



**LOIS RACS(C) Core Programme
Sea Vigil SV 16
Cruise Report
12th-16th December 1994**

Personnel:

Duncan Plummer (PML/LOIS Hull)	Senior Scientist
Robb Howland (PML)	
Alison Easton (PML)	
Jack Hardisty (U of Hull)	
Helen Rouse (U of Hull)	
Nick Hughes (U of Hull)	

Monday 12th: The scientific party mustered on board at 1000 and *Sea Vigil* departed Grimsby at 1030 and arrived on station at the 2Cs Lightfloat at 1140. Sampling for vertical profiles of conductivity, temperature and depth with concomitant recordings of current velocities, over a tidal cycle commenced at 1150. The surface waters were monitored using the NRAs system. The sampling was completed at 2400 and passage was made back to port. The *Sea Vigil* entered Grimsby Fish Dock at 0110. The equipment of the U of Hull was unloaded by 0130.

Tuesday 13th: (continued) The *Sea Vigil* traveled from Grimsby to Hull Marina between 1230 and 1430. LOIS personnel traveled from Plymouth during the morning. PML equipment was loaded on board between 1530 and 1630.

Wednesday 14th: From 1000 and 1300, when the *Sea Vigil* left the Marina, the analyzer were started up and standards recorded. The survey began from Hull at 1316 (station 16) to Selby (station 40) at 1723 passing stations 16-1 and 38-40. The survey downstream was started at station 40 at 1730 and passing through station 16 at 2111 (Hull) and continued eastwards to the mouth of the Humber. The westwards survey passed through all stations to Hull and finished at 0215 (station 17), stations 17-37 and 19-17. *Sea Vigil* locked into Hull Marina at 0245 and was along side at 0300.

The profile measured nutrients (nitrate, nitrite, phosphate, silicate and ammonium) conductivity, temperature, turbidity, pH and dissolved oxygen. Discrete samples were collected for gravimetric, C/N chlorophyll and Al analysis.

Thursday 15th: (continued) Between 1000 and 1115 the equipment and samples were unloaded from the *Sea Vigil*.

Friday 16th: Contingency day

Duncan Plummer

19th December 1994