0
Corycaeus giesbrechti	0.7	0	1.	1.3	0.2	2.9	0.8	2.9	5.0	7.9	2.6	3.9
Corycaeus lautus	c	0		0	0	0	O	0	0	0.4	0	0
Corycaeus limbatus	c	0		0	0	0	0	0	0	0	0.4	0
Corycaeus speciosus	C	0		0	0	0	0	0	0.8	0	-0.4	0
Corycaeus typicus	0	0		0	0	0	0	0	0.8	0	0	0.4
Farranula gracilis	0	0		0	0	0.7	0	0	9.6	7.9	4.4	2.8
Farranula rostrata	0	0		0	0	0	. O	0	0	0.4	0	0
Lichomolgus sp.	0	0		0	0.2	2.2	0.4	0	0	0	0	0
Lubbockia squillimana	0	0	(	0	0	0	0	0	0	0	´o	0.4

Appendix XIV-2-4 (cont.)

Oithona fallax	0	0	0	0	0	0	0	0	0.4	0	0	0
Oithona nana	0	0	0	0	0	0	0	0	0	0	0.4	0
Oithona plumifera	0.7	1.8	0	0	4.1	21.3	0	0	2.5	6.6	6.6	3.2
Oithona robusta	0	0	0	0	.0	0	0	0	0.8	0	0	0
Oithona setigera	0	0	0	1.3	0.2	0	0	0	1.7	2.6	2.2	0
Oithona tenuis	0	0	0	0	0.6	1.5	0	0	0.8	0	0.4	0
Oithona vivida	0	0	0	0	0	0.7	0	0	0.4	0	0	0
Oithona sp.1	0	0	0	0	0.2	1.5	0	0	2.9	0	0.9	0.7
Oncaea conifers	0	0	0	0	0.6	0.7	0	1.4	7.5	2.6	7.5	4.6
Oncaea media	0	0	a	0	0.4	0.7	0.8	0	0.8	1.7	1.3	2.1
Oncaea mediterranea	0	0	1.4	0	3.7	15.4	4.4	17.3	36.2	17.9	21.1	26.0
Oncaea venusta	2.3	10.6	4.3	2.7	1.9	9.5	4.0	11.6	7.5	7.0	1.3	5.7
Sapphirina metallina	0	0	c	a	0	c	0	" o	0	0.4	0	0
Sapphirina nigromaculata	0	3.5	c	c	0.4	c	0	c	0	c	0	0
HARPACTICOIDA												
Clytemnestra scutellata	0	0	c	c	0	c	0	c	o	0.4	2.2	c
Macrosetella gracilis	0	0	(	(	0.4	3.7	0.8	c	2.5	2.2	c	1.1
Oculosetella gracilis	0	0	(	c	0	c	0	c	0	0.4	c	c

APPENDIX XIV-3-1

NUMERICAL ABUNDANCE OF ADULT FEMALE COPEPODS PER M^3

AUGUST/SEPTEMBER CRUISE - TRANSECT I

Station	1				2				3			
Day or Night	I	D	N	1	D	D	N	I	D	D	N	N
Replicate No.	1	2	1		1	2	1	2	1	2	1	2
Total No./m^3	273.	00.6	470.5	41	314.1	663.0	232.8	359	278.7	81.0	46.1	63.5
CALANOIDA												
Acartia danae		0	0		0	0	0		1.5	1.5	0.6	0
Acartia lilljeborgii		1.0	49.7	35	0	0	0		0	0	0	0
Acartia tonsa	2.	1.5	4.1	8.	0	0	0		0.7	0.4	0	0
Acrocalanus andersoni		0	0		0	0	0.6		0	0.4	0.3	0.6
Acrocalanus longicornis		0	0		0	1.4	0	1.	0.4	0	0	0
Aetideus acutus		0	0		0	0	0		0.7	0.4	0	0
Calanopia americana		0	0.6	2.	0	0	0		0.4	0	0.6	2.0
Calanus tenuicornis		0	0		0	0	0		0.4	0	0	0.3
Calocalanus pavo		0	0.6		9.6	12.3	12.0	19,	6.3	6.2	6.6	4.1
Calocalanus pavoninus		0	0		1.3	1.4	1.1	4.	2.2	2.2	8.7	8.2
Calocalanus styliremis		0	0		0.6	0	0.6		0.7	0.4	4.8	3.2
Calocalanus gracilis		0	0		0	0	0.6		0	0	0	0.3
Calocalanus sp.3		0	0		0	0	0		0	0.7	0.3	0
Calocalanus sp.4		0	0		0	0	0		0	0	0.6	0
Candacia curta		0	0		0.6	0	0		0	0.4	0.3	0

Appendix XIV-3-1 (cont.)

Centropages caribbeanensis		0	0	0	0	0	0	0	0	0	0.6	0
Centropages velificatus	6.	20.0	46.8	53.5	7.7	13.6	6.9	5.8	1.1	1.1	0.6	0
Clausocalanus arcuicornis		0	0	0	0	0	0	0	1.1	0.4	0	0.3
Clausocalanus furcatus		2.4	0.6	2.1	65.1	302.1	21.8	129.4	52.2	61.4	116.1	136.6
Clausocalanus jobei		0	0	0	0	2.4	1.7	0	5.6	13.8	5.1	4.4
Clausocalanus mastigophorus		0	0	0	0	0	0	0	0	0	0.3	0
Clausocalanus parapergens		0	0	0	0	0	0	0	0.7	0	0.9	1.8
Clausocalanus paululus		0	0	0	0	0	0	0	0	0	0.6	0.3
Ctenocalanus vanus		0	0	0	0	0	0.6	0	1.5	4.4	1.2	0.3
Eucalanus pileatus	68.	113.1	47.9	37.0	5.7	5.4	4.0	2.9	0.4	1.8	0	0.9
Euchaeta marina		0	0	0	0	0	0	0	0	0	0.3	0
Euchaeta paraconcinna		0	0	0	0	0	0	0	0.4	0.7	1.2	0
Haloptilus longicornis		0	0	0	0	0	0	0	0.4	0.7	0.6	0
Heterorhabdus papilliger		0	0	0	0	0	0	0	0	0	0.3	0
Ischnocalanus plumulosus		0	0	0	0	0	0	0	0.7	0.4	0	0
Labidocera aestiva		0	0.6	0	0	0	0	0	0	0	0	0
Lucicutia flavicornis		0	0	0	0	0	0	0	3.0	4.4	4.5	7.0
Lucicutia gaussae		0	0	0	0	0	0	0	0	0.7	0.3	1.2
Lucicutia paraclausi		0	0	0	0	0	0	0	0	0.4	0	0

Appendix XIV-3--1 (cont.)

Mecynocera clausi	C		c	(	0.6	(	1.1	0	3	4.4	4.5	3.2
Nannocalanus minor	c		c	(	0.6	5.4	1.1	1.5	1	1.1	1.5	2.3
Paracalanus aculeatus	14.3	05	32.7	49.4	28.7	43.6	49.3	56.3	12	17.5	9.6	12.3
Paracalanus crassirostris	c		a	2.1	0	(	0	0		(	0	0
Paracalanus denudatus	c		0.6	(	0	(	0	0	0	c	0	"o
Paracalanus **indicus**	37.1	32	25.1	55.5	36.4	40.[	35.5	17.5	1	2.9	0.3	0.6
Paracalanus quasimoto	107.9	08	67.2	96.7	7.7	15.(	5.2	3.7	0	0.4	0.3	0.6
Paracandacia bispinosa	c		0	(	o	(	0	0		c	0.3	0
Paracandacia simplex	c		0	(	0	c	0	0		c	0.3	0.6
Parundinella spinodenticula	c		0	c	0	c	0	0	0	c	0	0
Pleuromamma gracilis	a		0	c	0	c	0	0		o	0.6	0
Pleuromamma piseki	o		0	c	0	c	0	0		0	0.9	0
Scaphocalanus subcurtus	0		0	c	0	c	0	0		0.4	0	0
Stephos deichmamae	0		0	c	0	c	2.9	0		0	0	0
Temora stylifera	0.3	2.	1.2	2.1	6.4	1.4	2.3	3.7	0.	0.7	0.6	1.2
Temora turbinata	7.1	52.	58.4	27.9	52.3	20.4	14.3	2.9	3.	5.8	2.7	2.6
Temoropia mayumbaensis	0		0	0	0	0	0	0	0.	0	0.3	0.6
Undinula vulgaris	o		0	0	0.6	0	0	1.5		0	0	0
CYCLOPOIDA												
Copilia mirabilis	0		0	o	0.6	1.4	0	0		0.4	0.3	1.2
Corycaeus amazonicus	9.1	22.	7.6	26.7	0.6	0	0.61	0		0	0	0.3

Appendix XIV-3-1 (cont.)

Corycaeus americanus	2.0	8.3	1.8	4.1	o	1.4	1.1	0.7	o	0	o	0
Corycaeus clausi	0	0	0	0	0	0	0	0	0	0	0.3	0
Corycaeus giesbrechti	3.7	18.5	9.9	20.6	1.9	1.4	1.7	0.7	3.7	5.1	2.4	5.8
Corycaeus latus	0	0	0.6	0	0.6	2.7	0.6	0.7	0.4	0.4	0	0.6
Corycaeus lautus	0	0	0	0	0	0	0	0	0	0	0	.0.3
Corycaeus speciosus	0	0	0	0	1.3	0	0	0	0.4	0.7	1.8	1.2
Farranula gracilis	0.9	0	1.8	0	21.7	62.6	11.5	39.5	26.,5	29.8	24.9	36.8
Farranula rostrata	0	0	0	0	0	0	0	0	0.4	0	0	0.3
Lubbockia squillimana	0	0	0	0	0	0	0	0	0.4	0	0.6	0.3
Oithona nana	0	0.5	0	0	0	0	0	0	0	0	0	0
Oithona plumifera	0.9	2.9	0.6	8.2	17.9	32.7	26.4	37.3	17.5	26.5	34.5	38.3
Oithona robusta	0	0	c	0	0	0	.0	0	0.7	c	0	0.6
Oithona setigera	0	0	c	0	0	0	0	0	5.2	9.5	1.2	1.2
Oithona tenuis	0	0	c	c	0	0	2.3	0	2.2	1.8	1.8	3.8
Oithona sp.1	0	0	c	c	c	0	0	0	0	1.1	c	c
Oncaea conifers	0	0	c	c	c	0	0.6	0	45.1	0.7	2.4	3.8
Oncaea media	0	0	c	c	1.3	0	0.6	0.7	0	0.4	0.6	G.9
Oncaea mediterranea	0	0	(	c	1.9	4.1	2.3	0	15.3	28.4	14.1	11.7
Oncaea venusta	13.1	9.3	10.5	8.2	40.2	89.8	22.9	28.5	52.9	37.4	79.2	56.7
Sapphirina nigromaculata	0.3	0	(	c	0.6	1.4	c	0.7	0.4	0.4	0	0.3
HARPACTICOIDA												
Clytemnestra rostrata	c	0	(	2.1	c	c	0.6	0	0	(	0	c
Clytemnestra scutellata	c	c	(	(	0.6	c	c	a	0	0.4	0.9	c

Appendix XIV-3-1 (cont.)

Macrosetella gracilis	0	0	1.2	0	0.6	0	0	0.7	2.2	2.5	3.6	3.5
Miracia minor	0	0	0	0	0	0	0	0	0	0	0,3	0
Benthic harpacticoids	0	0	0.6	0	0	0	0	0	0	0	0	0

APPENDIX XIV-3-2

NUMERICAL ABUNDANCE OF' ADULT FEMALE COPEPODS PER M^3

AUGUST/SEPTEMBER CRUISE - TRANSECT II

Station	1				2.				3			
Day or Night	D	D	N	N	D	D	N	N	D	D	N	N
Replicate No.	1	2	1	2	1	2	1	2	1	2	1	2
Total No./m^3	547.4	19.3	2115.5	61.6	96.6	03.6	130.6	369. C	24.7'	390.6	35.5	01.8
CALANOIDA												
Acartia danae	1.5	0	0	0	0	0	0	0.4	0.2	2.8	0.4	1.3
Acartia **lilljeborgii**	(	0	11.0	4.0	0	0	0	(	0.2	0	c	0
Acartia tonsa	(	4.5	8.8	1.3	0	0.4	0	(	(	0	c	0
Acrocalanus andersoni	(	0	0	0	0	0	0	(	0.2	0.5	0.7	0
Acrocalanus longicornis	(	a	0	0	0.1	0.4	"0	. 0.4	0.2	0	0.1	1.3
Aetideus acutus	(	a	0	0	0	0	"0	. (	0.2	0	0.1	0.3
Calanopia americana	(	c	8.8	1.3	0.3	0	0	3.4	0.!	0	0.6	1.3
Calanus tenuicornis	(	c	0	0	0	0	0	(	0.2	0.9	0.4	0.7
Calocalanus pavo	(	c	0	0	0.9	3.2	1.8	2.2	4.2	10.5	5.6	10.1
Calocalanus pavoninus	(	(	c	0	0.8	1.9	1.9	1.'	5.2	2.3	2.2	2.7
Calocalanus styliremis		(	c	0	0.1	0	0.4	0.2	1.	0.5	0.	0.3
Calocalanus gracilis		(	c	0	c	0	0		(	0.5	(	c
Calocalanus sp.2		(	c	0	c	0	0		0.	0	0.	c
Calocalanus sp.3		(	c	0	c	0	0		0.	1.4	0.	c
Calocalanus sp.4		(	c	0	c	0	0			0	0.	c

Appendix xIV-3-2 (cont.)

Candacia curta	0		0	0	0.4	1.3	0.5	0.4	0.	0.5	(	0
Candacia **pachydactyla**	0		0	0	0	0.2	0	(	(	c	c	
Centropages caribbeanensis	0		0	0	"o	0.2	0	c	(	c	c	
Centropages velificatus	5.9	14.	41.9	17.3	1.(	0	3.9	4.5	11.'	6.4	7.4	9
Clausocalanus furcatus	1.5'		26.5	10.7	21.9	11.1	37.4	151.5	83.(	12.3	57.9	132
Clausocalanus jobei	0		0	0	0.3	0	0	0.4	21.(	23.8	16.7	19
Clausocalanus mastigophorus	0		0	0	c	0	0	c	(	c	0.3	0
Clausocalanus parapergens	0		0	0	c	0	0	c	0.'	0.5	0.6	0
Clausocalanus paululus	0		0	0	c	0	0	"o	(	o	0.1	0
Ctenocalanus vanus	0		0	0	c	0	.0	0	7."	9.2	1.7	6
Eucalanus pileatus	.05.9	.03.	180.9	30.6	0.2	0.9	0.2	1.5	0.9	2.8	1.6	0
Euchaeta **paraconcinna**	0		0	0	o	0	0.2	0.4	0.5	0	0.4	
Haloptilus longicornis	0		0	0	0	0	0	0	0.2	0	0	
Ischnocalanus plumulosus	0		0	0	0	0	0.2	0	0.5	0.9	0	0.
Labidocera aestiva	2.9	1.	11.0	0	0	0	0	0	(	0	0	
Lucicutia **flavicornis**	0		0	0	0	0	1.6	11.3	1.6	2.3	2.9	3.
Lucicutia gaussae	0		0	0	0	0	0	0	0.7	0	0	
Lucicutia paraclausi	0		0	0	0	0	0	0	c	0.5	0.1	
Mecynocera clausi	0		0	0	0	0.	0	0	6.8	8.7	6.3	3.
Nannocalanus mine]	0		0	0	8.5	25.6	4.0	4.5	7.0	11.0	4.6	5.
Paracalanus aculeatus	00.0	87.	313.2	109.2	7.4	3.8	24.8	93.8	10.0	11.0	12.1	45.

Appendix xIV-3-2 (cont.)

Paracalanus crassirostris	0	1.1	0	0	0	0	0	0	0	0	0	
Paracalanus denudatus	0	0	a	0	0	0	0	0	0.5	0.5	0.1	
Paracalanus indicus	50.0	53.6	370.6	47.8	0.3	0.2	2.8	6.0	1.9	0	0.9	1.
Paracalanus quasimoto	17.7	40.1	922.1	64.9	0.9	1.5	0.5	1.5	2.6	0.9	0.6	1.
Paracandacia simplex	0	0	c	0	0	0	0	0	0	0	0.1	
Parundinella spinodenticula	0	0	c	0	0	c	0	0	0.7	0.9	0.1	0.
Pleuromamma gracilis	0	0	0	0	0	c	0	0	0	0	0.1	
Pontellina pulmata	0	0	c	0	0	c	0.2	0	0	0	0	
Scaphocalanus subcurtus	0	0	0	0	0	c	0	0	0.2	0	0.1	1.
Scolecithricella ctenopus	0	0	c	0	0	c	0	0	0	0	0	0.
Scolecithricella dentata	0	0	c	0	0	c	0	0	0.2	0	0	0.
Scolecithricella tenuiserrata	0	0	(	0	0	c	0	0	0.2	0	0.1	0.
Scolecithrix bradyi	0	c	(	0	0	c	0	0	c	0	0.1	
Temora stylifera	0	1.1	2.2	2.7	8.1	6.6	2.5	1.5	0.7	1.4	0.1	
Temora turbinata	73.6	127.3	83.8	17.3	2.1	c	4.0	2.3	1.2	0.9	0	1.
Temoropia mayumbaensis	0	0	(	0	0	c	0	0	c	0.5	0	
Undinula vulgaris	4.4	c	(	0	0.5	1.3	1.2	3.4	0.2	0	0.3	
CYCLOPOIDA												
Copilia mirabilis	0	c	(	0	0.2	0.2	0.2	0.4	0.2	1.4	0.6	0.
Corycaeus amazonicus	20.6	31.3	17.6	8.0	0.2	c	0.5	4.5	c	0	0	
Corycaeus americanus	0	c	4.4	2.7	0.1	0.2	0.2	0.8	c	0.5	0	

Appendix xIV-3-2 [cont.)

Corycaeus clausi		0		0		(	0	1	0	0.5	0	0
Corycaeus giesbrechti	19	26.8	46	20.0	0	(	2.6	4.!	5.4	4.6	2.7	3.4
Corycaeus latus		0		0	0	0.2	0.2	(	0.7	0.5	0.3	1.0
Corycaeus lautus		0		0		c	0	(	0.2	0	0	0
Corycaeus limbatu		0		0		c	0	(	0.5	0	0.1,	0
Corycaeus speciosus		0		0	0	c	0	0.4	0.2	0	0.4	0.3
Corycaeus typicus		0		0		c	0	(	0.2	0	0.1	0
Farranula gracili	7.	0	17	5.3	13	19.8	14.4	14.(	16.6	17.0	12.4	45.8
Farranula rostrat.		0		0		c	0	(	a	1.4	0	0
Lichomolgus sp.		0		0		c	0.2	0.4	c	0	0	0
Oithona nana	5.	5.6		0		c	0	(	0	0	0	0
Oithona plumifera	2.	2.2	8	2.7	18	19.8	16.9	24.4	16.3	33.5	11.0	12.8
Oithona robusta		0		0		0	0	(	0.2	0	0.3	0
Oithona setigera		0		0		0	0	(	9.6	3.7	2.6	1.7
Oithona tenuis		0		0		0	0.2	(	1.6	4.6	0.9	0.7
Oithona vivida		0		0		0	0	(	0	0	0	0.3
Oithona sp.1		0		0		0	0	(	0.9	1.4	0	0.7
Oncaea conifers		0		0		0	0	1.5	0.2	0.5	0.3	0.7
Oncaea media		0		0	0.	1.3	1.2	1.1	0.5	0	0.4	1.7
Oncaea mediterranea		0		0		0	0	0.8	36.6	39.9	45.9	39.7
Oncaea venusta	23.	12.3	30.	14.6	7.	2.3	5.6	21.4	57.8	56.5	31.4	38.4
Paroithona pulls		0		0		0	0	c	0	0	0	0.3
Sapphirina nigromaculata		0		0	0.	0.9	0.4	1.9	0	0	0	0.7
HARPACTICOIDA												
Clytemnestra rostrata		0	2.	0		0	0	0	0.2	0	0	0

Appendix XIV-3.2 (cont.)

Clytemnestra scutellata	0	0	2.2	0	0	0	0	0	0.5	0	0	0
Macrosetella gracilis	0	1.1	4.4	1.3	0.2	0.2	0	0.4	2.1	0.9	0.1	0.3
Microsetella norvegica	1.5	0	0	0	0	0	0	0	0	0	0	0
Benthic harpacticoids	2.9	5.6	0	0	0	0	0	0.4	0	0	0	0

APPENDIX XIV-3-3

NUMERICAL ABUNDANCE OF ADULT FEMALE COPEPODS PER M^3

AUGUST/SEPTENEER CRUISE - TRANSECT III

Station	1				2							
Pay or Night	D	D	N	N	D	D	N	N	1	D	N	N
Replicate No.	1	2	1	2	1	2	1	2	1	2	1	2
Total No./m^3	583.0	146.2	726.9	276.2	611.1	640.9	831.0	503.6	378,	430.:	723.2	806 .5
CALANOIDA												
Acertia lilljeborgii	0.8	4.3	6.3	22.1	0	(	0	0		c	C	0
Acartia tonsa	0.8	1.1	5.0	20.9	0	(	0	0		o	a	0
Acrocalanus andersoni	0	0	0	o	0.8	(	0	0	1.	0	3.0	0
Acrocalanus longicornis	0.8	0	0	o	0	0.9	0	0	0.	0	1.0	0.8
Aetideus acutus	0	0	C	o	0	c	0	0		0.7	0	0
Calanopia americana	0	0	8.8	11.4	0	c	Q	2.5	1.	0	1.0	2.5
Calanus tenuicornis	0	0	0	o	0	c	0	0	0.	0	0	0
Calocalanus pavo	0	0	0	0.6	12.8	5.2	21.5	11.6	4.	4.2	12.0	15..6
Calocalanus pavoninus	0	0	0	0	2.4	4.3	16.2	10.0	2.	1.4	5.0	1.6
Calocalanus stylirémis	o	0	0	0	2.4	0.9	1.8	5.0		0.7	0	0.8
Calocalanus gracilis	0	0	0	0	0	0.9	0	0		0	0	0
Calocalanus sp.3	0	0	0	0	0	C	0	,0	1.	0.7	0	0
Candacia curta	0	0.	0	0	0.8	0	0	0		0	1.0	0
Centropages velificatus	37.2	45.5	71.7	20.9	4.8	0.9	16.2	15.8	1.	2.8	6.0	9.0
Clausocalanus furcatus	23.1	3.2	20.1	7.6	233.4	287.9	228.0	43.3	111.	.00.1	199.5	.71.7

Appendix XIV-3-3 <cont.)

Clausocalanus jobei	0	0	0	0	0	0	0	0	21.8	28.5	22.9	56.7
Clausocalanus parapergens	0	0	0	0	0	0	0	0	0.6	0.7	0	0
Clausocalanus pergens	0	0	0	0	0	0	0	0	0.6	0	0	0
Ctenocalanus vanus	0	0	c	0	0	0	0	0	5.9	9.0	3.0	5.7
Eucalanus pileatus	66.1	60.6	123.3	13.3	6.4	5.2	1.8	2.5	0.6	0.7	3.0	4.1
Eucalanus sewelli	0	0	0	0	0	0	0	0	0	0	1.0	0
Eucalanus subtenuis	0	0	a	0	0	0	0	0	0	0.7	0	0
Euchaeta paraconcinna	0	0	a	a	0	0	1.8	0	1.8	a	1.0	1.6
Haloptilus longicornis	0	0	0	0	0	0	0	0	0.6	a	0	0
Ischnocalanus plumulosus	0	0	c	0	a	0	o	0	0.6	0.7	0	0
Labidocera aestiva	0	0	2.5	1.9	o	0	0	0	0	0	0	0
Lucicutia flavicornis	0	0	0	0	0	0	12.6	7.5	4.1	3.5	12.0	14.8
Lucicutia gaussae	0	0	a	0	0	0	0	o	0	0.7	0	0
Lucicutia paraclausi	0	0	a	0	0	0	0	0	0.6	0.7	0	0
Mecynocera clausi	0	0	o	0	0	0	0	0	7.7	4.2	0	2.5
Nannocalanus minor	0	0	0	0	3.2	6.1	7.2	4.2	12.4	16.7	13.0	22.2
Paracalanus aculeatus	33.0	84.5	142.1	35.4	69.0	43.4	44.9	58.9	13.0	9.0	8.0	41.9
Paracalanus crassirostris	0.8	0	o	0	0	0	0	0	0	0	0	0
Paracalanus denudatus	0	0	0	0	0	0	0	0	0.6	0	0	0
Paracalanus indicus	56.2	19.5	34.0	25.3	4.0	6.9	84.4	32.4	1.2	0.7	6.0	7.4
Paracalanus quasimoto	70.9	78.0	74.2	34.1	57.7	23.4	9.0	2.5	1.2	1.4	35.9	23.o

Appendix- XIV-3-3 (cont.)

Paracalanus nudus		0	0	0	c	0.9	c	c		0		0
Paracandacia simplex		0	0	0	c	0	c	a	0.6	0		0
Parundinella spinodenticula		0	0	0	c	0	c	0	2.4	9.7		0
Scolecithricella tenuiserrata		0	0	0	c	0	0	0		0.7		0
Scolecithrix bradyi		0	0	0	c	0	0	0		0.7		0
Temora stylifera	2.1	3.2	0	0	4.8	2.6	3.6	2.5	2.4	0.7	7.(	7.4
Temora turbinata	38.(	45.5	10.0	55.6	4.0	0.9	9.0	13.3	2.4	2.8	8.0	20.5
Undinula vulgaris	0.8	0	0	0	4.8	0.9	1.8	0	c	0.7	c	0.8
CYCLOPOIDA												
Copilia mirabilis	0.8	0	0	0	1.6	0.9	3.6	1:7	0.6	1.4	1.0	0.8
Corycaeus amazonicus	9.1	9.7	3.8	6.3	1.6	0	5.4	4.2	0.6	0	c	1.6
Corycaeus americanus	c	0	0	0	0	0	.0	0.8	c	0	a	1.6
Corycaeus flaccus	c	0	0	0	0	0	0	0	c	0.7	a	0
Corycaeus furcifer	c	0	0	0	0	0	-0	0	c	0.7	0	0
Corycaeus giesbrechti	10.7	8.7	10.1	9.5	13.7	14.7	30.5	23.2	6.5	9.0	12.0	12.3
Corycaeus latus	c	0	0	0	0.8	1.7	5.4	0.8	0.6	0	1.0	0
Corycaeus limbatus	c	0	0	0	0	0	0	0	0.6	0	0	0
Corycaeus speciosus	c	1.1	0	0	0.8	0	9.6	0.8	0	0.7	1.0	3.3
Corycaeus typicus	c	0	0	0	0	0	0	0	0	0.7	0	0
Farranula gracilis	4.1	2.2	0	0	77.0	18.8	107.7	37.4	17.2	55.6	81.8	40.4
Lichomolgus sp.	0	0	0	0	0	0	1.8	0	0	0	0	0
Oithona nana	0.8	3.2	0	0	0	0	0	0	0	0	0	0
Oithona plumifera	0	0	0	2.5	40.1	19.4	68.2	33.2	20.6	25.0	23.9	18.9
Oithona robusta	0	0	0	0	0	0	0	0	0.6	0	0	0

Appendix XIV-3-3 (co :.)

Oithona setigera	0	0	o	0	0	0	0	o	1.8	1.4	0	0.8
Oithona simplex	0	5.2	0	0	0	0	0	0	0	0	0	0
Oithona tenuis	0	0	0	0	0	0	o	0	1.2	0.7	2.0	1.6
Oithona sp.1	0	0	0	0	0	0	0	0	1.2	0	0	0
Oncaea conifers	0	0	0	0	0	o	1.8	0	1.8	0	8.0	2.5
Oncaea media	0	0	0	0	2.4	0	0	1.7	0.6	0	1.0	4.9
Oncaea mediterranea	0	1.1	0	0	7.2	6.9	12.6	12-.5	27.7	43.1	52.9	39.4
Oncaea venusta	13.9	66.1	13.8	7.6	52.1	54.6	25.6	73.9	60.7	86.2	.85.5	.64.3
Sapphirina nigromaculata	1.7	1.1	0	0	0	1.7	5.4	1.7	1.2	0	1.0	0.8
HARPACTICOIDA												
Clytemnestra rostrata	0	1.1	0	0	0	0	0	0	0	0	1.0	1.6
Macrosetella gracilis	0.8	1.1	0	0	2.4	0	0	0	0	2.1	2.0	0.8
Microsetella - rosea	-0	0	0	0	0	0.9	0	0	0	0	0	0
Benthic harpacti-coids	0	2.2	1.3	1.3	o	0	0	0	0	0	0	0

APPENDIX XIV-3-4

NUMERICAL ABUNDANCE OF ADULT FEMALE COPEPODS PER M^3

AUGUST/SEPTEMBER CRUISE -- TRANSECT IV

Station	1				2				3			
Day or Night	D	D	N	N	D	D	N	N	D	D	N	N
Replicate No.	1	2	1	2	1	2	1	2	1	2	1	2
Total No. /m^3	283.	652.	625.	648.	875.	413.	904.	82.0	426.	476.	233.	75.[illegible]
CALANOIDA												
Acartia lilljeborgii	0.	0.	[illegible]	4.				[illegible]	[illegible]		[illegible]	[illegible]
Acartia tonsa	3.	5.[illegible]	3.[illegible]	2.[illegible]	[illegible]	0.[illegible]	[illegible]	0	[illegible]	[illegible]	[illegible]	0
Acrocalanus andersoni	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	0	[illegible]	[illegible]	0.[illegible]	1.1
Acrocalanus longicornis	1.[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	0	[illegible]	0.[illegible]	[illegible]	0
Calanopia americana	[illegible]	0.[illegible]	9.[illegible]	11.1	[illegible]	[illegible]	14.[illegible]	3.5	5.[illegible]	1.[illegible]	5.[illegible]	5.4
Calocalanus pavo	0.[illegible]	[illegible]	1.[illegible]	1.[illegible]	1.[illegible]	0.[illegible]	6.[illegible]	1.7	13.[illegible]	4.[illegible]	3.[illegible]	3.8
Calocalanus pavoninus	[illegible]	0	0	0	0	[illegible]	3.[illegible]	0	1.[illegible]	1.[illegible]	1.[illegible]	1.1
Calocalanus styliremis	0	0	0	0	0	0	1.6	1.7	1.3	0	1.1	1.6
Candacia pachydactyla	0	0	0	0	0	0	0	0	0	0	0	0.5
Centropages caribbeanensis	0	0	0	0	0	0	0	0	1.3	0	0	0
Centropages velificatus	36.1	29.7	16.7	49.9	15.6	15.0	14.6	2.1	17.9	16.7	4.2	5.4
Clausocalanus furcatus	5.2	23.9	8.6	20.8	84.1	39.4	29.7	0.6	19.4	00.6	12.8	7.6
Clausocalanus jobei	0	0	0	0	0	0	0	0	0	0	0.2	0
Eucalanus pileatus	26.1	18.7	41.9	43.0	36.3	12.2	27.6	6.9	1.9	3.7	0.9	1.6

Appendix XIV-3-4 (cont.)

Euchaeta paraconcinna	0	0	0	0	0	0	0	0	0	0	0.2	0
Labidocera aestiva	0.5	0	0	1.4	0	0	0	0	0	0	0	0
Labidocera scotti	0	0	1.0	0	0	0	0	0	0	0	0	0
Lucicutia flavicornis	0	0	0	0	0	0	0	0	0.6	0	0.7	1.1
Lucicutia paraclausi	0	0	0	0	0	0	0	0	0.8	0	0	0
Nannocalanus minei	0	0	0	0	0	0.9	0	0	2.6	0	1.5	2.2
Neocalanus gracilis	0	0	0	0	0	0	0	0	0	0.6	0	0
Paracalanus aculeatus	101.5	36.6	63.8	77.2	76.5	82.5	43.1	93.2	50.0	58.6	15.0	23.2
Paracalanus indicus	1.9	5.3	40.0	43.0	77.8	12.2	8.1	48.3	7.7	13.6	1.5	3.8
Paracalanus quasimoto	38.0	40.3	39.1	56.8	34.6	28.1	43.8	34.5	19.8	35.8	7.3	10.3
Pontellopsis villosa	0	0	0	1.4	0	0	0	0	0	0	0	0
Rhincalanus cornutus	0	0.5	0	0	0	0	0	0	0	0	0	0
Tenors stylifera	2.8	1.6	1.9	0	13.0	1.9	6.5	8.6	6.4	4.9	3.7	1.1
Temora turbinata	7.1	18.6	25.7	92.9	24.6	17.8	38.3	69.2	1.3	0	3.5	3.2
Undinula vulgaris	0.9	1.1	0	0	0	0	0	0	0	0	0	0
CYCLOPOIDA												
Copilia mirabilis	0	0.5	0	0	0	0.9	0	0	1.3	0.6	0.4	0.5
Corycaeus amazonicus	4.7	8.0	3.8	6.9	2.6	0.9	11.3	6.9	1.3	4.9	0.7	0.5
Corycaeus americanus	0	1.1	0	0	1.3	1.9	0	0	0	0	0.2	0
Corycaeus giesbrechti	4.7	12.2	11.4	13.9	14.3	18.7	58.3	36.3	3.8	16.7	5.1	6.5
Corycaeus latus	0	0	0	0	1.3	0.9	0	1.7	0.6	0	0.2	0
Corycaeus speciosus	0	0	0	0	0	0.9	0	0	0.6	1.2	0	1.6

Appendix XIV-3-4 (cont.)

Farranula gracilis	0.9	0	1.9	0	79.1	34.7	22.7	50.1	34.5	37.6	14.:	22.:
Lichomolgus sp.	0	0	1.0	0	0	(	-(	(	0	(	0.9	0.5
Oithona nana	0.5	0	1.9	1.4	1.3	(	(	1.7	0	0.6	(	(
Oithona plumifera	0	0	0	0	2.6	9.4	14.6	8.6	36.4	30.2	24.5	18.9
Oithona setigera	0	0	0	0	0	0	0	0	0	0	0.:	(
Oithona simplex	0	0	0	0	1.3	0	0	0	0	0	0	0
Oithona tenuis	0	0	0	0	0	0	0	0	0.6	0	0.2	0.5
Oncaea media	0	0	0	0	1.3	0	0	0	0	0	0.4	0.5
Oncaea mediterranea	0	0	" 0	0	0	0	0	0	2.6	1.2	1.5	3.2
Oncaea venusta	46.0	36.6	17.1	18.0	03.7	131.2	51.9	34.5	80.4	39.5	20.0	15.1
Sapphirina nigromaculata	0	0	1.0	0	0	1.9	0	0	0	0	0.4	1.1
HARPACTICOIDA												
Clytemnestra rostrata	0	0	1.0	1.4	0	0	4.9	1.7	0	0	0	0
Clytemnestra scutellata	0	0	1.0	0	0	0	1.6	0	0	0	0.5	0
Macrosetella gracilis	0	0.5	1.9	1.4	0	0	1.6	0	3.2	1.2	0.7	0.5
Microsetella rosea	0.5	0	0	0	0	0	0	0	0	0	0	0
Benthic harpacticoids	0	0	1.0	0	2.6	0	0	0	0	0	0	0

APPENDIX XV

PERCENTAGE COMPOSITION OF ADULT FEMALE COPEPODS

APPENDIX XV-1-1

percentage CONPOSITION OF ADULT FEMALE COPEPODS

DECEMBER/JANUARY CRUISE - TRANSECT I

Station	1				2				3			
Day or Night	D	D	N	N	D	D	N	N	D	D	N	N
Replicate No.	1	2	1	2	1	2	1	2	1	2	1	2
CALANOIDA												
Acartia danae	0	0	0	0	0.2	0	0.2	0.3	0	0	0	0
Acartia lilljeborgii	0.3	1.0	0.4	0	0	0	0	0	0	0	0	0
Acartia tonsa	1.6	8.9	2.4	2.1	0.2	1.5	0	0	0	0	0	0
Acrocalanus andersoni	0	0	0	0	0	0	0.1	0	0	0	0.5	0.3
Acrocalanus longicornis	0	0	0	0	0	0	0	0	0	0	0.3	0.3
Aetideus acutus	0	0	0	0	0.2	0	0.3	0	0	0.3	0.5	0.3
Calanopia americana	0.3	0.1	0	0	2.3	0	3.9	0.6	0.5	0	0.5	0
Calanus tenuicornis	0	0	0	0	0	0	0.2	0.3	0	0.3	0	0.3
Calocalanus pavo	0	0	0	0	0	0	0.2	0	0.5	0.5	0.5	0
Calocalanus pavoninus	0	0	0	0	0	0.2	0.2	1.5	2.2	1.3	0.3	2.2
Calocalanus styliremis	0	0	0	0	0.2	0	0.3	0.6	0.9	0	3.8	0.5
Calocalanus sp.4	0	0	0	0	0	0	0.1	0.6	1.2	1.1	1.3	0.8
Candacia curta	0	0	0	0	0.2	0.3	0.6	0	0	0	0	0
Candacia pachydactyla	0	0	0	0	0	0	0	0	0	0	0.3	0
Centropages caribbeanensis	0	0	0	0	0	0	0	0	0.5	0	0	0
Centropages velificatus	8.8	5.0	1.8	1.6	3.4	2.1	0.9	1.5	0	0	0.5	0.5
Clausocalanus arcuicornis	0	0	0	0	0.2	0	0.1	0	0	2.2	0.5	0.5
Clausocalanus furcatus	1.7	0.7	0.1	0.9	6.3	7.9	9.3	2.2	3.3	2.4	1.8	7.8
Clausocalanus jobei	0	0	0	0	0	0.2	0.2	0.3	0	0.3	0.5	0
Clausocalanus mastigophorus	0	0	0	0	0	0	0	0	0	0	0.3	0
Clausocalanus parapergens	0	0	0	0	0	0.2	0.6	1.8	0.5	1.1	0.5	0

Appendix XV-1-1 (cont.)

Clausocalanus paululus	0	0	0	0	0	0	0	.0	0.9	1.6	0.5	0.3
Clausocalanus pergens	0	0	0	0	0	0	0	0	0	0	0.5	0
Ctenocalanus vanus	0	0	0	0	0.2	0	1.9	0.6	0.9	1.9	1.8	0.5
Eucalanus hyalinus	0	0	0	0	0	0	0	0	0	0.3	0	0
Eucalanus pileatus	5.1	2.8	3.5	2.3	6.6	7.6	4.8	0.6	0.5	0.3	0.8	0
Euchaeta marina	0.1	0	0	0	0	0	0.1	0	1.3	0	0.5	0
Euchaeta media	0	0	0	0	0	0	0	0	0	0.3	0.3	0
Euchaeta paraconcinna	0	0	0	0	0.5	0.2	0.2	0.3	0	1.1	1.0	0
Haloptilus acutifrons	0	0	0	0	0	0	0	0	0	0.3	0	0
Haloptilus longicornis	0	0	0	0	0	0	0	0	1.2	1.3	0.8	0.5
Heterorhabdus papilliger	0	0	0	0	0	0	0	0	0	0	0.3	0
Heterorhabdus spinifer	0	0	0	0	0	0	0	0	0	0.3	0	0.6
Labidocera aestiva	0	0.1	0	0	0	0	0	0	0	0	0	0
Lucicutia flavicornis	0	0	0	0	1.8	2.3	3.3	4.8	1.2	4.3	1.8	3.3
Lucicutia gaussae	0	0	0	0	0	0	0	0	0.5	0	0.8	0.3
Mecynocera clausi	0	0	0	0	0	0	0.1	0	0.5	1.9	0.5	1.6
Nannocalanus minor	0	0	0	0.2	0	0	0.5	0	1.3	0	1.3	0.5
Paivella inaciae	0	0	0	0	0	0	0	0	0.5	0	0.3	0
Paracalanus aculeatus	1.5	2.4	0.8	0.7	6.6	6.8	6.2	8.9	0.9	0.3	0.8	0.3
Paracalanus crassirostris	0	0.1	0	0	0	0	0	0	0	0	0	0
Paracalanus denudatus	0	0	0	0	0	0	0	0	0	0	0	0.8
Paracalanus indicus	5.4	4.2	7.2	5.2	1.6	2.1	4.9	0.4	1.3	0	2.4	1.9
Paracalanus quasimoto	0.1	0.4	4.5	3.4	4.5	3.3	6.5	1.5	0.5	0	0.3	0.8
Paracandacia bispinosa	0	0	0	0	0	0	0	0	0.5	0.5	0	0.3
Paracandacia simplex	0	0	0	0	0	0	0	0	0	0	1.0	0
Pleuromamma abdominalis	0	0	0	0	0	0	0	0	0.5	0	0.3	0.3
Pleuromamma gracilis	0	0	0	0	0	0	0.1	0	0.9	1.6	0.3	0.3

Appendix XV-l-1 (cont.)

Pleuromamma piseki	(	0	C	0	(	0	c	(	0.!	c	0.3	0
Rhincalanus cornutus	c	0	0	0	c	0	c	C	0.5	0.3	0	0
Scaphocalanus brevirostris	c	0	0	0	c	0	c	(	(	C	0	0.3
Scaphocalanus subcurtus	c	0	0	0	c	0	c	c	C	0	0.3	0.3
Scolecithricella dentata	c	0	0	0	c	0.2	c	c	C	0.3	0.8	1.1
Scolecithricella tcnuiserrat	C	0	0	0	c	0.2	0.3	0.6	C	0.s	0.5	0.3
Scolecithrix bradyi	c	0	0	0	c	0	0.1	c	0.5	0	0".5	0.3
Scolecithrix danae	C	0	0	0	c	0	0	c	(	0	0.3	0.3
Temora stylifera	0.9	0.3	0.4	0	0.5	2.1	0.4	2.7	" c	0.3	0	0
Temora turbinata	3.5	3.1	0.5	0.4	0.9	1.1	1.6	0.3	0.9	0	0.3	0.5
Temoropia **mayumbaensis**	0	0	0	0	c	0	0	c	C	0.8	1.3	1.1
Undeuchaeta plumosa	C	0	0	0	C	0	0	c	C	0	0.3	0
Undinula vulgaris	0.1	0.2	0	0	c	0	0.2	C	0.5	0	0.3	0.5
CYCLOPOIDA												
Copilia mirabilis ,	0	0	0	0	0	·0	0	0	C	0	0.5	0
Corycaeus amazonicus	0.0	4.4	1.4	0.6	3.4	1.7	1.6	B.3	C	0.5	0.8	1.1
Corycaeus americanus	0.4	0.9	0.-1	0.5	0.2	0.2	0	0.3	C	C	0	0
Corycaeus flaccus	0	0	C	0	0	0	0	C	0	0	0	0.3
Corycaeus furcifer	0	0	0	0	0	0	0	0	0	0.3	C	0
Corycaeus giesbrechti	8.9	3.7	5.4	0.4	4.1	0.0	3.4	5.1	0.5	1.6	0.8	1.1
Corycaeus latus	0	0	0	0	0	0	0	0	0	0.3	0.5	0
Corycaeus limbatus	0	0	0	0	0	0	0	0	0.5	0	0.3	0.5
Corycaeus minimus indicus	0	0	C	C	0	0	0	0	0	0	0.3	0
Corycaeus speciosus	0	0	0	0	0	0	0.2	C.3	0.5	0.3	1.6	1.1
Corycaeus typicus	0	0	C	0	0	0	0.1	0	0.5	0.5	0.3	0
Farranula gracilis	0	0	0	0	).5	0	1.0	0	5.2	3.0	4.0	1.6′
Lichomolgus sp.	0	0	0	0.2	).2	C.2	0	0	0	0	0	0

Appendix XV-l-1 (cont.)

Lubbockia squillimana	c	0	0	c	0	0	o.“	0.3	0.9	0.3	0	0.8
Oithona hamata	c	0	0	c	0	0	(	c	0.9	1.6	0.5	1.1
Oithona nana	0.1	0.4	0.4	0.7	0	0	(	a	c	0	0	c
Oithona plumifera	0.2	0.8	0.2	0.4	8.5	4.0	0.6	18.8	21.5	7.8	9.2	1.6
Oithona robusta	c	0	0	0	0	0	(	0	1.3	0.8	0.8	1.4
Oithona setigera	c	0	0	0	0.3	0.3	0.1	1.8	4.7	9.2	5.8	9.3
Oithona tenuis	c	0	0	0	0.2	0.2	c	0.9	2.2	1.6	i. 3	2.7
Oncaea conifers	o	0	0	0	0.2	0.5	3.1	1.5	0.9	0.8	1.6	0.8
Oncaea media	c	0	0	0	0	0	c	0	“ a	0	1.3	0.8
Oncaea mediterranea	0.1	0	0	0	2.9	2.1	4.2	4.2	3.9	0.8	4.0	4.6
Oncaea notopus	0	0	0	0	0	0	c	0.3	a	0	0	0
Oncaea venusta	0.8	0.6	0.2	0.4	2.9	2.3	7.0	4.8	3.9	i.6	6.3	3.8
HARPACTICOIDA												
Clytemnestra scutellata	o	0	0	0	0	0.2	0.2	0.3	0.5	0	0	0
Macrosetella gracilis	0.1	0.1	0.1	0	0.2	0.2	0.5	2.7	0.9	1.1	0	).5
Miracia minor	0	0	0	0	o”	0	0	0	0	0	0	).3
Oculosetella gracilis	0	0	0	0	o	0	0	0.3	0	0	0	o

APPENDIX XV-1-2

PERCENTAGE CONPOSITION OF ADULT FENALE COPEPODS .

DECEMBER/JANUARY CRUISE - TRANSECT II

Station	1				2				3			
Day or Night	D	D	N	N	D	D	N	N	D	D	N	N
Replicate No.'	1	2	1	2	1	2	1	2	1	2	1	2
CALANOIDA												
Acartia danae	0	0	0	c	0.2	0.2	0	0.1	0	0	0.2	0.2
Acartia tonsa	0.1	0.1	0	0.4	4.7	9.2	0	(	0	0	C	0
Acrocalanus andersoni	0	0	0	0.4	0.2	0.2	0.1	0.!	0.2	0.2	1.3	0
Acrocalanus longicornis	0	0	0	C	0.2	0	0.6	.0.:	0.2	0.5	" o	0
Aetideus acutus	0	0	0	C	0.2	0.2	0	0.1	0	0	0.2	0
Calanopia americana	0.3	0.1	0.5	2.5	0.6	0.6	0.7	0.9	1.2	1.4	0.3	1.3
Calanus tenuicornis	0	0.1	0	0	0	0	0	0.3	0.2	0.1	0.5	0.2
Calocalanus pavo "	0	0	0	0	0	0	0.2	0.4	0.2	0.3	0.2	0.7
Calocalanus pavoninus	0	0	0	0.4	0	0.2	0	0.3	0.5	0.4	0.3	0.9
Calocalanus styliremis	0	0	0	0	0	0.2	0.2	0.1	0.5	0.3	0.5	0.2
Calocalanus sp.1	0	0	0	0	0	0	0	?	0	0.1	0	0
Calocalanus sp.4	0	0	0.2	0	0.2	0	0	0.1	0	0.1	0.3	0
Candacia curta	0	0.1	0	0.4	0	0	0.3	(	0	0.1	0	0
Centropages caribbeanensis	0	0	0	0.4	0	0	0	c	0	0	0	0.4
Centropages hamatus	0	0	0	0	0.2	0.6	0	(	0	, 0	0	0
Centropages velificatus	3.3	2.9	1.3	1.8	0.6	0.4	0.3	c	0.3	0.1	0.5	0.2
Clausocalanus arcuicornis	0	0	0	0	0.2	0.2	0.3	0.5	0.9	0.3	0.7	0.2
Clausocalanus furcatus	6.9	4.7	3.1	6.8	2.5	8.8	15.5	31.1	11.3	14.4	2.9	5.5
Clausocalanus jobei	0	0	0	0	0.2	0.6	0	0.1	0.3	0.1	0	0
Clausocalanus mastigophorus	0	0	0	0	0	0	0.1	0.1	0	0	0	0

Appendix XV-l-2 "(cont.)

Clausocalanus parapergens	0	0	0	0	0	0	0.1	0.1	0.2	0.1	0.7	0.5
Clausocalanus paululus	0	0	0	0	0	0	0	0	0	0.2	0.7	0.2
Ctenocalanus vanus	0	0	0	0	0.4	0.2	0.1	0.1	0.3	0.4	1.3	0.5
Eucalanus hyal inus	0	0	0	0	0.2	0	0	0	0	0	0	0
Eucalanus monachus	0	0	0	0	0	0	0	0	0	0	0	0.2
Eucalanus pileatus	4.5	1.4	0.5	2.9	3.8	0.6	1.2	0.8	3.8	3.2	0.2	0.5
Eucalanus sewelli	0	0	0	0	0.2	0	0	0	0	0	0	0
Euchaeta marina	0	0	0	0	0.2	0.4	0.1	0	0.5	0	0.2	0
Euchaeta paraconcinna	0	0	0	0	0.4	0.6	0.1	0.4	0.3	0.1	0.3	0.2
Haloptilus longicornis	0	0	0	0	0	0	0	0	0.5	0.4	0	0
Heterorhabdus papilliger	0	0	0	0	0	0	0	0	0.2	0	0	0
Ischnocalanus plumulosus	0	0	0	0	0	0	0	0	0	0.1	0	0
Lsbidocera aestiva	0	0	0	0	0.2	0	0	0	0	0	0	0
Lucicutia flavicornis	0	0.1	0	1.1	1.4	0.6	0.1	1.9	1.9	2.1	1.5	2.4
Lucicutia gaussae	0	0	0	0	0	0	0.1	0.1	0	0.1	0.2	0.2
Lucicutia paraclausi	0	0	0	0	0.2	0.6	0.1	0	0	0	0	0
Mecynocera clausi	0	0	0	0	0.2	0.4	0	0.1	0	0	0.2	0.5
Nannocalanus minor	0	0	0	0	2.9	1.6	1.9	0.7	3.1	1.4	1.0	2.5
Neocalanus gracilis	0	0	0	0	0	0	0	0	0	0	0.2	0
Paivella inaciae	0	0	0	0	0	0	0	0	0.2	0	0	0
Paracalanus aculeatus	1.5	2.8	1.0	3.2	4.7	2.1	3.1	3.7	1.9	3.8	1.0	2.4
Paracalanus crassirostris	0.3	0.1	0	0.4	0	0	0	0	0	0	0	0
Paracalanus denudatus	0	0	0	0	0.4	0	0	0	0	0	0	0
Paracalanus indicus	36.1	17.0	28.8	21.5	29.6	25.6	27.5	13.0	1.5	10.4	9.7	6.9
Paracalanus quasimoto	2.9	55.2	48.6	10.4	18.8	15.4	5.6	3.2	7.0	5.5	0.8	2.5
Paracandacia simplex	0.2	0	0	0	0	0	0	0	0	0.1	0	0
Parundinella sp.	0	0	0	0	0	0	0	0.5	0	0.1	0	0
Pleuromamma abdominalis	0	0	0	0	0	0	0	0	0.2	0	0	0
Pleuromamma gracilis	0	0	0	0	0	0	0	0	0.5	0.4	0.2	0.2

Appendix XV-l-2 (cont.)

Pleuromamma piseki	0	0	0	0	0	0	0.1	0	0.2	0.2	0	0.2
Pontellina pulmata	0	0	0	0	0	0	0	"0	0.2	0	0	0
Rhincalanus cornutus	0	0	0	0	0	0	0	0	0	0	0.2	0
Scaphocalanus brevirostris	0	0	0	0	0	0	0	0	0	0.1	0.2	0
Scolecithricella ctenopus	0	0	0	0	0	0	0	0.1	0	a	0	0.2
Scolecithricella dentata	0	0	0	0	0	0	0	"0	0.3	0.5	0	0
Scolecithricella tenuiserrata	0	0	0	0	0	0	0	0.1	0.3	0.1	0	0
Scolecithrix bradyi	0	0	0	0	0	0	0	0	0	c	0.2	0
Scolecithrix danae	0	0	0	0	0	0	0	0.3	0.3	a	0	0
Temora stylifera	1.3	0.5	0.2	1.8	0.8	1.6	1.2	1.4	1.0	1.0	0.2	0
Temora turbinata	5.9	3.7	1.5	2.1	3.5	6.3	3.1	6.1	3.3	3.4	1.1	3.1
Temoropia mayumbaensis	0	0	0	0	0.2	0	0	0	0.2	0	0.5	0
Undinula vulgaris	0	0	0	0	0.2	0	0.1	0.3	0.7	0.9	0.2	0
CYCLOPOIDA												
Copilia lata	0	0	0	0	0	0	0.1	0	0	0	0	0
Copilia mirabilis	0	0	0	0	D.4	0	0.1	0.1	0	0.2	0	0.2
Corissa parva	0	0	0	0	0	0	0	0	0	0.1	0	0
Corycaeus amazonicus	1.8	2.8	5.8	3.6	2.9	1.8	0.6	2.4	0.9	0.5	0.8	0.2
Corycaeus americanus	0.2	0.4	0.7	L.4	0	0	0.1	0	0	0	0.2	0
Corycaeus giesbrechti	7.1	3.8	2.6	3.2	0.6	1.2	1.7	4.7	1.4	2.0	2.1	2.7
Corycaeus latus	0.2	0	0	0	0	0	0.2	0.1	0	0.1	0.2	0
Corycaeus lautus	0	0.1	0	0	0	0	0.1	0	0	0	0	0
Corycaeus limbatus	0	0	0	0	0	0	0	0	0.2	0	0.3	0
Corycaeus speciosus	0.2	0.2	0.2	0	0	0.4	0	0.3	0.3	0.4	1.1	0
Corycaeus typicus	0	0	0	0	0.2	0	0	0	0.2	0.2	0.2	0
Farranula gracilis	).9	0.7	2.1	0	0	0.6	2.8	1.2	1.2	1.6	1.0	2.4
Lubbockia squillimana	0	0	0	).4	).2	0	0.1	0.1	0	0.2	0	0.2

Appendix XV-1-2 (cont.)

Oithona brevicornis	0	0	0	0	0	0	0	0	0	0	0.2	0
Oithona hamata	0	0	0	0	0	0	0	0	0	0.1	0	0
Oithona nana	0.2	0.1	0	0	0	0.2	0	0	0	0	0	0
Oithona plumifera	0.2	0.4	1.5	7.9	2.3	6.0	0.9	3.6	1.5	1.2	5.6	4.0
Oithona robusta	0	0	0	0.4	0.2	0.2	0	0	0.3	0	0	0
Oithona setigera	0	0	0	0	1.2	0.2	0.1	0	0.9	1.1	0.5	0.9
Oithona tenuis	0	0	0	0	0	0	0	0.1	0	0.3	0.3	0.2
Oncaea conifers	0	0	0	0	0	0.2	0	0.9	0.2	0.3	0.8	0.9
Oncaea media	0	0	0	0	0.2	0	0	0	0	0	0	0.2
Oncaea mediterranea	0.2	0.9	0.5	2.8	1.4	6.0	0.8	3.9	0.5	0.9	1.0	2.0
Oncaea venusta	5.3	1.2	0.8	3.2	1.8	5.5	9.2	14.1	7.9	7.5	6.6	14.5
Saphirella sp.	0	0.1	0	0	0	0	0	0	0	0	0	0
HARPACTICOIDA												
Clytemnestra scutellata	0	0.1	0	0.7	0	0	0.1	0	0	0	0	0
Macrosetella gracilis	0.3	0.4	0.2	0	0.4	0.4	0.4	0.5	0	0.4	0.8	0.5
Miracia minor	0	0	0	0	0	0	0	0	0	0	0.2	0

APPENDIX XV-1-3

PERCENTAGE COMPOSITION OF ADULT FEMALE COPEPODS

DECEMBER/JANUARY CRUISE - TRANSECT III

Station	1				2				3			
Day or Night	D	D	N	N	D	D	N	N	D	D	N	N
Replicate No.	1	2	1	2	1	2	1	2	1	2	1	2
CALANOIDA												
Acartia danae	(	(	c	"Cl	i	c	0	0	0.:	c	(	0
Acartia lilljeborgii	0.4	(	0.3	0.2	(	C	0	0	(	c	(	0
Acartia tonsa	c	(	3.2	6.6	0.1	C	0	0	(	c	(	0
Acrocalanus andersoni	c	(	c	0	0.1	c	0	0.2	(	0.2	c	0.2
Acrocalanus longicornis	c	(	a	0	0.1	0	0.3	0.2	(	0.2	c	0.2
Calanopia americana	C	0.1	1.3	0.9	0.4	0.4	0.8	0.7	0.1	0.3	5.1	1.0
Calanus tenuicornis	c	(	0	0	0.3	0	0	0	0.1	C	c	0
Calocalanus pavo	o	C	0	0	0.8	0.1	1.1	1.0	0.6	0.2	0.2	0
Calocalanus pavoninus	C	C	0	0	0.2	0.4	0.6	0.5	1.4	0.6	c	0.8
Calocalanus styliremis	0	C	c	0	0.7	0.5	0.7	1.2	1.0	0.6	o	1.3
Calocalanus sp.1	0	C	o	0	c	0	0.1	0.2	c	0	0	0
Calocalanus sp.4	C	C	0	0	c	0.1	0.3	0	0.4	0	0	0
Candacia curta	C	C	0	0	0.1	0.1	0.3	0.2	c	0.1	0.2	0.4
Centropages caribbeanensis	C	C	0	0	0.1	0	0	0	0.1	0	0	0
Centropages hamatus	0	0.1	0	0	C	0	0	0	c	0	0	0
Centropages velificatus	1.3	1.1	2.6	1,4	0.2	0.1	).1	0	o	0	1.9	0.4
Clausocalanus arcuicornis	0	0	0	0	0.3	0.4	0.7	0.2	0.6	0.4	0	0.4
Clausocalanus furcatus	0.9	1.3	3.9	0.7	4.0	3.8	2.2	4.4	4.1	0.4	8.6	2.7
Clausocalanus jobei	0	0.1	0	0	0.4	0.1	0	0.7	0.3	0.2	0.5	0.4
Clausocalanus mastigophorus	0	0	0	0	0.1	0	0	0	o	0	0	0.4
Clausocalanus parapergens	0	0	0	0	3.1	0	0.4	0	0	0	0.9	0.6

Appendix XV-1-3 (cont.)

Ctenocalanus vanus	0	0	0	0	0	0	0.1	0.5	0.3	0.1	0.2	0
Eucalanus hyalinus	0	0	0	0	0	0	0	0	0	0.1	0	0
Eucalanus monachus	0	0	0	0	0	0	0	0	0	0.1	0	0
Eucalanus pileatus	6.7	4.7	6.1	5.9	0.8	2.3	2.0	0.5	0.4	1.3	2.8	0.6
Eucalanus sewelli	0	0	0	0	0	0	0	0	0.2	0	0	0
Euchaeta marina	0	0	0	0	0	0.3	0	0	0.4	0.1	0	0.2
Euchaeta paraconcinna	0	0	0	0	0.2	0.1	0	0	0.1	0.2	0.7	0.4
Haloptilus longicornis	0	0	0	0	0	0	0	0.2	0	0.2	0	0
Heterorhabdus papilliger	0	0	0	0	0	0	0	0	0.1	0	0	0
Heterorhabdus spinifer	0	0	0	0	0	0	0	0	0	0.1	0.3	0
Ischnocalanus plumulosus	0	0	0	0	0	0.1	0	0	0	0	0	0
Labidocera aestiva	0	0	0	0	0	0.3	0	0	0	0	0	0
Lucicutia flavicornis	0	0	0.2	0	1.5	0.1	1.1	1.2	1.7	1.2	1.6	1.0
Lucicutia gaussae	0	0	0	0	0	0.1	0.1	0	0.6	0	0	0
Mecynocera clausi	0	0	0	0	0	0	0	0.2	0.1	0.4	0	0
Nannocalanus minor	0.7	0	0	0	0.2	0.3	0.7	0.2	2.7	0.7	3.0	4.0
Neocalanus gracilis	0	0	0	0	0	0	0	0	0.1	0.2	0	0
Paivella inaciae	0	0	0	0	0.1	0	0	0	0.3	0	0.2	0
Paracalanus aculeatus	1.3	0.3	10.0	2.7	3.6	3.5	3.5	4.6	1.9	2.3	2.1	2.3
Paracalanus denudatus	0	0	0	0	0	0	0	0	0	0	0	0.2
Paracalanus indicus	9.8	6.6	24.6	3.3	3.0	5.8	2.5	6.8	2.6	5.6	7.7	0.4
Paracalanus quasimoto	4.2	7.0	12.5	3.5	0.3	1.7	0.3	0	0.1	1.0	4.4	1.2
Paracandacia bispinosa	0	0	0	0	0	0	0	0	0	0.1	0	0
Paracandacia simplex	0	0	0	0	0	0	0	0	0.1	0.1	0	0
Pleuromamma abdominalis	0	0	0	0	0	0	0	0	0.1	0	0	0
Pleuromamma gracilis	0	0	0	0	0.1	0	0	0	0.3	0	0.2	0
Pleuromamma piseki	0	0	0	0	0	0	0	0	0.1	0	0.2	0

Appendix XV-1-3 (cont.)

Scaphocalanus subcurtus			(	0	(		0	0	0.7	(	0	0
Scolecithricella dentata			(	0	0	(	0	0	0,1	0.1	0	0.2
Scolecithricella tenuiserrata			(	0	0		0	0.2	0	(	0	0
Scolecithrix bradyi			0	0	0	(	"0	0	0.1	(	0	0
Scolecithrix danae			0	0	0	(	0.3	0	0	0.:	0	0
Temora stylifera	0..	0.	0.2	0	0.1	0.4	1.4	0.3	0.3	0.4	0	1.7
Temora turbinata	5.'	3.	1.2	2.5	5.7	3.8	2.9	4.2	"2.4	1.4	9.4	2.3
Temoropia mayumbaensis	(		0	0	0	(	0	0	0.3	0	0.5	0.4
Undinula vulgaris	(		0	0	0	0.'	0	0	0.4	0.2	1.9	0.4
CYCLOPOIDA												
Corycaeus amazonicus	).:	0.'	8.1	8.4	1.1	0.;	0.8	0.8	0.7	0.6	0.9	0
Corycaeus americanus	).:	0.:	0.7	1.4	0	(	0	0	0	0	0	0.3
Corycaeus giesbrechti	).(	3.:	7.7	7.3	3.5	2.1	2.5	2.4	1.0	1.1	3.3	2.5
Corycaeus latus	(	(	0	0	0.2	0.3	0.1	0	0	0.2	0	0
Corycaeus speciosus	(	(	0	0	0.5	0	0	0.2	0.1	0	0.2	0
Corycaeus typicus	(	(	0	0	0.1	0	0	0.3	0.3	0.1	0	0
Farranula gracilis	0	(	0.2	0	1.8	2.7	1.0	0.7	0.3	1.2	2.3	1.3
Lubbockia squillimana	0	(	0	0	0	0.1	).1	0	0.8	0	0	0.2
Oithona nana	0	(	0.7	1.4	0	0	).1	0	0	0	0	0
Oithona plumifera	..3	0.1	2.3	3.0	1.5	1.2	2.9	1.2	6.7	3.1	0.5	3.5
Oithona robusta	0	0	0	0	0	0	0	0	0.1	0.1	0	0
Oithona setigera	0	0	0	0	0	'0	0	0	1.6	1.0	0.7	1.3
Oithona tenuis	0	0	0	0'	0'	0	0	0	0.3	0.1	0	0
Oncaea conifers	a	0	0	0	0.1	0	).1	0.2,	0	0.2	1.3	1.0
Oncaea media	0	0	0	'0	0.2	0.3	).3	0.6	0.1	0	0.2	0
Oncaea mediterranea	.7	0	0.9	0'	2.1	2.4	).4	4.1	1.3	1.5	1.4	1.5'
Oncaea venusta	.8	).4	3.2	0.7	15.0	4.8	).1	10.6	9.7	9.6	?5.8	13.7
HARPACTICOIDA												
Clytemnestra scutellata	0	0	0	0	0	0	).1	0.3	0.3	0	0	0
Macrosetella gracilis	0	0	0.2	0	0.3	).3	0	0	1.0	0.4	0.7	0.4

APPENDIX XT-1-4

PERCENTAGE CONPOSITION OF ADULT FENALE COPEPODS

DECEMBER/JANUARY CRUISE - TRANSECT IV

Station	1				2				3			
Day or Night	D	D	N	N	D	D	N	N	D	D	N	N
Replicate No.	1	2	1	2	1	2	1	2	1	2	1	2
CALANOIDA												
Acartia danae	c	0	c	c	0	0	c	0	0	0.1	0.6	0.1
Acartia tonsa	3.7	0.7	0.6	0.8	0	0	0.2	0.3	0.3	0	0	0.3
Acrocalanus andersoni	c	0	c	c	"0	0.1	0.5	0.3	0	0.1	0.2	0.3
Acrocalanus longicornis	c	0	c	c	0	0.1	C	C	0.2	0	0.2	c
Aetideus acutus	c	0	C	c	0.3	0	0	c	0	0	0	0.1
Calanopia americana	c	0.7	0	c	0.9	0	1.0	1.0	0.5	0	0.2	c
Calanus tenuicornis	c	0	0	0	0	0	0.1	0	0	0	D.8	0.3
Calocalanus pavo	c	0	0	c	0.3	0	0	0	0.5	0.1	0.2	0.1
Calocalanus pavoninus	c	0	0	0	1.7	1.0	1.0	0.9	3.2	3.2	1.3	2.0
Calocalanus styliremis	a	0	0.2	0	1.7	0.8	1.8	1.8	2.6	1.6	2.0	2.0
Calocalanus sp.1	a	0	0	c	0	0.1	0	0	0	0	0	0
Calocalanus sp.4	0	0	0	0	0.6	0.3	0.5	0.1	0.2	0.4	1.3	0.3
Candacia curta	0	0	0	0	0	0	0.4	0.2	0.2	0	0	0.1
Centropages caribbeanensis	0	0	0	0	,0	0	0	0.1	0	0	0	0
Centropages hamatus	0.9	0	0.6	0.2	0	0	0	0	0	0	0	0
Centropages velificatus	0.2	1.7	1.0	0.6	0.3	0.2	0.1	0.3	0.5	0.4	).6	0.4
Clausocalanus arcuicornis	0	0	0	0	0.3	1.2	0.4	0.5	0.7	0.6	1.7	1,3
Clausocalanus furcatus	1.5	2.5	5.8	2.5	2.9	9.2	5.8	1.8	9.8	0.0	3.2	3.1
Clausocalanus jobei	0.2	0.2	0	0	0	0.1	0.3	0.4	0.3	0.4	).6	1.1
Clausocalanus mastigophorus	0	0	0	0	0	0.4	0	0	0.5	0.4	).2	0.7
Clausocalanus parapergens	0	0	0	0	3.6	0	0.7	0.6	0	0.7	1.3	1.7

Appendix 'XV-1-4 (cont.)

Clausocalanus paululus	0	0	0	0	0	0	0.4	0	0	0.4	0.6	0.3
Clausocalanus pergens	0	0.2	0	0	0	0	0	0	0	0	0	0.1
Ctenocalanus vanus	0	0	0	0	0	0.1	0.9	0.6	0	0	3.5	1.0
Eucalanus monachus	0	0	0	0	0	0.1	0	0	0	0	0	0.1
Eucalanus pileatus	0.2	0.7	0.2	0.6	0.9	0.7	2.2	1.0	2.8	1.0	0.8	2.1
Eucalanus sewelli	0	0	0	0	0	0	0	0	0	0.4	0	0
Euchaeta marina	0	0	0	0	0	0.1	0	0.1	1.6	0.7	0	0.1
Euchaeta paraconcinna	0	0	0	0	0	0	0.2	0.4	0.2	0.1	1.1	0.6
Haloptilus longicornis	0	0	0	0	0	0	0.2	0	0	0	0	0
Heterorhabdus spinifer	0	0	0	0	0	0	0	0	0	0	0	0.1
Ischnocalanus plumulosus	0	0	0	0	0	0.1	0	0	0	0	0	0
Labidocera aestiva	0	0	0	0	0	0	0	0	0	0.1	0	0.3
Lucicutia flavicornis	0	0	0.3	0	0.6	0.8	3.3	3.2	2.1	0.7	5.0	4.4
Lucicutia gaussae	0	0	0	0	0	0.2	0	0	0.2	0	0	0
Lucicutia paraclausi	0.2	0.2	0	0	0	0	0	0	0	0	0.2	0.1
Mecynocera clausi	0	0	0	0	1.1	0	0.2	0.1	0.5	0	1.1	0.3
Nannocalanus minor	0	0	0	0.2	2.3	4.6	1.0	3.2	2.5	1.6	1.7	3.4
Neocalanus gracilis	0	0	0	0	0	0	0	0	0	0.1	0	0
Paracalanus aculeatus	2.1	0.5	0.6	0	4.9	0.2	7.1	7.4	8.1	2.7	4.6	1.7
Paracalanus denudatus	0	0	0	0	0	0.1	0.2	0	0	0	0	0
Paracalanus indicus	9.2	51.0	1.2	3.4	25.1	3.5	0.4	6.3	7.8	3.4	3.9	5.9
Paracalanus quasimoto	3.2	35.5	3.5	9.1	7.9	0.0	4.6	1.8	0	0	0.4	1.0
Paracandacia bispinosa	0	0	0	0	0	0.1	0.1	0	0.2	0.1	0	0
Paracandacia simplex	0	0	0	0	0	0	0.1	0.1	0.2	0.1	0	0.3
Parundinella spinodenticula	0	0	0	0	0	0	0	0	0	0	0.6	0
Pleuromamma abdominalis	0	0	0	0	0	0	0	0	0	0.3	0	0
Pleuromamma gracilis	0	0	0	0	0	0.1	0	0	0	0	0.2	0.3
Pontellopsis villosa	0	0	0	0	0	0.1	0	0	0	0	0	0

Appendix XV-l-4 (cont.)

Rhincalanus cornutus	o	0	o	0	o	0.1	0	o	o	o	0	o
Scaphocalanus subcurtus	0	0	0	0	0	0	0.1	0:1	0	0	0	0
Scolecithricella ctenopus	0	0	0	0	o'	0	0	0	0	0	0	0.3
Scolecithricella dentata	0	0	0	0	0	0	0	0	0	0	0.2	0.1
Scolecithricella tenuiserrata	0	0	0	0	o	0	0	0.3	0	0	0	0.3
Scolecithrix bradyi	0	0	0	0	0	0	0	0.1	0	0	0	0.1
Scolecithrix danae	0	0	0	0	0	0	0	0	0.9	0	0	0
Temora stylifera	.2	0	0.4	9.6	0.9	1.3	0.5	0.1	1.8	0.7	0.4	1.7
Temora turbinata	.9	0.7	2.2	0.8	0	6.3	2.2	0.5	7.6	4.3	3.0	5.5
Temoropia mayumbaensis	0	0	0	0	0	0	0	0	0	0	0.8	0
Undinula vulgaris	0	0	0	0	0	0.3	0.1	0	0.5	0.7	0	0.6
CYCLOPOIDA												
Copilia lata	0	0	0	0	0	0	0	0.1	c	0	0	0.1
Copilia mirabilis	0	0	0	0	0	0	0	0.1	0.2	0	0	0.1
Corycaeus amazonicus	.2	0.2	0,6	0.2	2.9	2.4	2.1	2.0	"2.5	1.8	2.8	2.4
Corycaeus americanus	.6	0.5	0.2	0	0.9	0.2	0.2	0.1	c	0.1	0.6	0.6
Corycaeus clausi	0	0	0	0	0	0	0.1	0	c	0	0	0
Corycaeus flaccus	0	0	0	0	0	0	0.1	0.1	c	0.3	0	0
Corycaeus giesbrechti	.2	0.7	0.2	0	0.3	0.2	0.4	0.3	0.5	0.3	0.4	1.1
Corycaeus latus	0	0	0	0	0	0.1	0.2	0	0.5	0.1	c	0
Corycaeus lautus	0	0	0	c	0	0.1	0	c	c	0	c	0
Corycaeus limbatus	0	0	0	c	0	0.1	0	c	c	.0	a	0
Corycaeus minimus indicus	0	0	0	c	0	0	0	0.1	c	0	c	0
Corycaeus speciosus	0	0	0	c	0	0.1	0.3	0.1	0.7	0.3	0.2	0.6
Corycaeus typicus	0	0	0	c	0.3	0	0.1	0.1	(	0	c	0
Farranula gracilis	0	0	0.2	c	1.7	2.7	2.2	0.7	0.9	0.6	1.5	1.8
Lubbockia squillimana	0	0	0	c	0.3	0	0.1	0.1	(	0.1	0.4	0
Oithona nana	0	0.8	0.5	c	0	0	0	c	c	0	c	0

Appendix XV-1-4 (cont.)

Oithona plumifera	0.5	1.4	0	(	6.8	5.6	9.1	4.2	12.(	17.7	18.(	4.9
Oithona setigera	0	(	0	(	(	0.3	0.5	0.4	0.4	0	0.8	0
Oithona tenuis	0	(	0	(	(	0.3	0.3	0	(	0	0.6	0
Oithona sp.1	0	(	0	c	(	0	c	0	(	0	2.2	0
Oithona sp.2	0	c	0	c	(	0	(	0	(	0	0.2	0
Oncaea conifers	0	c	0	a	(	0.1	0.8	0.3	(	0.1	0.2	0.3
Oncaea media	0	c	0	0	c	0	0.2	0.3	0.5	0.3	0.6	0.4
Oncaea mediterranea	1.2	0.7	0.4	0.8	0.3	1.9	4.0	2.0	3.5	4.6	5.0	4.3
Oncaea venusta	D.9	0.3	1.2	0.2	3.1	2.3	2.3	4.8	.1.1	7.8	8.3	7.3
Sapphirina opalina	3.3	0	" O	0	0.3	0.4	0	0.3	0	0	0	0
Sapphirina ovatolanceolata	0	0	0	0	0	0.2	0	0	c	0	0	0
HARPACTICOIDA												
Clytemnestra scutellata	0	0	0,	0	0	0	0.1	).2	0.2	0.1	0.2	0
Macrosetella gracilis	).5	0.2	0	0	0	0.1	0.4	0	0.7	0.3	0.4	0.4

-APPENDIX XV-2-1

PERCENTAGE COMPOSITION OF ADULT FENALE COPEPODS

APRIL/NAY CRUISE - TRANSECT I

Station	1				2				3			
Day or Night	D	D	N	N	D	D	N	N	D	D	N	N
Replicate No.	1	2	1	2	1′	2	1	2	1	2	1	2
CALANOIDA												
Acartia danae	0	0	0	c	0	0	0	0	1.1	0.9	1.4	0.9
Acartia tonsa	75.6	77.5	1.7	9.9	4.7	4.0	6.5	.6.6	0	0	0	c
Acrocalanus andersoni	0	0	0	c	0	0	0	0	0.8	0.3	0.6	c
Aetideus acutus	0	0	0	C	0	0	0	0	0	0.2	0.2	c
Bradyidius sp.1	0	0	0	a	0	0	0.2	0	0	0	0	c
Bradyidius sp.2	0	0	0	o	0	0	0	0	0	0	0	0.2
Calanopia americana	0	0	0	0	0	0	0.2	0.3	0.2	0	0	0.5
Calanus tenuicornis "	0	0	0	0	0	0	0	0	0.3	0.5	0.6	0.2
Calocalanus pavo	0	0	0	0	1.1	0.6	0.4	0.6	0.8	1.0	1.6	1.1
Calocalanus pavoninus	0	0	0	0	0.3	0	0.2	0	1.3	0.5	1.6	0.7
Calocalanus styliremis	0	0	0	0	0.3	0	0	0	1.0	1.2	0.6	0.5
Calocalanus sp.2	0	0	0	0	0,	0	0	0	0	0.2	0.2	0
Calocalanus sp.3	0	0	0	0	0	0	0	0	0.6	0.5	0.4	0.2
Calocalanus sp.4 ′	0	0	0	0	0	0	0	0	0.8	0.2	0.4	0.2
Candacia curta	0	0	0	0	0	0	0	0	0.2	0.2	0	0
Candacia pachydactyla	0	0	0	0	0	0	0	0	0	"0	0	0.2
Centropages velificatus	0.6	0.2	0.4	0.2	0.5	0.8	0.8	1.1	0	0	0.2	0
Clausocalanus arcuicornis	0	0	0	0	0	0	0	0	1.0	0.2	0	0.5
Clausocalanus furcatus	0.7	0	0	0	3.2	1.3	3.8	6.5	4.6	0.0	8.2	9.6
Clausocalanus jobei	0	0	0	0	0.5	0	0.2	0	1.1	1.2	5.3	6.2

Appendix XV-2-I (cont.)

Clausocalanus parapergens	0	0	0	0	0	0	0	0	0.2	0.2	0.6	0.2
Clausocalanus paululus	0	0	0	0	0	0	0	0	0	0	0.4	0
Clausocalanus pergens	0	0	0	0	0	0	0	0	0	0	1.0	0.5
Ctenocalanus vanus	0	0	0	0	0	0	0	0.3	1.9	1.4	2,0	1.6
Eucalanus pileatus	0.6	0.3	0.2	1.2	16.7	15.6	8.5	9.5	0.5	0.5	0.4	0.7
Eucalanus sewelli	0	0	0	0	0	0.2	0	0	0	0.2	0.6	0.9
Euchaeta marina	0	0	0	0	0	0	0	0	0.8	0.9	0.6	0.7
Euchaeta paraconcinna	0	0	0	0	0	0	0	0	0	0.8	1.0	0.7
Haloptilus longicornis	0	0	0	0	0	0	0	0	1.0	0.3	0.8	0.3
Ischnocalanus plumulosus	0	0	0	0	0	0	0	0	0	0.3	0.4	0
Labidocera aestiva	3.5	1.1	0.6	2.6	0.3	0	0.4	0	0.2	0	0.4	0
Lucicutia flavicornis	0	0	0	0	0	0	0	0	0.8	0.5	1.6	2.8
Lucicutia gaussae	0	0	0	0	0	0	0	0	0.3	0.3	0.2	0
Mecynocera clausi	0	0	0	0	0.3	0	0	0	2.9	4.1	3.5	1.8
Nannocalanus minor	0.2	0	0	0	0	0	0	0	1.6	1.0	1.0	0.3
Paracalanus aculeatus	0.6	0.5	0	1.9	1.3	0.2	0.8	2.5	4.7	2.4	4.1	3.2
Paracalanus crassirostris	2.4	1.1	0.8	0.9	0	0	0	0	0	0	0	0
Paracalanus denudatus	0	0	0	0	0	0	0	0	0.3	0.2	0.8	0
Paracalanus indicus	10.7	14.3	12.7	14.8	9.9	3.5	18.4	8.1	0.8	3.1	6.1	5.5
Paracalanus quasimoto	3.0	4.0	2.3	5.6	14.0	2.2	10.2	4.7	2.2	3.4	0.6	0.5
Paracandacia bispinosa	0	0	0	0	0	0	0	0	0.2	0	0	0
Paracandacia simplex	0	0	0	0	0	0	0	0	0	0.3	0	0
Parundinella spinodenticula	0	0	0	0	0.3	0	0	0	0	0	0.2	0
Pleuromamma gracilis	0	0	0	0	0	0	0	0	0.2	0	0.2	0.5
Pleuromamma piseki	0	0	0	0	0	0	0	0	0	0	0	0.2
Pseudodiaptomus sp.	0.2	0	0	0	0	0	0	0	0	0	0	0
Rhincalanus atlanticus	0	0	0	0	0.3	0	0	0	0	0	0	0.2
Scolecithricella tenuiserrata	0	0	0	0	0	0	0	0	0.2	0.2	0.4	0.3

Appendix XV-2-1 (cont.

Scolecithrix danae	0	0	0	0	0	0	0	0	0.3	1.0	0	0
Temora stylifera	0.3	0	0	0.2	0	0	D.4	0.,6	1.0	1.4	0.4	0.7
Temora turbinata	1.0	).5	0.4	1.4	0	0	1.8	0.3	0	0	0	0
Temoropia mayumbaensis	0	0	0	0	0	0	0	0	0	0	0.2	0
CYCLOPOIDA												
Copilia lata	"0	0	0	0	0	0	0	0	0	0	0	0.2
Copilia mirabilis	0	0	0	0	0	0	0	0	0.2	0	0	0
Corissa parva	0	0	0	0	0	0	0	0	0	0.2	0	0.2
Corycaeus amazonicus	0.2	0	0.2	0	0.3	0.2	0.4	0.8	0	0	0.6	0
Corycaeus americanus	0.4	0.5	0	0.7	2.7	1.8	2.8	2.2	0	0	0	0
Corycaeus clausi	0	0	0	0	0	0	0	0	0.3	0	0.6	0
Corycaeus giesbrechti	0	0	0.6	0.7	0.3	0	0	0	1.4	1.7	1.8	1.1
Corycaeus latus	0	0	0	0	0.3	0	0	0.3	0.2	0	0	0
Corycaeus lautus	0	0	0	0	0	0	0	0	0	0.2	0	0.2
Corycaeus speciosus	0	0	0	0	0	0	0	0.3	0.2	0.2	0.4	0
Farranula gracilis	0	0	0	0	4.8	1.4	0	1.1	7.1	4.4	3.5	1.6
Farranula rostrata	0	0	0	0	0	0	0	0	0.2	0.5	.0.2	0.2
Lichomologus sp.	0	0	0	0	0	0	0.2	0	0	0	0	0
Lubbockia squillimana	0	0	0	0	0	0	0	0	0.5	0.5	0.2	0.7
Oithona fallax	0	0	0	0	0	0	0	0	0.2	0	0	0.2
Oithona nana	0	0.2	0	0	0.3	0	0	0	0	0	0	0
Oithona plumifera	0	0	0	0	9.7	6.9	3.4	1.7	,3.0	2.4	5.7	9.0
Oithona robusta	0	0	0	0	0	0	0	0	0.8	0.2	1.0	0.2
Oithona setigera	0	0	0	0	0.3	0	0	0	2.3	4.4	3.3	1.6
Oithona tenuis	0	0	0	0	2.1	a	0	0	0.6	2.2	1.0	0.7
Oithona sp.1	0	0	0	0	0	0	0	0	0.8	1.0	3.3	0.9
Oncaea conifers	0	0	0	0	0	c	0	0	0.2	0.5	0.2	1.2
Oncaea media	0	0	0	0	c	c	0	0.3	1.1	0.3	1.3	0.3

Appendix XV-2-1 (cont.)

Oncaea mediterranea	0	0	0	0	0	0.2	0	0.3	.2.7	6.8	4.1	4.3
Oncaea venusta	0	0	0	0	0.3	0	0	0.3	2.3	2.7	3.3	3.2
Sapphirina metallina	0	0	0	0	0	0	0	0	0	0	0.2	0
HARPACTICOIDA												
Clytemnestra scutellata	0	0	0	0	0.3	0	0	0	0.5	0.2	0.2	0
Macrosetella gracilis	0	0	0	0	4.7	1.2	0.4	1.7	1.1	1.7	0.8	1.4
Microsetella norvegica	0	0	0	0	0.3	0	0	0	0	0	0	0
Oculosetella gracilis	0	0	0	.0	0	0	0	0	0.3	0.2	0	0.3

APPENDIX XV-2-2

PERCENTAGE CONPOSITION OF ADULT FEMALE COPEPODS

APRIL/MAY CRUISE - TRANSECT II

Station	1				2				3			
Day or Night	D	D	N	N	D	D	N	N	D	D	N	N
Replicate No.	1	2	1	2	1	2	1	2	1	2	1	2
CALANOIDA												
Acartia danae	0	0	0	0	0	0.3	0	0	0.7	1.7	1.5	1.8
Acartia tonsa	0.2	1.5	3.6	3.6	0.4	0.3	0	0.7	0.1	0	0	0
Acrocalanus andersoni	0	0	0	0	0	0	0	0	0.3	0.6	0.6	0.2
Acrocalanus longicornis	0	0	0	0	0	0	0	0	0	0.2	0	0
Aetideus acutus	0	0	0	0	0	0	0	0	0	0	0	0.2
Calanopia americana	0	0	0	0	0	0.3	0	0.9	0	0	0	0
Calanus tenuicornis	0	0	0	0	0	0	0	0	0.3	0	0.8	0.8
Calocalanus pavo	0	0	0	0	0	0	0	0	0.8	0.7	0.8	0.8
Calocalanus pavoninus	0	0	0	0	0	0	0	0	0.4	0.4	0.8	0.2
Calocalanus styliremis	0	0	0	0	0	0	0.3	0	0.4	2.0	1.5	1.0
Calocalanus sp.2	0	0	0	0	0	0	0	0	0.1	0.2	0.3	0
Calocalanus sp.3	0	0	0	0	0	0	0	0	0.5	0.3	0	0.4
Calocalanus sp.4	0	0	0	0	0	0	0	0	0	0.6	0.6	0
Candacia **curta**	0	0	0	0	0.2	0	0	0	0.1	0	0.3	0.2
Centropages velificatus	1.3	0.6	0.7	0.8	2.8	1.2	1.5	1.2	0.1	0.3	0.3	0
Clausocalanus arcuicornis	0	0	0	0	0	0	0	0	0.8	0.7	0.3	0
Clausocalanus furcatus	1.0	3.7	0.5	0	2.2	2.6	2.5	3.1	23.6	14.1	7.6	3.5
Clausocalanus jobei	0.7	0.3	0.3	0	0.6	0.3	0.3	0.2	1.6	0.2	0.0	2.3
Clausocalanus parapergens	0	0	0	0	0	0	0	0	0	0	0	0.4
Ctenocalanus vanus	0	0	0	0	0.4	0.3	0	0	0.9	0.5	6.2	9.6

Appendix xv-2-2 (cont.)

Eucalanus hyalinus	c	0	U	c	c	0	0	0	0	0.1	c	0
Eucalanus monachus	c	0	0	c	c	0	c	0	0	0.2	c	0
Eucalanus pileatus	5.8	8.0	0.3	1.3	7.4	5.3	2.6	5.7	0.3	0.5	c	0.4
Eucalanus sewelli	c	0	0	c	c	0	0	0	0	0.1	c	0.2
Euchaeta marina	c	0	0	c	c	0	0	0	0	0	c	0.4
Haloptilus longicornis	0	0	0	0	c	0	0	0	0.3	0.2	0.6	1.0
Ischnocalanus plumulosus	0	0	0	0	c	0	0	0	0.1	0.5	0.3	0.2
Labidocera aestiva	0.2	0	2.8	2.0	c	0.9	0	0.2	0	0	c	0
Lucicutia flavicornis	0	0	0	0	c	0	0	0	0.3	0.5	3.2	1.4
Lucicutia gaussae	0	0	0	0	c	0	0	0	0.1	0.8	c	0.4
Mecynocera clausi	0	0	0	0	c	0	0	0	3.6	4.5	1.8	3.9
Nannocalanus minor	0	0	0	0	0	0	0.3	0.2	0	0	1.8	1.2
Neocalanus gracilis	0	0	0	0	0	0	0	0	0.2	0	c	0.2
Paivella inaciae	0	0	0	0	0	0	0	0	0	0	0.3	0.7
Paracalanus aculeatus	5.2	2.5	1.9	0.7	7.8	4.7	4.8	4.9	0.9	0.8	5.6	1.4
Paracalanus crassirostris	0	0	0.2	0	0	0	0	0	0	0	0	0
Paracalanus denudatus	0	0	0	0	0	0	0	0	0.4	0.5	0	0
Paracalanus indicus	7.4	33.8	3.3	3.0	5.9	3.2	3.3	3.1	1.4	0.2	2.9	2.0
Paracalanus quasimoto	5.5	12.7	1.4	5.8	9.3	8.5	7.1	3.1	4.8	5.4	3.5	1.0
Paracandacia simplex	0	0	0	0	0	0	0	0	0.4	0.2	0	0
Parundinella spinodenticula	0	0	0	0	0	0	0	0	0	0	0.6	0.6
Rhincalanus cornutus atlanticus	0	0	0	0	0	0	0.3	0	0.2	0.1	0	0
Scaphocalanus subcurtus	0	0	0	0	0	0	0	0	0	0	0	0.2
Scolecithricella dentata	0	0	0	0	0	0	0	0	0.1	0	0	0
Scolecithricella tenuiserrata	0	0	0	0	0	0	0	0	0.3	0.3	0.3	0
Scolecithrix danae	0	0	0	0	0	0	0	0	0.1	0	0	0
Temora stylifera	1.3	0.3	0.2	0.3	1.3	1.8	0.3	0.2	1.3	1.6	0	0.8
Temora turbinata	1.7	1.2	0.5	0.7	1.5	0.3	0	0.2	0.1	0	0.6	0.2

Appendix XV-2-2 (cont.)

Temoropia mayumbaensis	0	0	0	0	0	0	0	0	0	0	0.3	0
CYCLOPOIDA												
Copilia lata	0	0	0	0	0	0	0	0	0.1	0	0	0
Copilia mirabilis	0	0	0	0	0	0	0	0	0.4	0.4	0	0.2
Copilia vitrea	0	0	0	0	0	0	0	0	0.1	0	0	0
Corissa parva	0	0	0	0	0	0	0	0	0.1	0	0.3	0
Corycaeus amazonicus	2.2	1.9	0.7	0.7	6.2	2.1	5.8	5.1	0.3	0.5	0.3	0
Corycaeus americanus	2.7	1.9	2.4	0.8	1.7	4.1	0.1	4.2	0.1	0.2	0.6	0.2
Corycaeus clausi	0	0	0	0	0	0	0	0	0.2	0.3	0	0
Corycaeus flaccus	0	0	0	0	0	0	0	0	0.2	0.1	0	0
Corycaeus giesbrechti	0.3	0	0	0	0.6	0.3	0	0.7	1.5	0.8	2.0	2.3
Corycaeus latus	0	0	0	0	0	0	0	0	0.4	0.1	0	0.4
Corycaeus lautus	0	0	0	0	0	0	0	0	0.2	0.2	0	0.2
Corycaeus limbatus	0	0	0	0	0	0	0	0	0.1	0.2	0.3	0
Corycaeus speciosus	0	0	0	0	0	0	0	0	0.4	0.2	0.3	0
Corycaeus typicus	0	0	0	0	0	0	0	0	0.1	0.2	0	0
Farranula gracilis	0	0	0	0	0	0	0	0	0.5	6.0	5.9	4.7
Farranula rostrata	0	0	0	0	0	0	0	0	0.2	0.3	0	0
Lichomolgus sp.	0	0	0	0	0	0	0.3	0	0	0	0	0
Lubbockia squillimana	0	0	0	0	0	0	0	0	0.1	0.6	0.6	0.2
Oithona fallax	0	0	0	0	0	0	0	0	0	0.2	0.3	0.4
Oit.bona nana	0	0	0	0	0	0	0	0.2	0	0	0	0
Oithona plumifera	0.4	0.3	0	0	0.6	1.2	0	0.2	4.9	7.6	3.5	3.3
Oithona robusta	0	0	0	0	0	0	0	0	0.4	0.4	0.6	0
Oithona setigera	0	0	0	0	0	0	0	0	2.9	2.5	1.8	2.5
Oithona tenuis	0	0	0	0	0	0	0	0	1.3	1.2	0.9	0
Oithona vivida	0	0	0	0	0	0	0	0	0	0.2	0.6	0
Oithona sp.1	0	0	0	0	0	0	0	0	3.9	1.0	1.2	0.7

Appendix XV-2-2 (cont.)

Oncaea conifers	0	0.3	0	0	0	0	0	0	0.1	0.2	0.3	0.8
Oncaea media	0	0	0.2	0	0.2	0	0	0	0.7	0.8	1.5	1.2
Oncaea mediterranea	0	0	0.3	0.2	0	0.7	0.5	0.4	0.4	0.7	13.1	21.5
Oncaea venusta	0.3	0.6	0.5	0.2	0.8	1.2	0	0.4	0.7	2.2	2.0	2.0
Sapphirina auronitens	0	0	0	0	0	0	0	0	0	0.1	0	0.2
Sapphirina metallina	0	0	0	0	0	0	0	0	0.2	0.3	0	0
Sapphirina nigromaculata	0	0	0	0	0	0	0	0	0.2	0.1	0	0.2
Sapphirina ovatolanceolata	0	0	0	0	0	0	0	0	0	0.1	0	0
HARPACTICOIDA												
Clytemnestra scutellata	0	0.3	0	0	0	0.3	0	0	0	0	0	0.2
Macr-tells gracilis	0	0	0	0	0	0	0	0	3.7	3.2	0.3	1.0
Microsetella rosea	0	0	0	0	0	0	0	0	0	0.1	0	0
Oculosetella gracilis	0	0	0	0	0	0	0	0	0.1	0	0.3	0

APPENDIX XV-2-3

PERCENTAGE CONPOSITION OF ADULT FEMALE COPEPODS

APRIL/MAY CRUISE - TRANSECT III .

Station	1				2				3			
Day or Night	D	D	N	N	D	D	N	N	D	D	N	N
Replicate No.	1	2	1	2	1	2	1	2	1	2	1	2
CALANOIDA												
Acartia danae	0	0	0	0	0	0	1.1	0.4	2.4	3.4	1.1	1.1
Acartia tonsa	7.9	3.8	2.4	6.0	2.2	0.2	1.5	2.9	0.4	0.5	0.6	3.0
Acrocalanus andersoni	0	0	0	0	0	0	0	0	0	0	0.2	0.4
Acrocalanus longicornis	0	0	0	0	0	0	0	0	0	0	0	0.2
Aetideus acutus	0	0	0	0	0	0	0	0.2	0.6	0	0.2	0.2
Calanopia americana	0	0	0.5	0	0	0	0.8	0.4	0	0	0.4	0
Calanus tenuicornis	0	0	0	0	0	0	0	0	0	0	0.7	0.5
Calocalanus pavo	0.2	0	0	0	2.0	0.6	1.3	1.0	2.4	2.7	0.7	1.8
Calocalanus pavoninus	0	0	0	0	0	0.1	1.3	0.6	0.8	0.5	0.4	0.4
Calocalanus styliremis	0	0	0	0	0.7	0.1	0.9	0	1.6	1.4	0.9	1.2
Calocalanus sp.1	0	0	0	0	0	0	0.5	0	0	0	0	0
Calocalanus sp.2	0	0	0	0	0.2	0	0.1	0	0.2	0.2	0.2	0.4
Calocalanus sp.3	0	0	0	0	0	0	0	0	0.2	0	0.5	0.4
Calocalanus sp.4	0	0	0	0	0	0	0	0	0	0.2	0	0.2
Candacia curta	0	0	0	0	0	0	0.3	0	0.2	0	0	0.2
Centropages velificatus	1.8	1.8	2.2	3.6	0.5	0.1	0.5	1.1	0	0	0.4	0.4
Clausocalanus arcuicornis	0	0	0	0	0	0	0.5	0	0	0	0.4	0.2
Clausocalanus furcatus	0.4	0	0	0.4	6.1	17.0	1.9	2.1	27.0	13.6	12.9	16.9
Clausocalanus jobei	0	0	0.2	0	0.5	0	7.3	8.4	3.1	0.9	9.0	8.6
Clausocalanus parapergens	0	0	0	0	0	0	0	0	0	0	1.1	0.5

Appendix XV-2-3 (cont.)

Clausocalanus pergens	(	c	0	(	c	(	0	c	(	0	0.(	(
Ctenocalanus vanus	(	c	o	(	0.2	(	0	0.8	1.4	0.3	5.(	2.8
Eucalanus pileatus	2.9	6.4	1.7	8.(	2.3	2.5	1.1	2.3	(	0.3	(	0.5
Eucalanus sewelli	(	c	0	(	c	(	0.3	0.2	c	0	(	c
Euchaeta paraconcinna	(	c	0.2	(	0.4	0.2	0.1	1.3	c	0	0.2	0.2
Haloptilus longicornis	(	c	0	(	c	c	0	0	c	0	(	0.2
Ischnocalanus plumulosus	(	c	0	(	0.4	0.1	0.5	0.8	0.4	0.2	0.4	0.2
Labidocera aestiva	1.1	0.4	0	0.8	a	0.1	0	0	. c	0	(	0.2
Lucicutia flavicornis	(	c	0	(	0	c	0.5	0.6	c	0.2	2.8	0.2
Lucicutia gaussae	(	0	, 0	(	0	c	0	0	c	0	0.:	0.2
Lucicutia paraclausi	c	a	0	c	0	0	0.1	0	c	0	(	0.4
Mecynocera clausi	c	0	0	c	1.1	0.2	0.7	0.2	3.8	6.7	4.2	1.8
Nannocalanus minor	c	0	0	c	0.7	0.1	1.6	2.7	c	0	0.4	0.7
Paracalanus aculeatus	0.9	0	1.0	1.2	3.8	0.4	1.7	3.1	2.8	1.9	0.9	0.4
Paracalanus denudatus	c	0	.0	c	0	0	0	0	0.4	0	0.2	0
Paracalanus indicus	2.4	4.2	28.6	9.2	4.5	9.5	7.4	10.2	1.8	1.4	2.2	4.0
Paracalanus quasimoto	.7.C	19.1	26.4	9.6	11.2	9.0	5.6	16.3	1.8	3.0	1.7	3.3
Paracandacia simplex	c	o	0	c	0.4	0	0.1	0.4	0	0.3	c	0
Parundinella spinodenticula	0	0	0	c	0	0	0	0	0	0	0.4	0.9
Pseudodiaptomus sp.1	0	o	0	0.4	0	0	0	0	0	0	c	0
Scolecithricella tenuiserrata	0	0	0	a	0	0	0	, 0	0	0.2	0.4	0.4
Scolecithrix bradyi	0	0	0	0	0	0	0.1	0	0	. 0	c	0
Scolecithrix danae	0	0	0	0	0	0	0.4	0	0	0	c	0
Stephos deichmannae	c	0	0	"0	0	, 0	0	0	0	0	0	0.2
Temora stylifera	1.1	1.8	0.7	5.2	1.3	1.2	2.1	1.0	1.8	4.1	0.5	0.4
Temora turbinata	3.1	2.4	3.6	11.6	0.2	0.2	0.3	0	0	0.2	0	0
Undinula vulgaris	0	0	0	0	0	0	0.1	0	0	0	0	0

Appendix XV-2-3 (cont.)

CYCLOPOIDA												
Copilia lata	0	0	0	0	0	0	0	"o	o	0.2	0	0.2
Copilia mirabilis	0	0	0	0	0	0	0	0.2	0.2	0.2	0	0
Copilia quadrata	0	0	0	0	0	0	0	0	0	0.2	0	0
Corycaeus amazonicus	23.0	18.4	.8.3	29.2	1.1	0.7	5.6	6.3	1.0	0.2	0.4	0.2
Corycaeus americanus	36.0	39.3	.1.6	9.6	0.2	0.2	0.7	1.3	0.6	0.5	0.4	0.4
Corycaeus clausi	0	0	0	0	0.2	0	0	0	0.2	0.2	0.2	0.4
Corycaeus flaccus	0	0	0	0	0	0	0	0	.0	0	0	0.2
Corycaeus giesbrechti	0.4	0.9	1.2	1.6	3.6	0.2	2.3	1.1	1.4	2.5	1.5	1.9
Corycaeus latus	0	0	0	0	0	0.5	0.1	0	0.2	0.2	0	0
Corycaeus lautus	0.2	0	0	0	0	0	0	0	0.4	0.5	0	0
Corycaeus limbatus	0	0	0	0	0	0	0	0	0	0.2	0	0
Corycaeus speciosus	0	0	0	0	0.4	0	1.1	0.8	0	0	0.2	0.5
Corycaeus typicus	0	0	0	0	0	0	0	0	0	0.2	0	0
Farranula gracilis	0.4	1.1	.0	0	6.6	11.6	7.9	6.9	6.2	5.5	3.3	2.3
Farranula rostrata	0	0	0	0	0	0	0	0	0.2	0.2	0.4	0
Lubbockia squillimana	0	0	0.2	0	0	0	0	0	0.2	0	0.4	0
Oithona fallax	0	0	0	0	0	0	0	0	0.2	0	0	0
Oithona nana	.0	0	0.3	0.4	0	0	0	0	0	0	0	0
Oithona plumifera	0	0	0	"o	6.6	2.1	4.8	2.3	6.8	9.6	.1.1	12.3
Oithona robusta	"0	0	0	0	0	0	0	0	0.4	0	0.7	0
Oithona setigera	0	0	0	0	0.4	0.2	0	0	4.2	0.7	5.0	1.9
Oithona tenuis	0	0	0	0	1.3	0	0.1	0	2.0	1.9	1.5	0.7
Oithona sp.1	0	0	0	'o	4.1	0.4	0	0	1.4	0.2	5.7	3.3
Oncaea conifers	0	0	0	0	0.5	0	0.8	1.1	0.4	0.2	1.5	0.5
Oncaea media	0	0	0	0	0.5	0.2	1.1	1.1	0.6	0.3	0.2	1.1
Oncaea mediterranea	0	0	0	1.2	4.8	1.3	4.5	14.4	15.1	0.4	.5.1	17.2
Oncaea venusta	1.1	0.4	0.9	2.0	0.4	0.3	4.5	3.4	2.0	1.6	2.4	1.8

Appendix xV-2-3 (cont.)

Sapphirina metallina	0	0	0	0	0	0	0	0	0	0	0.2
Sapphirina nigromaculata	0.2	0	0	0.4	0	0.1	0	0	0	0	0
Sapphirina opalina	0	0	0	0	0	0	0	0	0.2	0	0
HARPACTICOIDA											
Clytemnestra rostrata	0	0	0	0	0.2	0.1	0	0	0	0	0.4
Clytemnestra scutellata	0	0	0	0.5	0	0.1	0.2	0	0	0.2	0
Macrosetella gracilis	0	0	0	0	0.6	5.3	4.0	3.1	1.8	0.5	0.4
Microsetella rosea	0	0	0	0	0	0.1	0	0	0	0	0.2
Oculosetella gracilis	0	0	0	0	0	0	0	0.2	0.2	0	0.2

APPENDIX 'V-2-4

PERCENTAGE COMPOSITION OF ADULT FENALE COPEPODS

APRIL/NAY CRUISE - TRANSECT IV

Station	1				2				3			
Day or Night	D	D	N	N	D	D	N	N	D	D	N	N
Replicate No.	1	2	i	2	1	2	1	2	1	2	1	2
CALANOIDA												
Acartia danae	0	0	0	"0	0	0	0	0.4	0	0	0.4	0
Acartia tonsa	3.5	6.1	3.5	6.7	3.8	1.7	6.4	1.8	0.7	0.8	0.9	0.6
Acrocalanus andersoni	0	0	0	0	0	0	0	0	0.2	0	0	0
Aetideus acutus	0	0	0	0	0	0	0	0	0.1	0	0	0.2
Calanopia americana	0	0	0	0	0	0	0	0	0	0	0.2	0
Calanus tenuicornis	0	0	0.	0	0	0	0	0	0.2	0	0	0.2
Calocalanus pavo	0	0	0	0	0	0	0	0.9	0.8	0	0.4	1.1
Calocalanus pavoninus	0	0	"0	0	0	0.2	0	0	0.1	0.2	0.2	0.6
Calocalanus styliremis	"0	0	0	0	0	0	0	0	0.1	0	0	0
Calocalanus sp.1	0	0	0	0	0	0	0	0	0	0.2	0.2	0
Calocalanus sp.3	0	0	0	0	0	0	0	0	0.1	0	0	0.4
Candacia curta	0	0	0	0	0	"0	0	0	0	0.4	0.4	0.4
Centropages velificatus	13.6	12.1	1.7	1.1	3.8	2.6	2.8	0.9	0.9	0	2.2	1.2
Clausocalanus arcuicornis	0	0	0	0	0	0	0	0	0.8	0.8	0.7	0
Clausocalanus furcatus	0	3.0	0.4	0.7	3.1	2.4	0	3.1	19.2	19.3	9.9	9.5
Clausocalanus jobei	0	0	0.4	0	14.7	22.4	7.2	4.0	26.9	25.2,	10.6	.2.5
Clausocalanus parapergens	0	0	0	0	0	"0	0	0	0.8	0.8	0.4	0.2
Clausocalanus paululus	0	0	0	0	0	0	0	0	0	0.5	0	0
Clausocalanus pergens	0	0	0	0	0	0	0	0	0.1	0	0.2	0
Ctenocalanus vanus	,0	0	0	0	2.6	1.4	0	0	8.4	5.0	1.6	5.5
Eucalanus pileatus	12.5	13.6	8.0	4.4	7.8	5.6	8.0	8.5	0.4	0	0.7	1.9

Appendix XV-2-4 (cont.)

Euchaeta marina	c	C	(	(	c	0.:	(	0.4	0	o	0.:	c
Euchaeta paraconcinna	c	C	(	(	1.4	1.(	2.(	1.:	0.5	0.4	(	0.4
Ischnocalanus plumulosus	C	c	(	(	C	0.:	(	c	0.1	0	(	C
Labidocera aestiva	C	c	1.(	1.!	0.:	1.(	0.(	0.9	0	0	0.:	0.2
Lucicutia flavicornis	0	C	(	(	c	0.:	0.8	C	1.3	1.2	1.″	5.1
Lucicutia gaussae	0	C	C	(	C	c	0.(	0	0.1	0.2	0.:	C
Lucicutia paraclausi	0	C	c	(	C	c	(	0	0	0	(	0.6
Mecynocera clausi	0	0	c	C	0	0.2	(	0	1.1	0.4	0.9	0.6
Nannocalanus minor .	1.1	0	c	c	2.9	2.4	4.:	3.5	3.8	2.7	1.8	7.6
Neocalanus gracilis	0	0	c	c	0	0	c	0	0	0	C	0.2
Paracalanus aculeatus	5.7	6.1	1.7	1.8	7.8	6.1	6.8	18.1	1.2	1.9	2.6	0.6
Paracalanus crassirostris	0	0	0	C	0.3	C	c	0	0	0	C	0
Paracalanus denudatus	0	0	0	C	0	0	c	0	0.2	0	C	0
Paracalanus indicus	3.5	4.5	51.2	4.1	2.1	1.2	7.1	9.7	1.8	2.5	13.6	9.9
Paracalanus quasimoto ,	5.7	6.1	10.7	5.6	1.4	0.7	1.2	1.8	2.2	3.9	2.9	0.8
Paracandacia simplex	0	0	0	C	0	0	0	0	0.6	0	0.4	0.6
Parundinella spinodenticula	0	0	0	0	0	0	0	0	0.	0.4	17.1	2.8
Phaema spinifera	0	0	0	0	0	0	0	0	0	0.2	0	0
Pleuromamma gracilis	0	0	0	0	0	0	0	0	0.1	0	0	0
Pleuromamma piseki	0	0	0	0	0	0	0	0	0.1	1.4	0.2	0
Rhincalanus atlanticus	0	0	0	0	).6	).4	0.4	1.3	0	0	0	0
Scaphocalanus subcurtus	0	0	0	0	o	0	0	0	0.4	0	0	0
Scolecithricella tenuiserrata	0	0	0	0	0	0	0	0	0	).4	0.4	0
Scolecithrix bradyi	0	0	0	.0	0	0	0	0	0	0	0.2	0
Scolecithrix danae	0	0	0	0	0	0	0	0	0.1	).4	0	0.4
Stephos deichmannae	0	0	0	0	0	0	0	0	0	0	0.2	0
Temora stylifera	20.4	.8.2	3.8	1.8	5.5	4.9	4.0	8.4	2.6	2.9	1.8	1.9
Temora turbinata	17.0	3.0	5.9	7.4	).9	1.4	5.6	8.8	0.2	0.5	0	0.4
Temoropia mayumbaensis	01	0	0	0	0	0	0	0	0	0.2	0	0

Appendix XV-2-4 (cont.)

Undinula vulgaris	0	0	0	0.4	0	0	0	0	0	0	0.2	0.2
CYCLOPOIDA												
Copilia lata	0	0	0	0	0	0	-0	0	0	0	0	0.2
Copilia mirabilis	0	0	0	0	0	0	0	0	0	0	0	0.2
Corycaeus amazonicus	0	0	1.0	1.1	2.3	2.8	2.8	0.9	0.6	1.5	2.6	4.1
Corycaeus americanus	11.4	3.6	9.0	1.9	9.5	4.9	8.8	5.3	0.5	0.2	2.2	1.3
Corycaeus clausi	0	0	0	0	0	0.2	0	0	0.1	0.4	0.2	0.6
Corycaeus flaccus	0	0	0	0	0	0	0	0	0	0.2	0	0
Corycaeus giesbrechti	1.1	0	0.4	0.4	0.3	0.7	0.8	0.9	1.4	3.4	1.1	2.1
Corycaeus limbatus	0	0	0	0	0	0	0	0	0	0.2	0.2	0
Corycaeus speciosus	0	0	0	0	0	0	0	0	0.2	0	0.2	0
Corycaeus typicus	0	0	0	0	0	0	0	0	0.2	0	0	0.2
Farranula gracilis	0	0	0	0	0	0.2	0	0	2.7	3.4	1.8	1.5
Farranula rostrata	0	0	0	0	0	c	0	0	0	0.4	0	a
Lichomolgus Sp.	o	0	0	0	0.'3	0.5	0.4	0	0	0	0	o
Lubbockia squillimana	0	0	0	0	0	0	0	0	0	0	0	0.2
Oithona fallax	0	0	0	0	0	0	0	0	0.1	0	0	0
Oithona nana	0	0	G	0	0	0	0	0	0	0	0.2	0
Oithona plumifera	1.1	1.5	o	0	6.1	5.1	0	0	0.7	2.9	2.7	1.7
Oithona robusta	0	0	'o	0	0	0	0	0	0.2	0	0	0
Oithona setigera	0	0	o	0.4	0.3	0	0	0	0.5	1.2	0.9	0
Oithona tenuis	0	0	0	0	0.9'	0.4	0	0	0.2	0	0.2	0
Oithona vivida	0	0	0	0	0	0.2	0	0	0.1	0	0	0
Oithona sp.1	0	0	0	0	0.3	0.4	0	0	0.8	0	0.4	0.4
Oncaea conifers	0	0	0	0	0.9	0.2	0	0.4	2.1	1.2	3.1	2.5
Oncaea media	0	0	0	0	0..6	0.2	0.8	0	0.2	0.8	0.5	1.1
Oncaea mediterranea	0	0	0.4	0	5.5	3.7	4.3	5.3	0.3	7.9	8.8	3.8
Oncaea venusta	3.5	9.1	1.0	0.7	2.9	2.3	4.0	3.5	2.1	3.1	0.5	3.0

Appendi XV-2-4 (cont.)

sapphirina metallina	0	0	0	0	0	0	0	0	0	0.2	0	0
Sapphirina nigromaculata	0	3.0	0	0	0.6	0	0	0	0	0	0	0
HARPACTICOIDA												
Clytemnestra scutellata	0	0	0	0	0	0	0	0	0	0.2	0.9	0
Macrosetella gracilis	0	0	0	0	0.6	0.9	0.8	0	0.7	1.0	0	0.6
Oculosetella gracilis	0	0	0	0	0	0	0	0	0	0.2	0	0

APPENDIX xv-3-1

PERCENTAGE CONPOSITION OF ADULT FENALE COPEPODS

AUGUST/SEPTEMBER CRUISE - TRANSECT I

Station	1				2				3			
Day or Night	D	D	N	N	D	D	N	N	D	D	N	N
Replicate No.	1	2	1	2	1	2	1	2	1	2	1	2
CALANOIDA												
Acartia danae	0	0	0	0	0	0	0	G	0.5	0.4	0.2	0
Acartia lilljeborgii	0	0.1	0.6	4.2	0	0	0	0	0	0	0	0
Acartia tonsa	0.8	0.2	0.9	1.0	0	0	0	0	0.3	0.11	0	0
Acrocalanus andersoni	0	0	0	0	0	0	0.2	0	0	0.1	0.1	0.2
Acrocalanus longicornis	0	0	0	0	0	0.2	0	0.4	0.1	0	0	0
Aetideus acutus	0	0	0	0	0	0	0	0	0.3	0.1	0	0
Calanopia americana	0	0	0.1	0.2	0	0	0	0	0.1	0	0.2	0.6
Calanus tenuicornis "	0	0	0	0	0	0	0	0	0.1	0	0	0.1
Calocalanus pavo	0	0	0.1	0	3.1	1.8"	5.2	5.3	2.3	1.6	1.9	1.1
Calocalanus pavoninus	0	0	0	0	0.4	0.2	0.5	1.2	0.8	0.6	2.5	2.3
Calocalanus styliremis	0	0	0	0	0.2	0	0.2	0	0.3	0.1	1.4	0.9
Calocalanus gracilis	0	0	0	0	0	0	0.2	0	0	0	0	0.1
Calocalanus sp.3	0	0	0	0	0	0	0	0	0	0.2	0.1	0
Calocalanus sp.4	0	0	0	0	0	0	0	0	0	0	0.2	0
Candacia curta	0	0	0	0	0.2	0	0	0	0	0.1	0.1	0
Centropages caribbeanensis	0	0	0	0	0	0	0	0	0	"o	0.2	0
Centropages velificatus	2.5	2.2	9.9	6.4	2.4	2.1	3.0	1.6	0.4	0.3	0.2	0
Clausocalanus arcuicornis	0	0	0	0	0	0	0	0	0.4	0.1	0	0.1
Clausocalanus furcatus	0	0.3	0.1	0.2	0.7	5.6	9.4	16.0	8.7	6.1	33.5	17.6
Clausocalanus jobei	0	0	0	0	,0	0.4	0.7	0	2.0	3.6	1.5	1.2
Clausocalanus mastigophorus	0	0	0	0	0	0	0	0	0	0	0.1	0

Appendix XV-3-1 (cont.)

Clausocalanus parapergens	(	(	0	0	(	(	c	0	0.:	0	0.4	0.5
Clausocalanus paululus	(	'	0	0	(	i	c	0	(	0	0.:	0.1
Ctenocalanus vanus	(	(	0	0	(	(	0.2	0	0.!	1.1	0.:	0.1
Eucalanus pileatus	24.8	2.6	0.-2	4.4	1.8	0.8	1.7	0.8	0.:	0.5	(	0.3
Euchaeta marina	c	(	0	0	(	(	c	0	(	0	0.1	0
Euchaeta paraconcinna	c	(	0	0	(	(	c	.0	0.:	0.2	0.4	0
Haloptilus longicornis	c	(	0	0	(	(	0	0	0.1	0.2	0.2	0
Heterorhabdus papilliger	c	(	0	0	c	(	0	0	(	0	0.1	0
Ischnocalanus plumulosus	c	c	0	0	c	(	0	0	0.3	0.1	c	0
Labidocera aestiva	a	c	0.1	0	c	c	0	0	(	0	c	0
Lucicutia flavicornis	0	c	0	0	c	c	0	0	1.1	1.1	1.3	1.9
Lucicutia gaussae	0	c	0	0	c	c	0	0	c	0.2	0.1	0.3
Lucicutia paraclausi	0	c	0	0	c	c	0	0	c	0.1	c	0
Mecynocera clausi	0	c	0	0	0.2	c	0.5	0	1.3	1.1	1.3	0.9
Nannocalanus minor	0	c	0	0	0.2	0.8	0.5	0.4	0.5	D.3	0.4	0.6
Paracalanus aculeatus	5.2	1.7	7.0	5.9	9.2	5.6	21.2	5.7	4.5	4.6	2.8	3.5
Paracalanus crassirostris	0	0	0	0.2	0	c	0	0	c	0	0	0
Paracalanus denudatus	0	0	).1	0	0	0	0	0	0.3	0	0	0
Paracalanus indicus	3.6	4.7	5.3	6.6	11.6	5.2	.5.3	4.9	0.5	0.8	0.1	0.2
Paracalanus quasimoto	9.4	5.4	1.3	1.5	2.4	2.3	2.2	1.0	0.1	).1	0.1	0.2
Paracandacia bispinosa	0	0	0	0	0	0	0	0	0	0	0.1	0
Paracandacia simplex	0	0	0	0	0	0	0	0	0	0	).1	0.2
Parundinella spinodenticula	0	0	0	0	0	0	0	0	0.1	0	0	0
Pleuromamma gracilis	0	0	0	0	0	.0	0	0	0	0	).2	0
Pleuromamma piseki	0	0	0	0	0	0	0	0	.0	0	).3	0
Scaphocalanus subcurtus	0	0	0	0	0	0	0	0	0	).1	0	0
Stephos deichmannae	0	0	0	0	" 0	0	1.2	0	0	0	0	0
Temora stylifera	0.1	).2	1.2	0.2	2.0	1.2	1.0	1.0	).3	0.2	).2	0.3

Appendix XV-3-1 (cont.)

'remora turbinata	2.6	5.8	3.7	0.9	16.7	3.1	6.2	0.8	1.1	1.5	0.8	0.7
Temoropia mayumbaensis	0	0	0	0	0	0	0	0	0.1	0	0.1	0.2
Undinula vulgaris	0	0	0	0	0.2	0	0	0.4	0	0	0,	0
CYCLOPOIDA												
Copilia mirabilis	0	0	0	0	0.2	0.2	0	0	0	0.1	0.1	0.3
Corycaeus amazonicus	3.3	2.5	1.6	3.2	0.2	0	0.2	0	0	0	0	0.1
Corycaeus americanus	0.7	0.9	0.4	0.5	0	0.2	0.5	0.2	0	0	0	0
Corycaeus clausi	0	0	0	0	0	0	0	0	.0	0	0.1	0
Corycaeus giesbrechti	1.4	2.1	2.1	2.4	0.6	0.2	0.7	0.2	1.3	1.3	0.7	1.6
Corycaeus latus	0	0	0.1	0	0.2	0.4	0.2	0.2	0.1	0.1	0	0.2
Corycaeus lautus	0	0	0	0	0	0	0	0	0	0	0	0.1
Corycaeus speciosus	0	0	0	0	0.4	0	0	0	0.1	0.2	0.5	0.3
Farranula gracilis	0.3	0	0.4	0	6.9	9.4	4.9	.1.0	9.5	7.8	7.2	10.1
Farranula rostrata	0	0	0	0	0	0	0	0	0.1	0	0	0.1
Lubbockia squillimana	0	0	0	0	0	0	0	0	"0.1	0	0.2	0.1
Oithona nana	0	0.1	0	0	0	0	0	0	0	0	0	0
Oithona plumifera	0.3	0.3	0.1	1.0	5.7	4.9	1.3	.0.4	6.3	7.0	10.0	10.5
Oithona robusta	0	0	0	0	0	0	0	0	0.3	0	0	0.2
Oithona setigera	0	0	0	0	0	0	0	0	1.9	2.5	0.3	0.3
Oithona tenuis	0	0	0	0	0	0	1.0	0	0.8	0.5	0.5	1.0
Oithona sp.1	0	0	0	0	0	0	0	0	0	0.3	0	0
Oncaea conifers	0	0	0	0	0	0	0.2	0	.6.2	0.,2	0.7	1.0
Oncaea media	0	0	0	0	0.4	0	0.2	0.2	0	0.1	0.2	0.2
Oncaea medi terranea	0	0	0	0	0.6	0.6	1.0	0	5.5	7.4	4.1	3.2
Oncaea venusta	4.8	1.0	2.2	1.0	12.8	3.6	9.9	7.9	.9.0	36.1	22.9	15.6
Sapphirina nigromaculata	0.1	0	0	0	0.2	0.2	0	0.2	0.1	0.1	0	0.1
HARPACTICOIDA												
Clytemnestra rostrata	0	0	0	0.2	0	0	).2	0	0	0	0	0

Appendix XV-3-1 [cont.)

Clytemnestra scutellata	0	0	0	0	0.2	0	0	0	0	0.1	0.3	0
Macrosetella gracilis	0	0	0.2	0	0.2	0	0	0.2	0.8	0.7	1.0	1.0
Miracia mirier	0	0	0	"0	0	0	0	0	0	0	0.1	0
Benthic harpacticoida	"0	0	0.1	0	0	0	0	0	0	0	0	0

APPENDIX XV-3-2

PERCENTAGE COMPOSITION OF ADULT FEMALE COPEPODS

AUGUST/SEPTEMBER CRUISE - TRANSECT II

Station	1				2				3			
Day or Night	D	D	N	N.	D	D	N	N	D	D	N	N
Replicate No.	1	2	1	2	1	2	1	2	1	2	1	2
CALANOIDA												
Acartia danae	0	0	"0	0	0	0	(	0.:	0.1	0.7	0.2	0.3
Acartia lilljeborgii	0	0	0.5	0.6	0	0	(	(	0.1	0	a	0
Acartia tonsa	0.2	0.6	0.4	0.2	0	0.4	(	(	c	0	C	0
Acrocalanus andersoni	0	0	0	0	0	0	(	(	0.1	0.1	0.3	0
Acrocalanus longicornis	0	0	0	0	0.1	0.4	.(	0.:	0.1	0	0.1	0.3
Aetidéus acutus	0	0	0	0	0	.0	(	(	0.3	0	0.1	0.1
Calanopia americana	0	0	0.4	0.2	0.3	· 0	(	0.:	0.1	0	0.2	0.3
Calanus tenuicornis	0	0	0	0	0	0	(	(	0.1	0.2	0.2	0.2
Calocalanus pavo	0	0	0	0	0.9	. 3.1	1.4	0.(	1.:	2.7	2.1	2.5
Calocalanus pavoninus	0	0	a	0	0.8	1.9	1.!	0.!	1.6	0.6	0.9	0.7
Calocalanus styliremis	0	0	0	0	0.1	0	0.".	0.:	0.4	0.1	0.1	0.1
Calocalanus gracilis	0	0	a	0	0	0	(	(	c	0.1	c	0
Calocalanus sp.2	0	0	0	0	0	0	(	(	0.1	0	0.1	0
Calocalanus sp.3	0	0	0	0	0	0	(	(	0.1	0.4	0.1	0
Calocalanus sp.4	0	0	0	0	0	0	(	(	c	0	0.1	0
Candacia curta	0	0	0	0	0.5	1.2	0.4	0.:	0.1	0.1	c	0.1
Candacia pachydactyla	0	0	0	0	0	0.2	(	(	c	0	c	0
Centropages caribbeanensis	0	0	0	0	0	0.2	(	(	c	0	0	0
Centropages velificatus	0'.9	2.0	"2.0	2.6	1.0	0	3.(	1.:	3.6	1.7	3.1	2.3
Clausocalanus furcatus	0.2	0	1.3	1.6	22.7	10.7	28."'	41.:	25.6	28.8	24.6	33.0

Appendix xV-3-2 (cont.)

Clausocalanus jobei	0	!	0	0	0.3	0	0	0.1	6.5	6.1	7.1	4.9
Clausocalanus mastigophorus	0	0	0	0	0	0	0	0	0	0	0.1	0.1
Clausocalanus parapergens	0	(	0	0	0	0	0	(	0.2	0.1	0.2	0.1
Clausocalanus paululus	0	0	0	0	0	0	0	0	0	0	0.1	0.1
Ctenocalanus vanus	0	0	0	0	0	0	0	"	2.4	2.4	0.7	1.7
Eucalanus pileatus	.6.4	14.4	8.6	4.6	0.2	0.8	0.1	0.4	0.3	0.7	0.7	0.2
Euchaeta paraconcinna	0	0	0	0	0	0	0.1	0.1	0.1	0	0.2	0
Haloptilus longicornis	0	0	0	0	0	0	0	0	0.1	0	0	0
Ischnocalanus plumulosus	0	0	0	0	0	0	0.1	(	0.1	0.2	0	0.2
Labidocera aestiva	0.5	0.2	0.5	0	0	0	0	0	0	0	0	0
Lucicutia flavicornis	0	0	0	0	0	0	1.2	3.1	0.5	0.6	1.2	0.8
Lucicutia gaussae	0	0	0	0	0	0	0	0	0.2	0	0	0
Lucicutia paraclausi	0	0	0	0	0	0	0	0	0	0.1	0.1	0
Mecynocera clausi	0	0	0	0	0	0	0	0	2.1	2.2	2.7	0.8
Nannocalanus minor	0	a	0	0	8.8	24.7	3.1	1.2	2.2	2.8	1.9	1.3
Paracalanus aculeatus	5.5	12.1	.4.8	16.5	7.6	3.7	,9.0	25.4	3.1	2.8	5.1	11.2
Paracalanus crassirostris	0	0.2	0	0	0	0	0	0	0	0	0	0
Paracalanus denudatus	0	0	0	0	0	0	0	0	0.1	0.1	0.1	0
Paracalanus indicus	7.7	7.5	.7.5	22.3	0.3	0.2	2.2	1.6	0.6	0	0.4	0.3
Paracalanus quasimoto	3.6	33.4	13.6	40.0	0.9	1.4	0.4	0.4	0.8	0.2	0.4	0.4
Paracandacia simplex	0	0	0	0	0	0	0	0	0	0	0.1	0
Parundinella spinodenticula	0	0	0	0	0	0	0	0	0.2	0.2	0.1	0.2
Pleuromamma gracilis	0	0	0	0	0	0	0	0	0	0	0.1	0
Pontellina pulmata	0	0	0	0	0	0	0.1	0	0	0	0	0
Scaphocalanus subcurtus	0	0	0	0	0	0	0	0	0.1	0	0.1	0.3
Scolecithricella ctenopus	0	0	0	0	0	0	0	0	0	0	0	0.1
Scolecithricella dentata	0	0	0	0	0	0	0	.0	0.1	0	0	0.1
Scolecithricella tenuiserrata	0	0	0	0	0	0	0	0	0.1	0	0.1	0.1

Appendix XV-3-2 (cont.)

Scolecithrix bradyi	0	c	0	0	0	0	0	c	c	(	0.1	0
Temora stylifera	0	0.2	0.1	0.4	8.4	6.4	1.9	0.4	0.2	0.4	0.1	0
Temora turbinata	11.4	.7.7	4.0	2.6	2.1	0	3.'1	0.6	"0.4	0.2	0	0.3
Temoropia mayumbaensis	G	0	0	0	0	0	0	0	a	0.1	0	0
Undinula vulgaris	0.7	c	0	0	0.6	1.2	0.9	0.9	0.1	c	0.1	0
CYCLOPOIDA												
Copilia mirabilis	0	0	0	0	0.2	0.2	0.1	0.1	0.1	0.4	0.2	0.2
Corycaeus amazonicus	3.2	4.3	0.8	1.2	0.2	0	0.4	1.2	0	c	0	0
Corycaeus americanus	3.0	3.7	0.2	0.4	0.1	0.2	0.1	0.2	*o	0.1	0	0
Corycaeus clausi	0	0	0	"0	0	0	0	0	0	0.1	0	0
Corycaeus giesbrechti	0	0	2.2	3.0	0.5	0	2.0	1.2	1.7	1.2	1.2	0.8
Corycaeus latus	0	0	0	0	0.2	0.2	0.1	0	0.2	0.1	0.1	0.3
Corycaeus lautus	0	0	0	0	0	0	0	0	0.1	c	0	0
Corycaeus limbatus	0	0	0	0	0	0	0	0	0.1	0	0.1	0
Corycaeus speciosus	0	0	0	0	0.3	0	0	0.1	0.1	0	0.2	0.1
Corycaeus typicus	0	0	0	0	0	0	0	0	0.1	0	0.1	0
Farranula gracilis	1.1	0	0.8	0.8	4.1	9.1	1.0	4.0	5.1	4.3	5.3	1.4
Farranula rostrata	0	o	0	0	0	0	0	0	0	0.4	0	0
Lichomolgus sp.	0	0	0	0	0	0	0.1	0.1	0	0	0	0
Oithona nana	0.9	0.8	0	0	0	0	0	0	0	0	0	0
Oithona plumifera	0.5	0.3	0.4	0.4	9.1	9.1	2.9	6.6	5.0	8.6	4.7	3.2
Oithona robusta	0	0	0	0	0	0	0	0	0.1	0	0.1	0
Oithona setigera	0	0	0	0	0	0	0	0	2.9	0.9	1.1	0.4
Oithona tenuis	0	0	0	0	0	0	0.1	0	0.5	1.2	0.4	0.2'
Oithona vivida	0	0	0	0	0	0	o	0	0	0	0	0.1
Oithona sp.1	0	0	0	0	0	0	0	0	0.3	0.4	0	0.2
Oncaea conifers	0	0	0	0	0	0	0	0.4	0.1	0.1	0.1	0.2
Oncaea media	0	0	0	0	0.8	1.2	0.9	0.3	0.1	0	0.2	0.4

Appendix XV-3-2 (cont.)

Oncaea mediterranea	0	0	0	0	0	0	0	0.2	1.3	D.2	9.5	9.91
Oncaea venusta	3.6	1.7	1.5	2.2	8.2	2.3	4.3	5.8	7.8	7.0	3.3	9.6
Paroithona pulls	0	0	0	0	0	0	0	0	0	0	0	0.1
Sapphirina nigromaculata	0	0	0	0	0.3	0.8	0.3	0.5	0	0	0	0.2
HARPACTICOIDA												
Clytemnestra rostrata	0	0	0.1	0	0	0	0	0	0.1	0	0	0
Clytemnestra scutellata	0	0	0.1	0	0	0	0	0	0.1	0	0	0
Macrosetella gracilis	0	0.2	0.2	0.2	0.2	0.2	0	0.1	0.6	0.2	0.1	0.1
Microsetella norvegica	0.2	0	0	0	0	0	0	0	*0	0	0	0
Benthic harpacticoida	0.5	0.8	0	0	0	0	0	0.1	0	0	0	0

APPENDIX XV-3-3

PERCENTAGE COMPOSITION OF ADULT FENALE COPEPODS

AUGUST/SEPTEM8ER CRUISE - TRANSECT III

Station	1				2				3			
Day or Night	D	D	N	N	D	D	N	N	D	D	N	N
Replicate No.	1	2	1	2	1	2	1	2	1	2	1	2
CALANOIDA												
Acartia lilljeborgii	0.1	1.0	0.9	8.0	0	0	" c	0	(	(	c	0
Acartia tonsa	0.1	0.2	0.7	7.6	o	0	0	0	(	(	c	0
Acrocalanus andersoni	0	0	" o	0	0.1	0	c	0	o.!	(	0.4	0
Acrocalanus longicornis .	0.1	0	0	0	o	0.1	c	0	o.:	(	0.1	0.1
Aetideus acutus	0	0	0	0	o	0	c	0	(	0.:	c	0
Calanopia americana	0	0	1.2	4.1	o	0	c	0.4	o.:	(	0.1	0.3
Calanus tenuicornis	0	0	0	0	o	0	c	0	0.:	(	c	0
Calocalanus pavo	0	0	0	0.2	2.1	0.8	2.6	1.9	1.:	1.(	1.7	1.9
Calocalanus pavoninus	0	0	0	0	0.4	0.7	1.9	1.7	0.(	0 .	0.7	0.2
Calocalanus styliremis	0	0	0	0	0.4	0.1	0.2	0.8	(	0..	(	0.1
Calocalanus gracilis	0	0	0	0	0	0.1	(	0	(	(	(	0
Calocalanus sp.3	0	0	0	0	o	0	c	0	o.:	0.:	(	0
Candacia **curta**	0	0	0	0	0.1	0	c	0	(	(	0.1	0
Centropages velificatus	6.4	,0.2	9.9	7.6	0.8	0.1	1.9	2.6	0.:	0.(	0.8	1.1
Clausocalanus furcatus	4.0	0.7	2.8	2.7	38.2	44.9	27.4	10.3	9.(	23.	27.6	21.3
Clausocalanus jobei	0	0	0	0	o	0	(	0	5.(	6.(	3.:	7.0
Clausocalanus parapergens"	0	.0	0	0	o	0	c	0	0.:	0.:	(	0
Clausocalanus pergens	0	0	0	0	o	0	c	0	0.!	(	(	0
Ctenocalanus vanus	0	0	0	0	. 0	0	c	0	1.(	2.	0.(	0.7
Eucalanus pileatus	,1.3	.3.6	17.0	4.0	1.0	0.8	0.:	0.4	0.!	0.	0.(	0.5
Eucalanus sewelli	0	0	0	0	0	0	(	0	(		0.1	0

Appendix XV-3-3 (cont.

Eucalanus subtenuis	0	0	0	0	0	0	0	0	0	0.2	0	0
Euchaeta paraconcinna	0	0	0	0	0	0	0.2	0	0.5	0	0.1	0.2
Haloptilus longicornis	0	0	0	0	0	0	0	0	0.2	0	0	0
Ischnocalanus plumulosus	0	0	0	0	0	0	0	0	0.2	0.2	0	0
Labidocera aestiva	0	0	0.3	0.7	0	0	0	0	0	0	0	0
Lucicutia flavicornis	0	0	0	0	0	0	1.5	1.2	1.1	0.8	1.7	1.8
Lucicutia gaussae	0	0	0	0	0	0	0	0	0	0.2	0	0
Lucicutia paraclausi	0	0	0	0	0	0	0	0	0.2	0.2	0	0
Mecynocera clausi	0	0	0	0	0	0	0	0	2.0	1.0	0	0.3
Nannocalanus minor	0	0	0	0	0.5	0.9	0.9	0.7	3.3	3.9	1.8	2.7
Paracalanus aculeatus	5.7	18.9	19.6	12.8	11.3	6.8	5.4	9.8	3.4	2.1	1.1	5.2
Paracalanus crassirostris	0.1	0	0	0	0	0	0	0	0	0	0	0
Paracalanus denudatus	0	0	0	0	0	0	0	0	0.2	0	0	0
Paracalanus indicus	9.6	4.4	4.7	9.2	0.7	1.1	0.2	5.4	0.3	0.2	0.8	0.9
Paracalanus quasimoto	9.3	17.5	10.2	12.4	9.4	3.7	1.1	0.4	0.3	0.3	5.0	2.9
Paracalanus sp.	0	0	0	0	0	0.1	0	0	0	0	0	0
Paracandacia simplex	0	0	0	0	0	0	0	0	0.2	0	0	0
Parundinella spinodenticula	0	0	0	0	0	0	0	0	0.6	2.3	0	0
Scolecithricella tenuiserrata	0	0	0	0	0	0	0	0	0	0.2	0	0
Scolecithrix bradyi	0	0	0	0	0	0	0	0	0	0.2	0	0
Temora stylifera	0.4	0.7	0	0	0.8	0.4	0.4	0.4	0.6	0.2	1.0	0.9
Temora turbinata	6.5	10.2	28.9	20.1	0.7	0.1	1.1	2.2	0.6	0.6	1.1	2.5
Undinula vulgaris	0.1	0	0	0	0.8	0.1	0.2	0	0	0.2	0	0.1
CYCLOPOIDA												
Copilia mirabilis	0.1	0	0	0	0.3	0.1	0.4	0,3	0.2	0.3	0.1	0.1
Corycaeus amazonicus	1.6	2.2	0.5	2.3	0.3	0	0.6	0.7	0.2	0	0	0.2
Corycaeus americanus	0	0	0	0	0	0	0	0.1	0	0	0	0.2
Corycaeus flaccus	0	0	0	0	0	0	0	0	0	0.2	0	0

Appendix XV-3-.3 (cont.)

corycaeus furcifer	0	0	0	0	0					0	0
Corycaeus giesbrechti	1.8	1.9	1.4	3.4	2.2					1.7	1.5
Corycaeus latus	0	0	0	0	0.1					0.1	0
Corycaeus limbatus	0	0	0	0	0					0	0
Corycaeus speciosus	0	0.2	0	0	0.1					0.1	0.4
Corycaeus typicus	0	0	0	0	0					0	0
Farranula gracilis	0.7	0.5	0	0	2.6					11.3	17.4
Lichomologus sp.	0	0	0	0	0					0	0
Oithona nana	0.1	0.7	0	0	0					0	0
Oithona plumifera	0	0	0	0.9	6.6					3.3	2.3
Oithona robusta	0	0	0	0	0					0	0
Oithona setigera	0	0	0	0	0					0	0.1
Oithona simplex	0	0.7	0	0	0					0	0
Oithona tenuis	0	0	0	0	0					0.3	0.2
Oithona sp.1	0	0	0	0	0					0	0
Oncaea conifers	0	0	0	0	0					1.1	0.3
Oncaea media	0	0	0	0	0.4					0.1	0.6
Oncaea mediterranea	0	0.2	0	0	1.2					7.3	4.9
Oncaeavenusta	21.2	14.8	1.9	2.7	8.5					15.7	20.4
Sapphirina nigromaculata	0.3	0.2	0	0	0					0.1	0.1
HARPACTICOIDA											
Clytemnestra rostrata	0	0.2	0	0	0					0.1	0.2
Macrosetella gracilis	0.1	0.2	0	0	0.4					0.3	0.1
Microsetella rosea	0	0	0	0	0					0	0
Benthic harpacticoida	0	0.5	0.2	0.5	0					0	0

APPENDIX XV- 3-4

PERCENTAGE CONPOSITION OF ADULT FEMALE COPEPODS

AUGUST/SEPTEMBER CRUISE - TRANSECT IV

Station	1				2				3			
Day or Night	D	D	N	N	D	D	N	N	D	D	N	N
Replicate No.	1	2	1	2	1	2	1	2	1	2	1	2
CALANOIDA												
Acartia lilljeborgii	0.[illegible]	0.[illegible]	(	0.6	(	(	(	0	0	0	(	c
Acartia tonsa	1.[illegible]	1.[illegible]	0.7	0,4	(	0.2	(	0	0	0	(	c
Acrocalanus andersoni	(	(	c	0	(	c	(	0	0	0	0.[illegible]	0.4
Acrocalanus longicornis	0.5	(	C	0	(	c	(	0	0	0.1	(	c
Calanopia *americana*	(	0.[illegible]	1.8	1.7	(	c	1.6	D.5	1.3	0.3	2.!	2.0
Calocalanus pavo	0.2	(	0.2	0.2	0.1	0.2	0.7	3.3	3.1	1.0	1.!	1.4
Calocalanus pavoninus	(	(	c	0	(	0	0.4	0	0.3	0.3	0.6	0.4
Calocalanus styliremis	c	(	0	0	c	0	0.2	0.3	0.3	0	0.5	0.6
Candacia pachydactyla	c	(	0	0	c	0	a	0	0	0	c	0.2
Centropages caribbeanensis	c	c	0	0	c	0	0	0	0.3	0	c	0
Centropages velificatus	2.7	5.4	8.9	7.7	1.8	3.6	1.6	1.8	4.2	3.5	1.8	2.0
Clausocalanus furcatus	1.8	4.3	1.6	3.2	21.0	3.5	4.3	3.5	28.0	42.1	48.3	0.0
Clausocalanus jobei	0	c	0	0	0	0	0	0	0	0	0.3	0
Eucalanus pileatus	9.5	5.2	8.0	6.6	4.1	2.9	3.0	1.0	0.4	0.8	0.4	0.6
Euchaeta paraconcinna	0	C	0	0	0	0	0	0	0	0	0.1	0
Labidocera aestiva	0.2	0	0	0.2	0	0	0	0	0	0	0	0
Labidocera scotti	0	0	0.2	0	0	0	0	0	0	0	0	0
Lucicutia flavicornis	0	0	0	0	0	0	0	0	0.1	0	0.3	0.4
Lucicutia paraclausi	0	0	0	0	0	0	0	0	0.1	0	0	0
Nannocalanus minor	0	0	0	0	0	0.2	0	0	0.6	0	0.6	0.8

Appendix XV-3-4 (cont.)

Neocalanus gracilis	0	0	0	0	0	0	0	0	0	0.1	0	0
Paracalanus aculeatus	35.8	1.0	1.2	2.7	8.7	0.0	26.9	13.7	9.1	.2.3	6.4	8.4
Paracalanus indicus	0.7	1.0	7.6	6.6	8.9	2.9	0.9	7.1	1.8	2.8	0.6	1.4
Paracalanus quasimoto	13.4	7.3	7.4	8.8	6.8	6.8	4.8	5.1	4.6	7.5	3.1	3.-)
Pontellopsis villosa	0	0	0	0.2	0	0	0	0	0	0	0	0
Rhincalanus cornutus	0	0.1	0	0	0	0	0	0	0	0	0	0
Temora stylifera	1.0	0.3	0.4	0	1.5	0.5	0.7	1.3	1.5	1.0	1.6	0.4
Temora turbinata	2.5	3.4	3.9	4.3	2.8	4.3	26.3	24.8	0.3	0	1.5	1.2
Undinula vulgaris	0.3	0.2	0	0	0	0	0	0	0	0	0	0
CYCLOPOIDA												
Copilia mirabilis	0	0.1	0	0	0	0.2	0	0	0.3	0.1	0.2	0.2
Corycaeus amazonicus	1.7	1.4	0.7	1.1	0.3	0.2	i.3	1.0	0.3	1.0	0.3	0.2
Corycaeus americanus	0	0.2	0	0	0.1	0.5	0	0	0	0	0.1	0
Corycaeus giesbrechti	1.7	2.2	2.2	2.1	1.6	4.5	6.5	5.3	0.9	3.5	2.2	2.4
Corycaeus latus	0	0	0	0	0.1	0.2	0	0.3	0.1	0	0.1	0
Corycaeus speciosus	0	0	0	0	0	0.2	0	0	0.1	0.3	0	0.6
Farranula gracilis	0.3	0	0.4	0	9.0	8.4	2.5	7.3	3.1	7.9	6.0	8.2
Lichomologus sp.	0	0	0.2	0	0	0	0	0	0	0	0.4	0.2
Oithona nana	0.2	0	0.4	D.2	0.1	0	0	0.3	0	0.1	0	0
Oithona plumifera	0	0	0	0	0.3	2.3	1.6	1.3	3.5	6.3	0.5	6.9
Oithona setigera	0	0	0	0	0	0	0	0	0	0	0.1	0
Oithona simplex	0	0	0	0	0.1	0	0	0	0	0	0	0
Oithona tenuis	0	0	0	0	0	0	0	0	).1	0	0.1	0.2
Oncaea media	0	0	0	0	0.1	0	0	0	0	0	0.2	0.2
Oncaea mediterranea	0	0	0	0	0	0	0	0	3.6	0.3	0.6	1.2
Oncaea venusta	16.2	6.6	3.3	2.8	1.9	1.7	5.7	5.1	B.9	8.3	8.5	5.5
Sapphirina nigromaculata	0	0	0.2	0	0	0.5	0	0	0	0	0.2	0.4

Appendix XV-3-4 (cont.)

HARPACTICOIDA												
Clytemnestra rostrata	0	0	0.2	0.2	0	0	0.5	0.3	0	0	0	0
Clytemnestra scutellata	0	0	0.2	0	0	0	0.2	0	0	0	0.3	0
Macrosetella gracilis	0	0.1	0.4	0.2	0	0	0.2	0	0.7	0.3	0.3	0.2
Microsetella rosea	0.2	0	0	0	0	0	0	0	0	0	0	0
Benthic harpacticoida	0	0	0.2″	0	0.3	c	0	0	0	0	0	0

APPENDIX XVI

NUMBER OF SPECIMENS AND SPECIES OF COPEPODS OBSERVED

AND CALCULATED SPECIES DIVERSITY INDEX AND EQUITABILITY

APPENDIX XVI-1

NUMBER OF SPECIMENS AND SPECIES OF COPEPODS OBSERVED

AND CALCULATED SPECIES DIVERSITY INDEX

AND EQUITABILITY

DECEMBER/JANUARY CRUISE

Transect	Station	Day or Night	Replicate No.	No. of Specimens (N)	No. of Species (S)	Species Diversity Index (H)	Equitability $E = \frac{S'}{S}$	$E = \frac{H(S)}{H_{max}(S)}$
1	1	D	1	1789	21	2.9957	0.524	0.6820
			2	1038	21	3.0349	0.571	0.6909
		N	1	1003	17	2.4267	0.412	0.5936
			2	558	16	2.2097	0.375	0.5519
	2	D	1	647	30	3.6285	0.600	0.7394
			2	606	29	3.5222	0.586	0.7249
		N	1	1284	45	3.9666	0.511	0.7222
			2	336	35	4.0486	0.686	0.7892
	3	D	1	231	45	3.8844	0.489	0.7072
			2	370	45	3.8388	0.467	0.6989
		N	1	380	63	4.4756	0.523	0.7487
			2	366	52	4.2015	0.519	0.7370
11	1	D	1	603	22	2.9961	0.500	0.6718
			2	1472	27	2.4300	0.259	0.5110
		N	1	605	19	2.2847	0.368	0.5378
			2	279	25	3.6342	0.720	0.7825
	2	D	1	514	43	3.5763	0.395	0.6590
			2	512	37	3.6956	0.513	0.7093

Appendix XVI-1 (Cont.)

		N	1	1295	41	2.9904	0.268	0.5581
			2	737	45	3.6401	0.400	0.6627
	3	D	1	572	47	3.5063	0.340	0.6312
			2	1103	54	3.3976	0.278	0.1687
		N	1	609	52	3.1090	0.231	0.5453
			2	551	40	3.1783	0.325	0.5971
III	1	D	1	450	16	2.3536	0.437	0.5883
			2	1022	16	1.8485	0.312	0.4621
		N	1	570	21	3.4308	0.667	0.7810
			2	438	16	2.9588	0.687	0.7396
	2	D	1	981	39	2.6830	0.231	0.5076
			2	745	34	2.6605	0.265	0.5229
		N	1	711	35	3.0760	0.343	0.5996
			2	410	33	2.7522	0.303	0.5455
	3	D	1	694	52	3.0444	0.231	().'5340
			2	938	45	2.6217	0.178	0.4773
		N	1	430	33	3.7314	0.576	0.7396
			2	480	36	3.2802	0.389	0.6344
Iv	1	D	1	429	20	2.1302	0.300	0.4928
			2	406	20	1.9295	0.250	0.4464
		N	1	480	19	1.9461	0.263	0.4581
			2	486	13	1.5392	0.308	0.4159
	2	D	1	350	28	3.1810	0.464	0.6616
			2	828	48	3.4257	0.312	0.6133
		N	1	1028	50	3.7850	0.400	0.6706
			2	779	49	3.5596	0.326	0.6339
	3	D	1	567	44	4.0856	0.568	0.7483

Appendix XVI-1(Cont.)

	2	676	44	3.5935	0.386	0.6582
N	1	460	49	4.3968	0.633	0.7830
	2	709	54	4.3007	0.537	0.7472

APPENDIX XVI-2

NUMBER OF SPECIMENS AND SPECIES OF COPEPODS OBSERVED

AND CALCULATED SPECIES DIVERSITY INDEX

AND EQUITABILITY

APRIL/MAY CRUISE

Transect	Station	Day or Night	Replicate No.	No. of Specimens (N)	No. of Species (S)	Species Diversity Index - (H)	Equitability $E = \frac{S'}{S}$	$E = \frac{H(S)}{H_{max}(S)}$
I	1	D	1	664	15	1.4582	0.200	0.3732
			2	648	11	1.1769	0.273	0.3402
		N	1	480	10	0.9937	0.200	0.2991
			2	588	12	1.6051	0.333	0.4477
	2	D	1	372	28	3.3819	0.536	0.7034
			2	508	15	1.9047	0.333	0.4875
		N	1	496	20	2.4894	0.400	0.5759
			2	356	22	2.9557	0.500	0.6627
	3	D	1	622	53	4.3972	0.585	0.7680
			2	588	53	4.2384	0.528	0.7399
		N	1	511	56	4.6102	0.643	0.7938
			2	567	51	4.0065	0.451	0.7062
II	1	D	1	599	16	2.2145	0.375	0.5536
			2	323	16	2.2596	0.375	0.5648
		N	1	575	17	1.9589	0.294	0.4792
			2	603	13	1.7259	0.308	0.4664
	2	D	1	471	18	2.8991	0.556	0.6952
			2	340	21	2.5618	0.381	0.5832

Appendix XVI-2 (cont.)

		N	1	397	16	2.5327	0.500	0.6331
			2	451	20	2.6528	0.450	0.6137
	3	D	1	1167	63	4.0078	0.381	0.6705
			2	1269	62	4.0181	0.387	0.6748
		N	1	341	48	4.4346	0.667	0.7939
			2	489	50	4.1870	0.540	0.7418
III	1	D	1	547	18	2.6948	0.500	0.6462
			2	451	13	2.5991	0.615	0.7023
		N	1	584	17	2.7244	0.529	0.6664
			2	250	17	3.2872	0.824	0.8041
	2	D	1	555	35	3.8624	0.600	0.7529
			2	1185	30	2.6775	0.300	0.5456
		N	1	755	47	4.1874	0.574	0.7538
			2	522	35	4.1626	0.743	0.8115
	3	D	1	503	41	4.0556	0.585	0.7572
			2	564	44	5.2376	1.295	0.9593
		N	1	542	50	4.3886	0.620	0.7775
			2	568	57	4.3064	0.588	0.7382
IV	1	D	1	88	13	3.2164	1.000	0.8691
			2	66	13	3.4030	1.154	0.9195
		N	1	289	16	2.5519	0.500	0.6379
			2	270	16	2.6837	0.563	0.6709
	2	D	1	346	30	4.1244	0.867	0.8405
			2	571	35	3.8536	0.629	0.7512
		N	1	251	23	3.7223	0.826	0.8228
			2	227	23	3.5195	0.696	0.7780

Appendix XVI-2 (Cont.)

3	D	1	848	52	3.8464	0.404	0.6747
		2	519	44	3.9684	0.523	0.7268
	N	1	545	49	4.2661	0.571	0.7597
		2	527	45	4.3629	0.667	0.7944

APPENDIX XVI-3

NUMBER OF SPECIMENS AND SPECIES OF COPEPODS OBSERVED

AND CALCULATED SPECIES DIVERSITY INDEX

AND EQUITABILITY

AUGUST/SEPTEMBER CRUISE

Transect	Station	Day or Night	Replicate No.	No. of Specimens (N)	No. of Species (S)	Species Diversity Index - (H)	Equitability $E = \frac{S'}{S}$	$E = \frac{H(S)}{H_{max}(S)}$
I	1	D	1	959	15	2.5520	0.533	0.6531
			2	1847	16	2.5013	0.500	0.6253
		N	1	805	23	3.0273	0.478	0.6692
			2	409	18	2.6237	0.444	0.6291
	2	D	1	492	28	3.4803	0.571	0.7239
			2	487	22	2.8008	0.454	0.6280
		N	1	406	30	3.6721	0.600	0.7483
			2	492	22	2.9923	0.500	0.6709
	3	D	1	748	45	3.7438	0.422	0.6816
			2	1048	45	3.3779	0.333	0.6150
		N	1	1154	51	3.3269	0.274	0.5864
			2	1243	44	3.2976	0.318	0.6040
II	1	D	1	440	18	2.9085	0.611	0.6974
			2	644	17	2.8475	0.588	0.6966
		N	1	959	21	2.6207	0.381	0.5966
			2	497	18	2.6185	0.444	0.6279
		D	1	891	29	3.3381	0.483	0.6871
			2	486	24	3.2015	0.542	0.6982

Appendix XVI-3(Cont.)

		N	1	743	30	3.3365	0.467	0.6799
			2	984	35	2.8728	0.286	0.5600
	3	D	1	1392	57	3.7901	0.351	0.6497
			2	852	42	3.6174	0.429	0.6708
		N	1	1651	53	3.6191	0.340	0.6318
			2	1193	47	3.4436	0.620	0.3404
III	1	D	1	706	22	3.0286	0.500	0.6791
			2	412	22	3.2664	0.636	0.7324
		N	1	578	15	2.8912	0.667	0.7399
			2	437	17	3.5321	1.000	0.8640
	2	D	1	762	26	3.0497	0.461	0.6487
			2	739	25	2.6809	0.360	0.5772
		N	1	463	27	3.4381	0.593	0.7230
			2	727	26	3.1692	0.500	0.6742
	3	D	1	642	45	3.6051	0.400	0.6564
			2	619	40	3.5315	0.425	0.6635
		N	1	725	34	3.3144	0.4118	0.6514
			2	982	36	3.7774	0.556	0.7306
IV	1	D	1	598	20	2.8486	0.500	0.6590
			2	1040	19	2.2308	0.316	0.5251
		N	1	552	23	2.9992	0.478	0.6630
			2	468	19	2.8225	0.526	0.6644
	2	D	1	675	20	3.0618	0.600	0.7084
			2	441	21	3.1168	0.619	0.7095
		N	1	558	20	3.0573	0.600	0.7073
			2	395	19	3.1356	0.632	0.7381

Appendix XVI-3 (Cont.)

D	1	668	27	3.2508	0.518	0.6836
	2	772	22	2.9227	0.500	0.6553
N	1	1275	33	2.9237	0.333	0.5795
	2	510	29	2.9056	0.345	0.5980

APPENDIX XVII

NUMERICAL ABUNDANCE AND TOTAL NUMBER OF ORGANISMS COLLECTED PER STATION ON THE STOCS 1975

Table 1. Numerical abundance and total number of organisms collected at 1/1 AHK-Neuston-Winter.

Calanoid copepod	2,500
Mollusc larvae	2,375
Cyclopoid copepod	1,125
Barnacle larvae	625
Harpacticoid copepod	500
Copepod nauplii	125
Total	7,250

Note: *Coscinodiscus* sp. abundant in sample.

Table 2. Numerical abundance and total number of organisms collected at 2/1 AEX-Neuston-Winter.

Calanoid copepod	37,500
Cyclopoid copepod	30,750
Mollusc larvae	13,250
Harpacticoid copepod	11,250
Copepod nauplii	11,250
Larvacean	4,000
Lucifer faxoni	3,250
Decapod larvae	2,750
Chaetognath	2,000
Ostracod	500
Fish larvae	275
Pteropod	125
Fish egg	75
Total	116,975

Table 3. Numerical abundance and total number of organisms collected at 3/1 BHU-Neuston-Winter.

Calanoid copepod	2,550
Cyclopoid copepod	1,900
Mollusc larvae	700
Copepod nauplii	350
Harpacticoid copepod	250
Chaetognath	100
Larvacean	50
Total	5,900

Table 4. Numerical abundance and total number of organisms collected at 1/II AJH-Neuston-Winter.

Mollusc larvae	122,400
Calanoid copepod	84,800
Cyclopoid copepod	6,400
Chaetognath	4,840
Amph ipod	2,520
Harpacticoid copepod	1,600
Decapod larvae	960
Barnacle larvae	760
Mysid	360
Polychaete larvae	320
Ostracod	160
Lucifer faxoni	120
Fish egg	80
Fish larvae	40
Total	225,360

Table 5. Numerical abundance and total number of organisms collected at 2/11 ALV-Neuston-Winter.

Harpacticoid copepod	2,375
Isopod	100
Total	2,475

Note: *Sargassum* only.

Table 6. Numerical abundance and total number of organisms collected at 3/11 AOY-Neuston-Winter.

Note: Sample missing.

Table 7. Numerical abundance and total number of organisms collected at 1/111 ASA-Neuston-Winter.

Cyclopoid copepod	72,800
Calanoid copepod	64,000
Chaetognath	52,800
Larvacea	1,600
Copepod nauplii	400
Lucifer faxoni	120
Fish larvae	4 0
Acetes sp.	40
Amphipod	40
Total	191,840

Table 8. Numerical abundance and total number of organisms collected at 2/III AVF-Neuston-Winter.

Harpacticoid copepod	200
Isopod	90
Mollusc larvae	10
Total	300

Note: *Sargassum* only.

Table 9. Numerical abundance and total number of organisms collected at 3/III AYC-Neuston-Winter.

Cyclopoid copepod	1,900
Mollusc larvae	1,600
Calanoid copepod	1,400
Harpacticoid copepod	300
Copepod nauplii	200
Isopod	60
Pteropod	50
Fish egg	50
Latreutes fucorum	40
Fish larvae	20
Decapod larvae	10
Chaetognath	10
Total	5,640

Note: Some *Sargassum* in sample.

Table 10. Numerical abundance and total number of organisms collected at l/IV BBB-Neuston-Winter.

Calanoid copepod	137,600
Cyclopoid copepod	40,000
Mollusc larvae	2,800
Copepod nauplii	2,800
Chaetognath	680
Harpacticoid copepod	400
Pteropod	40
Fish egg	40
Total	184,360

Table 11. Numerical abundance and total number of organisms collected at 2/IV BED-Neuston-Winter.

Calanoid copepod	8,250
Cyclopoid copepod	1,750
Mollusc larvae	500
Harpacticoid copepod	250
Copepod nauplii	125
Lucifer faxoni	63
Chaetognath	38
Fish egg	13
Larvacea	13
Latreutes fucorum	13
Pteropod	13
Total	11,028

Note: Some *Sargassum* with *Lepas* sp. attached in sample.

Table 12. Numerical abundance and total number of organisms collected at 3/IV BPH-Neuston-Winter.

Cyclopoid copepod	8,375
Calanoid copepod	7,625
Mollusc larvae	1,000
Copepod nauplii	625
Harpacticoid copepod	250
Chaetognath	213
Larvacea	38
Fish egg	13
Fish larvae	13
Amphipod	13
Total	18,165

Note: Small amount of Sargassum in sample with few Lepas sp. attached.

Table 13. Numerical abundance and total number of organisms collected at 1/1 CAW-Neuston-Spring.

Cyclopoid copepod	8,000
Calanoid copepod	3,500
Copepod nauplii	1,375
Mollusc larvae	250
Harpacticoid copepod	125
Fish egg	13
Fish larvae	13
Total	13,276

Note: Phytoplankton abundant in sample.

Table 14. Numerical abundance and total number of organisms collected at 2/1 CEK-Neuston-Spring.

Calanoid copepod	13,750
Cyclopoid copepod	4,500
Mollusc larvae	750
Larvacea	750
Fish egg	650
Harpacticoid copepod	500
Copepod nauplii	250
Lucifer faxoni	250
Amphipod	175
Latreutes parvulus	150
Decapod larvae	125
Chaetognath	125
Isopod	125
Latreutes fucorum	75
Pteropod	25
Total	22,200

Note: Large piece of *Sargassum* in sample.

Table 15. Numerical abundance and total number of organisms collected at 3/1 CHG-Neuston-Spring.

Calanoid copepod	8,500
Cyclopoid copepod	3,100
Copepod nauplii	1,800
Fish egg	310
Mollusc larvae	230
Harpacticoid copepod	140
Total	14,080

Table 16. Numerical abundance and total number of organisms collected at 1/11 CKM-Neuston-Spring.

Cyclopoid copepod	25,000
Calanoid copepod	10,500
Copepod nauplii	8,000
Mollusc larvae	4,500
Echinoderm larvae	3,000
Harpacticoid copepod	2,500
Barnacle larvae	1,000
Decapod larvae	100
Fish egg	50
Chaetognath	25
Total	54,675

Note: Phytoplankton abundant in sample.

Table 17. Numerical abundance and total number of organisms collected at 2/11 CNP-Neuston-Spring.

Calanoid copepod	168,600
Mollusc larvae	142,200
Cyclopoid copepod	100,200
Chaetognath	23,400
Harpacticoid copepod	11,400
Copepod nauplii	3,600
Fish egg	3,000
Lucifer faxoni	1,800
Larvacea	600
Decapod larvae	120
Total	454,920

Table 18. Numerical abundance and total number of organisms collected at 3/11 CQR-Neuston-Spring.

Fish egg	350	
Calanoid copepod	250	
Cyclopoid copepod	50	
Latreutes fucorum	40	
Fish larvae	20	
Lucifer faxoni	20	
Chaetognath	10	
Amphipod	1	0
Polychaete larvae	10	
Total	760	

Table 19. Numerical abundance and total number of organisms collected at CTZ-Neuston-Spring.

Calanoid copepod	2,825	
Cyclopoid copepod	100	
Echinoderm larvae	88	
Mollusc larvae	50	
Harpacticoid copepod	25	"
Decapod larvae	25	
Lucifer faxoni	25	
Fish egg	25	
Chaetognath	13	
Larvacea	13	
Total	3,189	

Table 20. Numerical abundance and total number of organisms collected at 2/111 CYE-Neuston-Spring.

Calanoid copepod	2,300
Fish egg	960
Chaetognath	190
Decapod larvae	80
Mollusc larvae	30
Amphipod	10
Total	3,570

Table 21. Numerical abundance and total number of organisms collected at 3/111 DAX-Neuston-Spring.

Fish egg	270
Latreutes fucorum	195
Harpacticoid copepod	120
Calanoid copepod	90
Cyclopoid copepod	60
Amphipod	45
Polychaete larvae	45
Decapod larvae	30
Total	855

Note: Some *Sargassum* in sample.

Table 22. Numerical abundance and total number of organisms collected at l/IV DDX-Neuston-Spring.

Calanoid copepod	1,320
Harpacticoid copepod	540
Latreutes parvulus	120
Isopod	90
Fish egg	60
Pycnogonid	30
Amphipod	30
Decapod larvae	30
Total	2,220

Note: *Sargassum* abundant in sample.

Table 23. Numerical abundance and total number of organisms collected at 2/IV DGW-Neuston-Spring.

Calanoid copepod	2,700
Decapod larvae	210
Fish egg	40
Latreutes parvulus	40
Chaetognath	30
Echinoderm larvae	20
Portunid juvenile	10
Cyclopoid copepod	10
Harpacticoid copepod	10
Total	3,090

Note: Small amount of *Sargassum* in sample.

Table 24. Numerical abundance and total number of organisms collected at 3/IV DKB-Neuston-Spring.

Calanoid copepod	8,000
Fish egg	125
Mollusc larvae	100
Latreutes parvulus	100
Decapod larvae	75
Fish larvae	50
Chaetognath	50
Lucifer faxoni	25
Harpacticoid copepod	25
Amphipod	25
Total	8,575

Note: *Sargassum* abundant in sample.

Table 25. Numerical abundance and total number of organisms collected at 1/1 EAN-Neuston-Summer.

Calanoid copepod	5,250
Lucifer faxoni	1,575
Cyclopoid copepod	1,000
Decapod larvae	325
Amphipod	75
Polychaete larvae	75
Fish egg	75
Harpacticoid copepod	50
Cladocera	25
Total	8,450

Note: *Sargassum* in sample.

Table 26. Numerical abundance and total number of organisms collected at 2/1 EEH-Neuston-Summer.

Calanoid copepod	12,200
Cyclopoid copepod	4,400
Cladocera	1,600
Lucifer faxoni	1,060
Chaetognath	560
Larvacea	400
Harpacticoid copepod	200
Mollusc larvae	200
Amphipod	80
Fish egg	80
Decapod larvae	60
Total	20,840

Table 27. Numerical abundance and total number of organisms collected at 3/1 EHG-Neuston-Summer.

Cyclopoid copepod	4,650
Calanoid copepod	3,750
Harpacticoid copepod	1,200
Fish egg	315
Mollusc larvae	300
Polychaete larvae	165
Cladocera	150
Amphipod	120
Latreutes fucorum	60
Total	10,710

Note: *Sargassum* in sample.

Table 28. Numerical abundance and total number of organisms collected at 1/11 EKM-Neuston-Summer.

Calanoid copepod	58,500
Cyclopoid copepod	2,750
Mollusc larvae	1,250
Decapod larvae	525
Lucifer faxoni	400
Chaetognath	125
Amphipod	75
Fish egg	38
Larvacea	38
Total	63,701

Table 29. Numerical abundance and total number of organisms collected at 2/11 ENQ-Neuston-Summer.

Calanoid copepod	2,100
Cyclopoid copepod	1,950
Lucifer faxoni	1,335
Chaetognath	285
Larvacea	150
Fish egg	75
Polychaete larvae	45
Decapod larvae	30
Pteropod	30
Isopod	30
Amphipod	15
Harpacticoid copepod	15
Total	6,060

Table 30. Numerical abundance and total number of organisms collected at 3/11 EQR-Neuston-Summer.

Calanoid copepod	240
Cyclopoid copepod	50
Fish egg	50
Harpacticoid copepod	20
Copepod nauplii	20
Larvacea	20
Chaetognath	10
Total	410

Table 31. Numerical abundance and total number of organisms collected at 1/III ETZ-Neuston-Summer.

Calanoid copepod	27,625
Cyclopoid copepod	3,000
Chaetognath	650
Mollusc larvae	500
Lucifer faxoni	100
Decapod larvae	100
Fish egg	25
Cladocera	13
Total	32,013

Table 32. Numerical abundance and total number of organisms collected at 2/111 EYE-Neuston-Summer.

Calanoid copepod	23,550
Cyclopoid copepod	14,700
Mollusc larvae	600
Harpacticoid copepod	60
Chaetognath	50
Lucifer faxoni	30
Polychaete larvae	30
Amphipod	15
Cladocera	15
Isopod	15
Pteropod	15
Total	39,090

Table 33. Numerical abundance and total number of organisms collected at 3/111 FAX-Neuston-Summer.

Calanoid copepod	2,300
Cyclopoid copepod	2,300
Mollusc larvae	100
Harpacticoid copepod	30
Fish egg	20
Larvacea	20
Lucifer faxoni	10
Amphipod	10
Cladocera	10
Latreutes parvulus	1
File fish	1
Total	4,802

Note: Small amount of *Sargassum* in sample.

Table 34. Numerical abundance and total number of organisms collected in l/IV FEF-Neuston-Summer.

Calanoid copepod	14,500
Cyclopoid copepod	2,375
Harpacticoid copepod	1,125
Mollusc larvae	500
Fish egg	413
Decapod larvae	150
Lucifer faxoni protozoea	88
Amphipod	38
Isopod	13
Chaetognath	13
Polychaete larvae	13
Fish larvae	1
Portunid juvenile	1
Latreutes parvulus	1
Total	19,231

Note: *Sargassum* in sample.

Table 35. Numerical abundance and total number of organisms collected at 2/IV FHG-Neuston-Summer.

Mollusc larvae	6,875
Cyclopoid copepod	5,500
Calanoid copepod	5,375
Fish egg	450
Chaetognath	350
Larvacea	250
Decapod larvae	213
Lucifer faxoni	88
Polychaete larvae	75
Harpacticoid copepod	13
Amphipod	13
Pteropod	13
Total	19,215

Note: Small piece of *Sargassum* in sample.

Table 36. Numerical abundance and total number of organisms collected at 3/IV FKL-Neuston-Summer.

Calanoid copepod	2,750
Cyclopoid copepod	375
Harpacticoid copepod	375
Mollusc larvae	250
Polychaete larvae	250
Cladocera	250
Fish egg	113
Amphipod	75
Latreutes fucorum	38
Latreutes parvulus	25
Decapod larvae	13
Total	4,514

Note: *Sargassum* in sample.

APPENDIX XVIII

SPECIES OF MACROINFAUNA

COLLECTED ON THE STOCS 1975

BLM BENTHIC INVERTEBRATE DATA
INFAUNA

WINTER TRANSECT I STATION 1 DAY DEPTH 10 M.
SAMPLE AGO

GENUS SPECIES	NUMBER
AMPELISCA VADORUM	39
AMPHINOME ROSTRATA	2
ANCISTROSYLLIS PAPILLOSA	1
ARMANDIA AGILIS	1
CLYMEN MUCOSA	1
COSSURA SOYERI	1
DIOPAT CUPREA	3
GYPTIS VITTATA	1
ISOLDA PULCHELLA	1
MAGELONA PETTIBONEPE	1
MAGELONA SP	1
MALOCOCERUS INDICUS	1
MELITA NITIDA	1
NEPHTYS INCISA	1
NEREIS FALSA	6

BLM BENTHIC INVERTEBRATE DATA

INFAUNA

WINTER TRANSECT I STATION I DAY DEPTH 8 M.

SAMPLE AGO

(CONTINUED)

GENUS SPECIES	NUMBER
NEREIS SP	2
NINOE NIGRIPES	1
NOTOMASTUS LATERICEUS	7
ONUPHI EREMIT	1
ONUPHI MAGNA	1
PARAPRIONUSP C PINNATA	5

BLM BENTHIC INVERTEBRATE DATA
INFAUNA
WINTER TRANSECT 1 STATION 1 DAY DEPTH 18 M.
SAMPLE AGP

GENUS SPECIES	NUMBER
AGLAOPHAMUS CIRCINATA	1
AMPELISCA TYPICA	50
AMPELISCA VADORUM	1
AMPHINOME ROSTRATA	2
CLYMEN MUCOSA	1
DIOPAT CUPREA	1
LUMBRINERIS TENUIS	2
MAGELONA SP	1
MALOCOCEROS SP	1
NINOE NIGRIPES	2
NOTOMASTUS LATERICEUS	3
ONUPHI MAGNA	1
PALEONOTUS HETEROSETA	1
PARAPRIONOSPIO PINNATA	4
TRACHYPENAEUS SIMILIS	1

BLM BENTHIC INVERTEBRATE DATA
INFAUNA
WINTER TRANSECT I STATION 1 DAY DEPTH 18 M.
SAMPLE AGU

GENUS SPECIES	NUMBER
AEDICIRA ALBATROSSAE	1
ALPHEUS FLORIDANUS	1
AMPELISCA TYPICA	10
AMPHINOME ROSTRATA	1
ARMANDIA AGILIS	4
BREGMACEROS MACCIELLANDI	1
LUMBRINERIS TENUIS	1
NEPHTYS INCISA	3
NEREIS SP	4
NOTOMASTUS LATERICEUS	1
ONUPHI MAGNA	6
PARAPRIONOSPIO PINNATA	7
PINNIX SP	1

BLM B ENTHIC INVERTEBRATE DATA
INFAUNA

WINTER TRANSECT 1 STATION 1 DAY DEPTH 18 M.
SAMPLE AGR

GENUS SPECIES	NUMBER
ALPHEUS FLORIDANUS	1
AMPELISCA TYPICA	35
AMPELISCA VADORUM	1
ARMANDIA AGILIS	4
DIOPAT CUPREA	4
MAGELONA PETTIBONEPE	1
NASSARIUS VIBEX	13
NEPHTYS INCISA	4
NEREIS SP	2
NINOE NIGRIPES	2
PARAPRIONOSPIO PINNATA	3
STHENELAIS BOA	1

BLM BENTHIC INVERTEBRATE DATA
INFAUNA

WINTER TRANSECT 1 STATION 2 DAY DEPTH 42 M.
SAMPLE AEA

GENUS SPECIES	NUMBER
AMPELISCA TYPICA	1
AMPELISCA VERRILLI	1
ARMANDIA AGILIS	1
AUTOMATE EVERMANII	3
DIOPAT CUPREA	1
MAGELONA PETTIBONEPE	3
MICRONEPHTYS MINUTA	1
NEPHTYS INCISA	1
NEREIS SP	3
NOTOMASTUS LATERICEUS	1
PARAPRIONOSPIO PINNATA	8
SPEOCARCINUS LOBATUS	1

BLM BENTHIC INVERTEBRATE DATA
INFAUNA

WINTER TRANSECT I STATION 2 DAY DEPTH 42 M.
SAMPLE AEB

GENUS SPECIES	NUMBER
ALPHEUS SP	1
AMPELISCA VERRILLI	1
BREGMACEROS MACCIELLANDI	1
MAGELONA SP	1
MICRONEPHTYS MINUTA	1
NEREIS SP	8
NINOE NIGRIPES	1
OPHIUROIDEA	1
PARAPRIONOSPIO PINNATA	9
PRIONOSPIO CIRRIFERA	1
SCOLECOLEPIDES VIRIDIS	1
THARYX SETIGERA	2

BLM BENTHIC INVERTEBRATE DATA
INFAUNA

rIN.@x TRANSECT I STATION 2 DAY DEPTH 42 M.
SAMPLE AEC

GENUS SPECIES	NUMBER
AEDICIRA ALBATROSSAE	1
AMPELISCA TYPICA	1
APSEUDID SP	1
ARICIDEA BREVICORNIS	2
COSSURA DELTA	.
MAGELONA PETTIBONEPE	2
MAGELONA SP	2
NEPHTYS INCISA	3
NEREIS SP	3
PARAPRIONOSPIO PINNATA	6
SPIONIDAE	1
SPIOPHANES BOMBYX	1
WEBSTERINEREIS SP	1

BLM BENTHIC INVERTEBRATE DATA
INFAUNA
WINTER TRANSECT 1 STATION 2 DAY DEPTH 42 M.
SAMPLE AED

GENUS SPECIES	NUMBER
AMPELISCA SP	1
AMPELISCA TYPICA	2
APSEUDID SP	1
ARICIDEA LONGOBRANCHIATA	1
AUTOMATE EVERMANII	1
MAGELONA SP	Y
MEDIOMASTUS CALIFORNIENSIS	1
NEREIS SP	1
NOTOMASTUS LATERICEUS	1
PARAPRIONOSPIO PINNATA	4
SIGAMBRA TENTACULATA	1
SPIONIDAE	1

BLM BENTHIC INVERTEBRATE DATA
INFAUNA
WINTER TRANSECT 1 STATION 3 DAY DEPTH 134 M.
SAMPLE ABB

GENUS SPECIES	NUMBER
ASYCHIS SP	2
EUPANTHALIS TUBIFEX	3
POLYDONTES LUPINA	2

BLM BENTHIC INVERTEBRATE DATA
INFAUNA
WINTER TRANSECT 1 STATION 3 DAY DEPTH 134 M.
SAMPLE ABC

GENUS SPECIES	NUMBER
ARICIDEA JEFFREYSI	1
BRISSI ALTA	1
EUPANTHALIS TUBIFEX	1
LUMBRI PARVIP	1
PARALACYDONIA PARADOXA	2
PARAPRIONOSPIO PINNATA	1

BLM BENTHIC INVERTEBRATE DATA
INFAUNA
WINTER TRANSECT 1 STATION 3 DAY DEPTH 134 M.
SAMPLE ABF

GENUS SPECIES	NUMBER
AGLAOPHAMUS CIRCINATA	1
AMPELISCA TYPICA	1
ARICIDEA JEFFREYSI	1
ECHURD SP	2
HAPLOSCOLOPLOS FOLIOSUS	1
HARPINEA NEGLECTA	1
NOTOMASTUS LATERICEUS	1
PARALACYDONIA PARADOXA	2
SIGAMBRA TENTACULATA	1
TRACHYCARDIUM	1
XENANTHURA BREVITELSON	1

BLM BENTHIC INVERTEBRATE DATA

INFAUNA

WINTER TRANSECT 1 STATION 3 DAY DEPTH 134 M.

SAMPLE ABG

GENUS SPECIES	NUMBER
AMPELISCA ABDITA	0
CIRRATULIDAE	0
NINOE NIGRIPES	0

BLM BENTHIC INVERTEBRATE DATA
INFAUNA
WINTER TRANSECT II STATION 1 DAY DEPTH 22 M.
SAMPLE AKW

GENUS SPECIES	NUMBER
AMPELISCA TYPICA	12
CHASMOCARCINUS MISSISSIPIENSIS	1
CRASSI OSTREA	1
LUMBRINERIS TETRAURA	2
MAGELONA SP	1
NEPHTYS INCISA	3
NEREIS SP	5
NINOE NIGRIPES	1
NOTOMA AMERIC	1
ONUPHI EREMIT	1
PARAPRIONOSPIU PINNATA	30

BLM BENTHIC INVERTEBRATE DATA
INFAUNA
WINTER TRANSECT II STATION 1 DAY DEPTH 22 M.
SAMPLE AKR

GENUS SPECIES	NUMBER
AMPELISCA TYPICA	17
ARICIDEA SP	1
AUTOMATE EVERMANII	1
CRASSI OSTREA	17
NEREIS SP	2
NINOE NIGRIPES	1
PARAPRIONOSPIO PINNATA	6

BLM BENTHIC INVERTEBRATE DATA
INFAUNA
WINTER TRANSECT II STATION 1 DAY DEPTH 22 M.
SAMPLE AKT

GENUS SPECIES	NUMBER
AMPELISCA TYPICA	15
AMPHAR SP	1
ANCISTROSYLLIS PAPILLOSA	1
CRASSI OSTREA	1
DIOPAT CUPREA	1
MAGELONA SP	1
NEPHTYS INCISA	1
NEREIS SP	4
ONUPHI MAGNA	1
PARAPRIONOSPIO PINNATA	9
POLYPTHALMUS PICTA	1
SPIOPHANES BOMBYX	1

BLM BENTHIC INVERTEBRATE DATA
INFAUNA
WINTER TRANSECT II STATION 1 DAY DEPTH 22 M.
SAMPLE AKU

GENUS SPECIES	NUMBER
AMPELISCA TYPICA	34
MAGELONA SP	2
MALOCOCERUS INDICUS	2
NEPHTYS INCISA	4
NEREIS SP	5
PARAPRIONOSPIO PINNATA	53
POLYCI EXIMIU	1
SIGAMBRA TENTACULATA	1

BLM BENTHIC INVERTEBRATE DATA
INFAUNA
WINTER TRANSECT II STATION 2 DAY DEPTH 49 M.
SAMPLE ANP

GENUS SPECIES	NUMBER
EUDORELLA HISPIDA	3
MAGELONA SP	3
NEREIS SP	1
PALEONOTUS HETEROSETA	1
PARAPRIONOSPIO PINNATA	1
POLYPT PICTUS	1

BLM BENTHIC INVERTEBRATE DATA
INFAUNA
WINTER TRANSECT II STATION 2 DAY DEPTH 49 M.
SAMPLE ANW

GENUS SPECIES	NUMBER
AMPELISCA TYPICA	1
ARMANDIA MACULATA	1
NEPHTYS INCISA	1
NEREIS SP	2
NINOE NIGRIPES	1
PARAPRIONOSPIO PINNATA	1

BLM BENTHIC INVERTEBRATE DATA
INFAUNA
WINTER TRANSECT II STATION 2 DAY DEPTH 49 M.
SAMPLE ANS

GENUS SPECIES	NUMBER
COSSURA DELTA	3
MOIRA ATROPO	1
NEPHTYS INCISA	1

BLM BENTHIC INVERTEBRATE DATA
INFAUNA
WINTER TRANSECT II STATION 2 DAY DEPTH 49 M.
SAMPLE ANT

GENUS SPECIES	NUMBER
EUDORELLA HISPIDA	1
MOIRA ATROPO	3
NEREIS SP	2
SIGAMBRA TENTACULATA	1

BLM BENTHIC INVERTEBRATE DATA
INFAUNA
WINTER TRANSECT II STATION 3 DAY DEPTH 3 M.
SAMPLE AQR

GENUS SPECIES	NUMBER
AMPELISCA SP	1
AUTOMATE EVERMANII	1
GLYCINDE SOLITARIA	1
MEDIOMASTUS CALIFORNIENSIS	1
PARAPRIONOSPIO PINNATA	1
THARYX SETIGERA	1

BLM BENTHIC INVERTEBRATE DATA
INFAUNA
WINTER TRANSECT I STATION 3 DAY DEPTH 131 M.
SAMPLE AWS

GENUS SPECIES	NUMBER
AMPELISCA ABDITA	1
PARAPRIONOSPIO PINNATA	1
THARYX SETIGERA	1

BLM BENTHIC INVERTEBRATE DATA
INFAUNA
WINTER TRANSECT II STATION 3 DAY DEPTH 131 M.
SAMPLE AQV

GENUS SPECIES	NUMBER
NUCULADA ACUTA	1

BLM BENTHIC INVERTEBRATE DATA
INFAUNA
WINTER TRANSECT III STATION 1 DAY DEPTH 25 M.
SAMPLE ATW

GENUS SPECIES	NUMBER
AMPELISCA TYPICA	23
AMPELISCA VERRILLI	2
CUMACEAN	1
MAGELONA PHYLLSAE	1
ONUPHI EREMIT	1

BLM BENTHIC INVERTEBRATE DATA
INFAUNA
W NTER TRANSECT III STATION 1 DAY DEPTH 25 M.
SAMPLE ATA

GENUS SPECIES	NUMBER
AMPELISCA TYPICA	48
DIOPAT CUPREA	2
NEPHTYS INCISA	.
NINOE NIGRIPES	2
NOTOMASTUS LATERICEUS	1

BLM BENTHIC INVERTEBRATE DATA
INFAUNA
WINTER TRANSECT III STATION 1 DAY DEPTH 25 M.
SAMPLE ATZ

GENUS SPECIES	NUMBER
AMPELISCA TYPICA	27
DIOPAT CUPREA	1
MAGELONA SP	1
OPHIUROIDEA	1

BLM BENTHIC INVERTEBRATE DATA
INFAUNA
WINTER TRANSECT III STATION 1 DAY DEPTH 25 M.
SAMPLE AUA

GENUS SPECIES	NUMBER
AMPELISCA TYPICA	5
MAGELONA SP	1
NEPHTY SP	1
NINOE NIGRIPES	4
PARAONIDES LYRA	1
SIGAMBRA TENTACULATA	1

BLM BENTHIC INVERTEBRATE DATA
INFAUNA
„INTER TRANSECT III STATION 2 DAY DEPTH 65 M.
SAMPLE AWV

GENUS SPECIES	NUMBER
ARICIDEA FRAGILIS	1

BLM BENTHIC INVERTEBRATE DATA
INFAUNA
WINTER TRANSECT III STATION 2 DAY DEPTH 65 M.
SAMPLE AWW

GENUS SPECIES	NUMBER
ASYCHIS SP	3
MAGELONA SP	3

BLM BENTHIC INVERTEBRATE DATA
INFAUNA
WINTER TRANSECT III STATION 2 DAY DEPTH 65 M.
SAMPLE ANY

GENUS SPECIES	NUMBER
ARICID SUECIC	3
PARAPRIONOSPIO PINNATA	2

BLM BENTHIC INVERTEBRATE DATA
INFAUNA
WINTER TRANSECT III STATION 2 DAY DEPTH 65 M.
SAMPLE AWZ

GENUS SPECIES	NUMBER
AMPELISCA TYPICA	1
COSSURA DELTA	1
NEPHTY SP	1

BLM BENTHIC INVERTEBRATE DATA
INFAUNA
WINTER TRANSECT III STATION 3 DAY DEPTH 106 M.
SAMPLE AZT

GENUS SPECIES	NUMBER
COSSURA DELTA	1
GLYCERA AMERICANA	1
PARAPRIONOSPIO PINNATA	1
SIGAMBRA TENTACULATA	1
THARYX SETIGERA	1

BLM BENTHIC INVERTEBRATE DATA
INFAUNA
WINTER TRANSECT III STATION 3 DAY DEPTH 106 M.
SAMPLE AZU

GENUS SPECIES	NUMBER
MALLET OBTUSA	1
ONUPHI EREMIT	1
PARAPRIONOSPIO PINNATA	2

BLM BENTHIC INVERTEBRATE DATA
INFAUNA
WINTER TRANSECT III STATION 3 DAY DEPTH 106 M.
SAMPLE AZW

GENUS SPECIES	NUMBER
AMPELISCA ABDITA	1
GLYCERA AMERICANA	2
PARAPRIONOSPIO PINNATA	1

BLM BENTHIC INVERTEBRATE DATA
INFAUNA
WINTER TRANSECT III STATION 3 DAY DEPTH 106 M.
SAMPLE AZ.

GENUS SPECIES	NUMBER
CIRRATULIDAE	1
HAPLOSCOLOPLOS FOLIOSUS	1
PARAPRIONOSPIO PINNATA	1
TEREBELLIDES STROEMII	1

BLM BENTHIC INVERTEBRATE DATA
INFAUNA
WINTER TRANSECT IV STATION 1 DAY DEPTH 27 M.
SAMPLE BCR

GENUS SPECIES	NUMBER
AMPELISCA VERRILLI	4
ANCISTROSYLLIS PAPILLOSA	2
ARABELLA IRICOLOR	2
ARICIDEA SP	3
ASYCHIS CAROLINAE	2
CAPITE TERES	1
CARIDEAN SHRIMP(UNID)	1
CHASMOCARCINUS MISSISSIPIENSIS	1
CLYMEN SP	1
CLYMENELLA TORQUATA	2
COROPH ASCHER	6
COROPH BONELL	1
COROPH INSIDI	5
COROPHIUM SP	5
COSSURA DELTA	2

BLM BENTHIC INVERTEBRATE DATA
INFAUNA
WINTER TRANSECT IV STATION 1 DAY DEPTH 27 M.
SAMPLE BCR
(CONTINUED)

GENUS SPECIES	NUMBER
DIOPAT CUPREA	1
EUPANTHALIS TUBIFEX	1
GLYCERA AMERICANA	1
LUMBRI PARVIP	1
LUMBRINERIS TETRAURA	1
MAGELONA PETTIBONEPE	2
MAGELONA PHYLLSAE	8
MALDANE SARSI	1
MEDIOMASTUS CALIFORNIENSIS	1
NEPHTYS INCISA	1
NEREIS SP	6
NOTOMASTUS HEMIPODUS	1
PARAPRIONOSPIO PINNATA	1
SPEOCARCINUS LOBATUS	1
TEREBELLIDES STROEMII	1

BLMBENTHICINVERTEBRATE DATA

INFAUNA

WINTER TRANSECT IV STATION 1 DAY DEPTH 27 M.

SAMPLE BCR

(CONTINUED)

GENUS SPECIES	NUMBER
THARYX SETIGERA	1

BLM BENTHIC INVERTEBRATE DATA
INFAUNA
WINTER TRANSECT IV STATION 1 DAY DEPTH 25 M.
SAMPLE BCS

GENUS SPECIES	NUMBER
AMPELISCA AEQUICORNIS	1
AMPELISCA TYPICA	1
ARABELLA IRICOLOR	1
ARICIO TAYLOR	2
ASYCHIS CAROLINAE	3
BRANIA CLARAT	2
CERATO MIRABI	2
CLYMENELLA TORQUATA	1
COSSURA DELTA	1
DIOPAT CUPREA	1
EUPANTHALIS TUBIFEX	1
GLYCERA AMERICANA	1
LUMBRI PARVIP	1
LUMBRINERIS TETRAURA	1
MAGELONA PHYLLSAE	3

BLM BENTHIC INVERTEBRATE DATA
INFAUNA
WINTER TRANSECT IV STATION 1 DAY DEPTH 27 M.
SAMPLE BCS
(CONTINUED)

GENUS SPECIES	NUMBER
MAGELONA SP	1
NEPHTYS INCISA	1
NEREIS 'SP	3
NOTOMASTUS HEMIPODUS	1
NOTOMASTUS LATERICEUS	1
PARAPRIONOSPIO PINNATA	Y
PSEUDO AMBIGU	1
THARYX SETIGERA	5

BLM BENTHIC INVERTEBRATE DATA
INFAUNA
WINTER TRANSECT IV STATION 1 DAY DEPTH 27 M.
SAMPLE BCU

GENUS SPECIES	NUMBER
AMPELISCA AEQUICORNIS	1
AMPELISCA VERRILLI	2
CERATO MIRABI	1
CLYMENELLA TORQUATA	1
DIOPAT CUPREA	41
DRILONEREIS LONGA	1
GLYCERA AMERICANA	1
LUMBRINERIS TETRAURA	3
MAGELONA PHYLLSAE	2
MALOCOCERUS INDICUS	1
NEPHTYS INCISA	1
NEREIS SP	8
NOTOMASTUS LATERICEUS	1
PARAPRIONOSPIO PINNATA	4
PHYLLO MACULA	1

BLM BENTHIC INVERTEBRATE DATA
INFAUNA
WINTER TRANSECT IV STATION 1 DAY DEPTH 27 M.
SAMPLE BCV

GENUS SPECIES	NUMBER
AMPELISCA AEQUICORNIS	2
AMPELISCA TYPICA	2
AMPELISCA VERRILLI	3
ARABELLA IRICOLOR	1
ARICID TAYLOR	3
CARIDEAN SHRIMP(UNID)	1
CERATO MIRABI	1
CORBULA CONTRACTA	1
DIOPAT CUPREA	3
GLYCERA AMERICANA	3
LUMBRINERIS TETRAURA	8
MAGELONA SP	6
MALDANE SARSI	3
MALOCOCEROS INDICUS	1
NEOPANOPE TEXANA	1

BLM BENTHIC INVERTEBRATE DATA
INFAUNA
WINTER TRANSECT IV STATION 1 DAY DEPTH 27 M.
SAMPLE BCV
(CONTINUED)

GENUS SPECIES	NUMBER
NEREIS 5P	9
NOTOMASTUS SP	1
ONUPHI EREMIT	4
OPHUID SP	1
PARAPRIONOSPIO PINNATA	19
POLYPTHALMUS PICTA	2
TEREBELLIDES STROEMII	2
THARYX SETIGERA	4

BLM BENTHIC INVERTEBRATE DATA
INFAUNA
WINTER TRANSECT IV STATION 2 DAT DEPTH 47 M.
SAMPLE BFU

GENUS SPECIES	NUMBER
ARABELLA IRICOLOR	1
AUTOMATE EVERMANII	1
HARPIN PROPIN	1
MAGELONA SP	A

BLM BENTHIC INVERTEBRATE DATA

INFAUNA

WINTER TRANSECT IV STATION 2 DAY DEPTH 47 M.

SAMPLE BFV

GENUS SPECIES	NUMBER
ASYCHIS SP	1
EUDORELLA TRUNCATULA	1
GONIADA MACULATA	0
MAGELONA SP	0
NEPHTYS INCISA	2
NEREIS SP	0
OPHIUROIDEA	1
PARAPRIONOSPIO PINNATA	0
PINNIXA RETINENS	1

BLM BENTHIC INVERTEBRATE DATA
INFAUNA
WINTER TRANSECT IV STATION 2 DAY DEPTH 47 M.
SAMPLE BFX

GENUS SPECIES	NUMBER
GLYCERA AMERICANA	2
GONIADA MACULATA	1
MAGELONA SP	3
NINOE NIGRIPES	1
PARAPRIONOSPIO PINNATA	2
PROCES HEMPHI	1
XANTHIDAE	1

BLM BENTHIC INVERTEBRATE DATA
INFAUNA
WINTER TRANSECT IV STATION 2 DAY DEPTH 47 M.
SAMPLE BFY

GENUS SPECIES	NUMBER
ALPHEUS FLORIDANUS	1
APSEUDID SP	3
AUTOMATE EVERMANII	0
COSSURA DELTA	3
GLYCERA AMERICANA	1
LUMBRINERIS FRAGILIS	1
MAGELONA SP	2
ONUPHD EREMIT	1
PARAPRIONOSPIO PINNATA	1
PILARD SP	1
SPIOCA LOBATU	1
TEREBELLIDES STROEMII	1

BLM BENTHIC INVERTEBRATE DATA
INFAUNA

WINTER TRANSECT IV STATION 3 DAY DEPTH 91 M.
SAMPLE BOT

GENUS SPECIES	NUMBER
AMPELISCA ABDITA	1
ARACHI OBESA	1
MELLIT NITIDA	1
PARALACYDONIA PARADOXA	1

BLM BENTHIC INVERTEBRATE DATA
INFAUNA
WINTER TRANSECT IV STATION 3 DAY DEPTH 91 M.
SAMPLE BOV

GENUS SPECIES	NUMBER
NEPHTYS INCISA	1
STHENELAIS BOA	1

BLM BENTHIC INVERTEBRATE DATA
INFAUNA
WINTER TRANSECT IV STATION 3 DAY DEPTH 91 M.
SAMPLE BOW

GENUS SPECIES	NUMBER
LOSSURA DELTA	1
GLYCERA TESSELLATA	1

BLM BENTHIC INVERTEBRATE DATA
INFAUNA
WINTER TRANSECT IV STATION 3 DAY DEPTH 91 M.
SAMPLE BOX

GENUS SPECIES	NUMBER
ALPHEUS SP	1
AMPELISCA AEWOICORNIS	1
AMPELISCA TYPICA	1
CAAETOZONE GAKHEADIA	1
CHLEOI VERIDI	1
NEPHTYS INCISA	1
PARAPRIONOSPIO PINNATA	3
SCOLELEPIS SP	1
SIGAMBRA TENTACULATA	1
STHENELAIS LIMICOLA	1

BLM BENTHIC INVERTEBRATE DATA
INFAUNA

SPx NG TRANSECT 1 STATION 1 DAY DEPTH 18 M.
SAMPLE CCR

GENUS SPECIES	NUMBER
AMPELISCA AEQUICORNIS	4
AMPELISCA TYPICA	2
ANCISTROSYLLIS PAPILLOSA	2
ANONYX SARSIA	1
ASYCHIS CAROLINAE	1
CUSSURA DELTA	2
GLYCERA AMERICANA	1
LUMBRI PARVIP	7
LUMBRINERIS SP	1
LUMBRINERIS TENUIS	1
LUMBRINERIS TETRAURA	2
MAGELONA PHYLLSAE	4
MAGELONA SP	1
NEPHTYS INCISA	1
NINOE NIGRIPES	1

BLM BENTHIC INVERTEBRATE DATA

INFAUNA

SPRING TRANSECT 1 STATION 1 DAY DEPTH 18 M.

SAMPLE CCR

(CONTINUED)

GENUS SPECIES	NUMBER
PALEONOTUS HETEROSETA	3
PARAPRIONOSPIO PINNATA	47
PHOTIS MACROCOXA	1
UNCIOLA SERRATA	1

BLM BENTHIC INVERTEBRATE DATA
INFAUNA

SEX NG TRANSECT 1 STATION 1 DAY DEPTH 18 M.
SAMPLE CCS

GENUS SPECIES	NUMBER
AMPELISCA AEQUICORNIS	1
AMPELISCA TYPICA	2
ARMANDIA AGILIS	1
CHASMOCARCINUS MISSISSIPIENSIS	1
DIOPAT CUPREA	3
GLYCERA AMERICANA	1
LISTRIELLA CLYMENELLA	2
LUMBRI PARVIP	7
LUMBRINERIS TENUIS	1
MAGELONA PHYLLSAE	20
MAGELONA SP	1
MELINNOPSIS ATLANTICA	1
NEPHTYS INCISA	1
NINOE NIGRIPES	3
PALEONOTUS HETEROSETA	2

BLM BENTHIC INVERTEBRATE DATA

INFAUNA

SPRING TRANSECT I STATION 1 DAY DEPTH 18 M.

SAMPLE CCS

(CONTINUED)

GENUS SPECIES	NUMBER
PARAPRIONOSPIO PINNATA	101
POLYDORA LIGNI	2
SIGAMBRA BASSI	1
SPIOPHANES BOMBYX	1

BLM BENTHIC INVERTEBRATE DATA
INFAUNA

SPRING TRANSECT 1 STATION 1 DAY DEPTH 18 M.
SAMPLE CCT

GENUS SPECIES	NUMBER
AMPELISCA TYPICA	3
AMPELISCA VADORUM	1
ANCISTROSYLLIS GROENLANDICA	2
ARMANDIA AGILIS	1
COSSURA DELTA	1
DIOPAT CUPREA	4
EUDORELLA TRUNCATULA	1
LUMBRI PARVIP	0
LUMBRINERIS TETRAURA	5
MAGELONA PHYLLSAE	9
MAGELONA SP	
MEDIOMASTUS CALIFORNIENSIS	2
MELINNOPSIS ATLANTICA	2
NEPHTYS INCISA	3
NEREIS SP	

BLM BENTHIC INVERTEBRATE DATA

INFAUNA

SPRING TRANSECT I STATION I DAY DEPTH 18 M.

SAMPLE CCT

(CONTINUED)

GENUS SPECIES	NUMBER
NINOE NIGRIPES	2
NOTOMASTUS LATERICEUS	1
PALEONOTUS HETEROSETA	2
PARAPRIONOSPIO PINNATA	62
POLYDORA SOCIALIS	1
POLYDORA WEBSTERI	1
RENILLA MULLERI	1
STHENELAIS BOA	1

BLM BENTHIC INVERTEBXATE DATA
INFAUNA

SPX NO TRANSECT 1 STATION 1 DAY DEPTH 18 M.
SAMPLE CCO

GENUS SPECIES	NUMBER
AEDICIRA ALBATROSSAE	2
AMPELISCA AEQUICORNIS	1
AMPELISCA VADORUM	1
CIRRATULIDAE	1
COSSURA DELTA	1
DIOPAT CUPREA	4
LUMBRI PARVIP	10
MAGELONA PHYLLSAE	17
NEANTH SUCCIN	1
NEREIS SP	2
NOTOMA AMERIC	1
NOTOMASTUS LATERICEUS	1
PALEONOTUS HETEROSETA	1
PARAPRIONOSPIO PINNATA	104
PHOTIS MACROCOXA	1

BLM BENTHIC INVERTEBRATE DATA

INFAUNA

SPRING TRANSECT 1 STATION 1 DAY DEPTH = M.

SAMPLE CCU

(CONTINUED)

GENUS SPECIES	NUMBER
SIGAMBRA BASSI	1
STHENELAIS BOA	1

BLM BENTHIC INVERTEBRATE DATA
INFAUNA

SPRING TRANSECT 1 STATION 2 DAY DEPTH 42 M.
SAMPLE CFV

GENUS SPECIES	NUMBER
AUTOMATE EVERMANII	1
DIOPAT CUPREA	1
EUDORELLA EMARGINATUS	1
MAGELONA SP	1
NEREIS SP	2
OPHIUROIDEA	1
PARAPRIONOSPIO PINNATA	7
SPIOPHANES SP	1
THARYX SETIGERA	3

BLM BENTHIC INVERTEBRATE DATA
INFAUNA

SPRING TRANSECT I STATION 2 DAY DEPTH 42 M.
SAMPLE CFW

GENUS SPECIES	NUMBER
AMPELISCA AEQUICORNIS	1
BREGMACEROS MACCIELLANDI	1
LUMBRINERIS SP	1
MAGELONA PETTIBONEPE	2
NEREIS SP	3
NINOE NIGRIPES	1
PARAPRIONOSPIO PINNATA	4
PINNIXA RETINENS	1
SPIOPHANES LONGICIRUS	2

BLM BENTHIC INVERTEBRATE DATA

INFAUNA

SPRING TRANSECT I STATION 2 DAY DEPTH 42 M.

SAMPLE CFX

GENUS SPECIES	NUMBER
COSSURA DELTA	2
LUMBRINERIS SP	1
MAGELONA PETTIBONEPE	1
MEDIOMASTUS CALIFORNIENSIS	1
NEPHTYS INCISA	3
NEREIS SP	1
OPHIOPROMUS OBSCURUS	1
PARAONIDAE	1
PARAPRIONOSPIO PINNATA	2
TELLINA SP	1

BLM BENTHIC INVERTEBRATE DATA
INFAUNA
SPRING TRANSECT 1 STATION 2 DAY DEPTH 42 M.
SAMPLE CFY

GENUS SPECIES	NUMBER
ALPHEUS SP	1
AMPELISCA TYPICA	1
ARICIDEA BREVICORNIS	1
COSSURA DELTA	1
DIOPAT CUPREA	1
EUDORELLA TRUNCATULA	1
GLYCERA AMERICANA	1
NEPHTYS INCISA	2
NEREIS SP	3
NINOE NIGRIPES	2
OPHIUROIDEA	1
PARAPRIONOSPIO PINNATA	1

BLM BENTHIC INVERTEBRATE DATA
INFAUNA
SPRING TRANSECT 1 STATION 3 DAY DEPTH 134 M.
SAMPLE C1Z

GENUS SPECIES	NUMBER
AMPELISCA SP	1
ARICIDEA BREVICORNIS	1
DIOPAT COPREA	1
HIPPOMEDON PROPINQUUS	1
PARALACYDONIA PARADOXA	3
SIGAMBRA TENTACULATA	1

BLM BENTHIC INVERTEBRATE DATA
INFAUNA
SPRING TRANSECT I STATION 3 DAY DEPTH 134 M.
SAMPLE CJA

GENUS SPECIES	NUMBER
ANEMONE	1
THARYX SETIGERA	1

BLM BENTHIC INVERTEBRATE DATA
INFAUNA

SPRING TRANSECT 1 STATION 3 DAY DEPTH 134 M.
SAMPLE CJB

GENUS SPECIES	NUMBER
AMPHARETIDAE	1
CUMACEAN	1
NOTUMA AMERIC	1
PARALACYDONIA PARADOXA	1

BLM BENTHIC INVERTEBRATE DATA
INFAUNA
SPRING TRANSECT 1 STATION 3 DAY DEPTH 134 M.
SAMPLE CJC

GENUS SPECIES	NUMBER
PARAPRIONOSPIO PINNATA	1

BLM BENTHIC INVERTEBRATE DATA
INFAUNA
SPRING TRANSECT II STATION 1 DAY DEPTH 22 M.
SAMPLE CMF

GENUS SPECIES	NUMBER
AMPELISCA AEQUICORNIS	5
AMPELISCA TYPICA	30
BRANCHIOASYCHIS AMERICANA	1
COSSURA DELTA	3
DIPLOD SP	7
LISTRIELLA BARNARDI	1
LUMBRINERIS TETRAURA	4
MAGELONA PHYLLSAE	7
MALOCOCERUS INDICUS	1
NEPHTYS INCISA	1
NEREIS SP	5
NINOE NIGRIPES	1
ONUPHI MAGNA	1
PARAPRIONOSPIO PINNATA	130
SIGAMBRA TENTACULATA	1

BLM BENTHIC INVERTEBRATE DATA

INFAUNA

SPRING TRANSECT II STATION 1 DAY DEPTH 22 M.

SAMPLE CMF

(CONTINUED)

GENUS SPECIES	NUMBER
STHENELAIS BOA	1

BLM BENTHIC INVERTEBRATE DATA
INFAUNA
SPRING TRANSECT II STATION 1 DAY DEPTH 22 M.
SAMPLE CMG

GENUS SPECIES	NUMBER
AMPELISCA AEQUICORNIS	19
AMPELISCA TYPICA	44
AMPELISCA VADORUM	1
ANADAR LIENOS	1
CLYMENELLA TORQUATA	0
DIPLOD SP	12
GLYCERA AMERICANA	0
LISTRIELLA CLYMENELLA	1
LUMBRINERIS TETRAURA	5
MAGELONA PHYLLSAE	=
MAGELONA SP	3
MELLIT NITIDA	3
NEPHTYS BUCERA	1
NEPHTYS INCISA	1
NEREIS SP	4

BLM BENTHIC INVERTEBRATE DATA
INFAUNA
SPRING TRANSECT II STATION 1 DAY DEPTH 22 M.
SAMPLE CMG
(CONTINUED)

GENUS SPECIES	NUMBER
NINOE NIGRIPES	0
ONUPHI MAGNA	0
PARAPRIONOSP IO PINNATA	144
PHOTIS MACROCOXA	1
PINNIXA RETINENS	2

OLM BENTHIC INVERTEBRATE DATA
INFAUNA
SPRING TRANSECT II STATION 1 DAY DEPTH 22 M.
SAMPLE CMH

GENUS SPECIES	NUMBER
AMPELISCA AEQUICORNIS	26
AMPELISCA TYPICA	12
ARICID TAYLOR	1
AUTOMA SP	1
CLYMENELLA TORQUATA	1
COROPHIUM SP	1
DIOPAT CUPREA	2
DIPLOD SP	486
GLYCERA AMERICANA	2
LEPIDASTHENIA SP	1
LISTRIELLA CLYMENELLA	2
LUMBRI PARVIP	1
LUMBRINERIS TETRAURA	4
MAGELONA PHYLLSAE	17
NEREIS LAMELLOSA	1

BLM BENTHIC INVERTEBRATE DATA

INFAUNA

SPRING TRANSECT 11 STATION 1 DAY DEPTH 22 M.

SAMPLE CMH

(CONTINUED)

GENUS SPECIES	NUMBER
NEREIS SP	1
NINOE NIGRIPES	1
ONUPHI MAGNA	1
PARAPRIONOSPIO PINNATA	52
PECTINARIA GOULDI	2
PHOTIS MACROCOXA	2
PINNIXA RETINENS	1
SPEOCARCINUS LOBATUS	2
STHENELAIS BOA	1

BLM BENTHIC INVERTEBRATE DATA
INFAUNA
SPRING TRANSECT II STATION 1 DAY DEPTH 22 M.
SAMPLE CMI

GENUS SPECIES	NUMBER
AMPELISCA AEGUICORNIS	49
AMPELISCA TYPICA	32
ARICIDEA WASSI	1
AUTOMATE EVERMANII	1
COSSURA DELTA	3
DIOPAT CUPREA	2
DIPLOD SP	6
HIRUDINEAN	1
LISTRIELLA CLYMENELLA	2
LUMBRINERIS TETRAURA	4
MAGELONA SP	13
NEPHTYS INCISA	2
NEREIS SP	5
ONUPHI MAGNA	3
PARAPRIONOSPIU PINNATA	277

BLM BENTHIC INVERTEBRATE DATA
INFAUNA
SPRING TRANSECT II STATION 1 DAY DEPTH 22 M.
SAMPLE CM1
(CONTINUED)

GENUS SPECIES	NUMBER
PECTINARIA GOULDI	2
PHOTIS MACROCOXA	2
PINNIXA RETINENS	1
POLYDORA SOCIALIS	1
POLYDORA WEBSTERI	1
PRIONOSPIO CIRRIFERA	2
SIGAMBRA TENTACULATA	2
SPIOPHANES BOMBYX	1
STHENELAIS BOA	2
TELLINA SP	1

BLM BENTHIC INVERTEBRATE DATA
INFAUNA

SPRING TRANSECT 1 1 STATION 2 DAY DEPTH 49 M.
SAMPLE CPJ

GENUS SPECIES	NUMBER
AMPELISCA SP	1
ARICID TAYLOR	1
COSSURA DELTA	1
DRILONEREIS MAGNA	1
EUDORELLA HISPIDA	1
MAGELONA PHYLLSAE	1
MAGELONA SP	1
NEPHTYS INCISA	1
ONUPHI MAGNA	1
PARAPRIONOSPIO PINNATA	2
TEREBELLID SP	1

BLM BENTHIC INVERTEBRATE DATA
INFAUNA
SPRING TRANSECT II STATION 2 DAY DEPTH 49 M.
SAMPLE CPK

GENUS SPECIES	NUMBER
APSEUDID SP	1
ARABELLA IRICOLOR	1
COSSURA DELTA	1
EUPANTHALIS TUBIFEX	1
GYPTIS VITTATA	1
MAGELONA SP	2
MOIRA ATROPO	1
NEPHTYS INCISA	3
OPHION LIMICO	1
PARAPRIONOSPIO PINNATA	1
PECTINARIA GOULDI	1
POLYPT PICTUS	1
SPIOPHANES BOMBYX	1
THARYX SETIGERA	1

BLM BENTHIC INVERTEBRATE DATA
INFAUNA
SPRING TRANSECT II STATION 2 DAY DEPTH 49 M.
SAMPLE CPL

GENUS SPECIES	NUMBER
ARABELLA IRICOLOR	1
CARIDEAN SHRIMP(UNID)	1
EUPANTHALIS TUBIFEX	1
MOIRA ATROPO	1
NEPHTYS INCISA	4
NEREIS SP	6
PARAPRIONOSPIO PINNATA	4
PINNIXA RETINENS	1
SIGAMBRA TENTACULATA	1
TEREBO SP	1
THARYX SETIGERA	2

BLM BENTHIC INVERTEBRATE DATA
INFAUNA
SP× NO TRANSECT II STATION 2 DAY DEPTH 49 M.
SAMPLE CPM

GENUS SPECIES	NUMBER
CARIDEAN SHRIMP(UNID)	1
COSSURA DELTA	4
EUDORELLA TRUNCATULA	2
MAGELONA SP	5
NEPHTYS INCISA	4
NEREIS SP	2
PHYLLOPOCE MUCOSA	1
TEREBD SP	1
THARYX SETIGERA	1

OLM BENTHIC INVERTEBRATE DATA
INFAUNA
SPRING TRANSECT II STATION 3 DAY DEPTH 131 M.
SAMPLE CSP

GENUS SPECIES	NUMBER
NEPHTYS BUCERA	1
SYNELMIS ALBINI	1

BLM BENTHIC INVERTEBRATE DATA
INFAUNA
SPRING TRANSECT II STATION 3 DAY DEPTH 131 M.
SAMPLE CSW

GENUS SPECIES	NUMBER
COSSURA DELTA	1
PARALACYDONIA PARADOXA	1
SIGAMBRA TENTACULATA	

BLM BENTHIC INVERTEBRATE DATA
INFAUNA
SPRING TRANSECT II STATION 3 DAY DEPTH 131 M.
SAMPLE CSR

GENUS SPECIES	NUMBER
GLYCERA CAPITATA	1
NEPHTYS INCISA	1
SIGAMBRA TENTACULATA	2

BLM BENTHIC INVERTEBRATE DATA
INFAUNA
SPRING TRANSECT II STATION 3 DAY DEPTH 131 M.
SAMPLE CSS

GENUS SPECIES	NUMBER
ARICIDEA CERRUTI	1
CARIDEAN SHRIMP(UNID)	1
HIPPOMEDON PROPINQUUS	1
LEIOCAPITELLA GLABRA	1
NEPHTYS INCISA	1
SIPUNC SP	1
UPOGEBIA AFFINIS	3

BLM BENTHIC INVERTEBRATE DATA
INFAUNA
SPRING TRANSECT III STATION 1 DAY DEPTH 25 M.
SAMPLE CWT

GENUS SPECIES	NUMBER
AMPELISCA AEQUICORNIS	16
AMPELISCA SP	2
AMPELISCA TYPICA	27
AMPELISCA VADORUM	8
ANCISTROSYLLIS JONESI	1
AUTOMATE EVERMANII	1
BREGMACEROS MACCIELLANDI	1
COROPHIUM VOLUTATOR	3
DIOPAT CUPREA	1
EUDORELLA TRUNCATULA	1
HAPLOSCOLOPLOS FOLIOSUS	1
LUMBRI PARVIP	1
MAGELONA PETTIBONEPE	1
MAGELONA PHYLLSAE	1
MEDIOMASTUS CALIFORNIENSIS	1

BLM BENTHIC INVERTEBRATE DATA

INFAUNA

SPRING TRANSECT III STATION 1 DAY DEPTH 25 M.

SAMPLE CWT

(CONTINUED)

GENUS SPECIES	NUMBER
NEPHTYS INCISA	3
NINOE NIGRIPES	1
PARAPRIONOSPIO PINNATA	144
PHOTIS MACROCOXA	1
SIGALONIDAE	1
SPIOPHANES BOMBYX	1
STHENELAIS BOA	1
TRACHYPENAEUS SIMILIS	1

BLM BENTHIC INVERTEBRATE DATA
INFAUNA
SPRING TRANSECT III STATION 1 DAY DEPTH 25 M.
SAMPLE CWU

GENUS SPECIES	NUMBER
AMPELISCA SP	1
AMPELISCA TYPICA	17
AMPELISCA VADORUM	1
DIOPAT CUPREA	1
HAPLOSCOLOPLOS FOLIOSUS	1
LUMBRINERIS TETRAURA	1
MAGELONA SP	1
MEDIOMASTUS CALIFORNIENSIS	1
NEPHTYS INCISA	3
NINOE NIGRIPES	3
PARAPRIONOSPIO PINNATA	15
SIGAMBRA OCELLATA	1
STHENELAIS BOA	2

BLM BENTHIC INVERTEBRATE DATA
INFAUNA
SPX-NG TRANSECT III STATION 1 DAY DEPTH 25 M.
SAMPLE CNV

GENUS SPECIES	NUMBER
AMPELISCA ABDITA	1
AMPELISCA TYPICA	16
AMPELISCA VADORUM	1
COSSURA DELTA	1
DIOPAT CUPREA	2
LUMBRI PARVIP	2
MAGELONA SP	1
NEPHTYS INCISA	4
NINOE NIGRIPES	3
ONUPHI EREMIT	1
PARAPRIONOSPIO PINNATA	7
PINNOD SP	1
THARYX SETIGERA	1

BLM BENTHIC INVERTEBRATE DATA
INFAUNA
SPRING TRANSECT III STATION 1 DAY DEPTH 25 M.
SAMPLE CWW

GENUS SPECIES	NUMBER
GYPTIS VITTATA	1
NINOE NIGRIPES	2
PARAPRIONOSPIO PINNATA	1
PRIONOTUS STEARNSI	1
SIGAMBRA TENTACULATA	1

BLM BENTHIC INVERTEBRATE DATA
INFAUNA
SPRING TRANSECT III STATION 2 DAY DEPTH 65 M.
SAMPLE CZS

GENUS SPECIES	NUMBER
APSEUDID SP	1
ARMANDIA AGILIS	2
COSSURA DELTA	5
DIOPAT CUPREA	
MAGELONA PETTIBONEPE	3
MICRODEUTOPAS ANOMALUS	1
NEPHTYS INCISA	1
OPHIUROIDEA	1
PHYLLO SP	
PSEUDOEURYTHOE SP	2
THARYX SETIGERA	1

BLM BENTHIC INVERTEBRATE DATA
INFAUNA
SPRING TRANSECT III STATION 2 DAY DEPTH 65 M.
SAMPLE C2T

GENUS SPECIES	NUMBER
AUTOMATE EVERMANII	5
COSSURA DELTA	2
CUMACEAN	1
DRILONEREIS MAGNA	1
GLYCERA AMERICANA	1
MAGELONA PETTIBONEPE	6
NEPHTYS INCISA	1
PARAPRIONOSPIO PINNATA	2
SCOLELEPIS TEXANA	1
SIGALONIDAE	
SPIOPHANES LONGICIRUS	2

BLM BENTHIC INVERTEBRATE DATA
INFAUNA
SPRING TRANSECT III STATION 2 DAY DEPTH 65 M.
SAMPLE CZU

GENUS SPECIES	NUMBER
AEDICIRA SP	2
CHASMOCARCINUS MISSISSIPIENSIS	1
DRILONEREIS MAGNA	1
MAGELONA PETTIBONEPE	1
PARAPRIONOSPIO PINNATA	2
PSEUDOEURYTHOE SP	1

BLM BENTHIC INVERTEBRATE DATA
INFAUNA
SPRING TRANSECT III STATION 2 DAY DEPTH 65 M.
SAMPLE CZV

GENUS SPECIES	NUMBER
COSSURA DELTA	2
MAGELONA PETTIBONEPE	1
MALOCOCERUS INDICUS	1
NEREIS SP	1
PARAPRIONOSPIO PINNATA	1
SIGAMBRA TENTACULATA	1
THARYX SETIGERA	2

BLM BENTHIC INVERTEBRATE DATA
INFAUNA
SPRING TRANSECT III STATION 3 DAY DEPTH 106 M.
SAMPLE DCR

GENUS SPECIES	NUMBER
PSEUDOEURYTHOE SP	2

OLM BENTHIC INVERTEBRATE DATA
INFAUNA
SPRING TRANSECT III STATION 3 DAY DEPTH 106 M.
SAMPLE DCS

GENUS SPECIES	NUMBER
PARAPRIONOSPIO PINNATA	1

BLM BENTHIC INVERTEBRATE DATA
INFAUNA
SPRING TRANSECT III STATION 3 DAY DEPTH 106 M.
SAMPLE DCT

GENUS SPECIES	NUMBER
ALPHEUS SP	1
APSEUDID SP	1
AUTOMATE EVERMANII	1
COSSURA DELTA	1
MEDIOMASTUS CALIFORNIENSIS	1
SPEOCARCINUS LOBATUS	1

BLM BENTHIC INVERTEBRATE DATA
INFAUNA
SPRING TRANSECT III STATION 3 DAY DEPTH 106 M.
SAMPLE DCU

GENUS SPECIES	NUMBER
AGLAOPHAMUS CIRCINATA	1
APSEUDID SP	2
COSSURA DELTA	2
ONUPHI EREMIT	1
PARALACYDONIA PARADOXA	3
PARAPRIONOSPIO PINNATA	2
SIGAMBRA TENTACULATA	1

BLM BENTHIC INVERTEBRATE DATA
INFAUNA

SPRING TRANSECT IV STATION 1 DAY DEPTH 27 M.
SAMPLE DFW

GENUS SPECIES	NUMBER
AMPELISCA ABDITA	2
AMPELISCA TYPICA	2
DIOPAT COPREA	2
LISTRIELLA CLYMENELLA	2
LUMBRINERIS TETRAURA	3
MAGELONA SP	3
NEREIS SP	3
NOTOMASTUS LATERICEUS	1
ONUPHIS SP	1
PARAPRIONOSPIO PINNATA	14
PINNIXA RETINENS	1
POLYDORA WEBSTERI	
PRIONOSPIO STEENSTRUPI	1
SIGAMBRA TENTACULATA	1
SPIOPHANES BOMBYX	

BLM BENTHIC INVERTEBRATE DATA

INFAUNA

SPRING TRANSECT IV STATION 1 DAY DEPTH 27 M.

SAMPLE DFW

(CONTINUED)

GENUS SPECIES	NUMBER
THARYX SETIGERA	1

BLM BENTHIC INVERTEBRATE DATA
INFAUNA
SPRING TRANSECT IV STATION 1 DAY DEPTH 27 M.
SAMPLE DFR

GENUS SPECIES	NUMBER
AMPELISCA AEQUICORNIS	4
AMPELISCA SP	1
AMPELISCA VERRILLI	5
ASYCHIS CAPENSIS	1
COSSURA DELTA	1
DIOPAT CUPREA	1
GLYCERA AMERICANA	3
LUMBRI PARVIP	3
MAGELONA PETTIBONEPE	1
MAGELONA PHYLLSAE	2
MAGELONA SP	2
NEPHTYS INCISA	1
NEREIS SP	6
NOTOMASTUS LATERICEUS	3
OWENIA FUSIFORMIS	2

BLM BENTHIC INVERTEBRATE DATA
INFAUNA
SPRING TRANSECT IV STATION 1 DAY DEPTH 27 M.
SAMPLE DFR
(CONTINUED)

GENUS SPECIES	NUMBER
PARAPRIONOSPIO PINNATA	14
PINNIXA RETINENS	1
PRIONOSPIO STEENSTRUPI	3
SIGAMBRA TENTACULATA	1
TEREBELLIDES STROEMII	1
THARYX SETIGERA	3

BLM BENTHIC INVERTEBRATE DATA
INFAUNA
SPR NO TRANSECT IV STATION 1 DAY DEPTH 25 M.
SAMPLE DFS

GENUS SPECIES	NUMBER
AMPELISCA ABDITA	2
AMPELISCA SP	2
AMPELISCA TYPICA	1
ASYCHIS CAROLINAE	1
AUTOMATE EVERMANII	2
CALIGO SP	1
CIRRATULIDAE	1
DIOPAT CUPREA	1
EUDORELLA TRUNCATULA	1
GLYCERA AMERICANA	1
LUMBRINERIS TETRAURA	4
MAGELONA PHYLLSAE	1
MAGELONA SP	3
MALOCOCEROS INDICUS	1
MELINNOPSIS ATLANTICA	2

BLM BENTHIC INVERTEBRATE DATA
INFAUNA
SPRING TRANSECT IV STATION 1 DAY DEPTH 27 M.
SAMPLE DFS
(CONTINUED)

GENUS SPECIES	NUMBER
NEPHTY SP	1
NEREIS SP	1
NOTOMASTUS LATERICEUS	1
ONUPHI EREMIT	1
ONUPHI MAGNA	1
OWENIA FUSIFORMIS	3
PARAONIDAE	1
PARAPRIONOSPIO PINNATA	2
PECTID SP	1
PINNIXA RETINENS	1
PRIONOSPIO STEENSTRUPI	21
THARYX SETIGERA	1

BLM BENTHIC INVERTEBRATE DATA
INFAUNA
SPRING TRANSECT IV STATION 1 DAY DEPTH 27 M.
SAMPLE DFT

GENUS SPECIES	NUMBER
ALPHEUS FLORIDANUS	1
BREGMACEROS MACCLELLANDI	2
CLYMENELLA TORQUATA	1
DIOPAT CUPREA	1
GLYCERA AMERICANA	2
LUMBRINERIS TENUIS	1
NEREIS SP	3
NOTOMASTUS LATERICEUS	1
OWENIA FUSIFORMIS	1

BLM BENTHIC INVERTEBRATE DATA
INFAUNA
SPRING TRANSECT IV STATION 2 DAY DEPTH 47 M.
SAMPLE DIG

GENUS SPECIES	NUMBER
ARMANDIA AGILIS	1
BREGMACEROS MACCLELLAND	1
CHASMOCARCINUS MISSISSIPIENSIS	1
COSSURA DELTA	1
MAGELONA PETTIBONEPE	1
OPHIUROIDEA	1
PARAONIDES LYRA	2

BLM BENTHIC INVERTEBRATE DATA
INFAUNA
SPx NG TRANSECT IV STATION 2 DAY DEPTH 47 M.
SAMPLE DIR

GENUS SPECIES	NUMBER
CORUPHIUM SP	1
MAGELONA PETTIBONEPE	1
NEREIS SP	2
NINOE NIGRIPES	1
OPHIUROIDEA	1
PARAPRIONOSP O PINNATA	1
THARYX SETIGERA	1

BLM BENTHIC INVERTEBRATE DATA
INFAUNA
SPRING TRANSECT IV STATION 2 DAY DEPTH 47 M.
SAMPLE DIS

GENUS SPECIES	NUMBER
APSEUDID SP	1
ARICIDEA SP	1
AUTOMATE EVERMANII	1
CHASMOCARCINUS MISSISSIPIENSIS	1
CUSSURA DELTA	1
MAGELONA PETTIBONEPE	1
NEPHTYS INCISA	2
OPHIUROIDEA	1
THARYX SETIGERA	3

BLM BENTHIC INVERTEBRATE DATA
INFAUNA
SPRING TRANSECT IV STATION 2 DAY DEPTH 47 M.
SAMPLE DIT

GENUS SPECIES	NUMBER
DIOPAT CUPREA	1
NINOE NIGRIPES	1

BLM BENTHIC INVERTEBRATE DATA
INFAUNA
SPRING TRANSECT IV STATION 3 DAY DEPTH 91 M.
SAMPLE DLY

GENUS SPECIES	NUMBER
LEPAS SP	1
NEPHTY SP	1
PARALACYDONIA PARADOXA	1
STERNASPIS SCUTATA	1

BLMBENTHICINVERTEBRATE DATA

INF AUNA

SPRING TRANSECT IV STATION 3 DAY DEPTH 91 M.

SAMPLE DLZ

GENUS SPECIES	NUMBER
PARALACYDONIA PARADOXA	1
PARAPRIONOSPIO PINNATA	1

OLM BENTHIC INVERTEBRATE DATA
INFAUNA
SPRING TRANSECT IV STATION 3 DAY DEPTH 91 M.
SAMPLE UMA

GENUS SPECIES	NUMBER
PARALACYDONIA PARADOXA	2
PARAPRIONOSPIO PINNATA	1
SIGAMBRA TENTACULATA	1

BLM BENTHIC INVERTEBRATE DATA
INFAUNA
SPRING TRANSECT 10 STATION 3 DAY DEPTH 91 M.
SAMPLE DM8

GENUS SPECIES	NUMBER
ARICIDEA JEFFREYSI	1

BLM BENTHIC INVERTEBRATE DATA
INFAUNA
SUMMER TRANSECT SUM STATION 1 DAY DEPTH *** M.
SAMPLE EWT

GENUS SPECIES	NUMBER
AMPELISCA AEGUICORNIS	1
AMPELISCA TYPICA	5
ANCHOA SP	2
ARMANDIA AGILIS	2
CHASMOCARCINUS MISSISSIPIENSIS	2
DIOPAT CUPREA	1
LUMBRINERIS FRAGILIS	1
LUMBRINERIS TETRAURA	2
MALDANE SARSI	1
NEPHTYS INCISA	5
NINOE NIGRIPES	3
NOTOMASTUS LATERICEUS	2
PARAPRIONOSPIO PINNATA	1
SIGAMBRA TENTACULATA	3

BLM BENTHIC INVERTEBRATE DATA
INFAUNA
SUMMER TRANSECT SUM STATION 1 DAY DEPTH *** M.
SAMPLE EWU

GENUS SPECIES	NUMBER
AMPELISCA TYPICA	20
AMPELISCA VERRILLI	3
DIOPAT CUPREA	1
LUMBRINERIS TETRAURA	2
MAGELONA PETTIBONEPE	3
NEPHTYS INCISA	2
NINOE NIGRIPES	1
OPHIUROIDEA	1
PARAPRIONOSPIO PINNATA	3
SIGAMBRA TENTACULATA	2

BLM BENTHIC INVERTEBRATE DATA
INFAUNA
SUMMER TRANSECT SUM STATION 1 DAY DEPTH *** M.
SAMPLE EWV

GENUS SPECIES	NUMBER
AMPELISCA AEQUICORNIS	1
AMPELISCA TYPICA	12
LUMBRINERIS FRAGILIS	1
LUMBRINERIS TETRAURA	1
MAGELONA SP	1
NEPHTYS INCISA	2
NEREIDAE	1
NINOE NIGRIPES	1
PARAPRIONOSPIO PINNATA	1
SIGAMBRA TENTACULATA	2

BLM BENTHIC INVERTEBRATE DATA
INFAUNA
SUMMER TRANSECT SUM STATION 1 DAY DEPTH *** M.
SAMPLE EWW

GENUS SPECIES	NUMBER
AMPELISCA AEQUICORNIS	1
AMPELISCA TYPICA	6
LUMBRINERIS TETRAURA	2
NEPHTYS INCISA	2
NEREIDAE	3
NINOE NIGRIPES	1
NOTOMASTUS LATERICEUS	1
ONUPHI EREMIT	2
SIGAMBRA TENTACULATA	3
XANTHIDAE	1

OLM BENTHIC INVERTEBRATE DATA

INFAUNA

SUMMER TRANSECT 1 STATION 1 DAY DEPTH 18 Mb

SAMPLE ECR

GENUS SPECIES	NUMBER
ANCISTROSYLLIS PAPILLOSA	1
ASYCHIS CAROLINAE	1
EUDORELLA EMARGINATUS	1
MAGELONA PHYLLSAE	&
NEPHTYS INCISA	2
NEREIS SP	3
NINOE NIGRIPES	2

BLM BENTHIC INVERTEBRATE DATA
INFAUNA

SUMMER TRANSECT 1 STATION 1 DAY DEPTH 18 M.
SAMPLE ECS

GENUS SPECIES	NUMBER
DIOPAT CUPREA	1
GLYCERA AMERICANA	1
MAGELONA PHYLLSAE	5
MARPHYSA SANGUINEA	1
NINOE NIGRIPES	1

BLM BENTHIC INVERTEBRATE DATA
INFAUNA
SUMMER TRANSECT 1 STATION 1 DAY DEPTH 18 M.
SAMPLE ECT

GENUS SPECIES	NUMBER
AMPHIPRORA SP	1
ANCISTROSYLLIS GROENLANDICA	6
ASYCHIS CAROLINAE	5
CLYMENELLA TORQUATA	1
COSSURA DELTA	1
DIOPAT CUPREA	2
GLYCERA AMERICANA	1
LUMBRINERIS FRAGILIS	1
LUMBRI PARVIP	3
LUMBRINERIS TENUIS	1
MAGELONA PHYLLSAE	19
MAGELONA SP	1
NINOE NIGRIPES	1
OPHIUROIDEA	1
PARAPRIONOSPIO PINNATA	1

BLM BENTHIC INVERTEBRATE DATA

INFAUNA

SUMMEX TRANSECT 1 STATION 1 DAY DEPTH 1σ M•

SAMPLE ECT

(CONTINUED)

GENUS SPECIES	NUMBER
POLYDORA LIGNI	1
SIGAMBRA TENTACULATA	
SPEOCARCINUS LOBATUS	1
STHENELAIS BOA	1

BLM BENTHIC INVERTEBRATE DATA
INFAUNA
SUMMER TRANSECT I STATION 1 DAY DEPTH 18 M.
SAMPLE ECU

GENUS SPECIES	NUMBER
ASYCHIS CAROLINAE	1
AUTOMATE EVERMANII	1
COSSURA DELTA	1
DIOPAT CUPREA	1
LUMBRI PARVIP	4
MAGELONA PHYLLSAE	48
NEREIS SP	4
NINOE NIGRIPES	2
SIGAMBRA TENTACULATA	3
THARYX SETIGERA	1

BLM BENTHIC INVERTEBRATE DATA
INFAUNA
SUMMER TRANSECT I STATION 2 DAY DEPTH 42 M.
SAMPLE EFV

GENUS SPECIES	NUMBER
AMPELISCA AEQUICORNIS	1
AMPELISCA TYPICA	1
ARICIDEA JEFFREYSI	1
CIRRATULIDAE	1
COSSURA DELTA	1
MAGELONA PETTIBONEPE	2
MAGELONA PHYLLSAE	1
NEPHTYS INCISA	2
NEREIS SP	1
OPHIUROIDEA	1
PARAPRIONOSPIO PINNATA	1
PINNIXA RETINENS	1
POLYPT PICTUS	1
SCULELEPIS TEXANA	1

BLM BENTHIC INVERTEBRATE DATA
INFAUNA
SUMMER TRANSECT 1 STATION 2 DAY DEPTH 42 M.
SAMPLE EFW

GENUS SPECIES	NUMBER
AMPELISCA AEQUICORNIS	1
APSEUDID SP	1
COSSURA DELTA	3
LUMBRINERIS TETRAURA	2
MAGELONA PETTIBONEPE	2
MICROPANOPE SCULPTIPES	1
MINUSPIO CIRRIFERA	1
NEPHTYS INCISA	1
NEPHTY SP	1
NEREIS SP	1
PARAPRIONOSPIO PINNATA	1
PINNIXA RETINENS	1

BLM BENTHIC INVERTEBRATE DATA
INFAUNA
SUMMER TRANSECT 1 STATION 2 DAY DEPTH 42 M.
SAMPLE EFA

GENUS SPECIES	NUMBER
LUMBRINERIS TETRAURA	1
MAGELONA PETTIBONEPE	2
NEPHTYS INCISA	1
NEREIS SP	2
NOTOMASTUS HEMIPODUS	1
OPHIUROIDEA	1
PARAONIDAE	1
PINNIXA RETINENS	1
THARYX SETIGERA	4

BLM BENTHIC INVERTEBRATE DATA
INFAUNA

SOMMEX TRANSECT 1 STATION 2 DAY DEPTH 42 M.
SAMPLE EFY

GENUS SPECIES	NUMBER
APSEUDID SP	1
CARIDEAN SHRIMP(UNID)	1
EUDORELLA HISPIDA	1
GLYCERA AMERICANA	1
GYPTIS VITTATA	1
MAGELONA PETTIBONEPE	3
MOIRA ATROPO	1
PARAPRIONOSPIO PINNATA	2
THARYX SETIGERA	1

BLM BENTHIC INVERTEBRATE DATA
INFAUNA
SUMMER TRANSECT 1 STATION 3 DAY DEPTH 134 M.
SAMPLE E12

GENUS SPECIES	NUMBER
PARALACYDONIA PARADOXA	1
STHENELAIS BOA	1

OLM BENTHIC INVERTEBRATE DATA
INFAUNA
SUMMER TRANSECT 1 STATION 3 DAY DEPTH 134 M.
SAMPLE EJA

GENUS SPECIES	NUMBER
ARABELLA IRICOLOR	1
NEPHTYS INCISA	1
PARALACYDONIA PARADOXA	1

BLM BENTHIC INVERTEBRATE DATA
INFAUNA

SUMMER TRANSECT 1 STATION 3 DAY DEPTH 134 M=
SAMPLE EJB

GENUS SPECIES	NUMBER
GLYCERA AMERICANA	1
NEPHTY SP	2
NINOE NIGRIPES	1
OPHIUROIDEA	1
WEBSTERINEXEIS TRIDENTATA	

BLM BENTHIC INVERTEBRATE DATA
INFAUNA
SUMMER TRANSECT 1 STATION 3 DAY DEPTH 134 M.
SAMPLE EJC

GENUS SPECIES	NUMBER
NEPHTYS INCISA	1
NINOE NIGRIPES	1
PRUCES HEMPHI	1

BLM BENTHIC INVERTEBRATE DATA
INFAUNA

SUMMER TRANSECT 11 STATION 1 DAY DEPTH 22 M.
SAMPLE EMF

GENUS SPECIES	NUMBER
AMPELISCA AEQUICORNIS	1
AMPELISCA TYPICA	1
AMPELISCA VADORUM	1
COSSURA DELTA	1
MAGELONA PETTIBONEPE	1
NEREIS SP	2
PARAPR PINNIX	4

BLM BENTHIC INVERTEBRATE DATA
INFAUNA
SUMMER TRANSECT II STATION 1 DAY DEPTH 22 M.
SAMPLE EMG

GENUS SPECIES	NUMBER
AMPELISCA TYPICA	3
GONPLD SP	1
HETEROMASTUS FILIFORMIS	1
MAGELONA PHYLLSAE	1
MALOCOCEROS INDICUS	2
NEREIS SP	3
NOTOMASTUS LATERICEUS	1
OPHIUROIDEA	1
PARAPRIONOSPIO PINNATA	10
PSEUDOEURYTHOE SP	1
SIGAMBRA TENTACULATA	1

BLM BENTHIC INVERTEBRATE DATA
INFAUNA
SUMMER TRANSECT II STATION 1 DAY DEPTH 22 M.
SAMPLE EMH

GENUS SPECIES	NUMBER
AMPELISCA AEQUICORNIS	1
AMPELISCA TYPICA	10
ARICID TAYLOR	1
ARMANDIA AGILIS	2
COSSURA DELTA	2
DRILONEREIS MAGNA	1
MAGELONA PHYLLSAE	1
MEDIOMASTUS CALIFORNIENSIS	4
NEPHTYS INCISA	.
NEREIS SP	4
NINOE NIGRIPES	1
ONUPHI EREMIT	2
PARAPRIONOSPIO PINNATA	8
POLYPT PICTUS	1
SIGAMBRA TENTACULATA	1

OLM BENTHIC INVERTEBRATE DATA

INFAUNA

SUMMER TRANSECT II STATION 1 DAY DEPTH 22 M.

SAMPLE EMH

(CONTINUED)

GENUS SPECIES	NUMBER
SPIOPHANES BOMBYX	1

BLM BENTHIC INVERTEBRATE DATA
INFAUNA

SUMMER TRANSECT II STATION 1 DAY DEPTH 22 M.
SAMPLE EMI

GENUS SPECIES	NUMBER
AMPELISCA AEQUICORNIS	1
AMPELISCA TYPICA	9
ARICIDEA SP	1
ARMANDIA AGILIS	2
AUTOMATE EVERMANII	1
CARIDEAN SHRIMP(UNI.	2
COSSURA DELTA	2
DIOPAT CUPREA	1
MALOCOCERUS INDICUS	1
MEDIOMASTUS CALIFORNIENSIS	4
NEREIS SP	3
NOTOMASTUS LATERICEUS	1
PARAPRIONOSPIO PINNATA	11
SIGAMBRA TENTACULATA	1

BLM BENTHIC INVERTEBRATE DATA
INFAUNA
SUMMER TRANSECT II STATION 2 DAY DEPTH 49 M.
SAMPLE EPK

GENUS SPECIES	NUMBER
APOPRIONOSPIO SP	1
COSSURA DELTA	3
EUDORE SP	1
MAGELONA PETTIBONEPE	4
NEPHTYS INCISA	1

BLM BENTHIC INVERTEBRATE DATA
INFAUNA
SUMMER TRANSECT II STATION 2 DAY DEPTH 49 M.
SAMPLE EPL

GENUS SPECIES	NUMBER
COSSURA DELTA	1
EUDORELLA EMARGINATUS	1
LUMBRINERIS FRAGILIS	1
MINUSP OLYBR	1
NEPHTYS INCISA	3
ONUPHI EREMIT	1
OPHIUROIDEA	1
PARAPRIONOSPIO PINNATA	2
SPEOCA DELTA	1
THARYX SETIGERA	1

BLM BENTHIC INVERTEBRATE DATA
INFAUNA
SUMMER TRANSECT II STATION 2 DAY DEPTH 49 M.
SAMPLE EPM

GENUS SPECIES	NUMBER
ASYCHIS CAROLINAE	1
CUSSURA DELTA	1
PINNIXA SAYANA	1
SPIOPHANES BOMBYX	1

BLM BENTHIC INVERTEBRATE DATA
INFAUNA
SUMMER TRANSECT II STATION 2 DAY DEPTH 49 M.
SAMPLE EPN

GENUS SPECIES	NUMBER
AMPELISCA TYPICA	1
DRILONEREIS LONGA	1
MAGELONA SP	1
NEPHTYS INCISA	1
NINOE NIGRIPES	1
SPIOPHANES BOMBYX	1

BLM BENTHIC INVERTEBRATE DATA

INFAUNA

SUMMER TRANSECT II STATION 3 DAY DEPTH 131 M.

SAMPLE ESR

GENUS SPECIES	NUMBER
COSSURA DELTA	1
NINOE NIGRIPES	1

BLM BENTHIC INVERTEBRATE DATA
INFAUNA
SUMMER TRANSECT II STATION 3 DAY DEPTH 131 M.
SAMPLE ESS

GENUS SPECIES	NUMBER
ARICIDEA SP	1
COSSURA DELTA	
SIGAMBRA TENTACULATA	1
THARYX SETIGERA	1

BLM BENTHIC INVERTEBRATE DATA
INFAUNA
SUMMER TRANSECT II STATION 3 DAY DEPTH 13. M.
SAMPLE EST

GENUS SPECIES	NUMBER
AMPHIPRORA SP	1
ARICIDEA JEFFREYSI	1
AUTOMATE EVERMANII	1
PARALACYDONIA PARADOXA	1

BLM BENTHIC INVERTEBRATE DATA
INFAUNA
SUMMER TRANSECT II STATION 3 DAY DEPTH 131 M.
SAMPLE ESU

GENUS SPECIES	NUMBER
AMPELISCA TYPICA	1
BREGMACEROS MACCIELLANDI	1
NEPHTYS INCISA	2
NINOE NIGRIPES	2
PARAPRIONOSPIO PINNATA	1

BLM BENTHIC INVERTEBRATE DATA
INFAUNA
SUMMER TRANSECT III STATION 2 DAY DEPTH 45 M.
SAMPLE EZS

GENUS SPECIES	NUMBER
AUTOMATE EVERMANII	1
DRILONEREIS MAGNA	1
MALDANE SARSI	1
NEPHTYS INCISA	2
STHENELAIS BOA	1
XANTHIDAE	1

BLM BENTHIC INVERTEBRATE DATA
INFAUNA
SUMMER TRANSECT III STATION 2 DAY DEPTH 65 M.
SAMPLE EZT

GENUS SPECIES	NUMBER
ARICIDEA JEFFREYSI	
AUTOMATE EVERMANII	1
COSSURA DELTA	3
LISTRIELLA BARNARDI	1
LUMBRINERIS LATRELLI	1
LUMBRINERIS TETRAURA	1
MAGELONA PETTIBONEPE	3
NEOCONGER MUCRONATUS	
PINNIXA RETINENS	1
TEREBELLIDES STROEMII	1

BLM BENTHIC INVERTEBRATE DATA

INFAUNA

SUMMER TRANSECT III STATION 2 DAY GLPOF 65 M.

SAMPLE EZU

GENUS SPECIES	NUMBER
AMPELISCA TYPICA	1
AUTOMATE EVERMANII	2
MAGELONA PETTIBONEPE	1

BLM BENTHIC INVERTEBRATE DATA

INFAUNA

SOMMEX TRANSECT III STATION 2 DAY DEPTH 65 M.

SAMPLE EZY

GENUS SPECIES	NUMBER
ALPHEUS FLORIDANUS	1
AUTOMATE EVERMANII	1
MAGELONA PETIIBONEPE	1
TEREBO SP	1

OLM BENTHIC INVERTEBRATE DATA
INFAUNA
SUMMER TRANSECT III STATION 3 DAY DEPTH 106 M.
SAMPLE FC2

GENUS SPECIES	NUMBER
APSEUDID SP	1
ARICIDEA JEFFREYSI	1
CARIDEAN SHRIMP(UNID)	1
LISTRIELLA BARNARDI	1
NINOE NIGRIPES	1
PARALC PARADO	3
PARAPRIONOSPIO PINNATA	1
PECTINARIA GOULDI	1
SIGAMBRA TENTACULATA	2

BLM BENTHIC INVERTEBRATE DATA
INFAUNA
SUMMER TRANSECT III STATION 3 DAY DEPTH 106 M.
SAMPLE FDA

GENUS SPECIES	NUMBER
COSSURA DELTA	1
NEOPAN SP	1
PARAPRIONOSPIO PINNATA	1
SIGAMBRA TENTACULATA	1
THARYX SETIGERA	1

BLM BENTHIC INVERTEBRATE DATA
INFAUNA
SUMMER TRANSECT III STATION 3 DAY DEPTH 106 M.
SAMPLE FDB

GENUS SPECIES	NUMBER
ARICIDEA JEFFREYSI	2
AURINI KIENER	1
AUTOMATE EVERMANII	1
BREGMA MACCEL	1
CAAETOZONE GARHEADIA	1
COSSURA DELTA	1
EUPOMATUS PROTULICOLA	18
FLABELLIGERIDAE	1
GLYCERA AMERICANA	1
NEPHTYS PICTA	1
NEREIS SP	1
NINOE NIGRIPES	1
OPHIUROIDEA	1
PARALACYDONIA PARADOXA	1
PARAPRIONOSPIO PINNATA	2

BLM BENTHIC INVERTEBRATE DATA

INFAUNA

SUMMER TRANSECT III STATION 3 DAY DEPTH 106 M.

SAMPLE FDB

(CONTINUED)

GENUS SPECIES	NUMBER
SIGAMBRA TENTACULATA	3
THARYX SETIGERA	1

BLM BENTHIC INVERTEBRATE DATA
INFAUNA

SUMMER TRANSECT IV STATION 1 DAY DEPTH 27 M.
SAMPLE FFY

GENUS SPECIES	NUMBER
AMPELISCA AEQUICORNIS	1
AMPELISCA VADORUM	1
AMPELISCA VERRILLI	4
AMPHIC GUNNER	2
ARABELLA IRICOLOR	1
ARMANDIA AGILIS	1
CAAETOZONE GARMEADIA	1
CLYMENELLA TORQUATA	1
DOPATR CUPREA	6
ERICHT RUBRIC	1
EUPOMATUS PROTULICOLA	1
GLYCERA AMERICANA	5
LUMBRINERIS TETRAURA	1
MAGELONA PHYLLSAE	2
MAGELONA SP	3

BLM BENTHIC INVERTEBRATE DATA
INFAUNA
SUMMER TRANSECT IV STATION 1 DAY DEPTH 27 M.
SAMPLE FFY
(CONTINUED)

GENUS SPECIES	NUMBER
MALDANE SARSI	1
NEPHTYS PICTA	3
NEREIS SP	3
ONUPHIS SP	2
PORTUNIDAE	1
PRIONOSPIO STEENSTRUPI	3
SIGAMBRA TENTACULATA	1
TELLINA SP	1
TEREBELLIDES STROEMII	1
THARYX MARIONI	2
THARYX SETIGERA	2

BLM BENTHIC INVERTEBRATE DATA
INFAUNA
SUMMER TRANSECT IV STATION 1 DAY DEPTH 25 M.
SAMPLE FFZ

GENUS SPECIES	NUMBER
AMPELISCA ABDITA	1
AMPELISCA AEQUICORNIS	2
AMPELISCA TYPICA	9
AMPELISCA VERRILLI	12
ARICID JEFFER	1
ARMANDIA AGILIS	4
CAAETOZONE GARHEADIA	1
CHASMOCARCINUS MISSISSIPIENSIS	1
CLYMENELLA TORQUATA	4
COSSURA DELTA	.
DIOPAT CUPREA	7
EUDORELLA HISPIDA	1
GLYCERA AMERICANA	4
LEPTOC SERRAT	1
LUMBRINERIS FRAGILIS	2

BLM BENTHIC INVERTEBRATE DATA
INFAUNA
SUMMER TRANSECT IV STATION 1 DAY DEPTH 27 M.
SAMPLE FFZ
(CONTINUED)

GENUS SPECIES	NUMBER
LUMBRI PARVIP	6
LUMBRINERIS TETRAURA	1
MAGELONA PETTIBONEPE	12
MAGELONA SP	4
MALDANE SARSI	4
MONOCU NORVEG	1
NEPHTYS PICTA	1
NEREIDAE	1
NEREIS SP	20
ONUPHIS SP	1
PARAON FULGEN	1
PARAPRIONOSPIO PINNATA	7
PRIONOSPIO STEENSTRUPI	29
PSEUDOEURYTHOE SP	2
SPEOCARCINUS LOBATUS	3

BLM BENTHIC INVERTEBRATE DATA

INFAUNA

SUMMER TRANSECT IV STATION 1 DAY DEPTH 27 M.

SAMPLE FFZ

(CONTINUED)

GENUS SPECIES	NUMBER
TELLINA SP	1
TEREBELLIDES STROEMII	1
THARYX MARIONI	1

BLM BENTHIC INVERTEBRATE DATA
INFAUNA
SUMMER TRANSECT IV STATION 1 DAY DEPTH 27 M.
SAMPLE FGA

GENUS SPECIES	NUMBER
AMPELISCA TYPICA	4
AMPELISCA VERRILLI	2
AMPHIC GUNNER	1
ARICIDEA FRAGILIS	1
ARMANDIA AGILIS	3
AUTOMATE EVERMANII	2
CLYMENELLA TORQUATA	2
COSSURA DELTA	2
DIOPAT CUPREA	1
GLYCERA AMERICANA	2
LUMBRI PARVIP	1
MAGELONA PETTIBONEPE	3
MALOCO IDICUS	1
NEPHTYS PICTA	1
NEREIS SP	2

BLM BENTHIC INVERTEBRATE DATA

INFAUNA

SUMMER TRANSECT IV STATION 1 DAY DEPTH 27 M.

SAMPLE FGA

(CONTINUED)

GENUS SPECIES	NUMBER
NOTOMASTUS LATERICEUS	1
ONUPHIS SP	1
PARAPRIONOSPIO PINNATA	1
PRIONOSPIO STEENSTRUPI	9
TEREBELLIDES STROEMII	3

BLM BENTHIC INVERTEBRATE DATA
INFAUNA
SUMMEX TRANSECT IV STATION 1 DAY DEPTH 27 M.
SAMPLE FGB

GENUS SPECIES	NUMBER
AMPELISCA AEQUICORNIS	1
AMPELISCA TYPICA	16
AMPELISCA VERRILLI	10
AMPHIZ GUNNER	3
ARICIDEA SP	1
ARMANDIA AGILIS	3
AUTOMATE EVERMANII	1
COROPHIUM SP	1
COSSURA DELTA	2
DIOPAT CUPREA	2
DRILONEREIS MAGNA	1
LUMBRINERIS FRAGILIS	3
LUMBRI PARVIP	3
LUMBRINERIS SP	1
MAGELONA PHYLLSAE	3

OLM BENTHIC INVERTEBRATE DATA
INFAUNA

SUMMER TRANSECT IV STATION 1 DAY DEPTH 27 M.
SAMPLE FGB
(CONTINUED)

GENUS SPECIES	NUMBER
MAGELONA SP	6
MALDANE SARSI	2
MINUSPIO CIRRIFERA	1
MINUSP LONGIB	1
NEPHTYS INCISA	1
NEREIS SP	9
NOTOMASTUS LATERICEUS	2
ONUPHIS SP	1
PARAPRIONUSPIO PINNATA	4
PHOTIS SP	3
PRIONOSPIO STEENSTRUPI	18
PSEUDOEURYTHOE SP	1
SPEOCARCINUS LOBATUS	2
TELLINA SP	3
THARYX MARIONI	4

BLM BENTHIC INVERTEBRATE DATA
INFAUNA

SUMMER TRANSECT IV STATION 2 DAY DEPTH 47 M.
SAMPLE FJA

GENUS SPECIES	NUMBER
AMPELISCA AEQUICORNIS	2
ARICIDEA BREVICORNIS	1
ARICID JEFFER	1
MAGELONA PETTIBONEPE	3
MICROPANOPE SCULPTIPES	1
OPHIUROIDEA	1
PINNIXA SAYANA	1
SIGAMBRA TENTACULATA	1
THARYX SETIGERA	1

BLM BENTHIC INVERTEBRATE DATA
INFAUNA
SUMMER TRANSECT IV STATION 2 DAY DEPTH 47 M.
SAMPLE FJB

GENUS SPECIES	NUMBER
AMPELISCA TYPICA	2
AMPHARETIDAE	1
APSEUDID SP	2
ARICID JEFFER	1
LUMBRINERIS TETRAURA	2
MAGELONA PETTIBONEPE	1
MINUIS LONGIB	2
NEPHTYS INCISA	2
NOTOMASTUS LATERICEUS	1
ORBINIDAE	1
PINNIXA RETINENS	2
THARYX SETIGERA	1

BLM BENTHIC INVERTEBRATE DATA
INFAUNA

SUMMER TRANSECT IV STATION 2 DAY DEPTH 47 M.
SAMPLE FJC

GENUS SPECIES	NUMBER
ARMANDIA AGILIS	1
AUTOMATE EVERMANII	2
MAGELONA PETTIBONEPE	1
NEPHTYS INCISA	2
NOTOMASTUS LATERICEUS	2
ONUPHI SPA	1
SCOLELEPIS TEXANA	1
THARYX SETIGERA	1

BLM BENTHIC INVERTEBRATE DATA
INFAUNA
SUMMER TRANSECT IV STATION 2 DAY DEPTH 47 M.
SAMPLE FJU

GENUS SPECIES	NUMBER
APSEUDID SP	1
ARICIDEA JEFFREYSI	1
COSSURA DELTA	3
DRILONEREIS MAGNA	1
LUMBRINERIS FRAGILIS	1
MAGELONA PETTIBONEPE	3
TELLINA SP	1

BLM BENTHIC INVERTEBRATE DATA
INFAUNA
SUMMER TRANSECT IV STATION 3 DAY DEPTH 91 M.
SAMPLE FLY

GENUS SPECIES	NUMBER
ALPHEUS SP	1
AMPELISCA AEQUICORNIS	1
APSEUDID SP	3
PARAPRIONOSPIO PINNATA	2

BLM BENTHIC INVERTEBRATE DATA
INFAUNA
SUMMER TRANSECT IV STATION 3 DAY DEPTH 91 M.
SAMPLE FMJ

GENUS SPECIES	NUMBER
AGLAUPHAMUS CIRCINATA	1
AMPELISCA ABDITA	1
AMPELISCA VERRILLI	1
APSEUDID SP	1
CALLIANASSA LATISPINA	1
CLYMENELLA TORQUATA	1
COSSURA DELTA	2
ERICHT RUBRIC	1
EUNICD 5P	1
FLABELLIGERIDAE	4
GLYCERA AMERICANA	3
MALOCOCERUS INDICUS	1
OMUPHI SPA	1
PARALACYDONIA PARADOXA	1
SPIONIDAE	1

BLM BENTHIC INVERTEBRATE DATA

INFAUNA

SUMMER TRANSECT IV STATION 3 DAY DEPTH 91 M.

SAMPLE FMJ

(CONTINUED)

GENUS SPECIES	NUMBER
SURPUD SP	1
THARYX SETIGERA	1

BLM BENTHIC INVERTEBRATE DATA
INFAUNA
SUMMER TRANSECT IV STATION 3 DAY DEPTH 91 M.
SAMPLE FMK

GENUS SPECIES	NUMBER
AGLAOPHAMUS CIRCINATA	1
AMPELISCA ABDITA	1
AMPELISCA VERRILLI	0
AMPHIPRORA SP	0
APSODI SP	0
AUTOMATE EVERMANII	1
CALLIANASSA LATISPINA	1
CALOCA OXYPLE	1
COSSURA DELTA	1
ERICHT RUBRIC	0
FLABELLIGERIDAE	1
GLYCERA AMERICANA	5
MARPHYSA ARANSENSIS	1
MELITA DENTAT	0
MINUSPIO SP	1

BLM BENTHIC INVERTEBRATE DATA
INFAUNA
SUMMER TRANSECT IV STATION 3 DAY DEPTH 91 M.
SAMPLE FMK
(CONTINUED)

GENUS SPECIES	NUMBER
NEOPANOPE TEXANA	1
NOTOMA LATERA	1
ONUPHIS SP	8
ONUPHI SPA	1
PARALACYDONIA PARADOXA	2
PARAPRIONOSPIO PINNATA	1
PHYLLO GROENL	1
PRIONOSPIO STEENSTRUPI	1
RUDELE NAGLEI	0
SHRIMP SP	1
SPIOPH BOBBYX	1
THARYX SETIGERA	2

BLM BENTHIC INVERTEBRATE DATA
INFAUNA
SUMMER TRANSECT IV STATION 3 DAY DEPTH 9. M.
SAMPLE FML

GENUS SPECIES	NUMBER
AMPELISCA ABDITA	1
AMPELISCA TYPICA	1
AMPELISCA VERRILLI	4
ANAITI LONGIP	1
APSEUD SPB	1
APSEUD SPC	1
CORUPHIUM SP	2
DRILONEREIS MAGNA	2
ERICHT RUBRIC	1
FLABELLIGERIDAE	2
GLYCINDE SOLITARIA	2
LUMBRINERIS TENUIS	1
LYSIAD SP	1
ONUPHI SPA	3
ONUPHI SPB	1

BLM BENTHIC INVERTEBRATE DATA
INFAUNA
SUMMER TRANSECT IV STATION 3 DAY DEPTH 91 M.
SAMPLE FML
(CONTINUED)

GENUS SPECIES	NUMBER
OPHIUROIDEA	1
PARALACYDONIA PARADOXA	3
PARAPRIONOSPIO PINNATA	2
POLYCHAETE (UNID) FLANGEWORM	2
POLYND SP	
POLYPT PICTUS	.
PRIONO SP	.
PSEUDOEURYTHOE SP	4
SHRIMP SP	2
STHENE SP	1
THARYX SETIGERA	2
UNCIOL IRRORA	6

BLM BENTHIC INVERTEBRATE DATA
INFAUNA

SOMMEX TRANSECT IV STATION 3 DAY DEPTH 91 M.
SAMPLE FMM

GENUS SPECIES	NUMBER
AGLAOPHAMUS CIRCINATA	7
DRILONEREIS MAGNA	1
FLABELLIGERIDAE	4
LUMBRINERIS TENUIS	1
ONUPHI SPA	5
ONUPHI SPB	1
PARAPRIONOSPIO PINNATA	1
POLYCHAETE (UNID) FLANGEWORM	2
PSEUDOEURYTHOE SP	2
SHRIMP SP	1
STHENE SPA	2
UNCIOLA SERRATA	2

WORKPT PRINTS

APPENDIX XIX

SPECIES OF MACROEPIFAUNA

COLLECTED ON THE STOCS 1975

BLM BENTHIC INVERTEBRATE DATA
EPIFAUNA

WINTER TRANSECT I STATION 1 DAY DEPTH 16 M.
SAMPLE AHD

GENUS SPECIES	NUMBER	MALES	FEMALES	FEM. W/EGGS
CALLINECTES SIMILIS	5	3	2	0
CARIDEAN SHRIMP(UNID)	1	0	0	0
LOLLIGUNCULA BREVIS	158	0	0	0
PENAEUS DUORARUM	1	0	0	0
PENAEUS SETIFERUS	28	15	13	0
PORTUNUS SPINICARPUS	5	2	3	0
RENILLA MULLERI	1	0	0	0
SICYONIA DORSALIS	6	4	2	0
SQUILLA EMPUSA	15	5	10	0
TRACHYPENAEUS SIMILIS	12	1	11	0

OLM BENTHIC INVERTEBRATE DATA
EPIFAUNA

WINTER TRANSECT 1 STATION 1 NIGHT DEPTH 18 M.
SAMPLE AFL

GENUS SPECIES	NUMBER	MALES	FEMALES	FEM. W/EGGS
CALIACTIS TRICOLOR	3	0	0	0
CALLINECTES SIMILIS	142	71	71	0
CANTHARUS CANCELLARIA	1	0	0	0
DIOPAT CUPREA	2	0	0	0
HEPATUS EPHELITICUS	1	1	0	0
ILIOCANTHUS LIODACTYLUS	1	0	1	0
LOLLIGUNCULA BREVIS	6	0	0	0
PENAEUS SETIFERUS	58	28	30	0
PORTUNUS GIBBESI	3	0	3	0
RENILLA MULLERI	4	0	0	0
SICYONIA DORSALIS	113	0	0	0
SQUILLA EMPUSA	55	26	29	0
TRACHYPENAEUS SIMILIS	122	25	97	0

OLM BENTHIC INVERTEBRATE DATA
EPIFAUNA
WINTER TRANSECT I STATION 2 DAY DEPTH 42 M.
SAMPLE AFB

GENUS SPECIES	NUMBER	MALES	FEMALES	FEM. W/EGGS
ASTROPECTEN DUPLICATUS	3	0	0	0
CALLINECTES SIMILIS	4	1	3	0
DIOPAT CUPREA	3	0	0	0
LOLLIGUNCULA BREVIS	206	0	u	0
PENAEUS AZTECUS	3	2	1	0
PORTUNUS SPINICARPUS	I	0	0	o
SICYONIA DORSALIS	17	9	8	u
SQUILLA CHYDAEA	1	1	0	0
TRACHYPENAEUS SIMILIS	2	0	2	cl

BLM BENTHIC INVERTEBRATE DATA
EPIFAUNA

WINTER TRANSECT 1 STATION 2 NIGHT DEPTH 42 M.
SAMPLE ACT

GENUS SPECIES	NUMBER	MALES	FEMALES	FEM. W/EGGS
ASTROPECTEN DUPLICATUS	28	8	0	0
ASYCHIS SP	1	0	0	0
CALLINECTES SIMILIS	16	5	1	2
DIOPAT CUPREA	5	0	0	0
LOLLIGUNCULA BREVIS	1	0	0	0
MUIRA ATROPO	5	0	0	0
PENAEUS AZTECUS	30	14	16	0
SICYONIA DORSALIS	287	143	44	0
SOLENOCERA VIOSCI	1		0	0
SQUILLA CHYDAEA	11	5	6	0
SQUILLA EMPUSA	1	0		0
TRACHYPENAEUS SIMILIS	64	7	57	0

BLM BENTHIC INVERTEBRATE DATA
EPIFAUNA

WINTER TRANSECT 1 STATION 3 DAY DEPTH 134 M.
SAMPLE ABD

GENUS SPECIES	NUMBER	MALES	FEMALES	FEM. W/EGGS
ACANTHOCARPUS ALEXANDRI	5	2	3	0
AMPHIPRORA SP	2	0	0	0
ANASIMUS LATUS	1	0	1	1
ASTROPECTEN DUPLICATUS	3	0	0	0
ASYCHIS SP	2	0	0	0
BRISSI ALTA	3	0	0	0
COLLODES LEPTOCHELES	1	0	0	0
PARDANUS INSIGNIS	1	0	1	0
EUPANTHALIS TUBIFEX	3	0	0	0
HERMIT CRABS	111	0	0	0
LOLIGO PEALEA	2	0	0	0
LOLLIGUNCULA BREVIS	6	0	0	0
NUCULA CONCEN	6	0	0	0
PAGURUS ANNULIPES	2	0	0	0
PAGURU LONGIR	1	0	1	1

BLM BENTHIC INVERTEBRATE DATA

EPIFAUNA

WINTER TRANSECT 1 STATION 3 DAY DEPTH 134 M.

SAMPLE ABD

(CONTINUED)

GENUS SPECIES	NUMBER	MALES	FEMALES	FEM. W/EGGS
PARAPENAEUS LONGIROSTRUS	9	0	0	0
POLYDONTES LUPINA	2	0	0	0
PORTUNUS SPINICARPUS	13	4	9	4
RANINOIDEA LOUISIANENSIS	1	0	0	0
RUASTER ALEXANDRI	1	0	0	0
TRIGONIOCARDIUM ANTILLARUN	6	0	0	0

OLM BENTHIC INVERTEBRATE DATA
EPIFAUNA

WINTER TRANSECT 1 STATION 3 NIGHT DEPTH 134 M.
SAMPLE BHW

GENUS SPECIES	NUMBER	MALES	FEMALES	FEM. W/EGGS
ACANTHOCARPUS ALEXANDRI	3	0	3	3
ANASIMUS LATUS	1	0	1	1
ASTROPECTEN SP	1	0	0	0
AURINOPSIS KIENERI	2	0	0	0
BRISSI ALTA	14	0	0	0
CANCELLARIA RETICULATA	1	0	0	0
CUSPIDARIA MEDIA	1	0	0	0
CYMOPOLIA OBESA	1	0	1	1
ETHUSA MICROPHALMA	1	0	1	0
EUPANTHALIS TUBIFEX	3	0	0	0
LOLIGO PEALEA	3	0	0	0
MICROCARDIUM PERMABLE	4	0	0	0
MYROPSIS QUINQUESPINOSA	1	0	0	0
PARAPENAEUS LONGIROSTRUS	12	0	0	0
PENAEI SP	12	0	0	0

OLM BENTHIC INVERTEBRATE DATA

EPIFAUNA

WINTER TRANSECT I STATION 3 NIGHT DEPTH 134 M.

SAMPLE BHW

(CONTINUED)

GENUS SPECIES	NUMBER	MALES	FEMALES	FEM. W/EGGS
PETROC OIDGEN	9	5	4	4
POLYDONTES LUPINA	2	0	0	0
PORTUNUS SPINICARPUS	8	1	7	3
RANINOIDEA LOUISIANENSIS	2	0	0	0
SOLENOCERA VIOSCI	4	0	0	0
TRIGONIOCARDIUM ANTILLARUN	2	0	0	0

BLM BENTHIC INVERTEBRATE DATA
EPIFAUNA

WINTER TRANSECT II STATION 1 DAY DEPTH 22 M.
SAMPLE AJB

GENUS SPECIES	NUMBER	MALES	FEMALES	FEM. W/EGGS
CALLINECTES SIMILIS	1	0	0	0
LOLIGO PEALEA	120	0	0	0

BLM BENTHIC INVERTEBRATE DATA
EPIFAUNA
WINTER TRANSECT II STATION 1 NIGHT DEPTH 22 M.
SAMPLE AII

GENUS SPECIES	NUMBER	MALES	FEMALES	FEM. W/EGGS
CALLINECTES SIMILIS	1	1	0	0
LOLIGO PEALEA	1	0	0	0
LOLLIGUNCULA BREVIS	7	0	0	0
PENAEUS AZTECUS	35	22	13	0
PORTUNUS GIBBESI	2	0	2	0
SICYONIA BREVIROSTRIS	2	0	2	0
SQUILLA CHYDAEA	1	0	0	0
SQUILLA EMPUSA	1	0	0	0
TRACHYPENAEUS SIMILIS	44		43	0

DLM BENTHIC INVERTEBRATE DATA

EPIFAUNA

WINTER TRANSECT 11 STATION 2 DAY DEPTH 49 M.

SAMPLE AMA

GENUS SPECIES	NUMBER	MALES	FEMALES	FEM. W/EGGS
CALLINECTES SIMILIS	2	1	1	0
LOLLIGUNCULA BREVIS	88	0	0	0
MULINIA LATERALIS	4	0	0	0
PENAEUS AZTECUS	2	1	1	0
SICYONIA DORSALIS	21	4	15	0

BLM BENTHIC INVERTEBRATE DATA
EPIFAUNA

WINTER TRANSECT II STATION 2 DAY DEPTH 49 M.
SAMPLE ANX

GENUS SPECIES	NUMBER	MALES	FEMALES	FEM. W/EGGS
AMUSIUM PAPYRACEUS	72	0	0	0
ANADAR NOTABI	1	0	0	0
ANASIMUS LATUS	1	0	0	0
ASTROPECTEN CINGULATUS	14	0	0	0
BRISSI ALTA	76	0	0	0
CALLINECTES SIMILIS	15	1	4	0
PAGURU LONGIR	1	0	0	0
PANDAL SP	2	0	2	1
PARAPENAEUS LONGIRUSTRUS	4	0	0	0
PENAEUS AZTECUS	6	2	4	0
PORTUNUS SPINICARPUS	4	3	1	0
RANINOIDEA LOUISIANENSIS	2	0	0	0
SOLENOCERA VIOSCI	5	0	0	0
SQUILLA CHYDAEA	2	0	0	0
TELLINA SP	2	0	0	0

BLM BENTHIC INVERTEBRATE DATA
EPIFAUNA

WINTER TRANSECT II STATION 2 NIGHT DEPTH 49 M.
SAMPLE ALG

GENUS SPECIES	NUMBER	MALES	FEMALES	FEM. W/EGGS
LOLLIGUNCULA BREVIS	1	0	0	0
PENAEUS AZTECUS	1	0	1	0
SICYONIA DORSALIS	1	0	1	0
TRACHYPENAEUS SIMILIS	1	0	1	0

BLM BENTHIC INVERTEBRATE DATA
EPIFAUNA
WINTER TRANSECT II STATION 3 DAY DEPTH 3 M.
SAMPLE APD

GENUS SPECIES	NUMBER	MALES	FEMALES	FEM. W/EGGS
ANADAR NOTABI	4	0	0	0
LOLIGO PEALEA	2	0	0	0
LOLLIGONCULA BREVIS	6	0	0	0
MOIRA ATROPO	3	0	0	0
PENAEUS AZTECUS	1	0	0	0
SOLENOCERA VIOSCI	1	0	0	0

BLM BENTHIC INVERTEBRATE DATA
EPIFAUNA

WINTER TRANSECT II STATION 3 NIGHT DEPTH 131 M.
SAMPLE A01

GENUS SPECIES	NUMBER	MALES	FEMALES	FEM. W/EGGS
AMUSIUM PAPYRACEUS	14	0	0	0
ANADAR NOTABI	1	0	0	0
ANASIMUS LATUS	1	0	0	0
LOLIGO PEALEA	1	0	0	0
LOLLIGUNCULA BREVIS	1	0	L	0
PARAPENAEUS LONGIROSTRUS	1	0	0	0
PARAPENAEUS LONGIROSTRUS	1	0	0	0
PENAEUS AZTECUS	4	1	3	0
PORTUNUS SPINICARPUS	2	1	1	0
SOLENOCERA VIOSCI	4	2	1	0
SQUILLA CHYDAEA	1	1	0	0

BLM BENTHIC INVERTEBRATE DA A
EPIFAUNA
WINTER TRANSECT III STATION 1 DAY DEPTH 25 M.
SAMPLE ASF

GENUS SPECIES	NUMBER	MALES	FEMALES	FEM. W/EGGS
LOLIGO PEALEA	2	0	2	0
LOLLIGUNCULA BREVIS	206	0	0	0
PENAEUS AZTECUS	4	0	4	0
SQUILLA EMPUSA	1	0	0	0
TRACHYPENAEUS SIMILIS	1	0	0	0

BLM BENTHIC INVERTEBRATE DATA
EPIFAUNA
WINTER TRANSECT III STATION 1 NIGHT DEPTH 25 M.
SAMPLE ARL

GENUS SPECIES	NUMBER	MALES	FEMALES	FEM. W/EGGS
CALLINECTES SIMILIS	5	1	4	0
LOLIGO PEALEA	3	0	0	0
LOLLIGUNCULA BREVIS	32	0	0	0
PENAEUS AZTECUS	40	17	23	0
PENAEUS DUORARUM	1	0	1	0
SICYONIA BREVIROSTRIS	4	3	1	0
SICYONIA DORSALIS	1	0	0	0
SQUILLA EMPUSA	6	1	5	0
TRACHYPENAEUS SIMILIS	25	23	2	0

BLM BENTHIC INVERTEBRATE DATA
EPIFAUNA
WINTER TRANSECT 111 STATION 2 NIGHT DEPTH 65 M.
SAMPLE AUK

GENUS SPECIES	NUMBER	MALES	FEMALES	FEM. W/EGGS
LOLIGO PEALEA	1	0	0	0
LOLLIGUNCULA BREVIS	431	0	0	0
PENAEUS AZTECUS	2	0	0	0

BLM BENTHIC INVERTEBRATE DATA
EPIFAUNA
WINTER TRANSECT III STATION 2 NIGHT DEPTH 65 M.
SAMPLE AUU

GENUS SPECIES	NUMBER	MALES	FEMALES	FEM. W/EGGS
ASTROPECTEN CINGULATUS	1	0	0	0
CALLINECTES SIMILIS	7	4	3	0
LOLLIGUNCULA BREVIS	2	0	0	0
PARAPENAEUS LONGIROSTRUS	2	0	0	0
PENAEUS AZTECUS	7	5	2	0
PORTUNUS SPINIMANUS	1	0	1	0
SICYONIA DORSALIS	24	1	23	0
SOLENOCERA VIOSCI	7	0	0	0

BLM BENTHIC INVERTEBRATE DATA
EPIFAUNA
WINTER TRANSECT III STATION 3 DAY DEPTH 106 M.
SAMPLE AYH

GENUS SPECIES	NUMBER	MALES	FEMALES	FEM. W/EGGS
LOLIGO PEALEA	8	0	0	0
LOLLIGUNCULA BREVIS	18	0	0	0
PENAEUS AZTECUS	9	8	1	0

BLM BENTHIC INVERTEBRATE DATA

EPIFAUNA

WINTER TRANSECT IV STATION 1 DAY DEPTH 27 M.

SAMPLE 6BG

GENUS SPECIES	NUMBER	MALES	FEMALES	FEM. W/EGGS
ARCHITICTONICA NOBILIS	1	0	0	0
CHIONE CLENCHI	1	0	0	0
LOLIGO PEALEA	9	0	0	0
LOLLIGUNCULA BREVIS	62	0	0	0
MUREX FULVESCENS	1	0	0	0
PENAEUS AZTECUS	4	0	4	0
PORTUNUS GIBBESI	1	0	1	0
SICYONIA BREVIROSTRIS	1	0	1	0
SICYONIA DORSALIS	6	0	6	0
TRACHYPENAEUS SIMILIS	3	1	2	0

BLM BENTHIC INVERTEBRATE DATA
EPIFAUNA

WINTER TRANSECT IV STATION 1 NIGHT DEPTH 27 M.
SAMPLE BAL

GENUS SPECIES	NUMBER	MALES	FEMALES	FEM. W/EGGS
LOLLIGUNCULA BREVIS	59	0	0	0
PENAEUS AZTECUS	15	3	12	0
PENAEUS DUORARUM	4	3	1	0
SICYONIA BREVIROSTRIS	24	9	15	0
SICYONIA DORSALIS	34	9	27	0
SOLENOCERA ATLANTIDIS	1	0	0	0
SQUILLA CHYDAEA	5	2	3	0
SQUILLA EMPUSA	21	9	13	0
TRACHYPENAEUS SIMILIS	55	8	47	0

OLM BENTHIC INVERTEBRATE DATA
EPIFAUNA

WINTER TRANSECT IV STATION 2 DAY DEPTH 47 M.
SAMPLE BEI

GENUS SPECIES	NUMBER	MALES	FEMALES	FEM. W/EGGS
CONUS CLARKI	1	0	0	0
PENAEUS AZTECUS	1	1	0	0
PITAR ARESTA	1	0	0	0
SICYONIA DORSALIS	1	1	0	0
TELLINA AEQUISTRIATA	1	0	0	0

BLM BENTHIC INVERTEBRATE DATA

EPIFAUNA

WINTER TRANSECT IV STATION 2 NIGHT DEPTH 47 M.

SAMPLE BDL

GENUS SPECIES	NUMBER	MALES	FEMALES	FEM. W/EGGS
EURYPANOPEUS DEPRESSUS	1	0	0	0
LOLIGO PEALEA	7	0	0	0
PENAEUS AZTECUS	22	10	12	0
SICYONIA DORSALIS	5	2	3	0
SOLENOCERA VIOSCI	12	0	0	0
SQUILLA CHYDAEA	8	2	6	0
TRACHYPENAEUS SIMILIS	18	0	18	0

OLM BENTHIC INVERTEBRATE DATA
EPIFAUNA

WINTER TRANSECT IV STATION 3 DAY DEPTH 91 M.
SAMPLE BPD

GENUS SPECIES	NUMBER	MALES	FEMALES	FEM. W/EGGS
LOLIGO PEALEA	88	0	0	0

BLM BENTHIC INVERTEBRATE DATA
EPIFAUNA

WINTER TRANSECT IV STATION 3 NIGHT DEPTH 91 M.
SAMPLE BGM

GENUS SPECIES	NUMBER	MALES	FEMALES	FEM. W/EGGS
LOLIGO PEALEA	3	0	0	0
PAGURU LONGIR	1	0	0	0
PENAEUS AZTECUS	22	10	12	0
PORTUNUS SPINICARPUS	3	2	1	0
SICYONIA BREVIROSTRIS	12	6	6	0
SICYONIA STEMPSONI	2	0	0	0
SOLENOCERA VIOSCI	4	0	0	0

OLM BENTHIC INVERTEBRATE DATA

EPIFAUNA

SPRING TRANSECT 1 STATION 1 DAY DEPTH 18 M.

SAMPLE CBB

GENUS SPECIES	NUMBER	MALES	FEMALES	FEM. W/EGGS
BUSYCON CONTRATIUM	1	0	0	0
CALLINECTES SAPIDUS	2	0	2	0
CALLINECTES SIMILIS	108	67	41	0
CANTHARUS CANCELLARIA	2	0	0	0
HEPATUS EPHELITICUS	1	1	0	0
LOLLIGUNCULA BREVIS	1	0	0	0
PENAEUS SETIFERUS	19	7	12	0
PORCELLANA SAYANA	1	0	0	0
PORTUNUS GIBBESI	8	6	2	0
SICYONIA DORSALIS	448	21	36	0
SQUILLA EMPUSA	51	25	26	0
TRACHYPENAEUS SIMILIS	674	14	88	0

BLM BENTHIC INVERTEBRATE DATA
EPIFAUNA

SPRING TRANSECT I STATION 1 NIGHT DEPTH 18 M.
SAMPLE CAH

GENUS SPECIES	NUMBER	MALES	FEMALES	FEM. W/EGGS
ALPHEUS FLORIDANUS	4	0	0	0
ANEMONE	2	0	0	0
CALAPPA SULCATA	1	0	0	0
CALIACTIS TRICOLOR	1	0	0	0
CALLINECTES SIMILIS	60	34	26	0
HEPATUS PUDIBUNDUS	1	0	0	0
LUIDIA CLATHRATA	1	0	0	0
OVALIPES GUADULPENIS	1	0	0	0
PENAEUS AZTECUS	1	0	0	0
PENAEUS SETIFERUS	3	1	2	0
PORTUNUS GIBBESI	6	5	1	0
RENILLA MULLERI	5	0	0	0
SICYONIA DORSALIS	135	0	0	0
SQUILLA EMPUSA	63	29	34	0
TRACHYPENAEUS CONSTRICTUS	1	0	1	0

OLM BENTHIC INVERTEBRATE DATA

EPIFAUNA

SPRING TRANSECT 1 STATION 1 NIGHT DEPTH 18 M.

SAMPLE CAH

(CONTINUED)

GENUS SPECIES	NUMBER	MALES	FEMALES	FEM. W/EGGS
TRACHYPENAEUS SIMILIS	1135	163	661	0

OLM BENTHIC INVERTEBRATE DATA
EPIFAUNA

SPRING TRANSECT 1 STATION 2 DAY DEPTH 42 M.
SAMPLE CEB

GENUS SPECIES	NUMBER	MALES	FEMALES	FEM. W/EGGS
ASTROPECTEN DUPLICATUS	1	0	0	0
BRYOZO SP	3	0	0	0
CALLINECTES SAPIDUS	1	0	0	0
CALLINECTES SIMILIS	1	0	0	0
LEIOLAMBRUS NITIDUS	1	0	0	0
LOLIGO PEALEA	64	0	0	0
OVALIPES GUADULPENIS	2	0	0	0
PENAEUS AZTECUS	1	1	0	0
PORTUNUS GIBBESI	4	0	0	0
RENILLA MULLERI	4	0	0	0
SICYONIA DORSALIS	146	56	90	0

BLM BENTHIC INVERTEBRATE DATA
EPIFAUNA

SPRING TRANSECT 1 STATION 2 NIGHT DEPTH 42 M.
SAMPLE CDL

GENUS SPECIES	NUMBER	MALES	FEMALES	FEM. W/EGGS
CALLINECTES SIMILIS	3	3	0	0
CARIDEAN SHRIMP(UNID)	1	0	0	0
LEIOLAMBRUS NITIDUS	1	0	1	0
LOLIGO PEALEA	1	0	0	0
PARAPENAEUS LONGIROSTRUS	2	1	1	0
PENAEUS AZTECUS	17	12	5	0
PORTUNUS GIBBESI	1	1	0	0
PORTUNUS SPINICARPUS	6	3	3	0
ROSSIA TENERA	14	0	0	0
SICYONIA BREVIROSTRIS	1	0	1	0
SICYONIA DORSALIS	460	212	248	0
SICYONIA STEMPSONI	8	4	4	0
SOLENOCERA VIOSCI	112	31	81	0
TRACHYPENAEUS SIMILIS	69	3	66	0

BLM BENTHIC INVERTEBRATE DATA
EPIFAUNA

SPRING TRANSECT I STATION 3 DAY DEPTH 134 M.
SAMPLE CHL

GENUS SPECIES	NUMBER	MALES	FEMALES	FEM. w/EGGS
ACANTHOCARPUS ALEXANDRI	3	0	0	0
EURYPANOPEUS DEPRESSUS	1	0	0	0
LOLIGO PEALEA	1	0	0	0
MYROPSIS QUINQUESPINOSA	1	0	0	0
PARAPENAEUS LONGIROSTRUS	1	0	0	0
RANINOIDEA LOUISIANENSIS	1	0	0	0

BLM BENTHIC INVERTEBRATE DATA
EPIFAUNA

SPRING TRANSECT I STATION 3 NIGHT DEPTH 134 M.
SAMPLE CGP

GENUS SPECIES	NUMBER	MALES	FEMALES	FEM. W/EGGS
AMUSIUM PAPYRACEUS	9	0	0	0
EURYPANOPEUS DEPRESSUS	1	0	0	0
LOLLIGUNCULA BREVIS	1	0	0	0
PARAPENAEUS LONGIRUSTRUS	12	4	8	0
PODOCHELIA SIDNEYI	3	1	2	0
PORTUNUS SPINICARPUS	1	0	1	0
RANINOIDEA LOUISIANENSIS	1	0	0	0
SOLENOCERA VIOSCI	5	3	2	0

BLM BENTHIC INVERTEBRATE DATA
EPIFAUNA

SPRING TRANSECT II STATION 1 DAY DEPTH 22 M.
SAMPLE CKR

GENUS SPECIES	NUMBER	MALES	FEMALES	FEM. W/EGGS
ALPHEUS FLORIDANUS	2	0	0	0
ANASIMUS LATUS	3	3	0	0
ASTROPECTEN DUPLICATUS	296	0	0	0
BUSYCON CONTRATIUM	1	0	0	0
CALLINECTES SIMILIS	6	5	1	0
CANTHARUS CANCELLARIA	2	0	0	0
LOLIGO PEALEA	12	0	0	0
LOLLIGUNCULA BREVIS	170	0	0	0
PENAEUS AZTECUS	4	2	2	0
PENAEUS SETIFERUS	2	0	2	0
PORTUNUS GIBBESI	1	0	0	0
RENILLA MULLERI	2	0	0	0
SICYONIA DORSALIS	408	48	50	0
TRACHYPENAEUS SIMILIS	130	46	64	0

OLM BENTHIC INVERTEBRATE DATA
EPIFAUNA

SPRING TRANSECT II STATION 1 NIGHT DEPTH 22 M.
SAMPLE CJW

GENUS SPECIES	NUMBER	MALES	FEMALES	FEM. W/EGGS
ALPHEUS FLORIDANUS	6	0	0	0
CALAPPA SULCATA	1	0	0	0
CALLINECTES SIMILIS	23	0	0	0
CANTHARUS CANCELLARIA	33	0	0	0
HEPATUS PUDIBUNDUS	1	0	0	0
LABINIA EMARGINATA	2	0	0	0
LOLLIGUNCULA BREVIS	5	0	0	0
NEOPANOPE TEXANA	1	0	0	0
PENAEUS AZTECUS	1	0	1	0
PENAEUS DUORARUM	3	1	2	0
PENAEUS SETIFERUS	7	3	4	0
PERSEPHONA CRINATA	2	0	0	0
PORCELLANA SAYANA	2	0	0	0
RENILLA MULLERI	115	0	0	0
SQUILLA EMPUSA	22	12	10	0

OLM BENTHIC INVERTEBRATE DATA
EPIFAUNA

SPRING TRANSECT II STATION 1 NIGHT DEPTH 22 M.
SAMPLE CJ8
(CONTINUED)

GENUS SPECIES	NUMBER	MALES	FEMALES	FEM. W/EGGS
TRACHYPENAEUS SIMILIS	1009	52	57	0

BLM BENTHIC INVERTEBRATE DATA
EPIFAUNA

SPRING TRANSECT II STATION 2 DAY DEPTH 49 M.
SAMPLE CNU

GENUS SPECIES	NUMBER	MALES	FEMALES	FEM. W/EGGS
ASTROPECTEN DUPLICATUS	7	0	0	0
CALLINECTES SIMILIS	3	0	0	0
LOLIGO PEALEA	11	0	0	0
LOLLIGUNCULA BREVIS	34	2	0	0
PENAEUS AZTECUS	1	1	0	0
SICYONIA DORSALIS	45	18	27	0
TRACHYPENAEUS SIMILIS	22	7	15	0

OLM BENTHIC INVERTEBRATE DATA

EPIFAUNA

SPRING TRANSECT II STATION 2 NIGHT DEPTH 49 M.

SAMPLE CMZ

GENUS SPECIES	NUMBER	MALES	FEMALES	FEM. W/EGGS
ALPHEUS FLORIDANUS	2	u	0	0
ASTROPECTEN DUPLICATUS	2	b	0	0
CALLINECTES SIMILIS	17	12	5	d
PARAPENAEUS LONGIROSTRUS	11	0	11	0
PENAEUS AZTECUS	26	7	21	0
PORTUNUS GIBBESI	3	1	2	u
PORTUNUS SPINICARPUS	5	4	1	0
ROSSIA TENERA	4	0	0	0
SICYONIA DORSALIS	468	49	51	0
SICYONIA STEMPSONI	25	9	16	0
SOLENOCERA VIOSCI	265	24	70	0
SQUILLA CHYDAEA	24	b	18	0
SQUILLA EMPUSA	2	0	2	0
TRACHYPENAEUS SIMILIS	325	36	82	0

BLM BENTHIC INVERTEBRATE DATA
EPIFAUNA

SPRING TRANSECT II STATION 3 DAY DEPTH 131 M.
SAMPLE CQW

GENUS SPECIES	NUMBER	MALES	FEMALES	FEM. W/EGGS
AMUSIUM PAPYRACEUS	9	0	0	0
LOLIGO PEALEA	451	8	0	0
SICYONIA STEMPSONI	1	0	0	0

BLM BENTHIC INVERTEBRATE DATA
EPIFAUNA

SPRING TRANSECT II STATION 3 NIGHT DEPTH 131 M.
SAMPLE CQB

GENUS SPECIES	NUMBER	MALES	FEMALES	FEM. W/EGGS
EURYPANOPEUS DEPRESSUS	1	0	0	0
LOLLIGUNCULA BREVIS	1	0	0	0
RANINOIDEA LOUISIANENSIS	1	0	0	0
SOLENOCERA VIOSCI	6	1	5	0
SQUILLA CHYDAEA	1	1	0	0
TRACHYPENAEUS SIMILIS	45	1	30	0

BLM BENTHIC INVERTEBRATE DATA

EPIFAUNA

SPRING TRANSECT III STATION 1 DAY DEPTH 25 M.

SAMPLE CUE

GENUS SPECIES	NUMBER	MALES	FEMALES	FEM. W/EGGS
ASTROPECTEN DUPLICATUS	7	0	0	0
CALLINECTES SIMILIS	4	2	2	0
LOLIGO PEALEA	17	0	0	0
LOLLIGUNCULA BREVIS	74	0	0	0
PENAEUS AZTECUS	1	0	0	0
SICYONIA DORSALIS	51	0	0	0
TRACHYPENAEUS SIMILIS	9	3	6	0

BLM BENTHIC INVERTEBRATE DATA
EPIFAUNA

SPRING TRANSECT III STATION 1 NIGHT DEPTH 25 M.
SAMPLE CTI

GENUS SPECIES	NUMBER	MALES	FEMALES	FEM. W/EGGS
ASTROPECTEN DUPLICATUS	1	0	0	0
CALLINECTES SIMILIS	41	19	22	1
LOLIGO PEALEA	3	0	0	0
LOLLIGUNCULA BREVIS	6	0	0	0
NUDIBR SP	2	0	0	0
PENAEUS AZTECUS	20	10	10	0
PORTUNUS GIBBESI	5	0	0	0
RENILLA MULLERI	1	0	0	0
SICYONIA BREVIROSTRIS	3	1	2	0
SICYONIA DORSALIS	471	22	33	0
SQUILLA CHYDAEA	3	3	0	0
SQUILLA EMPUSA	14	5	9	0
SQUILLA SP	3	0	0	0
TRACHYPENAEUS SIMILIS	468	17	61	0

BLM BENTHIC INVERTEBRATE DATA
EPIFAUNA

SPRING TRANSECT III STATION 2 DAY DEPTH 65 M.
SAMPLE CYA

GENUS SPECIES	NUMBER	MALES	FEMALES	FEM. W/EGGS
ALPHEUS FLORIDANUS	2	0	0	0
AMUSIUM PAPYRACEUS	3	0	0	0
ANASIMUS LATUS	5	1	4	0
ASTROPECTEN CINGULATUS	6	0	0	0
CALLINECTES SIMILIS	1	0	1	1
LOLIGO PEALEA	183	0	0	0
MOIRA ATROPO	2	0	0	0
PENAEUS AZTECUS	6	3	3	0
PITAR CHORDATA	3	0	0	0
PLEISONIKA TENUIPES	3	0	0	0
ROSSIA SP	1	0	0	0
SQUILLA CHYDAEA	1	0	1	0
TRACHYPENAEUS SIMILIS	47	19	21	0

BLM BENTHIC INVERTEBRATE DATA
EPIFAUNA
SPRING TRANSECT III STATION 2 NIGHT DEPTH 65 M.
SAMPLE CXL

GENUS SPECIES	NUMBER	MALES	FEMALES	FEM. W/EGGS
AMUSIUM PAPYRACEUS	3	0	0	0
ANASIMUS LATUS	4	1	3	0
ASTROPECTEN DUPLICATUS	5	0	0	0
LATREUTES FUCORUM	1	0	0	0
LEANDER TUNICORNIS	1	0	0	0
LOLIGO PEALEA	5	0	0	0
PARAPENAEUS LONGIRUSTRUS	82	5	41	0
PENAEUS AZTECUS	21	9	12	0
PORTUNUS SPINICARPUS	6	5	1	0
RUSSIA TENERA	6	0	0	0
SICYONIA DORSALIS	1	1	0	0
SICYONIA STEMPSONI	4	1	3	0
SOLENOCERA VIOSCI	124	10	42	0
SQUILLA CHYDAEA	21	7	14	0
TRACHYPENAEUS SIMILIS	45	6	39	0

BLM BENTHIC INVERTEBRATE DATA
EPIFAUNA

SPRING TRANSECT III STATION 3 DAY DEPTH 106 M.
SAMPLE DBC

GENUS SPECIES	NUMBER	MALES	FEMALES	FEM. W/EGGS
AMUSIUM PAPYRACEUS	21	0	0	0
ANASIMUS LATUS	2	1	1	0
BRISSI ALTA	15	0	0	0
CALLINECTES SIMILIS	1	0	1	1
LOLIGO PEALEA	311	0	0	0
PARAPENAEUS LONGIROSTRUS	2	0	0	0
PENAEUS AZTECUS	1	0	1	0

BLM BENTHIC INVERTEBRATE DATA
EPIFAUNA

SPRING TRANSECT III STATION 3 NIGHT DEPTH 106 M.
SAMPLE DAJ

GENUS SPECIES	NUMBER	MALES	FEMALES	FEM. W/EGGS
AMUSIUM PAPYRACEUS	20	0	0	0
ANASIMUS LATUS	14	8	6	0
ASTROPECTEN CINGULATUS	2	0	0	0
BRISSI ALTA	4	0	0	0
CARIDEAN SHRIMP(UNID)	1	0	0	0
MOIRA ATROPO	66	0	0	0
PARAPENAEUS LONGIROSTRUS	14	1	13	0
PENAEUS AZTECUS	12	3	9	0
RANINOIDEA LOUISIANENSIS	3	0	3	0
SCONSI STRIAT	2	0	0	0
SOLENOCERA VIOSCI	24	10	12	0

OLM BENTHIC INVERTEBRATE DATA
EPIFAUNA

SPRING TRANSECT IV STATION 1 DAY DEPTH 27 M.
SAMPLE DEC

GENUS SPECIES	NUMBER	MALES	FEMALES	FEM. W/EGGS
ASTROPELTEN DUPLICATUS	3	0	0	0
CALLINECTES SIMILIS	97	26	71	20
LOLIGO PEALEA	10	0	0	0
PENAEUS AZTECUS	8	7	2	0
SICYONIA BREVIROSTRIS	1	0	1	0
SICYONIA DORSALIS	166	22	33	0
SQUILLA CHYDAEA	22	8	14	0
SQUILLA EMPUSA	22	15	7	0
TRACHYPENAEUS SIMILIS	113	8	43	0

OCM BENTHIC INVERTEBRATE DATA
EPIFAUNA
SPRING TRANSECT IV STATION 1. NIGHT DEPTH 27 M.
SAMPLE 000

GENUS SPECIES	NUMBER	MALES	FEMALES	FEM. W/EGGS
ASTROPECTEN DUPLICATUS	2	0	0	0
CALLINECTES SIMILIS	258	24	38	2
HEPATUS EPHELITICUS	1	1	0	0
PENAEUS AZTECUS	10	5	5	0
PENAEUS DUORARUM	1	1	0	0
PORTUNUS GIBBESI	2	2	0	0
SICYONIA BREVIROSTRIS	1	1	0	0
SICYONIA DORSALIS	697	48	58	0
SPEOCA CARDI	1	0	0	0
SQUILLA CHYDAEA	5	2	3	0
SQUILLA EMPUSA	28	17	11	0
TRACHYPENAEUS SIMILIS	436	24	42	0

OLM BENTHIC INVERTEBRATE DATA
EPIFAUNA

SPRING TRANSECT IV STATION 2 BOY DEPTH 47 M.
SAMPLE DRB

GENUS SPECIES	NUMBER	MALES	FEMALES	FEM. W/EGGS
CHLEGIA VIRIDIS	1	0	0	0
FASCIOLARIA HUNTERIA	1	0	0	0
LOLIGO PEALEA	41	0	0	0
PARAPENAEUS LONGIROSTRUS	3	0	0	0
PENAEUS AZTECUS	3	2	1	0
PORTUNUS SPINICARPUS	1	0	1	0
RUSSIA TENERA		0	0	0
SICYONIA BREVIROSTRIS	1	0	0	0
SICYONIA DORSALIS	1	0	0	0

SLM BENTHIC INVERTEBRATE DATA
EPIFAUNA

SPRING TRANSECT IV STATION 2 NIGHT DEPTH 47 M.
SAMPLE UGI

GENUS SPECIES	NUMBER	MALES	FEMALES	FEM. W/EGGS
AMUSIUM PAPYRACEUS	2	0	0	0
ANASIMUS LATUS	1	0	0	0
ASTROPECTEN DUPLICATUS	1	0	0	0
CALLINECTES SIMILIS	2	0	2	0
CONUS AUSTINI	1	0	0	0
LEIOLAMBRUS NITIDUS	1	0	0	0
LOLIGO PEALEA	5	0	0	0
PARAPENAEUS LONGIROSTRUS	9	4	5	0
PENAEUS AZTECUS	1	0	0	0
PORTUNUS SPINICARPUS	1	0	0	0
RUSSIA TENERA	2	0	0	0
SICYONIA BREVIROSTRIS	7	3	4	0
SICYONIA DORSALIS	23	5	17	0
SOLENOCERA VIOSCI	17	3	14	0
SQUILLA CHYDAEA	18	5	13	0

OLM BENTHIC INVERTEBRATE DATA

EPIFAUNA

SPRING TRANSECT IV STATION 2 NIGHT DEPTH 47 M.

SAMPLE DGI

(CONTINUED)

GENUS SPECIES	NUMBER	MALES	FEMALES	FEM. W/EGGS
SQUILLA EMPUSA	1	0	1	1
STENOCIONOPUS FURCATA	1	0	0	0
TRACHYPENAEUS SIMILIS	56	0	46	0

OLM BENTHIC INVERTEBRATE DATA
EPIFAUNA

SPRING TRANSECT IV STATION 3 DAY DEPTH 91 M.
SAMPLE DRG

GENUS SPECIES	NUMBER	MALES	FEMALES	FEM. w/EGGS
AMUSIUM PAPYRACEUS	1	0	0	0
CALLINECTES SIMILIS	1	0	0	0
CLYPEASTER RAVENELLI	5	0	0	0
PARDANUS INSIGNIS	2	0	0	0
LOLIGO PEALEA	35	0	0	0
MUREX FULVESCENS	1	0	0	0
PARAPENAEUS LONGIROSTRUS	1	0	0	0
PETROC DIOGEN	1	0	1	1
PORCELLANA SAYANA	12	0	0	0
PORTUNUS SPINICARPUS	1	0	0	0
SICYONIA DORSALIS	2	1	1	0

BLM BENTHIC INVERTEBRATE DATA
EPIFAUNA

SPRING TRANSECT IV STATION 3 NIGHT DEPTH 91 M.
SAMPLE DJK

GENUS SPECIES	NUMBER	MALES	FEMALES	FEM. W/EGGS
AMUSIUM PAPYRACEUS	3	0	0	0
ANASIMUS LATUS	1	0	0	0
CALAPPA SULCATA	2	0	0	0
CLYPEASTER RAVENELLI	9	0	0	0
LOLIGO PEALEA	1	0	0	0
PARAPENAEUS LONGIROSTRUS	1	0	0	0
PARAPE SP	5	0	0	0
PARASQUILLA COCCINEA	1	0	0	0
PENAEUS AZTECUS	2	0	2	0
PORTUNUS SPINIMANUS	22	17	3	1
PORTUNUS SPINIMANUS	3	0	0	0
SCYLLARUS CHACEI	2	0	2	2
SICYONIA BREVIROSTRIS	2	0	2	0
SOLENOCERA VIOSCI	1	0	0	0
SQUILLA CHYDAEA	2	1	1	0

OCM BENTHIC INVERTEBRATE DATA
EPIFAUNA

SUMMER TRANSECT 1 STATION 1 DAY DEPTH 18 M.
SAMPLE EBB

GENUS SPECIES	NUMBER	MALES	FEMALES	FEM. W/EGGS
CALLINECTES SAPIDUS	1	0	0	0
CALLINECTES SIMILIS	57	23	34	8
PARDANUS INSIGNIS	1	0	0	0
LOLIGO PEALEA	14	0	0	0
LOLLIGUNCULA BREVIS	6	0	0	0
PAGURUS POLLICARIS	3	0	0	0
PENAEUS AZTECUS	5	2	3	0
PORCELLANA SAYANA	2	0	0	0
RENILLA MULLERI	3	0	0	0
SICYONIA DORSALIS	12	2	10	0
TRACHYPENAEUS SIMILIS	5	4	1	0

OLM BENTHIC INVERTEBRATE DATA

EPIFAUNA

SUMMER TRANSECT 1 STATION 1 NIGHT DEPTH 1.0 M.

SAMPLE EAH

GENUS SPECIES	NUMBER	MALES	FEMALES	FEM. W/EGGS
CALLINECTES SIMILIS	97	28	69	2
LOLLIGUNCULA BREVIS	1	0	0	0
PENAEUS AZTECUS	69	17	52	0
PENAEUS DUORARUM	1	0	1	0
PORTUNUS GIBBESI	1	0	0	0
SICYONIA DORSALIS	1	0	0	0
SQUILLA EMPUSA	6	0	6	0
TRACHYPENAEUS SIMILIS	8	3	5	0

OLM BENTHIC INVERTEBRATE DATA
EPIFAUNA

SUMMER TRANSECT 1 STATION 2 DAY DEPTH 42 M.
SAMPLE EEB

GENUS SPECIES	NUMBER	MALES	FEMALES	FEM. W/EGGS
ASTROPECTEN DUPLICATUS	2	0	0	0
CALLINECTES SIMILIS	95	0	0	0
HEPATUS EPHELITICUS	1	0	0	0
LOLIGO PEALEA	5	0	0	0
PENAEUS AZTECUS	2	0	0	0
RENILLA MULLERI	1	0	0	0
SICYONIA DORSALIS	391	0	0	0
SQUILLA CHYDAEA	1	0	0	0
SQUILLA EMPUSA	1	0	0	0
TELLINA SP	1	0	0	0

OLM BENTHIC INVERTEBRATE DATA
EPIFAUNA

SUMMER TRANSECT 1 STATION 2 NIGHT DEPTH 42 M.
SAMPLE EDL

GENUS SPECIES	NUMBER	MALES	FEMALES	FEM. W/EGGS
AMUSIUM PAPYRACEUS	1	0	0	0
ASTROPECTEN DUPLICATUS	4	0	0	0
CALLINECTES SIMILIS	14	7	7	0
LOLIGO PEALEA	2	0	0	0
PENAEUS AZTECUS	42	0	32	0
PORTUNUS SPINICARPUS	2	2	0	0
SICYONIA DORSALIS	52	30	22	0
SOLENOCERA VIOSCI	13	0	0	0
SQUILLA CHYDAEA	2		.	0
SQUILLA EMPUSA	1		0	0
TRACHYPENAEUS SIMILIS	3	0	3	0

BLM BENTHIC INVERTEBRATE DATA
EPIFAUNA

SUMMER TRANSECT 1 STATION 3 DAY DEPTH 134 M.
SAMPLE EHL

GENUS SPECIES	NUMBER	MALES	FEMALES	FEM. W/EGGS
ACANTHOCARPUS ALEXANDRI	1	0	0	0
ANASIMUS LATUS	1	0	0	0
ASTROPECTEN CINGULATUS	7	0	0	0
BRISSI ALTA	4	0	0	0
PAGURUS BULLISI	2	0	0	0
PENAEUS AZTECUS	2	1	1	0
PORTUNUS SPINICARPUS	14	6	8	0
RANINOIDEA LOUISIANENSIS	1	0	0	0
SPEOCARCINUS LOBATUS	1	0	0	0
TETHYASTER VESTITUS	4	0	0	0

BLM BENTH = INVERTEBRATE DATA
EPIFAUNA

SUMMER TRANSECT 1 STATION 3 NIGHT DEPTH 134 M.
SAMPLE EGP

GENUS SPECIES	NUMBER	MALES	FEMALES	FEM. W/EGGS
AMOSIUM PAPYRACEUS	1	0	0	0
ANASIMUS LATUS	3	0	0	0
EURYPANOPEUS DEPRESSUS	1	0	0	0
ILIOCANTHUS LIODACTYLUS	1	0	0	0
LOLIGO PEALEA	2	0	0	0
NEOPANOPE TEXANA	1	0	0	0
PAGURUS BOLLISI	2	0	0	0
PENAEUS AZTECUS	3	0	0	0
PORTUNUS SPINICARPUS	8	0	0	0
SOLENOCERA VIOSCI	5.	0	0	0
SQUILLA EMPUSA		0	0	0

OLM BENTHIC INVERTEBRATE DATA
EPIFAUNA

SUMMER TRANSECT II STATION 1 DAY DEPTH 22 M.
SAMPLE EKR

GENUS SPECIES	NUMBER	MALES	FEMALES	FEM. w/EGGS
LOLIGO PEALEA	47	0	0	0
PENAEUS AZTECUS	1	0	0	0

BLM BENTHIC INVERTEBRATE DATA
EPIFAUNA

SUMMER TRANSECT II STATION 1 NIGHT DEPTH 22 M.
SAMPLE EJW

GENUS SPECIES	NUMBER	MALES	FEMALES	FEM. W/EGGS
CALLINECTES SIMILIS	22	0	0	0
LOLIGO PEALEA	4	0	0	0
PENAEUS AZTECUS	22	0	0	0
SICYONIA DORSALIS	20	0	0	0
SQUILLA CHYDAEA	6	0	0	0
SQUILLA EMPUSA	6	0	0	0
TRACHYPENAEUS SIMILIS	19	0	0	0

BLM BENTHIC INVERTEBRATE DATA
EPIFAUNA

SUMMER TRANSECT II STATION 2 DAY DEPTH 49 M.
SAMPLE ENV

GENUS SPECIES	NUMBER	MALES	FEMALES	FEM. W/EGGS
ANADAR NOTABI	2	0	0	0
ASTROPECTEN DUPLICATUS	2	0	0	0
CALLINECTES SIMILIS	1	0	0	0
LEIOLAMBRUS NITIDUS	1	0	0	0
LOLIGO PEALEA	19	0	0	0
MICROPANOPE SCULPTIPES	1	0	0	0
PENAEUS AZTECUS	1	0	0	0
PORTUNUS SPINICARPUS	2	0	0	0
SICYONIA DORSALIS	10	0	0	0
SQUILLA CHYDAEA	1	0	0	0
TELLINA SP	1	0	0	0

SLM BENTHIC INVERTEBRATE DATA
EPIFAUNA

SUMMER TRANSECT II STATION 2 NIGHT DEPTH 49 M.
SAMPLE EMZ

GENUS SPECIES	NUMBER	MALES	FEMALES	FEM. W/EGGS
AMUSIUM PAPYRACEUS	1	0	0	0
CALLINECTES SIMILIS	24	0	0	0
MICROPANOPE SCULPTIPES	1	0	0	0
PENAEUS AZTECUS	1	0	0	0
PORTUNUS SPINICARPUS	5	0	0	0
SICYONIA DORSALIS	3	0	0	0
SQUILLA CHYDAEA	1	0	0	0
SQUILLA EMPUSA	1	0	0	0

OCM BENTHIC INVERTEBRATE DATA
EPIFAUNA
SUMMER TRANSECT II STATION 3 DAY DEPTH 131 M.
SAMPLE EGW

GENUS SPECIES	NUMBER	MALES	FEMALES	FEM. W/EGGS
BRISSI ALTA	6	0	0	0
CALLINECTES SIMILIS	5	5	0	0
EURYPANOPEUS DEPRESSUS	2	0	0	0
LOLIGO PEALEA	24	0	0	0
PARAPENAEUS LONGIROSTRUS	1	0	0	0
PILUMNUS DASYPODUS	1	0	0	0
PORCELLANA SIGSBEIANA	1	0	0	0
SOLENOCERA VIOSCI	1	0	1	0

OLM BENTHIC INVERTEBRATE DATA
EPIFAUNA
SUMMER TRANSECT 1. STATION 3 NIGHT DEPTH 3. M.
SAMPLE EQB

GENUS SPECIES	NUMBER	MALES	FEMALES	FEM. W/EGGS
AMOSIUM PAPYRACEUS	8	0	0	0
MUNIDA FORCEPSI	1	0	0	0
PARAPENAEUS LONGIROSTRUS	1	0	0	0
PARAPE SP	2	0	0	0
PENAEUS AZTECUS	2	0	2	0
PORTUNUS SPINICARPUS	1	0		0
SOLENOCERA VIOSCI	5	2	3	0
SYNALPHEUS SP	1	0	0	0

BLM BENTHIC INVERTEBRATE DATA
EPIFAUNA

SUMMER TRANSECT III STATION 1 DAY DEPTH 25 M.
SAMPLE EDE

GENUS SPECIES	NUMBER	MALES	FEMALES	FEM. W/EGGS
CALLINECTES SIMILIS	12	3	9	0
LOLIGO PEALEA	6	0	0	0
LOLLIGUNCULA BREVIS	76	0	0	0
PENAEUS AZTECUS	51	7	44	0
PORTUNUS GIBBESI	2	0	0	0
RENILLA MULLERI	4	0	0	0
SICYONIA DORSALIS	6	0	0	0
SQUILLA EMPUSA	4	2	2	0

BLM BENTHIC INVERTEBRATE DATA
EPIFAUNA

SUMMER TRANSECT III STATION 1 NIGHT DEPTH 25 M.
SAMPLE ETI

GENUS SPECIES	NUMBER	MALES	FEMALES	FEM. W/EGGS
CALLINECTES SIMILIS	49	10	39	0
LOLIGO PEALEA	1	0	0	0
LOLLIGUNCULA BREVIS	1	0	0	0
PENAEUS AZTECUS	73	25	48	0
PORTUNUS GIBBESI	1	0	1	0
SICYONIA DORSALIS	21	7	14	0
SQUILLA CHYDAEA	2	0	0	0
SQUILLA EMPUSA	7	3	4	0
TRACHYPENAEUS SIMILIS	6	1	4	0

OLM BENTHIC INVERTEBRATE DATA
EPIFAUNA
SUMMER TRANSECT III STATION 2 DAY DEPTH 65 M.
SAMPLE EYA

GENUS SPECIES	NUMBER	MALES	FEMALES	FEM. W/EGGS
ASTROPECTEN CINGULATUS	1	0	0	0
CALLINECTES SIMILIS	28	10	18	0
EURYPANOPEUS DEPRESSUS	1	0	1	0
LEIOLAMBRUS NITIDUS	1	1	0	0
PENAEUS AZTECUS	4	3	1	0
PITAR CHORDATA	2	0	0	0
PORTUNUS GIBBESI	1	0	1	0
SICYONIA DORSALIS	18	6	12	0

OLM BENTHIC INVERTEBRATE DATA
EPIFAUNA
SUMMER TRANSECT III STATION 2 NIGHT DEPTH 65 M.
SAMPLE EXL

GENUS SPECIES	NUMBER	MALES	FEMALES	FEM. W/EGGS
ANASIMUS LATUS	4	2	2	0
CALLINECTES SIMILIS	4	2	2	0
LOLIGO PEALEA	1	0	0	0
PENAEUS AZTECUS	12	4	8	0
SICYONIA DORSALIS	74	24	50	0
SOLENOCERA VIOSCI	41	8	33	0
SQUILLA CHYDAEA	11	6	5	0
SQUILLA EMPUSA			0	0

BLM BENTHIC INVERTEBRATE DATA
EPIFAUNA

SUMMER TRANSECT III STATION 3 DAY DEPTH 106 M.
SAMPLE FBC

GENUS SPECIES	NUMBER	MALES	FEMALES	FEM. W/EGGS
AMUSIUM PAPYRACEUS	5	0	0	0
LOLIGO PEALEA	117	0	0	0

OCM BENTHIC INVERTEBRATE DATA
EPIFAUNA
SUMMER TRANSECT IV STATION 1 DAY DEPTH 27 M.
SAMPLE PEK

GENUS SPECIES	NUMBER	MALES	FEMALES	FEM. W/EGGS
CALLINECTES SIMILIS	9	5	4	0
LOLIGO PEALEA	157	0	0	0
PENAEUS AZTECUS	9	7	2	0
SICYONIA DORSALIS	78	40	38	0
SQUILLA EMPUSA	1	0	1	0

BLM BENTHIC INVERTEBRATE DATA

EPIFAUNA

SUMMER TRANSECT IV STATION 1 NIGHT DEPTH 27 M.

SAMPLE FDW

GENUS SPECIES	NUMBER	MALES	FEMALES	FEM. W/EGGS
ARCHITICTONICA NOBILIS	1	0	0	0
CALLINECTES SIMILIS	12	1	11	0
FASCIOLARIA HUNTERIA	2	0	0	0
PENAEUS DUORARUM	39	19	20	0
PORTUNUS GIBBESI	9	4	6	1
SICYONIA BREVIROSTRIS	15	7	8	0
SICYONIA DORSALIS	10	4	6	0
SOLENOCERA ATLANTIDIS	7	0	0	0

BLM BENTHIC INVERTEBRATE DATA
EPIFAUNA

SUMMER TRANSECT IV STATION 2 DAY DEPTH 47 M.
SAMPLE FHL

GENUS SPECIES	NUMBER	MALES	FEMALES	FEM. W/EGGS
ASTROPECTEN DUPLICATUS	1	0	0	0
LOLIGO PEALEA	8	0	0	0
PENAEUS AZTECUS	6	2	4	0
SICYONIA DORSALIS	33	21	12	0

BLM BENTHIC INVERTEBRATE DATA
EPIFAUNA

SUMMER TRANSECT IV STATION 2 NIGHT DEPTH 47 M.
SAMPLE FGW

GENUS SPECIES	NUMBER	MALES	FEMALES	FEM. W/EGGS
CALLINECTES SIMILIS	14	5	9	0
CLYPEASTER RAVENELLI	1	0	0	0
PENAEUS AZTECUS	19	11	8	0
PORTUNUS SPINICARPUS	1	0	1	0
SICYONIA BREVIROSTRIS	8	6	2	0
SICYONIA DORSALIS	330	28	25	0
SICYONIA STEMPSONI	17	4	13	0
SOLENOCERA VIOSCI	110	14	44	0
SQUILLA CHYDAEA	18	4	14	0
SQUILLA EMPUSA	1	0	0	0
TRACHYPENAEUS SIMILIS	10	2	8	0

BLM BENTHIC INVERTEBRATE DATA
EPIFAUNA

SUMMER TRANSECT IV STATION 3 DAY DEPTH 91 M.
SAMPLE PKG

GENUS SPECIES	NUMBER	MALES	FEMALES	FEM. W/EGGS
AMUSIUM PAPYRACEUS	1	0	0	0
CLYPEA SUBDEP	1	0	0	0
LOLIGO PEALEA	37	0	0	0
PENAEUS AZTECUS	2	2	0	0
SQUILLA CHYDAEA	1	0	0	0

BLM BENTHIC INVERTEBRATE DATA
EPIFAUNA

SUMMER TRANSECT IV STATION 3 NIGHT DEPTH 91 M.
SAMPLE FJU

GENUS SPECIES	NUMBER	MALES	FEMALES	FEM. W/EGGS
AMUSIUM PAPYRACEUS	4	0	0	0
AMUSIUM PAPYRACEUS	8	0	0	0
ANASIMUS LATUS	3	0	3	0
ASTROPECTEN CINGULATUS	3	0	0	0
ASTROPECTEN CINGULATUS	1	0	0	0
ASTROPECTEN SP	1	0	0	0
CALAPPA SULCATA	1	0	0	0
CLYPEA SUBDEP	5	0	0	0
PARDANUS INSIGNIS	1	0	0	0
DISTORSIO CLATHRATA	2	0	0	0
LOLIGO PEALEA	2	0	0	0
PAGURUS BULLISI	1	0	0	0
PARAPENAEUS LONGIROSTRUS	9	0	0	0
PARAPE SP	2	0	0	0
PENAEUS AZTECUS	3	1	2	0

BLM BENTHIC INVERTEBRATE DATA
EPIFAUNA

SUMMER TRANSECT IV STATION 3 NIGHT DEPTH 91 M.
SAMPLE FJU
(CONTINUED)

GENUS SPECIES	NUMBER	MALES	FEMALES	FEM. W/EGGS
PENAEUS AZTECUS	2	0	2	0
PORTUNUS SPINICARPUS	24	18	6	0
PORTUNUS SPINICARPUS	2	0	2	0
SICYONIA BREVIROSTRIS	1	0	0	0
SICYONIA BREVIROSTRIS	9	7	2	0
SICYONIA DORSALIS	2	0	0	0
SOLENOCERA VIOSCI	9	0	0	0
SOLENOCERA VIOSCI	2	1	1	0
SQUILLA CHYDAEA	1	0	0	0

DBKP PRINT$

APPENDIX XX

NUMBERS AND WEIGHTS OF BENTHIC FISHES COLLECTED ON ALL 12 STATIONS OF THE STOCS (WINTER, SPRING, SUMMER; DAY & NIGHT)

1975

Appendix

OCS Benthic Fishes; Code AHN.
Transect I, Station 1.
6 December 1974; Winter, Day Trawl.

Species	Number	Weight (g.)
Chaetodipterus faber	3	111.2
Prionotus paralatus	3	69.4
Sphoeroides parvus	7	40.9
Peprilus alepidotus	3	45.3
Anchoa hepsetus	1	19.3
Selene vomer	2	6.0
Lepophidium graellsi	6	165.3
Centropristis philadelphica	1	17.7
Micropogon undulatus	2	60.9
Menticirrhus americanus	3	467.5
Ophidion welshi	2	104.0
Stellifer lanceolatus	1	20.5
Saurida brasiliensis	1	4.2
Symphurus plagiusa	3	60.6
Syacium gunteri	19	229.4
Citharichthys spilopterus	1	14.6
Trichiurus lepturus	4	36.9
Bagre marinus	2	73.6
Halieutichthys aculeatus	1	3.9
Synodus foe-tens	1	0.9
Eucinostomus argenteus	1	6.0
Cynoscion arenarius	2	109.8
Cynoscion nothus	631	4755.7
Totals: 23	700	6423.6

Appendix

OCS Benthic Fishes; Code AFK.
Transect I, Station 1.
5 December 1974; Winter, Night Trawl.

Species	Number	Weight (g.)
Cynoscion nothus	272	888.9
Symphurus plagiusa	56	893.9
Syacium gunteri	23	212.4
Scorpaena brasiliensis	1	471.1
Chaetodipterus faber	3	59.5
Lutjanus campechanus	2	30.3
Sphoeroides parvus	8	40.7
Peprilus alepidotus	5	76.7
Selene vomer	1	10.9
Porichthys porosissimus	6	117.8
Lepophidium graellsi	1	38.7
Trichiurus lepturus	8	63.7
Diplectrum bivittatum	2	34.6
Serranus atrobranchus	3	24.5
Synodus foetens	1	25.7
Saurida brasiliensis	1	3.0
Anchoa mitchilli	13	24.8
Eucinostomus argenteus	1	20.9
Micropogon undulatus	1	81.3
Leiostomus xanthurus	2	141.2
Ophichthus gomesi	1	41.2
Ophidion welshi	2	167.4
Stellifer lanceolatus	341	1375.7
Totals: *23*	*754*	*4844.9*

Appendix

OCS Benthic Fishes; Code AFC.
Transect I, Station 2.
5 December 1974; Winter, Day Trawl.

Species	Number	Weight (g.)
Chloroscombrus chrysurus	1	21.2
Stenotomus caprinus	2	31.2
Peprilus burti	1	61.5
Lagodon rhomboids	1	34.2
Prionotus paralatus	3	55.1
Serranus atrobranchus	37	326.8
Centropristis philadelphica	6	181.4
Diplectrum bivittatum	31	541.0
Lutjanus campechanus	7	99.2
Pristipomoides aquilonaris	34	157.3
Anchoa mitchilli	1	1.4
Upeneus parvus	1	27.7
Synodus foetens	7	627.6
Synodus poeyi	2	5.6
Sau.rids brasiliensis	18	55.9
Engyophrys senta	2	8.4
Paralichthys lethostigma	1	140.4
Syacium gunteri	23	251.2
Totals: 18	178	2627.1

Appendix

OCS Benthic Fishes; Code ACT.
Transect I, Station 2.
4 December 1974; Winter, Night Trawl.

Species	Number	Weight (g.)
Chaetodipterus faber	1	30.5
Saurida brasiliensis	1	4.8
Bollmannia communis	5	11.5
Leiostomus xanthurus	1	44.6
Bregmaceros atlanticus	4	2.9
Pristipomoides aquilonaris	8	27.5
Gymnothorax nigromarcinatus	1	39.1
Lutjanus campechanus	4	48.5
Porichthys porosissimus	3	16.9
Centropristis philadelphica	10	212.8
Engyophrys senta	12	49.6
Synodus foetens	7	314.7
Symphurus plagiusa	1	20.0
Hoplunnis macrurus	2	8.6
Serranus atrobranchus	27	223.9
Diplectrum bivittatum	42	577.6
Lepophidium graellsi	9	304.3
Scorpaena brasiliensis	1	6.7
Prionotus rubio	10	278.0
Cyclopsetta chittendeni	2	15.2
Syacium gunteri	92	1218.0
Totals: 21	243	3455.7

Appendix

OCS Benthic Fishes; Code A.AK.
Transect I, Station 3.
4 December 1974; Winter, Day Trawl.

Species	Number	Weight (g.)
Paralichthys lethostigma	2	1025.2
Pristipomoides aquilonaris	148	3821.6
Pontinus longispinis	73	2891.5
Prionotus paralatus	21	729.0
Prionotus stearnsi	78	774.1
Serranus atrobranchus	50	899.7
Trachurus lathami	20	585.9
Halieutichthys aculeatus	11	77.4
Zalieutes mcgintyi	1	9.7
Urophycis cirratus	3	174.8
Caulolatilus cyanops	3	358.0
Kathetostoma albigutta	1	36.1
Ancylopsetta dilecta	3	97.8
Trichopsetta ventralis	38	492.4
Monolene sessilicauda	3	17.7
Pikea mexicana	4	79.1
Decodon puellaris	3	47.2
Stenotomus caprinus	1	48.0
Upeneus parvus	6	118.6
Bembrops anatirostris	3	108.9
Saurida brasiliensis	16	41.6
Totals: *21*	*488*	*12434.3*

Appendix VI

OCS Benthic Fishes; Code AAE.
Transect I, Station 3.
3 December 1974; Winter, Night Trawl.

Species	Number	Weight (g.)
Pristipomoides aquilonaris	72	6334.4
Pontinus longispinis	96	4239.8
Decodon puellaris	1	27.2
Serranus atrobranchus	49	854.9
Equetus acuminates	3	161.8
Upeneus parvus	2	51.6
Stenotomus caprinus	5	222.3
Prionotus paralatus	8	322.7
Trachurus lathami	2	62.6
Trichopsetta ventralis	39	499.3
Ancylopsetta dilecta	1	18.8
Zalieutes mcgintyi	2	32.7
Synodus foetens	1	171.7
Urophycis floridanus	3	721.4
Urophycis cirratus	3	201.1
Lepophidium graellsi	8	224.7
Hoplunnis macrurus	2	5.1
Paralichthys lethostigma	3	986.0
Hoplunnis tenuis	2	5.9
Totals: 19	302	15144.0

Appendix

OCS Benthic Fishes; Code AJA.
Transect II, Station 1.
17 December 1974; Winter, Day Trawl.

Species	Number	Weight (g.)
Syacium gunteri	1	10.1
Centropristis philadelphica	3	74.2
Cynoscion arenarius	1	83.4
Synodus foetens	2	61.4
Citharichthys macrops	1	343.7
Totals: 5	8	572.8

Appendix

OCS Benthic Fishes; Code AIA.
Transect II, Station 1.
17 December 1974; Winter, Night Trawl.

Species	Number	Weight (g.)
Chaetodipterus faber	6	212.3
Synodus foetens	4	302.9
Harengula pensacolae	1	42.6
Upeneus parvus	2	26.6
Trachurus lathami	1	31.7
Diplectrum bivittatum	2	14.1
Centropristis philadelphica	4	91.3
Sphoeroides parvus	1	5.8
Prionotus rubio	1	24.7
Porichthys porosissimus	12	49.0
Saurida brasiliensis	2	9.6
Bollmannia communis	1	5.7
Stellifer lanceolatus	1	37.1
Cynoscion arenarius	9	11.6
Bregmaceros atlanticus	1	0.2
Lepophidium graellsi	2	7.3
Etropus crossotus	1	16.8
Symphurus plagiusa	1	14.1
Syacium gunteri	31	291.5
Totals: 19	83	1194.9

Appendix

OCS Benthic Fishes; Code ALZ.
Transect 11, Station 2.
1 January 1975; Winter, Day Trawl.

Species	Number	Weight (g.)
Synodus foetens	10	886.8
Pristipomoides aquilonaris	9	76.7
Stenotomus caprinus	18	972.3
Lutjanus campechanus	1	19.3
Chloroscombrus chrysurus	6	156.7
Cyclopsetta chittendeni	2	281.5
Harengula pensacolae	2	104.6
Upeneus parvus	3	65.9
Diplectrum bivittatum	2	35.6
Centropristis philadelphica	9	385.1
Syacium gunteri	5	90.5
Prionotus rubio	4	105.5
Prionotus paralatus	1	13.0
Serranus atrobranchus	75	691.6
Saurida brasilensis	42	142.0
Totals : 15	189	4027.1

Appendix

OCS Benthic Fishes; Code ALF.
Transect II, Station 2.
18 December 1974; Winter, Night Trawl.

Species	Number	Weight (g.)
Synodus foetens	2	225.5
Synodus poeyi	2	12.9
Chaetodipterus faber	1	37'.3
Diplectrum bivittatum	1	16.2
Syacium gunteri	2	12.0
Serranus atrobranchus	1	4.6
Totals: 6	9	308.5

Appendix

OCS Benthic Fishes; Code APC.
Transect II, Station 3.
12 December 1974; Winter, Day Trawl.

Species	Number	Weight (g.)
Pristipomoides aquilonaris	39	1952.2
Prionotus stearnsi	6	53.4
Prionotus paralatus	5	146.3
Trachurus lathami	426	6162.3
Serranus atrobranchus	22	399.1
Prionotus rubio	1	85.6
Centropristis philadelphica	4	555.0
Stenotomus caprinus	6	313.8
Upeneus parvus	4	85.3
Caulolatilus cyanops	5	365.2
Saurida brasiliensis	8	29.5
Prionanthus arenatus	2	521.1
Urophycis cirratus	1	75.5
Trichopsetta ventralis	4	68.7
Pikes mexicana	2	20.2
Totals: 15	535	10833.2

Appendix

OCS Benthic Fishes; Code AOH.
Transect II, Station 3.
11 December 1974; Winter, Night Trawl

Species	Number	Weight (g.)
Caulolatilus cyanops	2	57.5
Scorpaena brasiliensis	1	502.3
Squatina dumerili	1	412.0
Upeneus parvus	1	34.8
Lepophidium graellsi	3	56.0
Hoplunnis macrurus	1	22.8
Prionotus rubio	1	46.4
Decodon puellaris	3	39.8
Prionotus paralatus	27	825.5
Peprilus burti	1	29.0
Centropristis philadelphica	2	130.1
Ancylopsetta dilecta	3	80.5
Pontinus longispinis	3	47.4
Equetus acuminatus	4	153.7
Congrina flava	1	24.7
Neobythites gilli	4	5.9
Symphurus plagiusa	1	1757.1
Pristipomoides aquilonaris	53	1136.0
Stenotomus caprinus	22	1695.9
Serranus atrobranchus	107	35.4
Pikes mexicana	1	487.7
Trichopsetta ventralis	41	
Totals: 22	283	7607.5

Appendix

OCS Benthic Fishes; Code ASE.
Transect 111, Station 1
15 December 1974; Winter, Day Trawl.

Species	Number	Weight (g.)
Selene vomer	1	10,8
Chloroscombrus chrysurus	1	11.6
Trichiurus lepturus	2	7.4
Sphoeroides parvus	2	8.3
Trachurus lathami	5	94.0
Cynoscion nothus	1	16.7
Cynoscion arenarius	3	30.5
Diplectrum bivittatum	1	6.1
Syacium gunteri	3	25.1
Etropus crossotus	1	16.7
Synodus foetens	2	89.0
Saurida brasiliensis	9	46.3
Totals: 12	31	362.5

Appendix

OCS Benthic Fishes; Code ARK.
Transect III, Station 1.
14 December 1974, Winter, Night Trawl

Species	Number	Weight (g.)
Pristipomoides aquilonaris	1	5.7
Bregmaceros atlanticus	2	1.3
Sphoeroides parvus	2	11.5
Lepophidium graellsi	7	29.1
Upeneus parvus	1	23.2
Trachurus lathami	1	13.3
Cynoscion no-thus	1	20.0
Eucinostomus argenteus	1	12.9
Synodus foetens	4	86.3
Prionotus rubio	2	39.3
Umbrina coroides	1	226.2
Symphurus diomedianus	1	19.9
Etropus crossotus	1	19.3
Serranus atrobranchus	1	8.2
Saurida brasiliensis	2	12.9
Symphurus plagiusa	6	100.2
Centropristis philadelphica	2	58.9
Cynoscion arenarius	27	166,9
Syacium gunteri	34	448.1
Totals: 19	97	1303,2

Appendix

OCS Benthic Fishes; Code AVJ.
Transect III, Station 2.
14 December 1974; Winter, Day Trawl.

Species	Number	Weight (g.)
Upeneus parvus	2	65.3
Trachurus lathami	1	14.9
Prionotus rubio	3	78.0
Synodus foetens	7	466.8
Saurida brasiliensis	1	3*9
Centropristis philadelphica	3	157.7
Peprilus burti	1	41.0
Pristipomoides aquilonaris	9	68.9
Prionotus stearnsi	1	9.9
Serranus atrobranchus	54	535.5
Syacium gunteri	2	46.6
Tota. .s: 11	84	1488.5

Appendix

OCS Benthic Fishes; Code AUN.
Transect III, Station 2.
13 December 1974; Winter, Night Trawl

Species	Number	Weight (g.)
Leiostomus xanthurus	14	1930.2
Prionotus rubio	11	439.5
Centropristis philadelphica	18	854.5
Prionotus paralatus	3	52.1
Pristipomoides aquilonaris	7	67.0
Trachurus lathami	13	240.5
Lutjanus campechanus	6	279.2
Serranus atrobranchus	101	1250.0
Cynoscion arenarius	1	300.4
Synodus foetens	5	1006.6
Synodus poeyi	4	35.5
Bollmannia communis	2	8.1
Lepophidium graellsi	3	65.3
Porichthys porosissimus	2	18.4
Cynoscion nothus	4	314.1
Cyclopsetta chittendeni	2	294.7
Congrina flava	4	135.3
Peprilus burti	4	178.4
Chaetodipterus faber	3	106.2
Prionotus stearnsi	2	20.6
Trichopsetta ventralis	6	109.4
Totals: 21 "	215	7706.0

Appendix

OCS Benthic Fishes; Code AYG.
Transect III, Station 3.
12 December 1974, Winter, Day Trawl.

Species	Number	Weight (g.)
Pristipomoides aquilonaris	21	1716.7
Peprilus burti	23	1077.6
Serranus atrobranchus	21	421.7
Prionotus stearnsi	1	5.9
Prionotus paralatus	1	36.1
Scomber japonicus	1	33.0
Kathetostoma albigutta	1	48.8
Caulolatilus cyanops	1	73.1
Stenotomus caprinus	5	272.9
Upeneus parvus	9	245.4
Cynoscion arenarius	2	579.6
Trichopsetta ventralis	8	245.6
Saurida brasiliensis	4	9.1
Trachurus lathami	313	4868.9
Totals: 14	411	9634.4

Appendix

OCS Benthic Fishes; Code AXM.
Transect III, Station 3.
13 December 1974; Winter, Night Trawl.

Species	Number	Weight (g.)
Pristipomoides aquilonaris	25	2155.4
Prionotus rubio	6	406.9
Prionotus paralatus	63	2373.6
Stenotomus caprinus	13	827.2
Serranus atrobranchus	85	1366.5
Synodus foe-tens	9	1783.0
Centropristis philadelphica	14	1244.1
Cynoscion arenarius	1	120.5
Prionotus stearnsi	1	10.1
Porichthys porosissimus	7	121.7
Trachurus lathami	23	343.4
Lepophidium graellsi	4	166.0
Gymnachirus texae	2	40.3
Cyclopsetta chittendeni	2	258.2
Ancylopsetta dilecta	2	211.9
Trichopsetta ventralis	30	445.7
Priacanthus arenatus	1	217.9
Zalieutes mcgintyi	2	38.2
Urophycis floridanus	2	289.8
Brotula barbata	1	36.2
Hoplunnis macrurus	1	3.8
Opsanus beta	1	402.3
Decodon puellaris	1	2.7
Scorpaena brasiliensis	2	2.6
Rypticus saponaceus	1	55.2
Congrina flava	6	159.4
Totals: 26	305	13082.6

Appendix

OCS Benthic Fishes; Code BBF.
Transect IV, Station 1.
22 January 1975; Winter, Day Trawl.

Species	Number	Weight (g.)
Anchoa hepsetus	1	20.9
Scomber japonicus	4	147.8
Trachurus lathami	35	772.1
Trichiurus lepturus	1	26.6
Diplectrum bivittatum	4	66.2
Sphoeroides parvus	7	38.7
Synodus foetens	10	236.2
Centropristis philadelphica	1	25.2
Menticirrhus americanus	5	628.3
Cynoscion arenarius	1	20.9
Saurida brasiliensis	3	25.4
Symphurus plagiusa	1	14.1
Etropus crossotus	1	32.5
Syacium gunteri	10	134.5
Eucinostomus argenteus	1	14.0
Totals: 15	85	2203.4

Appendix

OCS Benthic Fishes; Code BAK.
Transect IV, Station 1.
21 January 1975; Winter, Night Trawl.

Species	Number	Weight (g.)
Sphoeroides parvus	67	342.7
Leiostomus xanthurus	4	428.0
Lepophidium graellsi	4	95.5
Menticirrhus americanus	2	230.5
Scorpaena brasiliensis	1	11.4
Urophycis floridanus	1	2.8
Porichthys porosissimus	1	1.4
Serranus atrobranchus	3	47.5
Cynoscion no-thus	10	127.6
Synodus foetens	3	104.5
Symphurus diomedianus	1	16.2
Symphurus plagiusa	8	122.4
Syacium gunteri	19	309.7
Totals: 13	124	1840.2

Appendix

OCS Benthic Fishes; Code BEH.
Transect IV, Station 2.
24 January 1975; Winter, Day Trawl.

Species	Number	Weight (g.)
Upeneus parvus	11	246.1
Serranus atrobranchus	20	256.5
Syacium gunteri	3	45.5
Pristipomoides aquilonaris	17	113.2
Prionotus rubio	1	27.1
Engyophrys senta	1	6.7
Cyclopsetta chittendeni	1	66.9
Porichthys porosissimus	i	7.4
Synodus foetens	5	413.2
Saurida brasiliensis	1	5.0
Lagodon rhomboides	1	37.8
Peprilus burti	1	49.2
Selar crumenophthalmus	1	82.7
Trachurus lathami	45	1141.5
Totals: 14	109	2498.8

Appendix

OCS Benthic Fishes; Code BDK.
Transect IV, Station 2.
24 January 1975; Winter, Night Trawl.

Species	Number	Weight (g.)
Upeneus parvus	57	772.2
Synodus poeyi	3	30.6
Synodus foetens	2	203.5
Pristipomoides aquilonaris	145	862.5
Porichthys porosissimus	22	125.1
Serranus atrobranchus	21	205.0
Lagodon rhomboides	3	132.5
Syacium gunteri	1	14.9
Stenotomus caprinus	1	36.7
Trachurus lathami	8	231.7
Micropogon undulatus	1	107.7
Engyophrys senta	1	4.0
Symphurus diomedianus	2	38.2
Bollmannis communis	2	9.5
Lepophidium graellsi	1	4.6
Totals: 15	269	2778.7

Appendix

OCS Benthic Fishes; Code BPC.
Transect IV, Station 3.
25 January 1975; Winter, Day Trawl.

Species	Number	Weight (g.)
Mustelus canis	1	1020.0
Pristipomoides aquilonaris	17	2267.0
Chaetodipterus faber	2	162.0
Stenotomus caprinus	8	517.2
Synodus foetens	16	2450.7
Upeneus parvus	117	2755.3
Prionotus paralatus	5	160.0
Prionotus rubio	1	23.0
Porichthys porosissimus	1	14.7
Saurida brasiliensis	1	1.8
Trachurus lathami	1	19.0
Serranus atrobranchus	12	225.4
Kathetostoma albigutta	1	37.4
Lagocephalus laevigatus	2	226.2
Urophycis floridanus	1	112.5
Totals: 15	186	9992.2

Appendix

OCS Benthic Fishes; Code BGI.
Transect IV, Station 3.
24 January 1975; Winter, Night Trawl.

Species	Number	Weight (g.)
Mustelus canis	1	4173.0
Pristipomoides aquilonaris	26	1472.0
Prionotus paralatus	36	1071.0
Prionotus rubio	1	28.1
Mullus auratus	1	70.8
Upeneus parvus	12	509.1
Equetus acuminatus	5	304.7
Synodus foe-tens	4	477.9
Stenotomus caprinus	9	446.0
Cynoscion arenarius	3	502.4
Caulolatilus cyanops	4	95.0
Centropristis philadelphica	9	419.7
Porichthys porosissimus	15	156.5
Serranus atrobranchus	49	776.9
Trachurus lathami	1	72.4
Symphurus diomedianus	2	36.5
Lepophidium graellsi	3	98.0
Trichopsetta ventralis	16	299.1
Halieutichthys aculeatus	2	15.7
Lophiomus sp.	1	15.0
Totals: 20	200	11039.8

Appendix

OCS Benthic Fishes; Code CBA.
Transect I, Station 1.
8 April 1975; Spring, Day Trawl.

Species	Number	Weight (g.)
Micropogon undulatus	1646	4418.1
Cynoscion nothus	207	2727.5
Cynoscion arenarius	1	27.4
Stellifer lanceolatus	159	1538.4
Larimus fasciatus	29	265.0
Etropus crossotus	6	42.2
Anchoa mitchilli	13	24.9
Arius felis	8	2198.7
Menticirrhus americanus	9	1100.9
Urophycis floridanus	19	644.6
Ophidion velshi	1	59.2
Ophichthus gomesi	2	106.1
Citharichthys spilopterus	4	19.0
Gobionellus hastatus	1	5.6
Symphurus plagiusa	59	895.9
Peprilus alepidotus	1	23.7
Peprilus burti	16	168.2
Trichiurus lepturus	3	46.7
Prionotus tribulus	6	39.0
Prionotus rubio	9	14.0
Totals: 20	2199	14365.1

Appendix

OCS Benthic Fishes; Code CAG
Transect I, Station 1.
8 April 1975; Spring, Night Trawl.

Species	Number	Weight (g.)
Leiostomus xanthurus	1	79.0
Micropogon undulatus	635	2170.4
Stellifer lanceolatus	57	675.4
Symphurus plagiusa	24	409.9
Urophycis floridanus	15	362.1
Prionotus tribulus	17	26.9
Anchoa mitchilli	48	97.0
Cynoscion arenarius	3	85.4
Cynoscion nothus	162	2234.7
Menticirrhus americanus	7	1050.3
Zalieutes mcgintyi	2	24.9
Peprilus burti	2	26.9
Larimus fasciatus	16	135.5
Ophidion welshi	12	102.9
Syacium gunteri	1	14.4
Engyophyris senta	4	23.9
Citharichthys spilopterus	4	53.0
Porichthys porosissimus	2	38.3
Trichiurus lepturus	1	4.7
Symphurus pelicanus	4	4.3
Myrophis punctatus	1	18.7
Totals: 21	1018	7638.6

Appendix

OCS Benthic Fishes; Code CEA.
Transect I, Station 2.
9 April 1975; Spring, Day Trawl.

Species	Number	Weight (g.)
Cynoscion arenarius	2	361.7
Stenotomus caprinus	10	424.4
Diplectrum bivittatum	4	110.6
Prionotus stearnsi	47	178.9
Synodus foe-tens	32	2269.6
Serranus atrobranchus	34	396.6
Prionotus rubio	1	33.0
Syacium gunteri	47	916.6
Centropristis philadelphica	7	251.3
Synodus peoyi	15	94.5
Sphyraena guachancho	1	120.2
Lagodon rhomboids	1	44*5
Lutj mus campechanus	1	25.3
Eucinostomus gula	1	23.8
Stellifer lanceolatus	1	8.2
Upeneus parvus	3	36.8
Sphoeroides parvus	2	13.0
Engyophrys senta	1	5.0
Ophidion welshi	1	6.6
Symphurus pelicanus	2	2.4
Cyclopsetta chittendeni	2	38.8
Pristipomoides aquilonaris	13	247.7
Trachurus lathami	7	140.9
Saurida brasiliensis	163	810.4
Totals: 24	398	6560.8

Appendix

OCS Benthic Fishes; Code CDK.
Transect I, Station 2.
9 April 1975; Spring, Night Trawl.

Species	Number	Weight (g.)
Synodus foetens	3	536.9
Urophycis floridanus	6	561.1
Cynoscion arenarius	6	664.1
Centropristis philadelphica	11	169.5
Vomer setapinnis	1	55.0
Antennarius radiosus	1	4.0
Stenotomus caprinus	1	53.9
Lagodon rhomboides	3	130.4
Lutjanus campechanus	3	47.8
Serranus atrobranchus	28	267.1
Bregmaceros atlanticus	2	3.4
Synodus poeyi	13	82.3
Saurida brasiliensis	3	15.1
Bollmannia communis	11	59.8
Pristipomoides aquilonaris	10	162.9
Sphoeroides parvus	1	6.1
Porichthys porosissimus	10	83.2
Gymnothorax nigromarginatus	2	134.6
Congrina flava	2	41.1
Lepophidium graellsi	9	169.0
Hoplunnis macrurus	6	56.3
Prionotus stearnsi	2	8.5
Prionotus rubio	4	193.1
Prionotus paralatus	3	2.4
Diplectrum bivittatum	5	117.7
Syacium gunteri	48	651.3
Engyophrys senta	11	62.7
Symphurus parvus	1	2.8
Cyclopsetta chittendeni	10	864.2
Totals: 29	216	5206.3

Appendix

OCS Benthic Fishes; Code CHK.
Transect I, Station 3.
10 April 1975; Spring, Day Trawl.

Species	Number	Weight (g.)
Pontinus longispinis	36	1792.2
Pristipomoides aquilonaris	38	2789.4
Prionotus paralatus	27	938.1
Serranus atrobranchus	23	406.7
Synodus foetens	1	117.6
Halieutichthys aculeatus	2	14.4
Prionotus stearnsi	2	12.7
Stenotomus caprinus	3	129.1
Trichopsetta ventralis	10	188.0
Ancylopsetta dilecta	1	29.4
Saurida brasiliensis	4	24.8
Upeneus parvus	5	127.4
Trachurus lathami	13	147.6
Caulolatilus cyanops	4	355.9
Urophycis floridanus	1	64.0
Urophycis cirratus	1	95.0
pikes mexicana	1	15.6
Hemanthias vivanus	1	8.4
Decodon puellaris	4	197.9
Totals: 19	177	7454.2

Appendix

OCS Benthic Fishes; Code CGO.
Transect I, Station 3.
10 April 1975; Spring, Night Trawl.

Species	Number	Weight (g.)
Serranus atrobranchus	62	1301.9
Urophycis floridanus	4	337.5
Prionotus paralatus	18	585.8
Stenotomus caprinus	38	1724.6
Pristipomoides aquilonaris	27	1706.1
Congrina flava	2	106.2
Pontinus longispinis	2	66.0
Equetus acuminatus	1	43.4
Trachurus lathami	1	22.6
Lepophidium graellsi	10	177.9
Hoplunnis macrurus	11	135.6
Zalieutes mcgintyi	1	15.3
Prionotus stearnsi	1	1.2
Porichthys porosissimus	1	8.4
Neobythites gilli	3	18.0
Ancylopsetta dilecta	1	11.5
Trichopsetta ventralis	9	90.7
Hemanthias vivanus	1	10.3
Totals: 18	193	6363.0

Appendix

OCS Benthic Fishes; Code CKQ.
Transect II, Station 1.
17 April 1975; Spring, Day Trawl.

Species	Number	Weight (g.)
Syacium gunteri	376	4623.4
Anchoa hepsetus	10	218.3
Diplectrum bivittatum	31	424.7
Citharichthys spilopterus	19	240.8
Ancylopsetta dilecta	2	7.4
Bollmannia communis	4	22.6
Synodus foetens	56	1244.6
Trachurus lathami	89	1774.9
Centropristis philadelphica	23	158.8
Cynoscion nothus	193	3247.5
Vomer setapinnis	2	101.2
Peprilus burti	4	231.7
Urophycis floridanus	1	103.7
Chloroscombrus chrysurus	7	236.7
Antennarius radiosus	1	4.5
Sphoeroides parvus	1	8*6
Saurida brasiliensis	1	10.8
Prionotus rubio	2	2.2
Cyclopsetta chittendeni	2	51.8
Upeneus parvus	1	2.2
Mullus auratus	1	2.6
Hippocampus erectus	1	1.4
Syngnathus louisianae	2	3.7
Neobythites gilli	1	1.3
Totals: 24	830	12725.4

Appendix

OCS Benthic Fishes; Code CJV."
Transect II, Station 1.
16 April 1975; Spring, Night Trawl.

Species	Number	Weight (g.)
Cynoscion nothus	298	3931.2
Syacium gunteri	64	778.5
Citharichthys spilopterus	5	65.7
Etropus crossotus	1	18.5
Larimus fasciatus	9	83.0
Brotula barbata	1	8.1
Trichurus lepturus	2	53.6
Stellifer lanceolatus	5	90.4
Prionotus rubio	24	34.4
Centropristis philadelphica	2	3.7
Polydactylus octonemus	2	4.3
Anchoa mitchilli	1	1.0
Urophycis floridanus	13	372.2
Cynoscion arenarius	1	70.7
Porichthys porosissimus	2	88.9
Symphurus plagiusa	27	522.7
Totals: 16	457	6126.9

Appendix

OCS Benthic Fishes; Code CNT.
Transect II, Station 2.
18 April 1975; Spring, Day Trawl.

Species	Number	Weight (g.)
Syacium gunteri	111	1561.9
Peprilus burti	2	117.3
Chloroscombrus chrysurus	1	23.9
Vomer setapinnis	7	333.7
Cynoscion arenarius	1	105.7
Prionotus stearnsi	1	7.5
Priacanthus arenatus	2	6.6
Centropristis philadelphica	3	43.7
Serranus atrobranchus	1	4.3
Pristipomoides aquilonaris	8	109.6
Bollmannia communis	7	27.2
Prionotus salmonicolor	4	23.1
Etropus crossotus	2	55.5
Cyclopsetta chittendeni	1	23.4
Engyophrys senta	8	48.9
Anchoa hepsetus	2	40.2
Diplectrum bivittatum	25	644.5
Synodus foetens	22	1179.1
Synodus poeyi	16	141.4
Upeneus parvus	76	365.4
Trachurus lathami	149	1768.0
Saurida brasiliensis	25	146.7
Stenotomus caprinus	34	66.4
Totals: 23	508	6844.0

Appendix

OCS Benthic Fishes; Code CMY.
Transect II, Station 2.
18 April 1975; Spring, Night Trawl.

Species	Number	Weight (g.)
Cynoscion nothus	2	136.5
Diplectrum bivittatum	11	195.2
Stenotomus caprinus	7	12.1
Pristipomoides aquilonaris	15	216.2
Cynoscion arenarius	7	1068.2
Lutjanus campechanus	2	31.6
Prionotus stearnsi	1	5.2
Prionotus rubio	6	186.8
Bollmannia communis	11	55.6
Serranus atrobranchus	14	84.4
Centropristis philadelphica	8	321.5
Lagodon rhomboides	2	80.7
Porichthys porosissimus	2	22.9
Gymnothorax nigromarginatus	1	64.4
Urophycis floridanus	3	186.8
Urophycis cirratus	3	20.5
Lepophidium graellsi	9	108.0
Ophichthus gomesi	1	75.4
Hoplunnis macrurus	8	77.9
Congrina flava	1	9.5
Bregmaceros atlanticus	1	0.7
Zalieutes mcgintyi	1	6.7
Antennarius radiosus	5	20.4
Prionotus salmonicolor	1	24.2
Engyophrys senta	25	148.3
Cyclopsetta chittendeni	11	550.0
Syacium gunteri	108	1632.1
Synodus foe-tens	9	642.5
Synodus poeyi	2	7.4
Symphurus parvus	5	12.4
Totals: 30	282	6004.1

Appendix

OCS Benthic Fishes; Code CQV.
Transect II, Station 3.
17 May 1975; Spring, Day Trawl.

Species	Number	Weight (g.)
Stenotomus caprinus	15	832.8
Caulolatilus cyanops	4	301.7
Saurida brasiliensis	4	15.5
Synodus foetens	6	832.2
Pristipomoides aquilonaris	28	2100.6
Serranus atrobranchus	25	417.9
Upeneus parvus	19	413.6
Prionotus paralatus	7	237.7
Trichopsetta ventralis	2	16.5
Halieutichthys aculeatus	1	0.6
Trachurus lathami	14	233.4
Tota. s: 11	125	5402.5

Appendix

OCS Benthic Fishes; Code CQA.
Transect II, Station 3.
17 May 1975; Spring, Night Trawl.

Species	Number	Weight (g.)
Pristipomoides aquilonaris	17	652.3
Peprilus burti	5	301.4
Prionotus paralatus	9	277.5
Prionotus stearnsi	1	11.0
Stenotomus caprinus	2	124.4
Serranus atrobranchus	15	291.4
Synodus foetens	1	329.5
Equetus acuminatus	1	37.0
Lepophidium graellsi	1	20.8
Upeneus parvus	2	77.4
Lagodon rhomboides	1	96.1
Monolene sessilicauda	1	3.0
Trichopsetta ventralis	2	19.9
Pikea mexicana	1	10.8
Scopraena brasiliensis	2	55.6
Ancylopsetta dilecta	2	67.0
Hoplunnis macrurus	1	19.0
Congrina flava	1	26.3
Neobythites gilli	4	32.4
Totals: 19	69	2452.8

Appendix

OCS Benthic Fishes; Code CUD.
Transect 111, Station 1.
14 May 1975; Spring, Day Trawl.

Species	Number	Weight (g.)
Peprilus burti	3	118.3
Diplectrum bivittatum	7	140.8
Pristipomoides aquilonaris	21	430.9
Monacanthus hispidus	1	13.4
Citharichthys spilopterus	2	26.6
Syacium gunteri	83	1383.5
Anchoa hepsetus	4	84.5
Trachurus lathami	8	78.7
Prionotus stearnsi	68	344.2
Synodus feotens	11	346.0
Stenotomus caprinus	44	127.7
Lagocephalus laevigatus	5	30.8
Serranus atrobranchus	21	29.4
Bollmannia communis	2	4.5
Halieutichthys aculeatus	1	0.3
Prionotus rubio	1	2.5
Polydactylus octonemus	1	1.8
Saurida brasiliensis	98	547.7
Upeneus parvus	87	421.5
Centropristis philadelphica	34	85.7
Totals: 20	502	4218.8

Appendix

OCS Benthic Fishes; Code CTH.
Transect III, Station 1.
14 May 1975; Spring, Night Trawl.

Species	Number	Weight (g.)
Cynoscion arenarius	2	232.6
Cynoscion nothus	9	431.3
Brotula barbata	2	12.3
Urophycis floridanus	3	121.4
Prionotus rubio	2	17.1
Syacium gunteri	118	1858.2
Centropristis philadelphica	147	551.8
Syngnathus louisianae	1	4.4
Symphurus plagiusa	5	107.7
Porichthys porosissimus	2	38.2
Zalieutes mcgintyi	1	24.8
Stenotomus caprinus	6	18.5
Bregmaceros atlanticus	7	3.0
Synodus foetens	3	56.5
Gymnothorax nigromarginatus	8	324.2
Lepophidium graellsi	12	164.4
Hoplunnis macrurus	2	44.7
Bollmannia communis	1	3.2
Ophichthus gomesi	2	222.9
To tab: 1 9	333	4237.2

Appendix

OCS Benthic Fishes; Code CXZ.
Transect III, Station 2.
15 May 1975; Spring, Day Trawl.

Species	Number	Weight (g.)
Cynoscion arenarius	1	195.5
Cyclopsetta chittendeni	1	134.4
Peprilus burti	5	383.8
Centropristis philadelphica	8	460.4
Prionotus paralatus	2	70.4
Trichopsetta ventralis	17	397.7
Porichthys porosissimus	1	11.1
Prionotus rubio	4	217.4
Vomer setapinnis	1	94.4
Pristipomoides aquilonaris	2	91.0
Trachurus lathami	7	175.8
Synodus foetens	7	1562.6
Stenotomus caprinus	8	561.4
Serranus atrobranchus	62	1008.1
Prionotus stearnsi	29	324.3
Halieutichthys aculeatus	2	18.7
Zalieutes mcgintyi	2	113.0
Monacanthus hispidus	1	7.7
Upeneus parvus	19	740.8
Synodus poeyi	12	106.9
Saurida brasiliensis	37	174.1
Totals: 21	228	6849.5

Appendix

OCS Benthic Fishes; Code CXK.
Transect III, Station 2.
15 May 1975; Spring, Night Trawl.

Species	Number	Weight (g,)
Gymnothorax nigromarginatus	2	196.2
Cyclopsetta chittendeni	1	110.4
Trichiurus lepturus	2	97.7
Sphoeroides parvus	2	17.3
Stenotomus caprinus	13	645.5
Symphurus plagiusa	2	5.5
Engyophrys senta	1	4.0
Ancylopsetta dilecta	1	3.3
Trichopsetta ventralis	10	134.0
Lagocephalus laevigatus	1	6.9
Antennarius radiosus	1	1.0
Kathetostoma albigutta	1	1.9
Hoplunnis macrurus	10	110,1
Halieutichthys aculeatus	1	0.8
Lepophidium graellsi	11	202.2
Congrina flava	9	157.2
Cnetropristis philadelphica	4	288.1
Scorpaena brasiliensis	1	1.2
Caulolatilus cyanops	2	2.4
Upeneus parvus	2	115.3
Prionotus stearnsi	4	39.3
Prionotus paralatus	3	56.2
Urophycis floridanus	1	48.0
Prionotus rubio	8	377 .3
Saurida brasiliensis	2	16.4
Porichthys porosissimus	17	213.9
Bollmannia communis	21	42.8
Serranus atrobranchus	128	1559.2
Synodus foetens	8	848.1
Synodus poeyi	16	143.8
Totals : 30	285	5446.0

Appendix

OCS Benthic Fishes; Code DBB.
Transect III, Station 3.
16 May 1975; Spring, Day Trawl.

Species	Number	Weight (g.)
Synodus foe-tens	12	2153.9
Pristipomoides aquilonaris	4	468.7
Urophycis floridanus	1	45.5
Sphoeroides dorsalis	1	16.5
Serranus atrobranchus	32	561.9
Stenotomus caprinus	14	815.4
Lagodon rhomboides	22	1192.6
Upeneus parvus	30	714.4
Caulolatilus cyanops	2	208.5
Porichthys porosissimus	1	9.0
Peprilus burti	9	669.2
Trichopsetta ventralis	1	29.6
Prionotus rubio	3	193.6
Prionotus paralatus	8	294.4
Saurida brasiliensis	4	7.9
Totals: 15	144	7381.1

Appendix

OCS Benthic Fishes; Code DAI.
Transect III, Station 3.
16 May 1975; Spring, Night Trawl.

Species	Number	Weight (g.)
Prionotus paralatus	26	999.7
Trichopsetta ventralis	15	262.1
Cyclopsetta chittendeni	2	515.6
Stenotomus caprinus	23	1481.7
Lagodon rhomboides	3	177.4
Upeneus parvus	1	73.5
Trachurus lathami	1	49.1
Peprilus burti	1	60.0
Pristipomoides aquilonaris	14	1752.4
Centropristis philadelphica	14	962.1
Serranus atrobranchus	132	2107.3
Prionotus rubio	7	418.3
Caulolatilus cyanops	1	43.5
Porichthys porosissimus	19	379.9
Urophycis floridanus	6	554.9
Urophycis cirratus	1	30.1
Kathetostoma albigutta	1	47.3
Synodus poeyi	1	5.9
Synodus foetens	2	458.3
Gymnothorax nigromarginatus	1	149.7
Ophichthus gomesi	1	35.5
Lepophidium graellsi	7	310.1
Hoplunnis macrurus	2	25.4
Neobythites gilli	3	15.2
Congrina flava	5	257.6
Totals: 25	289	11172.6

Appendix

OCS Benthic Fishes; Code DEB.
Transect IV, Station 1.
1 May 1975; Spring, Day Trawl.

Species	Number	Weight (g.)
Priacanthus arenatus	5	30.7
Diplectrum bivittatum	3	64.7
Trachurus lathami	100	1461.8
Syacium gunteri	77	1254.6
Saurida brasiliensis	115	673.7
Symphurus plagiusa	36	757.1
Prionotus stearnsi	20	186.3
Urophycis floridanus	3	171.1
Centropristis philadelphica	1	1.6
Peprilus burti	15	98.5
Cynoscion nothus	2	62.5
Bollmannia communis	1	3.7
Upeneus parvus	1	4.7
AntennaPius *radiosus*	4	16.0
Halieutichthys aculeatus	3	33.2
Lepophidium graellsi	1	52.4
Porichthys porosissimus	3	48.9
Synodus foetens	6	148.2
Prionotus rubio	1	6.7
Prionotus salmonicolor	1	25.7
Anchoa hepsetus	2	40.2
Syngnathus louisianae	1	1.7
Lagocephalus laevigatus	1	10..4
Sphoeroides parvus	2	1.8
Sardinella anchovia	1	16.0
Totals: 25	405	5172.2

Appendix

OCS Benthic Fishes; Code DDI.
. Transect IV; Station 1.
1 May 1975; Spring, Night Trawl.

Species	Number	Weight (g.)
Synodus foetens	2	92.5
Gymnothorax nigromarginatus	1	27.1
Syacium gunteri	76	1186.2
Urophycis floridanus	4	124.3
Lepophidium graellsi	4	36.4
Ophichthus gomesi	1	43.0
Saurida brasiliensis	13	105.5
Symphurus plagiusa	38	733.3
Brotula barbata	2	8.5
Trachurus lathami	4	77.1
Prionotus stearnsi	23	195.2
Prionotus rubio	1	0.2
Stenotomus caprinus	1	2.6
Centropristis philadelphica	6	9.2
Halieutichthys aculeatus	8	62.2
Zalieutes mcgintyi	4	35.7
Engyophrys senta	2	19.7
Bregmaceros atlanticus	1	1.0
Antennarius radiosus	5	19.0
Cyclopsetta chittendeni	3	42.2
Diplectrum bivittatum	4	73.3
Porichthys porosissimus	9	145.1
Prionotus paralatus	2	4.5
Raja texana	1	21.5
Totals: 24	215	3065.3

Appendix

OCS Benthic Fishes; Code DHA.
Transect IV, Station 2.
2 May 1975; Spring, Day Trawl.

Species	Number	Weight (g.)
Upeneus parvus	110	1685.9
Sphoeroides parvus	5	24.1
Synodus foe-tens	6	407.3
Synodus poeyi	17	106.2
Antennarius radiosus	1	1.1
Sau.rids brasiliensis	68	296.6
Lagodon rhomboides	1	53.0
Prionotus rubio	2	34.0
Caulolatilus cyanops	10	47.9
Hippocampus erectus	1	1.3
Pristipomoides aquilonaris	14	206.0
Prionotus stearnsi	80	277.2
Raja texana	1	7.9
Stenotomus caprinus	1	27.1
Engyophrys senta	5	25.1
Porichthys porosissimus	5	35.4
Bollmannia communis	1	2.6
Urophycis floridanus	2	114.6
Syacium gunteri	16	197.5
Serranus atrobranchus	8	68.6
Totals: 20	354	3619.4

Appendix

OCS Benthic Fishes; Code DGH.
Transect IV, Station 2.
2 May 1975; Spring, Night Trawl.

Species	Number	Weight (g.)
Lagodon rhomboids	8	570.1
Lutjanus campechanus	3	82.9
Porichthys porosissimus	26	187.5
Serranus atrobranchus	32	315.2
Cynoscion no-thus	4	349.0
Gymnothorax nigromarginatus	2	74.8
Congrina flava	2	121.9
Hoplunnis macrurus	1	19.8
Bollmannia communis	5	25.5
Engyophrys senta	2	9.1
Bregmaceros atlanticus	9	5*3
Hippocampus erectus	1	0.7
Micropogon undulatus	2	234.0
Ancylopsetta quadrocellata	1	232.2
Lepophidium graellsi	16	312.8
Syacium gunteri	16	183.4
Urophycis cirratus	2	28.2
Gymnachirus texae	2	26.8
Equetus acuminatus	6	108.7
Synodus foetens	1	47.4
Saurida brasiliensis	1	4.8
Prionotus rubio	7	198.7
Sphoeroides parvus	3	19.3
Mustelus canis	1	232.3
Eucinostomus argenteus	2	60.7
Antennarius radiosus	4	15.7
Symphurus diomedianus	3	61.5
Stenotomus caprinus	1	54.4
Halieutichthys aculeatus	1	0.2
Zalieutes mcgintyi	3	23.1
Pristipomoides aquilonaris	6	79.6
Seriola zonata	1	60.9
Totals: 32	114	3746.5

Appendix

OCS Benthic Fishes; Code DKF.
Transect IV, Station 3.
2 May 1975; Spring, Day Trawl.

Species	Number	Weight (g.)
Synodus foetens	6	844.8
Trachurus lathami	1	45.8
Priacanthus arenatus	1	145.9
Lagodon rhomboides	1	80.3
Pristipomoides aquilonaris	2	67.3
Peprilus burti	8	513.5
Serranus atrobranchus	3	31.1
Saurida brasiliensis	4	15.1
Prionotus stearnsi	7	34.8
Monacanthus hispidus	1	32.8
Sphoeroides parvus	4	29.2
Engyophrys senta	4	15.0
Porichthys porosissimus	4	37.8
Halieutichthys aculeatus	6	47.5
Syacium gunteri	8	64.3
Trichopsetta ventralis	5	63.5
Lagocephalus laevigatus	1	322.9
Bellator militaris	1	16.4
Symphurus diomedianus	1	19.4
Stenotomus caprinus	1	36.5
Eucinostomus gula	1	27.3
Synodus poeyi	4	21.6
Prionotus paralatus	5	134.6
Hippocampus erectus	1	2.7
Upeneus parvus	159	3088.8
Totals: 25	239	5738.9

Appendix

OCS Benthic Fishes; Code DJJ.
Transect IV, Station 3.
29 April 1975; Spring, Night Trawl.

Species	Number	Weight (g.)
Stenotomus caprinus	11	641.4
Synodus foe-tens	1	179.9
Trichopsetta ventralis	4	93.6
Symphurus diomedianus	3	34.1
Lepophidium graellsi	13	129.6
Syacium gunteri	3	8.2
Centropristis philadelphica	10	589.8
Pristipomoides aquilonaris	8	202.9
Lutjanus campechanus	1	63.1
Pikes mexicana	1	17.1
Halieutichthys aculeatus	10	75.0
Trachurus lathami	1	5.6
Serranus atrobranchus	1	10.7
Pontinus longispinis	3	9.2
Callionymus agassizi	1	4.4
Lagodon rhomboides	1	89.5
Prionotus parpalatus	9	220.7
Porichthys porosissimus	12	89.3
Bellator militaris	3	32.7
Equetus acuminatus	5	134.6
Kathetostoma albigutta	1	1.5
Sphoeroides parvus	1	9.2
Sphoeroides dorsalis	2	31.0
Totals: 23	105	2673.1

Appendix

OCS Benthic Fishes; Code EBA.
Transect I, Station 1.
27 August.1975; Summer, Day Trawl.

Species	Number	Weight (g.)
Peprilus burti	10	263.0
Micropogon undulatus	2	57.2
Prionotus rubio	23	272.1
Ancylopsetta quadrocellata	1	58.4
Citharichthys spilopterus	2	32.1
Etropus crossotus	5	107.4
Symphurus plagiusa	5	95.9
Sphoeroides parvus	27	74.9
Monacanthus hispidus	1	5.5
Arius felis	1	219.4
Centropristis philadelphica	3	22.2
Stenotomus caprinus	8	109.4
Lutjanus campechanus	19	143.0
Cynoscion nothus	4	224.0
Chloroscombrus chrysurus	45	1126.3
Syacium gunteri	20	442.4
Anchoa hepsetus	5	58.5
Cyclopsetta chittendeni	1	2.2
Synodus foe-tens	23	350.2
Harengula pensacolae	2	20.6
Totals: 20	207	3684.7

Appendix

OCS Benthic Fishes; Code EAG.
Transect I, Station 1.
27 August 1975; Summer, Night Trawl.

Species	Number	Weight (g.)
Micropogon undulatus	362	11143.6
Leiostomus xanthurus	55	2153.0
Polydactylus octonemus	44	969.3
Cynoscion arenarius	11	483.5
Synodus foetens	5	316.9
Prionotus rubio	45	696.1
Sphoeroides parvus	87	256.1
Larimus fasciatus	4	108.0
Stellifer lanceolatus	1	25.0
Ancylopsetta quadrocellata	1	75.7
Centropristis philadelphica	2	23.5
Cyclopsetta chittendeni	1	26.5
Citharichthys spilopterus	1	11.0
Arius felis	1	158.4
Symphurus plagiusa	9	105.2
Syacium gunteri	7	132.4
Lepophidium graellsi	1	19.8
Porichthys porosissimus	1	20.7
Chloroscombrus chrysurus	1	21.2
Lutjanus campechanus	6	61.0
Gymnothorax nigromarginatus	1	15.5
Chilomycterus schoepfi	1	7.5
Epinephelus nigritus	1	19.3
Totals: 23	648	16849.2

Appendix

OCS Benthic Fishes; Code EEA.
Transect I, Station 2.
27 August 1975; Summer, Day Trawl.

Species	Number	Weight (g.)
Saurida brasiliensis	158	685.1
Synodus foetens	10	972.5
Syacium gunteri	30	521.7
Cyclopsetta chittendeni	7	706.3
Serranus atrobranchus	31	232.6
Chloroscombrus chrysurus	5	117.6
Centropristis philadelphica	17	349.9
Priacanthus arenatus	1	33.8
Prionotus rubio	4	69.0
Prionotus paralatus	9	89.4
Prionotus stearnsi	2	5.7
Bollmannia communis	2	8.6
Lutjanus campechanus	1	0.6
Sphoeroides parvus	11	39.2
Gymnachirus texae	1	12.5
Stenotomus caprinus	3	19.0
Ancylopsetta quadrocellata	1	98.5
Synodus poeyi	3	10.9
Pristipomoides aquilonaris	7	25.0
Ancylopsetta dilecta	1	25.6
Engyophrys senta	2	6.4
Lagocephalus laevigatus	10	145.2
Totals: 22	316	4175.1

Appendix

OCS Benthic Fishes; Code EDK.
Transect I, Station 2.
28 August 1975; Summer, Night Trawl.

Species	Number	Weight (g.)
Synodus foetens "	2	290.4
Saurida brasiliensis	1	11.6
Zalieutes mcgintyi	1	8.7
Cyclopsetta chittendeni	2	97.4
Prionotus rubio	7	135.7
Centropristis philadelphica	7	123.7
Prionotus paralatus	4	36.0
Serranus atrobranchus	8	112.6
Syacium gunteri	3	60.1
Stenotomus caprinus	2	22.0
Micropogon undulatus	1	60.6
Pristipomoides aquilonaris	1	3.4
Caulolatilus cyanops	1	17.8
Totals: 13	40	980.0

Appendix

OCS Benthic Fishes; Code EHK.
Transect I, Station 3.
28 August 1975; Summer, Day Trawl.

Species		Number	Weight (g.)
Synodus foetens		2	246.1
Pristipomoides aquilonaris		8	864.6
Pontinus longispinis		5	190.6
Urophycis floridanus		1	79.1
Caulolatilus cyanops		1	85.8
Zalieutes mcgintyi		1	19.9
Ancylopsetta dilecta		2	133.7
Halieutichthys aculeatus		4	29.6
Prionotus stearnsi		7	57.1
Saurida brasiliensis		1	3*0
Upeneus parvus		3	77.2
Trichopsetta ventralis		7	147.5
Stenotomus caprinus		7	350.6
Serranus atrobranchus		12	225.1
Prionotus rubio		3	102.9
Kathetostoma albigutta		3	172.5
Prionotus paralatus		18	803.3
Ancylopsetta quadrocellata		1	989.5
Totals:	18	86	4578.1

Appendix

OCS Benthic Fishes; Code EGO.
Transect I, Station 3.
28 August 1975; Summer, Night Trawl.

Species	Number	Weight (g.)
Serranus atrobranchus	106	2147.7
Stenotomus caprinus	14	759.1
Centropristis philadelphica	1	60,1
Pikes mexicana	1	2.7
Pristipomoides aquilonaris	36	2499.7
Prionotus stearnsi	3	33.8
Trachurus lathami	5	154.2
Prionotus paralatus	12	421.7
Urophycis floridanus	4	378.8
Urophycis cirratus	4	243.9
Neobythites gilli	1	1.6
Ancylopsetta dilecta	3	86.5
Trichopsetta ventralis	2	34.3
Porichthys porosissimus	2	12.2
Peprilus burti	1	59*7
Pontinus longispinis	2	50.1
Saurida brasiliensis	1	1.1
Bembrops anatirostris	1	64.0
Caulolatilus cyanops	2	140.9
Hoplunnis macrurus	4	75.6
Totals: 20	205	7227.7

Appendix

OCS Benthic Fishes; Code EKQ.
Transect II, Station 1.
5 September 1975; Summer, Day Trawl.

Species	Number	Weight (g.)
Vomer setapinnis	9	843.9
Chloroscombrus chrysurus	26	865.1
Prionotus rubio	1	7.4
Lutjanus campechanus	7	83.8
Upeneus parvus	7	106.4
Centropristis philadelphica	2	24.1
Micropogon undulatus	28	1347.6
Cynoscion nothus	9	489.8
Stenotomus caprinus	16	183.5
Anchoa hepsetus	4	29.3
Peprilus burti	18	452.9
Syacium gunteri	13	107.0
Synodus foetens	4	181.6
Sphyrna tiburo	1	120.3
Caranx crysos	2	98.0
Totals: 15	147	4895.7

Appendix

OCS Benthic Fishes; Code EJV.
Transect II, Station 1.
5 September 1975; Summer, Night Trawl.

Species	Number	Weight (g.)
Cynoscion nothus	1	66.5
Saurida brasiliensis	2	17.4
Lutjanus campechanus	4	35.5
Synodus foetens	5	120.0
Stenotomus caprinus	34	360.5
Prionotus rubio	49	689.3
Syacium gunteri	32	446.4
Cyclopsetta chittendeni	14	194.4
Centropristis philadelphica	15	154.7
Bollmannia communis	2	7.3
Micropogon undulatus	9	453.6
Symphurus plagiusa	3	40.7
Chloroscombrus chrysurus	9	275.9
Sphoeroides parvus	8	24.6
Upeneus parvus	1	13.8
Vomer setapinnis	1	74.2
Lepophidium graellsi	1	18.5
Hoplunnis macrurus	1	4.7
Gymnachirus texae	1	8.5
Porichthys porosissimus	4	60.0
Diplectrum bivittatum	11	39.6
Totals: 21	207	3106.1

Appendix

OCS Benthic Fishes; Code ENU.
Transect II, Station 2.
6 September 1975; Summer, Day Trawl.

Species	Number	Weight (g.)
Balistes capriscus	1	207.2
Kathetostoma albigutta	1	8.8
Micropogon undulatus	6	361.5
Diplectrum bivittatum	2	5.8
Lagocephalus laevigatus	2	104.8
Lutjanus campechanus	1	9.2
Sphoeroides parvus	1	1.2
Upeneus parvus	2	95.6
Serranus atrobranchus	21	279.6
Centropristis philadelphica	4	147.9
Synodus foetens	6	591.7
Saurida brasiliensis	13	66.3
Syacium gunteri	2	62.0
Synodus poeyi	2	7.9
Prionotus rubio	6	73.3
Pristipomoides aquilonaris	4	7.8
Stenotomus caprinus	12	151.7
Totals: *17*	*86*	*2182.3*

Appendix

OCS Benthic Fishes; Code ENY.
Transect 11, Station 2.
6 September 1975; Summer, Night Trawl.

Species		Number	Weight (g.)
Lepophidium graellsi		2	58.8
Trichopsetta ventralis		2	27.2
Prionotus paralatus		1	9.6
Prionotus rubio		2	24.2
Serranus atrobranchus		2	38.4
Centropristis philadelphica		1	110.6
Cyclopsetts chittendeni		2	173.2
Saurida brasiliensis		1	5.7
Synodus foetens		1	437.0
Engyophrys senta		1	3.2
Totals:	10	15	887.9

Appendix

OCS Benthic Fishes; Code EQU.
Transect 11, Station 3.
7 September 1975; Summer, Day Trawl.

Species	Number	Weight (g.)
Pristipomoides aquilonaris	27	1806.0
Equetus acuminatus	2	124.4
Trachurus lathami	6	130.3
Serranus atrobranchus	10	217.7
Senotomus caprinus	1	94.3
Prionotus paralatus	2	76.3
Caulolatilus cyanops	1	90.3
Upeneus parvus	1	22.2
Prionotus rubio	4	111.8
Bembrops anatirostris	2	70.4
Saurida brasiliensis	4	10.3
Totals: 11	60	2754.0

Appendix

OCS Benthic Fishes; Code EQA.
Transect II, Station 3.
7 September 1975; Summer, Night Trawl.

Species	Number	Weight (g.)
Serranus atrobranchus	44	855.4
Pristipomoides aquilonaris	20	1210.4
Stenotomus caprinus	8	432.8
Trachurus lathami	6	162.1
Prionotus paralatus	4	124.8
Prionotus stearnsi	1	7.4
Equetus acuminatus	1	70.1
Caulolatilus cyanops	1	43.9
Trichopsetta ventralis	1	6.7
Upeneus parvus	1	33.4
Urophycis floridanus	1	70.0
Lepophidium graellsi	1	18.4
Neobythites gilli	1	3.7
Ophichthus gomesi	1	17.3
Hoplunnis macrurus	2	24.3
Totals: 15	93	3080.7

Appendix

OCS Benthic Fishes; Code EUD.
Transect III, Station 1.
9 September 1975; Summer, Day Trawl.

Species	Number	Weight (g.)
Micropogon undulatus	217	8421.7
Prionotus rubio	7	79.1
Menticirrhus americanus	3	433.8
Vomer setapinnis	14	292.0
Chloroscombrus chrysurus	8	236.4
Gymnothorax nigromarginatus	3	105.9
Upeneus parvus	3	42.4
Leiostomus xanthurus	59	3181.6
Sphyraena guachancho	2	30.7
Stenotomus caprinus	21	280.4
Anchoa hepsetus	221	390.3
Peprilus burti	24	430.3
Synodus foetens	21	611.3
Harengula pensacolae	5	162.2
Centropristis philadelphica	1	11.3
Syacium gunteri	26	416.1
Stellifer lanceolatus	15	645.7
Cynoscion nothus	66	3237.5
Cynoscion arenarius	30	1664.9
Citharichthys spilopterus	1	17.2
Trichiurus lepturus	2	108.4
Polydactylus octonemus	18	659.2
Etropus crossotus	2	38.8
Serranus atrobranchus	1	20.4
Lutjanus campechanus	1	25.6
Cyclopsetta chittendeni	3	40.1
Symphurus plagiusa	1	1.9
Scomberomorus cabana	1	21.6
Totals: 28	776	21606.8

Appendix "

OCS Benthic Fishes; Code ETH.
Transect 111, Station 1.
9 September 1975; Summer, Night Trawl.

Species	Number	Weight (g.)
Micropogon undulatus	168	7765.6
Polydactylus octonemus	59	2106.0
Leiostomus xanthurus	9	525.5
Cynoscion nothus	1	63.2
Chaetodipterus faber	1	28.7
Sphoeroides parvus	3	8,8
Hoplunnis macrurus	1	14.7
Bollmannia communis	1	8.3
Centropristis philadelphica	4	38.9
Diplectrum bivittatum	5	26.0
Menticirrhus americanus	1	124.0
Synodus foetens	2	43.7
Symphurus plagiusa	2	38.8
Syacium gunteri	12	246.9
Cyclopsetta chittendeni	3	50.6
Stenotomus caprinus	3	45.3
Prionotus rubio	1	11.5
Lepophidium graellsi	1	2.7
Cynoscion arenarius	1	1.8
Totals: 19	278	11151.0

Appendix

OCS Benthic Fishes; Code EXZ.
Transect III, Station 2.
8 September 1975; Summer, Day Trawl.

Species		Number	Weight (g.)
Lagocephalus laevigatus		3	162.7
Prionotus paralatus		3	36.3
Trichopsetta ventralis		1	8.2
Porichthys porosissimus		6	146.7
Gymnachirus texae		1	12.3
Saurida brasiliensis		1	6.7
Bollmannia communis		1	6.2
Pristipomoides aquilonaris		1	1.7
Serranus atrobracnhus		2	20.7
Stenotomus caprinus		2	29.5
Upeneus parvus		2	66.1
Synodus foetens		2	288.3
Cyclopsetta chittendeni		2	257.0
Prionotus stearnsi		1	18.2
Totals:	14	28	1060.6

Appendix

OCS Benthic Fishes; Code EXK.
Transect III, Station 2.
9 September 1975; Summer, Night Trawl.

Species	Number	Weight (g.)
Synodus foetens	11	1657.6
Cyclopsetta chittendeni	3	298.3
Micropogon undulatus	1	79.7
Synodus poeyi	1	6.2
Sphoeroides parvus	1	2.7
Stenotomus caprinus	3	112.7
Upeneus parvus	2	103.8
Pristipomoides aquilonaris	3	38.3
Trichopsetta ventralis	5	89.7
Porichthys porosissimus	7	111.8
Hoplunnis macrurus	1	30.5
Prionotus rubio	2	122.0
Prionotus paralatus	4	69.8
Prionotus stearnsi	13	123.0
Lepophidium graellsi	8	258.3
Serranus atrobranchus	105	1060.7
Centropristis philadelphica	25	659.5
Bollmannia communis	20	8.0
Totals: 18	215	4832.6

Appendix .

OCS Benthic Fishes; Code FBB.
Transect III, Station 3.
8 September 1975; Summer, Day Trawl.

Species	Number	Weight (g.)
Pristipomoides aquilonaris	20	2149.9
Caulolatilus cyanops	4	307.7
Prionotus paralatus	3	67.6
Centropristis philadelphica	1	82.9
Lagocephalus laevigatus	1	54.8
Ancylopsetta dilecta	2	98.8
Serranus atrobranchus	26	542.5
Synodus foetens	3	570.6
Trichopsetta ventralis	2	19.2
Prionotus stearnsi	4	37.0
Stenotomus caprinus	6	296.7
Upeneus parvus	23	549.6
Mullus auratus	2	71.9
Decodon puellaris	1	2.0
Saurida brasiliensis	8	25.6
Totals: 15	106	4876.8

Appendix

OCS Benthic Fishes; Code FAI.
Transect III, Station 3.
8 September 1975; Summer, Night Trawl.

Species	Number	Weight (g.)
Serranus atrobranchus	83	1524.6
Pristipomoides aquilonaris	26	1875.9
Prionotus rubio	2	93.4
Trichopsetta ventralis	4	80.7
Zalieutes mcgintyi	1	13.4
Upeneus parvus	2	77.3
Stenotomus caprinus	7	343.8
Centropristis philadelphica	8	875.3
Neobythites gilli	5	21.5
Urophycis cirratus	1	22.3
Saurida brasiliensis	4	16.9
Synodus foetens	1	131.7
Gymnachirus texae	1	10.2
Trachurus lathami	1	44.1
Caulolatilus cyanops	2	121.0
Prionotus stearnsi	1	14.2
Lepophidium graellsi	1	13.2
Peprilus burti	3	175.9
Pikes mexicana	1	11.2
Decodon puellaris	1	9.5
Cynoscion arenarius	1	197.4
Prionotus paralatus	14	355.0
Totals: 22	170	6028.5

Appendix

OCS **Benthic** Fishes; Code FEJ.
Transect IV, Station 1.
12 September 1975; Summer, Day Trawl.

Species	Number	Weight (g.)
Peprilus burti	53	1039.8
Anchoa hepsetus	16	209.8
Citharichthys spilopterus	1	11.3
Lagocephalus laevigatus	10	40.6
Engyophrys senta	1	5.0
Etropus crossotus	7	21.2
Sphoeroides parvus	2	5.7
Cynoscion nothus	7	252.5
Ancylopsetta quadrocellata	2	208.8
Prionotus rubio	3	37.7
Selene vomer	1	1.1
Synodus foetens	8	483.5
Syacium gunteri	15	211.3
Upeneus parvus	19	232.1
Trichiurus lepturus	26	1327.9
Chloroscombrus chrysurus	6	213.1
Symphurus plagiusa	2	32.9
Diplectrum bivittatum	1	4.5
Serranus atrobranchus	6	35.3
Sphyraena guachancho	3	35.5
Micropogon undulatus	3	126.1
Stenotomus caprinus	17	184.0
Centropristis philadelphica	2	31.9
Saurida brasiliensis	20	147.2
Trachurus lathami	44	839.8
Totals: 25	275	5738.6

Appendix

OCS Benthic Fishes; Code FDP.
Transect IV, Station 1.
11 September 1975, Summer, Night Trawl.

Species	Number	Weight (g.)
Micropogon undulatus	256	12938.9
Balistes capriscus	13	231.1
Lagocephalus laevigatus	1	103.5
Lagodon rhomboides	3	93.0
Porichthys porosissimus	16	239.8
Upeneus parvus	8	150.4
Arius felis	2	386.4
Gymnothorax nigromarginatus	1	40.7
Prionotus rubio	17	216.8
Stellifer lanceolatus	2	111.9
Anchoa hepsetus	1	16.4
Lutjanus campechanus	12	7.0
Sphoeroides parvus	149	381.6
Diplectrum bivittatum	48	295.2
Syacium gunteri	34	492.3
Etropus crossotus	60	311.9
Congrina flava	5	90.1
Centropristis philadelphica	21	294.2
Synodus foetens	8	177.3
Orthopristis chrysoptera	23	649.3
Stenotomus caprinus	52	743.6
Ophidion welshi	1	43.3
Eucinostomus argenteus	7	109,3
Prionotus ophryas	2	13.3
Prionotus tribulus	1	90.6
Serraniculus pumilio	3	20.4
Symphurus diomedianus	1	12.3
Symphurus plagiusa	1	11.3
Lepophidium graellsi	2	37.6
Leiostomus xanthurus	3	192.8
Polydactylus octonemus	2	82.0
Scorpaena brasiliensis	3	13.9
Lactophrys quadricornis	2	9.0
Engyophrys senta	2	9.1
Totals: 34	762	18616.3

Appendix

OCS Benthic Fishes; Code FHK.
Transect IV, Station 2.
12 September 1975; Summer, Day Trawl.

Species	Number	Weight (g.)
Chloroscombrus chrysurus	1	31.7
Prionotus stearnsi	3	27.3
Peprilus burti	15	708.6
Lagocephalus laevigatus	11	723.0
Synodus poeyi	8	45.9
Prionotus rubio	4	69.1
Trachurus lathami	82	1720.9
Priacanthus arenatus	2	135.7
Cynoscion arenarius	2	156.0
Synodus foetens	9	979.0
Ancylopsetta quadrocellata	1	90.5
Cyclopsetta chittendeni	1	70.2
Micropogon undulatus	1	74.5
Centropristis philadelphica	7	150.5
Trichiurus lepturus	2	101.3
Stenotomus caprinus	5	65.1
Serranus atrobranchus	20	275.2
Saurida brasiliensis	13	38.2
Upeneus parvus	38	1067.2
Pristipomoides aquilonaris	9	27.5
Totals : 20	234	6557.4

Appendix

OCS Benthic Fishes; Code FGP.
Transect IV, Station 2.
13 September 1975; Summer, Night Trawl.

Species	Number	Weight (g.)
Serranus atrobranchus	241	1556.7
Prionotus rubio	21	332.3
Engyophrys senta	16	43.0
Lagocephalus laevigatus	1	64.2
Priacanthus arenatus	1	59.0
Stenotomus caprinus	2	22.9
Upeneus parvus	2	50.1
Ancylopsetta quadrocellata	1	115.5
Porichthys porosissimus	4	55.7
Synodus foetens	1	169.4
Prionotus paralatus	30	293.5
Sphoeroides parvus	16	45.4
Prionotus stearnsi	14	143.9
Halieutichthys aculeatus	1	4.1
Micropogon undulatus	1	60.3
Cyclopsetta chittendeni	3	162.6
Synodus poeyi	7	48.7
Centropristis philadelphica	6	87.8
Saurida brasiliensis	14	61.5
Prionotus ophryas	1	1.8
Bollmannia communis	23	120.5
Symphurus diomedianus	1	19.0
Syacium gunteri	8	109.5
Hoplunnis macrurus	7	56.7
Congrina flava	5	66.7
Lepophidium graellsi	6	127.6
Pristipomoides aquilonaris	70	201.1
Symphurus plagiusa	8	20.4
Dysomma aphododera	2	37.0
Scorpaena brasiliensis	1	32.4
Totals: 30	514	4179.3

Appendix

OCS Benthic Fishes; Code FKP.
Transect IV, Station 3.
13 September 1975; Summer, Day Trawl.

Species	Number	Weight (g.)
Pristipomoides aquilonaris	19	1255.4
Peprilus burti	4	226.2
Caranx ruber	1	209.2
Prionotus stearnsi	6	46.6
Synodus foetens	17	2208.4
Upeneus parvus	54	1531.5
Lagodon rhomboides	1	77.0
Caulolatilus cyanops	1	38.8
Ancylopsetta dilecta	1	25.0
Lagocephalus laevigatus	2	156.3
Sphoeroides parvus	1	3.6
Priacanthus arenatus	4	201.9
Stenotomus caprinus	6	270.8
Serranus atrobranchus	9	137.5
Saurida brasiliensis	5	32.9
Trachurus lathami	33	741.4
Prionotus paralatus	4	86.7
Trichopsetta ventralis	1	22.2
Centropristis philadelphica	2	137.6
Totals: 19	171	7409.0

Appendix

OCS Benthic Fishes; Code FJT.
Transect IV, Station 3.
12 September 1975; Summer, Night Trawl.

Species	Numb er	Weight (g.)
Pristipomoides aquilonaris	70	2108.5
Prionotus paralatus	33	588.3
Halieutichthys aculeatus	34	241.8
Centropristis philadelphica	12	649.5
Caulolatilus cyanops	4	134.6
Cynoscion arenarius	2	373.4
Stenotomus caprinus	4	209.5
Trachurus lathami	3	88.2
Prionotus stearnsi	4	23.5
Uorphycis floridanus	4	303.8
Lepophidium graellsi	2	72.1
Engyophrys senta	1	2.1
Sphceroides parvus	1	2.3
Synodus poeyi	1	1.6
Saurida brasiliensis	1	2.1
Porichthys porosissimus	2	16.1
Upeneus parvus	2	45.3
Symphurus diomedianus	3	75.2
Cyclopsetta chittendeni	1	229.0
Trichopsetta ventralis	3	54.8
Syacium gunteri	5	12.9
Serranus atrobranchus	11	204.4
Sphoeroides dorsalis	1	8.7
Decodon puellaris	1	1.8
Totals: 24	205	5449*5

APPENDIX XXI

OEP CURVES OF SAMPLES FOR

HIGH-MOLECULAR-WEIGHT HYDROCARBON ANALYSIS

Figure 1 - 1-19 Water

Figure 2 - 1-24 Particulate Matter

Figure 3 - 1-6 Zooplankton

Figure 4 - 1-13 Neuston

Figure 5 - 1-34 Sediment

Figure 6 - 1-4 Skin Lipids of Macronekton

Figure 7 - 1-7 Flesh of Macronekton

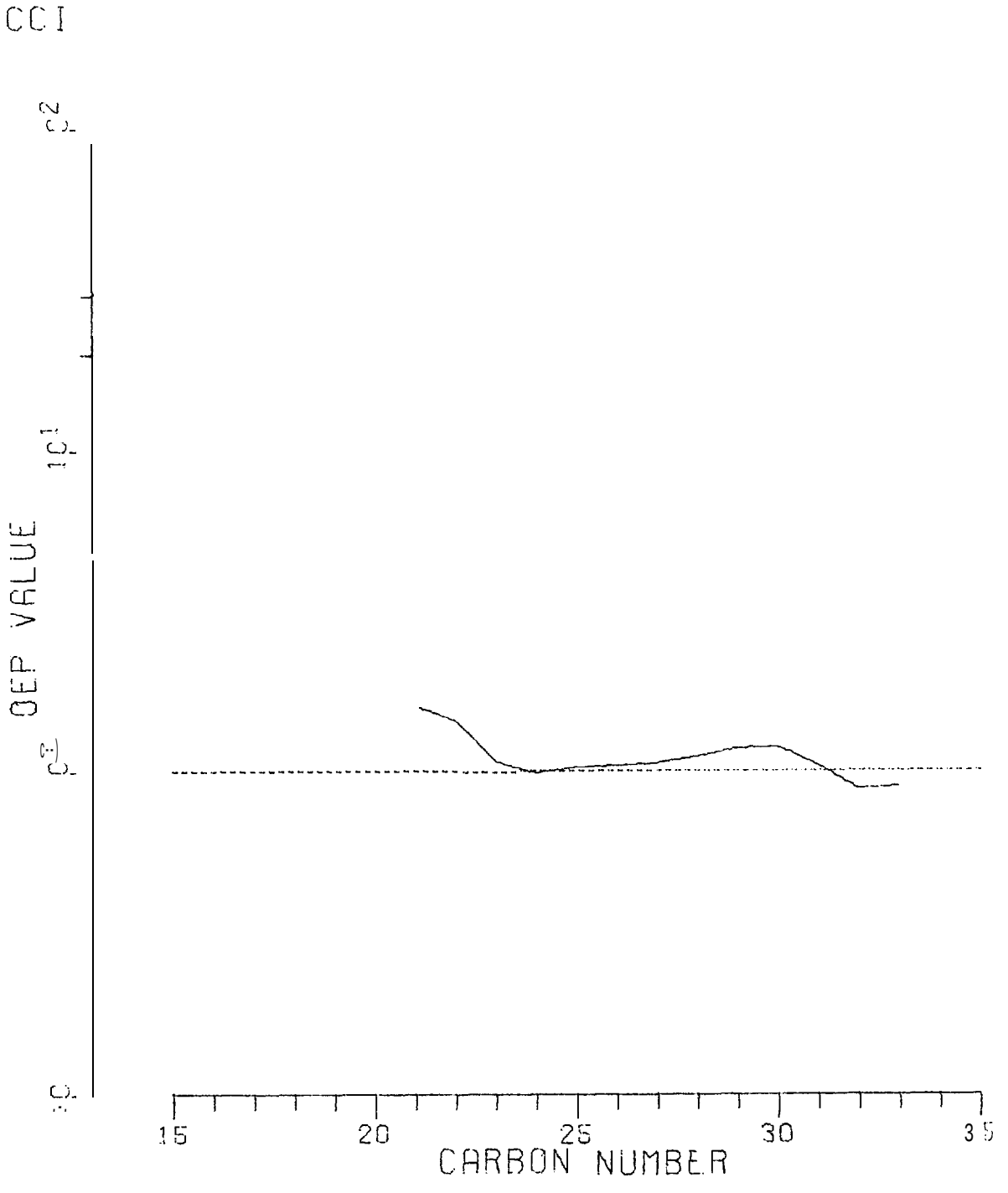


Figure 1-1. OEP curves of spring water samples, CCI, 1/1.

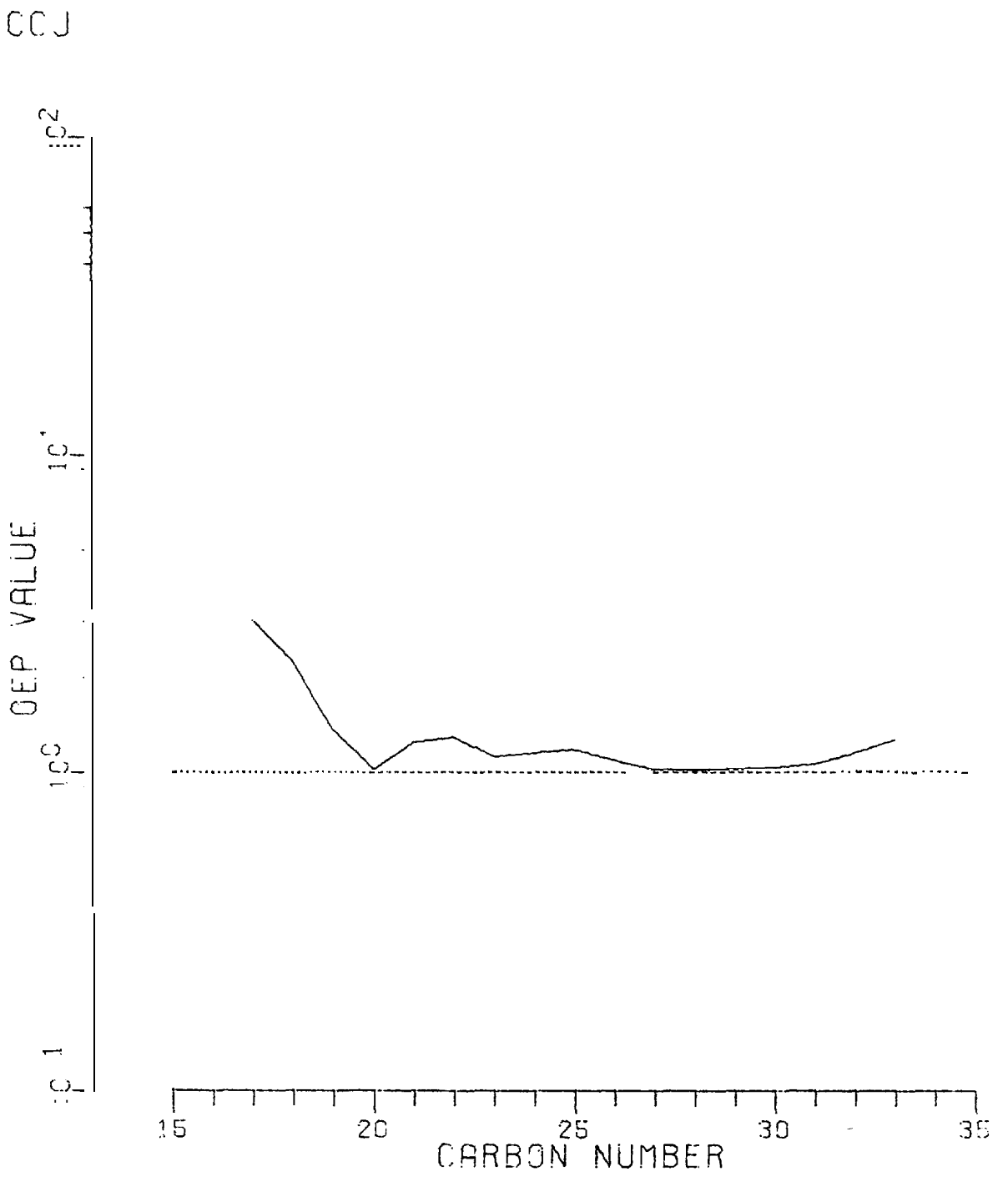


Figure 1-2. OEP curve of spring water samples CCJ, 1/1.

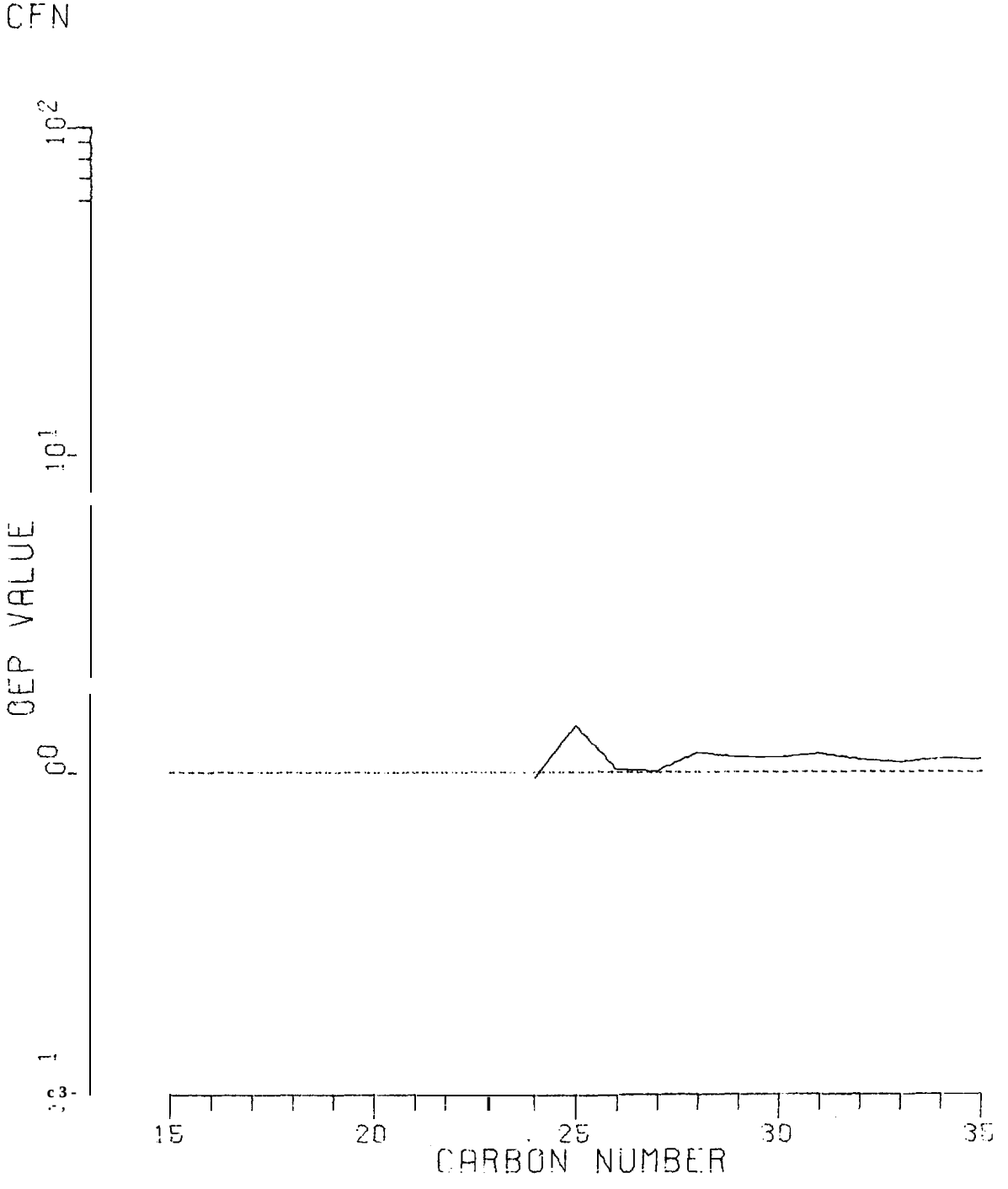


Figure 1-3. OEP curve of spring water samples, CFN, 2/1.

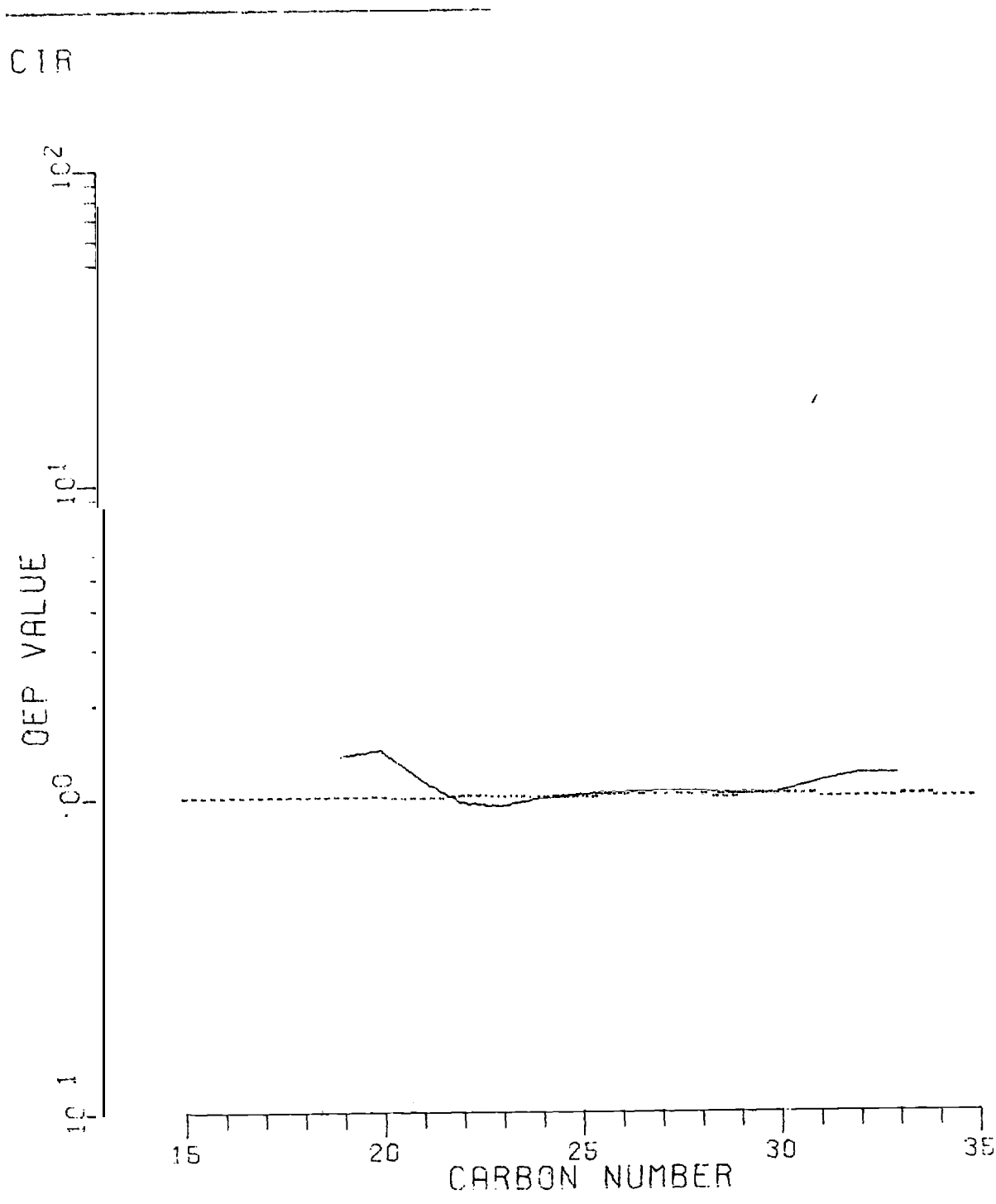


Figure 1-4. OEP curve of spring water samples, CIR, 3/1.

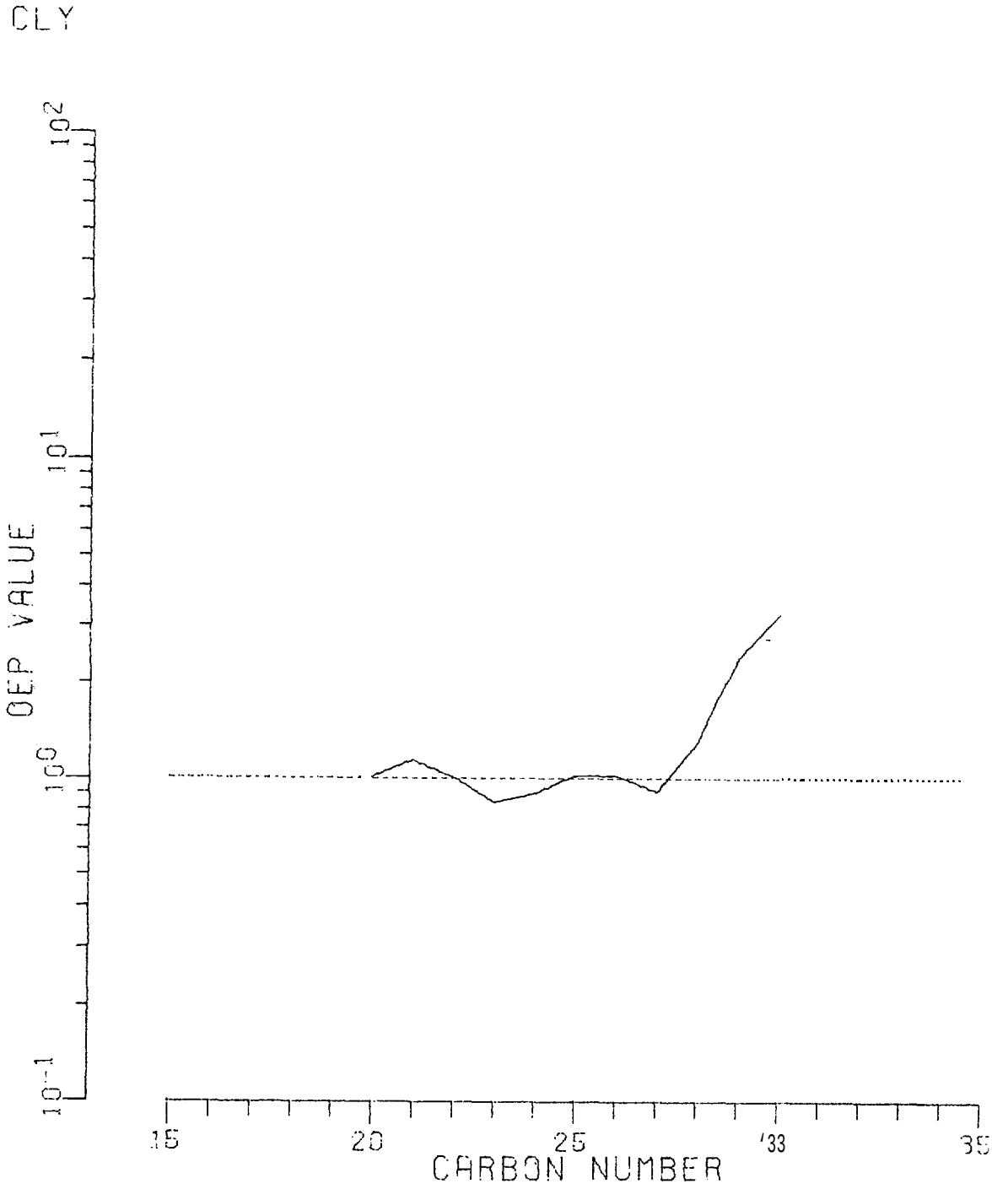


Figure 1-5. OEP curve of spring water samples, CLY, 1/11

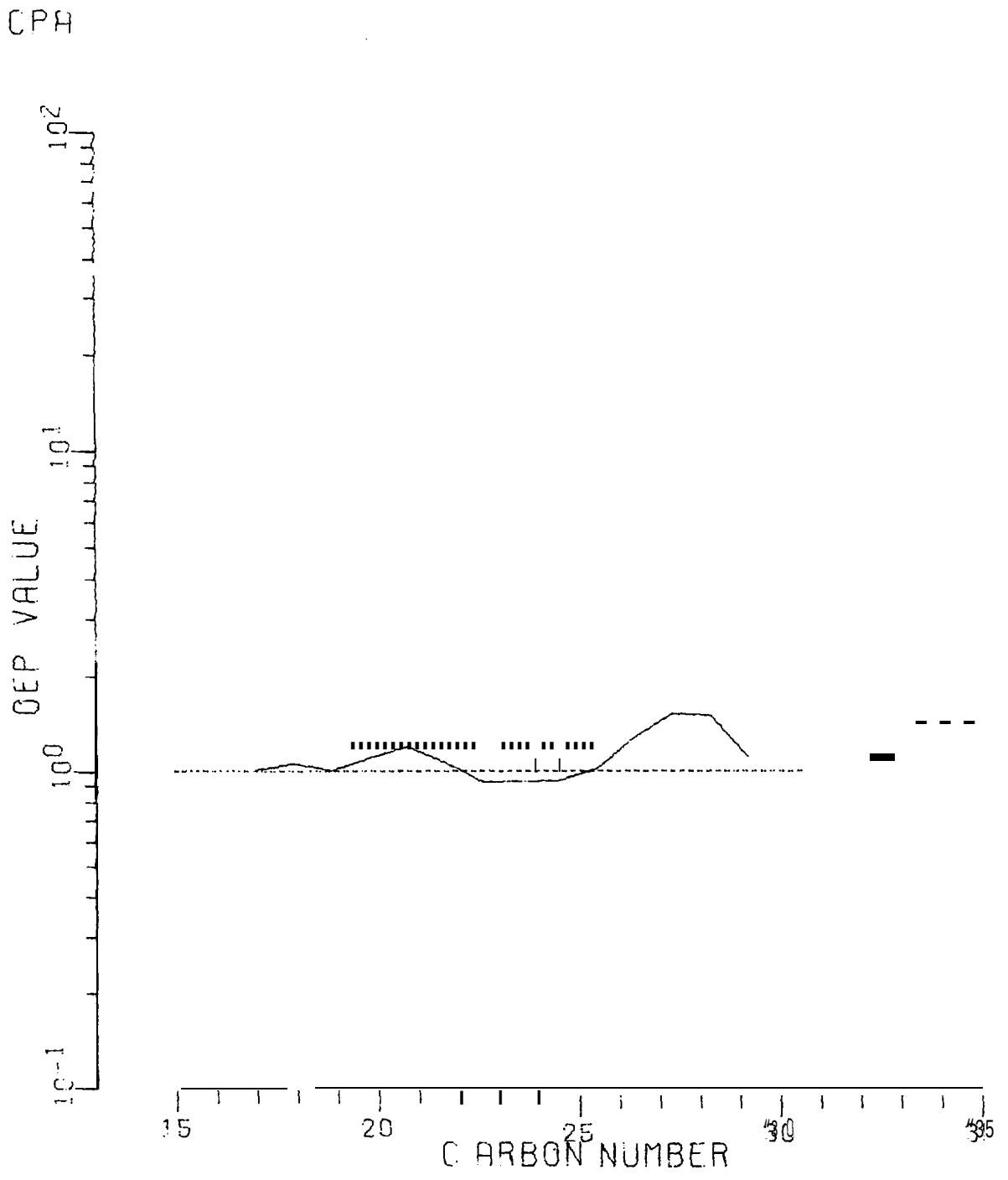


Figure 1-6. OEP curve of spring water samples, CPA, 2/11.

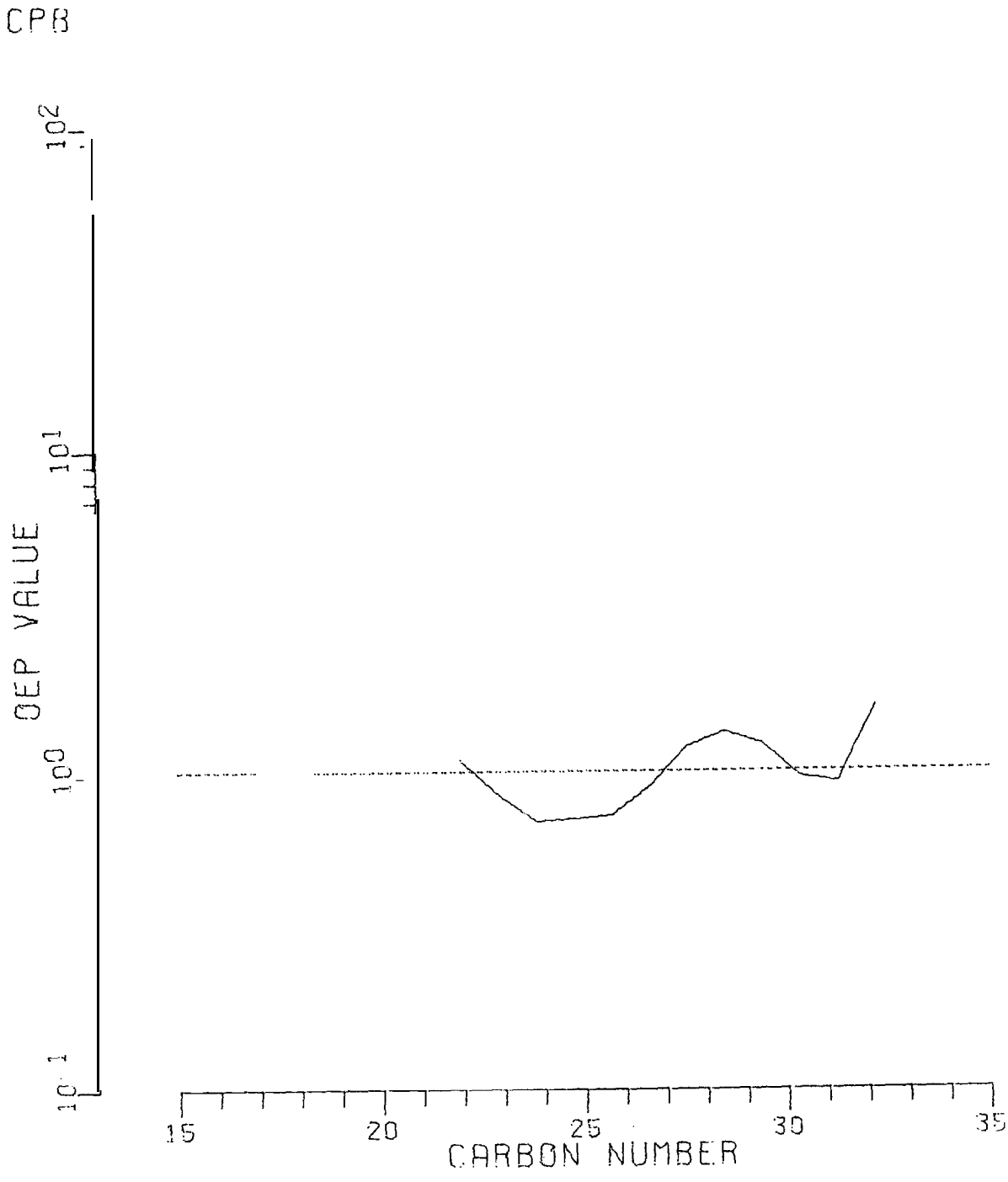


Figure 1-7. OEP curve of spring water samples, CPB, 2/II.

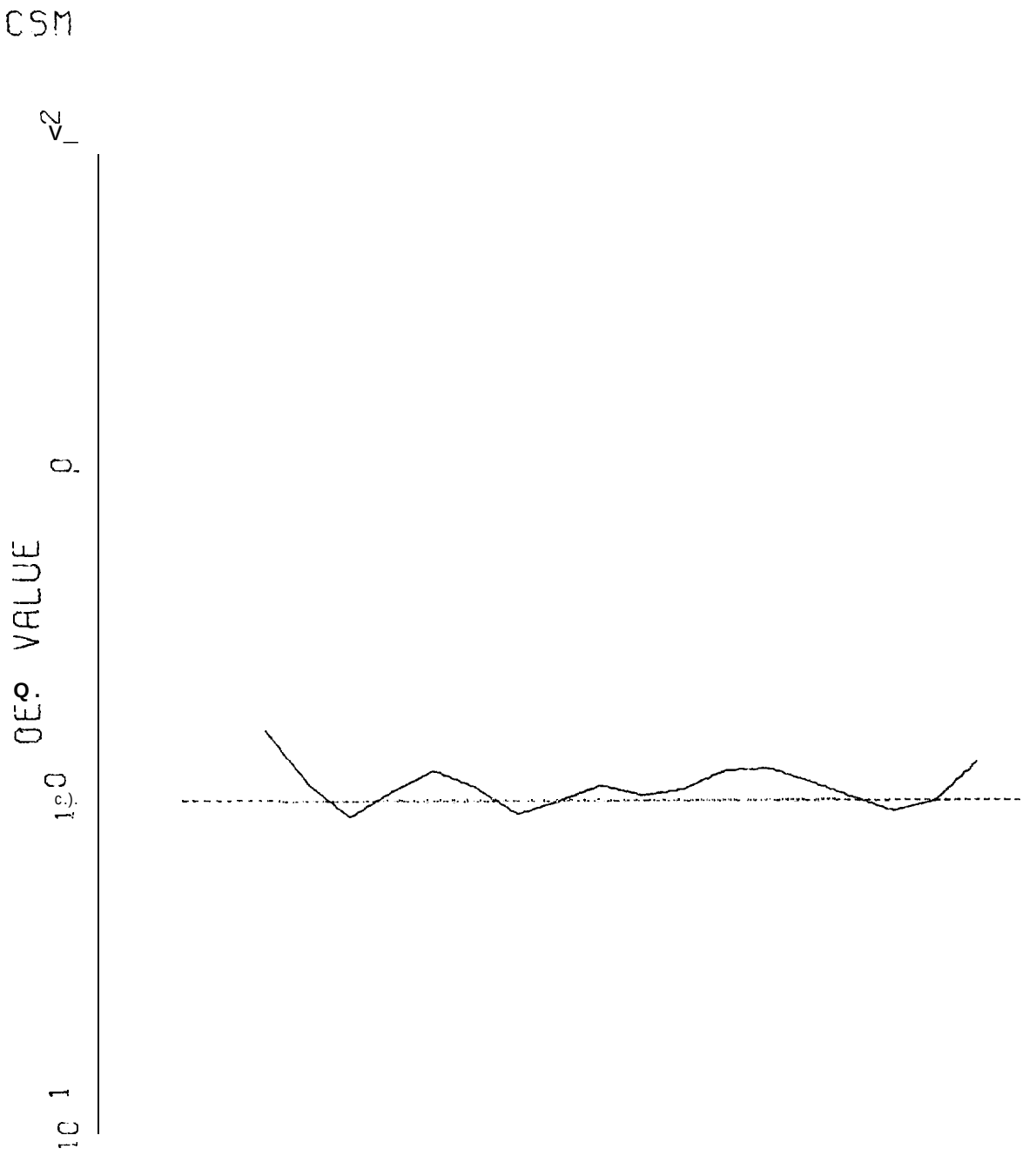


Figure 1-8. OEP curve of spring water samples, CSM, 3/11.

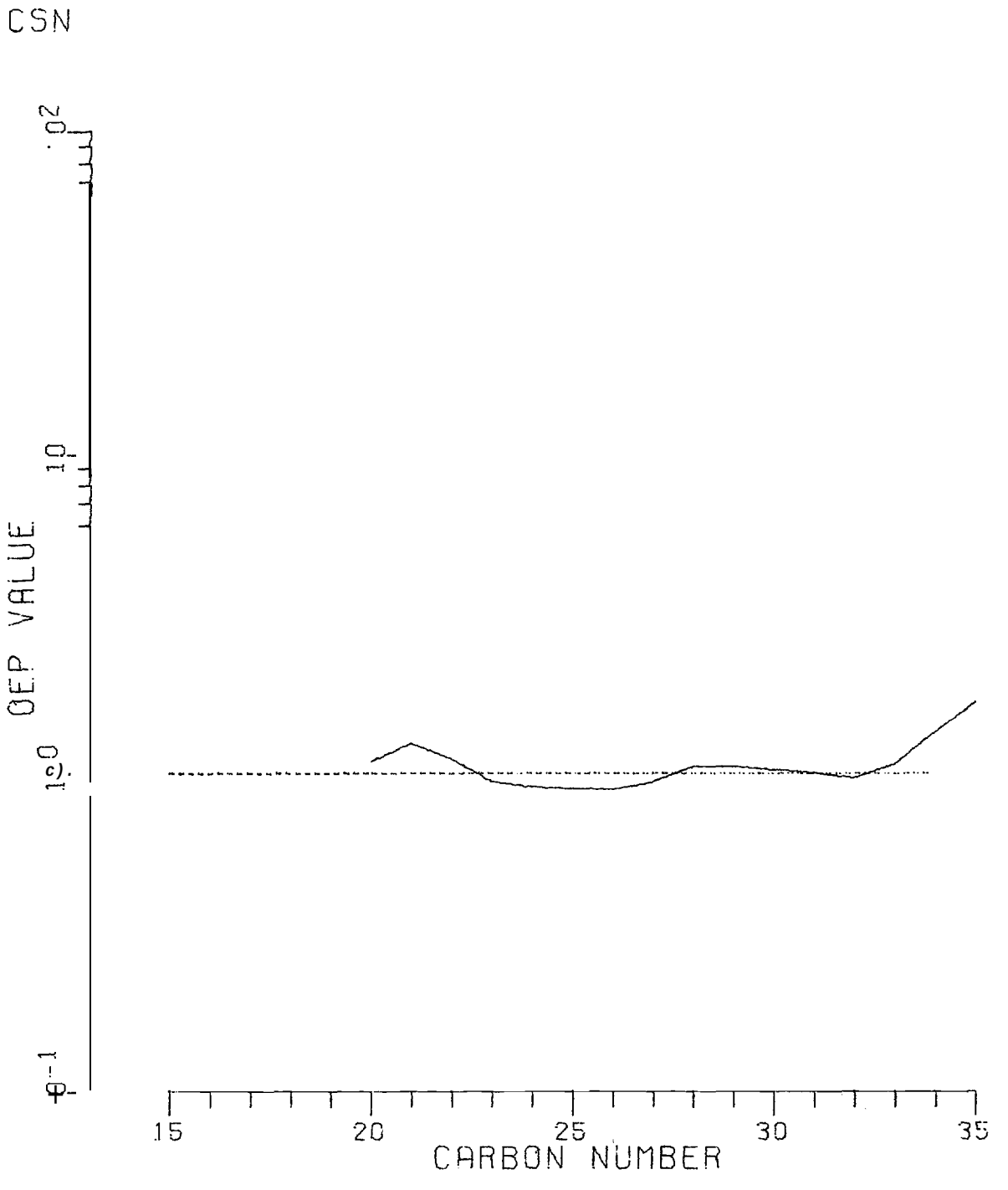


Figure 1-9. OEP curves of spring water samples, CSN, 3/11.

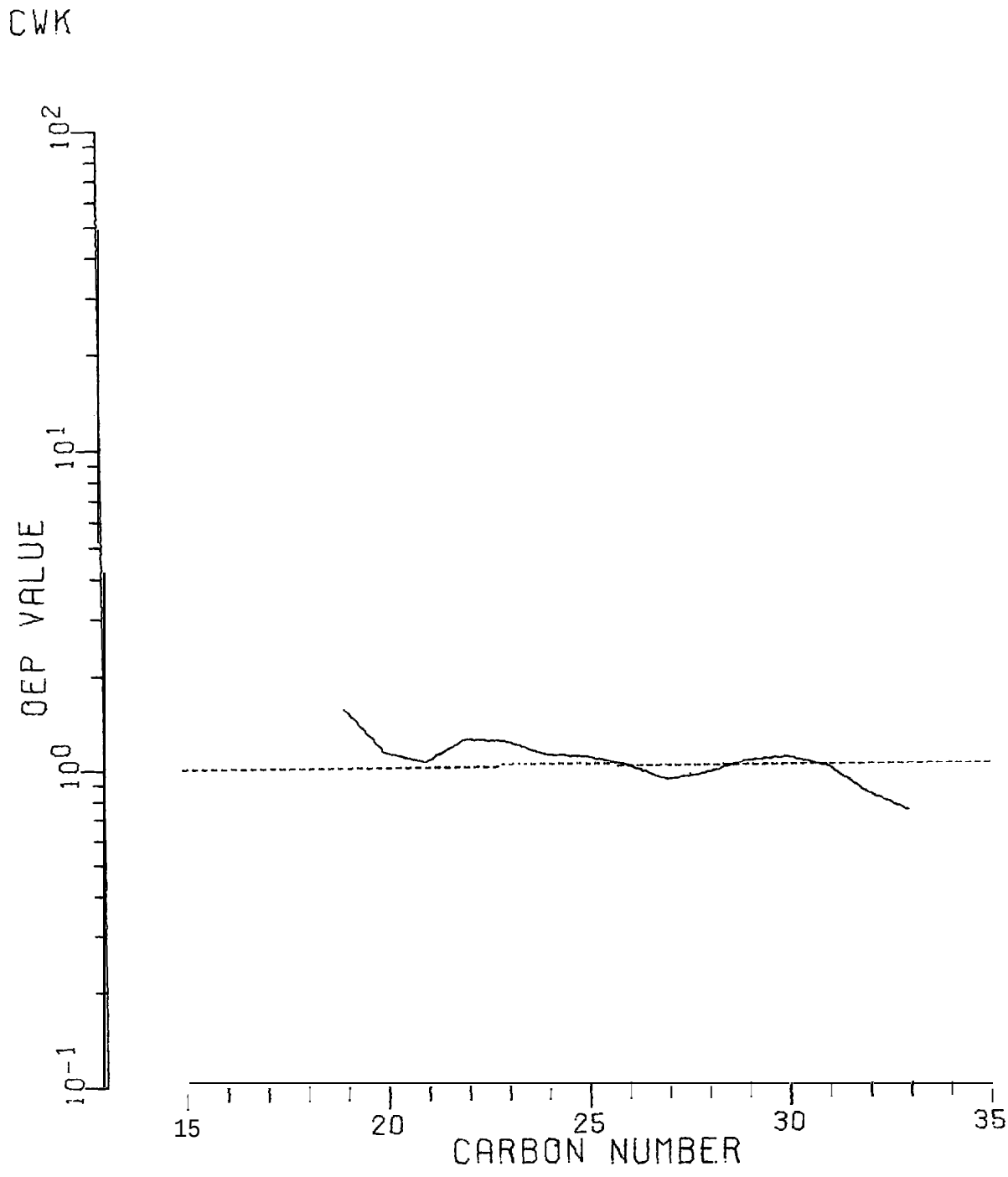


Figure 1-10. OEP curve of spring **water samples, CWK,** 1/111.

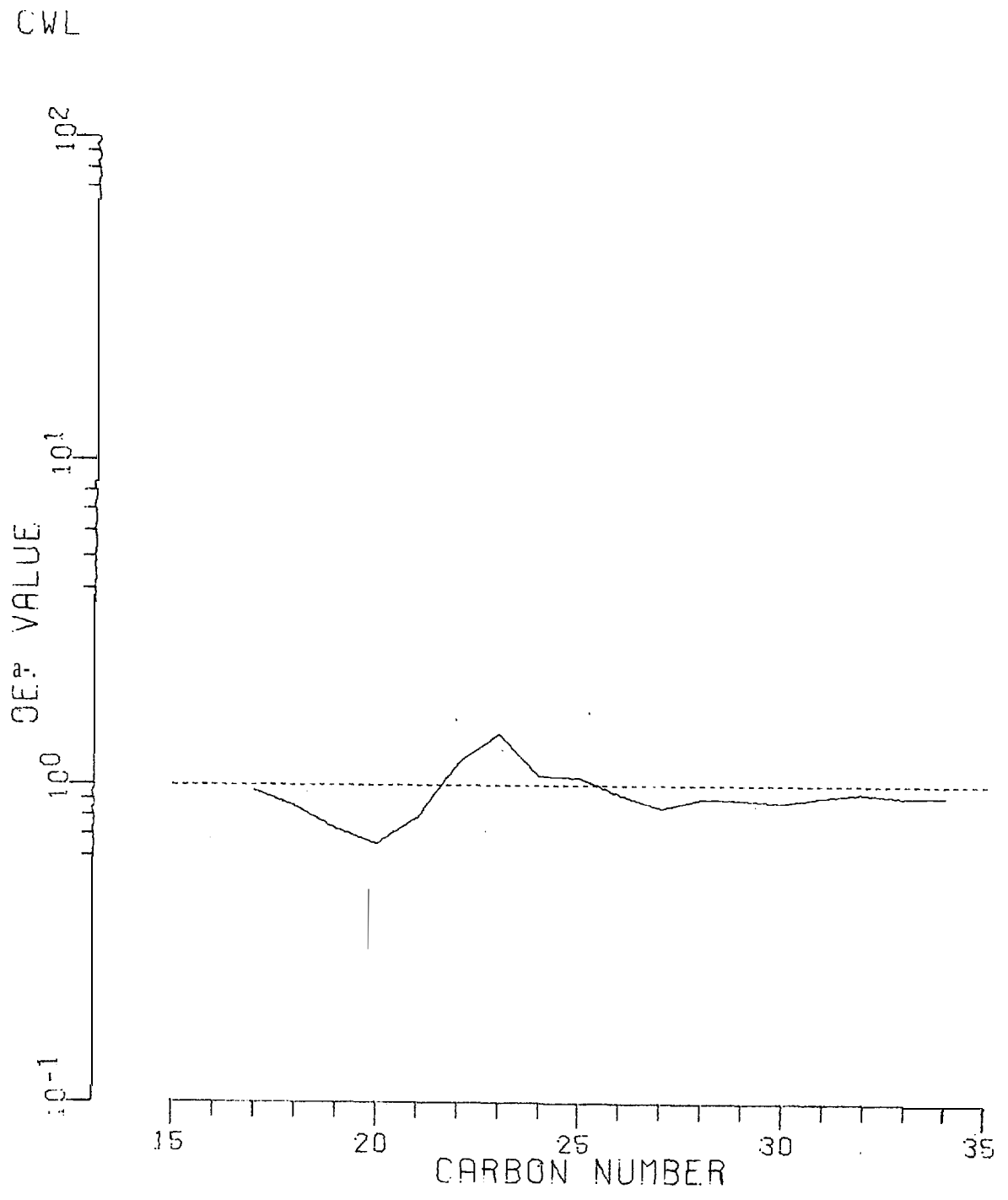


Figure 1- 11. OEP curve of spring water samples, CWL, 1/III.

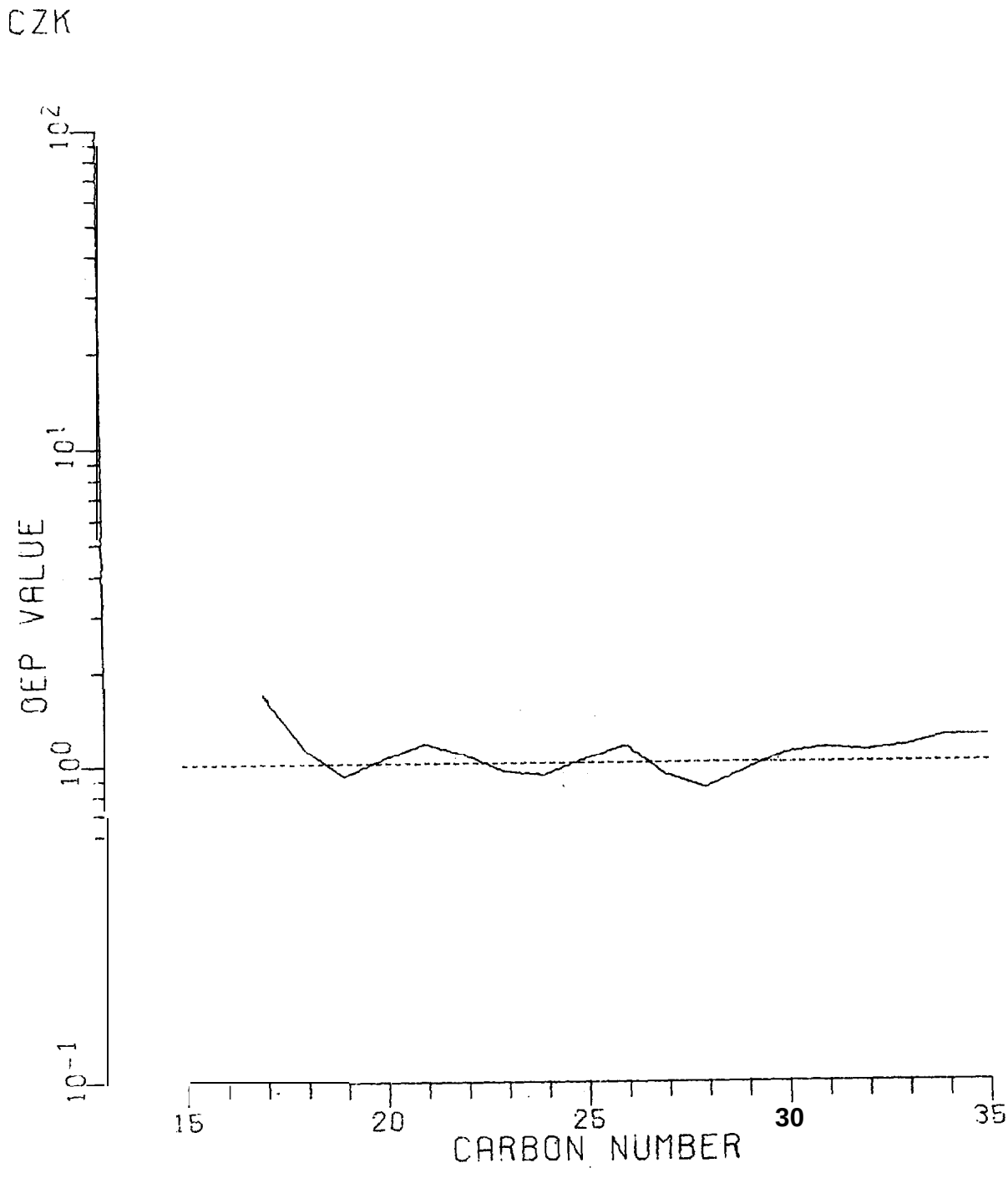


Figure 1-12. OEP curve of spring water samples, CZK, 2/111,

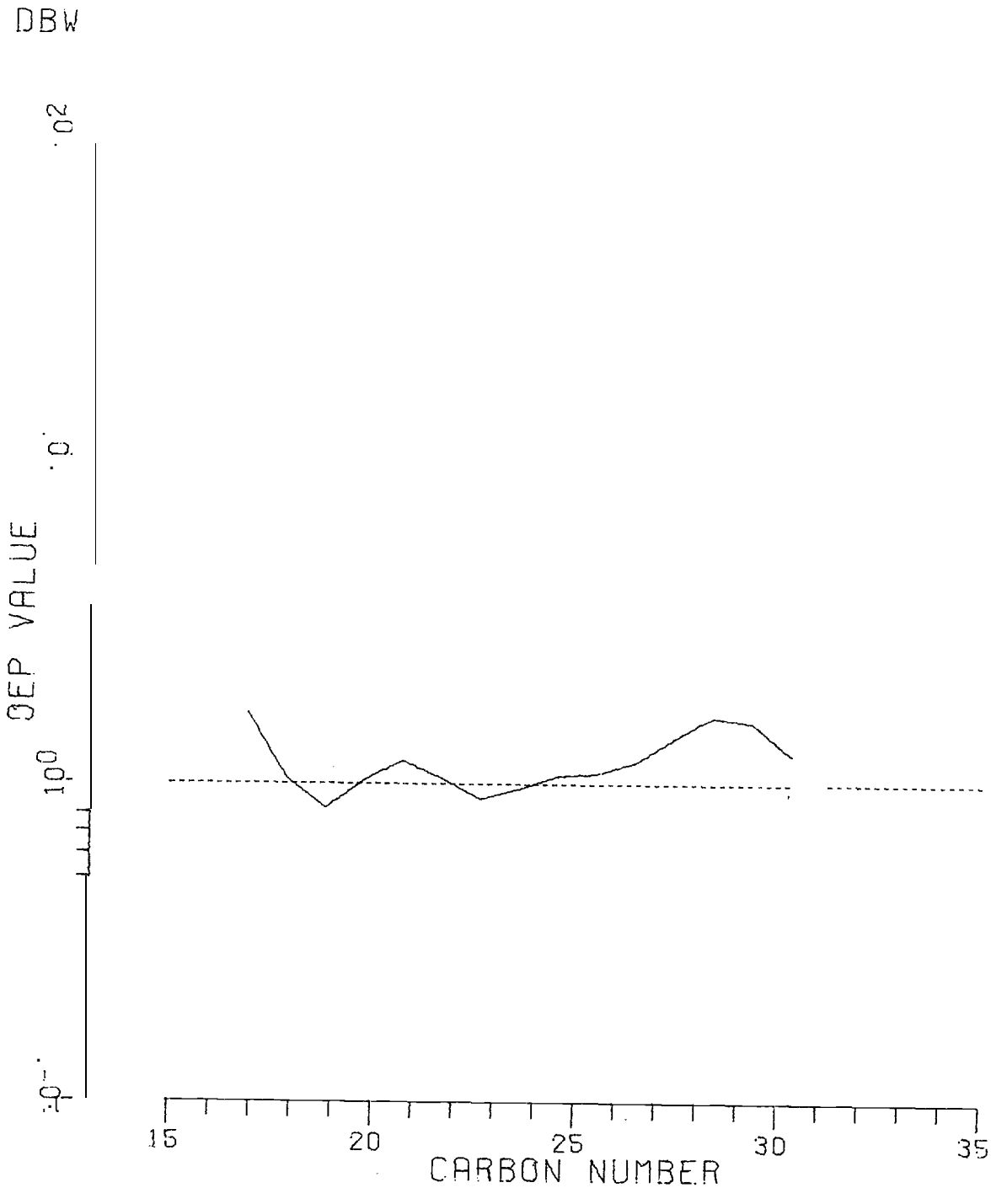


Figure 1-13. OEP curve of spring water samples, DBW, 3/111.

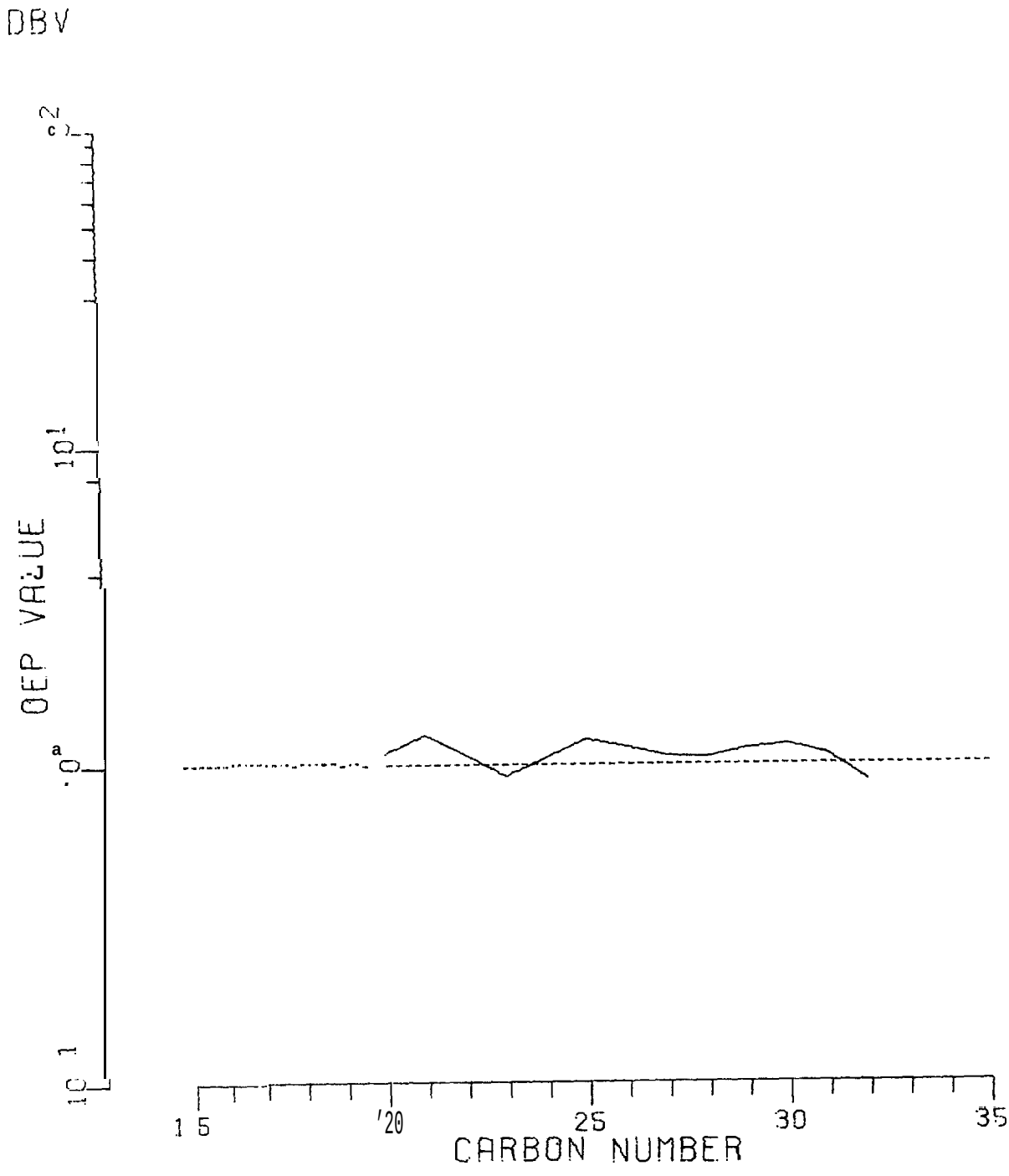


Figure 1-14. OEP curve of spring water samples, **DBV, 3/III.**

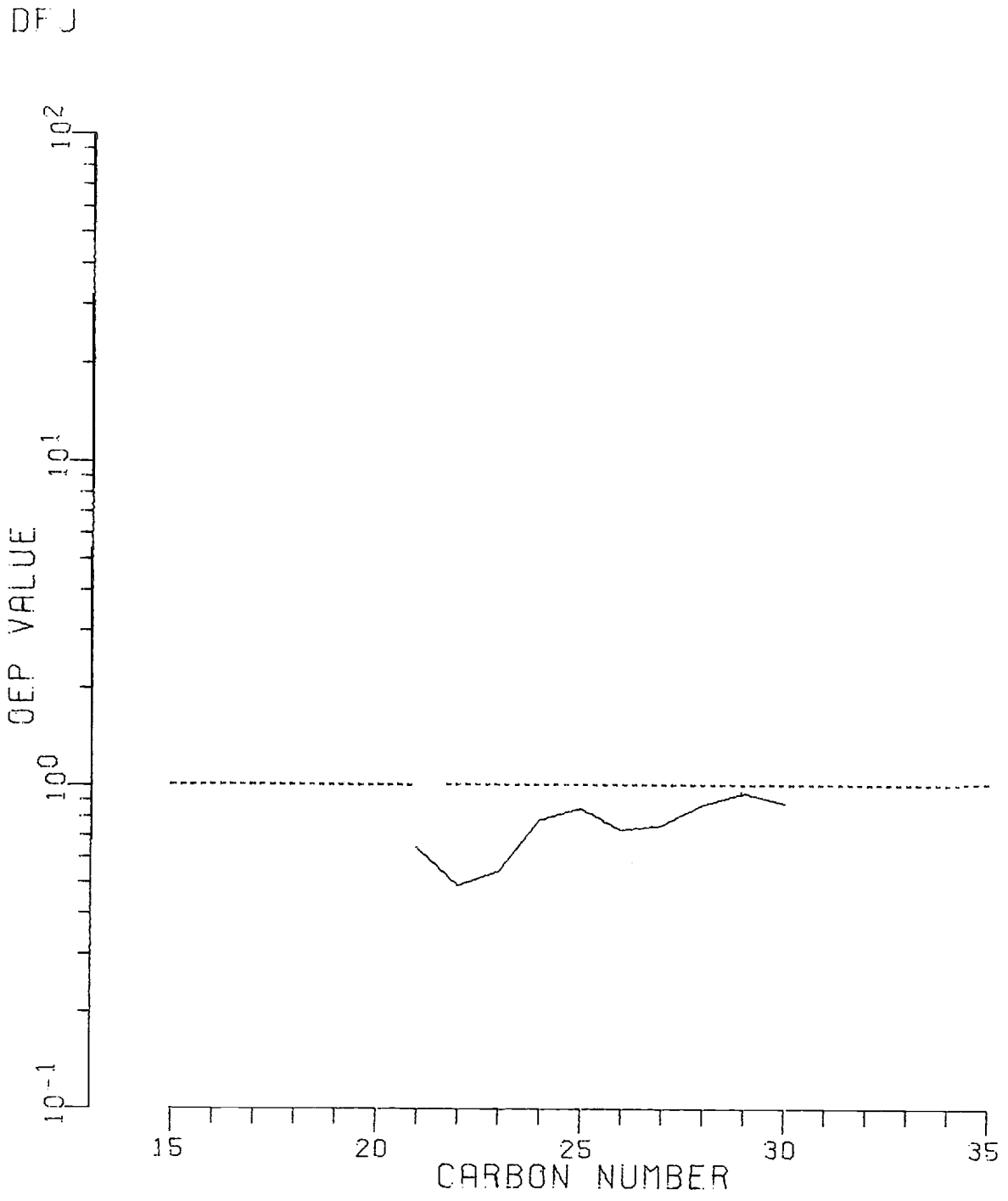


Figure 1-15. OEP curve of spring water samples, DFJ, l/IV.

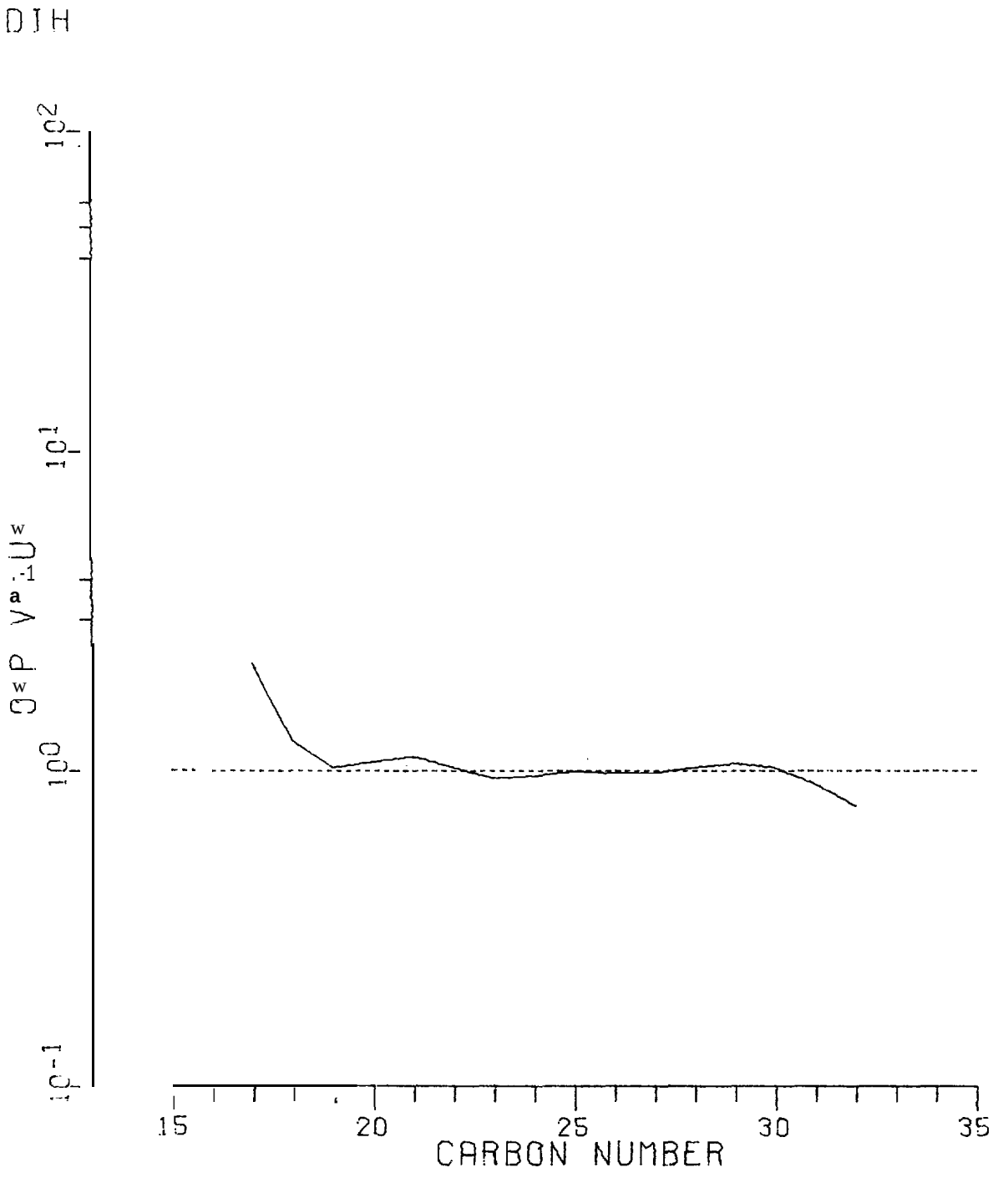


Figure 1-16.OEP curve of spring water sample DIH, 2/IV.

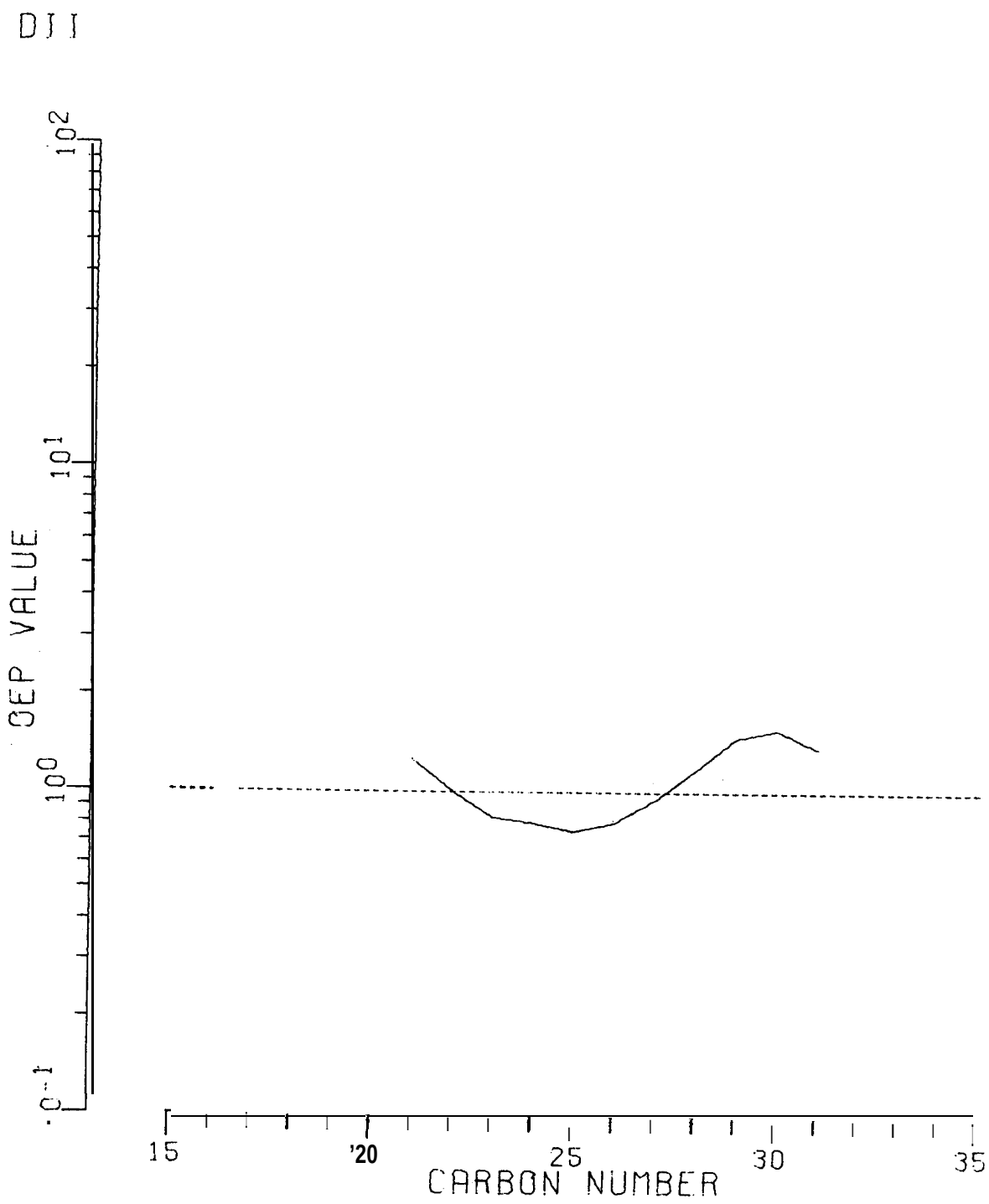


Figure ?-17. OEP curve of spring water sample DII, 2/IV.

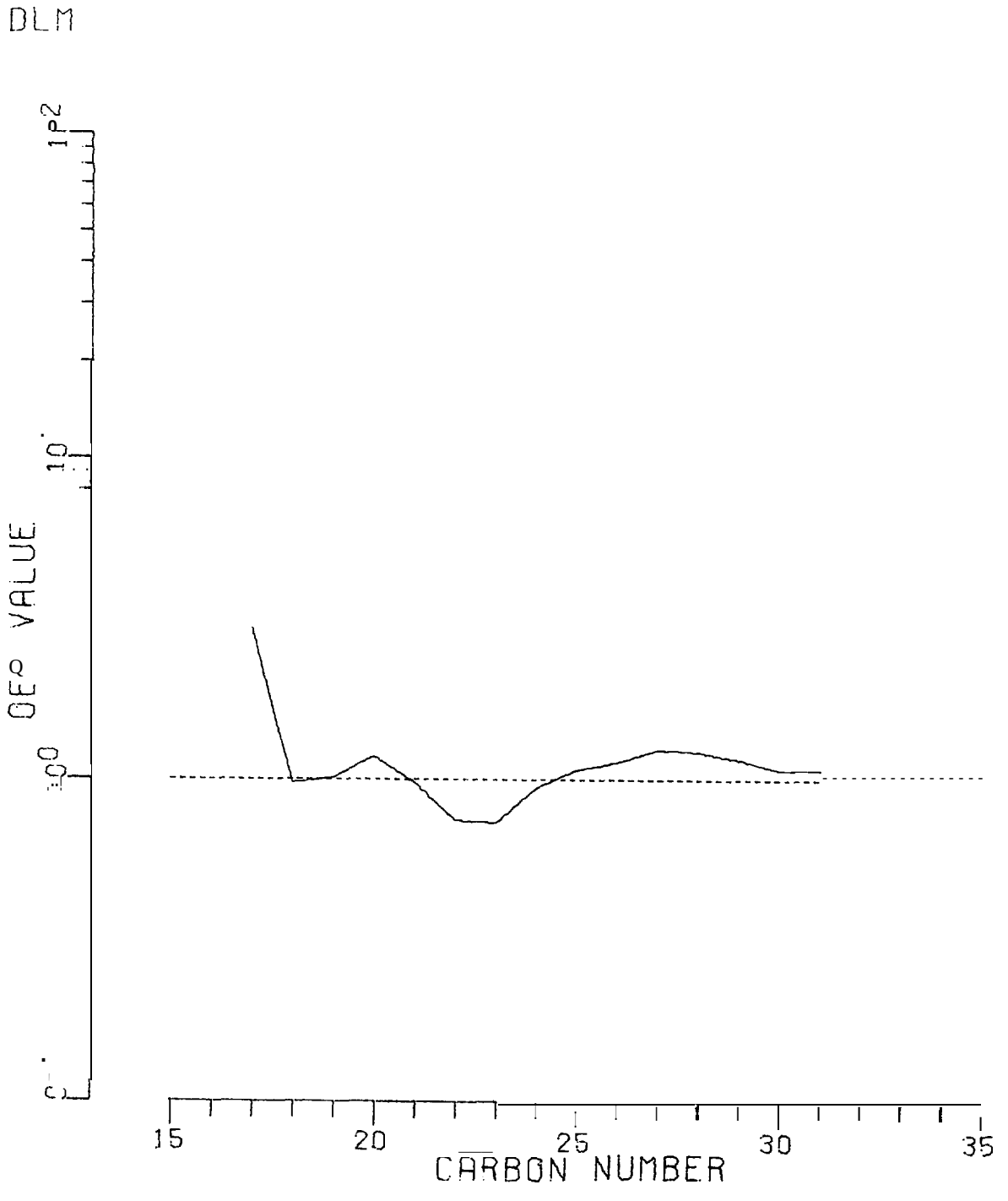


Figure 1-18. OEP curve of spring water sample DLM, 3/IV.

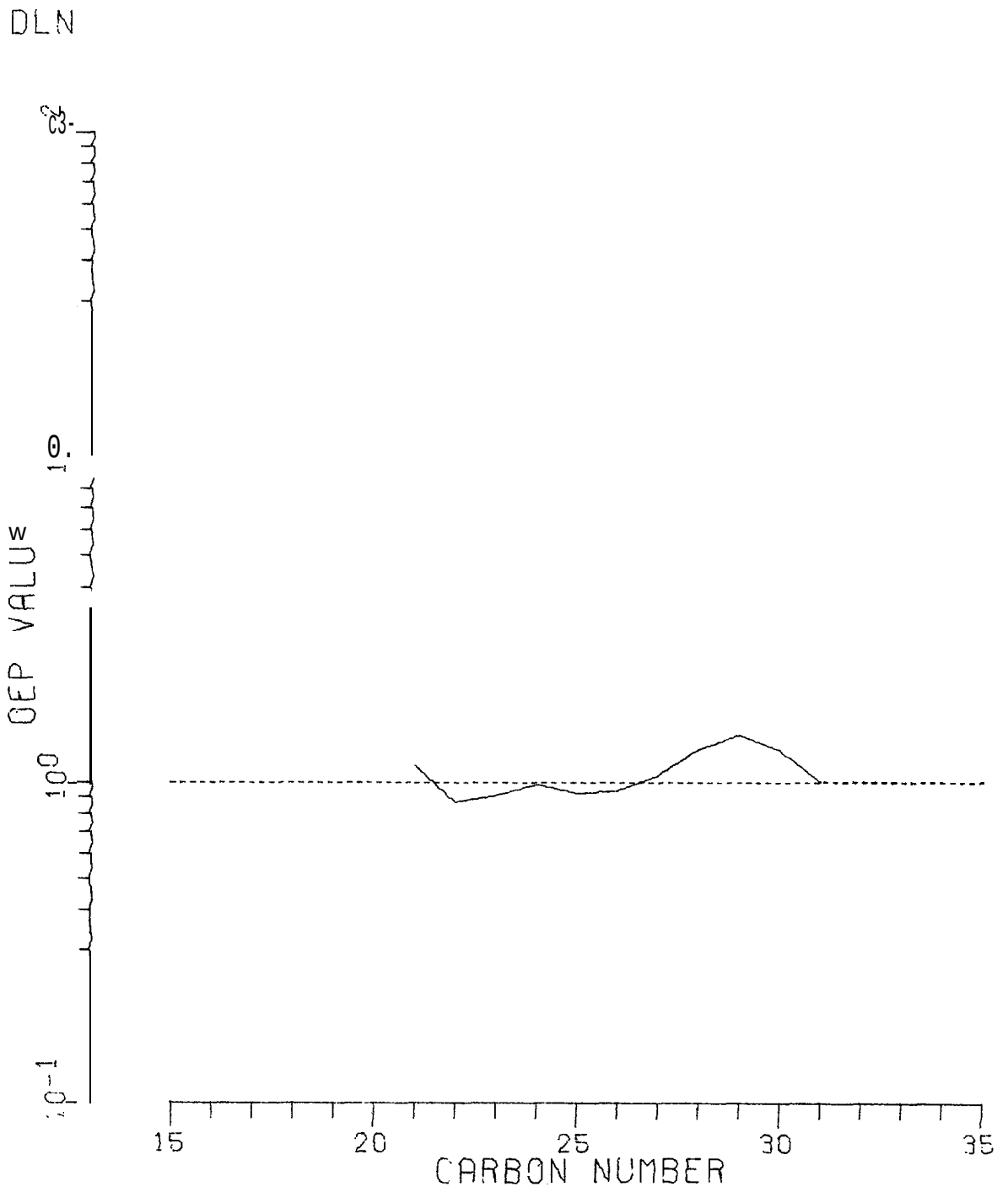


Figure 1-19. OEP curve of spring water sample DLN, 3/IV.

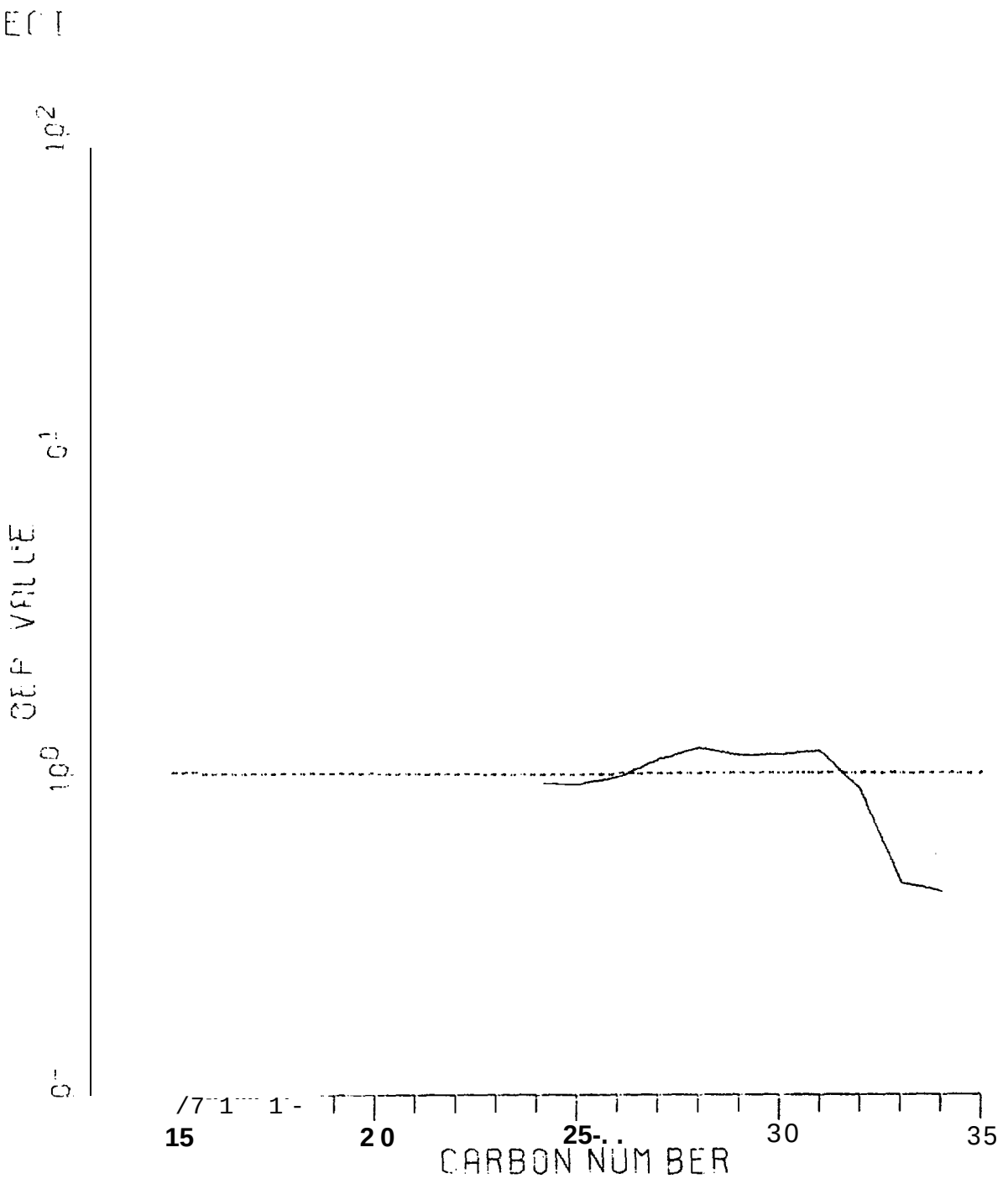


Figure 2-1. OEP curve of summer particulate matter ECI, 1/1.

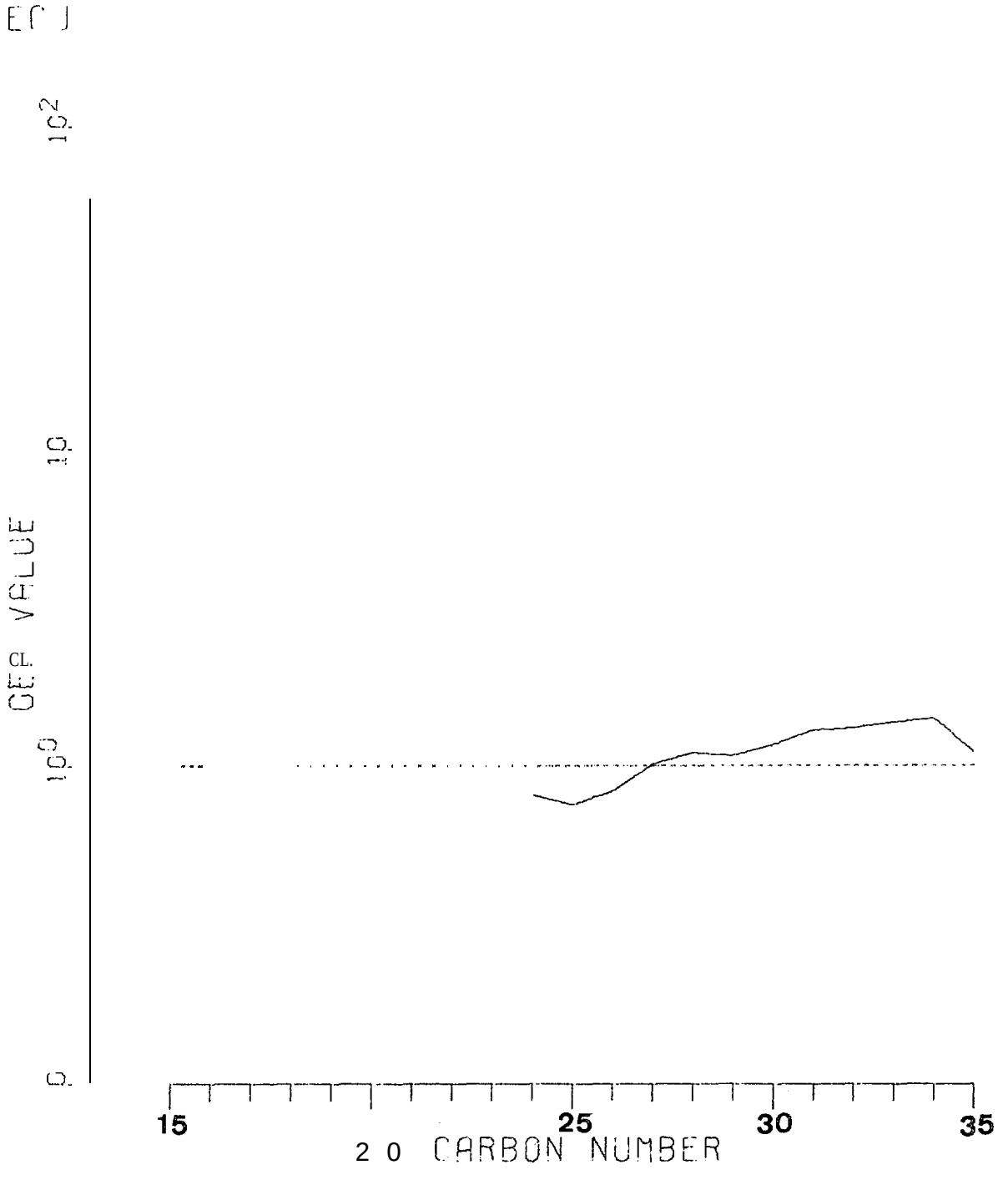


Figure 2-2. OEP curve of summer particulate matter ECJ, 1/1.

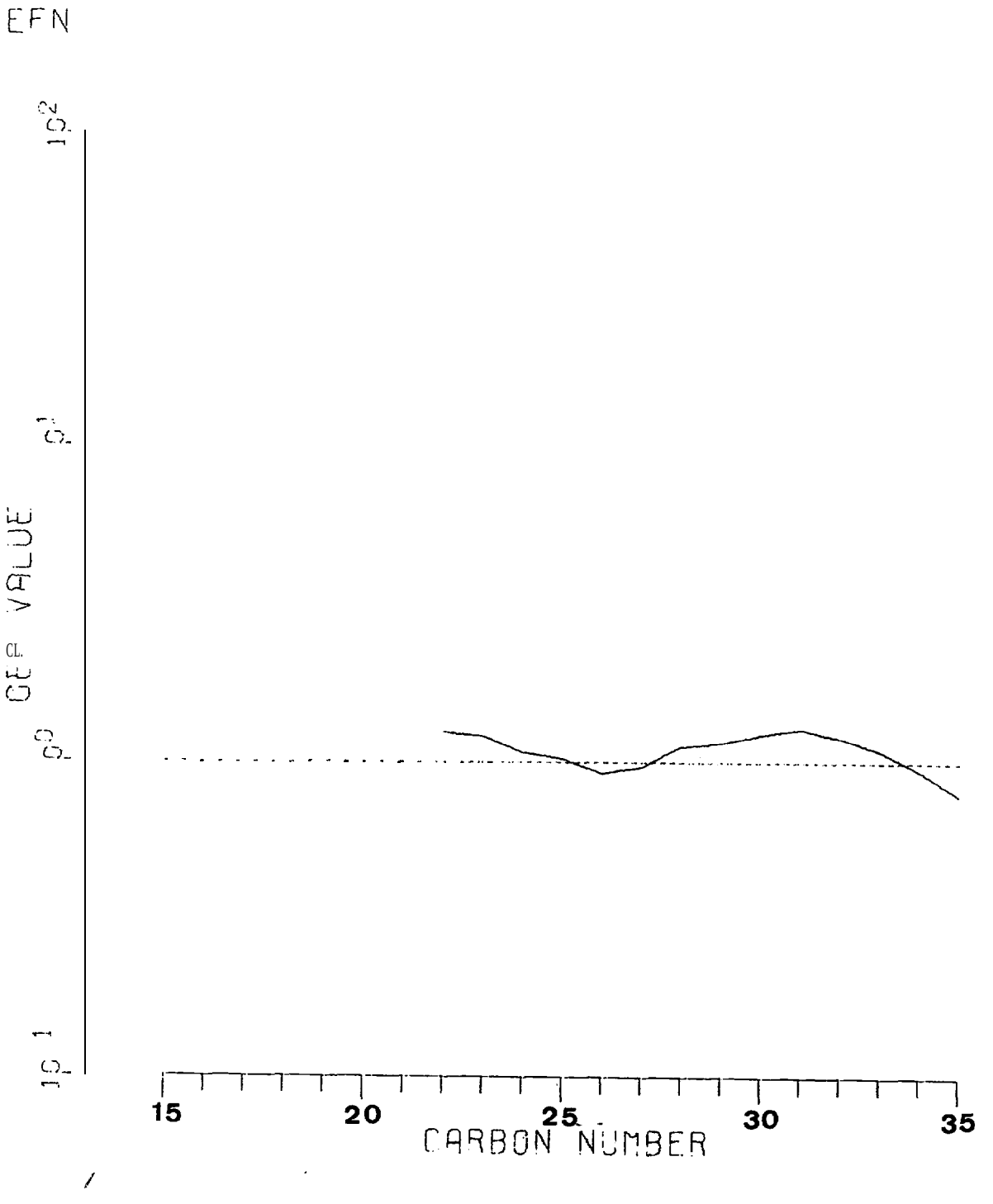


Figure 2-3. OEP curve of summer particulate matter EFN, 2/1.

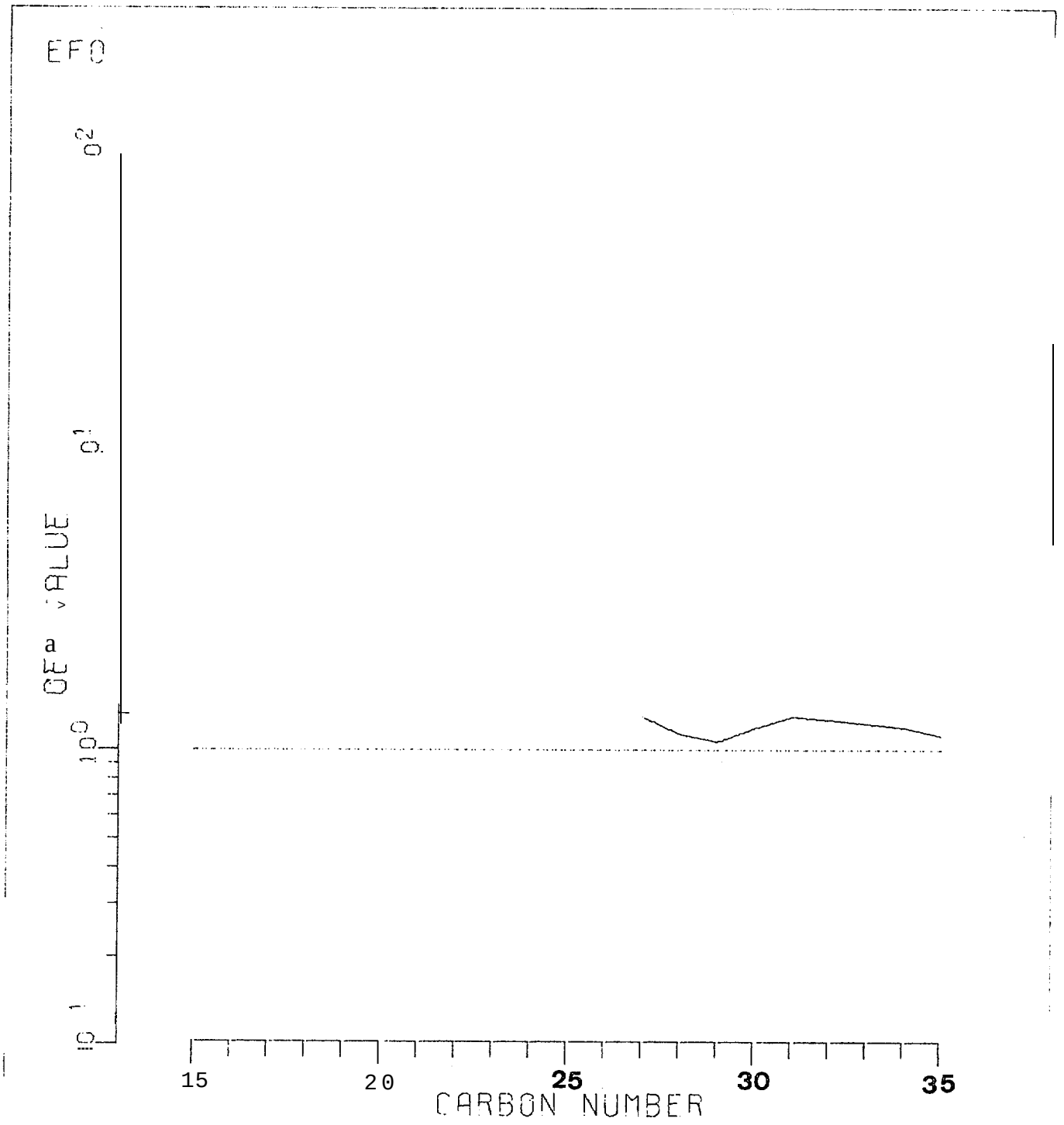


Figure 2-4. OEP curve of summer particulate matter EFO, 2/1.

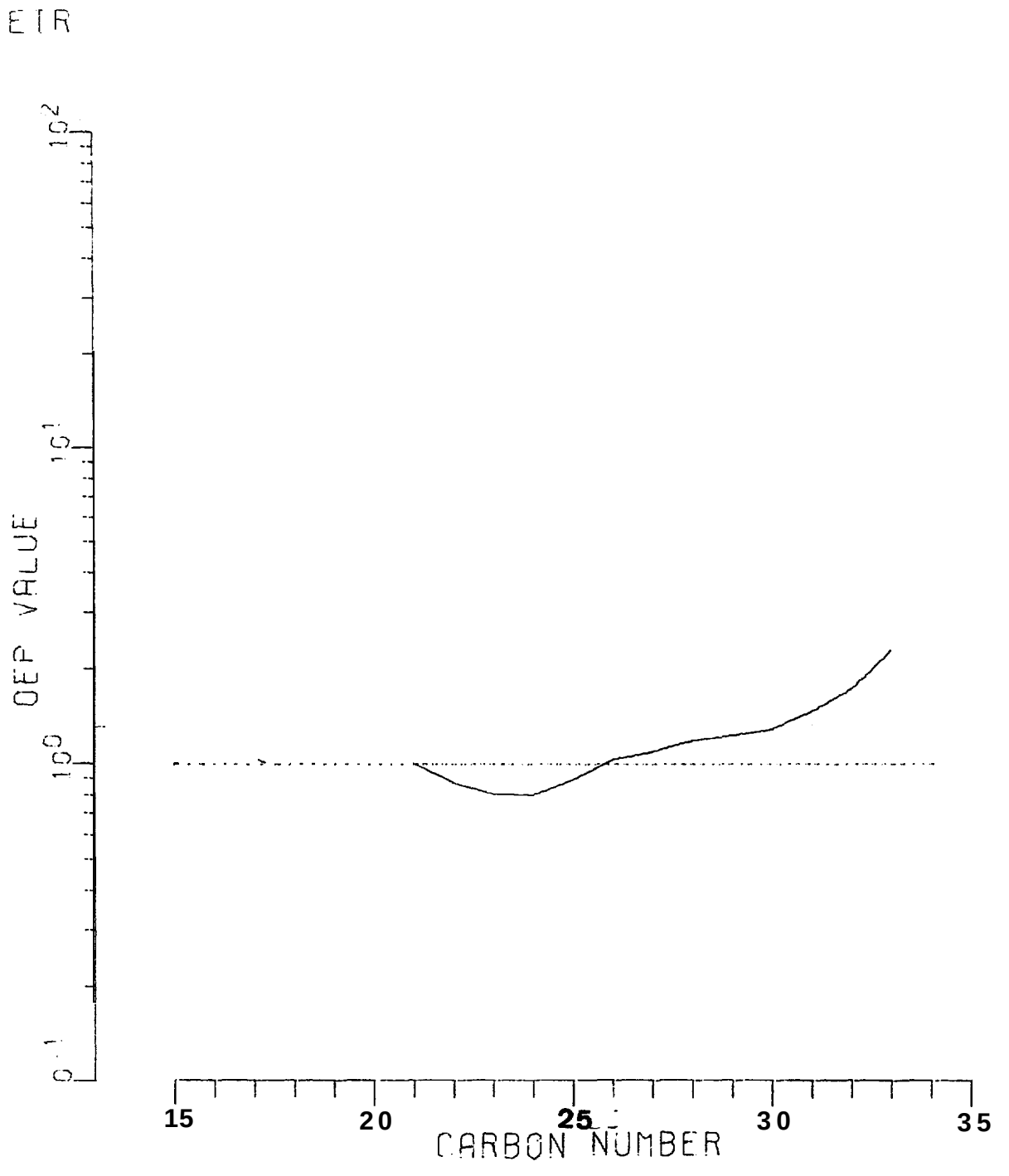


Figure 2.5. OEP curve of summer particulate matter EIR, 3/1.

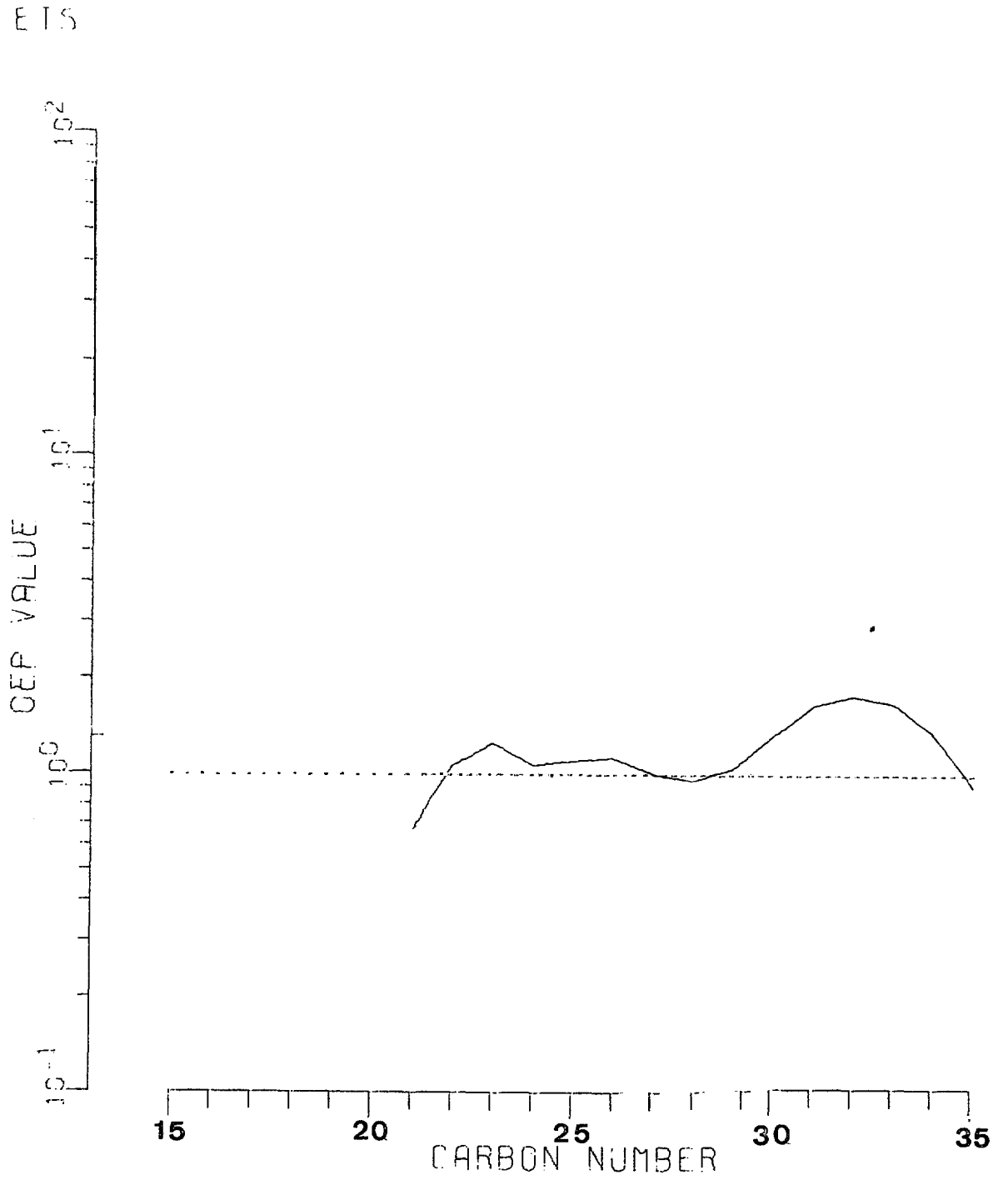


Figure 2-6. OEP curve of summer particulate matter EIS, 3/1.

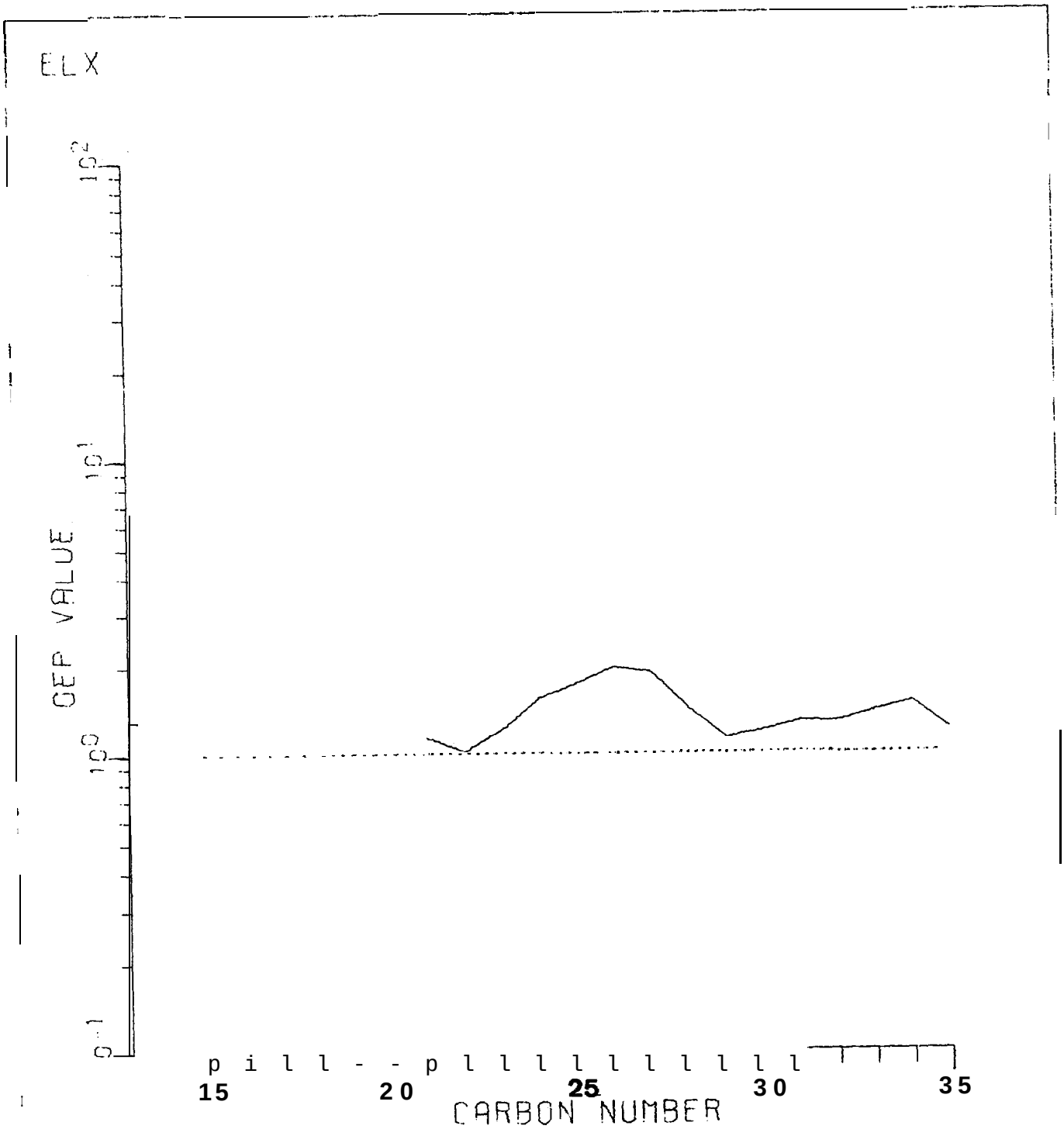


Figure 2-7. OEP curve of summer particulate matter ELX, 1/11.

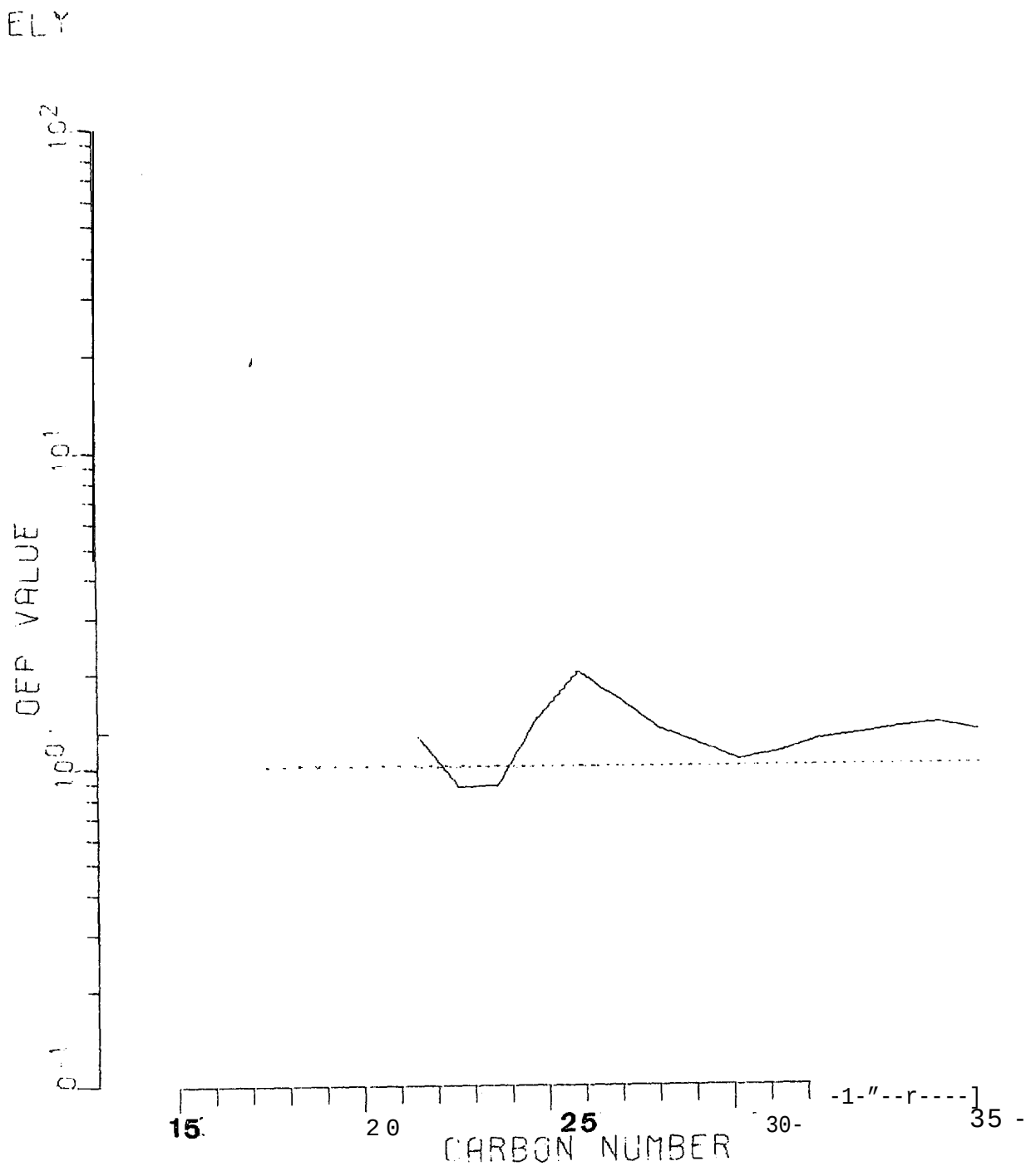


Figure 2-8. OEP curve of summer particulate matter ELY, 1/II.

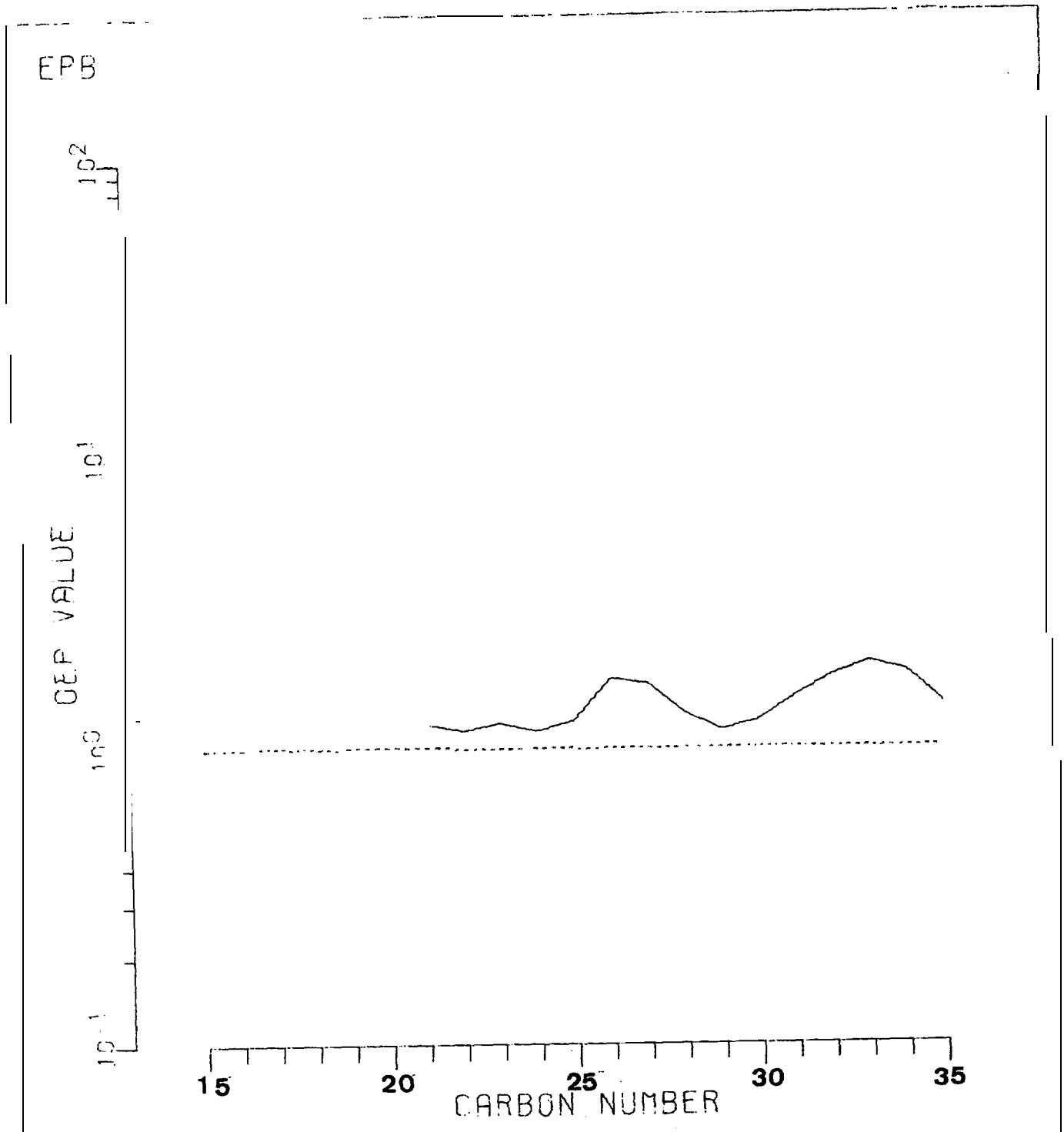


Figure 2-9. OEP curve of summer particulate **matter** EPB, **2/II.**

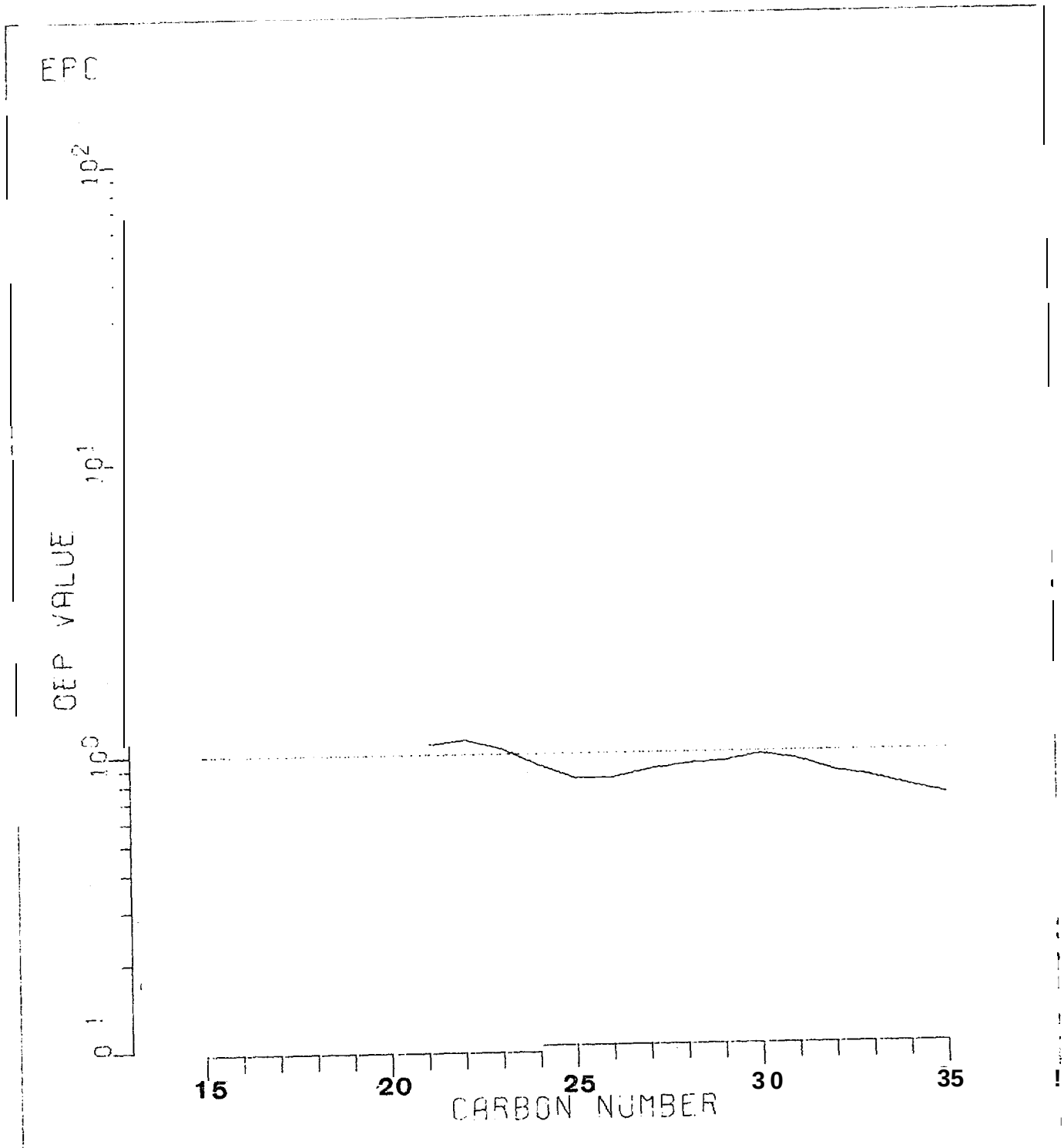


Figure 2-10. OEP curve of summer particulate matter EPC, 2/11.

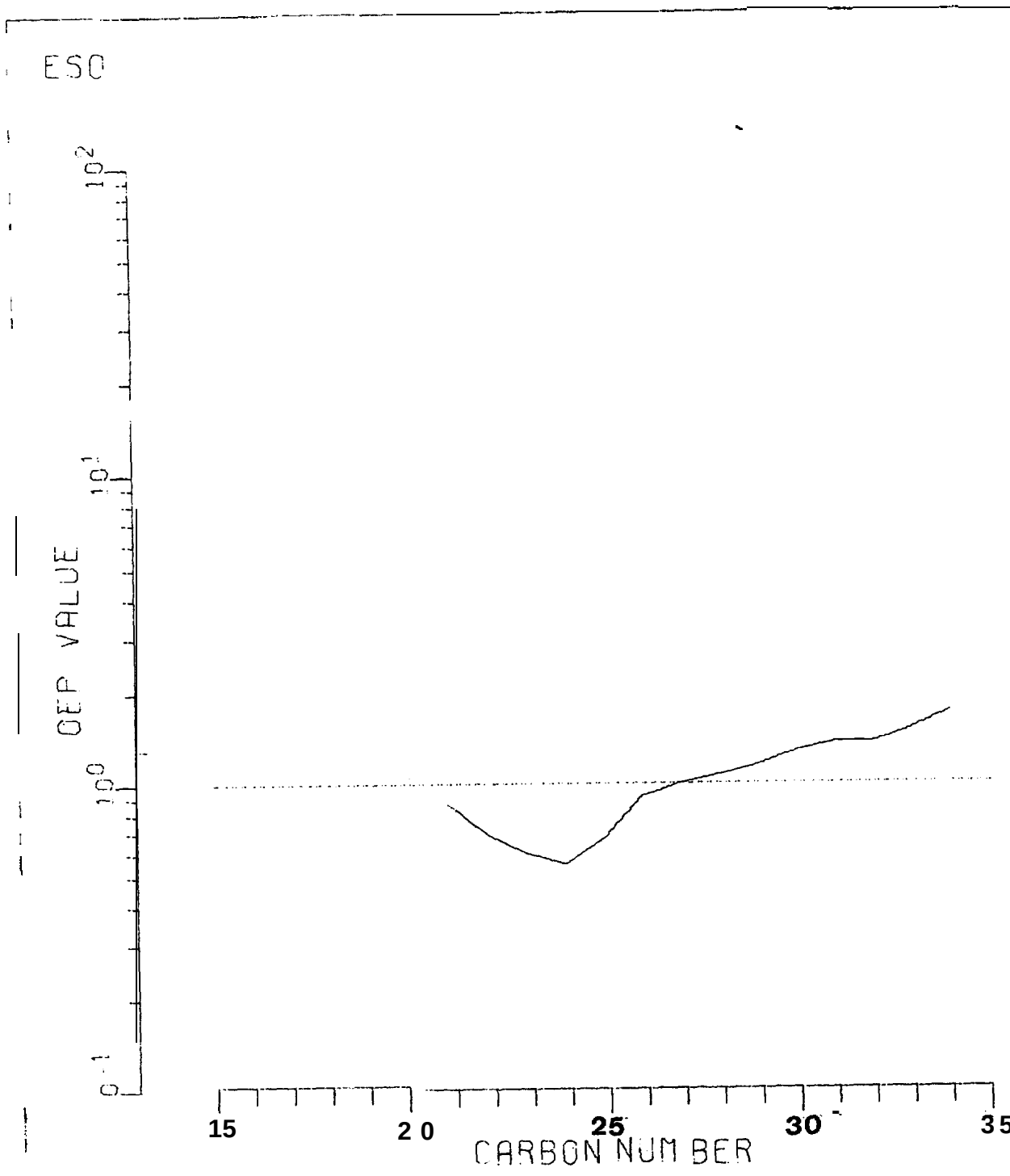


Figure 2-11. OEP curve of summer particulate matter, ESO, 3/11.

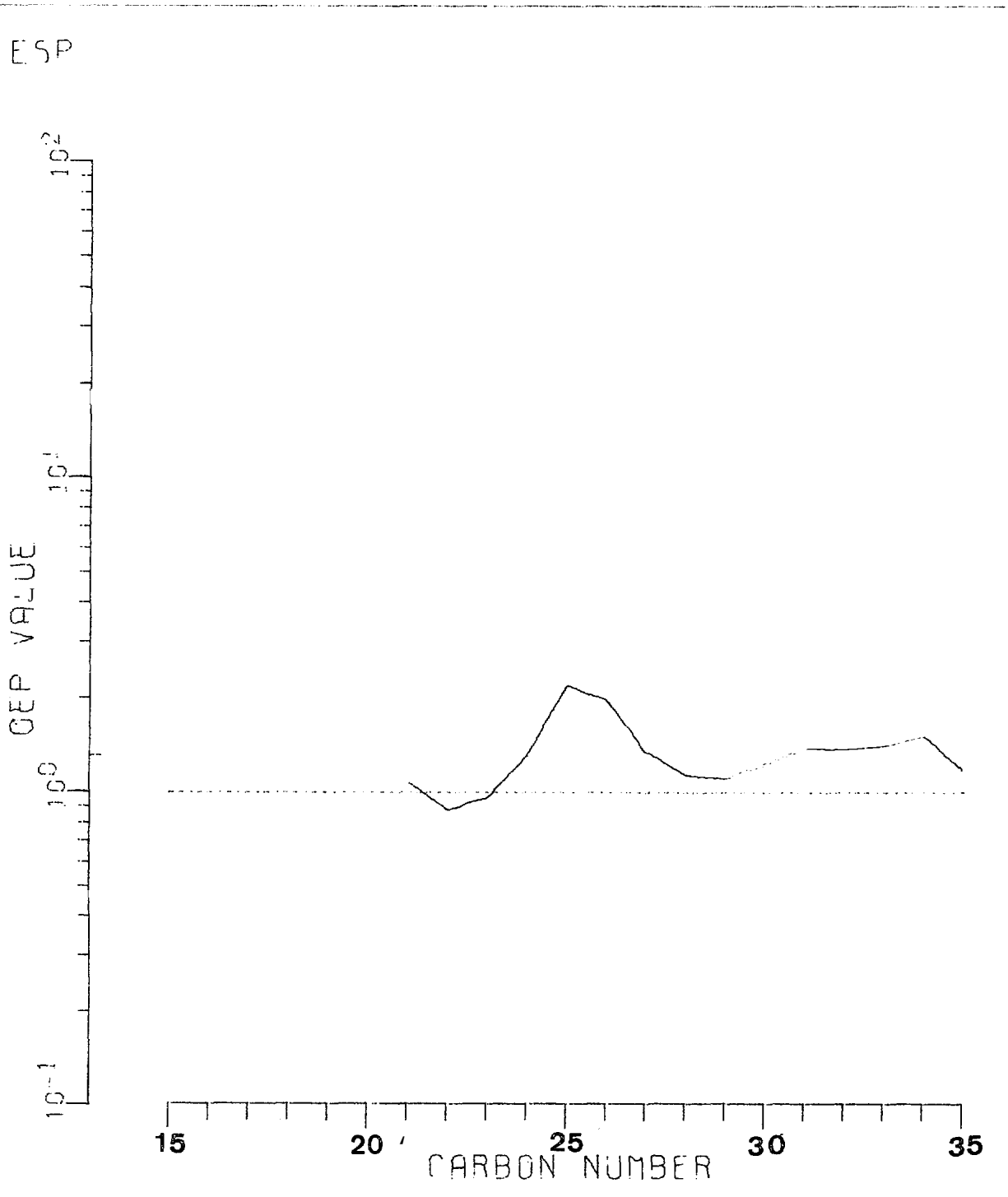


Figure 2-12. OEP curve of summer particulate matter ESP, 3/11.

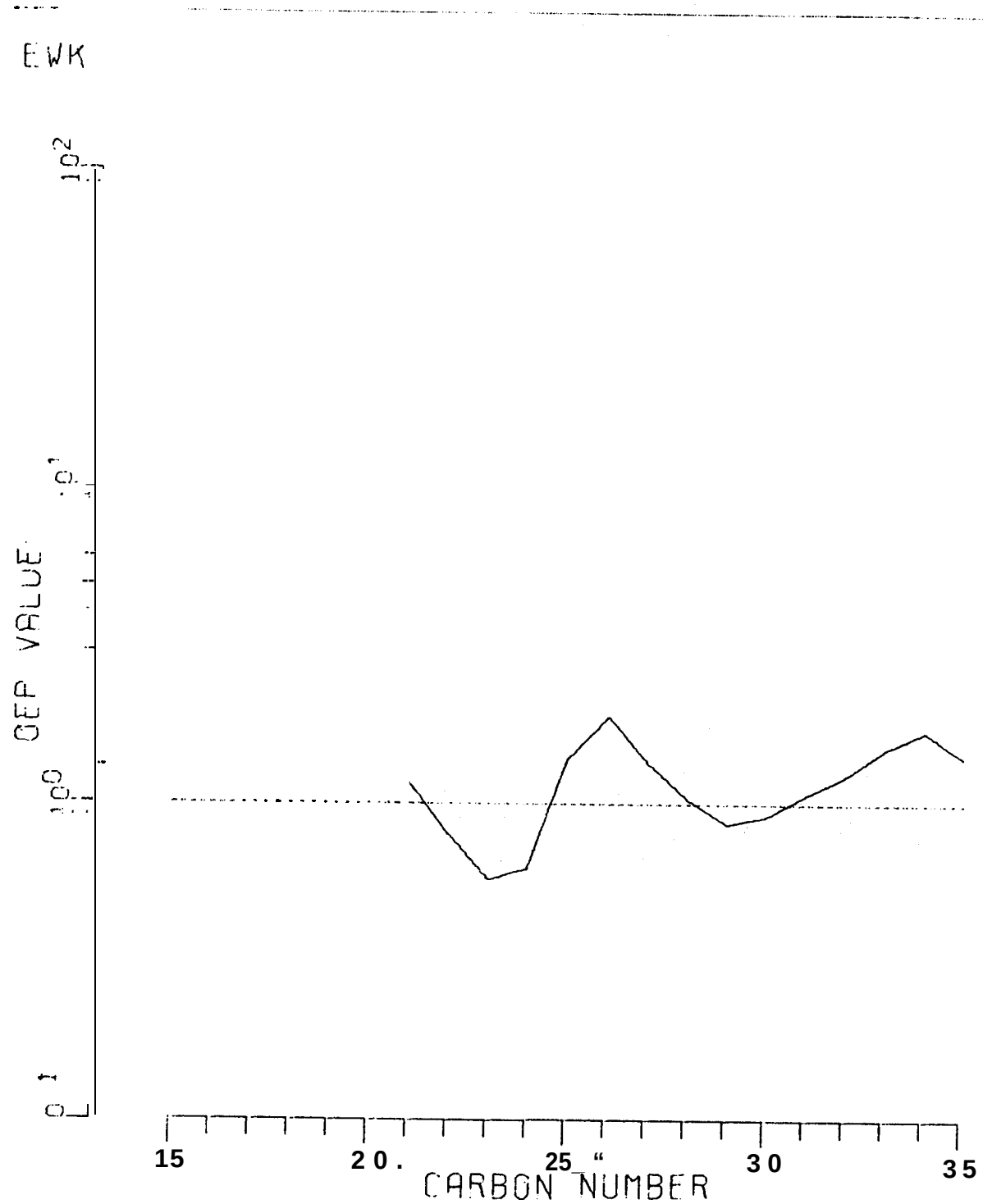


Figure 2-13. OEP curve of summer particulate matter EWK, 1/111.

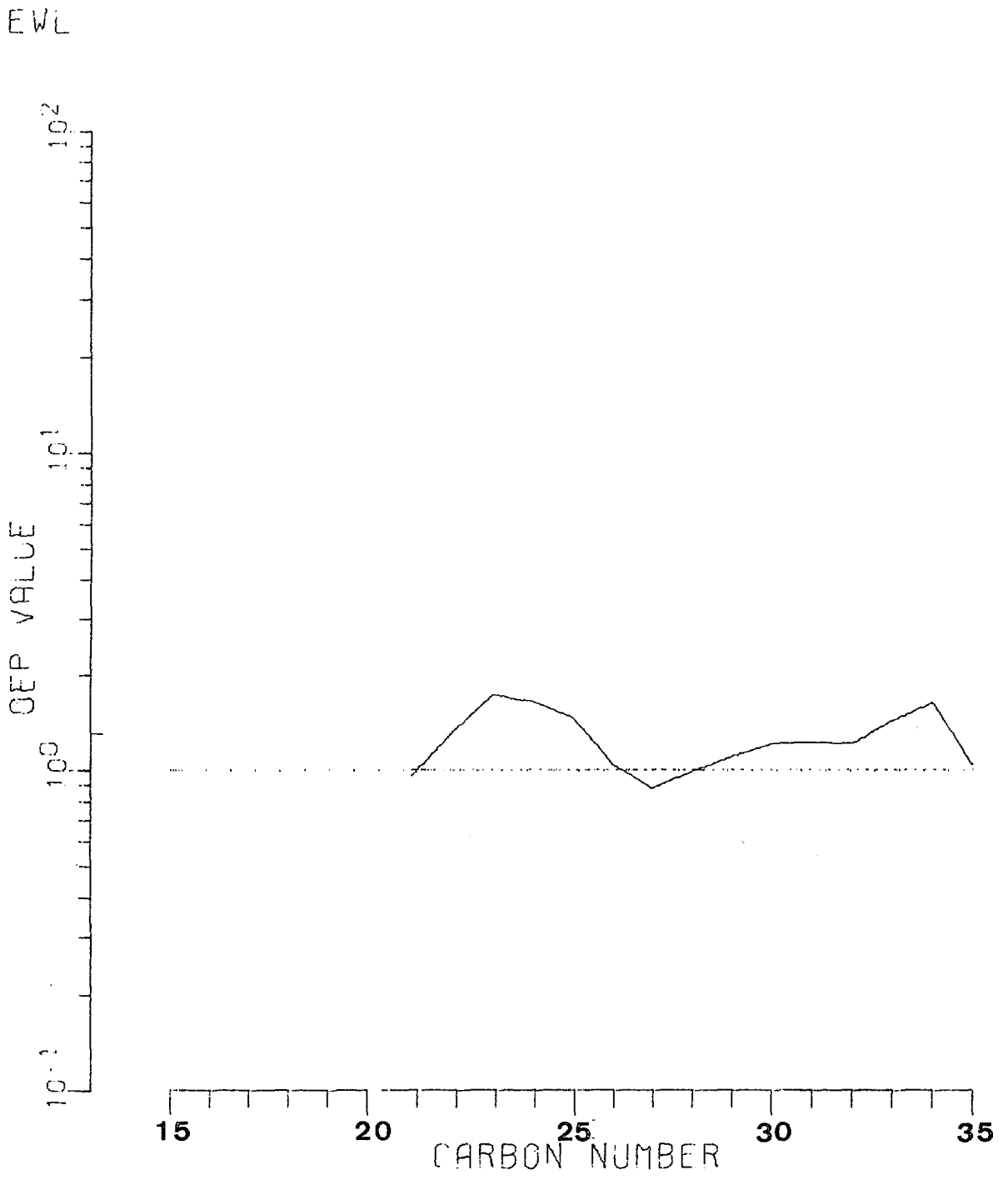


Figure 2-14. OEP curve of summer particulate matter EWL, 1/111.

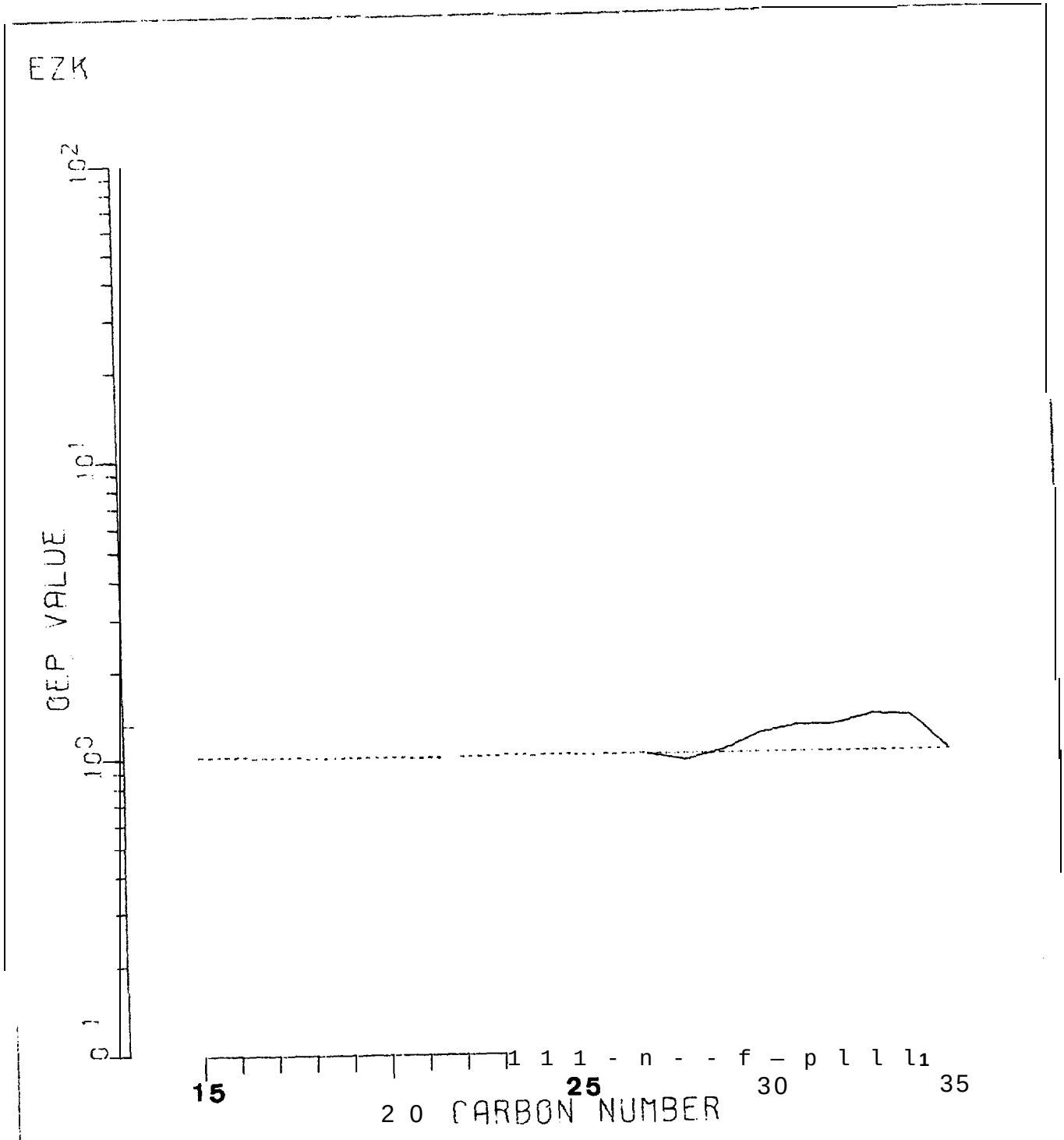


Figure 2-15. OEP curve of summer particulate matter EZK, 2/III.

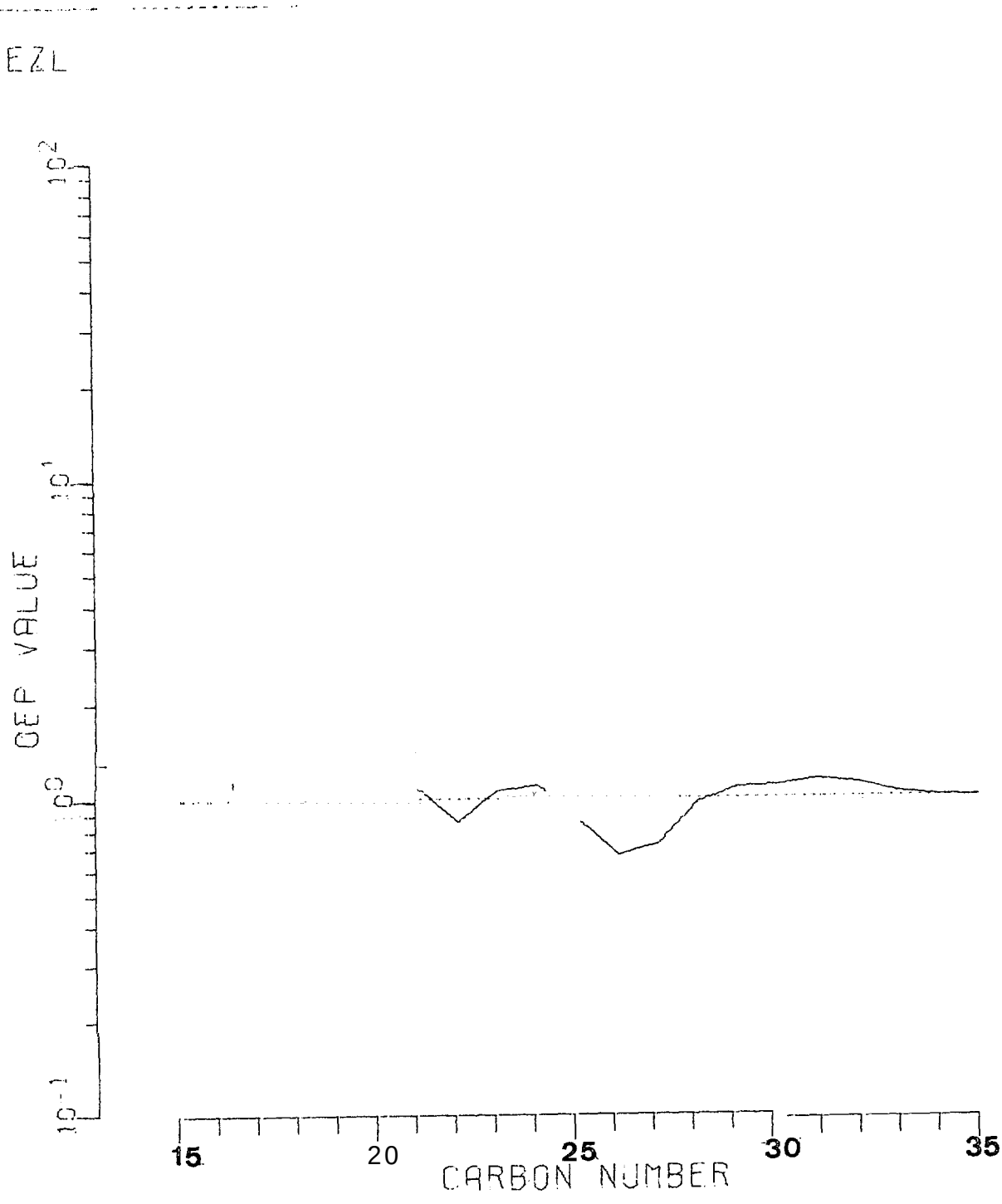


Figure 2-16. OEP curve of summer particulate matter EZL, 2/111.

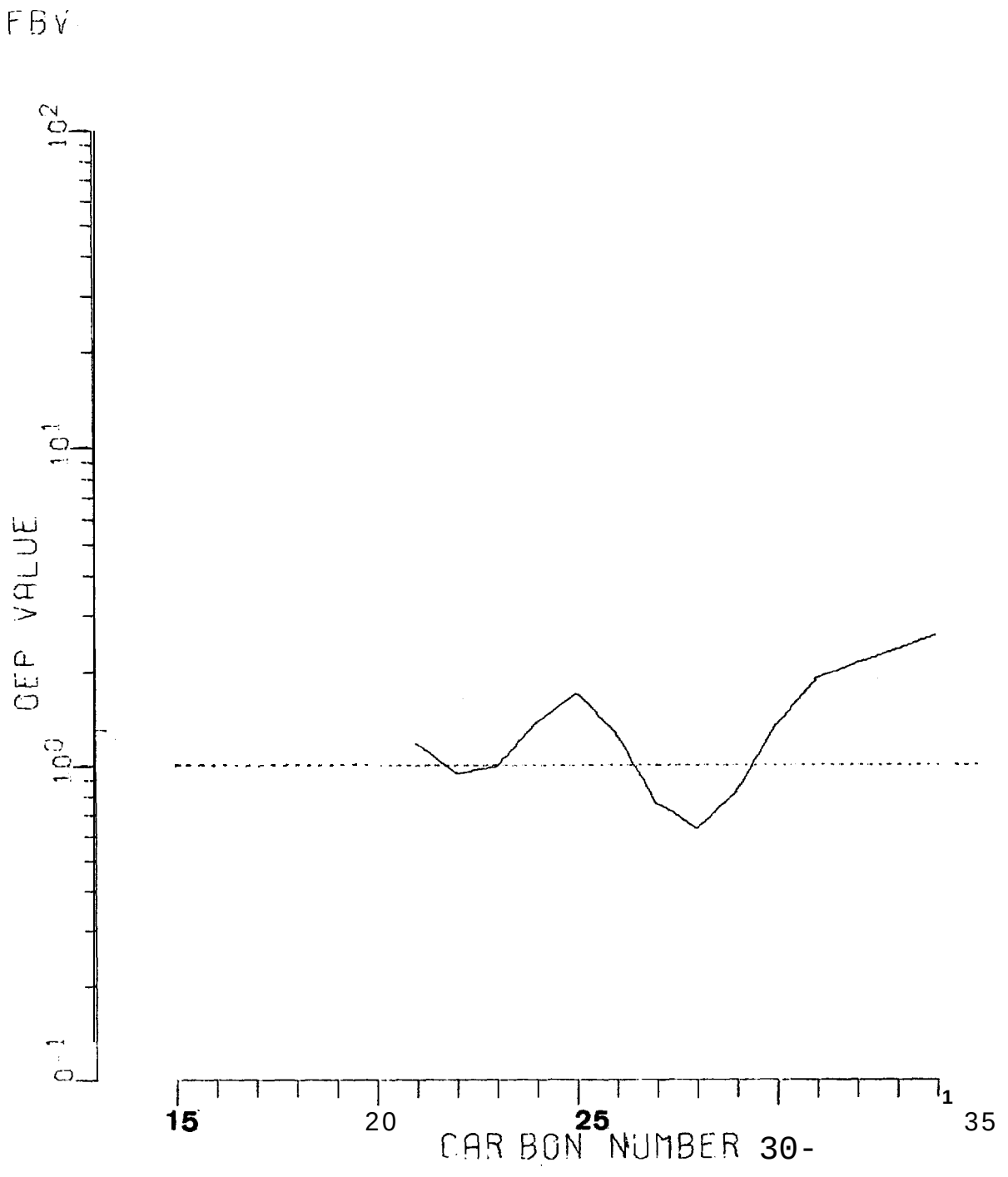


Figure 2-17. OEP curve of summer particulate matter FBV, 3/111.

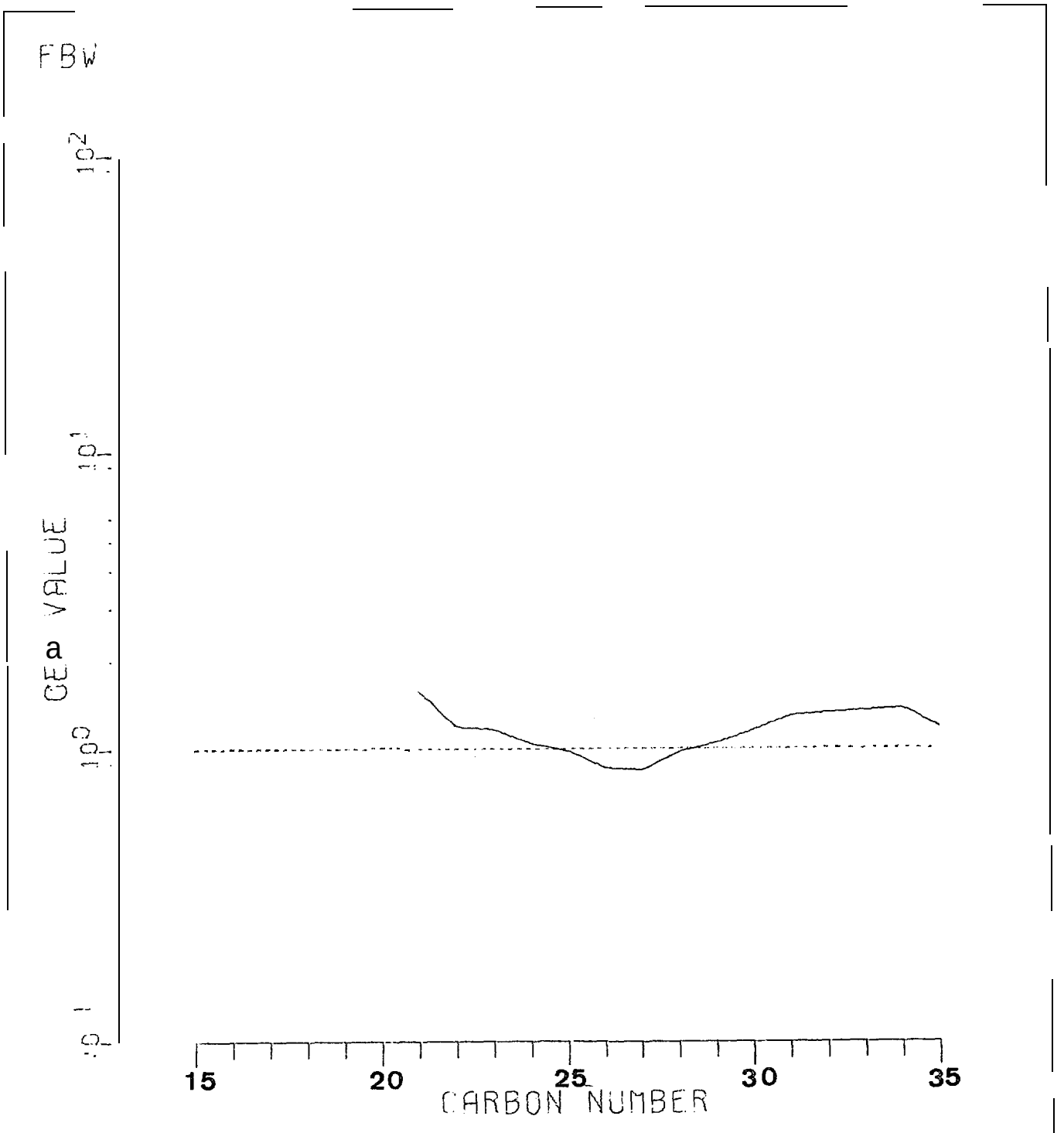


Figure 2-18. OEP curve of summer particulate matter FBW, 3/111.

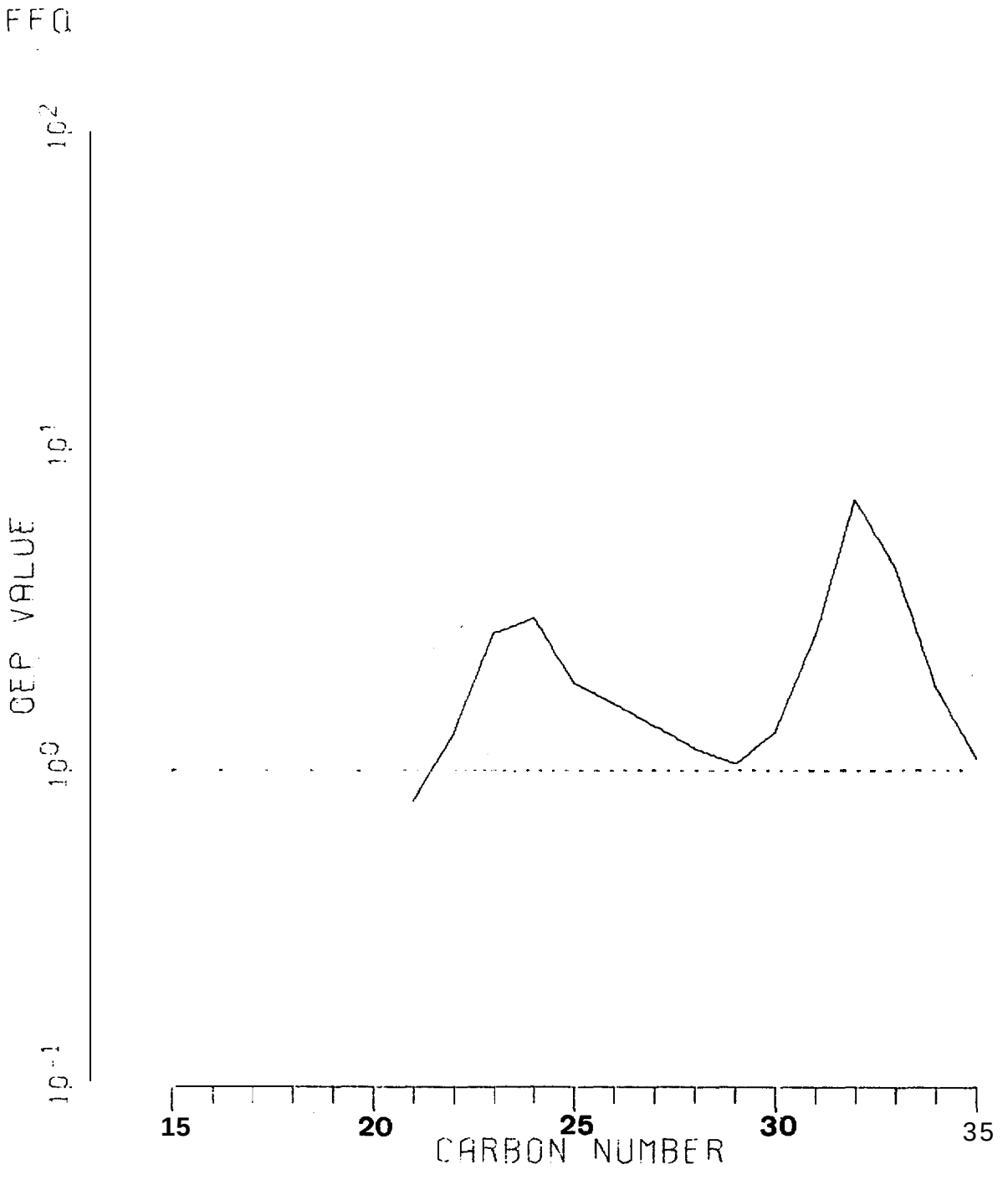


Figure 2-19. OEP curve of summer particulate matter FFQ, I/IV.

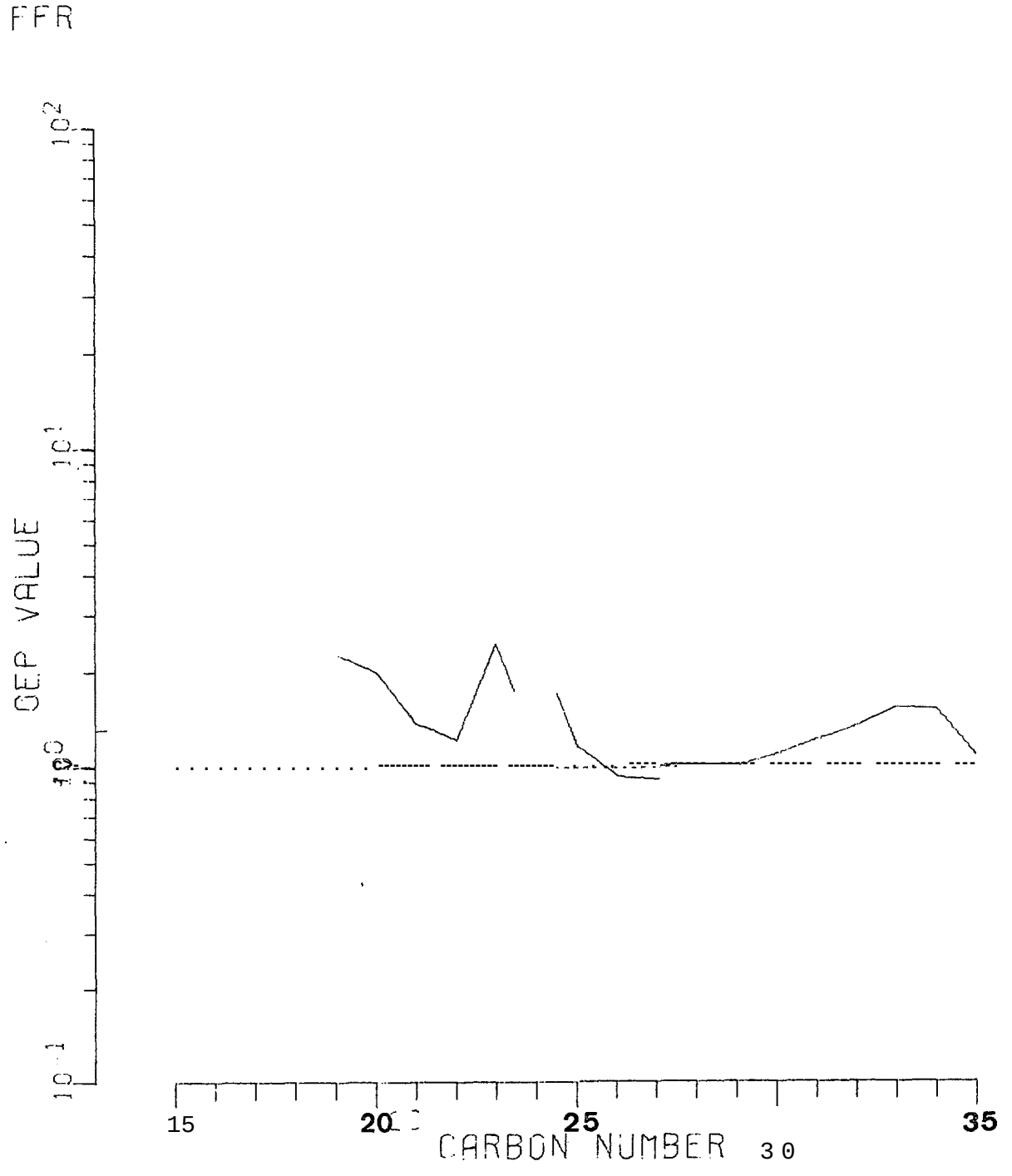


Figure 2-20. OEP curve of summer particulate matter FFR, l/IV.

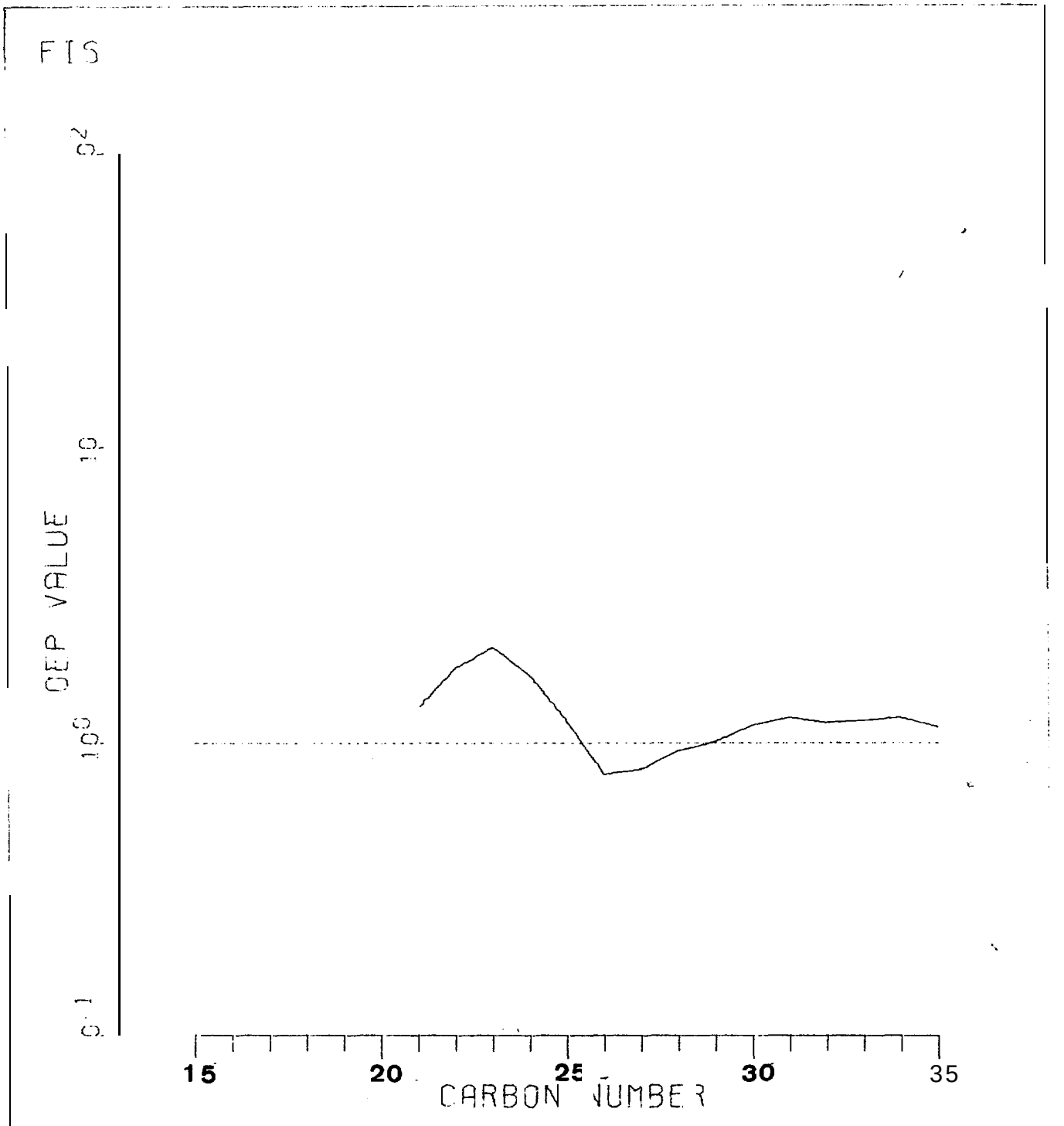


Figure 2-21. OEP curve of summer particulate matter FIS, 2/IV.

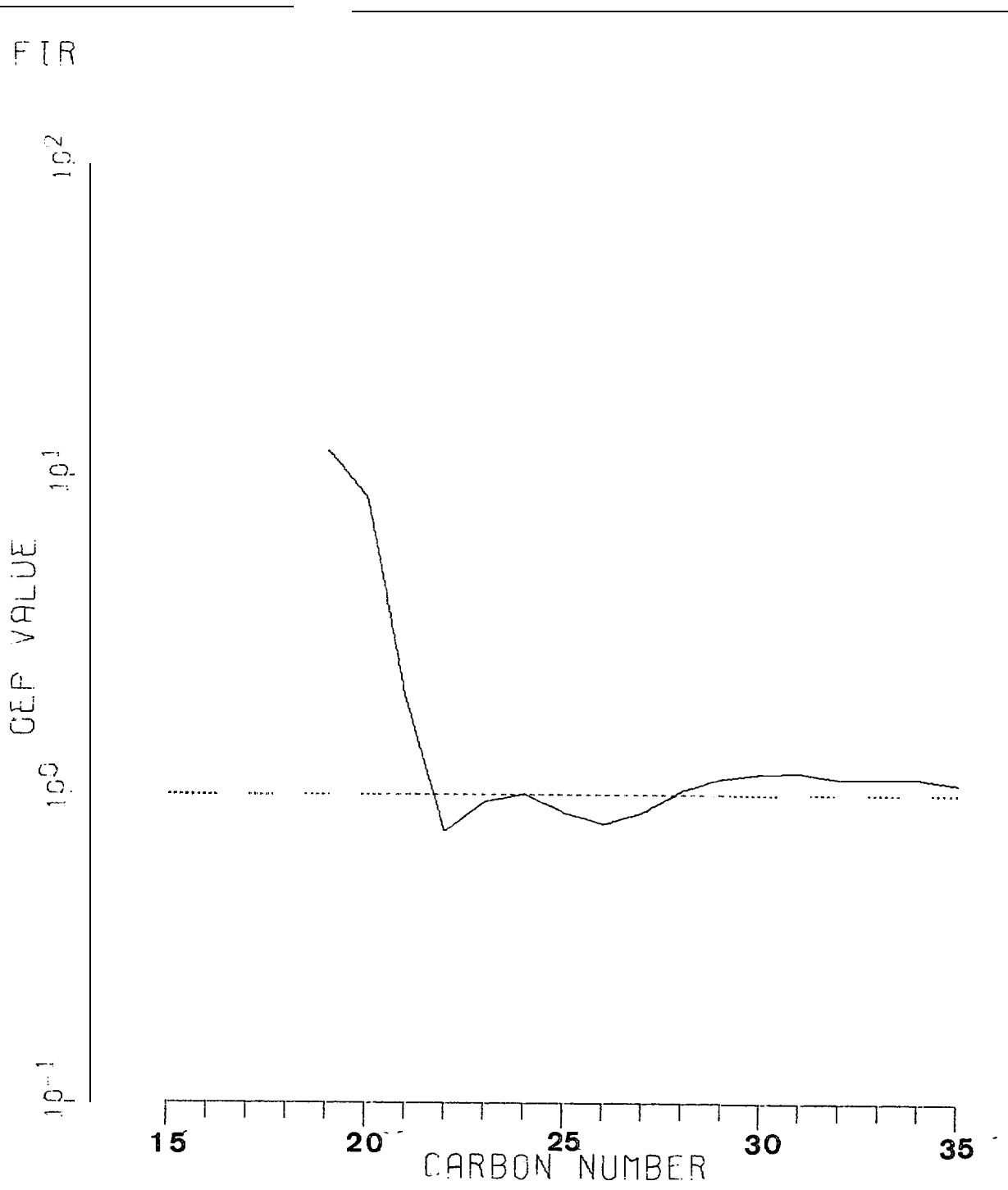


Figure 2 22. OEP curve of summer particulate matter FIR, 2/IV.

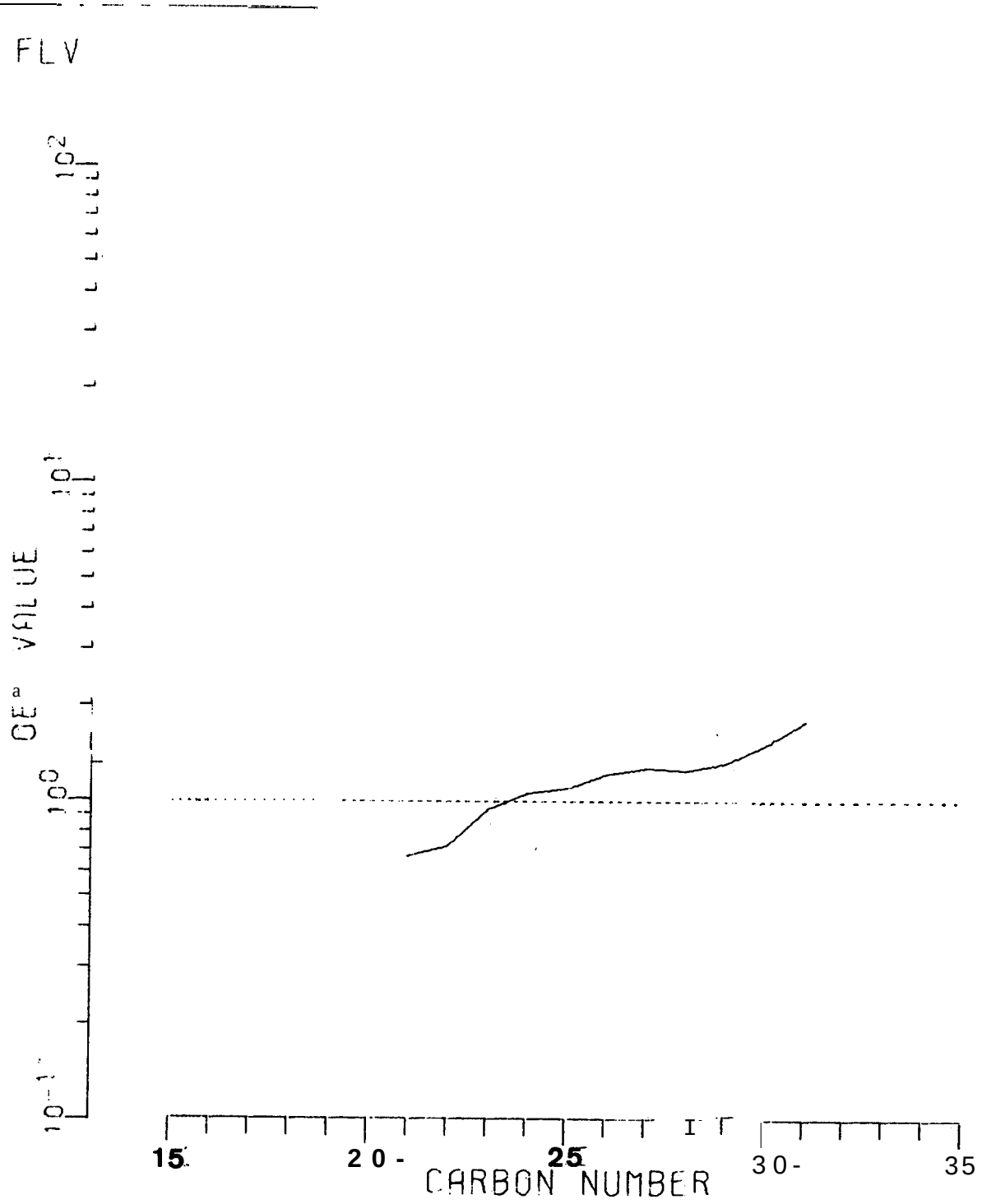


Figure 2-23. OEP curve of summer particulate matter FLV, 3/IV.

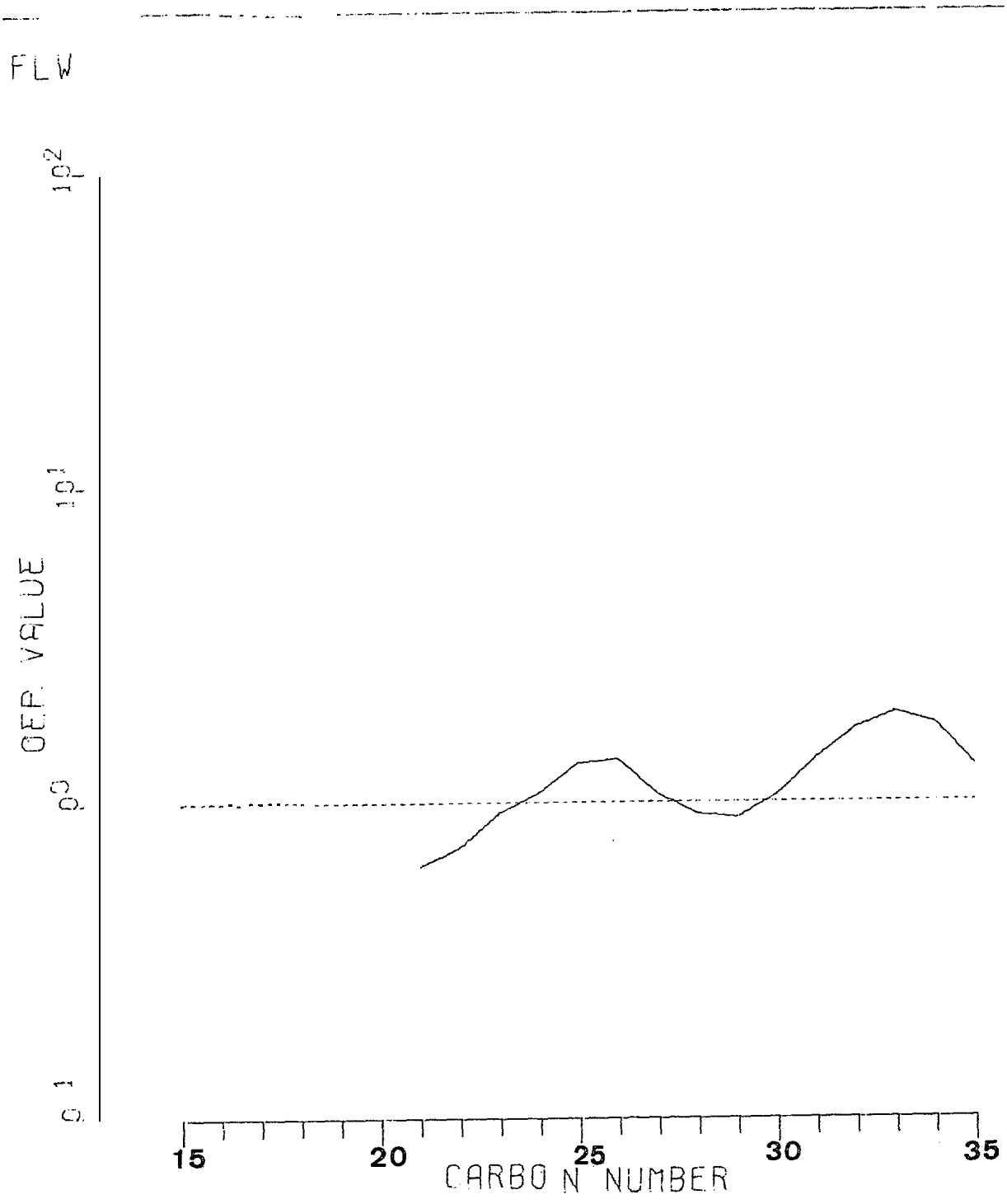


Figure 2-24. OEP curve of summer particulate matter FLW, 3/IV.

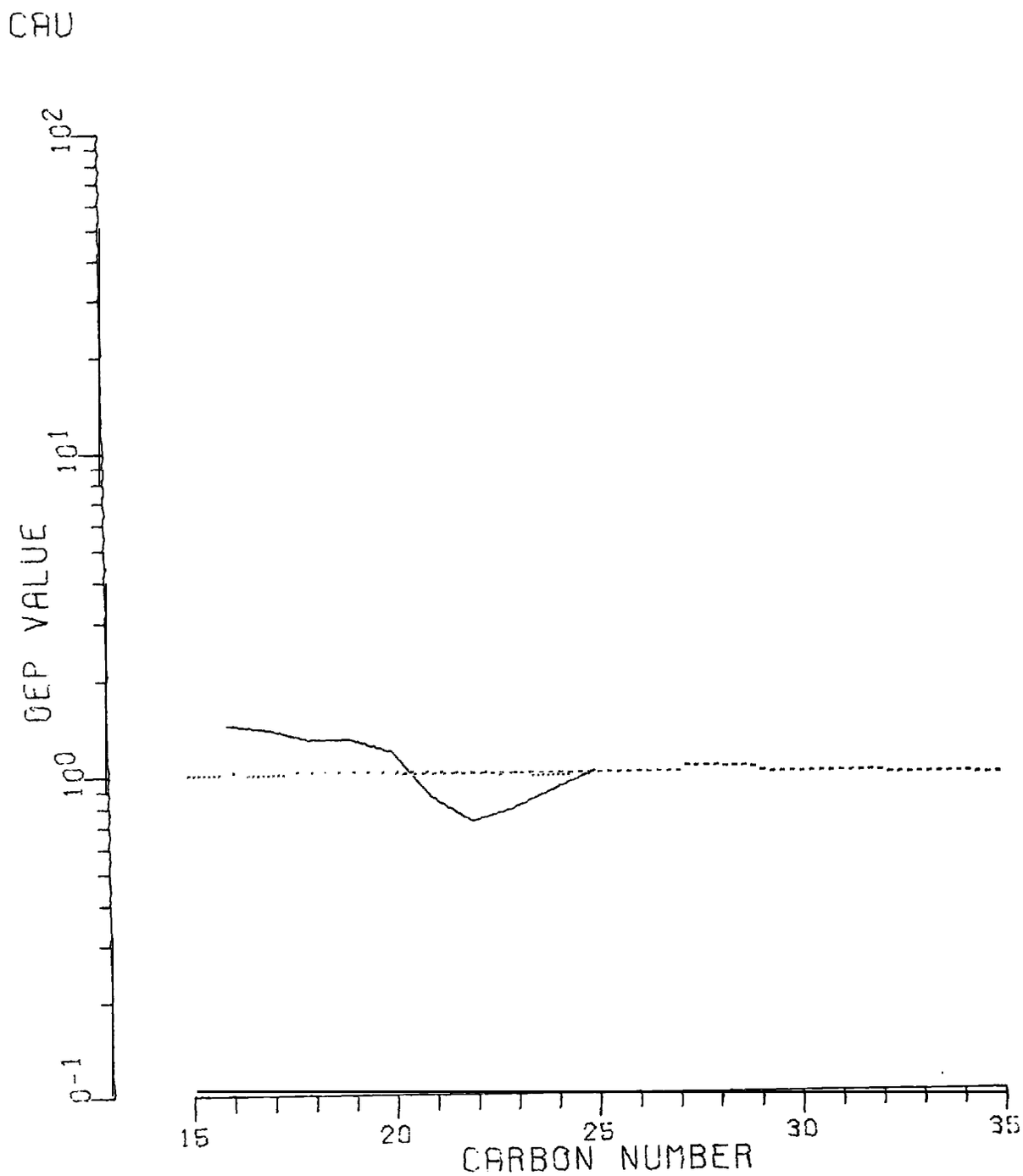


Figure 3-1. OEP curve of zooplankton spring sample CAU, 1/1.

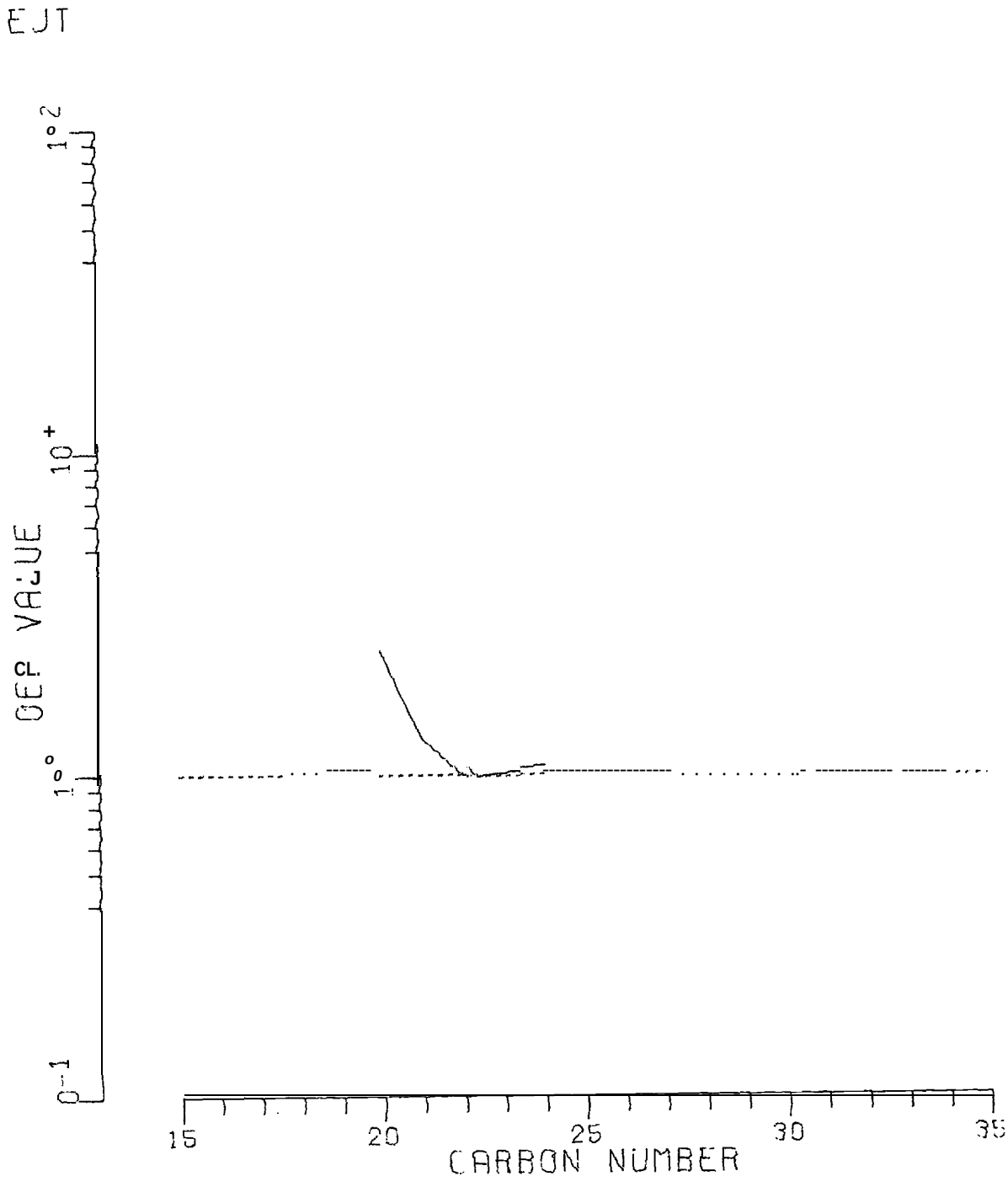


Figure 3-2. OEP curve of zooplankton summer sample EJT, 1/11.

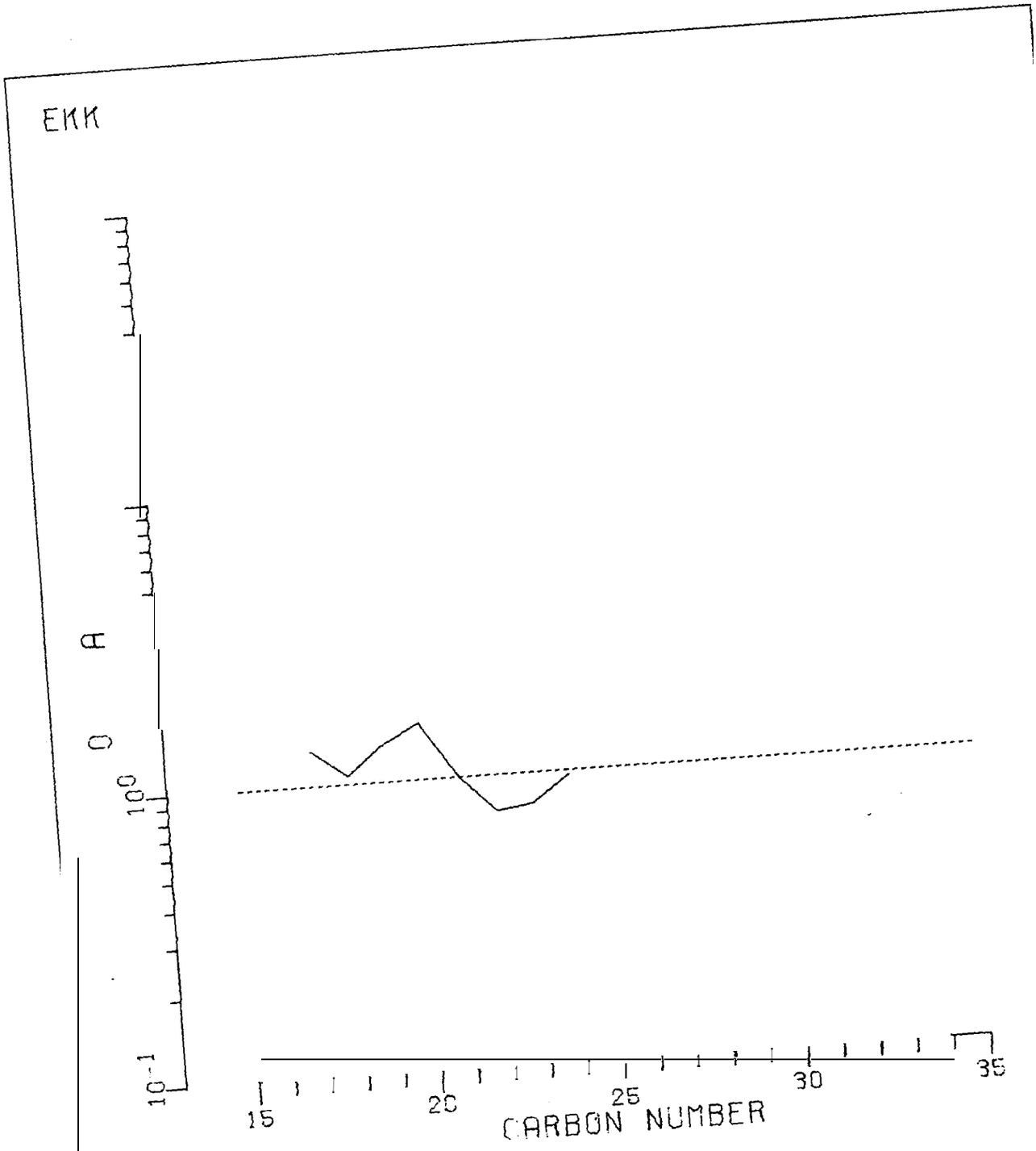


Figure 3-3. OEP curve of zooplankton summer sample EKK, 1/11.

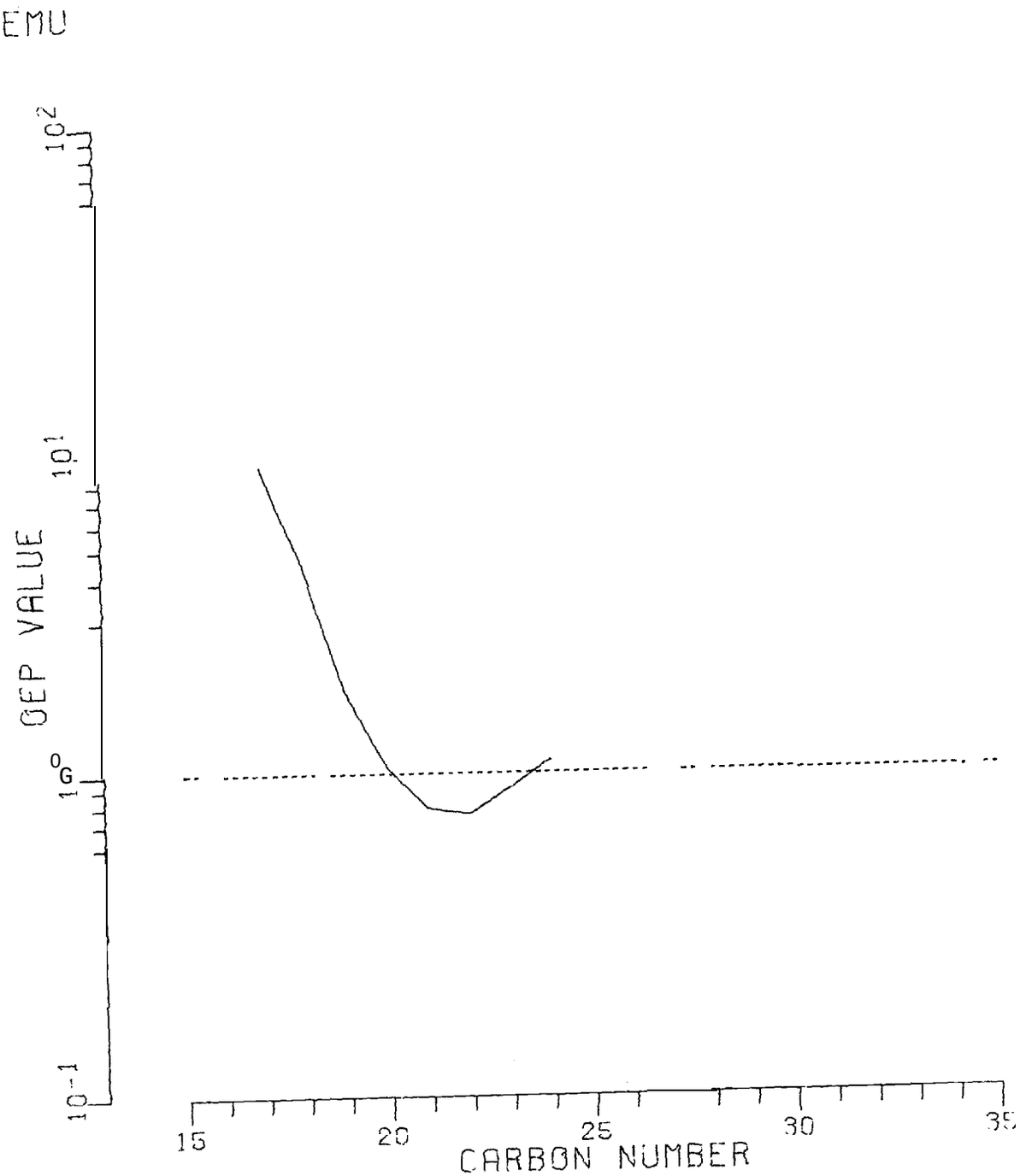


Figure 3-4" OEP curve of zooplankton summer sample EMU, 2/11.

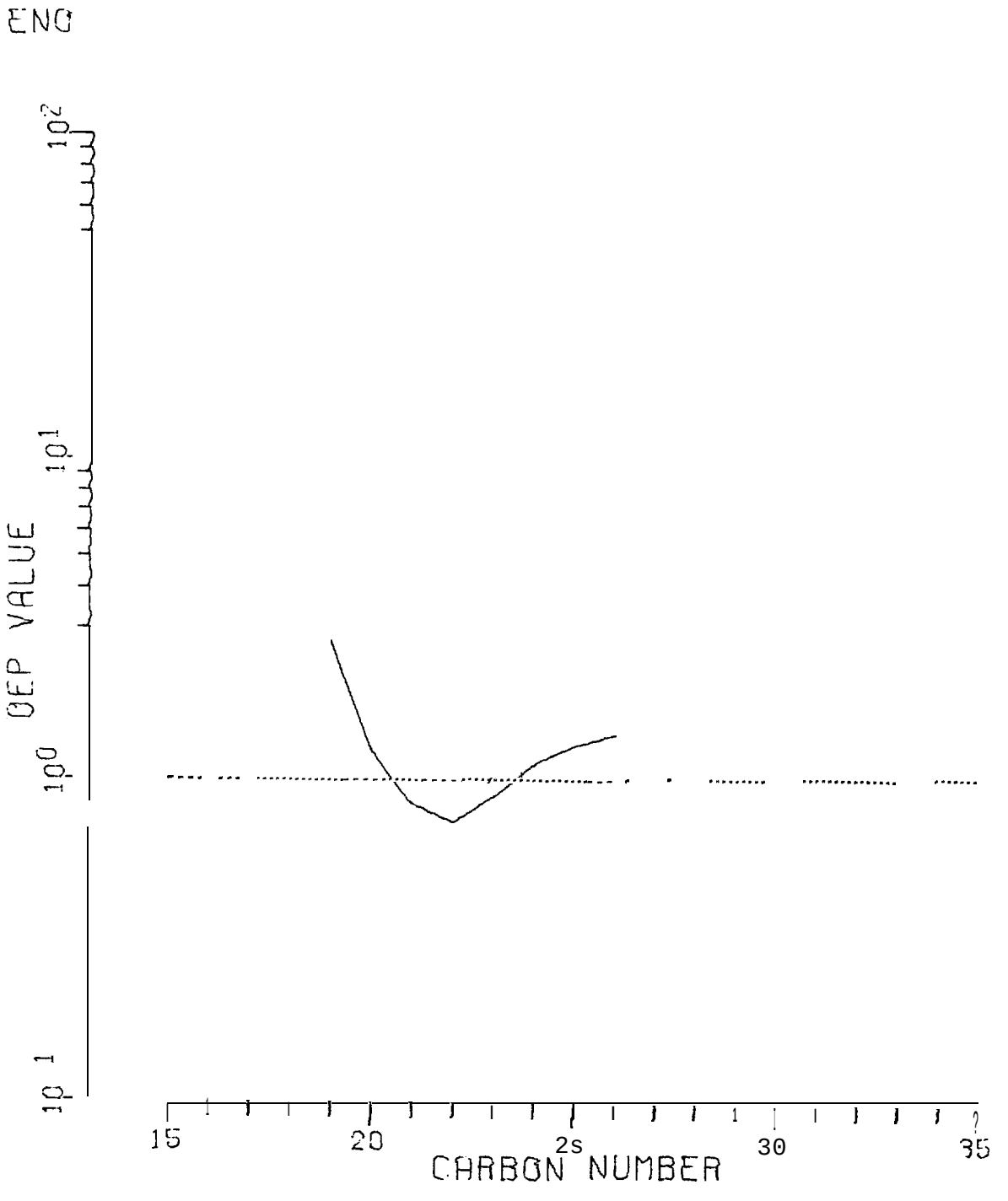


Figure 3-5. OEP curve of zooplankton summer sample ENO, 2/11.

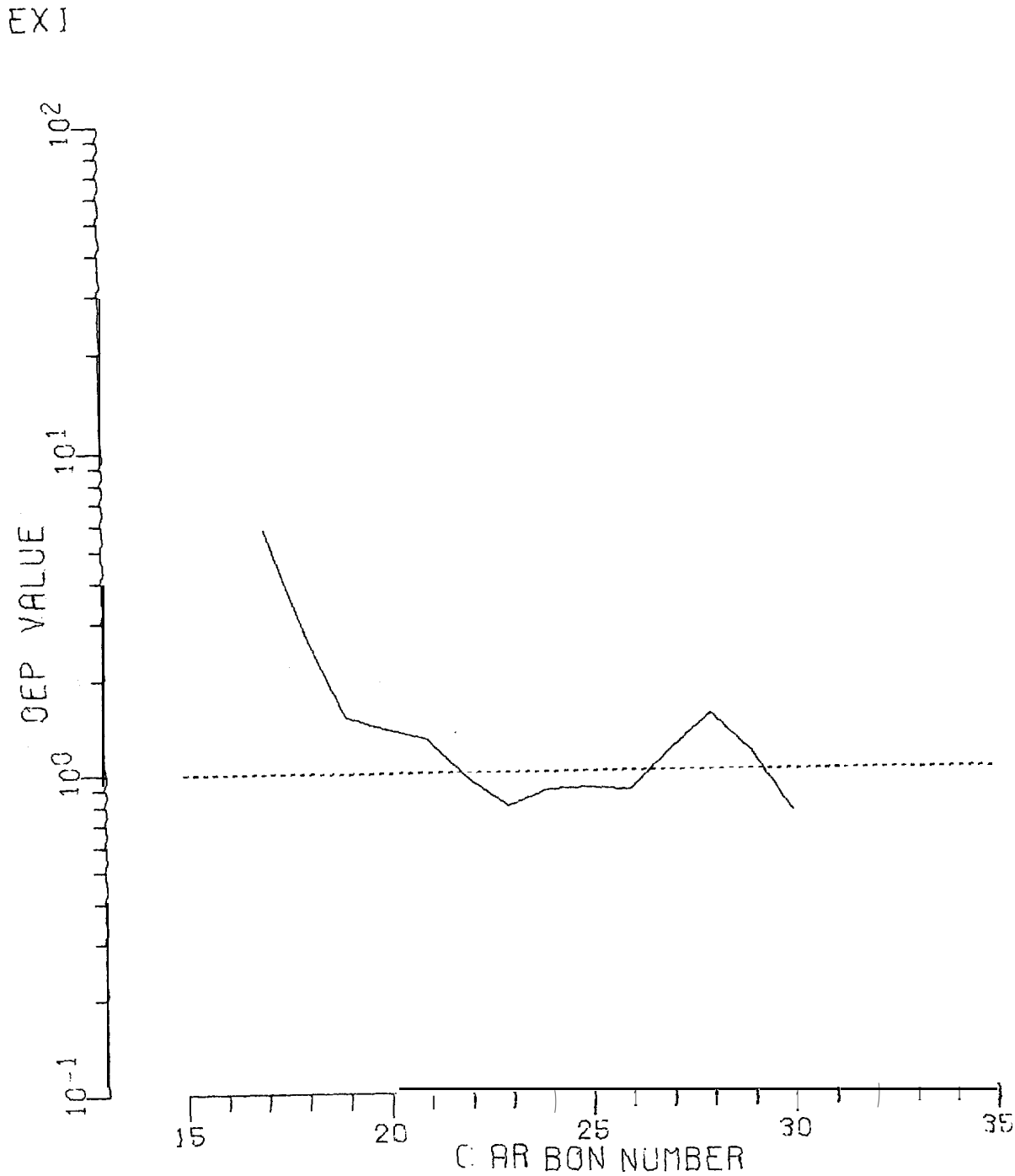


Figure 3-6. OEP curve of zooplankton summer sample EXI, 2/111.

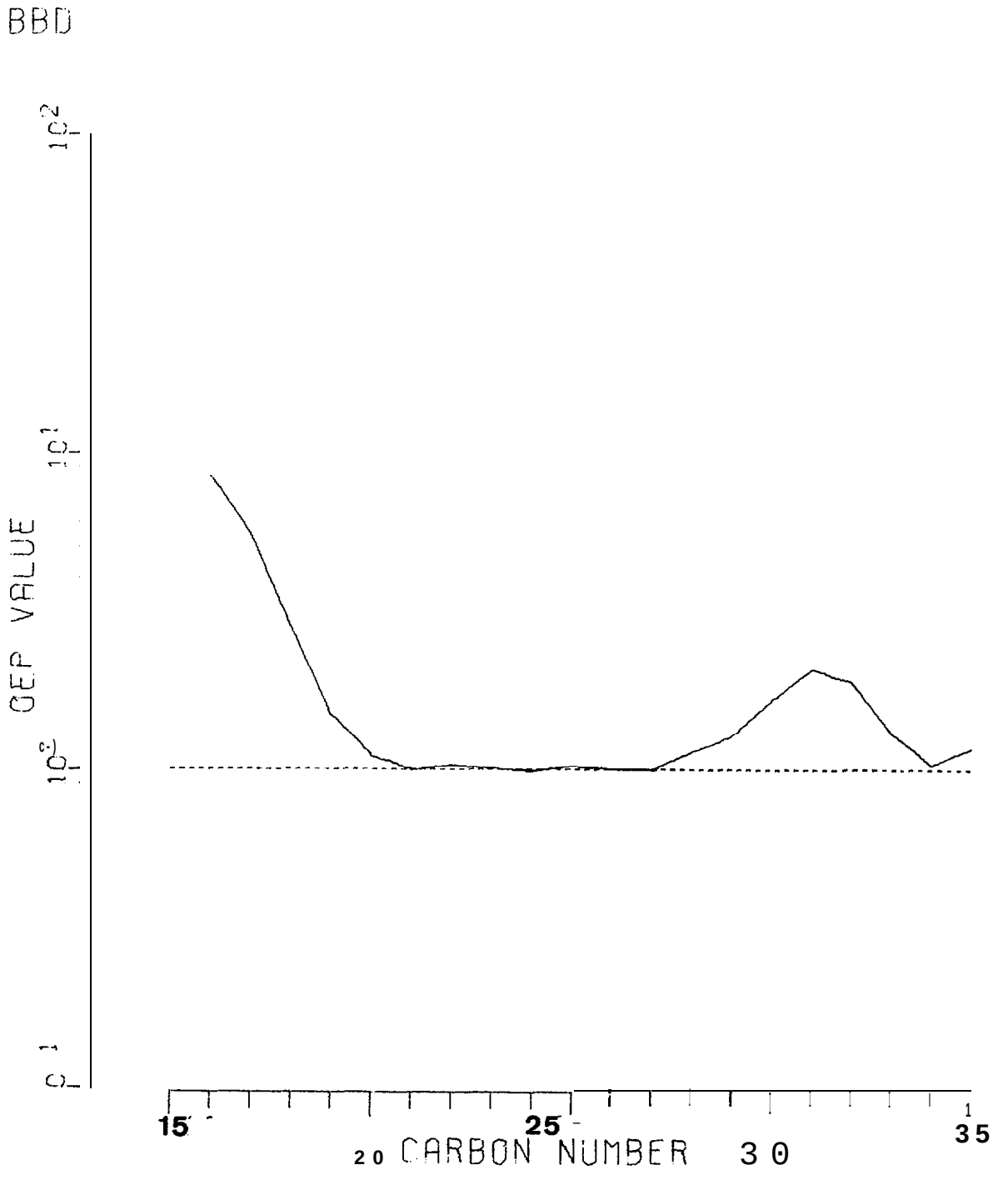


Figure 4-1. OEP curve for Neuston sample BBD, l/IV.

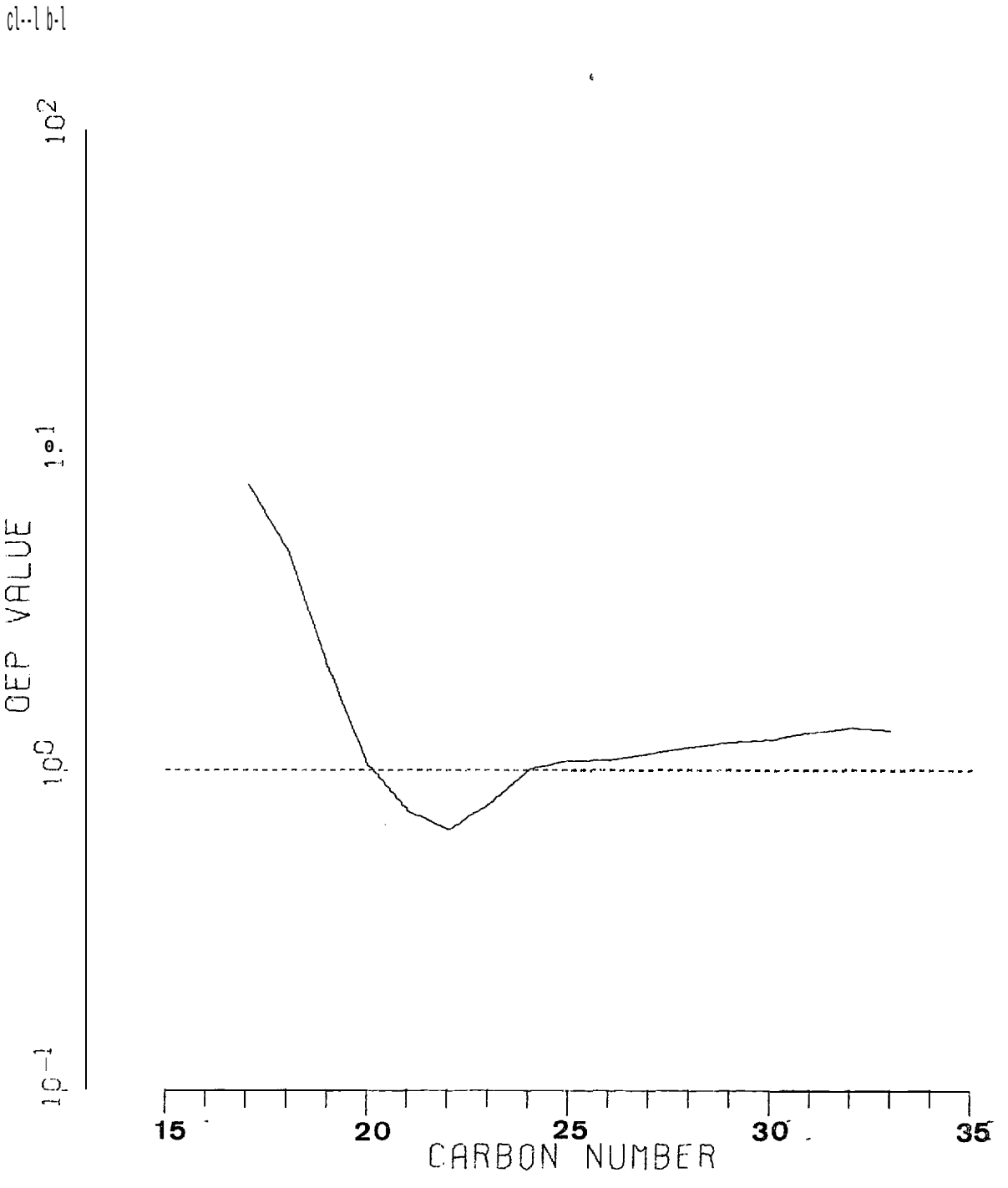


Figure 4-2. OEP curve for Neuston sample CHH, 3/1.

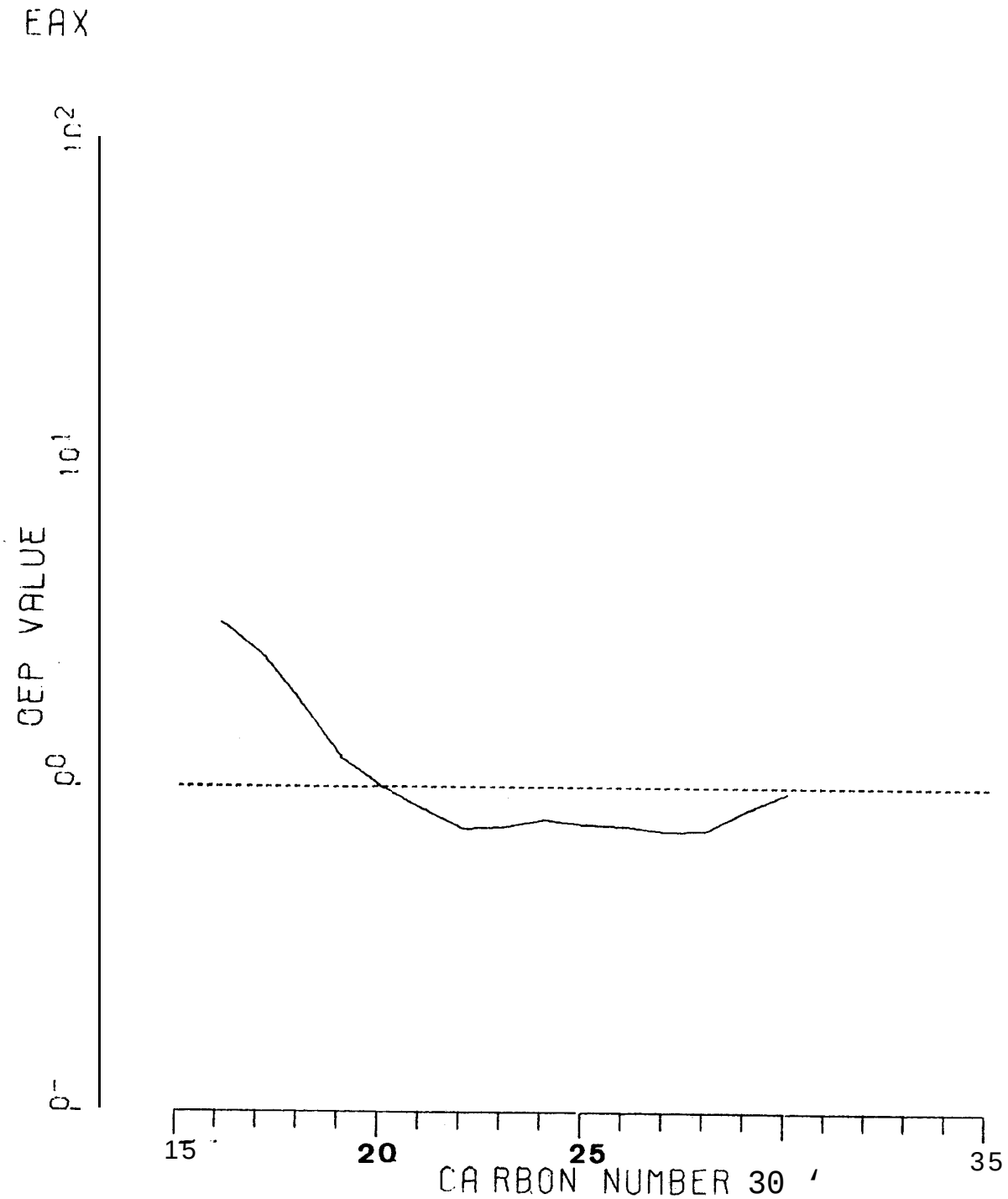


Figure 4-3. OEP curve for Neuston sample EAx, 1/I.

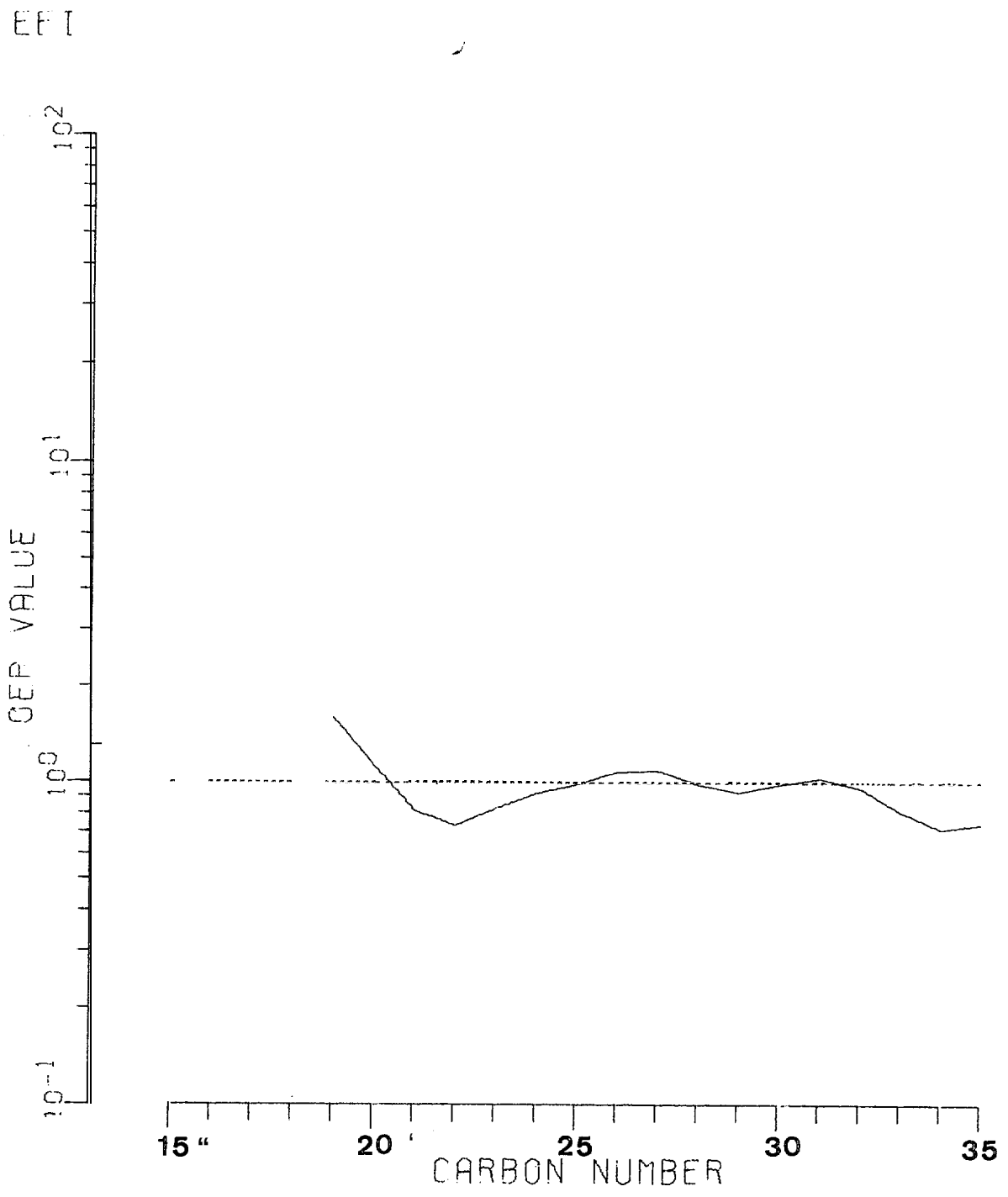


Figure 4-4. OEP curve for Neuston sample EEI, 2/1.

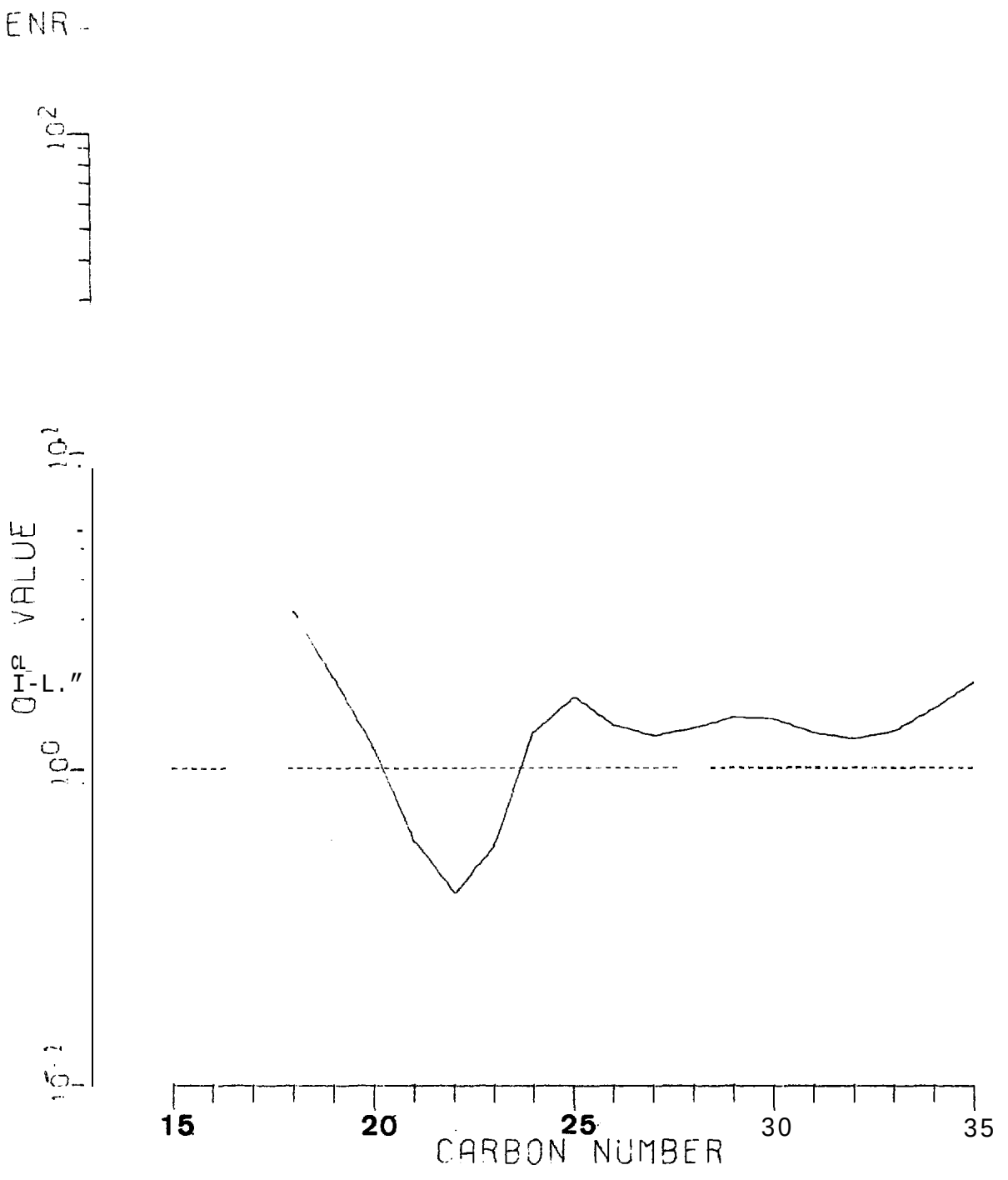


Figure 4-5. OEP curve for Neuston sample ENR, 2/11.

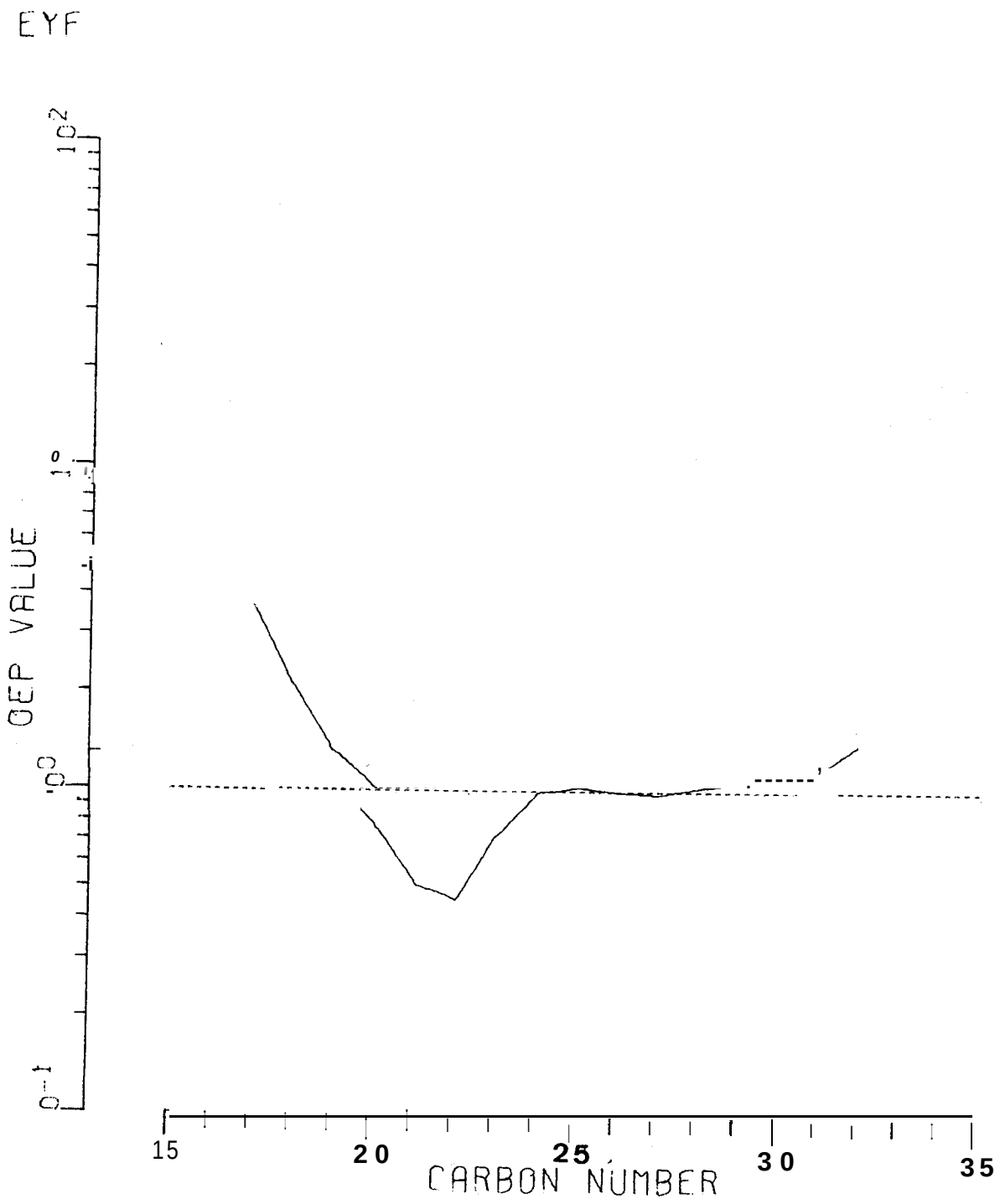


Figure 4.-6. OEP curve for Neuston sample EYF, 2/III.

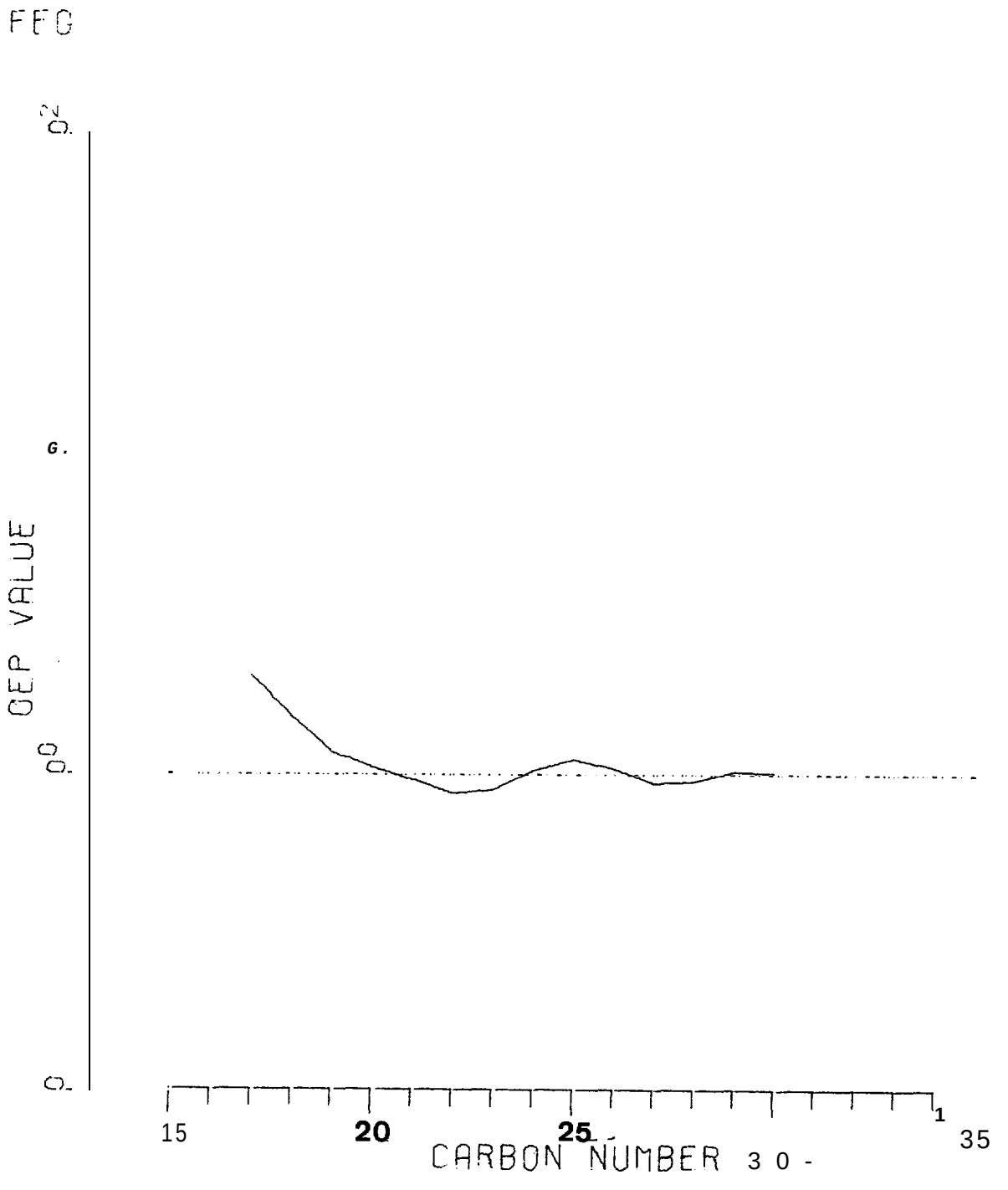


Figure 4-7. OEP curve for Neuston sample FEG, I/IV.

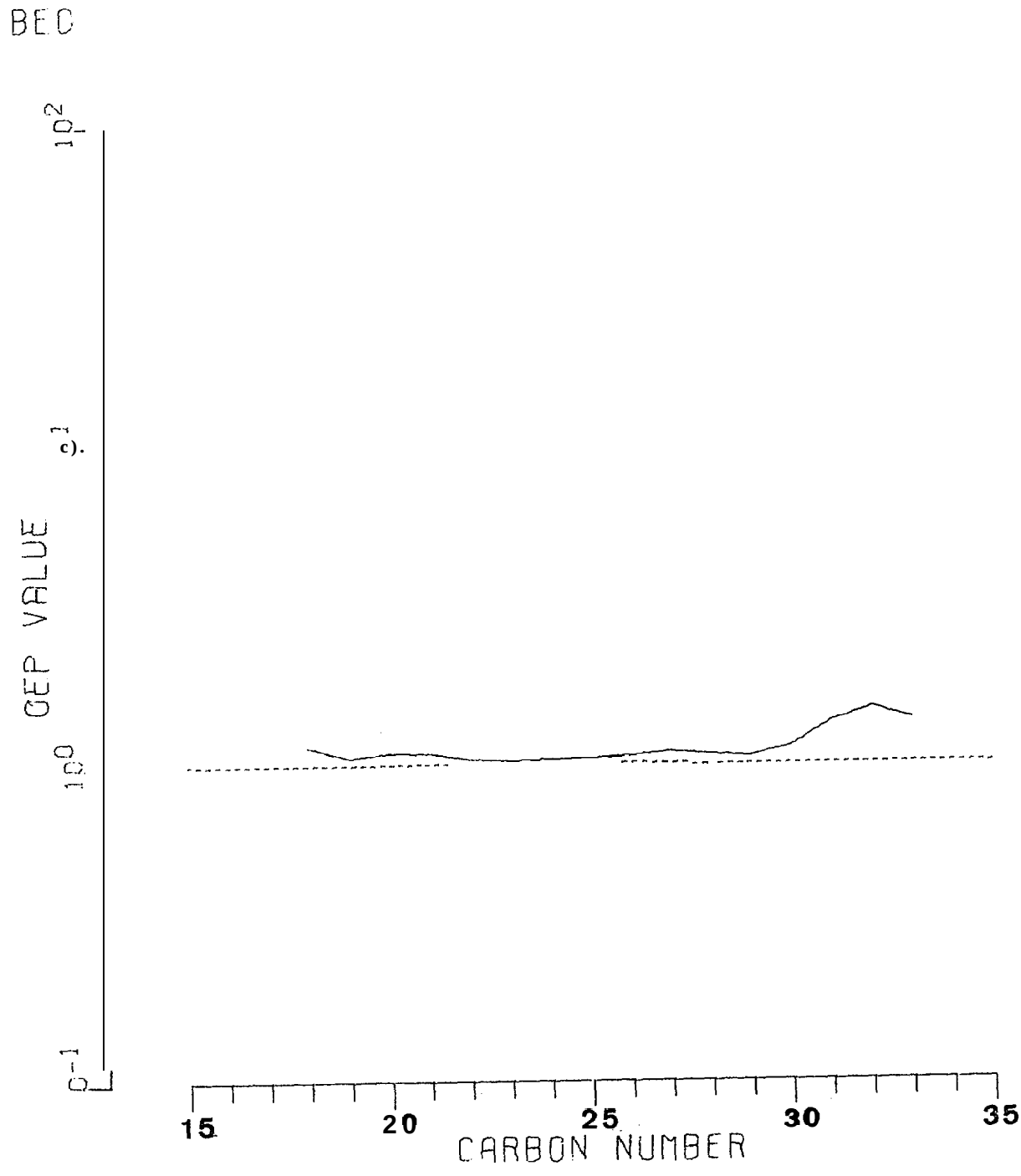


Figure 4-8. OEP curve for Neuston sample BEG, 2/IV.

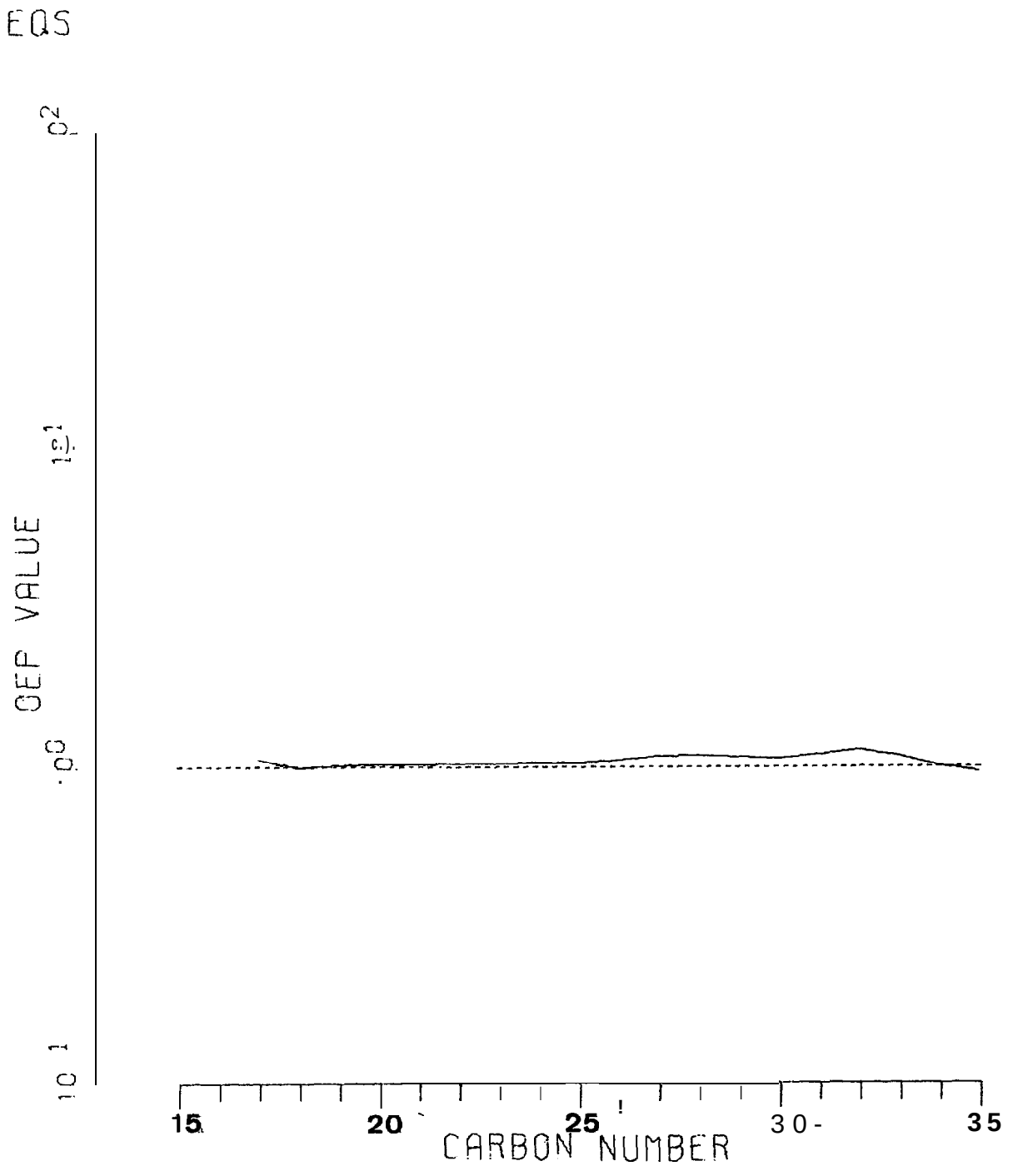


Figure 4-9. OEP curve for Neuston sample EQS, 3/II.

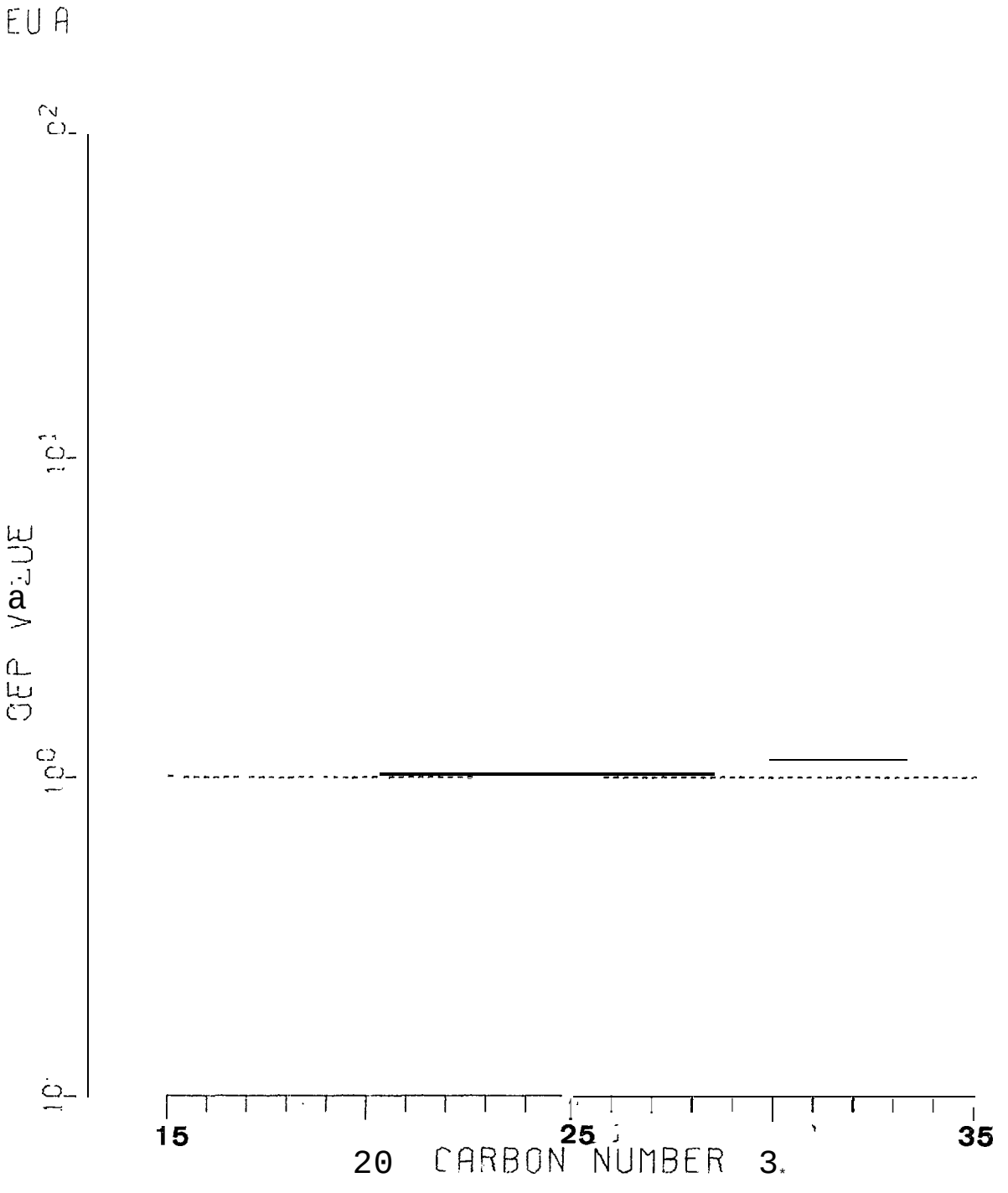


Figure 4-10. OEP curve for Neuston sample EUA, 1/111.

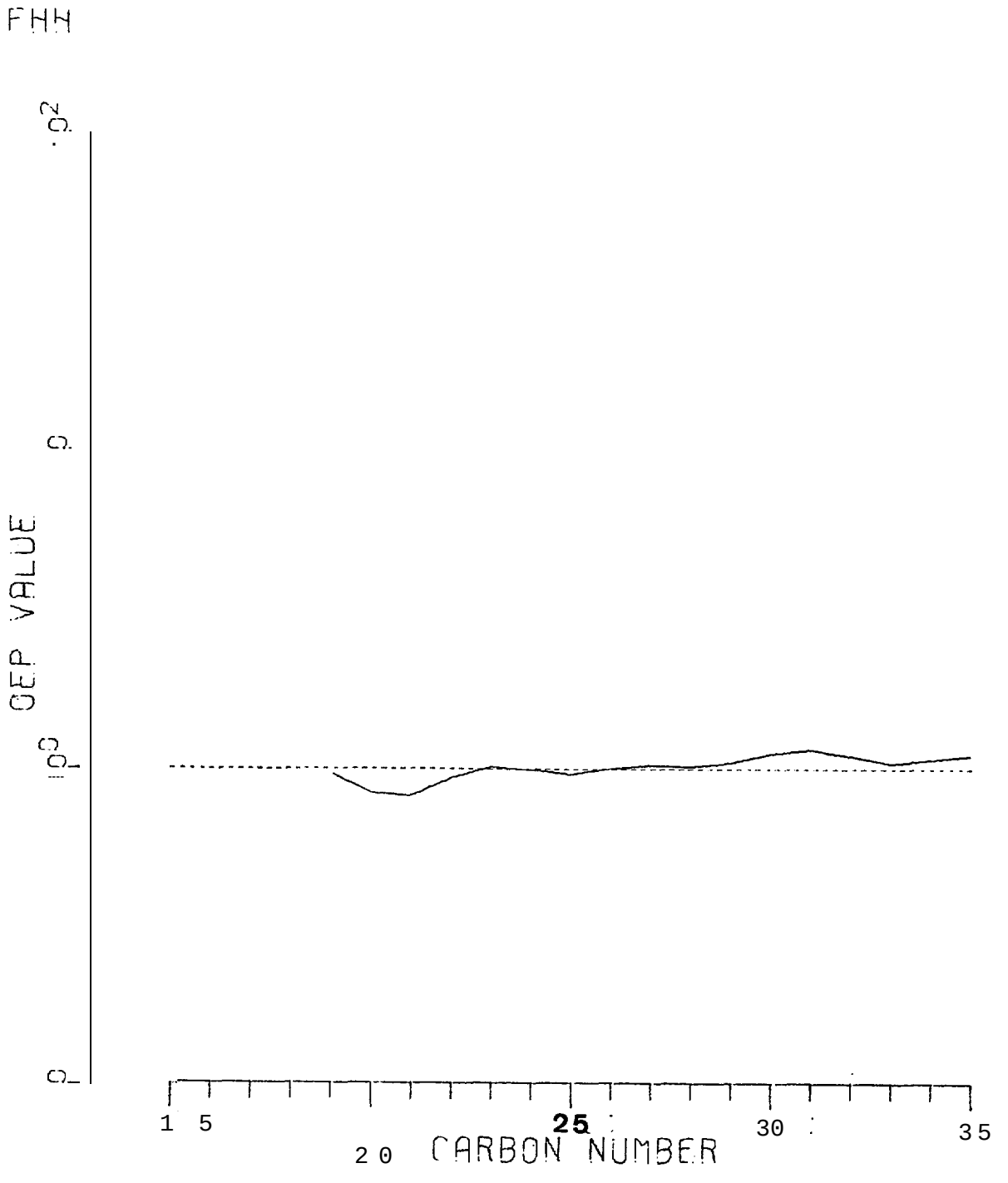


Figure 4-11. OEP curve for Neuston sample FHH, 2/IV.

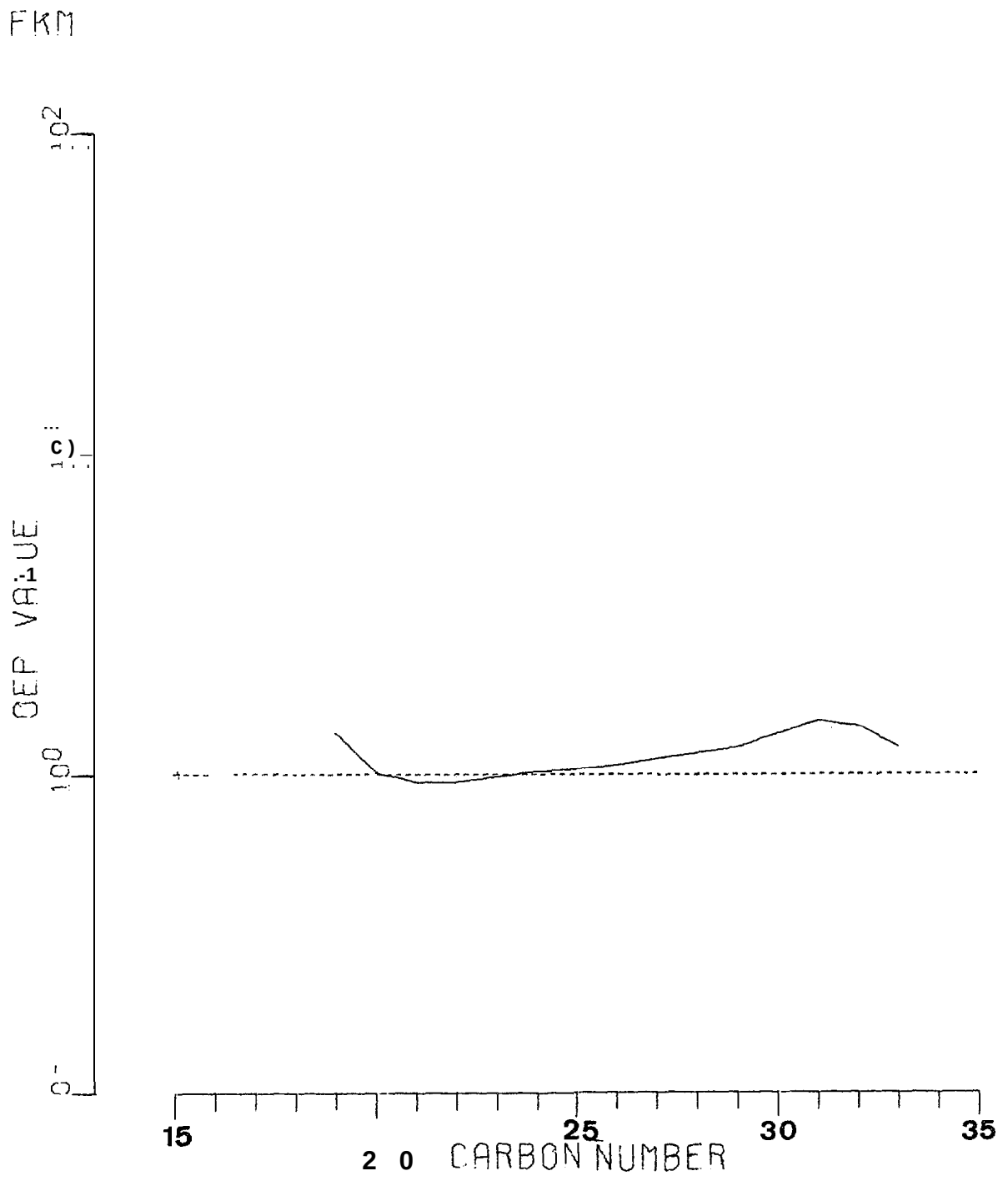


Figure 4-12. OEP curve for Neuston sample FKM, 3/IV.

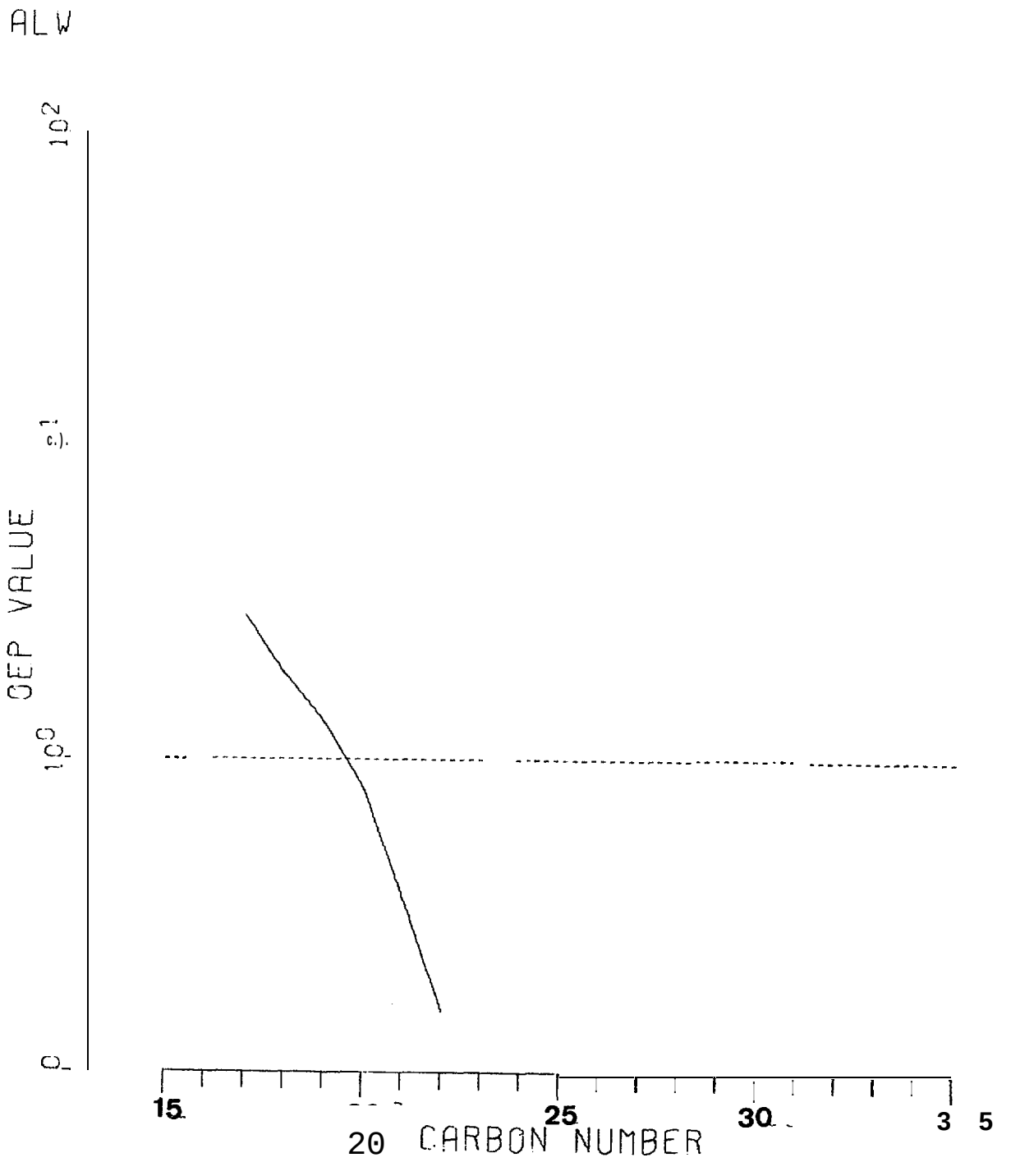


Figure 4-13. OEP curve for Neuston sample ALW, 2/11.

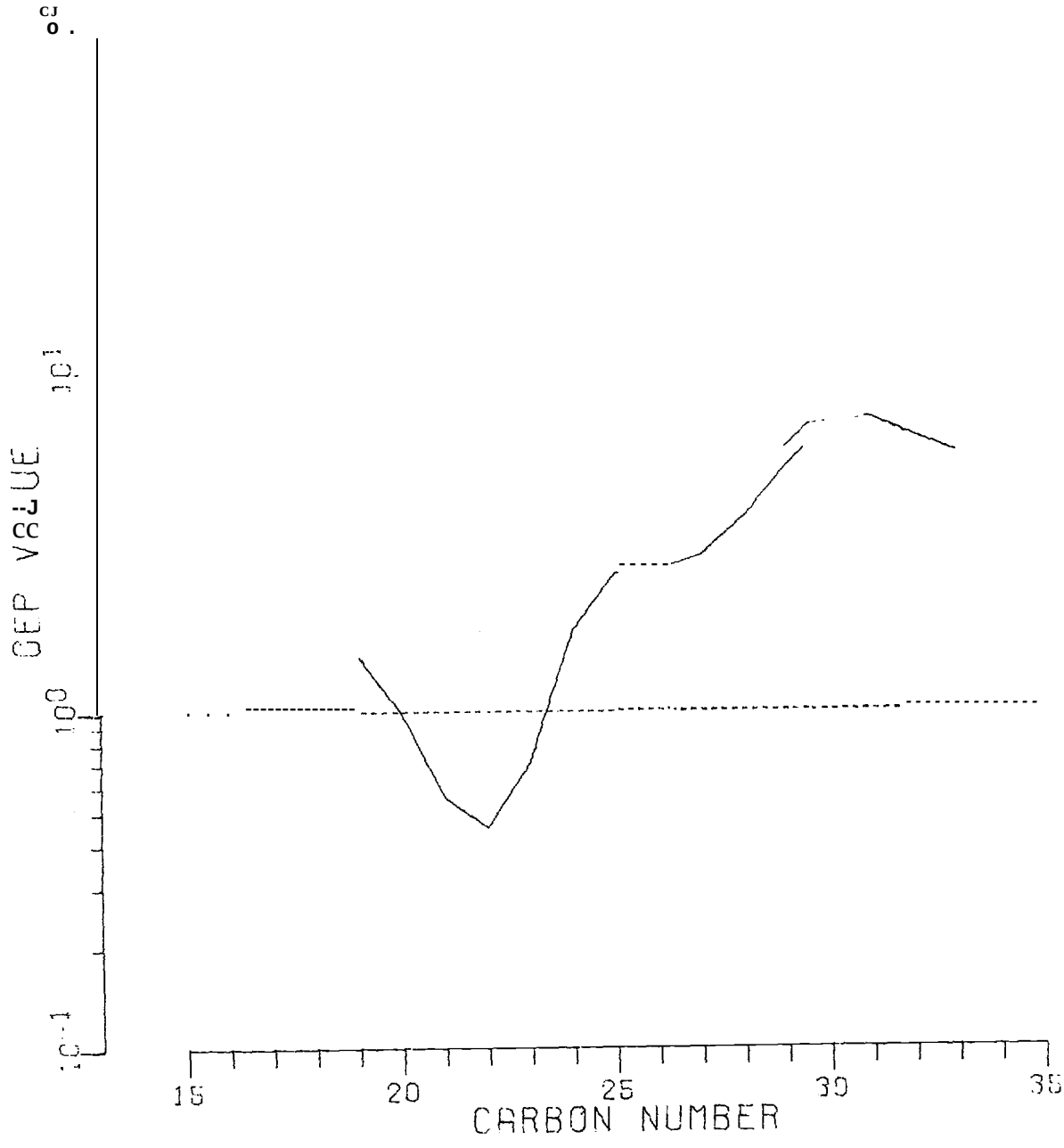


Figure 5-1. OEP curve for Sediment Sample AGU, 1/1.

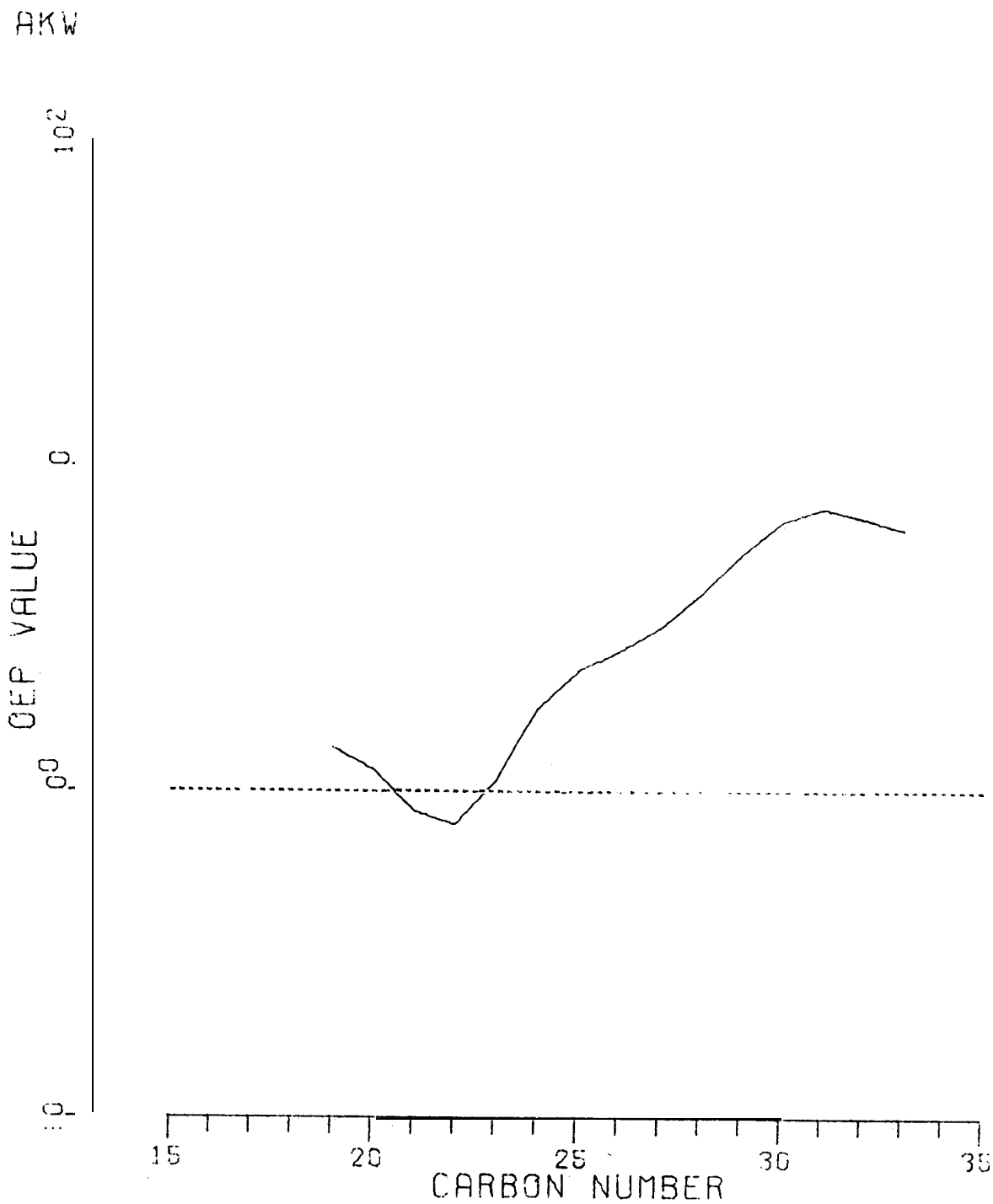


Figure 5-2. OEP curve for Sedimet **Sample AKW, 1/II.**

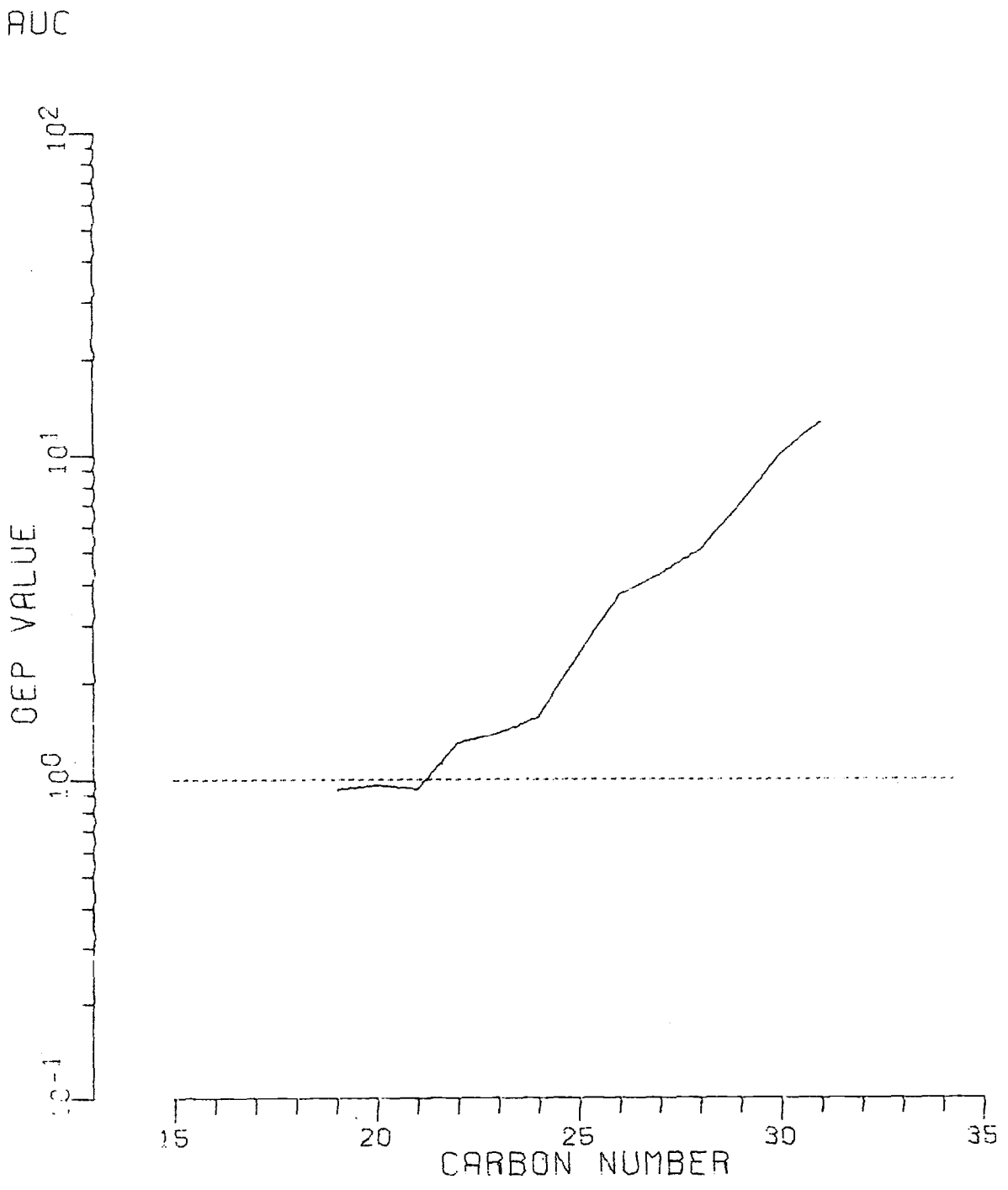


Figure 5-3. OEP curve for Sediment Sample AUC, 1/111.

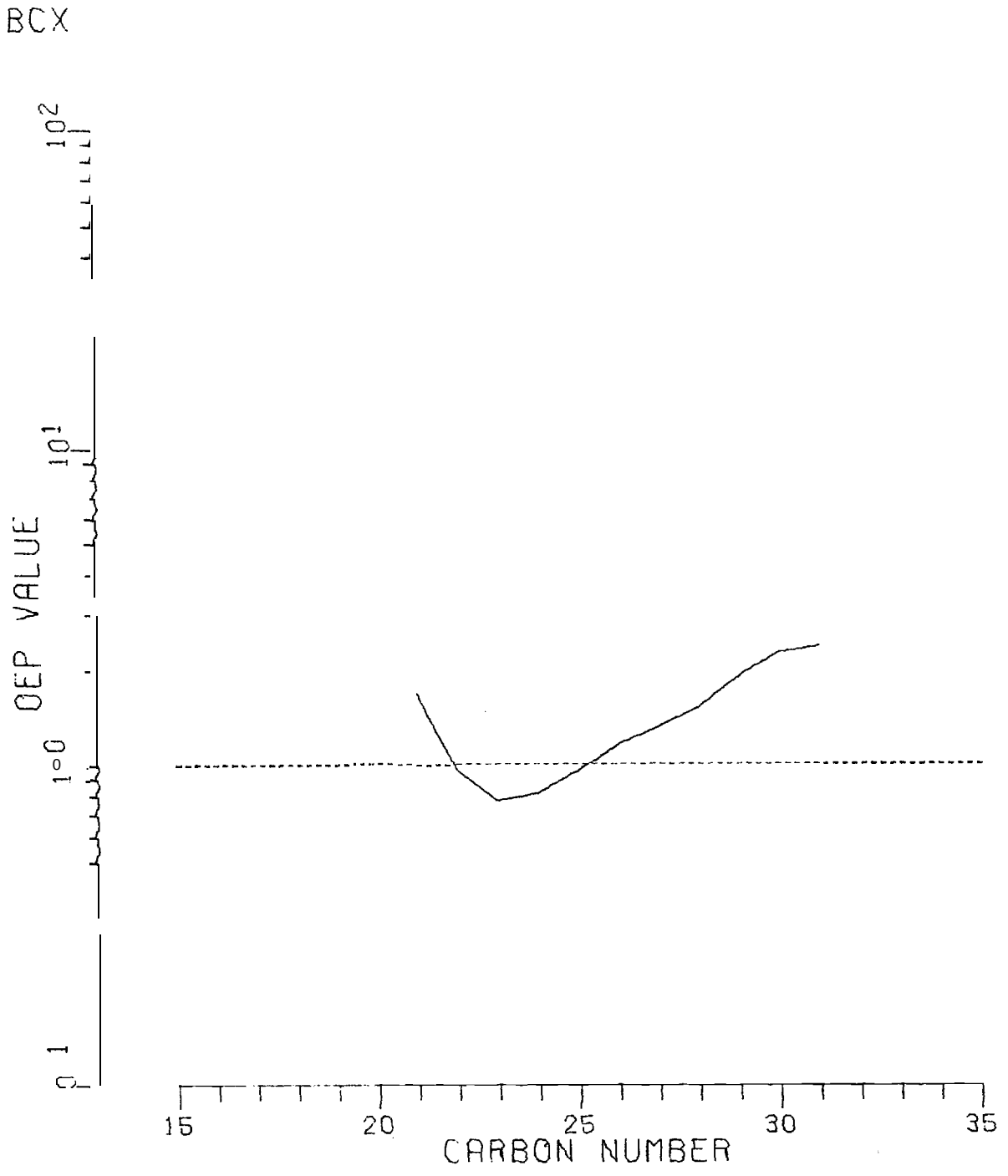


Figure 5-4. OEP curve for Sediment Sample BCX, l/IV.

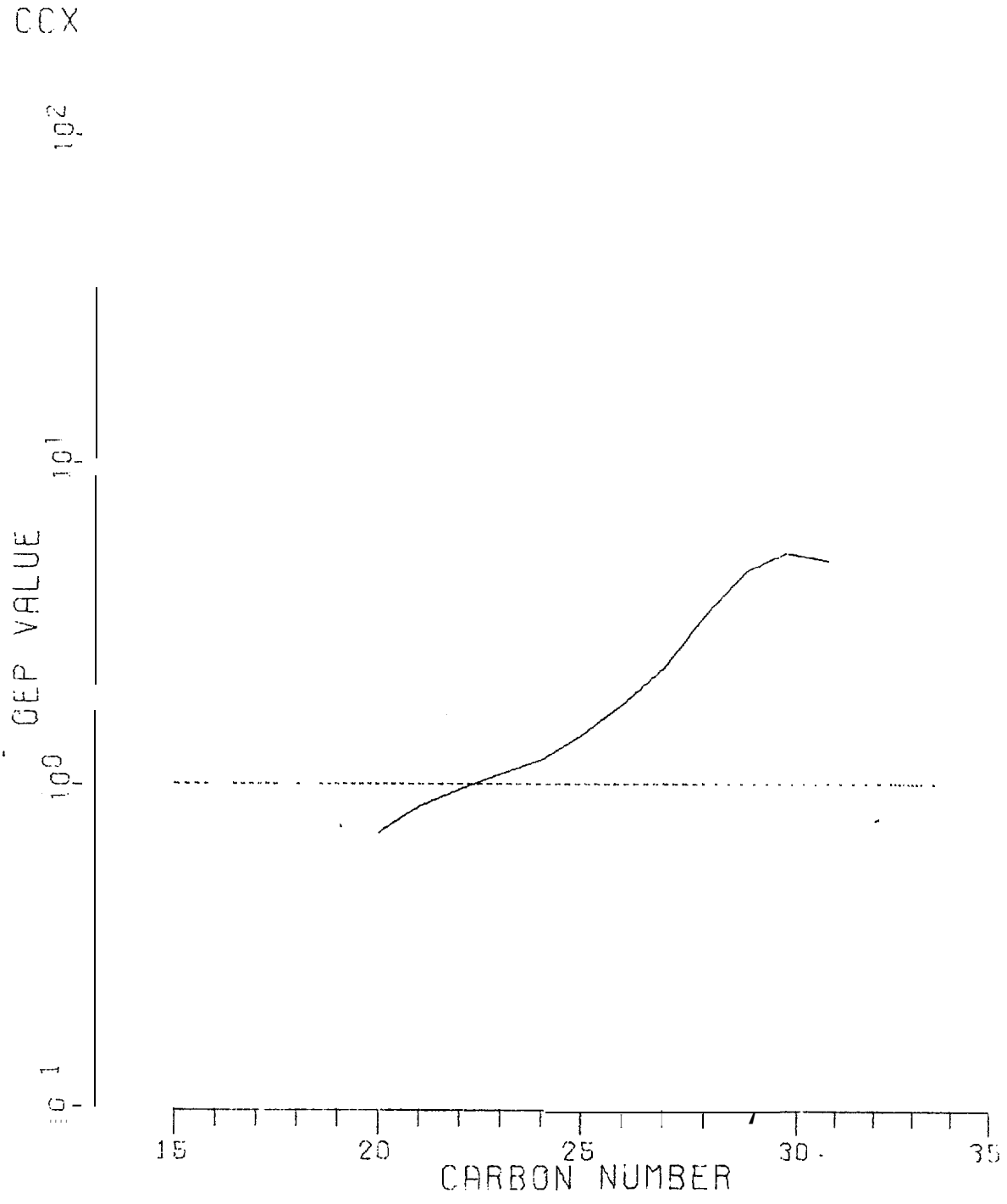


Figure 5-5. OEP curve for Sediment Sample CCX, 1/1.

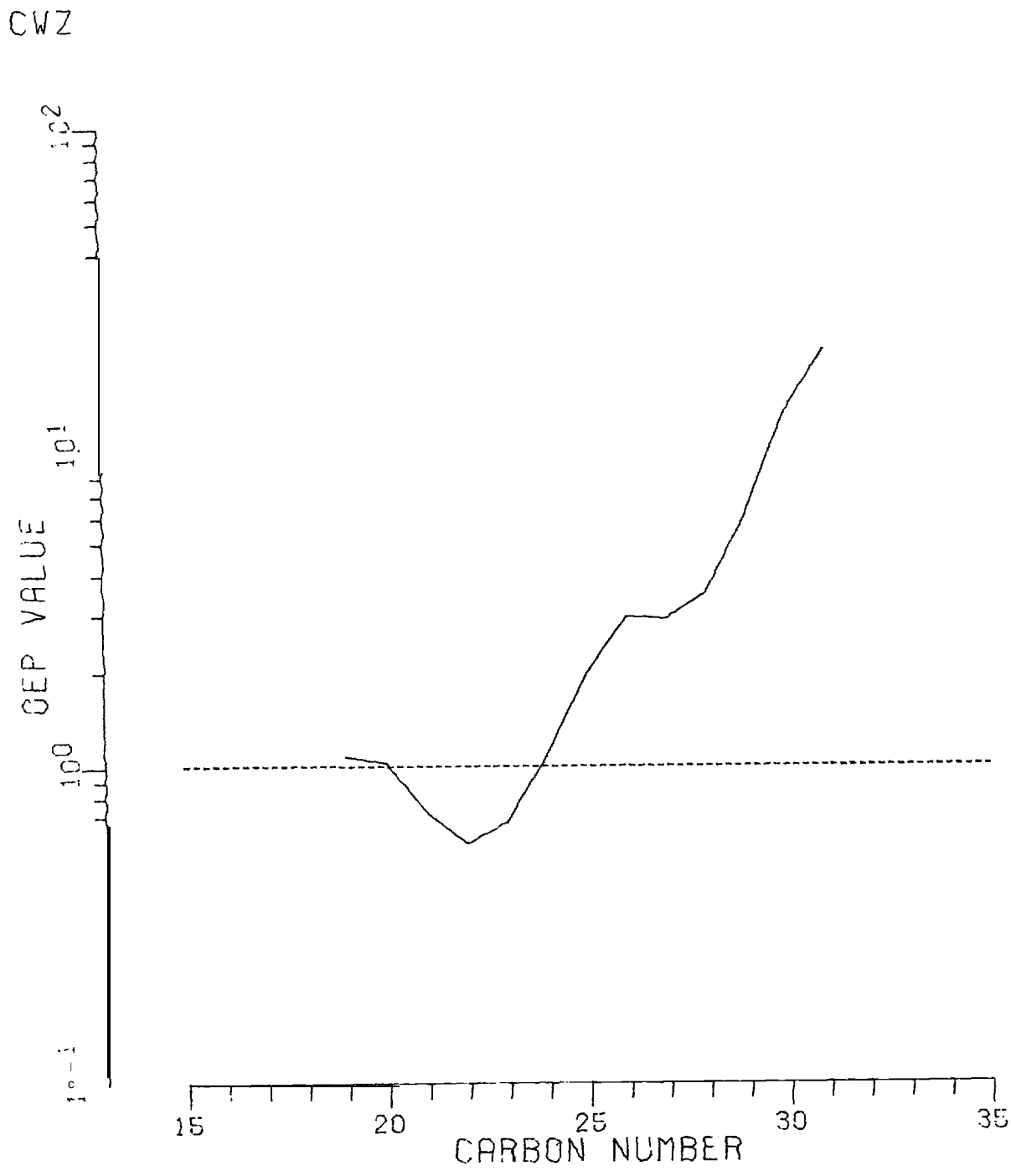


Figure 5-6. OEP curve for Sediment Sample CWZ, 1/111.

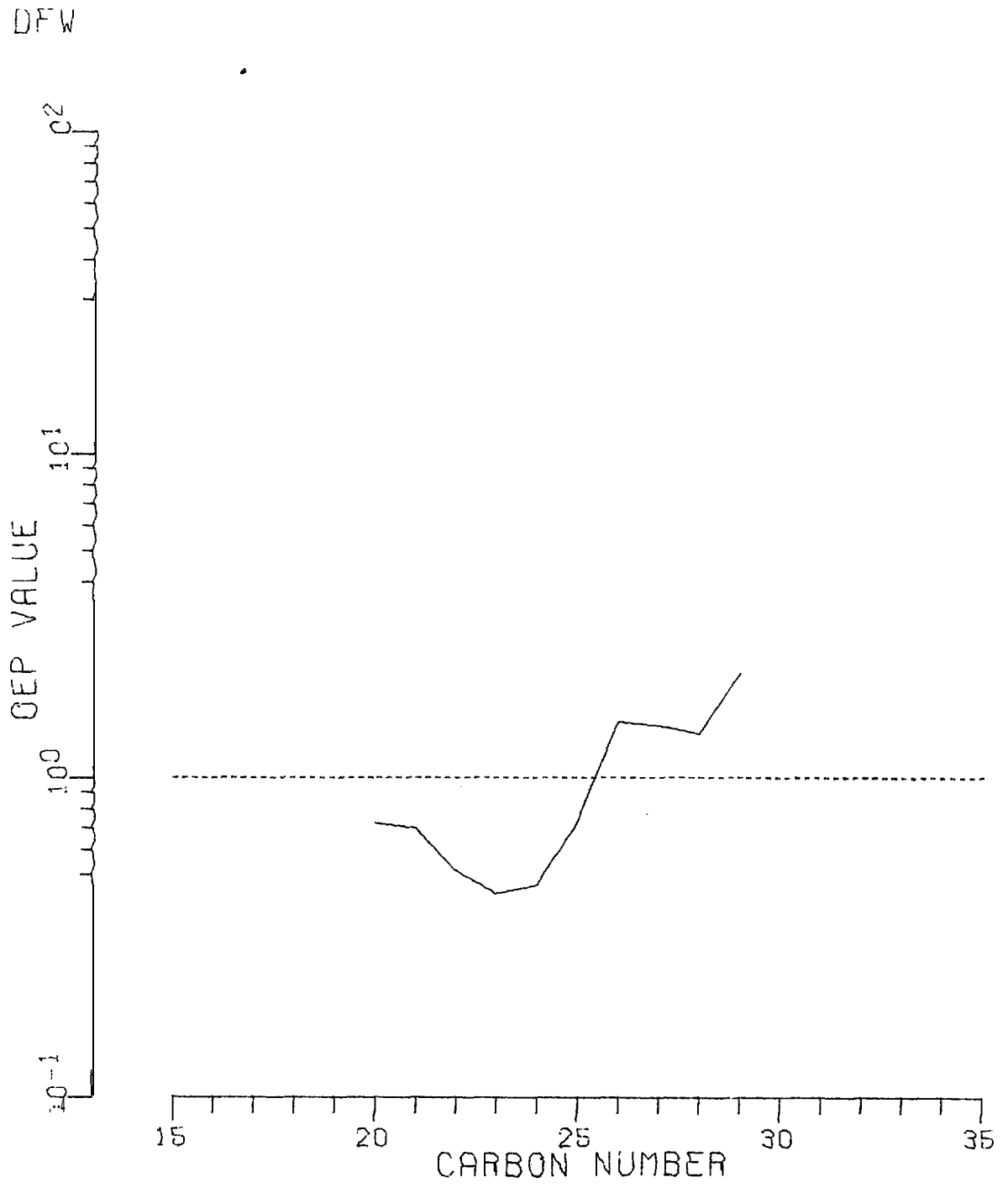


Figure 5-7. OEP curve for Sediment Sample DFW, I/IV.

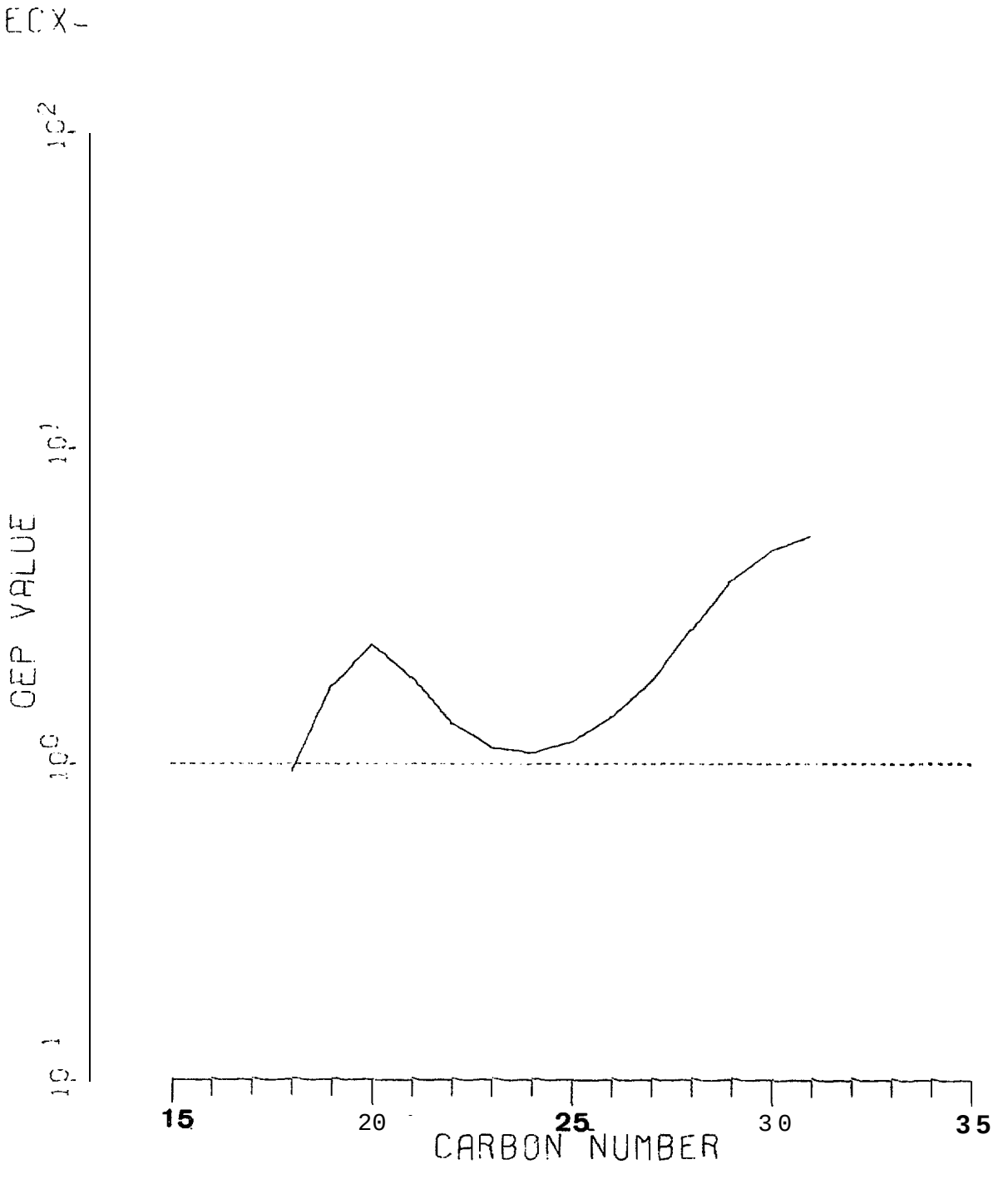


Figure 5-8, OEP curve for Sediment Sample **ECX,** 1/1.

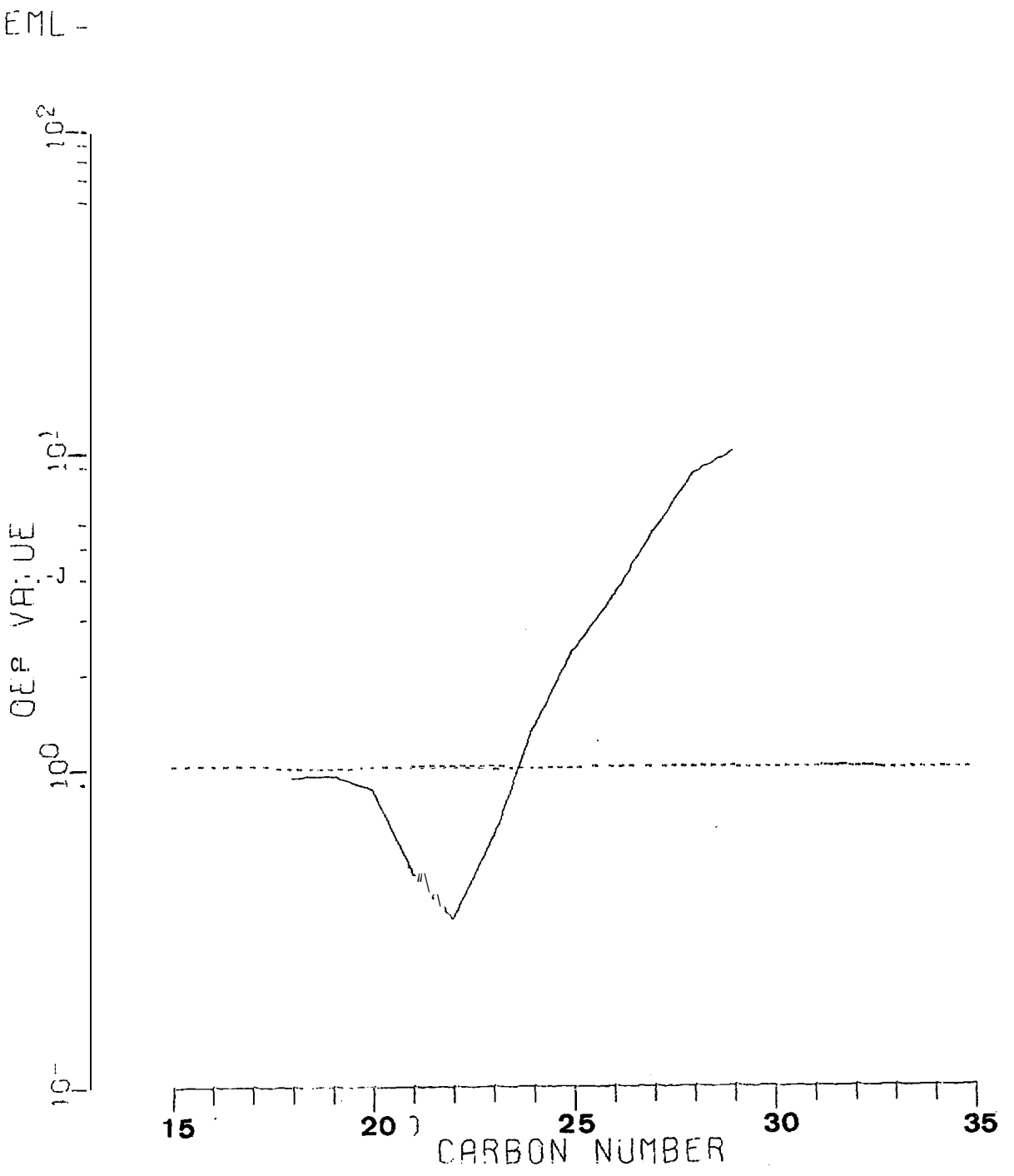


Figure 5-9. OEP curve for Sediment Sample EML, 1/11.

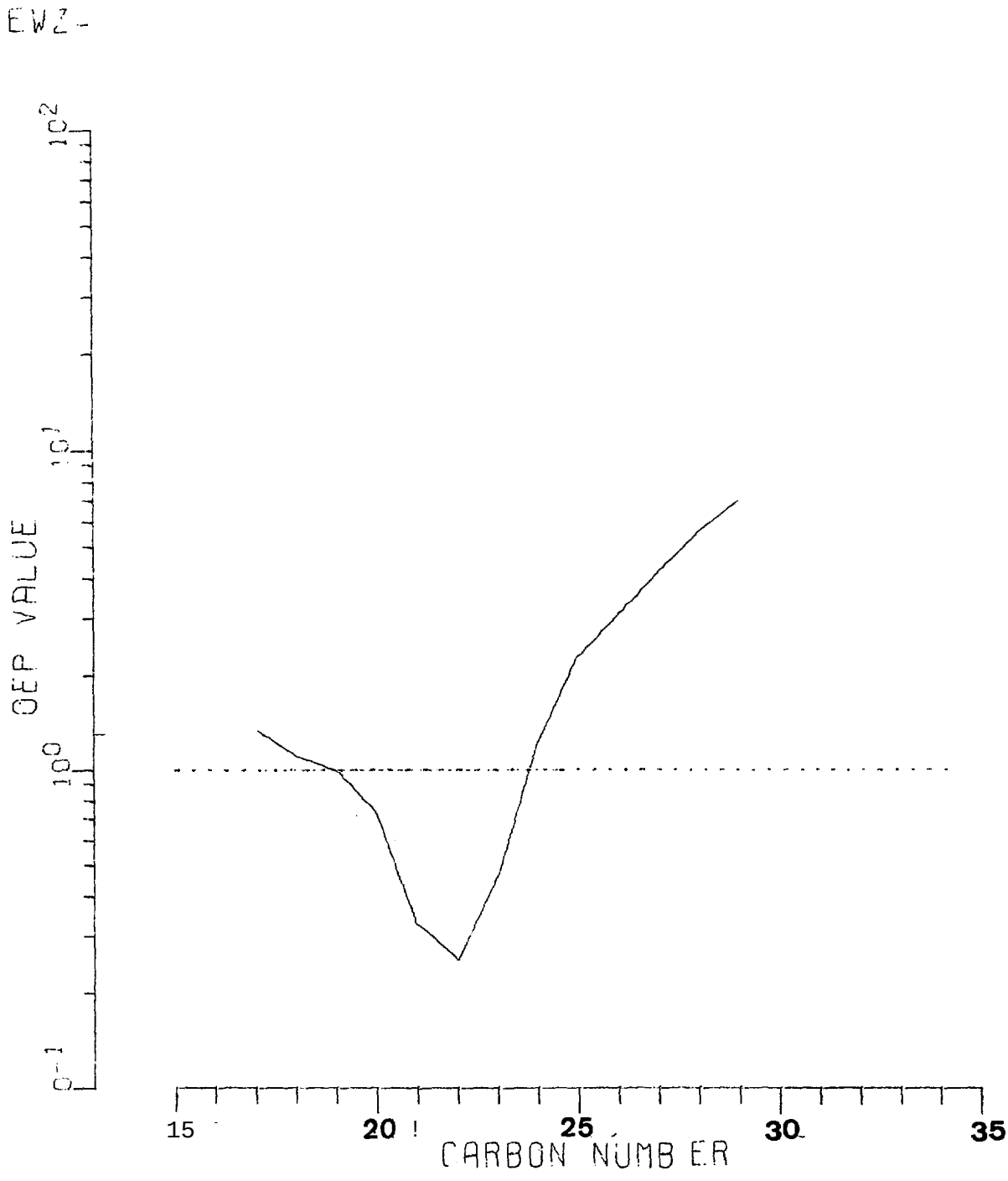


Figure 5-10. OEP curve for Sediment Sample EWZ, 1/III.

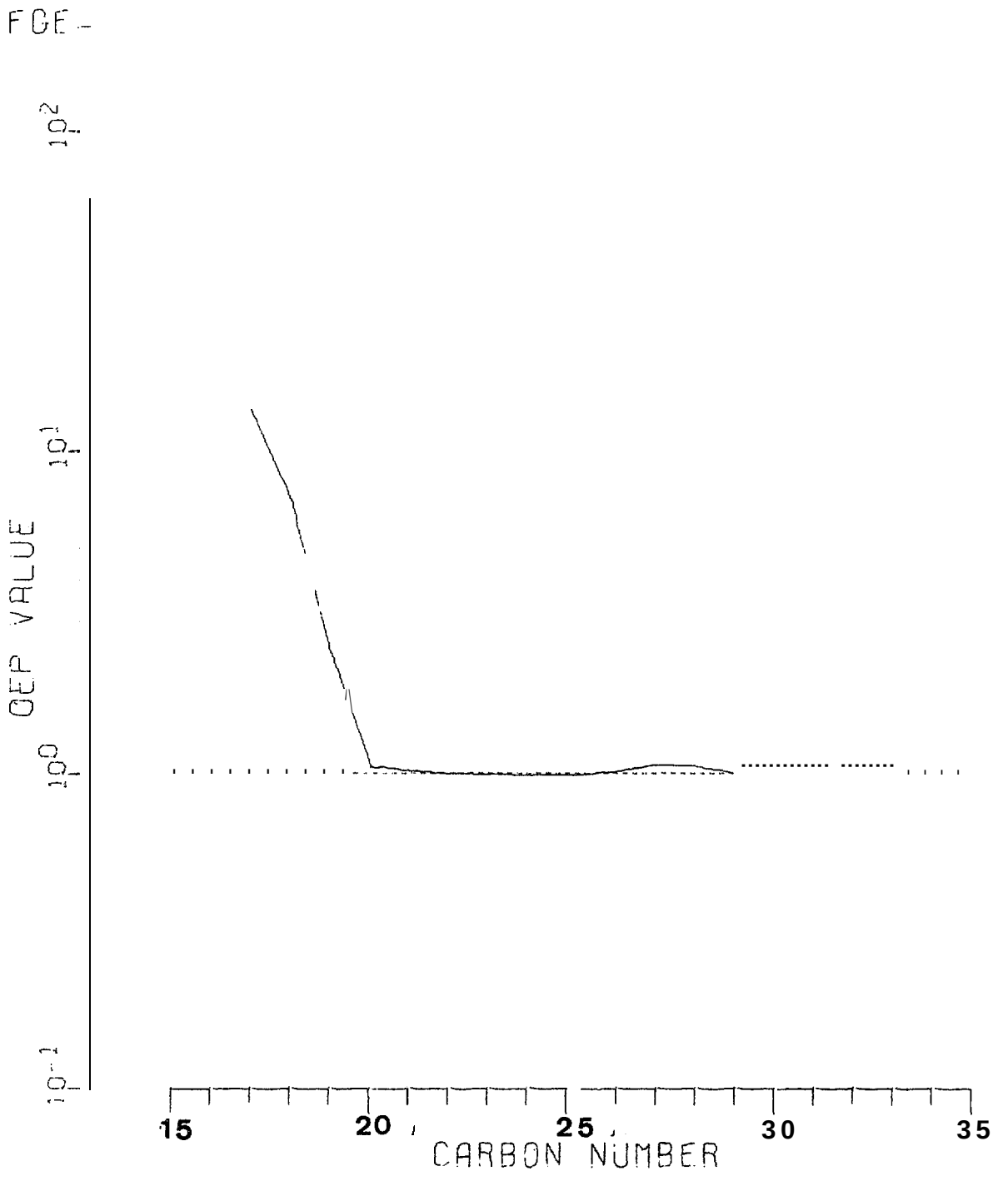


Figure 5-11. OEP curve for Sediment Sample FGE, l/IV.

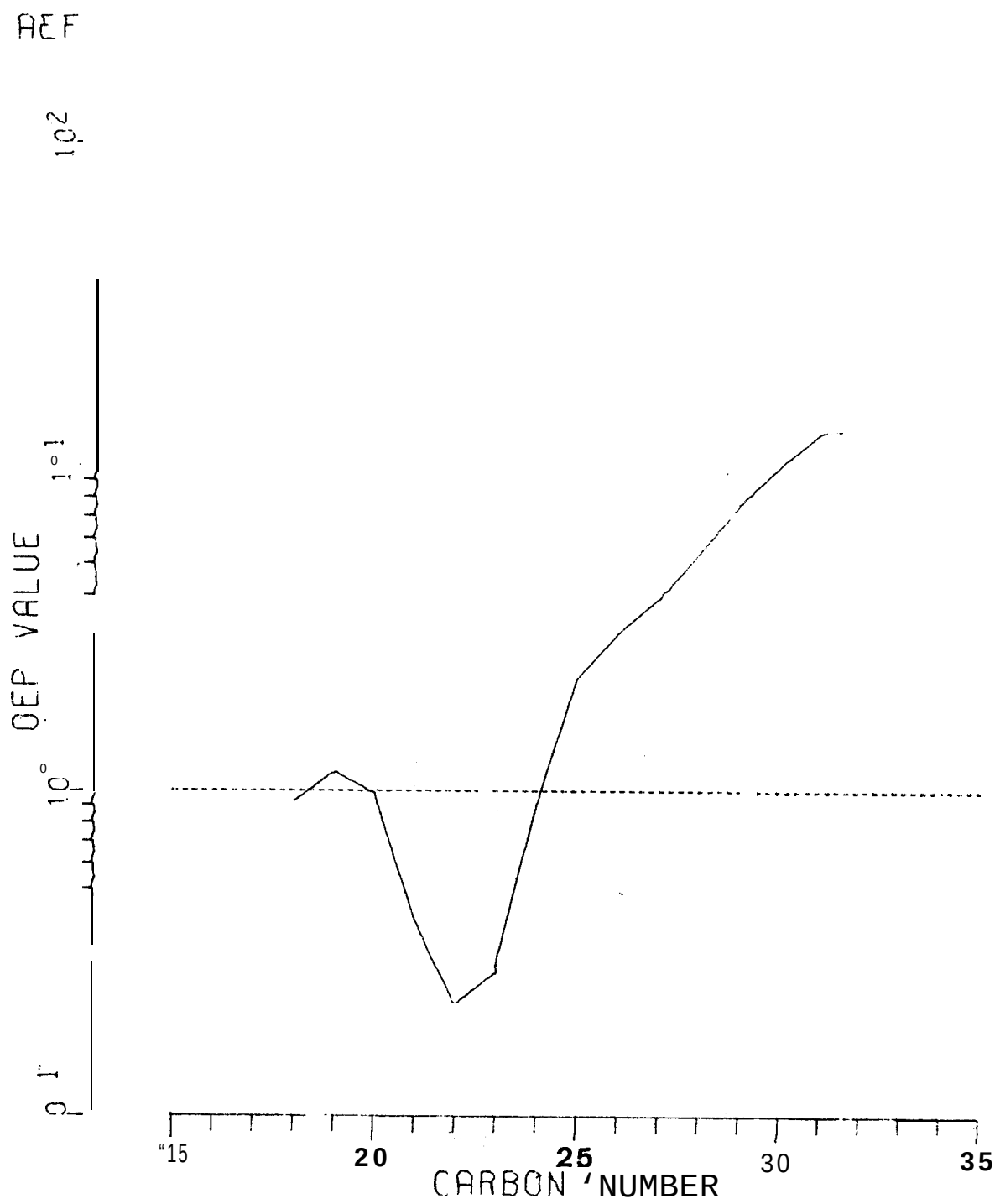


Figure 5-12. OEP curve for Sediment **Sample** AEF, 2/1.

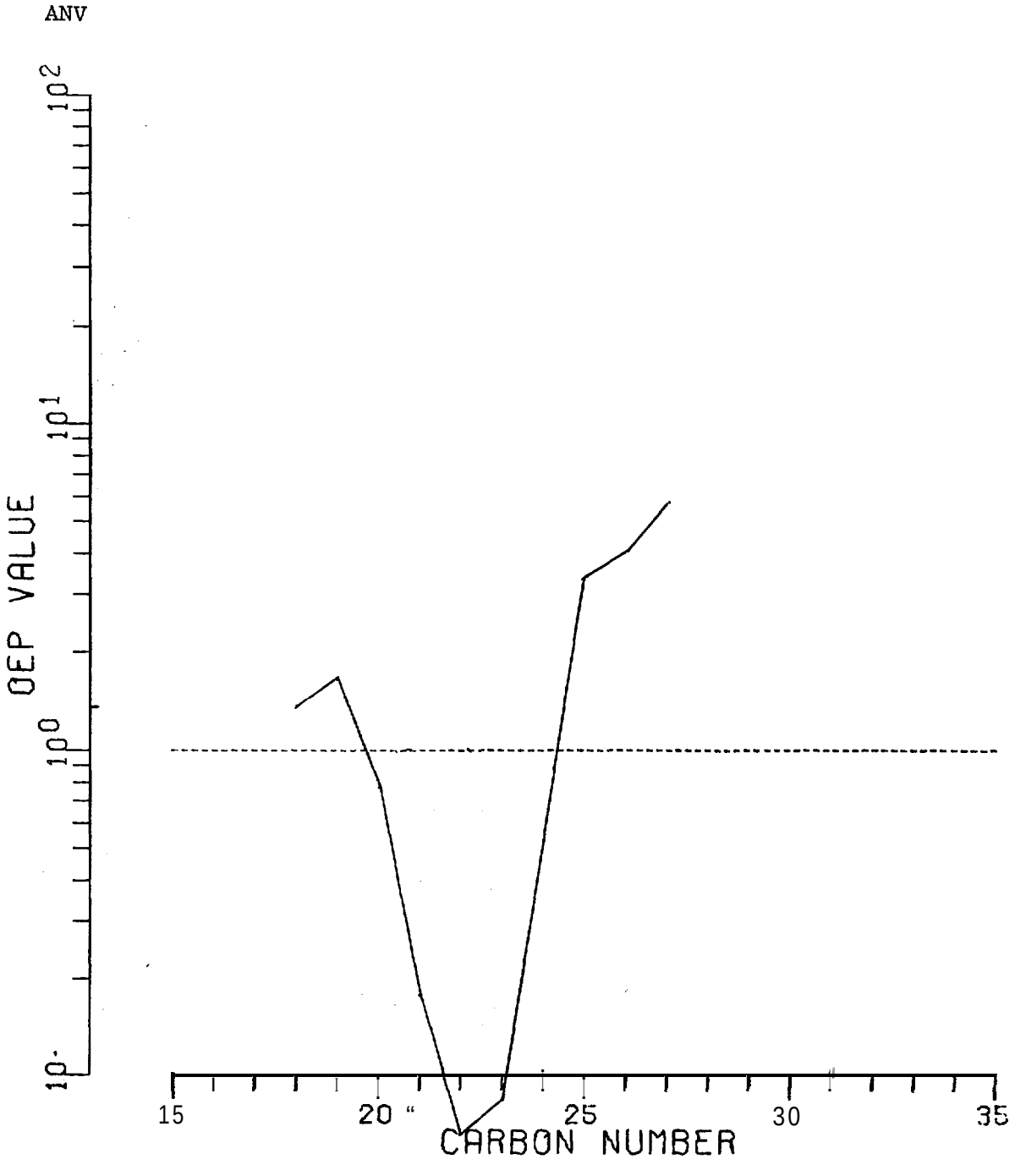


Figure 5-13. OEP curve for Sediment Sample ANV, 2/11.

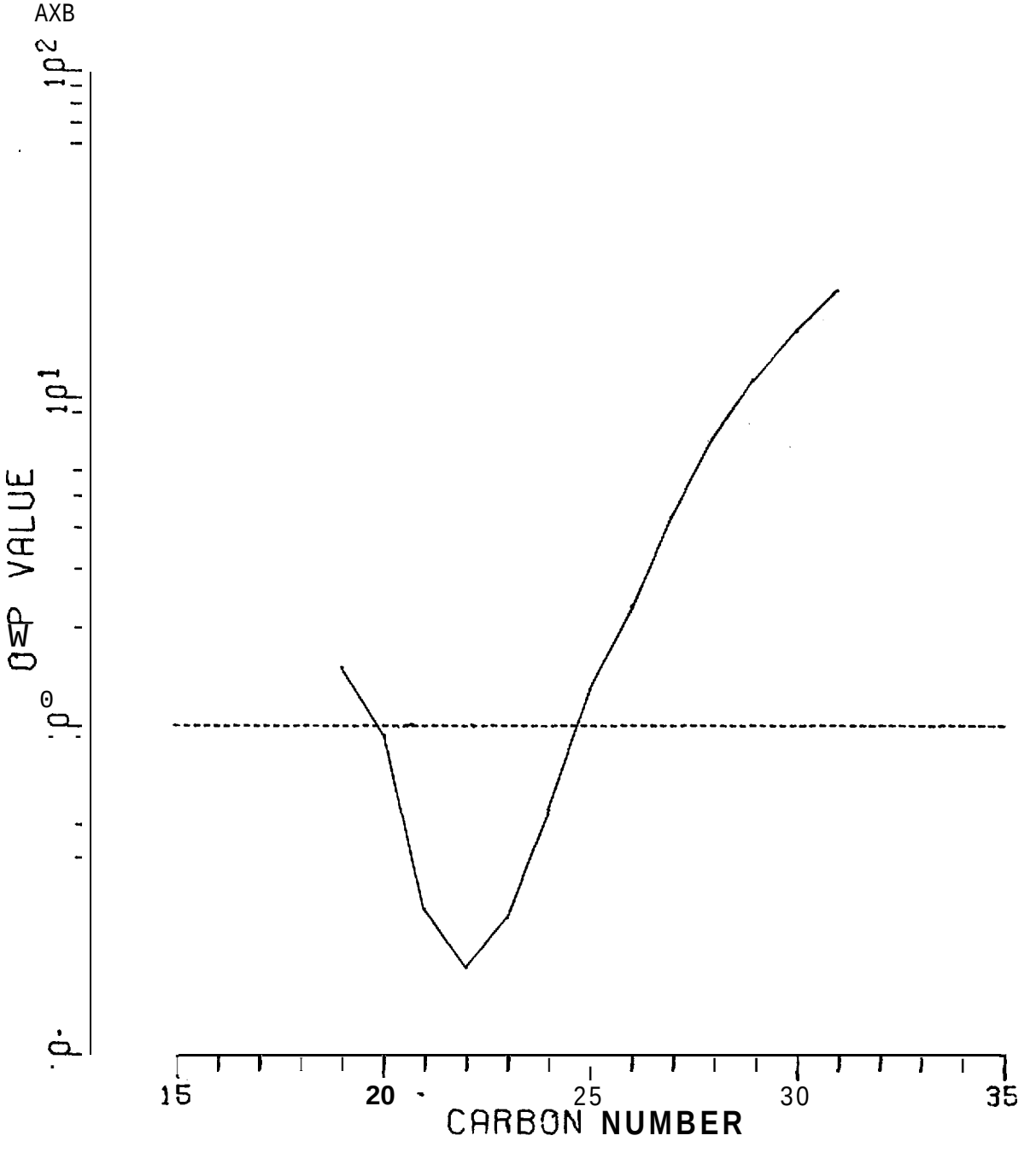


Figure 5-14. OEP curve for Sediment Sample AXB, 2/111.

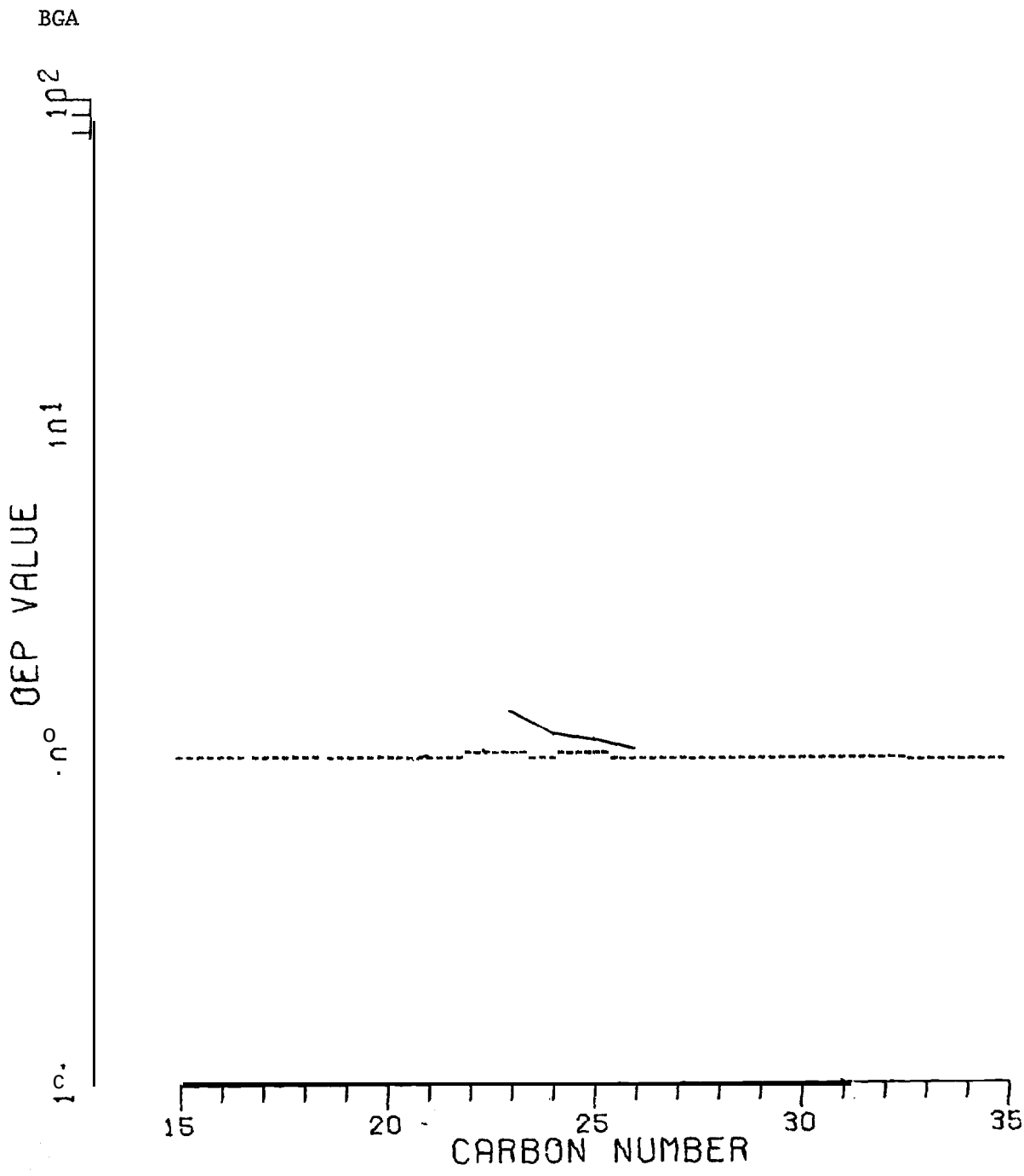


Figure 5-15. OEP curve for Sediment Sample BGA, 2/IV.

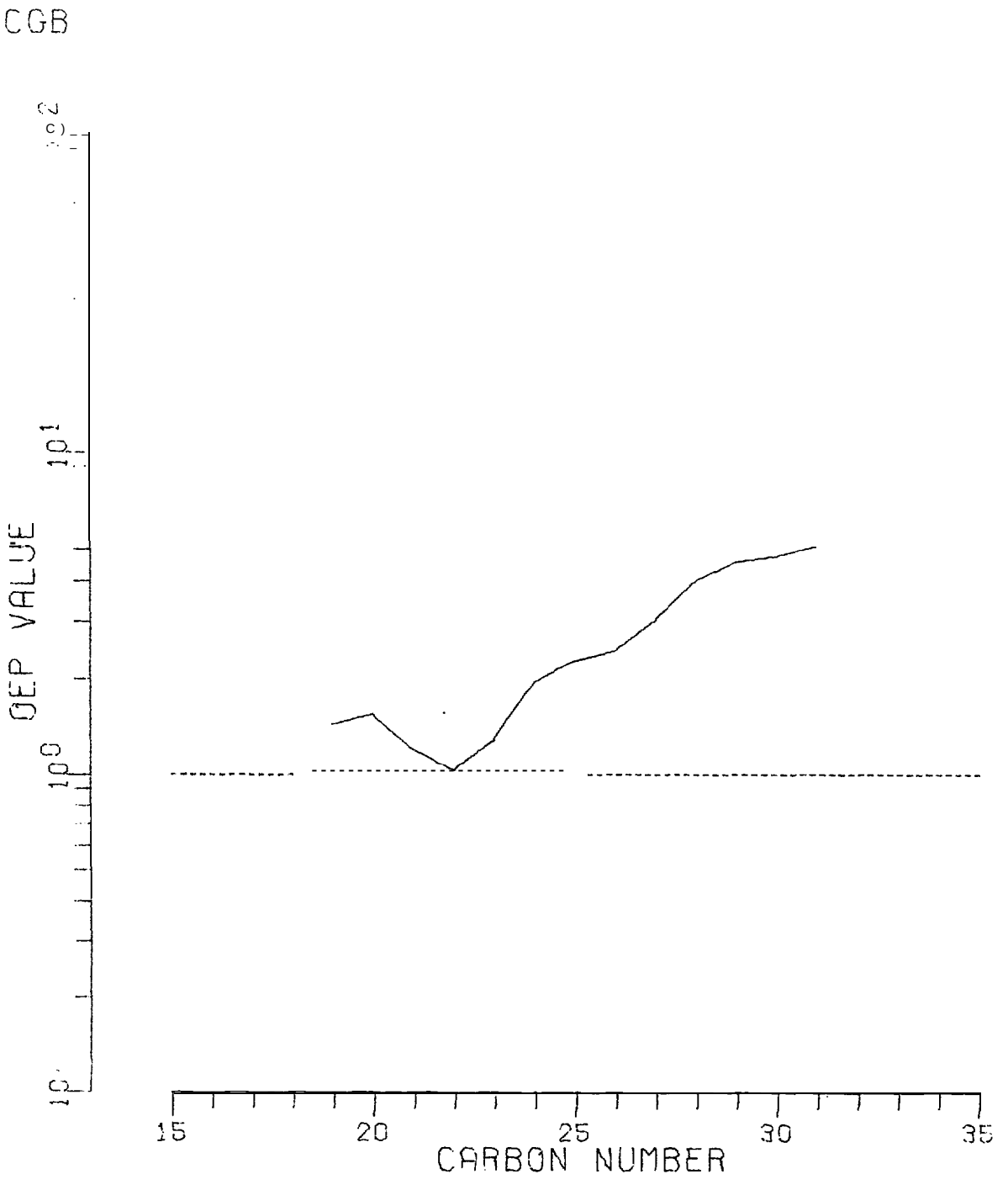


Figure 5-16. OEP curve for Sediment Sample CGB, 2/1.

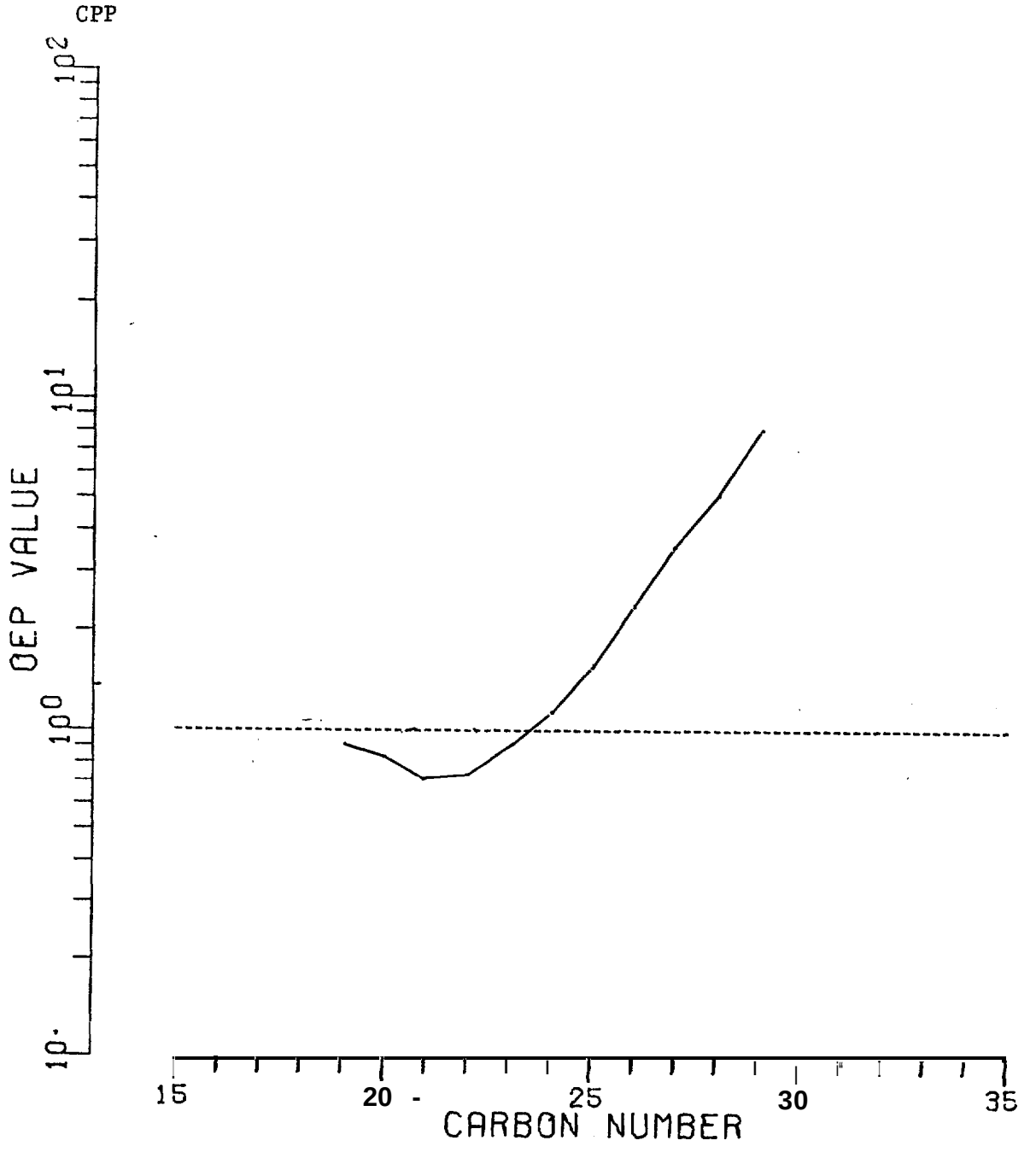


Figure 5-17. OEP curve for Sediment Sample CPP, 2/11.

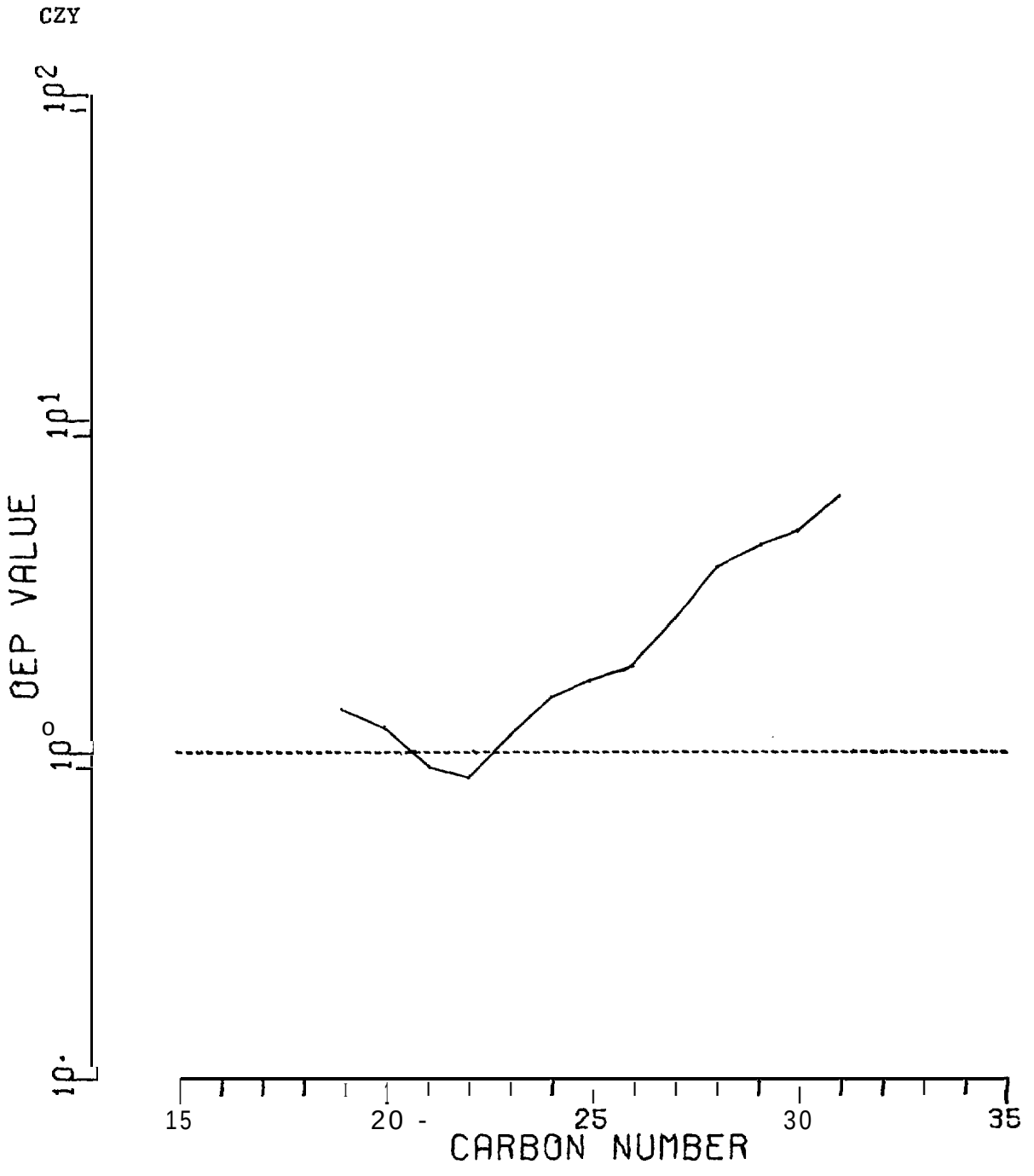


Figure 5-18. OEP curve for Sediment Sample CZY, 2/111.

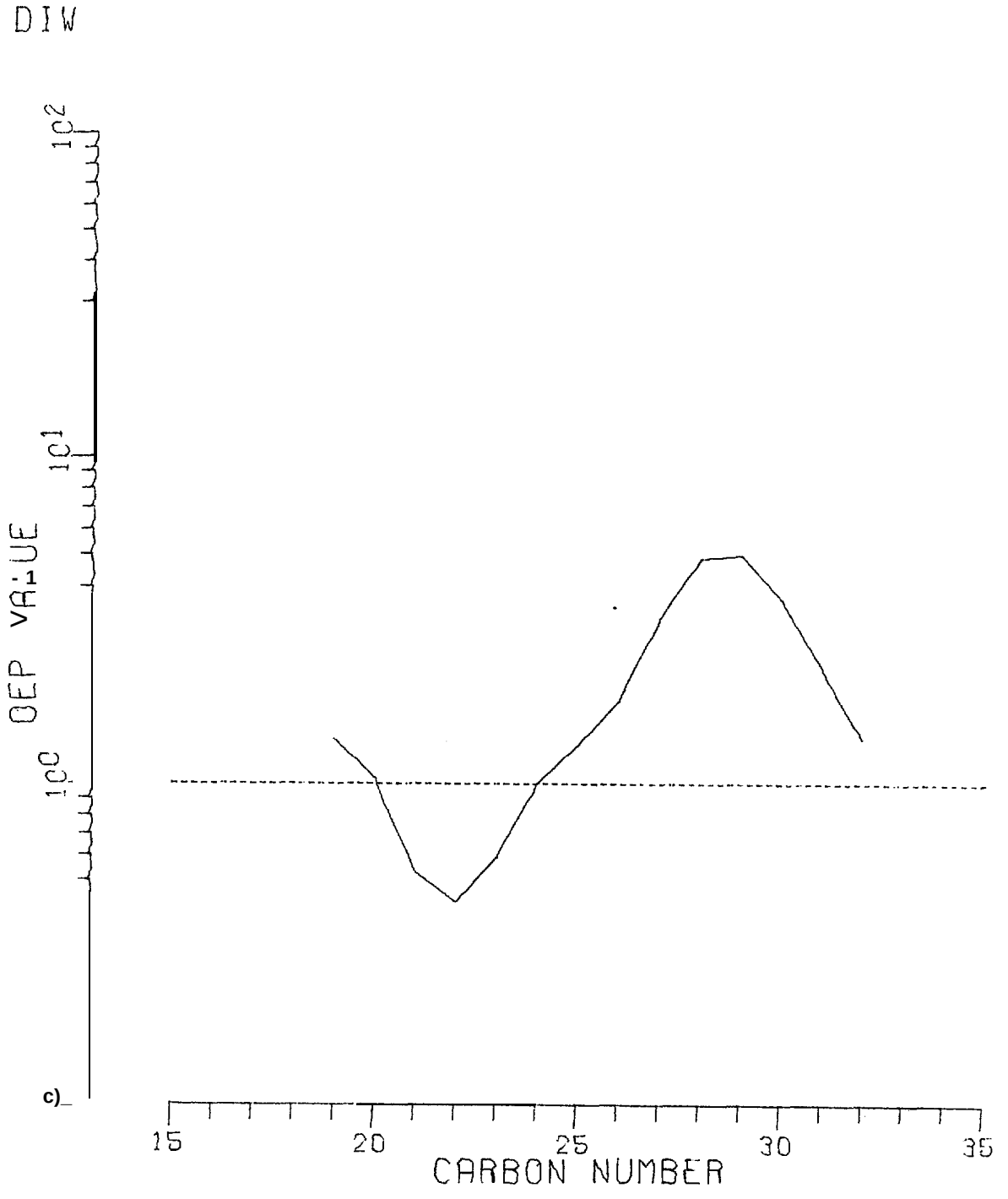


Figure 5-19. OEP curve for Sediment Sample DIW, 2/IV.

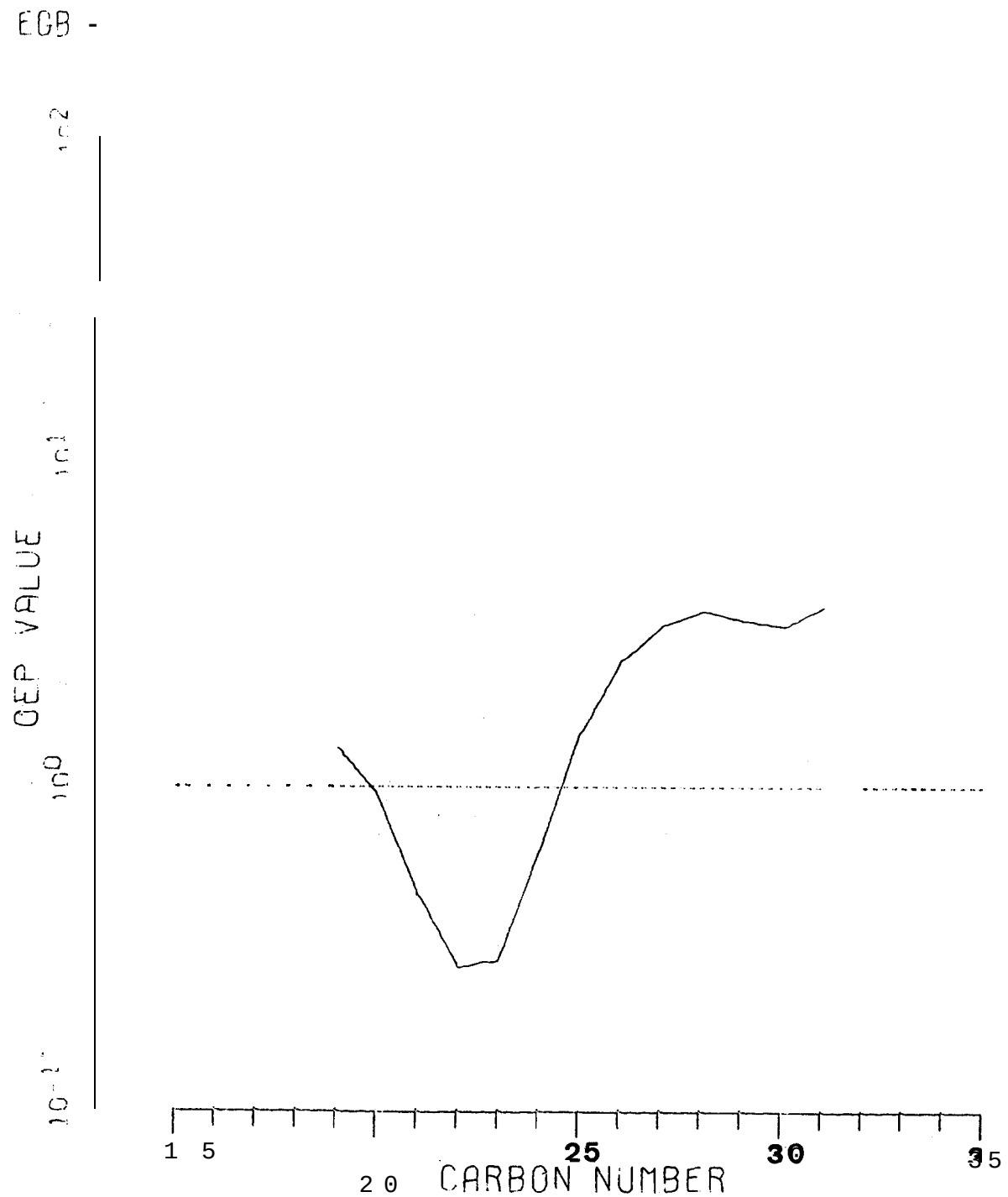


Figure 5-20. OEP curve for Sediment Sample EGBj 2/1.

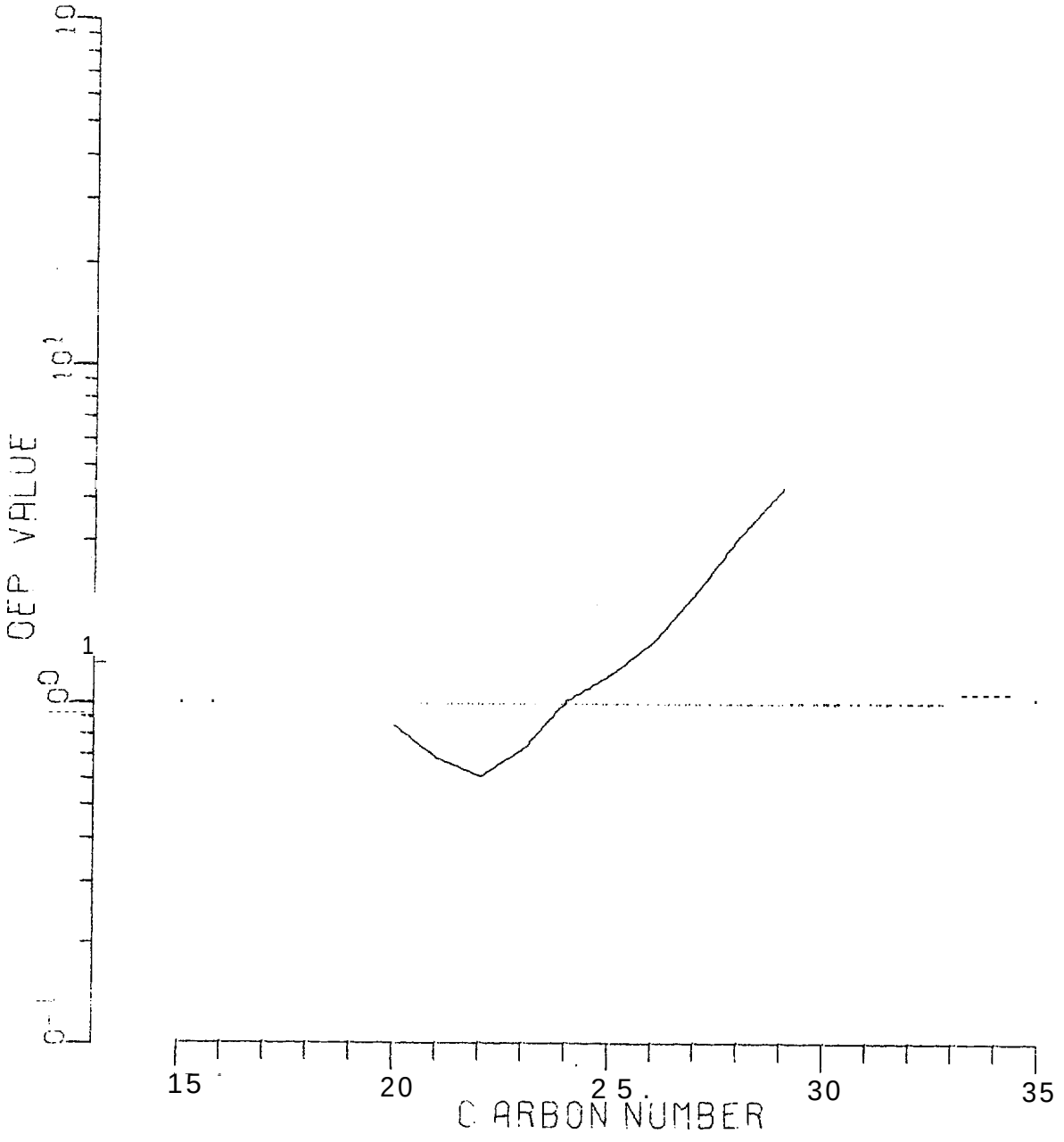


Figure 5-21. OEP curve for Sediment Sample EPP, 2/11.

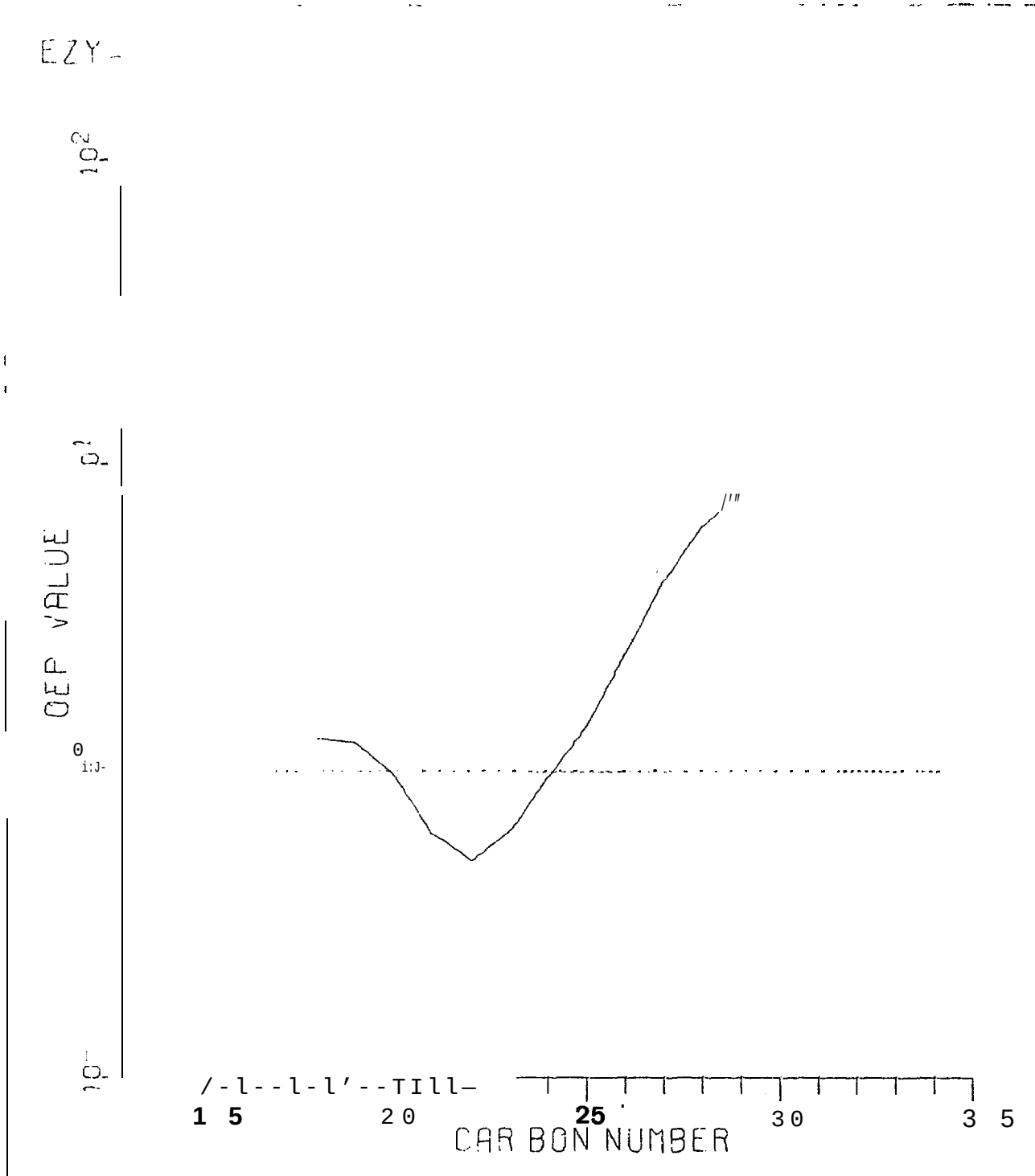


Figure 5-22. OEP curve for Sediment Sample EZY, 2/111.

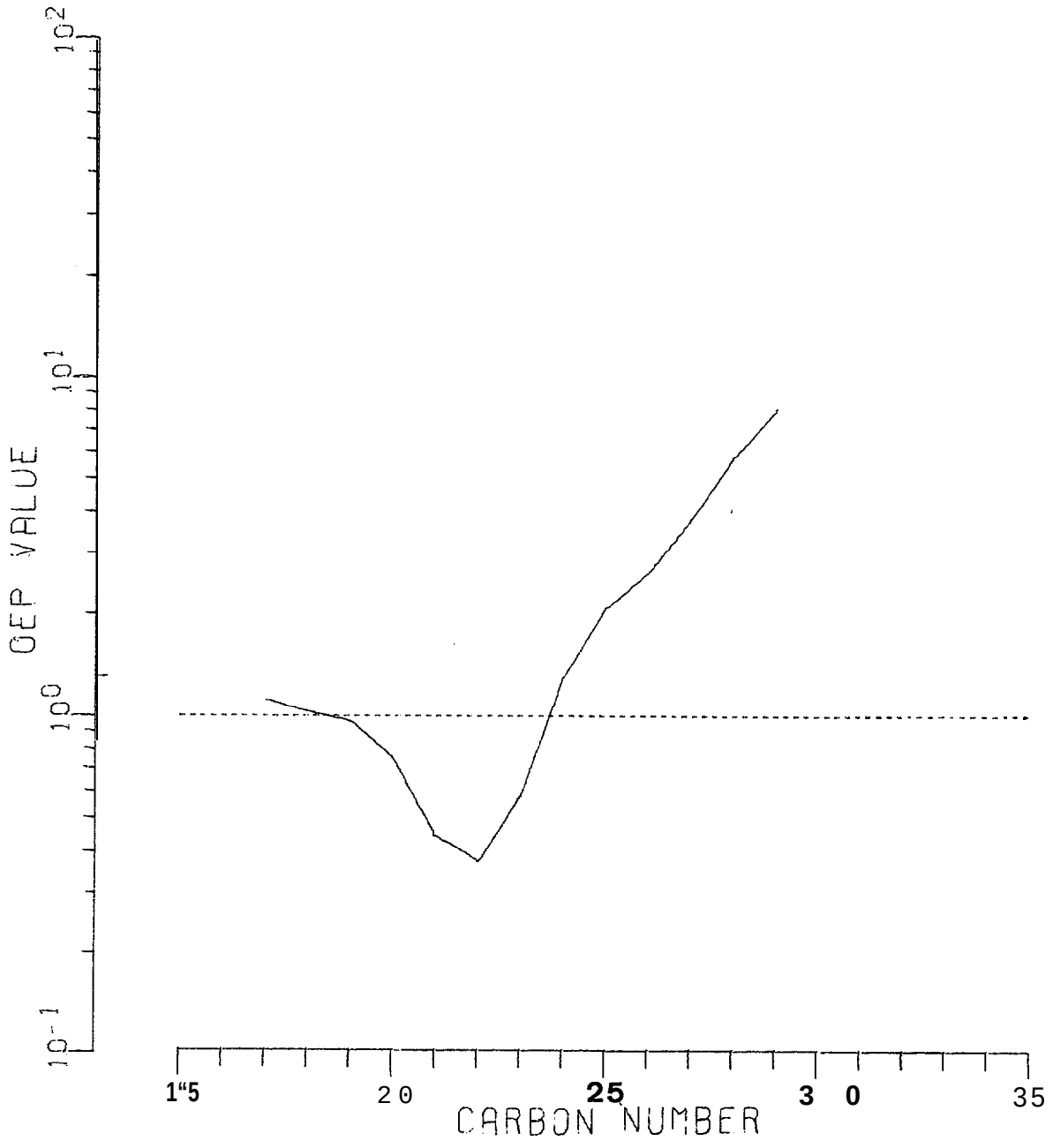


Figure 5-23. OEP curve for Sediment Sample FJG, 2/IV.

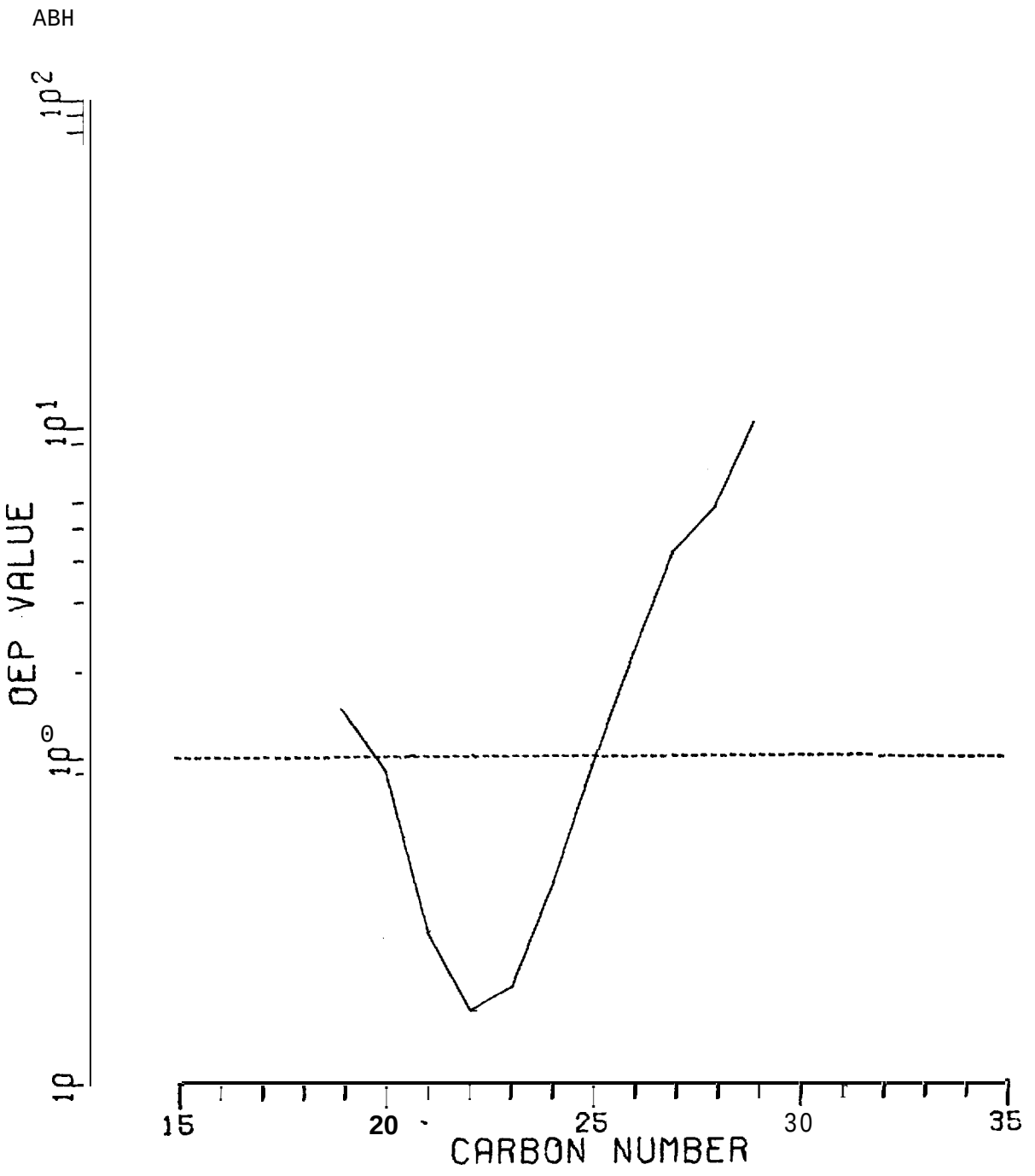


Figure 5-24. OEP curve for Sediment Sample ABH, 3/1,

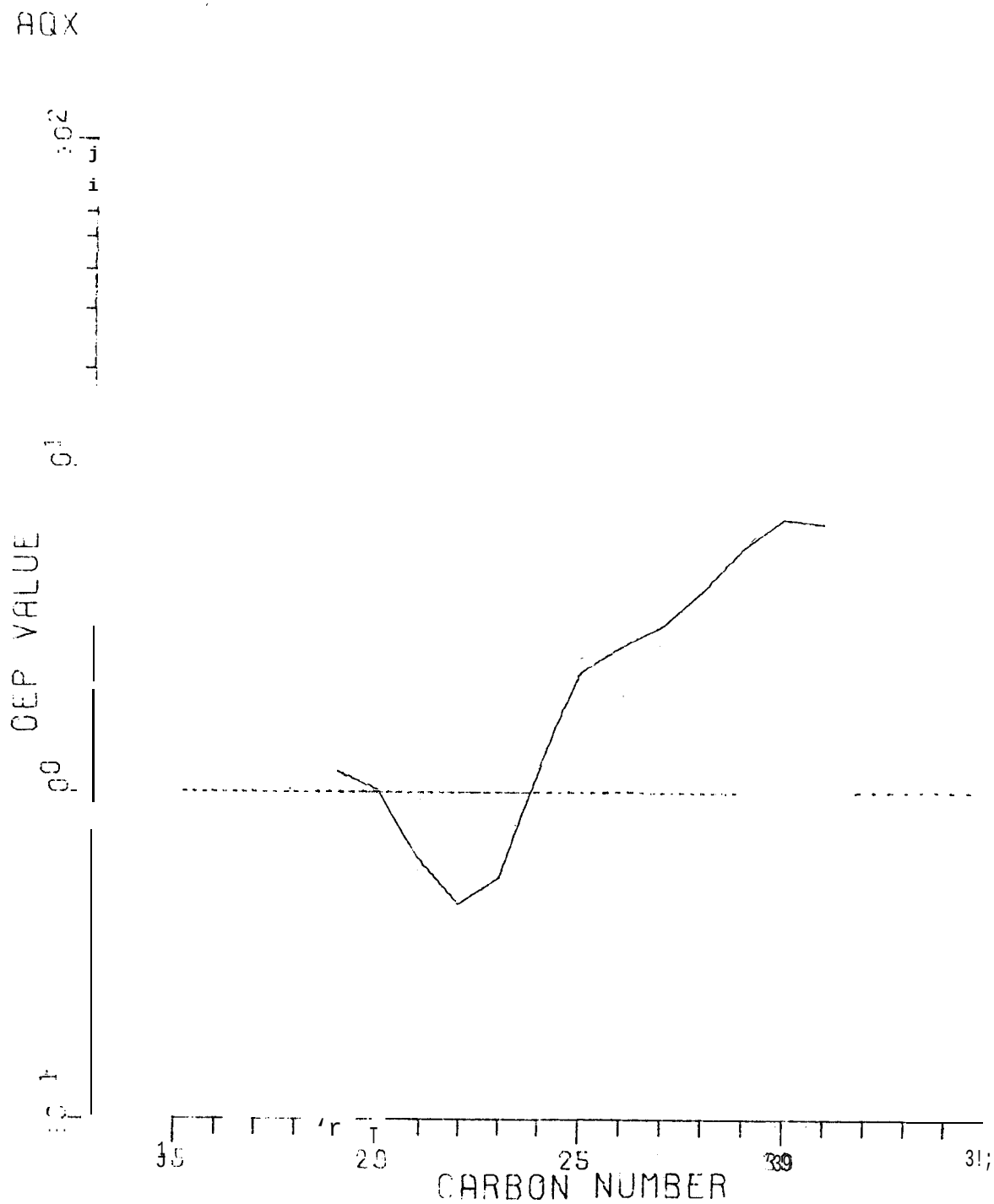


Figure 5-25. OEP curve for Sediment **Sample** AQX, 3/11.

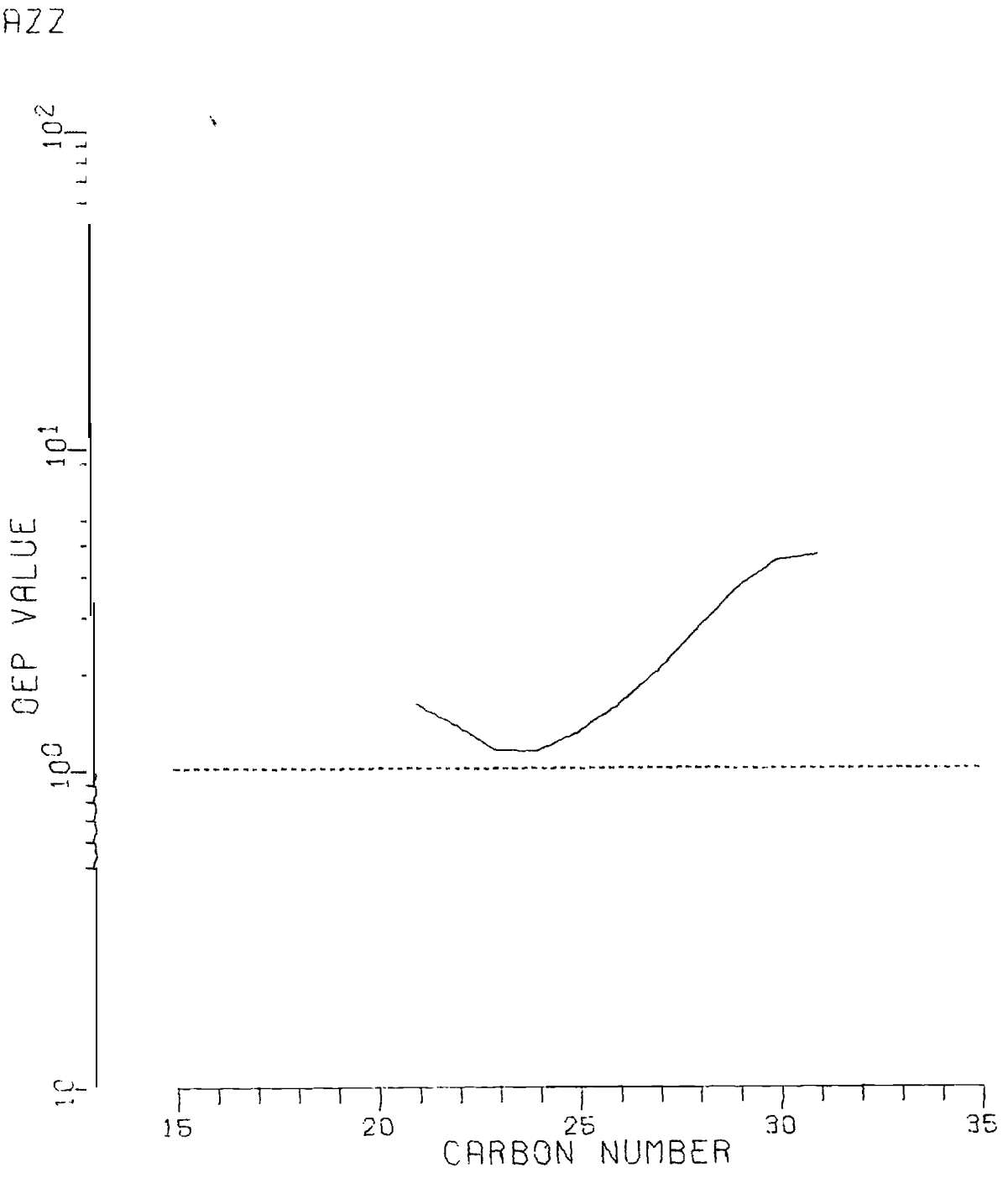


Figure 5-26. OEP curve for Sediment Sample AZZ, 3/111.

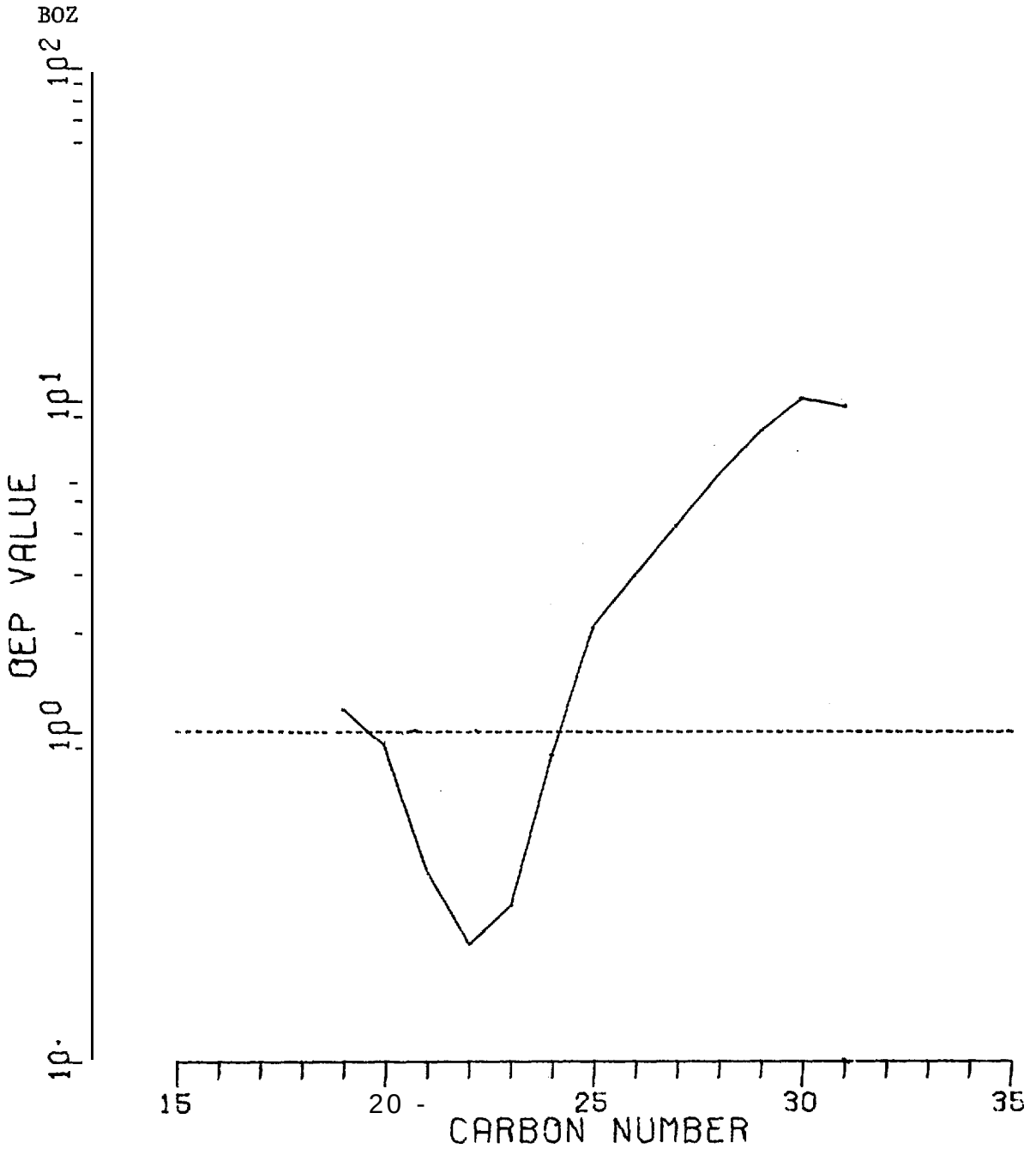


Figure 5-27. OEP curve for Sediment Sample BOZ, 3/IV.

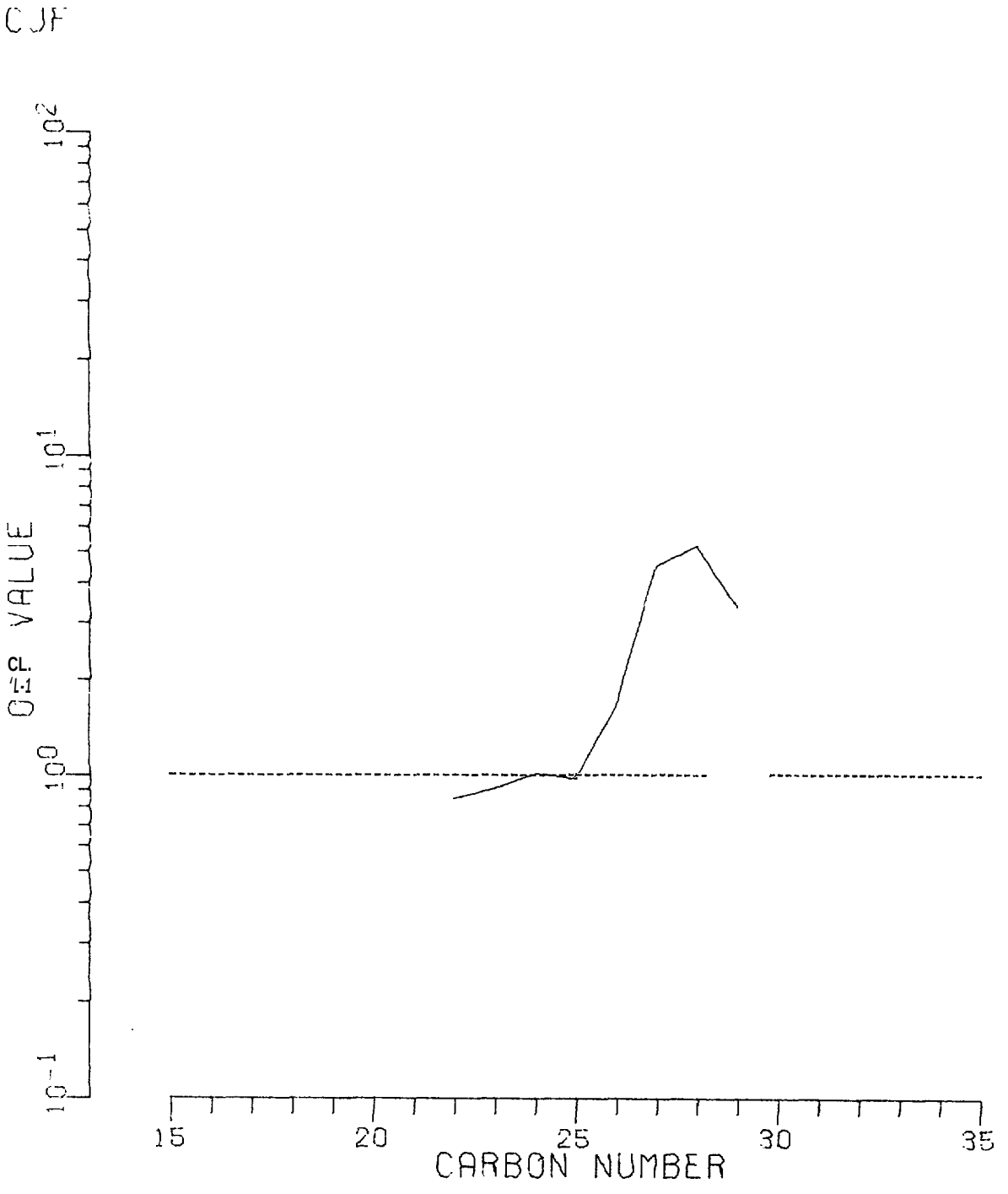


Figure 5-28. OEP curve for Sediment Sample CJF, 3/1.

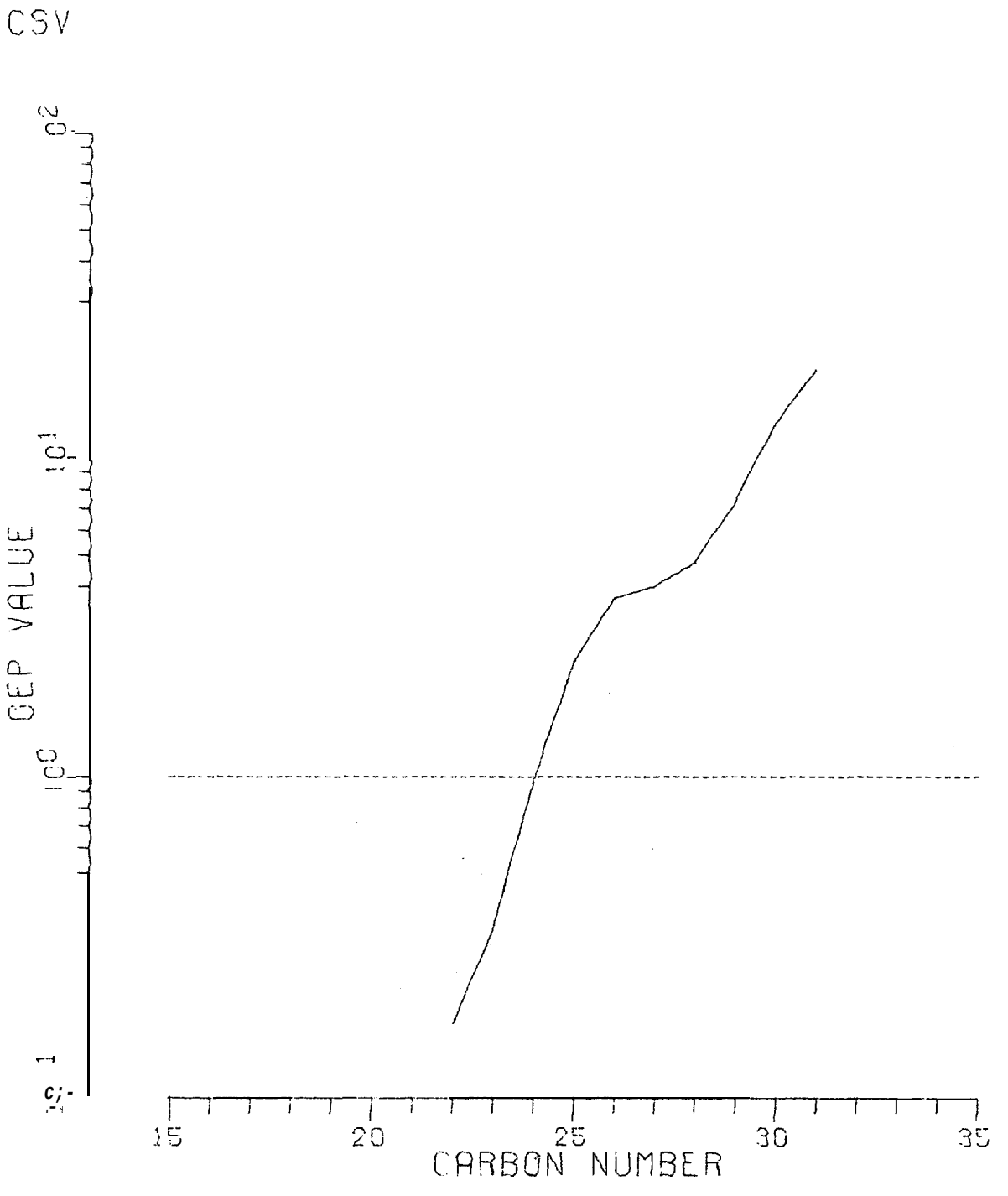


Figure 5-29. OEP curve for Sediment Sample CSV, 3/11.

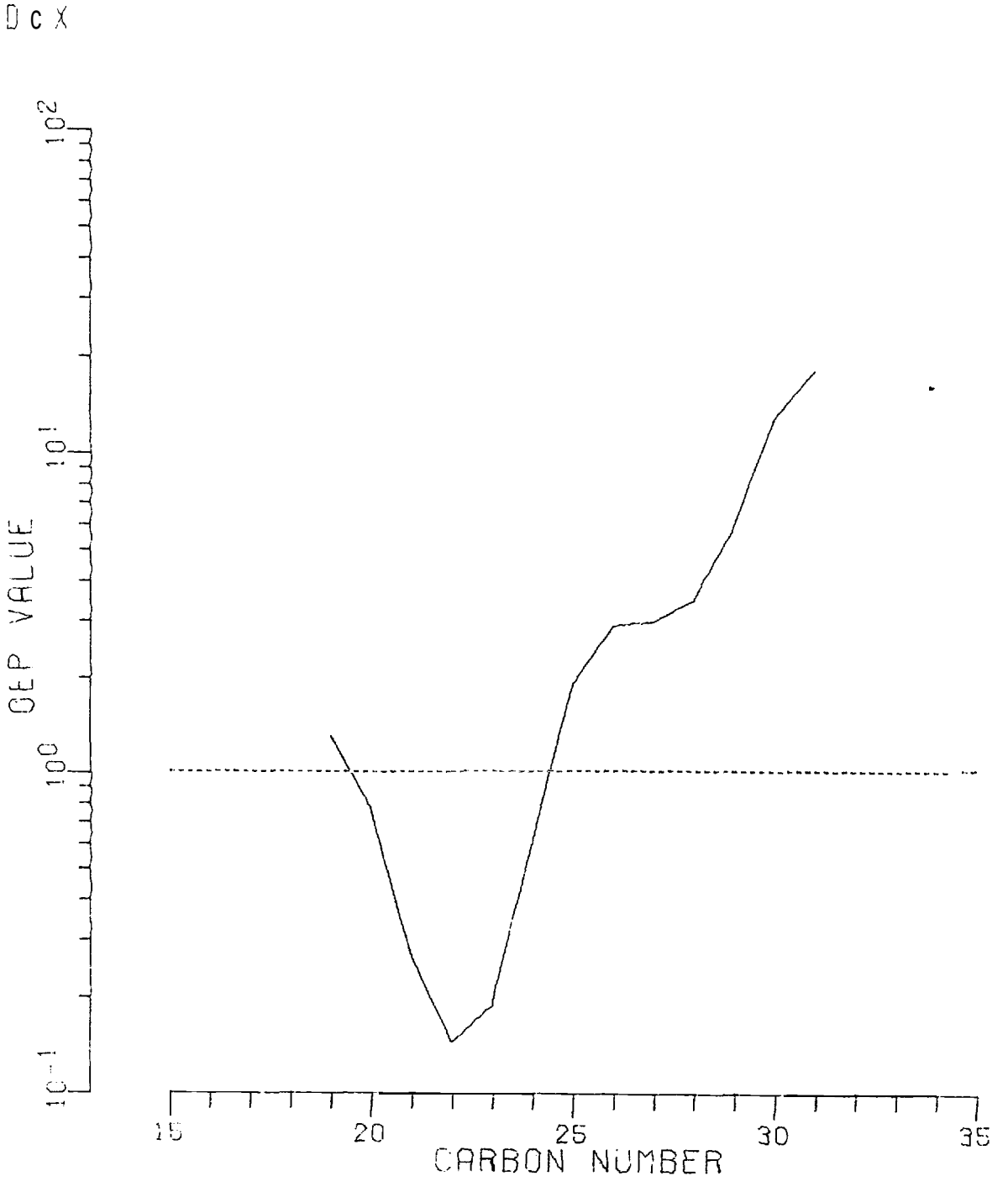


Figure 5-30. **OEP** curve for **Sediment** Sample DCX, 3/111.

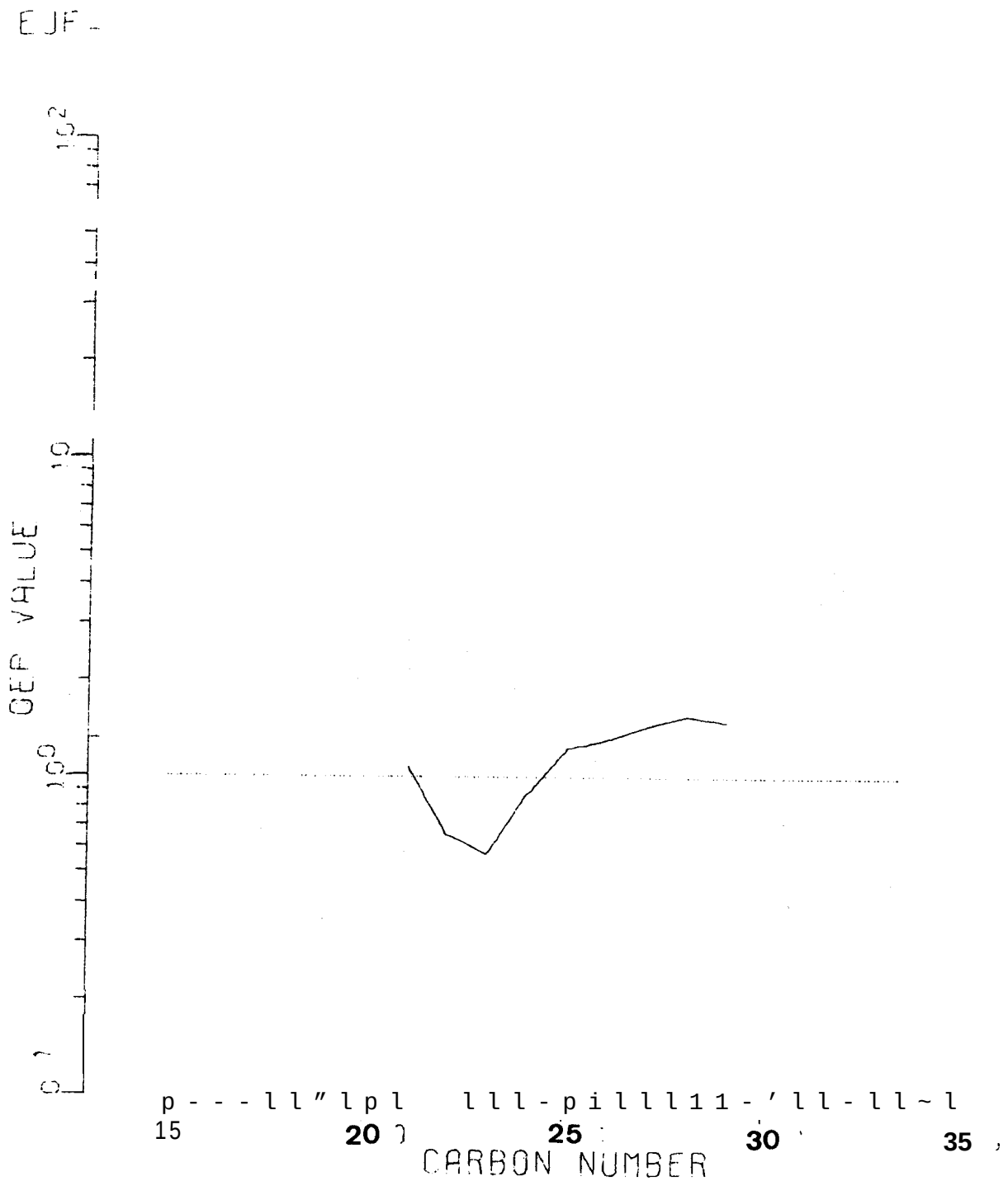


Figure 5-31. OEP curve for Sediment Sample EJF, '3/1.

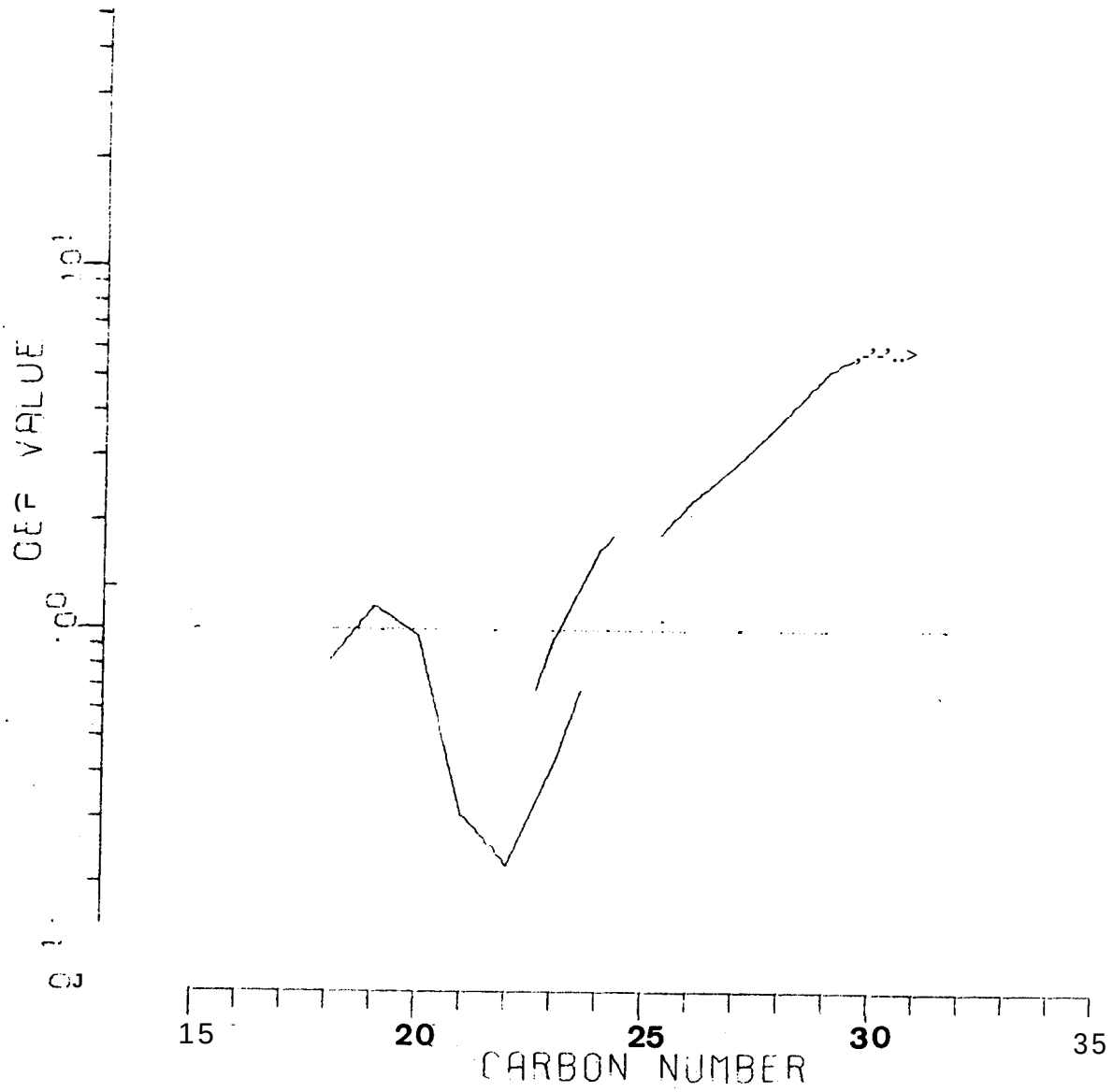


Figure 5-32. OEP curve for Sediment Sample ESW, 3/11.

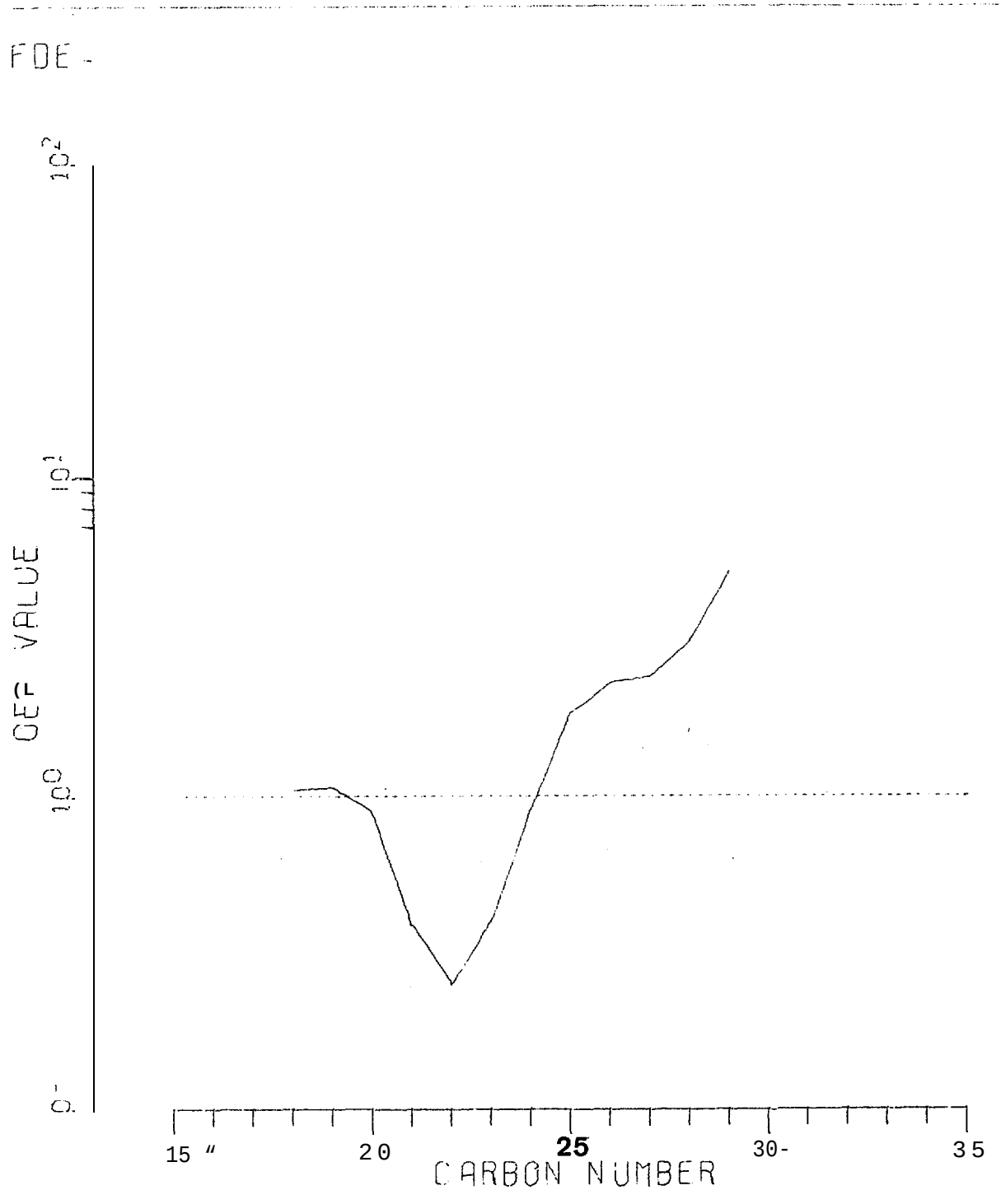


Figure 5-33. OEP curve for Sediment Sample FDE, 3/111.

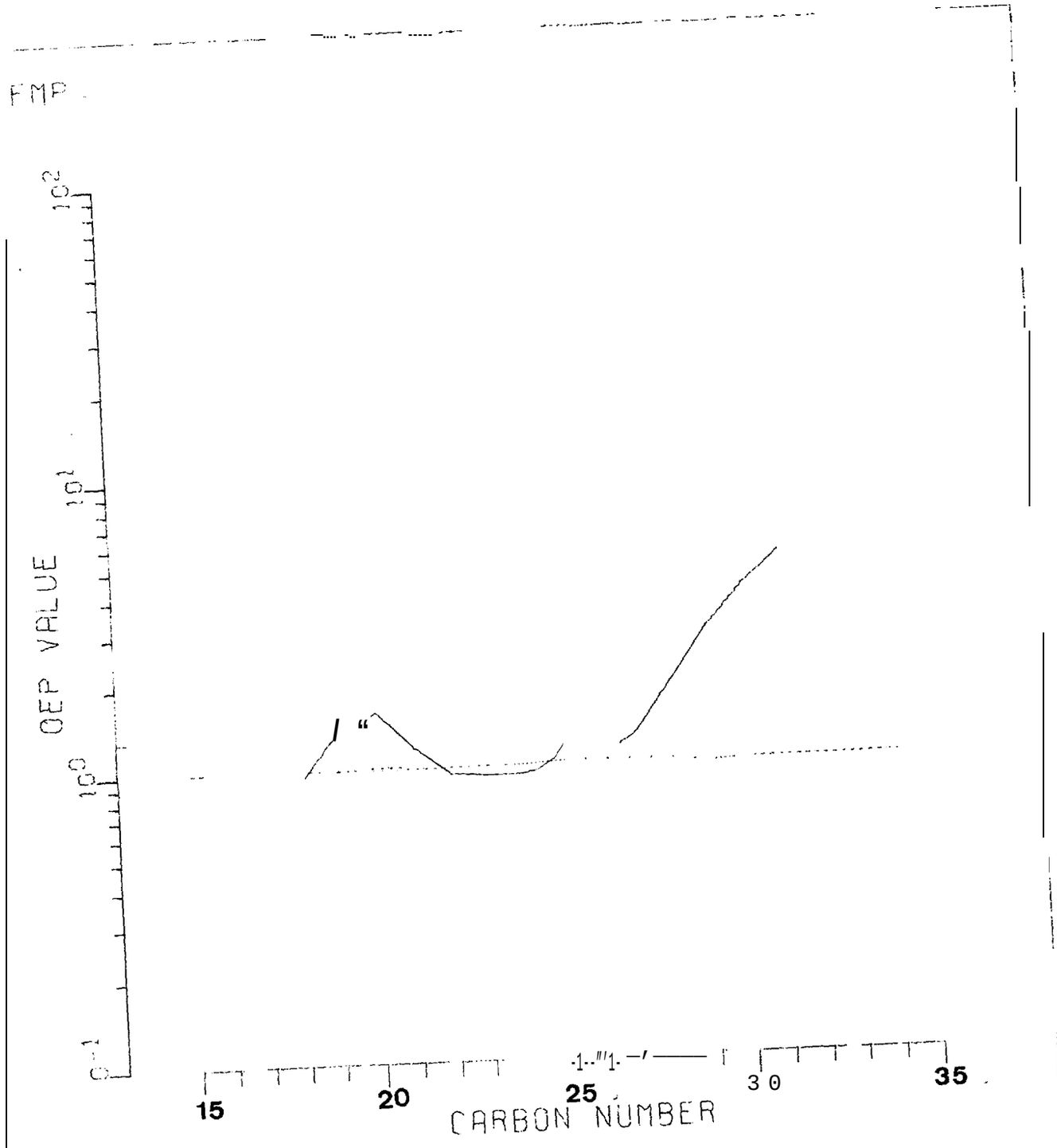


Figure 5-34. OEP curve for Sediment Sample FMP, 3/IV.

Fish #4

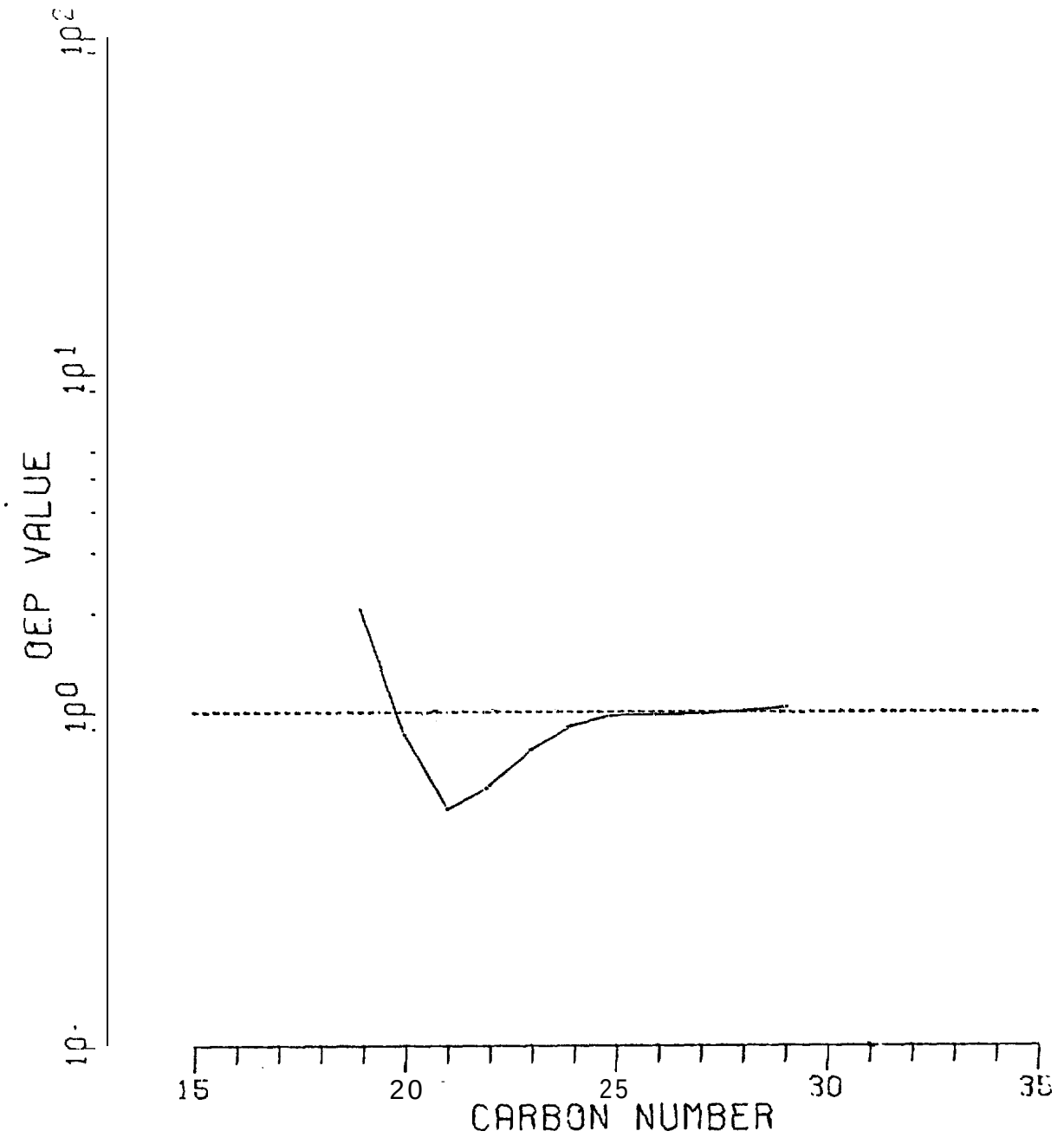


Figure 6-1. OEP curve for skin lipids of Fish #4.

Fish #12

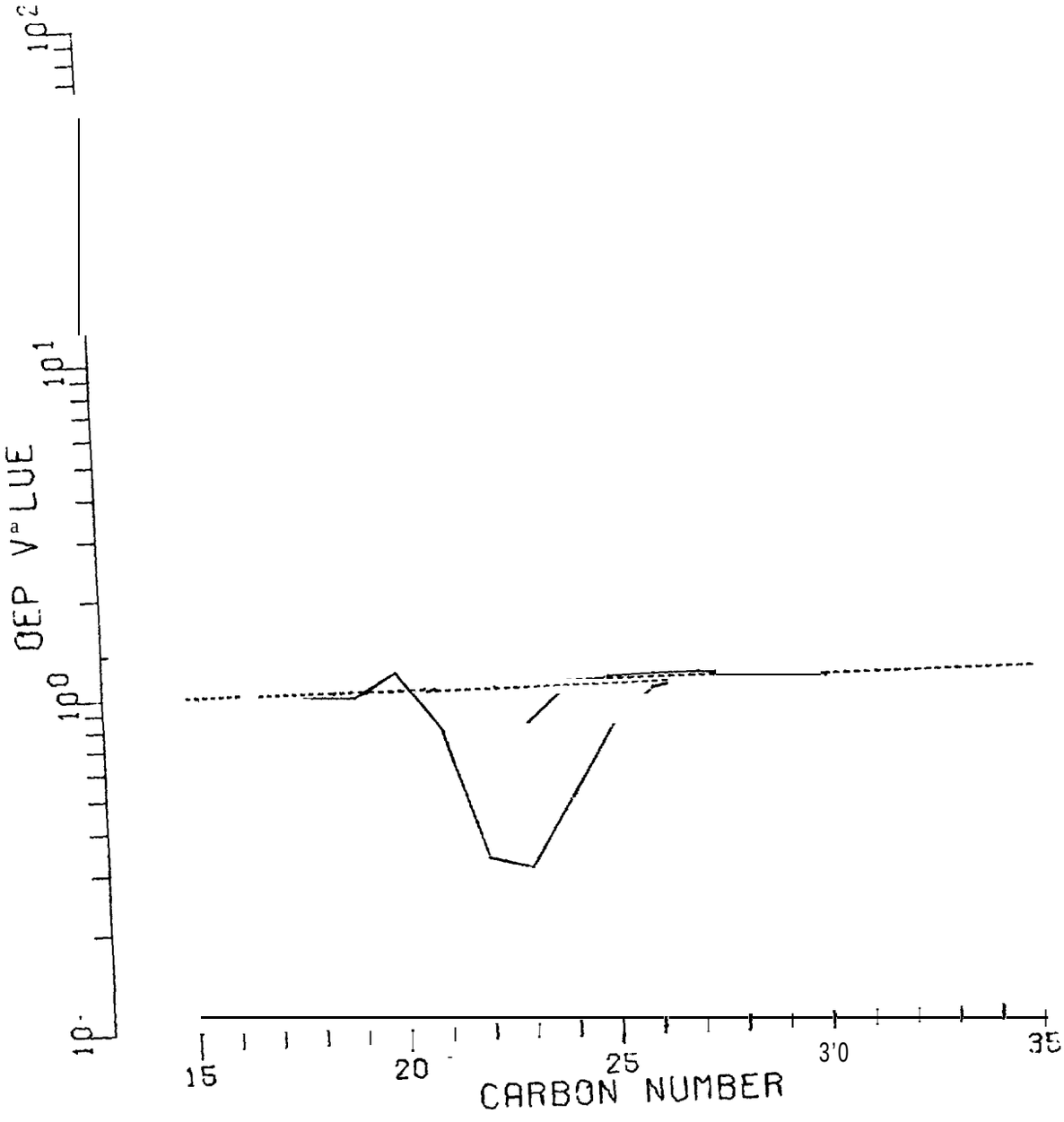


Figure 6-2. OEP curve for skin lipids of Fish #12*

Fish #13

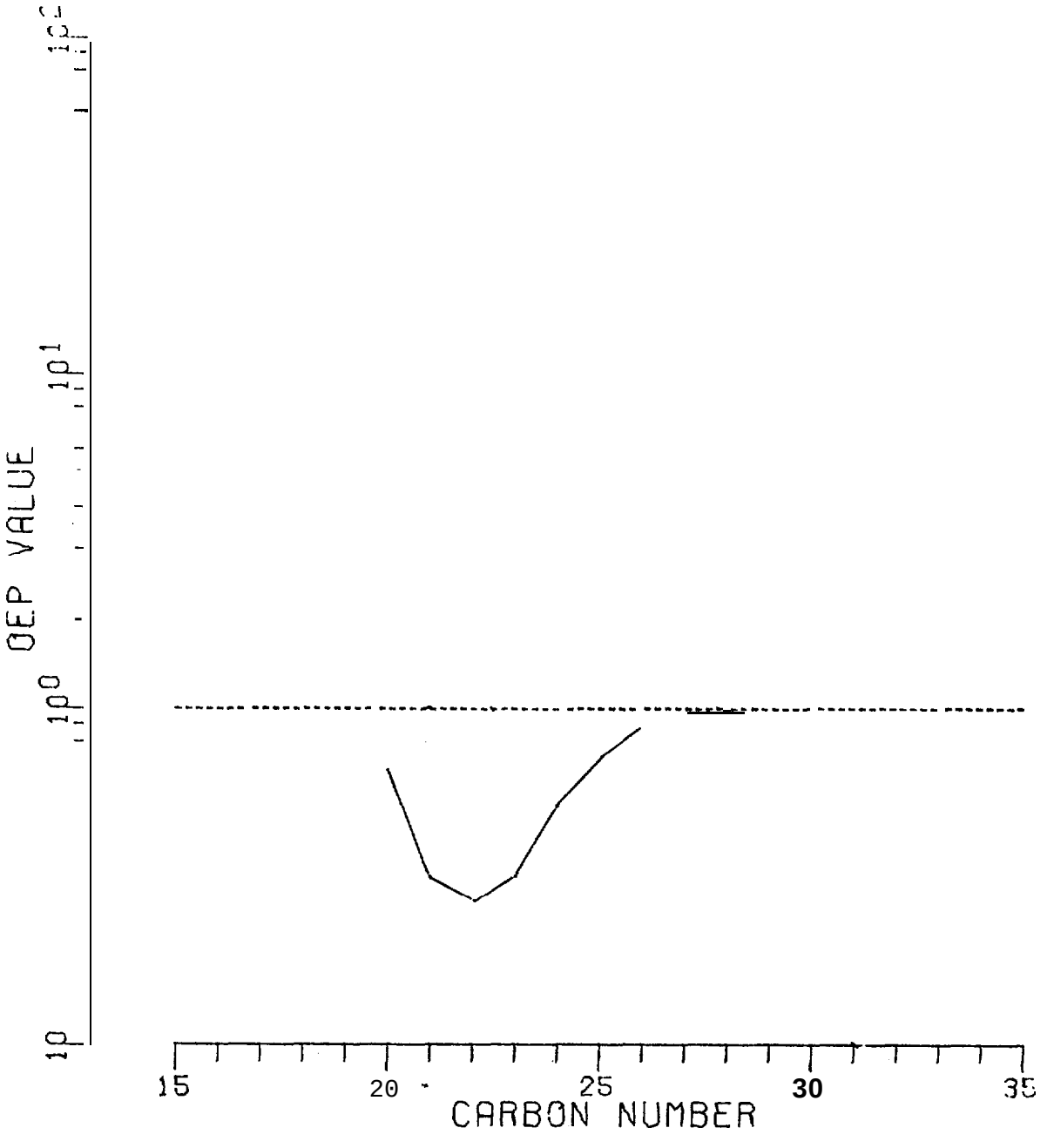


Figure 6-3. OEP curve for skin lipids for Fish #13.

Fish #20

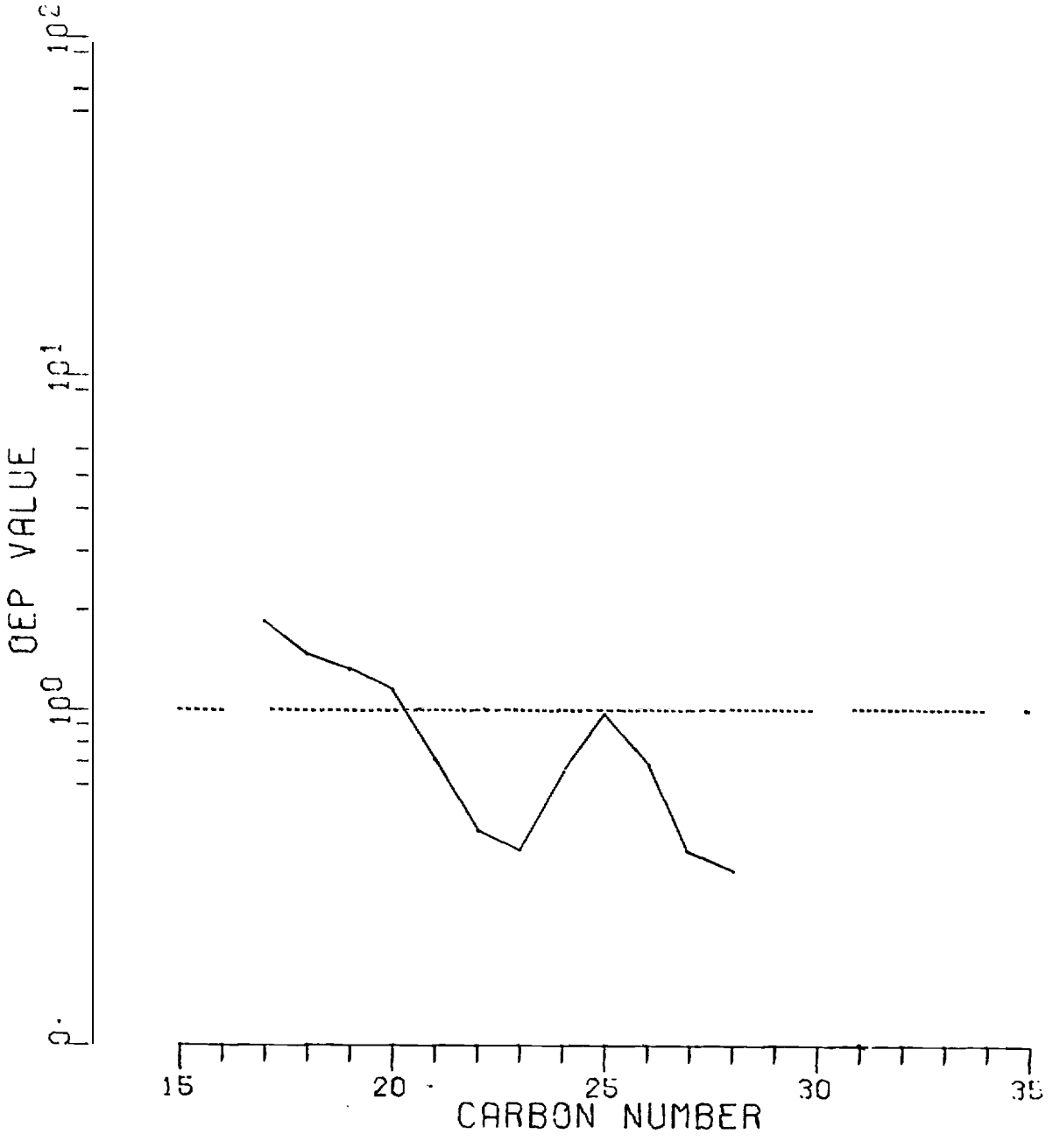


Figure 6-4. OEP curve for skin lipid of Fish #20.

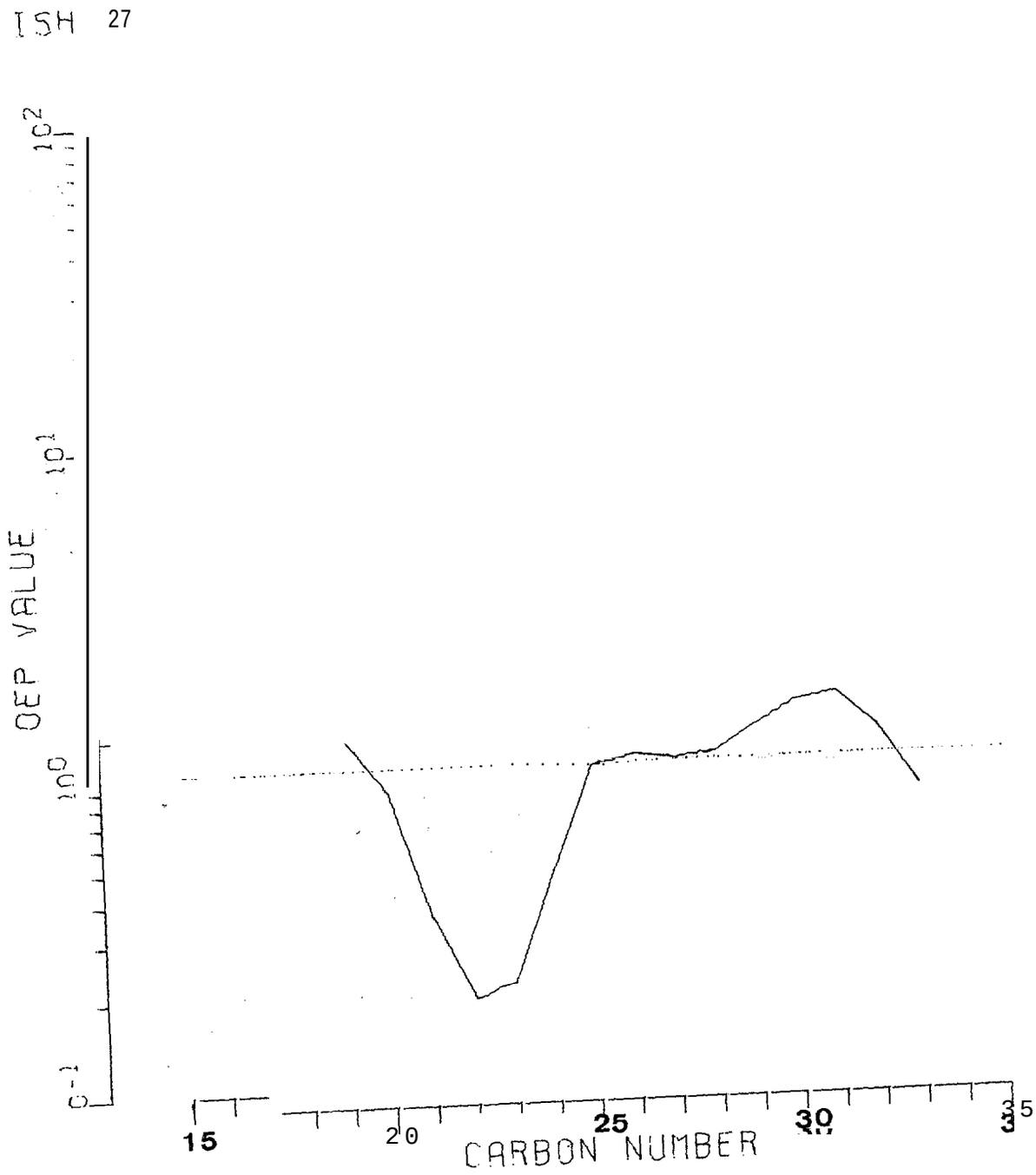


Figure 7-1. OEP curve for Flesh from Fish #27.

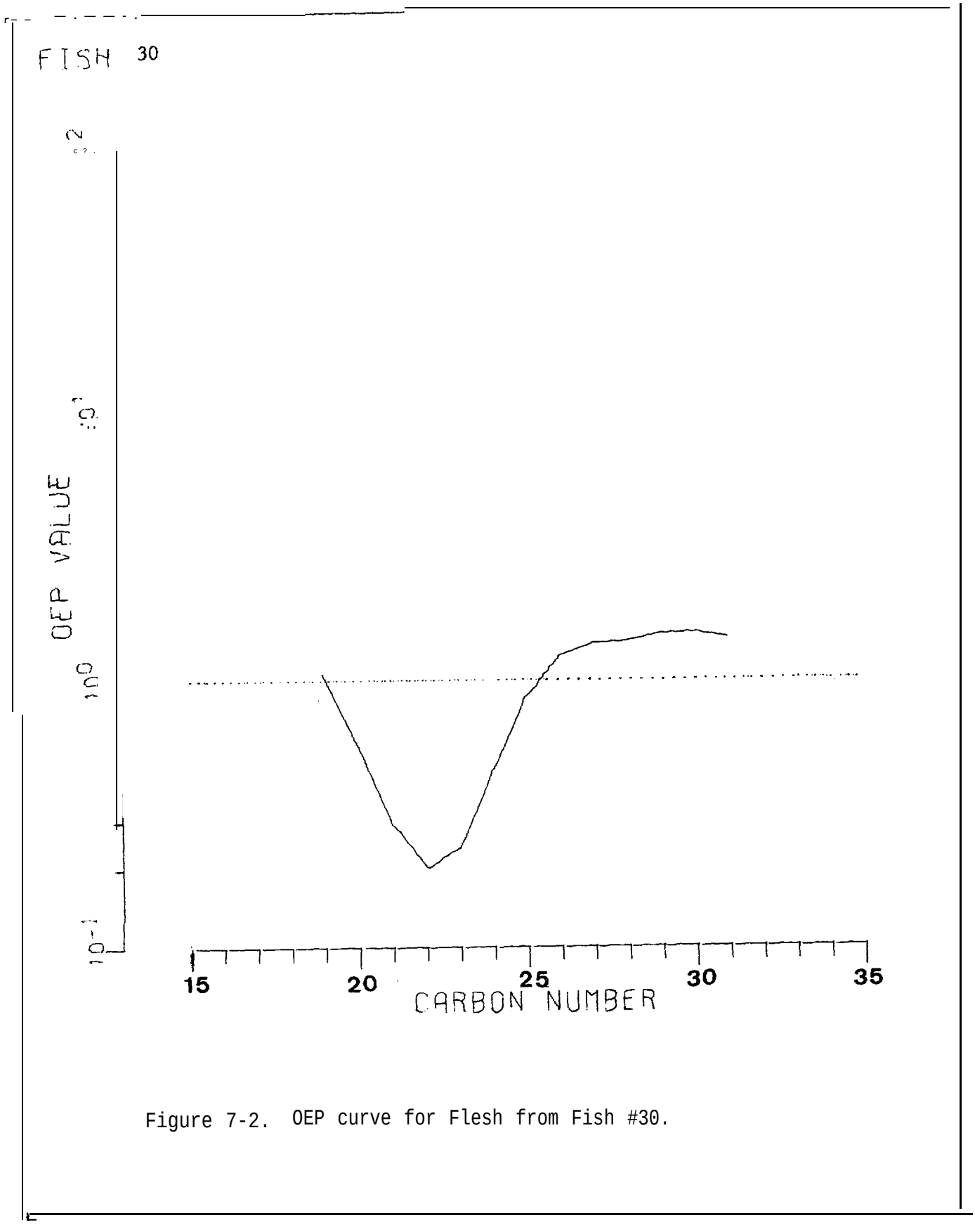


Figure 7-2. OEP curve for Flesh from Fish #30.

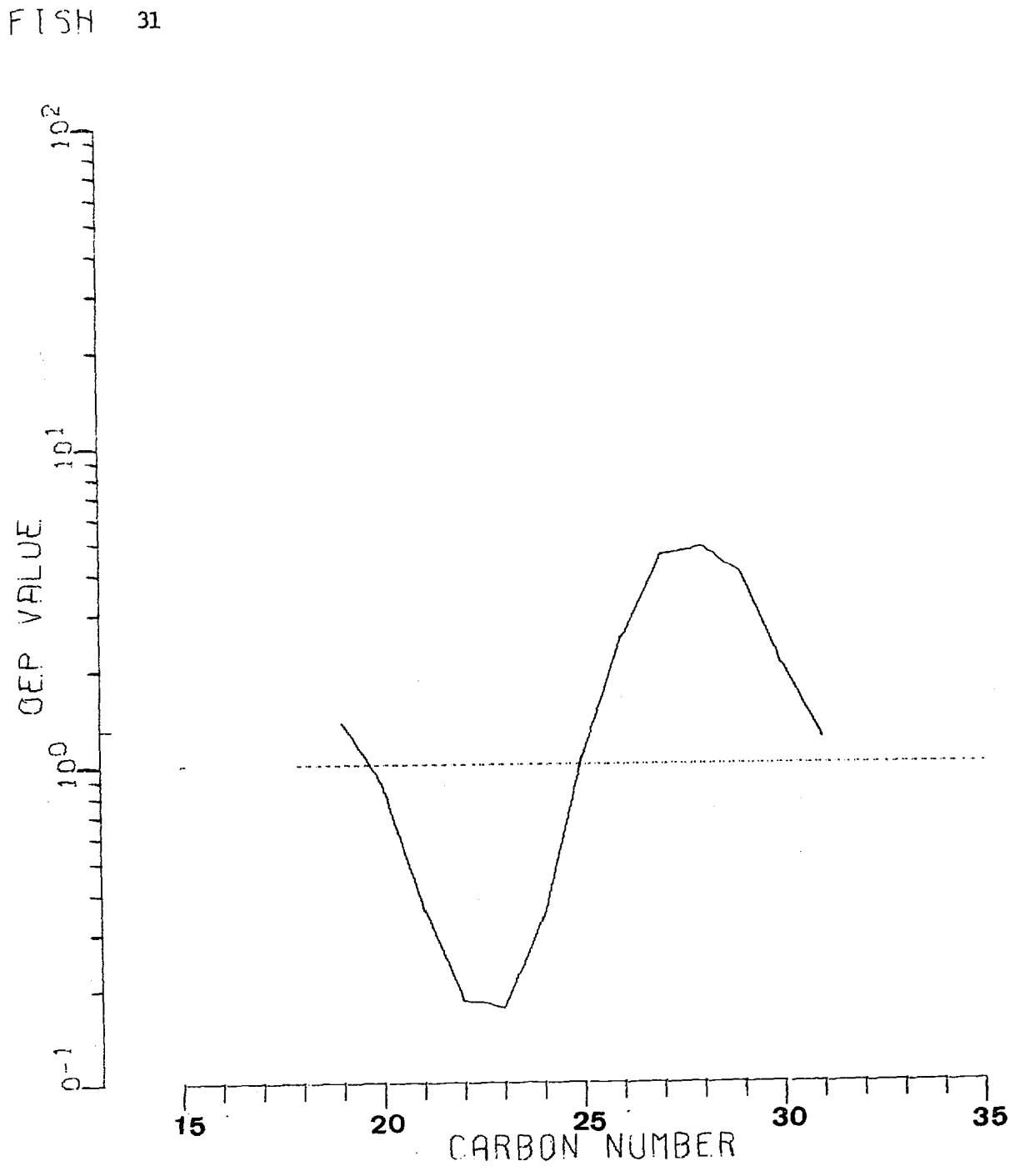


Figure 7-3. OEP curve for Flesh from Fish #31.

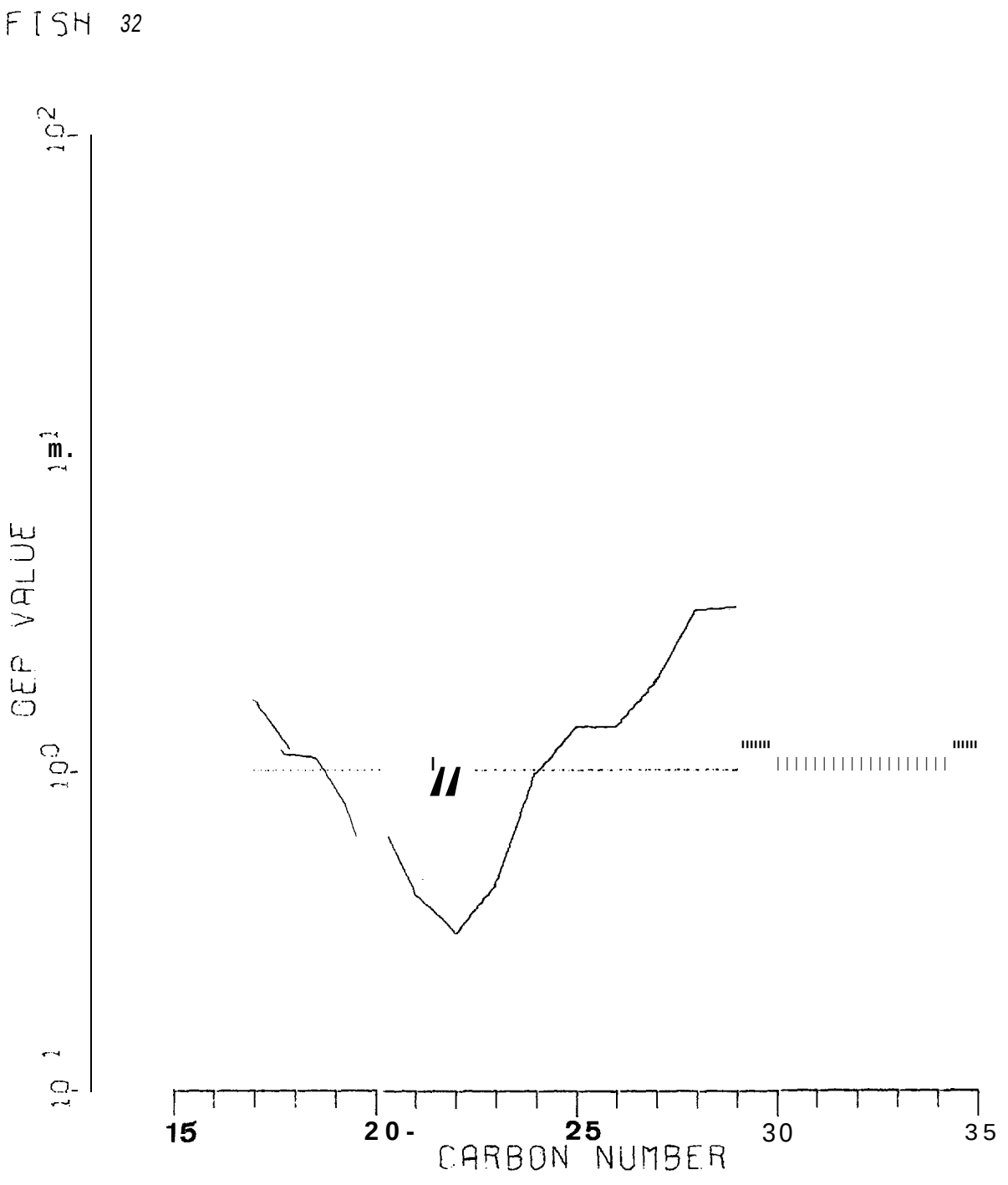


Figure 7-4. OEP curve for Flesh from Fish #32.

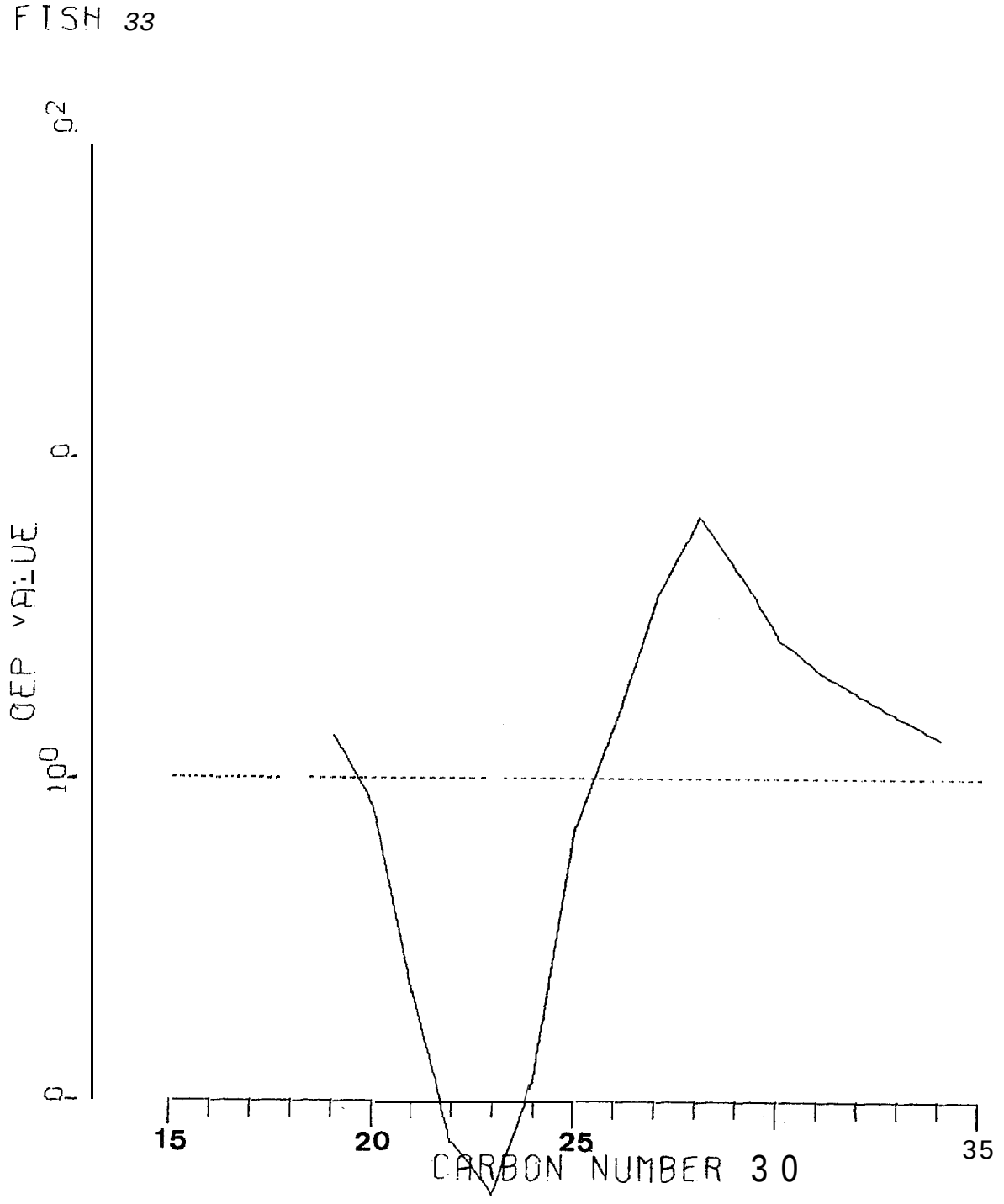


Figure 7-5.. OEP curve for Flesh from Fish #33,

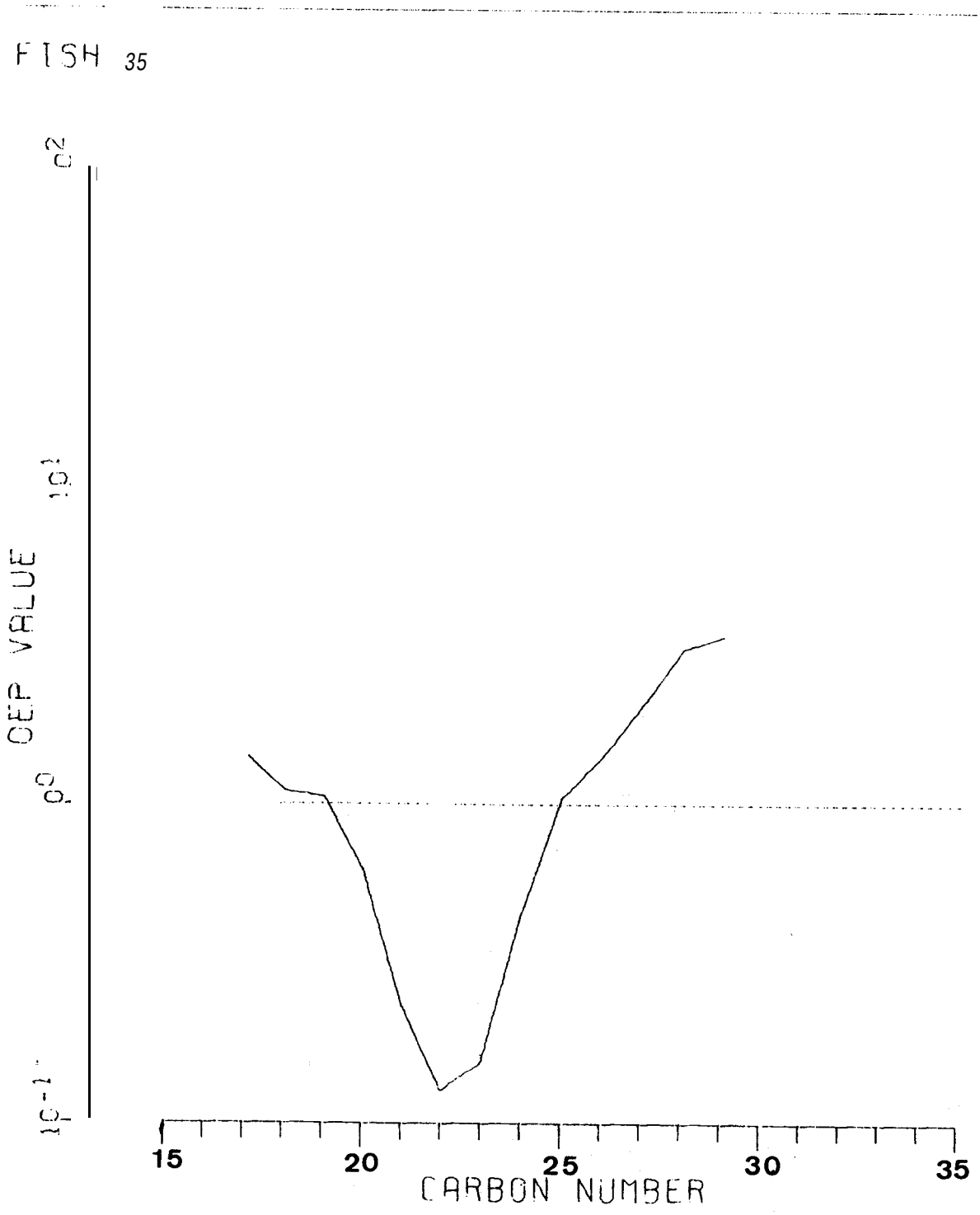


Figure 7-6. OEP curve for Flesh from Fish #35.

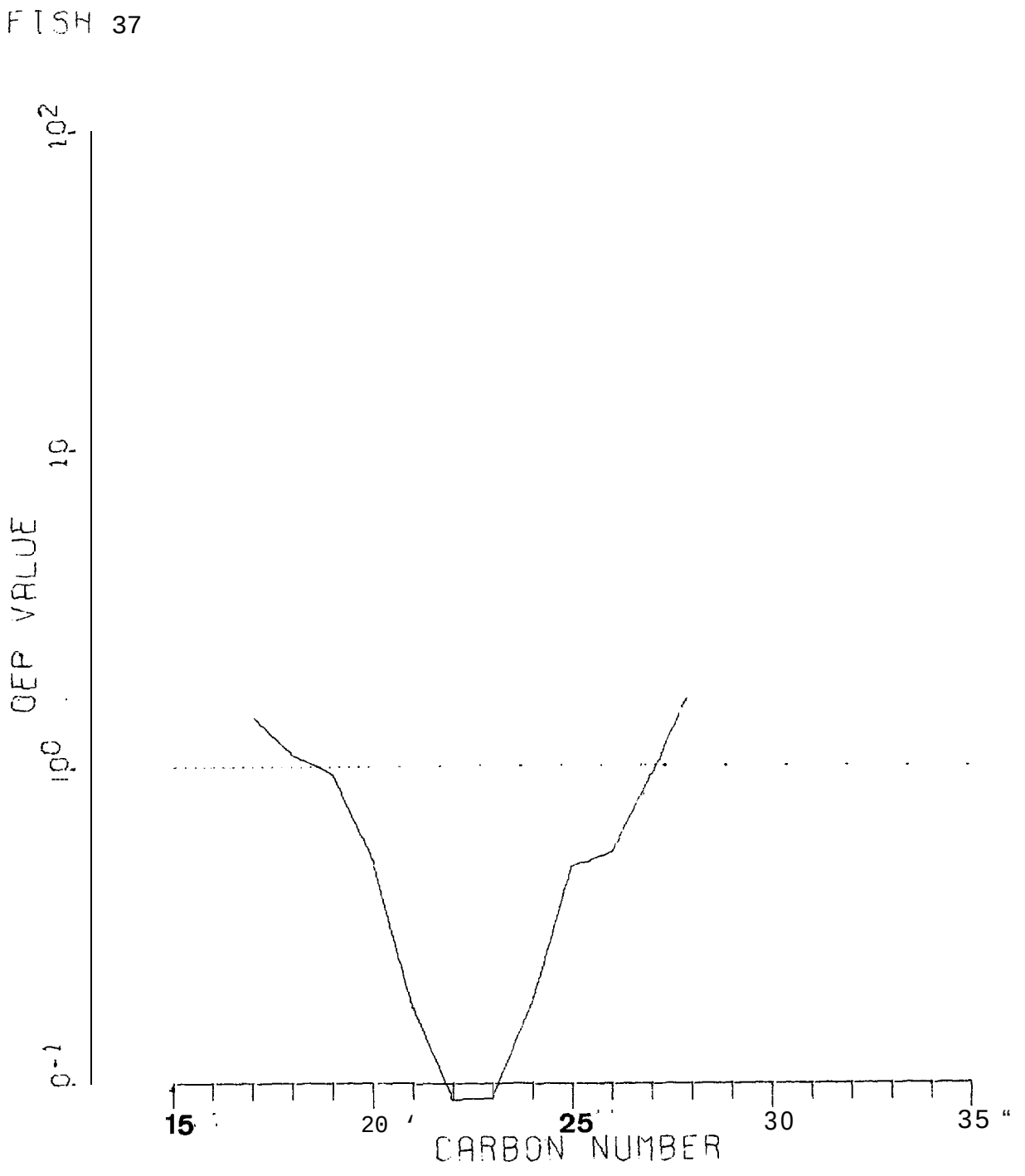


Figure 7-7. OEP curve for Flesh from Fish #37.

APPENDIX XXII

DISSOLVED LOW-MOLECULAR-WEIGHT (LMW) HYDROCARBONS AND HYDROGRAPHIC DATA IN THE STOCS LEASE REGION

(NON-CONTRACT DATA)

A. Water Column Data

B. Hydrocarbon "Sniffing" Data in STOCS

APPENDIX

CRUISE : 75-G-13
DATE : 10/3/75
LOCATION : 28° 20.5'N & 95° 25.0'W
DESCRIPTIVE LOCATION: Station 12, lower Texas shelf
BOTTOM DEPTH: 33 meters

Depth (meters)	CH4 (nl/L)	Temp. (°C)	Salinity (‰)	O_2 (ml/L)	Phosphate (ug-at/L)	Nitrate (ug-at/L)	Silicate (ug-at/L)
0	190	26.04	34.086	4.729	0.12		0.9
10	'170	26.10	34.096	4.715	0.80		1.5
20	190	26.24	34.306	4.763	0.09		2.4
30	180	26.94	36.267	4.590	0.05	-	2.5

APPENDIX

CRUISE: 75-G-13
DATE : 10/5/75
LOCATION: 27° 0.2'N & 96° 42'W
DESCRIPTIVE LOCATION: Station 13, lower Texas shelf
BOTTOM DEPTH: 75 meters

Depth meters)	CH_4 (nl/L)	Temp. (°C)	Salinity (°/₀₀)	O_2 (ml/L)	Phosphate (ug-at/L)	Nitrate (ug-at/L)	Silicate (ug-at/L)
0	47	---	34.022	---	---	---	---
3	---	26.32	34.019	4.750	---	---	---
8	79	27.53	35.529	4.553	---	---	---
18	93	26.92	35.707	4.595	---	---	---
19	---	---	35.695	..-	---	---	---
28	122	26.94	35.826	4.597	---	---	---
34	--	---	35.831	e--	---	---	---
38	114	26.91	35.824	4.596	---	---	---
48	935	25.78	36,054	4.450	---	---	---
49	--	---	36.072	---	---	---	---
58	1,230	24.44	36.128	4.632	---	---	---
64	--	---	36.186	---	---	---	---
68	920	24.20	36.176	4.593	---	---	---
79	---	---	36.241	---	---	---	---

APPENDIX

CRUISE: 75-G-13
DATE: 10/'5/75
LOCATION: 26° 44.7'N & 96° 30.6'W
DESCRIPTIVE LOCATION: Station 14, lower Texas shelf
BOTTOM DEPTH: 130 meters

Depth (meters)	CH_4 (nl/L)	Temp. (“c)	Salinity (°/₀₀)	O_2 (ml/L)	Phosphate (ug-at/L)	Nitrate” (ug-at/L)	Silicate (ug-at/L)
0	64	27.40	35.169	4.604	0.09		3.6
10	81	2“7.72	35.382	4.619	0.07		2.2
20	64	27.15	35.437	4.586	0.03		2.1
30	79	27.28	35.743	4.602	0.0		2.8
40	110	27.19	35.741	4.603	0.03		2.6
50	270	27.08	35.848	4.495	0.07		3.4
60	950	24.92	36.135	4.347	0.18		5.6
70	760	23,80	36.208	4.543	0.12		2.1
80	960	24.67	36.105	4.319	0.27		6.4
90	810	23.68	36.211	4.433	0.05		2.1
100	660	22.96	36.203	4.724	0.12		3.4
110	730	22.48	36.157	6,257	0.27		5.0
120	700	22.02	36.188	4.010	0.24		4.6

APPENDIX

CRUISE: 75-G-13
DATE : 10/5/75
LOCATION: 26″ 53.5'N & 96° 15.0'W
DESCRIPTIVE LOCATION: Station 15, lower Texas shelf
BOTTOM DEPTH: 548 meters

Depth (meters)	CH_4 (nl/L)	Temp. (″c)	Salinity (°/₀₀)	O_2 (ml/L)	Phosphate (ug-at/L)	Nitrate (ug-at/L)	Silicate (ug-at/L)
0	61	27.15	34.844	4.651	0.17		4.3
10	74	27.20	35.384	4.700	0.09		2.9
20	67	27.58	35.927	4.561	0.02		.2.5
30	67	27.73	35.998	4.569	0.02		2.1
40	74	27.82	36.061	4.568	0.02		2.0
50	440	27.02	36.075	4.571	0.12		3.5
60	1,270	24.70	36.111	4.748	0.19		4.9
70	610	24.02	36.235	4,870	0.05		1.8
80	340	22.90	36.250	4.568	0.12		1.8
90,	260	21.68	36.232	3.903	0.06		2.2
100	84	20.27	36.285	3.306	0.43		2.9
120	44	18.84	36.392	3.339	0.64		3.5
140	52	17.48	36.303	3.044	0.58		1.5
160	44	16.85	36.226	W--	0.81		4.1
180	68	16.12	36.109	3.036	0.97		4.1
200	34	15.57	36.021	3.025	0.85		6.1
300	37	12.39	35.530	2.786	1.60		10.5
400	24	10.18	35.228	2,675	1.98		12.9
500	27	8.08	34.972	2.925	2.25		19.5

APPENDIX

CRUISE: 75-G-13
DATE : 10/6/75
LOCATION : 26° 40. 0'N & 95° 51. 0'W
DESCRIPTIVE LOCATION: Station 16, lower Texas slope
BOTTOM DEPTH: 1320 meters

Depth (meters)	CH_4 (nl/L)	Temp. (°C)	Salinity (°/₀₀)	O_2 (ml/L)	Phosphate (ug-at/L)	Nitrate (ug-at/L)	Silicate (ug-at/L)
0	55	27.23	36.306	4.604	0.02		1.0
10	40	27.22	36.303	4.719	0.00		1.0
20	43	27.20	36.303	4.634	0.00		0.3
30	39	27.19	36.325	4.624	0.00		0.7
35	59	27.20	36.342	4.617	0.02	" -	1.0
40	52	27.22	36.324	4.625	0.02		0.9
45	58	27.20	36.341	4.659	0.00		0.7
50	50	27.21	36.332	4.679	0.05	/ -	0.9
55	43	27.18	36.337	4.642	0.00		1.0
60	63	25.10	36.339	5.145	0.02		0.7
65	54	24.65	36.349	5.124	0.09		1.0
70	52	24.34	36.338	5.051	0.01		1.0
75	52	24.16	36.357	4.996	0.00		1.0
80	59	23.96	36.340	4.947	0.00		1.0
90	90	23.52	36.329	4.760	0.00		0.7
100	63	23.22	36.307	4.649	0.43		0.7
125	64	---	36.376	4.306	0.01		0.8
150	91	21.24	36.402	3.359	0.79		2.7
200	65	18.11	36.319	2.907	0.58		3.6
300	27	13.58	35.713	2.853	1.29		7.7
400	27	11.22	35.369	2.752	1.49		12.5
500	32	9*35	35.112	2.680	2.05		16.7
600	74	7,94	34.978	2.791	2.06		18.7
700	23	6,82	34.882	3.111	2.30		22.5
800	26	6.09	34.878	3.408	2.45		21.8
900	18"	5.46	34.886	3.792	2.30		25.5
1000	19	5.00	34.908	4.236	2.14		20.7
1100	23	4.68	34.927	4.401	6.11		--
1200	20	4.50	34.947	4.589	6.11		25.6
1300	27	4.38	34.946	4.750	1.94		25.7

APPEND IX

HYDROCARBON "SNIFFING" DATA IN SOUTH TEXAS OCS AREA

Time	C_1	C_2	C_3	Location
5-x-75				
0000				28° 13.5′; 95° 35′
0030	180	2.0	0.8	
0035	173	3.5	1.0	
0040	155	3.0	1.0	
0045	145	2.0	0.8	
0050	135	2.0	0.5	
0055	115	1.5	<0.5	
0100	110	1.5	<0.5	28° 06.2′; 95° 43.5′
0105		2.5	<0.5	
0110	105	1.0	<0*5	
0115	100	1.0	<0.5	
0120	100	1.0	<0.5	
0125	100	1.0	<0.5	
0130	97	0.8	<,0.5	
0135	100	1″. 0	<0.5	
0145	96	1.0	<0.5	
0150		1.2	<0.5	
0155	98	1.0	<0.5	
0200	100	1.0	<0.5	27° 58′; 95° 53.3′
0205	100	1.0	<0.5	
0210	97	1.0	<().5	
0215	94	1.0	<0.5	
0220	94	1.0	<0.5	
0225	97	1.0	<0.5	
0230	98	0.8	<0.5	
0235	98	1.0	<0.5	
0240	100	1.0	<0*5	
0245	103	1.0	<0.5	
0250	100	0.8	<0.5	
0255	100	1.0	<0.5	
0300	100	0.8	<0.5	27° 51′; 96° 01′
0305	90	0.8	<0.5	
0310	92	0.8	<0.5	
0315	100	0.8	<0.5	
0320	108	1.0	<0.5	
0325	112	1.0	<0.5	
0330	104	1.0	<0.5	
0335	110	1.0,	<0.5	
0340	112	1.0	<0.5	
0345	105	1.0	<0.5	
0350	100	1.0	<0.5	
0355	105	1.0	<0.5	
0400	100	1.0	<0.5	27° 43.6′; 96° 09.7′
0405	100	0.6	<().5	
0410	105	0.8	<0.5	
0415	102	0.8	<0.5	

Time	C_1	C_2	C_3	Location
0420	105	1.0	<0.5	
0425	105	1.0	<0.5	
0430		1.0	<0.5	
0435		0.8	<0.5	
0440		0.8	<0.5	
0445		0.8	<0.5	
0450	108	1.0	<0.5	
0455	110	0.8	<0.5	
0500		0.8	<0.5	27° 31.6′; 96° 19.5'
0505	110	0.8	<0.5	
0510	109	0.8	<0.5	
0515	110	0.8	<0.5	
0520	112	1.0	<0.5	
0525			<0.5	
0530		0.8	<0.5	
0535	115	0.8	<0.5	
0540	110	0.8	<0.5	
0545	112	0.8	<0.5	
0550	107	1.0	<0.5	
0555		0.8	<0.5	
0600	100	1.0	<0.5	27° 29.1'; 96° 29.0′
0605	104	0.8	<0.5	
0610	105	0.8	<0.5	
0615	110		<0.5	
0620	116	1.0	<0.5	
0625	118	1.0	<0.5	
0630	120	1.0	<0.5	
0635	127	1.0	<0.5	
0640	122	0.8	<0.5	
0645	118	1.0	<0.5	
0650	120	1.0	<0.5	
0655	120	0.8	<0.5	
0700	120	0.8	<0.5	27° 27′; 96° 31.0′
0705	120	0.8	<()*5	
0710	120	0.8	<0.5	
0715	120	0.8	<0.5	
0720	120	0.8	<0.5	
0725	120	0.8	<0.5	
0730	120	0.8	<0.5	
0735	120	0.8	<0.5	
0740	120	0.8	<0.5	
0745	120	0.8	<0.5	
0750	120	0.8	<0.5	
0755	120	0.8	<0.5	
0800	120	0.8	<0.5	*27° 26.0′; 96° 33.0′*
0805	120	0.5	<0.5	
0810		0.5	<0.5	
0815	112	0.5	<0.5	
0820	111		<0.5	
0825	111	0.8	<0.5	
0830	105	0.5	t	

Time	C_1	C_2	C_3	Location
0835	112	0.6	t	
0840	122	0.6		
0845	129	0.5		
0850	124	0.8		
0855	124			
0900	136	0.6		
0905	150	0.8		
0910	145	0.9	t	27° 13.0′; 96° 47.0′
0915	121	0.8		
0920	118	0.8		
0925	118	0.8		
0930	118	0.8		
0935	113	0.8		
0940	112	0.6		
0945	118	0.6		
0950	108	0.8		
0955	105	0.8		
1000	108	0.8		27″ 04.5′; 96″ 42′
1510				27° 02.0'; 96° 42′
1515	84	0.5		
1520	95	0.5		
1525	95	0.5		
1530	103	0.5	–	
1535	103	0.5		
1540	100	0.5		
1545	95	0.5		
1550	95	0.5		
1555	108	0.5		
1600	130	0.5		27° 02.0′; 96° 31.7'
1605	138	0.5		
1610	136	0.5		
1615	136	0.5		
1620	135	0.5		27° 02.5′; 96° 27.2'
1625	165	0.5		
1630	125	0.5		
1635	116	0.5		
1640	80	0.5		
1645	80	0.5		
1650	80	0.5		
1655	80	0.5		
1700	76	0.5		26° 55.0′; 96° 28′
1705	87	3.0	1.0	
1710		1.0		
1715	75	0.8		
1720	73	0.5		
1725	75	0.5		
1730	75	0.5		
1735	73	0.5		
1740	70	0.5		
1745	72	0.5		
1750	75	0.5		
1755	75	0.5		
1800	82	0.5		26° 44.0′; 96° 30.5′