

MINISTRY OF AGRICULTURE, FISHERIES AND FOOD
FISHERIES LABORATORY, LOWESTOFT, SUFFOLK, ENGLAND

1973 RESEARCH VESSEL PROGRAMME

REPORT: RV CIROLANA: CRUISE 3a

(PROVISIONAL: Not to be quoted without prior reference to the author)

STAFF

D J Ellett
A K Steele
G A Sutton
J F Smith

DURATION

Sailed from Grimsby 0610 h, 6 March

Arrived at Greenock 1845 h, 12 March

All times are Greenwich Mean Time

LOCALITY

North-western North Sea and approaches.

AIM

To collect water samples for ^{137}Cs analysis with a view to tracing the paths of coastal and Atlantic waters at the northern entrance to the North Sea.

NARRATIVE

The ship sailed northwards from the vicinity of the Humber Lightvessel to $57^{\circ}10'N$ and thence westwards towards the coast, being off Aberdeen at 0835 h, 7 March. Surface sampling for ^{137}Cs analysis and salinity was carried out at all stations, but due to moderate contrary winds on the northward leg and the short time available for the survey, sampling in mid-water and above-bottom was restricted to three of the six stations to the east of Aberdeen. Depth sampling was also carried out at a station off Peterhead. Surface sampling continued at stations northward to Sumburgh Head and thence to Duncansby Head, the ship passing through the Pentland Firth at 0516 h, 8 March. Two stations with depth sampling were worked along the Scottish north coast, and surface observations were made at others. CIROLANA passed through the Minches and rounded the Mull of Kintyre at 0800 h, 12 March, taking surface samples at a number of points upon the ship's track. Subsequent to a period of noise trials the ship arrived at Greenock during the evening of 12 March, where staff and gear were disembarked.

RESULTS

Water samples for ^{137}Cs analysis were collected at 38 stations, and samples were pumped from mid-water and near-bottom levels at six of these. The 50 l samples were reduced aboard ship to cartridges of ASG suitable for counting ashore. Salinity samples were taken for later precise determination, but approximate values were obtained from an NIO temperature/salinity bridge at each station. Surface salinities appeared to be higher than the 1905-55 mean values over all of the ship's track, maximal values occurring 18 n. mls. SSW of

Sumburgh Head. Bathythermograph lowerings at four of the stations sampled at depth showed homothermal conditions. The main aim of sampling in both Atlantic and coastal waters was achieved.

D J Ellett
20 March 1973

SEEN IN DRAFT: T R Finn (Master)

G W Argumont (Fishing Skipper)

INITIALLED: AJL

DISTRIBUTION:

Basic List
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