Cruise Report L. Foyle Cruise 6-9 May 1991 Cruise LF/11/91

## Cruise personnel

(C.Gibson (SIC)

W.Clarke .

R.Hensley

K.Macoscar

P.Elliott

## Cruise Narrative

Scientific staff joined the boat on the night of 5 May and worked readying the equipment for the cruise next morning. The vessel sailed at 08.30 on 6 May and stopped at Buoy No. 4 to take surface mud samples for dinoflagellate cysts. There was a strong tide and it was difficult to hold station. The new core tubes supplied for the Jenkin sampler by Duncan Associates did not fit the sampler and had to be modified. The sampler was only partially closing and sampling was abandoned until the return journey. The vessel arrived at the first open water station at 09.45 and the scheduled work programme began. The Day grab was deployed at Beaufort's Dyke in 240m water. On recovering the grab, a shackle used to join the cable on the previous DAFS cruise jammed in the winch and the cable immediately snapped, losing the grab. There being no spare grab, further samples were impossible. From then on, everything went smoothly in fine and mostly calm weather. Very marked fluoresence peaks were noted in several areas, notably North and Southwest of the Isle of Man. The vessel sailed on the planned course and made good progress. A burst fuel pipe in the engine room caused a 30min delay in the afternoon of 8/5/91. Due to the excellent weather conditions, some good light profiles were possible both near the coast and in the open sea. The vessel turned for home at midnight on 8/5/91 after taking a depth profile at the southernmost point of the voyage, 53 27.19N 5 12.09W. On the return home, one of the marked fluorescence peaks at 54 00.81N 5 09.97W was investigated more fully with depth profiles and Bongo net tows. There were dense populations of phyto and zooplankton. The vessel proceeded to Tthe Mull of Galloway, then ran due West, stopping at 4 minutes of longitude intervals for CTD profiles until the N.Irish coast was reached. Inward, the vessel stopped again at Buoy 4 and successfully deployed the Jenkin sampler. The vessel docked and was unloaded by 1600h.

> C.E.Gibson 10/5/91