

VOYAGE SUMMARY ss2013_c01

BOAGS deepwater testing

Voyage period:

04/03/2013 to 05/03/2013

Port of departure:

Hobart, Australia

Port of return:

Hobart, Australia

Responsible laboratory:

CMAR, Marine and
Atmospheric Research

Castray Esplanade, Battery Point
TAS 7004

GPO Box 1538
7001 Hobart, TAS
Australia

Chief Scientist(s)

Dr Alan Williams

Scientific Objectives

Testing of newly configured BOAGS sampler in working depths 1000 – 2700 m

Voyage Objectives

Results against objectives

1. Deploy the new BOAGS sampler (without full suite of hydrocarbon and acoustic sensors) to evaluate:
 - ♦ the performance of the D&N Francis winch in regard to power and spooling
 - trialled to maximum working depth (2,700 m); successful in all aspects, including identifying a problem in the hydraulic spooling valve [result indicates hydraulic service and spare valve needed before survey]
 - ♦ the response of the torque-balanced wire to the release of tension during the coring interval
 - trialled during 4 landings on seabed (530-2,700 m); no problems with twisting or kinking in wire; tow-staff provides good indicator of wire-out and tension when BOAGS on seabed [result indicates low risk in fitting all hydrocarbon and acoustic sensors to the BOAGS platform for simultaneous data collection on coring deployments]
 - ♦ the performance of the new KC multicorer and the new BOAGS frame
 - all pressure cases and electronics components worked faultlessly; 2 significant problems identified with corer, and solutions identified [result indicates the need to add collars to stabilise location of coring barrels on baseplate and increase frictional grip of locking pins to prevent premature release of sealing plates on bases of coring barrels; some other design fine-tuning will also be considered]

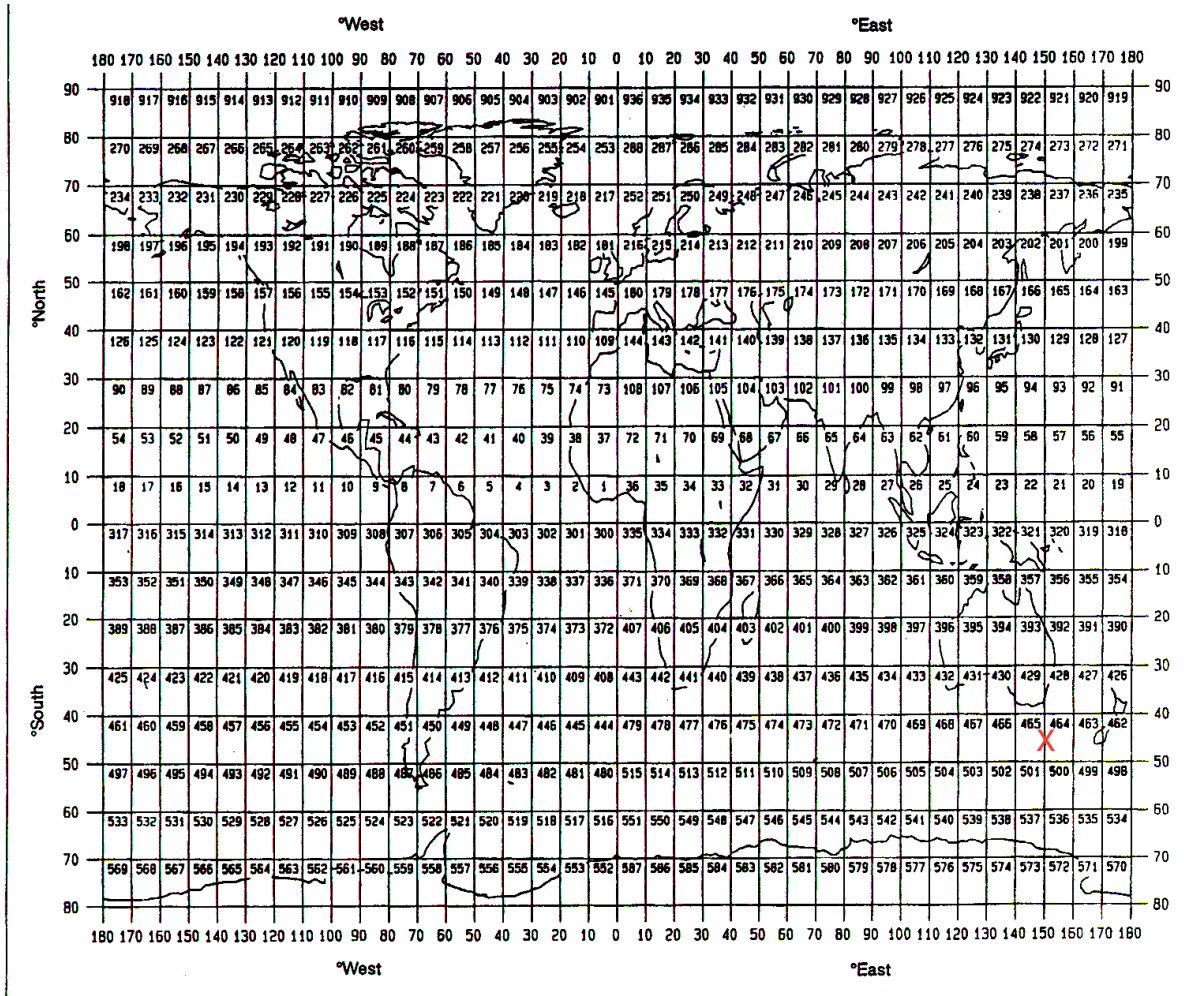
2. Deploy the ANU multicorer to understand its operating details, and evaluate its performance
 - ♦ deployed successfully in 530 m; training in assembly and use of the multicorer was completed [result provides us with a fall-back sampler for the forthcoming GAB survey] ss2013_c02
3. Consider and on-board sample processing procedures, including laboratory set ups
 - ♦ many aspects of sample and data processing were discussed and agreed in situ; several important actions will stem from this planning opportunity

Principal Investigators

A. Dr Alan Williams

Marsden Squares

A red "x" indicates where data was collected.



MOORINGS, BOTTOM MOUNTED GEAR AND DRIFTING SYSTEMS

ITEM NO	PI SEE PAGE ABOVE	APPROXIMATE POSITION						DATA TYPE ENTER CODES FROM LIST ON LAST PAGE	DESCRIPTION
		DEG	MIN	N/S	DEG	MIN	E/W		
n/a									

SUMMARY OF MEASUREMENTS AND SAMPLES TAKEN

ITEM NO.	PI	NO	UNITS	DATA TYPE	DESCRIPTION
n/a					

CURATION REPORT

ITEM NO.	DESCRIPTION
n/a	

VOYAGE TRACK

Steam from Hobart to SE Tasmania to appropriate testing depths (~2000 – 2700 m)

TIME ESTIMATES

ACTIVITY	REGION	DISTANCE	TIME	DATE
Transit	Hobart – SE Tas (2000 m)	56 nm	6 hrs	4th March
Gear testing	SE Tas 2000 m		12 hrs	4-5th March
Transit	SE Tas - Hobart	56 nm	6 hrs	5th March

Table 1. Estimate of time for transit and surveys during SS2013_RC01

Personnel list

Scientific Participants

Alan Williams	CSIRO	Chief Scientist
Bill Butler	P&O (VIPAC)	VIPAC Tech
Graham Nash	ANU	Multi-corer
Ron Hackney	GA	Observer
Christian Blood	CSIRO	SE&T Mechanical Technician
Matt Sherlock	CSIRO	Electronic Engineer
Xiubin Qi	CSIRO	CESRE -Petroleum Res
Emma Crooke	CSIRO	CESRE -Petroleum Res
Toni Moate	CSIRO	Observer
Karen Gowlett-Holmes	CSIRO	Core sample processingt
Mark Lewis	CSIRO	Gear operations
Mark Green	CSIRO	Gear operations
Lindsay Pender	CSIRO	MNF Computing Support
Jeff Cordell	CSIRO	MNF Electronics support and Dep. Voyage Manager
Don McKenzie	CSIRO	MNF Voyage Manager

Marine Crew

Name	Role
Mike Watson	Master
John Boyes	Chief Officer
Simon Smeaton	Second Officer
Frederick Rostron	Chief Engineer
Stephen Dunmall	First Engineer
Graeme Perkins	Second Engineer
Anthony Hearne	Chief Integrated Rating
Matthew Streat	Integrated Rating
Jonathon Lumb	Integrated Rating
Nathan Arahanga	Integrated Rating
Lewis Coombe	Integrated Rating
Peter Maher	Chief Cook
Oliver Herlihy	Cook
Michael O'Connor	Chief Steward

Dr Alan Williams
Chief Scientist