

Voyage SS05-2005

Arafura Sea Marine Survey: Identifying potential natural hydrocarbon seeps and petroleum resources, including sea floor mapping and classification of Australia's central northern EEZ.

Dr Graham Logan (Chief Scientist), Geoscience Australia

Collaborative Charters 2004/2005			Environmentally Sustainable Australia					Frontier Technologies	Safeguarding Australia
			1	2	5	6	7	4	2
SS05/2005	Arafura Sea Marine Survey: Identifying potential natural hydrocarbon seeps and petroleum resources, including sea floor mapping and classification of Australia's central northern EEZ.	GA/NOO							

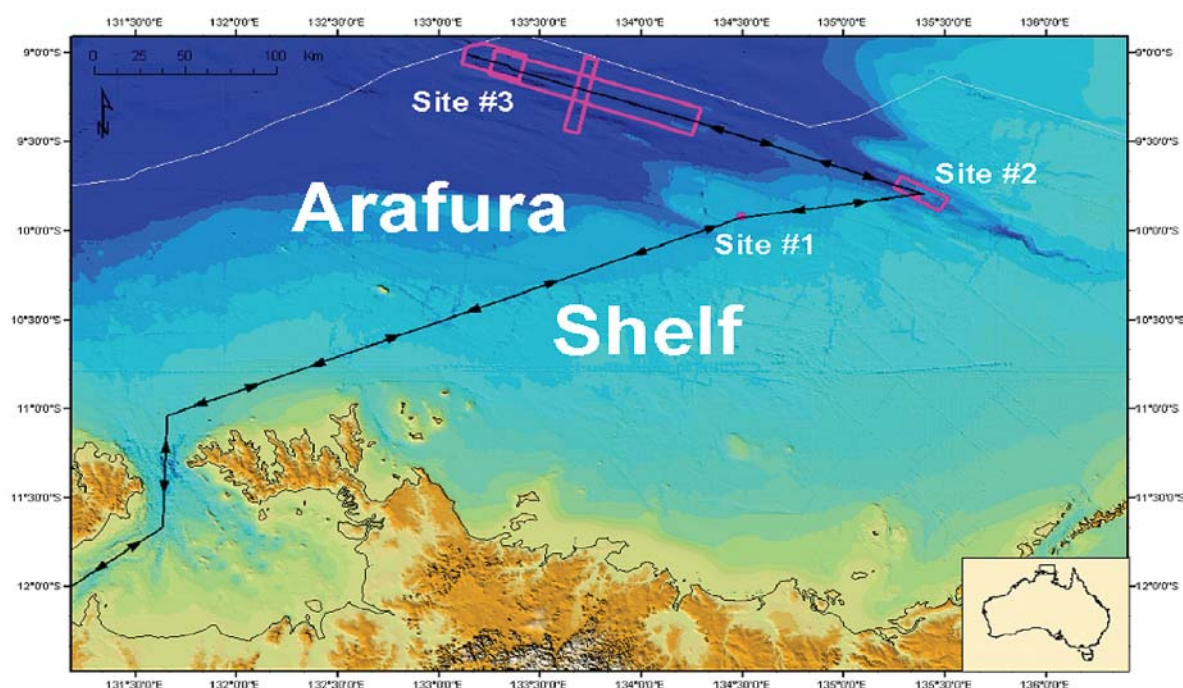
The potential of the voyage to contribute to Australia's national benefit:

This research makes a significant contribution to the nation through improving understanding of the petroleum resources in the Arafura Sea and by identifying and sampling natural hydrocarbon seepage in the area. Natural hydrocarbon seepage can provide evidence for an active petroleum system within the

subsurface. Sites of seepage can also support highly diverse ecosystems. This is due to the provision of nutrients, changes to biogeochemical cycles and sediment substrate.

Data obtained on the voyage provided information on the nature of the sea floor, variation in sediment type,

bathymetry, and evidence for shallow gas and faulting. This information was used to select specific sites for further sampling. These were chosen to reflect a range of benthic habitats for environmental and sedimentological sampling and areas of natural hydrocarbon seepage for geochemical and environmental sampling.



> SS05-2005 voyage track

□ sampling sites

→ voyage track