

R1/4

AMM

In Confidence - Not to be quoted without reference to the Laboratory 4ER82

FRV "Explorer"

Cruise 4/82

REPORT

30 April - 20 May 1982

Narrative

"Explorer" left Aberdeen on afternoon of 30 April and headed for the Montrose oilfield. Due to bad weather no work could be undertaken around the platform and "Explorer" therefore steamed to Sullom Voe where Chlamys opercularis were caught and deployed in cages around the effluent pipe in Calback Ness. On the evening of 4 May "Explorer" steamed to Murchison oilfield where work commenced at 0930 on 5 May and continued with short breaks, due to bad weather and winch breakdowns until the survey was completed at 1200 on 8 May. "Explorer" then steamed to Balta Sound to catch fish for chemical analysis, thence to Sullom Voe to recover the Chlamys cages. After the half landing in Lerwick "Explorer" steamed to the JONSIS line, collecting a sample for radio caesium en route. Work commenced on the JONSIS line at 1930 on 11 May. On completion of the JONSIS line "Explorer" steamed to the Beryl and Montrose oilfields completing these surveys at 1200 hours 16 May. North Sea Benthos stations were sampled en route to Arbroath where a further radio caesium sample was taken. "Explorer" docked at 1600 on 19 May.

Results

- 1 All stations around the oilfields were sampled for macrobenthic and epibenthic fauna, particle size analysis, diesel analysis (see table attached), carbon/chlorophyll analysis and fish for taste panel assessment and observations on disease and ulceration. Due to the prevailing sea states no measurements of Eh could be obtained.
- 2 Twenty-six general North Sea benthos stations (including JONSIS line) were occupied and satisfactorily sampled.
- 3 Chlamys opercularis cages were successfully deployed and recovered in Calback Ness.
- 4 Water samples for radio caesium analysis were obtained from the Fair Isle and Arbroath areas.

D C Moore

Seen in draft W Smith

11 October 1982

StationDiesel Equivalents in $\mu\text{g/g}$ dry weight

<u>Murchison</u>	North Close Up	3.42
	$\frac{1}{2}$ mile	1.6
	1	1.2
	3	1.0
	10	1.4
	15	2.7
	South Close Up	120.0
	$\frac{1}{2}$	3.9
	1	2.7
	3	2.0
	5	1.7
	East Close Up	16.7
	$\frac{1}{2}$	12.7
	1	1.2
	3	0.7
	4	1.5
	5	0.4
	10	2.7
	15	3.1
<u>Montrose</u>	South	32.3
	$\frac{1}{2}$	6.2
	1	1.6
	3	2.3
	5	5.1
	10	2.3
	North	7.2
	$\frac{1}{2}$	2.7
	1	3.5
	3	1.0
	5	0.2
	10	2.7
	East	-
	$\frac{1}{2}$	4.6
	1	1.3
	3	5.2
	5	2.6
	10	4.4
	West Close Up	2.1
	$\frac{1}{2}$	1.6
	1	929.0
	3	29.4
	5	3.9
	10	3.7
	South Close Up	4200.0
	South	33.2
	$\frac{1}{2}$	10.1
	1	3.6
	2	104.0
	10	53.0
	East Close Up	7.9
	$\frac{1}{2}$	4.7
	1	5.7
	3	3.5
	5	
	10	

Beryl

North Close Up

929.0

1

29.4

3

3.9

10

3.7

South Close Up

4200.0

South

 $\frac{1}{2}$

33.2

2

10.1

10

3.6

East Close Up

104.0

 $\frac{1}{2}$

53.0

1

7.9

3

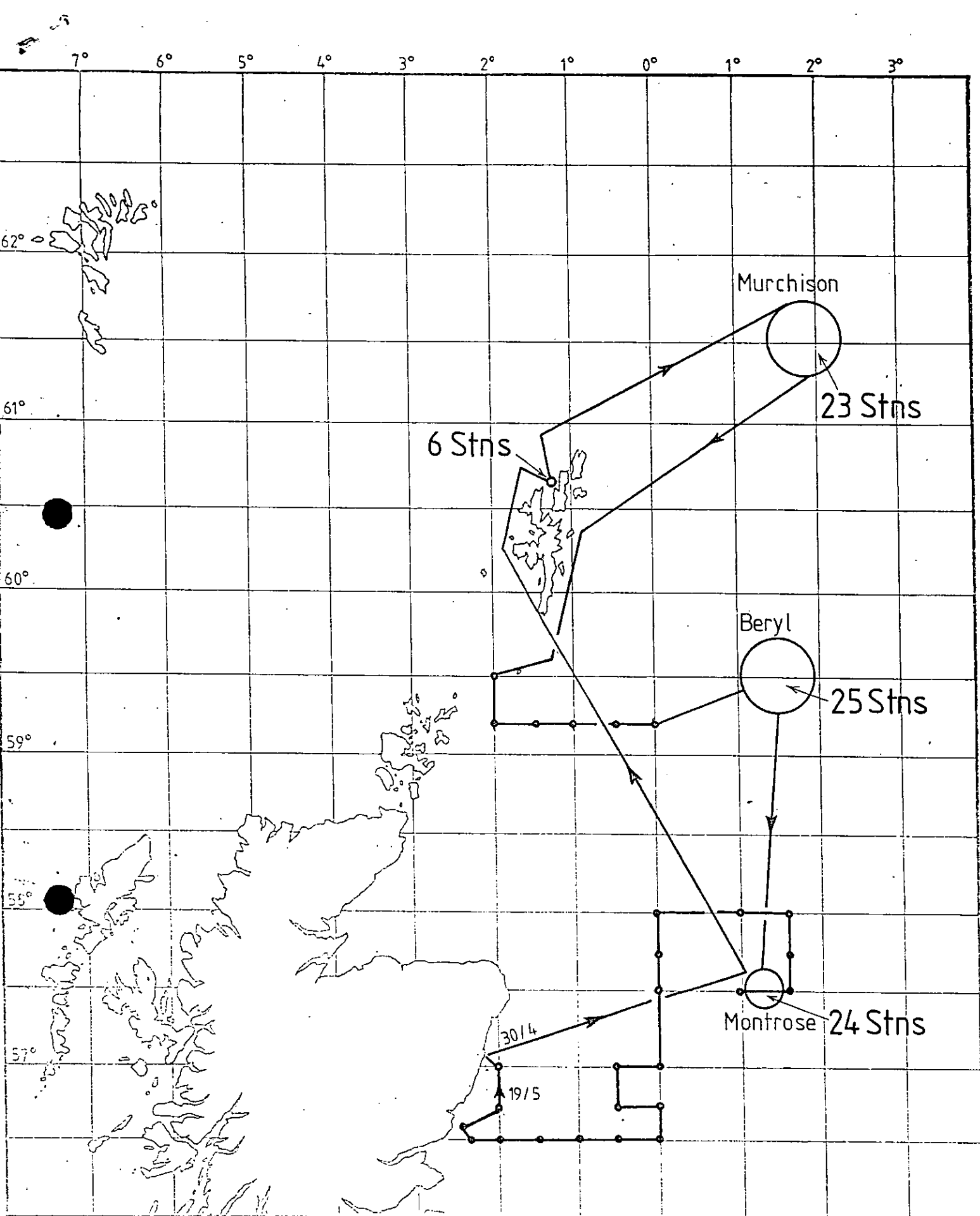
4.7

5

5.7

10

3.5



FRV. Explorer 30/4—20/5/82

4ER82