



**LOIS RACS(C) Core Programme  
Sea Vigil SV 21  
Cruise Report  
15th-18th May 1995**

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**Monday 15th:** The scientific party was onboard at 0705 and passage was made from Hull Marina at 0707. At 0925 *Sea Vigil* anchored at the chosen site, Hawke Light Float. The bed rig was deployed and profiling was undertaken. The rig measured conductivity, temperature, turbidity and depth with concomitant recordings of current velocities. At 1000 the operation was transferred to the Bull Light Station. The surface waters were monitored using the NRAs system. At 1655 the anchor was recovered and passage was made to Hull. During the passage No 17 buoy was visited (1756-1825) to plan future work. *Sea Vigil* entered Hull Marina at 1930 and the party from the U of Hull departed at 2000. Between 1930-2130 the nutrient analyser and other equipment was commissioned for use the following day.

**Tuesday 16th:** The party mustered at 0730 and the *Sea Vigil* locked out of Hull Marina at 0815. The downstream survey started at station 17 (0855) and continued seawards to station 26 (1110). Due to bad weather stations 27 and 28 were omitted. The survey continued to station 30 (1134) and the vessel sheltered between 1200-1500. During the period off line (sheltering) standards and blanks were run on the analysers. The survey commenced at station 31 (1518) and ended at station 17 (1734). The survey measured nutrients (nitrate, nitrite, phosphate, silicate and ammonium), conductivity, temperature, turbidity, pH and DO. Discrete samples were collected for gravimetric, C/N and chlorophyll analysis. In addition samples were collected for phytoplankton enumeration and identification. Large volume samples were collected at stations 24, 26, 29, 30, 32 and 34 for later incubation experiment. As a result of the weather it was not possible to collect the large volume samples in the Humber plume region. The *Sea Vigil* locked into the marina at 1815 and was along side at 1830.

**Wednesday 17th:** From 0530 when the party boarded *Sea Vigil* to the start of the survey at 0621 standards and blanks were run through the underway instruments. The vessel left the marina at 0600 and the upstream survey commenced at station 16 (0621) and continued to station 40 (0941) and returned downstream (0945) and finished at station 16 (1344). Stations sampled 16-1, 38-40, 40-38, 1-16. The survey commenced at station 31 (1518) and ended at station 17 (1734). The survey measured nutrients (nitrate, nitrite, phosphate, silicate and ammonium), conductivity, temperature, turbidity, pH and DO. Discrete samples were collected at all visited station for gravimetric, C/N and chlorophyll analysis. In addition samples were collected for phytoplankton enumeration and identification. Large volume samples were collected at stations 16, 12, 8, 4, 1, and 40 for later incubation experiment. The *Sea Vigil* was along side at the Admiral Steps, where unloading of samples occurred, until entering Hull Marina at 1800. Unloading of equipment was completed at 1830.

**Thursday 18th:** contingency day

**Notes:** This was the seventeenth LOIS RACS(C) survey of the Humber and Ouse. The nutrient survey carried out underway using the NRA analyser. The week included the second collection of samples for determination of production parameters. This sampling was extended to include upstream stations. Once again it was not possible to collect samples in the Humber plume region so the down stream stations were as SV20.

Duncan Plummer

5th June 1995