



**LOIS RACS(C) Core Programme
Sea Vigil SV 18
Cruise Report
27th February-3rd March 1995**

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Sunday 26th: *Scientific Party traveled from Plymouth and St Andrews.*

Monday 27th: Due to inclement weather the *Sea Vigil* did not leave Grimsby Fish Dock. Between 1000 and 1830 the nutrient analyser on board *Sea Vigil* was commissioned and PML personnel received instruction from the NRA nutrient chemist. Following discussions the LISP work planned for today was rescheduled for Friday.

Tuesday 28th: The *Sea Vigil* made a passage from Grimsby Fish Dock to Hull Marina between 0400 and 0630. The scientific party boarded at 0630 and the *Sea Vigil* left Hull Marina at 0740.

The survey commenced at station 17 at 0822 continuing eastwards to station 30 (Spurn Head) at 1108. The westwards survey passed through all stations to station 6 (Goole) at 1635. The *Sea Vigil* locked into Goole Docks at 1745 and was along side at 1830. (Stations sampled 17-36, 20-6).

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 and chlorophyll analysis.

Wednesday 1st: The survey was from Goole to Selby and then back to Hull to complete the nutrient profile. *Sea Vigil* locked out of Goole at 0530 and the survey started at station 5 at 0620 and proceeded to Selby (station 40) at 0745. The downstream survey commenced at Selby and continued to station 16 (Hull) at 1120. At 1145 the *Sea Vigil* tied up at the Admiral steps and PML equipment was unloaded. The measurements were as for the survey on Wednesday. (Stations 5-1, & 38-40, 40-38 & 1-16).

From 1300 to 1515 the *Sea Vigil* proceeded to Grimsby Fish Dock and tied up at 1545.

Thursday 2nd: At 0900 the *Sea Vigil* left Grimsby Fish Dock and proceeded to the steps outside of the Royal Dock. The scientific party was onboard at 1030 and passage was made from Grimsby at 1120. At 1200 *Sea Vigil* arrived at the chosen site, flux curtain station J (53 33.64 N 00 05.02 W). A trial deployment of the bed rig profiling was undertaken between 1230 and 1250. The rig measured conductivity, temperature, turbidity and depth with concomitant recordings of current velocities. The surface waters were monitored using the NRAs system. Between 1350 and 1740 the rig was deployed on station. The rig was recovered twice during this period to add additional lead weights.

Sea Vigil returned to Grimsby and tied up at the step at 1845 and the scientific equipment was unloaded. The vessel left the steps at 1930 and was along side in the Fish Dock at 2000.

Friday 3rd: The *Sea Vigil* departed Grimsby at 0500 and was on station at 0615. Measurements of conductivity, temperature, turbidity were made using the system on board the vessel. A depth profile was recorded using the echo sounder along a transect normal to the coast at Skefling. The profile started at 0718 and was completed at 0742. Ten sediment samples were collected using the grab off the *Sea Vigil*. The sediment samples were collected from along the transect. At 0945 the *Sea Vigil* locked into Grimsby and was along side in the Fish Dock at 1000

Notes: The work programmed on Monday was rescheduled for Friday due to inclement weather.

Duncan Plummer

17th March 1995