

R1/6

Not to be cited without prior reference to the Laboratory

RV *Farnella*

Cruise 0193H

## REPORT

3-12 May 1993

### Personnel

A McIntosh	HSO (SIC)
D Moore	SSO
S Forsyth	SO
C Megginson	SO
L Newton (Miss)	Visitor
S Hamilton (Mrs)	Visitor

### Objectives

1. To collect sediment for total hydrocarbons and macrobenthos analysis from transects west of the Hebrides and in the Minch.
2. To trawl for samples of commercial fish species for hydrocarbons and biochemical analysis.
3. To collect sediment samples in relation to the *Braer* incident.

### Out-turn days per project

Six days/project BIA 1; four days/project *Braer*

### Narrative

After all the gear and equipment had been loaded and secured, *Farnella* departed from Aberdeen on 3 May and made passage North to the first sampling site. Nine stations were successfully occupied between 0200 and 1200 on 4 May when sediments were collected for hydrocarbon analysis. Passage was then made to the west of Shetland where sampling of sediments by grab for macrobenthos and hydrocarbon analysis commenced at 2100. Forty stations were occupied along three transects, which centred on the sedimentary basin off the southern west coast. These samples were collected in relation to the *Braer* incident. During this period, because of worsening mechanical problems associated with the winch operating the grab, spares were despatched from Aberdeen and collected from Scalloway by rubber boat. Successful repairs were carried out by the engineers aboard.

On completion of this sampling, *Farnella* made passage to the north west of Shetland where sampling by grab for sediments was conducted in areas that have been subject to exploration by the oil industry. Sediment collection continued along a transect which passed through the Minch and then up to the western side of the Hebrides. This

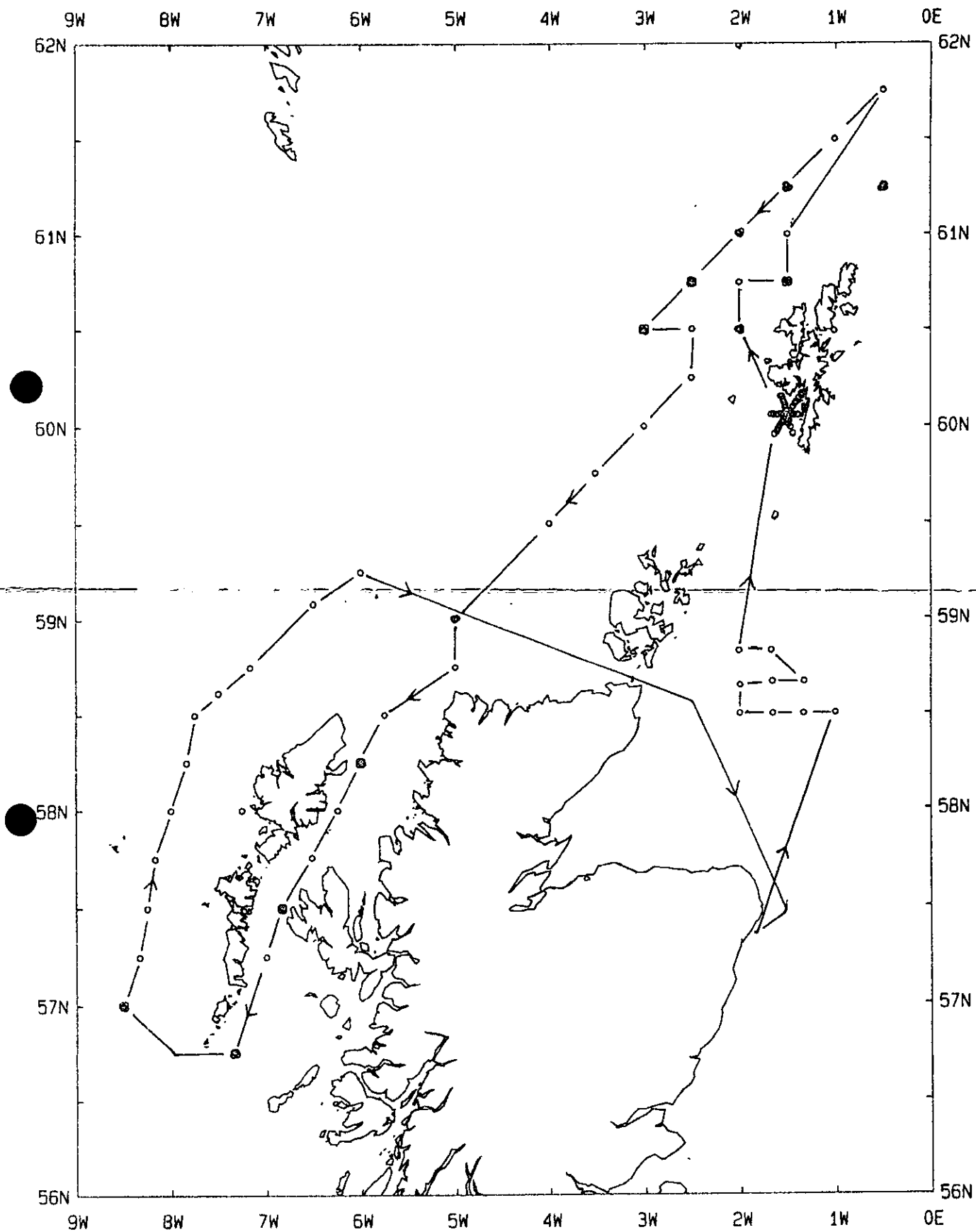
programme provided 80 sediment samples for hydrocarbon analysis. On completion of this sampling programme at 1100 on 11 May, passage was then made to Aberdeen where *Farnella* berthed for unloading on the 12th.

## Results

- Objective 1. Was carried out successfully with only nine stations not sampled. These sediment samples will provide both spacial and temporal trend data in monitoring the activities of the offshore industry during exploration on the western shelf. All samples collected were treated according to standard protocols aboard ship and returned to Aberdeen where detailed analysis will be carried out.
- Objective 2. This aspect of the cruise was unsuccessful, as the fishing gear provided for the purpose, the means of its deployment and retrieval, all proved inadequate.
- Objective 3. The work undertaken in relation to the *Braer* incident was successfully carried out. Forty-two stations generated 110 samples for macrobenthos, meiobenthos, particles size analysis, and sediment bioassay. All samples collected were treated according to standard protocols aboard ship and returned to Aberdeen where detailed analysis will be carried out.

A McIntosh  
12 April 1994

Cruise Track and Sampling Positions - RV Farnella May 1993



Cruise 0193H 3 - 12 May 1993