

R1/7

Cruise Report

FRV 'Mara'

30 June - 14 July 1977

Objectives:

- 1) To conduct hydrobiological surveys in Sullom Voe and adjacent areas.
- 2) To replace the current meter mooring deployed in Sullom Voe in April.
- 3) To collect material sedimenting from the water column by means of sediment traps.

Narrative:

'Mara' sailed from Buckie as scheduled at noon on 30 June and arrived at Sullom Voe the following morning. Sedimentation traps and current meters were deployed in the upper basin for the duration of the cruise and the mooring deployed near Sullom church in April was replaced. Six surveys of the voe were completed before 'Mara' returned to Buckie at 1530 on 13 July.

Results:

- a) The bottom water at the head of the voe was very low in oxygen content (< 10% saturation). The current meter results indicate that this water had been present there for less than 2 months.
- b) Elsewhere in the voe the exchange of water was rapid which produced high chlorophyll values.
- c) Phytoplankton levels were high, particularly at the stations in the outer part of the voe. The most dominant diatoms were Chaetoceros species with Chaetoceros curvisetum the most abundant form. Aurelia aurita were also very abundant and had a median diameter of approximately 16 cms.

D D Seaton
H D Dooley
29 September 1977

Seen in draft: W T Mair