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BIOLOGICAL OCEANOGRAPHY CRUISE REPORT

LF 3096

27-29 March 1996

PERSONNEL

Dr S I Heaney

SIC, SPSO, DANI

Charles Quartly

Valeport Ltd

Robert McKinley

Valeport Ltd

Steve White

Valeport Ltd (from Thursday, 28 March)

Cruise Objectives

1. To test the undulating plankton sampler being developed by Valeport Ltd.

2. To determine chlorophyll a in the Irish Sea using hot methanol and cold acetone extractory procedures.

CRUISE NARRATIVE

Wednesday, 27 March 1996

Depart Belfast 07.00.

After thorough safety drill and demonstration arrived on station. Deployed U-tow in North Channel. During initial trials U-tow operated mechanically satisfactory. However there were problems with software to track theoretical undulations with overshooting on the upward track. Much time was spent on software manipulations. The trials were carried out in fine weather.

In the evening problems arose with insufficient voltage to operate servo motor operating the U-tow wings. The problem was resolved after electrical checks indicated increasing voltage to be safe to instrument circuitry.

Anchored off Kilroot 01.30.

Thursday, 28 March 1995

Departed for open sea 07.00 h.

Trials with U-tow continued in freshening winds. Further problems occurred with ingress of water into electrical components. To overcome problems spare parts were flown in from Bristol by Steve White. The system was dismantled and rebuilt in Belfast in the evening.

Samples of water from the North Channel were also filtered to check completeness of chlorophyll extraction using standard cold methanol procedure.

Arrive Belfast 19,20 h.

Friday, 29 March 1996

Depart Belfast 06.35 h.

U-tow deployed in North Channel at 08.10 h and worked satisfactorily. Trials recommenced.

Ship arrived Belfast 14.00 h.

A copy of the report by Valeport on their results is attached.

Acknowledgements

I am grateful to the ship's master, officers, engineers, catering staff and crew for their cooperation during this cruise.

S I Heaney 4.4.96.