SAMPLING GULF WHITE HAKE: 1970 TO 1984 IN NAFO DIVISION 4T

by

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Abstract

Sampling data from 1966 to 1984 are presented and used to generate catch at length data for the years 1970 to 1984. No samples were collected between 1970 and 1974 inclusive and thus samples from before and after this period were used to derive the annual catch at age. Sampling has been good since 1981 and is considered adequate for stock assessment purposes.

A variety of sampling strategies was used to overcome the problem of fishermen landing gutted head-off hake. These included routine samples from 'complete' fish, headless 'stump length' samples and head only otolith samples. All such samples were transformed to 'complete' fish prior to merging with the historic data set.

The samples from gillnets and particularly longlines were found to be made up of larger fish than those from otter trawls and seiners. All gears showed definite monthly differences in length frequencies, and where data were available, area differences were also demonstrated.

Résumé

On présente des données sur des échantillonnages effectués de 1966 à 1984 et l'on en dérive les prises par longueur de 1970 à 1984. Aucun échantillon n'ayant été prélevé de 1970 à 1974, on s'est servi de ceux qui ont été recueillis avant et après cette période pour déterminer les prises annuelles par âge. Les échantillonnages donnent de bons résultats depuis 1981 et on les considère satisfaisants pour l'évaluation du stock.

On a recouru à diverses méthodes d'échantillonnage pour pallier le fait que le merlu est débarqué étêté et éviscéré. Entre autres, on échantillonne régulièrement des poissons entiers, des poissons étêtés (longeur au moignon) et des otolithes provenants d'échantillonns de têtes seulement. Toutes les données portant sur ces échantillons ont été étendues au "poisson entier" avant d'être versées aux archives.

On a constaté que les poissons des échantillons prélevés au filet maillant et à la palangre en particulier sont plus gros que ceux des échantillons prélevés au chalutier à panneaux et à senne. La fréquence des longueurs varie nettement d'un mois à l'autre, quel que soit le type d'engin employé pour l'échantillonnage, et dans les cas où l'on possède des données sur la question, elle varie aussi selon la zone considérée.

Introduction

White hake (Urophycis tenuis, Mitchill) is a demersal gadoid widely distributed throughout the northwest Atlantic from Newfoundland to New England. The southern Gulf of St. Lawrence (NAFO Division 4T) white hake stock, has been fished as a minor species (averaging about 6000 tonnes over the last decade) with the majority of landings coming from the Northumberland Strait and P.E.I. areas. It is an inshore mixed fishery making it very dependent on weather and local markets.

The inshore nature of this fishery complicates the sampling of commercial landings. The standard operating procedure for sampling commercial marine species on Canada's east coast has been to measure a minimum of 200 fish and collect a stratified random sample of otoliths from them. This is difficult to achieve with many stocks and in particular with Gulf hake for two main reasons. First, many processors pay a premium price for head-off gutted hake - making the collection of otolith samples for age determination difficult and those samples that are collected possibly not representative of the true landings. Secondly, many inshore fishermen have total daily hake landings smaller than the suggested guideline for commercial sampling, ie. less than 200 fish.

Sampling

Samples were collected by Department of Fisheries and Oceans staff under two separate programs during 1983 and 1984. The first was that carried out by the sampling group of the Gulf Fisheries Center. From this program a total of 40 samples comprising 4520 fish from 11 ports in Nova Scotia and P.E.I were collected. Otoliths were obtained from 586 of these fish. The second scheme was carried out in an opportunistic manner by the authors. This latter program resulted in 45 samples taken with detailed biological measurements on 3063 hake and otoliths collected from 1153. A third sampling program was carried out by the P.E.I. Department of Fisheries and Labour, whose staff collected 178 samples involving length measurements of approximately 17,800 hake. In total during 1984, approximately 26,050 white hake were measured and otoliths were obtained from 1739 fish. These were sampled from ports in New Brunswick, Nova Scotia, Prince Edward Island, and Quebec.

Many processors continued to offer premium prices to fishermen landing gutted/head-off hake in 1984. Consequently, DFO samplers were instructed to measure "first dorsal" lengths (ie the length from the anterior of the first dorsal fin to

the tip of the caudal fin) for catches landed in this condition. Twenty such samples (representing 1,900 fish) were transformed to total lengths by applying the following regression equation:

$$TL = -0.24 + 1.30*DL1; \quad n = 225, \; r^2 = 0.91$$

where TL represents total length in cm and DL1 represents first dorsal length in cm.

The P.E.I. provincial sampling program collected head-off lengths where necessary by measuring the 'stump' of the fish retained for processing. A sample of head-off stump length vs total length was taken by the staff of the P.E.I. Department of Fisheries and Labour giving the relationship:

$$TL = -0.93 + 1.25*SL; \; n = 220, \; r^2 = 0.95$$

where TL is the total length in cm and SL is the stump length in cm.

To ensure adequate total numbers of otolith samples and to increase the precision of the age-at-length key over the most common length/age groups (knowing there would not be sufficient stratified samples) we collected some samples from heads only. In these cases we bought the heads from the entire catch of one vessel that was beheading their fish at sea. Six samples representing 841 otolith pairs were taken. The otoliths were cleaned and each pair weighed to the nearest 0.001 g and the mean weight calculated. Total lengths for these fish were estimated from the following relationship:

$$TL = 109.82 * OW^{0.545}; \quad n = 80, \; r^2 = 0.84$$

where TL represents total length in cm and OW represents mean otolith weight in g. A length frequency was compiled from these estimates and all the otoliths used for ageing.

Estimates of discard rates derived from three sea trips on small inshore gillnet vessels in 1984 indicate that from 0.1 to 1% by numbers and 1 to 3% by weight of the hake catch is discarded at sea. These fish averaged 45±4 cm. There would probably be slightly more discarding done on trawlers and seiners, although no information is currently available. There is also a significant portion of the catch (personal estimate of less than 5%) that is consumed locally (sometimes fresh and often salted). This unreported portion of the catch is not considered significant in light of other inadequacies in the sampling data. Thus no attempt has been made to compensate for discarding and unreported catch.

Catch at length

It has long been recognized that gear selectivity is extremely important in fisheries management. Some gears such as gillnets and longlines tend to have a narrower selection range

than other gears such as otter trawlers and seiners. There has been no appreciable shift in the average gillnet mesh sizes used in the groundfish fishery between 1970 and 1984, however, there have been several shifts in the legislated minimum codend mesh size of otter trawlers and seiners. For these reasons comparisons of length frequencies from several gears and time periods have been made for the 1984 samples.

1984 Samples: OTTER TRAWL

The majority of landings from otter trawlers are from tonnage class 0 and 1 stern trawlers (OTB-2). Samples from NAFO sub-division 4Tg (eastern P.E.I.) for the months June to October (inclusive) show peak numbers at length occurring between 60 to 70 cm in length with a mean length of about 60 cm (Fig 1). The percentage of smaller commercial fish ($\leq$ 60 cm) increases from June to July and decreases in September and October - although not to the June levels.

: DANISH and SCOTTISH SEINERS

The inshore seiners (tonnage class 0 and 1 vessels) for the months June through October in NAFO sub-division 4Tg (Fig 2) show very similar trends in length frequency distribution to OTB-2 vessels. The same pronounced immigration of smaller commercially sized fish ($\leq$ 60 cm) between June and July with subsequent reductions in the percent composition of these smaller fish is occurring.

: LONGLINERS

Although longliners contribute only a small portion of the total landings, they are generally considered to land the largest and sometimes the best quality fish. The longline fishery doesn't start until August/September and the major landings do not occur until October and November. Many gillnetters and draggers take up longlining as the weather deteriorates in the fall. The size of fish landed is very much larger than either the trawlers or seiners (Fig 3). Approximately 10% (by numbers) of the landings are fish above 100 cm in length and thus do not appear on the figures - less than a half of 1% of the trawler and seiner catches are over 100 cm in length. The mean length of fish landed by long liners is 70+ cm.

: GILLNETTERS

Gillnetters made up the largest portion of the total landings in 1984 - as they have in every year since 1977. The major gillnet fleet fishes out of Tignish, P.E.I. - NAFO sub-division 4Tl, however significant landings do occur in NAFO sub-division 4Tg. The length frequencies from sub-division 4Tg between June and September indicate the same increase in small ($\leq$ 60 cm) commercial fish after June as was observed in both the trawler and seiner landings (Fig 4). However, the subsequent

drop-off does not appear to occur - in fact the numbers of small fish increase again in August and remain constant through September.

The length frequencies from gillnetters from NAFO sub-division 4T1 show a different pattern with the smaller commercially sized fish present in June and subsequently decreasing as the season in western P.E.I. progresses (Fig 5). This implies a possible movement of these smaller fish ($\leq$ 60 cm) from west to east during the hake season in the southern Gulf. Other anecdotal data from fisherman in the Cape Tormentine area of New Brunswick would tend to bear out an easterly spawning movement through the Northumberland Strait during June and July.

Combining all sampling data for the southern Gulf - NAFO Division 4T for all months for each of the above gears (Fig 6) provides a more general between gear comparison. Gillnets, seiners, and otter trawlers all land a similar size distribution of fish up to a length of about 55 cm. The seiners and trawlers land more fish in the 55 to 65 cm size range and the gillnetters land more 65cm and over fish. The trawlers and seiners land fish with similar size distributions, the gillnetters land slightly larger fish. Longliners land a very different size frequency of fish, the only significant mode occurring between 62 and 68 cm; the remaining distribution is relatively uniform with distinct but minor modes occurring at frequent intervals.

1983 Samples:

Otter trawl samples combined for all areas (NAFO division 4T) for July through September show patterns similar to 1984 - with all areas combined there is no obvious movement of smaller fish between months.

The otter trawlers and seiners for the entire southern Gulf for May through October combined indicate the same similarity between themselves and the same differences with the gillnetters as were observed in 1984.

Sampling requirements

These data indicate significant spacial and temporal differences in the size distribution by length of the landings. Because of these differences it would be necessary to have at least monthly sampling by NAFO sub-division for gillnetters, longliners and otter trawlers and seiners combined for Gulf hake.

This has not been accomplished in the past and although the sampling was the best on record in 1984 - it did not achieve this level. It is therefore necessary to group the available data to achieve the most representative sampling. In all cases the seiners and otter trawlers have been grouped, and where necessary the gillnetters and longliners have been combined.

Catch at age

These samples were used to generate a catch numbers-at-age matrix for Gulf hake. The use of samples from various years, gears and time periods is itemized in Appendix I. All of the commercial samples currently available for the southern Gulf hake (NAFO Division 4T) are listed in Appendix II. The catch matrix (Table 1) and weight-at-age matrix (Table 2) were generated for the years 1970 to 1984. The software package ALSYSX was used to create the age-at-length keys (Appendix I) for each year. These were totalled to produce the frequency per year, the weights at age were averaged and weighted by the catch for each key. The length-weight relationship for sexes combined used in the weight-at-age calculation was an average taken from 5 years of research vessel data combined. It is:

$$W = 0.0043\ TL^{3.153}$$

In the early years when insufficient sampling precluded using samples from the actual landings, and in some years even the actual year, the nearest comparable sampling information was selected. In some years an age-at-length key for an entire year (season = May to September) was used with appropriate catch length frequencies from the period in question.

The sparse and thus poor sampling from the early 1970's leaves a very short time series (1978 to 1984) that can be considered a dependable representation of the catch. The 1970 to 1977 catch at age is presented in order to give a historical perspective of the fishery.

ACKNOWLEDGEMENTS

Dave MacEwen of the P.E.I. Department of Fisheries and Labour has supervised the field sampling program throughout the province since 1980. He also provided the stump-length / total-length data for our analysis. David Younker, P.E.I., Department of Fisheries and Labour kindly permitted the use of the P.E.I. provincial sampling data for this assessment of the Gulf hake - without these data no assessment would have been possible for at least 3 more years.

Gloria Nielsen and Martina Poirier carried out the task of entering, validating and loading the historic data series on to the ALSYSX system data base.

TABLE 1. Catch-at-age matrix for southern Gulf hake in NAFO Division 4T by year.

Catch numbers in thousands of GULF hake DATE = 3.5.85:6

YEAR :	70	71	72	73	74	75	76
AGE :							
3 :	90.	88.	95.	83.	51.	58.	84.
4 :	740.	748.	662.	519.	259.	222.	310.
5 :	834.	835.	781.	690.	393.	404.	450.
6 :	477.	469.	507.	479.	307.	356.	346.
7 :	390.	396.	422.	472.	324.	393.	303.
8 :	150.	151.	173.	199.	141.	177.	137.
9 :	77.	81.	88.	112.	81.	102.	70.
10 :	44.	45.	46.	52.	34.	43.	29.
11 :	13.	15.	13.	13.	8.	8.	5.
12 :	7.	8.	8.	9.	5.	7.	9.
13 :	6.	6.	6.	8.	5.	5.	3.
3+ :	2828.	2842.	2801.	2636.	1608.	1775.	1746.
4+ :	2738.	2754.	2706.	2553.	1557.	1717.	1662.
5+ :	1998.	2006.	2044.	2034.	1298.	1495.	1352.
6+ :	1164.	1171.	1263.	1344.	905.	1091.	902.

YEAR :	77	78	79	80	81	82	83	84
AGE :								
3 :	90.	83.	94.	94.	68.	5.	60.	54.
4 :	346.	370.	489.	469.	442.	123.	135.	381.
5 :	490.	605.	866.	1066.	1112.	596.	627.	714.
6 :	376.	569.	1011.	1723.	2043.	1239.	829.	776.
7 :	314.	360.	699.	1240.	1438.	1204.	642.	471.
8 :	142.	180.	328.	560.	625.	601.	419.	239.
9 :	69.	64.	105.	142.	159.	163.	246.	142.
10 :	30.	27.	49.	78.	97.	86.	75.	48.
11 :	5.	4.	8.	7.	4.	23.	5.	18.
12 :	8.	8.	11.	6.	1.	10.	4.	9.
13 :	3.	2.	7.	9.	13.	16.	1.	1.
3+ :	1873.	2272.	3667.	5394.	6002.	4066.	3043.	2853.
4+ :	1783.	2189.	3573.	5300.	5934.	4061.	2983.	2799.
5+ :	1437.	1819.	3084.	4831.	5492.	3938.	2848.	2418.
6+ :	947.	1214.	2218.	3765.	4380.	3342.	2221.	1704.

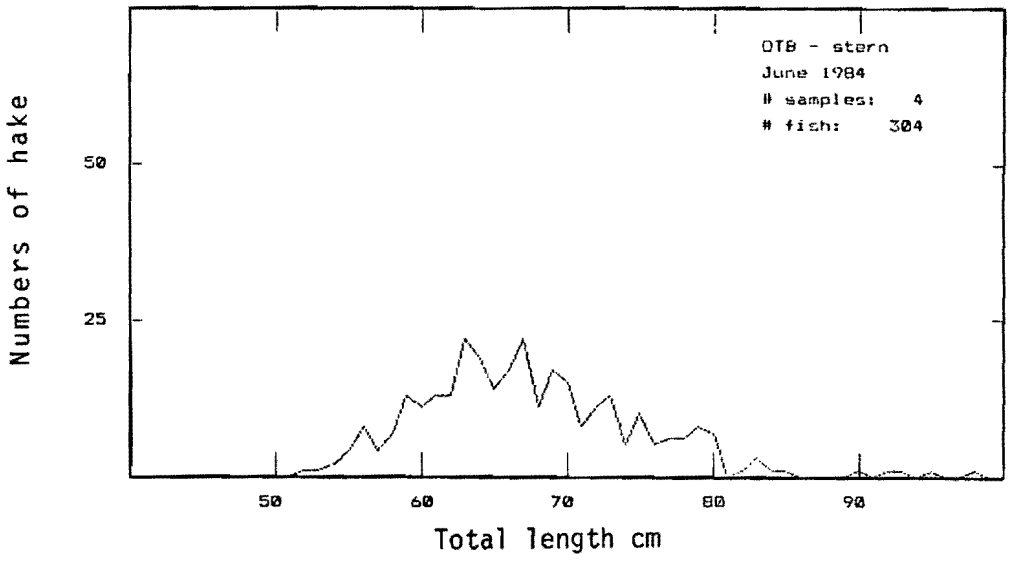
Table 2. Weight-at-age matrix for southern Gulf hake in NAFO Division 4T. Estimated from the commercial sampling data, weights for the older age groups prior to 1982 are extremely doubtful.

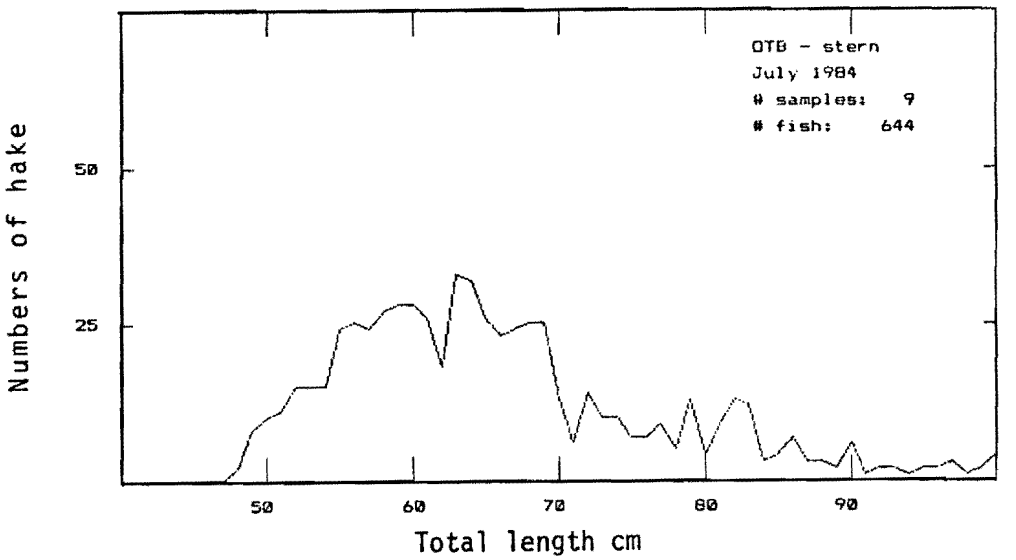
Weights-at-age of GULF hake DATE = 3.5.85:6

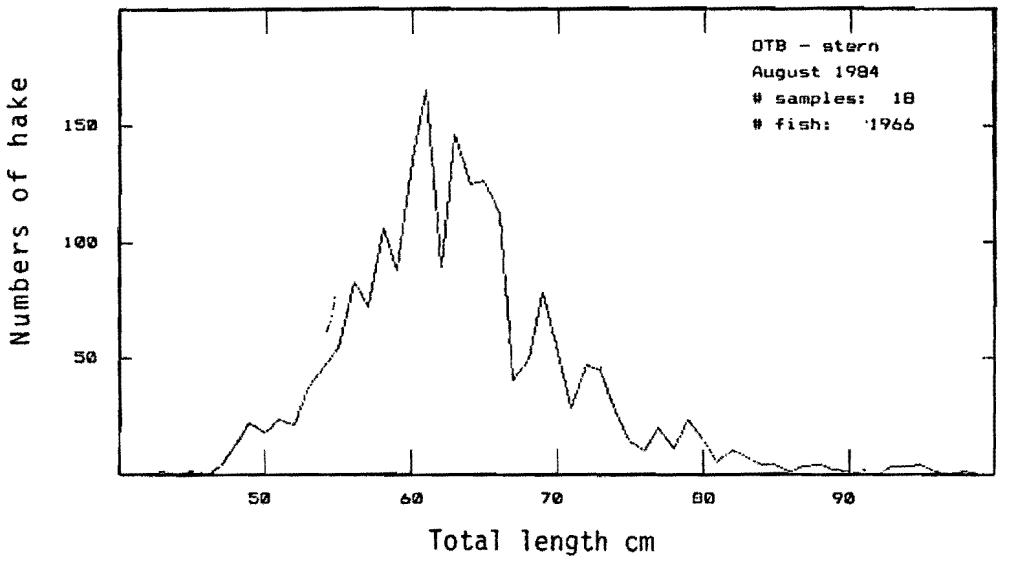
YEAR :	70	71	72	73	74	75	76
AGE :							
3 :	0.920	0.920	0.940	0.970	0.990	1.090	0.840
4 :	1.330	1.330	1.310	1.280	1.260	1.150	1.310
5 :	1.600	1.600	1.570	1.550	1.520	1.430	1.710
6 :	2.000	2.000	1.940	1.880	1.820	1.630	2.030
7 :	2.290	2.290	2.260	2.230	2.190	2.080	2.290
8 :	2.370	2.370	2.380	2.390	2.400	2.310	2.580
9 :	3.100	3.100	3.070	3.040	3.010	2.900	2.880
10 :	2.370	2.370	2.770	3.180	3.580	3.930	4.210
11 :	2.970	2.970	3.400	3.820	4.250	4.680	4.600
12 :	3.800	3.800	3.990	4.180	4.370	4.560	4.730
13 :	3.220	3.220	3.510	3.810	4.100	4.390	4.340
MEAN :	2.361	2.361	2.467	2.575	2.681	2.741	2.865
MEAN/POP:	1.468	1.481	1.498	1.521	1.472	1.387	1.351

YEAR :	77	78	79	80	81	82	83	84
AGE :								
3 :	0.830	0.760	0.730	0.750	0.800	0.920	1.060	1.040
4 :	1.310	1.240	1.230	1.240	1.210	1.410	1.350	1.290
5 :	1.710	1.620	1.600	1.640	1.590	1.640	1.910	1.670
6 :	2.030	2.080	2.110	2.200	2.190	2.360	2.220	2.210
7 :	2.300	2.650	2.620	2.580	2.570	2.590	2.810	2.680
8 :	2.590	2.870	3.000	3.140	3.130	3.110	3.210	3.230
9 :	2.900	3.690	3.710	3.620	3.860	3.430	3.470	3.530
10 :	4.230	4.750	4.470	4.010	3.800	3.900	4.460	4.390
11 :	4.590	5.870	5.450	6.850	8.180	3.760	6.670	4.590
12 :	4.790	6.280	5.590	4.870	7.160	5.480	8.350	6.010
13 :	4.340	5.370	6.200	5.490	4.280	4.920	10.730	9.030
MEAN :	2.875	3.380	3.337	3.308	3.525	3.047	4.204	3.606
MEAN/POP:	1.338	1.380	1.511	1.672	1.685	1.674	1.685	1.671

Figure 1. see next page for caption.







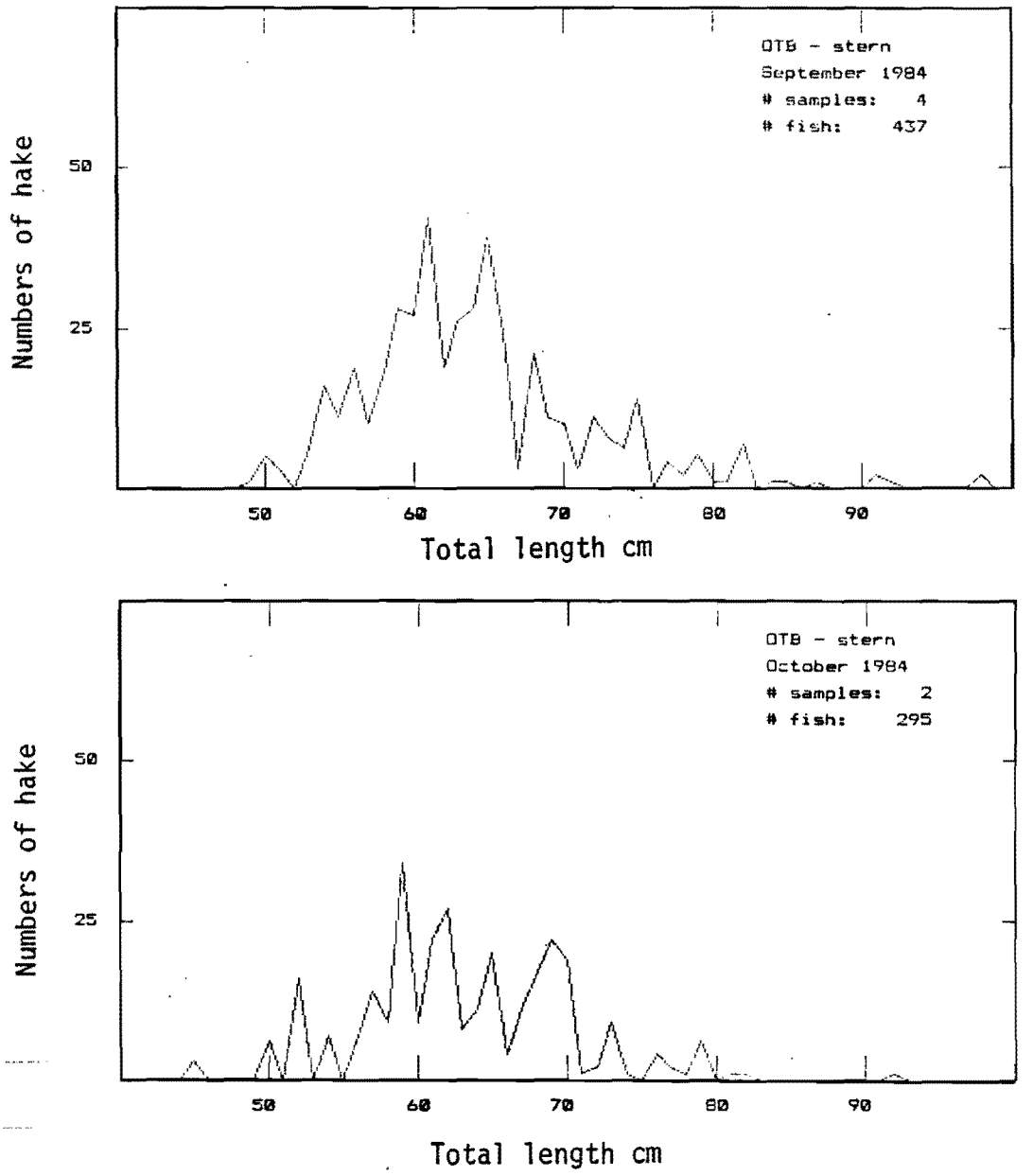
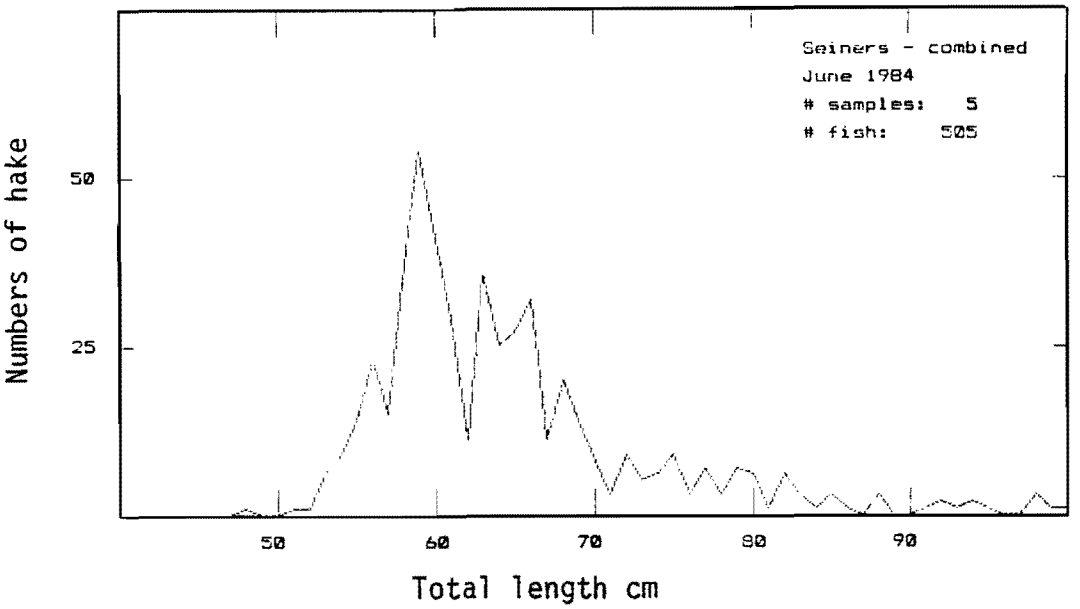
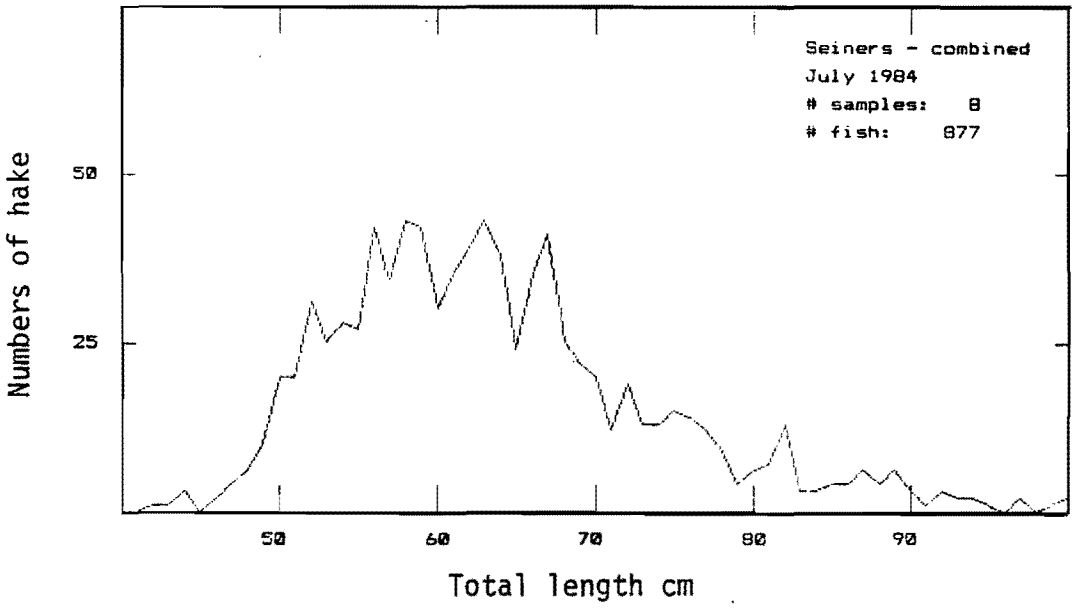


Figure 1. con't
Monthly length frequencies of white hake from tonnage class 0 and 1 stern trawlers from NAFO sub-division 4Tg in 1984. These fish were landed mainly on the eastern end of P.E.I. - probably from the Beach Point / Murray Harbour areas.





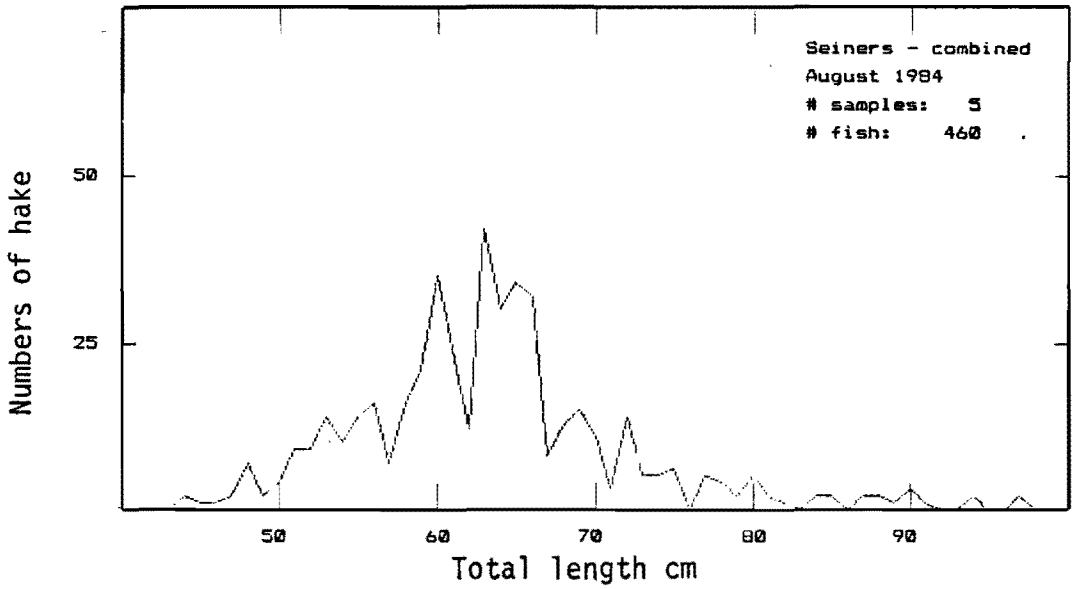


Figure 2. see next page for caption.

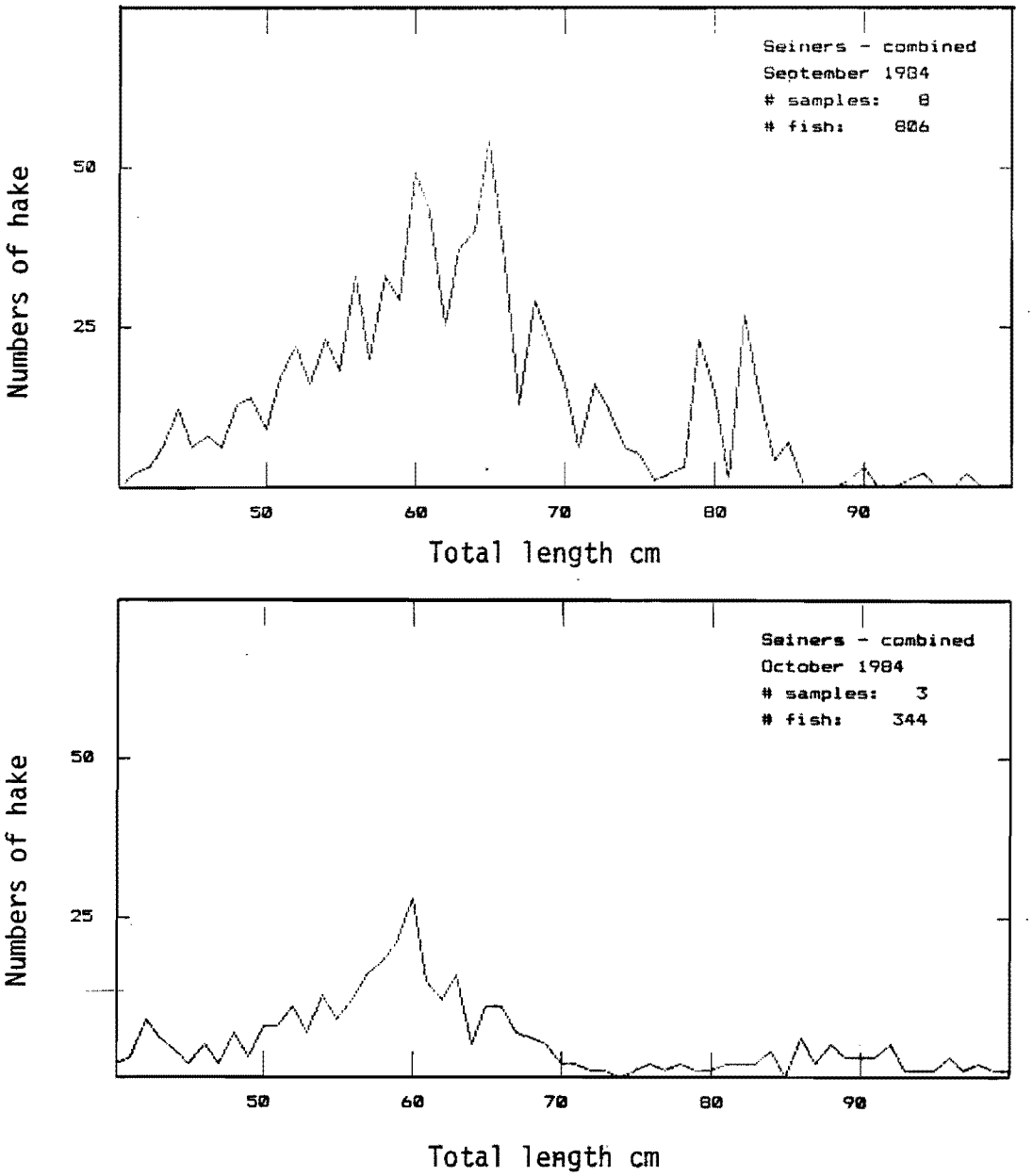


Figure 2. con't
Monthly length frequencies of white hake from tonnage class 0 and 1 Danish and Scottish seiners fishing in NAFO sub-division 4Tg in 1984. These fish were landed mainly on the eastern end of P.E.I. - probably from the Souris and Northlake areas.

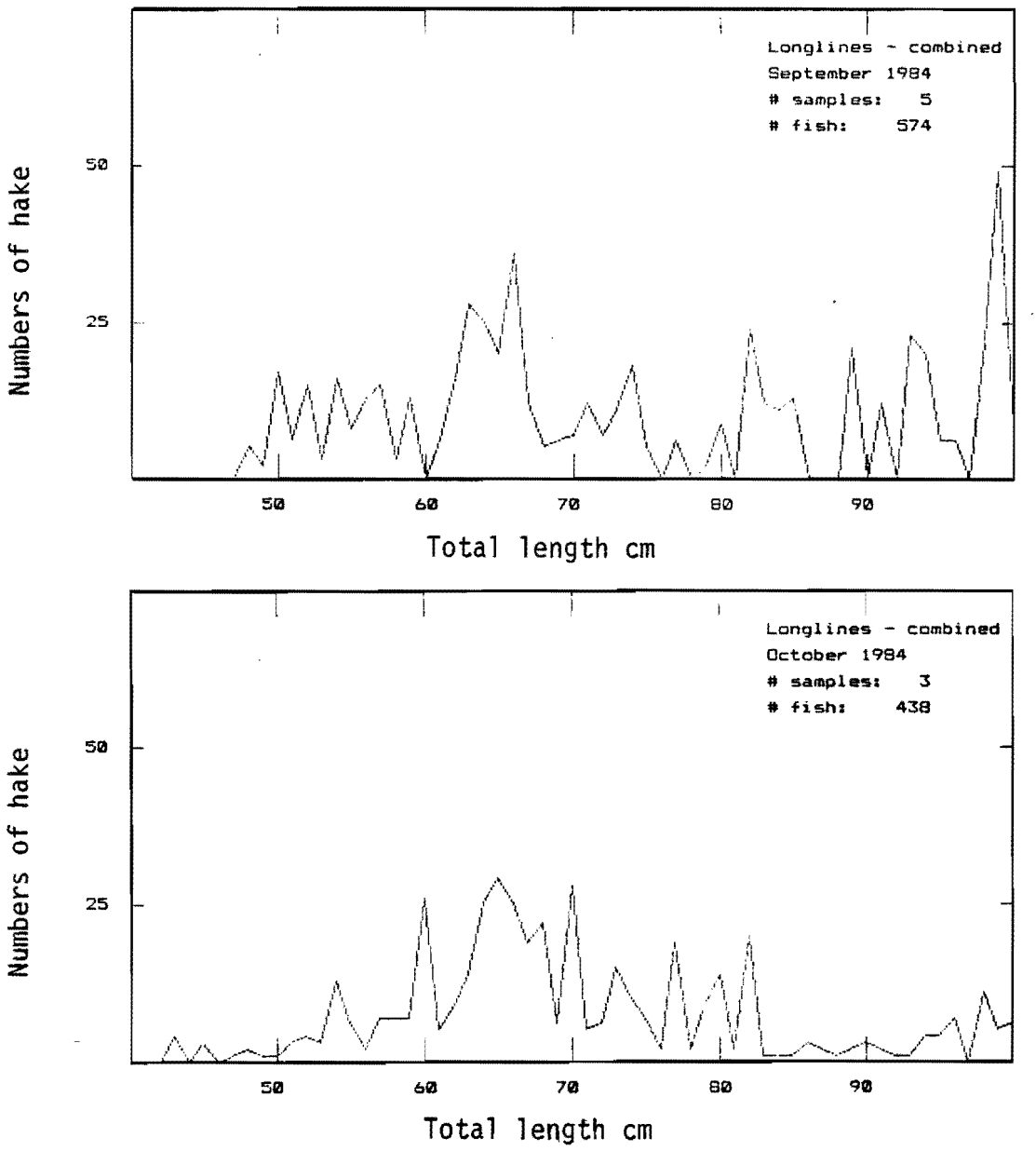


Figure 3. Monthly length frequencies of white hake from tonnage class 0 and 1 longliners fishing in NAFO sub-division 4Tg in 1984. These fish were landed mainly on the eastern end of P.E.I. - probably from the Beach Point / Murray Harbour areas.

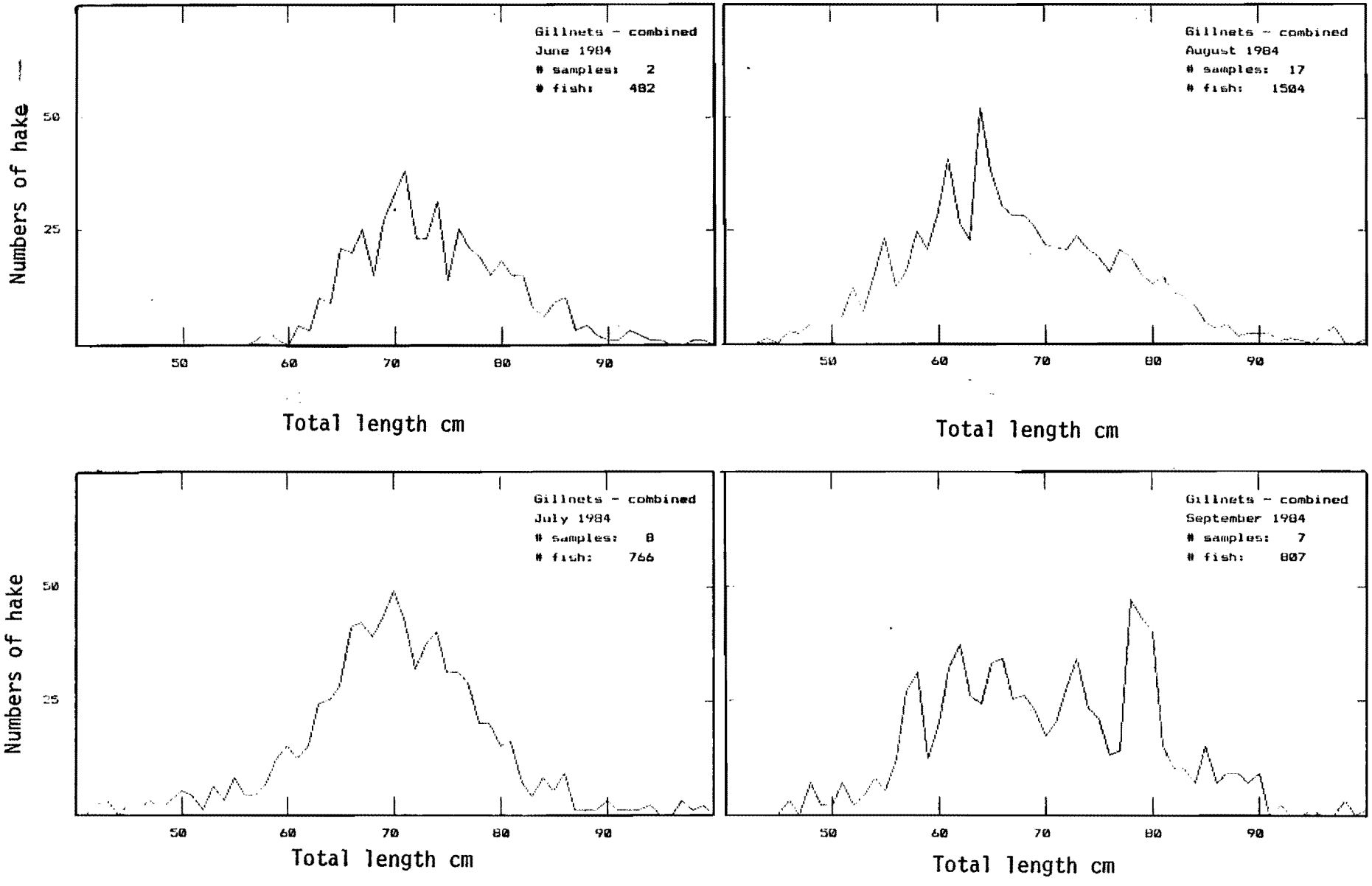


Figure 4. Monthly length frequencies of white hake from tonnage class 0 and 1 gillnetters from NAFO sub-division 4Tg in 1984. These fish were landed mainly on the eastern end of P.E.I. - probably from the Beach Point / Murray Harbour areas.

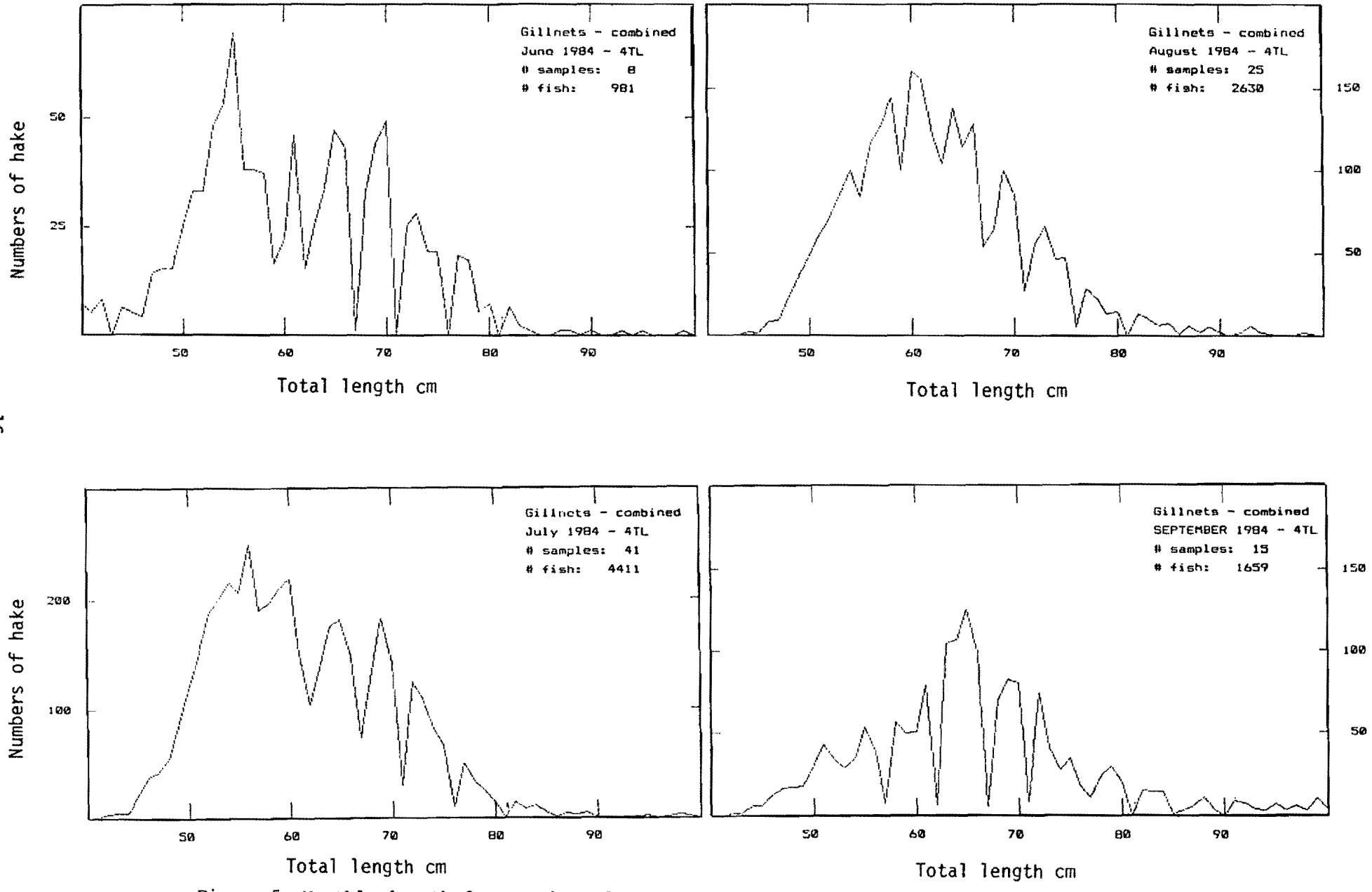


Figure 5. Monthly length frequencies of white hake from tonnage class 0 and 1 gillnetters from NAFO sub-division 4Tl in 1984. These fish were landed mainly on the western end of P.E.I. - probably from the Tignish area.

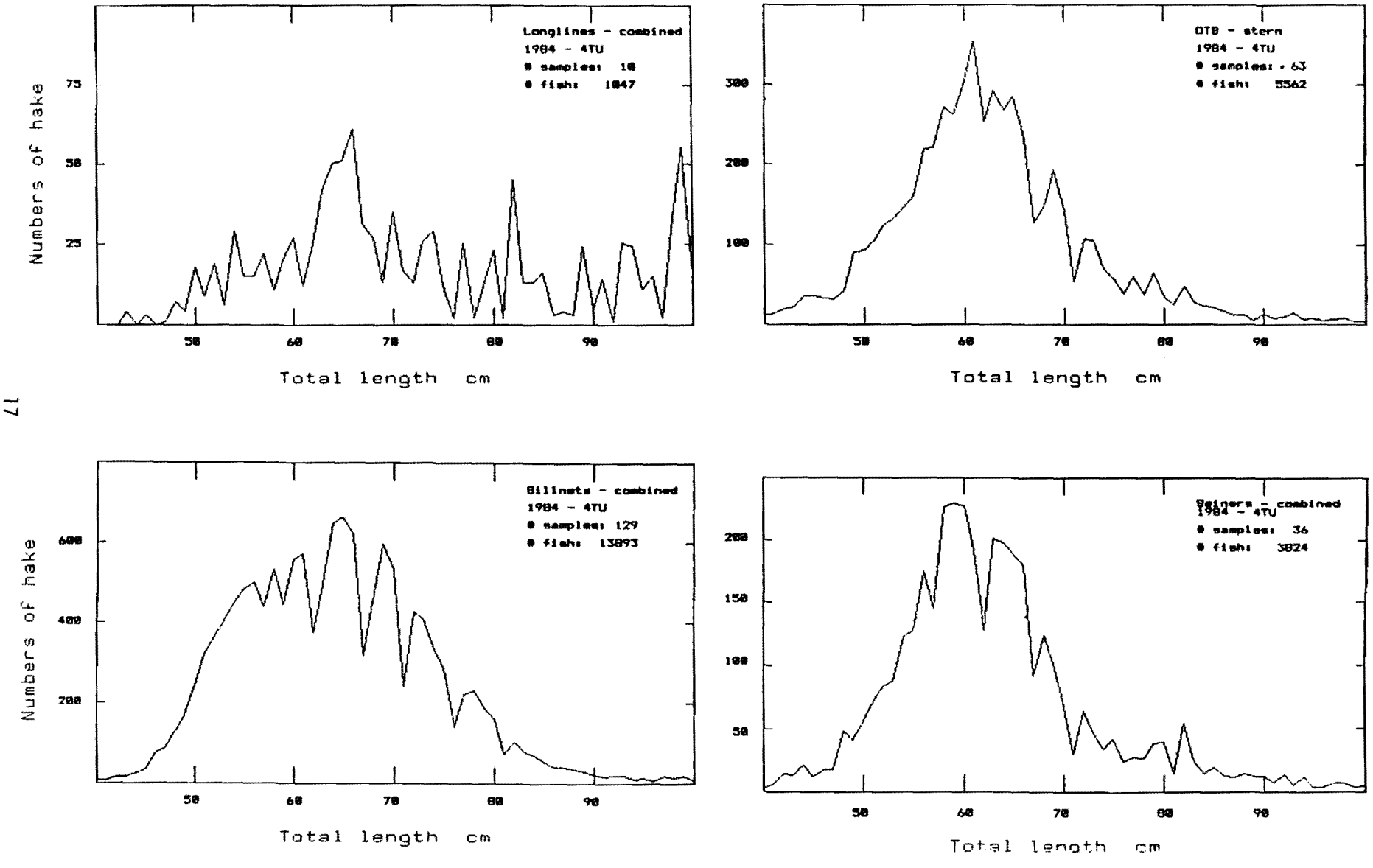


Figure 6. Length frequencies of Gulf white hake from NAFO division 4T in 1984 - all areas all months combined.

APPENDIX I.

Samples used in the construction of the catch numbers at age matrix for southern Gulf hake. Under the heading KEY is the source of the sample age-length key used to distribute the catch over the appropriate age groups. Under the heading CATCH is the source and tonnage broken down by the key. Dates are indicated as yy/yy-mm/mm with an A or L if the key is a composite comprising 'A'ges from one period and 'L'engths from another.

YEAR	-- K E Y --		-- C A T C H --			
	DATE	GEAR	DATE	GEAR	TONNES	TOTAL
1970	66/67	OTB/SNU	70	OTB/SNU	1845	
	75-82A	GN/LL	70	GN/LL	2534	
	66-81L	GN/LL				
	66/67	all	70	other	1289	
						5668
1971	66/67	OTB/SNU	71	OTB/SNU	2155	
	75-82A	GN/LL	71	GN/LL	2324	
	66-81L	GN/LL				
	66/67	all	71	other	1228	
						5707
1972	66/67	OTB/SNU	72	OTB/SNU	1575	
	75-82A	GN/LL	72	GN/LL	2794	
	66-81L	GN/LL				
	66/67	all	72	other	720	
	75/76	OTB/SNU	72	OTB/SNU	428	
	75/76	all	72	other	240	
						5757
1973	66/67	OTB/SNU	73	OTB/SNU	1335	
	75-82A	GN/LL	73	GN/LL	2310	
	66-81L	GN/LL				
	66/67	all	73	other	356	
	75/76	OTB/SNU	73	OTB/SNU	1344	
	75/76	all	73	other	357	
						5702
1974	66/67	OTB/SNU	74	OTB/SNU	440	
	75-82A	GN/LL	74	GN/LL	1445	
	66-81L	GN/LL				
	66/67	all	74	other	103	
	75/76	OTB/SNU	74	OTB/SNU	1319	
	75/76	all	74	other	309	
						3616
1975	75/76	OTB/SNU	75	OTB/SNU	1882	
	75-82A	GN/LL	75	GN/LL	1609	
	66-81L	GN/LL				
	75/76	all	75	other	634	
						4125

1976	75/76/77	OTB/SNU	76	OTB/SNU	1827	
	75-82A	GN/LL	76	GN/LL	1330	
	66-81L	GN/LL				
	75/76/77	all	76	other	601	
						3758
1977	75/76/77	OTB/SNU	77	OTB/SNU	1635	
	75-82A	GN/LL	77	GN/LL	1531	
	66-81L	GN/LL				
	75/76/77	all	77	other	818	
						3984
1978	75/76/77	OTB/SNU	78	OTB/SNU	1524	
	75-81	GN/LL	78	GN/LL	1785	
	75/76/77	all	78	other	310	
	81/82	OTB/SNU	78	OTB/SNU	508	
	81/82	GN/LL	78	GN/LL	500	
	81/82	all	78	other	198	
						4825
1979	76/77	OTB/SNU	79	OTB/SNU	1869	
	75-81	GN/LL	79	GN/LL	1834	
	76/77	all	79	other	352	
	81/82	OTB/SNU	79	OTB/SNU	1869	
	81/82	GN/LL	79	GN/LL	1834	
	81/82	all	79	other	352	
						8110
1980	77/81	OTB/SNU	80	OTB/SNU	2523	
	77/81/82	GN/LL	80	GN/LL	2831	
	77/81/82	all	80	other	858	
	81/82	OTB/SNU	80	OTB/SNU	2522	
	81/82	GN/LL	80	GN/LL	2832	
	81/82	all	80	other	857	
						12423
1981	81	OTB/SNU	80	OTB/SNU	6655	
	81/82	GN/LL	80	GN/LL	6973	
	81/82	all	80	other	411	
						14039
1982	82A-all	OTB/SNU	82-01/07	OTB/SNU	2270	
	82L-01/07	OTB/SNU				
	82A-all	OTB/SNU	82-08/12	OTB/SNU	1684	
	82L-08/12	OTB/SNU				
	82A-all	GN/LL	82-01/07	GN/LL	2220	
	82L-01/07	GN/LL				
	82A-all	GN/LL	82-08/12	GN/LL	3621	
	82L-08/12	GN/LL				
	82A-all	all	82-01/07	other	221	
	82L-01/07	all				
	82A-all	all	82-08/12	other	337	
	82L-08/12	all				
						10353

1983	83A-all	OTB/SNU	83-01/06	OTB/SNU	562	
	83L-01/06	OTB/SNU				
	83A-all	OTB/SNU	83-07/08	OTB/SNU	1729	
	83L-07/08	OTB/SNU				
	83A-all	OTB/SNU	83-09/12	OTB/SNU	793	
	83L-09/12	OTB/SNU				
	83A-all	GN/LL	83-01/06	GN/LL	529	
	83L-01/06	GN/LL				
	83A-all	GN/LL	83-07/08	GN/LL	1889	
	83L-07/08	GN/LL				
	83A-all	GN/LL	83-09/12	GN/LL	1405	
	83L-09/12	GN/LL				
	83A-all	all	83-01/06	other	79	
	83L-01/06	all				
	83A-all	all	83-07/08	other	377	
	83L-07/08	all				
	83A-all	all	83-09/12	other	90	
	83L-09/12	all				
						7453
1984	84-01/07	OTB/SNU	84-01/06	OTB/SNU	196	
	84-07/08	OTB/SNU	84-07/08	OTB/SNU	915	
	84-08/12	OTB/SNU	84-09/12	OTB/SNU	919	
	84-01/07	GN/LL	84-01/06	GN/LL	405	
	84-07/08	GN/LL	84-07/08	GN/LL	2048	
	84-08/12	GN/LL	84-09/12	GN/LL	1788	
	84-01/07	all	84-01/06	other	8	
	84-07/08	all	84-07/08	other	73	
						6353

APPENDIX II.

Inventory of Gulf white hake commercial samples collected from 1966 to 1984 by the Department of Fisheries and Oceans and from 1981 to 1984 by the P.E.I. Department of Fisheries and Labour. Sex 'undetermined' indicates when no samples were collected by sex while sex 'combined' indicates times when both sexed and non-sexed samples were collected - however it does not indicate a sexed sample. OTB-1 are side trawlers, OTB-2 are stern trawlers, GN are gill nets-unspecified, LL are longlines-unspecified, LHP are hand lines, SNU are Danish and Scottish seiners. The day is not captured on the age-length system and so all samples are collected the 'first' of each month. Areas refer to NAFO unit areas.

RECORD	SEX	DATE	AREA	GEAR	SIZED	AGED	TONNAGE
1316	UNDETERM	1 MAY 1966	4TF	OTB-1	147	0	26-50
1341	UNDETERM	1 AUG 1966	4TG	LL	169	0	0-25
1342	UNDETERM	1 AUG 1966	4TG	LL	103	0	0-25
1343	UNDETERM	1 AUG 1966	4TG	LL	49	0	0-25
1349	UNDETERM	1 SEP 1966	4TQ	OTB-1	224	0	51-150
1353	UNDETERM	1 SEP 1966	4TQ	OTB-1	178	0	51-150
1350	UNDETERM	1 SEP 1966	4TG	OTB-1	152	0	51-150
1351	UNDETERM	1 SEP 1966	4TG	LL	92	0	0-25
1352	UNDETERM	1 SEP 1966	4TG	LL	73	0	0-25
1358	UNDETERM	1 OCT 1966	4TG	OTB-1	158	0	51-150
1361	UNDETERM	1 OCT 1966	4TG	OTB-1	100	0	51-150
1382	UNDETERM	1 AUG 1967	4TG	OTB-1	144	29	51-150
1383	UNDETERM	1 AUG 1967	4TG	OTB-1	118	27	51-150
1392	UNDETERM	1 SEP 1967	4TG	OTB-1	112	34	51-150
1402	UNDETERM	1 OCT 1967	4TG	OTB-1	207	0	51-150
1955	UNDETERM	1 AUG 1975	4TG	SNU	99	32	0-25
1967	UNDETERM	1 AUG 1975	4TG	LL	101	50	0-25
414	UNDETERM	1 JUL 1976	4TG	OTB-1	152	39	26-50
415	UNDETERM	1 JUL 1976	4TG	SNU	200	38	0-25
451	UNDETERM	1 AUG 1976	4TG	SNU	200	43	0-25
479	UNDETERM	1 AUG 1976	4TL	SNU	200	31	51-150
457	UNDETERM	1 AUG 1976	4TL	GN	200	21	0-25
50	UNDETERM	1 JUN 1977	4TG	OTB-2	200	37	0-25
126	UNDETERM	1 JUL 1977	4TG	SNU	199	45	0-25
127	UNDETERM	1 JUL 1977	4TL	SNU	200	47	0-25
176	UNDETERM	1 AUG 1977	4TG	GN	200	20	0-25

33867	COMBINED	1	JUN	1981	4TL	OTB-2	56	0	0-25
2545	UNDETERM	1	JUN	1981	4TG	SNU	240	41	0-25
33868	COMBINED	1	JUN	1981	4TJ	GN	80	0	0-25
33869	COMBINED	1	JUN	1981	4TJ	GN	66	0	0-25
33870	COMBINED	1	JUN	1981	4TJ	GN	58	0	0-25
33871	COMBINED	1	JUN	1981	4TJ	GN	58	0	0-25
33872	COMBINED	1	JUN	1981	4TJ	GN	124	0	0-25
2567	UNDETERM	1	JUL	1981	4TG	SNU	284	38	0-25
2591	UNDETERM	1	AUG	1981	4TG	OTB-2	200	32	0-25
2592	UNDETERM	1	AUG	1981	4TG	SNU	200	25	0-25
2593	UNDETERM	1	AUG	1981	4TG	SNU	200	25	0-25
2594	UNDETERM	1	AUG	1981	4TG	SNU	200	23	0-25
2607	UNDETERM	1	SEP	1981	4TG	SNU	200	27	0-25
2612	UNDETERM	1	OCT	1981	4TG	SNU	305	33	51-150
2611	UNDETERM	1	OCT	1981	4TG	LL	305	40	0-25
33989	COMBINED	1	MAY	1982	4TG	SNU	17	0	0-25
2852	UNDETERM	1	JUN	1982	4TG	OTB-1	200	27	0-25
33945	COMBINED	1	JUN	1982	4TG	OTB-2	38	0	0-25
33987	COMBINED	1	JUN	1982	4TG	SNU	82	0	0-25
33998	COMBINED	1	JUN	1982	4TG	SNU	121	0	26-50
33903	COMBINED	1	JUN	1982	4TL	SNU	24	0	0-25
2853	UNDETERM	1	JUN	1982	4TN	SNU	202	42	51-150
2854	UNDETERM	1	JUN	1982	4TN	SNU	217	37	26-50
2855	UNDETERM	1	JUN	1982	4TN	SNU	83	34	51-150
33877	COMBINED	1	JUN	1982	4TL	GN	47	0	0-25
2858	UNDETERM	1	JUL	1982	4TG	OTB-1	200	36	0-25
33915	COMBINED	1	JUL	1982	4TG	OTB-2	41	0	0-25
33949	COMBINED	1	JUL	1982	4TG	OTB-2	27	0	0-25
33948	COMBINED	1	JUL	1982	4TG	SNU	34	0	0-25
33997	COMBINED	1	JUL	1982	4TG	SNU	68	0	0-25
33899	COMBINED	1	JUL	1982	4TL	SNU	43	0	0-25
33900	COMBINED	1	JUL	1982	4TL	SNU	115	0	0-25
33904	COMBINED	1	JUL	1982	4TL	SNU	44	0	0-25
33905	COMBINED	1	JUL	1982	4TL	SNU	28	0	0-25
2856	UNDETERM	1	JUL	1982	4TG	GN	211	27	0-25
2857	UNDETERM	1	JUL	1982	4TG	GN	158	26	0-25
33918	COMBINED	1	JUL	1982	4TG	GN	32	0	0-25
33920	COMBINED	1	JUL	1982	4TG	GN	47	0	0-25
33921	COMBINED	1	JUL	1982	4TG	GN	49	0	0-25
33922	COMBINED	1	JUL	1982	4TG	GN	52	0	0-25
33923	COMBINED	1	JUL	1982	4TG	GN	49	0	0-25
33933	COMBINED	1	JUL	1982	4TG	GN	35	0	0-25
33947	COMBINED	1	JUL	1982	4TG	GN	34	0	0-25
33954	COMBINED	1	JUL	1982	4TG	GN	24	0	0-25
33955	COMBINED	1	JUL	1982	4TG	GN	36	0	0-25
33956	COMBINED	1	JUL	1982	4TG	GN	49	0	0-25
33957	COMBINED	1	JUL	1982	4TG	GN	35	0	0-25
33958	COMBINED	1	JUL	1982	4TG	GN	42	0	0-25
33959	COMBINED	1	JUL	1982	4TG	GN	29	0	0-25
33966	COMBINED	1	JUL	1982	4TG	GN	49	0	0-25
33971	COMBINED	1	JUL	1982	4TG	GN	22	0	0-25
33972	COMBINED	1	JUL	1982	4TG	GN	57	0	0-25
34038	COMBINED	1	JUL	1982	4TG	GN	40	0	0-25
34037	COMBINED	1	JUL	1982	4TJ	GN	53	0	0-25

33883	COMBINED	1	JUL	1982	4TL	GN	33	0	0-25
33884	COMBINED	1	JUL	1982	4TL	GN	81	0	0-25
33885	COMBINED	1	JUL	1982	4TL	GN	48	0	0-25
34019	COMBINED	1	JUL	1982	4TL	GN	31	0	0-25
34020	COMBINED	1	JUL	1982	4TL	GN	68	0	0-25
34021	COMBINED	1	JUL	1982	4TL	GN	80	0	0-25
34022	COMBINED	1	JUL	1982	4TL	GN	36	0	0-25
34023	COMBINED	1	JUL	1982	4TL	GN	45	0	0-25
33937	COMBINED	1	JUL	1982	4TG	LL	40	0	0-25
33917	COMBINED	1	AUG	1982	4TG	OTB-2	110	0	26-50
33942	COMBINED	1	AUG	1982	4TG	OTB-2	20	0	0-25
33946	COMBINED	1	AUG	1982	4TG	OTB-2	43	0	0-25
33953	COMBINED	1	AUG	1982	4TG	OTB-2	107	0	0-25
33960	COMBINED	1	AUG	1982	4TG	OTB-2	57	0	0-25
34035	COMBINED	1	AUG	1982	4TJ	OTB-2	14	0	0-25
33878	COMBINED	1	AUG	1982	4TL	OTB-2	8	0	0-25
2860	UNDETERM	1	AUG	1982	4TG	SNU	200	28	0-25
33979	COMBINED	1	AUG	1982	4TG	SNU	53	0	0-25
33988	COMBINED	1	AUG	1982	4TG	SNU	61	0	0-25
33897	COMBINED	1	AUG	1982	4TL	SNU	152	0	0-25
33901	COMBINED	1	AUG	1982	4TL	SNU	64	0	0-25
33902	COMBINED	1	AUG	1982	4TL	SNU	20	0	0-25
2859	UNDETERM	1	AUG	1982	4TG	GN	200	25	0-25
2861	UNDETERM	1	AUG	1982	4TG	GN	201	26	0-25
2862	UNDETERM	1	AUG	1982	4TG	GN	313	37	0-25
2863	UNDETERM	1	AUG	1982	4TG	GN	200	27	0-25
33895	COMBINED	1	AUG	1982	4TG	GN	84	0	0-25
33924	COMBINED	1	AUG	1982	4TG	GN	47	0	0-25
33925	COMBINED	1	AUG	1982	4TG	GN	60	0	0-25
33926	COMBINED	1	AUG	1982	4TG	GN	40	0	0-25
33927	COMBINED	1	AUG	1982	4TG	GN	51	0	0-25
33928	COMBINED	1	AUG	1982	4TG	GN	66	0	0-25
33929	COMBINED	1	AUG	1982	4TG	GN	57	0	0-25
33930	COMBINED	1	AUG	1982	4TG	GN	76	0	0-25
33931	COMBINED	1	AUG	1982	4TG	GN	74	0	0-25
33932	COMBINED	1	AUG	1982	4TG	GN	74	0	26-50
33934	COMBINED	1	AUG	1982	4TG	GN	72	0	26-50
33935	COMBINED	1	AUG	1982	4TG	GN	51	0	0-25
33938	COMBINED	1	AUG	1982	4TG	GN	9	0	0-25
33941	COMBINED	1	AUG	1982	4TG	GN	52	0	0-25
33961	COMBINED	1	AUG	1982	4TG	GN	47	0	0-25
33973	COMBINED	1	AUG	1982	4TG	GN	30	0	0-25
33974	COMBINED	1	AUG	1982	4TG	GN	35	0	0-25
33975	COMBINED	1	AUG	1982	4TG	GN	24	0	0-25
33976	COMBINED	1	AUG	1982	4TG	GN	59	0	0-25
33977	COMBINED	1	AUG	1982	4TG	GN	52	0	0-25
33980	COMBINED	1	AUG	1982	4TG	GN	70	0	0-25
33981	COMBINED	1	AUG	1982	4TG	GN	46	0	0-25
33983	COMBINED	1	AUG	1982	4TG	GN	51	0	0-25
33984	COMBINED	1	AUG	1982	4TG	GN	47	0	0-25
33985	COMBINED	1	AUG	1982	4TG	GN	42	0	0-25
34036	COMBINED	1	AUG	1982	4TG	GN	30	0	0-25
33873	COMBINED	1	AUG	1982	4TL	GN	73	0	0-25
33874	COMBINED	1	AUG	1982	4TL	GN	61	0	0-25
33875	COMBINED	1	AUG	1982	4TL	GN	64	0	0-25

33881	COMBINED	1	AUG	1982	4TL	GN	78	0	0-25
33882	COMBINED	1	AUG	1982	4TL	GN	81	0	0-25
33886	COMBINED	1	AUG	1982	4TL	GN	70	0	0-25
33887	COMBINED	1	AUG	1982	4TL	GN	28	0	0-25
33888	COMBINED	1	AUG	1982	4TL	GN	62	0	0-25
33896	COMBINED	1	AUG	1982	4TL	GN	79	0	0-25
34004	COMBINED	1	AUG	1982	4TL	GN	69	0	0-25
34005	COMBINED	1	AUG	1982	4TL	GN	118	0	0-25
34006	COMBINED	1	AUG	1982	4TL	GN	90	0	0-25
34007	COMBINED	1	AUG	1982	4TL	GN	113	0	0-25
34008	COMBINED	1	AUG	1982	4TL	GN	124	0	0-25
34009	COMBINED	1	AUG	1982	4TL	GN	96	0	0-25
34017	COMBINED	1	AUG	1982	4TL	GN	59	0	0-25
34018	COMBINED	1	AUG	1982	4TL	GN	56	0	0-25
34024	COMBINED	1	AUG	1982	4TL	GN	57	0	0-25
34025	COMBINED	1	AUG	1982	4TL	GN	35	0	0-25
34034	COMBINED	1	AUG	1982	4TL	GN	74	0	0-25
2866	UNDETERM	1	AUG	1982	4TG	LL	117	0	0-25
33939	COMBINED	1	AUG	1982	4TG	LL	43	0	0-25
33963	COMBINED	1	AUG	1982	4TG	LL	79	0	0-25
33967	COMBINED	1	AUG	1982	4TG	LL	50	0	0-25
33978	COMBINED	1	AUG	1982	4TG	LL	43	0	0-25
33982	COMBINED	1	AUG	1982	4TG	LL	73	0	0-25
33994	COMBINED	1	AUG	1982	4TG	LL	34	0	0-25
34000	COMBINED	1	AUG	1982	4TG	LL	44	0	0-25
2864	UNDETERM	1	AUG	1982	4TL	LL	202	51	0-25
2865	UNDETERM	1	AUG	1982	4TG	LHP	53	34	0-25
33907	COMBINED	1	SEP	1982	4TG	OTB-2	90	0	0-25
33908	COMBINED	1	SEP	1982	4TG	OTB-2	98	0	0-25
33909	COMBINED	1	SEP	1982	4TG	OTB-2	68	0	0-25
33910	COMBINED	1	SEP	1982	4TG	OTB-2	22	0	0-25
33911	COMBINED	1	SEP	1982	4TG	OTB-2	47	0	0-25
33912	COMBINED	1	SEP	1982	4TG	OTB-2	37	0	0-25
33913	COMBINED	1	SEP	1982	4TG	OTB-2	19	0	0-25
33914	COMBINED	1	SEP	1982	4TG	OTB-2	58	0	0-25
33916	COMBINED	1	SEP	1982	4TG	OTB-2	67	0	0-25
33919	COMBINED	1	SEP	1982	4TG	OTB-2	28	0	0-25
33940	COMBINED	1	SEP	1982	4TG	OTB-2	65	0	0-25
33944	COMBINED	1	SEP	1982	4TG	OTB-2	39	0	0-25
33950	COMBINED	1	SEP	1982	4TG	OTB-2	28	0	0-25
33951	COMBINED	1	SEP	1982	4TG	OTB-2	66	0	0-25
33952	COMBINED	1	SEP	1982	4TG	OTB-2	76	0	0-25
33964	COMBINED	1	SEP	1982	4TG	OTB-2	24	0	0-25
33968	COMBINED	1	SEP	1982	4TG	OTB-2	88	0	0-25
33969	COMBINED	1	SEP	1982	4TG	OTB-2	27	0	0-25
33970	COMBINED	1	SEP	1982	4TG	OTB-2	54	0	0-25
33990	COMBINED	1	SEP	1982	4TG	OTB-2	46	0	0-25
33991	COMBINED	1	SEP	1982	4TG	OTB-2	43	0	0-25
33993	COMBINED	1	SEP	1982	4TG	OTB-2	38	0	0-25
33898	COMBINED	1	SEP	1982	4TL	SNU	122	0	0-25
33962	COMBINED	1	SEP	1982	4TG	GN	40	0	0-25
33965	COMBINED	1	SEP	1982	4TG	GN	27	0	0-25
33986	COMBINED	1	SEP	1982	4TG	GN	64	0	0-25
33992	COMBINED	1	SEP	1982	4TG	GN	32	0	0-25
34001	COMBINED	1	SEP	1982	4TG	GN	80	0	0-25

34002	COMBINED	1	SEP	1982	4TG	GN	7	0	0-25
34003	COMBINED	1	SEP	1982	4TG	GN	25	0	0-25
33876	COMBINED	1	SEP	1982	4TL	GN	22	0	0-25
33880	COMBINED	1	SEP	1982	4TL	GN	122	0	0-25
33889	COMBINED	1	SEP	1982	4TL	GN	67	0	0-25
33890	COMBINED	1	SEP	1982	4TL	GN	66	0	0-25
33891	COMBINED	1	SEP	1982	4TL	GN	85	0	0-25
33892	COMBINED	1	SEP	1982	4TL	GN	98	0	0-25
34010	COMBINED	1	SEP	1982	4TL	GN	46	0	0-25
34011	COMBINED	1	SEP	1982	4TL	GN	64	0	0-25
34012	COMBINED	1	SEP	1982	4TL	GN	56	0	0-25
34013	COMBINED	1	SEP	1982	4TL	GN	72	0	0-25
34014	COMBINED	1	SEP	1982	4TL	GN	169	0	0-25
34016	COMBINED	1	SEP	1982	4TL	GN	79	0	0-25
34026	COMBINED	1	SEP	1982	4TL	GN	75	0	0-25
34027	COMBINED	1	SEP	1982	4TL	GN	83	0	0-25
34028	COMBINED	1	SEP	1982	4TL	GN	98	0	0-25
34029	COMBINED	1	SEP	1982	4TL	GN	67	0	0-25
34030	COMBINED	1	SEP	1982	4TL	GN	70	0	0-25
33906	COMBINED	1	OCT	1982	4TG	OTB-2	55	0	0-25
33936	COMBINED	1	OCT	1982	4TG	OTB-2	60	0	0-25
33943	COMBINED	1	OCT	1982	4TG	OTB-2	18	0	0-25
33996	COMBINED	1	OCT	1982	4TG	OTB-2	61	0	0-25
33999	COMBINED	1	OCT	1982	4TG	OTB-2	12	0	0-25
33879	COMBINED	1	OCT	1982	4TL	GN	79	0	0-25
33893	COMBINED	1	OCT	1982	4TL	GN	67	0	0-25
33894	COMBINED	1	OCT	1982	4TL	GN	79	0	0-25
34031	COMBINED	1	OCT	1982	4TL	GN	73	0	0-25
34032	COMBINED	1	OCT	1982	4TL	GN	62	0	0-25
34033	COMBINED	1	OCT	1982	4TL	GN	75	0	0-25
33995	COMBINED	1	OCT	1982	4TG	LL	40	0	0-25
34015	COMBINED	1	OCT	1982	4TL	LL	44	0	0-25
34139	COMBINED	1	MAY	1983	4TL	SNU	55	0	26-50
3300	UNDETERM	1	JUN	1983	4TU	OTB-2	211	30	51-150
3298	UNDETERM	1	JUN	1983	4TF	OTB-2	260	27	51-150
3299	UNDETERM	1	JUN	1983	4TF	OTB-2	228	33	51-150
34141	COMBINED	1	JUN	1983	4TG	OTB-2	104	0	26-50
34100	COMBINED	1	JUN	1983	4TH	OTB-2	63	0	0-25
34140	COMBINED	1	JUN	1983	4TL	OTB-2	35	0	0-25
34083	COMBINED	1	JUN	1983	4TL	PTB	52	0	0-25
3296	COMBINED	1	JUN	1983	4TG	SNU	235	48	0-25
3297	UNDETERM	1	JUN	1983	4TG	SNU	92	33	51-150
34138	COMBINED	1	JUN	1983	4TG	SNU	202	0	26-50
34157	COMBINED	1	JUN	1983	4TG	SNU	212	0	0-25
34163	COMBINED	1	JUN	1983	4TG	SNU	107	0	26-50
34049	COMBINED	1	JUN	1983	4TL	GN	51	0	0-25
34077	COMBINED	1	JUN	1983	4TL	GN	55	0	0-25
34078	COMBINED	1	JUN	1983	4TL	GN	55	0	0-25
34080	COMBINED	1	JUN	1983	4TL	GN	61	0	0-25
34081	COMBINED	1	JUN	1983	4TL	GN	36	0	0-25
34082	COMBINED	1	JUN	1983	4TL	GN	62	0	0-25
34084	COMBINED	1	JUN	1983	4TL	GN	60	0	0-25
34085	COMBINED	1	JUN	1983	4TL	GN	46	0	0-25
34086	COMBINED	1	JUN	1983	4TL	GN	54	0	0-25

34087	COMBINED	1	JUN	1983	4TL	GN	70	0	0-25
34200	COMBINED	1	JUN	1983	4TL	GN	56	0	0-25
34212	COMBINED	1	JUN	1983	4TL	GN	56	0	0-25
34213	COMBINED	1	JUN	1983	4TL	GN	75	0	0-25
34214	COMBINED	1	JUN	1983	4TL	GN	68	0	0-25
34215	COMBINED	1	JUN	1983	4TL	GN	60	0	0-25
34216	COMBINED	1	JUN	1983	4TL	GN	67	0	0-25
34079	COMBINED	1	JUN	1983	4TL	LL	74	0	0-25
34116	COMBINED	1	JUL	1983	4TG	OTB-2	86	0	0-25
34132	COMBINED	1	JUL	1983	4TG	OTB-2	45	0	0-25
34133	COMBINED	1	JUL	1983	4TG	OTB-2	20	0	0-25
34134	COMBINED	1	JUL	1983	4TG	OTB-2	56	0	0-25
34158	COMBINED	1	JUL	1983	4TG	OTB-2	31	0	0-25
34162	COMBINED	1	JUL	1983	4TG	OTB-2	9	0	0-25
3302	UNDETERM	1	JUL	1983	4TH	OTB-2	135	26	0-25
3303	UNDETERM	1	JUL	1983	4TH	OTB-2	247	29	0-25
34101	COMBINED	1	JUL	1983	4TH	OTB-2	59	0	0-25
34103	COMBINED	1	JUL	1983	4TH	OTB-2	72	0	0-25
34088	COMBINED	1	JUL	1983	4TL	OTB-2	66	0	0-25
34094	COMBINED	1	JUL	1983	4TL	OTB-2	55	0	0-25
34143	COMBINED	1	JUL	1983	4TG	SNU	47	0	0-25
34145	COMBINED	1	JUL	1983	4TG	SNU	115	0	0-25
34091	COMBINED	1	JUL	1983	4TL	SNU	86	0	0-25
34142	COMBINED	1	JUL	1983	4TL	SNU	178	0	0-25
3301	UNDETERM	1	JUL	1983	4TG	GN	85	21	0-25
34111	COMBINED	1	JUL	1983	4TG	GN	85	0	0-25
34112	COMBINED	1	JUL	1983	4TG	GN	99	0	0-25
34113	COMBINED	1	JUL	1983	4TG	GN	72	0	0-25
34114	COMBINED	1	JUL	1983	4TG	GN	102	0	0-25
34115	COMBINED	1	JUL	1983	4TG	GN	92	0	0-25
34119	COMBINED	1	JUL	1983	4TG	GN	23	0	0-25
34120	COMBINED	1	JUL	1983	4TG	GN	68	0	0-25
34121	COMBINED	1	JUL	1983	4TG	GN	71	0	0-25
34135	COMBINED	1	JUL	1983	4TG	GN	66	0	0-25
34136	COMBINED	1	JUL	1983	4TG	GN	70	0	0-25
34161	COMBINED	1	JUL	1983	4TG	GN	48	0	0-25
34221	COMBINED	1	JUL	1983	4TG	GN	80	0	0-25
34102	COMBINED	1	JUL	1983	4TH	GN	59	0	0-25
34062	COMBINED	1	JUL	1983	4TL	GN	53	0	0-25
34063	COMBINED	1	JUL	1983	4TL	GN	47	0	0-25
34064	COMBINED	1	JUL	1983	4TL	GN	57	0	0-25
34065	COMBINED	1	JUL	1983	4TL	GN	67	0	0-25
34066	COMBINED	1	JUL	1983	4TL	GN	72	0	0-25
34067	COMBINED	1	JUL	1983	4TL	GN	65	0	0-25
34068	COMBINED	1	JUL	1983	4TL	GN	56	0	0-25
34069	COMBINED	1	JUL	1983	4TL	GN	61	0	0-25
34070	COMBINED	1	JUL	1983	4TL	GN	63	0	0-25
34071	COMBINED	1	JUL	1983	4TL	GN	65	0	0-25
34072	COMBINED	1	JUL	1983	4TL	GN	73	0	0-25
34073	COMBINED	1	JUL	1983	4TL	GN	58	0	0-25
34074	COMBINED	1	JUL	1983	4TL	GN	61	0	0-25
34075	COMBINED	1	JUL	1983	4TL	GN	52	0	0-25
34076	COMBINED	1	JUL	1983	4TL	GN	50	0	0-25
34089	COMBINED	1	JUL	1983	4TL	GN	34	0	0-25
34090	COMBINED	1	JUL	1983	4TL	GN	65	0	0-25

34092	COMBINED	1	JUL	1983	4TL	GN	53	0	0-25
34197	COMBINED	1	JUL	1983	4TL	GN	53	0	0-25
34198	COMBINED	1	JUL	1983	4TL	GN	59	0	0-25
34199	COMBINED	1	JUL	1983	4TL	GN	66	0	0-25
34201	COMBINED	1	JUL	1983	4TL	GN	49	0	0-25
34202	COMBINED	1	JUL	1983	4TL	GN	65	0	0-25
34203	COMBINED	1	JUL	1983	4TL	GN	67	0	0-25
34204	COMBINED	1	JUL	1983	4TL	GN	63	0	0-25
34205	COMBINED	1	JUL	1983	4TL	GN	73	0	0-25
34206	COMBINED	1	JUL	1983	4TL	GN	76	0	0-25
34207	COMBINED	1	JUL	1983	4TL	GN	83	0	0-25
34208	COMBINED	1	JUL	1983	4TL	GN	49	0	0-25
34209	COMBINED	1	JUL	1983	4TL	GN	54	0	0-25
34210	COMBINED	1	JUL	1983	4TL	GN	52	0	0-25
34211	COMBINED	1	JUL	1983	4TL	GN	69	0	0-25
34217	COMBINED	1	JUL	1983	4TL	GN	48	0	0-25
34104	COMBINED	1	AUG	1983	4TG	OTB-2	74	0	0-25
34110	COMBINED	1	AUG	1983	4TG	OTB-2	90	0	0-25
34124	COMBINED	1	AUG	1983	4TG	OTB-2	85	0	0-25
34125	COMBINED	1	AUG	1983	4TG	OTB-2	51	0	0-25
34126	COMBINED	1	AUG	1983	4TG	OTB-2	27	0	0-25
34127	COMBINED	1	AUG	1983	4TG	OTB-2	45	0	0-25
34128	COMBINED	1	AUG	1983	4TG	OTB-2	52	0	0-25
34129	COMBINED	1	AUG	1983	4TG	OTB-2	33	0	0-25
34130	COMBINED	1	AUG	1983	4TG	OTB-2	12	0	0-25
34131	COMBINED	1	AUG	1983	4TG	OTB-2	25	0	0-25
34148	COMBINED	1	AUG	1983	4TG	OTB-2	21	0	0-25
34155	COMBINED	1	AUG	1983	4TG	OTB-2	25	0	0-25
34156	COMBINED	1	AUG	1983	4TG	OTB-2	41	0	0-25
34159	COMBINED	1	AUG	1983	4TG	OTB-2	33	0	0-25
34160	COMBINED	1	AUG	1983	4TG	OTB-2	42	0	0-25
34166	COMBINED	1	AUG	1983	4TG	OTB-2	62	0	0-25
34167	COMBINED	1	AUG	1983	4TG	OTB-2	25	0	0-25
3304	UNDETERM	1	AUG	1983	4TH	OTB-2	97	36	0-25
3305	UNDETERM	1	AUG	1983	4TH	OTB-2	177	43	0-25
3306	UNDETERM	1	AUG	1983	4TH	OTB-2	154	46	0-25
3307	UNDETERM	1	AUG	1983	4TH	OTB-2	24	0	0-25
3308	UNDETERM	1	AUG	1983	4TH	OTB-2	133	37	0-25
3310	COMBINED	1	AUG	1983	4TH	OTB-2	53	13	0-25
3311	UNDETERM	1	AUG	1983	4TH	OTB-2	104	0	0-25
3314	UNDETERM	1	AUG	1983	4TG	SNU	212	27	51-150
34107	COMBINED	1	AUG	1983	4TG	SNU	116	0	0-25
34171	COMBINED	1	AUG	1983	4TG	SNU	27	0	0-25
34093	COMBINED	1	AUG	1983	4TL	SNU	50	0	0-25
34095	COMBINED	1	AUG	1983	4TL	SNU	58	0	0-25
34096	COMBINED	1	AUG	1983	4TL	SNU	55	0	0-25
34099	COMBINED	1	AUG	1983	4TL	SNU	63	0	0-25
3309	UNDETERM	1	AUG	1983	4TG	GN	168	34	0-25
3312	COMBINED	1	AUG	1983	4TG	GN	51	19	0-25
3313	COMBINED	1	AUG	1983	4TG	GN	50	19	0-25
34165	COMBINED	1	AUG	1983	4TG	GN	22	0	0-25
34218	COMBINED	1	AUG	1983	4TG	GN	57	0	0-25
34219	COMBINED	1	AUG	1983	4TJ	GN	60	0	0-25
34220	COMBINED	1	AUG	1983	4TJ	GN	57	0	0-25
3315	UNDETERM	1	AUG	1983	4TL	GN	28	0	0-25

3316	UNDETERM	1	AUG	1983	4TL	GN	52	0	0-25
3317	UNDETERM	1	AUG	1983	4TL	GN	23	0	0-25
34042	COMBINED	1	AUG	1983	4TL	GN	77	0	0-25
34051	COMBINED	1	AUG	1983	4TL	GN	77	0	0-25
34052	COMBINED	1	AUG	1983	4TL	GN	67	0	0-25
34053	COMBINED	1	AUG	1983	4TL	GN	71	0	0-25
34054	COMBINED	1	AUG	1983	4TL	GN	58	0	0-25
34055	COMBINED	1	AUG	1983	4TL	GN	65	0	0-25
34056	COMBINED	1	AUG	1983	4TL	GN	51	0	0-25
34057	COMBINED	1	AUG	1983	4TL	GN	43	0	0-25
34058	COMBINED	1	AUG	1983	4TL	GN	55	0	0-25
34059	COMBINED	1	AUG	1983	4TL	GN	43	0	0-25
34060	COMBINED	1	AUG	1983	4TL	GN	61	0	0-25
34061	COMBINED	1	AUG	1983	4TL	GN	50	0	0-25
34179	COMBINED	1	AUG	1983	4TL	GN	64	0	0-25
34186	COMBINED	1	AUG	1983	4TL	GN	81	0	0-25
34187	COMBINED	1	AUG	1983	4TL	GN	60	0	0-25
34188	COMBINED	1	AUG	1983	4TL	GN	82	0	0-25
34189	COMBINED	1	AUG	1983	4TL	GN	82	0	0-25
34190	COMBINED	1	AUG	1983	4TL	GN	60	0	0-25
34191	COMBINED	1	AUG	1983	4TL	GN	53	0	0-25
34192	COMBINED	1	AUG	1983	4TL	GN	60	0	0-25
34193	COMBINED	1	AUG	1983	4TL	GN	56	0	0-25
34194	COMBINED	1	AUG	1983	4TL	GN	61	0	0-25
34195	COMBINED	1	AUG	1983	4TL	GN	60	0	0-25
34196	COMBINED	1	AUG	1983	4TL	GN	49	0	0-25
34164	COMBINED	1	AUG	1983	4TG	LL	38	0	0-25
3318	UNDETERM	1	SEP	1983	4TG	OTB-2	119	17	0-25
34105	COMBINED	1	SEP	1983	4TG	OTB-2	54	0	0-25
34106	COMBINED	1	SEP	1983	4TG	OTB-2	82	0	26-50
34108	COMBINED	1	SEP	1983	4TG	OTB-2	101	0	0-25
34109	COMBINED	1	SEP	1983	4TG	OTB-2	104	0	0-25
34117	COMBINED	1	SEP	1983	4TG	OTB-2	23	0	0-25
34122	COMBINED	1	SEP	1983	4TG	OTB-2	101	0	0-25
34123	COMBINED	1	SEP	1983	4TG	OTB-2	101	0	0-25
34137	COMBINED	1	SEP	1983	4TG	OTB-2	50	0	0-25
34150	COMBINED	1	SEP	1983	4TG	OTB-2	30	0	0-25
34151	COMBINED	1	SEP	1983	4TG	OTB-2	24	0	0-25
34152	COMBINED	1	SEP	1983	4TG	OTB-2	44	0	0-25
34153	COMBINED	1	SEP	1983	4TG	OTB-2	19	0	0-25
34154	COMBINED	1	SEP	1983	4TG	OTB-2	50	0	0-25
34222	COMBINED	1	SEP	1983	4TG	OTB-2	102	0	0-25
34118	COMBINED	1	SEP	1983	4TG	SNU	77	0	0-25
3319	UNDETERM	1	SEP	1983	4TG	GN	138	25	0-25
34144	COMBINED	1	SEP	1983	4TG	GN	67	0	0-25
34146	COMBINED	1	SEP	1983	4TG	GN	50	0	0-25
34147	COMBINED	1	SEP	1983	4TG	GN	27	0	0-25
34149	COMBINED	1	SEP	1983	4TG	GN	28	0	0-25
34223	COMBINED	1	SEP	1983	4TG	GN	60	0	0-25
34039	COMBINED	1	SEP	1983	4TL	GN	71	0	0-25
34040	COMBINED	1	SEP	1983	4TL	GN	69	0	0-25
34041	COMBINED	1	SEP	1983	4TL	GN	53	0	0-25
34043	COMBINED	1	SEP	1983	4TL	GN	80	0	0-25
34044	COMBINED	1	SEP	1983	4TL	GN	47	0	0-25
34045	COMBINED	1	SEP	1983	4TL	GN	89	0	0-25

34046	COMBINED	1	SEP	1983	4TL	GN	64	0	0-25
34047	COMBINED	1	SEP	1983	4TL	GN	73	0	0-25
34048	COMBINED	1	SEP	1983	4TL	GN	67	0	0-25
34050	COMBINED	1	SEP	1983	4TL	GN	53	0	0-25
34097	COMBINED	1	SEP	1983	4TL	GN	58	0	0-25
34098	COMBINED	1	SEP	1983	4TL	GN	88	0	0-25
34172	COMBINED	1	SEP	1983	4TL	GN	71	0	0-25
34173	COMBINED	1	SEP	1983	4TL	GN	68	0	0-25
34174	COMBINED	1	SEP	1983	4TL	GN	63	0	0-25
34175	COMBINED	1	SEP	1983	4TL	GN	60	0	0-25
34176	COMBINED	1	SEP	1983	4TL	GN	70	0	0-25
34177	COMBINED	1	SEP	1983	4TL	GN	109	0	0-25
34178	COMBINED	1	SEP	1983	4TL	GN	52	0	0-25
34180	COMBINED	1	SEP	1983	4TL	GN	82	0	0-25
34181	COMBINED	1	SEP	1983	4TL	GN	63	0	0-25
34182	COMBINED	1	SEP	1983	4TL	GN	95	0	0-25
34183	COMBINED	1	SEP	1983	4TL	GN	75	0	0-25
34184	COMBINED	1	SEP	1983	4TL	GN	50	0	0-25
34185	COMBINED	1	SEP	1983	4TL	GN	58	0	0-25
3320	COMBINED	1	OCT	1983	4TG	OTB-2	37	23	0-25
3321	UNDETERM	1	OCT	1983	4TG	OTB-2	48	13	0-25
34168	COMBINED	1	OCT	1983	4TG	OTB-2	83	0	0-25
34170	COMBINED	1	OCT	1983	4TG	OTB-2	59	0	0-25
3322	COMBINED	1	OCT	1983	4TG	SNU	239	45	51-150
34169	COMBINED	1	OCT	1983	4TG	SNU	203	0	26-50
3323	UNDETERM	1	OCT	1983	4TL	GN	125	0	0-25
3330	COMBINED	1	NOV	1983	4TG	SNU	103	50	51-150
3324	UNDETERM	1	NOV	1983	4TG	GN	263	29	0-25
3325	UNDETERM	1	NOV	1983	4TG	GN	368	39	0-25
3326	UNDETERM	1	NOV	1983	4TG	GN	203	22	0-25
3327	UNDETERM	1	NOV	1983	4TG	GN	78	13	0-25
3328	UNDETERM	1	NOV	1983	4TG	GN	207	23	0-25
3329	UNDETERM	1	NOV	1983	4TG	GN	89	12	0-25
33843	COMBINED	1	MAY	1984	4TL	GN	23	0	0-25
33627	COMBINED	1	JUN	1984	4TG	OTB-2	31	18	0-25
33776	COMBINED	1	JUN	1984	4TG	OTB-2	109	0	0-25
33777	COMBINED	1	JUN	1984	4TG	OTB-2	113	0	0-25
33779	COMBINED	1	JUN	1984	4TG	OTB-2	82	0	0-25
33645	COMBINED	1	JUN	1984	4TH	OTB-2	122	34	0-25
33646	COMBINED	1	JUN	1984	4TH	OTB-2	33	32	0-25
33657	COMBINED	1	JUN	1984	4TL	OTB-2	139	0	0-25
33731	COMBINED	1	JUN	1984	4TU	SNU	140	34	0-25
33751	COMBINED	1	JUN	1984	4TG	SNU	100	0	0-25
33766	COMBINED	1	JUN	1984	4TG	SNU	84	0	0-25
33769	COMBINED	1	JUN	1984	4TG	SNU	98	0	0-25
33774	COMBINED	1	JUN	1984	4TG	SNU	100	0	0-25
33775	COMBINED	1	JUN	1984	4TG	SNU	123	0	0-25
33654	COMBINED	1	JUN	1984	4TL	SNU	102	0	0-25
33805	COMBINED	1	JUN	1984	4TL	SNU	21	0	0-25
33623	COMBINED	1	JUN	1984	4TG	GN	305	44	0-25
33624	COMBINED	1	JUN	1984	4TG	GN	178	44	0-25
33675	COMBINED	1	JUN	1984	4TL	GN	165	0	0-25
33683	COMBINED	1	JUN	1984	4TL	GN	124	0	0-25
33841	COMBINED	1	JUN	1984	4TL	GN	138	0	0-25

33842	COMBINED	1	JUN	1984	4TL	GN	141	0	0-25
33849	COMBINED	1	JUN	1984	4TL	GN	58	0	0-25
33851	COMBINED	1	JUN	1984	4TL	GN	66	0	0-25
33854	COMBINED	1	JUN	1984	4TL	GN	150	0	0-25
33855	COMBINED	1	JUN	1984	4TL	GN	142	0	0-25
33752	COMBINED	1	JUN	1984	4TG	LHP	102	0	0-25
33862	COMBINED	1	JUL	1984	4TF	OTB-2	184	0	151-500
33863	COMBINED	1	JUL	1984	4TF	OTB-2	192	0	151-500
33722	COMBINED	1	JUL	1984	4TG	OTB-2	101	0	0-25
33723	COMBINED	1	JUL	1984	4TG	OTB-2	65	0	0-25
33724	COMBINED	1	JUL	1984	4TG	OTB-2	72	0	0-25
33747	COMBINED	1	JUL	1984	4TG	OTB-2	21	0	0-25
33749	COMBINED	1	JUL	1984	4TG	OTB-2	97	0	0-25
33753	COMBINED	1	JUL	1984	4TG	OTB-2	20	0	0-25
33781	COMBINED	1	JUL	1984	4TG	OTB-2	52	0	0-25
33782	COMBINED	1	JUL	1984	4TG	OTB-2	123	0	0-25
33788	COMBINED	1	JUL	1984	4TG	OTB-2	101	0	0-25
33643	COMBINED	1	JUL	1984	4TH	OTB-2	122	37	0-25
33647	COMBINED	1	JUL	1984	4TH	OTB-2	28	28	0-25
33648	COMBINED	1	JUL	1984	4TH	OTB-2	81	0	0-25
33687	COMBINED	1	JUL	1984	4TH	OTB-2	5	5	0-25
33688	COMBINED	1	JUL	1984	4TH	OTB-2	43	0	0-25
33689	COMBINED	1	JUL	1984	4TH	OTB-2	18	17	0-25
33690	COMBINED	1	JUL	1984	4TH	OTB-2	94	94	0-25
33658	COMBINED	1	JUL	1984	4TL	OTB-2	100	0	0-25
33708	COMBINED	1	JUL	1984	4TG	SNU	102	0	0-25
33748	COMBINED	1	JUL	1984	4TG	SNU	107	0	0-25
33750	COMBINED	1	JUL	1984	4TG	SNU	108	0	0-25
33764	COMBINED	1	JUL	1984	4TG	SNU	115	0	0-25
33771	COMBINED	1	JUL	1984	4TG	SNU	111	0	0-25
33772	COMBINED	1	JUL	1984	4TG	SNU	105	0	0-25
33773	COMBINED	1	JUL	1984	4TG	SNU	113	0	0-25
33787	COMBINED	1	JUL	1984	4TG	SNU	116	0	0-25
33649	COMBINED	1	JUL	1984	4TH	SNU	111	0	0-25
33653	COMBINED	1	JUL	1984	4TL	SNU	135	0	0-25
33720	COMBINED	1	JUL	1984	4TG	GN	101	0	0-25
33721	COMBINED	1	JUL	1984	4TG	GN	101	0	0-25
33732	COMBINED	1	JUL	1984	4TG	GN	72	26	0-25
33733	COMBINED	1	JUL	1984	4TG	GN	78	27	0-25
33765	COMBINED	1	JUL	1984	4TG	GN	109	0	0-25
33778	COMBINED	1	JUL	1984	4TG	GN	101	0	0-25
33783	COMBINED	1	JUL	1984	4TG	GN	105	0	0-25
33784	COMBINED	1	JUL	1984	4TG	GN	99	0	0-25
33859	COMBINED	1	JUL	1984	4TJ	GN	81	0	0-25
33650	COMBINED	1	JUL	1984	4TL	GN	49	47	0-25
33656	COMBINED	1	JUL	1984	4TL	GN	98	0	0-25
33659	COMBINED	1	JUL	1984	4TL	GN	92	0	0-25
33660	COMBINED	1	JUL	1984	4TL	GN	112	0	0-25
33664	COMBINED	1	JUL	1984	4TL	GN	126	0	0-25
33666	COMBINED	1	JUL	1984	4TL	GN	97	0	0-25
33667	COMBINED	1	JUL	1984	4TL	GN	139	0	0-25
33668	COMBINED	1	JUL	1984	4TL	GN	137	0	0-25
33669	COMBINED	1	JUL	1984	4TL	GN	131	0	0-25
33670	COMBINED	1	JUL	1984	4TL	GN	143	0	0-25
33671	COMBINED	1	JUL	1984	4TL	GN	148	0	0-25

33672	COMBINED	1	JUL	1984	4TL	GN	106	0	0-25
33673	COMBINED	1	JUL	1984	4TL	GN	121	0	0-25
33674	COMBINED	1	JUL	1984	4TL	GN	143	0	0-25
33676	COMBINED	1	JUL	1984	4TL	GN	105	0	0-25
33677	COMBINED	1	JUL	1984	4TL	GN	79	0	0-25
33679	COMBINED	1	JUL	1984	4TL	GN	123	0	0-25
33791	COMBINED	1	JUL	1984	4TL	GN	62	0	0-25
33792	COMBINED	1	JUL	1984	4TL	GN	67	0	0-25
33794	COMBINED	1	JUL	1984	4TL	GN	16	0	26-50
33795	COMBINED	1	JUL	1984	4TL	GN	62	0	0-25
33796	COMBINED	1	JUL	1984	4TL	GN	94	93	0-25
33821	COMBINED	1	JUL	1984	4TL	GN	176	0	0-25
33822	COMBINED	1	JUL	1984	4TL	GN	139	0	0-25
33823	COMBINED	1	JUL	1984	4TL	GN	143	0	0-25
33824	COMBINED	1	JUL	1984	4TL	GN	107	0	0-25
33828	COMBINED	1	JUL	1984	4TL	GN	109	0	0-25
33829	COMBINED	1	JUL	1984	4TL	GN	111	0	0-25
33830	COMBINED	1	JUL	1984	4TL	GN	14	0	0-25
33831	COMBINED	1	JUL	1984	4TL	GN	100	0	0-25
33832	COMBINED	1	JUL	1984	4TL	GN	123	0	0-25
33833	COMBINED	1	JUL	1984	4TL	GN	111	0	0-25
33834	COMBINED	1	JUL	1984	4TL	GN	126	0	0-25
33835	COMBINED	1	JUL	1984	4TL	GN	139	0	0-25
33837	COMBINED	1	JUL	1984	4TL	GN	99	0	0-25
33838	COMBINED	1	JUL	1984	4TL	GN	109	0	0-25
33839	COMBINED	1	JUL	1984	4TL	GN	103	0	0-25
33840	COMBINED	1	JUL	1984	4TL	GN	114	0	0-25
33845	COMBINED	1	JUL	1984	4TL	GN	133	0	0-25
33846	COMBINED	1	JUL	1984	4TL	GN	128	0	0-25
33850	COMBINED	1	JUL	1984	4TL	GN	128	0	0-25
33793	COMBINED	1	JUL	1984	4TL	LL	6	0	0-25
33780	COMBINED	1	JUL	1984	4TG	LHP	48	0	0-25
33655	COMBINED	1	JUL	1984	4TL	LHP	9	0	0-25
33630	COMBINED	1	AUG	1984	4TU	OTB-2	31	22	0-25
33634	COMBINED	1	AUG	1984	4TU	OTB-2	115	0	0-25
33635	COMBINED	1	AUG	1984	4TU	OTB-2	82	0	0-25
33636	COMBINED	1	AUG	1984	4TU	OTB-2	61	0	0-25
33629	COMBINED	1	AUG	1984	4TG	OTB-2	275	0	0-25
33693	COMBINED	1	AUG	1984	4TG	OTB-2	61	60	0-25
33694	COMBINED	1	AUG	1984	4TG	OTB-2	166	0	0-25
33705	COMBINED	1	AUG	1984	4TG	OTB-2	70	0	0-25
33706	COMBINED	1	AUG	1984	4TG	OTB-2	110	0	0-25
33711	COMBINED	1	AUG	1984	4TG	OTB-2	117	0	0-25
33712	COMBINED	1	AUG	1984	4TG	OTB-2	110	0	0-25
33713	COMBINED	1	AUG	1984	4TG	OTB-2	208	0	0-25
33717	COMBINED	1	AUG	1984	4TG	OTB-2	108	0	0-25
33718	COMBINED	1	AUG	1984	4TG	OTB-2	37	0	0-25
33719	COMBINED	1	AUG	1984	4TG	OTB-2	106	0	0-25
33725	COMBINED	1	AUG	1984	4TG	OTB-2	105	0	0-25
33726	COMBINED	1	AUG	1984	4TG	OTB-2	213	0	0-25
33727	COMBINED	1	AUG	1984	4TG	OTB-2	103	0	0-25
33729	COMBINED	1	AUG	1984	4TG	OTB-2	54	0	0-25
33739	COMBINED	1	AUG	1984	4TG	OTB-2	27	0	0-25
33762	COMBINED	1	AUG	1984	4TG	OTB-2	79	0	0-25
33763	COMBINED	1	AUG	1984	4TG	OTB-2	109	0	0-25

33642	COMBINED	1	AUG	1984	4TH	OTB-2	70	0	0-25
33691	COMBINED	1	AUG	1984	4TH	OTB-2	93	0	0-25
33678	COMBINED	1	AUG	1984	4TL	OTB-2	77	0	0-25
33680	COMBINED	1	AUG	1984	4TL	OTB-2	111	0	0-25
33848	COMBINED	1	AUG	1984	4TL	OTB-2	111	0	0-25
33728	COMBINED	1	AUG	1984	4TG	SNU	111	0	0-25
33767	COMBINED	1	AUG	1984	4TG	SNU	102	0	0-25
33768	COMBINED	1	AUG	1984	4TG	SNU	98	0	0-25
33770	COMBINED	1	AUG	1984	4TG	SNU	96	0	0-25
33785	COMBINED	1	AUG	1984	4TG	SNU	55	0	0-25
33692	COMBINED	1	AUG	1984	4TH	SNU	153	0	0-25
33789	COMBINED	1	AUG	1984	4TU	GN	47	0	0-25
33631	COMBINED	1	AUG	1984	4TG	GN	21	13	0-25
33637	COMBINED	1	AUG	1984	4TG	GN	21	0	0-25
33638	COMBINED	1	AUG	1984	4TG	GN	84	0	0-25
33639	COMBINED	1	AUG	1984	4TG	GN	45	0	0-25
33640	COMBINED	1	AUG	1984	4TG	GN	77	0	0-25
33641	COMBINED	1	AUG	1984	4TG	GN	54	54	0-25
33695	COMBINED	1	AUG	1984	4TG	GN	51	0	0-25
33696	COMBINED	1	AUG	1984	4TG	GN	352	175	0-25
33697	COMBINED	1	AUG	1984	4TG	GN	86	0	0-25
33730	COMBINED	1	AUG	1984	4TG	GN	352	175	0-25
33734	COMBINED	1	AUG	1984	4TG	GN	60	21	0-25
33735	COMBINED	1	AUG	1984	4TG	GN	107	26	0-25
33737	COMBINED	1	AUG	1984	4TG	GN	32	32	0-25
33738	COMBINED	1	AUG	1984	4TG	GN	59	0	0-25
33757	COMBINED	1	AUG	1984	4TG	GN	108	0	0-25
33786	COMBINED	1	AUG	1984	4TG	GN	17	0	0-25
33858	COMBINED	1	AUG	1984	4TG	GN	34	0	0-25
33661	COMBINED	1	AUG	1984	4TL	GN	117	0	0-25
33662	COMBINED	1	AUG	1984	4TL	GN	113	0	0-25
33663	COMBINED	1	AUG	1984	4TL	GN	114	0	0-25
33665	COMBINED	1	AUG	1984	4TL	GN	102	0	0-25
33681	COMBINED	1	AUG	1984	4TL	GN	129	0	0-25
33682	COMBINED	1	AUG	1984	4TL	GN	113	0	0-25
33790	COMBINED	1	AUG	1984	4TL	GN	79	0	0-25
33797	COMBINED	1	AUG	1984	4TL	GN	149	147	0-25
33798	COMBINED	1	AUG	1984	4TL	GN	69	0	0-25
33799	COMBINED	1	AUG	1984	4TL	GN	87	0	0-25
33800	COMBINED	1	AUG	1984	4TL	GN	96	0	0-25
33801	COMBINED	1	AUG	1984	4TL	GN	30	0	0-25
33802	COMBINED	1	AUG	1984	4TL	GN	79	0	0-25
33803	COMBINED	1	AUG	1984	4TL	GN	70	0	0-25
33816	COMBINED	1	AUG	1984	4TL	GN	106	0	0-25
33817	COMBINED	1	AUG	1984	4TL	GN	108	0	0-25
33818	COMBINED	1	AUG	1984	4TL	GN	99	0	0-25
33819	COMBINED	1	AUG	1984	4TL	GN	98	0	0-25
33820	COMBINED	1	AUG	1984	4TL	GN	139	0	0-25
33825	COMBINED	1	AUG	1984	4TL	GN	130	0	0-25
33826	COMBINED	1	AUG	1984	4TL	GN	108	0	0-25
33827	COMBINED	1	AUG	1984	4TL	GN	114	0	0-25
33836	COMBINED	1	AUG	1984	4TL	GN	120	0	0-25
33852	COMBINED	1	AUG	1984	4TL	GN	124	0	0-25
33853	COMBINED	1	AUG	1984	4TL	GN	137	0	0-25
33628	COMBINED	1	AUG	1984	4TG	FIX	151	39	0-25

33804	COMBINED	1	SEP	1984	4TF	OTB-2	60	0	0-25
33709	COMBINED	1	SEP	1984	4TG	OTB-2	123	0	0-25
33715	COMBINED	1	SEP	1984	4TG	OTB-2	131	0	0-25
33744	COMBINED	1	SEP	1984	4TG	OTB-2	60	0	0-25
33815	COMBINED	1	SEP	1984	4TG	OTB-2	125	0	0-25
33740	COMBINED	1	SEP	1984	4TH	OTB-2	164	0	0-25
33710	COMBINED	1	SEP	1984	4TG	SNU	106	0	0-25
33714	COMBINED	1	SEP	1984	4TG	SNU	122	0	0-25
33743	COMBINED	1	SEP	1984	4TG	SNU	156	0	0-25
33745	COMBINED	1	SEP	1984	4TG	SNU	80	0	0-25
33746	COMBINED	1	SEP	1984	4TG	SNU	132	0	0-25
33754	COMBINED	1	SEP	1984	4TG	SNU	139	0	0-25
33759	COMBINED	1	SEP	1984	4TG	SNU	13	0	0-25
33761	COMBINED	1	SEP	1984	4TG	SNU	61	0	0-25
33686	COMBINED	1	SEP	1984	4TL	SNU	175	0	0-25
33632	COMBINED	1	SEP	1984	4TG	GN	280	29	0-25
33716	COMBINED	1	SEP	1984	4TG	GN	148	0	0-25
33736	COMBINED	1	SEP	1984	4TG	GN	119	26	0-25
33755	COMBINED	1	SEP	1984	4TG	GN	91	0	0-25
33756	COMBINED	1	SEP	1984	4TG	GN	21	0	0-25
33758	COMBINED	1	SEP	1984	4TG	GN	43	0	0-25
33760	COMBINED	1	SEP	1984	4TG	GN	105	0	0-25
33644	COMBINED	1	SEP	1984	4TL	GN	249	0	0-25
33651	COMBINED	1	SEP	1984	4TL	GN	134	0	0-25
33652	COMBINED	1	SEP	1984	4TL	GN	115	0	0-25
33684	COMBINED	1	SEP	1984	4TL	GN	84	0	0-25
33685	COMBINED	1	SEP	1984	4TL	GN	62	0	0-25
33806	COMBINED	1	SEP	1984	4TL	GN	102	0	0-25
33807	COMBINED	1	SEP	1984	4TL	GN	86	0	0-25
33808	COMBINED	1	SEP	1984	4TL	GN	129	0	0-25
33809	COMBINED	1	SEP	1984	4TL	GN	100	0	0-25
33810	COMBINED	1	SEP	1984	4TL	GN	110	0	0-25
33811	COMBINED	1	SEP	1984	4TL	GN	102	0	0-25
33812	COMBINED	1	SEP	1984	4TL	GN	100	0	0-25
33813	COMBINED	1	SEP	1984	4TL	GN	84	0	0-25
33814	COMBINED	1	SEP	1984	4TL	GN	108	0	0-25
33847	COMBINED	1	SEP	1984	4TL	GN	105	0	0-25
33861	COMBINED	1	SEP	1984	4TN	GN	68	0	0-25
33699	COMBINED	1	SEP	1984	4TG	LL	153	0	0-25
33702	COMBINED	1	SEP	1984	4TG	LL	113	0	0-25
33703	COMBINED	1	SEP	1984	4TG	LL	120	0	0-25
33704	COMBINED	1	SEP	1984	4TG	LL	117	0	0-25
33707	COMBINED	1	SEP	1984	4TG	LL	158	0	0-25
33857	COMBINED	1	SEP	1984	4TJ	LL	29	0	0-25
33633	COMBINED	1	OCT	1984	4TG	OTB-2	134	26	0-25
33701	COMBINED	1	OCT	1984	4TG	OTB-2	161	0	0-25
33856	COMBINED	1	OCT	1984	4TL	OTB-2	142	0	0-25
33625	COMBINED	1	OCT	1984	4TG	SNU	59	35	26-50
33741	COMBINED	1	OCT	1984	4TG	SNU	121	0	0-25
33742	COMBINED	1	OCT	1984	4TG	SNU	169	0	0-25
33626	COMBINED	1	OCT	1984	4TG	GN	334	33	0-25

33844	COMBINED	1	OCT	1984	4TL	GN	100	0	0-25
33698	COMBINED	1	OCT	1984	4TG	LL	229	134	0-25
33700	COMBINED	1	OCT	1984	4TG	LL	156	0	0-25
33860	COMBINED	1	OCT	1984	4TG	LL	82	0	0-25