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

1973 RESEARCH VESSEL PROGRAMME

REPORT: R V CORELLA: CRUISE 5

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

STAFF: P G W Jones
A R Folkard
J L Henry
T C Doddington
D Hydes (Univ East Anglia) 16 - 27 March only

DURATION: Left Lowestoft 1500 h 13 March
Arrived Lowestoft 1800 h 15 March
Left Lowestoft 1800 h 16 March
Arrived Lowestoft 1400 h 27 March

All times are Greenwich mean time

LOCALITY: North Sea and eastern English Channel

AIMS:

1 It surveys the distributon of selected dissolved and particulate trace metals (cadmium, copper, mercury, mickel and zinc) in the English coastal region of the northern North Sea, the southern North Sea and the eastern English Channel.

2 To measure the aultra violet absorption of sea water on the above grid as an index of its dissolved organic content.

3 To measure the aluminium content of sea water over the above grid (UEA project).

4 To recover the moored current meters laid in the Thames Estuary during CORELLA Cruise 2/73.

NARRATIVE

After sailing from Lowestoft, CORELLA anchored off Clacton for the night of 13 March and commenced recovery of the moored current meter stations in the Thames Estuary at 0600 h the following morning. This operation was completed by 1130 h on 15 March. The surface buoys from rigs PK and G and the Plessey current meter number 166 from rig N were all missing. CORELLA then returned to Lowestoft and docked at 1800 h. The current meter gear was unloaded during the morning of the following day.

The vessel sailed again 16 1800 h on 16 March and commenced the trace metal survey near the Farne Islands at 1650 h the following day. On 19 and 20 March trace metal samples were taken during 13 hour tidal cycles at an anchor station in the entrance to the River Humber and in the Wash. On 23 March the vessel called at IJmuiden from 0815 to 1430 h. Trace metal water samples were exchanged woth the Netherlands Institute of Sewage Treatment as part of an international intercalibration exercise. The trace metal survey grid was vompleted at 0840 hours on 26 March in the Solent. CORELLA then returned to Lowestoft, docking at 1400 h the following day.

RESULTS

1 The area covered by the trace metal survey is shown on the attached chart. Surface samples were taken on all stations and bottom samples were collected mainly on alternate stations. All water samples were returned to the laboratory deep frozen for analysis. Particulate material to be analysed was retained on membrane filters.

2 and 3 Both the ultra violet absorption measurements and the aluminium content of the water generally showed the highest values in coastal waters with rleatively low levels offshore. Water samples for the analysis of phosphate and silicate were taken at selected stations as part of the aluminium survey.

P G W Jones
28 March 1973

Seen in draft: J C M B
C N S

INITIALLED: H A C

DISTRIBUTION:

Basic list

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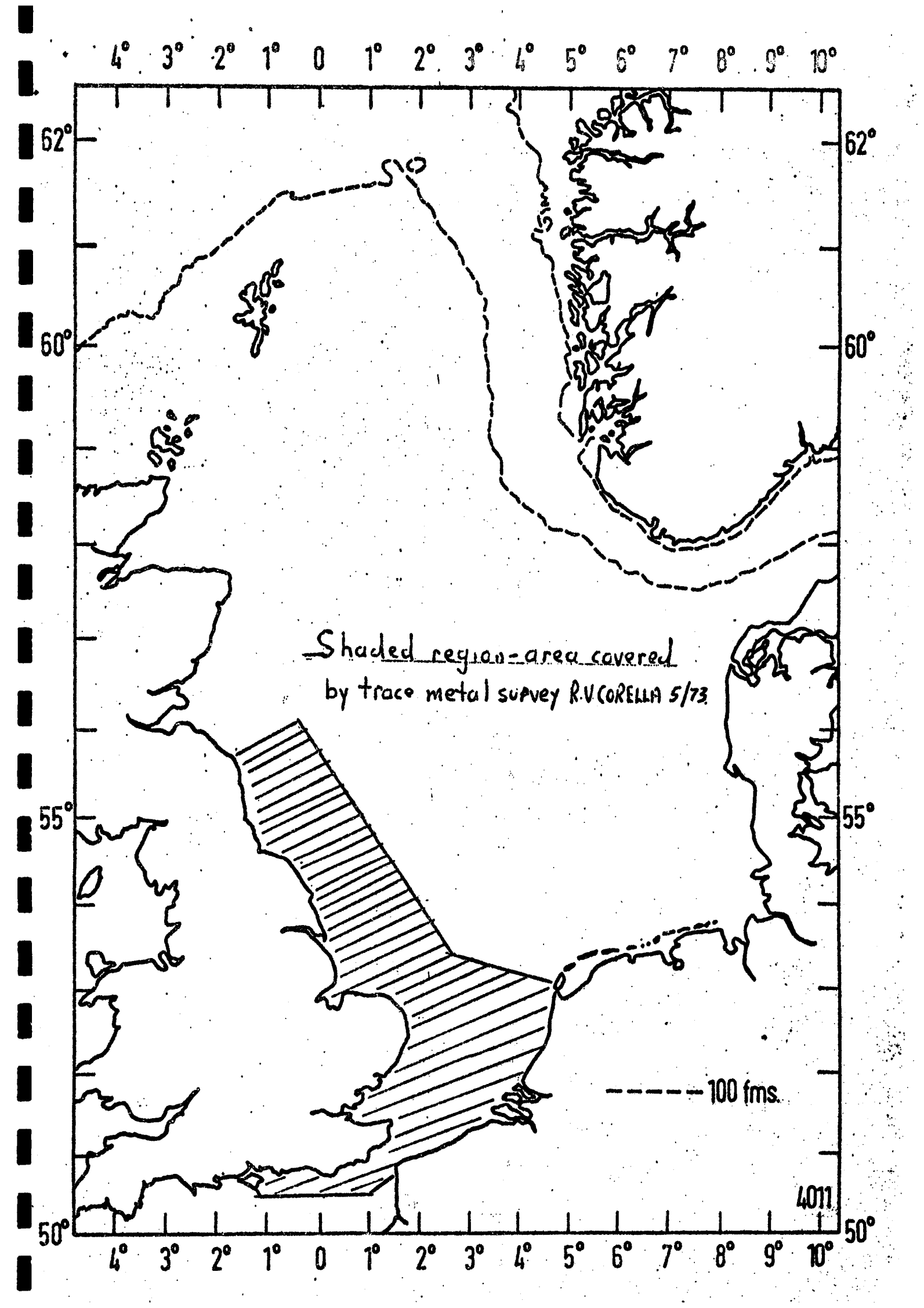
4° 3° 2° 1° 0 1° 2° 3° 4° 5° 6° 7° 8° 9° 10°
62°
60°
55°
50°
Shaded region = area covered
by trace metal survey R.V CORELLA 5/73
100 fms.
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