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MRV Scotia

Survey 0619S

PROGRAMME

28 April - 05 May 2019

Loading: Aberdeen, 26 April 2019 Unloading: Aberdeen, 05 May 2019

In setting the survey programme and specific objectives, etc. the Scientist-in-Charge needs to be aware of the restrictions on working hours and the need to build in adequate rest days and rest breaks as set out in Marine Scotland's Working Time Policy (Notice 34/03). In addition, the Scientist-in-Charge must formally review the risk assessments for the survey with staff on-board before work is commenced.

In the interest of efficient data management it is now mandatory to return the survey report, to I Gibb and the Survey Summary Report (old ROSCOP form) to M Geldart, within four weeks of a survey ending. In the case of the Survey Summary Report a nil return is required, if appropriate.

Equipment: Day grab; sieve table; TV drop frame with lasers; armoured cable; multibeam echosounder system; SVP; time lapse cameras and associated moorings.

Objectives

1. To assess the macro benthic ecology of drill cuttings material using time lapse cameras.

Estimated Days per Project: 8 days, RE01T0

Procedure

MRV Scotia will depart from Aberdeen Harbour at 09:00 hours on 28 April and, after all safety drills have been undertaken, make passage to the decommissioned Murchison platform. The nature of the survey work will be heavily dependent on the prevailing weather conditions encountered and a daily plan will be agreed between the SIC, Captain and Fishing Master. The survey techniques are no different to previous similar surveys conducted by MSS using *MRV Scotia*.

Multibeam Bathymetry

A sound velocity profile (SVP) will be collected within the survey location. On completion of the SVP, *MRV* Scotia will conduct a multibeam swathe survey of approximately 5 x 5 km over the decommissioned site. Survey speed will be 4 knots. The output will be checked for any anomalous features that could interact with other survey equipment. This will provide insight to locate subsequent survey stations.

Grab Samples

Grab samples of surface sediments will be collected and sub sampled for hydrocarbon analysis.

Seabed Video footage

Video footage and digital stills will be recorded using a *drop-frame* camera suspended 1-1.5 m above the seabed and towed at a speed of 1 knot or less (0.5 m per second).

Time Lapse Camera

Seven time lapse cameras will be placed on the seabed guided by the bathymetry data collected.

If time permits, additional survey data will be collected from the Hutton decommissioned platform. On completion of all survey work *MRV Scotia* will return to Aberdeen Harbour on 4 May in preparation for unloading the following day.

Normal contact will be maintained with the Marine Laboratory.

Submitted: P Hayes 18 April 2019

Approved: I Gibb 18 April 2019



Figure 1: Map showing of the survey locations.