

# STATION POSITION LOG

Station No. 323/A. Date 3.9.75.

Time from \_\_\_\_\_

Time	Log	POSITION			WIND		Weath. and Vis.	WAVES			Corrected Barometric Press. mbs.	TEMPERATURE		CLOUD		REMARKS AND GEAR USE
		Lat.	Long.	Method of Determination	Dir. from	Speed Kts.		Dir. from	Period secs.	Height ft.		Dry Bulb	Wet Bulb	Type	Amt.	
0240		56°01.3	07°39.3	SW				20.0	37.56	68.35						On station
0243								21.10	37.56	68.35						Cover over.
0246								21.12	37.56	68.39						Cover on bottom.
0249																Cover up.
0258								20.								Cover over.
0300		56°01.3	07°39.6	SW				20.08	37.60	68.39						Cover on bottom.
0306																Cover up.
0309																Cover over.
0312		"	"					21.02	37.30	68.62						Cover on bottom.
0317																Cover up.
0325								21.02	37.60	68.86						Cover over.
0327								21.10	37.60	68.86						Cover on bottom.
0333																Cover up.
0339																Cover over.
0342								21.17	37.44	69.20						Cover on bottom.
0347																Cover up.
0347																Cover over.
0353								21.06	37.62	69.36						Cover on bottom.

Cruise Report of Proceedings

RRS Challenger Cruise No. 12B/75, 2-10 September 1975

1) The primary objectives of the cruise were to sample the deep-sea and outer shelf macro- and meio-benthos, midwater plankton and bathyal demersal fish populations, in order to continue a study of seasonal changes in these communities, and to provide material for a pilot study of heavy metal dispersal in deep water.

2) Geographical Area

Shelf Station:  $56^{\circ}01.5' N$ ,  $07^{\circ}39.2' W$ , depth 148 metres.

Fish Trawling Station a):  $56^{\circ}21' N$ ,  $09^{\circ}11.6' W$ : 750 metres.

b):  $56^{\circ}28-21' N$ ,  $09^{\circ}20-19' W$  1000 metres.

Deep Station:  $55^{\circ}03.5' N$ ,  $12^{\circ}03.5' W$ ; depth 2875 metres.

3) Sea and Weather Conditions

Good. Winds mainly SW-NW, 1-7.

4) Conduct of Cruise

Challenger sailed on schedule from Dunstaffnage at 1700 hrs on 2 September, approximately 8 hours after arriving there at the completion of Cruise 12A. The Shelf Station was reached at 0240 hrs the following day. After successfully completing the benthic coring work with the Craib Corer, the Shipek 70 mm deep sea camera, on loan from I.O.S. Barry, was then tested at 150 m depth on the Shelf Station. The flash unit failed owing to a short circuit of the watertight flash plug connector due to the entry of seawater. The ship sailed for the trawling position



on the Hebrides Slope, arriving at 1306 hrs. Two hauls were made with the otter trawl, one at 750 and the other at 1000 metres depth, and the work successfully completed on schedule at 2254 hrs.

Challenger then steamed for the Deep Station arriving at 1336 on 4 September. It was decided to launch the 2-metre 'Stramin' net, rigged up with a RMT 2 net, and to attempt the long, deep haul required. A successful sample was obtained after an eight-hour tow, and this was immediately followed by another cast, this time an oblique haul, which was completed at 0040 hrs 5 September, obtaining another good haul despite a torn net.

This was followed by an attempt at an epibenthic sled haul. Unfortunately, although there was no indication of anything wrong during the 1-hour-long bottom tow, the sled itself was not recovered on winching back the wire. Both the weak link and (most surprisingly) the safety strop had parted company with the shackle and swivel assembly on the end of the main wire.

It was then attempted to lay the deep water mooring using a dhan buoy. Unfortunately, the 2-mm wire supplied had not been tightly spooled onto the drum. After catching up and snagging many times the Master decided it too dangerous to continue spooling it out from the hand winch fitted, and the operation was abandoned at 1136 hrs 5 September.

# STATION POSITION LOG

Station No. 373 A (CONT.)

Date 3/9/75

Time from \_\_\_\_\_

Time	Log	POSITION			WIND		Weath. and Vis.	WAVES			Corrected Barometric Press. mbs.	TEMPERATURE		CLOUD		REMARKS AND GEAR USE		
		Lat. N	Long. W	Method of Determination	Dir. from	Speed Kts.		Dir. from	Period secs.	Height ft.		Dry Bulb	Wet Bulb	Type	Amt.			
0515								I	A	I.						CORER O/B.		
0518								20.95	37.40	69.69						CORER ON BOTTOM.		
0523																CORER I/B. / O/B.		
0527								20.96	37.30	69.95						CORER ON BOTTOM.		
0534																CORER I/B.		
0537																CORER O/B.		
0439								20.80	37.77	70.02						CORER ON BOTTOM.		
0446																CORER I/B.		
0552																CORER O/B WITH W.B. etc		
0605		56 02.2	07 39.2													CORER ETC. I/B.		
0620																CAMERA O/B.		
0636																CAMERA I/B.		
							32k		Trawl	STW. I						SPEED.		
1306		56° 21.0	009° 13.1W					15.1	41.6	76.65						00	2 station Aband.	
1326		56° 21.0	009° 11.6					16.52	41.22	76.96							Aband. on station	
1327								16.52	41.22	76.96						1Kt	Coat and outboard	
1350								16.16	41.08	75.64						"	Oars away.	
1351								16.08	41.08	75.80						010	6Kts	paying out.

The multiple corer was then readied for lowering, and eight dips made completing at 0140 hrs 6 September with a recovery of 26 cores out of a possible 32. A reversing thermometer assembly mounted on the corer was tested for the first time and provided bottom temperature data.

Two hauls were then made with the anchor-box dredge, completing at 0300 hrs after satisfactory samples had been obtained. These were followed by two more successful drops with the multiple corer. This was followed by trials with the spade corer. Although promising samples were obtained on some early lowerings, some obviously failed owing to slack in the wire after the corer bottomed hitching up with projecting parts of the corer assembly, and modifications had to be made. This provided an opportunity for another multicorer dip followed by a 2-metre/RMT2 oblique haul in night-time, these hauls being completed at 0405 hrs 7 September. These were followed by a single trial with the Shipek 70 mm camera, borrowed from I.O.S. Barry, mounted on the multicorer framework and lowered to the bottom. This was unsuccessful owing to the leaking plug - to which no repair or modification was possible while at sea.

Trials then continued with the spade corer until 1023 hrs followed by a daylight 2-metre/RMT2 oblique haul which was completed successfully at 1328 hrs.

# STATION POSITION LOG

Station No. 326 / TRAWL

Date 3 / 9 / 75

Time from \_\_\_\_\_

Time	Log	POSITION			WIND		Weath. and Vis.	WAVES			Corrected Barometric Press. mbs.	TEMPERATURE		CLOUD		REMARKS AND GEAR USE	
		Lat.	Long.	Method of Determination	Dir. from	Speed Kts.		Dir. from	Period secs.	Height ft.		Dry Bulb	Wet Bulb	Type	Amt.		
1431								5	DECCA A	5	Co	SPEED.					
								11.71	60.16	50.31	Altrains, Co	6.75.					Complete paying out 2
1506								10.79	39.82	52.56	320	4					
1515								10.68	39.68	53.60	330	6					
1536								10.26	39.58	56.31	340	4					
1556								9.86	39.62	55.46	350	4					
1604.								9.60	39.36	56.03	350	1 1/2					COM. HAULING
52.								8.75	39.05	57.88	350	1					Doors Inboard
1752								7.9	38.7	59.4	350	1 1/2					cod end onboard
1801																	Proceeding W. to next stat.

There was the sufficient time in hand for four more spade corer dips, successful core samples being obtained on each occasion, and completing the scientific work at 2253 hrs 7 September.

#### 5) Equipment Performance

Because the starb'd trawl wire had been logged as having been cropped to remove kinks, it was necessary to remove a similar length from the port wire and to splice in a new eye before we could start trawling. This was accomplished despite the added difficulty of the wire having a lefthand 'lay'.

The wire metering gear was found to even less reliable on this cruise than on previous SMBA biological cruises. It appeared to fail quite unpredictably and, on occasion, re-starting spontaneously.

The multiple coring operations were delayed and complicated by the failure of the ship's main wire metering system so that wire pay-out rates, recovery rates and the amount of warp-out could not be monitored. We are grateful for the efforts of the Chief and Second Engineer to rectify the fault although they were unable to find the trouble and the equipment finally started working again for no apparent reason.

The state of the scientific workshop continues to be a source of intense frustration, especially when repairs have to be made to gear quickly in order to avoid wasting valuable shiptime. We are, however, all relieved that the cruise was



# STATION POSITION LOG

Station No. 325 / TRAWL Date 3/9/75

Time from \_\_\_\_\_

Time	Log	POSITION			WIND		Weath. and Vis.	WAVES			Corrected Barometric Press. mbs.	TEMPERATURE		CLOUD		REMARKS AND GEAR USE
		Lat. N	Long. W	Method of Determination	Dir. from	Speed Kts.		Dir. from	Period secs.	Height ft.		Dry Bulb	Wet Bulb	Type	Amt.	
								DECLA 33.			<u>6</u>	<u>Speed</u>				
1823		56 34.5	09 17.3	SATNAV				J A. J								W/ MOVE TO IN 1000M.
25								9-21 39-17 58-62								TURNING TO 180
1835								9-23 39-17 58-52								COM. SHOOT NET.
1900																Net tangled. retrieved
1930		56 35.55	09 18.2	SATNAV				9-66 39-32 57-40								SHOOTING NET.
1948								9-83 39-46 56-96								DOORS AWAY. INC. SPD T.
2008		56° 32.0	09° 19.3					10-9 39-7 55-1		200		5 kts				
2048		56° 28.9	09° 20.3					12-8 40-5 51-3		195		4 kts				Completed purging out
2132		56° 25.4	09° 21.4					14-3 41-0 77-8		185						
2138		56° 25.0	09° 21.5					14-5 41-1 77-7		180						
2144		56° 24.7	09° 21.6					14-7 41-1 77-0		170						
2224		56 21.8	09° 19.1					15-9 41-6 74-7		170		1 1/2 2 kts				Completed hauling.
2325		56° 19.9	09° 17.8					16-4 41-8 73-4								Completed hauling down
2251		56° 19.6	09° 17.1					16-4 41-9 73-0								Coil end inboard.
2256																Completed station

not plagued with the engine/generator failures that have affected so many previous cruises, and we hope that the problems have indeed been conquered permanently. We are also grateful for the improvements to the darkroom door and trawl deck communications speakers.

Most of the scientific party complained of headaches at one time or another which, apart from other possible causes, seemed likely to be due to funnel fumes entering the accommodation from a ventilator on the winch deck. Black smoke can often be seen to billow all over the after deck areas - which have always collected black smuts. Hence the long periods spent on the trawl-deck washing samples were often rendered quite unnecessarily uncomfortable. Maybe a modified funnel which ejects the boiler gases upwards more efficiently is the answer.

It is hoped to attempt laying another deep-water mooring on our November cruise (14B). It would be appreciated if the wire supplied for this attempt is tightly spooled.

It is a pleasure to record our thanks to the Master, Capt. P. Maw, and the officers and crew of 'Challenger' for their continued cooperation and interest in our work. In particular, the ready help of the engineering officers did much to overcome the inadequacies of the scientific workshop. But it is sad that we have to exploit their good nature in this way. We were also impressed with the ship's greatly improved station-keeping performance made possible with the satellite navigation equipment installed, and we hope that we can rely on this being present on all future biological cruises of 'Challenger'.

(Signed)

  
J.D. Gage.

R.V.B. SAILING INSTRUCTIONS

Reference P12/12/75

R.R.S. "CHALLENGER" : CRUISE 12B/75 : 2 - 10 September, 1975

To The Master

1. Ship's Programme

(a) R.R.S. "CHALLENGER" is to sail from Dunstaffnage on Tuesday 2 September with members of the Scottish Marine Biological Association, The University of Manchester and the University College of Wales, for a Biological cruise in the North-East Atlantic - Rockall Trough area, as required by The Senior Scientist.

The outline programme is given below.

(b) Tuesday 2 September	p:m.	Sail Dunstaffnage
Wednesday 10 September	1300	Arrive Barry

2. Scientific Requirements

(a) It is required to carry out a study of deep-sea and shelf benthic, and deep-water pelagic communities and demersal fish on the Continental slope.

There is also a requirement to carry out a pilot investigation of heavy metal concentration in deep sea sediments and benthos coring will be carried out using a spade corer and a multiple corer with attached camera.

Mid-water Trawling will be carried out using a rectangular trawl, and for demersal fish trawling an otter trawl will be used.

A Dhan-buoy will be laid (4-9 September) in position  $55^{\circ} 03.5'N$   $12^{\circ} 03.5'W$  in a depth of 2900 metres for station marking purposes.

(b) SMBA equipment will be loaded in Dunstaffnage on Tuesday 2 September, and unloaded in Barry on arrival.

3. Scientific Party

(a) From the Scottish Marine Biological Association, Dunstaffnage :-

Dr. J.GAGE            Senior Scientist  
Dr. P.BARNETT  
Dr. J.GORDON  
Miss.H. GRIGG  
Mrs.M.PEARSON  
Mr. J. WATSON

From the Museum, Manchester University :-

Mr.C. PETTIT

From the Department of Geology, University College of Wales :-

Dr. J. HAYNES.

(b) Scientific personnel will embark in Dunstaffnage on the afternoon of Tuesday 2 September and disembark in Barry.



D.M.H.STOBIE

13th August, 1975

# STATION POSITION LOG

Station No. 326 / RMT Date 4.9.75

Time from \_\_\_\_\_

Time	Log	POSITION			WIND		Weath. and Vis.	WAVES			Corrected Barometric Press. mbs.	TEMPERATURE		CLOUD		REMARKS AND GEAR USE
		Lat. <sub>W</sub>	Long. <sub>W</sub>	Method of Determination	Dir. from	Speed Kts.		Dir. from	Period secs.	Height ft.		Dry Bulb	Wet Bulb	Type	Amt.	
1336		55° 16.0	110° 32.3	S. NAV.	280	25	08	280	4	12	1011.6	14.3	13.0	Sc	8	On station spd 1. Knot
1340		55° 17														preparing RMT for launch
1400		55° 15.9N	110° 33.2	S. NAV.												RMT + 2M STRAMIN LAUNCHED.
1500		55° 13.9N	110° 38.2	S. NAV.												paying out
1531		55° 13.7N	110° 40.2	S. NAV.												4000M and stop paying out
1600		55° 12.1N	110° 42.7	S. NAV.												
1930		55° 08.4	111° 52.0	S. NAV.												COM. HAULING NET.
2100		55° 09.4	111° 55.2	S. NAV.												
2130		55° 09.9	111° 56.3	S. NAV.												
2145		55° 10.12	111° 56.89	S. NAV.												R.M.T. recovered
2148		55° 10.19	111° 57.06	S. NAV.												STRAMIN in hand.
<u>327 / RMT</u>																
2212		55° 09.7	111° 58.3	S. NAV.												On station 1kt.
2216		55° 09.67	111° 58.4	S. NAV.												R.M.T. + 2M STRAMIN LAU
2218		55° 09.67	111° 58.37	S. NAV.												paying out
2230		55° 09.3	111° 58.84	S. NAV.												
2300		55° 07.5	111° 58.3	S. NAV.												
2308		55° 06.9	111° 58.9	S. NAV.												ALTERING CO. TO 300
2313		55° 06.8	111° 59.2	S. NAV.												Completed paying out

# STATION POSITION LOG

Station No. 327/RMT Date 4.9.75

Time from \_\_\_\_\_

Time	Log	POSITION			WIND		Weath. and Vis.	WAVES			Corrected Barometric Press. mbs.	TEMPERATURE		CLOUD		REMARKS AND GEAR USE
		Lat. N	Long. W	Method of Determination	Dir. from	Speed Kts.		Dir. from	Period secs.	Height ft.		Dry Bulb	Wet Bulb	Type	Amt.	
2318		55° 06.7	11° 59.5	S.NAV												Commenced hauling.
2330		55° 06.2	11° 57.3	S.NAV												
0000		55° 05.9	11° 58.8	S.NAV												
0040		55° 05.1	12° 03.7	S.NAV.												Nets on board.
0045							STN 328/	ERIGENTHIC SLEDGE.								Steaming to sledge for
0130		55° 03.0	12° 01.9	S.NAV.												In position for sledge run.
0135		55° 03.0	12° 01.9	S.NAV												sledge over.
0145																Attaching chain. 100m.
0148		55° 03.0	12° 02.0	S.NAV.												chain over.
0150		"	"													Attaching pulge. 150m
0153		55° 03.1	12° 02.1	S.NAV												Pulge away. lowering s
0200		55° 03.2	12° 02.3	S.NAV												
0205		55° 03.4	12° 03.1	S.NAV.												
0220		55° 03.6	12° 03.6	S.NAV												Reduce to 1/2 knot. Co =
0245		55° 03.5	12° 04.0	S.NAV.												Up date by Det Fix.
0255		55° 03.7	12° 04.8	S.NAV.												Stop work. sledge on 60
																Bad Fix on S.NAV.
0400		55° 04.0	12° 04.7	EST.												Comm hauling sled.



# STATION POSITION LOG

Station No. 331 / Corcor. Date 5-9-75

Time from \_\_\_\_\_

Time	Log	POSITION			WIND		Weath. and Vis.	WAVES			Corrected Barometric Press. mbs.	TEMPERATURE		CLOUD		REMARKS AND GEAR USE
		Lat. N	Long. W	Method of Determination	Dir. from	Speed Kts.		Dir. from	Period secs.	Height ft.		Dry Bulb	Wet Bulb	Type	Amt.	
							DECCA 3B	7990	LORAN							
145		55° 03.51	12° 03.52	S NAV.	1176	40.4	53-08	50346.5	31563.7							On station
152		"	"		1176	40.14	53-08	50346.5	31563.7							Cover launched
330		55° 03.3	12° 05.6	S NAV.	1176	40.14	53-08	50346.5	31563.7							on bottom
607		55° 03.23	12° 05.68	S NAV.	1170	40.09	53-24	50342.1	31567.1							M.E. I/B.
STN 332 / Multi-CORCOR																
28.		55° 03.45	12° 03.55	S NAV.	11.61	39.9	53-33	50348.2	31563.2							M/C O/B.
706		55° 03.85	12° 04.71	S. NAV.	11.7	40.05	53-12	50347.2	31562.4							Cover on bottom
49		55° 03.36	12° 04.92	S NAV.	11.77	40.15	52-99	50345.2	31562.8							M/C I/B
STN 333 / Multi-CORCOR																
806		55° 03.49	12° 03.46	S NAV.	11.65	40.00	53-13	50347.4	31561.4							M/C O/B.
42		55° 03.43	12° 04.74	---	11.65	40.04	53-11	50346.7	31555.7							cover bottomal
9.20		03.51	05.05	---	11.65	40.05	53-12	50346.9	31564.7							M/C I/B.
STN 334 / Multi-CORCOR																
932		55° 03.57	12° 03.65	---	11.60	39.98	53-10	50348.0	31557.9							M/C O/B.
005		55° 03.57	12° 03.15	---	11.65	39.97	53-09	50346.8	31562.8							cover on bottom
2040		55° 03.50	12° 05.27	---	11.52	40.0	53-21	50345.0	31564.9							M/C I/B
STN 335 / Multi-CORCOR																
207		55° 3.44	12° 03.42	SAT NAV	11.84	39.99	52-84	50349.4	31560.3							M/C O/B
2140		55° 3.41	12° 03.26	SAT NAV	11.84	39.92	52-68	50347.8	31561.0							cover on bottom

# STATION POSITION LOG

Station No. 335 / Multiple Cores Date 5-9-75

Time from \_\_\_\_\_

Time	Log	POSITION			WIND		Weath. and Vis.	WAVES			Corrected Barometric Press. mbs.	TEMPERATURE		CLOUD		REMARKS AND GEAR USE
		Lat. N	Long. W	Method of Determination	Dir. from	Speed Kts.		Dir. from	Period secs.	Height ft.		Dry Bulb	Wet Bulb	Type	Amt.	
2111		55° 03.41	12° 03.36	SAT. NAV	11.75	40.06	52.54	503547	315	6.30						M/c I/B 2 cores
					336 / Core											
2245		55° 03.45	12° 03.44	SAT NAV	11.72	40.08	52.62	503488	315	5.88						M/c 0/G
2318		55° 03.45	12° 03.44	SAT NAV	11.76	40.0	52.16	503491	315	5.95						Cores on bottom.
2358		55° 02.78	12° 04.34	SAT NAV	11.82	40.22	51.54	503462	315	6.70						M/c 3/B
					337 / Core											
2024		55° 03.51	12° 03.44	S NAV	11.60	39.66	52.93	503697	315	5.99						M/c 0/G
0058		55° 03.51	12° 03.44	"	11.51	40.20	52.43	503487	315	5.95						Core on bottom
0140		55° 03.51	12° 03.44	"	11.63	41.56	52.14	503465	315	6.14						M/c I/B
					338 / Box dredge											
0211		55° 03.61	11° 59.57	S NAV	11.86	40.61	52.97	503607	315	5.02						270° 1 knot. Dredging
0300		55° 03.52	12° 01.54	S NAV	11.86	40.18	52.82	503541	315	5.33						Dredge on bottom
2324		55° 03.1	12° 03.3	S NAV	11.58	40.38	53.54	503516	315	6.43						SAT Fix. Hauling
0441		55° 03.26	12° 05.65	S NAV	12.18	42.45	53.16	503414	315	6.10						Box dredge inboard.
					339 / Box dredge											
0519		55° 03.46	12° 01.62	S NAV	12.45	42.83	59.92	503104	315	6.21						Box dredge overboard.
0610		55° 03.76	12° 03.05	S NAV	12.21	44.50	58.29	503463	315	5.80						— — on bottom
0630		55° 03.70	12° 03.18	S NAV	12.00	44.75	58.05									Hauling Box overboard
0800		55° 02.50	12° 10.40	S NAV	12.25	42.88	58.00	503414	315	6.21						Box dredge inboard.







# STATION POSITION LOG

Station No. 346 / 2<sup>nd</sup> Stream Date 7.9.75.

Time from \_\_\_\_\_

Time	Log	POSITION			WIND		Weath. and Vis.	WAVES			Corrected Barometric Press. mbs.	TEMPERATURE		CLOUD		REMARKS AND GEAR USE
		Lat.	Long.	Method of Determination	Dir. from	Speed Kts.		Dir. from	Period secs.	Height ft.		Dry Bulb	Wet Bulb	Type	Amt.	
0201 <del>0159</del> <del>0203</del> <del>0158</del>		55°02.9	12°04.3	S.W.	B 13.10	C 44.54	315 G 58.12									Net away 060° 1 knot. 2 knots
0220		55°02.5	12°05.1	"	12.90	44.26	58.70									
0225		55°02.6	12°04.8	"	13.22	44.30	58.86									1000m
0240		55°03.5	12°03.4	"	13.19	44.28	59.00									Paying out to 1500
0255		55°03.6	12°02.7	"	12.55	43.76	59.00									1500m
0309		55°03.9	12°02.0	"	12.62	43.46	58.98									1 1/2 knots camera hauling
0358		55°04.6	11°59.8	"	12.53	45.65	59.14									1 knot
0405		55°04.7	11°59.3	"	12.50	45.62	60.50									Net on board.
347 / Multiple cover																
0542		55°03.4	12°03.4		12.65	46.45	59.22									Multi cover o/s. with
0633		55°03.4	12°04.0		12.68	45.98	59.05									cover on bottom.
0724		55°03.8	12°04.7		12.70	46.09	58.95									cover Inboard.
348 / Sample cover																
0841		55°03.48	12°03.52		12.72	45.98	58.94		503508		315.487					Cover o/s.
0846																Pump attached
0930		55°03.63	12°03.70		12.68	45.98	59.18		503530		315.601					Cover on bottom
1019		55°03.68	12°03.61		12.68	45.94	59.24		503492		315.615					Pump up
1023		55°03.68	12°03.61		12.68	45.94	59.26		503502		315.611					Cover #10



# STATION POSITION LOG

Station No. 352 / Box cover

Date 7/9/75

Time from .....

Time	Log	POSITION			WIND		Weath. and Vis.	WAVES			Corrected Barometric Press. mbs.	TEMPERATURE		CLOUD		REMARKS AND GEAR USE
		Lat. N	Long. W	Method of Determination	Dir. from	Speed Kts.		Dir. from	Period secs.	Height ft.		Dry Bulb	Wet Bulb	Type	Amt.	
1845		55° 03.66	12° 03.00	S. NAV				11.70	39.90	53.15						cover 0/10
1932		55° 04.10	12° 02.51	S. NAV				11.55	39.83	53.32						cover on bottom
2019		55° 04.30	12° 02.22	S. NAV				11.54	39.80	53.54						cover 1/10
	353 / spade	Cover														
2101		55° 03.57	12° 03.52	S. NAV				11.84	40.08	52.98						cover 0/10
2104		<del>55° 03.34</del>	<del>12° 02.69</del>	<del>S. NAV</del>				<del>11.66</del>	<del>40.0</del>	<del>52.12</del>						Prize attached
2149		55° 03.34	12° 02.69	S. NAV				11.66	40.0	52.12						cover on bottom
2250																Prize up
2253		55° 03.24	12° 02.44	S. NAV				11.80	39.98	52.22						cover 1/10

# STATION POSITION LOG

Station No. 352 / Box Cove

Date 7/9/75

Time from \_\_\_\_\_

Time	Log	POSITION			WIND		Weath. and Vis.	WAVES			Corrected Barometric Press. mbs.	TEMPERATURE		CLOUD		REMARKS AND GEAR USE
		Lat. N	Long. W	Method of Determination	Dir. from	Speed Kts.		Dir. from	Period secs.	Height ft.		Dry Bulb	Wet Bulb	Type	Amt.	
1845		55° 03.26	12° 03.00	S. NAV				11.70	39.90	53.15						Core 0/3.
1932		55° 04.10	12° 02.51	S. NAV				11.55	39.83	53.32						Core on bottom.
2019		55° 04.30	12° 02.22	S. NAV				11.54	39.80	53.54						Core 2/3
353 / Spade Cove																
2101		55° 03.57	12° 03.52	S. NAV				11.84	40.08	52.98						Core 0/0
2104		<del>55° 03.34</del>	<del>12° 02.69</del>	<del>S. NAV</del>				<del>11.66</del>	<del>40.00</del>	<del>52.72</del>						Ridge attached
2109		55° 03.34	12° 02.64	S. NAV				11.66	40.00	52.12						Core on bottom
2230																Ridge up.
2253		55° 03.24	12° 02.44	S. NAV				11.80	39.98	52.22						Core 2/3