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

1987 RESEARCH VESSEL PROGRAMME

REPORT: RV PRINCE MADOG : CRUISE 40

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

STAFF:

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DURATION:

Left Menai Bridge 1030 h 20 July 1987  
Docked Menai Bridge 0830 h 24 July 1987

(All times are Greenwich Mean Time)

LOCATION:

Eastern Irish Sea

AIMS:

1. To collect samples of water and surface sediment from the vicinity of the Morecambe Bay gas field, to be analysed for hydrocarbons and trace metals. This is part of the continuing study of the development of the gas field.

NARRATIVE:

PRINCE MADOG left Menai Bridge at 1030 h on 20 July and sailed to the Lune Deep at the entrance to Morecambe Bay where she anchored at 1700 h. Gear was set up and checked by 1830 h, and on 21 July samples were collected and analysed through a tidal cycle, the 13 hour sampling period ending at 2030 h. Two similar anchor stations were worked on 22 and 23 July, the first at the northern end of the Morecambe Bay gas field where further development is shortly to take place, and the second near the central platform of the gas field. Sampling was completed at 2030 h on 23 July, after which PRINCE MADOG returned to the Menai Straits, anchoring overnight before proceeding to Menai Bridge with the rising tide and arriving at 0830 h on 24 July.

RESULTS:

As good weather prevailed during the cruise all planned sampling was completed successfully. Sampling and analysis of water samples from various depths was carried out over a 13 hour period at each of 3 anchor stations. Readings of current speed and direction, salinity and temperature were made near the surface and seabed hourly. Surface samples were taken for hydrocarbon analysis hourly, and samples from greater depths (3 to 30 m) were taken periodically. These were all analysed on-board by fluorescence spectroscopy and the sample extracts preserved at -20°C for further analysis by gas chromatography in the laboratory. Further samples were filtered and the filters preserved to allow determination of the particulate loadings in the laboratory.

Water samples for hydrocarbon analysis were taken from depths > 5 m using a modified shallow water sampler adapted for deployment from a hydrowire. This was first tried on CIROLANA 4/87 when samples were collected from 70 m, and

was used routinely for the first time on this cruise. The device worked well, and for future cruises will be further modified in the light of this experience so that it is easier to fit and remove from the wire.

R J Law  
31 July 1987

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