

# Sea Vigil 5

## Fieldwork Report

### 21-25 February 1994

#### Personnel:

Robb Howland (PML)  
Duncan Plummer (LOIS Hull)  
Trevor McCormack (UOP)  
Jack Hardisty (UOH)  
Helen Rowse (UOH)  
Jeremy Hoad (UOH)  
Craig Mottram (UOH)  
Nick Strugnell (UOH)

#### Itinerary:

**Monday 21st February:** Plymouth staff travelled to Hull. Loaded and set up equipment on arrival. Completed at 1900.

**Tuesday 22nd February:** Departed Hull marina at 1200. Carried out an axial transect of the Humber/Ouse estuaries from Hull to the confluence of the rivers Ouse and Aire (about 1km above Boothferry bridge) and on completion returned downestuary as far as Goole where we spent the night. During the transect the following measurements were made:

- a). Continuously monitored. Phosphate, silicate, nitrate and nitrite.
- b). Monitored every minute. Salinity, temperature, suspended particulate material, dissolved oxygen.
- c). Discrete samples taken at station positions for Ammonia, pH, gravimetrics, C/N. Completed at 1800.

**Wednesday 23rd February:** Departed Goole at 0430. Carried out an axial transect of the estuary from Goole to Spurn Head (with a short excursion into the Trent) and back to Hull. Unloaded all equipment on completion. Left Sea Vigil at about 1500. Measurements were as for the previous day.

**Thursday 24th February:** Plymouth staff returned to Plymouth. Sea Vigil departed Hull marina at 0630 and steamed downestuary as far as the North Holme light float. Carried out vertical profiling every 15 minutes at 1m intervals through the water column from 1045 until 1640, completing 25 profiles for salinity, temperature and suspended particulate material. This was a contingency plan which had to be employed because the weather was unsuitable for transects across the Humber mouth between Tetney and Spurn. Unloaded all equipment on completion.

**Friday 25th February: Contingency day.**

**Summary:**

All equipment worked well on this trip. Sampling was greatly helped by placing a submersible pump in the 'moon pool' (see summary note in the report from Sea Vigil 4), feeding a 'pig'. The higher flow rate to the continuous filtration block on the nutrient analyser made it more efficient (filters lasted at least an hour), and having a sample supply on board obviated throwing buckets over the side! I recommend that we buy the valves and fittings to construct our own 'pig' since the one I borrowed is on its last legs. The 'moon pool' mounting for the NRA standard suite probe functioned very well. We used the same stanchions and track to secure the submersible pump. The 'pig' was positioned by the port side entry door, just aft of the lab, with the sampling tubes pointing over the side. This was very convenient for the supply for the AA continuous filtration block since we were able to pass the tubes through the access port on the rear port side of the lab.