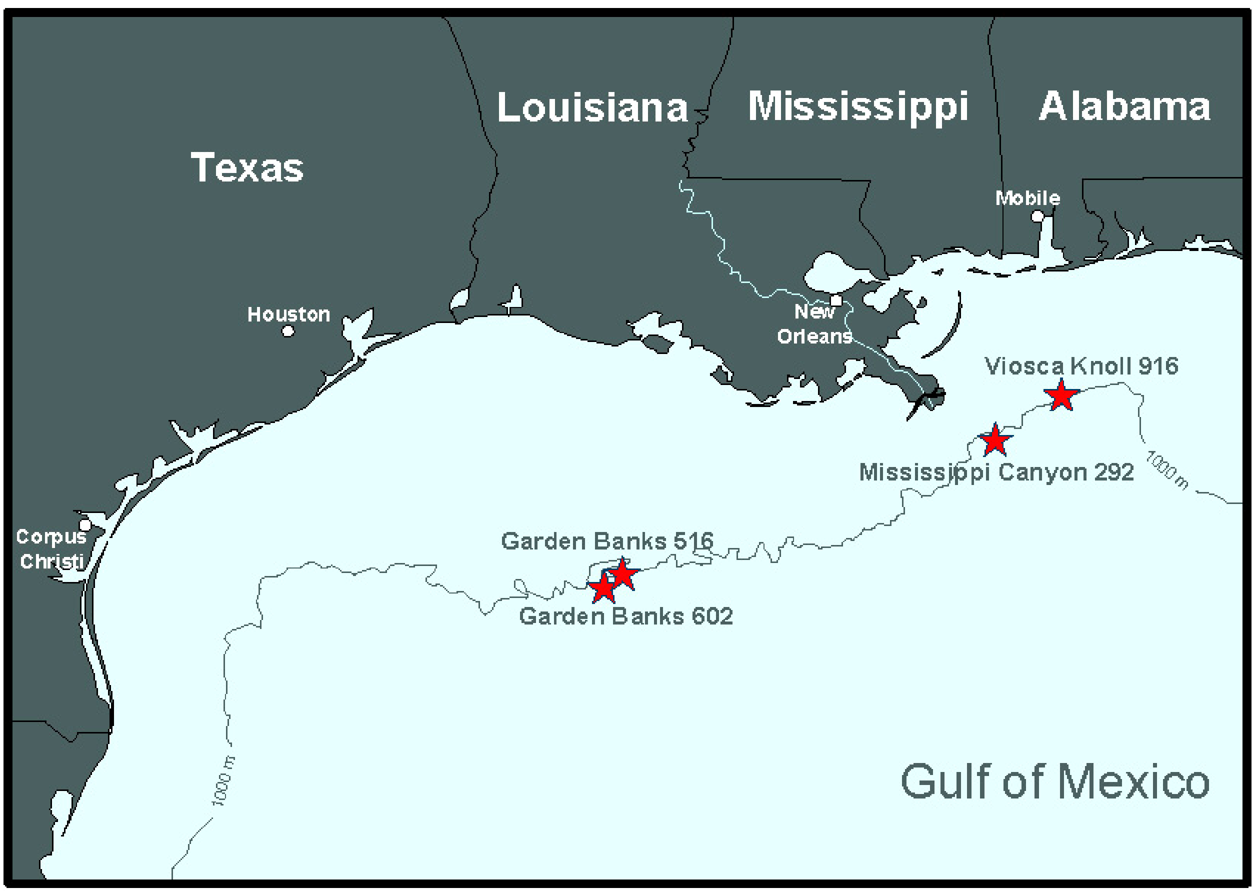
OCS Study
MMS 2006-046

Effects of Oil and Gas Exploration and Development at Selected Continental Slope Sites in the Gulf of Mexico

Volume III: Appendices



U.S. Department of the Interior
Minerals Management Service
Gulf of Mexico OCS Region

OCS Study
MMS 2006-046

Effects of Oil and Gas Exploration and Development at Selected Continental Slope Sites in the Gulf of Mexico

Volume III: Appendices

Author

Continental Shelf Associates, Inc.

Prepared under MMS Contract
1435-01-00-CT-31034
by
Continental Shelf Associates, Inc.
759 Parkway Street
Jupiter, Florida 33477-9596

Published by

U.S. Department of the Interior
Minerals Management Service
Gulf of Mexico OCS Region

New Orleans
July 2006

Disclaimer

This report was prepared under contract between the Minerals Management Service (MMS) and Continental Shelf Associates, Inc. This report has been technically reviewed by the MMS and has been approved for publication. Approval does not signify that the contents necessarily reflect the views or policies of the MMS, nor does mention of trade names or commercial products constitute endorsement or recommendation for use. It is, however, exempt from review and compliance with MMS editorial standards.

Report Availability

Extra copies of this report may be obtained from the Public Information Office at the following address:

U.S. Department of the Interior
Minerals Management Service
Gulf of Mexico OCS Region
Public Information Office (MS 5034)
1201 Elmwood Park Boulevard
New Orleans, LA 70123-2394

Telephone: (504) 736-2519 or
1-800-200-GULF

Citation

Suggested citation:

Continental Shelf Associates, Inc. 2006. Effects of Oil and Gas Exploration and Development at Selected Continental Slope Sites in the Gulf of Mexico. Volume III: Appendices. U.S. Department of the Interior, Minerals Management Service, Gulf of Mexico OCS Region, New Orleans, LA. OCS Study MMS 2006-046. 938 pp.

Acknowledgments

The program was conducted by a large, multidisciplinary team under the direction of Continental Shelf Associates, Inc. (CSA). David Gettleson was the program manager and Alan Hart served as deputy program manager and data manager. Neal Phillips was the scientific editor for the final report. Principal investigators are acknowledged at the head of each report chapter in Volume II (Technical Report).

We appreciate the assistance of MMS staff including Greg Boland (Contracting Officer's Technical Representative), Mary Boatman (Technical Performance Evaluation Committee), Debra Bridge (Contracting Officer), and Tom Ahlfeld. Jill Leale with the MMS Mapping & Automation Unit provided historical well data and georeferenced maps of well locations based on the MMS Technical Information Management System.

Drilling discharge data were kindly provided by Vince Cottone (ChevronTexaco) and Kent Satterlee, Ellen Polanski, and Jane Chady (Shell). Joe Smith (ExxonMobil) sent unpublished reports that were helpful in drilling discharge calculations.

The Scientific Review Board consisted of Andy Glickman (ChevronTexaco), Donald Harper (Texas A&M University at Galveston), and Jim Ray (Oceanic Environmental Solutions). Additional input in the study design was provided by Peter Arnold (independent consultant), Maynard Brandsma (Brandsma Engineering), and Woollcott Smith (Temple University).

We wish to recognize the following individuals for their roles in the field surveys:

- Jay Northcutt (C&C Technologies) – Project manager, geophysical cruises
- Tony George (C&C Technologies) – Manager, geophysical interpretation
- Scott Melancon – Party chief, geophysical Cruises 2A and 3A
- Tim MacEwan – Senior operator, geophysical Cruise 2A
- Scott McBay, David Aucoin, and Paige Melancon – Party chiefs, geophysical Cruise 1A
- Roger Fay (TDI-Brooks International, Inc.) – Chief scientist, chemical/biological cruises
- Lynwood Powell (CSA) – Field operations manager, chemical/biological Cruises 1B and 2B; navigation/post-plotting and geographic information system development
- Frank Johnson (CSA) – Field operations manager, chemical/biological Cruise 3B

Other cruise participants including staff from Continental Shelf Associates, Inc., C&C Technologies, TDI-Brooks International, Inc., Florida Institute of Technology, and Louisiana State University are too numerous to list individually, but their contributions are sincerely appreciated. We also wish to acknowledge Wayne Isphording (University of South Alabama) for conducting laboratory sediment grain size analyses.

The CSA document production team included Melody Powell (document production coordinator and technical editor), Heidi Glick (technical editor), Suzanne Short (graphics), and Debbie Raffel, Karen Stokesbury, Lynanne Rockhill, and Debbie Cannon (word processing).

Contents

APPENDIX A1

Samples Collected and Transects Completed During Cruises 1B, 2B, and 3B

Table A1-1. Box core samples and subsamples collected during Cruise 1B (October-November 2000).

Zone	Box Core Station	Date Sampled	Latitude	Longitude	Samples Collected									
					Metals/ TOC*	Pore Water	Radio-nuclides	Redox Chemistry	Grain Size	Clay Mineralogy	Hydro-carbons	Macro-infauna	Meio-fauna	Micro-biota
Garden Banks Block 516														
Near-field	NF-B01	10/28/00	27°29.45’N	92°22.97’W	X	--	--	X	X	X	X	X	X	X
Near-field	NF-B02	10/29/00	27°29.42’N	92°23.26’W	X	--	--	X	X	X	X	X	X	X
Near-field	NF-B03	10/29/00	27°29.26’N	92°23.15’W	X	--	--	X	X	X	X	X	X	X
Near-field	NF-B04	10/29/00	27°29.31’N	92°23.00’W	X	--	--	X	X	X	X	X	X	X
Near-field	NF-B05	10/29/00	27°29.54’N	92°23.10’W	X	--	--	X	X	X	X	X	X	X
Near-field	NF-B06	10/29/00	27°29.48’N	92°23.15’W	X	--	--	X	X	X	X	X	X	X
Near-field	NF-B07	10/29/00	27°29.30’N	92°23.20’W	X	--	--	X	X	X	X	X	X	X
Near-field	NF-B08	10/30/00	27°29.30’N	92°23.02’W	X	--	--	X	X	X	X	X	X	X
Near-field	NF-B09	10/30/00	27°29.48’N	92°22.97’W	X	--	--	X	X	X	X	X	X	X
Near-field	NF-B10	10/30/00	27°29.48’N	92°23.39’W	X	--	--	X	X	X	X	X	X	X
Near-field	NF-B11	10/30/00	27°29.13’N	92°23.19’W	X	--	--	X	X	X	X	X	X	X
Near-field	NF-B12	10/30/00	27°29.20’N	92°22.94’W	X	--	--	X	X	X	X	X	X	X
Far-field 1	FF1-B01	11/1/00	27°27.00’N	92°29.12’W	X	--	--	X	X	X	X	X	X	X
Far-field 1	FF1-B02	11/1/00	27°27.02’N	92°28.96’W	X	--	--	X	X	X	X	X	X	X
Far-field 2	FF2-B01	10/30/00	27°30.64’N	92°16.72’W	X	X	--	X	X	X	X	X	X	X
Far-field 2	FF2-B02	10/31/00	27°30.78’N	92°16.63’W	X	--	--	X	X	X	X	X	X	X
Far-field 3	FF3-B01	10/31/00	27°30.90’N	92°15.58’W	X	--	--	X	X	X	X	X	X	X
Far-field 3	FF3-B02	10/31/00	27°30.92’N	92°15.60’W	X	--	--	X	X	X	X	X	X	X
Far-field 4	FF4-B01	10/31/00	27°31.56’N	92°14.14’W	X	--	--	X	X	X	X	X	X	X
Far-field 4	FF4-B02	10/31/00	27°31.60’N	92°14.20’W	X	--	--	X	X	X	X	X	X	X
Far-field 5	FF5-B01	11/1/00	27°31.86’N	92°13.95’W	X	--	--	X	X	X	X	X	X	X
Far-field 5	FF5-B02	11/1/00	27°31.83’N	92°13.88’W	X	--	--	--	X	X	X	X	X	X
Far-field 6	FF6-B01	11/1/00	27°31.52’N	92°12.70’W	X	--	X	X	X	X	X	X	X	X
Far-field 6	FF6-B02	11/1/00	27°31.60’N	92°12.72’W	X	X	--	X	X	X	X	X	X	X

Table A1-1. (Continued).

Zone	Box Core Station	Date Sampled	Latitude	Longitude	Samples Collected									
					Metals/ TOC*	Pore Water	Radio-nuclides	Redox Chemistry	Grain Size	Clay Mineralogy	Hydro-carbons	Macro-infauna	Meio-fauna	Micro-biota
Viosca Knoll Block 916														
Near-field	NF-B01	11/5/00	29°06.46’N	87°53.17’W	X	--	--	X	X	X	X	X	X	X
Near-field	NF-B02	11/4/00	29°06.54’N	87°53.36’W	X	X	--	X	X	X	X	X	X	X
Near-field	NF-B03	11/5/00	29°06.39’N	87°53.35’W	X	--	X	X	X	X	X	X	X	X
Near-field	NF-B04	11/5/00	29°06.25’N	87°53.28’W	X	--	--	X	X	X	X	X	X	X
Near-field	NF-B05	11/5/00	29°06.49’N	87°53.25’W	X	--	--	X	X	X	X	X	X	X
Near-field	NF-B06	11/5/00	29°06.48’N	87°53.42’W	X	--	--	X	X	X	X	X	X	X
Near-field	NF-B07	11/5/00	29°06.33’N	87°53.37’W	X	--	--	X	X	X	X	X	X	X
Near-field	NF-B08	11/5/00	29°06.30’N	87°53.24’W	X	--	--	X	X	X	X	X	X	X
Near-field	NF-B09	11/7/00	29°06.43’N	87°53.08’W	X	--	--	X	X	X	X	X	X	X
Near-field	NF-B10	11/7/00	29°06.46’N	87°53.60’W	X	--	--	X	X	X	X	X	X	X
Near-field	NF-B11	11/7/00	29°06.25’N	87°53.40’W	X	--	--	X	X	X	X	X	X	X
Near-field	NF-B12	11/7/00	29°06.24’N	87°53.10’W	X	--	--	X	X	X	X	X	X	X
Far-field 1	FF1-B01	N/A	N/A	N/A	--	--	--	--	--	--	--	--	--	--
Far-field 1	FF1-B02	N/A	N/A	N/A	--	--	--	--		--	--	--	--	--
Far-field 2	FF2-B01	11/6/00	29°04.50’N	87°58.99’W	X	X	--	X	X	X	X	X	X	X
Far-field 2	FF2-B02	11/6/00	29°04.39’N	87°59.08’W	X	--	--	X	X	X	X	X	X	X
Far-field 3	FF3-B01	11/6/00	29°08.80’N	87°47.88’W	X	--	--	X	X	X	X	X	X	X
Far-field 3	FF3-B02	11/8/00	29°08.83’N	87°47.93’W	X	--	X	X	X	X	X	X	X	X
Far-field 4	FF4-B01	11/8/00	29°09.90’N	87°46.58’W	X	--	--	X	X	X	X	X	X	X
Far-field 4	FF4-B02	11/8/00	29°09.80’N	87°46.63’W	X	--	--	X	X	X	X	X	X	X
Far-field 5	FF5-B01	11/8/00	29°10.70’N	87°45.10’W	X	--	--	X	X	X	X	X	X	X
Far-field 5	FF5-B02	11/8/00	29°10.59’N	87°45.12’W	X	--	--	X	X	X	X	X	X	X
Far-field 6	FF6-B01	11/8/00	29°11.07’N	87°44.03’W	X	--	--	X	X	X	X	X	X	X
Far-field 6	FF6-B02	11/8/00	29°11.26’N	87°43.97’W	X	--	--	X	X	X	X	X	X	X

* TOC = Total organic carbon.
N/A = not applicable (no samples were collected at this location).

Table A1-2. Box core samples and subsamples collected during Cruise 2B (July 2001).

Station	Date	Latitude	Longitude	Samples Collected									
				Metals/ TOC*	Pore Water	Radio- nuclides	Redox Chemistry	Grain Size	Clay Mineralogy	Hydro- carbons	Macro- infauna	Meio- fauna	Micro- biota
Garden Banks Block 516													
FF6-B01	07/11/01	27°31.65'N	92°13.40'W	X			X	X	X	X	X	X	X
FF6-B02	07/11/01	27°31.65'N	92°12.73'W	X	X	X	X	X	X	X	X	X	X
FF5-B01	07/12/01	27°31.92'N	92°13.77'W	X			X	X	X	X	X	X	X
FF5-B02	07/12/01	27°31.82'N	92°13.80'W	X			X	X	X	X	X	X	X
FF4-B01	07/12/01	27°31.63'N	92°14.21'W	X			X	X	X	X	X	X	X
FF4-B02	07/12/01	27°31.51'N	92°14.24'W	X			X	X	X	X	X	X	X
FF3-B02	07/12/01	27°30.87'N	92°15.81'W	X			X	X	X	X	X	X	X
FF3-B01	07/12/01	27°30.83'N	92°15.77'W	X			X	X	X	X	X	X	X
FF2-B01	07/12/01	27°30.78'N	92°16.61'W	X			X	X	X	X	X	X	X
FF2-B02	07/12/01	27°30.67'N	92°16.70'W	X			X	X	X	X	X	X	X
NF-B01	07/12/01	27°29.46'N	92°22.99'W	X			X	X	X	X	X	X	X
NF-B02	07/12/01	27°29.55'N	92°23.18'W	X			X	X	X	X	X	X	X
NF-B03	07/12/01	27°29.40'N	92°23.15'W	X			X	X	X	X	X	X	X
NF-B04	07/12/01	27°29.25'N	92°23.11'W	X			X	X	X	X	X	X	X
NF-B05	07/12/01	27°29.50'N	92°23.08'W	X			X	X	X	X	X	X	X
NF-B06	07/13/01	27°29.49'N	92°23.23'W	X			X	X	X	X	X	X	X
NF-B07	07/13/01	27°29.34'N	92°23.19'W	X			X	X	X	X	X	X	X
NF-B08	07/13/01	27°29.30'N	92°23.06'W	X			X	X	X	X	X	X	X
NF-B09	07/13/01	27°29.43'N	92°22.91'W	X			X	X	X	X	X	X	X
NF-B10	07/13/01	27°29.47'N	92°23.41'W	X			X	X	X	X	X	X	X
NF-B11	07/13/01	27°29.26'N	92°23.22'W	X			X	X	X	X	X	X	X
NF-B12	07/13/01	27°29.24'N	92°22.92'W	X			X	X	X	X	X	X	X

Table A1-2. (Continued).

Station	Date	Latitude	Longitude	Samples Collected									
				Metals/ TOC*	Pore Water	Radio-nuclides	Redox Chemistry	Grain Size	Clay Mineralogy	Hydro-carbons	Macro-infauna	Meio-fauna	Micro-biota
NF-DS1**	07/13/01	27º29.43'N	92º23.18'W	X			X	X	X	X	X	X	X
NF-DS2**	07/13/01	27º29.46'N	92º23.13'W	X			X	X	X	X	X	X	X
NF-DS3**	07/13/01	27º29.42'N	92º23.10'W	X			X	X	X	X	X	X	X
FF1-B01	07/14/01	27º27.07'N	92º29.07'W	X			X	X	X	X	X	X	X
FF1-B02	07/14/01	27º26.94'N	92º28.98'W	X			X	X	X	X	X	X	X
Garden Banks Block 602													
NF-B01	07/14/01	27º22.74'N	92º27.49'W	X			X	X	X	X	X	X	X
NF-B05	07/14/01	27º22.74'N	92º27.46'W	X			X	X	X	X	X	X	X
NF-B09	07/14/01	27º22.76'N	92º27.45'W	X			X	X	X	X	X	X	X
NF-B02	07/14/01	27º22.76'N	92º27.73'W	X			X	X	X	X	X	X	X
NF-B06	07/14/01	27º22.73'N	92º27.70'W	X			X	X	X	X	X	X	X
NF-B10	07/14/01	27º22.66'N	92º27.87'W	X			X	X	X	X	X	X	X
NF-B03	07/14/01	27º22.60'N	92º27.73'W	X			X	X	X	X	X	X	X
NF-B07	07/15/01	27º22.54'N	92º27.70'W	X			X	X	X	X	X	X	X
FF5-B01	07/15/01	27º15.44'N	92º28.16'W	X			X	X	X	X	X	X	X
FF5-B02	07/15/01	27º15.41'N	92º28.18'W	X	X	X	X	X	X	X	X	X	X
FF4-B01	07/15/01	27º12.77'N	92º31.54'W	X			X	X	X	X	X	X	X
FF4-B02	07/15/01	27º12.83'N	92º31.35'W	X			X	X	X	X	X	X	X
FF1-B01	07/19/01	27º22.66'N	92º36.41'W	X			X	X	X	X	X	X	X
FF1-B02	07/19/01	27º22.76'N	92º36.50'W	X			X	X	X	X	X	X	X
NF-B08	07/19/01	27º22.57'N	92º27.45'W	X			X	X	X	X	X	X	X
NF-B04	07/19/01	27º22.53'N	92º27.59'W	X			X	X	X	X	X	X	X
NF-B11	07/19/01	27º22.45'N	92º27.75'W	X			X	X	X	X	X	X	X
NF-B12	07/19/01	27º22.42'N	92º27.50'W	X			X	X	X	X	X	X	X

Table A1-2. (Continued).

Station	Date	Latitude	Longitude	Samples Collected									
				Metals/ TOC*	Pore Water	Radio- nuclides	Redox Chemistry	Grain Size	Clay Mineralogy	Hydro- carbons	Macro- infauna	Meio- fauna	Micro- biota
NF-DS1**	07/19/01	27°22.55'N	92°27.47'W	X			X	X	X	X	X	X	X
NF-DS2**	07/19/01	27°22.59'N	92°27.68'W	X	X		X	X	X	X	X	X	X
NF-DS3**	07/19/01	27°22.29'N	92°28.06'W	X			X	X	X	X	X	X	X
FF3-B01	07/19/01	27°13.02'N	92°36.50'W	X			X	X	X	X	X	X	X
FF3-B02	07/19/01	27°13.06'N	92°36.33'W	X			X	X	X	X	X	X	X
FF2-B01	07/19/01	27°17.32'N	92°36.89'W	X			X	X	X	X	X	X	X
FF2-B02	07/19/01	27°17.44'N	92°36.96'W	X			X	X	X	X	X	X	X
FF6-B01	07/20/01	27°22.86'N	92°17.01'W	X			X	X	X	X	X	X	X
FF6-B02	07/20/01	27°22.66'N	92°17.05'W	X			X	X	X	X	X	X	X
Mississippi Canyon Block 292													
FF1-B01	07/21/01	28°42.26'N	88°48.20'W	X			X	X	X	X	X	X	X
FF1-B02	07/21/01	28°42.29'N	88°48.11'W	X			X	X	X	X	X	X	X
FF2-B01	07/21/01	28°43.92'N	88°47.33'W	X			X	X	X	X	X	X	X
FF2-B02	07/21/01	28°43.75'N	88°47.43'W	X	X	X	X	X	X	X	X	X	X
FF4-B01	07/21/01	28°47.30'N	88°39.88'W	X			X	X	X	X	X	X	X
FF4-B02	07/22/01	28°47.20'N	88°39.89'W	X			X	X	X	X	X	X	X
FF5-B01	07/22/01	28°48.10'N	88°33.90'W	X			X	X	X	X	X	X	X
FF5-B02	07/22/01	28°48.28'N	88°33.92'W	X			X	X	X	X	X	X	X
NF-B10	07/22/01	28°42.37'N	88°35.90'W	X			X	X	X	X	X	X	X
NF-B06	07/22/01	28°42.32'N	88°35.83'W	X			X	X	X	X	X	X	X
NF-B02	07/22/01	28°42.32'N	88°35.77'W	X			X	X	X	X	X	X	X
NF-B05	07/22/01	28°42.35'N	88°35.67'W	X			X	X	X	X	X	X	X
NF-B07	07/23/01	28°42.16'N	88°35.89'W	X			X	X	X	X	X	X	X
NF-B03	07/23/01	28°42.12'N	88°35.84'W	X			X	X	X	X	X	X	X
NF-B11	07/23/01	28°42.06'N	88°35.90'W	X			X	X	X	X	X	X	X

Table A1-2. (Continued).

Station	Date	Latitude	Longitude	Samples Collected									
				Metals/ TOC*	Pore Water	Radio- nuclides	Redox Chemistry	Grain Size	Clay Mineralogy	Hydro- carbons	Macro- infauna	Meio- fauna	Micro- biota
NF-B04	07/23/01	28º42.08'N	88º35.69'W	X			X	X	X	X	X	X	X
FF3-B01	07/23/01	28º48.63'N	88º39.87'W	X			X	X	X	X	X	X	X
FF3-B02	07/23/01	28º48.67'N	88º39.86'W	X			X	X	X	X	X	X	X
NF-B01	07/23/01	28º42.24'N	88º35.63'W	X			X	X	X	X	X	X	X
NF-B08	07/23/01	28º42.23'N	88º35.61'W	X			X	X	X	X	X	X	X
NF-B09	07/23/01	28º42.27'N	88º35.45'W	X			X	X	X	X	X	X	X
NF-B12	07/23/01	28º42.23'N	88º35.45'W	X			X	X	X	X	X	X	X
NF-DS1**	07/23/01	28º42.18'N	88º35.71'W	X			X	X	X	X	X	X	X
NF-DS2**	07/23/01	28º42.16'N	88º35.69'W	X	X		X	X	X	X	X	X	X
NF-DS3**	07/23/01	28º42.15'N	88º35.70'W	X			X	X	X	X	X	X	X
FF6-B01	07/23/01	28º48.82'N	88º33.07'W	X			X	X	X	X	X	X	X
FF6-B02	07/23/01	28º48.71'N	88º33.08'W	X			X	X	X	X	X	X	X

* TOC - Total organic carbon.
**DS - Discretionary subsurface sediment sample stations.

Table A1-3. Box core samples and subsamples collected during Cruise 3B (August 2002).

Station	Date	Latitude	Longitude	Samples Collected								
				Metals/ TOC*	Pore Water	Redox	Hydro-carbons	Grain Size	Clay Mineralogy	Macro-infauna	Meio-fauna	Micro-biota
NF-B01	07/08/02	29º06.43'N	87º53.21'W	X	--	X	X	X	X	X	X	X
NF-B02	07/08/02	29º06.54'N	87º53.42'W	X	--	X	X	X	X	X	X	X
NF-B03	07/08/02	29º06.33'N	87º53.37'W	X	--	X	X	X	X	X	X	X
NF-B04	07/08/02	29º06.28'N	87º53.27'W	X	--	X	X	X	X	X	X	X
NF-B05	08/08/02	29º06.48'N	87º53.24'W	X	--	X	X	X	X	X	X	X
NF-B06	08/08/02	29º06.41'N	87º53.36'W	X	--	X	X	X	X	X	X	X
NF-B07	08/08/02	29º06.40'N	87º53.41'W	X	--	X	X	X	X	X	X	X
NF-B08	08/08/02	29º06.39'N	87º53.28'W	X	--	X	X	X	X	X	X	X
NF-B09	08/08/02	29º06.46'N	87º53.04'W	X	--	X	X	X	X	X	X	X
NF-B10	09/08/02	29º06.55'N	87º53.44'W	X	--	X	X	X	X	X	X	X
NF-B11	09/08/02	29º06.17'N	87º53.34'W	X	--	X	X	X	X	X	X	X
NF-B12	09/08/02	29º06.39'N	87º53.13'W	X	--	X	X	X	X	X	X	X
NF-DS1	08/08/02	29º06.41'N	87º53.33'W	X	--	X	X	X	X	X	X	X
NF-DS2	08/08/02	29º06.46'N	87º53.24'W	X	X	X	X	X	X	X	X	X
NF-DS3	08/08/02	29º06.49'N	87º53.16'W	X	--	X	X	X	X	X	X	X
FF1-B01	07/08/02	29º03.30'N	88º02.71'W	X	--	X	X	X	X	X	X	X
FF1-B02	07/08/02	29º03.28'N	88º02.62'W	X	--		X	X	X	X	X	X
FF2-B01	07/08/02	29º04.39'N	87º59.09'W	X	--	X	X	X	X	X	X	X
FF2-B02	07/08/02	29º04.46'N	87º59.09'W	X	--		X	X	X	X	X	X
FF3-B01	09/08/02	29º08.95'N	87º47.85'W	X	--	X	X	X	X	X	X	X
FF3-B02	09/08/02	29º08.79'N	87º47.88'W	X	X		X	X	X	X	X	X
FF4-B01	09/08/02	29º09.80'N	87º46.63'W	X	--	X	X	X	X	X	X	X
FF4-B02	09/08/02	29º09.83'N	87º46.48'W	X	--		X	X	X	X	X	X
FF5-B01	09/08/02	29º10.59'N	87º45.08'W	X	--	X	X	X	X	X	X	X
FF5-B02	09/08/02	29º10.72'N	87º45.09'W	X	--		X	X	X	X	X	X
FF6-B01	09/08/02	29º11.17'N	87º44.10'W	X	--	X	X	X	X	X	X	X
FF6-B02	09/08/02	29º11.19'N	87º44.10'W	X	--		X	X	X	X	X	X

* TOC = Total organic carbon.

Table A1-4. Sediment profile imaging (SPI) camera transects completed. Only transects successfully completed are listed (i.e., acceptable data obtained).

Transect	Date	Start		Finish	
		Latitude	Longitude	Latitude	Longitude
Cruise 1B (October-November 2000)					
Garden Banks Block 516					
NF1-SPI	10/28/2000	27°29.22'N	92°22.58'W	27°29.63'N	92°23.24'W
NF2-SPI	10/28/2000	27°29.28'N	92°22.94'W	27°29.58'N	92°23.35'W
NF3-SPI	10/29/2000	27°29.18'N	92°23.12'W	27°29.35'N	92°23.29'W
FF2-SPI	10/30/2000	27°30.62'N	92°16.62'W	27°30.75'N	92°16.77'W
FF4-SPI	10/31/2000	27°31.44'N	92°14.21'W	27°31.64'N	92°14.23'W
FF6-SPI	11/01/2000	27°31.46'N	92°12.69'W	27°31.60'N	92°12.85'W
Viosca Knoll Block 916					
NF1-SPI	11/04/2000	29°06.49'N	87°53.05'W	29°06.39'N	87°53.62'W
NF2-SPI	11/04/2000	29°06.57'N	87°53.50'W	29°06.23'N	87°53.12'W
FF2-SPI	11/06/2000	29°04.32'N	87°59.05'W	29°04.51'N	87°59.16'W
FF4-SPI	11/11/2000	29°09.84'N	87°46.53'W	29°09.68'N	87°46.63'W
FF6-SPI	11/11/2000	29°11.25'N	87°43.97'W	29°11.06'N	87°44.12'W
Cruise 2B (July 2001)					
Garden Banks Block 516					
NF1-SPI	07/13/01	27º29.56'N	92º23.05'W	27º29.33'N	92º23.01'W
NF2-SPI	07/13/01	27º29.65'N	92º23.25'W	27º29.21'N	92º23.30'W
NF3-SPI	07/13/01	27º29.26'N	92º22.82'W	27º29.63'N	92º23.21'W
FF3-SPI[a]	07/12/01	27º30.94'N	92º15.62'W	27º30.85'N	92º15.78'W
FF4-SPI	07/12/01	27º31.63'N	92º14.17'W	27º31.42'N	92º14.31'W
FF5-SPI	07/12/01	27º31.98'N	92º13.75'W	27º31.74'N	92º13.90'W
Garden Banks Block 602					
NF1-SPI	07/14/01	27º22.76'N	92º27.33'W	27º22.76'N	92º27.88'W
NF2-SPI	07/14/01	27º22.59'N	92º27.34'W	27º22.59'N	92º27.74'W
NF3-SPI	07/14/01	27º22.46'N	92º27.44'W	27º22.81'N	92º27.44'W
FF1-SPI	07/18/01	27º22.77'N	92º36.46'W	27º22.58'N	92º36.47'W
FF4-SPI	07/19/01	27º12.81'N	92º31.30'W	27º12.82'N	92º31.45'W
FF5-SPI	07/15/01	27º15.59'N	92º28.00'W	27º15.41'N	92º28.21'W
Mississippi Canyon Block 292					
NF1-SPI	07/22/01	28º42.22'N	88º36.04'W	28º42.41'N	88º35.57'W
NF2-SPI	07/22/01	28º42.32'N	88º36.02'W	28º42.03'N	88º35.64'W
FF1-SPI	07/21/01	28º42.20'N	88º48.31'W	28º42.30'N	88º48.16'W
FF4-SPI	07/22/01	28º47.25'N	88º39.68'W	28º47.23'N	88º39.93'W
FF5-SPI	07/22/01	28º48.16'N	88º33.76'W	28º48.23'N	88º34.00'W
Cruise 3B (August 2002)					
Viosca Knoll Block 916[b]					
NF1-SPI	08/08/02	29º06.69'N	87º53.5'W	29º06.17'N	87º53.1'W
NF2-SPI	08/08/02	29º06.69'N	87º53.6'W	29º06.47'N	87º53.3'W
NF3-SPI	08/08/02	29º06.08'N	87º53.3'W	29º06.43'N	87º53.3'W

[a] The FF3 transect at Garden Banks Block 516 on Cruise 2B consisted of two overlapping transects, which were treated as one in the analysis.

[b] During Cruise 3B, far-field transects were attempted at Viosca Knoll FF2 and FF4; however, due to problems with the SPI camera, no usable data were collected.

Table A1-5. Camera sled transects completed. Only transects successfully completed are listed (i.e., acceptable data obtained).

Transect and Film No.	Date	Start		Finish	
		Latitude	Longitude	Latitude	Longitude
Cruise 1B (October-November 2000)					
Garden Banks Block 516					
NF1-R1	10/29/00	27°29.16'N	92°23.01'W	27°29.60'N	92°23.33'W
NF2-R2	10/30/00	27°29.23'N	92°22.93'W	27°29.63'N	92°23.27'W
NF3-R3	10/30/00	27°29.18'N	92°22.92'W	27°29.58'N	92°23.33'W
FF1-R19	11/16/00	27°26.89'N	92°28.86'W	27°27.35'N	92°29.17'W
FF3-R4	10/31/00	27°30.77'N	92°15.70'W	27°30.96'N	92°15.76'W
FF3-R18	11/15/00	27°31.03'N	92°15.49'W	27°31.19'N	92°16.09'W
FF5-R5	10/31/00	27°31.73'N	92°13.78'W	27°31.96'N	92°13.88'W
FF5-R17	11/15/00	27°31.95'N	92°13.54'W	27°31.92'N	92°13.90'W
Viosca Knoll Block 916					
NF1-R6	11/4/00	29°06.60'N	93°53.52'W	29°06.32'N	93°53.23'W
NF2-R10	11/11/00	29°06.49'N	93°53.02'W	29°05.99'N	93°53.34'W
NF3-R15	11/12/00	29°06.62'N	93°53.02'W	29°06.24'N	93°53.49'W
FF3-R14	11/12/00	29°09.08'N	93°47.76'W	29°08.79'N	93°48.02'W
FF4-R13	11/12/00	29°09.96'N	93°46.38'W	29°09.61'N	93°46.51'W
FF4-R16	11/12/00	29°09.98'N	93°46.51'W	29°09.73'N	93°46.93'W
FF5-R11	11/11/00	29°10.65'N	93°45.05'W	29°10.30'N	93°45.21'W
Cruise 2B (July 2001)					
Garden Banks Block 516					
NF1-R3	07/13/01	27º29.56'N	92º23.10'W	27º29.27'N	92º23.50'W
NF2-R4	07/13/01	27º29.17'N	92º22.63'W	27º29.71'N	92º23.30'W
NF3-R5	07/13/01	27º29.17'N	92º23.06'W	27º29.15'N	92º23.04'W
FF1-R6	07/14/01	27º26.93'N	92º28.94'W	27º27.23'N	92º29.20'W
FF2-R1	07/12/01	31º59.92'N	117º00.48'W	31º59.92'N	117º00.48'W
FF6-R2	07/12/01	27º31.78'N	92º12.81'W	27º31.30'N	92º12.68'W
Garden Banks Block 602					
NF1-R7	07/14/01	27º22.73'N	92º27.46'W	27º22.75'N	92º27.96'W
NF2-R10	07/20/01	27º22.37'N	92º27.55'W	27º22.72'N	92º27.87'W
NF3-R11	07/20/01	27º23.06'N	92º27.53'W	27º22.37'N	92º27.32'W
FF2-R9	07/19/01	27º17.27'N	92º36.90'W	27º17.69'N	92º36.93'W
FF3-R8	07/19/01	27º13.02'N	92º36.15'W	27º13.08'N	92º36.69'W
FF6-R12	07/20/01	27º23.08'N	92º16.70'W	27º22.64'N	92º17.08'W
Mississippi Canyon Block 292					
NF1-R14	07/22/01	28º41.94'N	88º35.40'W	28º42.49'N	88º35.78'W
NF2-R15	07/22/01	28º41.88'N	88º35.67'W	28º42.41'N	88º36.02'W
NF3-R18	07/24/01	28º42.37'N	88º35.28'W	28º42.07'N	88º35.84'W
FF2-R13	07/21/01	28º43.94'N	88º47.19'W	28º43.66'N	88º47.75'W
FF3-R16	07/23/01	28º48.80'N	88º39.61'W	28º48.52'N	88º40.19'W
FF6-R17	07/24/01	28º49.18'N	88º32.81'W	28º48.67'N	88º33.21'W
Cruise 3B (August 2002)					
Viosca Knoll Block 916					
NF1-R2	08/11/02	29º06.45'N	87º53.44'W	29º06.09'N	87º52.77'W
NF2-R3	08/11/02	29º06.59'N	87º53.51'W	29º06.24'N	87º52.87'W
NF4-R7	08/12/02	29º06.47'N	87º53.71'W	29º06.15'N	87º53.06'W
FF4-R6	08/12/02	29º09.86'N	87º46.74'W	29º09.42'N	87º46.04'W
FF5-R5	08/12/02	29º10.67'N	87º45.33'W	29º10.49'N	87º44.29'W

APPENDIX A2

Locations of Far-Field Samples and Transects During Cruises 1B, 2B, and 3B

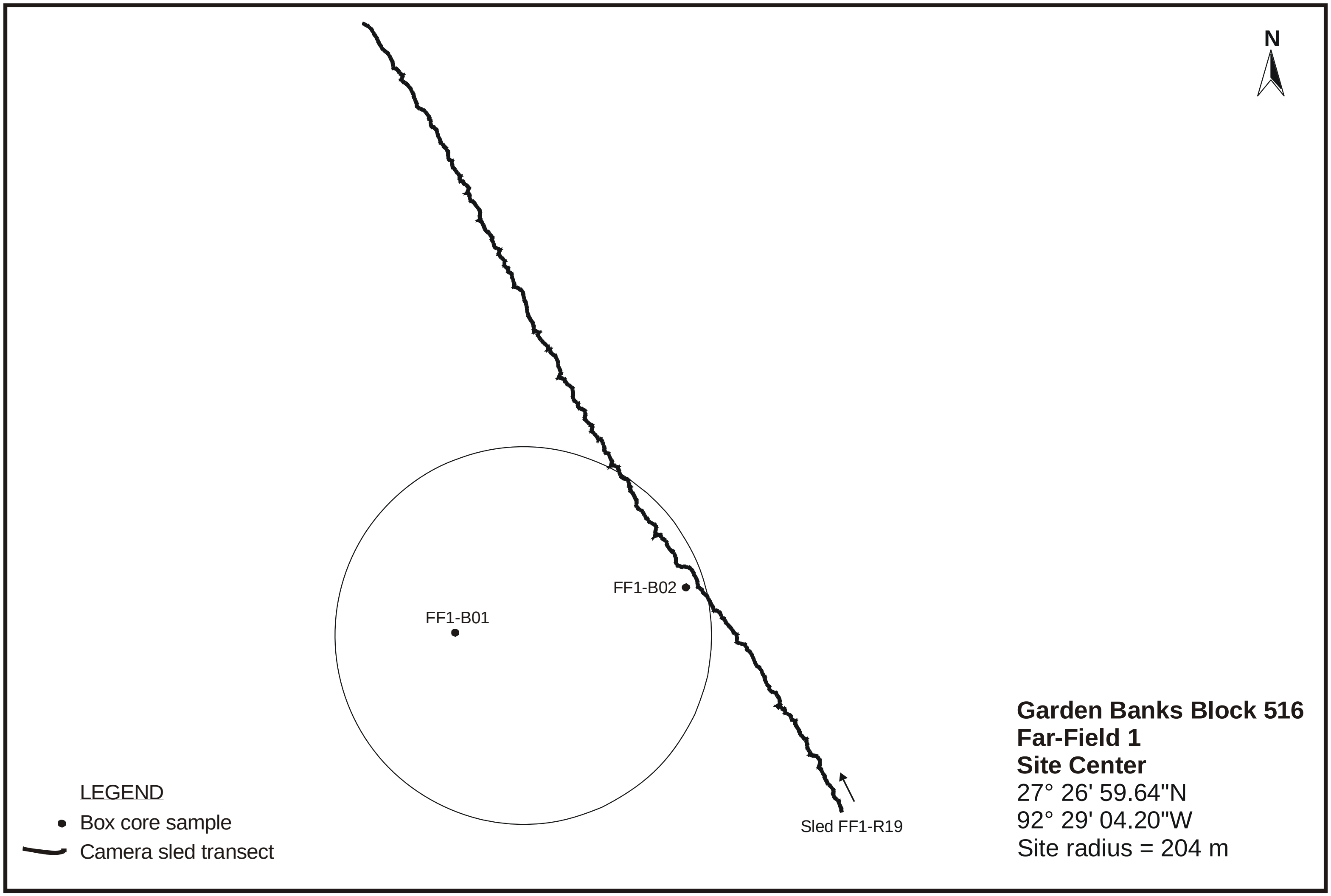


Figure A2-1. Garden Banks Block 516 Far-field 1 (FF1) site, showing sampling locations on Cruise 1B.

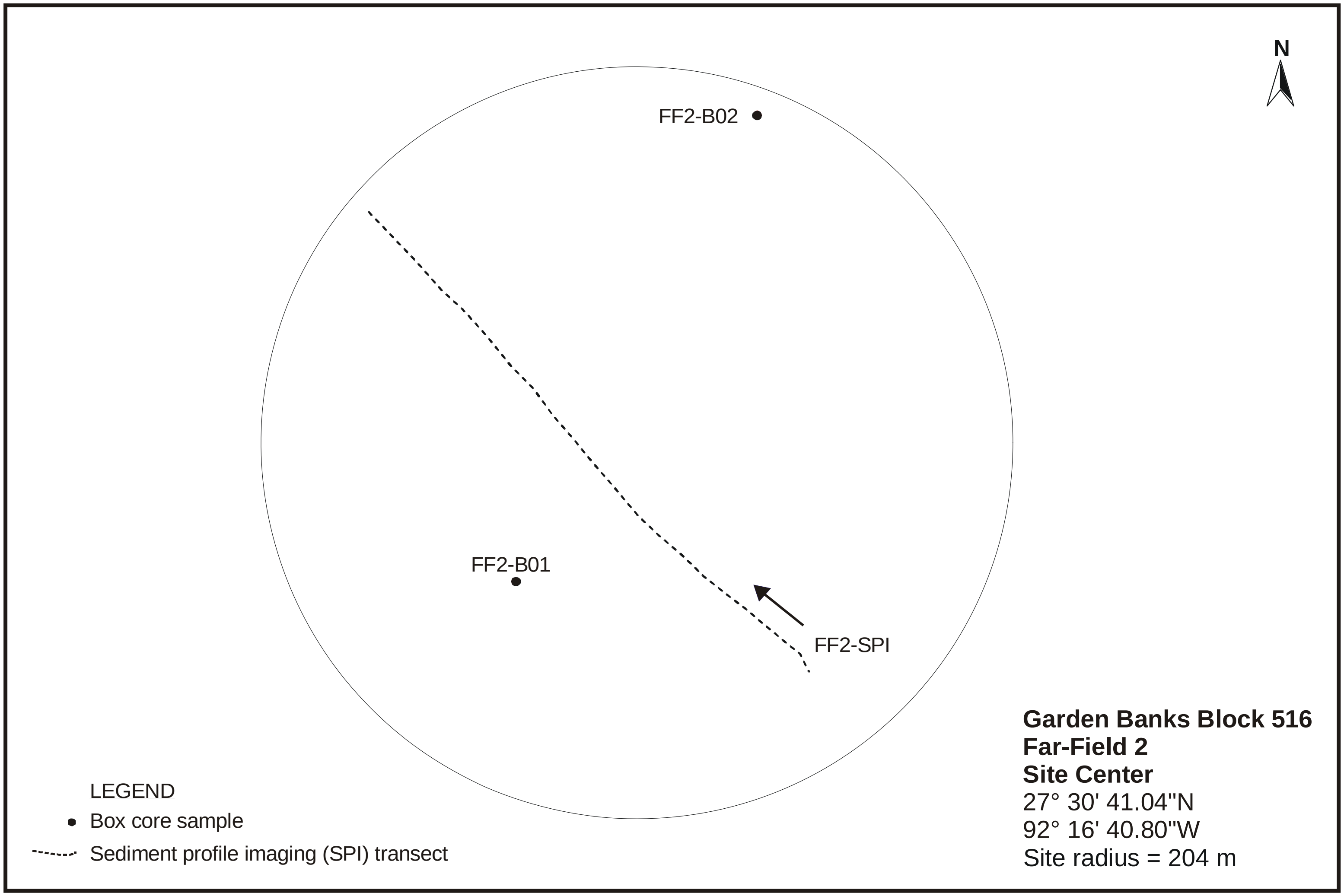


Figure A2-2. Garden Banks Block 516 Far-field 2 (FF2) site, showing sampling locations on Cruise 1B.

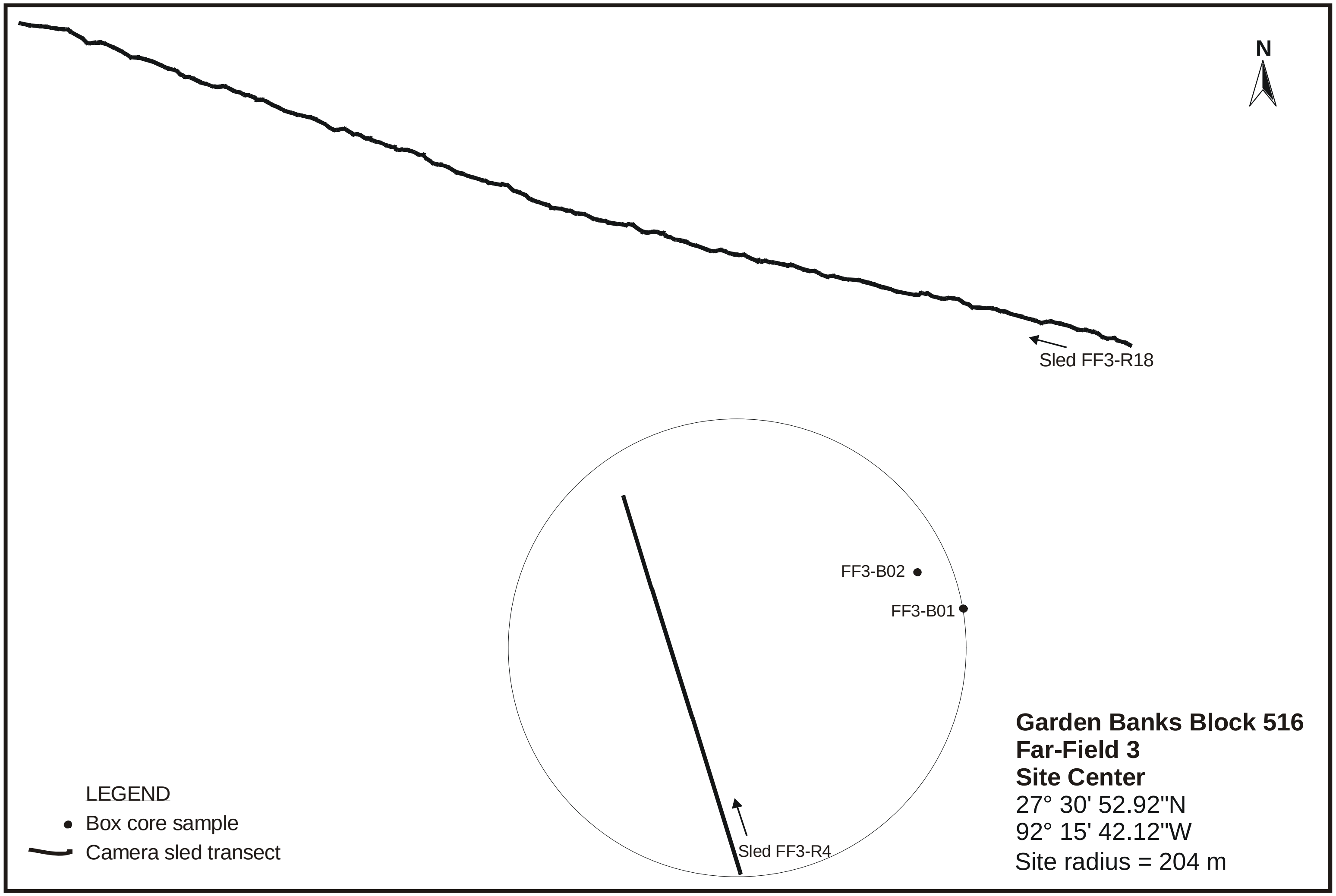


Figure A2-3. Garden Banks Block 516 Far-field 3 (FF3) site, showing sampling locations on Cruise 1B.

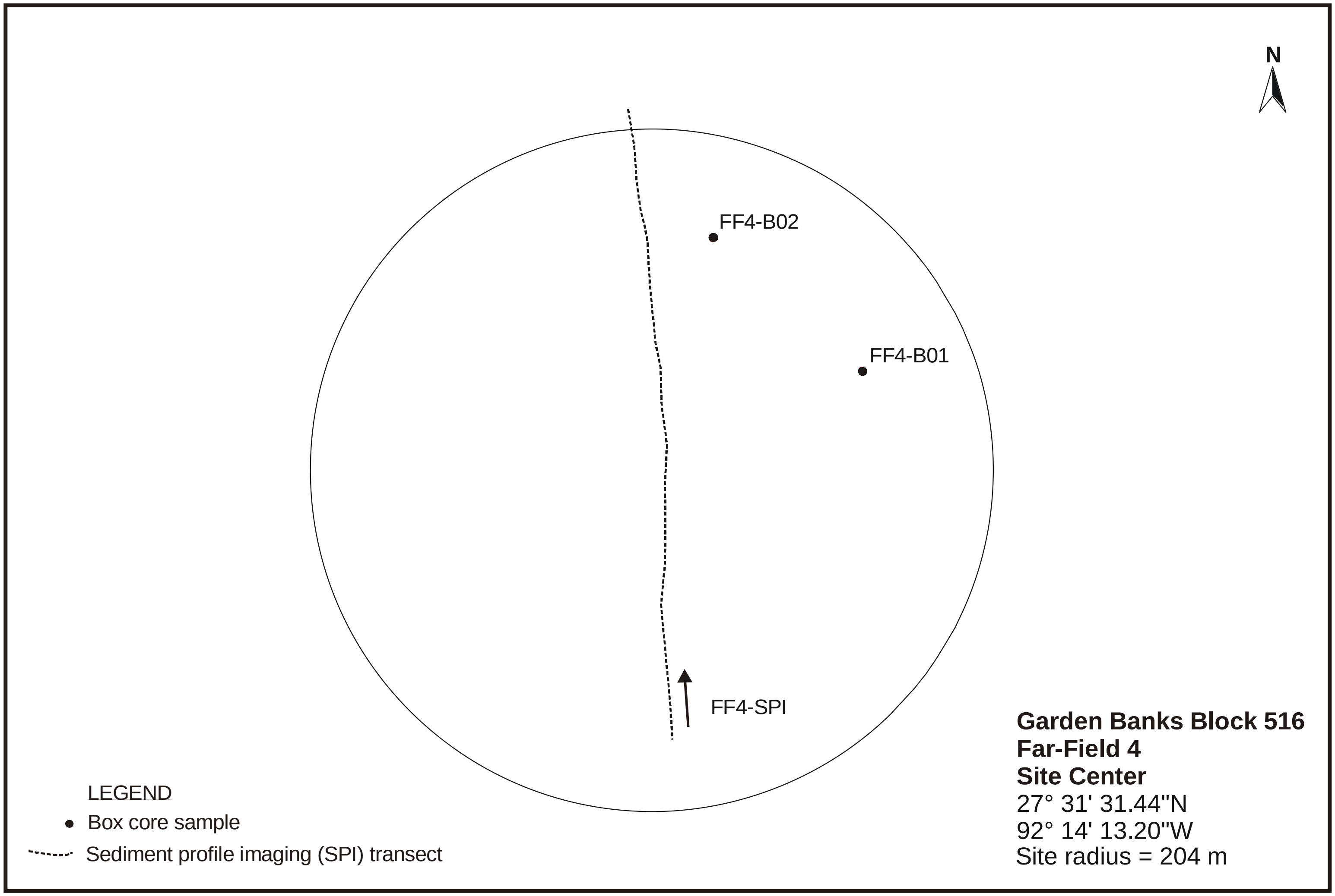


Figure A2-4. Garden Banks Block 516 Far-field 4 (FF4) site, showing sampling locations on Cruise 1B.

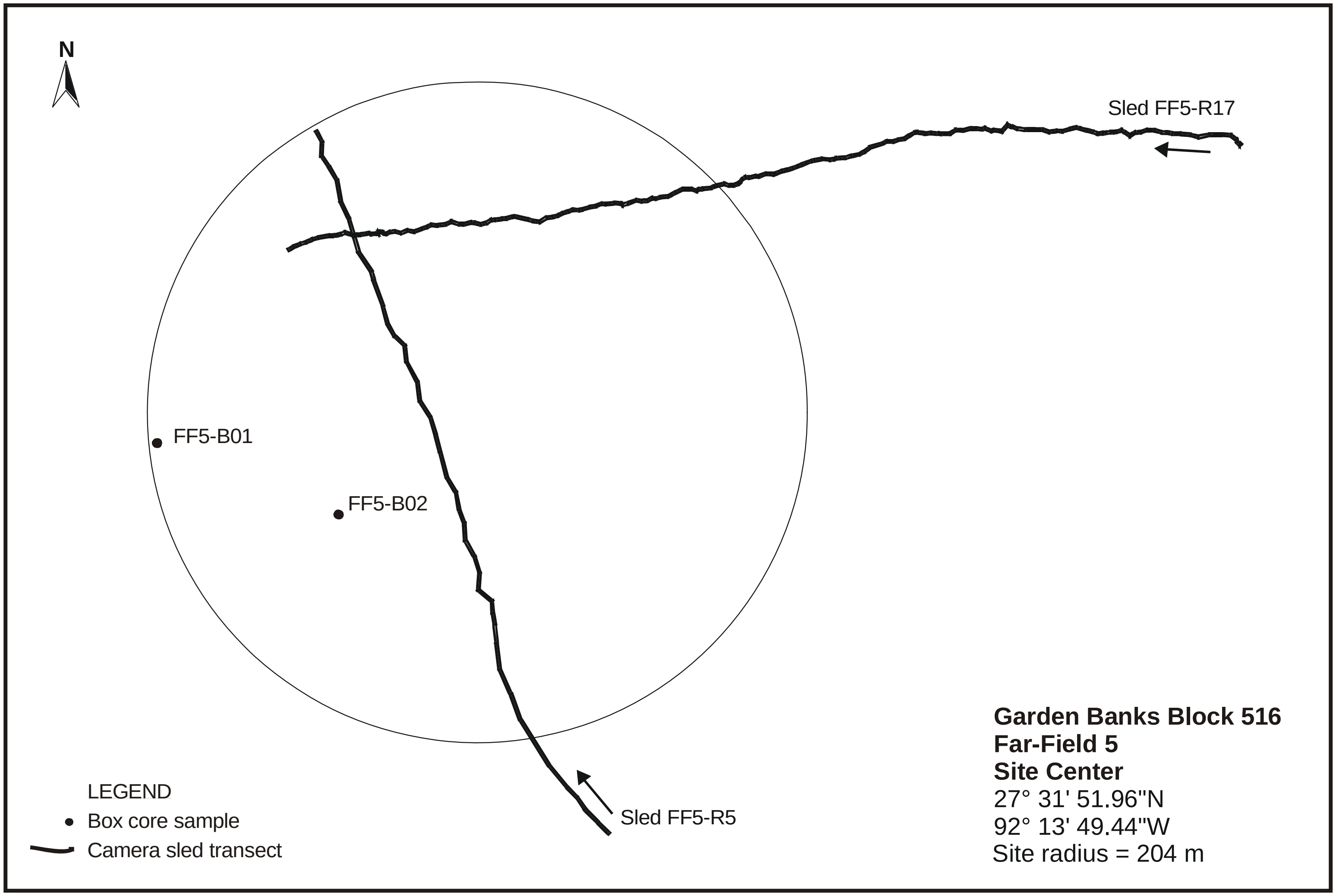


Figure A2-5. Garden Banks Block 516 Far-field 5 (FF5) site, showing sampling locations on Cruise 1B.

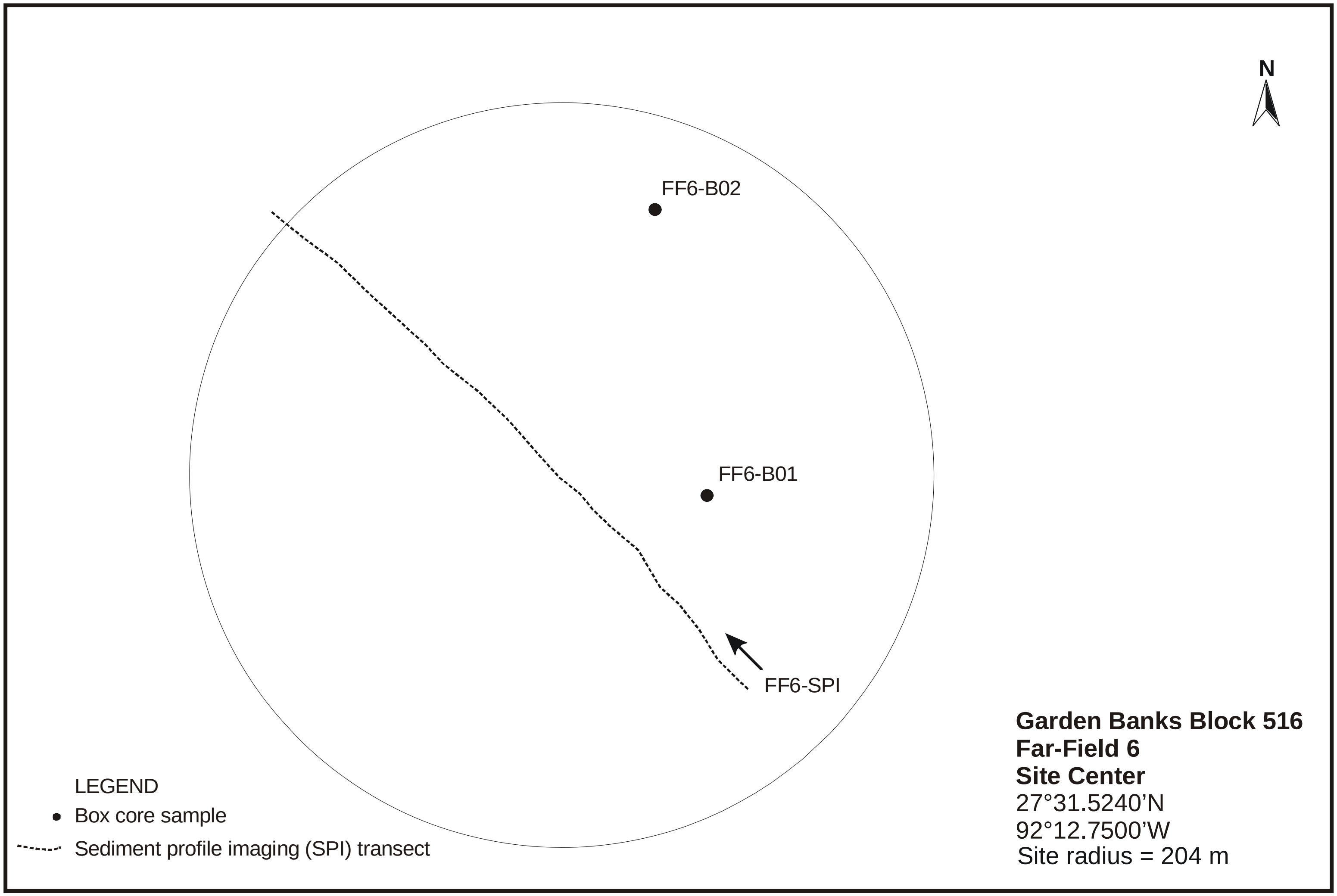


Figure A2-6. Garden Banks Block 516 Far-field 6 (FF6) site, showing sampling locations on Cruise 1B.

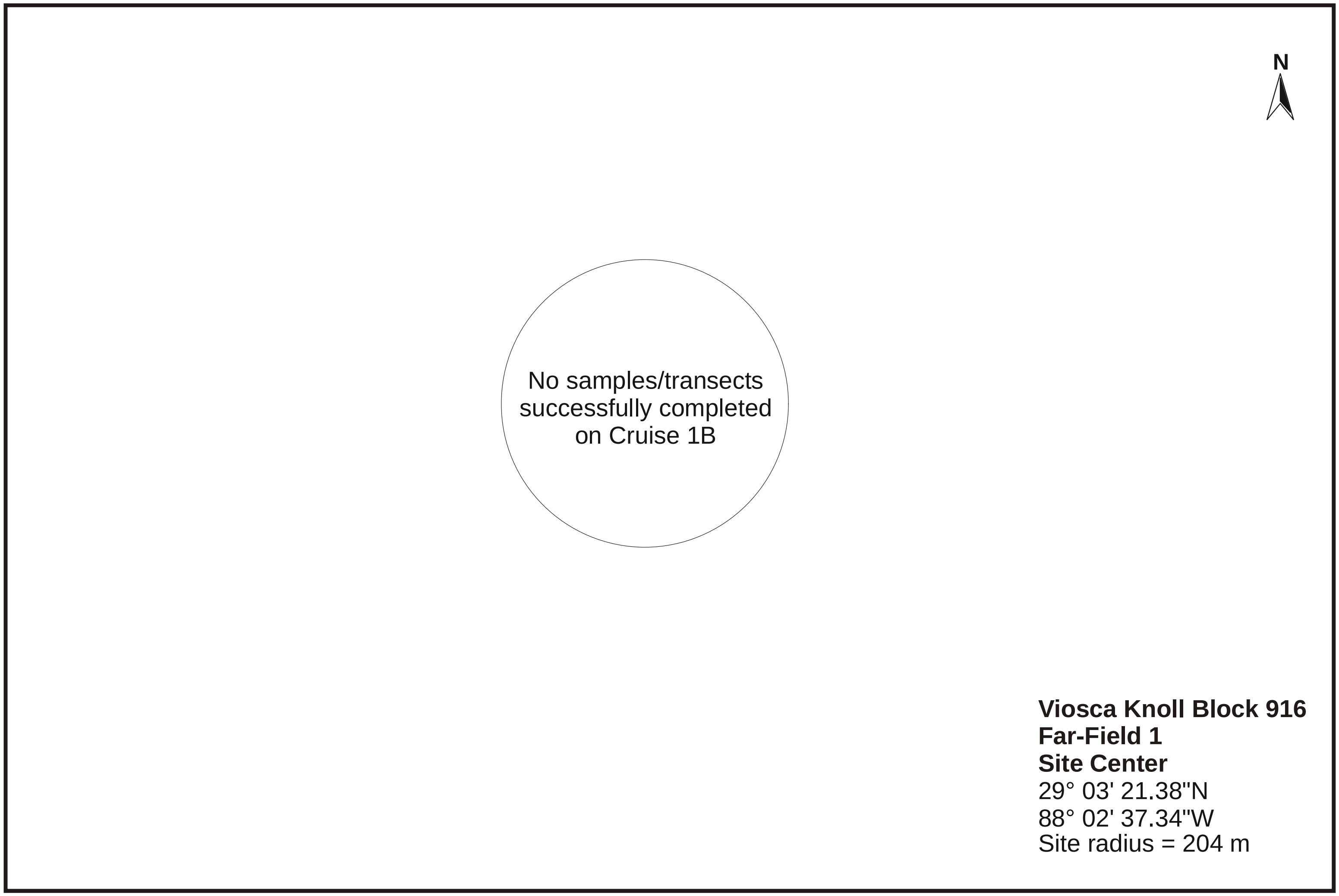


Figure A2-7. Viosca Knoll Block 916 Far-field 1 (FF1) site, showing sampling locations on Cruise 1B.

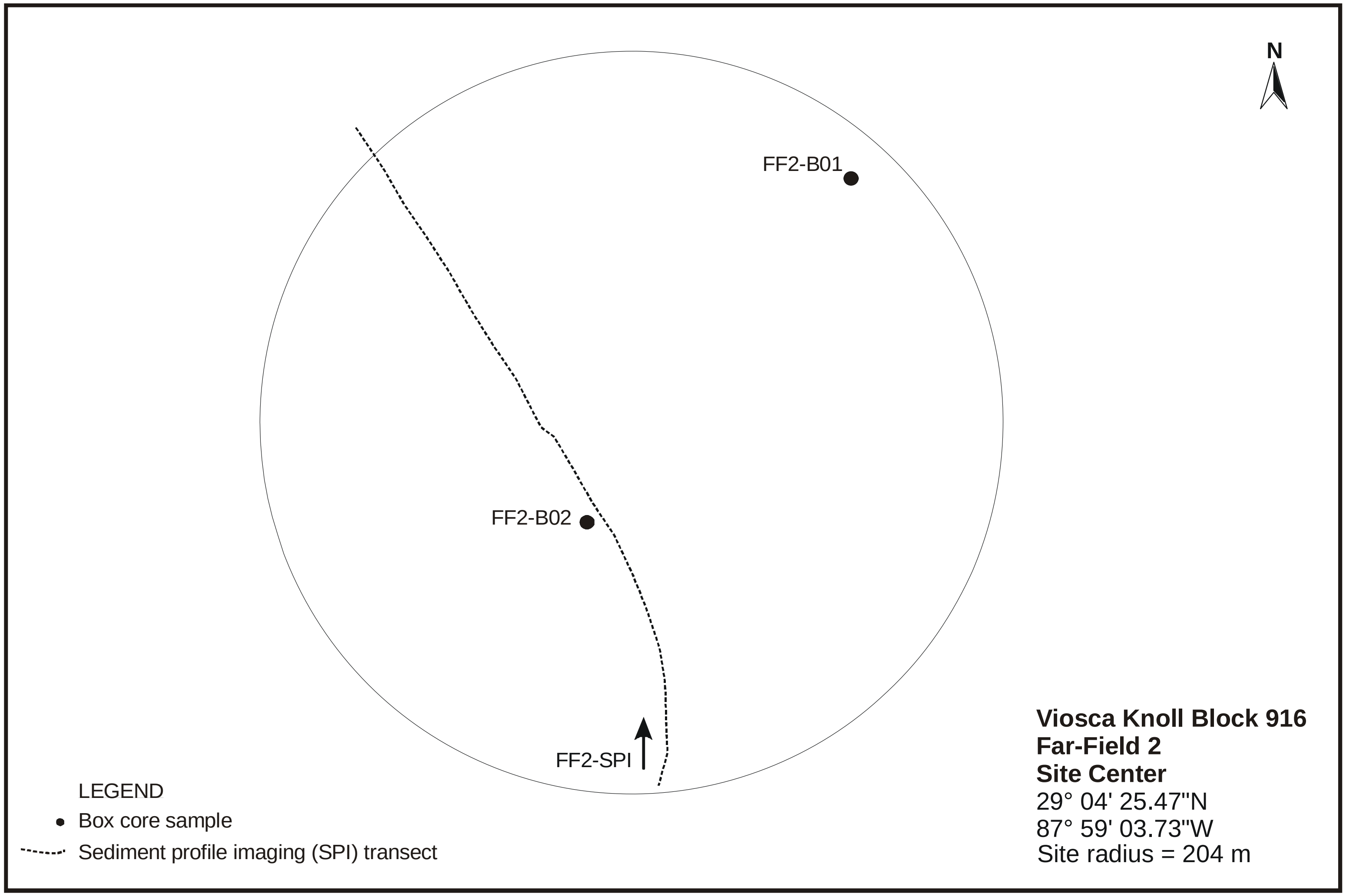


Figure A2-8. Viosca Knoll Block 916 Far-field 2 (FF2) site, showing sampling locations on Cruise 1B.

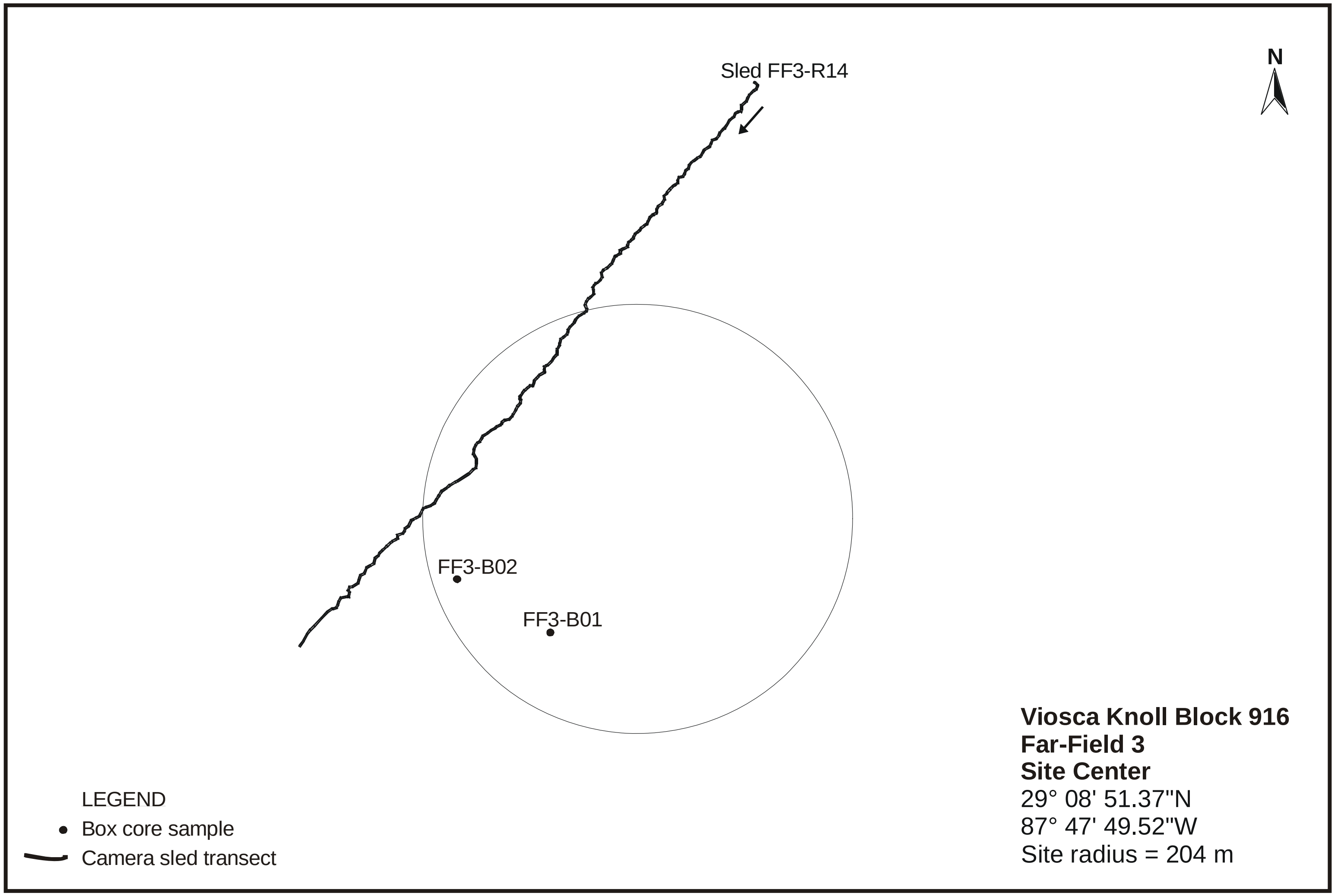


Figure A2-9. Viosca Knoll Block 916 Far-field 3 (FF3) site, showing sampling locations on Cruise 1B.

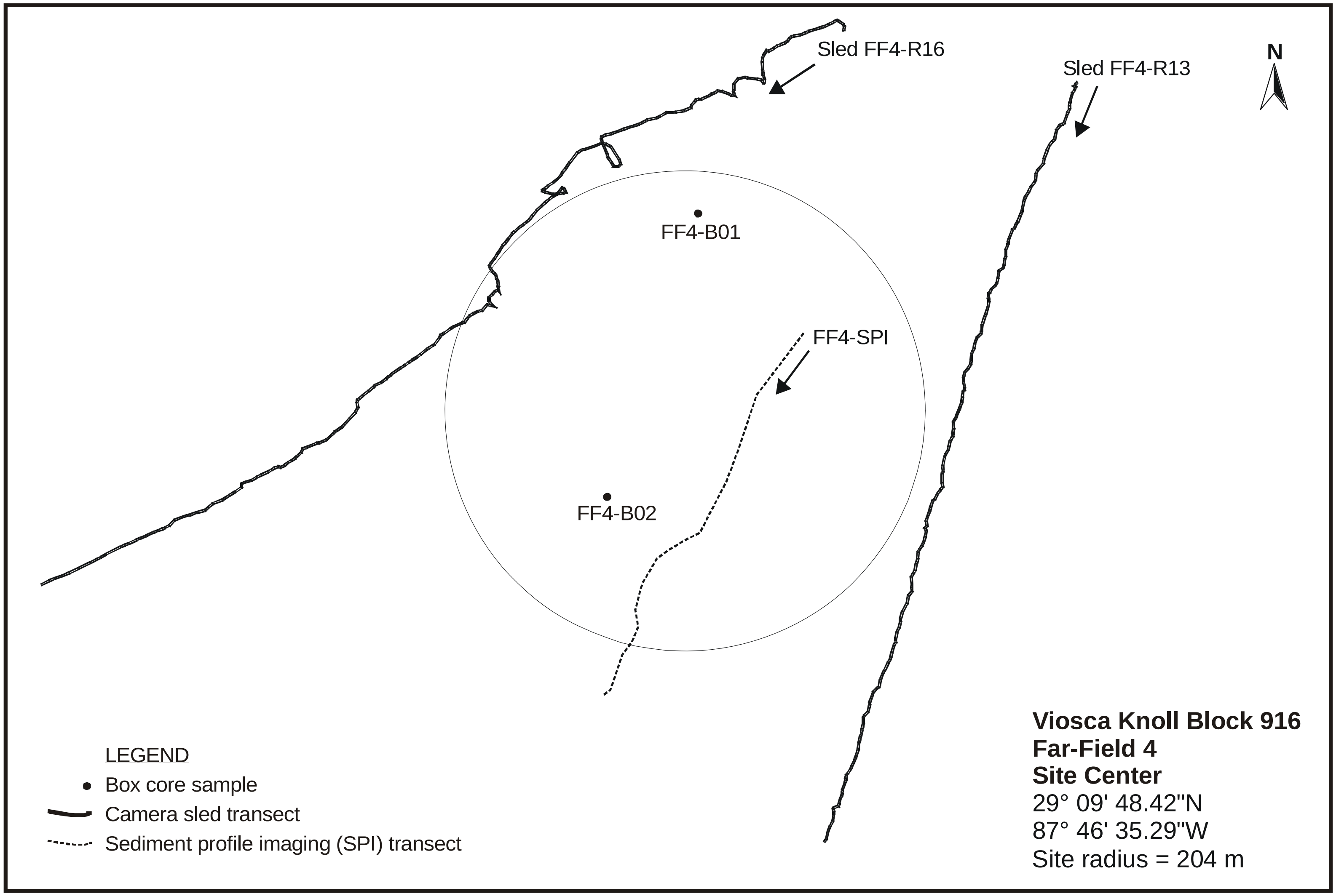


Figure A2-10. Viosca Knoll Block 916 Far-field 4 (FF4) site, showing sampling locations on Cruise 1B.

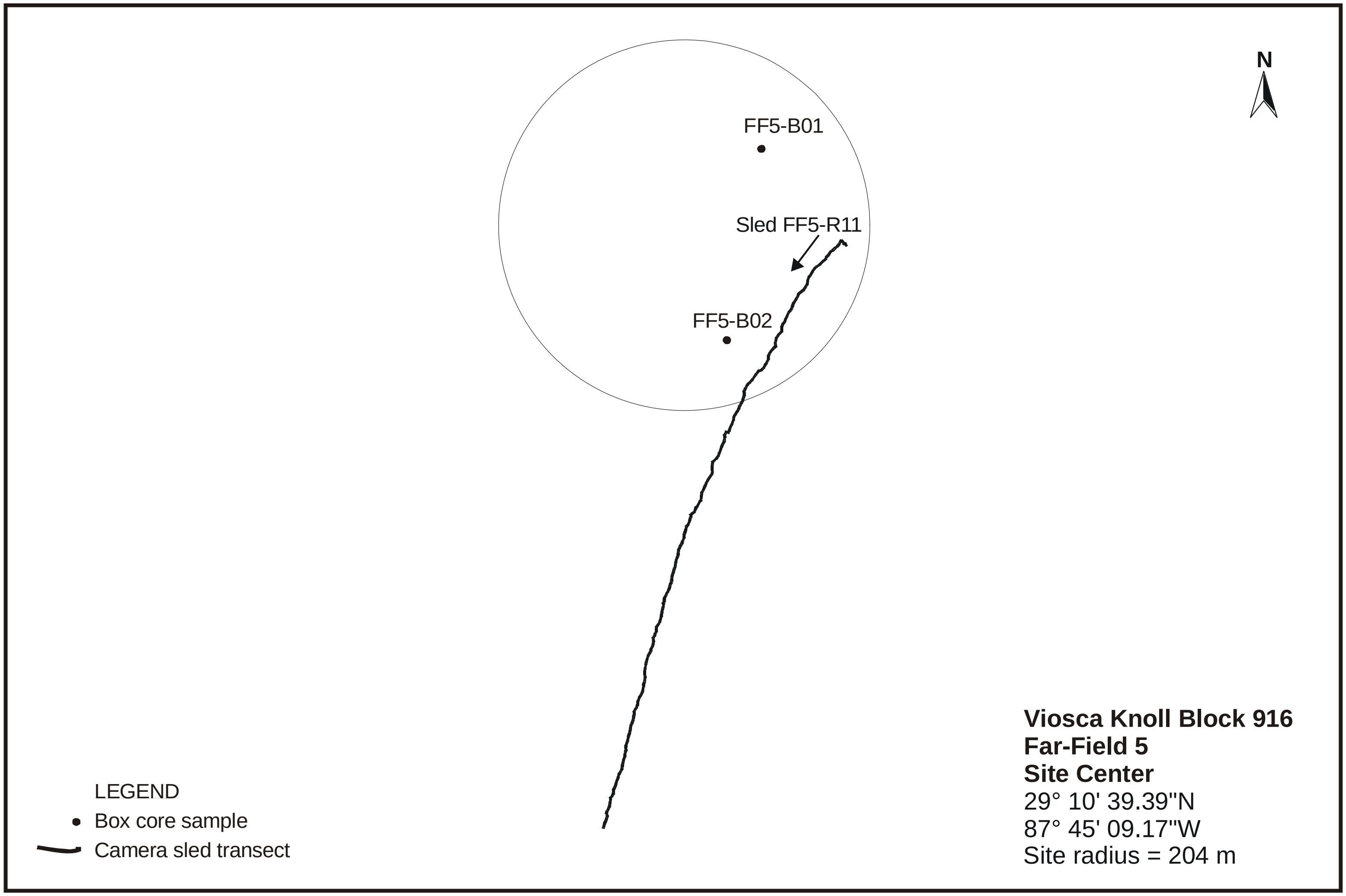


Figure A2-11. Viosca Knoll Block 916 Far-field 5 (FF5) site, showing sampling locations on Cruise 1B.

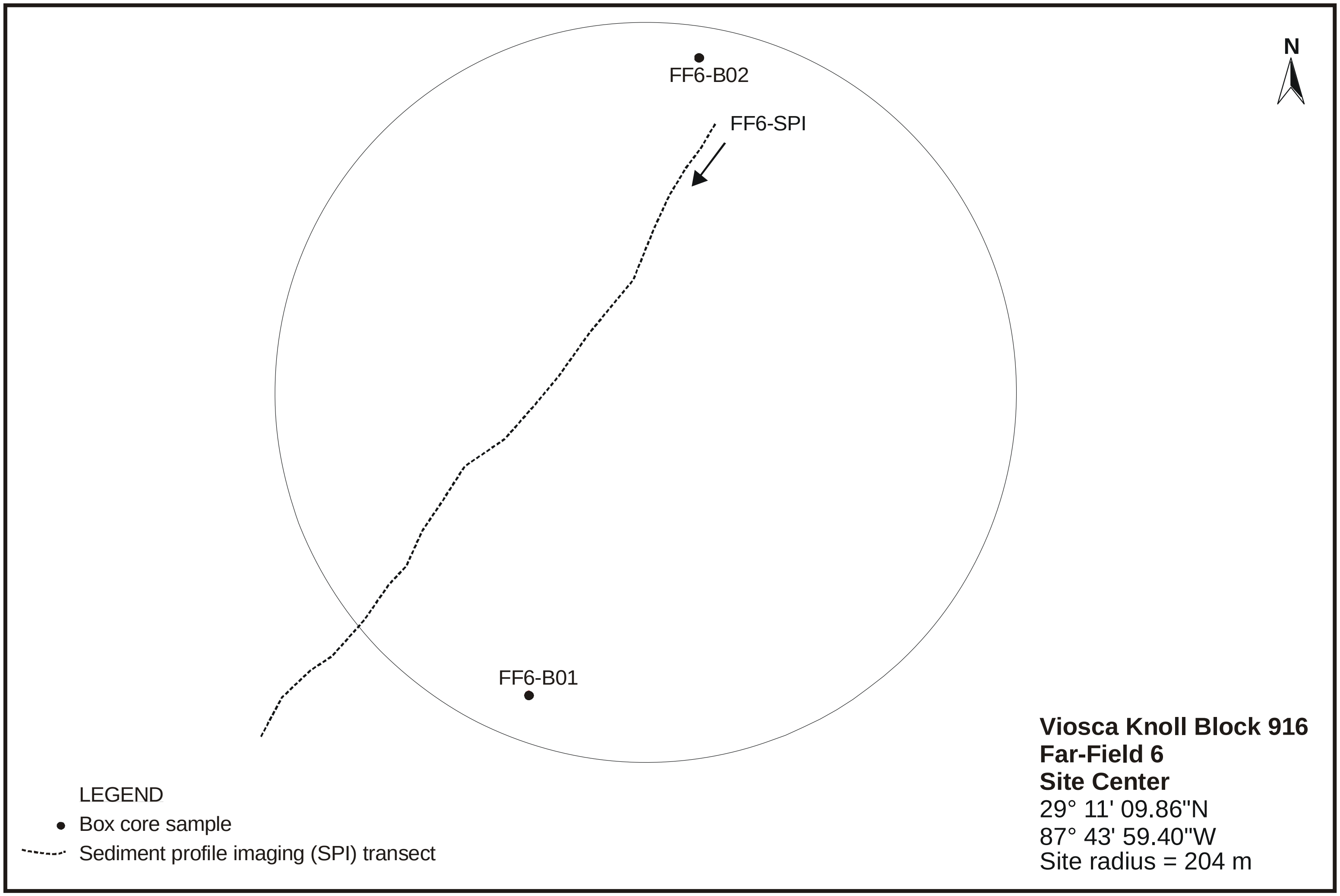


Figure A2-12. Viosca Knoll Block 916 Far-field 6 (FF6) site, showing sampling locations on Cruise 1B.

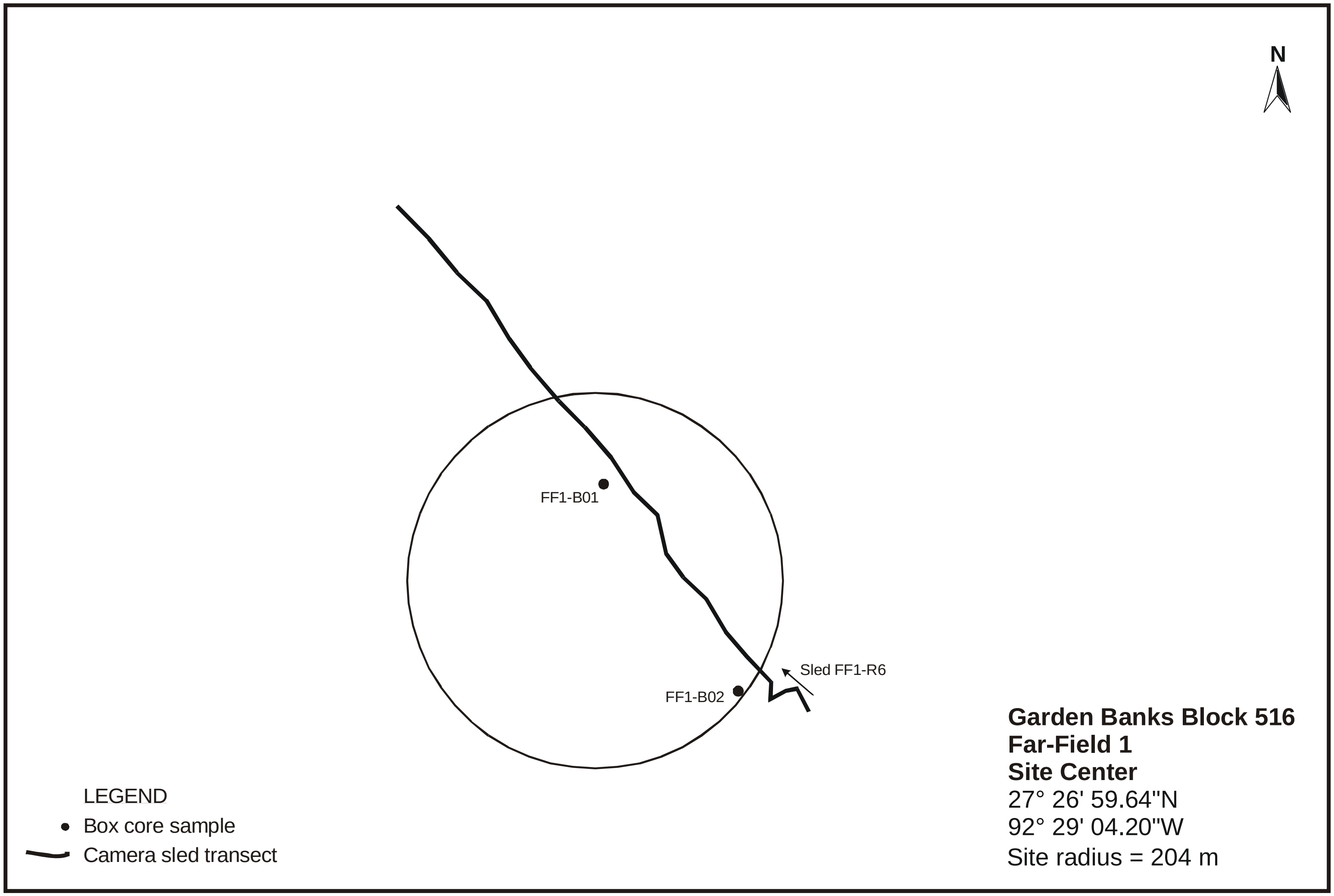


Figure A2-13. Garden Banks Block 516 Far-field 1 (FF1) site, showing sampling locations on Cruise 2B.

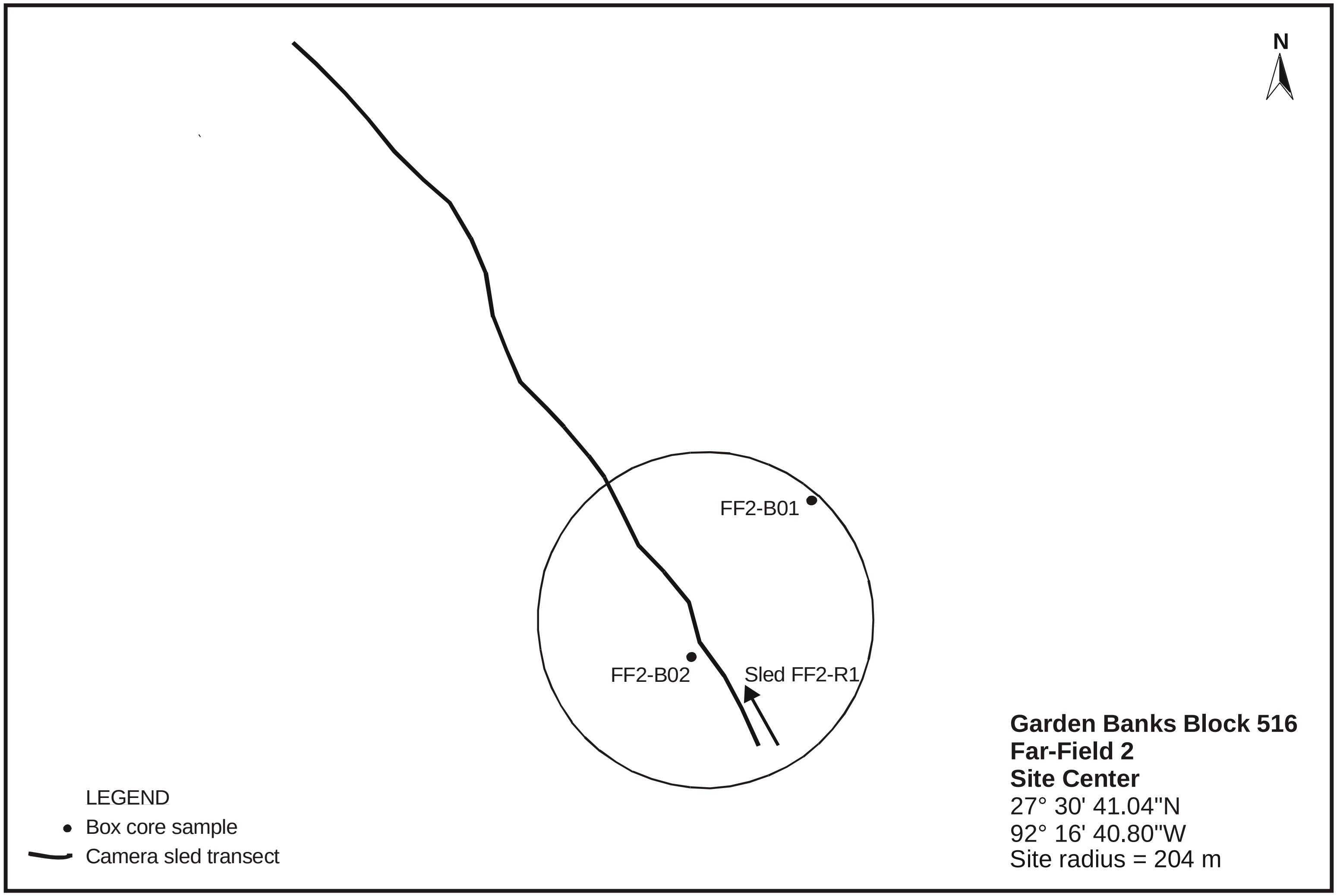


Figure A2-14. Garden Banks Block 516 Far-field 2 (FF2) site, showing sampling locations on Cruise 2B.

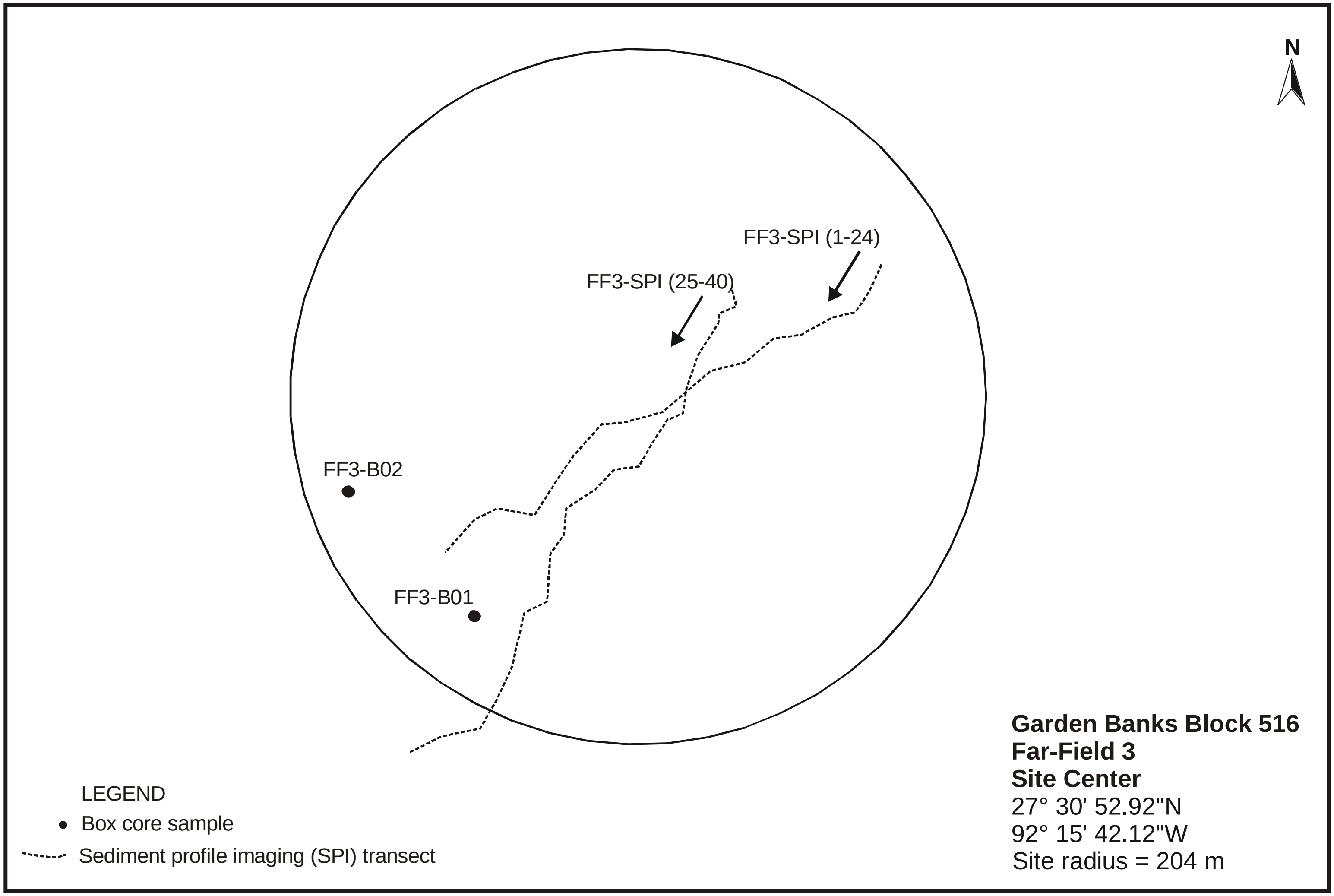


Figure A2-15. Garden Banks Block 516 Far-field 3 (FF3) site, showing sampling locations on Cruise 2B.

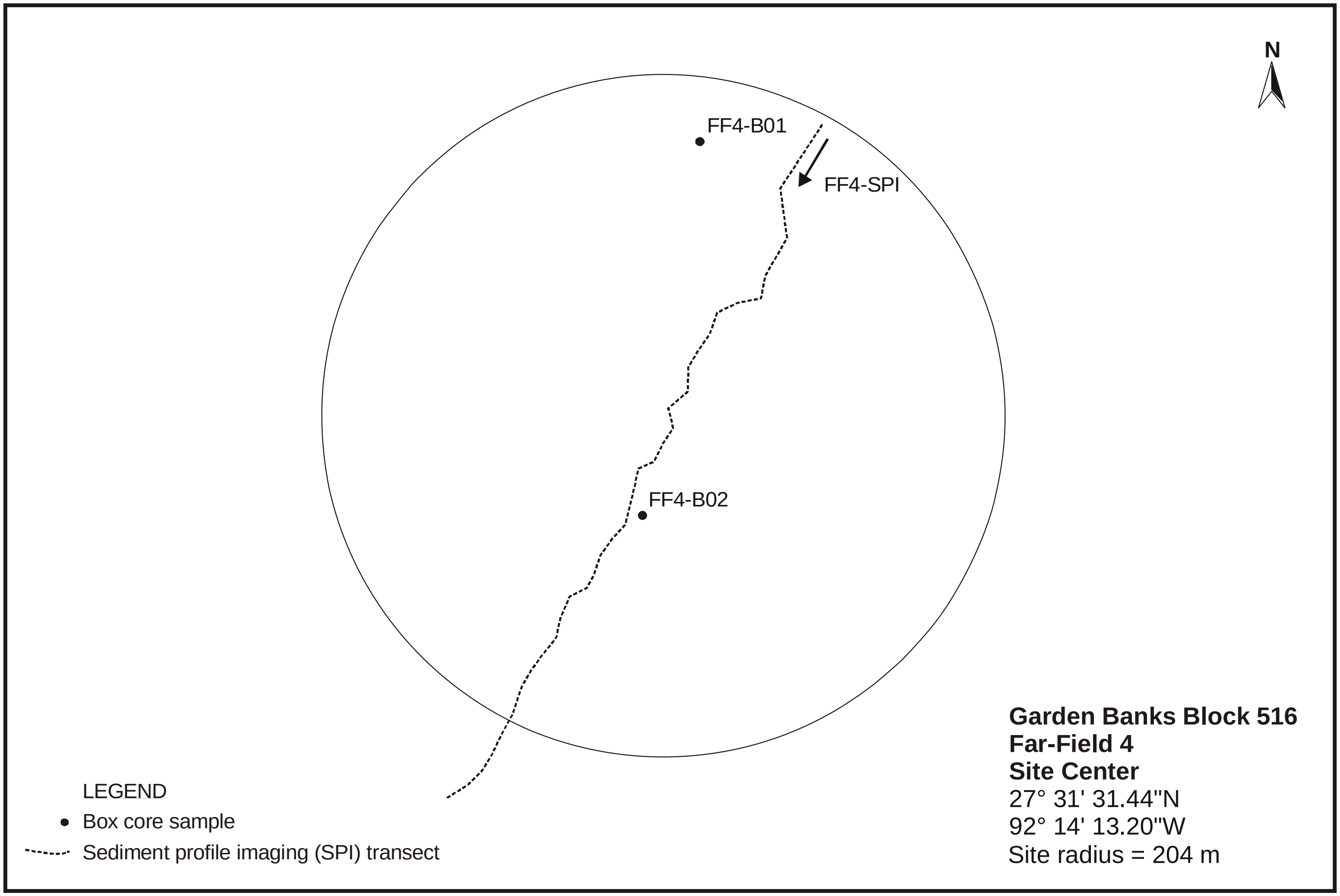


Figure A2-16. Garden Banks Block 516 Far-field 4 (FF4) site, showing sampling locations on Cruise 2B.

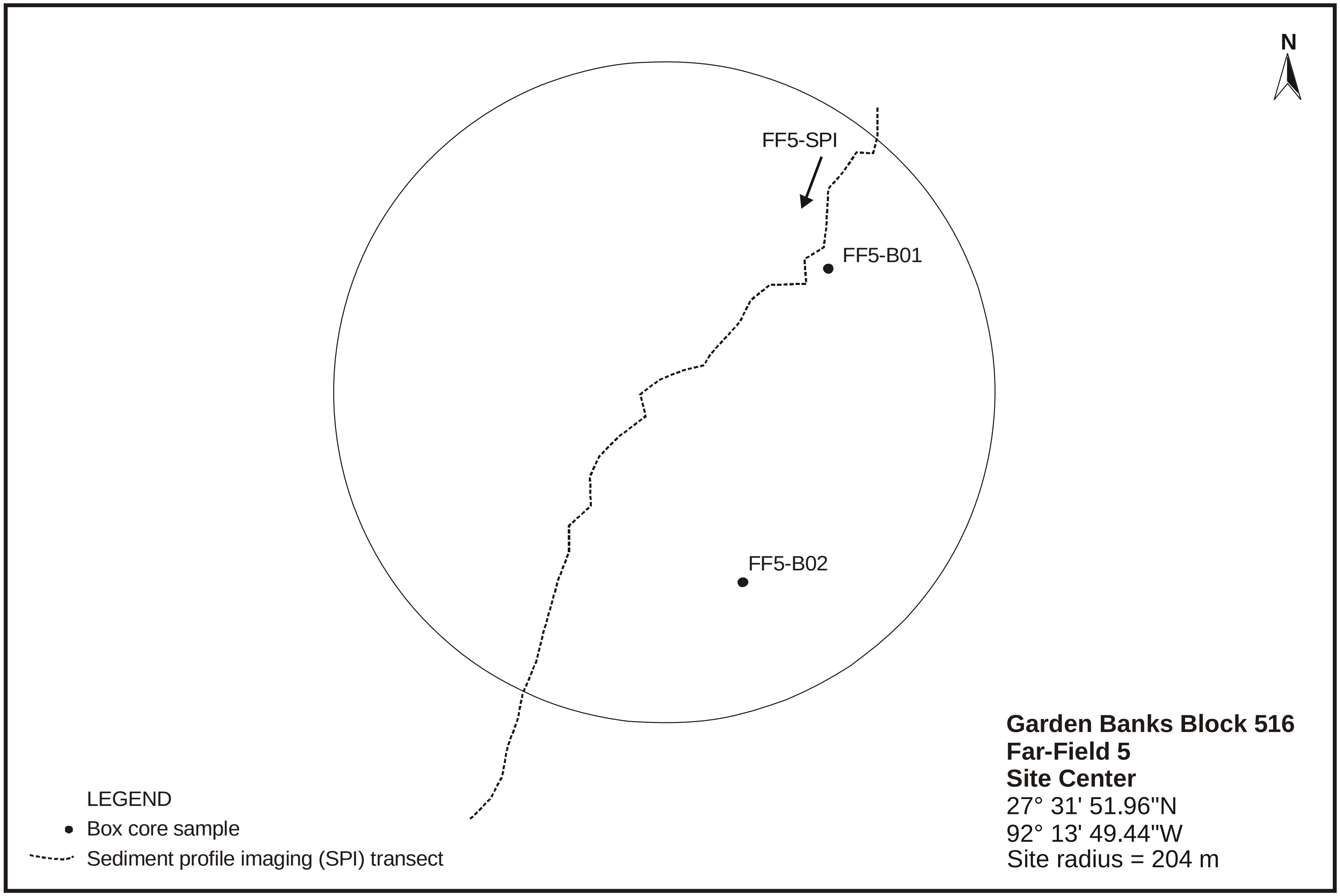


Figure A2-17. Garden Banks Block 516 Far-field 5 (FF5) site, showing sampling locations on Cruise 2B.

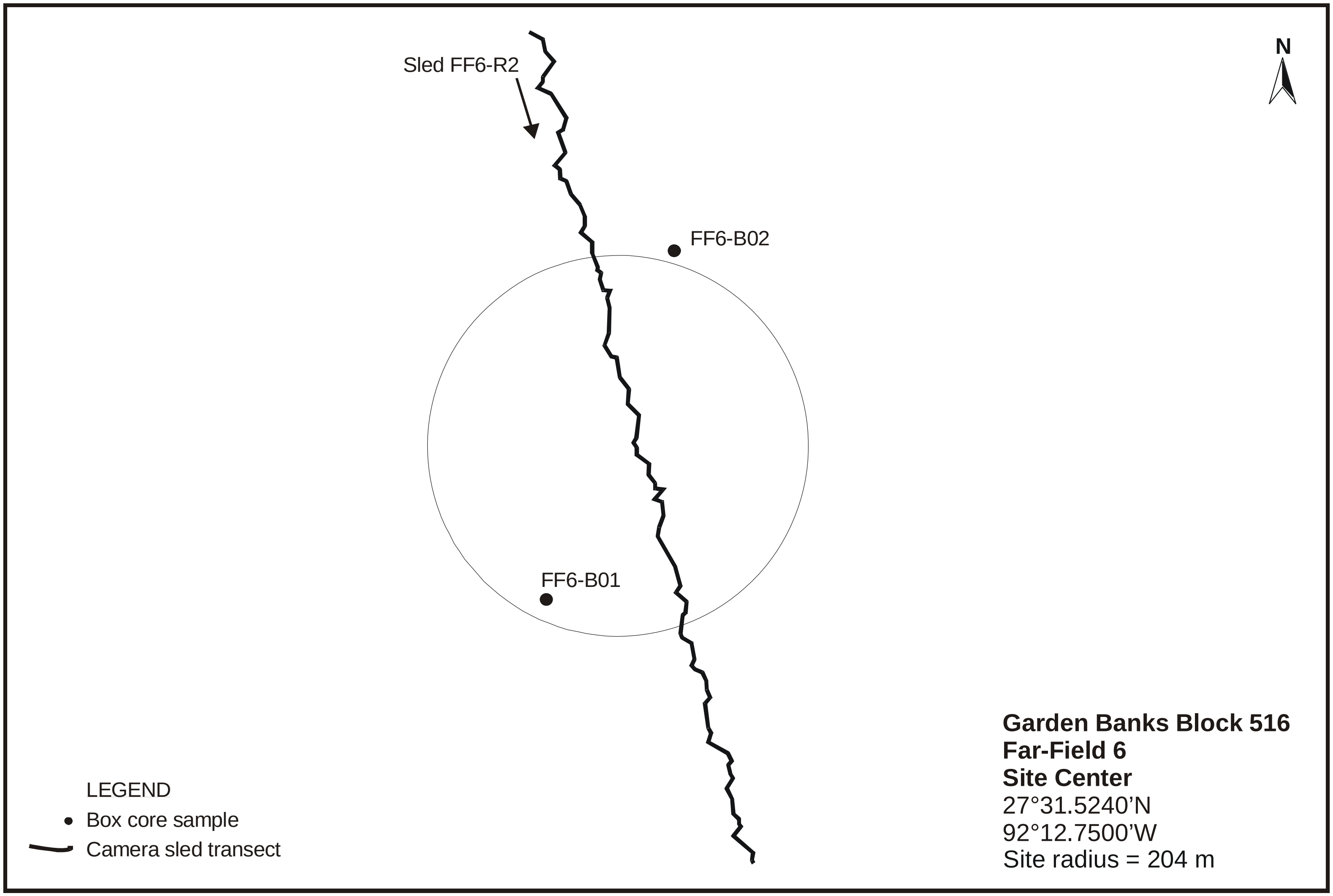


Figure A2-18. Garden Banks Block 516 Far-field 6 (FF6) site, showing sampling locations on Cruise 2B.

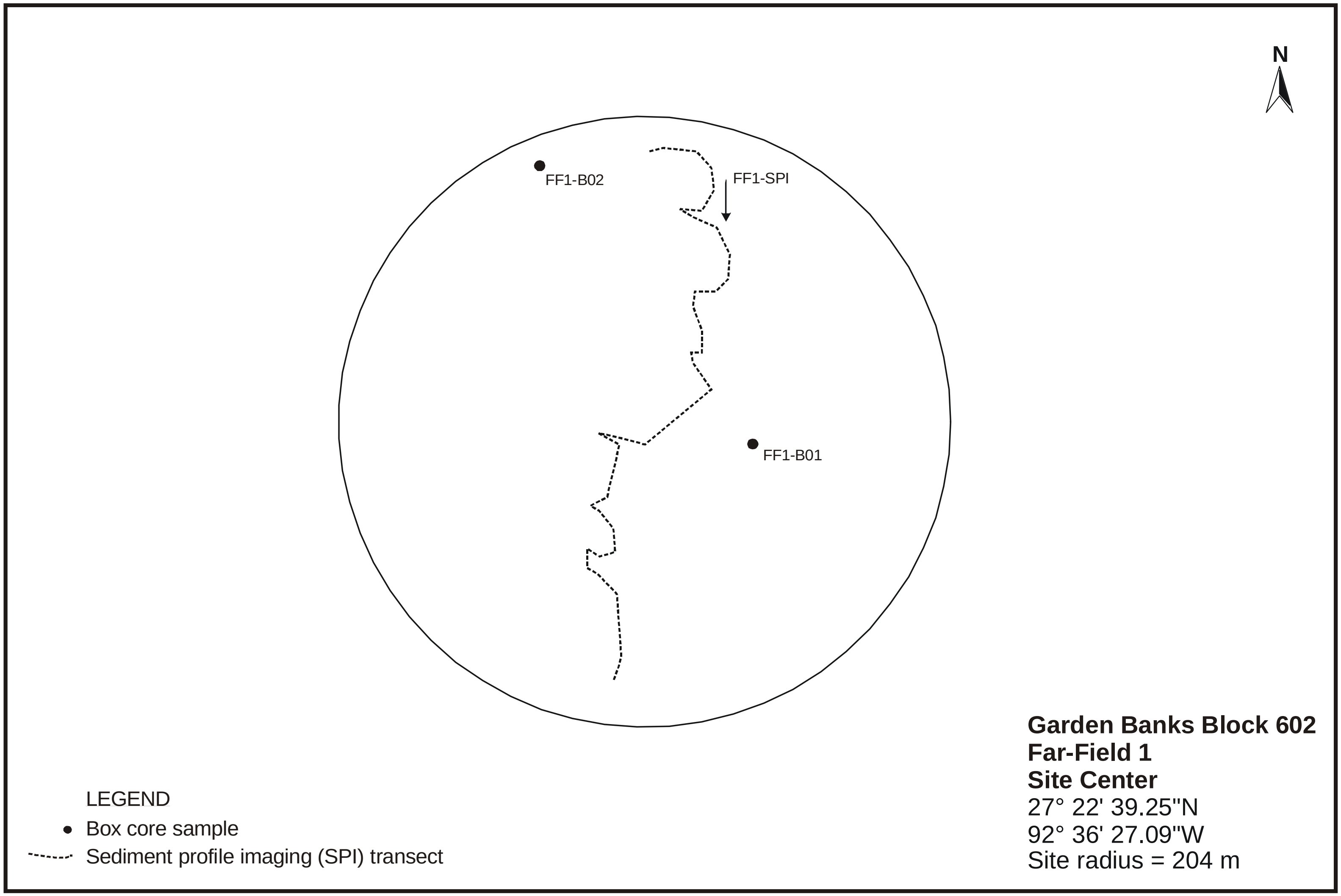


Figure A2-19. Garden Banks Block 602 Far-field 1 (FF1) site, showing sampling locations on Cruise 2B.

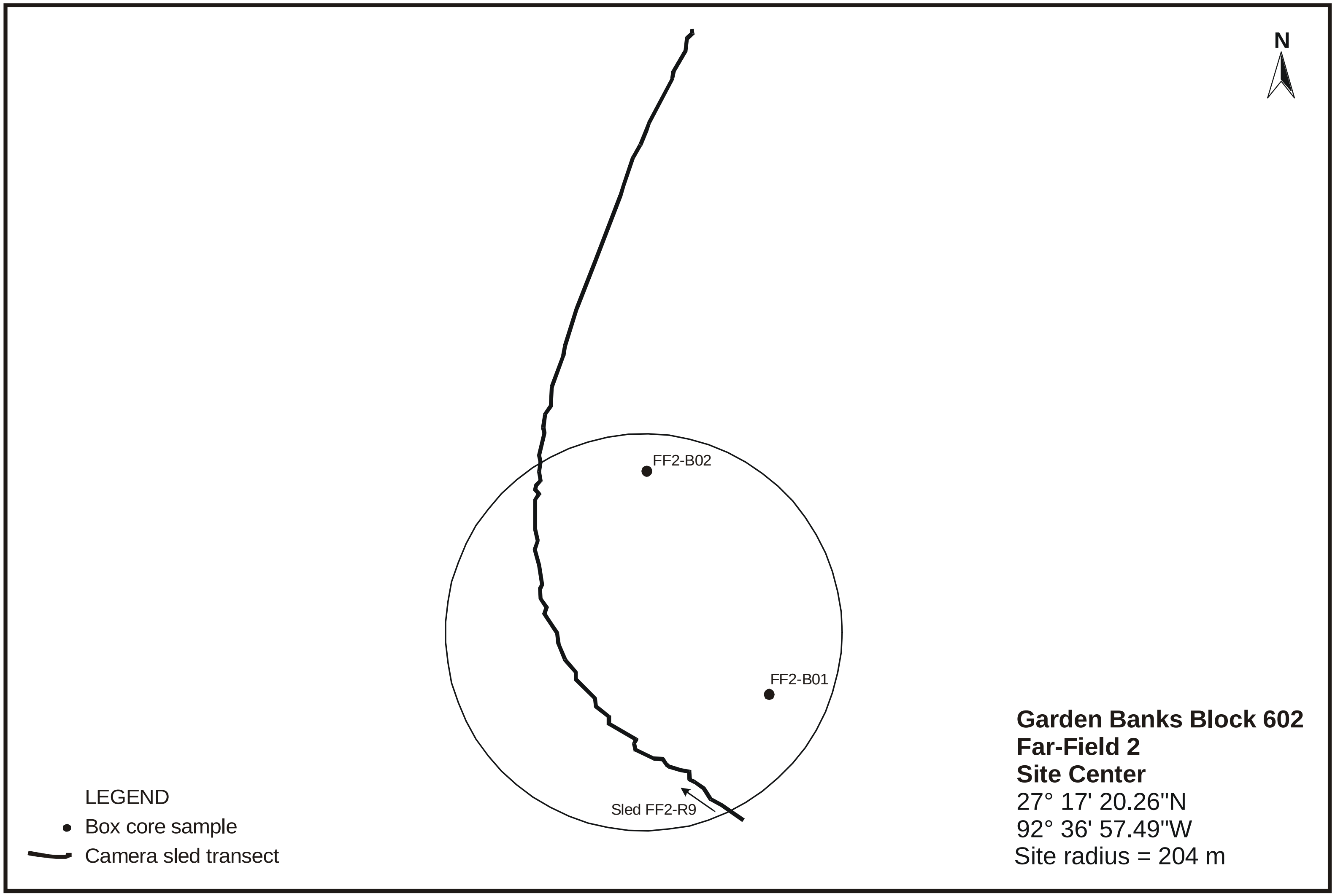


Figure A2-20. Garden Banks Block 602 Far-field 2 (FF2) site, showing sampling locations on Cruise 2B.

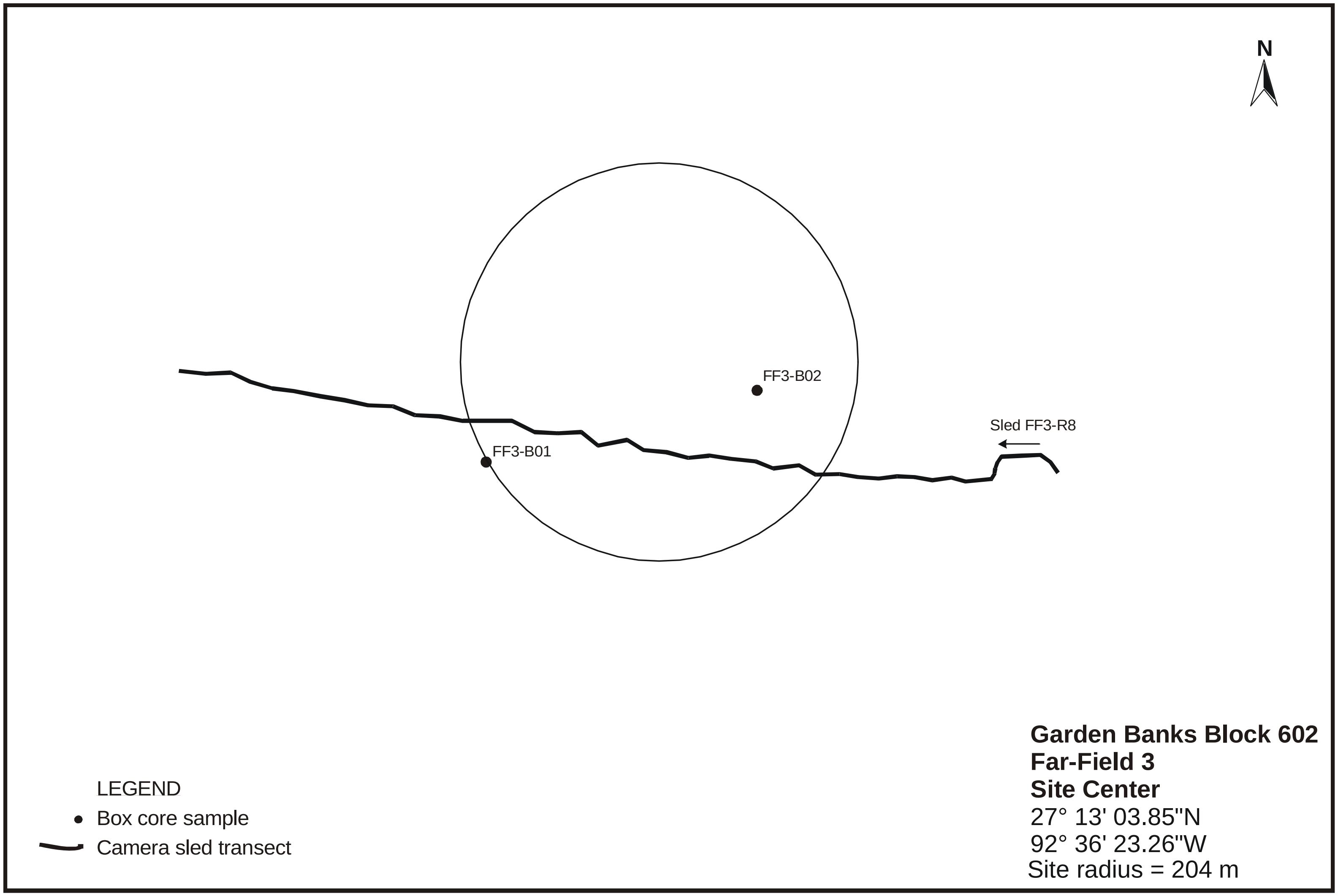


Figure A2-21. Garden Banks Block 602 Far-field 3 (FF3) site, showing sampling locations on Cruise 2B.

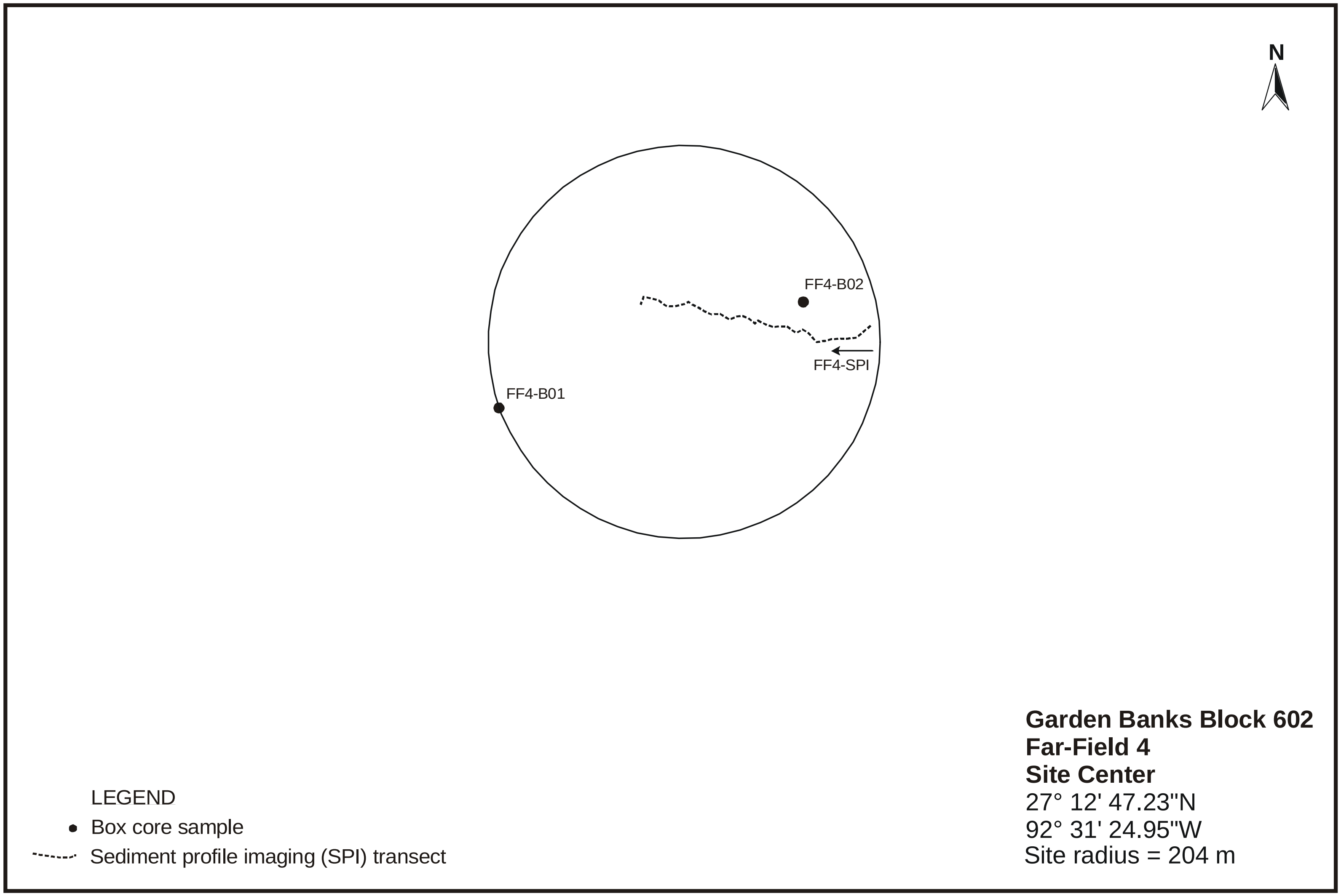


Figure A2-22. Garden Banks Block 602 Far-field 4 (FF4) site, showing sampling locations on Cruise 2B.

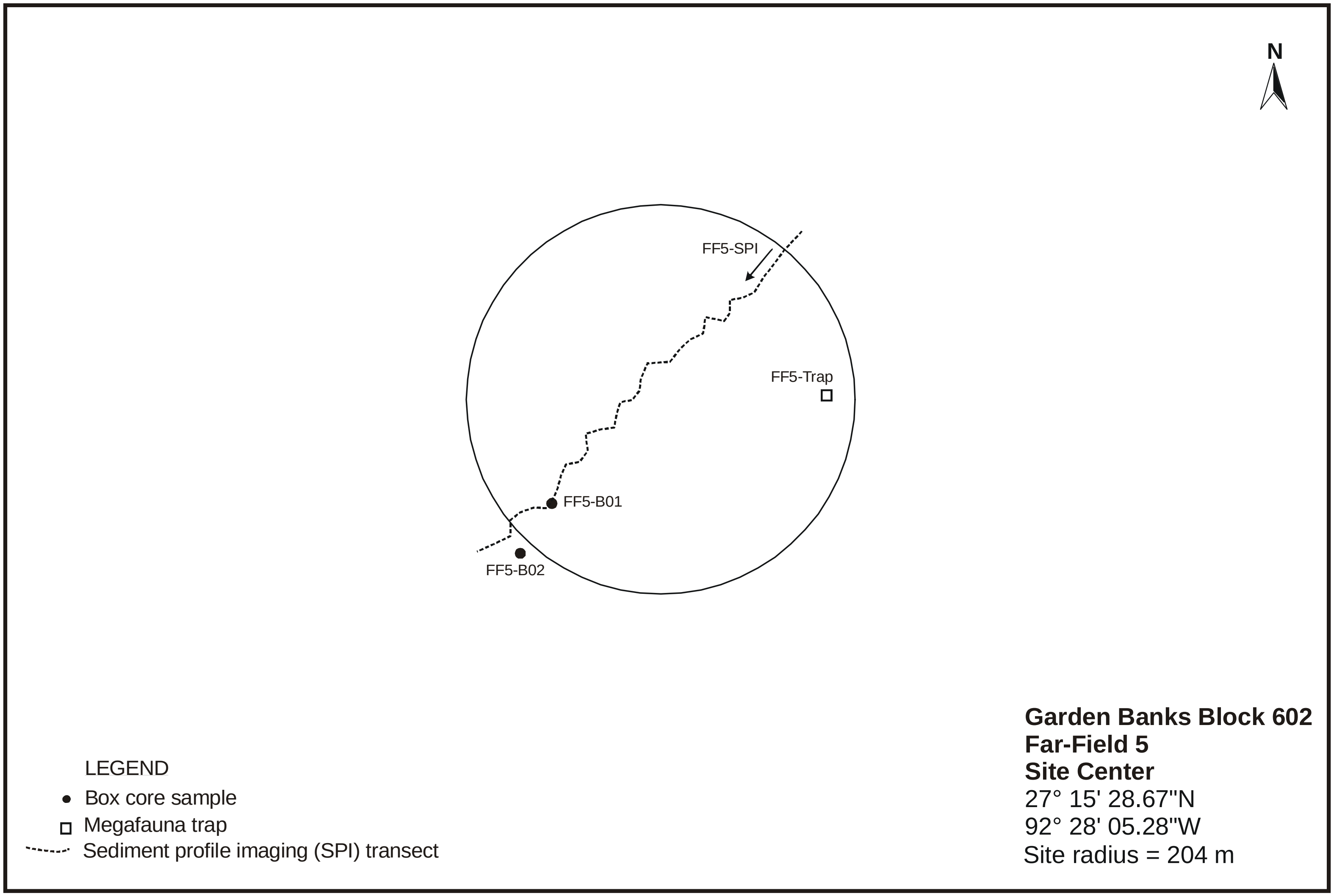


Figure A2-23. Garden Banks Block 602 Far-field 5 (FF5) site, showing sampling locations on Cruise 2B.

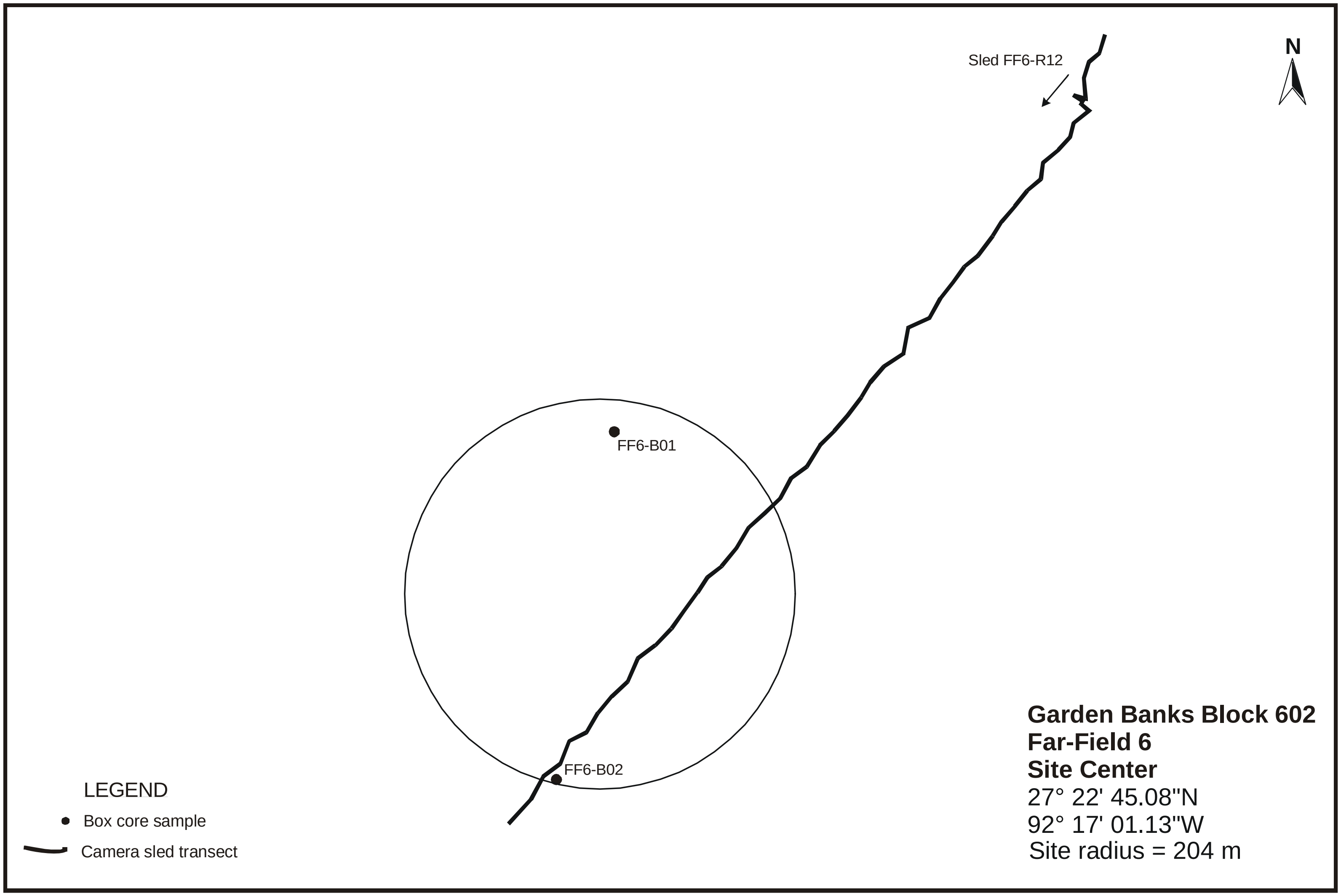


Figure A2.24. Garden Banks Block 602 Far-field 6 (FF6) site, showing sampling locations on Cruise 2B.

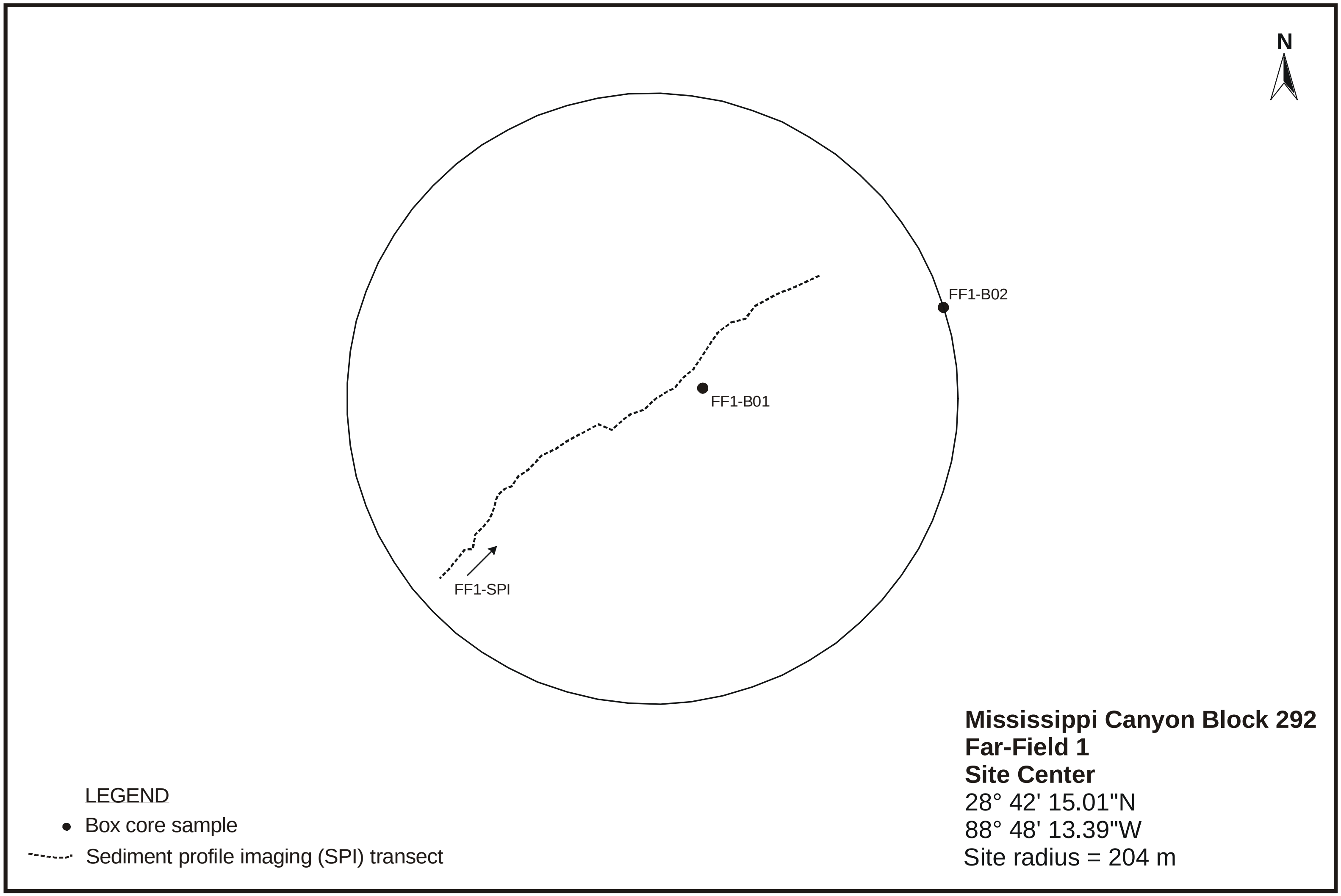


Figure A2-25. Mississippi Canyon Block 292 Far-field 1 (FF1) site, showing sampling locations on Cruise 2B.

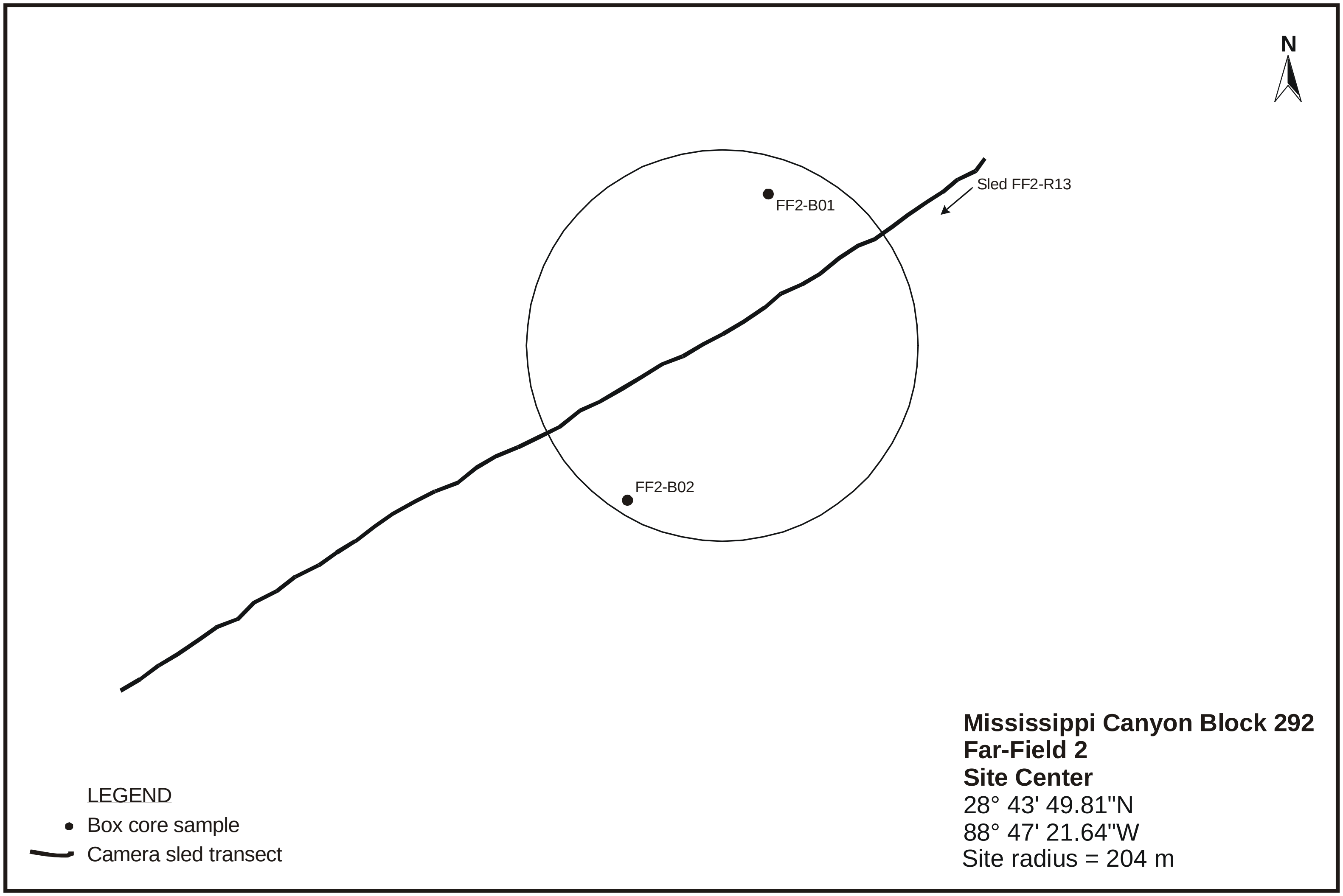


Figure A2-26. Mississippi Canyon Block 292 Far-field 2 (FF2) site, showing sampling locations on Cruise 2B.

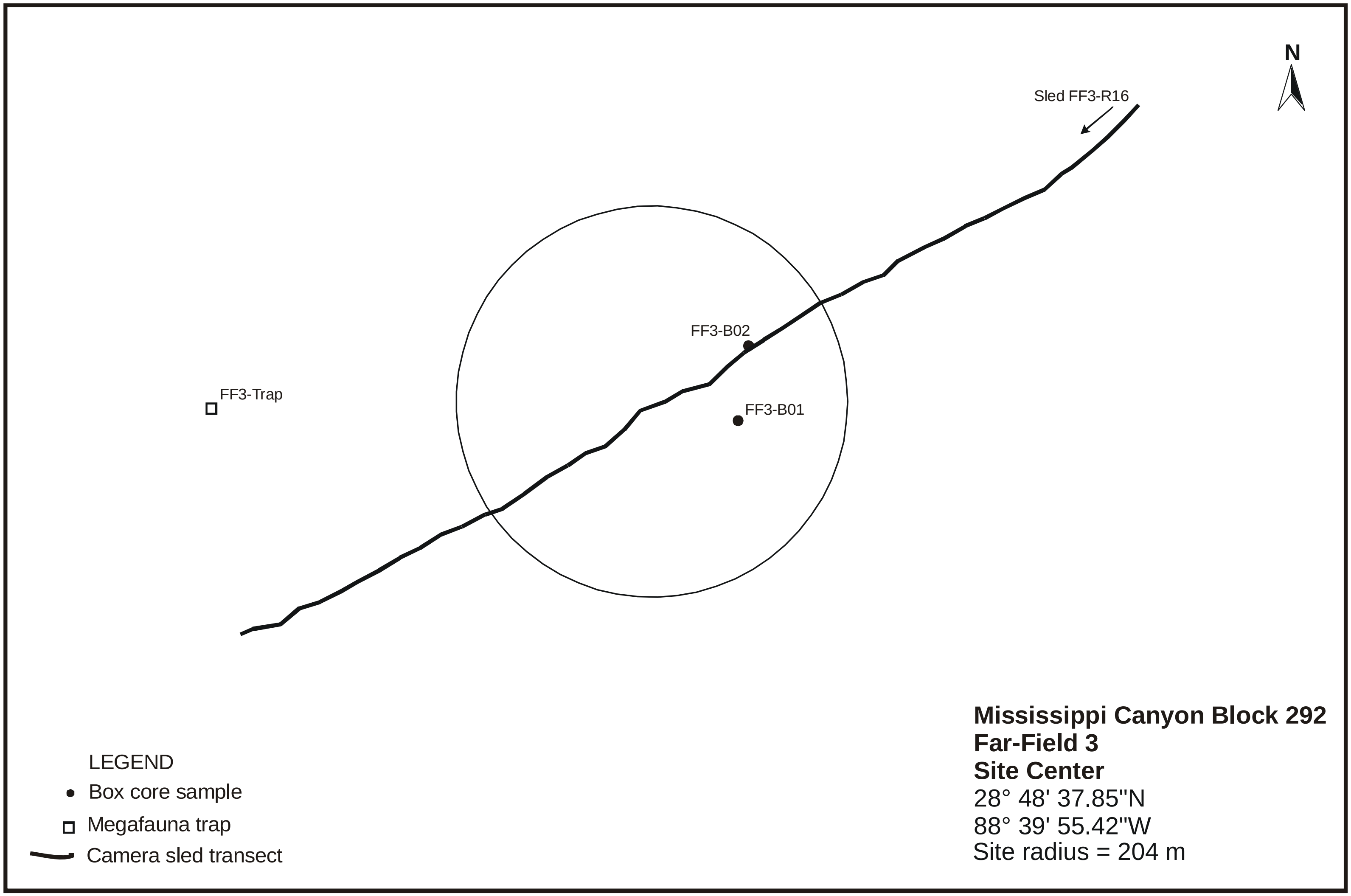


Figure A2-27. Mississippi Canyon Block 292 Far-field 3 (FF3) site, showing sampling locations on Cruise 2B.

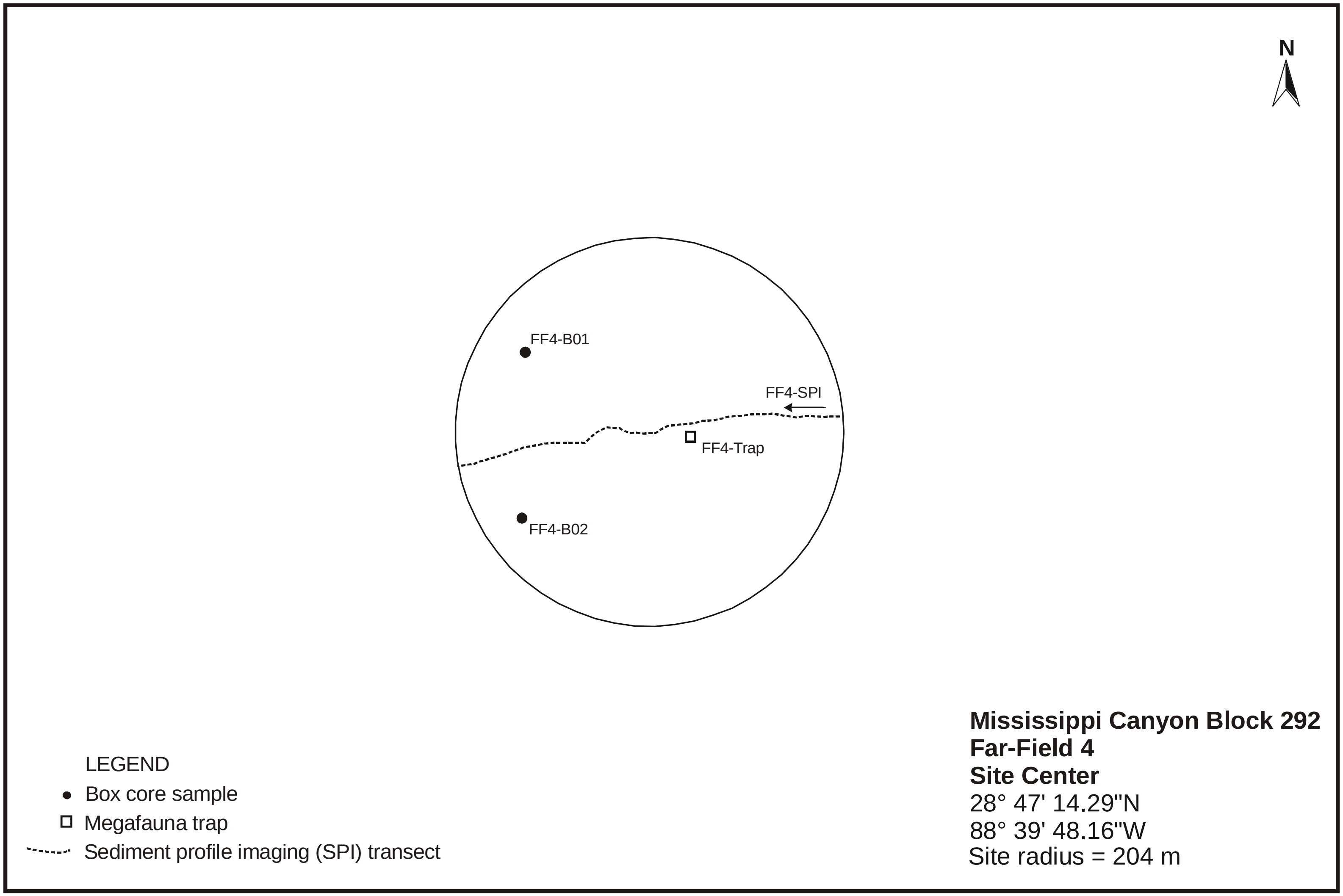


Figure A2-28. Mississippi Canyon Block 292 Far-field 4 (FF4) site, showing sampling locations on Cruise 2B.

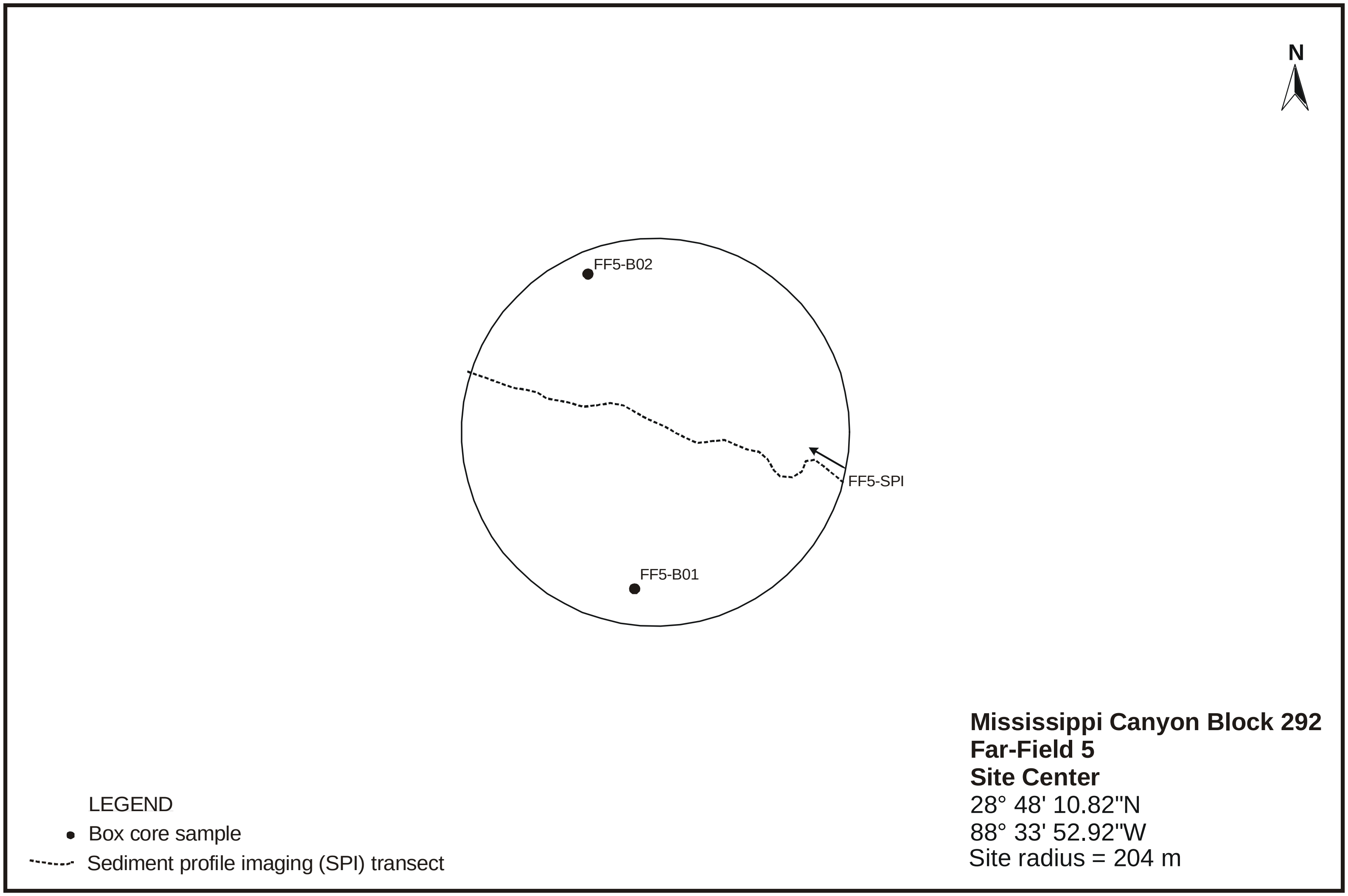


Figure A2-29. Mississippi Canyon Block 292 Far-field 5 (FF5) site, showing sampling locations on Cruise 2B.

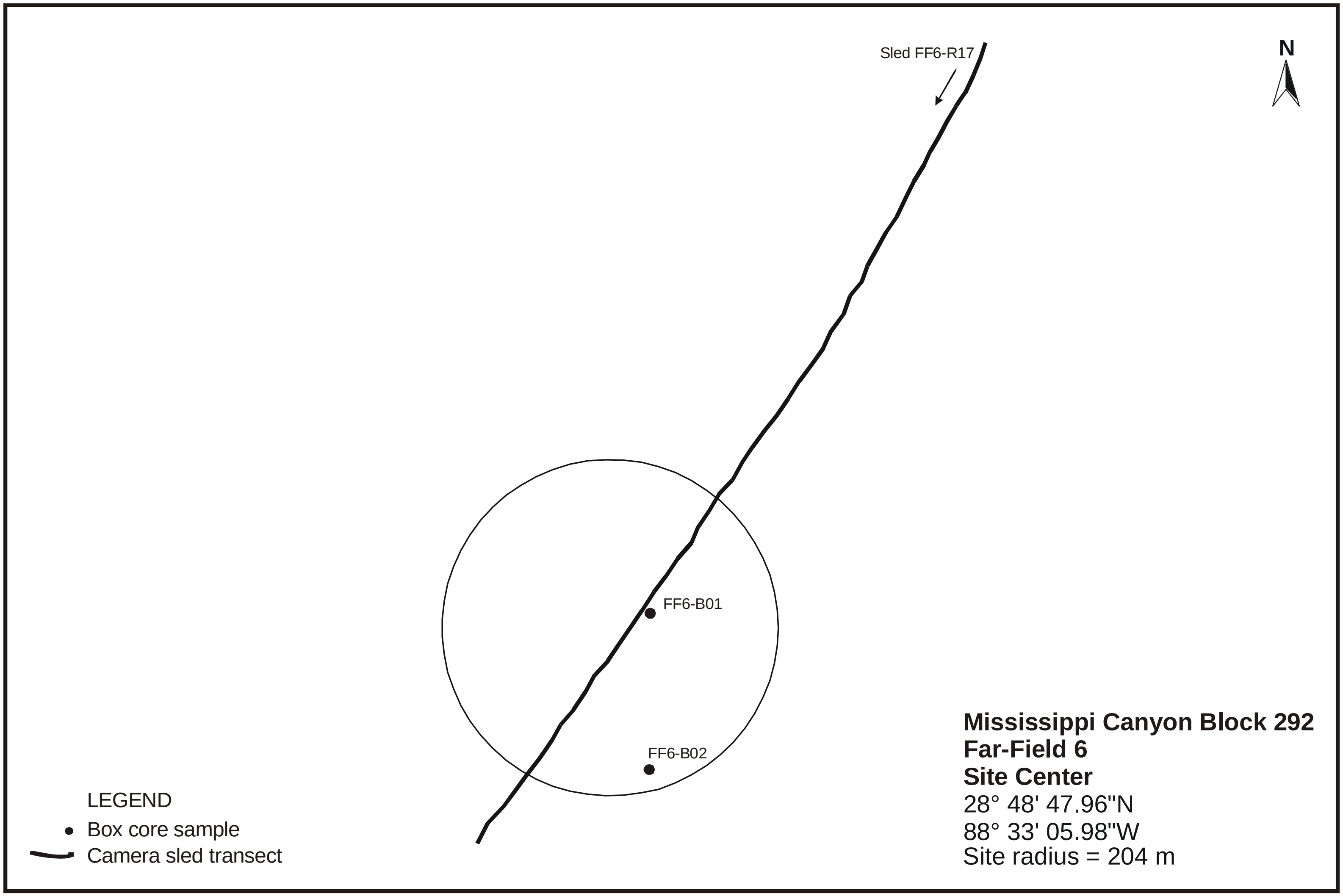


Figure A2-30. Mississippi Canyon Block 292 Far-field 6 (FF6) site, showing sampling locations on Cruise 2B.

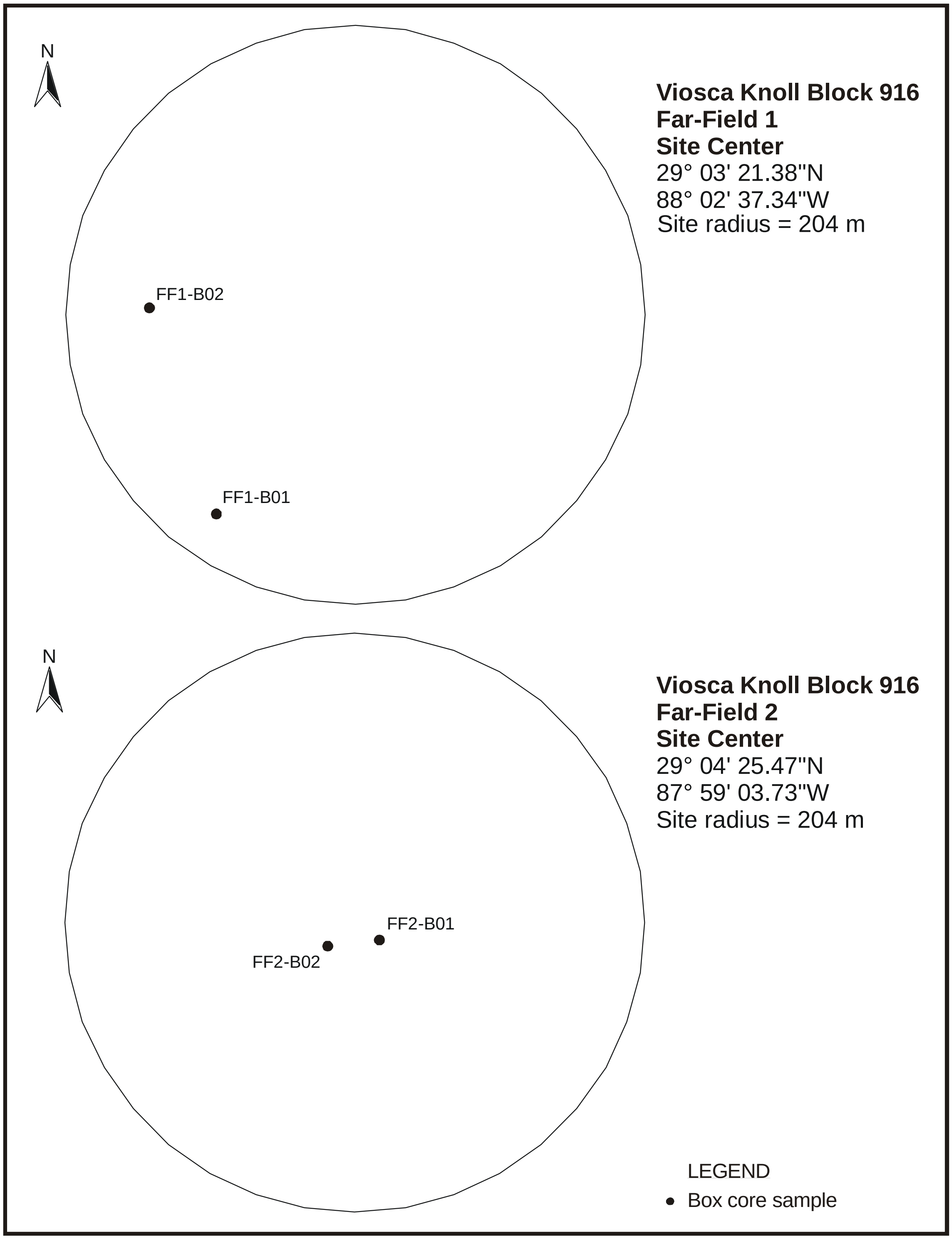


Figure A2-31. Viosca Knoll Block 916 Far-field 1 (FF1) and Far-field 2 (FF2) sites, showing sampling locations on Cruise 3B.

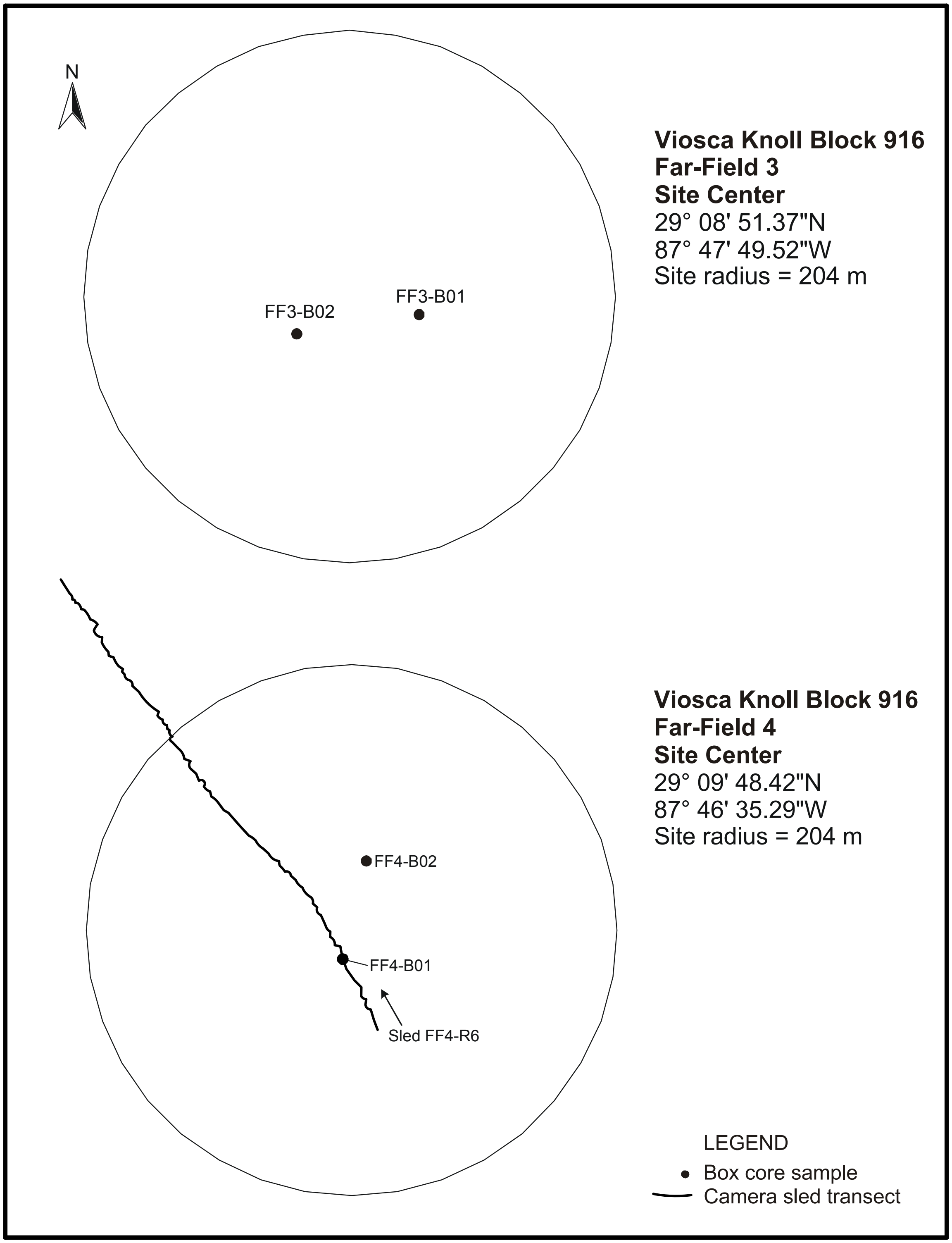


Figure A2-32. Viosca Knoll Block 916 Far-field 3 (FF3) and Far-field 4 (FF4) sites, showing sampling locations on Cruise 3B.

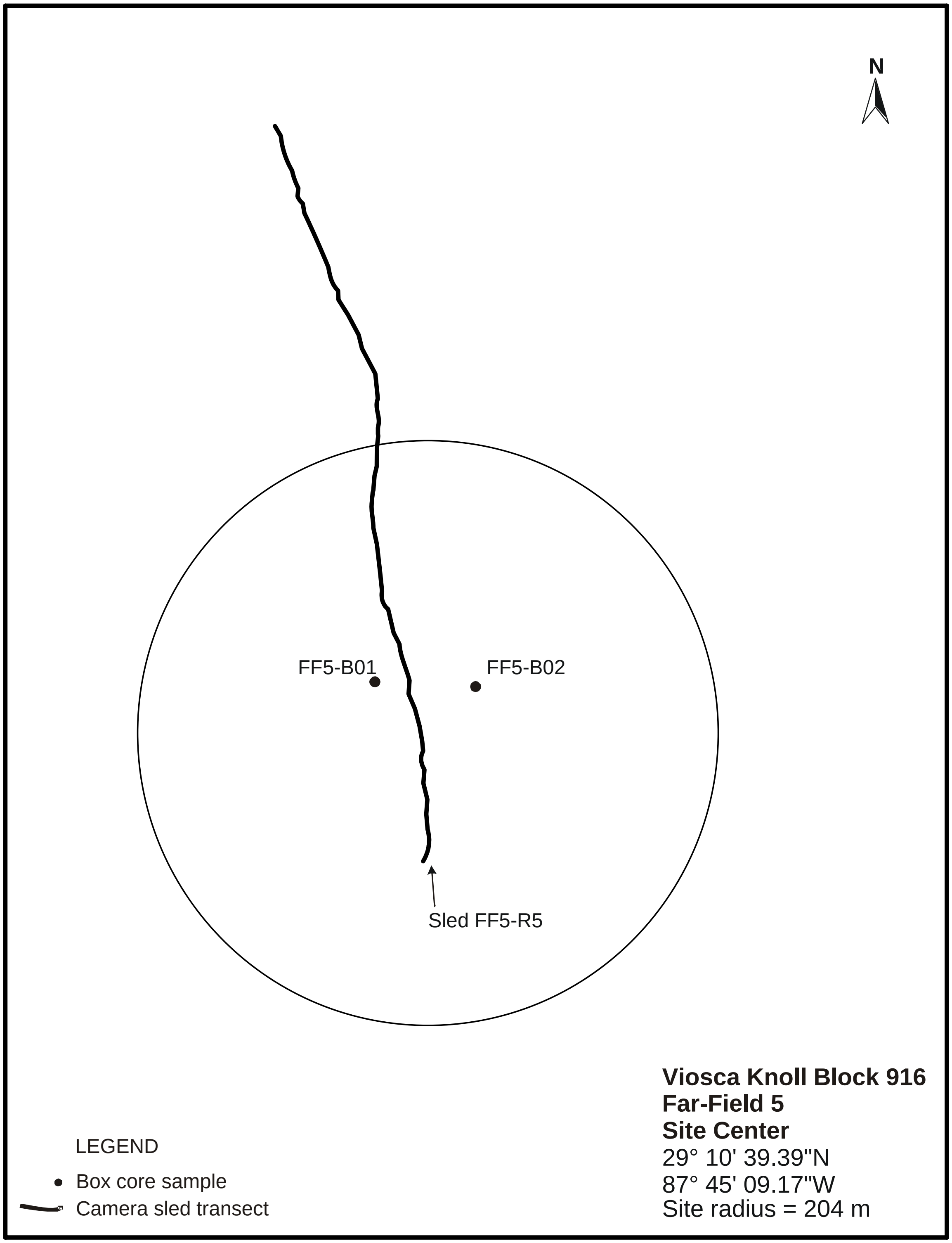


Figure A2-33. Viosca Knoll Block 916 Far-field 5 (FF5) site, showing sampling locations on Cruise 3B.

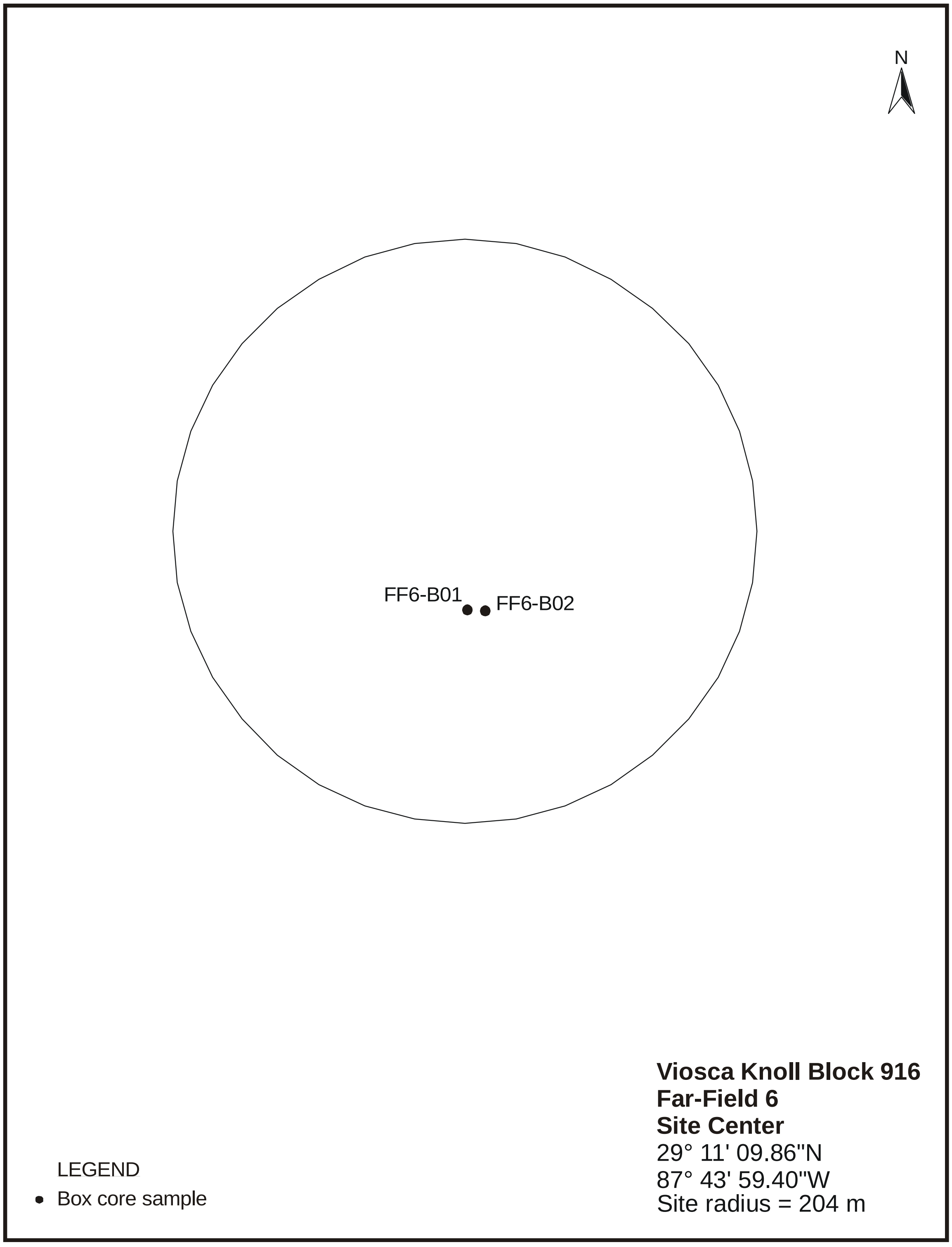


Figure A2-34. Viosca Knoll Block 916 Far-field 6 (FF6) site, showing sampling locations on Cruise 3B.

APPENDIX B1

Well Locations within 10 km of Near-Field and Far-Field Sites

Table B1-1. Well locations within 10 km of the Viosca Knoll (VK) 916 near-field site.
Rows in red were drilled during this study (all others prior to Cruises 1A and 1B).

API	Operator's	Area/	Dates		Surface Location		Surface UTM Coordinates		Distance to NF
Well No.	Well No.	Block	Spud	Total Depth	Longitude	Latitude	Y	X	Center (m)
608164037600	1	VK 916	11/27/2001	12/18/2001	-87.88874905	29.10676494	10564166.00	1356695.00	1
608164033600	1	VK 872	11/20/1998	12/6/1998	-87.87973272	29.12610618	10571175.00	1359626.00	2316
608164033601	1 ST01	VK 872	12/15/1998	12/18/1998	-87.87973272	29.12610618	10571175.00	1359626.00	2316
608164012400	--	VK 873	2/21/1988	3/25/1988	-87.86066856	29.12644721	10571254.00	1365712.00	3496
608164019900	--	VK 871	5/26/1994	7/16/1994	-87.94735952	29.13292161	10573820.00	1338060.00	6398
608164040000	--	VK 917	11/21/2001	12/8/2001	-87.82587804	29.07240754	10551531.00	1376679.00	7205
608164033300	--	VK 827	9/14/1998	11/8/1998	-87.94291857	29.15679831	10582488.00	1339547.00	7650
608164033301	--	VK 827	6/25/2000	6/27/2000	-87.94291857	29.15679831	10582488.00	1339547.00	7650
608164040200	--	VK 915	1/9/2002	2/23/2002	-87.93478573	29.09681247	10560662.00	1341969.00	4614
608164038300	--	VK 915	1/27/2001	4/2/2001	-87.93519036	29.09653180	10560561.00	1341839.00	4660
608164040900	--	VK 915	5/18/2002	6/15/2002	-87.92720116	29.07386402	10552301.00	1344325.00	5224
608164029400	--	VK 915	8/15/1997	1/6/1998	-87.94356610	29.10760637	10564608.00	1339197.00	5335
608164029401	--	VK 915	2/25/1998	2/28/1998	-87.94356610	29.10760637	10564608.00	1339197.00	5335
608164027400	--	VK 915	10/20/1996	12/4/1996	-87.94362203	29.10755646	10564590.00	1339179.00	5341
608164029500	--	VK 915	9/13/1997	1/6/1998	-87.94362604	29.10765272	10564625.00	1339178.00	5341
608164029501	--	VK 915	1/11/1998	1/4/2001	-87.94362604	29.10765272	10564625.00	1339178.00	5341
608164018100	--	VK 915	4/13/1993	5/24/1993	-87.94368130	29.10752848	10564580.00	1339160.00	5346
608164018101	--	VK 915	6/6/1993	7/8/1993	-87.94368130	29.10752848	10564580.00	1339160.00	5346
608164029600	--	VK 915	9/16/1997	12/1/1997	-87.94367971	29.10769911	10564642.00	1339161.00	5347
608164029700	--	VK 915	8/17/1997	4/10/1998	-87.94373566	29.10765195	10564625.00	1339143.00	5352
608164040500	--	VK 915	2/12/2002	3/9/2002	-87.94110732	29.07351688	10552210.00	1339883.00	6287
608164040700	--	VK 915	3/18/2002	3/25/2002	-87.96069607	29.08424722	10556161.00	1333659.00	7433
608164040701	--	VK 915	3/29/2002	4/17/2002	-87.96069606	29.08424722	10556161.00	1333659.00	7433
608164040702	--	VK 915	4/24/2002	4/26/2002	-87.96069606	29.08424722	10556161.00	1333659.00	7433
608164040703	--	VK 915	5/4/2002	5/6/2002	-87.96069607	29.08424722	10556161.00	1333659.00	7433

API = American Petroleum Institute; NF = near-field; UTM = Universal Transverse Mercator.
X/Y coordinates are for UTM North American Datum 1927, Zone 16.
Source: Minerals Management Service Technical Information Management System.

Table B1-2. Well locations within 10 km of the Viosca Knoll (VK) 916 Far-field 1 site.
Rows in red were drilled during this study (all others prior to Cruises 1A and 1B).

API	Area/	Dates		Surface Location		Surface UTM Coordinates*		Distance to FF1
Well No.	Block	Spud	Total Depth	Longitude	Latitude	Y	X	Center (m)
608164013500	VK 957	1/5/1989	3/20/1989	-88.06308102	29.05593252	10546149.00	1300872.00	1886
608164013501	VK 957	4/2/1989	4/19/1989	-88.06308102	29.05593252	10546149.00	1300872.00	1886
608164013503	VK 957	6/22/1989	7/4/1989	-88.06308102	29.05593252	10546149.00	1300872.00	1886
608164013502	VK 957	5/24/1989	6/10/1989	-88.06308102	29.05593252	10546149.00	1300872.00	1886
608164028400	VK 914	4/20/1997	4/30/1997	-88.01555741	29.07773329	10553940.00	1316120.00	3652
608164028401	VK 914	6/9/1997	6/25/1997	-88.01555741	29.07773329	10553940.00	1316120.00	3652
608164028402	VK 914	6/27/1997	7/2/1997	-88.01555741	29.07773329	10553940.00	1316120.00	3652
608164028403	VK 914	4/12/1999	5/2/1999	-88.01555741	29.07773329	10553940.00	1316120.00	3652
608164010700	VK 956	2/20/1987	4/30/1987	-88.08941623	29.04339443	10541668.00	1292418.00	4663
608164010701	VK 956	5/27/1987	6/4/1987	-88.08941623	29.04339443	10541668.00	1292418.00	4663
608164010702	VK 956	6/11/1987	6/29/1987	-88.08941623	29.04339443	10541668.00	1292418.00	4663
608164010703	VK 956	7/7/1987	7/21/1987	-88.08941623	29.04339443	10541668.00	1292418.00	4663
608164024500	VK 956	4/1/1996	2/20/1997	-88.09168777	29.06083349	10548014.00	1291751.00	4703
608164025300	VK 956	4/5/1996	3/13/1997	-88.09168844	29.06089675	10548037.00	1291751.00	4704
608164024102	VK 956	1/28/1997	2/7/1997	-88.09170592	29.06077282	10547992.00	1291745.00	4704
608164024100	VK 956	4/6/1996	4/15/1996	-88.09170592	29.06077282	10547992.00	1291745.00	4704
608164024101	VK 956	9/19/1996	9/24/1996	-88.09170592	29.06077282	10547992.00	1291745.00	4704
608164025700	VK 956	4/9/1996	3/7/1997	-88.09171943	29.06086624	10548026.00	1291741.00	4706
608164024700	VK 956	9/27/1997	9/6/1999	-88.09172012	29.06093226	10548050.00	1291741.00	4707
608164025800	VK 956	3/23/1996	3/2/1997	-88.09176285	29.06082737	10548012.00	1291727.00	4710
608164024000	VK 956	4/3/1996	4/23/1996	-88.09176360	29.06089889	10548038.00	1291727.00	4711
608164024001	VK 956	4/30/1998	4/30/1998	-88.09176360	29.06089889	10548038.00	1291727.00	4711
608164024002	VK 956	5/14/1998	6/27/1998	-88.09176360	29.06089889	10548038.00	1291727.00	4711
608164025100	VK 956	3/31/1996	3/10/1997	-88.09176430	29.06096491	10548062.00	1291727.00	4712
608164024302	VK 956	2/11/1998	3/5/1998	-88.09179836	29.06092887	10548049.00	1291716.00	4715
608164024300	VK 956	11/3/1996	11/29/1996	-88.09179836	29.06092887	10548049.00	1291716.00	4715
608164024301	VK 956	12/8/1996	12/16/1996	-88.09179836	29.06092887	10548049.00	1291716.00	4715
608164024800	VK 956	3/30/1996	2/24/1997	-88.09179911	29.06100039	10548075.00	1291716.00	4716
608164024200	VK 956	12/19/1996	1/18/1997	-88.09182552	29.06083237	10548014.00	1291707.00	4716
608164024201	VK 956	10/16/1997	11/22/1997	-88.09182552	29.06083237	10548014.00	1291707.00	4716
608164024202	VK 956	12/5/2001	12/11/2001	-88.09182552	29.06083237	10548014.00	1291707.00	4716
608164024203	VK 956	12/16/2001	12/21/2001	-88.09182552	29.06083237	10548014.00	1291707.00	4716
608164024600	VK 956	2/17/1997	2/10/1999	-88.09182621	29.06089838	10548038.00	1291707.00	4717
608164024601	VK 956	2/20/1999	3/4/1999	-88.09182621	29.06089838	10548038.00	1291707.00	4717

Table B1-2. (continued).

API	Area/	Dates		Surface Location		Surface UTM Coordinates*		Distance to FF1
Well No.	Block	Spud	Total Depth	Longitude	Latitude	Y	X	Center (m)
608164024602	VK 956	3/10/1999	3/15/1999	-88.09182621	29.06089838	10548038.00	1291707.00	4717
608164025000	VK 956	3/28/1996	3/5/1997	-88.09183004	29.06096437	10548062.00	1291706.00	4718
608164025500	VK 956	3/14/1997	5/27/1999	-88.09185717	29.06086512	10548026.00	1291697.00	4719
608164023970	VK 956	6/25/1997	7/9/1997	-88.09185784	29.06092839	10548049.00	1291697.00	4720
608164023971	VK 956	7/10/1997	7/15/1997	-88.09185784	29.06092839	10548049.00	1291697.00	4720
608164023900	VK 956	7/30/1997	8/16/1997	-88.09185784	29.06092839	10548049.00	1291697.00	4720
608164024900	VK 956	3/31/1996	3/1/1997	-88.09185856	29.06099715	10548074.00	1291697.00	4721
608164024401	VK 956	8/27/1998	10/28/1998	-88.09190378	29.06083173	10548014.00	1291682.00	4724
608164024402	VK 956	11/6/1998	1/11/1999	-88.09190378	29.06083173	10548014.00	1291682.00	4724
608164024400	VK 956	3/8/1997	8/8/1998	-88.09190378	29.06083173	10548014.00	1291682.00	4724
608164025400	VK 956	4/5/1996	2/26/1997	-88.09190448	29.06089775	10548038.00	1291682.00	4724
608164025600	VK 956	3/23/1996	3/3/1997	-88.09193857	29.06086446	10548026.00	1291671.00	4727
608164025200	VK 956	4/4/1996	10/1/1999	-88.09193926	29.06093047	10548050.00	1291671.00	4728
608164025201	VK 956	10/5/1999	10/29/1999	-88.09193926	29.06093047	10548050.00	1291671.00	4728
608164010200	VK 912	6/23/1986	8/15/1986	-88.08759186	29.08193331	10555672.00	1293130.00	5152
608164009801	VK 956	1/17/1986	2/17/1986	-88.10169689	29.06405552	10549215.00	1288565.00	5717
608164009800	VK 956	11/16/1985	1/1/1986	-88.10169689	29.06405552	10549215.00	1288565.00	5717
608164034000	VK 1001	3/20/1999	4/25/1999	-88.05922056	29.00255317	10526734.00	1301931.00	6105
608164034001	VK 1001	5/2/1999	5/9/1999	-88.05922056	29.00255317	10526734.00	1301931.00	6105
608164034002	VK 1001	5/13/1999	5/14/1999	-88.05922056	29.00255317	10526734.00	1301931.00	6105
608164034003	VK 1001	5/15/1999	6/19/1999	-88.05922056	29.00255317	10526734.00	1301931.00	6105
608164040700	VK 915	3/18/2002	3/25/2002	-87.96069607	29.08424722	10556161.00	1333659.00	8668
608164040701	VK 915	3/29/2002	4/17/2002	-87.96069606	29.08424722	10556161.00	1333659.00	8668
608164040702	VK 915	4/24/2002	4/26/2002	-87.96069606	29.08424722	10556161.00	1333659.00	8668
608164040703	VK 915	5/4/2002	5/6/2002	-87.96069607	29.08424722	10556161.00	1333659.00	8668
608164009000	VK 912	3/1/1985	5/14/1985	-88.11927014	29.09933642	10562093.00	1283074.00	8788
608164013700	VK 870	12/2/1989	1/8/1990	-88.01452810	29.13148086	10573475.00	1316617.00	8838
608164013800	VK 869	4/6/1989	5/18/1989	-88.05470598	29.13578951	10575154.00	1303807.00	8912
608164013801	VK 869	5/23/1989	6/14/1989	-88.05470597	29.13578957	10575154.00	1303807.00	8912

API = American Petroleum Institute; FF = far-field; UTM = Universal Transverse Mercator.

*X/Y coordinates are for UTM North American Datum 1927, Zone 16.

Source: Minerals Management Service Technical Information Management System.

Table B1-3. Well locations within 10 km of the Viosca Knoll (VK) 916 Far-field 2 site.
Rows in red were drilled during this study (all others prior to Cruises 1A and 1B).

API	Area/	Dates		Surface Location		Surface UTM Coordinates*		Distance to FF2
Well No.	Block	Spud	Total Depth	Longitude	Latitude	Y	X	Center (m)
608164040700	VK 915	3/18/2002	3/25/2002	-87.96069607	29.08424722	10556161.00	1333659.00	2582
608164040701	VK 915	3/29/2002	4/17/2002	-87.96069606	29.08424722	10556161.00	1333659.00	2582
608164040702	VK 915	4/24/2002	4/26/2002	-87.96069606	29.08424722	10556161.00	1333659.00	2582
608164040703	VK 915	5/4/2002	5/6/2002	-87.96069607	29.08424722	10556161.00	1333659.00	2582
608164028400	VK 914	4/20/1997	4/30/1997	-88.01555741	29.07773329	10553940.00	1316120.00	3068
608164028401	VK 914	6/9/1997	6/25/1997	-88.01555741	29.07773329	10553940.00	1316120.00	3068
608164028402	VK 914	6/27/1997	7/2/1997	-88.01555741	29.07773329	10553940.00	1316120.00	3068
608164028403	VK 914	4/12/1999	5/2/1999	-88.01555741	29.07773329	10553940.00	1316120.00	3068
608164040500	VK 915	2/12/2002	3/9/2002	-87.94110732	29.07351688	10552210.00	1339883.00	4211
608164038300	VK 915	1/27/2001	4/2/2001	-87.93519036	29.09653180	10560561.00	1341839.00	5412
608164018100	VK 915	4/13/1993	5/24/1993	-87.94368130	29.10752848	10564580.00	1339160.00	5449
608164018101	VK 915	6/6/1993	7/8/1993	-87.94368130	29.10752848	10564580.00	1339160.00	5449
608164029700	VK 915	8/17/1997	4/10/1998	-87.94373566	29.10765195	10564625.00	1339143.00	5455
608164027400	VK 915	10/20/1996	12/4/1996	-87.94362203	29.10755646	10564590.00	1339179.00	5456
608164040200	VK 915	1/9/2002	2/23/2002	-87.93478573	29.09681247	10560662.00	1341969.00	5461
608164029600	VK 915	9/16/1997	12/1/1997	-87.94367971	29.10769911	10564642.00	1339161.00	5462
608164029500	VK 915	9/13/1997	1/6/1998	-87.94362604	29.10765272	10564625.00	1339178.00	5463
608164029501	VK 915	1/11/1998	1/4/2001	-87.94362604	29.10765272	10564625.00	1339178.00	5463
608164029400	VK 915	8/15/1997	1/6/1998	-87.94356610	29.10760637	10564608.00	1339197.00	5463
608164029401	VK 915	2/25/1998	2/28/1998	-87.94356610	29.10760637	10564608.00	1339197.00	5463
608164040900	VK 915	5/18/2002	6/15/2002	-87.92720116	29.07386402	10552301.00	1344325.00	5565
608164013700	VK 870	12/2/1989	1/8/1990	-88.01452810	29.13148086	10573475.00	1316617.00	7038
608164019900	VK 871	5/26/1994	7/16/1994	-87.94735952	29.13292161	10573820.00	1338060.00	7481
608164013501	VK 957	4/2/1989	4/19/1989	-88.06308102	29.05593252	10546149.00	1300872.00	7912
608164013503	VK 957	6/22/1989	7/4/1989	-88.06308102	29.05593252	10546149.00	1300872.00	7912
608164013502	VK 957	5/24/1989	6/10/1989	-88.06308102	29.05593252	10546149.00	1300872.00	7912
608164013500	VK 957	1/5/1989	3/20/1989	-88.06308102	29.05593252	10546149.00	1300872.00	7912
608164015900	VK 826	11/14/1990	12/22/1990	-87.99977507	29.15676836	10582627.00	1321404.00	9320
608164015901	VK 826	12/26/1990	1/8/1991	-87.99977507	29.15676836	10582627.00	1321404.00	9320
608164015902	VK 826	1/21/1991	2/9/1991	-87.99977507	29.15676836	10582627.00	1321404.00	9320

Table B1-3. (continued).

API	Area/	Dates		Surface Location		Surface UTM Coordinates*		Distance to FF2
Well No.	Block	Spud	Total Depth	Longitude	Latitude	Y	X	Center (m)
608164013000	VK 869	5/26/1988	6/14/1988	-88.03433119	29.14830548	10579646.00	1310350.00	9586
608164013800	VK 869	4/6/1989	5/18/1989	-88.05470598	29.13578951	10575154.00	1303807.00	9701
608164013801	VK 869	5/23/1989	6/14/1989	-88.05470597	29.13578957	10575154.00	1303807.00	9701
608164022100	VK 826	11/20/1995	1/23/1996	-87.98777583	29.16332765	10584979.00	1325253.00	9931
608164032400	VK 826	4/5/1998	7/16/1998	-87.98780498	29.16342647	10585015.00	1325244.00	9942
608164019400	VK 826	1/16/1994	3/13/1994	-87.98775824	29.16345432	10585025.00	1325259.00	9945
608164019401	VK 826	2/7/1996	2/17/1996	-87.98775824	29.16345432	10585025.00	1325259.00	9945
608164032500	VK 826	4/15/1998	4/23/1998	-87.98783348	29.16345652	10585026.00	1325235.00	9946
608164032501	VK 826	4/28/1998	5/26/1998	-87.98783348	29.16345652	10585026.00	1325235.00	9946
608164032700	VK 826	4/7/1998	4/8/1998	-87.98789984	29.16351380	10585047.00	1325214.00	9952
608164037600	VK 916	11/27/2001	12/18/2001	-87.88874905	29.10676494	10564166.00	1356695.00	9999

API = American Petroleum Institute; FF = far-field; UTM = Universal Transverse Mercator.

*X/Y coordinates are for UTM North American Datum 1927, Zone 16.

Source: Minerals Management Service Technical Information Management System.

Table B1-4. Well locations within 10 km of the Viosca Knoll (VK) 916 Far-field 3 site.
Rows in red were drilled during this study (all others prior to Cruises 1A and 1B).

API	Area/	Dates		Surface Location		Surface UTM Coordinates*		Distance to FF3
Well No.	Block	Spud	Total Depth	Longitude	Latitude	Y	X	Center (m)
608164020100	VK 829	6/17/1994	8/15/1994	-87.82651300	29.18983629	10594218.00	1376776.00	5485
608164012400	VK 873	2/21/1988	3/25/1988	-87.86066856	29.12644721	10571254.00	1365712.00	6614
608164033600	VK 872	11/20/1998	12/6/1998	-87.87973272	29.12610618	10571175.00	1359626.00	8385
608164033601	VK 872	12/15/1998	12/18/1998	-87.87973272	29.12610618	10571175.00	1359626.00	8385
608164040000	VK 917	11/21/2001	12/8/2001	-87.82587804	29.07240754	10551531.00	1376679.00	8789
608164031400	VK 786	9/23/1997	8/14/2001	-87.78104352	29.22898929	10608351.00	1391375.00	9151
608164030800	VK 786	9/29/1997	2/21/2001	-87.78106246	29.22900568	10608357.00	1391369.00	9153
608164030801	VK 786	3/7/2001	3/27/2001	-87.78106246	29.22900568	10608357.00	1391369.00	9153
608164031500	VK 786	9/18/1997	10/21/2001	-87.78102483	29.22900590	10608357.00	1391381.00	9153
608164030900	VK 786	10/3/1997	10/15/2000	-87.78104377	29.22902230	10608363.00	1391375.00	9155
608164031000	VK 786	9/27/1997	4/22/2003	-87.78100614	29.22902252	10608363.00	1391387.00	9155
608164030500	VK 786	10/6/1997	10/7/1997	-87.78106271	29.22903869	10608369.00	1391369.00	9156
608164030200	VK 786	9/22/1997	1/15/1998	-87.78102508	29.22903891	10608369.00	1391381.00	9157
608164022700	VK 786	11/25/1995	2/28/1996	-87.78109416	29.22904951	10608373.00	1391359.00	9157
608164031600	VK 786	10/4/1997	10/5/1997	-87.78098745	29.22903913	10608369.00	1391393.00	9157
608164030100	VK 786	9/26/1997	2/1/1998	-87.78104402	29.22905531	10608375.00	1391375.00	9158
608164030300	VK 786	9/30/1997	12/16/2000	-87.78106915	29.22906066	10608377.00	1391367.00	9158
608164030000	VK 786	9/30/1997	10/27/1997	-87.78100639	29.22905553	10608375.00	1391387.00	9159
608164031100	VK 786	9/18/1997	5/30/2001	-87.78096562	29.22905577	10608375.00	1391400.00	9160
608164030600	VK 786	9/18/1997	5/5/2001	-87.78102533	29.22907192	10608381.00	1391381.00	9160
608164031200	VK 786	10/8/1997	6/26/2003	-87.78098770	29.22907214	10608381.00	1391393.00	9161
608164031700	VK 786	9/17/1997	10/24/2002	-87.78095005	29.22906961	10608380.00	1391405.00	9161
608164030701	VK 786	6/4/2002	6/6/2002	-87.78100351	29.22908856	10608387.00	1391388.00	9163
608164030700	VK 786	10/4/1997	4/18/2002	-87.78100351	29.22908856	10608387.00	1391388.00	9163
608164030702	VK 786	6/14/2002	6/17/2002	-87.78100351	29.22908856	10608387.00	1391388.00	9163
608164021100	VK 786	6/28/1995	7/14/1995	-87.78104434	29.22909657	10608390.00	1391375.00	9163
608164031300	VK 786	9/26/1997	5/28/2003	-87.78096587	29.22908878	10608387.00	1391400.00	9163
608164022600	VK 786	11/28/1995	12/18/1995	-87.78099452	29.22914363	10608407.00	1391391.00	9169
608164022601	VK 786	12/30/1995	1/20/1996	-87.78099452	29.22914363	10608407.00	1391391.00	9169
608164037600	VK 916	11/27/2001	12/18/2001	-87.88874905	29.10676494	10564166.00	1356695.00	9999

API = American Petroleum Institute; FF = far-field; UTM = Universal Transverse Mercator.
*X/Y coordinates are for UTM North American Datum 1927, Zone 16.
Source: Minerals Management Service Technical Information Management System.

Table B1-5. Well locations within 10 km of the Viosca Knoll (VK) 916 Far-field 4 site.
Rows in red were drilled during this study (all others prior to Cruises 1A and 1B).

API	Area/	Dates		Surface Location		Surface UTM Coordinates*		Distance to FF4
Well No.	Block	Spud	Total Depth	Longitude	Latitude	Y	X	Center (m)
608164020100	VK 829	6/17/1994	8/15/1994	-87.82651300	29.18983629	10594218.00	1376776.00	5677
608164031400	VK 786	9/23/1997	8/14/2001	-87.78104352	29.22898929	10608351.00	1391375.00	7275
608164031500	VK 786	9/18/1997	10/21/2001	-87.78102483	29.22900590	10608357.00	1391381.00	7277
608164030800	VK 786	9/29/1997	2/21/2001	-87.78106246	29.22900568	10608357.00	1391369.00	7277
608164030801	VK 786	3/7/2001	3/27/2001	-87.78106246	29.22900568	10608357.00	1391369.00	7277
608164031000	VK 786	9/27/1997	4/22/2003	-87.78100614	29.22902252	10608363.00	1391387.00	7278
608164030900	VK 786	10/3/1997	10/15/2000	-87.78104377	29.22902230	10608363.00	1391375.00	7278
608164031600	VK 786	10/4/1997	10/5/1997	-87.78098745	29.22903913	10608369.00	1391393.00	7280
608164030200	VK 786	9/22/1997	1/15/1998	-87.78102508	29.22903891	10608369.00	1391381.00	7280
608164030500	VK 786	10/6/1997	10/7/1997	-87.78106271	29.22903869	10608369.00	1391369.00	7280
608164031100	VK 786	9/18/1997	5/30/2001	-87.78096562	29.22905577	10608375.00	1391400.00	7282
608164022700	VK 786	11/25/1995	2/28/1996	-87.78109416	29.22904951	10608373.00	1391359.00	7282
608164030000	VK 786	9/30/1997	10/27/1997	-87.78100639	29.22905553	10608375.00	1391387.00	7282
608164030100	VK 786	9/26/1997	2/1/1998	-87.78104402	29.22905531	10608375.00	1391375.00	7282
608164030300	VK 786	9/30/1997	12/16/2000	-87.78106915	29.22906066	10608377.00	1391367.00	7283
608164031700	VK 786	9/17/1997	10/24/2002	-87.78095005	29.22906961	10608380.00	1391405.00	7283
608164031200	VK 786	10/8/1997	6/26/2003	-87.78098770	29.22907214	10608381.00	1391393.00	7284
608164030600	VK 786	9/18/1997	5/5/2001	-87.78102533	29.22907192	10608381.00	1391381.00	7284
608164031300	VK 786	9/26/1997	5/28/2003	-87.78096587	29.22908878	10608387.00	1391400.00	7285
608164030701	VK 786	6/4/2002	6/6/2002	-87.78100351	29.22908856	10608387.00	1391388.00	7286
608164030700	VK 786	10/4/1997	4/18/2002	-87.78100351	29.22908856	10608387.00	1391388.00	7286
608164030702	VK 786	6/14/2002	6/17/2002	-87.78100351	29.22908856	10608387.00	1391388.00	7286
608164021100	VK 786	6/28/1995	7/14/1995	-87.78104434	29.22909657	10608390.00	1391375.00	7287
608164022600	VK 786	11/28/1995	12/18/1995	-87.78099452	29.22914363	10608407.00	1391391.00	7292
608164022601	VK 786	12/30/1995	1/20/1996	-87.78099452	29.22914363	10608407.00	1391391.00	7292
608164012400	VK 873	2/21/1988	3/25/1988	-87.86066856	29.12644721	10571254.00	1365712.00	9159

API = American Petroleum Institute; FF = far-field; UTM = Universal Transverse Mercator.
*X/Y coordinates are for UTM North American Datum 1927, Zone 16.
Source: Minerals Management Service Technical Information Management System.

Table B1-6. Well locations within 10 km of the Viosca Knoll (VK) 916 Far-field 5 site.
Rows in red were drilled during this study (all others prior to Cruises 1A and 1B).

API	Area/	Dates		Surface Location		Surface UTM Coordinates*		Distance to FF5
Well No.	Block	Spud	Total Depth	Longitude	Latitude	Y	X	Center (m)
608164031400	VK 786	9/23/1997	8/14/2001	-87.78104352	29.22898929	10608351.00	1391375.00	6331
608164031500	VK 786	9/18/1997	10/21/2001	-87.78102483	29.22900590	10608357.00	1391381.00	6332
608164031000	VK 786	9/27/1997	4/22/2003	-87.78100614	29.22902252	10608363.00	1391387.00	6332
608164030800	VK 786	9/29/1997	2/21/2001	-87.78106246	29.22900568	10608357.00	1391369.00	6333
608164030801	VK 786	3/7/2001	3/27/2001	-87.78106246	29.22900568	10608357.00	1391369.00	6333
608164031600	VK 786	10/4/1997	10/5/1997	-87.78098745	29.22903913	10608369.00	1391393.00	6333
608164030900	VK 786	10/3/1997	10/15/2000	-87.78104377	29.22902230	10608363.00	1391375.00	6334
608164031100	VK 786	9/18/1997	5/30/2001	-87.78096562	29.22905577	10608375.00	1391400.00	6334
608164031700	VK 786	9/17/1997	10/24/2002	-87.78095005	29.22906961	10608380.00	1391405.00	6335
608164030200	VK 786	9/22/1997	1/15/1998	-87.78102508	29.22903891	10608369.00	1391381.00	6335
608164030000	VK 786	9/30/1997	10/27/1997	-87.78100639	29.22905553	10608375.00	1391387.00	6336
608164030500	VK 786	10/6/1997	10/7/1997	-87.78106271	29.22903869	10608369.00	1391369.00	6337
608164031200	VK 786	10/8/1997	6/26/2003	-87.78098770	29.22907214	10608381.00	1391393.00	6337
608164030100	VK 786	9/26/1997	2/1/1998	-87.78104402	29.22905531	10608375.00	1391375.00	6337
608164031300	VK 786	9/26/1997	5/28/2003	-87.78096587	29.22908878	10608387.00	1391400.00	6337
608164030600	VK 786	9/18/1997	5/5/2001	-87.78102533	29.22907192	10608381.00	1391381.00	6338
608164022700	VK 786	11/25/1995	2/28/1996	-87.78109416	29.22904951	10608373.00	1391359.00	6339
608164030701	VK 786	6/4/2002	6/6/2002	-87.78100351	29.22908856	10608387.00	1391388.00	6339
608164030700	VK 786	10/4/1997	4/18/2002	-87.78100351	29.22908856	10608387.00	1391388.00	6339
608164030702	VK 786	6/14/2002	6/17/2002	-87.78100351	29.22908856	10608387.00	1391388.00	6339
608164030300	VK 786	9/30/1997	12/16/2000	-87.78106915	29.22906066	10608377.00	1391367.00	6339
608164021100	VK 786	6/28/1995	7/14/1995	-87.78104434	29.22909657	10608390.00	1391375.00	6341
608164022600	VK 786	11/28/1995	12/18/1995	-87.78099452	29.22914363	10608407.00	1391391.00	6344
608164022601	VK 786	12/30/1995	1/20/1996	-87.78099452	29.22914363	10608407.00	1391391.00	6344
608164020100	VK 829	6/17/1994	8/15/1994	-87.82651300	29.18983629	10594218.00	1376776.00	7318

API = American Petroleum Institute; FF = far-field; UTM = Universal Transverse Mercator.
*X/Y coordinates are for UTM North American Datum 1927, Zone 16.
Source: Minerals Management Service Technical Information Management System.

Table B1-7. Well locations within 10 km of the Viosca Knoll (VK) 916 Far-field 6 site.
Rows in red were drilled during this study (all others prior to Cruises 1A and 1B).

API	Area/	Dates		Surface Location		Surface UTM Coordinates*		Distance to FF6
Well No.	Block	Spud	Total Depth	Longitude	Latitude	Y	X	Center (m)
608164031100	VK 786	9/18/1997	5/30/2001	-87.78096562	29.22905577	10608375.00	1391400.00	6654
608164031400	VK 786	9/23/1997	8/14/2001	-87.78104352	29.22898929	10608351.00	1391375.00	6654
608164031700	VK 786	9/17/1997	10/24/2002	-87.78095005	29.22906961	10608380.00	1391405.00	6654
608164031500	VK 786	9/18/1997	10/21/2001	-87.78102483	29.22900590	10608357.00	1391381.00	6654
608164031000	VK 786	9/27/1997	4/22/2003	-87.78100614	29.22902252	10608363.00	1391387.00	6654
608164031600	VK 786	10/4/1997	10/5/1997	-87.78098745	29.22903913	10608369.00	1391393.00	6654
608164030800	VK 786	9/29/1997	2/21/2001	-87.78106246	29.22900568	10608357.00	1391369.00	6656
608164030801	VK 786	3/7/2001	3/27/2001	-87.78106246	29.22900568	10608357.00	1391369.00	6656
608164031300	VK 786	9/26/1997	5/28/2003	-87.78096587	29.22908878	10608387.00	1391400.00	6656
608164030900	VK 786	10/3/1997	10/15/2000	-87.78104377	29.22902230	10608363.00	1391375.00	6656
608164030200	VK 786	9/22/1997	1/15/1998	-87.78102508	29.22903891	10608369.00	1391381.00	6656
608164030000	VK 786	9/30/1997	10/27/1997	-87.78100639	29.22905553	10608375.00	1391387.00	6656
608164031200	VK 786	10/8/1997	6/26/2003	-87.78098770	29.22907214	10608381.00	1391393.00	6656
608164030701	VK 786	6/4/2002	6/6/2002	-87.78100351	29.22908856	10608387.00	1391388.00	6659
608164030700	VK 786	10/4/1997	4/18/2002	-87.78100351	29.22908856	10608387.00	1391388.00	6659
608164030702	VK 786	6/14/2002	6/17/2002	-87.78100351	29.22908856	10608387.00	1391388.00	6659
608164030500	VK 786	10/6/1997	10/7/1997	-87.78106271	29.22903869	10608369.00	1391369.00	6659
608164030100	VK 786	9/26/1997	2/1/1998	-87.78104402	29.22905531	10608375.00	1391375.00	6659
608164030600	VK 786	9/18/1997	5/5/2001	-87.78102533	29.22907192	10608381.00	1391381.00	6659
608164030300	VK 786	9/30/1997	12/16/2000	-87.78106915	29.22906066	10608377.00	1391367.00	6661
608164022700	VK 786	11/25/1995	2/28/1996	-87.78109416	29.22904951	10608373.00	1391359.00	6662
608164021100	VK 786	6/28/1995	7/14/1995	-87.78104434	29.22909657	10608390.00	1391375.00	6662
608164022600	VK 786	11/28/1995	12/18/1995	-87.78099452	29.22914363	10608407.00	1391391.00	6662
608164022601	VK 786	12/30/1995	1/20/1996	-87.78099452	29.22914363	10608407.00	1391391.00	6662
608164020100	VK 829	6/17/1994	8/15/1994	-87.82651300	29.18983629	10594218.00	1376776.00	9085

API = American Petroleum Institute; FF = far-field; UTM = Universal Transverse Mercator.
*X/Y coordinates are for UTM North American Datum 1927, Zone 16.
Source: Minerals Management Service Technical Information Management System.

Table B1-8. Well locations within 10 km of the Garden Banks (GB) 516 near-field site.
Rows in red were drilled between Cruises 1B and 2B (all others prior to Cruise 1B).

API	Operator's	Area/	Dates		Surface Location		Surface UTM Coordinates*		Distance to NF
Well No.	Well No.	Block	Spud	Total Depth	Longitude	Latitude	Y	X	Center (m)
608074020900	SE001	GB 516	7/13/1999	8/15/1999	-92.38562778	27.48994824	9975978.00	1839532.00	0
608074020901	SE001 ST01	GB 516	8/20/1999	8/21/1999	-92.38562778	27.48994824	9975978.00	1839532.00	0
608074020902	SE001 ST02	GB 516	11/29/2000	12/15/2000	-92.38562778	27.48994824	9975978.00	1839532.00	0
608074020903	SE001 ST03	GB 516	12/24/2000	12/29/2000	-92.38562778	27.48994824	9975978.00	1839532.00	0
608074022402	SE002 ST02	GB 516	1/30/2001	2/5/2001	-92.38533273	27.49029641	9976105.00	1839627.00	48
608074022400	SE002	GB 516	11/6/2000	11/21/2000	-92.38529259	27.49030174	9976107.00	1839640.00	51
608074022401	SE002 ST01	GB 516	11/24/2000	11/25/2000	-92.38529259	27.49030174	9976107.00	1839640.00	51
608074014300	1	GB 516	9/23/1995	7/23/1996	-92.37777854	27.48224150	9973190.00	1842090.00	1153
608074020500	--	GB 515	6/4/1999	6/25/1999	-92.41573079	27.46746115	9967759.00	1829814.00	3879
608074004501	--	GB 471	6/3/1987	6/30/1987	-92.43491683	27.54147721	9994628.00	1823472.00	7501
608074004500	--	GB 471	2/23/1987	5/27/1987	-92.43491683	27.54147721	9994628.00	1823472.00	7501
608074004502	--	GB 471	7/8/1987	10/30/1987	-92.43491683	27.54147721	9994628.00	1823472.00	7501
608074019900	--	GB 559	2/10/1999	3/27/1999	-92.44038956	27.43472546	9955826.00	1821874.00	8166
608074019901	--	GB 559	8/27/2000	9/1/2000	-92.44038956	27.43472546	9955826.00	1821874.00	8166
608074022100	--	GB 559	8/15/2000	10/2/2000	-92.44094796	27.43468367	9955810.00	1821693.00	8206
608074022101	--	GB 559	10/6/2000	10/8/2000	-92.44094796	27.43468367	9955810.00	1821693.00	8206
608074022102	--	GB 559	10/19/2000	10/24/2000	-92.44094796	27.43468367	9955810.00	1821693.00	8206
608074022103	--	GB 559	10/24/2000	10/29/2000	-92.44094796	27.43468367	9955810.00	1821693.00	8206
608074008000	--	GB 426	12/17/1990	1/24/1992	-92.44301666	27.54579987	9996187.00	1820841.00	8390
608074008100	--	GB 426	12/17/1990	7/11/1991	-92.44305999	27.54577803	9996179.00	1820827.00	8391
608074008802	--	GB 426	6/7/2000	6/13/2000	-92.44299793	27.54583838	9996201.00	1820847.00	8392
608074008800	--	GB 426	10/2/1991	5/10/2000	-92.44299793	27.54583838	9996201.00	1820847.00	8392
608074008801	--	GB 426	5/21/2000	5/24/2000	-92.44299793	27.54583838	9996201.00	1820847.00	8392
608074009900	--	GB 426	3/22/1992	7/8/1992	-92.44311248	27.54577549	9996178.00	1820810.00	8394
608074007100	--	GB 426	5/6/1990	7/21/1990	-92.44298228	27.54588228	9996217.00	1820852.00	8394
608074009800	--	GB 426	3/21/1992	11/2/1997	-92.44297589	27.54592629	9996233.00	1820854.00	8398

Table B1-8. (continued).

API	Operator's	Area/	Dates		Surface Location		Surface UTM Coordinates*		Distance to NF
Well No.	Well No.	Block	Spud	Total Depth	Longitude	Latitude	Y	X	Center (m)
608074009801	--	GB 426	11/19/1997	12/2/1997	-92.44297588	27.54592634	9996233.00	1820854.00	8398
608074009802	--	GB 426	12/12/1997	12/13/1997	-92.44297588	27.54592634	9996233.00	1820854.00	8398
608074007501	--	GB 426	6/26/1999	6/28/1999	-92.44315873	27.54578399	9996181.00	1820795.00	8398
608074007503	--	GB 426	7/25/1999	8/11/1999	-92.44315873	27.54578399	9996181.00	1820795.00	8398
608074007570	--	GB 426	8/9/1990	4/10/1991	-92.44315872	27.54578674	9996182.00	1820795.00	8398
608074007500	--	GB 426	4/11/1991	4/24/1991	-92.44315873	27.54578668	9996182.00	1820795.00	8398
608074007502	--	GB 426	7/6/1999	7/16/1999	-92.44315871	27.54578673	9996182.00	1820795.00	8398
608074009000	--	GB 426	10/4/1991	5/13/1992	-92.44320498	27.54579518	9996185.00	1820780.00	8402
608074009001	--	GB 426	2/27/1998	5/27/1998	-92.44320498	27.54579518	9996185.00	1820780.00	8402
608074008900	--	GB 426	3/7/1996	6/3/1996	-92.44299420	27.54596764	9996248.00	1820848.00	8402
608074008901	--	GB 426	6/25/1996	7/29/1996	-92.44299419	27.54596769	9996248.00	1820848.00	8402
608074009002	--	GB 426	6/2/1998	6/6/1998	-92.44320807	27.54579519	9996185.00	1820779.00	8402
608074010000	--	GB 426	3/24/1992	2/7/2003	-92.44325744	27.54580084	9996187.00	1820763.00	8406
608074007400	--	GB 426	8/4/1990	10/19/1991	-92.44303729	27.54599258	9996257.00	1820834.00	8407
608074007401	--	GB 426	10/21/1998	1/1/1999	-92.44303727	27.54599538	9996258.00	1820834.00	8407
608074007270	--	GB 426	5/13/1990	11/28/1990	-92.44307732	27.54601205	9996264.00	1820821.00	8411
608074007200	--	GB 426	11/29/1990	12/1/1990	-92.44307733	27.54601200	9996264.00	1820821.00	8411
608074010100	--	GB 426	3/25/1992	8/15/1995	-92.44329682	27.54594689	9996240.00	1820750.00	8421
608074010500	--	GB 426	3/27/1992	5/11/1995	-92.44329682	27.54594689	9996240.00	1820750.00	8421
608074008300	--	GB 426	12/18/1990	9/16/1991	-92.44346705	27.54586221	9996209.00	1820695.00	8425
608074010101	--	GB 426	9/26/1995	10/29/1995	-92.44351324	27.54588172	9996216.00	1820680.00	8430
608074010200	--	GB 426	3/27/1992	2/7/1995	-92.44355638	27.54590110	9996223.00	1820666.00	8434
608074007900	--	GB 426	12/19/1990	12/3/1991	-92.44360256	27.54592605	9996232.00	1820651.00	8439
608074008200	--	GB 426	12/20/1990	3/3/1992	-92.44348429	27.54611544	9996301.00	1820689.00	8447
608074010400	--	GB 426	9/17/1992	9/22/1992	-92.44353367	27.54611570	9996301.00	1820673.00	8450
608074010401	--	GB 426	5/23/2001	5/31/2001	-92.44353367	27.54611570	9996301.00	1820673.00	8450
608074010300	--	GB 426	3/26/1992	4/21/1992	-92.44357393	27.54609379	9996293.00	1820660.00	8451
608074010301	--	GB 426	11/3/1999	12/6/1999	-92.44357392	27.54609384	9996293.00	1820660.00	8451
608074003700	--	GB 426	7/21/1988	7/25/1988	-92.44756804	27.55051251	9997893.00	1819359.00	9078
608074003701	--	GB 426	10/27/1988	12/4/1988	-92.44756804	27.55051251	9997893.00	1819359.00	9078

API = American Petroleum Institute; NF = near-field; UTM = Universal Transverse Mercator.

*X/Y coordinates are for UTM North American Datum 1927, Zone 15.

Source: Minerals Management Service Technical Information Management System.

Table B1-9. Well locations within 10 km of the Garden Banks (GB) 516 Far-field 1 site.
Rows in red were drilled between Cruises 1B and 2B (all others prior to Cruise 1B).

API	Area/	Dates		Surface Location		Surface UTM Coordinates*		Distance to FF1
Well No.	Block	Spud	Total Depth	Longitude	Latitude	Y	X	Center (m)
608074022100	GB 559	8/15/2000	10/2/2000	-92.44094796	27.43468367	9955810.00	1821693.00	4622
608074022101	GB 559	10/6/2000	10/8/2000	-92.44094796	27.43468367	9955810.00	1821693.00	4622
608074022102	GB 559	10/19/2000	10/24/2000	-92.44094796	27.43468367	9955810.00	1821693.00	4622
608074022103	GB 559	10/24/2000	10/29/2000	-92.44094796	27.43468367	9955810.00	1821693.00	4622
608074019900	GB 559	2/10/1999	3/27/1999	-92.44038956	27.43472546	9955826.00	1821874.00	4672
608074019901	GB 559	8/27/2000	9/1/2000	-92.44038956	27.43472546	9955826.00	1821874.00	4672
608074015100	GB 602	4/3/1996	7/5/1996	-92.44870909	27.39515203	9941433.00	1819240.00	7020
608074015170	GB 602	7/14/1996	7/24/1996	-92.44870909	27.39515203	9941433.00	1819240.00	7020
608074015101	GB 602	7/25/1996	8/7/1996	-92.44870909	27.39515203	9941433.00	1819240.00	7020
608074020500	GB 515	6/4/1999	6/25/1999	-92.41573079	27.46746115	9967759.00	1829814.00	7068
608074014800	GB 602	2/10/1996	2/19/1996	-92.44993165	27.38482933	9937680.00	1818860.00	7976
608074014200	GB 602	9/13/1995	9/21/1995	-92.46242076	27.37745362	9934982.00	1814820.00	8316
608074014400	GB 602	9/25/1995	1/21/1996	-92.45993653	27.37742751	9934976.00	1815626.00	8386
608074014401	GB 602	2/25/1997	3/24/1997	-92.45993653	27.37742751	9934976.00	1815626.00	8386
608074019400	GB 602	12/11/1998	3/7/1999	-92.46004008	27.37704816	9934838.00	1815593.00	8423
608074019401	GB 602	4/26/1999	5/29/1999	-92.46004008	27.37704816	9934838.00	1815593.00	8423
608074019300	GB 602	12/10/1998	9/27/1999	-92.45978099	27.37708569	9934852.00	1815677.00	8427
608074019301	GB 602	11/29/2000	1/3/2001	-92.45978099	27.37708569	9934852.00	1815677.00	8427
608074023200	GB 600	6/24/2001	8/13/2001	-92.54267909	27.38941846	9939226.00	1788766.00	8829

API = American Petroleum Institute; FF = far-field; UTM = Universal Transverse Mercator.
*X/Y coordinates are for UTM North American Datum 1927, Zone 15.
Source: Minerals Management Service Technical Information Management System.

Table B1-10. Well locations within 10 km of the Garden Banks (GB) 516 Far-field 2 site.
Rows in red were drilled between Cruises 1B and 2B (all others prior to Cruise 1B).

API	Area/	Dates		Surface Location		Surface UTM Coordinates*		Distance to FF2
Well No.	Block	Spud	Total Depth	Longitude	Latitude	Y	X	Center (m)
608074016600	GB 386	6/17/1997	10/15/1997	-92.28836535	27.58874687	10012051.00	1870849.00	8628
608074016601	GB 386	11/2/1997	12/10/1997	-92.28836535	27.58874687	10012051.00	1870849.00	8628
608074016602	GB 386	4/20/1998	5/7/1998	-92.28836535	27.58874687	10012051.00	1870849.00	8628
608074016603	GB 386	5/30/1998	6/9/1998	-92.28836535	27.58874687	10012051.00	1870849.00	8628
608074018800	GB 386	11/10/1998	1/29/1999	-92.26484592	27.59105955	10012936.00	1878460.00	8919
608074018801	GB 386	3/4/1999	3/15/1999	-92.26484592	27.59105955	10012936.00	1878460.00	8919
608074021900	GB 562	8/14/2000	9/19/2000	-92.25515991	27.43042441	9954578.00	1881947.00	9249

API = American Petroleum Institute; FF = far-field; UTM = Universal Transverse Mercator.
*X/Y coordinates are for UTM North American Datum 1927, Zone 15.
Source: Minerals Management Service Technical Information Management System.

Table B1-11. Well locations within 10 km of the Garden Banks (GB) 516 Far-field 3 site.
All wells were drilled prior to Cruise 1B.

API	Area/	Dates		Surface Location		Surface UTM Coordinates*		Distance to FF3
Well No.	Block	Spud	Total Depth	Longitude	Latitude	Y	X	Center (m)
608074018800	GB 386	11/10/1998	1/29/1999	-92.26484592	27.59105955	10012936.00	1878460.00	8464
608074018801	GB 386	3/4/1999	3/15/1999	-92.26484592	27.59105955	10012936.00	1878460.00	8464
608074016600	GB 386	6/17/1997	10/15/1997	-92.28836535	27.58874687	10012051.00	1870849.00	8614
608074016601	GB 386	11/2/1997	12/10/1997	-92.28836535	27.58874687	10012051.00	1870849.00	8614
608074016602	GB 386	4/20/1998	5/7/1998	-92.28836535	27.58874687	10012051.00	1870849.00	8614
608074016603	GB 386	5/30/1998	6/9/1998	-92.28836535	27.58874687	10012051.00	1870849.00	8614
608074021900	GB 562	8/14/2000	9/19/2000	-92.25515991	27.43042441	9954578.00	1881947.00	9357

API = American Petroleum Institute; FF = far-field; UTM = Universal Transverse Mercator.
*X/Y coordinates are for UTM North American Datum 1927, Zone 15.
Source: Minerals Management Service Technical Information Management System.

Table B1-12. Well locations within 10 km of the Garden Banks (GB) 516 Far-field 4 site.
All wells were drilled prior to Cruises 1A and 1B.

API	Area/	Dates		Surface Location		Surface UTM Coordinates*		Distance to FF4
Well No.	Block	Spud	Total Depth	Longitude	Latitude	Y	X	Center (m)
608074018800	GB 386	11/10/1998	1/29/1999	-92.26484592	27.59105955	10012936.00	1878460.00	7775
608074018801	GB 386	3/4/1999	3/15/1999	-92.26484592	27.59105955	10012936.00	1878460.00	7775
608074016600	GB 386	6/17/1997	10/15/1997	-92.28836535	27.58874687	10012051.00	1870849.00	8657
608074016601	GB 386	11/2/1997	12/10/1997	-92.28836535	27.58874687	10012051.00	1870849.00	8657
608074016602	GB 386	4/20/1998	5/7/1998	-92.28836535	27.58874687	10012051.00	1870849.00	8657
608074016603	GB 386	5/30/1998	6/9/1998	-92.28836535	27.58874687	10012051.00	1870849.00	8657
608074006900	GB 386	4/22/1990	7/4/1990	-92.20509204	27.60134612	10016794.00	1897785.00	8983

API = American Petroleum Institute; FF = far-field; UTM = Universal Transverse Mercator.
*X/Y coordinates are for UTM North American Datum 1927, Zone 15.
Source: Minerals Management Service Technical Information Management System.

Table B1-13. Well locations within 10 km of the Garden Banks (GB) 516 Far-field 5 site.
All wells were drilled prior to Cruises 1A and 1B.

API	Area/	Dates		Surface Location		Surface UTM Coordinates*		Distance to FF5
Well No.	Block	Spud	Total Depth	Longitude	Latitude	Y	X	Center (m)
608074018800	GB 386	11/10/1998	-92.26484592	27.59105955	1/29/1999	10012936.00	1878460.00	7461
608074018801	GB 386	3/4/1999	-92.26484592	27.59105955	3/15/1999	10012936.00	1878460.00	7461
608074006900	GB 387	4/22/1990	-92.20509204	27.60134612	7/4/1990	10016794.00	1897785.00	8172
608074016600	GB 386	6/17/1997	-92.28836535	27.58874687	10/15/1997	10012051.00	1870849.00	8574
608074016601	GB 386	11/2/1997	-92.28836535	27.58874687	12/10/1997	10012051.00	1870849.00	8574
608074016602	GB 386	4/20/1998	-92.28836535	27.58874687	5/7/1998	10012051.00	1870849.00	8574
608074016603	GB 386	5/30/1998	-92.28836535	27.58874687	6/9/1998	10012051.00	1870849.00	8574
608074013600	GB 387	8/7/1994	-92.23586646	27.61905522	9/1/1994	10023167.00	1887781.00	9757
608074013601	GB 387	9/2/1994	-92.23586646	27.61905522	10/3/1994	10023167.00	1887781.00	9757
608074015200	GB 387	6/21/1996	-92.23585398	27.61907442	10/17/1996	10023174.00	1887785.00	9759
608074014000	GB 387	8/23/1995	-92.23592464	27.61912984	9/28/1995	10023194.00	1887762.00	9766
608074014001	GB 387	9/29/1995	-92.23592464	27.61912984	11/20/1995	10023194.00	1887762.00	9766

API = American Petroleum Institute; FF = far-field; UTM = Universal Transverse Mercator.
*X/Y coordinates are for UTM North American Datum 1927, Zone 15.
Source: Minerals Management Service Technical Information Management System.

Table B1-14. Well locations within 10 km of the Garden Banks (GB) 516 Far-field 6 site.
All wells were drilled prior to Cruises 1A and 1B.

API	Area/	Dates		Surface Location		Surface UTM Coordinates*		Distance to FF6
Well No.	Block	Spud	Total Depth	Longitude	Latitude	Y	X	Center (m)
608074006900	GB 387	4/22/1990	7/4/1990	-92.20509204	27.60134612	10016794.00	1897785.00	8444
608074018800	GB 386	11/10/1998	1/29/1999	-92.26484592	27.59105955	10012936.00	1878460.00	8922
608074018801	GB 386	3/4/1999	3/15/1999	-92.26484592	27.59105955	10012936.00	1878460.00	8922

API = American Petroleum Institute; FF = far-field; UTM = Universal Transverse Mercator.
*X/Y coordinates are for UTM North American Datum 1927, Zone 15.
Source: Minerals Management Service Technical Information Management System.

Table B1-15. Well locations within 10 km of the Garden Banks (GB) 602 near-field site.
Row in red was drilled during Cruises 2A and 2B (all others prior to these cruises).

API	Operator's	Area/	Dates		Surface Location		Surface UTM Coordinates*		Distance to NF
Well No.	Well No.	Block	Spud	Total Depth	Longitude	Latitude	Y	X	Center (m)
608074019400	5	GB 602	12/11/1998	3/7/1999	-92.46004008	27.37704816	9934838.00	1815593.00	22
608074019401	5-ST1	GB 602	4/26/1999	5/29/1999	-92.46004008	27.37704816	9934838.00	1815593.00	22
608074019300	4	GB 602	12/10/1998	9/27/1999	-92.45978099	27.37708569	9934852.00	1815677.00	22
608074019301	4-ST1	GB 602	11/29/2000	1/3/2001	-92.45978099	27.37708569	9934852.00	1815677.00	22
608074014400	2	GB 602	9/25/1995	1/21/1996	-92.45993653	27.37742751	9934976.00	1815626.00	22
608074014401	2-ST1	GB 602	2/25/1997	3/24/1997	-92.45993653	27.37742751	9934976.00	1815626.00	22
608074014200	1	GB 602	9/13/1995	9/21/1995	-92.46242076	27.37745362	9934982.00	1814820.00	247
608074014800	BH001	GB 602	2/10/1996	2/19/1996	-92.44993165	27.38482933	9937680.00	1818860.00	1299
608074015100	3	GB 602	4/3/1996	7/5/1996	-92.44870909	27.39515203	9941433.00	1819240.00	2275
608074015170	3	GB 602	7/14/1996	7/24/1996	-92.44870909	27.39515203	9941433.00	1819240.00	2275
608074015101	3	GB 602	7/25/1996	8/7/1996	-92.44870909	27.39515203	9941433.00	1819240.00	2275
608074022100	--	GB 559	8/15/2000	10/2/2000	-92.44094796	27.43468367	9955810.00	1821693.00	6635
608074022101	--	GB 559	10/6/2000	10/8/2000	-92.44094796	27.43468367	9955810.00	1821693.00	6635
608074022102	--	GB 559	10/19/2000	10/24/2000	-92.44094796	27.43468367	9955810.00	1821693.00	6635
608074022103	--	GB 559	10/24/2000	10/29/2000	-92.44094796	27.43468367	9955810.00	1821693.00	6635
608074019900	--	GB 559	2/10/1999	3/27/1999	-92.44038956	27.43472546	9955826.00	1821874.00	6655
608074019901	--	GB 559	8/27/2000	9/1/2000	-92.44038956	27.43472546	9955826.00	1821874.00	6655
608074023200	--	GB 600	6/24/2001	8/13/2001	-92.54267909	27.38941846	9939226.00	1788766.00	8292

API = American Petroleum Institute; NF = near-field; UTM = Universal Transverse Mercator.
*X/Y coordinates are for UTM North American Datum 1927, Zone 15.
Source: Minerals Management Service Technical Information Management System.

Table B1-16. Well locations within 10 km of the Garden Banks (GB) 602 Far-field 1 site.
Row in red was drilled during Cruises 2A and 2B (all others prior to these cruises).

API	Area/	Dates		Surface Location		Surface UTM Coordinates*		Distance to FF1
Well No.	Block	Spud	Total Depth	Longitude	Latitude	Y	X	Center (m)
608074023200	GB 600	6/24/2001	8/13/2001	-92.54267909	27.38941846	9939226.00	1788766.00	6545
608074014200	GB 602	9/13/1995	9/21/1995	-92.46242076	27.37745362	9934982.00	1814820.00	14348
608074019400	GB 602	12/11/1998	3/7/1999	-92.46004008	27.37704816	9934838.00	1815593.00	14584
608074019401	GB 602	4/26/1999	5/29/1999	-92.46004008	27.37704816	9934838.00	1815593.00	14584
608074014400	GB 602	9/25/1995	1/21/1996	-92.45993653	27.37742751	9934976.00	1815626.00	14594
608074014401	GB 602	2/25/1997	3/24/1997	-92.45993653	27.37742751	9934976.00	1815626.00	14594
608074019300	GB 602	12/10/1998	9/27/1999	-92.45978099	27.37708569	9934852.00	1815677.00	14609
608074019301	GB 602	11/29/2000	1/3/2001	-92.45978099	27.37708569	9934852.00	1815677.00	14609
608074014800	GB 602	2/10/1996	2/19/1996	-92.44993165	27.38482933	9937680.00	1818860.00	15603
608074015100	GB 602	4/3/1996	7/5/1996	-92.44870909	27.39515203	9941433.00	1819240.00	15823
608074015170	GB 602	7/14/1996	7/24/1996	-92.44870909	27.39515203	9941433.00	1819240.00	15823
608074015101	GB 602	7/25/1996	8/7/1996	-92.44870909	27.39515203	9941433.00	1819240.00	15823
608074022100	GB 559	8/15/2000	10/2/2000	-92.44094796	27.43468367	9955810.00	1821693.00	17640
608074022101	GB 559	10/6/2000	10/8/2000	-92.44094796	27.43468367	9955810.00	1821693.00	17640
608074022102	GB 559	10/19/2000	10/24/2000	-92.44094796	27.43468367	9955810.00	1821693.00	17640
608074022103	GB 559	10/24/2000	10/29/2000	-92.44094796	27.43468367	9955810.00	1821693.00	17640
608074019900	GB 559	2/10/1999	3/27/1999	-92.44038956	27.43472546	9955826.00	1821874.00	17694
608074019901	GB 559	8/27/2000	9/1/2000	-92.44038956	27.43472546	9955826.00	1821874.00	17694
608074021900	GB 562	8/14/2000	9/19/2000	-92.25515991	27.43042441	9954578.00	1881947.00	35323

API = American Petroleum Institute; FF = far-field; UTM = Universal Transverse Mercator.
*X/Y coordinates are for UTM North American Datum 1927, Zone 15.
Source: Minerals Management Service Technical Information Management System.

Table B1-17. Well locations within 10 km of the Garden Banks (GB) 602 Far-field 2 site.
Row in red was drilled during Cruises 2A and 2B (all others prior to these cruises).

API	Area/	Dates		Surface Location		Surface UTM Coordinates*		Distance to FF2
Well No.	Block	Spud	Total Depth	Longitude	Latitude	Y	X	Center (m)
608074023200	GB 600	6/24/2001	8/13/2001	-92.54267909	27.38941846	9939226.00	1788766.00	13280
608074014200	GB 602	9/13/1995	9/21/1995	-92.46242076	27.37745362	9934982.00	1814820.00	18077
608074019400	GB 602	12/11/1998	3/7/1999	-92.46004008	27.37704816	9934838.00	1815593.00	18251
608074019401	GB 602	4/26/1999	5/29/1999	-92.46004008	27.37704816	9934838.00	1815593.00	18251
608074019300	GB 602	12/10/1998	9/27/1999	-92.45978099	27.37708569	9934852.00	1815677.00	18275
608074019301	GB 602	11/29/2000	1/3/2001	-92.45978099	27.37708569	9934852.00	1815677.00	18275
608074014400	GB 602	9/25/1995	1/21/1996	-92.45993653	27.37742751	9934976.00	1815626.00	18282
608074014401	GB 602	2/25/1997	3/24/1997	-92.45993653	27.37742751	9934976.00	1815626.00	18282
608074014800	GB 602	2/10/1996	2/19/1996	-92.44993165	27.38482933	9937680.00	1818860.00	19557
608074015100	GB 602	4/3/1996	7/5/1996	-92.44870909	27.39515203	9941433.00	1819240.00	20299
608074015170	GB 602	7/14/1996	7/24/1996	-92.44870909	27.39515203	9941433.00	1819240.00	20299
608074015101	GB 602	7/25/1996	8/7/1996	-92.44870909	27.39515203	9941433.00	1819240.00	20299
608074022100	GB 559	8/15/2000	10/2/2000	-92.44094796	27.43468367	9955810.00	1821693.00	23666
608074022101	GB 559	10/6/2000	10/8/2000	-92.44094796	27.43468367	9955810.00	1821693.00	23666
608074022102	GB 559	10/19/2000	10/24/2000	-92.44094796	27.43468367	9955810.00	1821693.00	23666
608074022103	GB 559	10/24/2000	10/29/2000	-92.44094796	27.43468367	9955810.00	1821693.00	23666
608074019900	GB 559	2/10/1999	3/27/1999	-92.44038956	27.43472546	9955826.00	1821874.00	23710
608074019901	GB 559	8/27/2000	9/1/2000	-92.44038956	27.43472546	9955826.00	1821874.00	23710
608074021900	GB 562	8/14/2000	9/19/2000	-92.25515991	27.43042441	9954578.00	1881947.00	38972

API = American Petroleum Institute; FF = far-field; UTM = Universal Transverse Mercator.
*X/Y coordinates are for UTM North American Datum 1927, Zone 15.
Source: Minerals Management Service Technical Information Management System.

Table B1-18. Well locations within 10 km of the Garden Banks (GB) 602 Far-field 3 site.
Row in red was drilled during Cruises 2A and 2B (all others prior to these cruises).

API	Area/	Dates		Surface Location		Surface UTM Coordinates*		Distance to FF3
Well No.	Block	Spud	Total Depth	Longitude	Latitude	Y	X	Center (m)
608074023200	GB 600	6/24/2001	8/13/2001	-92.54267909	27.38941846	9939226.00	1788766.00	20035
608074014200	GB 602	9/13/1995	9/21/1995	-92.46242076	27.37745362	9934982.00	1814820.00	22717
608074019400	GB 602	12/11/1998	3/7/1999	-92.46004008	27.37704816	9934838.00	1815593.00	22831
608074019401	GB 602	4/26/1999	5/29/1999	-92.46004008	27.37704816	9934838.00	1815593.00	22831
608074019300	GB 602	12/10/1998	9/27/1999	-92.45978099	27.37708569	9934852.00	1815677.00	22851
608074019301	GB 602	11/29/2000	1/3/2001	-92.45978099	27.37708569	9934852.00	1815677.00	22851
608074014400	GB 602	9/25/1995	1/21/1996	-92.45993653	27.37742751	9934976.00	1815626.00	22870
608074014401	GB 602	2/25/1997	3/24/1997	-92.45993653	27.37742751	9934976.00	1815626.00	22870
608074014800	GB 602	2/10/1996	2/19/1996	-92.44993165	27.38482933	9937680.00	1818860.00	24133
608074015100	GB 602	4/3/1996	7/5/1996	-92.44870909	27.39515203	9941433.00	1819240.00	25095
608074015170	GB 602	7/14/1996	7/24/1996	-92.44870909	27.39515203	9941433.00	1819240.00	25095
608074015101	GB 602	7/25/1996	8/7/1996	-92.44870909	27.39515203	9941433.00	1819240.00	25095
608074022100	GB 559	8/15/2000	10/2/2000	-92.44094796	27.43468367	9955810.00	1821693.00	29077
608074022101	GB 559	10/6/2000	10/8/2000	-92.44094796	27.43468367	9955810.00	1821693.00	29077
608074022102	GB 559	10/19/2000	10/24/2000	-92.44094796	27.43468367	9955810.00	1821693.00	29077
608074022103	GB 559	10/24/2000	10/29/2000	-92.44094796	27.43468367	9955810.00	1821693.00	29077
608074019900	GB 559	2/10/1999	3/27/1999	-92.44038956	27.43472546	9955826.00	1821874.00	29112
608074019901	GB 559	8/27/2000	9/1/2000	-92.44038956	27.43472546	9955826.00	1821874.00	29112
608074021900	GB 562	8/14/2000	9/19/2000	-92.25515991	27.43042441	9954578.00	1881947.00	41986

API = American Petroleum Institute; FF = far-field; UTM = Universal Transverse Mercator.
*X/Y coordinates are for UTM North American Datum 1927, Zone 15.
Source: Minerals Management Service Technical Information Management System.

Table B1-19. Well locations within 10 km of the Garden Banks (GB) 602 Far-field 4 site.
Row in red was drilled during Cruises 2A and 2B (all others prior to these cruises).

API	Area/	Dates		Surface Location		Surface UTM Coordinates*		Distance to FF4
Well No.	Block	Spud	Total Depth	Longitude	Latitude	Y	X	Center (m)
608074014200	GB 602	9/13/1995	9/21/1995	-92.46242076	27.37745362	9934982.00	1814820.00	19181
608074019400	GB 602	12/11/1998	3/7/1999	-92.46004008	27.37704816	9934838.00	1815593.00	19215
608074019401	GB 602	4/26/1999	5/29/1999	-92.46004008	27.37704816	9934838.00	1815593.00	19215
608074019300	GB 602	12/10/1998	9/27/1999	-92.45978099	27.37708569	9934852.00	1815677.00	19227
608074019301	GB 602	11/29/2000	1/3/2001	-92.45978099	27.37708569	9934852.00	1815677.00	19227
608074014400	GB 602	9/25/1995	1/21/1996	-92.45993653	27.37742751	9934976.00	1815626.00	19258
608074014401	GB 602	2/25/1997	3/24/1997	-92.45993653	27.37742751	9934976.00	1815626.00	19258
608074023200	GB 600	6/24/2001	8/13/2001	-92.54267909	27.38941846	9939226.00	1788766.00	19617
608074014800	GB 602	2/10/1996	2/19/1996	-92.44993165	27.38482933	9937680.00	1818860.00	20367
608074015100	GB 602	4/3/1996	7/5/1996	-92.44870909	27.39515203	9941433.00	1819240.00	21480
608074015170	GB 602	7/14/1996	7/24/1996	-92.44870909	27.39515203	9941433.00	1819240.00	21480
608074015101	GB 602	7/25/1996	8/7/1996	-92.44870909	27.39515203	9941433.00	1819240.00	21480
608074022100	GB 559	8/15/2000	10/2/2000	-92.44094796	27.43468367	9955810.00	1821693.00	25866
608074022101	GB 559	10/6/2000	10/8/2000	-92.44094796	27.43468367	9955810.00	1821693.00	25866
608074022102	GB 559	10/19/2000	10/24/2000	-92.44094796	27.43468367	9955810.00	1821693.00	25866
608074022103	GB 559	10/24/2000	10/29/2000	-92.44094796	27.43468367	9955810.00	1821693.00	25866
608074019900	GB 559	2/10/1999	3/27/1999	-92.44038956	27.43472546	9955826.00	1821874.00	25888
608074019901	GB 559	8/27/2000	9/1/2000	-92.44038956	27.43472546	9955826.00	1821874.00	25888
608074021900	GB 562	8/14/2000	9/19/2000	-92.25515991	27.43042441	9954578.00	1881947.00	35841

API = American Petroleum Institute; FF = far-field; UTM = Universal Transverse Mercator.
*X/Y coordinates are for UTM North American Datum 1927, Zone 15.
Source: Minerals Management Service Technical Information Management System.

Table B1-20. Well locations within 10 km of the Garden Banks (GB) 602 Far-field 5 site.
Row in red was drilled during Cruises 2A and 2B (all others prior to these cruises).

API	Area/	Dates		Surface Location		Surface UTM Coordinates*		Distance to FF5
Well No.	Block	Spud	Total Depth	Longitude	Latitude	Y	X	Center (m)
608074019400	GB 602	12/11/1998	3/7/1999	-92.46004008	27.37704816	9934838.00	1815593.00	13214
608074019401	GB 602	4/26/1999	5/29/1999	-92.46004008	27.37704816	9934838.00	1815593.00	13214
608074019300	GB 602	12/10/1998	9/27/1999	-92.45978099	27.37708569	9934852.00	1815677.00	13220
608074019301	GB 602	11/29/2000	1/3/2001	-92.45978099	27.37708569	9934852.00	1815677.00	13220
608074014200	GB 602	9/13/1995	9/21/1995	-92.46242076	27.37745362	9934982.00	1814820.00	13247
608074014400	GB 602	9/25/1995	1/21/1996	-92.45993653	27.37742751	9934976.00	1815626.00	13256
608074014401	GB 602	2/25/1997	3/24/1997	-92.45993653	27.37742751	9934976.00	1815626.00	13256
608074014800	GB 602	2/10/1996	2/19/1996	-92.44993165	27.38482933	9937680.00	1818860.00	14166
608074015100	GB 602	4/3/1996	7/5/1996	-92.44870909	27.39515203	9941433.00	1819240.00	15316
608074015170	GB 602	7/14/1996	7/24/1996	-92.44870909	27.39515203	9941433.00	1819240.00	15316
608074015101	GB 602	7/25/1996	8/7/1996	-92.44870909	27.39515203	9941433.00	1819240.00	15316
608074023200	GB 600	6/24/2001	8/13/2001	-92.54267909	27.38941846	9939226.00	1788766.00	16321
608074022100	GB 559	8/15/2000	10/2/2000	-92.44094796	27.43468367	9955810.00	1821693.00	19757
608074022101	GB 559	10/6/2000	10/8/2000	-92.44094796	27.43468367	9955810.00	1821693.00	19757
608074022102	GB 559	10/19/2000	10/24/2000	-92.44094796	27.43468367	9955810.00	1821693.00	19757
608074022103	GB 559	10/24/2000	10/29/2000	-92.44094796	27.43468367	9955810.00	1821693.00	19757
608074019900	GB 559	2/10/1999	3/27/1999	-92.44038956	27.43472546	9955826.00	1821874.00	19769
608074019901	GB 559	8/27/2000	9/1/2000	-92.44038956	27.43472546	9955826.00	1821874.00	19769
608074021900	GB 562	8/14/2000	9/19/2000	-92.25515991	27.43042441	9954578.00	1881947.00	28437

API = American Petroleum Institute; FF = far-field; UTM = Universal Transverse Mercator.
*X/Y coordinates are for UTM North American Datum 1927, Zone 15.
Source: Minerals Management Service Technical Information Management System.

Table B1-21. Well locations within 10 km of the Garden Banks (GB) 602 Far-field 6 site.
Row in red was drilled during Cruises 2A and 2B (all others prior to these cruises).

API	Area/	Dates		Surface Location		Surface UTM Coordinates*		Distance to FF6
Well No.	Block	Spud	Total Depth	Longitude	Latitude	Y	X	Center (m)
608074021900	GB 562	8/14/2000	9/19/2000	-92.25515991	27.43042441	9954578.00	1881947.00	6336
608074015100	GB 602	4/3/1996	7/5/1996	-92.44870909	27.39515203	9941433.00	1819240.00	16416
608074015170	GB 602	7/14/1996	7/24/1996	-92.44870909	27.39515203	9941433.00	1819240.00	16416
608074015101	GB 602	7/25/1996	8/7/1996	-92.44870909	27.39515203	9941433.00	1819240.00	16416
608074014800	GB 602	2/10/1996	2/19/1996	-92.44993165	27.38482933	9937680.00	1818860.00	16454
608074019900	GB 559	2/10/1999	3/27/1999	-92.44038956	27.43472546	9955826.00	1821874.00	16671
608074019901	GB 559	8/27/2000	9/1/2000	-92.44038956	27.43472546	9955826.00	1821874.00	16671
608074022100	GB 559	8/15/2000	10/2/2000	-92.44094796	27.43468367	9955810.00	1821693.00	16721
608074022101	GB 559	10/6/2000	10/8/2000	-92.44094796	27.43468367	9955810.00	1821693.00	16721
608074022102	GB 559	10/19/2000	10/24/2000	-92.44094796	27.43468367	9955810.00	1821693.00	16721
608074022103	GB 559	10/24/2000	10/29/2000	-92.44094796	27.43468367	9955810.00	1821693.00	16721
608074019300	GB 602	12/10/1998	9/27/1999	-92.45978099	27.37708569	9934852.00	1815677.00	17418
608074019301	GB 602	11/29/2000	1/3/2001	-92.45978099	27.37708569	9934852.00	1815677.00	17418
608074014400	GB 602	9/25/1995	1/21/1996	-92.45993653	27.37742751	9934976.00	1815626.00	17433
608074014401	GB 602	2/25/1997	3/24/1997	-92.45993653	27.37742751	9934976.00	1815626.00	17433
608074019400	GB 602	12/11/1998	3/7/1999	-92.46004008	27.37704816	9934838.00	1815593.00	17444
608074019401	GB 602	4/26/1999	5/29/1999	-92.46004008	27.37704816	9934838.00	1815593.00	17444
608074014200	GB 602	9/13/1995	9/21/1995	-92.46242076	27.37745362	9934982.00	1814820.00	17679
608074023200	GB 600	6/24/2001	8/13/2001	-92.54267909	27.38941846	9939226.00	1788766.00	25637

API = American Petroleum Institute; FF = far-field; UTM = Universal Transverse Mercator.
*X/Y coordinates are for UTM North American Datum 1927, Zone 15.
Source: Minerals Management Service Technical Information Management System.

Table B1-22. Well locations within 10 km of the Mississippi Canyon (MC) 292 near-field site.
All wells were drilled prior to Cruises 2A and 2B.

API	Operator's	Area/	Dates		Surface Location		Surface UTM Coordinates*		Distance to NF
Well No.	Well No.	Block	Spud	Total Depth	Longitude	Latitude	Y	X	Center (m)
608174083200	3	MC 292	2/11/1999	4/15/1999	-88.59560800	28.70363341	10419990.00	1129042.00	0
608174083201	3-ST1	MC 292	6/10/1999	6/21/1999	-88.59560799	28.70363340	10419990.00	1129042.00	0
608174050900	1	MC 292	5/7/1995	9/7/1995	-88.59560283	28.70349868	10419941.00	1129043.00	15
608174083300	4	MC 292	2/4/1999	3/13/1999	-88.59560692	28.70376821	10420039.00	1129043.00	15
608174083301	4-ST1	MC 292	7/8/1999	7/16/1999	-88.59560692	28.70376820	10420039.00	1129043.00	15
608174087000	--	MC 248	1/11/2000	2/4/2000	-88.59696955	28.72610483	10428165.00	1128715.00	2494
608174087001	--	MC 248	2/16/2000	2/22/2000	-88.59696955	28.72610483	10428165.00	1128715.00	2494
608174087002	--	MC 248	2/27/2000	3/14/2000	-88.59696955	28.72610483	10428165.00	1128715.00	2494
608174057600	--	MC 291	8/13/1997	10/20/1997	-88.61114651	28.68155867	10412032.00	1123953.00	2879
608174054301	2-ST3	MC 292	1/24/1997	2/13/1997	-88.58858271	28.67577369	10409832.00	1131159.00	3163
608174054370	2	MC 292	9/5/1996	11/12/1996	-88.58857265	28.67572705	10409815.00	1131162.00	3168
608174054371	2-ST1	MC 292	11/13/1996	12/17/1996	-88.58857265	28.67572705	10409815.00	1131162.00	3168
608174054300	2-ST2	MC 292	12/18/1996	1/18/1997	-88.58857265	28.67572705	10409815.00	1131162.00	3168
608174054302	2-ST4	MC 292	2/22/1997	3/13/1997	-88.58857265	28.67572705	10409815.00	1131162.00	3168
608174058300	--	MC 247	11/6/1997	12/5/1997	-88.63122590	28.72188883	10426781.00	1117716.00	4025
608174058301	--	MC 247	12/20/1997	2/18/1998	-88.63122590	28.72188883	10426781.00	1117716.00	4025

API = American Petroleum Institute; NF = near-field; UTM = Universal Transverse Mercator.
*X/Y coordinates are for UTM North American Datum 1927, Zone 16.
Source: Minerals Management Service Technical Information Management System.

Table B1-23. Well locations within 10 km of the Mississippi Canyon (MC) 292 Far-field 1 site.
All wells were drilled prior to Cruises 2A and 2B.

API	Area/	Dates		Surface Location		Surface UTM Coordinates*		Distance to FF1
Well No.	Block	Spud	Total Depth	Longitude	Latitude	Y	X	Center (m)
608174049900	MC 243	9/17/1994	10/19/1994	-88.81275308	28.71058799	10423513.00	1059476.00	1133
608174085400	MC 243	8/18/1999	9/21/1999	-88.81000140	28.72852022	10430019.00	1060457.00	2767
608174038200	MC 243	6/27/1990	9/4/1990	-88.82404125	28.73722682	10433253.00	1056006.00	4167
608174084200	MC 243	2/20/1999	3/20/1999	-88.82561389	28.74224470	10435085.00	1055530.00	4731
608174084201	MC 243	3/25/1999	3/26/1999	-88.82561389	28.74224470	10435085.00	1055530.00	4731
608174084202	MC 243	3/28/1999	4/12/1999	-88.82561389	28.74224470	10435085.00	1055530.00	4731
608174085000	MC 243	6/26/1999	7/27/1999	-88.81681090	28.74588683	10436366.00	1058371.00	4797
608174087700	MC 199	11/16/2000	11/26/2000	-88.83477439	28.75659136	10440346.00	1052675.00	6554
608174087701	MC 199	11/29/2000	12/1/2000	-88.83477439	28.75659136	10440346.00	1052675.00	6554
608174087702	MC 199	12/3/2000	12/3/2000	-88.83477439	28.75659136	10440346.00	1052675.00	6554
608174087703	MC 199	12/6/2000	12/22/2000	-88.83477439	28.75659136	10440346.00	1052675.00	6554
608174010200	MC 198	1/1/1980	1/2/1980	-88.86431754	28.77511326	10447227.00	1043315.00	9841

API = American Petroleum Institute; FF = far-field; UTM = Universal Transverse Mercator.
*X/Y coordinates are for UTM North American Datum 1927, Zone 16.
Source: Minerals Management Service Technical Information Management System.

Table B1-24. Well locations within 10 km of the Mississippi Canyon (MC) 292 Far-field 2 site. All wells were drilled prior to Cruises 2A and 2B.

API	Area/	Dates		Surface Location		Surface UTM Coordinates*		Distance to FF2
Well No.	Block	Spud	Total Depth	Longitude	Latitude	Y	X	Center (m)
608174085400	MC 243	8/18/1999	9/21/1999	-88.81000140	28.72852022	10430019.00	1060457.00	2030
608174049900	MC 243	9/17/1994	10/19/1994	-88.81275308	28.71058799	10423513.00	1059476.00	3178
608174085000	MC 243	6/26/1999	7/27/1999	-88.81681090	28.74588683	10436366.00	1058371.00	3179
608174038200	MC 243	6/27/1990	9/4/1990	-88.82404125	28.73722682	10433253.00	1056006.00	3470
608174084200	MC 243	2/20/1999	3/20/1999	-88.82561389	28.74224470	10435085.00	1055530.00	3774
608174084201	MC 243	3/25/1999	3/26/1999	-88.82561389	28.74224470	10435085.00	1055530.00	3774
608174084202	MC 243	3/28/1999	4/12/1999	-88.82561389	28.74224470	10435085.00	1055530.00	3774
608174087700	MC 199	11/16/2000	11/26/2000	-88.83477439	28.75659136	10440346.00	1052675.00	5296
608174087701	MC 199	11/29/2000	12/1/2000	-88.83477439	28.75659136	10440346.00	1052675.00	5296
608174087702	MC 199	12/3/2000	12/3/2000	-88.83477439	28.75659136	10440346.00	1052675.00	5296
608174087703	MC 199	12/6/2000	12/22/2000	-88.83477439	28.75659136	10440346.00	1052675.00	5296
608174030100	MC 201	1/6/1988	1/17/1988	-88.73646015	28.78791669	10451262.00	1084340.00	8195
608174010200	MC 198	1/1/1980	1/2/1980	-88.86431754	28.77511326	10447227.00	1043315.00	8835

API = American Petroleum Institute; FF = far-field; UTM = Universal Transverse Mercator.
*X/Y coordinates are for UTM North American Datum 1927, Zone 16.
Source: Minerals Management Service Technical Information Management System.

Table B1-25. Well locations within 10 km of the Mississippi Canyon (MC) 292 Far-field 3 site.
All wells were drilled prior to Cruises 2A and 2B.

API	Area/	Dates		Surface Location		Surface UTM Coordinates*		Distance to FF3
Well No.	Block	Spud	Total Depth	Longitude	Latitude	Y	X	Center (m)
608174030100	MC 201	1/6/1988	1/17/1988	-88.73646015	28.78791669	10451262.00	1084340.00	7375
608174036600	MC 160	9/6/1989	11/6/1989	-88.59417812	28.83499823	10467740.00	1130140.00	7461

API = American Petroleum Institute; FF = far-field; UTM = Universal Transverse Mercator.
*X/Y coordinates are for UTM North American Datum 1927, Zone 16.
Source: Minerals Management Service Technical Information Management System.

Table B1-26. Well locations within 10 km of the Mississippi Canyon (MC) 292 Far-field 4 site.
All wells were drilled prior to Cruises 2A and 2B.

API	Area/	Dates		Surface Location		Surface UTM Coordinates*		Distance to FF4
Well No.	Block	Spud	Total Depth	Longitude	Latitude	Y	X	Center (m)
608174030100	MC 201	1/6/1988	1/17/1988	-88.73646015	28.78791669	10451262.00	1084340.00	7135
608174058300	MC 247	11/6/1997	12/5/1997	-88.63122590	28.72188883	10426781.00	1117716.00	7899
608174058301	MC 247	12/20/1997	2/18/1998	-88.63122590	28.72188883	10426781.00	1117716.00	7899
608174036600	MC 160	9/6/1989	11/6/1989	-88.59417812	28.83499823	10467740.00	1130140.00	8576
608174087000	MC 248	1/11/2000	2/4/2000	-88.59696955	28.72610483	10428165.00	1128715.00	9383
608174087001	MC 248	2/16/2000	2/22/2000	-88.59696955	28.72610483	10428165.00	1128715.00	9383
608174087002	MC 248	2/27/2000	3/14/2000	-88.59696955	28.72610483	10428165.00	1128715.00	9383

API = American Petroleum Institute; FF = far-field; UTM = Universal Transverse Mercator.
*X/Y coordinates are for UTM North American Datum 1927, Zone 16.
Source: Minerals Management Service Technical Information Management System.

Table B1-27. Well locations within 10 km of the Mississippi Canyon (MC) 292 Far-field 5 site. All wells were drilled prior to Cruises 2A and 2B.

API	Area/	Dates		Surface Location		Surface UTM Coordinates*		Distance to FF5
Well No.	Block	Spud	Total Depth	Longitude	Latitude	Y	X	Center (m)
608174036600	MC 160	9/6/1989	11/6/1989	-88.59417812	28.83499823	10467740.00	1130140.00	4566
608174053400	MC 162	5/30/1996	6/14/1996	-88.49624115	28.81940928	10461665.00	1161421.00	6924
608174049800	MC 162	8/5/1994	11/30/1994	-88.48101479	28.82182743	10462483.00	1166307.00	8430
608174087000	MC 248	1/11/2000	2/4/2000	-88.59696955	28.72610483	10428165.00	1128715.00	9085
608174087001	MC 248	2/16/2000	2/22/2000	-88.59696955	28.72610483	10428165.00	1128715.00	9085
608174087002	MC 248	2/27/2000	3/14/2000	-88.59696955	28.72610483	10428165.00	1128715.00	9085
608174054700	MC 162	6/2/1997	6/26/1997	-88.46882796	28.81520191	10460026.00	1170179.00	9454
608174037100	MC 118	11/18/1989	12/6/1989	-88.50077615	28.87141737	10480590.00	1160208.00	9817
608174037101	MC 118	12/10/1989	1/4/1990	-88.50077615	28.87141737	10480590.00	1160208.00	9817

API = American Petroleum Institute; FF = far-field; UTM = Universal Transverse Mercator.
*X/Y coordinates are for UTM North American Datum 1927, Zone 16.
Source: Minerals Management Service Technical Information Management System.

Table B1-28. Well locations within 10 km of the Mississippi Canyon (MC) 292 Far-field 6 site. All wells were drilled prior to Cruises 2A and 2B.

API	Area/	Dates		Surface Location		Surface UTM Coordinates*		Distance to FF6
Well No.	Block	Spud	Total Depth	Longitude	Latitude	Y	X	Center (m)
608174036600	MC 160	9/6/1989	11/6/1989	-88.59417812	28.83499823	10467740.00	1130140.00	4794
608174053400	MC 162	5/30/1996	6/14/1996	-88.49624115	28.81940928	10461665.00	1161421.00	5451
608174049800	MC 162	8/5/1994	11/30/1994	-88.48101479	28.82182743	10462483.00	1166307.00	6959
608174054700	MC 162	6/2/1997	6/26/1997	-88.46882796	28.81520191	10460026.00	1170179.00	8087
608174037100	MC 118	11/18/1989	12/6/1989	-88.50077615	28.87141737	10480590.00	1160208.00	8130
608174037101	MC 118	12/10/1989	1/4/1990	-88.50077615	28.87141737	10480590.00	1160208.00	8130

API = American Petroleum Institute; FF = far-field; UTM = Universal Transverse Mercator.

*X/Y coordinates are for UTM North American Datum 1927, Zone 16.

Source: Minerals Management Service Technical Information Management System.

APPENDIX B2

Drilling Discharge Calculations for Near-Field Sites

Table B2-1. Drilling mud and cuttings discharge estimates for Viosca Knoll Block 916, Well No. 1.

Hole Size (in.)	Interval Length (ft)	Hole Volume (bbl)	Estimated WBF Mud Released at Seafloor (bbl)	Estimated WBF Cuttings Released at Seafloor (bbl)	Estimated WBF Mud Discharged from Rig (bbl)	Estimated WBF Cuttings Discharged from Rig (bbl)	Estimated SBF Cuttings Discharged from Rig (bbl)	Mud Type	Discharge Location**
36.00	222	279	3,074	419	-	-	-	WBF	Seafloor
26.00	1,773	1,164	-	-	12,807	1,746	-	WBF	Rig
20.00	1,630	633	-	-	-	-	950	SBF*	Rig
14.75	3,000	634	-	-	-	-	951	SBF*	Rig
10.63	3,701	406	-	-	-	-	609	SBF*	Rig
		Totals:	3,074	419	12,807	1,746	2,510		

Source: Well intervals and hole sizes were provided by Shell. Cuttings volume was estimated as 1.5 times hole volume. Mud volume was estimated at 11 times hole volume.
SBF = synthetic-based fluid.
WBF = water-based fluid.
* The SBF used was Syn-Teq.
** Discharge location not specified; assumed first interval was riserless (all material released at seafloor).

Table B2-2. Drilling mud and cuttings discharge estimates for Garden Banks Block 516, Well Nos. SE001 and SE001, Sidetrack 1.
No discharge data were available for these wells other than planned well intervals in the Exploration Plan.
Therefore data are assumed identical to Well Nos. SE002 and SE002, Sidetrack 1 (data below).

Hole Size (in.)	Interval Length (ft)	Hole Volume (bbl)	Estimated WBF Mud Released at Seafloor (bbl)	Estimated WBF Cuttings Released at Seafloor (bbl)	Estimated WBF Mud Discharged from Rig (bbl)	Estimated WBF Cuttings Discharged from Rig (bbl)	Estimated SBF Cuttings Discharged from Rig (bbl)	Mud Type	Discharge Location**
30	676	591	6,501	887	-	-	-	WBF	Seafloor
24.000	971	543	-	-	5,977	815	-	WBF	Rig
17.500	2,675	796	-	-	8,754	1,194	-	WBF	Rig
10.625	6,463	709	-	-	-	-	1,063	SBF*	Rig
10.625	5,109	560	-	-	-	-	840	SBF*	Rig
10.625	0	0	-	-	-	-	0	SBF*	Rig
		Totals:	6,501	887	14,731	2,009	1,904		

Source: Well intervals and hole sizes were provided by Shell. Cuttings volume was estimated as 1.5 times hole volume.
Mud volume was estimated at 11 times hole volume.
SBF = synthetic-based fluid.
WBF = water-based fluid.
* The SBF used for Well No. SE002 was Novaplus; however, the Exploration Plan for Well No. SE001 indicates that either Novaplus or Petrofree LE would be used.
** Discharge location not specified; assumed first interval was riserless (all material released at seafloor).

Table B2-3. Drilling mud and cuttings discharge estimates for Garden Banks Block 516, Well No. SE001, Sidetrack 2.

Hole Size (in.)	Interval Length (ft)	Hole Volume (bbl)	Estimated WBF Mud Released at Seafloor (bbl)	Estimated WBF Cuttings Released at Seafloor (bbl)	Estimated WBF Mud Discharged from Rig (bbl)	Estimated WBF Cuttings Discharged from Rig (bbl)	Estimated SBF Cuttings Discharged from Rig (bbl)	Mud Type	Discharge Location
10.625	12,345	1,354	-	-	-	-	2,031	SBF (Novaplus)	Rig
		Totals:	0	0	0	0	2,031		

Source: Well intervals and hole sizes were provided by Shell. Cuttings volume was estimated as 1.5 times hole volume.
SBF = synthetic-based fluid.
WBF = water-based fluid.

Table B2-4. Drilling mud and cuttings discharge estimates for Garden Banks Block 516, Well No. SE001, Sidetrack 3.

Hole Size (in.)	Interval Length (ft)	Hole Volume (bbl)	Estimated WBF Mud Released at Seafloor (bbl)	Estimated WBF Cuttings Released at Seafloor (bbl)	Estimated WBF Mud Discharged from Rig (bbl)	Estimated WBF Cuttings Discharged from Rig (bbl)	Estimated SBF Cuttings Discharged from Rig (bbl)	Mud Type	Discharge Location
10.625	4,085	448	-	-	-	-	672	SBF (Novaplus)	Rig
		Totals:	0	0	0	0	672		

Source: Well intervals and hole sizes were provided by Shell. Cuttings volume was estimated as 1.5 times hole volume.
SBF = synthetic-based fluid.
WBF = water-based fluid.

Table B2-5. Drilling mud and cuttings discharge estimates for Garden Banks Block 516, Well Nos. SE002 and SE002, Sidetrack 1.

Hole Size (in.)	Interval Length (ft)	Hole Volume (bbl)	Estimated WBF Mud Released at Seafloor (bbl)	Estimated WBF Cuttings Released at Seafloor (bbl)	Estimated WBF Mud Discharged from Rig (bbl)	Estimated WBF Cuttings Discharged from Rig (bbl)	Estimated SBF Cuttings Discharged from Rig (bbl)	Mud Type	Discharge Location**
30	676	591	6,501	887	-	-	-	WBF	Seafloor
24.000	971	543	-	-	5,977	815	-	WBF	Rig
17.500	2,675	796	-	-	8,754	1,194	-	WBF	Rig
10.625	6,463	709	-	-	-	-	1,063	SBF*	Rig
10.625	5,109	560	-	-	-	-	840	SBF*	Rig
		Totals:	6,501	887	14,731	2,009	1,904		

Source: Well intervals and hole sizes were provided by Shell. Cuttings volume was estimated as 1.5 times hole volume. Mud volume was estimated at 11 times hole volume.

SBF = synthetic-based fluid.

WBF = water-based fluid.

* The SBF used was Novaplus.

** Discharge location not specified; assumed first interval was riserless (all material released at seafloor).

Table B2-6. Drilling mud and cuttings discharge estimates for Garden Banks Block 516, Well No. SE002, Sidetrack 2.

Hole Size (in.)	Interval Length (ft)	Hole Volume (bbl)	Estimated WBF Mud Released at Seafloor (bbl)	Estimated WBF Cuttings Released at Seafloor (bbl)	Estimated WBF Mud Discharged from Rig (bbl)	Estimated WBF Cuttings Discharged from Rig (bbl)	Estimated SBF Cuttings Discharged from Rig (bbl)	Mud Type	Discharge Location
10.625	4,878	535	-	-	-	-	802	SBF	Rig
								(Novaplus)	
		Totals:	0	0	0	0	802		

Source: Well intervals and hole sizes were provided by Shell. Cuttings volume was estimated as 1.5 times hole volume.

SBF = synthetic-based fluid.

WBF = water-based fluid.

Table B2-7. Drilling mud and cuttings discharge estimates for Garden Banks Block 602, Well No. 1.

Hole Size (in.)	Interval Length (ft)	Hole Volume (bbl)	Estimated WBF Mud Released at Seafloor (bbl)	Estimated WBF Cuttings Released at Seafloor (bbl)	Estimated WBF Mud Discharged from Rig (bbl)	Estimated WBF Cuttings Discharged from Rig (bbl)	Estimated SBF Cuttings Discharged from Rig (bbl)	Mud Type	Discharge Location**
36.00	200	252	2,770	378	-	-	-	WBF	Seafloor
31.50	610	588	-	-	6,468	882	-	WBF	Rig
26.00	1,100	722	-	-	7,946	1,084	-	WBF	Rig
22.00	3,100	1,458	-	-	16,033	2,186	-	WBF	Rig
17.50	5,500	1,636	-	-	-	-	2,454	SBF*	Rig
15.50	5,700	1,330	-	-	-	-	1,995	SBF*	Rig
10.63	492	54	-	-	-	-	81	SBF*	Rig
10.63	740	81	-	-	-	-	122	SBF*	Rig
10.63	541	59	-	-	-	-	89	SBF*	Rig
10.63	162	18	-	-	-	-	27	SBF*	Rig
10.63	463	51	-	-	-	-	76	SBF*	Rig
10.63	428	47	-	-	-	-	70	SBF*	Rig
9.63	709	64	-	-	-	-	96	SBF*	Rig
9.63	511	46	-	-	-	-	69	SBF*	Rig
7.00	254	12	-	-	-	-	18	SBF*	Rig
		Totals:	2,770	378	30,447	4,152	5,098		

Source: Well intervals and hole sizes were provided by Shell. Cuttings volume was estimated as 1.5 times hole volume.
Mud volume was estimated at 11 times hole volume.
SBF = synthetic-based fluid.
WBF = water-based fluid.
* The Exploration Plan lists either Novadril or Petrofree ester as the SBF to be used.
** Discharge location not specified; assumed first interval was riserless (all material released at seafloor).

Table B2-8. Drilling mud and cuttings discharge estimates for Garden Banks Block 602, Well No. 2.

Hole Size (in.)	Interval Length (ft)	Hole Volume (bbl)	Estimated WBF Mud Released at Seafloor (bbl)	Estimated WBF Cuttings Released at Seafloor (bbl)	Estimated WBF Mud Discharged from Rig (bbl)	Estimated WBF Cuttings Discharged from Rig (bbl)	Estimated SBF Cuttings Discharged from Rig (bbl)	Mud Type	Discharge Location**
36.00	200	252	2,770	378	-	-	-	WBF	Seafloor
30.50	540	488	-	-	5,368	732	-	WBF	Rig
26.00	640	420	-	-	4,623	630	-	WBF	Rig
22.00	830	390	-	-	4,293	585	-	WBF	Rig
17.50	200	60	-	-	655	89	-	WBF	Rig
17.50	5,000	1,488	-	-	-	-	2,231	SBF*	Rig
15.50	800	187	-	-	-	-	280	SBF*	Rig
15.50	5,500	1,284	-	-	-	-	1,925	SBF*	Rig
15.50	500	117	-	-	-	-	175	SBF*	Rig
10.63	3,232	354	-	-	-	-	532	SBF*	Rig
10.63	541	59	-	-	-	-	89	SBF*	Rig
10.63	162	18	-	-	-	-	27	SBF*	Rig
10.63	463	51	-	-	-	-	76	SBF*	Rig
10.63	428	47	-	-	-	-	70	SBF*	Rig
9.63	709	64	-	-	-	-	96	SBF*	Rig
9.63	511	46	-	-	-	-	69	SBF*	Rig
7.00	254	12	-	-	-	-	18	SBF*	Rig
		Totals:	2,770	378	14,938	2,037	5,589		

Source: Well intervals and hole sizes were provided by Shell. Cuttings volume was estimated as 1.5 times hole volume. Mud volume was estimated at 11 times hole volume.

SBF = synthetic-based fluid.

WBF = water-based fluid.

* The Exploration Plan lists either Novaplus or Petrofree LE as the SBF to be used.

** Discharge location not specified; assumed first interval was riserless (all material released at seafloor).

Table B2-9. Drilling mud and cuttings discharge estimates for Garden Banks Block 602, Well No. 2, Sidetrack 1.

Hole Size (in.)	Interval Length (ft)	Hole Volume (bbl)	Estimated WBF Mud Released at Seafloor (bbl)	Estimated WBF Cuttings Released at Seafloor (bbl)	Estimated WBF Mud Discharged from Rig (bbl)	Estimated WBF Cuttings Discharged from Rig (bbl)	Estimated SBF Cuttings Discharged from Rig (bbl)	Mud Type	Discharge Location**
36.00	196	247	2,714	370	-	-	-	WBF	Seafloor
26.00	541	355	-	-	3,908	533	-	WBF	Rig
20.00	430	167	-	-	1,838	251	-	WBF	Rig
16.00	1,262	314	-	-	3,452	471	-	WBF	Rig
13.63	5,474	987	-	-	-	-	1,481	SBF*	Rig
13.63	845	152	-	-	-	-	229	SBF*	Rig
11.75	5,669	760	-	-	-	-	1,140	SBF*	Rig
11.75	100	13	-	-	-	-	20	SBF*	Rig
10.63	3,932	431	-	-	-	-	647	SBF*	Rig
10.63	1,367	150	-	-	-	-	225	SBF*	Rig
10.63	270	30	-	-	-	-	44	SBF*	Rig
10.63	306	34	-	-	-	-	50	SBF*	Rig
7.00	30	1	-	-	-	-	2	SBF*	Rig
		Totals:	2,714	370	9,198	1,254	3,839		

Source: Well intervals and hole sizes were provided by Shell. Cuttings volume was estimated as 1.5 times hole volume.
Mud volume was estimated at 11 times hole volume.
SBF = synthetic-based fluid.
WBF = water-based fluid.
* The Exploration Plan lists either Novaplus or Petrofree LE as the SBF to be used.
** Discharge location not specified; assumed first interval was riserless (all material released at seafloor).

Table B2-10. Drilling mud and cuttings discharge estimates for Garden Banks Block 602, Well No. 4.

Hole Size (in.)	Interval Length (ft)	Hole Volume (bbl)	Estimated WBF Mud Released at Seafloor (bbl)	Estimated WBF Cuttings Released at Seafloor (bbl)	Estimated WBF Mud Discharged from Rig (bbl)	Estimated WBF Cuttings Discharged from Rig (bbl)	Estimated SBF Cuttings Discharged from Rig (bbl)	Mud Type	Discharge Location**
26.00	659	433	4,760	649	-	-	-	WBF	Seafloor
20.00	596	232	-	-	2,548	347	-	WBF	Rig
16.00	1,868	465	-	-	5,110	697	-	WBF	Rig
16.00	511	127	-	-	1,398	191	-	WBF	Rig
13.63	889	160	-	-	-	-	240	SBF*	Rig
13.63	4,300	775	-	-	-	-	1,163	SBF*	Rig
13.63	282	51	-	-	-	-	76	SBF*	Rig
13.63	100	18	-	-	-	-	27	SBF*	Rig
11.75	3,818	512	-	-	-	-	768	SBF*	Rig
11.75	1,582	212	-	-	-	-	318	SBF*	Rig
11.75	250	34	-	-	-	-	50	SBF*	Rig
9.63	1,168	105	-	-	-	-	158	SBF*	Rig
7.63	242	14	-	-	-	-	21	SBF*	Rig
7.63	640	36	-	-	-	-	54	SBF*	Rig
7.63	400	23	-	-	-	-	34	SBF*	Rig
7.63	470	27	-	-	-	-	40	SBF*	Rig
7.63	310	18	-	-	-	-	26	SBF*	Rig
7.63	640	36	-	-	-	-	54	SBF*	Rig
7.63	580	33	-	-	-	-	49	SBF*	Rig
		Totals:	**4,760**	**649**	**9,055**	**1,235**	**3,079**		

Source: Well intervals and hole sizes were provided by Shell. Cuttings volume was estimated as 1.5 times hole volume.
Mud volume was estimated at 11 times hole volume.
SBF = synthetic-based fluid.
WBF = water-based fluid.
* The Exploration Plan lists either Novaplus or Petrofree LE as the SBF to be used.
** Discharge location not specified; assumed first interval was riserless (all material released at seafloor).

Table B2-11. Drilling mud and cuttings discharge estimates for Garden Banks Block 602, Well No. 5.

Hole Size (in.)	Interval Length (ft)	Hole Volume (bbl)	Estimated WBF Mud Released at Seafloor (bbl)	Estimated WBF Cuttings Released at Seafloor (bbl)	Estimated WBF Mud Discharged from Rig (bbl)	Estimated WBF Cuttings Discharged from Rig (bbl)	Estimated SBF Cuttings Discharged from Rig (bbl)	Mud Type	Discharge Location**
26.00	762	500	5,504	751	-	-	-	WBF	Seafloor
20.00	68	26	-	-	291	40	-	WBF	Rig
20.00	142	55	-	-	607	83	-	WBF	Rig
20.00	340	132	-	-	1,453	198	-	WBF	Rig
20.00	50	19	-	-	214	29	-	WBF	Rig
16.00	2,150	535	-	-	5,881	802	-	WBF	Rig
16.00	300	75	-	-	821	112	-	WBF	Rig
13.63	2,500	451	-	-	-	-	676	SBF*	Rig
13.63	2,500	451	-	-	-	-	676	SBF*	Rig
13.63	500	90	-	-	-	-	135	SBF*	Rig
13.63	50	9	-	-	-	-	14	SBF*	Rig
11.75	3,650	490	-	-	-	-	734	SBF*	Rig
11.75	1,333	179	-	-	-	-	268	SBF*	Rig
11.75	49	7	-	-	-	-	10	SBF*	Rig
9.63	1,618	146	-	-	-	-	218	SBF*	Rig
7.63	932	53	-	-	-	-	79	SBF*	Rig
7.63	670	38	-	-	-	-	57	SBF*	Rig
7.63	480	27	-	-	-	-	41	SBF*	Rig
7.63	400	23	-	-	-	-	34	SBF*	Rig
7.63	560	32	-	-	-	-	47	SBF*	Rig
7.63	780	44	-	-	-	-	66	SBF*	Rig
		Totals:	5,504	751	9,267	1,264	3,056		

Source: Well intervals and hole sizes were provided by Shell. Cuttings volume was estimated as 1.5 times hole volume.
Mud volume was estimated at 11 times hole volume.
SBF = synthetic-based fluid.
WBF = water-based fluid.
* The Exploration Plan lists either Novaplus or Petrofree LE as the SBF to be used.
** Discharge location not specified; assumed first interval was riserless (all material released at seafloor).

Table B2-12. Drilling mud and cuttings discharge estimates for Garden Banks Block 602, Well No. 4, Sidetrack 1.

No data are available for this sidetrack; therefore data were assumed to be identical to Well No. 2, Sidetrack 1 (totals below).

Hole Size (in.)	Interval Length (ft)	Hole Volume (bbl)	Estimated WBF Mud Released at Seafloor (bbl)	Estimated WBF Cuttings Released at Seafloor (bbl)	Estimated WBF Mud Discharged from Rig (bbl)	Estimated WBF Cuttings Discharged from Rig (bbl)	Estimated SBF Cuttings Discharged from Rig (bbl)	Mud Type*	Discharge Location
-	-	-	-	-	-	-	-	-	-
		Totals:	2,714	370	9,198	1,254	3,839		

* The Exploration Plan lists either Novaplus or Petrofree LE as the SBF to be used.
SBF = synthetic-based fluid.
WBF = water-based fluid.

Table B2-13. Drilling mud and cuttings discharge estimates for Garden Banks Block 602, Well No. 5, Sidetrack 1.

No data are available for this sidetrack; therefore data were assumed to be identical to Well No. 2, Sidetrack 1 (totals below).

Hole Size (in.)	Interval Length (ft)	Hole Volume (bbl)	Estimated WBF Mud Released at Seafloor (bbl)	Estimated WBF Cuttings Released at Seafloor (bbl)	Estimated WBF Mud Discharged from Rig (bbl)	Estimated WBF Cuttings Discharged from Rig (bbl)	Estimated SBF Cuttings Discharged from Rig (bbl)	Mud Type*	Discharge Location
-	-	-	-	-	-	-	-	-	-
		Totals:	2,714	370	9,198	1,254	3,839		

* The Exploration Plan lists either Novaplus or Petrofree LE as the SBF to be used.
SBF = synthetic-based fluid.
WBF = water-based fluid.

Table B2-14. Drilling mud and cuttings discharge estimates for Mississippi Canyon Block 292, Well No. 1.

Hole Size (in.)	Interval Length (ft)	Hole Volume (bbl)	Estimated WBF Mud Released at Seafloor (bbl)	Estimated WBF Cuttings Released at Seafloor (bbl)	Estimated WBF Mud Discharged from Rig (bbl)	Estimated WBF Cuttings Discharged from Rig (bbl)	Estimated SBF Cuttings Discharged from Rig (bbl)	Mud Type	Discharge Location *
36.00	242	305	3,351	457	-	-	-	WBF	Seafloor
26.00	1,763	1,158	-	-	12,735	1,737	-	WBF	Rig
22.00	1,511	710	-	-	7,815	1,066	-	WBF	Rig
14.75	3,760	795	-	-	8,741	1,192	-	WBF	Rig
12.25	1,670	243	-	-	2,678	365	-	WBF	Rig
7.88	5,551	334	-	-	3,679	502	-	WBF	Rig
		Totals:	3,351	457	35,648	4,861	0		

Source: Well intervals and hole sizes were provided by Texaco. Cuttings volume was estimated as 1.5 times hole volume.
Mud volume was estimated at 11 times hole volume.
SBF = synthetic-based fluid.
WBF = water-based fluid.
* Discharge location not specified; assumed first interval was riserless (all material released at seafloor).

Table B2-15. Drilling mud and cuttings discharge estimates for Mississippi Canyon Block 292, Well No. 3.

Hole Size (in.)	Interval Length (ft)	Hole Volume (bbl)	Estimated WBF Mud Released at Seafloor (bbl)	Estimated WBF Cuttings Released at Seafloor (bbl)	Estimated WBF Mud Discharged from Rig (bbl)	Estimated WBF Cuttings Discharged from Rig (bbl)	Estimated SBF Cuttings Discharged from Rig (bbl)	Mud Type	Discharge Location *
36.00	252	317	3,490	476	-	-	-	WBF	Seafloor
24.00	2,064	1,155	-	-	12,704	1,732	-	WBF	Rig
17.00	1,338	376	-	-	4,132	563	-	WBF	Rig
14.75	4,490	949	-	-	10,439	1,423	-	WBF	Rig
12.25	1,142	166	-	-	1,831	250	-	WBF	Rig
8.50	65	5	-	-	50	7	-	WBF	Rig
		Totals:	3,490	476	29,156	3,976	0		

Source: Well intervals and hole sizes were provided by Texaco. Cuttings volume was estimated as 1.5 times hole volume.
Mud volume was estimated at 11 times hole volume.
SBF = synthetic-based fluid.
WBF = water-based fluid.
* Discharge location not specified; assumed first interval was riserless (all material released at seafloor).

Table B2-16. Drilling mud and cuttings discharge estimates for Mississippi Canyon Block 292, Well No. 3, Sidetrack 1.

Hole Size (in.)	Interval Length (ft)	Hole Volume (bbl)	Estimated WBF Mud Released at Seafloor (bbl)	Estimated WBF Cuttings Released at Seafloor (bbl)	Estimated WBF Mud Discharged from Rig (bbl)	Estimated WBF Cuttings Discharged from Rig (bbl)	Estimated SBF Cuttings Discharged from Rig (bbl)	Mud Type	Discharge Location
8.50	4,392	308	-	-	-	-	462	SBF	Rig
								(Novaplus)	
		Totals:	0	0	0	0	462		

Source: Well intervals and hole sizes were provided by Texaco. Cuttings volume was estimated as 1.5 times hole volume.
SBF = synthetic-based fluid.
WBF = water-based fluid.

Table B2-17. Drilling mud and cuttings discharge estimates for Mississippi Canyon Block 292, Well No. 4.

Hole Size (in.)	Interval Length (ft)	Hole Volume (bbl)	Estimated WBF Mud Released at Seafloor (bbl)	Estimated WBF Cuttings Released at Seafloor (bbl)	Estimated WBF Mud Discharged from Rig (bbl)	Estimated WBF Cuttings Discharged from Rig (bbl)	Estimated SBF Cuttings Discharged from Rig (bbl)	Mud Type	Discharge Location *
36.00	252	317	3,490	476	-	-	-	WBF	Seafloor
24.00	2,072	1,159	-	-	12,753	1,739	-	WBF	Rig
17.00	1,600	449	-	-	4,941	674	-	WBF	Rig
14.75	3,954	836	-	-	9,192	1,254	-	WBF	Rig
12.25	1,415	206	-	-	2,269	309	-	WBF	Rig
		Totals:	3,490	476	29,156	3,976	0		

Source: Well intervals and hole sizes were provided by Texaco. Cuttings volume was estimated as 1.5 times hole volume.
Mud volume was estimated at 11 times hole volume.
SBF = synthetic-based fluid.
WBF = water-based fluid.
* Discharge location not specified; assumed first interval was riserless (all material released at seafloor).

Table B2-18. Drilling mud and cuttings discharge estimates for Mississippi Canyon Block 292, Well No. 4, Sidetrack 1.

Hole Size (in.)	Interval Length (ft)	Hole Volume (bbl)	Estimated WBF Mud Released at Seafloor (bbl)	Estimated WBF Cuttings Released at Seafloor (bbl)	Estimated WBF Mud Discharged from Rig (bbl)	Estimated WBF Cuttings Discharged from Rig (bbl)	Estimated SBF Cuttings Discharged from Rig (bbl)	Mud Type	Discharge Location
12.25	4,700	685	-	-	-	-	1028	SBF	Rig
								(Novaplus)	
		Totals:	0	0	0	0	1,028		

Source: Well intervals and hole sizes were provided by Texaco. Cuttings volume was estimated as 1.5 times hole volume.
SBF = synthetic-based fluid.
WBF = water-based fluid.

APPENDIX C1

Geophysical Survey Report for Cruise 1A

Continental Shelf Associates, Inc.

SURVEY OPERATIONS REPORT

SEAFLOOR PHYSICAL CHARACTERIZATION
PRE-EXPLORATION DRILL SITE

PROPOSED WELL NO. 1 (OCS-G-21733)
BLOCK 916, VIOSCA KNOLL AREA

January, 2001

prepared by

C&C Technologies
SURVEY SERVICES
730 E. KALISTE SALOOM ROAD, LAFAYETTE, LA (337) 261-0660

Continental Shelf Associates, Inc.

SURVEY OPERATIONS REPORT

SEAFLOOR PHYSICAL CHARACTERIZATION PRE-EXPLORATION DRILL SITE

PROPOSED WELL NO. 1 (OCS-G-21733) BLOCK 916, VIOSCA KNOLL AREA

prepared by

C&C Technologies
SURVEY SERVICES
730 E. KALISTE SALOOM ROAD, LAFAYETTE, LA (337) 261-0660

January, 2001

Jennifer Peacock
Geophysicist

TABLE OF CONTENTS

1.0 INTRODUCTION

C & C Technologies, Inc. (C&C) was contracted by Continental Shelf Associates (CSA) to provide geophysical survey data for several deep-water exploration and production sites located on the upper slope of the Gulf of Mexico. The survey data were collected for the Minerals Management Services' program titled "Effects of Oil and Gas Exploration and Development at Selected Continental Slope Sites in the Gulf of Mexico". CSA was awarded the contract for the overall project management of the program and assembled a team of prominent researchers. Dr. Harry Roberts and Dr. Sam Bentley from Louisiana State University are the Principal Investigators (PI's) for the geophysical program.

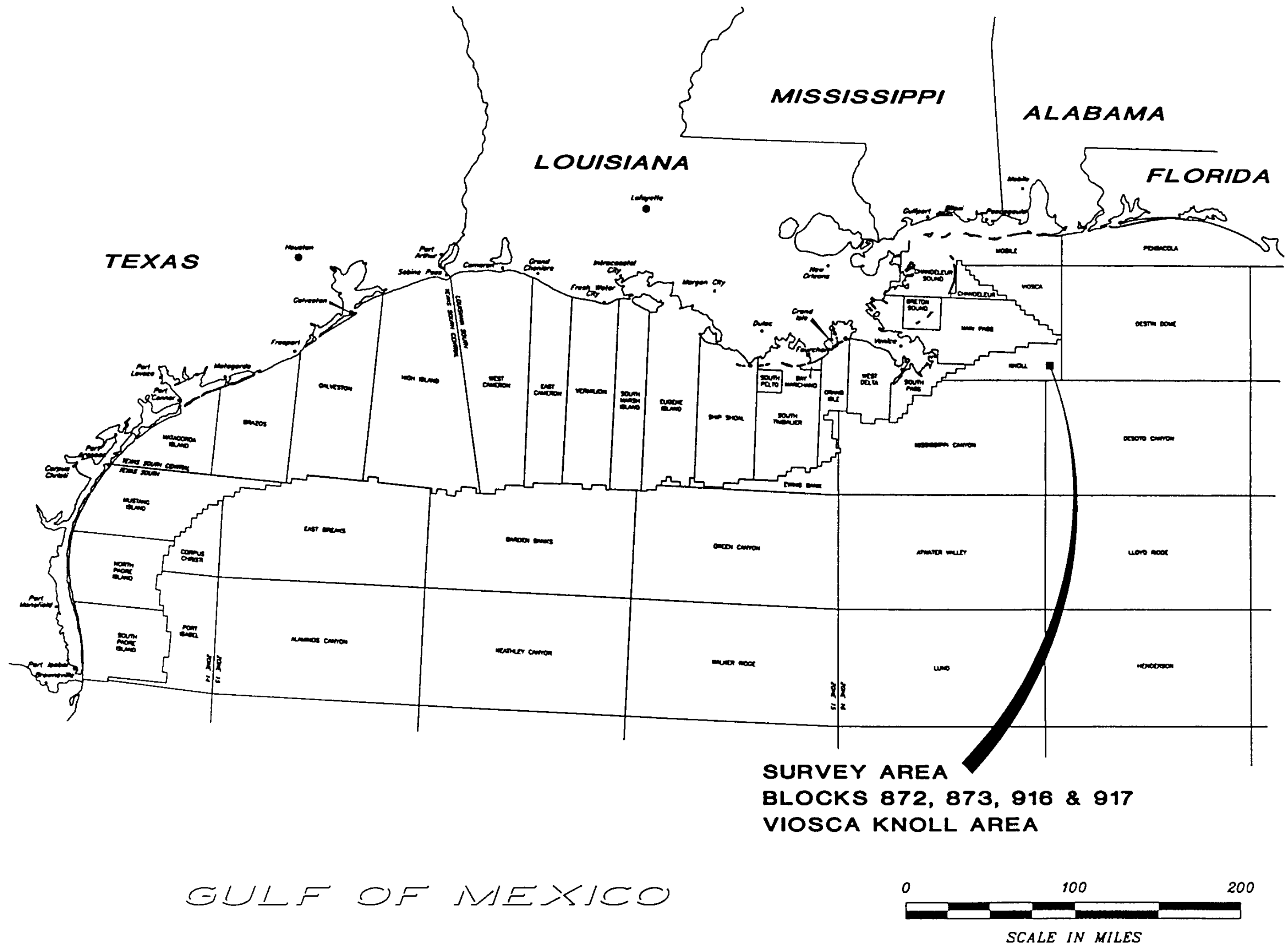
The original research plan was to survey two exploration sites and three development (production) sites. Five sites were to be surveyed in the month of September 2000 and the two exploration sites were to be revisited in April 2001 after completion of the wells. Due to extended delays due to weather (fronts and hurricanes), equipment, software and vessel problems, the Block 916, Viosca Knoll Area site was the only exploration site surveyed in the geophysical program. Regional and vicinity maps showing the survey area are found on Pages 3 and 4, respectively.

Geophysical data acquisition for the Block 916 site was conducted utilizing a two-boat shoot configuration periodically between November 10, 2000 and January 1, 2001. The M/V *Seacor Surf* was used as the tow vessel for the geophysical equipment and the R/V *Ocean Surveyor* served as the chase vessel for the acoustic positioning of the towfish. The acoustic positions were transmitted via a radio modem to the tow vessel and merged with the geophysical data. A schematic showing the two-boat shoot configuration is included in Appendix A.

An Odom Deep-Water Echotrac Bathymetry System was used to collect single-beam bathymetry data across the survey area. These soundings were corrected for speed of sound in the water column using salinity, temperature and depth (CTD) data collected with a SeaBird Profiler. A water column velocity data listing and velocity profile are found in Appendix B. The deep-tow system utilized for the survey work was the Edgetech Full Spectrum Deep-Tow System. This system provided high-frequency (420 kHz) and low-frequency (120 kHz) sonar imagery and "chirped" subbottom profiles in the frequency band of 2 to 16 kHz. Attempts were made to

collect magnetometer data with a Geometric Cesium Magnetometer, however, engineering design flaws did not allow for collection of usable data at depth due to the cold temperature.
The towfish was tracked acoustically using a Sonardyne Ultra-Short-Baseline (USBL) Tracking System with the transceiver deployed from the chase vessel. Surface positioning of both survey vessels was accomplished using differential GPS (Trimble Receivers) with the SATLOC L-Band Navigation System used for relaying the corrections. An U.S. Coast Guard Beacon (MBX-2) was also monitored as a back up for the surface positioning. A brief narrative of the equipment utilized is located in the following section. Detailed equipment descriptions, instrument settings and survey logs are contained in Appendix A.

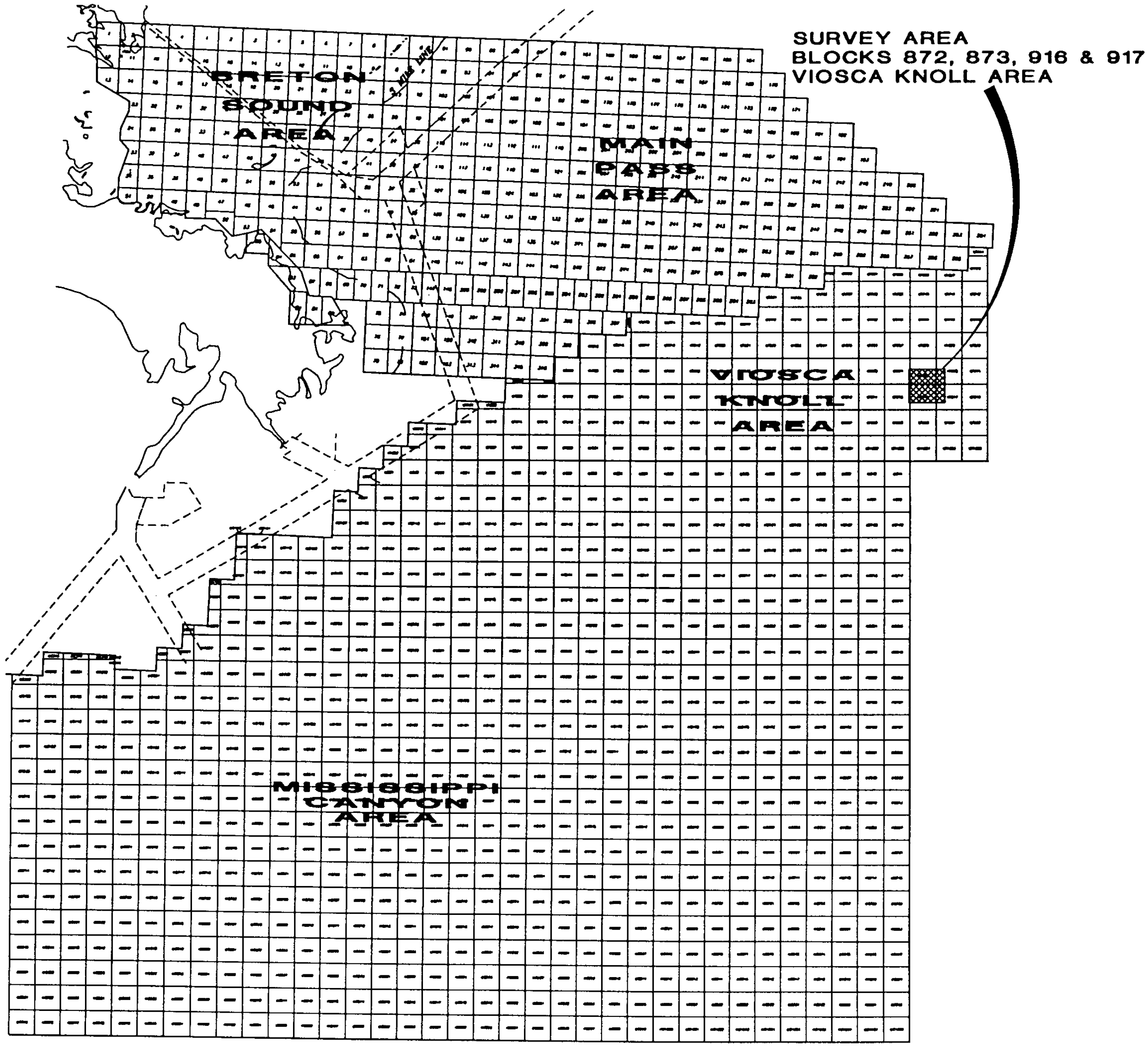
REGIONAL MAP



C & C TECHNOLOGIES, INC.
SURVEY SERVICES

730 EAST KALISTE SALOOM ROAD, LAFAYETTE, LA 70508

VICINITY MAP
BRETON SOUND, MAIN PASS, VIOSCA KNOLL & MISSISSIPPI CANYON AREA



2.0 SURVEY INSTRUMENTATION

The following sections summarize the major survey instrumentation utilized for the geophysical survey. Surface positioning of both vessels was accomplished utilizing DGPS and the towfish was positioned acoustically using ultra-short baseline technology. Remote sensing side scan sonar, subbottom and single-beam fathometer data are the three types of data used to assess the physical characteristics of the proposed drill site. Detailed descriptions and instrument settings for each system are included in Appendix A.

2.1 SATLOC Surface Positioning System

Surface positioning of the survey vessels was accomplished using differential GPS with the SATLOC L-Band Navigation System used for relaying the differential corrections via satellite. Trimble GPS Receivers were used for tracking the GPS satellites. Accuracy of the surface positioning system is on the order of 2 to 3 meters. A survey quality gyro provided vessel-heading direction for the survey boats. WinFrog® Navigation Software was used for digital logging of the vessel and the fish positions. The software also controlled the transfer of the positioning data via a radio modem, logged the digital soundings output from the Echotrac Fathometer and annotated event marks on the hardcopy data (150-meter intervals) along the survey lines. The software provided the vessel helmsmen with a real-time display of the locations of the tow vessel and towfish position along with the positions of any known man-made features.

2.2 Sonardyne Ultra-Short Baseline System (USBL)

Sonardyne's Model 7784 Ultra-Short Baseline System was used for tracking the sonar towfish positions. This system was deployed from the chase vessel, the R/V *Ocean Surveyor*. Two-way traveltime from the towfish was velocity corrected and a compensator eliminated the effects of heave, yaw, pitch and roll. These acoustically determined fish positions were shipped by a radio modem to the tow vessel and merged with the digital geophysical data. Annotation of the acoustically determined navigation events on the hardcopy records occurred at approximately 150-meter (492-foot) intervals.

2.3 Odom Deep-Water Echotrac System

Single-beam fathometer data were collected with an Odom Deep-Water Echotrac System. The seafloor depths were recorded on hardcopy and were digitally logged and merged with the navigation data. The system operates at a frequency of 24 kilohertz and a beam width of 11°. The recorded soundings were collected with an input velocity of 5,000 feet per second. The water depth readings were velocity corrected utilizing a harmonic mean velocity function generated from CTD (salinity, temperature and depth) data sampled in the survey area.

2.4 Edgetech Full Spectrum Deep-Tow System

The Edgetech Full Spectrum Deep-Tow System was used for collecting subbottom profiles and sonar imagery. The side scan sonar is dual frequency system operating at center frequencies of 120 kHz and 420 kHz, respectively. The frequency bandwidth of the "chirped", or frequency modulated, pinger signals is 2 to 10 kHz. A deep-water precision depth sensor recorded fish depth. An electro-hydraulic winch with over 20,000 feet of cable controls the fish altitude while surveying.

3.0 PROJECT PROFESSIONALS

Jay Northcutt functioned as the project manager for C & C Technologies. Dr. Sam Bentley and Dr. Harry Roberts from the Coastal Studies Institute at Louisiana State University served as the Principal Investigators (PIs) for the geophysical data collected. The geophysical data acquisition aboard the M/V *Seacor Surf* was under the direction of Scott McBay, David Aucoin and Paige Melancon (Party Chiefs).

Project Professionals		
Harry Roberts	Louisiana State University	Principal Investigator
Sam Bentley	Louisiana State University	Assistant Principal Investigator
Jay Northcutt	C & C Technologies, Inc.	Project Manager
Tony George	C & C Technologies, Inc.	Manager, Geophysical Interpretation
Ralph Coleman	C & C Technologies, Inc.	Database Manager
Eddy Lee	C & C Technologies, Inc.	Geophysicist

Project Professionals		
Jennifer Peacock	C & C Technologies, Inc.	Geophysicist/Mosaic Processing
Chester Spencer	C & C Technologies, Inc.	AutoCAD Cartographer

4.0 SURVEY GRID

The geodetic datum for the survey mapping is the North American Datum, 1927 and the ellipsoid used is the Clarke 1866. The projection is the Universal Transverse Mercator, Zone 16N. The parameters used to convert the GPS positions from the WGS84 datum to the local NAD27 datum are: X = +7 m, Y = -151 m, Z = -175 m.

The survey was designed to cover a radius of 10,000 feet centered on the proposed well site. Primary line spacing for the survey was designed at a 300-meter (982-foot) interval. Twenty north-south primary lines were run to cover this circular area and the side scan sonar system was operated at a range of 200 to 250 meters/channel (Lines 1001 to 1020). Four tracklines (Lines 1021 – 1024) were proposed in close proximity to the well location in order to obtain very high-resolution sonar imagery in a box around the proposed Well No. 1. The parallel tracklines were offset at 75 meters to each other. The post-plotted survey tracklines are included on the enclosed maps. Fish positions are found on the Sonar Mosaics and tow boat locations are presented on the Bathymetry Map. Deep-tow survey data (fish positions) were not collected with the system along Line Nos. 1002, 1003, 1020 and 1024.

5.0 DELIVERABLES

The following subsections describe the data deliverables provided to Dr. Harry Roberts for his review and research at the proposed exploration site in Block 916, Viosca Knoll Area. A statement regarding the quality of the data collected is included.

5.1 Bathymetry Data

The results of the single-beam bathymetry collected across Block 916, Viosca Knoll Area are presented on the Bathymetry Map at a 1" = 600' scale and a 20-foot contour interval. The trackline positions presented on the Bathymetry Map represent those of the survey vessel. The bathymetry data were corrected for water column velocity variations utilizing a harmonic mean velocity function. A listing of these data and water column velocity versus depth curve are presented in Appendix B. Hardcopy seafloor profile data for each trackline were produced with scale divisions in feet. An assumed water column velocity of 5,000 feet per second was input into the system to convert two-way traveltime to depths in feet.

The single-beam bathymetry data were logged at approximately 1-second updates with very low signal to noise. Excellent ties between the soundings exist where the tie lines and primary lines intersect.

5.2 Side Scan Sonar Data

Low frequency (120 kHz), side scan sonar data were collected along the tracklines shown on the Side Scan Sonar Mosaic at a 1" = 600' scale. The Detailed Side Scan Sonar Mosaic at a 1" = 100' scale was generated utilizing the high-frequency (420 kHz) side scan sonar data in addition to the low frequency data and is included as an enclosure. The side scan sonar data were collected utilizing C & C's proprietary HydroMap software running under the Unix operating system on a Sun workstation. The side scan sonar data were converted to XTF (eXtended Triton Format) and printed out in hardcopy at a range of 200 or 250 meters/channel. A manual input of 3.2 knots was used to speed correct the sonar imagery. Fish position coordinates, determined by the acoustic USBL system on the chase boat, were logged with the side scan sonar data. Software from Ocean Imaging Consultants (OIC) was used to create the mosaics. Details of the processing procedures are found in Appendix A (OIC Swath).

Sonar data quality is considered fair to good. A band of increased gain averaging 15 meters in width occurs on both channels of the side scan sonar at about 25 to 50 meters outward from nadir depending on the altitude of the fish. This banding problem is due to a possible problem in the manufacturing process of the transducers. This banding effect was reduced to some degree in the mosaic processing. A decrease in the resolution of the sonar returns occurs on some of digital data collected. This decrease in resolution is most apparent when the data are reviewed digitally. A weak cable termination or fish electronics board apparently caused the loss in resolution.

5.3 Subbottom Data

Frequency modulated subbottom data were digitally recorded with the HydroMap software. These data were collected in the frequency band of 2 to 10 kHz. Hardcopy records for the subbottom data were produced utilizing Triton's Isis software. The hardcopy seismic profiles were generated with the water column removed (delayed) at a 100-millisecond record scale with divisions at 10-millisecond increments. The digital subbottom data are available in XTF format and can be converted to SEG-Y format if needed.

Subbottom profiler data quality is considered fair to good. Noise manifested itself on some of the subbottom data collected in the earlier sessions. The source of this noise was determined to be in the electronics boards that exist in the fish. This noise occurs on the records as the Time Varying Gain (TVG) ramps up in the lower half of the seismic profile. Another problem with these particular boards resulted in a portion of the subbottom data being absent from the record when the towfish was towed at an altitude of less than 28 meters. The geophysical operators observed this situation and minimized this effect by keeping the towfish flying above 28 meters.

6.0 SURVEY OPERATION SUMMARY

The original plan of work called for the geophysical acquisition to begin in early September 2000. A total of 2 exploration sites and 3 production sites were to be surveyed in the original scope of work. Delays resulted in the scope of work being reduced to only the Block 916, Viosca Knoll Area. Mobilization of the vessels for the survey work was performed in Morgan City, Louisiana.

The two survey vessels, M/V *Seacor Surf* and R/V *Ocean Surveyor,* departed Fourchon, Louisiana for Block 916, Viosca Knoll Area on November 10, 2000. Surveyors on both vessels performed a check in at the "A" Platform in Block 55, South Pass Area. Work on the Block 916, Viosca Knoll Area site began on November 11 at 22:28 hours (UTC) along Line 1010. Survey operations continued uninterrupted on November 12 until 14:30 hours when the R/V *Glorita* requested the towfish be picked up while the R/V *Glorita* conducted geotechnical sampling of the site. Data acquisition resumed at 19:31 hours along Line 1001A. A winch failure resulted in a free spool condition, and data acquisition ceased at 22:00 hours. The survey crews proceeded to Fourchon to fix the winch problem.

The vessels returned to the work area on November 26 and began collecting survey data along Line 1007 at 20:23 hours. A winch level wind problem resulted in Line 1007 being aborted at 21:05 and the crew returned to Fourchon for repairs.

The next data acquisition session in Viosca Knoll Block 916 began on November 29 with a rerun of Line 1007 (Line 21007A). Data collection continued until 16:05 hours on November 30 when survey operations were halted due to increased sea and wind conditions.

The two-boat shoot crews departed Fourchon on December 5 at 23:30 hours, performed a navigation check-in at Block 55, South Pass Area at 12:07 hours on December 6 and deployed the fish at 15:12 hours. Noise was noted on the subbottom and troubleshooting began on the system. Cable terminations were eliminated as a source of the problem and the fish electronics bottle was removed in order to replace the electronics boards with the spares. The new boards subsequently resulted in no subbottom signal being returned. The crew departed the work area at 20:00 on December 7 to pick up an Edgetech technician in Fourchon. The technician arrived and the vessel departed at 09:30 on December 8 to test the fish. The survey crew sailed south of Fourchon to the closest deep water and deployed the towfish with the newly installed Edgetech board. This board appeared to work and the crew sailed back to Fourchon and departed for the Viosca Knoll work site at 21:00 hours on December 8. The fish was deployed at 15:15 hours and data acquisition commenced at 17:15 hours. Problems with the computer in the electronics bottle in the fish began to occur causing gaps in the data collected along each line. Deteriorating weather conditions coupled with the computer lock up problems in the fish resulted in the crew returning to Fourchon at 12:00 hours on December 11.

A cold front passing across the northern Gulf of Mexico resulted in very rough sea conditions on December 12. Despite 5 to 7-foot seas on December 13, the crew picked up two Edgetech technicians in New Orleans and sailed offshore from Fourchon at 19:00 hours on December 13. December 14 was spent troubleshooting the towfish with a determination made that the problem was thermal. The deeper the fish, the colder the temperature and the lock up problem would occur. The board was replaced and the problem could not be replicated on the subsequent tests.

Weather conditions did not allow for the return of the survey vessels to the Viosca Knoll site until December 30. Seas were in the 5 to 7-foot range and the Echotrac Fathometer was deployed at 14:04 on December 31 to collect data that had been improperly evented (navigation fixes) with fish positions. These lines were completed at 23:01 on December 31 and the deep-tow fish was deployed. Data were collected between 04:38 and 13:34 hours on January 1 when weather conditions became too rough to collect data.

Continental Shelf and Associates released C & C Technologies prior to the next weather window and no additional data were collected.

GEOPHYSIC... LOG

Job No.:	Client:	Vessel:	Geophysical Equipment (Operating)
1401	MMS/CSA	Seacor Surf	Edgetech Deep Tow, Mag, Fathometer (Towed)
Date: 10-11-00	Area: Vioscaknoll 916	Remote Vessel: Ocean Surveyor	Job Description: MMS Site Survey

Personnel:

Time	Heading	Fix Number	Line Number	Water Depth	Mag Cable Out	Sonar Cable Out	SOL	EOL	Remarks
2000									Depart dock enroute. Check-in point.
0000					New Day 10/12/00				Enroute check-in seas 2-4' winds 10-15 kts
0830									Arrive check-in navigation OK enroute to deploy equipment.
1715									Gear on deck. Completed testing. Awaiting weather to calm down for USBL calibration.
0000					New Day 10/13/00				Friday
1500									Will Bordelon departed to dock for USBL swap.
0000					New Day 10/14/00				Saturday
2300									Will Bordelon returned. Awaiting daylight for calibration.
0000					New Day 10/15/00				Sunday
1500									Will Bordelon completed calibration. Winfrog problem. Fish tracking with dead reconing.
2100									Gear deployed. Tuning equipment
2140									Brake failure on seamac winch. Cable freespooled to 13492 before cable birdnested into levelwind and stopped cable. Cable began to freespool at 3500 ft. Currently attempting to tie off cable. Position based on USBL fix N 10003282.82 ft, E 18423617.92 ft UTM 15
0000					New Day 10/16/00				Monday
0915									Sea Leader arrived in order to pull up fish.
1020									Cable frayed and snapped. Sea leader released.
1045									Enroute Morgan City
0800									Arrive Office
1300									Depart office. Enroute Fouchon La.
1700									Arrive Fouchon La.

GEOPHYSICAL LOG

Job No.: 1401	Client: MMS/CSA	Vessel: Seacor Surf	Geophysical Equipment (Operating) Edgetech Deep Tow, Mag, Fathometer (Towed)
Date: 10-30-00	Area: Vioscaknoll 916	Remote Vessel Ocean Surveyor	Job Description MMS Site Survey

Personnel:

Time	Heading	Fix Number	Line Number	Water Depth	Mag Cable Out	Sonar Cable Out	SOL	EOL	Remarks
2300									Crew #2 Arrives Fouchon La
0000	New Day 10/31/00								
0100									Problems with power bottle on fish
1300									Problem fixed. Stand-by for M/V Ocean Surveyor.
2300									M/V Ocean Surveyor arrives Fourchon La. Working on Secor Surf Gen.
0000	New Day 11/1/00								
0420									Depart dock enroute MC 582
0930									Check –in MC 311. Enroute work area N 10404803, E 744332
1130									Deploy fish. Tune and work on topsides.
1300									Reterminate cable.
1800									Cable good. Working on software
0000	New Day 11/2/00								
0400									Pick-up fish enroute Fourchon La.
1000									Arrive Dock.

GEOPHYSIC... LOG

Job No.: 1401	Client: MMS/CSA	Vessel: Seacor Surf	Geophysical Equipment (Operating) Edgetech Deep Tow, Mag, Fathometer (Towed)
Date: 11-11-00	Area: Vioscaknoll 916	Remote Vessel Ocean Surveyor	Job Description MMS Site Survey

Personnel:
Scott McBay, Brent Faulk, Dave Aucoin, Jennifer Peacock, Phillip Alfrord, Mark Hayes, Travis Romero, Bill Stenson, Charles Honea

Time	Heading	Fix Number	Line Number	Water Depth	Mag Cable Out	Sonar Cable Out	SOL	EOL	Remarks
2228	180	1	1010a	3456 ft	5951	5931	☐		
2258	180	11	1010b	3789 ft	6549	6529	☐		Line increment (edgetech only) 1010b
2321	180	21	1010c	3992 ft	6817	6797	☐		Line increment (run other half for Nav) 1010c
2325	180	22	1010c						Telemetry reset
2327	180	24	1010c						Telemetry back in
2355	180	36	1010c	4217 ft	7824	7624		☐	Stop logging to make adjustments in Hydromap
0000									New Day 11/12/00 Seas: calm, Wind: 5 kts
0226	360	44	21010a	4025 ft	7750	7730	☐		Sol 21010a
0255	360	33	21010a	3791 ft	8137	8117			C/O on winch
0302	360	30	21010a	3722 ft	8004	7984			C/I on winch
0306	360	27	21010a	3127ft	7885	7865			C/I on winch
0309	360	26	21010b	3583ft	7885	7865			Line Increment
0314	360	22	21010b	3509ft	7800	7780			C/I on winch
0327	360	15	21010b	3385ft	7619	7599			C/I on winch
0332	360	12	21010b	3304ft	7443	7423			C/I on winch
0337	360	9	21010b	3278ft	7443	7423			Restart side scan and subbottom on hydromap
0339	360	8	21010b	3237ft	7298	7278			C/I on winch
0347	360	4	21010b	3168ft	7146	7126			C/I on winch
0350	360	1	21010b	3154ft	7146	7126		☐	EOL 21010b
0540	180	1	1011a	3607ft	7008	6988	☐		SOL 1011a
0541	180	1	1011a	3640ft	7313	7333			C/O on winch
0547	180	3	1011a	3735ft	7563	7543			C/O on winch
0551	180	5	1011a	3723ft	7447	7427			C/O on winch

GEOPHYSICAL LOG

Job No.: 1401	Client: MMS/CSA	Vessel: Seacor Surf	Geophysical Equipment (Operating) Edgetech Deep Tow, Mag, Fathometer (Towed)
Date: 11-11-00	Area: Vioscaknoll 916	Remote Vessel Ocean Surveyor	Job Description MMS Site Survey

Personnel:
Scott McBay, Brent Faulk, Dave Aucoin, Jennifer Peacock, Phillip Alfrord, Mark Hayes, Travis Romero, Bill Stenson, Charles Honea

Time	Heading	Fix Number	Line Number	Water Depth	Mag Cable Out	Sonar Cable Out	SOL	EOL	Remarks
0556	180	8	1011a	3709	7920	7940			C/O Winch
0601	180	12	1011a	3753	8054	8074			C/O Winch
0606	180	13	1011a	3818	8366	8386			C/O Winch
0611	180	14	1011a	3885					Primary GPS out
0612	180	16	1011a	3890					Primary GPS online
0617	180	17							Soanr contact "STBD"
0620			1011b						Logging line name 1011b
0626	180	24	1011b						Lost fish pos/0627 required fish pos
0630	180	26	1011b	4100	8572	8594			C/O Winch
0634	180	29	1011b	4153	8626	8646			C/O Winch
0640	180	33	1011b	4215	8755	8777			Adjust scale sonar / C/O winch
0648	180	37	1011b	4243	8930	8952			C/O Winch
0654	180	40	1011b	4287	9100	9122			C/O Winch
0701	180	44	1011b	4328	9239	9261		☐	C/I Winch EOL
0909	360	44	1019a	3540	8208	8228	☐		SOL 1019a
0910	360	36/28	1019a						Winfrog preplot FSP. 36. HYMP PPFSP 28
0911	360	36	1019a	3507	8172	8192			C/O Winch
0916	360	26	1019a	3470	8052	8072			C/I
0931		12	1019a	3290	7670	7690			C/I
0934		13							Sonar target port chnl sp.12 sonar target
0937		13							Multiple targets post chnl
0953	360	11	1019a	3038	7022	7242		☐	EOL 1019a

GEOPHYSICAL LOG

Job No.: 1401	Client: MMS/CSA	Vessel: Seacor Surf	Geophysical Equipment (Operating): Edgetech Deep Tow, Mag, Fathometer (Towed)
Date: 11-12-00	Area: VK 916 / 872	Remote Vessel: Ocean Surveyor	Job Description: MMS Site Survey

Personnel:
Scott McBay, Brent Faulk, Dave Aucoin, Jennifer Peacock, Phillip Alfrord, Mark Hayes, Travis Romero, Bill Stenson, Charles Honea

Time	Heading	Fix Number	Line Number	Water Depth	Mag Cable Out	Sonar Cable Out	SOL	EOL	Remarks
1207	180	1	1009a	3697	8132		☐		SOL
1209	180	3	1009a	3800	8307	8285			C/O
1214	180	5		3825	8422	8402			C/O
1217		7			8441	8461			Sonar target port - STBD
1220		10		3847	8477	8457			C/O
1225		12		3830	8602	8582			C/O
1229		15		3990	8722	8702			C/O
1245		20		4018	9052	9032			C/O
1247		25	1009b	1013			☐		End 1009a begin 1009b
1254		29		4175	9253	9253			C/O
1315		41		4316	9177	9177			C/O
1320		44	1009b	4351	9272	9272		☐	EOL
1340									Pick up fish
1430									Fish on deck. standby for R/V Glorita
1800									Launch fish & head for line
									Seas: calm, Wind: 5 kts
1931	360	33	1001a	3945	9768	9748	☐		Sol line 1001a
1936	360	32	1001a	3906	9597	9577			C/I line 1001a
1941	360	29	1001a						C/I line 1001a
1945									Winch broken, paying out wide open.
2200			1001a					☐	Stopped logging
2205									Heading to port in Fourchon.

GEOPHYSICAL LOG

Job No.:	Client:	Vessel:	Geophysical Equipment (Operating)
1401	MMS/CSA	Seacor Surf	Edgetech Deep Tow, Mag, Fathometer (Towed)

Date:	Area:	Remote Vessel	Job Description
11-25-00	VK 872		MMS Site Survey

Personnel:
D. Aucoin, D. Albright, B. Stinson, M. Hayes, T. Romero, C. Honea, J. McCulloch, S. Allemon

Time	Heading	Fix Number	Line Number	Water Depth	Mag Cable Out	Sonar Cable Out	SOL	EOL	Remarks
1000 L									Depart office. Enroute Secor Surf
1400 L									Arrive Secor Surf. Preparing to get underway. Replacing center shaft on level wind.
2230 L									Depart dock enroute job location
0000									New Day 11-26-00 Sunday
1324 (UTM)									Check-in VK 989 SW Riser –2ft off bow. N 10517945.20 E 1120691.71 ft
1830									Conducted fire and abandon ship drill
1845									Deployed gear testing equipment
2023	0	43	1007	3920	11275	11169	☐		
2027		40							C/Out 11275
2035		33							C/In 11042
2042		28							C/In 10741
2048		25							C/In 10258
2054		20							C/In 9765
2058		15							C/In 9465
2105									Abort due to level wind.
0000	New Day 11-26-00								En route Port Fourchon for Winch repairs
0000	New Day 11-27-00								In Port Fourchon. Repairing winch
0000	New Day 11-28-00								In Port Fourchon. Depart Fourchon. Enroute job location.
1155									Check in 20ft off bow N 10482312.03 ft E 911383.44 ft
1800									Arrive job location. Deploying gear.
1830									Sonar malfunction. Cable was pinched and sliced. Performing retermination.
2300									Deploying Gear

GEOPHYSICAL LOG

Job No.: 1401	Client: MMS/CSA	Vessel: Seacor Surf	Geophysical Equipment (Operating): Edgetech Deep Tow, Mag, Fathometer (Towed)
Date: 11-29-00	Area: VK 872	Remote Vessel	Job Description: MMS Site Survey

Personnel:
D. Aucoin, D. Albright, B. Stinson, M. Hayes, T. Romero, C. Honea, J. McCulloch, S. Allemon

Time	Heading	Fix Number	Line Number	Water Depth	Mag Cable Out	Sonar Cable Out	SOL	EOL	Remarks
0000	New Day 11-29-00								
0130	360	43	21007A	3975	8588	8568	☐		
0147	360	33	21007A	3756	8376	8356			C/In
0155	360	30	21007A	3683	8222	8202			C/In
0208	360	23	21007A	3595	8072	8052			C/In
0214	360	19	21007A	3554	7922	7902		☐	New line 21007B. C/In
0219	360	16	21007B	3554	7922	7902	☐		Undersea well head sp.9
0235	360	8	21007B	3361	8043	8023			C/Out
0243	360	2	21007B	3243	8043	8023		☐	End of Line
0502	180	1	1008A	3632	7507	7487	☐		SOL "Possible rerun"
0508	180	4	1008A	3731	7763	7743			C/Out
0511	180	7	1008A	3833	7919	7899			C/Out
0515	180	8	1008A	3920	8175	8155			C/Out
0520	180	11	1008A	3965	8386	8366			C/Out
0524	180	14	1008A	4019	8651	8631			C/Out
0530	180	16	1008A	4087	9023	9003			C/Out
0534	180	19	1008A	4111	9243	9223			C/Out
0544	180	25	1008A	4070	9367	9347			C/Out
0551	180	29	1008A	4119	9367	9347		☐	End Line
0551	180	29	1008B	4119	9367	9247	☐		New Line
0606	180	38	1008B	4275	9255	9235			C/In
0612	180	41	1008B	4315	8920	8900			C/In
0615	180	44	1008B	4325	8900	8920			C/In

GEOPHYSICAL LOG

Job No.: 1401	Client: MMS/CSA	Vessel: Seacor Surf	Geophysical Equipment (Operating) Edgetech Deep Tow, Mag, Fathometer (Towed)
Date: 11-29-00	Area: VK 872	Remote Vessel	Job Description MMS Site Survey

Personnel:
D. Aucoin, D. Albright, B. Stinson, M. Hayes, T. Romero, C. Honea, J. McCulloch, S. Allemon

Time	Heading	Fix Number	Line Number	Water Depth	Mag Cable Out	Sonar Cable Out	SOL	EOL	Remarks
0615	180		1008B	4325				☐	
0811	360	44	1012	4051	9028	9006	☐		C/O 8950
0824	360	38	1012	3671	9066	9044			C/O Sonar/Mag
0828	360	36	1012	3665	8962	8943			C/I Sonar/Mag
0840		29		3650	9052	9032			C/I 8830 S/M
0842		26		3600	9055	9035			C/I 8833 S/M
0846		23	1012b	3513	8839	8821			C/I 8619 S/M /Change Line @ Sp.23 to 1012b
0851		20		3440	8641	8623			C/I 8421 S/M
0901		14		3292	8690	8672			C/O 8470 S/M
0903		12		3272	8713	8695			C/I 8271 S/M
0905		12		3240	8613	8595			8393 S/M
0907		10		3214	8491	8473			C/I 8271 S/M
0911		7		3141	8289	8271			C/I 8069 S/M
0915		5		3095	8043	8025			C/I 7823 S/M
0920	360	1	1012b						EOL
1106	180	7	1018	3500	7722	7704	☐		7502 C/O
1109		8		3538	7890	7872			7670 C/O
1110		9		3575	8083	8065			7863 C/O
1114		11		3600	8218	8200			7998 C/O
1118		13		3643	8357	8339			8137 C/O
1121		16		3693	8508	8490			8288 C/O Target Sonar sp # 17-18 Stbd
1125		18		3754	8700	8682			8480 C/O
1129		21		3811	8893	8875			8673 C/O

GEOPHYSICAL LOG

Job No.: 1401	Client: MMS/CSA	Vessel: Seacor Surf	Geophysical Equipment (Operating) Edgetech Deep Tow, Mag, Fathometer (Towed)
Date: 11-29-00	Area: VK 872	Remote Vessel Ocean Surveyor	Job Description MMS Site Survey

Personnel:
D. Aucoin, D. Albright, B. Stinson, M. Hayes, T. Romero, C. Honea, J. McCulloch, S. Allemon

Time	Heading	Fix Number	Line Number	Water Depth	Mag Cable Out	Sonar Cable Out	SOL	EOL	Remarks
1134		23		3875	9081	9063			8861 C/O
	180	25	1018						Cont. Ln # 1018
1137		25		3928	9227	9209			9007 C/O
1141		28		4002	9398	9380			9178 C/O
1146		31		4034	9535	9517			9315 C/O
1149		33		4093	9645	9627			9425 C/O
1152		35		4219	9809	9791			9589 C/O
1157	180	38	1018	4247	9811	9793		☐	9589 C/O SOL 1106 EOL157 SP. 7-38
1408	360	44	1013	3823	9040	9022	☐		8820
1415		40		3745	8883	8865			C/I 8663
1421		37		3643	9750	8732			C/I 8528
1427		33		3585	8600	8582			C/I 8378
1433		29		3567	8481	8463			C/I 8259
1441		24		3552	8379	8361			C/I 8157
1448		20		3449	8227	8209			C/I 8005
1456		15		3309	8124	8104			C/I 7903
1503		10							
1508		7		3153	7998	7978			C/I 7776
1512		5		3090	7829	7809			C/I 7607
1516		1		3011	7829	7809		☐	C/I 7607 EOL

Job No.: 1401	Client: MMS/CSA	Vessel: Seacor Surf	Geophysical Equipment (Operating) Edgetech Deep Tow, Mag, Fathometer (Towed)
Date: 11-29-00	Area: VK 912	Remote Vessel Ocean Surveyor	Job Description MMS Site Survey

Personnel:
D. Aucoin, D. Albright, B. Stinson, M. Hayes, T. Romero, C. Honea, J. McCulloch, S. Allemon

Time	Heading	Fix Number	Line Number	Water Depth	Mag Cable Out	Sonar Cable Out	SOL	EOL	Remarks
1645	180	5	1004	3874	8492	8472	☐		8270 C/O SOL
1651		7		3920	8901	8881			8679 C/O
1656		10		3967	9090	9070			8868 C/O
1700		12		4031	9242	9222			9020 C/O
1705		15		4059	9426	9406			9204 C/O
1713		20		4109	9579	9559			9357 C/O
1718		23		4162	9716	9696			9494 C/O
1723		26							Logging Line 1004b
1725		27		4297	9852	9832			9630 C/O
1735		33		4342					9630
1746		40	1004	4400	9852	9832		☐	9630
1925	360	43	1014	3801	9172	9152	☐		SOL
1938		36		3615	8912	8892			C/In
1946		31		3505	8689	8669			C/In
1953		26		3514	8491	8471			C/In
2007		17		3333	8290	8270			C/In
2028		2	1014	2951	8290	8270		☐	EOL
2100									Pick up gear (Working on Mag)
2230									Gear back in water
2314	180	3	1015	3409	5385	5365	☐		SOL
2318		4		3448	5543	5523			C/Out
2321		5		3455	5460	5440			C/In
2326		8		3532	5608	5588			C/Out

GEOPHYSICAL LOG

Job No.: 1401	Client: MMS/CSA	Vessel: Seacor Surf	Geophysical Equipment (Operating) Edgetech Deep Tow, Mag, Fathometer (Towed)
Date: 11-29-00	Area: VK 912	Remote Vessel Ocean Surveyor	Job Description MMS Site Survey

Personnel:
D. Aucoin, D. Albright, B. Stinson, M. Hayes, T. Romero, C. Honea, J. McCulloch, S. Allemon

Time	Heading	Fix Number	Line Number	Water Depth	Mag Cable Out	Sonar Cable Out	SOL	EOL	Remarks
2337		12		3630	5750	5750			C/Out
2342		15		3704	5947	5927			C/Out
2350	180	18	1015	3777	6117	6097			C/Out
0000		23		3862					New Day 30 Nov. 00
0006		25						☐	C/Out
0007	180	25	1015B	3912	6222	6202	☐		C/Out
0017		30		4007	6364	6344			C/Out
0023		32		4063	6442	6422			C/Out
0031		35		4143	6614	6594			C/Out
0046		42	1015B	4182	6614	6594		☐	EOL
0115									Pick up gear (working on mag)
0300									Gear back in water
0341	360	41	1016	3786	7672	7652	☐		SOL
0349		39		3665	7533	7513			C/In
0357		35		3593	7412	7392			C/In
0406		30		3503	7279	7259			C/In
0414		26		3400	7122	7102			C/In
0424		20		3334	7022	7002			C/In
0431		16		3302	6952	6932			C/In
0435		13		3281	6747	6727			C/In
0443		9		3227	6627	6607			C/In
0451		4						☐	End of Line
Shift Change									D. Aucoin, M. Hayes, T. Romero Seas 2-3'. Winds 10-15 kts

GEOPHYSIC. _ LOG

Job No.: 1401	Client: MMS/CSA	Vessel: Seacor Surf	Geophysical Equipment (Operating) Edgetech Deep Tow, Mag, Fathometer (Towed)
Date: 11-29-00	Area: VK 912	Remote Vessel Ocean Surveyor	Job Description MMS Site Survey

Personnel:
D. Aucoin, D. Albright, B. Stinson, M. Hayes, T. Romero, C. Honea, J. McCulloch, S. Allemon

Time	Heading	Fix Number	Line Number	Water Depth	Mag Cable Out	Sonar Cable Out	SOL	EOL	Remarks
0618	180	2	31007	3548	8010	7990	☐		SOL
0620		3		3684	8272	8252			C/Out
0625		5		3800	8461	8441			C/Out
0629		7		3842	8596	8576			C/Out
0634		10	31007a	3944	8784	8764			C/Out
0640		14		3983	8946	8926			C/Out
0645		17		4065	9124	9104			C/Out
0652		21		4152	9271	9251			C/Out 9049
0657		24		4135	9360	9340			C/Out
0659	180	25	31007a	4129	9360	9340		☐	EOL 31007A
0659	180	26	31007b	4129	9360	9340	☐		SOL 31007B
0708		31		4143	9629	9609			C/Out
0715		34		4194	9797	9777			C/Out
0721		38		4280	9927	9907			C/Out
0729		43	31007b	4329	9927	9907		☐	EOL 31007B
0916	360	40	1017a	3648	9255	9235	☐		Sol 1017A
0924		37		3559	9168	9148			C/In
0930		33		3479	8739	8719			C/In
0939		27		3402	8520	8500			C/In 8298
0941		25		3349	8291	8271			C/In 8069
0945		23		3282	8084	8064			SonarTarget #19
0952		18		3239	7796	7776			C/In 7574
0957		14		3210	7553	7533			C/In 7331

GEOPHYSICAL LOG

Job No.: 1401	Client: MMS/CSA	Vessel: Seacor Surf	Geophysical Equipment (Operating) Edgetech Deep Tow, Mag, Fathometer (Towed)
Date: 11-30-00	Area: VK 912	Remote Vessel Ocean Surveyor	Job Description MMS Site Survey

Personnel:
D. Aucoin, D. Albright, B. Stinson, M. Hayes, T. Romero, C. Honea, J. McCulloch, S. Allemon

Time	Heading	Fix Number	Line Number	Water Depth	Mag Cable Out	Sonar Cable Out	SOL	EOL	Remarks
1006		8		3118	7129	7110			C/In
1010		6		3078	7241	7244			
1014		3		3042	6958	6938			C/In 6736
1018		1	1017a	2984	6792	6772		☐	C/In 6570 EOL
1147	180	3	1006a	3785	10381	10361	☐		SOL 1006a, Winds & Seas Increasing. Seas 4-6'. Winds 15-25 kts
1150		4		3861	11446	11426			C/Out
1158		8		3962	11838	11818			C/Out
1203		12		4108	12026	12006			C/Out
1208		15		4194	12159	12139			C/Out
1215		21		4209	12294	12274			C/Out
1218		24		4151	12359	12339			C/Out 12220
1226		30		4214	12587	12567			C/Out
1228		32		4266	12897	12877			C/Out Sonar Target sp.33
1235		36		4296	13096	13076			C/Out
1241		42		4390	13221	13201		☐	C/Out 12999
1535	360	33	1001a	3904	10836	10816	☐		SOL 1001A
1537		33		3871	10931	10911			C/Out
1540		31		3833	10501	10481			C/In
1545		27		3776	9947	9927			C/In
1549		24		3750	9500	9450			C/In
1551		23		3724	9377	9350			C/In
1552		22		3721	9190	9200			C/In
1553		21		3708	9110	9062			C/In

GEOPHYSICAL LOG

Job No.: 1401	Client: MMS/CSA	Vessel: Seacor Surf	Geophysical Equipment (Operating) Edgetech Deep Tow, Mag, Fathometer (Towed)
Date: 11-30-00	Area: VK 912	Remote Vessel Ocean Surveyor	Job Description MMS Site Survey

Personnel:
D. Aucoin, D. Albright, B. Stinson, M. Hayes, T. Romero, C. Honea, J. McCulloch, S. Allemon

Time	Heading	Fix Number	Line Number	Water Depth	Mag Cable Out	Sonar Cable Out	SOL	EOL	Remarks
1554		20		3690	9094	9074			C/In
1556		19		3678					C/In
1557		18		3666	8942	8922			C/In
1559		17		3638	8608	8588			C/In
1604		13		3580	8442	8422			C/In
1605		12		3567	3560	3550		☐	EOL C/In
									WOW. Headed to Fourchon

GEOPHYSICAL LOG

Job No.: 1401	Client: MMS/CSA	Vessel: Seacor Surf	Geophysical Equipment (Operating) Edgetech Deep Tow, Mag, Fathometer (Towed)
Date: 12-05-00	Area: VK 912	Remote Vessel Ocean Surveyor	Job Description MMS Site Survey

Personnel:
D. Aucoin, Paige melancon, B. Stinson, S. Allemon, T. Romero, M. Hayes, R. Dailey

Time	Heading	Fix Number	Line Number	Water Depth	Layback to Sonar	Delta Cable In	Delta Cable Out	SOL	EOL	Remarks
New Day 12/05/00										Reterminate EOC End of cable (Armor)
2330										Depart Dock enroute to Check-in point
New Day 12/06/00										SP55 checkin
1207	1									Sp55 check-in 28°51.9173'N 89°16.6837'E Fix @ 28°51.9572'N 89°16.7049'E
1210										Heading to VK 916. ETA 1300 (7hrs run)
1512										Deploy fish
1515										Working on same / Reterminate
2000										Fish working / Mag not working enroute line F-1001
2140	360	33	F-1001	3882	11484			☐		Start of Line
2145	360	28				☐				
2148		24				☐				
2151		21				☐				
2155		17				☐				
2202		13							☐	
										Still having problems with noise in data. Chopping 20' of cable and reterminating.
0000										New Day 12/07/00
0100										Heading to shallower water to test fish
0215										Still have noise in subbottom data
0400										Pulling bottle to change out cards
1200										New cards don't work. Trouble shooting.
1700										Heading to Fourchon to get Edgetech rep.
0000										New Day 12/08/00
0500										Arrive Fourchon. Stand-by Edgetech Tech

GEOPHYSIC. .. LOG

Job No.: 1401	Client: MMS/CSA	Vessel: Seacor Surf	Geophysical Equipment (Operating) Edgetech Deep Tow, Mag, Fathometer (Towed)
Date: 12-05-00	Area: VK 912	Remote Vessel Ocean Surveyor	Job Description MMS Site Survey

Personnel:
D. Aucoin. Paige melancon. B. Stinson. S. Allemon. T. Romero. M. Hayes. R. Dailey

Time	Heading	Fix Number	Line Number	Water Depth	Layback to Sonar	Delta Cable In	Delta Cable Out	SOL	EOL	Remarks
0900										Edgetech Tech. Onboard
0930										Depart Dock to test fish.
1700										Fish testing complete. Heading to dock.
2000										Arrive Fourchon. Meet MacKey. Take on groceries. Drop off Edgetech Rep.
2100										Depart dock. Enroute work area
0000	New Day 12/09/00									Enroutr check-in. Seas 5-7'. Winds 20 kts NE
0710										Check-in Sp55. Check-in good
0730										Enroute work area.
1515										Arrived in work area. Deploying fish. Magnetometer below power cards. Not running Prepare to start line F-1020A
1715	360	40	F1017	3665	8457			☐		Start of Line F-1017a
1716			F1017c	3430		☐				Fish died. Restart sp 32. Good data F-1017c
1742	360	22	F1017c	3290	8757	☐				C/I
1742	360	20	F1017c	3245	8637	☐				
1750	360	19	F1017c	3232	8487	☐				Sp. 20-19
1753	360	17		3223					☐	Hydromap topside lock-up. EOL
1933	180	4	B-1005 F-1005	3835	9294		☐	☐		SOL
1934		5		3862	9476		☐			
1939		8		3910	9602		☐			
1943		10		3946	9755		☐			
1946		12		3971	9864		☐			
1950		14		4055	9959		☐			
1958		20		4152						Fish died. Picking up fish
2030										Working on Edgetech fish

GEOPHYSICAL LOG

Job No.: 1401	Client: MMS/CSA	Vessel: Seacor Surf	Geophysical Equipment (Operating) Edgetech Deep Tow, Mag, Fathometer (Towed)
Date: 12-10-00	Area: VK 912	Remote Vessel Ocean Surveyor	Job Description MMS Site Survey

Personnel:
D. Aucoin, Paige melancon, B. Stinson, S. Allemon, T. Romero, M. Hayes, R. Dailey

Time	Heading	Fix Number	Line Number	Water Depth	Layback to Sonar	Delta Cable In	Delta Cable Out	SOL	EOL	Remarks
0000										Testing. New Day 12-10-00
0300										Fish back in water
0332	180	8	B1005B F1005B	3838			☐	☐		
0336	180	8					☐			Fish died
0337		9		3882	8766		☐			Restart
0344		12		3969	8892		☐			
0347		14		3985	9302		☐			
0350		15		4030	9467		☐			
0354		18		4111	9627		☐			
0358		19		4157	9627					Target Stb. 140m
0359	180	20	B1005B F1005B	4200	9776		☐			
0403		22		4242	9872		☐			
0405		24		4255	9950		☐			
0408		25		4265	10052		☐			
0409		26		4262	10183		☐			
0418		31		4271	9522	☐				Fish died
0421		34		4271	9522				☐	
0601										Enrt. Ln # F1021
0626	360	31	F1021	3705	9629		☐			Sonar (125m scale. 500khz). Line F-1021a. Start line data all system
		28		3581	9708	☐				
0632		28		3553	9745	☐			☐	Abort line E/T malfunction. Enrt Ln F1022
	180	14	F1022a	3679	8302		☐			Cable adj. Vessel trk. Line F1022a

Job No.: 1401	Client: MMS/CSA	Vessel: Seacor Surf	Geophysical Equipment (Operating) Edgetech Deep Tow, Mag, Fathometer (Towed)
Date: 12-10-00	Area: VK 912	Remote Vessel Ocean Surveyor	Job Description MMS Site Survey

Personnel:
D. Aucoin. Paige melancon. B. Stinson. S. Allemon. T. Romero. M. Hayes. R. Dailey

Time	Heading	Fix Number	Line Number	Water Depth	Layback to Sonar	Delta Cable In	Delta Cable Out	SOL	EOL	Remarks
0831	180	14	F1022a	3764	8512		☐	☐		
		19		3760	8469	☐				
		24		3784	8690		☐			
0907		31		3908	9202		☐			
		32		3934	9279		☐			
		17		3985	9329		☐			Cable sdj. Fish track
		18		3995	9390		☐			
		23		4081	9480		☐			
0917		26		4146	9531		☐			
		27		4162	9639		☐			
0925	180	31	F1022a	4190	9639				☐	Data acquired throughout line
1204	90	1	F1023a	3894	8413			☐		
1209	90	2	F1023a	3822	8586		☐			
1214		4		3850	8642		☐			
1217		7		3890	8753		☐			
1220		8		3950	8879		☐			
1225		11		4008	8940		☐			
1233	90	19	F1023a	4039	8940	☐			☐	Fish lock up. Edgetexh malfunction LSP (98% good line)
1320	270	19	F1024a					☐	☐	Edgetech malfunction at SOL. Turning to line F1003a
1430										Missed line turn. Circling up.
1445										Edgetech Technician advises to take transformer out of line in Starmux unit.
1458										System lock up before SOL. Reinstall transformer enroute to line F1020.

GEOPHYSICAL LOG

Job No.: 1401	Client: MMS/CSA	Vessel: Seacor Surf	Geophysical Equipment (Operating) Edgetech Deep Tow, Mag, Fathometer (Towed)
Date: 12-10-00	Area: VK 912	Remote Vessel Ocean Surveyor	Job Description MMS Site Survey

Personnel:
D. Aucoin. Paige melancon. B. Stinson. S. Allemon. T. Romero. M. Hayes. R. Dailey

Time	Heading	Fix Number	Line Number	Water Depth	Layback to Sonar	Delta Cable In	Delta Cable Out	SOL	EOL	Remarks
1550										E/T Technician advised to reset DSL modem when prem slows, enroute to ln 1003
1600										Turning on to line 1003
1835	360	39	F1003a	3920	11127			☐		
1837		39		3880	11067	☐				
1843		37		3811	10979	☐				
1846		35		3770	10870	☐				
1850		33		3729	10741	☐				
1854		22		3667	10623	☐				
1857	360	21	F1003							Abort line. Lost data link and computer in fish froze up. Bringing fish on deck.
1936										Fish on deck and secure. Heading to Fourchon
2000										Enroute to Fourchon.
0000										** New Day 12/11/00 ** En route to Stolt Dock, Fourchon.
1200										Arrive Stolt Dock, waiting on transport to Lafayette.
1300										Bus arrives, depart to C&C office.
0000										** New Day 12/12/00 ** WOW
1200										WOW
2400										WOW
0000										** New Day 12/13/00 **
1300										Paige Melancon, Sam Allemon, Scott McBay, and Pablo Mejia arrive to begin work on Hydromap
1330										R. Dailey, T. Romero, B. Stinson, M. Hayes, D. Aucoin depart Lafayette enroute to NO Airport
1600										Arrive N.O. Airport. Pick up 2 Edgetech and J Kelley.
1630										Depart for Stolt Dock, Fourchon
1800										Arrive @ Stolt Dock.

GEOPHYSICAL LOG

Job No.: 1401	Client: MMS/CSA	Vessel: Seacor Surf	Geophysical Equipment (Operating) Edgetech Deep Tow, Mag, Fathometer (Towed)

Date: 12-14-00	Area: VK 912	Remote Vessel Ocean Surveyor	Job Description MMS Site Survey

Personnel:
Romero, Dailey, Melancon, Garfield, Allemon, Stinson, Hayes

Time	Heading	Fix Number	Line Number	Water Depth	Layback to Sonar	Delta Cable In	Out	SOL	EOL	Remarks
1830										Scott McBay and Pablo Mejia depart.
1900										Depart enroute to deep water
0000										** New day 12/14/00 ** Enroute to deep water. Seas 5-7'
0800										Deploy fish, begin testing. Seas 5-7'
1200										Fish failed. Bring on deck. Begin troubleshooting. Seas 5-7'
1400										Bottle out, 2 Edgetech techs change out main board. Do not have spare DSP, only FSIC board.
1500										After changing board, noise in subbottom. Working on other problems. We know by changing back to original fish board, noise will go away. * Mag failed @ 750m on initial dive.
1700										Decision made to return to dock and work on problem there. Repaired DSP card @ C&C will be delivered to boat at Stolt dock. Problem seems to be temperature related with indications it is in DSP board. When we arrive at dock, will obtain ice and try to cool bottle to make it fail before changing DSP board.
1800										Enroute to dock will arrive Dec 15.
0000										** New Day 12/15/00 ** Enroute to dock.
0400										Arrive dock @ Fourchon. Stolt dock. Standby for hotshot driver and DSP card.

GEOPHYSICAL LOG

Job No.: 1401	Client: MMS/CSA	Vessel: Seacor Surf	Geophysical Equipment (Operating) Edgetech Deep Tow, Mag, Fathometer (Towed)
Date: 12-30-00	Area: VK 912	Remote Vessel Nicholas Callais	Job Description MMS Site Survey

Personnel:
D. Aucoin, M. Hayes, W. Stinson, T. Romero, P. Melancon

Time	Heading	Fix Number	Line Number	Water Depth	Layback to Sonar	Delta Cable In	Delta Cable Out	SOL	EOL	Remarks
2300										Depart dock. Enroute check-in
0000										** New Day 12/31/00 ** Seas 5-7', winds 10-15 kts. Lat 29°04'57", Lon. 087°58'13"
0450										Check in at SP#55
0500										Enroute to work area
1230										Arrive at work area, deploy fathometer.
1300										Enroute line B11001
1404	000	33	B11001					☐		Fathometer only
1434	000	12	B11001						☐	
1507	180	4	B1005					☐		Fathometer only, lost nav at SP 7, reset at SP 13
1528	180	23	B1005						☐	
1544	000	35	B1006					☐		Fathometer only
1623	000	3	B1006						☐	
1639	180	1	B1008					☐		Fathometer only
1654	180	16	B1008						☐	
1707	000	22	B1009					☐		Fathometer only
1733	000	1	B1009						☐	
1740	180	1	B1011					☐		Fathometer only
1758	180	15	B1011						☐	
1803	180	28	B1012					☐		Fathometer only
1830	180	44	B1012						☐	
1846	000	44	B1013					☐		Fathometer only
1907	000	25	B1013						☐	
1937	180	24	B1014					☐		Fathometer only

GEOPHYSIC, _ LOG

Job No.: 1401	Client: MMS/CSA	Vessel: Seacor Surf	Geophysical Equipment (Operating) Edgetech Deep Tow, Mag, Fathometer (Towed)

Date: 12-31-00	Area: VK 912	Remote Vessel Nicholas Callais	Job Description MMS Site Survey

Personnel:
D. Aucoin, M. Hayes, W. Stinson, T. Romero, P. Melancon

Time	Heading	Fix Number	Line Number	Water Depth	Layback to Sonar	Delta Cable In	Delta Cable Out	SOL	EOL	Remarks
1958	180	43	B1014						☐	
2009	000	41	B1016					☐		Fathometer only
2032	000	25	B1016						☐	
2040	180	22	B1017					☐		Fathometer only
2101	180	40	B1017						☐	
2109	000	36	B1019	3890				☐		Fathometer only
2132	000	20	B1019	3497					☐	
2148	000	17	B1018	3545				☐		Fathometer only. S.P numbers off due to WinFrog malfunction.
2204	000	3	B1018	3200					☐	
2230	180	3	B1015	3221				☐	☐	Fathometer only. Abort, Nav lockup.
2251	000	15	B1015	3470				☐		
2301	000	3	B1015						☐	
0000										*** New Year 01/01/01 ***
0438	360	44	F1008	4050	11775			✓		Edgetech & echotrac
0500	360	40	F1008	3827	11947		✓			Sonar C/O
0502	360	39	F1008	3709	14020		✓			Sonar C/O
0510	360	33	F1008	3578	12040	✓				Sonar C/I
0513	360	30	F1008	3535	11637	✓				Sonar C/I
0522	360		F1008B			✓		✓		Sonar C/I, switch line F-1008b
0523	360	23	F1008B	3421	10505	✓				
0533	360	13	F1008B	3325	10527	✓				
0535	360	10	F1008B	3261	10405	✓				
0539	360	7	F1008B	3200	10282	✓				

GEOPHYSICAL LOG

Job No.: 1401	Client: MMS/CSA	Vessel: Seacor Surf	Geophysical Equipment (Operating) Edgetech Deep Tow, Mag, Fathometer (Towed)
Date: 01-01-01	Area: VK 912	Remote Vessel Nicholas Callais	Job Description MMS Site Survey

Personnel:
D. Aucoin, M. Hayes, W. Stinson, T. Romero, P. Melancon

Time	Heading	Fix Number	Line Number	Water Depth	Layback to Sonar	Delta Cable In	Delta Cable Out	SOL	EOL	Remarks
0542	360	4	F1008B	3125	10127	✓				
0545	360	1	F1008B	3100	10127	✓			✓	EOL
0828	180	1	B1013					✓		SOL
0848	180	1	F1013	3546	8335			✓		Edge Tech
0854	180	4	F1013	3591	8499		✓			Target on port side sonar
0858	180	6	F1013	3665						
0900	180	8	F1013	3685	8724					
0907	180	11	F1013	3788	8855		✓			
0914	180	16	F1013	3909	8802		✓			
0922	180	23	F1013	4025	8919	✓				
0929	180	26	F1013	4082	9071		✓			
0932	180	44	B1013						✓	EOL B-1013
0934	180	29	F1013	4142	9274		✓			
0940	180	32	F1013	4177	9476		✓			
0945	180	35	F1013	4211	9554		✓			
0952	180	40	F1013	4240	9702		✓			
0959	180	44	F1013						✓	No data recorded
1205	360	44	B1010							SOL B-1010
1230	360	44	F1013	3839	10129			✓		Edgetech & Fath
1240	360	37	F1013	3810	9962	✓				
1253	360	30	F1013	3635	9702	✓				
1258	360	27	F1013	3533	9361	✓				
1305	360	22	F1013	3449	9182	✓				

Note: Mag layback + 20 feet from sonar,

GEOPHYSIC, L LOG

Job No.: 1401	Client: MMS/CSA	Vessel: Seacor Surf	Geophysical Equipment (Operating) Edgetech Deep Tow, Mag, Fathometer (Towed)
Date: 01-01-01	Area: VK 912	Remote Vessel Nicholas Callais	Job Description MMS Site Survey

Personnel:
D. Aucoin, M. Hayes, W. Stinson, T. Romero, P. Melancon

Time	Heading	Fix Number	Line Number	Water Depth	Layback to Sonar	Delta Cable In	Delta Cable Out	SOL	EOL	Remarks
1311	360	18	F1013	3380						P/L on Port side scan
1313	360	1	B1010							EOL B-1010
1314	360	15	F1013	3327	8932	✓				
1318	360	13	F1013	3295	8642	✓				
1322	360	10	F1013	3250	8413	✓				
1328	360	5	F1013	3180	8138	✓				
1334	360	1	F1013	3180					✓	
1400										Picking up gear. Headed to Fourchon. W.O.W

APPENDIX A

EQUIPMENT DESCRIPTIONS
INSTRUMENT SETTINGS
TWO-BOAT SHOOT SCHEMATIC
SURVEY LOGS

EDGETECH FULL SPECTRUM DEEP TOW SYSTEM

The Edgetech Full Spectrum Deep Tow System consists of a chirp dual frequency side scan sonar, and a chirp sub-bottom profiler packaged in a towed fish configuration.

The full spectrum chirp side scan sonar uses a calibrated wide band digital frequency modulated (FM) signal to provide high resolution, low-noise images. It simultaneously transmits linearly swept FM pulses centered at 2 discrete frequencies: 75 kHz and 410 kHz or 120 kHz and 410 kHz. A digital signal processor periodically sends the waveforms to a digital to analog converter that generates an analog pilot signal. These FM signals are then amplified and transmitted by a set of wide band transducers. The sampled acoustic return is sent to a digital signal processor for match filter processing. The Edgetech proprietary matched filter uses special amplitude and phase weighting functions for the transmitted pulse and a pulse compression filter that maximizes the signal to noise ratio. This broad bandwidth pulse that sweeps out over a range of frequencies, combined with the match filter signal processing, allows for higher resolution and a better signal to noise ratio than conventional systems. This configuration also leads to the reduction of side lobes in the effective transducer aperture.

The package also includes a 2-16 kHz subbottom profiler. Separate hydrophones are mounted to the underside of the tow fish to provide a narrow acoustic beam. The transmitters and receivers are designed to operate over a large contiguous bandwidth. The system takes advantage of built-in de-convolution of the system response from the output pulse. The sonar's measured system impulse response is used to design a unique output pulse that will prevent the source from ringing. The wavelet is also weighted in the frequency domain to have a Guassian like shaped such that when the signal is attenuated it looses energy but preserves bandwidth and thus resolution.

EDGETECH FULL SPECTRUM DEEP TOW SYSTEM

Specifications:

Full Spectrum Chirp Side Scan Sonar

Modulation	Full Spectrum Chirp Frequency Modulated Pulse with amplitude and phase weighting
Dual Frequency Combinations	75/410 kHz or 120/410 kHz

Common

Vertical Beam Width	70°
Depression Angle	adjustable: 10°,15°,20° from vertical
A/D Resolution 1	6 bits
Sample Rate	940 K samples per record

Frequency Specific

Center Frequency	75 kHz	120 kHz	410 kHz
Pulse Bandwidth	7.5 kHz	12 kHz	41 kHz
Pulse Length	13 ms	8.3 ms	2.4 ms
Range Scale Selection (per side)	50-1250 m	25-500 m	12.5-100 m
Maximum Ping Rate	15 pps	30 pps	60 pps
Range Resolution	10 cm	6.25 cm	1.8 cm
Horizontal 3 dB Beam Width	0.8°	0.8°	0.5°
Transmit Power	200 Watts	200 Watts	160 Watts
Peak Source Level	210 dB	210 dB	216 dB
	(ref = 1µPa @ 1 m)		
Receiver Sensitivity	-190 dB	-190 dB	-196 dB
	(ref = 1 V/µPa @ center frequency)		

Full Spectrum Chirp Subbottom Profiler

Modulation	Full Spectrum Chirp Frequency Modulated Pulse with amplitude and phase weighting
Source Level	200 dB re 1 µPa at one meter
Transmit Power	200 Watts
Receive Sensitivity	-204 dB re 1 µPa at one meter
Receiver Variable Gain	38 – 105 dB, automatic or manual control
Noise Level	70 dB re 1 µPa at one meter over sonar bandwidth (at hydrophone input)
Pulse Repetition Frequency	15 Hz maximum
Calibration	Each system is acoustic tank tested to calibrate for reflection coefficient measurements

Frequency Band	2 – 16 kHz
Number of Hydrophone Arrays	2
Pulse Selections	2 - 15 kHz / 20 ms 2 - 12 kHz / 20 ms 2 – 10 kHz / 20 ms
Resolution	6 – 10 cm
Beam Width	15° - 25°

SATLOC® DIFFERENTIAL GPS

The United States Department of Defense (DOD) has deployed a satellite based navigation system that incorporates 24 satellites known as the Global Positioning System (GPS). This navigation system allows its users to determine position; velocity and time anywhere on earth 24 hours a day. The basic stand-alone accuracy of GPS is 15-20 meters. The DOD does not want the users of the GPS to be allowed such accurate positioning, so deliberate range degradation, known as Selective Availability (SA) may be applied. This makes GPS's stand alone accuracy 50-100 meters. This performance will not meet the accuracy of the client or the Minerals Management Service for geophysical data acquisition. In order to achieve survey quality accuracy of GPS, differential corrections must be applied.

The pseudo- range errors, which are dithered by DOD and transmitted through the GPS satellites, can be determined by placing a GPS receiver at a known geodetic point, thus determining the required corrections. By determining the range and bearing of the erroneous signal, the error or differential correction can be relayed via satellite or radio telemetry link to users who are located within the base station coverage area. This GPS technique has proven to be particularly effective and accuracies in the sub meter range have been achieved when utilizing a Wide Area Differential GPS network.

The SATLOC® differential GPS system is a wide area differential system which utilizes fourteen base stations scattered across the United States and Canada. The algorithms used for the network were developed and tested at the Jet Propulsion Laboratory (JPL) prior to being used commercially. User position accuracy for single-frequency receiver is at the level of 1 to 3 meters in the dynamic state.

SONARDYNE ULTRA-SHORT BASELINE SYSTEM (USBL)

and fixed. The baselines between elements are only a few centimeters in length, hence the term "ultra-short baseline". When the acoustic interrogation frequency is transmitted to a transponder in the water, a timer begins. The transponder sends back an acoustic response through the water column. Upon reception of the acoustic response by each of the elements in the transducer head, the timer stops. The central processing unit (CPU) calculates the time from send to receive and the phase difference in the reception of the return acoustic transmission by each element in the transducer head. The CPU can then determine by resection the azimuth, slant range depression angle to the transponder or responder.

There are four (4) major areas of concern to the overall accuracy of the absolute position of a USBL tie. At the top of the list is the accuracy of the surface positioning system used. The accuracy of the SATLOC® differential GPS System used on the project was 2 to 3 meters. The second item that is subject to degrade the accuracy of the USBL position is the gyrocompass (gyro). Most gyros in use today have some drift and are subject to error for latitude above or below the equator. Typically, the accuracy of a survey standard gyro is plus or minus one degree ($\pm 1°$). Since the azimuth of the remote unit is relative to the bow heading of the vessel, the actual position of the remote transponder being tracked is subject to this gyro error. If the remote unit is directly below the USBL transducer, there is no appreciable error in the calculated position that is directly attributable to the gyro error. However, as the remote moves out in any direction from being directly beneath the USBL transducer, the horizontal position calculated by the acoustic positioning computer will have a certain amount of error that is attributable to the gyro error. The farther the transducer and remote are separated in the horizontal plane, the more error in the position.

Next on the list of major areas of influential error for the USBL position is the effect of heave, pitch, and roll of the USBL transducer caused by sea conditions. A state-of -the-art compensator is tied to

SONARDYNE ULTRA-SHORT BASELINE SYSTEM (USBL)

the CPU to null the dynamics of the sea conditions. The speed of sound through the water column is also of great concern. Since the slant ranges measured with the USBL System is determined by the actual speed of sound through the water column, it is particularly important to measure the speed of sound through water as accurately as possible. Using the velocimeter data, a harmonic mean velocity function can be generated to convert the traveltime between the vessel and remote vehicle.

SEABIRD SEACAT 19 CTD PROFILER

The Seacat SBE 19-01 Profiler from Sea-Bird Electronics, Inc., measures electrical conductivity and temperature versus pressure (depth) in marine environments to depths up to 6,800 meters (22,309 feet). The maximum sampling rate is 2 scans per second. Self-powered and self-contained, the SBE 19 features proven Sea-Bird conductivity and temperature sensors and a precision semiconductor strain-gauge pressure transducer. A 64 kilobyte solid-state memory allows 1.5 hours of recording (6 hours with optional 256 kilobyte memory) while sampling at two scans per second. Set-up, check-out, and data extraction are performed without opening the housing. Simultaneous real time monitoring is possible using the Seacat Profiler's two wire RS-232C transmit capability. Sea-Bird's powerful Seasoft CTD software derives salinity, density, sound velocity, and other ocean parameters from stored CTD (conductivity, temperature, depth) and may be used for data analysis, plotting and archival. Small external sensors may be powered and their frequency or voltage outputs acquired by the SBE 19.

Seacat Profiler options include 1) aluminum housings for use to 3,400 or 6,800 meters; 2) 256 kilobyte memory; 3) an extra bulkhead connector for auxiliary inputs; 4) SBE 5 submersible pump for pumped conductivity; 5) an opto-isolated junction box for supplying power and interconnecting Seacat Profiler and a companion computer which is necessary when using the Profiler in real-time mode.

Use of conductivity, temperature, and depth measurement for determination of sound velocity is appealing because these instruments are simpler and more rugged and because resolution, accuracy, and stability lead to better precision than can be obtained with direct sound velocity measuring devices. Three equations are widely used for deriving sound velocity from CTD data (Wilson, 1959; Del Grosso, 1972; Millero and Chen, 1977). Absolute sound velocities derived

SEABIRD SEACAT 19 CTD PROFILER

from these equations differ on the order of .5 meter/second for various combinations of water temperature, salinity, and pressure. The work of Millero and Chen is the most modern and builds upon and attempts to incorporate the work of the earlier investigators. Millero and Chen's 1977 equation is used in the Sea-Bird Seasoft software, and is the one which is endorsed by the Unesco/SCOR/ICES/IASPO Joint Panel on Oceanographic Tables and Standards which comprises the internationally recognized authority for measurements of ocean parameters.

Specifications:

	Measurement Range	Initial Accuracy	Resolution	Sensor Calibration
Conductivity	0 to 7 S/m	+/- 0.001 S/m	+/- 0.0001 S/m	0 – 7 S/m Physical calibration over the range 1.4 to 6 S/m, plus zero conductivity (air)
Temperature (°C)	-5 to + 35	+/- 0.01	+/-0.001	-1 to +31 (Measurements outside this range may be at slightly reduces accuracy due to extrapolation errors)
Depth	68 to 1000 m	+/- 0.25%	+/- 0.015%	Minimum 5 values between 0 and full scale

SONARDYNE ULTRA-SHORT BASELINE SYSTEM (USBL)

The Sonardyne, Inc Model 7784 USBL System is an integrated, ultra-short baseline acoustic tracking system designed to operate with up to ten targets for a wide range of subsea navigation and relocation tasks. The target types consist of transponders or responders. The system is microprocessor-based, and consists of a hydrophone assembly, interconnecting deck cable and command/display module. Configurations for towed fish tracking, vessel positioning, and subsea relocation are operator controlled using a keypad entry system. The USBL transducer was mounted on a pole over the side of the vessel. The transducer is aligned with the bow heading as accurately as possible.

The USBL system presents the user with a video display of the underwater position of the target relative to a chosen reference point on the surface vessel. In addition to the graphic display of the target position, the USBL system displays digital values for azimuth and range to each target. Up to ten targets may be tracked and displayed simultaneously. For this application, updates on position are set at 5-second updates.

The system measures the range and direction of a beacon relative to the known location and orientation of the transceiver housing. Beacon range may be calculated by measuring the elapsed time between the interrogation signal and the detection of the beacon reply. Beacon bearing may be calculated by measuring the difference in "time - phase" between signals in a number of pairs of acoustic receiving elements on the front face of the transceiver. The USBL transducer head contains three or more elements that can both transmit an interrogation and receive the acoustic reply. The elements are positioned such that each element is in a different plane. In other words, the elements are in a phased array describing an equilateral triangle. The separations between elements are known

DEEP WATER ECHOTRAC

The Deep Water Echotrac echo sounder by ODOM Hydrographic Systems, Inc. collects analog paper records as well as digitized depth information for output to a data logger. Digital depth data can be logged directly to the navigation computer along with date, time, and position for later post processing and mapping. The system includes a recording unit with built in digitizer, interface cables, winch, tow cable, and a towed transducer/receiver. The unit utilizes a combination of dynamic gating and velocity fit to track the true bottom through advanced microprocessor technology, solving the normal problems associated with conventional depth sounders.

The acoustic pulse is generated with an Airmar 24 kHz transducer that operates with a beam width of 11°. A 12 kHz option will hopefully be available in the near future. The fish is housed in a towfish and is usually towed off the stern below the cavitation of the vessel. Power output to the transducer is controlled by analog control on the topside recorder. The 24-kHz transducer is capable of recording to depths of 3,000 meters.

A thermal paper recording is printed in real-time where automated scale changes prevent the bottom from "running" off the chart. Scale widths are selectable in meters, 2 to 1,000, or feet, 10 to 3,000. Key system parameters, i.e. velocity of sound, draft, and time are input from the recorder's front panel. Four bi-directional RS-232 serial ports control logging of the digital data values and annotation. Up to 80 characters can be annotated at the fix mark line. Standard NEMA formats from GPS receivers as well as proprietary strings from positioning and navigation computers can be accepted. Heave compensation is provided over a dedicated RS-232 serial port.

DEEP WATER ECHOTRAC

Specifications:

Dual Frequency Combinations	12 or 24 kHz
Depth Range	3,000 meters (9,842 feet)
Input Velocity	1,370 to 1,700 m/sec (4,500 to 5,600 ft/sec)
Hardcopy Width	216 mm (8.5")
Thermal Printer Gray Shades	16
Interfacing	4 bi-directional RS-232 Ports
Draft	0 to 50 meters (0 to 164 feet)
Repetition Rate	1 to pings/sec
Noise Filter	On/Off

- **Unit Dimensions**
  Height: 470 mm (18.5")
  Width: 432 mm (17")
  Depth: 279 mm (11")

- **Weight**
  21.7 kg (48 lbs)

- **Power Requirements**
  110/220 VAC (50/60 Hz)

TRANSDUCER PERFORMANCE DATA	
Frequency – Airmar Piezoceramic Designator	24 kHx – G
Frequency Tolerance (kHz)	+- 1.0
Element Material/Quantity x Diameter (mm)	PZT/L/(30 x 5)
Beam Width at -3 dB	11°
Beam Width at –6 dB	15°
Beam Width at –10 dB	18°
Rated RMS Power	7 kW
Voltage Responses: Transmit/Receive (dB)	171/-165
Figure of Merit (Insertion Loss) (dB)	-2
Parallel impedance Resistance (Ohm) Capacitance (pF)	60 9
Series Impedance (R-jx)	60 – j0
Acoustic Window Material	Urethane

OIC SWATH

This software package, which runs under the Unix Windows operating system, is able to display, post-process and mosaic side scan data in gridded databases that can be exported for chart plotting. The database structure for processing data is called an Operational Area or a Keeper Mosaic, where eventually all the processed swaths will be merged to. For each Operational Area, a set of processing parameters must be defined, such as center point (longitude/latitude, X/Y), width and length in meters, orientation with respect to north of the length axis and grid resolution. An Operational Area is the Keeper for the mosaic, which will be composed of sub-areas or swaths. A line with a set of 100K pings collected in time sequential order is defined as a swath.

Data can be edited and corrected on the image or on the meta-data while processing swaths. For this purpose, OICSwath has tools and attitudes to filter, interpolate and correct navigation points, heading, course, pitch, roll, depth, altitude (ProcessLine), beam pattern (AVG - Angle varying Gain), resolution (LUT - side scan LookUp Table), Time - Varying Gain (TVG).

Processed data in swath grids is UTM projected in X/Y coordinates. Swath files are generated after editing and may be displayed individually or as adjacent tracks of gridded data in order to evaluate the data within and between adjacent swaths. After a swath is processed, it is automatically shown in the Map Editor for further processing such as filtering, and merging swaths. Overlapping layers can be combined in the Clip Editor using a Front, Back, Min, Max, Average and Feathered method to merge the swaths into the Keeper Mosaic. Swaths are merged into the Keeper Mosaic individually.

INSTRUMENT SETTINGS

CONTINENTAL SHELF & ASSOCIATES
TWO-BOAT SHOOT SURVEY
PRE-EXPLORATION SITE
BLOCK 916, VIOSCA KNOLL AREA

EDGETECH SUBBOTTOM PROFILER
Record Length = 100 msecs. (delay in meters)
Record Divisions = 10 msecs.
Frequency = 2 to 10 kiloHertz
Pulse Width = 20 msec.
Data files stored digitally in XTF format.

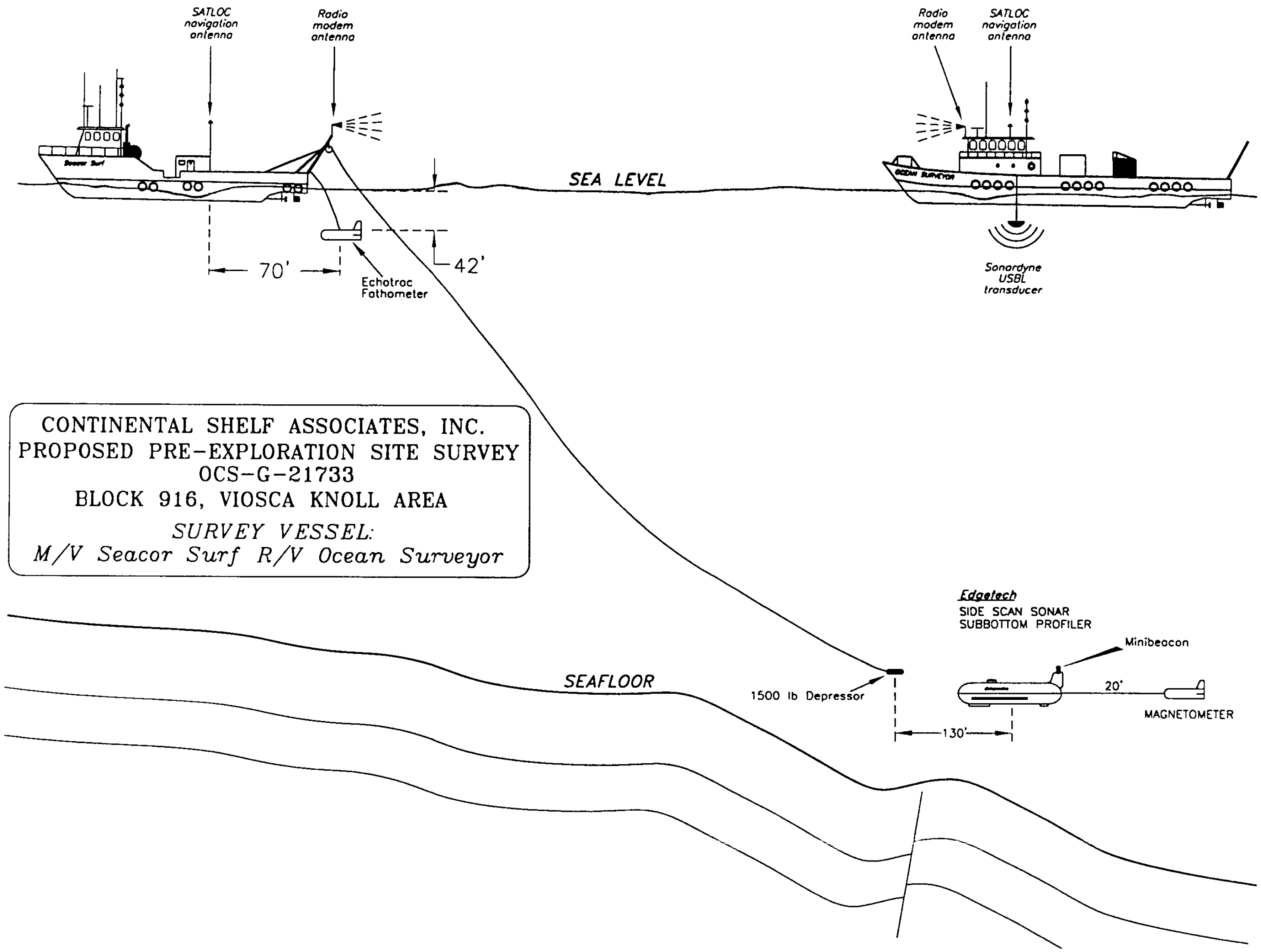
EDGETECH SIDE SCAN SONAR
Range = 200 to 250 meters per channel
Record Divisions = 25 meters
Frequencies = 120 kiloHertz (Low Frequency)
= 420 kiloHertz (High Frequency)
Data files stored digitally in XTF format

ECHOTRAC DEEP-WATER FATHOMETER
Record Length = Variable
Record Divisions = Variable
Frequency = 24 kHz
Pulse Width = 20 msec.
Setback = 70'
Tow Depth = 42'

SURVEY VESSEL
M/V Seacor Surf
Average speed during survey = 2.5 to 3 knots
Navigation center = 61 feet ahead of stern
Survey sea state = 1 - 7 foot seas

R/V Ocean Surveyor
Average speed during survey = 2.5 to 3 knots
Navigation center = 60 feet ahead of stern
Survey sea state = 1 - 7 foot seas

DEEP-TOW SYSTEM

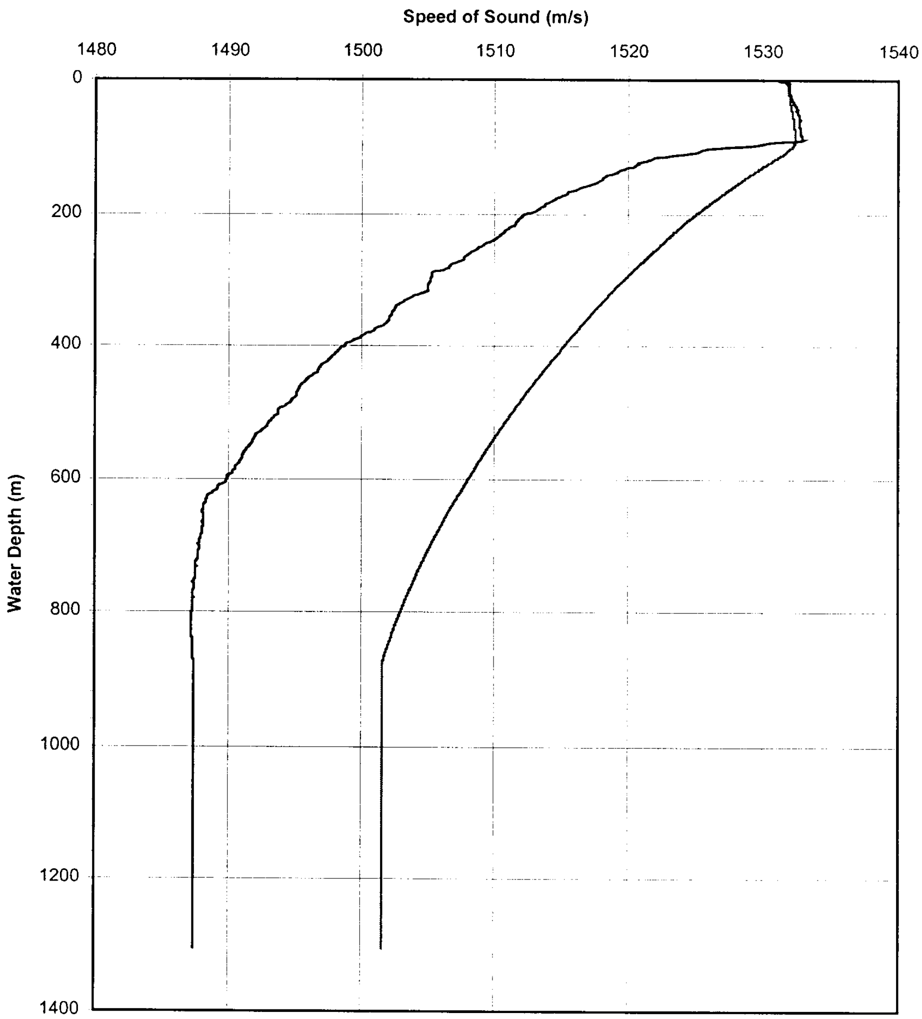


C & C TECHNOLOGIES, INC.
SURVEY SERVICES
730 EAST KALISTE SALOOM ROAD, LAFAYETTE, LA 70508

APPENDIX B

VELOCIMETER DATA
VELOCIMETER PROFILES

MMS/CSA SITE SURVEY
Viosco Knoll 916



11/28/00 Viosco Knoll 916
Lattitude: 29° 06' 24"
Longitude: 087° 53' 19"

Sound Velocity
Haromic Mean

Water Depth (m)	Water Depth (m)	Water Depth (m)	Water Depth (m)	Water Depth (m)	Water Depth (m)	Water Depth (m)	Water Depth (m)
1	1531.3	59	1532.8	117	1521.9	175	1514.7
2	1531.3	60	1532.8	118	1521.8	176	1514.6
3	1531.9	61	1532.7	119	1521.7	177	1514.6
4	1531.9	62	1532.7	120	1521.5	178	1514.5
5	1532	63	1532.7	121	1521.4	179	1514.4
6	1532	64	1532.7	122	1521.1	180	1514.3
7	1532	65	1532.7	123	1520.9	181	1514.2
8	1532	66	1532.7	124	1520.7	182	1514.1
9	1532	67	1532.7	125	1520.8	183	1514
10	1532	68	1532.7	126	1520.7	184	1513.8
11	1532	69	1532.7	127	1520.6	185	1513.8
12	1531.9	70	1532.7	128	1520.5	186	1513.8
13	1531.9	71	1532.8	129	1520.5	187	1513.8
14	1531.9	72	1532.8	130	1520.4	188	1513.6
15	1532	73	1532.8	131	1520	189	1513.5
16	1532	74	1532.8	132	1519.8	190	1513.4
17	1532	75	1532.8	133	1519.8	191	1513.4
18	1532	76	1532.8	134	1519.5	192	1513.4
19	1532	77	1532.8	135	1519.4	193	1513.2
20	1532	78	1532.8	136	1519.3	194	1513.2
21	1532	79	1532.8	137	1519.2	195	1513.1
22	1532.1	80	1532.8	138	1519.2	196	1513
23	1532.1	81	1532.8	139	1519	197	1512.8
24	1532.1	82	1532.8	140	1518.9	198	1512.5
25	1532.1	83	1532.9	141	1518.7	199	1512.4
26	1532.1	84	1532.9	142	1518.4	200	1512.2
27	1532.1	85	1532.9	143	1518.4	201	1512.2
28	1532.2	86	1532.9	144	1518.3	202	1512.1
29	1532.2	87	1532.9	145	1518.2	203	1512.1
30	1532.2	88	1532.9	146	1518.1	204	1512
31	1532.2	89	1533	147	1518.1	205	1512
32	1532.3	90	1532.9	148	1518.1	206	1511.9
33	1532.3	91	1532.5	149	1518	207	1511.8
34	1532.3	92	1531.4	150	1517.9	208	1511.8
35	1532.3	93	1530.8	151	1517.8	209	1511.8
36	1532.4	94	1530.4	152	1517.7	210	1511.7
37	1532.4	95	1530.2	153	1517.7	211	1511.7
38	1532.4	96	1529.9	154	1517.5	212	1511.6
39	1532.5	97	1529.7	155	1517.4	213	1511.6
40	1532.5	98	1529.3	156	1517.2	214	1511.6
41	1532.5	99	1528.6	157	1517.1	215	1511.6
42	1532.5	100	1527.7	158	1516.9	216	1511.5
43	1532.6	101	1527	159	1516.7	217	1511.5
44	1532.6	102	1526.4	160	1516.5	218	1511.3
45	1532.5	103	1526	161	1516.4	219	1511.2
46	1532.5	104	1525.7	162	1516.3	220	1511.1
47	1532.6	105	1525.5	163	1516.2	221	1511.1
48	1532.6	106	1525.4	164	1516.1	222	1511
49	1532.6	107	1525.3	165	1515.9	223	1510.9
50	1532.6	108	1525.2	166	1515.7	224	1510.8
51	1532.6	109	1524.9	167	1515.5	225	1510.8
52	1532.7	110	1524.5	168	1515.5	226	1510.7
53	1532.7	111	1524.2	169	1515.5	227	1510.7
54	1532.7	112	1523.6	170	1515.4	228	1510.6
55	1532.7	113	1523.2	171	1515.3	229	1510.5
56	1532.7	114	1523	172	1515.1	230	1510.5
57	1532.7	115	1522.6	173	1515	231	1510.4
58	1532.7	116	1522	174	1514.9	232	1510.4

Water Depth (m)	Speed of Sound (m/s)	Water Depth (m)	Speed of Sound (m/s)	Water Depth (m)	Speed of Sound (m/s)	Water Depth (m)	Speed of Sound (m/s)
233	1510.3	291	1505.3	349	1502.3	408	1498.2
234	1510.2	292	1505.3	350	1502.3	409	1498.2
235	1510.2	293	1505.3	351	1502.3	410	1498.1
236	1510.1	294	1505.3	352	1502.3	411	1498
237	1510	295	1505.2	353	1502.2	412	1498
238	1509.9	296	1505.2	354	1502.2	413	1498
239	1509.8	297	1505.2	355	1502.1	414	1497.9
240	1509.7	298	1505.2	356	1502.1	415	1497.8
241	1509.5	299	1505.2	357	1502.1	416	1497.8
242	1509.4	300	1505.2	358	1502.1	417	1497.7
243	1509.3	301	1505.2	359	1502.1	418	1497.7
244	1509.2	302	1505.1	360	1502.1	419	1497.6
245	1509.2	303	1505.1	361	1502.1	420	1497.6
246	1509.1	304	1505.1	362	1502	421	1497.5
247	1509	305	1505	363	1502	422	1497.5
248	1508.8	306	1505	364	1501.9	423	1497.5
249	1508.8	307	1505	365	1501.9	424	1497.4
250	1508.7	308	1505	366	1501.8	425	1497.3
251	1508.7	309	1505	367	1501.7	426	1497.2
252	1508.6	310	1505	368	1501.7	427	1497.1
253	1508.5	311	1505	369	1501.6	428	1497
254	1508.4	312	1505	370	1501.5	429	1497
255	1508.3	313	1505	371	1501.3	430	1496.9
256	1508.2	314	1505	372	1501.2	431	1496.9
257	1508.2	315	1505	373	1501.1	432	1496.9
258	1508.1	316	1505	374	1501	433	1496.8
259	1508	317	1504.8	375	1501	434	1496.8
260	1508	318	1504.7	376	1501	435	1496.8
261	1507.9	319	1504.5	377	1500.9	436	1496.7
262	1507.8	320	1504.4	378	1500.8	437	1496.7
263	1507.8	321	1504.3	379	1500.7	438	1496.7
264	1507.7	322	1504.1	380	1500.4	439	1496.7
265	1507.7	323	1503.9	381	1500.3	440	1496.7
266	1507.7	324	1503.9	382	1500.3	441	1496.6
267	1507.7	325	1503.8	383	1500.2	442	1496.4
268	1507.6	326	1503.7	384	1500.1	443	1496.4
269	1507.5	327	1503.6	385	1500	444	1496.3
270	1507.3	328	1503.5	386	1500	445	1496.3
271	1507.2	329	1503.4	387	1499.9	446	1496.2
272	1507.1	330	1503.3	388	1499.9	447	1496.1
273	1506.9	331	1503.2	389	1499.7	448	1496
274	1506.8	332	1503.2	390	1499.6	449	1496
275	1506.7	333	1503.1	391	1499.4	450	1495.9
276	1506.7	334	1503	392	1499.4	451	1495.9
277	1506.7	335	1502.9	393	1499.3	452	1495.8
278	1506.6	336	1502.8	394	1499.2	453	1495.8
279	1506.6	337	1502.8	395	1499.1	454	1495.7
280	1506.6	338	1502.6	396	1498.9	455	1495.7
281	1506.4	339	1502.6	397	1498.8	456	1495.6
282	1506.3	340	1502.6	398	1498.8	457	1495.5
283	1506.2	341	1502.6	399	1498.8	458	1495.5
284	1505.9	342	1502.5	400	1498.7	459	1495.4
285	1505.5	343	1502.5	401	1498.7	460	1495.4
286	1505.4	344	1502.5	402	1498.5	461	1495.4
287	1505.3	345	1502.5	403	1498.4	462	1495.3
288	1505.3	346	1502.4	404	1498.4	463	1495.3
289	1505.3	347	1502.4	406	1498.3	464	1495.3
290	1505.3	348	1502.3	407	1498.2	465	1495.3

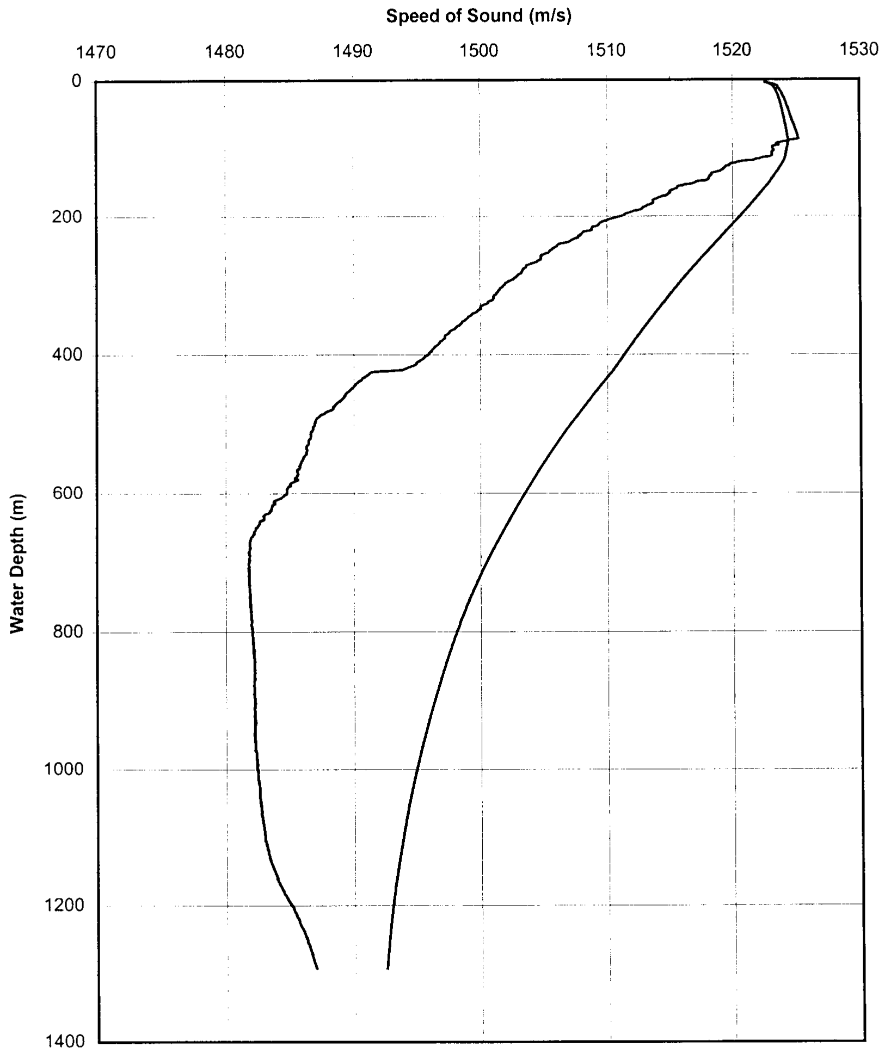
Water Depth (m)	Speed of Sound (m/s)	Water Depth (m)	Speed of Sound (m/s)	Water Depth (m)	Speed of Sound (m/s)	Water Depth (m)	Speed of Sound (m/s)
466	1495.2	524	1492.7	583	1490.5	641	1488.1
467	1495.2	525	1492.6	584	1490.5	642	1488.1
468	1495.2	526	1492.5	585	1490.5	643	1488.1
469	1495.2	527	1492.5	586	1490.4	644	1488.1
470	1495.1	528	1492.4	587	1490.3	645	1488.1
471	1495.1	529	1492.4	588	1490.3	646	1488.1
472	1495.1	530	1492.3	589	1490.3	647	1488
473	1495.1	531	1492.2	590	1490.3	648	1488
474	1495.1	532	1492.1	591	1490.3	649	1488
475	1495.1	533	1492.1	592	1490.2	650	1488
476	1495.1	534	1492	593	1490	651	1488.1
477	1495	535	1492	594	1490	652	1488.1
478	1495	536	1492	595	1490	653	1488.1
479	1494.9	537	1492	596	1490	654	1488.1
480	1494.8	538	1491.9	597	1489.9	655	1488.1
481	1494.8	539	1491.9	598	1489.9	656	1488.1
482	1494.7	540	1491.9	599	1489.9	657	1488.1
483	1494.7	541	1491.8	600	1489.9	658	1488.1
484	1494.7	542	1491.8	601	1489.8	659	1488.1
485	1494.6	543	1491.8	602	1489.8	660	1488.1
486	1494.6	544	1491.8	603	1489.8	661	1488.1
487	1494.5	545	1491.8	604	1489.8	662	1488.1
488	1494.4	546	1491.7	605	1489.7	663	1488
489	1494.3	547	1491.7	606	1489.6	664	1488
490	1494.3	548	1491.7	607	1489.5	665	1488
491	1494.2	549	1491.6	608	1489.3	666	1488.1
492	1494.1	550	1491.6	609	1489.3	667	1488.1
493	1493.9	551	1491.5	610	1489.2	668	1488.1
494	1493.8	552	1491.5	611	1489.2	669	1488.1
495	1493.8	553	1491.4	612	1489.2	670	1488.1
496	1493.7	554	1491.4	613	1489.2	671	1488
497	1493.7	555	1491.3	614	1489.2	672	1488
498	1493.7	556	1491.3	615	1489.1	673	1488
499	1493.7	557	1491.3	616	1489.1	674	1488
500	1493.7	558	1491.2	617	1489	675	1488
501	1493.7	559	1491.2	618	1488.9	676	1488
502	1493.7	560	1491.1	619	1488.8	677	1488
503	1493.7	561	1491.1	620	1488.8	678	1488
504	1493.6	562	1491.1	621	1488.8	679	1488
505	1493.5	563	1491.1	622	1488.6	680	1488
506	1493.4	564	1491	623	1488.5	681	1488
507	1493.4	565	1491	624	1488.5	682	1488
508	1493.4	566	1491	625	1488.4	683	1487.9
509	1493.3	567	1491	626	1488.4	684	1487.9
510	1493.2	568	1491	627	1488.4	685	1487.9
511	1493.2	569	1491	628	1488.4	686	1487.9
512	1493.2	570	1490.9	629	1488.4	687	1487.9
513	1493.2	571	1490.9	630	1488.3	688	1487.9
514	1493	572	1490.9	631	1488.3	689	1487.9
515	1493	573	1490.8	632	1488.3	690	1487.8
516	1493	574	1490.8	633	1488.3	691	1487.8
517	1493	575	1490.8	634	1488.3	692	1487.8
518	1492.9	576	1490.8	635	1488.3	693	1487.8
519	1492.9	577	1490.7	636	1488.2	694	1487.8
520	1492.9	579	1490.6	637	1488.2	695	1487.8
521	1492.9	580	1490.5	638	1488.1	696	1487.8
522	1492.8	581	1490.5	639	1488.1	697	1487.7
23	1492.7	582	1490.5	640	1488.1	698	1487.7

Water Depth (m)	Speed of Sound (m/s)	Water Depth (m)	Speed of Sound (m/s)	Water Depth (m)	Speed of Sound (m/s)	Water Depth (m)	Speed of Sound (m/s)
699	1487.8	758	1487.4	816	1487.2	875	1487.4
700	1487.8	759	1487.4	817	1487.2	876	1487.4
701	1487.8	760	1487.4	818	1487.2	877	1487.4
702	1487.8	761	1487.4	819	1487.2	878	1487.4
703	1487.8	762	1487.4	820	1487.2	879	1487.4
704	1487.8	763	1487.4	821	1487.2	880	1487.4
705	1487.8	764	1487.4	822	1487.2	881	1487.4
706	1487.8	765	1487.4	823	1487.2	882	1487.4
707	1487.7	766	1487.4	824	1487.2	883	1487.4
708	1487.7	767	1487.4	825	1487.2	884	1487.4
709	1487.7	768	1487.3	826	1487.2	885	1487.4
710	1487.7	769	1487.3	827	1487.2	886	1487.4
711	1487.7	770	1487.3	828	1487.2	887	1487.4
712	1487.7	771	1487.3	829	1487.2	888	1487.4
713	1487.7	772	1487.3	830	1487.2	889	1487.4
714	1487.7	773	1487.3	831	1487.2	890	1487.4
715	1487.7	774	1487.3	832	1487.2	891	1487.4
716	1487.7	775	1487.3	834	1487.2	892	1487.4
717	1487.7	776	1487.3	835	1487.2	893	1487.4
718	1487.7	777	1487.3	836	1487.2	894	1487.4
719	1487.7	778	1487.3	837	1487.2	895	1487.4
720	1487.7	779	1487.4	838	1487.2	896	1487.4
721	1487.6	780	1487.3	839	1487.3	897	1487.4
722	1487.6	781	1487.3	840	1487.3	898	1487.4
723	1487.6	782	1487.3	841	1487.3	899	1487.4
724	1487.5	783	1487.3	842	1487.3	900	1487.4
725	1487.5	784	1487.3	843	1487.3	901	1487.4
726	1487.5	785	1487.3	844	1487.3	902	1487.4
727	1487.5	786	1487.3	845	1487.3	903	1487.4
728	1487.5	787	1487.3	846	1487.3	904	1487.4
729	1487.5	788	1487.3	847	1487.3	905	1487.4
730	1487.5	789	1487.3	848	1487.3	906	1487.4
731	1487.6	790	1487.3	849	1487.3	907	1487.4
732	1487.6	791	1487.3	850	1487.3	908	1487.4
733	1487.5	792	1487.3	851	1487.3	909	1487.4
734	1487.5	793	1487.3	852	1487.3	910	1487.4
735	1487.5	794	1487.3	853	1487.3	911	1487.4
736	1487.5	795	1487.3	854	1487.3	912	1487.4
737	1487.5	796	1487.3	855	1487.3	913	1487.4
738	1487.5	797	1487.3	856	1487.3	914	1487.4
739	1487.5	798	1487.3	857	1487.3	915	1487.4
740	1487.5	799	1487.3	858	1487.3	916	1487.4
741	1487.5	800	1487.3	859	1487.3	917	1487.4
742	1487.5	801	1487.2	860	1487.3	918	1487.4
743	1487.5	802	1487.2	861	1487.3	919	1487.4
744	1487.5	803	1487.2	862	1487.3	920	1487.4
745	1487.5	804	1487.2	863	1487.3	921	1487.4
747	1487.5	805	1487.2	864	1487.3	922	1487.4
748	1487.5	806	1487.2	865	1487.3	923	1487.4
749	1487.5	807	1487.2	866	1487.3	924	1487.4
750	1487.5	808	1487.2	867	1487.3	925	1487.4
751	1487.4	809	1487.2	868	1487.3	926	1487.4
752	1487.4	810	1487.2	869	1487.3	927	1487.4
753	1487.4	811	1487.2	870	1487.3	928	1487.4
754	1487.4	812	1487.2	871	1487.3	929	1487.4
755	1487.3	813	1487.2	872	1487.4	930	1487.4
756	1487.3	814	1487.2	873	1487.4	931	1487.4
757	1487.4	815	1487.2	874	1487.4	932	1487.4

Water Depth (m)	Speed of Sound (m/s)	Water Depth (m)	Speed of Sound (m/s)	Water Depth (m)	Speed of Sound (m/s)	Water Depth (m)	Speed of Sound (m/s)
933	1487.4	991	1487.4	1049	1487.4	1107	1487.4
934	1487.4	992	1487.4	1050	1487.4	1108	1487.4
935	1487.4	993	1487.4	1051	1487.4	1109	1487.4
936	1487.4	994	1487.4	1052	1487.4	1110	1487.4
937	1487.4	995	1487.4	1053	1487.4	1111	1487.4
938	1487.4	996	1487.4	1054	1487.4	1112	1487.4
939	1487.4	997	1487.4	1055	1487.4	1113	1487.4
940	1487.4	998	1487.4	1056	1487.4	1114	1487.4
941	1487.4	999	1487.4	1057	1487.4	1115	1487.4
942	1487.4	1000	1487.4	1058	1487.4	1116	1487.4
943	1487.4	1001	1487.4	1059	1487.4	1117	1487.4
944	1487.4	1002	1487.4	1060	1487.4	1118	1487.4
945	1487.4	1003	1487.4	1061	1487.4	1119	1487.4
946	1487.4	1004	1487.4	1062	1487.4	1120	1487.4
947	1487.4	1005	1487.4	1063	1487.4	1121	1487.4
948	1487.4	1006	1487.4	1064	1487.4	1122	1487.4
949	1487.4	1007	1487.4	1065	1487.4	1123	1487.4
950	1487.4	1008	1487.4	1066	1487.4	1124	1487.4
951	1487.4	1009	1487.4	1067	1487.4	1125	1487.4
952	1487.4	1010	1487.4	1068	1487.4	1126	1487.4
953	1487.4	1011	1487.4	1069	1487.4	1127	1487.4
954	1487.4	1012	1487.4	1070	1487.4	1128	1487.4
955	1487.4	1013	1487.4	1071	1487.4	1129	1487.4
956	1487.4	1014	1487.4	1072	1487.4	1130	1487.4
957	1487.4	1015	1487.4	1073	1487.4	1131	1487.4
958	1487.4	1016	1487.4	1074	1487.4	1132	1487.4
959	1487.4	1017	1487.4	1075	1487.4	1133	1487.4
960	1487.4	1018	1487.4	1076	1487.4	1134	1487.4
961	1487.4	1019	1487.4	1077	1487.4	1135	1487.4
962	1487.4	1020	1487.4	1078	1487.4	1136	1487.4
963	1487.4	1021	1487.4	1079	1487.4	1137	1487.4
964	1487.4	1022	1487.4	1080	1487.4	1138	1487.4
965	1487.4	1023	1487.4	1081	1487.4	1139	1487.4
966	1487.4	1024	1487.4	1082	1487.4	1140	1487.4
967	1487.4	1025	1487.4	1083	1487.4	1141	1487.4
968	1487.4	1026	1487.4	1084	1487.4	1142	1487.4
969	1487.4	1027	1487.4	1085	1487.4	1143	1487.4
970	1487.4	1028	1487.4	1086	1487.4	1144	1487.4
971	1487.4	1029	1487.4	1087	1487.4	1145	1487.4
972	1487.4	1030	1487.4	1088	1487.4	1146	1487.4
973	1487.4	1031	1487.4	1089	1487.4	1147	1487.4
974	1487.4	1032	1487.4	1090	1487.4	1148	1487.4
975	1487.4	1033	1487.4	1091	1487.4	1149	1487.4
976	1487.4	1034	1487.4	1092	1487.4	1150	1487.4
977	1487.4	1035	1487.4	1093	1487.4	1151	1487.4
978	1487.4	1036	1487.4	1094	1487.4	1152	1487.4
979	1487.4	1037	1487.4	1095	1487.4	1153	1487.4
980	1487.4	1038	1487.4	1096	1487.4	1154	1487.4
981	1487.4	1039	1487.4	1097	1487.4	1155	1487.4
982	1487.4	1040	1487.4	1098	1487.4	1156	1487.4
983	1487.4	1041	1487.4	1099	1487.4	1157	1487.4
984	1487.4	1042	1487.4	1100	1487.4	1158	1487.4
985	1487.4	1043	1487.4	1101	1487.4	1159	1487.4
986	1487.4	1044	1487.4	1102	1487.4	1160	1487.4
987	1487.4	1045	1487.4	1103	1487.4	1161	1487.4
988	1487.4	1046	1487.4	1104	1487.4	1162	1487.4
989	1487.4	1047	1487.4	1105	1487.4	1163	1487.4
)90	1487.4	1048	1487.4	1106	1487.4	1164	1487.4

Water Depth (m)	Speed of Sound (m/s)	Water Depth (m)	Speed of Sound (m/s)	Water Depth (m)	Speed of Sound (m/s)
1165	1487.4	1223	1487.4	1281	1487.4
1166	1487.4	1224	1487.4	1282	1487.4
1167	1487.4	1225	1487.4	1283	1487.4
1168	1487.4	1226	1487.4	1284	1487.4
1169	1487.4	1227	1487.4	1285	1487.4
1170	1487.4	1228	1487.4	1286	1487.4
1171	1487.4	1229	1487.4	1287	1487.4
1172	1487.4	1230	1487.4	1288	1487.4
1173	1487.4	1231	1487.4	1289	1487.4
1174	1487.4	1232	1487.4	1290	1487.4
1175	1487.4	1233	1487.4	1291	1487.4
1176	1487.4	1234	1487.4	1292	1487.4
1177	1487.4	1235	1487.4	1293	1487.4
1178	1487.4	1236	1487.4	1294	1487.4
1179	1487.4	1237	1487.4	1295	1487.4
1180	1487.4	1238	1487.4	1296	1487.4
1181	1487.4	1239	1487.4	1297	1487.4
1182	1487.4	1240	1487.4	1298	1487.4
1183	1487.4	1241	1487.4	1299	1487.4
1184	1487.4	1242	1487.4	1300	1487.4
1185	1487.4	1243	1487.4	1301	1487.4
1186	1487.4	1244	1487.4	1302	1487.4
1187	1487.4	1245	1487.4	1303	1487.4
1188	1487.4	1246	1487.4	1304	1487.4
1189	1487.4	1247	1487.4	1305	1487.4
1190	1487.4	1248	1487.4	1306	1487.4
1191	1487.4	1249	1487.4		
1192	1487.4	1250	1487.4		
1193	1487.4	1251	1487.4		
1194	1487.4	1252	1487.4		
1195	1487.4	1253	1487.4		
1196	1487.4	1254	1487.4		
1197	1487.4	1255	1487.4		
1198	1487.4	1256	1487.4		
1199	1487.4	1257	1487.4		
1200	1487.4	1258	1487.4		
1201	1487.4	1259	1487.4		
1202	1487.4	1260	1487.4		
1203	1487.4	1261	1487.4		
1204	1487.4	1262	1487.4		
1205	1487.4	1263	1487.4		
1206	1487.4	1264	1487.4		
1207	1487.4	1265	1487.4		
1208	1487.4	1266	1487.4		
1209	1487.4	1267	1487.4		
1210	1487.4	1268	1487.4		
1211	1487.4	1269	1487.4		
1212	1487.4	1270	1487.4		
1213	1487.4	1271	1487.4		
1214	1487.4	1272	1487.4		
1215	1487.4	1273	1487.4		
1216	1487.4	1274	1487.4		
1217	1487.4	1275	1487.4		
1218	1487.4	1276	1487.4		
1219	1487.4	1277	1487.4		
1220	1487.4	1278	1487.4		
1221	1487.4	1279	1487.4		
1222	1487.4	1280	1487.4		

MMS/CSA SITE SURVEY
Viosco Knoll 916



12/31/00 Viosco Knoll 916
Lattitude: 29° 01' 22.7"
Longitude: 093° 57' 35.61"

Sound Velocity
Harmonic Mean

Water Depth (m)	Speed of Sound (m/s)	Water Depth (m)	Speed of Sound (m/s)	Water Depth (m)	Speed of Sound (m/s)	Water Depth (m)	Speed of Sound (m/s)
4	1522.62	62	1524.80	120	1520.40	178	1513.66
5	1522.97	63	1524.80	121	1520.24	179	1513.67
6	1523.19	64	1524.85	122	1519.92	180	1513.64
7	1523.37	65	1524.86	123	1519.82	181	1513.58
8	1523.50	66	1524.87	124	1519.75	182	1513.44
9	1523.59	67	1524.89	125	1519.73	183	1513.27
10	1523.61	68	1524.91	126	1519.48	184	1513.13
11	1523.63	69	1524.92	127	1519.43	185	1513.04
12	1523.68	70	1524.95	128	1519.37	186	1512.92
13	1523.72	71	1524.98	129	1519.28	187	1512.86
14	1523.76	72	1524.98	130	1519.25	188	1512.79
15	1523.77	73	1525.00	131	1519.19	189	1512.76
16	1523.82	74	1525.04	132	1519.07	190	1512.66
17	1523.86	75	1525.04	133	1519.02	191	1512.46
18	1523.88	76	1525.07	134	1518.72	192	1512.15
19	1523.92	77	1525.08	135	1518.60	193	1512.06
20	1523.94	78	1525.10	136	1518.33	194	1511.90
21	1523.97	79	1525.12	137	1518.31	195	1511.74
22	1523.97	80	1525.14	138	1518.31	196	1511.51
23	1524.04	81	1525.15	139	1518.32	197	1511.44
24	1524.02	82	1525.17	140	1518.20	198	1511.38
25	1524.06	83	1525.18	141	1518.16	199	1511.28
26	1524.11	84	1525.18	142	1518.14	200	1511.13
27	1524.13	85	1525.19	143	1518.10	201	1510.92
28	1524.15	86	1525.19	144	1518.10	202	1510.74
29	1524.15	87	1524.94	145	1518.09	203	1510.56
30	1524.17	88	1524.53	146	1518.03	204	1510.33
31	1524.20	89	1524.45	147	1517.85	205	1510.14
32	1524.24	90	1524.08	148	1517.30	206	1510.01
33	1524.25	91	1523.90	149	1517.07	207	1509.82
34	1524.26	92	1523.56	150	1516.96	208	1509.65
35	1524.26	93	1523.49	151	1516.87	209	1509.58
36	1524.29	94	1523.60	152	1516.60	210	1509.46
37	1524.30	95	1523.68	153	1516.17	211	1509.37
38	1524.33	96	1523.43	154	1516.05	212	1509.35
39	1524.37	97	1523.19	155	1515.72	213	1509.35
40	1524.38	98	1523.15	156	1515.60	214	1509.27
41	1524.39	99	1523.16	157	1515.58	215	1509.08
42	1524.43	100	1523.19	158	1515.58	216	1508.88
43	1524.46	101	1523.22	159	1515.46	217	1508.83
44	1524.46	102	1523.26	160	1515.31	218	1508.81
45	1524.47	103	1523.29	161	1515.12	219	1508.82
46	1524.51	104	1523.20	162	1515.05	220	1508.81
47	1524.50	105	1523.14	163	1514.99	221	1508.73
48	1524.51	106	1523.13	164	1514.97	222	1508.42
49	1524.54	107	1523.14	165	1515.01	223	1508.15
50	1524.54	108	1523.16	166	1514.95	224	1508.10
51	1524.58	109	1523.16	167	1514.84	225	1508.05
52	1524.59	110	1523.17	168	1514.78	226	1508.02
53	1524.61	111	1523.13	169	1514.70	227	1507.94
54	1524.64	112	1522.94	170	1514.43	228	1507.90
55	1524.64	113	1522.57	171	1514.27	229	1507.79
56	1524.66	114	1522.31	172	1514.13	230	1507.73
57	1524.67	115	1522.07	173	1514.01	231	1507.74
58	1524.68	116	1521.84	174	1513.88	232	1507.59
59	1524.71	117	1521.71	175	1513.74	233	1507.41
60	1524.73	118	1521.14	176	1513.65	234	1507.31
61	1524.75	119	1520.62	177	1513.65	235	1507.21

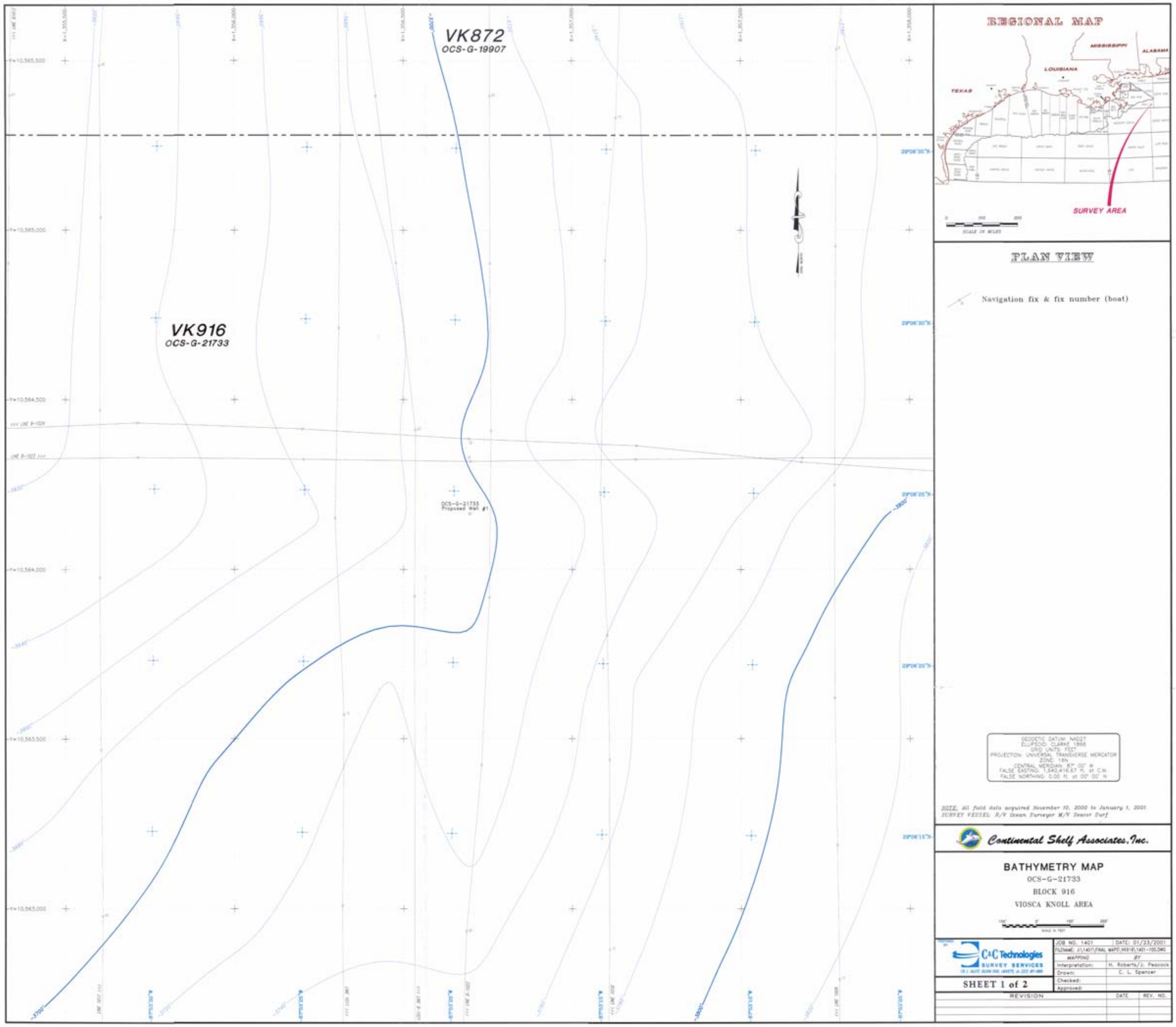
Water Depth (m)	Speed of Sound (m/s)	Water Depth (m)	Speed of Sound (m/s)	Water Depth (m)	Speed of Sound (m/s)	Water Depth (m)	Speed of Sound (m/s)
236	1507.13	294	1502.39	352	1498.68	410	1495.06
237	1507.03	295	1502.23	353	1498.60	411	1494.99
238	1506.92	296	1502.15	354	1498.60	412	1494.97
239	1506.60	297	1502.08	355	1498.55	413	1494.93
240	1506.38	298	1502.01	356	1498.49	414	1494.87
241	1506.18	299	1501.98	357	1498.43	415	1494.78
242	1506.09	300	1501.92	358	1498.39	416	1494.60
243	1506.07	301	1501.87	359	1498.28	417	1494.45
244	1506.04	302	1501.80	360	1498.13	418	1494.34
245	1505.95	303	1501.75	361	1498.11	419	1494.20
246	1505.84	304	1501.69	362	1498.06	420	1494.06
247	1505.74	305	1501.63	363	1498.02	421	1493.95
248	1505.69	306	1501.56	364	1497.93	422	1493.73
249	1505.66	307	1501.53	365	1497.80	423	1492.79
250	1505.55	308	1501.48	366	1497.69	424	1491.91
251	1505.50	309	1501.42	367	1497.60	425	1491.42
252	1505.46	310	1501.41	368	1497.58	426	1491.27
253	1505.38	311	1501.36	369	1497.51	427	1491.21
254	1505.21	312	1501.31	370	1497.49	428	1491.20
255	1505.11	313	1501.28	371	1497.40	429	1491.12
256	1504.95	314	1501.22	372	1497.28	430	1491.02
257	1504.82	315	1501.11	373	1497.23	431	1490.94
258	1504.82	316	1501.11	374	1497.21	432	1490.87
259	1504.83	317	1501.07	375	1497.21	433	1490.75
260	1504.81	318	1501.08	376	1497.22	434	1490.69
261	1504.79	319	1501.06	377	1497.21	435	1490.64
262	1504.81	320	1501.05	378	1497.11	436	1490.61
263	1504.80	321	1501.01	379	1497.01	437	1490.48
264	1504.65	322	1500.92	380	1496.97	438	1490.39
265	1504.56	323	1500.72	381	1496.89	439	1490.36
266	1504.52	324	1500.66	382	1496.83	440	1490.31
267	1504.43	325	1500.64	383	1496.79	441	1490.22
268	1504.24	326	1500.60	384	1496.75	442	1490.16
269	1504.08	327	1500.52	385	1496.72	443	1490.15
270	1503.94	328	1500.35	386	1496.64	444	1490.10
271	1503.80	329	1500.22	387	1496.56	445	1490.05
272	1503.68	330	1500.16	388	1496.48	446	1490.00
273	1503.66	331	1500.07	389	1496.42	447	1489.95
274	1503.66	332	1500.05	390	1496.35	448	1489.87
275	1503.59	333	1500.07	391	1496.32	449	1489.82
276	1503.52	334	1500.09	392	1496.26	450	1489.75
277	1503.39	335	1499.94	393	1496.20	451	1489.72
278	1503.38	336	1499.84	394	1496.18	452	1489.67
279	1503.37	337	1499.85	395	1496.17	453	1489.58
280	1503.32	338	1499.78	396	1496.05	454	1489.51
281	1503.30	339	1499.72	397	1496.01	455	1489.44
282	1503.29	340	1499.63	398	1495.96	456	1489.36
283	1503.25	341	1499.48	399	1495.95	457	1489.36
284	1503.13	342	1499.38	400	1495.87	458	1489.36
285	1503.05	343	1499.36	401	1495.79	459	1489.28
286	1503.03	344	1499.27	402	1495.65	460	1489.25
287	1502.94	345	1499.14	403	1495.61	461	1489.22
288	1502.88	346	1499.06	404	1495.57	462	1489.14
289	1502.83	347	1499.06	405	1495.52	463	1489.12
290	1502.73	348	1498.99	406	1495.47	464	1489.04
291	1502.70	349	1498.92	407	1495.33	465	1488.96
292	1502.65	350	1498.86	408	1495.26	466	1488.96
293	1502.51	351	1498.81	409	1495.20	467	1488.82

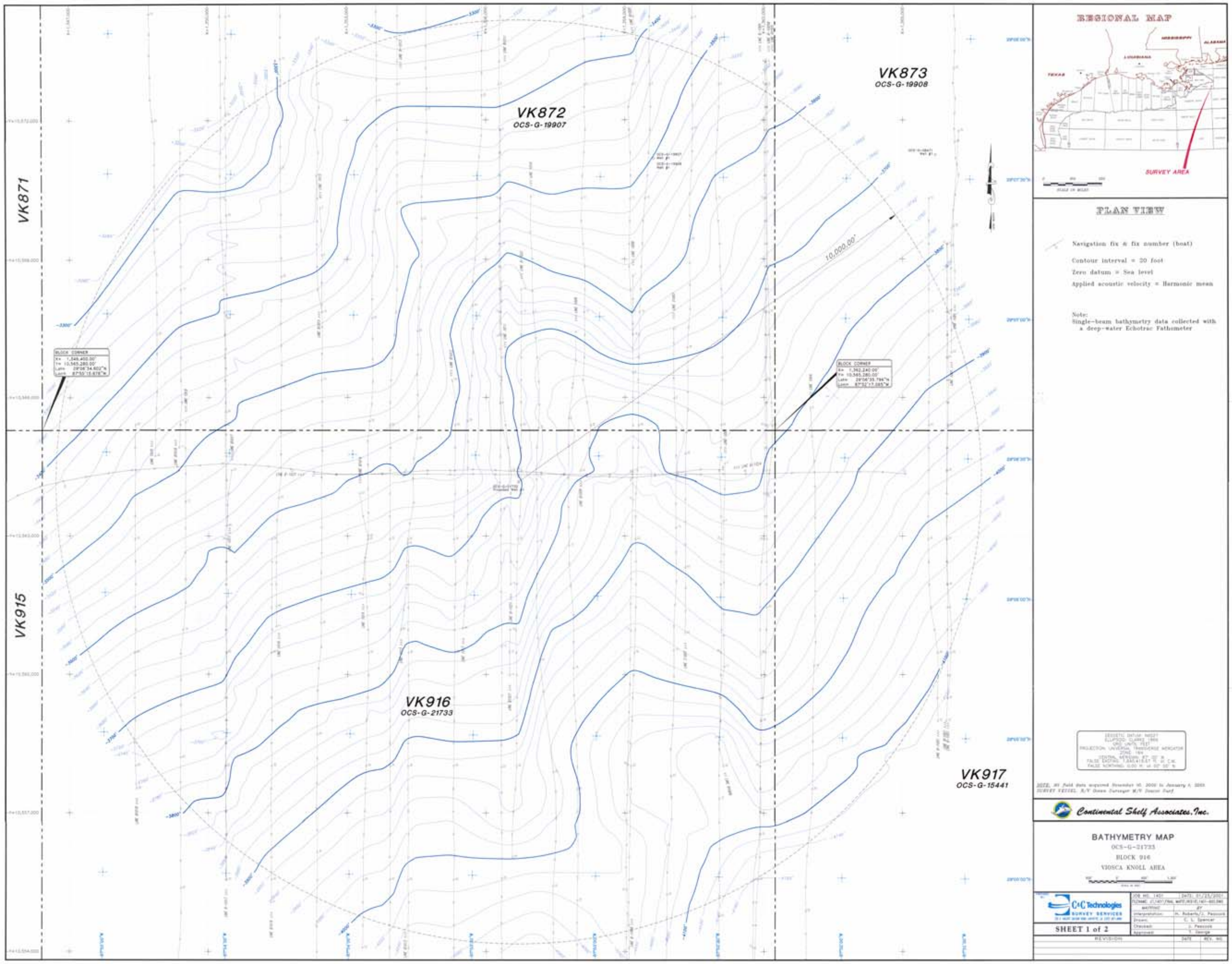
Water Depth (m)	Speed of Sound (m/s)	Water Depth (m)	Speed of Sound (m/s)	Water Depth (m)	Speed of Sound (m/s)	Water Depth (m)	Speed of Sound (m/s)
468	1488.76	526	1486.48	584	1485.12	642	1482.61
469	1488.68	527	1486.46	585	1485.03	643	1482.62
470	1488.66	528	1486.43	586	1484.99	644	1482.65
471	1488.61	529	1486.36	587	1484.98	645	1482.55
472	1488.55	530	1486.30	588	1485.07	646	1482.53
473	1488.50	531	1486.31	589	1485.02	647	1482.51
474	1488.43	532	1486.31	590	1484.89	648	1482.47
475	1488.38	533	1486.30	591	1484.83	649	1482.46
476	1488.39	534	1486.31	592	1484.79	650	1482.32
477	1488.39	535	1486.31	593	1484.77	651	1482.32
478	1488.37	536	1486.32	594	1484.76	652	1482.30
479	1488.26	537	1486.33	595	1484.77	653	1482.30
480	1488.04	538	1486.32	596	1484.78	654	1482.28
481	1487.93	539	1486.31	597	1484.78	655	1482.23
482	1487.81	540	1486.27	598	1484.75	656	1482.18
483	1487.75	541	1486.30	599	1484.75	657	1482.18
484	1487.65	542	1486.28	600	1484.73	658	1482.22
485	1487.48	543	1486.26	601	1484.73	659	1482.19
486	1487.42	544	1486.17	602	1484.63	660	1482.13
487	1487.32	545	1486.13	603	1484.56	661	1482.08
488	1487.31	546	1486.08	604	1484.52	662	1482.09
489	1487.23	547	1486.06	605	1484.44	663	1482.03
490	1487.16	548	1486.06	606	1484.38	664	1481.96
491	1487.10	549	1486.01	607	1484.28	665	1481.94
492	1487.06	550	1486.00	608	1484.25	666	1481.95
493	1487.03	551	1485.99	609	1484.04	667	1481.89
494	1487.00	552	1485.92	610	1483.89	668	1481.89
495	1486.99	553	1485.89	611	1483.77	669	1481.89
496	1487.01	554	1485.88	612	1483.72	670	1481.88
497	1486.97	555	1485.88	613	1483.79	671	1481.83
498	1486.92	556	1485.84	614	1483.81	672	1481.83
499	1486.97	557	1485.82	615	1483.84	673	1481.86
500	1486.95	558	1485.82	616	1483.80	674	1481.85
501	1486.94	559	1485.80	617	1483.65	675	1481.85
502	1486.89	560	1485.75	618	1483.60	676	1481.87
503	1486.83	561	1485.80	619	1483.62	677	1481.86
504	1486.81	562	1485.77	620	1483.55	678	1481.88
505	1486.82	563	1485.77	621	1483.57	679	1481.89
506	1486.84	564	1485.71	622	1483.57	680	1481.89
507	1486.79	565	1485.58	623	1483.54	681	1481.83
508	1486.78	566	1485.55	624	1483.51	682	1481.84
509	1486.75	567	1485.55	625	1483.54	683	1481.84
510	1486.67	568	1485.56	626	1483.42	684	1481.81
511	1486.65	569	1485.59	627	1483.41	685	1481.80
512	1486.63	570	1485.58	628	1483.40	686	1481.77
513	1486.64	571	1485.61	629	1483.32	687	1481.80
514	1486.62	572	1485.65	630	1483.13	688	1481.77
515	1486.63	573	1485.57	631	1483.02	689	1481.82
516	1486.63	574	1485.58	632	1482.99	690	1481.85
517	1486.64	575	1485.54	633	1482.92	691	1481.83
518	1486.62	576	1485.49	634	1482.93	692	1481.83
519	1486.64	577	1485.38	635	1482.95	693	1481.82
520	1486.62	578	1485.44	636	1482.97	694	1481.82
521	1486.52	579	1485.55	637	1482.93	695	1481.81
522	1486.47	580	1485.63	638	1482.93	696	1481.82
523	1486.47	581	1485.47	639	1482.89	697	1481.86
524	1486.50	582	1485.36	640	1482.66	698	1481.80
525	1486.48	583	1485.29	641	1482.62	699	1481.79

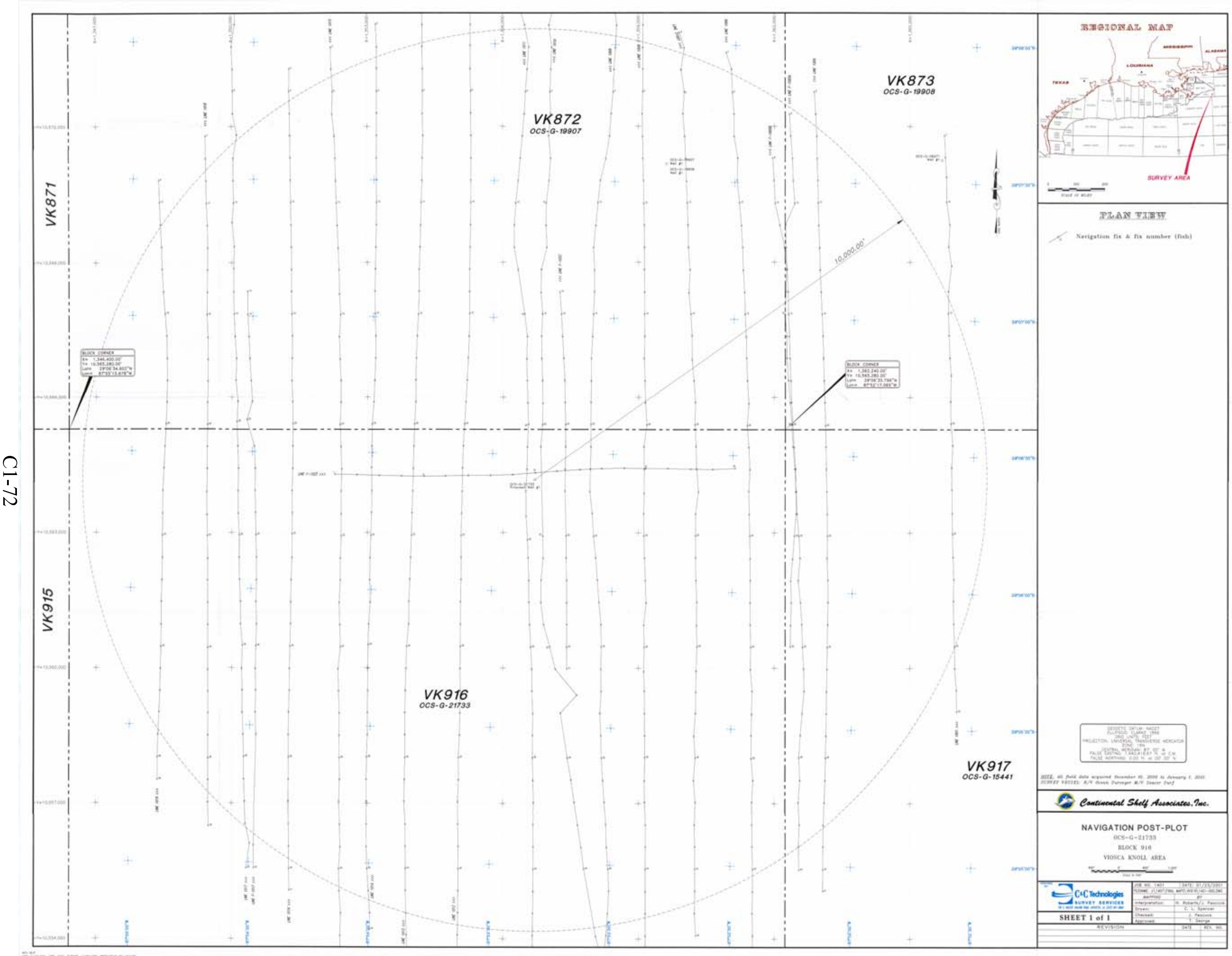
Water Depth (m)	Speed of Sound (m/s)	Water Depth (m)	Speed of Sound (m/s)	Water Depth (m)	Speed of Sound (m/s)	Water Depth (m)	Speed of Sound (m/s)
700	1481.81	758	1481.91	816	1482.06	874	1482.17
701	1481.78	759	1481.88	817	1482.14	875	1482.17
702	1481.75	760	1481.89	818	1482.13	876	1482.18
703	1481.75	761	1481.92	819	1482.11	877	1482.18
704	1481.77	762	1481.92	820	1482.14	878	1482.17
705	1481.78	763	1481.86	821	1482.14	879	1482.18
706	1481.78	764	1481.93	822	1482.12	880	1482.18
707	1481.80	765	1481.91	823	1482.14	881	1482.19
708	1481.79	766	1481.91	824	1482.14	882	1482.17
709	1481.76	767	1481.93	825	1482.15	883	1482.17
710	1481.79	768	1481.94	826	1482.14	884	1482.20
711	1481.77	769	1481.94	827	1482.17	885	1482.21
712	1481.81	770	1481.91	828	1482.13	886	1482.18
713	1481.78	771	1481.97	829	1482.14	887	1482.19
714	1481.77	772	1481.96	830	1482.16	888	1482.19
715	1481.81	773	1481.94	831	1482.13	889	1482.16
716	1481.80	774	1481.94	832	1482.17	890	1482.18
717	1481.79	775	1481.95	833	1482.15	891	1482.21
718	1481.81	776	1481.97	834	1482.15	892	1482.20
719	1481.82	777	1481.96	835	1482.18	893	1482.18
720	1481.78	778	1481.96	836	1482.16	894	1482.22
721	1481.80	779	1481.96	837	1482.18	895	1482.22
722	1481.81	780	1481.97	838	1482.17	896	1482.23
723	1481.82	781	1481.95	839	1482.19	897	1482.23
724	1481.81	782	1481.97	840	1482.21	898	1482.26
725	1481.82	783	1481.98	841	1482.21	899	1482.22
726	1481.83	784	1481.98	842	1482.19	900	1482.23
727	1481.82	785	1482.01	843	1482.22	901	1482.27
728	1481.80	786	1481.99	844	1482.20	902	1482.23
729	1481.79	787	1481.99	845	1482.21	903	1482.24
730	1481.83	788	1481.98	846	1482.19	904	1482.26
731	1481.84	789	1481.98	847	1482.21	905	1482.24
732	1481.82	790	1481.96	848	1482.22	906	1482.22
733	1481.82	791	1481.98	849	1482.18	907	1482.23
734	1481.83	792	1481.99	850	1482.20	908	1482.22
735	1481.82	793	1482.03	851	1482.19	909	1482.21
736	1481.82	794	1482.01	852	1482.18	910	1482.20
737	1481.83	795	1482.03	853	1482.17	911	1482.21
738	1481.84	796	1482.05	854	1482.22	912	1482.20
739	1481.85	797	1482.04	855	1482.23	913	1482.20
740	1481.84	798	1482.02	856	1482.20	914	1482.21
741	1481.87	799	1482.06	857	1482.21	915	1482.23
742	1481.86	800	1482.07	858	1482.23	916	1482.21
743	1481.85	801	1482.04	859	1482.23	917	1482.21
744	1481.86	802	1482.04	860	1482.21	918	1482.21
745	1481.87	803	1482.06	861	1482.21	919	1482.22
746	1481.88	804	1482.05	862	1482.21	920	1482.20
747	1481.90	805	1482.07	863	1482.19	921	1482.22
748	1481.87	806	1482.08	864	1482.22	922	1482.21
749	1481.86	807	1482.07	865	1482.22	923	1482.21
750	1481.89	808	1482.06	866	1482.20	924	1482.21
751	1481.83	809	1482.09	867	1482.24	925	1482.20
752	1481.86	810	1482.10	868	1482.24	926	1482.19
753	1481.87	811	1482.08	869	1482.21	927	1482.23
754	1481.89	812	1482.08	870	1482.18	928	1482.26
755	1481.88	813	1482.10	871	1482.17	929	1482.23
756	1481.87	814	1482.10	872	1482.18	930	1482.24
757	1481.88	815	1482.10	873	1482.17	931	1482.27

Water Depth (m)	Speed of Sound (m/s)	Water Depth (m)	Speed of Sound (m/s)	Water Depth (m)	Speed of Sound (m/s)	Water Depth (m)	Speed of Sound (m/s)
932	1482.23	990	1482.36	1048	1482.65	1111	1483.11
933	1482.22	991	1482.40	1049	1482.63	1112	1483.10
934	1482.26	992	1482.38	1050	1482.62	1113	1483.13
935	1482.24	993	1482.38	1051	1482.66	1114	1483.13
936	1482.20	994	1482.41	1052	1482.64	1115	1483.13
937	1482.23	995	1482.40	1053	1482.66	1116	1483.14
938	1482.24	996	1482.38	1054	1482.65	1117	1483.17
939	1482.24	997	1482.40	1055	1482.69	1118	1483.15
940	1482.25	998	1482.40	1056	1482.67	1119	1483.22
941	1482.23	999	1482.39	1058	1482.70	1120	1483.22
942	1482.25	1000	1482.43	1059	1482.69	1121	1483.21
943	1482.22	1001	1482.41	1061	1482.72	1122	1483.23
944	1482.22	1002	1482.39	1062	1482.72	1123	1483.24
945	1482.22	1003	1482.43	1063	1482.72	1124	1483.25
946	1482.20	1004	1482.45	1064	1482.72	1125	1483.27
947	1482.18	1005	1482.47	1065	1482.71	1126	1483.30
948	1482.23	1006	1482.45	1066	1482.69	1127	1483.30
949	1482.19	1007	1482.43	1067	1482.72	1128	1483.31
950	1482.18	1008	1482.43	1068	1482.73	1129	1483.35
951	1482.22	1009	1482.45	1069	1482.72	1130	1483.33
952	1482.20	1010	1482.44	1070	1482.78	1131	1483.33
953	1482.21	1011	1482.45	1071	1482.76	1132	1483.36
954	1482.21	1012	1482.45	1072	1482.76	1133	1483.39
955	1482.23	1013	1482.46	1073	1482.78	1134	1483.40
956	1482.22	1014	1482.48	1074	1482.80	1135	1483.40
957	1482.23	1015	1482.45	1075	1482.79	1136	1483.43
958	1482.26	1016	1482.46	1076	1482.83	1137	1483.46
959	1482.23	1017	1482.50	1077	1482.82	1138	1483.47
960	1482.22	1018	1482.50	1079	1482.82	1139	1483.50
961	1482.25	1019	1482.53	1080	1482.83	1140	1483.53
962	1482.26	1020	1482.54	1081	1482.87	1141	1483.53
963	1482.24	1021	1482.50	1082	1482.85	1142	1483.57
964	1482.26	1022	1482.54	1083	1482.87	1143	1483.58
965	1482.25	1023	1482.56	1084	1482.86	1144	1483.58
966	1482.26	1024	1482.55	1085	1482.88	1145	1483.64
967	1482.28	1025	1482.56	1086	1482.89	1147	1483.65
968	1482.26	1026	1482.56	1087	1482.89	1148	1483.70
969	1482.25	1027	1482.56	1088	1482.89	1149	1483.71
970	1482.28	1028	1482.55	1089	1482.92	1150	1483.72
971	1482.28	1029	1482.59	1090	1482.93	1151	1483.78
972	1482.25	1030	1482.57	1091	1482.93	1152	1483.77
973	1482.28	1031	1482.55	1093	1482.95	1153	1483.78
974	1482.33	1032	1482.55	1094	1482.95	1154	1483.85
975	1482.32	1033	1482.59	1095	1482.95	1155	1483.85
976	1482.32	1034	1482.57	1096	1482.95	1156	1483.85
977	1482.34	1035	1482.57	1097	1482.98	1157	1483.91
978	1482.32	1036	1482.58	1098	1482.99	1158	1483.93
979	1482.33	1037	1482.60	1099	1482.97	1159	1483.90
980	1482.34	1038	1482.58	1100	1482.96	1160	1483.94
981	1482.35	1039	1482.58	1101	1482.99	1161	1483.91
982	1482.32	1040	1482.58	1103	1482.98	1162	1483.96
983	1482.34	1041	1482.59	1104	1483.02	1163	1483.98
984	1482.35	1042	1482.59	1105	1483.00	1164	1483.98
985	1482.37	1043	1482.60	1106	1482.99	1165	1483.99
986	1482.35	1044	1482.61	1107	1483.06	1166	1484.05
987	1482.37	1045	1482.62	1108	1483.05	1167	1484.05
988	1482.38	1046	1482.61	1109	1483.05	1168	1484.08
989	1482.36	1047	1482.62	1110	1483.09	1169	1484.12

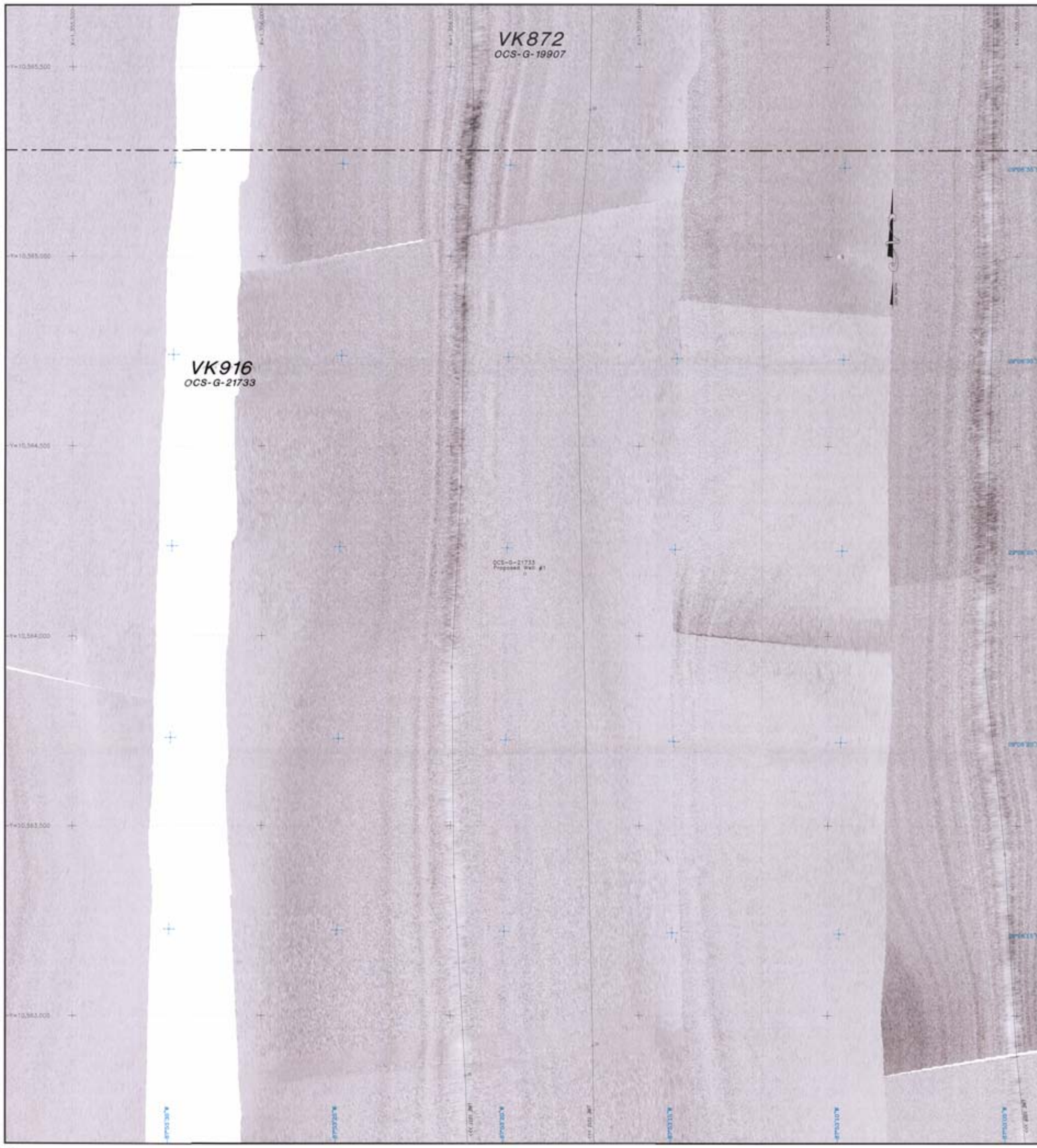
Water Depth (m)	Speed of Sound (m/s)	Water Depth (m)	Speed of Sound (m/s)	Water Depth (m)	Speed of Sound (m/s)
1170	1484.11	1228	1485.73	1286	1486.88
1171	1484.16	1229	1485.76	1287	1486.88
1172	1484.21	1230	1485.78	1288	1486.91
1173	1484.23	1231	1485.80	1289	1486.92
1174	1484.25	1232	1485.83	1290	1486.92
1175	1484.30	1233	1485.86	1291	1486.97
1176	1484.30	1234	1485.90		
1177	1484.32	1235	1485.92		
1178	1484.35	1236	1485.98		
1179	1484.40	1237	1485.99		
1180	1484.42	1238	1486.00		
1181	1484.44	1239	1486.02		
1182	1484.47	1240	1486.06		
1183	1484.49	1241	1486.07		
1184	1484.51	1242	1486.08		
1185	1484.56	1243	1486.11		
1186	1484.59	1244	1486.14		
1187	1484.62	1245	1486.14		
1188	1484.64	1246	1486.18		
1189	1484.71	1247	1486.17		
1190	1484.71	1248	1486.22		
1191	1484.75	1249	1486.24		
1192	1484.78	1250	1486.26		
1193	1484.79	1251	1486.28		
1194	1484.85	1252	1486.27		
1195	1484.88	1253	1486.29		
1196	1484.89	1254	1486.29		
1197	1484.94	1255	1486.33		
1198	1484.98	1256	1486.35		
1199	1485.01	1257	1486.39		
1200	1485.06	1258	1486.39		
1201	1485.08	1259	1486.44		
1202	1485.14	1260	1486.44		
1203	1485.17	1261	1486.43		
1204	1485.17	1262	1486.49		
1205	1485.23	1263	1486.48		
1206	1485.23	1264	1486.52		
1207	1485.24	1265	1486.53		
1208	1485.26	1266	1486.54		
1209	1485.27	1267	1486.57		
1210	1485.32	1268	1486.59		
1211	1485.34	1269	1486.61		
1212	1485.37	1270	1486.61		
1213	1485.41	1271	1486.67		
1214	1485.42	1272	1486.64		
1215	1485.43	1273	1486.65		
1216	1485.44	1274	1486.67		
1217	1485.48	1275	1486.68		
1218	1485.54	1276	1486.69		
1219	1485.54	1277	1486.72		
1220	1485.59	1278	1486.74		
1221	1485.58	1279	1486.76		
1222	1485.62	1280	1486.76		
1223	1485.62	1281	1486.78		
1224	1485.65	1282	1486.80		
1225	1485.65	1283	1486.80		
1226	1485.68	1284	1486.85		
1227	1485.70	1285	1486.86		


VK872
OCS-G-19907
VK916
OCS-G-21733
OCS-G-21733
Proposed Well #1
REGIONAL MAP
MISSISSIPPI
ALABAMA
LOUISIANA
TEXAS
SURVEY AREA
PLAN VIEW
Navigation fix & fix number (boat)
PROJECTION: UNIVERSAL TRANSVERSE MERCATOR
NOTE: All field data acquired November 10, 2000 to January 1, 2001
SURVEY VESSEL: R/V Ocean Surveyor M/V Seacor Surf
Continental Shelf Associates, Inc.
BATHYMETRY MAP
OCS-G-21733
BLOCK 916
VIOSCA KNOLL AREA
C&C Technologies
SURVEY SERVICES
SHEET 1 of 2
JOB NO. 1401
DATE: 01/23/2001
MAPPING
BY
Interpretation:
H. Roberts/J. Peacock
Drawn:
C. L. Spencer
Checked:
Approved:
REVISION
DATE
REV. NO.


REGIONAL MAP
MISSISSIPPI
ALABAMA
LOUISIANA
TEXAS
SURVEY AREA
SCALE IN MILES
PLAN VIEW
Navigation fix & fix number (boat)
Contour interval = 20 foot
Zero datum = Sea level
Applied acoustic velocity = Harmonic mean
Note:
Single-beam bathymetry data collected with a deep-water Echotrac Fathometer
VK871
VK872
OCS-G-19907
VK873
OCS-G-19908
VK915
VK916
OCS-G-21733
VK917
OCS-G-15441
10,000.00'
BLOCK CORNER
Continental Shelf Associates, Inc.
BATHYMETRY MAP
OCS-G-21733
BLOCK 916
VIOSCA KNOLL AREA
C&C Technologies
SURVEY SERVICES
SHEET 1 of 2
REVISION


REGIONAL MAP
TEXAS
LOUISIANA
MISSISSIPPI
ALABAMA
SURVEY AREA
PLAN VIEW
Navigation fix & fix number (fish)
VK871
VK872
OCS-G-19907
VK873
OCS-G-19908
VK915
VK916
OCS-G-21733
VK917
OCS-G-15441
10,000.00'
BLOCK CORNER
BLOCK CORNER
Continental Shelf Associates, Inc.
NAVIGATION POST-PLOT
OCS-G-21733
BLOCK 916
VIOSCA KNOLL AREA
C&C Technologies
SURVEY SERVICES
SHEET 1 of 1
REVISION


REGIONAL MAP
TEXAS
LOUISIANA
MISSISSIPPI
ALABAMA
SURVEY AREA
PLAN VIEW
Navigation fix & fix number (fish)
Dark returns represent high seafloor backscatter
VK871
VK872
OCS-G-19907
VK873
OCS-G-19908
VK915
VK916
OCS-G-21733
VK917
OCS-G-15441
Continental Shelf Associates, Inc.
SIDE SCAN SONAR MOSAIC
OCS-G-21733
BLOCK 916
VIOSCA KNOLL AREA
C&C Technologies
SURVEY SERVICES
SHEET 2 of 2
REVISION



PLAN VIEW

Navigation fix & fix number (fish)

Dark returns represent high seafloor backscatter

GEODETIC DATUM: NAD27
ELLIPSOID: CLARKE 1866
GRID UNITS: FEET
PROJECTION: UNIVERSAL TRANSVERSE MERCATOR
ZONE: 16N
CENTRAL MERIDIAN: 87° 00' W
FALSE EASTING: 1,640,416.67 ft. at C.M.
FALSE NORTHING: 0.00 ft. at 00° 00' N

NOTE: All field data acquired November 10, 2000 to January 1, 2001
SURVEY VESSEL: R/V Ocean Surveyor M/V Seacor Surf

Continental Shelf Associates, Inc.

SIDE SCAN SONAR MOSAIC

OCS-G-21733

BLOCK 916

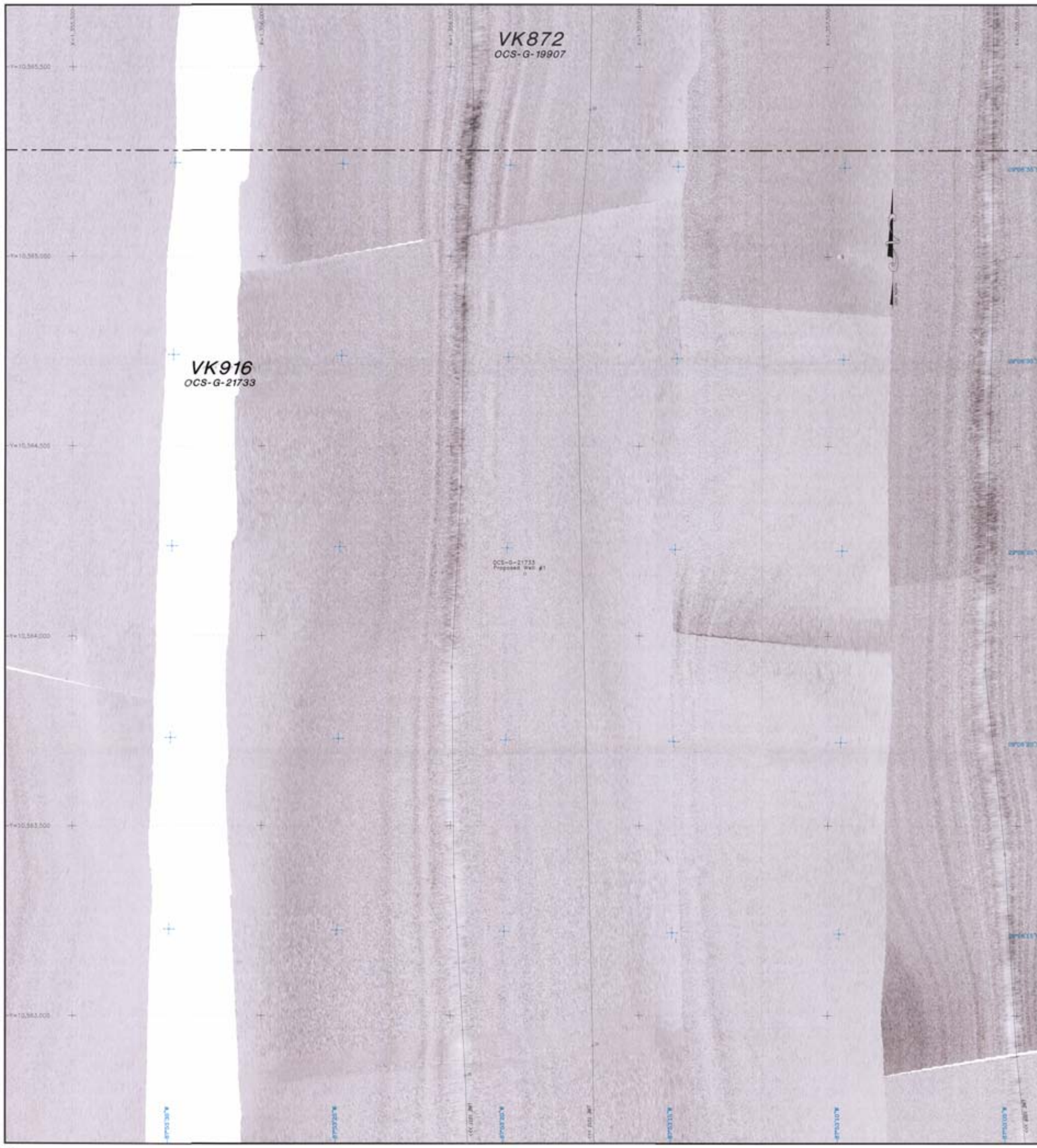
VIOSCA KNOLL AREA

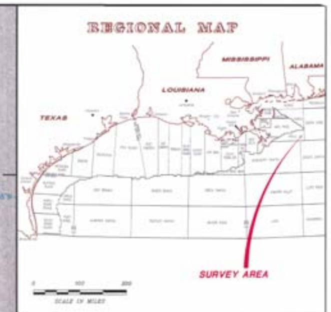
C&C Technologies
SURVEY SERVICES

SHEET 2 of 2

JOB NO. 1401	DATE: 01/23/2001
FILENAME: J:\1401\FINAL MAPS\VK916\1401-100.DWG	
MAPPING	BY
Interpretation:	H. Roberts/J. Peacock
Drawn:	C. L. Spencer
Checked:	
Approved:	

REVISION	DATE	REV. NO.





PLAN VIEW

Navigation fix & fix number (fish)

Dark returns represent high seafloor backscatter

GEODETIC DATUM: NAD27
ELLIPSOID: CLARKE 1866
GRID UNITS: FEET
PROJECTION: UNIVERSAL TRANSVERSE MERCATOR
ZONE: 16N
CENTRAL MERIDIAN: 87° 00' W
FALSE EASTING: 1,640,416.67 ft. at C.M.
FALSE NORTHING: 0.00 ft. at 00° 00' N

NOTE: All field data acquired November 10, 2000 to January 1, 2001
SURVEY VESSEL: R/V Ocean Surveyor M/V Seacor Surf

Continental Shelf Associates, Inc.

SIDE SCAN SONAR MOSAIC
OCS-G-21733
BLOCK 916
VIOSCA KNOLL AREA

SCALE IN FEET

C&C Technologies
SURVEY SERVICES

SHEET 2 of 2

JOB NO. 1401	DATE: 01/23/2001
FILENAME: J:\1401\FINAL MAPS\VK916\1401-100.DWG	
MAPPING	BY
Interpretation:	H. Roberts/J. Peacock
Drawn:	C. L. Spencer
Checked:	
Approved:	

REVISION	DATE	REV. NO.

APPENDIX C2

Geophysical Survey Report for Cruise 3A

Continental Shelf Associates, Inc.

MINERALS MANAGEMENT SERVICE
U.S. DEPARTMENT OF THE INTERIOR

SURVEY REPORT

Seafloor Physical Characterization Post-Exploration Survey Site

Block 916, Viosca Knoll Area (OSC-G-21733 Well No. 1)

JUNE 2002

Continental Shelf Associates, Inc.

MINERALS MANAGEMENT SERVICE
U.S. DEPARTMENT OF THE INTERIOR

SURVEY REPORT

Seafloor Physical Characterization
Post-Exploration Site

Well No. 1 (OCS-G-21733)
Block 916, Viosca Knoll Area

C&C Technologies
SURVEY SERVICES

June 2002

TABLE OF CONTENTS

1.0 INTRODUCTION

C&C Technologies, Inc. (C&C) was contracted by Continental Shelf Associates, Inc. (CSA) to provide geophysical survey data for a post-exploration site located on the upper slope of the Gulf of Mexico. The survey data were collected for the Minerals Management Services' program entitled "Effects of Oil and Gas Exploration and Development at Selected Continental Slope Sites in the Gulf of Mexico". CSA was awarded the contract for the overall project management of the program and assembled a team of prominent researchers. Dr. Harry Roberts and Dr. Sam Bentley from Louisiana State University are the Principal Investigators (PI) for the physical seafloor characterization study.

C&C Technologies, Inc.'s HUGIN 3000 Autonomous Underwater Vehicle (AUV) was used to collect the multi-sensor high-resolution geophysical data for this survey. This system provides EM2000 swath bathymetric mapping, high-resolution sonar imagery and subbottom profiles. The HUGIN 3000 AUV was deployed from the mother vessel and navigated with inertial navigation. The survey vessel R/V *Rig Supporter* (mother vessel) was used for field operations for the post-exploration site survey. C&C surveyed the Block 916 (OCS-G-21733), Viosca Knoll Area site on May 16 - 18, 2002 with the HUGIN AUV. The site is presented on a Regional Map and a Vicinity Map, pages 3 and 4 respectively. Sea conditions varied during the data acquisition with wave heights ranging between 1 to 3 feet. The survey for the pre-exploration site survey was accomplished with a conventional deep tow between November 10, 2000 and January 1, 2001.

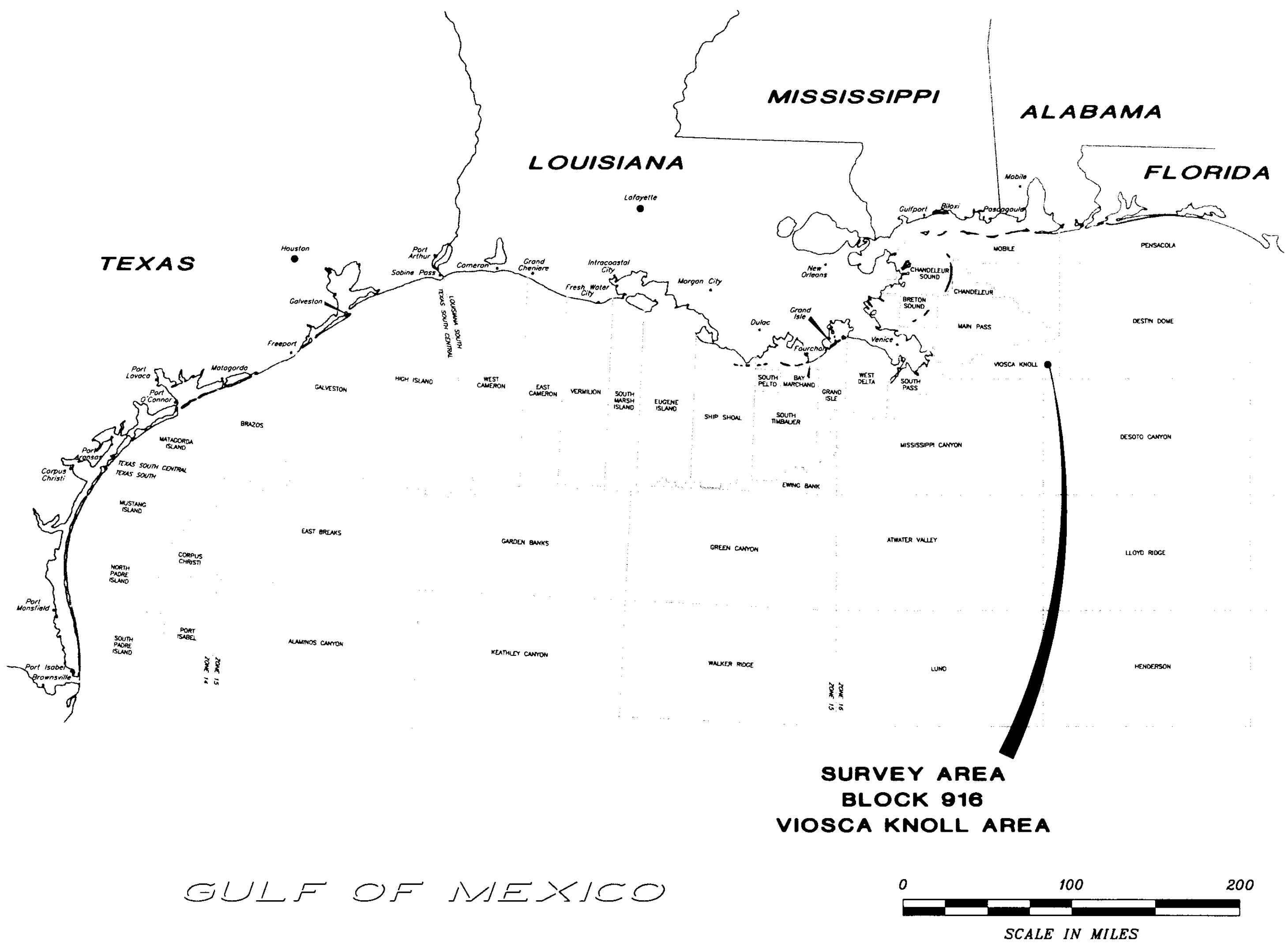
Positioning of the mother ship was accomplished using differential GPS with the C-Nav® Navigation System used for relaying the corrections. The positioning solution for the AUV is calculated using a Kalman filter with the inertial navigation position providing the most statistical weight. A HiPAP acoustic tracking system and Doppler velocity log provide additional input into the Kalman filter. AUV positions were recorded and annotated on the hard copy data at 150-meter intervals. An U.S. Coast Guard Beacon (MBX-2) was also monitored as a back up for the surface positioning. The specifications and instrument settings of survey equipment used onboard are presented in detail in Appendix B. A vessel diagram and a copy of the survey logs are also found in Appendix B. Acoustic velocity curve profiles for the water column are included in Appendix C.

C&C personnel processed the information presented on the enclosed study maps. The preliminary interpretation is included to assist Dr. Roberts and Dr. Bentley with their assessment.

The collected geophysical data were reviewed for geologic interpretation and for evidence of potential hazards to the CSA investigation equipment. Six maps were created to present the survey results at the survey location. Three of the six maps, Bathymetry Map (Sheet 1), Seafloor Investigation Map (Sheet 2) and Side Scan Sonar Mosaic Map (Sheet 3) are scaled at 1 inch = 600 feet and are provided to supply coverage for the entire survey area. Three additional detail maps, Detail Bathymetry Map (Sheet 4), Detail Seafloor Investigation Map (Sheet 5) and Detail Side Scan Sonar Mosaic (Sheet 6), scaled at 1 inch = 100 feet, are provided for close-in coverage of the well location. Geophysical data reproductions of the well site and pertinent features are included in Appendix A.

The entire set of maps use geodetic datum North American Datum, 1927 and Clarke 1866 ellipsoid. The projection used for Block 916, Viosca Knoll Area is the Universal Transverse Mercator (UTM), Zone 16 North (16N). All grid units, as well as scales and measurements are in feet.

REGIONAL MAP



3

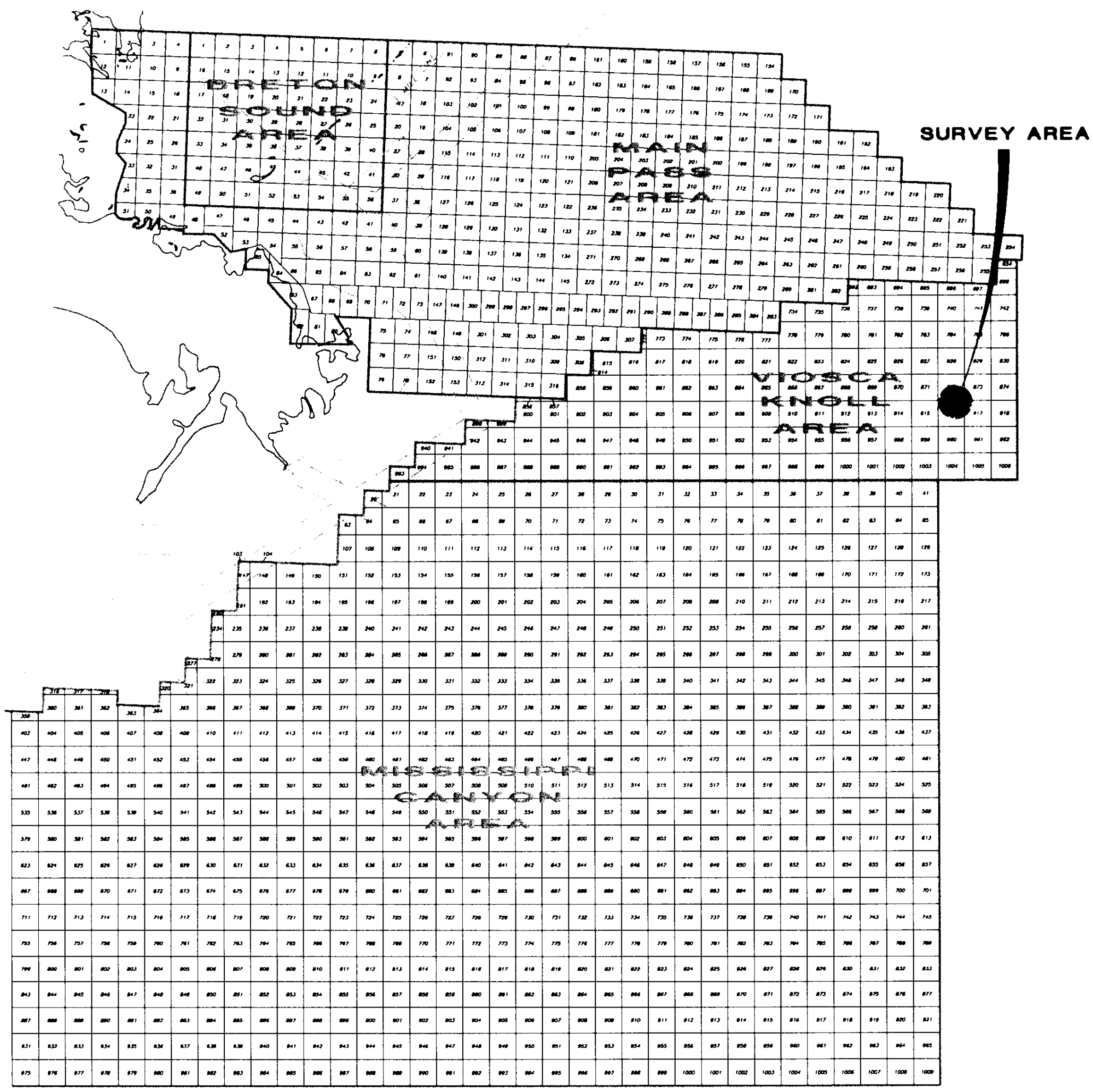
C2-8

730 EAST KALISTE SALOOM ROAD, LAFAYETTE, LOUISIANA 70508

C&C Technologies
SURVEY SERVICES

Continental Shelf Associates, Inc.

VICINITY MAP
BRETON SOUND AREA, MAIN PASS AREA, VIOSCA KNOLL AREA & MISSISSIPPI CANYON AREA



2.0 SURVEY INSTRUMENTATION

The HUGIN 3000 (High Precision Untethered Geosurvey and Inspection System) Autonomous Underwater Vehicle (AUV) is designed to collect deep-water, high-resolution geophysical data for site and route surveys in water depths up to 3,000 meters. C & C Technologies, Inc. worked with Kongsberg Simrad in developing the complex system design throughout the year 2000. The HUGIN is the first AUV designed and operated for commercial survey applications. A schematic diagram of the vehicle and major system components is presented in Appendix B.

Primary survey sensors found in the system payload include a Simrad EM2000 Swath Bathymetric System, Edgetech Side Scan Sonar and an Edgetech Chirp Subbottom Profiler. An inertial guidance system is used for primary positioning of the underwater vehicle. Ancillary sensors include a precision depth sensor, altimeter, acoustic Doppler log and a salinity/temperature probe for calculating water column sound velocity. Transponders on the system for transmission of data include the HiPAP (High Precision Acoustic Positioning), ACL (Acoustic Command Link) and ADL (Acoustic Data Link). An aluminum/oxygen fuel cell powers the AUV for a period of up to 50 hours. Emergency ascent systems include a drop weight and air bag. A pinger, radio beacon, flashing light and GPS/RF link output visual and remote sensing aids used in locating the AUV should an event occur where normal communication is lost with the survey ship.

Three industrial strength computers control all the system functions within the HUGIN. These computers are referred to as the Control Processor, Payload Processor and Navigation Processor. The processors use artificial intelligence algorithms based on feedback returned from the more than 75 sensors to make real-time decisions regarding the system performance. Two titanium spheres, payload and control, house the computers and a 50-gigabyte data storage drive.

Three topside computers communicate continuously with the vehicle while it is in operation. The HUGIN Operator Station is responsible for monitoring all the sensors found in the vehicle and generates warnings to the operator when the values are out of optimal range. The Payload Operator Station computer provides the user with graphical views of the reduced subsets of the subbottom, bathymetry and side scan sonar data. It also allows the user to turn the systems on or off and adjust instrument settings as needed. The third topside computer is the HiPAP Operator

Station. This computer provides a real-time graphic display of the HUGIN vehicle subsurface position and the surface position of the mother ship, which travels directly above the AUV while collecting data. Differential GPS provides the mother ship positions while the AUV vehicle positions are calculated using ultra short baseline acoustics (USBL), inertial navigation and Doppler velocity speed log.

Primary positioning of the HUGIN is controlled by the inertial navigation system. This system uses precision gyros and accelerometers to maintain the AUV track of the mission plan (trackline running sequence). The mission plan is downloaded to the HUGIN system computers before deployment. The HiPAP system and Doppler velocity speed log provide input into the inertial navigation system for guidance system checks. These inputs are weighted and applied to the positioning solution using a Kalman digital filter. Post processing routines can be implemented to further refine the subsea positions.

The Simrad EM2000 Swath Bathymetry System collects soundings in approximately a 200-meter swath underneath the HUGIN vehicle. An onboard velocimeter provides real-time data at the transducer for proper beam forming of the acoustic transmissions. The system is capable of collecting 111 beams or soundings across the swath. A high-precision depth sensor provides the HUGIN vehicle depth. The data are processed utilizing C&C's proprietary HydroMap software.

The HUGIN is equipped with a dual frequency chirp Edgetech Side Scan Sonar that uses a calibrated wide band digital frequency modulated (FM) signal to provide high resolution, low-noise images. This sonar simultaneously transmits linearly swept FM pulses centered at two discrete frequencies: 120 kHz and 410 kHz. The raw data files are post-processed and converted to XTF (eXtended Triton Format) for digital interpretation and hardcopy generation.

Seismic profiles are collected with an Edgetech Chirp Subbottom Profiler. The transmit pulses are generated in the frequency band between 2 and 8 kHz. The system takes advantage of built-in deconvolution of the system response of the output pulse. The sonar's measured system impulse response is used to design a unique output pulse that will prevent the source from ringing. The raw seismic data can be post processed to create SEG-Y or XTF datasets.

3.0 PROJECT PROFESSIONALS

Jay Northcutt functioned as the project manager for C & C Technologies. Dr. Sam Bentley and Dr. Harry Roberts from the Coastal Studies Institute at Louisiana State University served as the Principal Investigators (PI) for the geophysical data collected. The geophysical data acquisition aboard the R/V *Pacific Horizon* was under the direction of Scott Melancon.

Project Professionals		
Harry Roberts	Louisiana State University	Principal Investigator
Sam Bentley	Louisiana State University	Assistant Principal Investigator
Jay Northcutt	C & C Technologies, Inc.	Project Manager
Tony George	C & C Technologies, Inc.	Manager, Geophysical Interpretation
Jesslyn Belanger	C & C Technologies, Inc.	Geologist – On Board Interpretation
Paul Monier	C & C Technologies, Inc.	Geologist – Post survey Interpretation and Reporting
Ralph Coleman	C & C Technologies, Inc.	Database Manager
Doug Pierrottie	C & C Technologies, Inc.	AutoCAD Supervisor
Jason Credeur	C & C Technologies, Inc.	AutoCAD Operator
Charlie Spann	C & C Technologies, Inc.	Manager, Geophysical Operations
Scott Melancon	C & C Technologies, Inc.	Party Chief
Heather Langill	C & C Technologies, Inc.	Data Processor

4.0 SURVEY GRID

The geodetic datum for the survey mapping is the North American Datum, 1927 and the ellipsoid used is the Clarke 1866. The projection used is the Universal Transverse Mercator, Zone 16N. The parameters used to convert the GPS positions from the WGS84 datum to the local NAD27 datum are: X = +7 m, Y = -151 m, Z = -175 m.

The survey was designed to cover a radius of 10,000 feet centered on the investigation site. Primary line spacing for the survey was designed at a 200-meter (656-foot) interval. Thirty-two north-south primary lines were run to cover this circular area and the side scan sonar system was operated at a range of 238 meters (780 feet) per channel. Three additional tielines run east-west at 150 meters (492 feet) spacing and one north-south tieline were run across the well location in order to obtain high-resolution sonar imagery. AUV trackline positions are shown on the enclosed maps for the survey site.

5.0 DELIVERABLES

The following subsections describe the data deliverables provided to Dr. Harry Roberts and Dr. Sam Bentley for their review and research at each survey site. A statement is included regarding the quality of data collected.

5.1 Bathymetry Data

The multi-beam bathymetry collected during the investigation is presented on the Bathymetry Map (Sheet 1) at 1" = 600' scale and Detail Bathymetry Map (Sheet 4) at 1" = 100' scale for the survey site. A perspective color shaded relief image was generated from the multibeam bathymetry data with Fledermaus software and is presented in Appendix A as Figure No. 1. Contour lines on Sheet Nos. 1 and 4 are presented at 5-foot and 1-foot contour intervals respectively. The trackline positions presented on the Bathymetry Map represent the position of the AUV. The bathymetry data were corrected for water column velocity variations utilizing recoded acoustic velocities. Water column acoustic velocities versus depth curves are presented in Appendix C.

The multi-beam bathymetry data were logged at approximately 3 times per second with a very low signal to noise ratio. Excellent ties between the soundings exist where the tielines and primary lines intersect; however, some minor problems were encountered within the data set. There was a systematic error in the dataset that resulted in apparent "ray bending". Post-processing conducted in the office successfully corrected the contour ties between the survey tracks.

5.2 Side Scan Sonar Data

Sonar data quality is considered excellent. Low frequency (120 kHz), side scan sonar data were collected along the tracklines as shown on the Side Scan Sonar Mosaic at a 1" = 600' scale (Sheet No. 3) at 1 meter bin size. A Detailed Side Scan Sonar Mosaic at a 1" = 100' scale (Sheet

No. 6) was generated utilizing the high-frequency (410 kHz) sonar data. The Detailed Side Scan Sonar Mosaic of the investigation site was generated using high frequency side scan sonar data at a 0.25 meter bin size. The side scan sonar data were converted to XTF (eXtended Triton Format) and printed out in hardcopy at a range of 238 meters/channel for the low frequency data and 75 meters/channel for the high frequency data. Software from Ocean Imaging Consultants (OIC) was used to create the mosaics. Details of the processing procedures are found in Appendix B (OIC Swath).

5.3 Subbottom Data

Subbottom profiler data quality is considered excellent. Frequency modulated subbottom data were digitally recorded with the HydroMap software. These data were collected in the frequency band of 2 to 8 kHz. Hardcopy records for the subbottom data were produced utilizing Triton Elics Isis software. The hardcopy seismic profiles were depth corrected at a 150-meter record scale with divisions at 10-meter increments for the investigation site. The digital subbottom data are available in XTF format and can be converted to SEG-Y format if needed.

6.0 SURVEY OPERATION SUMMARY

The original plan of work called for the geophysical data acquisition at 2 exploration sites and 3 production sites to begin in early September 2000 utilizing a deep-tow system. The 2 exploration sites were to be surveyed before and after the wells were completed. Equipment problems and weather delays resulted in the scope of work being reduced to one exploration site, Block 916, Viosca Knoll Area, being completed in 2000. Geotechnical sampling at the Block 516, Garden Banks Area post-exploration site was performed as a pre-exploration investigation, but no physical seafloor characterization investigation was performed. The Block 916, Viosca Knoll Area site, surveyed in the latter part of 2000, was subsequently abandoned as an exploration site by the operator and was not revisited. Three sites within the original scope of work had reports submitted by C&C in September 2001. The original scope of work also called for the post-exploration site to be performed in a two-boat deep tow survey configuration, however, the site was surveyed with C & C Technologies' HUGIN 3000 Autonomous Underwater Vehicle (AUV).

The post-exploration site investigation work aboard the survey vessel, R/V *Rig Supporter*, for Block 916, Viosca Knoll Area began at 1700 hours on May 16, 2002. Pre-dive work on the Block 916, Viosca Knoll Area site began on May 16 at 22:27 hours. The dive mission program was initiated at 22:55 hours and the survey commenced at 23:37 hours on May 16. Survey operations were suspended when the AUV experienced low fuel cell voltage on May 18 at 03:05 hours. The fuel cell was replaced and the AUV was back on survey at 07:18 hours on May 18. Survey Site operations continued successfully until their completion on May 18 at 08:03 hours. Two investigation lines were run adjacent to the Well No. 1 (OCS-G-21733) on May 20 from 06:01 to 06:23 hours, which completed the data acquisition for this site.

7.0 INTERPRETIVE SUMMARY

Block 915, Viosca Knoll Area – Post-Exploration Site

7.1 Seafloor Features (Side Scan Sonar)

Several seafloor features have been interpreted from sonar and pinger data and are presented on the Seafloor Investigation Map (Sheet No. 2). A region of high seafloor reflectivity radiating from Well No. 1 (OCS-G-21733) at the center of the survey area has been interpreted as drilling mud and well cuttings (Appendix A, Figure Nos. 2 and 3). It appears that the well cuttings overlie the drilling mud for this location. The thickness of the well cuttings and drilling mud has been presented on the Seafloor Investigation Map (Sheet No. 2) and the Detail Seafloor Investigation Map (Sheet No. 5) as an isopach contour drawing with a 0.25-foot thickness interval. Numerous seafloor drag scars radiate from the centralized well location. Several areas of disturbed seafloor sediment associated with seafloor drag scars are indicative of lease development activity in the area. A region of high and low reflectivity is apparent in the vicinity of Well Nos. 1 (OCS-G-19908) and SS-1 (OCS-G-19907) in Block 872. These regions are also interpreted as drilling mud and well cuttings. Several small depressions (1 – 3 feet deep) near the well locations have the appearance of pockmarks on the seafloor and may be the locations of removed anchor piles for the setting of sub-sea production facilities.

7.2 Existing Infrastructure and Unidentified Contacts

Public and company file information were reviewed in conjunction with the acquired high-resolution geophysical data to confirm the positions of existing platforms, pipelines, and wells within the survey area (Appendix A, Figure Nos. 2 - 5). Three pipelines and one umbilical were detected during the survey operations for this site. Of the 3 pipelines and 1 umbilical detected only the Shell 6-inch pipeline and Shell 3-inch umbilical are actually within the 10,000-foot radius of the site investigation. The 6-inch pipeline and 3-inch umbilical are connected to the sub sea infrastructure at the Well Nos. 1 (OCS-G-19908) and SS-1 (OCS-G-19907), which were also confirmed with the high-resolution geophysical data (Appendix A, Figure No. 4). Several anchor piles around the well sites were detected in the survey area. The site investigation Well No. 1 (OCS-G-21733) was detected with the high-resolution geophysical data and is the only other existing infrastructure reported within the survey area (Appendix A, Figure No. 2).

Four unidentified sonar contacts were detected within the bounds of the survey area and are also presented on the Seafloor Investigation Map (Sheet No. 2). In the western portion of the survey area 2 single contacts (Sonar Contacts Nos. 1 and 2) and a relatively large zone of debris (Sonar Contacts No. 3) are likely joints of pipe that were detected in previous surveys by C&C (Appendix A, Figure No. 6). Sonar Contact No. 4 in the eastern portion of the survey area is also multiple contacts in a relatively small area and is presented as a debris zone on the Seafloor Investigation Map (Sheet No. 2).

A Sonar Contact Table with object dimensions and coordinates is presented on the Seafloor Investigation Map (Sheet No. 2).

7.3 Subbottom Features

An examination of the subbottom profiles revealed laterally continuous parallel reflectors across the majority of the survey area. Several areas of relict channel-like features were interpreted across the survey area. The channel-like features are probably turbidite channels and/or mass movement gullies (Appendix A, Figure No. 7). A localized sediment fracture zone has been detected approximately 1,800 feet northwest of the site investigation Well No. 1 (OCS-G-21733). The sediment fractures extend from a depth of 14 feet below the seafloor to a maximum depth of 55 feet below the seafloor.

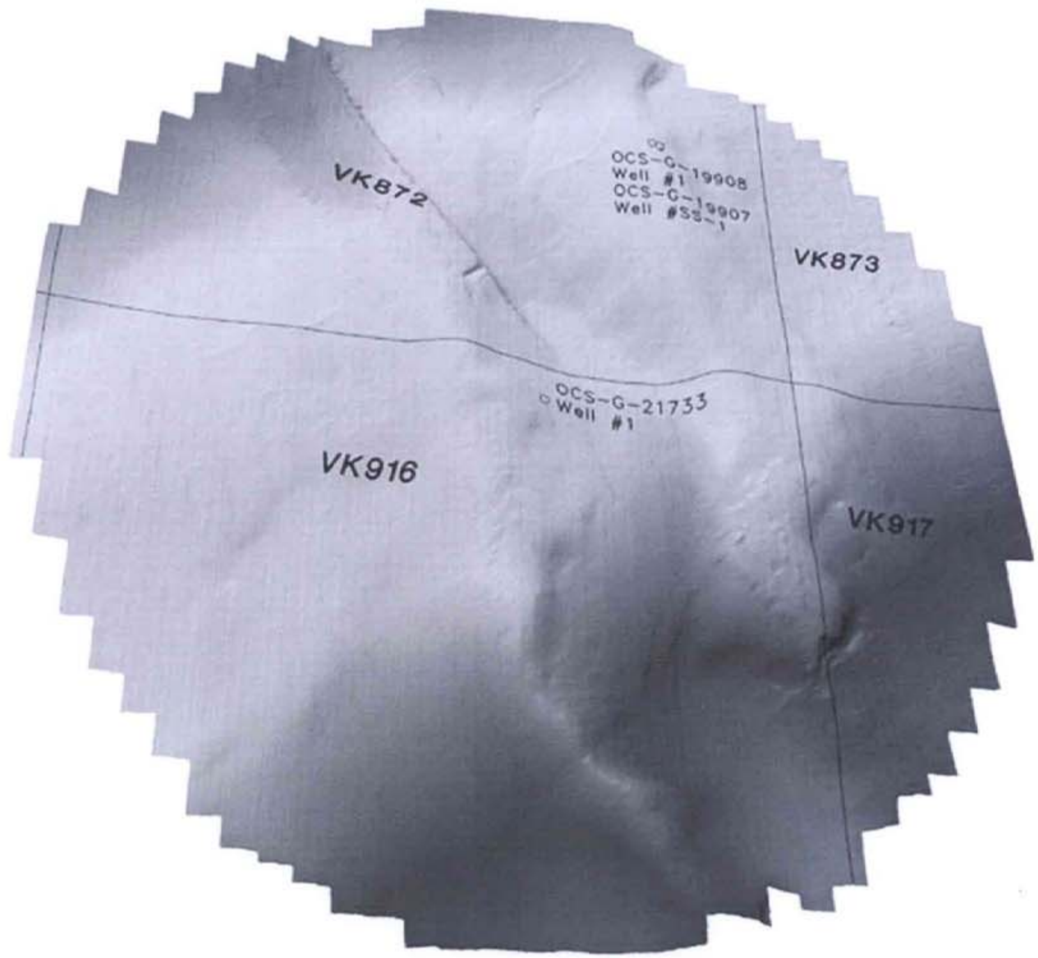
7.4 Bathymetry and Seafloor Slopes

The regional bathymetry depicted on the Bathymetry Map (Sheet 1) shows two large ridges (approximately 75 to 100 feet high), which traverse the survey area in a northwest-southeast direction. A perspective color shaded relief image was generated from the multibeam bathymetry data with Fledermaus software and is presented in Appendix A as Figure No. 1. The ridges are approximately 3,000 feet and 4,000 feet wide, separated by a valley or topographic low approximately 2,500 feet wide. The survey area is approximately 10 – 12 miles northeast of a salt dome trend at the boundary of Mississippi Canyon Area – Viosca Knoll Area. The continental slope and salt dome trend have affected the characteristics of the seafloor at this survey site.

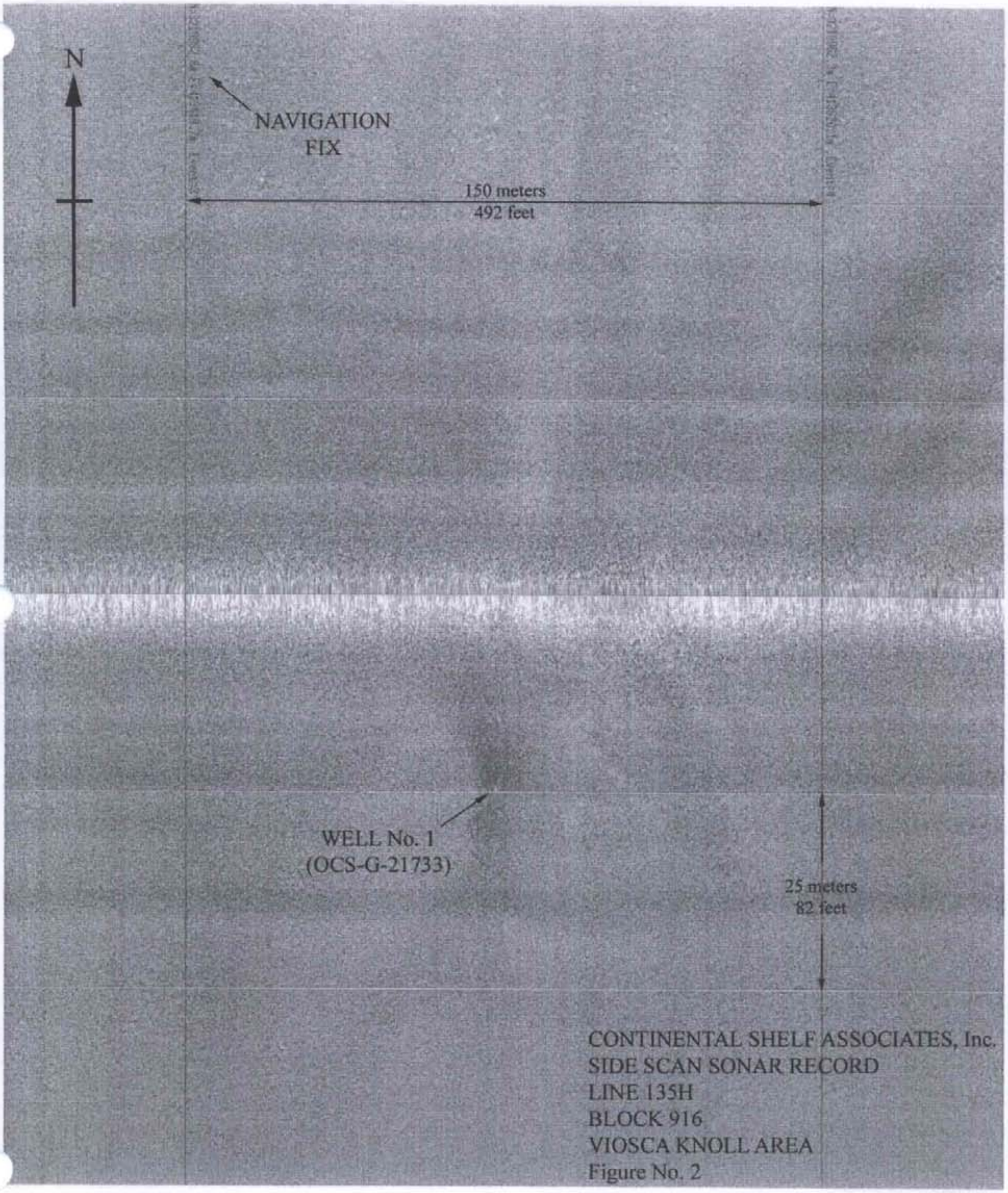
The investigation site centered on Well No 1 (OCS-G-21733) is at a water depth of 3,690 feet. The regional seafloor slope in the survey area is to the southeast at approximately 240 feet/mile (2.60°) with higher slope gradients along the flanks of the ridges. The seafloor in the survey area has a maximum water depth of 4,170 feet and a minimum water depth of 3,195 feet. The slope gradient along the flanks of the ridges varies from 12.50° to 4.5°. A seafloor depression approximately 8 feet deep is noted on the Seafloor Investigation Map (Sheet No. 2) approximately 3,250 feet northwest of the site investigation Well No. 1 (OCS-G-21733).

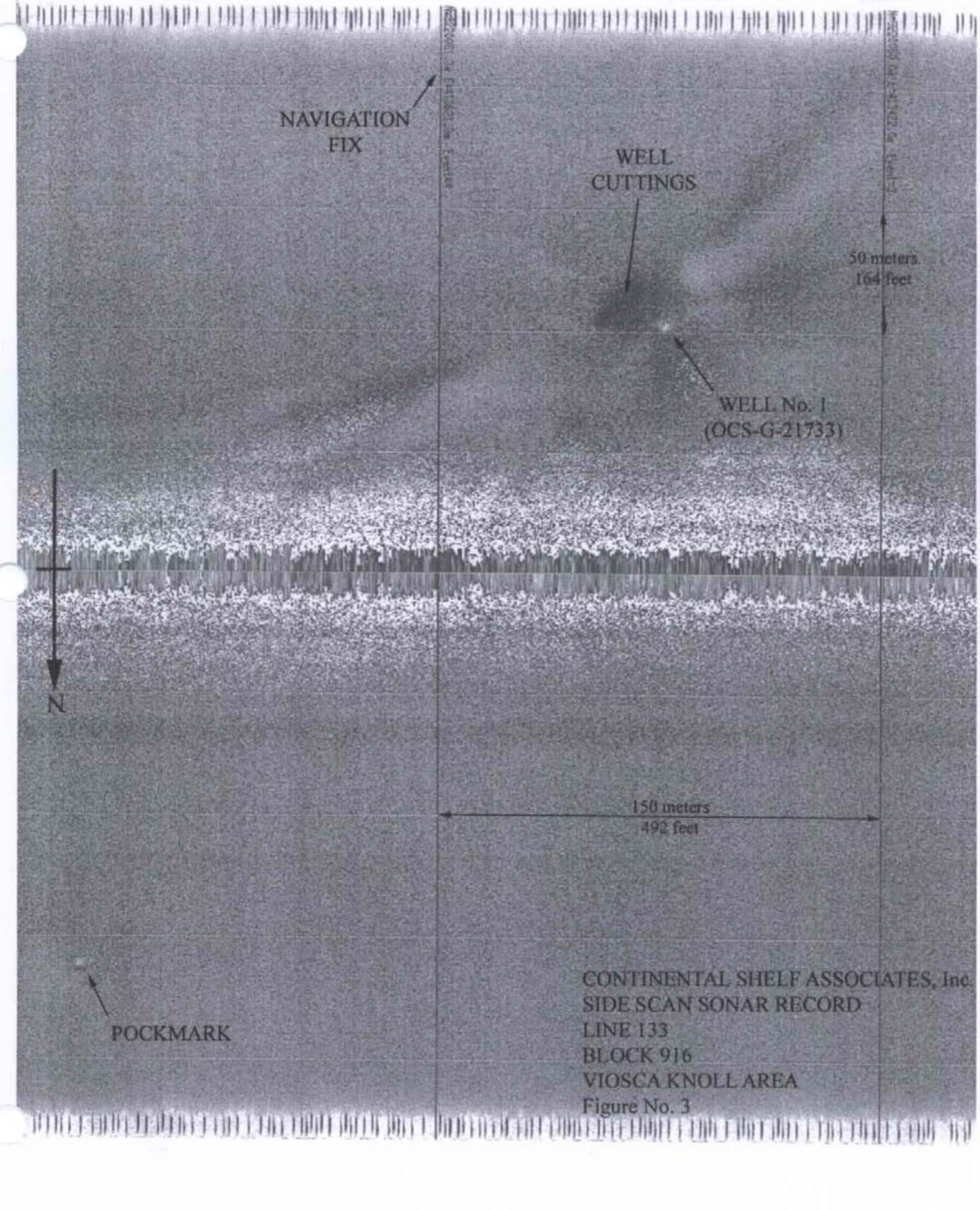
APPENDIX A

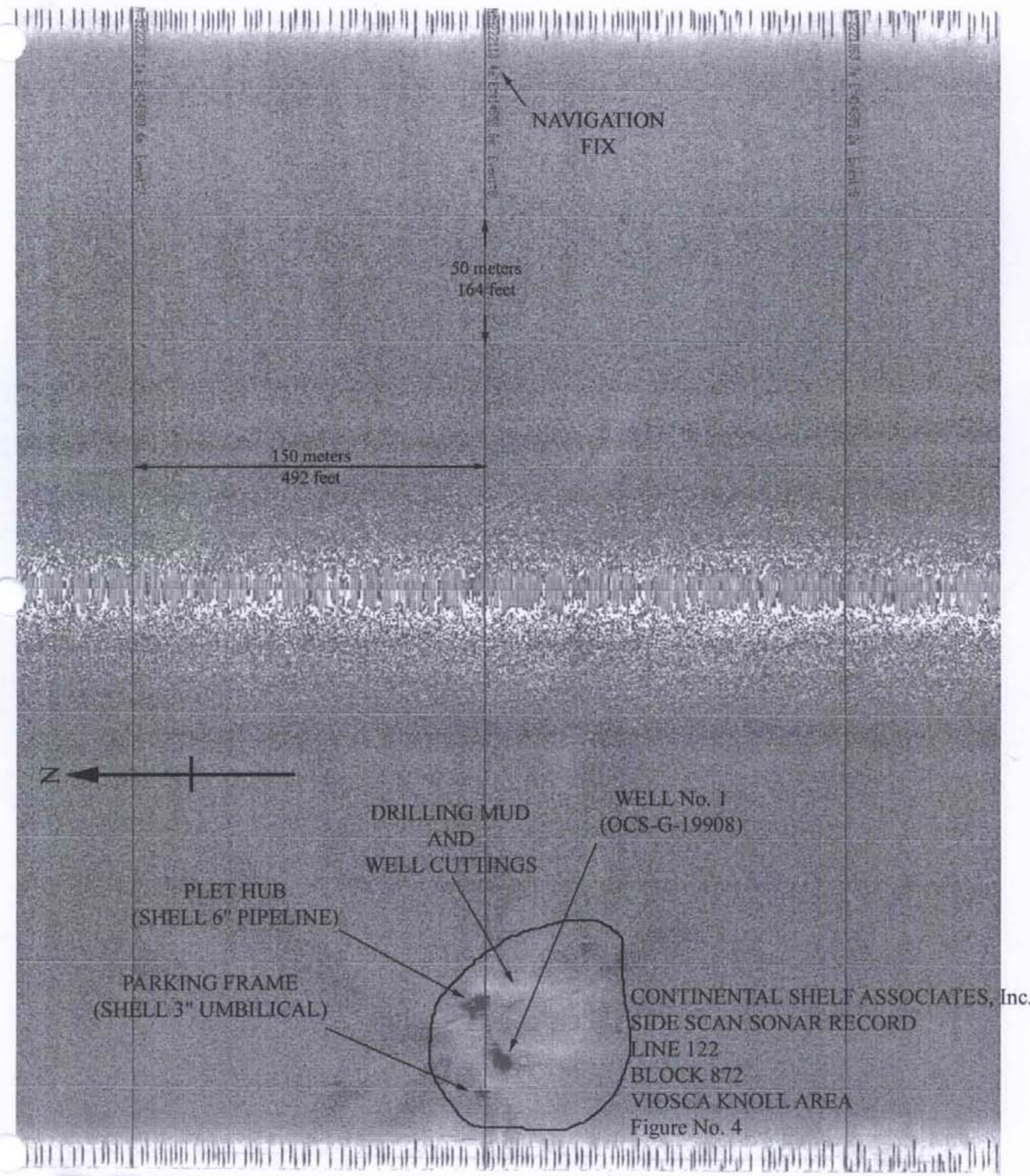
DATA REPRODUCTIONS

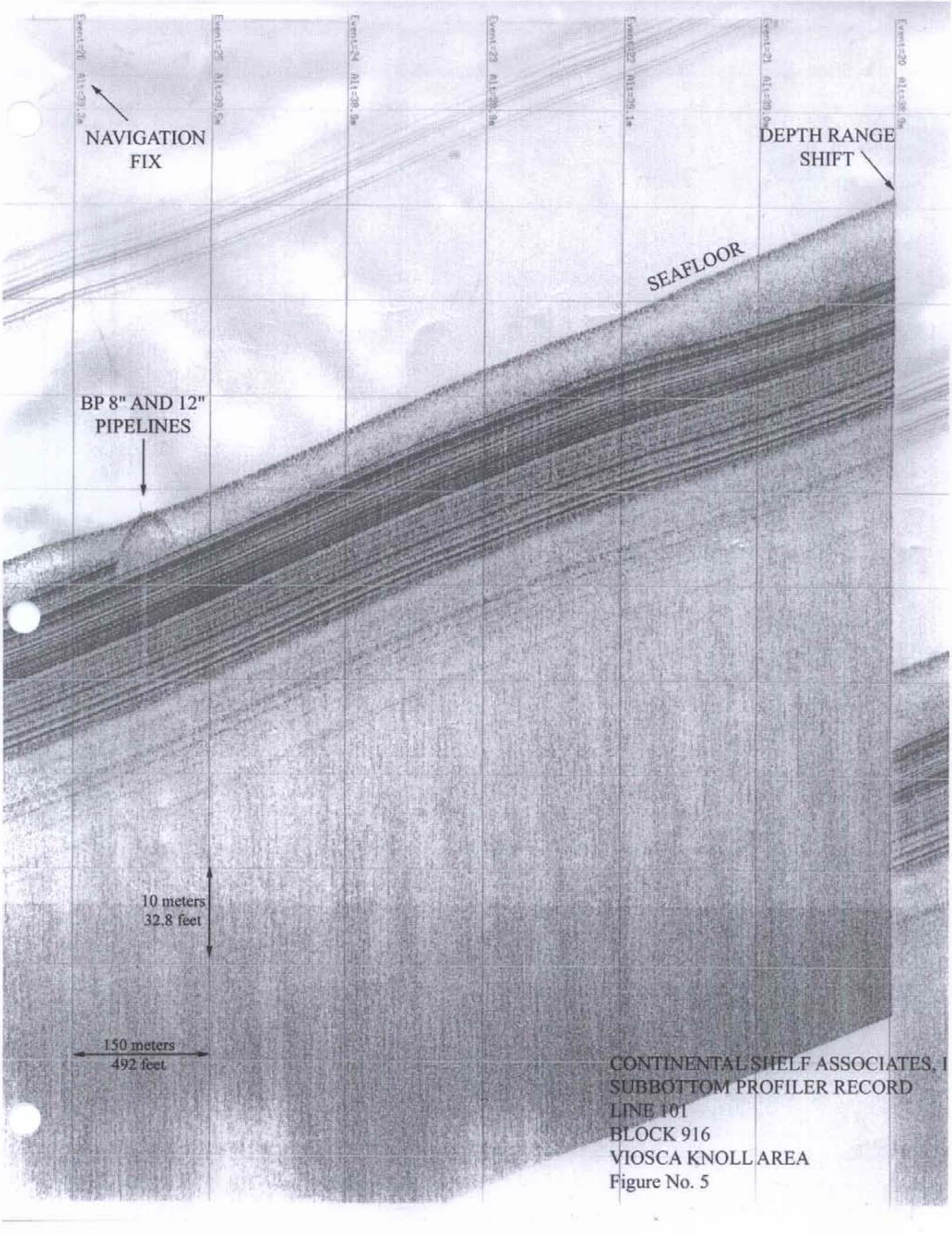


CONTINENTAL SHELF ASSOCIATES, Inc.
BATHYMETRIC IMAGE OVERVIEW
VIOSCA KNOLL AREA
Figure No. 1

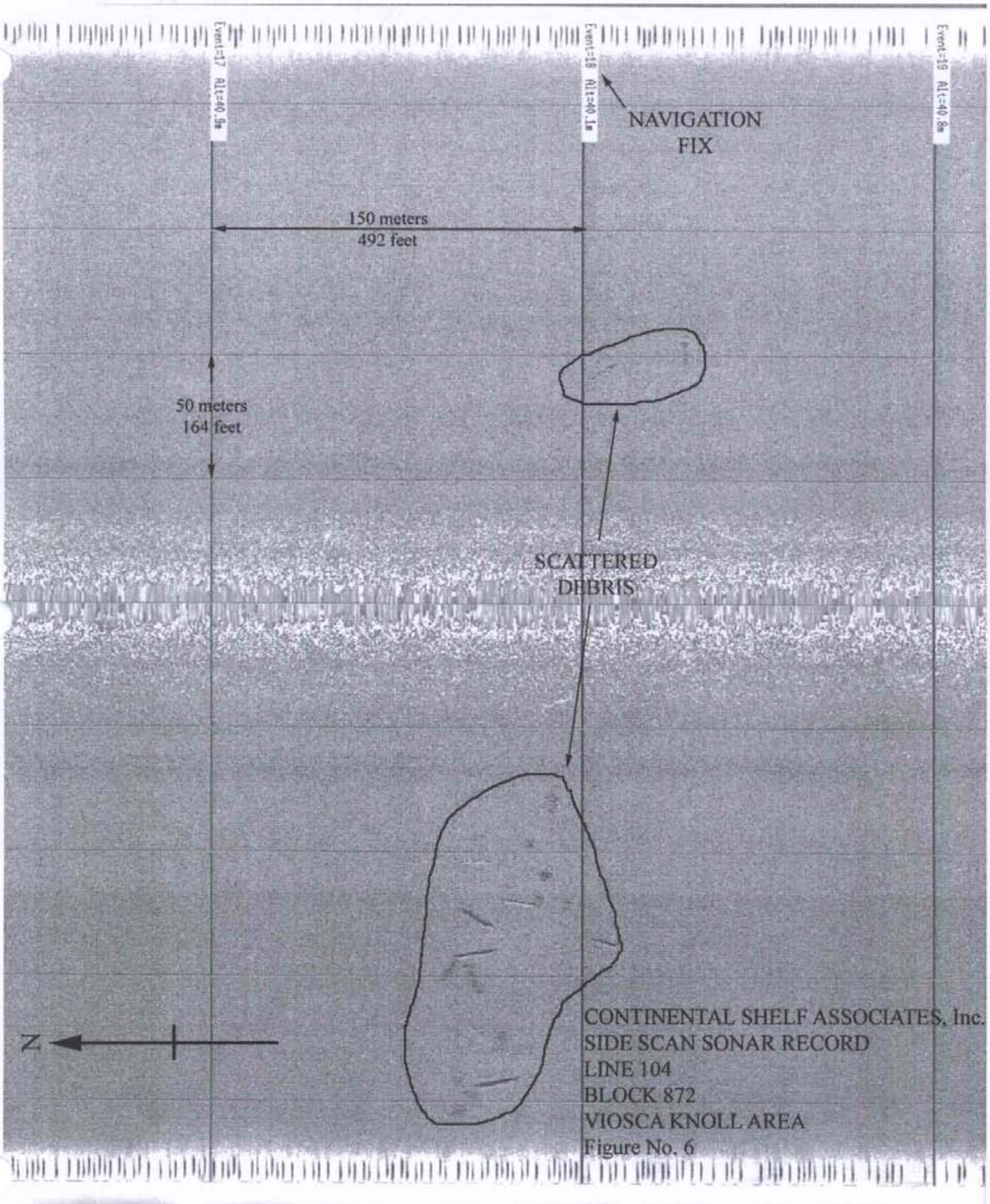

N
NAVIGATION FIX
150 meters
492 feet
WELL No. 1
(OCS-G-21733)
25 meters
82 feet
CONTINENTAL SHELF ASSOCIATES, Inc.
SIDE SCAN SONAR RECORD
LINE 135H
BLOCK 916
VIOSCA KNOLL AREA
Figure No. 2


NAVIGATION
FIX
WELL
CUTTINGS
50 meters
164 feet
WELL No. 1
(OCS-G-21733)
N
150 meters
492 feet
POCKMARK
CONTINENTAL SHELF ASSOCIATES, Inc.
SIDE SCAN SONAR RECORD
LINE 133
BLOCK 916
VIOSCA KNOLL AREA
Figure No. 3

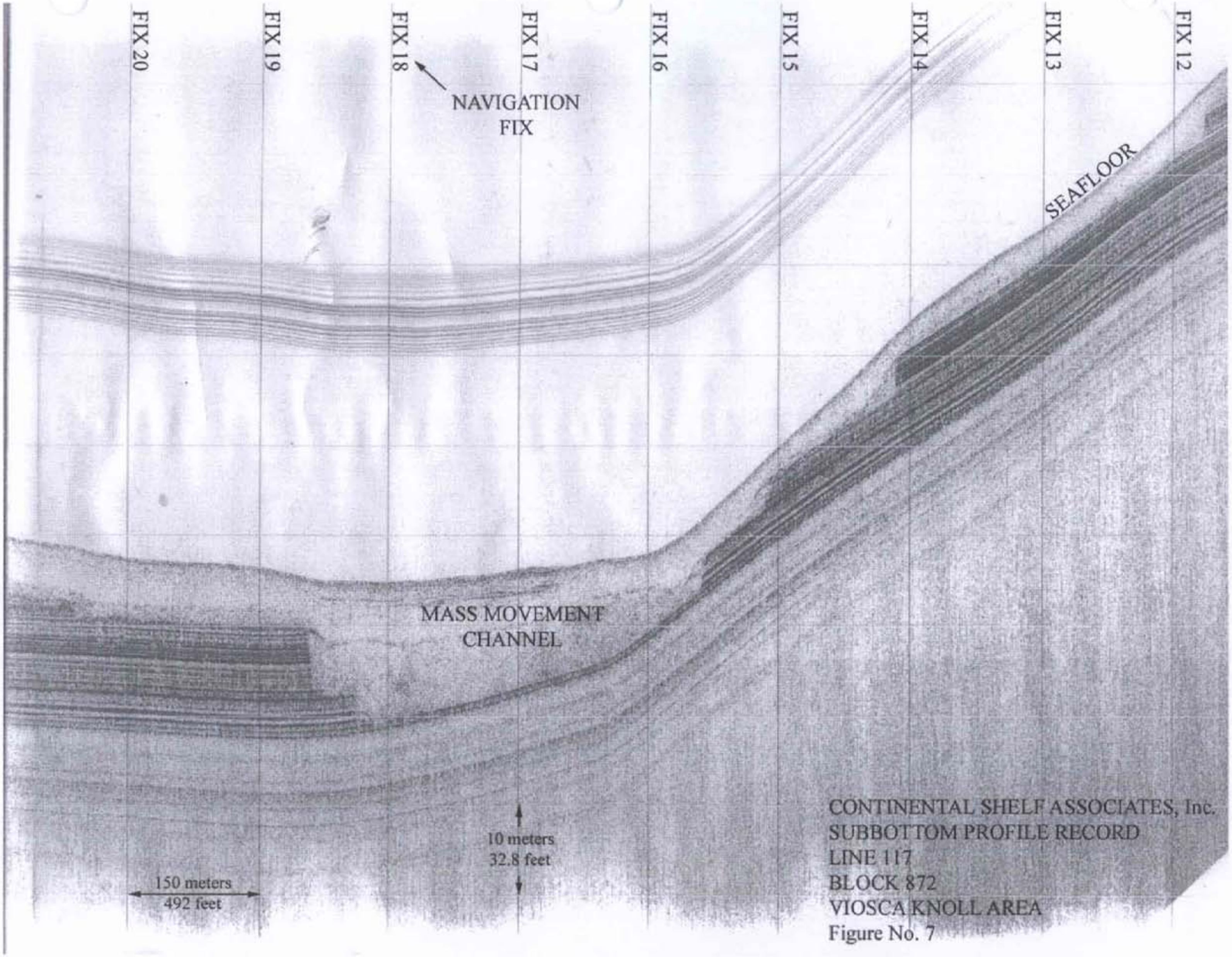

NAVIGATION
FIX
50 meters
164 feet
150 meters
492 feet
N
DRILLING MUD
AND
WELL CUTTINGS
WELL No. 1
(OCS-G-19908)
PLET HUB
(SHELL 6" PIPELINE)
PARKING FRAME
(SHELL 3" UMBILICAL)
CONTINENTAL SHELF ASSOCIATES, Inc.
SIDE SCAN SONAR RECORD
LINE 122
BLOCK 872
VIOSCA KNOLL AREA
Figure No. 4



CONTINENTAL SHELF ASSOCIATES, I
SUBBOTTOM PROFILER RECORD
LINE 101
BLOCK 916
VIOSCA KNOLL AREA
Figure No. 5



CONTINENTAL SHELF ASSOCIATES, Inc.
SIDE SCAN SONAR RECORD
LINE 104
BLOCK 872
VIOSCA KNOLL AREA
Figure No. 6



CONTINENTAL SHELF ASSOCIATES, Inc.
SUBBOTTOM PROFILE RECORD
LINE 117
BLOCK 872
VIOSCA KNOLL AREA
Figure No. 7

APPENDIX B

EQUIPMENT DESCRIPTIONS

INSTRUMENT SETTINGS

BOAT DIAGRAM

SURVEY LOGS

HUGIN AUTONOMOUS UNDERWATER VEHICLE

The HUGIN (High Precision Untethered Geosurvey and Inspection System) Autonomous Underwater Vehicle (AUV) is designed to collect deep-water, high-resolution geophysical data for site and route surveys in water depths up to 3,000 meters. C & C Technologies, Inc. worked with Kongsberg Simrad in developing the complex system design in the year 2000. The HUGIN is the first AUV designed and operated for commercial survey applications. A schematic diagram of the vehicle and major system components is presented following this text.

Primary survey sensors found in the system payload include a Simrad EM 2000 Swath Bathymetric System, Edgetech Side Scan Sonar and an Edgetech Chirp Subbottom Profiler. An inertial guidance system is used for primary positioning of the underwater vehicle. Ancillary sensors include a precision depth sensor, altimeter, acoustic Doppler log and a salinity/temperature probe for calculating water column sound velocity. Transponders on the system for transmission of data include the HiPAP (High Precision Acoustic Positioning), ACL (Acoustic Command Link) and ADL (Acoustic Data Link). An aluminum/oxygen fuel cell powers the AUV for a period of up to 40 hours. Emergency ascent systems include a drop weight and air bag. A pinger, radio beacon, flashing light and GPS/RF link output visual and remote sensing aids used in locating the AUV should an event occur where communication is lost with the survey ship.

Three industrial strength computers control all the system functions within the HUGIN. These computers are referred to as the Control Processor, Payload Processor and Navigation Processor. The processors use artificial intelligence algorithms based on feedback returned from the more than 75 sensors to make real-time decisions regarding the system performance. Two titanium spheres, payload and control, house the computers and dual 50-gigabyte data storage drives.

HUGIN AUTONOMOUS UNDERWATER VEHICLE

Three topside computers communicate continuously with the vehicle while it is in operation. The HUGIN Operator Station is responsible for monitoring all the sensors found in the vehicle and generates warnings to the operator when the values are out of optimal range. The Payload Operator Station computer provides the user with graphical views of the reduced subsets of the subbottom, bathymetry and side scan sonar data. It allows the user to turn the systems on or off and adjust instrument settings as needed. The third topside computer is the HiPAP Operator Station. This computer provides real-time graphic display of the HUGIN vehicle subsurface position and the surface position of the mother ship, which travels directly above the AUV while collecting data. Differential GPS provides mother ship positions while AUV positions are calculated using ultra short baseline acoustics (USBL), inertial navigation and Doppler velocity speed log. Primary positioning of the HUGIN is controlled by the inertial navigation system. The system uses precision gyros and accelerometers to maintain the AUV track of the mission plan. The mission plan is downloaded to the HUGIN system computers before deployment. The HiPAP system and Doppler velocity speed log provide input into the inertial navigation system for guidance system checks. The inputs are weighted and applied to a positioning solution using a Kalman digital filter. Post processing routines can be implemented to further refine the subsea positions.

Simrad's EM 2000 Swath Bathymetry System collects soundings in approximately a 200-meter swath underneath the HUGIN vehicle. An onboard velocimeter provides real-time data at the transducer for proper beam forming of the acoustic transmissions. The system is capable of collecting 111 beams or soundings across the swath. A high-precision depth sensor provides the HUGIN vehicle depth. The data are processed utilizing C & C's proprietary HydroMap software.

HUGIN AUTONOMOUS UNDERWATER VEHICLE

The HUGIN is equipped with a dual frequency chirp Edgetech Side Scan Sonar that uses a calibrated wide band digital frequency modulated (FM) signal to provide high resolution, low-noise images. This sonar simultaneously transmits linearly swept FM pulses centered at two discrete frequencies: 120 kHz and 410 kHz. The raw data files are post-processed and converted to XTF (eXtended Triton Format) for digital interpretation and hardcopy generation.

Seismic profiles are collected with an Edgetech Chirp Subbottom Profiler. The transmit pulses are generated in the frequency band between 2 and 8 kHz. The system takes advantage of built-in deconvolution of the system response of the output pulse. The sonar's measured system impulse response is used to design a unique output pulse that will prevent the source from ringing. The raw seismic data can be post processed to create SEG-Y or XTF datasets.

HUGIN AUTONOMOUS UNDERWATER VEHICLE

Survey Sensors:

Simrad EM 2000 Bathymetry and Imagery (200 kHz, 150°)
Side Scan Sonar: Chirp (120 kHz and/or 410 kHz)
Subbottom Profiler: Chirp (2 – 8 kHz)

Ancillary Sensors:

Inertial Navigation
Simrad HiPAP USBL
Doppler Velocity Log
Kalman Filter
Fiber Optic Gyro
Motion Reference Unit
Digiquartz Depth Unit
Single-Beam Altimeter
DGPS
Acoustic Communications
  Command and Control (Low Speed Acoustic Modem)
  Data Uplink (High Speed Acoustic Modem)

Vessel Specifications:

Depth Rating: 3,000 meters
Length: 5.2 meters
Maximum Diameter: 0.96 meters
Normal Speed: 4 knots
Underwater Endurance @ 4 knots: 40 hours
Power: Aluminum Oxygen Fuel Cell

Survey Equipment Specifications:

Simrad EM 2000 Multibeam Echo Sounder

Frequency	200 kHz
Maximum Ping Rate	10 times per second
Number of Beams per Ping	111
Beamwidth	2° acrosstrack; 1.5° alongtrack
Beam Spacing	Equiangle or equidistant
Coverage Sector	150°
Depth Resolution	2 cm
Pulse Length	0.05 – 0.25 msecs
Range Sampling Rate	10 kHz
Sonar Head Depth Rating	3,000 meters

HUGIN AUTONOMOUS UNDERWATER VEHICLE

Full Spectrum Chirp Side Scan Sonar

Modulation	Full spectrum chirp frequency modulated pulse with amplitude and phase weighting
Dual Frequency Combinations	120/410 kHz

Common

Vertical Beam Width	70°
Depression Angle	25° from horizontal
A/D Resolution	16 bits
Sample Rate	~2,000 samples per channel

Frequency Specific

Center Frequency	120 kHz	410 kHz
Pulse Bandwidth	12 kHz	41 kHz
Pulse Length	8.3 msec.	2.4 msec.
Range Scale Selection (per side)	25-500 meters	12.5-100 meters
Maximum Ping Rate	30 pps	60 pps
Range Resolution	6.25 cm	1.8 cm
Horizontal 3 dB Beam Width	0.8°	0.5°
Transmit Power	200 Watts	160 Watts
Peak Source Level (ref = 1μPa @ 1 m)	210 dB	216 dB
Receiver Sensitivity (ref = 1 V/μPa @ center frequency)	-190 dB	-196 dB

Full Spectrum Chirp Subbottom Profiler

Modulation	Full Spectrum Chirp Frequency Modulated Pulse with amplitude and phase weighting
Source Level	200 dB re 1 μPa at one meter
Transmit Power	200 Watts
Receive Sensitivity	-204 dB re 1 μPa at one meter
Receiver Variable Gain	38 – 105 dB, automatic or manual control
Noise Level	70 dB re 1 μPa at one meter over sonar bandwidth (at hydrophone input)
Pulse Repetition Frequency	15 Hz maximum
Calibration	Each system is acoustic tank tested to calibrate for reflection coefficient measurements
Frequency Band	2 – 8 kHz
Number of Hydrophone Arrays	2
Resolution	6 – 10 cm
Beam Width	15° - 25°

HUGIN AUTONOMOUS UNDERWATER VEHICLE

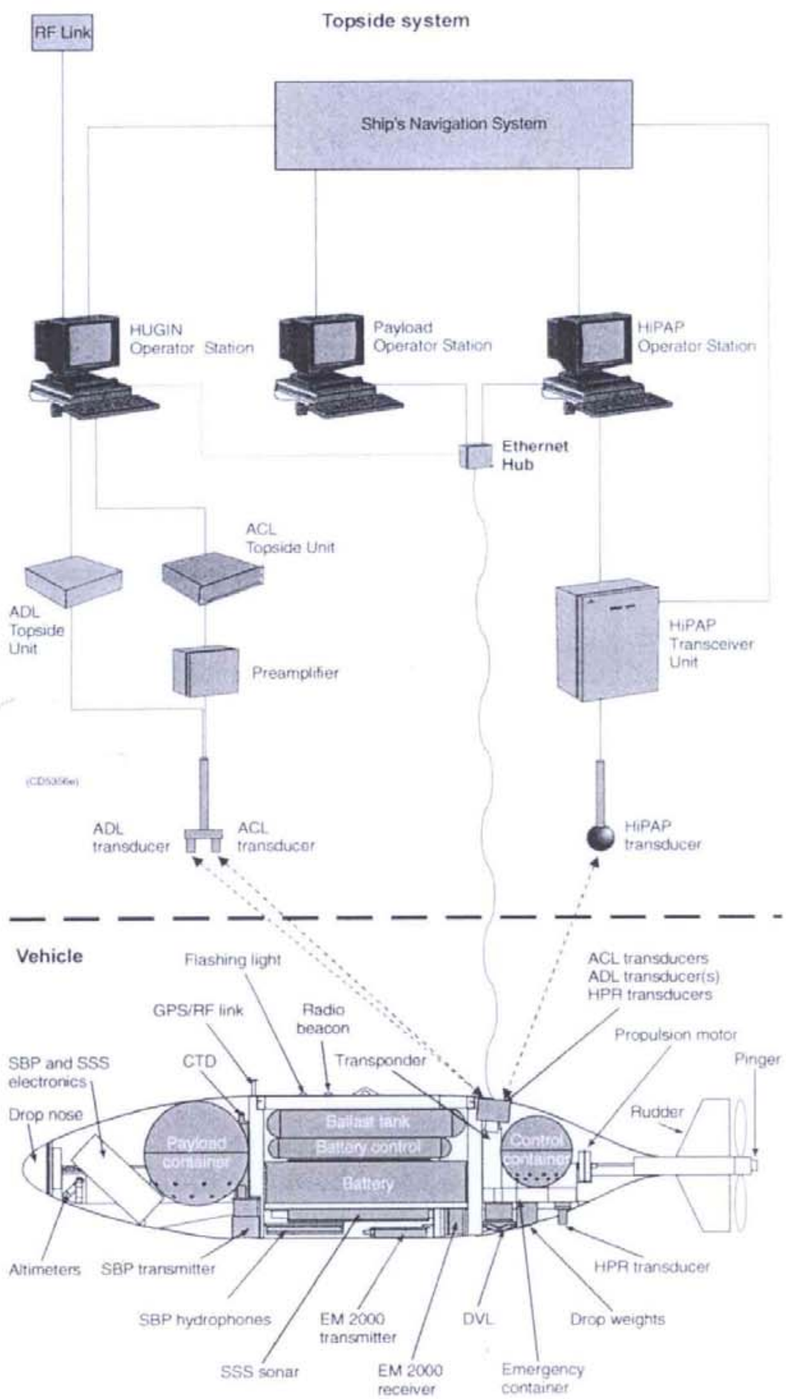


Figure 1 - HUGIN 3000 (complete system)

C-NAV DIFFERENTIAL GPS

C-Nav is a globally corrected differential GPS system owned and operated by C&C Technologies, Inc. The C-Nav GPS Receiver combines a dual-frequency, geodetic grade, GPS Receiver with an integrated L-BAND communication RF detector and decoder all linked by an internal microprocessor. C-Nav uses monitoring stations strategically located around the globe to provide worldwide accuracies on the order of 0.25m (1 sigma)*.

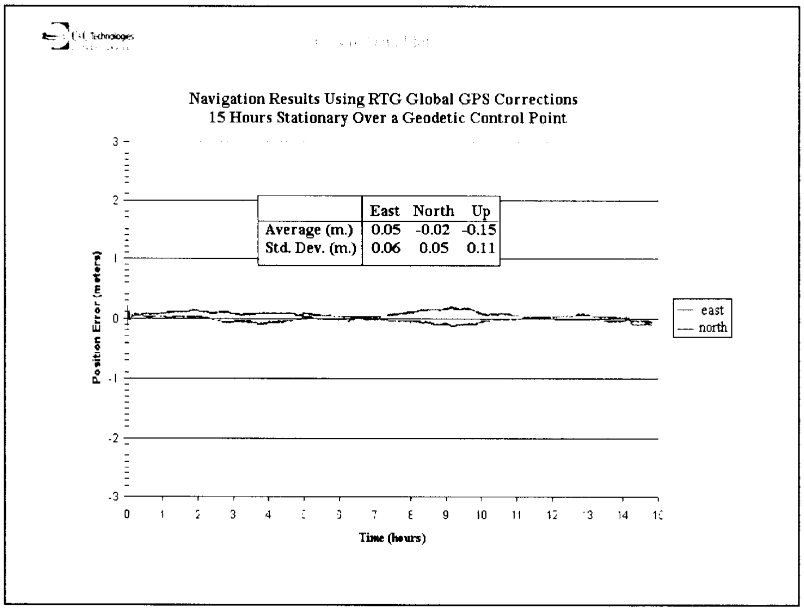
The technique, developed by the Jet Propulsion Lab for the National Aeronautics Space Administration, uses a global network of references stations to track the entire constellation of GPS satellites. The raw GPS observations are transmitted via the Internet back to the Network Control Center where the GPS constellation satellite orbital corrections and clock offset values are calculated and modeled in real-time. These corrections are universally valid and can be applied to GPS measurements from any location on earth.

The multi-function antenna assembly is capable of receiving the L1 and L2 GPS frequencies as well as the Inmarsat L-BAND receive frequency band. The gain pattern of this antenna is designed to be relatively constant even at lower elevations. This allows for an efficient link budget when the unit is operated at higher latitudes where the elevation of the geo-stationary communication satellite is low and close to the horizon. Atmospheric delays are eliminated from local measurements by comparing the L1 and L2 frequencies in the internal GPS receiver.

The C-Nav GPS System provides an output of RTCM (Type 1) pseudorange differential correction messages via a second RS232 interface. Raw GPS observation information can be collected from the

C-Nav GPS Receiver system for recording and analysis. The raw GPS observation information can be converted to RINEX ASCII data (observation and navigation) file format as and when required.

The C-Nav GPS Receiver requires at least four (4) usable GPS satellites to compute a three dimensional (3D) solution. The C-Nav GPS Receiver will yield an autonomous horizontal position accuracy of 2 to 5 meters (1 sigma), depending on the GPS satellite geometry configuration and tracking (DOP index values).



Receiver Specifications:

Features

- Real-time sub meter accuracy
- Single integrated package – simple installation
- Rugged, waterproof housing
- Wide-range (10-40VDC) power supply
- RTCM and NMEA {GGA, GSA, RMC, VTG, ZDA) outputs
- Patented multipath mitigation significantly reduces noise
- Geodetic quality dual frequency GPS virtually eliminates ionospheric effects

Performance

- L-band receiver frequency
- Automatically selected 1525 to 1560 MHz
- GcGPS Accuracy:
  - Position (H): <30cm
  - Position (V): <70cm
  - {1–sigma and HDOP ≤ 1}
  - Velocity <0.02m/s
- Time to first fix: Cold Start: 90 sec(typical)
- Reacquisition
  - Coast for 30 sec with GPS lock <2sec
  - L-band loss with less than 30 sec with GPS lock <30 sec

Physical/Environmental

- Size: 9.2 in (H) x 7.2 in (D) (24.8 x 18.7 cm)
- Weight: 5.5 lbs (2.4 kg)
- Power: Input voltages: 10-40 VDC
  Consumption: <10W average power
  1.2 A max @12 VDC
- I/O Connector 8 pin waterproof connector
- Temperature: Operating: -20°C to +70°C
  Storage: -40°C to 85°C
- Humidity: 100% non-condensing

Display Unit Specifications:

Features

- 4 x 20 character LCD screen
- 12 key membrane button input pad
- Rugged, stainless steel housing
- Wide-range (20-40VDC) power supply
- RTCM and NMEA and raw data outputs

Physical/Environmental

- Size: 9.6 in (L) x 6.7 in (W) x 3.3 in (H) (24.4 x 17.0 x 3.3 cm)
- Weight: 3.8 lbs (1.75 kg)
- Power: Input voltages: 20-40 VDC
  Consumption: <1W average power
  100 mA max @28 VDC typical
- I/O Connectors: 3 db-9, 1 cat-5 and 1 8 pin waterproof connector
- Temperature: Operating: -20°C to +70°C
  Storage: -40°C to 85°C
- Humidity: 100% non-condensing

OIC SWATH

This software package, which runs under the Unix Windows operating system, is able to display, post-process and mosaic side scan data in gridded databases that can be exported for chart plotting. The database structure for processing data is called an Operational Area or a Keeper Mosaic, where eventually all the processed swaths will be merged to. For each Operational Area, a set of processing parameters must be defined, such as center point (longitude/latitude, X/Y), width and length in meters, orientation with respect to north of the length axis and grid resolution. An Operational Area is the Keeper for the mosaic, which will be composed of sub-areas or swaths. A line with a set of 100K pings collected in time sequential order is defined as a swath.

Data can be edited and corrected on the image or on the meta-data while processing swaths. For this purpose, OICSwath has tools and attitudes to filter, interpolate and correct navigation points, heading, course, pitch, roll, depth, altitude (ProcessLine), beam pattern (AVG - Angle varying Gain), resolution (LUT - side scan LookUp Table), Time - Varying Gain (TVG).

Processed data in swath grids is UTM projected in X/Y coordinates. Swath files are generated after editing and may be displayed individually or as adjacent tracks of gridded data in order to evaluate the data within and between adjacent swaths. After a swath is processed, it is automatically shown in the Map Editor for further processing such as filtering, and merging swaths. Overlapping layers can be combined in the Clip Editor using a Front, Back, Min, Max, Average and Feathered method to merge the swaths into the Keeper Mosaic. Swaths are merged into the Keeper Mosaic individually.

INSTRUMENT SETTINGS

CONTINENTAL SHELF ASSOCIATES, INC.
POST-EXPLORATION SITE
BLOCK 916, VIOSCA KNOLL AREA
Well No. 1 (OCS-G-21733)

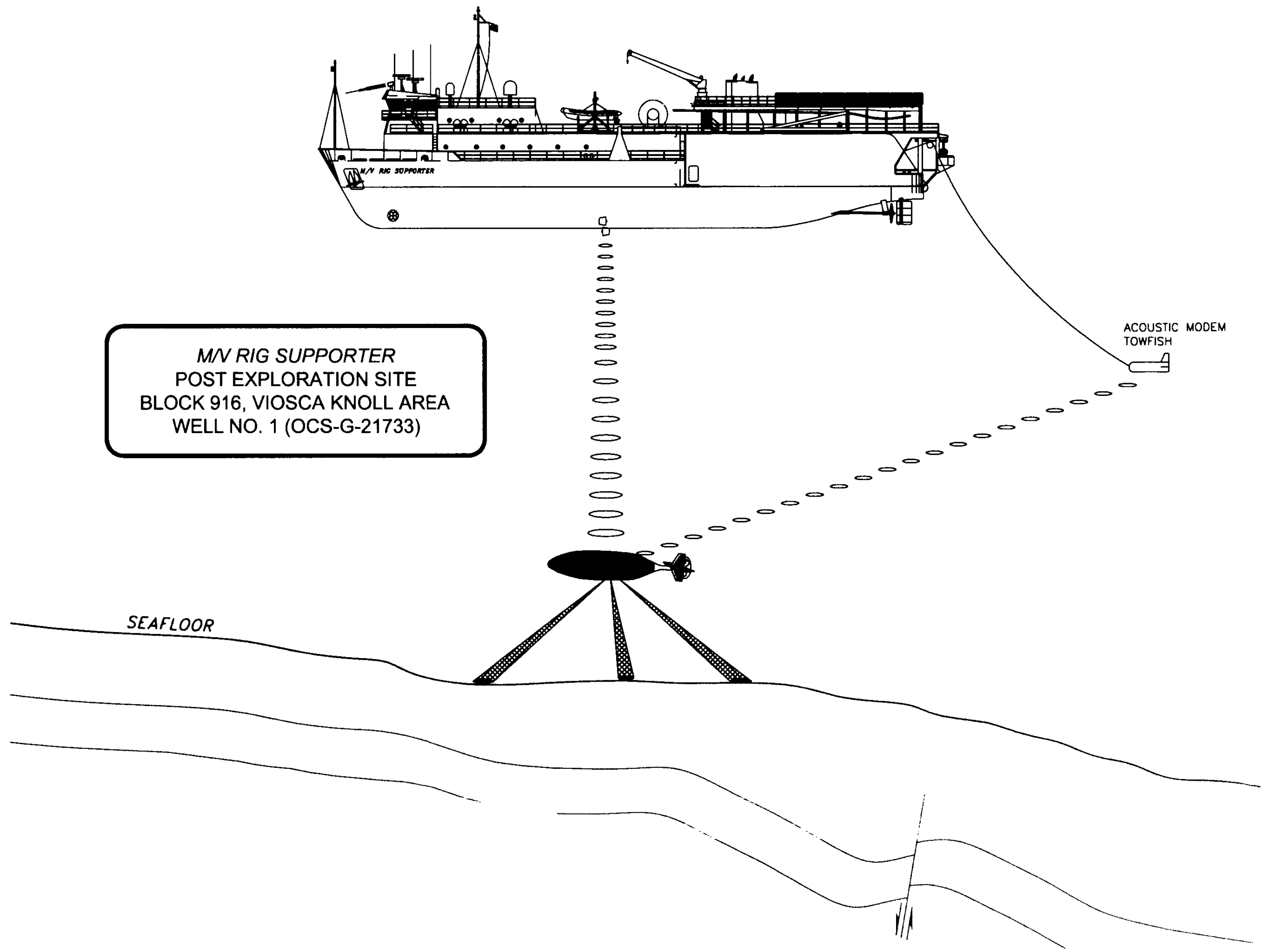
EDGETECH CHIRPED SUBBOTTOM PROFILER
Acoustic Source Level = 200 dB re 1 μPa at one meter
Beam Width = 15° - 25°
Record Length = 100 meters (1,500 meters/second)
Record Divisions = 10 meters
Delay = Variable in meters
Setback = None (acoustically positioned)
Frequency = 2 to 10 kilohertz (Chirped/Frequency Modulated)

EDGETECH DUAL FREQUENCY SIDE SCAN SONAR
Frequency = 120 kilohertz
Acoustic Source Level = 210 dB re 1μPa @ 1 m
Transducer Radiation = 0.8° horizontal composite, 70° vertical
Range = 238 meters per channel
Record Divisions = 50 meters
Pulse Bandwidth = 12 kHz

SIMRAD EM-2000 MULTIBEAM SYSTEM
Frequency = 200 kHz
Ping Rate = 10 times per second
Number of Beams per Ping = 111
Beamwidth = 2° acrosstrack; 1.5° alongtrack
Pulse Length = 0.05 – 0.25 msecs

SURVEY VESSEL
R/V *Rig Supporter*
Average speed during survey = 3.8 knots
Sea state during the survey = Near calm to 7 feet

AUV SYSTEM CONFIGURATION



730 EAST KALISTE SALOOM ROAD, LAFAYETTE, LOUISIANA 70508

C&C Technologies
SURVEY SERVICES

Continental Shelf Associates, Inc.

C&C Technologies

Continental Shelf Associates, Inc.

C & C TECHNOLOGIES AUV HOS SURVEY LOG

Page No. 1

Job No: 3081 Mission Name: run020516_2	Client: MMS	Vessel: M/V Rig Supporter	Survey Equipment: Satloc DGPS, Inertial Navigation, HiPAP, Doppler Speed Log

Date: May 16, 2002	Area: OCS-G-21733 VK 916	Survey Units: Meters	Datum, Projection: WGS 84, UTM16	Geophysical Equipment: Edgetech 216 FSSB Profiler, Edgetech Dual Frequency SSS, Simrad EM 2000 Multibeam

Time (UTC) (-5to Local)	Heading	Water Depth	Fix No.	Line Name	Remarks
1700					Transit to job site from job no. 3063
2145					Arrived onsite for seabird, CTD
2219					CTD complete
2227					Begin pre-dive
2253					Pre-dive complete, sound velocity 020516c entered into HiPAP
2255					Start mission run020516_2
22:58:45					Split pin pulled run020516_2
2259					Hugin in water
2301					Acoustic fish in water
2303					ADL and HiPAP communication
2309					ACL communication
2311					Hugin at 200m, command to 400m
2314					Hugin at 400m, command to 700m
2320					Hugin at 700m, command to 925m
2324					Hugin at 925m, command to 975m
2325					Change to height mode, 50m
2326					Execute external plan
2337	360	1058	27	101	SOL
2351	360	1005	17	101	EOL
2356	180	997	15	102	SOL
2359					Used HP and Used Energy not reset: Used HP = 29.4781 Used Energy = 22.53 kWh
0000					New day May 17, 2002
0019	180	1109	30	102	EOL
0023	360	1113	33	103	SOL

C&C Technologies

Continental Shelf Associates, Inc.

C & C TECHNOLOGIES AUV HOS SURVEY LOG

Page No. 2

Job No: 3081 Mission Name: run020516_2	Client: MMS	Vessel: M/V Rig Supporter	Survey Equipment: Satloc DGPS, Inertial Navigation, HiPAP, Doppler Speed Log	
Date: May 17, 2002	Area: OCS-G-21733 VK 916	Survey Units: Meters	Datum, Projection: WGS 84, UTM16	Geophysical Equipment: Edgetech 216 FSSB Profiler, Edgetech Dual Frequency SSS, Simrad EM 2000 Multibeam

Time (UTC) (-5to Local)	Heading	Water Depth	Fix No.	Line Name	Remarks
0051	360	987	12	103	EOL
0056	180	984	10	104	SOL
0130	180	1135	35	104	EOL
0134	360	1150	37	105	SOL
0212	360	981	8	105	EOL
0216	180	970	7	106	SOL
0257	180	1160	38	106	EOL
0302	360	1182	38	107	SOL
0348	360	975	6	107	EOL
0353	180	985	4	108	SOL
0443	180	1188	41	108	EOL
0445	360	1197	42	109	SOL
0500					Shift change D. Aucoin J. Barras seas: 1m wind: SE 10 knts
0537	360	1001	3	109	EOL
0541	180	1008	3	110	SOL
0631	180	1206	42	110	EOL
0636	360	1217	43	111	SOL
0731	360	1006	2	111	EOL
0735	180	1002	2	112	SOL
0828	180	1223	43	112	EOL
0833	360	1231	44	113	SOL
0929	360	983	1	113	EOL
0934	180	995	1	117	SOL

730 EAST KALISTE SALOOM ROAD, LAFAYETTE, LOUISIANA 70508

C&C Technologies

Continental Shelf Associates, Inc.

C & C TECHNOLOGIES AUV HOS SURVEY LOG

Page No. 3

Job No: 3081 Mission Name: run020516_2	Client: MMS	Vessel: M/V Rig Supporter	Survey Equipment: Satloc DGPS, Inertial Navigation, HiPAP, Doppler Speed Log	
Date: May 17, 2002	Area: OCS-G-21733 VK 916	Survey Units: Meters	Datum, Projection: WGS 84, UTM16	Geophysical Equipment: Edgetech 216 FSSB Profiler, Edgetech Dual Frequency SSS, Simrad EM 2000 Multibeam

Time (UTC) (-5to Local)	Heading	Water Depth	Fix No.	Line Name	Remarks
1030	180	1234	44	114	EOL
1034	360	1240	44	115	SOL
1100	360	1102	23	115	Seas: 1m winds: 10-15 knts SE
1131	360	999	1	115	EOL
1135	180	1000	1	116a	SOL
1206	180	1131	25	116s	EOL
1210	360	1144	6	136	SOL
1219	360	1127	1	136	EOL
1229	090	1101	1	135	SOL
1238	090	1157	6	135	EOL
1241	270	1157	6	133	SOL
1250	270	1096	1	133	EOL
1254	090	1107	1	134	SOL
1303	090	1159	6	134	EOL
1313	360	1144	6	136h	SOL SSH only
1321	360	1128	1	136h	EOL
1332	090	1099	1	135h	SOL SSH only
1340	090	1158	6	135h	EOL
1344	270	1154	6	133h	SOL SSH only
1352	270	1096	1	133h	EOL
1356	090	1108	1	134h	SOL SSH only
1405	090	1159	6	134h	EOL
1414	180	1128	25	116b	SOL all sensors
1439	180	1242	44	116b	EOL

C&C Technologies

Continental Shelf Associates, Inc.

C & C TECHNOLOGIES AUV HOS SURVEY LOG

Page No. 4

Job No: 3081 Mission Name: run020516_2	Client: MMS	MINERALS MANAGEMENT SERVICE U.S. DEPARTMENT OF THE INTERIOR	Vessel: M/V Rig Supporter	Survey Equipment: Satloc DGPS, Inertial Navigation, HiPAP, Doppler Speed Log
Date: May 17, 2002	Area: OCS-G-21733 VK 916	Survey Units: Meters	Datum, Projection: WGS 84, UTM16	Geophysical Equipment: Edgetech 216 FSSB Profiler, Edgetech Dual Frequency SSS, Simrad EM 2000 Multibeam

Time (UTC) (-5to Local)	Heading	Water Depth	Fix No.	Line Name	Remarks
1443	360	1246	44	117	SOL
1542	360	1000	1	117	EOL
1544	180	1008	1	118	SOL
1640	180	1245	44	118	EOL
1644	360	1245	44	119	SOL
1700					Shift change H. Carnocki Z. Rivers
					Winds: S 15 knots Seas: 1m
1741	360	1010	1	119	EOL
1746	180	1018	1	120	SOL
1841	180	1230	44	120	EOL
1846	360	1222	43	121	SOL
1940	360	1028	2	121	EOL
1944	180	1048	2	122	SOL
2038	180	1240	43	122	EOL
2041	360	1263	42	123	SOL
2133	360	1059	3	123	EOL
2136	180	10066	3	124	SOL
2226	180	1271	42	124	EOL
2231	360	1273	41	125	SOL
2320	360	1076	4	125	EOL
2324	180	1087	5	126	SOL
0000	180		33	126	New day May 18, 2002
0008	180	1241	39	126	EOL
0011	360	1243	38	127	SOL

C&C Technologies

Continental Shelf Associates, Inc.

C & C TECHNOLOGIES AUV HOS SURVEY LOG

Page No. 5

Job No: 3081 Mission Name:	Client: MMS	Vessel: M/V Rig Supporter	Survey Equipment: Satloc DGPS, Inertial Navigation, HiPAP, Doppler Speed Log

Date: May 18th 2002	Area: OCS-G-21733 VK 916	Survey Units: Meters	Datum, Projection: WGS 84, UTM16	Geophysical Equipment: Edgetech 216 FSSB Profiler, Edgetech Dual Frequency SSS, Simrad EM 2000 Multibeam

Time (UTC) (-5to Local)	Heading	Water Depth	Fix No.	Line Name	Remarks
0055	360	1101	6	127	EOL
0059	180	1107	7	128	SOL
0138	180	1244	27	128	EOL
0143	360	1250	35	129	SOL
0218	360	1127	9	129	EOL
0224	180	1145	10	130	SOL
0253	180	1251	32	130	EOL
0259	360	1245	27	131	SOL
0305	360	1218		131	Battery voltages falling. HP dosing voltage = 5V. Not response from battery. Turned off
/					Edgetech Em2000 and Seabird.
0308					Hugin emergency Accented due to Low battery voltages
/					Errors = " Critical Battery Cell Voltage"
0331					Acoustic fish on Deck
0344					Hugin on surface
0403					Exit session run020516_2
0404					Hugin in Van
0405					Downloading flash data run020516_2
0410					Flash Download complete
0459					Data download complete
0537					Start Pre-dive Run020518_1
0606					Finished w/ Pre-dive
0610					Restarting Pre-dive, 'SDLC CRC NavP error"

C & C Technologies

Continental Shelf Associates, Inc.

C & C TECHNOLOGIES AUV HOS SURVEY LOG

Page No. 6

Job No: 3081 Mission Name: run020518_2	Client: MMS	Vessel: M/V Rig Supporter	Survey Equipment: Satloc DGPS, Inertial Navigation, HiPAP, Doppler Speed Log

Date: May 18th 2002	Area: OCS-G-21733 VK 916	Survey Units: Meters	Datum, Projection: WGS 84, UTM16	Geophysical Equipment: Edgetech 216 FSSB Profiler, Edgetech Dual Frequency SSS, Simrad EM 2000 Multibeam

Time (UTC) (-5to Local)	Heading	Water Depth	Fix No.	Line Name	Remarks
0633					Finish Pre-Dive run020518_1
0634					Started Mission
0636:07					Split pin pulled
0637					Hugin in the water, Acoustic fish in the water
0640					HiPAP & ADL operational
0645					ACL working
0650					Command Hugin to 800m
0703					Commanded Hugin to 100m
0706					Commanded Hugin to 1125m
0707					Commanded Hugin to Height 50m
0711					Commanded External Guidance
0718	180	1176	14	132	SOL
0733	180	1227	25	132	EOL
0740	360	1243	28	131	SOL
0802	360	1157	11	131	EOL Mission Complete / transit to DVL Testing Area
					May 20, 2002
0549					External guidance
0601	270	1162	8	137	SOL
0611	270	1102	1	137	EOL
0614	090	1099	1	138	SOL
0623	090	1160	8	138	EOL – end of mission
					In transit to DVL Testing020519

C · C Technologies

Continental Shelf Associates, Inc.

C & C TECHNOLOGIES SURVEY LOG (Hydro-station)

Page No. 1

Job # 3081	Client:	Vessel: M/V Rig Supporter Remote Vessel: AUV	Survey Equipment: Satloc DGPS, Inertial Navigation, HiPAP, Doppler Speed Log

Date: (UTC, -5 to Local) 17 May 17, 2002	Area: OCS-G-21733 VK 916 Units: m	Mission: MMS_020516	Datum,Projection: NAD 27, UTM16N	Geophysical Equipment: Edgetech 216 FSSB Profiler, Edgetech Dual Frequency SSS, Simrad EM 2000

Time (UTC) (-5 to Local)	Heading	Water Depth	Fix No.	Line Name	Remarks
1700					Transit to Job Site
2145					On location, Positioning Boat for CTD cast
2151					CTD Deployed
2203		1255			CTD on bottom 020516C VK917
/					Lat 29 05.31980 Lon -87 51.9849
/					X = 415676 Y = 3217692
2213					CTD on Surface
2226					Sound Velocity processed. Starting Pre-Dive checks
/					Hydrostation = MMS_020516
/					HOS = Run020516_2
2248					Pre-Dive complete waiting on battery
2255					Mission Started
2258:45					Split pin pulled
2259					Hugin in the water
2330					All systems functioning, External
/					Guidance started
2337	360	1058	27	101	SOL
2351	360	1005	17	101	EOL
2356	180	997	15	102	SOL
0000	180		17	102	New Day 020517
/					Lat 29 06.825 Lon -87 55.126
/					X = 410606.00 Y = 3220762.93
0019	180	1109	30	102	EOL
0023	360	1113	33	103	SOL
0051	360	987	12	103	EOL
0056	180	984	10	104	SOL
0130	180	1135	35	104	EOL
0134	360	1150	37	105	SOL
0212	360	981	8	105	EOL
0216	180	969	7	106	Sol
0258	180	1158	38	106	EOL
0301	360	1176	40	107	SOL

C & C Technologies

Continental Shelf Associates, Inc.

C & C TECHNOLOGIES SURVEY LOG (Hydro-station)

Page No. 2

Job #	Client:	Vessel	Survey Equipment
3081		**Vessel:** M/V Rig Supporter **Remote Vessel:** AUV	**Survey Equipment:** Satloc DGPS, Inertial Navigation, HiPAP, Doppler Speed Log

Date: (UTC, -5 to Local)	Area	Mission:	Datum,Projection:	Geophysical Equipment
May 17th 2002	**Area:** OCS-G-21733 VK 916 **Units:** m	MMS_020516	NAD 27, UTM16N	**Geophysical Equipment:** Edgetech 216 FSSB Profiler, Edgetech Dual Frequency SSS, Simrad EM 2000

Time (UTC) (-5 to Local)	Heading	Water Depth	Fix No.	Line Name	Remarks
0348	360	975	6	107	EOL
0353	180	985	4	108	SOL
0442	180	1188	41	108	EOL
0445	360	1197	42	109	SOL
0500					Shift Change; Jay Barras, Dave Aucoin **Winds SE 10 kts Seas 3 ft**
0537	360	1001	3	109	EOL
0541	180	1008	3	110	SOL
0631	180	1206	42	110	EOL
0636	360	1217	43	111	SOL
0731	360	1006	2	111	EOL
0735	180	1002	2	112	SOL
0828	180	1223	43	112	EOL
0833	360	1231	44	113	SOL
0929	360	983	1	113	EOL
0934	180	995	1	114	SOL
1030	180	1234	44	114	EOL
1034	360	1240	44	115	SOL
1100	360		23	115	Winds: SE 10-15 kts Seas 3ft
1131	360	999	1	115	EOL
1135	180	1000	1	116a	SOL
1206	180	1131	25	116a	EOL
1210	360	1142	6	136	SOL
1219	360	1127	1	136	EOL
1229	090	1101	1	135	SOL
1238	090	1157	6	135	EOL
1241	270	1157	6	133	SOL
1250	270	1096	1	133	EOL
1254	090	1107	1	134	SOL
1303	090	1159	6	134	EOL SSL SB = OFF SSH = ON
1313	360	1144	6	136h	SOL
1321	360	1128	1	136h	EOL

730 EAST KALISTE SALOOM ROAD, LAFAYETTE, LOUISIANA 70508

C & C TECHNOLOGIES SURVEY LOG (Hydro-station)

Page No. 3

Job # 3081	Client: [illegible]	Vessel: M/V Rig Supporter Remote Vessel: AUV	Survey Equipment: Satloc DGPS, Inertial Navigation, HiPAP, Doppler Speed Log

Date: (UTC, -5 to Local) May 17th 2002	Area: OCS-G-21733 VK 916 Units: m	Mission: MMS_020516	Datum,Projection: NAD 27, UTM16N	Geophysical Equipment: Edgetech 216 FSSB Profiler, Edgetech Dual Frequency SSS, Simrad EM 2000

Time (UTC) (-5 to Local)	Heading	Water Depth	Fix No.	Line Name	Remarks
1332	090	1099	1	135h	SOL
1340	090	1158	6	135h	EOL
1344	270	1154	6	133h	SOL
1352	270	1096	1	133h	EOL
1356	090	1108	1	134h	SOL
1405	090	1159	6	134h	EOL
1414	180	1128	25	116b	SOL
1439	180	1242	44	116b	EOL
1443	360	1246	44	117	SOL
1540	180	1009	3	117	Sippican T-5 020517 VK 872
/					Lat 29 08.0841 Lon –87 53.3010
/					X = 413582.36 Y = 3223037.90
1542	360	1000	1	117	EOL
1544	180	1008	1	118	SOL
1640	180	1245	44	118	EOL
1644	360	1245	44	119	SOL
1700					Shift Change: Zac Rivers, H Carnocki Winds s 15kts Seas 3ft
1741	360	1010	1	119	EOL
1743	180	1014	1	120	SOL
1841	180	1228	44	120	EOL
1846	360	1222	43	121	SOL
1940	360	1028	2	121	EOL
1944	180	1048	2	122	SOL
2037	180	1240	43	122	EOL
2041	360	1263	42	123	SOL
2133	360	1057	3	123	EOL
2136	180	1062	3	124	SOL
2226	180	1271	42	124	EOL
2231	360	1273	41	125	SOL
2320	360	1076	4	125	EOL
2324	180	1087	5	126	SOL
/	/	/	/	/	Continued Next Page / / / / / /

C & C TECHNOLOGIES SURVEY LOG (Hydro-station)

Page No. 4

Job # 3081	**Client:** Minerals Management Service U.S. Department of the Interior	**Vessel:** M/V Rig Supporter **Remote Vessel:** AUV	**Survey Equipment:** Satloc DGPS, Inertial Navigation, HiPAP, Doppler Speed Log

Date: (UTC, -5 to Local) 18 May 2002	**Area:** OCS-G-21733 VK 916 **Units:** m	**Mission:** MMS_020516	**Datum,Projection:** NAD 27, UTM16N	**Geophysical Equipment:** Edgetech 216 FSSB Profiler, Edgetech Dual Frequency SSS, Simrad EM 2000

Time (UTC) (-5 to Local)	Heading	Water Depth	Fix No.	Line Name	Remarks
0008	180	1241	39	126	EOL
0011	360	1243	38	127	SOL
0056	360	1099	6	127	EOL
0059	180	1107	7	128	SOL
0138	180	1244	37	128	EOL
0144	360	1248	35	129	SOL
0218	360	1127	9	129	EOL
0224	180	1145	10	130	SOL
0252	180	1251	32	130	EOL
0259	360	1245	28	131	SOL
0305					Turned off all sensors due to
/					Battery Voltage falling off
0308					Emergency Ascent due to
					Critical voltage, Battery
					Unresponsive to HP Boosting
					Switched to NiCad Batteries
					And continued to drop w /all
					Sensors off
0331					Acoustic Fish on Deck
0345					Hugin on surface
0404					Hugin in van
0405					Downloading data
0500					Shift change J. Barras, D. Aucoin
0537					Starting pre-dive
0606					Pre-dive complete
0610					Re-starting pre-dive, SDLC CRC error
0633					Finish pre-dive run020518_1
0634					Mission started
0636:07					Split pin pulled

C&C Technologies

Continental Shelf Associates, Inc.

C & C TECHNOLOGIES SURVEY LOG (Hydro-station)

Page No. 5

Job # 3081	**Client:** [illegible]	**Vessel:** M/V Rig Supporter **Remote Vessel:** AUV	**Survey Equipment:** Satloc DGPS, Inertial Navigation, HiPAP, Doppler Speed Log

Date: (UTC, -5 to Local) 18 May, 2002	**Area:** OCS-G-21733 VK 916 **Units:** m	**Mission:** MMS_020518	**Datum, Projection:** NAD 27, UTM16N	**Geophysical Equipment:** Edgetech 216 FSSB Profiler, Edgetech Dual Frequency SSS, Simrad EM 2000

Time (UTC) (-5 to Local)	Heading	Water Depth	Fix No.	Line Name	Remarks
0637					Hugin in water
0640					Hi-pap and ADL working
0645					ACL working
0711					External guidance
0718	180	1176	14	132	Sol
0733	180	1227	25	132	Eol
0740	360	1243	28	131	Sol
0802	360	1157	11	131	Eol
0803					Mission Complete / Transit to DVL test site

C & C TECHNOLOGIES SURVEY LOG (Hydro-station)

Page No. 6

Job # 3081	**Client:** [illegible]	**Vessel:** M/V Rig Supporter **Remote Vessel:** AUV	**Survey Equipment:** Satloc DGPS, Inertial Navigation, HiPAP, Doppler Speed Log

Date: (UTC, -5 to Local) 20 May, 2002	**Area:** OCS-G-21733 VK 916 **Units:** m	**Mission:** MMS_020518	**Datum, Projection:** NAD 27, UTM16N	**Geophysical Equipment:** Edgetech 216 FSSB Profiler, Edgetech Dual Frequency SSS, Simrad EM 2000

Time (UTC) (-5 to Local)	Heading	Water Depth	Fix No.	Line Name	Remarks
/					Waiting on weather
2305					Starting pre-dive MMS_020519
2320					Pre-dive complete
0000					New Day May 20, 2002
/					Lat 29:06.9993 Lon 87:52.1102W
0145					Continuing to have battery problems
					Changing DC to DC converter bottle
0258					Restarting predive
0307					Predive complete
0446					Restarting predive
0453					Predive complete
0500					Shift change J.Barras, D.Aucoin
0508:25					Spilt pin pulled
0509					Hugin in water
0510					Acoustic fish in water
0515					Winds NNE 20kts Seas 1-1.5m
0549					External guidance
0601	270	1162	8	137	Sol
0611	270	1102	1	137	Eol
0614	090	1099	1	138	Sol
0623	090	1160	8	138	Eol, end of mission
/	/	/	/	/	In transit to DVL_Testing_020519

C&C Technologies

Continental Shelf Associates, Inc.

"CSA VK 916"
Survey Project
Job # 3081
Daily Progress Report Number 001 for May16, 2002

CSA:

C&C Technologies:

jgn@cctechnol.com; tsc@cctechnol.com; jef@cctechnol.com; tdr@cctechnol.com; jms@cctechnol.com; dpr@cctechnol.com; mjd@cctechnol.com; dpr@cctechnol.com;

Client	CSA
Scope of Work	
Vessel	MV *"Rig Supporter"*
Midnight Location	Lat: 28: 06.825 Lon: 087: 55.126

Note: All times UTC.

	Date	Time
Commenced MOB	05-16-02	1700
Transit from Job # 3063	05-16-02	1700
Commenced Scope of Work	05-16-02	2145
Completed Scope of Work		
Commenced Alternate Route Work		
Completed Alternate Route Work		
Arrived alongside		
Date completed Demob		

AA SAFETY

First aid cases	0	Date of last safety meeting	May 15, 2002
Medical treatment cases	0	Date of last safety committee	May 13, 2002
Restricted work cases	0	Date of last fire drill	April 14, 2002
Fatalities	0	Date of last abandon ship drill	April 28, 2002
Lost time incidents	0	Date of last man overboard drill	April 03, 2002

BB WEATHER – Last 24 hours

	Wind Direction	Wind Speed	Sea State
06:00	ESE	15-20kts	4-6'/7
12:00	SSE	15-20kts	4-6'/7
18:00	SSE	15-20kts	4-6'/7
24:00	SSE	10-20kts	3-5'/7

CC WEATHER FORECAST (VK 916) – next 72 hours

	Wind Direction	Wind Speed	Sea State
Friday 17th May 02	SSW	10-20kts	2-4'/7
Saturday 18th May 02	SSW	10-20kts	2-4'/7
Sunday 19th May 02	SSW	10-20kts	2-4'/7

DD DAILY CHRONOLOGY SUMMARY (Activities last 24hrs. Times in UTC. –5hrs to local)

FROM	TO	DESCRIPTION
0000	0100	Devil's Tower Re Route Job # 3064
0100	1700	SIEP Job # 3063
1700	2145	Transit Job Site VK916
2145	2226	CTD cast 020516b
2226	2259	Pre-dive run020516_2
2259	2337	Hugin launch and diving to depth.
2337	2400	Running lines on Job # 3081

EE CUMULATIVE TIMES (Note: All times UTC/Decimal hrs (-5 to local time)

	DAILY	CUMULATIVE
Office Standby	0.00	0.00
Mobilisation	0.00	0.00
Transit (Vessel)	4.75	4.75
Platform Check-in/Recon/CTD casts	0.68	0.68
Mission Planning/Pre-dive for Proposed Route	0.55	0.55
Survey of Proposed Route	0.38	0.38
Mission Planning/Pre-dive for Alternate Routes	0.00	0.00
Survey of Alternate Routes	0.00	0.00
Client request – extra work	0.00	0.00
Waiting on Weather	0.00	0.00
Vessel Downtime	0.00	0.00
Equipment Downtime	0.00	0.00
Anode Change/AUV Prep/Data Download	0.00	0.00
Dockside Data Processing/Demobilisation	0.00	0.00
Hugin Transit Time	0.00	0.00
Hugin recovery or dive (Operational)	0.64	0.64
Standby infield Data Processing	0.00	0.00
Job # 3063	16.00	16.00
Job # 3064	1.00	1.00
Totals	24.00	24.00

FF SURVEY OPERATIONS SUMMARY:

DIVE MISSION ACTIVITY

TOTAL APPROXIMATE DIVES FOR JOB.	CUMULATIVE PLANNED DIVES	PLANNED DIVES COMPLETE	PLANNED DIVES ABORTED / FAILED PRIOR TO MISSION	DIVES ABORTED DURING MISION
1	1	0	0	0

GG PERCENTAGES

	Distance (Miles approx)	% Completed	% Remaining
Mob/De-mob		50	50
Transit		50	50
Trials			100
Survey of Proposed Route: Job# 3081	107	01	99
Survey of Alternate Route:			
Total survey line miles run = 1.12			

HH C&C PERSONNEL

Name	Position	Company	Joined	Departed
Scott Melancon	Party Manager	C&C	04-25-02	
Heather Langill	Data Processor	C&C	04-25-02	
Mike Legros	System Admin.	C&C	04-25-02	
Sam Alleman	System Admin.	C&C	04-25-02	
Jesse Belanger	Geo	C&C	05-14-02	
Zac Rivers	Hugin Operator	C&C	04-25-02	
Heather Carnocki	Hugin Operator	C&C	04-25-02	
Jay Barras	Hugin Operator	C&C	04-25-02	
David Aucoin	Hugin Operator	C&C	04-25-02	
Ed Moore	Hugin Operator/Van	C&C	04-25-02	
Harvey Duplantis	Hugin Van Manager	C&C	04-25-02	
Brian Boudreaux	Hugin Van	C&C	04-25-02	
John Grovesnor	Hugin Van	C&C	04-25-02	
David McBride	Hugin Van	C&C	04-25-02	
Mike Marks	Hugin Van	C&C	04-25-02	
Jason Credeur	Draftsman	C&C	05-04-02	

II SITE QUERIES/MANAGEMENT OF CHANGE

JJ COMMENTS

C&C:

KK CONTACT NUMBERS:

LAB VOICE	Cellular	337-654-7519
LAB VOICE	Cellular Offshore	337-265-6529
LAB VOICE	Sky Cell	1-866-820-1465
LAB VOICE	Sat-B	011-874-320-599-212
LAB FAX	Satellite	011-874-320-599-213

	Charlie Spann Office Project Manager C&C Representative:	Scott Melancon Marine Project Manager C&C Representative:
	C&C	C&C

C&C Technologies

Continental Shelf Associates, Inc.

"CSA VK 916"
Survey Project
Job # 3081
Daily Progress Report Number 002 for May17, 2002

CSA:

C&C Technologies:
jgn@cctechnol.com; tsc@cctechnol.com; jef@cctechnol.com; tdr@cctechnol.com;
jms@cctechnol.com; dpr@cctechnol.com; mjd@cctechnol.com; dpr@cctechnol.com;

Client	CSA
Scope of Work	
Vessel	MV *"Rig Supporter"*
Midnight Location	Lat: 29: 05.566 Lon: 087: 52.139

Note: All times UTC.

	Date	Time
Commenced MOB	05-16-02	1700
Transit from Job # 3063	05-16-02	1700
Commenced Scope of Work	05-16-02	2145
Completed Scope of Work		
Commenced Alternate Route Work		
Completed Alternate Route Work		
Arrived alongside		
Date completed Demob		

AA SAFETY

First aid cases	0	Date of last safety meeting	May 17, 2002
Medical treatment cases	0	Date of last safety committee	May 13, 2002
Restricted work cases	0	Date of last fire drill	April 14, 2002
Fatalities	0	Date of last abandon ship drill	April 28, 2002
Lost time incidents	0	Date of last man overboard drill	April 03, 2002

BB WEATHER – Last 24 hours

	Wind Direction	Wind Speed	Sea State
06:00	S	10-15kts	2-3/7
12:00	SSW	10-15kts	2-4'/7
18:00	SW	10-20kts	2-4'/7

24:00	WSW	15-20kts	3-4'/7

CC WEATHER FORECAST (VK 916) – next 72 hours

	Wind Direction	Wind Speed	Sea State
Saturday 18th May 02	W/N	15-25kts	3-5'/7
Sunday 19th May 02	NE	20-25kts	5-7'/7
Monday 20th May 02	NE	20-25kts	6-8'/7

DD DAILY CHRONOLOGY SUMMARY (Activities last 24hrs. Times in UTC. –5hrs to local)

FROM	TO	DESCRIPTION
0000	2400	Running lines. 1730 C&C all hands Safety Meeting.

EE CUMULATIVE TIMES (Note: All times UTC/Decimal hrs (-5 to local time)

	DAILY	CUMULATIVE
Office Standby	0.00	0.00
Mobilisation	0.00	0.00
Transit (Vessel)	0.00	4.75
Platform Check-in/Recon/CTD casts	0.00	0.68
Mission Planning/Pre-dive for Proposed Route	0.00	0.55
Survey of Proposed Route	24.00	24.38
Mission Planning/Pre-dive for Alternate Routes	0.00	0.00
Survey of Alternate Routes	0.00	0.00
Client request – extra work	0.00	0.00
Waiting on Weather	0.00	0.00
Vessel Downtime	0.00	0.00
Equipment Downtime	0.00	0.00
Anode Change/AUV Prep/Data Download	0.00	0.00
Dockside Data Processing/Demobilisation	0.00	0.00
Hugin Transit Time	0.00	0.00
Hugin recovery or dive (Operational)	0.00	0.64
Standby infield Data Processing	0.00	0.00
Job # 3063	0.00	16.00
Job # 3064	0.00	1.00
Totals	24.00	48.00

FF SURVEY OPERATIONS SUMMARY:

DIVE MISSION ACTIVITY

TOTAL APPROXIMATE DIVES FOR JOB.	CUMULATIVE PLANNED DIVES	PLANNED DIVES COMPLETE	PLANNED DIVES ABORTED / FAILED PRIOR TO MISSION	DIVES ABORTED DURING MISION
1	1	0	0	0

GG PERCENTAGES

	Distance (Miles approx)	% Completed	% Remaining
Mob/De-mob		50	50
Transit		50	50
Trials			100
Survey of Proposed Route: Job# 3081	107	86	14
Survey of Alternate Route:			
Total survey line miles run = 92.37			

HH C&C PERSONNEL

Name	Position	Company	Joined	Departed
Scott Melancon	Party Manager	C&C	04-25-02	
Heather Langill	Data Processor	C&C	04-25-02	
Mike Legros	System Admin.	C&C	04-25-02	
Sam Alleman	System Admin.	C&C	04-25-02	
Jesse Belanger	Geo	C&C	05-14-02	
Zac Rivers	Hugin Operator	C&C	04-25-02	
Heather Carnocki	Hugin Operator	C&C	04-25-02	
Jay Barras	Hugin Operator	C&C	04-25-02	
David Aucoin	Hugin Operator	C&C	04-25-02	
Ed Moore	Hugin Operator/Van	C&C	04-25-02	
Harvey Duplantis	Hugin Van Manager	C&C	04-25-02	
Brian Boudreaux	Hugin Van	C&C	04-25-02	
John Grovesnor	Hugin Van	C&C	04-25-02	
David McBride	Hugin Van	C&C	04-25-02	
Mike Marks	Hugin Van	C&C	04-25-02	
Jason Credeur	Draftsman	C&C	05-04-02	

II SITE QUERIES/MANAGEMENT OF CHANGE

JJ COMMENTS

C&C:

KK CONTACT NUMBERS:

LAB VOICE	Cellular	337-654-7519
LAB VOICE	Cellular Offshore	337-265-6529
LAB VOICE	Sky Cell	1-866-820-1465
LAB VOICE	Sat-B	011-874-320-599-212
LAB FAX	Satellite	011-874-320-599-213

	Charlie Spann Office Project Manager C&C Representative:	Scott Melancon Marine Project Manager C&C Representative:
	C&C	C&C

"CSA VK 916"
Survey Project
Job # 3081
Daily Progress Report Number 003 for May18, 2002

CSA:

C&C Technologies:
jgn@cctechnol.com; tsc@cctechnol.com; jef@cctechnol.com; tdr@cctechnol.com; jms@cctechnol.com; dpr@cctechnol.com; mjd@cctechnol.com; dpr@cctechnol.com;

Client	**CSA**
Scope of Work	
Vessel	**MV *"Rig Supporter"***
Midnight Location	**Lat: 29: 05.566 Lon: 087: 52.139**

Note: All times UTC.

	Date	Time
Commenced MOB	05-16-02	1700
Transit from Job # 3063	05-16-02	1700
Commenced Scope of Work	05-16-02	2145
Completed Scope of Work	05-18-02	0800
Commenced Alternate Route Work		
Completed Alternate Route Work		
Arrived alongside		
Date completed Demob		

AA SAFETY

First aid cases	**0**	**Date of last safety meeting**	**May 17, 2002**
Medical treatment cases	**0**	**Date of last safety committee**	**May 13, 2002**
Restricted work cases	**0**	**Date of last fire drill**	**May 18, 2002**
Fatalities	**0**	**Date of last abandon ship drill**	**April 28, 2002**
Lost time incidents	**0**	**Date of last man overboard drill**	**April 03, 2002**

BB WEATHER – Last 24 hours

	Wind Direction	Wind Speed	Sea State
06:00	SW	15-20kts	3-4'/7
12:00	W/N	15-25kts	4-6'/7
18:00	NNE	20-25kts	5-7'/7
24:00	NNE	20-30kts	6-9'/7

CC WEATHER FORECAST (VK 916) – next 72 hours

	Wind Direction	Wind Speed	Sea State
Sunday 19th May 02	NE	15-25kts	5-7'/7
Monday 20th May 02	NE	15-20kts	4-6'/7
Tuesday 21st May 02	NE	15-20kts	4-6'/7

DD DAILY CHRONOLOGY SUMMARY (Activities last 24hrs. Times in UTC. –5hrs to local)

FROM	TO	DESCRIPTION
0000	0259	Running lines.
0259		Hugin Emergency Ascent due to Critical Cell Voltage.
0259	0718	Down due to battery problems. Changed out Circ. Pump.
0718	0800	Running lines.
0800		CSA/MMS Survey complete.
0800	2400	Off CSA/MMS time. C&C testing Job # 3087

EE CUMULATIVE TIMES (Note: All times UTC/Decimal hrs (-5 to local time)

	DAILY	CUMULATIVE
Office Standby	0.00	0.00
Mobilisation	0.00	0.00
Transit (Vessel)	0.00	4.75
Platform Check-in/Recon/CTD casts	0.00	0.68
Mission Planning/Pre-dive for Proposed Route	0.00	0.55
Survey of Proposed Route	3.68	24.38
Mission Planning/Pre-dive for Alternate Routes	0.00	0.00
Survey of Alternate Routes	0.00	0.00
Client request – extra work	0.00	0.00
Waiting on Weather	0.00	0.00
Vessel Downtime	0.00	0.00
Equipment Downtime	4.32	0.00
Anode Change/AUV Prep/Data Download	0.00	0.00
Dockside Data Processing/Demobilisation	0.00	0.00
Hugin Transit Time	0.00	0.00
Hugin recovery or dive (Operational)	0.00	0.64
Standby infield Data Processing	0.00	0.00
Job # 3063	0.00	16.00
Job # 3064	0.00	1.00
Job # 3087	16.00	16.00
Totals	24.00	72.00

FF SURVEY OPERATIONS SUMMARY:

DIVE MISSION ACTIVITY

TOTAL APPROXIMATE DIVES FOR JOB.	CUMULATIVE PLANNED DIVES	PLANNED DIVES COMPLETE	PLANNED DIVES ABORTED / FAILED PRIOR TO MISSION	DIVES ABORTED DURING MISION
1	2	1	0	1

GG PERCENTAGES

	Distance (Miles approx)	% Completed	% Remaining
Mob/De-mob		**50**	**50**
Transit		**50**	**50**
Trials			**100**
Survey of Proposed Route: Job# 3081	**107**	**100**	**0**
Survey of Alternate Route:			
Total survey line miles run = 106.26			

HH C&C PERSONNEL

Name	Position	Company	Joined	Departed
Scott Melancon	Party Manager	C&C	04-25-02	
Heather Langill	Data Processor	C&C	04-25-02	
Mike Legros	System Admin.	C&C	04-25-02	
Sam Alleman	System Admin.	C&C	04-25-02	
Jesse Belanger	Geo	C&C	05-14-02	
Zac Rivers	Hugin Operator	C&C	04-25-02	
Heather Carnocki	Hugin Operator	C&C	04-25-02	
Jay Barras	Hugin Operator	C&C	04-25-02	
David Aucoin	Hugin Operator	C&C	04-25-02	
Ed Moore	Hugin Operator/Van	C&C	04-25-02	
Harvey Duplantis	Hugin Van Manager	C&C	04-25-02	
Brian Boudreaux	Hugin Van	C&C	04-25-02	
John Grovesnor	Hugin Van	C&C	04-25-02	
David McBride	Hugin Van	C&C	04-25-02	
Mike Marks	Hugin Van	C&C	04-25-02	
Jason Credeur	Draftsman	C&C	05-04-02	

II SITE QUERIES/MANAGEMENT OF CHANGE

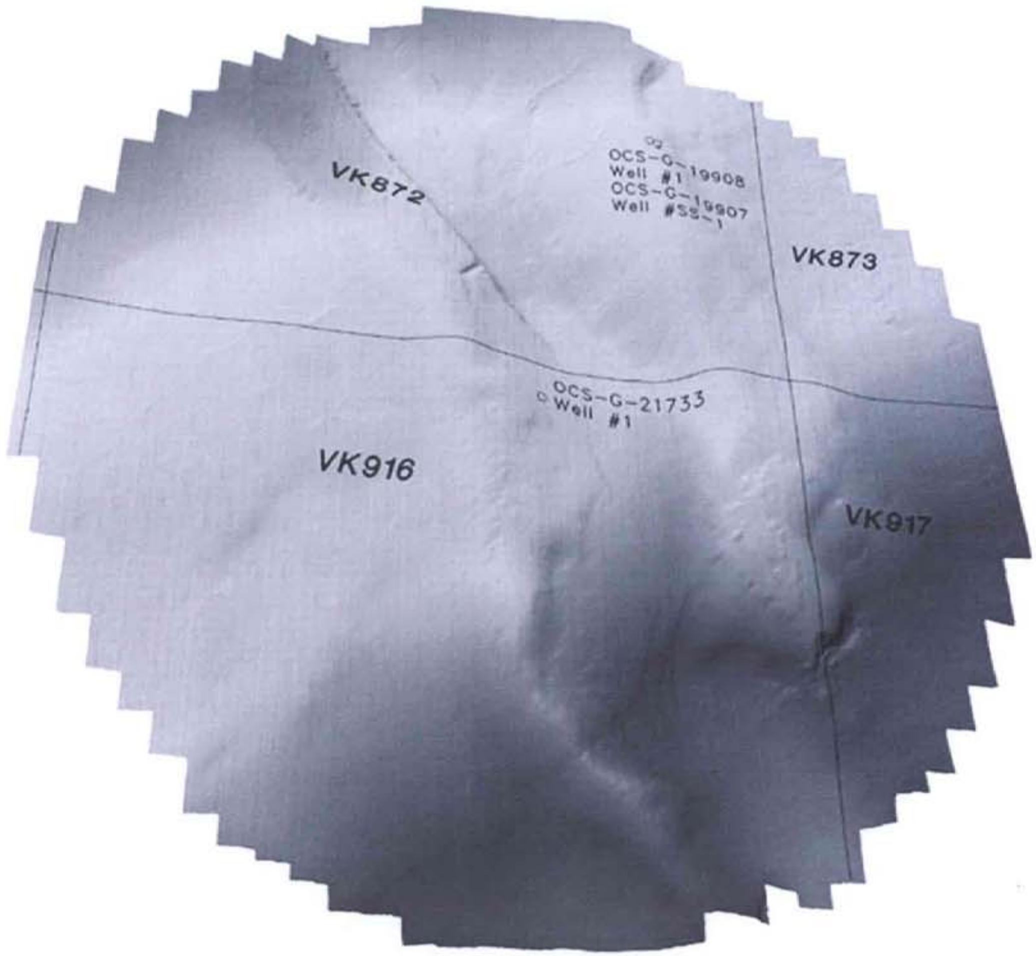
JJ COMMENTS

C&C:

KK CONTACT NUMBERS:

LAB VOICE	Cellular	337-654-7519
LAB VOICE	Cellular Offshore	337-265-6529
LAB VOICE	Sky Cell	1-866-820-1465
LAB VOICE	Sat-B	011-874-320-599-212
LAB FAX	Satellite	011-874-320-599-213

	Charlie Spann Office Project Manager C&C Representative:	Scott Melancon Marine Project Manager C&C Representative:
	C&C	C&C

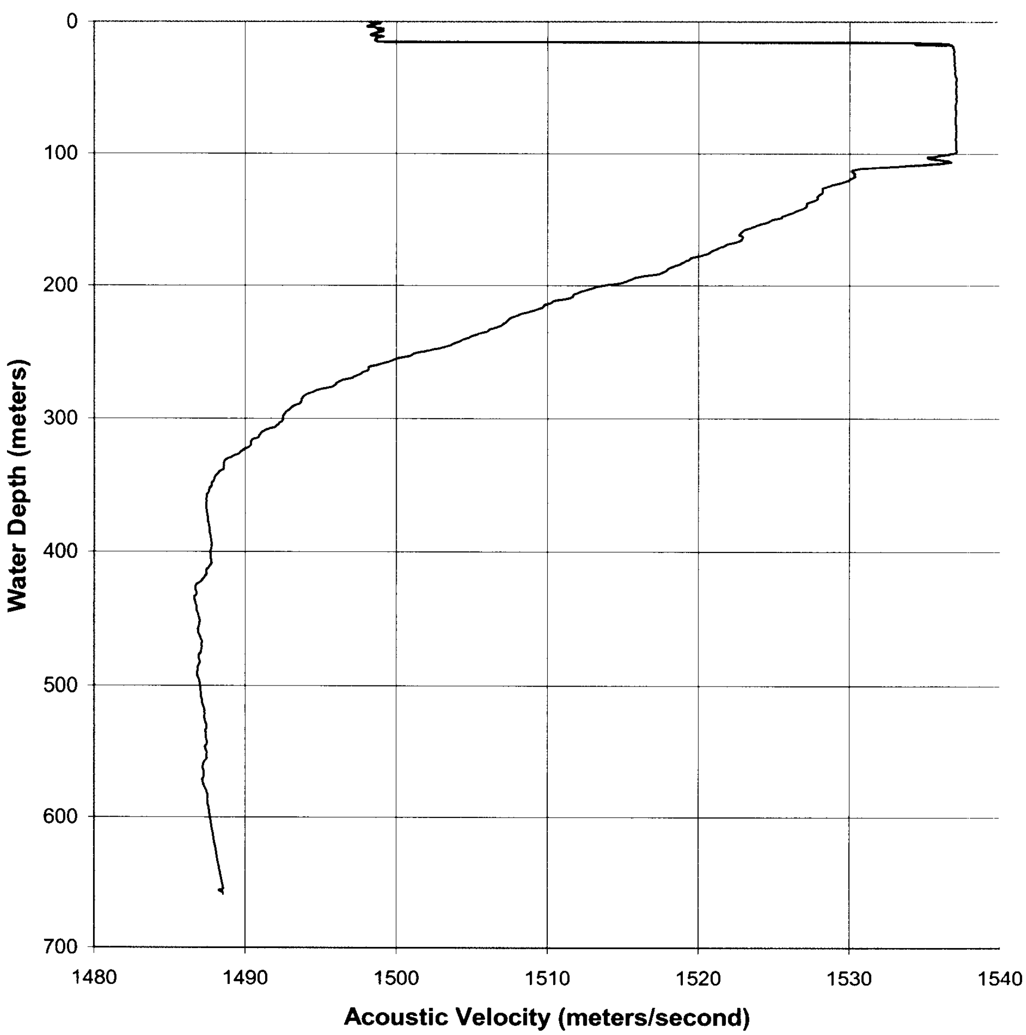


CONTINENTAL SHELF ASSOCIATES, Inc.
BATHYMETRIC IMAGE OVERVIEW
VIOSCA KNOLL AREA
Figure No. 1

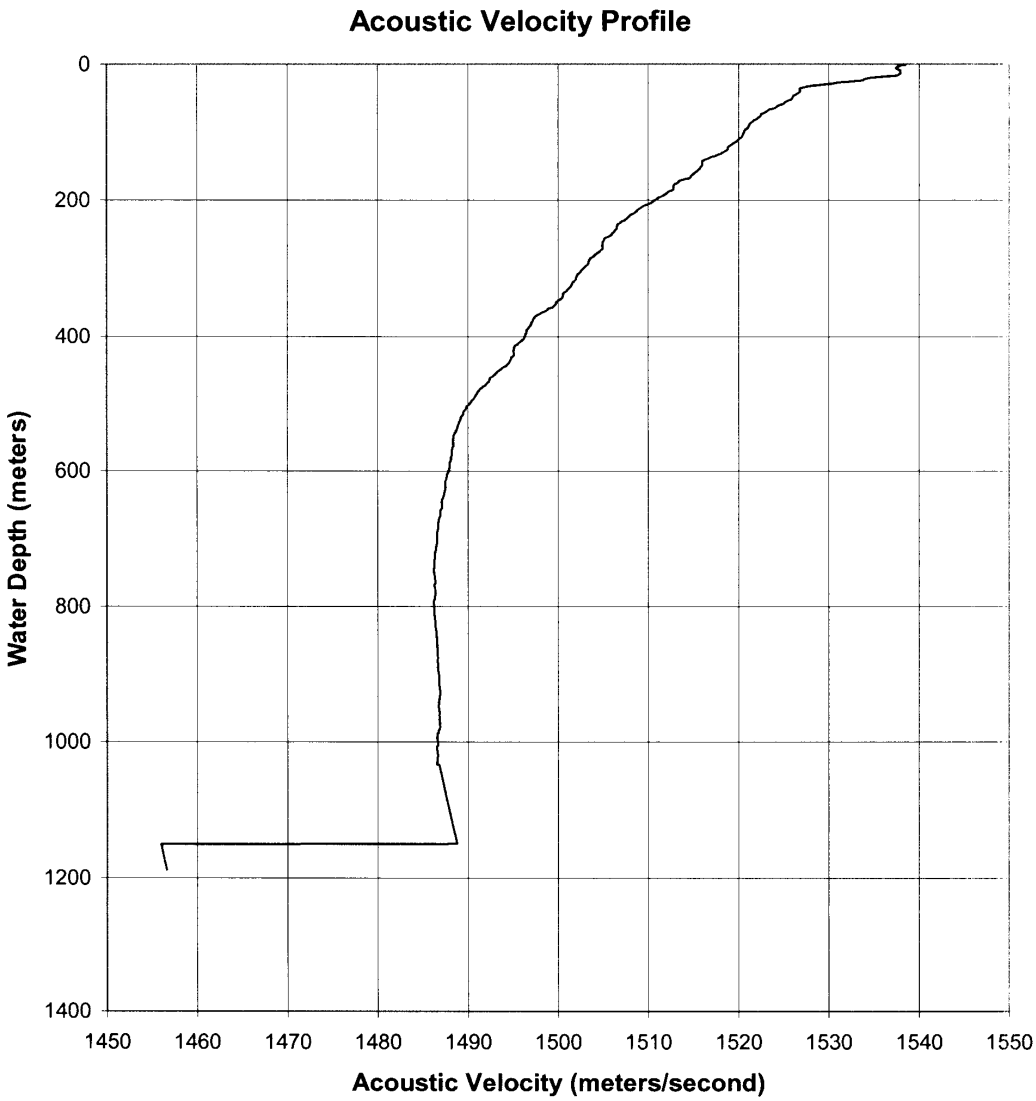
APPENDIX C

VELOCIMETER PROFILES

Acoustic Velocity Profile



Seabird SBE-19 Acoustic Velocimeter
Date: May 16, 2002
Latitude: 29.086634°
Longitude: -87.866416°
Easting: 415676.82m
Northing: 3217692.46m
Block 917, Vioska Knoll Area



Seabird SBE-19 Acoustic Velocimeter
Date: May 17, 2002
Latitude: 29.134735°
Longitude: -87.88835°
Easting: 413582.36m
Northing: 3223037.90m
Block 872, Vioska Knoll Area

C&C Technologies

Continental Shelf Associates, Inc.

ACOUSTIC VELOCITY DATA

Water Depth (meters)	Recorded Acoustic Velocity (meters)	Water Depth (meters)	Recorded Acoustic Velocity (meters)	Water Depth (meters)	Recorded Acoustic Velocity (meters)
0	1498.22	23	1536.91	46	1537.05
0.5	1498.69	23.5	1536.9	46.5	1537.04
1	1498.98	24	1536.91	47	1537.05
1.5	1498.73	24.5	1536.92	47.5	1537.07
2	1498.5	25	1536.92	48	1537.07
2.5	1498.27	25.5	1536.94	48.5	1537.08
3	1498.13	26	1536.94	49	1537.07
3.5	1498.07	26.5	1536.94	49.5	1537.07
4	1498.53	27	1536.93	50	1537.06
4.5	1498.69	27.5	1536.94	50.5	1537.06
5	1499.18	28	1536.95	51	1537.06
5.5	1499.16	28.5	1536.95	51.5	1537.07
6	1498.77	29	1536.93	52	1537.07
6.5	1499.03	29.5	1536.94	52.5	1537.07
7	1499.19	30	1536.96	53	1537.06
7.5	1498.94	30.5	1536.96	53.5	1537.06
8	1498.71	31	1536.96	54	1537.07
8.5	1498.55	31.5	1536.95	54.5	1537.08
9	1498.42	32	1536.96	55	1537.07
9.5	1498.32	32.5	1536.95	55.5	1537.08
10	1498.3	33	1536.97	56	1537.07
10.5	1499	33.5	1536.97	56.5	1537.07
11	1499.2	34	1536.99	57	1537.07
11.5	1498.77	34.5	1536.99	57.5	1537.06
12	1498.72	35	1536.98	58	1537.06
12.5	1498.64	35.5	1536.98	58.5	1537.07
13	1498.74	36	1536.99	59	1537.08
13.5	1498.59	36.5	1537.01	59.5	1537.08
14	1498.59	37	1537	60	1537.08
14.5	1498.72	37.5	1536.99	60.5	1537.07
15	1498.73	38	1536.98	61	1537.07
15.5	1533.81	38.5	1536.97	61.5	1537.06
16	1535.56	39	1536.97	62	1537.04
16.5	1536.59	39.5	1536.98	62.5	1537.03
17	1534.33	40	1536.99	63	1537.01
17.5	1536.8	40.5	1537	63.5	1537.01
18	1536.82	41	1537.03	64	1537.01
18.5	1536.89	41.5	1537.04	64.5	1537.02
19	1536.83	42	1537.07	65	1537.01
19.5	1536.89	42.5	1537.07	65.5	1537.01
20	1536.91	43	1537.08	66	1537.02
20.5	1536.91	43.5	1537.07	66.5	1537.05
21	1536.91	44	1537.07	67	1537.06
21.5	1536.92	44.5	1537.07	67.5	1537.06
22	1536.94	45	1537.07	68	1537.06
22.5	1536.93	45.5	1537.06	68.5	1537.05

730 EAST KALISTE SALOOM ROAD, LAFAYETTE, LOUISIANA 70508

ACOUSTIC VELOCITY DATA

Water Depth (meters)	Recorded Acoustic Velocity (meters)	Water Depth (meters)	Recorded Acoustic Velocity (meters)	Water Depth (meters)	Recorded Acoustic Velocity (meters)
69	1537.04	91.5	1537.06	114.5	1530.24
69	1537.04	92	1537.05	115	1530.31
69.5	1537.03	92.5	1537.05	115.5	1530.38
70	1537.03	93	1537.05	116	1530.38
70.5	1537.03	93.5	1537.06	116.5	1530.33
71	1537.03	94	1537.06	117	1530.32
71.5	1537.03	94.5	1537.05	117.5	1530.39
72	1537.01	95	1537.05	118	1530.39
72.5	1537.01	95.5	1537.06	118.5	1530.29
73	1537.01	96	1537.06	119	1530.15
73.5	1537.02	96.5	1537.06	119.5	1530.03
74	1537.02	97	1537.07	120	1530.02
74.5	1537.01	97.5	1537.08	120.5	1529.97
75	1537.01	98	1537.08	121	1529.84
75.5	1537.01	98.5	1537.09	121.5	1529.72
76	1537.01	99	1537.06	122	1529.59
76.5	1537.02	99.5	1536.94	122.5	1529.46
77	1537.03	100	1536.64	123	1529.27
77.5	1537.04	100.5	1536.62	123.5	1529.06
78	1537.03	101	1536.13	124	1528.89
78.5	1537.04	101.5	1535.84	124.5	1528.78
79	1537.04	102	1535.71	125	1528.62
79.5	1537.05	102.5	1535.17	125.5	1528.49
80	1537.05	103	1535.2	126	1528.36
80.5	1537.06	103.5	1535.2	126.5	1528.24
81	1537.07	104	1535.43	127	1528.2
81.5	1537.07	104.5	1535.86	127.5	1528.2
82	1537.07	105	1536.25	128	1528.22
82.5	1537.07	105.5	1536.57	128.5	1528.22
83	1537.07	106	1536.7	129	1528.23
83.5	1537.06	106.5	1536.78	129.5	1528.24
84	1537.06	107	1536.4	130	1528.23
84.5	1537.05	107.5	1536.05	130.5	1528.18
85	1537.05	108	1535.48	131	1528.1
85.5	1537.04	108.5	1534.79	131.5	1528.02
86	1537.05	109	1533.96	132	1527.97
86.5	1537.05	109.5	1533.3	132.5	1527.91
87	1537.05	110	1532.7	133	1527.87
87.5	1537.04	110.5	1531.98	133.5	1527.91
88	1537.03	111	1531.27	134	1527.91
88.5	1537.01	111.5	1530.74	134.5	1527.93
89	1537.02	112	1530.47	135	1527.91
89.5	1537.04	112.5	1530.28	135.5	1527.81
90	1537.05	113	1530.18	136	1527.67
90.5	1537.06	113.5	1530.17	136.5	1527.52
91	1537.06	114	1530.2	137	1527.39

ACOUSTIC VELOCITY DATA

Water Depth (meters)	Recorded Acoustic Velocity (meters)
137.5	1527.26
137.5	1527.26
138	1527.2
138.5	1527.18
139	1527.17
139.5	1527.18
140	1527.19
140.5	1527.17
141	1527.1
141.5	1527.03
142	1526.95
142.5	1526.84
143	1526.7
143.5	1526.59
144	1526.48
144.5	1526.38
145	1526.31
145.5	1526.2
146	1526.05
146.5	1525.92
147	1525.8
147.5	1525.65
148	1525.52
148.5	1525.53
149	1525.57
149.5	1525.36
150	1525.07
150.5	1524.92
151	1524.83
151.5	1524.73
152	1524.68
152.5	1524.57
153	1524.42
153.5	1524.25
154	1524.09
154.5	1523.95
155	1523.84
155.5	1523.74
156	1523.62
156.5	1523.52
157	1523.39
157.5	1523.23
158	1523.09
158.5	1523.01
159	1522.95
159.5	1522.89

Water Depth (meters)	Recorded Acoustic Velocity (meters)
160	1522.84
160.5	1522.81
161	1522.78
161.5	1522.72
162	1522.7
162.5	1522.83
163	1522.93
163.5	1522.97
164	1522.97
164.5	1522.94
165	1522.9
165.5	1522.88
166	1522.81
166.5	1522.73
167	1522.61
167.5	1522.47
168	1522.26
168.5	1522.05
169	1521.9
169.5	1521.83
170	1521.8
170.5	1521.69
171	1521.53
171.5	1521.39
172	1521.3
172.5	1521.23
173	1521.13
173.5	1521.01
174	1520.91
174.5	1520.86
175	1520.79
175.5	1520.73
176	1520.66
176.5	1520.5
177	1520.33
177.5	1520.2
178	1520.01
178.5	1519.75
179	1519.56
179.5	1519.48
180	1519.45
180.5	1519.41
181	1519.3
181.5	1519.2
182	1519.1
182.5	1519.01

Water Depth (meters)	Recorded Acoustic Velocity (meters)
183	1518.93
183.5	1518.85
184	1518.78
184.5	1518.65
185	1518.52
185.5	1518.4
186	1518.26
186.5	1518.13
187	1518.04
187.5	1517.99
188	1517.95
188.5	1517.92
189	1517.88
189.5	1517.75
190	1517.64
190.5	1517.57
191	1517.48
191.5	1517.3
192	1516.92
192.5	1516.57
193	1516.34
193.5	1516.08
194	1515.86
194.5	1515.74
195	1515.7
195.5	1515.55
196	1515.41
196.5	1515.35
197	1515.24
197.5	1515.1
198	1514.95
198.5	1514.77
199	1514.42
199.5	1514.01
200	1513.72
200.5	1513.49
201	1513.31
201.5	1513.16
202	1513.04
202.5	1512.89
203	1512.73
203.5	1512.58
204	1512.43
204.5	1512.28
205	1512.17
205.5	1512.08

ACOUSTIC VELOCITY DATA

Water Depth (meters)	Recorded Acoustic Velocity (meters)
206	1511.94
206.5	1511.81
207	1511.76
207.5	1511.73
208	1511.72
208.5	1511.7
209	1511.63
209.5	1511.48
210	1511.28
210.5	1510.96
211	1510.62
211.5	1510.43
212	1510.36
212.5	1510.34
213	1510.29
213.5	1510.13
214	1509.92
214.5	1509.83
215	1509.8
215.5	1509.78
216	1509.73
216.5	1509.69
217	1509.55
217.5	1509.38
218	1509.28
218.5	1509.14
219	1508.95
219.5	1508.8
220	1508.69
220.5	1508.49
221	1508.28
221.5	1508.16
222	1508.11
222.5	1508
223	1507.86
223.5	1507.72
224	1507.59
224.5	1507.52
225	1507.49
225.5	1507.46
226	1507.4
226.5	1507.35
227	1507.31
227.5	1507.27
228	1507.18
228.5	1507.11

Water Depth (meters)	Recorded Acoustic Velocity (meters)
229	1507.07
229.5	1507.02
230	1506.95
230.5	1506.83
231	1506.72
231.5	1506.6
232	1506.45
232.5	1506.27
233	1506.16
233.5	1506.12
234	1506.11
234.5	1506.04
235	1505.87
235.5	1505.64
236	1505.49
236.5	1505.41
237	1505.3
237.5	1505.11
238	1504.99
238.5	1504.91
239	1504.84
239.5	1504.71
240	1504.56
240.5	1504.44
241	1504.34
241.5	1504.25
242	1504.17
242.5	1504.07
243	1503.91
243.5	1503.79
244	1503.73
244.5	1503.66
245	1503.58
245.5	1503.39
246	1503.23
246.5	1503.07
247	1502.9
247.5	1502.7
248	1502.46
248.5	1502.28
249	1502.1
249.5	1501.88
250	1501.61
250.5	1501.33
251	1501.2
251.5	1501.14

Water Depth (meters)	Recorded Acoustic Velocity (meters)
252	1501.06
252.5	1501
253	1500.88
253.5	1500.64
254	1500.33
254.5	1500.12
255	1500
255.5	1499.89
256	1499.77
256.5	1499.69
257	1499.58
257.5	1499.39
258	1499.2
258.5	1499.07
259	1498.91
259.5	1498.76
260	1498.55
260.5	1498.34
261	1498.22
261.5	1498.16
262	1498.16
262.5	1498.16
263	1498.16
263.5	1498.14
264	1498.02
264.5	1497.86
265	1497.76
265.5	1497.73
266	1497.67
266.5	1497.57
267	1497.5
267.5	1497.39
268	1497.25
268.5	1497.18
269	1497.13
269.5	1496.98
270	1496.71
270.5	1496.48
271	1496.38
271.5	1496.31
272	1496.23
272.5	1496.14
273	1496.08
273.5	1496.04
274	1496
274.5	1495.96

ACOUSTIC VELOCITY DATA

Water Depth (meters)	Recorded Acoustic Velocity (meters)	Water Depth (meters)	Recorded Acoustic Velocity (meters)	Water Depth (meters)	Recorded Acoustic Velocity (meters)
275	1495.92	298	1492.51	321	1490.33
275.5	1495.88	298.5	1492.49	321.5	1490.27
276	1495.79	299	1492.49	322	1490.23
276.5	1495.61	299.5	1492.5	322.5	1490.15
277	1495.35	300	1492.51	323	1490.02
277.5	1495.14	300.5	1492.52	323.5	1489.93
278	1494.93	301	1492.52	324	1489.88
278.5	1494.77	301.5	1492.48	324.5	1489.82
279	1494.67	302	1492.44	325	1489.73
279.5	1494.59	302.5	1492.4	325.5	1489.69
280	1494.52	303	1492.31	326	1489.68
280.5	1494.39	303.5	1492.26	326.5	1489.66
281	1494.24	304	1492.24	327	1489.56
281.5	1494.13	304.5	1492.21	327.5	1489.44
282	1494.04	305	1492.14	328	1489.3
282.5	1493.97	305.5	1492.08	328.5	1489.22
283	1493.92	306	1492.04	329	1489.15
283.5	1493.88	306.5	1491.99	329.5	1489.06
284	1493.83	307	1491.86	330	1488.96
284.5	1493.8	307.5	1491.7	330.5	1488.84
285	1493.77	308	1491.55	331	1488.76
285.5	1493.72	308.5	1491.42	331.5	1488.71
286	1493.71	309	1491.31	332	1488.66
286.5	1493.71	309.5	1491.22	332.5	1488.63
287	1493.73	310	1491.14	333	1488.61
287.5	1493.71	310.5	1491.08	333.5	1488.59
288	1493.67	311	1491.05	334	1488.59
288.5	1493.65	311.5	1491.02	334.5	1488.59
289	1493.57	312	1491	335	1488.6
289.5	1493.42	312.5	1490.97	335.5	1488.59
290	1493.29	313	1490.94	336	1488.6
290.5	1493.2	313.5	1490.92	336.5	1488.59
291	1493.15	314	1490.91	337	1488.59
291.5	1493.09	314.5	1490.86	337.5	1488.59
292	1493.03	315	1490.72	338	1488.59
292.5	1492.98	315.5	1490.57	338.5	1488.57
293	1492.95	316	1490.47	339	1488.5
293.5	1492.9	316.5	1490.45	339.5	1488.4
294	1492.81	317	1490.42	340	1488.31
294.5	1492.74	317.5	1490.38	340.5	1488.27
295	1492.71	318	1490.37	341	1488.27
295.5	1492.68	318.5	1490.37	341.5	1488.22
296	1492.65	319	1490.38	342	1488.17
296.5	1492.62	319.5	1490.39	342.5	1488.12
297	1492.59	320	1490.39	343	1488.08
297.5	1492.55	320.5	1490.36	343.5	1488.05

730 EAST KALISTE SALOOM ROAD, LAFAYETTE, LOUISIANA 70508

ACOUSTIC VELOCITY DATA

Water Depth (meters)	Recorded Acoustic Velocity (meters)
344	1488.02
344.5	1488
345	1487.98
345.5	1487.96
346	1487.96
346.5	1487.95
347	1487.94
347.5	1487.9
348	1487.86
348.5	1487.81
349	1487.79
349.5	1487.79
350	1487.79
350.5	1487.79
351	1487.8
351.5	1487.78
352	1487.71
352.5	1487.65
353	1487.65
353.5	1487.64
354	1487.62
354.5	1487.61
355	1487.6
355.5	1487.6
356	1487.58
356.5	1487.55
357	1487.51
357.5	1487.47
358	1487.47
358.5	1487.47
359	1487.47
359.5	1487.48
360	1487.46
360.5	1487.44
361	1487.43
361.5	1487.44
362	1487.45
362.5	1487.47
363	1487.46
363.5	1487.45
364	1487.44
364.5	1487.43
365	1487.43
365.5	1487.43
366	1487.43
366.5	1487.44

Water Depth (meters)	Recorded Acoustic Velocity (meters)
367	1487.44
367.5	1487.42
368	1487.43
368.5	1487.44
369	1487.46
369.5	1487.47
370	1487.48
370.5	1487.48
371	1487.48
371.5	1487.49
372	1487.49
372.5	1487.51
373	1487.51
373.5	1487.53
374	1487.53
374.5	1487.54
375	1487.55
375.5	1487.54
376	1487.54
376.5	1487.54
377	1487.54
377.5	1487.55
378	1487.57
378.5	1487.59
379	1487.6
379.5	1487.61
380	1487.61
380.5	1487.62
381	1487.63
381.5	1487.64
382	1487.64
382.5	1487.64
383	1487.65
383.5	1487.66
384	1487.67
384.5	1487.67
385	1487.66
385.5	1487.65
386	1487.67
386.5	1487.68
387	1487.69
387.5	1487.71
388	1487.72
388.5	1487.73
389	1487.74
389.5	1487.74

Water Depth (meters)	Recorded Acoustic Velocity (meters)
390	1487.74
390.5	1487.75
391	1487.75
391.5	1487.76
392	1487.77
392.5	1487.77
393	1487.78
393.5	1487.79
394	1487.79
394.5	1487.79
395	1487.78
395.5	1487.77
396	1487.78
396.5	1487.79
397	1487.77
397.5	1487.76
398	1487.76
398.5	1487.75
399	1487.73
399.5	1487.71
400	1487.7
400.5	1487.7
401	1487.71
401.5	1487.71
402	1487.72
402.5	1487.71
403	1487.71
403.5	1487.73
404	1487.74
404.5	1487.75
405	1487.74
405.5	1487.74
406	1487.76
406.5	1487.77
407	1487.77
407.5	1487.77
408	1487.78
408.5	1487.78
409	1487.78
409.5	1487.75
410	1487.72
410.5	1487.67
411	1487.64
411.5	1487.61
412	1487.58
412.5	1487.54

ACOUSTIC VELOCITY DATA

Water Depth (meters)	Recorded Acoustic Velocity (meters)
413	1487.48
413.5	1487.44
414	1487.42
414.5	1487.42
415	1487.42
415.5	1487.44
416	1487.46
416.5	1487.48
417	1487.45
417.5	1487.41
418	1487.36
418.5	1487.34
419	1487.31
419.5	1487.26
420	1487.22
420.5	1487.19
421	1487.18
421.5	1487.12
422	1487.08
422.5	1487.03
423	1486.92
423.5	1486.84
424	1486.79
424.5	1486.75
425	1486.75
425.5	1486.72
426	1486.7
426.5	1486.7
427	1486.71
427.5	1486.72
428	1486.73
428.5	1486.75
429	1486.76
429.5	1486.77
430	1486.79
430.5	1486.79
431	1486.8
431.5	1486.78
432	1486.76
432.5	1486.69
433	1486.64
433.5	1486.63
434	1486.64
434.5	1486.65
435	1486.65
435.5	1486.66

Water Depth (meters)	Recorded Acoustic Velocity (meters)
436	1486.67
436.5	1486.68
437	1486.7
437.5	1486.7
438	1486.71
438.5	1486.73
439	1486.75
439.5	1486.77
440	1486.79
440.5	1486.8
441	1486.8
441.5	1486.79
442	1486.79
442.5	1486.79
443	1486.78
443.5	1486.79
444	1486.81
444.5	1486.83
445	1486.85
445.5	1486.87
446	1486.89
446.5	1486.9
447	1486.91
447.5	1486.91
448	1486.93
448.5	1486.94
449	1486.96
449.5	1486.98
450	1486.98
450.5	1486.99
451	1487
451.5	1487.01
452	1487
452.5	1486.99
453	1486.96
453.5	1486.96
454	1486.96
454.5	1486.96
455	1486.94
455.5	1486.94
456	1486.93
456.5	1486.91
457	1486.89
457.5	1486.87
458	1486.87
458.5	1486.88

Water Depth (meters)	Recorded Acoustic Velocity (meters)
459	1486.88
459.5	1486.89
460	1486.9
460.5	1486.92
461	1486.94
461.5	1486.96
462	1486.99
462.5	1487
463	1487.02
463.5	1487.04
464	1487.05
464.5	1487.07
465	1487.08
465.5	1487.11
466	1487.13
466.5	1487.13
467	1487.14
467.5	1487.14
468	1487.13
468.5	1487.11
469	1487.11
469.5	1487.11
470	1487.13
470.5	1487.14
471	1487.14
471.5	1487.12
472	1487.12
472.5	1487.11
473	1487.11
473.5	1487.09
474	1487.08
474.5	1487.08
475	1487.07
475.5	1487.03
476	1486.96
476.5	1486.93
477	1486.92
477.5	1486.93
478	1486.94
478.5	1486.93
479	1486.94
479.5	1486.95
480	1486.96
480.5	1486.98
481	1487
481.5	1487.01

ACOUSTIC VELOCITY DATA

Water Depth (meters)	Recorded Acoustic Velocity (meters)
482	1487
482.5	1487.01
483	1486.97
483.5	1486.95
484	1486.93
484.5	1486.92
485	1486.88
485.5	1486.87
486	1486.86
486.5	1486.86
487	1486.87
487.5	1486.88
488	1486.88
488.5	1486.87
489	1486.85
489.5	1486.84
490	1486.84
490.5	1486.83
491	1486.82
491.5	1486.83
492	1486.83
492.5	1486.84
493	1486.87
493.5	1486.89
494	1486.91
494.5	1486.93
495	1486.94
495.5	1486.95
496	1486.96
496.5	1486.97
497	1486.98
497.5	1487.01
498	1487.02
498.5	1487.02
499	1487.02
499.5	1487.02
500	1487.02
500.5	1487.03
501	1487.04
501.5	1487.04
502	1487.03
502.5	1487.04
503	1487.05
503.5	1487.05
504	1487.06
504.5	1487.07

Water Depth (meters)	Recorded Acoustic Velocity (meters)
505	1487.08
505.5	1487.08
506	1487.06
506.5	1487.06
507	1487.07
507.5	1487.07
508	1487.08
508.5	1487.1
509	1487.11
509.5	1487.13
510	1487.16
510.5	1487.16
511	1487.17
511.5	1487.16
512	1487.15
512.5	1487.16
513	1487.17
513.5	1487.18
514	1487.2
514.5	1487.21
515	1487.23
515.5	1487.25
516	1487.27
516.5	1487.28
517	1487.29
517.5	1487.29
518	1487.31
518.5	1487.33
519	1487.32
519.5	1487.31
520	1487.3
520.5	1487.32
521	1487.32
521.5	1487.32
522	1487.33
522.5	1487.32
523	1487.3
523.5	1487.3
524	1487.29
524.5	1487.31
525	1487.32
525.5	1487.33
526	1487.34
526.5	1487.35
527	1487.35
527.5	1487.37

Water Depth (meters)	Recorded Acoustic Velocity (meters)
528	1487.38
528.5	1487.41
529	1487.43
529.5	1487.44
530	1487.44
530.5	1487.45
531	1487.46
531.5	1487.46
532	1487.45
532.5	1487.45
533	1487.42
533.5	1487.38
534	1487.36
534.5	1487.37
535	1487.39
535.5	1487.4
536	1487.39
536.5	1487.4
537	1487.39
537.5	1487.39
538	1487.4
538.5	1487.41
539	1487.4
539.5	1487.41
540	1487.43
540.5	1487.44
541	1487.45
541.5	1487.47
542	1487.48
542.5	1487.49
543	1487.49
543.5	1487.48
544	1487.48
544.5	1487.46
545	1487.43
545.5	1487.38
546	1487.35
546.5	1487.34
547	1487.35
547.5	1487.37
548	1487.38
548.5	1487.4
549	1487.42
549.5	1487.44
550	1487.46
550.5	1487.48

ACOUSTIC VELOCITY DATA

Water Depth (meters)	Recorded Acoustic Velocity (meters)	Water Depth (meters)	Recorded Acoustic Velocity (meters)	Water Depth (meters)	Recorded Acoustic Velocity (meters)
551	1487.48	574	1487.22	597	1487.64
551.5	1487.46	574.5	1487.23	597.5	1487.65
552	1487.46	575	1487.23	598	1487.65
552.5	1487.45	575.5	1487.26	598.5	1487.66
553	1487.44	576	1487.28	599	1487.66
553.5	1487.45	576.5	1487.3	599.5	1487.66
554	1487.45	577	1487.32	600	1487.68
554.5	1487.47	577.5	1487.34	600.5	1487.68
555	1487.47	578	1487.35	601	1487.69
555.5	1487.46	578.5	1487.37	601.5	1487.7
556	1487.43	579	1487.4	602	1487.71
556.5	1487.39	579.5	1487.42	602.5	1487.71
557	1487.33	580	1487.44	603	1487.72
557.5	1487.3	580.5	1487.45	603.5	1487.73
558	1487.29	581	1487.47	604	1487.73
558.5	1487.27	581.5	1487.48	604.5	1487.74
559	1487.25	582	1487.49	605	1487.75
559.5	1487.22	582.5	1487.5	605.5	1487.76
560	1487.21	583	1487.51	606	1487.76
560.5	1487.23	583.5	1487.51	606.5	1487.76
561	1487.21	584	1487.52	607	1487.76
561.5	1487.2	584.5	1487.51	607.5	1487.77
562	1487.19	585	1487.5	608	1487.78
562.5	1487.19	585.5	1487.5	608.5	1487.79
563	1487.21	586	1487.5	609	1487.81
563.5	1487.22	586.5	1487.5	609.5	1487.81
564	1487.23	587	1487.49	610	1487.83
564.5	1487.25	587.5	1487.5	610.5	1487.84
565	1487.27	588	1487.52	611	1487.84
565.5	1487.27	588.5	1487.53	611.5	1487.85
566	1487.26	589	1487.51	612	1487.86
566.5	1487.25	589.5	1487.52	612.5	1487.85
567	1487.26	590	1487.52	613	1487.86
567.5	1487.26	590.5	1487.55	613.5	1487.86
568	1487.27	591	1487.56	614	1487.87
568.5	1487.27	591.5	1487.57	614.5	1487.88
569	1487.26	592	1487.59	615	1487.89
569.5	1487.24	592.5	1487.59	615.5	1487.9
570	1487.24	593	1487.59	616	1487.9
570.5	1487.23	593.5	1487.6	616.5	1487.91
571	1487.2	594	1487.6	617	1487.92
571.5	1487.16	594.5	1487.61	617.5	1487.92
572	1487.16	595	1487.61	618	1487.92
572.5	1487.17	595.5	1487.62	618.5	1487.94
573	1487.19	596	1487.63	619	1487.95
573.5	1487.21	596.5	1487.64	619.5	1487.95

ACOUSTIC VELOCITY DATA

Water Depth (meters)	Recorded Acoustic Velocity (meters)
620	1487.96
620.5	1487.96
621	1487.98
621.5	1487.98
622	1488
622.5	1488.01
623	1488.02
623.5	1488.03
624	1488.04
624.5	1488.05
625	1488.06
625.5	1488.06
626	1488.07
626.5	1488.07
627	1488.08
627.5	1488.08
628	1488.09
628.5	1488.1
629	1488.11
629.5	1488.11
630	1488.12
630.5	1488.13
631	1488.14
631.5	1488.14
632	1488.15
632.5	1488.16
633	1488.17
633.5	1488.17
634	1488.18
634.5	1488.19
635	1488.2
635.5	1488.21
636	1488.21
636.5	1488.23
637	1488.24
637.5	1488.25
638	1488.25
638.5	1488.26
639	1488.27
639.5	1488.28
640	1488.29
640.5	1488.29
641	1488.3
641.5	1488.32
642	1488.32
642.5	1488.33

Water Depth (meters)	Recorded Acoustic Velocity (meters)
643	1488.35
643.5	1488.35
644	1488.36
644.5	1488.37
645	1488.38
645.5	1488.39
646	1488.39
646.5	1488.4
647	1488.41
647.5	1488.42
648	1488.43
648.5	1488.44
649	1488.45
649.5	1488.45
650	1488.47
650.5	1488.48
651	1488.49
651.5	1488.5
652	1488.51
652.5	1488.52
653	1488.53
653.5	1488.54
654	1488.54
654.5	1488.55
655	1488.56
655.5	1488.56
656	1488.27
656.5	1488.25
657	1488.32
657.5	1488.5
658	1488.52
658.5	1488.54
659	1488.54
659.5	1488.55

Seabird SBE-19 Acoustic Velocimeter
Date: May 16, 2002
Latitude: 29.086634° N
Longitude: 87.866416° W
Easting: 415676.82m
Northing: 3217692.46m
Block 917, Viosca Knoll Area

ACOUSTIC VELOCITY DATA

Water Depth (meters)	Recorded Acoustic Velocity (meters)	Water Depth (meters)	Recorded Acoustic Velocity (meters)	Water Depth (meters)	Recorded Acoustic Velocity (meters)
0.7	1538.57	32.1	1527.88	63.3	1524.25
1.4	1538.16	32.7	1527.49	64	1524.21
2	1538.04	33.4	1527.45	64.7	1524.14
2.7	1537.91	34.1	1527.22	65.4	1523.97
3.4	1537.71	34.8	1526.87	66.1	1523.82
4.1	1537.58	35.5	1526.76	66.7	1523.6
4.8	1537.47	36.1	1526.76	67.4	1523.43
5.5	1537.46	36.8	1526.76	68.1	1523.35
6.1	1537.45	37.5	1526.8	68.8	1523.29
6.8	1537.5	38.2	1526.85	69.5	1523.2
7.5	1537.63	38.9	1526.88	70.1	1523.12
8.2	1537.8	39.5	1526.88	70.8	1523.08
8.9	1537.92	40.2	1526.83	71.5	1523
9.6	1537.97	40.9	1526.78	72.2	1522.94
10.2	1537.96	41.6	1526.73	72.9	1522.79
10.9	1537.91	42.3	1526.66	73.5	1522.63
11.6	1537.93	42.9	1526.58	74.2	1522.56
12.3	1537.96	43.6	1526.51	74.9	1522.51
13	1537.98	44.3	1526.45	75.6	1522.5
13.6	1537.96	45	1526.34	76.2	1522.5
14.3	1537.88	45.7	1526.22	76.9	1522.46
15	1537.8	46.3	1526.12	77.6	1522.38
15.7	1537.79	47	1526.08	78.3	1522.31
16.4	1537.57	47.7	1526.07	79	1522.22
17.1	1536.88	48.4	1526.05	79.6	1522.17
17.7	1536.38	49.1	1526.03	80.3	1522.12
18.4	1535.7	49.7	1525.99	81	1522.08
19.1	1535.05	50.4	1525.95	81.7	1521.99
19.8	1534.68	51.1	1525.93	82.4	1521.84
20.5	1534.34	51.8	1525.93	83	1521.75
21.1	1534.05	52.5	1525.89	83.7	1521.68
21.8	1533.93	53.1	1525.71	84.4	1521.62
22.5	1533.91	53.8	1525.51	85.1	1521.57
23.2	1533.86	54.5	1525.43	85.7	1521.54
23.9	1533.54	55.2	1525.3	86.4	1521.5
24.6	1533.08	55.9	1525.22	87.1	1521.42
25.2	1532.56	56.5	1525.2	87.8	1521.32
25.9	1531.99	57.2	1525.11	88.5	1521.28
26.6	1531.36	57.9	1525.07	89.1	1521.23
27.3	1530.88	58.6	1525.04	89.8	1521.21
28	1530.59	59.3	1524.97	90.5	1521.23
28.6	1530.39	59.9	1524.73	91.2	1521.19
29.3	1529.76	60.6	1524.6	91.8	1521.16
30	1529.2	61.3	1524.41	92.5	1521.14
30.7	1528.72	62	1524.36	93.2	1521.12
31.4	1528.29	62.7	1524.3	93.9	1521.11

ACOUSTIC VELOCITY DATA

Water Depth (meters)	Recorded Acoustic Velocity (meters)
94.6	1521.06
95.2	1521.01
95.9	1520.9
96.6	1520.82
97.3	1520.76
97.9	1520.72
98.6	1520.7
99.3	1520.67
100	1520.65
100.7	1520.63
101.3	1520.63
102	1520.58
102.7	1520.55
103.4	1520.54
104	1520.48
104.7	1520.5
105.4	1520.48
106.1	1520.46
106.8	1520.44
107.4	1520.39
108.1	1520.37
108.8	1520.29
109.5	1520.17
110.1	1520.11
110.8	1520.06
111.5	1520.04
112.2	1520
112.8	1519.98
113.5	1519.91
114.2	1519.8
114.9	1519.7
115.6	1519.61
116.2	1519.51
116.9	1519.46
117.6	1519.36
118.3	1519.31
118.9	1519.22
119.6	1519.11
120.3	1519.03
121	1518.97
121.6	1518.85
122.3	1518.85
123	1518.84
123.7	1518.86
124.3	1518.85
125	1518.86
125.7	1518.85
126.4	1518.78
127	1518.72
127.7	1518.61
128.4	1518.53
129.1	1518.46
129.8	1518.31
130.4	1518.2
131.1	1518.14
131.8	1518.11
132.5	1518
133.1	1517.85
133.8	1517.64
134.5	1517.56
135.2	1517.52
135.8	1517.37
136.5	1517.12
137.2	1516.98
137.9	1516.89
138.5	1516.8
139.2	1516.68
139.9	1516.5
140.6	1516.37
141.2	1516.23
141.9	1516.15
142.6	1516.03
143.3	1515.98
143.9	1515.97
144.6	1515.97
145.3	1515.97
146	1515.96
146.6	1515.99
147.3	1515.99
148	1516.01
148.7	1516.01
149.3	1515.98
150	1515.97
150.7	1515.87
151.4	1515.81
152	1515.82
152.7	1515.79
153.4	1515.76
154.1	1515.75
154.7	1515.67
155.4	1515.61
156.1	1515.56
156.8	1515.53
157.4	1515.48
158.1	1515.45
158.8	1515.35
159.5	1515.26
160.1	1515.18
160.8	1515.13
161.5	1515.08
162.1	1515.04
162.8	1514.95
163.5	1514.86
164.2	1514.82
164.8	1514.8
165.5	1514.73
166.2	1514.73
166.9	1514.7
167.5	1514.66
168.2	1514.58
168.9	1514.27
169.6	1514.02
170.2	1513.89
170.9	1513.67
171.6	1513.52
172.3	1513.43
172.9	1513.4
173.6	1513.37
174.3	1513.33
175	1513.23
175.6	1513.11
176.3	1512.98
177	1512.94
177.6	1512.9
178.3	1512.85
179	1512.82
179.7	1512.8
180.3	1512.8
181	1512.8
181.7	1512.81
182.4	1512.83
183	1512.84
183.7	1512.84
184.4	1512.8
185	1512.75
185.7	1512.6
186.4	1512.41
187.1	1512.25

ACOUSTIC VELOCITY DATA

Water Depth (meters)	Recorded Acoustic Velocity (meters)
187.7	1512.18
188.4	1512.13
189.1	1512.11
189.8	1512.02
190.4	1512.02
191.1	1511.92
191.8	1511.78
192.4	1511.78
193.1	1511.68
193.8	1511.6
194.5	1511.45
195.1	1511.32
195.8	1511.18
196.5	1511.1
197.2	1511.04
197.8	1511.01
198.5	1510.97
199.2	1510.87
199.8	1510.77
200.5	1510.64
201.2	1510.63
201.9	1510.61
202.5	1510.51
203.2	1510.41
203.9	1510.36
204.5	1510.25
205.2	1510.17
205.9	1510.02
206.6	1509.81
207.2	1509.72
207.9	1509.61
208.6	1509.51
209.2	1509.39
209.9	1509.33
210.6	1509.32
211.3	1509.19
211.9	1509.09
212.6	1509.02
213.3	1508.92
213.9	1508.85
214.6	1508.82
215.3	1508.78
216	1508.75
216.6	1508.69
217.3	1508.64
218	1508.56

Water Depth (meters)	Recorded Acoustic Velocity (meters)
218.6	1508.47
219.3	1508.44
220	1508.3
220.7	1508.19
221.3	1508.12
222	1508.04
222.7	1507.98
223.3	1507.94
224	1507.86
224.7	1507.83
225.4	1507.77
226	1507.67
226.7	1507.64
227.4	1507.64
228	1507.53
228.7	1507.49
229.4	1507.42
230	1507.34
230.7	1507.14
231.4	1507.04
232.1	1506.98
232.7	1506.95
233.4	1506.89
234.1	1506.79
234.7	1506.69
235.4	1506.66
236.1	1506.61
236.8	1506.56
237.4	1506.57
238.1	1506.55
238.8	1506.55
239.4	1506.52
240.1	1506.52
240.8	1506.53
241.4	1506.54
242.1	1506.52
242.8	1506.46
243.4	1506.38
244.1	1506.34
244.8	1506.29
245.5	1506.26
246.1	1506.25
246.8	1506.2
247.5	1506.14
248.1	1506.06
248.8	1506.03

Water Depth (meters)	Recorded Acoustic Velocity (meters)
249.5	1505.99
250.1	1505.97
250.8	1505.97
251.5	1505.91
252.2	1505.77
252.8	1505.65
253.5	1505.56
254.2	1505.46
254.8	1505.3
255.5	1505.18
256.2	1505.15
256.8	1505.13
257.5	1505.14
258.2	1505.11
258.8	1505.07
259.5	1505.05
260.2	1505.04
260.8	1504.99
261.5	1504.97
262.2	1504.96
262.9	1504.97
263.5	1504.94
264.2	1504.92
264.9	1504.93
265.5	1504.93
266.2	1504.91
266.9	1504.91
267.5	1504.95
268.2	1504.93
268.9	1504.94
269.5	1504.94
270.2	1504.97
270.9	1504.96
271.5	1504.95
272.2	1504.87
272.9	1504.82
273.5	1504.73
274.2	1504.69
274.9	1504.68
275.6	1504.58
276.2	1504.52
276.9	1504.4
277.6	1504.39
278.2	1504.34
278.9	1504.19
279.6	1504.15

C&C Technologies

Continental Shelf Associates, Inc.

ACOUSTIC VELOCITY DATA

Water Depth (meters)	Recorded Acoustic Velocity (meters)	Water Depth (meters)	Recorded Acoustic Velocity (meters)	Water Depth (meters)	Recorded Acoustic Velocity (meters)
280.2	1504.07	310.9	1502.12	341.5	1500.52
280.9	1504.04	311.6	1502.1	342.2	1500.5
281.6	1503.95	312.2	1502.08	342.8	1500.46
282.2	1503.97	312.9	1502.04	343.5	1500.4
282.9	1503.95	313.6	1502.04	344.2	1500.33
283.6	1503.75	314.2	1502.02	344.8	1500.3
284.2	1503.63	314.9	1502	345.5	1500.25
284.9	1503.61	315.6	1502	346.1	1500.15
285.6	1503.55	316.2	1501.99	346.8	1500.04
286.2	1503.51	316.9	1501.98	347.5	1500.01
286.9	1503.53	317.6	1501.94	348.1	1499.91
287.6	1503.48	318.2	1501.92	348.8	1499.86
288.2	1503.41	318.9	1501.85	349.5	1499.82
288.9	1503.45	319.6	1501.79	350.1	1499.8
289.6	1503.39	320.2	1501.67	350.8	1499.79
290.2	1503.42	320.9	1501.6	351.5	1499.77
290.9	1503.4	321.6	1501.58	352.1	1499.76
291.6	1503.38	322.2	1501.56	352.8	1499.69
292.2	1503.42	322.9	1501.57	353.5	1499.64
292.9	1503.38	323.5	1501.54	354.1	1499.59
293.6	1503.34	324.2	1501.54	354.8	1499.59
294.2	1503.32	324.9	1501.48	355.4	1499.53
294.9	1503.24	325.5	1501.47	356.1	1499.49
295.6	1503.17	326.2	1501.45	356.8	1499.43
296.2	1503.12	326.9	1501.4	357.4	1499.3
296.9	1503.08	327.5	1501.36	358.1	1499.05
297.6	1502.99	328.2	1501.28	358.8	1498.9
298.2	1502.96	328.9	1501.23	359.4	1498.92
298.9	1502.9	329.5	1501.21	360.1	1498.83
299.6	1502.89	330.2	1501.14	360.8	1498.79
300.2	1502.83	330.9	1501.06	361.4	1498.77
300.9	1502.75	331.5	1501.03	362.1	1498.68
301.6	1502.74	332.2	1501	362.7	1498.63
302.2	1502.73	332.9	1500.95	363.4	1498.46
302.9	1502.59	333.5	1500.9	364.1	1498.33
303.6	1502.57	334.2	1500.8	364.7	1498.25
304.2	1502.56	334.9	1500.72	365.4	1498.16
304.9	1502.51	335.5	1500.65	366.1	1498.03
305.6	1502.47	336.2	1500.62	366.7	1498
306.2	1502.44	336.8	1500.58	367.4	1497.84
306.9	1502.4	337.5	1500.55	368	1497.72
307.6	1502.34	338.2	1500.56	368.7	1497.68
308.2	1502.23	338.8	1500.57	369.4	1497.56
308.9	1502.19	339.5	1500.55	370	1497.55
309.6	1502.18	340.2	1500.54	370.7	1497.44
310.2	1502.16	340.8	1500.53	371.4	1497.43

730 EAST KALISTE SALOOM ROAD, LAFAYETTE, LOUISIANA 70508

ACOUSTIC VELOCITY DATA

Water Depth (meters)	Recorded Acoustic Velocity (meters)	Water Depth (meters)	Recorded Acoustic Velocity (meters)	Water Depth (meters)	Recorded Acoustic Velocity (meters)
372	1497.41	402.5	1496.27	432.8	1494.81
372.7	1497.34	403.1	1496.25	433.5	1494.79
373.3	1497.29	403.8	1496.2	434.2	1494.78
374	1497.29	404.4	1496.11	434.8	1494.74
374.7	1497.27	405.1	1496.05	435.5	1494.72
375.3	1497.23	405.8	1496.02	436.1	1494.7
376	1497.22	406.4	1495.93	436.8	1494.69
376.7	1497.23	407.1	1495.88	437.4	1494.63
377.3	1497.2	407.8	1495.84	438.1	1494.62
378	1497.14	408.4	1495.75	438.8	1494.59
378.6	1497.13	409.1	1495.7	439.4	1494.59
379.3	1497.03	409.7	1495.67	440.1	1494.51
380	1497.08	410.4	1495.66	440.7	1494.46
380.6	1497.01	411.1	1495.59	441.4	1494.44
381.3	1497.05	411.7	1495.55	442.1	1494.41
382	1496.97	412.4	1495.44	442.7	1494.34
382.6	1497.03	413	1495.33	443.4	1494.32
383.3	1496.96	413.7	1495.24	444	1494.26
383.9	1496.99	414.4	1495.2	444.7	1494.15
384.6	1496.85	415	1495.2	445.4	1493.99
385.3	1496.8	415.7	1495.22	446	1493.91
385.9	1496.76	416.3	1495.2	446.7	1493.85
386.6	1496.78	417	1495.14	447.3	1493.78
387.3	1496.74	417.7	1495.12	448	1493.75
387.9	1496.7	418.3	1495.14	448.6	1493.72
388.6	1496.63	419	1495.13	449.3	1493.61
389.2	1496.61	419.6	1495.13	450	1493.55
389.9	1496.58	420.3	1495.1	450.6	1493.51
390.6	1496.51	421	1495.07	451.3	1493.41
391.2	1496.55	421.6	1495.08	451.9	1493.33
391.9	1496.54	422.3	1495.08	452.6	1493.31
392.5	1496.55	422.9	1495.07	453.3	1493.24
393.2	1496.52	423.6	1495.1	453.9	1493.25
393.9	1496.53	424.3	1495.1	454.6	1493.18
394.5	1496.5	424.9	1495.13	455.2	1493.15
395.2	1496.49	425.6	1495.14	455.9	1493.1
395.9	1496.4	426.2	1495.14	456.5	1493.02
396.5	1496.37	426.9	1495.13	457.2	1492.96
397.2	1496.39	427.6	1495.13	457.9	1492.89
397.8	1496.4	428.2	1495.13	458.5	1492.89
398.5	1496.41	428.9	1495.09	459.2	1492.85
399.2	1496.38	429.5	1495.05	459.8	1492.75
399.8	1496.32	430.2	1494.9	460.5	1492.67
400.5	1496.3	430.9	1494.91	461.1	1492.58
401.1	1496.29	431.5	1494.84	461.8	1492.49
401.8	1496.29	432.2	1494.83	462.5	1492.48

730 EAST KALISTE SALOOM ROAD, LAFAYETTE, LOUISIANA 70508

C&C Technologies

Continental Shelf Associates, Inc.

ACOUSTIC VELOCITY DATA

Water Depth (meters)	Recorded Acoustic Velocity (meters)
463.1	1492.43
463.8	1492.44
464.4	1492.47
465.1	1492.43
465.8	1492.39
466.4	1492.4
467.1	1492.38
467.7	1492.36
468.4	1492.27
469	1492.21
469.7	1492.19
470.4	1492.14
471	1492.1
471.7	1492.07
472.3	1492.01
473	1491.97
473.6	1491.94
474.3	1491.78
475	1491.67
475.6	1491.69
476.3	1491.63
476.9	1491.53
477.6	1491.45
478.2	1491.4
478.9	1491.32
479.6	1491.32
480.2	1491.32
480.9	1491.27
481.5	1491.18
482.2	1491.21
482.8	1491.2
483.5	1491.12
484.1	1491.08
484.8	1491.03
485.5	1491.05
486.1	1491.01
486.8	1490.97
487.4	1490.95
488.1	1490.89
488.7	1490.88
489.4	1490.82
490.1	1490.81
490.7	1490.78
491.4	1490.77
492	1490.73
492.7	1490.7

Water Depth (meters)	Recorded Acoustic Velocity (meters)
494	1490.63
494.6	1490.6
495.3	1490.54
496	1490.49
496.6	1490.43
497.3	1490.41
497.9	1490.37
498.6	1490.32
499.2	1490.32
499.9	1490.28
500.5	1490.27
501.2	1490.23
501.9	1490.17
502.5	1490.1
503.2	1490.05
503.8	1489.93
504.5	1489.87
505.1	1489.86
505.8	1489.87
506.4	1489.84
507.1	1489.83
507.8	1489.81
508.4	1489.8
509.1	1489.76
509.7	1489.74
510.4	1489.67
511	1489.62
511.7	1489.58
512.3	1489.56
513	1489.52
513.7	1489.51
514.3	1489.51
515	1489.52
515.6	1489.53
516.3	1489.47
516.9	1489.47
517.6	1489.46
518.2	1489.45
518.9	1489.37
519.5	1489.29
520.2	1489.25
520.9	1489.23
521.5	1489.25
522.2	1489.24
522.8	1489.26
523.5	1489.22

Water Depth (meters)	Recorded Acoustic Velocity (meters)
524.1	1489.21
524.8	1489.17
525.4	1489.19
526.1	1489.13
526.7	1489.13
527.4	1489.1
528	1489.05
528.7	1489.04
529.4	1489.02
530	1489.03
530.7	1489.02
531.3	1488.98
532	1488.96
532.6	1488.93
533.3	1488.93
533.9	1488.9
534.6	1488.91
535.2	1488.89
535.9	1488.85
536.5	1488.84
537.2	1488.83
537.9	1488.81
538.5	1488.8
539.2	1488.8
539.8	1488.79
540.5	1488.76
541.1	1488.67
541.8	1488.72
542.4	1488.71
543.1	1488.64
543.7	1488.65
544.4	1488.58
545	1488.54
545.7	1488.55
546.3	1488.5
547	1488.52
547.7	1488.46
548.3	1488.45
549	1488.43
549.6	1488.38
550.3	1488.41
550.9	1488.38
551.6	1488.41
552.2	1488.39
552.9	1488.38
553.5	1488.39

730 EAST KALISTE SALOOM ROAD, LAFAYETTE, LOUISIANA 70508

C&C Technologies

Continental Shelf Associates, Inc.

ACOUSTIC VELOCITY DATA

Water Depth (meters)	Recorded Acoustic Velocity (meters)	Water Depth (meters)	Recorded Acoustic Velocity (meters)	Water Depth (meters)	Recorded Acoustic Velocity (meters)
554.2	1488.38	584.2	1488.15	614.1	1487.55
554.8	1488.37	584.8	1488.11	614.7	1487.54
555.5	1488.38	585.5	1488.12	615.4	1487.52
556.1	1488.42	586.1	1488.05	616	1487.49
556.8	1488.39	586.8	1488.04	616.7	1487.5
557.4	1488.39	587.4	1488.01	617.3	1487.49
558.1	1488.35	588.1	1488.01	618	1487.51
558.7	1488.43	588.7	1488.04	618.6	1487.52
559.4	1488.35	589.4	1488	619.3	1487.55
560.1	1488.41	590	1487.99	619.9	1487.54
560.7	1488.37	590.7	1487.96	620.6	1487.53
561.4	1488.42	591.3	1487.97	621.2	1487.52
562	1488.41	592	1487.97	621.9	1487.51
562.7	1488.44	592.6	1488	622.5	1487.53
563.3	1488.41	593.3	1488	623.2	1487.54
564	1488.44	593.9	1487.99	623.8	1487.52
564.6	1488.39	594.6	1487.97	624.4	1487.55
565.3	1488.32	595.2	1487.99	625.1	1487.54
565.9	1488.33	595.9	1487.98	625.7	1487.53
566.6	1488.3	596.5	1487.92	626.4	1487.53
567.2	1488.28	597.2	1487.93	627	1487.51
567.9	1488.27	597.8	1487.94	627.7	1487.52
568.5	1488.28	598.5	1487.95	628.3	1487.49
569.2	1488.28	599.1	1487.92	629	1487.48
569.8	1488.24	599.8	1487.9	629.6	1487.46
570.5	1488.24	600.4	1487.94	630.3	1487.48
571.1	1488.22	601.1	1487.88	630.9	1487.41
571.8	1488.22	601.7	1487.83	631.6	1487.42
572.4	1488.27	602.4	1487.84	632.2	1487.38
573.1	1488.26	603	1487.8	632.9	1487.43
573.7	1488.25	603.7	1487.78	633.5	1487.37
574.4	1488.23	604.3	1487.74	634.2	1487.35
575	1488.24	605	1487.73	634.8	1487.37
575.7	1488.24	605.6	1487.68	635.5	1487.37
576.3	1488.23	606.3	1487.71	636.1	1487.36
577	1488.21	606.9	1487.69	636.8	1487.31
577.7	1488.21	607.6	1487.67	637.4	1487.31
578.3	1488.22	608.2	1487.66	638.1	1487.33
579	1488.2	608.9	1487.67	638.7	1487.28
579.6	1488.18	609.5	1487.66	639.4	1487.28
580.3	1488.13	610.2	1487.63	640	1487.25
580.9	1488.15	610.8	1487.64	640.7	1487.25
581.6	1488.17	611.5	1487.65	641.3	1487.2
582.2	1488.16	612.1	1487.61	641.9	1487.15
582.9	1488.16	612.8	1487.62	642.6	1487.13
583.5	1488.17	613.4	1487.58	643.2	1487.15

730 EAST KALISTE SALOOM ROAD, LAFAYETTE, LOUISIANA 70508

ACOUSTIC VELOCITY DATA

Water Depth (meters)	Recorded Acoustic Velocity (meters)
643.9	1487.15
644.5	1487.12
645.2	1487.1
645.8	1487.08
646.5	1487.08
647.1	1487.12
647.8	1487.11
648.4	1487.13
649.1	1487.13
649.7	1487.11
650.4	1487.14
651	1487.14
651.7	1487.16
652.3	1487.14
653	1487.15
653.6	1487.17
654.2	1487.16
654.9	1487.15
655.5	1487.1
656.2	1487.07
656.8	1487.07
657.5	1487.01
658.1	1486.98
658.8	1486.95
659.4	1486.94
660.1	1486.95
660.7	1486.94
661.4	1486.93
662	1486.96
662.7	1486.96
663.3	1486.93
663.9	1486.96
664.6	1486.93
665.2	1486.95
665.9	1486.94
666.5	1486.97
667.2	1486.9
667.8	1486.87
668.5	1486.86
669.1	1486.83
669.8	1486.83
670.4	1486.8
671.1	1486.81
671.7	1486.8
672.3	1486.76
673	1486.76

Water Depth (meters)	Recorded Acoustic Velocity (meters)
673.6	1486.78
674.3	1486.79
674.9	1486.75
675.6	1486.73
676.2	1486.71
676.9	1486.74
677.5	1486.72
678.2	1486.73
678.8	1486.68
679.5	1486.69
680.1	1486.69
680.7	1486.7
681.4	1486.69
682	1486.71
682.7	1486.7
683.3	1486.72
684	1486.73
684.6	1486.72
685.3	1486.71
685.9	1486.68
686.6	1486.65
687.2	1486.65
687.8	1486.66
688.5	1486.65
689.1	1486.65
689.8	1486.59
690.4	1486.59
691.1	1486.56
691.7	1486.58
692.4	1486.58
693	1486.58
693.6	1486.57
694.3	1486.6
694.9	1486.6
695.6	1486.63
696.2	1486.6
696.9	1486.6
697.5	1486.59
698.2	1486.6
698.8	1486.58
699.4	1486.6
700.1	1486.58
700.7	1486.6
701.4	1486.57
702	1486.61
702.7	1486.59

Water Depth (meters)	Recorded Acoustic Velocity (meters)
703.3	1486.62
704	1486.6
704.6	1486.6
705.2	1486.57
705.9	1486.6
706.5	1486.59
707.2	1486.59
707.8	1486.57
708.5	1486.56
709.1	1486.52
709.8	1486.54
710.4	1486.5
711	1486.48
711.7	1486.5
712.3	1486.46
713	1486.49
713.6	1486.5
714.3	1486.48
714.9	1486.45
715.5	1486.48
716.2	1486.43
716.8	1486.44
717.5	1486.45
718.1	1486.46
718.8	1486.41
719.4	1486.44
720	1486.4
720.7	1486.33
721.3	1486.32
722	1486.31
722.6	1486.35
723.3	1486.33
723.9	1486.34
724.6	1486.36
725.2	1486.32
725.8	1486.32
726.5	1486.32
727.1	1486.32
727.8	1486.35
728.4	1486.35
729.1	1486.33
729.7	1486.31
730.3	1486.3
731	1486.29
731.6	1486.27
732.3	1486.27

ACOUSTIC VELOCITY DATA

Water Depth (meters)	Recorded Acoustic Velocity (meters)	Water Depth (meters)	Recorded Acoustic Velocity (meters)	Water Depth (meters)	Recorded Acoustic Velocity (meters)
732.9	1486.25	762.4	1486.39	791.9	1486.24
733.5	1486.26	763.1	1486.4	792.5	1486.21
734.2	1486.28	763.7	1486.39	793.1	1486.2
734.8	1486.29	764.3	1486.39	793.8	1486.22
735.5	1486.28	765	1486.41	794.4	1486.2
736.1	1486.3	765.6	1486.41	795.1	1486.23
736.8	1486.29	766.3	1486.35	795.7	1486.22
737.4	1486.28	766.9	1486.33	796.3	1486.25
738	1486.31	767.6	1486.32	797	1486.25
738.7	1486.32	768.2	1486.29	797.6	1486.25
739.3	1486.28	768.8	1486.29	798.3	1486.28
740	1486.32	769.5	1486.28	798.9	1486.26
740.6	1486.31	770.1	1486.32	799.5	1486.27
741.3	1486.28	770.8	1486.33	800.2	1486.24
741.9	1486.32	771.4	1486.34	800.8	1486.24
742.5	1486.28	772	1486.34	801.4	1486.25
743.2	1486.27	772.7	1486.37	802.1	1486.29
743.8	1486.24	773.3	1486.36	802.7	1486.27
744.5	1486.23	774	1486.38	803.4	1486.27
745.1	1486.22	774.6	1486.37	804	1486.3
745.8	1486.22	775.2	1486.38	804.6	1486.3
746.4	1486.23	775.9	1486.4	805.3	1486.27
747	1486.22	776.5	1486.42	805.9	1486.29
747.7	1486.26	777.2	1486.44	806.6	1486.24
748.3	1486.22	777.8	1486.43	807.2	1486.24
749	1486.27	778.4	1486.41	807.8	1486.27
749.6	1486.24	779.1	1486.44	808.5	1486.27
750.2	1486.29	779.7	1486.42	809.1	1486.27
750.9	1486.28	780.4	1486.43	809.7	1486.29
751.5	1486.29	781	1486.39	810.4	1486.28
752.2	1486.3	781.6	1486.4	811	1486.27
752.8	1486.31	782.3	1486.38	811.7	1486.29
753.4	1486.31	782.9	1486.41	812.3	1486.32
754.1	1486.3	783.6	1486.38	812.9	1486.32
754.7	1486.3	784.2	1486.35	813.6	1486.34
755.4	1486.31	784.8	1486.36	814.2	1486.32
756	1486.32	785.5	1486.37	814.9	1486.34
756.7	1486.33	786.1	1486.36	815.5	1486.34
757.3	1486.36	786.8	1486.33	816.1	1486.34
757.9	1486.35	787.4	1486.34	816.8	1486.34
758.6	1486.36	788	1486.33	817.4	1486.32
759.2	1486.38	788.7	1486.32	818	1486.34
759.9	1486.4	789.3	1486.33	818.7	1486.35
760.5	1486.37	789.9	1486.31	819.3	1486.36
761.1	1486.39	790.6	1486.28	820	1486.37
761.8	1486.41	791.2	1486.24	820.6	1486.39

ACOUSTIC VELOCITY DATA

Water Depth (meters)	Recorded Acoustic Velocity (meters)	Water Depth (meters)	Recorded Acoustic Velocity (meters)	Water Depth (meters)	Recorded Acoustic Velocity (meters)
821.2	1486.39	850.5	1486.6	879.7	1486.65
821.9	1486.4	851.2	1486.6	880.4	1486.64
822.5	1486.41	851.8	1486.59	881	1486.66
823.1	1486.39	852.4	1486.62	881.6	1486.67
823.8	1486.39	853.1	1486.59	882.3	1486.65
824.4	1486.38	853.7	1486.58	882.9	1486.65
825.1	1486.37	854.3	1486.58	883.5	1486.67
825.7	1486.37	855	1486.58	884.2	1486.67
826.3	1486.38	855.6	1486.6	884.8	1486.68
827	1486.38	856.2	1486.56	885.4	1486.68
827.6	1486.37	856.9	1486.59	886.1	1486.67
828.2	1486.38	857.5	1486.63	886.7	1486.68
828.9	1486.41	858.1	1486.63	887.3	1486.66
829.5	1486.43	858.8	1486.6	888	1486.67
830.2	1486.41	859.4	1486.57	888.6	1486.68
830.8	1486.44	860.1	1486.61	889.2	1486.67
831.4	1486.43	860.7	1486.6	889.9	1486.69
832.1	1486.44	861.3	1486.61	890.5	1486.65
832.7	1486.45	862	1486.63	891.1	1486.69
833.3	1486.45	862.6	1486.61	891.8	1486.68
834	1486.5	863.2	1486.62	892.4	1486.69
834.6	1486.46	863.9	1486.64	893	1486.7
835.2	1486.5	864.5	1486.62	893.7	1486.69
835.9	1486.48	865.1	1486.63	894.3	1486.71
836.5	1486.5	865.8	1486.64	894.9	1486.71
837.2	1486.5	866.4	1486.64	895.6	1486.71
837.8	1486.55	867	1486.64	896.2	1486.73
838.4	1486.54	867.7	1486.65	896.8	1486.75
839.1	1486.53	868.3	1486.65	897.5	1486.75
839.7	1486.51	868.9	1486.65	898.1	1486.79
840.3	1486.52	869.6	1486.68	898.7	1486.76
841	1486.53	870.2	1486.65	899.4	1486.77
841.6	1486.53	870.8	1486.64	900	1486.78
842.2	1486.52	871.5	1486.64	900.6	1486.78
842.9	1486.53	872.1	1486.66	901.3	1486.79
843.5	1486.55	872.8	1486.65	901.9	1486.8
844.2	1486.56	873.4	1486.65	902.5	1486.79
844.8	1486.52	874	1486.66	903.2	1486.79
845.4	1486.54	874.7	1486.66	903.8	1486.78
846.1	1486.59	875.3	1486.66	904.4	1486.79
846.7	1486.56	875.9	1486.68	905.1	1486.81
847.3	1486.55	876.6	1486.67	905.7	1486.8
848	1486.61	877.2	1486.67	906.3	1486.79
848.6	1486.58	877.8	1486.68	907	1486.81
849.2	1486.61	878.5	1486.66	907.6	1486.83
849.9	1486.57	879.1	1486.64	908.2	1486.82

ACOUSTIC VELOCITY DATA

Water Depth (meters)	Recorded Acoustic Velocity (meters)
908.9	1486.83
909.5	1486.84
910.1	1486.82
910.8	1486.83
911.4	1486.84
912	1486.83
912.7	1486.8
913.3	1486.79
913.9	1486.79
914.6	1486.81
915.2	1486.82
915.8	1486.83
916.5	1486.8
917.1	1486.82
917.7	1486.85
918.3	1486.84
919	1486.87
919.6	1486.88
920.2	1486.86
920.9	1486.89
921.5	1486.86
922.1	1486.91
922.8	1486.88
923.4	1486.92
924	1486.92
924.7	1486.91
925.3	1486.95
925.9	1486.93
926.6	1486.92
927.2	1486.94
927.8	1486.94
928.5	1486.93
929.1	1486.94
929.7	1486.98
930.3	1486.95
931	1486.93
931.6	1486.91
932.2	1486.9
932.9	1486.89
933.5	1486.9
934.1	1486.88
934.8	1486.89
935.4	1486.86
936	1486.89
936.7	1486.86
937.3	1486.85

Water Depth (meters)	Recorded Acoustic Velocity (meters)
937.9	1486.82
938.6	1486.82
939.2	1486.82
939.8	1486.84
940.4	1486.8
941.1	1486.8
941.7	1486.79
942.3	1486.77
943	1486.78
943.6	1486.78
944.2	1486.79
944.9	1486.79
945.5	1486.8
946.1	1486.77
946.8	1486.79
947.4	1486.77
948	1486.78
948.6	1486.76
949.3	1486.77
949.9	1486.77
950.5	1486.79
951.2	1486.79
951.8	1486.82
952.4	1486.81
953.1	1486.83
953.7	1486.85
954.3	1486.83
954.9	1486.83
955.6	1486.85
956.2	1486.88
956.8	1486.87
957.5	1486.85
958.1	1486.89
958.7	1486.87
959.4	1486.85
960	1486.83
960.6	1486.83
961.2	1486.86
961.9	1486.84
962.5	1486.86
963.1	1486.87
963.8	1486.86
964.4	1486.87
965	1486.86
965.6	1486.85
966.3	1486.86

Water Depth (meters)	Recorded Acoustic Velocity (meters)
966.9	1486.87
967.5	1486.83
968.2	1486.86
968.8	1486.89
969.4	1486.85
970	1486.89
970.7	1486.88
971.3	1486.88
971.9	1486.9
972.6	1486.9
973.2	1486.9
973.8	1486.9
974.5	1486.92
975.1	1486.88
975.7	1486.91
976.3	1486.9
977	1486.91
977.6	1486.92
978.2	1486.91
978.9	1486.91
979.5	1486.91
980.1	1486.88
980.7	1486.9
981.4	1486.88
982	1486.83
982.6	1486.79
983.2	1486.76
983.9	1486.78
984.5	1486.76
985.1	1486.76
985.8	1486.76
986.4	1486.75
987	1486.72
987.6	1486.67
988.3	1486.62
988.9	1486.61
989.5	1486.62
990.2	1486.61
990.8	1486.6
991.4	1486.62
992	1486.6
992.7	1486.6
993.3	1486.56
993.9	1486.6
994.6	1486.59
995.2	1486.63

ACOUSTIC VELOCITY DATA

Water Depth (meters)	Recorded Acoustic Velocity (meters)
995.8	1486.62
996.4	1486.63
997.1	1486.65
997.7	1486.62
998.3	1486.66
998.9	1486.65
999.6	1486.66
1000.2	1486.66
1000.8	1486.66
1001.5	1486.68
1002.1	1486.69
1002.7	1486.68
1003.3	1486.69
1004	1486.71
1004.6	1486.73
1005.2	1486.67
1005.8	1486.62
1006.5	1486.58
1007.1	1486.54
1007.7	1486.55
1008.4	1486.57
1009	1486.56
1009.6	1486.56
1010.2	1486.56
1010.9	1486.59
1011.5	1486.59
1012.1	1486.58
1012.7	1486.59
1013.4	1486.61
1014	1486.62
1014.6	1486.63
1015.2	1486.65
1015.9	1486.65
1016.5	1486.65
1017.1	1486.65
1017.7	1486.67
1018.4	1486.68
1019	1486.69
1019.6	1486.68
1020.3	1486.69
1020.9	1486.71
1021.5	1486.68
1022.1	1486.66
1022.8	1486.64
1023.4	1486.6
1024	1486.61
1024.6	1486.6
1025.3	1486.61
1025.9	1486.62
1026.5	1486.6
1027.1	1486.6
1027.8	1486.61
1028.4	1486.58
1029	1486.57
1029.6	1486.57
1030.3	1486.58
1030.9	1486.62
1031.5	1486.61
1032.1	1486.63
1032.8	1486.52
1033.4	1486.85
1034	1486.86
1034.6	1486.86
1035.3	1486.89
1035.9	1486.88
1036.5	1486.88
1037.1	1486.89
1037.8	1486.92
1038.4	1486.91
1039	1486.93
1039.6	1486.93
1040.3	1486.95
1040.9	1486.94
1041.5	1486.94
1042.1	1486.98
1042.8	1486.97
1043.4	1486.98
1044	1487.01
1044.6	1487.02
1045.3	1487.02
1045.9	1487.03
1046.5	1487.05
1047.1	1487.07
1047.8	1487.07
1048.4	1487.08
1049	1487.11
1049.6	1487.1
1050.3	1487.11
1050.9	1487.13
1051.5	1487.16
1052.1	1487.15
1052.8	1487.16
1053.4	1487.17
1054	1487.18
1054.6	1487.18
1055.3	1487.2
1055.9	1487.21
1056.5	1487.23
1057.1	1487.23
1057.8	1487.23
1058.4	1487.25
1059	1487.28
1059.6	1487.25
1060.2	1487.27
1060.9	1487.3
1061.5	1487.31
1062.1	1487.32
1062.7	1487.33
1063.4	1487.31
1064	1487.33
1064.6	1487.34
1065.2	1487.36
1065.9	1487.39
1066.5	1487.39
1067.1	1487.4
1067.7	1487.41
1068.4	1487.42
1069	1487.43
1069.6	1487.43
1070.2	1487.43
1070.8	1487.47
1071.5	1487.45
1072.1	1487.5
1072.7	1487.49
1073.3	1487.5
1074	1487.5
1074.6	1487.52
1075.2	1487.54
1075.8	1487.53
1076.5	1487.56
1077.1	1487.55
1077.7	1487.58
1078.3	1487.58
1078.9	1487.61
1079.6	1487.6
1080.2	1487.61
1080.8	1487.62
1081.4	1487.64

ACOUSTIC VELOCITY DATA

Water Depth (meters)	Recorded Acoustic Velocity (meters)	Water Depth (meters)	Recorded Acoustic Velocity (meters)	Water Depth (meters)	Recorded Acoustic Velocity (meters)
1082.1	1487.65	1110.7	1488.14	1139.2	1488.65
1082.7	1487.65	1111.3	1488.16	1139.8	1488.65
1083.3	1487.66	1111.9	1488.16	1140.4	1488.66
1083.9	1487.67	1112.5	1488.16	1141	1488.67
1084.5	1487.68	1113.1	1488.18	1141.6	1488.69
1085.2	1487.7	1113.8	1488.2	1142.3	1488.7
1085.8	1487.72	1114.4	1488.2	1142.9	1488.7
1086.4	1487.73	1115	1488.2	1143.5	1488.72
1087	1487.73	1115.6	1488.22	1144.1	1488.72
1087.7	1487.73	1116.2	1488.23	1144.7	1488.74
1088.3	1487.74	1116.9	1488.25	1145.4	1488.76
1088.9	1487.76	1117.5	1488.25	1146	1488.75
1089.5	1487.79	1118.1	1488.27	1146.6	1488.79
1090.1	1487.8	1118.7	1488.27	1147.2	1488.78
1090.8	1487.81	1119.3	1488.29	1147.8	1488.79
1091.4	1487.8	1120	1488.28	1148.5	1488.81
1092	1487.81	1120.6	1488.31	1149.1	1488.83
1092.6	1487.81	1121.2	1488.3	1149.7	1456
1093.3	1487.85	1121.8	1488.34	1150.3	1456.01
1093.9	1487.86	1122.4	1488.33	1150.9	1456.02
1094.5	1487.85	1123.1	1488.37	1151.5	1456.03
1095.1	1487.88	1123.7	1488.37	1152.2	1456.04
1095.7	1487.89	1124.3	1488.38	1152.8	1456.05
1096.4	1487.88	1124.9	1488.38	1153.4	1456.07
1097	1487.87	1125.5	1488.39	1154	1456.08
1097.6	1487.92	1126.2	1488.42	1154.6	1456.09
1098.2	1487.93	1126.8	1488.42	1155.3	1456.1
1098.9	1487.93	1127.4	1488.43	1155.9	1456.11
1099.5	1487.95	1128	1488.45	1156.5	1456.12
1100.1	1487.94	1128.6	1488.45	1157.1	1456.13
1100.7	1487.97	1129.3	1488.45	1157.7	1456.14
1101.3	1487.98	1129.9	1488.48	1158.3	1456.15
1102	1487.98	1130.5	1488.49	1159	1456.16
1102.6	1487.98	1131.1	1488.5	1159.6	1456.17
1103.2	1488	1131.7	1488.49	1160.2	1456.18
1103.8	1488.03	1132.4	1488.52	1160.8	1456.19
1104.4	1488.03	1133	1488.53	1161.4	1456.2
1105.1	1488.06	1133.6	1488.52	1162.1	1456.21
1105.7	1488.05	1134.2	1488.58	1162.7	1456.22
1106.3	1488.06	1134.8	1488.57	1163.3	1456.23
1106.9	1488.07	1135.5	1488.57	1163.9	1456.24
1107.5	1488.08	1136.1	1488.58	1164.5	1456.25
1108.2	1488.09	1136.7	1488.59	1165.1	1456.26
1108.8	1488.12	1137.3	1488.61	1165.8	1456.27
1109.4	1488.11	1137.9	1488.62	1166.4	1456.28
1110	1488.12	1138.6	1488.63	1167	1456.29

C&C Technologies

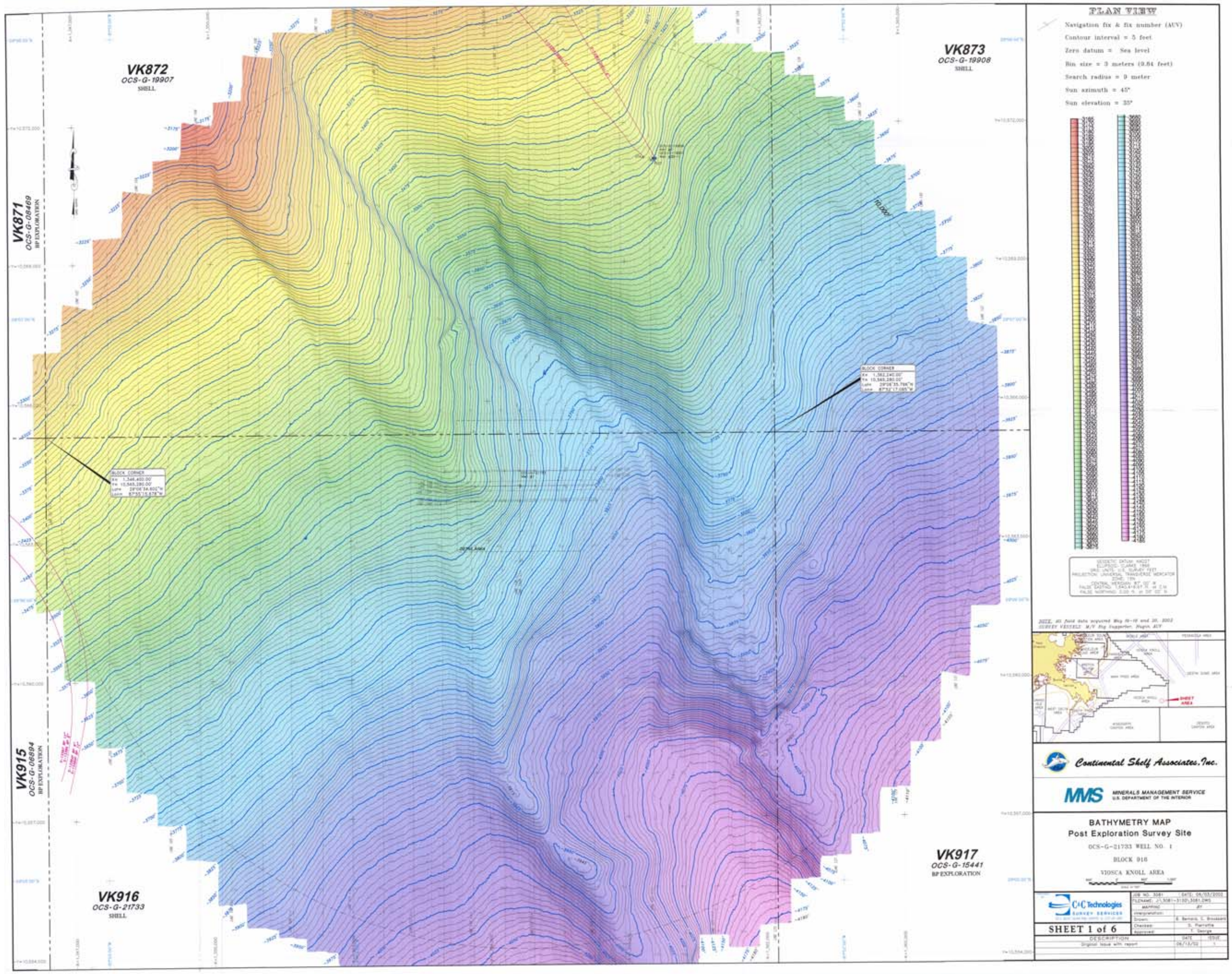
Continental Shelf Associates, Inc.

ACOUSTIC VELOCITY DATA

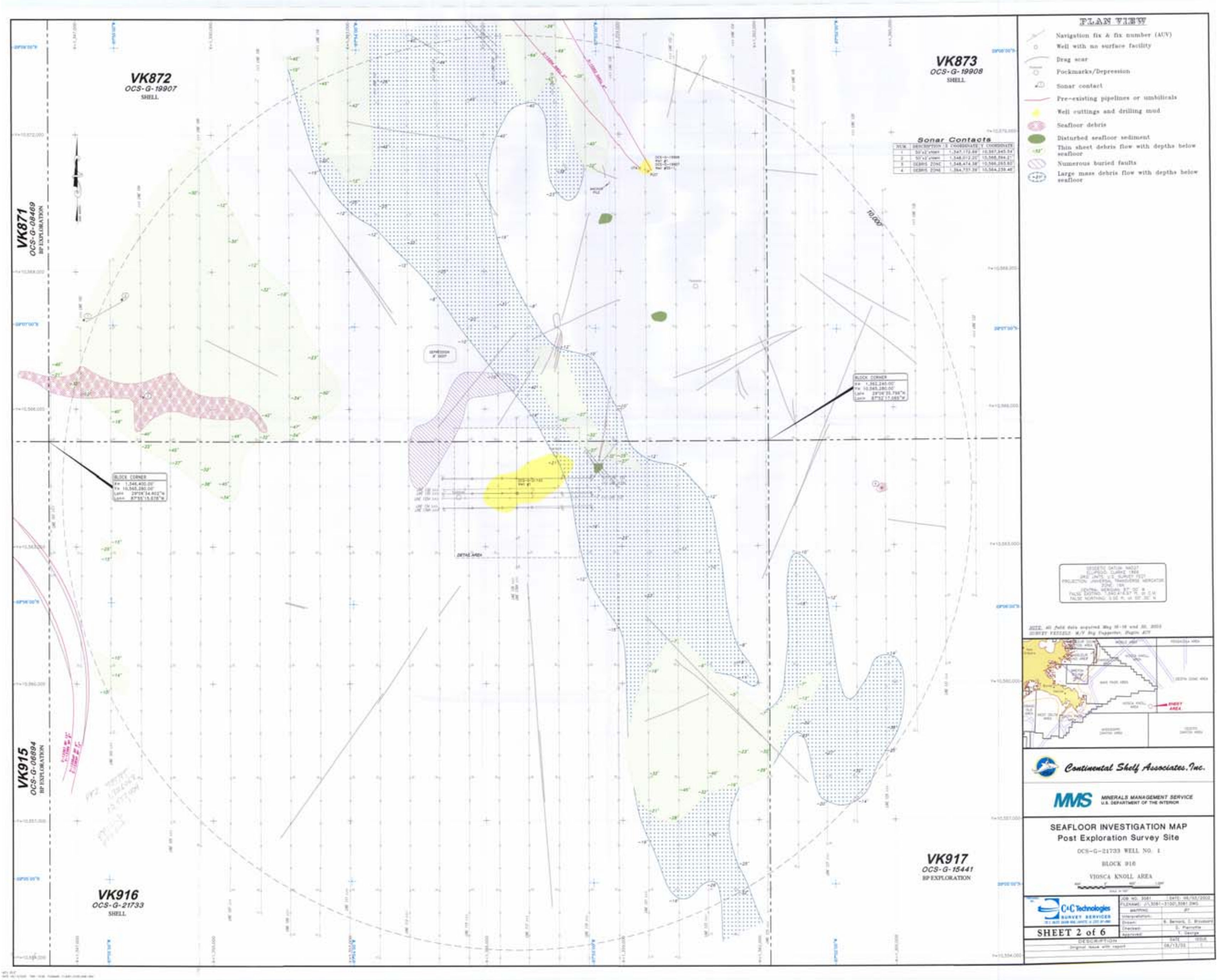
Water Depth (meters)	Recorded Acoustic Velocity (meters)
1167.6	1456.3
1168.2	1456.31
1168.8	1456.32
1169.5	1456.33
1170.1	1456.34
1170.7	1456.35
1171.3	1456.36
1171.9	1456.37
1172.6	1456.38
1173.2	1456.39
1173.8	1456.4
1174.4	1456.41
1175	1456.42
1175.6	1456.43
1176.3	1456.45
1176.9	1456.46
1177.5	1456.47
1178.1	1456.48
1178.7	1456.49
1179.3	1456.5
1180	1456.51
1180.6	1456.52
1181.2	1456.53
1181.8	1456.54
1182.4	1456.55
1183	1456.56
1183.7	1456.57
1184.3	1456.58
1184.9	1456.59
1185.5	1456.6
1186.1	1456.61
1186.7	1456.62
1187.4	1456.63
1188	1456.64
1188.6	1456.65

Seabird SBE-19 Acoustic Velocimeter
Date: May 17, 2002
Latitude: 29.134735° N
Longitude: 87.88835° W
Easting: 413582.36m
Northing: 3223037.90m
Block 872, Viosca Knoll Area

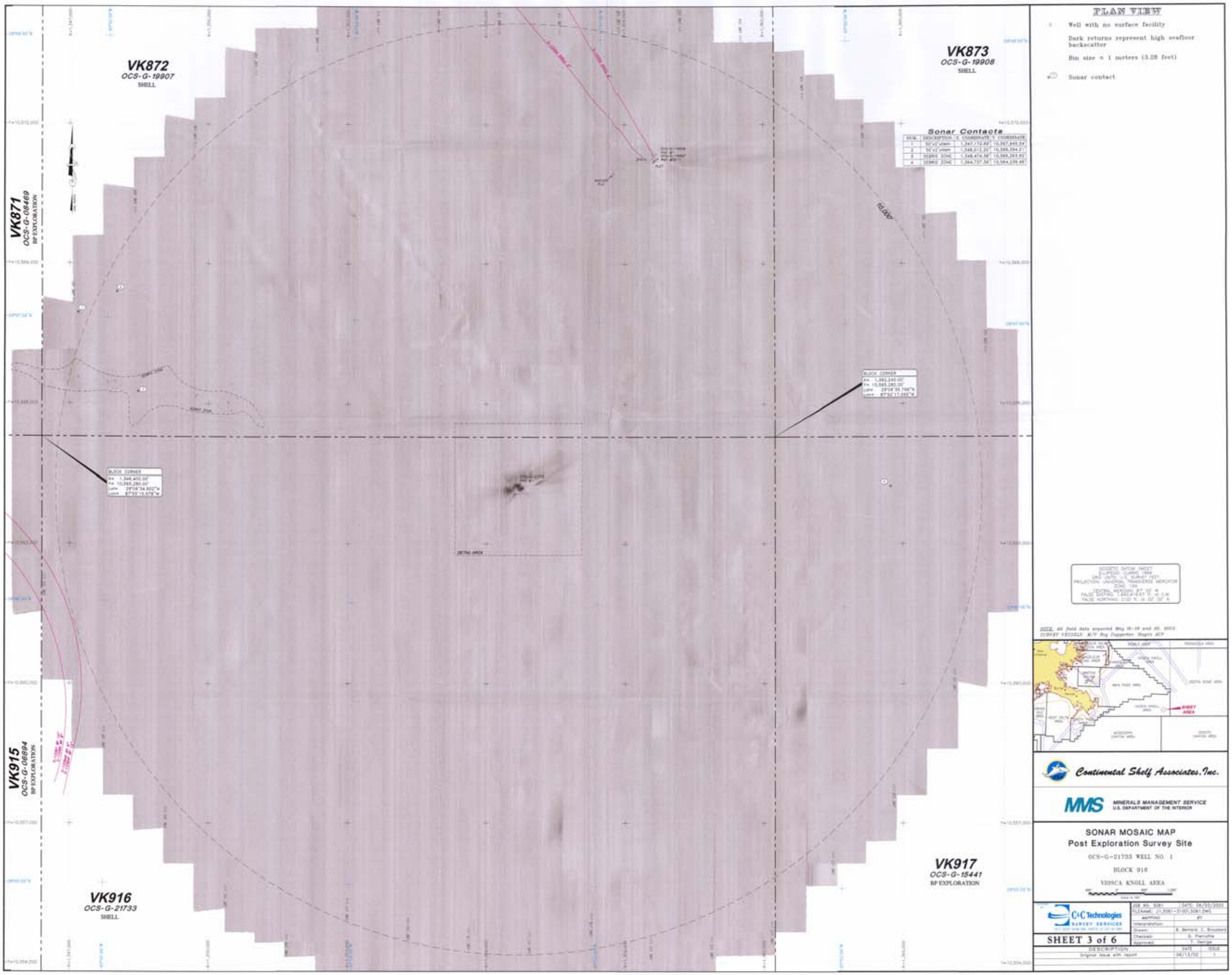
730 EAST KALISTE SALOOM ROAD, LAFAYETTE, LOUISIANA 70508



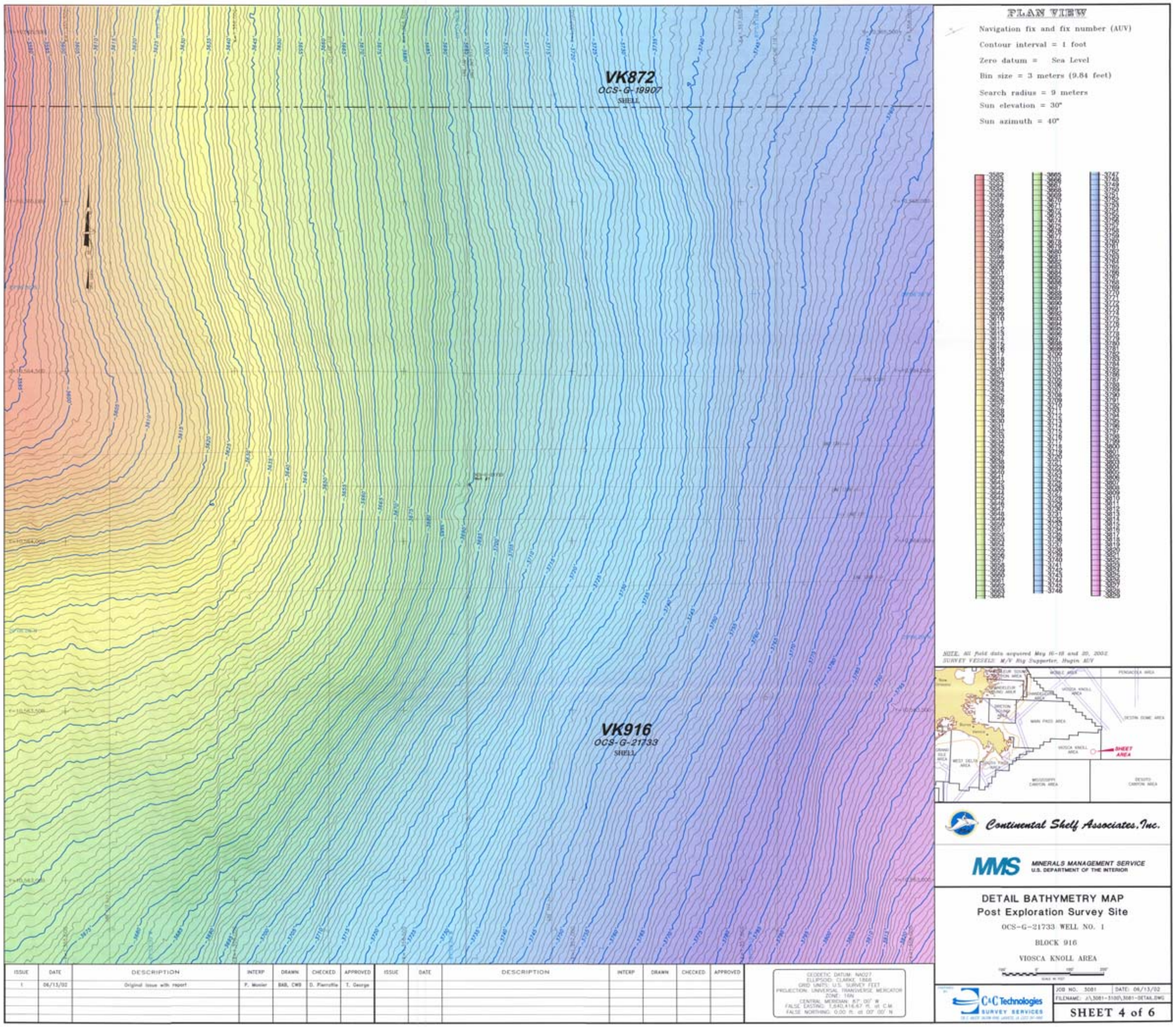
VK872
OCS-G-19907
SHELL
VK873
OCS-G-19908
SHELL
VK871
OCS-G-08469
BP EXPLORATION
VK915
OCS-G-06894
BP EXPLORATION
VK916
OCS-G-21733
SHELL
VK917
OCS-G-15441
BP EXPLORATION
BLOCK CORNER
PLAN VIEW
Navigation fix & fix number (AUV)
Contour interval = 5 feet
Zero datum = Sea level
Bin size = 3 meters (9.84 feet)
Search radius = 9 meter
Sun azimuth = 45°
Sun elevation = 35°
SHEET AREA
Continental Shelf Associates, Inc.
MMS
MINERALS MANAGEMENT SERVICE
U.S. DEPARTMENT OF THE INTERIOR
BATHYMETRY MAP
Post Exploration Survey Site
OCS-G-21733 WELL NO. 1
BLOCK 916
VIOSCA KNOLL AREA
C&C Technologies
SURVEY SERVICES
SHEET 1 of 6
DESCRIPTION
Original issue with report

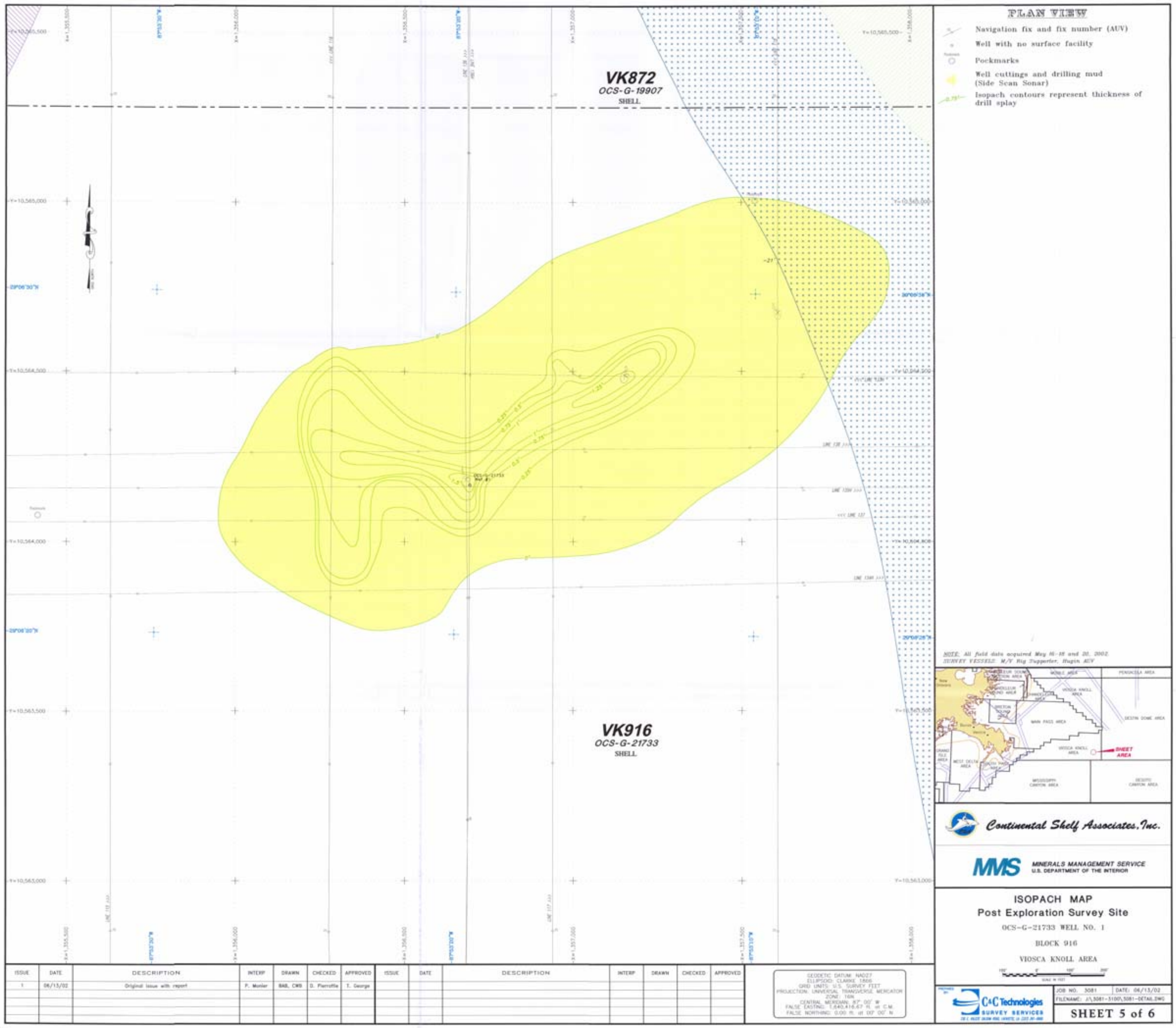


VK872
OCS-G-19907
SHELL
VK873
OCS-G-19908
SHELL
VK871
OCS-G-08469
BP EXPLORATION
VK915
OCS-G-08894
BP EXPLORATION
VK916
OCS-G-21733
SHELL
VK917
OCS-G-15441
BP EXPLORATION
Sonar Contacts
10,000'
DETAIL AREA
BLOCK CORNER
PLAN VIEW
Navigation fix & fix number (AUV)
Well with no surface facility
Drag scar
Pockmarks/Depression
Sonar contact
Pre-existing pipelines or umbilicals
Well cuttings and drilling mud
Seafloor debris
Disturbed seafloor sediment
Thin sheet debris flow with depths below seafloor
Numerous buried faults
Large mass debris flow with depths below seafloor
Continental Shelf Associates, Inc.
MMS
MINERALS MANAGEMENT SERVICE
U.S. DEPARTMENT OF THE INTERIOR
SEAFLOOR INVESTIGATION MAP
Post Exploration Survey Site
OCS-G-21733 WELL NO. 1
BLOCK 916
VIOSCA KNOLL AREA
C&C Technologies
SURVEY SERVICES
SHEET 2 of 6
DESCRIPTION
Original Issue with report

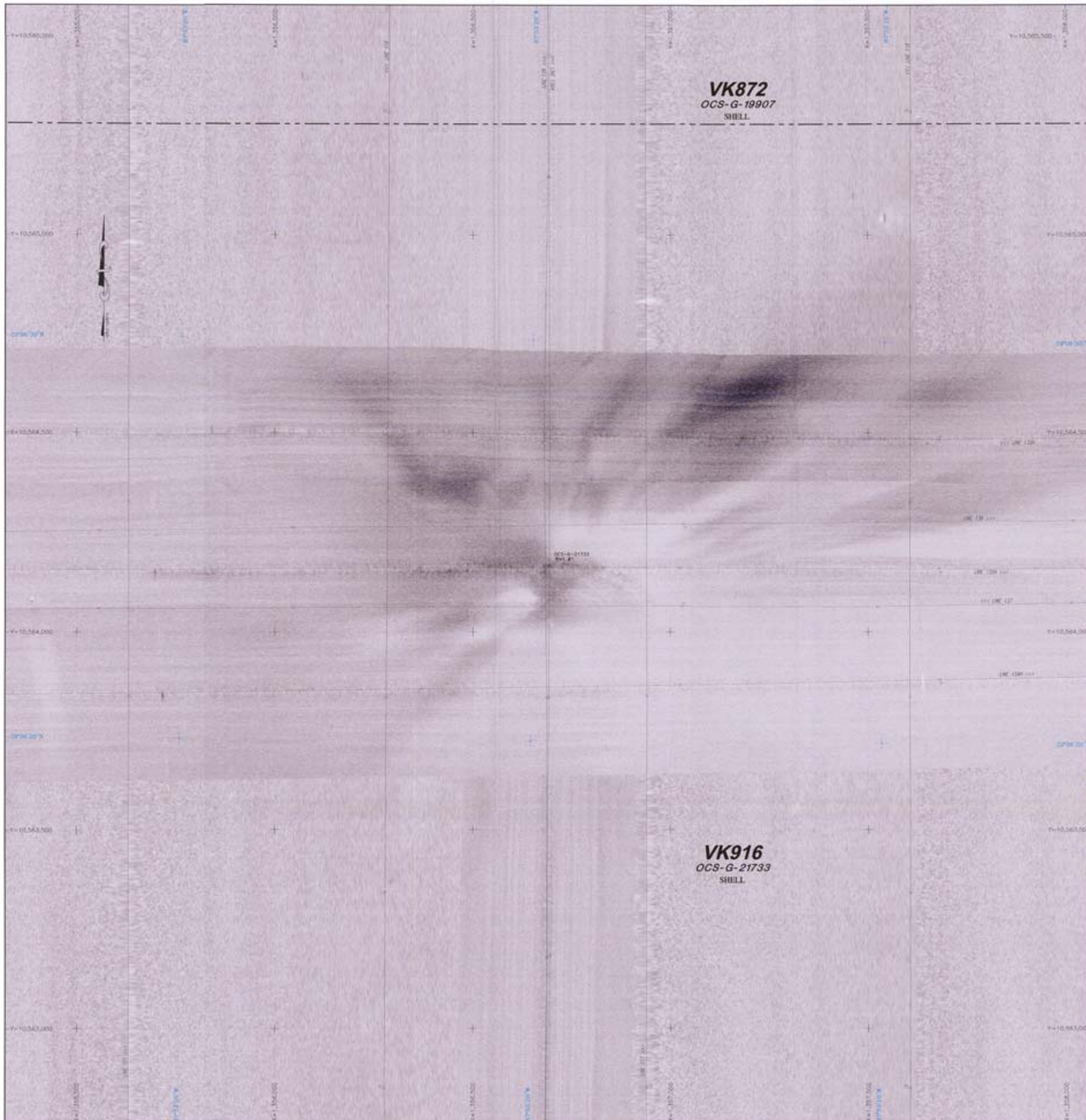


VK872
OCS-G-19907
SHELL
VK873
OCS-G-19908
SHELL
VK871
OCS-G-08469
BP EXPLORATION
VK915
OCS-G-06894
BP EXPLORATION
VK916
OCS-G-21733
SHELL
VK917
OCS-G-15441
BP EXPLORATION
10,000'
Sonar Contacts
PLAN VIEW
Well with no surface facility
Dark returns represent high seafloor backscatter
Bin size = 1 meters (3.28 feet)
Sonar contact
SHEET AREA
Continental Shelf Associates, Inc.
MMS
MINERALS MANAGEMENT SERVICE
U.S. DEPARTMENT OF THE INTERIOR
SONAR MOSAIC MAP
Post Exploration Survey Site
OCS-G-21733 WELL NO. 1
BLOCK 916
VIOSCA KNOLL AREA
C&C Technologies
SURVEY SERVICES
SHEET 3 of 6


VK872
OCS-G-19907
SHELL
VK916
OCS-G-21733
SHELL
PLAN VIEW
Navigation fix and fix number (AUV)
Contour interval = 1 foot
Zero datum = Sea Level
Bin size = 3 meters (9.84 feet)
Search radius = 9 meters
Sun elevation = 30°
Sun azimuth = 40°
NOTE: All field data acquired May 16-18 and 20, 2002
SURVEY VESSELS: M/V Rig Supporter, Hugin AUV
VIOSCA KNOLL AREA
MAIN PASS AREA
MISSISSIPPI CANYON AREA
DESOTO CANYON AREA
DESTIN DOME AREA
PENSACOLA AREA
SHEET AREA
Continental Shelf Associates, Inc.
MMS
MINERALS MANAGEMENT SERVICE
U.S. DEPARTMENT OF THE INTERIOR
DETAIL BATHYMETRY MAP
Post Exploration Survey Site
OCS-G-21733 WELL NO. 1
BLOCK 916
VIOSCA KNOLL AREA
C&C Technologies
SURVEY SERVICES
JOB NO. 3081
DATE: 06/13/02
FILENAME: J:\3081-3100\3081-DETAIL.DWG
SHEET 4 of 6
ISSUE
DATE
DESCRIPTION
INTERP
DRAWN
CHECKED
APPROVED
1
06/13/02
Original issue with report
P. Monier
BAB, CWB
D. Pierrottie
T. George



VK872
OCS-G-19907
SHELL
VK916
OCS-G-21733
SHELL
PLAN VIEW
Navigation fix and fix number (AUV)
Well with no surface facility
Pockmarks
Well cuttings and drilling mud (Side Scan Sonar)
Isopach contours represent thickness of drill splay
Continental Shelf Associates, Inc.
MMS
MINERALS MANAGEMENT SERVICE
U.S. DEPARTMENT OF THE INTERIOR
ISOPACH MAP
Post Exploration Survey Site
OCS-G-21733 WELL NO. 1
BLOCK 916
VIOSCA KNOLL AREA
C&C Technologies
SURVEY SERVICES
JOB NO. 3081
DATE: 06/13/02
SHEET 5 of 6



PLAN VIEW

- Well or platform with no surface facility

Dark returns represent high seafloor backscatter

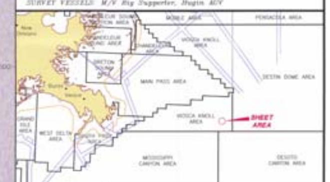
High frequency bin size = 0.25 meter (0.82 feet)

Low frequency bin size = 0.50 meter (1.64 feet)

Lines 133H–136H collected with 420khz data.

Lines 115–118 collected with 120khz data.

NOTE: All field data acquired May 16–18 and 20, 2002.
SURVEY VESSELS: M/V Rig Supporter, Hugin AUV



Continental Shelf Associates, Inc.

MMS — MINERALS MANAGEMENT SERVICE
U.S. DEPARTMENT OF THE INTERIOR

DETAIL SONAR MOSAIC MAP
Post Exploration Survey Site

OCS-G-21733 WELL NO. 1

BLOCK 916

VIOSCA KNOLL AREA

ISSUE	DATE	DESCRIPTION	INTERP	DRAWN	CHECKED	APPROVED	ISSUE	DATE	DESCRIPTION	INTERP	DRAWN	CHECKED	APPROVED
1	06/13/02	Original issue with report	P. Monier	BAB, CWB	D. Pierrottie	T. George							

GEODETIC DATUM: NAD27
ELLIPSOID: CLARKE 1866
GRID UNITS: U.S. SURVEY FEET
PROJECTION: UNIVERSAL TRANSVERSE MERCATOR
ZONE: 16N
CENTRAL MERIDIAN: 87° 00' W
FALSE EASTING: 1,640,416.67 ft. at C.M.
FALSE NORTHING: 0.00 ft. at 00° 00' N

C&C Technologies SURVEY SERVICES

JOB NO. 3081	DATE: 06/13/02
FILENAME: J:\3001-3100\3081-DETAIL.DWG	

SHEET 6 of 6

APPENDIX C3

Geophysical Survey Report for Cruise 2A

Continental Shelf Associates, Inc.

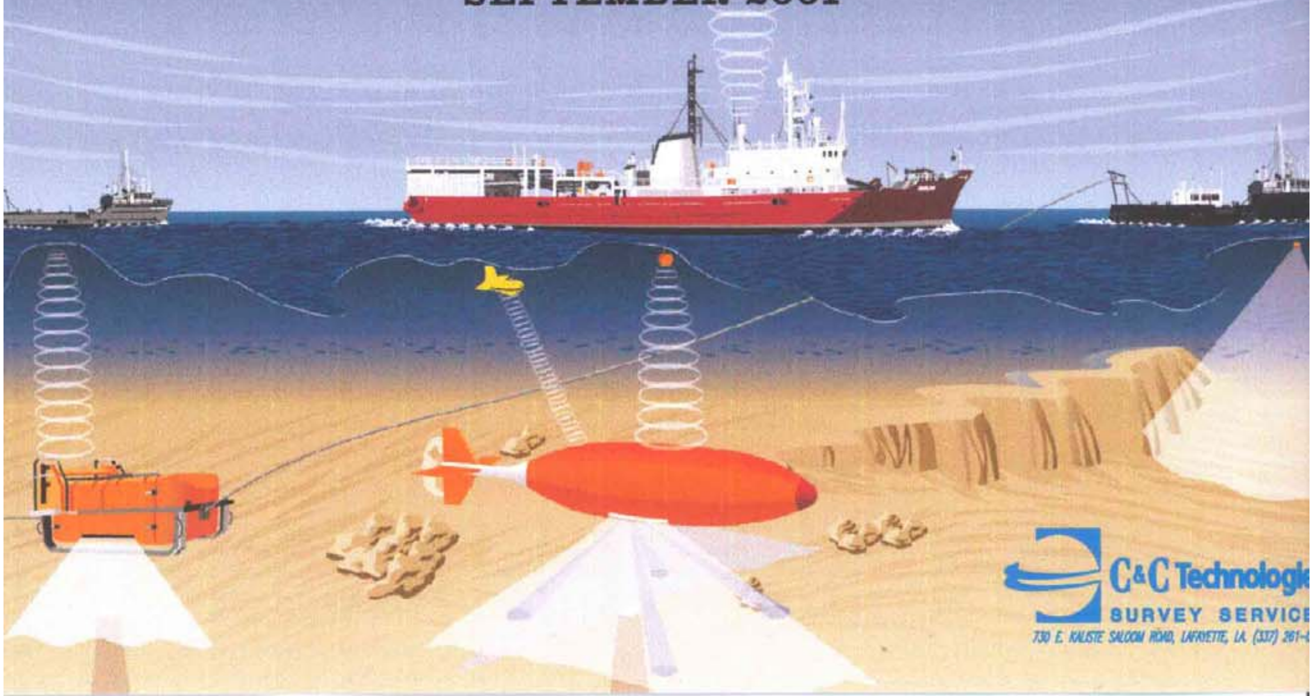
MMS MINERALS MANAGEMENT SERVICE
U.S. DEPARTMENT OF THE INTERIOR

SURVEY REPORT

Seafloor Physical Characterization Post-Development and Post-Exploration Sites

Block 602, Garden Banks Area
(OSC-G-11553 Wells A-2, A-4, A-5)
Block 516, Garden Banks Area
(OCS-G-11528 Well 1)
Block 292, Mississippi Canyon Area
(OCS-G-08806 Wells 1, 3, & 4)

SEPTEMBER 2001



Continental Shelf Associates, Inc.

MMS MINERALS MANAGEMENT SERVICE
U.S. DEPARTMENT OF THE INTERIOR

SURVEY REPORT

Seafloor Physical Characterization
Post-Development and Post-Exploration Sites

Block 602, Garden Banks Area
(OSC-G-11553 Wells A-2, A-4, A-5)

Block 516, Garden Banks Area
(OCS-G-11528 Well 1)

Block 292, Mississippi Canyon Area
(OCS-G-08806 Wells 1, 3, & 4)

SEPTEMBER 2001

C&C Technologies
SURVEY SERVICES
730 E. KALISTE SALOOM ROAD, LAFAYETTE, LA (337) 261-0660

TABLE OF CONTENTS

1.0 INTRODUCTION

C & C Technologies, Inc. (C&C) was contracted by Continental Shelf Associates, Inc. (CSA) to provide geophysical survey data for two post-development sites and one exploration site located on the upper slope of the Gulf of Mexico. The survey data were collected for the Minerals Management Services' program entitled "Effects of Oil and Gas Exploration and Development at Selected Continental Slope Sites in the Gulf of Mexico". CSA was awarded the contract for the overall project management of the program and assembled a team of prominent researchers. Dr. Harry Roberts and Dr. Sam Bentley from Louisiana State University are the Principal Investigators (PI) for the physical seafloor characterization study.

C & C Technologies surveyed three sites between June 24 and July 7, 2001: Block 602 (OCS-G-11553), Garden Banks Area; Block 516 (OCS-G-11528), Garden Banks Area and Block 292 (OCS-G-08806), Mississippi Canyon Area. These sites are numbered Survey Site Nos. 1, 2, and 3, respectively. A Regional Map showing the location of each site is located on page 3 and a Vicinity Map for each of the survey areas are found on pages 4 and 5.

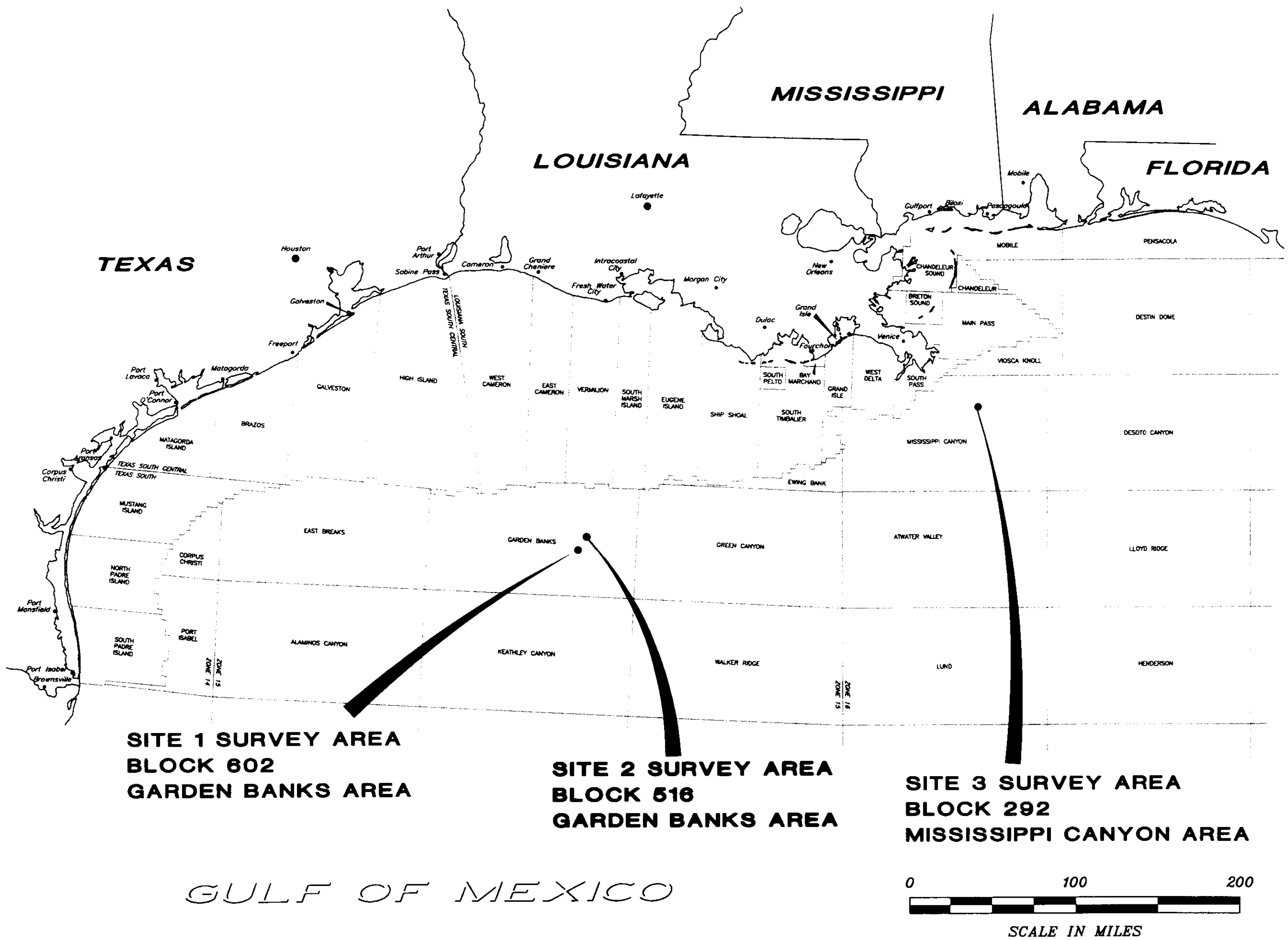
One vessel, the R/V *Pacific Horizon* (mother vessel) was used for field operations for all three site surveys. Sea conditions varied during the data acquisition with wave heights ranging between 3 and 6 feet. C & C Technologies, Inc.'s HUGIN 3000 Autonomous Underwater Vehicle (AUV) was used to collect all multi-sensor data for this survey. This system provides EM2000 swath bathymetric mapping, high-resolution sonar imagery and subbottom profiles. The HUGIN 3000 AUV was deployed from the mother vessel and navigated with inertial navigation.

Positioning of the mother ship was accomplished using differential GPS with the SatLoc® Navigation System used for relaying the corrections. The positioning solution for the AUV is calculated using a Kalman filter with the inertial navigation position providing the most statistical weight. A HiPAP acoustic tracking system and Doppler velocity log provide additional input into the Kalman filter. AUV positions were recorded and annotated on the hard copy data at 150-meter intervals. An U.S. Coast Guard Beacon (MBX-2) was also monitored as a back up for the surface positioning. The specifications and instrument settings of survey equipment used onboard are presented in detail in Appendix B. A vessel diagram and a copy of the survey logs are also found in Appendix B. Sound velocity curve profiles for the water column velocities are included in Appendix C.

The collected geophysical data were reviewed for geologic interpretation and for evidence of potential hazards to CSA's investigation equipment. Six maps were created to present the survey results at each location. Three of the six maps, Bathymetry Map (Sheet 1), Seafloor Investigation Map (Sheet 2) and Side Scan Sonar Mosaic Map (Sheet 3) are scaled at 1 inch = 600 feet and are provided to supply coverage for the entire survey area. Three additional detail maps, Detail Bathymetry Map (Sheet 4), Detail Seafloor Investigation Map (Sheet 5) and Detail Side Scan Sonar Mosaic (Sheet 6), scaled at 1 inch = 100 feet, are provided for close-in coverage of each well location. Geophysical data reproductions of the well sites and pertinent features are included in Appendix A.

The entire set of maps use geodetic datum North American Datum, 1927 and Clarke 1866 ellipsoid. The projection used for Blocks 602 and 516 of Garden Banks Area is the Universal Transverse Mercator (UTM), Zone 15 North (15N). The projection used for Block 292 of the Mississippi Canyon Area is the Universal Transverse Mercator (UTM), Zone 16 North (16N). All grid units, as well as scales and measurements are in feet.

REGIONAL MAP



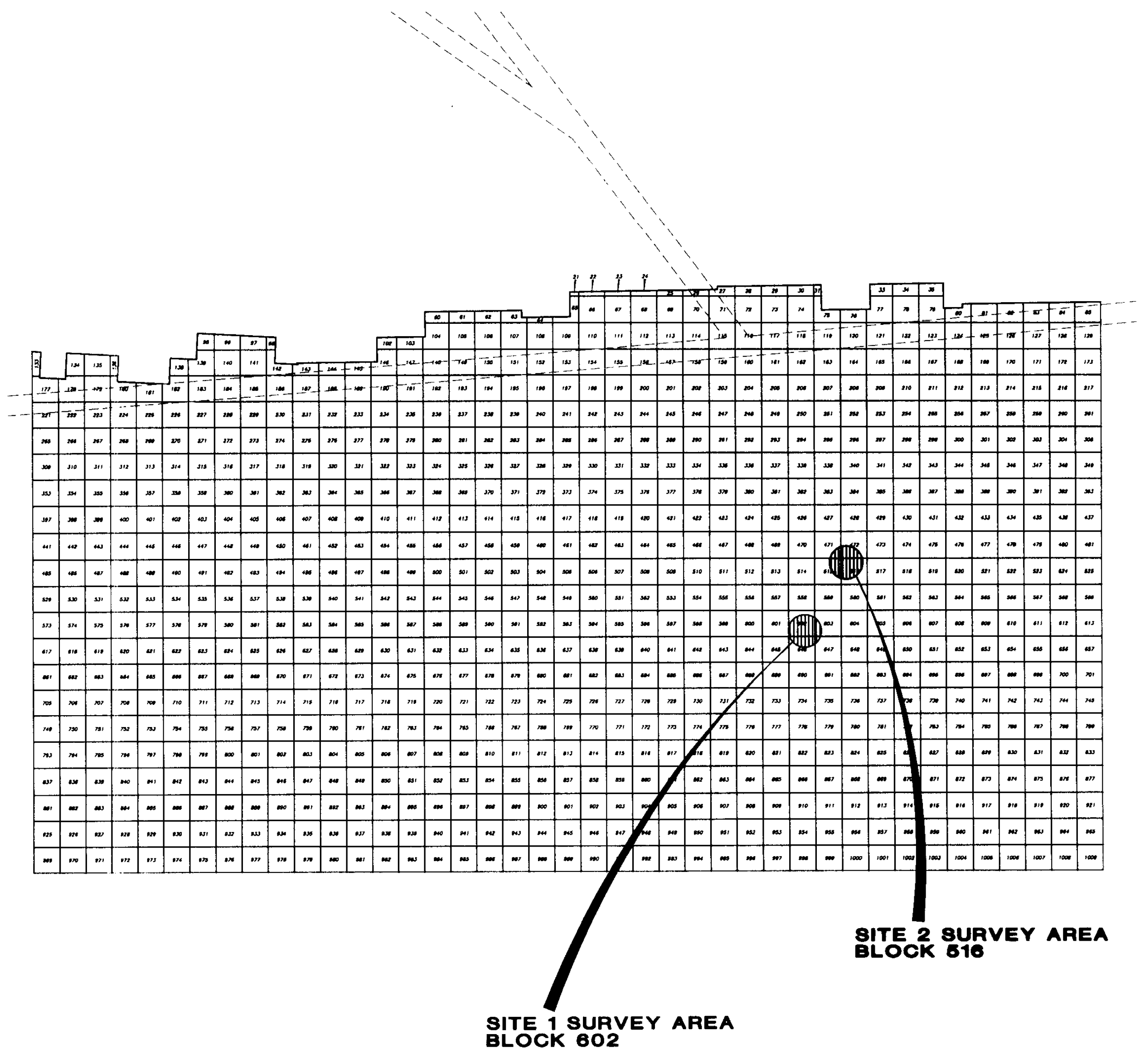
730 EAST KALISTE SALOOM ROAD, LAFAYETTE, LOUISIANA 70508

C&C Technologies
SURVEY SERVICES

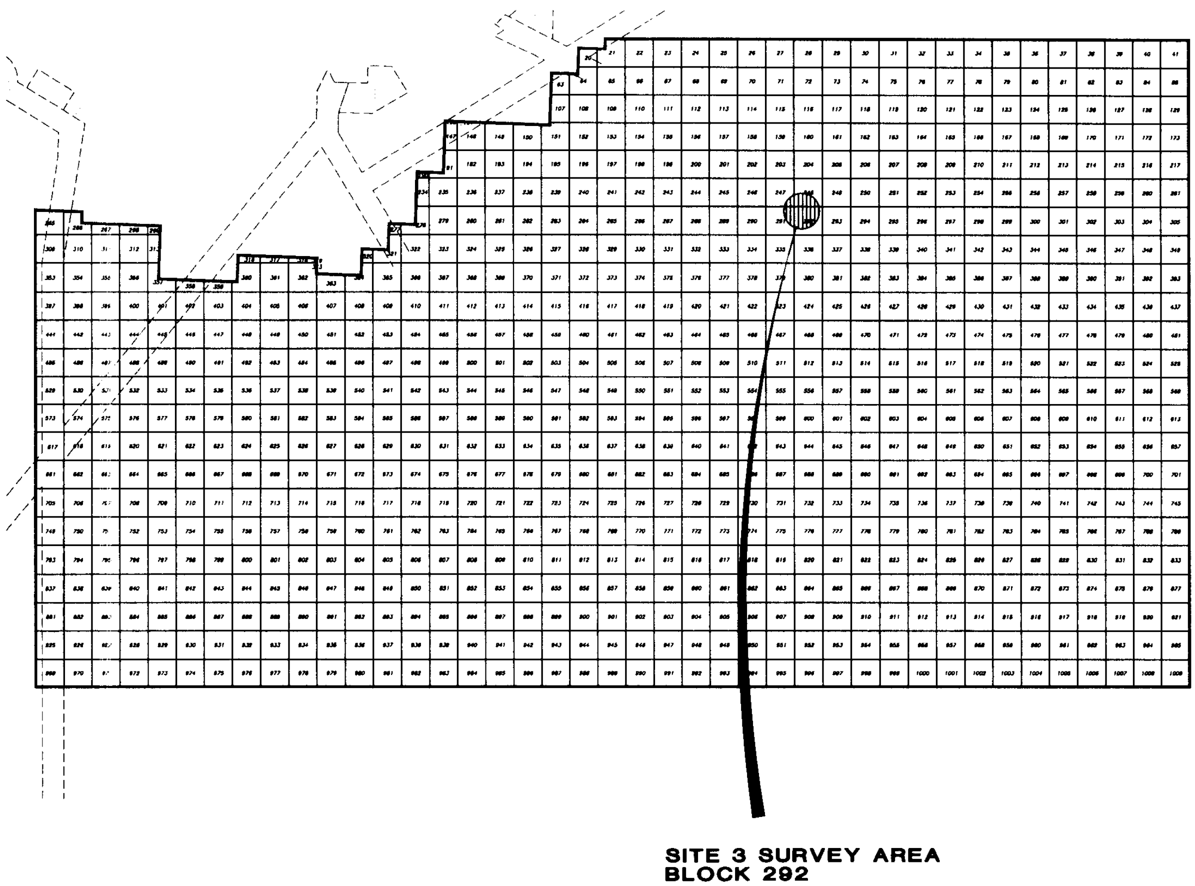
Continental Shelf Associates, Inc.

VICINITY MAP

GARDEN BANKS AREA



VICINITY MAP
MISSISSIPPI CANYON AREA



2.0 SURVEY INSTRUMENTATION

The HUGIN 3000 (High Precision Untethered Geosurvey and Inspection System) Autonomous Underwater Vehicle (AUV) is designed to collect deep-water, high-resolution geophysical data for site and route surveys in water depths up to 3,000 meters. C & C Technologies, Inc. worked with Kongsberg Simrad in developing the complex system design throughout the year 2000. The HUGIN is the first AUV designed and operated for commercial survey applications. A schematic diagram of the vehicle and major system components is presented in Appendix B.

Primary survey sensors found in the system payload include a Simrad EM 2000 Swath Bathymetric System, Edgetech Side Scan Sonar and an Edgetech Chirp Subbottom Profiler. An inertial guidance system is used for primary positioning of the underwater vehicle. Ancillary sensors include a precision depth sensor, altimeter, acoustic Doppler log and a salinity/temperature probe for calculating water column sound velocity. Transponders on the system for transmission of data include the HiPAP (High Precision Acoustic Positioning), ACL (Acoustic Command Link) and ADL (Acoustic Data Link). An aluminum/oxygen fuel cell powers the AUV for a period of up to 40 hours. Emergency ascent systems include a drop weight and air bag. A pinger, radio beacon, flashing light and GPS/RF link output visual and remote sensing aids used in locating the AUV should an event occur where normal communication is lost with the survey ship.

Three industrial strength computers control all the system functions within the HUGIN. These computers are referred to as the Control Processor, Payload Processor and Navigation Processor. The processors use artificial intelligence algorithms based on feedback returned from the more than 75 sensors to make real-time decisions regarding the system performance. Two titanium spheres, payload and control, house the computers and a 50-gigabyte data storage drive.

Three topside computers communicate continuously with the vehicle while it is in operation. The HUGIN Operator Station is responsible for monitoring all the sensors found in the vehicle and generates warnings to the operator when the values are out of optimal range. The Payload Operator Station computer provides the user with graphical views of the reduced subsets of the subbottom, bathymetry and side scan sonar data. It also allows the user to turn the systems on or off and adjust instrument settings as needed. The third topside computer is the HiPAP Operator

Station. This computer provides a real-time graphic display of the HUGIN vehicle subsurface position and the surface position of the mother ship, which travels directly above the AUV while the collecting data. Differential GPS provides the mother ship positions while the AUV vehicle positions are calculated using ultra short baseline acoustics (USBL), inertial navigation and Doppler velocity speed log.

Primary positioning of the HUGIN is controlled by the inertial navigation system. This system uses precision gyros and accelerometers to maintain the AUV track of the mission plan (trackline running sequence). The mission plan is downloaded to the HUGIN system computers before deployment. The HiPAP system and Doppler velocity speed log provide input into the inertial navigation system for guidance system checks. These inputs are weighted and applied to the positioning solution using a Kalman digital filter. Post processing routines can be implemented to further refine the subsea positions.

Simrad's EM 2000 Swath Bathymetry System collects soundings in approximately a 200-meter swath underneath the HUGIN vehicle. An onboard velocimeter provides real-time data at the transducer for proper beam forming of the acoustic transmissions. The system is capable of collecting 111 beams or soundings across the swath. A high-precision depth sensor provides the HUGIN vehicle depth. The data are processed utilizing C & C's proprietary HydroMap software.

The HUGIN is equipped with a dual frequency chirp Edgetech Side Scan Sonar that uses a calibrated wide band digital frequency modulated (FM) signal to provide high resolution, low-noise images. This sonar simultaneously transmits linearly swept FM pulses centered at two discrete frequencies: 120 kHz and 410 kHz. The raw data files are post-processed and converted to XTF (eXtended Triton Format) for digital interpretation and hardcopy generation.

Seismic profiles are collected with an Edgetech Chirp Subbottom Profiler. The transmit pulses are generated in the frequency band between 2 and 8 kHz. The system takes advantage of built-in deconvolution of the system response of the output pulse. The sonar's measured system impulse response is used to design a unique output pulse that will prevent the source from ringing. The raw seismic data can be post processed to create SEG-Y or XTF datasets.

3.0 PROJECT PROFESSIONALS

Jay Northcutt functioned as the project manager for C & C Technologies. Dr. Sam Bentley and Dr. Harry Roberts from the Coastal Studies Institute at Louisiana State University served as the Principal Investigators (PI) for the geophysical data collected. The geophysical data acquisition aboard the R/V *Pacific Horizon* was under the direction of Scott Melancon and Tim MacEwen.

Project Professionals		
Harry Roberts	Louisiana State University	Principal Investigator
Sam Bentley	Louisiana State University	Assistant Principal Investigator
Jay Northcutt	C & C Technologies, Inc.	Project Manager
Tony George	C & C Technologies, Inc.	Manager, Geophysical Interpretation
Lynn Braud	C & C Technologies, Inc.	Geologist
Bruce Samuel	C & C Technologies, Inc.	Geologist
Mike Taylor	C & C Technologies, Inc.	Geologist
Ralph Coleman	C & C Technologies, Inc.	Database Manager
Doug Pierrottie	C & C Technologies, Inc.	AutoCAD Supervisor
Ave McBride	C & C Technologies, Inc.	AutoCAD Operator
Charlie Span	C & C Technologies, Inc.	Manager, Geophysical Operations
Scott Melancon	C & C Technologies, Inc.	Party Chief
Tim MacEwen	C & C Technologies, Inc.	Senior Operator

4.0 SURVEY GRID

The geodetic datum for the survey mapping is the North American Datum, 1927 and the ellipsoid used is the Clarke 1866. The projections used are the Universal Transverse Mercator, Zone 15N (Blocks 602 and 516, Garden Banks Area) and Zone 16N (Block 292, Mississippi Canyon Area). The parameters used to convert the GPS positions from the WGS84 datum to the local NAD27 datum are: X = +7 m, Y = -151 m, Z = -175 m.

The surveys were designed to cover a radius of 10,000 feet centered on each site. Primary line spacing for the surveys was designed at a 200-meter (656-foot) interval. Thirty-two north-south primary lines were run to cover this circular area and the side scan sonar system was operated at a range of 250 meters (820 feet) per channel. Two additional east-west tielines were run 150 meters (492 feet) from each well location in order to obtain very high-resolution sonar imagery around each well. AUV trackline positions are shown on Sheet Nos. 1 - 6 for each of the survey sites.

5.0 DELIVERABLES

The following subsections describe the data deliverables provided to Dr. Harry Roberts and Dr. Sam Bentley for their review and research at each survey site. A statement is included regarding the quality of data collected.

5.1 Bathymetry Data

The results of the multi-beam bathymetry collected during these investigations are presented on the Bathymetry Map (Sheet 1) at a 1" = 600' scale and the Detail Bathymetry Map (Sheet 4) at a 1" = 100' scale for each survey site. Contour lines on Sheet Nos. 1 and 4 are presented at 5-foot and 1-foot contour intervals respectively. The track line positions presented on the Bathymetry Map represent those of the AUV. The bathymetry data were corrected for water column velocity variations utilizing a harmonic mean velocity function. Water column velocities versus depth curves are presented in Appendix C.

The multi-beam bathymetry data were logged at approximately 3 times per second with a very low signal to noise ratio. Excellent ties between the soundings exist where the tielines and primary lines intersect; however, some problems were encountered within the data set. There was a systematic error in the dataset that resulted in apparent "ray bending". The problem was observed in the field and a number of velocimeter casts were made in an attempt to correct the problem. An intensive effort in post-processing was conducted in the office to correct the dataset recorded velocities; however, a clear scientific solution to the problem could not be resolved and the final results were produced by applying intuitive rational to correct the concave effect.

5.2 Side Scan Sonar Data

Low frequency (120 kHz), side scan sonar data were collected along the tracklines as shown on the Side Scan Sonar Mosaic at a 1" = 600' scale (Sheet No. 3) at 1.5 meter bin size. The Detailed Side Scan Sonar Mosaic at a 1" = 100' scale (Sheet No. 6) was generated utilizing the high-frequency (420 kHz) side scan sonar data in addition to the low frequency data for Survey Site Nos. 2 and 3 at a 0.5 meter bin size. The Detailed Side Scan Sonar Mosaic of Survey Site No. 1 was generated using only low frequency (0.5 meter bin size) side scan sonar data due to missing data and therefore possesses a slightly lower resolution than the detailed mosaics of Survey Site Nos. 2 and 3. The side scan sonar data were converted to XTF (eXtended Triton Format) and printed out in hardcopy at a range of 200 or 250 meters/channel. Software from Ocean Imaging Consultants (OIC) was used to create the mosaics. Details of the processing procedures are found in Appendix B (OIC Swath).

Sonar data quality is considered good. A band of increased gain averaging 15 meters in width occurs on both channels of the side scan sonar at about 25 to 50 meters outward from nadir depending on the altitude of the fish. This banding problem is due to a possible problem in the manufacturing process of the transducers. This banding effect was reduced to some degree in the mosaic processing.

5.3 Subbottom Data

Frequency modulated subbottom data were digitally recorded with the HydroMap software. These data were collected in the frequency band of 2 to 8 kHz. Hardcopy records for the subbottom data were produced utilizing Triton Elics' Isis software. The hardcopy seismic profiles were generated with the water column removed (delayed), depth corrected at a 100-millisecond record scale with divisions at 10-millisecond increments for Survey Site Nos. 1 and 3, and 15-millisecond increments for Survey Site No. 2. The digital subbottom data are available in XTF format and can be converted to SEG-Y format if needed.

Subbottom profiler data quality is considered excellent. A minimal amount of noise is manifested in the subbottom data, which is represented as alternating bands of increased and decreased amplitude, however it does not hinder interpretation. This noise is due to the time cycled Acoustic Data Link between the AUV and the mother vessel.

6.0 SURVEY OPERATION SUMMARY

The original plan of work called for the geophysical acquisition of two exploration sites to begin in early September 2000 utilizing a deep-tow system. A total of 2 exploration sites and 3 production sites were to be surveyed in the original scope of work. The 2 exploration sites were to be surveyed before and after the wells were completed. The Block 915, Viosca Knoll Area site, surveyed in the latter part of 2000, was abandoned as an exploration site by the operator and was not revisited. Geotechnical sampling at the Block 516, Garden Banks Area post-exploration site was performed as a pre-exploration investigation, but no physical seafloor characterization investigation was performed. Equipment problems and weather delays resulted in the scope of work being reduced to one exploration site, Block 915, Viosca Knoll Area, being completed in 2000. The three sites discussed within this report are within the original scope of work. The original scope of work also called for these investigations to be performed in a two-boat deep tow survey configuration, however, these sites were surveyed with C & C Technologies' HUGIN 3000 Autonomous Underwater Vehicle (AUV).

A failure of the control processor (CP) of the AUV on June 14th, 2001 resulted in a significant delay in the start of the survey on June 15th, 2001. Survey operations were suspended temporarily awaiting the arrival of parts and technical personnel. The survey vessel, R/V *Pacific Horizon*, departed Fourchon, Louisiana for Block 292, Mississippi Canyon Area (Survey Site No. 3) on June 24, 2001. Work on the Block 292, Mississippi Canyon Area site began on June 25th at 01:10 hours (UTC). Several problems relating to the installation of the new control processor ensued resulting in a delay in the diving of the AUV until 15:38 hours (UTC). The AUV aborted it mission shortly after, at 16:48 hours (UTC), after completing 1.25 survey lines due to Doppler Velocity Log (DVL) and HiPAP malfunctions. Survey operations were discontinued for replacement of the DVL and further testing of the AUV until June 27th at 22:38 hours (UTC), when the survey was continued. Survey Site No. 3 operations continued successfully until their completion on June 29th at 10:45 hours (UTC). Work on the Block 602, Garden Banks Area (Survey Site No. 1) began on July 3rd, 2001 at 09:42 hours (UTC) and ensued until survey completion on July 4th at 22:07 hours (UTC). Survey Operations for Block 516, Garden Banks Area (Survey Site No. 2) began on July 5th at 17:37 hours (UTC) and extended through their completion on July 8th at 03:14 (UTC), when all site surveys were completed.

7.0 INTERPRETIVE SUMMARY

7.1 Survey Site No. 1, Garden Banks Area, Block 602 – Post-Development Site

Side Scan Sonar Features

Several seafloor features have been interpreted radiating from Well Nos. A-2, A-4, and A-5 (OCS-G-11553) at the center of the Seafloor Investigation Map (Sheet No. 2). An elongated north-south trending region of low seafloor reflectivity surrounds the wells and has been interpreted as drilling mud. Beyond the drilling mud a region of higher amplitude returns radiates outward in an east-west trending pattern. This region has been interpreted as drill cuttings. Numerous drag scars and drag trenches also radiate from the centralized well location.

A region of increased seafloor backscatter is apparent in close vicinity to Well No. 1 (OCS-G-11553). Regions of decreased and increased seafloor reflectivity are evident in the surrounds of Well No. 3 (OCS-G-11553). These regions are also interpreted as drilling mud and well cuttings.

Several regions of variable anomalous reflectivity occur scattered across the expanse of the Seafloor Investigation Map. These regions are interpreted as either dumped or disturbed sediment from production operations.

Sonar Contacts and Known Infrastructure

Forty-three sonar contacts appear within the bounds of the survey area (Sheet Nos. 2, 3, 5 and 6). Of these, eight are larger contacts that are part of a production operations array (Sonar Contact Nos. 36 – 43) (Appendix A, Figure No. 1). Sonar Contact Nos. 36, 37, and 40 are the wellheads for Well Nos. A-4, A-5, and A-2 (OCS-G-11553) respectively. The wellheads (Sonar Contact Nos. 36,37, and 40) exhibit dimensions of 17 feet x 20 feet x 31 feet, 19 feet x 12 feet x 33 feet, and 23 feet x 23 feet x 33 feet respectively. Sonar Contact Nos. 38 and 39 represent a sub-sea manifold, which exhibits a combined length of 42 feet, width of 29 feet, and height of 23 feet. Three small 6-inch umbilicals extend from each of the wellheads to the sub-sea manifold. Sonar Contacts Nos. 41 – 43 represent pipeline sleds, which serve as the termination points for two pipelines and one umbilical that trend northward (Two (2) Devon 6" Pipelines within a 10" Casing (Pipe in a Pipe Configuration), and one (1) Devon 6" Umbilical). The pipeline sleds (Sonar Contact Nos. 41, 42, and 43) exhibit the dimensions 26 feet x 20 feet x no measurable height, 21 feet x 23 feet x 7 feet, and 31 feet x 12 feet x 7 feet respectively. The remaining thirty-five sonar contacts are interpreted as debris from production operations that possess no measurable height.

Subbottom

An examination of the subbottom profiles revealed laterally undisturbed, consistent, parallel reflectors. No anomalous map-able features were noted (See Sheet Nos. 2 and 5).

Bathymetry

The bathymetry map depicts a flat surface that dips gently into a concave geometry in the southern central region of the Bathymetry Map (Sheet 1), with a maximum water depth of 3,705 feet. Water depths vary between 3,460 feet and 3,705 feet. The slope gradient remains less than 1.9° throughout the area, except where an isolated slope of 3.6° was calculated in the western central portion of the survey area. A seafloor furrow extends south-southeast from the northwestern limits of the survey area.

7.2 Survey Site No. 2, Garden Banks Area, Block 516 – Post-Exploration Site

Side Scan Sonar Features

Several seafloor features have been interpreted radiating from Well No. 1 (OCS-G-11528) and Well No. 2 (OCS-G- 08252) at the center of the Seafloor Investigation Map (Sheet No. 2). A region of low seafloor reflectivity surrounds the well and has been interpreted as drilling mud. Beyond the drilling mud, a region of increased amplitude returns radiates outward in an east-west trending pattern. This region of increased amplitude has been interpreted as drill cuttings. Numerous drag scars and drag trenches radiate from the centralized well location.

A region of low seafloor reflectivity is also apparent in close vicinity to Well No. 1 (OCS-G-08252), and has been interpreted as drilling mud.

Several regions of variable anomalous reflectivity occur within the expanse of the Seafloor Investigation Map (Sheet 2). These regions have been interpreted as either disturbed sediment from production operations or sediment variations due to fault disturbance. A large region of anchor chain scars occurs in the eastern central portion of the map.

Sonar Contacts and Interpreted Infrastructure

Twenty-seven sonar contacts appear within the bounds of the survey area (See Sheet Nos. 2, 3, 5, and 6). Sonar Contact Nos. 16, and 19 – 22 are interpreted as parts of the active production array based on Minerals Management Service (MMS) database information and side scan sonar imagery (Appendix A, Figure No. 2). The "as-built" information for the production array was requested from Shell, but was not received at the time this report was written. Sonar Contacts Nos. 19 and 22 mark the positions of Well No. 1 (OCS-G-11528) and Well No. 2 (OCS-G-08252) respectively. The dimensions on Well No. 1 and Well No. 2 are 13 feet x 13 feet x 3 feet and 11 feet x 13 feet x 8 feet respectively. A Shell 2" Umbilical was permitted by the MMS and extends from Well No. 2 to the southwest. The umbilical existence could not be verified on side scan sonar imagery. Three sonar contacts (Sonar Contact Nos. 16, 20, and 21), are interpreted as sleds due to their size and close proximity to Well Nos. 1 and 2. Sonar Contacts 16, 20, and 21 exhibit the dimensions 34 feet x 16 feet x 7 feet, 37 feet x 15 feet x no measurable height, and 31 feet x 21 feet x no measurable height respectively. A Shell 6" Pipeline within 10" Casing (Pipe in Pipe Configuration) is verified by sonar imagery in its MMS permitted location extending northwest from the Sonar Contact No. 21 (Sled) location. Two small Shell 6" Pipelines, are permitted, but are not verifiable on sonar, extend from the Sonar Contact No. 21 (Sled) to Well Nos. 1 and 2. A Shell 6" Umbilical is permitted by the MMS and extends outward from Sonar Contact No. 20 (Sled) to the northwest. The umbilical existence could not be verified on side scan sonar imagery. A Shell 4" Umbilical is permitted by the MMS and extends outward from Sonar Contact No. 16 (Sled) to the southwest. The umbilical existence could not be verified on side scan sonar imagery. The remaining twenty-two sonar contacts are described as debris relating to production activities with no measurable heights.

Subbottom

The subbottom profiles acquired during this survey for this area reveal extreme deformation of subsurface sediments due to diapiric uplift. A portion of this uplift occurs within the southeastern region of the survey grid. Subsurface sediments found within the area include heavily faulted sediments, uplifted and eroded sediments, and buried submarine landslide deposits. Major faulting of surrounding sediments includes several fault scarps of measurable height. The largest fault within the area traverses the southwestern region of the survey grid and exhibits a scarp measured up to 77 feet. Two areas of extreme faulting have been noted on the Seafloor Investigation Map (Sheet 2). The submarine landslides appear to have traveled northward down dip of the uplifted region. These deposits are acoustically amorphous and are framed by laterally continuous parallel reflectors. Bulge-like structures exist within the geometry of these deposits, occurring as the unit dewaters and begins to compress. Small fracture-like high amplitude features occurring within the onlaping sediments are most likely planes of dewatering of the landslide units below it.

Within the upper regions of the uplift, there exists acoustically amorphous, subsurface sediments that have been interpreted as gas charged sediments. In addition, large areas near and at the surface exhibit geophysical properties similar to those of frozen hydrates, and authigenic carbonates.

Bathymetry

A large trough trending northeast to southwest with a maximum depth of 3,405 feet occupies the central portion of the Bathymetry Map (Sheet Nos. 1 and 4). A ridge with a maximum flank gradient of 4.3° occupies the northwestern quadrant of the map. The southeastern quadrant of the map is occupied by another ridge with an extremely steep slope. A maximum local slope gradient of 36.7° was calculated in this region. Numerous north-south trending submarine landslides have affected the bathymetry east of the well site. A series of roughly east-west trending fault scarps can be discerned from the multibeam data in this region. Additionally, a long crescent shaped fault scarp trends from east to west across the southern extremity of the survey area.

7.3 Survey Site No. 3, Mississippi Canyon Area, Block 292 – Post-Development Site

Side Scan Sonar Features

Several seafloor features have been interpreted radiating from Well Nos. 1, 3, and 4 (OCS-G-08806) at the center of the Seafloor Investigation Map (Sheet No. 2). A region expressed by low seafloor backscatter occurs trending toward the southeast from the wells, and has been interpreted as drilling mud. Beyond the drilling mud, a region of higher amplitude returns radiates outward in a northeast-southwest trending pattern. This region is interpreted as well cuttings. Several drag scars and drag trenches radiate from the centralized well location.

Regions of increased seafloor backscatter radiate from Well Nos. 1 and 2 (OCS-G-13114) in the north-central portion of the map, as well as from Well No. 1 (OCS-G-08805) in the southwestern portion of the map. These regions have also been interpreted as well cuttings.

Sonar Contacts and Known Infrastructure

Twenty-six sonar contacts appear within the bounds of the survey area (Sheet Nos. 2, 3, 5, and 6). Sonar Contact Nos. 8 – 12, and 18 - 24 are parts of the active production array (Appendix A, Figure No. 3). Sonar Contact Nos. 18, 19, and 20 mark the positions of wellheads for Well No. 4, Well No. 3, and Well No. 1 (OCS-G-08806) respectively. The three wellheads (Sonar Contact Nos. 18, 19, and 20) have dimensions 15 feet x 15 feet x 24 feet, 16 feet x 17 feet x 25 feet, and 17 feet x 18 feet x 24 feet respectively. Three Texaco 4" Pipelines extend from each well to a sub-sea manifold (Sonar Contact No. 21). The manifold exhibits dimensions of 19 feet x 19 feet x 22 feet. A Texaco Umbilical and two Texaco 12" Pipelines trend north to south and terminate at three sleds (Sonar Contact Nos. 22, 23, and 24 respectively) in the production area. The sleds (Sonar Contact Nos. 22, 23, and 24) are of dimensions 19 feet x 15 feet x 12 feet, 24 feet x 19 feet x no measurable height, and 19 feet x 19 feet x no measurable height respectively. A positioning transponder array (Sonar Contact Nos. 8 – 12), configured in a pentagonal formation, is centered on the production area. The transponders exhibit variable length (23 feet – 31 feet), and width (6 feet – 8 feet), but possess no measurable height. The remaining 14 sonar contacts are interpreted as debris from production operations that exhibit no measurable height.

Subbottom

An examination of the subbottom profiles identified several predominately northeast-southwest trending faults in the northeast and southeast quadrants of the map (See Sheet Nos. 2 and 5). Most of the faults dip to the south or southeast. Several scarps of 1 to 2 feet in relief are present, however, overall this faulting expresses only minimal surface relief.

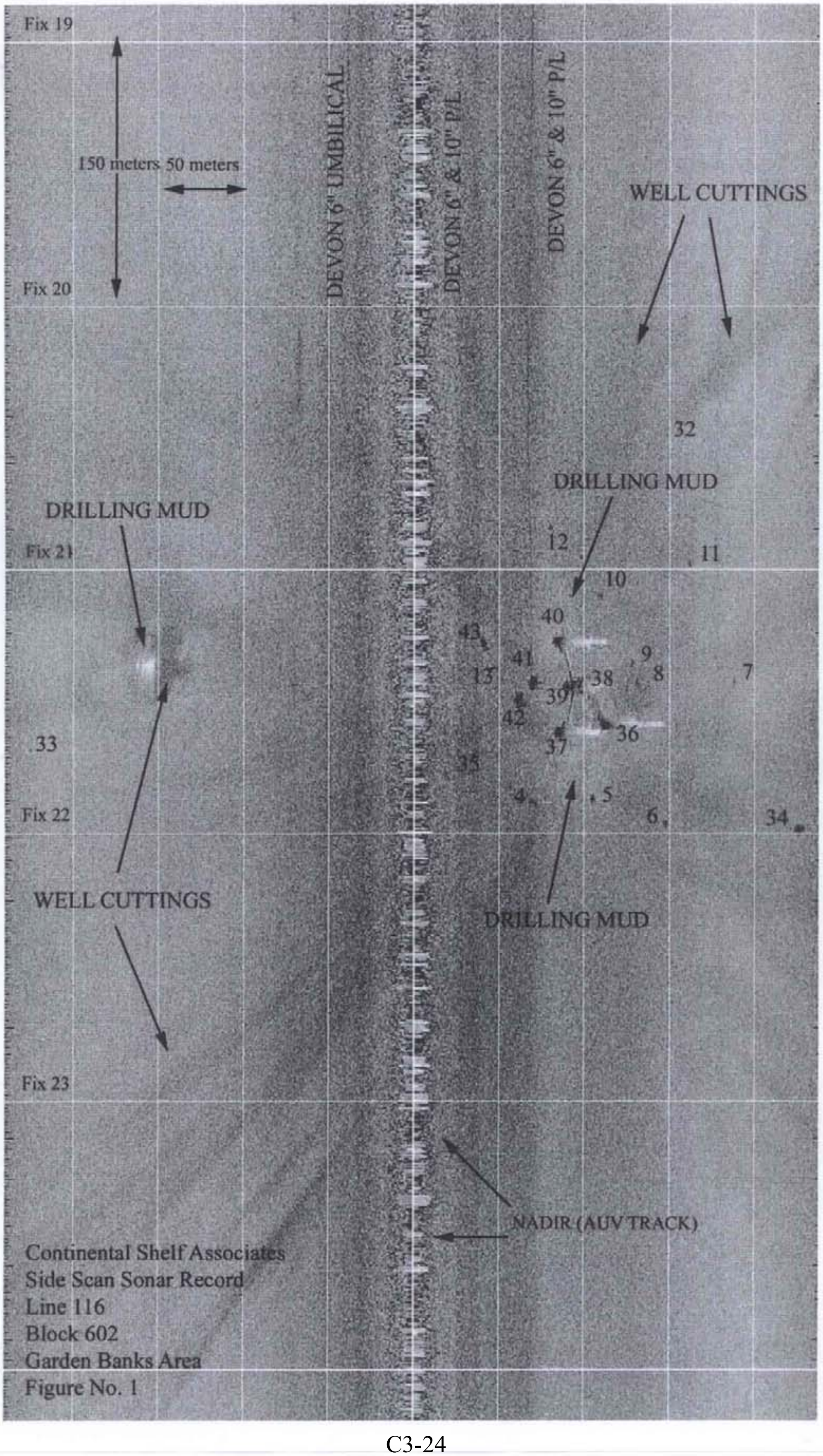
Several regions of eroded sediments occur on steeper slopes throughout the survey area. In these areas hemipelagic sediment accumulation is thin or has been somewhat eroded.

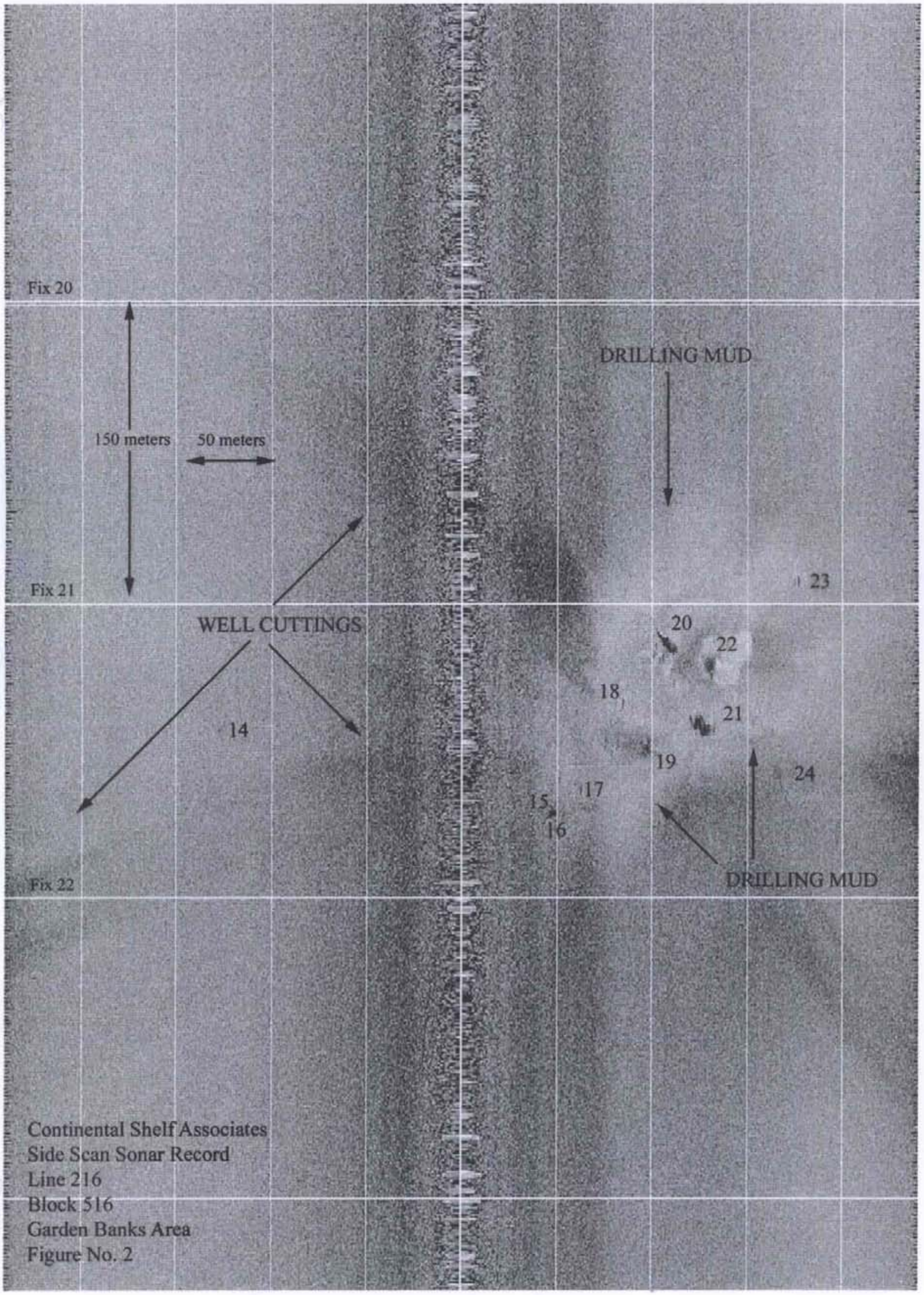
Bathymetry

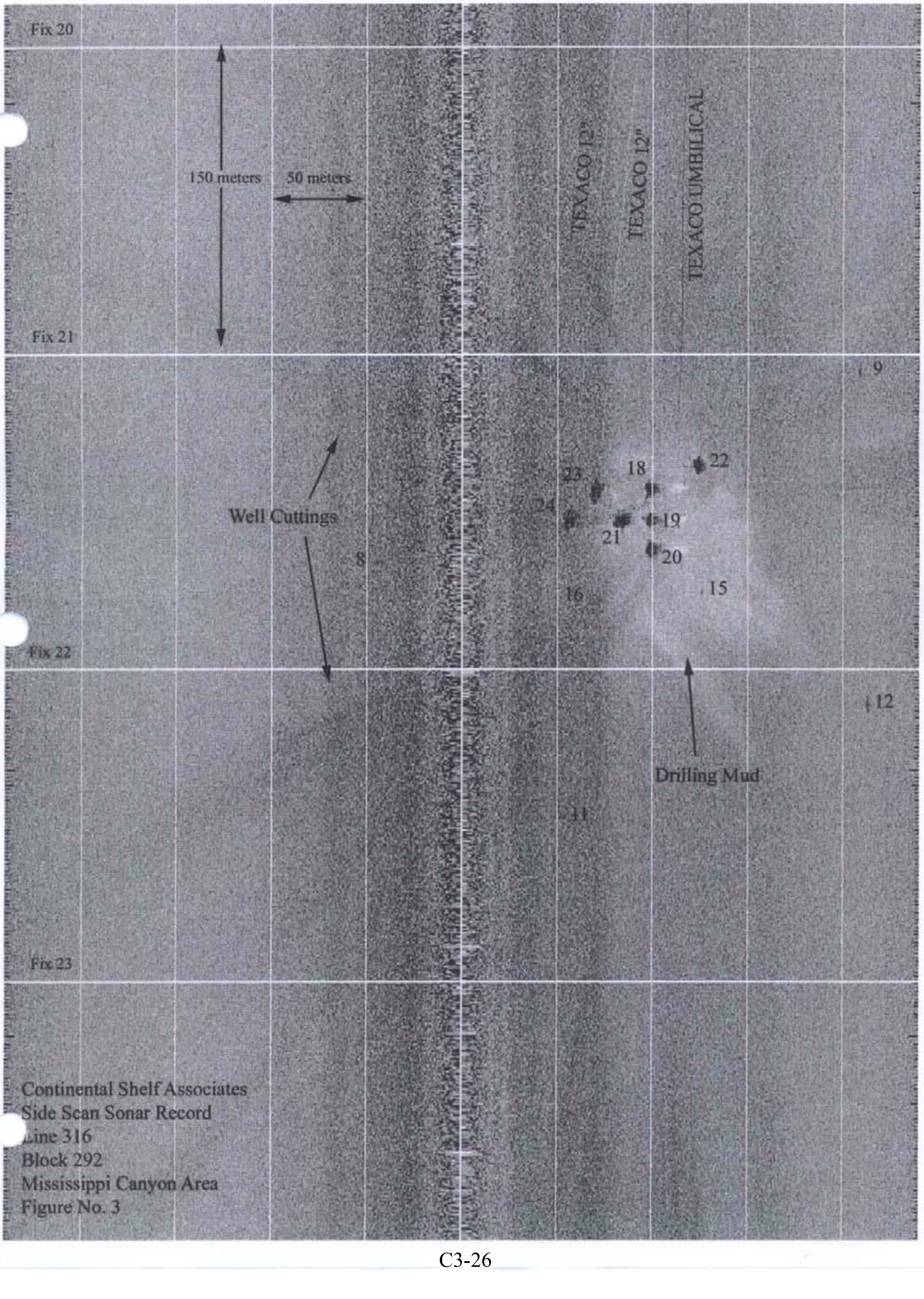
Multibeam data reveals a bathymetry that slopes to the southeast from 3,025 feet water depth in the northwest map quadrant to 4,445 feet water depth in the southeast quadrant (Sheet Nos. 1 and 4). The steepest slopes occur in the southeastern quadrant where gradients reach 11.25°.

APPENDIX A

FIGURES


Fix 19
150 meters
50 meters
DEVON 6" UMBILICAL
DEVON 6" & 10" P/L
DEVON 6" & 10" P/L
WELL CUTTINGS
Fix 20
32
DRILLING MUD
DRILLING MUD
Fix 21
12
11
10
40
43
41
9
8
7
13
38
39
42
33
36
37
35
4
5
Fix 22
6
34
WELL CUTTINGS
DRILLING MUD
Fix 23
NADIR (AUV TRACK)
Continental Shelf Associates
Side Scan Sonar Record
Line 116
Block 602
Garden Banks Area
Figure No. 1

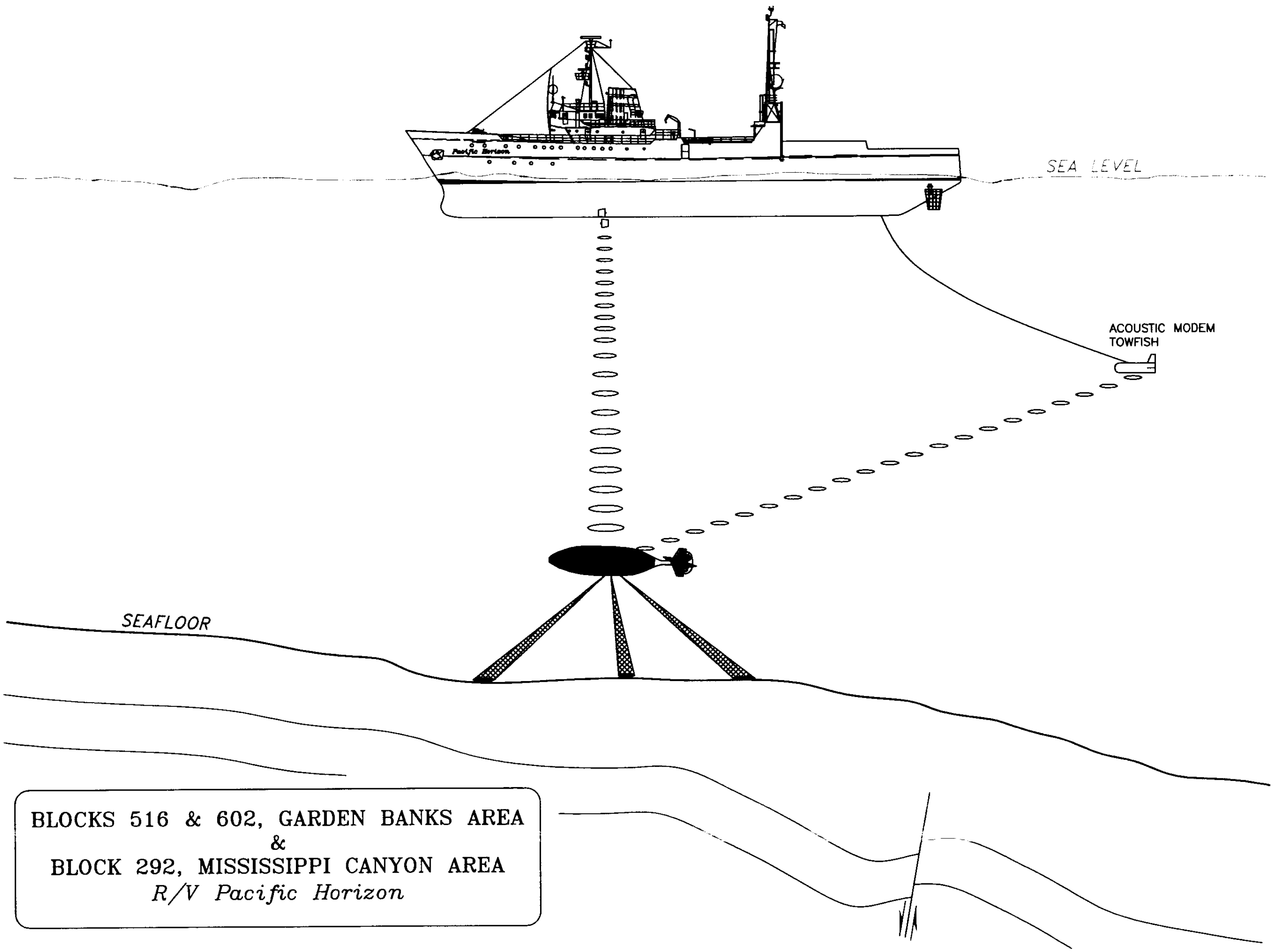

Fix 20
150 meters
50 meters
DRILLING MUD
Fix 21
23
WELL CUTTINGS
20
22
18
21
14
19
24
17
15
16
Fix 22
DRILLING MUD
Continental Shelf Associates
Side Scan Sonar Record
Line 216
Block 516
Garden Banks Area
Figure No. 2


Fix 20
150 meters
50 meters
TEXACO 12"
TEXACO 12"
TEXACO UMBILICAL
Fix 21
9
22
23
18
24
Well Cuttings
19
21
8
20
16
15
Fix 22
12
Drilling Mud
11
Fix 23
Continental Shelf Associates
Side Scan Sonar Record
Line 316
Block 292
Mississippi Canyon Area
Figure No. 3

APPENDIX B

BOAT DIAGRAM
EQUIPMENT DESCRIPTIONS
INSTRUMENT SETTINGS
SURVEY LOGS

AUV SYSTEM CONFIGURATION



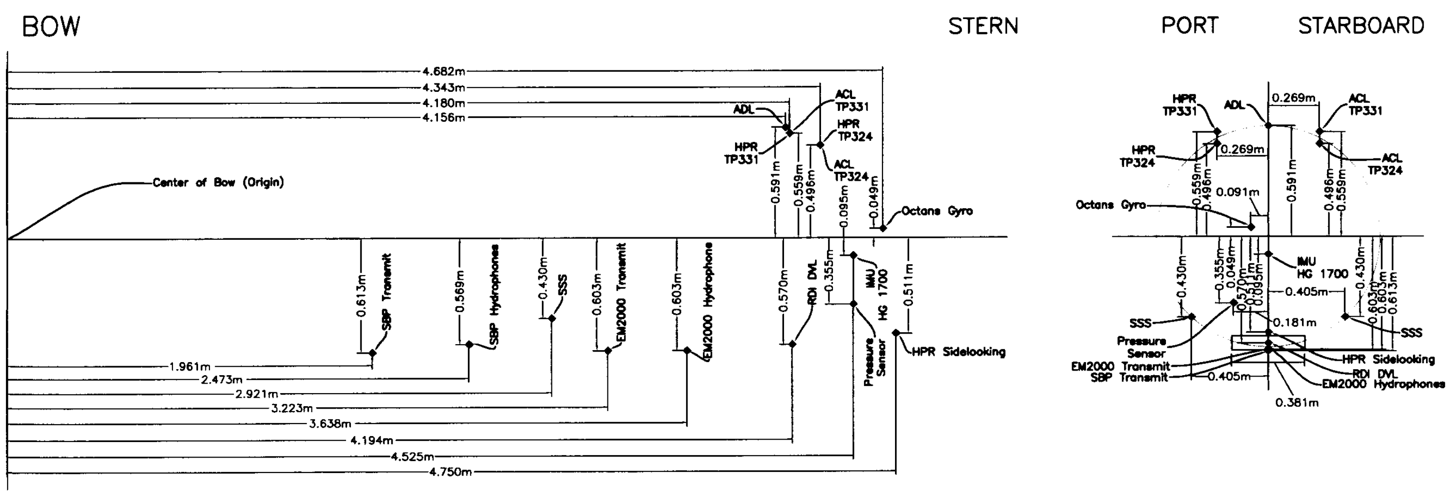
BLOCKS 516 & 602, GARDEN BANKS AREA
&
BLOCK 292, MISSISSIPPI CANYON AREA
R/V Pacific Horizon

730 EAST KALISTE SALOOM ROAD, LAFAYETTE, LOUISIANA 70508

C&C Technologies
SURVEY SERVICES

Continental Shelf Associates, Inc.

C&C Technologies
SURVEY SERVICES



Hugin AUV Offset Diagram

Prepared from As-built Data
Provided by Kongsberg Simrad
Date: January 8, 2001
Prepared By: TEM

730 EAST KALISTE SALOOM ROAD, LAFAYETTE, LOUISIANA 70508

Continental Shelf Associates, Inc.

HUGIN AUTONOMOUS UNDERWATER VEHICLE

Three topside computers communicate continuously with the vehicle while it is in operation. The HUGIN Operator Station is responsible for monitoring all the sensors found in the vehicle and generates warnings to the operator when the values are out of optimal range. The Payload Operator Station computer provides the user with graphical views of the reduced subsets of the subbottom, bathymetry and side scan sonar data. It also allows the user to turn the systems on or off and adjust instrument settings as needed. The third topside computer is the HiPAP Operator Station. This computer provides a real-time graphic display of the HUGIN vehicle subsurface position and the surface position of the mother ship, which travels directly above the AUV while the collecting data. Differential GPS provides the mother ship positions while the AUV vehicle positions are calculated using ultra short baseline acoustics (USBL), inertial navigation and Doppler velocity speed log. Primary positioning of the HUGIN is controlled by the inertial navigation system. This system uses precision gyros and accelerometers to maintain the AUV track of the mission plan (trackline running sequence). The mission plan is downloaded to the HUGIN system computers before deployment. The HiPAP system and Doppler velocity speed log provide input into the inertial navigation system for guidance system checks. These inputs are weighted and applied to the positioning solution using a Kalman digital filter. Post processing routines can be implemented to further refine the subsea positions.

Simrad's EM 2000 Swath Bathymetry System collects soundings in approximately a 200-meter swath underneath the HUGIN vehicle. An onboard velocimeter provides real-time data at the transducer for proper beam forming of the acoustic transmissions. The system is capable of collecting 111 beams or soundings across the swath. A high-precision depth sensor provides the

HUGIN AUTONOMOUS UNDERWATER VEHICLE

HUGIN vehicle depth. The data are processed utilizing C & C's proprietary HydroMap software.

The HUGIN is equipped with a dual frequency chirp Edgetech Side Scan Sonar that uses a calibrated wide band digital frequency modulated (FM) signal to provide high resolution, low-noise images. This sonar simultaneously transmits linearly swept FM pulses centered at two discrete frequencies: 120 kHz and 410 kHz. The raw data files are post-processed and converted to XTF (eXtended Triton Format) for digital interpretation and hardcopy generation.

Seismic profiles are collected with an Edgetech Chirp Subbottom Profiler. The transmit pulses are generated in the frequency band between 2 and 8 kHz. The system takes advantage of built-in deconvolution of the system response of the output pulse. The sonar's measured system impulse response is used to design a unique output pulse that will prevent the source from ringing. The raw seismic data can be post processed to create SEG-Y or XTF datasets.

HUGIN AUTONOMOUS UNDERWATER VEHICLE

Survey Sensors:

Simrad EM 2000 Bathymetry and Imagery (200 kHz, 150°)
Side Scan Sonar: Chirp (120 kHz and/or 410 kHz)
Subbottom Profiler: Chirp (2 – 8 kHz)

Ancillary Sensors:

Inertial Navigation
Simrad HiPAP USBL
Doppler Velocity Log
Kalman Filter
Fiber Optic Gyro
Motion Reference Unit
Digiquartz Depth Unit
Single-Beam Altimeter
DGPS
Acoustic Communications
  Command and Control (Low Speed Acoustic Modem)
  Data Uplink (High Speed Acoustic Modem)

Vessel Specifications:

Depth Rating: 3,000 meters
Length: 5.2 meters
Maximum Diameter: 0.96 meters
Normal Speed: 4 knots
Underwater Endurance @ 4 knots: 40 hours
Power: Aluminum Oxygen Fuel Cell

Survey Equipment Specifications:

Simrad EM 2000 Multibeam Echo Sounder

Frequency	200 kHz
Maximum Ping Rate	10 times per second
Number of Beams per Ping	111
Beamwidth	2° acrosstrack; 1.5° alongtrack
Beam Spacing	Equiangle or equidistant
Coverage Sector	150°
Depth Resolution	2 cm
Pulse Length	0.05 – 0.25 msecs
Range Sampling Rate	10 kHz
Sonar Head Depth Rating	3,000 meters

HUGIN AUTONOMOUS UNDERWATER VEHICLE

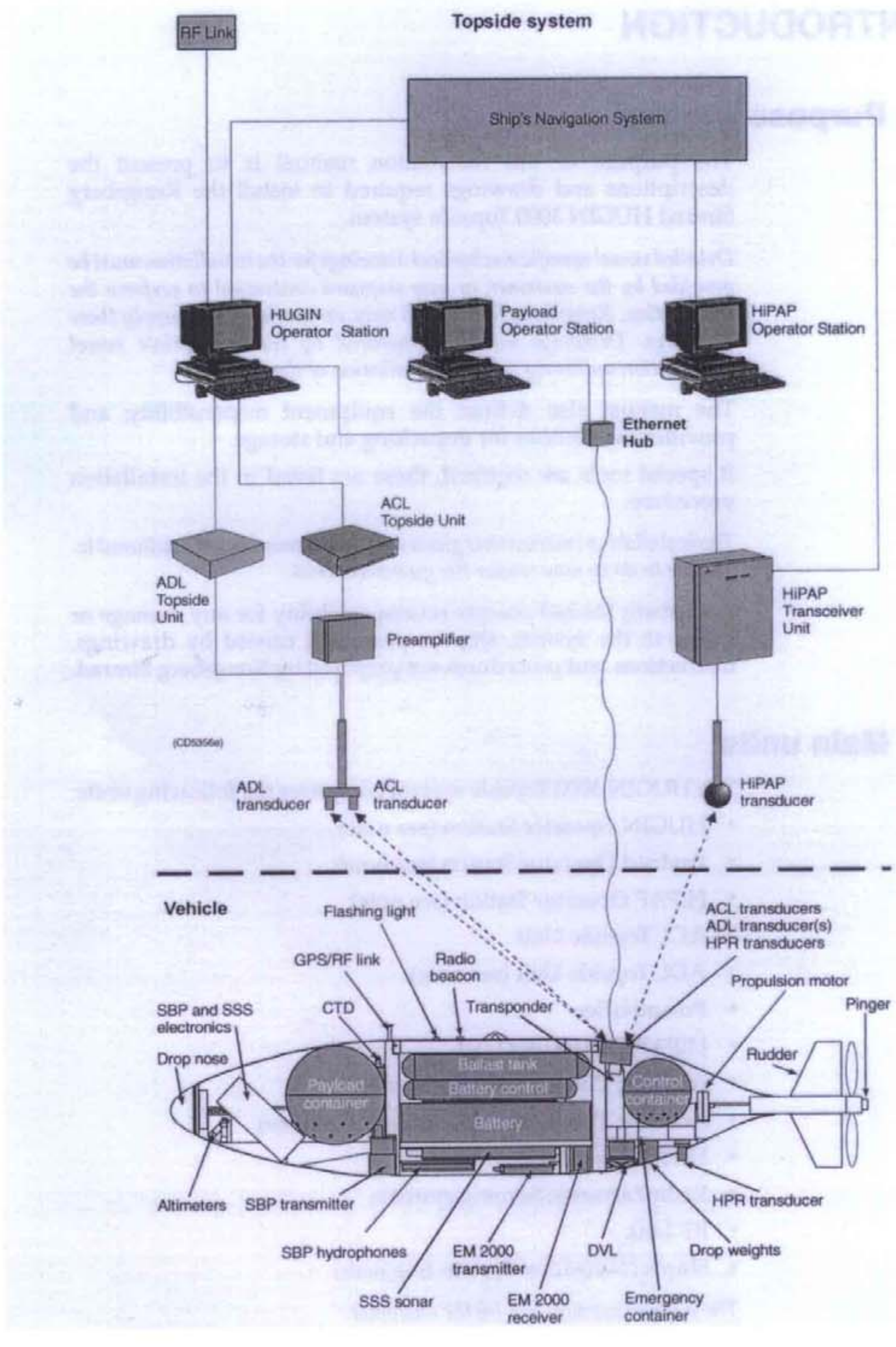
Full Spectrum Chirp Side Scan Sonar

Modulation	Full spectrum chirp frequency modulated pulse with amplitude and phase weighting	
Dual Frequency Combinations	120/410 kHz	
Common		
Vertical Beam Width	70°	
Depression Angle	25° from horizontal	
A/D Resolution	16 bits	
Sample Rate	~2,000 samples per channel	
Frequency Specific		
Center Frequency	120 kHz	410 kHz
Pulse Bandwidth	12 kHz	41 kHz
Pulse Length	8.3 msec.	2.4 msec.
Range Scale Selection (per side)	25-500 meters	12.5-100 meters
Maximum Ping Rate	30 pps	60 pps
Range Resolution	6.25 cm	1.8 cm
Horizontal 3 dB Beam Width	0.8°	0.5°
Transmit Power	200 Watts	160 Watts
Peak Source Level (ref = 1μPa @ 1 m)	210 dB	216 dB
Receiver Sensitivity (ref = 1 V/μPa @ center frequency)	-190 dB	-196 dB

Full Spectrum Chirp Subbottom Profiler

Modulation	Full Spectrum Chirp Frequency Modulated Pulse with amplitude and phase weighting
Source Level	200 dB re 1 μPa at one meter
Transmit Power	200 Watts
Receive Sensitivity	-204 dB re 1 μPa at one meter
Receiver Variable Gain	38 – 105 dB, automatic or manual control
Noise Level	70 dB re 1 μPa at one meter over sonar bandwidth (at hydrophone input)
Pulse Repetition Frequency	15 Hz maximum
Calibration	Each system is acoustic tank tested to calibrate for reflection coefficient measurements
Frequency Band	2 – 8 kHz
Number of Hydrophone Arrays	2
Resolution	6 – 10 cm
Beam Width	15° - 25°

HUGIN AUTONOMOUS UNDERWATER VEHICLE



SATLOC® DIFFERENTIAL GPS

The United States Department of Defense (DOD) has deployed a satellite based navigation system that incorporates 24 satellites known as the Global Positioning System (GPS). This navigation system allows its users to determine position; velocity and time anywhere on earth 24 hours a day. The basic stand-alone accuracy of GPS is 15-20 meters. The DOD does not want the users of the GPS to be allowed such accurate positioning, so deliberate range degradation, known as Selective Availability (SA) may be applied. This makes GPS's stand alone accuracy 50-100 meters. This performance will not meet the accuracy of the client or the Minerals Management Service for geophysical data acquisition. In order to achieve survey quality accuracy of GPS, differential corrections must be applied.

The pseudo- range errors, which are dithered by DOD and transmitted through the GPS satellites, can be determined by placing a GPS receiver at a known geodetic point, thus determining the required corrections. By determining the range and bearing of the erroneous signal, the error or differential correction can be relayed via satellite or radio telemetry link to users who are located within the base station coverage area. This GPS technique has proven to be particularly effective and accuracies in the sub meter range have been achieved when utilizing a Wide Area Differential GPS network.

The SATLOC® differential GPS system is a wide area differential system which utilizes fourteen base stations scattered across the United States and Canada. The algorithms used for the network were developed and tested at the Jet Propulsion Laboratory (JPL) prior to being used commercially. User position accuracy for single-frequency receiver is at the level of 1 to 3 meters in the dynamic state.

OIC SWATH

This software package, which runs under the Unix Windows operating system, is able to display, post-process and mosaic side scan data in gridded databases that can be exported for chart plotting. The database structure for processing data is called an Operational Area or a Keeper Mosaic, where eventually all the processed swaths will be merged to. For each Operational Area, a set of processing parameters must be defined, such as center point (longitude/latitude, X/Y), width and length in meters, orientation with respect to north of the length axis and grid resolution. An Operational Area is the Keeper for the mosaic, which will be composed of sub-areas or swaths. A line with a set of 100K pings collected in time sequential order is defined as a swath.

Data can be edited and corrected on the image or on the meta-data while processing swaths. For this purpose, OICSwath has tools and attitudes to filter, interpolate and correct navigation points, heading, course, pitch, roll, depth, altitude (ProcessLine), beam pattern (AVG - Angle varying Gain), resolution (LUT - side scan LookUp Table), Time - Varying Gain (TVG).

Processed data in swath grids is UTM projected in X/Y coordinates. Swath files are generated after editing and may be displayed individually or as adjacent tracks of gridded data in order to evaluate the data within and between adjacent swaths. After a swath is processed, it is automatically shown in the Map Editor for further processing such as filtering, and merging swaths. Overlapping layers can be combined in the Clip Editor using a Front, Back, Min, Max, Average and Feathered method to merge the swaths into the Keeper Mosaic. Swaths are merged into the Keeper Mosaic individually.

C & C TECHNOLOGIES AUV SURVEY LOG

Page No. 1

Job No: 2380 Mission Name:	Client: Continental Shelf Associates	Vessel: M/V Pacific Horizon	Survey Equipment: Satloc DGPS, Inertial Navigation, HiPAP, Doppler Speed Log	
Date: 06/24/2001	Area:	Survey Units: Meters	Datum: WGS 84, UTM 16	Geophysical Equipment: Edgetech 216 FSSB Profiler, Edgetech Dual Frequency SSS, Simrad EM 2000 Multibeam

Time (UTC) (-5to Local)	Heading	Fix. No.	Line Name	Remarks
1204				Departing dock in Fourchon, on way to job site (site #3-CSA)
0000				** New Day ** June 25, 2001, Lat: 28.44.0709' N, Lon: 88.43.5807' W, Seas: 1-3', Winds: Calm
0110				At location for CTD cast, SE corner of survey area
0144				CTD cast 010625a, WD=1378m, 28.40.3524' N, 88.34.3286' W, X=340380.8m, Y=3172517.26m
0204				Seabird on deck
0210				Starting predive
0227				Waiting for control of battery
0236				Pre-dive cancelled due to Hugin problems (High pressure line leak)
0500				Shift change, D. Aucoin, E. Moore
0734				Start pre-dive, run 010625_2
0810				Finish pre-dive
0854				Restart pre-dive, run 010625_2
0905				Finish pre-dive/Stand-by working on battery
0935				Restart pre-dive/working on Hugin
0944				Finish pre-dive/working on Hugin
0955				Battery dosing OK, heading for drop
1005				Ship in our path, holding N 10 minutes
1016:40				Split pin pulled
1017				Hugin in water, run 010625_2 (csa.site3.010625), 28.39.5818' N, 88.34.8287' W
1020				Nose cone separation on surface, preparing for recovery
1050				Hugin under tow
1055				Hugin in van, downloading flash data, .248 used HP, .31 Kwh
1110				Failed dive apparently due to Octans lockup and reset causing emergency ascent
1115				Shutting down CP. Error files no on CP – New software?
1130				Start pre-dive, run 010625_3

C & C TECHNOLOGIES AUV SURVEY LOG

Page No. 2

Job No: 2380 Mission Name:	Client: Continental Shelf Associates	Vessel: M/V Pacific Horizon	Survey Equipment: Satloc DGPS, Inertial Navigation, HiPAP, Doppler Speed Log

Date: 06/25/2001	Area:	Survey Units: Meters	Datum: WGS 84, UTM 16	Geophysical Equipment: Edgetech 216 FSSB Profiler, Edgetech Dual Frequency SSS, Simrad EM 2000 Multibeam

Time (UTC) (-5to Local)	Heading	Fix. No.	Line Name	Remarks
1040				Start mission in van
1145				Complete mission test in van
1147				Start pre-dive, run 010625_4
1150				Crash on Apollo / reboot topside
1200				Start pre-dive, run 010625_5
1215				Pre-dive complete
1220:30				Split pin pulled
1221				Hugin in water
1222				Propeller turning
1223				Hugin diving
1224				Acoustic fish in water, sporadic HiPAP
1225				ADL in
1226				ACL in
1233				Dive Hugin to 800m
1241				Dive Hugin to 1000m
1247				Dive Hugin to 1125m
1255				Dive Hugin to 1270m
1310				DVL & HiPAP problems
1409				HiPAP working / DVL down, bringing Hugin to 1000m
1436				External guidance
1538	180	1	317	SOL WD=1013m
1632	180	42	317	EOL WD=1230m
1638	360	42	316R	SOL WD=1230m
1648	360	34	316R	Abort line / Bringing Hugin to surface
1700				Shift change, J. Barras, H. Langill

C & C TECHNOLOGIES AUV SURVEY LOG

Page No. 3

Job No: 2380 Mission Name:	Client: Continental Shelf Associates	Vessel: M/V Pacific Horizon	Survey Equipment: Satloc DGPS, Inertial Navigation, HiPAP, Doppler Speed Log

Date: 06/25/2001	Area:	Survey Units: Meters	Datum: WGS 84	Geophysical Equipment: Edgetech 216 FSSB Profiler, Edgetech Dual Frequency SSS, Simrad EM 2000 Multibeam

Time (UTC) (-5to Local)	Heading	Fix. No.	Line Name	Remarks
1702				Command Hugin to 700m
1706				Command Hugin to 500m
1714				Command Hugin to 300m
1724				Jump to line 16
1728				Re-started ACL handler
1733				Hugin @ 300m, command to 150m
1736				Acoustic fish onboard
1747				Hugin @ 150m, starting ascent
1752				Hugin visual on surface
1807				Hugin under tow
1811				Hugin in van
1900				Restarted CP & doing pre-dive (run 010625_6)
1900				Aborted pre-dive, shut down CP shielding, problems in sphere / bogus readings on navp, restarting HOS
2010				Restarted CP, doing pre-dive (run 010625_7) / bogus reading on navp, readings normalized
2029				Waiting for control of battery
2051				Starting test mission in van
2052				Pin pulled
2059				Stopping mission
2101				Starting pre-dive, run 010625_8
2108				Waiting for control of battery
2120				Starting mission
2121:52				Split pin pulled
2122				Hugin in water
2127				HiPAP reading, acoustic fish in water
2132				ACL & ADL

C & C TECHNOLOGIES AUV SURVEY LOG

Page No. 4

Job No: 2380
Mission Name:

Client: Continental Shelf Associates

Vessel: M/V Pacific Horizon

Survey Equipment: Satloc DGPS, Inertial Navigation, HiPAP, Doppler Speed Log

Date: 06/25/2001

Area:

Survey Units: Meters

Datum: WGS 84

Geophysical Equipment: Edgetech 216 FSSB Profiler, Edgetech Dual Frequency SSS, Simrad EM 2000 Multibeam

Time (UTC) (-5to Local)	Heading	Fix. No.	Line Name	Remarks
2134				X 50 degrees, discrepancy noted between heading 1 and heading 2 status
2136				Hugin at 400m, proceeding to 600m
2141				Hugin at 600m, proceeding to 800m
2148				Hugin at 800m, proceeding to 850m
2152				Hugin at 850m, proceeding to 900m
2154				Hugin at 900m, proceeding to 950m
2155				Noted Doppler log com failure / power cycle DVL
2159				Hugin at 950m, proceeding to 1000m
2203				Hugin at 1000m, proceeding to 1050m
2208				Hugin at 1050m, proceeding to 1150m
2211				Hugin at 1150m, proceeding to 1200m
2214				Course change to 50 degrees from 145 degrees
2216				DVL sync multiplier set to 6
2219				Hugin at 1200m, proceeding to 1225m
2222				Hugin at 1225m, proceeding to 1250m
2225				Hugin at 1250m, proceeding to 1275m
2228				Hugin at 1275m, proceeding to 1300m
2231				Applied secondary altimeter
2236				Switch to height mode
2316				Heading back to survey zone; changed heading to 320 degrees
2321				Course changed to 230 degrees

C & C TECHNOLOGIES AUV SURVEY LOG

Page No. 5

Job No: 2380 Mission Name:	Client: Continental Shelf Associates	Vessel: M/V Pacific Horizon	Survey Equipment: Satloc DGPS, Inertial Navigation, HiPAP, Doppler Speed Log

Date: 06/26/2001	Area:	Survey Units: Meters	Datum: WGS 84	Geophysical Equipment: Edgetech 216 FSSB Profiler, Edgetech Dual Frequency SSS, Simrad EM 2000 Multibeam

Time (UTC) (-5to Local)	Heading	Fix. No.	Line Name	Remarks
0000				** New Day ** June 26, 2001 / Lat: 28.41.6266' N, Lon: 88.33.6329' W
0020				Execute external plan – command rejected
0023				Heading changed to 360 degrees
0025				Execute external plan
0028				Height reference changed to 40m
0026	360	1		SOL WD 1333m
0038				Depth control; 1000m
0043				Steep D applied
0046				ALHP control gain set to .74
0047				Commanded to 900m; depth mode
0052				PP turned off then on
0100				Noted DVL external sync on; WD 900m
0104				Course changed to 180 degrees
0109				Commanded to 950m
0111				Course changed to 180 degrees
0113				Commanded to 1000m
0115				Commanded to 1050m
0118				Commanded to 1075m, noted DVL status OK
0121				Commanded to 1100m, noted DVL status NO DATA
0127				Commanded to 1150m, noted DVL status OK
0129				Commanded to 1200m, noted DVL status NO DATA
0132				Commanded to 1250m, noted DVL status OK
0135				Switched to primary altimeter
0138				Height mode applied 50m
0143				Primary altimeter failure warning; command rejected to switch to primary

C & C TECHNOLOGIES AUV SURVEY LOG

Page No. 6

Job No: 2380 Mission Name:	Client: Continental Shelf Associates	Vessel: M/V Pacific Horizon	Survey Equipment: Satloc DGPS, Inertial Navigation, HiPAP, Doppler Speed Log

Date: 06/26/2001	Area:	Survey Units: Meters	Datum: WGS 84	Geophysical Equipment: Edgetech 216 FSSB Profiler, Edgetech Dual Frequency SSS, Simrad EM 2000 Multibeam

Time (UTC) (-5to Local)	Heading	Fix. No.	Line Name	Remarks
0146				DVL powered off
0148				Course changed to 140 degrees
0150				Commanded to 1200m; noted DVL status COM ERROR
0153				Course changed to 180 degrees
0158				Commanded to 1150m
0202				Power cycle PP
0212				Commanded to 1200m
0214				Course changed to 270 degrees
0219				Commanded to 1100m
0222				Commanded to 1150m
0226				Commanded to 1200m
0229				Commanded to 1250m
0230				Sync pulse & multiplier set to 333, 3
0245				Commanded to 1200m
0247				Course changed to 300 degrees
0257				Commanded to 1100m
0307				Commanded to 1000m
0322				Hugin @ 750m, heading of 360 degrees, power cycle PP
0325				PP powered on
0336				Course changed to 270 degrees
0343				Course changed to 180 degrees
0415				Course changed to 90 degrees
0503				Course changed to 270 degrees, shift change D. Aucoin, E. Moore
0530				Course changed to 180 degrees
0551				Course changed to 090 degrees

C & C TECHNOLOGIES AUV SURVEY LOG

Job No: 2380 Mission Name:		Client: Continental Shelf Associates	Vessel: M/V Pacific Horizon	Survey Equipment: Satloc DGPS, Inertial Navigation, HiPAP, Doppler Speed Log	Page No. 7
Date: 06/26/2001	Area:	Survey Units: Meters	Datum: WGS 84	Geophysical Equipment: Edgetech 216 FSSB Profiler, Edgetech Dual Frequency SSS, Simrad EM 2000 Multibeam	

Time (UTC) (-5to Local)	Heading	Fix. No.	Line Name	Remarks
0555				Course changed to 360 degrees
0628				Testing Hugin DVL
0744				Bringing Hugin to surface
0755				Beginning step-up pro
0808				Acoustic fish on deck
0818				Hugin on final ascent from 150m
0822				Hugin on surface
0834				Nose cone still attached. Preparing to deploy Zodiac
0845				Nose cone released
0900				Hugin under tow
0905				Hugin in van
0910				Retrieving Zodiac
0912				Zodiac in cradle
0921				Downloading flash data
1058				CP shut down
1230				Problem appears to be DVL. Diagnostic hookups lock up, and it shows irregular power characteristics. Will swap with spare DVL
1330				Starting CTD cast
1343				CTD cast 010626a, 28.43.8008' N, 88.35.7484' W, water depth 1005
1355				CTD on deck
1500				In transit to MC 195 to meet crew boat
1700				Shift change, J. Barras, H. Langill
2130				Met Crew boat.
2200				Heading back towards survey site.

C & C TECHNOLOGIES AUV SURVEY LOG

Page No. 8

Job No: 2380 Mission Name:	Client: Continental Shelf Associates	Vessel: M/V Pacific Horizon	Survey Equipment: Satloc DGPS, Inertial Navigation, HiPAP, Doppler Speed Log

Date: 06/26/01	Area:	Survey Units: Meters	Datum: WGS 84	Geophysical Equipment: Edgetech 216 FSSB Profiler, Edgetech Dual Frequency SSS, Simrad EM 2000 Multibeam

Time (UTC) (-5to Local)	Heading	Fix. No.	Line Name	Remarks
0000				** New Day ** June 27, 2001
				Lat: 28 degrees 44.5758'N, Lon : 88 degrees 43.7575'W.
				Seas: calm, Winds: Calm
0054				Starting predive run010627_1
0103				Waiting for control of battery
0118				CTD cast 010628a, 28 degrees 44.0922'N, 88 degrees 37.3301'W, WD= 930in
0126				Starting mission in van
0131				Mission Stopped
0135				Starting pre-dive run010627_2
0143				Waiting for control of battery
0159				Mission started
0200				Corba: Comm Failure exception caught while sending message
0215				Hugin @ 400m proceeding to 600m
0221				Hugin @ 600m proceeding to 750m
0226				Hugin @ 750m proceeding to 850m
0229				Hugin @ 850m ; switching to height mode
0232				ALHP Control gain set to .74
0241				DVL powered off
0243				DVL powered on
0313				ALHP set to .72
0334				Power DVL off
0337				Command ship all stop; driving "circles" around ship to syne DVL & navp
				Heading 180 degrees
0343				Heading 270 degrees

C & C TECHNOLOGIES AUV SURVEY LOG

Page No. 9

Job No: 2380 Mission Name:	Client: Continental Shelf Associates	Vessel: M/V Pacific Horizon	Survey Equipment: Satloc DGPS, Inertial Navigation, HiPAP, Doppler Speed Log

Date: 06/26/01	Area:	Survey Units: Meters	Datum: WGS 84	Geophysical Equipment: Edgetech 216 FSSB Profiler, Edgetech Dual Frequency SSS, Simrad EM 2000 Multibeam

Time (UTC) (-5to Local)	Heading	Fix. No.	Line Name	Remarks
0346				Heading 360 degrees
0349				Power DVL on
0350				Heading 040 degrees
0354				Heading 090 degrees
0356				Heading 180 degrees
0400				Heading 270 degrees
0405				Heading 360 degrees
0413				Heading 090 degrees
0420				Heading 180 degrees
0421				Heading 225 degrees
0424				Heading 315 degrees
0425				Commandging Hugin to 600m
0433				Course 070 degrees
0435				Coming up to 600m
0447				Power cycling PP
0500				Shift Change D. Aucoin and E. Moore
0503				Course 360 degrees
0506				Course 270 degrees
0509				Command Hugin to 500m
0528				Course 180 degrees
0545				Course 090 degrees
0553				Command Hugin to 300m
0601				Start step-up program
0620				Acoustic Fish on deck
0628				Hugin @ 150m depth – on final ascent
0632				Hugin on surface
0638				Nose cone not off
0715				Hugin in van
0725				Retreiving Zodiac

C & C TECHNOLOGIES AUV SURVEY LOG

Page No. 10

Job No: 2380 Mission Name:	Client: Continental Shelf Associates	Vessel: M/V Pacific Horizon	Survey Equipment: Satloc DGPS, Inertial Navigation, HiPAP, Doppler Speed Log

Date: 06/27/01	Area:	Survey Units: Meters	Datum: WGS 84	Geophysical Equipment: Edgetech 216 FSSB Profiler, Edgetech Dual Frequency SSS, Simrad EM 2000 Multibeam

Time (UTC) (-5to Local)	Heading	Fix. No.	Line Name	Remarks
0730				Zodiak in cradle
0735				Downloading flash data
1507				Begin pre-dive
1540				Pre-dive complete
1606				Mission started
1608				Split pin pulled
1609				Hugin in water
1613				Hugin diving 1st hipap Acoustic Fish in water
1614				ADC working
1617				ACL working
1620				Dive hugin to 600m
1633				Dive hugin to 825m
1648				Mission decision bring Hugin to surface
1700				Shift change J.Barras, H. Langill
1715				Hugin @ 300m
1745				Acoustic fish on deck
1746				Hugin visual on surface
1759				Nose cone onboard
1801				Hugin under tow
1803				Hugin in van
1814				Used Hp .822, used energy 1.49
1900				Starting pre-dive run010627_4
1908				Waiting for control at battery
1933				Reset used HP calculation
1938				Mission started
1941				Split pin pulled
1942				Hugin in water
1946				HiPap & ADL reading
1951				ACL reading
1953				Hugin @ 400m proceeding to 600m

C & C TECHNOLOGIES AUV SURVEY LOG

Page No. 10

Job No: 2380 Mission Name:	Client: Continental Shelf Associates	Vessel: M/V Pacific Horizon	Survey Equipment: Satloc DGPS, Inertial Navigation, HiPAP, Doppler Speed Log

Date: 06/27/01	Area:	Survey Units: Meters	Datum: WGS 84	Geophysical Equipment: Edgetech 216 FSSB Profiler, Edgetech Dual Frequency SSS, Simrad EM 2000 Multibeam

Time (UTC) (-5to Local)	Heading	Fix. No.	Line Name	Remarks
1958				Hugin @ 600m proceeding to 750m
2008				50m off bottom; height mode
2010				ALHP control gain set to .74
2018				External guidance
2020				RPM change to 158
2021	029	21	DVL-1ar	WD 923m
2036	029	10	DVL-1ar	WD 925m RPM 160
2049	029	1	DVL-1ar	EOL WD 929m
2052	208	1	DVL-2ar	SOL WD 928m RPM 150
2105				RPM change to 140 WD 924m
2122	208	21	DVL-2ar	WD 932m EOL RPM change to 135
2125	029	21	DVL-1br	SOL WD 926m
2130				T-5 Cast 010627b WD 925m lat: 28.42 Lon: 88.38 x=340082.82 y=3177234.66
2141				RPM change to 150
2156	029	1	DVL-1br	EOL WD=928m
2201	208	1	DVL-2b	SOL WD=928
2212				RPM change to 158
2225	208	21	DVL-2b	EOL WD=929
2238	180	17	301	SOL WD 921
2252	180	27	301	EOL WD 974
2302	0	32	302r	SOL WD 1024
2329	0	12	302r	EOL WD 923
2336	180	1	303	SOL WD 924
2340				ALHP Control gain set to .74
0000				New Day Lat: 28 41.4803 Lon: 88 37.3788 WD 1019 Seas 34, Winds E 10-15 kts

C & C TECHNOLOGIES AUV SURVEY LOG

Page No. 11

Job No: 2380 Mission Name:run010627_4	Client: Continental Shelf Associates	Vessel: M/V Pacific Horizon	Survey Equipment: Satloc DGPS, Inertial Navigation, HiPAP, Doppler Speed Log
Date: 06/27/01	Area: MC 292	Survey Units: Meters	Datum: WGS 84

Geophysical Equipment: Edgetech 216 FSSB Profiler, Edgetech Dual Frequency SSS, Simrad EM 2000 Multibeam

Time (UTC) (-5to Local)	Heading	Fix. No.	Line Name	Remarks
0014	180	39	303	EOL WD=1109m
0020	360	37	305r	SOL WD=1075m
0101	360	7	305r	EOL WD=931m
0105	180	8	304	SOL WD=928m
0147	180	39	304	EOL WD=1114m
0152	360	38	306r	SOL WD=1090m
0211				Cycle power on EM 2000 due to bad data
0224				Mission decision External guidance aborted Switching to CP mission
0225				Restart POS handler / Execute External mission plan
0229				Bad data on EM and ET execute CP mission plan
0231				Bring Hugin to 700m to cycle power on PP
0238				At 700m going to 600m
0242				Power down sensors
0243				Power down PP
0248				Power up sensors and PP
0301				At 600m going to 800m
0304				At 800m going to 900m
0343				Execute External mission plan
0353	360	38	306r	SOL WD=1090m
0427				ALHP control gain set to .75
0437	360	6	306r	EOL WD=936m
0449	180	4	307	SOL WD=940m
0500				Shift change D. Aucoin E. Moore
0535	180	39	307	EOL WD=1102m

C & C TECHNOLOGIES AUV SURVEY LOG

Job No: 2380 Mission Name: run010627_4		Client: Continental Shelf Associates	Vessel: M/V Pacific Horizon	Survey Equipment: Satloc DGPS, Inertial Navigation, HiPAP, Doppler Speed Log	Page No. 12
Date: 06/28/01	Area: MC 292	Survey Units: Meters	Datum: WGS 84	Geophysical Equipment: Edgetech 216 FSSB Profiler, Edgetech Dual Frequency SSS, Simrad EM 2000 Multibeam	

Time (UTC) (-5to Local)	Heading	Fix. No.	Line Name	Remarks
0540	360	40	308r	SOL WD=1125m
0628	360	4	308r	EOL WD=946m
0634	180	3	309	SOL WD=951m
0721	180	40	309	EOL WD=1121m
0727	360	41	310r	SOL WD=1128m
0819	360	2	310r	EOL WD=955m
0824	180	2	311-1	SOL WD=960m
0848	180	22	311-1	EOL WD=1003m
0856	090	15	333r	SOL WD=1002m
0914	090	1	333r	EOL WD=1046m
0919	270	1	334	SOL WD=1066m
0937	270	15	334	EOL WD=1009m
0945	180	20	311-2	SOL WD=994m
1012	180	41	311-2	EOL WD=1144m
1017	360	42	312r	SOL WD=1171m
1114	360	1	312r	EOL WD=964m
1117	180	1	313	SOL WD=970m
1209	180	42	313	EOL WD=1179m
1214	360	42	314r	SOL WD=1198m
1245	360	22	314r	EM 2000 Malfunction
1253				Execute CP mission
1257				Command Hugin to 600m
1259				Cycle power on all sensors and PP
1308				Power on all sensors and PP

C & C TECHNOLOGIES AUV SURVEY LOG

Page No. 13

Job No: 2380 Mission Name: run010627_4	Client: Continental Shelf Associates	Vessel: M/V Pacific Horizon	Survey Equipment: Satloc DGPS, Inertial Navigation, HiPAP, Doppler Speed Log

Date: 06/28/01	Area: MC 292	Survey Units: Meters	Datum: WGS 84	Geophysical Equipment: Edgetech 216 FSSB Profiler, Edgetech Dual Frequency SSS, Simrad EM 2000 Multibeam

Time (UTC) (-5to Local)	Heading	Fix. No.	Line Name	Remarks
1312				Power on all sensors
1320				Command Hugin to 180 deg.
1330				Hugin in height mode 60m off bottom heading 180 to south end of job to rerun line 314r
1407				Try to pick-up line 314r Error PP guidance command time out
1409				Turn Hugin to 180 bring Hugin to 70m off bottom
1415				Cycle power on PP and all sensors
1433				Command Hugin to 50m off bottom
1437				Execute external guidance
1441	360	42	314ra	SOL WD=1202m
1538	360	1	314ra	EOL WD=978m
1542	180	1	315	SOL WD=988m
1634	180	42	315	EOL WD=1212m
1638	360	42	316r	SOL WD=1228m
1700				Shift change J. Buras H Langill
1703				Bad data on EM coming up to reset PP
1706				Changing course 180 to rerun line
1726				Command Hugin to 900m
1739				Change course to 360 to rerun line 316r
1754	360	32	316r-a	SOL WD=1102
1816				Abort line due to traffic in our path Hydro station commanding Hugin to rerun line 316r
1819				ALHP control gain set to .76
1824				Cycle power on EM
1834				Hugin on course of 360 to rerun line 316r starting at SP#31
1835	360	31	316r-	SOL WD=1086m

C & C TECHNOLOGIES AUV SURVEY LOG

Page No. 14

Job No: 2380 Mission Name: run010627_4	Client: Continental Shelf Associates	Vessel: M/V Pacific Horizon	Survey Equipment: Satloc DGPS, Inertial Navigation, HiPAP, Doppler Speed Log

Date: 06/28/01	Area: MC 292	Survey Units: Meters	Datum: WGS 84	Geophysical Equipment: Edgetech 216 FSSB Profiler, Edgetech Dual Frequency SSS, Simrad EM 2000 Multibeam

Time (UTC) (-5to Local)	Heading	Fix. No.	Line Name	Remarks
1917	360	1	316r-b	EOL WD=1001m
1921	180	1	317	SOL WD=1012m
2014	180	42	317	EOL WD=1257m
2017	360	42	318r	SOL WD=1255m
2103				Problems with ET cycle power and rerun line 318r
2138	360	30	318r-a	SOL WD=1104m
2218	360	1	318r-a	EOL WD=1019m
2223	180	1	319	SOL WD=1024m
2314	180	42	319	EOL WD=1262m
2319	360	42	320r	SOL WD=1265m
0000				New Day 06/29/01 Winds calm Seas 1-2 Lat. 28 43.0999N Lon. 88 35.3284W
0015	360	1	320r	EOL WD=1028m
0020	180	1	321	SOL WD=1033m
0110	180	42	321	EOL WD=1275m
0116	360	41	322r	SOL WD=1278m
0210	360	2	322r	EOL WD=1034m
0213	180	2	323	SOL WD=1029m
0303	180	41	323	EOL WD=1301m
0306	360	40	324r	SOL WD=1290m
0358	360	3	324r	EOL WD=1031m
0402	180	4	325	SOL WD=1038m
0447	180	40	325	EOL WD=1309m
0451	360	39	326r	SOL WD=1331m
0500				Shift change D. Aucoin E. Moore

C & C TECHNOLOGIES AUV SURVEY LOG

Page No. 15

Job No: 2380 Mission Name: run010627_4	Client: Continental Shelf Associates	Vessel: M/V Pacific Horizon	Survey Equipment: Satloc DGPS, Inertial Navigation, HiPAP, Doppler Speed Log
Date: 06/29/01 Area: MC 292	Survey Units: Meters	Datum: WGS 84	Geophysical Equipment: Edgetech 216 FSSB Profiler, Edgetech Dual Frequency SSS, Simrad EM 2000 Multibeam

Time (UTC) (-5to Local)	Heading	Fix. No.	Line Name	Remarks
0538	360	4	326r	EOL WD=1045m
0545	180	6	327	SOL WD=1056m
0625	180	38	327	EOL WD=1313m
0630	360	37	328r	SOL WD=1332m
0710	360	7	328r	EOL WD=1066m
0715	180	8	329	SOL WD=1083m
0749	180	35	329	EOL WD=1329m
0755	360	33	330r	SOL WD=1346m
0824	360	10	330r	EOL WD=1117m EM 2000 problems
0830	180	12	331	SOL WD=1156m
0856	180	32	331	EOL WD=1350m
0906	360	27	332r	SOL WD=1337m
0918	360	17	332r	EOL WD=1250m
0923	360	17	330ra	SOL WD=1168m Rerun line
0932	360	10	330ra	EOL WD=1114m
0934				Start bringing Hugin to surface Execute CP mission plan
0942				Command Hugin to 500m
0949				Hugin at 300m for 10 minutes
0959				Issue ascent command
1001				Acoustic fish on deck
1003				Hugin on surface
1024				Hugin under tow
1029				Hugin in van
1032				Download flash data

C & C TECHNOLOGIES AUV SURVEY LOG

Page No. 16

Job No: 2380 Mission Name: run010627_4	Client: Continental Shelf Associates	Vessel: M/V Pacific Horizon	Survey Equipment: Satloc DGPS, Inertial Navigation, HiPAP, Doppler Speed Log

Date: 06/29/01	Area: MC 292	Survey Units: Meters	Datum: WGS 84	Geophysical Equipment: Edgetech 216 FSSB Profiler, Edgetech Dual Frequency SSS, Simrad EM 2000 Multibeam

Time (UTC) (-5to Local)	Heading	Fix. No.	Line Name	Remarks
1045				Begin download of all data / Transit Holstein Project for BP
				Arrive Holstein project

C & C TECHNOLOGIES AUV SURVEY LOG

Page No. 1

Job No: 2380 Mission Name:	Client: Continental Shelf Associates	Vessel: M/V Pacific Horizon	Survey Equipment: Satloc DGPS, Inertial Navigation, HiPAP, Doppler Speed Log

Date: 07/02/2001	Area:	Survey Units: Meters	Datum: WGS 84	Geophysical Equipment: Edgetech 216 FSSB Profiler, Edgetech Dual Frequency SSS, Simrad EM 2000 Multibeam

Time (UTC) (-5to Local)	Heading	Fix. No.	Line Name	Remarks
2130				July 2, 2001 – Starting transit toward CSA site 1
0000				**New Day** – July 3, 2001 Lat: 28.03.8414' N, Lon: 90.39.4388' W
0942				Arrived at location csa_site_1
0955				Taking velo 010703a
1025				Velo on deck
1130				Starting predive
1216				Running test mission
1221				Test mission successful
1235				Finish predive, have control of battery. Heading for line
1253:09				Split pin pulled
1253				Hugin is in the water
1256				Hugin is diving
1256				Acoustic fish in water
1257				First HiPAP contact
1258				First ADL contact
1300				First ACL contact
1303				Diving Hugin to 700m
1311				Diving Hugin to 850m
1315				Diving Hugin to 920m
1316				Diving Hugin to 980m
1322				Switching to height mode 50m off bottom, changed control gain from 1.0 to .7
1343				External guidance
1356	180	16	101	SOL WD=1065m
1410	180	27	101	EOL WD=1079m
1421	360	32	102r	SOL WD=1080m

C & C TECHNOLOGIES AUV SURVEY LOG

Page No. 2

Job No: 2380 Mission Name:	Client: Continental Shelf Associates	Vessel: M/V Pacific Horizon	Survey Equipment: Satloc DGPS, Inertial Navigation, HiPAP, Doppler Speed Log

Date: 07/03/2001	Area:	Survey Units: Meters	Datum: WGS 84	Geophysical Equipment: Edgetech 216 FSSB Profiler, Edgetech Dual Frequency SSS, Simrad EM 2000 Multibeam

Time (UTC) (-5to Local)	Heading	Fix. No.	Line Name	Remarks
1447	360	12	102r	EOL WD=1061m, high payload temp=159 Celsius erroneous reading
1454	180	10	103	SOL WD=1066m, 26 Celsius error cleared
1523	180	33	103	EOL WD=1085m
1530	360	35	104r	SOL WD=1085m
1546	360	23	104r	Sippican #010703b WD=1084m Lat: 27.22.4976 N, Lon: 92.29.0890 W, **Probe Failed**
1551	360	19	104r	Sippican #010703c WD=1079m Lat: 27.22.7928 N, Lon: 92.29.0903 W
1605	360	8	104r	EOL WD=1071m
1611	180	7	105	SOL WD=1070m
1650	180	37	105	EOL WD=1094m
1656	360	38	106r	SOL WD=1098m
1700				**Shift Change**: H. Langill, Z. Rivers
1738	360	6	106r	EOL WD=1075m
1744	180	4	107	SOL WD=1078m
1831	180	39	107	EOL WD=1106m
1836	360	40	108r	SOL WD=1102m
1853	360	27	108r	Changed control gain from 0.8 to 0.78
1923	360	4	108r	EOL WD=1086m
1928	180	3	109	SOL WD=1090m
2019	180	40	109	EOL WD=1112m
2023	360	41	110r	SOL WD=1115
2113	360	2	110r	EOL WD=1092m
2118	180	2	111	SOL WD=1093m
2210	180	41	111	EOL WD=1121m
2215	360	42	112r	SOL WD=1120m
2308	360	1	112r	EOL WD=1093m

C & C TECHNOLOGIES AUV SURVEY LOG

Page No. 3

Job No: 2380 Mission Name:	Client: Continental Shelf Associates	Vessel: M/V Pacific Horizon	Survey Equipment: Satloc DGPS, Inertial Navigation, HiPAP, Doppler Speed Log

Date: 07/03/2001	Area:	Survey Units: Meters	Datum: WGS 84	Geophysical Equipment: Edgetech 216 FSSB Profiler, Edgetech Dual Frequency SSS, Simrad EM 2000 Multibeam

Time (UTC) (-5to Local)	Heading	Fix. No.	Line Name	Remarks
2313	180	1	113	SOL WD=1095m
2354	180	28		PP guidance commands timed out, will restart PP
2359				Power cycled PP
0000				**New Day**, July 4, 2001 Lat: 27.21.431 N, Lon: 92.27.992 W
0005				PP back up
0012				Hugin turning to pick up where it left off, SP #28
0042	180	25	113	SOL WD=1128m
0105	180	42	113	EOL WD=1118m
0109	360	42	114r	SOL WD=1123m
0203	360	1	114r	EOL WD=1094m
0212	180	1	115	SOL WD=1095m
0252	180	31	115	Sippican T-5 010704a, WD=1130m, Lat: 27.21.9091 N, Lon: 92.27.7374 W
0307	180	42	115	EOL WD=1125m
0312	360	42	116r	SOL WD=1125m
0340	360	21	116r	EOL WD=1125m
0349				Power cycled power on PP
0354				Sensors back on, EM still not working
0403				Power cycle only EM2000
0416				EM2000 working, no CP pressure depth, heading to line
0427				Cycled power on Em2000 again due to data gaps
0433				Turning back online
0434	360	28	116ra	SOL WD=1130m
0509	360	1	116ra	EOL WD=1098m
0509				**Shift Change**: E. Moore, D. Aucoin
0514	180	1	117	SOL WD=1101m

C & C TECHNOLOGIES AUV SURVEY LOG

Page No. 4

Job No: 2380 Mission Name:	Client: Continental Shelf Associates	Vessel: M/V Pacific Horizon	Survey Equipment: Satloc DGPS, Inertial Navigation, HiPAP, Doppler Speed Log

Date: 07/04/2001	Area:	Survey Units: Meters	Datum: WGS 84	Geophysical Equipment: Edgetech 216 FSSB Profiler, Edgetech Dual Frequency SSS, Simrad EM 2000 Multibeam

Time (UTC) (-5to Local)	Heading	Fix. No.	Line Name	Remarks
0606	180	42	117	EOL WD=1126m
0611	360	1	118r	SOL WD-1125m
0705	360	1	118r	EOL WD=1105m
0710	180	1	119	SOL WD=1104m
0803	180	42	119	EOL WD=1127m
0808	360	42	120r	SOL WD=1127m
0840	360	20	120r	EM2000 cut out, cycling power on EM2000 –Re-run-
0911	360	21	120ra	SOL Aborted line turn around to rerun line WD=1127m
0937	360	1	120ra	EOL WD=1102m
0942	180	1	121a	SOL WD=1098m
1010	180	23	121a	EOL WD=1128m
1024	270	1	134	SOL WD=1127m
1050	270	21	134	EOL WD=1121m
1054	090	21	133r	SOL WD=1119m
1113	090	7	133r	EOL WD=1128m
1124	180	17	1216	SOL WD=1127m
1232				Changed control gain to .78 from .84
1252	360	2	122r	EOL WD=1098m
1257	180	2	123	SOL WD=1095m
1348	180	41	123	EOL WD=1127m
1353	360	40	124r	SOL WD=1126m
1357				Changed control gain from 0.78 to 0.76
1441	360	3	124r	EOL WD=1100m
1445	180	4	125	SOL WD=1100m
1532	180	40	125	SOL WD=1126m

C & C TECHNOLOGIES AUV SURVEY LOG

Page No. 5

Job No: 2380 Mission Name:	Client: Continental Shelf Associates	Vessel: M/V Pacific Horizon	Survey Equipment: Satloc DGPS, Inertial Navigation, HiPAP, Doppler Speed Log

Date: 07/04/2001	Area:	Survey Units: Meters	Datum: WGS 84	Geophysical Equipment: Edgetech 216 FSSB Profiler, Edgetech Dual Frequency SSS, Simrad EM 2000 Multibeam

Time (UTC) (-5to Local)	Heading	Fix. No.	Line Name	Remarks
1537	360	39	126r	SOL WD=1121m
1544				Changed control gain from 0.78 to 0.76
1622	360	4	126r	EOL WD=1103m
1628	180	6	127	SOL WD=1104m
1709	180	38	127	EOL WD=1121m
1709				**Shift Change**: Z. Rivers, H. Langill
1715	360	37	128r	SOL WD=1115m
1715				Change control gain from 0.78 to 0.76
1753	360	7	128r	EOL WD=1108m
1757	180	8	129	SOL WD=1108m
1834	180	35	129	EOL WD=1115m
1839	360	33	130r	EOL WD=1107m
1908	360	10	130r	EOL WD=1107m
1914	180	12	131	SOL WD=1105m
1941	180	32	131	EOL WD=1111m
1950	360	27	132r	SOL WD=1110m
2004	360	16	132r	EOL WD=1106m
2007				Mission complete, Hugin turning to 180 degrees for recovery
2009				Commanded Hugin to 500m
2022				Commanded Hugin to 300m
2027				Commanded Hugin to 100m
2032				Acoustic tow fish on deck
2038				Hugin on surface, visual
2050				Nose cone onboard, Hugin under tow
2103				Flash data downloaded, used HP= 26.367L, Used Energy=47.65 Kwh

C & C TECHNOLOGIES AUV SURVEY LOG

Page No. 6

Job No: 2380
Mission Name:

Client: Continental Shelf Associates

Vessel: M/V Pacific Horizon

Survey Equipment: Satloc DGPS, Inertial Navigation, HiPAP, Doppler Speed Log

Date: 07/04/2001

Area:

Survey Units: Meters

Datum: WGS 84

Geophysical Equipment: Edgetech 216 FSSB Profiler, Edgetech Dual Frequency SSS, Simrad EM 2000 Multibeam

Time (UTC) (-5to Local)	Heading	Fix. No.	Line Name	Remarks
2237				CP is shutdown
2237				CTD cast 010704c, WD=994m, Lat: 27.29.0568 N, Lon: 92.22.8195 W
2245				Seabird on deck, starting predive run010704_1
2329				Predive complete, starting test mission
2333				Test stopped, running through hardware loop test
2349				Hardware loop test OK, filling battery
2358				Battery filled, starting mission
0000				**New Day**, July 5, 2001, Lat: 27.31.3514 N, Lon: 92.22.6906 W
0004:17				Pin is pulled, run010704_1
0005				Hugin in water
0006				Acoustic fish in water
0013				ACL
0016				Hugin depth 400m, going to 800m
0022				Hugin depth 800m, going to 920m
0025				Tracking bottom with SS & DVL
0027				Started navigation
0028				Hugin 50m off bottom, all sensors working
0031				NavP error, "Disk write failed, unknown reason", NavP not alive
0035				Sub bottom really noisy, no apparent reason
0038				Circulation pump error, emergency ascent
0110				Visual Hugin on surface
0111				Acoustic fish on deck
0121				Nose cone onboard and Hugin under tow
0125				Hugin in van
0217				CP is down

C & C TECHNOLOGIES AUV SURVEY LOG

Page No. 7

Job No: 2380 Mission Name:	Client: Continental Shelf Associates	Vessel: M/V Pacific Horizon	Survey Equipment: Satloc DGPS, Inertial Navigation, HiPAP, Doppler Speed Log

Date: 07/05/2001	Area:	Survey Units: Meters	Datum: WGS 84	Geophysical Equipment: Edgetech 216 FSSB Profiler, Edgetech Dual Frequency SSS, Simrad EM 2000 Multibeam

Time (UTC) (-5to Local)	Heading	Fix. No.	Line Name	Remarks
0500				**Shift Change**: E. Moore, D. Aucoin
1600				Reassembling Hugin and beginning testing procedures
1636				Start pre-dive run010705_1
1705				Predive complete, filling battery
1709				Start test mission in van
1716				Stop mission / Restart mission
1719				Starting predive
1728				Predive complete, waiting on battery
1732				Mission started
1736:25				Split pin pulled
1737				Hugin in water, Lat: 27.31.3803 N, Lon: 92.22.6394 W
1738				Acoustic fish in water
1755				Hugin at 400m, going to 800m
1800				Hugin at 800m, going to 900m, tracking bottom w/SS & DVL
1803				Started navigation
1807				Height of 50m, all sensors working
1818				External guidance
1822	180	16	201	SOL WD=992m
1836	180	27	201	EOL WD=1010m
1847	360	32	202r	SOL WD=1010m
1857				XSV-02 010705a, **Probe Failed**
1900				XSV-02 010705b, X=557775.24, Y=3040723.01; WD=1005m
1913	360	12	202r	EOL WD=998m
1919	180	10	203	SOL WD=987m
1950	180	33	203	EOL WD=1010m

C & C TECHNOLOGIES AUV SURVEY LOG

Page No. 8

Job No: 2380 Mission Name:	Client: Continental Shelf Associates	Vessel: M/V Pacific Horizon	Survey Equipment: Satloc DGPS, Inertial Navigation, HiPAP, Doppler Speed Log	
Date: 07/05/2001	Area:	Survey Units: Meters	Datum: WGS 84	Geophysical Equipment: Edgetech 216 FSSB Profiler, Edgetech Dual Frequency SSS, Simrad EM 2000 Multibeam

Time (UTC) (-5to Local)	Heading	Fix. No.	Line Name	Remarks
1956	360	35	204r	SOL WD=1006m
2032	360	8	204r	EOL WD=987m
2037	180	7	205	SOL WD-983m
2057				No EM2000 data, cycling power
2103				Turning Hugin to 360 degrees to restart line
2105				Cycling power on PP
2111				Payload up, sensors coming on
2116				PP guidance command timed out, must reset PP again
2120				Powered on PP
2124				PP is up, powered on sensors
2130				Executed external plan, heading to line
2136	180	7	205	SOL WD=983m
2215	180	37	205	EOL WD=984m
2226	360	38	206r	SOL WD=982m
2243	360	29	206r	EOL, EM2000 locked up
2249				Restarted EM2000, still no effect
2250				Restarting PP
2252				Turning Hugin to 180 degrees
2257				PP powered up, sensors coming on
2315	360	30	206ra	SOL WD=1016m
2346	360	6	206ra	EOL WD=985m

C & C TECHNOLOGIES AUV SURVEY LOG

Page No. 9

Job No: 2380
Mission Name:

Client: Continental Shelf Associates

Vessel: M/V Pacific Horizon

Survey Equipment: Satloc DGPS, Inertial Navigation, HiPAP, Doppler Speed Log

Date: 07/06/2001

Area:

Survey Units: Meters

Datum: WGS 84

Geophysical Equipment: Edgetech 216 FSSB Profiler, Edgetech Dual Frequency SSS, Simrad EM 2000 Multibeam

Time (UTC) (-5to Local)	Heading	Fix. No.	Line Name	Remarks
0000				**New Day**, July 6, 2001, Lat: 27.30.6535 N, Lon: 92.24.2871 W
0000	180	4	207	SOL WD=982m
0045	180	39	207	EOL WD=976m
0052	360	40	208r	EOL WD=968m
0140	360	4	208r	EOL WD=977m
0145	180	3	209	SOL WD=978m
0232	180	40	209	EOL WD=1004m
0238	360	41	210r	SOL WD=948m
0329	360	2	210r	EOL WD=967m
0334	180	2	211	SOL WD=977m
0425	180	42	211	EOL WD=920m
0431	360	42	212r	SOL WD=926m
0524	360	1	212r	EOL WD=981m
0524	180	1	213	SOL WD=988m
0624	180	42	213	EOL WD=911m
0628	360	42	214r	SOL WD=903m
0721	360	1	214r	EOL WD=1001m
0726	180	1	215	SOL WD=1006m
0820	180	42	215	EOL WD=888m
0824	360	42	216r	SOL WD=880m
0917	360	1	216r	EOL WD=1015m
0922	180	1	217	SOL WD=1020m
1017	180	42	217	EOL WD=869m
1021	360	42	218r	SOL WD=850m

C & C TECHNOLOGIES AUV SURVEY LOG

Page No.

Job No: 2380
Mission Name:

Client: Continental Shelf Associates

Vessel: M/V Pacific Horizon

Survey Equipment: Satloc DGPS, Inertial Navigation, HiPAP, Doppler Speed Log

Date: 07/07/06

Area: GB 516

Survey Units: Meters

Datum: WGS 84

Geophysical Equipment: Edgetech 216 FSSB Profiler, Edgetech Dual Frequency SSS, Simrad EM 2000 Multibeam

Time (UTC) (-5to Local)	Heading	Fix. No.	Line Name	Remarks
1114	360	1	218r	EOL WD=1024m
1119	180	1	219	SOL WD=1022m
1132				Changing control gain from .60 to .58
1213	180	42	219	EOL WD=838m
1218	360	42	220r	SOL WD=822m
1220				Changing control gain from .58 to .60
1233				Changing control gain from .56 to .54
1311	360	1	220r	EOL WD=1032m
1315	180	1	221a	SOL WD=1034m
1344	180	23	221a	EOL WD=1028m
1356	270	1	234	SOL WD=1001m
1424	270	21	234	EOL WD=1034m
1429	90	21	233r	SOL WD=1030m
1447	90	7	233r	EOL WD=1033m
1459	270	1	234a	SOL WD=1004m R/R line SSH only
1525	270	21	234a	EOL WD=1032m
1530	90	21	233ra	SOL WD=1032m
1548	90	7	233ra	EOL WD=1032m
1558	180	17	221b	SOL WD=1036m
1611	180	24	221b	EOL Hugin emergency
1623				Acoustic fish on deck
1638				Hugin on the surface
1702				Hugin in van
1710				Downloading data

C & C TECHNOLOGIES AUV SURVEY LOG

Page No.

Job No: 2380 Mission Name:	Client: Continental Shelf Associates	Vessel: M/V Pacific Horizon	Survey Equipment: Satloc DGPS, Inertial Navigation, HiPAP, Doppler Speed Log

Date: 07/06/01	Area: GB 516	Survey Units: Meters	Datum: WGS 84	Geophysical Equipment: Edgetech 216 FSSB Profiler, Edgetech Dual Frequency SSS, Simrad EM 2000 Multibeam

Time (UTC) (-5to Local)	Heading	Fix. No.	Line Name	Remarks
1800				Data download complete
2153				At drop point starting the predive
2213				Predive complete
2214:10				Pin is pulled for test mission
2217				Test mission was successful, starting the hardware loop test
2254				Mission started
2259:40				Pin is pulled
2300				Hugin is in the water, LAT: 27 30.7260N LON: -92 24.8751W
2306				ACL and ADL contact
2311				Hugin at 400 going to 800m
2317				Hugin at 800m going to 930m, Battery control gain =.80
2320				Hugin at 930m going to 50m off bottom
2325				MP line jump to line 4
2328				Hugin 50m off bottom, heading for start of line , control gain to .70
2330				Lowered control gain from .70 to .66
2341	180	17	221b	SOL WD=1036
0000				New day July 7th 2001 LAT: 27 28.4953N LON: -92 22.6042W
0014	180	42	221b	EOL WD=808m
0019	360	41	222r	SOL WD=1036m
0100	360	10	222r	Changed control gain from .70 to .80, automatic boost function on throughout whole line
0110	360	2	222r	EOL WD=1037m
0114	180	2	223	SOL WD=1036m
0205	180	40	223	EOL WD=791m, turning Hugin around to recover due to fluctuating cell voltages
0215				Hugin going to 500m

C & C TECHNOLOGIES AUV SURVEY LOG

Job No: 2380 Mission Name:		Client: Continental Shelf Associates	Vessel: M/V Pacific Horizon	Survey Equipment: Satloc DGPS, Inertial Navigation, HiPAP, Doppler Speed Log	Page No.
Date: 07/07/01	Area: GB 516	Survey Units: Meters	Datum: WGS 84	Geophysical Equipment: Edgetech 216 FSSB Profiler, Edgetech Dual Frequency SSS, Simrad EM 2000 Multibeam	

Time (UTC) (-5to Local)	Heading	Fix. No.	Line Name	Remarks
0229				Acoustic tow fish on deck
0250				Nosecone onboard and Hugin is under tow
0335				Finishing downloading data
0445				Shutting down the CP
0500				Shift change E Moore D. Aucoin
1120				Starting predive run 010707_1
1142				Predive complete, running test mission in van
1148				Restart predive
1205				Finish predive filling the battery

C & C TECHNOLOGIES AUV SURVEY LOG

Job No: 2380 Mission Name: run010707	Client: Continental Shelf Associates	Vessel: M/V Pacific Horizon	Survey Equipment: Satloc DGPS, Inertial Navigation, HiPAP, Doppler Speed Log	Page No.
Date: 010707	Area: g13 516	Survey Units: Meters	Datum: WGS 84	Geophysical Equipment: Edgetech 216 FSSB Profiler, Edgetech Dual Frequency SSS, Simrad EM 2000 Multibeam

Time (UTC) (-5to Local)	Heading	Fix. No.	Line Name	Remarks
1217				hugin in water pin pulled
1220				hipap working
1221				acoustic fish in water first adl
1223				first acl
1227				command hugin to 700m
1239				command hugin to 900m
1242				command hugin to 930m
1244				height mode 50m
1247				jump to mission line four / waypoint mode
1259				execute CP mission cell voltage low. auto boost mode
1304				emergency ascent cell voltage low
1309				acoustic fish on deck
1332				hugin on surface
1344				hugin under tow
1349				hugin in van
1355				download flash data; critical cell voltage caused ascent ascent used HP .915l ebergy .92kwh
1530				start pre dive run 010707_2
1548				predive complete, filling battery
1614				pin pulled, hugin in water
1618				first hipap/ adl working
1621				first acl
1625				command hugin to 700m
1631				command hugin to 800m
1635				command hugin to 900m

C & C TECHNOLOGIES AUV SURVEY LOG

Page No.

Job No: 2380 Mission Name:	Client: Continental Shelf Associates	Vessel: M/V Pacific Horizon	Survey Equipment: Satloc DGPS, Inertial Navigation, HiPAP, Doppler Speed Log

Date:	Area:	Survey Units: Meters	Datum: WGS 84	Geophysical Equipment: Edgetech 216 FSSB Profiler, Edgetech Dual Frequency SSS, Simrad EM 2000 Multibeam

Time (UTC) (-5to Local)	Heading	Fix. No.	Line Name	Remarks
1640				command hugin to height mode
1642				hugin in waypoint mode
1650				external guidance
1701	180	3	224	sol wd 1035m
1751	180	40	224	eol wd 797m
1755	360	40	225r	sol wd 767m
1842	30	4	225r	eol wd 1036m
1846	180	4	226	sol wd 1029m
1933	180	39	226	eol wd 754m
1937	360	38	227r	sol wd 784m
2010	360 .	13	227r	xsv-02 010707a wd 1037m lat 27.30 lon 92.21
2019	360	8	227r	eol wd 1037
2023	180	7	228	sol wd 1038
2103	180	37	228	eol wd 823
2108	360	35	229r	sol wd 833
2141	360	8	229r	eol wd 1038
2149	180	10	230	sol wd 1038
2220	180	33	230	eol wd 846
2225	360	32	231r	sol wd 822
2251	360	12	231r	eol wd 1038
2257	180	16	232	sol wd 1038
2314	180	27	232	eol wd 868
2316				command hugin to CP mission plan for bathy fill in
2321				starting bathy fill in

C & C TECHNOLOGIES AUV SURVEY LOG

Job No: 2380 Mission Name:	Client: Continental Shelf Associates	Vessel: M/V Pacific Horizon	Survey Equipment: Satloc DGPS, Inertial Navigation, HiPAP, Doppler Speed Log

Page No.

Date:	Area:	Survey Units: Meters	Datum: WGS 84	Geophysical Equipment: Edgetech 216 FSSB Profiler, Edgetech Dual Frequency SSS, Simrad EM 2000 Multibeam

Time (UTC) (-5to Local)	Heading	Fix. No.	Line Name	Remarks
2331				bathy fill in complete, heading for testing area
2354				starting absorption coefficient testing
0000				new day 010708 lat 27.29 lon 92.23
0219				finished testing
0218				execute CP mission plan
0221				command hugin to 500m
0232				command hugin to 300m
0242				command hugin to 100m
0251				acoustic fish on deck
0254				visual hugin on surface
0312				nose cone onboard and hugin under tow
0314				hugin in van
0328				dl flash data used hp 5.851l used energy 10.19kwh
0405				shutdown cp

C & C TECHNOLOGIES SURVEY LOG (Hydro-station)				Page No. 1
Job No.: 2380	**Client:** Continental Shelf Associates	**Vessel:** M/V Pacific Horizon Remote Vessel: AUV		**Survey Equipment:** Satloc DGPS, Inertial Navigation, HiPAP, Doppler Speed Log
Date:(UTC, Local) June 24, 2001	**Area: MC** **Units: m**	**Mission**	**Datum:** NAD 27	Geophysical Equipment: Edgetech 216 FSSB Profiler, Edgetech Dual Frequency SSS, Simrad EM 2000

Time (UTC) (-5 to Local)	Heading	Water Depth	Fix No.	Line Name	Remarks
1204					Departing dock in Fourchon, on way to job site (Site #3)
0000					****New Day ** June 25, 2001** Lat: 28.734516, Lon: -88.726347, Seas: 1-3', Winds: Calm
0110					At location for CTD cast. SE corner of survey area
0144		1378			CTD Cast 010625a WD=1378 Lat: 28.672541, Lon: -88.572144, X: 346380.80, Y: 3172517.26
0204					Seabird on deck
0210					Starting predive
0225					Pressure leak in high-pressure hose. Shutting down CP & PP repair
0734					Pressure leak fixed starting predive.
0808					Predive complete, heading to drop point
0820					Problem with power cable on AUV
0855					Starting predive
0905					Finished predive. Error aborted
0935					Starting new predive
0944					Predive complete. Dosing problems – checking out
0955					Battery dosing OK. Heading for drop
1005					Ship in path, holding ~ 10 min
10:16:40					Split pin pulled
1017					Hugin in water, run 010625_2 (csa_site3_010625) Lat: 28.659698, Lon: -88.580479
1020					Nose cone separation on surface, preparing for recovery
1050					Hugin under tow.
1055					Hugin in van
1102					Downloading flashdata
1130					Start predive run010625_3
1140					Start mission in van, mission success
1147					Predive run010625_4
1155					Computer crash reboot Apollo
1159					Computer rebooted start predive run010625_5
1213					Predive complete
1216					Mission started
12:20:30					Split
1221					Hugin in water, run010625_5 (csa_site3_010625) Lat: 28.658375, Lon: -88.577647

J:\2380\CSA_Report\Logs\hydro-station_log_062401.doc

C & C TECHNOLOGIES SURVEY LOG (Hydro-station)

Page No. 2

Job No.: 2380	**Client:** Continental Shelf Associates	**Vessel:** M/V Pacific Horizon Remote Vessel: AUV	**Survey Equipment:** Satloc DGPS, Inertial Navigation, HiPAP, Doppler Speed Log
Date:(UTC, Local) June 25, 2001	**Area: MC** **Units: m**	**Mission**	**Datum:** NAD 27 — Geophysical Equipment: Edgetech 216 FSSB Profiler, Edgetech Dual Frequency SSS, Simrad EM 2000

Time (UTC) (-5 to Local)	Heading	Water Depth	Fix No.	Line Name	Remarks
1222					Prop turning
1223					Hugin diving
1224					Acoustic fish in water, sporadic HiPAP
1225					ADL in
1226					ACL in
1233					Hugin diving to 800m
					prelinecsa1
					HiPAP is malfunctioning
1310					DVL not reporting, holding course until problem is identified
1350					DVL still not in operation, HiPAP restored to working condition
1400					No DVL, turning Hugin back to job site
1538	180	1013	1	317	SOL, 40m off bottom
1552	180	1020	11	317	Kicked out of external mission
1554	180	1020	14	317	Returned external mission plan
1632	180	1230	42	317	EOL
1638	360	1230	42	316r	SOL, Hugin turning back up line 317 and running reverse direction
1648	360	1121	34	316r	EOL, aborted raising Hugin to surface
1649				postline-1	SOL
1700					Shift Change: J. Barras, H. Langill
1752					Hugin on surface
1807					Hugin under tow
1811					Hugin in van
1900					Restarting Cp & doing predive (run010625_6)
					Had to shutdown CP, do shield cables in sphere
2010					Restarting Cp & doing predive (run010625_7)
2050					Predive complete
2052					Started mission in van
2059					Stopped mission. / Shutting down CP
2100					Restarting CP & doing predive (run010625_8)
2120					Started mission
21:21:52					Split pin pulled
2122					Hugin in water

J:\2380\CSA_Report\Logs\hydro-station_log_062401.doc

C & C TECHNOLOGIES SURVEY LOG (Hydro-station)

Page No. 3

Job No.: 2380	Client: Continental Shelf Associates	Vessel: M/V Pacific Horizon Remote Vessel: AUV	Survey Equipment: Satloc DGPS, Inertial Navigation, HiPAP, Doppler Speed Log
Date:(UTC, Local) June 25, 2001	**Area: MC** **Units: m**	**Mission**	**Datum:** NAD 27 / Geophysical Equipment: Edgetech 216 FSSB Profiler, Edgetech Dual Frequency SSS, Simrad EM 2000

Time (UTC) (-5 to Local)	Heading	Water Depth	Fix No.	Line Name	Remarks
2127					HiPAP reading, Acoustic fish in water
2132					ACL & ADL
2134	145			premission-1	SOL
2146					Powering on ET
2209					Starting tracking bottom ET/EM2000
2315	145			premission-1	EOL
2315				pre-mission-1	SOL, Started turning Hugin to bring back to survey area
0000					** New Day ** June 26, 2001 Lat: 28.41.6026'N, Lon: 88.33.6736'W
0025				pre-mission-1	EOL
0026	360	1333	1	332r	SOL
0038	360	1265	21	332r	EOL, Bring Hugin up to 1000m to restart PP, as we are unable to go into external guidance
0052					Shutting down PP
0053					Starting PP up again
0100					Feedback from Octans, Seabird, Mission Control, ET, EM2000
0105	090			pre-mision-3	SOL
0111					Changing heading to 180 degrees
0122					Doppler Log has some OK values
0149					Changing heading to 140 degrees. Attempting to reboot PP climbing to 1200m depth
0153					Changing heading to 180 degrees
0200					Turning of sensors
0201					Powering down PP
0203					Starting PP up again
0211					Feedback from Octans, Seabird, Mission Control
0215					Changing heading to 270 degrees
0220					Changing heading to 360 degrees
0248					Changing heading to 300 degrees
0320					Changing heading to 360 degrees
0322					Powering down PP
0325					Starting PP up again
0330					Feedback from Octans, Mission Control, Seabird, EM2000, ET
0331				pre-mission-4	SOL

J:\2380\CSA_Report\Logs\hydro-station_log_062401.doc

C & C TECHNOLOGIES SURVEY LOG (Hydro-station)					Page No. 4
Job No.: 2380	**Client:** Continental Shelf Associates	**Vessel:** M/V Pacific Horizon Remote Vessel: AUV		**Survey Equipment**: Satloc DGPS, Inertial Navigation, HiPAP, Doppler Speed Log	
Date:(UTC, Local) June 26, 2001	**Area: MC** **Units: m**	**Mission**	**Datum:** NAD 27	Geophysical Equipment: Edgetech 216 FSSB Profiler, Edgetech Dual Frequency SSS, Simrad EM 2000	

Time (UTC) (-5 to Local)	Heading	Water Depth	Fix No.	Line Name	Remarks
0336					Changing heading to 270 degrees
0343					Changing heading to 180 degrees
0415					Changing heading to 090 degrees. Waiting to 0600 to call Normway for tech-support on "DVL Com failure"
0426		1110			Changing heading to 360 degrees
0501		1035			Change heading to 270 degrees
0516		1110			Change heading to 180 degrees
0550		1100			Change heading to 90 degrees
0554		1119			Change heading to 360 degrees
0628					Testing Hugin, raising to 800 meters
0644					Cycled power on PP-no affect on DVL status, Will try with DVL off
0653					Raising Hugin slowly while testing
0744					Tests failed, bringing Hugin to surface
0808					Acoustic fish on deck
0822					Hugin on surface
0834					Launched Zodiac
0845					Nose cone released
0900					Hugin under tow
0905					Hugin in van
0910					Retrieving Zodiac
0912					Zodiac in cradle
0921					Downloading flash data
1330					Starting CTD cast
1343		1005			CTD cast 010626a, Lat: 28.43.8008'N, Lon: 88.35.7484'W
1355					CTD on deck
1500					In transit to MC 195 to meet crew boat
1541					CP up, testing DVL
1623					DVL checks out OK, shutting down CP
1700					Shift change, J. Barras, H. Langill
2130					Meet crew boa
2200					Heading back to survey sight
0000					New day June 27, 2001
					Lat : 28n lon:88w

J:\2380\CSA_Report\Logs\hydro-station_log_062401.doc

C & C TECHNOLOGIES SURVEY LOG (Hydro-station)

Page No. 5

Job No.: 2380	**Client:** Continental Shelf Associates	**Vessel:** M/V Pacific Horizon Remote Vessel: AUV	**Survey Equipment:** Satloc DGPS, Inertial Navigation, HiPAP, Doppler Speed Log
Date:(UTC, Local) June 26, 2001	**Area: MC** **Units: m**	**Mission**	**Datum:** NAD 27 — Geophysical Equipment: Edgetech 216 FSSB Profiler, Edgetech Dual Frequency SSS, Simrad EM 2000

Time (UTC) (-5 to Local)	Heading	Water Depth	Fix No.	Line Name	Remarks
0015					Start mission generation for DVI calabration & cso site 3 starting
0050					Atarting
0100					Starting ctd cast 010627a
0118		930			Ctd cast 0106279 28.44.0922 n 88.37.3301w
0125					Pre dive complete on hydro station and hos
0127					Mission started in van
0127					Pin is pulled
0128					Seabird on deck
0131					Stopped mission in van
0135					started pre dive
0140					Pre dive complete started to fill battery
0201					Started mission
0203					Split pin pulled
0203					Hugin in water lat 28.44n lon 88.37
0208					hipap reading acoustic fish in water
0212					ACL ADL
					230 m comm. Error on DVL
					300m switch to no data
0219	209			Pre mission	Sol
0224					Powering on et
0230					Having problems with NAVP
					Wrong position being reported from NAVP negative velocity and starbord
					Velocity on navp
0258	209	1022		Pre mission	Eol
0258	028	1020		Permission	Sol turning hugin 180 deg. Forward velocity working. Going to trg and
					Doing circkes with the hugin
0312					Navp switched from stanby to on
0329					Changing heading to 090
0330					Changing heading to 360
0336					Changing heading to 180
0345					Changing heading to 270
0347					Changing heading to 360

C & C TECHNOLOGIES SURVEY LOG (Hydro-station)				Page No. 6
Job No.: 2380	**Client:** Continental Shelf Associates	**Vessel:** M/V Pacific Horizon Remote Vessel: AUV	**Survey Equipment:** Satloc DGPS, Inertial Navigation, HiPAP, Doppler Speed Log	
Date:(UTC, Local) June 26, 2001	**Area: MC** **Units: m**	**Mission**	**Datum:** NAD 27	Geophysical Equipment: Edgetech 216 FSSB Profiler, Edgetech Dual Frequency SSS, Simrad EM 2000

Time (UTC) (-5 to Local)	Heading	Water Depth	Fix No.	Line Name	Remarks
0351					Chang heading to 045
0354					Chang heading to 090
0356					Chang heading to 180
0400					Change heading to 270
					Appears to be lock on constant heading
					Heading forward velocity stbd velocity
					090 -1.3kts 3.5kts
					180 -3.8kts .3kts
					270 -1.6kts -3.3kts
					360 3.7kts .2kts
0427				Post mission	Bring hugin to surface. Still having problems with negative forward
					Stbl velocity
0433					Having problems switching to depth mock
0437					Turning off sensors. Weather has picked up. Bringing hugin to 600m
					Rebooting PP
0447					Winds 22-24kts
0449					Pp restarted
0454					Starting to turn sensors on
0500					Sensors started, no change
0509					Bringing hugin to 500m
0528					Course change from 180 to 270
0545					Course change to 090
0553					Command hugin to 300m
0601					Start step up program
0620					Acoustic fish on deck
0632					Hugin on surface
0638					Nose cone off
0715					Hugin in van
0725					Retrieving zodiac
0730					Zodiac in cradle
0735					Downloading flash data
0800					Still analizing data, sending data

J:\2380\CSA_Report\Logs\hydro-station_log_062401.doc

C & C TECHNOLOGIES SURVEY LOG (Hydro-station)				Page No. 7
Job No.: 2380	**Client:** Continental Shelf Associates	**Vessel:** M/V Pacific Horizon Remote Vessel: AUV	**Survey Equipment:** Satloc DGPS, Inertial Navigation, HiPAP, Doppler Speed Log	
Date:(UTC, Local) June 26, 2001	**Area: MC** **Units: m**	**Mission**	**Datum:** NAD 27	Geophysical Equipment: Edgetech 216 FSSB Profiler, Edgetech Dual Frequency SSS, Simrad EM 2000

Time (UTC) (-5 to Local)	Heading	Water Depth	Fix No.	Line Name	Remarks
					Off to Norway for analisis (Bjorn)
0930					Draining battery
1005					Van crew shutting down for rest. Stell awaiting word from Norway. Sending nav graph stats to Bjorn
1420					After talking to Stig, we are tring to change referance forms in the DVC
1507`					Starting predive
1540					Predive complete
1609					Hugin in water
1613					Hugin diving (run 010627.3) lat 28.43n lon –88.37w
1630					Hugin saw bottom sensors on
1640					On bottom
1647					Bringing hugin to surface
1700					Shift change to J.Barras, H.Langil
1745					Acoustic fish on deck
1746					Hugin visual on surface
1759					Nose cone onboard
1801					Hugn in tow
1803					Hugin in van
1900					Starting pre dive (run 010627.4)
1926					Predive completed
1938					Mission started
1941					Split pin pulled
1942					Hugin in water (run 010627.4) lat 28.44 lon 88.37
1946					Hipap and ADL reading
1951					ACL reading
2001					Starting to turn on sensors
2003				Permission-s	
2018					Switched to external guidance
2020					Change rpm to 158
2021	029	923	21	Dvl-1ar	SOL -> dvl calibration
2036	029	925	10	DVL-1ar	Change rpm to 160
2049	29	929	1	Dvl-1ar	Eol
2052	208	928	"	Dvl-2ar	Sol rpm line to 150

J:\2380\CSA_Report\Logs\hydro-station_log_062401.doc

C & C TECHNOLOGIES SURVEY LOG (Hydro-station)				Page No. 8
Job No.: 2380	**Client:** Continental Shelf Associates	**Vessel:** M/V Pacific Horizon Remote Vessel: AUV	**Survey Equipment**: Satloc DGPS, Inertial Navigation, HiPAP, Doppler Speed Log	
Date:(UTC, Local) June 26, 2001	**Area: MC** **Units: m**	**Mission**	**Datum:** NAD 27	Geophysical Equipment: Edgetech 216 FSSB Profiler, Edgetech Dual Frequency SSS, Simrad EM 2000

Time (UTC) (-5 to Local)	Heading	Water Depth	Fix No.	Line Name	Remarks
2105	208	925	10	"	Rpm to 140
2122	"	932	21	"	Eol Change rpm to 135
2125	029	926	"	Dvl-1br	Sol
2130	24	925			T5 cast 010627b wd=925 lat 28.42n lon-88.38e x=340082.82 y=3177234.6
2141	29		10	Dvl-1br	Change rpm to 150
2157	029	928	1	Dvl-2b	Eol
2158	208	928	1	Dvl-1b	sol change rpm to 160
2212	208	929	10	Dvl-2b	Change rpm to 158
2225	208	929	21	Dvl-2b	Eol
2238	180	922	1	301	Sol
2256	180	974	27	301	Sol
2302	360	1024	32	302r	Sol
2329	360	923	12	302r	Eol
2326	180	924	10	303	Sol
0000					New day June 28, 2001 lat 28.41n lon 88.37w seas 3-4 winds 10-15kts
0014	180	1109	39	303	Eol
0020	360	1075	37	305r	sol

C & C TECHNOLOGIES SURVEY LOG (Hydro-station)

Job No.: 2380	**Client:** Continental Shelf Associates	**Vessel:** M/V Pacific Horizon Remote Vessel: AUV	**Survey Equipment:** Satloc DGPS, Inertial Navigation, HiPAP, Doppler Speed Log	Page No.
Date:(UTC, Local) 6/27/01	**Area: MC 297** **Units: m**	**Mission** Run 010627_4	**Datum:** Wgs 84	Geophysical Equipment: Edgetech 216 FSSB Profiler, Edgetech Dual Frequency SSS, Simrad EM 2000

Time (UTC) (-5 to Local)	Heading	Water Depth	Fix No.	Line Name	Remarks
0014	180		39	303	EOL wd 1109
0020	0		37	305r	SOL wd 1075
0101	0		07	305r	EOL wd 931
0105	180		8	304	SOL wd 928
0147	180		39	304	EOL wd 1114
0152	0		38	306r	SOL wd 1090
0211					Power cycle EM due to bad data.
0224					Mission decision; external guidance aborted. Using hugin mission plan.
0225					Restarted pos handler
0225					Executed external mission plan
0229					Bad data on EM and SS; executing cp mission plan; aborting line.
0231					Bringing hugin up to 700m to restart PP
0238					At 700m proceding to 600,
0242					Power down sensors
0243					Power down PP
0248					Power up PP and Sensors
0301					@600m proceding to 800m
0304					800m proceding to 900m
0343					Executing external plan
0353	0		38	306r	SOL wd 1090
0427					ALHP set to .75
0437	0		6	306r	EOL wd 936
0449	180		4	307	SOL wd 940
0500					Shift change D.avcoin E.Moore
0535	180		39	307	EOL wd 1102
0540	000		40	308r	SOL wd 1125
0628	000		4	308r	EOL wd 946
0634	180		3	308	SOL wd 951
0721	180		40	309	EOL wd 1121
0727	360		41	310r	SOL wd 1128
0819	360		2	310r	EOL wd 955
0824	180		2	311-1	SOL wd 960

C & C TECHNOLOGIES SURVEY LOG (Hydro-station)

Page No.

Job No.: 2380	Client: Continental Shelf Associates	Vessel: M/V Pacific Horizon Remote Vessel: AUV	Survey Equipment: Satloc DGPS, Inertial Navigation, HiPAP, Doppler Speed Log

Date:(UTC, Local) 6/27/01	Area: MC 297 Units: m	Mission Run 010627_4	Datum: Wgs 84	Geophysical Equipment: Edgetech 216 FSSB Profiler, Edgetech Dual Frequency SSS, Simrad EM 2000

Time (UTC) (-5 to Local)	Heading	Water Depth	Fix No.	Line Name	Remarks
0848	180		22	311-1	EOL wd 1003
0856	090		15	333r	SOL wd 1002
0914	090		1	333r	EOL wd 1046
0919	270		1	334	SOL wd 1066
0937	270		15	334	EOL wd 1009
0945	180		20	311-2	SOL wd 994
1012	180		41	311-2	EOL wd 1144
1017	360		42	312r	SOL wd 1171
1114	360		1	312r	EOL wd 946
1117	180			313	SOL wd 970
1209	180		42	313	EOL ed 1179
1214	360		42	314r	SOL wd 1198
1245	360		22	314r	Em3000 malfunction
1257					Command hugin to 600m
1259					Cycle power on all sensors and PP
1308					Power on PP and all sensors
1312					Power on all sensors
1320					Command hugin to 180 deg.
1320					Hugin to 60m off bottom haeding to 180 return to south end of job @ line
					314r
1407					Try to pick up line 314r / PP guidance commands time out
1409					Turn hugin to 180 deg set altitude to 70m off bottom
1437					External guidance
1441	360		42	314ra	SOL wd 1202
1538	360		1	314ra	DOL wd 978
1542	180		1	315	SOL wd 988
1634	180		42	315	EOL wd 1212
1638	360		42	316r	SOL wd 1228
1700					Shift change J. Barras H. Langill
1703					Bad data on multibeam, coming up to restart PP
1706					Changing course to 180
1726					Command to 900m

Z:\data2\2380\admin\survey_log_062801.doc

C & C TECHNOLOGIES SURVEY LOG (Hydro-station)				Page No.
Job No.: 2380	**Client:** Continental Shelf Associates	**Vessel:** M/V Pacific Horizon Remote Vessel: AUV	**Survey Equipment:** Satloc DGPS, Inertial Navigation, HiPAP, Doppler Speed Log	
Date:(UTC, Local) 6/27/01	**Area: MC 297** **Units: m**	**Mission** Run 010627_4	**Datum:** Wgs 84	Geophysical Equipment: Edgetech 216 FSSB Profiler. Edgetech Dual Frequency SSS. Simrad EM 2000

Time (UTC) (-5 to Local)	Heading	Water Depth	Fix No.	Line Name	Remarks
1739					Change course to 360 to restart line 316r
1754	360		32	316r-a	SOL wd 1102
1816					Aborting line due to traffic in path. Commanding hugin to rerun line 316r

Z:\data2\2380\admin\survey_log_062801.doc

C & C TECHNOLOGIES SURVEY LOG (Hydro-station)

Page No. 1

Job No.: 2380	**Client:** Continental Shelf Associates	**Vessel:** M/V Pacific Horizon Remote Vessel: AUV	**Survey Equipment:** Satloc DGPS, Inertial Navigation, HiPAP, Doppler Speed Log

Date:(UTC, Local) June 28, 2001	**Area: MC** **Units: m**	**Mission** Csa_site3_010627 Run010627_4	**Datum:** NAD 27	Geophysical Equipment: Edgetech 216 FSSB Profiler, Edgetech Dual Frequency SSS, Simrad EM 2000

Time (UTC) (-5 to Local)	Heading	Water Depth	Fix No.	Line Name	Remarks
0101	360	931	7	305r	EOL
0105	180	928	8	304	SOL
0147	180	1114	39	306r	SOL
0155					MB – only reporting 76 beams restarting pinging on MB.
0200	360		32	306r	
0201					Vehicle depth – reading. 1061m
0212	360		24	306r	Powering EM off from HOS. TD-SV not updating
0213					Powering EM – up from HOS.
0221					No reply from EM2000 –recycling power on EM2000
0224					Execute CP-mission plan
0225					Execute external mission plan.
0230					Execute CP-mission plan. EM2000 will not power back on
					Bring Hugin back up to 600m – to reset PP.
0242					Cycling power to PP
0245					Turning on PP.
0308					Tracking bottom, EM2000 working
0343					Change mission – control so 306r will be rerun
0353	360	1090	38	306r-a	SOL
0437	360	936	6	306r-a	EOL
0449	180	940	4	307	SOL
0500					Shift change E. Moore D. Aucoin
0515					Launch XCTD Deep 010628a WD=978m Lat. 28 42.1364 Lon. 88 36.87 didn't work.
0520					Launch Sippican T-5 010628b WD 1006m Lat. 28 44.8722 Lon. 88 36.89
0535	180	1102	39	307	EOL
0540	360	1125	40	308r	SOL
0628	360	946	4	308r	EOL
0634	180	951	3	309	SOL
0721	180	1121	40	309	EOL
0727	360	1128	41	310r	SOL
0819	360	955	2	310r	EOL
0824	180	960	2	311-1	SOL
0848	180	1003	22	311-1	EOL

Z:\data2\2380\admin\hydro-station_log_062801.doc

C & C TECHNOLOGIES SURVEY LOG (Hydro-station)				Page No. 1
Job No.: 2380	**Client:** Continental Shelf Associates	**Vessel:** M/V Pacific Horizon Remote Vessel: AUV		**Survey Equipment**: Satloc DGPS, Inertial Navigation, HiPAP, Doppler Speed Log
Date:(UTC, Local) June 28, 2001	**Area: MC** **Units: m**	**Mission** Csa_site3_010627 Run010627_4	**Datum:** NAD 27	Geophysical Equipment: Edgetech 216 FSSB Profiler, Edgetech Dual Frequency SSS, Simrad EM 2000

Time (UTC) (-5 to Local)	Heading	Water Depth	Fix No.	Line Name	Remarks
0856	90	1002	15	333r	SOL
0906			8		Well head located
0914	90	1046	1	333r	EOL
0919	270	1066	1	334	SOL
0934	270	1009	15	334	EOL
0945	180	994	20	311-2	SOL
1014	180	1144	41	311-2	EOL
1017	360	1171	42	312r	SOL
1114	360	964	1	312r	EOL
1117	180	970	1	313	SOL
1209	180	1179	42	313	EOL
1214	360	1198	42	314r	SOL
1248	360		22	314r	Lost XYZ from EM2000
					Switching to CP mission Plan
					Rase to safe height to cycle PP
1306					Powering PP back up
1312					PP back up
1315					Turning Hugin to 180 to deadhead and rerun line.
1407					Couldn't get Hugin in External guidance
1408					Turning Hugin South to cycle power on PP
1413					Bringing Hugin to 70m Height to cycle power on PP – sensors are off
					Cycling power
1430					Sensors on line – hugin is online
1441	360	1202	42	314ra	SOL
1538	360	978	1	314ra	EOL
1542	180	988	1	315	SOL
1634	180	1212	42	315	EOL
1638	360	1228	42	316r	SOL
1659					EM2000 – Not working – locked up again
1703					Execute CP- Mission Plan, Recycling Power on PP.
1712					PP off
1745					PP on

Z:\data2\2380\admin\hydro-station_log_062801.doc

<table>
<tr><td colspan="5">C & C TECHNOLOGIES SURVEY LOG (Hydro-station)</td><td>Page No. 1</td></tr>
<tr><td>Job No.: 2380</td><td colspan="2">Client: Continental Shelf Associates</td><td colspan="2">Vessel: M/V Pacific Horizon
Remote Vessel: AUV</td><td>Survey Equipment: Satloc DGPS, Inertial Navigation, HiPAP, Doppler Speed Log</td></tr>
<tr><td>Date:(UTC, Local)
June 28, 2001</td><td colspan="2">Area: MC
Units: m</td><td>Mission
Csa_site3_010627
Run010627_4</td><td>Datum:
NAD 27</td><td>Geophysical Equipment: Edgetech 216 FSSB Profiler, Edgetech Dual Frequency SSS, Simrad EM 2000</td></tr>
</table>

Time (UTC) (-5 to Local)	Heading	Water Depth	Fix No.	Line Name	Remarks
1759	360	1102	32	316r-a	SOL,
1808					Traffic in area, haven't to turn Hugin around
					Only receiving 56 beams from EM2000; turning Pinging off
					Pinging – active – still only 56 beams
1824					Recycle power – to EM2000 – by – PP
					EM2000 – working – 109 beams pinging ; No cp pressure depth.
1835	360	1086	31	316r-b	SOL
					Well & P/L visual on BS data.
1917	360	1001	1	316r-b	EOL
1921	180	1012	1	317	SOL
2014	180	1257	42	317	EOL
2017	360	1255	42	318r	SOL

Z:\data2\2380\admin\hydro-station_log_062801.doc

C & C TECHNOLOGIES SURVEY LOG (Hydro-station)

Page No.

Job No.: 2380	**Client:** Continental Shelf Associates	**Vessel:** M/V Pacific Horizon Remote Vessel: AUV	**Survey Equipment:** Satloc DGPS, Inertial Navigation, HiPAP, Doppler Speed Log
Date:(UTC, Local) June 28	**Area: MC** **Units: m**	**Mission** Csa_site3_010627 Run010627_4	**Datum:** NAD 27
			Geophysical Equipment: Edgetech 216 FSSB Profiler, Edgetech Dual Frequency SSS, Simrad EM 2000

Time (UTC) (-5 to Local)	Heading	Water Depth	Fix No.	Line Name	Remarks
2040					No update from edgetech
2054					Trying to turn Edgetech off
2058					Turning power off to the edgetech from HOS, unable to get query from Edgetech
2059					Powering Edgetech back on
2104					Edgetech working again, rerunning part of the line
2137					Hugin turning around and starting, rerun gap in Edgetech data
2138	360	1104	30	318ra	SOL
2209	360	929	6	318ra	P/L visual in sidescan data
2218	360	1019	1	318ra	EOL
2223	180	1024	1	319	SOL
2314	180	1262	42	319	EOL
2319	360	1265	42	320r	SOL
0000					New day June 29 2001, Winds: calm Seas: 1-2ft Lat : 28 43.0999N Lon : -88 35.3284
0015	360	1028	1	320r	Eol
0020	180	1033	1	321	Sol
0111	180	1275	42	321	Eol
0116	360	1278	41	322r	Sol
0210	360	1034	2	322r	Eol
0213	180	1029	2	323	Sol
0303	180	1301	41	323	Eol
0307	360	1290	40	324r	Sol
0358	360	1031	3	324r	Eol
0402	180	1038	4	325	Sol
0448	180	1309	40	325	Eol
0451	360	1331	39	326r	Sol
0538	360	1045	4	326r	Eol
0545	180	1056	6	327	Sol
0625	180	1313	38	327	Eol
0630	360	1332	37	328r	Sol
0710	360	1066	7	328r	Eol
0715	180	1083	8	329	Sol

Z:\data2\2380\admin\hydro-station_log_062801.doc

C & C TECHNOLOGIES SURVEY LOG (Hydro-station)

Page No.

Job No.: 2380	Client: Continental Shelf Associates	Vessel: M/V Pacific Horizon Remote Vessel: AUV	Survey Equipment: Satloc DGPS, Inertial Navigation, HiPAP, Doppler Speed Log

Date:(UTC, Local) June 29 2001	Area: MC Units: m	Mission Csa_site3_010629 Run010627_4	Datum: NAD 27	Geophysical Equipment: Edgetech 216 FSSB Profiler, Edgetech Dual Frequency SSS, Simrad EM 2000

Time (UTC) (-5 to Local)	Heading	Water Depth	Fix No.	Line Name	Remarks
0749	180	1329	35	329	Eol
0755	360	1346	33	330r	Sol
0824	360	1117	10	330r	Eol cycling power on PP
0830	180	1156	12	331	Sol
0856	180	1350	32	331	Eol
0906	360	1337	27	332r	Sol Sippican T-5 010629a Lat : 28 41.4545 Lon : -88 33.7565
0918	360	1250	18	332r	Eol
0923	360	1168	17	330ra	Sol rerun small segment on northern end of survey area
0935					Bringing the HUGIN to the surface
1001					Acoustic fish on deck
1003					HUGIN on the surface
1024					HUGIN under tow, large amount of KOH on the surface
1026					HUGIN in the van
1032					Downloading the flash data and survey data
1040					Heading to crewboat transfer location
1315					Meeting crewboat
1325					Transfer complete: OFF: P. Deval, B. Boudreaux, J Baras, R. Verma
					ON: S. Meloncon

Z:\data2\2380\admin\hydro-station_log_062801.doc

C & C TECHNOLOGIES SURVEY LOG (Hydro-station)				Page No. 1
Job No.: 2380	**Client:** Continental Shelf Associates	**Vessel:** M/V Pacific Horizon Remote Vessel: AUV	**Survey Equipment:** Satloc DGPS, Inertial Navigation, HiPAP, Doppler Speed Log	
Date:(UTC, Local) 07/02/2001	**Area: MC** **Units: m**	**Mission**	**Datum:** NAD 27	Geophysical Equipment: Edgetech 216 FSSB Profiler, Edgetech Dual Frequency SSS, Simrad EM 2000

Time (UTC) (-5 to Local)	Heading	Water Depth	Fix No.	Line Name	Remarks
2130					July 2, 2001, Starting transit toward csa_site_1
0000					**New Day**, July 3, 2001, Lat: 28.03.84114 N, Lon: 90.39.4388 W
0942					Arrived at location, preparing for CTD cast
0955		1127			Cast #010703a, WD=1127, Lat: 27.22.0213 N, Lon: 92.27.6125 W
1025					Velo on deck
1130					Start predive
1220					Run fake mission in van, restart pre-dive run010703_1 / csa_site_1
1235					Finish predive
1253					Pull splint pin/ Hugin in water, Lat: 27.26.5159 N, Lon: 92.28.6805 W
1356	180	1065	16	101	SOL
1410	180	1079	27	101	EOL
1421	360	1080	32	102r	SOL
1447	360	1061	12	102r	EOL
1454	180	1066	10	103	SOL
1523	180	1085	33	103	EOL
1530	360	1085	35	104r	SOL
1546					Launch sippican T-5 010703b WD=1084, Lat: 27.22.4976 N, Lon: 92.29.0898 W, **Probe Failed**
1551					Launch sippican T-5 010703c WD=1079m, Lat: 27.22.7928N, Lon: 92.29.0903 W
1605	360	1071	8	104r	EOL
1611	180	1070	7	105	SOL
1650	180	1094	37	105	EOL
1656	360	1098	38	106r	SOL
1738	360	1075	6	106r	EOL
1744	180	1078	4	107	SOL
1831	180	1106	39	107	EOL
1836	360	1102	40	108r	SOL
1923	360	1086	4	108r	EOL
1928	180	1090	3	109	SOL
1933	180	1092	6	109	Change fixed gain to 12db from 6db
2019	180	1112	40	109	EOL
2023	360	1115	41	110r	SOL
2113	360	1092	2	110r	EOL

Z:\data2\2380\admin\hydro-station_log_070601.doc

C & C TECHNOLOGIES SURVEY LOG (Hydro-station)

Page No. 2

Job No.: 2380	Client: Continental Shelf Associates	Vessel: M/V Pacific Horizon Remote Vessel: AUV	Survey Equipment: Satloc DGPS, Inertial Navigation, HiPAP, Doppler Speed Log

Date:(UTC, Local) 07/03/2001	Area: MC Units: m	Mission	Datum: NAD 27	Geophysical Equipment: Edgetech 216 FSSB Profiler, Edgetech Dual Frequency SSS, Simrad EM 2000

Time (UTC) (-5 to Local)	Heading	Water Depth	Fix No.	Line Name	Remarks
2118	180	1093	2	111	SOL
2140					Changed port max angle to 72 degrees to stop port edge of swath from having bad pings
2210	180	1121	41	111	EOL
2215	360	1120	42	112r	SOL
2308	360	1093	1	112r	EOL
2313	180	1095	1	113	SOL
2357	180		31	113	PP guidance command timeout, rebooting PP
2359					All sensors turned off, PP off
0000					**New Day**, July 4, 2001, Lat: 27.21.4037 N, Lon: 92.27.9912 W
0005					PP powered back on
0010					Sensors powered back on
0012					All sensors working, external guidance
0042	180	1128	25	113	SOL
0106	180	1118	42	113	EOL
0109	360	1123	42	114r	SOL
0203	360	1094	1	114r	EOL
0212	180	1095	1	115	SOL
0252	180	1129	31	115	Sippican T-5 010704a WD=1130m, Lat: 27.219091 N, Lon: 92.27.7374 W
0307	180	1125	42	115	EOL
0312	360	1125	42	116r	SOL
0340			21	116r	No data from MB-current ping rat 0
0348					Cycling power on PP
0354					Feedback from Octans, seabird, ET
0400					Having problems with EM2000, still no day coming back, recycling powe on EM only
0414					EM2000 pinging again, CP pressure depth not working
0425					Outer edges, recycling power on EM2000, by the PP
0433	360	1130	28	116ra	SOL
0500					**Shift Change**: D. Aucoin, E. Moore
0509	360	1098	1	116ra	EOL
0514	180	1101	1	117	SOL
0606	180	1126	42	117	EOL
0611	360	1125	42	118r	SOL

C & C TECHNOLOGIES SURVEY LOG (Hydro-station)

Page No. 3

Job No.: 2380	Client: Continental Shelf Associates	Vessel: M/V Pacific Horizon Remote Vessel: AUV	Survey Equipment: Satloc DGPS, Inertial Navigation, HiPAP, Doppler Speed Log

Date:(UTC, Local) 07/04/2001	Area: MC Units: m	Mission	Datum: NAD 27	Geophysical Equipment: Edgetech 216 FSSB Profiler, Edgetech Dual Frequency SSS, Simrad EM 2000

Time (UTC) (-5 to Local)	Heading	Water Depth	Fix No.	Line Name	Remarks
0705	360	1105	1	118r	EOL
0710	180	1104	1	119	SOL
0803	180	1127	42	119	EOL
0808	360	1127	42	120r	SOL
0840	360		20	120r	Cycle power on EM2000 / EOL
0911	360	1127	21	120ra	SOL
0937	360	1102	1	120ra	EOL
0942	180	1098	1	121a	SOL
1010	180	1128	23	121a	EOL
1010					Change pin rate on EdgeTech to 150ms, intenal trigger / high sidescan on
1024	270	1127	1	134	SOL / noise on SS low, ping rate to 166ms / back to 150ms ping rate
1050	270	1121	21	134	EOL
1055	090	1119	21	133r	SOL
1113	090	1128	7	133r	EOL
1124	180	1126	17	121b	SOL / Edgetech back to external trigger
1156	180	1128	42	121b	EOL
1201	360	1127	41	122r	SOL
1252	360	1088	2	122r	EOL
1257	180	1095	2	123	SOL
1348	180	1127	41	123	EOL
1353	360	1126	40	124r	SOL
1441	360	1100	3	124r	EOL
1445	180	1100	4	125	SOL
1532	180	1126	40	125	EOL
1537	360	1121	39	126r	SOL
1622	360	1103	4	126r	EOL
1628	180	1104	6	127	SOL
1700					**Shift Change**: Z. Rivers, H. Langill
1710	180	1121	38	127	EOL
1715	360	1115	37	128r	SOL
1753	360	1108	7	128r	EOL
1757	180	1108	8	129	SOL

Z:\data2\2380\admin\hydro-station_log_070601.doc

C & C TECHNOLOGIES SURVEY LOG (Hydro-station)				Page No. 4
Job No.: 2380	**Client:** Continental Shelf Associates	**Vessel**: M/V Pacific Horizon Remote Vessel: AUV	**Survey Equipment**: Satloc DGPS, Inertial Navigation, HiPAP, Doppler Speed Log	
Date:(UTC, Local) 07/04/2001	**Area: MC** **Units: m**	**Mission**	**Datum:** NAD 27	Geophysical Equipment: Edgetech 216 FSSB Profiler, Edgetech Dual Frequency SSS, Simrad EM 2000

Time (UTC) (-5 to Local)	Heading	Water Depth	Fix No.	Line Name	Remarks
1834	180	1115	35	129	EOL
1839	360	1113	33	130r	SOL
1859	360		17	130r	Launch T-5 Sippican, Lat: 27.22.97 N, Lon: 92.25.945 W
1908	360	1107	10	1302	EOL
1914	180	1105	12	131	SOL
1941	180	1111	32	131	EOL
1950	360	1110	27	132r	SOL
2004	360	1106	16	132r	EOL
2004					Finished site_1, Execute CP mission plan, start to bring Hugin to surface
2032					Acoustic fish on deck
2038					Hugin on surface, visual
2050					Nose cone aboard, Hugin under tow
2158					At site_2, getting ready to do CDT cast 010704c
2214					CTD cast 010704c, Lat: 27.29.07 N, Lon: 92.22.81 W
2231					CTD on bottom, X=561392.44, Y=3040029.87
2245					Seabird on deck, heading toward drop point, starting predive
2329					Predive complete, test mission on deck
2333					Test mission complete
2339					Starting 2nd predive
2349					Predive complete, waiting for battery control
2358					Battery status good, mission started
0000					**New Day**, July 5, 2001, Lat: 27.31.3514 N, Lon: 92.22.6906 W
0004:17					Pin pulled, run010704_1
0005					Hugin in water, Lat: 27.31.1814 N, Lon: 92.22.8479 W
0006					Acoustic fish in water
0010					HiPAP & ADL reading
0016					Hugin depth 4000m, going to 800m
0020	233			premission 1	SOL
0021					Powering on SSL & SB
0022					Feedback from SSL & SB
0026					EM turned on, Hugin 75m AH
0028					Hugin Alt 50m

C & C TECHNOLOGIES SURVEY LOG (Hydro-station)

Page No. 5

Job No.: 2380	Client: Continental Shelf Associates	Vessel: M/V Pacific Horizon Remote Vessel: AUV	Survey Equipment: Satloc DGPS, Inertial Navigation, HiPAP, Doppler Speed Log
Date:(UTC, Local) 07/05/2001	**Area: MC** **Units: m**	**Mission**	**Datum:** NAD 27 / Geophysical Equipment: Edgetech 216 FSSB Profiler, Edgetech Dual Frequency SSS, Simrad EM 2000

Time (UTC) (-5 to Local)	Heading	Water Depth	Fix No.	Line Name	Remarks
0038					Emergency ascent, dosing pump error
0110					Visual, Hugin on surface
0111					Acoustic fish on deck
0121					Nose cone onboard and Hugin under tow
0125					Hugin in van
0500					**Shift Change**: E. Moore, D. Aucoin
1600					Reassembling Hugin, beginning test dive procedures
1636					Starting predive
1705					Predive complete, **Shift Change**: Z. Rivers, H. Langill
1706					Filling battery
1709					Test mission started
1710:40					Pin pulled
1716					Test mission successful, start hardware loop test
1729					All systems go, waiting on battery
1733					Mission started run010705_1
1736:25					Split-pin pulled
1737					Hugin in water, Lat: 27.31.3803 N, Lon: 92.22.6394 W
1738					Acoustic fish in water
1743					HiPAP and ADL reading
1750					ACL reading
1759					Turning on ET
1802					ET working
1805					EM2000 working
1814					Changed auto range / Man gain to 6db from 12db
1822	180	992	16	201	SOL
1827					Set fixed gain to 7db
1836	180	1010	27	201	EOL
1847	360	1010	32	202r	SOL
1857					XSV-02 010705a, **Probe Failed**
1900					XSV-02 010705b, X=557775.24, Y=3040723.01, WD=1005m, cast data went to 963m
1913	360	998	12	202r	EOL
1919	180	987	10	203	SOL

Z:\data2\2380\admin\hydro-station_log_070601.doc

C & C TECHNOLOGIES SURVEY LOG (Hydro-station)

Page No. 6

Job No.: 2380	**Client:** Continental Shelf Associates	**Vessel**: M/V Pacific Horizon Remote Vessel: AUV	**Survey Equipment**: Satloc DGPS, Inertial Navigation, HiPAP, Doppler Speed Log

Date:(UTC, Local) 07/05/2001	**Area: MC** **Units: m** GB 516 csa site 2	**Mission** Run010705_1	**Datum:** NAD 27	Geophysical Equipment: Edgetech 216 FSSB Profiler, Edgetech Dual Frequency SSS, Simrad EM 2000

Time (UTC) (-5 to Local)	Heading	Water Depth	Fix No.	Line Name	Remarks
1950	180	1010	33	203	EOL
1956	360	1006	35	204r	SOL
2032	360	987	8	204r	EOL
2037	180	983	7	205	SOL
2057					Ping rate zero, no multibeam data, cycling power in EM2000
2103					Aborting line, rerunning due to no multibeam data
2105					Recycling power in PP
2106					Switching to CP mission plan
2117					Resetting PP again due to guidance time outs
2119					Recycling power to PP
2136	180	983	7	205	SOL
2215	180	984	37	205	EOL
2226	360	982	38	206r	SOL
2230	360		35	206r	Switching primary GPS, correction to Satloc from WAAS
2240	360		28	206r	MB - lockup again, recycling power on EM2000
2249	360			206r	MB – wouldn't start pinging again, cycling power on PP
2257	360			206r	Octans, seabird, ET, EM2000
2314	360	1016	30	206ra	SOL
2346	360	985	6	206ra	EOL
0000					**New Day**, July 6, 2001, Lat: 27.30.6535 N, Lon: 92.24.2871 W
0000	180	982	4	207	SOL
0017	180	995	17	207	Changed absorption coefficient from 65 to 60db/km
0017	180	976	39	207	EOL
0052	360	968	40	208r	SOL
0140	360	977	4	208r	EOL
0149	180	986	7	209	Changed absorption coefficient from 60 to 65db/km
0232	180	1004	40	209	EOL
0238	360	948	41	210r	SOL
0329	360	967	2	210r	EOL
0334	180	977	2	211	SOL
0425	180	936	41	211	EOL
0431	360	920	42	212r	Sol

Z:\data2\2380\admin\hydro-station_log_070601.doc

C & C TECHNOLOGIES SURVEY LOG (Hydro-station)

Page No.

Job No.: 2380	**Client:** Continental Shelf Associates	**Vessel:** M/V Pacific Horizon Remote Vessel: AUV		**Survey Equipment:** Satloc DGPS, Inertial Navigation, HiPAP, Doppler Speed Log
Date:(UTC, Local) 07/06/01	**Area: MC** **Units: m** Csa_site_2 GB 516	**Mission** Run010705_1	**Datum:** NAD 27	Geophysical Equipment: Edgetech 216 FSSB Profiler, Edgetech Dual Frequency SSS, Simrad EM 2000

Time (UTC) (-5 to Local)	Heading	Water Depth	Fix No.	Line Name	Remarks
0444	360	1020	32	212r	Changed fixed gain from 6db to 0db
0500					Shift change: Ed Moore David Aucoin
0524	360	981	1	212r	Eol
0529	180	988	1	213	Sol
0554	180	1009	19	213	Slope filter on
0624	180	911	42	213	Eol
0628	360	903	42		Sol
0721	360	1001	1	214r	Eol
0726	180	1006	1	214r	Sol
0820	180	888	42	215	Eol
0824	360	880	42	215	Sol
0917	360	1015	1	216r	Eol
0922	180	1020	1	216r	Sol
1002					010706a XCTD sippican Lat:27 28.6671 Lon: -92 23.0818
1017	180	869	42	217	eol
1021	360	850	42	218r	Sol
1114	360	1024	1	218r	Eol
1119	180	1022	1	219	Sol
1213	180	838	42	219	Eol
1218	360	822	42	220r	Sol
1311	360	1032	1	220r	Eol
1315	180	1034	1	221a	Sol
1344	180	1028	23	221a	Eol hugin is diving to a height of 15meters
1356	270	1001	1	234	Sol
1424	270	1034	21	234	Eol
1429	90	1030	21	233r	Sol Absorption Coefficient 65
1447	90	1033	7	233r	Eol
1459	270	1004	1	234a	Sol change the absorption coefficient to 75
1525	270	1032	21	234a	Eol
1530	90	1032	21	233r	Sol changed the absorption coefficient from 75 to 50
1548	90	1032	7	233ra	Eol
1556	180	1036	17	221b	Sol changed the absorption coefficient from 50 to 65, turned ssl back on

Z:\data2\2380\admin\hydro-station_log_070601.doc

C & C TECHNOLOGIES SURVEY LOG (Hydro-station)

Page No.

Job No.: 2380	Client: Continental Shelf Associates	Vessel: M/V Pacific Horizon Remote Vessel: AUV	Survey Equipment: Satloc DGPS, Inertial Navigation, HiPAP, Doppler Speed Log
Date:(UTC, Local) 07/06/01	**Area: MC** **Units: m**	**Mission** Csa-site_2 / **Datum:** NAD 27	Geophysical Equipment: Edgetech 216 FSSB Profiler, Edgetech Dual Frequency SSS, Simrad EM 2000

Time (UTC) (-5 to Local)	Heading	Water Depth	Fix No.	Line Name	Remarks
0611			24	221b	Hugin emergency ascent
1702					Hugin is in the van
2200					Started predive csa_site_2_010706 and run010706_1
2215					Predive complete, starting the dive in the van
2220					pedive
2240					Starting to fill the battery
2256					Starting the mission
2259:40					Pin is pulled
2300					Hugin is in the water Lat:27 30.7260NLon:92 24.8751W, acoustic fish is the water
2306					Hipap acl and adl contact
2311					Hugin at 400 meters depth
2314					Starting to turn on the sensors
2317					Hugin tracking bottom at 200 meters altitude
2322					All sensors are working
2333					Changed the absorption coefficient to 100 db/nm
2335					Changed the absorption coefficient to 25db/km- the swath narrowed
2337					Changed the absorption coefficient to 150db
2339					Changed the absorption coefficient to 65db
2341	180	1036	17	221b	Sol
0001					New day July the 7th 2001 Lat: 27 28.4953N Lon: 92 22.6042W
0014	180	808	42	221b	Eol
0019	360	796	41	222r	Sol
0110	360	1037	2	222r	Eol
0114	180	1036	2	223	Sol
0116	180				May need to abort due to problems with the cell voltage, and having to automatic boost
0206	180	791	40	223	Eol
	360		40	224r	Sol aborting the mission due to fluctuating cell voltages, gong to do an anode change
0210	360			postmission	Sol Execute CP mission plan
0215					All sensors powered off
0229					Acoustic tow fish on deck
0250					Nose cone onboard, hugin is under tow

Z:\data2\2380\admin\hydro-station_log_070601.doc

C & C TECHNOLOGIES SURVEY LOG (Hydro-station)

Job No.: 2380	**Client:** Continental Shelf Associates	**Vessel:** M/V Pacific Horizon Remote Vessel: AUV	**Survey Equipment:** Satloc DGPS, Inertial Navigation, HiPAP, Doppler Speed Log	Page No.
Date:(UTC, Local) July 7	**Area: MC** **Units: m**	**Mission** Csa_site_2	**Datum:** NAD 27	Geophysical Equipment: Edgetech 216 FSSB Profiler, Edgetech Dual Frequency SSS, Simrad EM 2000

Time (UTC) (-5 to Local)	Heading	Water Depth	Fix No.	Line Name	Remarks
0335					Finish the download of the data, shutting down the CP
1120					Starting predive anode change complete
1142					Predive complete
1147					Test mission successful
1148					Starting real predive
1205					Predive complete, filling battery
1217					Pin is pulled Hugin is in the water
1220					Hipap is working
1221					Acoustic fish in water, first adl

Z:\data2\2380\admin\hydro-station_log_070601.doc

C & C TECHNOLOGIES SURVEY LOG (Hydro-station)

Page No. 27

Job No.: 2380	**Client:** Continental Shelf Associates	**Vessel**: M/V Pacific Horizon Remote Vessel: AUV	**Survey Equipment**: Satloc DGPS, Inertial Navigation, HiPAP, Doppler Speed Log
Date:(UTC, Local) 010707	**Area: MC** **Units: m** csa_site_2_010707_1	**Mission** RUN010707 **Datum:** NAD 27	Geophysical Equipment: Edgetech 216 FSSB Profiler, Edgetech Dual Frequency SSS, Simrad EM 2000

Time (UTC) (-5 to Local)	Heading	Water Depth	Fix No.	Line Name	Remarks
1223					First ACL
1226					Diving to 700m
1242					Edgetech tracking bottom
1243					Turning em2000 sensors on
1244					height to 50m off bottom, heading to waypoint
1304					hugnin emergency ascent due to low battery voltage
1332					hugin on surface
1344					hugin under tow
1349					hugin in van
1530					starting predive
1548					predive complete, filling battery
1614					hugin in water, pin pulled
1618					first hipap
1638					bottom track on side scan
				premission	hugin to 50m off bottom
1701	180	1035	3	224	sol shift change Z. Rivers H. Langill
1751	180	797	40	224	eol
1755	360	796	40	225r	sol
1757					changed fixed gain to 12 db from 6
1800					changed back to 6db
1842	360	1036	4	225r	eol
1846	180	1029	4	226	sol
1933	180	754	39	226	eol
1937	360	758	38	227r	sol
2010	360	1037	13	227r	xsv-02 010707a lat 27.30n lon 92.21w x 562772 y 3041891 probe depth 992m
2019	360	1037	8	227r	eol
2023	180	1038	7	228	sol
2103	180	823	37	228	eol
2108	360	833	35	229r	sol
2144	360	1038	8	229r	eol
2149	180	1038	10	230	sol

C & C TECHNOLOGIES SURVEY LOG (Hydro-station)

Page No. 2

Job No.: 2380	Client: Continental Shelf Associates	Vessel: M/V Pacific Horizon Remote Vessel: AUV	Survey Equipment: Satloc DGPS, Inertial Navigation, HiPAP, Doppler Speed Log
Date:(UTC, Local) 010707	Area: MC Units: m	Mission run010707	Datum: NAD 27
Geophysical Equipment: Edgetech 216 FSSB Profiler, Edgetech Dual Frequency SSS, Simrad EM 2000			

Time (UTC) (-5 to Local)	Heading	Water Depth	Fix No.	Line Name	Remarks
2220	180	846	33	230	eol
2225	360	822	32	231r	sol
2251	360	1038	12	232	eol
2257	180		16	232	sol
2314	180	868	27		eol ; execute cp mission plan to fill in lines will be logged as post mission on bottom side
2320	310			fill in	sol
2330					eol ; finished bathy fill in. execute external mission plan; heading to do te lines for absorption coefficient
2349					changed fixed gain from 6db to 0db; changed absorption coefficient to 30
2354	360	1032	25	401r	sol
0000					new day 010708 lat 27.29n lon 92.23w
0001	360	1037	20	401	changed absorption coefficient to 30db
0008	360	1038	15	401r	eol
0012	180	1037	15	400	sol logged on topside as 401; changed absorption coefficient to 40db
0019	180	1037	20	400	changed absorption coefficient to 45db
0025	180	1035	25	400	eol
0030	360	1033	25	401a	sol; changed absorption coefficient to 50 km
0037	360	1037	20	401a	changed absorption coefficient to 55db
0043	360	1037	15	401a	eol ; changed absorption coefficient to 60db
0047	180	1037	15	400a	sol
0054	180	1037	20	400a	changed absorption coefficient to 70db
0100	180	1035	25	400a	eol ; **changed absorption coefficient to 75**
0112	360	1033	25	401rb	sol
0118	360	1037	20	401rb	changed absorption coefficient to 80db
0125	360	1038	15	401rb	eol; changed absorption coefficient to 100db
0129	180	1038	15	400b	sol
0136	180	1036	20	400b	changed absorption coefficient to 85db
0142	180	1034	25	400b	eol changed absorption coefficient to90db
0147	360	1033	25	401rc	sol
0153	360	1036	20	401rc	changed absorption coefficient to 95db
0200	360	1032	15	401rc	eol
0204	180	1037	15	400c	sol

Z:\data2\2380\admin\hydro-station_log_070601.doc

C & C TECHNOLOGIES SURVEY LOG (Hydro-station)				Page No. 2
Job No.: 2380	**Client:** Continental Shelf Associates	**Vessel:** M/V Pacific Horizon Remote Vessel: AUV	**Survey Equipment:** Satloc DGPS, Inertial Navigation, HiPAP, Doppler Speed Log	
Date:(UTC, Local)	**Area: MC** **Units: m**	**Mission**	**Datum:** NAD 27	Geophysical Equipment: Edgetech 216 FSSB Profiler, Edgetech Dual Frequency SSS, Simrad EM 2000

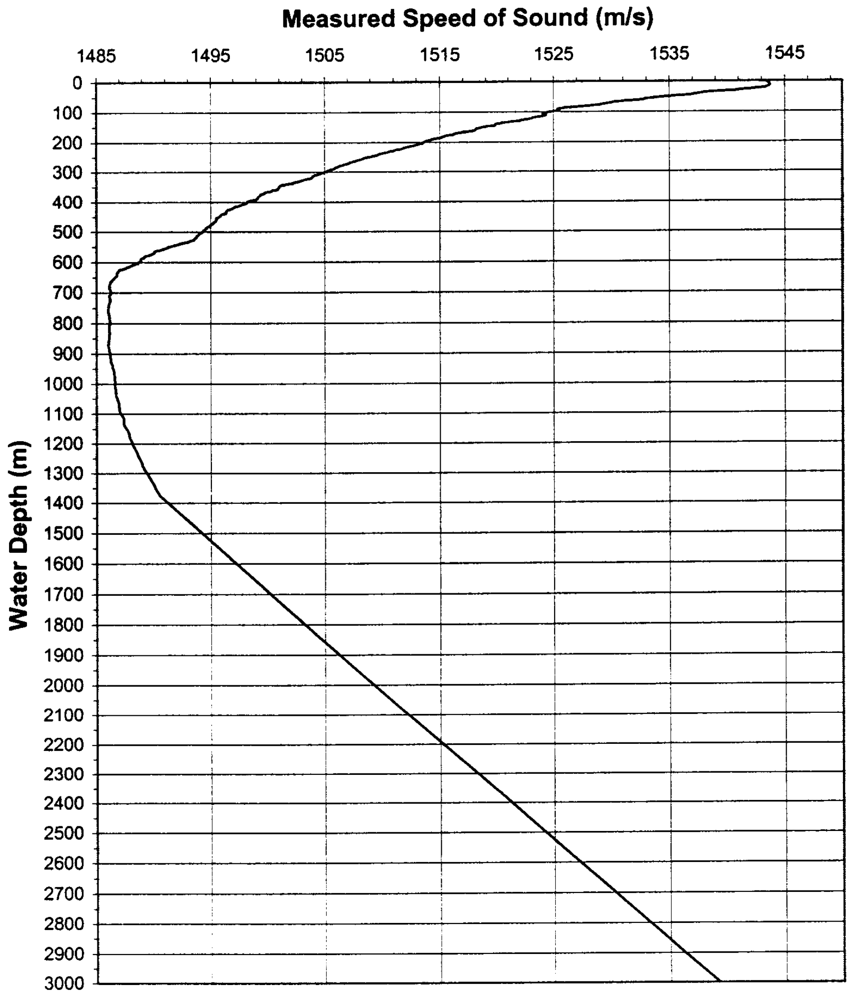
Time (UTC) (-5 to Local)	Heading	Water Depth	Fix No.	Line Name	Remarks
0211	180	1036	20	400c	changed tvg law crossover angle to 15deg
0217	180	1033	25	400c	eol execute mission plan for ascent
0218					changed absorption to 150db
0221					command hugin to 500m
0232					command hugin to 300m
0242					command hugin to 100m
0251					acoustic fish on deck
0254					visual of hugin on surface
0312					nose cone onboard and hugin under tow
0314					hugin in van
0328					downloading data heading to lake charles mission complete
0405					shutdown CP

Z:\data2\2380\admin\hydro-station_log_070601.doc

APPENDIX C

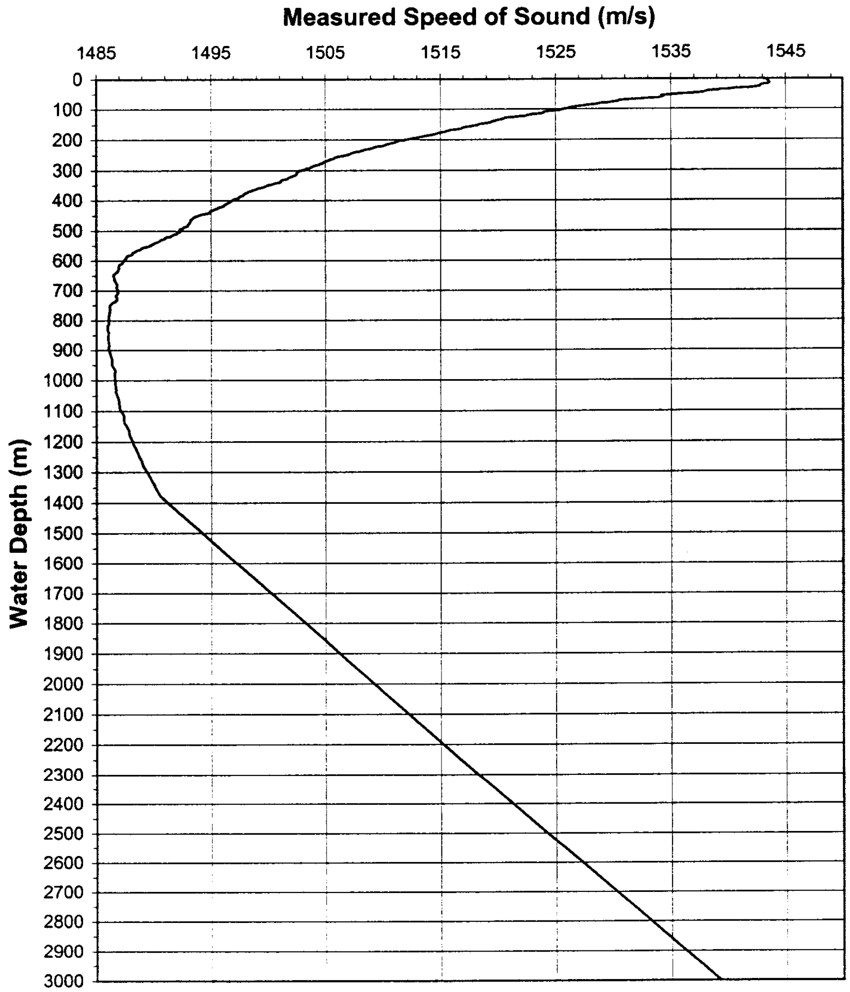
VELOCIMETER PROFILES

Continental Shelf Associates, Inc.
Block 292, Mississippi Canyon Area
Sound Velocity Profile



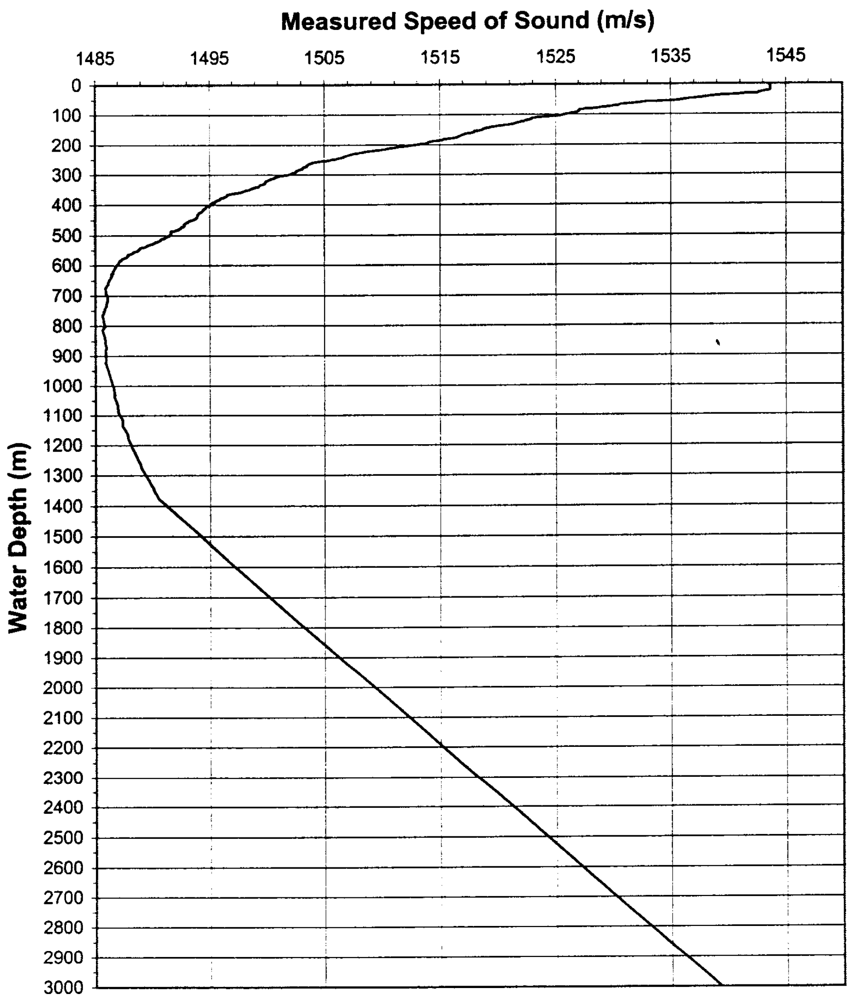
Vessel: *M/V Pacific Horizon*
Profile: 2380\010625a
25-June-01 01:44 (UTC)
X = 1,136,417.56'
Y = 10,408,500.27'
Water depth: 1,378 meters (4,520 feet)

Continental Shelf Associates, Inc.
Block 248, Mississippi Canyon Area
Sound Velocity Profile



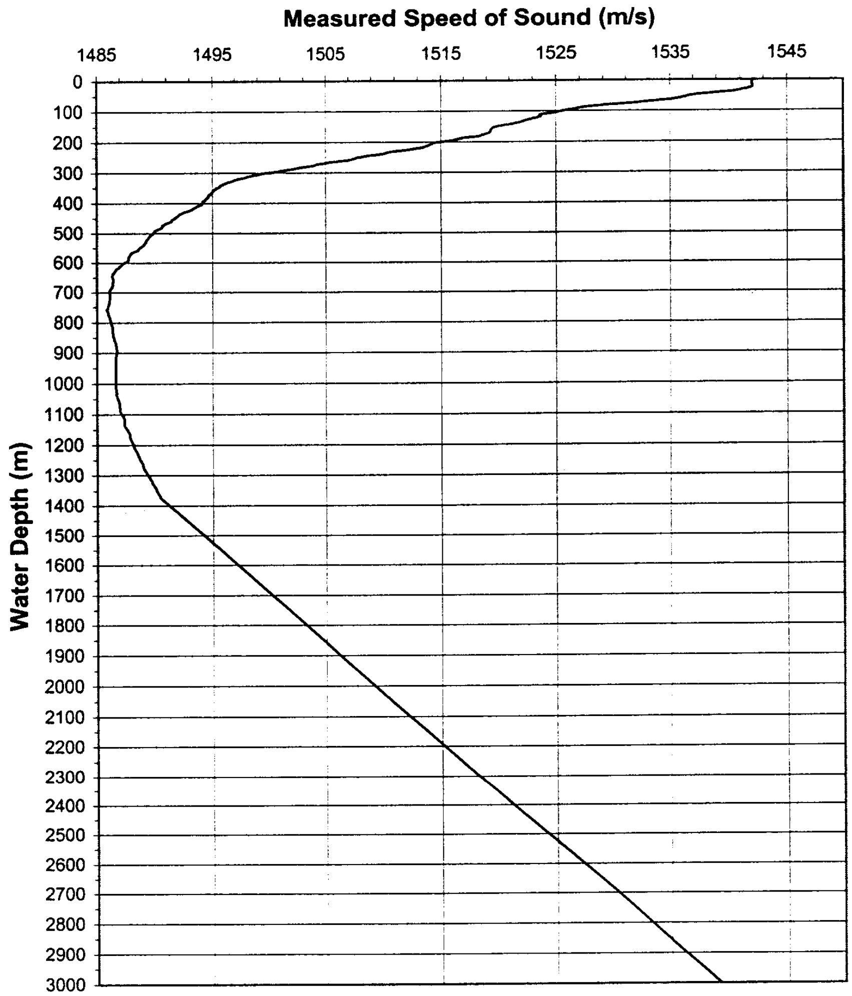
Vessel: *M/V Pacific Horizon*
Profile: 2380\010626a
26-June-01 13:43 (UTC)
X = 1,129,122.11'
Y = 10,429,580.33'
Water depth: 1,005 meters (3,297 feet)

Continental Shelf Associates, Inc.
Block 247, Mississippi Canyon Area
Sound Velocity Profile



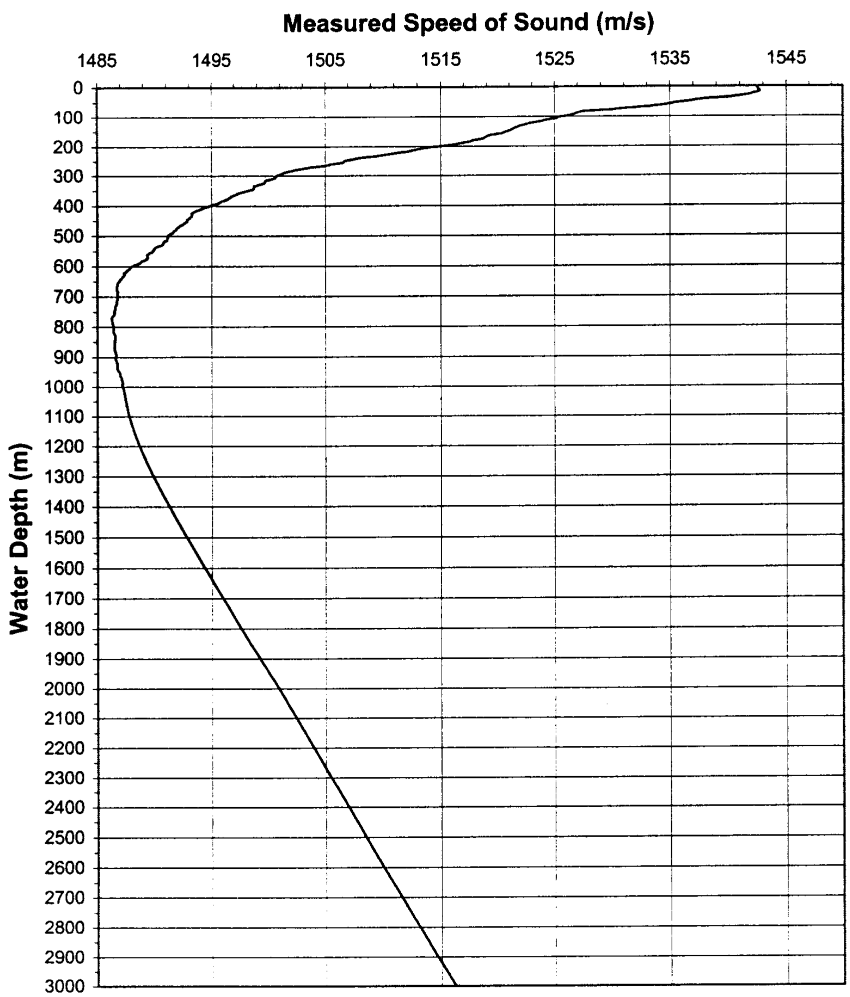
Vessel: *M/V Pacific Horizon*
Profile: 2380\010627a
27-June-01 01:18 (UTC)
X = 1,120,698.37 '
Y = 10,431,459.96'
Water depth: 930 meters (3,051 feet)

Continental Shelf Associates, Inc.
Block 291, Mississippi Canyon Area
Sound Velocity Profile



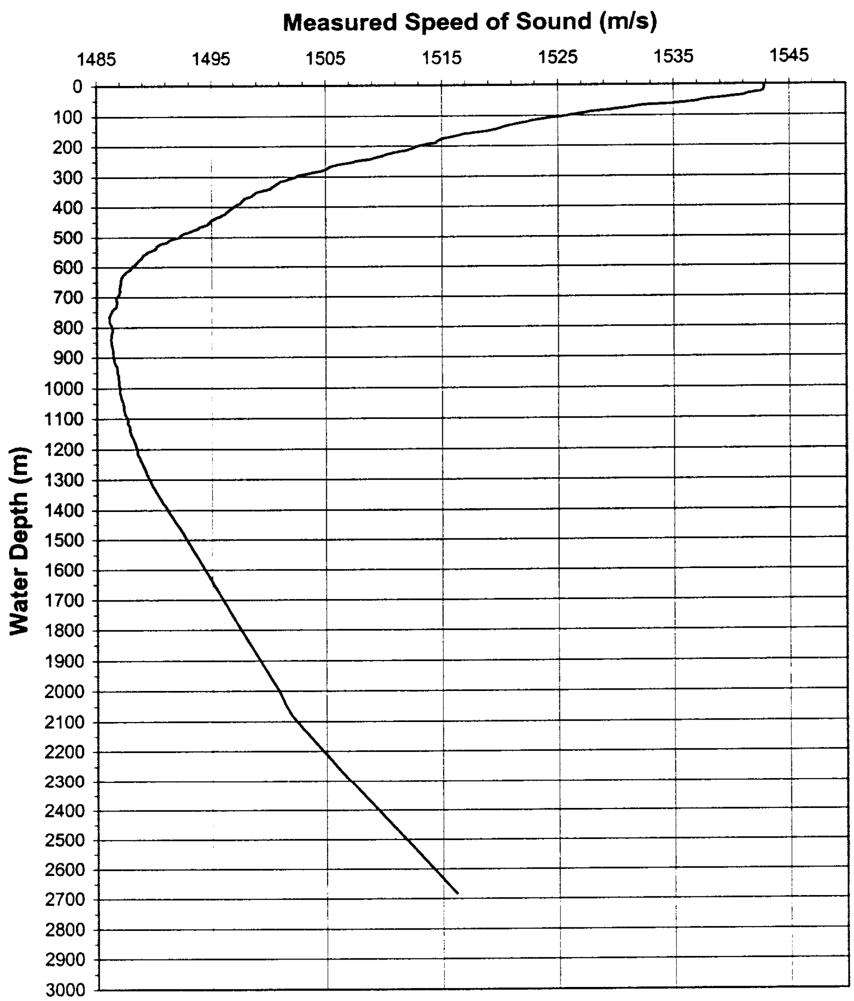
Vessel: *M/V Pacific Horizon*
Profile: 2380\010627b
27-June-01 21:30 (UTC)
X = 1,116,947.12'
Y = 10,418,832.11'
Water depth: 925 meters (3,035 feet)

Continental Shelf Associates, Inc.
Block 247, Mississippi Canyon Area
Sound Velocity Profile



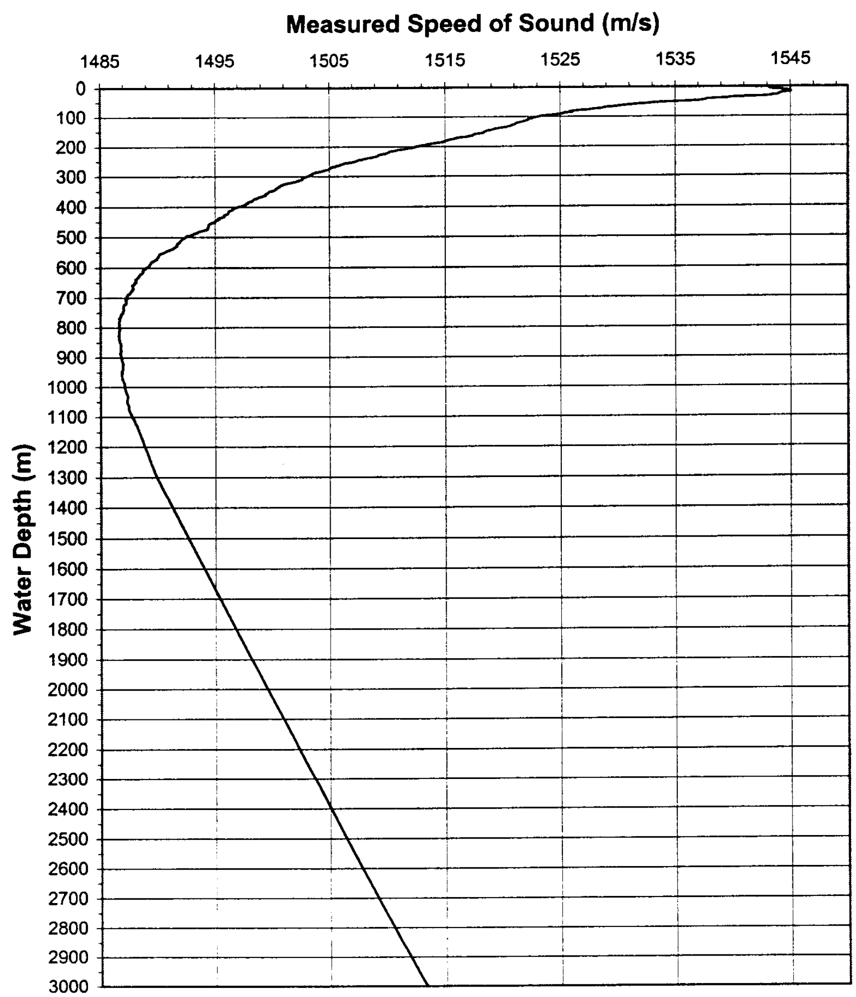
Vessel: *M/V Pacific Horizon*
Profile: 2380\010628b
28-June-01 05:20 (UTC)
X = 1,123,112.82'
Y = 10,436,154.08'
Water depth: 1,006 meters (3,301 feet)

Continental Shelf Associates, Inc.
Block 292, Mississippi Canyon Area
Sound Velocity Profile



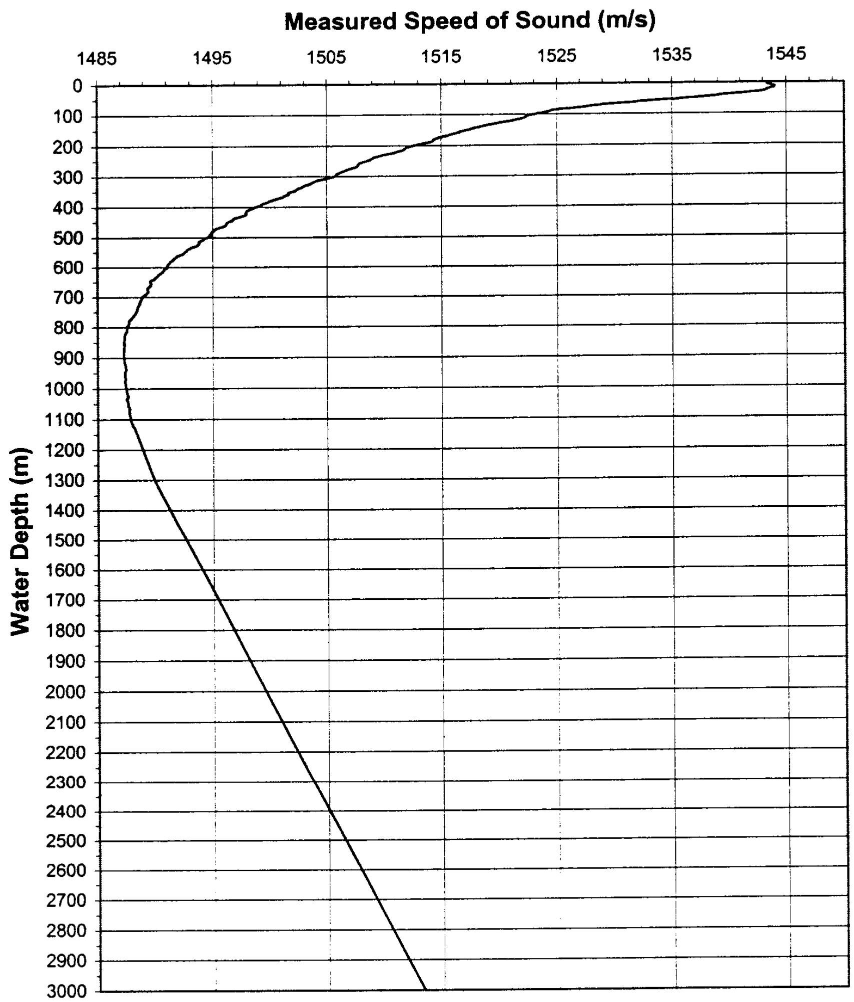
Vessel: *M/V Pacific Horizon*
Profile: 2380\010629a
29-June-01 09:06 (UTC)
X = 1,139,574.53'
Y = 10,415,223.25'
Water depth: 1437 meters (4715 feet)

Continental Shelf Associates, Inc.
Block 646, Garden Banks Area
Sound Velocity Profile



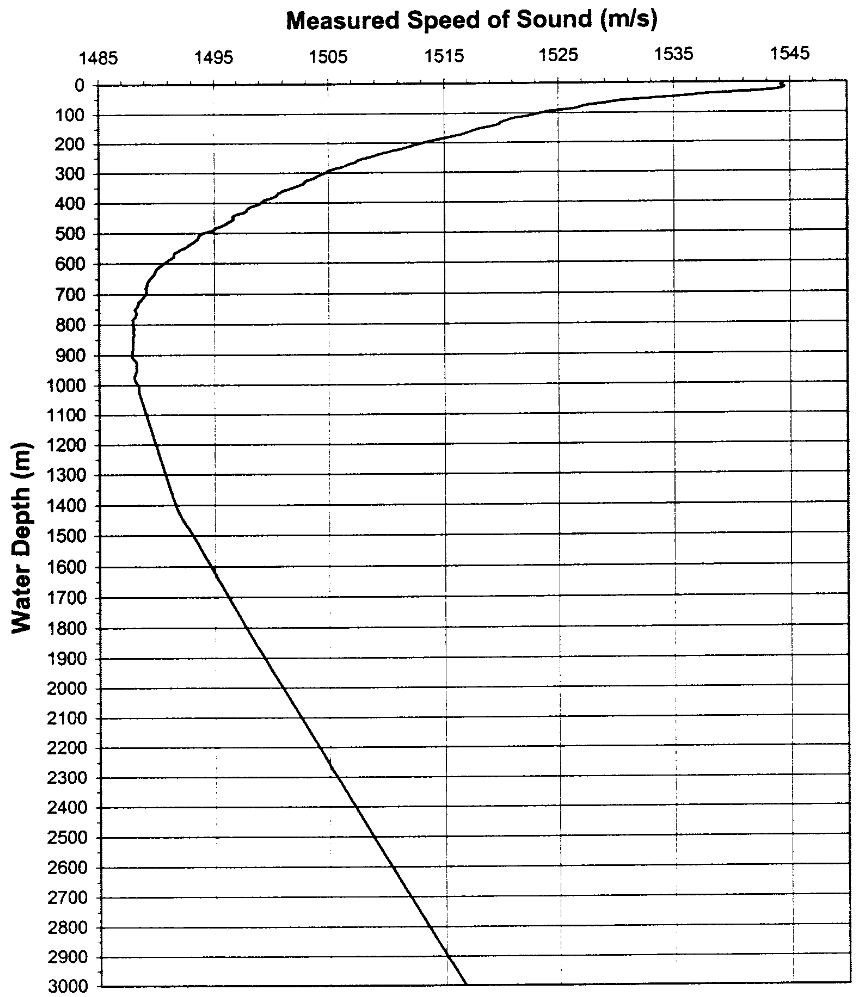
Vessel: *M/V Pacific Horizon*
Profile: 2380\010703a
03-July-01 09:55 (UTC)
X = 1,815,567.82'
Y = 9,931,186.51'
Water depth: 1,127 meters (3,698 feet)

Continental Shelf Associates, Inc.
Block 602, Garden Banks Area
Sound Velocity Profile



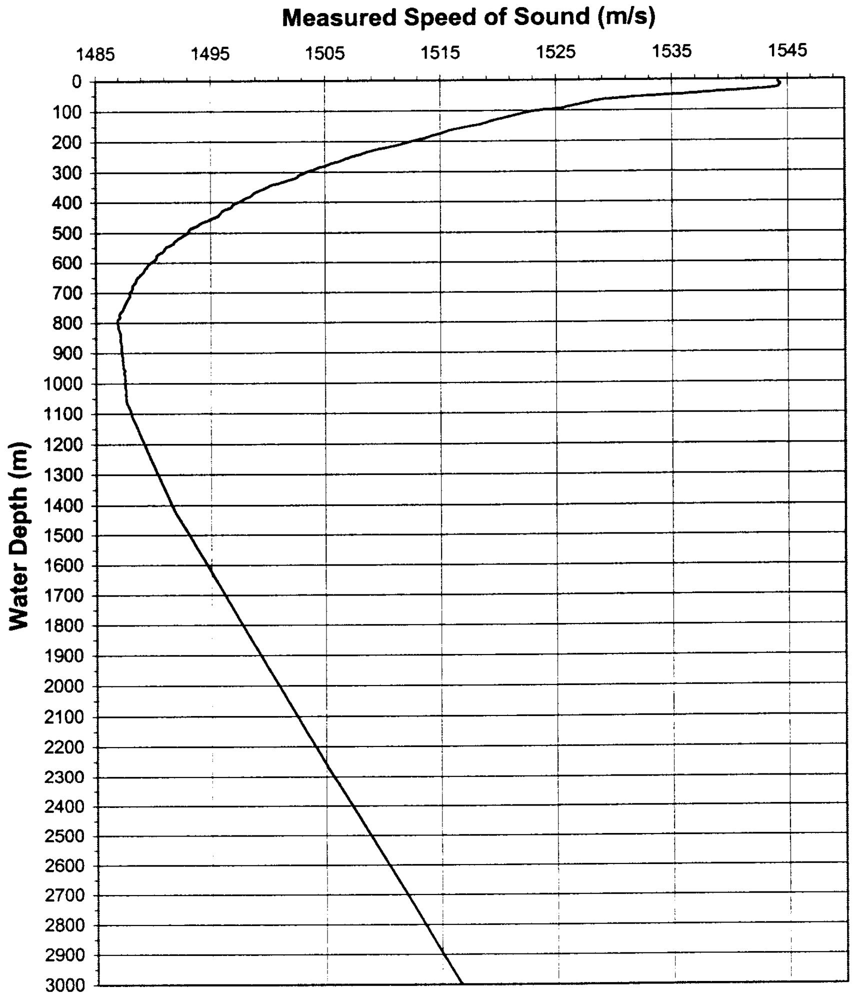
Vessel: *M/V Pacific Horizon*
Profile: 2380\010703c
03-July-01 15:51 (UTC)
X = 1,807,556.94'
Y = 9,935,825.41'
Water depth: 1,079 meters (3,540 feet)

Continental Shelf Associates, Inc.
Block 646, Garden Banks Area
Sound Velocity Profile



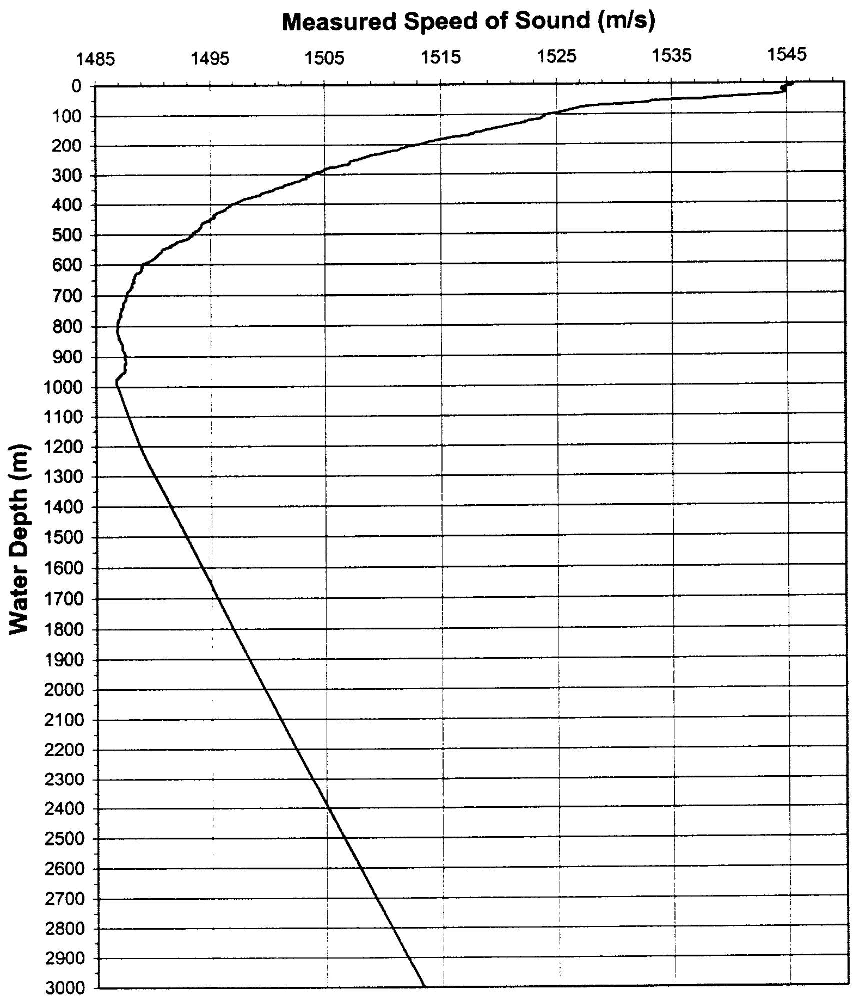
Vessel: *M/V Pacific Horizon*
Profile: 2380\010704a
04-July-01 02:52 (UTC)
X = 1,814,895.34'
Y = 9,930,504.03'
Water depth: 1,130 meters (3,707 feet)

Continental Shelf Associates, Inc.
Block 603, Garden Banks Area
Sound Velocity Profile



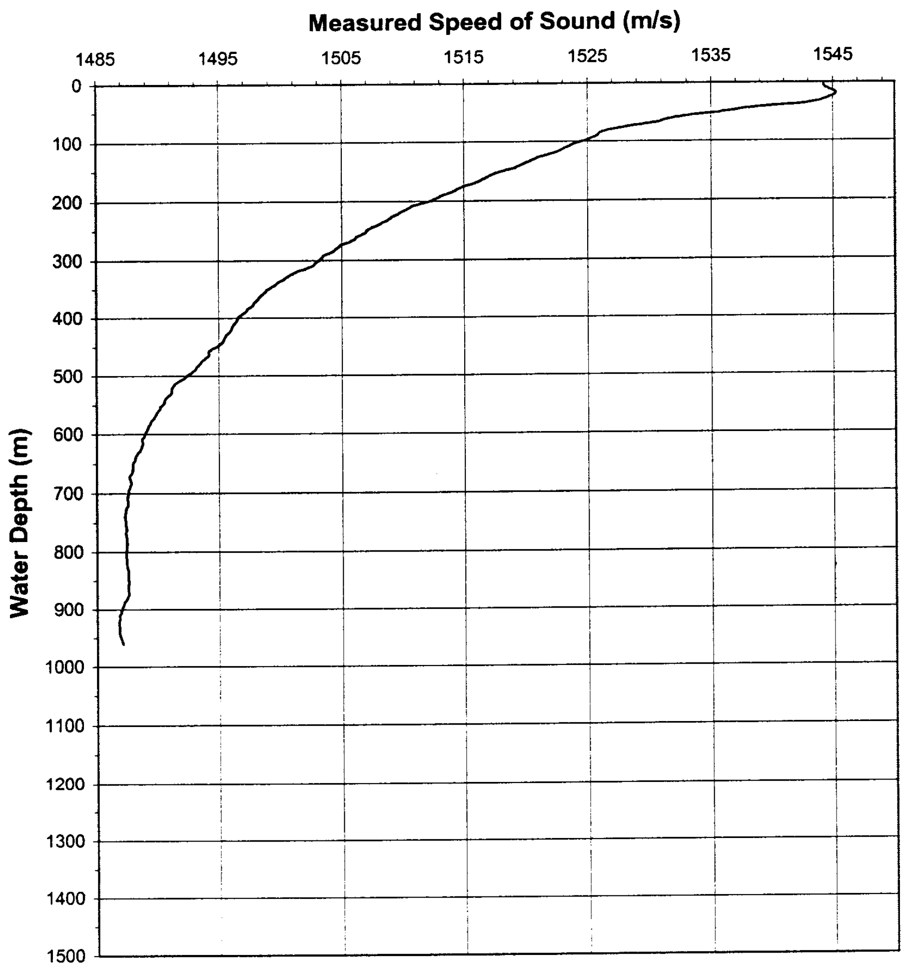
Vessel: *M/V Pacific Horizon*
Profile: 2380\010704b
04-July-01 18:59 (UTC)
X = 1,824,558.92'
Y = 9,936,972.58'
Water depth: 1,110 meters (3,645 feet)

Continental Shelf Associates, Inc.
Block 515, Garden Banks Area
Sound Velocity Profile



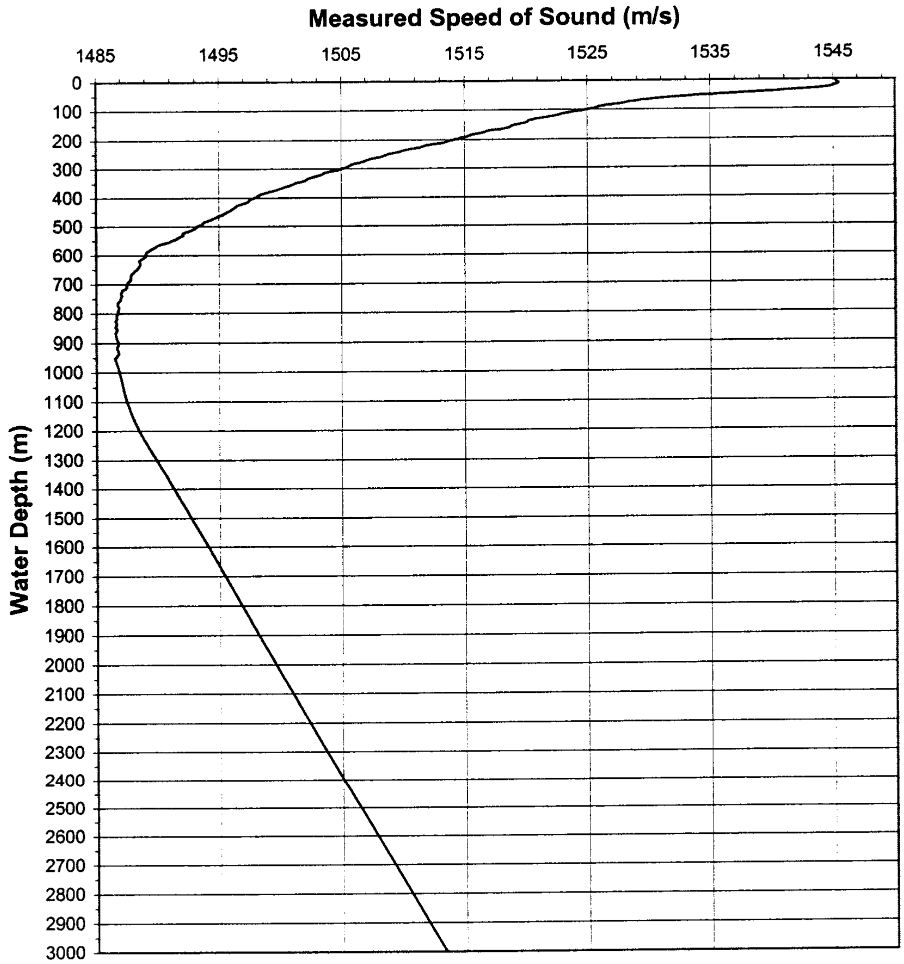
Vessel: *M/V Pacific Horizon*
Profile: 2380\010704c
04-July-01 22:14 (UTC)
X = 1,824,389.76'
Y = 9,973,918.82'
Water depth: 1,001 meters (3,284 feet)

Continental Shelf Associates, Inc.
Block 515, Garden Banks Area
Sound Velocity Profile



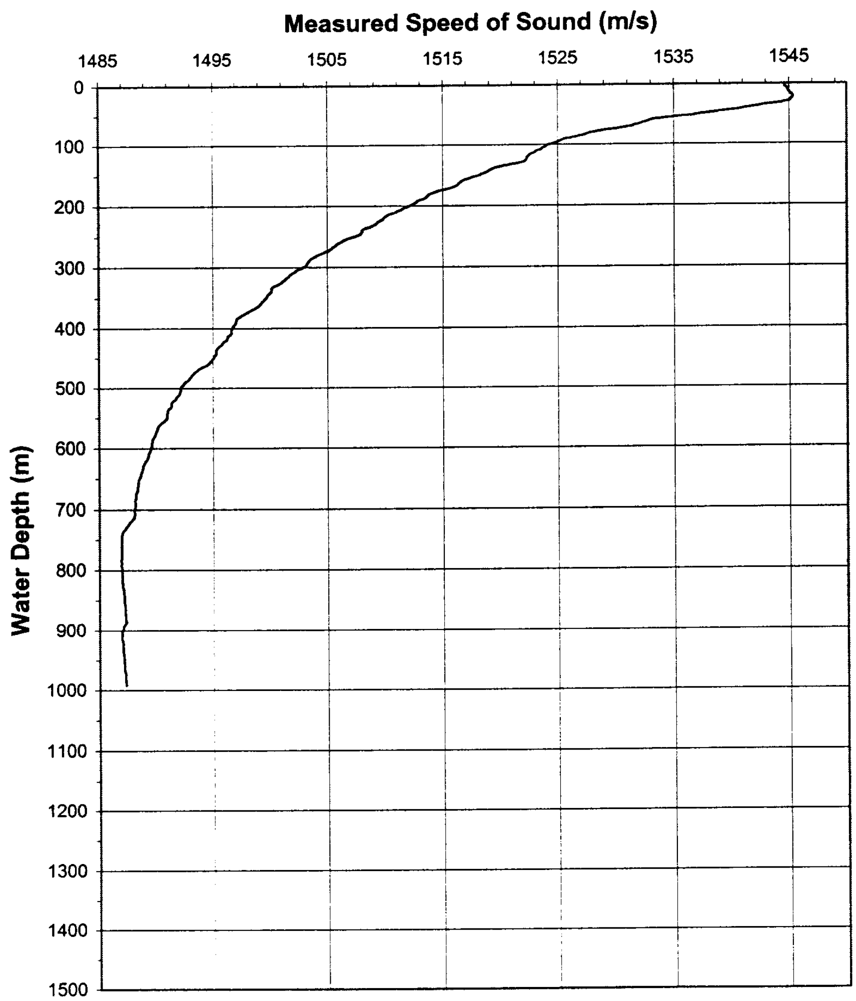
Vessel: *M/V Pacific Horizon*
Profile: 2380\010705b
05-July-01 19:00 (UTC)
X = 1,829,967.58'
Y = 9,976,105.31'
Water depth: 1,005 meters (3,297 feet)

Continental Shelf Associates, Inc.
Block 516, Garden Banks Area
Sound Velocity Profile

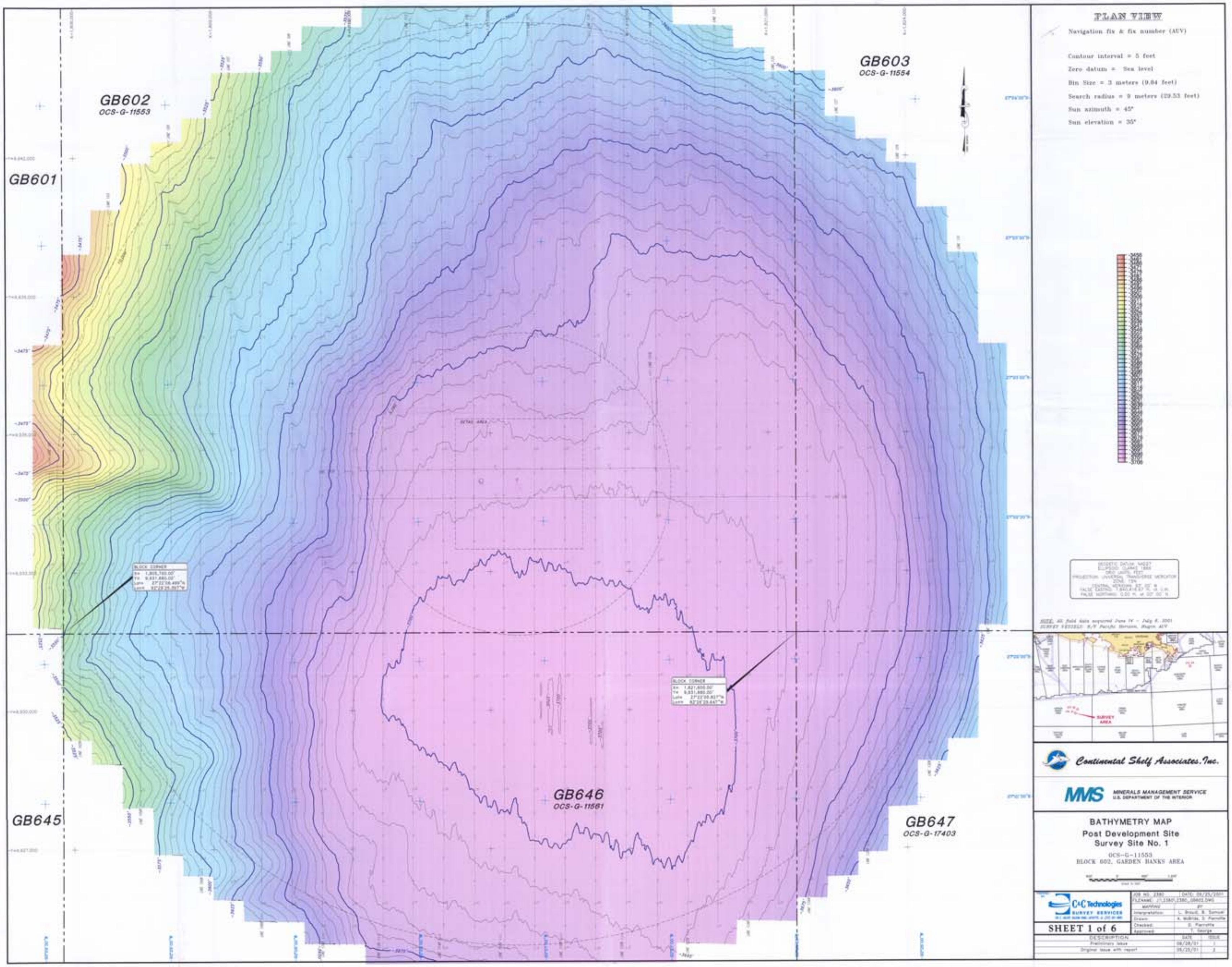


Vessel: *M/V Pacific Horizon*
Profile: 2380\010706a
06-July-01 10:02 (UTC)
X = 1,839,868.93'
Y = 9,971,552.23'
Water depth: 989 meters (3,240 feet)

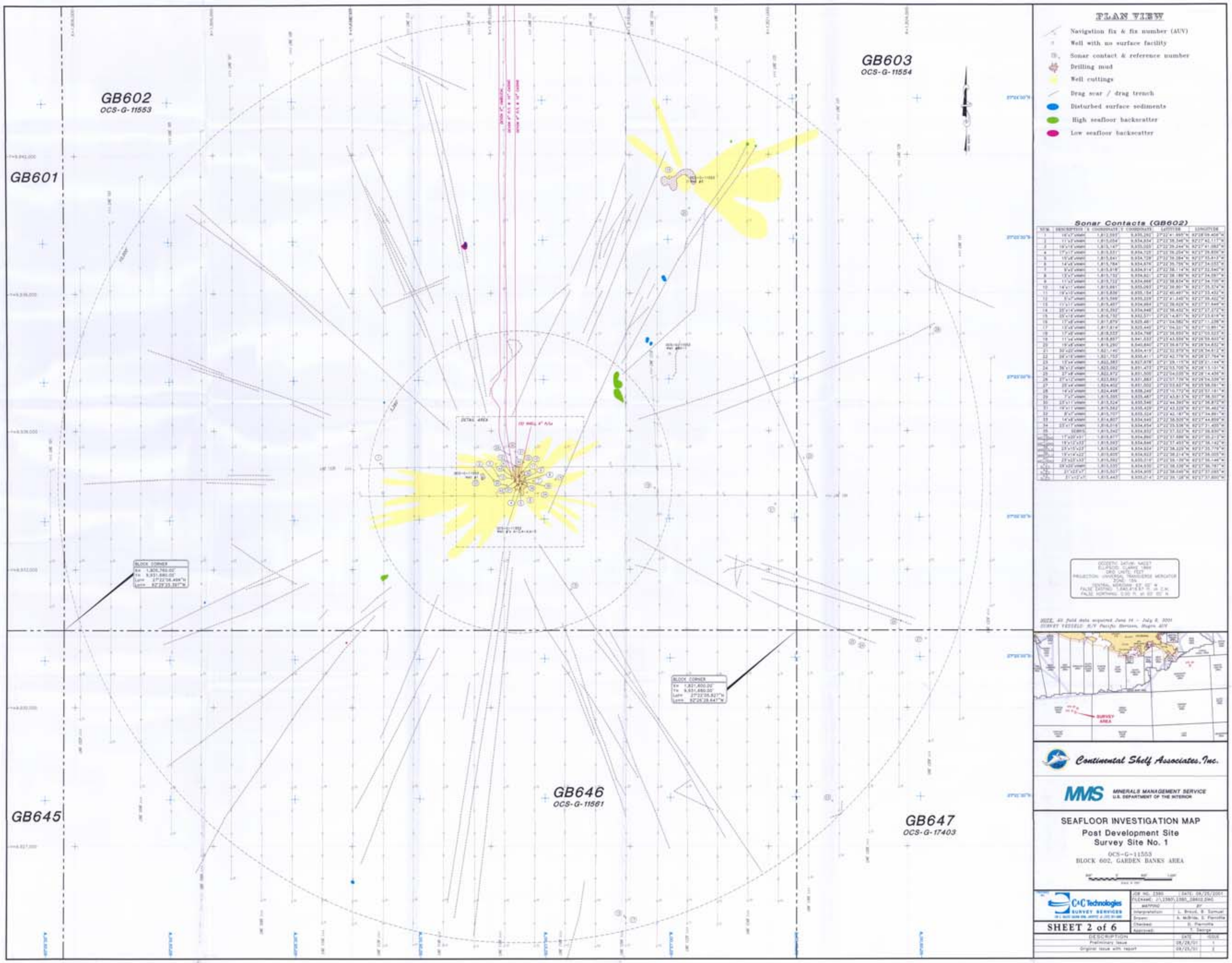
Continental Shelf Associates, Inc.
Block 472, Garden Banks Area
Sound Velocity Profile

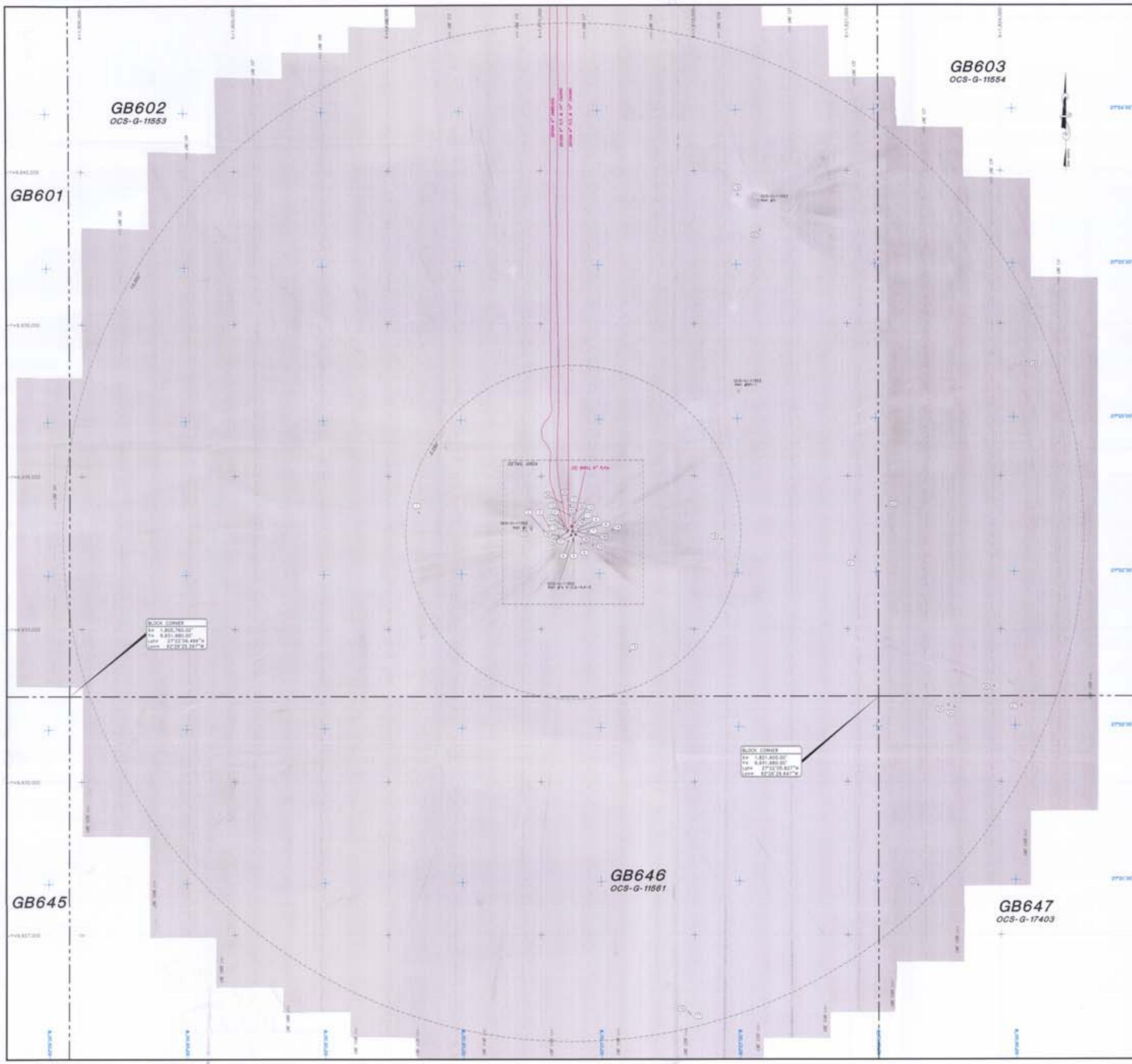


Vessel: *M/V Pacific Horizon*
Profile: 2380\010707a
07-July-01 20:10 (UTC)
X = 1,851,073.17'
Y = 9,979,682.72'
Water depth: 992 meters (3,254 feet)



GB602
OCS-G-11553
GB603
OCS-G-11554
GB601
GB645
GB646
OCS-G-11561
GB647
OCS-G-17403
PLAN VIEW
Navigation fix & fix number (AUV)
Contour interval = 5 feet
Zero datum = Sea level
Bin Size = 3 meters (9.84 feet)
Search radius = 9 meters (29.53 feet)
Sun azimuth = 45°
Sun elevation = 35°
SURVEY AREA
Continental Shelf Associates, Inc.
MMS
MINERALS MANAGEMENT SERVICE
U.S. DEPARTMENT OF THE INTERIOR
BATHYMETRY MAP
Post Development Site
Survey Site No. 1
OCS-G-11553
BLOCK 602, GARDEN BANKS AREA
C&C Technologies
SURVEY SERVICES
SHEET 1 of 6


GB601
GB602
OCS-G-11553
GB603
OCS-G-11554
GB645
GB646
OCS-G-11561
GB647
OCS-G-17403
PLAN VIEW
Navigation fix & fix number (AUV)
Well with no surface facility
Sonar contact & reference number
Drilling mud
Well cuttings
Drag scar / drag trench
Disturbed surface sediments
High seafloor backscatter
Low seafloor backscatter
Sonar Contacts (GB602)
SURVEY AREA
Continental Shelf Associates, Inc.
MMS
MINERALS MANAGEMENT SERVICE
U.S. DEPARTMENT OF THE INTERIOR
SEAFLOOR INVESTIGATION MAP
Post Development Site
Survey Site No. 1
OCS-G-11553
BLOCK 602, GARDEN BANKS AREA
C&C Technologies
SURVEY SERVICES
SHEET 2 of 6
Interpretation: L. Broud, B. Samuel
Drawn: A. McBride, E. Pierotti
Checked: E. Pierotti
Approved: T. George
DESCRIPTION
Preliminary Issue
Original issue with report



PLAN VIEW

Well with no surface facility

Sonar contact & reference number

Dark returns represent high seafloor backscatter

Bin size = 1.5 meters (4.92 feet)

Sonar Contacts (GB602)

NUM	DESCRIPTION	X COORDINATE	Y COORDINATE	LATITUDE	LONGITUDE
1	16'x7' x[illegible]	1,812,593'	9,836,292'	27°22'41.995"N	92°28'09.405"W
2	11'x3' x[illegible]	1,815,054'	9,834,934'	27°22'38.346"N	92°27'42.117"W
3	18'x16' x[illegible]	1,815,147'	9,835,025'	27°22'39.244"N	92°27'41.083"W
4	17'x17' x[illegible]	1,815,331'	9,834,725'	27°22'36.254"N	92°27'38.835"W
5	15'x8' x[illegible]	1,815,641'	9,834,726'	27°22'36.284"N	92°27'35.613"W
6	14'x8' x[illegible]	1,815,794'	9,834,679'	27°22'35.759"N	92°27'34.035"W
7	8'x3' x[illegible]	1,815,918'	9,834,914'	27°22'38.114"N	92°27'32.540"W
8	13'x7' x[illegible]	1,815,732'	9,834,921'	27°22'38.189"N	92°27'34.597"W
9	11'x3' x[illegible]	1,815,732'	9,834,966'	27°22'38.634"N	92°27'34.705"W
10	14'x11' x[illegible]	1,815,881'	9,835,093'	27°22'39.901"N	92°27'35.374"W
11	19'x10' x[illegible]	1,815,838'	9,835,154'	27°22'40.497"N	92°27'33.432"W
12	5'x7' x[illegible]	1,815,598'	9,835,228'	27°22'41.245"N	92°27'36.422"W
13	11'x11' x[illegible]	1,815,457'	9,834,994'	27°22'38.929"N	92°27'37.649"W
14	25'x14' x[illegible]	1,816,392'	9,834,948'	27°22'38.432"N	92°27'27.272"W
15	25'x16' x[illegible]	1,816,732'	9,832,371'	27°22'14.871"N	92°27'23.619"W
16	17'x8' x[illegible]	1,817,879'	9,825,481'	27°21'04.382"N	92°27'11.238"W
17	13'x6' x[illegible]	1,817,914'	9,825,449'	27°21'04.221"N	92°27'10.891"W
18	17'x8' x[illegible]	1,818,533'	9,834,768'	27°22'36.551"N	92°27'03.523"W
19	11'x4' x[illegible]	1,818,857'	9,841,533'	27°23'43.559"N	92°26'59.603"W
20	19'x8' x[illegible]	1,819,290'	9,840,840'	27°23'36.673"N	92°26'54.852"W
21	30'x20' x[illegible]	1,821,140'	9,834,416'	27°22'32.979"N	92°26'34.612"W
22	28'x16' x[illegible]	1,821,755'	9,835,411'	27°22'42.779"N	92°26'27.794"W
23	13'x4' x[illegible]	1,822,380'	9,827,978'	27°21'29.115"N	92°26'21.146"W
24	35'x12' x[illegible]	1,823,092'	9,831,473'	27°22'03.705"N	92°26'13.101"W
25	27'x8' x[illegible]	1,822,972'	9,831,500'	27°22'04.035"N	92°26'14.438"W
26	27'x11' x[illegible]	1,823,880'	9,831,885'	27°22'07.739"N	92°26'04.538"W
27	25'x4' x[illegible]	1,824,402'	9,831,502'	27°22'03.837"N	92°25'58.881"W
28	14'x7' x[illegible]	1,824,409'	9,838,249'	27°23'10.772"N	92°25'57.161"W
29	7'x7' x[illegible]	1,815,395'	9,835,487'	27°22'43.815"N	92°27'38.507"W
30	23'x11' x[illegible]	1,815,524'	9,835,348'	27°22'44.395"N	92°27'36.872"W
31	16'x11' x[illegible]	1,815,582'	9,835,426'	27°22'43.229"N	92°27'36.462"W
32	8'x7' x[illegible]	1,815,707'	9,835,324'	27°22'42.187"N	92°27'34.881"W
33	14'x8' x[illegible]	1,814,807'	9,834,949'	27°22'38.505"N	92°27'44.856"W
34	23'x17' x[illegible]	1,816,019'	9,834,654'	27°22'35.535"N	92°27'31.405"W
35	DEBRIS	1,815,542'	9,834,632'	27°22'37.333"N	92°27'36.830"W
[illegible]	17'x20'x31'	1,815,477'	9,834,800'	27°22'37.588"N	92°27'35.313"W
[illegible]	15'x12'x33'	1,815,593'	9,834,846'	27°22'37.451"N	92°27'36.142"W
[illegible]	22'x13'x22'	1,815,628'	9,834,928'	27°22'38.329"N	92°27'35.779"W
[illegible]	19'x14'x22'	1,815,600'	9,834,937'	27°22'38.214"N	92°27'36.000"W
[illegible]	33'x23'x33'	1,815,582'	9,835,018'	27°22'39.133"N	92°27'36.146"W
[illegible]	28'x20' x[illegible]	1,815,533'	9,834,933'	27°22'38.338"N	92°27'36.797"W
[illegible]	21'x33'x7'	1,815,507'	9,834,905'	27°22'38.045"N	92°27'37.095"W
[illegible]	31'x12'x7'	1,815,447'	9,835,014'	27°22'39.128"N	92°27'37.800"W

GEODETIC DATUM: NAD27
ELLIPSOID: CLARKE 1866
GRID UNITS: FEET
PROJECTION: UNIVERSAL TRANSVERSE MERCATOR
ZONE: 15N
CENTRAL MERIDIAN: 93° 00' W
FALSE EASTING: 1,640,416.67 ft. at C.M.
FALSE NORTHING: 0.00 ft. at 00° 00' N

NOTE: All field data acquired June 14 – July 8, 2001
SURVEY VESSELS: R/V Pacific Horizon, Hugin AUV

Continental Shelf Associates, Inc.

MMS MINERALS MANAGEMENT SERVICE
U.S. DEPARTMENT OF THE INTERIOR

SONAR MOSAIC MAP
Post Development Site
Survey Site No. 1

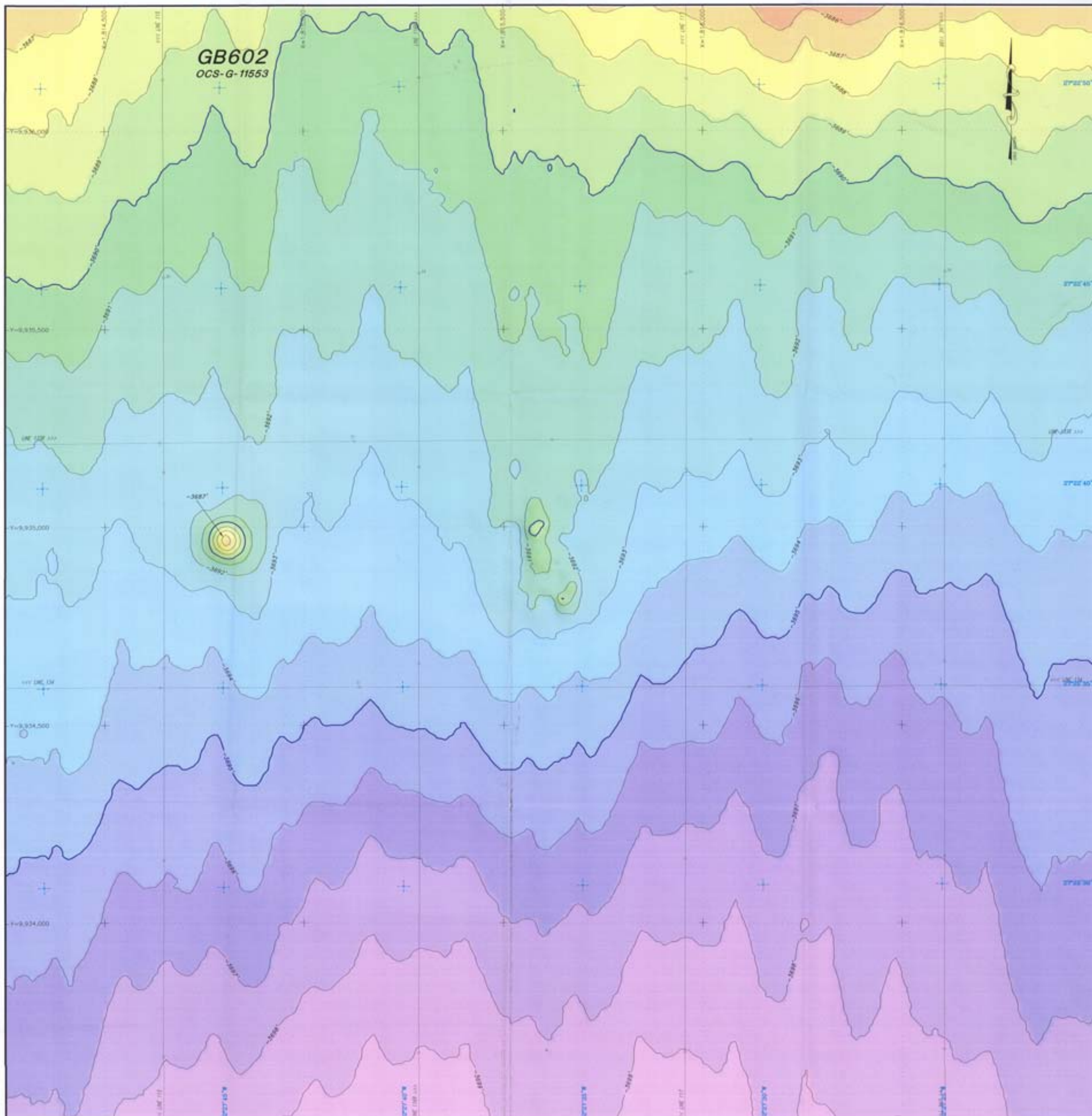
OCS-G-11553
BLOCK 602, GARDEN BANKS AREA

C&C Technologies
SURVEY SERVICES

SHEET 3 of 6

JOB NO. 2380	DATE: 09/25/2001
FILENAME: J:\2380\2380_GB602.DWG	
MAPPING	BY
Interpretation:	L. Brood, B. Samuel
Drawn:	A. McAfee, D. Pierotta
Checked:	D. Pierotta
Approved:	T. George

DESCRIPTION	DATE	ISSUE
Preliminary issue	08/28/01	1
Original issue with report	09/25/01	2



PLAN VIEW

Navigation fix & fix number (AUV)
Contour interval = 1 foot
Zero datum = Sea level
Bin size = 3 meters (9.84 feet)
Search radius = 9 meters (29.5 feet)
Sun azimuth = 45°
Sun elevation = 35°

GEODETIC DATUM: NAD27
ELLIPSOID: CLARKE 1866
GRID UNITS: FEET
PROJECTION: UNIVERSAL TRANSVERSE MERCATOR
ZONE: 15N
CENTRAL MERIDIAN: 93° 00' W
FALSE EASTING: 1,640,416.67 ft. at C.M.
FALSE NORTHING: 0.00 ft. at 00° 00' N

NOTE: All field data acquired June 14 – July 8, 2001
SURVEY VESSELS: R/V Pacific Horizon, Hugin AUV

Continental Shelf Associates, Inc.

MMS MINERALS MANAGEMENT SERVICE
U.S. DEPARTMENT OF THE INTERIOR

DETAIL BATHYMETRY MAP

Post Development Site
Survey Site No. 1

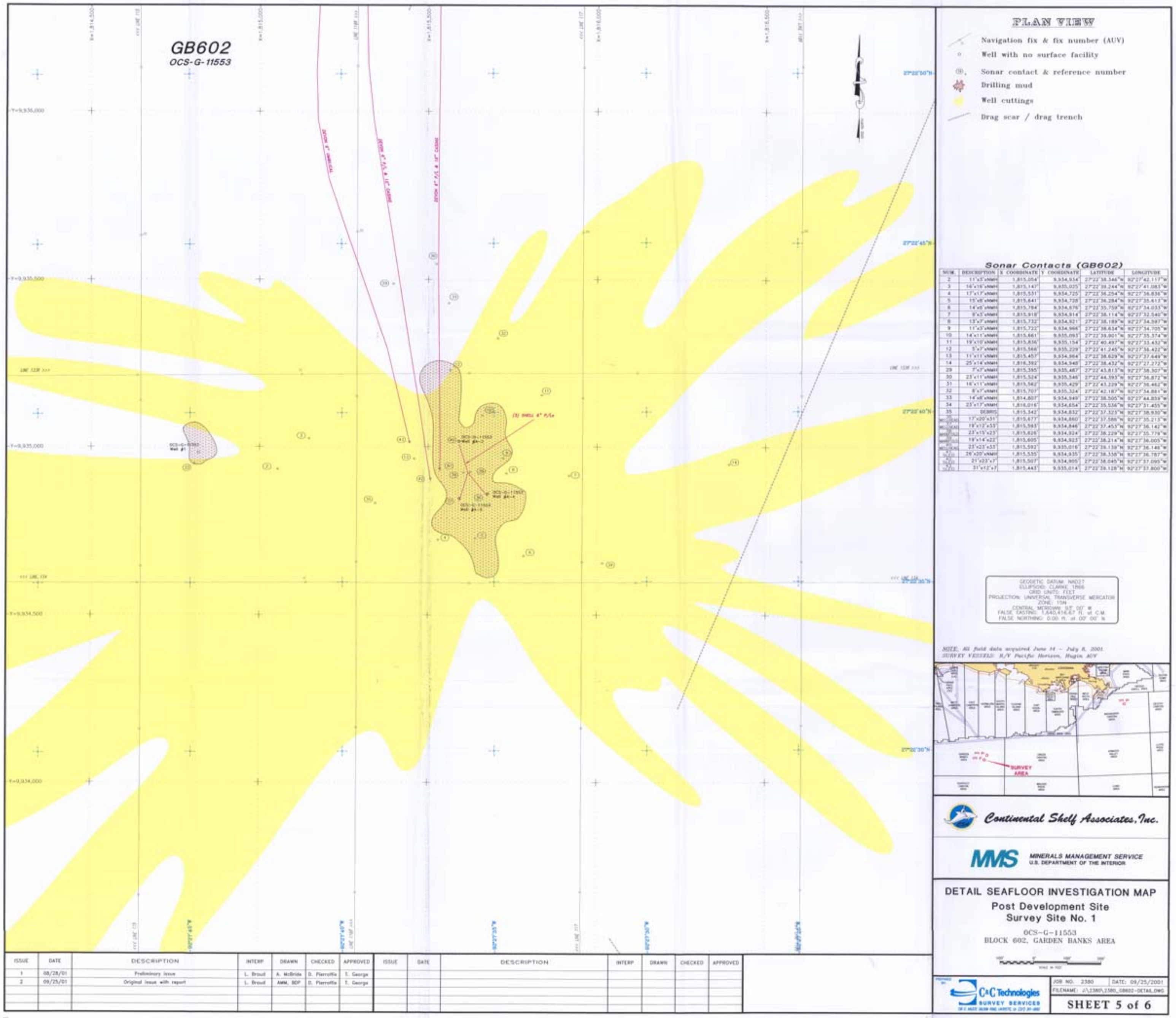
OCS-G-11553
BLOCK 602, GARDEN BANKS AREA

PREPARED BY C&C Technologies SURVEY SERVICES

JOB NO. 2380	DATE: 09/25/2001
FILENAME: J:\2380\2380_GB602-DETAIL.DWG	

SHEET 4 of 6

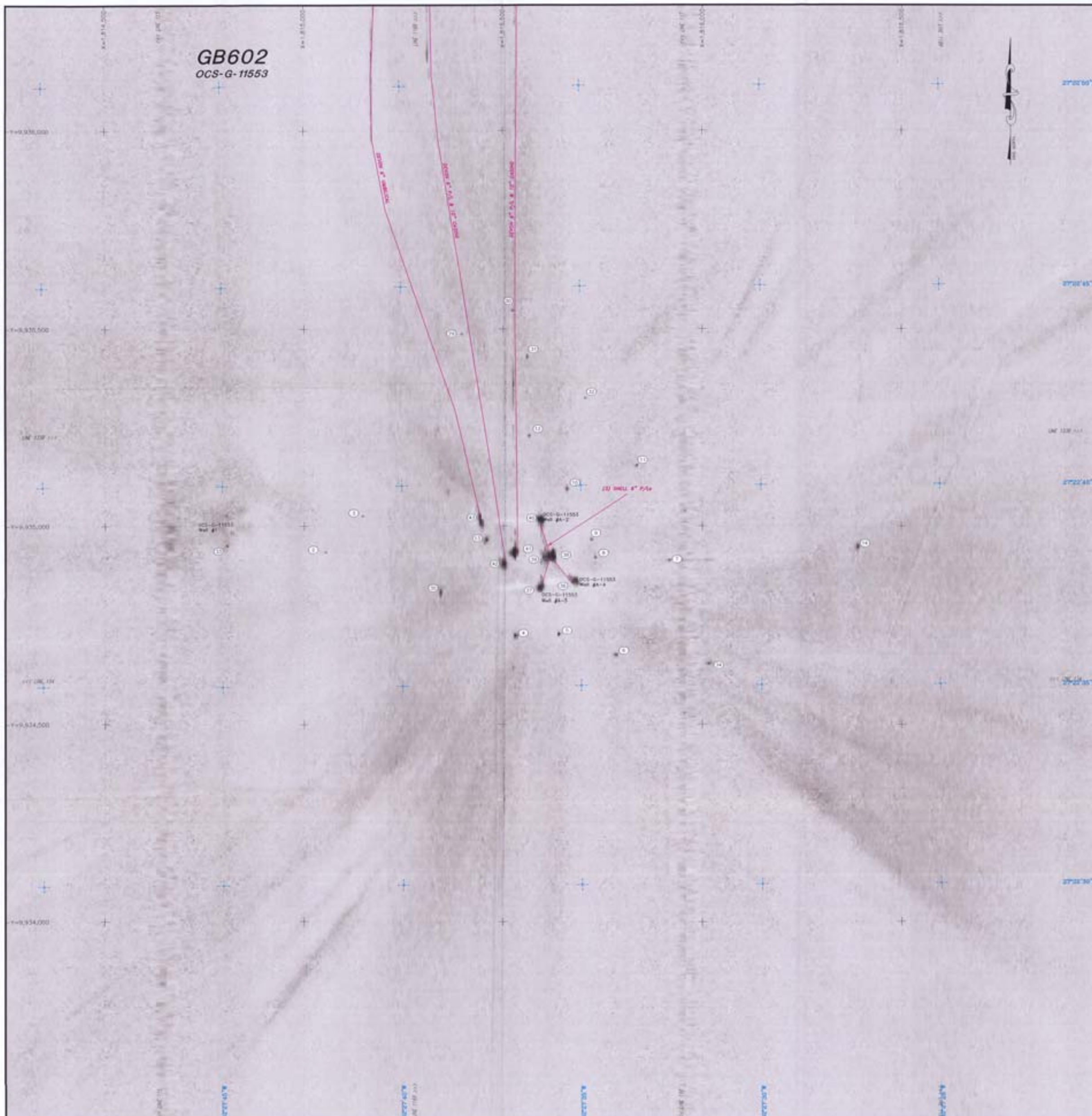
ISSUE	DATE	DESCRIPTION	INTERP	DRAWN	CHECKED	APPROVED	ISSUE	DATE	DESCRIPTION	INTERP	DRAWN	CHECKED	APPROVED
1	08/28/01	Preliminary Issue	L. Broud	A. McBride	D. Pierrottie	T. George							
2	09/25/01	Original issue with report	L. Broud	AMM, BDP	D. Pierrottie	T. George							



Sonar Contacts (GB602)

NUM.	DESCRIPTION	X COORDINATE	Y COORDINATE	LATITUDE	LONGITUDE
2	11'x5'xNMH	1,815,054'	9,934,934'	27°22'38.346"N	92°27'42.117"W
3	16'x16'xNMH	1,815,147'	9,935,025'	27°22'39.244"N	92°27'41.083"W
4	17'x17'xNMH	1,815,531'	9,934,725'	27°22'36.254"N	92°27'36.836"W
5	15'x8'xNMH	1,815,641'	9,934,728'	27°22'36.284"N	92°27'35.613"W
6	14'x6'xNMH	1,815,784'	9,934,676'	27°22'35.759"N	92°27'34.033"W
7	8'x5'xNMH	1,815,918'	9,934,914'	27°22'38.114"N	92°27'32.540"W
8	13'x7'xNMH	1,815,732'	9,934,921'	27°22'38.189"N	92°27'34.597"W
9	11'x3'xNMH	1,815,722'	9,934,966'	27°22'38.634"N	92°27'34.705"W
10	14'x11'xNMH	1,815,661'	9,935,093'	27°22'39.901"N	92°27'35.374"W
11	19'x10'xNMH	1,815,836'	9,935,154'	27°22'40.497"N	92°27'33.432"W
12	5'x7'xNMH	1,815,566'	9,935,229'	27°22'41.245"N	92°27'36.422"W
13	11'x11'xNMH	1,815,457'	9,934,964'	27°22'38.629"N	92°27'37.649"W
14	25'x14'xNMH	1,816,392'	9,934,948'	27°22'38.432"N	92°27'27.272"W
29	7'x7'xNMH	1,815,395'	9,935,487'	27°22'43.813"N	92°27'38.307"W
30	23'x11'xNMH	1,815,524'	9,935,546'	27°22'44.393"N	92°27'36.872"W
31	16'x11'xNMH	1,815,562'	9,935,429'	27°22'43.229"N	92°27'36.462"W
32	8'x7'xNMH	1,815,707'	9,935,324'	27°22'42.187"N	92°27'34.861"W
33	14'x8'xNMH	1,814,807'	9,934,949'	27°22'38.505"N	92°27'44.859"W
34	23'x17'xNMH	1,816,016'	9,934,654'	27°22'35.536"N	92°27'31.455"W
35	DEBRIS	1,815,342'	9,934,832'	27°22'37.325"N	92°27'38.930"W
[illegible] WELLHEAD	17'x20'x31'	1,815,677'	9,934,860'	27°22'37.588"N	92°27'35.213"W
[illegible] WELLHEAD	19'x12'x33'	1,815,593'	9,934,846'	27°22'37.453"N	92°27'36.142"W
[illegible]	23'x15'x23'	1,815,626'	9,934,924'	27°22'38.229"N	92°27'35.779"W
[illegible]	19'x14'x22'	1,815,605'	9,934,923'	27°22'38.214"N	92°27'36.005"W
[illegible] WELLHEAD	23'x23'x33'	1,815,592'	9,935,016'	27°22'39.139"N	92°27'36.148"W
[illegible] SKID	26'x20'xNMH	1,815,535'	9,934,935'	27°22'38.338"N	92°27'36.787"W
[illegible] SKID	21'x23'x7'	1,815,507'	9,934,905'	27°22'38.045"N	92°27'37.095"W
[illegible] SKID	31'x12'x7'	1,815,443'	9,935,014'	27°22'39.128"N	92°27'37.800"W

ISSUE	DATE	DESCRIPTION	INTERP	DRAWN	CHECKED	APPROVED
1	08/28/01	Preliminary issue	L. Broud	A. McBride	D. Pierrotte	T. George
2	09/25/01	Original issue with report	L. Broud	AMM, BDP	D. Pierrotte	T. George



PLAN VIEW

- Well with no surface facility
- Sonar contact & reference number
- Dark returns represent high seafloor backscatter
- Bin size = 0.5 meters (1.64 feet)

Sonar Contacts (GB602)

NUM.	DESCRIPTION	X COORDINATE	Y COORDINATE	LATITUDE	LONGITUDE
2	11'x5'xNMH	1,815,054'	9,934,934'	27°22'38.346"N	92°27'42.117"W
3	16'x16'xNMH	1,815,147'	9,935,025'	27°22'39.244"N	92°27'41.083"W
4	17'x17'xNMH	1,815,531'	9,934,725'	27°22'36.254"N	92°27'36.836"W
5	15'x8'xNMH	1,815,641'	9,934,728'	27°22'36.284"N	92°27'35.613"W
6	14'x6'xNMH	1,815,784'	9,934,676'	27°22'35.759"N	92°27'34.033"W
7	9'x5'xNMH	1,815,918'	9,934,914'	27°22'38.114"N	92°27'32.540"W
8	13'x7'xNMH	1,815,732'	9,934,921'	27°22'38.189"N	92°27'34.597"W
9	11'x5'xNMH	1,815,722'	9,934,966'	27°22'38.634"N	92°27'34.705"W
10	14'x11'xNMH	1,815,661'	9,935,093'	27°22'39.901"N	92°27'35.374"W
11	19'x10'xNMH	1,815,836'	9,935,154'	27°22'40.497"N	92°27'33.432"W
12	5'x7'xNMH	1,815,566'	9,935,229'	27°22'41.245"N	92°27'36.422"W
13	11'x11'xNMH	1,815,457'	9,934,984'	27°22'38.629"N	92°27'37.649"W
14	25'x14'xNMH	1,816,392'	9,934,948'	27°22'38.432"N	92°27'27.272"W
29	7'x7'xNMH	1,815,395'	9,935,487'	27°22'43.813"N	92°27'38.307"W
30	23'x11'xNMH	1,815,524'	9,935,546'	27°22'44.393"N	92°27'36.873"W
31	16'x11'xNMH	1,815,562'	9,935,429'	27°22'43.229"N	92°27'36.462"W
32	8'x7'xNMH	1,815,707'	9,935,324'	27°22'42.187"N	92°27'34.881"W
33	14'x8'xNMH	1,814,807'	9,934,949'	27°22'38.505"N	92°27'44.859"W
34	23'x17'xNMH	1,816,016'	9,934,654'	27°22'35.536"N	92°27'31.455"W
35	DEBRIS	1,815,542'	9,934,832'	27°22'37.323"N	92°27'38.930"W
36 WELLHEAD	17'x20'x31'	1,815,677'	9,934,860'	27°22'37.586"N	92°27'35.213"W
37 WELLHEAD	19'x12'x33'	1,815,593'	9,934,846'	27°22'37.453"N	92°27'36.142"W
[illegible]	23'x15'x23'	1,815,626'	9,934,924'	27°22'38.229"N	92°27'35.779"W
[illegible]	19'x14'x22'	1,815,605'	9,934,923'	27°22'38.214"N	92°27'36.005"W
[illegible] WELLHEAD	23'x23'x33'	1,815,592'	9,935,016'	27°22'39.139"N	92°27'36.146"W
[illegible] SLED	26'x20'xNMH	1,815,535'	9,934,935'	27°22'38.338"N	92°27'36.787"W
[illegible] SLED	21'x23'x7'	1,815,507'	9,934,905'	27°22'38.045"N	92°27'37.095"W
[illegible] SLED	31'x12'x7'	1,815,443'	9,935,014'	27°22'39.128"N	92°27'37.800"W

GEODETIC DATUM: NAD27
ELLIPSOID: CLARKE 1866
GRID UNITS: FEET
PROJECTION: UNIVERSAL TRANSVERSE MERCATOR
ZONE: 15N
CENTRAL MERIDIAN: 93° 00' W
FALSE EASTING: 1,640,416.67 ft. at C.M.
FALSE NORTHING: 0.00 ft. at 00° 00' N

NOTE: All field data acquired June 14 – July 8, 2001
SURVEY VESSELS: R/V Pacific Horizon, Hugin AUV

Continental Shelf Associates, Inc.

MMS MINERALS MANAGEMENT SERVICE
U.S. DEPARTMENT OF THE INTERIOR

DETAIL SONAR MOSAIC MAP
Post Development Site
Survey Site No. 1

OCS-G-11553
BLOCK 602, GARDEN BANKS AREA

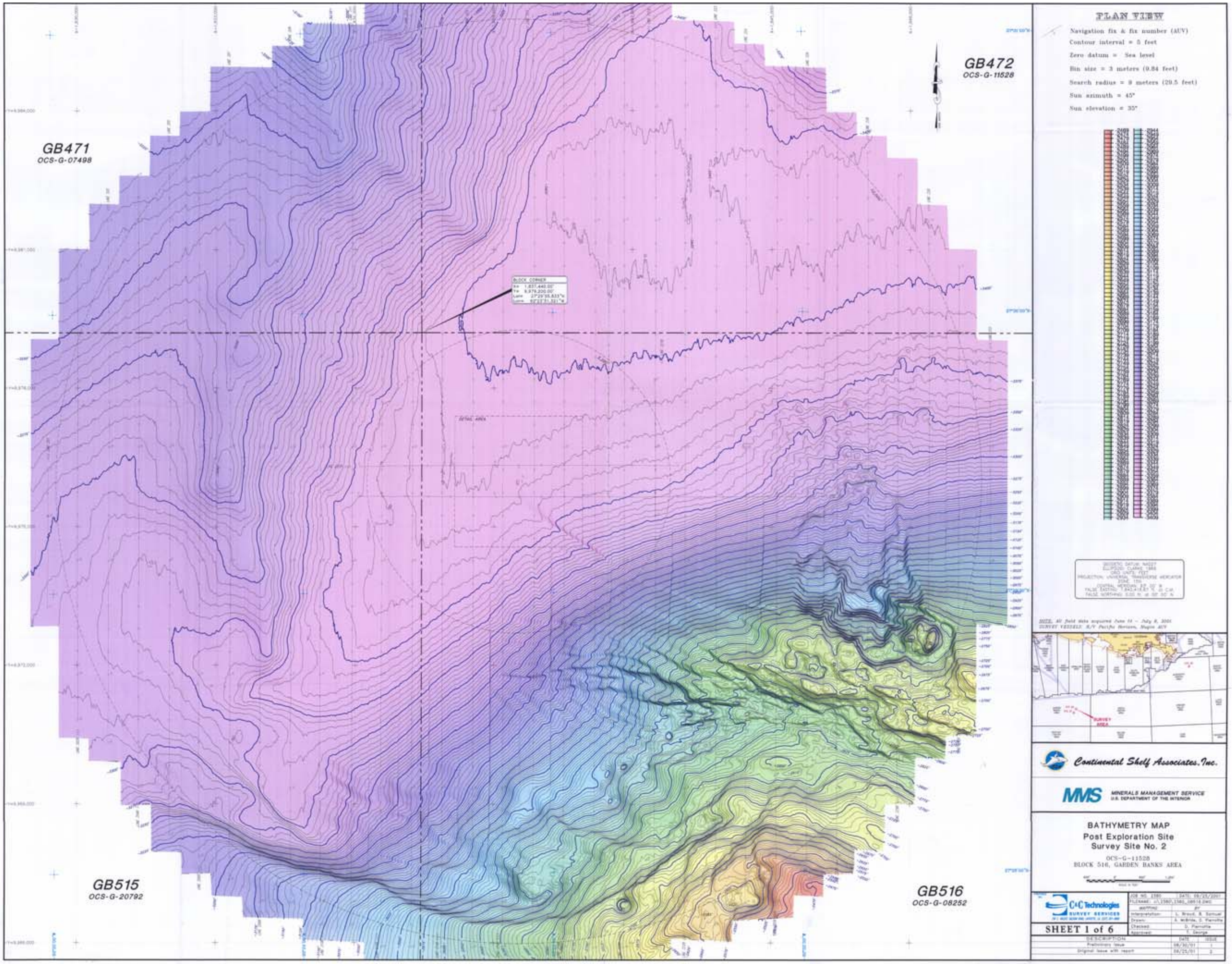
PREPARED BY: C&C Technologies SURVEY SERVICES

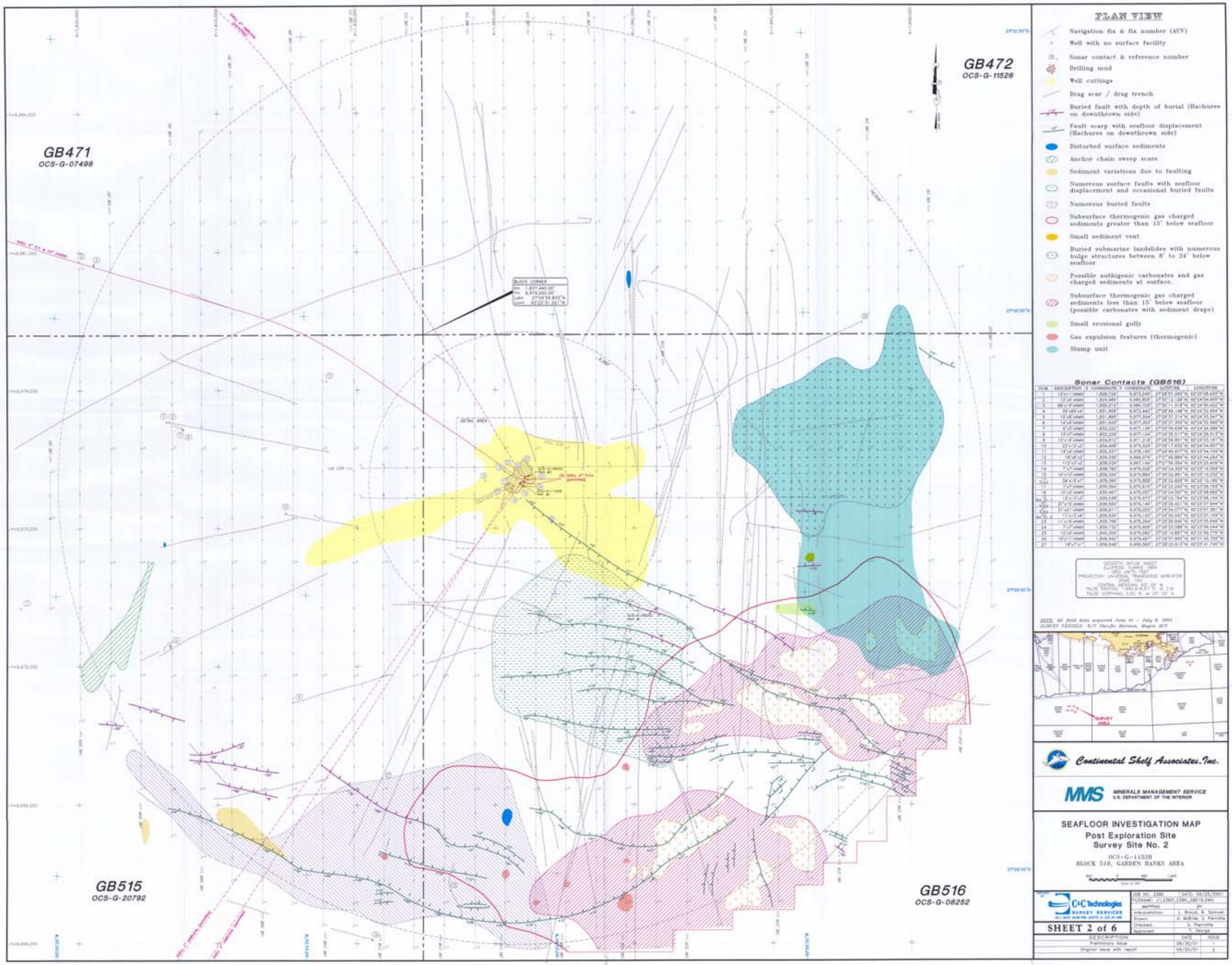
JOB NO. 2380 | DATE: 09/25/2001
FILENAME: J:\2380\2380_GB602-DETAIL.DWG

SHEET 6 of 6

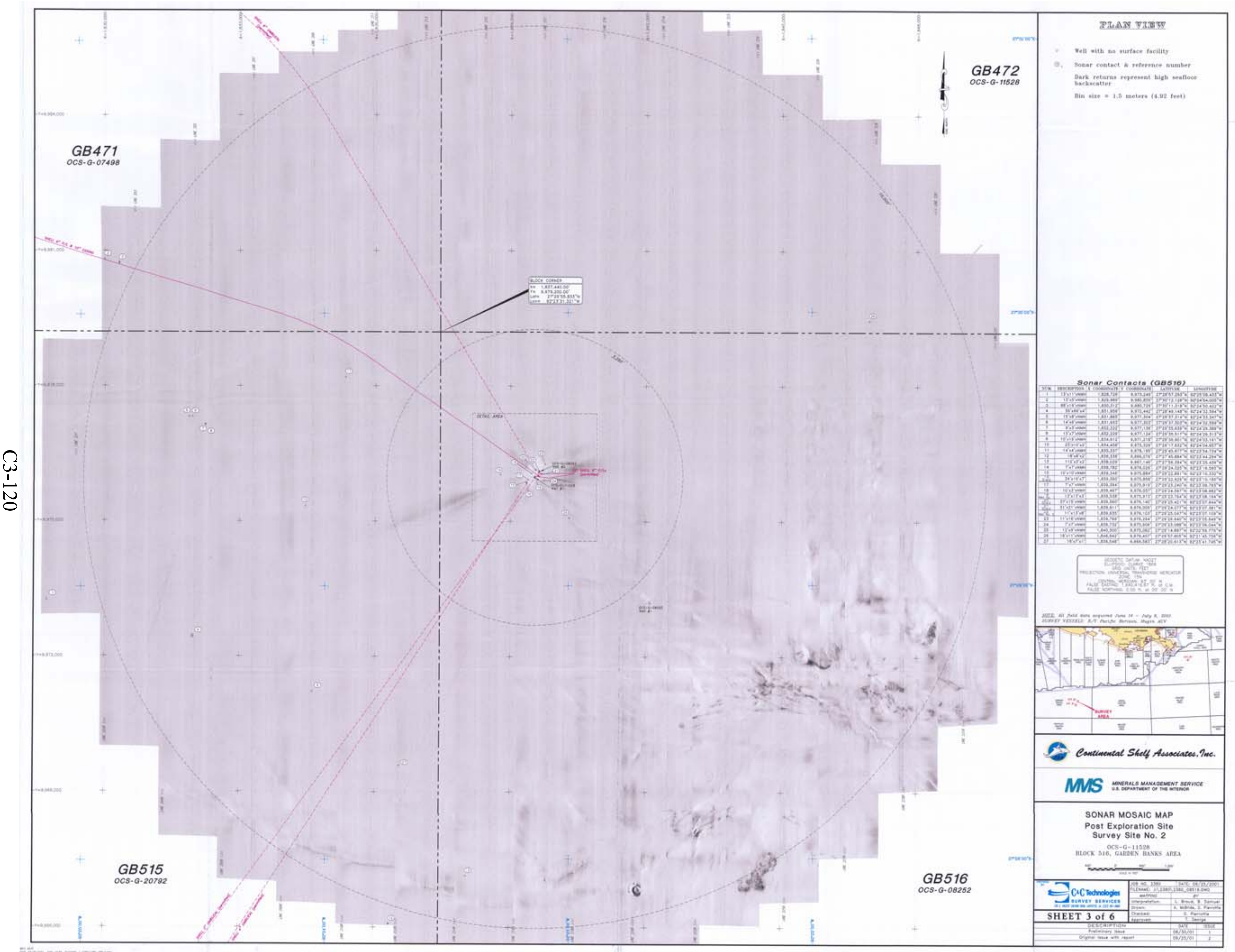
ISSUE	DATE	DESCRIPTION	INTERP	DRAWN	CHECKED	APPROVED	ISSUE	DATE	DESCRIPTION	INTERP	DRAWN	CHECKED	APPROVED
1	08/28/01	Preliminary issue	L. Broud	A. McBride	D. Pierrottie	T. George							
2	09/25/01	Original issue with report	L. Broud	AMM, BDF	D. Pierrottie	T. George							

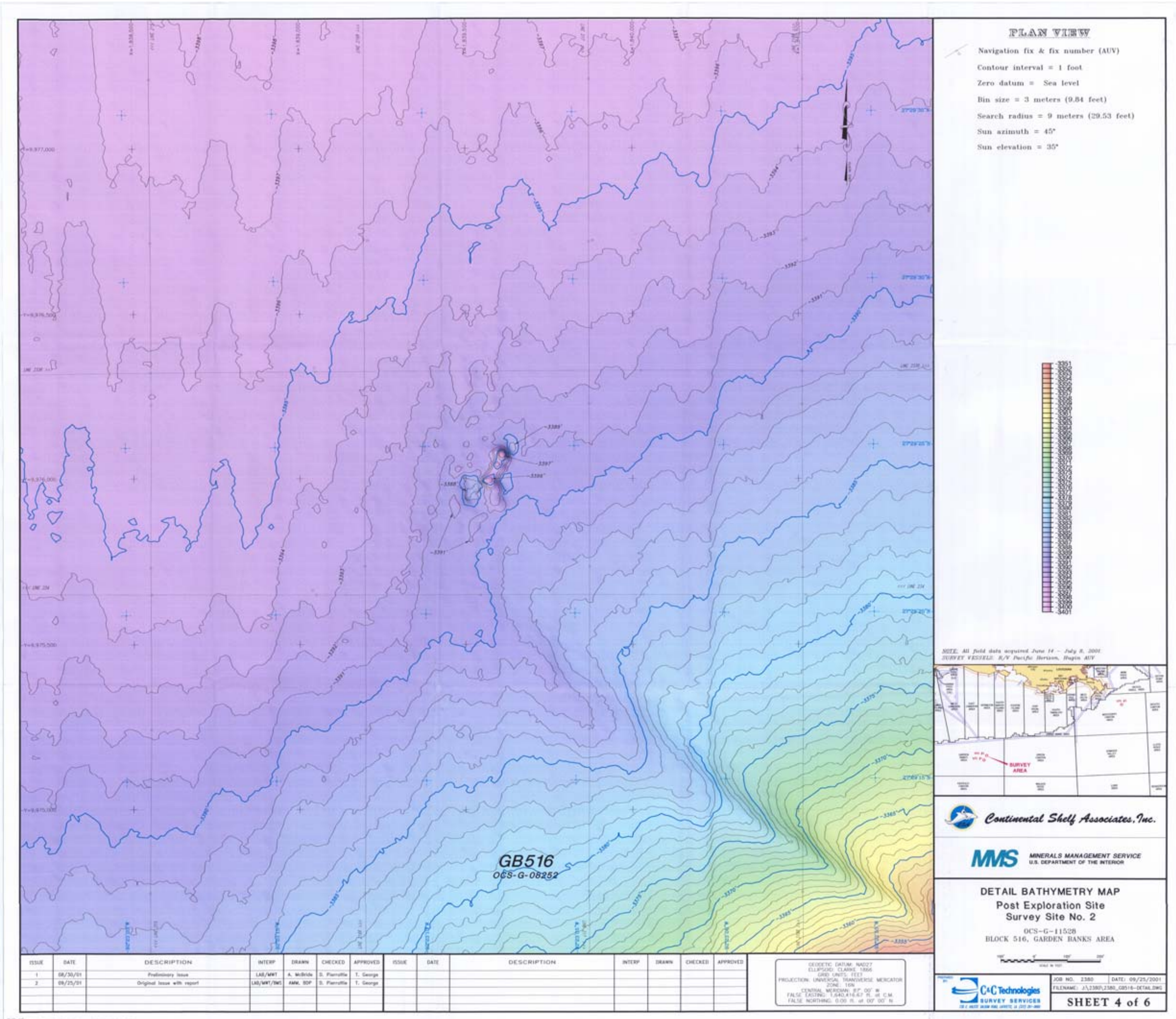
C3-118

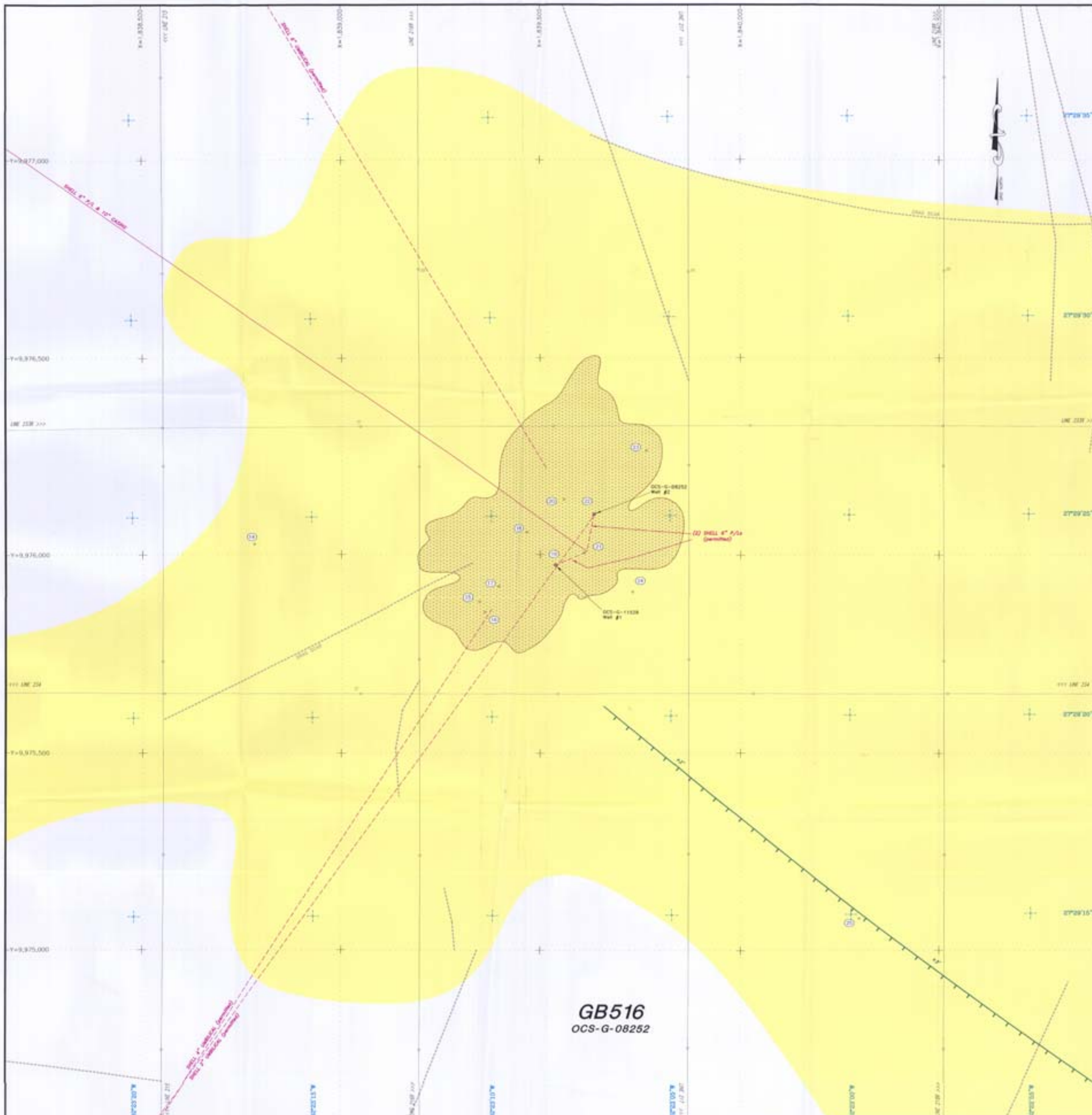

GB471
OCS-G-07498
GB472
OCS-G-11528
GB515
OCS-G-20792
GB516
OCS-G-08252
PLAN VIEW
Navigation fix & fix number (AUV)
Contour interval = 5 feet
Zero datum = Sea level
Bin size = 3 meters (9.84 feet)
Search radius = 9 meters (29.5 feet)
Sun azimuth = 45°
Sun elevation = 35°
Continental Shelf Associates, Inc.
MMS
MINERALS MANAGEMENT SERVICE
U.S. DEPARTMENT OF THE INTERIOR
BATHYMETRY MAP
Post Exploration Site
Survey Site No. 2
OCS-G-11528
BLOCK 516, GARDEN BANKS AREA
C&C Technologies
SURVEY SERVICES
SHEET 1 of 6
DESCRIPTION
Preliminary Issue
Original Issue with report



GB472
OCS-G-11528
GB471
OCS-G-07498
GB515
OCS-G-20792
GB516
OCS-G-08252
PLAN VIEW
Navigation fix & fix number (AUV)
Well with no surface facility
Sonar contact & reference number
Drilling mud
Well cuttings
Drag scar / drag trench
Buried fault with depth of burial (Hachures on downthrown side)
Fault scarp with seafloor displacement (Hachures on downthrown side)
Disturbed surface sediments
Anchor chain sweep scars
Sediment variations due to faulting
Numerous surface faults with seafloor displacement and occasional buried faults
Numerous buried faults
Subsurface thermogenic gas charged sediments greater than 15' below seafloor
Small sediment vent
Buried submarine landslides with numerous bulge structures between 8' to 24' below seafloor
Possible authigenic carbonates and gas charged sediments at surface.
Subsurface thermogenic gas charged sediments less than 15' below seafloor (possible carbonates with sediment drape)
Small erosional gully
Gas expulsion features (thermogenic)
Slump unit
Sonar Contacts (GB516)
Continental Shelf Associates, Inc.
MMS
MINERALS MANAGEMENT SERVICE
U.S. DEPARTMENT OF THE INTERIOR
SEAFLOOR INVESTIGATION MAP
Post Exploration Site
Survey Site No. 2
OCS-G-11528
BLOCK 516, GARDEN BANKS AREA
C&C Technologies
SURVEY SERVICES
SHEET 2 of 6
DESCRIPTION
DATE
ISSUE


GB471
OCS-G-07498
GB472
OCS-G-11528
GB515
OCS-G-20792
GB516
OCS-G-08252
PLAN VIEW
Well with no surface facility
Sonar contact & reference number
Dark returns represent high seafloor backscatter
Bin size = 1.5 meters (4.92 feet)
Sonar Contacts (GB516)
NUM. DESCRIPTION X COORDINATE Y COORDINATE LATITUDE LONGITUDE
Continental Shelf Associates, Inc.
MMS MINERALS MANAGEMENT SERVICE
U.S. DEPARTMENT OF THE INTERIOR
SONAR MOSAIC MAP
Post Exploration Site
Survey Site No. 2
OCS-G-11528
BLOCK 516, GARDEN BANKS AREA
C&C Technologies
SURVEY SERVICES
SHEET 3 of 6
DESCRIPTION DATE ISSUE
Preliminary Issue
Original issue with report


PLAN VIEW
Navigation fix & fix number (AUV)
Contour interval = 1 foot
Zero datum = Sea level
Bin size = 3 meters (9.84 feet)
Search radius = 9 meters (29.53 feet)
Sun azimuth = 45°
Sun elevation = 35°
NOTE: All field data acquired June 14 – July 8, 2001
SURVEY VESSELS: R/V Pacific Horizon, Hugin AUV
SURVEY AREA
GB516
OCS-G-08252
Continental Shelf Associates, Inc.
MMS MINERALS MANAGEMENT SERVICE
U.S. DEPARTMENT OF THE INTERIOR
DETAIL BATHYMETRY MAP
Post Exploration Site
Survey Site No. 2
OCS-G-11528
BLOCK 516, GARDEN BANKS AREA
GEODETIC DATUM: NAD27
ELLIPSOID: CLARKE 1866
GRID UNITS: FEET
PROJECTION: UNIVERSAL TRANSVERSE MERCATOR
ZONE: 16N
CENTRAL MERIDIAN: 87° 00' W
FALSE EASTING: 1,640,416.67 ft. at C.M.
FALSE NORTHING: 0.00 ft. at 00° 00' N
ISSUE | DATE | DESCRIPTION | INTERP | DRAWN | CHECKED | APPROVED
1 | 08/30/01 | Preliminary issue | LAB/MWT | A. McBride | D. Pierrottie | T. George
2 | 09/25/01 | Original issue with report | LAB/MWT/DWS | AMM, BDP | D. Pierrottie | T. George
C&C Technologies SURVEY SERVICES
JOB NO. 2380
DATE: 09/25/2001
SHEET 4 of 6



PLAN VIEW

- Navigation fix & fix number (AUV)
- Well with no surface facility
- Sonar contact & reference number
- Drilling mud
- Well cuttings
- Drag scar / drag trench
- Fault scarp with seafloor displacement (Hachures on downthrown side)

Sonar Contacts (GB516)

NUM.	DESCRIPTION	X COORDINATE	Y COORDINATE	LATITUDE	LONGITUDE
14	7'x7'xNMH	1,838,782'	9,976,026'	27°29'24.325"N	92°23'16.593"W
15	10'x10'xNMH	1,839,346'	9,975,884'	27°29'22.891"N	92°23'10.332"W
16 [illegible]	34'x16'x7'	1,839,360'	9,975,858'	27°29'22.629"N	92°23'10.180"W
17	7'x7'xNMH	1,839,394'	9,975,919'	27°29'23.240"N	92°23'09.793"W
18	10'x3'xNMH	1,839,467'	9,976,057'	27°29'24.597"N	92°23'08.982"W
19 [illegible]	13'x13'x3'	1,839,538'	9,975,973'	27°29'23.764"N	92°23'08.194"W
20 [illegible]	37'x15'xNMH	1,839,560'	9,976,140'	27°29'25.421"N	92°23'07.944"W
21 [illegible]	31'x21'xNMH	1,839,611'	9,976,005'	27°29'24.077"N	92°23'07.381"W
22 [illegible]	11'x13'x8'	1,839,635'	9,976,103'	27°29'25.047"N	92°23'07.109"W
23	11'x16'xNMH	1,839,766'	9,976,264'	27°29'26.640"N	92°23'05.649"W
24	7'x7'xNMH	1,839,732'	9,975,906'	27°29'23.088"N	92°23'06.044"W
25	12'x9'xNMH	1,840,300'	9,975,082'	27°29'14.897"N	92°22'59.776"W

NOTE: All field data acquired June 14 – July 8, 2001
SURVEY VESSELS: R/V Pacific Horizon, Hugin AUV

Continental Shelf Associates, Inc.

MMS MINERALS MANAGEMENT SERVICE
U.S. DEPARTMENT OF THE INTERIOR

DETAIL SEAFLOOR INVESTIGATION MAP
Post Exploration Site
Survey Site No. 2

OCS-G-11528
BLOCK 516, GARDEN BANKS AREA

PREPARED BY: C&C Technologies SURVEY SERVICES

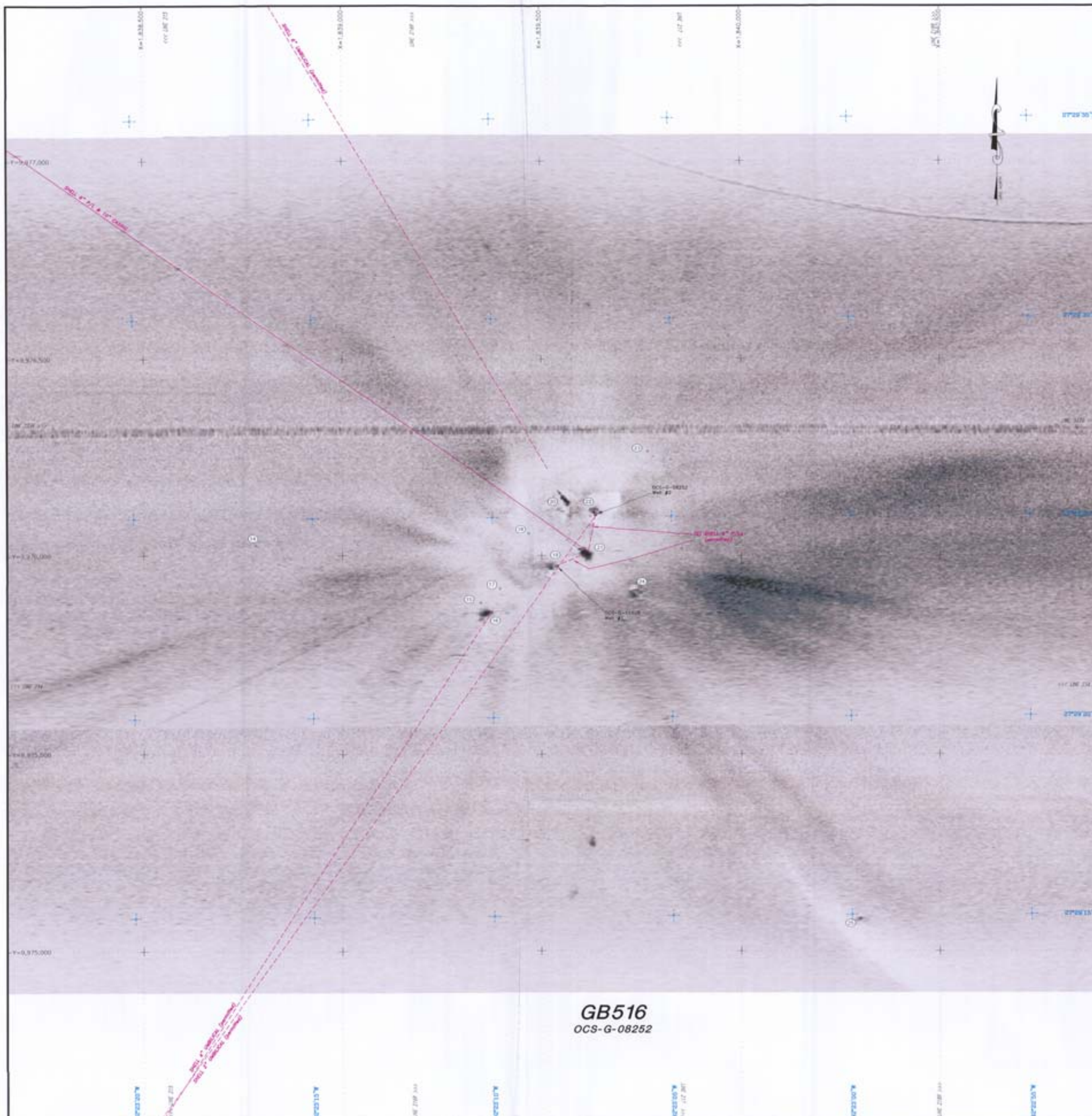
JOB NO. 2380 | DATE: 09/25/2001
FILENAME: J:\2380\2380_GB516-DETAIL.DWG

SHEET 5 of 6

ISSUE	DATE	DESCRIPTION	INTERP	DRAWN	CHECKED	APPROVED
1	08/30/01	Preliminary issue	LAB/WWT	A. McBride	D. Pierrottie	T. George
2	09/25/01	Original issue with report	LAB/WWT/SWS	AWM, SDP	D. Pierrottie	T. George

GEODETIC DATUM: NAD27
ELLIPSOID: CLARKE 1866
GRID UNITS: FEET
PROJECTION: UNIVERSAL TRANSVERSE MERCATOR
ZONE: 16N
CENTRAL MERIDIAN: 87° 00' W
FALSE EASTING: 1,640,416.67 ft. at C.M.
FALSE NORTHING: 0.00 ft. at 00° 00' N

C3-123



PLAN VIEW

- Well with no surface facility
- Sonar contact & reference number
- Dark returns represent high seafloor backscatter
- Bin size = 0.5 meters (1.64 feet)

Sonar Contacts (GB516)

NUM.	DESCRIPTION	X COORDINATE	Y COORDINATE	LATITUDE	LONGITUDE
14	7'x7'xNMH	1,838,782'	9,976,026'	27°29'24.325"N	92°23'16.593"W
15	10'x10'xNMH	1,839,546'	9,975,884'	27°29'22.891"N	92°23'10.332"W
16 Steel	34'x14'x7'	1,839,560'	9,975,858'	27°29'22.629"N	92°23'10.180"W
17	7'x7'xNMH	1,839,594'	9,975,919'	27°29'23.240"N	92°23'09.793"W
18	10'x3'xNMH	1,839,467'	9,976,057'	27°29'24.597"N	92°23'08.982"W
19 Well No. 1	13'x13'x3'	1,839,538'	9,975,973'	27°29'23.764"N	92°23'08.194"W
20 Steel	37'x15'xNMH	1,839,560'	9,976,140'	27°29'25.421"N	92°23'07.944"W
21 Steel	31'x21'xNMH	1,839,611'	9,976,005'	27°29'24.077"N	92°23'07.381"W
22 Well No. 2	11'x13'x8'	1,839,635'	9,976,103'	27°29'25.047"N	92°23'07.108"W
23	11'x16'xNMH	1,839,766'	9,976,264'	27°29'26.640"N	92°23'05.649"W
24	7'x7'xNMH	1,839,732'	9,975,906'	27°29'23.088"N	92°23'06.044"W
25	12'x9'xNMH	1,840,300'	9,975,082'	27°29'14.897"N	92°22'59.776"W

NOTE: All field data acquired June 14 – July 8, 2001
SURVEY VESSELS: R/V Pacific Horizon, Hugin AUV

Continental Shelf Associates, Inc.

MMS MINERALS MANAGEMENT SERVICE
U.S. DEPARTMENT OF THE INTERIOR

DETAIL SONAR MOSAIC MAP
Post Exploration Site
Survey Site No. 2

OCS-G-11528
BLOCK 516, GARDEN BANKS AREA

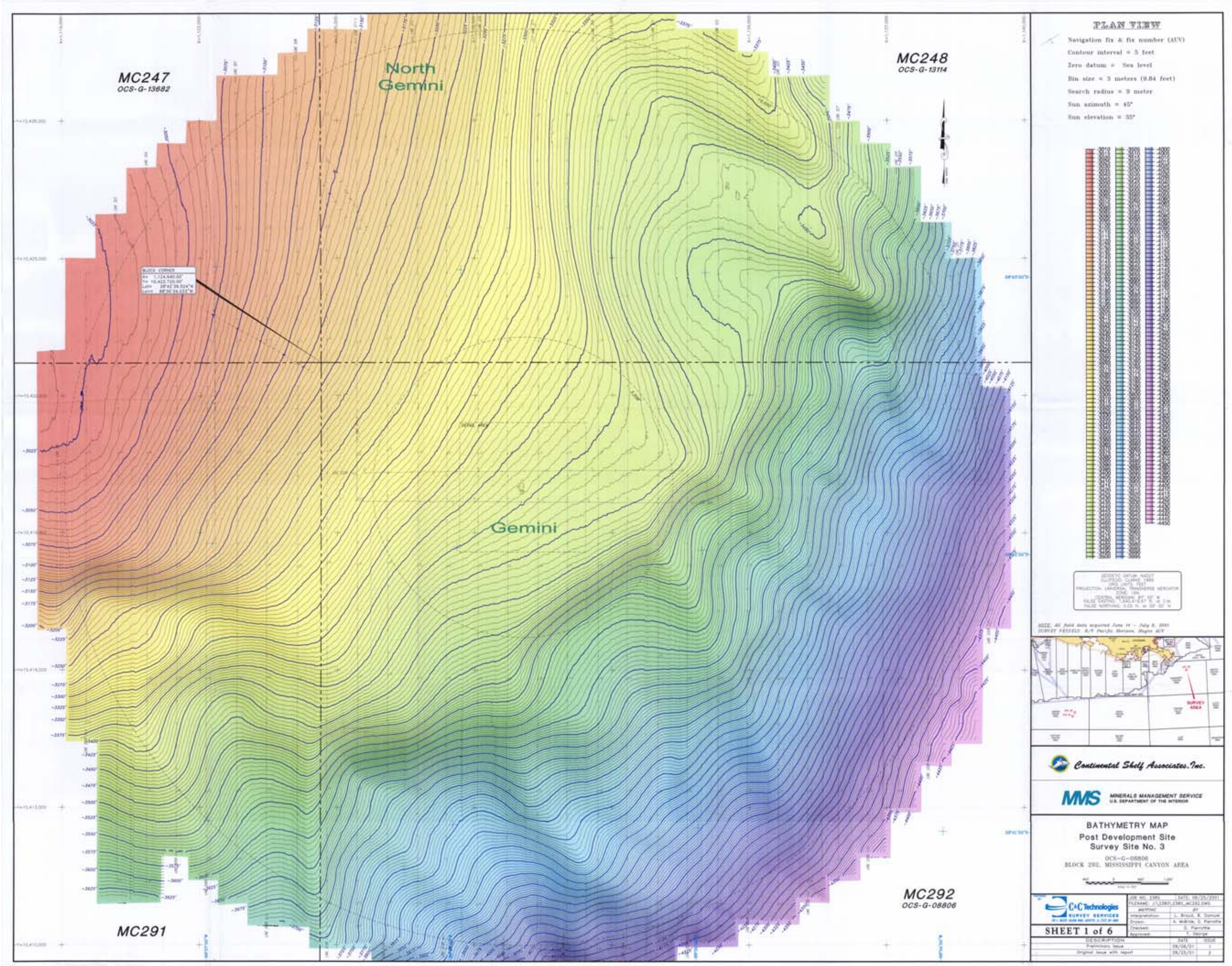
ISSUE	DATE	DESCRIPTION	INTERP	DRAWN	CHECKED	APPROVED
1	08/30/01	Preliminary Issue	LAB/WWT	A. McBride	D. Pierrottie	T. George
2	09/25/01	Original Issue with report	LAB/WWT/DWS	AMM, BDP	D. Pierrottie	T. George

GEODETIC DATUM: NAD27
ELLIPSOID: CLARKE 1866
GRID UNITS: FEET
PROJECTION: UNIVERSAL TRANSVERSE MERCATOR
ZONE: 16N
CENTRAL MERIDIAN: 87° 00' W
FALSE EASTING: 1,640,416.67 ft. at C.M.
FALSE NORTHING: 0.00 ft. at 00° 00' N

PREPARED BY C&C Technologies SURVEY SERVICES

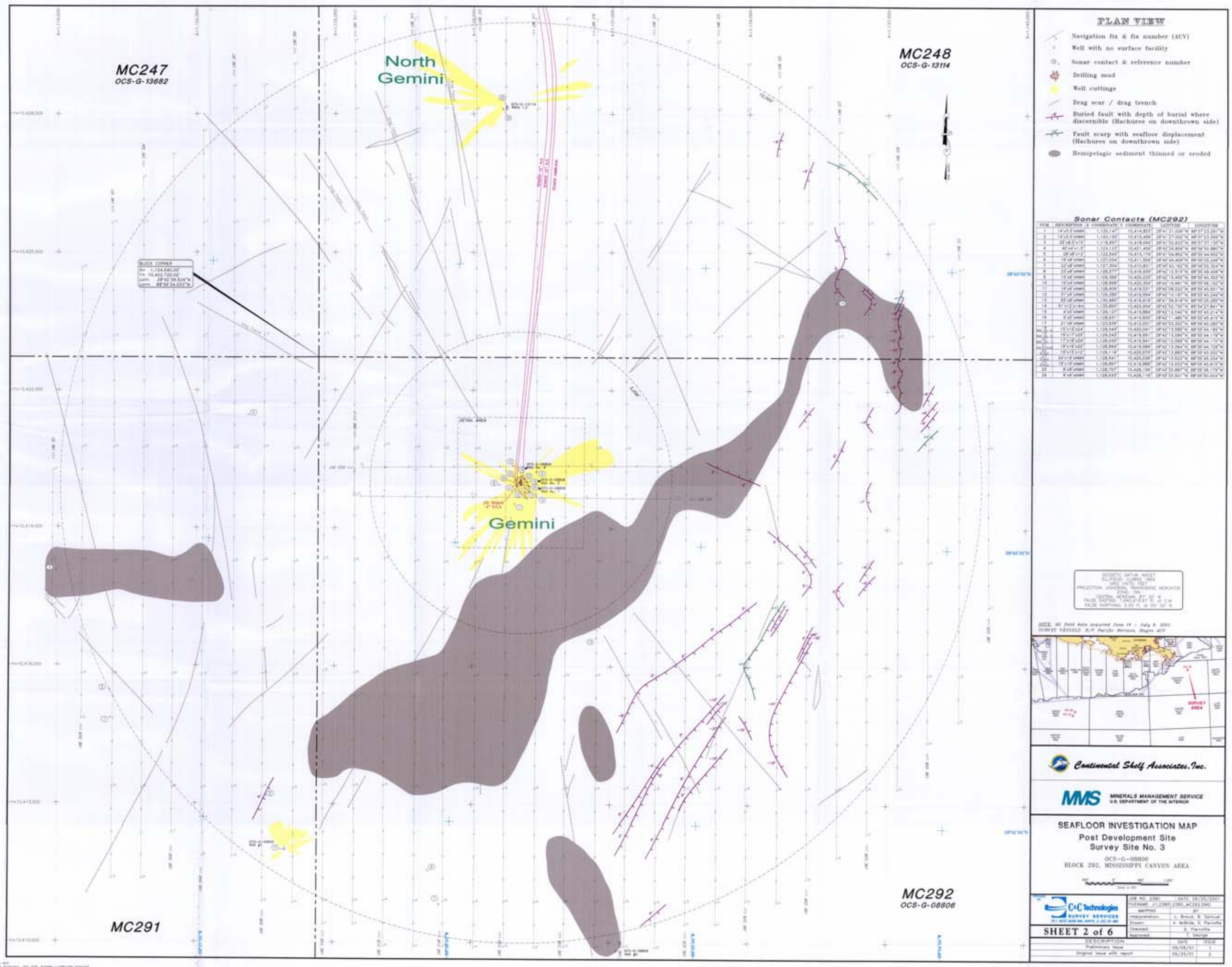
JOB NO. 2380 | DATE: 09/25/2001
FILENAME: J:\2380\2380_GB516-DETAIL.DWG

SHEET 6 of 6



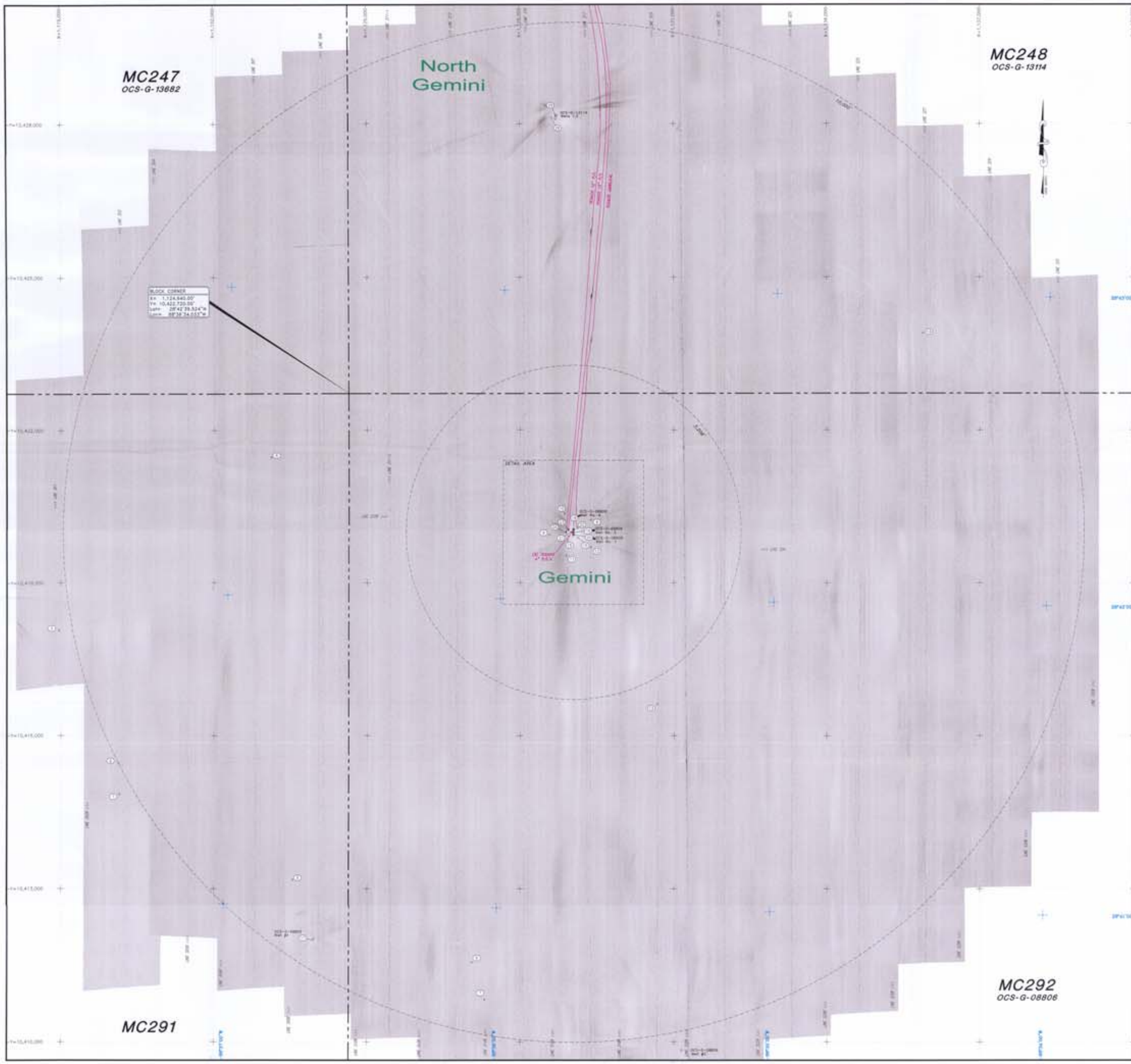
MC247
OCS-G-13682
North Gemini
MC248
OCS-G-13114
Gemini
MC291
MC292
OCS-G-08806
PLAN VIEW
Navigation fix & fix number (AUV)
Contour interval = 5 feet
Zero datum = Sea level
Bin size = 3 meters (9.84 feet)
Search radius = 9 meter
Sun azimuth = 45°
Sun elevation = 35°
SURVEY AREA
Continental Shelf Associates, Inc.
MMS MINERALS MANAGEMENT SERVICE
U.S. DEPARTMENT OF THE INTERIOR
BATHYMETRY MAP
Post Development Site
Survey Site No. 3
OCS-G-08806
BLOCK 292, MISSISSIPPI CANYON AREA
C&C Technologies
SURVEY SERVICES
SHEET 1 of 6
DESCRIPTION
Preliminary Issue
Original issue with report

C3-124



Sonar Contacts (MC292)

NUM.	DESCRIPTION	X COORDINATE	Y COORDINATE	LATITUDE	LONGITUDE
1	14'x3.5'xNMH	1,120,147'	10,414,817'	28°41'21.026"N	88°37'23.291"W
2	14'x3.5'xNMH	1,120,130'	10,415,456'	28°41'27.002"N	88°37'23.566"W
3	25'x8.5'x15'	1,118,857'	10,418,080'	28°41'52.423"N	88°37'37.131"W
4	40'x4'x1.5'	1,125,125'	10,421,456'	28°42'26.809"N	88°36'30.880"W
5	28'x6'x12'	1,123,545'	10,415,174'	28°41'24.862"N	88°36'44.902"W
6	16'x8'xNMH	1,127,054'	10,411,568'	28°40'48.409"N	88°36'05.246"W
7	22'x8'xNMH	1,127,304'	10,410,831'	28°40'41.162"N	88°36'02.524"W
8	23'x8'xNMH	1,128,577'	10,414,939'	28°41'12.515"N	88°35'49.408"W
9	13'x8'xNMH	1,128,886'	10,420,225'	28°42'15.455"N	88°35'40.352"W
10	18'x4'xNMH	1,128,868'	10,420,354'	28°42'16.661"N	88°35'46.162"W
11	19'x6'xNMH	1,128,808'	10,419,531'	28°42'08.522"N	88°35'45.651"W
12	51'x6'xNMH	1,129,789'	10,419,594'	28°42'10.197"N	88°35'40.246"W
13	83'x8'xNMH	1,130,880'	10,418,819'	28°41'59.918"N	88°35'25.285"W
14	51'x12'x14NMH	1,135,893'	10,423,904'	28°42'52.732"N	88°34'27.841"W
15	4'x5'xNMH	1,129,127'	10,419,884'	28°42'12.042"N	88°35'45.214"W
16	6'x7'xNMH	1,128,931'	10,419,830'	28°42'11.480"N	88°35'45.815"W
17	21'x9'xNMH	1,123,839'	10,412,000'	28°40'53.302"N	88°36'40.280"W
18	15'x10'x24'	1,129,043'	10,420,041'	28°42'13.585"N	88°35'44.185"W
19	19'x17'x25'	1,129,043'	10,419,991'	28°42'13.090"N	88°35'44.178"W
20	17'x18'x24'	1,129,043'	10,419,941'	28°42'12.595"N	88°35'44.172"W
21	19'x19'x22'	1,128,894'	10,419,988'	28°42'13.064"N	88°35'44.719"W
22	19'x15'x12'	1,129,119'	10,420,070'	28°42'13.865"N	88°35'43.332"W
23	24'x18'xNMH	1,128,941'	10,420,036'	28°42'13.523"N	88°35'45.534"W
24	19'x19'xNMH	1,128,897'	10,419,989'	28°42'13.053"N	88°35'45.815"W
25	8'x8'xNMH	1,128,707'	10,428,198'	28°43'33.887"N	88°35'49.179"W
26	9'x8'xNMH	1,128,833'	10,428,118'	28°43'33.301"N	88°35'50.004"W



PLAN VIEW

Well with no surface facility
Sonar contact & reference number
Dark returns represent high seafloor backscatter
Bin size = 1.5 meters (4.92 feet)

Sonar Contacts (MC292)

NUM.	DESCRIPTION	X COORDINATE	Y COORDINATE	LATITUDE	LONGITUDE
1	14'x3.5'xNMH	1,120,147'	10,414,853'	28°41'21.028"N	88°37'23.291"W
2	14'x3.5'xNMH	1,120,130'	10,415,459'	28°41'27.002"N	88°37'23.568"W
3	25'x8.2'x10'	1,118,907'	10,418,090'	28°41'52.822"N	88°37'37.170"W
4	40'x4'x1.3'	1,123,123'	10,421,459'	28°42'26.808"N	88°36'50.890"W
5	28'x8'x12'	1,123,543'	10,415,174'	28°41'24.862"N	88°36'44.902"W
6	19'x8'xNMH	1,127,354'	10,411,369'	28°40'46.409"N	88°36'03.246"W
7	22'x8'xNMH	1,127,354'	10,410,851'	28°40'42.192"N	88°36'03.324"W
8	27'x8'xNMH	1,128,877'	10,419,939'	28°42'12.315"N	88°35'46.409"W
9	15'x8'xNMH	1,129,386'	10,420,235'	28°42'15.455"N	88°35'40.363"W
10	16'x4'xNMH	1,128,898'	10,420,354'	28°42'16.661"N	88°35'46.192"W
11	19'x8'xNMH	1,128,806'	10,419,551'	28°42'08.522"N	88°35'45.651"W
12	31'x8'xNMH	1,129,389'	10,419,894'	28°42'10.187"N	88°35'40.249"W
13	85'x8'xNMH	1,130,660'	10,418,619'	28°41'59.919"N	88°35'25.285"W
14	31'x12'x14m	1,135,893'	10,423,804'	28°42'52.730"N	88°34'27.841"W
15	6'x5'xNMH	1,128,127'	10,419,884'	28°42'12.042"N	88°35'43.214"W
16	6'x5'xNMH	1,128,331'	10,419,835'	28°42'11.480"N	88°35'40.417"W
17	21'x9'xNMH	1,123,879'	10,413,201'	28°40'55.202"N	88°36'40.280"W
[illegible]	15'x15'x24'	1,129,043'	10,420,041'	28°42'13.585"N	88°35'44.185"W
[illegible]	16'x17'x25'	1,129,042'	10,419,891'	28°42'13.090"N	88°35'44.178"W
[illegible]	17'x18'x24'	1,129,043'	10,419,941'	28°42'12.595"N	88°35'44.170"W
[illegible]	19'x18'x12'	1,128,994'	10,419,989'	28°42'13.064"N	88°35'44.728"W
[illegible]	19'x13'x12'	1,129,119'	10,420,070'	28°42'13.883"N	88°35'43.332"W
[illegible]	34'x19'xNMH	1,128,941'	10,420,008'	28°42'13.523"N	88°35'45.334"W
[illegible]	19'x19'xNMH	1,128,897'	10,419,888'	28°42'13.053"N	88°35'45.815"W
25	9'x9'xNMH	1,126,707'	10,428,156'	28°43'33.887"N	88°35'46.179"W
26	9'x9'xNMH	1,126,432'	10,428,118'	28°43'33.001"N	88°35'50.004"W

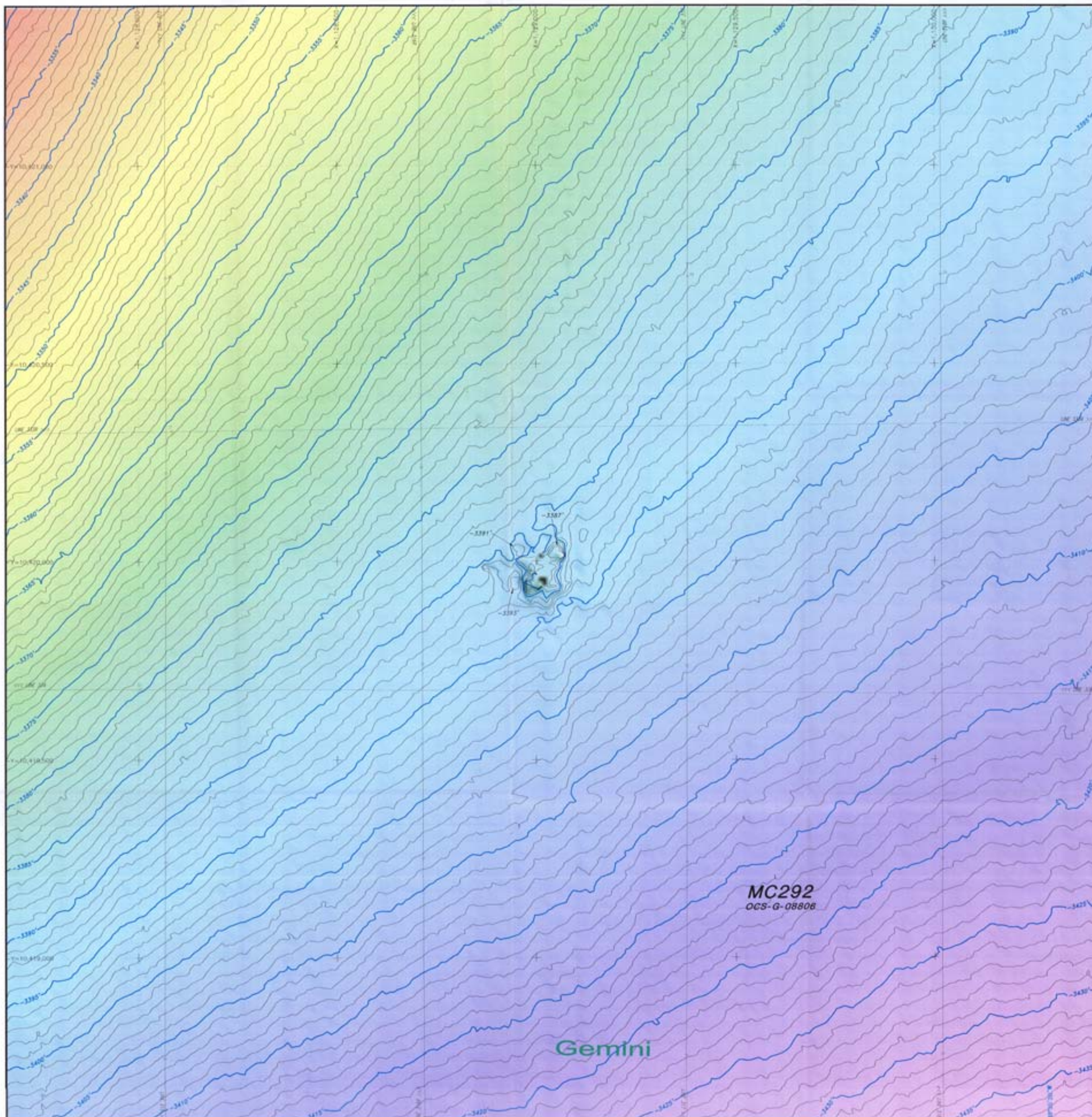
Continental Shelf Associates, Inc.

MMS MINERALS MANAGEMENT SERVICE
U.S. DEPARTMENT OF THE INTERIOR

SONAR MOSAIC MAP
Post Development Site
Survey Site No. 3
OCS-G-08806
BLOCK 292, MISSISSIPPI CANYON AREA

C&C Technologies
SURVEY SERVICES

SHEET 3 of 6



PLAN VIEW

Navigation fix & fix number (AUV)

Contour interval = 1 foot

Zero datum = Sea level

Bin size = 3 meters (9.84 feet)

Search radius = 9 meters (29.5 feet)

Sun azimuth = 45°

Sun elevation = 35°

NOTE: All field data acquired June 14 – July 8, 2001.
SURVEY VESSELS: R/V Pacific Horizon, Hugin AUV

Continental Shelf Associates, Inc.

MMS MINERALS MANAGEMENT SERVICE
U.S. DEPARTMENT OF THE INTERIOR

DETAIL BATHYMETRY MAP
Post Development Site
Survey Site No. 3

OCS-G-08806
BLOCK 292, MISSISSIPPI CANYON AREA

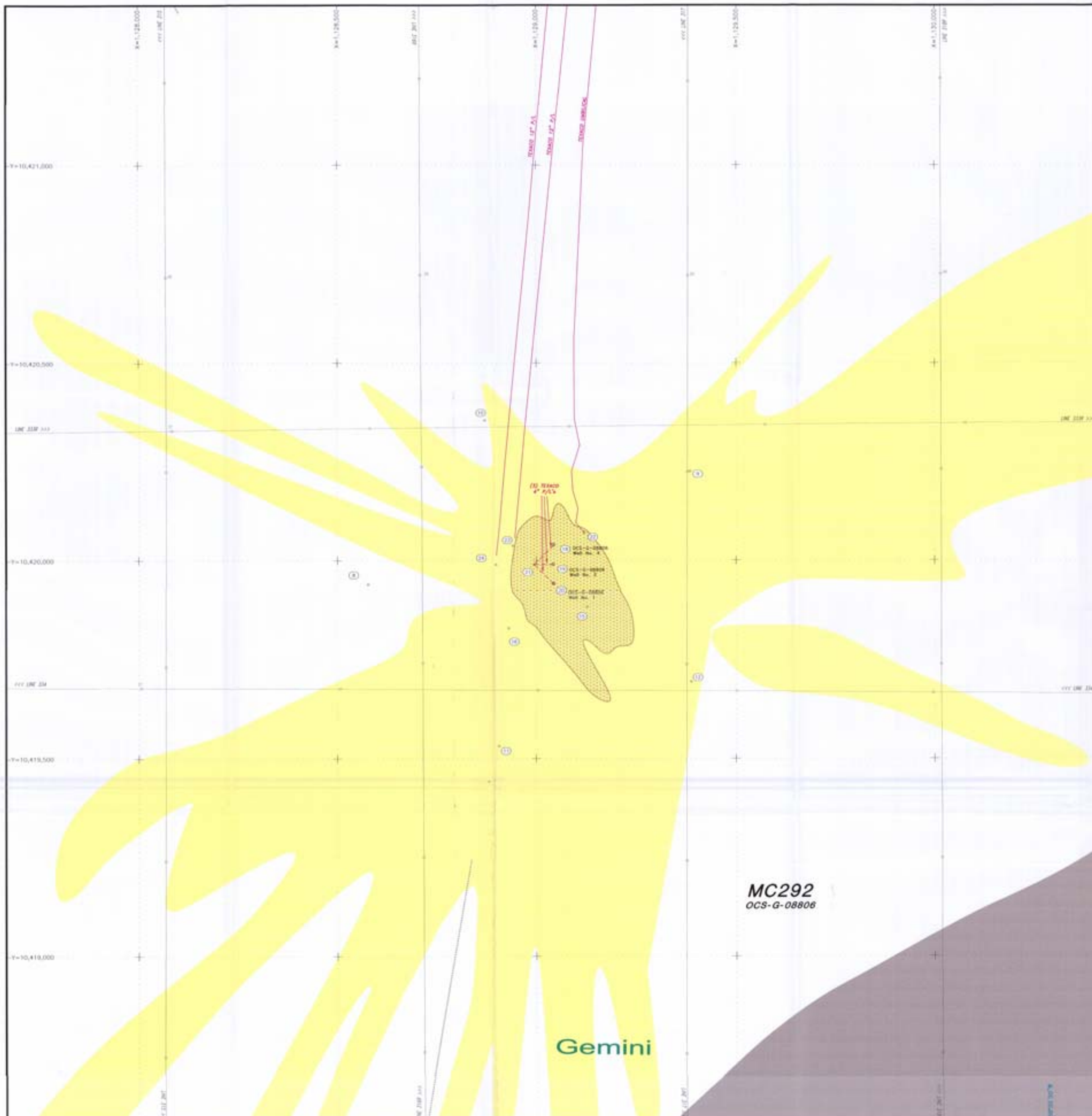
ISSUE	DATE	DESCRIPTION	INTERP	DRAWN	CHECKED	APPROVED	ISSUE	DATE	DESCRIPTION	INTERP	DRAWN	CHECKED	APPROVED
1	09/06/01	Preliminary issue	L. Broud	A. McBride	D. Pierrottie	T. George							
2	09/25/01	Original issue with report	LB, BMS	AMM, BDP	D. Pierrottie	T. George							

GEODETIC DATUM: NAD27
ELLIPSOID: CLARKE 1866
GRID UNITS: FEET
PROJECTION: UNIVERSAL TRANSVERSE MERCATOR
ZONE: 16N
CENTRAL MERIDIAN: 87° 00' W
FALSE EASTING: 1,640,416.67 ft. at C.M.
FALSE NORTHING: 0.00 ft. at 00° 00' N

PREPARED BY: C&C Technologies SURVEY SERVICES

JOB NO. 2380	DATE: 09/25/2001
FILENAME: J:\2380\2380_MC292-DETAIL.DWG	

SHEET 4 of 6



PLAN VIEW

- Navigation fix & fix number (AUV)
- Well with no surface facility
- Sonar contact & reference number
- Drilling mud
- Well cuttings
- Drag scar / drag trench
- Hemipelagic sediment thinned or eroded

Sonar Contacts (MC292)

NUM.	DESCRIPTION	X COORDINATE	Y COORDINATE	LATITUDE	LONGITUDE
8	23'x8'xNMH	1,128,577'	10,419,939'	28°42'12.515"N	88°35'49.406"W
9	15'x6'xNMH	1,129,386'	10,420,225'	28°42'15.455"N	88°35'40.363"W
10	16'x4'xNMH	1,128,868'	10,420,354'	28°42'16.661"N	88°35'46.192"W
11	19'x6'xNMH	1,128,906'	10,419,531'	28°42'08.522"N	88°35'45.651"W
12	31'x6'xNMH	1,129,389'	10,419,694'	28°42'10.197"N	88°35'40.249"W
13	4'x5'xNMH	1,129,127'	10,419,884'	28°42'12.042"N	88°35'43.214"W
16	6'x5'xNMH	1,128,931'	10,419,830'	28°42'11.480"N	88°35'45.415"W
18 Wel. No. [illegible]	15'x15'x24'	1,129,043'	10,420,041'	28°42'13.585"N	88°35'44.185"W
19 Wel. No. [illegible]	16'x17'x25'	1,129,043'	10,419,991'	28°42'13.090"N	88°35'44.178"W
20 Wel. No. [illegible]	17'x18'x24'	1,129,043'	10,419,941'	28°42'12.595"N	88°35'44.170"W
21 Wellhead	19'x19'x22'	1,128,994'	10,419,989'	28°42'13.064"N	88°35'44.728"W
22 Sled	19'x15'x12'	1,129,119'	10,420,070'	28°42'13.883"N	88°35'43.332"W
23 Sled	24'x19'xNMH	1,128,941'	10,420,036'	28°42'13.523"N	88°35'45.334"W
24 Sled	19'x19'xNMH	1,128,897'	10,419,989'	28°42'13.053"N	88°35'45.815"W

NOTE: All field data acquired June 14 – July 8, 2001
SURVEY VESSELS: R/V Pacific Horizon, Hugin AUV

SURVEY AREA

Continental Shelf Associates, Inc.

MMS MINERALS MANAGEMENT SERVICE
U.S. DEPARTMENT OF THE INTERIOR

DETAIL SEAFLOOR INVESTIGATION MAP
Post Development Site
Survey Site No. 3
OCS-G-08806
BLOCK 292, MISSISSIPPI CANYON AREA

SCALE IN FEET

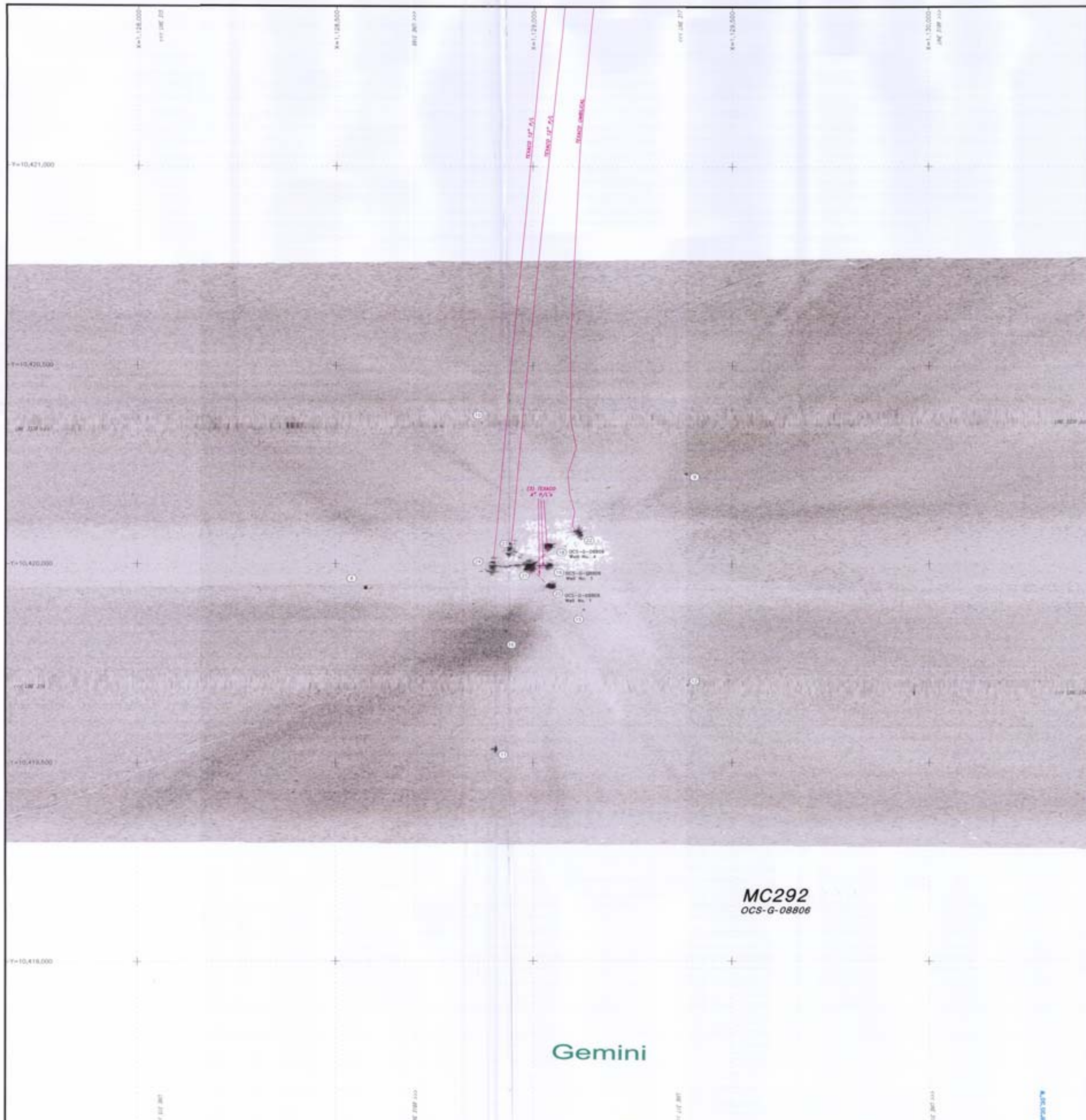
ISSUE	DATE	DESCRIPTION	INTERP	DRAWN	CHECKED	APPROVED
1	09/06/01	Preliminary Issue	L. Broud	A. McBride	D. Pierrottie	T. George
2	09/25/01	Original Issue with report	LB, BWS	AMM, BDP	D. Pierrottie	T. George

GEODETIC DATUM: NAD27
ELLIPSOID: CLARKE 1866
GRID UNITS: FEET
PROJECTION: UNIVERSAL TRANSVERSE MERCATOR
ZONE: 16N
CENTRAL MERIDIAN: 87° 00' W
FALSE EASTING: 1,640,416.67 ft. at C.M.
FALSE NORTHING: 0.00 ft. at 00° 00' N

PREPARED BY C&C Technologies SURVEY SERVICES

JOB NO. 2380 | DATE: 09/25/2001
FILENAME: J:\2380\2380_MC292-DETAIL.DWG

SHEET 5 of 6



PLAN VIEW

- Well with no surface facility
- Sonar contact & reference number
- Dark returns represent high seafloor backscatter
- Bin size = 0.5 meters (1.64 feet)

Sonar Contacts (MC292)

NUM.	DESCRIPTION	X COORDINATE	Y COORDINATE	LATITUDE	LONGITUDE
8	23'x8'xNMH	1,128,577'	10,419,939'	28°42'12.515"N	88°35'49.408"W
9	15'x6'xNMH	1,129,386'	10,420,225'	28°42'15.455"N	88°35'40.363"W
10	16'x4'xNMH	1,128,868'	10,420,354'	28°42'16.661"N	88°35'46.192"W
11	19'x6'xNMH	1,128,906'	10,419,531'	28°42'08.522"N	88°35'45.651"W
12	31'x6'xNMH	1,129,589'	10,419,694'	28°42'10.197"N	88°35'40.249"W
15	4'x5'xNMH	1,129,127'	10,419,884'	28°42'12.042"N	88°35'43.214"W
16	6'x5'xNMH	1,128,931'	10,419,830'	28°42'11.480"N	88°35'45.415"W
18 Well No. 4	15'x15'x24'	1,129,043'	10,420,041'	28°42'13.585"N	88°35'44.185"W
19 Well No. 1	16'x17'x25'	1,129,043'	10,419,991'	28°42'13.090"N	88°35'44.178"W
20 Well No. 7	17'x18'x24'	1,129,043'	10,419,941'	28°42'12.595"N	88°35'44.170"W
21 Manifold	19'x19'x22'	1,128,994'	10,419,989'	28°42'13.064"N	88°35'44.728"W
22 [illegible]	19'x15'x12'	1,129,119'	10,420,070'	28°42'13.883"N	88°35'43.332"W
23 [illegible]	24'x19'xNMH	1,128,941'	10,420,036'	28°42'13.523"N	88°35'45.354"W
24 [illegible]	19'x19'xNMH	1,128,897'	10,419,989'	28°42'13.053"N	88°35'45.815"W

NOTE: All field data acquired June 14 – July 8, 2001
SURVEY VESSELS: R/V Pacific Horizon, Hugin AUV

SURVEY AREA

Continental Shelf Associates, Inc.

MMS MINERALS MANAGEMENT SERVICE
U.S. DEPARTMENT OF THE INTERIOR

DETAIL SONAR MOSAIC MAP
Post Development Site
Survey Site No. 3

OCS-G-08806
BLOCK 292, MISSISSIPPI CANYON AREA

SCALE IN FEET

PREPARED BY C&C Technologies SURVEY SERVICES

JOB NO. 2380 | DATE: 09/25/2001
FILENAME: J:\2380\2380_MC292-DETAIL.DWG

SHEET 6 of 6

ISSUE	DATE	DESCRIPTION	INTERP	DRAWN	CHECKED	APPROVED	ISSUE	DATE	DESCRIPTION	INTERP	DRAWN	CHECKED	APPROVED
1	09/06/01	Preliminary issue	L. Broud	A. McBride	D. Pierroffe	T. George							
2	09/25/01	Original issue with report	LR, BMS	AMM, BDP	D. Pierroffe	T. George							

GEODETIC DATUM: NAD27
ELLIPSOID: CLARKE 1866
GRID UNITS: FEET
PROJECTION: UNIVERSAL TRANSVERSE MERCATOR
ZONE: 16N
CENTRAL MERIDIAN: 87° 00' W
FALSE EASTING: 1,640,416.67 ft. at C.M.
FALSE NORTHING: 0.00 ft. at 00° 00' N

APPENDIX D1

Grain Size Data from Cruise 1B

Appendix D1. Grain size data from Cruise 1B.

	Percentage					Mean		Folk's Statistics					
Station	Gravel	Sand	Silt	Clay	Folk's Description	(phi)	(µm)	StandDev		Skewness		Kurtosis	
								(phi)	Description	(phi)	Description	(phi)	Description
VK916-NF-B01	0.00	4.24	35.64	60.12	Mud	8.426	2.909	1.629	Poorly sorted	-0.639	Strongly coarse-skewed	0.742	Platykurtic
VK916-NF-B02	0.00	2.47	27.28	70.25	Clay	8.811	2.227	1.644	Poorly sorted	-0.485	Strongly coarse-skewed	0.915	Mesokurtic
VK916-NF-B03	0.00	1.30	28.31	70.40	Clay	8.778	2.278	1.735	Poorly sorted	-0.506	Strongly coarse-skewed	0.829	Platykurtic
VK916-NF-B04	0.00	2.48	56.40	41.11	Mud	7.288	6.397	1.977	Poorly sorted	-0.174	Coarse-skewed	0.734	Platykurtic
VK916-NF-B05	0.00	3.82	37.84	58.34	Mud	8.089	3.671	1.859	Poorly sorted	-0.381	Strongly coarse-skewed	0.854	Platykurtic
VK916-NF-B06	0.00	2.33	19.77	77.90	Clay	9.586	1.301	1.913	Poorly sorted	-0.463	Strongly coarse-skewed	0.949	Mesokurtic
VK916-NF-B07	0.00	4.53	40.40	55.07	Mud	8.088	3.675	1.991	Poorly sorted	-0.369	Strongly coarse-skewed	0.717	Platykurtic
VK916-NF-B08	0.00	3.80	29.96	66.23	Clay	8.666	2.461	1.722	Poorly sorted	-0.471	Strongly coarse-skewed	0.831	Platykurtic
VK916-NF-B09	0.00	3.46	27.70	68.84	Clay	8.752	2.320	1.633	Poorly sorted	-0.492	Strongly coarse-skewed	0.876	Platykurtic
VK916-NF-B10	0.00	2.55	26.23	71.23	Clay	9.049	1.888	2.132	Very poorly sorted	-0.433	Strongly coarse-skewed	0.952	Mesokurtic
VK916-NF-B11	0.00	2.51	26.35	71.14	Clay	8.767	2.295	1.397	Poorly sorted	-0.580	Strongly coarse-skewed	0.948	Mesokurtic
VK916-NF-B12	0.00	1.23	14.59	84.18	Clay	9.938	1.020	1.779	Poorly sorted	-0.474	Strongly coarse-skewed	1.223	Leptokurtic
VK916-FF2-B01	0.00	3.30	26.23	70.47	Clay	8.788	2.262	1.977	Poorly sorted	-0.540	Strongly coarse-skewed	0.997	Mesokurtic
VK916-FF2-B02	0.00	3.16	29.95	66.89	Clay	8.785	2.267	2.062	Very poorly sorted	-0.447	Strongly coarse-skewed	0.913	Mesokurtic
VK916-FF3-B01	0.00	4.90	39.25	55.85	Mud	8.122	3.590	2.154	Very poorly sorted	-0.361	Strongly coarse-skewed	0.712	Platykurtic
VK916-FF3-B02	0.00	3.69	25.62	70.69	Clay	8.800	2.243	1.694	Poorly sorted	-0.497	Strongly coarse-skewed	0.867	Platykurtic
VK916-FF4-B01	0.00	5.40	43.64	50.96	Mud	7.825	4.411	2.130	Very poorly sorted	-0.237	Coarse-skewed	0.769	Platykurtic
VK916-FF4-B02	1.20	3.10	24.93	70.77	Slightly gravelly mud	9.539	1.344	3.060	Very poorly sorted	-0.386	Strongly coarse-skewed	0.687	Platykurtic
VK916-FF5-B01	0.00	2.96	23.82	73.22	Clay	9.071	1.859	2.063	Very poorly sorted	-0.472	Strongly coarse-skewed	0.951	Mesokurtic
VK916-FF5-B02	0.00	3.10	25.77	71.13	Clay	8.827	2.202	1.732	Poorly sorted	-0.481	Strongly coarse-skewed	0.918	Mesokurtic
VK916-FF6-B01	0.00	3.22	24.91	71.87	Clay	8.899	2.095	1.787	Poorly sorted	-0.494	Strongly coarse-skewed	0.887	Platykurtic
VK916-FF6-B02	0.00	2.09	27.24	70.67	Clay	8.864	2.147	1.775	Poorly sorted	-0.475	Strongly coarse-skewed	0.894	Platykurtic

Appendix D1. Grain size data from Cruise 1B.

	Interpolated Phi Percentiles (Percent Retained)														
Station	**-1.00**	**-0.50**	**0.00**	**0.50**	**1.00**	**1.50**	**2.00**	**2.50**	**3.00**	**3.50**	**4.00**	**4.50**	**5.00**	**5.50**	**6.00**
VK916-NF-B01	0	0	0	0	2.57	0.01	0.02	0.52	0.51	0.31	0.3	0.05	0.05	2.84	5.21
VK916-NF-B02	0	0	0	0	0.12	0.49	0.49	0.29	0.29	0.4	0.39	0.69	0.69	3.46	2.51
VK916-NF-B03	0	0	0	0	0	0	0.40	0.22	0.21	0.23	0.24	1.15	1.19	2.56	3.91
VK916-NF-B04	0	0	0	0	0	0	1.07	0.40	0.40	0.31	0.30	7.35	7.36	2.08	6.20
VK916-NF-B05	0	0	0	0	0	0	1.82	0.62	0.61	0.39	0.38	3.07	3.06	2.08	4.38
VK916-NF-B06	0	0	0	0	0.03	0.55	0.54	0.26	0.25	0.35	0.35	1.15	1.14	2.29	2.11
VK916-NF-B07	0	0	0	0	0	0	2.49	0.61	0.60	0.41	0.42	2.08	2.08	4.01	8.77
VK916-NF-B08	0	0	0.03	0.02	0.01	0.96	0.95	0.50	0.50	0.41	0.42	0.55	0.59	3.74	2.58
VK916-NF-B09	0	0	0	0	0.03	0.81	0.82	0.48	0.49	0.41	0.42	0.40	0.40	2.06	2.60
VK916-NF-B10	0	0	0	0	0	0	1.15	0.24	0.23	0.46	0.47	2.97	2.97	2.91	2.19
VK916-NF-B11	0	0	0	0	0	0	0.76	0.39	0.40	0.48	0.48	0.27	0.27	1.78	2.80
VK916-NF-B12	0	0	0	0	0	0	0.23	0.20	0.20	0.30	0.30	0.79	0.78	2.06	2.02
VK916-FF2-B01	0	0	0	0	0	0	1.03	0.39	0.39	0.75	0.74	1.68	1.67	1.85	3.49
VK916-FF2-B02	0	0	0.10	0.01	0.02	0.40	0.41	0.50	0.51	0.61	0.60	2.67	2.66	2.05	2.77
VK916-FF3-B01	0	0	0	0	0.11	1.34	1.33	0.63	0.63	0.43	0.43	3.11	3.12	4.42	7.57
VK916-FF3-B02	0	0	0.09	0.77	0.77	0.02	0.01	0.54	0.55	0.47	0.47	0.21	0.20	2.02	3.22
VK916-FF4-B01	0	0	0	0	0.41	1.28	1.28	0.70	0.70	0.52	0.51	3.81	3.81	3.08	8.03
VK916-FF4-B02	1.20	0.04	0.04	0.02	0.01	0.72	0.73	0.40	0.40	0.37	0.38	3.56	3.56	3.15	4.62
VK916-FF5-B01	0	0	0.05	0.01	0.01	0.40	0.40	0.48	0.47	0.57	0.57	1.61	1.61	2.58	3.06
VK916-FF5-B02	0	0	0	0	0.15	0.43	0.44	0.47	0.47	0.57	0.57	0.77	0.76	2.56	3.22
VK916-FF6-B01	0	0	0	0	0	0	1.27	0.43	0.44	0.54	0.54	0.23	0.23	3.51	3.82
VK916-FF6-B02	0	0	0	0	0	0	0.56	0.27	0.26	0.50	0.50	1.30	1.29	3.57	2.57

Appendix D1. Grain size data from Cruise 1B.

	Interpolated Phi Percentiles (Percent Retained)														
Station	**6.50**	**7.00**	**7.50**	**8.00**	**8.50**	**9.00**	**9.50**	**10.00**	**10.50**	**11.00**	**11.50**	**12.00**	**12.50**	**13.00**	**Unaccounted***
VK916-NF-B01	6.65	7.19	7.14	6.99	5.74	2.66	5.42	35.54	*	*	*	*	*	*	10.28
VK916-NF-B02	2.46	4.72	5.42	7.87	6.75	3.94	7.58	23.81	23.82	*	*	*	*	*	3.81
VK916-NF-B03	4.60	5.14	5.09	5.00	4.50	3.23	6.25	23.82	23.82	*	*	*	*	*	8.44
VK916-NF-B04	7.99	7.74	8.41	9.96	7.21	3.52	6.51	*	*	*	*	*	*	*	23.19
VK916-NF-B05	5.96	6.05	6.31	7.44	8.11	9.70	5.51	23.90	*	*	*	*	*	*	10.61
VK916-NF-B06	2.05	2.30	3.01	6.14	5.47	2.94	5.17	14.68	15.14	15.15	15.15	*	*	*	3.78
VK916-NF-B07	9.77	4.14	4.50	5.42	4.57	2.61	5.44	22.75	*	*	*	*	*	*	19.33
VK916-NF-B08	3.07	6.71	6.65	6.52	5.82	4.21	5.03	23.89	23.90	*	*	*	*	*	2.94
VK916-NF-B09	3.23	5.96	6.24	7.31	6.41	3.74	6.77	25.39	25.38	*	*	*	*	*	0.65
VK916-NF-B10	1.74	3.21	3.64	7.08	6.71	4.96	6.29	13.40	13.76	13.76	*	*	*	*	11.86
VK916-NF-B11	3.41	4.06	4.57	9.86	9.45	8.03	5.96	33.76	*	*	*	*	*	*	13.27
VK916-NF-B12	2.01	2.92	2.70	1.41	1.89	5.68	9.69	14.49	14.70	14.71	14.70	*	*	*	8.22
VK916-FF2-B01	4.92	2.50	3.02	7.62	7.14	4.87	8.61	17.53	17.79	*	*	*	*	*	14.01
VK916-FF2-B02	3.53	4.60	4.99	7.17	6.36	3.30	5.87	15.91	16.23	16.24	*	*	*	*	2.49
VK916-FF3-B01	7.67	3.66	4.31	5.79	4.82	2.78	5.82	17.35	17.34	*	*	*	*	*	7.34
VK916-FF3-B02	4.06	5.19	5.32	5.80	5.55	4.70	5.56	23.66	23.97	*	*	*	*	*	6.85
VK916-FF4-B01	9.68	4.69	5.04	5.91	5.09	3.37	4.34	19.74	*	*	*	*	*	*	18.01
VK916-FF4-B02	4.90	1.99	1.89	1.35	1.41	1.73	7.84	8.17	7.91	7.91	7.91	7.91	7.91	7.91	4.06
VK916-FF5-B01	3.30	3.12	3.34	5.59	5.48	4.83	6.05	14.84	15.64	15.64	*	*	*	*	10.35
VK916-FF5-B02	3.48	3.93	4.34	7.20	6.65	4.18	8.64	20.77	21.14	*	*	*	*	*	9.26
VK916-FF6-B01	3.57	3.38	3.87	6.76	5.79	1.71	7.91	20.24	20.74	*	*	*	*	*	15.02
VK916-FF6-B02	2.60	4.82	5.20	6.33	5.72	4.08	7.69	20.19	20.20	*	*	*	*	*	12.35

* Due to very long settling times for fine clay particles, some phi intervals (generally ≥ phi 11) were not measured in many samples.
The calculated total of these phi intervals is listed in the "unaccounted" column.

Appendix D1. Grain size data from Cruise 1B.

	Percentage					Mean		Folk's Statistics					
Station	Gravel	Sand	Silt	Clay	Folk's Description	(phi)	(µm)	StandDev		Skewness		Kurtosis	
								(phi)	Description	(phi)	Description	(phi)	Description
GB516-NF-B01	0.00	4.50	33.31	62.19	Mud	8.296	3.182	1.775	Poorly sorted	-0.510	Strongly coarse-skewed	0.811	Platykurtic
GB516-NF-B02	0.00	6.80	37.61	55.59	Mud	8.023	3.843	2.791	Very poorly sorted	-0.246	Coarse-skewed	0.631	Very platykurtic
GB516-NF-B03	0.00	4.68	22.30	73.02	Clay	9.114	1.805	2.021	Very poorly sorted	-0.478	Strongly coarse-skewed	0.800	Platykurtic
GB516-NF-B04	0.00	5.11	36.17	58.71	Mud	8.151	3.517	2.578	Very poorly sorted	-0.311	Strongly coarse-skewed	0.717	Platykurtic
GB516-NF-B05	0.00	4.70	32.36	62.94	Mud	8.503	2.757	1.813	Poorly sorted	-0.542	Strongly coarse-skewed	0.915	Mesokurtic
GB516-NF-B06	0.00	5.09	30.58	64.33	Clay	8.327	3.114	1.923	Poorly sorted	-0.499	Strongly coarse-skewed	0.942	Mesokurtic
GB516-NF-B07	0.00	4.85	21.72	73.43	Clay	8.996	1.958	2.033	Very poorly sorted	-0.467	Strongly coarse-skewed	1.101	Mesokurtic
GB516-NF-B08	0.00	5.37	29.10	65.52	Clay	8.685	2.429	2.123	Very poorly sorted	-0.566	Strongly coarse-skewed	0.918	Mesokurtic
GB516-NF-B09	0.00	6.53	23.12	70.35	Clay	8.829	2.199	2.298	Very poorly sorted	-0.468	Strongly coarse-skewed	1.100	Mesokurtic
GB516-NF-B10	0.00	4.42	33.89	61.69	Mud	8.498	2.766	2.315	Very poorly sorted	-0.414	Strongly coarse-skewed	0.803	Platykurtic
GB516-NF-B11	0.00	5.37	32.42	62.21	Mud	8.474	2.812	2.270	Very poorly sorted	-0.406	Strongly coarse-skewed	0.884	Platykurtic
GB516-NF-B12	0.00	7.25	24.77	67.99	Clay	8.731	2.353	2.118	Very poorly sorted	-0.481	Strongly coarse-skewed	1.227	Leptokurtic
GB516-FF1-B01	0.00	5.84	34.58	59.58	Mud	8.188	3.429	2.622	Very poorly sorted	-0.351	Strongly coarse-skewed	0.771	Platykurtic
GB516-FF1-B02	0.00	4.35	33.81	61.84	Mud	8.357	3.049	1.938	Poorly sorted	-0.369	Strongly coarse-skewed	0.974	Mesokurtic
GB516-FF2-B01	0.00	3.03	19.76	77.21	Clay	9.053	1.883	1.368	Poorly sorted	-0.471	Strongly coarse-skewed	0.981	Mesokurtic
GB516-FF2-B02	0.00	12.04	27.48	60.48	Sandy clay	8.199	3.404	2.903	Very poorly sorted	-0.430	Strongly coarse-skewed	1.035	Mesokurtic
GB516-FF3-B01	0.00	6.09	32.59	61.32	Mud	8.385	2.991	2.078	Very poorly sorted	-0.487	Strongly coarse-skewed	0.990	Mesokurtic
GB516-FF3-B02	0.00	4.74	27.09	68.17	Clay	8.630	2.525	2.288	Very poorly sorted	-0.358	Strongly coarse-skewed	0.967	Mesokurtic
GB516-FF4-B01	0.00	5.33	60.15	34.53	Mud	7.473	5.628	1.657	Poorly sorted	-0.248	Coarse-skewed	1.314	Leptokurtic
GB516-FF4-B02	0.00	6.61	27.31	66.08	Clay	8.531	2.704	1.970	Poorly sorted	-0.406	Strongly coarse-skewed	1.121	Leptokurtic
GB516-FF5-B01	0.00	3.32	27.99	68.68	Clay	8.749	2.324	1.449	Poorly sorted	-0.459	Strongly coarse-skewed	0.993	Mesokurtic
GB516-FF5-B02	0.00	4.56	30.26	65.18	Clay	8.389	2.984	1.836	Poorly sorted	-0.354	Strongly coarse-skewed	1.143	Leptokurtic
GB516-FF6-B01	0.00	4.06	30.77	65.17	Clay	8.764	2.300	1.835	Poorly sorted	-0.590	Strongly coarse-skewed	0.914	Mesokurtic
GB516-FF6-B02	0.00	3.37	28.54	68.10	Clay	8.816	2.218	1.607	Poorly sorted	-0.548	Strongly coarse-skewed	0.981	Mesokurtic

Appendix D1. Grain size data from Cruise 1B.

	Interpolated Phi Percentiles (Percent Retained)														
Station	**-1.00**	**-0.50**	**0.00**	**0.50**	**1.00**	**1.50**	**2.00**	**2.50**	**3.00**	**3.50**	**4.00**	**4.50**	**5.00**	**5.50**	**6.00**
GB516-NF-B01	0	0	0.14	0.02	0.03	0.47	0.48	0.74	0.73	0.95	0.94	0.46	0.46	2.18	5.77
GB516-NF-B02	0	0	0.16	0.01	0.01	0.17	0.17	0.88	0.88	2.26	2.26	7.86	7.82	5.09	4.43
GB516-NF-B03	0	0	0.07	0.02	0.01	0.46	0.46	0.89	0.89	0.94	0.94	0.11	0.11	3.08	3.54
GB516-NF-B04	0	0	0	0	0.05	0.59	0.58	0.97	0.96	0.98	0.98	5.99	5.97	3.16	3.42
GB516-NF-B05	0	0	0	0	0	0	1.04	0.88	0.87	0.96	0.95	0.62	0.61	2.77	3.77
GB516-NF-B06	0	0	0	0	0	0	0.53	0.83	0.83	1.45	1.45	0.64	0.64	3.76	4.79
GB516-NF-B07	0	0	0	0	0.06	0.49	0.49	0.96	0.97	0.94	0.94	1.31	1.31	2.12	2.51
GB516-NF-B08	0	0	0.05	0.28	0.27	0.28	0.27	1.08	1.07	1.04	1.03	1.39	1.39	3.86	3.11
GB516-NF-B09	0	0	0.05	0.50	0.50	0.50	0.50	1.17	1.18	1.06	1.07	1.61	1.62	2.08	2.45
GB516-NF-B10	0	0	0.03	0.26	0.27	0.26	0.26	0.90	0.89	0.78	0.77	4.34	4.33	2.15	3.66
GB516-NF-B11	0	0	0.05	0.02	0.01	0.43	0.42	0.96	0.96	1.26	1.26	3.40	3.40	2.14	3.08
GB516-NF-B12	0	0	0	0	0.03	0.97	0.98	1.41	1.41	1.22	1.23	0.73	0.74	1.88	2.32
GB516-FF1-B01	0	0	0	0	0	0	1.35	1.24	1.24	1.01	1.00	5.39	5.40	2.08	3.59
GB516-FF1-B02	0	0	0.03	0.14	0.15	0.15	0.14	0.78	0.79	1.08	1.09	2.91	2.91	1.16	2.89
GB516-FF2-B01	0	0	0	0	0	0	0.20	0.45	0.44	0.97	0.97	0.06	0.05	0.99	2.07
GB516-FF2-B02	0	0	0	0	0.03	7.54	0.79	0.52	0.52	1.32	1.32	1.88	1.88	1.99	3.46
GB516-FF3-B01	0	0	0	0	0.05	0.90	0.89	1.05	1.05	1.07	1.08	1.28	1.28	3.12	3.76
GB516-FF3-B02	0	0	0	0	0.05	0.19	0.19	0.86	0.85	1.30	1.30	3.51	3.50	2.09	2.27
GB516-FF4-B01	0	0	0	0	0.10	0.41	0.40	1.14	1.14	1.07	1.07	3.50	3.50	2.09	4.60
GB516-FF4-B02	0	0	0.08	0.03	0.03	0.47	0.47	0.93	0.93	1.84	1.83	0.87	0.86	3.12	2.26
GB516-FF5-B01	0	0	0	0	0	0	0.53	0.62	0.63	0.77	0.77	0.70	0.7	0.93	1.32
GB516-FF5-B02	0	0	0	0	0	0	1.57	0.59	0.59	0.91	0.90	1.77	1.76	2.00	2.86
GB516-FF6-B01	0	0	0	0	0.03	0.48	0.49	0.80	0.80	0.73	0.73	1.25	1.25	2.00	2.45
GB516-FF6-B02	0	0	0	0	0	0	0.48	0.60	0.60	0.85	0.84	0.84	0.83	2.88	2.26

Appendix D1. Grain size data from Cruise 1B.

	Interpolated Phi Percentiles (Percent Retained)														
Station	**6.50**	**7.00**	**7.50**	**8.00**	**8.50**	**9.00**	**9.50**	**10.00**	**10.50**	**11.00**	**11.50**	**12.00**	**12.50**	**13.00**	**Unaccounted***
GB516-NF-B01	8.78	4.24	4.67	7.24	7.04	6.25	4.04	31.06	*	*	*	*	*	*	13.31
GB516-NF-B02	3.89	2.63	2.81	3.31	4.66	7.91	3.51	8.62	8.61	8.61	8.61	*	*	*	4.83
GB516-NF-B03	3.33	5.10	4.77	2.43	2.51	3.19	7.48	15.44	16.04	16.04	*	*	*	*	12.15
GB516-NF-B04	3.64	4.20	4.53	5.65	5.59	5.45	3.29	11.32	11.31	11.32	*	*	*	*	10.05
GB516-NF-B05	4.44	6.88	6.88	6.86	6.42	5.24	5.15	26.21	*	*	*	*	*	*	19.45
GB516-NF-B06	5.16	4.78	5.03	6.20	6.93	9.02	6.34	24.16	*	*	*	*	*	*	17.46
GB516-NF-B07	2.65	2.14	2.81	7.37	7.42	7.59	8.27	15.25	15.25	15.25	*	*	*	*	3.90
GB516-NF-B08	2.81	6.18	5.94	4.75	5.31	7.10	3.59	17.64	17.64	*	*	*	*	*	13.92
GB516-NF-B09	2.72	3.51	3.83	5.69	6.53	9.37	4.12	14.31	14.32	14.31	*	*	*	*	7.00
GB516-NF-B10	4.29	3.47	4.32	7.87	6.60	3.58	3.86	13.61	13.62	13.61	*	*	*	*	6.27
GB516-NF-B11	3.64	4.24	4.98	8.10	6.90	4.45	3.2	14.77	14.77	14.78	*	*	*	*	2.78
GB516-NF-B12	2.57	3.34	4.05	9.80	8.90	6.13	6.26	17.23	17.24	*	*	*	*	*	11.56
GB516-FF1-B01	4.17	3.39	4.10	6.94	6.19	4.39	4.36	11.51	11.51	11.51	*	*	*	*	9.63
GB516-FF1-B02	4.21	4.64	5.45	10.35	8.86	5.12	6.43	19.33	19.34	*	*	*	*	*	2.05
GB516-FF2-B01	2.72	2.87	3.39	8.17	8.48	9.63	6.08	26.41	*	*	*	*	*	*	26.05
GB516-FF2-B02	4.20	4.00	4.40	6.09	6.08	6.09	3.32	12.27	12.26	12.27	*	*	*	*	7.77
GB516-FF3-B01	3.96	5.45	5.86	8.46	7.40	3.79	6.83	19.87	19.98	*	*	*	*	*	2.87
GB516-FF3-B02	2.52	3.27	3.68	6.71	7.16	8.74	3.81	13.21	13.21	13.21	*	*	*	*	8.37
GB516-FF4-B01	6.34	8.33	11.62	21.64	11.28	0.84	*	*	*	*	*	*	*	*	20.93
GB516-FF4-B02	2.10	5.04	5.55	8.06	8.46	9.50	4.82	19.38	19.38	*	*	*	*	*	3.99
GB516-FF5-B01	1.62	5.24	5.79	12.56	10.92	5.98	6.73	29.27	*	*	*	*	*	*	14.92
GB516-FF5-B02	3.35	2.68	3.79	12.94	11.53	8.02	4.68	21.82	*	*	*	*	*	*	18.24
GB516-FF6-B01	3.15	7.13	7.09	6.92	6.07	3.54	6.41	21.74	21.73	*	*	*	*	*	5.21
GB516-FF6-B02	1.82	4.14	4.95	11.61	9.94	5.35	3.62	24.9	*	*	*	*	*	*	23.49

* Due to very long settling times for fine clay particles, some phi intervals (generally ≥ phi 11) were not measured in many samples.
The calculated total of these phi intervals is listed in the "unaccounted" column.

APPENDIX D2

Grain Size Data from Cruise 2B

Appendix D2. Grain size data from Cruise 2B.

	Percentage						Mean		Folk's Statistics					
Station	Gravel	Sand	Silt	Clay	Silt&Clay	Folk's Description	(phi)	(µm)	StandDev		Skewness		Kurtosis	
									(phi)	Description	(phi)	Description	(phi)	Description
GB602-FF1-B01	0.00	7.70	20.87	71.43	0.00	Clay	9.003	1.949	2.267	Very poorly sorted	-0.447	Strongly coarse-skewed	1.354	Leptokurtic
GB602-FF1-B02	0.00	10.42	20.45	69.13	0.00	Sandy clay	10.940	0.509	5.286	Extremely poorly sorted	-0.291	Coarse-skewed	0.686	Platykurtic
GB602-FF2-B01	0.00	13.48	15.70	70.82	0.00	Sandy clay	10.004	0.974	4.041	Extremely poorly sorted	-0.395	Strongly coarse-skewed	0.810	Platykurtic
GB602-FF2-B02	0.00	7.40	16.92	75.68	0.00	Clay	9.829	1.099	3.213	Very poorly sorted	-0.461	Strongly coarse-skewed	0.951	Mesokurtic
GB602-FF3-B01	0.00	5.22	25.29	69.50	0.00	Clay	10.553	0.666	4.473	Extremely poorly sorted	-0.267	Coarse-skewed	0.605	Very platykurtic
GB602-FF3-B02	0.00	13.84	23.44	62.72	0.00	Sandy clay	10.799	0.561	5.779	Extremely poorly sorted	-0.122	Coarse-skewed	0.632	Very platykurtic
GB602-FF4-B01	0.00	10.14	16.52	73.34	0.00	Sandy clay	10.147	0.882	4.025	Extremely poorly sorted	-0.420	Strongly coarse-skewed	0.873	Platykurtic
GB602-FF4-B02	0.00	11.84	11.92	76.25	0.00	Sandy clay	9.752	1.159	3.853	Very poorly sorted	-0.451	Strongly coarse-skewed	1.092	Mesokurtic
GB602-FF5-B01	0.00	7.36	14.02	78.62	0.00	Clay	11.875	0.266	4.787	Extremely poorly sorted	-0.394	Strongly coarse-skewed	0.835	Platykurtic
GB602-FF5-B02	0.00	9.02	61.82	29.16	0.00	Silt	6.240	13.230	2.496	Very poorly sorted	0.557	Strongly coarse-skewed	0.782	Platykurtic
GB602-FF6-B01	0.00	10.44	16.31	73.26	0.00	Sandy clay	9.229	1.666	3.277	Very poorly sorted	-0.250	Coarse-skewed	1.061	Mesokurtic
GB602-FF6-B02	0.00	16.50	14.33	69.17	0.00	Sandy clay	9.533	1.350	4.626	Extremely poorly sorted	-0.367	Strongly coarse-skewed	0.769	Platykurtic
GB602-NF-B01	0.00	6.50	59.38	34.12	0.00	Mud	7.840	4.363	4.908	Extremely poorly sorted	0.827	Strongly fine-skewed	0.880	Platykurtic
GB602-NF-B02	0.00	10.59	15.25	74.17	0.00	Sandy clay	8.578	2.616	3.018	Very poorly sorted	-0.290	Coarse-skewed	1.061	Mesokurtic
GB602-NF-B03	0.00	21.12	31.70	47.18	0.00	Sandy mud	7.137	7.105	3.239	Very poorly sorted	-0.312	Strongly coarse-skewed	0.766	Platykurtic
GB602-NF-B04	0.00	7.11	20.37	72.52	0.00	Clay	8.553	2.662	2.923	Very poorly sorted	-0.341	Strongly coarse-skewed	0.942	Mesokurtic
GB602-NF-B05	0.00	10.67	29.49	59.85	0.00	Sandy clay	8.706	2.394	3.347	Very poorly sorted	-0.331	Strongly coarse-skewed	0.741	Platykurtic
GB602-NF-B06	0.00	12.83	30.03	57.14	0.00	Sandy mud	8.267	3.247	3.069	Very poorly sorted	-0.469	Strongly coarse-skewed	0.857	Platykurtic
GB602-NF-B07	0.00	12.93	35.19	51.87	0.00	Sandy mud	8.047	3.781	3.246	Very poorly sorted	-0.301	Strongly coarse-skewed	0.775	Platykurtic
GB602-NF-B08	0.00	11.22	22.03	66.76	0.00	Sandy clay	8.197	3.407	2.565	Very poorly sorted	-0.428	Strongly coarse-skewed	1.092	Mesokurtic
GB602-NF-B09	0.00	6.64	32.41	60.95	0.00	Mud	8.267	3.247	3.059	Very poorly sorted	-0.258	Coarse-skewed	0.623	Very platykurtic
GB602-NF-B10	0.00	10.02	36.41	53.57	0.00	Sandy mud	8.018	3.859	3.287	Very poorly sorted	-0.204	Coarse-skewed	0.712	Platykurtic
GB602-NF-B11	0.00	14.55	21.23	64.22	0.00	Sandy clay	8.757	2.311	3.869	Very poorly sorted	-0.400	Strongly coarse-skewed	0.860	Platykurtic
GB602-NF-B12	0.00	13.48	17.55	68.98	0.00	Sandy clay	8.858	2.155	3.173	Very poorly sorted	-0.441	Strongly coarse-skewed	0.959	Mesokurtic
GB602-NF-DS1 (0-2cm)	0.00	5.66	32.66	61.68	0.00	Mud	7.998	3.911	2.305	Very poorly sorted	-0.392	Strongly coarse-skewed	0.962	Mesokurtic
GB602-NF-DS1 (2-4cm)	0.00	15.73	36.92	47.35	0.00	Sandy mud	7.240	6.616	3.236	Very poorly sorted	-0.176	Coarse-skewed	0.872	Platykurtic
GB602-NF-DS1 (4-6cm)	0.00	19.15	17.59	63.26	0.00	Sandy clay	8.970	1.994	4.604	Extremely poorly sorted	-0.302	Strongly coarse-skewed	0.669	Very platykurtic
GB602-NF-DS1 (6-8cm)	0.00	8.19	20.88	70.93	0.00	Clay	9.100	1.822	2.788	Very poorly sorted	-0.476	Strongly coarse-skewed	1.126	Leptokurtic
GB602-NF-DS1 (8-10cm)	0.00	4.89	13.11	81.99	0.00	Clay	10.241	0.826	2.463	Very poorly sorted	-0.464	Strongly coarse-skewed	1.175	Leptokurtic
GB602-NF-DS2 (0-2cm)	0.00	6.51	54.96	38.53	0.00	Mud	7.191	6.841	2.302	Very poorly sorted	-0.195	Coarse-skewed	0.619	Very platykurtic
GB602-NF-DS2 (2-4cm)	0.00	11.69	49.31	39.00	0.00	Sandy mud	7.165	6.969	2.351	Very poorly sorted	-0.326	Strongly coarse-skewed	0.850	Platykurtic
GB602-NF-DS2 (4-6cm)	0.00	22.04	40.25	37.71	0.00	Sandy mud	6.633	10.073	2.856	Very poorly sorted	-0.303	Strongly coarse-skewed	0.966	Mesokurtic
GB602-NF-DS2 (6-8cm)	0.00	11.83	26.99	61.17	0.00	Sandy clay	9.086	1.840	4.288	Extremely poorly sorted	-0.052	Near-symmetrical	0.627	Very platykurtic
GB602-NF-DS2 (8-10cm)	0.00	13.48	36.28	50.24	0.00	Sandy mud	7.739	4.680	2.645	Very poorly sorted	-0.283	Coarse-skewed	1.057	Mesokurtic
GB602-NF-DS3 (0-2cm)	0.00	7.55	28.60	63.85	0.00	Clay	8.677	2.443	3.182	Very poorly sorted	-0.326	Strongly coarse-skewed	0.722	Platykurtic
GB602-NF-DS3 (2-4cm)	0.00	7.63	25.06	67.31	0.00	Clay	8.891	2.106	3.316	Very poorly sorted	-0.366	Strongly coarse-skewed	0.807	Platykurtic
GB602-NF-DS3 (4-6cm)	0.00	17.33	24.89	57.78	0.00	Sandy clay	7.708	4.783	3.244	Very poorly sorted	-0.437	Strongly coarse-skewed	0.922	Mesokurtic
GB602-NF-DS3 (6-8cm)	0.00	7.16	26.80	66.04	0.00	Clay	9.066	1.866	3.908	Very poorly sorted	-0.102	Coarse-skewed	0.600	Very platykurtic
GB602-NF-DS3 (8-10cm)	0.00	6.25	33.05	60.70	0.00	Mud	8.430	2.899	2.110	Very poorly sorted	-0.590	Strongly coarse-skewed	1.009	Mesokurtic

Appendix D2. Grain size data from Cruise 2B.

	Interpolated Phi Percentiles (Percent Retained)														
Station	**-1.00**	**-0.50**	**0.00**	**0.50**	**1.00**	**1.50**	**2.00**	**2.50**	**3.00**	**3.50**	**4.00**	**4.50**	**5.00**	**5.50**	**6.00**
GB602-FF1-B01	0	0	0.21	0.39	0.39	1.76	1.76	1.00	0.99	0.60	0.60	1.39	1.40	1.00	0.74
GB602-FF1-B02	0	0	0.11	0.41	0.40	2.36	2.37	0.78	0.79	1.60	1.60	5.35	5.35	1.17	2.07
GB602-FF2-B01	0	0	0	0	0	0	4.63	1.88	1.88	2.55	2.54	0.31	0.44	5.16	2.08
GB602-FF2-B02	0	0	0.44	0.13	0.13	0.17	0.17	1.05	1.04	2.14	2.13	0.65	1.20	5.04	2.00
GB602-FF3-B01	0	0	0	0	0	0	0.24	0.74	0.74	1.75	1.75	6.64	6.64	3.44	2.34
GB602-FF3-B02	0	0	0.04	1.26	1.25	2.40	2.40	1.88	1.89	1.36	1.36	7.00	6.99	2.28	1.50
GB602-FF4-B01	0	0	0.21	0.55	0.55	1.95	1.94	1.27	1.27	1.20	1.20	2.14	2.14	2.06	2.37
GB602-FF4-B02	0	0	0.07	1.11	1.11	1.78	1.78	1.56	1.57	1.43	1.43	1.87	1.85	1.34	1.17
GB602-FF5-B01	0	0	0	0	0.00	0.00	0.42	1.31	1.31	2.16	2.16	3.06	2.97	1.34	2.03
GB602-FF5-B02	0	0	0	0	0.34	0.50	0.51	1.94	1.94	1.89	1.90	23.52	17.32	1.61	1.34
GB602-FF6-B01	0	0	0	0	1.73	1.74	1.75	1.36	1.36	1.25	1.25	1.57	1.58	1.22	1.79
GB602-FF6-B02	0	0	0.15	2.13	2.13	2.07	2.07	2.26	2.26	1.72	1.71	1.96	2.09	2.91	1.51
GB602-NF-B01	0	0	0.05	0.19	0.19	1.37	1.38	0.93	0.94	0.72	0.73	29.18	23.78	1.84	1.57
GB602-NF-B02	0	0	0	0	0	0	0.56	2.21	2.22	2.80	2.80	2.62	2.62	2.18	1.92
GB602-NF-B03	0	0	0	0	3.77	2.29	2.28	2.92	2.92	3.47	3.47	2.89	2.86	2.56	2.21
GB602-NF-B04	0	0	0.19	0.29	0.30	0.74	0.74	0.24	1.77	1.42	1.42	4.50	4.39	1.24	1.83
GB602-NF-B05	0	0	0.06	0.03	0.03	1.55	1.55	2.03	2.02	1.70	1.70	3.62	3.61	4.57	4.01
GB602-NF-B06	0	0	0.59	0.59	0.60	1.83	1.83	1.92	1.92	1.78	1.77	2.65	2.64	3.25	4.17
GB602-NF-B07	0	0	0.27	1.25	1.26	1.44	1.45	1.49	1.50	2.14	2.13	4.72	4.71	4.19	3.68
GB602-NF-B08	0	0	2.19	0.28	0.29	0.61	0.62	1.33	1.33	2.29	2.28	1.77	1.78	1.81	1.55
GB602-NF-B09	0	0	0	0	0.63	0.63	0.63	1.26	1.26	1.11	1.12	8.82	8.81	4.15	2.33
GB602-NF-B10	0	0	0.52	0.56	0.57	1.93	1.93	1.45	1.46	0.80	0.80	8.23	8.22	1.42	1.75
GB602-NF-B11	0	0	3.06	2.43	2.44	0.71	0.70	0.71	0.71	1.90	1.89	1.90	2.49	4.34	3.65
GB602-NF-B12	0	0	0.69	0.68	0.69	1.55	1.54	1.03	1.03	3.13	3.14	0.37	0.79	3.29	2.83
GB602-NF-DS1 (0-2cm)	0	0	0	0	0.18	0.49	0.5	1.02	1.02	1.23	1.22	4.78	4.77	2.32	1.11
GB602-NF-DS1 (2-4cm)	0	0	4.57	1.12	1.12	1.37	1.36	1.95	1.95	1.14	1.15	7.15	7.16	5.47	3.7
GB602-NF-DS1 (4-6cm)	0	0	0.19	0.29	0.29	0.91	0.91	11.59	1.88	1.55	1.54	1.96	2.1	2.96	2.54
GB602-NF-DS1 (6-8cm)	0	0	0.38	0.65	0.65	1.22	1.21	1	0.99	1.05	1.04	1.36	1.4	2.63	2.31
GB602-NF-DS1 (8-10cm)	0	0	0.06	0.25	0.25	0.83	0.84	0.67	0.67	0.66	0.66	0.65	0.64	2.1	2.03
GB602-NF-DS2 (0-2cm)	0	0	0.13	0.14	0.15	0.36	0.36	0.91	0.91	1.77	1.78	11.41	11.41	2.43	1.45
GB602-NF-DS2 (2-4cm)	0	0	0.45	0.25	0.25	1.41	1.41	1.97	1.98	1.98	1.99	4.07	4.08	3.91	4.57
GB602-NF-DS2 (4-6cm)	0	0	0.11	0.24	0.24	3.36	3.36	3.8	3.81	3.56	3.56	0.44	0.59	1.4	3.21
GB602-NF-DS2 (6-8cm)	0	0	0	0	0	0	2.81	2.54	2.55	1.97	1.96	8.46	8.45	2.41	1.77
GB602-NF-DS2 (8-10cm)	0	0	0.06	0.70	0.69	2.17	2.17	2.28	2.28	1.56	1.57	1.27	1.35	2.48	2.96
GB602-NF-DS3 (0-2cm)	0	0	0	0	0.26	0.64	0.65	0.93	0.94	2.06	2.07	6.16	5.85	2.48	2.15
GB602-NF-DS3 (2-4cm)	0	0	0	0	0	0	2.02	1.22	1.21	1.59	1.59	5.79	5.68	1.1	1.63
GB602-NF-DS3 (4-6cm)	0	0	0	0	0.69	4.03	4.03	2.17	2.18	2.11	2.12	0.95	1.1	2.53	3.04
GB602-NF-DS3 (6-8cm)	0	0	0	0	0.53	0.5	0.51	1.63	1.64	1.17	1.18	8.86	8.86	2.35	1.65
GB602-NF-DS3 (8-10cm)	0	0	0.05	0.48	0.47	0.53	0.53	1.05	1.06	1.04	1.04	0.54	0.54	5.31	3.47

Appendix D2. Grain size data from Cruise 2B.

	Interpolated Phi Percentiles (Percent Retained)														
Station	**6.50**	**7.00**	**7.50**	**8.00**	**8.50**	**9.00**	**9.50**	**10.00**	**10.50**	**11.00**	**11.50**	**12.00**	**12.50**	**13.00**	**Unaccounted***
GB602-FF1-B01	0.66	3.50	4.35	8.45	8.88	4.16	15.11	13.38	12.8	12.8	*	*	*	*	3.68
GB602-FF1-B02	2.49	1.37	1.37	1.37	1.43	1.73	3.02	3.83	3.81	3.81	3.81	3.81	3.81	3.81	36.17
GB602-FF2-B01	1.30	2.52	2.34	1.67	1.77	2.16	3.82	5.93	5.98	5.98	5.97	5.98	5.97	5.98	21.16
GB602-FF2-B02	1.59	2.19	2.20	2.20	2.38	2.83	5.34	8.20	8.21	8.20	8.20	8.20	8.20	8.20	7.57
GB602-FF3-B01	1.84	1.49	1.50	1.50	1.57	1.94	3.35	4.42	4.43	4.44	4.44	4.44	4.44	4.44	31.48
GB602-FF3-B02	1.38	1.65	1.62	1.09	1.17	2.13	2.62	3.00	2.98	2.99	2.99	2.99	2.99	2.99	35.80
GB602-FF4-B01	2.55	2.03	1.98	1.34	1.48	2.63	6.73	6.29	5.88	5.87	5.88	5.88	5.88	5.87	20.86
GB602-FF4-B02	1.08	0.88	1.23	2.68	3.11	4.64	15.68	5.75	5.74	5.75	5.74	5.75	5.74	5.74	12.42
GB602-FF5-B01	2.01	0.89	0.89	0.89	1.17	2.31	4.05	4.37	4.34	4.34	4.34	4.34	4.34	4.34	40.62
GB602-FF5-B02	2.49	4.29	5.21	6.48	4.72	2.74	5.55	5.39	5.39	*	*	*	*	*	4.93
GB602-FF6-B01	2.10	2.43	2.57	3.27	2.82	1.03	19.76	6.97	6.97	6.98	6.97	6.97	6.98	6.97	0.61
GB602-FF6-B02	1.39	1.91	1.67	0.95	1.69	3.66	10.64	4.67	4.68	4.67	4.67	4.67	4.67	4.67	20.42
GB602-NF-B01	1.23	0.61	0.60	0.61	0.91	1.50	2.92	1.42	1.42	1.42	1.42	1.42	1.42	1.42	18.81
GB602-NF-B02	1.76	1.41	1.42	1.41	3.39	17.38	8.63	8.06	8.06	8.06	8.06	8.06	*	*	4.37
GB602-NF-B03	2.85	5.14	5.91	7.81	5.34	1.08	11.37	8.66	8.66	8.66	*	*	*	*	2.88
GB602-NF-B04	2.12	2.46	2.31	1.63	3.87	12.85	14.23	7.99	7.98	7.99	7.99	7.98	*	*	1.53
GB602-NF-B05	3.91	4.53	3.86	1.47	1.79	2.76	2.41	7.82	7.91	7.91	7.91	7.92	7.91	*	5.41
GB602-NF-B06	4.56	4.36	4.35	4.35	3.71	1.84	7.83	9.69	9.68	9.68	9.69	*	*	*	4.72
GB602-NF-B07	3.96	7.01	5.67	1.35	1.43	1.67	6.08	8.21	8.22	8.22	8.22	8.21	*	*	1.52
GB602-NF-B08	2.48	4.83	4.44	3.61	7.77	15.47	7.08	12.10	12.10	*	*	*	*	*	11.99
GB602-NF-B09	1.57	1.85	1.99	3.10	4.17	9.64	10.82	6.36	6.36	6.36	6.36	6.35	*	*	4.32
GB602-NF-B10	2.43	4.91	4.90	4.89	4.64	3.74	2.47	7.50	7.60	7.60	7.60	7.60	*	*	4.48
GB602-NF-B11	2.81	1.42	1.96	2.86	3.12	3.53	7.33	6.82	6.81	6.82	6.81	6.82	6.81	6.82	2.33
GB602-NF-B12	2.58	2.16	2.49	3.26	4.38	6.81	6.82	8.79	8.80	8.79	8.80	8.79	*	*	6.77
GB602-NF-DS1 (0-2cm)	1.01	5.6	5.94	7.65	8.65	11.57	7.1	13.72	13.72	*	*	*	*	*	6.40
GB602-NF-DS1 (2-4cm)	3.12	4.66	4.07	1.7	3.71	10.49	4.46	7.76	7.76	7.77	*	*	*	*	5.29
GB602-NF-DS1 (4-6cm)	2.32	1.95	1.95	1.95	2.12	2.51	4.69	4.88	4.87	4.87	4.87	4.87	4.87	4.87	19.70
GB602-NF-DS1 (6-8cm)	2.11	1.74	2.7	7.12	5.87	2.24	9.48	10.45	10.44	10.45	10.45	10.44	*	*	0.62
GB602-NF-DS1 (8-10cm)	1.85	1.48	1.58	2.99	3.08	3.88	9.22	10.18	9.91	9.9	9.91	9.91	9.91	*	5.89
GB602-NF-DS2 (0-2cm)	1.65	6.75	7.83	12.91	9.06	2.67	3.98	12.69	*	*	*	*	*	*	9.25
GB602-NF-DS2 (2-4cm)	5.14	6.56	8.23	13.68	8.74	1.56	8.27	*	*	*	*	*	*	*	19.50
GB602-NF-DS2 (4-6cm)	5.87	11.62	10.05	7.59	4.65	1.14	8.63	17.67	*	*	*	*	*	*	5.10
GB602-NF-DS2 (6-8cm)	1.93	1.53	1.5	1.01	1.49	7.32	3.98	3.85	4.19	4.19	4.19	4.19	4.19	4.19	19.33
GB602-NF-DS2 (8-10cm)	4.96	12.08	8.89	2.46	2.3	2.02	6.53	15.19	15.2	*	*	*	*	*	8.83
GB602-NF-DS3 (0-2cm)	2.32	3.29	3.28	3.29	4.12	6.18	3.54	7.72	7.72	7.72	7.72	7.71	7.72	*	3.48
GB602-NF-DS3 (2-4cm)	1.9	2.2	2.6	4.46	4.94	6.51	3.5	7.38	7.47	7.47	7.46	7.47	7.47	*	7.34
GB602-NF-DS3 (4-6cm)	3.23	3.36	4.3	6.84	5.94	4.16	8.47	9.91	9.91	9.9	*	*	*	*	9.03
GB602-NF-DS3 (6-8cm)	1.52	1.21	1.22	1.21	2.1	9.81	4.69	4.69	4.89	4.88	4.89	4.88	4.89	4.88	15.36
GB602-NF-DS3 (8-10cm)	1.81	6.78	6.97	8.19	6.74	2.42	7.29	20.73	20.73	*	*	*	*	*	2.23

* Due to very long settling times for fine clay particles, some phi intervals (generally > phi 11) were not measured in many samples
The calculated total of these phi intervals is listed in the "unaccounted" column

Appendix D2. Grain size data from Cruise 2B.

	Percentage						Mean		Folk's Statistics					
Station	Gravel	Sand	Silt	Clay	Silt&Clay	Folk's Description	(phi)	(µm)	StandDev		Skewness		Kurtosis	
									(phi)	Description	(phi)	Description	(phi)	Description
GB516-FF1-B01	0.00	6.60	31.58	61.82	0.00	Mud	9.288	1.600	4.145	Extremely poorly sorted	-0.045	Near-symmetrical	0.582	Very platykurtic
GB516-FF1-B02	0.00	6.46	46.42	47.12	0.00	Mud	7.784	4.538	3.255	Very poorly sorted	0.149	Fine-skewed	0.619	Very platykurtic
GB516-FF2-B01	0.00	5.29	29.69	65.02	0.00	Clay	8.416	2.928	1.692	Poorly sorted	-0.436	Strongly coarse-skewed	1.144	Leptokurtic
GB516-FF2-B02	0.00	5.48	54.43	40.09	0.00	Mud	7.066	7.465	2.800	Very poorly sorted	0.386	Strongly fine-skewed	0.626	Very platykurtic
GB516-FF3-B01	0.00	5.03	32.85	62.13	0.00	Mud	9.949	1.012	4.381	Extremely poorly sorted	-0.116	Coarse-skewed	0.548	Very platykurtic
GB516-FF3-B02	0.00	10.38	25.53	64.10	0.00	Sandy clay	8.557	2.654	2.404	Very poorly sorted	-0.498	Strongly coarse-skewed	1.085	Mesokurtic
GB516-FF4-B01	0.00	6.93	30.13	62.94	0.00	Clay	9.762	1.152	4.306	Extremely poorly sorted	-0.164	Coarse-skewed	0.575	Very platykurtic
GB516-FF4-B02	0.00	7.11	15.96	76.93	0.00	Clay	8.959	2.010	2.308	Very poorly sorted	-0.418	Strongly coarse-skewed	1.313	Leptokurtic
GB516-FF5-B01	0.00	4.18	33.63	62.19	0.00	Mud	10.573	0.657	4.958	Extremely poorly sorted	-0.065	Near-symmetrical	0.543	Very platykurtic
GB516-FF5-B02	0.00	5.39	30.76	63.85	0.00	Clay	9.613	1.277	4.054	Extremely poorly sorted	-0.261	Coarse-skewed	0.660	Very platykurtic
GB516-FF6-B01	0.00	5.25	27.95	66.80	0.00	Clay	10.000	0.977	4.238	Extremely poorly sorted	-0.213	Coarse-skewed	0.589	Very platykurtic
GB516-FF6-B02	0.00	5.76	25.91	68.33	0.00	Clay	8.622	2.539	2.144	Very poorly sorted	-0.511	Strongly coarse-skewed	0.982	Mesokurtic
GB516-NF-B01	0.00	5.18	23.71	71.12	0.00	Clay	8.590	2.595	1.573	Poorly sorted	-0.339	Strongly coarse-skewed	1.391	Leptokurtic
GB516-NF-B02	0.00	8.95	31.25	59.80	0.00	Mud	9.668	1.230	4.576	Extremely poorly sorted	-0.116	Coarse-skewed	0.622	Very platykurtic
GB516-NF-B03	0.00	11.25	37.16	51.58	0.00	Sandy mud	7.659	4.95	2.78	Very poorly sorted	-0.270	Coarse-skewed	0.763	Platykurtic
GB516-NF-B04	0.00	9.21	31.14	59.65	0.00	Mud	9.207	1.693	4.477	Extremely poorly sorted	0.007	Near-symmetrical	0.597	Very platykurtic
GB516-NF-B05	0.00	15.16	18.76	66.08	0.00	Sandy clay	9.047	1.891	3.851	Very poorly sorted	-0.372	Strongly coarse-skewed	0.756	Platykurtic
GB516-NF-B06	0.00	18.23	36.18	45.59	0.00	Sandy mud	7.199	6.804	3.034	Very poorly sorted	-0.198	Coarse-skewed	0.743	Platykurtic
GB516-NF-B07	0.00	9.80	25.22	64.97	0.00	Clay	10.051	0.943	4.660	Extremely poorly sorted	-0.207	Coarse-skewed	0.616	Very platykurtic
GB516-NF-B08	0.00	5.83	32.08	62.09	0.00	Mud	8.697	2.409	3.403	Very poorly sorted	-0.183	Coarse-skewed	0.571	Very platykurtic
GB516-NF-B09	0.00	8.12	22.36	69.51	0.00	Clay	8.790	2.259	2.088	Very poorly sorted	-0.448	Strongly coarse-skewed	1.180	Leptokurtic
GB516-NF-B10	0.00	12.86	23.46	63.67	0.00	Sandy clay	8.432	2.895	2.919	Very poorly sorted	-0.460	Strongly coarse-skewed	1.095	Mesokurtic
GB516-NF-B11	0.00	7.98	14.77	77.25	0.00	Clay	10.832	0.549	3.785	Very poorly sorted	-0.448	Strongly coarse-skewed	0.949	Mesokurtic
GB516-NF-B12	0.00	9.74	25.58	64.68	0.00	Clay	10.387	0.747	4.990	Extremely poorly sorted	-0.200	Coarse-skewed	0.621	Very platykurtic
GB516-NF-DS1 (0-2cm)	0.00	6.76	35.83	57.41	0.00	Mud	8.196	3.410	2.258	Very poorly sorted	-0.354	Strongly coarse-skewed	0.857	Platykurtic
GB516-NF-DS1 (2-4cm)	0.00	1.63	27.71	70.66	0.00	Clay	8.800	2.243	1.827	Poorly sorted	-0.408	Strongly coarse-skewed	0.990	Mesokurtic
GB516-NF-DS1 (4-6cm)	0.00	7.90	22.56	69.53	0.00	Clay	8.636	2.513	2.144	Very poorly sorted	-0.419	Strongly coarse-skewed	1.309	Leptokurtic
GB516-NF-DS1 (6-8cm)	0.00	4.82	20.42	74.76	0.00	Clay	8.824	2.206	1.763	Poorly sorted	-0.363	Strongly coarse-skewed	1.254	Leptokurtic
GB516-NF-DS1 (8-10cm)	0.00	2.92	21.09	75.99	0.00	Clay	8.881	2.121	1.564	Poorly sorted	-0.433	Strongly coarse-skewed	1.126	Leptokurtic
GB516-NF-DS2 (0-2cm)	0.00	8.20	16.16	75.64	0.00	Clay	9.018	1.929	2.295	Very poorly sorted	-0.375	Strongly coarse-skewed	1.363	Leptokurtic
GB516-NF-DS2 (2-4cm)	0.00	1.89	78.68	19.42	0.00	Silt	5.890	16.868	1.877	Poorly sorted	0.658	Strongly fine-skewed	0.780	Platykurtic
GB516-NF-DS2 (4-6cm)	0.00	12.19	5.84	0.00	81.97	Sandy silt	.	.	.	.	.	.	.	.
GB516-NF-DS2 (6-8cm)	0.00	12.67	50.25	37.08	0.00	Sandy mud	6.824	8.828	3.112	Very poorly sorted	0.553	Strongly fine-skewed	0.691	Platykurtic
GB516-NF-DS2 (8-10cm)	0.00	1.78	63.66	34.56	0.00	Mud	6.924	8.233	3.191	Very poorly sorted	0.808	Strongly fine-skewed	0.670	Very platykurtic
GB516-NF-DS3 (0-2cm)	0.00	4.31	27.63	68.05	0.00	Clay	8.499	2.764	1.563	Poorly sorted	-0.452	Strongly coarse-skewed	1.050	Mesokurtic
GB516-NF-DS3 (2-4cm)	0.00	3.78	30.06	66.16	0.00	Clay	8.441	2.878	1.471	Poorly sorted	-0.408	Strongly coarse-skewed	1.050	Mesokurtic
GB516-NF-DS3 (4-6cm)	0.00	3.10	25.59	71.31	0.00	Clay	8.439	2.882	1.791	Poorly sorted	-0.486	Strongly coarse-skewed	0.943	Mesokurtic
GB516-NF-DS3 (6-8cm)	0.00	3.89	24.65	71.46	0.00	Clay	8.893	2.104	1.854	Poorly sorted	-0.482	Strongly coarse-skewed	0.980	Mesokurtic
GB516-NF-DS3 (8-10cm)	0.34	1.79	23.95	73.91	0.00	Slightly gravelly mud	8.887	2.112	3.163	Very poorly sorted	-0.211	Coarse-skewed	0.880	Platykurtic

Appendix D2. Grain size data from Cruise 2B.

	Interpolated Phi Percentiles (Percent Retained)														
Station	**-1.00**	**-0.50**	**0.00**	**0.50**	**1.00**	**1.50**	**2.00**	**2.50**	**3.00**	**3.50**	**4.00**	**4.50**	**5.00**	**5.50**	**6.00**
GB516-FF1-B01	0	0	0.20	0.10	0.10	0.61	0.61	1.25	1.26	1.23	1.24	10.45	10.44	2.31	1.40
GB516-FF1-B02	0	0	0	0	0.26	0.32	0.32	1.25	1.24	1.54	1.53	18.64	16.85	2.04	1.07
GB516-FF2-B01	0	0	0	0	0	0	1.40	1.08	1.09	0.86	0.86	1.30	1.30	1.30	1.41
GB516-FF2-B02	0	0	0	0	0.15	0.20	0.20	1.00	1.01	1.46	1.46	19.38	19.38	2.99	1.88
GB516-FF3-B01	0	0	0	0	0	0	0.14	0.75	0.75	1.69	1.70	10.08	10.08	2.49	2.09
GB516-FF3-B02	0	0	0	0	0.97	1.49	1.50	1.25	1.25	1.96	1.96	0.02	0.21	2.87	2.49
GB516-FF4-B01	0	0	0.05	0.20	0.21	0.56	0.55	1.02	1.02	1.66	1.66	9.13	9.12	1.65	1.68
GB516-FF4-B02	0	0	0	0	0.27	0.49	0.50	0.02	0.02	2.90	2.91	0.59	0.76	2.93	2.56
GB516-FF5-B01	0	0	0	0	0.04	0.04	0.05	0.12	0.13	1.90	1.90	11.05	11.06	2.30	1.84
GB516-FF5-B02	0	0	0	0	0.22	0.45	0.46	2.03	2.02	0.11	0.10	8.08	8.08	2.25	1.84
GB516-FF6-B01	0	0	0	0	0.05	0.35	0.35	1.15	1.15	1.10	1.10	8.33	8.33	2.37	2.23
GB516-FF6-B02	0	0	0	0	0.51	0.87	0.87	0.72	0.71	1.04	1.04	1.10	1.11	2.62	3.89
GB516-NF-B01	0	0	0.06	0.09	0.10	0.35	0.35	1.01	1.01	1.10	1.11	0.84	0.84	1.29	1.51
GB516-NF-B02	0	0	0	0	3.44	0.35	0.34	0.98	0.97	1.44	1.43	9.33	9.33	2.79	1.42
GB516-NF-B03	0	0	0.13	0.24	0.24	1.06	1.06	-0.23	4.48	2.14	2.13	5.46	5.46	3.03	2.60
GB516-NF-B04	0	0	0.45	0.62	0.62	0.94	0.95	1.34	1.33	1.48	1.48	16.29	3.85	1.80	1.99
GB516-NF-B05	0	0	0.21	0.14	0.14	1.21	1.21	3.43	3.43	2.70	2.69	1.86	1.86	2.36	2.78
GB516-NF-B06	0	0	0.61	0.55	0.55	1.84	1.84	3.69	3.16	2.66	3.33	4.05	4.04	3.84	2.31
GB516-NF-B07	0	0	0.14	0.66	0.66	1.05	1.05	1.25	1.25	1.87	1.87	7.08	7.07	2.36	2.02
GB516-NF-B08	0	0	0.08	0.09	0.08	0.31	0.31	0.83	0.82	1.66	1.65	10.63	10.63	2.24	1.45
GB516-NF-B09	0	0	0	0	0.12	0.28	0.27	1.03	1.03	2.70	2.69	0.47	0.47	2.12	2.02
GB516-NF-B10	0	0	0.10	0.25	0.25	4.26	4.27	1.86	1.85	0.01	0.01	1.19	1.19	1.82	2.19
GB516-NF-B11	0	0	0.25	0.25	0.26	0.75	0.76	1.55	1.55	1.31	1.30	0.93	1.20	3.22	1.69
GB516-NF-B12	0	0	0	0	1.84	1.17	1.18	1.34	1.34	1.44	1.43	7.15	7.15	2.31	2.09
GB516-NF-DS1 (0-2cm)	0	0	0	0	0.12	0.67	0.66	0.73	0.74	1.92	1.92	3.32	3.31	2.13	3.58
GB516-NF-DS1 (2-4cm)	0	0	0	0	0.33	0.18	0.19	0.23	0.22	0.24	0.24	2.60	2.60	2.85	2.25
GB516-NF-DS1 (4-6cm)	0	0	0.02	0.03	0.02	1.47	1.46	1.44	1.43	1.02	1.01	0.88	0.87	1.55	1.99
GB516-NF-DS1 (6-8cm)	0	0	0	0	0.49	0.59	0.58	0.82	0.82	0.76	0.76	1.19	1.19	1.05	1.43
GB516-NF-DS1 (8-10cm)	0	0	0	0	0.07	0.10	0.10	0.57	0.58	0.75	0.75	1.02	1.02	1.52	2.24
GB516-NF-DS2 (0-2cm)	0	0	0	0	1.04	1.05	1.06	1.37	1.37	1.16	1.15	0.76	0.76	0.94	1.31
GB516-NF-DS2 (2-4cm)	0	0	0.16	0.02	0.02	0.02	0.02	0.10	0.10	0.73	0.72	24.48	23.57	6.47	5.55
GB516-NF-DS2 (4-6cm)	0	0	0.41	0.82	0.82	0.15	0.16	3.28	3.27	1.64	1.64	*	*	*	*
GB516-NF-DS2 (6-8cm)	0	0	0	0	0.04	0.33	0.32	1.90	1.90	4.09	4.09	18.02	18.01	1.56	1.24
GB516-NF-DS2 (8-10cm)	0	0	0	0	0	0	0	0	0.17	0.81	0.80	25.15	25.14	1.34	0.79
GB516-NF-DS3 (0-2cm)	0	0	0	0	0.31	0.58	0.58	0.70	0.69	0.73	0.72	0.68	0.69	1.19	1.88
GB516-NF-DS3 (2-4cm)	0	0	0	0	0.05	0.32	0.32	0.87	0.86	0.68	0.68	0.83	0.83	1.34	2.16
GB516-NF-DS3 (4-6cm)	0	0	0	0	0.04	0.28	0.29	0.66	0.66	0.58	0.59	0.68	0.69	3.76	6.38
GB516-NF-DS3 (6-8cm)	0	0	0	0	0.07	0.43	0.44	0.81	0.81	0.67	0.66	1.13	1.13	1.72	2.13
GB516-NF-DS3 (8-10cm)	0.34	0.09	0.08	0.08	0.08	0.08	0.08	0.25	0.26	0.40	0.40	7.51	7.50	2.35	1.33

Appendix D2. Grain size data from Cruise 2B.

	Interpolated Phi Percentiles (Percent Retained)														
Station	**6.50**	**7.00**	**7.50**	**8.00**	**8.50**	**9.00**	**9.50**	**10.00**	**10.50**	**11.00**	**11.50**	**12.00**	**12.50**	**13.00**	**Unaccounted***
GB516-FF1-B01	1.96	1.55	1.55	2.07	2.13	3.30	7.95	5.16	4.00	3.99	4.00	3.99	3.99	4.00	19.16
GB516-FF1-B02	1.11	2.01	2.19	2.70	3.67	6.08	8.32	3.84	3.84	3.84	3.84	3.84	3.84	3.84	1.98
GB516-FF2-B01	3.39	5.71	7.58	8.28	8.50	14.22	10.87	25.10	*	*	*	*	*	*	5.75
GB516-FF2-B02	1.83	2.34	2.63	4.29	4.72	6.10	3.51	4.72	4.72	4.71	4.72	4.72	*	*	1.88
GB516-FF3-B01	2.24	1.78	1.85	2.40	2.27	1.50	2.51	3.96	4.08	4.08	4.09	4.08	4.08	4.08	27.23
GB516-FF3-B02	3.06	5.76	5.75	5.76	5.84	6.05	5.85	15.45	15.44	*	*	*	*	*	15.07
GB516-FF4-B01	2.24	2.36	2.31	1.76	1.90	2.99	3.12	4.18	4.34	4.34	4.35	4.34	4.34	4.35	24.57
GB516-FF4-B02	2.34	1.93	2.14	2.91	5.66	14.12	7.72	12.54	12.55	12.54	*	*	*	*	11.60
GB516-FF5-B01	2.71	1.59	1.59	1.60	1.57	1.34	2.12	3.26	3.37	3.36	3.36	3.36	3.36	3.37	33.61
GB516-FF5-B02	1.90	3.46	3.24	2.05	1.99	1.73	2.97	5.08	5.23	5.24	5.23	5.24	5.23	5.24	20.53
GB516-FF6-B01	2.33	1.27	1.32	1.90	2.17	4.07	2.69	4.17	4.58	4.57	4.58	4.57	4.58	4.57	26.12
GB516-FF6-B02	4.40	4.37	4.36	4.36	5.55	9.00	6.10	17.35	17.35	*	*	*	*	*	12.68
GB516-NF-B01	1.32	3.15	3.77	11.91	13.82	16.46	10.63	22.84	*	*	*	*	*	*	6.44
GB516-NF-B02	1.30	2.57	2.59	2.06	2.02	1.29	4.38	4.47	3.84	3.83	3.84	3.83	3.83	3.84	24.49
GB516-NF-B03	2.73	6.06	6.14	6.11	6.00	5.56	3.57	10.23	11.09	11.08	*	*	*	*	3.63
GB516-NF-B04	1.05	1.06	2.64	2.57	1.62	1.61	10.02	3.64	3.64	3.64	3.64	3.64	3.64	3.64	20.81
GB516-NF-B05	2.72	1.55	1.98	3.92	3.69	2.95	3.83	6.37	6.48	6.48	6.48	6.48	6.48	6.48	10.09
GB516-NF-B06	2.21	7.80	7.20	5.08	4.87	2.22	1.45	10.91	10.92	10.92	*	*	*	*	3.95
GB516-NF-B07	2.19	1.73	1.70	1.16	1.17	1.46	7.88	5.24	3.83	3.84	3.84	3.83	3.84	3.84	26.12
GB516-NF-B08	2.00	1.58	1.58	2.11	2.38	6.22	16.20	5.33	4.55	4.55	4.55	4.55	4.55	4.55	4.52
GB516-NF-B09	1.95	2.99	3.65	9.33	8.80	6.90	8.16	15.66	15.66	*	*	*	*	*	13.70
GB516-NF-B10	2.42	4.52	4.63	5.91	5.89	5.79	5.43	11.24	11.39	11.39	11.39	*	*	*	0.75
GB516-NF-B11	1.52	2.12	2.12	2.11	1.91	1.33	2.41	6.31	6.42	6.42	6.42	6.42	6.42	6.43	26.62
GB516-NF-B12	2.24	1.80	1.74	1.19	1.22	1.50	4.32	4.20	3.71	3.70	3.71	3.71	3.71	3.71	31.10
GB516-NF-DS1 (0-2cm)	4.98	6.57	6.48	5.86	5.66	4.89	3.91	15.60	16.00	*	*	*	*	*	10.95
GB516-NF-DS1 (2-4cm)	1.60	4.40	4.61	7.29	7.56	9.30	5.51	17.53	18.54	*	*	*	*	*	11.73
GB516-NF-DS1 (4-6cm)	2.23	4.02	4.21	7.32	7.88	12.01	7.30	16.18	16.75	*	*	*	*	*	8.91
GB516-NF-DS1 (6-8cm)	1.75	3.48	3.65	7.17	8.32	15.16	9.97	17.86	17.85	*	*	*	*	*	5.11
GB516-NF-DS1 (8-10cm)	2.97	2.94	2.94	6.94	7.56	12.79	13.38	20.11	20.44	*	*	*	*	*	1.21
GB516-NF-DS2 (0-2cm)	1.62	3.19	3.28	4.61	5.41	14.19	7.25	12.73	13.38	13.39	*	*	*	*	8.98
GB516-NF-DS2 (2-4cm)	4.99	4.18	4.56	5.25	3.22	0.64	4.41	8.71	*	*	*	*	*	*	2.08
GB516-NF-DS2 (4-6cm)	*	*	*	*	*	*	*	*	*	*	*	*	*	*	87.81
GB516-NF-DS2 (6-8cm)	1.31	2.34	2.84	5.29	4.33	1.76	5.14	3.88	3.88	3.88	3.88	3.87	3.88	*	2.22
GB516-NF-DS2 (8-10cm)	1.05	4.57	3.96	1.78	1.90	2.25	1.50	3.27	3.32	3.32	3.32	3.32	3.32	3.32	5.60
GB516-NF-DS3 (0-2cm)	2.67	6.49	7.81	6.67	6.98	16.39	9.31	29.29	*	*	*	*	*	*	5.64
GB516-NF-DS3 (2-4cm)	2.37	5.77	8.09	9.33	9.74	14.52	8.43	*	*	*	*	*	*	*	32.81
GB516-NF-DS3 (4-6cm)	7.14	1.26	0.53	5.57	6.27	12.57	7.63	21.44	*	*	*	*	*	*	22.98
GB516-NF-DS3 (6-8cm)	2.38	5.56	5.82	5.13	5.47	8.27	6.39	18.19	19.55	*	*	*	*	*	13.24
GB516-NF-DS3 (8-10cm)	0.89	0.72	0.94	2.90	4.15	11.61	9.27	6.81	6.77	6.77	6.77	6.77	6.76	6.77	1.27

* Due to very long settling times for fine clay particles, some phi intervals (generally > phi 11) were not measured in many samples.
The calculated total of these phi intervals is listed in the "unaccounted" column.

Appendix D2. Grain size data from Cruise 2B.

	Percentage						Mean		Folk's Statistics					
Station	Gravel	Sand	Silt	Clay	Silt&Clay	Folk's Description	(phi)	(µm)	StandDev		Skewness		Kurtosis	
									(phi)	Description	(phi)	Description	(phi)	Description
MC292-FF1-B01	0.00	1.79	17.70	80.51	0.00	Clay	9.744	1.166	2.485	Very poorly sorted	-0.456	Strongly coarse-skewed	1.120	Leptokurtic
MC292-FF1-B02	0.00	1.89	23.29	74.82	0.00	Clay	9.156	1.753	2.012	Very poorly sorted	-0.467	Strongly coarse-skewed	0.985	Mesokurtic
MC292-FF2-B01	0.00	3.07	23.62	73.31	0.00	Clay	9.016	1.932	2.024	Very poorly sorted	-0.403	Strongly coarse-skewed	1.012	Mesokurtic
MC292-FF2-B02	0.00	2.50	25.16	72.34	0.00	Clay	8.831	2.195	1.850	Poorly sorted	-0.484	Strongly coarse-skewed	1.014	Mesokurtic
MC292-FF3-B01	0.00	1.15	19.80	79.06	0.00	Clay	11.655	0.310	4.501	Extremely poorly sorted	-0.391	Strongly coarse-skewed	0.795	Platykurtic
MC292-FF3-B02	0.00	0.65	29.99	69.36	0.00	Clay	11.254	0.409	5.071	Extremely poorly sorted	-0.207	Coarse-skewed	0.566	Very platykurtic
MC292-FF4-B01	0.00	2.78	38.53	58.70	0.00	Mud	9.943	1.016	4.592	Extremely poorly sorted	0.016	Near-symmetrical	0.550	Very platykurtic
MC292-FF4-B02	0.00	1.75	27.86	70.40	0.00	Clay	10.727	0.590	4.618	Extremely poorly sorted	-0.253	Coarse-skewed	0.629	Very platykurtic
MC292-FF5-B01	0.00	2.19	16.30	81.50	0.00	Clay	9.882	1.060	2.198	Very poorly sorted	-0.417	Strongly coarse-skewed	1.104	Mesokurtic
MC292-FF5-B02	0.00	1.62	64.13	34.25	0.00	Mud	7.074	7.420	2.483	Very poorly sorted	0.223	Fine-skewed	0.574	Very platykurtic
MC292-FF6-B01	0.00	2.65	19.82	77.53	0.00	Clay	9.659	1.237	2.732	Very poorly sorted	-0.445	Strongly coarse-skewed	1.005	Mesokurtic
MC292-FF6-B02	0.00	1.14	34.24	64.62	0.00	Mud	12.419	0.183	6.405	Extremely poorly sorted	-0.051	Near-symmetrical	0.532	Very platykurtic
MC292-NF-B01	0.00	3.34	19.04	77.62	0.00	Clay	9.635	1.26	2.445	Very poorly sorted	-0.439	Strongly coarse-skewed	1.043	Mesokurtic
MC292-NF-B02	0.00	2.78	26.28	70.94	0.00	Clay	8.913	2.075	1.963	Poorly sorted	-0.425	Strongly coarse-skewed	0.949	Mesokurtic
MC292-NF-B03	0.00	7.14	22.20	70.66	0.00	Clay	10.341	0.771	4.469	Extremely poorly sorted	-0.337	Strongly coarse-skewed	0.725	Platykurtic
MC292-NF-B04	0.00	4.04	30.55	65.41	0.00	Clay	10.500	0.691	4.698	Extremely poorly sorted	-0.156	Coarse-skewed	0.551	Very platykurtic
MC292-NF-B05	0.00	5.79	40.98	53.23	0.00	Mud	9.000	1.953	4.117	Extremely poorly sorted	0.078	Near-symmetrical	0.593	Very platykurtic
MC292-NF-B06	0.00	3.04	18.27	78.69	0.00	Clay	9.983	0.988	2.295	Very poorly sorted	-0.414	Strongly coarse-skewed	0.959	Mesokurtic
MC292-NF-B07	0.00	3.14	43.53	53.33	0.00	Mud	8.405	2.951	2.792	Very poorly sorted	-0.360	Strongly coarse-skewed	0.616	Very platykurtic
MC292-NF-B08	0.00	8.51	35.30	56.19	0.00	Mud	10.174	0.866	5.462	Extremely poorly sorted	0.096	Near-symmetrical	0.629	Very platykurtic
MC292-NF-B09	0.00	1.46	19.39	79.15	0.00	Clay	9.472	1.408	1.934	Poorly sorted	-0.238	Coarse-skewed	1.040	Mesokurtic
MC292-NF-B10	0.00	13.83	23.02	63.14	0.00	Sandy clay	8.918	2.068	3.879	Very poorly sorted	-0.150	Coarse-skewed	0.594	Very platykurtic
MC292-NF-B11	0.00	3.72	24.96	71.32	0.00	Clay	10.253	0.819	4.112	Extremely poorly sorted	-0.311	Strongly coarse-skewed	0.642	Very platykurtic
MC292-NF-B12	0.00	3.59	21.75	74.66	0.00	Clay	9.169	1.737	1.822	Poorly sorted	-0.319	Strongly coarse-skewed	1.105	Mesokurtic
MC292-NF-DS1 (0-2cm)	0.00	2.99	20.29	76.72	0.00	Clay	9.036	1.905	2.243	Very poorly sorted	-0.344	Strongly coarse-skewed	1.105	Mesokurtic
MC292-NF-DS1 (2-4cm)	0.00	3.75	20.48	75.77	0.00	Clay	8.548	2.671	1.671	Poorly sorted	-0.353	Strongly coarse-skewed	1.772	Very leptokurtic
MC292-NF-DS1 (4-6cm)	0.00	2.86	17.70	79.45	0.00	Clay	9.067	1.865	1.599	Poorly sorted	-0.313	Strongly coarse-skewed	1.284	Leptokurtic
MC292-NF-DS1 (6-8cm)	0.00	1.80	16.50	81.71	0.00	Clay	9.524	1.358	2.040	Very poorly sorted	-0.452	Strongly coarse-skewed	1.213	Leptokurtic
MC292-NF-DS1 (8-10cm)	0.00	2.02	21.17	76.81	0.00	Clay	9.071	1.860	1.813	Poorly sorted	-0.383	Strongly coarse-skewed	1.133	Leptokurtic
MC292-NF-DS2 (0-2cm)	0.00	2.13	21.36	76.51	0.00	Clay	9.352	1.530	1.945	Poorly sorted	-0.476	Strongly coarse-skewed	1.001	Mesokurtic
MC292-NF-DS2 (2-4cm)	0.00	5.33	28.15	66.52	0.00	Clay	8.582	2.610	2.044	Very poorly sorted	-0.383	Strongly coarse-skewed	1.066	Mesokurtic
MC292-NF-DS2 (4-6cm)	0.00	3.35	20.12	76.53	0.00	Clay	8.953	2.017	1.917	Poorly sorted	-0.368	Strongly coarse-skewed	1.154	Leptokurtic
MC292-NF-DS2 (6-8cm)	0.00	4.67	20.80	74.53	0.00	Clay	8.690	2.421	1.641	Poorly sorted	-0.457	Strongly coarse-skewed	1.174	Leptokurtic
MC292-NF-DS2 (8-10cm)	0.00	5.71	21.79	72.50	0.00	Clay	8.712	2.385	1.922	Poorly sorted	-0.440	Strongly coarse-skewed	1.205	Leptokurtic
MC292-NF-DS3 (0-2cm)	0.00	3.68	27.91	68.41	0.00	Clay	8.681	2.437	1.819	Poorly sorted	-0.466	Strongly coarse-skewed	1.036	Mesokurtic
MC292-NF-DS3 (2-4cm)	0.00	1.12	22.10	76.78	0.00	Clay	10.034	0.954	2.797	Very poorly sorted	-0.429	Strongly coarse-skewed	0.941	Mesokurtic
MC292-NF-DS3 (4-6cm)	0.00	2.05	21.60	76.34	0.00	Clay	9.742	1.167	2.751	Very poorly sorted	-0.423	Strongly coarse-skewed	0.903	Mesokurtic
MC292-NF-DS3 (6-8cm)	0.00	2.25	18.30	79.45	0.00	Clay	9.263	1.628	2.129	Very poorly sorted	-0.255	Coarse-skewed	1.219	Leptokurtic
MC292-NF-DS3 (8-10cm)	0.00	2.38	15.32	82.30	0.00	Clay	10.05	0.943	2.312	Very poorly sorted	-0.442	Strongly coarse-skewed	1.106	Mesokurtic

Appendix D2. Grain size data from Cruise 2B.

	Interpolated Phi Percentiles (Percent Retained)														
Station	**-1.00**	**-0.50**	**0.00**	**0.50**	**1.00**	**1.50**	**2.00**	**2.50**	**3.00**	**3.50**	**4.00**	**4.50**	**5.00**	**5.50**	**6.00**
MC292-FF1-B01	0	0	0	0	0.23	0.25	0.25	0.27	0.26	0.26	0.27	2.85	2.86	2.3	2.61
MC292-FF1-B02	0	0	0.03	0.31	0.32	0.17	0.17	0.16	0.15	0.29	0.29	2.25	2.25	2.06	2.30
MC292-FF2-B01	0	0	0	0	1.37	0.37	0.37	0.22	0.21	0.27	0.26	2.61	2.62	2.02	1.70
MC292-FF2-B02	0	0	0.02	0.23	0.24	0.31	0.31	0.25	0.25	0.45	0.44	1.99	1.99	1.79	2.43
MC292-FF3-B01	0	0	0	0	0	0	0.20	0.20	0.21	0.27	0.27	5.68	5.59	2.59	1.48
MC292-FF3-B02	0	0	0	0	0	0	0	0	0.27	0.19	0.19	10.04	10.03	2.33	2.45
MC292-FF4-B01	0	0	0	0	1.27	0.28	0.29	0.18	0.18	0.29	0.29	13.01	13.02	3.13	1.80
MC292-FF4-B02	0	0	0	0	0.06	0.17	0.16	0.29	0.28	0.39	0.40	9.60	9.60	1.15	0.96
MC292-FF5-B01	0	0	0.03	0.43	0.42	0.20	0.20	0.21	0.21	0.25	0.24	3.11	3.11	1.26	1.11
MC292-FF5-B02	0	0	0	0	0.29	0.08	0.07	0.08	0.07	0.52	0.51	19.18	13.76	2.80	2.33
MC292-FF6-B01	0	0	0.06	0.37	0.37	0.25	0.24	0.20	0.20	0.48	0.48	3.22	3.23	2.40	2.76
MC292-FF6-B02	0	0	0	0	0	0	0.14	0.24	0.24	0.26	0.26	12.23	12.23	2.56	2.12
MC292-NF-B01	0	0	0.10	0.35	0.35	0.42	0.43	0.58	0.57	0.27	0.27	2.98	2.97	1.25	1.76
MC292-NF-B02	0	0	0.35	0.08	0.08	0.16	0.17	0.42	0.42	0.55	0.55	2.93	2.93	2.06	1.59
MC292-NF-B03	0	0	0.94	0.92	0.91	0.50	0.51	0.79	0.80	0.88	0.89	5.87	5.87	1.12	1.65
MC292-NF-B04	0	0	0.21	0.37	0.36	0.42	0.42	0.50	0.50	0.63	0.63	9.83	9.84	2.25	1.78
MC292-NF-B05	0	0	0.08	1.11	1.10	0.49	0.48	0.52	0.53	0.74	0.74	13.16	13.15	3.57	2.11
MC292-NF-B06	0	0	0	0	0.17	0.18	0.18	0.49	0.49	0.76	0.77	2.35	2.34	2.17	1.93
MC292-NF-B07	0	0	0	0	1.09	0.12	0.12	0.42	0.43	0.48	0.48	8.75	7.68	4.63	5.76
MC292-NF-B08	0	0	0	0	2.65	0.86	0.87	1.12	1.12	0.95	0.94	11.94	11.95	4.14	2.41
MC292-NF-B09	0	0	0	0	0	0	0.02	0.29	0.30	0.42	0.43	2.77	2.76	2.05	1.61
MC292-NF-B10	0	0	0.20	0.15	0.15	0.42	0.42	0.55	0.54	5.70	5.70	5.70	5.70	2.10	1.70
MC292-NF-B11	0	0	0.23	0.31	0.31	0.24	0.23	0.35	0.35	0.85	0.85	6.87	6.42	2.98	2.56
MC292-NF-B12	0	0	0.11	0.55	0.55	0.36	0.37	0.40	0.41	0.42	0.42	2.49	2.50	1.21	1.50
MC292-NF-DS1 (0-2cm)	0	0	0.38	0.26	0.26	0.16	0.16	0.36	0.36	0.53	0.52	3.39	3.39	2.32	1.99
MC292-NF-DS1 (2-4cm)	0	0	0.15	0.15	0.16	0.42	0.43	0.73	0.74	0.48	0.49	2.32	2.32	2.34	2.09
MC292-NF-DS1 (4-6cm)	0	0	0	0	0.51	0.40	0.40	0.73	0.73	0.04	0.05	1.30	1.31	1.57	1.87
MC292-NF-DS1 (6-8cm)	0	0	0	0	0.02	0.09	0.08	0.37	0.36	0.44	0.44	2.13	2.13	2.59	2.20
MC292-NF-DS1 (8-10cm)	0	0	0	0	0	0	0.31	0.41	0.40	0.45	0.45	2.28	2.27	1.86	1.46
MC292-NF-DS2 (0-2cm)	0	0	0.14	0.03	0.04	0.10	0.10	0.43	0.43	0.43	0.43	1.78	1.78	1.31	1.92
MC292-NF-DS2 (2-4cm)	0	0	0.44	0.65	0.66	0.43	0.42	0.64	0.65	0.72	0.72	2.71	2.71	2.09	1.80
MC292-NF-DS2 (4-6cm)	0	0	0.05	0.06	0.07	0.16	0.16	0.58	0.57	0.85	0.85	1.86	1.86	3.50	2.72
MC292-NF-DS2 (6-8cm)	0	0	0	0	0.17	0.53	0.53	0.67	0.66	1.06	1.05	0.23	0.23	1.66	2.86
MC292-NF-DS2 (8-10cm)	0	0	0	0	0.27	0.62	0.63	1.05	1.06	1.04	1.04	0.84	0.84	1.40	2.25
MC292-NF-DS3 (0-2cm)	0	0	0.27	0.29	0.28	0.30	0.29	0.45	0.44	0.68	0.68	1.65	1.65	2.62	2.63
MC292-NF-DS3 (2-4cm)	0	0	0.03	0.01	0.02	0.02	0.03	0.13	0.12	0.38	0.38	3.85	3.85	2.32	1.94
MC292-NF-DS3 (4-6cm)	0	0	0	0	0.06	0.08	0.09	0.41	0.40	0.51	0.50	4.06	4.06	2.35	1.98
MC292-NF-DS3 (6-8cm)	0	0	0	0	0.05	0.14	0.14	0.45	0.45	0.51	0.51	3.19	3.18	1.35	1.32
MC292-NF-DS3 (8-10cm)	0	0	0	0	0.03	0.10	0.11	0.46	0.45	0.61	0.62	2.50	2.51	1.23	1.40

Appendix D2. Grain size data from Cruise 2B.

	Interpolated Phi Percentiles (Percent Retained)													
Station	**6.50**	**7.00**	**7.50**	**8.00**	**8.50**	**9.00**	**9.50**	**10.00**	**10.50**	**11.00**	**11.50**	**12.00**	**12.50**	**13.00**	**Unaccounted***
MC292-FF1-B01	2.74	1.48	1.48	1.48	1.92	5.76	17.07	10	9.05	9.05	9.05	9.05	9.05	*	0.41
MC292-FF1-B02	2.54	4.03	4.07	4.06	4.18	5.16	12.63	14.48	14.18	14.18	*	*	*	*	9.74
MC292-FF2-B01	1.53	4.12	4.37	4.99	5.23	8.07	11.82	13.74	13.68	13.68	*	*	*	*	6.75
MC292-FF2-B02	3.63	3.97	4.04	5.72	5.98	9.06	10.48	17.33	17.94	*	*	*	*	*	11.15
MC292-FF3-B01	1.04	0.84	0.99	1.70	1.78	2.16	3.71	4.63	4.62	4.62	4.62	4.62	4.61	4.62	38.95
MC292-FF3-B02	2.41	0.68	0.77	1.38	1.43	1.74	2.92	3.61	3.58	3.58	3.58	3.59	3.58	3.58	38.07
MC292-FF4-B01	1.97	2.09	2.05	1.56	1.59	1.97	2.43	3.35	3.47	3.48	3.47	3.47	3.47	3.47	28.42
MC292-FF4-B02	1.02	2.15	2.05	1.42	1.62	2.72	4.66	4.28	4.08	4.07	4.08	4.07	4.08	4.07	32.57
MC292-FF5-B01	1.10	1.65	1.86	3.33	4.39	9.8	11.13	10.25	10.2	10.19	10.2	10.2	*	*	4.92
MC292-FF5-B02	6.30	11.32	6.72	1.85	0.93	0.00	1.59	9.17	9.17	9.18	*	*	*	*	4.08
MC292-FF6-B01	2.82	1.56	1.65	2.34	2.75	5.00	10.25	9.25	8.95	8.94	8.95	8.94	8.95	*	5.39
MC292-FF6-B02	2.21	1.20	1.14	0.59	0.62	0.75	1.22	2.30	2.47	2.46	2.47	2.47	2.47	2.46	44.89
MC292-NF-B01	2.07	2.42	2.54	3.27	4.05	7.40	6.94	10.27	10.37	10.37	10.36	10.37	*	*	7.27
MC292-NF-B02	1.41	5.16	5.85	4.66	4.71	6.80	16.11	14.37	13.48	13.47	*	*	*	*	1.69
MC292-NF-B03	1.93	2.25	2.13	1.49	1.73	2.90	3.68	4.76	4.81	4.81	4.81	4.81	4.80	4.81	28.63
MC292-NF-B04	1.71	2.00	1.90	1.33	1.51	2.58	2.09	3.65	3.84	3.85	3.85	3.84	3.85	3.85	32.41
MC292-NF-B05	1.97	2.58	2.53	2.05	2.04	1.94	2.44	3.72	3.87	3.87	3.87	3.88	3.87	3.87	19.72
MC292-NF-B06	1.76	0.70	0.89	6.58	5.98	1.78	10.19	10.74	10.03	10.02	10.03	10.03	*	*	9.44
MC292-NF-B07	5.33	4.59	3.95	3.05	1.73	0.00	4.12	9.25	9.26	9.25	9.26	9.26	*	*	0.99
MC292-NF-B08	1.89	1.01	1.02	1.01	1.10	1.94	2.40	2.72	2.72	2.71	2.71	2.71	2.71	2.71	31.69
MC292-NF-B09	1.44	1.19	1.14	6.97	7.83	3.67	15.11	14.22	11.42	11.42	11.42	*	*	*	3.52
MC292-NF-B10	1.61	1.90	1.96	2.53	2.78	4.12	8.53	5.09	4.88	4.88	4.88	4.89	4.88	4.88	13.16
MC292-NF-B11	2.11	0.97	1.23	1.95	2.11	2.53	4.63	5.05	5.05	5.05	5.05	5.05	5.05	5.05	26.57
MC292-NF-B12	1.78	1.42	1.77	9.75	9.21	6.60	15.07	13.33	13.34	13.33	*	*	*	*	3.11
MC292-NF-DS1 (0-2cm)	1.83	1.47	1.72	4.49	5.84	13.96	7.14	11.41	11.65	11.65	11.66	*	*	*	3.10
MC292-NF-DS1 (2-4cm)	1.92	1.54	2.04	6.34	10.49	29.19	12.86	13.57	*	*	*	*	*	*	9.23
MC292-NF-DS1 (4-6cm)	2.15	2.24	2.27	5.38	5.87	16.69	13.66	16.66	17.03	*	*	*	*	*	9.14
MC292-NF-DS1 (6-8cm)	1.51	2.32	2.42	1.27	1.20	14.61	12.54	11.86	12.06	12.06	12.07	*	*	*	5.23
MC292-NF-DS1 (8-10cm)	1.26	3.25	4.15	5.00	5.22	12.04	12.30	15.01	15.51	15.51	*	*	*	*	0.86
MC292-NF-DS2 (0-2cm)	2.35	3.50	3.78	5.30	5.10	4.43	8.01	15.19	15.36	15.35	*	*	*	*	12.71
MC292-NF-DS2 (2-4cm)	1.64	4.65	4.90	8.22	8.28	8.62	7.74	15.43	15.55	*	*	*	*	*	10.33
MC292-NF-DS2 (4-6cm)	1.60	1.28	1.26	6.49	7.05	12.08	13.96	13.71	13.68	13.67	*	*	*	*	1.93
MC292-NF-DS2 (6-8cm)	3.54	3.38	3.35	5.98	6.41	15.54	12.82	21.49	*	*	*	*	*	*	17.84
MC292-NF-DS2 (8-10cm)	2.98	4.16	4.83	4.82	4.80	15.01	10.86	17.05	18.65	*	*	*	*	*	5.80
MC292-NF-DS3 (0-2cm)	2.39	4.38	4.59	8.59	8.41	7.41	8.40	19.26	19.70	*	*	*	*	*	4.64
MC292-NF-DS3 (2-4cm)	1.84	3.58	3.41	1.41	1.64	3.61	6.06	8.60	8.71	8.70	8.71	8.70	8.71	8.70	4.54
MC292-NF-DS3 (4-6cm)	1.83	1.45	1.72	4.46	4.23	2.78	9.98	9.07	8.51	8.51	8.50	8.51	8.51	*	7.44
MC292-NF-DS3 (6-8cm)	1.64	2.57	2.62	2.61	2.95	10.48	19.98	10.80	10.12	10.13	10.12	*	*	*	4.69
MC292-NF-DS3 (8-10cm)	1.71	2.03	2.04	2.04	2.29	8.05	11.30	10.39	9.91	9.90	9.90	9.91	9.90	*	0.61

* Due to very long settling times for fine clay particles, some phi intervals (generally > phi 11) were not measured in many samples
The calculated total of these phi intervals is listed in the "unaccounted" column

APPENDIX D3

Grain Size Data from Cruise 3B

Appendix D3 Grain size data from Cruise 3B.

	Percentage					Mean		Folk's Statistics					
Station	Gravel	Sand	Silt	Clay	Folk's Description	(phi)	(µm)	StandDev		Skewness		Kurtosis	
								(phi)	Description	(phi)	Description	(phi)	Description
VK916-NF-B01	0.74	7.70	28.91	62.65	Slightly gravelly mud	8.538	2.690	2.227	Very poorly sorted	-0.444	Strongly coarse-skewed	0.991	Mesokurtic
VK916-NF-B02	0.00	3.41	22.39	74.21	Clay	9.070	1.860	2.094	Very poorly sorted	-0.457	Strongly coarse-skewed	1.022	Mesokurtic
VK916-NF-B03	0.00	5.48	26.76	67.77	Clay	8.729	2.356	1.955	Poorly sorted	-0.579	Strongly coarse-skewed	1.092	Mesokurtic
VK916-NF-B04	0.00	2.73	24.59	72.68	Clay	8.829	2.199	1.728	Poorly sorted	-0.493	Strongly coarse-skewed	0.940	Mesokurtic
VK916-NF-B05	0.00	6.83	26.43	66.74	Clay	8.782	2.271	2.034	Very poorly sorted	-0.539	Strongly coarse-skewed	1.051	Mesokurtic
VK916-NF-B06	0.00	6.54	23.23	70.23	Clay	8.903	2.088	2.488	Very poorly sorted	-0.452	Strongly coarse-skewed	0.925	Mesokurtic
VK916-NF-B07	0.00	7.61	29.50	62.89	Clay	8.452	2.856	2.351	Very poorly sorted	-0.527	Strongly coarse-skewed	0.935	Mesokurtic
VK916-NF-B08	0.00	3.18	28.53	68.28	Clay	8.750	2.323	1.731	Poorly sorted	-0.583	Strongly coarse-skewed	0.916	Mesokurtic
VK916-NF-B09	0.00	2.25	24.04	73.71	Clay	8.961	2.007	1.636	Poorly sorted	-0.484	Strongly coarse-skewed	0.975	Mesokurtic
VK916-NF-B10	0.00	2.16	19.94	77.91	Clay	9.529	1.354	2.254	Very poorly sorted	-0.430	Strongly coarse-skewed	1.040	Mesokurtic
VK916-NF-B11	0.00	5.01	24.28	70.72	Clay	8.797	2.248	1.903	Poorly sorted	-0.517	Strongly coarse-skewed	1.060	Mesokurtic
VK916-NF-B12	0.00	3.05	25.92	71.03	Clay	8.800	2.243	1.624	Poorly sorted	-0.609	Strongly coarse-skewed	0.915	Mesokurtic
VK916-FF1-B01	0.00	3.96	26.05	69.99	Clay	8.831	2.195	1.588	Poorly sorted	-0.593	Strongly coarse-skewed	0.931	Mesokurtic
VK916-FF1-B02	0.00	3.40	25.02	71.58	Clay	8.751	2.320	1.699	Poorly sorted	-0.494	Strongly coarse-skewed	0.937	Mesokurtic
VK916-FF2-B01	0.00	2.54	17.68	79.78	Clay	9.429	1.450	1.692	Poorly sorted	-0.458	Strongly coarse-skewed	1.056	Mesokurtic
VK916-FF2-B02	0.00	2.27	16.66	81.07	Clay	9.511	1.371	1.736	Poorly sorted	-0.457	Strongly coarse-skewed	1.114	Leptokurtic
VK916-FF3-B01	0.00	3.02	17.70	79.28	Clay	9.419	1.461	1.794	Poorly sorted	-0.465	Strongly coarse-skewed	1.087	Mesokurtic
VK916-FF3-B02	0.00	3.34	23.78	72.88	Clay	9.034	1.907	1.813	Poorly sorted	-0.461	Strongly coarse-skewed	1.007	Mesokurtic
VK916-FF4-B01	0.00	2.47	16.08	81.45	Clay	9.716	1.189	2.114	Very poorly sorted	-0.464	Strongly coarse-skewed	1.091	Mesokurtic
VK916-FF4-B02	0.00	2.87	27.18	69.95	Clay	8.882	2.120	2.031	Very poorly sorted	-0.445	Strongly coarse-skewed	0.945	Mesokurtic
VK916-FF5-B01	0.00	1.69	17.16	81.15	Clay	9.453	1.427	1.763	Poorly sorted	-0.480	Strongly coarse-skewed	1.119	Leptokurtic
VK916-FF5-B02	0.00	2.98	17.56	79.46	Clay	9.564	1.321	2.248	Very poorly sorted	-0.456	Strongly coarse-skewed	1.102	Mesokurtic
VK916-FF6-B01	0.00	4.18	22.45	73.38	Clay	9.046	1.892	2.156	Very poorly sorted	-0.465	Strongly coarse-skewed	1.004	Mesokurtic
VK916-FF6-B02	0.00	4.77	26.20	69.03	Clay	8.738	2.343	1.894	Poorly sorted	-0.605	Strongly coarse-skewed	1.040	Mesokurtic
VK916-NF-DS1(0-2cm)	0.00	2.74	21.47	75.79	Clay	9.215	1.683	1.927	Poorly sorted	-0.456	Strongly coarse-skewed	1.029	Mesokurtic
VK916-NF-DS1(2-4cm)	0.00	2.93	18.33	78.74	Clay	9.383	1.498	2.035	Very poorly sorted	-0.471	Strongly coarse-skewed	1.095	Mesokurtic
VK916-NF-DS1(4-6cm)	0.00	2.00	17.23	80.77	Clay	9.662	1.235	2.209	Very poorly sorted	-0.462	Strongly coarse-skewed	1.101	Mesokurtic
VK916-NF-DS1(6-8cm)	0.00	1.99	16.80	81.21	Clay	9.587	1.300	1.844	Poorly sorted	-0.461	Strongly coarse-skewed	1.116	Leptokurtic
VK916-NF-DS1(8-10cm)	0.00	2.32	20.35	77.32	Clay	9.196	1.705	1.866	Poorly sorted	-0.460	Strongly coarse-skewed	1.075	Mesokurtic
VK916-NF-DS2(0-2cm)	0.00	4.23	27.89	67.88	Clay	8.660	2.473	2.073	Very poorly sorted	-0.519	Strongly coarse-skewed	0.958	Mesokurtic
VK916-NF-DS2(2-4cm)	0.00	4.43	24.55	71.03	Clay	8.790	2.259	1.861	Poorly sorted	-0.503	Strongly coarse-skewed	0.992	Mesokurtic
VK916-NF-DS2(4-6cm)	0.00	1.78	18.95	79.27	Clay	9.580	1.306	2.038	Very poorly sorted	-0.471	Strongly coarse-skewed	1.090	Mesokurtic
VK916-NF-DS2(6-8cm)	0.00	1.87	21.22	76.90	Clay	9.335	1.549	2.001	Very poorly sorted	-0.450	Strongly coarse-skewed	1.041	Mesokurtic
VK916-NF-DS2(8-10cm)	0.00	1.75	20.28	77.97	Clay	9.168	1.739	1.963	Poorly sorted	-0.473	Strongly coarse-skewed	1.138	Leptokurtic
VK916-NF-DS3(0-2cm)	0.00	17.14	27.22	55.65	Sandy clay	7.929	4.102	3.531	Very poorly sorted	-0.362	Strongly coarse-skewed	0.766	Platykurtic
VK916-NF-DS3(2-4cm)	0.00	4.90	26.72	68.38	Clay	8.687	2.427	1.937	Poorly sorted	-0.545	Strongly coarse-skewed	1.026	Mesokurtic
VK916-NF-DS3(4-6cm)	0.00	1.87	17.17	80.97	Clay	9.395	1.486	1.806	Poorly sorted	-0.480	Strongly coarse-skewed	1.191	Leptokurtic
VK916-NF-DS3(6-8cm)	0.00	1.14	18.98	79.87	Clay	9.549	1.335	1.952	Poorly sorted	-0.447	Strongly coarse-skewed	1.106	Mesokurtic
VK916-NF-DS3(8-10cm)	0.00	1.86	18.79	79.35	Clay	9.445	1.435	1.792	Poorly sorted	-0.459	Strongly coarse-skewed	1.099	Mesokurtic

Appendix D3. Grain size data from Cruise 3B.

Station	Interpolated Phi Percentiles (Percent Retained)														
Station	-1.00	-0.50	0.00	0.50	1.00	1.50	2.00	2.50	3.00	3.50	4.00	4.50	5.00	5.50	6.00
VK916-NF-B01	0.74	0.10	0.11	0.02	0.01	0.82	0.81	0.86	0.86	2.05	2.06	2.06	2.04	1.17	1.72
VK916-NF-B02	0	0	0	0	0	0	1.35	0.45	0.44	0.59	0.58	1.95	2.06	2.97	2.58
VK916-NF-B03	0	0	0	0	0.13	1.25	1.25	0.86	0.86	0.56	0.57	0.32	0.33	2.37	2.82
VK916-NF-B04	0	0	0	0	0	0	0.85	0.39	0.38	0.56	0.55	0.67	0.80	2.84	3.38
VK916-NF-B05	0	0	0	0	0	0	1.52	0.96	0.95	1.70	1.70	0.60	0.65	1.35	2.03
VK916-NF-B06	0	0	0.10	0.34	0.34	0.34	0.33	0.68	0.67	1.87	1.87	1.82	1.87	2.66	3.17
VK916-NF-B07	0	0	0	0	0.03	1.48	1.48	0.99	1.00	1.31	1.32	1.25	1.31	3.73	4.82
VK916-NF-B08	0	0	0	0	0.03	0.66	0.67	0.44	0.44	0.47	0.47	1.11	1.11	2.40	2.85
VK916-NF-B09	0	0	0	0	0	0	0.86	0.32	0.33	0.37	0.37	1.17	1.18	1.17	2.34
VK916-NF-B10	0	0	0.09	0.17	0.17	0.17	0.17	0.29	0.30	0.40	0.40	3.08	3.09	2.30	2.02
VK916-NF-B11	0	0	0	0	0	0	2.56	0.63	0.63	0.59	0.60	0.25	0.29	1.34	2.82
VK916-NF-B12	0	0	0.03	0.28	0.29	0.28	0.28	0.30	0.30	0.64	0.65	0.45	0.45	2.54	3.01
VK916-FF1-B01	0	0	0	0	0.03	0.91	0.91	0.58	0.58	0.48	0.47	0.28	0.28	2.07	1.99
VK916-FF1-B02	0	0	0	0	0	0	1.62	0.53	0.53	0.36	0.36	0.38	0.39	2.54	3.76
VK916-FF2-B01	0	0	0	0	0	0	1.04	0.50	0.51	0.25	0.24	0.86	0.86	1.95	1.90
VK916-FF2-B02	0	0	0	0	0	0	0.35	0.37	0.37	0.59	0.59	0.89	0.89	2.43	2.17
VK916-FF3-B01	0	0	0	0	0	0	1.44	0.38	0.39	0.40	0.41	0.65	0.78	2.83	1.56
VK916-FF3-B02	0	0	0	0	0	0	1.41	0.51	0.51	0.45	0.46	1.23	1.34	2.78	1.54
VK916-FF4-B01	0	0	0	0	0	0	0.61	0.46	0.45	0.48	0.47	1.27	1.41	2.92	2.54
VK916-FF4-B02	0	0	0	0	0	0	1.14	0.41	0.42	0.45	0.45	2.66	2.64	2.57	2.25
VK916-FF5-B01	0	0	0	0	0	0	0.35	0.26	0.27	0.41	0.40	1.16	1.19	1.47	2.22
VK916-FF5-B02	0	0	0	0	0	0	0.50	0.54	0.54	0.70	0.70	1.89	1.95	2.75	2.41
VK916-FF6-B01	0	0	0	0	0.04	0.77	0.78	0.52	0.52	0.77	0.78	1.59	1.73	2.96	2.57
VK916-FF6-B02	0	0	0	0	0	0	1.92	0.70	0.69	0.73	0.73	0.40	0.43	2.55	3.78
VK916-NF-DS1(0-2cm)	0	0	0	0	0	0	0.63	0.34	0.35	0.71	0.71	1.67	1.69	2.53	2.23
VK916-NF-DS1(2-4cm)	0	0	0	0	0	0	0.93	0.48	0.49	0.51	0.52	1.17	1.23	2.64	3.14
VK916-NF-DS1(4-6cm)	0	0	0	0	0	0	0.41	0.33	0.32	0.47	0.47	1.93	2.01	2.89	2.52
VK916-NF-DS1(6-8cm)	0	0	0	0	0	0	0.32	0.36	0.35	0.48	0.48	1.05	1.13	2.73	2.39
VK916-NF-DS1(8-10cm)	0	0	0	0	0	0	0.27	0.41	0.42	0.61	0.61	1.54	1.55	2.55	3.02
VK916-NF-DS2(0-2cm)	0	0	0	0	0	0	1.23	0.68	0.68	0.82	0.82	1.87	1.90	2.62	3.95
VK916-NF-DS2(2-4cm)	0	0	0	0	0	0	2.25	0.59	0.59	0.50	0.50	0.49	0.54	1.36	3.78
VK916-NF-DS2(4-6cm)	0	0	0	0	0	0	0.51	0.27	0.27	0.37	0.36	1.97	1.93	1.38	2.09
VK916-NF-DS2(6-8cm)	0	0	0	0	0	0	0.49	0.35	0.36	0.34	0.33	2.29	2.34	2.88	1.56
VK916-NF-DS2(8-10cm)	0	0	0	0	0	0	0.25	0.32	0.32	0.43	0.43	1.85	1.90	2.75	3.27
VK916-NF-DS3(0-2cm)	0	0	0.25	1.75	1.75	1.75	1.75	3.20	3.21	1.74	1.74	3.68	3.99	5.63	2.74
VK916-NF-DS3(2-4cm)	0	0	0	0	0	0	2.51	0.63	0.64	0.56	0.56	0.82	0.92	2.71	3.23
VK916-NF-DS3(4-6cm)	0	0	0	0	0	0	0.48	0.36	0.37	0.33	0.33	1.55	1.53	1.40	1.22
VK916-NF-DS3(6-8cm)	0	0	0	0	0	0	0.24	0.25	0.26	0.19	0.20	2.34	2.26	1.50	3.31
VK916-NF-DS3(8-10cm)	0	0	0	0	0	0	0.47	0.29	0.29	0.40	0.41	1.84	1.83	1.29	1.13

Appendix D3. Grain size data from Cruise 3B.

	Interpolated Phi Percentiles (Percent Retained)														
Station	**6.50**	**7.00**	**7.50**	**8.00**	**8.50**	**9.00**	**9.50**	**10.00**	**10.50**	**11.00**	**11.50**	**12.00**	**12.50**	**13.00**	**Unaccounted***
VK916-NF-B01	2.68	7.22	6.85	5.55	5.72	6.15	8.70	14.70	14.71	*	*	*	*	*	12.29
VK916-NF-B02	2.35	1.95	2.96	5.97	6.10	6.42	10.34	13.72	13.71	13.72	*	*	*	*	9.79
VK916-NF-B03	3.35	5.67	5.84	6.50	6.14	5.19	10.49	20.58	20.58	*	*	*	*	*	4.34
VK916-NF-B04	3.60	3.76	4.23	5.70	5.44	4.87	12.09	20.73	20.72	*	*	*	*	*	8.44
VK916-NF-B05	3.03	6.41	6.40	6.39	5.85	4.67	9.72	17.93	17.93	*	*	*	*	*	10.21
VK916-NF-B06	3.38	3.52	3.53	3.52	4.14	5.74	9.04	11.78	11.77	11.78	11.77	*	*	*	3.97
VK916-NF-B07	4.85	3.27	4.06	6.67	5.92	4.24	8.64	15.38	15.38	*	*	*	*	*	12.87
VK916-NF-B08	3.38	5.71	5.88	6.55	6.48	6.32	7.56	22.84	22.85	*	*	*	*	*	1.78
VK916-NF-B09	3.07	3.94	4.43	7.23	6.99	6.16	8.53	21.61	21.61	*	*	*	*	*	8.32
VK916-NF-B10	1.85	1.49	1.85	4.56	5.18	8.00	8.30	11.13	11.12	11.13	11.13	11.12	*	*	0.49
VK916-NF-B11	3.74	5.40	5.40	5.40	5.52	5.80	9.88	20.52	20.52	*	*	*	*	*	8.11
VK916-NF-B12	3.47	5.12	5.30	5.99	6.16	6.64	9.85	24.62	*	*	*	*	*	*	23.35
VK916-FF1-B01	2.08	6.03	6.25	7.59	7.42	6.80	6.96	25.39	*	*	*	*	*	*	22.90
VK916-FF1-B02	4.14	3.37	4.05	6.86	6.80	6.62	6.04	23.50	23.49	*	*	*	*	*	4.66
VK916-FF2-B01	1.75	2.08	2.28	6.44	6.58	7.42	7.67	16.79	17.13	17.14	*	*	*	*	6.61
VK916-FF2-B02	2.00	1.61	2.07	4.94	5.45	7.53	10.46	15.69	15.69	15.70	*	*	*	*	10.21
VK916-FF3-B01	1.47	2.81	3.21	4.71	5.40	7.38	8.11	16.04	16.04	16.04	*	*	*	*	9.95
VK916-FF3-B02	1.62	3.70	4.55	7.53	7.08	6.01	8.08	17.65	17.65	*	*	*	*	*	15.90
VK916-FF4-B01	2.32	1.92	1.92	1.92	3.35	7.62	8.12	12.39	12.40	12.39	12.40	12.39	*	*	0.25
VK916-FF4-B02	2.49	4.29	4.65	6.05	5.90	5.55	9.00	15.13	15.13	15.13	*	*	*	*	3.69
VK916-FF5-B01	2.55	2.93	2.92	2.92	4.52	9.03	6.78	16.70	16.71	16.70	*	*	*	*	10.51
VK916-FF5-B02	2.20	1.81	2.01	2.73	4.12	8.44	7.97	11.67	11.66	11.67	11.66	11.67	*	*	0.41
VK916-FF6-B01	2.58	2.94	3.47	4.94	5.39	6.42	8.30	13.98	13.98	13.98	*	*	*	*	10.99
VK916-FF6-B02	4.14	3.38	4.28	7.78	7.12	5.49	7.65	21.15	21.15	*	*	*	*	*	5.93
VK916-NF-DS1(0-2cm)	2.16	2.51	3.12	5.97	6.12	6.60	8.94	15.13	15.13	15.14	*	*	*	*	8.32
VK916-NF-DS1(2-4cm)	3.05	1.74	2.08	3.52	4.30	6.91	9.19	13.89	13.88	13.88	13.88	*	*	*	2.57
VK916-NF-DS1(4-6cm)	2.30	1.90	1.91	1.90	3.33	7.55	10.01	11.61	11.61	11.61	11.61	11.61	*	*	1.70
VK916-NF-DS1(6-8cm)	2.18	1.80	2.15	3.62	4.44	7.12	9.50	14.70	14.71	14.70	14.70	*	*	*	1.09
VK916-NF-DS1(8-10cm)	2.96	1.68	2.28	5.13	6.02	8.98	7.88	15.91	15.90	15.90	*	*	*	*	6.38
VK916-NF-DS2(0-2cm)	4.23	3.47	4.11	6.17	6.01	5.66	9.45	16.54	16.55	*	*	*	*	*	13.24
VK916-NF-DS2(2-4cm)	4.43	3.64	4.29	6.45	5.94	4.71	9.73	20.02	20.01	*	*	*	*	*	10.18
VK916-NF-DS2(4-6cm)	2.40	2.76	2.97	3.70	3.97	4.80	10.91	13.21	13.20	13.21	13.20	*	*	*	6.52
VK916-NF-DS2(6-8cm)	1.53	2.85	3.31	4.80	5.19	6.22	11.84	13.38	13.38	13.38	*	*	*	*	13.18
VK916-NF-DS2(8-10cm)	3.12	1.80	2.20	3.64	4.83	8.40	11.93	14.55	14.55	14.55	*	*	*	*	8.91
VK916-NF-DS3(0-2cm)	2.73	3.69	3.05	1.83	2.88	4.78	10.78	6.63	6.64	6.64	6.64	6.64	*	*	3.89
VK916-NF-DS3(2-4cm)	3.62	4.51	4.97	6.38	6.58	7.06	8.52	19.59	19.59	*	*	*	*	*	6.60
VK916-NF-DS3(4-6cm)	1.61	3.73	3.53	2.78	4.51	9.89	12.55	15.16	15.16	15.17	*	*	*	*	8.34
VK916-NF-DS3(6-8cm)	3.13	0.99	1.72	4.01	5.09	7.87	8.58	13.67	13.67	13.66	13.97	*	*	*	3.09
VK916-NF-DS3(8-10cm)	1.28	2.57	3.15	6.11	6.27	6.76	12.69	14.87	14.88	14.87	*	*	*	*	8.60
	* Due to very long settling times for fine clay particles, some phi intervals (generally > phi 11) were not measured in many samples.														

APPENDIX E1

Sediment Profile Imaging Data for Cruise 1B (Garden Banks Block 516 and Viosca Knoll Block 916)

Appendix E1. Sediment profile imaging data for Cruise 1B (Garden Banks Block 516 and Viosca Knoll Block 916).

Block	Station	Penetration Depth (cm)			Boundary Roughness		Grain Size (phi)			Redox Potential Discontinuity (RPD) Depth (cm)			Methane Bubbles	Anoxia Low DO	Successional Stage	Organism Sediment Index (OSI)	Burrow
		Minimum	Maximum	Mean	Thickness (cm)	Type	Minimum	Maximum	Major Mode	Minimum	Maximum	Mean					
GB516	FF2-S1.01	13.50	16.17	14.64	2.67	Indeterminate	>4	2 to 1	>4	3.86	5.23	4.49	No	No	I on III	11	No
GB516	FF2-S1.02	12.50	14.60	13.47	2.10	Biological	>4	2 to 1	>4	0.44	1.93	1.21	No	No	I on III	7	No
GB516	FF2-S1.03	11.90	12.64	12.29	0.74	Biological	>4	2 to 1	>4	0.14	0.80	0.51	No	No	I	2	No
GB516	FF2-S1.04	13.69	15.31	14.66	1.62	Indeterminate	>4	2 to 1	>4	0.44	1.49	0.89	No	No	I	3	No
GB516	FF2-S1.05	12.61	13.88	13.27	1.27	Biological	>4	2 to 1	>4	0.06	1.24	0.86	No	No	I on III	7	No
GB516	FF2-S1.06	13.63	14.68	14.12	1.05	Biological	>4	2 to 1	>4	0.66	1.46	1.07	No	No	I	3	No
GB516	FF2-S1.07	13.83	16.86	15.50	3.03	Biological	>4	2 to 1	>4	0.69	1.93	1.35	No	No	I on III	7	No
GB516	FF2-S1.08	11.46	12.92	12.28	1.46	Biological	>4	2 to 1	>4	0.44	1.51	0.82	No	No	I	3	No
GB516	FF2-S1.09	12.20	13.56	12.82	1.36	Biological	>4	2 to 1	>4	0.83	1.54	1.08	No	No	I	3	No
GB516	FF2-S1.10	12.17	13.44	12.81	1.27	Biological	>4	2 to 1	>4	0.28	1.46	1.00	No	No	I	3	No
GB516	FF2-S1.11	11.46	13.11	12.51	1.65	Biological	>4	2 to 1	>4	0.44	1.46	0.98	No	No	I	3	No
GB516	FF2-S1.12	9.72	10.16	9.98	0.44	Biological	>4	2 to 1	>4	0.14	0.99	0.47	No	No	I	1	No
GB516	FF2-S1.13	12.70	14.05	13.36	1.35	Biological	>4	2 to 1	>4	0.50	1.87	0.97	No	No	I	3	No
GB516	FF2-S1.14	11.62	12.31	11.96	0.69	Biological	>4	2 to 1	>4	0.36	1.21	0.74	No	No	I	2	No
GB516	FF2-S1.15	13.03	14.82	13.69	1.79	Biological	>4	2 to 1	>4	0.06	1.18	0.77	No	No	I	3	No
GB516	FF2-S1.16	12.45	13.06	12.82	0.61	Biological	>4	2 to 1	>4	0.50	1.46	1.00	No	No	I	3	No
GB516	FF2-S1.17	13.41	14.10	13.67	0.69	Biological	>4	2 to 1	>4	0.50	4.30	1.62	No	No	I on III	8	No
GB516	FF2-S1.18	12.28	13.00	12.60	0.72	Biological	>4	2 to 1	>4	0.88	1.76	1.40	No	No	I on III	7	No
GB516	FF2-S1.19	11.18	12.06	11.48	0.88	Biological	>4	2 to 1	>4	0.33	0.83	0.61	No	No	I on III	6	No
GB516	FF2-S1.20	12.34	13.41	13.07	1.07	Biological	>4	2 to 1	>4	0.25	0.91	0.53	No	No	I on III	6	Yes
GB516	FF2-S1.21	11.46	12.12	11.90	0.66	Biological	>4	2 to 1	>4	0.36	1.05	0.67	No	No	I	2	No
GB516	FF2-S1.22	10.69	11.43	11.03	0.74	Biological	>4	2 to 1	>4	0.52	1.57	0.90	No	No	I on III	7	No
GB516	FF4-S2.01	6.50	10.71	8.45	4.21	Indeterminate	>4	2 to 1	>4	0.00	2.56	0.59	No	No	I on III	6	No
GB516	FF4-S2.02	9.81	11.62	10.75	1.81	Physical	>4	2 to 1	>4	0.08	0.69	0.37	No	No	I	2	No
GB516	FF4-S2.04	10.41	11.51	10.92	1.10	Biological	>4	2 to 1	>4	0.08	0.44	0.31	No	No	I	2	No
GB516	FF4-S2.05	12.53	13.83	13.34	1.30	Biological	>4	2 to 1	>4	0.00	0.94	0.55	No	No	I	2	No
GB516	FF4-S2.06	12.26	14.24	13.28	1.98	Physical	>4	2 to 1	>4	0.00	4.71	1.47	No	No	I on III	7	No
GB516	FF4-S2.07	12.48	13.19	12.98	0.71	Biological	>4	2 to 1	>4	0.06	4.93	1.72	No	No	I	4	No
GB516	FF4-S2.08	11.49	12.45	11.96	0.96	Biological	>4	2 to 1	>4	0.72	6.03	2.56	No	No	I on III	9	No
GB516	FF4-S2.09	12.86	13.69	13.36	0.83	Biological	>4	2 to 1	>4	0.08	0.80	0.37	No	No	I on III	6	No
GB516	FF4-S2.10	12.12	13.28	12.69	1.16	Physical	>4	2 to 1	>4	0.06	0.41	0.19	No	No	I on III	6	No
GB516	FF4-S2.11	10.49	11.76	11.31	1.27	Biological	>4	2 to 1	>4	0.19	0.85	0.55	No	No	I on III	6	No
GB516	FF4-S2.12	11.32	13.63	13.02	2.31	Biological	>4	2 to 1	>4	0.11	1.96	0.82	No	No	I	3	No
GB516	FF4-S2.13	12.81	13.44	13.10	0.63	Biological	>4	2 to 1	>4	0.06	0.55	0.23	No	No	Indeterminate	Indeterminate	No
GB516	FF4-S2.14	14.10	15.12	14.58	1.02	Biological	>4	2 to 1	>4	0.06	1.60	0.68	No	No	I	2	No
GB516	FF4-S2.15	15.45	17.57	16.52	2.12	Physical	>4	2 to 1	>4	0.08	7.99	4.01	No	No	I	7	No

Appendix E1. Sediment profile imaging data for Cruise 1B (Garden Banks Block 516 and Viosca Knoll Block 916).

Block	Station	Penetration Depth (cm)			Boundary Roughness		Grain Size (phi)			Redox Potential Discontinuity (RPD) Depth (cm)			Methane Bubbles	Anoxia Low DO	Successional Stage	Organism Sediment Index (OSI)	Burrow
		Minimum	Maximum	Mean	Thickness (cm)	Type	Minimum	Maximum	Major Mode	Minimum	Maximum	Mean					
GB516	FF4-S2.16	12.86	13.52	13.28	0.66	Biological	>4	2 to 1	>4	0.00	2.07	0.75	No	No	I on III	6	No
GB516	FF4-S2.17	18.21	19.47	18.96	1.26	Biological	>4	2 to 1	>4	Indeterminate			No	No	I on III	Indeterminate	No
GB516	FF4-S2.18	14.29	14.93	14.48	0.64	Physical	>4	2 to 1	>4	0.11	0.83	0.40	No	No	I	2	No
GB516	FF6-S3.01	10.69	12.15	11.15	1.46	Physical	>4	2 to 1	>4	0.11	0.55	0.30	No	No	I on III	6	No
GB516	FF6-S3.03	12.01	13.11	12.60	1.10	Indeterminate	>4	2 to 1	>4	0.06	1.35	0.57	No	No	I on III	6	Yes
GB516	FF6-S3.04	12.26	13.00	12.57	0.74	Biological	>4	2 to 1	>4	0.08	1.10	0.58	No	No	I on III	6	No
GB516	FF6-S3.05	6.06	11.29	9.09	5.23	Physical	>4	2 to 1	>4	Indeterminate			No	No	Indeterminate	Indeterminate	No
GB516	FF6-S3.07	13.52	14.43	14.09	0.91	Biological	>4	2 to 1	>4	0.00	2.62	0.62	No	No	I on III	6	No
GB516	FF6-S3.08	4.24	5.21	4.72	0.97	Physical	>4	1 to 0	>4	Indeterminate			No	No	Indeterminate	Indeterminate	No
GB516	FF6-S3.09	12.50	13.19	12.90	0.69	Biological	>4	2 to 1	>4	1.85	4.10	3.33	No	No	I on III	10	No
GB516	FF6-S3.10	13.22	14.90	14.07	1.68	Physical	>4	2 to 1	>4	0.44	1.24	0.77	No	No	I on III	7	No
GB516	FF6-S3.11	11.90	12.94	12.47	1.04	Biological	>4	2 to 1	>4	0.06	0.77	0.85	No	No	I on III	7	No
GB516	FF6-S3.12	12.12	12.75	12.44	0.63	Biological	>4	2 to 1	>4	0.16	2.40	0.88	No	No	I	3	No
GB516	FF6-S3.13	15.18	15.97	15.61	0.79	Biological	>4	2 to 1	>4	0.44	2.81	1.02	No	No	I	3	No
GB516	FF6-S3.14	13.74	14.49	14.00	0.75	Physical	>4	2 to 1	>4	0.08	0.99	0.51	No	No	I on III	6	No
GB516	FF6-S3.15	11.90	12.45	12.12	0.55	Biological	>4	2 to 1	>4	0.25	1.27	0.77	No	No	I	2	No
GB516	FF6-S3.16	12.06	12.59	12.34	0.53	Biological	>4	3 to 2	>4	2.86	4.60	3.99	No	No	I on III	11	No
GB516	FF6-S3.17	12.39	12.92	12.63	0.53	Biological	>4	2 to 1	>4	0.06	0.61	0.33	No	No	I	2	No
GB516	FF6-S3.18	13.14	16.28	14.66	3.14	Physical	>4	2 to 1	>4	0.19	1.43	0.51	No	No	I	2	No
GB516	FF6-S3.19	9.28	10.27	9.73	0.99	Physical	>4	2 to 1	>4	0.03	0.74	0.35	No	No	I	2	No
GB516	FF6-S3.20	13.63	16.00	14.54	2.37	Physical	>4	2 to 1	>4	Indeterminate			No	No	I	Indeterminate	No
GB516	NFS-1.01	12.34	12.75	12.56	0.41	Biological	>4	3 to 2	>4	5.54	7.08	6.66	No	No	I	7	No
GB516	NFS-1.02	13.41	14.51	13.81	1.10	Biological	>4	3 to 2	>4	0.69	1.07	0.90	No	No	I	3	No
GB516	NFS-1.03	10.03	11.60	10.73	1.57	Biological	>4	3 to 2	>4	3.42	7.19	5.88	No	No	I	7	No
GB516	NFS-1.04	12.45	13.55	13.13	1.10	Biological	>4	3 to 2	>4	2.59	7.55	5.23	No	No	I on III	11	No
GB516	NFS-1.05	11.68	12.83	12.41	1.15	Biological	>4	3 to 2	>4	0.66	1.88	1.35	No	No	I	3	No
GB516	NFS-1.06	3.75	11.65	8.10	7.90	Biological	>4	3 to 2	>4	0.61	2.09	1.42	No	No	Indeterminate	Indeterminate	No
GB516	NFS-1.07	6.58	12.45	9.87	5.87	Biological	>4	3 to 2	>4	0.14	6.31	3.02	No	No	I	6	No
GB516	NFS-1.08	10.44	14.10	12.33	3.66	Physical	>4	3 to 2	>4	0.33	1.35	0.75	No	No	I	2	No
GB516	NFS-1.09	11.93	12.53	12.19	0.60	Biological	>4	3 to 2	>4	0.74	2.62	1.60	No	No	I	4	No
GB516	NFS-1.10	12.37	14.02	13.17	1.65	Biological	>4	3 to 2	>4	0.61	1.05	0.85	No	No	Indeterminate	Indeterminate	No

Appendix E1. Sediment profile imaging data for Cruise 1B (Garden Banks Block 516 and Viosca Knoll Block 916).

Block	Station	Penetration Depth (cm)			Boundary Roughness		Grain Size (phi)			Redox Potential Discontinuity			Methane	Anoxia	Successional	Organism	Burrow
					Thickness	Type			Major	(RPD) Depth (cm)			Bubbles	Low	Stage	Sediment	
		Minimum	Maximum	Mean	(cm)		Minimum	Maximum	Mode	Minimum	Maximum	Mean		DO		Index (OSI)	
GB516	NFS-1.11	13.63	14.18	13.89	0.55	Biological	>4	3 to 2	>4	0.17	0.80	0.49	No	No	I	2	No
GB516	NFS-1.12	10.88	11.40	11.12	0.52	Biological	>4	3 to 2	>4	0.41	1.18	0.81	No	No	I on III	7	No
GB516	NFS-1.13	12.75	13.88	13.35	1.13	Biological	>4	2 to 1	>4	0.19	0.94	0.52	No	No	I	2	No
GB516	NFS-1.14	9.34	13.36	11.80	4.02	Biological	>4	2 to 1	>4	0.00	1.27	0.47	No	No	I on III	6	No
GB516	NFS-1.15	11.98	13.96	13.08	1.98	Biological	>4	2 to 1	>4	0.03	0.72	0.38	No	No	I	2	No
GB516	NFS-1.16	11.98	13.96	13.08	1.98	Physical	>4	3 to 2	>4	0.06	0.80	0.29	No	No	I on III	6	No
GB516	NFS-1.17	12.75	13.96	13.16	1.21	Biological	>4	2 to 1	>4	0.03	1.05	0.42	No	No	I	2	No
GB516	NFS-1.18	9.28	11.76	10.74	2.48	Biological	>4	2 to 1	>4	0.00	0.91	0.34	No	No	I on III	6	Yes
GB516	NFS-1.19	13.69	14.62	14.11	0.93	Biological	>4	2 to 1	>4	0.03	1.43	0.83	No	No	I	3	No
GB516	NFS-1.20	13.06	13.99	13.58	0.93	Biological	>4	3 to 2	>4	0.00	0.47	0.18	No	No	I	2	No
GB516	NFS-1.22	14.49	15.84	15.07	1.35	Physical	>4	2 to 1	>4	0.00	0.00	0.00	No	Yes	Azoic	-8	No
GB516	NFS-1.23	14.02	14.90	14.44	0.88	Physical	>4	2 to 1	>4	0.00	0.00	0.00	No	Yes	Azoic	-8	No
GB516	NFS-1.24	13.17	14.71	13.93	1.54	Physical	>4	2 to 1	>4	0.00	0.00	0.00	No	Yes	Azoic	-8	No
GB516	NFS-1.25	9.25	9.78	9.59	0.53	Indeterminate	>4	2 to 1	>4	0.00	0.00	0.00	No	Yes	I	-3	No
GB516	NFS-1.26	11.65	13.66	12.81	2.01	Biological	>4	2 to 1	>4	0.00	0.00	0.00	No	Yes	I	-3	No
GB516	NFS-1.27	13.47	15.45	14.36	1.98	Physical	>4	2 to 1	>4	0.00	0.00	0.00	No	Yes	Azoic	-8	No
GB516	NFS-1.28	12.20	12.83	12.66	0.63	Biological	>4	2 to 1	>4	0.00	0.00	0.00	No	Yes	I	-3	No
GB516	NFS-2.06	14.18	14.65	14.35	0.47	Biological	>4	2 to 1	>4	0.00	0.83	0.33	No	No	I	2	No
GB516	NFS-2.07	12.67	13.11	12.91	0.44	Biological	>4	2 to 1	>4	0.03	0.88	0.41	No	No	I	2	No
GB516	NFS-2.08	12.78	13.61	13.26	0.83	Indeterminate	>4	2 to 1	>4	0.06	0.50	0.29	No	No	I on III	6	No
GB516	NFS-2.09	9.09	10.33	9.72	1.24	Biological	>4	2 to 1	>4	0.94	2.04	1.45	No	No	I	3	No
GB516	NFS-2.10	13.25	14.10	13.73	0.85	Biological	>4	3 to 2	>4	0.00	0.69	0.33	No	No	I	2	No
GB516	NFS-2.11	12.94	13.91	13.45	0.97	Indeterminate	>4	2 to 1	>4	0.00	0.00	0.00	No	Yes	I	-3	No
GB516	NFS-2.12	12.28	13.36	12.64	1.08	Indeterminate	>4	3 to 2	>4	0.00	0.00	0.00	No	Yes	I	-3	No
GB516	NFS-2.13	11.18	12.48	11.95	1.30	Biological	>4	2 to 1	>4	0.00	0.36	0.16	No	No	I	2	No
GB516	NFS-2.14	13.28	14.05	13.63	0.77	Biological	>4	2 to 1	>4	0.00	0.72	0.26	No	No	I	2	No
GB516	NFS-2.15	14.16	14.93	14.52	0.77	Indeterminate	>4	2 to 1	>4	0.00	1.07	0.14	No	Yes	I on III	2	No
GB516	NFS-2.16	15.56	16.44	16.01	0.88	Indeterminate	>4	2 to 1	>4	0.00	0.69	0.21	No	Yes	Azoic	-7	No
GB516	NFS-2.18	15.42	16.31	15.75	0.89	Indeterminate	>4	2 to 1	>4	0.00	0.00	0.00	No	Yes	I	-3	No
GB516	NFS-2.19	15.23	16.33	16.64	1.10	Indeterminate	>4	2 to 1	>4	0.00	1.16	0.39	No	Yes	Azoic	-7	No
GB516	NFS-2.20	14.98	15.84	15.59	0.86	Indeterminate	>4	3 to 2	>4	0.00	0.00	0.00	No	Yes	Azoic	-8	No
GB516	NFS-2.21	11.65	12.15	11.97	0.50	Physical	>4	3 to 2	>4	0.00	0.00	0.00	No	Yes	Azoic	-8	No
GB516	NFS-2.22	12.48	13.14	12.85	0.66	Physical	>4	2 to 1	>4	0.00	0.00	0.00	No	Yes	Azoic	-8	No

Appendix E1. Sediment profile imaging data for Cruise 1B (Garden Banks Block 516 and Viosca Knoll Block 916).

Block	Station	Penetration Depth (cm)			Boundary Roughness		Grain Size (phi)			Redox Potential Discontinuity			Methane	Anoxia	Successional	Organism	Burrow
					Thickness	Type			Major	(RPD) Depth (cm)			Bubbles	Low	Stage	Sediment	
		Minimum	Maximum	Mean	(cm)		Minimum	Maximum	Mode	Minimum	Maximum	Mean		DO		Index (OSI)	
GB516	NFS-2.23	9.23	10.77	9.84	1.54	Physical	>4	3 to 2	>4	0.00	0.00	0.00	No	Yes	Azoic	-8	No
GB516	NFS-2.24	11.73	12.64	12.31	0.91	Indeterminate	>4	2 to 1	>4	0.00	0.47	0.15	No	Yes	Azoic	-7	No
GB516	NFS-2.25	11.24	11.82	11.57	0.58	Physical	>4	2 to 1	>4	0.00	0.00	0.00	No	Yes	Azoic	-8	No
GB516	NFS-2.26	8.15	9.75	8.94	1.60	Indeterminate	>4	2 to 1	>4	0.00	0.00	0.00	No	Yes	Azoic	-8	No
GB516	NFS-2.27	12.64	13.94	13.13	1.30	Indeterminate	>4	2 to 1	>4	0.00	0.00	0.00	No	Yes	Azoic	-8	No
GB516	NFS-2.28	11.93	12.70	12.24	0.77	Physical	>4	3 to 2	>4	0.00	0.00	0.00	No	Yes	Azoic	-8	No
GB516	NFS-2.29	13.11	13.66	13.48	0.55	Indeterminate	>4	3 to 2	>4	0.00	0.00	0.00	No	Yes	I on III	1	No
GB516	NFS-2.30	13.74	14.40	14.02	0.66	Indeterminate	>4	2 to 1	>4	0.00	0.00	0.00	No	Yes	I	-3	No
GB516	NFS-2.31	11.82	12.48	12.13	0.66	Indeterminate	>4	3 to 2	>4	0.00	0.00	0.00	No	Yes	I	-3	No
GB516	NFS-2.32	12.06	13.08	12.65	1.02	Indeterminate	>4	3 to 2	>4	0.00	0.61	0.18	No	Yes	I	-2	No
GB516	NFS-2.33	12.94	14.18	13.58	1.24	Biological	>4	3 to 2	>4	0.52	1.62	1.10	No	No	I	3	No
GB516	NFS-2.34	12.83	13.63	13.14	0.80	Indeterminate	>4	2 to 1	>4	0.22	0.52	0.35	No	No	Azoic	-3	No
GB516	NFS-2.35	12.59	13.22	12.84	0.63	Indeterminate	>4	2 to 1	>4	0.08	0.55	0.33	No	No	Azoic	-3	No
GB516	NFS-2.36	19.00	20.35	19.90	1.35	Biological	>4	3 to 2	>4	0.00	0.41	0.20	No	No	I on III	6	No
GB516	NFS-3.01	5.21	5.87	5.64	0.66	Biological	>4	3 to 2	4 to 3	3.91	4.82	4.52	No	No	I on III	11	Yes
GB516	NFS-3.02	11.35	12.67	11.86	1.32	Biological	>4	2 to 1	>4	1.74	5.95	3.57	No	No	I	6	No
GB516	NFS-3.03	12.20	12.75	12.54	0.55	Biological	>4	2 to 1	>4	0.99	4.46	2.71	No	No	I	5	No
GB516	NFS-3.04	3.42	6.03	4.44	2.61	Indeterminate	>4	2 to 1	4 to 3	0.03	1.07	0.46	No	No	I on III	6	No
GB516	NFS-3.05	11.65	13.08	12.41	1.43	Biological	>4	2 to 1	>4	0.47	5.84	3.07	No	No	I	6	No
GB516	NFS-3.06	12.28	12.94	12.69	0.66	Physical	>4	2 to 1	>4	0.03	1.05	0.29	No	No	I	2	No
GB516	NFS-3.07	12.81	13.22	13.08	0.41	Biological	>4	2 to 1	>4	0.41	1.87	1.10	No	No	I on III	7	No
GB516	NFS-3.08	12.70	12.75	12.72	0.05	Biological	>4	2 to 1	>4	0.66	1.51	1.01	No	No	I on III	7	No
GB516	NFS-3.09	12.59	14.16	13.55	1.57	Physical	>4	2 to 1	>4	Indeterminate			No	No	III	Indeterminate	No
GB516	NFS-3.10	12.70	13.52	13.26	0.82	Indeterminate	>4	2 to 1	>4	0.17	1.05	0.64	No	No	I	2	No
GB516	NFS-3.11	11.71	12.37	12.09	0.66	Biological	>4	2 to 1	>4	0.27	1.38	0.80	No	No	I on III	7	No
GB516	NFS-3.12	11.07	12.50	11.92	1.43	Biological	>4	2 to 1	>4	0.00	1.05	0.56	No	No	I	2	No
GB516	NFS-3.13	12.20	12.83	12.54	0.63	Biological	>4	2 to 1	>4	0.28	1.16	0.67	No	No	I	2	No
GB516	NFS-3.14	10.55	11.54	11.01	0.99	Biological	>4	2 to 1	>4	0.47	0.96	0.62	No	No	I on III	6	No
GB516	NFS-3.15	12.81	13.88	13.22	1.07	Indeterminate	>4	2 to 1	>4	0.28	0.72	0.44	No	No	I on III	6	No
GB516	NFS-3.16	11.43	13.17	12.44	1.74	Biological	>4	2 to 1	>4	0.36	1.27	0.88	No	No	I	3	No
GB516	NFS-3.17	11.32	11.82	11.59	0.50	Biological	>4	2 to 1	>4	0.19	0.99	0.72	No	No	I on III	6	No
GB516	NFS-3.18	13.61	14.54	14.22	0.93	Biological	>4	2 to 1	>4	0.08	1.32	0.64	No	No	I on III	6	No

Appendix E1. Sediment profile imaging data for Cruise 1B (Garden Banks Block 516 and Viosca Knoll Block 916).

Block	Station	Penetration Depth (cm)			Boundary Roughness		Grain Size (phi)			Redox Potential Discontinuity			Methane	Anoxia	Successional	Organism	Burrow
					Thickness	Type			Major	(RPD) Depth (cm)			Bubbles	Low	Stage	Sediment	
		Minimum	Maximum	Mean	(cm)		Minimum	Maximum	Mode	Minimum	Maximum	Mean		DO		Index (OSI)	
VK916	FF2-S1.01	7.71	9.97	8.43	2.26	Physical	>4	2 to 1	>4	0.28	0.74	0.41	No	No	I on III	6	Yes
VK916	FF2-S1.02	13.17	14.27	13.53	1.10	Biological	>4	2 to 1	>4	0.19	7.49	1.15	No	No	I on III	7	Yes
VK916	FF2-S1.03	11.65	15.75	13.91	4.10	Biological	>4	2 to 1	>4	0.17	2.64	1.71	No	No	I on III	8	Yes
VK916	FF2-S1.04	11.90	12.50	12.21	0.60	Indeterminate	>4	2 to 1	>4	0.14	1.71	0.69	No	No	I	2	Yes
VK916	FF2-S1.05	13.94	14.98	14.51	1.04	Indeterminate	>4	2 to 1	>4	Indeterminate			No	No	I	Indeterminate	No
VK916	FF2-S1.06	10.82	12.70	11.72	1.88	Indeterminate	>4	2 to 1	>4	0.66	3.06	1.54	No	No	I on III	8	No
VK916	FF2-S1.07	12.12	13.25	12.72	1.13	Biological	>4	2 to 1	>4	0.11	2.07	1.17	No	No	I on III	7	No
VK916	FF2-S1.08	12.53	13.63	12.94	1.10	Indeterminate	>4	2 to 1	>4	0.94	1.18	1.08	No	No	I on III	7	No
VK916	FF2-S1.09	11.13	13.11	11.97	1.98	Indeterminate	>4	2 to 1	>4	0.14	2.45	1.15	No	No	I on III	7	No
VK916	FF2-S1.10	5.95	9.39	7.06	3.44	Physical	>4	2 to 1	>4	0.03	6.11	2.84	No	No	I on III	9	Yes
VK916	FF2-S1.11	12.94	15.31	14.55	2.37	Biological	>4	2 to 1	>4	0.06	2.18	1.51	No	No	I	4	Yes
VK916	FF2-S1.12	10.60	11.98	11.54	1.38	Biological	>4	2 to 1	>4	0.39	1.57	1.05	No	No	I	3	No
VK916	FF2-S1.13	14.21	15.23	14.77	1.02	Physical	>4	2 to 1	>4	0.22	3.03	1.72	No	No	I	4	No
VK916	FF2-S1.14	11.65	12.72	12.13	1.07	Physical	>4	2 to 1	>4	Indeterminate			No	No	I	Indeterminate	No
VK916	FF2-S1.15	10.80	13.44	12.45	2.64	Indeterminate	>4	2 to 1	>4	Indeterminate			No	No	I	Indeterminate	No
VK916	FF2-S1.16	12.53	14.05	13.23	1.52	Indeterminate	>4	2 to 1	>4	0.17	2.95	1.23	No	No	I on III	7	No
VK916	FF2-S1.17	14.21	15.12	14.75	0.91	Indeterminate	>4	2 to 1	>4	1.05	3.86	1.96	No	No	I	4	Yes
VK916	FF2-S1.18	12.61	15.78	14.46	3.17	Physical	>4	2 to 1	>4	Indeterminate			No	No	I	Indeterminate	No
VK916	FF2-S1.19	12.23	13.58	13.09	1.35	Indeterminate	>4	2 to 1	>4	0.11	2.62	1.75	No	No	I on III	8	Yes
VK916	FF2-S1.20	11.43	11.87	11.63	0.44	Biological	>4	4 to 3	>4	0.03	1.65	0.81	No	No	I	3	No
VK916	FF4-S2.01	5.54	7.85	6.93	2.31	Indeterminate	>4	2 to 1	>4	0.00	1.43	0.59	No	No	I on III	6	No
VK916	FF4-S2.03	14.35	16.53	15.70	2.18	Biological	>4	2 to 1	>4	0.66	1.24	0.91	No	No	I on III	7	No
VK916	FF4-S2.04	11.35	12.56	11.82	1.21	Biological	>4	2 to 1	>4	0.14	1.38	0.74	No	No	I on III	6	No
VK916	FF4-S2.06	12.17	13.30	12.71	1.13	Indeterminate	>4	2 to 1	>4	0.08	1.21	0.54	No	No	I	2	Yes
VK916	FF4-S2.07	15.12	15.75	15.45	0.63	Biological	>4	2 to 1	>4	0.17	2.37	0.88	No	No	I on III	7	Yes
VK916	FF4-S2.08	13.17	13.69	13.42	0.52	Indeterminate	>4	2 to 1	>4	0.03	1.85	0.79	No	No	I	3	Yes
VK916	FF4-S2.09	13.19	13.85	13.43	0.66	Indeterminate	>4	2 to 1	>4	0.19	1.29	0.49	No	No	I on III	6	Yes
VK916	FF4-S2.10	17.10	18.10	17.53	1.00	Indeterminate	>4	2 to 1	>4	0.06	2.04	0.86	No	No	I on III	7	No
VK916	FF4-S2.11	11.73	13.28	12.54	1.55	Physical	>4	2 to 1	>4	0.47	1.57	0.91	No	No	I	3	No
VK916	FF4-S2.12	14.54	15.45	14.96	0.91	Biological	>4	2 to 1	>4	0.14	2.75	0.85	No	No	I	3	Yes
VK916	FF4-S2.13	15.70	17.13	16.11	1.43	Indeterminate	>4	2 to 1	>4	0.14	2.75	0.85	No	No	I	3	Yes
VK916	FF4-S2.14	12.97	14.87	14.06	1.90	Physical	>4	2 to 1	>4	0.00	1.38	0.45	No	No	I	2	Yes
VK916	FF4-S2.15	14.65	15.89	15.38	1.24	Biological	>4	2 to 1	>4	0.06	1.68	0.60	No	No	I on III	6	No
VK916	FF4-S2.16	12.53	13.61	12.98	1.08	Indeterminate	>4	2 to 1	>4	0.03	3.47	0.76	No	No	I	3	Yes
VK916	FF4-S2.17	12.56	14.35	13.74	1.79	Indeterminate	>4	2 to 1	>4	0.11	2.01	0.78	No	No	I	3	Yes
VK916	FF4-S2.18	14.62	15.23	14.97	0.61	Biological	>4	2 to 1	>4	0.08	1.68	0.64	No	No	I on III	6	Yes
VK916	FF6-S3.01	13.63	14.27	13.86	0.64	Biological	>4	2 to 1	>4	0.11	2.07	1.29	No	No	I on III	7	No
VK916	FF6-S3.02	12.26	13.63	13.15	1.37	Biological	>4	2 to 1	>4	0.03	0.85	0.40	No	No	I on III	6	No
VK916	FF6-S3.03	9.61	10.93	10.63	1.32	Indeterminate	>4	2 to 1	>4	0.00	1.02	0.33	No	No	I on III	6	No

Appendix E1. Sediment profile imaging data for Cruise 1B (Garden Banks Block 516 and Viosca Knoll Block 916).

Block	Station	Penetration Depth (cm)			Boundary Roughness		Grain Size (phi)			Redox Potential Discontinuity			Methane	Anoxia	Successional	Organism	Burrow
					Thickness	Type			Major	(RPD) Depth (cm)			Bubbles	Low	Stage	Sediment	
		Minimum	Maximum	Mean	(cm)		Minimum	Maximum	Mode	Minimum	Maximum	Mean		DO		Index (OSI)	
VK916	FF6-S3.04	12.67	13.55	12.99	0.88	Biological	>4	2 to 1	>4	0.14	0.96	0.64	No	No	I on III	6	Yes
VK916	FF6-S3.05	9.06	11.21	10.34	2.15	Indeterminate	>4	2 to 1	>4	0.06	0.88	0.33	No	No	I	2	Yes
VK916	FF6-S3.06	4.60	5.67	5.11	1.07	Indeterminate	>4	2 to 1	>4	0.03	1.46	0.87	No	No	I	3	No
VK916	FF6-S3.08	12.26	13.33	12.87	1.07	Indeterminate	>4	2 to 1	>4	0.08	3.17	0.98	No	No	I	3	Yes
VK916	FF6-S3.09	13.00	13.99	13.52	0.99	Biological	>4	2 to 1	>4	0.14	1.87	0.63	No	No	I	2	Yes
VK916	FF6-S3.10	14.02	17.82	16.48	3.80	Indeterminate	>4	2 to 1	>4	0.08	1.65	0.60	No	No	I on III	6	No
VK916	FF6-S3.11	11.43	12.75	12.07	1.32	Indeterminate	>4	2 to 1	>4	0.06	0.99	0.39	No	No	I on III	6	No
VK916	FF6-S3.12	9.56	10.44	10.16	0.88	Indeterminate	>4	2 to 1	>4	0.08	1.71	0.86	No	No	I on III	7	No
VK916	FF6-S3.13	13.83	14.74	14.27	0.91	Biological	>4	2 to 1	>4	0.17	1.96	1.03	No	No	I on III	7	No
VK916	FF6-S3.14	8.95	11.18	9.59	2.23	Biological	>4	2 to 1	>4	0.06	0.74	0.35	No	No	I on III	6	No
VK916	FF6-S3.15	16.33	16.91	16.56	0.58	Physical	>4	2 to 1	>4	0.08	1.68	0.87	No	No	I	3	Yes
VK916	FF6-S3.16	11.32	12.23	11.93	0.91	Biological	>4	2 to 1	>4	0.39	2.18	1.29	No	No	I	3	No
VK916	FF6-S3.17	10.60	12.42	11.42	1.82	Indeterminate	>4	2 to 1	>4	0.08	1.43	0.64	No	No	I	2	No
VK916	FF6-S3.18	9.39	11.15	10.18	1.76	Physical	>4	2 to 1	>4	0.03	2.62	0.62	No	No	I	2	No
VK916	FF6-S3.19	11.90	13.03	12.38	1.13	Indeterminate	>4	2 to 1	4 to 3	0.03	1.18	0.49	No	No	I	2	Yes
VK916	FF6-S3.20	11.71	12.83	12.37	1.12	Physical	>4	2 to 1	>4	0.25	0.72	0.54	No	No	I	2	Yes
VK916	NFS-1.01	11.95	13.66	12.92	1.71	Biological	>4	2 to 1	>4	0.22	1.96	1.96	No	No	I on III	8	Yes
VK916	NFS-1.02	12.81	14.32	13.39	1.51	Biological	>4	2 to 1	>4	0.08	3.14	0.99	No	No	I on III	7	Yes
VK916	NFS-1.03	14.57	17.54	15.87	2.97	Physical	>4	2 to 1	>4	0.08	0.69	0.30	No	No	I on III	7	No
VK916	NFS-1.04	13.94	14.49	14.20	0.55	Biological	>4	2 to 1	>4	0.17	2.37	0.91	No	No	I	3	No
VK916	NFS-1.05	12.75	14.87	13.90	2.12	Indeterminate	>4	3 to 2	>4	Indeterminate			No	No	I	Indeterminate	No
VK916	NFS-1.06	13.55	14.13	13.79	0.58	Biological	>4	2 to 1	>4	1.07	2.26	1.58	No	No	I	4	No
VK916	NFS-1.07	11.95	12.89	12.57	0.94	Biological	>4	2 to 1	>4	0.11	1.38	0.77	No	No	I	3	No
VK916	NFS-1.08	13.06	14.43	13.92	1.37	Biological	>4	2 to 1	>4	0.03	2.37	0.84	No	No	I	3	No
VK916	NFS-1.09	10.69	12.37	11.72	1.68	Indeterminate	>4	2 to 1	>4	0.00	1.24	0.36	No	No	I	2	Yes
VK916	NFS-1.10	14.29	14.90	14.61	0.61	Biological	>4	2 to 1	>4	0.08	2.07	1.05	No	No	I on III	7	Yes
VK916	NFS-1.11	14.29	14.60	14.40	0.31	Biological	>4	2 to 1	>4	0.19	2.12	1.07	No	No	I	3	Yes
VK916	NFS-1.12	11.43	12.34	12.00	0.91	Biological	>4	2 to 1	>4	0.08	1.49	0.98	No	No	I on III	7	Yes
VK916	NFS-1.13	11.62	12.28	12.01	0.66	Biological	>4	2 to 1	>4	0.66	1.27	0.98	No	No	I on III	7	Yes
VK916	NFS-1.14	15.53	16.68	16.41	1.15	Biological	>4	2 to 1	>4	0.00	2.23	1.01	No	No	I on III	6	Yes
VK916	NFS-1.15	11.37	11.98	11.68	0.61	Biological	>4	2 to 1	>4	0.06	1.16	0.59	No	No	I	2	Yes
VK916	NFS-1.16	13.06	14.49	13.97	1.43	Biological	>4	2 to 1	>4	0.08	2.34	1.13	No	No	I on III	7	Yes
VK916	NFS-1.17	12.53	14.32	13.32	1.79	Biological	>4	2 to 1	>4	0.03	1.60	0.68	No	No	I	2	No
VK916	NFS-1.18	13.99	15.09	14.43	1.10	Indeterminate	>4	2 to 1	>4	0.14	2.34	0.60	No	No	I on III	6	No
VK916	NFS-1.19	11.82	12.37	12.08	0.55	Biological	>4	2 to 1	>4	0.08	1.51	0.78	No	No	I on III	7	Yes
VK916	NFS-1.20	11.98	14.57	13.51	2.59	Biological	>4	2 to 1	>4	0.06	1.62	0.48	No	No	I on III	6	No
VK916	NFS-1.21	13.66	14.43	13.97	0.77	Biological	>4	2 to 1	>4	0.14	1.46	0.84	No	No	I on III	7	No
VK916	NFS-1.22	12.50	13.25	12.93	0.75	Biological	>4	2 to 1	>4	0.99	2.70	2.03	No	No	I on III	8	Yes
VK916	NFS-1.23	13.03	13.91	13.41	0.88	Biological	>4	2 to 1	>4	0.11	1.76	0.82	No	No	I on III	7	Yes

Appendix E1. Sediment profile imaging data for Cruise 1B (Garden Banks Block 516 and Viosca Knoll Block 916).

Block	Station	Penetration Depth (cm)			Boundary Roughness		Grain Size (phi)			Redox Potential Discontinuity			Methane	Anoxia	Successional	Organism	Burrow
					Thickness	Type			Major	(RPD) Depth (cm)			Bubbles	Low	Stage	Sediment	
		Minimum	Maximum	Mean	(cm)		Minimum	Maximum	Mode	Minimum	Maximum	Mean		DO		Index (OSI)	
VK916	NFS-1.24	13.00	13.94	13.42	0.94	Biological	>4	2 to 1	>4	0.06	1.60	0.98	No	No	I on III	7	No
VK916	NFS-1.25	14.43	15.78	15.43	1.35	Biological	>4	2 to 1	>4	0.00	1.57	0.45	No	No	I on III	6	Yes
VK916	NFS-1.26	5.81	11.23	9.13	5.42	Indeterminate	>4	2 to 1	>4	0.03	1.85	0.57	No	No	I on III	6	No
VK916	NFS-1.27	14.98	16.22	15.69	1.24	Biological	>4	2 to 1	>4	0.14	1.87	0.72	No	No	I on III	6	No
VK916	NFS-1.28	11.10	11.95	11.63	0.85	Biological	>4	2 to 1	>4	0.11	1.79	0.82	No	No	I on III	7	No
VK916	NFS-1.29	13.25	13.80	13.62	0.55	Biological	>4	2 to 1	>4	0.06	2.97	0.82	No	No	I on III	7	No
VK916	NFS-1.30	12.64	13.52	13.15	0.88	Biological	>4	2 to 1	>4	0.00	1.29	0.42	No	No	I on III	6	No
VK916	NFS-1.31	15.70	16.94	16.27	1.24	Indeterminate	>4	2 to 1	>4	0.06	1.62	0.62	No	No	I	2	Yes
VK916	NFS-1.32	12.15	13.00	12.42	0.85	Biological	>4	2 to 1	>4	0.11	1.07	0.51	No	No	I	2	Yes
VK916	NFS-1.33	4.54	7.33	6.12	2.79	Indeterminate	>4	2 to 1	>4	0.08	1.13	0.42	No	No	I	2	No
VK916	NFS-1.34	10.77	11.54	11.17	0.77	Indeterminate	>4	2 to 1	>4	0.11	2.20	0.65	No	No	I on III	6	Yes
VK916	NFS-1.35	12.59	14.54	13.46	1.95	Biological	>4	2 to 1	>4	0.06	0.94	0.36	No	No	I	2	No
VK916	NFS-1.36	13.41	14.21	13.89	0.80	Biological	>4	2 to 1	>4	0.08	1.96	0.84	No	No	I	3	No
VK916	NFS-1.37	5.98	8.57	6.84	2.59	Indeterminate	>4	2 to 1	>4	0.03	0.99	0.25	No	No	I	2	No
VK916	NFS-1.38	12.34	13.47	12.96	1.13	Biological	>4	2 to 1	>4	0.14	2.14	0.76	No	No	I on III	7	Yes
VK916	NFS-1.39	12.50	13.30	12.91	0.80	Biological	>4	2 to 1	>4	0.06	1.93	0.67	No	No	I on III	6	Yes
VK916	NFS-1.40	8.95	13.00	11.27	4.05	Indeterminate	>4	2 to 1	>4	0.08	0.94	0.44	No	No	I on III	6	Yes
VK916	NFS-1.41	8.59	9.75	9.09	1.16	Indeterminate	>4	2 to 1	>4	0.06	0.85	0.31	No	No	I on III	6	Yes
VK916	NFS-1.42	12.17	13.03	12.93	0.86	Biological	>4	2 to 1	>4	0.14	1.54	0.95	No	No	I on III	7	Yes
VK916	NFS-1.43	13.03	14.74	13.68	1.71	Indeterminate	>4	2 to 1	>4	0.08	1.57	0.85	No	No	I	3	No
VK916	NFS-1.44	14.02	14.85	14.41	0.83	Indeterminate	>4	2 to 1	>4	0.03	0.72	0.38	No	No	I on III	6	No
VK916	NFS-1.45	12.42	12.92	12.64	0.50	Biological	>4	2 to 1	>4	0.17	1.96	0.86	No	No	I on III	7	No
VK916	NFS-2.01	13.88	15.03	14.31	1.15	Indeterminate	>4	2 to 1	>4	0.14	2.09	1.07	No	No	I on III	7	No
VK916	NFS-2.02	13.08	14.16	13.60	1.08	Indeterminate	>4	2 to 1	>4	0.00	1.74	0.78	No	No	I on III	7	No
VK916	NFS-2.03	14.12	17.13	15.49	3.01	Physical	>4	2 to 1	>4		Indeterminate		No	No	I on III	Indeterminate	Yes
VK916	NFS-2.04	13.66	14.85	14.14	1.19	Physical	>4	2 to 1	>4	0.55	2.34	1.14	No	No	I on III	7	No
VK916	NFS-2.05	5.43	7.71	6.66	2.28	Physical	>4	2 to 1	>4	0.28	1.87	1.01	No	No	I on III	7	No
VK916	NFS-2.06	13.30	14.21	13.75	0.91	Physical	>4	2 to 1	>4	0.06	2.34	1.03	No	No	I	3	Yes
VK916	NFS-2.07	15.95	17.54	16.40	1.59	Physical	>4	2 to 1	>4	0.47	1.93	1.22	No	No	I	3	No
VK916	NFS-2.08	12.56	14.10	13.40	1.54	Physical	>4	2 to 1	>4	0.90	3.31	1.58	No	No	I	4	Yes
VK916	NFS-2.09	12.61	13.80	13.32	1.19	Physical	>4	2 to 1	>4	0.41	2.34	1.07	No	No	I	3	No
VK916	NFS-2.10	15.34	16.80	16.10	1.46	Physical	>4	2 to 1	>4	0.17	2.34	1.07	No	No	I on III	7	No
VK916	NFS-2.11	13.94	15.37	14.49	1.43	Physical	>4	2 to 1	4 to 3		Indeterminate		No	No	I on III	Indeterminate	No
VK916	NFS-2.12	11.26	12.56	11.93	1.30	Physical	>4	2 to 1	>4	0.00	1.62	0.73	No	No	I	2	No
VK916	NFS-2.13	12.56	13.28	12.89	0.72	Indeterminate	>4	2 to 1	>4	0.52	3.55	1.56	No	No	I on III	8	No
VK916	NFS-2.14	12.09	14.29	13.20	2.20	Physical	>4	2 to 1	>4	0.50	1.51	1.04	No	No	I on III	7	No
VK916	NFS-2.15	13.72	14.79	14.26	1.07	Indeterminate	>4	2 to 1	>4	0.14	2.20	0.88	No	No	I on III	7	No
VK916	NFS-2.16	11.07	13.33	11.92	2.26	Physical	>4	2 to 1	>4	0.28	2.37	1.28	No	No	I	3	No
VK916	NFS-2.17	16.55	18.50	17.83	1.95	Indeterminate	>4	2 to 1	>4	0.19	3.14	0.98	No	No	I on III	7	No

Appendix E1. Sediment profile imaging data for Cruise 1B (Garden Banks Block 516 and Viosca Knoll Block 916).

Block	Station	Penetration Depth (cm)			Boundary Roughness		Grain Size (phi)			Redox Potential Discontinuity			Methane	Anoxia	Successional	Organism	Burrow
					Thickness	Type			Major	(RPD) Depth (cm)			Bubbles	Low	Stage	Sediment	
		Minimum	Maximum	Mean	(cm)		Minimum	Maximum	Mode	Minimum	Maximum	Mean		DO		Index (OSI)	
VK916	NFS-2.18	12.75	14.51	13.84	1.76	Physical	>4	2 to 1	>4	0.30	1.98	1.16	No	No	I	3	No
VK916	NFS-2.19	10.33	10.91	10.58	0.58	Indeterminate	>4	2 to 1	>4	0.08	1.76	0.77	No	No	I on III	7	No
VK916	NFS-2.20	14.71	16.39	15.18	1.68	Biological	>4	2 to 1	>4	1.02	2.56	1.61	No	No	I	4	Yes
VK916	NFS-2.21	12.78	13.39	13.31	0.61	Indeterminate	>4	2 to 1	>4	0.50	0.80	0.72	No	No	I on III	6	No
VK916	NFS-2.22	11.73	13.55	12.90	1.82	Indeterminate	>4	2 to 1	>4	0.17	1.46	0.74	No	No	I on III	6	No
VK916	NFS-2.23	8.54	9.14	8.75	0.60	Indeterminate	>4	2 to 1	>4	0.00	2.07	0.73	No	No	I	2	No
VK916	NFS-2.24	12.15	12.64	12.37	0.49	Biological	>4	2 to 1	>4	0.08	1.68	0.63	No	No	I on III	6	No
VK916	NFS-2.25	13.72	14.46	14.07	0.74	Biological	>4	2 to 1	>4	0.06	1.29	0.60	No	No	I	2	No
VK916	NFS-2.26	12.81	14.05	13.53	1.24	Indeterminate	>4	2 to 1	>4	1.02	6.20	2.87	No	No	I	5	No
VK916	NFS-2.27	11.04	12.81	12.13	1.77	Physical	>4	2 to 1	>4	0.11	2.37	0.66	No	No	I on III	6	No
VK916	NFS-2.28	12.75	13.58	13.21	0.83	Indeterminate	>4	2 to 1	>4	0.03	3.03	1.04	No	No	I	3	Yes
VK916	NFS-2.30	13.94	14.90	14.47	0.96	Indeterminate	>4	2 to 1	>4	0.08	2.48	1.10	No	No	I	3	No
VK916	NFS-2.31	13.63	14.62	14.12	0.99	Biological	>4	2 to 1	>4	0.36	4.41	2.15	No	No	I	4	No
VK916	NFS-2.32	17.65	18.67	18.39	1.02	Biological	>4	2 to 1	>4	0.06	3.17	0.83	No	No	I on III	7	No
VK916	NFS-2.33	13.17	14.18	13.86	1.01	Indeterminate	>4	2 to 1	>4	Indeterminate			No	No	I	Indeterminate	No
VK916	NFS-2.34	13.17	13.66	13.44	0.49	Biological	>4	2 to 1	>4	0.52	4.41	2.01	No	No	I	4	No

Appendix E1. Sediment profile imaging data for Cruise 1B (Garden Banks Block 516 and Viosca Knoll Block 916).

Block	Station	Burrow comments	Clast	Clast type, color, and size	Epifauna	Infauna	Faunal comments	Pelletal Layer
GB516	FF2-S1.01		No		No	Yes	Stage Is	Yes
GB516	FF2-S1.02	Burrow mottled	No		No	Yes	Stage Is	Yes
GB516	FF2-S1.03	Burrow mottled	Yes	Small wiper	No	Yes	Stage Is; pteropod shell on surface	Yes
GB516	FF2-S1.04	Burrow mottled	Yes	Small wiper	No	Yes	Stage Is	Yes
GB516	FF2-S1.05		Yes	Small wiper	No	Yes	Stage Is	Yes
GB516	FF2-S1.06	Burrow mottled	Yes	Wiper clasts	No	Yes	Stage Is	Yes
GB516	FF2-S1.07	Filled-in burrow; burrow mottled	Yes	Small wiper	No	Yes	Stage Is	Yes
GB516	FF2-S1.08	Burrow mottled	Yes	Small wiper clasts	No	Yes	Stage Is	Yes
GB516	FF2-S1.09	Burrow mottled	Yes	Wiper	No	Yes	Stage Is; pteropod shell? on surface	Yes
GB516	FF2-S1.10		Yes	Wiper	No	Yes	Stage Is; pteropod shell frags.? on surface	Yes
GB516	FF2-S1.11	Burrow mottled	Yes	4 cm tan oxidized and subrounded; wiper	No	Yes	Stage Is	Yes
GB516	FF2-S1.12		Yes	3 tan oxidized and subrounded, 1 to 3 cm	No	Yes	Stage Is	Yes
GB516	FF2-S1.13		Yes	Wipers	No	Yes	Stage Is	Yes
GB516	FF2-S1.14		Yes	1 tan; small wipers	No	Yes	Stage Is; pteropod shell on surface	Yes
GB516	FF2-S1.15	Burrow mottled	Yes	Large >6 cm oxidized subrounded	No	Yes	Stage Is	Yes
GB516	FF2-S1.16		No		No	Yes	Stage Is	Yes
GB516	FF2-S1.17	Burrow mottled	No		No	Yes	Stage Is	Yes
GB516	FF2-S1.18		No		No	Yes	Stage Is	Yes
GB516	FF2-S1.19		Yes	A few small tan	No	Yes	Stage Is	Yes
GB516	FF2-S1.20	Burrow mottled	Yes	Wiper	No	Yes	Stage Is	Yes
GB516	FF2-S1.21	Burrow mottled	Yes	Small wipers	No	Yes	Stage Is	Yes
GB516	FF2-S1.22	Burrow mottled	Yes	Wiper	No	Yes	Stage Is	Yes
GB516	FF4-S2.01		Yes	3 cm subrounded tan	No	Yes	Stage Is	Thin
GB516	FF4-S2.02	Burrow mottled	No		No	Yes	Stage Is	Yes
GB516	FF4-S2.04	Burrow mottled	Yes	Small tan; wiper?	No	Yes	Stage Is	Yes
GB516	FF4-S2.05	Burrow mottled	Yes	Wiper on left	No	Yes	Stage Is	Yes
GB516	FF4-S2.06		Yes	Many tan	No	Yes	Stage Is	Yes
GB516	FF4-S2.07	Burrow mottled	No		No	Yes	Stage Is	Yes
GB516	FF4-S2.08	Burrow mottled	Yes	Small tan; small wiper	No	Yes	Stage Is	Yes
GB516	FF4-S2.09	Burrow mottled	Yes	Small tan	No	Yes	Stage Is	Yes
GB516	FF4-S2.10	Burrow mottled	Yes	Many tan	No	Yes	Stage Is	Yes
GB516	FF4-S2.11	Burrow mottled	Yes	Small tan; wiper	No	Yes	Stage Is	Yes
GB516	FF4-S2.12	Burrow mottled	No		No	Yes	Stage Is	Yes
GB516	FF4-S2.13	Burrow mottled	Yes	Small tan and dark	No	Yes	Stage Is	Yes
GB516	FF4-S2.14		No		No	Yes	Stage Is; circular orange foraminiferan	Yes
GB516	FF4-S2.15		Yes	Many small to large tan, obscuring pelletal layer	No	Yes	Stage Is	No

Appendix E1. Sediment profile imaging data for Cruise 1B (Garden Banks Block 516 and Viosca Knoll Block 916).

Block	Station	Burrow comments	Clast	Clast type, color, and size	Epifauna	Infauna	Faunal comments	Pelletal Layer
GB516	FF4-S2.16		No		No	Yes	Stage Is; pteropod shell frags. on surface	Yes
GB516	FF4-S2.17		Yes	Tan	No	Yes	Stage Is	Yes
GB516	FF4-S2.18		Yes	Many tan	No	Yes	Stage Is; pteropod shell on surface	Yes
GB516	FF6-S3.01		Yes	Many small tan	No	Yes	Stage Is	Yes
GB516	FF6-S3.03	Filled-in, large oxidized burrow	Yes	Subrounded tan clasts	No	Yes	Stage Is	Yes
GB516	FF6-S3.04		Yes	Large (4 cm) oxidized clast	No	Yes	Stage Is	Yes
GB516	FF6-S3.05		No		No	Yes	Stage Is	No
GB516	FF6-S3.07		Yes	Small wiper	No	Yes	Stage Is	Yes
GB516	FF6-S3.08		Yes	Many tan clasts	No	No		No
GB516	FF6-S3.09		No		No	Yes	Stage Is	Yes
GB516	FF6-S3.10		Yes	Large (9 cm) tan; small gray wiper	No	Yes	Stage Is	Yes
GB516	FF6-S3.11		No		No	Yes	Stage Is	Yes
GB516	FF6-S3.12		Yes	A few small tan	No	Yes	Stage Is	Yes
GB516	FF6-S3.13		Yes	A few small tan	No	Yes	Stage Is; hydroids	Yes
GB516	FF6-S3.14		Yes	Large to small subrounded tan clasts	No	Yes	Stage Is	Yes
GB516	FF6-S3.15		Yes	A few small tan clasts	No	Yes	Stage Is	Yes
GB516	FF6-S3.16		No		No	Yes	Stage Is	Yes
GB516	FF6-S3.17		Yes	Large (5 cm) tan subrounded surface clasts	No	Yes	Stage Is	Yes
GB516	FF6-S3.18		Yes	Many small to large tan clasts	No	Yes	Stage Is	Yes
GB516	FF6-S3.19		Yes	Many small to large tan clasts	No	Yes	Stage Is	Yes
GB516	FF6-S3.20		Yes	Many small to large tan clasts	No	Yes	Stage Is; arenaceous foraminiferan	Yes
GB516	NFS-1.01		No		No	Yes	Stage Is	Yes
GB516	NFS-1.02		Yes	Small wiper	No	Yes	Stage Is	Yes
GB516	NFS-1.03		Yes	Tan; gray pull-down	No	Yes	Stage Is	Yes
GB516	NFS-1.04		No		No	Yes	Stage Is	Yes
GB516	NFS-1.05		Yes	Tan	No	Yes	Stage Is; hydroids	Yes
GB516	NFS-1.06		Yes	Tan	No	No		Yes
GB516	NFS-1.07		Yes	Tan	No	Yes	Stage Is	Yes
GB516	NFS-1.08	Burrow mottled	Yes	Many, small to large subrounded tan clasts	No	Yes	Stage Is	Yes
GB516	NFS-1.09		Yes	Small wiper	No	Yes	Stage Is	Yes
GB516	NFS-1.10	Burrow mottled	Yes	Large and small tan	No	No		Yes

Appendix E1. Sediment profile imaging data for Cruise 1B (Garden Banks Block 516 and Viosca Knoll Block 916).

Block	Station	Burrow comments	Clast	Clast type, color, and size	Epifauna	Infauna	Faunal comments	Pelletal Layer
GB516	NFS-1.11	Burrow mottled	Yes	Tan	No	Yes	Stage Is	Yes
GB516	NFS-1.12		Yes	Small wiper	No	Yes	Stage Is; komotchke; foraminiferans	Yes
GB516	NFS-1.13	Old filled-in burrow	Yes	Small wiper	No	Yes	Stage Is	Yes
GB516	NFS-1.14		Yes	a few small tan	No	Yes	Stage Is	Yes
GB516	NFS-1.15	Burrow mottled	Yes	2 cm tan and black	No	Yes	Stage Is	Yes
GB516	NFS-1.16	Filled-in burrow; burrow mottled	Yes	Tan and black	No	Yes	Stage Is	Yes
GB516	NFS-1.17		Yes	2 cm tan and black	No	Yes	Stage Is	Yes
GB516	NFS-1.18		Yes	A few small black and tan	No	Yes	Stage Is	Yes
GB516	NFS-1.19		Yes	Small black and tan	No	Yes	Stage Is	Yes
GB516	NFS-1.20		No		No	Yes	Stage Is	Yes
GB516	NFS-1.22		Yes	Tan and black	No	No		No
GB516	NFS-1.23		Yes	Many small tan	No	No		No
GB516	NFS-1.24		Yes	Many small tan and a few black	No	No		No
GB516	NFS-1.25		Yes	Many small tan	No	Yes	Stage Is	Yes
GB516	NFS-1.26		Yes	Small tan and black	No	Yes	Stage Is	Yes
GB516	NFS-1.27	Old filled-in burrow	Yes	Many tan clasts	No	No		No
GB516	NFS-1.28		Yes	Dark gray wiper clasts	No	Yes	Stage Is	Yes
GB516	NFS-2.06		Yes	Small tan and black	No	Yes	Stage Is	Yes
GB516	NFS-2.07		Yes	Dark wiper clast	No	Yes	Stage Is	Yes
GB516	NFS-2.08		Yes	Large tan	No	Yes	Stage Is	Yes
GB516	NFS-2.09	Burrow mottled	No		No	Yes	Stage Is	Yes
GB516	NFS-2.10	Burrow mottled	No		No	Yes	Stage Is; komotchke; foraminiferans	Yes
GB516	NFS-2.11		Yes	One tan clast	No	Yes	Stage Is	Yes
GB516	NFS-2.12		No		No	Yes	Stage Is	No
GB516	NFS-2.13		Yes	Tan and black	No	Yes	Stage Is	Yes
GB516	NFS-2.14		Yes	Small tan wiper clast	No	Yes	Stage Is	Yes
GB516	NFS-2.15		Yes	Black	No	No		No
GB516	NFS-2.16		Yes	Black; tan wiper	No	No		No
GB516	NFS-2.18	Burrow mottled	Yes	Gray wiper; one small tan	No	Yes	Stage Is	No
GB516	NFS-2.19		Yes	Tan and black	No	No		No
GB516	NFS-2.20		Yes	Large tan wiper clast	No	No		No
GB516	NFS-2.21		No		No	No		No
GB516	NFS-2.22		Yes	Tan wiper clasts	No	No		No

Appendix E1. Sediment profile imaging data for Cruise 1B (Garden Banks Block 516 and Viosca Knoll Block 916).

Block	Station	Burrow comments	Clast	Clast type, color, and size	Epifauna	Infauna	Faunal comments	Pelletal Layer
GB516	NFS-2.23		Yes	Black	No	No		No
GB516	NFS-2.24		No		No	No		No
GB516	NFS-2.25		Yes	Wiper	No	No		No
GB516	NFS-2.26		Yes	Tan wiper	No	No		No
GB516	NFS-2.27		Yes	Large black	No	No		No
GB516	NFS-2.28		No		No	No		No
GB516	NFS-2.29	Burrow mottled	Yes	Tan wiper	No	Yes	Stage Is; worm at 3 cm	No
GB516	NFS-2.30	Burrow mottled	Yes	Black	No	No		No
GB516	NFS-2.31	Burrow mottled	Yes	Tan wiper	No	Yes	Stage Is	No
GB516	NFS-2.32		Yes	Tan wiper	No	Yes	Stage Is	Yes
GB516	NFS-2.33		Yes	Black one, a sampling artifact	No	Yes	Stage Is	Yes
GB516	NFS-2.34		Yes	Tan and black	No	No		Yes
GB516	NFS-2.35		Yes	Wiper clasts	No	No		Yes
GB516	NFS-2.36		No		No	Yes	Stage Is	Yes
GB516	NFS-3.01	Associated with feeding void	No		No	Yes	Stage Is	Yes
GB516	NFS-3.02		Yes	Small tan	No	Yes	Stage Is	Yes
GB516	NFS-3.03		No		No	Yes	Stage Is; hydroids	Yes
GB516	NFS-3.04		No		No	Yes	Stage Is	Yes
GB516	NFS-3.05	Burrow mottled	Yes	Small tan	No	Yes	Stage Is	Yes
GB516	NFS-3.06	Burrow mottled	Yes	Many tan	No	Yes	Stage Is; arenaceous foraminiferan	Yes
GB516	NFS-3.07	Burrow mottled	Yes	Tan	No	Yes	Stage Is	Yes
GB516	NFS-3.08	Burrow mottled	Yes	Pull-away clasts	No	Yes	Stage Is	Yes
GB516	NFS-3.09	Burrow mottled	Yes	0.4 cm recent sediment deposition interval	No	No		No
GB516	NFS-3.10		Yes	Tan; gray wiper	No	Yes	Stage Is	Yes
GB516	NFS-3.11	Old filled-in burrow	No		No	Yes	Stage Is	Yes
GB516	NFS-3.12		Yes	1 tan (1.5 cm); small gray wiper	No	Yes	Stage Is	Yes
GB516	NFS-3.13		Yes	A few small tan	No	Yes	Stage Is	Yes
GB516	NFS-3.14		Yes	Tan, 2.5 cm	No	Yes	Stage Is	Yes
GB516	NFS-3.15	Burrow mottled	Yes	Large gray wiper	No	Yes	Stage Is	Yes
GB516	NFS-3.16	Burrow mottled	Yes	Small wiper	No	Yes	Stage Is	Yes
GB516	NFS-3.17		No		No	Yes	Stage Is	Yes
GB516	NFS-3.18		Yes	One small wiper	No	Yes	Stage Is	Yes

Appendix E1. Sediment profile imaging data for Cruise 1B (Garden Banks Block 516 and Viosca Knoll Block 916).

Block	Station	Burrow comments	Clast	Clast type, color, and size	Epifauna	Infauna	Faunal comments	Pelletal Layer
VK916	FF2-S1.01	Surrounded by sulfitic sediment	Yes	Small gray clasts on surface	No	Yes	Stage Is	Yes
VK916	FF2-S1.02	With sulfitic sediment	Yes	Top of gray layer irregular, some buried clasts	No	Yes	Stage Is	Yes
VK916	FF2-S1.03	Some sulfitic sediment at depth	Yes	Wiper clasts	No	Yes	Stage Is	Yes
VK916	FF2-S1.04	Lined with sulfitic sediment	Yes	Small gray ones on surface; wiper	No	Yes	Stage Is	Yes
VK916	FF2-S1.05		Yes	Tan and gray (20 @ 0.5 cm diam.); wiper	No	Yes	Stage Is	Yes
VK916	FF2-S1.06		Yes	Tan and gray (10 @ 0.5 cm diam.); wiper	No	Yes	Stage Is	Yes
VK916	FF2-S1.07		Yes	Gray (10 @ 0.3 cm); wiper	No	Yes	Stage Is; foraminiferans	Yes
VK916	FF2-S1.08		Yes	Tan+gray 20 @ 0.3 to 1.5 cm, surf. + buried; wiper	No	Yes	Stage Is; arenaceous foraminiferan	Yes
VK916	FF2-S1.09		Yes	Small tan and gray	No	Yes	Stage Is	Yes
VK916	FF2-S1.10		Yes	Small gray and tan clasts	No	Yes	Stage Is	Yes
VK916	FF2-S1.11		Yes	Small gray clast	No	Yes	Stage Is	Yes
VK916	FF2-S1.12		Yes	Wiper clasts	No	Yes	Stage Is	Yes
VK916	FF2-S1.13		Yes	5 gray (0.3 to 2 cm); dragged down wiper clast	No	Yes	Stage Is; foraminiferans	Yes
VK916	FF2-S1.14		Yes	10 tan and gray; large wiper clasts on surface	No	Yes	Stage Is; small worm at 11.40 cm	Yes
VK916	FF2-S1.15		Yes	Wiper clasts	No	Yes	Stage Is; worms @ 9.45 & 9.97 cm	Yes
VK916	FF2-S1.16		Yes	3 gray (1 cm); wiper clast	No	Yes	Stage Is	Yes
VK916	FF2-S1.17	Large, on right	Yes	Tan and gray; wiper clast	No	Yes	Stage Is; worms at 9.50, 9.31, & 14.07 cm	Yes
VK916	FF2-S1.18		Yes	9 cm gray clump on surface	No	Yes	Stage Is	Yes
VK916	FF2-S1.19		Yes	1 tan clast	No	Yes	Stage Is	Yes
VK916	FF2-S1.20		Yes	Wiper clasts	No	Yes	Stage Is	No
VK916	FF4-S2.01		No		No	Yes	Stage Is	Yes
VK916	FF4-S2.03		Yes	Wiper clasts	No	Yes	Stage Is	Yes
VK916	FF4-S2.04		Yes	Wiper clast	No	Yes	Stage Is; sipunculan? worm at 1 cm	Yes
VK916	FF4-S2.06	Thin, at depth	Yes	Tan and gray, 10 @ 0.3 cm; wiper clasts	No	Yes	Stage Is	Yes
VK916	FF4-S2.07	Deep and thin	No		No	Yes	Stage Is; worms at 14.24 and 14.76 cm	Yes
VK916	FF4-S2.08	Deep and thin	Yes	Tan and gray; wiper clast	No	Yes	Stage Is; worm at 12 cm	Yes
VK916	FF4-S2.09	Thin	Yes	Tan and gray; wiper clast	No	Yes	Stage Is; thin worms at 8.21 and 10.49	Yes
VK916	FF4-S2.10		Yes	Large wiper clasts	No	Yes	Stage Is	Yes
VK916	FF4-S2.11		Yes	Large wiper clasts	No	Yes	Stage Is	Yes
VK916	FF4-S2.12	Sediment within sl. sulfitic	Yes	Large wiper clasts	No	Yes	Stage Is	Yes
VK916	FF4-S2.13		Yes	Large (5 x 2 cm) gray; small (1 cm) tan	No	Yes	Stage Is	Yes
VK916	FF4-S2.14	Thin, at depth	Yes	Tan and gray; wiper clast	No	Yes	Stage Is	Yes
VK916	FF4-S2.15		Yes	Wiper clast	No	Yes	Stage Is	Yes
VK916	FF4-S2.16	Thin	Yes	1 x 3 cm gray, small gray and tan	No	Yes	Stage Is	Yes
VK916	FF4-S2.17	Thin	Yes	Wiper clasts	No	Yes	Stage Is	Yes
VK916	FF4-S2.18	Open burrows	Yes	Wiper clasts	No	Yes	Stage Is; sm. worms at 7.71 10.30 & 12.89	Yes
VK916	FF6-S3.01		Yes	Small red and gray	No	Yes	Stage Is	Yes
VK916	FF6-S3.02		Yes	Small red and gray	No	Yes	Stage Is	Yes
VK916	FF6-S3.03		Yes	Red and gray; wiper clasts	No	Yes	Stage Is	Yes

Appendix E1. Sediment profile imaging data for Cruise 1B (Garden Banks Block 516 and Viosca Knoll Block 916).

Block	Station	Burrow comments	Clast	Clast type, color, and size	Epifauna	Infauna	Faunal comments	Pelletal Layer
VK916	FF6-S3.04	Some sulfitic streaks	Yes	Red and gray	No	Yes	Stage Is	Yes
VK916	FF6-S3.05	Some sulfitic streaks	No		No	Yes	Stage Is	Yes
VK916	FF6-S3.06		Yes	Gray, disturbed	No	Yes	Stage Is	Yes
VK916	FF6-S3.08	Thin	Yes	Small red and gray	No	Yes	Stage Is; 6 worms from 8.12 to 10.93 cm	Yes
VK916	FF6-S3.09	Old, indicated by sulfitic streaks	Yes	Buried gray; wiper clast	No	Yes	Stage Is; worm at 5.50 cm	Yes
VK916	FF6-S3.10		Yes	Wiper	No	Yes	Stage Is; worms at 14.43 and 14.24 cm	Yes
VK916	FF6-S3.11		Yes	Red and gray; wiper	No	Yes	Stage Is	Yes
VK916	FF6-S3.12		Yes	Wiper clast falling in water column	No	Yes	Stage Is	Yes
VK916	FF6-S3.13		Yes	Red and gray	No	Yes	Stage Is	Yes
VK916	FF6-S3.14		Yes	Red and gray	No	Yes	Stage Is	Yes
VK916	FF6-S3.15	Thin	Yes	Small gray	No	Yes	Stage Is	Yes
VK916	FF6-S3.16		Yes	Small gray; wiper	No	Yes	Stage Is	Yes
VK916	FF6-S3.17		Yes	Small to large gray	No	Yes	Stage Is	Yes
VK916	FF6-S3.18		Yes	Buried gray	No	Yes	Stage Is	Yes
VK916	FF6-S3.19		Yes	Many, red and gray	No	Yes	Stage Is	Yes
VK916	FF6-S3.20		Yes	Small gray; wiper	No	Yes	Stage Is	Yes
VK916	NFS-1.01		Yes	Small red and gray	No	Yes	Stage Is; worms from 6.80 to 12.03 cm	Yes
VK916	NFS-1.02		Yes	Small red and gray	No	Yes	Stage Is	Yes
VK916	NFS-1.03		Yes	Large angular red; wiper	No	Yes	Stage Is	Yes
VK916	NFS-1.04		Yes	Red and gray; wiper	No	Yes	Stage Is	Yes
VK916	NFS-1.05		Yes	Wiper	No	Yes	Stage Is	Yes
VK916	NFS-1.06		Yes	Small gray; wiper	No	Yes	Stage Is	Yes
VK916	NFS-1.07		Yes	Small red and gray; wiper	No	Yes	Stage Is	Yes
VK916	NFS-1.08		Yes	Red at surface; buried gray	No	Yes	Stage Is	Yes
VK916	NFS-1.09	Two, large?	Yes	Large wiper	No	Yes	Stage Is	Yes
VK916	NFS-1.10	Thin	Yes	Small gray; wiper	No	Yes	Stage Is; worms at 8.54 and 12.28 cm	Yes
VK916	NFS-1.11	Thin, old, filled with sulf. sed.	Yes	Buried gray clasts	No	Yes	Stage Is	Yes
VK916	NFS-1.12	To depth	Yes	Buried gray clasts	No	Yes	Stage Is	Yes
VK916	NFS-1.13		Yes	Buried gray; wiper	No	Yes	Stage Is	Yes
VK916	NFS-1.14	Thin	Yes	Buried gray	No	Yes	Stage Is	Yes
VK916	NFS-1.15	Thin, with worm	Yes	Wiper	No	Yes	Stage Is; worm at 9.01 cm	Yes
VK916	NFS-1.16	Thin	Yes	Buried gray clasts	No	Yes	Stage Is	Yes
VK916	NFS-1.17		Yes	Buried gray; wiper	No	Yes	Stage Is	Yes
VK916	NFS-1.18		Yes	Buried gray; large wiper clast	No	Yes	Stage Is	Yes
VK916	NFS-1.19	Thin	Yes	Buried gray; wiper	No	Yes	Stage Is; worms at 9.53 and 10.41 cm	Yes
VK916	NFS-1.20		Yes	Buried gray	No	Yes	Stage Is	Yes
VK916	NFS-1.21		Yes	Buried gray; small wiper	No	Yes	Stage Is	Yes
VK916	NFS-1.22	Thin	Yes	Small buried gray	No	Yes	Stage Is; worm at 10.5 cm	Yes
VK916	NFS-1.23	Thin	Yes	Buried gray	No	Yes	Stage Is	Yes

Appendix E1. Sediment profile imaging data for Cruise 1B (Garden Banks Block 516 and Viosca Knoll Block 916).

Block	Station	Burrow comments	Clast	Clast type, color, and size	Epifauna	Infauna	Faunal comments	Pelletal Layer
VK916	NFS-1.24		Yes	Buried gray; large wiper on surface	No	Yes	Stage Is	Yes
VK916	NFS-1.25	Large in center, to depth	Yes	Buried gray; large wiper	No	Yes	Stage Is	Yes
VK916	NFS-1.26		Yes	Small red and gray; large wiper	No	Yes	Stage Is	Yes
VK916	NFS-1.27		Yes	Buried gray; wiper?	No	Yes	Stage Is	Yes
VK916	NFS-1.28		Yes	Red on surface; buried gray; wiper	No	Yes	Stage Is	Yes
VK916	NFS-1.29		Yes	Buried gray; large wiper	No	Yes	Stage Is	Yes
VK916	NFS-1.30		Yes	Buried gray; wiper	No	Yes	Stage Is	Yes
VK916	NFS-1.31		Yes	Buried gray; wiper	No	Yes	Stage Is	Yes
VK916	NFS-1.32		Yes	Small red and gray; large wiper	No	Yes	Stage Is	Yes
VK916	NFS-1.33		Yes	Small red + gray on surface, wiper	No	Yes	Stage Is	Yes
VK916	NFS-1.34		Yes	Small gray; wiper	No	Yes	Stage Is	Yes
VK916	NFS-1.35		Yes	Gray on surface and buried	No	Yes	Stage Is	Yes
VK916	NFS-1.36		Yes	Large wiper clasts	No	Yes	Stage Is	Yes
VK916	NFS-1.37		Yes	Many small red + gray chips on surface; buried gray	No	Yes	Stage Is	Yes
VK916	NFS-1.38	Old, filled with sulfitic sediment	Yes	Small gray; large wiper	No	Yes	Stage Is	Yes
VK916	NFS-1.39	Thin	Yes	Buried small gray; wiper	No	Yes	Stage Is; worm at 5.87 cm	Yes
VK916	NFS-1.40	Thin	Yes	Large (4 cm) mixed on surface; wiper	No	Yes	Stage Is; worm at 5.00 cm	Yes
VK916	NFS-1.41		Yes	Many small gray chip on surface; large wiper	No	Yes	Stage Is; worm at 8.57 cm	Yes
VK916	NFS-1.42		Yes	Buried gray	No	Yes	Stage Is	Yes
VK916	NFS-1.43		Yes	Large wiper	No	Yes	Stage Is	Yes
VK916	NFS-1.44		Yes	Red and gray; wiper	No	Yes	Stage Is	Yes
VK916	NFS-1.45		Yes	Buried gray; wiper	No	Yes	Stage Is	Yes
VK916	NFS-2.01		Yes	Red and gray	No	Yes	Stage Is	Yes
VK916	NFS-2.02		Yes	Red and gray	No	Yes	Stage Is	Yes
VK916	NFS-2.03		Yes	Red and gray; gray wiper clast	No	Yes	Stage Is	Yes
VK916	NFS-2.04		Yes	Red and gray; gray wiper clast	No	Yes	Stage Is	Yes
VK916	NFS-2.05		Yes	Small red and gray; wiper clast	No	Yes	Stage Is	Yes
VK916	NFS-2.06	Two	Yes	2 large rough clasts, 3 cm diameter	No	Yes	Stage Is; two worms	Yes
VK916	NFS-2.07		Yes	Red and gray; wiper clast	No	Yes	Stage Is	Yes
VK916	NFS-2.08	Two	No		No	Yes	Stage Is	Yes
VK916	NFS-2.09		No		No	Yes	Stage Is; pteropod shell	Yes
VK916	NFS-2.10	Burrow mottled to depth	No		No	Yes	Stage Is	Yes
VK916	NFS-2.11	Burrow mottled to depth	Yes	Wiper clasts only	No	Yes	Stage Is	Yes
VK916	NFS-2.12		Yes	Large irregular clasts on surface; 1 wiper clast	No	Yes	Stage Is	Yes
VK916	NFS-2.13		Yes	1 wiper clast	No	Yes	Stage Is	Yes
VK916	NFS-2.14		Yes	Large wiper clast	No	Yes	Stage Is	Yes
VK916	NFS-2.15		Yes	Wiper clasts	No	Yes	Stage Is	Yes
VK916	NFS-2.16		Yes	Red and gray clasts, 2 cm	No	Yes	Stage Is	Yes
VK916	NFS-2.17		Yes	Small red and gray clasts; 1 small wiper clast	No	Yes	Stage Is	Yes

Appendix E1. Sediment profile imaging data for Cruise 1B (Garden Banks Block 516 and Viosca Knoll Block 916).

Block	Station	Burrow comments	Clast	Clast type, color, and size	Epifauna	Infauna	Faunal comments	Pelletal Layer
VK916	NFS-2.18		Yes	Many red and gray; a few wiper clasts	No	Yes	Stage Is	Yes
VK916	NFS-2.19		Yes	Small red and gray; wiper clast	No	Yes	Stage Is; arenaceous foraminiferan	Yes
VK916	NFS-2.20		Yes	A few small red and gray, 0.2 to 0.5 cm diameter	No	Yes	Stage Is	Yes
VK916	NFS-2.21		Yes	Large red clast, 6 cm diameter	No	Yes	Stage Is	Yes
VK916	NFS-2.22		Yes	Large wiper clast	No	Yes	Stage Is	Yes
VK916	NFS-2.23		Yes	Large wiper clast	No	Yes	Stage Is	Yes
VK916	NFS-2.24		Yes	Wiper clast	No	Yes	Stage Is	Yes
VK916	NFS-2.25		Yes	A few small red and gray clasts	No	Yes	Stage Is	Yes
VK916	NFS-2.26		Yes	Large wiper clasts	No	Yes	Stage Is	Yes
VK916	NFS-2.27		Yes	Small gray wiper?	No	Yes	Stage Is	Yes
VK916	NFS-2.28	Three	Yes	Small red and gray	No	Yes	Stage Is	Yes
VK916	NFS-2.30		Yes	Wiper clasts	No	Yes	Stage Is	Yes
VK916	NFS-2.31		Yes	Wiper clast	No	Yes	Stage Is	Yes
VK916	NFS-2.32		Yes	A few small gray clasts	No	Yes	Stage Is	Yes
VK916	NFS-2.33		Yes	Large wiper clasts	No	Yes	Stage Is	Yes
VK916	NFS-2.34		Yes	Irregular gray clasts; wiper clasts	No	Yes	Stage Is	Yes

Appendix E1. Sediment profile imaging data for Cruise 1B (Garden Banks Block 516 and Viosca Knoll Block 916).

Block	Station	Sedimentary layers and depths (cm)	Feeding void numbers and depths (cm)	RPD, penetration depth, boundary roughness, and grain size comments
GB516	FF2-S1.01	Sulfitic layers at 6.59 and 13.66 (dark)	Void at 4.19	
GB516	FF2-S1.02	Sulfitic layers at 5.72, 9.38; light clay at depth	Void at 7.5	
GB516	FF2-S1.03	Layers at 8.50 and 10.25, light clay over sulfitic		
GB516	FF2-S1.04	Sulfitic layer at 9.67, under irregular clay		
GB516	FF2-S1.05	Sulfitic and clay layer at 9.67	3 voids from 6.0 to 7.5	
GB516	FF2-S1.06	Sulfitic layers at 6.05 and 12.71		Erosional
GB516	FF2-S1.07	Dark and irregular clay layer at 10.26	Void at 7.5	
GB516	FF2-S1.08	Sulfitic layers at 4.01 and 9.30	Small void at 12?	
GB516	FF2-S1.09	Sulfitic layers at 5.83 and 9.86	Tiny feeding void at depth?	Pull-away
GB516	FF2-S1.10	Sulfitic at 8.99 and 10.79; light clay in between		
GB516	FF2-S1.11	Sulfitic layer at 6.82; clay patch		Megafaunal excavation?
GB516	FF2-S1.12	Sulfitic layers at 5.22 and 8.76		
GB516	FF2-S1.13	Sulfitic layers at 7.65, 9.72, 12.60 (dark)		
GB516	FF2-S1.14	Layers at 5.05, 7.59, and 10.92		
GB516	FF2-S1.15	Layers at 7.10, 9.76, and 12.61		
GB516	FF2-S1.16	Layers at 4.65, 9.39, and 11.99 (dark)		
GB516	FF2-S1.17	Layers at 5.02, 9.58, and 12.84 (dark)	Void at 4.48	
GB516	FF2-S1.18	Sulfitic layers at 7.45 and 9.37	Small voids at 8.96 and 9.76	
GB516	FF2-S1.19	Layers at 4.96, 7.21, and 10.31	Voids at 9.33 and 9.66	
GB516	FF2-S1.20	Layers at 6.54, 10.15, and 11.48	Voids at 5.46 and 6.28	
GB516	FF2-S1.21	Layers at 5.07 and 9.33		
GB516	FF2-S1.22	Sulfitic layer at 5.88	Void at 5.01	
GB516	FF4-S2.01	Layers at 3.58 (reddish) and 7.38 (sulfitic)	Void at 4	RPD deep on right
GB516	FF4-S2.02	Sulfitic layers at 7.98 and 9.87		Mud waves?
GB516	FF4-S2.04	Layers at 4.15 (reddish) and 9.62 (sulfitic)		
GB516	FF4-S2.05	Sulfitic layers at 3.31, 7.48, and 11.34		
GB516	FF4-S2.06	Sulfitic layers at 1.92 and 9.01; light clay at 12.08	Void? at 4.72	RPD deep left of center
GB516	FF4-S2.07	Half of area sulfitic at 2.13		RPD deep on right
GB516	FF4-S2.08	Sulfitic layers at 8.10 and 10.74	Voids at 3.90 and 5.27	
GB516	FF4-S2.09	Sulfitic layers at 1.99, 6.93, and 10.59	Void at 4.14	
GB516	FF4-S2.10	Layers at 3.89, 6.92, and 9.33	Void at 4.18	
GB516	FF4-S2.11	Sulfitic layers at 2.73 and 5.54	Voids at 6.14, 6.41, and 8.11	
GB516	FF4-S2.12	Layers 3.05, 6.19, 9.61 (dark), & 11.76 (light clay)		
GB516	FF4-S2.13	Sulfitic at 7.16 and 11.48; light clay patch	Voids? at 6.61 and 11.29	
GB516	FF4-S2.14	Sulfitic layers at 5.76, 11.18, and 13.64	Voids? at 12.99 and 13.39	
GB516	FF4-S2.15	Sulfitic at 9.11; light clay at 15.21		RPD deep on right; rip-up?

Appendix E1. Sediment profile imaging data for Cruise 1B (Garden Banks Block 516 and Viosca Knoll Block 916).

Block	Station	Sedimentary layers and depths (cm)	Feeding void numbers and depths (cm)	RPD, penetration depth, boundary roughness, and grain size comments
GB516	FF4-S2.16	Sulfitic layers at 6.85 and 10.47	Voids at 3.73, 4.49, and 4.50	
GB516	FF4-S2.17	Sulfitic at 12.22 and 16.89; white haze??	Voids at 17.62 and 18.22	Large pull-away obscures RPD
GB516	FF4-S2.18	Sulfitic at 6.88, 10.10, and 12.06; light clay at 13.06		
GB516	FF6-S3.01	Layers at 4.09 and 8.38 (right only)	Void at 10.24	Large patch of blue clay in lower left
GB516	FF6-S3.03	Sulfitic layers at 4.72, 7.86, and 11.53	Tiny void at 5.32	
GB516	FF6-S3.04	Sulfitic layers at 3.18, 6.03, and 8.96; 10.07 (clay)	Voids at 4.40 and 4.62	
GB516	FF6-S3.05	Dark sulfitic layer at 2.93; clay at 7.58		Angular; recently disturbed
GB516	FF6-S3.07	Sulfitic layers at 7.03 and 11.13	Void at 12.47	
GB516	FF6-S3.08	Sulfitic at 0.81, 2.81, and 4.12; light clay at 1.54	No Stage I seen	RPD physically removed; eroded; RDSI; surface clay
GB516	FF6-S3.09	Sulfitic at 4.83, 9.27, and 11.68; pale clay at 6.94	Void at 6	
GB516	FF6-S3.10	Sulfitic at 5.09, 8.80, and 12.07; light clay at 11.60	Voids at 4 and 9	Excluded large surface clast
GB516	FF6-S3.11	Sulfitic at 1.50, 6.72, & 9.32; light clay @ 4.08, 11.6	Void at 4	
GB516	FF6-S3.12	Sulfitic at 6.39 and 9.21; light clay at 11. 85	Voids are shelter fabric in patchy clay?	
GB516	FF6-S3.13	Sulfitic at 6.34; 8-9 cm thick light clay from 8.35		
GB516	FF6-S3.14	Sulfitic at 3.60, 10.88, and 13.19; blue clay at 6.03	Void? at 10.52	
GB516	FF6-S3.15	Light clay at 3.81 and 8.76; sulfitic at 6.95	Voids are pull-aparts in clay patch	
GB516	FF6-S3.16	Sulfitic layers at 7.12 and 10.95	Void at 1.84	
GB516	FF6-S3.17	Sulfitic at 4.72 and 7.54; light clay at 10.76		
GB516	FF6-S3.18	Sulfitic at 8.44 and 13.42; pale clay at 11.01	Void? at 8.88	
GB516	FF6-S3.19	Sulfiticlayer at 5.57		
GB516	FF6-S3.20	Sulfitic at 7.61; blue clay at 12. 61		
GB516	NFS-1.01	Sulfitic layers at 7.90 and 11.35	Retrograde; old voids collapsed	Patchy microbial mat
GB516	NFS-1.02	White clay layer at 13.23		Patchy microbial mat
GB516	NFS-1.03	Sulfitic layers at 7.11 and 10.21		Patchy microbial mat
GB516	NFS-1.04	Sulfitic layers at 7.80, 9.84, and 12.07	Voids at 2.5 and 3.5	Patchy microbial mat
GB516	NFS-1.05	Sulfitic layers at 2.52, 8.24, and 11.74		Patchy microbial mat
GB516	NFS-1.06	Sulfitic at 1.90; reddish-black at 5.71 and 9.11	No animals seen	Pit; megafaunal excavation?
GB516	NFS-1.07	Reddish-black layers at 3.84 and 8.43	Relict voids?	Patchy microbial mat; pit, megafaunal excavation?
GB516	NFS-1.08	Sulfitic layers at 2.17 and 8.50	Old filled-in void?	Patchy microbial mat; erosional
GB516	NFS-1.09	Sulfitic layers at 4.76, 8.27, and 10.43		Patchy microbial mat; small pit in middle of picture
GB516	NFS-1.10	Sulfitic layers at 5.95 and 10.51	No animals seen	Patchy microbial mat

Appendix E1. Sediment profile imaging data for Cruise 1B (Garden Banks Block 516 and Viosca Knoll Block 916).

Block	Station	Sedimentary layers and depths (cm)	Feeding void numbers and depths (cm)	RPD, penetration depth, boundary roughness, and grain size comments
GB516	NFS-1.11	Sulfitic layers at 3.17, 8.54, and 12.82	Void at depth?	
GB516	NFS-1.12	Sulfitic layers at 3.58 and 7.42	Void at 7.5	
GB516	NFS-1.13	Sulfitic layers at 8.27, 11.79, and 12.87		
GB516	NFS-1.14	Sulfitic layers at 1.96, 8.37, and 11.06	Void at 9 cm depth under pit	Small pit on left
GB516	NFS-1.15	Sulfitic layers at 0.86, 6.56, and 10.87	Tiny stage I's; relict voids?	
GB516	NFS-1.16	Sulfitic at 1.68; reddish at 8.88 and 11.78	Small void at 6	Erosional
GB516	NFS-1.17	Sulfitic at 1.73; reddish at 9.67 and 12.47		
GB516	NFS-1.18	Sulfitic at 1.89; reddish at 7.67	Tiny void at 9.3	RPD patchy
GB516	NFS-1.19	V. sulfitic at 0.54; dark at 7.49, 10.34, and 13.08		
GB516	NFS-1.20	V. sulfitic at 0.91; dark at 6.81 and 11.69	Voids on right?	
GB516	NFS-1.22	Sulfitic layers at 3.01, 6.69, 9.21, and 12.95		
GB516	NFS-1.23	Sulfitic layers at 4.38, 8.10, 11.42, and 13.40		
GB516	NFS-1.24	Sulfitic at 4.47; reddish at 7.25, 9.91, and 12.53		
GB516	NFS-1.25	Sulfitic at 1.73; reddish at 6.07	A few tiny Stage I's	
GB516	NFS-1.26	Reddish-sulfitic layers at 6.08, 9.44, and 11.69		
GB516	NFS-1.27	Reddish-sulfitic layers at 3.20 and 6.31		
GB516	NFS-1.28	Reddish-sulfitic layer at 5.33		
GB516	NFS-2.06	Sulfitic layers at 5.38, 8.16, 11.77, and 13.51		
GB516	NFS-2.07	Sulfitic at 8.53; light gray clay at 12	Void?	
GB516	NFS-2.08	Sulfitic layers at 4.57, 8.62, and 12.50	Void at 8.81	
GB516	NFS-2.09	Reddish-black layers at 4.58 and 8.78	Void?	
GB516	NFS-2.10	Sulfitic layers at 3.98, 9.78, and 12.63	Relict voids?	
GB516	NFS-2.11	Sulfitic layers at 2.70, 8.17, and 12.22		Very sulfitic patch at 3 cm; patchy bacterial mat
GB516	NFS-2.12	Reddish-dark layer at 7.69	A few Stage I's	Nearly solid bacterial mat
GB516	NFS-2.13	Very sulfitic layer at 1; tan layer at 7.26		Very sulfitic layer at 1 to 4 cm depth
GB516	NFS-2.14	Very sulfitic at 0.3; dark at 9.22 and 12.41	A few Stage I's	Very sulfitic layer - 0.3 to 5 cm; clay layer is puzzle fabric
GB516	NFS-2.15	Dark layers at 9.93 and 13.78	Retrograde; void at 14	
GB516	NFS-2.16	Dark layers at 8.91 and 14.69		
GB516	NFS-2.18	No real layers	Few Stage I's; some tan, some gray	
GB516	NFS-2.19	Sulfitic layer at 12.40		Patchy bacterial mat; filaments
GB516	NFS-2.20	Sulfitic layers at 10.96 and 14.04		Microbial filaments in water
GB516	NFS-2.21	Very dark sulfitic layer at 7.18		Patch bacterial mat, filaments; elemental sulfur; shelter fabric
GB516	NFS-2.22	Sulfitic layer at 7.05		Bacterial mat; microbial filaments

Appendix E1. Sediment profile imaging data for Cruise 1B (Garden Banks Block 516 and Viosca Knoll Block 916).

Block	Station	Sedimentary layers and depths (cm)	Feeding void numbers and depths (cm)	RPD, penetration depth, boundary roughness, and grain size comments
GB516	NFS-2.23	Dark sulfitic layer at 5.46		Thick patch of bacterial mat; filaments
GB516	NFS-2.24	Layers are overwiped		
GB516	NFS-2.25	Dark sulfitic layer at 4.81		Bacterial mat; filaments
GB516	NFS-2.26	Very sulfitic layer at 0; sulfitic at 3.97		Very sulfitic 0 to 2 cm; bacterial filaments in water column
GB516	NFS-2.27	Layers difficult to distinguish		Patchy bacterial mat
GB516	NFS-2.28	Layers difficult to distinguish	One tube?; void?	Thin bacterial mat; erosional
GB516	NFS-2.29	Dark tan layer at 7.83	A few tubes; void at 5	
GB516	NFS-2.30	Layers difficult to distinguish		Bacterial mat
GB516	NFS-2.31	Dark reddish layer at 8.16	A few tubes	Bacterial mat
GB516	NFS-2.32	Layers difficult to distinguish	A few tubes	
GB516	NFS-2.33	Sulfitic layer at 10.55; light clay at 13		
GB516	NFS-2.34	Clay layer at 7.59; dark at 10.30	No animals seen	
GB516	NFS-2.35	Dark layers at 6.34, 10.14, and 12.14		
GB516	NFS-2.36	Light clay at 10.53; dark layer at 15.27	4 voids from 17 to 19	One corner over-penetrated
GB516	NFS-3.01	Top of dark reddish layer, 3.91	Void at 2.5 cm	
GB516	NFS-3.02	Layers at 6.25, 8.77, and 10.97	Filled-in void	
GB516	NFS-3.03	Dark-reddish layer at 6.29; light clay at 10.69	Filled-in void	
GB516	NFS-3.04	Patchy light clay at 3 cm depth	3 voids at 3 to 4 cm?	
GB516	NFS-3.05	Dark-reddish layer at 7.86; light clay at 11.26		
GB516	NFS-3.06	Dark-reddish layers at 6.94, 9.23, and 11.09	A few tubes	
GB516	NFS-3.07	Sulfitic layer at 6.19; patches of red	Void at 6	
GB516	NFS-3.08	Sulfitic layers at 5.34 and 8.29	Void at 13.5	
GB516	NFS-3.09	Sulfitic layers at 4.10 and 9.64	No stage I's seen; 4 voids at 13.5	RPD disturbed by RDSI; sampling artifact
GB516	NFS-3.10	Sulfiticlayers at 3.10, 6.27, 9.99, and 12.63	Voids?	
GB516	NFS-3.11	Sulfitic at 4.20, light clay layer at 7.21	Void at 11.86	
GB516	NFS-3.12	Sulfitic layers at 4.65 and 9.36	Filled-in void on left?	
GB516	NFS-3.13	Sulfitic layers at 3.49, 8.01, and 11.48		
GB516	NFS-3.14	Sulfitic layers at 3.12, 6.82, and 9.74	Voids at 4.67 and 5.07	
GB516	NFS-3.15	Sulfitic layers at 3.43 and 7.04; light clay at 10.60	Void at 8.20	
GB516	NFS-3.16	Sulfitic layers at 5.53, 10.02, and 12.12		
GB516	NFS-3.17	Sulfitic layers at 2.65, 5.65, 8.14, and 10.47	Void at 4.90	
GB516	NFS-3.18	Sulfitic layers at 4.24, 6.83, 10.56, and 13.38	2 small voids at 6	

Appendix E1. Sediment profile imaging data for Cruise 1B (Garden Banks Block 516 and Viosca Knoll Block 916).

Block	Station	Sedimentary layers and depths (cm)	Feeding void numbers and depths (cm)	RPD, penetration depth, boundary roughness, and grain size comments
VK916	FF2-S1.01	Tan layer, mean, 5.01	Voids-3.53, 4.46, 5.65, 5.73, 6.61, & 8.10	Rippled; top of gray layer irregular
VK916	FF2-S1.02	Tan layer, mean, 4.13	Feeding void at 12.20	Top of gray clay layer irregular
VK916	FF2-S1.03	Tan layer, mean, 7.65	Voids at 9.12 and 14.82	Top of gray clay layer irregular
VK916	FF2-S1.04	Tan layer, mean, 5.07	Void?	Top of gray clay layer irregular
VK916	FF2-S1.05	Tan layer, mean, 4.69	Void?	Wiper clast over RPD; top of gray clay layer irregular
VK916	FF2-S1.06	Tan layer, mean, 5.62	Feeding void at 6.31	Top of gray clay layer irregular
VK916	FF2-S1.07	Tan layer, mean, 5.72	Feeding void at 10.47	Top of gray clay layer irregular
VK916	FF2-S1.08	Tan layer, mean, 5.36	Voids at 4.99, 7.19, and 9.25	Top of gray clay layer irregular
VK916	FF2-S1.09	Tan layer, mean, 4.97	Feeding void at 9.94	Top of gray clay layer irregular
VK916	FF2-S1.10	Tan layer, mean, 2.84	Voids at 4.46 and 5.92	Top of gray clay layer irregular
VK916	FF2-S1.11	Tan layer, mean, 5.41		
VK916	FF2-S1.12	Tan layer, mean, 6.01		
VK916	FF2-S1.13	Tan layer, mean, 3.72		Erosional
VK916	FF2-S1.14	Tan layer, mean, 5.41		Wiper clast obscures RPD
VK916	FF2-S1.15	Tan layer, mean, 7.38		Wiper clast obscures RPD; pull-away; shelter fabric
VK916	FF2-S1.16	Tan layer, mean, 4.38	Void at 4.32	
VK916	FF2-S1.17	Tan layer, mean, 5.87		
VK916	FF2-S1.18	Tan layer, mean, 9.96		Wiper clast obscures RPD
VK916	FF2-S1.19	Tan layer, mean, 3.93	Void at 10.05	
VK916	FF2-S1.20	Tan layer, 5.77		
VK916	FF4-S2.01	Red layer, 4.33	Void at 4.68	
VK916	FF4-S2.03	Red layer, 5.67	Voids at 11.40 and 11.65	
VK916	FF4-S2.04	Red layer, 6.15	Voids	
VK916	FF4-S2.06	Tan layer, 5.81	Voids?	
VK916	FF4-S2.07	Tan layer, 5.00	Shallow voids at 1.29 and 1.43	
VK916	FF4-S2.08	Tan layer, 5.39		
VK916	FF4-S2.09	Tan layer, 5.67	Tiny voids at 11.13 and 11.21	
VK916	FF4-S2.10	Tan layer, 5.01	Pull-apart cracks at depth or voids?	
VK916	FF4-S2.11	Tan layer, 6.95		Rippled?
VK916	FF4-S2.12	Tan layer, 5.32		
VK916	FF4-S2.13	Tan layer, 8.80, including tan clay on left	Voids?	
VK916	FF4-S2.14	Tan layer, 5.12		
VK916	FF4-S2.15	Tan layer, 5.56	Void at 12.23 on left	
VK916	FF4-S2.16	Tan layer, 6.08		Small sulfitic patch at depth; puzzle fabric at top of clay layer?
VK916	FF4-S2.17	Tan layer, 6.87		Small sulfitic patch at depth
VK916	FF4-S2.18	Tan layer, 4.53	Void at 6.83	Shelter fabric
VK916	FF6-S3.01	Red layer, 4.96	Voids-4.96, 7.38, 8.48, 8.70, and 9.53	
VK916	FF6-S3.02	Red layer, 2.26	Void at 7.44	
VK916	FF6-S3.03	Red layer, 4.95	Voids at 10.77	

Appendix E1. Sediment profile imaging data for Cruise 1B (Garden Banks Block 516 and Viosca Knoll Block 916).

Block	Station	Sedimentary layers and depths (cm)	Feeding void numbers and depths (cm)	RPD, penetration depth, boundary roughness, and grain size comments
VK916	FF6-S3.04	Red layer, 3.55	Tiny void at 11.43	Some puzzle fabric
VK916	FF6-S3.05	Red layer, 4.61		
VK916	FF6-S3.06	Red layer, 2.90		Disturbed sampled
VK916	FF6-S3.08	Red layer, 4.06		
VK916	FF6-S3.09	Red layer, 4.31		
VK916	FF6-S3.10	Red layer, 5.65	Void at 8.24	RPD patchy
VK916	FF6-S3.11	Red layer, 4.85	Void at 4.35	
VK916	FF6-S3.12	Red layer, 6.40	Tiny void at 9.53	Erosional?
VK916	FF6-S3.13	Red layer, 6.00	Voids at 10.57	
VK916	FF6-S3.14	Red layer, 5.10	Voids at 5.70, 6.09, and 6.42	
VK916	FF6-S3.15	Red layer, 6.44		Rippled?
VK916	FF6-S3.16	Red layer, 4.65		
VK916	FF6-S3.17	Red layer, 5.19	Voids?	
VK916	FF6-S3.18	Red layer, 3.99		RPD patchy; surface sharply irregular; shelter fabric
VK916	FF6-S3.19	Red layer, 3.73		RPD patchy
VK916	FF6-S3.20	Red layer, 6.48		
VK916	NFS-1.01	Red layer, mean, 4.99	Voids at 6.80, 6.94, and 9.61	Dark gray red layer under RPD
VK916	NFS-1.02	Red layer, mean, 6.47	Void at 8.76	Laterally patchy, darker sediment on right
VK916	NFS-1.03	Red layer, mean, 6.22	Void at 10.69	RPD thin; color mottling in clay; sampling disturbance?
VK916	NFS-1.04	Red layer, mean, 6.14		Laterally patchy, darker sediment on right; color mottling in clay
VK916	NFS-1.05	Red layer, mean, 5.69		Wiper clast over RPD; large pull-away; color mottling in clay
VK916	NFS-1.06	Red layer, mean, 7.04		Dark gray red layer (5 cm) under RPD; color mottling in clay
VK916	NFS-1.07	Red layer, mean, 5.73		Shelter fabric
VK916	NFS-1.08	Red layer, mean, 4.64		Color mottling in clay; top of clay irregular
VK916	NFS-1.09	Red layer, mean, 6.00		Color mottling in clay; shelter fabric
VK916	NFS-1.10	Red layer, mean, 4.78	Void at 13.83	
VK916	NFS-1.11	Red layer, mean, 5.58		
VK916	NFS-1.12	Red layer, mean, 6.48	Voids at 5.84 and 11.73	Mottled
VK916	NFS-1.13	Red layer, mean, 5.45	Void at 9.25	
VK916	NFS-1.14	Red layer, mean, 4.25	Voids at 13.80 and 15.59	
VK916	NFS-1.15	Red layer, mean, 4.83	.	Patch of dark gray red layer under RPD
VK916	NFS-1.16	Red layer, mean, 5.00	Voids at 5.07, 5.62, and 12.56	
VK916	NFS-1.17	Red layer, mean, 6.71		Clay is color mottled; patchy red layer
VK916	NFS-1.18	Red layer, mean, 5.70	Voids at 6.53, 13.2, and 14.10	Irregular clay surface
VK916	NFS-1.19	Red layer, mean, 4.99	Void at 11.79	
VK916	NFS-1.20	Red layer, mean, 7.20	Voids at 3.55, 5.23, and 11.04	
VK916	NFS-1.21	Red layer, mean, 9.11	Voids at 7.49 and 7.74	Clay is color mottled
VK916	NFS-1.22	Red layer, mean, 6.09	Voids at 6.36, 6.94, 7.11, and 8.07	Dark gray red layer under RPD; color mottling in clay
VK916	NFS-1.23	Red layer, mean, 5.64	Voids at 6.17 and 11.51	Clay is color mottled

Appendix E1. Sediment profile imaging data for Cruise 1B (Garden Banks Block 516 and Viosca Knoll Block 916).

Block	Station	Sedimentary layers and depths (cm)	Feeding void numbers and depths (cm)	RPD, penetration depth, boundary roughness, and grain size comments
VK916	NFS-1.24	Red layer, mean, 5.01	Void at 7.02	
VK916	NFS-1.25	Red layer, mean, 7.23	Voids at 7.02, 8.32, and 11.13	RPD thin and evaginated
VK916	NFS-1.26	Red layer, mean, 4.00	Voids at 7.96 and 10.88	Surface rough
VK916	NFS-1.27	Red layer, mean, 9.49	Voids at 8.26 and 15.53	Clay is color mottled; maximum phi is within feeding void
VK916	NFS-1.28	Red layer, mean, 5.22	Voids at 10.11 and 11.49	Clay is color mottled
VK916	NFS-1.29	Red layer, mean, 5.59	Voids at 8.37 and 9.50	
VK916	NFS-1.30	Red layer, mean, 2.75	Void at 11.32	Some shelter fabric
VK916	NFS-1.31	Red layer, mean, 5.81		Some shelter fabric
VK916	NFS-1.32	Red layer, mean, 6.19		Shelter fabric
VK916	NFS-1.33	Red layer, mean, 4.43		Pit in background
VK916	NFS-1.34	Red layer, mean, 5.43	Voids at 4.99, 6.33, and 10.74	Dark gray red layer under RPD
VK916	NFS-1.35	Red layer, mean, 4.86		
VK916	NFS-1.36	Red layer, mean, 5.71		
VK916	NFS-1.37	Red layer, mean, 3.75	Void?	Thin RPD
VK916	NFS-1.38	Red layer, mean, 4.64	Void at 6.14	
VK916	NFS-1.39	Red layer, mean, 5.68	Void at 10.44	
VK916	NFS-1.40	Red layer, mean, 3.63	Voids at 9.03 and 9.45	RPD patchy; high relief
VK916	NFS-1.41	Red layer, mean, 5.26	Void at 5.15	Surface irregular; shelter fabric
VK916	NFS-1.42	Red layer, mean, 5.48	Void at 4.60	
VK916	NFS-1.43	Red layer, mean, 5.47		
VK916	NFS-1.44	Red layer, mean, 7.07	Void at 12.12	Clay is color mottled
VK916	NFS-1.45	Red layer, mean, 4.29	Voids at 4.82, 5.37, and 7.40	Dark gray red layer under RPD
VK916	NFS-2.01	Red layer, mean, 3.60	Feeding void at 2.0	Patches dark gray red layer under RPD; maximum phi is pelletal
VK916	NFS-2.02	Red layer, mean, 4.39	Feeding voids at 7.38 and 12.48	
VK916	NFS-2.03	Red layer, mean, 8.61	Feeding void at 15.90	Maximum phi is in pelletal layer
VK916	NFS-2.04	Red layer, mean, 6.72	Feeding voids at 7.08 and 12.31	
VK916	NFS-2.05	Red layer, mean, 3.12	Feeding void at 4.29	Very rough surface, wavy
VK916	NFS-2.06	Red layer, mean, 5.09		Dark gray red layer under RPD
VK916	NFS-2.07	Red layer, mean, 8.46		Patches of dark gray red layer under RPD
VK916	NFS-2.08	Red layer, mean, 2.01		Dark gray red layer under RPD; top surface of clay-puzzle fabric
VK916	NFS-2.09	Red layer, mean, 3.31		Small patches dark gray red layer under RPD; puzzle fabric
VK916	NFS-2.10	Red layer, mean, 7.90	Feeding void at 7.77	Dark gray red layer under RPD, some to depth
VK916	NFS-2.11	Red layer, mean, 5.29	Feeding voids-10.74 and 11.51	Wiper clast obscures RPD
VK916	NFS-2.12	Red layer, mean, 2.00		Small patch dark gray red layer under RPD; clay surface irregular
VK916	NFS-2.13	Red layer, mean, 2.40	Feeding void at 10.27	Top surface of clay is irregular clumps
VK916	NFS-2.14	Red layer, mean, 6.90	Feeding void at 6.33	
VK916	NFS-2.15	Red layer, mean, 3.78	Feeding void at 8.46	
VK916	NFS-2.16	Red layer, mean, 3.48		
VK916	NFS-2.17	Red layer, mean, 6.63	Feeding voids-10.49, 14.54, and 14.54	

Appendix E1. Sediment profile imaging data for Cruise 1B (Garden Banks Block 516 and Viosca Knoll Block 916).

Block	Station	Sedimentary layers and depths (cm)	Feeding void numbers and depths (cm)	RPD, penetration depth, boundary roughness, and grain size comments
VK916	NFS-2.18	Red layer, mean, 5.45		Surface rough, covered with clasts
VK916	NFS-2.19	Red layer, mean, 2.23	Feeding voids-8.79, 9.20, and 9.92	
VK916	NFS-2.20	Red layer, mean, 6.57		Dark gray red layer under RPD
VK916	NFS-2.21	Red layer, mean, 5.49	Feeding void at 12.92	Patch of very dark gray red layer under RPD
VK916	NFS-2.22	Red layer, mean, 5.83	Feeding void at 7.68	
VK916	NFS-2.23	Red layer, mean, 4.54		
VK916	NFS-2.24	Red layer, mean, 5.04	Feeding voids-1.02, 1.24, 2.75, and 5.70	Patch of dark gray red layer under RPD
VK916	NFS-2.25	Red layer, mean, 4.41		
VK916	NFS-2.26	Red layer, mean, 5.31		Patches of dark gray red layer under RPD
VK916	NFS-2.27	Red layer, mean, 3.76	Feeding void at 4.02	Some shelter fabric
VK916	NFS-2.28	Red layer, mean, 4.17		One ripple
VK916	NFS-2.30	Red layer, mean, 5.04		Patches of dark red gray layer under RPD
VK916	NFS-2.31	Red layer, mean, 6.74		Dark gray red layer under RPD
VK916	NFS-2.32	Red layer, mean, 4.28	Feeding void at 14.32	Black patch near surf.; dark gray red layer under RPD; shelter fabric
VK916	NFS-2.33	Red layer, mean, 4.21		Wiper clast obscures RPD
VK916	NFS-2.34	Red layer, mean, 4.72		Patches of dark gray red layer under RPD

APPENDIX E2

Sediment Profile Imaging Results for Cruise 2B (Garden Banks Block 516)

Appendix E2. Sediment profile imaging data for Cruise 2B (Garden Banks Block 516).

Block	Station	Penetration			Boundary Roughness		Grain Size (phi)			Redox Potential Discontinuity			Methane	Anoxia	Successional	Organism
		Penetration Depth (cm)			Thickness	Type			Major	RPD Depth (cm)			Bubbles	Low	Stage	Sediment Index
		Minimum	Maximum	Mean	(cm)		Minimum	Maximum	Mode	Minimum	Maximum	Mean		DO		(OSI)
GB516	FF3-01B	11.09	11.78	11.32	0.69	Biological	>4	2 to 1	>4	0.02	0.33	0.17	No	No	I on III	6
GB516	FF3-02B	12.28	12.74	12.51	0.46	Biological	>4	2 to 1	>4	0.03	1.84	0.20	No	No	I on III	6
GB516	FF3-03B	3.00	12.00	11.37	1.26	Biological	>4	2 to 1	>4	0.54	0.85	0.41	No	No	I on III	6
GB516	FF3-04B	12.70	13.43	12.95	0.73	Biological	>4	2 to 1	>4	0.02	0.41	0.19	No	No	I	2
GB516	FF3-05B	13.00	13.60	13.30	0.60	Biological	>4	2 to 1	>4	0.08	0.50	0.25	No	No	I on III	6
GB516	FF3-06B	12.63	13.70	13.22	1.07	Biological	>4	2 to 1	>4	0.21	0.38	0.29	No	No	I on III	6
GB516	FF3-07B	9.61	11.84	10.96	2.23	Biological	>4	2 to 1	>4	0.16	0.32	0.25	No	No	I on III	6
GB516	FF3-08B	7.52	9.89	8.56	2.37	Biological	>4	2 to 1	>4	0.20	0.34	0.26	No	No	I on III	6
GB516	FF3-09B	14.50	15.00	14.75	0.50	Biological	>4	2 to 1	>4	0.16	0.41	0.26	No	No	I	2
GB516	FF3-10B	11.56	13.04	13.61	1.48	Biological	>4	2 to 1	>4	0.05	0.47	0.22	No	No	I	2
GB516	FF3-11B	13.00	13.5	13.25	0.50	Biological	>4	2 to 1	>4	0.13	0.55	0.31	No	No	I on III	6
GB516	FF3-12B	12.12	12.99	12.54	0.87	Biological	>4	2 to 1	>4	0.00	0.32	0.15	No	No	I	2
GB516	FF3-13B	14.28	14.45	14.32	0.17	Biological	>4	2 to 1	>4	0.19	0.41	0.27	No	No	I on III	6
GB516	FF3-14B	12.70	13.30	13.00	0.60	Biological	>4	2 to 1	>4	0.05	0.38	0.22	No	No	I on III	6
GB516	FF3-15B	12.60	14.06	13.22	1.46	Indeterminate	>4	2 to 1	>4	0.05	0.49	0.24	No	No	I on III	6
GB516	FF3-16B	10.82	13.26	12.38	2.44	Indeterminate	>4	2 to 1	>4	0.10	0.43	0.23	No	No	I	2
GB516	FF3-17B	12.08	12.82	12.44	0.74	Biological	>4	2 to 1	>4	0.10	0.30	0.20	No	No	I on III	6
GB516	FF3-18B	14.61	15.41	15.11	0.80	Biological	>4	3 to 2	>4	0.11	0.41	0.21	No	No	I on III	6
GB516	FF3-19B	15.50	19.50	17.50	4.00	Indeterminate	>4	2 to 1	>4	0.27	0.36	0.21	No	No	Indeterminate	Indeterminate
GB516	FF3-20B	12.50	13.29	12.80	0.79	Biological	4 to 3	2 to 1	>4	0.27	0.43	0.34	No	No	I on III	6
GB516	FF3-21B	14.20	15.00	14.69	0.80	Biological	>4	2 to 1	>4	0.02	0.36	0.18	No	No	I	2
GB516	FF3-22B	14.67	15.41	15.01	0.74	Biological	>4	2 to 1	>4	0.14	0.51	0.32	No	No	I on III	6
GB516	FF3-23B	12.97	13.40	13.21	0.43	Biological	>4	2 to 1	>4	0.14	0.54	0.32	No	No	I on III	6
GB516	FF3-24B	12.36	13.60	12.97	1.24	Biological	>4	2 to 1	>4	0.14	0.38	0.29	No	No	I on III	6
GB516	FF3-25B	13.21	15.25	14.20	2.04	Biological	>4	2 to 1	>4	0.25	0.52	0.39	No	No	I	2
GB516	FF3-26B	12.47	13.02	12.78	0.55	Biological	>4	2 to 1	>4	0.10	0.44	0.23	No	No	I	2
GB516	FF3-27B	13.95	14.36	14.13	0.41	Biological	>4	2 to 1	>4	0.08	0.30	0.17	No	No	I on III	6
GB516	FF3-28B	12.40	14.05	13.20	1.65	Biological	>4	2 to 1	>4	0.08	0.32	0.21	No	No	I	2
GB516	FF3-29B	12.50	13.50	13.00	1.00	Biological	>4	2 to 1	>4	0.02	0.57	0.23	No	No	I	2
GB516	FF3-30B	12.46	13.16	12.83	0.70	Biological	>4	2 to 1	>4	0.05	0.36	0.19	No	No	I	2
GB516	FF3-31B	12.60	13.00	12.80	0.40	Biological	>4	2 to 1	>4	0.05	0.24	0.17	No	No	I	2
GB516	FF3-32B	14.89	15.79	15.44	0.90	Biological	>4	2 to 1	>4	0.08	0.44	0.30	No	No	I	2
GB516	FF3-33B	13.76	14.34	14.02	0.58	Biological	>4	2 to 1	>4	0.05	0.49	0.24	No	No	I on III	6
GB516	FF3-34B	12.14	13.68	13.05	1.54	Biological	>4	2 to 1	>4	0.08	0.46	0.26	No	No	I on III	6
GB516	FF3-35B	11.02	13.81	12.89	2.79	Biological	>4	2 to 1	>4	0.11	0.52	0.31	No	No	I on III	6
GB516	FF3-36B	13.29	14.61	14.05	1.32	Biological	>4	2 to 1	>4	0.10	0.35	0.23	No	No	I	2
GB516	FF3-37B	11.95	12.47	12.16	0.52	Biological	>4	2 to 1	>4	0.10	0.36	0.26	No	No	I on III	6
GB516	FF3-38B	14.94	15.27	15.14	0.33	Biological	>4	2 to 1	>4	0.10	0.38	0.24	No	No	I on III	6
GB516	FF3-39B	15.30	15.77	15.47	0.47	Biological	>4	2 to 1	>4	0.14	0.36	0.21	No	No	I on III	6
GB516	FF3-40B	8.37	12.28	10.35	3.91	Indeterminate	>4	2 to 1	>4	0.19	0.76	0.40	No	No	I on III	6
GB516	FF4-01B	10.74	11.32	11.10	0.58	Biological	>4	3 to 2	>4	0.00	0.74	0.34	No	No	I	2

Appendix E2. Sediment profile imaging data for Cruise 2B (Garden Banks Block 516).

Block	Station	Penetration: Penetration Depth (cm) Minimum	Maximum	Mean	Boundary Roughness: Thickness (cm)	Type	Grain Size (phi): Minimum	Maximum	Major Mode	Redox Potential Discontinuity: RPD Depth (cm) Minimum	Maximum	Mean	Methane Bubbles	Anoxia Low DO	Successional Stage	Organism Sediment Index (OSI)
GB516	FF4-02B	10.47	11.76	10.99	1.29	Biological	>4	3 to 2	>4	0.11	1.07	0.34	No	No	I	2
GB516	FF4-03B	12.61	13.13	12.87	0.52	Biological	>4	3 to 2	>4	0.05	0.30	0.16	No	No	I on III	6
GB516	FF4-04B	10.99	11.32	11.16	0.33	Biological	>4	3 to 2	>4	0.03	0.27	0.16	No	No	I on III	6
GB516	FF4-05B	11.32	12.36	11.89	1.04	Biological	>4	3 to 2	>4	0.00	0.33	0.11	No	No	I	2
GB516	FF4-06B	11.18	12.80	11.69	1.62	Indeterminate	>4	2 to 1	>4	0.14	0.85	0.39	No	No	I on III	6
GB516	FF4-07B	11.15	12.28	11.81	1.13	Indeterminate	>4	2 to 1	>4	0.08	0.91	0.45	No	No	I	2
GB516	FF4-08B	10.33	12.20	11.32	1.87	Biological	>4	2 to 1	>4	0.00	0.71	0.25	No	No	I on III	6
GB516	FF4-09B	11.40	11.95	11.78	0.55	Biological	>4	2 to 1	>4	0.19	0.69	0.37	No	No	I	2
GB516	FF4-10B	9.78	10.69	10.06	0.91	Biological	>4	2 to 1	>4	0.03	0.49	0.34	No	No	I	2
GB516	FF4-11B	10.19	11.18	10.56	0.99	Biological	>4	2 to 1	>4	0.03	0.58	0.24	No	No	I	2
GB516	FF4-12B	10.27	11.43	10.83	1.16	Biological	>4	2 to 1	>4	0.11	0.82	0.32	No	No	I on III	6
GB516	FF4-13B	10.93	11.92	11.49	0.99	Biological	>4	2 to 1	>4	0.00	0.66	0.38	No	No	I on III	6
GB516	FF4-14B	10.22	11.02	10.72	0.80	Biological	>4	2 to 1	>4	0.03	0.88	0.36	No	No	I	2
GB516	FF4-15B	10.69	11.29	10.99	0.60	Biological	>4	2 to 1	>4	0.11	0.77	0.46	No	No	I	2
GB516	FF4-16B	11.32	12.58	11.82	1.26	Biological	>4	2 to 1	>4	0.02	0.55	0.24	No	No	I	2
GB516	FF4-17B	11.70	12.80	12.31	1.10	Indeterminate	>4	2 to 1	>4	0.03	0.55	0.23	No	No	I on III	6
GB516	FF4-18B	9.97	10.55	10.29	0.58	Biological	>4	2 to 1	>4	0.03	0.74	0.24	No	No	I	2
GB516	FF4-19B	10.38	11.87	11.10	1.49	Biological	>4	2 to 1	>4	0.00	0.52	0.18	No	No	I	2
GB516	FF4-20B	9.89	10.96	10.37	1.07	Biological	>4	2 to 1	>4	0.01	0.58	0.25	No	No	I on III	6
GB516	FF4-21B	10.80	12.94	11.95	2.14	Biological	>4	2 to 1	>4	0.05	0.58	0.31	No	No	I	2
GB516	FF4-22B	10.38	11.07	10.71	0.69	Biological	>4	2 to 1	>4	0.03	0.41	0.18	No	No	I	2
GB516	FF4-23B	7.99	8.87	8.39	0.88	Biological	>4	2 to 1	>4	0.00	0.49	0.17	No	No	I on III	6
GB516	FF4-24B	8.68	11.18	9.68	2.50	Biological	>4	2 to 1	>4	0.03	0.49	0.25	No	No	I	2
GB516	FF4-25B	7.75	8.30	8.09	0.55	Biological	>4	2 to 1	>4	0.00	0.36	0.17	No	No	I	2
GB516	FF4-26B	7.23	9.20	8.15	1.97	Biological	>4	3 to 2	>4	0.11	0.58	0.28	No	No	I on III	6
GB516	FF4-27B	6.37	9.78	7.77	3.41	Biological	>4	2 to 1	>4	0.03	0.71	0.24	No	No	I	2
GB516	FF4-29B	10.74	11.51	11.22	0.77	Biological	>4	3 to 2	>4	0.00	0.77	0.33	No	No	I	2
GB516	FF4-30B	10.98	12.98	12.35	2.00	Biological	>4	2 to 1	>4	0.11	0.80	0.35	No	No	I on III	6
GB516	FF4-31B	10.77	10.99	10.88	0.22	Biological	>4	2 to 1	>4	0.03	0.49	0.24	No	No	I	2
GB516	FF4-32B	8.19	9.23	8.50	1.04	Biological	>4	2 to 1	>4	0.03	0.66	0.26	No	No	I	2
GB516	FF4-33B	9.48	10.77	9.93	1.29	Biological	>4	3 to 2	>4	0.14	1.04	0.52	No	No	I on III	6
GB516	FF4-34B	10.99	11.57	11.23	0.58	Biological	>4	2 to 1	>4	0.03	1.13	0.53	No	No	I	2
GB516	FF4-35B	6.24	7.36	6.88	1.12	Physical	>4	3 to 2	>4	0.08	0.82	0.34	No	No	I on III	6
GB516	FF4-36B	10.77	11.00	11.57	0.23	Biological	>4	3 to 2	>4	0.08	0.82	0.34	No	No	I	2

Appendix E2. Sediment profile imaging data for Cruise 2B (Garden Banks Block 516).

Block	Station	Penetration			Boundary Roughness		Grain Size (phi)			Redox Potential Discontinuity			Methane	Anoxia	Successional	Organism
		Penetration Depth (cm)			Thickness	Type			Major	RPD Depth (cm)			Bubbles	Low	Stage	Sediment Index
		Minimum	Maximum	Mean	(cm)		Minimum	Maximum	Mode	Minimum	Maximum	Mean		DO		(OSI)
GB516	FF5-01B	12.47	13.35	12.88	0.88	Biological	>4	2 to 1	>4	0.00	0.60	0.26	No	No	I on III	6
GB516	FF5-02B	14.75	15.55	15.09	0.80	Biological	>4	2 to 1	>4	0.00	0.74	0.26	No	No	I on III	6
GB516	FF5-03B	12.77	13.21	12.97	0.44	Biological	>4	2 to 1	>4	0.03	1.21	0.33	No	No	I	2
GB516	FF5-04B	15.27	16.35	15.95	1.08	Biological	>4	2 to 1	>4	0.00	0.58	0.34	No	No	I on III	6
GB516	FF5-05B	11.65	13.21	12.56	1.56	Biological	>4	2 to 1	>4	0.05	0.91	0.52	No	No	I on III	6
GB516	FF5-06B	12.64	15.38	14.41	2.74	Indeterminate	>4	2 to 1	>4	0.00	Indet.	Indet.	No	No	I on III	Indeterminate
GB516	FF5-07B	10.55	11.54	11.01	0.99	Biological	>4	2 to 1	>4	0.00	0.77	0.38	No	No	I on III	6
GB516	FF5-08B	12.25	12.97	12.59	0.72	Biological	>4	3 to 2	>4	0.00	0.74	0.28	No	No	I on III	6
GB516	FF5-09B	12.28	12.80	12.59	0.52	Biological	>4	3 to 2	>4	0.00	0.74	0.35	No	No	I	2
GB516	FF5-10B	11.35	12.47	11.88	1.12	Biological	>4	2 to 1	>4	0.14	0.97	0.53	No	No	I on III	6
GB516	FF5-11B	9.62	10.60	10.29	0.98	Biological	>4	2 to 1	>4	0.00	0.77	0.33	No	No	I on III	6
GB516	FF5-12B	13.30	14.81	14.09	1.51	Biological	>4	2 to 1	>4	0.08	1.37	0.61	No	No	I on III	6
GB516	FF5-13B	12.61	13.30	13.10	0.69	Biological	>4	2 to 1	>4	0.00	0.60	0.19	No	No	I	2
GB516	FF5-14A	8.32	9.97	8.95	1.65	Physical	>4	2 to 1	>4	0.03	0.88	0.34	No	No	I on III	6
GB516	FF5-15B	12.47	13.30	12.97	0.83	Indeterminate	>4	2 to 1	>4	0.08	0.58	0.28	No	No	I	2
GB516	FF5-16B	12.50	13.54	13.17	1.04	Biological	>4	2 to 1	>4	0.08	0.99	0.58	No	No	I	2
GB516	FF5-17B	13.05	14.18	13.74	1.13	Biological	>4	2 to 1	>4	0.03	0.60	0.30	No	No	I	2
GB516	FF5-18B	11.26	11.98	11.67	0.72	Biological	>4	2 to 1	>4	0.03	0.66	0.34	No	No	I on III	6
GB516	FF5-19B	11.68	13.27	12.69	1.59	Biological	>4	2 to 1	>4	0.00	0.82	0.38	No	No	I	2
GB516	FF5-20B	11.46	12.80	12.19	1.34	Biological	>4	2 to 1	>4	0.08	0.88	0.43	No	No	I on III	6
GB516	FF5-21B	12.47	13.57	13.20	1.10	Biological	>4	2 to 1	>4	0.08	0.66	0.40	No	No	I on III	6
GB516	FF5-22B	12.91	13.63	13.33	0.72	Biological	>4	2 to 1	>4	0.19	0.82	0.48	No	No	I on III	6
GB516	FF5-23B	13.57	14.31	13.82	0.74	Biological	>4	2 to 1	>4	0.03	0.82	0.38	No	No	I on III	6
GB516	FF5-24B	11.92	12.88	12.35	0.96	Biological	>4	2 to 1	>4	0.11	0.85	0.50	No	No	I on III	6
GB516	FF5-25B	12.14	13.35	12.81	1.21	Biological	>4	2 to 1	>4	0.11	0.96	0.46	No	No	I	2
GB516	FF5-26B	12.75	16.10	14.18	3.35	Indeterminate	>4	2 to 1	>4	0.00	1.04	0.34	No	No	I on III	6
GB516	FF5-27B	12.55	13.62	12.99	1.07	Biological	4 to 3	2 to 1	4 to 3	0.03	0.55	0.24	No	No	I	2
GB516	FF5-28B	11.76	12.72	12.23	0.96	Biological	>4	2 to 1	>4	0.08	0.47	0.31	No	No	I on III	6
GB516	FF5-29B	14.37	15.49	14.90	1.12	Biological	>4	2 to 1	>4	0.03	0.58	0.26	No	No	I on III	6
GB516	FF5-30B	12.09	13.08	12.75	0.99	Biological	>4	2 to 1	>4	0.00	0.96	0.41	No	No	I	2
GB516	FF5-31B	12.31	14.07	13.50	1.76	Biological	>4	2 to 1	>4	0.11	0.60	0.40	No	No	I	2
GB516	FF5-32B	11.62	12.34	11.96	0.72	Biological	>4	2 to 1	>4	0.14	0.88	0.43	No	No	I on III	6
GB516	FF5-33B	13.02	14.75	13.90	1.73	Biological	>4	2 to 1	>4	0.05	1.07	0.48	No	No	I	2
GB516	FF5-34B	12.12	13.57	12.84	1.45	Biological	>4	2 to 1	>4	0.14	0.74	0.42	No	No	I on III	6
GB516	FF5-35B	12.77	13.32	13.12	0.55	Biological	>4	2 to 1	>4	0.05	0.80	0.50	No	No	I	2
GB516	FF5-36B	12.66	14.03	13.48	1.37	Indeterminate	>4	2 to 1	>4	0.00	1.02	0.42	No	No	I	2

Appendix E2. Sediment profile imaging data for Cruise 2B (Garden Banks Block 516).

Block	Station	Penetration			Boundary Roughness		Grain Size (phi)			Redox Potential Discontinuity			Methane	Anoxia	Successional	Organism
		Penetration Depth (cm)			Thickness	Type			Major	RPD Depth (cm)			Bubbles	Low	Stage	Sediment Index
		Minimum	Maximum	Mean	(cm)		Minimum	Maximum	Mode	Minimum	Maximum	Mean		DO		(OSI)
GB516	NF1-01B	9.97	11.67	10.76	1.70	Indeterminate	>4	2 to 1	>4	0.14	0.49	0.28	No	No	I on III	6
GB516	NF1-02B	11.64	12.31	11.94	0.67	Biological	>4	2 to 1	>4	0.27	0.44	0.31	No	No	I	2
GB516	NF1-03B	12.11	13.00	12.65	0.89	Biological	>4	2 to 1	>4	0.08	0.36	0.21	No	No	I on III	6
GB516	NF1-04B	9.48	9.56	9.52	0.08	Biological	>4	2 to 1	>4	0.01	0.35	0.15	No	No	I on III	6
GB516	NF1-05B	11.98	12.58	12.32	0.60	Biological	>4	2 to 1	>4	0.05	0.27	0.16	No	No	I on III	6
GB516	NF1-06B	11.50	12.50	11.38	1.00	Biological	>4	2 to 1	>4	0.08	0.41	0.23	No	No	I	2
GB516	NF1-07B	9.00	10.00	9.50	1.00	Biological	>4	2 to 1	>4	0.05	0.66	0.22	No	No	I	2
GB516	NF1-08B	7.28	8.46	7.99	1.18	Indeterminate	>4	2 to 1	>4	0.02	0.44	0.19	No	No	I	2
GB516	NF1-09B	8.10	9.20	8.73	1.10	Biological	>4	2 to 1	>4	0.02	0.71	0.26	No	No	I	2
GB516	NF1-10B	7.50	8.65	8.21	1.15	Biological	>4	2 to 1	>4	0.08	0.38	0.20	No	No	I on III	6
GB516	NF1-11B	8.02	8.43	8.32	0.41	Biological	>4	2 to 1	>4	0.13	0.35	0.26	No	No	I on III	6
GB516	NF1-12B	9.45	9.78	9.65	0.33	Biological	>4	2 to 1	>4	0.05	0.52	0.20	No	No	I on III	6
GB516	NF1-13B	9.83	10.60	10.33	0.77	Biological	>4	2 to 1	>4	0.05	0.47	0.21	No	No	I on III	6
GB516	NF1-14B	6.18	7.01	6.45	0.83	Indeterminate	>4	2 to 1	>4	0.10	0.49	0.23	No	No	I	2
GB516	NF1-15B	7.80	8.65	8.28	0.85	Indeterminate	>4	2 to 1	>4	0.10	0.47	0.22	No	No	I on III	6
GB516	NF1-16B	7.25	8.02	7.59	0.77	Biological	>4	2 to 1	>4	0.19	0.55	0.31	No	No	I	2
GB516	NF1-17B	8.57	9.17	8.80	0.60	Biological	>4	2 to 1	>4	0.10	0.46	0.22	No	No	I on III	6
GB516	NF1-18B	7.25	7.99	7.67	0.74	Biological	>4	2 to 1	>4	0.13	0.47	0.30	No	No	I	2
GB516	NF1-19B	7.19	7.91	7.49	0.72	Biological	>4	2 to 1	>4	0.08	0.49	0.19	No	No	I	2
GB516	NF1-20B	9.91	10.35	10.15	0.44	Biological	>4	2 to 1	>4	0.11	0.47	0.26	No	No	I	2
GB516	NF1-21B	11.29	11.92	11.63	0.63	Biological	>4	2 to 1	>4	0.10	0.38	0.23	No	No	I	2
GB516	NF1-22B	11.26	12.53	11.89	1.27	Biological	>4	2 to 1	>4	0.27	0.38	0.19	No	No	I	2
GB516	NF1-23B	9.83	10.87	10.49	1.04	Biological	>4	2 to 1	>4	0.08	0.55	0.24	No	No	I	2
GB516	NF1-24B	11.12	11.81	11.44	0.69	Biological	>4	2 to 1	>4	0.08	0.32	0.26	No	No	I on III	6
GB516	NF1-25B	11.23	12.60	12.12	1.37	Indeterminate	>4	2 to 1	>4	0.00	0.32	0.19	No	No	I	2
GB516	NF1-26B	10.74	11.56	11.32	0.82	Indeterminate	>4	2 to 1	>4	0.00	0.00	0.00	No	No	I on III	5
GB516	NF1-27B	11.51	12.01	11.67	0.50	Indeterminate	>4	2 to 1	>4	0.00	0.00	0.00	No	Yes	I	-3
GB516	NF1-28B	11.97	12.74	12.25	0.77	Physical	>4	2 to 1	>4	0.00	0.00	0.00	No	Yes	Azoic	-8
GB516	NF1-29B	12.83	13.29	13.07	0.46	Physical	>4	2 to 1	>4	0.00	0.00	0.00	No	Yes	I	-3
GB516	NF1-30B	14.08	14.58	13.65	0.50	Physical	>4	2 to 1	>4	0.00	0.00	0.00	No	Yes	Azoic	-8
GB516	NF1-31B	11.84	12.60	12.25	0.76	Physical	>4	2 to 1	>4	0.00	0.00	0.00	No	Yes	Azoic	-8
GB516	NF1-32B	8.68	9.78	9.44	1.10	Physical	>4	2 to 1	>4	0.00	0.10	0.05	No	Yes	I	-2
GB516	NF1-33B	12.60	13.46	13.09	0.86	Physical	>4	2 to 1	>4	0.00	0.16	0.08	No	No	I	2
GB516	NF1-34B	10.19	10.85	10.57	0.66	Physical	>4	2 to 1	>4	0.00	0.87	0.44	No	Yes	I	-2
GB516	NF1-35B	10.00	10.76	10.38	0.76	Indeterminate	>4	2 to 1	>4	0.00	0.00	0.00	No	Yes	I	-3
GB516	NF1-36B	8.13	9.28	8.57	1.15	Physical	>4	2 to 1	>4	0.00	0.00	0.00	No	Yes	Azoic	-8

Appendix E2. Sediment profile imaging data for Cruise 2B (Garden Banks Block 516).

Block	Station	Penetration			Boundary Roughness		Grain Size (phi)			Redox Potential Discontinuity			Methane	Anoxia	Successional	Organism
		Penetration Depth (cm)			Thickness	Type			Major	RPD Depth (cm)			Bubbles	Low	Stage	Sediment Index
		Minimum	Maximum	Mean	(cm)		Minimum	Maximum	Mode	Minimum	Maximum	Mean		DO		(OSI)
GB516	NF2-01B	11.86	14.06	13.00	2.20	Physical	>4	2 to 1	>4	0.08	1.12	0.31	No	No	I on III	6
GB516	NF2-02B	10.57	12.08	11.37	1.51	Biological	>4	2 to 1	>4	0.01	0.38	0.15	No	No	I on III	6
GB516	NF2-03B	12.80	13.70	13.11	0.90	Biological	>4	2 to 1	>4	0.03	0.27	0.12	No	No	I	2
GB516	NF2-04B	11.20	11.64	11.43	0.44	Biological	>4	2 to 1	>4	0.05	0.16	0.11	No	No	I on III	6
GB516	NF2-05B	13.27	14.18	13.84	0.91	Biological	>4	2 to 1	>4	0.01	0.33	0.12	No	No	I on III	6
GB516	NF2-06B	10.98	12.23	11.43	1.25	Biological	>4	2 to 1	>4	0.01	0.27	0.14	No	No	I	2
GB516	NF2-07B	11.40	12.28	11.90	0.88	Biological	>4	2 to 1	>4	0.01	0.33	0.14	No	No	I on III	6
GB516	NF2-08B	2.77	3.27	3.02	0.50	Biological	>4	2 to 1	4 to 3	0.10	0.46	0.21	No	No	Indeterminate	Indeterminate
GB516	NF2-09B	9.73	11.18	10.41	1.45	Biological	>4	3 to 2	>4	0.02	0.38	0.15	No	No	I	2
GB516	NF2-10A	12.11	13.76	13.25	1.65	Biological	>4	2 to 1	>4	0.10	0.52	0.26	No	No	I	2
GB516	NF2-11A	12.63	12.96	12.61	0.33	Biological	>4	2 to 1	>4	0.02	0.25	0.13	No	No	I on III	6
GB516	NF2-12A	12.03	13.21	12.61	1.18	Biological	>4	2 to 1	>4	0.05	0.38	0.14	No	No	I	2
GB516	NF2-13A	13.04	13.57	13.36	0.53	Biological	>4	2 to 1	>4	0.05	0.27	0.15	No	No	I	2
GB516	NF2-14A	7.22	7.71	7.48	0.49	Biological	>4	2 to 1	>4	0.08	0.38	0.15	No	No	I on III	6
GB516	NF2-15A	12.69	13.68	13.29	0.99	Biological	>4	2 to 1	>4	0.03	0.30	0.13	No	No	I	2
GB516	NF2-16A	8.73	10.16	9.59	1.43	Biological	>4	2 to 1	>4	0.00	0.90	0.14	No	No	I on III	6
GB516	NF2-17A	8.59	8.79	8.70	0.20	Indeterminate	>4	2 to 1	>4	0.00	0.00	0.00	No	Yes	Azoic	-8
GB516	NF2-18A	8.87	10.71	9.77	1.84	Indeterminate	>4	2 to 1	>4	0.00	0.00	0.00	No	Yes	Azoic	-8
GB516	NF2-19A	8.51	9.59	8.86	1.08	Indeterminate	>4	2 to 1	>4	0.00	0.00	0.00	No	Yes	Azoic	-8
GB516	NF2-20A	9.03	10.93	10.42	1.90	Indeterminate	>4	2 to 1	>4	0.00	0.00	0.00	No	Indeterminate	Azoic	-4
GB516	NF2-21A	9.80	10.32	10.14	0.52	Physical	>4	2 to 1	>4	0.00	0.00	0.00	No	Indeterminate	Azoic	-4
GB516	NF2-22A	10.76	11.26	11.04	0.50	Biological	>4	2 to 1	>4	0.02	0.22	0.11	No	Indeterminate	I on III	6
GB516	NF2-23A	9.37	10.38	9.83	1.01	Physical	>4	2 to 1	>4	0.00	0.00	0.00	No	Yes	Azoic	-8
GB516	NF2-24B	12.74	13.60	13.17	0.86	Indeterminate	>4	2 to 1	>4	0.00	0.00	0.00	No	Yes	I	-3
GB516	NF2-25A	9.14	10.05	9.51	0.91	Physical	>4	2 to 1	>4	0.00	0.00	0.00	No	Yes	Azoic	-8
GB516	NF2-26A	13.62	14.06	13.76	0.44	Physical	>4	2 to 1	>4	0.00	0.00	0.00	No	Indeterminate	Azoic	-4
GB516	NF2-27B	12.88	13.79	13.33	0.91	Physical	>4	2 to 1	>4	0.00	0.27	0.09	No	No	I	2
GB516	NF2-28B	11.51	12.19	11.86	0.68	Biological	>4	2 to 1	>4	0.08	0.33	0.13	No	No	I on III	6
GB516	NF2-29B	9.67	11.56	10.56	1.89	Biological	>4	2 to 1	>4	0.10	0.60	0.24	No	No	I on III	6
GB516	NF2-30B	12.82	13.76	13.24	0.94	Biological	>4	2 to 1	>4	0.01	0.58	0.23	No	No	I	2
GB516	NF2-31B	12.03	12.94	12.46	0.91	Biological	>4	2 to 1	>4	0.05	0.36	0.19	No	No	I	2
GB516	NF2-32B	14.09	14.66	14.66	0.57	Biological	>4	2 to 1	>4	0.05	0.36	0.14	No	No	I on III	6
GB516	NF2-33B	11.70	13.81	12.92	2.11	Biological	>4	2 to 1	>4	0.03	0.30	0.16	No	No	I	2
GB516	NF2-34B	14.17	14.75	14.49	0.58	Biological	>4	2 to 1	>4	0.00	0.30	0.15	No	No	I	2
GB516	NF2-35B	13.74	14.69	14.16	0.95	Biological	>4	2 to 1	>4	0.10	0.55	0.24	No	No	I	2
GB516	NF2-36B	11.48	12.52	11.97	1.04	Indeterminate	>4	2 to 1	>4	0.05	0.46	0.18	No	No	I	2

Appendix E2. Sediment profile imaging data for Cruise 2B (Garden Banks Block 516).

Block	Station	Penetration			Boundary Roughness		Grain Size (phi)			Redox Potential Discontinuity			Methane	Anoxia	Successional	Organism
		Penetration Depth (cm)			Thickness	Type			Major	RPD Depth (cm)			Bubbles	Low	Stage	Sediment Index
		Minimum	Maximum	Mean	(cm)		Minimum	Maximum	Mode	Minimum	Maximum	Mean		DO		(OSI)
GB516	NF-3-01B	11.86	13.08	12.57	1.22	Indeterminate	>4	2 to 1	>4	0.08	0.41	0.21	No	No	Indeterminate	Indeterminate
GB516	NF-3-02B	12.80	14.20	13.40	1.40	Physical	>4	2 to 1	>4	0.13	1.26	0.59	No	No	Indeterminate	Indeterminate
GB516	NF-3-03B	13.40	13.95	13.39	0.55	Biological	>4	2 to 1	>4	0.05	0.27	0.15	No	No	I on III	6
GB516	NF-3-04B	14.53	15.76	15.22	1.23	Biological	>4	2 to 1	>4	0.05	0.27	0.14	No	No	I on III	6
GB516	NF-3-06B	14.20	15.14	14.70	0.94	Biological	>4	2 to 1	>4	0.08	0.35	0.17	No	No	I	2
GB516	NF-3-07B	12.74	13.37	13.14	0.63	Biological	>4	2 to 1	>4	0.05	0.44	0.15	No	No	I	4
GB516	NF-3-08B	11.97	12.36	12.15	0.39	Biological	>4	2 to 1	>4	0.05	0.32	0.19	No	No	I on III	6
GB516	NF-3-09B	12.91	14.45	13.83	1.54	Indeterminate	>4	2 to 1	>4	0.08	0.57	0.27	No	No	I	2
GB516	NF-3-10B	12.23	12.91	12.49	0.68	Biological	>4	2 to 1	>4	0.13	0.22	0.17	No	No	I on III	6
GB516	NF-3-11B	11.81	12.30	12.12	0.49	Biological	>4	2 to 1	>4	0.10	0.30	0.21	No	No	I	2
GB516	NF-3-12B	11.62	12.30	11.96	0.68	Biological	>4	2 to 1	>4	0.05	0.30	0.17	No	No	I on III	6
GB516	NF-3-13B	12.11	12.83	12.45	0.72	Indeterminate	>4	2 to 1	>4	0.14	0.44	0.25	No	No	I	2
GB516	NF-3-14B	10.05	11.20	10.79	1.15	Biological	>4	2 to 1	>4	0.10	0.36	0.22	No	No	I	2
GB516	NF-3-15B	13.68	14.50	14.23	0.82	Biological	>4	2 to 1	>4	0.02	0.32	0.18	No	No	I on III	6
GB516	NF-3-16B	13.63	14.56	14.01	0.93	Physical	>4	2 to 1	>4	0.08	0.50	0.20	No	No	I	2
GB516	NF-3-17B	11.09	11.78	11.30	0.69	Biological	>4	2 to 1	>4	0.05	0.30	0.17	No	No	I on III	6
GB516	NF-3-18B	10.85	11.57	11.29	0.72	Indeterminate	>4	2 to 1	>4	0.02	0.41	0.23	No	No	Indeterminate	Indeterminate
GB516	NF-3-19B	13.62	15.10	14.05	1.48	Physical	>4	2 to 1	>4	0.22	0.63	0.38	No	No	I on III	6
GB516	NF-3-20B	13.35	13.79	13.52	0.44	Indeterminate	>4	2 to 1	>4	0.16	0.55	0.31	No	No	I on III	6
GB516	NF-3-21B	13.20	13.60	12.82	0.40	Biological	>4	2 to 1	>4	0.16	0.55	0.32	No	No	I	2
GB516	NF-3-22B	NA	NA	NA		Physical	>4	2 to 1	>4	NA	NA	NA	No	No	Indeterminate	Indeterminate
GB516	NF-3-23B	16.68	17.99	17.31	1.31	Indeterminate	>4	2 to 1	>4	0.05	0.77	0.29	No	No	I on III	6
GB516	NF-3-24B	12.88	14.97	13.89	2.09	Indeterminate	>4	2 to 1	>4	0.08	0.41	0.23	No	No	I	2
GB516	NF-3-25B	10.41	12.60	11.45	2.19	Biological	>4	2 to 1	>4	0.13	0.52	0.29	No	No	I	2
GB516	NF-3-26B	11.89	12.64	12.38	0.75	Biological	>4	2 to 1	>4	0.08	0.57	0.35	No	No	I	2
GB516	NF-3-27B	17.69	18.32	18.07	0.63	Biological	>4	2 to 1	>4	0.14	0.32	0.21	No	No	I on III	6
GB516	NF-3-28B	13.57	14.36	13.87	0.79	Indeterminate	>4	2 to 1	>4	0.05	0.41	0.24	No	No	I	2
GB516	NF-3-29B	13.10	13.70	13.45	0.60	Biological	>4	2 to 1	>4	0.05	0.36	0.20	No	No	I on III	6
GB516	NF-3-30B	12.72	15.02	15.42	2.30	Biological	>4	2 to 1	>4	0.10	0.47	0.31	No	No	I	2
GB516	NF-3-31B	12.28	12.71	12.52	0.43	Indeterminate	>4	2 to 1	>4	0.08	0.47	0.28	No	No	I	2
GB516	NF-3-32B	12.11	12.75	12.48	0.64	Indeterminate	>4	2 to 1	>4	0.14	0.47	0.30	No	No	Indeterminate	Indeterminate
GB516	NF-3-33B	13.79	14.56	14.28	0.77	Indeterminate	>4	2 to 1	>4	0.13	0.50	0.31	No	No	I	2
GB516	NF-3-34B	9.64	10.24	10.08	0.60	Indeterminate	>4	2 to 1	>4	0.14	0.49	0.27	No	No	I on III	6
GB516	NF-3-35B	11.24	12.26	11.72	1.02	Biological	>4	2 to 1	>4	0.10	0.66	0.30	No	No	I on III	6
GB516	NF-3-36B	12.66	13.65	13.07	0.99	Biological	>4	2 to 1	>4	0.16	0.47	0.29	No	No	I on III	6

Appendix E2. Sediment profile imaging data for Cruise 2B (Garden Banks Block 516).

Block	Station	Burrow	Clast	Clast type, color, and size	Epifauna	Infauna	Faunal Comments	Pelletal Layer	Pelletal Layer Comments
GB516	FF3-01B	No	Yes	Small tan	No	Yes	Stage I's	Yes	Thin
GB516	FF3-02B	No	Yes	Wiper clay artifact	No	Yes	Tubes, Stage I	Yes	Thin
GB516	FF3-03B	No	Yes	Wiper clast artifact at 6.5	No	Yes	Stage I tubes	Yes	Thin
GB516	FF3-04B	No	Yes	Wiper artifact, white clay	No	Yes	Stage I tubes	Yes	Thin
GB516	FF3-05B	No	Yes	White clay artifact at 3.7	No	Yes	Stage I tubes	Yes	Thin
GB516	FF3-06B	No	Yes	Surface and 8	No	Yes	Stage I tubes	Yes	Thin
GB516	FF3-07B	No	Yes	White wiper artifact to 7	No	Yes	Stage I tubes	Yes	Thin
GB516	FF3-08B	No	Yes	White clay wiper artifact at 4	No	Yes	Stage I tubes	Yes	Thin
GB516	FF3-09B	No	Yes	White clay wiper artifact at 5	No	No	No tubes?	Yes	Thin
GB516	FF3-10B	No	No		No	Yes	Stage I tubes	Yes	Thin
GB516	FF3-11B	No	No	White clay wiper artifact to 4.5	No	Yes	Stage I tubes	Yes	Thin
GB516	FF3-12B	No	No	White clay wiper artifact at 0 to 6	No	Yes	Stage I tubes	Yes	Thin
GB516	FF3-13B	No	Yes		No	Yes	Stage I tubes	Yes	Thin
GB516	FF3-14B	No	No	White clay wiper artifact at 3 to 6	No	Yes	Stage I tubes	Yes	Thin
GB516	FF3-15B	Yes	Yes	White at 3.8	No	Yes	Stage I tubes	Yes	Thin
GB516	FF3-16B	No	Yes	White at 3.5	No	Indeterminate	No tubes?	Yes	Thin
GB516	FF3-17B	No	No	White clay wiper smear at 4	No	Yes	Stage I tubes	Yes	
GB516	FF3-18B	Yes	No	White wiper artifact	No	Yes	Stage I tubes	Yes	Thin
GB516	FF3-19B	No	No	White clay wiper artifact	No	Indeterminate		Yes	Thin
GB516	FF3-20B	No	Yes		No	Yes	Stage I tubes	Yes	Thin
GB516	FF3-21B	Yes	Yes		Indeterminate	Yes	Stage I tubes	Yes	Thin
GB516	FF3-22B	No	No	White clay wiper artifact	No	Yes	Stage I tubes	Yes	Thin
GB516	FF3-23B	No	Yes		No	Yes	Stage I tubes	Yes	Thin
GB516	FF3-24B	No	No	White clay wiper artifact	No	Yes	Stage I tubes	Yes	Thin
GB516	FF3-25B	No	No	White clay wiper artifact	No	Yes	Stage I tubes	Yes	Thin
GB516	FF3-26B	No	No	White clay wiper artifact	No	Yes	Stage I tubes	Yes	Thin
GB516	FF3-27B	No	No	White clay wiper artifact	No	Yes	Stage I tubes	Yes	Thin
GB516	FF3-28B	No	No	White clay wiper artifact	No	Yes	Stage I tubes	Yes	Thin
GB516	FF3-29B	No	No	White clay wiper artifact	No	Yes	Stage I tubes	Yes	Thin
GB516	FF3-30B	No	No	White clay wiper artifact	No	Yes	Stage I tubes	Yes	Thin
GB516	FF3-31B	No	No	White clay wiper artifact	No	Yes	Stage I tubes	Yes	Thin
GB516	FF3-32B	No	No	White clay wiper artifact	No	Yes	Stage I tubes	Yes	Thin
GB516	FF3-33B	No	No	White clay wiper artifact	No	Yes	Stage I tubes	Yes	Thin
GB516	FF3-34B	No	No	White clay wiper artifact	No	Yes	Stage I tubes	Yes	Thin
GB516	FF3-35B	No	No	White clay wiper artifact	No	Yes	Stage I tubes	Yes	Thin
GB516	FF3-36B	No	No	White clay wiper artifact	No	Yes	Stage I tubes	Yes	Thin
GB516	FF3-37B	No	No	White clay wiper artifact	No	Yes	Stage I tubes	Yes	Thin
GB516	FF3-38B	No	No	White clay wiper artifact	Yes	Yes	Stage I tubes	Yes	Thin
GB516	FF3-39B	No	No	White clay wiper artifact	No	Yes	Stage I tubes	Yes	Thin
GB516	FF3-40B	No	No	White clay wiper artifact	No	Yes	Stage I tubes	Yes	Thin
GB516	FF4-01B	No	Yes	A few small tan clasts	No	Yes	Stage I tubes	Yes	Thin

Appendix E2. Sediment profile imaging data for Cruise 2B (Garden Banks Block 516).

Block	Station	Burrow	Clast	Clast type, color, and size	Epifauna	Infauna	Faunal Comments	Pelletal Layer	Pelletal Layer Comments
GB516	FF4-02B	No	Yes	Small tan clasts	No	Yes	Stage I tubes	Yes	Thin
GB516	FF4-03B	No	Yes	A few small tan clasts	No	Yes	Stage I tubes	Yes	Thin
GB516	FF4-04B	No	Yes	Small tan clasts	No	Yes	Stage I tubes	Yes	Thin
GB516	FF4-05B	No	Yes	A few small tan clasts; white clay wiper clasts	No	Yes	Stage I tubes	Yes	Thin
GB516	FF4-06B	No	Yes	Small to medium tan clasts	No	Yes	Stage I tubes	Yes	Thin
GB516	FF4-07B	No	Yes	Small tan; white clay wiper clasts pulled-down	No	Yes	Stage I tubes	Yes	Thin
GB516	FF4-08B	No	Yes	Small tan; small white clay clasts pulled-down	No	Yes	Stage I tubes	Yes	Thin
GB516	FF4-09B	No	Yes	Small tan	No	Yes	Stage I tubes	Yes	Thin
GB516	FF4-10B	No	Yes	A few small tan clasts	No	Yes	Stage I tubes	Yes	Thin
GB516	FF4-11B	No	Yes	Small tan; small white clay wiper clasts	No	Yes	Stage I tubes	Yes	Thin
GB516	FF4-12B	No	Yes	A few small tan; white clay wiper clasts	No	Yes	Stage I tubes	Yes	Thin
GB516	FF4-13B	No	Yes	Small tan	No	Yes	Stage I tubes	Yes	Thin
GB516	FF4-14B	No	Yes	A few small tan	No	Yes	Stage I tubes	Yes	Thin
GB516	FF4-15B	No	Yes	Small tan	No	Yes	Stage I tubes	Yes	Thin
GB516	FF4-16B	No	Yes	Small and large tan	No	Yes	Stage I tubes	Yes	Thin
GB516	FF4-17B	No	Yes	Small and large tan	No	Yes	Stage I tubes	Yes	Thin
GB516	FF4-18B	No	Yes	Small tan; small smeared white wiper clasts	No	Yes	Stage I tubes	Yes	Thin
GB516	FF4-19B	No	Yes	A few small tan; small smeared white wiper clasts	No	Yes	Stage I tubes	Yes	Thin
GB516	FF4-20B	No	Yes	Small tan	No	Yes	Stage I tubes	Yes	Thin
GB516	FF4-21B	Yes	Yes	Small and 1 large tan	No	Yes	Stage I tubes	Yes	Thin
GB516	FF4-22B	No	Yes	A few small tan	No	Yes	Stage I tubes	Yes	Thin
GB516	FF4-23B	No	Yes	Small tan; small smeared white wiper clasts	No	Yes	Stage I tubes	Yes	Thin
GB516	FF4-24B	No	Yes	A few small tan	No	Yes	Stage I tubes	Yes	Thin
GB516	FF4-25B	No	Yes	Small tan; large wiper clast	No	Yes	Stage I tubes	Yes	Thin
GB516	FF4-26B	No	Yes	A few small tan; black and red rock?	No	Yes	Stage I tubes	Yes	Thin
GB516	FF4-27B	No	Yes	Small tan	Yes	Yes	Stage I tubes; hydroid	Yes	Thin
GB516	FF4-29B	No	Yes	Small tan	No	Yes	Stage I tubes	Yes	Thin
GB516	FF4-30B	No	No		No	Yes	Stage I tubes	Yes	Thin
GB516	FF4-31B	No	Yes	Small tan; small smeared white wiper clasts	No	Yes	Stage I tubes	Yes	Thin
GB516	FF4-32B	No	Yes	Small tan; medium smeared white wiper clasts	No	Yes	Stage I tubes	Yes	Thin
GB516	FF4-33B	No	Yes	Medium tan; white area is smeared wiper clast	No	Yes	Stage I tubes	Yes	Thin
GB516	FF4-34B	No	Yes	Small tan	No	Yes	Stage I tubes	Yes	Thin
GB516	FF4-35B	No	No		No	Yes	Stage I tubes	Yes	Thin
GB516	FF4-36B	No	Yes	Medium tan	No	Yes	Stage I tubes	Yes	Thin

Appendix E2. Sediment profile imaging data for Cruise 2B (Garden Banks Block 516).

Block	Station	Burrow	Clast	Clast type, color, and size	Epifauna	Infauna	Faunal Comments	Pelletal Layer	Pelletal Layer Comments
GB516	FF5-01B	No	Yes	Large tan	No	Yes	Stage I tubes	Yes	
GB516	FF5-02B	No	Yes	Small tan	No	Yes	Stage I tubes	Yes	
GB516	FF5-03B	No	Yes	Small tan	No	Yes	Stage I tubes	Yes	
GB516	FF5-04B	No	Yes	Small tan	No	Yes	Stage I tubes	Yes	
GB516	FF5-05B	No	Yes	Small tan	No	Yes	Stage I tubes	Yes	
GB516	FF5-06B	No	Yes	Large tan; many small reduced wiper clasts	No	Yes	Stage I tubes	Yes	
GB516	FF5-07B	No	Yes	Tan and reduced wiper clasts	No	Yes	Stage I tubes	Yes	
GB516	FF5-08B	No	Yes	Small red wiper clast; smeared white clay clast	No	Yes	Stage I tubes	Yes	
GB516	FF5-09B	No	Yes	Small tan	No	Yes	Stage I tubes	Yes	
GB516	FF5-10B	No	Yes	Small and 1 large tan	No	Yes	Stage I tubes	Yes	
GB516	FF5-11B	No	No		No	Yes	Stage I tubes	Yes	
GB516	FF5-12B	No	Yes	Small tan	No	Yes	Stage I tubes	Yes	
GB516	FF5-13B	No	Yes	Small tan	No	Yes	Stage I tubes	Yes	
GB516	FF5-14A	No	Yes	1 medium tan	No	Yes	Stage I tubes	Yes	
GB516	FF5-15B	No	Yes	Small tan and reduced wiper clast	No	Yes	Stage I tubes	Yes	
GB516	FF5-16B	No	Yes	Small tan	No	Yes	Stage I tubes	Yes	
GB516	FF5-17B	No	Yes	Small tan; smeared white clay wiper clasts	No	Yes	Stage I tubes	Yes	
GB516	FF5-18B	No	Yes	Small tan; small smeared white clay wiper clasts	No	Yes	Stage I tubes	Yes	
GB516	FF5-19B	No	Yes	Small tan; large smeared white clay wiper clasts	No	Yes	Stage I tubes	Yes	
GB516	FF5-20B	No	Yes	clasts	No	Yes	Stage I tubes	Yes	
GB516	FF5-21B	No	Yes	Smeared white clay wiper clasts	No	Yes	Stage I tubes	Yes	
GB516	FF5-22B	No	Yes	clasts	No	Yes	Stage I tubes	Yes	
GB516	FF5-23B	No	No	Small smeared white clay wiper clasts	No	Yes	Stage I tubes	Yes	
GB516	FF5-24B	No	Yes	Small tan; small smeared white clay wiper clast	No	Yes	Stage I tubes	Yes	
GB516	FF5-25B	No	Yes	clast	No	Yes	Stage I tubes	Yes	
GB516	FF5-26B	No	Yes	Small tan	No	Yes	Stage I tubes	Yes	
GB516	FF5-27B	No	No		No	Yes	Stage I tubes	Yes	
GB516	FF5-28B	No	Yes	Small tan; small smeared white clay wiper clasts	No	Yes	Stage I tubes	Yes	
GB516	FF5-29B	No	No		No	Yes	Stage I tubes	Yes	
GB516	FF5-30B	No	Yes	Small tan; small smeared white clay wiper clast	No	Yes	Stage I tubes	Yes	
GB516	FF5-31B	No	Yes	Small tan; large smeared white clay wiper clasts	No	Yes	Stage I tubes	Yes	
GB516	FF5-32B	No	Yes	Small tan; small smeared white clay wiper clasts	No	Yes	Stage I tubes	Yes	
GB516	FF5-33B	No	Yes	Small tan; smeared white clay wiper clasts	No	Yes	Stage I tubes	Yes	
GB516	FF5-34B	No	Yes	Small tan	No	Yes	Stage I tubes	Yes	
GB516	FF5-35B	No	No	Smeared white clay wiper clasts	No	Yes	Stage I tubes	Yes	
GB516	FF5-36B	No	Yes	Medium tan	No	Yes	Stage I tubes	Yes	

Appendix E2. Sediment profile imaging data for Cruise 2B (Garden Banks Block 516).

Block	Station	Burrow	Clast	Clast type, color, and size	Epifauna	Infauna	Faunal Comments	Pelletal Layer	Pelletal Layer Comments
GB516	NF1-01B	No	No		No	Yes	Stage I tubes	Yes	Thin
GB516	NF1-02B	No	No		Yes	Yes	Stage I tubes; komotchke?	Yes	Very thin
GB516	NF1-03B	No	No		No	Yes	Stage I tubes	Yes	Thin
GB516	NF1-04B	No	No		No	Yes	Stage I tubes	Yes	Thin
GB516	NF1-05B	No	No		No	Yes	Stage I tubes	Yes	Thin
GB516	NF1-06B	No	No		No	Yes	Stage I tubes	Yes	Thin
GB516	NF1-07B	No	No		No	Yes	Stage I tubes	Yes	Thin
GB516	NF1-08B	No	No		Yes	Yes	Stage I tubes	Yes	Thin
GB516	NF1-09B	No	No	White substance at surface, drilling mud?	No	Yes	Stage I tubes	Yes	Thin
GB516	NF1-10B	No	No	gray clay wiper smear	No	Yes	Stage I tubes	Yes	Thin
GB516	NF1-11B	No	No		No	Yes	Stage I tubes	Yes	Thin
GB516	NF1-12B	No	No		No	Yes	Stage I tubes	Yes	Thin
GB516	NF1-13B	No	No		No	Yes	Stage I tubes	Yes	Thin
GB516	NF1-14B	No	No		No	Yes	Stage I tubes	Yes	Thin
GB516	NF1-15B	No	No		No	Yes	Stage I tubes	Yes	Thin
GB516	NF1-16B	No	No		No	Yes	Stage I tubes	Yes	Thin
GB516	NF1-17B	No	No		No	Yes	Stage I tubes	Yes	Thin
GB516	NF1-18B	No	No		No	Yes	Stage I tubes	Yes	Thin
GB516	NF1-19B	No	No		No	Yes	Stage I tubes	Yes	Thin
GB516	NF1-20B	No	No		No	Yes	Stage I tubes	Yes	Thin
GB516	NF1-21B	No	No		No	Yes	Stage I tubes	Yes	Thin
GB516	NF1-22B	No	No		No	Yes	Stage I tubes	Yes	Thin
GB516	NF1-23B	No	No		No	Yes	Stage I tubes	Yes	Thin
GB516	NF1-24B	No	No		No	Yes	Stage I tubes	Yes	Thin
GB516	NF1-25B	No	No		No	Yes	Stage I tubes	Yes	Thin
GB516	NF1-26B	No	No		No	Yes	Stage I tubes	Yes	Thin
GB516	NF1-27B	No	No		No	Yes	Stage I tubes	No	
GB516	NF1-28B	No	No		No	No		No	
GB516	NF1-29B	No	No		No	No		No	
GB516	NF1-30B	No	No		No	No		No	
GB516	NF1-31B	No	No		No	No		No	
GB516	NF1-32B	No	No		No	Yes	Stage I tubes	No	
GB516	NF1-33B	No	No		No	Yes	Stage I tubes	No	
GB516	NF1-34B	No	No		No	Yes	Stage I tubes	Yes	Very thin?
GB516	NF1-35B	No	No		No	Yes	Stage I tubes	Yes	Very thin
GB516	NF1-36B	No	Yes	Reduced camera distance?	No	No		Indet.	

Appendix E2. Sediment profile imaging data for Cruise 2B (Garden Banks Block 516).

Block	Station	Burrow	Clast	Clast type, color, and size	Epifauna	Infauna	Faunal Comments	Pelletal Layer	Pelletal Layer Comments
GB516	NF2-01B	No	No		No	Yes	Stage I tubes	Yes	Thin
GB516	NF2-02B	No	No		No	Yes	Stage I tubes	Yes	Thin
GB516	NF2-03B	No	No	gray clay smears	No	Yes	Stage I tubes	Yes	Thin
GB516	NF2-04B	No	No	gray clay smears?	No	Yes	Stage I tubes	Yes	Thin
GB516	NF2-05B	No	No		Yes	Yes	Stage I tubes	Yes	Thin
GB516	NF2-06B	No	No	gray clay smears?	No	Yes	Stage I tubes	Yes	Thin
GB516	NF2-07B	No	No	gray clay smears?	No	Yes	Stage I tubes	Yes	Thin
GB516	NF2-08B	No	No		No	No	no tubes?	Yes	Thin
GB516	NF2-09B	No	No		No	Yes	Stage I tubes	Yes	Thin
GB516	NF2-10A	No	No		No	Yes	Stage I tubes	Yes	Thin
GB516	NF2-11A	No	No		No	Yes	Stage I tubes	Yes	Thin
GB516	NF2-12A	No	No		No	Yes	Stage I tubes	Yes	Thin
GB516	NF2-13A	No	No		No	Yes	Stage I tubes	Yes	Thin
GB516	NF2-14A	No	No		No	Yes	Stage I tubes	Yes	Thin
GB516	NF2-15A	No	No		No	Yes	Stage I tubes	Yes	Thin
GB516	NF2-16A	No	No		No	Yes	Stage I tubes	Yes	Thin
GB516	NF2-17A	No	No		No	No		No	
GB516	NF2-18A	No	No		No	No		No	
GB516	NF2-19A	No	No		No	No		No	
GB516	NF2-20A	No	No		No	No		No	
GB516	NF2-21A	No	No		No	No		No	
GB516	NF2-22A	No	Indeterminate		No	Yes	Stage I tubes	Yes	Very thin
GB516	NF2-23A	No	No		No	No		No	
GB516	NF2-24B	No	No		No	No		No	
GB516	NF2-25A	No	No		No	No		No	
GB516	NF2-26A	No	No		No	Yes	Stage I tubes	No	
GB516	NF2-27B	No	No		No	Yes	Stage I tubes	Yes	Very thin
GB516	NF2-28B	No	No		No	Yes	Stage I tubes	Yes	Thin
GB516	NF2-29B	No	No		Yes	Yes	Stage I tubes	Yes	Thin
GB516	NF2-30B	No	Yes	gray	No	Yes	Stage I tubes	Yes	Thin
GB516	NF2-31B	No	No		No	Yes	Stage I tubes	Yes	Thin
GB516	NF2-32B	No	No		No	Yes	Stage I tubes	Yes	Thin
GB516	NF2-33B	No	No	Reduced far-field	No	Yes	Stage I tubes	Yes	Thin
GB516	NF2-34B	No	No		No	Yes	Stage I tubes	Yes	Thin
GB516	NF2-35B	No	No		No	Yes	Stage I tubes	Yes	Thin
GB516	NF2-36B	No	No		Indeterminate	Yes	Stage I tubes	Yes	Thin

Appendix E2. Sediment profile imaging data for Cruise 2B (Garden Banks Block 516).

Block	Station	Burrow	Clast	Clast type, color, and size	Epifauna	Infauna	Faunal Comments	Pelletal Layer	Pelletal Layer Comments
GB516	NF-3-01B	No	No		No	No		No	
GB516	NF-3-02B	No	No		No	No		No	
GB516	NF-3-03B	No	No		No	No		No	
GB516	NF-3-04B	No	No		No	Yes	Stage I tubes	Yes	Thin
GB516	NF-3-06B	No	No		No	Yes	Stage I tubes	Yes	Thin
GB516	NF-3-07B	No	No		No	Yes	Stage I tubes	Yes	Thin
GB516	NF-3-08B	No	No		No	Yes	Stage I tubes	Yes	Thin
GB516	NF-3-09B	No	No		No	Yes	Stage I tubes	Yes	Thin
GB516	NF-3-10B	No	No		No	Yes	Stage I tubes	Yes	Thin
GB516	NF-3-11B	No	No		No	Yes	Stage I tubes	Yes	Thin
GB516	NF-3-12B	No	No		No	Yes	Stage I tubes	Yes	Thin
GB516	NF-3-13B	No	No		No	No		No	
GB516	NF-3-14B	No	No		No	Yes	Stage I tubes	Yes	Thin
GB516	NF-3-15B	No	No		No	Yes	Stage I tubes	Yes	Thin
GB516	NF-3-16B	No	No		No	Yes	Stage I tubes	Yes	Thin
GB516	NF-3-17B	No	No		No	Yes	Stage I tubes	Yes	Thin
GB516	NF-3-18B	No	No		No	No		No	
GB516	NF-3-19B	No	No		No	Yes	Stage I tubes	Yes	Thin
GB516	NF-3-20B	No	No		No	No	Stage I tubes	No	
GB516	NF-3-21B	No	Yes	Oxidized in far-field	No	Yes	Stage I tubes	Yes	Thin
GB516	NF-3-22B	Indeterminate	No		Indeterminate	Indeterminate		Indet.	
GB516	NF-3-23B	No	No		No	Yes	Stage I tubes	Yes	Thin
GB516	NF-3-24B	No	No		No	Yes	Stage I tubes	Yes	Thin
GB516	NF-3-25B	No	No		Yes	Yes	Stage I tubes; foraminiferans?	Yes	Thin
GB516	NF-3-26B	No	No		No	Yes	Stage I tubes	Yes	Thin
GB516	NF-3-27B	No	No		No	Yes	Stage I tubes	Yes	Thin
GB516	NF-3-28B	No	No		No	Yes	Stage I tubes	Yes	Thin
GB516	NF-3-29B	No	No		No	Yes	Stage I tubes	Yes	Thin
GB516	NF-3-30B	No	No		No	Yes	Stage I tubes	Yes	Thin
GB516	NF-3-31B	No	No		No	Yes	Stage I tubes	Yes	Thin
GB516	NF-3-32B	No	No		No	No		No	
GB516	NF-3-33B	No	No		No	No		No	
GB516	NF-3-34B	No	No	gray clay wiper smear	No	Yes	Stage I tubes	Yes	Thin
GB516	NF-3-35B	No	No		No	Yes	Stage I tubes	Yes	Thin
GB516	NF-3-36B	No	No		No	No		No	

Appendix E2. Sediment profile imaging data for Cruise 2B (Garden Banks Block 516).

Block	Station	Sedimentary Layers and Depth (cm)	Feeding Voids and Depth (cm)
GB516	FF3-01B	3 layers; top red to 8.47; gray mottled (GM) eutrophic below	Void at 11.5 depth
GB516	FF3-02B	4 layers, top red to 4.78 gray (G) eutrophic below	Relict voids at 0.8 and 1.0
GB516	FF3-03B	6 layers, red 8.67, black at 8.7 and 10.5/G/GM below	? voids
GB516	FF3-04B	5 layers, bifurcation; red to 7; black at 9 and 12/G below	
GB516	FF3-05B	5 layers, red to 7.8, black at 9 and 12/G/GM below	Void at 13.2
GB516	FF3-06B	5 layers, red to 7.2, black at 11.4/G/GM below	Void at 0.9?
GB516	FF3-07B	3 layers, red to 7.5, black at 10.9/G/GM below	Void at 1
GB516	FF3-08B	3 layers; bifurcation; red to 6, black at 8.7/G/GM below	Voids at 0.6 and 3.8
GB516	FF3-09B	5 layers, red to 7.4, black at 8.7, 10.3/G/GM below	No voids?
GB516	FF3-10B	6 layers, red to 7, black at 8.2 and 11.2/G/GM below	No voids?
GB516	FF3-11B	7 layers, red to 5.41, black at 6.6 and 8, and 12/below	Voids at 6.0 and 11
GB516	FF3-12B	6 layers, red to 6.6, black at 11.1/G/GM below	No voids?
GB516	FF3-13B	5 layers, red to 5.7, black at 12.4/G/GM below	Several voids
GB516	FF3-14B	5 layers, bifurcation, red to 7, black at 12, G/GM below	Voids at 3.4 and 4.8
GB516	FF3-15B	6 layers, red to 6.8, black at 7.9 and 11, G/GM below	Void at 5
GB516	FF3-16B	3 layers, red to 8.69, G/GM below, no black	No tubes?
GB516	FF3-17B	3 layers, red to 7.96, black at 10.53/G below	Void at 3.7
GB516	FF3-18B	5 layers, red to 6.4, black at 8.31 and 13.7, G below	Void at 14?
GB516	FF3-19B	5 layers, red to 7.7, black at 9.4 and 14.7, G/GM below	No tubes? no voids?
GB516	FF3-20B	5 layers, red to 6, black at 10.5 and 12.3/GM/G below	Void at 0.6?
GB516	FF3-21B	4 layers, bifurcations, red to 7.6, GM, black 13.4/G below	No voids
GB516	FF3-22B	5 layers, red to 6, bifurcation, black to 7.8 and 11, G below	Void at 14
GB516	FF3-23B	2 layers, red to 7.8, GM below	Voids at 0.5, 1.21, 9.0, and 13
GB516	FF3-24B	5? layers, red to 10.82, black 12.4/GM below	Drag-down at 8; void at 10
GB516	FF3-25B	6 layers, red to 4.18, white layer?, GM, black at 12 and 14	No voids?
GB516	FF3-26B	4 layers, red to 6.8, GM at 10.8, black at 12/G below	No voids
GB516	FF3-27B	4 layers, red to 10.15, black to 11.14, red to14, black/GM below	Voids at 2.8 and 8.3
GB516	FF3-28B	5 layers, red to 6.7, GM to 8.2, black to 11.4/G below	No voids
GB516	FF3-29B	6 layers, red to 7.4, GM/red below, black at 12.4	No voids
GB516	FF3-30B	4 to 5 layers, red to 8.4, black to 9.8, GM, black at 12.5	No voids
GB516	FF3-31B	4 layers, red to 6.7, black to 8.28, red, black at 12/G below	No voids
GB516	FF3-32B	5 layers, red to 8.27, black to 10.86, G/black 14/G below	No voids
GB516	FF3-33B	9 layers, 5 red, black 5.7, red, black at 8/red/GM/G below	Void at 8
GB516	FF3-34B	5 layers, 7.16 red, 10.79 GM, 11.36 black/GM below	Voids at 0.7 and 2.7
GB516	FF3-35B	5 layers, 6.69 red, 7.75 black, 8.7 red, 10.2, black/8/G	Voids at 0.5, 1.3, and 4.5
GB516	FF3-36B	5 layers, 7.1 red, 10.5 GM, 11.3 G, 13 black/G below	
GB516	FF3-37B	5 layers, 7.75 red, 8.98 black/GM below	Void at 4.5
GB516	FF3-38B	5 layers, 7.30 red, 8.65 black, 12.9 GM, 13.5, black/G below	Void at 9.8
GB516	FF3-39B	3 to 4 layers, 6.30 red, 8.6 GM, 15.47 G	Void at 14.3
GB516	FF3-40B	4 to 5 layers, 4.43 red, 6.56 GM, 8.29 black/G below	Void at 6.0?
GB516	FF4-01B	4 layers, top red, sulfitic at 5.43 and 9.43	

Appendix E2. Sediment profile imaging data for Cruise 2B (Garden Banks Block 516).

Block	Station	Sedimentary Layers and Depth (cm)	Feeding Voids and Depth (cm)
GB516	FF4-02B	5 layers, top red, sulfitic at 5.40, 6.94, and 9.46	
GB516	FF4-03B	5 layers, top red, sulfitic at 12.27, 6.94, and 11.76	Feeding void at depth?
GB516	FF4-04B	5 layers, top red, sulfitic at 6.50 and 9.46	Small void at 2 depth
GB516	FF4-05B	5 layers, top red, sulfitic at 7.22 and 10.51	
GB516	FF4-06B	4 layers, top red, sulfitic at 8.05	Void at 7.5 depth
GB516	FF4-07B	4 layers, top red, sulfitic at 5.79 and 8.35	
GB516	FF4-08B	4 layers, top red, sulfitic at 6.53 and 10.56	Small voids at 5 and 6
GB516	FF4-09B	3 sulfitic layers	
GB516	FF4-10B	5 layers, top red, sulfitic at 6.99 and 8.5	
GB516	FF4-11B	2 layers, top red, lower mottled, sulfitic at 6.86	
GB516	FF4-12B	4 layers, top red, sulfitic at 6.82, and 10.10	Void? at 9 depth
GB516	FF4-13B	5 layers, top red, sulfitic at 6.77 and 9.57	Void? at 7.5 depth
GB516	FF4-14B	5 layers, top red, sulfitic at 8.95	
GB516	FF4-15B	3 layers, top red, sulfitic at 6.35	
GB516	FF4-16B	4 layers, top red, sulfitic at 6.45 and 9.79	
GB516	FF4-17B	3 layers, top red, sulfitic patch at 5.49	Void at 10 depth
GB516	FF4-18B	2 layers, top red, lower mottled, sulfitic at 5.49	
GB516	FF4-19B	4 layers, sulfitic at 6.30 and 9.29	
GB516	FF4-20B	5 layers, top red, sulfitic at 6.5 and 8.92	Void?
GB516	FF4-21B	4 layers, top red, sulfitic at 7.23 and 11.26	
GB516	FF4-22B	3 layers, top red, lower mottled, sulfitic at 6.75	
GB516	FF4-23B	2 layers, top red, sulfitic at 7.10	A few small voids at 3.5 to 5
GB516	FF4-24B	3 layers, top red, reduced layer is dark gray	
GB516	FF4-25B	2 layers; top red; reduced layer is dark gray	
GB516	FF4-26B	3 layers, top red, sulfitic at 6.66 over clay	Void? at 2.5 depth
GB516	FF4-27B	2 layers, top red, lower mottled, sulfitic at 5.80	
GB516	FF4-29B	4 layers, top red, sulfitic at 5.21 and 9.58	
GB516	FF4-30B	4 layers, top red, sulfitic at 9.57	Small void at 3 depth
GB516	FF4-31B	4 layers, top red, sulfitic at 5.62 and 9.61	
GB516	FF4-32B	3 layers, top red, light gray reduced layers	
GB516	FF4-33B	3 layers, top red, sulfitic at 7.07	Tiny void? at 6 depth
GB516	FF4-34B	5 layers, top red, sulfitic at 8.05 and 10.52	
GB516	FF4-35B	2 layers, top red, lower light gray	Void?
GB516	FF4-36B	6 layers, top red, sulfitic at 6.51 and 8.86	

Appendix E2. Sediment profile imaging data for Cruise 2B (Garden Banks Block 516).

Block	Station	Sedimentary Layers and Depth (cm)	Feeding Voids and Depth (cm)
GB516	FF5-01B	5 layers, top red, sulfitic at 6.06 and 9.45	Void at 9
GB516	FF5-02B	4 layers, top red, sulfitic at 4.61	Voids at 10 to 12 depth
GB516	FF5-03B	6 layers, top red, sulfitic at 6.01, 8.53, and 10.06	
GB516	FF5-04B	6 layers, top red, sulfitic at 9.50, 11.86, and 14.82	Void at 8
GB516	FF5-05B	5 layers, top red, sulfitic at 4.93, 6.83, and 11.74	Void at 12 depth
GB516	FF5-06B	5 layers, top red, sulfitic at 7.60 and 11.10	Small voids at 4 depth
GB516	FF5-07B	5 layers, top red, sulfitic at 5.85 and 11.10	Voids at 10.5 and 11.5
GB516	FF5-08B	6 layers, top red, sulfitic at 6.13 and 10.53 bifurcated	Small void at 5 depth
GB516	FF5-09B	5 layers, top red, sulfitic at 4.53 and 8.19	Void at depth
GB516	FF5-10B	5 layers, top red, sulfitic at 6.18 and 8.88	Void at 10.5 depth
GB516	FF5-11B	3 layers, top red, sulfitic at 4.83	Small void at 9.0 depth
GB516	FF5-12B	6 layers, top red, sulfitic at 4.63, 8.69, and 13.03	Void at 4 depth
GB516	FF5-13B	5 layers, top red, sulfitic at 6.80 and 12.24	Small voids at about 2?
GB516	FF5-14A	3 layers, top red, sulfitic at 4.84, bifurcated+Z136	Voids at 6 depth
GB516	FF5-15B	6 layers, top red, sulfitic at 5.16, 8.94, and 11.43	
GB516	FF5-16B	7 layers, top red, sulfitic at 5.88 and 9.24	
GB516	FF5-17B	7 layers, top red, sulfitic at 6.72, 10.11, and 11.58	
GB516	FF5-18B	4 layers, top red, sulfitic at 6.07 and 8.50	Small void at 11 depth
GB516	FF5-19B	7 layers, top red, sulfitic at 6.67 and 10.48	Void? at 9 on left?
GB516	FF5-20B	4 layers, top red, sulfitic at 5.16, 7.71, and 10.37	Void at 4 depth
GB516	FF5-21B	5 layers, top red, sulfitic at 5.96, and 9.85	Void at 4.5 depth
GB516	FF5-22B	4 layers, top red, sulfitic at 4.92	Voids at 10 are cracks
GB516	FF5-23B	5 layers, top red, sulfitic at 6.37, 9.00, and 11.38	Feeding void at 10
GB516	FF5-24B	7 layers, top red, sulfitic at 6.60 and 9.60 bifurcated	Reddish feeding voids at 12 to 13
GB516	FF5-25B	7 layers, top red, sulfitic at 5.16 and 10.55	
GB516	FF5-26B	3 layers, top red, sulfitic at 10.60	Void at 3 depth
GB516	FF5-27B	7 layers, top red, sulfitic at 6.05, 8.71, 10.49, and 12.33	
GB516	FF5-28B	5 layers, top red, sulfitic at 5.33 and 9.08	Small void at 12 depth
GB516	FF5-29B	3 layers, top red, sulfitic at 5.71	
GB516	FF5-30B	6 layers, top red, sulfitic at 4.72, 7.63, and 11.16	
GB516	FF5-31B	5 layers, top red, sulfitic at 10.71	
GB516	FF5-32B	4 layers, top red, sulfitic at 3.47 and 11.74	Voids at 11 depth
GB516	FF5-33B	6 layers, top red, sulfitic at 6.17, 8.37, 10.58, and 12.03	Voids at depth?
GB516	FF5-34B	5 layers, top red, sulfitic at 4.90 and 8.66	Small void at 12 depth
GB516	FF5-35B	6 layers, top red, sulfitic at 5.65, 8.89, and 10.27	
GB516	FF5-36B	5 layers, top red, sulfitic at 4.48 and 11.16	

Appendix E2. Sediment profile imaging data for Cruise 2B (Garden Banks Block 516).

Block	Station	Sedimentary Layers and Depth (cm)	Feeding Voids and Depth (cm)
GB516	NF1-01B	6 to 7 layers, red to 6, GM below, bifurcation, black at 10.7	Voids at 3.7 and 9.7
GB516	NF1-02B	7 layers, red to 6, black at 7.3, 10.3, and 11.7; GM in between	
GB516	NF1-03B	6 layers, red to 5.33, black at 6.33, 10.5, and 12.6	2 voids at 2.5?
GB516	NF1-04B	9 layers, red to 5.5, black at 11.8; GM and red between	Void at 9.5?
GB516	NF1-05B	5 to 6 layers, red to 6.3, black at 11, red, and GM between	Void at 9.5?
GB516	NF1-06B	3 to 4 layers, red to 6.3, black to 7.46; G/GM below	
GB516	NF1-07B	7 layers, red to 5.3, black at 5.95 and 7.5; red/GM between/below, bifurcation	Worm at 7.0
GB516	NF1-08B	4 layers, red to 6.0, black at 6.5 and 8; GM between and below	Relict voids?
GB516	NF1-09B	5 layers, red to 6.2, black to 7.64; GM below	
GB516	NF1-10B	6 layers, red to 6.8, black at 7.6; red below, bifurcation	Void at 4.5?
GB516	NF1-11B	7 layers, red to 1.4, black drilling mud at 3.82; red/GM below, bifurcation	Void at 3.0
GB516	NF1-12B	7 layers, brown to 2, black drilling mud to 4.0	Void at 2
GB516	NF1-13B	6 layers, brown to 2, black drilling mud to 4.5	Void at 10? right side
GB516	NF1-14B	3 layers, brown to 1.5, black drilling mud to 3.8	
GB516	NF1-15B	5 layers, brown to 1.6, black drilling mud to 3.9	Void at 3
GB516	NF1-16B	4 layers, brown to 1.9, black drilling mud to 4.5	
GB516	NF1-17B	4 layers, red to 1.6, black drilling mud to 4.2	Void at 6.5
GB516	NF1-18B	5 layers, red 1.5, black drilling mud to 3.8	Relict voids at depth
GB516	NF1-19B	3 layers, red to 1.1, black drilling mud to 4.7	
GB516	NF1-20B	6 layers, red to 1.6, black drilling mud to 5.43 below	Voids at 0.8 and 1.3
GB516	NF1-21B	7 to 8 layers, red to 1, black at 7.5 and 9; red/GM between/below	
GB516	NF1-22B	8 layers, red to 2.9, black at 5.3 and 7.8; red/GM between/below	Relic voids at depth
GB516	NF1-23B	8 layers, red to 2.9, black at 5.5 and 8; red/GM between/below	
GB516	NF1-24B	8 lays, brown to 1.3, black below, red/GM again; drilling mud	Void at 3.5?
GB516	NF1-25B	6 layers, red to 1, black to 5.7, red/GM below; drilling mud	
GB516	NF1-26B	8 layers, red to 1.33, black to 7.05, GM/black below; drilling mud	Voids at 1.0 and 12.0?
GB516	NF1-27B	4 little oxic surface, black to 7.5; red/GM below	1 tube
GB516	NF1-28B	2 layers, black drilling mud to 9.1; red/GM below	
GB516	NF1-29B	5 layers, black drilling mud to 7.8; GM/red/black below	Relict voids at 10 and 10.3? 1 tube
GB516	NF1-30B	6 layers, black drilling mud to 6.8; red/GM below, bifurcation	
GB516	NF1-31B	5 layers, black drilling mud to 7.7; red/GM below	
GB516	NF1-32B	5 layers, black drilling mud to 5.6; red/GM below, bifurcation	
GB516	NF1-33B	6 layers, black drilling mud to 5.98; red/GM/G below	Relict voids at 2 to 3?
GB516	NF1-34B	6 layers, black drilling mud to 3.2, red to 7.41; G below bifurcation	
GB516	NF1-35B	3 layers, 5.57 drilling mud, black, red to 8.0; gray/red below	
GB516	NF1-36B	2 layers, black drilling mud to 7.1; red to 8.6	

Appendix E2. Sediment profile imaging data for Cruise 2B (Garden Banks Block 516).

Block	Station	Sedimentary Layers and Depth (cm)	Feeding Voids and Depth (cm)
GB516	NF2-01B	7 to 8 layers, red to 6, black at 7.8 and 10; bifurcation/GM below	Voids at 2.5, 9, and 10
GB516	NF2-02B	4 layers, drilling mud present at 8.35/G below	Voids at 8 and 11
GB516	NF2-03B	7 layers, bifurcation, red to 6, black to 6.7, and 8.7/G below	No voids?
GB516	NF2-04B	8 layers, bifurcation, red to 7, black at 8.2, and 10/G below	Void at 7
GB516	NF2-05B	6 layers, red to 5.79 and black to 7.23	Void at 9?
GB516	NF2-06B	5 layers, red to 6.5, black to 10.37/GM below	
GB516	NF2-07B	4 layers, drilling mud present? At 9, red to 7, black at 11.9 below	Void at 17
GB516	NF2-08B	2 layers, under penetrated	
GB516	NF2-09B	7 layers, brown to 1, drilling mud present at 2, GM/red, black at 7.9	Relict voids?
GB516	NF2-10A	8 layers, drilling mud, brown to 4, black drilling mud to 6.8, black at 8 and 11	
GB516	NF2-11A	8 layers, brown to 2.7, drilling mud at 3.6, black at 8 and 14	Voids at 5, 11, and 13
GB516	NF2-12A	9 layers, bifurcation, brown to 1.9, drilling mud at 4.5, black at 8 and 11	
GB516	NF2-13A	9 layers, brown to1.7, drilling mud at 4.2, black at 8 and 10.2	Relict voids?
GB516	NF2-14A	3 layers, brown to 2.5, black drilling mud to 5.8, black at 7.4	Voids at 1.2 and 7.2
GB516	NF2-15A	11 layers, brown to .78, black drilling mud to 4.3, black at 8, 11, and 13	
GB516	NF2-16A	7 layers, brown to 2, black drilling mud to 5.5, black at 7.3	Voids at 7 and 8
GB516	NF2-17A	3 layers, black drilling mud to 8	Inactive voids
GB516	NF2-18A	4 layers, drilling mud, black to 6.7	Inactive voids?
GB516	NF2-19A	2 layers, black to 7.7, drilling mud	
GB516	NF2-20A	4 layers, brown to 1.5, black drilling mud to 7.4; red/GM below	
GB516	NF2-21A	4 layers, bifurcation, black drilling mud to 6.5, red below, black at 8.6	Relict voids?
GB516	NF2-22A	4 layers, bifurcation, black drilling mud to 7.46, GM/red below	Active voids?
GB516	NF2-23A	3 layers, black drilling mud to 7.6, red to 9.5, black at 9.8	
GB516	NF2-24B	8 layers, black drilling mud to 6.7, black at 11.3; red/GM between/below	
GB516	NF2-25A	4 layers, black drilling mud to 7; black at 9.5 red/GM below/between	
GB516	NF2-26A	6 layers, bifurcation, black drilling mud to 6.5, black at 11.3; red/GM below/between	Relict voids at depth
GB516	NF2-27B	7 layers, brown to 2.1, black drilling mud to 5.3	
GB516	NF2-28B	6 layers, brown to 2.2, black drilling mud to 3.2, black at 8.3; red/GM	Voids at 2 and 10
GB516	NF2-29B	4 layers, red to 8, black 6.79, G/red below	Voids at 8.9 and 11
GB516	NF2-30B	10 layers, bifurcation, red to 5.8, GM below with black at 7.5, 9.5, and 11.3	
GB516	NF2-31B	6 layers, bifurcation, red to 6.8, black at 7.1, 9.2, 12.4, and GM below	
GB516	NF2-32B	4 layers, red to 7.8, black at 10, 14, and GM between/below	Voids at 5 and 6.5?
GB516	NF2-33B	7 layers, drilling mud, red to 8, brown and black; between and below	
GB516	NF2-34B	7 layers, black drilling mud to 3.4, red to 6.8, black 7; 10/GM below	Relict voids?
GB516	NF2-35B	7 layers, red to 6.3, black at 7 and 10, and GM below/between	
GB516	NF2-36B	6 layers, red to 7, black at 8, and 11/GM between/below	

Appendix E2. Sediment profile imaging data for Cruise 2B (Garden Banks Block 516).

Block	Station	Sedimentary Layers and Depth (cm)	Feeding Voids and Depth (cm)
GB516	NF-3-01B	7 layers, bifurcation, red to 6.8, 7.3, 9.4, 11.23; 12.7 black/GM/G below	Relict voids at 7 and 9.9
GB516	NF-3-02B	5 layers, bifurcation, drilling mud?; red to 2, black at 9.6, and 11.2/G below	No macrofauna visible
GB516	NF-3-03B	9 layers, red to 2, bifurcation, black drilling mud at 3.1, black at 9.6; 11/G below	Voids at 7.7 and 8
GB516	NF-3-04B	below	Void at 1.7?
GB516	NF-3-06B	8 layers, brown to 2, black drilling mud at 6.1, bifurcation, black at 10 and 12	Relict voids?
GB516	NF-3-07B	8 layers, brown to 2.3, black drilling mud at 4.05, black at 8.5 and 11	
GB516	NF-3-08B	8 layers, brown to 2.3, black drilling mud at 5.4, black at 8 and 12; R/G below	Void at 7
GB516	NF-3-09B	7 layers, brown to 1.8, black drilling mud at 5.2, black at 9+13/red/G below	
GB516	NF-3-10B	10 layers, brown to 2.7, black drilling mud at 4.8, black at 7, and 12/R/G below	Void at 10.5
GB516	NF-3-11B	6 to 7 layers, brown to 2.3, black drilling mud at 4.3, black at 6.7+12R/G below	Active voids at 2
GB516	NF-3-12B	6 to 9 layers, brown to 1.5, black drilling mud at 3.8, black at 8.2/GM/G below	Void at 2?
GB516	NF-3-13B	8 layers, brown to 2.8, black drilling mud at 4.1 red, black at 10 and 12/G below	
GB516	NF-3-14B	8 layers, brown to 2.2, black drilling mud at 3.54, black at 7.5 and 9.8R/G below	
GB516	NF-3-15B	5 layers, brown to 2.6, black drilling mud at 3.7, black at 11/red/G below	Void at 6.3?
GB516	NF-3-16B	8 layers, bifurcation, red to 7.5, black at 8, 11, and 12; red/GM/G below	
GB516	NF-3-17B	7 layers, bifurcation, red to 6.3, black at 7, 8.7, and 11; red/ below+between	Void at 3 ?
GB516	NF-3-18B	below	
GB516	NF-3-19B	10 layers, drilling mud, bifurcation, red to 3.5; BL/G below + between	Void at 12?
GB516	NF-3-20B	6 to 7 layers, red to 7.3, black at 8.3, 11, and 13GM/G below/between	Void at 2
GB516	NF-3-21B	5 to 6 layers, red to 7, black at 8.5 and 12.6 /G/GM below+between	
GB516	NF-3-22B	7 layers below surface, R/black at 3, and 5/G below	
GB516	NF-3-23B	4 layers, red to 7, black at 8.7/GM/G below+between	Void at 1.5?
GB516	NF-3-24B	6 layers, bifurcation, red to 8.8, black at 10+12/GM/G below+between	
GB516	NF-3-25B	6 layers, red to 6.2, bifurcation, black at 8+10; GM/G below+between	Foraminiferans?
GB516	NF-3-26B	7 layers, bifurcation, red to 7.4, black at 9.5, 10.5, and 12.5/GM/G below+between	
GB516	NF-3-27B	5 to 7 layers, red to 7.8, black at 13 and 18/GM/G below+between	Void at 2?
GB516	NF-3-28B	6 layers, red to 6.4, black at 9.4, 11.4, 13.8/GM/G below+between	
GB516	NF-3-29B	5 to 6 layers, red to 6.8, black at 10.7 and 13.5/GM below+between	Voids at 1 and 8.5
GB516	NF-3-30B	7 layers, red to 5.8, black at 7, 11, and 13/GM/G below	
GB516	NF-3-31B	5 layers, red to 6.6, black at 10, and 12/GM between	
GB516	NF-3-32B	7 layers, bifurcation, red to 6.8, black at 7.2, 8.2, and 10.7/GM below+between	
GB516	NF-3-33B	4 layers, red to 7.2, GM/G below, no black, no drilling mud	Relict voids at 9 and 12
GB516	NF-3-34B	5 layers, red to 7.3, black at 8.2+10/GM below	Voids at 3 to 4
GB516	NF-3-35B	8 layers, red to 5.7, black at 7.6, 9.3, and 11.3/GM/G below+between	Relict void at 7
GB516	NF-3-36B	7 to 8 layers, bifurcation, red to 6.7, black at 8.2, 9.7, and 11.7/GM below+between	Void at 3

Appendix E2. Sediment profile imaging data for Cruise 2B (Garden Banks Block 516).

Block	Station	RPD, penetration depth
		boundary roughness, and
		grain size comments
GB516	FF3-01B	
GB516	FF3-02B	
GB516	FF3-03B	
GB516	FF3-04B	
GB516	FF3-05B	
GB516	FF3-06B	
GB516	FF3-07B	
GB516	FF3-08B	
GB516	FF3-09B	
GB516	FF3-10B	
GB516	FF3-11B	
GB516	FF3-12B	
GB516	FF3-13B	
GB516	FF3-14B	
GB516	FF3-15B	
GB516	FF3-16B	
GB516	FF3-17B	
GB516	FF3-18B	
GB516	FF3-19B	
GB516	FF3-20B	
GB516	FF3-21B	
GB516	FF3-22B	
GB516	FF3-23B	
GB516	FF3-24B	
GB516	FF3-25B	
GB516	FF3-26B	
GB516	FF3-27B	
GB516	FF3-28B	
GB516	FF3-29B	
GB516	FF3-30B	
GB516	FF3-31B	
GB516	FF3-32B	
GB516	FF3-33B	
GB516	FF3-34B	
GB516	FF3-35B	
GB516	FF3-36B	
GB516	FF3-37B	
GB516	FF3-38B	
GB516	FF3-39B	
GB516	FF3-40B	Megafaunal mound?
GB516	FF4-01B	

Appendix E2. Sediment profile imaging data for Cruise 2B (Garden Banks Block 516).

Block	Station	RPD, penetration depth
		boundary roughness, and
		grain size comments
GB516	FF4-02B	
GB516	FF4-03B	
GB516	FF4-04B	
GB516	FF4-05B	
GB516	FF4-06B	surface interval (SI) pull-away
GB516	FF4-07B	SI pull-away, rippled? feeding depression?
GB516	FF4-08B	
GB516	FF4-09B	Small patch of microbial mat in center?
GB516	FF4-10B	SI pull-away
GB516	FF4-11B	
GB516	FF4-12B	
GB516	FF4-13B	SI pull-away
GB516	FF4-14B	
GB516	FF4-15B	
GB516	FF4-16B	SI pull-away
GB516	FF4-17B	Pull away
GB516	FF4-18B	
GB516	FF4-19B	
GB516	FF4-20B	
GB516	FF4-21B	
GB516	FF4-22B	
GB516	FF4-23B	
GB516	FF4-24B	
GB516	FF4-25B	
GB516	FF4-26B	
GB516	FF4-27B	
GB516	FF4-29B	SI pull-away
GB516	FF4-30B	
GB516	FF4-31B	
GB516	FF4-32B	
GB516	FF4-33B	
GB516	FF4-34B	SI pull-away
GB516	FF4-35B	Rippled
GB516	FF4-36B	

Appendix E2. Sediment profile imaging data for Cruise 2B (Garden Banks Block 516).

Block	Station	RPD, penetration depth
		boundary roughness, and
		grain size comments
GB516	FF5-01B	
GB516	FF5-02B	
GB516	FF5-03B	
GB516	FF5-04B	
GB516	FF5-05B	
GB516	FF5-06B	Indeterminant; surface disturbed
GB516	FF5-07B	
GB516	FF5-08B	
GB516	FF5-09B	
GB516	FF5-10B	
GB516	FF5-11B	
GB516	FF5-12B	
GB516	FF5-13B	
GB516	FF5-14A	Rippled
GB516	FF5-15B	
GB516	FF5-16B	SI pull-away
GB516	FF5-17B	
GB516	FF5-18B	
GB516	FF5-19B	
GB516	FF5-20B	
GB516	FF5-21B	
GB516	FF5-22B	SI pull-away
GB516	FF5-23B	
GB516	FF5-24B	
GB516	FF5-25B	SI pull-away
GB516	FF5-26B	SI pull-away; primary slope
GB516	FF5-27B	
GB516	FF5-28B	
GB516	FF5-29B	
GB516	FF5-30B	
GB516	FF5-31B	
GB516	FF5-32B	
GB516	FF5-33B	
GB516	FF5-34B	SI pull-away
GB516	FF5-35B	
GB516	FF5-36B	

Appendix E2. Sediment profile imaging data for Cruise 2B (Garden Banks Block 516).

Block	Station	RPD, penetration depth
		boundary roughness, and
		grain size comments
GB516	NF1-01B	Pull away
GB516	NF1-02B	
GB516	NF1-03B	
GB516	NF1-04B	
GB516	NF1-05B	
GB516	NF1-06B	
GB516	NF1-07B	
GB516	NF1-08B	Slight pull-away; gray/black mottled layer at ~ 2
GB516	NF1-09B	G/black mottled layer under dark(?); trace surface drilling mud?; mud at 2
GB516	NF1-10B	1.5 brown surface layer under RPD; surface trace drilling mud; gray/black under drilling mud 1 to 4
GB516	NF1-11B	Surface drilling mud over gray/black layer
GB516	NF1-12B	Drilling mud over gray/black clay
GB516	NF1-13B	Drilling mud over gray/black clay
GB516	NF1-14B	Drilling mud over gray/black clay
GB516	NF1-15B	Drilling mud over gray/black clay
GB516	NF1-16B	Drilling mud over gray/black clay
GB516	NF1-17B	Drilling mud over gray/black clay
GB516	NF1-18B	Drilling mud over gray/black clay
GB516	NF1-19B	Drilling mud over gray/black clay
GB516	NF1-20B	Drilling mud over gray/black clay
GB516	NF1-21B	gray-black clay under oxidized surface
GB516	NF1-22B	gray-black clay under oxidized surface
GB516	NF1-23B	gray-black clay under oxidized surface
GB516	NF1-24B	gray-black clay under oxidized surface
GB516	NF1-25B	Patch RPD; gray-black clay under oxidized surface
GB516	NF1-26B	gray-black clay at surface
GB516	NF1-27B	gray-black clay at surface; drilling mud present
GB516	NF1-28B	Sulfitic at surface
GB516	NF1-29B	Sulfitic at surface
GB516	NF1-30B	Smearing of lower layers to surface; sulfitic at surface
GB516	NF1-31B	Smear of oxygenated lower layers near surface?; sulfitic at surface
GB516	NF1-32B	Sulfitic at surface
GB516	NF1-33B	Sulfitic at surface
GB516	NF1-34B	Sulfitic at surface
GB516	NF1-35B	Sulfitic at surface
GB516	NF1-36B	Sulfitic at surface

Appendix E2. Sediment profile imaging data for Cruise 2B (Garden Banks Block 516).

Block	Station	RPD, penetration depth boundary roughness, and grain size comments
GB516	NF2-01B	Erosional
GB516	NF2-02B	
GB516	NF2-03B	
GB516	NF2-04B	
GB516	NF2-05B	
GB516	NF2-06B	
GB516	NF2-07B	
GB516	NF2-08B	Under penetrated; hard bottom
GB516	NF2-09B	
GB516	NF2-10A	
GB516	NF2-11A	
GB516	NF2-12A	
GB516	NF2-13A	
GB516	NF2-14A	
GB516	NF2-15A	
GB516	NF2-16A	sulfitic
GB516	NF2-17A	sulfitic at surface
GB516	NF2-18A	sulfitic at surface
GB516	NF2-19A	sulfitic at surface
GB516	NF2-20A	sulfitic
GB516	NF2-21A	
GB516	NF2-22A	
GB516	NF2-23A	sulfitic at surface
GB516	NF2-24B	sulfitic at surface
GB516	NF2-25A	sulfitic at surface
GB516	NF2-26A	sulfitic at surface
GB516	NF2-27B	sulfitic
GB516	NF2-28B	
GB516	NF2-29B	
GB516	NF2-30B	
GB516	NF2-31B	
GB516	NF2-32B	
GB516	NF2-33B	
GB516	NF2-34B	
GB516	NF2-35B	
GB516	NF2-36B	

Appendix E2. Sediment profile imaging data for Cruise 2B (Garden Banks Block 516).

Block	Station	RPD, penetration depth
		boundary roughness, and
		grain size comments
GB516	NF-3-01B	Maybe Stage I in far-field
GB516	NF-3-02B	Recently disturbed
GB516	NF-3-03B	
GB516	NF-3-04B	
GB516	NF-3-06B	
GB516	NF-3-07B	
GB516	NF-3-08B	
GB516	NF-3-09B	
GB516	NF-3-10B	
GB516	NF-3-11B	
GB516	NF-3-12B	
GB516	NF-3-13B	
GB516	NF-3-14B	
GB516	NF-3-15B	
GB516	NF-3-16B	No drilling mud
GB516	NF-3-17B	No drilling mud
GB516	NF-3-18B	
GB516	NF-3-19B	Camera disturbance
GB516	NF-3-20B	
GB516	NF-3-21B	
GB516	NF-3-22B	No surface; pull away
GB516	NF-3-23B	
GB516	NF-3-24B	
GB516	NF-3-25B	
GB516	NF-3-26B	
GB516	NF-3-27B	
GB516	NF-3-28B	
GB516	NF-3-29B	
GB516	NF-3-30B	
GB516	NF-3-31B	
GB516	NF-3-32B	
GB516	NF-3-33B	
GB516	NF-3-34B	
GB516	NF-3-35B	
GB516	NF-3-36B	

APPENDIX E3

Sediment Profile Imaging Results for Cruise 3B (Viosca Knoll Block 916)

Appendix E3. Sediment profile imaging data for Cruise 3B (Viosca Knoll Block 916).

Block	Station	Station	Penetration Depth (cm)			Boundary Roughness		Grain Size (phi)			Redox Potential Discontinuity			Methane	Anoxia	Successional	Organism
	Transect-					Thickness	Type			Major	(RPD) Depth (cm)			Bubbles	Low	Stage	Sediment
	Timestamp		Minimum	Maximum	Mean	(cm)		Minimum	Maximum	Mode	Minimum	Maximum	Mean		DO		Index (OSI)
VK916	NF1-1808	NF1-01	16.32	18.15	17.01	1.83	Physical	>4	3 to 2	>4	0.00	0.00	0.00	No	No	Stage III	5
VK916	NF1-1811	NF1-02	10.35	12.94	11.61	2.59	Physical	>4	3 to 2	>4	0.00	0.00	0.00	No	No	Stage III	5
VK916	NF1-1813	NF1-03	14.79	16.25	15.57	1.46	Physical	>4	3 to 2	>4	0.00	0.00	0.00	No	No	Stage III	5
VK916	NF1-1815	NF1-04	12.29	14.97	14.19	2.68	Physical	>4	3 to 2	>4	0.00	0.00	0.00	No	No	Azoic	-4
VK916	NF1-1818	NF1-05	16.59	18.05	17.01	1.46	Physical	>4	3 to 2	>4	0.00	0.00	0.00	No	No	Stage III	5
VK916	NF1-1819	NF1-06	13.29	16.22	15.28	2.93	Physical	>4	3 to 2	>4	0.00	0.00	0.00	No	No	Azoic	-4
VK916	NF1-1822	NF1-07	16.29	17.84	16.89	1.55	Physical	>4	3 to 2	>4	0.00	0.00	0.00	No	No	Azoic	-4
VK916	NF1-1824	NF1-08	18.14	18.83	18.65	0.69	Physical	>4	3 to 2	>4	0.00	0.00	0.00	No	No	Stage III	5
VK916	NF1-1827	NF1-09	19.60	20.70	19.94	1.10	Physical	>4	3 to 2	>4	0.00	0.00	0.00	No	No	Stage III	5
VK916	NF1-1828	NF1-10	12.94	16.42	14.66	3.48	Physical	>4	3 to 2	>4	0.00	0.00	0.00	No	No	Stage III	5
VK916	NF1-1830	NF1-11	17.29	20.20	18.77	2.91	Physical	>4	3 to 2	>4	0.00	0.00	0.00	No	No	Stage III	5
VK916	NF1-1831	NF1-12	18.00	19.48	18.54	1.48	Physical	>4	3 to 2	>4	0.00	0.00	0.00	No	No	Stage III	5
VK916	NF1-1833	NF1-13	20.41	21.71	21.31	1.30	Physical	>4	3 to 2	>4	0.00	0.00	0.00	No	No	Stage III	5
VK916	NF1-1835	NF1-14	16.86	18.80	18.07	1.94	Physical	>4	3 to 2	>4	0.00	0.00	0.00	No	No	Stage III	5
VK916	NF1-1836	NF1-15	14.67	17.62	16.53	2.95	Physical	>4	3 to 2	>4	0.00	0.00	0.00	No	No	Stage III	5
VK916	NF1-1838	NF1-16	21.41	22.37	22.08	0.96	Physical	>4	3 to 2	>4	0.00	0.00	0.00	No	No	Stage III	5
VK916	NF1-1840	NF1-17	18.21	21.12	19.25	2.91	Physical	>4	3 to 2	>4	0.00	0.00	0.00	No	No	Stage III	5
VK916	NF1-1842	NF1-18	15.32	16.57	15.98	1.25	Physical	>4	3 to 2	>4	0.00	0.00	0.00	No	No	Azoic	-4
VK916	NF1-1844	NF1-19	21.33	22.74	22.13	1.41	Physical	>4	3 to 2	>4	0.00	0.00	0.00	No	No	Azoic	-4
VK916	NF1-1846	NF1-20	15.38	17.67	16.93	2.29	Physical	>4	3 to 2	>4	0.00	0.00	0.00	No	No	Azoic	-4
VK916	NF1-1848	NF1-21	15.72	18.71	16.72	2.99	Physical	>4	3 to 2	>4	0.00	0.00	0.00	No	No	Stage III	5
VK916	NF1-1853	NF1-23	22.22	22.66	22.44	0.44	Physical	>4	3 to 2	>4	0.00	0.00	0.00	No	No	Stage III	5
VK916	NF1-1857	NF1-24	22.33	22.75	22.50	0.42	Physical	>4	3 to 2	>4	0.00	0.00	0.00	No	No	Stage III	5
VK916	NF1-1858	NF1-25	18.68	20.86	20.08	2.18	Physical	>4	3 to 2	>4	0.00	0.00	0.00	No	No	Azoic	-4
VK916	NF1-1900	NF1-26	17.52	18.77	18.11	1.25	Physical	>4	2 to 1	>4	0.00	0.00	0.00	No	No	Stage III	5
VK916	NF1-1902	NF1-27	15.67	16.15	15.94	0.48	Physical	>4	3 to 2	>4	0.00	0.00	0.00	No	No	Stage III	5
VK916	NF1-1903	NF1-28	15.84	18.38	17.28	2.54	Physical	>4	3 to 2	>4	0.00	0.00	0.00	No	No	Stage III	5
VK916	NF1-1905	NF1-29	16.67	18.49	17.71	1.82	Physical	>4	3 to 2	>4	0.00	0.00	0.00	No	No	Stage III	5
VK916	NF1-1906	NF1-30	18.68	19.56	19.13	0.88	Physical	>4	3 to 2	>4	0.00	0.00	0.00	No	No	Stage III	5
VK916	NF1-1907	NF1-31	15.49	17.87	16.56	2.38	Physical	>4	3 to 2	>4	0.00	0.00	0.00	No	No	Stage III	5
VK916	NF1-1909	NF1-32	18.99	19.80	19.29	0.81	Physical	>4	2 to 1	>4	0.00	0.00	0.00	No	No	Stage III	5
VK916	NF1-1911	NF1-33	20.22	22.36	21.65	2.14	Physical	>4	2 to 1	>4	0.00	0.00	0.00	No	No	Stage III	5
VK916	NF1-1913	NF1-34	20.19	21.26	20.92	1.07	Physical	>4	2 to 1	>4	0.00	0.00	0.00	No	No	Stage III	5
VK916	NF1-1915	NF1-35	20.89	21.83	21.40	0.94	Physical	>4	2 to 1	>4	0.00	0.00	0.00	No	No	Stage III	5
VK916	NF1-1917	NF1-36	16.11	17.18	16.45	1.07	Physical	>4	3 to 2	>4	0.00	0.00	0.00	No	No	Stage III	5
VK916	NF1-1919	NF1-37	19.00	21.38	20.46	2.38	Physical	>4	2 to 1	>4	0.00	0.00	0.00	No	No	Stage III	5
VK916	NF1-1921	NF1-38	19.26	20.16	19.77	0.90	Physical	>4	3 to 2	>4	0.00	0.00	0.00	No	No	Stage III	5
VK916	NF1-1922	NF1-39	16.89	18.56	17.70	1.67	Physical	>4	3 to 2	>4	0.00	0.00	0.00	No	No	Stage III	5
VK916	NF1-1924	NF1-40	17.60	20.27	19.26	2.67	Physical	>4	2 to 1	>4	0.00	0.00	0.00	No	No	Stage III	5
VK916	NF2-0137	NF2-03	16.15	18.91	18.09	2.76	Physical	>4	3 to 2	>4	0.00	0.00	0.00	No	No	Azoic	-4
VK916	NF2-0139	NF2-04	15.38	16.57	15.98	1.19	Physical	>4	3 to 2	>4	0.00	0.00	0.00	No	No	Stage III	5

Appendix E3. Sediment profile imaging data for Cruise 3B (Viosca Knoll Block 916).

Block	Station Transect-Timestamp	Station	Penetration Depth (cm) Minimum	Penetration Depth (cm) Maximum	Penetration Depth (cm) Mean	Boundary Roughness Thickness (cm)	Boundary Roughness Type	Grain Size (phi) Minimum	Grain Size (phi) Maximum	Grain Size (phi) Major Mode	Redox Potential Discontinuity (RPD) Depth (cm) Minimum	RPD Maximum	RPD Mean	Methane Bubbles	Anoxia Low DO	Successional Stage	Organism Sediment Index (OSI)
VK916	NF2-0140	NF2-05	16.91	17.89	17.43	0.98	Physical	>4	3 to 2	>4	0.00	0.00	0.00	No	No	Azoic	-4
VK916	NF2-0142	NF2-06	10.23	14.84	13.15	4.61	Physical	>4	3 to 2	>4	0.00	0.00	0.00	No	No	Azoic	-4
VK916	NF2-0143	NF2-07	14.41	15.65	14.87	1.24	Physical	>4	3 to 2	>4	0.00	0.00	0.00	No	No	Stage III	5
VK916	NF2-0147	NF2-09	16.51	18.32	17.53	1.81	Physical	>4	3 to 2	>4	0.00	0.00	0.00	No	No	Azoic	-4
VK916	NF2-0148	NF2-10	17.23	19.30	18.73	2.07	Physical	>4	3 to 2	>4	0.00	0.00	0.00	No	No	Stage III	5
VK916	NF2-0150	NF2-11	20.46	20.82	20.55	0.36	Physical	>4	3 to 2	>4	0.00	0.00	0.00	No	No	Azoic	-4
VK916	NF2-0152	NF2-12	13.62	18.02	17.73	4.40	Physical	>4	3 to 2	>4	0.00	0.00	0.00	No	No	Azoic	-4
VK916	NF2-0153	NF2-13	17.46	18.02	17.73	0.56	Physical	>4	3 to 2	>4	0.00	0.00	0.00	No	No	Stage III	5
VK916	NF2-0155	NF2-14	16.30	17.90	17.16	1.60	Physical	>4	3 to 2	>4	0.00	0.00	0.00	No	No	Stage I on III	5
VK916	NF2-0156	NF2-15	20.70	22.48	21.81	1.78	Physical	>4	3 to 2	>4	0.00	0.00	0.00	No	No	Stage I on III	5
VK916	NF2-0157	NF2-16	17.90	19.96	19.46	2.06	Physical	>4	3 to 2	>4	0.00	0.00	0.00	No	No	Stage I on III	5
VK916	NF2-0159	NF2-17	16.61	19.66	19.46	3.05	Physical	>4	3 to 2	>4	0.00	0.00	0.00	No	No	Stage I on III	5
VK916	NF2-0200	NF2-18	18.89	22.42	19.99	3.53	Physical	>4	3 to 2	>4	0.00	0.00	0.00	No	No	Stage III	5
VK916	NF2-0202	NF2-19	18.01	18.77	18.32	0.76	Physical	>4	3 to 2	>4	0.00	0.00	0.00	No	No	Azoic	-4
VK916	NF2-0205	NF2-20	18.88	20.70	19.70	1.82	Physical	>4	2 to 1	>4	0.00	0.00	0.00	No	Yes	Stage I on III	1
VK916	NF2-0207	NF2-21	19.69	20.47	20.04	0.78	Physical	>4	3 to 2	>4	0.00	0.00	0.00	No	No	Stage I on III	5
VK916	NF2-0208	NF2-22	16.88	18.26	17.41	1.38	Physical	>4	3 to 2	>4	0.00	0.00	0.00	No	No	Stage III	5
VK916	NF2-0209	NF2-23	18.94	19.84	19.29	0.90	Physical	>4	3 to 2	>4	0.00	0.00	0.00	No	No	Stage I on III	5
VK916	NF2-0213	NF2-25	18.26	20.32	19.40	2.06	Physical	>4	3 to 2	>4	0.00	0.00	0.00	No	No	Stage III	5
VK916	NF2-0214	NF2-26	22.45	22.45	22.45	0.00	Indeterminate	>4	3 to 2	>4	Indeterminate			No	No	Stage III	Indeterminate
VK916	NF2-0216	NF2-27	17.75	19.19	18.61	1.44	Physical	>4	3 to 2	>4	0.00	0.00	0.00	No	No	Stage III	5
VK916	NF2-0217	NF2-28	14.39	16.30	15.46	1.91	Physical	>4	3 to 2	>4	0.00	0.00	0.00	No	No	Stage III	5
VK916	NF2-0219	NF2-29	18.74	19.57	19.09	0.83	Physical	>4	3 to 2	>4	0.00	0.00	0.00	No	No	Azoic	-4
VK916	NF2-0220	NF2-30	16.65	17.34	16.97	0.69	Physical	>4	3 to 2	>4	0.00	0.00	0.00	No	No	Stage III	5
VK916	NF2-0222	NF2-31	17.99	19.49	18.70	1.50	Physical	>4	3 to 2	>4	0.00	0.00	0.00	No	No	Azoic	-4
VK916	NF2-0224	NF2-32	17.39	17.90	17.65	0.51	Physical	>4	3 to 2	>4	0.00	0.00	0.00	No	No	Azoic	-4
VK916	NF2-0225	NF2-33	14.80	16.93	15.64	2.13	Physical	>4	3 to 2	>4	0.00	0.00	0.00	No	No	Stage III	5
VK916	NF2-0227	NF2-34	19.27	20.52	19.90	1.25	Physical	>4	3 to 2	>4	0.00	0.00	0.00	No	No	Stage I	1
VK916	NF2-0228	NF2-35	16.54	18.23	17.19	1.69	Physical	>4	3 to 2	>4	0.00	0.00	0.00	No	No	Azoic	-4
VK916	NF2-0230	NF2-36	18.38	19.69	19.01	1.31	Physical	>4	3 to 2	>4	0.00	0.00	0.00	No	No	Stage III	5
VK916	NF2-0232	NF2-37	19.15	20.61	19.92	1.46	Physical	>4	3 to 2	>4	0.00	0.00	0.00	No	No	Stage III	5
VK916	NF2-0233	NF2-38	16.77	18.87	17.96	2.10	Physical	>4	3 to 2	>4	0.00	0.00	0.00	No	No	Azoic	-4
VK916	NF2-0235	NF2-39	16.48	18.83	17.69	2.35	Physical	>4	3 to 2	>4	0.00	0.00	0.00	No	No	Stage III	5
VK916	NF2-0236	NF2-40	20.05	21.07	20.68	1.02	Physical	>4	3 to 2	>4	0.00	0.00	0.00	No	No	Azoic	-4
VK916	NF3-0426	NF3-02	16.33	17.22	16.90	0.89	Physical	>4	2 to 1	>4	0.00	1.31	0.63	No	No	Stage III	6
VK916	NF3-0427	NF3-03	18.02	19.48	18.44	1.46	Physical	>4	2 to 1	>4	0.11	2.41	1.12	No	No	Stage III	7
VK916	NF3-0429	NF3-04	16.18	17.69	17.24	1.51	Physical	>4	2 to 1	>4	0.12	2.17	1.41	No	No	Azoic	-2
VK916	NF3-0430	NF3-05	18.15	19.66	18.84	1.51	Physical	>4	2 to 1	>4	0.00	0.00	0.00	No	No	Stage III	5
VK916	NF3-0432	NF3-06	18.14	19.27	18.68	1.13	Physical	>4	2 to 1	>4	0.00	0.00	0.00	No	No	Stage III	5

Appendix E3. Sediment profile imaging data for Cruise 3B (Viosca Knoll Block 916).

Block	Station Transect-Timestamp	Station	Penetration Depth (cm) Minimum	Penetration Depth (cm) Maximum	Penetration Depth (cm) Mean	Boundary Roughness Thickness (cm)	Boundary Roughness Type	Grain Size (phi) Minimum	Grain Size (phi) Maximum	Grain Size (phi) Major Mode	Redox Potential Discontinuity (RPD) Depth (cm) Minimum	RPD Depth (cm) Maximum	RPD Depth (cm) Mean	Methane Bubbles	Anoxia Low DO	Successional Stage	Organism Sediment Index (OSI)
VK916	NF3-0433	NF3-07	13.71	15.46	14.70	1.75	Physical	>4	2 to 1	>4	0.00	0.00	0.00	No	No	Azoic	-4
VK916	NF3-0439	NF3-08	16.34	18.45	17.65	2.11	Physical	>4	3 to 2	>4	0.00	0.00	0.00	No	No	Stage III	5
VK916	NF3-0441	NF3-09	16.97	18.20	17.63	1.23	Physical	>4	2 to 1	>4	0.00	0.77	0.36	No	No	Stage III	6
VK916	NF3-0443	NF3-10	17.48	19.21	18.48	1.73	Physical	>4	3 to 2	>4	0.00	0.80	0.32	No	Yes	Stage III	2
VK916	NF3-0445	NF3-11	16.77	18.65	17.77	1.88	Physical	>4	3 to 2	>4	0.00	1.37	0.46	No	No	Azoic	-3
VK916	NF3-0446	NF3-12	17.33	19.92	18.41	2.59	Physical	>4	3 to 2	>4	0.00	2.08	0.38	No	No	Stage III	6
VK916	NF3-0448	NF3-13	15.76	16.80	16.30	1.04	Physical	>4	2 to 1	>4	0.00	1.84	1.01	No	No	Azoic	-2
VK916	NF3-0449	NF3-14	15.65	17.52	16.89	1.87	Physical	>4	3 to 2	>4	0.00	1.33	0.67	No	No	Stage III	6
VK916	NF3-0452	NF3-15	15.95	17.81	16.51	1.86	Physical	>4	2 to 1	>4	0.00	0.92	0.51	No	Yes	Azoic	-7
VK916	NF3-0455	NF3-16	18.73	19.49	19.07	0.76	Physical	>4	2 to 1	>4	0.00	1.64	0.58	No	No	Stage III	6
VK916	NF3-0457	NF3-17	15.30	16.54	16.00	1.24	Physical	>4	2 to 1	>4	0.00	0.59	0.25	No	No	Stage III	6
VK916	NF3-0458	NF3-18	17.37	18.38	17.80	1.01	Physical	>4	3 to 2	>4	0.06	0.96	0.54	No	No	Stage III	6
VK916	NF3-0459	NF3-19	15.83	16.98	16.14	1.15	Physical	>4	2 to 1	>4	0.00	0.00	0.00	No	No	Azoic	-4
VK916	NF3-0501	NF3-20	16.28	17.00	16.72	0.72	Physical	>4	2 to 1	>4	0.00	0.00	0.00	No	No	Azoic	-4
VK916	NF3-0502	NF3-21	18.29	19.63	19.01	1.34	Physical	>4	3 to 2	>4	0.03	1.28	0.71	No	No	Stage I on III	6
VK916	NF3-0503	NF3-22	15.67	17.93	16.82	2.26	Physical	>4	3 to 2	>4	0.00	0.98	0.55	No	No	Stage III	6
VK916	NF3-0505	NF3-23	16.36	19.72	18.27	3.36	Physical	>4	3 to 2	>4	0.00	0.00	0.00	No	No	Stage III	5
VK916	NF3-0506	NF3-24	14.91	15.64	15.15	0.73	Physical	>4	3 to 2	>4	0.00	0.89	0.23	No	No	Stage III	6
VK916	NF3-0508	NF3-25	15.06	16.19	15.63	1.13	Physical	>4	3 to 2	>4	0.00	0.74	0.19	No	No	Stage III	6
VK916	NF3-0509	NF3-26	17.01	18.40	17.80	1.39	Physical	>4	2 to 1	>4	0.00	0.00	0.00	No	No	Stage III	5
VK916	NF3-0511	NF3-27	16.01	17.34	16.38	1.33	Physical	>4	2 to 1	>4	0.00	0.68	0.19	No	No	Stage III	6
VK916	NF3-0512	NF3-28	13.07	16.30	15.31	3.23	Physical	>4	2 to 1	>4	0.00	0.00	0.00	No	No	Stage III	5
VK916	NF3-0514	NF3-29	19.06	19.76	19.32	0.70	Physical	>4	2 to 1	>4	0.00	0.00	0.00	No	No	Stage I on III	5
VK916	NF3-0516	NF3-30	20.54	22.19	21.60	1.65	Physical	>4	3 to 2	>4	0.00	0.00	0.00	No	No	Azoic	-4
VK916	NF3-0517	NF3-31	16.13	16.75	16.39	0.62	Physical	>4	3 to 2	>4	0.00	0.00	0.00	No	No	Stage III	5
VK916	NF3-0519	NF3-32	15.49	17.13	16.35	1.64	Physical	>4	3 to 2	>4	0.00	0.00	0.00	No	Yes	Stage III	1
VK916	NF3-0522	NF3-34	14.01	16.22	15.19	2.21	Physical	>4	3 to 2	>4	0.00	0.00	0.00	No	No	Stage III	5
VK916	NF3-0523	NF3-35	19.18	20.85	19.97	1.67	Physical	>4	3 to 2	>4	0.00	0.00	0.00	No	Yes	Stage III	1
VK916	NF3-0525	NF3-36	21.08	22.17	21.59	1.09	Physical	>4	3 to 2	>4	0.00	0.89	0.20	No	No	Stage I on III	6
VK916	NF3-0527	NF3-37	21.97	22.33	22.27	0.36	Physical	>4	3 to 2	>4	0.01	1.47	0.62	No	No	Stage III	6
VK916	NF3-0529	NF3-38	20.04	21.07	20.59	1.03	Physical	>4	1 to 0	>4	0.00	0.00	0.00	No	No	Stage I on III	5
VK916	NF3-0531	NF3-39	17.72	20.22	19.24	2.50	Physical	>4	2 to 1	>4	0.00	0.86	0.34	No	No	Stage I on III	6

Appendix E3. Sediment profile imaging data for Cruise 3B (Viosca Knoll Block 916).

Block	Station Transect-Timestamp	Station	Burrow	Burrow comments	Clast	Clast Comments	Epifauna	Infauna	Faunal comments	Pelletal Layer
VK916	NF1-1808	NF1-01	No		Yes	Red and gray	No	No	.	No
VK916	NF1-1811	NF1-02	No		Yes	Red and gray	No	No		No
VK916	NF1-1813	NF1-03	Yes		Yes	Red and gray	No	No		No
VK916	NF1-1815	NF1-04	No		Yes	Red and gray	No	No		No
VK916	NF1-1818	NF1-05	No		Yes	Red and gray	No	No		No
VK916	NF1-1819	NF1-06	No		Yes	Red and gray	No	No		No
VK916	NF1-1822	NF1-07	No		Yes	Red and gray	No	No		No
VK916	NF1-1824	NF1-08	No		Yes	Red and gray	No	No		No
VK916	NF1-1827	NF1-09	No		Yes	Red and gray	No	No		No
VK916	NF1-1828	NF1-10	No		Yes	Red and gray; wiper clast	No	No		No
VK916	NF1-1830	NF1-11	No		Yes	Red and gray	No	No		No
VK916	NF1-1831	NF1-12	No		Yes	Red and gray	No	No		No
VK916	NF1-1833	NF1-13	No		Yes	Red and gray	No	No		No
VK916	NF1-1835	NF1-14	Yes	Thin	Yes	Red and gray	No	Yes	Worm at 10 to 11 cm depth	No
VK916	NF1-1836	NF1-15	No		Yes	Red and gray	No	Yes	Small worm? at 11 cm depth	No
VK916	NF1-1838	NF1-16	Yes	Thin	Yes	Red and gray	No	Yes	Worm at 9 to 11 cm depth	No
VK916	NF1-1840	NF1-17	No		Yes	Red and gray	No	No		No
VK916	NF1-1842	NF1-18	No		Yes	Red and gray	No	No		No
VK916	NF1-1844	NF1-19	No		Yes	Red and gray	No	No		No
VK916	NF1-1846	NF1-20	No		Yes	Red and gray	No	No		No
VK916	NF1-1848	NF1-21	Yes	Thin	Yes	Red and gray	No	Yes	Thin worm at 12.5 cm depth	No
VK916	NF1-1853	NF1-23	No		Yes	Red and gray	No	No		No
VK916	NF1-1857	NF1-24	Yes	Thin (2)	Yes	Red and gray	No	Yes	Thin worms (2)	No
VK916	NF1-1858	NF1-25	No		Yes	Red and gray	No	No		No
VK916	NF1-1900	NF1-26	Yes	Thin	Yes	Red and gray	No	No		No
VK916	NF1-1902	NF1-27	No		Yes	Red and gray	No	No		No
VK916	NF1-1903	NF1-28	No		Yes	Red and gray	No	No		No
VK916	NF1-1905	NF1-29	No		Yes	Red and gray	No	No		No
VK916	NF1-1906	NF1-30	No		Yes	Red and gray	No	No		No
VK916	NF1-1907	NF1-31	Yes	Thin	Yes	Red and gray	No	Yes	Worm at 3.2 to 5.1 cm depth	No
VK916	NF1-1909	NF1-32	No		Yes	Red and gray	No	No		No
VK916	NF1-1911	NF1-33	No		Yes	Red and gray	No	No		No
VK916	NF1-1913	NF1-34	No		Yes	Red and gray	No	No		No
VK916	NF1-1915	NF1-35	No		Yes	Red and gray	No	No		No
VK916	NF1-1917	NF1-36	No		Yes	Red and gray	No	No		No
VK916	NF1-1919	NF1-37	No		Yes	Red and gray	No	No		No
VK916	NF1-1921	NF1-38	No		Yes	Red and gray	No	No		No
VK916	NF1-1922	NF1-39	No		Yes	Red and gray	No	No		No
VK916	NF1-1924	NF1-40	No		Yes	Red and gray	No	No		No
VK916	NF2-0137	NF2-03	No		Yes		No	No		No
VK916	NF2-0139	NF2-04	No		Yes		No	No		No

Appendix E3. Sediment profile imaging data for Cruise 3B (Viosca Knoll Block 916).

Block	Station Transect-Timestamp	Station	Burrow	Burrow comments	Clast	Clast Comments	Epifauna	Infauna	Faunal comments	Pelletal Layer
VK916	NF2-0140	NF2-05	No		Yes		No	No		No
VK916	NF2-0142	NF2-06	No		Yes		No	No		No
VK916	NF2-0143	NF2-07	No		Yes		No	No		No
VK916	NF2-0147	NF2-09	No		Yes		No	No		No
VK916	NF2-0148	NF2-10	No		Yes		No	No		No
VK916	NF2-0150	NF2-11	No		Yes	Large wiper clast	No	No		No
VK916	NF2-0152	NF2-12	No		Yes		No	No		No
VK916	NF2-0153	NF2-13	No		Yes		No	No		No
VK916	NF2-0155	NF2-14	No		Yes		No	Yes	Stage I	No
VK916	NF2-0156	NF2-15	No		Yes		No	Yes	Stage I	No
VK916	NF2-0157	NF2-16	No		Yes		No	Yes	Stage I	No
VK916	NF2-0159	NF2-17	No		Yes		No	Yes	Stage I	No
VK916	NF2-0200	NF2-18	No		Yes		No	No		No
VK916	NF2-0202	NF2-19	No		Yes		No	No		No
VK916	NF2-0205	NF2-20	No		Yes		No	Yes	Stage I	No
VK916	NF2-0207	NF2-21	No		Yes		No	Yes	Stage I	No
VK916	NF2-0208	NF2-22	No		Yes		No	No		No
VK916	NF2-0209	NF2-23	No		Yes		No	Yes	Stage I	No
VK916	NF2-0213	NF2-25	No		Yes		No	No		No
VK916	NF2-0214	NF2-26	No		Yes		No	No		No
VK916	NF2-0216	NF2-27	No		Yes		No	No		No
VK916	NF2-0217	NF2-28	No		Yes		No	No		No
VK916	NF2-0219	NF2-29	No		Yes		No	No		No
VK916	NF2-0220	NF2-30	No		Yes		No	No		No
VK916	NF2-0222	NF2-31	No		Yes		No	No		No
VK916	NF2-0224	NF2-32	No		Yes		No	No		No
VK916	NF2-0225	NF2-33	No		Yes		No	No		No
VK916	NF2-0227	NF2-34	No		Yes		No	Yes	Stage I	No
VK916	NF2-0228	NF2-35	No		Yes		No	No		No
VK916	NF2-0230	NF2-36	No		Yes		No	No		No
VK916	NF2-0232	NF2-37	No		Yes		No	No		No
VK916	NF2-0233	NF2-38	No		Yes		No	No		No
VK916	NF2-0235	NF2-39	No		Yes		No	No		No
VK916	NF2-0236	NF2-40	No		Yes		No	No		No
VK916	NF3-0426	NF3-02	No		Yes		No	No		No
VK916	NF3-0427	NF3-03	No		Yes		No	No		No
VK916	NF3-0429	NF3-04	Yes	U-shaped burrow	Yes		No	No		No
VK916	NF3-0430	NF3-05	Yes		Yes		No	No		No
VK916	NF3-0432	NF3-06	No		Yes		No	No		No

Appendix E3. Sediment profile imaging data for Cruise 3B (Viosca Knoll Block 916).

Block	Station Transect-Timestamp	Station	Burrow	Burrow comments	Clast	Clast Comments	Epifauna	Infauna	Faunal comments	Pelletal Layer
VK916	NF3-0433	NF3-07	No		Yes		No	No		No
VK916	NF3-0439	NF3-08	No		Yes		No	No		No
VK916	NF3-0441	NF3-09	No		Yes		No	Yes	Worm at 5 cm depth	No
VK916	NF3-0443	NF3-10	No		Yes		No	No		No
VK916	NF3-0445	NF3-11	No		Yes		No	No		No
VK916	NF3-0446	NF3-12	No		Yes		No	No		No
VK916	NF3-0448	NF3-13	No		Yes		No	No		No
VK916	NF3-0449	NF3-14	No		Yes		No	No		No
VK916	NF3-0452	NF3-15	No		Yes		No	No		No
VK916	NF3-0455	NF3-16	No		Yes		No	No		No
VK916	NF3-0457	NF3-17	No		Yes		No	No		No
VK916	NF3-0458	NF3-18	No		Yes		No	No		No
VK916	NF3-0459	NF3-19	No		Yes		No	No		No
VK916	NF3-0501	NF3-20	No		Yes		No	No		No
VK916	NF3-0502	NF3-21	No		Yes		No	Yes	Stage I	No
VK916	NF3-0503	NF3-22	No		Yes		No	No		No
VK916	NF3-0505	NF3-23	No		Yes		No	No		No
VK916	NF3-0506	NF3-24	Yes	2	Yes		No	No		No
VK916	NF3-0508	NF3-25	No		Yes	Wiper clast	No	No		No
VK916	NF3-0509	NF3-26	Yes		Yes	Wiper clast	No	No		No
VK916	NF3-0511	NF3-27	No		Yes		No	No		No
VK916	NF3-0512	NF3-28	No		Yes		No	No		No
VK916	NF3-0514	NF3-29	No		Yes		No	Yes	Stage I	No
VK916	NF3-0516	NF3-30	No		Yes		No	No		No
VK916	NF3-0517	NF3-31	No		Yes		No	No		No
VK916	NF3-0519	NF3-32	No		Yes		No	No		No
VK916	NF3-0522	NF3-34	No		Yes		No	No		No
VK916	NF3-0523	NF3-35	No		Yes		No	No		No
VK916	NF3-0525	NF3-36	No		Yes		No	No		No
VK916	NF3-0527	NF3-37	No		Yes		No	No		No
VK916	NF3-0529	NF3-38	No		Yes		No	Yes	Stage I tubes	No
VK916	NF3-0531	NF3-39	No		Yes		No	Yes	Stage I	No

Appendix E3. Sediment profile imaging data for Cruise 3B (Viosca Knoll Block 916).

Block	Station Transect-Timestamp	Station	Sedimentary layers and depths (cm)	Feeding void numbers and depths (cm)
VK916	NF1-1808	NF1-01	3 layers; red 2.35, mid chaotic, lower gray clay	Void at 16.3 cm depth
VK916	NF1-1811	NF1-02	3 layers; red 3.02, chaotic, gray	Feeding void at 12 cm depth
VK916	NF1-1813	NF1-03	3 layers; red 2.20, chaotic, gray clay	Small feeding voids at 13 and 14 cm depth
VK916	NF1-1815	NF1-04	3 layers; red 5.05, chaotic, gray clay	Filled-in voids; recumbent/buried tubes
VK916	NF1-1818	NF1-05	3 layers; red 2.13, chaotic, gray clay	Small feeding void at 16.4 cm depth
VK916	NF1-1819	NF1-06	3 layers; red 1.73, chaotic, gray clay	Tubes in stirred-up sediment cloud
VK916	NF1-1822	NF1-07	3 layers; red 3.71, chaotic, gray clay	No feeding voids
VK916	NF1-1824	NF1-08	3 layers; red 3.36, chaotic, gray clay	Small void at 16 cm; gray filled void; tube at surface
VK916	NF1-1827	NF1-09	3 layers; red 4.69, chaotic, gray clay	Small void at 12 cm; recumbent/buried tubes
VK916	NF1-1828	NF1-10	3 layers; red 2.30, chaotic, gray clay	Tiny voids at 8 cm depth
VK916	NF1-1830	NF1-11	3 layers; red 4.25, chaotic, gray clay	Tiny voids at 15 and 18 cm; recumbent/buried tubes
VK916	NF1-1831	NF1-12	3 layers; red 2.92, chaotic, gray clay	Tiny void at 15.5 cm
VK916	NF1-1833	NF1-13	3 layers; red 5.12, chaotic, gray clay	Nice void at 17 cm
VK916	NF1-1835	NF1-14	3 layers; red 3.48, chaotic, gray clay	Void at 11.7 cm
VK916	NF1-1836	NF1-15	3 layers; red 2.16, chaotic, gray clay	Tiny void at 12 cm depth
VK916	NF1-1838	NF1-16	3 layers; red 3.75, chaotic, gray clay	Small voids at 19.6 and 22 cm
VK916	NF1-1840	NF1-17	3 layers; red 3.09, chaotic, gray clay	Small void at 9.9 cm depth
VK916	NF1-1842	NF1-18	3 layers; red 3.03, chaotic, gray clay	No feeding voids; recumbent/buried tube
VK916	NF1-1844	NF1-19	3 layers; red 4.63, chaotic, gray clay	No voids; no tubes
VK916	NF1-1846	NF1-20	3 layers; red 3.00, patchy, chaotic, gray clay	No voids; no tubes
VK916	NF1-1848	NF1-21	3 layers; red 3.51, chaotic, gray clay	Tiny void at 11 cm; no tubes
VK916	NF1-1853	NF1-23	3 layers; red 0.40, chaotic, gray clay	Nice feeding void at 18.5 cm depth
VK916	NF1-1857	NF1-24	3 layers; red 1.50, chaotic, gray clay	Void at 17.8 cm depth
VK916	NF1-1858	NF1-25	3 layers; red 0.98, chaotic, gray clay	No voids; no tubes
VK916	NF1-1900	NF1-26	3 layers; red 4.77, chaotic, gray clay	Nice feeding void at 17 cm depth
VK916	NF1-1902	NF1-27	3 layers; red 2.90, chaotic, gray clay	Nice feeding void at 15.9 cm depth
VK916	NF1-1903	NF1-28	3 layers; red 6.26, chaotic, gray clay	Small voids at 13 and 14.3; buried tube
VK916	NF1-1905	NF1-29	3 layers; red 4.10, chaotic, gray clay	Voids at 13.7 and 15.8 cm depth
VK916	NF1-1906	NF1-30	3 layers; red 4.20, chaotic, gray clay	Voids at 18.4 and 19.2; recumbent/buried tubes
VK916	NF1-1907	NF1-31	3 layers; red 2.91, chaotic, gray clay	Voids at 10.5 and 15.0 cm; recumbent/buried tube
VK916	NF1-1909	NF1-32	3 layers; red 4.69, chaotic, gray clay	4 voids at 16 to 19 cm; recumbent/buried tube
VK916	NF1-1911	NF1-33	3 layers; red 2.03, chaotic, gray clay	Void at 15.9 cm; recumbent/buried tube
VK916	NF1-1913	NF1-34	3 layers; red 4.59, chaotic, gray clay	Void at 20.5; recumbent/buried tubes
VK916	NF1-1915	NF1-35	3 layers; red 4.37, chaotic, gray clay	Void at 18.8; recumbent/buried tubes
VK916	NF1-1917	NF1-36	3 layers; red 2.94 chaotic, gray clay	Voids at 14.2 and 15.6; tube in disturbed sediment cloud
VK916	NF1-1919	NF1-37	3 layers; red 4.94 chaotic, gray clay	Voids at 15.1 and 16.1; recumbent tube near surface
VK916	NF1-1921	NF1-38	3 layers; red 3.29 chaotic, gray clay	Void at 10.9 cm; buried tubes near surface
VK916	NF1-1922	NF1-39	3 layers; red 1.40 chaotic, gray clay	Void? at 13.8 cm; tube in disturbed sediment cloud
VK916	NF1-1924	NF1-40	3 layers; red 3.12 chaotic, gray clay	Void at 10.7 cm;
VK916	NF2-0137	NF2-03	3 layers; red 3.26, chaotic 4.20, gray clay to depth	Filled-in voids; recumbent/buried tubes
VK916	NF2-0139	NF2-04	3 layers; red 2.47, chaotic 4.54, gray clay to depth	Void at 14.93 cm depth; recumbent tube

Appendix E3. Sediment profile imaging data for Cruise 3B (Viosca Knoll Block 916).

Block	Station Transect-Timestamp	Station	Sedimentary layers and depths (cm)	Feeding void numbers and depths (cm)
VK916	NF2-0140	NF2-05	3 layers; red 3.65; chaotic 3.15; gray clay to depth	No voids; recumbent/buried tube
VK916	NF2-0142	NF2-06	3 layers; red 2.16; chaotic 6.52; gray clay to depth	No voids; recumbent/buried tube
VK916	NF2-0143	NF2-07	3 layers; red 3.39; chaotic 2.91; gray clay to depth	Voids at 8.4, 9.3, and 14.0 cm depth
VK916	NF2-0147	NF2-09	3 layers; red 2.86; chaotic 2.52; gray clay to depth	No voids; recumbent/buried tube
VK916	NF2-0148	NF2-10	3 layers; red 3.85; chaotic 4.24; gray clay to depth	Good void at 8.5 cm depth; tiny void at 15.94 cm
VK916	NF2-0150	NF2-11	3 layers; red 4.87; chaotic 4.56; gray clay to depth	Filled-in voids; recumbent/buried tubes
VK916	NF2-0152	NF2-12	3 layers; red 2.93; chaotic 2.19; gray clay to depth	Filled-in voids; recumbent/buried tubes
VK916	NF2-0153	NF2-13	3 layers; red 3.62; chaotic 2.60; gray clay to depth	Void at 13.74 cm
VK916	NF2-0155	NF2-14	3 layers; red 2.51; chaotic 1.05; gray clay to depth	Voids at 15.40 and 15.97 cm depth
VK916	NF2-0156	NF2-15	3 layers; red 4.06; chaotic 4.42; gray clay to depth	A few Stage I on surface; void at 17 to 18 cm
VK916	NF2-0157	NF2-16	3 layers; red 3.53; chaotic 2.75; gray clay to depth	Void at 5.99 cm depth
VK916	NF2-0159	NF2-17	3 layers; red 4.78; chaotic 3.27; gray clay to depth	Voids at 17.77 and 19.36 cm depth
VK916	NF2-0200	NF2-18	3 layers; red 3.62; chaotic 4.54; gray clay to depth	Void at 18.58 cm depth; recumbent/buried tubes
VK916	NF2-0202	NF2-19	3 layers; red 2.48; chaotic 1.75; gray clay to depth	Filled-in voids; recumbent/buried tubes
VK916	NF2-0205	NF2-20	3 layers; red 4.87; chaotic 3.25; gray clay to depth	Void at 13.0 cm depth
VK916	NF2-0207	NF2-21	3 layers; red 2.88; chaotic 3.66; gray clay to depth	Void at 18.45 cm depth
VK916	NF2-0208	NF2-22	3 layers; red 4.50; chaotic 3.83; gray clay to depth	Void at 15.5 cm; recumbent/buried tubes
VK916	NF2-0209	NF2-23	3 layers; red 3.39; chaotic 3.94; gray clay to depth	Void at 17.2 cm
VK916	NF2-0213	NF2-25	3 layers; red 4.73; chaotic 2.87; gray clay to depth	Void at 19.18 cm depth; recumbent/buried tubes
VK916	NF2-0214	NF2-26	3 layers; red gone; chaotic 3.82; gray clay to depth	Void at 20.74 cm depth; recumbent/buried tubes
VK916	NF2-0216	NF2-27	3 layers; red 3.85; chaotic 3.09; gray clay to depth	Void at 16.24 cm depth
VK916	NF2-0217	NF2-28	3 layers; red 2.45; chaotic 3.05; gray clay to depth	Voids at 12.58 and 14.66 cm; recumbent/buried tubes
VK916	NF2-0219	NF2-29	3 layers; red 4.62; chaotic 4.27; gray clay to depth	No voids; no tubes
VK916	NF2-0220	NF2-30	3 layers; red 2.93; chaotic 3.72; gray clay to depth	Void at 16.50 cm depth
VK916	NF2-0222	NF2-31	3 layers; red 5.05; chaotic 2.77; gray clay to depth	No voids; recumbent/buried tubes
VK916	NF2-0224	NF2-32	3 layers; red 1.70; chaotic 3.81; gray clay to depth	Filled-in voids; recumbent/buried tubes
VK916	NF2-0225	NF2-33	3 layers; red 2.26; chaotic 5.54; gray clay to depth	Void at 12.50 cm depth
VK916	NF2-0227	NF2-34	3 layers; red 4.14; chaotic 4.20; gray clay to depth	No voids
VK916	NF2-0228	NF2-35	3 layers; red 3.64; chaotic 2.16; gray clay to depth	Filled-in voids; recumbent/buried tubes
VK916	NF2-0230	NF2-36	3 layers; red 3.67; chaotic 2.56; gray clay to depth	Void at 15.86 cm depth; recumbent/buried tubes
VK916	NF2-0232	NF2-37	3 layers; red 3.88; chaotic 4.01; gray clay to depth	Voids at 14.83 and 15.76 cm; recumbent/buried tubes
VK916	NF2-0233	NF2-38	3 layers; red 2.12; chaotic 12.79; gray clay to depth	No voids; no tubes
VK916	NF2-0235	NF2-39	3 layers; red 4.03; chaotic 2.51; gray clay to depth	Void at 15.42 cm depth
VK916	NF2-0236	NF2-40	3 layers; red 4.95; chaotic 2.08; gray clay to depth	No voids; recumbent/buried tubes
VK916	NF3-0426	NF3-02	4 layers; pink, red 3.58, chaotic, gray clay	Voids at 15.85 and 16.57; recumbent/buried tube
VK916	NF3-0427	NF3-03	4 layers; pink, red 4.06, chaotic, gray clay	Voids at 9.93 and 16.61; recumbent/buried tubes
VK916	NF3-0429	NF3-04	4 layers; pink, red 3.85, chaotic, gray clay	Buried/recumbent tubes
VK916	NF3-0430	NF3-05	3 layers; red 4.04, chaotic, gray clay	Void at 11.56; recumbent/buried tube
VK916	NF3-0432	NF3-06	3 layers; red 2.50, chaotic, gray clay	Tiny void at 16.71; recumbent/buried tubes

Appendix E3. Sediment profile imaging data for Cruise 3B (Viosca Knoll Block 916).

Block	Station Transect-Timestamp	Station	Sedimentary layers and depths (cm)	Feeding void numbers and depths (cm)
VK916	NF3-0433	NF3-07	3 layers; red 2.44, chaotic, gray clay	Recumbent tube
VK916	NF3-0439	NF3-08	3 layers; red 2.68, chaotic, gray clay	Void at 17.35; recumbent/buried tubes
VK916	NF3-0441	NF3-09	4 layers; tan, red 3.09, chaotic, gray clay	Void? at 7.94; recumbent tubes
VK916	NF3-0443	NF3-10	4 layers; pink, red 3.85, chaotic, gray clay	Voids at 17.34 and 18.20; recumbent tubes
VK916	NF3-0445	NF3-11	4 layers; pink, red 4.06, chaotic, gray clay	No voids; recumbent/buried tubes
VK916	NF3-0446	NF3-12	4 layers; pink, red 3.94, chaotic, gray clay	Voids at 18.80 and 19.62 cm
VK916	NF3-0448	NF3-13	4 layers; pink, red 3.96, chaotic, gray clay	No voids; no tubes
VK916	NF3-0449	NF3-14	4 layers; pink, red 2.76, chaotic, gray clay	Void at 15.99 cm
VK916	NF3-0452	NF3-15	4 layers; pink, red 3.07, chaotic, gray clay	No voids; recumbent/buried tubes
VK916	NF3-0455	NF3-16	4 layers; pink, red 3.01, chaotic, gray clay	Voids at 18.23 and 18.54; recumbent/buried tubes
VK916	NF3-0457	NF3-17	4 layers; pink, red 3.88, chaotic, gray clay	Voids at 12.38 and 13.71 cm
VK916	NF3-0458	NF3-18	4 layers; pink, red 2.05, chaotic, gray clay	Void at 16.21; recumbent/buried tubes
VK916	NF3-0459	NF3-19	3 layers; red 1.43, chaotic, gray clay	No voids; resuspended tubes
VK916	NF3-0501	NF3-20	3 layers; gray 2.32, chaotic, gray clay	No voids; no tubes
VK916	NF3-0502	NF3-21	4 layers; tan, red 3.45, chaotic, gray clay	Void at 16.24 cm depth
VK916	NF3-0503	NF3-22	3 layers; red 2.88, chaotic, gray clay	Voids at 11.38 and 16.72; resuspended foraminiferan tube
VK916	NF3-0505	NF3-23	3 layers; red 1.79, chaotic, gray clay	Voids at 9.52 and 18.50; recumbent/buried tubes
VK916	NF3-0506	NF3-24	4 layers; pink, red 2.49, chaotic, gray clay	Void at 14.17; no tubes
VK916	NF3-0508	NF3-25	4 layers; pink, red 3.41, chaotic, gray clay	Voids at 12.72 and 13.38; no tubes
VK916	NF3-0509	NF3-26	3 layers; red 3.16, chaotic, gray clay	Tiny void at 13.40; recumbent/buried tube
VK916	NF3-0511	NF3-27	4 layers; pink, red 3.88, chaotic, gray clay	Void at 13.29; recumbent/buried tubes
VK916	NF3-0512	NF3-28	3 layers; red 3.05, chaotic, gray clay	Tiny void at 15.41; no tubes
VK916	NF3-0514	NF3-29	3 layers; red 3.08, chaotic, gray clay	Voids at 11.78 and 18.94
VK916	NF3-0516	NF3-30	3 layers; patchy red/black 4.42, chaotic, gray clay	Recumbent foraminiferan tube
VK916	NF3-0517	NF3-31	3 layers; patchy red/black 3.38, chaotic, gray clay	Voids at 12.93 and 15.83; recumbent tube
VK916	NF3-0519	NF3-32	3 layers; patchy red/black 2.47, chaotic, gray clay	Void at 15.47 cm depth
VK916	NF3-0522	NF3-34	3 layers; patchy red/black 5.53, chaotic, gray clay	Voids at 13.95 and 14.21; recumbent tube
VK916	NF3-0523	NF3-35	3 layers; patchy red/black 5.49, chaotic, gray clay	Void at 18.32; recumbent/buried tubes
VK916	NF3-0525	NF3-36	4 layers; tan, uncon. black 5.85, con. black, gray clay	Void at 20.73 cm; recumbent/buried tubes
VK916	NF3-0527	NF3-37	3 layers; uncon. red 2.81, bl./white, red/gray clay	Void at 20.81; recumbent/buried tubes
VK916	NF3-0529	NF3-38	3 layers; clasty red/s 2.42, con. sulfitic, gray clay	Void at 20.27; Stage I tubes on surface
VK916	NF3-0531	NF3-39	4 layers; tan, red 0.31, sulfitic, gray clay	Voids at 16.38, 17.62; a few Stage I

Appendix E3. Sediment profile imaging data for Cruise 3B (Viosca Knoll Block 916).

Block	Station Transect-Timestamp	Station	RPD, penetration depth, boundary roughness, and grain size comments
VK916	NF1-1808	NF1-01	Red drilling mud, uppermost layer; dewatering channels
VK916	NF1-1811	NF1-02	
VK916	NF1-1813	NF1-03	Small patch of ligno-sulfate
VK916	NF1-1815	NF1-04	Dewatering channels
VK916	NF1-1818	NF1-05	
VK916	NF1-1819	NF1-06	
VK916	NF1-1822	NF1-07	Large patches of ligno-sulfate
VK916	NF1-1824	NF1-08	
VK916	NF1-1827	NF1-09	
VK916	NF1-1828	NF1-10	
VK916	NF1-1830	NF1-11	
VK916	NF1-1831	NF1-12	Dewatering channels
VK916	NF1-1833	NF1-13	
VK916	NF1-1835	NF1-14	
VK916	NF1-1836	NF1-15	Dewatering channels
VK916	NF1-1838	NF1-16	
VK916	NF1-1840	NF1-17	
VK916	NF1-1842	NF1-18	
VK916	NF1-1844	NF1-19	Sulfitic patches; small white (bacterial) patches?
VK916	NF1-1846	NF1-20	Large sulfitic patches; white (bacterial) patches?
VK916	NF1-1848	NF1-21	Large sulfitic patches; no white patches
VK916	NF1-1853	NF1-23	Some ligno-sulfate patches; overpenetrated
VK916	NF1-1857	NF1-24	Large ligno-sulfate patches; overpenetrated
VK916	NF1-1858	NF1-25	Ligno-sulfate patches
VK916	NF1-1900	NF1-26	
VK916	NF1-1902	NF1-27	Small sulfitic patches near surface dewatering channel
VK916	NF1-1903	NF1-28	Sulfitic patch at depth
VK916	NF1-1905	NF1-29	
VK916	NF1-1906	NF1-30	
VK916	NF1-1907	NF1-31	
VK916	NF1-1909	NF1-32	
VK916	NF1-1911	NF1-33	
VK916	NF1-1913	NF1-34	
VK916	NF1-1915	NF1-35	
VK916	NF1-1917	NF1-36	Some ligno-sulfate patches
VK916	NF1-1919	NF1-37	Some ligno-sulfate patches
VK916	NF1-1921	NF1-38	
VK916	NF1-1922	NF1-39	Erosional
VK916	NF1-1924	NF1-40	Some ligno-sulfate patches
VK916	NF2-0137	NF2-03	
VK916	NF2-0139	NF2-04	

Appendix E3. Sediment profile imaging data for Cruise 3B (Viosca Knoll Block 916).

Block	Station Transect-Timestamp	Station	RPD, penetration depth, boundary roughness, and grain size comments
VK916	NF2-0140	NF2-05	
VK916	NF2-0142	NF2-06	Partially oxidized surface?
VK916	NF2-0143	NF2-07	
VK916	NF2-0147	NF2-09	Dewatering channel
VK916	NF2-0148	NF2-10	
VK916	NF2-0150	NF2-11	
VK916	NF2-0152	NF2-12	Dewatering channels
VK916	NF2-0153	NF2-13	
VK916	NF2-0155	NF2-14	
VK916	NF2-0156	NF2-15	
VK916	NF2-0157	NF2-16	
VK916	NF2-0159	NF2-17	
VK916	NF2-0200	NF2-18	
VK916	NF2-0202	NF2-19	
VK916	NF2-0205	NF2-20	
VK916	NF2-0207	NF2-21	
VK916	NF2-0208	NF2-22	
VK916	NF2-0209	NF2-23	
VK916	NF2-0213	NF2-25	
VK916	NF2-0214	NF2-26	Indeterminate; overpenetrated (>22.45 cm)
VK916	NF2-0216	NF2-27	
VK916	NF2-0217	NF2-28	
VK916	NF2-0219	NF2-29	
VK916	NF2-0220	NF2-30	Erosional
VK916	NF2-0222	NF2-31	
VK916	NF2-0224	NF2-32	Small sulfitic patch
VK916	NF2-0225	NF2-33	Medium-sized sulfitic patches (filled?)
VK916	NF2-0227	NF2-34	
VK916	NF2-0228	NF2-35	Erosional
VK916	NF2-0230	NF2-36	Erosional
VK916	NF2-0232	NF2-37	Small sulfitic patch
VK916	NF2-0233	NF2-38	Small sulfitic patches; tiny white (bacterial) patches? Red sediment (6.4-12 cm)?; surface indistinct
VK916	NF2-0235	NF2-39	Half of surface sulfitic; small white bacterial patches?; erosional
VK916	NF2-0236	NF2-40	Bacterial patches with sulfitic sediment; possibly anoxic?
VK916	NF3-0426	NF3-02	RPD is pink layer; some ligno-sulfate present
VK916	NF3-0427	NF3-03	RPD is pink layer
VK916	NF3-0429	NF3-04	RPD is pink layer
VK916	NF3-0430	NF3-05	
VK916	NF3-0432	NF3-06	

Appendix E3. Sediment profile imaging data for Cruise 3B (Viosca Knoll Block 916).

Block	Station Transect-Timestamp	Station	RPD, penetration depth, boundary roughness, and grain size comments
VK916	NF3-0433	NF3-07	
VK916	NF3-0439	NF3-08	
VK916	NF3-0441	NF3-09	RPD is tan; thin and patchy RPD
VK916	NF3-0443	NF3-10	RPD is pink
VK916	NF3-0445	NF3-11	RPD is pink; thin and mottled RPD
VK916	NF3-0446	NF3-12	RPD is pink; patchy RPD
VK916	NF3-0448	NF3-13	RPD is pink
VK916	NF3-0449	NF3-14	RPD is pink
VK916	NF3-0452	NF3-15	RPD is pink
VK916	NF3-0455	NF3-16	RPD is pink; weak RPD
VK916	NF3-0457	NF3-17	RPD is pink; thin and discontinuous RPD; erosional
VK916	NF3-0458	NF3-18	RPD is pink; thin RPD
VK916	NF3-0459	NF3-19	Erosional
VK916	NF3-0501	NF3-20	Erosional
VK916	NF3-0502	NF3-21	RPD is tan; thin and discontinuous RPD
VK916	NF3-0503	NF3-22	RPD is pink
VK916	NF3-0505	NF3-23	.
VK916	NF3-0506	NF3-24	RPD is pink; thin and discontinuous RPD
VK916	NF3-0508	NF3-25	RPD is pink; thin and discontinuous RPD
VK916	NF3-0509	NF3-26	
VK916	NF3-0511	NF3-27	RPD is pink; very thin RPD
VK916	NF3-0512	NF3-28	Sloped
VK916	NF3-0514	NF3-29	
VK916	NF3-0516	NF3-30	Patchy sulfitic layer to 4.42 cm; oxidized sediment over half the surface
VK916	NF3-0517	NF3-31	Patchy sulfitic layer to 3.88; bacterial strands
VK916	NF3-0519	NF3-32	Patchy sulfitic layer to 2.47; bacterial strands
VK916	NF3-0522	NF3-34	Patchy sulfitic layer to 5.53; bacterial strands; oxidized sediment on surface
VK916	NF3-0523	NF3-35	Patchy sulfitic layer to 5.49; bacterial strands
VK916	NF3-0525	NF3-36	RPD is tan; thin RPD; sulfitic layer at surface; bacterial mats
VK916	NF3-0527	NF3-37	RPD is tan; thin RPD; sulfitic layer with torn-up bacterial mat from 2.8 to 5.8 cm
VK916	NF3-0529	NF3-38	Patchy sulf. layer to 7 cm; patches of bacterial mat
VK916	NF3-0531	NF3-39	RPD is tan; patchy sulfitic layer to 5.2 cm

APPENDIX E4

Plates (Photographs) from Sediment Profile Imaging Surveys at Garden Banks Block 516 and Viosca Knoll Block 916

Plate 1. Sediment profile image from the near-field site at Garden Banks Block 516 during Cruise 1B showing a granular surface layer of pink to reddish-tan sediment underlain by a dark gray to black sulfidic layer. Station NFS-1.19. Image width is 15 cm.

Plate 2. Sediment profile image from the near-field site at Garden Banks Block 516 during Cruise 1B representative of areas where a white microbial mat at the sediment surface overlies a sulfidic gray layer, which in turn, overlies a mottled light gray to tan sediment. Station NFS-2.12. Image width is 15 cm.

Plate 3. Sediment profile image from the near-field site at Garden Banks Block 516 during Cruise 1B showing the presence of a white surface microbial mat on the right. Station NFS-2.21. Image width is 15 cm.

Plate 4. Sediment profile image from the near-field site at Garden Banks Block 516 during Cruise 1B showing a microbial mat and a gray mottled sediment column at sediment profile imagery camera penetration depth. Station NFS-2.22. Image width is 15 cm.

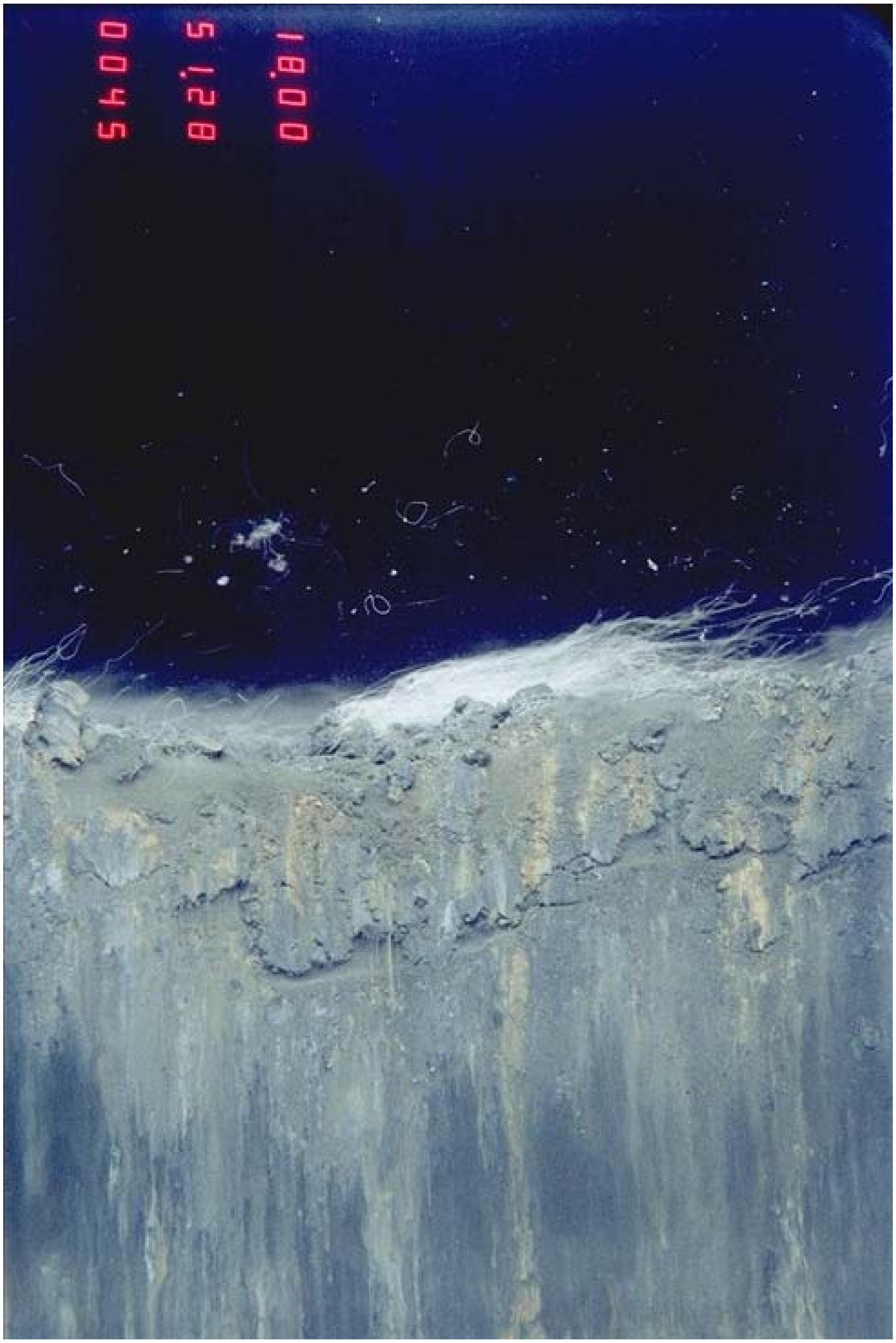


Plate 5. Sediment profile image from the near-field site at Garden Banks Block 516 during Cruise 1B showing a microbial mat and with the sediment column below completely gray to black; very little ferric hydroxide (yellow to tan color) is observed. Station NFS-2.23. Image width is 15 cm.

Plate 6. Sediment profile image from the near-field site at Garden Banks Block 516 during Cruise 1B showing burrow-mottled oxidized sediment with only a hint of gray layering at the penetration depth of the camera. Station NFS-3.17. A feeding void is present (arrow). Image width is 15 cm.

Plate 7. Sediment profile image from a far-field site at Garden Banks Block 516 during Cruise 1B showing pink to tan mottled surface sediments underlain by a thin layer of sulfidic gray to black sediment, which in turn, overlies a homogeneous light gray layer. Station FF6-S3.13. Image width is 15 cm.

Plate 8. Sediment profile image from a far-field site at Garden Banks Block 516 during Cruise 1B showing a near-surface layer of mottled pink to tan sediment overlying faint gray layers at depth. Station FF2-S1.4. Image width is 15 cm.

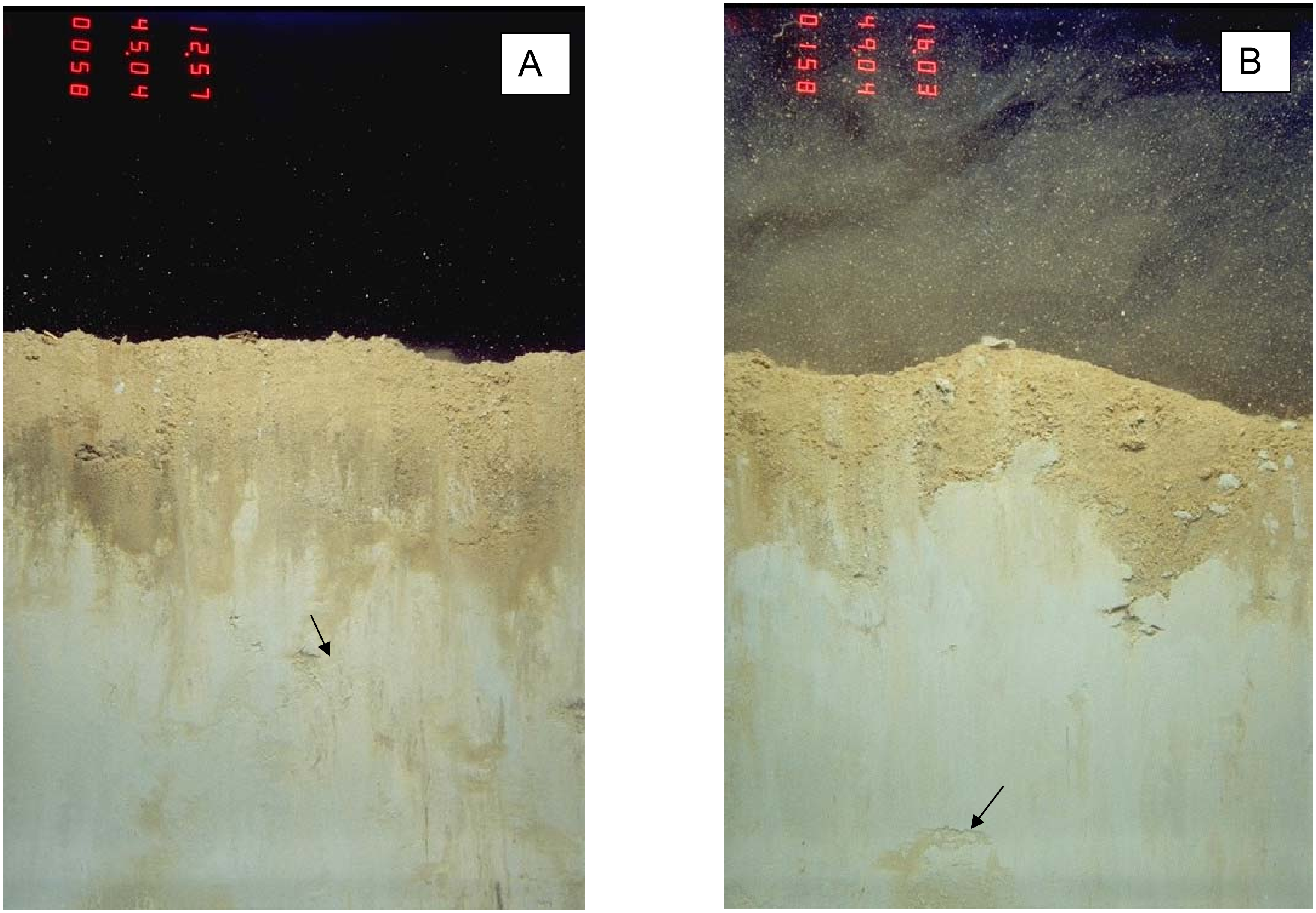


Plate 9. Sediment profile images from the near-field site at Viosca Knoll Block 916 during pre-drilling Cruise 1B showing layer of reddish-brown sediment overlying a homogeneous gray clay. A: Station NFS-1.22. B: Station NFS-2.27. Feeding voids (arrows) are present in both pictures, and a worm is seen at depth in 9-A. Image width is 15 cm.

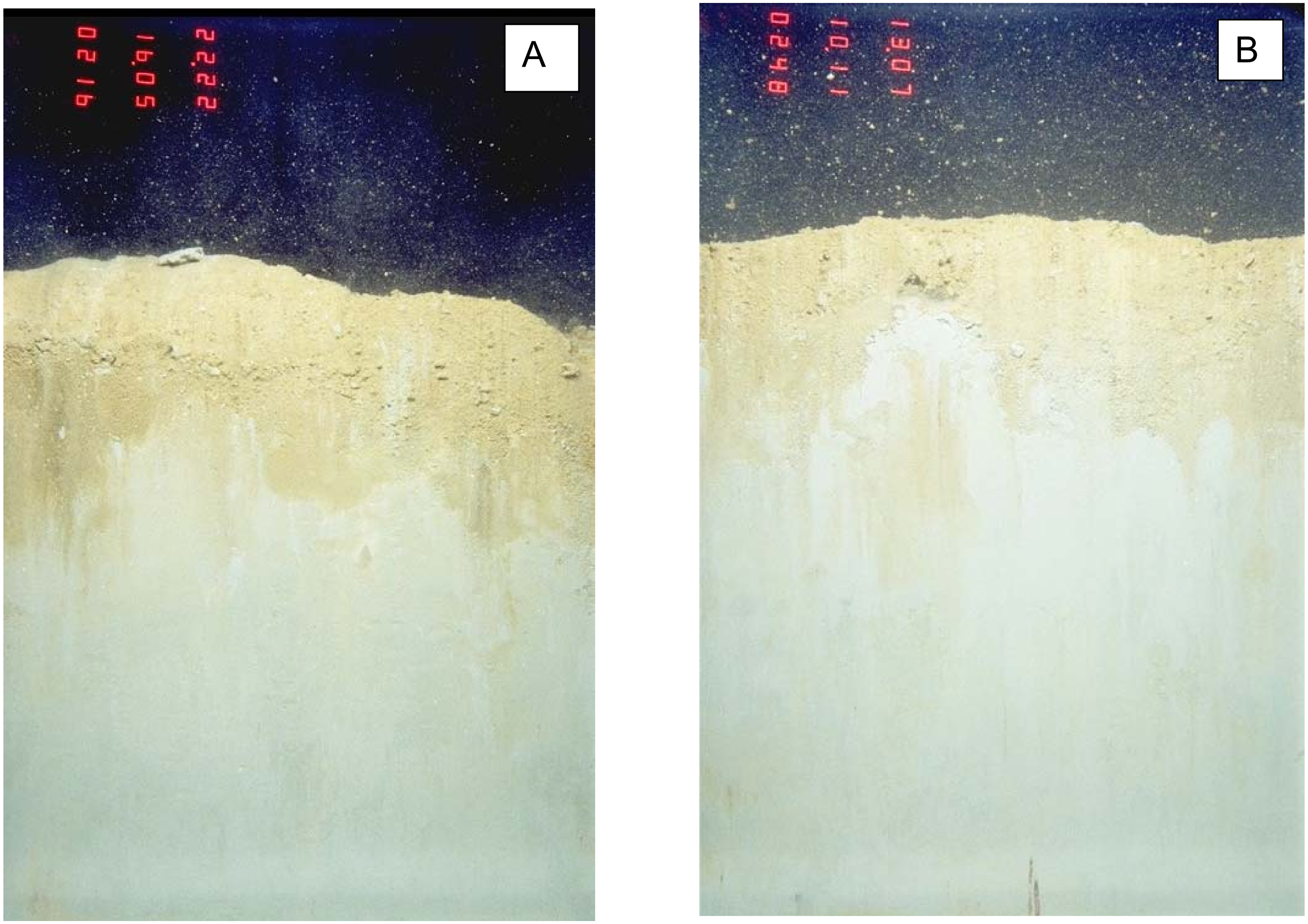


Plate 10. Sediment profile images that are typical of the far-field sites sampled during pre-drilling Cruise 1B at Viosca Knoll Block 916. A: Station FF2-S1.11. B: Station FF4-2.7. Image width is 15 cm.

Plate 11. Sediment profile image typical of the far-field sites sampled during pre-drilling Cruise 1B at Viosca Knoll Block 916. Station FF6-S3.18. Image width is 15 cm.

Plate 12. Sediment profile image from the near-field site at Garden Banks Block 516 during Cruise 2B. The upper few millimeters of the sediment consist of sand-sized grain aggregates; four layers of oxidized and reduced sediments are visible. Station NF1-6B. Image width is 15 cm.

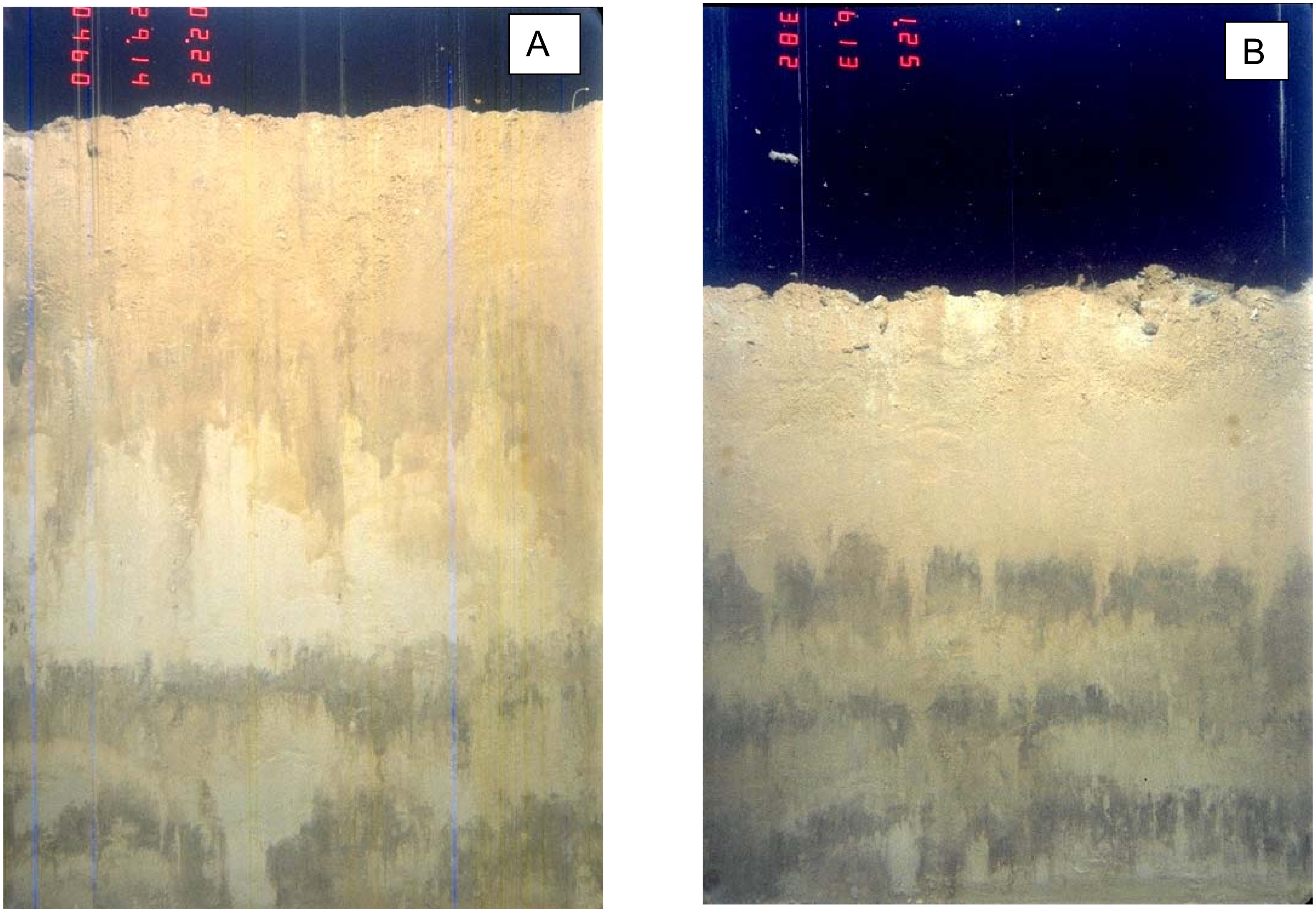


Plate 13. Sediment profile images from the near-field site at Garden Banks Block 516 during Cruise 2B. A: Station NF3-27B shows six layers of oxidized and reduced sediments. B: Station NF2-35B has seven layers of oxidized and reduced sediments. Image width is 15 cm.

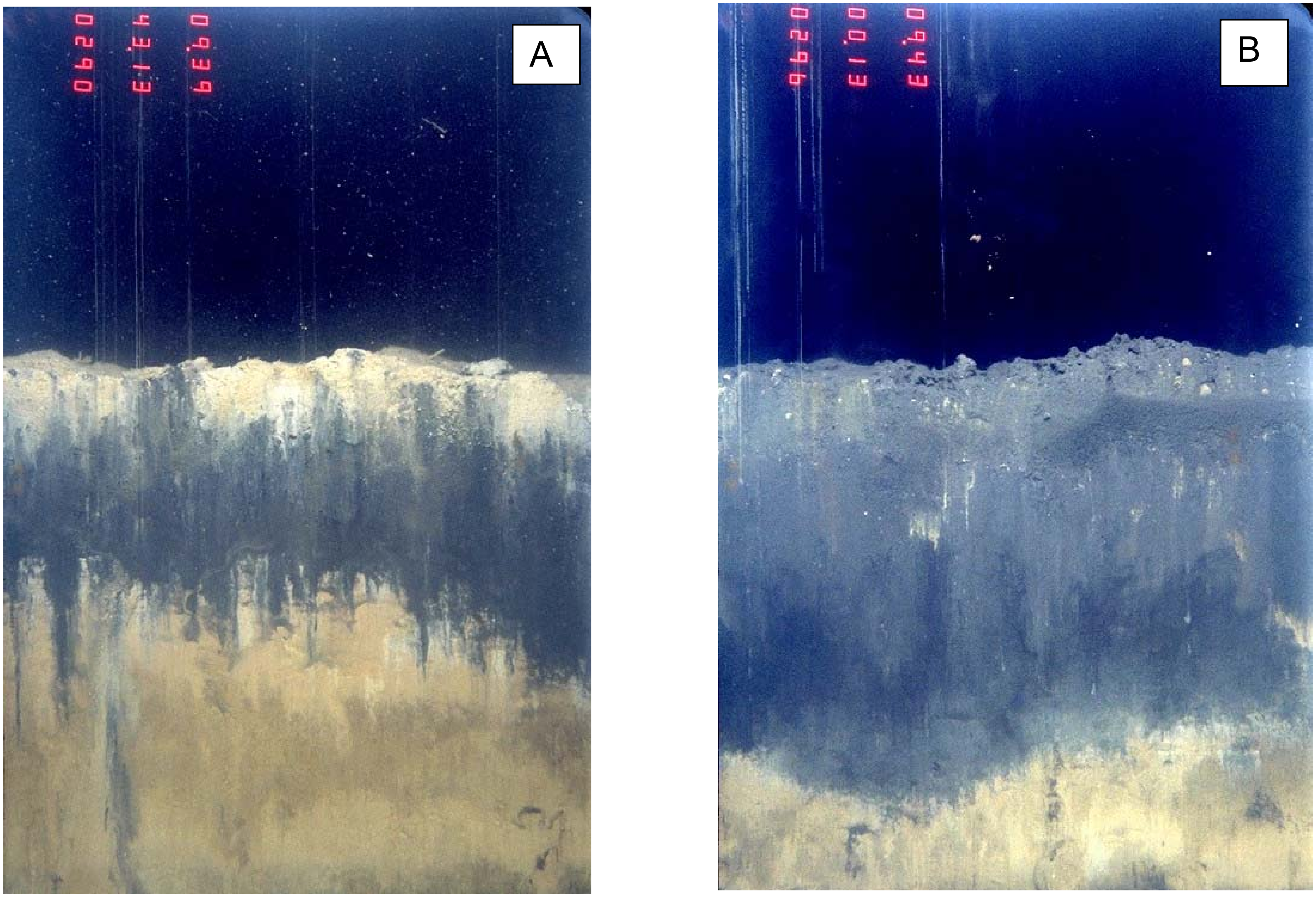


Plate 14. Sediment profile images from the near-field site at Garden Banks Block 516 during Cruise 2B showing black reduced sediments extending to the sediment-water interface and bounded above and below (A) or only below (B) by light gray sediment. A: Station NF1-25B. B: Station NF1-28B. Image width is 15 cm.

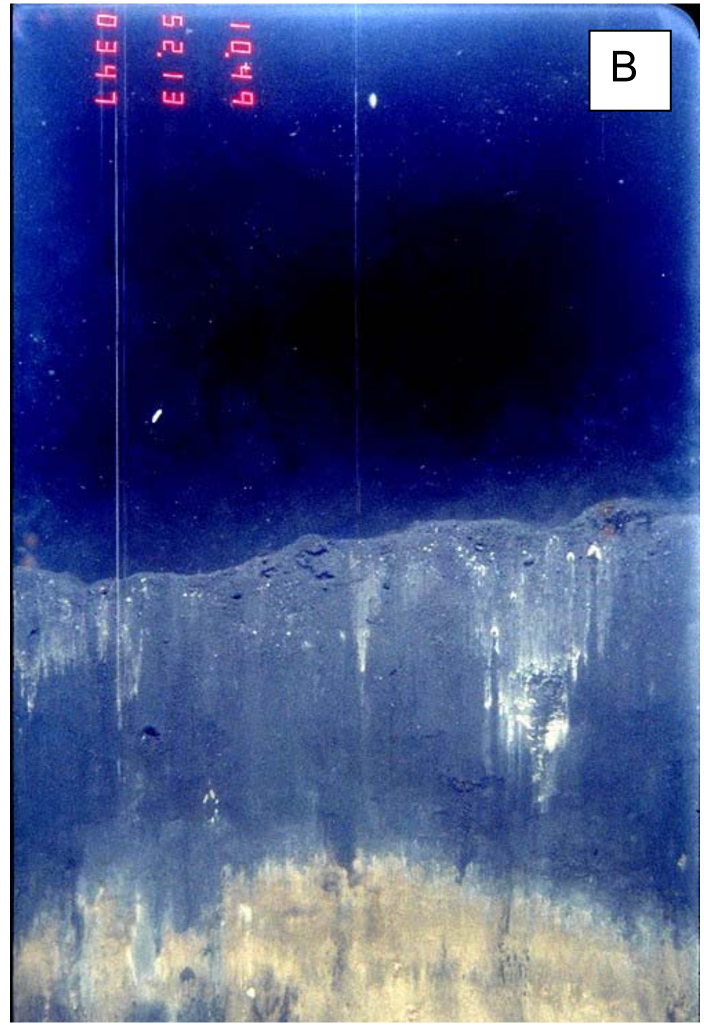


Plate 15. Sediment profile images from the near-field site at Garden Banks Block 516 during Cruise 2B showing black reduced sediments extending to the sediment-water interface and bounded below by light gray sediment. A: Station NF2-17A. B: Station NF2-18A. Image width is 15 cm.

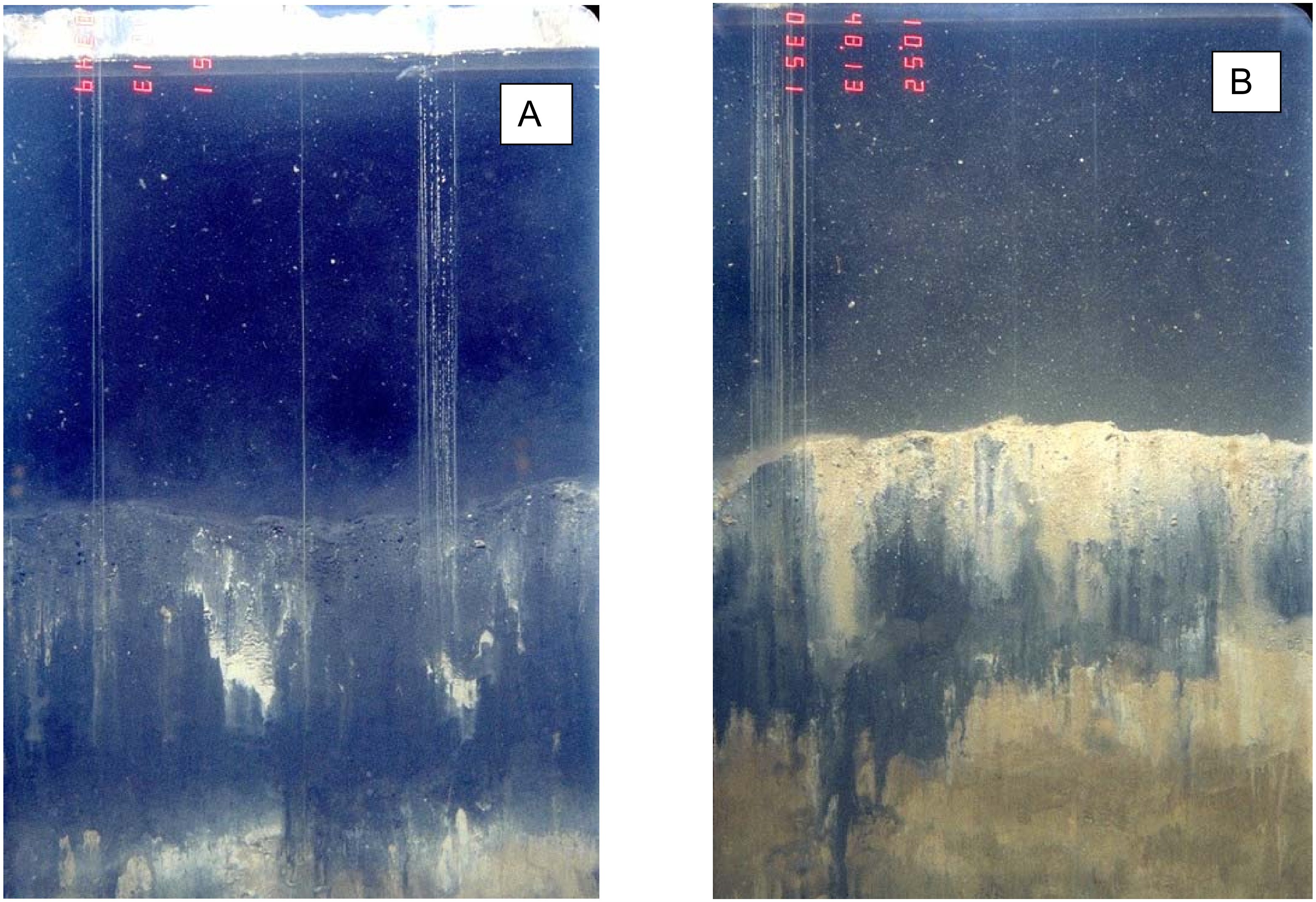


Plate 16. Sediment profile images from the near-field site at Garden Banks Block 516 during Cruise 2B showing black reduced sediments extending to the sediment-water interface and bounded below (A) or above and below (B) by light gray sediment.
A: Station NF2-19A. B: Station NF2-20A. Image width is 15 cm.

Plate 17. Sediment profile images from the near-field site at Garden Banks Block 516 during Cruise 2B showing black reduced sediments extending to the sediment-water interface and bounded below by light gray sediment. Station NF2-25A. Image width is 15 cm.

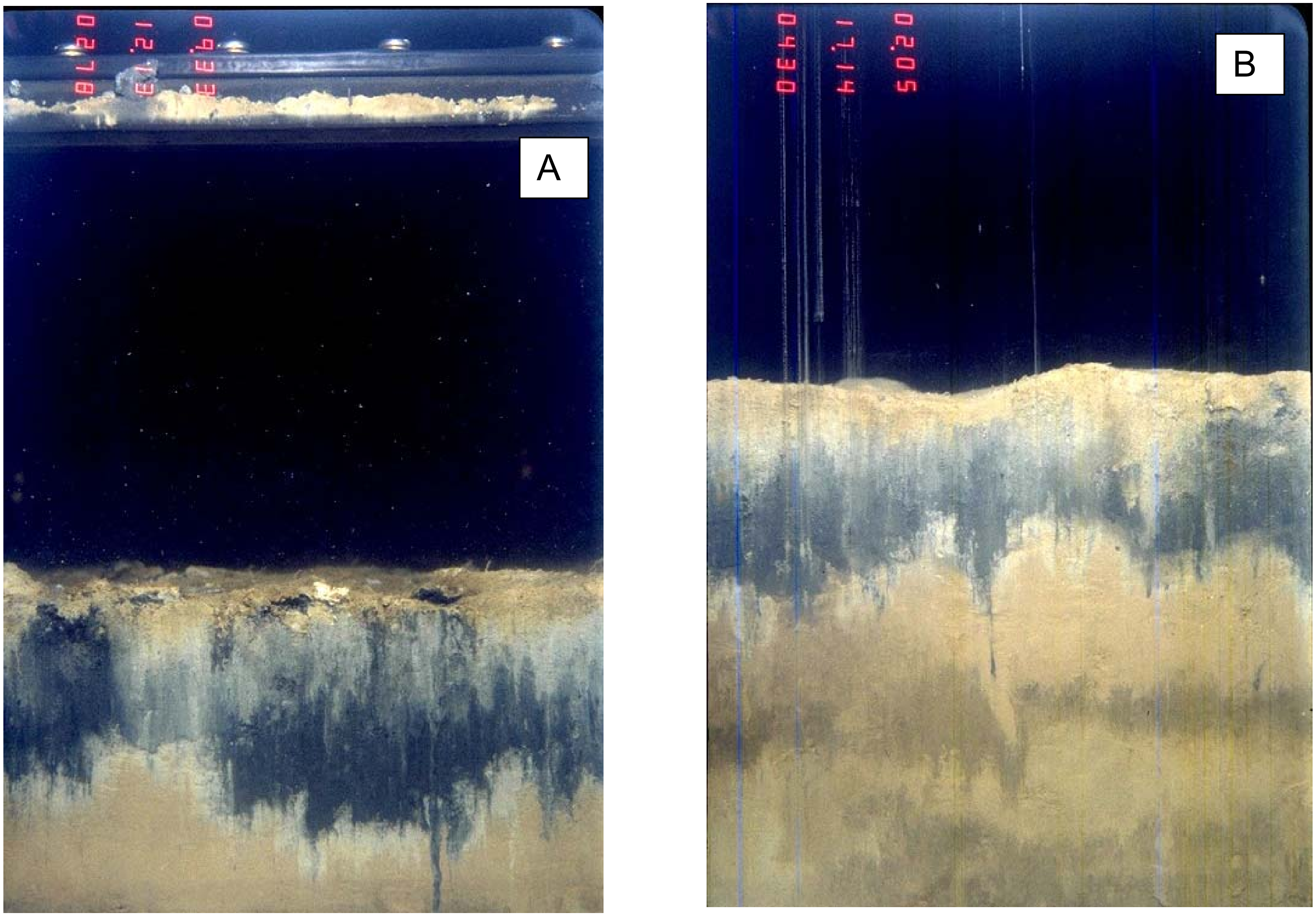


Plate 18. Sediment profile images from the near-field site at Garden Banks Block 516 during Cruise 2B showing black reduced sediments bounded by light gray sediment, and under ambient? reddish-brown sediment. A: Station NF1-19B. B: Station NF3-12B. Image width is 15 cm.

Plate 19. Sediment profile image typical of the far-field sites from Garden Banks Block 516 during Cruise 2B showing absence of dark black reduced sediments. Feeding voids (arrows) are present. Station FF3-13B. Image width is 15 cm.

Plate 20. Sediment profile image taken in the near-field site at Viosca Knoll Block 916 during post-drilling Cruise 3B showing a layer of red to reddish-gray sediment over a region of chaotic fabric, which in turn, overlays a homogeneous gray clay. Station NF1-01 (1808). The surface is erosional, and no Stage I tubes are visible. Dewatering channels are present (3 arrows near surface) in the uncompacted surface region. A tiny feeding void (arrow) is present at 18-cm depth. Image width is 15.2 cm.

Plate 21. Sediment profile image from the near-field site at Viosca Knoll Block 916 during post-drilling Cruise 3B showing numerous infaunal feeding voids (arrows). Station NF1-37 (1919). Image width is 15.2 cm.

Plate 22. Sediment profile image from the near-field site at Viosca Knoll Block 916 during post-drilling Cruise 3B showing chaotic fabric, feeding voids (arrows), and small reddish patches of lignosulfate. Station NF1-40 (1924). Image width is 15.2 cm.

Plate 23. Sediment profile image from the near-field site at Viosca Knoll Block 916 during post-drilling Cruise 3B showing Stage I infauna on the sediment surface (white arrows) and feeding voids (arrows). Station NF2-14 (0155). Image width is 15.2 cm.

Plate 24. Sediment profile image from the near-field site at Viosca Knoll Block 916 during post-drilling Cruise 3B showing a layer of red to reddish-gray sediment over a region of chaotic fabric, which in turn, overlays a homogeneous gray clay. Station NF2-21 (0207). Stage I tubes (white arrows) are visible on the sediment surface. A tiny feeding void (arrow) is present at 18-cm depth. Image width is 15.2 cm.

Plate 25. Sediment profile image from the near-field site at Viosca Knoll Block 916 during post-drilling Cruise 3B showing sulfidic areas within the layer of red to reddish-gray sediment. Station NF2-39 (0235). Thin strands of a small disturbed bacterial mat are visible in the upper layer (white arrows). A region of chaotic fabric is still present between the red layer and the homogeneous gray clay. The surface is erosional, and no Stage I tubes are visible. A tiny feeding void (black arrow) is present at 18-cm depth. Image width is 15.2 cm.

Plate 26. Sediment profile image from the near-field site at Viosca Knoll Block 916 during post-drilling Cruise 3B showing sulfidic areas within the layer of red to reddish-gray sediment. Station NF2-40 (0236). Thin strands of a small disturbed bacterial mat are visible in the upper layer (white arrows). A region of chaotic fabric is still present between the red layer and the homogeneous gray clay. A few recumbent tubes are present near the surface. No voids are present. Image width is 15.2 cm.

Plate 27. Sediment profile image from the near-field site at Viosca Knoll Block 916 during post-drilling Cruise 3B showing a redox potential discontinuity (light pinkish-red sediment at surface). Station NF3-14 (0449). Image width is 15.2 cm.

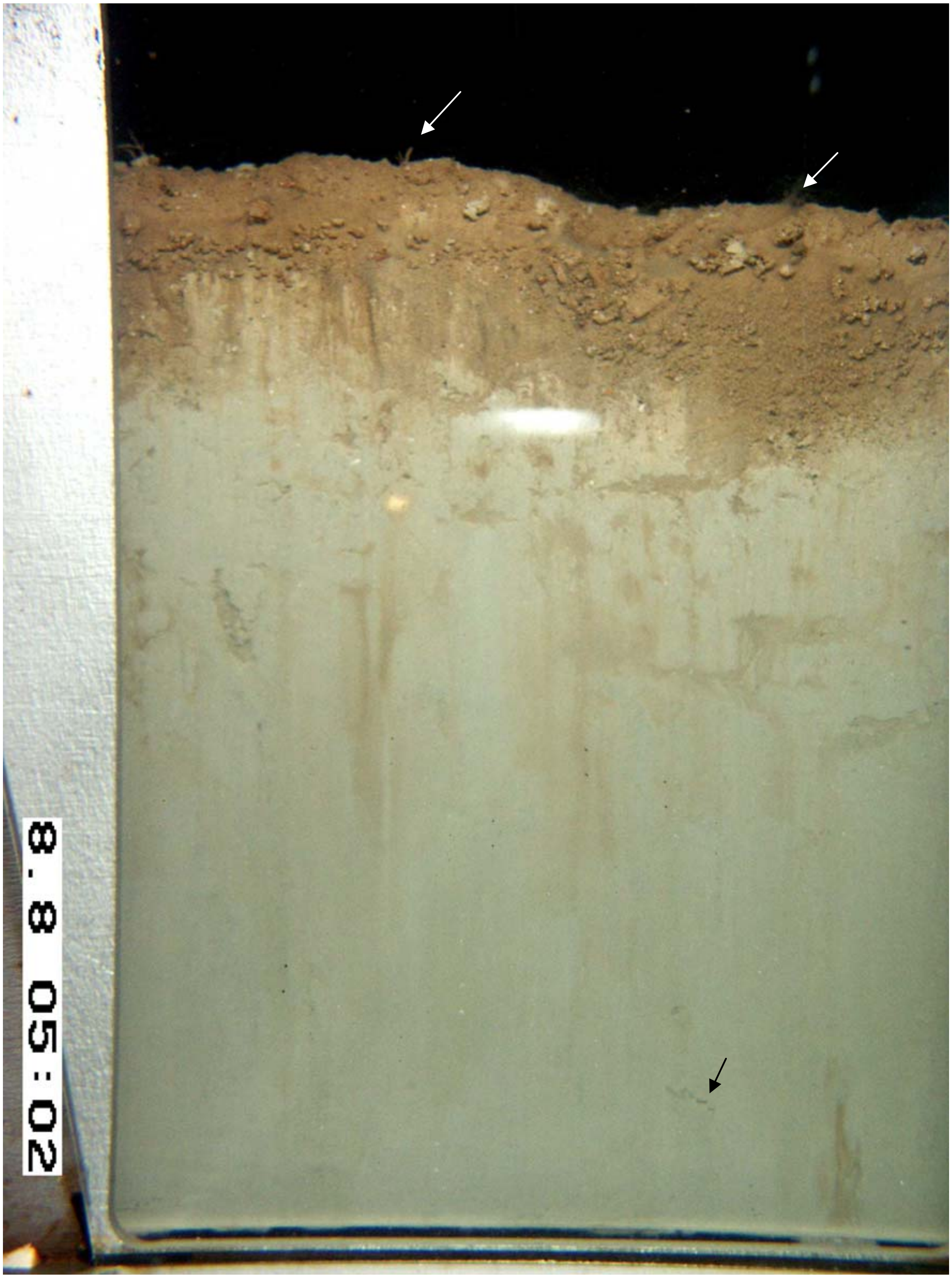


Plate 28. Sediment profile image from the near-field site at Viosca Knoll Block 916 during post-drilling Cruise 3B showing a redox potential discontinuity (light-brown sediment at surface). Station NF3-21 (0502). Stage I tubes are present on the sediment surface (white arrows). A feeding void is present at 16-cm depth. (arrow). An example of successional Stage I-III. Image width is 15.2 cm.

Plate 29. Sediment profile image from the near-field site at Viosca Knoll Block 916 during post-drilling Cruise 3B showing a thin redox potential discontinuity (patches of light-brown sediment at surface). Station NF3-29 (0514). Stage I tubes are present on the sediment surface (white arrows). A feeding void is present at 16-cm depth (black arrow). Image width is 15.2 cm.

Plate 30. Sediment profile image from the near-field site at Viosca Knoll Block 916 during post-drilling Cruise 3B showing sulfidic areas within the layer of red to reddish-gray sediment. Station NF3-34 (0522). Thin strands of a small disturbed bacterial mat are visible in the upper layer (white arrows). A region of chaotic fabric is still present between the upper layer and the homogeneous gray clay. A recumbent tube is present on the surface (white dashed arrow). Feeding voids are visible at depth (black arrows). Image width is 15.2 cm.

Plate 31. Sediment profile image from the near-field site at Viosca Knoll Block 916 during post-drilling Cruise 3B showing sulfidic areas within the layer of red to reddish-gray sediment. Station NF3-35 (0523). Thin strands of a small disturbed bacterial mat are visible in the upper layer (white arrows). A region of chaotic fabric is still present between the upper layer and the homogeneous gray clay. Recumbent/buried tubes are present on the surface (white dashed arrows). Feeding voids are visible at depth (black arrows). Image width is 15.2 cm.

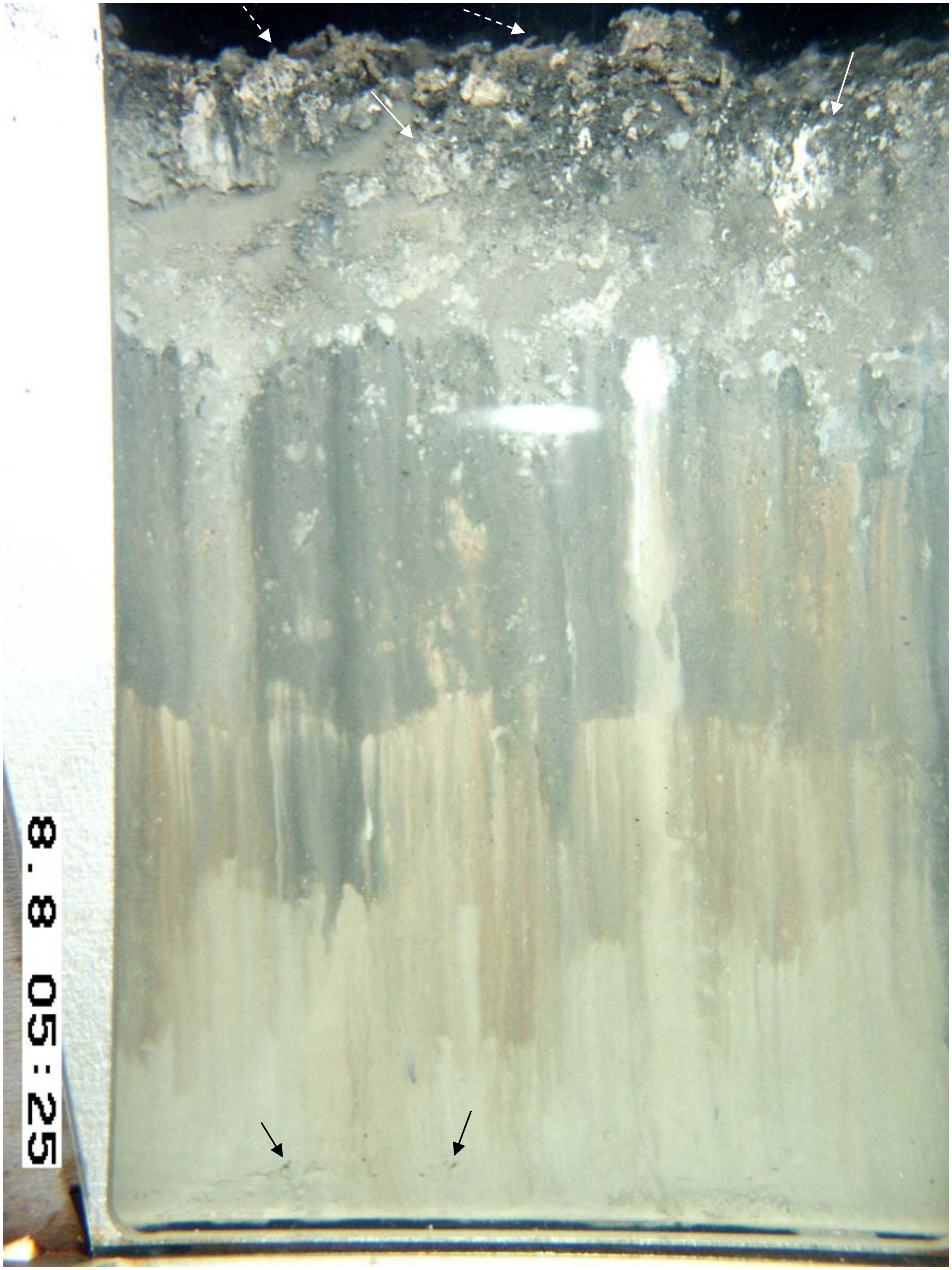


Plate 32. Sediment profile image from the near-field site at Viosca Knoll Block 916 during post-drilling Cruise 3B showing a thick sulfidic area underlying a thin redox potential discontinuity (<1 cm). Station NF3-36 (0525). A patchy white bacterial mat is visible in the upper layer (white arrows). Stage I tubes (dashed white arrows) are present on the surface. Small feeding voids are visible at depth (black arrows). The successional stage is I-III; Organism-Sediment Index is 6. Image width is 15.2 cm.

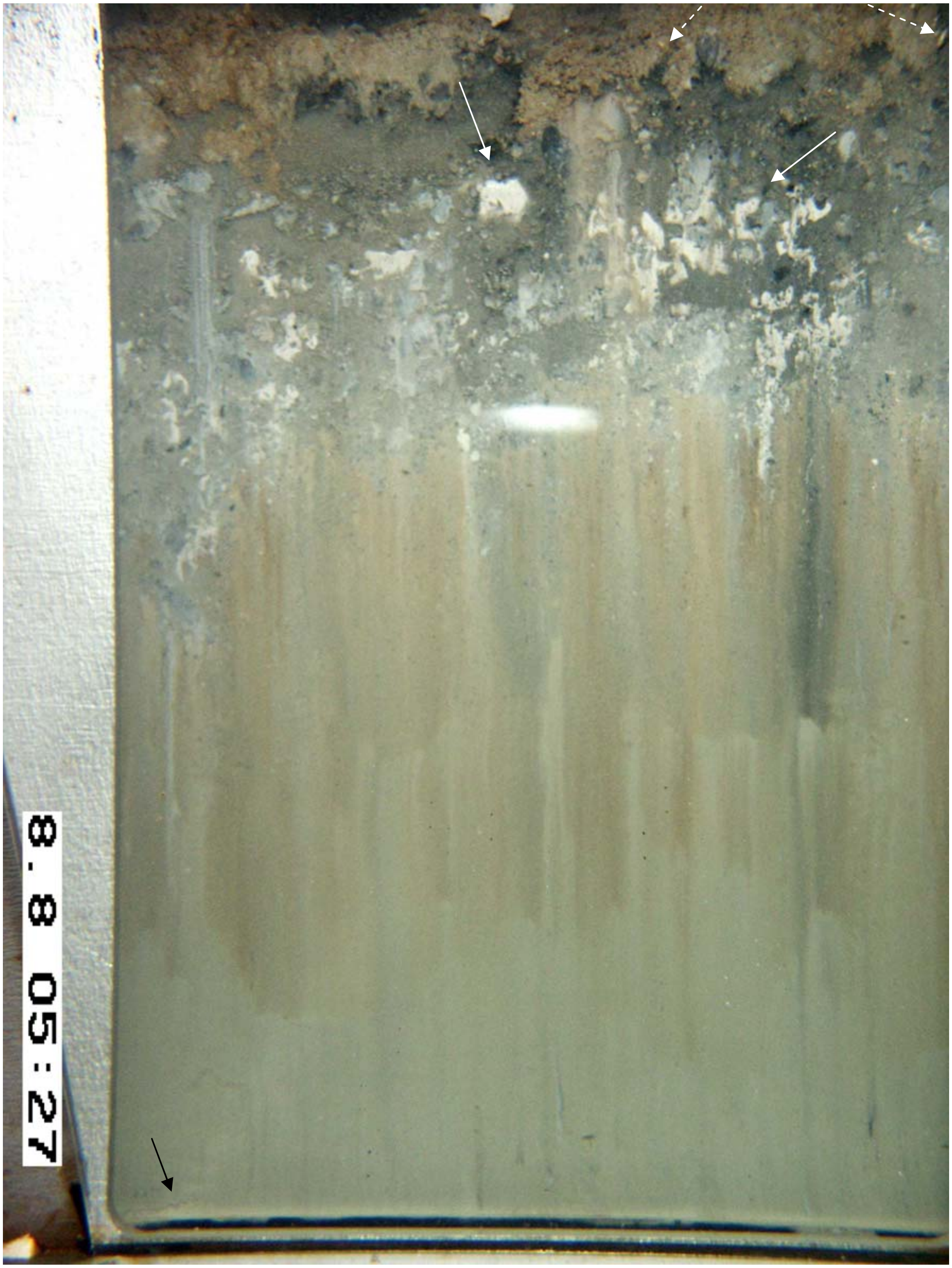


Plate 33. Sediment profile image from the near-field site at Viosca Knoll Block 916 during post-drilling Cruise 3B showing a sulfidic area underlying a thin redox potential discontinuity (<1 cm). Station NF3-37 (0527). Patches of a buried white bacterial mat are visible in the upper layer (white arrows). Recumbent/buried tubes (dashed white arrows) are present near the surface. A small feeding void is visible at depth (black arrow). Image width is 15.2 cm.

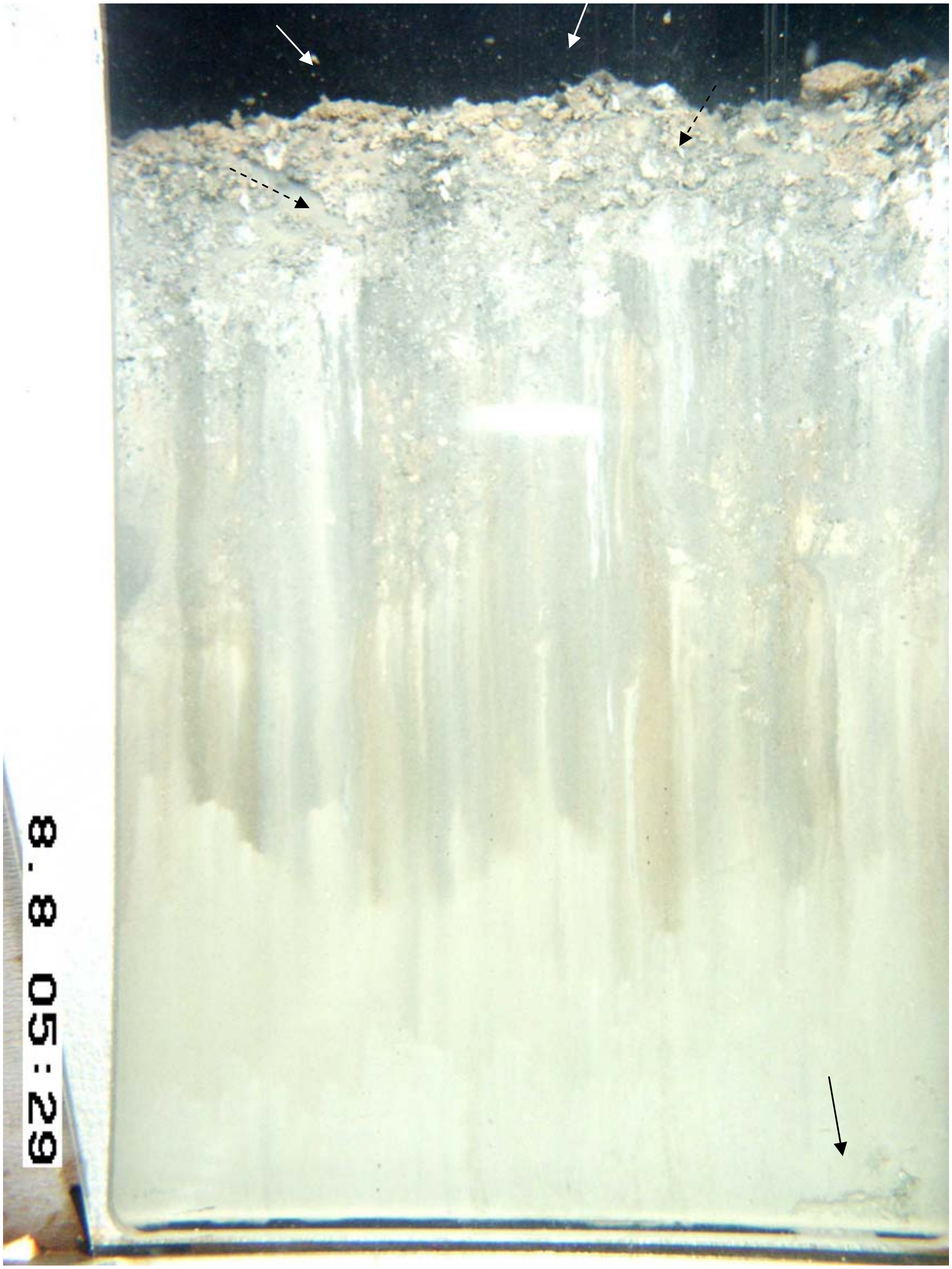


Plate 34. Sediment profile image from the near-field site at Viosca Knoll Block 916 during post-drilling Cruise 3B showing a patchy sulfidic layer and bacterial mat. Station NF3-38 (0529). The red layer is absent. Patches of a buried white bacterial mat are visible in the upper layer (dashed black arrows). Stage I tubes (white arrows) are present on the surface. A feeding void is visible at depth (black arrow). The successional stage is I-III; Organism-Sediment Index is 5. Image width is 15.2 cm.

Plate 35. Sediment profile image from the near-field site at Viosca Knoll Block 916 during post-drilling Cruise 3B showing a sulfidic layer underlying a thin redox potential discontinuity. Station NF3-39 (0531). The red layer is absent. Patches of a buried white bacterial mat are visible in the upper layer (dashed black arrows). A few Stage I tubes (white arrows) are present on the surface. Feeding voids are visible at depth (black arrows). The successional stage is I-III; Organism-Sediment Index is 6. Image width is 15.2 cm.

APPENDIX F1

Sediment Profile Imaging Data from Garden Banks Block 602

Appendix F1. Sediment profile imaging data for Garden Banks Block 602.

Site	Station	Rep	Penetration Ave	Surface Relief	RPD Ave	Sediment Type	Sediment Color
GB602	FF1	5	4.2	0.3	0.6	silt-clay	reddish brown
GB602	FF1	6	8.8	2.0	0.8	silt-clay	reddish brown/brown
GB602	FF1	7	7.3	1.8	1.0	silt-clay	reddish brown/brown
GB602	FF1	9	7.4	2.5	0.5	silt-clay	reddish brown/brown
GB602	FF1	11	6.4	1.5	0.8	silt-clay	reddish brown
GB602	FF1	12	11.5	1.1	1.1	silt-clay	reddish brown/darker brown
GB602	FF1	13	7.4	1.3	1.0	silt-clay	reddish brown/darker brown
GB602	FF1	14	7.1	1.1	0.8	silt-clay	grayish reddish brown
GB602	FF1	15	2.8	1.1	0.7	silt-clay	reddish brown
GB602	FF1	16	4.5	0.3	0.6	silt-clay	reddish brown
GB602	FF1	17	6.8	1.5	0.9	silt-clay	reddish brown/brown
GB602	FF1	18	7.3	0.5	0.8	silt-clay	reddish brown/brown
GB602	FF1	19	7.4	0.7	0.9	silt-clay	reddish brown/brown
GB602	FF1	20	3.8	0.8	0.9	silt-clay	reddish brown
GB602	FF1	21	6.4	0.7	0.8	silt-clay	reddish brown
GB602	FF1	22	7.9	1.4	0.7	silt-clay	reddish brown/brown
GB602	FF1	23	2.9	0.5	IND	silt-clay	grayish brown
GB602	FF1	24	8.7	1.1	0.7	silt-clay	reddish brown/brown
GB602	FF1	25	7.9	0.4	0.9	silt-clay	reddish brown/brown
GB602	FF1	28	4.6	0.8	0.9	silt-clay	reddish brown
GB602	FF1	29	6.7	1.5	IND	silt-clay	reddish brown/brown
GB602	FF1	30	6.7	1.4	0.9	silt-clay	reddish brown/brown
GB602	FF1	31	6.0	1.4	1.0	silt-clay	reddish brown/brown
GB602	FF1	32	7.4	0.7	0.8	silt-clay	reddish brown/brown
GB602	FF1	33	4.9	1.3	0.9	silt-clay	reddish brown/brown
GB602	FF1	34	10.4	0.4	0.7	silt-clay	reddish brown/brown
GB602	FF1	35	11.0	0.7	0.8	silt-clay	reddish brown/brown
GB602	FF1	36	7.1	2.6	1.2	silt-clay	reddish brown/brown
GB602	FF4	1	14.9	1.9	0.8	silt-clay	brownish red/brown/off-white
GB602	FF4	2	13.6	0.6	1.2	silt-clay	grayish-white red layer/reddish brown layer/darker brown with patches of white
GB602	FF4	3	13.0	1.1	0.8	silt-clay	granular reddish brown/smooth reddish brown/brown
GB602	FF4	4	15.3	1.3	1.0	silt-clay	granular reddish brown/smooth reddish brown/brown/off-white
GB602	FF4	5	10.8	1.0	0.9	silt-clay	granular reddish brown/off-white and deep red mixed layer/brown/off-white
GB602	FF4	6	14.9	0.5	0.7	silt-clay	granular grayish red/reddish brown (smooth)/brown/thick off-white laye
GB602	FF4	7	11.2	5.0	0.7	silt-clay	granular grayish red/smooth deep reddish brown/off-white
GB602	FF4	8	15.0	0.6	0.5	silt-clay	granular grayish red/reddish brown/dark brown/off-white
GB602	FF4	9	11.6	1.3	0.6	silt-clay	granular grayish red/reddish brown/dark brown/light brown/dark brown
GB602	FF4	10	14.2	1.2	1.0	silt-clay	reddish brown/brown
GB602	FF4	11	14.6	0.6	0.8	silt-clay	reddish brown/brown/light brown (off-white)/brown mixed with areas of light brown (off-white
GB602	FF4	12	11.5	3.7	IND	silt-clay	reddish brown/brown
GB602	FF4	13	11.8	1.1	0.6	silt-clay	reddish brown/darker brown with areas of red and white
GB602	FF4	14	11.3	3.2	IND	silt-clay	reddish brown/darker brown with areas of red and white
GB602	FF4	15	14.0	0.7	0.9	silt-clay	reddish brown/darker brown
GB602	FF4	16	12.0	2.1	0.8	silt-clay	reddish brown/light brown (tan)/brown
GB602	FF4	17	13.0	0.4	0.7	silt-clay	reddish brown/darker red (thin layer)/brown and light brown (off white) mixed laye
GB602	FF4	18	12.4	2.5	IND	silt-clay	reddish brown/darker brown
GB602	FF4	19	13.4	0.6	0.8	silt-clay	reddish brown/darker brown/off-white

Appendix F1. Sediment profile imaging data for Garden Banks Block 602.

Site	Station	Rep	Penetration Ave	Surface Relief	RPD Ave	Sediment Type	Sediment Color
GB602	FF4	20	13.7	0.7	0.5	silt-clay	grayish red/off-white/reddish brown/dark brown/mottled white and dark browr
GB602	FF4	21	15.9	1.8	0.6	silt-clay	granular reddish brown/off-white layer/reddish brown/brown/off-white
GB602	FF4	22	16.4	1.6	1.1	silt-clay	granular reddish gray/smooth reddish brown/brown/off-white
GB602	FF4	23	12.6	2.9	1.1	silt-clay	granular reddish gray/smooth reddish brown/dark brown/off-white
GB602	FF4	24	14.0	0.8	0.8	silt-clay	granular reddish brown/off-white thin layer/reddish brown (smooth)/brown with white patches
GB602	FF4	25	12.6	3.1	1.1	silt-clay	granular reddish brown/smooth reddish brown/deep red/brown with white streaks
GB602	FF4	26	13.0	0.6	0.7	silt-clay	granular reddish gray/off-white/smooth red-reddish brown/browr
GB602	FF4	27	11.9	1.0	0.7	silt-clay	granular reddish brown/smooth reddish brown/browr
GB602	FF4	28	11.7	1.4	0.7	silt-clay	granular reddish brown/smooth reddish brown/browr
GB602	FF4	29	14.3	0.1	0.9	silt-clay	grayish red/reddish-white/brown with white patches
GB602	FF4	30	13.9	0.9	1.0	silt-clay	granular reddish brown/smooth reddish brown/mottled brown and white
GB602	FF4	31	10.6	1.4	0.7	silt-clay	reddish brown/brown
GB602	FF4	32	15.3	0.7	0.6	silt-clay	granular reddish brown/smooth reddish brown/reddish darker browr
GB602	FF4	33	12.5	0.8	1.0	silt-clay	granular grayish red/reddish brown (smooth)/brown/off-white
GB602	FF4	34	12.7	0.7	0.9	silt-clay	granular reddish brown/smooth reddish brown/reddish darker browr
GB602	FF4	35	14.4	1.1	0.0	silt-clay	granular reddish brown/smooth reddish brown/reddish darker brown/off-white
GB602	FF4	36	13.2	0.9	0.7	silt-clay	granular reddish brown/smooth reddish brown/brown/mixed brown and off-white
GB602	FF5	1	14.9	1.3	IND	silt-clay	granulated reddish brown/smooth reddish brown/brown/off-white (light brown
GB602	FF5	2	10.7	0.5	0.4	silt-clay	light reddish brown/brownish tan
GB602	FF5	3	7.0	1.2	0.4	silt-clay	light reddish brown
GB602	FF5	4	9.7	0.5	0.6	silt-clay	light reddish brown
GB602	FF5	5	9.8	0.6	0.7	silt-clay	light reddish brown/darker browr
GB602	FF5	7	11.8	0.4	0.6	silt-clay	light reddish brown
GB602	FF5	8	12.5	0.9	0.4	silt-clay	light reddish brown/slightly darker brown/light brown (tan)
GB602	FF5	9	6.4	0.3	0.5	silt-clay	light brown
GB602	FF5	10	11.6	1.4	0.5	silt-clay	reddish brown/darker browr
GB602	FF5	11	13.0	2.3	0.7	silt-clay	granular grayish red/smooth reddish brown/deep reddish - darker browr
GB602	FF5	12	13.4	0.7	0.9	silt-clay	reddish brown/dark brown/off-white/browr
GB602	FF5	13	11.5	1.5	IND	silt-clay	smooth reddish brown/thin granulated strip (reddish brown/smooth reddish browr
GB602	FF5	14	11.3	0.6	0.6	silt-clay	grayish red/reddish brown/browr
GB602	FF5	15	9.9	0.8	0.6	silt-clay	granulated grayish-reddish brown/reddish brown/browr
GB602	FF5	16	9.5	0.5	IND	silt-clay	reddish brown/darker browr
GB602	FF5	17	8.6	3.6	0.7	silt-clay	granulated grayish-reddish brown/reddish brown/browr
GB602	FF5	18	13.2	0.5	IND	silt-clay	granulated reddish brown/smooth reddish brown/brown/off-white (light brown)/browi
GB602	FF5	19	9.6	1.0	0.6	silt-clay	granulated grayish-reddish brown/smooth reddish brown/browr
GB602	FF5	20	5.3	0.9	0.5	silt-clay	reddish brown
GB602	FF5	22	8.7	0.6	0.5	silt-clay	light reddish brown/darker browr
GB602	FF5	23	11.3	1.6	0.6	silt-clay	light reddish brown/darker browr
GB602	FF5	24	13.7	1.8	IND	silt-clay	light reddish brown/darker reddish brown/light brown/dark brown with some light brown patches
GB602	FF5	25	11.6	1.5	0.7	silt-clay	light reddish brown/darker browr
GB602	FF5	26	13.5	0.5	IND	silt-clay	light reddish brown/darker browr
GB602	FF5	27	12.7	2.2	IND	silt-clay	light reddish brown/darker browr
GB602	FF5	31	3.5	1.7	0.4	silt-clay	light reddish brown
GB602	FF5	36	7.4	2.1	0.5	silt-clay	light reddish brown
GB602	NF1	2	10.5	1.9	0.2	silt-clay	reddish light gray to dark greenish gray/white/brownish red/dark browr
GB602	NF1	3	8.4	0.7	0.2	silt-clay	gray/reddish brown/dark browr
GB602	NF1	4	9.0	0.8	0.5	silt-clay	reddish gray/reddish brown/dark browr

Appendix F1. Sediment profile imaging data for Garden Banks Block 602.

			Penetration	Surface	RPD	Sediment	Sediment
Site	Station	Rep	Ave	Relief	Ave	Type	Color
GB602	NF1	5	5.0	2.4	0.3	silt-clay	reddish gray/grayish brown
GB602	NF1	6	10.8	1.3	0.3	silt-clay	reddish gray/reddish brown/dark browr
GB602	NF1	7	13.0	3.8	0.6	silt-clay	reddish gray/reddish brown/dark brown/light brown/dark browr
GB602	NF1	8	10.4	0.7	0.6	silt-clay	reddish brown/grayish reddish brown/reddish brown/browr
GB602	NF1	9	10.7	1.0	0.5	silt-clay	reddish brown/lighter brown/reddish brown/brown/light brown (tan)/browı
GB602	NF1	10	11.2	1.0	0.3	silt-clay	gray/brownish red/mixed brown and light browr
GB602	NF1	11	12.6	1.8	0.0	silt-clay	gray/brownish red/brown/light brown/browr
GB602	NF1	12	8.4	1.2	0.4	silt-clay	reddish gray/reddish brown
GB602	NF1	13	5.6	1.9	0.3	silt-clay	light brown
GB602	NF1	14	10.6	1.2	0.1	silt-clay	pocket of dark gray/brownish red on sides of pocket/bottom of mottled brown and light browr
GB602	NF1	16	10.1	1.8	0.5	silt-clay	reddish gray/brownish red/brown/light brown/browr
GB602	NF1	17	10.4	0.5	0.2	silt-clay	reddish gray/dark greenish gray/white/reddish brown/light browr
GB602	NF1	18	10.3	1.0	0.8	silt-clay	reddish gray/white/light reddish brown/brown/light reddish brown/browr
GB602	NF1	19	10.3	0.6	1.6	silt-clay	reddish gray/brownish red/brown/light reddish brown/browr
GB602	NF1	20	10.4	0.6	0.9	silt-clay	reddish gray/brownish red/brown/light reddish brown/browr
GB602	NF1	21	11.5	1.1	0.9	silt-clay	reddish light gray/dark greenish gray/white/brownish red/light brown and dark brown mixture
GB602	NF1	22	10.1	1.2	0.0	silt-clay	reddish light gray/dark greenish gray/white/brownish red/light brown/dark browr
GB602	NF1	23	10.5	1.0	0.3	silt-clay	reddish light gray/dark greenish gray/white/brownish red and dark browr
GB602	NF1	24	11.7	1.2	0.3	silt-clay	reddish light gray/dark greenish gray/white/brownish red and dark browr
GB602	NF1	25	10.5	1.9	0.1	silt-clay	reddish light gray/dark greenish gray/white/brownish red and dark browr
GB602	NF1	26	14.2	1.8	0.2	silt-clay	reddish light gray/dark greenish gray/white/reddish light brown/dark browr
GB602	NF1	27	9.9	2.9	0.4	silt-clay	reddish light gray/dark greenish gray/white/reddish light brown/dark brown/light brown/dark browr
GB602	NF1	28	13.6	1.1	0.2	silt-clay	reddish light gray/dark greenish gray/white/brownish red/brown with areas of light browr
GB602	NF1	29	10.1	1.8	0.2	silt-clay	reddish light gray to dark greenish gray/reddish light brown/brown/light brown/browr
GB602	NF1	30	10.8	1.6	0.3	silt-clay	reddish light gray/dark greenish gray/white/brownish red/dark browr
GB602	NF1	31	11.5	0.4	0.3	silt-clay	reddish light gray/dark greenish gray/white/brownish red/dark browr
GB602	NF1	32	9.2	1.0	0.2	silt-clay	reddish light gray/dark greenish gray/white/brownish red/dark browr
GB602	NF1	33	8.0	1.1	0.2	silt-clay	reddish light gray/dark greenish gray/white/reddish browr
GB602	NF1	34	9.8	0.9	0.3	silt-clay	reddish light gray/dark greenish gray/white and reddish browr
GB602	NF1	35	14.4	1.2	0.2	silt-clay	reddish light gray/dark greenish gray/white/reddish dark browr
GB602	NF1	36	12.6	1.1	0.2	silt-clay	reddish light gray/dark greenish gray/white/light brown/dark brown/light brown/dark browr
GB602	NF1	37	13.3	0.8	0.4	silt-clay	reddish light gray/dark greenish gray/white/light brown/dark brown/light brown/dark browr
GB602	NF1	38	13.5	0.8	0.3	silt-clay	reddish light gray/dark greenish gray/white/dark brown/light brown/dark brown/light brown/dark browı
GB602	NF2	1	10.8	0.8	0.0	silt-clay	gray/reddish-light brown/brown
GB602	NF2	2	14.5	0.9	0.0	silt-clay	gray/brownish red/patchy brown-light browr
GB602	NF2	3	14.8	0.7	0.0	silt-clay	gray/brownish red/brown/light brown/browr
GB602	NF2	4	2.7	1.1	0.8	silt-clay	light brownish gray
GB602	NF2	5	15.0	1.5	0.0	silt-clay	gray/brownish red/brown/light brown/browr
GB602	NF2	6	14.4	1.3	0.0	silt-clay	gray/brownish red/patchy brown-light browr
GB602	NF2	7	14.8	0.8	0.0	silt-clay	gray/brownish red/brown/light brown/browr
GB602	NF2	8	14.7	0.6	0.0	silt-clay	gray/brownish red/brown/light brown/browr
GB602	NF2	9	14.5	0.5	0.0	silt-clay	gray/brownish red/brown/light brown/browr
GB602	NF2	10	14.3	0.3	0.0	silt-clay	gray/dark gray/light brown/reddish brown/light brown/reddish brown/light brown/browı
GB602	NF2	11	13.9	0.7	0.0	silt-clay	gray/dark gray/light brown/reddish brown/light brown/reddish brown/light brown/browı
GB602	NF2	12	14.6	0.8	0.0	silt-clay	gray/dark gray/white/light brown/reddish brown/light brown/browr
GB602	NF2	13	10.8	1.0	0.0	silt-clay	gray/dark gray/light brown
GB602	NF2	14	10.7	0.4	0.0	silt-clay	gray/dark gray/light brown

Appendix F1. Sediment profile imaging data for Garden Banks Block 602.

Site	Station	Rep	Penetration Ave	Surface Relief	RPD Ave	Sediment Type	Sediment Color
GB602	NF2	15	10.2	0.8	0.0	silt-clay	gray/dark gray/light brown
GB602	NF2	16	9.6	2.0	0.0	silt-clay	gray/dark gray/light brown
GB602	NF2	17	9.1	0.7	0.0	silt-clay	gray/dark gray/light brown
GB602	NF2	18	9.9	0.7	0.0	silt-clay	gray/dark gray/light brown
GB602	NF2	19	15.1	0.8	0.0	silt-clay	gray/dark gray/light brown/reddish brown/light brown/browr
GB602	NF2	20	16.8	0.1	0.0	silt-clay	gray/reddish-light brown/brown
GB602	NF2	21	15.8	0.3	0.0	silt-clay	brownish gray/dark greenish gray/brownish red/browr
GB602	NF2	22	14.0	1.6	0.0	silt-clay	brownish gray/dark greenish gray/reddish light-browr
GB602	NF2	23	16.4	1.3	0.0	silt-clay	brownish gray/yellowish-reddish-brown/browr
GB602	NF2	24	9.9	0.8	0.0	silt-clay	brownish gray/dark gray/brownish red/patchy brown (some red)/light browr
GB602	NF2	25	10.9	2.2	0.1	silt-clay	gray-dark gray/reddish brown/browr
GB602	NF2	26	10.7	0.5	0.1	silt-clay	brownish gray-dark gray/reddish browr
GB602	NF2	27	10.3	0.6	0.7	silt-clay	brownish dark gray/brownish red/browr
GB602	NF2	28	10.3	0.9	0.0	silt-clay	brownish gray/dark greenish gray/reddish browr
GB602	NF2	29	19.7	1.7	0.6	silt-clay	brownish dark gray/brownish red/brown/light brown/browr
GB602	NF2	30	11.3	0.9	1.1	silt-clay	brownish gray/dark greenish gray/dark reddish gray/light browr
GB602	NF2	31	10.1	0.4	0.2	silt-clay	brownish gray/dark greenish gray/
GB602	NF2	32	9.7	1.0	0.1	silt-clay	brownish gray/dark greenish gray
GB602	NF2	33	9.7	0.6	0.0	silt-clay	brownish gray/dark greenish gray
GB602	NF2	34	9.2	0.5	0.1	silt-clay	brownish gray/dark greenish gray
GB602	NF2	35	9.7	0.3	0.1	silt-clay	brownish gray/dark greenish gray
GB602	NF2	36	13.0	1.2	0.0	silt-clay	brownish gray/dark greenish gray
GB602	NF3	1	15.8	1.0	0.1	silt-clay	dark gray/brownish red/brownish strip/light brown strip/browr
GB602	NF3	2	15.3	1.0	0.0	silt-clay	gray (lighter to darker)/reddish brown/browr
GB602	NF3	3	12.5	0.3	0.0	silt-clay	light gray/dark gray/reddish brown/light yellowish brown
GB602	NF3	4	14.8	1.1	0.3	silt-clay	light gray/dark gray/light brown/reddish brown/browr
GB602	NF3	5	13.9	0.5	0.0	silt-clay	light gray/dark greenish gray/reddish light brown/browr
GB602	NF3	6	10.9	1.5	0.0	silt-clay	light gray/off-white/dark gray/light brown/darker browr
GB602	NF3	7	16.8	1.2	0.7	silt-clay	light gray/dark greenish gray/reddish light brown/browr
GB602	NF3	8	15.6	0.8	0.6	silt-clay	light gray/dark greenish gray/reddish-yellow-brown/brown/mottled yellowish browr
GB602	NF3	9	15.7	1.0	0.0	silt-clay	grayish brown/reddish light-brown/mottled darker browr
GB602	NF3	10	14.7	2.2	0.0	silt-clay	gray/brownish red/light brown/browr
GB602	NF3	11	15.5	1.0	0.1	silt-clay	gray/brownish red/brown/light brown/dark browr
GB602	NF3	12	13.7	1.2	0.0	silt-clay	gray/brownish red/brown/light brown/dark browr
GB602	NF3	13	15.3	0.9	0.0	silt-clay	dark gray/brownish red/dark brown
GB602	NF3	14	16.1	1.0	0.0	silt-clay	dark gray/brownish red/brown
GB602	NF3	15	14.3	0.6	0.0	silt-clay	dark gray/brownish red/brown
GB602	NF3	16	14.3	0.2	0.0	silt-clay	gray/brownish red/patchy brown-light browr
GB602	NF3	17	13.7	1.0	0.0	silt-clay	gray/brownish red/brown/light brown/browr
GB602	NF3	18	14.6	0.8	0.0	silt-clay	gray/brownish red/patchy brown and light brown/light browr
GB602	NF3	19	10.2	0.4	0.0	silt-clay	gray/brownish red/brown
GB602	NF3	20	10.4	1.5	0.0	silt-clay	gray/brownish red
GB602	NF3	21	11.2	1.8	0.0	silt-clay	gray/brownish red/brown
GB602	NF3	22	15.5	0.9	0.0	silt-clay	gray/brownish red/patchy brown-light brown/dark browr
GB602	NF3	23	15.1	0.5	0.0	silt-clay	gray/brownish red/patchy brown-light browr
GB602	NF3	24	10.7	0.8	0.0	silt-clay	gray/brownish red/patchy brown-light browr
GB602	NF3	25	13.4	0.8	0.0	silt-clay	gray/brownish red/brown/patchy brown-light browr

Appendix F1. Sediment profile imaging data for Garden Banks Block 602.

Site	Station	Rep	Penetration Ave	Surface Relief	RPD Ave	Sediment Type	Sediment Color
GB602	NF3	26	11.7	1.0	0.0	silt-clay	greenish gray/brownish red/light brown
GB602	NF3	27	15.7	1.6	0.0	silt-clay	gray/brownish red/light brown/dark brown/light browr
GB602	NF3	28	16.1	0.3	0.2	silt-clay	light-dark gray with red streaks/brownish red/browr
GB602	NF3	29	14.2	0.7	0.4	silt-clay	grayish-white/reddish brown/brown/light brown (tan)/browr
GB602	NF3	30	14.7	1.1	0.4	silt-clay	light-dark gray with red streaks/brown with red areas/brown with light-brown area:
GB602	NF3	31	11.3	0.7	0.4	silt-clay	light-dark gray with red streaks/brownish red/browr
GB602	NF3	32	15.9	0.9	0.6	silt-clay	light-dark gray with red streaks/brownish red/brown with some red /brown-light browr
GB602	NF3	33	15.4	1.0	0.5	silt-clay	light-dark gray with red streaks/brownish red/brown/light brown/browr
GB602	NF3	34	15.5	1.2	0.6	silt-clay	gray with red and brownish red streaks/light gray-off white/darker brown with light brown patche:
GB602	NF3	35	9.1	0.7	0.7	silt-clay	reddish light gray/dark gray with some red streaks
GB602	NF3	36	16.0	0.9	0.8	silt-clay	grayish-white/reddish light brown/darker brown/light brown/dark browr
GB602	NF3	37	15.0	0.6	0.8	silt-clay	light-dark gray/reddish brown/light yellowish brown/brown/light brown/browr

Appendix F1. Sediment profile imaging data for Garden Banks Block 602.

Site	Station	Rep	Sediment Layers	Layer 1 Thickness	Layer 2 Thickness	Layer 3 Thickness	Layer 4 Thickness	Layer 5 Thickness	Layer 6 Thickness	Layer 7 Thickness	Layer Ave	Burrows	Tubes	Infauna	Max Depth Infauna2	Void Oxic	Void Anaerobic	Max Void Depth	Comments
GB602	FF1	5	0									0	0	0		0	0		
GB602	FF1	6	1	7.4							7.4	0	0	0		0	1	5.1	
GB602	FF1	7	1	6.3							6.3	0	0	0		0	1	3.3	
GB602	FF1	9	1	6.6							6.6	0	8	0		0	0		
GB602	FF1	11	0									0	0	0		0	0		
GB602	FF1	12	1	9.8							9.8	0	3	0		0	0		
GB602	FF1	13	1	6.4							6.4	0	1	0		0	0		
GB602	FF1	14	0									0	0	0		0	0		
GB602	FF1	15	0									0	0	0		0	0		
GB602	FF1	16	0									0	1	0		0	0		
GB602	FF1	17	1	5.8							5.8	0	0	0		0	0		
GB602	FF1	18	1	6.4							6.4	0	2	0		0	0		
GB602	FF1	19	1	6.7							6.7	0	10	1	0.1	0	0		Branched tubes
GB602	FF1	20	0									0	3	0		0	0		
GB602	FF1	21	0									0	1	2	0.8	0	1	2.6	
GB602	FF1	22	1	6.9							6.9	0	2	0		0	1	6.0	
GB602	FF1	23	0									0	1	0		0	0		
GB602	FF1	24	1	8.0							8.0	0	7	0		0	0		Branched tubes
GB602	FF1	25	1	6.8							6.8	0	0	0		0	0		
GB602	FF1	28	0									0	0	0		0	0		
GB602	FF1	29	1	7.7							7.7	0	0	0		0	0		
GB602	FF1	30	1	6.1							6.1	0	1	0		0	1	2.6	
GB602	FF1	31	1	5.5							5.5	0	5	0		0	0		Branched tubes
GB602	FF1	32	1	6.5							6.5	0	6	0		0	0		
GB602	FF1	33	1	4.0							4.0	0	0	0		0	0		
GB602	FF1	34	1	9.1							9.1	0	0	0		0	0		
GB602	FF1	35	1	10.3							10.3	0	2	0		0	0		
GB602	FF1	36	1	6.3							6.3	0	0	0		0	0		
GB602	FF4	1	2	6.7	4.4						5.5	0	0	0		0	0		
GB602	FF4	2	2	4.7	4.9						4.8	0	1	0		0	0		
GB602	FF4	3	2	3.5	6.7						5.1	0	2	0		0	0		
GB602	FF4	4	3	4.9	5.9	1.6					4.1	0	0	0		0	0		
GB602	FF4	5	4	4.1	1.8	3.1					3.0	0	0	0		0	0		
GB602	FF4	6	3	4.0	3.6	1.6					3.1	0	2	0		0	0		
GB602	FF4	7	2	3.3	2.5						2.9	0	0	1	2.9	0	0		
GB602	FF4	8	3	3.7	2.0	1.4					2.4	0	0	0		0	0		
GB602	FF4	9	4	3.8	3.3	1.3	1.7				2.5	0	0	0		0	0		
GB602	FF4	10	1	9.3							9.3	0	2	2	0.8	0	1	4.4	
GB602	FF4	11	3	9.8	1.2	1.3					4.1	0	0	0		0	0		
GB602	FF4	12	1	9.9							9.9	0	0	0		0	0		
GB602	FF4	13	1	8.5							8.5	0	0	0		0	0		
GB602	FF4	14	1	7.5							7.5	0	0	0		0	0		
GB602	FF4	15	1	11.6							11.6	0	1	0		0	0		
GB602	FF4	16	2	9.6	1.4						5.5	0	1	0		0	0		
GB602	FF4	17	2	8.2	1.7						5.0	0	0	0		0	0		
GB602	FF4	18	1	9.4							9.4	0	0	0		0	0		
GB602	FF4	19	2	8.7	3.0						5.8	0	2	0		0	0		Branched tubes

Appendix F1. Sediment profile imaging data for Garden Banks Block 602.

Site	Station	Rep	Sediment Layers	Layer 1 Thickness	Layer 2 Thickness	Layer 3 Thickness	Layer 4 Thickness	Layer 5 Thickness	Layer 6 Thickness	Layer 7 Thickness	Layer Ave	Burrows	Tubes	Infauna	Max Depth Infauna2	Void Oxic	Void Anaerobic	Max Void Depth	Comments
GB602	FF4	20	4	2.4	0.9	5.3	1.6				2.6	0	2	0		0	0		
GB602	FF4	21	4	4.0	1.3	4.7	2.4				3.1	0	0	0		0	0		
GB602	FF4	22	3	3.3	9.9	2.3					5.2	0	1	0		0	0		
GB602	FF4	23	3	2.8	6.4	2.0					3.7	0	0	0		0	0		
GB602	FF4	24	3	3.4	1.4	4.1					3.0	0	0	0		0	0		
GB602	FF4	25	3	2.8	5.2	1.5					3.2	0	1	0		0	0		
GB602	FF4	26	3	3.4	2.3	4.6					3.4	0	0	0		0	0		
GB602	FF4	27	2	3.3	6.4						4.9	0	0	0		0	0		
GB602	FF4	28	2	3.9	5.9						4.9	0	0	0		0	0		
GB602	FF4	29	2	5.6	4.2						4.9	0	1	0		0	0		
GB602	FF4	30	2	4.1	6.5						5.3	0	0	0		0	1	2.4	
GB602	FF4	31	1	7.9							7.9	0	0	0		0	0		
GB602	FF4	32	2	3.9	6.6						5.2	0	0	0		0	0		
GB602	FF4	33	3	5.0	4.0	2.3					3.8	0	0	0		0	0		
GB602	FF4	34	2	3.1	4.7						3.9	0	1	0		0	0		
GB602	FF4	35	3	4.6	5.9	2.8					4.4	0	2	0		0	0		
GB602	FF4	36	3	4.6	4.5	1.9					3.7	0	0	0		0	0		
GB602	FF5	1	3	3.1	7.8	3.0					4.6	0	2	0		0	0		
GB602	FF5	2	1	8.7							8.7	0	0	0		0	0		
GB602	FF5	3	0									0	1	0		0	0		
GB602	FF5	4	0									0	1	0		0	0		
GB602	FF5	5	1	9.2							9.2	1	3	0		1	0	7.9	
GB602	FF5	7	0									0	2	0		0	0		
GB602	FF5	8	2	9.2	1.7						5.5	0	0	0		0	0		
GB602	FF5	9	0									0	0	0		0	0		
GB602	FF5	10	1	11.0							11.0	0	3	0		0	0		
GB602	FF5	11	2	3.4	6.4						4.9	0	1	0		0	0		
GB602	FF5	12	3	8.2	2.2	2.7					4.4	0	1	0		0	1	10.3	
GB602	FF5	13	2	3.5	1.0						2.3	0	1	0		0	4	3.6	
GB602	FF5	14	2	2.5	8.1						5.3	0	0	0		0	0		
GB602	FF5	15	2	3.4	5.9						4.6	0	0	0		0	0		
GB602	FF5	16	1	8.9							8.9	0	4	0		0	0		
GB602	FF5	17	2	2.4	5.8						4.1	0	1	0		0	0		
GB602	FF5	18	4	2.6	7.0	1.9	1.5				3.3	0	3	0		0	0		
GB602	FF5	19	2	3.6	5.6						4.6	0	1	0		0	0		
GB602	FF5	20	0									0	1	0		0	0		
GB602	FF5	22	1	7.6							7.6	0	0	0		0	0		
GB602	FF5	23	1	10.8							10.8	0	0	0		0	0		
GB602	FF5	24	3	7.2	1.7	2.0					3.6	0	2	0		0	0		
GB602	FF5	25	1	10.6							10.6	0	1	0		0	0		
GB602	FF5	26	1	10.2							10.2	0	1	0		0	0		
GB602	FF5	27	1	11.2							11.2	0	1	0		0	0		
GB602	FF5	31	0									0	1	0		0	0		
GB602	FF5	36	0									0	0	0		0	1	5.6	
GB602	NF1	2	3	3.7	1.7	3.8					3.1	0	2	0		0	0		
GB602	NF1	3	2	3.5	3.5						3.5	0	2	0		0	0		
GB602	NF1	4	2	4.0	2.5						3.3	0	1?	0		0	1	2.2	

Appendix F1. Sediment profile imaging data for Garden Banks Block 602.

Site	Station	Rep	Sediment Layers	Layer 1 Thickness	Layer 2 Thickness	Layer 3 Thickness	Layer 4 Thickness	Layer 5 Thickness	Layer 6 Thickness	Layer 7 Thickness	Layer Ave	Burrows	Tubes	Infauna	Max Depth Infauna2	Void Oxic	Void Anaerobic	Max Void Depth	Comments
GB602	NF1	5	1	1.0							1.0	0	0	0		0	1	4.1	
GB602	NF1	6	2	2.8	4.0						3.4	0	0	0		0	0		
GB602	NF1	7	4	3.1	5.1	1.3	1.1				2.6	0	2	0		0	1	0.8	
GB602	NF1	8	3	1.7	1.7	4.0					2.4	0	3	0		0	0		
GB602	NF1	9	5	2.2	1.1	2.2	1.6	2.4			1.9	0	2	0		0	0		
GB602	NF1	10	2	4.8	2.1						3.4	0	0	0		0	0		
GB602	NF1	11	4	5.6	2.3	2.4	1.2				2.9	0	0	0		0	1	10.5	
GB602	NF1	12	1	3.1							3.1	0	2	0		0	0		
GB602	NF1	13	0									0	2	0		0	0		
GB602	NF1	14	2	2.5	3.1						2.8	0	1	0		0	0		
GB602	NF1	16	4	3.7	2.9	1.7	1.1				2.4	0	0	0		0	0		
GB602	NF1	17	4	2.7	2.1	0.8	2.4				2.0	0	12	0		0	0		
GB602	NF1	18	5	4.1	1.2	1.4	1.3	1.3			1.9	0	1	0		0	0		
GB602	NF1	19	4	4.6	3.0	1.3	0.9				2.5	0	0	0		0	0		
GB602	NF1	20	4	3.9	2.3	1.1	1.2				2.1	0	0	0		0	0		
GB602	NF1	21	4	2.8	2.0	1.0	1.5				1.8	0	5	0		0	0		
GB602	NF1	22	5	2.4	4.7	0.4	0.6	1.0			1.8	0	8	0		0	0		
GB602	NF1	23	3	3.4	3.3	0.9					2.5	0	0	0		0	0		
GB602	NF1	24	3	3.3	4.7	0.4					2.8	0	3	0		0	0		
GB602	NF1	25	3	1.9	5.9	1.4					3.1	0	1	0		0	0		
GB602	NF1	26	3	7.0	4.7	1.1					4.2	0	0	0		0	0		
GB602	NF1	27	6	1.9	4.4	0.4	1.1	1.5	1.2		1.8	0	2	0		0	0		
GB602	NF1	28	4	2.7	4.6	0.7	2.1				2.5	0	1	0		0	0		
GB602	NF1	29	4	12.0	2.1	1.5	2.3				4.5	0	0	0		0	0		
GB602	NF1	30	4	2.5	3.6	0.8	1.9				2.2	0	2	0		0	0		
GB602	NF1	31	4	1.3	4.7	0.5	2.2				2.2	0	6	0		0	0		
GB602	NF1	32	4	1.4	5.5	0.6	0.8				2.1	0	3	0		0	0		
GB602	NF1	33	3	2.2	4.6	0.6					2.4	0	3	0		0	0		
GB602	NF1	34	2	1.1	6.2						3.7	0	21	0		0	0		
GB602	NF1	35	3	2.5	4.7	0.4					2.5	0	8	0		0	0		
GB602	NF1	36	6	2.1	3.3	1.1	0.7	0.9	2.9		1.8	0	4	0		0	0		
GB602	NF1	37	6	2.8	3.8	0.5	0.6	1.2	2.9		2.0	0	5	0		0	0		
GB602	NF1	38	7	2.5	2.9	0.8	1.6	1.4	1.2	0.7	1.6	0	1	0		0	0		
GB602	NF2	1	2	5.0	4.5						4.7	0	1	0		0	0		
GB602	NF2	2	2	6.4	3.5						4.9	0	1	0		0	0		
GB602	NF2	3	4	5.3	1.8	2.4	2.9				3.1	0	0	0		0	0		
GB602	NF2	4	0									0	0	0		0	0		
GB602	NF2	5	4	4.2	5.4	2.7	1.9				3.6	0	0	0		0	0		
GB602	NF2	6	2	6.8	4.6						5.7	0	0	0		0	0		
GB602	NF2	7	4	6.0	5.2	1.6	1.5				3.6	0	0	0		0	0		
GB602	NF2	8	4	5.8	4.8	1.4	1.7				3.4	0	0	0		0	0		
GB602	NF2	9	4	5.9	3.2	1.9	2.8				3.5	0	0	0		0	0		
GB602	NF2	10	7	2.7	3.5	2.6	1.2	0.9	1.0	1.6	1.9	0	0	0		0	0		
GB602	NF2	11	7	3.1	4.9	0.7	1.4	1.5	0.9	1.1	2.0	0	1	1	3.3	0	0		
GB602	NF2	12	6	3.2	3.7	0.6	1.8	1.9	1.5		2.1	0	0	0		0	0		
GB602	NF2	13	2	3.9	4.1						4.0	0	0	0		0	0		
GB602	NF2	14	2	3.9	5.6						4.8	0	1	0		0	0		

Appendix F1. Sediment profile imaging data for Garden Banks Block 602.

Site	Station	Rep	Sediment Layers	Layer 1 Thickness	Layer 2 Thickness	Layer 3 Thickness	Layer 4 Thickness	Layer 5 Thickness	Layer 6 Thickness	Layer 7 Thickness	Layer Ave	Burrows	Tubes	Infauna	Max Depth Infauna2	Void Oxic	Void Anaerobic	Max Void Depth	Comments
GB602	NF2	15	2	3.7	4.2						3.9	0	0	0		0	0		
GB602	NF2	16	2	3.5	4.0						3.8	0	0	0		0	0		
GB602	NF2	17	2	3.8	3.7						3.8	0	0	0		0	0		
GB602	NF2	18	2	3.7	4.3						4.0	0	0	0		0	0		
GB602	NF2	19	5	4.4	3.2	1.9	3.3	1.5			2.9	0	0	0		0	0		
GB602	NF2	20	2	6.9	8.9						7.9	0	0	0		0	0		
GB602	NF2	21	3	7.3	3.2	4.8					5.1	0	0	0		0	0		
GB602	NF2	22	2	7.3	2.8						5.1	0	3	0		0	0		
GB602	NF2	23	2	9.1	6.6						7.8	1	0	1	11.6	0	0		
GB602	NF2	24	4	4.7	1.7	2.5	3.2				3.0	0	1	0		0	0		
GB602	NF2	25	2	6.4	3.5						5.0	0	10	0		0	0		
GB602	NF2	26	1	7.5							7.5	0	0	0		0	0		
GB602	NF2	27	2	5.9	3.1						4.5	0	0	0		0	0		
GB602	NF2	28	2	4.2	3.7						4.0	0	4	0		0	0		
GB602	NF2	29	4	11.4	2.8	1.7	2.7				4.6	0	0	2	7.4	0	0		
GB602	NF2	30	3	3.0	3.4	2.2					2.9	0	1	0		0	0		
GB602	NF2	31	1	3.7							3.7	0	0	0		0	0		
GB602	NF2	32	1	4.3							4.3	0	0	0		0	0		
GB602	NF2	33	1	5.1							5.1	0	1	0		0	0		
GB602	NF2	34	1	4.7							4.7	0	0	0		0	0		
GB602	NF2	35	1	5.2							5.2	0	0	0		0	0		
GB602	NF2	36	1	5.7							5.7	0	0	0		0	0		
GB602	NF3	1	4	7.5	3.8	2.8	1.7				4.0	0	0	0		0	0		
GB602	NF3	2	2	7.2	6.0						6.6	0	0	0		0	0		
GB602	NF3	3	3	2.2	5.7	2.7					3.6	0	1	0		0	0		
GB602	NF3	4	4	1.9	8.4	2.0	1.6				3.5	0	0	0		0	0		
GB602	NF3	5	3	3.5	4.1	5.3					4.3	0	1	0		0	0		
GB602	NF3	6	4	4.6	1.7	1.5	1.6				2.3	0	1	0		0	0		
GB602	NF3	7	3	3.3	3.4	8.8					5.2	0	2	0		0	0		
GB602	NF3	8	4	2.5	4.7	2.8	2.0				3.0	0	1	1	6.6	0	0		
GB602	NF3	9	2	7.4	3.2						5.3	0	0	0		0	0		
GB602	NF3	10	3	7.6	2.9	2.4					4.3	0	1	0		0	0		
GB602	NF3	11	4	7.6	2.8	1.7	3.3				3.9	0	3	2	5.6	0	0		
GB602	NF3	12	4	6.5	3.3	1.4	1.9				3.2	0	2	0		0	0		
GB602	NF3	13	2	7.9	6.5						7.2	0	0	0		0	0		
GB602	NF3	14	2	9.4	5.1						7.3	0	1	0		0	0		
GB602	NF3	15	2	8.3	5.2						6.7	0	0	1	3.3	0	0		
GB602	NF3	16	2	7.1	2.8						5.0	0	0	0		0	0		
GB602	NF3	17	4	6.3	2.7	2.2	1.7				3.2	0	0	0		0	0		
GB602	NF3	18	3	5.9	3.0	3.0					4.0	0	2	0		0	0		
GB602	NF3	19	2	6.7	2.9						4.8	0	2	0		0	0		
GB602	NF3	20	1	9.2							9.2	0	0	0		0	0		
GB602	NF3	21	2	7.4	3.8						5.6	0	0	0		0	0		
GB602	NF3	22	3	4.3	3.7	6.4					4.8	0	0	0		0	0		
GB602	NF3	23	2	4.1	6.8						5.5	0	0	0		0	0		
GB602	NF3	24	2	4.6	2.7						3.6	0	0	0		0	0		
GB602	NF3	25	3	4.2	5.3	1.3					3.6	0	0	0		0	1	5.3	

Appendix F1. Sediment profile imaging data for Garden Banks Block 602.

Site	Station	Rep	Sediment Layers	Layer 1 Thickness	Layer 2 Thickness	Layer 3 Thickness	Layer 4 Thickness	Layer 5 Thickness	Layer 6 Thickness	Layer 7 Thickness	Layer Ave	Burrows	Tubes	Infauna	Max Depth Infauna2	Void Oxic	Void Anaerobic	Max Void Depth	Comments
GB602	NF3	26	2	4.1	6.5						5.3	0	1	0		0	0		
GB602	NF3	27	4	3.9	4.0	4.5	0.9				3.3	0	0	0		0	0		
GB602	NF3	28	2	5.3	4.3						4.8	0	0	0		0	0		
GB602	NF3	29	4	8.8	2.0	1.8	2.0				3.7	0	0	0		0	0		
GB602	NF3	30	2	7.2	2.9						5.0	0	1	0		0	0		
GB602	NF3	31	2	4.8	5.1						5.0	0	2	0		0	0		
GB602	NF3	32	3	4.0	3.0	3.6					3.5	0	1	0		0	1	11.4	
GB602	NF3	33	4	5.1	3.5	2.6	3.0				3.5	0	0	0		0	0		
GB602	NF3	34	2	6.5	3.9						5.2	0	1	0		0	0		
GB602	NF3	35	1	3.3							3.3	0	0	0		0	0		
GB602	NF3	36	4	5.2	2.5	3.6	3.0				3.6	0	0	0		0	1	9.4	
GB602	NF3	37	5	3.6	3.5	3.9	1.3	1.3			2.7	0	3	0		0	0		

APPENDIX F2

Sediment Profile Imaging Data from Mississippi Canyon Block 292

Appendix F2. Sediment profile imaging data for Mississippi Canyon Block 292.

Site	Transect	Rep	Penetration Avg	Surface Relief	RPD Avg	Sediment Type	Sediment Color	Sediment Layers	Layer 1 Thickness	Layer 2 Thickness	Burrows	Tubes
MC292	FF1	1	9.6	0.9	0.8	clay	reddish brown/gray to darker brown	1	3.8		1	2
MC292	FF1	2	12.5	2.3	0.7	clay	granular reddish brown/thin off-white layer/smooth reddish brown/gray	1	5.1		0	0
MC292	FF1	3	10.2	1.5	0.7	clay	reddish brown/gray	1	4.3		0	0
MC292	FF1	4	16.0	2.6	0.6	clay	reddish brown to gray	1	5.3		0	1
MC292	FF1	5	9.4	2.0	0.6	clay	reddish brown/gray	1	5.5		0	0
MC292	FF1	6	11.8	1.5	0.6	clay	reddish brown/gray	1	6.7		1	2
MC292	FF1	7	10.4	1.1	0.5	clay	reddish brown/gray	1	4.2		0	1
MC292	FF1	8	9.8	0.3	0.4	clay	reddish brown/gray	1	5.7		0	1
MC292	FF1	9	16.8	1.3	0.5	clay	reddish brown/gray	1	8.2		0	1
MC292	FF1	10	11.1	1.9	0.7	clay	reddish brown to gray/dark gray-dark brown	2	6.5	3.3	0	0
MC292	FF1	11	12.7	1.4	0.9	clay	reddish brown/gray	1	4.1		0	1
MC292	FF1	12	10.1	0.7	1.1	clay	reddish brown/gray	1	3.2		0	0
MC292	FF1	13	10.2	2.0	1.2	clay	reddish brown/gray	1	3.4		0	0
MC292	FF1	14	10.7	2.2	1.3	clay	reddish brown/gray	1	3.3		0	0
MC292	FF1	15	8.8	3.1	0.9	clay	reddish brown/gray	1	2.0		0	2
MC292	FF1	16	10.8	3.1	0.6	clay	reddish brown/gray to darker brown	1	4.5		0	1
MC292	FF1	17	11.1	0.9	0.7	clay	reddish brown to gray	1	3.5		0	1
MC292	FF1	18	9.8	1.6	0.6	clay	reddish brown/gray to darker brown	1	3.5		0	0
MC292	FF1	19	12.8	1.4	0.8	clay	reddish brown/gray	1	2.5		0	0
MC292	FF1	20	8.0	0.5	0.8	clay	reddish brown/gray	1	3.8		0	1
MC292	FF1	21	9.2	3.1	0.7	clay	reddish brown/gray to darker brown	1	4.5		0	2
MC292	FF1	22	12.2	4.9	0.8	clay	reddish brown/gray to darker brown	1	5.3		0	2
MC292	FF1	23	9.8	0.6	0.9	clay	reddish brown/gray	1	3.0		0	1
MC292	FF1	24	10.0	0.6	0.7	clay	reddish brown/gray	1	5.4		0	0
MC292	FF1	25	10.8	0.9	1.0	clay	reddish brown/gray	1	2.3		0	0
MC292	FF1	26	5.5	0.9	0.5	clay	reddish brown/gray	1	3.2		1	0
MC292	FF1	27	11.3	2.9	0.5	clay	reddish brown/gray	1	6.0		0	0
MC292	FF1	28	10.0	1.5	0.9	clay	reddish brown/gray	1	5.4		0	1
MC292	FF1	29	11.8	1.3	0.6	clay	reddish brown/gray	1	6.2		0	1
MC292	FF1	30	9.9	1.1	0.6	clay	reddish brown/gray	1	3.7		0	0
MC292	FF1	31	6.6	0.2	0.4	clay	reddish brown/gray	1	2.1		0	0
MC292	FF1	32	12.9	1.2	0.5	clay	reddish brown/gray	1	4.8		0	0
MC292	FF1	33	9.4	0.6	0.5	clay	reddish brown/gray	1	4.2		0	1

Appendix F2. Sediment profile imaging data for Mississippi Canyon Block 292.

Site	Transect	Rep	Penetration Avg	Surface Relief	RPD Avg	Sediment Type	Sediment Color	Sediment Layers	Layer 1 Thickness	Layer 2 Thickness	Burrows	Tubes
MC292	FF1	34	10.5	1.5	0.5	clay	reddish brown/gray	1	7.9		0	0
MC292	FF1	35	9.7	1.5	0.6	clay	reddish brown/gray	1	5.0		0	0
MC292	FF1	36	5.3	1.2	0.5	clay	brown/bluish gray	1	4.6		1	1
MC292	FF4	1	6.9	1.3	0.6	clay	reddish brown/gray	1	2.2		0	7
MC292	FF4	2	7.0	3.4	1.9	clay	reddish brown/gray	1	3.4		0	3
MC292	FF4	3	12.7	1.1	0.9	clay	reddish brown/gray	1	4.3		1	1
MC292	FF4	4	10.2	1.3	1.8	clay	reddish brown/gray	1	5.2		0	0
MC292	FF4	5	8.1	3.8	1.7	clay	reddish brown/gray	1	5.0		0	0
MC292	FF4	6	12.0	2.0	1.3	clay	reddish brown/gray	1	5.5		0	0
MC292	FF4	7	8.3	1.7	0.5	clay	reddish brown/gray	1	2.5		0	0
MC292	FF4	8	4.8	1.8	0.6	clay	reddish brown	1	4.5		0	0
MC292	FF4	9	11.1	1.2	0.7	clay	reddish brown/gray	1	4.9		1	0
MC292	FF4	10	7.6	0.8	0.5	clay	reddish brown/gray	1	4.3		0	1
MC292	FF4	11	9.4	2.3	1.6	clay	bluish brown	1	4.7		0	1
MC292	FF4	12	10.3	1.5	1.0	clay	reddish brown/gray	1	4.9		0	10
MC292	FF4	13	8.4	2.4	0.5	clay	reddish brown/gray	1	3.9		0	2
MC292	FF4	14	8.5	1.9	0.7	clay	reddish brown/gray	1	3.4		2	6
MC292	FF4	15	6.7	0.7	1.8	clay	reddish brown/gray	1	3.0		0	3
MC292	FF4	16	9.8	1.4	0.7	clay	reddish brown/gray	1	3.0		0	7
MC292	FF4	17	8.0	2.0	0.6	clay	reddish brown/gray	1	3.8		0	2
MC292	FF4	18	6.5	2.3	0.5	clay	reddish brown/gray	1	3.9		0	4
MC292	FF4	19	6.2	3.7	1.8	clay	reddish brown/gray	1	4.1		0	0
MC292	FF4	20	10.5	0.6	0.9	clay	reddish brown/gray	1	5.4		0	7
MC292	FF4	21	19.6	2.2	0.8	clay	reddish brown/bluish gray	1	4.4		0	0
MC292	FF4	22	11.1	1.8	2.0	clay	reddish brown/gray	1	4.1		0	2
MC292	FF4	23	13.0	1.1	0.8	clay	reddish brown/gray	1	6.1		0	0
MC292	FF4	24	12.6	1.5	1.7	clay	reddish brown/gray	1	5.9		0	0
MC292	FF4	25	14.3	1.4	0.7	clay	reddish brown/gray	1	5.6		0	0
MC292	FF4	26	14.1	1.9	0.9	clay	reddish brown/gray	1	8.0		0	0
MC292	FF4	27	4.8	3.2	0.7	clay	reddish brown/gray	1	3.7		0	1
MC292	FF4	28	12.1	2.3	1.2	clay	reddish brown/gray	1	4.7		0	3
MC292	FF4	29	7.0	0.7	1.4	clay	reddish brown/gray	1	6.4		0	2
MC292	FF4	30	9.4	0.8	0.5	clay	reddish brown/gray	1	5.4		0	2
MC292	FF4	31	8.0	1.5	0.8	clay	reddish brown/gray	1	6.9		0	2

Appendix F2. Sediment profile imaging data for Mississippi Canyon Block 292.

Site	Transect	Rep	Penetration Avg	Surface Relief	RPD Avg	Sediment Type	Sediment Color	Sediment Layers	Layer 1 Thickness	Layer 2 Thickness	Burrows	Tubes
MC292	FF4	32	8.7	1.1	0.6	clay	reddish brown/gray	1	4.6		0	2
MC292	FF4	33	7.7	1.3	0.6	clay	reddish brown/gray	1	4.6		0	2
MC292	FF4	34	8.4	1.0	0.8	clay	reddish brown/gray	1	4.4		0	3
MC292	FF4	35	14.9	2.0	1.5	clay	reddish brown/gray	1	4.6		0	1
MC292	FF4	36	7.6	2.4	1.2	clay	reddish brown/gray	1	4.0		0	3
MC292	FF5	1	15.5	3.4	1.4	clay	reddish brown/gray	1	2.6		0	4
MC292	FF5	2	14.9	0.9	1.2	clay	reddish brown/gray	1	3.6		0	0
MC292	FF5	3	17.7	1.8	1.5	clay	reddish brown/gray	1	5.6		0	1
MC292	FF5	4	6.4	3.3	0.9	clay	reddish brown/gray	1	2.8		0	4
MC292	FF5	5	15.0	3.1	1.8	clay	reddish brown/gray	1	6.5		1	3
MC292	FF5	6	17.1	2.5	1.4	clay	reddish brown/gray	1	4.1		0	3
MC292	FF5	7	17.3	2.4	1.2	clay	reddish brown/gray	1	5.2		0	2
MC292	FF5	8	18.1	0.8	1.3	clay	reddish brown/gray	1	5.0		0	0
MC292	FF5	9	16.5	4.0	1.4	clay	reddish brown/gray	1	6.5		0	0
MC292	FF5	10	6.8	4.3	0.9	clay	reddish brown/gray	1	3.0		0	0
MC292	FF5	11	19.8	2.0	2.8	clay	reddish brown/gray	1	6.5		0	0
MC292	FF5	12	15.6	3.8	2.7	clay	reddish brown/gray	1	6.5		0	1
MC292	FF5	13	15.6	2.2	1.2	clay	reddish brown/gray	1	7.5		0	2
MC292	FF5	14	13.9	3.4	1.7	clay	reddish brown/gray	1	4.2		0	2
MC292	FF5	15	11.6	1.9	1.2	clay	reddish brown/gray	1	6.7		0	1
MC292	FF5	16	17.4	0.3	2.7	clay	reddish brown/gray	1	4.3		0	1
MC292	FF5	17	17.2	1.7	2.5	clay	reddish brown/gray	1	4.6		0	1
MC292	FF5	18	15.0	1.8	1.0	clay	reddish brown/gray	1	5.7		0	1
MC292	FF5	19	13.2	1.2	0.9	clay	reddish brown/gray	1	6.5		0	0
MC292	FF5	20	19.1	2.0	2.9	clay	reddish brown/gray	1	6.4		0	0
MC292	FF5	21	14.3	1.2	1.6	clay	reddish brown/gray	1	4.0		1	0
MC292	FF5	22	12.8	2.0	1.3	clay	reddish brown/gray	1	4.9		0	1
MC292	FF5	23	13.2	3.2	1.1	clay	reddish brown/gray	1	6.7		0	7
MC292	FF5	24	15.9	1.5	1.6	clay	reddish brown/gray	1	5.3		1	0
MC292	FF5	25	11.5	0.7	0.9	clay	reddish brown/gray	1	4.8		2	5
MC292	FF5	26	13.5	3.9	1.6	clay	reddish brown/gray	1	3.3		2	2
MC292	FF5	27	14.2	2.4	2.2	clay	reddish brown/gray	1	3.0		1	0
MC292	FF5	28	14.4	1.8	1.1	clay	reddish brown/gray	1	6.0		0	0
MC292	FF5	29	13.1	1.0	2.5	clay	reddish brown/gray	1	6.2		2	1

Appendix F2. Sediment profile imaging data for Mississippi Canyon Block 292.

Site	Transect	Rep	Penetration Avg	Surface Relief	RPD Avg	Sediment Type	Sediment Color	Sediment Layers	Layer 1 Thickness	Layer 2 Thickness	Burrows	Tubes
MC292	FF5	30	8.7	2.4	1.6	clay	reddish brown/gray	1	3.0		0	4
MC292	FF5	31	22.1	2.8	1.4	clay	reddish brown/gray	1	7.2		0	0
MC292	FF5	32	16.5	1.8	2.0	clay	reddish brown/gray	1	5.6		2	3
MC292	FF5	33	14.3	2.0	0.8	clay	reddish brown/gray	1	6.3		0	2
MC292	FF5	34	14.9	2.7	1.5	clay	reddish brown/gray	1	4.9		0	1
MC292	FF5	35	15.5	1.5	1.0	clay	reddish brown/gray	1	5.7		0	1
MC292	FF5	36	13.8	1.9	0.9	clay	reddish brown/gray	1	5.6		2	2
MC292	NF1	1	16.8	0.8	2.0	clay	reddish brown/gray	1	4.7		0	1
MC292	NF1	2	18.4	1.6	0.9	clay	reddish brown/gray	1	6.8		2	1
MC292	NF1	3	15.8	2.1	1.8	clay	reddish brown/gray	1	5.2		1	2
MC292	NF1	4	17.8	1.8	2.3	clay	reddish brown/reddish gray	1	8.6		0	1
MC292	NF1	5	16.4	0.8	1.4	clay	reddish brown/reddish gray	1	9.0		2	2
MC292	NF1	6	15.3	1.2	1.3	clay	reddish brown/reddish gray	1	6.7		0	2
MC292	NF1	7	16.7	1.9	0.8	clay	reddish brown/reddish gray	1	9.9		0	4
MC292	NF1	8	17.6	0.5	1.0	clay	reddish brown/reddish gray	1	6.4		1	0
MC292	NF1	9	14.8	2.8	0.8	clay	reddish brown/reddish gray	1	6.2		0	0
MC292	NF1	10	18.2	0.7	2.7	clay	reddish brown/gray	1	6.2		0	0
MC292	NF1	11	18.4	0.2	2.9	clay	reddish brown/gray	1	8.6		5	2
MC292	NF1	12	19.7	1.8	1.5	clay	reddish brown/gray	1	14.3		0	0
MC292	NF1	13	16.5	1.9	2.6	clay	reddish brown/gray	1	4.2		0	1
MC292	NF1	14	18.3	1.5	2.6	clay	reddish brown/gray	1	5.4		1	2
MC292	NF1	15	17.0	1.7	1.8	clay	reddish brown/gray	1	9.3		1	2
MC292	NF1	16	18.3	2.5	2.7	clay	reddish brown/gray	1	7.4		2	3
MC292	NF1	17	18.2	1.0	2.2	clay	reddish brown/gray	1	6.1		2	0
MC292	NF1	18	16.9	0.5	2.6	clay	reddish brown/gray	1	6.4		0	1
MC292	NF1	19	16.1	0.6	1.0	clay	reddish brown/gray	1	7.3		0	4
MC292	NF1	20	18.3	1.3	2.0	clay	reddish brown/gray	1	6.3		0	0
MC292	NF1	21	16.8	1.0	2.4	clay	reddish brown/gray	1	6.8		2	1
MC292	NF1	22	17.3	0.8	2.5	clay	reddish brown/gray	1	9.6		3	2
MC292	NF1	23	17.8	1.1	1.4	clay	reddish brown/gray	1	6.2		0	14
MC292	NF1	24	18.5	1.2	1.7	clay	reddish brown/gray	1	9.3		2	5
MC292	NF1	25	15.0	1.5	0.9	clay	reddish brown/gray	1	5.6		1	0
MC292	NF1	26	15.2	2.2	1.1	clay	reddish brown/gray	1	5.1		1	7
MC292	NF1	27	16.4	0.4	1.1	clay	reddish brown/gray	1	7.2		1	0

Appendix F2. Sediment profile imaging data for Mississippi Canyon Block 292.

Site	Transect	Rep	Penetration Avg	Surface Relief	RPD Avg	Sediment Type	Sediment Color	Sediment Layers	Layer 1 Thickness	Layer 2 Thickness	Burrows	Tubes
MC292	NF1	28	17.1	0.9	1.3	clay	reddish brown/gray	1	5.8		0	2
MC292	NF1	29	16.9	1.0	1.0	clay	reddish brown/gray	1	6.1		1	0
MC292	NF1	30	17.6	1.0	1.3	clay	reddish brown/gray	1	8.7		0	3
MC292	NF1	31	17.9	0.6	2.3	clay	reddish brown/gray	1	5.5		0	8
MC292	NF1	32	15.8	1.5	0.9	clay	reddish brown/gray	1	6.2		1	6
MC292	NF1	33	15.5	2.3	0.7	silt-clay	reddish brown/dark greenish gray/light gray	2	0.9	3.6	0	9
MC292	NF1	34	14.4	1.0	0.1	silt-clay	light gray/dark greenish gray/gray	2	0.5	6.5	0	3
MC292	NF1	35	13.8	0.3	0.4	silt-clay	reddish brown/dark greenish gray/gray	2	0.5	5.3	0	8
MC292	NF1	36	17.9	1.6	0.2	silt-clay	reddish brown/dark greenish gray/gray	2	0.4	4.0	0	2
MC292	NF1	37	11.9	1.4	0.4	silt-clay	reddish brown/dark greenish gray/gray	2	0.7	4.5	0	2
MC292	NF1	38	16.6	1.0	0.4	silt-clay	reddish brown/dark greenish gray/gray	2	0.5	4.5	0	2
MC292	NF1	39	17.7	1.4	0.4	silt-clay	reddish brown/dark greenish gray/gray	2	0.3	4.9	0	2
MC292	NF1	40	18.3	1.5	0.5	silt-clay	reddish brown/dark greenish gray/gray	2	0.5	10.1	0	1
MC292	NF1	41	15.2	1.0	0.5	silt-clay	reddish brown/dark greenish gray/gray	2	0.7	3.8	0	6
MC292	NF1	42	16.2	0.6	0.4	silt-clay	reddish brown/dark greenish gray/gray	2	1.5	6.3	0	2
MC292	NF1	43	19.1	0.8	2.0	clay	reddish brown with trace of black/gray	1	5.5		0	0
MC292	NF1	44	17.3	1.2	1.1	clay	reddish brown/gray	1	5.1		0	1
MC292	NF1	45	16.5	1.6	1.3	clay	reddish brown and dark greenish gray/gray	1	5.1		0	4
MC292	NF1	46	16.3	1.1	1.4	clay	reddish brown/reddish gray	1	4.3		1	2
MC292	NF1	47	17.3	0.8	2.6	clay	reddish brown/reddish gray	1	11.5		1	0
MC292	NF1	48	15.0	1.3	0.9	clay	reddish brown/reddish gray	1	5.9		0	0
MC292	NF1	49	18.0	1.0	1.6	clay	reddish brown/reddish gray	1	5.0		1	0
MC292	NF1	50	17.2	0.8	1.0	clay	reddish brown/reddish gray	1	6.2		0	4
MC292	NF1	51	17.1	0.6	0.9	clay	reddish brown/reddish gray	1	9.2		0	0
MC292	NF1	52	16.4	1.4	0.9	clay	reddish brown/reddish gray	1	4.4		0	0
MC292	NF1	53	16.8	1.9	0.6	silt-clay	reddish dark gray/light gray/brown	2	4.7	10.5	0	1
MC292	NF1	54	18.9	1.4	0.4	silt-clay	reddish dark gray/light gray/brown	2	4.8	11.5	0	4
MC292	NF2	1	17.8	0.7	1.4	clay	reddish brown/light gray	1	6.4		0	4
MC292	NF2	2	15.7	0.8	0.6	clay	reddish brown/light gray	1	5.3		0	1
MC292	NF2	3	17.9	1.5	0.7	clay	reddish brown/light gray	1	9.6		0	0
MC292	NF2	4	14.9	1.9	0.7	clay	reddish brown/light gray	1	8.4		0	1
MC292	NF2	5	13.8	4.1	0.8	clay	reddish brown/light gray	1	8.4		1	0
MC292	NF2	6	16.9	0.8	0.7	clay	reddish brown/light gray	1	6.6		0	3

Appendix F2. Sediment profile imaging data for Mississippi Canyon Block 292.

Site	Transect	Rep	Penetration Avg	Surface Relief	RPD Avg	Sediment Type	Sediment Color	Sediment Layers	Layer 1 Thickness	Layer 2 Thickness	Burrows	Tubes
MC292	NF2	7	17.8	1.4	0.6	clay	reddish brown/light gray	1	9.0		0	5
MC292	NF2	8	17.0	0.6	0.7	clay	reddish brown/light gray	1	9.2		0	0
MC292	NF2	9	17.0	2.5	0.7	clay	reddish brown/light gray	1	7.8		0	0
MC292	NF2	10	19.1	1.0	1.2	clay	reddish brown/reddish gray	1	5.5		0	0
MC292	NF2	11	13.3	0.7	0.7	clay	reddish brown/reddish gray	1	6.3		0	0
MC292	NF2	12	18.6	0.7	1.1	clay	reddish brown/reddish gray	1	8.3		0	1
MC292	NF2	13	16.2	3.0	0.7	clay	reddish brown/reddish gray	1	9.5		0	0
MC292	NF2	14	15.8	1.6	1.1	clay	reddish brown/reddish gray	1	7.8		0	2
MC292	NF2	15	13.8	0.9	0.7	clay	reddish brown/reddish gray	1	8.0		0	3
MC292	NF2	16	15.9	1.1	1.0	clay	reddish brown/reddish gray	1	7.9		0	2
MC292	NF2	17	18.4	1.1	1.2	clay	reddish brown/reddish gray	1	6.5		0	1
MC292	NF2	18	17.8	1.6	1.1	clay	reddish brown/reddish gray	1	5.6		0	1
MC292	NF2	19	16.0	0.7	1.0	clay	reddish brown/reddish gray	1	6.9		0	5
MC292	NF2	20	17.8	1.0	0.8	clay	reddish brown/reddish gray	1	5.9		0	0
MC292	NF2	21	17.7	1.2	0.9	clay	reddish brown/reddish gray	1	8.8		0	2
MC292	NF2	22	15.5	1.2	0.5	clay	reddish brown/reddish gray	1	9.7		0	1
MC292	NF2	23	15.5	0.8	0.8	clay	reddish brown/reddish gray	1	7.3		0	4
MC292	NF2	24	18.8	3.6	1.1	clay	reddish brown/reddish gray	1	8.1		1	1
MC292	NF2	25	14.4	3.9	0.8	silt-clay	disturbed - can't distinguish layers				0	0
MC292	NF2	26	17.2	2.1	0.7	silt-clay	reddish dark gray/light gray	1	5.7		0	0
MC292	NF2	27	14.7	0.8	0.5	clay	reddish dark gray/reddish light gray	1	2.9		0	0
MC292	NF2	28	16.0	1.3	1.1	clay	reddish brown/light gray	1	3.3		0	2
MC292	NF2	29	14.0	0.7	0.6	clay	reddish brown/light gray	1	3.5		0	6
MC292	NF2	30	17.2	1.7	0.5	clay	reddish brown/light gray	1	3.6		0	0
MC292	NF2	31	15.3	1.0	0.5	clay	reddish brown/light gray	1	3.9		0	2
MC292	NF2	32	16.6	0.6	0.6	silt-clay	reddish dark gray/light gray	1	6.4		0	1
MC292	NF2	33	14.8	0.4	0.6	silt-clay	reddish dark gray/light gray	1	7.0		0	3
MC292	NF2	34	13.1	1.2	0.7	clay	reddish brown/bluish gray	1	10.8		0	2
MC292	NF2	35	16.5	1.9	0.7	clay	reddish brown/light gray	1	5.0		0	1
MC292	NF2	36	14.6	0.9	0.5	clay	reddish brown	1	6.3		0	1
MC292	NF2	37	15.9	1.8	0.6	clay	reddish brown	1	8.1		0	1
MC292	NF2	38	16.3	1.1	0.7	clay	reddish brown/light gray	1	6.9		0	2
MC292	NF2	39	18.3	1.3	0.5	clay	reddish brown/light gray	1	8.4		0	1
MC292	NF2	40	15.0	0.9	0.6	clay	reddish brown/light gray	1	7.8		0	3

Appendix F2. Sediment profile imaging data for Mississippi Canyon Block 292.

Site	Transect	Rep	Penetration Avg	Surface Relief	RPD Avg	Sediment Type	Sediment Color	Sediment Layers	Layer 1 Thickness	Layer 2 Thickness	Burrows	Tubes
MC292	NF2	42	17.1	1.2	0.5	clay	reddish brown/light gray	1	8.3		0	1
MC292	NF2	43	14.3	0.8	0.6	clay	reddish brown/light gray	1	9.0		0	0
MC292	NF2	44	15.0	4.5	0.6	clay	reddish brown/light gray	1	9.2		0	0
MC292	NF2	45	17.3	1.3	0.5	clay	reddish brown/light gray	1	14.2		0	1

Appendix F2. Sediment profile imaging data for Mississippi Canyon Block 292.

Site	Transect	Rep	Infauna	Max Infauna Depth	Oxic Voids	Anaerobic Voids	Max Void	Comments
MC292	FF1	1	2	7.6	0	1	3.3	
MC292	FF1	2	0		0	0		
MC292	FF1	3	0		0	0		
MC292	FF1	4	2	13.5	0	1	1.7	
MC292	FF1	5	0		0	1	4.4	
MC292	FF1	6	2	6.9	0	0		
MC292	FF1	7	0		0	0		
MC292	FF1	8	0		0	0		
MC292	FF1	9	0		0	0		
MC292	FF1	10	0		0	0		
MC292	FF1	11	1	1.2	0	0		
MC292	FF1	12	0		0	0		
MC292	FF1	13	1	4.8	0	0		
MC292	FF1	14	0		0	0		
MC292	FF1	15	0		0	0		
MC292	FF1	16	0		0	0		hexacoral
MC292	FF1	17	3	9.5	0	0		
MC292	FF1	18	0		0	0		
MC292	FF1	19	0		0	0		
MC292	FF1	20	0		0	0		
MC292	FF1	21	1	8.4	1	0	8.4	
MC292	FF1	22	0		0	0		
MC292	FF1	23	0		0	0		
MC292	FF1	24	0		0	0		
MC292	FF1	25	1	2.5	1	0	2.5	
MC292	FF1	26	0		0	0		
MC292	FF1	27	0		0	0		
MC292	FF1	28	0		0	0		
MC292	FF1	29	0		0	0		
MC292	FF1	30	2	8.0	0	1	1.4	
MC292	FF1	31	0		0	0		
MC292	FF1	32	0		0	0		
MC292	FF1	33	0		0	0		

Appendix F2. Sediment profile imaging data for Mississippi Canyon Block 292.

Site	Transect	Rep	Infauna	Max Infauna Depth	Oxic Voids	Anaerobic Voids	Max Void	Comments
MC292	FF1	34	0		0	0		
MC292	FF1	35	0		0	0		
MC292	FF1	36	0		0	0		
MC292	FF4	1	0		0	0		
MC292	FF4	2	0		0	0		
MC292	FF4	3	1	3.3	0	0		
MC292	FF4	4	0		0	0		
MC292	FF4	5	1	2.3	0	0		
MC292	FF4	6	0		0	0		
MC292	FF4	7	0		0	0		
MC292	FF4	8	0		0	0		
MC292	FF4	9	0		0	0		
MC292	FF4	10	0		0	0		
MC292	FF4	11	0		0	0		
MC292	FF4	12	1	9.2	0	2	6.8	
MC292	FF4	13	0		0	2	4.4	
MC292	FF4	14	2	5.9	0	0		
MC292	FF4	15	0		0	0		
MC292	FF4	16	0		0	0		
MC292	FF4	17	0		0	0		
MC292	FF4	18	2	1.7	0	0		
MC292	FF4	19	0		0	0		
MC292	FF4	20	0		0	0		
MC292	FF4	21	1	5.8	0	0		
MC292	FF4	22	0		0	0		
MC292	FF4	23	0		0	0		
MC292	FF4	24	2	10.5	0	0		
MC292	FF4	25	0		0	0		
MC292	FF4	26	0		0	0		
MC292	FF4	27	0		0	0		
MC292	FF4	28	0		0	0		
MC292	FF4	29	1	1.1	0	0		
MC292	FF4	30	0		0	0		
MC292	FF4	31	0		0	0		

Appendix F2. Sediment profile imaging data for Mississippi Canyon Block 292.

Site	Transect	Rep	Infauna	Max Infauna Depth	Oxic Voids	Anaerobic Voids	Max Void	Comments
MC292	FF4	32	0		0	0		
MC292	FF4	33	1		0	0		
MC292	FF4	34	0		0	0		
MC292	FF4	35	0		0	1	4.5	
MC292	FF4	36	0		0	0		
MC292	FF5	1	0		0	0		
MC292	FF5	2	0		0	0		
MC292	FF5	3	0		0	0		
MC292	FF5	4	0		0	0		
MC292	FF5	5	1		0	0		
MC292	FF5	6	1	14.2	0	1	1.9	
MC292	FF5	7	0		0	0		
MC292	FF5	8	1	5.8	0	0		
MC292	FF5	9	0		0	0		
MC292	FF5	10	0		0	0		
MC292	FF5	11	0		0	3	14.3	
MC292	FF5	12	0		0	0		
MC292	FF5	13	1	12.9	0	0		
MC292	FF5	14	0		0	0		
MC292	FF5	15	0		0	0		
MC292	FF5	16	0		0	0		
MC292	FF5	17	0		0	0		
MC292	FF5	18	0		0	0		
MC292	FF5	19	1	10.9	0	0		
MC292	FF5	20	1	6.5	0	0		
MC292	FF5	21	2	10.4	0	0		
MC292	FF5	22	0		0	0		
MC292	FF5	23	0		0	0		
MC292	FF5	24	2	13.3	0	0		
MC292	FF5	25	0		1	0	2.4	
MC292	FF5	26	1	10.2	0	0		
MC292	FF5	27	3	12.3	0	0		
MC292	FF5	28	1	11.6	0	0		
MC292	FF5	29	0		0	0		

Appendix F2. Sediment profile imaging data for Mississippi Canyon Block 292.

Site	Transect	Rep	Infauna	Max Infauna Depth	Oxic Voids	Anaerobic Voids	Max Void	Comments
MC292	FF5	30	1	5.8	0	0		
MC292	FF5	31	3	10.9	0	0		
MC292	FF5	32	1	1.9	0	0		
MC292	FF5	33	0		0	0		
MC292	FF5	34	2	13.4	0	0		
MC292	FF5	35	0		0	0		
MC292	FF5	36	0		0	0		
MC292	NF1	1	1	7.6	0	2	16.0	
MC292	NF1	2	1	7.0	0	0		
MC292	NF1	3	0		0	0		
MC292	NF1	4	0		0	0		
MC292	NF1	5	0		0	0		
MC292	NF1	6	0		0	0		
MC292	NF1	7	0		0	0		
MC292	NF1	8	2	13.2	0	0		
MC292	NF1	9	1	5.8	0	0		
MC292	NF1	10	0		0	1	5.1	
MC292	NF1	11	1	0.6	0	0		
MC292	NF1	12	1	2.2	0	1	13.5	
MC292	NF1	13	0		0	0		
MC292	NF1	14	0		0	0		
MC292	NF1	15	4	8.1	0	0		
MC292	NF1	16	0		0	0		
MC292	NF1	17	0		0	0		
MC292	NF1	18	0		0	0		
MC292	NF1	19	0		0	0		
MC292	NF1	20	1	2.3	0	1	15.0	
MC292	NF1	21	0		0	0		
MC292	NF1	22	0		0	0		
MC292	NF1	23	2	2.0	0	0		
MC292	NF1	24	0		0	0		
MC292	NF1	25	1	0.3	0	0		
MC292	NF1	26	1	6.6	0	0		
MC292	NF1	27	2	9.0	0	0		

Appendix F2. Sediment profile imaging data for Mississippi Canyon Block 292.

Site	Transect	Rep	Infauna	Max Infauna Depth	Oxic Voids	Anaerobic Voids	Max Void	Comments
MC292	NF1	28	0		0	0		
MC292	NF1	29	0		0	0		
MC292	NF1	30	0		0	0		
MC292	NF1	31	0		0	0		
MC292	NF1	32	0		0	0		
MC292	NF1	33	0		0	0		
MC292	NF1	34	0		0	0		
MC292	NF1	35	0		0	0		
MC292	NF1	36	0		0	0		
MC292	NF1	37	0		0	0		
MC292	NF1	38	0		0	0		
MC292	NF1	39	0		0	0		
MC292	NF1	40	3	1.1	0	0		
MC292	NF1	41	0		0	0		
MC292	NF1	42	0		0	0		
MC292	NF1	43	0		0	0		
MC292	NF1	44	0		0	0		
MC292	NF1	45	0		0	0		
MC292	NF1	46	0		0	0		
MC292	NF1	47	2	5.8	0	0		
MC292	NF1	48	0		0	0		
MC292	NF1	49	0		0	0		
MC292	NF1	50	0		0	0		
MC292	NF1	51	0		0	0		
MC292	NF1	52	0		0	0		
MC292	NF1	53	0		0	0		
MC292	NF1	54	0		0	0		
MC292	NF2	1	0		0	0		
MC292	NF2	2	1	5.0	0	0		
MC292	NF2	3	0		0	0		
MC292	NF2	4	0		0	0		
MC292	NF2	5	0		0	0		
MC292	NF2	6	0		0	0		

Appendix F2. Sediment profile imaging data for Mississippi Canyon Block 292.

Site	Transect	Rep	Infauna	Max Infauna Depth	Oxic Voids	Anaerobic Voids	Max Void	Comments
MC292	NF2	7	0		1	1	9.1	
MC292	NF2	8	0		0	0		
MC292	NF2	9	0		0	0		
MC292	NF2	10	0		0	0		
MC292	NF2	11	0		0	0		
MC292	NF2	12	0		0	0		
MC292	NF2	13	0		0	0		
MC292	NF2	14	0		0	0		
MC292	NF2	15	1	6.8	0	0		
MC292	NF2	16	1	4.7	0	0		
MC292	NF2	17	0		0	0		
MC292	NF2	18	0		0	0		
MC292	NF2	19	0		0	0		
MC292	NF2	20	0		0	0		
MC292	NF2	21	0		0	0		
MC292	NF2	22	0		0	0		
MC292	NF2	23	1	4.3	0	0		
MC292	NF2	24	0		0	0		
MC292	NF2	25	0		0	0		
MC292	NF2	26	0		0	0		
MC292	NF2	27	0		0	0		
MC292	NF2	28	0		0	0		
MC292	NF2	29	0		0	0		
MC292	NF2	30	0		0	0		
MC292	NF2	31	0		0	0		
MC292	NF2	32	0		0	0		
MC292	NF2	33	0		0	0		
MC292	NF2	34	2	1.4	0	0		
MC292	NF2	35	0		0	0		
MC292	NF2	36	0		0	0		
MC292	NF2	37	0		0	0		
MC292	NF2	38	0		0	0		
MC292	NF2	39	1	5.3	0	0		
MC292	NF2	40	1	8.9	0	1	3.7	

Appendix F2. Sediment profile imaging data for Mississippi Canyon Block 292.

Site	Transect	Rep	Infauna	Max Infauna Depth	Oxic Voids	Anaerobic Voids	Max Void	Comments
MC292	NF2	42	0		0	0		
MC292	NF2	43	0		0	0		
MC292	NF2	44	0		0	0		
MC292	NF2	45	0		0	0		

APPENDIX G1

Cruise 1B Data for Sediment Metals, Total Organic Carbon, and Redox Conditions

Table G1-1. Trace metal and total organic carbon concentrations in sediment samples (dry weight) with average marine sediment (Salomons and Förstner, 1984) and continental crust (Wedepohl, 1995) provided for comparison.

Sample Identification	Al (%)	As (µg/g)	Ba (µg/g)	Cd (µg/g)	Cr (µg/g)	Cu (µg/g)	Fe (%)	Hg (µg/g)	Mn (µg/g)	Ni (µg/g)	Pb (µg/g)	V (µg/g)	Zn (µg/g)	TOC (%)	Comments
GB516 NF-B01	7.07	7.9	12500	0.27	55.8	30.3	3.19	0.090	959	38.8	23.2	128	91.6	1.78	
GB516 NF-B02	4.59	5.2	135000	0.38	42.3	25.1	2.20	0.079	658	24.9	18.3	88.8	116	3.31	
GB516 NF-B03 #1	6.50	11.7	11500	0.29	46.8	27.0	2.94	0.078	6600	46.2	22.9	128	89.9	1.05	Lab Duplicate
GB516 NF-B03 #2	6.78	11.6	10200	0.30	44.9	27.9	2.90	0.082	6970	49.6	23.7	125	95.4	1.07	Lab Duplicate
GB516 NF-B04	6.47	11.2	14400	0.29	54.6	23.5	3.02	0.119	2980	38.6	28.7	124	133	0.96	
GB516 NF-B05	6.37	10.9	11800	0.33	54.0	26.9	2.89	0.104	3540	40.1	25.2	118	85.2	1.06	
GB516 NF-B06	5.72	9.1	70700	0.31	31.1	26.7	2.81	0.098	2380	33.2	21.6	114	84.1	1.02	
GB516 NF-B07	6.33	11.1	10200	0.35	52.0	27.3	2.98	0.092	6330	41.2	25.1	119	88.7	1.00	
GB516 NF-B08	6.37	12.3	3390	0.30	45.3	26.9	2.40	0.113	3600	44.6	24.0	125	93.9	0.98	
GB516 NF-B09	6.31	11.2	14500	0.26	57.4	29.3	2.69	0.090	3110	35.0	25.1	119	85.1	1.01	
GB516 NF-B10	4.98	10.8	4310	0.29	46.9	27.2	2.22	0.108	2770	47.9	24.1	123	90.2	0.84	
GB516 NF-B11	8.17	11.0	3430	0.30	62.7	27.3	3.64	0.111	5150	42.2	24.5	117	87.1	0.88	
GB516 NF-B12	6.03	11.4	3050	0.33	63.7	26.2	2.83	0.128	3400	42.9	26.4	120	85.4	1.04	
GB516 FF1-B01	6.44	11.1	1290	0.30	65.2	27.5	2.97	0.099	3950	45.1	23.5	121	90.7	0.72	
GB516 FF1-B02 #1	6.33	10.5	2010	0.33	63.2	27.5	2.80	0.111	3620	45.7	25.0	121	88.8	0.82	Lab Duplicate
GB516 FF1-B02 #2	6.30	11.0	1930	0.31	68.4	27.4	2.79	0.108	3660	45.5	24.1	120	87.5	0.80	Lab Duplicate
GB516 FF2-B01	6.27	10.1	1290	0.33	66.0	26.4	2.85	0.106	3080	39.4	24.1	116	87.0	0.90	
GB516 FF2-B02.1	6.20	10.2	1650	0.28	69.6	27.0	2.88	0.117	3330	40.6	25.5	116	88.0	0.95	
GB516 FF3-B01	6.53	10.5	817	0.31	60.6	26.4	2.97	0.095	3470	36.2	24.8	123	89.3	0.70	
GB516 FF3-B02.1	6.00	9.7	1480	0.36	67.4	26.2	2.75	0.103	3120	40.0	26.0	117	83.4	0.81	
GB516 FF4-B01	6.62	11.8	757	0.33	62.3	27.9	3.09	0.092	7570	49.1	20.9	137	95.4	0.75	
GB516 FF4-B02	6.48	11.5	1270	0.29	62.8	27.3	2.91	0.112	4020	45.4	25.3	125	91.7	0.79	
GB516 FF5-B01	6.37	11.1	1030	0.34	69.3	26.9	2.87	0.111	5290	48.0	23.6	125	92.1	0.79	
GB516 FF5-B02	6.45	11.4	1120	0.31	67.3	26.9	2.94	0.117	4460	44.5	23.9	125	91.0	0.94	
GB516 FF6-B01	6.62	12.2	1400	0.35	68.2	28.1	3.11	0.118	4410	48.8	27.3	129	93.7	0.85	
GB516 FF6-B02	6.52	11.4	1260	0.29	69.4	27.0	3.04	0.114	3780	47.6	24.9	129	92.5	0.77	
Average Marine Sediment	7.2	7.7	460	0.17	72	33	4.1	0.19	770	52	19	105	95	-	
Continental Crust	7.96	1.7	584	0.1	126	25	4.32	0.04	716	56	14.8	98	65	-	

Table G1-1. Continued.

Sample Identification	Al (%)	As (µg/g)	Ba (µg/g)	Cd (µg/g)	Cr (µg/g)	Cu (µg/g)	Fe (%)	Hg (µg/g)	Mn (µg/g)	Ni (µg/g)	Pb (µg/g)	V (µg/g)	Zn (µg/g)	TOC (%)	Comments
VK916 NF-B01	7.17	12.9	1200	0.31	62.1	28.0	3.31	0.070	10600	41.3	31.5	137	107	1.87	
VK916 NF-B02	7.53	13.0	1190	0.27	68.0	27.5	3.51	0.068	8110	40.5	34.2	142	110	1.79	
VK916 NF-B03	7.48	12.1	1190	0.28	43.7	28.5	3.44	0.074	9620	42.8	32.3	140	110	1.30	
VK916 NF-B04	7.20	13.7	1160	0.33	51.6	27.1	3.36	0.075	10000	40.7	32.6	133	106	1.36	
VK916 NF-B05	7.31	12.6	1150	0.33	34.1	25.1	3.33	0.072	8780	37.6	31.6	130	106	1.90	
VK916 NF-B06	7.37	13.4	1290	0.28	38.8	27.3	3.44	0.068	9350	44.0	34.8	141	109	1.50	
VK916 NF-B07	7.16	12.6	1210	0.28	41.1	25.4	3.45	0.070	7300	37.3	31.0	131	107	1.51	
VK916 NF-B08	6.92	11.9	965	0.29	65.4	26.7	3.67	0.065	9200	40.7	30.0	135	109	1.57	
VK916 NF-B09	7.13	11.1	837	0.24	64.4	26.4	3.45	0.073	9430	40.9	25.6	138	107	1.55	
VK916 NF-B10	7.57	11.3	802	0.18	31.2	25.5	3.75	0.069	5780	38.3	25.6	137	110	1.33	
VK916 NF-B11	7.16	13.0	1070	0.28	66.1	26.2	3.44	0.073	6620	41.4	25.0	136	108	1.33	
VK916 NF-B12 #1	7.52	13.6	972	0.27	65.6	28.1	3.53	0.069	10900	42.2	30.0	144	110	1.44	Lab Duplicate
VK916 NF-B12 #2	7.35	13.2	963	0.25	67.1	27.3	3.53	0.070	10500	42.4	29.4	143	110	1.51	Lab Duplicate
VK916 FF2-B01	7.29	13.2	1180	0.22	70.4	24.9	3.53	0.071	6950	38.9	29.9	131	105	1.34	
VK916 FF2-B02	7.77	14.4	1080	0.22	65.8	27.0	3.34	0.072	8420	40.6	29.7	136	106	1.34	
VK916 FF3-B01	7.79	12.9	823	0.24	71.8	23.1	3.42	0.078	6850	42.5	28.9	133	98.7	1.35	
VK916 FF3-B02	5.78	13.5	1020	0.23	78.3	25.9	3.38	0.074	10000	42.1	30.9	144	106	1.55	
VK916 FF4-B01	7.26	10.3	656	0.23	75.8	25.0	3.24	0.070	4710	38.8	26.7	143	106	1.58	
VK916 FF4-B02	7.12	13.3	855	0.22	71.7	26.4	3.27	0.067	6480	41.7	29.6	128	106	1.36	
VK916 FF5-B01	6.68	13.5	852	0.17	78.4	24.5	3.18	0.070	3810	38.6	27.5	123	100	1.46	
VK916 FF5-B02	6.91	9.6	698	0.23	76.2	25.1	3.35	0.062	2810	40.8	25.3	129	102	1.48	
VK916 FF6-B01	6.88	11.8	789	0.20	67.5	24.7	3.37	0.071	6490	39.4	27.2	132	102	1.58	
VK916 FF6-B02	6.87	10.3	747	0.23	76.3	25.5	3.35	0.075	5990	39.6	27.2	128	104	1.32	
Average Marine Sediment	7.2	7.7	460	0.17	72	33	4.1	0.19	770	52	19	105	95	-	
Continental Crust	7.96	1.7	584	0.1	126	25	4.32	0.04	716	56	14.8	98	65	-	

Table G1-2. Statistics for trace metal concentrations and total organic carbon (TOC) content in sediment samples (dry weight). Lab duplicates have been averaged prior to statistical analysis.

Sample Identification	Al (%)	As (µg/g)	Ba (µg/g)	Cd (µg/g)	Cr (µg/g)	Cu (µg/g)	Fe (%)	Hg (µg/g)	Mn (µg/g)	Ni (µg/g)	Pb (µg/g)	V (µg/g)	Zn (µg/g)	TOC (%)
GB516 NF														
Mean	6.25	10.3	24500	0.31	51.0	27.0	2.82	0.101	3470	39.8	24.1	119	94.4	1.25
Std. Dev.	0.92	2.0	38300	0.03	9.2	1.7	0.41	0.015	1870	6.5	2.5	10.2	14.9	0.69
n =	12	12	12	12	12	12	12	12	12	12	12	12	12	12
Maximum	8.17	12.3	135000	0.38	63.7	30.3	3.64	0.128	6790	47.9	28.7	128	133	3.31
Minimum	4.59	5.2	3050	0.26	31.1	23.5	2.20	0.079	658	24.9	18.3	88.8	84.1	0.84
GB516 FF														
Mean	6.40	11.0	1280	0.32	66.2	27.1	2.93	0.108	4180	44.2	24.5	124	90.2	0.82
Std. Dev.	0.18	0.7	336	0.03	3.0	0.6	0.11	0.009	1240	4.2	1.6	6.2	3.3	0.08
n =	12	12	12	12	12	12	12	12	12	12	12	12	12	12
Maximum	6.62	12.2	1970	0.36	69.6	28.1	3.11	0.118	7570	49.1	27.3	137	95.4	0.95
Minimum	6.00	9.7	757	0.28	60.6	26.2	2.75	0.092	3080	36.2	20.9	116	83.4	0.70
VK916 NF														
Mean	7.29	12.6	1090	0.28	52.7	26.8	3.47	0.071	8790	40.7	30.3	137	108	1.54
Std. Dev.	0.20	0.8	157	0.04	14.2	1.1	0.13	0.003	1550	2.0	3.3	4.3	1.6	0.21
n =	12	12	12	12	12	12	12	12	12	12	12	12	12	12
Maximum	7.57	13.7	1290	0.33	68.0	28.5	3.75	0.075	10700	44.0	34.8	144	110	1.90
Minimum	6.92	11.1	802	0.18	31.2	25.1	3.31	0.065	5780	37.3	25.0	130	106	1.30
VK916 FF														
Mean	7.04	12.3	870	0.22	73.2	25.2	3.34	0.071	6250	40.3	28.3	133	104	1.44
Std. Dev.	0.58	1.7	171	0.02	4.4	1.1	0.10	0.004	2110	1.4	1.8	6.7	2.7	0.11
n =	10	10	10	10	10	10	10	10	10	10	10	10	10	10
Maximum	7.79	14.4	1180	0.24	78.4	27.0	3.53	0.078	10000	42.5	30.9	144	106	1.58
Minimum	5.78	9.6	656	0.17	65.8	23.1	3.18	0.062	2810	38.6	25.3	123	98.7	1.32

MMS Deepwater Effects - Cruise 1B

Table G1-3. Quality assurance and quality control data for sediment metal analyses.

Results for the sediment Certified Reference Material (CRM) MESS-2 certified by the National Research Council of Canada (NRC) and the Standard Reference Material (SRM) Trace Elements in Water #1643d certified by the National Institute of Standards and Technology (NIST).

Reference Material	Al (%)	As (µg/g)	Ba (µg/g)	Cd (µg/g)	Cr (µg/g)	Cu (µg/g)	Fe (%)	Hg (µg/g)	Mn (µg/g)	Ni (µg/g)	Pb (µg/g)	V (µg/g)	Zn (µg/g)	TOC (%)
CRM MESS-2	8.55	21.4	1010	0.25	102	41.1	4.20	0.096	346	50.7	21.0	244	158	2.06
This Study	8.61	21.0	1010	0.25	99.3	38.0	4.24	0.095	355	56.2	22.6	247	157	2.04
	8.82	21.5	1060	0.25	99.7	38.3	4.17	0.094	364	49.6	22.4	247	157	-
	8.73	20.9	1040	0.24	100	39.7	4.17	0.092	360	47.8	22.4	252	163	-
	-	-	1090	-	-	-	-	-	-	-	-	-	-	-
	-	-	1030	-	-	-	-	-	-	-	-	-	-	-
CRM MESS-2	8.57	20.7	-	0.24	106	39.3	4.35	0.092	365	49.3	21.9	252	172	2.14*
NRC Certified Values	± 0.26	± 0.8	-	± 0.01	± 8	± 2.0	± 0.22	± 0.009	± 21	± 1.8	± 1.2	± 10	± 16	± 0.13
	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	-
SRM #1643d	-	-	514.3	-	-	-	-	-	-	-	-	-	-	-
This Study	-	-	512.2	-	-	-	-	-	-	-	-	-	-	-
	-	-	506.2	-	-	-	-	-	-	-	-	-	-	-
SRM #1643d	127.6	56.02	506.5	6.47	18.53	20.5	91.2	-	37.66	58.1	18.15	35.1	72.48	-
NIST Certified Values	± 3.5	± 0.73	± 8.9	± 0.37	± 0.20	± 3.8	± 3.9	-	± 0.83	± 2.7	± 0.64	± 1.4	± 0.65	-

*Certified value is for Total Carbon (Organic + Inorganic).

Method Detection Limits (MDLs).

	Al (%)	As (µg/g)	Ba (µg/g)	Cd (µg/g)	Cr (µg/g)	Cu (µg/g)	Fe (%)	Hg (µg/g)	Mn (µg/g)	Ni (µg/g)	Pb (µg/g)	V (µg/g)	Zn (µg/g)	TOC (%)
Sediment MDL	0.01	0.2	2.0	0.01	3.0	3.0	0.01	0.001	2.5	2.5	0.02	4.5	0.4	0.06

Percent Spike Recovery. Mean and Standard Deviation.

	Al	As	Ba	Cd	Cr	Cu	Fe	Hg**	Mn	Ni	Pb	V**	Zn	TOC
Mean	97.8	102.2	98.3	99.8	96.3	97.5	97.5	79.1	106.1	93.5	101.3	116.3	93.9	-
Standard Deviation	5.5	6.4	5.6	6.7	2.9	2.1	0.8	4.0	1.8	5.0	3.1	1.5	0.1	-
(n =)	2	4	4	4	3	3	2	11	2	3	4	3	2	-

**Final concentrations are corrected for percent spike recovery.

Estimate of Precision as Percent Relative Standard Deviation (RSD) of Lab Duplicates

	Al	As	Ba	Cd	Cr	Cu	Fe	Hg	Mn	Ni	Pb	V	Zn	TOC
GB516 NF-B03	3.0	0.6	8.5	2.4	2.9	2.3	1.0	3.5	2.0	5.0	2.4	2.2	4.2	1.3
GB516 FF1-B02	0.3	3.3	2.9	4.4	5.6	0.3	0.3	1.9	0.8	0.3	2.6	0.6	1.0	1.7
VK916 NF-B12	1.6	2.1	0.7	5.4	1.6	2.0	0.0	1.0	2.6	0.3	1.4	0.5	0.0	3.3

Percent RSD = (standard deviation / mean) X 100.

MMS Deep Gulf of Mexico Cruise 1B (Oct-Nov 2000)

Site: Viosca Knoll 916 Near-Field 1 (VK916 NF-B01)

Depth (cm)	Oxygen (%)	Oxygen (µM)	Depth (cm)	Temperature (C)	pH	Eh (mV)
Bottom Water	-	-	2	15.4	7.63	640
0.1	13.6	181	4	12.8	7.83	625
0.2	11.7	156	6	10.5	7.86	570
0.3	10.0	133	8	10.6	7.72	450
0.4	8.4	112	10	10.1	7.71	331
0.5	7.6	101	12	10.3	7.69	206
0.6	6.7	89	14	8.6	7.75	202
0.7	5.9	79	16	8.9	7.69	200
0.8	5.2	69	18	8.8	7.75	180
0.9	4.8	64	20	9.2	7.72	182
1.0	4.3	57	22	9.7	7.73	304
1.1	3.8	51	24	9.8	7.66	192
1.2	3.3	44	26	10.1	7.75	185
1.3	2.9	39	28	10.9	7.69	133
1.4	2.5	33	30	11.9	7.49	177
1.5	2.1	28				
1.6	1.7	23				
1.7	1.3	17				
1.8	1.0	13				
1.9	0.7	9				
2.0	0.5	7				
2.1	0.3	4				
2.2	0.2	3				
2.3	0.1	1				
2.4	0.0	0				

Oxygen Calibration: 0 and 20.9%
pH Calibration: 7 and 10, Slope = 99.4
Eh Calibration: oxidation/reduction potential (ORP) Standard = 425.3 mV at 18.6^{o}C

Oxygen µM Calculation Assumes Chlorinity of 20 and Avg. Temp of 10^{o}C

MMS Deep Gulf of Mexico Cruise 1B (Oct-Nov 2000)

Site: Viosca Knoll 916 Near-Field 2 (VK916 NF-B02)

Depth (cm)	Oxygen (%)	Oxygen (μM)	Depth (cm)	Temperature (C)	pH	Eh (mV)
Bottom Water	-	-	1	15.1	7.63	662
0.1	12.5	166	3	12.7	7.69	554
0.2	10.1	134	5	11.5	7.72	275
0.3	8.0	107	7	10.1	7.34	306
0.4	6.4	85	9	10.1	7.65	270
0.5	5.0	67	11	10.9	7.73	226
0.6	4.1	55	13	10.8	7.79	291
0.7	3.3	44	15	10.9	7.59	187
0.8	2.6	35	17	11.0	7.65	210
0.9	2.1	28	19	10.7	7.54	141
1.0	1.7	23	21	10.0	7.53	121
1.1	1.3	17	23	11.4	7.50	213
1.2	0.8	11	25	10.0	7.55	189
1.3	0.5	7	27	11.5	7.58	133
1.4	0.2	3	29	13.8	7.43	160
1.5	0.1	1				
1.6	0.0	0				

Oxygen Calibration: 0 and 20.9%
pH Calibration: 7 and 10, Slope = 99.5
Eh Calibration: ORP Standard = 424.8 mV at 18.4^{o}C

Oxygen μM Calculation Assumes Chlorinity of 20 and Avg. Temp of 10^{o}C

MMS Deep Gulf of Mexico Cruise 1B (Oct-Nov 2000)

Site: Viosca Knoll 916 Near-Field 3 (VK916 NF-B03)

Depth (cm)	Oxygen (%)	Oxygen (μM)	Depth (cm)	Temperature (C)	pH	Eh (mV)
Bottom Water	14.5	193	2	13.2	7.44	328
0.1	11.3	150	4	11.9	7.54	298
0.2	9.5	126	6	10.8	7.53	189
0.3	8.1	108	8	10.5	7.63	159
0.4	7.2	96	10	10.3	7.63	108
0.5	6.7	89	12	10.5	7.68	87
0.6	6.2	83	14	10.6	7.65	86
0.7	5.8	77	16	11.1	7.61	68
0.8	5.5	73	18	10.6	7.64	89
0.9	5.3	71	20	11.2	7.60	78
1.0	5.1	68	22	11.1	7.61	57
1.1	4.9	65	24	11.4	7.61	69
1.2	4.8	64	26	11.8	7.65	85
1.3	4.6	61	28	12.6	7.71	74
1.4	4.5	60	30	13.5	7.45	62
1.5	4.4	59				
1.6	4.3	57				
1.7	4.2	56				
1.8	4.1	55				
1.9	3.9	52				
2.0	3.8	51				
2.1	3.7	49				
2.2	3.6	48				
2.3	3.5	47				
2.4	3.4	45				
2.5	3.3	44				
2.6	3.2	43				
2.7	3.1	41				
2.8	3.0	40				
2.9	2.9	39				
3.0	2.8	37				
3.1	2.7	36				
3.2	2.6	35				
3.3	2.5	33				
3.4	2.4	32				

Oxygen Calibration: 0 and 20.9%
pH Calibration: 7 and 10, Slope = 100.9
Eh Calibration: ORP Standard = 424.8 mV at 18.9^{o}C

Oxygen μM Calculation Assumes Chlorinity of 20 and Avg. Temp of 10^{o}C

MMS Deep Gulf of Mexico Cruise 1B (Oct-Nov 2000)

Site: Viosca Knoll 916 Near-Field 4 (VK916 NF-B04)

Depth (cm)	Oxygen (%)	Oxygen (μM)	Depth (cm)	Temperature (C)	pH	Eh (mV)
Bottom Water	14.0	186	2	12.0	7.40	640
0.1	12.1	161	4	10.8	7.46	327
0.2	10.0	133	6	10.4	7.52	125
0.3	8.3	111	8	10.3	7.58	100
0.4	7.2	96	10	10.1	7.62	69
0.5	6.7	89	12	10.2	7.76	73
0.6	6.3	84	14	10.2	7.69	48
0.7	6.0	80	16	10.5	7.56	44
0.8	5.7	76	18	10.9	7.60	43
0.9	5.4	72	20	11.0	7.70	23
1.0	5.0	67	22	11.3	7.52	20
1.1	4.6	61	24	12.0	7.54	32
1.2	4.2	56	26	13.1	7.50	39
1.3	3.9	52				
1.4	3.5	47				
1.5	3.2	43				
1.6	2.8	37				
1.7	2.4	32				
1.8	2.0	27				
1.9	1.6	21				
2.0	1.2	16				
2.1	0.9	12				
2.2	0.6	8				
2.3	0.3	4				
2.4	0.2	3				
2.5	0.1	1				
2.6	0.0	0				

Oxygen Calibration: 0 and 20.9%
pH Calibration: 7 and 10, Slope = 100.4
Eh Calibration: ORP Standard = 424.3 mV at 18.5^{o}C

Oxygen μM Calculation Assumes Chlorinity of 20 and Avg. Temp of 10^{o}C

MMS Deep Gulf of Mexico Cruise 1B (Oct-Nov 2000)

Site: Viosca Knoll 916 Near-Field 5 (VK916 NF-B05)

Depth (cm)	Oxygen (%)	Oxygen (µM)	Depth (cm)	Temperature (C)	pH	Eh (mV)
Bottom Water	14.7	196	2	12.3	7.29	600
0.1	12.1	161	4	10.6	7.53	538
0.2	9.9	132	6	9.9	7.47	320
0.3	7.9	105	8	9.3	7.51	118
0.4	6.4	85	10	9.1	7.56	82
0.5	5.9	79	12	8.8	7.65	116
0.6	5.0	67	14	9.4	7.62	104
0.7	4.1	55	16	9.4	7.57	9
0.8	3.5	47	18	9.5	7.68	-10
0.9	2.9	39	20	9.8	7.59	7
1.0	2.3	31	22	10.6	7.51	7
1.1	1.8	24	24	10.9	7.44	-1
1.2	1.5	20	26	11.5	7.52	12
1.3	1.2	16	28	13.2	7.41	28
1.4	0.9	12				
1.5	0.6	8				
1.6	0.4	5				
1.7	0.2	3				
1.8	0.1	1				
1.9	0.1	1				
2.0	0.0	0				

Oxygen Calibration: 0 and 20.9%
pH Calibration: 7 and 10, Slope = 100.5
Eh Calibration: ORP Standard = 424.9 mV at 19.6^{o}C

Oxygen µM Calculation Assumes Chlorinity of 20 and Avg. Temp of 10^{o}C

MMS Deep Gulf of Mexico Cruise 1B (Oct-Nov 2000)

Site: Viosca Knoll 916 Near-Field 6 (VK916 NF-B06)

Depth (cm)	Oxygen (%)	Oxygen (μM)	Depth (cm)	Temperature (C)	pH	Eh (mV)
Bottom Water	14.0	186	1	13.7	7.28	596
0.1	12.2	162	3	12.2	7.36	303
0.2	11.0	146	5	11.5	7.42	317
0.3	9.4	125	7	10.8	7.51	132
0.4	7.9	105	9	10.6	7.47	94
0.5	6.8	91	11	10.6	7.51	58
0.6	6.0	80	13	10.7	7.43	66
0.7	5.4	72	15	10.8	7.45	69
0.8	4.9	65	17	11.1	7.56	46
0.9	4.5	60	19	11.4	7.37	38
1.0	4.1	55	21	12.2	7.36	40
1.1	3.6	48	23	12.4	7.38	23
1.2	3.2	43	25	13.8	7.67	44
1.3	2.8	37				
1.4	2.5	33				
1.5	2.3	31				
1.6	2.1	28				
1.7	1.9	25				
1.8	1.7	23				
1.9	1.5	20				
2.0	2.0	27				
2.1	2.1	28				
2.2	1.9	25				
2.3	1.7	23				
2.4	1.5	20				
2.5	1.3	17				
2.6	1.2	16				
2.7	1.1	15				
2.8	1.0	13				
2.9	0.9	12				
3.0	0.8	11				
3.1	0.7	9				
3.2	0.7	9				
3.3	0.6	8				

Oxygen Calibration: 0 and 20.9%
pH Calibration: 7 and 10, Slope = 101.3
Eh Calibration: ORP Standard = 423.6 mV at 19.4^{o}C

Oxygen μM Calculation Assumes Chlorinity of 20 and Avg. Temp of 10^{o}C

MMS Deep Gulf of Mexico Cruise 1B (Oct-Nov 2000)

Site: Viosca Knoll 916 Near-Field 7 (VK916 NF-B07)

Depth (cm)	Oxygen (%)	Oxygen (μM)	Depth (cm)	Temperature (C)	pH	Eh (mV)
Bottom Water	13.8	184	1	13.3	7.28	612
0.1	11.9	158	3	12.2	7.37	558
0.2	9.8	130	5	11.0	7.54	513
0.3	8.1	108	7	10.8	7.49	166
0.4	6.6	88	9	10.5	7.43	131
0.5	5.4	72	11	10.7	7.54	126
0.6	4.8	64	13	10.8	7.46	84
0.7	4.1	55	15	10.9	7.54	80
0.8	3.6	48	17	11.0	7.56	84
0.9	3.2	43	19	11.2	7.41	83
1.0	2.9	39	21	11.8	7.44	87
1.1	2.5	33	23	12.3	7.40	88
1.2	2.3	31	25	12.8	7.42	75
1.3	2.3	31	27	13.8	7.34	79
1.4	2.2	29				
1.5	2.2	29				
1.6	2.1	28				
1.7	2.0	27				
1.8	1.9	25				
1.9	1.8	24				
2.0	1.8	24				
2.1	1.7	23				
2.2	1.7	23				
2.3	1.6	21				
2.4	1.6	21				
2.5	1.5	20				
2.6	1.4	19				
2.7	1.4	19				
2.8	1.3	17				
2.9	1.2	16				
3.0	1.2	16				
3.1	1.1	15				
3.2	1.0	13				
3.3	0.9	12				
3.4	0.9	12				

Oxygen Calibration: 0 and 20.9%
pH Calibration: 7 and 10, Slope = 101.5
Eh Calibration: ORP Standard = 423.8 mV at 19.6^{o}C

Oxygen μM Calculation Assumes Chlorinity of 20 and Avg. Temp of 10^{o}C

MMS Deep Gulf of Mexico Cruise 1B (Oct-Nov 2000)

Site: Viosca Knoll 916 Near-Field 8 (VK916 NF-B08)

Depth (cm)	Oxygen (%)	Oxygen (μM)	Depth (cm)	Temperature (C)	pH	Eh (mV)
Bottom Water	16.0	213	1	14.1	7.34	591
0.1	12.8	170	3	12.5	7.63	529
0.2	11.7	156	5	11.2	7.60	421
0.3	9.7	129	7	11.0	7.53	128
0.4	7.6	101	9	10.7	7.50	109
0.5	6.2	83	11	10.6	7.59	108
0.6	5.1	68	13	10.7	7.52	41
0.7	4.4	59	15	10.8	7.51	52
0.8	3.9	52	17	10.9	7.47	50
0.9	3.4	45	19	11.1	7.61	49
1.0	3.0	40	21	11.4	7.44	43
1.1	2.7	36	23	11.8	7.80	44
1.2	2.4	32	25	12.8	7.48	41
1.3	2.1	28	27	14.0	7.36	35
1.4	1.8	24				
1.5	1.5	20				
1.6	1.3	17				
1.7	1.2	16				
1.8	1.1	15				
1.9	1.0	13				
2.0	1.0	13				
2.1	0.9	12				
2.2	0.8	11				
2.3	0.7	9				
2.4	0.7	9				
2.5	0.6	8				
2.6	0.6	8				
2.7	0.5	7				
2.8	0.4	5				
2.9	0.3	4				
3.0	0.3	4				
3.1	0.2	3				
3.2	0.2	3				
3.3	0.1	1				
3.4	0.0	0				

Oxygen Calibration: 0 and 20.9%
pH Calibration: 7 and 10, Slope = 100.7
Eh Calibration: ORP Standard = 424.2 mV at 20.0^{o}C

Oxygen μM Calculation Assumes Chlorinity of 20 and Avg. Temp of 10^{o}C

MMS Deep Gulf of Mexico Cruise 1B (Oct-Nov 2000)

Site: Viosca Knoll 916 Near-Field 9 (VK916 NF-B09)

Depth (cm)	Oxygen (%)	Oxygen (μM)	Depth (cm)	Temperature (C)	pH	Eh (mV)
Bottom Water	-	-	1	16.4	7.47	675
0.1	12.3	164	3	14.8	7.57	667
0.2	10.1	134	5	12.0	7.69	506
0.3	7.9	105	7	10.0	7.75	214
0.4	6.0	80	9	9.8	7.81	168
0.5	4.9	65	11	8.7	7.86	203
0.6	4.0	53	13	8.5	7.79	148
0.7	3.0	40	15	9.1	7.72	134
0.8	2.3	31	17	8.6	7.79	95
0.9	1.6	21	19	8.8	7.72	120
1.0	1.2	16	21	9.6	7.75	115
1.1	0.9	12	23	10.1	7.70	130
1.2	0.8	11	25	10.5	7.75	90
1.3	0.7	9	27	12.0	7.63	108
1.4	0.6	8				
1.5	0.5	7				
1.6	0.4	5				
1.7	0.3	4				
1.8	0.2	3				
1.9	0.2	3				
2.0	0.1	1				
2.1	0.1	1				
2.2	0.0	0				

Oxygen Calibration: 0 and 20.9%
pH Calibration: 7 and 10, Slope = 101.6
Eh Calibration: ORP Standard = 424.5 mV at 18.5^{o}C

Oxygen μM Calculation Assumes Chlorinity of 20 and Avg. Temp of 10^{o}C

MMS Deep Gulf of Mexico Cruise 1B (Oct-Nov 2000)

Site: Viosca Knoll 916 Near-Field 10 (VK916 NF-B10)

Depth (cm)	Oxygen (%)	Oxygen (µM)	Depth (cm)	Temperature (C)	pH	Eh (mV)
Bottom Water	18.6	248	1	15.0	7.64	603
0.1	14.6	194	3	12.4	7.57	260
0.2	11.1	148	5	10.0	7.61	148
0.3	9.2	122	7	8.4	7.79	113
0.4	7.1	95	9	8.4	7.75	185
0.5	5.1	68	11	8.5	7.87	96
0.6	3.9	52	13	8.5	7.75	90
0.7	3.0	40	15	8.5	7.72	96
0.8	2.2	29	17	8.6	7.71	94
0.9	1.6	21	19	8.7	7.84	85
1.0	1.1	15	21	8.8	7.65	90
1.1	0.8	11	23	9.4	7.70	84
1.2	0.7	9	25	10.9	7.60	90
1.3	0.6	8				
1.4	0.4	5				
1.5	0.3	4				
1.6	0.2	3				
1.7	0.1	1				
1.8	0.0	0				

Oxygen Calibration: 0 and 20.9%
pH Calibration: 7 and 10, Slope = 101.6
Eh Calibration: ORP Standard = 424.5 mV at 18.5^{o}C

Oxygen µM Calculation Assumes Chlorinity of 20 and Avg. Temp of 10^{o}C

MMS Deep Gulf of Mexico Cruise 1B (Oct-Nov 2000)

Site: Viosca Knoll 916 Near-Field 11 (VK916 NF-B11)

Depth (cm)	Oxygen (%)	Oxygen (µM)	Depth (cm)	Temperature (C)	pH	Eh (mV)
Bottom Water	18.6	248	1	15.9	7.43	601
0.1	12.6	168	3	13.6	7.35	585
0.2	9.9	132	5	11.4	7.39	539
0.3	8.1	108	7	9.8	7.58	132
0.4	5.9	79	9	9.4	7.59	124
0.5	4.7	63	11	9.3	7.61	94
0.6	3.2	43	13	8.9	7.61	108
0.7	2.5	33	15	9.0	7.72	92
0.8	1.8	24	17	9.1	7.64	88
0.9	1.5	20	19	9.3	7.60	90
1.0	1.3	17	21	9.5	7.75	86
1.1	1.1	15	23	9.8	7.58	74
1.2	1.0	13	25	10.7	7.53	106
1.3	0.9	12	27	12.5	7.52	82
1.4	0.8	11				
1.5	0.7	9				
1.6	0.6	8				
1.7	0.5	7				
1.8	0.4	5				
1.9	0.3	4				
2.0	0.2	3				
2.1	0.2	3				
2.2	0.1	1				
2.3	0.1	1				
2.4	0.1	1				
2.5	0.0	0				

Oxygen Calibration: 0 and 20.9%
pH Calibration: 7 and 10, Slope = 98.9
Eh Calibration: ORP Standard = 423.9 mV at 19.4^{o}C

Oxygen µM Calculation Assumes Chlorinity of 20 and Avg. Temp of 10^{o}C

MMS Deep Gulf of Mexico Cruise 1B (Oct-Nov 2000)

Site: Viosca Knoll 916 Near-Field 12 (VK916 NF-B12)

Depth (cm)	Oxygen (%)	Oxygen (µM)	Depth (cm)	Temperature (C)	pH	Eh (mV)
Bottom Water	18.1	241	1	15.8	7.40	618
0.1	Estimate this		3	10.6	7.58	180
0.2	much sediment		5	9.2	7.60	299
0.3	lost due to rough		7	8.5	7.83	141
0.4	box core handling		9	8.4	7.96	198
0.5	(exposed tube		11	8.4	7.67	90
0.6	worms).		13	8.6	7.75	80
0.7	Core vibrating		15	8.6	7.79	61
0.8	in rack.		17	8.8	7.80	80
0.9	2.1	28	19	9.4	7.65	87
1.0	1.4	19	21	10.1	7.70	71
1.1	1.1	15	23	11.3	7.51	56
1.2	0.7	9				
1.3	0.4	5				
1.4	0.2	3				
1.5	0.0	0				

Oxygen Calibration: 0 and 20.9%
pH Calibration: 7 and 10, Slope = 100.2
Eh Calibration: ORP Standard = 423.6 mV at 19.4^{o}C

Oxygen µM Calculation Assumes Chlorinity of 20 and Avg. Temp of 10^{o}C

MMS Deep Gulf of Mexico Cruise 1B (Oct-Nov 2000)

Site: Viosca Knoll 916 Far-Field 2, Box Core 1 (VK916 FF2-B01)

Depth (cm)	Oxygen (%)	Oxygen (µM)	Depth (cm)	Temperature (C)	pH	Eh (mV)
Bottom Water	17.0	226	1	15.8	7.50	614
0.1	13.4	178	3	13.2	7.46	430
0.2	10.9	145	5	12.0	7.50	254
0.3	8.2	109	7	11.3	7.39	197
0.4	6.9	92	9	11.4	7.59	200
0.5	5.5	73	11	10.3	7.57	140
0.6	4.5	60	13	11.1	7.65	150
0.7	3.9	52	15	11.0	7.65	173
0.8	3.6	48	17	12.3	7.49	134
0.9	3.4	45	19	12.0	7.60	156
1.0	3.2	43	21	12.6	7.53	90
1.1	3.1	41	23	13.7	7.66	103
1.2	3.0	40				
1.3	2.9	39				
1.4	2.8	37				
1.5	2.7	36				
1.6	2.6	35				
1.7	2.5	33				
1.8	2.4	32				
1.9	2.3	31				
2.0	2.2	29				
2.1	2.1	28				
2.2	2.0	27				
2.3	1.9	25				

Oxygen Calibration: 0 and 20.9%
pH Calibration: 7 and 10, Slope = 99.9
Eh Calibration: ORP Standard = 424.0 mV at 18.5^{o}C

Oxygen µM Calculation Assumes Chlorinity of 20 and Avg. Temp of 10^{o}C

MMS Deep Gulf of Mexico Cruise 1B (Oct-Nov 2000)

Site: Viosca Knoll 916 Far-Field 2, Box Core 2 (VK916 FF2-B02)

Depth (cm)	Oxygen (%)	Oxygen (μM)	Depth (cm)	Temperature (C)	pH	Eh (mV)
Bottom Water	-	-	2	11.5	7.76	572
0.1			4	9.2	7.57	500
0.2			6	8.7	7.67	289
0.3			8	7.3	7.75	161
0.4			10	8.5	7.74	175
0.5			12	8.6	7.73	232
0.6			14	9.0	7.63	306
0.7			16	9.1	7.58	210
0.8			18	8.1	7.73	192
0.9			20	9.1	7.63	160
1.0			22	8.5	7.80	144
1.1			24	9.2	7.55	209
1.2			26	11.4	7.64	113

pH Calibration: 7 and 10, Slope = 99.5

Eh Calibration: ORP Standard = 424.5 mV at 18.4^{o}C

MMS Deep Gulf of Mexico Cruise 1B (Oct-Nov 2000)

Site: Viosca Knoll 916 Far-Field 3, Box Core 1 (VK916 FF3-B01)

Depth (cm)	Oxygen (%)	Oxygen (μM)	Depth (cm)	Temperature (C)	pH	Eh (mV)
Bottom Water	16.4	218	2	13.5	7.48	374
0.1	12.8	170	4	12.2	7.56	416
0.2	11.3	150	6	11.4	7.60	161
0.3	10.4	138	8	11.2	7.71	110
0.4	9.1	121	10	11.0	7.62	108
0.5	8.3	111	12	11.3	7.68	106
0.6	6.8	91	14	11.3	7.61	87
0.7	5.3	71	16	11.4	7.73	80
0.8	4.1	55	18	11.7	7.61	91
0.9	3.6	48	20	11.9	7.58	76
1.0	3.0	40	22	12.2	7.51	49
1.1	2.7	36	24	13.0	7.54	74
1.2	2.5	33	26	13.4	7.64	64
1.3	2.2	29				
1.4	1.9	25				
1.5	1.7	23				
1.6	1.5	20				
1.7	1.3	17				
1.8	1.2	16				
1.9	1.1	15				
2.0	1.1	15				
2.1	1.0	13				
2.2	1.0	13				
2.3	0.9	12				
2.4	0.8	11				
2.5	0.8	11				
2.6	0.7	9				
2.7	0.6	8				
2.8	0.5	7				
2.9	0.5	7				
3.0	0.4	5				

Oxygen Calibration: 0 and 20.9%
pH Calibration: 7 and 10, Slope = 98.3
Eh Calibration: ORP Standard = 424.3 mV at 19.0^{o}C

Oxygen μM Calculation Assumes Chlorinity of 20 and Avg. Temp of 10^{o}C

MMS Deep Gulf of Mexico Cruise 1B (Oct-Nov 2000)

Site: Viosca Knoll 916 Far-Field 3, Box Core 2 (VK916 FF3-B02)

Depth (cm)	Oxygen (%)	Oxygen (μM)	Depth (cm)	Temperature (C)	pH	Eh (mV)
Bottom Water	-	-	1	16.8	7.53	501
0.1			3	15.2	7.53	442
0.2			5	11.2	7.55	257
0.3			7	9.7	7.64	245
0.4			9	8.7	7.80	127
0.5			11	8.4	7.64	136
0.6			13	8.0	7.71	114
0.7			15	7.5	7.77	93
0.8			17	8.7	7.70	90
0.9			19	9.4	7.66	101
1.0			21	9.1	7.75	94
1.1			23	9.4	7.72	91
1.2			25	9.1	7.73	79
1.3			27	10.3	7.62	70
1.4			29	13.5	7.58	67

pH Calibration: 7 and 10, Slope = 99.9

Eh Calibration: ORP Standard = 424.0 mV at 19.0^{o}C

MMS Deep Gulf of Mexico Cruise 1B (Oct-Nov 2000)

Site: Viosca Knoll 916 Far-Field 4, Box Core 1 (VK916 FF4-B01)

Depth (cm)	Oxygen (%)	Oxygen (µM)	Depth (cm)	Temperature (C)	pH	Eh (mV)
Bottom Water	18.0	240	1	17.0	7.87	595
0.1	13.3	177	3	14.7	7.85	563
0.2	10.2	136	5	12.3	7.65	360
0.3	8.8	117	7	9.9	7.64	282
0.4	7.1	95	9	10.2	7.72	121
0.5	5.5	73	11	10.4	7.66	107
0.6	4.6	61	13	11.2	7.74	85
0.7	3.9	52	15	10.4	7.86	68
0.8	3.3	44	17	11.0	7.88	71
0.9	2.8	37	19	12.4	7.85	66
1.0	2.3	31	21	11.5	7.88	81
1.1	1.9	25	23	12.4	7.85	60
1.2	1.6	21	25	13.2	7.80	58
1.3	1.3	17				
1.4	1.0	13				
1.5	0.8	11				
1.6	0.7	9				
1.7	0.6	8				
1.8	0.5	7				
1.9	0.4	5				
2.0	0.3	4				
2.1	0.2	3				
2.2	0.1	1				
2.3	0.1	1				
2.4	0.0	0				

Oxygen Calibration: 0 and 20.9%
pH Calibration: 7 and 10, Slope = 97.4
Eh Calibration: ORP Standard = 423.9 mV at 18.3^{o}C

Oxygen µM Calculation Assumes Chlorinity of 20 and Avg. Temp of 10^{o}C

MMS Deep Gulf of Mexico Cruise 1B (Oct-Nov 2000)

Site: Viosca Knoll 916 Far-Field 4, Box Core 2 (VK916 FF4-B02)

Depth (cm)	Oxygen (%)	Oxygen (μM)	Depth (cm)	Temperature (C)	pH	Eh (mV)
Bottom Water	-	-	2	16.7	7.63	585
0.1			4	11.5	7.59	326
0.2			6	9.4	7.65	146
0.3			8	9.3	7.65	111
0.4			10	8.5	7.76	120
0.5			12	8.6	7.67	187
0.6			14	8.9	7.74	165
0.7			16	8.1	7.93	118
0.8			18	8.8	7.84	99
0.9			20	9.0	7.75	108
1.0			22	10.5	7.74	112
1.1			24	9.2	7.86	97
1.2			26	10.4	7.70	79
1.3			28	13.1	7.70	131

pH Calibration: 7 and 10, Slope = 99.4

Eh Calibration: ORP Standard = 422.8 mV at 18.6^{o}C

MMS Deep Gulf of Mexico Cruise 1B (Oct-Nov 2000)

Site: Viosca Knoll 916 Far-Field 5, Box Core 1 (VK916 FF5-B01)

Depth (cm)	Oxygen (%)	Oxygen (µM)	Depth (cm)	Temperature (C)	pH	Eh (mV)
Bottom Water	18.4	245	2	13.6	7.53	274
0.1	11.4	152	4	12.1	7.60	159
0.2	9.4	125	6	10.4	7.70	116
0.3	7.8	104	8	10.3	7.65	114
0.4	6.5	87	10	9.7	7.62	114
0.5	5.5	73	12	9.8	7.70	85
0.6	4.6	61	14	10.0	7.76	99
0.7	4.0	53	16	9.9	7.70	92
0.8	3.5	47	18	10.1	7.71	86
0.9	3.1	41	20	9.9	7.69	80
1.0	2.7	36	22	10.3	7.65	76
1.1	2.4	32	24	10.8	7.64	81
1.2	2.1	28	26	12.1	7.60	74
1.3	1.9	25				
1.4	1.7	23				
1.5	1.5	20				
1.6	1.3	17				
1.7	1.1	15				
1.8	0.9	12				
1.9	0.8	11				
2.0	0.7	9				
2.1	0.6	8				
2.2	0.5	7				
2.3	0.4	5				
2.4	0.3	4				
2.5	0.3	4				
2.6	0.2	3				
2.7	0.1	1				
2.8	0.0	0				

Oxygen Calibration: 0 and 20.9%
pH Calibration: 7 and 10, Slope = 99.0
Eh Calibration: ORP Standard = 422.5 mV at 19.1^{o}C

Oxygen µM Calculation Assumes Chlorinity of 20 and Avg. Temp of 10^{o}C

MMS Deep Gulf of Mexico Cruise 1B (Oct-Nov 2000)

Site: Viosca Knoll 916 Far-Field 5, Box Core 2 (VK916 FF5-B02)

Depth (cm)	Oxygen (%)	Oxygen (µM)	Depth (cm)	Temperature (C)	pH	Eh (mV)
Bottom Water	-	-	2	13.5	7.48	181
0.1			4	9.1	7.74	226
0.2			6	7.8	7.69	179
0.3			8	7.7	7.67	92
0.4			10	7.6	7.85	81
0.5			12	7.7	7.73	77
0.6			14	7.9	7.81	102
0.7			16	8.4	7.72	63
0.8			18	8.4	7.72	86
0.9			20	8.6	7.59	147
1.0			22	9.5	7.64	151
1.1			24	11.8	7.68	93

pH Calibration: 7 and 10, Slope = 100.5

Eh Calibration: ORP Standard = 422.6 mV at 19.2^{o}C

MMS Deep Gulf of Mexico Cruise 1B (Oct-Nov 2000)

Site: Viosca Knoll 916 Far-Field 6, Box Core 1 (VK916 FF6-B01)

Depth (cm)	Oxygen (%)	Oxygen (μM)	Depth (cm)	Temperature (C)	pH	Eh (mV)
Bottom Water	-	-	1	12.8	7.47	605
0.1	13.1	174	3	10.3	7.55	475
0.2	11.4	152	5	9.1	7.55	170
0.3	9.4	125	7	9.0	7.70	176
0.4	7.2	96	9	8.9	7.81	132
0.5	5.6	75	11	8.9	7.67	56
0.6	4.6	61	13	8.8	7.68	109
0.7	3.7	49	15	9.1	7.73	76
0.8	3.0	40	17	9.5	7.70	131
0.9	2.3	31	19	9.6	7.80	104
1.0	1.8	24	21	10.1	7.72	107
1.1	1.5	20	23	11.2	7.62	139
1.2	1.3	17	25	12.4	7.88	109
1.3	1.1	15				
1.4	1.0	13				
1.5	0.8	11				
1.6	0.7	9				
1.7	0.6	8				
1.8	0.5	7				
1.9	0.4	5				
2.0	0.3	4				
2.1	0.2	3				
2.2	0.1	1				
2.3	0.1	1				
2.4	0.0	0				

Oxygen Calibration: 0 and 20.9%
pH Calibration: 7 and 10, Slope = 100.8
Eh Calibration: ORP Standard = 424.0 mV at 19.7^{o}C

Oxygen μM Calculation Assumes Chlorinity of 20 and Avg. Temp of 10^{o}C

MMS Deep Gulf of Mexico Cruise 1B (Oct-Nov 2000)

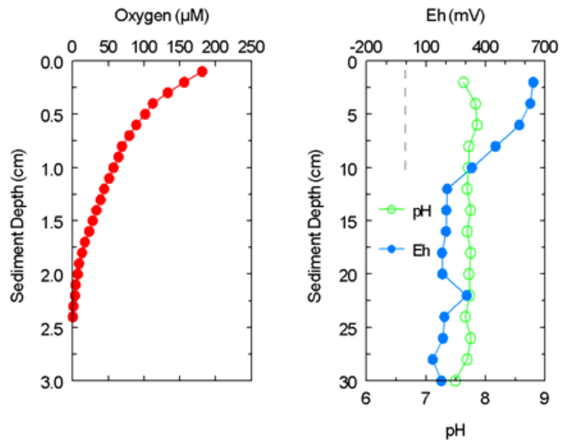
Site: Viosca Knoll 916 Far-Field 6, Box Core 2 (VK916 FF6-B02)

Depth (cm)	Oxygen (%)	Oxygen (µM)	Depth (cm)	Temperature (C)	pH	Eh (mV)
Bottom Water	-	-	2	11.8	7.55	135
0.1			4	13.7	7.88	124
0.2			6	13.2	7.19	49
0.3			8	12.7	7.65	67
0.4			10	1.5	7.61	169
0.5			12	12.6	7.26	122
0.6			14	12.4	7.51	102
0.7			16	12.6	7.58	144
0.8			18	12.8	7.38	142
0.9			20	13.0	7.22	121
1.0			22	13.6	7.40	100
1.1			24	14.1	7.29	84
1.2			26	15.0	7.28	98

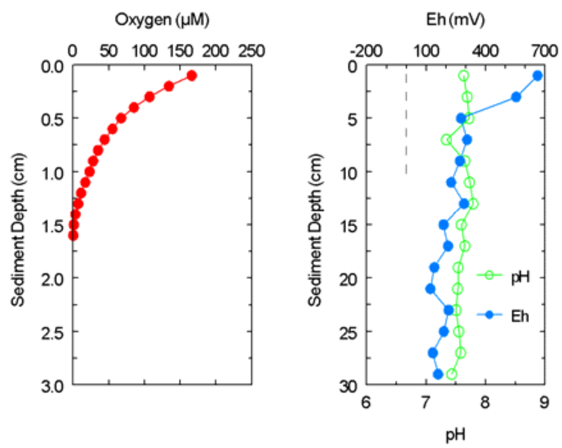
pH Calibration: 7 and 10, Slope = 103.9

Eh Calibration: ORP Standard = 424.0 mV at 19.7^{o}C

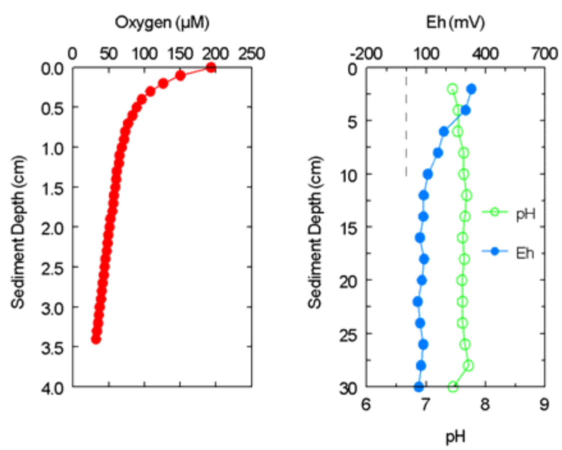
MMS Deep Gulf of Mexico Cruise 1: VK916 NF-B01



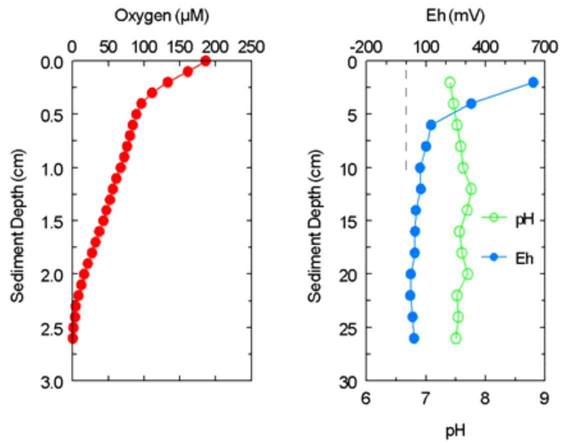
MMS Deep Gulf of Mexico Cruise 1: VK916 NF-B02



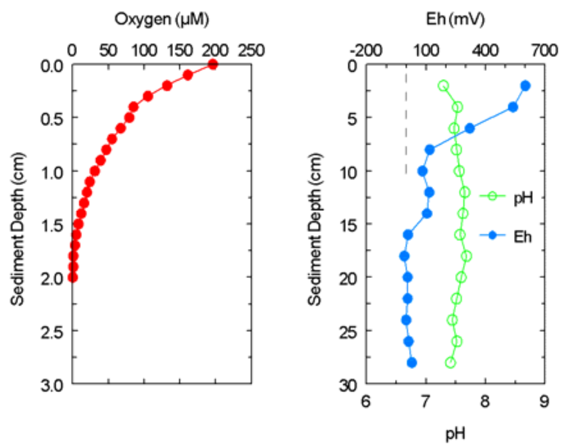
MMS Deep Gulf of Mexico Cruise 1: VK916 NF-B03



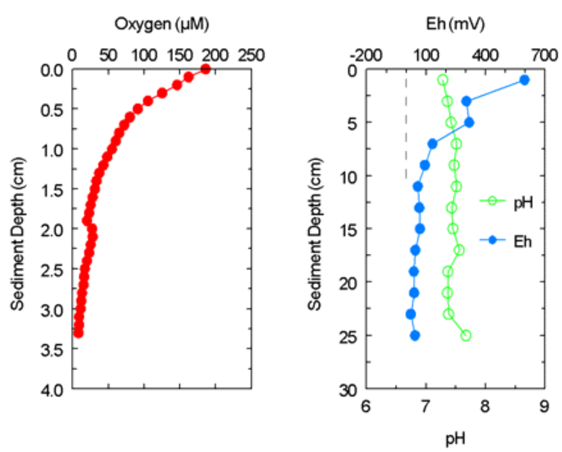
MMS Deep Gulf of Mexico Cruise 1: VK916 NF-B04



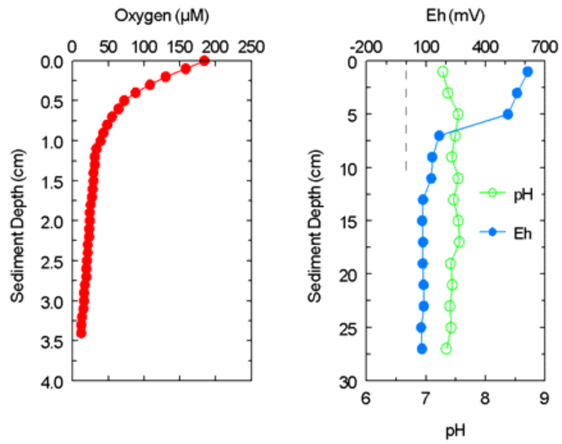
MMS Deep Gulf of Mexico Cruise 1: VK916 NF-B05



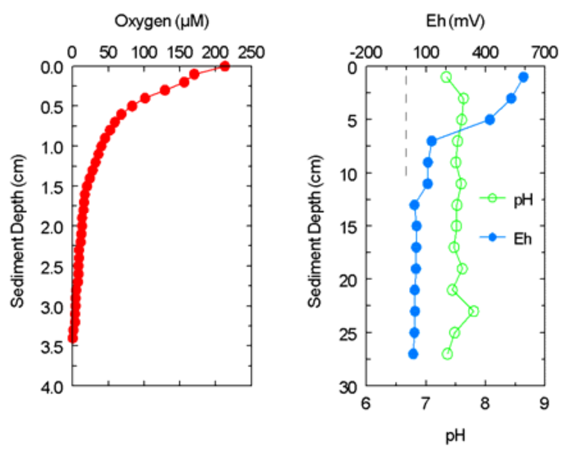
MMS Deep Gulf of Mexico Cruise 1: VK916 NF-B06



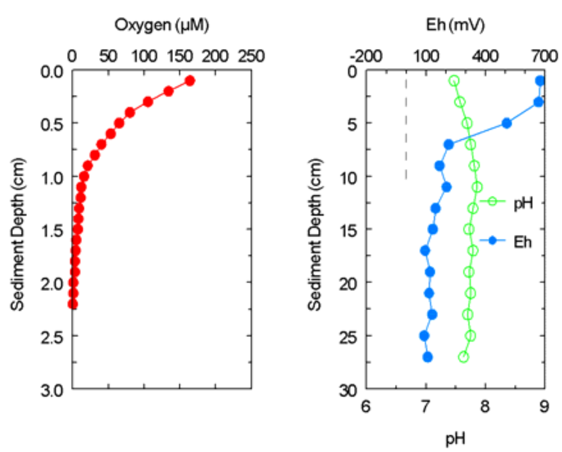
MMS Deep Gulf of Mexico Cruise 1: VK916 NF-B07



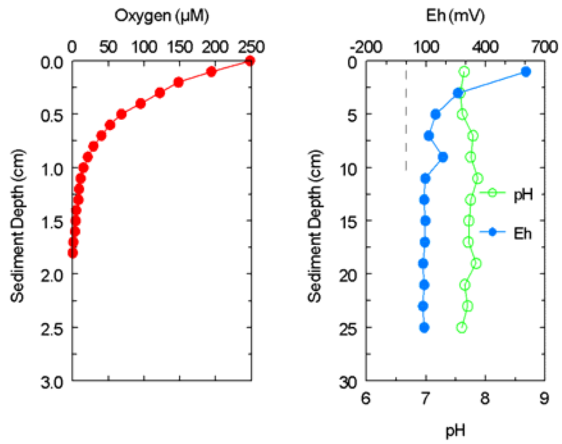
MMS Deep Gulf of Mexico Cruise 1: VK916 NF-B08



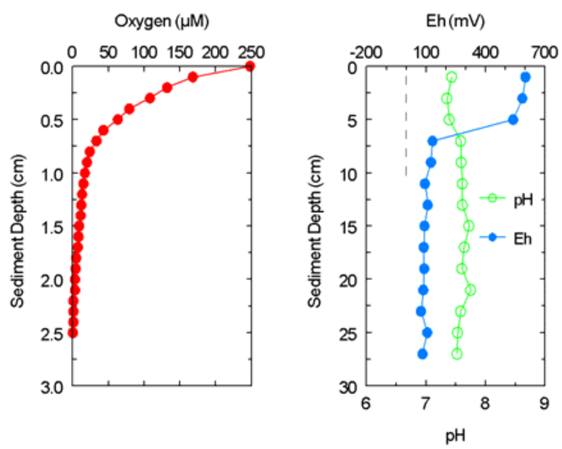
MMS Deep Gulf of Mexico Cruise 1: VK916 NF-B09



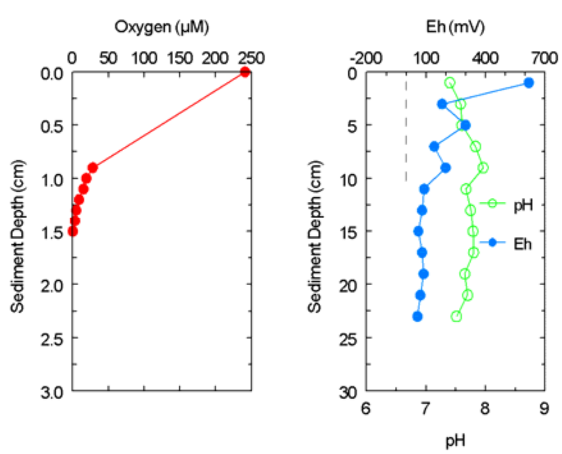
MMS Deep Gulf of Mexico Cruise 1: VK916 NF-B10



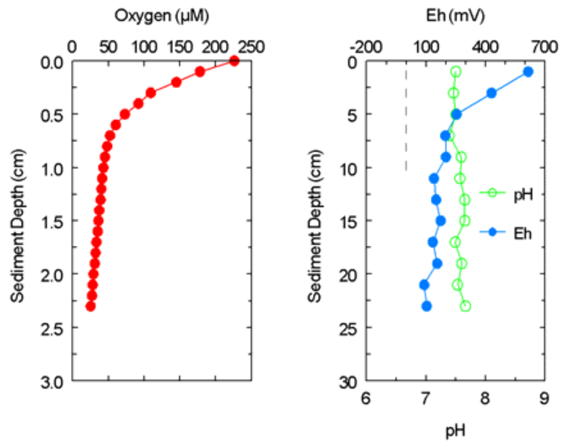
MMS Deep Gulf of Mexico Cruise 1: VK916 NF-B11



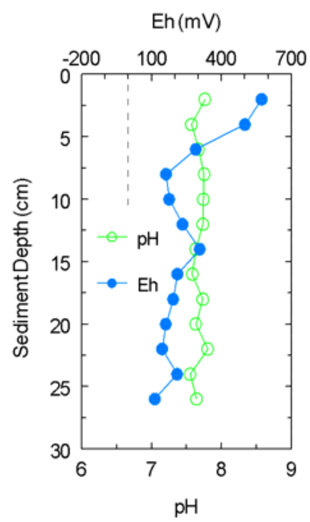
MMS Deep Gulf of Mexico Cruise 1: VK916 NF-B12



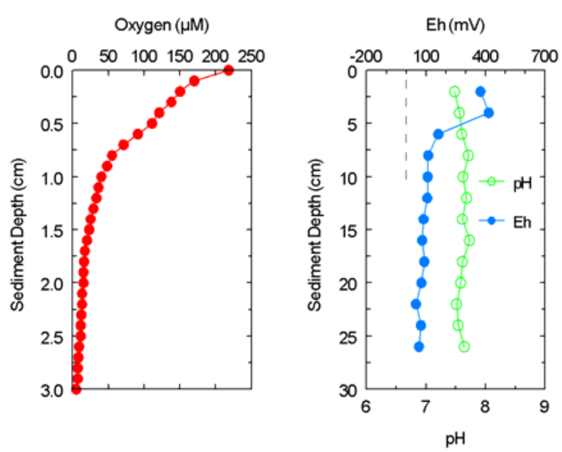
MMS Deep Gulf of Mexico Cruise 1: VK916 FF2-B01



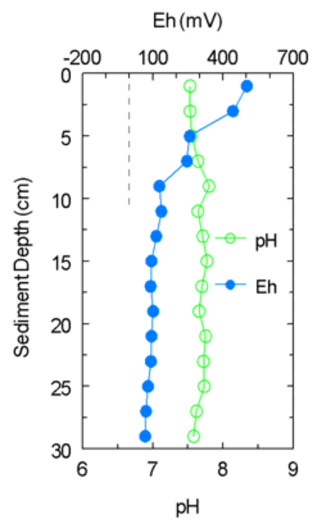
MMS Deep Gulf of Mexico Cruise 1: VK916 FF2-B02



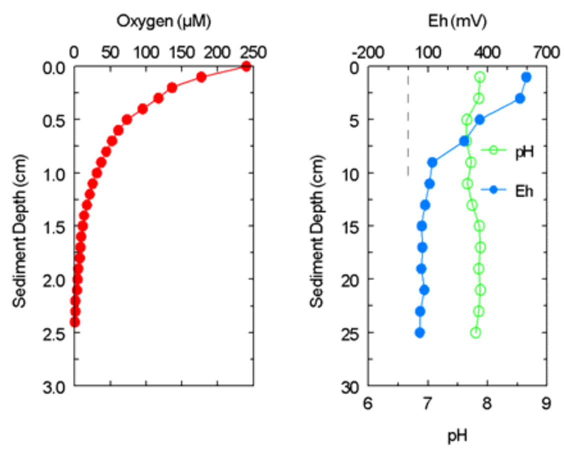
MMS Deep Gulf of Mexico Cruise 1: VK916 FF3-B01



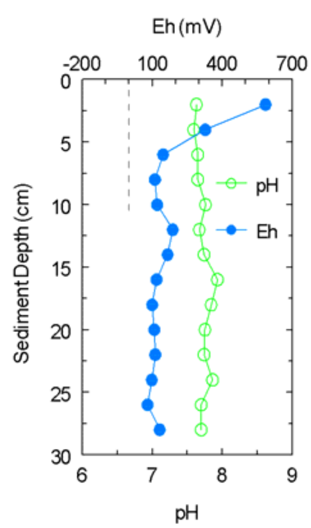
MMS Deep Gulf of Mexico Cruise 1: VK916 FF3-B02



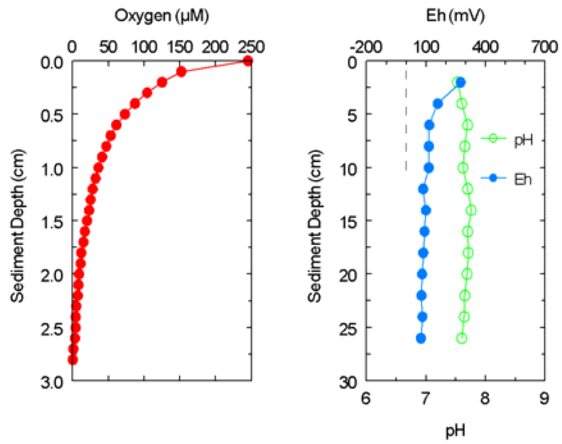
MMS Deep Gulf of Mexico Cruise 1: VK916 FF4-B01



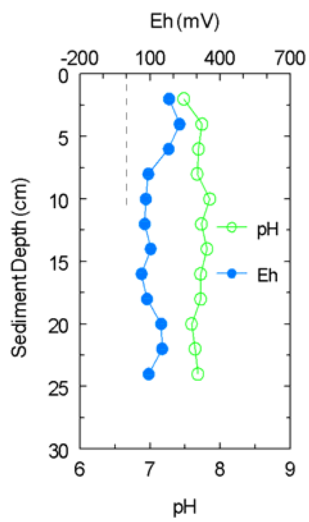
MMS Deep Gulf of Mexico Cruise 1: VK916 FF4-B02



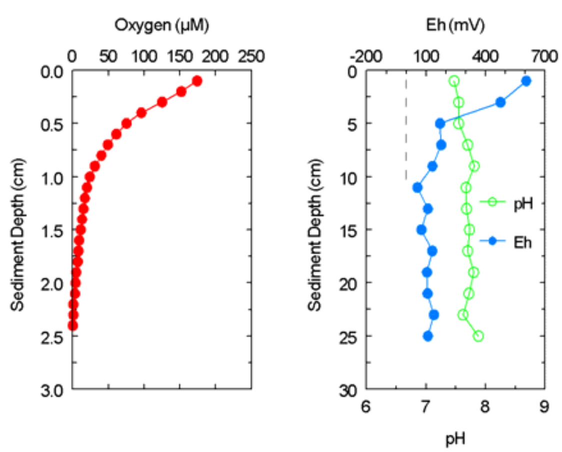
MMS Deep Gulf of Mexico Cruise 1: VK916 FF5-B01



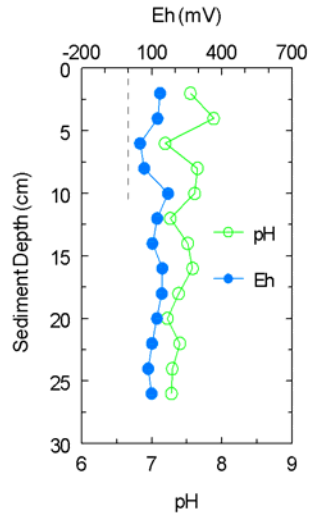
MMS Deep Gulf of Mexico Cruise 1: VK916 FF5-B02



MMS Deep Gulf of Mexico Cruise 1: VK916 FF6-B01



MMS Deep Gulf of Mexico Cruise 1: VK916 FF6-B02



MMS Deep Gulf of Mexico Cruise 1B (Oct-Nov 2000)

Site: Garden Banks 516 Near-Field 1 (GB516 NF-B01)

Depth (cm)	Oxygen (%)	Oxygen (μM)	Depth (cm)	Temperature (C)	pH	Eh (mV)
Bottom Water	17.6	234	1	17.4	7.16	185
0.1	13.6	181	3	15.0	7.42	324
0.2	10.4	138	5	13.5	7.31	364
0.3	7.6	101	7	12.8	7.34	377
0.4	5.8	77	9	10.1	7.42	410
0.5	4.8	64	11	10.0	7.49	399
0.6	3.7	49	13	10.1	7.50	396
0.7	3.1	41	15	9.4	7.58	434
0.8	2.7	36	17	9.9	7.55	395
0.9	2.2	29	19	10.0	7.57	384
1.0	1.8	24	21	10.9	7.48	205
1.1	1.5	20	23	12.5	7.47	196
1.2	1.2	16				
1.3	0.9	12				
1.4	0.7	9				
1.5	0.6	8				
1.6	0.5	7				
1.7	0.4	5				
1.8	0.3	4				
1.9	0.2	3				
2.0	0	0				

Oxygen Calibration: 0 and 20.9%
pH Calibration: 7 and 10, Slope = 99.2
Eh Calibration: ORP Standard = 424.3 mV at 19.2^{o}C

Oxygen μM Calculation Assumes Chlorinity of 20 and Avg. Temp of 10^{o}C

MMS Deep Gulf of Mexico Cruise 1B (Oct-Nov 2000)

Site: Garden Banks 516 Near-Field 2 (GB516 NF-B02)

Depth (cm)	Oxygen (%)	Oxygen (µM)	Depth (cm)	Temperature (C)	pH	Eh (mV)
Bottom Water	12.4	165	0.5	18.3	7.05	-163
0.1	9.6	128	2.5	14.1	7.22	-142
0.2	2.8	37	4.5	12.5	7.17	-154
0.3	0	0	6.5	9.9	8.06	-110
			8.5	9.7	7.63	37
			10.5	9.5	7.48	56
			12.5	9.4	7.39	60
			14.5	9.0	7.45	107
			16.5	9.1	7.40	156
			18.5	9.2	7.88	66
			20.5	9.8	7.69	100
			22.5	10.0	7.39	253
			24.5	11.7	7.37	133
			26.5	12.6	7.43	64

Oxygen Calibration: 0 and 20.9%
pH Calibration: 7 and 10, Slope = 100.0
Eh Calibration: ORP Standard = 424.0 mV at 20.2^{o}C

Oxygen µM Calculation Assumes Chlorinity of 20 and Avg. Temp of 10^{o}C

MMS Deep Gulf of Mexico Cruise 1B (Oct-Nov 2000)

Site: Garden Banks 516 Near-Field 3 (GB516 NF-B03)

Depth (cm)	Oxygen (%)	Oxygen (µM)	Depth (cm)	Temperature (C)	pH	Eh (mV)
Bottom Water	-	-	1.5	12.1	6.89	601
0.1	13.4	178	3.5	10.9	6.83	639
0.2	10.3	137	5.5	10.5	6.82	629
0.3	7.5	100	7.5	10.2	6.80	615
0.4	6.4	85	9.5	9.2	5.50*	579
0.5	5.7	76	11.5	9.5	5.44*	493
0.6	4.1	55	13.5	9.7	6.95	568
0.7	3.5	47	15.5	9.5	6.99	509
0.8	3.1	41	17.5	10.0	6.89	457
0.9	2.8	37	19.5	11.3	6.93	384
1.0	2.4	32	21.5	10.4	6.95	447
1.1	2.2	29	23.5	10.8	7.00	427
1.2	1.8	24	25.5	11.5	7.19	357
1.3	1.6	21				
1.4	1.4	19			*suspect	
1.5	1.1	15				
1.6	0.9	12				
1.7	0.8	11				
1.8	0.7	9				
1.9	0.6	8				
2.0	0.5	7				
2.1	0.4	5				
2.2	0.3	4				
2.3	0.3	4				
2.4	0.2	3				
2.5	0.2	3				
2.6	0.1	1				
2.7	0.1	1				
2.8	0.1	1				
2.9	0	0				

Oxygen Calibration: 0 and 20.9%
pH Calibration: 7 and 10, Slope = 101.5
Eh Calibration: ORP Standard = 424.0 mV at 20.0^{o}C

Oxygen µM Calculation Assumes Chlorinity of 20 and Avg. Temp of 10^{o}C

MMS Deep Gulf of Mexico Cruise 1B (Oct-Nov 2000)

Site: Garden Banks 516 Near-Field 4 (GB516 NF-B04)

Depth (cm)	Oxygen (%)	Oxygen (μM)	Depth (cm)	Temperature (C)	pH	Eh (mV)
Bottom Water	16.0	205	0.5	16.5	7.23	633
0.1	12.5	160	2.5	15.5	6.99	640
0.2	11.4	146	4.5	13.7	7.07	626
0.3	10.2	130	6.5	12.5	7.07	555
0.4	9.5	122	8.5	12.1	7.12	577
0.5	8.8	113	10.5	11.3	7.20	512
0.6	8.2	105	12.5	10.7	6.30*	548
0.7	7.7	98	14.5	11.1	7.28	495
0.8	7.2	92	16.5	11.2	7.25	496
0.9	6.7	86	18.5	11.9	7.25	458
1.0	6.2	79	20.5	12.2	7.23	316
1.1	5.8	74	22.5	12.5	7.35	320
1.2	5.2	67	24.5	13.3	7.51	152
1.3	4.7	60				
1.4	4.3	55				
1.5	3.8	49			*suspect	
1.6	3.4	43				
1.7	3.1	40				
1.8	2.8	36				
1.9	2.6	33				
2.0	2.4	31				
2.1	2.2	28				
2.2	2.0	26				
2.3	1.8	23				
2.4	1.6	20				
2.5	1.4	18				
2.6	1.3	17				
2.7	1.2	15				
2.8	1.1	14				
2.9	1.0	13				
3.0	0.9	12				

Oxygen Calibration: 0 and 20.9%
pH Calibration: 7 and 10, Slope = 99.0
Eh Calibration: ORP Standard = 424.5 mV at 18.8^{o}C

Oxygen μM Calculation Assumes Chlorinity of 20 and Avg. Temp of 12^{o}C

MMS Deep Gulf of Mexico Cruise 1B (Oct-Nov 2000)

Site: Garden Banks 516 Near-Field 5 (GB516 NF-B05)

Depth (cm)	Oxygen (%)	Oxygen (μM)	Depth (cm)	Temperature (C)	pH	Eh (mV)
Bottom Water	17.2	229	1	15.8	7.42	618
0.1	12.1	161	3	13.3	7.17	637
0.2	11.0	146	5	11.1	7.17	602
0.3	9.7	129	7	9.7	7.00	580
0.4	8.9	119	9	10.4	7.32	524
0.5	8.1	108	11	10.2	7.41	451
0.6	7.4	99	13	10.4	7.44	429
0.7	6.9	92	15	10.2	7.50	387
0.8	6.4	85	17	10.9	7.51	367
0.9	6.1	81	19	10.4	7.46	323
1.0	5.7	76	21	9.8	7.44	268
1.1	5.3	71	23	10.9	7.57	130
1.2	4.9	65	25	11.6	7.40	124
1.3	4.6	61	27	12.4	7.46	93
1.4	4.3	57				
1.5	4.0	53				
1.6	3.6	48				
1.7	3.4	45				
1.8	3.1	41				
1.9	2.8	37				
2.0	2.5	33				
2.1	2.2	29				
2.2	2.0	27				
2.3	1.8	24				
2.4	1.6	21				
2.5	1.4	19				
2.6	1.2	16				
2.7	1.1	15				
2.8	1.0	13				
2.9	0.9	12				
3.0	0.8	11				

Oxygen Calibration: 0 and 20.9%
pH Calibration: 7 and 10, Slope = 98.9
Eh Calibration: ORP Standard = 424.9 mV at 18.8^{o}C

Oxygen μM Calculation Assumes Chlorinity of 20 and Avg. Temp of 10^{o}C

MMS Deep Gulf of Mexico Cruise 1B (Oct-Nov 2000)

Site: Garden Banks 516 Near-Field 6 (GB516 NF-B06)

Depth (cm)	Oxygen (%)	Oxygen (μM)	Depth (cm)	Temperature (C)	pH	Eh (mV)
Bottom Water	14.2	189	0.5	15.2	7.97	550
0.1	8.5	113	2	12.3	7.32	-88
0.2	3.3	44	4	10.0	7.19	144
0.3	1.0	13	6	10.0	7.24	242
0.4	0.0	0	8	9.1	7.34	243
			10	8.7	7.31	260
			12	8.8	7.37	288
			14	8.6	7.46	309
			16	8.7	7.47	305
			18	8.3	7.46	324
			20	8.8	7.36	176
			22	9.3	7.34	110
			24	9.8	7.38	95
			26	10.8	7.42	75

Oxygen Calibration: 0 and 20.9%
pH Calibration: 7 and 10, Slope = 99.3
Eh Calibration: ORP Standard = 424.9 mV at 18.2^{o}C

Oxygen μM Calculation Assumes Chlorinity of 20 and Avg. Temp of 10^{o}C

MMS Deep Gulf of Mexico Cruise 1B (Oct-Nov 2000)

Site: Garden Banks 516 Near-Field 7 (GB516 NF-B07)

Depth (cm)	Oxygen (%)	Oxygen (μM)	Depth (cm)	Temperature (C)	pH	Eh (mV)
Bottom Water	-	-	1	13.6	7.39	603
0.1	13.4	178	3	11.2	7.28	635
0.2	9.0	120	5	9.9	7.29	616
0.3	7.7	103	7	9.6	7.33	568
0.4	6.1	81	9	8.7	7.49	537
0.5	5.2	69	11	8.7	7.54	518
0.6	4.5	60	13	8.8	7.55	455
0.7	4.0	53	15	8.7	7.33	394
0.8	3.5	47	17	9.1	7.53	326
0.9	3.0	40	19	9.1	7.49	350
1.0	2.7	36	21	9.4	7.51	180
1.1	2.4	32	23	9.7	7.55	282
1.2	2.2	29	25	10.3	7.56	226
1.3	2.0	27	27	11.0	7.51	186
1.4	1.8	24	29	12.0	7.57	113
1.5	1.6	21				
1.6	1.5	20				
1.7	1.4	19				
1.8	1.3	17				
1.9	1.2	16				
2.0	1.2	16				
2.1	1.1	15				
2.2	1.1	15				
2.3	1.0	13				
2.4	1.0	13				
2.5	0.9	12				
2.6	0.9	12				
2.7	0.8	11				
2.8	0.8	11				
2.9	0.7	9				
3.0	0.6	8				

Oxygen Calibration: 0 and 20.9%
pH Calibration: 7 and 10, Slope = 99.4
Eh Calibration: ORP Standard = 424.7 mV at 19.2^{o}C

Oxygen μM Calculation Assumes Chlorinity of 20 and Avg. Temp of 10^{o}C

MMS Deep Gulf of Mexico Cruise 1B (Oct-Nov 2000)

Site: Garden Banks 516 Near-Field 8 (GB516 NF-B08)

Depth (cm)	Oxygen (%)	Oxygen (μM)	Depth (cm)	Temperature (C)	pH	Eh (mV)
Bottom Water	15.1	201	2	13.4	7.18	664
0.1	12.0	160	4	12.2	7.16	656
0.2	11.0	146	6	11.4	7.20	611
0.3	8.7	116	8	11.0	7.30	563
0.4	8.0	107	10	10.7	7.31	528
0.5	7.7	103	12	10.7	7.29	499
0.6	7.5	100	14	10.4	7.38	447
0.7	7.2	96	16	10.5	7.38	360
0.8	7.0	93	18	10.8	7.36	301
0.9	6.8	91	20	11.0	7.35	219
1.0	6.6	88	22	11.2	7.33	155
1.1	6.4	85	24	11.8	7.42	103
1.2	6.2	83	26	12.5	7.33	90
1.3	6.0	80	28	13.6	7.35	79
1.4	5.8	77				
1.5	5.6	75				
1.6	5.5	73				
1.7	5.3	71				
1.8	5.1	68				
1.9	4.8	64				
2.0	4.6	61				
2.1	4.3	57				
2.2	4.0	53				
2.3	3.7	49				
2.4	3.5	47				
2.5	3.3	44				
2.6	3.0	40				
2.7	2.7	36				
2.8	2.5	33				
2.9	2.3	31				
3.0	2.1	28				
3.1	1.9	25				
3.2	1.8	24				
3.3	1.7	23				
3.4	1.6	21				
3.5	1.5	20				
3.6	1.4	19				
3.7	1.3	17				
3.8	1.2	16				

Oxygen Calibration: 0 and 20.9%
pH Calibration: 7 and 10, Slope = 100.6
Eh Calibration: ORP Standard = 424.3 mV at 19.5^{o}C

Oxygen μM Calculation Assumes Chlorinity of 20 and Avg. Temp of 10^{o}C

MMS Deep Gulf of Mexico Cruise 1B (Oct-Nov 2000)

Site: Garden Banks 516 Near-Field 9 (GB516 NF-B09)

Depth (cm)	Oxygen (%)	Oxygen (µM)	Depth (cm)	Temperature (C)	pH	Eh (mV)
Bottom Water	-	-	0.5	15.0	8.02	590
0.1	8.0	107	2.5	11.4	6.80	584
0.2	5.2	69	4.5	10.9	7.17	554
0.3	3.8	51	6.5	9.8	7.23	390
0.4	2.3	31	8.5	8.3	7.36	376
0.5	1.6	21	10.5	8.9	7.39	342
0.6	1.1	15	12.5	9.5	7.40	332
0.7	0.5	7	14.5	9.3	7.30	339
0.8	0.3	4	16.5	9.1	7.45	326
0.9	0.2	3	18.5	9.1	7.54	318
1.0	0.0	0	20.5	9.4	7.56	303
			22.5	9.4	7.42	284
			24.5	10.3	7.36	206
			26.5	10.8	7.34	226
			28.5	12.0	7.41	217

Oxygen Calibration: 0 and 20.9%
pH Calibration: 7 and 10, Slope = 100.7
Eh Calibration: ORP Standard = 424.5 mV at 18.8^{o}C

Oxygen µM Calculation Assumes Chlorinity of 20 and Avg. Temp of 10^{o}C

MMS Deep Gulf of Mexico Cruise 1B (Oct-Nov 2000)

Site: Garden Banks 516 Near-Field 10 (GB516 NF-B10)

Depth (cm)	Oxygen (%)	Oxygen (µM)	Depth (cm)	Temperature (C)	pH	Eh (mV)
Bottom Water	15.9	212	2	15.5	7.25	605
0.1	14.5	193	4	13.6	7.15	593
0.2	14.2	189	6	12.0	7.21	513
0.3	13.6	181	8	11.5	7.23	421
0.4	13.2	176	10	11.2	7.29	402
0.5	13.0	173	12	11.1	7.29	353
0.6	12.8	170	14	10.7	7.33	281
0.7	12.4	165	16	10.9	7.36	261
0.8	11.8	157	18	11.2	7.38	210
0.9	11.2	149	20	10.9	7.41	200
1.0	10.7	142	22	11.5	7.39	258
1.1	10.2	136	24	11.5	7.47	196
1.2	9.7	129	26	11.7	7.48	113
1.3	9.3	124	28	12.4	7.51	289
1.4	8.9	119	30	13.5	7.46	240
1.5	8.6	115				
1.6	8.3	111				
1.7	8.0	107				
1.8	7.7	103				
1.9	7.2	96				
2.0	6.7	89				
2.1	6.2	83				
2.2	5.7	76				
2.3	5.2	69				
2.4	4.7	63				
2.5	4.1	55				
2.6	3.6	48				
2.7	3.1	41				
2.8	2.6	35				
2.9	2.3	31				
3.0	2.0	27				
3.1	1.7	23				
3.2	1.4	19				
3.3	1.0	13				
3.4	0.6	8				
3.5	0.3	4				
3.6	0.2	3				
3.7	0.1	1				
3.8	0.0	0				

Oxygen Calibration: 0 and 20.9%
pH Calibration: 7 and 10, Slope = 99.9
Eh Calibration: ORP Standard = 424.8 mV at 19.2^{o}C

Oxygen µM Calculation Assumes Chlorinity of 20 and Avg. Temp of 10^{o}C

MMS Deep Gulf of Mexico Cruise 1B (Oct-Nov 2000)

Site: Garden Banks 516 Near-Field 11 (GB516 NF-B11)

Depth (cm)	Oxygen (%)	Oxygen (μM)	Depth (cm)	Temperature (C)	pH	Eh (mV)
Bottom Water	15.4	205	1	16.3	7.64	620
0.1	11.6	154	3	14.6	7.23	525
0.2	7.9	105	5	13.4	7.21	410
0.3	7.5	100	7	13.1	7.17	373
0.4	7.3	97	9	12.7	7.26	369
0.5	7.2	96	11	13.0	7.31	362
0.6	7.0	93	13	12.5	7.34	350
0.7	6.9	92	15	12.9	7.37	346
0.8	6.6	88	17	12.4	7.31	353
0.9	6.4	85	19	13.3	7.39	225
1.0	6.2	83	21	13.3	7.31	154
1.1	6.0	80	23	13.3	7.36	138
1.2	5.8	77	25	13.6	7.35	309
1.3	5.7	76	27	14.5	7.33	126
1.4	5.5	73				
1.5	5.4	72				
1.6	5.2	69				
1.7	5.0	67				
1.8	4.8	64				
1.9	4.7	63				
2.0	4.5	60				
2.1	4.3	57				
2.2	4.1	55				
2.3	3.9	52				
2.4	3.7	49				
2.5	3.6	48				
2.6	3.4	45				
2.7	3.3	44				
2.8	3.2	43				
2.9	3.0	40				
3.0	2.8	37				
3.1	2.6	35				
3.2	2.3	31				

MMS Deep Gulf of Mexico Cruise 1B (Oct-Nov 2000)

Site: Garden Banks 516 Near-Field 11 (GB516 NF-B11) continued.

Depth (cm)	Oxygen (%)	Oxygen (μM)	Depth (cm)	Temperature (C)	pH	Eh (mV)
3.3	2.0	27				
3.4	1.8	24				
3.5	1.6	21				
3.6	1.5	20				
3.7	1.3	17				
3.8	1.3	17				
3.9	1.2	16				
4.0	1.1	15				
4.1	1.0	13				
4.2	0.9	12				
4.3	0.9	12				
4.4	0.8	11				
4.5	0.7	9				
4.6	0.7	9				
4.7	0.6	8				
4.8	0.5	7				
4.9	0.5	7				

Oxygen Calibration: 0 and 20.9%
pH Calibration: 7 and 10, Slope = 99.8
Eh Calibration: ORP Standard = 424.9 mV at 18.6^{o}C

Oxygen μM Calculation Assumes Chlorinity of 20 and Avg. Temp of 10^{o}C

MMS Deep Gulf of Mexico Cruise 1B (Oct-Nov 2000)

Site: Garden Banks 516 Near-Field 12 (GB516 NF-B12)

Depth (cm)	Oxygen (%)	Oxygen (µM)	Depth (cm)	Temperature (C)	pH	Eh (mV)
Bottom Water	16.6	221	1	15.0	7.61	635
0.1	12.8	170	3	14.0	7.28	627
0.2	11.6	154	5	12.6	7.26	587
0.3	10.6	141	7	12.9	7.27	464
0.4	9.8	130	9	12.4	7.26	401
0.5	9.4	125	11	12.9	7.31	364
0.6	9.0	120	13	12.1	7.34	351
0.7	8.8	117	15	12.2	7.33	365
0.8	8.6	115	17	12.6	7.32	334
0.9	8.4	112	19	12.2	7.34	285
1.0	8.2	109	21	12.7	7.30	213
1.1	8.1	108	23	12.9	7.33	193
1.2	7.9	105	25	13.5	7.34	119
1.3	7.8	104	27	14.9	7.42	102
1.4	7.6	101				
1.5	7.5	100				
1.6	7.4	99				
1.7	7.2	96				
1.8	7.1	95				
1.9	6.9	92				
2.0	6.7	89				
2.1	6.5	87				
2.2	6.3	84				
2.3	6.1	81				
2.4	5.9	79				
2.5	5.7	76				
2.6	5.5	73				
2.7	5.3	71				
2.8	5.1	68				
2.9	4.9	65				
3.0	4.7	63				
3.1	4.4	59				
3.2	4.0	53				

MMS Deep Gulf of Mexico Cruise 1B (Oct-Nov 2000)

Site: Garden Banks 516 Near-Field 12 (GB516 NF-B12) continued.

Depth (cm)	Oxygen (%)	Oxygen (µM)	Depth (cm)	Temperature (C)	pH	Eh (mV)
3.3	3.6	48				
3.4	3.3	44				
3.5	2.9	39				
3.6	2.7	36				
3.7	2.5	33				
3.8	2.3	31				
3.9	2.2	29				
4.0	2.1	28				
4.1	1.9	25				
4.2	1.8	24				
4.3	1.7	23				
4.4	1.6	21				
4.5	1.5	20				
4.6	1.4	19				
4.7	1.3	17				
4.8	1.2	16				
4.9	1.0	13				
5.0	0.8	11				
5.1	0.6	8		Many worm tubes at the		
5.2	0.5	7		surface of the core.		
5.3	0.4	5				
5.4	0.3	4				
5.5	0.2	3				
5.6	0.1	1				
5.7	0.0	0				

Oxygen Calibration: 0 and 20.9%
pH Calibration: 7 and 10, Slope = 98.7
Eh Calibration: ORP Standard = 424.9 mV at 17.8°C

Oxygen µM Calculation Assumes Chlorinity of 20 and Avg. Temp of 10°C

MMS Deep Gulf of Mexico Cruise 1B (Oct-Nov 2000)

Site: Garden Banks 516 Far-Field 1, Box Core 1 (GB516 FF1-B01)

Depth (cm)	Oxygen (%)	Oxygen (µM)	Depth (cm)	Temperature (C)	pH	Eh (mV)
Bottom Water	16.2	207	2	14.3	7.42	588
0.1	13.8	177	4	14.2	7.38	588
0.2	12.0	154	6	14.0	7.37	538
0.3	11.1	142	8	13.6	7.44	507
0.4	10.5	134	10	13.1	7.54	434
0.5	9.2	118	12	13.3	7.59	395
0.6	8.3	106	14	13.3	7.60	373
0.7	7.3	93	16	13.2	7.59	370
0.8	6.7	86	18	13.0	7.68	290
0.9	6.2	79	20	13.3	7.62	230
1.0	5.7	73	22	13.4	7.72	125
1.1	5.4	69	24	13.6	7.69	98
1.2	5.1	65	26	13.7	7.66	80
1.3	4.8	61	28	14.4	7.64	69
1.4	4.6	59	30	14.9	7.61	55
1.5	4.4	56				
1.6	4.2	54				
1.7	3.8	49				
1.8	3.5	45				
1.9	3.3	42				
2.0	3.1	40				
2.1	3.1	40				
2.2	3.0	38				
2.3	2.9	37				
2.4	2.8	36				
2.5	2.7	35				
2.6	2.6	33				
2.7	2.5	32				
2.8	2.4	31				
2.9	2.3	29				
3.0	2.3	29				
3.1	2.2	28				
3.2	2.1	27				
3.3	2.0	26				
3.4	1.9	24				
3.5	1.9	24				
3.6	1.8	23				
3.7	1.7	22				

Oxygen Calibration: 0 and 20.9%
pH Calibration: 7 and 10, Slope = 99.9
Eh Calibration: ORP Standard = 424.5 mV at 18.5^{o}C

Oxygen µM Calculation Assumes Chlorinity of 20 and Avg. Temp of 12^{o}C

MMS Deep Gulf of Mexico Cruise 1B (Oct-Nov 2000)

Site: Garden Banks 516 Far-Field 1, Box Core 2 (GB516 FF1-B02)

Depth (cm)	Oxygen (%)	Oxygen (µM)	Depth (cm)	Temperature (C)	pH	Eh (mV)
Bottom Water	-	-	1	13.3	7.60	638
0.1			3	9.5	7.52	687
0.2			5	7.7	7.54	662
0.3			7	7.4	7.48	603
0.4			9	7.4	7.60	533
0.5			11	8.1	7.63	467
0.6			13	7.8	7.66	459
0.7			15	7.8	7.70	446
0.8			17	7.9	7.69	409
0.9			19	8.2	7.69	278
1.0			21	8.4	7.74	215
1.1			23	9.1	7.77	135
1.2			25	10.2	7.67	115
1.3			27	11.8	7.69	104

pH Calibration: 7 and 10, Slope = 99.9

Eh Calibration: ORP Standard = 424.5 mV at 18.5^{o}C

MMS Deep Gulf of Mexico Cruise 1B (Oct-Nov 2000)

Site: Garden Banks 516 Far-Field 2, Box Core 1 (GB516 FF2-B01)

Depth (cm)	Oxygen (%)	Oxygen (μM)	Depth (cm)	Temperature (C)	pH	Eh (mV)
Bottom Water	-	-	1	16.6	8.11	676
0.1	14.6	194	3	15.0	7.36	639
0.2	12.6	168	5	14.0	7.39	488
0.3	11.0	146	7	13.4	7.34	417
0.4	10.4	138	9	13.0	7.43	385
0.5	9.7	129	11	13.1	7.50	375
0.6	9.2	122	13	12.8	7.48	348
0.7	8.7	116	15	13.4	7.45	331
0.8	8.3	111	17	13.2	7.58	247
0.9	8.1	108	19	13.0	7.45	294
1.0	7.9	105	21	13.2	7.50	162
1.1	7.7	103	23	13.0	7.51	160
1.2	7.4	99	25	13.9	7.52	253
1.3	7.2	96	27	14.2	7.55	311
1.4	7.0	93	29	15.2	7.55	250
1.5	6.8	91				
1.6	6.6	88				
1.7	6.5	87				
1.8	6.3	84				
1.9	6.2	83				
2.0	6.0	80				
2.1	5.8	77				
2.2	5.6	75				
2.3	5.4	72				
2.4	5.2	69				
2.5	5.0	67				
2.6	4.7	63				
2.7	4.5	60				
2.8	4.3	57				
2.9	4.1	55				
3.0	3.9	52				
3.1	3.7	49				
3.2	3.5	47				

MMS Deep Gulf of Mexico Cruise 1B (Oct-Nov 2000)

Site: Garden Banks 516 Far-Field 2, Box Core 1 (GB516 FF2-B01) continued.

Depth (cm)	Oxygen (%)	Oxygen (µM)	Depth (cm)	Temperature (C)	pH	Eh (mV)
3.3	3.3	44				
3.4	3.0	40				
3.5	2.7	36				
3.6	2.4	32				
3.7	2.2	29				
3.8	2.1	28				
3.9	2.0	27				
4.0	2.0	27				
4.1	1.9	25				
4.2	1.8	24				
4.3	1.8	24				
4.4	1.7	23				
4.5	1.7	23				
4.6	1.7	23				
4.7	1.6	21				
4.8	1.6	21				
4.9	1.5	20				
5.0	1.5	20				
5.1	1.4	19				
5.2	1.4	19				
5.3	1.3	17				
5.4	1.2	16				
5.5	1.1	15				
5.6	1.1	15				
5.7	1.0	13				

Oxygen Calibration: 0 and 20.9%
pH Calibration: 7 and 10, Slope = 97.9
Eh Calibration: ORP Standard = 424.9 mV at 18.0^{o}C

Oxygen µM Calculation Assumes Chlorinity of 20 and Avg. Temp of 10^{o}C

MMS Deep Gulf of Mexico Cruise 1B (Oct-Nov 2000)

Site: Garden Banks 516 Far-Field 2, Box Core 2.1 (GB516 FF2-B02.1)

Depth (cm)	Oxygen (%)	Oxygen (μM)	Depth (cm)	Temperature (C)	pH	Eh (mV)
Bottom Water	-	-	1	13.3	7.55	692
0.1	12.1	161	4	12.3	7.46	703
0.2	9.6	128	6	11.2	7.47	677
0.3	8.6	115	8	10.9	7.53	635
0.4	7.7	103	10	10.5	7.58	598
0.5	7.0	93	12	10.5	7.60	542
0.6	6.5	87	14	10.7	7.68	332
0.7	6.1	81	16	10.6	7.53	263
0.8	5.8	77	18	10.8	7.63	172
0.9	5.6	75	20	11.0	7.72	150
1.0	5.5	73	22	11.1	7.68	144
1.1	5.3	71	24	11.2	7.76	117
1.2	4.9	65	26	11.6	7.82	132
1.3	4.5	60	28	12.2	7.72	90
1.4	4.2	56	30	12.7	7.66	113
1.5	4.0	53	32	13.5	7.66	150
1.6	3.9	52				
1.7	3.7	49				
1.8	3.5	47				
1.9	3.3	44				
2.0	3.2	43				
2.1	3.0	40				
2.2	2.8	37				
2.3	2.6	35				
2.4	2.3	31				
2.5	2.1	28				
2.6	1.9	25				
2.7	1.8	24				
2.8	1.7	23				
2.9	1.7	23				
3.0	1.6	21				
3.1	1.5	20				
3.2	1.5	20				
3.3	1.4	19				
3.4	1.4	19				
3.5	1.3	17				
3.6	1.3	17				

Oxygen Calibration: 0 and 20.9%
pH Calibration: 7 and 10, Slope = 99.1
Eh Calibration: ORP Standard = 424.3 mV at 18.9°C

Oxygen μM Calculation Assumes Chlorinity of 20 and Avg. Temp of 10°C

MMS Deep Gulf of Mexico Cruise 1B (Oct-Nov 2000)

Site: Garden Banks 516 Far-Field 3, Box Core 1 (GB516 FF3-B01)

Depth (cm)	Oxygen (%)	Oxygen (μM)	Depth (cm)	Temperature (C)	pH	Eh (mV)
Bottom Water	-	-	2	14.7	7.66	659
0.1	11.1	148	4	14.2	7.34	551
0.2	8.0	107	6	13.3	7.40	427
0.3	7.0	93	8	12.2	7.38	364
0.4	6.5	87	10	12.0	7.30	360
0.5	6.1	81	12	12.7	7.38	377
0.6	5.8	77	14	12.9	7.32	260
0.7	5.6	75	16	12.8	7.36	319
0.8	5.4	72	18	12.6	7.43	341
0.9	5.2	69	20	13.0	7.47	287
1.0	5.1	68	22	13.0	7.53	230
1.1	4.9	65	24	14.0	7.40	144
1.2	4.8	64	26	13.9	7.45	311
1.3	4.7	63	28	15.2	7.44	265
1.4	4.6	61				
1.5	4.5	60				
1.6	4.4	59				
1.7	4.3	57				
1.8	4.2	56				
1.9	4.1	55				
2.0	4.0	53				
2.1	3.9	52				
2.2	3.7	49				
2.3	3.5	47				
2.4	3.3	44				
2.5	3.1	41				
2.6	2.9	39				
2.7	2.8	37				
2.8	2.7	36				
2.9	2.6	35				
3.0	2.5	33				
3.1	2.4	32				
3.2	2.3	31				

MMS Deep Gulf of Mexico Cruise 1B (Oct-Nov 2000)

Site: Garden Banks 516 Far-Field 3, Box Core 1 (GB516 FF3-B01) continued.

Depth (cm)	Oxygen (%)	Oxygen (µM)	Depth (cm)	Temperature (C)	pH	Eh (mV)
3.3	2.1	28				
3.4	1.9	25				
3.5	1.7	23				
3.6	1.6	21				
3.7	1.5	20				
3.8	1.4	19				
3.9	1.3	17				
4.0	1.2	16				
4.1	1.2	16				
4.2	1.1	15				
4.3	1.0	13				
4.4	0.9	12				
4.5	0.8	11				
4.6	0.7	9				
4.7	0.6	8				
4.8	0.5	7				
4.9	0.5	7				
5.0	0.4	5				
5.1	0.3	4				
5.2	0.3	4				
5.3	0.2	3				
5.4	0.2	3				
5.5	0.1	1				
5.6	0.1	1				
5.7	0.1	1				

Oxygen Calibration: 0 and 20.9%
pH Calibration: 7 and 10, Slope = 99.1
Eh Calibration: ORP Standard = 424.7 mV at 19.0^{o}C

Oxygen µM Calculation Assumes Chlorinity of 20 and Avg. Temp of 10^{o}C

MMS Deep Gulf of Mexico Cruise 1B (Oct-Nov 2000)

Site: Garden Banks 516 Far-Field 3, Box Core 2.1 (GB516 FF3-B02.1)

Depth (cm)	Oxygen (%)	Oxygen (µM)	Depth (cm)	Temperature (C)	pH	Eh (mV)
Bottom Water	15.4	205	2	13.1	7.54	620
0.1	13.0	173	4	12.2	7.43	636
0.2	11.7	156	6	11.6	7.43	531
0.3	10.7	142	8	11.4	7.42	480
0.4	10.0	133	10	12.1	7.44	428
0.5	9.5	126	12	11.9	7.44	388
0.6			14	11.6	7.43	349
0.7	lowered 5 mm,		16	11.3	7.43	340
0.8	wait 20 min		18	11.7	7.60	287
0.9			20	12.3	7.47	217
1.0	6.7	89	22	12.7	7.35	276
1.1			24	13.6	8.34	135
1.2	lowered 5 mm,		26	13.5	8.37	198
1.3	wait 20 min					
1.4						
1.5	5.4	72				
1.6						
1.7	lowered 5 mm,					
1.8	wait 20 min					
1.9						
2.0	4.2	56				
2.1						
2.2	lowered 5 mm,					
2.3	wait 20 min					
2.4						
2.5	3.0	40				

Oxygen Calibration: 0 and 20.9%
pH Calibration: 7 and 10, Slope = 97.7
Eh Calibration: ORP Standard = 425.2 mV at 19.0^{o}C

Oxygen µM Calculation Assumes Chlorinity of 20 and Avg. Temp of 10^{o}C

MMS Deep Gulf of Mexico Cruise 1B (Oct-Nov 2000)

Site: Garden Banks 516 Far-Field 4, Box Core 1 (GB516 FF4-B01)

Depth (cm)	Oxygen (%)	Oxygen (μM)	Depth (cm)	Temperature (C)	pH	Eh (mV)
Bottom Water	16.0	213	2	13.3	7.33	635
0.1	12.9	172	4	12.6	7.42	649
0.2	11.5	153	6	11.9	7.48	554
0.3	10.1	134	8	11.5	7.46	498
0.4	9.4	125	10	11.2	7.56	448
0.5	8.8	117	12	11.1	7.52	405
0.6	8.3	111	14	11.2	7.53	210
0.7	7.9	105	16	11.3	7.58	163
0.8	7.3	97	18	11.6	7.66	107
0.9	6.8	91	20	12.0	7.59	104
1.0	6.4	85	22	12.8	7.67	90
1.1	6.1	81	24	13.2	7.61	82
1.2	5.8	77	26	13.8	7.62	92
1.3	5.5	73				
1.4	5.2	69				
1.5	5.0	67				
1.6	4.8	64				
1.7	4.6	61				
1.8	4.4	59				
1.9	4.2	56				
2.0	4.0	53				
2.1	3.8	51				
2.2	3.6	48				
2.3	3.4	45				
2.4	3.2	43				
2.5	2.9	39				
2.6	2.7	36				
2.7	2.5	33				
2.8	2.3	31				
2.9	2.2	29				
3.0	2.0	27				
3.1	1.9	25				
3.2	1.8	24				
3.3	1.7	23				
3.4	1.6	21				
3.5	1.5	20				

Oxygen Calibration: 0 and 20.9%
pH Calibration: 7 and 10, Slope = 99.6
Eh Calibration: ORP Standard = 424.7 mV at 18.4^{o}C

Oxygen μM Calculation Assumes Chlorinity of 20 and Avg. Temp of 10^{o}C

MMS Deep Gulf of Mexico Cruise 1B (Oct-Nov 2000)

Site: Garden Banks 516 Far-Field 4, Box Core 2 (GB516 FF4-B02)

Depth (cm)	Oxygen (%)	Oxygen (μM)	Depth (cm)	Temperature (C)	pH	Eh (mV)
Bottom Water	-	-	2	8.5	7.36	627
0.1			4	8.1	7.35	628
0.2			6	7.4	7.41	574
0.3			8	7.3	7.45	512
0.4			10	7.3	7.47	467
0.5			12	8.1	7.45	427
0.6			14	8.1	7.42	423
0.7			16	8.3	7.46	240
0.8			18	9.2	7.55	243
0.9			20	10.3	7.51	264
1.0			22	10.1	7.55	374
1.1			24	10.6	7.52	97
1.2			26	11.3	7.48	321
1.3			28	12.2	7.56	145
1.4			30	13.6	7.47	339

pH Calibration: 7 and 10, Slope = 99.6

Eh Calibration: ORP Standard = 424.7 mV at 18.4^{o}C

MMS Deep Gulf of Mexico Cruise 1B (Oct-Nov 2000)

Site: Garden Banks 516 Far-Field 5, Box Core 1 (GB516 FF5-B01)

Depth (cm)	Oxygen (%)	Oxygen (μM)	Depth (cm)	Temperature (C)	pH	Eh (mV)
Bottom Water	16.5	220	2	15.4	7.31	639
0.1	13.0	173	4	15.0	7.23	515
0.2	11.4	152	6	12.7	7.37	410
0.3	9.3	124	8	12.3	7.47	334
0.4	7.6	101	10	12.2	7.54	303
0.5	5.9	79	12	11.7	7.52	281
0.6	5.1	68	14	11.3	7.57	255
0.7	4.2	56	16	11.4	7.54	170
0.8	3.6	48	18	11.9	7.63	216
0.9	3.2	43	20	11.8	7.47	135
1.0	2.9	39	22	13.6	7.53	106
1.1	2.7	36	24	11.5	7.57	112
1.2	2.4	32	26	11.4	7.54	87
1.3	2.2	29	28	12.9	7.53	73
1.4	2.0	27	30	14.4	7.42	215
1.5	1.8	24				
1.6	1.6	21				
1.7	1.4	19				
1.8	1.2	16				
1.9	1.0	13				
2.0	0.9	12				
2.1	0.8	11				
2.2	0.7	9				
2.3	0.6	8				
2.4	0.6	8				
2.5	0.5	7				
2.6	0.4	5				
2.7	0.4	5				
2.8	0.3	4				
2.9	0.3	4				
3.0	0.2	3				
3.1	0.2	3				
3.2	0.1	1				
3.3	0.1	1				
3.4	0.0	0				

Oxygen Calibration: 0 and 20.9%
pH Calibration: 7 and 10, Slope = 100.0
Eh Calibration: ORP Standard = 424.0 mV at 20.0^{o}C

Oxygen μM Calculation Assumes Chlorinity of 20 and Avg. Temp of 10^{o}C

MMS Deep Gulf of Mexico Cruise 1B (Oct-Nov 2000)

Site: Garden Banks 516 Far-Field 6, Box Core 1 (GB516 FF6-B01)

Depth (cm)	Oxygen (%)	Oxygen (μM)	Depth (cm)	Temperature (C)	pH	Eh (mV)
Bottom Water	-	-	2	15.0	7.30	406
0.1	14.0	186	4	14.8	7.36	430
0.2	12.1	161	6	14.4	7.42	395
0.3	11.0	146	8	14.1	7.51	394
0.4	10.0	133	10	13.9	7.63	401
0.5	9.4	125	12	13.8	7.63	335
0.6	8.8	117	14	13.8	7.56	218
0.7	8.2	109	16	13.9	7.55	162
0.8	7.6	101	18	14.0	7.60	186
0.9	7.1	95	20	14.1	7.62	124
1.0	6.7	89	22	14.2	7.67	106
1.1	6.4	85	24	14.5	7.65	97
1.2	6.0	80	26	15.4	7.74	82
1.3	5.6	75	28	15.2	7.81	83
1.4	5.1	68	30	15.6	7.65	76
1.5	4.7	63				
1.6	4.3	57				
1.7	4.0	53				
1.8	3.7	49				
1.9	3.2	43				
2.0	2.9	39				
2.1	2.5	33				
2.2	2.3	31				
2.3	2.0	27				
2.4	1.8	24				
2.5	1.7	23				
2.6	1.6	21				
2.7	1.5	20				
2.8	1.4	19				
2.9	1.3	17				
3.0	1.2	16				
3.1	1.1	15				
3.2	1.0	13				
3.3	0.9	12				
3.4	0.8	11				
3.5	0.7	9				

Oxygen Calibration: 0 and 20.9%
pH Calibration: 7 and 10, Slope = 99.8
Eh Calibration: ORP Standard = 424.8 mV at 20.2°C

Oxygen μM Calculation Assumes Chlorinity of 20 and Avg. Temp of 10°C

MMS Deep Gulf of Mexico Cruise 1B (Oct-Nov 2000)

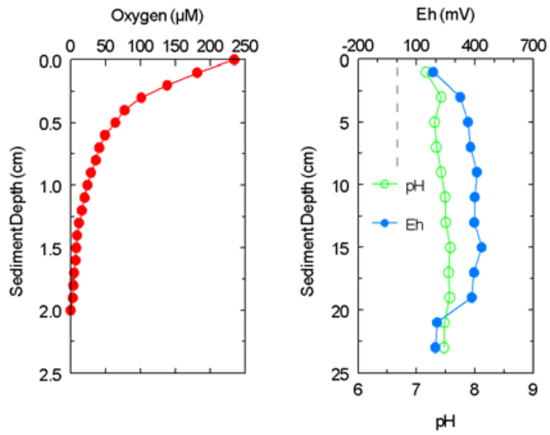
Site: Garden Banks 516 Far-Field 6, Box Core 2 (GB516 FF6-B02)

Depth (cm)	Oxygen (%)	Oxygen (μM)	Depth (cm)	Temperature (C)	pH	Eh (mV)
Bottom Water	-	-	2	9.1	7.44	667
0.1			4	8.7	7.42	653
0.2			6	7.2	7.48	592
0.3			8	7.2	7.55	553
0.4			10	7.8	7.48	503
0.5			12	7.5	7.51	554
0.6			14	7.9	7.51	253
0.7			16	8.5	7.52	254
0.8			18	8.7	7.51	151
0.9			20	8.9	7.55	130
1.0			22	9.0	7.56	102
1.1			24	9.3	7.59	92
1.2			26	10.1	7.61	89
1.3			28	11.2	7.59	94
1.4			30	12.8	7.56	105

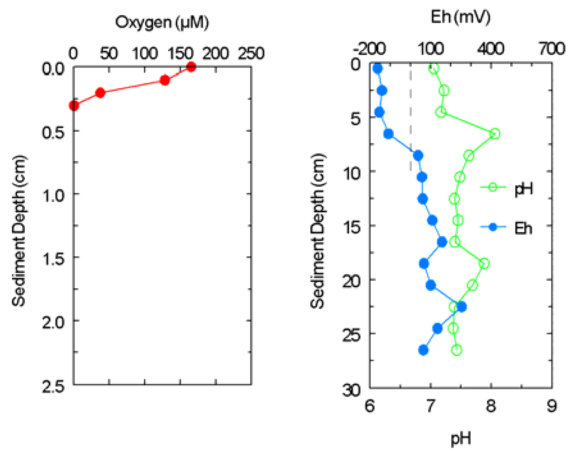
pH Calibration: 7 and 10, Slope = 99.8

Eh Calibration: ORP Standard = 424.8 mV at 20.2^{o}C

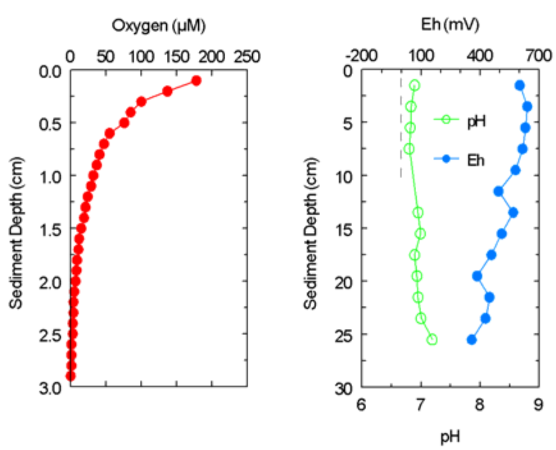
MMS Deep Gulf of Mexico Cruise 1: GB516 NF-B01



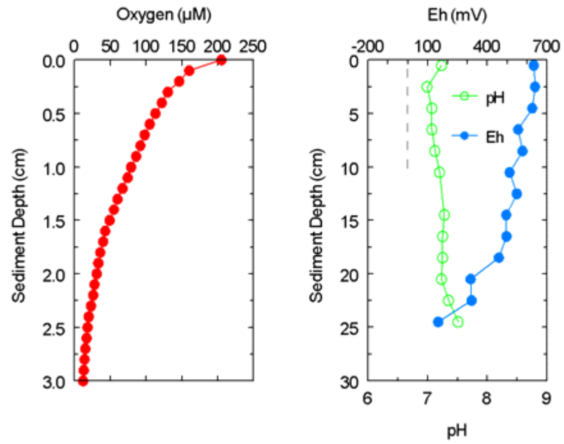
MMS Deep Gulf of Mexico Cruise 1: GB516 NF-B02



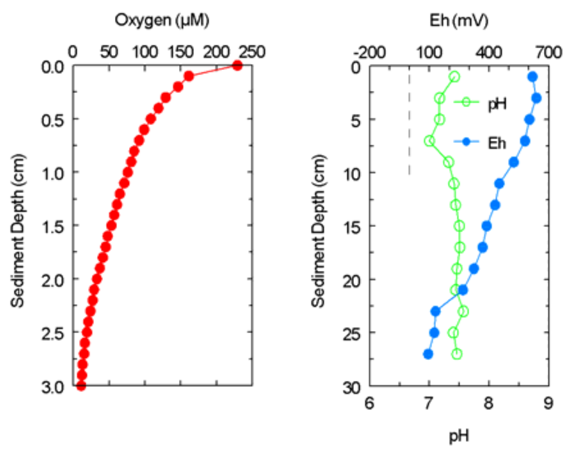
MMS Deep Gulf of Mexico Cruise 1: GB516 NF-B03



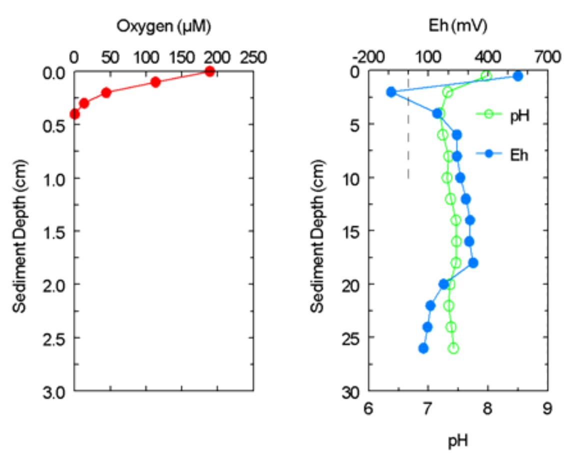
MMS Deep Gulf of Mexico Cruise 1: GB516 NF-B04



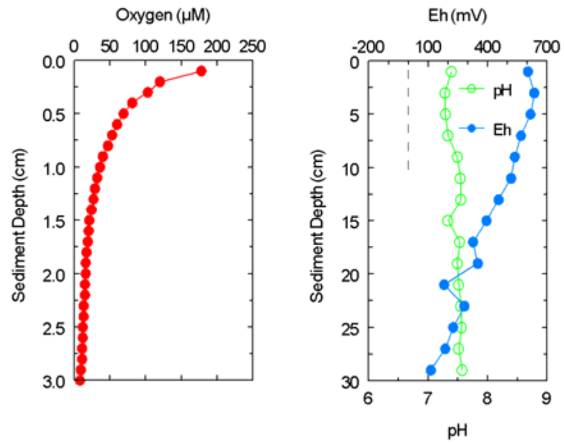
MMS Deep Gulf of Mexico Cruise 1: GB516 NF-B05



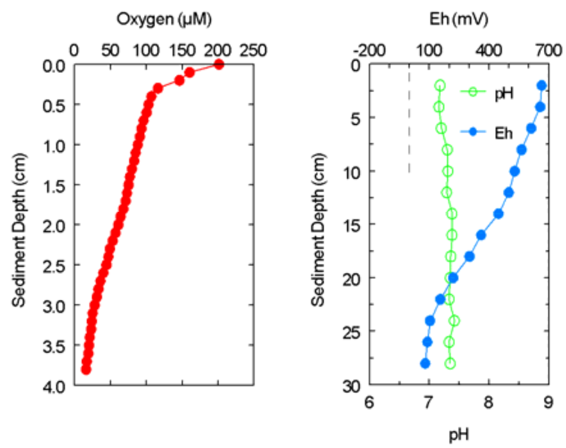
MMS Deep Gulf of Mexico Cruise 1: GB516 NF-B06



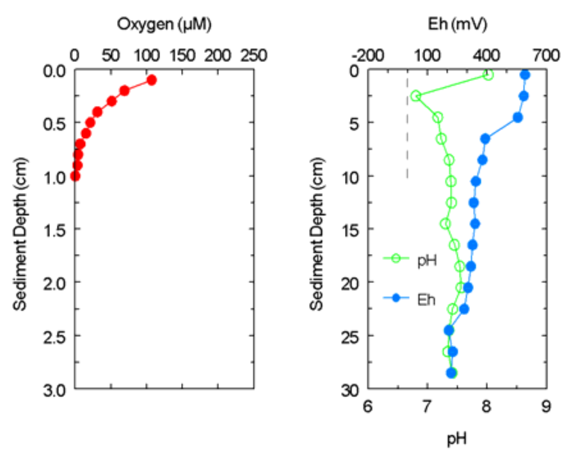
MMS Deep Gulf of Mexico Cruise 1: GB516 NF-B07



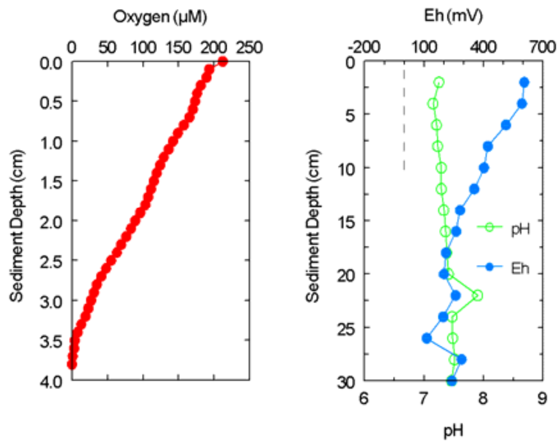
MMS Deep Gulf of Mexico Cruise 1: GB516 NF-B08



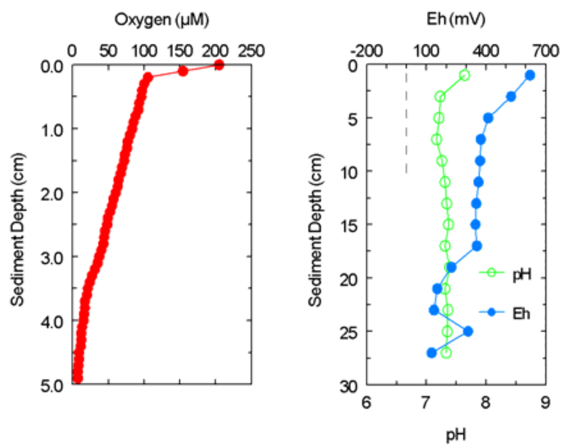
MMS Deep Gulf of Mexico Cruise 1: GB516 NF-B09



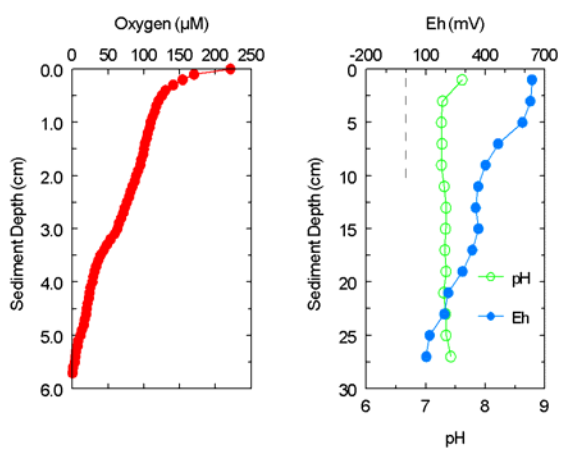
MMS Deep Gulf of Mexico Cruise 1: GB516 NF-B10



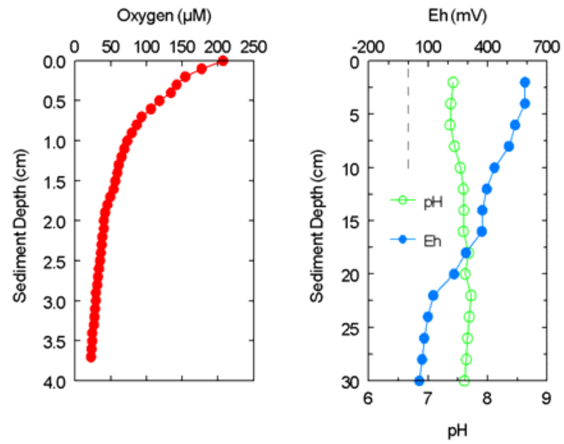
MMS Deep Gulf of Mexico Cruise 1: GB516 NF-B11



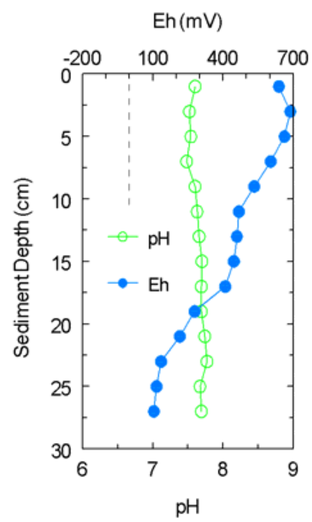
MMS Deep Gulf of Mexico Cruise 1: GB516 NF-B12



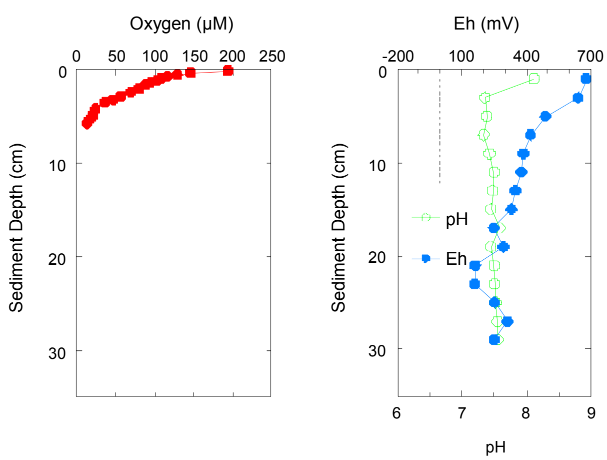
MMS Deep Gulf of Mexico Cruise 1: GB516 FF1-B01



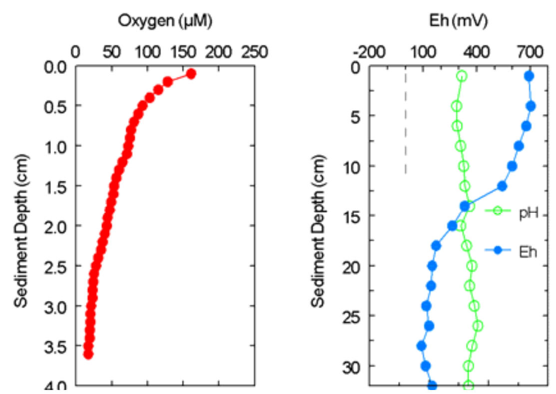
MMS Deep Gulf of Mexico Cruise 1: GB516 FF1-B02



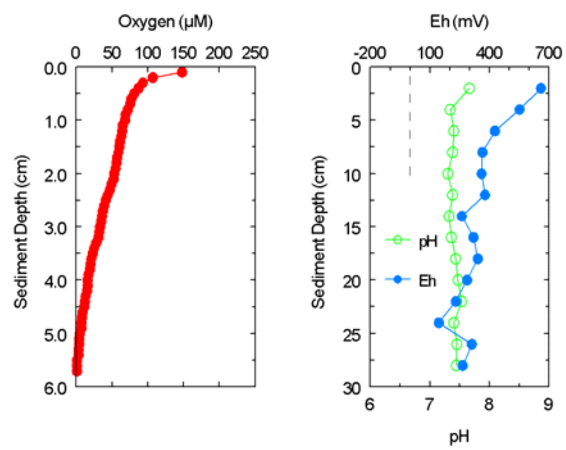
MMS Deep Gulf of Mexico Cruise 1: GB516 FF2-B01



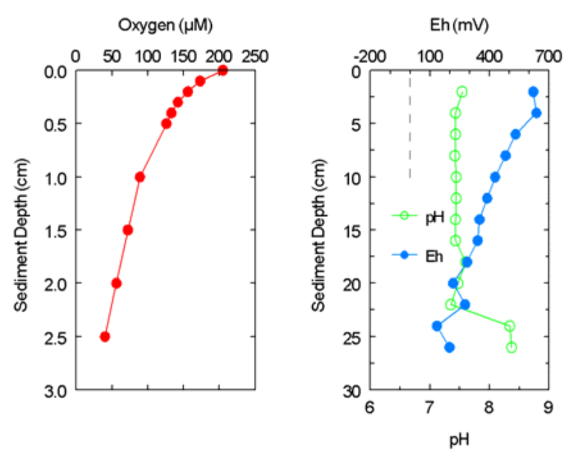
MMS Deep Gulf of Mexico Cruise 1: GB516 FF2-B02.1



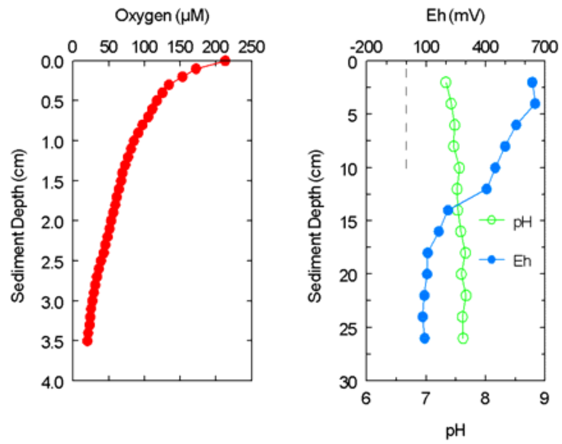
MMS Deep Gulf of Mexico Cruise 1: GB516 FF3-B01



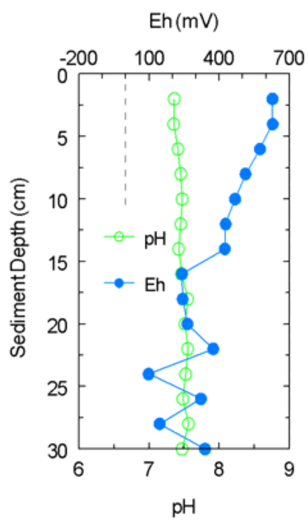
MMS Deep Gulf of Mexico Cruise 1: GB516 FF3-B02.1



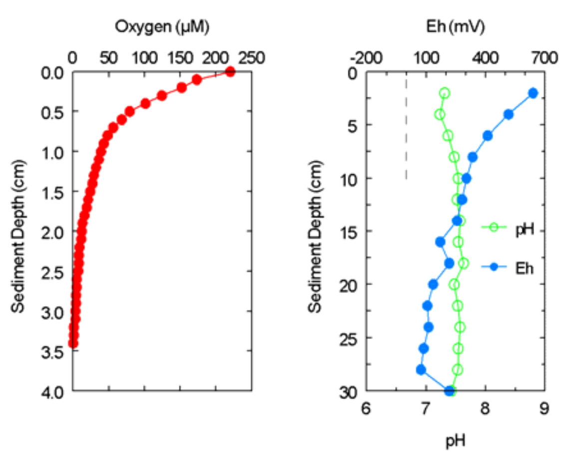
MMS Deep Gulf of Mexico Cruise 1: GB516 FF4-B01



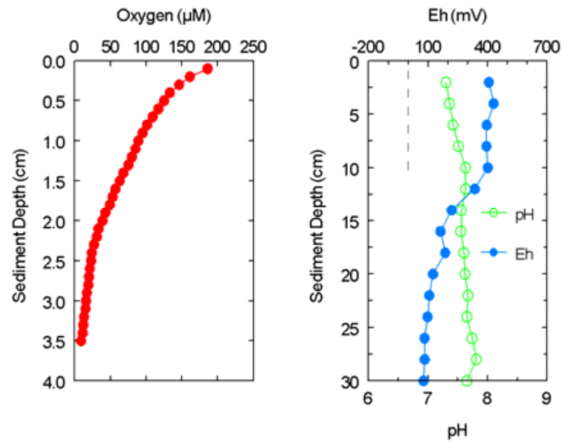
MMS Deep Gulf of Mexico Cruise 1: GB516 FF4-B02



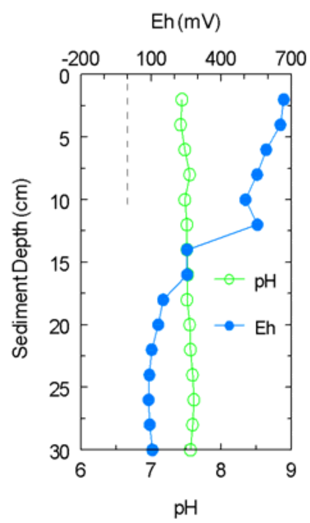
MMS Deep Gulf of Mexico Cruise 1: GB516 FF5-B01



MMS Deep Gulf of Mexico Cruise 1: GB516 FF6-B01



MMS Deep Gulf of Mexico Cruise 1: GB516 FF6-B02



REFERENCES

Salomons, W. and U. Förstner. 1984. Metals in the Hydrocycle. Springer-Verlag, Berlin. 349 pp.

Wedepohl, K.H. 1995. The composition of the continental crust. Geochim. Cosmochim. Acta 59:1,217-1,232.

APPENDIX G2

Cruise 2B Data for Sediment and Tissue Metals, Total Organic Carbon, and Redox Conditions

Table G2-1. Trace metal and total organic carbon concentrations in sediment samples (dry weight) with average marine sediment (Salomons and Förstner, 1984) and continental crust (Wedepohl, 1995) provided for comparison.

Sample Identification	Al (%)	As (µg/g)	Ba (µg/g)	Cd (µg/g)	Cr (µg/g)	Cu (µg/g)	Fe (%)	Hg (µg/g)	Mn (µg/g)	Ni (µg/g)	Pb (µg/g)	V (µg/g)	Zn (µg/g)	TOC (%)	Comments
GB516 NF-B01	6.84	10.2	8730	0.34	70.0	30.1	3.21	0.088	1160	41.0	25.1	140	88.1	1.29	
GB516 NF-B02	6.60	11.2	16100	0.25	74.7	31.0	3.19	0.121	2810	33.4	37.2	132	86.5	1.12	
GB516 NF-B03A	3.29	12.7	351000	0.23	41.4	45.8	1.76	0.237	285	14.1	60.3	57.0	63.1	0.82	
GB516 NF-B04	5.67	11.0	12800	0.27	52.9	30.6	2.87	0.142	3200	39.9	36.1	120	86.7	1.28	
GB516 NF-B05	6.04	13.0	42600	0.27	56.4	33.0	2.69	0.126	2600	35.3	35.9	125	86.7	1.07	
GB516 NF-B06	5.47	8.5	99000	0.41	66.6	33.1	2.62	0.092	693	27.6	21.0	114	87.4	2.87	
GB516 NF-B07	6.43	11.0	50300	0.31	71.0	34.1	3.09	0.092	855	30.6	28.7	137	90.3	1.19	
GB516 NF-B08	6.60	12.3	13500	0.26	69.1	29.9	3.23	0.113	2870	39.7	33.3	126	213	1.15	
GB516 NF-B09	6.14	9.7	55000	0.27	71.7	38.5	3.20	0.119	1130	38.4	33.9	123	110	1.42	
GB516 NF-B10	6.29	11.0	8570	0.24	64.6	28.3	2.91	0.130	3490	42.3	27.2	125	84.9	1.12	
GB516 NF-B11	4.72	11.1	19600	0.24	58.4	27.0	2.42	0.118	2860	36.2	24.3	104	76.8	1.13	
GB516 NF-B12	5.27	11.1	31300	0.30	54.8	30.5	2.75	0.102	2890	35.7	40.7	116	81.0	1.41	
GB516 FF1-B01	5.81	10.6	1890	0.28	61.4	27.7	2.52	0.107	3520	41.4	24.6	125	82.0	1.16	
GB516 FF1-B02 #1	5.89	10.9	2780	0.29	55.9	29.2	2.77	0.101	3390	43.6	23.6	125	84.8	1.16	Lab Duplicate
GB516 FF1-B02 #2	5.76	10.4	2750	0.27	62.8	28.3	2.79	0.098	3450	41.8	23.1	125	82.4	1.27	Lab Duplicate
GB516 FF2-B01	6.11	11.1	843	0.24	63.8	27.5	2.98	0.109	2990	43.4	21.5	128	86.8	1.07	
GB516 FF2-B02	5.76	10.7	794	0.27	68.0	28.3	2.81	0.109	3770	44.7	20.9	128	85.6	1.02	
GB516 FF3-B01	5.84	10.3	1220	0.26	39.5	26.1	3.05	0.095	3330	40.2	23.5	123	84.3	0.97	
GB516 FF3-B02	5.86	10.8	1790	0.29	57.8	26.6	2.82	0.096	2740	37.7	25.9	122	81.5	1.13	
GB516 FF4-B01	6.20	12.6	1210	0.30	58.3	29.0	3.15	0.097	4840	46.8	24.9	132	90.0	0.99	
GB516 FF4-B02	5.99	9.8	1410	0.24	64.6	28.7	2.85	0.129	3250	42.7	21.0	131	86.0	1.15	
GB516 FF5-B01	6.37	12.0	1160	0.28	54.7	28.5	2.87	0.137	3550	43.4	24.5	127	89.0	1.09	
GB516 FF5-B02	6.26	11.6	2050	0.30	61.9	29.7	2.95	0.154	4340	45.6	26.8	129	92.6	1.11	
GB516 FF6-B01	6.18	11.6	1270	0.26	59.9	28.8	2.90	0.126	4040	46.2	25.5	137	89.3	1.05	
GB516 FF6-B02 #1	6.16	11.1	1320	0.25	66.1	28.1	3.08	0.134	4010	43.8	24.9	137	89.7	1.03	Lab Duplicate
GB516 FF6-B02 #2	6.10	11.3	1290	0.25	63.7	28.6	3.08	0.137	3930	43.9	25.3	135	91.2	1.03	Lab Duplicate
Average Marine Sediment	7.2	7.7	460	0.17	72	33	4.1	0.19	770	52	19	105	95	-	
Continental Crust	7.96	1.7	584	0.1	126	25	4.32	0.04	716	56	14.8	98	65	-	

Table G2-1. Continued.

Sample Identification	Al (%)	As (µg/g)	Ba (µg/g)	Cd (µg/g)	Cr (µg/g)	Cu (µg/g)	Fe (%)	Hg (µg/g)	Mn (µg/g)	Ni (µg/g)	Pb (µg/g)	V (µg/g)	Zn (µg/g)	TOC (%)	Comments
GB516 DISC-1 0-2 cm	1.85	12.2	281000	0.30	22.8	35.6	0.98	0.193	227	9.2	34.3	32.6	59.1	2.39	
GB516 DISC-1 2-4 cm	3.65	10.1	266000	0.23	42.5	27.2	1.81	0.145	447	16.4	28.1	58.3	63.6	1.56	
GB516 DISC-1 4-6 cm	4.66	9.6	181000	0.19	47.3	27.4	2.32	0.125	549	21.3	19.8	82.3	67.6	0.75	
GB516 DISC-1 6-8 cm	6.71	11.9	1400	0.25	64.4	28.3	3.28	0.071	1860	38.9	19.3	135	92.7	1.63	
GB516 DISC-1 8-10 cm	6.29	11.0	816	0.29	58.5	28.9	3.09	0.118	4530	47.5	20.4	130	95.7	1.51	
GB516 DISC-2 0-2 cm	0.78	15.5	198000	0.30	14.8	74.7	0.48	0.501	294	5.9	197	18.2	88.3	7.16	
GB516 DISC-2 2-4 cm	1.19	21.0	317000	0.42	20.4	113	0.76	0.628	453	8.6	256	28.7	138	6.48	
GB516 DISC-2 4-6 cm	0.71	12.2	280000	0.28	12.6	66.9	0.44	0.467	279	5.1	166	16.7	82.1	8.87	
GB516 DISC-2 6-8 cm	0.96	16.0	298000	0.37	16.8	90.7	0.60	0.458	370	6.8	120	19.9	108	8.28	
GB516 DISC-2 8-10 cm	1.23	22.8	344000	0.45	21.2	116	0.76	0.722	447	8.5	328	28.5	147	7.48	
GB516 DISC-3 0-2 cm	6.73	7.8	4650	0.22	49.5	30.1	3.21	0.088	4840	54.4	18.7	132	101	1.29	
GB516 DISC-3 2-4 cm	6.89	11.5	1610	0.24	50.0	31.1	3.30	0.074	17600	65.3	16.3	141	104	1.10	
GB516 DISC-3 4-6 cm	7.06	12.1	619	0.14	56.1	31.9	3.42	0.081	8790	51.1	18.5	141	100	1.36	
GB516 DISC-3 6-8 cm	6.87	11.1	583	0.14	58.1	31.6	3.31	0.068	10500	57.4	16.4	133	99.3	1.46	
GB516 DISC-3 8-10 cm #1	7.19	10.3	610	0.11	59.7	29.3	3.55	0.061	9600	61.8	16.1	142	103	1.20	Lab Duplicate
GB516 DISC-3 8-10 cm #2	7.20	10.0	614	0.12	63.3	29.3	3.56	0.060	9580	61.6	16.0	139	102	1.21	Lab Duplicate
Average Marine Sediment	7.2	7.7	460	0.17	72	33	4.1	0.19	770	52	19	105	95	-	
Continental Crust	7.96	1.7	584	0.1	126	25	4.32	0.04	716	56	14.8	98	65	-	

Table G2-1. Continued.

Sample Identification	Al (%)	As (µg/g)	Ba (µg/g)	Cd (µg/g)	Cr (µg/g)	Cu (µg/g)	Fe (%)	Hg (µg/g)	Mn (µg/g)	Ni (µg/g)	Pb (µg/g)	V (µg/g)	Zn (µg/g)	TOC (%)	Comments
GB602 NF-B01	5.75	12.1	16600	0.27	55.3	31.3	2.87	0.098	3920	43.8	50.5	119	81.8	1.34	
GB602 NF-B02	6.04	9.3	44500	0.38	68.0	34.3	3.02	0.091	712	29.0	52.1	126	91.2	1.27	
GB602 NF-B03	4.89	12.5	111000	0.54	65.7	44.6	2.58	0.167	650	27.2	45.2	104	99.8	1.99	
GB602 NF-B04	6.17	11.2	27600	0.27	66.4	30.9	3.07	0.097	1360	30.4	33.0	124	100	1.27	
GB602 NF-B05	5.01	11.7	50300	0.26	55.5	34.5	2.67	0.101	2920	33.6	38.1	112	92.7	1.60	
GB602 NF-B06	6.15	9.1	65200	0.45	66.6	49.6	2.99	0.070	417	26.9	48.3	121	101	1.37	
GB602 NF-B07	5.45	12.2	44900	0.26	56.5	33.2	2.83	0.102	5410	43.3	22.1	115	84.0	1.13	
GB602 NF-B08	5.19	11.4	116000	0.36	59.5	39.6	2.67	0.096	517	23.6	57.0	99.5	76.2	1.95	
GB602 NF-B09	5.89	13.2	35400	0.19	61.3	31.1	2.91	0.075	5990	32.5	44.0	116	79.7	1.62	
GB602 NF-B10	6.15	10.2	41000	0.40	68.0	37.9	2.89	0.146	736	33.0	42.9	130	99.9	1.22	
GB602 NF-B11	6.17	12.0	33300	0.31	63.9	32.9	2.98	0.103	1670	30.4	38.5	126	93.8	1.33	
GB602 NF-B12	6.00	12.7	23800	0.23	59.8	31.5	2.94	0.106	3570	32.9	29.9	121	83.4	1.24	
GB602 FF1-B01	6.03	10.8	1170	0.26	57.8	28.9	2.95	0.103	3500	43.4	24.0	122	79.6	1.27	
GB602 FF1-B02	5.85	10.7	967	0.23	53.2	28.5	2.86	0.103	3700	42.3	21.9	121	82.4	1.32	
GB602 FF2-B01	5.34	10.0	977	0.28	46.2	27.7	2.60	0.095	3340	40.2	20.7	109	73.0	1.05	
GB602 FF2-B02	5.34	10.4	1550	0.30	54.2	28.0	2.58	0.103	2910	40.0	22.7	115	73.5	1.16	
GB602 FF3-B01	5.43	10.6	636	0.46	53.8	28.8	2.58	0.093	3160	39.0	21.7	114	71.8	1.23	
GB602 FF3-B02	5.56	10.3	571	0.25	54.2	29.6	2.66	0.100	2910	38.5	20.1	110	75.5	1.14	
GB602 FF4-B01	5.44	11.0	813	0.23	39.6	28.9	2.60	0.096	2850	37.7	24.1	114	73.9	1.11	
GB602 FF4-B02	5.45	10.5	787	0.26	55.9	29.0	2.65	0.103	3170	42.7	21.4	114	74.4	1.03	
GB602 FF5-B01 #1	5.43	10.4	988	0.28	51.3	29.1	2.63	0.097	2910	38.6	22.2	113	74.5	1.16	Lab Duplicate
GB602 FF5-B01 #2	5.49	10.6	989	0.26	53.7	28.3	2.66	0.098	2990	39.6	22.6	114	75.4	1.29	Lab Duplicate
GB602 FF5-B02	5.61	10.5	570	0.22	53.4	28.1	2.66	0.090	2870	40.1	19.5	115	77.4	0.91	
GB602 FF6-B01	5.72	11.0	571	0.23	48.1	28.7	2.77	0.108	3420	43.6	21.1	120	82.9	0.95	
GB602 FF6-B02	6.08	10.7	599	0.22	42.3	29.8	2.93	0.084	3320	44.8	20.1	125	89.3	0.99	
Average Marine Sediment	7.2	7.7	460	0.17	72	33	4.1	0.19	770	52	19	105	95	-	
Continental Crust	7.96	1.7	584	0.1	126	25	4.32	0.04	716	56	14.8	98	65	-	

Table G2-1. Continued.

Sample Identification	Al (%)	As (µg/g)	Ba (µg/g)	Cd (µg/g)	Cr (µg/g)	Cu (µg/g)	Fe (%)	Hg (µg/g)	Mn (µg/g)	Ni (µg/g)	Pb (µg/g)	V (µg/g)	Zn (µg/g)	TOC (%)	Comments
GB602 DISC-1 0-2 cm	5.21	8.6	129000	0.33	59.1	36.5	2.66	0.186	523	30.5	103	100	79.2	2.07	
GB602 DISC-1 2-4 cm	6.91	8.6	55200	0.32	65.6	37.5	3.06	0.090	1010	48.7	77.1	131	98.8	1.43	
GB602 DISC-1 4-6 cm	6.88	11.8	941	0.20	54.9	30.6	3.05	0.079	3450	53.7	17.9	134	92.1	0.84	
GB602 DISC-1 6-8 cm	7.07	13.5	600	0.15	64.1	30.9	3.10	0.068	14900	62.1	16.2	140	96.4	0.79	
GB602 DISC-1 8-10 cm	7.11	10.8	656	0.13	47.9	32.0	3.11	0.068	13900	55.9	14.8	137	96.3	0.86	
GB602 DISC-2 0-2 cm	7.47	9.7	47100	0.35	79.0	32.5	3.43	0.083	540	35.3	37.3	138	94.1	1.19	
GB602 DISC-2 2-4 cm	6.89	7.4	52300	0.26	67.2	31.1	3.06	0.096	689	39.4	36.0	130	91.8	1.06	
GB602 DISC-2 4-6 cm	7.00	6.8	8010	0.23	64.6	31.7	3.00	0.085	1300	50.6	25.0	133	87.8	0.87	
GB602 DISC-2 6-8 cm	6.99	14.3	716	0.23	44.4	32.2	3.05	0.068	10000	63.7	16.6	139	97.0	0.78	
GB602 DISC-2 8-10 cm	7.17	11.9	633	0.15	50.5	31.4	3.03	0.061	15700	57.2	14.5	137	92.7	0.84	
GB602 DISC-3 0-2 cm	6.78	11.7	14800	0.30	63.8	39.6	2.95	0.081	3510	52.1	26.5	134	98.1	1.03	
GB602 DISC-3 2-4 cm	6.82	12.0	997	0.22	43.5	31.1	3.01	0.084	6680	54.8	19.1	132	90.1	0.91	
GB602 DISC-3 4-6 cm	6.82	12.7	855	0.26	43.8	29.2	3.03	0.081	13300	59.5	17.0	133	89.7	0.82	
GB602 DISC-3 6-8 cm	6.94	12.2	623	0.30	44.5	30.2	2.91	0.081	4620	51.2	19.2	131	87.7	0.90	
GB602 DISC-3 8-10 cm	7.00	13.1	682	0.23	40.5	30.1	3.09	0.078	10100	56.6	18.7	135	93.8	0.86	
Average Marine Sediment	7.2	7.7	460	0.17	72	33	4.1	0.19	770	52	19	105	95	-	
Continental Crust	7.96	1.7	584	0.1	126	25	4.32	0.04	716	56	14.8	98	65	-	

Table G2-1. Continued.

Sample Identification	Al (%)	As (µg/g)	Ba (µg/g)	Cd (µg/g)	Cr (µg/g)	Cu (µg/g)	Fe (%)	Hg (µg/g)	Mn (µg/g)	Ni (µg/g)	Pb (µg/g)	V (µg/g)	Zn (µg/g)	TOC (%)	Comments
MC292 NF-B01	7.36	11.3	39700	0.32	77.4	28.0	3.79	0.091	722	31.7	26.1	147	49.8	1.63	
MC292 NF-B02	7.91	13.1	8040	0.18	80.1	29.2	4.24	0.073	1590	36.1	29.1	168	112	1.31	
MC292 NF-B03	7.60	13.3	5420	0.19	43.7	26.8	3.83	0.085	4730	38.8	29.9	153	107	1.30	
MC292 NF-B04	7.01	14.3	3080	0.19	78.1	26.9	3.71	0.073	4910	41.5	26.6	151	102	1.20	
MC292 NF-B05	7.20	15.4	11700	0.21	80.1	27.2	3.75	0.061	4640	35.0	33.0	155	112	1.46	
MC292 NF-B06	7.26	13.5	5810	0.17	79.7	27.1	3.75	0.076	4840	37.7	28.5	153	106	1.22	
MC292 NF-B07	7.45	16.3	3260	0.20	55.1	27.5	3.77	0.088	5680	38.2	29.4	151	111	1.27	
MC292 NF-B08	7.29	12.6	20300	0.23	63.3	27.4	3.78	0.109	1020	40.3	30.0	156	110	1.39	
MC292 NF-B09	7.67	10.1	1260	0.25	91.0	29.3	4.00	0.075	1650	37.5	24.6	177	110	1.23	
MC292 NF-B10	7.37	16.0	4570	0.17	82.9	31.3	3.92	0.086	6730	38.1	44.4	155	294	1.43	
MC292 NF-B11	7.56	15.6	2430	0.19	85.0	28.9	3.88	0.077	5590	41.7	29.5	159	112	1.32	
MC292 NF-B12	7.64	16.5	2450	0.17	78.0	29.0	4.18	0.084	4610	40.6	30.3	157	111	1.39	
MC292 FF1-B01	8.32	16.7	675	0.22	80.5	36.0	4.13	0.075	3030	37.5	31.1	162	117	1.26	
MC292 FF1-B02 #1	7.69	13.1	632	0.25	80.2	25.1	3.95	0.075	2390	37.6	33.9	150	114	1.35	Lab Duplicate
MC292 FF1-B02 #2	7.77	13.9	636	0.24	83.6	25.3	3.90	0.079	2370	36.9	34.1	152	114	1.34	Lab Duplicate
MC292 FF2-B01	6.18	12.1	661	0.19	63.2	20.5	3.20	0.067	2880	28.9	31.0	119	89.8	1.40	
MC292 FF2-B02	8.42	16.3	733	0.18	74.3	29.2	4.14	0.082	2520	38.7	31.2	169	121	1.32	
MC292 FF3-B01	9.86	11.8	638	0.25	103	32.5	5.11	0.063	921	46.3	31.4	199	141	1.43	
MC292 FF3-B02	8.00	12.5	646	0.24	77.8	27.9	3.98	0.066	3490	37.7	30.2	162	115	1.40	
MC292 FF4-B01	7.59	14.4	776	0.17	78.3	26.8	3.98	0.069	5400	38.9	31.1	152	111	1.51	
MC292 FF4-B02	7.51	16.6	843	0.18	73.4	26.3	3.93	0.071	5610	39.0	32.7	152	111	1.49	
MC292 FF5-B01	7.73	17.1	814	0.21	74.8	27.2	4.04	0.066	3440	41.9	32.0	156	113	1.46	
MC292 FF5-B02	7.47	14.7	923	0.18	76.6	26.7	4.01	0.071	5600	41.3	30.3	154	111	1.49	
MC292 FF6-B01	7.70	13.6	877	0.17	68.1	27.2	3.96	0.061	3790	40.3	30.8	153	109	1.47	
MC292 FF6-B02	7.71	14.7	859	0.18	72.6	27.4	4.04	0.070	3840	41.2	31.1	156	107	1.40	
Average Marine Sediment	7.2	7.7	460	0.17	72	33	4.1	0.19	770	52	19	105	95	-	
Continental Crust	7.96	1.7	584	0.1	126	25	4.32	0.04	716	56	14.8	98	65	-	

Table G2-1. Continued.

Sample Identification	Al (%)	As (µg/g)	Ba (µg/g)	Cd (µg/g)	Cr (µg/g)	Cu (µg/g)	Fe (%)	Hg (µg/g)	Mn (µg/g)	Ni (µg/g)	Pb (µg/g)	V (µg/g)	Zn (µg/g)	TOC (%)	Comments
MC292 DISC-1 0-2 cm	7.81	16.3	4710	0.19	44.9	30.4	4.00	0.060	4770	41.5	29.4	154	120	1.22	
MC292 DISC-1 2-4 cm	7.91	17.7	1690	0.18	75.2	27.3	4.15	0.058	3110	40.7	29.3	157	122	1.28	
MC292 DISC-1 4-6 cm	8.06	12.3	886	0.22	63.3	28.3	4.31	0.061	708	39.2	26.6	165	121	1.18	
MC292 DISC-1 6-8 cm	8.18	8.6	583	0.29	71.4	30.0	4.05	0.051	534	39.5	23.3	176	120	1.15	
MC292 DISC-1 8-10 cm	8.16	7.6	517	0.33	65.5	28.3	3.77	0.045	465	39.5	21.1	170	116	1.05	
MC292 DISC-2 0-2 cm	7.40	15.0	11900	0.17	70.7	27.5	3.67	0.058	3910	33.9	27.1	147	109	1.29	
MC292 DISC-2 2-4 cm	7.65	13.0	4060	0.20	67.1	29.5	3.88	0.057	1020	38.1	27.4	160	115	1.24	
MC292 DISC-2 4-6 cm	7.89	7.8	1140	0.31	72.9	28.1	3.74	0.050	607	39.2	25.2	166	118	1.21	
MC292 DISC-2 6-8 cm	7.98	7.6	635	0.31	73.2	28.8	3.79	0.043	551	40.3	21.6	165	117	1.13	
MC292 DISC-2 8-10 cm	7.86	7.1	654	0.26	73.0	28.3	3.63	0.038	492	40.5	18.9	157	112	0.99	
MC292 DISC-3 0-2 cm	7.59	14.5	14900	0.18	68.7	29.1	3.67	0.057	3060	34.9	27.3	145	107	1.13	
MC292 DISC-3 2-4 cm	7.49	19.3	3560	0.15	70.2	27.5	3.97	0.058	2700	38.5	27.1	151	111	1.21	
MC292 DISC-3 4-6 cm	7.65	17.1	1720	0.16	72.5	28.4	3.88	0.058	1380	38.6	27.2	158	117	1.24	
MC292 DISC-3 6-8 cm	7.81	11.6	1010	0.16	73.6	28.7	4.27	0.052	624	37.9	23.2	162	116	1.10	
MC292 DISC-3 8-10 cm #1	8.17	8.0	776	0.31	72.5	29.3	3.98	0.051	539	38.7	21.7	171	117	1.09	Lab Duplicate
MC292 DISC-3 8-10 cm #2	8.12	8.0	787	0.32	74.9	29.6	3.95	0.050	544	38.9	21.7	174	117	1.11	Lab Duplicate
Average Marine Sediment	7.2	7.7	460	0.17	72	33	4.1	0.19	770	52	19	105	95	-	
Continental Crust	7.96	1.7	584	0.1	126	25	4.32	0.04	716	56	14.8	98	65	-	

Table G2-2. Trace metal concentrations and percent water content of internal organ tissue samples from *Bathynomus giganteus* (isopod) and *Chaceon quinquedens* (crab).

Sample Identification	As (µg/g)	Ba (µg/g)	Cd (µg/g)	Cr (µg/g)	Cu (µg/g)	Fe (µg/g)	Hg (µg/g)	Ni (µg/g)	Pb (µg/g)	V (µg/g)	Zn (µg/g)	Water (%)	Comments
GB602 NF-1 *Bathynomus giganteus* #1	45.2	9.75	6.31	0.47	41.7	940	2.08	2.41	0.28	1.44	354	71.0	
GB602 NF-1 *Bathynomus giganteus* #2	25.8	251	6.15	3.28	26.0	1210	4.31	0.74	1.11	4.48	193	77.7	
GB602 NF-1 *Bathynomus giganteus* #3	27.1	73.5	5.51	0.36	90.2	434	1.49	1.90	0.16	1.52	107	75.9	
GB602 NF-2 *Bathynomus giganteus* #1	32.5	389	6.54	2.01	8.2	939	4.16	0.89	1.03	4.91	477	69.0	
GB602 NF-2 *Bathynomus giganteus* #2	12.6	131	2.35	0.21	6.3	443	2.51	1.55	0.42	1.73	120	71.0	
GB602 NF-2 *Bathynomus giganteus* #3	91.4	128	15.4	0.99	132	1910	4.28	0.35	0.65	2.66	816	77.4	
GB602 NF-1 *Chaceon quinquedens* #1	78.4	96.4	3.94	1.20	115	341	0.729	3.58	0.35	2.30	127	83.6	
GB602 NF-1 *Chaceon quinquedens* #2	82.1	30.3	1.25	0.40	46.3	104	0.479	3.00	0.14	0.90	258	70.7	
GB602 NF-1 *Chaceon quinquedens* #3	99.6	9.85	2.76	0.67	115	141	0.694	5.75	0.13	1.48	149	79.6	
GB602 NF-2 *Chaceon quinquedens* #1	49.6	121	1.90	2.19	27.8	365	0.439	4.47	0.62	1.64	131	80.2	
GB602 NF-2 *Chaceon quinquedens* #2	35.0	11.1	1.12	0.85	11.0	204	0.402	2.04	0.14	0.46	73.7	61.5	
GB602 NF-2 *Chaceon quinquedens* #3	46.1	57.3	1.60	0.74	38.6	139	0.472	1.32	0.20	0.93	150	67.4	
GB602 FF-5 *Bathynomus giganteus* #1	25.1	9.84	10.7	0.41	74.9	1840	15.7	0.12	0.31	0.52	248	60.6	
GB602 FF-5 *Bathynomus giganteus* #2	90.8	24.7	10.0	0.48	19.7	1680	5.91	0.52	0.27	1.29	302	62.9	
GB602 FF-5 *Bathynomus giganteus* #3	65.7	9.37	19.9	0.41	189	830	2.71	1.01	0.20	3.34	431	76.8	
GB602 FF-5 *Chaceon quinquedens* #1	207	5.76	12.9	0.76	98.9	293	1.48	12.8	0.45	4.54	216	78.5	
GB602 FF-5 *Chaceon quinquedens* #2 A	147	17.5	15.1	0.87	210	291	1.78	8.15	0.36	3.23	268	82.5	Lab Duplicate
GB602 FF-5 *Chaceon quinquedens* #2 B	147	16.9	15.0	0.92	203	300	1.73	8.53	0.35	3.20	272	82.2	Lab Duplicate
GB602 FF-5 *Chaceon quinquedens* #3	179	4.22	4.78	0.41	90.3	132	0.922	7.37	0.12	2.16	287	77.1	

Table G2-2. Continued.

Sample Identification	As (µg/g)	Ba (µg/g)	Cd (µg/g)	Cr (µg/g)	Cu (µg/g)	Fe (µg/g)	Hg (µg/g)	Ni (µg/g)	Pb (µg/g)	V (µg/g)	Zn (µg/g)	Water (%)	Comments
MC292 NF-1 *Bathynomus giganteus* #1	18.3	26.3	17.9	2.10	34.9	3470	2.91	1.34	0.70	4.34	310	72.6	
MC292 NF-1 *Bathynomus giganteus* #2	61.0	20.7	20.7	1.95	1660	1880	7.13	1.60	0.69	3.90	567	85.1	
MC292 NF-1 *Bathynomus giganteus* #3	66.7	6.79	17.0	1.02	127	1270	6.54	0.91	0.38	2.32	354	76.6	
MC292 NF-2 *Bathynomus giganteus* #1	17.8	25.2	0.96	0.15	5.6	319	1.23	0.32	0.08	2.51	100	72.7	
MC292 NF-2 *Bathynomus giganteus* #2	41.1	7.64	25.3	0.32	201	455	1.60	0.34	0.11	1.32	111	66.6	
MC292 NF-2 *Bathynomus giganteus* #3	26.4	16.8	0.97	1.05	7.8	472	0.641	0.86	0.34	2.23	143	74.0	
MC292 NF-1 *Chaceon quinquedens* #1	192	16.6	6.77	1.54	261	522	1.29	9.78	0.46	3.56	181	83.6	
MC292 NF-1 *Chaceon quinquedens* #2	89.9	63.2	7.19	5.10	203	3020	0.981	14.3	1.73	11.9	430	89.3	
MC292 NF-1 *Chaceon quinquedens* #3	153	5.98	1.64	0.50	190	254	0.510	11.5	0.20	2.01	210	81.3	
MC292 NF-2 *Chaceon quinquedens* #1	143	83.3	6.91	2.91	263	1450	1.34	22.6	0.87	6.97	124	80.4	
MC292 NF-2 *Chaceon quinquedens* #2	112	83.6	35.5	4.51	382	2220	1.49	11.5	1.77	9.03	179	77.3	
MC292 NF-2 *Chaceon quinquedens* #3	109	4.51	3.00	0.34	191	570	0.677	14.4	0.33	2.57	253	75.9	
MC292 FF-3 *Bathynomus giganteus* #1	20.7	17.6	5.04	3.06	27.4	3190	4.940	1.71	0.66	4.99	521	66.2	
MC292 FF-3 *Bathynomus giganteus* #2	38.5	35.2	12.4	3.11	10.1	4050	5.170	1.75	1.07	5.19	400	72.1	
MC292 FF-3 *Bathynomus giganteus* #3	27.9	4.71	3.21	0.22	11.1	301	0.895	0.84	0.09	2.70	139	75.4	
MC292 FF-4 *Bathynomus giganteus* #1	11.9	0.89	30.7	2.52	64.4	266	0.624	0.75	0.15	3.94	131	75.8	
MC292 FF-4 *Bathynomus giganteus* #2 A	11.7	6.38	6.63	0.48	136	556	2.41	0.41	0.23	1.45	141	70.6	Lab Duplicate
MC292 FF-4 *Bathynomus giganteus* #2 B	11.9	6.46	6.31	0.46	136	565	2.47	0.39	0.25	1.33	147	70.5	Lab Duplicate
MC292 FF-4 *Bathynomus giganteus* #3	74.1	38.4	49.3	0.70	126	6830	13.4	0.68	0.79	1.37	1044	75.9	
MC292 FF-3 *Chaceon quinquedens* #1	158	4.16	4.17	0.61	212	811	0.758	10.4	0.34	2.69	177	82.6	
MC292 FF-3 *Chaceon quinquedens* #2	113	3.12	6.90	0.39	221	494	0.774	9.77	0.17	1.95	237	75.7	
MC292 FF-3 *Chaceon quinquedens* #3	203	5.92	2.66	1.21	180	936	0.947	11.0	0.37	4.13	255	83.3	
MC292 FF-4 *Chaceon quinquedens* #1	113	3.34	1.08	0.49	140	425	0.489	10.4	0.19	2.25	240	75.0	
MC292 FF-4 *Chaceon quinquedens* #2	131	5.79	1.80	0.89	319	421	1.50	14.5	0.33	4.57	221	75.2	
MC292 FF-4 *Chaceon quinquedens* #3	68.7	1.30	0.93	0.22	124	588	0.343	4.43	0.076	1.10	227	64.4	

Table G2-3. Statistics for trace metal concentrations and total organic carbon (TOC) content in sediment samples (dry weight). Lab duplicates have been averaged prior to statistical analysis.

Sample Identification	Al (%)	As (µg/g)	Ba (µg/g)	Cd (µg/g)	Cr (µg/g)	Cu (µg/g)	Fe (%)	Hg (µg/g)	Mn (µg/g)	Ni (µg/g)	Pb (µg/g)	V (µg/g)	Zn (µg/g)	TOC (%)
GB516 NF														
Mean	5.78	11.1	59000	0.28	62.6	32.7	2.83	0.123	2070	34.5	33.6	118	96.2	1.32
Std. Dev.	1.00	1.2	95700	0.05	9.9	5.1	0.43	0.039	1140	7.7	10.3	21.7	38.3	0.51
n =	12	12	12	12	12	12	12	12	12	12	12	12	12	12
Maximum	6.84	13	351000	0.41	74.7	45.8	3.23	0.237	3490	42.3	60.3	140	213	2.87
Minimum	3.29	8.5	8570	0.23	41.4	27.0	1.76	0.088	285	14.1	21.0	57.0	63.1	0.82
GB516 FF														
Mean	6.03	11.1	1480	0.27	59.5	28.2	2.90	0.116	3650	43.2	24.0	129	86.8	1.08
Std. Dev.	0.21	0.8	559	0.02	7.3	1.0	0.17	0.020	585	2.6	2.0	4.7	3.5	0.07
n =	12	12	12	12	12	12	12	12	12	12	12	12	12	12
Maximum	6.37	12.6	2770	0.30	68.0	29.7	3.15	0.154	4840	46.8	26.8	137	92.6	1.22
Minimum	5.76	9.8	794	0.24	39.5	26.1	2.52	0.095	2740	37.7	20.9	122	81.5	0.97
GB602 NF														
Mean	5.74	11.5	50800	0.33	62.2	36.0	2.87	0.104	2320	32.2	41.8	118	90.3	1.44
Std. Dev.	0.48	1.3	31900	0.10	4.8	6.0	0.15	0.027	1990	6.1	10.0	9.1	8.9	0.28
n =	12	12	12	12	12	12	12	12	12	12	12	12	12	12
Maximum	6.17	13.2	116000	0.54	68.0	49.6	3.07	0.167	5990	43.8	57.0	130	101	1.99
Minimum	4.89	9.1	16600	0.19	55.3	30.9	2.58	0.070	417	23.6	22.1	100	76.2	1.13
GB602 FF														
Mean	5.61	10.6	850	0.27	50.9	28.7	2.71	0.098	3170	41.0	21.6	116	77.4	1.12
Std. Dev.	0.26	0.3	300	0.07	5.6	0.6	0.14	0.007	283	2.3	1.5	4.9	5.2	0.13
n =	12	12	12	12	12	12	12	12	12	12	12	12	12	12
Maximum	6.08	11.0	1550	0.46	57.8	29.8	2.95	0.108	3700	44.8	24.1	125	89.3	1.32
Minimum	5.34	10.0	570	0.22	39.6	27.7	2.58	0.084	2850	37.7	19.5	109	71.8	0.91

Table G2-3. Continued.

Sample Identification	Al (%)	As (µg/g)	Ba (µg/g)	Cd (µg/g)	Cr (µg/g)	Cu (µg/g)	Fe (%)	Hg (µg/g)	Mn (µg/g)	Ni (µg/g)	Pb (µg/g)	V (µg/g)	Zn (µg/g)	TOC (%)
MC292 NF														
Mean	7.44	14.0	9000	0.21	74.5	28.2	3.88	0.082	3890	38.1	30.1	157	120	1.35
Std. Dev.	0.25	2.0	11016	0.04	13.6	1.3	0.17	0.012	2050	2.9	5.0	8.2	57.6	0.12
n =	12	12	12	12	12	12	12	12	12	12	12	12	12	12
Maximum	7.91	16.5	39700	0.32	91.0	31.3	4.24	0.109	6730	41.7	44.4	177	294	1.63
Minimum	7.01	10.1	1260	0.17	43.7	26.8	3.71	0.061	722	31.7	24.6	147	49.8	1.20
MC292 FF														
Mean	7.85	14.5	757	0.20	77.0	27.7	4.04	0.070	3570	39.1	31.4	157	113	1.41
Std. Dev.	0.84	1.9	105	0.03	9.7	3.8	0.42	0.006	1420	4.1	1.1	17.9	11.6	0.08
n =	12	12	12	12	12	12	12	12	12	12	12	12	12	12
Maximum	9.86	17.1	923	0.25	103	36.0	5.11	0.082	5610	46.3	34.0	199	141	1.51
Minimum	6.18	11.8	634	0.17	63.2	20.5	3.20	0.061	921	28.9	30.2	119	89.8	1.26

Table G2-4. Statistics for trace metal concentrations (dry weight) and percent water content of internal organ tissue samples from *Bathynomus giganteus* (isopod). Lab duplicates have been averaged prior to statistical analysis.

Sample Identification	As (µg/g)	Ba (µg/g)	Cd (µg/g)	Cr (µg/g)	Cu (µg/g)	Fe (µg/g)	Hg (µg/g)	Ni (µg/g)	Pb (µg/g)	V (µg/g)	Zn (µg/g)	Water (%)
GB602 NF												
Mean	39.1	164	7.04	1.22	50.7	979	3.14	1.31	0.61	2.79	345	73.7
Std. Dev.	27.7	136	4.38	1.20	50.3	549	1.26	0.78	0.39	1.54	272	3.8
n =	6	6	6	6	6	6	6	6	6	6	6	6
Maximum	91.4	389	15.4	3.28	132	1910	4.31	2.41	1.11	4.91	816	77.7
Minimum	12.6	9.75	2.35	0.21	6.3	434	1.49	0.35	0.16	1.44	107	69.0
GB602 FF												
Mean	60.5	14.6	13.5	0.43	94.5	1450	8.11	0.55	0.26	1.72	327	66.8
Std. Dev.	33.2	8.72	5.52	0.04	86.3	543	6.77	0.45	0.06	1.46	94.0	8.8
n =	3	3	3	3	3	3	3	3	3	3	3	3
Maximum	90.8	24.7	19.9	0.48	189	1840	15.7	1.01	0.31	3.34	431	76.8
Minimum	25.1	9.37	10.0	0.41	19.7	830	2.71	0.12	0.20	0.52	248	60.6
MC292 NF												
Mean	38.6	17.2	13.8	1.10	339	1310	3.34	0.90	0.38	2.77	264	74.6
Std. Dev.	21.4	8.47	10.4	0.81	652	1220	2.81	0.52	0.27	1.13	183	6.1
n =	6	6	6	6	6	6	6	6	6	6	6	6
Maximum	66.7	26.3	25.3	2.10	1660	3470	7.13	1.60	0.70	4.34	567	85.1
Minimum	17.8	6.79	0.96	0.15	5.6	319	0.641	0.32	0.08	1.32	100	66.6
MC292 FF												
Mean	30.8	17.2	17.9	1.68	62.5	2530	4.58	1.02	0.50	3.26	397	72.7
Std. Dev.	23.5	16.2	18.4	1.36	56.7	2650	4.73	0.57	0.40	1.71	356	3.9
n =	6	6	6	6	6	6	6	6	6	6	6	6
Maximum	74.1	38.4	49.3	3.11	136	6830	13.4	1.75	1.07	5.19	1040	75.9
Minimum	11.8	0.89	3.21	0.22	10.1	266	0.624	0.40	0.09	1.37	131	66.2

Table G2-5. Statistics for trace metal concentrations (dry weight) and percent water content of internal organ tissue samples from *Chaceon quinquedens* (crab). Lab duplicates have been averaged prior to statistical analysis.

Sample Identification	As (µg/g)	Ba (µg/g)	Cd (µg/g)	Cr (µg/g)	Cu (µg/g)	Fe (µg/g)	Hg (µg/g)	Ni (µg/g)	Pb (µg/g)	V (µg/g)	Zn (µg/g)	Water (%)
GB602 NF												
Mean	65.1	54.3	2.10	1.01	59.0	216	0.536	3.36	0.26	1.29	148	73.8
Std. Dev.	25.2	46.1	1.08	0.63	45.0	111	0.139	1.61	0.19	0.66	60.6	8.6
n =	6	6	6	6	6	6	6	6	6	6	6	6
Maximum	99.6	121	3.94	2.19	115	365	0.729	5.75	0.62	2.30	258	83.6
Minimum	35.0	9.85	1.12	0.40	11.0	104	0.402	1.32	0.13	0.46	73.7	61.5
GB602 FF												
Mean	178	9.06	10.9	0.69	132	240	1.39	9.50	0.31	3.31	258	79.3
Std. Dev.	30.0	7.09	5.42	0.25	64.7	93.7	0.424	2.90	0.17	1.19	37.1	2.7
n =	3	3	3	3	3	3	3	3	3	3	3	3
Maximum	207	17.2	15.1	0.90	207	296	1.76	12.8	0.45	4.54	287	82.4
Minimum	147	4.22	4.78	0.41	90.3	132	0.922	7.37	0.12	2.16	216	77.1
MC292 NF												
Mean	133	42.9	10.2	2.48	248	1340	1.05	14.0	0.89	6.01	230	81.3
Std. Dev.	37.0	38.0	12.6	2.03	73.5	1100	0.393	4.57	0.70	3.96	107	4.8
n =	6	6	6	6	6	6	6	6	6	6	6	6
Maximum	192	83.6	35.5	5.10	382	3020	1.49	22.6	1.77	11.9	430	89.3
Minimum	89.9	4.51	1.64	0.34	190	254	0.510	9.78	0.20	2.01	124	75.9
MC292 FF												
Mean	131	3.94	2.92	0.64	199	613	0.802	10.1	0.25	2.78	226	76.0
Std. Dev.	45.7	1.75	2.28	0.36	70.0	215	0.405	3.24	0.12	1.33	26.8	6.8
n =	6	6	6	6	6	6	6	6	6	6	6	6
Maximum	203	5.92	6.90	1.21	319	936	1.5	14.5	0.37	4.57	255	83.3
Minimum	68.7	1.30	0.93	0.22	124	421	0.343	4.43	0.076	1.10	177	64.4

Table G2-6. Quality assurance and quality control data for sediment and tissue metal analyses.

Results for the sediment Certified Reference Material (CRM) MESS-2, and the tissue CRMs TORT-2 and DORM-2 certified by the National Research Council of Canada (NRC) and the Standard Reference Material (SRM) Trace Elements in Water SRM #1643d certified by the National Institute of Standards and Technology (NIST).

Reference Material	Al (%)	As (µg/g)	Ba (µg/g)	Cd (µg/g)	Cr (µg/g)	Cu (µg/g)	Fe (%)	Hg (µg/g)	Mn (µg/g)	Ni (µg/g)	Pb (µg/g)	V (µg/g)	Zn (µg/g)	TOC (%)
CRM MESS-2	8.48	20.2	1030	0.24	112	38.4	4.26	0.096	358	47.9	21.8	261	158	2.05
This Study	8.41	20.4	1020	0.24	112	37.3	4.23	0.099	354	47.9	22.4	262	159	2.02
	8.35	20.8	995	0.24	104	38.8	4.20	0.098	350	48.7	21.8	243	158	2.02
	8.31	20.8	983	0.23	106	38.5	4.18	0.091	347	48.6	21.8	245	159	2.04
	8.74	21.0	1000	0.25	99.5	39.5	4.19	0.097	361	47.9	21.6	256	160	2.03
	8.72	21.1	1030	0.25	99.1	39.6	4.19	0.091	370	47.7	21.9	257	159	2.03
	8.77	20.2	1040	0.24	98.2	38.5	4.23	0.100	351	49.4	21.5	248	159	2.00
	8.78	20.0	1000	0.25	103	37.6	4.25	0.097	352	50.2	21.2	251	159	2.00
	-	-	1010	-	-	-	-	-	-	-	-	-	-	2.02
	-	-	970	-	-	-	-	-	-	-	-	-	-	2.00
	-	-	1000	-	-	-	-	-	-	-	-	-	-	2.04
	-	-	-	-	-	-	-	-	-	-	-	-	-	2.04
CRM MESS-2	8.57	20.7	-	0.24	106	39.3	4.35	0.092	365	49.3	21.9	252	172	2.14*
NRC Certified Values	± 0.26	± 0.8	-	± 0.01	± 8	± 2.0	± 0.22	± 0.009	± 21	± 1.8	± 1.2	± 10	± 16	± 0.13
							(µg/g)							
CRM TORT-2	-	22.3	1.66	27.0	0.72	99.1	109	0.319	-	2.33	0.29	1.62	184	-
This Study	-	23.1	1.98	26.7	0.72	106	116	0.301	-	2.41	0.33	1.67	184	-
	-	-	-	-	-	-	-	0.313	-	-	-	-	-	
	-	-	-	-	-	-	-	0.308	-	-	-	-	-	
CRM TORT-2	-	21.6	-	26.7	0.77	106	105	0.27	13.6	2.50	0.35	1.64	180	-
NRC Certified Values	-	± 1.8	-	± 0.6	± 0.15	± 10	± 13	± 0.06	± 1.2	± 0.19	± 0.13	± 0.19	± 6	-
CRM DORM-2	-	17.9	2.68	0.039	32.3	2.39	149	-	-	18.1	0.059	1.36	24.0	-
This Study	-	18.9	2.53	0.038	33.7	2.20	148	-	-	18.0	0.070	1.04	24.3	-
CRM DORM-2	10.9	18.0	-	0.043	34.7	2.34	142	4.64	3.66	19.4	0.065	-	25.6	-
NRC Certified Values	± 1.7	± 1.1	-	± 0.008	± 5.5	± 0.16	± 10	± 0.26	± 0.34	± 3.1	± 0.007	-	± 2.3	-
	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	
SRM #1643d	-	-	509.3	-	-	-	-	-	-	-	-	-	-	-
This Study	-	-	504.3	-	-	-	-	-	-	-	-	-	-	-
	-	-	506.6	-	-	-	-	-	-	-	-	-	-	-
	-	-	511.5	-	-	-	-	-	-	-	-	-	-	-
	-	-	503.9	-	-	-	-	-	-	-	-	-	-	-
	-	-	499.5	-	-	-	-	-	-	-	-	-	-	-
	-	-	503.1	-	-	-	-	-	-	-	-	-	-	-
	-	-	514.0	-	-	-	-	-	-	-	-	-	-	-
SRM #1643d	127.6	56.02	506.5	6.47	18.53	20.5	91.2	-	37.66	58.1	18.15	35.1	72.48	-
NIST Certified Values	± 3.5	± 0.73	± 8.9	± 0.37	± 0.20	± 3.8	± 3.9	-	± 0.83	± 2.7	± 0.64	± 1.4	± 0.65	-

*Certified value is for Total Carbon (Organic + Inorganic).

Method Detection Limits (MDLs).

	Al (%)	As (µg/g)	Ba (µg/g)	Cd (µg/g)	Cr (µg/g)	Cu (µg/g)	Fe (%)	Hg (µg/g)	Mn (µg/g)	Ni (µg/g)	Pb (µg/g)	V (µg/g)	Zn (µg/g)	TOC (%)
Sediment MDL	0.01	0.2	2.0	0.01	3.0	3.0	0.01	0.001	2.5	2.5	0.02	4.5	0.4	0.06
							(µg/g)							
Tissue MDL	-	0.03	0.01	0.001	0.003	0.7	2.5	0.001	-	0.01	0.001	0.007	0.4	-

Table G2-6. Continued.

Percent Spike Recovery. Mean and Standard Deviation.

	Al	As	Ba	Cd	Cr	Cu	Fe	Hg	Mn	Ni	Pb	V	Zn	TOC
Sediment Mean	100.5	98.9	96.5	93.4	103.1	96.8	101.3	85.2**	100.8	93.1	94.5	116.1**	97.7	-
Standard Deviation	3.4	5.2	2.4	3.3	9.5	2.9	2.8	8.9	2.5	4.2	2.8	3.5	3.6	-
(n =)	6	8	8	8	6	6	6	26	6	8	8	6	6	-
Tissue Mean	-	103.3	98.9	91.9	102.7	98.0	98.5	89.4**	-	98.5	92.5	92.6	97.9	-
Standard Deviation	-	1.7	2.2	2.2	7.0	1.4	3.4	9.1	-	1.5	1.4	1.8	3.1	-
(n =)	-	4	4	4	4	4	4	10	-	4	4	4	4	-

**Final concentrations are corrected for percent spike recovery.

Estimate of Precision as Percent Relative Standard Deviation (RSD) of Lab Duplicates

	Al	As	Ba	Cd	Cr	Cu	Fe	Hg	Mn	Ni	Pb	V	Zn	TOC
Sediment														
GB516 FF1-B02	1.6	2.0	0.8	5.0	8.2	2.2	0.5	2.1	1.2	3.0	1.5	0.0	2.0	6.4
GB516 FF6-B02	0.7	1.3	1.6	0.0	2.6	1.2	0.0	1.6	1.4	0.2	1.1	1.0	1.2	0.0
GB516 DISC-3 8-10 cm	0.1	2.1	0.5	6.1	4.1	0.0	0.2	1.2	0.1	0.2	0.4	1.5	0.7	0.6
GB602 FF5-B01	0.1	1.3	0.1	5.2	3.2	2.0	0.8	0.7	1.9	1.8	0.9	0.6	0.8	7.5
MC292 FF1-B02	0.7	4.2	0.4	2.9	2.9	0.6	0.9	3.7	0.6	1.3	0.4	0.9	0.0	0.5
MC292 DISC-3 8-10 cm	0.4	0.0	1.0	2.2	2.3	0.7	0.5	1.4	0.7	0.4	0.0	2.7	0.0	1.3
Tissue														
GB602 FF-5 *Chaceon* #2	-	0.0	2.5	0.5	3.9	2.4	2.1	2.0	-	3.2	2.0	0.7	1.0	-
MC292 FF-4 *Bathynomus* #2	-	1.2	0.9	3.5	3.0	0.0	1.1	1.7	-	3.5	5.9	6.1	2.9	-

Percent RSD = (standard deviation/mean) X 100.

MMS Deep Gulf of Mexico Cruise 2B (July 2001)

Site: Garden Banks 516 Discretionary Box Core 1 (GB516 DISC-B01)

Depth (cm)	Oxygen (%)	Oxygen (μM)	Depth (cm)	Temperature (C)	pH	Eh (mV)
Bottom Water	10.2	136	2	10.7	7.25	-171
0.1	4.3	57	4	10.9	7.36	-145
0.2	0.4	5	8	10.1	7.41	-78
0.3	0.0	0	12	8.7	7.28	71
			16	8.8	7.26	92
			20	8.8	7.25	73
			24	9.1	7.20	17

Oxygen Calibration: 0 and 20.9%
pH Calibration: 7 and 10, Slope = 104.1
Eh Calibration: oxidation/reduction potential (ORP) Standard = 419.2 mV at 22.1^{o}C

Oxygen μM Calculation Assumes Chlorinity of 20 and Avg. Temp of 10^{o}C

MMS Deep Gulf of Mexico Cruise 2B (July 2001)

Site: Garden Banks 516 Discretionary Box Core 2 (GB516 DISC-B02)

Depth (cm)	Oxygen (%)	Oxygen (µM)	Depth (cm)	Temperature (C)	pH	Eh (mV)
Bottom Water	11.2	149	2	13.1	6.64	196
0.1	9.7	129	4	9.7	10.20	68
0.2	2.2	29	8	10.7	8.10	-35
0.3	0.0	0	12	11.9	9.02	26
			16	10.6	8.31	-80
			20	10.1	10.38	31
			24	10.5	10.52	165

Oxygen Calibration: 0 and 20.9%
pH Calibration: 7 and 10, Slope = 103.7
Eh Calibration: ORP Standard = 419.6 mV at 22.1^{o}C

Oxygen µM Calculation Assumes Chlorinity of 20 and Avg. Temp of 10^{o}C

MMS Deep Gulf of Mexico Cruise 2B (July 2001)

Site: Garden Banks 516 Discretionary Box Core 3 (GB516 DISC-B03)

Depth (cm)	Oxygen (%)	Oxygen (µM)	Depth (cm)	Temperature (C)	pH	Eh (mV)
Bottom Water	-	-	2	11.9	7.27	47
0.1	0.0	0	4	10.7	7.14	6
			8	9.5	7.21	39
			12	9.8	7.19	-1
			16	9.5	7.25	-7
			20	9.9	7.31	-21

Oxygen Calibration: 0 and 20.9%
pH Calibration: 7 and 10, Slope = 105.4
Eh Calibration: ORP Standard = 419.8 mV at 21.5^{o}C

Oxygen µM Calculation Assumes Chlorinity of 20 and Avg. Temp of 10^{o}C

MMS Deep Gulf of Mexico Cruise 2B (July 2001)

Site: Garden Banks 516 Near-Field 1 (GB516 NF-B01)

Depth (cm)	Oxygen (%)	Oxygen (µM)	Depth (cm)	Temperature (C)	pH	Eh (mV)
Bottom Water	-	-	1	11.5	7.03	106
0.1	9.8	130	3	11.6	7.05	120
0.2	0.4	5	7	9.5	7.09	116
0.3	0.1	1	11	9.8	7.09	177
0.4	0	0	15	9.5	7.24	142
			19	9.3	7.23	90
			23	10.0	7.22	79
			30	11.3	7.21	79

Oxygen Calibration: 0 and 20.9%
pH Calibration: 7 and 10, Slope = 103.7
Eh Calibration: ORP Standard = 421.7 mV at 21.0^{o}C

Oxygen µM Calculation Assumes Chlorinity of 20 and Avg. Temp of 10^{o}C

MMS Deep Gulf of Mexico Cruise 2B (July 2001)

Site: Garden Banks 516 Near-Field 2 (GB516 NF-B02)

Depth (cm)	Oxygen (%)	Oxygen (µM)	Depth (cm)	Temperature (C)	pH	Eh (mV)
Bottom Water	12.4	165	2	13.1	6.87	210
0.1	6.9	92	4	12.1	6.99	210
0.2	4.7	63	8	11.7	7.11	204
0.3	3.4	45	12	11.1	7.12	172
0.4	3.1	41	16	11.3	7.14	101
0.5	2.6	35				
0.6	2.1	28				
0.7	1.7	23				
0.8	1.5	20				
0.9	0.9	12				
1.0	0.7	9				
1.1	0.6	8				
1.2	0.4	5				
1.3	0.3	4				
1.4	0.2	3				
1.5	0.1	1				
1.6	0.1	1				
1.7	0	0				

Oxygen Calibration: 0 and 20.9%
pH Calibration: 7 and 10, Slope = 100.0
Eh Calibration: ORP Standard = 424.0 mV at 20.2^{o}C

Oxygen µM Calculation Assumes Chlorinity of 20 and Avg. Temp of 10^{o}C

MMS Deep Gulf of Mexico Cruise 2B (July 2001)

Site: Garden Banks 516 Near-Field 3A (GB516 NF-B03A)

Depth (cm)	Oxygen (%)	Oxygen (μM)	Depth (cm)	Temperature (C)	pH	Eh (mV)
Bottom Water	8.4	112	2	14.6	7.14	-78
0.1	3.6	48	4	13.7	7.09	-88
0.2	0.8	11	8	12.0	7.05	31
0.3	0	0	12	11.2	6.99	91
			16	10.5	7.09	95
			20	10.8	7.21	151
			24	11.0	7.15	175

Oxygen Calibration: 0 and 20.9%
pH Calibration: 7 and 10, Slope = 103.5
Eh Calibration: ORP Standard = 421.1 mV at 21.1^{o}C

Oxygen μM Calculation Assumes Chlorinity of 20 and Avg. Temp of 10^{o}C

MMS Deep Gulf of Mexico Cruise 2B (July 2001)

Site: Garden Banks 516 Near-Field 5 (GB516 NF-B05)

Depth (cm)	Oxygen (%)	Oxygen (μM)	Depth (cm)	Temperature (C)	pH	Eh (mV)
Bottom Water	-	-	2	12.0	7.17	290
0.1	9.0	120	4	10.9	7.10	282
0.2	7.7	103	8	9.4	7.15	259
0.3	7.1	95	12	9.1	7.28	269
0.4	6.4	85	16	9.1	7.31	279
0.5	5.8	77	20	9.6	7.27	257
0.6	5.3	71	24	9.6	7.22	209
0.7	4.8	64				
0.8	4.4	59				
0.9	4.1	55				
1.0	3.8	51				
1.1	3.6	48				
1.2	3.2	43				
1.3	2.8	37				
1.4	2.5	33				
1.5	2.2	29				
1.6	1.9	25				
1.7	1.6	21				
1.8	1.4	19				
1.9	1.2	16				
2.0	0.9	12				
2.1	0.6	8				
2.2	0.3	4				
2.3	0.2	3				
2.4	0.1	1				
2.5	0.0	0				

Oxygen Calibration: 0 and 20.9%
pH Calibration: 7 and 10, Slope = 102.7
Eh Calibration: ORP Standard = 419.5 mV at 25.0^{o}C

Oxygen μM Calculation Assumes Chlorinity of 20 and Avg. Temp of 10^{o}C

MMS Deep Gulf of Mexico Cruise 2B (July 2001)

Site: Garden Banks 516 Near-Field 6 (GB516 NF-B06)

Depth (cm)	Oxygen (%)	Oxygen (µM)	Depth (cm)	Temperature (C)	pH	Eh (mV)
Bottom Water	10.1	134	1	13.1	6.91	-107
0.1	3.7	49	3	9.5	7.15	-104
0.2	0.0	0	7	7.8	7.82	-57
			11	9.3	7.40	53
			15	9.4	6.62	80
			19	9.8	7.45	122
			23	9.6	7.30	130

Oxygen Calibration: 0 and 20.9%
pH Calibration: 7 and 10, Slope = 103.2
Eh Calibration: ORP Standard = 419.5 mV at 25.0^{o}C

Oxygen µM Calculation Assumes Chlorinity of 20 and Avg. Temp of 10^{o}C

MMS Deep Gulf of Mexico Cruise 2B (July 2001)

Site: Garden Banks 516 Near-Field 7 (GB516 NF-B07)

Depth (cm)	Oxygen (%)	Oxygen (µM)	Depth (cm)	Temperature (C)	pH	Eh (mV)
Bottom Water	-	-	1.5	10.5	7.14	184
0.1	10.1	134	3	9.6	7.15	221
0.2	7.4	99	5	9.1	7.14	210
0.3	6.3	84	7	10.4	7.19	244
0.4	5.2	69	11	9.9	7.31	270
0.5	4.3	57	15	10.6	7.15	222
0.6	3.4	45	19	11.0	7.31	189
0.7	2.5	33	21	11.5	7.15	215
0.8	1.7	23				
0.9	1.1	15				
1.0	0.4	5				
1.1	0.0	0				

Oxygen Calibration: 0 and 20.9%
pH Calibration: 7 and 10, Slope = 103.1
Eh Calibration: ORP Standard = 419.5 mV at 25.0^{o}C

Oxygen µM Calculation Assumes Chlorinity of 20 and Avg. Temp of 10^{o}C

MMS Deep Gulf of Mexico Cruise 2B (July 2001)

Site: Garden Banks 516 Near-Field 8 (GB516 NF-B08)

Depth (cm)	Oxygen (%)	Oxygen (µM)	Depth (cm)	Temperature (C)	pH	Eh (mV)
Bottom Water	13.9	185	2	12.8	7.20	267
0.1	9.9	132	4	10.7	7.08	249
0.2	6.4	85	6	10.2	7.11	248
0.3	4.6	61	10	10.0	7.22	246
0.4	3.3	44	14	9.4	7.29	242
0.5	2.4	32	18	9.7	7.32	192
0.6	1.7	23	22	9.8	7.28	122
0.7	1.2	16				
0.8	0.8	11				
0.9	0.5	7				
1.0	0.3	4				
1.1	0.2	3				
1.2	0.0	0				

Oxygen Calibration: 0 and 20.9%
pH Calibration: 7 and 10, Slope = 103.1
Eh Calibration: ORP Standard = 419.5 mV at 25.0^{o}C

Oxygen µM Calculation Assumes Chlorinity of 20 and Avg. Temp of 10^{o}C

MMS Deep Gulf of Mexico Cruise 2B (July 2001)

Site: Garden Banks 516 Near-Field 9 (GB516 NF-B09)

Depth (cm)	Oxygen (%)	Oxygen (µM)	Depth (cm)	Temperature (C)	pH	Eh (mV)
Bottom Water	-	-	1	10.2	6.97	-86
0.1	5.2	69	3	9.7	7.47	-56
0.2	0.0	0	7	8.4	7.36	40
			11	8.2	7.46	29
			15	8.2	7.48	78
			19	8.2	7.44	-43
			23	8.5	7.51	-20

Oxygen Calibration: 0 and 20.9%
pH Calibration: 7 and 10, Slope = 102.5
Eh Calibration: ORP Standard = 419.8 mV at 25.0^{o}C

Oxygen µM Calculation Assumes Chlorinity of 20 and Avg. Temp of 10^{o}C

MMS Deep Gulf of Mexico Cruise 2B (July 2001)

Site: Garden Banks 516 Near-Field 10 (GB516 NF-B10)

Depth (cm)	Oxygen (%)	Oxygen (µM)	Depth (cm)	Temperature (C)	pH	Eh (mV)
Bottom Water	-	-	2	13.1	7.05	238
0.1	12.8	170	4	13.0	7.06	209
0.2	10.7	142	8	12.6	7.20	205
0.3	9.1	121	12	11.3	7.19	111
0.4	7.8	104	16	12.0	7.16	69
0.5	6.9	92	20	11.7	7.22	39
0.6	6.3	84				
0.7	5.7	76				
0.8	4.8	64				
0.9	4.2	56				
1.0	3.7	49				
1.1	3.3	44				
1.2	2.9	39				
1.3	2.7	36				
1.4	2.5	33				
1.5	2.2	29				
1.6	1.7	23				
1.7	1.4	19				
1.8	1.2	16				
1.9	1.1	15				
2.0	0.9	12				
2.1	0.8	11				
2.2	0.3	4				
2.3	0.2	3				
2.4	0.1	1				
2.5	0.0	0				

Oxygen Calibration: 0 and 20.9%
pH Calibration: 7 and 10, Slope = 103.7
Eh Calibration: ORP Standard = 424.8 mV at 19.2^{o}C

Oxygen µM Calculation Assumes Chlorinity of 20 and Avg. Temp of 10^{o}C

MMS Deep Gulf of Mexico Cruise 2B (July 2001)

Site: Garden Banks 516 Near-Field 11 (GB516 NF-B11)

Depth (cm)	Oxygen (%)	Oxygen (μM)	Depth (cm)	Temperature (C)	pH	Eh (mV)
Bottom Water	-	-	1	10.8	7.23	506
			3	10.7	7.12	218
			7	10.3	7.10	209
			11	10.1	7.21	215
			15	8.3	7.21	130

Oxygen Calibration: 0 and 20.9%
pH Calibration: 7 and 10, Slope = 103.6
Eh Calibration: ORP Standard = 418.8 mV at 21.8^{o}C

Oxygen μM Calculation Assumes Chlorinity of 20 and Avg. Temp of 10^{o}C

MMS Deep Gulf of Mexico Cruise 2B (July 2001)

Site: Garden Banks 516 Far-Field 1, Box Core 1 (GB516 FF1-B01)

Depth (cm)	Oxygen (%)	Oxygen (µM)	Depth (cm)	Temperature (C)	pH	Eh (mV)
Bottom Water	-	-	2	12.1	7.32	242
0.1	11.4	152	4	11.2	7.29	223
0.2	10.7	142	6	9.4	7.30	222
0.3	10.1	134	10	10.0	7.41	246
0.4	9.5	126	14	10.1	7.57	218
0.5	9.1	121	18	10.0	7.89	182
0.6	8.6	115	22	11.8	7.52	148
0.7	8.2	109				
0.8	7.8	104				
0.9	7.5	100				
1.0	7.1	95				
1.1	6.7	89				
1.2	6.4	85				
1.3	6.1	81				
1.4	5.9	79				
1.5	5.7	76				
1.6	5.4	72				
1.7	5.3	71				
1.8	5.1	68				
1.9	4.9	65				
2.0	4.8	64				
2.1	4.8	64				
2.2	4.5	60				
2.3	4.3	57				
2.4	4.1	55				
2.5	3.9	52				
2.6	3.8	51				
2.7	3.6	48				
2.8	3.4	45				
2.9	3.1	41				
3.0	2.8	37				
3.1	2.5	33				
3.2	2.2	29				

MMS Deep Gulf of Mexico Cruise 2B (July 2001)

Site: Garden Banks 516 Far-Field 1, Box Core 1 (GB516 FF1-B01) continued.

Depth (cm)	Oxygen (%)	Oxygen (μM)	Depth (cm)	Temperature (C)	pH	Eh (mV)
3.3	2.0	27				
3.4	1.8	24				
3.5	1.6	21				
3.6	1.4	19				
3.7	1.2	16				
3.8	1.1	15				
3.9	1.0	13				
4.0	0.9	12				
4.1	0.8	11				
4.2	0.7	9				
4.3	0.7	9				
4.4	0.6	8				
4.5	0.5	7				
4.6	0.4	5				
4.7	0.4	5				
4.8	0.3	4				
4.9	0.2	3				
5.0	0.1	1				
5.1	0.1	1				
5.2	0.1	1				
5.3	0.0	0				

Oxygen Calibration: 0 and 20.9%
pH Calibration: 7 and 10, Slope = 102.3
Eh Calibration: ORP Standard = 419.5 mV at 25.0°C

Oxygen μM Calculation Assumes Chlorinity of 20 and Avg. Temp of 10°C

MMS Deep Gulf of Mexico Cruise 2B (July 2001)

Site: Garden Banks 516 Far-Field 1, Box Core 2 (GB516 FF1-B02)

Depth (cm)	Oxygen (%)	Oxygen (µM)	Depth (cm)	Temperature (C)	pH	Eh (mV)
Bottom Water	13.5	180	2	13.1	7.24	219
0.1	11.0	146	4	12.4	7.17	252
0.2	9.8	130	6	11.7	7.25	246
0.3	8.8	117	10	11.4	7.33	227
0.4	8.2	109	14	11.6	7.33	238
0.5	7.7	103	18	12.0	7.32	157
0.6	7.3	97	22	12.9	7.31	119
0.7	7.0	93				
0.8	6.6	88				
0.9	6.4	85				
1.0	6.0	80				
1.1	5.7	76				
1.2	5.4	72				
1.3	5.2	69				
1.4	5.0	67				
1.5	4.7	63				
1.6	4.4	59				
1.7	4.2	56				
1.8	4.0	53				
1.9	3.8	51				
2.0	3.7	49				
2.1	3.4	45				
2.2	3.2	43				
2.3	3.0	40				
2.4	2.8	37				
2.5	2.5	33				
2.6	2.4	32				
2.7	2.2	29				
2.8	2.0	27				
2.9	1.9	25				
3.0	1.7	23				
3.1	1.6	21				
3.2	1.4	19				

MMS Deep Gulf of Mexico Cruise 2B (July 2001)

Site: Garden Banks 516 Far-Field 1, Box Core 2 (GB516 FF1-B02) continued.

Depth (cm)	Oxygen (%)	Oxygen (µM)	Depth (cm)	Temperature (C)	pH	Eh (mV)
3.3	1.3	17				
3.4	1.1	15				
3.5	1.1	15				
3.6	1.0	13				
3.7	0.9	12				
3.8	0.8	11				
3.9	0.7	9				
4.0	0.6	8				
4.1	0.6	8				
4.2	0.5	7				
4.3	0.5	7				
4.4	0.4	5				
4.5	0.4	5				
4.6	0.3	4				
4.7	0.3	4				
4.8	0.2	3				
4.9	0.2	3				
5.0	0.1	1				
5.1	0.1	1				
5.2	0.1	1				
5.3	0.1	1				
5.4	0.1	1				
5.5	0.0	0				

Oxygen Calibration: 0 and 20.9%
pH Calibration: 7 and 10, Slope = 102.8
Eh Calibration: ORP Standard = 419.5 mV at 25.0^{o}C

Oxygen µM Calculation Assumes Chlorinity of 20 and Avg. Temp of 10^{o}C

MMS Deep Gulf of Mexico Cruise 2B (July 2001)

Site: Garden Banks 516 Far-Field 2, Box Core 2 (GB516 FF2-B02)

Depth (cm)	Oxygen (%)	Oxygen (μM)	Depth (cm)	Temperature (C)	pH	Eh (mV)
Bottom Water	-	-	1	14.4	7.01	247
0.1	13.1	174	3	14.0	7.01	204
0.2	10.9	145	7	13.0	7.08	241
0.3	8.5	113	11	13.1	7.13	207
0.4	7.8	104	15	12.3	7.11	237
0.5	7.0	93	19	12.7	7.08	137
0.6	6.4	85				
0.7	6.1	81				
0.8	6.0	80				
0.9	6.0	80				
1.0	6.0	80				
1.1	5.8	77				
1.2	5.7	76				
1.3	5.5	73				
1.4	5.2	69				
1.5	5.1	68				
1.6	4.9	65				
1.7	4.7	63				
1.8	4.6	61				
1.9	4.4	59				
2.0	4.2	56				
2.1	4.1	55				
2.2	3.9	52				
2.3	3.7	49				
2.4	3.6	48				
2.5	3.3	44				
2.6	3.1	41				
2.7	3.0	40				
2.8	2.8	37				
2.9	2.6	35				

Oxygen Calibration: 0 and 20.9%
pH Calibration: 7 and 10, Slope = 102.8
Eh Calibration: ORP Standard = 422.2 mV at 21.1^{o}C

Oxygen μM Calculation Assumes Chlorinity of 20 and Avg. Temp of 10^{o}C

MMS Deep Gulf of Mexico Cruise 2B (July 2001)

Site: Garden Banks 516 Far-Field 3, Box Core 1 (GB516 FF3-B01)

Depth (cm)	Oxygen (%)	Oxygen (μM)	Depth (cm)	Temperature (C)	pH	Eh (mV)
Bottom Water	16.4	218	2	13.1	6.92	235
0.1	13.0	173	4	15.7	6.91	225
0.2	11.1	148	8	14.4	7.05	202
0.3	10.5	140	12	13.7	7.13	133
0.4	10.0	133	16	13.9	7.18	29
0.5	9.6	128	20	13.8	6.19*	25
0.6	9.2	122	24	14.5	7.04	-8
0.7	9.0	120				
0.8	8.7	116			* suspect	
0.9	8.5	113				
1.0	8.2	109				
1.1	7.8	104				
1.2	7.5	100				
1.3	7.1	95				
1.4	6.5	87				
1.5	5.7	76				
1.6	5.2	69				
1.7	4.8	64				
1.8	4.4	59				
1.9	4.0	53				
2.0	3.6	48				
2.1	3.2	43				
2.2	3.1	41				
2.3	2.7	36				
2.4	2.6	35				
2.5	2.5	33				
2.6	2.4	32				
2.7	2.3	31				

Oxygen Calibration: 0 and 20.9%
pH Calibration: 7 and 10, Slope = 102.7
Eh Calibration: ORP Standard = 422.8 mV at 19.7^{o}C

Oxygen μM Calculation Assumes Chlorinity of 20 and Avg. Temp of 10^{o}C

MMS Deep Gulf of Mexico Cruise 2B (July 2001)

Site: Garden Banks 516 Far-Field 3, Box Core 2 (GB516 FF3-B02)

Depth (cm)	Oxygen (%)	Oxygen (µM)	Depth (cm)	Temperature (C)	pH	Eh (mV)
Bottom Water	-	-	1	13.5	7.25	275
0.1			3	12.3	7.26	208
0.2			7	11.2	7.27	202
0.3			11	10.5	7.24	195
0.4			15	8.5	7.36	175
0.5			19	9.5	7.41	113
0.6			27	9.5	7.36	70

pH Calibration: 7 and 10, Slope = 102.8

Eh Calibration: ORP Standard = 422.5 mV at 21.0^{o}C

MMS Deep Gulf of Mexico Cruise 2B (July 2001)

Site: Garden Banks 516 Far-Field 4, Box Core 1 (GB516 FF4-B01)

Depth (cm)	Oxygen (%)	Oxygen (µM)	Depth (cm)	Temperature (C)	pH	Eh (mV)
Bottom Water	16.0	213	2	15.4	7.14	480
0.1	12.2	162	4	14.0	7.12	454
0.2	11.0	146	8	13.5	7.24	390
0.3	10.3	137	12	12.8	7.21	304
0.4	9.6	128	16	13.2	7.30	269
0.5	9.2	122	20	13.4	7.30	157
0.6	8.6	115				
0.7	8.2	109				
0.8	7.7	103				
0.9	7.4	99				
1.0	7.2	96				
1.1	7.0	93				
1.2	6.9	92				
1.3	6.7	89				
1.4	6.6	88				
1.5	6.5	87				
1.6	6.4	85				
1.7	6.1	81				
1.8	5.9	79				
1.9	5.7	76				
2.0	5.6	75				
2.1	5.4	72				
2.2	5.2	69				
2.3	5.1	68				
2.4	4.9	65				
2.5	4.8	64				
2.6	4.6	61				
2.7	4.4	59				
2.8	4.2	56				
2.9	4.1	55				
3.0	3.9	52				
3.1	3.8	51				
3.2	3.6	48				

MMS Deep Gulf of Mexico Cruise 2B (July 2001)

Site: Garden Banks 516 Far-Field 4, Box Core 1 (GB516 FF4-B01) continued.

Depth (cm)	Oxygen (%)	Oxygen (μM)	Depth (cm)	Temperature (C)	pH	Eh (mV)
3.3	3.4	45				
3.4	3.3	44				
3.5	3.2	43				
3.6	2.8	37				
3.7	2.6	35				
3.8	2.4	32				
3.9	2.3	31				
4.0	2.2	29				
4.1	2.1	28				
4.2	1.9	25				
4.3	1.8	24				
4.4	1.7	23				
4.5	1.6	21				
4.6	1.5	20				
4.7	1.4	19				
4.8	1.3	17				
4.9	1.2	16				
5.0	1.1	15				
5.1	0.9	12				
5.2	0.8	11				
5.3	0.7	9				
5.4	0.7	9				
5.5	0.6	8				
5.6	0.6	8				
5.7	0.5	7				

Oxygen Calibration: 0 and 20.9%
pH Calibration: 7 and 10, Slope = 103.7
Eh Calibration: ORP Standard = 423.2 mV at 20.8^{o}C

Oxygen μM Calculation Assumes Chlorinity of 20 and Avg. Temp of 10^{o}C

MMS Deep Gulf of Mexico Cruise 2B (July 2001)

Site: Garden Banks 516 Far-Field 4, Box Core 2 (GB516 FF4-B02)

Depth (cm)	Oxygen (%)	Oxygen (μM)	Depth (cm)	Temperature (C)	pH	Eh (mV)
Bottom Water	-	-	2	11.9	7.19	455
0.1			4	10.7	7.20	415
0.2			8	10.4	7.30	304
0.3			12	10.7	7.38	292
0.4			16	12.2	7.34	261
				short core		

pH Calibration: 7 and 10, Slope = 103.3

Eh Calibration: ORP Standard = 419.5 mV at 25.0^{o}C

MMS Deep Gulf of Mexico Cruise 2B (July 2001)

Site: Garden Banks 516 Far-Field 5, Box Core 1 (GB516 FF5-B01)

Depth (cm)	Oxygen (%)	Oxygen (µM)	Depth (cm)	Temperature (C)	pH	Eh (mV)
Bottom Water	-	-	1	14.0	7.12	452
0.1	14.2	189	3	12.7	7.15	390
0.2	13.0	173	7	12.1	7.28	339
0.3	12.2	162	11	11.9	7.32	338
0.4	11.2	149	15	11.6	7.33	295
0.5	10.2	136	19	13.9	7.31	310
0.6	9.5	126				
0.7	8.7	116				
0.8	8.1	108				
0.9	7.5	100				
1.0	7.1	95				
1.1	6.8	91				
1.2	6.5	87				
1.3	6.3	84				
1.4	6.0	80				
1.5	5.8	77				
1.6	5.6	75				
1.7	5.4	72				
1.8	5.1	68				
1.9	4.9	65				
2.0	4.7	63				
2.1	4.5	60				
2.2	4.3	57				
2.3	4.2	56				
2.4	4.0	53				
2.5	3.8	51				
2.6	3.6	48				
2.7	3.5	47				
2.8	3.3	44				
2.9	3.1	41				
3.0	2.8	37				
3.1	2.5	33				
3.2	2.2	29				

MMS Deep Gulf of Mexico Cruise 2B (July 2001)

Site: Garden Banks 516 Far-Field 5, Box Core 1 (GB516 FF5-B01) continued.

Depth (cm)	Oxygen (%)	Oxygen (µM)	Depth (cm)	Temperature (C)	pH	Eh (mV)
3.3	1.9	25				
3.4	1.6	21				
3.5	1.5	20				
3.6	1.3	17				
3.7	1.2	16				
3.8	1.2	16				
3.9	1.1	15				
4.0	1.0	13				
4.1	0.8	11				
4.2	0.7	9				
4.3	0.6	8				
4.4	0.6	8				
4.5	0.5	7				
4.6	0.5	7				
4.7	0.5	7				
4.8	0.4	5				
4.9	0.3	4				
5.0	0.3	4				
5.1	0.2	3				
5.2	0.2	3				
5.3	0.1	1				
5.4	0.1	1				
5.5	0.1	1				
5.6	0.0	0				

Oxygen Calibration: 0 and 20.9%
pH Calibration: 7 and 10, Slope = 100.1
Eh Calibration: ORP Standard = 417.6 mV at 21.7^{o}C

Oxygen µM Calculation Assumes Chlorinity of 20 and Avg. Temp of 10^{o}C

MMS Deep Gulf of Mexico Cruise 2B (July 2001)

Site: Garden Banks 516 Far-Field 5, Box Core 2 (GB516 FF5-B02)

Depth (cm)	Oxygen (%)	Oxygen (μM)	Depth (cm)	Temperature (C)	pH	Eh (mV)
Bottom Water	-	-	1	15.5	7.10	492
0.1			3	14.8	7.10	464
0.2			7	11.9	7.46	427
0.3			11	11.0	7.43	367
0.4			15	11.4	7.41	281
0.5			19	11.7	7.30	211
0.6			23	11.2	7.49	170
0.7			27	11.5	7.36	227

pH Calibration: 7 and 10, Slope = 101.5

Eh Calibration: ORP Standard = 422.9 mV at 20.9^{o}C

MMS Deep Gulf of Mexico Cruise 2B (July 2001)

Site: Garden Banks 516 Far-Field 6, Box Core 1 (GB516 FF6-B01)

Depth (cm)	Oxygen (%)	Oxygen (μM)	Depth (cm)	Temperature (C)	pH	Eh (mV)
Bottom Water	-	-	2	13.9	7.07	104
0.1	7.0	93	4	13.0	7.14	98
0.2	6.5	87	6	11.8	7.14	62
0.3	6.1	81	10	11.3	7.29	101
0.4	5.6	75	14	10.9	7.37	-57
0.5	5.1	68	18	11.2	7.30	-70
0.6	4.6	61	22	11.9	7.56	-129
0.7	4.3	57	26	12.9	7.39	-143
0.8	3.8	51				
0.9	2.6	35				
1.0	2.3	31				
1.1	2.1	28				
1.2	1.8	24				
1.3	1.7	23				
1.4	1.5	20				
1.5	1.4	19				
1.6	1.3	17				
1.7	1.2	16				
1.8	1.1	15				
1.9	1.0	13				
2.0	0.8	11				
2.1	0.7	9				
2.2	0.6	8				
2.3	0.6	8				
2.4	0.5	7				
2.5	0.5	7				
2.6	0.5	7				
2.7	0.4	5				

Oxygen Calibration: 0 and 20.9%
pH Calibration: 7 and 10, Slope = 100.6
Eh Calibration: ORP Standard = 419.1 mV at 21.5^{o}C

MMS Deep Gulf of Mexico Cruise 2B (July 2001)

Site: Garden Banks 516 Far-Field 6, Box Core 2 (GB516 FF6-B02)

Depth (cm)	Oxygen (%)	Oxygen (µM)	Depth (cm)	Temperature (C)	pH	Eh (mV)
Bottom Water	18.4	245	2	15.0	6.94	225
0.1	10.5	140	4	14.3	6.97	210
0.2	9.4	125	6	14.9	7.04	184
0.3	8.6	115	8	14.0	7.07	156
0.4	7.7	103	10	12.6	7.09	130
0.5	6.8	91	12	12.0	7.10	102
0.6	6.0	80	14	12.9	7.09	82
0.7	5.3	71	16	12.8	7.07	56
0.8	4.8	64	18	13.1	7.16	51
0.9	4.5	60	20	12.7	7.12	32
1.0	4.2	56	22	12.9	7.12	15
1.1	3.8	51	24	13.9	7.14	-6
1.2	3.5	47	26	14.6	7.14	-18
1.3	3.2	43	28	14.8	7.12	-25
1.4	3.0	40				
1.5	2.8	37				
1.6	2.6	35				
1.7	2.5	33				
1.8	2.3	31				
1.9	2.2	29				
2.0	2.1	28				
2.1	2.0	27				
2.2	1.9	25				
2.3	1.8	24				
2.4	1.7	23				
2.5	1.6	21				
2.6	1.5	20				
2.7	1.4	19				
2.8	1.3	17				
2.9	1.1	15				
3.0	1.0	13				
3.1	0.9	12				
3.2	0.9	12				

MMS Deep Gulf of Mexico Cruise 2B (July 2001)

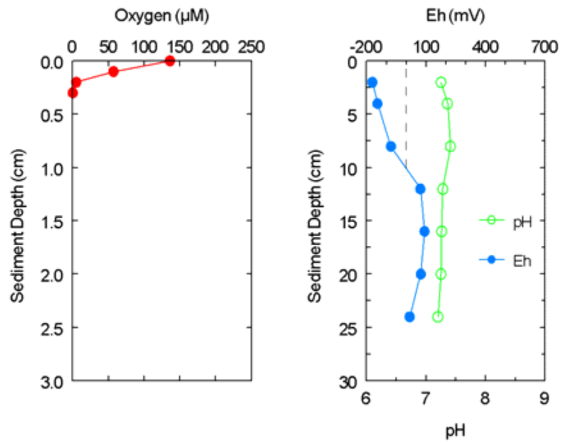
Site: Garden Banks 516 Far-Field 6, Box Core 2 (GB516 FF6-B02) continued.

Depth (cm)	Oxygen (%)	Oxygen (µM)	Depth (cm)	Temperature (C)	pH	Eh (mV)
3.3	0.6	8				
3.4	0.5	7				
3.5	0.5	7				
3.6	0.4	5				
3.7	0.4	5				

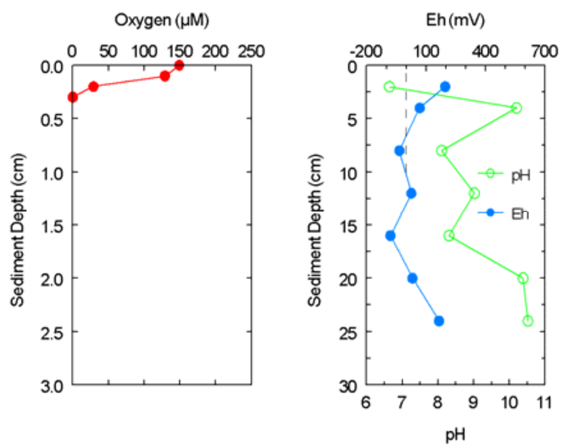
Oxygen Calibration: 0 and 20.9%
pH Calibration: 7 and 10, Slope = 100.4
Eh Calibration: ORP Standard = 418.9 mV at 21.4^{o}C

Oxygen µM Calculation Assumes Chlorinity of 20 and Avg. Temp of 10^{o}C

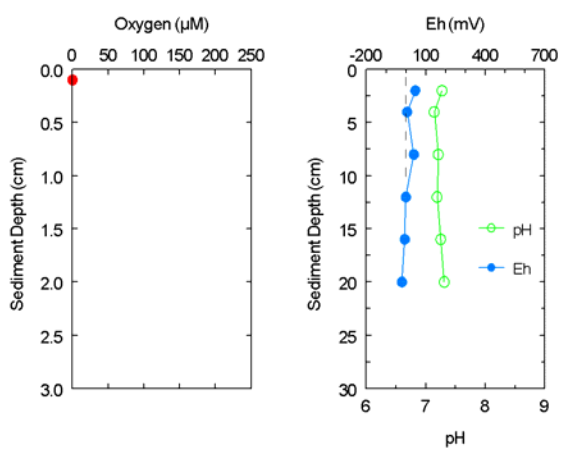
MMS Deep Gulf of Mexico Cruise 2: GB516 DISC-B01



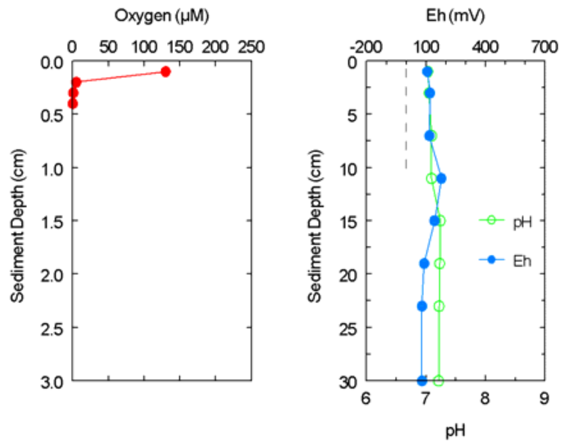
MMS Deep Gulf of Mexico Cruise 2: GB516 DISC-B02



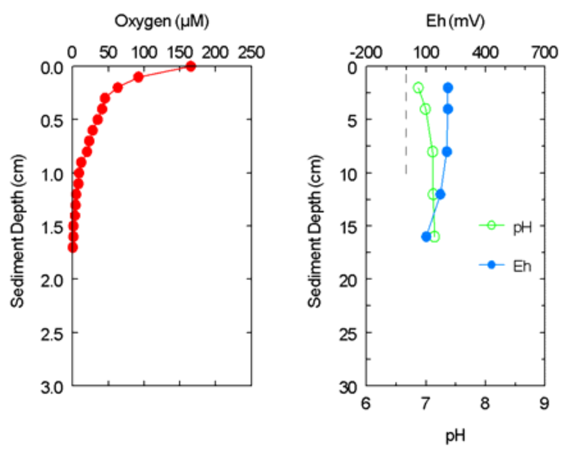
MMS Deep Gulf of Mexico Cruise 2: GB516 DISC-B03



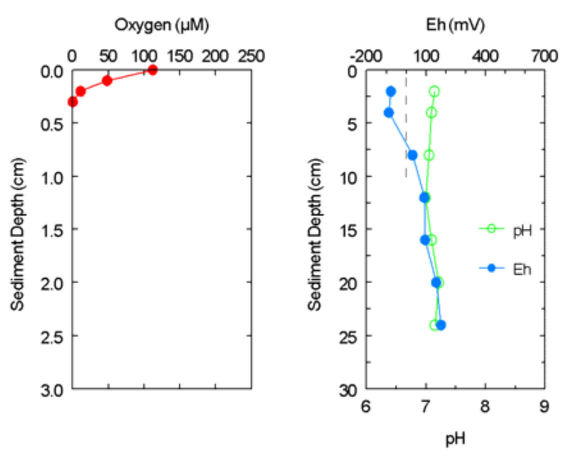
MMS Deep Gulf of Mexico Cruise 2: GB516 NF-B01



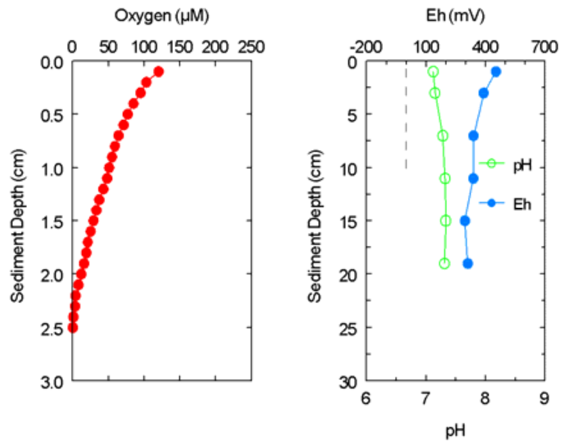
MMS Deep Gulf of Mexico Cruise 2: GB516 NF-B02



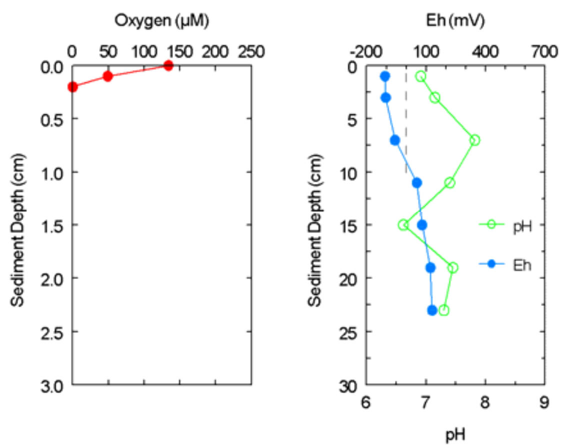
MMS Deep Gulf of Mexico Cruise 2: GB516 NF-B03A



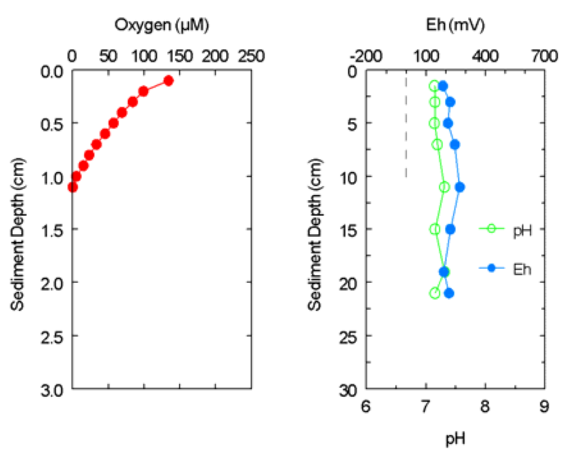
MMS Deep Gulf of Mexico Cruise 2: GB516 NF-B05



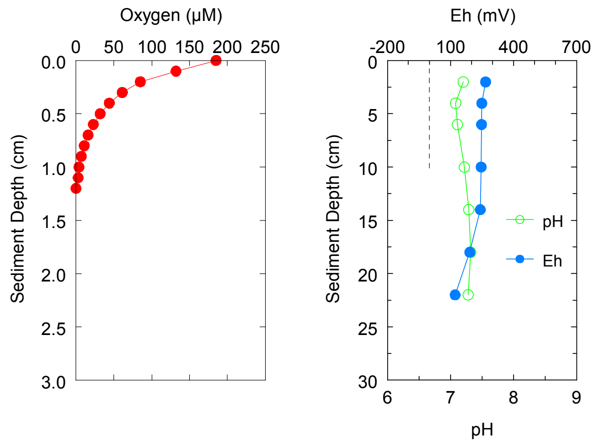
MMS Deep Gulf of Mexico Cruise 2: GB516 NF-B06



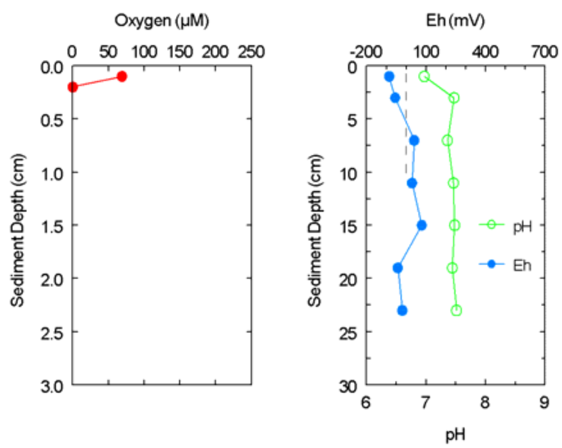
MMS Deep Gulf of Mexico Cruise 2: GB516 NF-B07



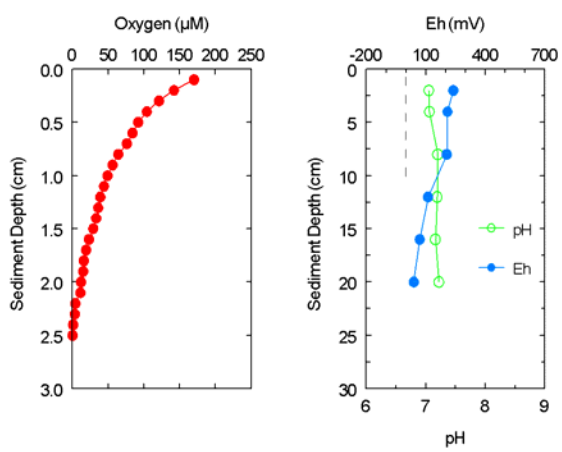
MMS Deep Gulf of Mexico Cruise 2: GB516 NF-B08



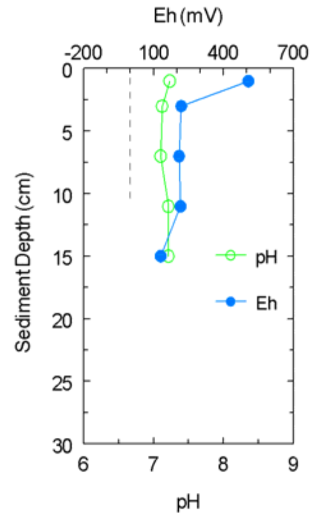
MMS Deep Gulf of Mexico Cruise 2: GB516 NF-B09



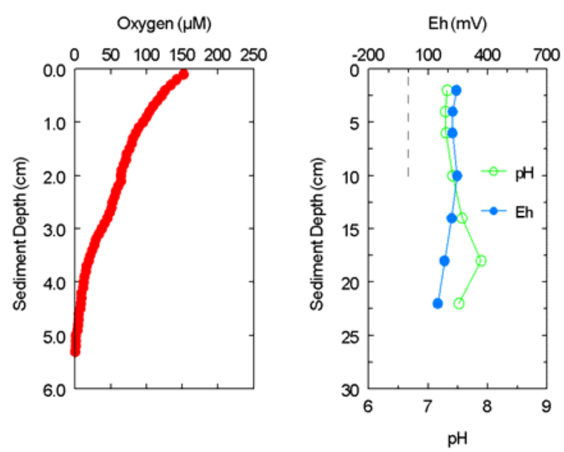
MMS Deep Gulf of Mexico Cruise 2: GB516 NF-B10



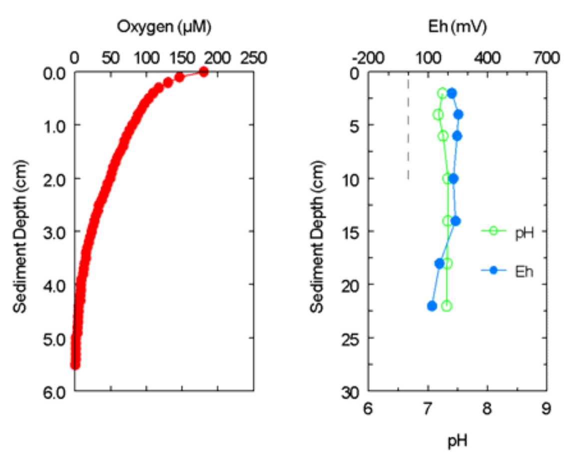
MMS Deep Gulf of Mexico Cruise 2: GB516 NF-B11



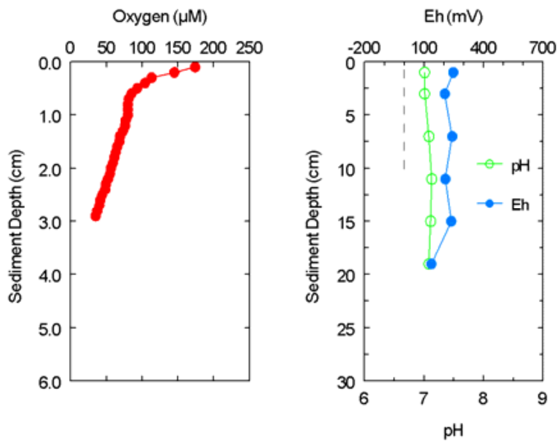
MMS Deep Gulf of Mexico Cruise 2: GB516 FF1-B01



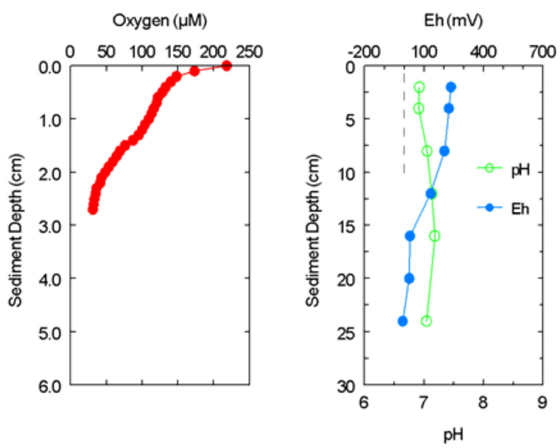
MMS Deep Gulf of Mexico Cruise 2: GB516 FF1-B02



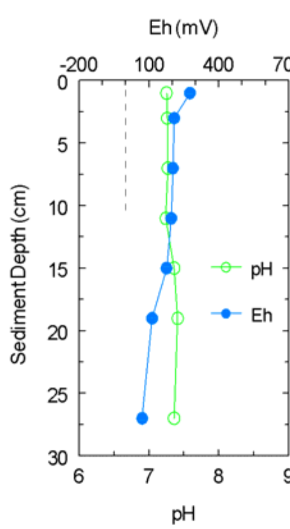
MMS Deep Gulf of Mexico Cruise 2: GB516 FF2-B02



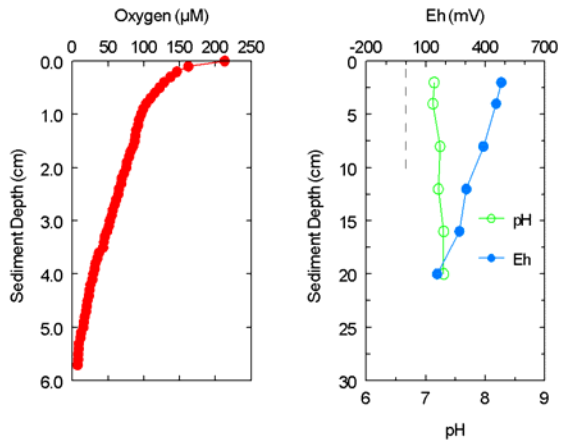
MMS Deep Gulf of Mexico Cruise 2: GB516 FF3-B01



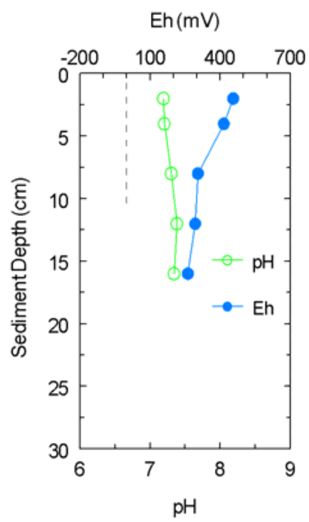
MMS Deep Gulf of Mexico Cruise 2: GB516 FF3-B02



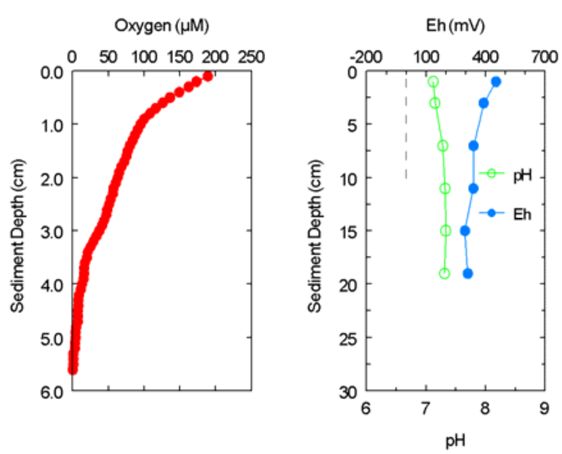
MMS Deep Gulf of Mexico Cruise 2: GB516 FF4-B01



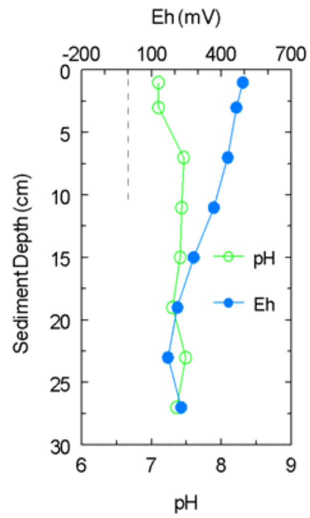
MMS Deep Gulf of Mexico Cruise 2: GB516 FF4-B02



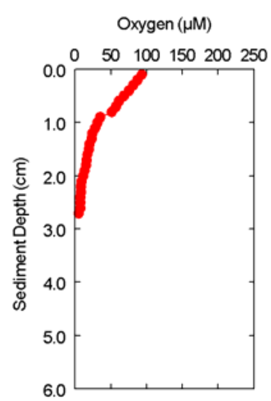
MMS Deep Gulf of Mexico Cruise 2: GB516 FF5-B01

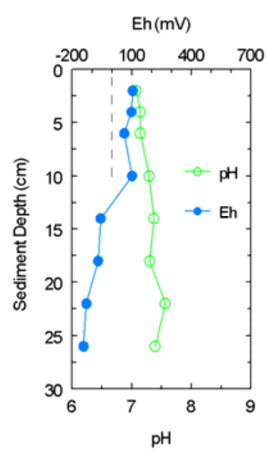


MMS Deep Gulf of Mexico Cruise 2: GB516 FF5-B02

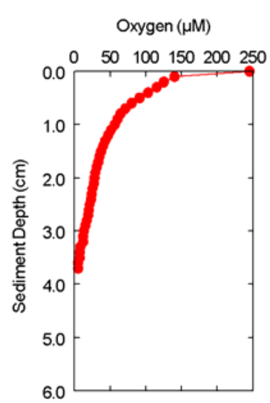


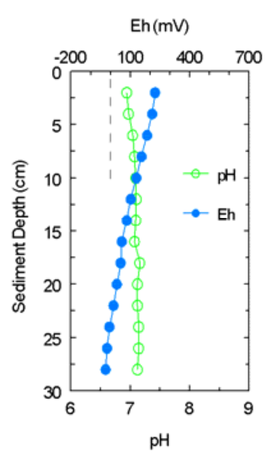
MMS Deep Gulf of Mexico Cruise 2: GB516 FF6-B01





MMS Deep Gulf of Mexico Cruise 2: GB516 FF6-B02





MMS Deep Gulf of Mexico Cruise 2B (July 2001)

Site: Garden Banks 602 Discretionary Box Core 1 (GB602 DISC-B01)

Depth (cm)	Oxygen (%)	Oxygen (μM)	Depth (cm)	Temperature (C)	pH	Eh (mV)
Bottom Water	10.7	142	2	10.6	7.23	-296
0.1	0.8	11	4	8.9	8.01	-271
0.2	0.0	0	6	9.0	7.40	-68
			10	8.4	7.46	-165
			14	10.8	7.44	-49
			18	10.1	7.38	-194
			22	11.0	7.41	-67
			26	10.1	7.93	-176

Oxygen Calibration: 0 and 20.9%
pH Calibration: 7 and 10, Slope = 102.5
Eh Calibration: ORP Standard = 422.9 mV at 20.8^{o}C

Oxygen μM Calculation Assumes Chlorinity of 20 and Avg. Temp of 10^{o}C

MMS Deep Gulf of Mexico Cruise 2B (July 2001)

Site: Garden Banks 602 Discretionary Box Core 2 (GB602 DISC-B02)

Depth (cm)	Oxygen (%)	Oxygen (µM)	Depth (cm)	Temperature (C)	pH	Eh (mV)
Bottom Water	15.2	202	2	14.5	7.26	-206
0.1	8.1	108	4	12.6	7.45	-230
0.2	3.6	48	6	12.8	7.67	-204
0.3	2.4	32	8	12.0	7.61	-8
0.4	1.4	19	10	10.8	7.44	-66
0.5	0.6	8	12	10.5	7.45	-35
0.6	0.0	0	14	10.1	7.40	-67
			16	10.6	7.36	-35
			18	9.8	7.40	-66
			20	9.7	7.37	-10
			22	10.7	7.38	-11
			24	10.8	7.36	33
			26	10.5	7.39	-36

Oxygen Calibration: 0 and 20.9%
pH Calibration: 7 and 10, Slope = 102.5
Eh Calibration: ORP Standard = 422.6 mV at 21.2^{o}C

Oxygen µM Calculation Assumes Chlorinity of 20 and Avg. Temp of 10^{o}C

MMS Deep Gulf of Mexico Cruise 2B (July 2001)

Site: Garden Banks 602 Discretionary Box Core 3 (GB602 DISC-B03)

Depth (cm)	Oxygen (%)	Oxygen (µM)	Depth (cm)	Temperature (C)	pH	Eh (mV)
Bottom Water	-	-	3	12.7	7.27	424
0.1	-	-	5	11.7	7.26	313
0.2	-	-	7	10.2	7.23	287
0.3	-	-	11	9.5	7.36	273
0.4	5.2	69	15	8.8	7.51	287
0.5	4.3	57	19	8.8	7.52	245
0.6	3.6	48	23	10.1	7.38	139
0.7	3.1	41	27	10.6	7.41	113
0.8	2.6	35				
0.9	2.1	28				
1.0	1.7	23				
1.1	1.3	17				
1.2	1.0	13				
1.3	0.7	9				
1.4	0.5	7		Top few mm of core		
1.5	0.3	4		disturbed (lost).		
1.6	0.2	3				
1.7	0.0	0				

Oxygen Calibration: 0 and 20.9%
pH Calibration: 7 and 10, Slope = 103.9
Eh Calibration: ORP Standard = 423.2 mV at 20.5^{o}C

Oxygen µM Calculation Assumes Chlorinity of 20 and Avg. Temp of 10^{o}C

MMS Deep Gulf of Mexico Cruise 2B (July 2001)

Site: Garden Banks 602 Near-Field 1 (GB602 NF-B01)

Depth (cm)	Oxygen (%)	Oxygen (µM)	Depth (cm)	Temperature (C)	pH	Eh (mV)
Bottom Water	15.5	206	2	9.5	7.25	186
0.1	8.7	116	4	11.8	7.28	116
0.2	7.4	99	8	11.1	7.34	53
0.3	5.9	79	12	10.9	7.49	141
0.4	4.8	64	16	11.2	7.61	117
0.5	4.0	53	20	11.4	7.57	155
0.6	3.5	47				
0.7	3.0	40				
0.8	2.5	33				
0.9	2.0	27				
1.0	1.8	24				
1.1	1.6	21				
1.2	1.4	19				
1.3	1.2	16				
1.4	1.1	15				
1.5	0.9	12				
1.6	0.7	9				
1.7	0.5	7				
1.8	0.4	5				
1.9	0.3	4				
2.0	0.3	4				
2.1	0.2	3				
2.2	0.2	3				
2.3	0.2	3				
2.4	0.1	1				
2.5	0.1	1				
2.6	0.1	1				
2.7	0.1	1				

Oxygen Calibration: 0 and 20.9%
pH Calibration: 7 and 10, Slope = 104.1
Eh Calibration: ORP Standard = 425.9 mV at 21.6^{o}C

Oxygen µM Calculation Assumes Chlorinity of 20 and Avg. Temp of 10^{o}C

MMS Deep Gulf of Mexico Cruise 2B (July 2001)

Site: Garden Banks 602 Near-Field 2 (GB602 NF-B02)

Depth (cm)	Oxygen (%)	Oxygen (μM)	Depth (cm)	Temperature (C)	pH	Eh (mV)
Bottom Water	-	-	2	11.2	7.30	-55
0.1	11.9	158	4	10.0	7.53	-49
0.2	8.8	117	8	9.3	7.42	21
0.3	7.4	99	12	9.3	7.48	51
0.4	6.3	84	16	9.2	7.47	57
0.5	5.5	73	20	9.5	7.45	59
0.6	4.8	64				
0.7	4.2	56				
0.8	3.5	47				
0.9	3.1	41				
1.0	2.6	35				
1.1	2.0	27				
1.2	1.5	20				
1.3	1.1	15				
1.4	0.8	11				
1.5	0.6	8				
1.6	0.5	7				
1.7	0.4	5				
1.8	0.3	4				
1.9	0.2	3				
2.0	0.1	1				
2.1	0.0	0				

Oxygen Calibration: 0 and 20.9%
pH Calibration: 7 and 10, Slope = 102.6
Eh Calibration: ORP Standard = 429.1 mV at 21.5^{o}C

Oxygen μM Calculation Assumes Chlorinity of 20 and Avg. Temp of 10^{o}C

MMS Deep Gulf of Mexico Cruise 2B (July 2001)

Site: Garden Banks 602 Near-Field 3 (GB602 NF-B03)

Depth (cm)	Oxygen (%)	Oxygen (µM)	Depth (cm)	Temperature (C)	pH	Eh (mV)
Bottom Water	16.0	213	2	10.0	7.25	385
0.1	2.4	32	4	9.2	7.28	373
0.2	1.1	15	6	9.3	7.84	369
0.3	0.2	3	10	8.6	7.39	358
0.4	0	0	14	9.2	7.60	388
			18	10.1	7.49	412
			22	12.1	7.37	466

Oxygen Calibration: 0 and 20.9%
pH Calibration: 7 and 10, Slope = 104.2
Eh Calibration: ORP Standard = 419.5 mV at 25.0^{o}C

Oxygen µM Calculation Assumes Chlorinity of 20 and Avg. Temp of 10^{o}C

MMS Deep Gulf of Mexico Cruise 2B (July 2001)

Site: Garden Banks 602 Near-Field 4 (GB602 NF-B04)

Depth (cm)	Oxygen (%)	Oxygen (μM)	Depth (cm)	Temperature (C)	pH	Eh (mV)
Bottom Water	14.8	197	2	12.3	7.08	145
0.1	0.4	5	4	10.6	7.29	212
0.2	0.0	0	6	10.6	7.43	242
			10	9.2	7.33	179
			14	9.0	7.27	155
			18	10.8	7.24	100

Oxygen Calibration: 0 and 20.9%
pH Calibration: 7 and 10, Slope = 101.4
Eh Calibration: ORP Standard = 422.9 mV at 20.9^{o}C

Oxygen μM Calculation Assumes Chlorinity of 20 and Avg. Temp of 10^{o}C

MMS Deep Gulf of Mexico Cruise 2B (July 2001)

Site: Garden Banks 602 Near-Field 5 (GB602 NF-B05)

Depth (cm)	Oxygen (%)	Oxygen (µM)	Depth (cm)	Temperature (C)	pH	Eh (mV)
Bottom Water	-	-	2	12.9	6.78	-90
0.1	1.0	13	4	11.5	6.96	-100
0.2	0.3	4	8	9.5	7.27	-27
0.3	0.0	0	12	10.4	7.03	-96
			16	10.4	7.36	-87
			20	10.3	7.28	-95

Oxygen Calibration: 0 and 20.9%
pH Calibration: 7 and 10, Slope = 103.5
Eh Calibration: ORP Standard = 431.6 mV at 21.3^{o}C

Oxygen µM Calculation Assumes Chlorinity of 20 and Avg. Temp of 10^{o}C

MMS Deep Gulf of Mexico Cruise 2B (July 2001)

Site: Garden Banks 602 Near-Field 6 (GB602 NF-B06)

Depth (cm)	Oxygen (%)	Oxygen (μM)	Depth (cm)	Temperature (C)	pH	Eh (mV)
Bottom Water	12.8	170	2	13.0	7.24	-98
0.1	1.3	17	4	10.0	7.39	-106
0.2	0.4	5	8	8.9	7.75	-85
0.3	0.2	3	12	8.3	7.52	-73
0.4	0.0	0	16	9.0	7.54	-72
			20	9.0	7.59	-78
			24	9.5	7.48	-63

Oxygen Calibration: 0 and 20.9%
pH Calibration: 7 and 10, Slope = 105.4
Eh Calibration: ORP Standard = 428.0 mV at 20.7^{o}C

Oxygen μM Calculation Assumes Chlorinity of 20 and Avg. Temp of 10^{o}C

MMS Deep Gulf of Mexico Cruise 2B (July 2001)

Site: Garden Banks 602 Near-Field 7 (GB602 NF-B07)

Depth (cm)	Oxygen (%)	Oxygen (µM)	Depth (cm)	Temperature (C)	pH	Eh (mV)
Bottom Water	13.0	173	1	13.6	6.89	75
0.1	9.2	122	3	11.4	7.15	55
0.2	7.6	101	5	10.5	7.16	73
0.3	5.7	76	9	10.5	7.29	41
0.4	3.8	51	13	10.3	7.33	159
0.5	2.6	35	17	10.3	7.33	129
0.6	1.9	25				
0.7	1.4	19				
0.8	1.1	15		Short Core		
0.9	0.8	11				
1.0	0.6	8				
1.1	0.4	5				
1.2	0.3	4				
1.3	0.2	3				
1.4	0.1	1				
1.5	0.0	0				

Oxygen Calibration: 0 and 20.9%
pH Calibration: 7 and 10, Slope = 103.3
Eh Calibration: ORP Standard = 419.5 mV at 25.0^{o}C

Oxygen µM Calculation Assumes Chlorinity of 20 and Avg. Temp of 10^{o}C

MMS Deep Gulf of Mexico Cruise 2B (July 2001)

Site: Garden Banks 602 Near-Field 8 (GB602 NF-B08)

Depth (cm)	Oxygen (%)	Oxygen (µM)	Depth (cm)	Temperature (C)	pH	Eh (mV)
Bottom Water	14.0	186	2	12.6	7.22	-167
0.1	0.0	0	4	10.1	7.49	-145
			6	9.9	7.46	18
			10	9.0	7.36	89
			14	8.0	7.48	136
			18	8.6	7.38	93
			22	8.7	7.39	129
			26	9.0	8.03	24

Oxygen Calibration: 0 and 20.9%
pH Calibration: 7 and 10, Slope = 101.2
Eh Calibration: ORP Standard = 422.3 mV at 21.6^{o}C

Oxygen µM Calculation Assumes Chlorinity of 20 and Avg. Temp of 10^{o}C

MMS Deep Gulf of Mexico Cruise 2B (July 2001)

Site: Garden Banks 602 Near-Field 9 (GB602 NF-B09)

Depth (cm)	Oxygen (%)	Oxygen (µM)	Depth (cm)	Temperature (C)	pH	Eh (mV)
Bottom Water	8.3	111	2	16.0	6.91	-
0.1	3.4	45	8	13.9	7.06	
0.2	2.8	37	12	12.5	7.19	
0.3	3.0	40	16	12.2	7.28	
0.4	1.3	17	20	12.4	7.18	
0.5	0.3	4	24	13.2	7.20	
0.6	0.1	1			Eh probe wouldn't fit	
0.7	0.0	0			core barrel	

Oxygen Calibration: 0 and 20.9%
pH Calibration: 7 and 10, Slope = 104.6
Eh Calibration: ORP Standard = 432.2 mV at 21.2^{o}C

Oxygen µM Calculation Assumes Chlorinity of 20 and Avg. Temp of 10^{o}C

MMS Deep Gulf of Mexico Cruise 2B (July 2001)

Site: Garden Banks 602 Near-Field 10 (GB602 NF-B10)

Depth (cm)	Oxygen (%)	Oxygen (μM)	Depth (cm)	Temperature (C)	pH	Eh (mV)
Bottom Water	14.2	189	2	12.0	7.02	-45
0.1	4.2	56	4	9.3	7.29	-32
0.2	1.3	17	8	8.9	7.30	-35
0.3	0.5	7	12	9.7	7.42	15
0.4	0.3	4	16	9.1	7.54	45
0.5	0.1	1	20	12.0	7.43	-43
0.6	0.0	0				

Oxygen Calibration: 0 and 20.9%
pH Calibration: 7 and 10, Slope = 105.6
Eh Calibration: ORP Standard = 427.4 mV at 21.7^{o}C

Oxygen μM Calculation Assumes Chlorinity of 20 and Avg. Temp of 10^{o}C

MMS Deep Gulf of Mexico Cruise 2B (July 2001)

Site: Garden Banks 602 Near-Field 11 (GB602 NF-B11)

Depth (cm)	Oxygen (%)	Oxygen (µM)	Depth (cm)	Temperature (C)	pH	Eh (mV)
Bottom Water	14.2	189	1	14.1	7.40	-97
0.1	7.5	100	3	12.8	7.29	38
0.2	1.5	20	5	12.6	7.27	103
0.3	0.6	8	9	9.9	7.34	244
0.4	0.0	0	13	10.8	7.47	253
			17	10.6	7.56	251
			21	10.6	7.51	211
			25	10.2	7.49	118
			29	10.8	7.47	62

Oxygen Calibration: 0 and 20.9%
pH Calibration: 7 and 10, Slope = 103.4
Eh Calibration: ORP Standard = 423.3 mV at 20.4^{o}C

Oxygen µM Calculation Assumes Chlorinity of 20 and Avg. Temp of 10^{o}C

MMS Deep Gulf of Mexico Cruise 2B (July 2001)

Site: Garden Banks 602 Near-Field 12 (GB602 NF-B12)

Depth (cm)	Oxygen (%)	Oxygen (µM)	Depth (cm)	Temperature (C)	pH	Eh (mV)
Bottom Water	11.6	154	1	13.9	7.32	298
0.1	2.3	31	3	11.9	7.25	249
0.2	0.5	7	5	11.9	7.42	247
0.3	0.0	0	9	11.0	7.26	283
			13	11.6	7.36	292
			17	12.3	7.27	190
			21	12.8	7.30	202

Oxygen Calibration: 0 and 20.9%
pH Calibration: 7 and 10, Slope = 102.3
Eh Calibration: ORP Standard = 423.5 mV at 20.1^{o}C

Oxygen µM Calculation Assumes Chlorinity of 20 and Avg. Temp of 10^{o}C

MMS Deep Gulf of Mexico Cruise 2B (July 2001)

Site: Garden Banks 602 Far-Field 1, Box Core 1 (GB602 FF1-B01)

Depth (cm)	Oxygen (%)	Oxygen (μM)	Depth (cm)	Temperature (C)	pH	Eh (mV)
Bottom Water	-	-	1	13.5	7.25	402
0.1	12.9	172	3	12.1	7.24	320
0.2	12.1	161	5	11.5	7.23	279
0.3	11.3	150	9	11.3	7.24	288
0.4	10.6	141	13	11.0	7.63	251
0.5	9.9	132	17	11.2	7.26	263
0.6	9.3	124	21	11.5	7.30	242
0.7	8.8	117				
0.8	8.2	109				
0.9	7.8	104				
1.0	7.4	99				
1.1	7.0	93				
1.2	6.5	87				
1.3	6.1	81				
1.4	5.8	77				
1.5	5.6	75				
1.6	5.4	72				
1.7	5.2	69				
1.8	5.0	67				
1.9	4.8	64				
2.0	4.6	61				
2.1	4.4	59				
2.2	4.3	57				
2.3	4.1	55				
2.4	4.0	53				
2.5	3.8	51				
2.6	3.7	49				
2.7	3.6	48				
2.8	3.4	45				

Oxygen Calibration: 0 and 20.9%
pH Calibration: 7 and 10, Slope = 100.4
Eh Calibration: ORP Standard = 422.9 mV at 20.8^{o}C

Oxygen μM Calculation Assumes Chlorinity of 20 and Avg. Temp of 10^{o}C

MMS Deep Gulf of Mexico Cruise 2B (July 2001)

Site: Garden Banks 602 Far-Field 1, Box Core 2 (GB602 FF1-B02)

Depth (cm)	Oxygen (%)	Oxygen (µM)	Depth (cm)	Temperature (C)	pH	Eh (mV)
Bottom Water	15.0	200	1	15.1	7.15	393
0.1	12.0	160	3	14.8	7.12	341
0.2	10.8	144	5	13.8	7.12	309
0.3	10.2	136	9	13.3	7.14	290
0.4	9.5	126	13	12.8	7.15	289
0.5	8.9	119	17	12.3	7.21	225
0.6	8.6	115	21	12.3	7.34	196
0.7	8.0	107	25	13.1	7.29	119
0.8	7.3	97				
0.9	7.0	93				
1.0	6.6	88				
1.1	6.3	84				
1.2	6.0	80				
1.3	5.8	77				
1.4	5.4	72				
1.5	5.0	67				
1.6	4.7	63				
1.7	4.5	60				
1.8	4.3	57				
1.9	4.2	56				
2.0	4.0	53				
2.1	3.9	52				
2.2	3.7	49				
2.3	3.6	48				
2.4	3.5	47				
2.5	3.4	45				
2.6	3.3	44				
2.7	3.2	43				
2.8	3.1	41				
2.9	3.0	40				
3.0	2.9	39				
3.1	2.8	37				
3.2	2.7	36				

MMS Deep Gulf of Mexico Cruise 2B (July 2001)

Site: Garden Banks 602 Far-Field 1, Box Core 2 (GB602 FF1-B02) continued.

Depth (cm)	Oxygen (%)	Oxygen (µM)	Depth (cm)	Temperature (C)	pH	Eh (mV)
3.3	2.5	33				
3.4	2.5	33				
3.5	2.4	32				
3.6	2.2	29				
3.7	2.1	28				
3.8	2.1	28				
3.9	2.0	27				
4.0	1.9	25				
4.1	1.9	25				
4.2	1.8	24				
4.3	1.7	23				
4.4	1.7	23				
4.5	1.7	23				
4.6	1.6	21				
4.7	1.6	21				
4.8	1.5	20				
4.9	1.5	20				
5.0	1.4	19				
5.1	1.3	17				
5.2	1.3	17				
5.3	1.2	16				
5.4	1.2	16				
5.5	1.1	15				
5.6	1.0	13				
5.7	0.9	12				
5.8	0.9	12				

Oxygen Calibration: 0 and 20.9%
pH Calibration: 7 and 10, Slope = 101.9
Eh Calibration: ORP Standard = 423.5 mV at 20.1^{o}C

Oxygen µM Calculation Assumes Chlorinity of 20 and Avg. Temp of 10^{o}C

MMS Deep Gulf of Mexico Cruise 2B (July 2001)

Site: Garden Banks 602 Far-Field 2, Box Core 1 (GB602 FF2-B01)

Depth (cm)	Oxygen (%)	Oxygen (µM)	Depth (cm)	Temperature (C)	pH	Eh (mV)
Bottom Water	11.9	158	3	14.8	7.19	237
0.1	10.8	144	5	12.1	7.19	222
0.2	10.2	136	9	10.6	7.20	149
0.3	9.7	129	13	10.7	7.21	217
0.4	9.4	125	17	10.8	7.21	116
0.5	9.0	120	21	12.2	7.23	16
0.6	8.7	116	25	13.7	7.25	8
0.7	8.2	109				
0.8	7.7	103				
0.9	7.4	99				
1.0	7.2	96				
1.1	6.7	89				
1.2	6.3	84				
1.3	6.2	83				
1.4	6.3	84				
1.5	6.2	83				
1.6	6.1	81				
1.7	5.8	77				
1.8	5.5	73				
1.9	5.3	71				
2.0	4.9	65				
2.1	4.7	63				

Oxygen Calibration: 0 and 20.9%
pH Calibration: 7 and 10, Slope = 104.8
Eh Calibration: ORP Standard = 420.9 mV at 22.3^{o}C

Oxygen µM Calculation Assumes Chlorinity of 20 and Avg. Temp of 10^{o}C

MMS Deep Gulf of Mexico Cruise 2B (July 2001)

Site: Garden Banks 602 Far-Field 2, Box Core 2 (GB602 FF2-B02)

Depth (cm)	Oxygen (%)	Oxygen (µM)	Depth (cm)	Temperature (C)	pH	Eh (mV)
Bottom Water	-	-	2	16.1	7.05	257
0.1	11.8	157	4	15.7	7.00	236
0.2	10.7	142	8	14.6	7.02	251
0.3	9.7	129	12	13.8	7.08	239
0.4	9.2	122	16	13.8	7.16	203
0.5	8.7	116	20	14.4	7.10	18
0.6	8.4	112	24	14.8	7.13	214
0.7	8.0	107				
0.8	7.7	103				
0.9	7.1	95				
1.0	6.8	91				
1.1	6.6	88				
1.2	6.5	87				
1.3	6.4	85				
1.4	6.2	83				
1.5	6.0	80				
1.6	5.9	79				
1.7	5.5	73				
1.8	5.3	71				
1.9	5.2	69				
2.0	5.1	68				
2.1	5.0	67				
2.2	4.9	65				
2.3	4.8	64				
2.4	4.7	63				
2.5	4.6	61				
2.6	4.5	60				
2.7	4.4	59				
2.8	4.3	57				
2.9	4.2	56				
3.0	4.1	55				
3.1	4.0	53				
3.2	3.9	52				

MMS Deep Gulf of Mexico Cruise 2B (July 2001)

Site: Garden Banks 602 Far-Field 2, Box Core 2 (GB602 FF2-B02) continued.

Depth (cm)	Oxygen (%)	Oxygen (µM)	Depth (cm)	Temperature (C)	pH	Eh (mV)
3.3	3.8	51				
3.4	3.7	49				
3.5	3.6	48				
3.6	3.5	47				
3.7	3.4	45				
3.8	3.3	44				
3.9	3.2	43				
4.0	3.1	41				
4.1	3.0	40				
4.2	2.9	39				
4.3	2.9	39				
4.4	2.8	37				
4.5	2.8	37				
4.6	2.7	36				
4.7	2.7	36				
4.8	2.6	35				
4.9	2.6	35				
5.0	2.5	33				
5.1	2.5	33				
5.2	2.4	32				
5.3	2.4	32				
5.4	2.3	31				
5.5	2.3	31				
5.6	2.2	29				
5.7	2.2	29				
5.8	2.1	28				
5.9	2.1	28				
6.0	2.0	27				
6.1	2.0	27				

Oxygen Calibration: 0 and 20.9%
pH Calibration: 7 and 10, Slope = 104.2
Eh Calibration: ORP Standard = 422.4 mV at 22.3^{o}C

Oxygen µM Calculation Assumes Chlorinity of 20 and Avg. Temp of 10^{o}C

MMS Deep Gulf of Mexico Cruise 2B (July 2001)

Site: Garden Banks 602 Far-Field 3, Box Core 1 (GB602 FF3-B01)

Depth (cm)	Oxygen (%)	Oxygen (µM)	Depth (cm)	Temperature (C)	pH	Eh (mV)
Bottom Water	17.6	234	2	14.2	7.29	225
0.1	13.2	176	4	11.9	7.31	217
0.2	12.3	164	8	10.8	7.28	179
0.3	11.5	153	12	10.1	7.36	207
0.4	10.9	145	16	11.1	7.39	167
0.5	10.3	137	20	10.6	7.45	117
0.6	9.8	130	24	10.7	7.48	186
0.7	9.3	124	28	11.4	7.45	57
0.8	8.7	116				
0.9	8.3	111				
1.0	7.9	105				
1.1	7.5	100				
1.2	7.3	97				
1.3	7.1	95				
1.4	7.0	93				
1.5	6.7	89				
1.6	6.4	85				
1.7	6.1	81				
1.8	5.9	79				
1.9	5.7	76				
2.0	5.5	73				
2.1	5.3	71				
2.2	5.1	68				
2.3	5.0	67				
2.4	4.8	64				
2.5	4.7	63				
2.6	4.6	61				

Oxygen Calibration: 0 and 20.9%
pH Calibration: 7 and 10, Slope = 102.9
Eh Calibration: ORP Standard = 423.0 mV at 22.1^{o}C

Oxygen µM Calculation Assumes Chlorinity of 20 and Avg. Temp of 10^{o}C

MMS Deep Gulf of Mexico Cruise 2B (July 2001)

Site: Garden Banks 602 Far-Field 3, Box Core 2 (GB602 FF3-B02)

Depth (cm)	Oxygen (%)	Oxygen (μM)	Depth (cm)	Temperature (C)	pH	Eh (mV)
Bottom Water	17.2	229	2	17.2	7.23	230
0.1	14.1	188	4	15.7	7.25	224
0.2	12.5	166	8	14.8	7.25	133
0.3	11.5	153	12	14.4	7.29	156
0.4	10.8	144	16	14.6	7.28	196
0.5	10.2	136	20	14.9	7.31	214
0.6	9.8	130	24	15.6	7.32	-30
0.7	9.5	126				
0.8	9.2	122				
0.9	8.9	119				
1.0	8.7	116				
1.1	8.3	111				
1.2	8.1	108				
1.3	7.9	105				
1.4	7.7	103				
1.5	7.6	101				
1.6	7.4	99				
1.7	7.3	97				
1.8	7.1	95				
1.9	6.9	92				
2.0	6.7	89				
2.1	6.5	87				
2.2	6.3	84				
2.3	6.2	83				
2.4	6.1	81				
2.5	6.0	80				
2.6	5.7	76				
2.7	5.5	73				
2.8	5.4	72				
2.9	5.2	69				
3.0	5.1	68				
3.1	5.0	67				
3.2	5.0	67				

MMS Deep Gulf of Mexico Cruise 2B (July 2001)

Site: Garden Banks 602 Far-Field 3, Box Core 2 (GB602 FF3-B02) continued.

Depth (cm)	Oxygen (%)	Oxygen (μM)	Depth (cm)	Temperature (C)	pH	Eh (mV)
3.3	4.8	64				
3.4	4.5	60				
3.5	4.4	59				
3.6	4.3	57				
3.7	4.1	55				
3.8	4.0	53				
3.9	3.9	52				
4.0	3.8	51				
4.1	3.7	49				
4.2	3.6	48				
4.3	3.4	45				
4.4	3.3	44				
4.5	3.2	43				
4.6	3.1	41				
4.7	3.0	40				
4.8	2.9	39				
4.9	2.9	39				
5.0	2.8	37				
5.1	2.8	37				
5.2	2.7	36				
5.3	2.6	35				
5.4	2.5	33				
5.5	2.5	33				
5.6	2.4	32				
5.7	2.3	31				
5.8	2.2	29				
5.9	2.1	28				

Oxygen Calibration: 0 and 20.9%
pH Calibration: 7 and 10, Slope = 103.1
Eh Calibration: ORP Standard = 422.0 mV at 22.1^{o}C

Oxygen μM Calculation Assumes Chlorinity of 20 and Avg. Temp of 10^{o}C

MMS Deep Gulf of Mexico Cruise 2B (July 2001)

Site: Garden Banks 602 Far-Field 4, Box Core 1 (GB602 FF4-B01)

Depth (cm)	Oxygen (%)	Oxygen (µM)	Depth (cm)	Temperature (C)	pH	Eh (mV)
Bottom Water	15.8	210	2	14.1	7.29	322
0.1	14.4	192	4	13.5	7.29	269
0.2	13.2	176	12	12.8	7.33	247
0.3	12.6	168	20	13.0	7.35	197
0.4	11.8	157				
0.5	11.1	148				
0.6	10.4	138				
0.7	9.7	129				
0.8	9.2	122				
0.9	8.8	117				
1.0	8.5	113				
1.1	8.1	108				
1.2	7.8	104				
1.3	7.5	100				
1.4	7.2	96				
1.5	6.8	91				
1.6	6.5	87				
1.7	6.3	84				
1.8	6.1	81				
1.9	5.9	79				
2.0	5.7	76				
2.1	5.5	73				
2.2	5.3	71				
2.3	5.2	69				
2.4	5.0	67				
2.5	4.8	64				
2.6	4.6	61				
2.7	4.5	60				
2.8	4.4	59				
2.9	4.2	56				
3.0	4.1	55				
3.1	3.9	52				
3.2	3.6	48				

MMS Deep Gulf of Mexico Cruise 2B (July 2001)

Site: Garden Banks 602 Far-Field 4, Box Core 1 (GB602 FF4-B01) continued.

Depth (cm)	Oxygen (%)	Oxygen (µM)	Depth (cm)	Temperature (C)	pH	Eh (mV)
3.3	3.3	44				
3.4	3.1	41				
3.5	3.0	40				
3.6	2.9	39				
3.7	2.8	37				
3.8	2.6	35				
3.9	2.5	33				
4.0	2.4	32				
4.1	2.3	31				
4.2	2.2	29				
4.3	2.1	28				
4.4	2.1	28				
4.5	2.0	27				
4.6	1.9	25				
4.7	1.9	25				
4.8	1.8	24				
4.9	1.7	23				
5.0	1.7	23				
5.1	1.6	21				
5.2	1.5	20				
5.3	1.5	20				
5.4	1.4	19				
5.5	1.4	19				
5.6	1.3	17				
5.7	1.2	16				

Oxygen Calibration: 0 and 20.9%
pH Calibration: 7 and 10, Slope = 103.7
Eh Calibration: ORP Standard = 422.4 mV at 21.4^{o}C

Oxygen µM Calculation Assumes Chlorinity of 20 and Avg. Temp of 10^{o}C

MMS Deep Gulf of Mexico Cruise 2B (July 2001)

Site: Garden Banks 602 Far-Field 4, Box Core 2 (GB602 FF4-B02)

Depth (cm)	Oxygen (%)	Oxygen (μM)	Depth (cm)	Temperature (C)	pH	Eh (mV)
Bottom Water	14.9	198	2	13.1	7.29	283
0.1	12.0	160	4	12.3	7.32	237
0.2	10.9	145	8	11.7	7.32	231
0.3	10.3	137	12	11.8	7.34	199
0.4	9.8	130	16	11.9	7.35	159
0.5	9.5	126	20	12.3	7.36	194
0.6	9.2	122	24	12.6	7.38	125
0.7	9.0	120				
0.8	8.7	116				
0.9	8.4	112				
1.0	8.2	109				
1.1	7.9	105				
1.2	7.8	103				
1.3	7.5	100				
1.4	7.2	96				
1.5	7.0	93				
1.6	6.8	91				
1.7	6.6	88				
1.8	6.5	87				
1.9	6.2	83				
2.0	6.0	80				
2.1	5.8	77				
2.2	5.6	75				
2.3	5.4	72				
2.4	5.2	69				
2.5	5.0	67				
2.6	4.8	64				
2.7	4.5	60				
2.8	4.2	56				
2.9	4.1	55				
3.0	3.9	52				
3.1	3.7	49				
3.2	3.5	47				

MMS Deep Gulf of Mexico Cruise 2B (July 2001)

Site: Garden Banks 602 Far-Field 4, Box Core 2 (GB602 FF4-B02) continued.

Depth (cm)	Oxygen (%)	Oxygen (μM)	Depth (cm)	Temperature (C)	pH	Eh (mV)
3.3	3.3	44				
3.4	3.2	43				
3.5	3.1	41				
3.6	3.0	40				
3.7	3.0	40				
3.8	2.9	39				
3.9	2.9	39				
4.0	2.8	37				
4.1	2.8	37				
4.2	2.7	36				
4.3	2.6	35				
4.4	2.5	33				
4.5	2.5	33				
4.6	2.5	33				
4.7	2.4	32				
4.8	2.3	31				
4.9	2.3	31				
5.0	2.2	29				
5.1	2.2	29				
5.2	2.1	28				
5.3	2.1	28				
5.4	2.1	28				
5.5	2.0	27				
5.6	2.0	27				
5.7	1.9	25				

Oxygen Calibration: 0 and 20.9%
pH Calibration: 7 and 10, Slope = 104.7
Eh Calibration: ORP Standard = 421.4 mV at 21.5°C

Oxygen μM Calculation Assumes Chlorinity of 20 and Avg. Temp of 10°C

MMS Deep Gulf of Mexico Cruise 2B (July 2001)

Site: Garden Banks 602 Far-Field 5, Box Core 1 (GB602 FF5-B01)

Depth (cm)	Oxygen (%)	Oxygen (µM)	Depth (cm)	Temperature (C)	pH	Eh (mV)
Bottom Water	15.6	208	2	14.0	7.36	225
0.1	12.2	162	4	11.3	7.33	204
0.2	11.3	150	6	11.1	7.31	202
0.3	10.8	144	10	10.0	7.34	194
0.4	10.3	137	14	10.4	7.35	212
0.5	9.9	132	18	10.7	7.34	206
0.6	9.5	126	22	10.6	7.35	131
0.7	9.1	121				
0.8	8.8	117				
0.9	8.5	113				
1.0	8.2	109				
1.1	7.9	105				
1.2	7.7	103				
1.3	7.4	99				
1.4	7.2	96				
1.5	7.1	95				
1.6	6.8	91				
1.7	6.6	88				
1.8	6.4	85				
1.9	6.3	84				
2.0	6.1	81				
2.1	5.9	79				
2.2	5.7	76				
2.3	5.6	75				
2.4	5.4	72				
2.5	5.2	69				
2.6	5.1	68				
2.7	5.0	67				
2.8	4.8	64				
2.9	4.7	63				
3.0	4.5	60				
3.1	4.3	57				
3.2	4.1	55				

MMS Deep Gulf of Mexico Cruise 2B (July 2001)

Site: Garden Banks 602 Far-Field 5, Box Core 1 (GB602 FF5-B01) continued.

Depth (cm)	Oxygen (%)	Oxygen (µM)	Depth (cm)	Temperature (C)	pH	Eh (mV)
3.3	3.8	51				
3.4	3.5	47				
3.5	3.3	44				
3.6	3.2	43				
3.7	3.2	43				
3.8	3.0	40				
3.9	3.0	40				
4.0	2.9	39				

Oxygen Calibration: 0 and 20.9%
pH Calibration: 7 and 10, Slope = 101.9
Eh Calibration: ORP Standard = 423.4 mV at 20.2^{o}C

Oxygen µM Calculation Assumes Chlorinity of 20 and Avg. Temp of 10^{o}C

MMS Deep Gulf of Mexico Cruise 2B (July 2001)

Site: Garden Banks 602 Far-Field 5, Box Core 2 (GB602 FF5-B02)

Depth (cm)	Oxygen (%)	Oxygen (µM)	Depth (cm)	Temperature (C)	pH	Eh (mV)
Bottom Water	15.4	205	1	15.3	7.32	344
0.1	13.9	185	3	14.4	7.27	359
0.2	13.2	176	5	13.1	7.26	363
0.3	12.5	166	7	13.2	7.24	377
0.4	12.0	160	9	12.7	7.26	368
0.5	11.5	153	11	13.0	7.26	361
0.6	11.1	148	13	12.6	7.26	394
0.7	10.6	141	15	12.8	7.26	400
0.8	10.2	136	17	13.2	7.26	380
0.9	9.9	132	19	13.1	7.26	400
1.0	9.4	125	21	12.9	7.25	374
1.1	8.8	117	23	12.5	7.26	421
1.2	8.4	112	25	13.3	7.23	369
1.3	7.9	105	27	14.0	7.23	361
1.4	7.5	100				
1.5	7.1	95				
1.6	6.8	91				
1.7	6.6	88				
1.8	6.3	84				
1.9	6.0	80				
2.0	5.8	77				
2.1	5.6	75				
2.2	5.4	72				
2.3	5.2	69				
2.4	5.0	67				
2.5	4.8	64				
2.6	4.6	61				
2.7	4.5	60				
2.8	4.3	57				
2.9	4.1	55				
3.0	4.0	53				
3.1	3.8	51				
3.2	3.6	48				

MMS Deep Gulf of Mexico Cruise 2B (July 2001)

Site: Garden Banks 602 Far-Field 5, Box Core 2 (GB602 FF5-B02) continued.

Depth (cm)	Oxygen (%)	Oxygen (µM)	Depth (cm)	Temperature (C)	pH	Eh (mV)
3.3	3.4	45				
3.4	3.3	44				
3.5	3.2	43				
3.6	3.1	41				
3.7	3.0	40				
3.8	2.8	37				
3.9	2.7	36				
4.0	2.6	35				
4.1	2.4	32				
4.2	2.3	31				
4.3	2.2	29				
4.4	2.1	28				
4.5	2.0	27				
4.6	1.9	25				
4.7	1.8	24				
4.8	1.7	23				
4.9	1.5	20				
5.0	1.4	19				
5.1	1.3	17				
5.2	1.3	17				
5.3	1.2	16				
5.4	1.2	16				
5.5	1.1	15				
5.6	1.1	15				
5.7	1.0	13				

Oxygen Calibration: 0 and 20.9%
pH Calibration: 7 and 10, Slope = 101.9
Eh Calibration: ORP Standard = 423.4 mV at 20.3^{o}C

Oxygen µM Calculation Assumes Chlorinity of 20 and Avg. Temp of 10^{o}C

MMS Deep Gulf of Mexico Cruise 2B (July 2001)

Site: Garden Banks 602 Far-Field 6, Box Core 1 (GB602 FF6-B01)

Depth (cm)	Oxygen (%)	Oxygen (μM)	Depth (cm)	Temperature (C)	pH	Eh (mV)
Bottom Water	13.0	173	2	12.7	7.29	462
0.1	10.9	145	4	11.7	7.28	325
0.2	9.7	129	6	10.5	7.27	309
0.3	9.1	121	10	10.0	7.33	320
0.4	8.7	116	14	10.1	7.44	292
0.5	8.5	113				
0.6	8.2	109				
0.7	7.8	104		Short Core		
0.8	7.7	103				
0.9	7.6	101				
1.0	7.4	99				

Oxygen Calibration: 0 and 20.9%
pH Calibration: 7 and 10, Slope = 102.9
Eh Calibration: ORP Standard = 422.3 mV at 21.6^{o}C

Oxygen μM Calculation Assumes Chlorinity of 20 and Avg. Temp of 10^{o}C

MMS Deep Gulf of Mexico Cruise 2B (July 2001)

Site: Garden Banks 602 Far-Field 6, Box Core 2 (GB602 FF6-B02)

Depth (cm)	Oxygen (%)	Oxygen (µM)	Depth (cm)	Temperature (C)	pH	Eh (mV)
Bottom Water	12.9	172	1	16.2	7.22	279
0.1	10.2	136	3	14.3	7.19	219
0.2	9.7	129	5	14.2	7.18	139
0.3	9.1	121	9	12.8	7.25	93
0.4	8.5	113	13	12.8	7.30	97
0.5	8.1	108	17	12.7	7.28	34
0.6	7.7	103	21	14.0	7.31	-56
0.7	7.3	97				
0.8	7.0	93				
0.9	6.6	88				
1.0	6.3	84				
1.1	6.0	80				
1.2	5.8	77				
1.3	5.6	75				
1.4	5.4	72				
1.5	5.2	69				
1.6	4.9	65				
1.7	4.6	61				
1.8	4.4	59				
1.9	4.3	57				
2.0	4.0	53				
2.1	3.7	49				
2.2	3.5	47				
2.3	3.3	44				
2.4	3.1	41				
2.5	3.0	40				
2.6	2.9	39				
2.7	2.8	37				
2.8	2.7	36				
2.9	2.6	35				
3.0	2.5	33				
3.1	2.3	31				
3.2	2.2	29				

MMS Deep Gulf of Mexico Cruise 2B (July 2001)

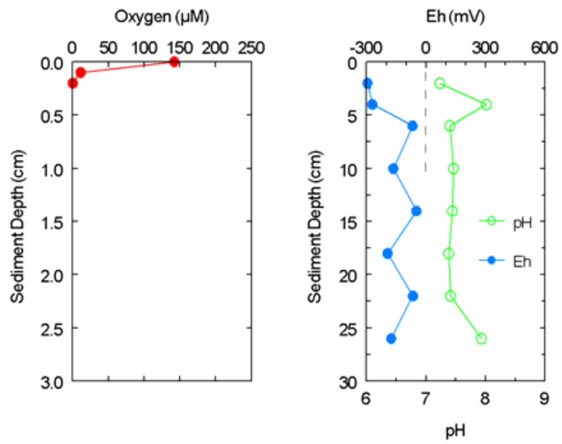
Site: Garden Banks 602 Far-Field 6, Box Core 2 (GB602 FF6-B02) continued.

Depth (cm)	Oxygen (%)	Oxygen (µM)	Depth (cm)	Temperature (C)	pH	Eh (mV)
3.3	2.1	28				
3.4	2.1	28				
3.5	2.0	27				
3.6	1.9	25				
3.7	1.9	25				
3.8	1.8	24				
3.9	1.8	24				
4.0	1.7	23				
4.1	1.7	23				
4.2	1.6	21				
4.3	1.5	20				
4.4	1.5	20				
4.5	1.4	19				
4.6	1.4	19				
4.7	1.3	17				
4.8	1.3	17				
4.9	1.2	16				
5.0	1.2	16				
5.1	1.1	15				
5.2	1.1	15				
5.3	1.1	15				
5.4	1.0	13				
5.5	1.0	13				
5.6	1.0	13				
5.7	0.9	12				
5.8	0.9	12				

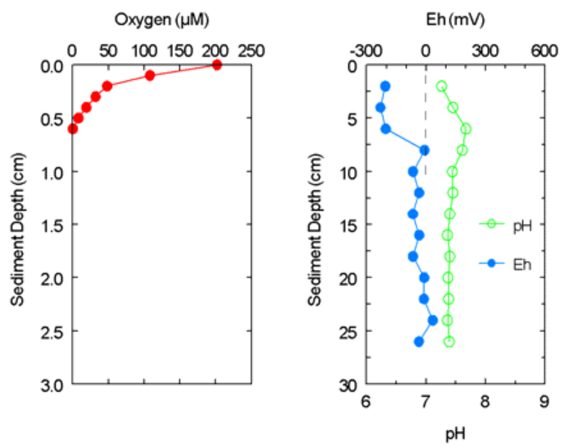
Oxygen Calibration: 0 and 20.9%
pH Calibration: 7 and 10, Slope = 102.6
Eh Calibration: ORP Standard = 422.6 mV at 21.2^{o}C

Oxygen µM Calculation Assumes Chlorinity of 20 and Avg. Temp of 10^{o}C

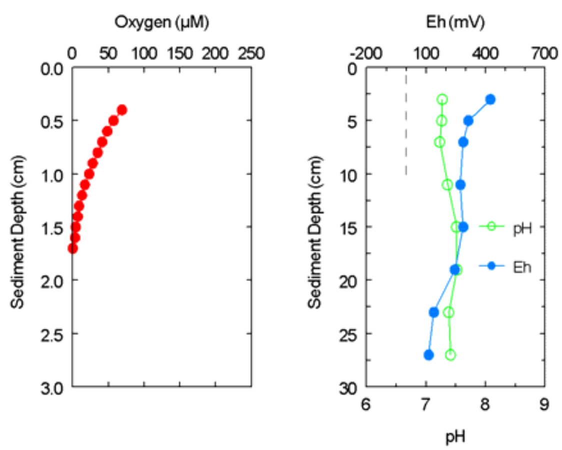
MMS Deep Gulf of Mexico Cruise 2: GB602 DISC-B01



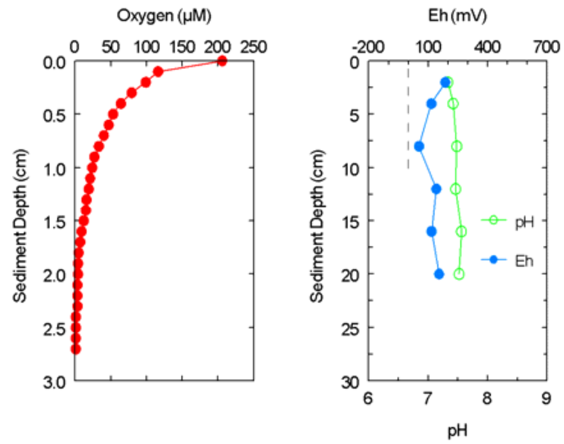
MMS Deep Gulf of Mexico Cruise 2: GB602 DISC-B02



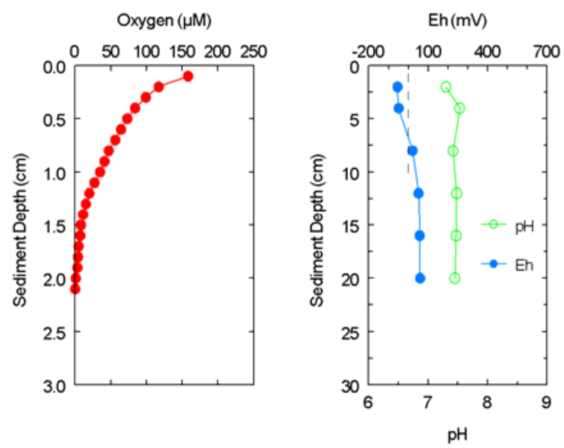
MMS Deep Gulf of Mexico Cruise 2: GB602 DISC-B03



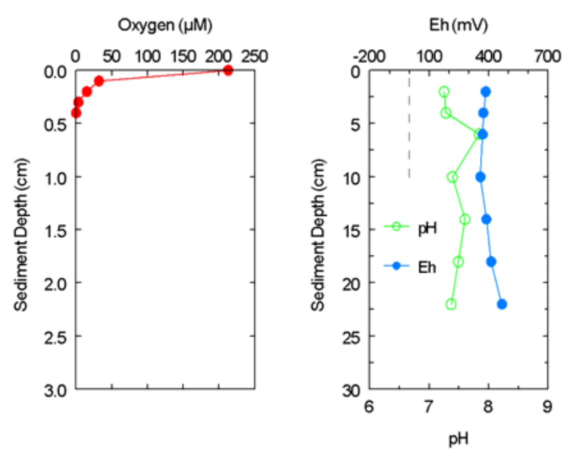
MMS Deep Gulf of Mexico Cruise 2: GB602 NF-B01



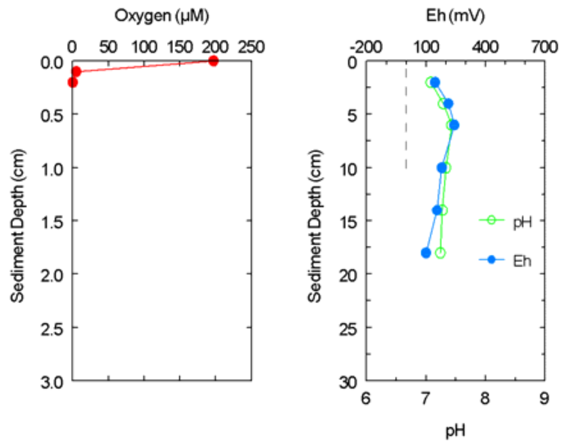
MMS Deep Gulf of Mexico Cruise 2: GB602 NF-B02



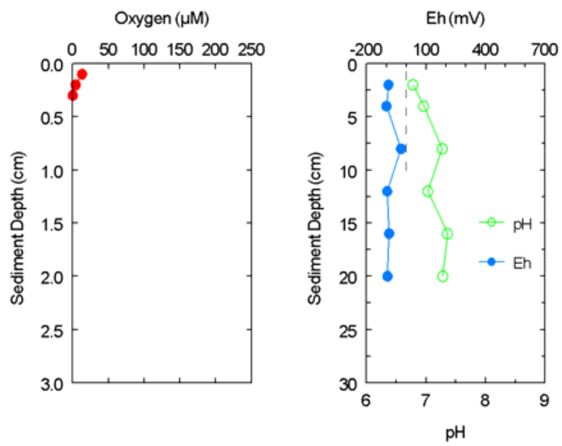
MMS Deep Gulf of Mexico Cruise 2: GB602 NF-B03



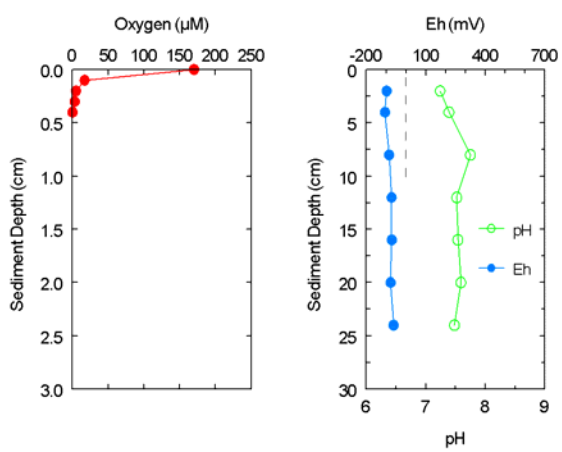
MMS Deep Gulf of Mexico Cruise 2: GB602 NF-B04



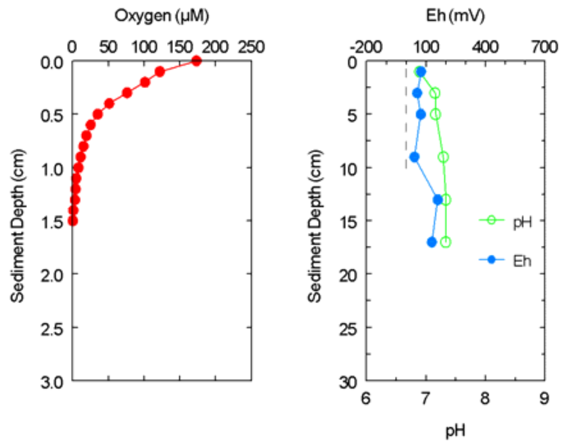
MMS Deep Gulf of Mexico Cruise 2: GB602 NF-B05



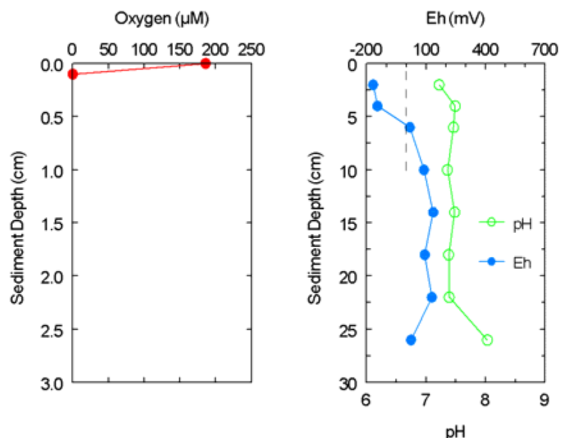
MMS Deep Gulf of Mexico Cruise 2: GB602 NF-B06



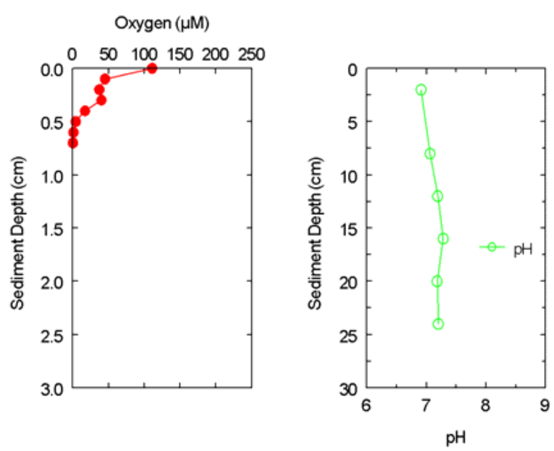
MMS Deep Gulf of Mexico Cruise 2: GB602 NF-B07



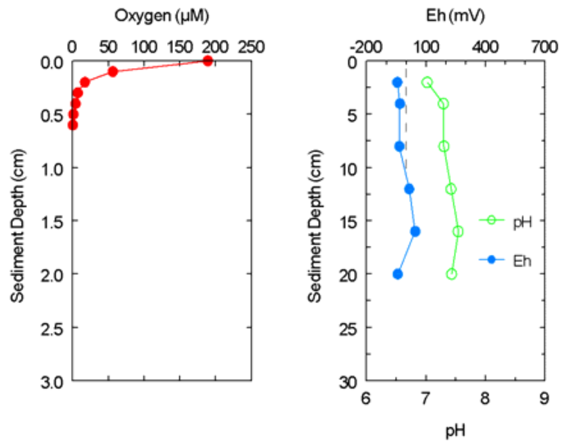
MMS Deep Gulf of Mexico Cruise 2: GB602 NF-B08



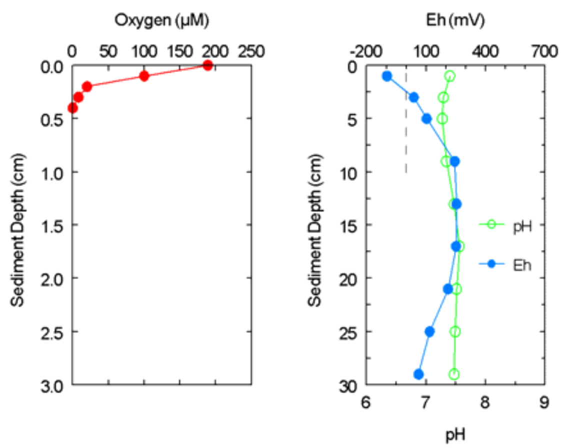
MMS Deep Gulf of Mexico Cruise 2: GB602 NF-B09



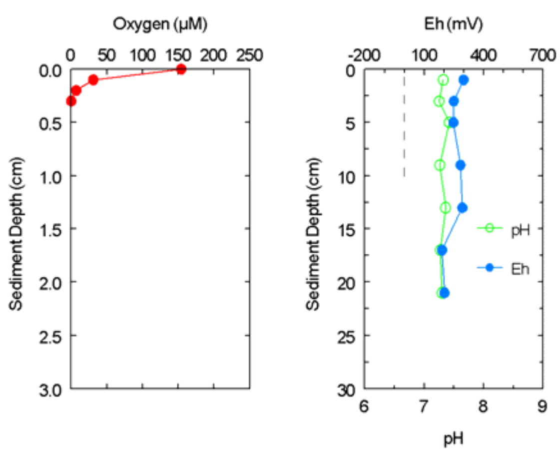
MMS Deep Gulf of Mexico Cruise 2: GB602 NF-B10



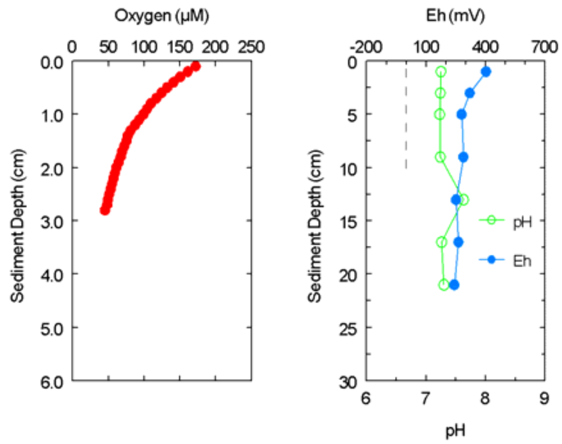
MMS Deep Gulf of Mexico Cruise 2: GB602 NF-B11



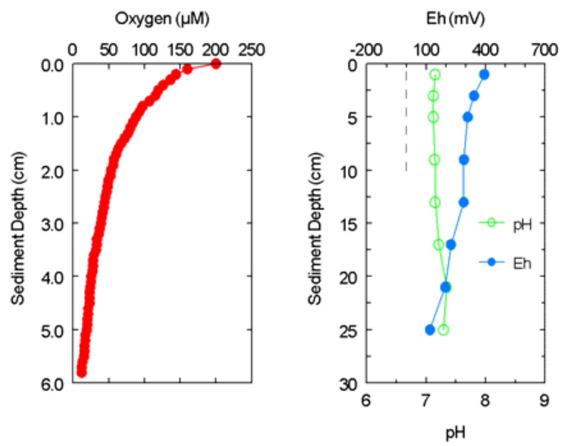
MMS Deep Gulf of Mexico Cruise 2: GB602 NF-B12



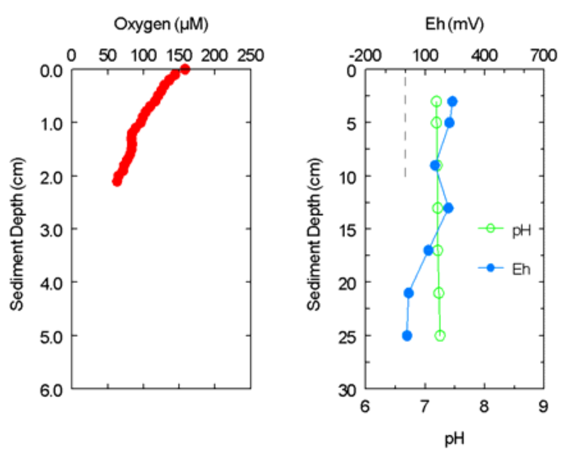
MMS Deep Gulf of Mexico Cruise 2: GB602 FF1-B01



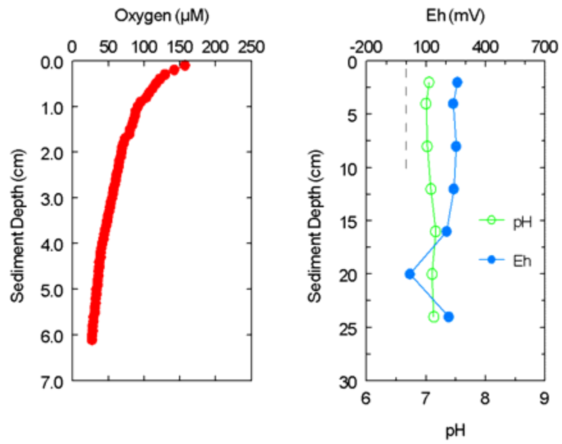
MMS Deep Gulf of Mexico Cruise 2: GB602 FF1-B02



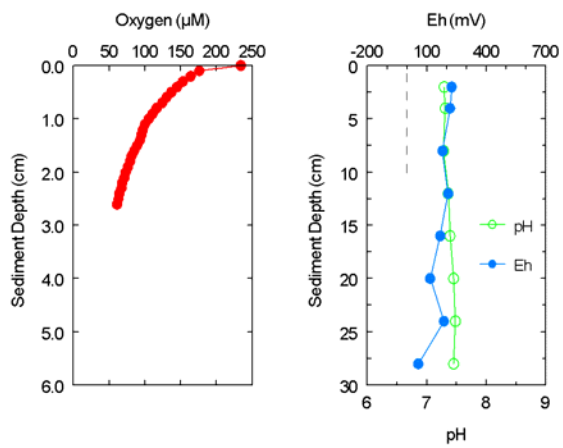
MMS Deep Gulf of Mexico Cruise 2: GB602 FF2-B01



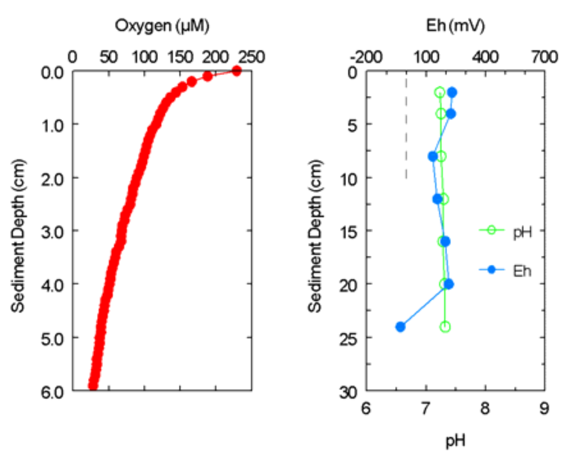
MMS Deep Gulf of Mexico Cruise 2: GB602 FF2-B02



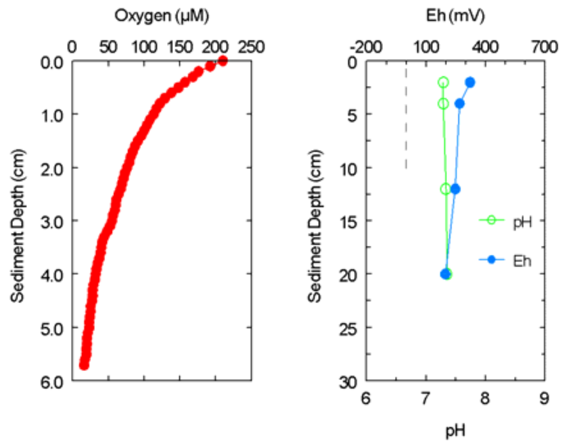
MMS Deep Gulf of Mexico Cruise 2: GB602 FF3-B01



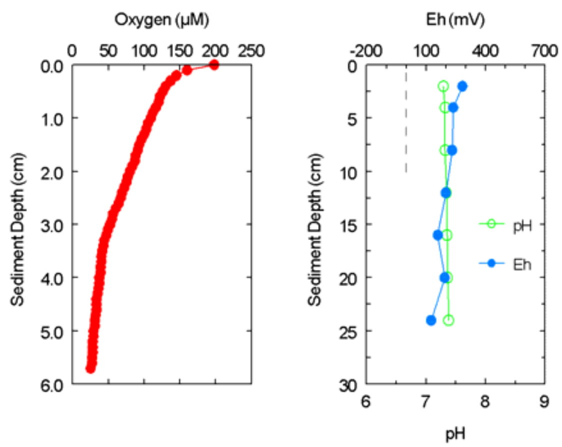
MMS Deep Gulf of Mexico Cruise 2: GB602 FF3-B02



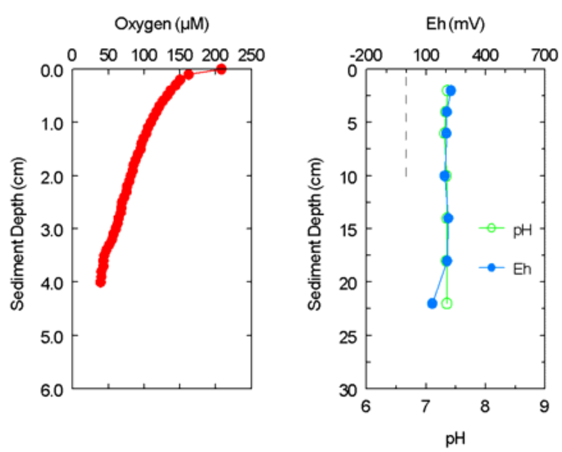
MMS Deep Gulf of Mexico Cruise 2: GB602 FF4-B01



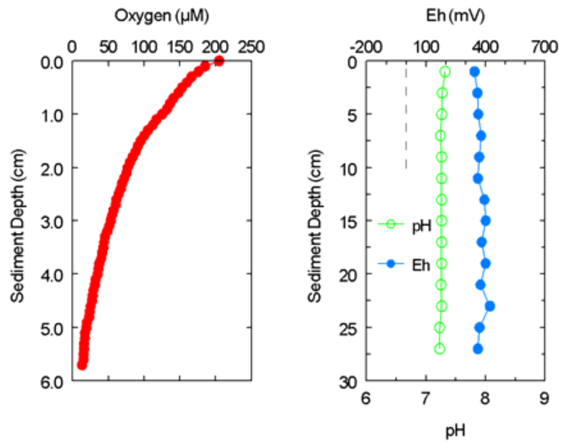
MMS Deep Gulf of Mexico Cruise 2: GB602 FF4-B02



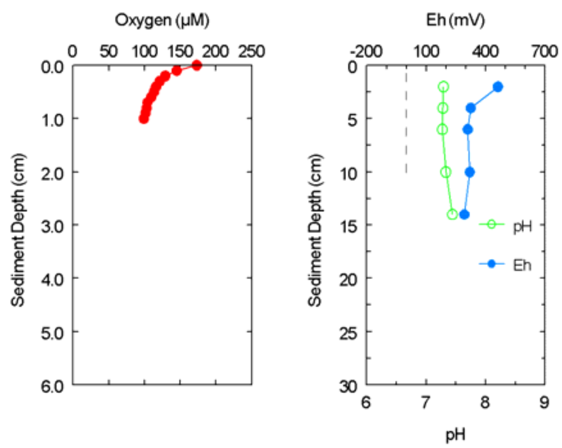
MMS Deep Gulf of Mexico Cruise 2: GB602 FF5-B01



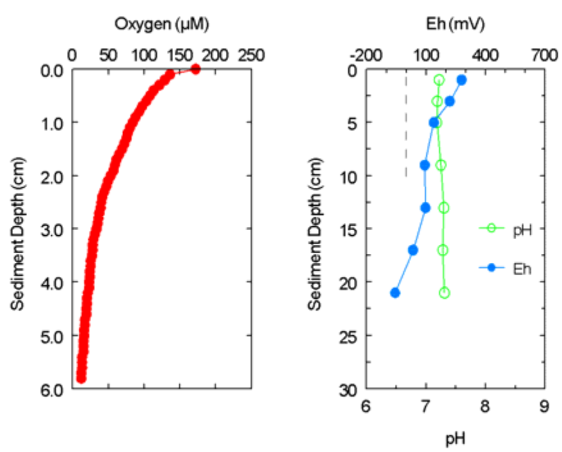
MMS Deep Gulf of Mexico Cruise 2: GB602 FF5-B02



MMS Deep Gulf of Mexico Cruise 2: GB602 FF6-B01



MMS Deep Gulf of Mexico Cruise 2: GB602 FF6-B02



MMS Deep Gulf of Mexico Cruise 2B (July 2001)

Site: Mississippi Canyon 292 Discretionary Box Core 1 (MC292 DISC-B01)

Depth (cm)	Oxygen (%)	Oxygen (μM)	Depth (cm)	Temperature (C)	pH	Eh (mV)
Bottom Water	16.1	214	1	14.5	7.41	321
0.1	9.2	122	3	10.8	7.27	233
0.2	5.4	72	7	9.6	7.19	117
0.3	1.4	19	11	9.6	7.25	85
0.4	0.7	9	15	8.8	7.28	81
0.5	0.5	7	19	8.9	7.30	65
0.6	0.3	4	23	9.5	7.27	64
0.7	0.1	1				
0.8	0.0	0				

Oxygen Calibration: 0 and 20.9%
pH Calibration: 7 and 10, Slope = 102.1
Eh Calibration: ORP Standard = 422.7 mV at 21.3^{o}C

Oxygen μM Calculation Assumes Chlorinity of 20 and Avg. Temp of 10^{o}C

MMS Deep Gulf of Mexico Cruise 2B (July 2001)

Site: Mississippi Canyon 292 Discretionary Box Core 2 (MC292 DISC-B02)

Depth (cm)	Oxygen (%)	Oxygen (µM)	Depth (cm)	Temperature (C)	pH	Eh (mV)
Bottom Water	16.0	213	1	14.0	7.11	29
0.1	7.8	104	3	11.3	7.16	69
0.2	4.7	63	5	9.5	7.17	126
0.3	3.7	49	7	8.6	7.22	88
0.4	2.9	39	9	8.5	7.25	102
0.5	2.4	32	11	8.9	7.26	56
0.6	2.1	28	13	9.7	7.25	56
0.7	1.7	23	15	9.6	7.28	62
0.8	1.5	20	17	9.7	7.24	49
0.9	1.3	17	19	9.5	7.25	66
1.0	0.9	12	21	10.0	7.24	62
1.1	0.6	8	23	10.5	7.23	42
1.2	0.5	7	25	10.4	7.22	40
1.3	0.4	5	27	10.9	7.21	53
1.4	0.3	4				
1.5	0.2	3				
1.6	0.1	1				
1.7	0.0	0				

Oxygen Calibration: 0 and 20.9%
pH Calibration: 7 and 10, Slope = 103.5
Eh Calibration: ORP Standard = 422.0 mV at 21.8^{o}C

Oxygen µM Calculation Assumes Chlorinity of 20 and Avg. Temp of 10^{o}C

MMS Deep Gulf of Mexico Cruise 2B (July 2001)

Site: Mississippi Canyon 292 Discretionary Box Core 3 (MC292 DISC-B03)

Depth (cm)	Oxygen (%)	Oxygen (μM)	Depth (cm)	Temperature (C)	pH	Eh (mV)
Bottom Water	14.6	194	2	14.3	7.30	217
0.1	7.2	96	4	12.0	7.22	120
0.2	4.2	56	8	10.5	7.25	73
0.3	3.4	45	12	9.6	7.25	74
0.4	2.7	36	16	9.5	7.28	53
0.5	2.1	28	20	9.7	7.25	86
0.6	1.8	24	24	10.1	7.22	96
0.7	1.6	21				
0.8	1.3	17				
0.9	1.0	13				
1.0	0.8	11				
1.1	0.6	8				
1.2	0.4	5				
1.3	0.3	4				
1.4	0.2	3				
1.5	0.1	1				
1.6	0.0	0				

Oxygen Calibration: 0 and 20.9%
pH Calibration: 7 and 10, Slope = 103.3
Eh Calibration: ORP Standard = 422.2 mV at 21.7^{o}C

Oxygen μM Calculation Assumes Chlorinity of 20 and Avg. Temp of 10^{o}C

MMS Deep Gulf of Mexico Cruise 2B (July 2001)

Site: Mississippi Canyon 292 Near-Field 1 (MC292 NF-B01)

Depth (cm)	Oxygen (%)	Oxygen (μM)	Depth (cm)	Temperature (C)	pH	Eh (mV)
Bottom Water	7.9	105	2	10.5	7.47	71
0.1	1.4	19	4	8.3	7.45	50
0.2	0	0	8	7.8	7.40	53
			12	7.8	7.43	49
			16	8.3	7.42	54
			20	8.7	7.43	31
			24	10.1	7.41	46

Oxygen Calibration: 0 and 20.9%
pH Calibration: 7 and 10, Slope = 101.0
Eh Calibration: ORP Standard = 421.3 mV at 20.8^{o}C

Oxygen μM Calculation Assumes Chlorinity of 20 and Avg. Temp of 10^{o}C

MMS Deep Gulf of Mexico Cruise 2B (July 2001)

Site: Mississippi Canyon 292 Near-Field 2 (MC292 NF-B02)

Depth (cm)	Oxygen (%)	Oxygen (µM)	Depth (cm)	Temperature (C)	pH	Eh (mV)
Bottom Water	8.8	117	1	15.3	7.21	185
0.1	0.9	12	3	12.8	7.24	84
0.2	0.4	5	7	9.8	7.38	71
0.3	0.2	3	11	9.1	7.36	62
0.4	0.0	0	15	10.0	7.32	75
			19	10.1	7.37	73

Oxygen Calibration: 0 and 20.9%
pH Calibration: 7 and 10, Slope = 103.2
Eh Calibration: ORP Standard = 423.5 mV at 21.4^{o}C

Oxygen µM Calculation Assumes Chlorinity of 20 and Avg. Temp of 10^{o}C

MMS Deep Gulf of Mexico Cruise 2B (July 2001)

Site: Mississippi Canyon 292 Near-Field 3 (MC292 NF-B03)

Depth (cm)	Oxygen (%)	Oxygen (µM)	Depth (cm)	Temperature (C)	pH	Eh (mV)
Bottom Water	14.9	198	1	15.9	7.32	-163
0.1	9.6	128	3	13.8	7.20	-293
0.2	8.3	111	5	11.6	7.29	-356
0.3	7.2	96	9	11.2	7.41	-387
0.4	6.0	80	13	10.1	6.52	-394
0.5	5.0	67	17	10.2	7.37	-401
0.6	4.0	53	21	10.1	7.37	-399
0.7	3.2	43				
0.8	2.6	35				
0.9	2.1	28				
1.0	1.7	23				
1.1	1.4	19				
1.2	1.1	15				
1.3	0.8	11				
1.4	0.5	7				
1.5	0.4	5				
1.6	0.2	3				
1.7	0.1	1				
1.8	0.0	0				

Oxygen Calibration: 0 and 20.9%
pH Calibration: 7 and 10, Slope = 100.9
Eh Calibration: ORP Standard = 422.5 mV at 21.4^{o}C

Oxygen µM Calculation Assumes Chlorinity of 20 and Avg. Temp of 10^{o}C

MMS Deep Gulf of Mexico Cruise 2B (July 2001)

Site: Mississippi Canyon 292 Near-Field 4 (MC292 NF-B04)

Depth (cm)	Oxygen (%)	Oxygen (μM)	Depth (cm)	Temperature (C)	pH	Eh (mV)
Bottom Water	15.9	212	1	15.4	7.23	350
0.1	12.9	172	3	14.8	7.19	181
0.2	12.0	160	7	11.4	7.39	159
0.3	11.2	149	11	10.4	7.43	103
0.4	10.5	140	15	10.3	7.45	107
0.5	9.9	132	19	10.3	7.35	81
0.6	9.3	124	23	10.7	7.37	101
0.7	8.5	113				
0.8	8.0	107				
0.9	7.4	99				
1.0	6.8	91				
1.1	6.4	85				
1.2	5.9	79				
1.3	5.4	72				
1.4	5.0	67				
1.5	4.5	60				
1.6	4.1	55				
1.7	3.7	49				
1.8	3.3	44				
1.9	2.9	39				
2.0	2.5	33				
2.1	2.2	29				
2.2	1.9	25				
2.3	1.7	23				
2.4	1.4	19				
2.5	1.0	13				
2.6	0.8	11				
2.7	0.6	8				
2.8	0.4	5				
2.9	0.3	4				
3.0	0.2	3				
3.1	0.1	1				
3.2	0.1	1				
3.3	0.0	0				

Oxygen Calibration: 0 and 20.9%
pH Calibration: 7 and 10, Slope = 102.3
Eh Calibration: ORP Standard = 422.7 mV at 21.1^{o}C

Oxygen μM Calculation Assumes Chlorinity of 20 and Avg. Temp of 10^{o}C

MMS Deep Gulf of Mexico Cruise 2B (July 2001)

Site: Mississippi Canyon 292 Near-Field 5 (MC292 NF-B05)

Depth (cm)	Oxygen (%)	Oxygen (µM)	Depth (cm)	Temperature (C)	pH	Eh (mV)
Bottom Water	12.7	169	2	12.6	7.38	166
0.1	1.6	21	4	10.0	7.36	96
0.2	0.8	11	8	10.1	7.35	76
0.3	0.5	7	12	9.9	7.29	53
0.4	0.3	4	16	9.5	7.27	59
0.5	0.2	3	20	9.4	7.28	54
0.6	0.1	1				
0.7	0.0	0				

Oxygen Calibration: 0 and 20.9%
pH Calibration: 7 and 10, Slope = 103.0
Eh Calibration: ORP Standard = 423.3 mV at 21.7^{o}C

Oxygen µM Calculation Assumes Chlorinity of 20 and Avg. Temp of 10^{o}C

MMS Deep Gulf of Mexico Cruise 2B (July 2001)

Site: Mississippi Canyon 292 Near-Field 6 (MC292 NF-B06)

Depth (cm)	Oxygen (%)	Oxygen (μM)	Depth (cm)	Temperature (C)	pH	Eh (mV)
Bottom Water	15.6	208	3	12.9	7.36	191
0.1	10.4	138	5	10.9	7.35	120
0.2	7.6	101	13	11.2	7.29	78
0.3	6.1	81	21	11.4	7.29	63
0.4	5.1	68				
0.5	4.5	60				
0.6	4.1	55				
0.7	3.7	49				
0.8	3.1	41				
0.9	2.7	36				
1.0	2.5	33				
1.1	2.1	28				
1.2	1.9	25				
1.3	1.7	23				
1.4	1.5	20				
1.5	1.4	19				
1.6	1.2	16				
1.7	1.1	15				
1.8	1.0	13				
1.9	0.9	12				
2.0	0.8	11				
2.1	0.7	9				
2.2	0.6	8				
2.3	0.5	7				
2.4	0.4	5				
2.5	0.3	4				
2.6	0.3	4				
2.7	0.2	3				
2.8	0.2	3				
2.9	0.1	1				
3.0	0.0	0				

Oxygen Calibration: 0 and 20.9%
pH Calibration: 7 and 10, Slope = 103.4
Eh Calibration: ORP Standard = 423.0 mV at 21.9^{o}C

Oxygen μM Calculation Assumes Chlorinity of 20 and Avg. Temp of 10^{o}C

MMS Deep Gulf of Mexico Cruise 2B (July 2001)

Site: Mississippi Canyon 292 Near-Field 7 (MC292 NF-B07)

Depth (cm)	Oxygen (%)	Oxygen (µM)	Depth (cm)	Temperature (C)	pH	Eh (mV)
Bottom Water	16.1	214	1	15.9	7.42	322
0.1	9.3	124	3	13.0	7.39	246
0.2	7.0	93	5	11.8	7.41	159
0.3	5.9	79	9	11.2	7.50	155
0.4	5.1	68	13	10.9	7.39	142
0.5	4.5	60	17	11.3	7.56	129
0.6	3.9	52	21	10.7	7.37	117
0.7	3.3	44				
0.8	2.8	37				
0.9	2.4	32				
1.0	2.0	27				
1.1	1.7	23				
1.2	1.4	19				
1.3	1.1	15				
1.4	0.9	12				
1.5	0.6	8				
1.6	0.4	5				
1.7	0.3	4				
1.8	0.1	1				
1.9	0.0	0				

Oxygen Calibration: 0 and 20.9%
pH Calibration: 7 and 10, Slope = 100.1
Eh Calibration: ORP Standard = 422.0 mV at 22.0^{o}C

Oxygen µM Calculation Assumes Chlorinity of 20 and Avg. Temp of 10^{o}C

MMS Deep Gulf of Mexico Cruise 2B (July 2001)

Site: Mississippi Canyon 292 Near-Field 8 (MC292 NF-B08)

Depth (cm)	Oxygen (%)	Oxygen (µM)	Depth (cm)	Temperature (C)	pH	Eh (mV)
Bottom Water	14.2	189	1	13.0	7.19	96
0.1	5.6	75	3	10.8	7.26	93
0.2	1.1	15	7	9.7	7.24	115
0.3	1.0	13	11	8.8	7.35	77
0.4	1.1	15	15	8.8	7.24	70
0.5	0.8	11	19	9.0	7.29	62
0.6	0.6	8	23	10.2	7.26	56
0.7	0.4	5				
0.8	0.3	4				
0.9	0.1	1				
1.0	0.0	0				

Oxygen Calibration: 0 and 20.9%
pH Calibration: 7 and 10, Slope = 101.2
Eh Calibration: ORP Standard = 422.3 mV at 21.6^{o}C

Oxygen µM Calculation Assumes Chlorinity of 20 and Avg. Temp of 10^{o}C

MMS Deep Gulf of Mexico Cruise 2B (July 2001)

Site: Mississippi Canyon 292 Near-Field 9 (MC292 NF-B09)

Depth (cm)	Oxygen (%)	Oxygen (μM)	Depth (cm)	Temperature (C)	pH	Eh (mV)
Bottom Water	12.3	164	2	13.9	7.19	224
0.1	6.2	83	4	13.6	7.16	203
0.2	3.8	51	8	10.0	7.24	143
0.3	2.9	39	12	11.0	7.20	120
0.4	2.2	29	16	10.5	7.23	95
0.5	1.8	24				
0.6	1.5	20				
0.7	1.2	16				
0.8	1.1	15				
0.9	0.9	12				
1.0	0.7	9				
1.1	0.5	7				
1.2	0.4	5				
1.3	0.3	4				
1.4	0.2	3				
1.5	0.2	3				
1.6	0.2	3				
1.7	0.1	1				
1.8	0.1	1				
1.9	0.0	0				

Oxygen Calibration: 0 and 20.9%
pH Calibration: 7 and 10, Slope = 102.9
Eh Calibration: ORP Standard = 422.5 mV at 21.7^{o}C

Oxygen μM Calculation Assumes Chlorinity of 20 and Avg. Temp of 10^{o}C

MMS Deep Gulf of Mexico Cruise 2B (July 2001)

Site: Mississippi Canyon 292 Near-Field 10 (MC292 NF-B10)

Depth (cm)	Oxygen (%)	Oxygen (µM)	Depth (cm)	Temperature (C)	pH	Eh (mV)
Bottom Water	14.1	188	2	14.4	7.17	168
0.1	11.8	157	4	12.0	7.21	135
0.2	11.1	148	8	10.6	7.27	90
0.3	10.3	137	12	10.1	7.36	82
0.4	9.8	130	16	10.3	7.39	73
0.5	9.4	125	20	10.2	7.39	60
0.6	9.0	120	24	11.0	7.40	56
0.7	8.6	115	28	11.2	7.35	73
0.8	7.7	103				
0.9	5.5	73				
1.0	3.1	41				
1.1	2.0	27				
1.2	1.1	15				
1.3	0.8	11				
1.4	0.5	7				
1.5	0.3	4				
1.6	0.2	3				
1.7	0.1	1				
1.8	0.0	0				

Oxygen Calibration: 0 and 20.9%
pH Calibration: 7 and 10, Slope = 101.1
Eh Calibration: ORP Standard = 422.0 mV at 21.7^{o}C

Oxygen µM Calculation Assumes Chlorinity of 20 and Avg. Temp of 10^{o}C

MMS Deep Gulf of Mexico Cruise 2B (July 2001)

Site: Mississippi Canyon 292 Near-Field 11 (MC292 NF-B11)

Depth (cm)	Oxygen (%)	Oxygen (μM)	Depth (cm)	Temperature (C)	pH	Eh (mV)
Bottom Water	12.5	166	2	15.2	7.32	185
0.1	9.3	124	4	11.8	7.34	156
0.2	6.7	89	6	10.8	7.58	151
0.3	5.5	73	10	10.0	7.40	126
0.4	4.6	61	14	10.2	7.40	135
0.5	3.9	52	18	10.1	7.45	111
0.6	3.3	44	22	10.3	7.36	121
0.7	2.7	36				
0.8	2.1	28				
0.9	1.7	23				
1.0	1.2	16				
1.1	0.9	12				
1.2	0.6	8				
1.3	0.4	5				
1.4	0.2	3				
1.5	0.0	0				

Oxygen Calibration: 0 and 20.9%
pH Calibration: 7 and 10, Slope = 101.5
Eh Calibration: ORP Standard = 423.0 mV at 20.7^{o}C

Oxygen μM Calculation Assumes Chlorinity of 20 and Avg. Temp of 10^{o}C

MMS Deep Gulf of Mexico Cruise 2B (July 2001)

Site: Mississippi Canyon 292 Near-Field 12 (MC292 NF-B12)

Depth (cm)	Oxygen (%)	Oxygen (µM)	Depth (cm)	Temperature (C)	pH	Eh (mV)
Bottom Water	-	-	1	12.3	7.19	163
0.1	9.3	124	3	10.9	7.24	183
0.2	8.7	116	11	9.1	7.31	128
0.3	7.4	99	19	9.7	7.28	118
0.4	5.7	76				
0.5	5.1	68				
0.6	4.4	59				
0.7	3.6	48				
0.8	3.2	43				
0.9	2.7	36				
1.0	2.4	32				
1.1	2.1	28				
1.2	1.7	23				
1.3	1.4	19				
1.4	1.2	16				
1.5	1.1	15				
1.6	0.9	12				
1.7	0.8	11				
1.8	0.7	9				
1.9	0.6	8				

Oxygen Calibration: 0 and 20.9%
pH Calibration: 7 and 10, Slope = 102.8
Eh Calibration: ORP Standard = 422.2 mV at 21.3^{o}C

Oxygen µM Calculation Assumes Chlorinity of 20 and Avg. Temp of 10^{o}C

MMS Deep Gulf of Mexico Cruise 2B (July 2001)

Site: Mississippi Canyon 292 Far-Field 1, Box Core 1 (MC292 FF1-B01)

Depth (cm)	Oxygen (%)	Oxygen (µM)	Depth (cm)	Temperature (C)	pH	Eh (mV)
Bottom Water	13.6	181	3	12.5	7.24	100
0.1	13.1	174	5	11.6	7.25	86
0.2	10.4	138	9	10.4	7.20	57
0.3	9.4	125	13	10.6	7.31	49
0.4	8.7	116	17	11.2	7.31	52
0.5	7.7	103				
0.6	7.4	99				
0.7	6.8	91		Short Core		
0.8	6.4	85				
0.9	6.1	81				
1.0	5.7	76				
1.1	5.4	72				
1.2	5.1	68				
1.3	4.8	64				
1.4	3.7	49				
1.5	2.2	29				
1.6	1.9	25				
1.7	1.4	19				
1.8	1.2	16				
1.9	1.0	13				
2.0	0.8	11				
2.1	0.6	8				
2.2	0.4	5				
2.3	0.3	4				
2.4	0.0	0				

Oxygen Calibration: 0 and 20.9%
pH Calibration: 7 and 10, Slope = 102.9
Eh Calibration: ORP Standard = 425.9 mV at 21.0^{o}C

Oxygen µM Calculation Assumes Chlorinity of 20 and Avg. Temp of 10^{o}C

MMS Deep Gulf of Mexico Cruise 2B (July 2001)

Site: Mississippi Canyon 292 Far-Field 1, Box Core 2 (MC292 FF1-B02)

Depth (cm)	Oxygen (%)	Oxygen (μM)	Depth (cm)	Temperature (C)	pH	Eh (mV)
Bottom Water	-	-	2	10.3	7.34	182
0.1			4	8.3	7.38	103
0.2			8	7.2	7.46	74
0.3			12	9.3	7.37	46
				Short Core		

pH Calibration: 7 and 10, Slope = 101.7

Eh Calibration: ORP Standard = 422.8 mV at 21.0^{o}C

MMS Deep Gulf of Mexico Cruise 2B (July 2001)

Site: Mississippi Canyon 292 Far-Field 2, Box Core 1 (MC292 FF2-B01)

Depth (cm)	Oxygen (%)	Oxygen (µM)	Depth (cm)	Temperature (C)	pH	Eh (mV)
Bottom Water	-	-	2	8.9	7.28	212
0.1	0.3	4	4	8.8	7.28	88
0.2	0.0	0	8	8.5	7.27	183
			12	8.4	7.31	61
	Surface may have been washed away.		16	10.3	7.62	49
				Short Core		

Oxygen Calibration: 0 and 20.9%
pH Calibration: 7 and 10, Slope = 104.2
Eh Calibration: ORP Standard = 424.2 mV at 21.4^{o}C

Oxygen µM Calculation Assumes Chlorinity of 20 and Avg. Temp of 10^{o}C

MMS Deep Gulf of Mexico Cruise 2B (July 2001)

Site: Mississippi Canyon 292 Far-Field 2, Box Core 2 (MC292 FF2-B02)

Depth (cm)	Oxygen (%)	Oxygen (µM)	Depth (cm)	Temperature (C)	pH	Eh (mV)
Bottom Water	-	-	1	14.3	7.13	158
0.1	10.5	140	3	12.0	7.21	69
0.2	7.7	103	5	11.1	7.24	126
0.3	6.6	88	7	11.0	7.25	85
0.4	5.9	79	9	10.2	7.26	65
0.5	4.7	63	11	10.2	7.32	92
0.6	3.8	51	13	11.3	7.27	130
0.7	2.9	39	15	11.5	7.24	146
0.8	1.9	25	17	11.5	7.26	57
0.9	1.4	19	19	13.1	7.21	123
1.0	1.2	16	21	14.2	7.25	91
1.1	0.8	11				
1.2	0.5	7				
1.3	0.4	5				
1.4	0.3	4				
1.5	0.2	3				
1.6	0.0	0				

Oxygen Calibration: 0 and 20.9%
pH Calibration: 7 and 10, Slope = 103.7
Eh Calibration: ORP Standard = 423.9 mV at 21.5^{o}C

Oxygen µM Calculation Assumes Chlorinity of 20 and Avg. Temp of 10^{o}C

MMS Deep Gulf of Mexico Cruise 2B (July 2001)

Site: Mississippi Canyon 292 Far-Field 3, Box Core 1 (MC292 FF3-B01)

Depth (cm)	Oxygen (%)	Oxygen (µM)	Depth (cm)	Temperature (C)	pH	Eh (mV)
Bottom Water	14.7	196	1	16.8	7.10	351
0.1	12.2	162	3	14.1	7.19	145
0.2	9.5	126	5	12.9	8.04	98
0.3	7.8	104	9	12.6	7.25	85
0.4	6.7	89	13	11.8	7.49	103
0.5	5.8	77	17	11.3	7.35	105
0.6	5.1	68				
0.7	4.4	59		Short Core		
0.8	3.9	52				
0.9	3.4	45				
1.0	2.9	39				
1.1	2.5	33				
1.2	2.1	28				
1.3	1.6	21				
1.4	1.1	15				
1.5	0.7	9				
1.6	0.4	5				
1.7	0.2	3				
1.8	0.0	0				

Oxygen Calibration: 0 and 20.9%
pH Calibration: 7 and 10, Slope = 100.0
Eh Calibration: ORP Standard = 422.0 mV at 21.9^{o}C

Oxygen µM Calculation Assumes Chlorinity of 20 and Avg. Temp of 10^{o}C

MMS Deep Gulf of Mexico Cruise 2B (July 2001)

Site: Mississippi Canyon 292 Far-Field 3, Box Core 2 (MC292 FF3-B02)

Depth (cm)	Oxygen (%)	Oxygen (µM)	Depth (cm)	Temperature (C)	pH	Eh (mV)
Bottom Water	14.9	198	1	15.3	7.21	180
0.1	9.1	121	3	13.1	7.26	128
0.2	7.6	101	5	11.4	7.22	118
0.3	2.4	32	9	10.2	7.28	73
0.4	0.6	8	13	11.1	7.28	66
0.5	0.3	4	17	10.1	7.41	41
0.6	0.0	0	21	11.0	7.35	109

Oxygen Calibration: 0 and 20.9%
pH Calibration: 7 and 10, Slope = 101.0
Eh Calibration: ORP Standard = 421.6 mV at 22.5^{o}C

Oxygen µM Calculation Assumes Chlorinity of 20 and Avg. Temp of 10^{o}C

MMS Deep Gulf of Mexico Cruise 2B (July 2001)

Site: Mississippi Canyon 292 Far-Field 4, Box Core 1 (MC292 FF4-B01)

Depth (cm)	Oxygen (%)	Oxygen (μM)	Depth (cm)	Temperature (C)	pH	Eh (mV)
Bottom Water	15.1	201	2	13.7	7.24	319
0.1	8.4	112	4	12.8	7.34	215
0.2	7.0	93	6	11.6	7.41	149
0.3	6.3	84	10	8.7	7.47	97
0.4	5.7	76	14	9.3	7.54	-46
0.5	5.2	69	18	10.6	7.50	-73
0.6	5.0	66	22	11.8	7.51	-28
0.7	4.5	60				
0.8	4.2	56				
0.9	4.0	53				
1.0	3.8	51				
1.1	3.7	49				
1.2	3.6	48				
1.3	3.4	45				
1.4	3.2	43				
1.5	3.1	41				
1.6	3.0	40				
1.7	2.9	39				
1.8	2.7	36				
1.9	2.6	35				
2.0	2.5	33				
2.1	2.4	32				
2.2	2.2	29				
2.3	2.1	28				
2.4	2.0	27				
2.5	1.9	25				
2.6	1.8	24				
2.7	1.6	21				
2.8	1.5	20				
2.9	1.5	20				
3.0	1.4	19				
3.1	1.3	17				
3.2	1.2	16				
3.3	1.1	15				

Oxygen Calibration: 0 and 20.9%
pH Calibration: 7 and 10, Slope = 101.3
Eh Calibration: ORP Standard = 421.7 mV at 22.3^{o}C

Oxygen μM Calculation Assumes Chlorinity of 20 and Avg. Temp of 10^{o}C

MMS Deep Gulf of Mexico Cruise 2B (July 2001)

Site: Mississippi Canyon 292 Far-Field 4, Box Core 2 (MC292 FF4-B02)

Depth (cm)	Oxygen (%)	Oxygen (μM)	Depth (cm)	Temperature (C)	pH	Eh (mV)
Bottom Water	12.1	161	1	15.5	7.37	449
0.1	8.3	111	3	13.4	7.37	261
0.2	7.1	95	5	12.6	7.40	152
0.3	6.2	83	9	11.7	7.43	164
0.4	5.6	75	13	11.7	7.42	98
0.5	5.0	67	17	12.1	7.41	84
0.6	4.5	60				
0.7	4.1	55		Short Core		
0.8	3.7	49				
0.9	3.2	43				
1.0	2.9	39				
1.1	2.7	36				
1.2	2.4	32				
1.3	2.1	28				
1.4	1.9	25				
1.5	1.7	23				
1.6	1.5	20				
1.7	1.3	17				
1.8	1.1	15				
1.9	1.0	13				
2.0	0.8	11				
2.1	0.7	9				
2.2	0.6	8				
2.3	0.5	7				
2.4	0.4	5				
2.5	0.3	4				
2.6	0.3	4				
2.7	0.2	3				
2.8	0.1	1				
2.9	0.1	1				
3.0	0.0	0				

Oxygen Calibration: 0 and 20.9%
pH Calibration: 7 and 10, Slope = 102.1
Eh Calibration: ORP Standard = 423.3 mV at 20.3^{o}C

Oxygen μM Calculation Assumes Chlorinity of 20 and Avg. Temp of 10^{o}C

MMS Deep Gulf of Mexico Cruise 2B (July 2001)

Site: Mississippi Canyon 292 Far-Field 5, Box Core 1 (MC292 FF5-B01)

Depth (cm)	Oxygen (%)	Oxygen (μM)	Depth (cm)	Temperature (C)	pH	Eh (mV)
Bottom Water	11.7	156	2	16.0	7.32	301
0.1	9.7	129	4	13.1	7.32	159
0.2	8.0	107	6	12.3	7.35	119
0.3	6.6	88	10	12.0	7.45	79
0.4	5.6	75	14	11.1	7.38	100
0.5	4.9	65	18	10.8	7.43	74
0.6	4.4	59	22	10.8	7.50	152
0.7	4.0	53				
0.8	3.6	48				
0.9	3.3	44				
1.0	3.0	40				
1.1	2.7	36				
1.2	2.5	33				
1.3	2.1	28				
1.4	1.8	24				
1.5	1.5	20				
1.6	1.3	17				
1.7	1.1	15				
1.8	0.9	12				
1.9	0.8	11				
2.0	0.7	9				
2.1	0.5	7				
2.2	0.4	5				
2.3	0.3	4				
2.4	0.2	3				
2.5	0.2	3				
2.6	0.1	1				
2.7	0.1	1				
2.8	0.0	0				

Oxygen Calibration: 0 and 20.9%
pH Calibration: 7 and 10, Slope = 100.7
Eh Calibration: ORP Standard = 422.7 mV at 21.7^{o}C

Oxygen μM Calculation Assumes Chlorinity of 20 and Avg. Temp of 10^{o}C

MMS Deep Gulf of Mexico Cruise 2B (July 2001)

Site: Mississippi Canyon 292 Far-Field 5, Box Core 2 (MC292 FF5-B02)

Depth (cm)	Oxygen (%)	Oxygen (μM)	Depth (cm)	Temperature (C)	pH	Eh (mV)
Bottom Water	14.3	190	2	13.6	7.28	281
0.1	8.0	107	4	12.3	7.32	36
0.2	6.0	80	6	10.8	7.47	-33
0.3	4.3	57	10	10.2	7.62	-49
0.4	2.7	36	14	9.1	7.48	-88
0.5	1.7	23	18	11.5	7.49	-63
0.6	1.0	13	22	11.6	7.51	-99
0.7	0.5	7				
0.8	0.2	3				
0.9	0.0	0				

Oxygen Calibration: 0 and 20.9%
pH Calibration: 7 and 10, Slope = 102.1
Eh Calibration: ORP Standard = 422.1 mV at 21.8^{o}C

Oxygen μM Calculation Assumes Chlorinity of 20 and Avg. Temp of 10^{o}C

MMS Deep Gulf of Mexico Cruise 2B (July 2001)

Site: Mississippi Canyon 292 Far-Field 6, Box Core 1 (MC292 FF6-B01)

Depth (cm)	Oxygen (%)	Oxygen (µM)	Depth (cm)	Temperature (C)	pH	Eh (mV)
Bottom Water	14.7	196	2	13.4	7.25	292
0.1	11.0	146	4	12.2	7.31	149
0.2	8.3	111	8	11.0	7.39	91
0.3	6.3	84	12	10.4	7.42	90
0.4	4.7	63	16	10.1	7.38	118
0.5	3.6	48	20	10.0	7.36	139
0.6	2.6	35	24	9.8	7.35	181
0.7	2.0	27	28	10.2	7.43	65
0.8	1.6	21	32	10.9	7.41	67
0.9	1.2	16				
1.0	1.0	13				
1.1	0.7	9				
1.2	0.6	8				
1.3	0.4	5				
1.4	0.3	4				
1.5	0.3	4				
1.6	0.2	3				
1.7	0.2	3				
1.8	0.1	1				
1.9	0.1	1				
2.0	0.0	0				

Oxygen Calibration: 0 and 20.9%
pH Calibration: 7 and 10, Slope = 102.3
Eh Calibration: ORP Standard = 421.3 mV at 22.0^{o}C

Oxygen µM Calculation Assumes Chlorinity of 20 and Avg. Temp of 10^{o}C

MMS Deep Gulf of Mexico Cruise 2B (July 2001)

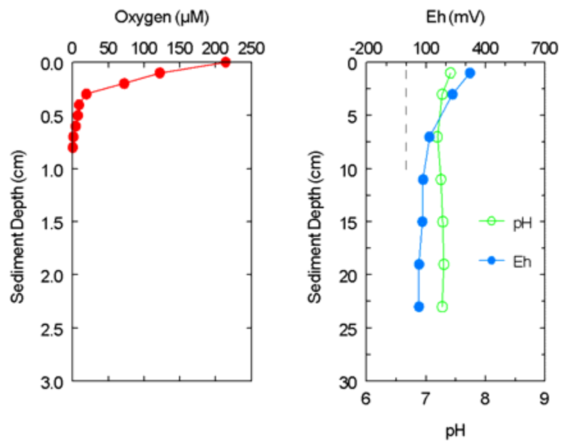
Site: Mississippi Canyon 292 Far-Field 6, Box Core 2 (MC292 FF6-B02)

Depth (cm)	Oxygen (%)	Oxygen (µM)	Depth (cm)	Temperature (C)	pH	Eh (mV)
Bottom Water	14.9	198	2	12.9	7.07	266
0.1	10.7	142	4	12.0	7.00	205
0.2	8.8	117	8	11.2	7.09	93
0.3	7.4	99	12	8.8	7.14	80
0.4	6.2	83	16	10.0	7.12	45
0.5	5.4	72	20	10.4	7.13	49
0.6	4.6	61	24	10.3	7.16	62
0.7	4.0	53				
0.8	3.4	45				
0.9	3.0	40				
1.0	2.6	35				
1.1	2.2	29				
1.2	1.9	25				
1.3	1.7	23				
1.4	1.4	19				
1.5	1.2	16				
1.6	1.0	13				
1.7	0.8	11				
1.8	0.7	9				
1.9	0.6	8				
2.0	0.5	7				
2.1	0.5	7				
2.2	0.4	5				
2.3	0.3	4				
2.4	0.1	1				
2.5	0.0	0				

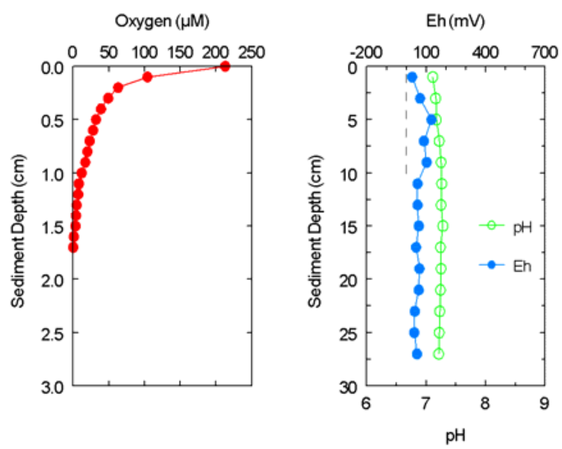
Oxygen Calibration: 0 and 20.9%
pH Calibration: 7 and 10, Slope = 103.7
Eh Calibration: ORP Standard = 419.7 mV at 21.9^{o}C

Oxygen µM Calculation Assumes Chlorinity of 20 and Avg. Temp of 10^{o}C

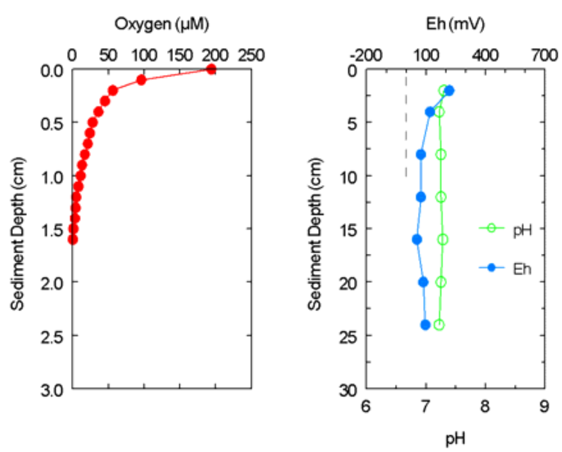
MMS Deep Gulf of Mexico Cruise 2: MC292 DISC-B01



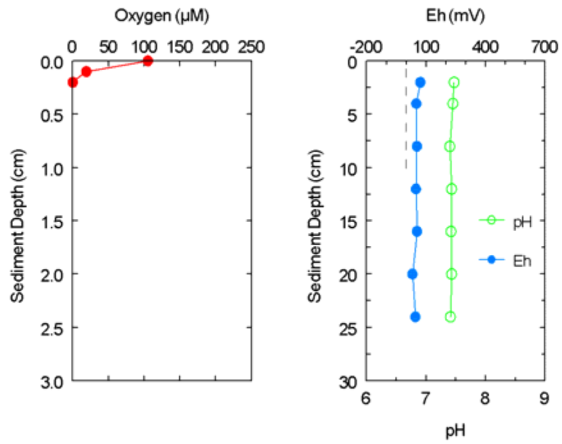
MMS Deep Gulf of Mexico Cruise 2: MC292 DISC-B02



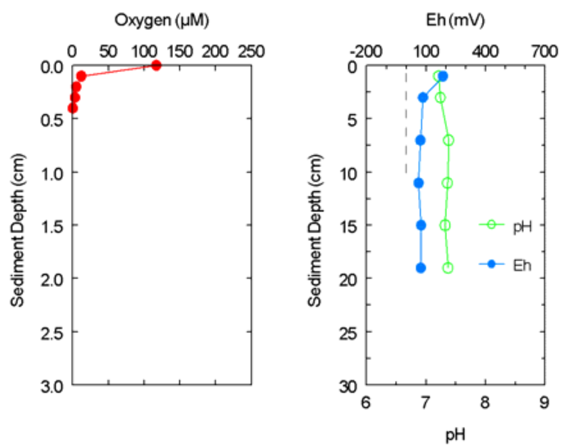
MMS Deep Gulf of Mexico Cruise 2: MC292 DISC-B03



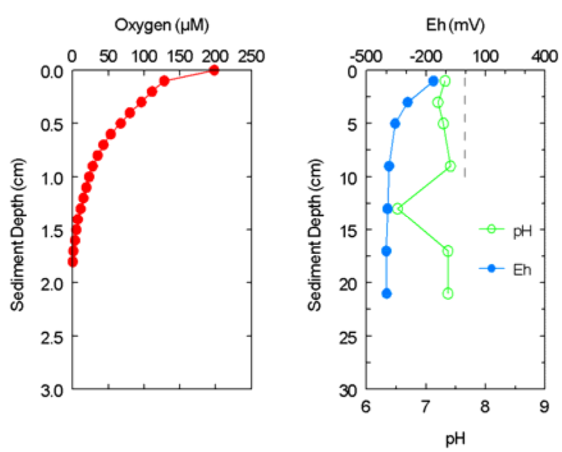
MMS Deep Gulf of Mexico Cruise 2: MC292 NF-B01



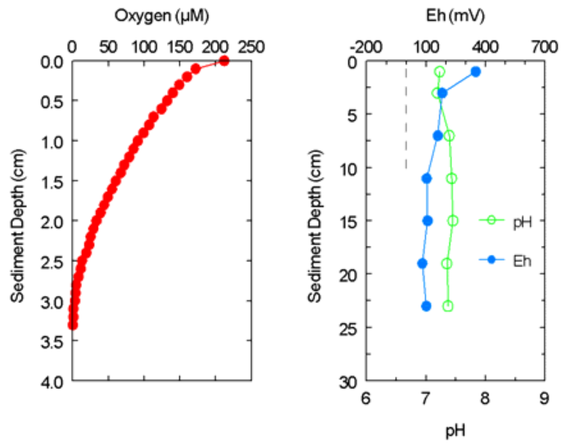
MMS Deep Gulf of Mexico Cruise 2: MC292 NF-B02



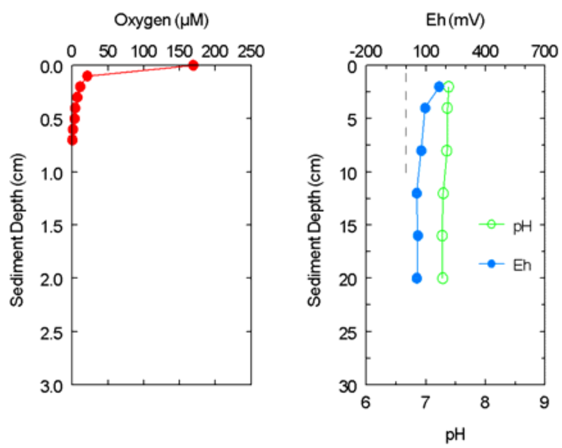
MMS Deep Gulf of Mexico Cruise 2: MC292 NF-B03



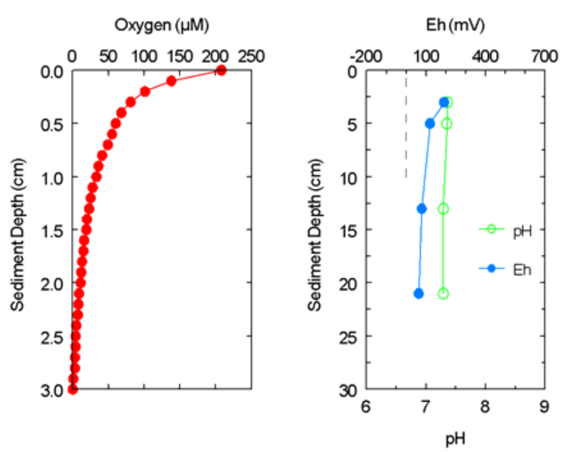
MMS Deep Gulf of Mexico Cruise 2: MC292 NF-B04



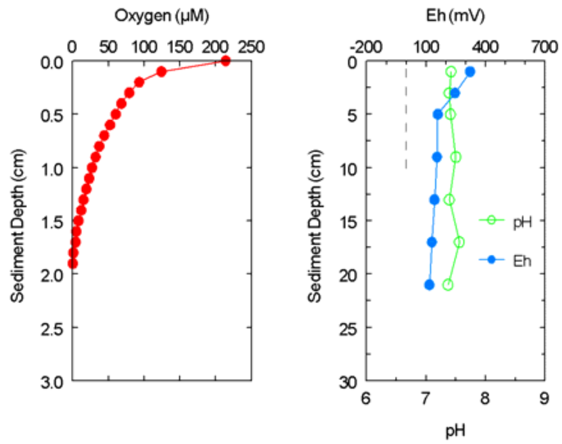
MMS Deep Gulf of Mexico Cruise 2: MC292 NF-B05



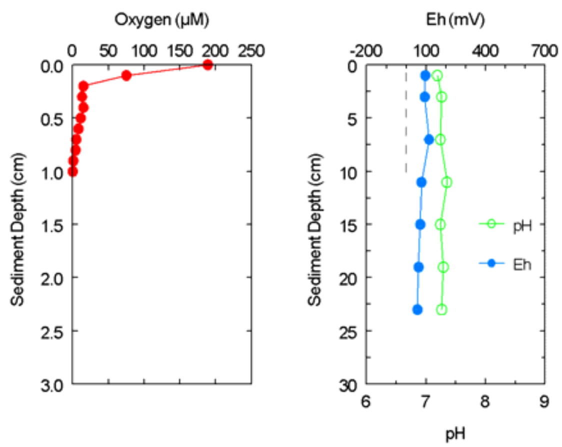
MMS Deep Gulf of Mexico Cruise 2: MC292 NF-B06



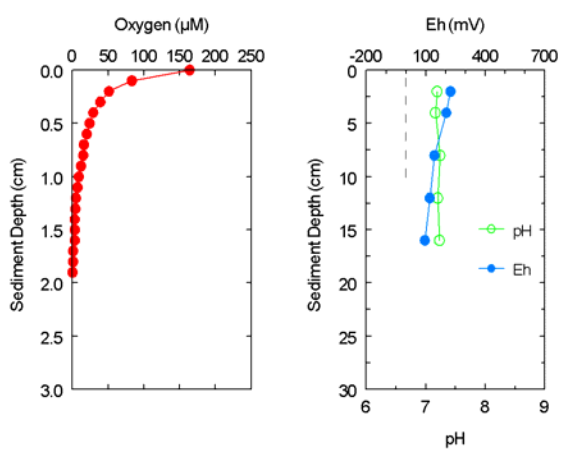
MMS Deep Gulf of Mexico Cruise 2: MC292 NF-B07



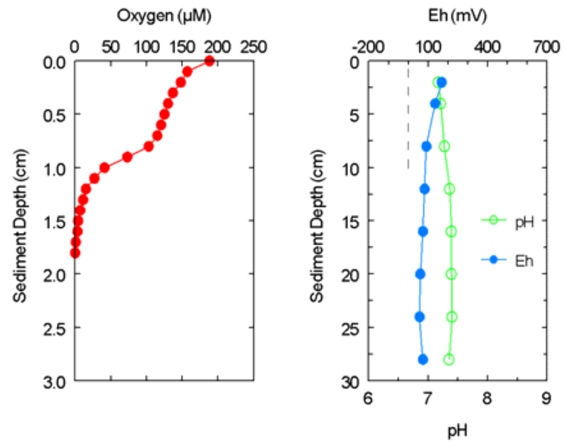
MMS Deep Gulf of Mexico Cruise 2: MC292 NF-B08



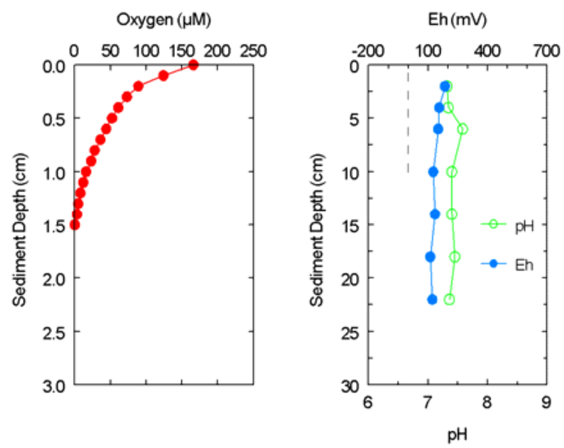
MMS Deep Gulf of Mexico Cruise 2: MC292 NF-B09



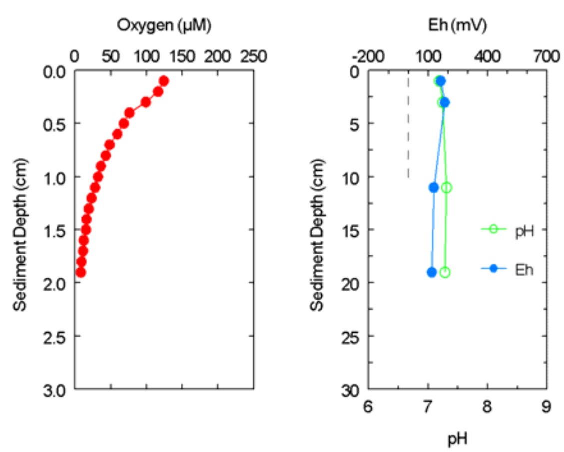
MMS Deep Gulf of Mexico Cruise 2: MC292 NF-B10



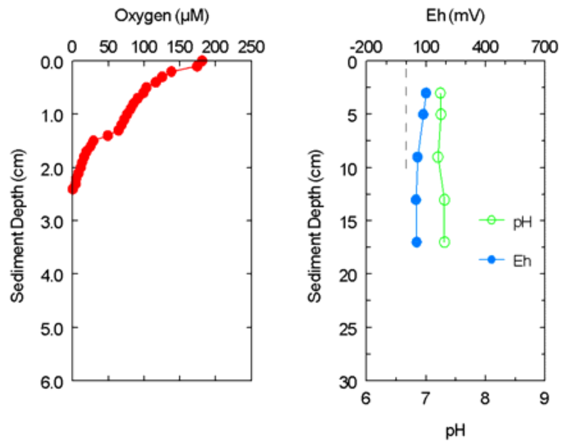
MMS Deep Gulf of Mexico Cruise 2: MC292 NF-B11



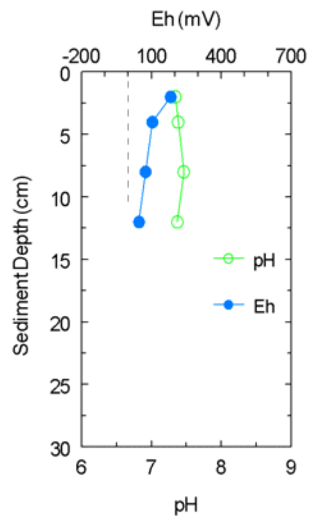
MMS Deep Gulf of Mexico Cruise 2: MC292 NF-B12



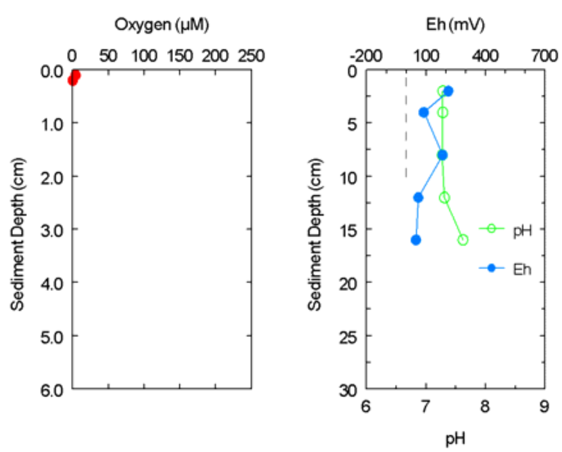
MMS Deep Gulf of Mexico Cruise 2: MC292 FF1-B01



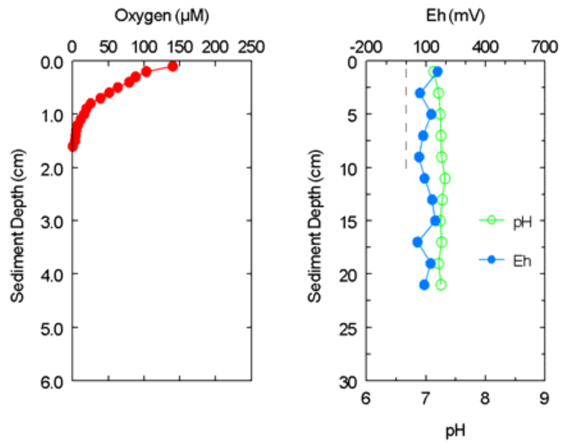
MMS Deep Gulf of Mexico Cruise 2: MC292 FF1-B02



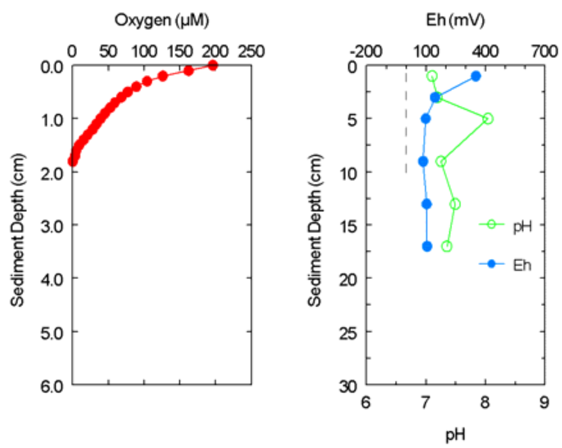
MMS Deep Gulf of Mexico Cruise 2: MC292 FF2-B01



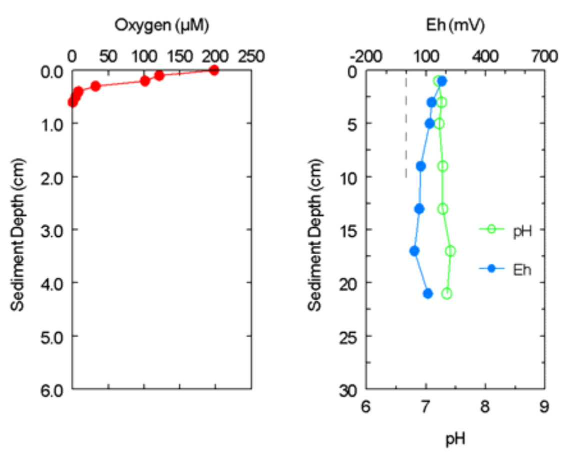
MMS Deep Gulf of Mexico Cruise 2: MC292 FF2-B02



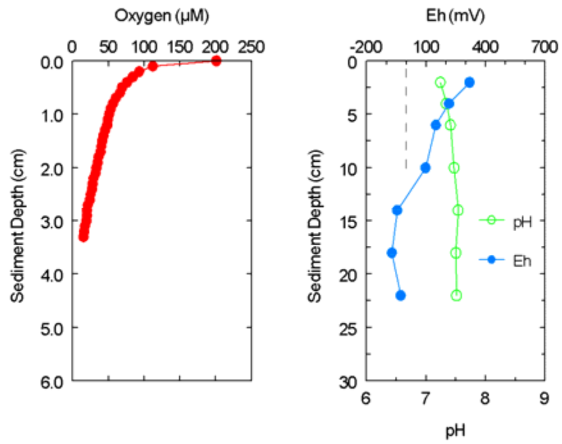
MMS Deep Gulf of Mexico Cruise 2: MC292 FF3-B01



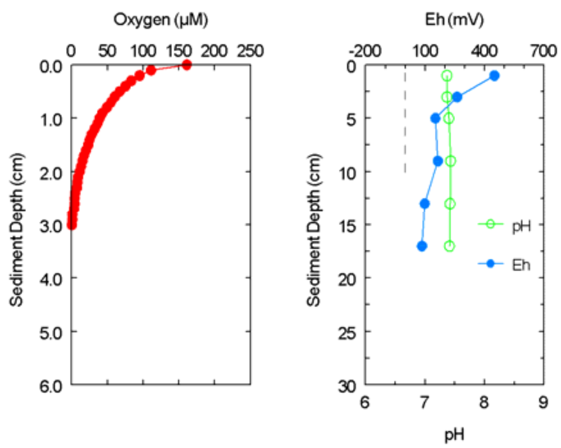
MMS Deep Gulf of Mexico Cruise 2: MC292 FF3-B02



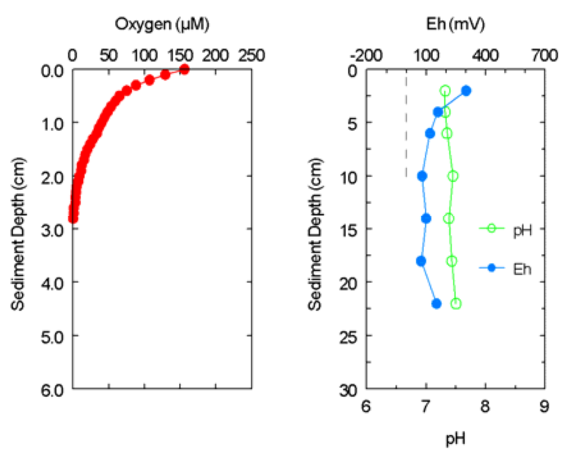
MMS Deep Gulf of Mexico Cruise 2: MC292 FF4-B01



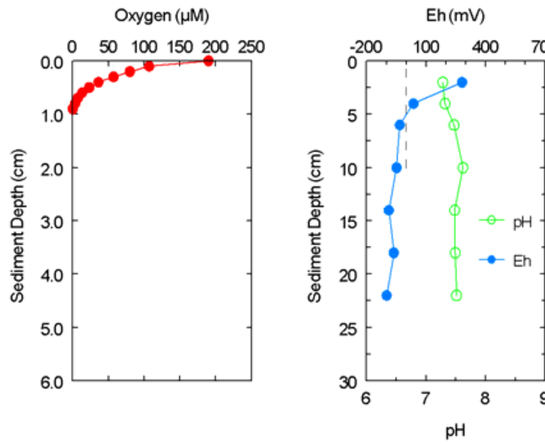
MMS Deep Gulf of Mexico Cruise 2: MC292 FF4-B02



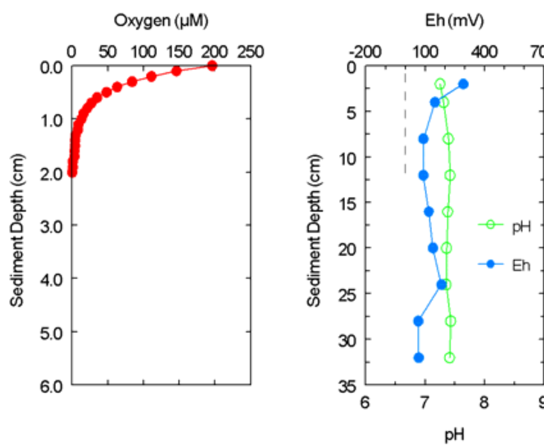
MMS Deep Gulf of Mexico Cruise 2: MC292 FF5-B01



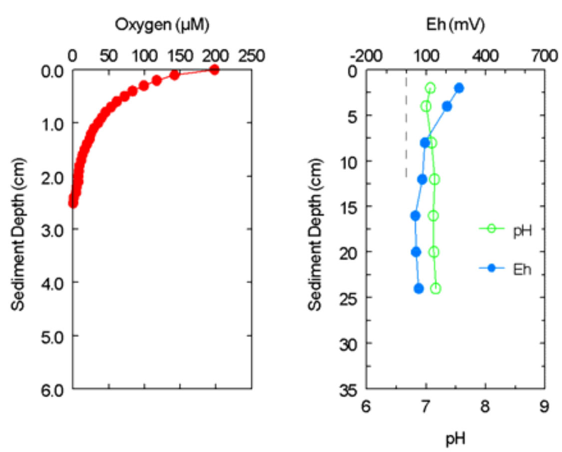
MMS Deep Gulf of Mexico Cruise 2: MC292 FF5-B02



MMS Deep Gulf of Mexico Cruise 2: MC292 FF6-B01



MMS Deep Gulf of Mexico Cruise 2: MC292 FF6-B02



REFERENCES

Salomons, W. and U. Förstner. 1984. Metals in the Hydrocycle. Springer-Verlag, Berlin. 349 pp.

Wedepohl, K.H. 1995. The composition of the continental crust. Geochim. Cosmochim. Acta 59:1,217-1,232.

APPENDIX G3

Cruise 3B Data for Sediment Metals, Total Organic Carbon, and Redox Conditions

Table G3-1. Trace metal and total organic carbon concentrations in sediment samples (dry weight) with average marine sediment (Salomons and Förstner, 1984) and continental crust (Wedepohl, 1995) provided for comparison.

Sample Identification	Al (%)	As (µg/g)	Ba (µg/g)	Cd (µg/g)	Cr (µg/g)	Cu (µg/g)	Fe (%)	Hg (µg/g)	Mn (µg/g)	Ni (µg/g)	Pb (µg/g)	V (µg/g)	Zn (µg/g)	TOC (%)	Comments
VK916 NF-B01	4.75	19.9	171000	0.32	62.7	48.0	2.42	0.071	6880	29.2	27.8	87.6	142	2.76	
VK916 NF-B02 #1	7.05	14.2	1990	0.23	75.3	25.7	3.37	0.078	9670	42.7	27.8	125	106	1.68	Lab Duplicate
VK916 NF-B02 #2	7.03	14.0	2030	0.23	74.4	26.0	3.33	0.076	9620	42.1	28.0	127	107	1.65	Lab Duplicate
VK916 NF-B03	7.16	14.2	3350	0.20	71.6	25.8	3.28	0.073	7850	41.4	28.6	130	105	1.59	
VK916 NF-B04	6.97	14.4	4300	0.22	77.9	26.3	3.18	0.084	9030	41.0	27.8	125	99.6	1.45	
VK916 NF-B05	7.22	11.6	36600	0.32	75.4	29.7	3.13	0.075	1400	31.7	27.4	112	104	2.22	
VK916 NF-B06	6.73	11.3	86800	0.27	67.2	32.6	2.78	0.089	1180	25.7	34.4	96.2	99.0	3.43	
VK916 NF-B07	5.65	12.5	81500	0.27	62.9	39.1	2.63	0.153	1040	23.2	36.9	89.8	87.6	3.45	
VK916 NF-B08	7.27	15.2	9420	0.21	78.4	28.0	3.35	0.085	9770	41.6	31.9	129	104	1.39	
VK916 NF-B09	7.44	12.6	2150	0.14	80.2	27.3	3.49	0.072	4610	40.1	26.5	130	108	1.50	
VK916 NF-B10	7.69	15.4	1050	0.14	78.8	27.3	3.68	0.085	7480	43.6	28.9	129	109	1.56	
VK916 NF-B11	7.00	14.4	1070	0.17	79.4	27.1	3.52	0.073	10400	42.5	26.3	129	108	1.53	
VK916 NF-B12	6.92	10.1	30500	0.24	75.2	34.8	3.09	0.145	7910	37.8	33.6	90.6	102	1.68	
VK916 FF1-B01	7.62	14.8	1040	0.15	81.5	28.0	3.57	0.080	9210	42.5	27.0	133	116	1.67	
VK916 FF1-B02	7.72	13.0	811	0.21	83.2	28.7	3.60	0.087	4830	41.5	27.4	137	111	1.44	
VK916 FF2-B01 #1	7.23	12.8	1390	0.19	76.2	26.1	3.49	0.076	6780	37.7	25.9	127	108	1.63	Lab Duplicate
VK916 FF2-B01 #2	7.26	13.0	1390	0.19	76.0	26.2	3.44	0.077	6760	37.9	25.5	127	108	1.61	Lab Duplicate
VK916 FF2-B02	5.93	14.0	1240	0.15	70.3	24.4	3.34	0.069	6570	36.1	22.4	118	102	1.52	
VK916 FF3-B01	7.41	13.4	954	0.19	75.8	26.9	3.43	0.080	9050	42.1	26.3	127	110	1.37	
VK916 FF3-B02	6.80	14.5	1090	0.17	76.2	26.4	3.45	0.086	12000	42.7	26.8	117	106	1.73	
VK916 FF4-B01	7.62	12.5	880	0.19	76.9	26.5	3.48	0.071	6530	41.2	26.0	125	109	1.42	
VK916 FF4-B02	7.01	12.1	881	0.18	75.0	26.7	3.36	0.087	7120	39.3	25.5	123	104	1.48	
VK916 FF5-B01	7.20	11.9	828	0.14	74.1	26.2	3.28	0.077	5830	37.7	24.2	115	103	1.48	
VK916 FF5-B02	6.29	11.3	804	0.17	75.0	25.6	3.27	0.064	5250	37.5	24.6	115	101	1.65	
VK916 FF6-B01	7.66	8.9	693	0.17	76.4	26.8	3.37	0.069	2070	38.9	25.0	127	106	1.67	
VK916 FF6-B02	6.76	10.0	674	0.17	75.1	26.4	3.35	0.074	5890	39.1	24.1	128	109	1.35	
Average Marine Sediment	7.2	7.7	460	0.17	72	33	4.1	0.19	770	52	19	105	95	-	
Continental Crust	7.96	1.7	584	0.1	126	25	4.32	0.04	716	56	14.8	98	65	-	

Table G3-1. Continued.

Sample Identification	Al (%)	As (µg/g)	Ba (µg/g)	Cd (µg/g)	Cr (µg/g)	Cu (µg/g)	Fe (%)	Hg (µg/g)	Mn (µg/g)	Ni (µg/g)	Pb (µg/g)	V (µg/g)	Zn (µg/g)	TOC (%)	Comments
VK916 DISC-1 0-2 cm	7.16	9.6	33100	0.21	74.9	31.1	3.20	0.082	5270	35.8	20.6	126	105	2.18	
VK916 DISC-1 2-4 cm	7.47	15.2	1110	0.15	79.4	27.1	3.58	0.076	6910	41.7	26.9	132	111	1.44	
VK916 DISC-1 4-6 cm	7.98	11.2	726	0.17	84.4	28.3	3.84	0.080	1270	40.4	26.5	143	116	1.42	
VK916 DISC-1 6-8 cm	8.42	9.3	632	0.28	87.8	29.8	3.77	0.077	867	40.9	24.9	155	118	1.24	
VK916 DISC-1 8-10 cm	8.13	7.2	462	0.29	88.0	29.1	3.62	0.053	690	39.3	20.3	151	115	1.25	
VK916 DISC-2 0-2 cm	7.25	14.1	66200	0.28	74.0	32.8	3.26	0.107	1560	26.7	26.2	111	99.8	2.72	
VK916 DISC-2 2-4 cm	7.41	14.2	7530	0.16	77.6	29.3	3.54	0.071	8260	39.8	30.3	132	111	1.98	
VK916 DISC-2 4-6 cm	8.25	12.2	788	0.18	81.6	28.6	3.90	0.076	3020	41.0	26.4	145	117	1.38	
VK916 DISC-2 6-8 cm	8.43	9.3	630	0.26	81.4	29.5	3.75	0.076	1160	41.9	25.6	149	119	1.47	
VK916 DISC-2 8-10 cm	8.31	9.0	507	0.30	82.9	29.0	3.74	0.067	1120	41.6	23.5	150	118	1.35	
VK916 DISC-3 0-2 cm	6.41	12.6	73000	0.28	61.2	36.6	2.91	0.123	2460	28.5	20.9	107	103	3.07	
VK916 DISC-3 2-4 cm	7.62	15.5	2420	0.16	75.1	28.0	3.51	0.084	12100	43.4	28.7	133	112	1.66	
VK916 DISC-3 4-6 cm	8.09	12.6	968	0.15	79.7	28.3	3.78	0.083	2600	41.6	27.4	136	114	1.46	
VK916 DISC-3 6-8 cm	8.35	8.7	614	0.27	83.6	28.8	3.81	0.079	1260	42.2	25.5	149	114	1.23	
VK916 DISC-3 8-10 cm	8.44	7.7	547	0.28	88.2	28.8	3.79	0.065	1130	42.6	22.6	149	116	1.34	
Average Marine Sediment	7.2	7.7	460	0.17	72	33	4.1	0.19	770	52	19	105	95	-	
Continental Crust	7.96	1.7	584	0.1	126	25	4.32	0.04	716	56	14.8	98	65	-	

Table G3-2. Statistics for trace metal concentrations and total organic carbon (TOC) content in sediment samples (dry weight). Lab duplicates have been averaged prior to statistical analysis.

Sample Identification	Al (%)	As (µg/g)	Ba (µg/g)	Cd (µg/g)	Cr (µg/g)	Cu (µg/g)	Fe (%)	Hg (µg/g)	Mn (µg/g)	Ni (µg/g)	Pb (µg/g)	V (µg/g)	Zn (µg/g)	TOC (%)
VK916 NF														
Mean	6.82	13.8	35900	0.23	73.6	31.0	3.15	0.090	6360	36.6	29.9	115	106	2.02
Std. Dev.	0.82	2.5	52600	0.06	6.3	6.7	0.38	0.028	3500	7.2	3.5	18.1	12.7	0.77
n =	12	12	12	12	12	12	12	12	12	12	12	12	12	12
Maximum	7.69	19.9	171000	0.32	80.2	48.0	3.68	0.153	10400	43.6	36.9	130	142	3.45
Minimum	4.75	10.1	1050	0.14	62.7	25.8	2.42	0.071	1040	23.2	26.3	87.6	87.6	1.39
VK916 FF														
Mean	7.11	12.4	940	0.17	76.3	26.6	3.41	0.077	6760	39.7	25.4	124	107	1.53
Std. Dev.	0.57	1.8	216	0.02	3.3	1.1	0.10	0.008	2500	2.2	1.4	7.0	4.3	0.13
n =	12	12	12	12	12	12	12	12	12	12	12	12	12	12
Maximum	7.72	14.8	1390	0.21	83.2	28.7	3.60	0.087	12000	42.7	27.4	137	116	1.73
Minimum	5.93	8.9	674	0.14	70.3	24.4	3.27	0.064	2070	36.1	22.4	115	101	1.35

Table G3-3. Quality assurance and quality control data for sediment metal analyses.

Results for the sediment Certified Reference Material (CRM) MESS-2 certified by the National Research Council of Canada (NRC) and the Standard Reference Material (SRM) Trace Elements in Water #1643d certified by the National Institute of Standards and Technology (NIST).

Reference Material	Al (%)	As (µg/g)	Ba (µg/g)	Cd (µg/g)	Cr (µg/g)	Cu (µg/g)	Fe (%)	Hg (µg/g)	Mn (µg/g)	Ni (µg/g)	Pb (µg/g)	V (µg/g)	Zn (µg/g)	TOC (%)
CRM MESS-2	8.65	20.9	989	0.24	110	41.2	4.23	0.099	363	48.6	20.9	243	159	2.02
This Study	8.74	21.0	1060	0.25	111	40.1	4.42	0.091	379	47.6	21.2	244	165	-
	-	-	1000	-	-	-	-	-	-	-	-	-	-	-
	-	-	1020	-	-	-	-	-	-	-	-	-	-	-
CRM MESS-2	8.57	20.7	-	0.24	106	39.3	4.35	0.092	365	49.3	21.9	252	172	2.14*
NRC Certified Values	± 0.26	± 0.8	-	± 0.01	± 8	± 2.0	± 0.22	± 0.009	± 21	± 1.8	± 1.2	± 10	± 16	± 0.13
	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)
SRM #1643d	-	-	504.0	-	-	-	-	-	-	-	-	-	-	-
This Study	-	-	511.3	-	-	-	-	-	-	-	-	-	-	-
SRM #1643d	127.6	56.02	506.5	6.47	18.53	20.5	91.2	-	37.66	58.1	18.15	35.1	72.48	-
NIST Certified Values	± 3.5	± 0.73	± 8.9	± 0.37	± 0.20	± 3.8	± 3.9	-	± 0.83	± 2.7	± 0.64	± 1.4	± 0.65	-

*Certified value is for Total Carbon (Organic + Inorganic).

Method Detection Limits (MDLs).

	Al (%)	As (µg/g)	Ba (µg/g)	Cd (µg/g)	Cr (µg/g)	Cu (µg/g)	Fe (%)	Hg (µg/g)	Mn (µg/g)	Ni (µg/g)	Pb (µg/g)	V (µg/g)	Zn (µg/g)	TOC (%)
Sediment MDL	0.01	0.2	2.0	0.01	3.0	3.0	0.01	0.001	2.5	2.5	0.02	4.5	0.4	0.06

Percent Spike Recovery. Mean and Standard Deviation.

	Al	As	Ba	Cd	Cr	Cu	Fe	Hg**	Mn	Ni	Pb	V**	Zn	TOC
Mean	98.1	99.8	99.9	97.7	103.5	98.8	97.9	87.5	97.9	97.8	96.5	118.9	96.5	-
Standard Deviation	3.1	0.3	5.8	0.1	0.1	2.5	1.2	13.1	1.5	0.8	1.1	0.6	0.8	-
(n =)	2	2	4	2	2	2	2	8	2	2	2	2	2	-

**Final concentrations are corrected for percent spike recovery.

Estimate of Precision as Percent Relative Standard Deviation (RSD) of Lab Duplicates.

	Al	As	Ba	Cd	Cr	Cu	Fe	Hg	Mn	Ni	Pb	V	Zn	TOC
VK916 NF-B02	0.2	1.0	1.4	0.0	0.9	0.8	0.8	1.8	3.7	1.0	0.5	1.1	0.7	1.3
VK916 FF2-B01	0.3	1.1	0.0	0.0	0.2	0.3	1.0	0.9	0.2	0.4	1.1	0.0	0.0	0.9

Percent RSD = (standard deviation / mean) X 100.

MMS Deep Gulf of Mexico Cruise 3B (August 2002)

Site: Viosca Knoll 916 Discretionary 1 (VK916 DISC-B01)

Depth (cm)	Oxygen (%)	Oxygen (µM)	Depth (cm)	Temperature (C)	Eh (mV)
Bottom Water	8.2	114	1	7.9	-65
0.1	6.6	92	3		-91
0.2	6.6	92	5		-92
0.3	5.2	72	7		-60
0.4	4.5	63	9		-16
0.5	0.0	0	13		-94
			17		14
			21		-4

Oxygen Calibration: 0 and 20.9%

Eh Calibration: oxidation/reduction potential (ORP) Standard = 418.7 mV at 23.3^{o}C

Oxygen µM Calculation Assumes Chlorinity of 20 and Avg. Temp of 8^{o}C

MMS Deep Gulf of Mexico Cruise 3B (August 2002)

Site: Viosca Knoll 916 Discretionary 2 (VK916 DISC-B02)

Depth (cm)	Oxygen (%)	Oxygen (μM)	Depth (cm)	Temperature (C)	Eh (mV)
Bottom Water	10.2	139	1	9.2	31
0.1	0.0	0	3		79
			5		98
			7		87
			9		107
			11		75
			13		66
			17		78
			21		73

Oxygen Calibration: 0 and 20.9%
Eh Calibration: ORP Standard = 418.4 mV at 22.5°C

Oxygen μM Calculation Assumes Chlorinity of 20 and Avg. Temp of 9°C

MMS Deep Gulf of Mexico Cruise 3B (August 2002)

Site: Viosca Knoll 916 Discretionary 3 (VK916 DISC-B03)

Depth (cm)	Oxygen (%)	Oxygen (μM)	Depth (cm)	Temperature (C)	Eh (mV)
Bottom Water	-	-	1	7.5	-54
0.1	0.2	3	3		138
0.2	0.1	1	5		153
0.3	0.0	0	7		87
			9		87
			11		88
			15		104
			19		72
			23		50

Oxygen Calibration: 0 and 20.9%
Eh Calibration: ORP Standard = 418.5 mV at 23.5°C

Oxygen μM Calculation Assumes Chlorinity of 20 and Avg. Temp of 7°C

MMS Deep Gulf of Mexico Cruise 3B (August 2002)

Site: Viosca Knoll 916 Near-Field 1 (VK916 NF-B01)

Depth (cm)	Oxygen (%)	Oxygen (µM)	Depth (cm)	Temperature (C)	Eh (mV)
Bottom Water	9.5	132	1	7.8	513
0.1	4.8	67	3		495
0.2	1.2	17	5		191
0.3	0.0	0	7		215
			9		115
			11		104
			13		87
			15		134
			17		85
			19		82
			23		96
			27		97

Oxygen Calibration: 0 and 20.9%

Eh Calibration: ORP Standard = 421.5 mV at 20.9^{o}C

Oxygen µM Calculation Assumes Chlorinity of 20 and Avg. Temp of 8^{o}C

MMS Deep Gulf of Mexico Cruise 3B (August 2002)

Site: Viosca Knoll 916 Near-Field 2 (VK916 NF-B02)

Depth (cm)	Oxygen (%)	Oxygen (μM)	Depth (cm)	Temperature (C)	Eh (mV)
Bottom Water	12.9	176	3	8.8	543
0.1	11.2	153	5		526
0.2	10.1	138	7		495
0.3	9.6	131	9		428
0.4	8.2	112	11		230
0.5	7.1	97	13		181
0.6	5.4	74	15		228
0.7	4.5	61	17		126
0.8	3.9	53	19		140
0.9	3.1	42	23		163
1.0	2.4	33	27		107
1.1	2.2	30			
1.2	2.0	27			
1.3	1.8	25			
1.4	1.6	22			
1.5	1.4	19			
1.6	1.2	16			
1.7	1.1	15			
1.8	0.9	12			
1.9	0.8	11			
2.0	0.7	10			
2.1	0.6	8			
2.2	0.5	7			
2.3	0.4	5			
2.4	0.3	4			
2.5	0.3	4			
2.6	0.2	3			
2.7	0.2	3			
2.8	0.1	1			
2.9	0.1	1			
3.0	0.0	0			

Oxygen Calibration: 0 and 20.9%
Eh Calibration: ORP Standard = 421.0 mV at 22.7^{o}C

Oxygen μM Calculation Assumes Chlorinity of 20 and Avg. Temp of 9^{o}C

MMS Deep Gulf of Mexico Cruise 3B (August 2002)

Site: Viosca Knoll 916 Near-Field 4 (VK916 NF-B04)

Depth (cm)	Oxygen (%)	Oxygen (μM)	Depth (cm)	Temperature (C)	Eh (mV)
Bottom Water	12.0	163	1	8.7	529
0.1	11.2	153	3		512
0.2	10.2	139	5		161
0.3	8.6	117	7		141
0.4	8.1	110	9		123
0.5	7.6	104	11		125
0.6	7.3	99	13		113
0.7	6.9	94	17		103
0.8	6.6	90	21		124
0.9	6.2	84			
1.0	5.9	80			
1.1	5.5	75			
1.2	5.2	71			
1.3	5.0	68			
1.4	4.8	65			
1.5	4.7	64			
1.6	4.6	63			
1.7	4.5	61			
1.8	4.4	60			
1.9	4.3	59		Oxygen profile stopped	
2.0	4.2	57		due to hard clay.	
2.1	4.1	56			
2.2	4.0	54			
2.3	3.9	53			
2.4	3.7	50			
2.5	3.4	46			
2.6	3.1	42			
2.7	2.7	37			
2.8	2.4	33			
2.9	1.9	26			

Oxygen Calibration: 0 and 20.9%
Eh Calibration: ORP Standard = 420.5 mV at 22.6^{o}C

Oxygen μM Calculation Assumes Chlorinity of 20 and Avg. Temp of 9^{o}C

MMS Deep Gulf of Mexico Cruise 3B (August 2002)

Site: Viosca Knoll 916 Near-Field 5 (VK916 NF-B05)

Depth (cm)	Oxygen (%)	Oxygen (µM)	Depth (cm)	Temperature (C)	Eh (mV)
Bottom Water	11.6	158	3	8.8	477
0.1	9.2	125	5		235
0.2	0.2	3	7		154
0.3	0.0	0	9		106
			11		106
			13		86
			17		76
			21		72
			25		84

Oxygen Calibration: 0 and 20.9%
Eh Calibration: ORP Standard = 419.4 mV at 21.9^{o}C

Oxygen µM Calculation Assumes Chlorinity of 20 and Avg. Temp of 9^{o}C

MMS Deep Gulf of Mexico Cruise 3B (August 2002)

Site: Viosca Knoll 916 Near-Field 6 (VK916 NF-B06)

Depth (cm)	Oxygen (%)	Oxygen (μM)	Depth (cm)	Temperature (C)	Eh (mV)
Bottom Water	2.8	41	1	13.7	-12
0.1	0.2	3	3		47
0.2	0.0	0	5		106
			7		88
			9		82
			13		83
			17		70
			21		80
			24		68
			28		86

Oxygen Calibration: 0 and 20.9%

Eh Calibration: ORP Standard = 419.9 mV at 22.5^{o}C

Oxygen μM Calculation Assumes Chlorinity of 20 and Avg. Temp of 14^{o}C

MMS Deep Gulf of Mexico Cruise 3B (August 2002)

Site: Viosca Knoll 916 Near-Field 7 (VK916 NF-B07)

Depth (cm)	Oxygen (%)	Oxygen (µM)	Depth (cm)	Temperature (C)	Eh (mV)
Bottom Water	3.0	41	2	9.5	-79
0.1	0.1	1	4		2
0.2	0.0	0	6		-72
			8		58
			10		66
			12		56
			14		28
			16		61
			20		74
			24		88
			28		78

Oxygen Calibration: 0 and 20.9%

Eh Calibration: ORP Standard = 419.3 mV at 22.5^{o}C

Oxygen µM Calculation Assumes Chlorinity of 20 and Avg. Temp of 9^{o}C

MMS Deep Gulf of Mexico Cruise 3B (August 2002)

Site: Viosca Knoll 916 Near-Field 8 (VK916 NF-B08)

Depth (cm)	Oxygen (%)	Oxygen (µM)	Depth (cm)	Temperature (C)	Eh (mV)
Bottom Water	12.7	177	2	7.6	510
0.1	8.5	118	4		499
0.2	7.8	109	6		161
0.3	5.5	77	8		127
0.4	2.8	39	10		147
0.5	1.9	26	14		122
0.6	1.1	15	18		115
0.7	0.6	8	22		114
0.8	0.4	6	26		132
0.9	0.2	3	30		105
1.0	0.1	1			
1.1	0.1	1			
1.2	0.0	0			

Oxygen Calibration: 0 and 20.9%

Eh Calibration: ORP Standard = 420.3 mV at 22.2^{o}C

Oxygen µM Calculation Assumes Chlorinity of 20 and Avg. Temp of 8^{o}C

MMS Deep Gulf of Mexico Cruise 3B (August 2002)

Site: Viosca Knoll 916 Near-Field 9 (VK916 NF-B09)

Depth (cm)	Oxygen (%)	Oxygen (µM)	Depth (cm)	Temperature (C)	Eh (mV)
Bottom Water	11.3	157	3	8.4	524
0.1	4.3	60	5		260
0.2	0.0	0	7		165
			9		125
			15		100
			21		145
			29		115

Oxygen Calibration: 0 and 20.9%
Eh Calibration: ORP Standard = 419.0 mV at 23.2^{o}C

Oxygen µM Calculation Assumes Chlorinity of 20 and Avg. Temp of 8^{o}C

MMS Deep Gulf of Mexico Cruise 3B (August 2002)

Site: Viosca Knoll 916 Near-Field 10 (VK916 NF-B10)

Depth (cm)	Oxygen (%)	Oxygen (µM)	Depth (cm)	Temperature (C)	Eh (mV)
Bottom Water	10.6	148	2	8.2	131
0.1	8.5	118	4		192
0.2	3.5	49	6		171
0.3	1.3	18	8		154
0.4	0.4	6	10		118
0.5	0.0	0	12		123
			16		105
			20		137

Oxygen Calibration: 0 and 20.9%

Eh Calibration: ORP Standard = 418.2 mV at 23.5^{o}C

Oxygen µM Calculation Assumes Chlorinity of 20 and Avg. Temp of 8^{o}C

MMS Deep Gulf of Mexico Cruise 3B (August 2002)

Site: Viosca Knoll 916 Near-Field 12 (VK916 NF-B12)

Depth (cm)	Oxygen (%)	Oxygen (µM)	Depth (cm)	Temperature (C)	Eh (mV)
Bottom Water	11.7	159	1	9.4	524
0.1	9.0	123	3		252
0.2	5.5	75	5		153
0.3	3.8	52	7		93
0.4	2.1	29	9		84
0.5	1.0	14	13		69
0.6	0.3	4	17		56
0.7	0.0	0			

Oxygen Calibration: 0 and 20.9%

Eh Calibration: ORP Standard = 418.2 mV at 23.5^{o}C

Oxygen µM Calculation Assumes Chlorinity of 20 and Avg. Temp of 9^{o}C

MMS Deep Gulf of Mexico Cruise 3B (August 2002)

Site: Viosca Knoll 916 Far-Field 1, Box Core 1 (VK916 FF1-B01)

Depth (cm)	Oxygen (%)	Oxygen (μM)	Depth (cm)	Temperature (C)	Eh (mV)
Bottom Water	12.8	174	2	9.0	492
0.1	10.8	147	4		224
0.2	10.1	138	6		130
0.3	9.6	131	8		111
0.4	9.1	124	10		91
0.5	8.7	118	12		92
0.6	8.3	113	16		108
0.7	7.8	106	20		93
0.8	7.4	101	24		168
0.9	6.9	94			
1.0	6.4	87			
1.1	5.4	74			
1.2	4.9	67			
1.3	4.3	59			
1.4	3.8	52			
1.5	3.4	46			
1.6	3.0	41			
1.7	2.4	33			
1.8	2.1	29			
1.9	1.7	23			
2.0	1.1	15			
2.1	0.7	10			
2.2	0.5	7			
2.3	0.4	5			
2.4	0.2	3			
2.5	0.1	1			
2.6	0.0	0			

Oxygen Calibration: 0 and 20.9%

Eh Calibration: ORP Standard = 419.5 mV at 22.2^{o}C

Oxygen μM Calculation Assumes Chlorinity of 20 and Avg. Temp of 9^{o}C

MMS Deep Gulf of Mexico Cruise 3B (August 2002)

Site: Viosca Knoll 916 Far-Field 2, Box Core 1 (VK916 FF2-B01)

Depth (cm)	Oxygen (%)	Oxygen (µM)	Depth (cm)	Temperature (C)	Eh (mV)
Bottom Water	13.2	180	2	9.2	491
0.1	11.4	155	4		483
0.2	9.0	123	6		433
0.3	7.9	108	8		291
0.4	7.3	99	10		195
0.5	6.8	93	12		166
0.6	6.4	87	14		195
0.7	6.0	82	16		150
0.8	5.5	75	18		114
0.9	5.0	68	20		126
1.0	3.9	53	22		147
1.1	3.2	44	26		127
1.2	2.7	37			
1.3	2.3	31			
1.4	2.0	27			
1.5	1.9	26			
1.6	1.7	23			
1.7	1.6	22			
1.8	1.5	20			
1.9	1.4	19			
2.0	1.2	16			
2.1	1.1	15			
2.2	1.0	14			
2.3	0.8	11			
2.4	0.7	10			
2.5	0.6	8			
2.6	0.5	7			
2.7	0.4	5			
2.8	0.3	4			
2.9	0.2	3			
3.0	0.1	1			
3.1	0.0	0			

Oxygen Calibration: 0 and 20.9%
Eh Calibration: ORP Standard = 421.8 mV at 22.9^{o}C

Oxygen µM Calculation Assumes Chlorinity of 20 and Avg. Temp of 9^{o}C

MMS Deep Gulf of Mexico Cruise 3B (August 2002)

Site: Viosca Knoll 916 Far-Field 2, Box Core 2 (VK916 FF2-B02)

Depth (cm)	Oxygen (%)	Oxygen (µM)	Depth (cm)	Temperature (C)	Eh (mV)
Bottom Water	13.0	173	2	9.8	514
0.1	8.1	108	4		504
0.2	5.4	72	6		161
0.3	4.0	53	8		184
0.4	3.5	47	10		119
0.5	3.1	41	12		124
0.6	2.7	36	14		118
0.7	2.3	31	18		107
0.8	1.9	25	22		99
0.9	1.6	21	26		111
1.0	1.4	19			
1.1	1.2	16			
1.2	1.0	13			
1.3	0.9	12		Oxygen profile stopped	
1.4	0.8	11		due to stiff clay.	
1.5	0.7	9			
1.6	0.6	8			
1.7	0.5	7			
1.8	0.4	5			
1.9	0.4	5			
2.0	0.3	4			

Oxygen Calibration: 0 and 20.9%

Eh Calibration: ORP Standard = 422.0 mV at 23.0^{o}C

Oxygen µM Calculation Assumes Chlorinity of 20 and Avg. Temp of 10^{o}C

MMS Deep Gulf of Mexico Cruise 3B (August 2002)

Site: Viosca Knoll 916 Far-Field 3, Box Core 2 (VK916 FF3-B02)

Depth (cm)	Oxygen (%)	Oxygen (μM)	Depth (cm)	Temperature (C)	Eh (mV)
Bottom Water	11.9	158	1	9.8	512
0.1	11.4	152	3		506
0.2	9.1	121	5		446
0.3	7.7	103	7		183
0.4	7.4	99	9		120
0.5	7.1	95	11		117
0.6	6.6	88	15		92
0.7	5.7	76	19		98
0.8	4.8	64			
0.9	4.0	53			
1.0	2.2	29			
1.1	1.3	17			
1.2	1.0	13			
1.3	0.7	9			
1.4	0.4	5			
1.5	0.2	3			
1.6	0.0	0			

Oxygen Calibration: 0 and 20.9%
Eh Calibration: ORP Standard = 417.9 mV at 22.7^{o}C

Oxygen μM Calculation Assumes Chlorinity of 20 and Avg. Temp of 10^{o}C

MMS Deep Gulf of Mexico Cruise 3B (August 2002)

Site: Viosca Knoll 916 Far-Field 4, Box Core 1 (VK916 FF4-B01)

Depth (cm)	Oxygen (%)	Oxygen (μM)	Depth (cm)	Temperature (C)	Eh (mV)
Bottom Water	11.8	151	1	11.6	488
0.1	11.5	147	3		328
0.2	9.4	120	5		324
0.3	8.0	102	7		149
0.4	7.5	96	9		119
0.5	7.1	91	11		117
0.6	6.7	86	15		115
0.7	6.3	81	19		101
0.8	5.9	75			
0.9	5.6	72			
1.0	5.4	69			
1.1	5.1	65			
1.2	4.9	63			
1.3	4.8	61			
1.4	4.7	60			
1.5	4.6	59			
1.6	4.6	59			
1.7	4.5	58			
1.8	4.5	58			
1.9	4.4	56			
2.0	4.4	56			
2.1	4.3	55			
2.2	4.2	54			
2.3	4.1	52			
2.4	3.9	50			
2.5	2.6	33			
2.6	1.2	15			
2.7	0.7	9			
2.8	0.5	6			
2.9	0.3	4			
3.0	0.2	3			
3.1	0.1	1			
3.2	0.0	0			

Oxygen Calibration: 0 and 20.9%
Eh Calibration: ORP Standard = 418.0 mV at 23.2^{o}C

Oxygen μM Calculation Assumes Chlorinity of 20 and Avg. Temp of 12^{o}C

MMS Deep Gulf of Mexico Cruise 3B (August 2002)

Site: Viosca Knoll 916 Far-Field 5, Box Core 2 (VK916 FF5-B02)

Depth (cm)	Oxygen (%)	Oxygen (µM)	Depth (cm)	Temperature (C)	Eh (mV)
Bottom Water	9.4	128	1	9.4	218
0.1	3.2	44	3		164
0.2	1.2	16	5		149
0.3	0.6	8	7		139
0.4	0.1	1	9		115
0.5	0.0	0	11		112
			15		123
			19		120

Oxygen Calibration: 0 and 20.9%
Eh Calibration: ORP Standard = 419.6 mV at 23.6^{o}C

Oxygen µM Calculation Assumes Chlorinity of 20 and Avg. Temp of 9^{o}C

MMS Deep Gulf of Mexico Cruise 3B (August 2002)

Site: Viosca Knoll 916 Far-Field 6, Box Core 1 (VK916 FF6-B01)

Depth (cm)	Oxygen (%)	Oxygen (µM)	Depth (cm)	Temperature (C)	Eh (mV)
Bottom Water	9.2	125	1	9.5	240
0.1	0.0	0	3		124
			5		107
			7		101
			9		98
			13		106

Oxygen Calibration: 0 and 20.9%

Eh Calibration: ORP Standard = 418.6 mV at 22.5^{o}C

Oxygen µM Calculation Assumes Chlorinity of 20 and Avg. Temp of 9^{o}C

MMS Deep Gulf of Mexico Cruise 3B (August 2002)

Site: Viosca Knoll 916 Far-Field 6, Box Core 2 (VK916 FF6-B02)

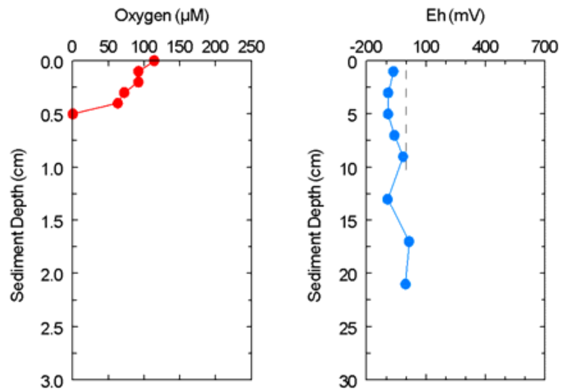
Depth (cm)	Oxygen (%)	Oxygen (µM)	Depth (cm)	Temperature (C)	Eh (mV)
Bottom Water	11.1	148	2	9.6	491
0.1	6.6	88	4		326
0.2	4.9	65	6		171
0.3	3.8	51	8		119
0.4	3.3	44	10		115
0.5	2.7	36	14		106
0.6	2.0	27	18		100
0.7	1.5	20	22		112
0.8	1.1	15			
0.9	0.9	12			
1.0	0.8	11			
1.1	0.6	8			
1.2	0.5	7			
1.3	0.4	5			
1.4	0.4	5			
1.5	0.3	4			
1.6	0.2	3			
1.7	0.1	1			
1.8	0.0	0			

Oxygen Calibration: 0 and 20.9%

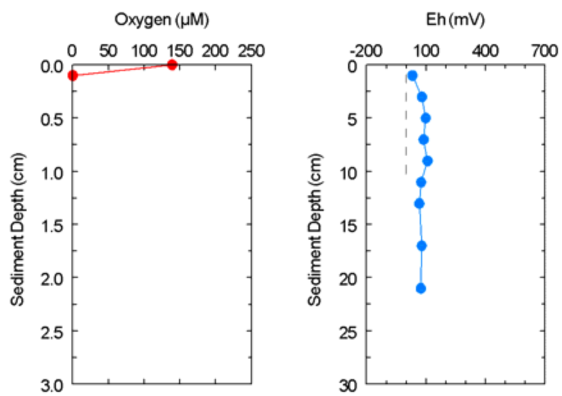
Eh Calibration: ORP Standard = 419.5 mV at 23.3^{o}C

Oxygen µM Calculation Assumes Chlorinity of 20 and Avg. Temp of 10^{o}C

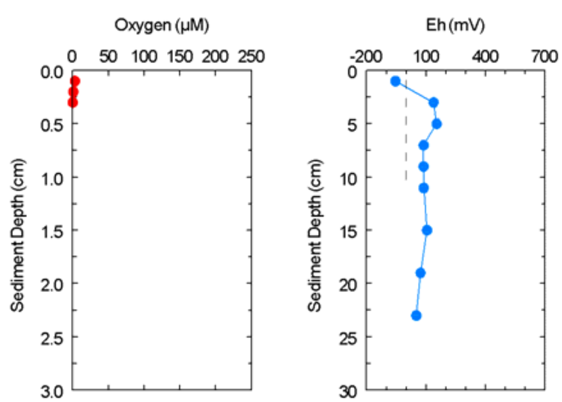
MMS Deep Gulf of Mexico Cruise 3B: VK916 DISC-B01



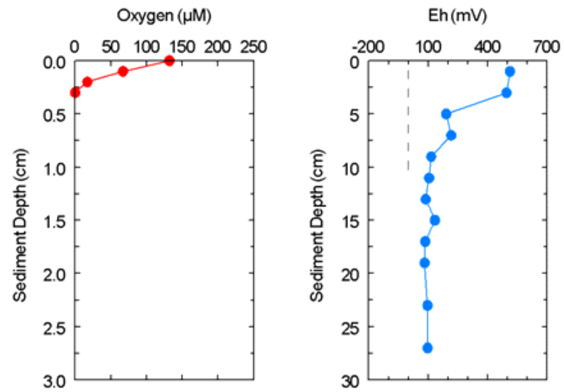
MMS Deep Gulf of Mexico Cruise 3B: VK916 DISC-B02



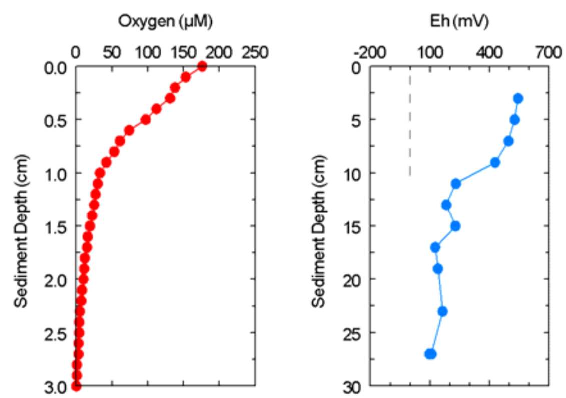
MMS Deep Gulf of Mexico Cruise 3B: VK916 DISC-B03



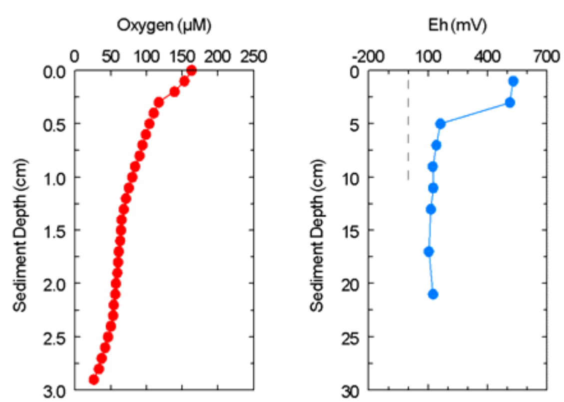
MMS Deep Gulf of Mexico Cruise 3B: VK916 NF-B01



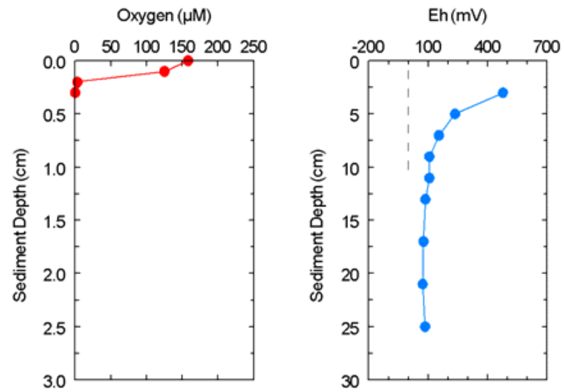
MMS Deep Gulf of Mexico Cruise 3B: VK916 NF-B02



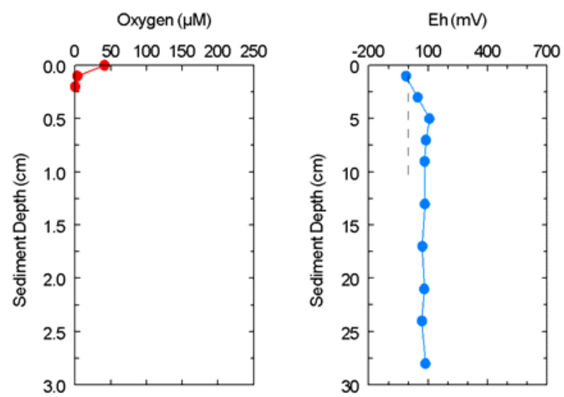
MMS Deep Gulf of Mexico Cruise 3B: VK916 NF-B04



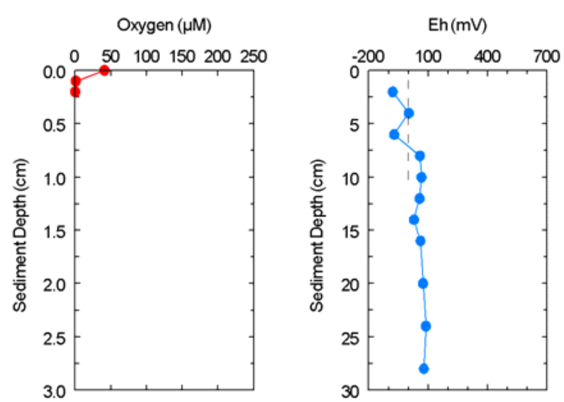
MMS Deep Gulf of Mexico Cruise 3B: VK916 NF-B05



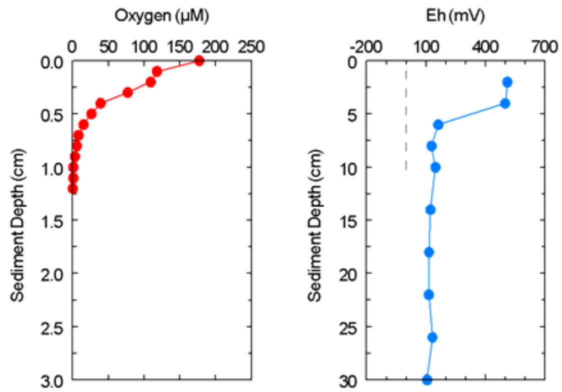
MMS Deep Gulf of Mexico Cruise 3B: VK916 NF-B06



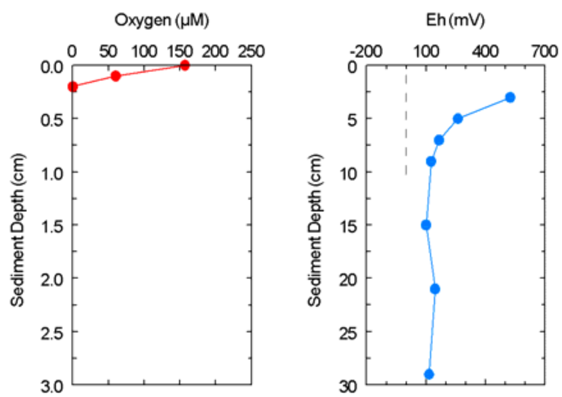
MMS Deep Gulf of Mexico Cruise 3B: VK916 NF-B07



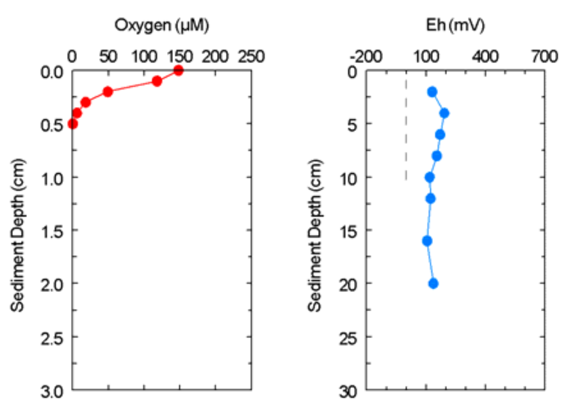
MMS Deep Gulf of Mexico Cruise 3B: VK916 NF-B08



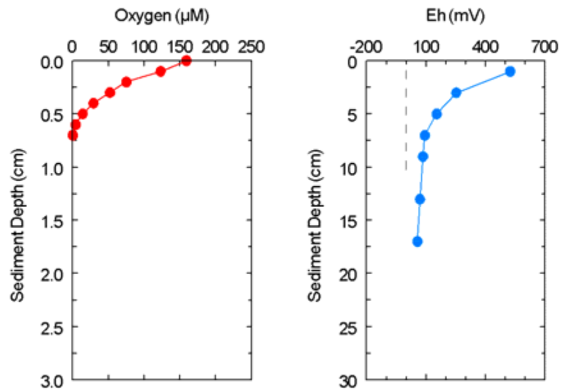
MMS Deep Gulf of Mexico Cruise 3B: VK916 NF-B09



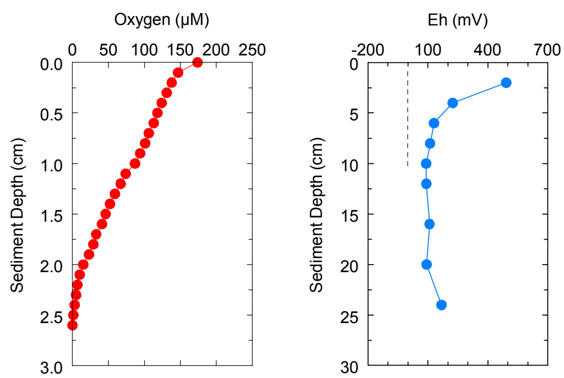
MMS Deep Gulf of Mexico Cruise 3B: VK916 NF-B10



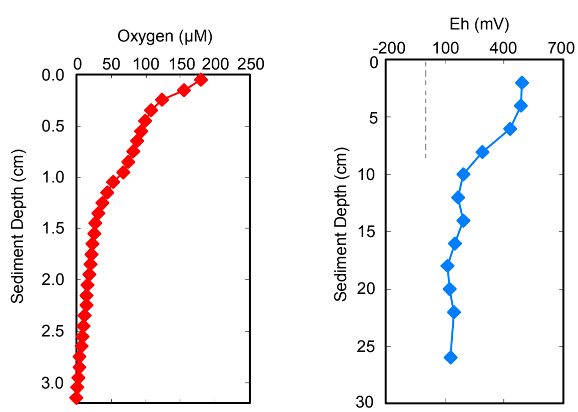
MMS Deep Gulf of Mexico Cruise 3B: VK916 NF-B12



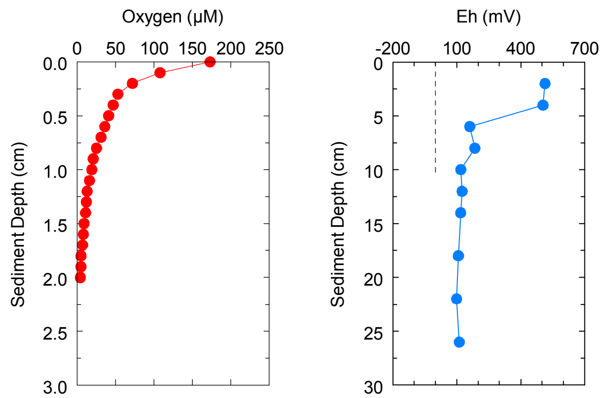
MMS Deep Gulf of Mexico Cruise 3B: VK916 FF1-B01



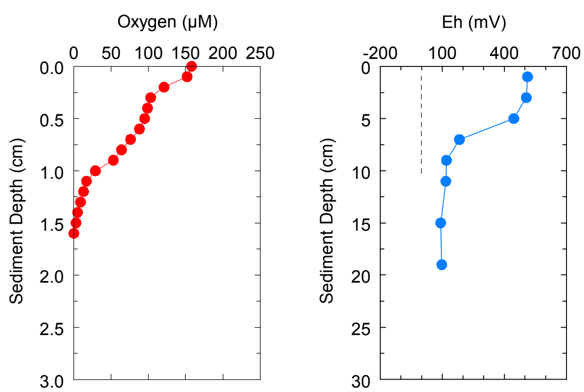
MMS Deep Gulf of Mexico Cruise 3B: VK916 FF2-B01



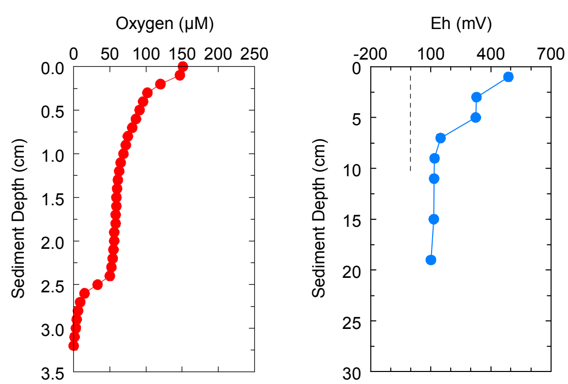
MMS Deep Gulf of Mexico Cruise 3B: VK916 FF2-B02



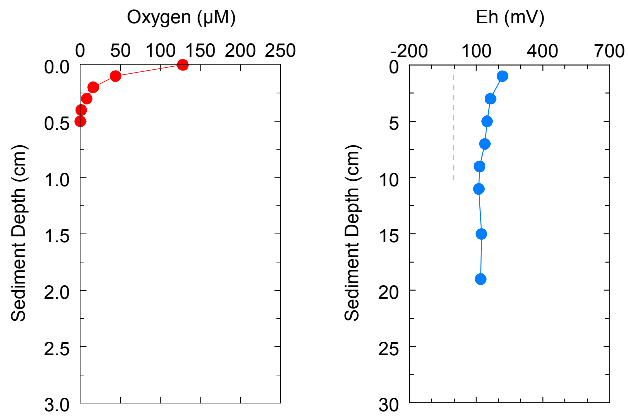
MMS Deep Gulf of Mexico Cruise 3B: VK916 FF3-B02



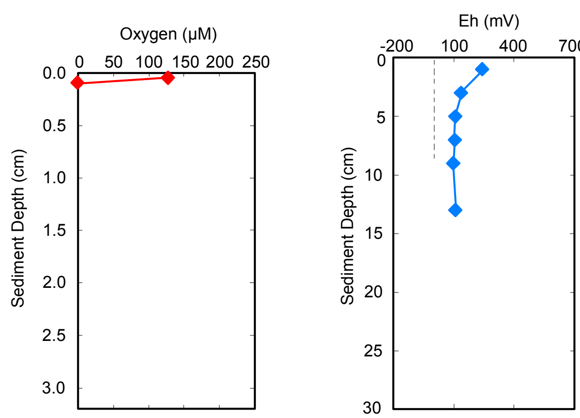
MMS Deep Gulf of Mexico Cruise 3B: VK916 FF4-B01



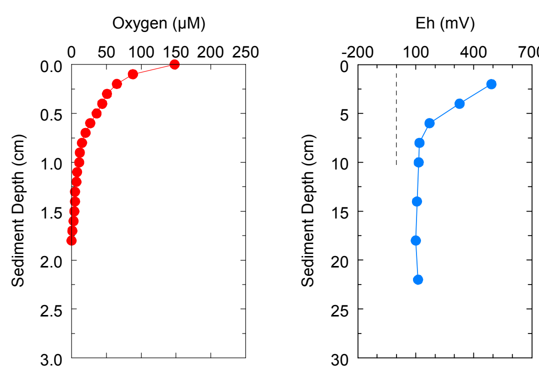
MMS Deep Gulf of Mexico Cruise 3B: VK916 FF5-B02



MMS Deep Gulf of Mexico Cruise 3B: VK916 FF6-B01



MMS Deep Gulf of Mexico Cruise 3B: VK916 FF6-B02



REFERENCES

Salomons, W. and U. Förstner. 1984. Metals in the Hydrocycle. Springer-Verlag, Berlin. 349 pp.

Wedepohl, K.H. 1995. The composition of the continental crust. Geochim. Cosmochim. Acta 59:1,217-1,232.

APPENDIX H

Sediment Hydrocarbon Data

Table H.1. Sediment polycyclic aromatic hydrocarbon data for Cruise 1B.

Cruise	Sample No.	Station	Collection Date	Received Date	Extraction Date	Extraction Batch	Date Acquired
1	MMS0013.D	GB516-FF1-B01	11/01/00	11/20/00	12/05/00	ENV 322	03/17/01
1	MMS0014.D	GB516-FF1-B02	11/01/00	11/20/00	12/05/00	ENV 322	03/17/01
1	MMS0015.D	GB516-FF2-B01	10/30/00	11/20/00	12/05/00	ENV 322	03/17/01
1	MMS0016.D	GB516-FF2-B02	10/31/00	11/20/00	12/05/00	ENV 322	03/17/01
1	MMS0017.D	GB516-FF3-B01	10/31/00	11/20/00	12/05/00	ENV 322	03/17/01
1	MMS0018.D	GB516-FF3-B02	10/31/00	11/20/00	12/05/00	ENV 322	03/17/01
1	MMS0019.D	GB516-FF4-B01	10/31/00	11/20/00	12/05/00	ENV 322	03/17/01
1	MMS0020.D	GB516-FF4-B02	10/31/00	11/20/00	12/06/00	ENV 324	03/23/01
1	MMS0021.D	GB516-FF5-B01	11/01/00	11/20/00	12/06/00	ENV 324	03/24/01
1	MMS0022.D	GB516-FF5-B02	11/01/00	11/20/00	12/06/00	ENV 324	03/24/01
1	MMS0023.D	GB516-FF6-B01	11/01/00	11/20/00	12/06/00	ENV 324	03/24/01
1	MMS0024.D	GB516-FF6-B02	11/01/00	11/20/00	12/06/00	ENV 324	03/24/01
1	MMS0001.D	GB516-NF-B01	10/28/00	11/20/00	12/05/00	ENV 322	03/17/01
1	MMS0002.D	GB516-NF-B02	10/28/00	11/20/00	12/05/00	ENV 322	03/27/01
1	MMS0003.D	GB516-NF-B03	10/29/00	11/20/00	12/05/00	ENV 322	03/17/01
1	MMS0004.D	GB516-NF-B04	10/28/00	11/20/00	12/05/00	ENV 322	03/17/01
1	MMS0005.D	GB516-NF-B05	10/29/00	11/20/00	12/05/00	ENV 322	03/17/01
1	MMS0006.D	GB516-NF-B06	10/29/00	11/20/00	12/05/00	ENV 322	03/17/01
1	MMS0007.D	GB516-NF-B07	10/29/00	11/20/00	12/05/00	ENV 322	03/17/01
1	MMS0008.D	GB516-NF-B08	10/30/00	11/20/00	12/05/00	ENV 322	03/17/01
1	MMS0009.D	GB516-NF-B09	10/30/00	11/20/00	12/05/00	ENV 322	03/17/01
1	MMS0010.D	GB516-NF-B10	10/30/00	11/20/00	12/05/00	ENV 322	03/17/01
1	MMS0011.D	GB516-NF-B11	10/30/00	11/20/00	12/05/00	ENV 322	03/17/01
1	MMS0012.D	GB516-NF-B12	10/29/00	11/20/00	12/05/00	ENV 322	03/17/01
1	MMS0037.D	VK916-FF2-B01	11/06/00	11/20/00	12/06/00	ENV 324	03/24/01
1	MMS0038.D	VK916-FF2-B02	11/06/00	11/20/00	12/06/00	ENV 324	03/24/01
1	MMS0039.D	VK916-FF3-B01	11/06/00	11/20/00	12/15/00	ENV 325	03/26/01
1	MMS0040.D	VK916-FF3-B02	11/08/00	11/20/00	12/15/00	ENV 325	03/26/01
1	MMS0041.D	VK916-FF4-B01	11/08/00	11/20/00	12/15/00	ENV 325	03/27/01
1	MMS0042.D	VK916-FF4-B02	11/08/00	11/20/00	12/15/00	ENV 325	03/27/01
1	MMS0043.D	VK916-FF5-B01	11/08/00	11/20/00	12/15/00	ENV 325	03/27/01
1	MMS0044.D	VK916-FF5-B02	11/08/00	11/20/00	12/15/00	ENV 325	03/27/01
1	MMS0045.D	VK916-FF6-B01	11/08/00	11/20/00	12/15/00	ENV 325	03/27/01
1	MMS0046.D	VK916-FF6-B02	11/08/00	11/20/00	12/15/00	ENV 325	03/27/01
1	MMS0025.D	VK916-NF-B01	11/05/00	11/20/00	12/06/00	ENV 324	03/24/01
1	MMS0026.D	VK916-NF-B02	11/04/00	11/20/00	12/06/00	ENV 324	03/24/01
1	MMS0027.D	VK916-NF-B03	11/05/00	11/20/00	12/06/00	ENV 324	03/24/01
1	MMS0028.D	VK916-NF-B04	11/05/00	11/20/00	12/06/00	ENV 324	03/24/01
1	MMS0029.D	VK916-NF-B05	11/05/00	11/20/00	12/06/00	ENV 324	03/24/01
1	MMS0030.D	VK916-NF-B06	11/05/00	11/20/00	12/06/00	ENV 324	03/24/01
1	MMS0031.D	VK916-NF-B07	11/05/00	11/20/00	12/06/00	ENV 324	03/24/01
1	MMS0032.D	VK916-NF-B08	11/05/00	11/20/00	12/06/00	ENV 324	03/24/01
1	MMS0033.D	VK916-NF-B09	11/07/00	11/20/00	12/06/00	ENV 324	03/24/01
1	MMS0034.D	VK916-NF-B10	11/07/00	11/20/00	12/06/00	ENV 324	03/24/01
1	MMS0035.D	VK916-NF-B11	11/07/00	11/20/00	12/06/00	ENV 324	03/24/01
1	MMS0036.D	VK916-NF-B12	11/07/00	11/20/00	12/06/00	ENV 324	03/24/01

Table H.1. Sediment polycyclic aromatic hydrocarbon data for Cruise 1B.

Cruise	Sample No.	Station	Method	Wet Wt.	Dry Wt.	%Moisture	%Dry	Dilution
1	MMS0013.D	GB516-FF1-B01	PAH-2000	59.3	15.0	75	25	NA
1	MMS0014.D	GB516-FF1-B02	PAH-2000	52.7	14.9	72	28	NA
1	MMS0015.D	GB516-FF2-B01	PAH-2000	53.7	15.1	72	28	NA
1	MMS0016.D	GB516-FF2-B02	PAH-2000	42.7	15.1	65	35	NA
1	MMS0017.D	GB516-FF3-B01	PAH-2000	56.9	14.8	74	26	NA
1	MMS0018.D	GB516-FF3-B02	PAH-2000	53.0	15.0	72	28	NA
1	MMS0019.D	GB516-FF4-B01	PAH-2000	55.8	15.0	73	27	NA
1	MMS0020.D	GB516-FF4-B02	PAH-2000	47.6	14.9	69	31	NA
1	MMS0021.D	GB516-FF5-B01	PAH-2000	51.2	15.1	71	29	NA
1	MMS0022.D	GB516-FF5-B02	PAH-2000	54.5	15.0	73	27	NA
1	MMS0023.D	GB516-FF6-B01	PAH-2000	45.8	15.1	67	33	NA
1	MMS0024.D	GB516-FF6-B02	PAH-2000	48.2	15.0	69	31	NA
1	MMS0001.D	GB516-NF-B01	PAH-2000	43.4	15.0	66	34	4x
1	MMS0002.D	GB516-NF-B02	PAH-2000	40.9	15.1	63	37	50x
1	MMS0003.D	GB516-NF-B03	PAH-2000	55.9	15.2	73	27	4x
1	MMS0004.D	GB516-NF-B04	PAH-2000	54.4	15.0	72	28	NA
1	MMS0005.D	GB516-NF-B05	PAH-2000	47.1	15.0	68	32	NA
1	MMS0006.D	GB516-NF-B06	PAH-2000	49.9	15.4	69	31	4x
1	MMS0007.D	GB516-NF-B07	PAH-2000	51.5	14.9	71	29	10x
1	MMS0008.D	GB516-NF-B08	PAH-2000	54.0	15.0	72	28	NA
1	MMS0009.D	GB516-NF-B09	PAH-2000	49.5	15.0	70	30	NA
1	MMS0010.D	GB516-NF-B10	PAH-2000	54.6	15.0	73	28	NA
1	MMS0011.D	GB516-NF-B11	PAH-2000	53.6	15.3	71	29	NA
1	MMS0012.D	GB516-NF-B12	PAH-2000	65.3	14.9	77	23	NA
1	MMS0037.D	VK916-FF2-B01	PAH-2000	55.2	15.1	73	27	NA
1	MMS0038.D	VK916-FF2-B02	PAH-2000	66.7	15.2	77	23	NA
1	MMS0039.D	VK916-FF3-B01	PAH-2000	76.9	15.0	80	20	NA
1	MMS0040.D	VK916-FF3-B02	PAH-2000	75.0	15.0	80	20	NA
1	MMS0041.D	VK916-FF4-B01	PAH-2000	78.7	15.0	81	19	NA
1	MMS0042.D	VK916-FF4-B02	PAH-2000	59.5	15.0	75	25	NA
1	MMS0043.D	VK916-FF5-B01	PAH-2000	50.6	15.0	70	30	NA
1	MMS0044.D	VK916-FF5-B02	PAH-2000	45.0	15.0	67	33	NA
1	MMS0045.D	VK916-FF6-B01	PAH-2000	49.3	15.0	70	30	NA
1	MMS0046.D	VK916-FF6-B02	PAH-2000	48.3	15.0	69	31	NA
1	MMS0025.D	VK916-NF-B01	PAH-2000	66.9	15.1	77	23	NA
1	MMS0026.D	VK916-NF-B02	PAH-2000	63.8	15.0	76	24	NA
1	MMS0027.D	VK916-NF-B03	PAH-2000	78.4	15.0	81	19	NA
1	MMS0028.D	VK916-NF-B04	PAH-2000	72.3	15.1	79	21	NA
1	MMS0029.D	VK916-NF-B05	PAH-2000	75.7	14.9	80	20	NA
1	MMS0030.D	VK916-NF-B06	PAH-2000	84.7	15.1	82	18	NA
1	MMS0031.D	VK916-NF-B07	PAH-2000	62.7	15.2	76	24	NA
1	MMS0032.D	VK916-NF-B08	PAH-2000	74.2	15.0	80	20	NA
1	MMS0033.D	VK916-NF-B09	PAH-2000	78.1	15.1	81	19	NA
1	MMS0034.D	VK916-NF-B10	PAH-2000	58.3	15.0	74	26	NA
1	MMS0035.D	VK916-NF-B11	PAH-2000	63.4	16.1	75	25	NA
1	MMS0036.D	VK916-NF-B12	PAH-2000	55.1	15.0	73	27	NA

Table H.1. Sediment polycyclic aromatic hydrocarbon data for Cruise 1B.

Cruise	Sample No.	Station	Target Compounds	Naphthal	C1-Naphth	C2-Naphth	C3-Naphth
1	MMS0013.D	GB516-FF1-B01	Su Corrected	2.8	2.2	3.8	4.6
1	MMS0014.D	GB516-FF1-B02	Su Corrected	2.9	2.8	4.9	4.8
1	MMS0015.D	GB516-FF2-B01	Su Corrected	3.0	2.3	3.2	3.1
1	MMS0016.D	GB516-FF2-B02	Su Corrected	3.7	3.3	3.6	3.8
1	MMS0017.D	GB516-FF3-B01	Su Corrected	3.5	2.6	3.9	3.6
1	MMS0018.D	GB516-FF3-B02	Su Corrected	3.7	2.1	3.0	3.0
1	MMS0019.D	GB516-FF4-B01	Su Corrected	4.0	2.4	3.9	3.9
1	MMS0020.D	GB516-FF4-B02	Su Corrected	1.6	2.0	3.2	3.8
1	MMS0021.D	GB516-FF5-B01	Su Corrected	1.3	1.6	2.6	3.2
1	MMS0022.D	GB516-FF5-B02	Su Corrected	1.9	2.1	3.3	3.5
1	MMS0023.D	GB516-FF6-B01	Su Corrected	1.9	1.8	3.0	3.5
1	MMS0024.D	GB516-FF6-B02	Su Corrected	1.7	2.0	3.0	3.6
1	MMS0001.D	GB516-NF-B01	Su Corrected	6.5	4.2	12.2	42.9
1	MMS0002.D	GB516-NF-B02	Su Corrected	17.3	13.2	52.3	150
1	MMS0003.D	GB516-NF-B03	Su Corrected	4.2	4.0	7.4	11.4
1	MMS0004.D	GB516-NF-B04	Su Corrected	2.4	4.3	6.6	9.4
1	MMS0005.D	GB516-NF-B05	Su Corrected	1.6	4.0	8.6	10.8
1	MMS0006.D	GB516-NF-B06	Su Corrected	3.8	4.1	7.9	22.9
1	MMS0007.D	GB516-NF-B07	Su Corrected	11.4	4.2	11.9	14.1
1	MMS0008.D	GB516-NF-B08	Su Corrected	2.6	2.7	4.2	4.4
1	MMS0009.D	GB516-NF-B09	Su Corrected	3.3	5.1	11.2	13.8
1	MMS0010.D	GB516-NF-B10	Su Corrected	3.2	3.0	4.6	3.9
1	MMS0011.D	GB516-NF-B11	Su Corrected	2.7	2.1	3.3	3.7
1	MMS0012.D	GB516-NF-B12	Su Corrected	3.1	2.6	3.9	3.4
1	MMS0037.D	VK916-FF2-B01	Su Corrected	4.4	3.6	5.3	4.1
1	MMS0038.D	VK916-FF2-B02	Su Corrected	5.0	4.6	6.4	4.7
1	MMS0039.D	VK916-FF3-B01	Su Corrected	4.5	4.4	6.1	4.6
1	MMS0040.D	VK916-FF3-B02	Su Corrected	9.8	9.9	10.7	6.9
1	MMS0041.D	VK916-FF4-B01	Su Corrected	4.8	4.5	6.8	5.2
1	MMS0042.D	VK916-FF4-B02	Su Corrected	4.9	4.8	7.2	5.4
1	MMS0043.D	VK916-FF5-B01	Conc. (ng/dry g)	5.1	4.4	6.9	4.7
1	MMS0044.D	VK916-FF5-B02	Su Corrected	4.2	3.8	5.7	4.2
1	MMS0045.D	VK916-FF6-B01	Su Corrected	4.7	4.1	6.5	4.6
1	MMS0046.D	VK916-FF6-B02	Su Corrected	16.5	23.7	28.1	16.9
1	MMS0025.D	VK916-NF-B01	Su Corrected	6.4	5.6	8.1	6.4
1	MMS0026.D	VK916-NF-B02	Su Corrected	7.7	7.4	7.9	5.3
1	MMS0027.D	VK916-NF-B03	Su Corrected	6.9	6.8	7.6	5.5
1	MMS0028.D	VK916-NF-B04	Su Corrected	8.9	8.2	8.6	5.9
1	MMS0029.D	VK916-NF-B05	Su Corrected	5.3	5.0	7.2	5.2
1	MMS0030.D	VK916-NF-B06	Su Corrected	5.1	5.3	7.2	5.3
1	MMS0031.D	VK916-NF-B07	Su Corrected	7.6	6.9	7.4	5.3
1	MMS0032.D	VK916-NF-B08	Su Corrected	4.4	4.1	5.9	4.6
1	MMS0033.D	VK916-NF-B09	Su Corrected	4.9	3.8	5.5	3.9
1	MMS0034.D	VK916-NF-B10	Su Corrected	4.5	3.9	4.9	3.4
1	MMS0035.D	VK916-NF-B11	Su Corrected	7.0	6.3	7.0	4.7
1	MMS0036.D	VK916-NF-B12	Su Corrected	6.7	5.8	7.0	4.7

Table H.1. Sediment polycyclic aromatic hydrocarbon data for Cruise 1B.

Cruise	Sample No.	Station	C4-Naphth	Biphenyl	Acena_lene	Acen_thene	Fluorene
1	MMS0013.D	GB516-FF1-B01	4.6	0.9	1.0	1.0	1.0
1	MMS0014.D	GB516-FF1-B02	4.8	1.0	0.9	1.3	1.1
1	MMS0015.D	GB516-FF2-B01	3.0	0.8	0.9	1.2	1.0
1	MMS0016.D	GB516-FF2-B02	3.7	0.8	0.7	0.7	0.8
1	MMS0017.D	GB516-FF3-B01	2.9	1.0	1.2	0.9	1.1
1	MMS0018.D	GB516-FF3-B02	2.9	0.7	0.8	0.7	0.7
1	MMS0019.D	GB516-FF4-B01	3.3	0.8	1.2	0.8	0.9
1	MMS0020.D	GB516-FF4-B02	3.7	0.6	0.5	0.8	0.5
1	MMS0021.D	GB516-FF5-B01	3.0	0.5	0.4	0.5	0.4
1	MMS0022.D	GB516-FF5-B02	3.7	0.7	0.6	0.7	0.7
1	MMS0023.D	GB516-FF6-B01	3.7	0.6	0.4	0.9	0.8
1	MMS0024.D	GB516-FF6-B02	3.5	0.7	0.6	0.9	0.8
1	MMS0001.D	GB516-NF-B01	69.8	2.0	0.8	42.5	22.0
1	MMS0002.D	GB516-NF-B02	151	20.7	3.7	202	403
1	MMS0003.D	GB516-NF-B03	10.2	2.2	0.9	27.3	15.8
1	MMS0004.D	GB516-NF-B04	11.4	1.5	0.8	7.5	4.0
1	MMS0005.D	GB516-NF-B05	4.8	1.5	1.0	7.0	4.6
1	MMS0006.D	GB516-NF-B06	13.2	4.3	0.1	46.6	17.5
1	MMS0007.D	GB516-NF-B07	19.0	6.1	0.1	19.3	94.1
1	MMS0008.D	GB516-NF-B08	2.6	1.3	1.0	1.5	1.3
1	MMS0009.D	GB516-NF-B09	6.1	2.4	1.2	8.0	5.1
1	MMS0010.D	GB516-NF-B10	2.8	1.1	1.0	2.9	1.7
1	MMS0011.D	GB516-NF-B11	4.1	0.9	1.0	1.4	1.2
1	MMS0012.D	GB516-NF-B12	4.4	1.1	1.0	0.2	1.0
1	MMS0037.D	VK916-FF2-B01	3.4	1.4	1.4	1.1	1.4
1	MMS0038.D	VK916-FF2-B02	3.4	1.7	1.7	1.3	1.6
1	MMS0039.D	VK916-FF3-B01	4.3	1.7	1.8	1.8	2.0
1	MMS0040.D	VK916-FF3-B02	6.2	2.2	2.0	2.4	2.9
1	MMS0041.D	VK916-FF4-B01	4.5	1.8	1.7	1.4	1.7
1	MMS0042.D	VK916-FF4-B02	4.5	1.9	1.8	1.8	2.3
1	MMS0043.D	VK916-FF5-B01	3.9	1.9	1.8	1.7	2.1
1	MMS0044.D	VK916-FF5-B02	3.9	1.5	1.5	1.6	2.0
1	MMS0045.D	VK916-FF6-B01	5.0	1.9	1.7	1.8	2.3
1	MMS0046.D	VK916-FF6-B02	11.4	3.5	2.3	2.1	2.8
1	MMS0025.D	VK916-NF-B01	4.5	2.1	2.3	1.6	2.0
1	MMS0026.D	VK916-NF-B02	3.9	1.9	1.7	1.9	2.4
1	MMS0027.D	VK916-NF-B03	4.0	1.9	1.8	1.9	2.4
1	MMS0028.D	VK916-NF-B04	4.8	1.9	1.9	2.0	2.2
1	MMS0029.D	VK916-NF-B05	4.3	1.8	1.8	2.5	2.7
1	MMS0030.D	VK916-NF-B06	5.0	1.9	2.0	2.4	2.5
1	MMS0031.D	VK916-NF-B07	4.1	1.9	2.0	1.9	2.4
1	MMS0032.D	VK916-NF-B08	4.3	1.7	1.6	1.8	2.0
1	MMS0033.D	VK916-NF-B09	2.8	1.6	1.5	1.1	1.3
1	MMS0034.D	VK916-NF-B10	2.9	1.5	1.5	0.8	1.1
1	MMS0035.D	VK916-NF-B11	3.5	1.8	1.8	1.5	2.3
1	MMS0036.D	VK916-NF-B12	3.4	1.8	1.9	1.2	2.0

Table H.1. Sediment polycyclic aromatic hydrocarbon data for Cruise 1B.

Cruise	Sample No.	Station	C1-Fluor	C2-Fluor	C3-Fluor	Anthracene	Phenanthre
1	MMS0013.D	GB516-FF1-B01	1.4	3.1	5.3	2.1	3.6
1	MMS0014.D	GB516-FF1-B02	1.3	2.5	3.6	1.0	3.3
1	MMS0015.D	GB516-FF2-B01	0.8	2.1	3.4	1.5	3.2
1	MMS0016.D	GB516-FF2-B02	0.8	1.9	3.3	1.4	2.7
1	MMS0017.D	GB516-FF3-B01	0.9	1.8	3.5	3.1	3.8
1	MMS0018.D	GB516-FF3-B02	0.8	1.9	3.1	1.2	2.7
1	MMS0019.D	GB516-FF4-B01	1.1	2.4	4.8	1.1	3.6
1	MMS0020.D	GB516-FF4-B02	0.7	1.5	2.3	0.7	2.4
1	MMS0021.D	GB516-FF5-B01	0.5	1.2	2.0	0.7	2.3
1	MMS0022.D	GB516-FF5-B02	0.6	1.6	2.5	1.5	3.3
1	MMS0023.D	GB516-FF6-B01	0.6	1.3	2.5	0.6	2.4
1	MMS0024.D	GB516-FF6-B02	0.6	1.2	2.7	1.2	2.7
1	MMS0001.D	GB516-NF-B01	60.4	38.6	23.0	5.0	7.5
1	MMS0002.D	GB516-NF-B02	416	398	643	23.0	15.8
1	MMS0003.D	GB516-NF-B03	16.0	20.0	21.6	1.3	4.6
1	MMS0004.D	GB516-NF-B04	4.2	5.9	7.6	1.7	5.3
1	MMS0005.D	GB516-NF-B05	3.5	12.8	8.8	1.8	5.1
1	MMS0006.D	GB516-NF-B06	31.7	50.5	41.3	0.6	2.5
1	MMS0007.D	GB516-NF-B07	74.2	21.5	24.0	0.8	3.5
1	MMS0008.D	GB516-NF-B08	1.2	2.0	2.6	3.6	4.1
1	MMS0009.D	GB516-NF-B09	12.2	22.7	8.6	1.3	3.7
1	MMS0010.D	GB516-NF-B10	0.9	1.4	3.6	1.5	3.8
1	MMS0011.D	GB516-NF-B11	0.8	1.9	3.3	1.2	3.1
1	MMS0012.D	GB516-NF-B12	1.0	2.2	3.7	1.4	3.9
1	MMS0037.D	VK916-FF2-B01	1.2	2.5	2.0	1.5	6.5
1	MMS0038.D	VK916-FF2-B02	1.3	2.4	2.3	1.8	8.4
1	MMS0039.D	VK916-FF3-B01	1.3	2.8	3.0	1.9	8.7
1	MMS0040.D	VK916-FF3-B02	2.1	4.4	3.7	2.3	10.4
1	MMS0041.D	VK916-FF4-B01	1.6	3.9	3.3	1.8	8.8
1	MMS0042.D	VK916-FF4-B02	1.4	2.8	2.6	1.9	8.8
1	MMS0043.D	VK916-FF5-B01	1.7	3.6	3.7	2.6	9.2
1	MMS0044.D	VK916-FF5-B02	1.2	2.3	2.9	1.6	7.5
1	MMS0045.D	VK916-FF6-B01	1.5	2.8	3.1	1.9	9.0
1	MMS0046.D	VK916-FF6-B02	2.4	5.5	5.6	2.4	17.0
1	MMS0025.D	VK916-NF-B01	1.6	3.9	3.5	2.6	8.4
1	MMS0026.D	VK916-NF-B02	1.5	3.7	3.1	2.5	7.9
1	MMS0027.D	VK916-NF-B03	1.5	5.0	3.9	1.7	7.1
1	MMS0028.D	VK916-NF-B04	1.8	3.9	4.1	1.8	7.3
1	MMS0029.D	VK916-NF-B05	1.6	4.7	2.9	2.5	8.8
1	MMS0030.D	VK916-NF-B06	1.6	4.9	3.5	1.6	7.6
1	MMS0031.D	VK916-NF-B07	1.7	3.6	2.4	2.0	7.3
1	MMS0032.D	VK916-NF-B08	1.6	3.7	2.6	2.3	7.7
1	MMS0033.D	VK916-NF-B09	1.4	2.4	2.7	1.5	6.9
1	MMS0034.D	VK916-NF-B10	1.2	2.3	2.8	1.6	5.9
1	MMS0035.D	VK916-NF-B11	1.5	3.5	2.4	2.9	8.6
1	MMS0036.D	VK916-NF-B12	1.7	2.7	2.2	2.2	9.2

Table H.1. Sediment polycyclic aromatic hydrocarbon data for Cruise 1B.

Cruise	Sample No.	Station	C1-PhenAnt	C2-PhenAnt	C3-PhenAnt	C4-PhenAnt
1	MMS0013.D	GB516-FF1-B01	5.1	7.4	6.9	6.2
1	MMS0014.D	GB516-FF1-B02	5.1	6.5	4.5	4.0
1	MMS0015.D	GB516-FF2-B01	4.3	5.9	5.9	6.0
1	MMS0016.D	GB516-FF2-B02	3.6	5.1	4.2	3.3
1	MMS0017.D	GB516-FF3-B01	4.9	7.9	8.1	7.1
1	MMS0018.D	GB516-FF3-B02	3.8	5.6	5.5	3.9
1	MMS0019.D	GB516-FF4-B01	5.0	8.3	15.1	16.0
1	MMS0020.D	GB516-FF4-B02	3.8	5.5	4.2	2.7
1	MMS0021.D	GB516-FF5-B01	3.3	4.6	3.8	3.9
1	MMS0022.D	GB516-FF5-B02	4.5	5.4	4.4	4.0
1	MMS0023.D	GB516-FF6-B01	3.7	4.8	4.2	2.8
1	MMS0024.D	GB516-FF6-B02	3.6	4.9	4.2	3.3
1	MMS0001.D	GB516-NF-B01	7.4	10.8	9.0	5.3
1	MMS0002.D	GB516-NF-B02	46.5	54.6	28.7	12.1
1	MMS0003.D	GB516-NF-B03	6.6	10.9	8.4	6.8
1	MMS0004.D	GB516-NF-B04	6.8	9.1	7.3	6.0
1	MMS0005.D	GB516-NF-B05	6.8	11.3	11.8	8.7
1	MMS0006.D	GB516-NF-B06	4.8	8.8	7.0	5.8
1	MMS0007.D	GB516-NF-B07	5.5	10.2	7.1	3.5
1	MMS0008.D	GB516-NF-B08	5.6	7.1	5.5	4.1
1	MMS0009.D	GB516-NF-B09	5.5	8.5	5.3	3.8
1	MMS0010.D	GB516-NF-B10	4.7	6.8	5.3	3.8
1	MMS0011.D	GB516-NF-B11	4.4	5.8	5.2	5.5
1	MMS0012.D	GB516-NF-B12	5.2	7.4	6.7	5.3
1	MMS0037.D	VK916-FF2-B01	5.8	6.6	3.0	2.2
1	MMS0038.D	VK916-FF2-B02	7.1	8.8	3.6	2.9
1	MMS0039.D	VK916-FF3-B01	7.8	8.7	4.0	3.5
1	MMS0040.D	VK916-FF3-B02	8.3	8.9	4.8	3.9
1	MMS0041.D	VK916-FF4-B01	8.0	9.0	4.2	3.7
1	MMS0042.D	VK916-FF4-B02	7.3	8.0	4.3	3.3
1	MMS0043.D	VK916-FF5-B01	7.5	8.6	4.8	4.2
1	MMS0044.D	VK916-FF5-B02	6.3	7.3	4.0	3.3
1	MMS0045.D	VK916-FF6-B01	7.0	8.4	4.7	3.4
1	MMS0046.D	VK916-FF6-B02	17.1	17.9	10.4	7.1
1	MMS0025.D	VK916-NF-B01	7.7	7.6	4.0	2.9
1	MMS0026.D	VK916-NF-B02	7.1	7.6	4.1	3.5
1	MMS0027.D	VK916-NF-B03	6.5	7.3	3.9	2.6
1	MMS0028.D	VK916-NF-B04	6.4	9.1	7.7	5.2
1	MMS0029.D	VK916-NF-B05	7.1	7.6	3.9	3.0
1	MMS0030.D	VK916-NF-B06	6.9	7.5	3.8	2.6
1	MMS0031.D	VK916-NF-B07	6.9	7.7	3.5	2.6
1	MMS0032.D	VK916-NF-B08	7.2	8.8	4.7	3.7
1	MMS0033.D	VK916-NF-B09	6.4	7.2	3.3	2.5
1	MMS0034.D	VK916-NF-B10	5.4	5.8	3.1	2.3
1	MMS0035.D	VK916-NF-B11	7.5	7.5	4.6	4.8
1	MMS0036.D	VK916-NF-B12	7.7	8.6	4.9	4.4

Table H.1. Sediment polycyclic aromatic hydrocarbon data for Cruise 1B.

Cruise	Sample No.	Station	Dibenzothi	C1-Dibenz	C2-Dibenz	C3-Dibenz	Fluoranth
1	MMS0013.D	GB516-FF1-B01	0.5	1.5	4.9	9.1	4.2
1	MMS0014.D	GB516-FF1-B02	0.4	1.1	2.9	4.7	3.3
1	MMS0015.D	GB516-FF2-B01	0.4	1.0	2.6	5.8	3.9
1	MMS0016.D	GB516-FF2-B02	0.3	0.9	1.8	3.2	2.0
1	MMS0017.D	GB516-FF3-B01	0.5	1.1	3.5	10.0	3.6
1	MMS0018.D	GB516-FF3-B02	0.4	0.9	2.8	6.1	3.0
1	MMS0019.D	GB516-FF4-B01	0.4	1.3	4.7	19.5	3.7
1	MMS0020.D	GB516-FF4-B02	0.3	0.9	2.2	3.7	2.2
1	MMS0021.D	GB516-FF5-B01	0.3	0.8	1.7	3.6	1.9
1	MMS0022.D	GB516-FF5-B02	0.4	1.1	2.2	3.0	3.1
1	MMS0023.D	GB516-FF6-B01	0.3	0.9	1.9	3.0	1.8
1	MMS0024.D	GB516-FF6-B02	0.4	0.9	2.0	3.1	2.4
1	MMS0001.D	GB516-NF-B01	3.7	24.8	15.3	10.6	10.7
1	MMS0002.D	GB516-NF-B02	193	118	40.5	67.3	14.4
1	MMS0003.D	GB516-NF-B03	2.1	12.2	9.7	13.7	5.1
1	MMS0004.D	GB516-NF-B04	0.5	11.9	13.6	11.2	5.9
1	MMS0005.D	GB516-NF-B05	0.6	9.8	7.3	14.2	5.2
1	MMS0006.D	GB516-NF-B06	1.8	13.2	15.1	8.9	2.2
1	MMS0007.D	GB516-NF-B07	1.3	35.6	20.0	16.9	3.8
1	MMS0008.D	GB516-NF-B08	0.4	1.8	3.0	5.1	3.8
1	MMS0009.D	GB516-NF-B09	1.0	3.3	5.6	6.4	2.8
1	MMS0010.D	GB516-NF-B10	0.5	3.5	2.9	6.3	4.3
1	MMS0011.D	GB516-NF-B11	0.4	1.6	2.6	5.0	3.3
1	MMS0012.D	GB516-NF-B12	0.5	1.4	3.6	7.2	4.3
1	MMS0037.D	VK916-FF2-B01	0.6	1.1	1.7	1.5	7.3
1	MMS0038.D	VK916-FF2-B02	0.9	1.3	2.1	2.2	9.5
1	MMS0039.D	VK916-FF3-B01	0.8	1.5	2.1	2.2	10.0
1	MMS0040.D	VK916-FF3-B02	1.0	1.7	2.4	2.0	10.9
1	MMS0041.D	VK916-FF4-B01	1.0	1.5	2.2	2.0	9.8
1	MMS0042.D	VK916-FF4-B02	0.9	1.4	2.0	1.9	9.5
1	MMS0043.D	VK916-FF5-B01	1.1	1.4	2.3	2.2	10.4
1	MMS0044.D	VK916-FF5-B02	0.8	1.2	1.8	1.4	8.4
1	MMS0045.D	VK916-FF6-B01	0.8	1.3	2.1	2.5	9.7
1	MMS0046.D	VK916-FF6-B02	1.1	2.5	3.4	2.6	11.3
1	MMS0025.D	VK916-NF-B01	0.8	1.4	2.0	1.7	8.6
1	MMS0026.D	VK916-NF-B02	0.7	1.3	1.9	1.6	8.9
1	MMS0027.D	VK916-NF-B03	0.8	1.2	1.9	1.6	7.8
1	MMS0028.D	VK916-NF-B04	0.7	1.2	3.0	4.0	8.0
1	MMS0029.D	VK916-NF-B05	0.8	1.2	2.0	1.5	9.8
1	MMS0030.D	VK916-NF-B06	0.7	1.3	2.0	1.6	8.3
1	MMS0031.D	VK916-NF-B07	0.7	1.3	1.9	1.7	8.4
1	MMS0032.D	VK916-NF-B08	0.7	1.4	1.9	2.0	8.7
1	MMS0033.D	VK916-NF-B09	0.7	1.2	1.9	1.6	7.6
1	MMS0034.D	VK916-NF-B10	0.6	1.0	1.4	1.3	6.3
1	MMS0035.D	VK916-NF-B11	0.9	1.3	2.1	1.9	9.3
1	MMS0036.D	VK916-NF-B12	0.9	1.3	2.1	1.9	9.8

Table H.1. Sediment polycyclic aromatic hydrocarbon data for Cruise 1B.

Cruise	Sample No.	Station	Pyrene	C1-FluorPyr	C2-FluorPyr	C3-FluorPyr	Naphthoben
1	MMS0013.D	GB516-FF1-B01	5.1	5.9	7.2	6.1	2.5
1	MMS0014.D	GB516-FF1-B02	4.1	3.8	5.1	3.8	1.8
1	MMS0015.D	GB516-FF2-B01	4.7	6.0	10.0	5.2	2.4
1	MMS0016.D	GB516-FF2-B02	2.6	2.8	4.0	3.1	1.4
1	MMS0017.D	GB516-FF3-B01	4.8	7.3	11.8	4.7	3.0
1	MMS0018.D	GB516-FF3-B02	3.7	4.2	6.0	2.6	2.0
1	MMS0019.D	GB516-FF4-B01	5.0	11.7	24.0	24.0	4.8
1	MMS0020.D	GB516-FF4-B02	2.6	3.0	3.5	2.2	1.5
1	MMS0021.D	GB516-FF5-B01	2.3	2.6	4.2	2.9	1.4
1	MMS0022.D	GB516-FF5-B02	3.6	4.5	10.2	9.4	2.0
1	MMS0023.D	GB516-FF6-B01	2.5	2.6	3.7	2.1	1.4
1	MMS0024.D	GB516-FF6-B02	2.9	3.0	3.9	2.7	1.5
1	MMS0001.D	GB516-NF-B01	10.3	10.7	8.4	2.9	6.3
1	MMS0002.D	GB516-NF-B02	13.7	18.1	14.9	0.3	7.6
1	MMS0003.D	GB516-NF-B03	5.5	6.3	8.4	6.4	6.3
1	MMS0004.D	GB516-NF-B04	6.3	6.9	8.0	6.4	2.3
1	MMS0005.D	GB516-NF-B05	6.3	8.9	10.1	8.0	3.3
1	MMS0006.D	GB516-NF-B06	2.8	4.6	6.0	2.9	5.4
1	MMS0007.D	GB516-NF-B07	4.8	5.1	5.5	2.0	9.8
1	MMS0008.D	GB516-NF-B08	4.6	6.0	7.6	6.1	2.0
1	MMS0009.D	GB516-NF-B09	3.4	3.6	4.6	1.9	1.7
1	MMS0010.D	GB516-NF-B10	5.0	4.9	6.2	4.6	2.4
1	MMS0011.D	GB516-NF-B11	4.0	4.9	7.3	5.1	2.0
1	MMS0012.D	GB516-NF-B12	5.1	5.9	9.3	3.5	2.5
1	MMS0037.D	VK916-FF2-B01	8.0	5.0	4.5	1.8	1.7
1	MMS0038.D	VK916-FF2-B02	10.5	6.2	6.2	2.9	2.4
1	MMS0039.D	VK916-FF3-B01	10.8	6.3	6.5	2.8	2.3
1	MMS0040.D	VK916-FF3-B02	12.0	7.1	6.5	2.8	2.8
1	MMS0041.D	VK916-FF4-B01	10.5	6.2	6.2	2.5	2.5
1	MMS0042.D	VK916-FF4-B02	10.8	6.4	6.4	2.8	2.5
1	MMS0043.D	VK916-FF5-B01	10.5	6.3	6.1	2.8	2.5
1	MMS0044.D	VK916-FF5-B02	8.9	5.5	5.7	2.7	2.0
1	MMS0045.D	VK916-FF6-B01	10.5	6.4	6.7	2.5	2.3
1	MMS0046.D	VK916-FF6-B02	12.8	9.4	10.1	6.0	3.0
1	MMS0025.D	VK916-NF-B01	10.5	6.4	6.5	3.7	2.4
1	MMS0026.D	VK916-NF-B02	9.2	6.0	5.8	2.5	2.5
1	MMS0027.D	VK916-NF-B03	8.2	5.4	5.7	2.4	2.1
1	MMS0028.D	VK916-NF-B04	8.5	6.9	7.1	2.9	2.2
1	MMS0029.D	VK916-NF-B05	10.0	6.5	6.0	2.5	2.5
1	MMS0030.D	VK916-NF-B06	8.7	5.8	5.4	2.3	2.3
1	MMS0031.D	VK916-NF-B07	8.6	5.9	5.6	2.2	2.4
1	MMS0032.D	VK916-NF-B08	8.9	6.6	6.6	2.5	2.3
1	MMS0033.D	VK916-NF-B09	8.3	5.5	6.1	3.2	2.1
1	MMS0034.D	VK916-NF-B10	7.1	4.6	4.4	1.6	1.7
1	MMS0035.D	VK916-NF-B11	9.4	6.2	6.1	2.4	2.4
1	MMS0036.D	VK916-NF-B12	12.1	7.1	6.5	2.7	2.8

Table H.1. Sediment polycyclic aromatic hydrocarbon data for Cruise 1B.

Cruise	Sample No.	Station	C1-Naphth	C2-Naphth	C3-Naphth	Benz(a)ant	Chrysene
1	MMS0013.D	GB516-FF1-B01	6.4	11.2	7.3	2.2	4.5
1	MMS0014.D	GB516-FF1-B02	3.3	5.9	4.4	1.5	3.2
1	MMS0015.D	GB516-FF2-B01	7.0	13.3	11.0	2.1	3.9
1	MMS0016.D	GB516-FF2-B02	2.9	4.6	3.6	0.9	2.1
1	MMS0017.D	GB516-FF3-B01	10.4	18.7	15.0	2.0	4.2
1	MMS0018.D	GB516-FF3-B02	4.6	7.4	5.8	1.5	3.0
1	MMS0019.D	GB516-FF4-B01	22.2	43.0	38.7	2.3	5.6
1	MMS0020.D	GB516-FF4-B02	2.6	3.2	3.0	1.2	2.8
1	MMS0021.D	GB516-FF5-B01	3.4	4.7	4.5	1.0	2.4
1	MMS0022.D	GB516-FF5-B02	4.4	8.4	9.0	1.7	4.2
1	MMS0023.D	GB516-FF6-B01	3.1	4.5	3.9	0.8	2.6
1	MMS0024.D	GB516-FF6-B02	2.7	4.1	3.6	1.1	2.7
1	MMS0001.D	GB516-NF-B01	4.1	5.7	3.4	5.0	7.6
1	MMS0002.D	GB516-NF-B02	9.0	9.8	6.0	8.4	10.3
1	MMS0003.D	GB516-NF-B03	5.9	9.7	9.4	2.3	4.8
1	MMS0004.D	GB516-NF-B04	4.9	9.8	11	2.6	5.6
1	MMS0005.D	GB516-NF-B05	7.9	13.1	11.1	2.5	6.4
1	MMS0006.D	GB516-NF-B06	3.7	5.3	4.9	1.3	2.3
1	MMS0007.D	GB516-NF-B07	4.8	7.0	5.6	1.5	3.3
1	MMS0008.D	GB516-NF-B08	4.7	7.6	7.1	2.4	4.5
1	MMS0009.D	GB516-NF-B09	2.9	4.4	3.7	1.2	2.7
1	MMS0010.D	GB516-NF-B10	4.4	8.2	5.8	2.1	4.1
1	MMS0011.D	GB516-NF-B11	4.9	9.3	6.8	1.4	3.1
1	MMS0012.D	GB516-NF-B12	7.5	13.2	11.6	2.0	4.1
1	MMS0037.D	VK916-FF2-B01	2.1	2.6	2.1	2.8	6.1
1	MMS0038.D	VK916-FF2-B02	2.7	3.6	3.0	3.5	7.7
1	MMS0039.D	VK916-FF3-B01	2.9	4.4	3.9	3.7	8.7
1	MMS0040.D	VK916-FF3-B02	3.1	4.2	3.1	4.6	9.1
1	MMS0041.D	VK916-FF4-B01	2.9	3.9	2.9	3.8	8.6
1	MMS0042.D	VK916-FF4-B02	2.9	3.5	2.8	3.7	9.0
1	MMS0043.D	VK916-FF5-B01	2.8	4.1	2.8	4.1	8.6
1	MMS0044.D	VK916-FF5-B02	2.4	3.3	2.6	3.2	6.9
1	MMS0045.D	VK916-FF6-B01	2.6	4.0	3.1	3.8	7.6
1	MMS0046.D	VK916-FF6-B02	3.5	4.6	3.7	4.4	9.5
1	MMS0025.D	VK916-NF-B01	2.9	3.7	3.1	4.2	8.2
1	MMS0026.D	VK916-NF-B02	2.6	3.6	2.9	4.1	7.9
1	MMS0027.D	VK916-NF-B03	2.7	3.0	2.6	3.7	6.6
1	MMS0028.D	VK916-NF-B04	2.7	3.2	2.6	3.8	7.0
1	MMS0029.D	VK916-NF-B05	2.5	3.3	2.5	4.5	7.6
1	MMS0030.D	VK916-NF-B06	2.7	3.4	2.6	4.0	7.3
1	MMS0031.D	VK916-NF-B07	2.5	3.1	2.6	4.1	7.4
1	MMS0032.D	VK916-NF-B08	2.7	3.5	3.0	3.7	7.1
1	MMS0033.D	VK916-NF-B09	2.2	3.0	2.5	3.2	6.6
1	MMS0034.D	VK916-NF-B10	1.8	2.0	1.6	2.9	6.0
1	MMS0035.D	VK916-NF-B11	2.6	3.7	3.1	3.9	7.6
1	MMS0036.D	VK916-NF-B12	2.9	4.8	3.5	3.6	7.8

Table H.1. Sediment polycyclic aromatic hydrocarbon data for Cruise 1B.

Cruise	Sample No.	Station	C1-Chrysen	C2-Chrysen	C3-Chrysen	C4-Chrysen	Benzo(b)fl
1	MMS0013.D	GB516-FF1-B01	5.5	5.6	3.2	1.1	6.6
1	MMS0014.D	GB516-FF1-B02	3.8	3.0	1.9	1.0	6.1
1	MMS0015.D	GB516-FF2-B01	6.1	8.9	5.3	1.5	5.3
1	MMS0016.D	GB516-FF2-B02	2.9	3.7	2.1	0.5	3.1
1	MMS0017.D	GB516-FF3-B01	7.1	7.1	4.4	1.3	5.6
1	MMS0018.D	GB516-FF3-B02	4.1	3.9	1.0	1.1	4.7
1	MMS0019.D	GB516-FF4-B01	16.7	24.2	10.0	2.8	8.0
1	MMS0020.D	GB516-FF4-B02	3.1	3.4	1.7	0.5	3.8
1	MMS0021.D	GB516-FF5-B01	3.3	3.5	1.0	0.4	3.9
1	MMS0022.D	GB516-FF5-B02	6.8	10.9	6.8	1.2	5.7
1	MMS0023.D	GB516-FF6-B01	3.1	3.4	1.7	0.5	4.5
1	MMS0024.D	GB516-FF6-B02	3.1	3.4	1.9	0.6	4.0
1	MMS0001.D	GB516-NF-B01	6.1	5.1	0.3	0.3	6.1
1	MMS0002.D	GB516-NF-B02	13.2	32.5	0.3	0.3	11.1
1	MMS0003.D	GB516-NF-B03	6.4	6.6	0.3	0.3	7.6
1	MMS0004.D	GB516-NF-B04	6.7	6.9	4.0	1.7	8.1
1	MMS0005.D	GB516-NF-B05	8.0	9.3	3.7	2.0	10
1	MMS0006.D	GB516-NF-B06	3.8	4.5	0.3	0.3	3.1
1	MMS0007.D	GB516-NF-B07	3.7	6.5	0.3	0.3	4.3
1	MMS0008.D	GB516-NF-B08	5.4	6.9	5.1	1.1	6.4
1	MMS0009.D	GB516-NF-B09	2.8	2.5	1.0	0.3	6.5
1	MMS0010.D	GB516-NF-B10	4.5	5.0	1.8	1.2	6.3
1	MMS0011.D	GB516-NF-B11	4.5	4.9	1.1	0.3	4.4
1	MMS0012.D	GB516-NF-B12	6.3	7.8	3.1	1.5	5.8
1	MMS0037.D	VK916-FF2-B01	5.0	2.6	2.8	1.2	9.2
1	MMS0038.D	VK916-FF2-B02	6.0	6.4	2.8	1.4	11.7
1	MMS0039.D	VK916-FF3-B01	7.2	8.1	6.3	1.9	12.2
1	MMS0040.D	VK916-FF3-B02	7.2	6.6	4.0	1.8	14.4
1	MMS0041.D	VK916-FF4-B01	6.9	6.6	4.9	2.8	11.9
1	MMS0042.D	VK916-FF4-B02	6.4	4.5	2.4	2.3	12.0
1	MMS0043.D	VK916-FF5-B01	7.4	6.3	4.5	1.8	13.0
1	MMS0044.D	VK916-FF5-B02	5.8	6.0	4.9	2.2	10.3
1	MMS0045.D	VK916-FF6-B01	6.6	4.0	3.7	2.0	12.1
1	MMS0046.D	VK916-FF6-B02	9.7	6.5	6.9	2.1	13.7
1	MMS0025.D	VK916-NF-B01	6.6	6.3	4.1	2.1	10.6
1	MMS0026.D	VK916-NF-B02	5.8	5.7	2.6	1.5	10.4
1	MMS0027.D	VK916-NF-B03	5.4	4.7	2.9	1.7	8.9
1	MMS0028.D	VK916-NF-B04	6.0	6.0	2.7	1.4	9.6
1	MMS0029.D	VK916-NF-B05	5.9	5.8	3.5	1.7	10.7
1	MMS0030.D	VK916-NF-B06	6.2	5.4	3.6	2.0	10.3
1	MMS0031.D	VK916-NF-B07	5.6	4.4	2.2	1.7	10.2
1	MMS0032.D	VK916-NF-B08	6.0	4.9	3.1	1.7	10.2
1	MMS0033.D	VK916-NF-B09	5.4	5.1	4.1	1.4	9.5
1	MMS0034.D	VK916-NF-B10	4.4	2.8	1.0	0.7	8.2
1	MMS0035.D	VK916-NF-B11	6.2	5.8	3.3	1.2	10.8
1	MMS0036.D	VK916-NF-B12	6.1	5.1	3.6	2.2	11.2

Table H.1. Sediment polycyclic aromatic hydrocarbon data for Cruise 1B.

Cruise	Sample No.	Station	Benzo(k)fl	Benzo(e)py	Benzo(a)py	Perylene	Indeno(1,2
1	MMS0013.D	GB516-FF1-B01	3.1	3.9	2.5	35.2	6.1
1	MMS0014.D	GB516-FF1-B02	1.9	3.1	1.6	40.8	5.0
1	MMS0015.D	GB516-FF2-B01	3.8	4.4	3.1	41.7	5.6
1	MMS0016.D	GB516-FF2-B02	1.9	2.2	1.0	28.8	3.4
1	MMS0017.D	GB516-FF3-B01	4.1	5.0	3.1	26.2	5.7
1	MMS0018.D	GB516-FF3-B02	3.1	3.5	2.0	39.8	5.0
1	MMS0019.D	GB516-FF4-B01	5.2	8.1	5.3	49.5	7.8
1	MMS0020.D	GB516-FF4-B02	2.1	2.6	1.0	18.4	3.3
1	MMS0021.D	GB516-FF5-B01	2.1	2.7	1.2	16.2	3.2
1	MMS0022.D	GB516-FF5-B02	3.3	5.6	2.7	60.4	5.2
1	MMS0023.D	GB516-FF6-B01	2.5	2.9	0.9	71.1	4.0
1	MMS0024.D	GB516-FF6-B02	2.4	2.6	1.2	43.0	3.9
1	MMS0001.D	GB516-NF-B01	2.6	3.4	2.3	46.6	4.2
1	MMS0002.D	GB516-NF-B02	4.7	44.6	76.3	81.5	7.1
1	MMS0003.D	GB516-NF-B03	2.1	4.3	1.8	14.4	6.0
1	MMS0004.D	GB516-NF-B04	3.5	5.1	2.7	206	7.2
1	MMS0005.D	GB516-NF-B05	3.5	5.5	2.8	62.0	8.0
1	MMS0006.D	GB516-NF-B06	1.9	2.0	3.0	23.7	2.4
1	MMS0007.D	GB516-NF-B07	3.9	2.8	4.3	11.2	4.2
1	MMS0008.D	GB516-NF-B08	4.4	5.6	3.1	59.5	7.1
1	MMS0009.D	GB516-NF-B09	4.6	3.9	1.8	31.0	6.9
1	MMS0010.D	GB516-NF-B10	4.3	4.5	2.5	49.6	6.5
1	MMS0011.D	GB516-NF-B11	3.0	3.3	1.8	45.4	4.8
1	MMS0012.D	GB516-NF-B12	4.6	4.8	3.0	38.7	6.1
1	MMS0037.D	VK916-FF2-B01	2.5	5.7	4.1	18.4	7.2
1	MMS0038.D	VK916-FF2-B02	4.1	7.6	5.0	21.2	9.0
1	MMS0039.D	VK916-FF3-B01	4.0	8.3	4.8	52.3	9.0
1	MMS0040.D	VK916-FF3-B02	5.0	8.4	5.4	47.6	10.2
1	MMS0041.D	VK916-FF4-B01	5.3	8.2	5.1	19.0	9.6
1	MMS0042.D	VK916-FF4-B02	4.6	7.7	4.8	37.0	9.7
1	MMS0043.D	VK916-FF5-B01	5.1	8.2	5.5	22.8	10.4
1	MMS0044.D	VK916-FF5-B02	4.0	6.2	4.3	23.2	8.3
1	MMS0045.D	VK916-FF6-B01	5.2	7.8	5.3	23.7	10.6
1	MMS0046.D	VK916-FF6-B02	5.0	8.4	6.1	21.3	10.9
1	MMS0025.D	VK916-NF-B01	6.3	8.0	5.7	19.2	10.0
1	MMS0026.D	VK916-NF-B02	5.8	7.4	4.4	41.0	9.0
1	MMS0027.D	VK916-NF-B03	5.3	6.4	4.1	32.6	8.2
1	MMS0028.D	VK916-NF-B04	4.9	6.5	4.9	23.3	8.1
1	MMS0029.D	VK916-NF-B05	6.5	7.6	5.1	42.8	10.0
1	MMS0030.D	VK916-NF-B06	5.7	7.2	4.4	65.3	8.9
1	MMS0031.D	VK916-NF-B07	6.0	7.4	4.1	37.5	8.8
1	MMS0032.D	VK916-NF-B08	6.0	7.5	5.0	26.7	8.9
1	MMS0033.D	VK916-NF-B09	4.9	7.3	4.5	14.9	8.2
1	MMS0034.D	VK916-NF-B10	4.1	5.8	3.8	14.6	6.5
1	MMS0035.D	VK916-NF-B11	5.1	7.2	4.6	27.4	9.1
1	MMS0036.D	VK916-NF-B12	4.6	7.2	5.2	18.7	9.2

Table H.1. Sediment polycyclic aromatic hydrocarbon data for Cruise 1B.

Cruise	Sample No.	Station	Dibenzo(a,	C1-Dibenzo	C2-Dibenzo	C3-Dibenzo	Benzo(g,h,
1	MMS0013.D	GB516-FF1-B01	1.0	2.8	0.2	0.2	5.7
1	MMS0014.D	GB516-FF1-B02	0.8	2.9	0.2	0.2	4.7
1	MMS0015.D	GB516-FF2-B01	1.0	3.9	0.2	0.2	5.6
1	MMS0016.D	GB516-FF2-B02	0.5	1.7	0.2	0.2	3.0
1	MMS0017.D	GB516-FF3-B01	1.1	3.4	0.2	0.2	5.7
1	MMS0018.D	GB516-FF3-B02	0.9	2.8	0.2	0.2	5.0
1	MMS0019.D	GB516-FF4-B01	1.7	7.2	0.2	0.2	8.3
1	MMS0020.D	GB516-FF4-B02	0.4	0.8	0.2	0.2	3.3
1	MMS0021.D	GB516-FF5-B01	0.5	0.8	0.2	0.2	3.3
1	MMS0022.D	GB516-FF5-B02	0.8	2.8	0.2	0.2	6.2
1	MMS0023.D	GB516-FF6-B01	0.5	0.8	0.2	0.2	3.6
1	MMS0024.D	GB516-FF6-B02	0.5	1.1	0.2	0.2	3.6
1	MMS0001.D	GB516-NF-B01	1.2	0.2	0.2	0.2	4.0
1	MMS0002.D	GB516-NF-B02	9.5	0.2	0.2	0.2	5.6
1	MMS0003.D	GB516-NF-B03	1.2	0.2	0.2	0.2	6.1
1	MMS0004.D	GB516-NF-B04	1.2	2.7	0.9	0.2	8.5
1	MMS0005.D	GB516-NF-B05	1.4	5.0	1.1	0.2	8.3
1	MMS0006.D	GB516-NF-B06	1.4	0.2	0.2	0.2	2.7
1	MMS0007.D	GB516-NF-B07	0.1	0.2	0.2	0.2	4.0
1	MMS0008.D	GB516-NF-B08	1.1	3.2	0.2	0.2	8.2
1	MMS0009.D	GB516-NF-B09	1.5	0.2	0.2	0.2	6.3
1	MMS0010.D	GB516-NF-B10	1.1	2.9	0.2	0.2	6.2
1	MMS0011.D	GB516-NF-B11	0.8	2.7	0.2	0.2	4.4
1	MMS0012.D	GB516-NF-B12	1.1	2.5	0.2	0.2	6.1
1	MMS0037.D	VK916-FF2-B01	0.9	2.2	0.2	0.2	7.2
1	MMS0038.D	VK916-FF2-B02	1.2	2.3	0.2	0.2	9.1
1	MMS0039.D	VK916-FF3-B01	1.1	3.4	0.2	0.2	9.8
1	MMS0040.D	VK916-FF3-B02	1.2	2.5	0.2	0.2	10.6
1	MMS0041.D	VK916-FF4-B01	1.2	1.6	0.2	0.2	9.9
1	MMS0042.D	VK916-FF4-B02	1.1	2.5	0.2	0.2	10.0
1	MMS0043.D	VK916-FF5-B01	1.3	2.3	0.2	0.2	10.5
1	MMS0044.D	VK916-FF5-B02	0.9	2.8	0.2	0.2	8.1
1	MMS0045.D	VK916-FF6-B01	1.2	3.6	0.2	0.2	10.3
1	MMS0046.D	VK916-FF6-B02	1.3	4.2	0.2	0.2	11.0
1	MMS0025.D	VK916-NF-B01	1.4	3.1	0.2	0.2	10.3
1	MMS0026.D	VK916-NF-B02	1.1	2.9	0.2	0.2	9.2
1	MMS0027.D	VK916-NF-B03	1.1	1.4	0.2	0.2	8.4
1	MMS0028.D	VK916-NF-B04	1.1	3.2	0.2	0.2	8.1
1	MMS0029.D	VK916-NF-B05	1.3	2.4	0.2	0.2	9.9
1	MMS0030.D	VK916-NF-B06	1.2	3.9	0.2	0.2	9.3
1	MMS0031.D	VK916-NF-B07	1.2	1.6	0.2	0.2	9.2
1	MMS0032.D	VK916-NF-B08	1.3	2.8	0.2	0.2	9.2
1	MMS0033.D	VK916-NF-B09	1.1	2.5	0.2	0.2	8.6
1	MMS0034.D	VK916-NF-B10	0.8	0.9	0.2	0.2	6.7
1	MMS0035.D	VK916-NF-B11	1.2	2.1	0.2	0.2	8.9
1	MMS0036.D	VK916-NF-B12	1.1	2.0	0.2	0.2	9.1

Table H.1. Sediment polycyclic aromatic hydrocarbon data for Cruise 1B.

Cruise	Sample No.	Station	Total PAHS	D2/P2	D3/P3	D2/C2	D3/C3	2-Methylna	1-Methylna
1	MMS0013.D	GB516-FF1-B01	224	0.662	1.319	0.875	2.844	2.0	1.2
1	MMS0014.D	GB516-FF1-B02	182	0.446	1.044	0.967	2.474	2.8	1.5
1	MMS0015.D	GB516-FF2-B01	227	0.441	0.983	0.292	1.094	2.2	1.3
1	MMS0016.D	GB516-FF2-B02	138	0.353	0.762	0.486	1.524	3.2	1.7
1	MMS0017.D	GB516-FF3-B01	242	0.443	1.235	0.493	2.273	2.4	1.5
1	MMS0018.D	GB516-FF3-B02	177	0.500	1.109	0.718	6.100	2.0	1.2
1	MMS0019.D	GB516-FF4-B01	444	0.566	1.291	0.194	1.950	2.2	1.4
1	MMS0020.D	GB516-FF4-B02	120	0.400	0.881	0.647	2.176	1.7	1.2
1	MMS0021.D	GB516-FF5-B01	115	0.370	0.947	0.486	3.600	1.3	1.0
1	MMS0022.D	GB516-FF5-B02	230	0.407	0.682	0.202	0.441	1.9	1.2
1	MMS0023.D	GB516-FF6-B01	174	0.396	0.714	0.559	1.765	1.6	1.1
1	MMS0024.D	GB516-FF6-B02	149	0.408	0.738	0.588	1.632	1.7	1.2
1	MMS0001.D	GB516-NF-B01	581	1.417	1.178	3.000	NA	3.6	2.7
1	MMS0002.D	GB516-NF-B02	3470	0.742	2.345	1.246	NA	9.3	10.1
1	MMS0003.D	GB516-NF-B03	344	0.890	1.631	1.470	NA	3.8	2.3
1	MMS0004.D	GB516-NF-B04	473	1.495	1.534	1.971	2.800	3.9	2.6
1	MMS0005.D	GB516-NF-B05	359	0.646	1.203	0.785	3.838	3.5	2.4
1	MMS0006.D	GB516-NF-B06	402	1.716	1.271	3.356	NA	3.8	2.5
1	MMS0007.D	GB516-NF-B07	502	1.961	2.380	3.077	NA	3.5	2.8
1	MMS0008.D	GB516-NF-B08	241	0.423	0.927	0.435	1.000	2.5	1.5
1	MMS0009.D	GB516-NF-B09	246	0.659	1.208	2.240	6.400	4.6	3.0
1	MMS0010.D	GB516-NF-B10	218	0.426	1.189	0.580	3.500	2.9	1.7
1	MMS0011.D	GB516-NF-B11	194	0.448	0.962	0.531	4.545	2.0	1.2
1	MMS0012.D	GB516-NF-B12	230	0.486	1.075	0.462	2.323	2.4	1.5
1	MMS0037.D	VK916-FF2-B01	175	0.258	0.500	0.654	0.536	3.3	2.1
1	MMS0038.D	VK916-FF2-B02	222	0.239	0.611	0.328	0.786	4.2	2.6
1	MMS0039.D	VK916-FF3-B01	270	0.241	0.550	0.259	0.349	4.1	2.4
1	MMS0040.D	VK916-FF3-B02	299	0.270	0.417	0.364	0.500	9.6	5.0
1	MMS0041.D	VK916-FF4-B01	236	0.244	0.476	0.333	0.408	4.2	2.5
1	MMS0042.D	VK916-FF4-B02	246	0.250	0.442	0.444	0.792	4.5	2.7
1	MMS0043.D	VK916-FF5-B01	246	0.267	0.458	0.365	0.489	4.0	2.5
1	MMS0044.D	VK916-FF5-B02	209	0.247	0.350	0.300	0.286	3.5	2.1
1	MMS0045.D	VK916-FF6-B01	237	0.250	0.532	0.525	0.676	3.8	2.2
1	MMS0046.D	VK916-FF6-B02	388	0.190	0.250	0.523	0.377	21.3	13.6
1	MMS0025.D	VK916-NF-B01	241	0.263	0.425	0.317	0.415	5.2	3.1
1	MMS0026.D	VK916-NF-B02	249	0.250	0.390	0.333	0.615	7.2	3.8
1	MMS0027.D	VK916-NF-B03	225	0.260	0.410	0.404	0.552	6.5	3.5
1	MMS0028.D	VK916-NF-B04	241	0.330	0.519	0.500	1.481	8.0	4.0
1	MMS0029.D	VK916-NF-B05	254	0.263	0.385	0.345	0.429	4.6	2.7
1	MMS0030.D	VK916-NF-B06	294	0.267	0.421	0.370	0.444	4.9	2.9
1	MMS0031.D	VK916-NF-B07	235	0.247	0.486	0.432	0.773	6.7	3.5
1	MMS0032.D	VK916-NF-B08	227	0.216	0.426	0.388	0.645	3.7	2.3
1	MMS0033.D	VK916-NF-B09	194	0.264	0.485	0.373	0.390	3.4	2.1
1	MMS0034.D	VK916-NF-B10	159	0.241	0.419	0.500	1.300	3.6	2.1
1	MMS0035.D	VK916-NF-B11	235	0.280	0.413	0.362	0.576	6.1	3.2
1	MMS0036.D	VK916-NF-B12	233	0.244	0.388	0.412	0.528	5.5	3.0

Table H.1. Sediment polycyclic aromatic hydrocarbon data for Cruise 1B.

Cruise	Sample No.	Station	2,6-Dimeth	1,6,7-Trim	1-Methylph	17a, 21b	Surrogate
1	MMS0013.D	GB516-FF1-B01	1.5	0.5	1.0	537	Su Recovery (%)
1	MMS0014.D	GB516-FF1-B02	2.0	0.6	0.9	303	Su Recovery (%)
1	MMS0015.D	GB516-FF2-B01	1.4	0.6	0.6	244	Su Recovery (%)
1	MMS0016.D	GB516-FF2-B02	1.5	0.2	0.8	155	Su Recovery (%)
1	MMS0017.D	GB516-FF3-B01	1.6	0.5	0.8	248	Su Recovery (%)
1	MMS0018.D	GB516-FF3-B02	1.2	0.4	0.6	218	Su Recovery (%)
1	MMS0019.D	GB516-FF4-B01	1.4	0.5	0.7	267	Su Recovery (%)
1	MMS0020.D	GB516-FF4-B02	1.3	0.5	0.8	160	Su Recovery (%)
1	MMS0021.D	GB516-FF5-B01	0.9	0.4	0.5	117	Su Recovery (%)
1	MMS0022.D	GB516-FF5-B02	1.1	0.4	0.6	243	Su Recovery (%)
1	MMS0023.D	GB516-FF6-B01	1.1	0.5	0.7	194	Su Recovery (%)
1	MMS0024.D	GB516-FF6-B02	1.2	0.5	0.7	160	Su Recovery (%)
1	MMS0001.D	GB516-NF-B01	3.1	1.2	1.9	294	Su Recovery (%)
1	MMS0002.D	GB516-NF-B02	17.5	2.4	11.8	736	Su Recovery (%)
1	MMS0003.D	GB516-NF-B03	2.7	1.4	1.0	406	Su Recovery (%)
1	MMS0004.D	GB516-NF-B04	2.8	0.3	1.7	440	Su Recovery (%)
1	MMS0005.D	GB516-NF-B05	3.1	0.9	1.3	540	Su Recovery (%)
1	MMS0006.D	GB516-NF-B06	3.2	1.5	1.1	418	Su Recovery (%)
1	MMS0007.D	GB516-NF-B07	2.8	2.1	0.9	386	Su Recovery (%)
1	MMS0008.D	GB516-NF-B08	1.6	0.5	0.7	339	Su Recovery (%)
1	MMS0009.D	GB516-NF-B09	3.9	0.8	1.4	384	Su Recovery (%)
1	MMS0010.D	GB516-NF-B10	1.7	0.5	1.0	315	Su Recovery (%)
1	MMS0011.D	GB516-NF-B11	1.3	0.5	0.9	261	Su Recovery (%)
1	MMS0012.D	GB516-NF-B12	1.6	0.5	0.9	316	Su Recovery (%)
1	MMS0037.D	VK916-FF2-B01	2.2	0.6	1.2	202	Su Recovery (%)
1	MMS0038.D	VK916-FF2-B02	2.7	0.7	1.6	266	Su Recovery (%)
1	MMS0039.D	VK916-FF3-B01	2.5	0.7	1.7	305	Su Recovery (%)
1	MMS0040.D	VK916-FF3-B02	4.4	1.1	2.0	286	Su Recovery (%)
1	MMS0041.D	VK916-FF4-B01	2.8	0.8	1.6	297	Su Recovery (%)
1	MMS0042.D	VK916-FF4-B02	3.1	0.8	1.7	315	Su Recovery (%)
1	MMS0043.D	VK916-FF5-B01	2.8	0.7	1.6	278	Su Recovery (%)
1	MMS0044.D	VK916-FF5-B02	2.5	0.6	1.5	235	Su Recovery (%)
1	MMS0045.D	VK916-FF6-B01	2.8	0.7	1.6	297	Su Recovery (%)
1	MMS0046.D	VK916-FF6-B02	10.7	3.1	4.8	372	Su Recovery (%)
1	MMS0025.D	VK916-NF-B01	3.3	0.8	1.5	333	Su Recovery (%)
1	MMS0026.D	VK916-NF-B02	3.2	0.7	1.4	299	Su Recovery (%)
1	MMS0027.D	VK916-NF-B03	3.2	0.7	1.3	282	Su Recovery (%)
1	MMS0028.D	VK916-NF-B04	3.6	0.7	1.3	253	Su Recovery (%)
1	MMS0029.D	VK916-NF-B05	3.0	0.7	1.4	293	Su Recovery (%)
1	MMS0030.D	VK916-NF-B06	3.1	0.7	1.6	283	Su Recovery (%)
1	MMS0031.D	VK916-NF-B07	3.1	0.7	1.4	260	Su Recovery (%)
1	MMS0032.D	VK916-NF-B08	2.4	0.7	1.6	275	Su Recovery (%)
1	MMS0033.D	VK916-NF-B09	2.2	0.6	1.4	229	Su Recovery (%)
1	MMS0034.D	VK916-NF-B10	1.9	0.7	1.1	144	Su Recovery (%)
1	MMS0035.D	VK916-NF-B11	3.0	0.8	1.7	284	Su Recovery (%)
1	MMS0036.D	VK916-NF-B12	3.0	0.8	1.7	316	Su Recovery (%)

Table H.1. Sediment polycyclic aromatic hydrocarbon data for Cruise 1B.

Cruise	Sample No.	Station	Naphthalene	Acenaphthe	Phenanthrene	Chrysene-D	Perylene-D
1	MMS0013.D	GB516-FF1-B01	93	79	85	82	17
1	MMS0014.D	GB516-FF1-B02	95	87	83	87	15
1	MMS0015.D	GB516-FF2-B01	97	88	84	88	16
1	MMS0016.D	GB516-FF2-B02	97	93	94	91	18
1	MMS0017.D	GB516-FF3-B01	92	88	84	84	32
1	MMS0018.D	GB516-FF3-B02	93	89	83	79	16
1	MMS0019.D	GB516-FF4-B01	91	89	82	76	17
1	MMS0020.D	GB516-FF4-B02	86	94	89	88	34
1	MMS0021.D	GB516-FF5-B01	77	85	84	85	39
1	MMS0022.D	GB516-FF5-B02	82	90	88	89	13
1	MMS0023.D	GB516-FF6-B01	84	90	89	90	10
1	MMS0024.D	GB516-FF6-B02	79	87	87	94	16
1	MMS0001.D	GB516-NF-B01	100	97	98	98	90
1	MMS0002.D	GB516-NF-B02	89	92	92	95	93
1	MMS0003.D	GB516-NF-B03	99	96	87	94	93
1	MMS0004.D	GB516-NF-B04	92	90	91	80	34
1	MMS0005.D	GB516-NF-B05	100	94	86	88	44
1	MMS0006.D	GB516-NF-B06	90	88	85	92	95
1	MMS0007.D	GB516-NF-B07	81	70	88	93	85
1	MMS0008.D	GB516-NF-B08	93	89	85	82	24
1	MMS0009.D	GB516-NF-B09	83	69	78	83	87
1	MMS0010.D	GB516-NF-B10	100	98	85	87	15
1	MMS0011.D	GB516-NF-B11	99	96	85	91	15
1	MMS0012.D	GB516-NF-B12	100	93	84	85	23
1	MMS0037.D	VK916-FF2-B01	84	88	99	93	85
1	MMS0038.D	VK916-FF2-B02	79	84	89	89	78
1	MMS0039.D	VK916-FF3-B01	90	88	95	85	22
1	MMS0040.D	VK916-FF3-B02	75	78	88	82	22
1	MMS0041.D	VK916-FF4-B01	86	86	90	82	72
1	MMS0042.D	VK916-FF4-B02	93	97	98	93	34
1	MMS0043.D	VK916-FF5-B01	85	84	98	83	66
1	MMS0044.D	VK916-FF5-B02	88	88	97	90	63
1	MMS0045.D	VK916-FF6-B01	85	86	89	81	62
1	MMS0046.D	VK916-FF6-B02	84	88	89	82	76
1	MMS0025.D	VK916-NF-B01	82	91	98	91	76
1	MMS0026.D	VK916-NF-B02	93	91	94	90	25
1	MMS0027.D	VK916-NF-B03	88	84	95	95	39
1	MMS0028.D	VK916-NF-B04	85	88	98	92	62
1	MMS0029.D	VK916-NF-B05	86	91	94	94	28
1	MMS0030.D	VK916-NF-B06	86	87	94	87	12
1	MMS0031.D	VK916-NF-B07	91	85	97	93	31
1	MMS0032.D	VK916-NF-B08	96	93	92	93	55
1	MMS0033.D	VK916-NF-B09	93	89	90	86	83
1	MMS0034.D	VK916-NF-B10	98	87	97	88	67
1	MMS0035.D	VK916-NF-B11	97	92	94	91	43
1	MMS0036.D	VK916-NF-B12	100	92	89	94	83

Table H.2. Sediment total petroleum hydrocarbon data for Cruise 1B.

Cruise	Sample Name	Station	Collection Date	Received Date	Extraction Date	Extraction Batch	Date Acquired
1	MMS0001	GB516-NF-B01	10/28/00	11/20/00	12/05/00	ENV322	03/23/00
1	MMS0002	GB516-NF-B02	10/28/00	11/20/00	12/05/00	ENV322	03/23/00
1	MMS0003	GB516-NF-B03	10/29/00	11/20/00	12/05/00	ENV322	03/23/00
1	MMS0004	GB516-NF-B04	10/28/00	11/20/00	12/05/00	ENV322	03/16/00
1	MMS0005	GB516-NF-B05	10/29/00	11/20/00	12/05/00	ENV322	03/16/00
1	MMS0006	GB516-NF-B06	10/29/00	11/20/00	12/05/00	ENV322	03/23/00
1	MMS0007	GB516-NF-B07	10/29/00	11/20/00	12/05/00	ENV322	03/23/00
1	MMS0008	GB516-NF-B08	10/30/00	11/20/00	12/05/00	ENV322	03/16/00
1	MMS0009	GB516-NF-B09	10/30/00	11/20/00	12/05/00	ENV322	03/16/00
1	MMS0010	GB516-NF-B10	10/30/00	11/20/00	12/05/00	ENV322	03/16/00
1	MMS0011	GB516-NF-B11	10/30/00	11/20/00	12/05/00	ENV322	03/16/00
1	MMS0012	GB516-NF-B12	10/29/00	11/20/00	12/05/00	ENV322	03/16/00
1	MMS0013	GB516-FF1-B01	11/01/00	11/20/00	12/05/00	ENV322	03/16/00
1	MMS0014	GB516-FF1-B02	11/01/00	11/20/00	12/05/00	ENV322	03/16/00
1	MMS0015	GB516-FF2-B01	10/30/00	11/20/00	12/05/00	ENV322	03/16/00
1	MMS0016	GB516-FF2-B02	10/31/00	11/20/00	12/05/00	ENV322	03/16/00
1	MMS0017	GB516-FF3-B01	10/31/00	11/20/00	12/05/00	ENV322	03/16/00
1	MMS0018	GB516-FF3-B02	10/31/00	11/20/00	12/05/00	ENV322	03/16/00
1	MMS0019	GB516-FF4-B01	10/31/00	11/20/00	12/05/00	ENV322	03/16/00
1	MMS0020	GB516-FF4-B02	10/31/00	11/20/00	12/06/00	ENV324	03/19/00
1	MMS0021	GB516-FF5-B01	11/01/00	11/20/00	12/06/00	ENV324	03/19/00
1	MMS0022	GB516-FF5-B02	11/01/00	11/20/00	12/06/00	ENV324	03/20/00
1	MMS0023	GB516-FF6-B01	11/01/00	11/20/00	12/06/00	ENV324	03/20/00
1	MMS0024	GB516-FF6-B02	11/01/00	11/20/00	12/06/00	ENV324	03/20/00
1	MMS0025	VK916-NF-B01	11/05/00	11/20/00	12/06/00	ENV324	03/20/00
1	MMS0026	VK916-NF-B02	11/04/00	11/20/00	12/06/00	ENV324	03/20/00
1	MMS0027	VK916-NF-B03	11/05/00	11/20/00	12/06/00	ENV324	03/20/00
1	MMS0028	VK916-NF-B04	11/05/00	11/20/00	12/06/00	ENV324	03/20/00
1	MMS0029	VK916-NF-B05	11/05/00	11/20/00	12/06/00	ENV324	03/20/00
1	MMS0030	VK916-NF-B06	11/05/00	11/20/00	12/06/00	ENV324	03/20/00
1	MMS0031	VK916-NF-B07	11/05/00	11/20/00	12/06/00	ENV324	03/23/00
1	MMS0032	VK916-NF-B08	11/05/00	11/20/00	12/06/00	ENV324	03/20/00
1	MMS0033	VK916-NF-B09	11/07/00	11/20/00	12/06/00	ENV324	03/20/00
1	MMS0034	VK916-NF-B10	11/07/00	11/20/00	12/06/00	ENV324	03/20/00
1	MMS0035	VK916-NF-B11	11/07/00	11/20/00	12/06/00	ENV324	03/20/00
1	MMS0036	VK916-NF-B12	11/07/00	11/20/00	12/06/00	ENV324	03/20/00
1	MMS0037	VK916-FF2-B01	11/06/00	11/20/00	12/06/00	ENV324	03/20/00
1	MMS0038	VK916-FF2-B02	11/06/00	11/20/00	12/6/2000	ENV324	03/20/00
1	MMS0039	VK916-FF3-B01	11/06/00	11/20/00	12/15/00	ENV325	03/21/00
1	MMS0040	VK916-FF3-B02	11/08/00	11/20/00	12/15/00	ENV325	03/21/00
1	MMS0041	VK916-FF4-B01	11/08/00	11/20/00	12/15/00	ENV325	03/22/00
1	MMS0042	VK916-FF4-B02	11/08/00	11/20/00	12/15/00	ENV325	03/22/00
1	MMS0043	VK916-FF5-B01	11/08/00	11/20/00	12/15/00	ENV325	03/22/00
1	MMS0044	VK916-FF5-B02	11/08/00	11/20/00	12/15/00	ENV325	03/22/00
1	MMS0045	VK916-FF6-B01	11/08/00	11/20/00	12/15/00	ENV325	03/22/00
1	MMS0046	VK916-FF6-B02	11/08/00	11/20/00	12/15/00	ENV325	03/22/00

Table H.2. Sediment total petroleum hydrocarbon data for Cruise 1B.

Cruise	Sample Name	Station	Method	Wet Wt (g)	Dry Wt (g)	% Moisture	% Dry	Dilution
1	MMS0001	GB516-NF-B01	ALI_COMP.M	43.4	15.0	66	34	10x
1	MMS0002	GB516-NF-B02	ALI_COMP.M	40.9	15.1	63	37	50x
1	MMS0003	GB516-NF-B03	ALI_COMP.M	55.9	15.2	73	27	10x
1	MMS0004	GB516-NF-B04	ALI_COMP.M	54.4	15.0	72	28	NA
1	MMS0005	GB516-NF-B05	ALI_COMP.M	47.1	15.0	68	32	NA
1	MMS0006	GB516-NF-B06	ALI_COMP.M	49.9	15.4	69	31	10x
1	MMS0007	GB516-NF-B07	ALI_COMP.M	51.5	14.9	71	29	10x
1	MMS0008	GB516-NF-B08	ALI_COMP.M	54.0	15.0	72	28	NA
1	MMS0009	GB516-NF-B09	ALI_COMP.M	49.5	15.0	70	30	NA
1	MMS0010	GB516-NF-B10	ALI_COMP.M	54.6	15.0	73	28	NA
1	MMS0011	GB516-NF-B11	ALI_COMP.M	53.6	15.3	71	29	NA
1	MMS0012	GB516-NF-B12	ALI_COMP.M	65.3	14.9	77	23	NA
1	MMS0013	GB516-FF1-B01	ALI_COMP.M	59.3	15.0	75	25	NA
1	MMS0014	GB516-FF1-B02	ALI_COMP.M	52.7	14.9	72	28	NA
1	MMS0015	GB516-FF2-B01	ALI_COMP.M	53.7	15.1	72	28	NA
1	MMS0016	GB516-FF2-B02	ALI_COMP.M	42.7	15.1	65	35	NA
1	MMS0017	GB516-FF3-B01	ALI_COMP.M	56.9	14.8	74	26	NA
1	MMS0018	GB516-FF3-B02	ALI_COMP.M	53.0	15.0	72	28	NA
1	MMS0019	GB516-FF4-B01	ALI_COMP.M	55.8	15.0	73	27	NA
1	MMS0020	GB516-FF4-B02	ALI_COMP.M	47.6	14.9	69	31	NA
1	MMS0021	GB516-FF5-B01	ALI_COMP.M	51.2	15.1	71	29	NA
1	MMS0022	GB516-FF5-B02	ALI_COMP.M	54.5	15.0	73	27	NA
1	MMS0023	GB516-FF6-B01	ALI_COMP.M	45.8	15.1	67	33	NA
1	MMS0024	GB516-FF6-B02	ALI_COMP.M	48.2	15.0	69	31	NA
1	MMS0025	VK916-NF-B01	ALI_COMP.M	66.9	15.1	77	23	NA
1	MMS0026	VK916-NF-B02	ALI_COMP.M	63.8	15.0	76	24	NA
1	MMS0027	VK916-NF-B03	ALI_COMP.M	78.4	15.0	81	19	NA
1	MMS0028	VK916-NF-B04	ALI_COMP.M	72.3	15.1	79	21	NA
1	MMS0029	VK916-NF-B05	ALI_COMP.M	75.7	14.9	80	20	NA
1	MMS0030	VK916-NF-B06	ALI_COMP.M	84.7	15.1	82	18	NA
1	MMS0031	VK916-NF-B07	ALI_COMP.M	62.7	15.2	76	24	NA
1	MMS0032	VK916-NF-B08	ALI_COMP.M	74.2	15.0	80	20	NA
1	MMS0033	VK916-NF-B09	ALI_COMP.M	78.1	15.1	81	19	NA
1	MMS0034	VK916-NF-B10	ALI_COMP.M	58.3	15.0	74	26	NA
1	MMS0035	VK916-NF-B11	ALI_COMP.M	63.4	16.1	75	25	NA
1	MMS0036	VK916-NF-B12	ALI_COMP.M	55.1	15.0	73	27	NA
1	MMS0037	VK916-FF2-B01	ALI_COMP.M	55.2	15.1	73	27	NA
1	MMS0038	VK916-FF2-B02	ALI_COMP.M	66.7	15.2	77	23	NA
1	MMS0039	VK916-FF3-B01	ALI_COMP.M	76.9	15.0	80	20	NA
1	MMS0040	VK916-FF3-B02	ALI_COMP.M	75.0	15.0	80	20	NA
1	MMS0041	VK916-FF4-B01	ALI_COMP.M	78.7	15.0	81	19	NA
1	MMS0042	VK916-FF4-B02	ALI_COMP.M	59.5	15.0	75	25	NA
1	MMS0043	VK916-FF5-B01	ALI_COMP.M	50.6	15.0	70	30	NA
1	MMS0044	VK916-FF5-B02	ALI_COMP.M	45.0	15.0	67	33	NA
1	MMS0045	VK916-FF6-B01	ALI_COMP.M	49.3	15.0	70	30	NA
1	MMS0046	VK916-FF6-B02	ALI_COMP.M	48.3	15.0	69	31	NA

Table H.2. Sediment total petroleum hydrocarbon data for Cruise 1B.

Cruise	Sample Name	Station	Target Compounds	Total Petroleum Hydrocarbon	Total Resolved Hydrocarbon	Unresolved Complex Mixture
1	MMS0001	GB516-NF-B01	Su Corrected	877	757	120
1	MMS0002	GB516-NF-B02	Su Corrected	25992	25180	811
1	MMS0003	GB516-NF-B03	Su Corrected	616	543	72.5
1	MMS0004	GB516-NF-B04	Su Corrected	160	87.6	72.6
1	MMS0005	GB516-NF-B05	Su Corrected	268	187	80.8
1	MMS0006	GB516-NF-B06	Su Corrected	1168	1071	96.7
1	MMS0007	GB516-NF-B07	Su Corrected	2054	1922	132
1	MMS0008	GB516-NF-B08	Su Corrected	44.7	11.8	32.9
1	MMS0009	GB516-NF-B09	Su Corrected	588	516	71.6
1	MMS0010	GB516-NF-B10	Su Corrected	60.1	23.7	36.4
1	MMS0011	GB516-NF-B11	Su Corrected	40.6	11.7	28.9
1	MMS0012	GB516-NF-B12	Su Corrected	34.0	5.7	28.3
1	MMS0013	GB516-FF1-B01	Su Corrected	83.9	9.6	74.3
1	MMS0014	GB516-FF1-B02	Su Corrected	44.4	5.7	38.7
1	MMS0015	GB516-FF2-B01	Su Corrected	31.0	4.5	26.5
1	MMS0016	GB516-FF2-B02	Su Corrected	24.7	2.3	22.4
1	MMS0017	GB516-FF3-B01	Su Corrected	40.0	4.8	35.2
1	MMS0018	GB516-FF3-B02	Su Corrected	31.9	3.2	28.7
1	MMS0019	GB516-FF4-B01	Su Corrected	31.7	4.0	27.7
1	MMS0020	GB516-FF4-B02	Su Corrected	17.1	2.5	14.6
1	MMS0021	GB516-FF5-B01	Su Corrected	15.5	2.0	13.5
1	MMS0022	GB516-FF5-B02	Su Corrected	24.6	3.2	21.4
1	MMS0023	GB516-FF6-B01	Su Corrected	17.2	2.9	14.3
1	MMS0024	GB516-FF6-B02	Su Corrected	17.3	3.0	14.3
1	MMS0025	VK916-NF-B01	Su Corrected	28.7	8.7	20.0
1	MMS0026	VK916-NF-B02	Su Corrected	28.7	9.3	19.4
1	MMS0027	VK916-NF-B03	Su Corrected	28.2	9.6	18.6
1	MMS0028	VK916-NF-B04	Su Corrected	25.6	9.0	16.6
1	MMS0029	VK916-NF-B05	Su Corrected	38.0	10.5	27.4
1	MMS0030	VK916-NF-B06	Su Corrected	35.8	11.0	24.8
1	MMS0031	VK916-NF-B07	Su Corrected	30.8	9.5	21.3
1	MMS0032	VK916-NF-B08	Su Corrected	32.5	10.1	22.4
1	MMS0033	VK916-NF-B09	Su Corrected	22.6	5.0	17.6
1	MMS0034	VK916-NF-B10	Su Corrected	13.8	3.0	10.8
1	MMS0035	VK916-NF-B11	Su Corrected	28.5	8.0	20.5
1	MMS0036	VK916-NF-B12	Su Corrected	29.4	7.5	21.9
1	MMS0037	VK916-FF2-B01	Su Corrected	23.7	6.4	17.3
1	MMS0038	VK916-FF2-B02	Su Corrected	28.2	8.1	20.1
1	MMS0039	VK916-FF3-B01	Su Corrected	31.8	9.6	22.2
1	MMS0040	VK916-FF3-B02	Su Corrected	30.1	8.3	21.8
1	MMS0041	VK916-FF4-B01	Su Corrected	26.3	7.2	19.1
1	MMS0042	VK916-FF4-B02	Su Corrected	25.7	8.8	16.9
1	MMS0043	VK916-FF5-B01	Su Corrected	35.0	8.8	26.2
1	MMS0044	VK916-FF5-B02	Su Corrected	24.6	7.4	17.2
1	MMS0045	VK916-FF6-B01	Su Corrected	24.5	6.8	17.7
1	MMS0046	VK916-FF6-B02	Su Corrected	29.0	8.1	20.9

Table H.2. Sediment total petroleum hydrocarbon data for Cruise 1B.

Cruise	Sample Name	Station	Total Petroleum Hydrocarbon (Non-SBM Range)	Total Resolved Hydrocarbon (Non-SBM Range)
1	MMS0001	GB516-NF-B01	102	13.8
1	MMS0002	GB516-NF-B02	861	311
1	MMS0003	GB516-NF-B03	58.4	5.9
1	MMS0004	GB516-NF-B04	66.9	7.2
1	MMS0005	GB516-NF-B05	72.2	7.6
1	MMS0006	GB516-NF-B06	76.2	11.5
1	MMS0007	GB516-NF-B07	127	18.3
1	MMS0008	GB516-NF-B08	32.7	2.5
1	MMS0009	GB516-NF-B09	61.7	7.4
1	MMS0010	GB516-NF-B10	36.1	3.5
1	MMS0011	GB516-NF-B11	29.2	1.7
1	MMS0012	GB516-NF-B12	28.6	2.7
1	MMS0013	GB516-FF1-B01	74.5	6.5
1	MMS0014	GB516-FF1-B02	38.7	3.1
1	MMS0015	GB516-FF2-B01	27.4	2.1
1	MMS0016	GB516-FF2-B02	21.4	0.4
1	MMS0017	GB516-FF3-B01	34.0	2.1
1	MMS0018	GB516-FF3-B02	27.7	1.3
1	MMS0019	GB516-FF4-B01	28.1	1.8
1	MMS0020	GB516-FF4-B02	13.7	0.5
1	MMS0021	GB516-FF5-B01	13.4	0.4
1	MMS0022	GB516-FF5-B02	21.0	1.2
1	MMS0023	GB516-FF6-B01	13.7	0.9
1	MMS0024	GB516-FF6-B02	14.3	1.0
1	MMS0025	VK916-NF-B01	22.6	4.8
1	MMS0026	VK916-NF-B02	23.6	5.6
1	MMS0027	VK916-NF-B03	22.7	6.0
1	MMS0028	VK916-NF-B04	20.8	5.5
1	MMS0029	VK916-NF-B05	31.3	6.6
1	MMS0030	VK916-NF-B06	29.6	6.3
1	MMS0031	VK916-NF-B07	25.7	6.2
1	MMS0032	VK916-NF-B08	27.1	6.5
1	MMS0033	VK916-NF-B09	19.1	2.8
1	MMS0034	VK916-NF-B10	11.4	1.4
1	MMS0035	VK916-NF-B11	23.4	4.9
1	MMS0036	VK916-NF-B12	24.8	4.9
1	MMS0037	VK916-FF2-B01	19.2	3.5
1	MMS0038	VK916-FF2-B02	23.9	5.6
1	MMS0039	VK916-FF3-B01	26.1	6.3
1	MMS0040	VK916-FF3-B02	24.0	5.0
1	MMS0041	VK916-FF4-B01	21.8	4.5
1	MMS0042	VK916-FF4-B02	21.0	5.5
1	MMS0043	VK916-FF5-B01	27.7	5.1
1	MMS0044	VK916-FF5-B02	20.2	4.3
1	MMS0045	VK916-FF6-B01	20.2	3.8
1	MMS0046	VK916-FF6-B02	23.0	4.5

Table H.2. Sediment total petroleum hydrocarbon data for Cruise 1B.

Cruise	Sample Name	Station	Unresolved Complex Mixture (Non-SBM Range)	Total Petroleum Hydrocarbon (SBM Range)
1	MMS0001	GB516-NF-B01	88.2	775
1	MMS0002	GB516-NF-B02	550	25131
1	MMS0003	GB516-NF-B03	52.5	557
1	MMS0004	GB516-NF-B04	59.7	93.3
1	MMS0005	GB516-NF-B05	64.6	195
1	MMS0006	GB516-NF-B06	64.7	1091
1	MMS0007	GB516-NF-B07	109	1926
1	MMS0008	GB516-NF-B08	30.2	12.0
1	MMS0009	GB516-NF-B09	54.3	526
1	MMS0010	GB516-NF-B10	32.6	24.0
1	MMS0011	GB516-NF-B11	27.5	11.4
1	MMS0012	GB516-NF-B12	25.9	5.4
1	MMS0013	GB516-FF1-B01	68.0	9.4
1	MMS0014	GB516-FF1-B02	35.6	5.7
1	MMS0015	GB516-FF2-B01	25.3	3.6
1	MMS0016	GB516-FF2-B02	21.0	3.3
1	MMS0017	GB516-FF3-B01	31.9	6.1
1	MMS0018	GB516-FF3-B02	26.4	4.2
1	MMS0019	GB516-FF4-B01	26.3	3.6
1	MMS0020	GB516-FF4-B02	13.2	3.3
1	MMS0021	GB516-FF5-B01	13.0	2.0
1	MMS0022	GB516-FF5-B02	19.8	3.6
1	MMS0023	GB516-FF6-B01	12.8	3.4
1	MMS0024	GB516-FF6-B02	13.3	3.0
1	MMS0025	VK916-NF-B01	17.8	6.1
1	MMS0026	VK916-NF-B02	18.0	5.1
1	MMS0027	VK916-NF-B03	16.7	5.5
1	MMS0028	VK916-NF-B04	15.3	4.8
1	MMS0029	VK916-NF-B05	24.8	6.6
1	MMS0030	VK916-NF-B06	23.3	6.1
1	MMS0031	VK916-NF-B07	19.5	5.1
1	MMS0032	VK916-NF-B08	20.6	5.4
1	MMS0033	VK916-NF-B09	16.3	3.5
1	MMS0034	VK916-NF-B10	10.0	2.4
1	MMS0035	VK916-NF-B11	18.5	5.0
1	MMS0036	VK916-NF-B12	19.9	4.6
1	MMS0037	VK916-FF2-B01	15.7	4.5
1	MMS0038	VK916-FF2-B02	18.3	4.3
1	MMS0039	VK916-FF3-B01	19.8	5.7
1	MMS0040	VK916-FF3-B02	19.0	6.1
1	MMS0041	VK916-FF4-B01	17.3	4.4
1	MMS0042	VK916-FF4-B02	15.5	4.7
1	MMS0043	VK916-FF5-B01	22.6	7.2
1	MMS0044	VK916-FF5-B02	15.9	4.4
1	MMS0045	VK916-FF6-B01	16.4	4.4
1	MMS0046	VK916-FF6-B02	18.5	5.9

Table H.2. Sediment total petroleum hydrocarbon data for Cruise 1B.

Cruise	Sample Name	Station	Total Resolved Hydrocarbon (SBM Range)	Unresolved Complex Mixture (SBM Range)	EOM (mg/g dry)
1	MMS0001	GB516-NF-B01	743	32.0	1590
1	MMS0002	GB516-NF-B02	24870	261	31900
1	MMS0003	GB516-NF-B03	537	20.0	1150
1	MMS0004	GB516-NF-B04	80.4	12.9	374
1	MMS0005	GB516-NF-B05	179	16.1	590
1	MMS0006	GB516-NF-B06	1059	32.0	2450
1	MMS0007	GB516-NF-B07	1904	22.2	3660
1	MMS0008	GB516-NF-B08	9.3	2.7	252
1	MMS0009	GB516-NF-B09	509	17.3	881
1	MMS0010	GB516-NF-B10	20.2	3.8	222
1	MMS0011	GB516-NF-B11	10.0	1.4	2000
1	MMS0012	GB516-NF-B12	3.0	2.4	236
1	MMS0013	GB516-FF1-B01	3.1	6.3	264
1	MMS0014	GB516-FF1-B02	2.6	3.1	209
1	MMS0015	GB516-FF2-B01	2.4	1.2	208
1	MMS0016	GB516-FF2-B02	1.9	1.4	193
1	MMS0017	GB516-FF3-B01	2.8	3.3	280
1	MMS0018	GB516-FF3-B02	2.0	2.2	214
1	MMS0019	GB516-FF4-B01	2.2	1.4	180
1	MMS0020	GB516-FF4-B02	2.0	1.3	173
1	MMS0021	GB516-FF5-B01	1.5	0.5	163
1	MMS0022	GB516-FF5-B02	2.0	1.6	200
1	MMS0023	GB516-FF6-B01	2.0	1.4	181
1	MMS0024	GB516-FF6-B02	2.0	1.0	206
1	MMS0025	VK916-NF-B01	3.9	2.2	271
1	MMS0026	VK916-NF-B02	3.6	1.5	248
1	MMS0027	VK916-NF-B03	3.6	1.9	252
1	MMS0028	VK916-NF-B04	3.5	1.3	257
1	MMS0029	VK916-NF-B05	4.0	2.6	275
1	MMS0030	VK916-NF-B06	4.6	1.5	274
1	MMS0031	VK916-NF-B07	3.3	1.8	249
1	MMS0032	VK916-NF-B08	3.7	1.7	275
1	MMS0033	VK916-NF-B09	2.2	1.3	225
1	MMS0034	VK916-NF-B10	1.6	0.8	168
1	MMS0035	VK916-NF-B11	3.0	2.0	226
1	MMS0036	VK916-NF-B12	2.6	2.0	202
1	MMS0037	VK916-FF2-B01	2.9	1.6	228
1	MMS0038	VK916-FF2-B02	2.5	1.8	251
1	MMS0039	VK916-FF3-B01	3.3	2.4	252
1	MMS0040	VK916-FF3-B02	3.4	2.7	228
1	MMS0041	VK916-FF4-B01	2.7	1.7	264
1	MMS0042	VK916-FF4-B02	3.3	1.4	216
1	MMS0043	VK916-FF5-B01	3.7	3.5	290
1	MMS0044	VK916-FF5-B02	3.1	1.3	210
1	MMS0045	VK916-FF6-B01	3.1	1.3	186
1	MMS0046	VK916-FF6-B02	3.6	2.3	178

Table H.2. Sediment total petroleum hydrocarbon data for Cruise 1B.

Cruise	Sample Name	Station	*Surrogate (Su)*	n-dodecane-d34	n-eicosane-d42	n-triacontane-d62
1	MMS0001	GB516-NF-B01	Su Recovery (%)	113	109	111
1	MMS0002	GB516-NF-B02	Su Recovery (%)	114	98	115
1	MMS0003	GB516-NF-B03	Su Recovery (%)	100	103	110
1	MMS0004	GB516-NF-B04	Su Recovery (%)	108	116	117
1	MMS0005	GB516-NF-B05	Su Recovery (%)	99	118	113
1	MMS0006	GB516-NF-B06	Su Recovery (%)	109	107	112
1	MMS0007	GB516-NF-B07	Su Recovery (%)	108	113	108
1	MMS0008	GB516-NF-B08	Su Recovery (%)	109	103	110
1	MMS0009	GB516-NF-B09	Su Recovery (%)	119	92	120
1	MMS0010	GB516-NF-B10	Su Recovery (%)	111	101	110
1	MMS0011	GB516-NF-B11	Su Recovery (%)	120	104	105
1	MMS0012	GB516-NF-B12	Su Recovery (%)	118	106	96
1	MMS0013	GB516-FF1-B01	Su Recovery (%)	118	113	110
1	MMS0014	GB516-FF1-B02	Su Recovery (%)	107	109	108
1	MMS0015	GB516-FF2-B01	Su Recovery (%)	120	107	105
1	MMS0016	GB516-FF2-B02	Su Recovery (%)	108	96	101
1	MMS0017	GB516-FF3-B01	Su Recovery (%)	116	103	108
1	MMS0018	GB516-FF3-B02	Su Recovery (%)	115	108	99
1	MMS0019	GB516-FF4-B01	Su Recovery (%)	115	104	100
1	MMS0020	GB516-FF4-B02	Su Recovery (%)	99	102	97
1	MMS0021	GB516-FF5-B01	Su Recovery (%)	106	98	95
1	MMS0022	GB516-FF5-B02	Su Recovery (%)	99	99	92
1	MMS0023	GB516-FF6-B01	Su Recovery (%)	104	97	96
1	MMS0024	GB516-FF6-B02	Su Recovery (%)	104	101	100
1	MMS0025	VK916-NF-B01	Su Recovery (%)	113	101	92
1	MMS0026	VK916-NF-B02	Su Recovery (%)	112	98	94
1	MMS0027	VK916-NF-B03	Su Recovery (%)	115	100	98
1	MMS0028	VK916-NF-B04	Su Recovery (%)	108	101	114
1	MMS0029	VK916-NF-B05	Su Recovery (%)	111	94	95
1	MMS0030	VK916-NF-B06	Su Recovery (%)	114	99	109
1	MMS0031	VK916-NF-B07	Su Recovery (%)	110	104	119
1	MMS0032	VK916-NF-B08	Su Recovery (%)	106	103	104
1	MMS0033	VK916-NF-B09	Su Recovery (%)	103	96	97
1	MMS0034	VK916-NF-B10	Su Recovery (%)	111	96	96
1	MMS0035	VK916-NF-B11	Su Recovery (%)	119	100	94
1	MMS0036	VK916-NF-B12	Su Recovery (%)	118	101	98
1	MMS0037	VK916-FF2-B01	Su Recovery (%)	114	98	98
1	MMS0038	VK916-FF2-B02	Su Recovery (%)	99	89	87
1	MMS0039	VK916-FF3-B01	Su Recovery (%)	119	98	115
1	MMS0040	VK916-FF3-B02	Su Recovery (%)	109	91	93
1	MMS0041	VK916-FF4-B01	Su Recovery (%)	118	99	112
1	MMS0042	VK916-FF4-B02	Su Recovery (%)	118	98	111
1	MMS0043	VK916-FF5-B01	Su Recovery (%)	116	94	111
1	MMS0044	VK916-FF5-B02	Su Recovery (%)	117	102	103
1	MMS0045	VK916-FF6-B01	Su Recovery (%)	114	101	94
1	MMS0046	VK916-FF6-B02	Su Recovery (%)	109	89	84

Table H.3. Sediment polycyclic aromatic hydrocarbon data for Cruise 2B.

Cruise	Sample	Station	Collection Date	Received Date	Extraction Date	Extraction Batch	Date Acquired
2	CSA0074.D	GB516-FF1-B01	07/14/01	08/17/01	09/25/01	ENV454	11/24/01
2	CSA0080.D	GB516-FF1-B02	07/14/01	08/17/01	09/25/01	ENV454	11/24/01
2	CSA0075.D	GB516-FF2-B01	07/12/01	08/17/01	09/25/01	ENV454	11/24/01
2	CSA0081.D	GB516-FF2-B02	07/12/01	08/17/01	09/25/01	ENV454	11/24/01
2	CSA0076.D	GB516-FF3-B01	07/12/01	08/17/01	09/25/01	ENV454	11/28/01
2	CSA0082.D	GB516-FF3-B02	07/12/01	08/17/01	09/25/01	ENV454	11/28/01
2	CSA0077.D	GB516-FF4-B01	07/12/01	08/17/01	09/25/01	ENV454	11/24/01
2	CSA0083.D	GB516-FF4-B02	07/12/01	08/17/01	09/25/01	ENV454	11/24/01
2	CSA0078.D	GB516-FF5-B01	07/12/01	08/17/01	09/25/01	ENV454	11/24/01
2	CSA0084.D	GB516-FF5-B02	07/12/01	08/17/01	09/25/01	ENV454	11/24/01
2	CSA0079.D	GB516-FF6-B01	07/12/01	08/17/01	09/25/01	ENV454	11/24/01
2	CSA0085.D	GB516-FF6-B02	07/12/01	08/17/01	09/25/01	ENV454	11/24/01
2	CSA0062.D	GB516-NF-B01	07/13/01	08/17/01	09/21/01	ENV453	11/22/01
2	CSA0063.D	GB516-NF-B02	07/13/01	08/17/01	09/21/01	ENV453	11/22/01
2	CSA0064.D	GB516-NF-B03	07/13/01	08/17/01	09/21/01	ENV453	11/22/01
2	CSA0065.D	GB516-NF-B04	07/13/01	08/17/01	09/21/01	ENV453	11/22/01
2	CSA0066.D	GB516-NF-B05	07/13/01	08/17/01	09/21/01	ENV453	11/22/01
2	CSA0067.D	GB516-NF-B06	07/13/01	08/17/01	09/21/01	ENV453	11/28/01
2	CSA0068.D	GB516-NF-B07	07/13/01	08/17/01	09/21/01	ENV453	11/22/01
2	CSA0069.D	GB516-NF-B08	07/13/01	08/17/01	09/21/01	ENV453	11/22/01
2	CSA0070.D	GB516-NF-B09	07/13/01	08/17/01	09/25/01	ENV454	11/24/01
2	CSA0071.D	GB516-NF-B10	07/13/01	08/17/01	09/25/01	ENV454	11/24/01
2	CSA0072.D	GB516-NF-B11	07/13/01	08/17/01	09/25/01	ENV454	11/24/01
2	CSA0073.D	GB516-NF-B12	07/13/01	08/17/01	09/25/01	ENV454	11/24/01
2	CSA0047.D	GB516-NF-DS-1 (0-2cm)	07/13/01	08/17/01	09/21/01	ENV453	11/27/01
2	CSA0048.D	GB516-NF-DS-1 (2-4cm)	07/13/01	08/17/01	09/21/01	ENV453	11/27/01
2	CSA0049.D	GB516-NF-DS-1 (4-6cm)	07/13/01	08/17/01	09/21/01	ENV453	11/22/01
2	CSA0050.D	GB516-NF-DS-1 (6-8cm)	07/13/01	08/17/01	09/21/01	ENV453	11/22/01
2	CSA0051.D	GB516-NF-DS-1 (8-10cm)	07/13/01	08/17/01	09/21/01	ENV453	11/22/01
2	CSA0053.D	GB516-NF-DS-2 (2-4cm)	07/13/01	08/17/01	12/11/01	ENV501	01/04/01
2	CSA0054.D	GB516-NF-DS-2 (4-6cm)	07/13/01	08/17/01	12/11/01	ENV501	01/04/01
2	CSA0055.D	GB516-NF-DS-2 (6-8cm)	07/13/01	08/17/01	12/11/01	ENV501	01/04/01
2	CSA0056.D	GB516-NF-DS-2 (8-10cm)	07/13/01	08/17/01	09/21/01	ENV453	11/28/01
2	CSA0052.D	GB516-NF-DS-2(0-2cm)	07/13/01	08/17/01	12/11/01	ENV501	01/04/01
2	CSA0057.D	GB516-NF-DS-3 (0-2cm)	07/13/01	08/17/01	09/21/01	ENV453	11/28/01
2	CSA0058.D	GB516-NF-DS-3 (2-4cm)	07/13/01	08/17/01	09/21/01	ENV453	11/22/01
2	CSA0059.D	GB516-NF-DS-3 (4-6cm)	07/13/01	08/17/01	09/21/01	ENV453	11/22/01
2	CSA0060.D	GB516-NF-DS-3 (6-8cm)	07/13/01	08/17/01	09/21/01	ENV453	11/22/01
2	CSA0061.D	GB516-NF-DS-3 (8-10cm)	07/13/01	08/17/01	09/21/01	ENV453	11/22/01
2	CSA0113.D	GB602-FF1-B01	07/19/01	08/17/01	10/05/01	ENV461	12/07/01
2	CSA0119.D	GB602-FF1-B02	07/19/01	08/17/01	10/05/01	ENV461	12/07/01
2	CSA0114.D	GB602-FF2-B01	07/20/01	08/17/01	10/05/01	ENV461	12/07/01
2	CSA0120.D	GB602-FF2-B02	07/20/01	08/17/01	10/05/01	ENV461	12/07/01
2	CSA0115.D	GB602-FF3-B01	07/19/01	08/17/01	10/05/01	ENV461	12/07/01
2	CSA0121.D	GB602-FF3-B02	07/19/01	08/17/01	10/05/01	ENV461	12/07/01
2	CSA0116.D	GB602-FF4-B01	07/15/01	08/17/01	10/05/01	ENV461	12/07/01
2	CSA0122.D	GB602-FF4-B02	07/15/01	08/17/01	10/05/01	ENV461	12/07/01
2	CSA0117.D	GB602-FF5-B01	07/15/01	08/17/01	10/05/01	ENV461	12/07/01

Table H.3. Sediment polycyclic aromatic hydrocarbon data for Cruise 2B.

Cruise	Sample	Station	Collection Date	Received Date	Extraction Date	Extraction Batch	Date Acquired
2	CSA0123.D	GB602-FF5-B02	07/15/01	08/17/01	10/05/01	ENV461	12/07/01
2	CSA0118.D	GB602-FF6-B01	07/20/01	08/17/01	10/05/01	ENV461	12/07/01
2	CSA0124.D	GB602-FF6-B02	07/20/01	08/17/01	10/05/01	ENV461	12/07/01
2	CSA0101.D	GB602-NF-B01	07/14/01	08/17/01	10/04/01	ENV460	12/01/01
2	CSA0102.D	GB602-NF-B02	07/15/01	08/17/01	10/04/01	ENV460	12/01/01
2	CSA0103.D	GB602-NF-B03	07/15/01	08/17/01	10/04/01	ENV460	12/01/01
2	CSA0104.D	GB602-NF-B04	07/19/01	08/17/01	10/04/01	ENV460	12/01/01
2	CSA0105.D	GB602-NF-B05	07/14/01	08/17/01	10/04/01	ENV460	12/24/01
2	CSA0106.D	GB602-NF-B06	07/15/01	08/17/01	10/04/01	ENV460	12/02/01
2	CSA0107.D	GB602-NF-B07	07/15/01	08/17/01	10/04/01	ENV460	12/02/01
2	CSA0108.D	GB602-NF-B08	07/19/01	08/17/01	10/05/01	ENV461	12/06/01
2	CSA0109.D	GB602-NF-B09	07/14/01	08/17/01	10/05/01	ENV461	12/06/01
2	CSA0110.D	GB602-NF-B10	07/15/01	08/17/01	10/05/01	ENV461	12/07/01
2	CSA0111.D	GB602-NF-B11	07/19/01	08/17/01	10/05/01	ENV461	12/07/01
2	CSA0112.D	GB602-NF-B12	07/19/01	08/17/01	10/05/01	ENV461	12/07/01
2	CSA0086.D	GB602-NF-DS-1(0-2cm)	07/19/01	08/17/01	09/25/01	ENV454	11/24/01
2	CSA0087.D	GB602-NF-DS-1(2-4cm)	07/19/01	08/17/01	09/25/01	ENV454	11/24/01
2	CSA0088.D	GB602-NF-DS-1(4-6cm)	07/19/01	08/17/01	09/25/01	ENV454	11/24/01
2	CSA0089.D	GB602-NF-DS-1(6-8cm)	07/19/01	08/17/01	10/04/01	ENV460	12/01/01
2	CSA0090.D	GB602-NF-DS-1(8-10cm)	07/19/01	08/17/01	10/04/01	ENV460	12/01/01
2	CSA0093.D	GB602-NF-DS-2 (4-6cm)	07/19/01	08/17/01	10/04/01	ENV460	12/01/01
2	CSA0091.D	GB602-NF-DS-2(0-2cm)	07/19/01	08/17/01	10/04/01	ENV460	12/01/01
2	CSA0092.D	GB602-NF-DS-2(2-4cm)	07/19/01	08/17/01	10/04/01	ENV460	12/01/01
2	CSA0094.D	GB602-NF-DS-2(6-8cm)	07/19/01	08/17/01	10/04/01	ENV460	12/20/01
2	CSA0095.D	GB602-NF-DS-2(8-10cm)	07/19/01	08/17/01	10/04/01	ENV460	12/01/01
2	CSA0096.D	GB602-NF-DS-3(0-2cm)	07/19/01	08/17/01	10/04/01	ENV460	12/01/01
2	CSA0097.D	GB602-NF-DS-3(2-4cm)	07/19/01	08/17/01	10/04/01	ENV460	12/01/01
2	CSA0098.D	GB602-NF-DS-3(4-6cm)	07/19/01	08/17/01	10/04/01	ENV460	12/01/01
2	CSA0099.D	GB602-NF-DS-3(6-8cm)	07/19/01	08/17/01	10/04/01	ENV460	12/20/01
2	CSA0100.D	GB602-NF-DS-3(8-10cm)	07/19/01	08/17/01	10/04/01	ENV460	12/01/01
2	CSA0125.D	MC292-DS-1(0-2cm)	07/24/01	08/17/01	10/05/01	ENV461	12/07/01
2	CSA0126.D	MC292-DS-1(2-4cm)	07/24/01	08/17/01	10/05/01	ENV461	12/07/01
2	CSA0127.D	MC292-DS-1(4-6cm)	07/24/01	08/17/01	10/15/01	ENV462	12/14/01
2	CSA0128.D	MC292-DS-1(6-8 cm)	07/24/01	08/17/01	10/15/01	ENV462	12/15/01
2	CSA0129.D	MC292-DS-1(8-10cm)	07/24/01	08/17/01	10/15/01	ENV462	12/15/01
2	CSA0130.D	MC292-DS-2(0-2cm)	07/24/01	08/17/01	10/15/01	ENV462	12/15/01
2	CSA0131.D	MC292-DS-2(2-4cm)	07/24/01	08/17/01	10/15/01	ENV462	12/15/01
2	CSA0132.D	MC292-DS-2(4-6cm)	07/24/01	08/17/01	10/15/01	ENV462	12/15/01
2	CSA0133.D	MC292-DS-2(6-8cm)	07/24/01	08/17/01	10/15/01	ENV462	12/15/01
2	CSA0134.D	MC292-DS-2(8-10cm)	07/24/01	08/17/01	10/15/01	ENV462	12/15/01
2	CSA0135.D	MC292-DS-3(0-2cm)	07/24/01	08/17/01	10/15/01	ENV462	12/15/01
2	CSA0136.D	MC292-DS-3(2-4cm)	07/24/01	08/17/01	10/15/01	ENV462	12/15/01
2	CSA0137.D	MC292-DS-3(4-6cm)	07/24/01	08/17/01	10/15/01	ENV462	12/15/01
2	CSA0138.D	MC292-DS-3(6-8cm)	07/24/01	08/17/01	10/15/01	ENV462	12/15/01
2	CSA0139.D	MC292-DS-3(8-10cm)	07/24/01	08/17/01	10/15/01	ENV462	12/15/01
2	CSA0152.D	MC292-FF1-B01	07/21/01	08/17/01	10/23/01	ENV467	12/20/01
2	CSA0158.D	MC292-FF1-B02	07/13/01	08/17/01	12/11/01	ENV501	12/24/01
2	CSA0153.D	MC292-FF2-B01	07/22/01	08/17/01	10/23/01	ENV467	12/20/01

Table H.3. Sediment polycyclic aromatic hydrocarbon data for Cruise 2B.

Cruise	Sample	Station	Collection Date	Received Date	Extraction Date	Extraction Batch	Date Acquired
2	CSA0159.D	MC292-FF2-B02	07/22/01	08/17/01	12/11/01	ENV501	12/24/01
2	CSA0154.D	MC292-FF3-B01	07/23/01	08/17/01	10/23/01	ENV467	12/20/01
2	CSA0160.D	MC292-FF3-B02	07/23/01	08/17/01	12/11/01	ENV501	12/24/01
2	CSA0155.D	MC292-FF4-B01	07/22/01	08/17/01	10/23/01	ENV467	12/20/01
2	CSA0161.D	MC292-FF4-B02	07/22/01	08/17/01	12/11/01	ENV501	12/24/01
2	CSA0156.D	MC292-FF5-B01	07/22/01	08/17/01	10/23/01	ENV467	12/20/01
2	CSA0162.D	MC292-FF5-B02	07/22/01	08/17/01	12/11/01	ENV501	12/24/01
2	CSA0157.D	MC292-FF6-B01	07/24/01	08/17/01	12/11/01	ENV501	12/24/01
2	CSA0163.D	MC292-FF6-B02	07/24/01	08/17/01	12/11/01	ENV501	12/24/01
2	CSA0140.D	MC292-NF-B01	07/23/01	08/17/01	10/15/01	ENV462	12/20/01
2	CSA0141.D	MC292-NF-B02	07/22/01	08/17/01	10/15/01	ENV462	12/15/01
2	CSA0142.D	MC292-NF-B03	07/23/01	08/17/01	10/15/01	ENV462	12/15/01
2	CSA0143.D	MC292-NF-B04	07/23/01	08/17/01	12/11/01	ENV501	12/24/01
2	CSA0144.D	MC292-NF-B05	07/22/01	08/17/01	10/15/01	ENV462	12/20/01
2	CSA0145.D	MC292-NF-B06	07/22/01	08/17/01	10/15/01	ENV462	12/20/01
2	CSA0146.D	MC292-NF-B07	07/23/01	08/17/01	10/23/01	ENV467	12/19/01
2	CSA0147.D	MC292-NF-B08	07/23/01	08/17/01	10/23/01	ENV467	12/19/01
2	CSA0148.D	MC292-NF-B09	07/23/01	08/17/01	10/23/01	ENV467	12/19/01
2	CSA0149.D	MC292-NF-B10	07/22/01	08/17/01	10/23/01	ENV467	12/19/01
2	CSA0150.D	MC292-NF-B11	07/23/01	08/17/01	10/23/01	ENV467	12/20/01
2	CSA0151.D	MC292-NF-B12	07/23/01	08/17/01	10/23/01	ENV467	12/20/01

Table H.3. Sediment polycyclic aromatic hydrocarbon data for Cruise 2B.

Cruise	Sample	Station	Method	Dry Wt (g)	%Moisture	%Dry	Dilution	Target Compounds
2	CSA0074.D	GB516-FF1-B01	PAH-2000	15.19	70.94	29.06	NA	Su Corrected
2	CSA0080.D	GB516-FF1-B02	PAH-2000	15.04	64.84	35.16	NA	Su Corrected
2	CSA0075.D	GB516-FF2-B01	PAH-2000	15.26	64.58	35.42	NA	Su Corrected
2	CSA0081.D	GB516-FF2-B02	PAH-2000	15.15	63.57	36.43	NA	Su Corrected
2	CSA0076.D	GB516-FF3-B01	PAH-2000	15.45	67.05	32.95	NA	Su Corrected
2	CSA0082.D	GB516-FF3-B02	PAH-2000	15.17	66.30	33.70	NA	Su Corrected
2	CSA0077.D	GB516-FF4-B01	PAH-2000	15.18	65.57	34.43	NA	Su Corrected
2	CSA0083.D	GB516-FF4-B02	PAH-2000	15.46	68.70	31.30	NA	Su Corrected
2	CSA0078.D	GB516-FF5-B01	PAH-2000	15.16	70.18	29.82	NA	Su Corrected
2	CSA0084.D	GB516-FF5-B02	PAH-2000	15.25	73.44	26.56	NA	Su Corrected
2	CSA0079.D	GB516-FF6-B01	PAH-2000	15.04	65.83	34.17	NA	Su Corrected
2	CSA0085.D	GB516-FF6-B02	PAH-2000	15.23	69.42	30.58	NA	Su Corrected
2	CSA0062.D	GB516-NF-B01	PAH-2000	15.07	61.01	38.99	10x	Su Corrected
2	CSA0063.D	GB516-NF-B02	PAH-2000	15.00	61.50	38.50	10x	Su Corrected
2	CSA0064.D	GB516-NF-B03	PAH-2000	15.22	52.11	47.89	10x	Su Corrected
2	CSA0065.D	GB516-NF-B04	PAH-2000	15.03	70.25	29.75	NA	Su Corrected
2	CSA0066.D	GB516-NF-B05	PAH-2000	15.17	58.93	41.07	NA	Su Corrected
2	CSA0067.D	GB516-NF-B06	PAH-2000	15.04	51.64	48.36	100x	Su Corrected
2	CSA0068.D	GB516-NF-B07	PAH-2000	15.17	66.67	33.33	10x	Su Corrected
2	CSA0069.D	GB516-NF-B08	PAH-2000	15.09	64.02	35.98	NA	Su Corrected
2	CSA0070.D	GB516-NF-B09	PAH-2000	15.22	60.38	39.62	NA	Su Corrected
2	CSA0071.D	GB516-NF-B10	PAH-2000	15.21	66.55	33.45	NA	Su Corrected
2	CSA0072.D	GB516-NF-B11	PAH-2000	15.19	66.06	33.94	NA	Su Corrected
2	CSA0073.D	GB516-NF-B12	PAH-2000	15.35	65.08	34.92	NA	Su Corrected
2	CSA0047.D	GB516-NF-DS-1 (0-2cm)	PAH-2000	15.04	60.87	39.13	100x	Su Corrected
2	CSA0048.D	GB516-NF-DS-1 (2-4cm)	PAH-2000	15.02	56.44	43.56	100x	Su Corrected
2	CSA0049.D	GB516-NF-DS-1 (4-6cm)	PAH-2000	15.05	55.13	44.87	10x	Su Corrected
2	CSA0050.D	GB516-NF-DS-1 (6-8cm)	PAH-2000	15.07	54.59	45.41	10x	Su Corrected
2	CSA0051.D	GB516-NF-DS-1 (8-10cm)	PAH-2000	15.06	61.08	38.92	10x	Su Corrected
2	CSA0053.D	GB516-NF-DS-2 (2-4cm)	PAH-2000	2.06	66.40	33.60	100x	Su Corrected
2	CSA0054.D	GB516-NF-DS-2 (4-6cm)	PAH-2000	2.21	60.00	40.00	100x	Su Corrected
2	CSA0055.D	GB516-NF-DS-2 (6-8cm)	PAH-2000	2.29	57.14	42.86	100x	Su Corrected
2	CSA0056.D	GB516-NF-DS-2 (8-10cm)	PAH-2000	15.03	36.27	63.73	100x	Su Corrected
2	CSA0052.D	GB516-NF-DS-2(0-2cm)	PAH-2000	2.08	68.67	31.33	100x	Su Corrected
2	CSA0057.D	GB516-NF-DS-3 (0-2cm)	PAH-2000	15.00	57.01	42.99	100x	Su Corrected
2	CSA0058.D	GB516-NF-DS-3 (2-4cm)	PAH-2000	15.09	60.37	39.63	NA	Su Corrected
2	CSA0059.D	GB516-NF-DS-3 (4-6cm)	PAH-2000	15.09	58.79	41.21	NA	Su Corrected
2	CSA0060.D	GB516-NF-DS-3 (6-8cm)	PAH-2000	15.23	58.02	41.98	NA	Su Corrected
2	CSA0061.D	GB516-NF-DS-3 (8-10cm)	PAH-2000	15.07	58.29	41.71	NA	Su Corrected
2	CSA0113.D	GB602-FF1-B01	PAH-2000	15.07	63.22	36.78	NA	Su Corrected
2	CSA0119.D	GB602-FF1-B02	PAH-2000	15.15	66.39	33.61	NA	Su Corrected
2	CSA0114.D	GB602-FF2-B01	PAH-2000	15.27	64.39	35.61	NA	Su Corrected
2	CSA0120.D	GB602-FF2-B02	PAH-2000	15.06	63.94	36.06	NA	Su Corrected
2	CSA0115.D	GB602-FF3-B01	PAH-2000	16.03	64.29	35.71	NA	Su Corrected
2	CSA0121.D	GB602-FF3-B02	PAH-2000	15.20	63.55	36.45	NA	Su Corrected
2	CSA0116.D	GB602-FF4-B01	PAH-2000	15.11	68.03	31.97	NA	Su Corrected
2	CSA0122.D	GB602-FF4-B02	PAH-2000	15.20	64.84	35.16	NA	Su Corrected
2	CSA0117.D	GB602-FF5-B01	PAH-2000	15.02	64.24	35.76	NA	Su Corrected

Table H.3. Sediment polycyclic aromatic hydrocarbon data for Cruise 2B.

Cruise	Sample	Station	Method	Dry Wt (g)	%Moisture	%Dry	Dilution	Target Compounds
2	CSA0123.D	GB602-FF5-B02	PAH-2000	15.11	62.77	37.23	NA	Su Corrected
2	CSA0118.D	GB602-FF6-B01	PAH-2000	15.08	65.51	34.49	NA	Su Corrected
2	CSA0124.D	GB602-FF6-B02	PAH-2000	15.17	65.22	34.78	NA	Su Corrected
2	CSA0101.D	GB602-NF-B01	PAH-2000	15.03	63.44	36.56	10x	Su Corrected
2	CSA0102.D	GB602-NF-B02	PAH-2000	15.20	58.86	41.14	NA	Su Corrected
2	CSA0103.D	GB602-NF-B03	PAH-2000	15.09	55.06	44.94	10x	Su Corrected
2	CSA0104.D	GB602-NF-B04	PAH-2000	15.08	63.08	36.92	10x	Su Corrected
2	CSA0105.D	GB602-NF-B05	PAH-2000	15.01	65.66	34.34	10x	Su Corrected
2	CSA0106.D	GB602-NF-B06	PAH-2000	15.31	73.81	26.19	20x	Su Corrected
2	CSA0107.D	GB602-NF-B07	PAH-2000	15.10	58.45	41.55	10x	Su Corrected
2	CSA0108.D	GB602-NF-B08	PAH-2000	15.12	53.85	46.15	10x	Su Corrected
2	CSA0109.D	GB602-NF-B09	PAH-2000	15.26	65.91	34.09	10x	Su Corrected
2	CSA0110.D	GB602-NF-B10	PAH-2000	15.20	61.01	38.99	10x	Su Corrected
2	CSA0111.D	GB602-NF-B11	PAH-2000	15.31	66.45	33.55	10x	Su Corrected
2	CSA0112.D	GB602-NF-B12	PAH-2000	15.11	65.15	34.85	NA	Su Corrected
2	CSA0086.D	GB602-NF-DS-1(0-2cm)	PAH-2000	15.28	50.00	50.00	NA	Su Corrected
2	CSA0087.D	GB602-NF-DS-1(2-4cm)	PAH-2000	15.47	56.07	43.93	NA	Su Corrected
2	CSA0088.D	GB602-NF-DS-1(4-6cm)	PAH-2000	15.69	60.61	39.39	NA	Su Corrected
2	CSA0089.D	GB602-NF-DS-1(6-8cm)	PAH-2000	15.01	59.85	40.15	10x	Su Corrected
2	CSA0090.D	GB602-NF-DS-1(8-10cm)	PAH-2000	15.17	60.45	39.55	NA	Su Corrected
2	CSA0093.D	GB602-NF-DS-2 (4-6cm)	PAH-2000	15.18	61.47	38.53	10x	Su Corrected
2	CSA0091.D	GB602-NF-DS-2(0-2cm)	PAH-2000	15.10	57.27	42.73	20x	Su Corrected
2	CSA0092.D	GB602-NF-DS-2(2-4cm)	PAH-2000	15.10	57.14	42.86	20x	Su Corrected
2	CSA0094.D	GB602-NF-DS-2(6-8cm)	PAH-2000	15.20	62.93	37.07	NA	Su Corrected
2	CSA0095.D	GB602-NF-DS-2(8-10cm)	PAH-2000	15.19	62.70	37.30	NA	Su Corrected
2	CSA0096.D	GB602-NF-DS-3(0-2cm)	PAH-2000	15.11	66.00	34.00	NA	Su Corrected
2	CSA0097.D	GB602-NF-DS-3(2-4cm)	PAH-2000	15.10	64.79	35.21	NA	Su Corrected
2	CSA0098.D	GB602-NF-DS-3(4-6cm)	PAH-2000	15.15	63.58	36.42	NA	Su Corrected
2	CSA0099.D	GB602-NF-DS-3(6-8cm)	PAH-2000	15.29	62.41	37.59	NA	Su Corrected
2	CSA0100.D	GB602-NF-DS-3(8-10cm)	PAH-2000	15.04	62.05	37.95	NA	Su Corrected
2	CSA0125.D	MC292-DS-1(0-2cm)	PAH-2000	15.34	84.67	15.33	NA	Su Corrected
2	CSA0126.D	MC292-DS-1(2-4cm)	PAH-2000	15.22	60.00	40.00	NA	Su Corrected
2	CSA0127.D	MC292-DS-1(4-6cm)	PAH-2000	15.20	67.48	32.52	NA	Su Corrected
2	CSA0128.D	MC292-DS-1(6-8 cm)	PAH-2000	15.08	61.59	38.41	NA	Su Corrected
2	CSA0129.D	MC292-DS-1(8-10cm)	PAH-2000	15.15	62.86	37.14	NA	Su Corrected
2	CSA0130.D	MC292-DS-2(0-2cm)	PAH-2000	15.11	63.28	36.72	NA	Su Corrected
2	CSA0131.D	MC292-DS-2(2-4cm)	PAH-2000	15.15	62.81	37.19	NA	Su Corrected
2	CSA0132.D	MC292-DS-2(4-6cm)	PAH-2000	15.41	62.79	37.21	NA	Su Corrected
2	CSA0133.D	MC292-DS-2(6-8cm)	PAH-2000	15.15	61.17	38.83	NA	Su Corrected
2	CSA0134.D	MC292-DS-2(8-10cm)	PAH-2000	15.08	63.09	36.91	NA	Su Corrected
2	CSA0135.D	MC292-DS-3(0-2cm)	PAH-2000	15.38	14.96	85.04	NA	Su Corrected
2	CSA0136.D	MC292-DS-3(2-4cm)	PAH-2000	15.13	65.77	34.23	NA	Su Corrected
2	CSA0137.D	MC292-DS-3(4-6cm)	PAH-2000	15.06	55.31	44.69	NA	Su Corrected
2	CSA0138.D	MC292-DS-3(6-8cm)	PAH-2000	15.41	61.98	38.02	NA	Su Corrected
2	CSA0139.D	MC292-DS-3(8-10cm)	PAH-2000	15.15	60.77	39.23	NA	Su Corrected
2	CSA0152.D	MC292-FF1-B01	PAH-2000	15.04	63.91	36.09	NA	Su Corrected
2	CSA0158.D	MC292-FF1-B02	PAH-2000	15.10	64.66	35.34	NA	Su Corrected
2	CSA0153.D	MC292-FF2-B01	PAH-2000	15.15	59.41	40.59	NA	Su Corrected

Table H.3. Sediment polycyclic aromatic hydrocarbon data for Cruise 2B.

Cruise	Sample	Station	Method	Dry Wt (g)	%Moisture	%Dry	Dilution	Target Compounds
2	CSA0159.D	MC292-FF2-B02	PAH-2000	15.04	64.48	35.52	NA	Su Corrected
2	CSA0154.D	MC292-FF3-B01	PAH-2000	14.97	65.73	34.27	NA	Su Corrected
2	CSA0160.D	MC292-FF3-B02	PAH-2000	15.06	67.16	32.84	NA	Su Corrected
2	CSA0155.D	MC292-FF4-B01	PAH-2000	15.04	68.07	31.93	NA	Su Corrected
2	CSA0161.D	MC292-FF4-B02	PAH-2000	15.06	69.81	30.19	NA	Su Corrected
2	CSA0156.D	MC292-FF5-B01	PAH-2000	14.95	67.76	32.24	NA	Su Corrected
2	CSA0162.D	MC292-FF5-B02	PAH-2000	2.06	67.20	32.80	NA	Su Corrected
2	CSA0157.D	MC292-FF6-B01	PAH-2000	15.41	69.53	30.47	NA	Su Corrected
2	CSA0163.D	MC292-FF6-B02	PAH-2000	15.06	66.40	33.60	NA	Su Corrected
2	CSA0140.D	MC292-NF-B01	PAH-2000	15.15	75.86	24.14	10x	Su Corrected
2	CSA0141.D	MC292-NF-B02	PAH-2000	15.06	64.12	35.88	NA	Su Corrected
2	CSA0142.D	MC292-NF-B03	PAH-2000	15.27	69.09	30.91	NA	Su Corrected
2	CSA0143.D	MC292-NF-B04	PAH-2000	15.09	67.05	32.95	NA	Su Corrected
2	CSA0144.D	MC292-NF-B05	PAH-2000	15.17	64.71	35.29	NA	Su Corrected
2	CSA0145.D	MC292-NF-B06	PAH-2000	15.32	62.89	37.11	NA	Su Corrected
2	CSA0146.D	MC292-NF-B07	PAH-2000	15.13	65.47	34.53	NA	Su Corrected
2	CSA0147.D	MC292-NF-B08	PAH-2000	15.10	62.31	37.69	NA	Su Corrected
2	CSA0148.D	MC292-NF-B09	PAH-2000	14.99	66.03	33.97	NA	Su Corrected
2	CSA0149.D	MC292-NF-B10	PAH-2000	15.02	67.71	32.29	NA	Su Corrected
2	CSA0150.D	MC292-NF-B11	PAH-2000	14.97	65.08	34.92	NA	Su Corrected
2	CSA0151.D	MC292-NF-B12	PAH-2000	15.02	63.28	36.72	NA	Su Corrected

Table H.3. Sediment polycyclic aromatic hydrocarbon data for Cruise 2B.

Cruise	Sample	Station	Naphthal	C1-Naphth	C2-Naphth	C3-Naphth	C4-Naphth
2	CSA0074.D	GB516-FF1-B01	2.30	2.70	3.90	3.80	1.00
2	CSA0080.D	GB516-FF1-B02	2.40	2.90	4.20	3.30	0.80
2	CSA0075.D	GB516-FF2-B01	2.40	3.20	4.20	3.30	1.30
2	CSA0081.D	GB516-FF2-B02	2.40	2.80	4.70	4.20	1.30
2	CSA0076.D	GB516-FF3-B01	2.30	2.10	3.10	3.00	1.30
2	CSA0082.D	GB516-FF3-B02	2.00	2.10	2.30	3.20	0.70
2	CSA0077.D	GB516-FF4-B01	1.90	2.30	3.40	2.50	0.80
2	CSA0083.D	GB516-FF4-B02	2.20	2.50	3.80	3.50	1.10
2	CSA0078.D	GB516-FF5-B01	2.40	2.70	4.20	2.80	0.70
2	CSA0084.D	GB516-FF5-B02	2.60	3.20	5.20	3.70	1.30
2	CSA0079.D	GB516-FF6-B01	2.30	2.90	4.00	3.20	1.30
2	CSA0085.D	GB516-FF6-B02	2.90	3.40	4.80	3.50	1.30
2	CSA0062.D	GB516-NF-B01	2.30	2.90	10.80	24.30	0.15
2	CSA0063.D	GB516-NF-B02	2.30	4.60	12.30	0.15	0.15
2	CSA0064.D	GB516-NF-B03	2.00	6.50	81.50	94.60	23.60
2	CSA0065.D	GB516-NF-B04	1.80	3.40	10.10	9.90	0.15
2	CSA0066.D	GB516-NF-B05	2.40	6.60	12.80	16.50	0.15
2	CSA0067.D	GB516-NF-B06	6.30	13.50	0.15	0.15	0.15
2	CSA0068.D	GB516-NF-B07	3.70	0.20	0.15	0.15	0.15
2	CSA0069.D	GB516-NF-B08	3.30	6.50	15.10	19.70	4.40
2	CSA0070.D	GB516-NF-B09	1.30	5.40	0.15	0.15	0.15
2	CSA0071.D	GB516-NF-B10	2.10	2.50	3.90	3.20	0.15
2	CSA0072.D	GB516-NF-B11	1.40	2.60	4.20	6.40	0.15
2	CSA0073.D	GB516-NF-B12	1.90	2.70	5.30	6.20	2.10
2	CSA0047.D	GB516-NF-DS-1 (0-2cm)	3.40	9.80	0.15	0.15	0.15
2	CSA0048.D	GB516-NF-DS-1 (2-4cm)	2.10	8.50	0.15	0.15	0.15
2	CSA0049.D	GB516-NF-DS-1 (4-6cm)	5.50	6.90	16.80	0.15	0.15
2	CSA0050.D	GB516-NF-DS-1 (6-8cm)	2.90	14.10	28.40	45.30	38.60
2	CSA0051.D	GB516-NF-DS-1 (8-10cm)	5.50	8.00	16.50	0.10	0.15
2	CSA0053.D	GB516-NF-DS-2 (2-4cm)	<6.9	219.00	5540.00	3410.00	574.00
2	CSA0054.D	GB516-NF-DS-2 (4-6cm)	<6.4	145.00	5000.00	3100.00	342.00
2	CSA0055.D	GB516-NF-DS-2 (6-8cm)	34.40	120.00	4330.00	3040.00	412.00
2	CSA0056.D	GB516-NF-DS-2 (8-10cm)	163.00	43.60	741.00	417.00	140.00
2	CSA0052.D	GB516-NF-DS-2(0-2cm)	<6.8	211.00	6630.00	5400.00	370.00
2	CSA0057.D	GB516-NF-DS-3 (0-2cm)	2.90	5.00	0.15	0.15	0.15
2	CSA0058.D	GB516-NF-DS-3 (2-4cm)	2.70	3.60	12.30	12.20	7.20
2	CSA0059.D	GB516-NF-DS-3 (4-6cm)	1.00	4.10	11.00	6.90	2.50
2	CSA0060.D	GB516-NF-DS-3 (6-8cm)	1.90	3.00	8.00	4.70	2.40
2	CSA0061.D	GB516-NF-DS-3 (8-10cm)	1.30	3.70	9.30	5.80	2.30
2	CSA0113.D	GB602-FF1-B01	2.20	2.70	3.40	3.60	3.60
2	CSA0119.D	GB602-FF1-B02	1.80	2.40	3.00	2.60	2.30
2	CSA0114.D	GB602-FF2-B01	1.60	1.90	2.90	2.90	2.00
2	CSA0120.D	GB602-FF2-B02	2.00	2.30	3.60	2.90	2.40
2	CSA0115.D	GB602-FF3-B01	1.70	2.10	3.20	2.50	1.80
2	CSA0121.D	GB602-FF3-B02	1.40	2.00	3.20	3.00	2.60
2	CSA0116.D	GB602-FF4-B01	1.60	1.90	2.50	2.60	2.40
2	CSA0122.D	GB602-FF4-B02	1.80	2.30	3.90	3.50	3.20
2	CSA0117.D	GB602-FF5-B01	1.70	2.20	3.30	2.60	2.20

Table H.3. Sediment polycyclic aromatic hydrocarbon data for Cruise 2B.

Cruise	Sample	Station	Naphthal	C1-Naphth	C2-Naphth	C3-Naphth	C4-Naphth
2	CSA0123.D	GB602-FF5-B02	2.50	2.60	3.30	3.20	3.10
2	CSA0118.D	GB602-FF6-B01	2.60	3.20	3.90	3.20	2.80
2	CSA0124.D	GB602-FF6-B02	1.90	2.40	3.50	3.10	1.30
2	CSA0101.D	GB602-NF-B01	2.20	1.90	7.10	8.10	4.90
2	CSA0102.D	GB602-NF-B02	4.10	5.30	10.70	15.60	6.10
2	CSA0103.D	GB602-NF-B03	9.80	9.80	15.10	0.15	0.15
2	CSA0104.D	GB602-NF-B04	2.70	4.50	15.80	0.15	0.15
2	CSA0105.D	GB602-NF-B05	2.10	1.70	6.90	0.15	0.15
2	CSA0106.D	GB602-NF-B06	6.70	5.90	14.40	0.15	0.15
2	CSA0107.D	GB602-NF-B07	4.10	3.90	9.60	0.15	0.15
2	CSA0108.D	GB602-NF-B08	14.00	0.20	0.15	0.15	0.15
2	CSA0109.D	GB602-NF-B09	1.90	3.60	0.15	0.15	0.15
2	CSA0110.D	GB602-NF-B10	4.90	14.30	20.50	26.60	9.70
2	CSA0111.D	GB602-NF-B11	2.00	3.00	8.40	0.15	0.15
2	CSA0112.D	GB602-NF-B12	2.30	3.10	6.10	0.15	0.15
2	CSA0086.D	GB602-NF-DS-1(0-2cm)	9.70	9.60	0.15	0.15	0.15
2	CSA0087.D	GB602-NF-DS-1(2-4cm)	6.30	5.80	58.90	126.00	25.60
2	CSA0088.D	GB602-NF-DS-1(4-6cm)	3.70	4.00	23.70	48.30	27.90
2	CSA0089.D	GB602-NF-DS-1(6-8cm)	2.10	2.60	7.70	5.70	0.15
2	CSA0090.D	GB602-NF-DS-1(8-10cm)	2.20	2.60	5.70	8.00	6.30
2	CSA0093.D	GB602-NF-DS-2 (4-6cm)	1.80	3.30	6.30	11.70	3.70
2	CSA0091.D	GB602-NF-DS-2(0-2cm)	8.40	5.80	0.15	0.15	0.15
2	CSA0092.D	GB602-NF-DS-2(2-4cm)	4.80	5.70	0.15	0.15	0.15
2	CSA0094.D	GB602-NF-DS-2(6-8cm)	1.60	2.00	4.70	5.80	4.10
2	CSA0095.D	GB602-NF-DS-2(8-10cm)	1.20	2.20	3.00	4.00	1.40
2	CSA0096.D	GB602-NF-DS-3(0-2cm)	14.60	6.70	12.00	14.00	11.00
2	CSA0097.D	GB602-NF-DS-3(2-4cm)	5.90	3.90	6.50	9.00	3.70
2	CSA0098.D	GB602-NF-DS-3(4-6cm)	2.60	2.50	3.50	3.40	2.60
2	CSA0099.D	GB602-NF-DS-3(6-8cm)	2.10	2.70	5.10	4.70	2.80
2	CSA0100.D	GB602-NF-DS-3(8-10cm)	2.10	2.90	3.80	4.10	4.70
2	CSA0125.D	MC292-DS-1(0-2cm)	4.20	5.80	8.70	8.10	5.00
2	CSA0126.D	MC292-DS-1(2-4cm)	8.10	13.20	21.10	18.50	11.20
2	CSA0127.D	MC292-DS-1(4-6cm)	4.60	5.90	8.10	7.10	5.40
2	CSA0128.D	MC292-DS-1(6-8 cm)	3.90	4.30	5.60	4.90	3.50
2	CSA0129.D	MC292-DS-1(8-10cm)	3.10	3.80	5.10	4.40	3.00
2	CSA0130.D	MC292-DS-2(0-2cm)	6.70	6.10	12.50	18.10	0.15
2	CSA0131.D	MC292-DS-2(2-4cm)	3.80	4.70	7.90	9.30	5.50
2	CSA0132.D	MC292-DS-2(4-6cm)	3.30	4.10	5.30	6.30	3.30
2	CSA0133.D	MC292-DS-2(6-8cm)	2.50	3.30	5.30	6.90	4.00
2	CSA0134.D	MC292-DS-2(8-10cm)	1.60	1.90	3.70	4.30	2.30
2	CSA0135.D	MC292-DS-3(0-2cm)	4.70	6.80	12.90	18.70	9.90
2	CSA0136.D	MC292-DS-3(2-4cm)	4.50	6.60	11.00	14.20	7.80
2	CSA0137.D	MC292-DS-3(4-6cm)	5.30	7.00	11.00	9.80	6.20
2	CSA0138.D	MC292-DS-3(6-8cm)	2.10	3.00	5.40	4.70	2.70
2	CSA0139.D	MC292-DS-3(8-10cm)	2.20	2.80	5.70	5.40	3.10
2	CSA0152.D	MC292-FF1-B01	6.20	6.10	9.60	8.00	3.70
2	CSA0158.D	MC292-FF1-B02	10.10	10.90	14.10	11.70	6.80
2	CSA0153.D	MC292-FF2-B01	8.70	9.60	15.80	13.70	7.60

Table H.3. Sediment polycyclic aromatic hydrocarbon data for Cruise 2B.

Cruise	Sample	Station	Naphthal	C1-Naphth	C2-Naphth	C3-Naphth	C4-Naphth
2	CSA0159.D	MC292-FF2-B02	7.10	8.00	13.60	10.80	6.80
2	CSA0154.D	MC292-FF3-B01	5.20	5.50	8.10	6.90	4.00
2	CSA0160.D	MC292-FF3-B02	4.20	4.30	7.60	6.90	5.00
2	CSA0155.D	MC292-FF4-B01	5.80	6.20	9.60	7.40	3.80
2	CSA0161.D	MC292-FF4-B02	4.70	5.70	10.20	8.20	5.50
2	CSA0156.D	MC292-FF5-B01	4.70	5.10	8.30	6.50	2.80
2	CSA0162.D	MC292-FF5-B02	5.70	5.90	12.40	9.90	5.80
2	CSA0157.D	MC292-FF6-B01	4.00	4.20	6.50	6.70	2.30
2	CSA0163.D	MC292-FF6-B02	4.60	4.70	7.50	5.20	3.80
2	CSA0140.D	MC292-NF-B01	6.80	14.40	28.80	48.30	17.50
2	CSA0141.D	MC292-NF-B02	2.90	4.10	8.40	0.15	0.15
2	CSA0142.D	MC292-NF-B03	7.90	9.30	11.90	8.80	4.70
2	CSA0143.D	MC292-NF-B04	4.50	4.50	8.10	6.40	2.80
2	CSA0144.D	MC292-NF-B05	30.60	9.20	11.80	14.60	6.80
2	CSA0145.D	MC292-NF-B06	2.80	3.00	5.60	4.60	1.90
2	CSA0146.D	MC292-NF-B07	3.60	4.50	7.50	7.60	4.80
2	CSA0147.D	MC292-NF-B08	7.40	14.10	25.50	32.90	20.80
2	CSA0148.D	MC292-NF-B09	3.20	3.60	6.10	6.20	3.90
2	CSA0149.D	MC292-NF-B10	4.30	4.90	8.30	8.90	9.50
2	CSA0150.D	MC292-NF-B11	4.50	4.40	7.90	7.30	3.50
2	CSA0151.D	MC292-NF-B12	3.90	4.60	7.50	6.40	3.90

Table H.3. Sediment polycyclic aromatic hydrocarbon data for Cruise 2B.

Cruise	Sample	Station	Biphenyl	Acena_lene	Acen_thene	Fluorene	C1-Fluor
2	CSA0074.D	GB516-FF1-B01	1.60	0.70	1.10	1.00	1.00
2	CSA0080.D	GB516-FF1-B02	0.30	0.90	1.90	1.50	1.60
2	CSA0075.D	GB516-FF2-B01	0.80	0.10	2.40	2.50	0.70
2	CSA0081.D	GB516-FF2-B02	0.80	0.90	5.60	3.80	0.70
2	CSA0076.D	GB516-FF3-B01	0.30	0.50	1.50	1.30	0.70
2	CSA0082.D	GB516-FF3-B02	0.20	0.50	1.20	1.00	1.00
2	CSA0077.D	GB516-FF4-B01	0.20	0.60	0.90	0.70	0.70
2	CSA0083.D	GB516-FF4-B02	0.20	0.10	0.60	0.80	0.70
2	CSA0078.D	GB516-FF5-B01	0.20	0.70	0.80	0.70	0.80
2	CSA0084.D	GB516-FF5-B02	0.40	0.90	2.20	1.70	1.70
2	CSA0079.D	GB516-FF6-B01	0.40	0.70	2.80	2.00	1.40
2	CSA0085.D	GB516-FF6-B02	0.50	0.70	2.50	1.90	1.60
2	CSA0062.D	GB516-NF-B01	0.15	0.10	0.10	0.05	0.10
2	CSA0063.D	GB516-NF-B02	0.15	0.10	0.10	0.05	0.10
2	CSA0064.D	GB516-NF-B03	0.15	0.10	0.10	0.05	0.10
2	CSA0065.D	GB516-NF-B04	0.15	0.10	0.10	0.05	0.10
2	CSA0066.D	GB516-NF-B05	0.15	0.10	0.10	0.05	0.10
2	CSA0067.D	GB516-NF-B06	0.15	0.10	0.10	0.05	0.10
2	CSA0068.D	GB516-NF-B07	0.15	0.10	0.10	0.05	0.10
2	CSA0069.D	GB516-NF-B08	0.15	0.10	0.10	0.05	0.10
2	CSA0070.D	GB516-NF-B09	0.15	0.10	0.10	0.05	0.10
2	CSA0071.D	GB516-NF-B10	3.20	0.50	1.00	0.90	0.70
2	CSA0072.D	GB516-NF-B11	0.15	0.10	0.10	0.05	0.10
2	CSA0073.D	GB516-NF-B12	0.15	0.10	0.10	0.05	0.10
2	CSA0047.D	GB516-NF-DS-1 (0-2cm)	0.15	0.10	0.10	0.05	0.10
2	CSA0048.D	GB516-NF-DS-1 (2-4cm)	0.15	0.10	0.10	0.05	0.10
2	CSA0049.D	GB516-NF-DS-1 (4-6cm)	0.15	0.15	0.15	0.05	0.10
2	CSA0050.D	GB516-NF-DS-1 (6-8cm)	0.15	0.10	0.10	0.05	0.10
2	CSA0051.D	GB516-NF-DS-1 (8-10cm)	0.15	0.10	0.10	0.05	0.10
2	CSA0053.D	GB516-NF-DS-2 (2-4cm)	8680.00	0.60	0.80	<0.9	0.85
2	CSA0054.D	GB516-NF-DS-2 (4-6cm)	8550.00	62.80	0.75	<0.8	0.80
2	CSA0055.D	GB516-NF-DS-2 (6-8cm)	8450.00	73.70	0.70	<0.8	0.80
2	CSA0056.D	GB516-NF-DS-2 (8-10cm)	0.15	0.10	0.10	0.05	0.10
2	CSA0052.D	GB516-NF-DS-2(0-2cm)	10300.00	101.00	0.80	<0.9	0.85
2	CSA0057.D	GB516-NF-DS-3 (0-2cm)	0.15	0.10	0.10	0.05	0.10
2	CSA0058.D	GB516-NF-DS-3 (2-4cm)	7.80	0.50	10.20	0.05	0.10
2	CSA0059.D	GB516-NF-DS-3 (4-6cm)	6.50	0.10	0.10	0.05	0.10
2	CSA0060.D	GB516-NF-DS-3 (6-8cm)	4.90	0.10	4.20	3.10	0.10
2	CSA0061.D	GB516-NF-DS-3 (8-10cm)	6.70	0.10	0.10	0.05	0.10
2	CSA0113.D	GB602-FF1-B01	0.80	0.10	4.30	2.40	0.70
2	CSA0119.D	GB602-FF1-B02	5.10	0.40	1.80	1.20	0.50
2	CSA0114.D	GB602-FF2-B01	2.40	0.60	1.10	0.90	0.50
2	CSA0120.D	GB602-FF2-B02	4.60	0.60	1.50	1.40	0.60
2	CSA0115.D	GB602-FF3-B01	3.10	0.60	1.20	1.00	0.60
2	CSA0121.D	GB602-FF3-B02	6.40	0.30	3.10	1.60	0.50
2	CSA0116.D	GB602-FF4-B01	3.30	0.40	1.90	1.20	0.40
2	CSA0122.D	GB602-FF4-B02	6.50	0.40	3.70	2.00	0.60
2	CSA0117.D	GB602-FF5-B01	6.70	0.50	2.70	1.60	0.60

Table H.3. Sediment polycyclic aromatic hydrocarbon data for Cruise 2B.

Cruise	Sample	Station	Biphenyl	Acena_lene	Acen_thene	Fluorene	C1-Fluor
2	CSA0123.D	GB602-FF5-B02	4.40	0.50	1.50	2.00	0.80
2	CSA0118.D	GB602-FF6-B01	7.30	0.50	2.40	1.50	0.80
2	CSA0124.D	GB602-FF6-B02	4.40	0.40	2.20	1.30	0.70
2	CSA0101.D	GB602-NF-B01	5.10	0.10	6.00	5.90	1.40
2	CSA0102.D	GB602-NF-B02	0.70	1.30	8.80	4.60	0.10
2	CSA0103.D	GB602-NF-B03	0.15	0.10	0.10	0.05	0.10
2	CSA0104.D	GB602-NF-B04	7.20	0.10	0.10	0.05	0.10
2	CSA0105.D	GB602-NF-B05	30.40	0.10	0.10	0.05	0.10
2	CSA0106.D	GB602-NF-B06	0.80	0.10	0.10	0.05	0.10
2	CSA0107.D	GB602-NF-B07	0.70	0.10	0.10	0.05	0.10
2	CSA0108.D	GB602-NF-B08	0.15	0.10	0.10	0.05	0.10
2	CSA0109.D	GB602-NF-B09	0.15	0.10	0.10	0.05	0.10
2	CSA0110.D	GB602-NF-B10	6.60	0.10	0.10	0.05	0.10
2	CSA0111.D	GB602-NF-B11	5.10	0.10	0.10	0.05	0.10
2	CSA0112.D	GB602-NF-B12	0.80	0.10	0.10	0.05	0.10
2	CSA0086.D	GB602-NF-DS-1(0-2cm)	0.15	0.10	0.10	0.05	0.10
2	CSA0087.D	GB602-NF-DS-1(2-4cm)	0.15	0.10	0.10	0.05	0.10
2	CSA0088.D	GB602-NF-DS-1(4-6cm)	0.15	0.10	0.10	0.05	0.10
2	CSA0089.D	GB602-NF-DS-1(6-8cm)	2.10	0.10	0.10	0.05	0.10
2	CSA0090.D	GB602-NF-DS-1(8-10cm)	0.15	0.10	0.10	0.05	0.10
2	CSA0093.D	GB602-NF-DS-2 (4-6cm)	0.15	0.10	0.10	0.05	0.10
2	CSA0091.D	GB602-NF-DS-2(0-2cm)	0.15	0.10	0.10	0.05	0.10
2	CSA0092.D	GB602-NF-DS-2(2-4cm)	0.15	0.10	0.10	0.05	0.10
2	CSA0094.D	GB602-NF-DS-2(6-8cm)	0.90	0.40	3.80	0.05	0.10
2	CSA0095.D	GB602-NF-DS-2(8-10cm)	0.60	0.10	3.20	2.30	6.80
2	CSA0096.D	GB602-NF-DS-3(0-2cm)	2.50	0.10	0.10	0.05	0.10
2	CSA0097.D	GB602-NF-DS-3(2-4cm)	0.15	0.10	0.10	0.05	0.10
2	CSA0098.D	GB602-NF-DS-3(4-6cm)	0.60	0.10	3.60	2.90	0.10
2	CSA0099.D	GB602-NF-DS-3(6-8cm)	1.00	0.10	5.40	3.30	0.60
2	CSA0100.D	GB602-NF-DS-3(8-10cm)	0.70	0.30	7.80	4.00	0.90
2	CSA0125.D	MC292-DS-1(0-2cm)	9.50	0.80	6.80	4.30	0.10
2	CSA0126.D	MC292-DS-1(2-4cm)	42.00	1.60	17.80	12.00	0.10
2	CSA0127.D	MC292-DS-1(4-6cm)	17.30	1.60	5.10	3.80	1.70
2	CSA0128.D	MC292-DS-1(6-8 cm)	6.10	1.60	3.60	2.80	1.60
2	CSA0129.D	MC292-DS-1(8-10cm)	8.80	1.10	3.20	2.40	1.60
2	CSA0130.D	MC292-DS-2(0-2cm)	0.40	1.00	13.80	0.05	0.10
2	CSA0131.D	MC292-DS-2(2-4cm)	0.60	1.10	5.30	3.40	3.00
2	CSA0132.D	MC292-DS-2(4-6cm)	1.10	1.00	6.20	4.20	1.50
2	CSA0133.D	MC292-DS-2(6-8cm)	2.00	0.60	8.60	5.10	1.50
2	CSA0134.D	MC292-DS-2(8-10cm)	1.50	0.30	3.10	2.10	0.90
2	CSA0135.D	MC292-DS-3(0-2cm)	1.40	1.10	13.40	0.05	0.10
2	CSA0136.D	MC292-DS-3(2-4cm)	1.10	1.30	6.70	4.90	0.10
2	CSA0137.D	MC292-DS-3(4-6cm)	3.30	1.50	17.20	11.40	3.20
2	CSA0138.D	MC292-DS-3(6-8cm)	1.60	0.60	8.00	5.00	1.20
2	CSA0139.D	MC292-DS-3(8-10cm)	1.80	0.50	10.30	6.50	1.20
2	CSA0152.D	MC292-FF1-B01	4.90	3.80	0.40	2.40	2.20
2	CSA0158.D	MC292-FF1-B02	4.30	6.80	13.70	13.00	5.10
2	CSA0153.D	MC292-FF2-B01	2.80	5.20	6.90	6.40	3.70

Table H.3. Sediment polycyclic aromatic hydrocarbon data for Cruise 2B.

Cruise	Sample	Station	Biphenyl	Acena_lene	Acen_thene	Fluorene	C1-Fluor
2	CSA0159.D	MC292-FF2-B02	5.00	4.80	2.60	3.60	3.80
2	CSA0154.D	MC292-FF3-B01	0.50	2.30	3.00	2.80	1.90
2	CSA0160.D	MC292-FF3-B02	3.50	1.90	2.30	2.50	1.50
2	CSA0155.D	MC292-FF4-B01	0.50	2.70	2.70	2.70	2.00
2	CSA0161.D	MC292-FF4-B02	6.90	2.40	3.70	3.40	2.10
2	CSA0156.D	MC292-FF5-B01	0.20	2.00	1.30	2.10	1.30
2	CSA0162.D	MC292-FF5-B02	7.20	2.40	3.40	3.20	2.00
2	CSA0157.D	MC292-FF6-B01	0.30	1.40	3.70	2.90	1.40
2	CSA0163.D	MC292-FF6-B02	4.00	2.00	4.90	3.50	1.70
2	CSA0140.D	MC292-NF-B01	7.80	0.10	60.10	0.05	0.10
2	CSA0141.D	MC292-NF-B02	0.50	0.10	0.10	0.05	0.10
2	CSA0142.D	MC292-NF-B03	0.30	1.60	5.50	0.05	0.10
2	CSA0143.D	MC292-NF-B04	0.80	1.40	2.30	2.00	1.70
2	CSA0144.D	MC292-NF-B05	0.60	2.90	18.80	0.05	0.10
2	CSA0145.D	MC292-NF-B06	0.80	1.10	3.10	2.30	1.10
2	CSA0146.D	MC292-NF-B07	3.50	1.80	2.80	2.20	2.50
2	CSA0147.D	MC292-NF-B08	0.15	0.10	0.10	0.05	0.10
2	CSA0148.D	MC292-NF-B09	4.20	1.80	4.30	3.10	1.80
2	CSA0149.D	MC292-NF-B10	5.90	1.80	3.90	3.50	0.10
2	CSA0150.D	MC292-NF-B11	3.80	2.70	2.50	2.10	2.10
2	CSA0151.D	MC292-NF-B12	5.40	1.70	2.40	2.30	1.40

Table H.3. Sediment polycyclic aromatic hydrocarbon data for Cruise 2B.

Cruise	Sample	Station	C2-Fluor	C3-Fluor	Anthracene	Phenanthre	C1-PhenAnt
2	CSA0074.D	GB516-FF1-B01	2.30	3.40	2.10	4.30	4.90
2	CSA0080.D	GB516-FF1-B02	2.30	2.30	2.00	4.60	5.00
2	CSA0075.D	GB516-FF2-B01	2.00	2.00	14.20	6.00	4.30
2	CSA0081.D	GB516-FF2-B02	2.60	2.00	2.80	4.20	4.80
2	CSA0076.D	GB516-FF3-B01	2.50	3.80	1.00	3.20	3.70
2	CSA0082.D	GB516-FF3-B02	1.70	2.10	0.70	3.30	3.80
2	CSA0077.D	GB516-FF4-B01	1.40	1.80	1.10	3.10	3.80
2	CSA0083.D	GB516-FF4-B02	2.00	2.70	1.50	4.10	4.70
2	CSA0078.D	GB516-FF5-B01	1.20	2.00	1.60	4.00	4.30
2	CSA0084.D	GB516-FF5-B02	2.70	2.20	2.30	4.40	4.80
2	CSA0079.D	GB516-FF6-B01	2.00	2.30	6.40	5.10	4.90
2	CSA0085.D	GB516-FF6-B02	2.40	1.90	1.40	4.30	4.80
2	CSA0062.D	GB516-NF-B01	0.10	0.10	1.10	4.00	4.90
2	CSA0063.D	GB516-NF-B02	0.10	0.10	1.40	5.30	8.20
2	CSA0064.D	GB516-NF-B03	0.10	0.10	1.20	6.60	12.00
2	CSA0065.D	GB516-NF-B04	0.10	0.10	1.20	4.80	5.30
2	CSA0066.D	GB516-NF-B05	0.10	0.10	4.00	8.50	11.00
2	CSA0067.D	GB516-NF-B06	0.10	0.10	61.30	19.50	0.15
2	CSA0068.D	GB516-NF-B07	0.10	0.10	2.80	9.00	13.70
2	CSA0069.D	GB516-NF-B08	0.10	0.10	1.90	5.40	8.40
2	CSA0070.D	GB516-NF-B09	0.10	0.10	1.70	5.30	9.40
2	CSA0071.D	GB516-NF-B10	2.00	2.70	1.30	4.00	4.40
2	CSA0072.D	GB516-NF-B11	0.10	0.10	2.40	4.00	4.80
2	CSA0073.D	GB516-NF-B12	0.10	0.10	2.80	4.70	4.50
2	CSA0047.D	GB516-NF-DS-1 (0-2cm)	0.10	0.10	0.90	5.80	13.60
2	CSA0048.D	GB516-NF-DS-1 (2-4cm)	0.10	0.10	1.70	10.60	16.30
2	CSA0049.D	GB516-NF-DS-1 (4-6cm)	0.10	0.10	1.30	5.50	0.15
2	CSA0050.D	GB516-NF-DS-1 (6-8cm)	0.10	0.10	1.40	13.90	34.70
2	CSA0051.D	GB516-NF-DS-1 (8-10cm)	0.10	0.10	0.70	8.80	18.40
2	CSA0053.D	GB516-NF-DS-2 (2-4cm)	0.85	0.85	18.90	118.00	105.00
2	CSA0054.D	GB516-NF-DS-2 (4-6cm)	0.80	0.80	13.20	119.00	91.90
2	CSA0055.D	GB516-NF-DS-2 (6-8cm)	0.80	0.80	14.40	138.00	1.10
2	CSA0056.D	GB516-NF-DS-2 (8-10cm)	0.10	0.10	3.60	20.70	22.10
2	CSA0052.D	GB516-NF-DS-2(0-2cm)	0.85	0.85	16.90	95.30	127.00
2	CSA0057.D	GB516-NF-DS-3 (0-2cm)	0.10	0.10	1.90	4.40	0.15
2	CSA0058.D	GB516-NF-DS-3 (2-4cm)	0.10	0.10	2.60	5.60	5.70
2	CSA0059.D	GB516-NF-DS-3 (4-6cm)	0.10	0.10	1.80	5.40	5.00
2	CSA0060.D	GB516-NF-DS-3 (6-8cm)	0.10	0.10	0.60	2.10	3.00
2	CSA0061.D	GB516-NF-DS-3 (8-10cm)	0.10	0.10	0.30	2.20	3.40
2	CSA0113.D	GB602-FF1-B01	2.10	2.00	0.80	2.80	4.10
2	CSA0119.D	GB602-FF1-B02	1.70	2.00	1.40	3.00	3.80
2	CSA0114.D	GB602-FF2-B01	1.60	2.00	1.90	3.40	4.00
2	CSA0120.D	GB602-FF2-B02	1.50	2.20	3.40	5.40	4.30
2	CSA0115.D	GB602-FF3-B01	1.70	1.80	1.90	3.70	4.00
2	CSA0121.D	GB602-FF3-B02	1.60	2.10	0.80	2.70	3.20
2	CSA0116.D	GB602-FF4-B01	1.60	1.80	1.50	2.50	3.40
2	CSA0122.D	GB602-FF4-B02	1.90	2.40	1.00	3.00	4.00
2	CSA0117.D	GB602-FF5-B01	1.60	1.90	1.00	3.20	3.80

Table H.3. Sediment polycyclic aromatic hydrocarbon data for Cruise 2B.

Cruise	Sample	Station	C2-Fluor	C3-Fluor	Anthracene	Phenanthre	C1-PhenAnt
2	CSA0123.D	GB602-FF5-B02	2.00	3.10	6.30	4.70	4.30
2	CSA0118.D	GB602-FF6-B01	1.90	1.90	1.00	3.20	3.80
2	CSA0124.D	GB602-FF6-B02	1.90	2.00	0.70	3.10	3.70
2	CSA0101.D	GB602-NF-B01	2.80	6.90	0.60	2.80	4.40
2	CSA0102.D	GB602-NF-B02	0.10	0.10	1.50	6.10	13.50
2	CSA0103.D	GB602-NF-B03	0.10	0.10	1.50	10.20	26.20
2	CSA0104.D	GB602-NF-B04	0.10	0.10	1.10	7.10	9.20
2	CSA0105.D	GB602-NF-B05	0.10	0.10	1.20	3.40	4.70
2	CSA0106.D	GB602-NF-B06	0.10	0.10	1.10	8.20	16.30
2	CSA0107.D	GB602-NF-B07	0.10	0.10	0.80	7.00	8.60
2	CSA0108.D	GB602-NF-B08	0.10	0.10	1.50	8.70	24.80
2	CSA0109.D	GB602-NF-B09	0.10	0.10	0.50	3.50	9.00
2	CSA0110.D	GB602-NF-B10	0.10	0.10	1.50	13.10	20.20
2	CSA0111.D	GB602-NF-B11	0.10	0.10	1.20	5.30	11.40
2	CSA0112.D	GB602-NF-B12	0.10	0.10	1.30	3.90	7.90
2	CSA0086.D	GB602-NF-DS-1(0-2cm)	0.10	0.10	1.50	11.10	23.00
2	CSA0087.D	GB602-NF-DS-1(2-4cm)	0.10	0.10	1.30	7.30	16.80
2	CSA0088.D	GB602-NF-DS-1(4-6cm)	0.10	0.10	0.80	5.80	10.00
2	CSA0089.D	GB602-NF-DS-1(6-8cm)	0.10	0.10	0.60	2.50	6.60
2	CSA0090.D	GB602-NF-DS-1(8-10cm)	0.10	0.10	0.30	2.80	5.30
2	CSA0093.D	GB602-NF-DS-2 (4-6cm)	0.10	0.10	0.80	4.00	7.20
2	CSA0091.D	GB602-NF-DS-2(0-2cm)	0.10	0.10	1.40	11.40	17.60
2	CSA0092.D	GB602-NF-DS-2(2-4cm)	0.10	0.10	1.00	9.00	14.10
2	CSA0094.D	GB602-NF-DS-2(6-8cm)	0.10	0.10	0.40	2.80	5.40
2	CSA0095.D	GB602-NF-DS-2(8-10cm)	5.50	7.30	1.30	3.10	4.00
2	CSA0096.D	GB602-NF-DS-3(0-2cm)	0.10	0.10	1.10	6.50	8.90
2	CSA0097.D	GB602-NF-DS-3(2-4cm)	0.10	0.10	0.90	3.80	5.40
2	CSA0098.D	GB602-NF-DS-3(4-6cm)	0.10	0.10	0.40	2.20	3.90
2	CSA0099.D	GB602-NF-DS-3(6-8cm)	2.10	1.80	0.30	2.40	4.70
2	CSA0100.D	GB602-NF-DS-3(8-10cm)	3.40	4.20	0.40	3.40	4.80
2	CSA0125.D	MC292-DS-1(0-2cm)	0.10	0.10	1.20	7.90	8.50
2	CSA0126.D	MC292-DS-1(2-4cm)	0.10	0.10	2.20	15.00	14.70
2	CSA0127.D	MC292-DS-1(4-6cm)	2.10	3.10	2.00	7.80	7.20
2	CSA0128.D	MC292-DS-1(6-8 cm)	2.00	2.30	2.70	6.70	6.90
2	CSA0129.D	MC292-DS-1(8-10cm)	2.70	1.80	1.40	5.30	5.80
2	CSA0130.D	MC292-DS-2(0-2cm)	0.10	0.10	3.70	14.50	11.80
2	CSA0131.D	MC292-DS-2(2-4cm)	5.60	3.70	1.50	6.90	9.30
2	CSA0132.D	MC292-DS-2(4-6cm)	3.70	3.10	1.40	5.50	6.40
2	CSA0133.D	MC292-DS-2(6-8cm)	3.90	3.00	0.80	3.80	4.90
2	CSA0134.D	MC292-DS-2(8-10cm)	1.70	1.30	0.30	2.10	3.30
2	CSA0135.D	MC292-DS-3(0-2cm)	0.10	0.10	2.50	10.20	12.60
2	CSA0136.D	MC292-DS-3(2-4cm)	0.10	0.10	2.10	9.10	13.90
2	CSA0137.D	MC292-DS-3(4-6cm)	6.50	4.60	2.10	9.00	9.90
2	CSA0138.D	MC292-DS-3(6-8cm)	2.50	2.10	0.70	3.60	4.20
2	CSA0139.D	MC292-DS-3(8-10cm)	3.20	2.90	0.50	3.10	3.70
2	CSA0152.D	MC292-FF1-B01	5.60	3.90	3.90	11.40	10.90
2	CSA0158.D	MC292-FF1-B02	7.40	7.60	12.10	31.60	19.20
2	CSA0153.D	MC292-FF2-B01	6.10	6.30	5.60	17.00	16.60

Table H.3. Sediment polycyclic aromatic hydrocarbon data for Cruise 2B.

Cruise	Sample	Station	C2-Fluor	C3-Fluor	Anthracene	Phenanthre	C1-PhenAnt
2	CSA0159.D	MC292-FF2-B02	8.00	6.10	4.80	14.00	17.40
2	CSA0154.D	MC292-FF3-B01	3.30	4.00	3.80	9.40	9.60
2	CSA0160.D	MC292-FF3-B02	5.00	4.30	3.50	7.80	8.80
2	CSA0155.D	MC292-FF4-B01	3.50	5.00	4.00	10.40	9.40
2	CSA0161.D	MC292-FF4-B02	6.30	4.30	3.20	9.60	9.50
2	CSA0156.D	MC292-FF5-B01	3.10	3.70	2.70	8.90	8.10
2	CSA0162.D	MC292-FF5-B02	4.70	3.60	2.90	9.90	12.00
2	CSA0157.D	MC292-FF6-B01	4.20	2.90	1.90	7.40	7.40
2	CSA0163.D	MC292-FF6-B02	3.00	3.50	2.70	7.50	7.50
2	CSA0140.D	MC292-NF-B01	0.10	0.10	2.00	18.50	31.50
2	CSA0141.D	MC292-NF-B02	0.10	0.10	1.70	5.50	6.50
2	CSA0142.D	MC292-NF-B03	0.10	0.10	2.70	8.00	8.50
2	CSA0143.D	MC292-NF-B04	2.30	2.70	1.30	6.60	7.80
2	CSA0144.D	MC292-NF-B05	0.10	0.10	13.10	46.90	15.00
2	CSA0145.D	MC292-NF-B06	2.10	1.40	1.50	5.50	5.40
2	CSA0146.D	MC292-NF-B07	1.90	3.10	1.70	7.40	9.00
2	CSA0147.D	MC292-NF-B08	0.10	0.10	2.30	14.50	20.90
2	CSA0148.D	MC292-NF-B09	3.30	3.30	2.10	6.90	6.60
2	CSA0149.D	MC292-NF-B10	0.10	0.10	2.20	8.60	8.50
2	CSA0150.D	MC292-NF-B11	4.20	3.60	6.20	8.50	8.20
2	CSA0151.D	MC292-NF-B12	3.90	3.20	2.10	7.90	7.60

Table H.3. Sediment polycyclic aromatic hydrocarbon data for Cruise 2B.

Cruise	Sample	Station	C2-PhenAnt	C3-PhenAnt	C4-PhenAnt	Dibenzothi
2	CSA0074.D	GB516-FF1-B01	7.20	7.00	3.50	0.70
2	CSA0080.D	GB516-FF1-B02	6.60	5.00	3.50	0.60
2	CSA0075.D	GB516-FF2-B01	5.50	3.80	2.00	0.80
2	CSA0081.D	GB516-FF2-B02	5.80	4.90	3.20	0.60
2	CSA0076.D	GB516-FF3-B01	5.90	5.40	2.40	0.40
2	CSA0082.D	GB516-FF3-B02	5.60	4.40	2.30	0.50
2	CSA0077.D	GB516-FF4-B01	5.40	6.30	4.70	0.50
2	CSA0083.D	GB516-FF4-B02	5.70	4.50	1.90	0.50
2	CSA0078.D	GB516-FF5-B01	5.90	5.40	2.90	0.60
2	CSA0084.D	GB516-FF5-B02	6.90	7.30	5.20	0.70
2	CSA0079.D	GB516-FF6-B01	6.30	5.90	3.90	0.60
2	CSA0085.D	GB516-FF6-B02	6.70	5.30	6.30	0.60
2	CSA0062.D	GB516-NF-B01	7.10	0.15	0.15	3.30
2	CSA0063.D	GB516-NF-B02	9.00	5.50	0.15	4.80
2	CSA0064.D	GB516-NF-B03	16.60	9.10	5.10	12.70
2	CSA0065.D	GB516-NF-B04	8.20	5.50	0.15	1.40
2	CSA0066.D	GB516-NF-B05	13.80	8.90	4.00	1.60
2	CSA0067.D	GB516-NF-B06	0.15	0.15	0.15	218.00
2	CSA0068.D	GB516-NF-B07	19.00	11.10	7.20	19.80
2	CSA0069.D	GB516-NF-B08	11.10	7.60	4.70	2.70
2	CSA0070.D	GB516-NF-B09	16.70	9.90	0.15	16.90
2	CSA0071.D	GB516-NF-B10	5.90	5.50	1.90	0.50
2	CSA0072.D	GB516-NF-B11	6.50	4.50	1.60	0.80
2	CSA0073.D	GB516-NF-B12	5.90	3.40	1.90	0.70
2	CSA0047.D	GB516-NF-DS-1 (0-2cm)	0.15	0.15	0.15	9.90
2	CSA0048.D	GB516-NF-DS-1 (2-4cm)	0.15	0.15	0.15	69.60
2	CSA0049.D	GB516-NF-DS-1 (4-6cm)	0.15	0.15	0.15	21.90
2	CSA0050.D	GB516-NF-DS-1 (6-8cm)	48.70	51.60	24.00	6.70
2	CSA0051.D	GB516-NF-DS-1 (8-10cm)	28.00	32.30	10.40	2.60
2	CSA0053.D	GB516-NF-DS-2 (2-4cm)	124.00	1.25	1.25	270.00
2	CSA0054.D	GB516-NF-DS-2 (4-6cm)	178.00	1.15	1.15	280.00
2	CSA0055.D	GB516-NF-DS-2 (6-8cm)	1.10	1.10	1.10	137.00
2	CSA0056.D	GB516-NF-DS-2 (8-10cm)	0.15	0.15	0.15	39.00
2	CSA0052.D	GB516-NF-DS-2(0-2cm)	124.00	1.25	1.25	308.00
2	CSA0057.D	GB516-NF-DS-3 (0-2cm)	0.15	0.15	0.15	13.60
2	CSA0058.D	GB516-NF-DS-3 (2-4cm)	7.70	6.90	4.80	1.80
2	CSA0059.D	GB516-NF-DS-3 (4-6cm)	7.60	5.40	2.70	1.10
2	CSA0060.D	GB516-NF-DS-3 (6-8cm)	4.90	2.70	0.15	0.50
2	CSA0061.D	GB516-NF-DS-3 (8-10cm)	5.00	2.80	0.15	0.60
2	CSA0113.D	GB602-FF1-B01	5.80	3.60	1.60	0.30
2	CSA0119.D	GB602-FF1-B02	6.20	5.10	2.50	0.30
2	CSA0114.D	GB602-FF2-B01	5.60	3.80	1.80	0.40
2	CSA0120.D	GB602-FF2-B02	6.30	4.10	1.90	0.40
2	CSA0115.D	GB602-FF3-B01	5.10	3.70	2.00	0.30
2	CSA0121.D	GB602-FF3-B02	4.80	2.20	1.90	0.30
2	CSA0116.D	GB602-FF4-B01	5.20	3.80	1.50	0.30
2	CSA0122.D	GB602-FF4-B02	4.90	3.40	1.60	0.40
2	CSA0117.D	GB602-FF5-B01	5.10	3.60	1.90	0.40

Table H.3. Sediment polycyclic aromatic hydrocarbon data for Cruise 2B.

Cruise	Sample	Station	C2-PhenAnt	C3-PhenAnt	C4-PhenAnt	Dibenzothi
2	CSA0123.D	GB602-FF5-B02	6.20	4.00	2.60	0.50
2	CSA0118.D	GB602-FF6-B01	6.20	4.80	2.50	0.30
2	CSA0124.D	GB602-FF6-B02	6.40	3.90	1.90	0.40
2	CSA0101.D	GB602-NF-B01	7.20	4.80	3.20	0.80
2	CSA0102.D	GB602-NF-B02	36.00	39.60	15.60	1.90
2	CSA0103.D	GB602-NF-B03	74.70	58.30	12.20	6.20
2	CSA0104.D	GB602-NF-B04	16.00	10.30	3.40	2.60
2	CSA0105.D	GB602-NF-B05	10.70	8.70	4.50	13.10
2	CSA0106.D	GB602-NF-B06	43.50	31.80	15.40	7.80
2	CSA0107.D	GB602-NF-B07	14.50	9.20	2.60	2.40
2	CSA0108.D	GB602-NF-B08	53.50	33.60	11.10	31.90
2	CSA0109.D	GB602-NF-B09	17.20	12.30	10.50	3.00
2	CSA0110.D	GB602-NF-B10	41.90	32.60	13.80	2.90
2	CSA0111.D	GB602-NF-B11	22.10	12.90	7.10	3.30
2	CSA0112.D	GB602-NF-B12	15.40	12.90	5.00	3.90
2	CSA0086.D	GB602-NF-DS-1(0-2cm)	33.70	24.80	7.10	15.90
2	CSA0087.D	GB602-NF-DS-1(2-4cm)	26.50	13.80	9.60	41.10
2	CSA0088.D	GB602-NF-DS-1(4-6cm)	18.50	14.90	9.50	24.30
2	CSA0089.D	GB602-NF-DS-1(6-8cm)	13.70	9.10	0.15	4.10
2	CSA0090.D	GB602-NF-DS-1(8-10cm)	9.30	5.40	1.00	1.60
2	CSA0093.D	GB602-NF-DS-2 (4-6cm)	16.30	13.50	6.20	1.20
2	CSA0091.D	GB602-NF-DS-2(0-2cm)	34.10	25.30	8.20	5.70
2	CSA0092.D	GB602-NF-DS-2(2-4cm)	27.40	24.80	8.90	4.60
2	CSA0094.D	GB602-NF-DS-2(6-8cm)	9.00	6.70	3.10	0.50
2	CSA0095.D	GB602-NF-DS-2(8-10cm)	6.30	3.80	1.60	0.30
2	CSA0096.D	GB602-NF-DS-3(0-2cm)	14.80	9.50	5.10	2.00
2	CSA0097.D	GB602-NF-DS-3(2-4cm)	11.10	7.70	2.80	0.70
2	CSA0098.D	GB602-NF-DS-3(4-6cm)	7.10	5.00	1.40	0.40
2	CSA0099.D	GB602-NF-DS-3(6-8cm)	7.30	5.40	2.30	0.40
2	CSA0100.D	GB602-NF-DS-3(8-10cm)	6.60	4.80	1.50	0.40
2	CSA0125.D	MC292-DS-1(0-2cm)	12.80	9.10	4.50	1.10
2	CSA0126.D	MC292-DS-1(2-4cm)	18.10	10.20	3.80	1.70
2	CSA0127.D	MC292-DS-1(4-6cm)	8.40	4.00	2.60	0.80
2	CSA0128.D	MC292-DS-1(6-8 cm)	7.80	5.20	2.60	0.70
2	CSA0129.D	MC292-DS-1(8-10cm)	6.60	4.10	3.20	0.60
2	CSA0130.D	MC292-DS-2(0-2cm)	19.90	16.10	7.40	1.40
2	CSA0131.D	MC292-DS-2(2-4cm)	11.80	8.60	4.20	1.10
2	CSA0132.D	MC292-DS-2(4-6cm)	7.60	5.10	2.20	0.60
2	CSA0133.D	MC292-DS-2(6-8cm)	5.50	3.30	1.20	0.50
2	CSA0134.D	MC292-DS-2(8-10cm)	3.50	1.70	0.60	0.30
2	CSA0135.D	MC292-DS-3(0-2cm)	20.90	18.80	7.70	1.80
2	CSA0136.D	MC292-DS-3(2-4cm)	17.70	14.20	5.30	1.30
2	CSA0137.D	MC292-DS-3(4-6cm)	9.10	5.30	3.20	1.10
2	CSA0138.D	MC292-DS-3(6-8cm)	4.60	2.20	1.10	0.40
2	CSA0139.D	MC292-DS-3(8-10cm)	4.30	1.80	1.10	0.40
2	CSA0152.D	MC292-FF1-B01	12.80	9.10	4.00	0.90
2	CSA0158.D	MC292-FF1-B02	21.40	13.80	7.40	2.20
2	CSA0153.D	MC292-FF2-B01	18.30	13.40	7.70	1.60

Table H.3. Sediment polycyclic aromatic hydrocarbon data for Cruise 2B.

Cruise	Sample	Station	C2-PhenAnt	C3-PhenAnt	C4-PhenAnt	Dibenzothi
2	CSA0159.D	MC292-FF2-B02	19.70	11.40	6.60	1.40
2	CSA0154.D	MC292-FF3-B01	12.00	7.60	3.00	1.00
2	CSA0160.D	MC292-FF3-B02	13.60	9.40	5.50	0.80
2	CSA0155.D	MC292-FF4-B01	11.00	7.40	4.00	1.00
2	CSA0161.D	MC292-FF4-B02	11.10	7.40	5.20	0.90
2	CSA0156.D	MC292-FF5-B01	9.50	5.80	2.70	0.80
2	CSA0162.D	MC292-FF5-B02	21.50	8.50	4.60	1.00
2	CSA0157.D	MC292-FF6-B01	8.90	5.00	2.80	0.70
2	CSA0163.D	MC292-FF6-B02	8.90	5.00	2.60	0.70
2	CSA0140.D	MC292-NF-B01	42.20	21.10	8.60	12.70
2	CSA0141.D	MC292-NF-B02	9.30	5.70	2.90	0.90
2	CSA0142.D	MC292-NF-B03	10.90	7.70	3.20	1.10
2	CSA0143.D	MC292-NF-B04	12.10	9.80	3.70	0.80
2	CSA0144.D	MC292-NF-B05	16.00	9.90	4.50	2.20
2	CSA0145.D	MC292-NF-B06	6.90	4.10	1.60	0.60
2	CSA0146.D	MC292-NF-B07	12.90	9.10	2.80	0.70
2	CSA0147.D	MC292-NF-B08	26.10	18.40	7.30	1.80
2	CSA0148.D	MC292-NF-B09	8.90	6.10	2.70	0.70
2	CSA0149.D	MC292-NF-B10	10.40	7.50	4.90	1.10
2	CSA0150.D	MC292-NF-B11	9.80	5.90	2.70	0.70
2	CSA0151.D	MC292-NF-B12	8.50	6.10	2.80	0.70

Table H.3. Sediment polycyclic aromatic hydrocarbon data for Cruise 2B.

Cruise	Sample	Station	C1-Dibenz	C2-Dibenz	C3-Dibenz	Fluoranth	Pyrene
2	CSA0074.D	GB516-FF1-B01	1.40	3.60	6.80	4.80	5.40
2	CSA0080.D	GB516-FF1-B02	1.30	2.50	3.80	6.30	5.60
2	CSA0075.D	GB516-FF2-B01	1.20	2.20	1.90	3.90	4.80
2	CSA0081.D	GB516-FF2-B02	1.30	2.90	5.00	4.90	4.80
2	CSA0076.D	GB516-FF3-B01	1.10	2.20	4.80	4.50	5.70
2	CSA0082.D	GB516-FF3-B02	1.00	1.70	3.80	4.20	5.60
2	CSA0077.D	GB516-FF4-B01	1.00	2.80	8.00	4.00	4.10
2	CSA0083.D	GB516-FF4-B02	1.20	2.30	3.80	6.40	6.40
2	CSA0078.D	GB516-FF5-B01	1.40	2.90	5.00	5.10	5.20
2	CSA0084.D	GB516-FF5-B02	1.40	2.90	8.90	5.30	5.00
2	CSA0079.D	GB516-FF6-B01	1.30	3.10	6.10	5.30	5.30
2	CSA0085.D	GB516-FF6-B02	1.60	3.30	4.50	5.00	5.20
2	CSA0062.D	GB516-NF-B01	0.15	0.15	0.15	3.60	4.60
2	CSA0063.D	GB516-NF-B02	0.15	0.15	0.15	4.30	6.30
2	CSA0064.D	GB516-NF-B03	17.40	0.15	0.15	5.40	5.10
2	CSA0065.D	GB516-NF-B04	7.00	7.90	10.60	4.80	4.60
2	CSA0066.D	GB516-NF-B05	7.70	8.90	12.60	10.10	11.70
2	CSA0067.D	GB516-NF-B06	0.15	0.15	0.15	12.70	11.30
2	CSA0068.D	GB516-NF-B07	19.70	19.20	15.40	9.90	9.10
2	CSA0069.D	GB516-NF-B08	9.90	22.20	23.40	5.50	6.70
2	CSA0070.D	GB516-NF-B09	30.30	15.00	21.40	5.90	6.50
2	CSA0071.D	GB516-NF-B10	1.10	2.60	4.40	3.40	4.50
2	CSA0072.D	GB516-NF-B11	3.20	4.50	5.50	5.10	5.30
2	CSA0073.D	GB516-NF-B12	1.30	2.50	2.70	4.20	5.20
2	CSA0047.D	GB516-NF-DS-1 (0-2cm)	0.15	0.15	0.15	2.10	4.50
2	CSA0048.D	GB516-NF-DS-1 (2-4cm)	0.15	0.15	0.15	4.10	6.00
2	CSA0049.D	GB516-NF-DS-1 (4-6cm)	0.15	0.15	0.15	0.15	0.25
2	CSA0050.D	GB516-NF-DS-1 (6-8cm)	19.60	17.90	16.80	5.10	8.50
2	CSA0051.D	GB516-NF-DS-1 (8-10cm)	0.15	0.15	0.15	5.90	8.50
2	CSA0053.D	GB516-NF-DS-2 (2-4cm)	1.15	1.15	1.15	45.40	37.40
2	CSA0054.D	GB516-NF-DS-2 (4-6cm)	1.05	1.05	1.05	46.50	39.80
2	CSA0055.D	GB516-NF-DS-2 (6-8cm)	1.05	1.00	1.00	33.40	29.20
2	CSA0056.D	GB516-NF-DS-2 (8-10cm)	34.70	0.15	0.15	15.70	15.80
2	CSA0052.D	GB516-NF-DS-2(0-2cm)	1.15	1.10	1.10	54.50	40.10
2	CSA0057.D	GB516-NF-DS-3 (0-2cm)	0.15	0.15	0.15	2.80	3.60
2	CSA0058.D	GB516-NF-DS-3 (2-4cm)	6.50	6.30	5.20	4.30	5.30
2	CSA0059.D	GB516-NF-DS-3 (4-6cm)	2.60	3.00	4.30	5.60	6.10
2	CSA0060.D	GB516-NF-DS-3 (6-8cm)	1.80	1.60	2.10	1.30	1.70
2	CSA0061.D	GB516-NF-DS-3 (8-10cm)	1.80	2.70	2.80	0.90	1.40
2	CSA0113.D	GB602-FF1-B01	0.70	1.60	2.10	2.60	2.80
2	CSA0119.D	GB602-FF1-B02	0.70	1.40	2.30	2.80	3.50
2	CSA0114.D	GB602-FF2-B01	0.70	1.30	1.50	4.10	4.90
2	CSA0120.D	GB602-FF2-B02	0.70	1.30	2.10	4.00	5.10
2	CSA0115.D	GB602-FF3-B01	0.60	1.40	1.70	3.50	4.40
2	CSA0121.D	GB602-FF3-B02	0.70	1.40	1.60	2.20	2.60
2	CSA0116.D	GB602-FF4-B01	0.70	1.30	1.40	2.40	3.40
2	CSA0122.D	GB602-FF4-B02	0.70	1.50	1.70	2.60	2.90
2	CSA0117.D	GB602-FF5-B01	0.80	1.20	1.60	3.30	3.40

Table H.3. Sediment polycyclic aromatic hydrocarbon data for Cruise 2B.

Cruise	Sample	Station	C1-Dibenz	C2-Dibenz	C3-Dibenz	Fluoranth	Pyrene
2	CSA0123.D	GB602-FF5-B02	0.70	1.60	1.60	3.90	4.40
2	CSA0118.D	GB602-FF6-B01	0.80	1.60	2.20	3.30	3.50
2	CSA0124.D	GB602-FF6-B02	0.70	2.10	1.80	2.60	3.50
2	CSA0101.D	GB602-NF-B01	4.00	3.70	5.80	1.70	2.10
2	CSA0102.D	GB602-NF-B02	16.40	30.90	30.80	4.50	8.30
2	CSA0103.D	GB602-NF-B03	57.00	44.20	51.30	6.20	8.90
2	CSA0104.D	GB602-NF-B04	6.70	7.80	10.60	3.40	5.30
2	CSA0105.D	GB602-NF-B05	10.80	25.20	14.90	2.40	3.80
2	CSA0106.D	GB602-NF-B06	28.30	38.20	38.30	6.40	12.20
2	CSA0107.D	GB602-NF-B07	18.40	10.00	10.70	3.70	6.50
2	CSA0108.D	GB602-NF-B08	33.60	40.90	57.70	4.90	8.70
2	CSA0109.D	GB602-NF-B09	7.90	11.10	16.20	1.80	1.70
2	CSA0110.D	GB602-NF-B10	13.00	16.20	16.00	11.00	10.20
2	CSA0111.D	GB602-NF-B11	12.50	9.60	10.50	4.20	6.40
2	CSA0112.D	GB602-NF-B12	15.20	9.80	9.83	3.20	4.20
2	CSA0086.D	GB602-NF-DS-1(0-2cm)	34.70	99.20	31.80	5.40	1.00
2	CSA0087.D	GB602-NF-DS-1(2-4cm)	86.30	29.90	25.90	4.80	5.80
2	CSA0088.D	GB602-NF-DS-1(4-6cm)	65.00	30.10	21.20	4.10	5.10
2	CSA0089.D	GB602-NF-DS-1(6-8cm)	16.20	13.90	11.90	1.90	2.20
2	CSA0090.D	GB602-NF-DS-1(8-10cm)	11.90	9.70	9.70	1.20	1.90
2	CSA0093.D	GB602-NF-DS-2 (4-6cm)	13.20	9.90	11.70	2.00	3.70
2	CSA0091.D	GB602-NF-DS-2(0-2cm)	41.40	24.70	25.00	5.00	7.30
2	CSA0092.D	GB602-NF-DS-2(2-4cm)	15.60	14.70	20.10	3.80	6.60
2	CSA0094.D	GB602-NF-DS-2(6-8cm)	5.10	4.60	4.60	1.70	1.80
2	CSA0095.D	GB602-NF-DS-2(8-10cm)	3.30	2.30	3.40	1.30	2.10
2	CSA0096.D	GB602-NF-DS-3(0-2cm)	47.80	38.50	18.60	4.30	5.70
2	CSA0097.D	GB602-NF-DS-3(2-4cm)	17.20	15.80	12.40	2.50	3.50
2	CSA0098.D	GB602-NF-DS-3(4-6cm)	10.20	5.10	6.60	1.10	1.70
2	CSA0099.D	GB602-NF-DS-3(6-8cm)	2.80	2.70	3.50	1.30	1.70
2	CSA0100.D	GB602-NF-DS-3(8-10cm)	0.80	2.00	2.10	1.70	2.40
2	CSA0125.D	MC292-DS-1(0-2cm)	13.30	3.80	5.70	6.80	9.70
2	CSA0126.D	MC292-DS-1(2-4cm)	18.50	5.80	7.80	9.20	13.60
2	CSA0127.D	MC292-DS-1(4-6cm)	3.00	2.30	1.00	8.40	10.30
2	CSA0128.D	MC292-DS-1(6-8 cm)	1.40	1.70	1.50	7.10	10.90
2	CSA0129.D	MC292-DS-1(8-10cm)	1.10	1.60	1.70	5.90	9.70
2	CSA0130.D	MC292-DS-2(0-2cm)	9.60	9.50	9.40	18.70	15.10
2	CSA0131.D	MC292-DS-2(2-4cm)	8.40	12.90	5.40	6.90	8.80
2	CSA0132.D	MC292-DS-2(4-6cm)	2.20	2.40	1.70	5.30	6.70
2	CSA0133.D	MC292-DS-2(6-8cm)	1.40	1.60	1.20	3.30	4.30
2	CSA0134.D	MC292-DS-2(8-10cm)	0.70	1.00	0.60	1.60	2.40
2	CSA0135.D	MC292-DS-3(0-2cm)	39.30	30.50	21.30	9.40	12.20
2	CSA0136.D	MC292-DS-3(2-4cm)	13.20	7.90	6.90	9.20	11.10
2	CSA0137.D	MC292-DS-3(4-6cm)	2.90	3.30	2.20	7.40	10.40
2	CSA0138.D	MC292-DS-3(6-8cm)	1.10	1.40	1.00	2.90	5.30
2	CSA0139.D	MC292-DS-3(8-10cm)	1.00	1.30	0.70	2.50	3.50
2	CSA0152.D	MC292-FF1-B01	1.50	2.70	2.30	14.30	22.70
2	CSA0158.D	MC292-FF1-B02	2.30	4.50	3.70	62.20	58.40
2	CSA0153.D	MC292-FF2-B01	2.80	4.70	4.10	20.40	29.80

Table H.3. Sediment polycyclic aromatic hydrocarbon data for Cruise 2B.

Cruise	Sample	Station	C1-Dibenz	C2-Dibenz	C3-Dibenz	Fluoranth	Pyrene
2	CSA0159.D	MC292-FF2-B02	3.10	4.30	3.50	15.80	20.30
2	CSA0154.D	MC292-FF3-B01	1.60	3.10	3.40	11.60	15.40
2	CSA0160.D	MC292-FF3-B02	1.40	3.30	4.50	10.40	11.90
2	CSA0155.D	MC292-FF4-B01	1.50	2.50	2.40	12.30	15.60
2	CSA0161.D	MC292-FF4-B02	1.40	2.40	2.70	11.10	12.40
2	CSA0156.D	MC292-FF5-B01	1.50	2.20	2.10	10.10	13.00
2	CSA0162.D	MC292-FF5-B02	1.50	3.30	2.70	11.30	12.80
2	CSA0157.D	MC292-FF6-B01	1.20	2.10	1.70	8.70	10.00
2	CSA0163.D	MC292-FF6-B02	1.20	1.80	1.50	8.10	9.60
2	CSA0140.D	MC292-NF-B01	18.60	17.40	11.60	7.10	7.60
2	CSA0141.D	MC292-NF-B02	7.50	4.10	6.00	6.60	9.10
2	CSA0142.D	MC292-NF-B03	10.60	5.20	7.70	11.40	11.00
2	CSA0143.D	MC292-NF-B04	1.60	2.80	2.40	7.40	9.30
2	CSA0144.D	MC292-NF-B05	6.40	8.20	10.40	61.00	52.10
2	CSA0145.D	MC292-NF-B06	1.10	1.70	1.20	6.20	8.20
2	CSA0146.D	MC292-NF-B07	1.90	3.00	3.10	7.80	11.10
2	CSA0147.D	MC292-NF-B08	10.10	12.90	8.20	9.70	14.70
2	CSA0148.D	MC292-NF-B09	1.30	1.80	1.90	8.10	12.70
2	CSA0149.D	MC292-NF-B10	9.30	4.50	5.40	8.60	12.70
2	CSA0150.D	MC292-NF-B11	1.30	2.20	1.90	9.20	12.50
2	CSA0151.D	MC292-NF-B12	1.30	2.00	1.60	8.50	12.30

Table H.3. Sediment polycyclic aromatic hydrocarbon data for Cruise 2B.

Cruise	Sample	Station	C1-FluorPyr	C2-FluorPyr	C3-FluorPyr	Naphthoben	C1-Naphth
2	CSA0074.D	GB516-FF1-B01	6.50	8.80	4.50	3.00	7.30
2	CSA0080.D	GB516-FF1-B02	6.50	9.60	5.30	3.10	6.30
2	CSA0075.D	GB516-FF2-B01	4.00	4.40	1.80	2.00	2.10
2	CSA0081.D	GB516-FF2-B02	5.80	6.60	4.60	2.60	6.60
2	CSA0076.D	GB516-FF3-B01	6.80	8.30	4.80	3.30	6.80
2	CSA0082.D	GB516-FF3-B02	5.60	7.00	3.70	2.20	5.00
2	CSA0077.D	GB516-FF4-B01	6.40	12.10	8.90	3.00	11.70
2	CSA0083.D	GB516-FF4-B02	5.90	9.90	7.90	2.60	5.60
2	CSA0078.D	GB516-FF5-B01	5.70	7.30	5.30	2.40	6.20
2	CSA0084.D	GB516-FF5-B02	7.40	14.20	8.50	3.50	12.10
2	CSA0079.D	GB516-FF6-B01	6.10	8.20	6.80	2.80	7.80
2	CSA0085.D	GB516-FF6-B02	7.20	14.60	7.90	3.10	8.80
2	CSA0062.D	GB516-NF-B01	5.80	5.90	0.30	0.10	0.15
2	CSA0063.D	GB516-NF-B02	10.30	7.90	4.30	0.10	0.15
2	CSA0064.D	GB516-NF-B03	9.20	7.00	3.90	0.10	0.15
2	CSA0065.D	GB516-NF-B04	6.10	7.70	3.70	2.60	6.20
2	CSA0066.D	GB516-NF-B05	15.10	12.50	8.40	5.20	8.80
2	CSA0067.D	GB516-NF-B06	0.30	0.30	0.30	0.10	0.15
2	CSA0068.D	GB516-NF-B07	15.70	17.50	9.90	6.40	10.70
2	CSA0069.D	GB516-NF-B08	8.00	10.00	5.40	3.30	7.60
2	CSA0070.D	GB516-NF-B09	10.70	9.80	6.50	2.30	3.80
2	CSA0071.D	GB516-NF-B10	4.90	6.60	3.60	2.30	5.20
2	CSA0072.D	GB516-NF-B11	5.20	5.70	3.50	2.50	4.60
2	CSA0073.D	GB516-NF-B12	4.60	4.50	1.90	2.20	3.10
2	CSA0047.D	GB516-NF-DS-1 (0-2cm)	0.30	0.30	0.30	0.10	0.15
2	CSA0048.D	GB516-NF-DS-1 (2-4cm)	0.30	0.30	0.30	0.10	0.15
2	CSA0049.D	GB516-NF-DS-1 (4-6cm)	0.30	0.30	0.30	0.10	0.15
2	CSA0050.D	GB516-NF-DS-1 (6-8cm)	24.10	28.20	23.20	12.00	11.80
2	CSA0051.D	GB516-NF-DS-1 (8-10cm)	17.80	19.30	12.70	0.10	0.15
2	CSA0053.D	GB516-NF-DS-2 (2-4cm)	2.25	2.20	2.20	0.60	1.25
2	CSA0054.D	GB516-NF-DS-2 (4-6cm)	2.10	2.05	2.05	0.60	1.15
2	CSA0055.D	GB516-NF-DS-2 (6-8cm)	2.00	2.00	2.00	0.55	1.10
2	CSA0056.D	GB516-NF-DS-2 (8-10cm)	0.30	0.30	0.30	0.10	0.15
2	CSA0052.D	GB516-NF-DS-2(0-2cm)	2.20	2.20	2.20	0.60	1.25
2	CSA0057.D	GB516-NF-DS-3 (0-2cm)	0.30	0.30	0.30	0.10	0.15
2	CSA0058.D	GB516-NF-DS-3 (2-4cm)	5.00	6.30	6.50	1.70	3.30
2	CSA0059.D	GB516-NF-DS-3 (4-6cm)	5.50	7.90	8.50	2.20	3.20
2	CSA0060.D	GB516-NF-DS-3 (6-8cm)	2.90	5.20	3.30	0.70	0.15
2	CSA0061.D	GB516-NF-DS-3 (8-10cm)	1.90	2.50	1.90	0.80	1.10
2	CSA0113.D	GB602-FF1-B01	2.30	3.00	2.00	1.10	1.90
2	CSA0119.D	GB602-FF1-B02	2.90	3.80	2.10	1.70	3.10
2	CSA0114.D	GB602-FF2-B01	4.60	4.20	1.70	2.30	2.60
2	CSA0120.D	GB602-FF2-B02	5.70	6.40	4.00	2.50	2.90
2	CSA0115.D	GB602-FF3-B01	4.70	3.90	2.30	2.10	2.50
2	CSA0121.D	GB602-FF3-B02	1.90	2.50	1.30	1.00	1.30
2	CSA0116.D	GB602-FF4-B01	2.00	2.10	1.10	1.20	1.50
2	CSA0122.D	GB602-FF4-B02	2.30	3.40	2.90	1.50	2.50
2	CSA0117.D	GB602-FF5-B01	2.40	3.50	1.70	1.40	1.90

Table H.3. Sediment polycyclic aromatic hydrocarbon data for Cruise 2B.

Cruise	Sample	Station	C1-FluorPyr	C2-FluorPyr	C3-FluorPyr	Naphthoben	C1-Naphth
2	CSA0123.D	GB602-FF5-B02	3.40	4.70	2.40	1.90	2.80
2	CSA0118.D	GB602-FF6-B01	3.20	5.80	2.40	1.50	3.30
2	CSA0124.D	GB602-FF6-B02	2.90	3.90	1.60	1.40	2.40
2	CSA0101.D	GB602-NF-B01	2.90	3.40	2.30	0.80	2.20
2	CSA0102.D	GB602-NF-B02	10.30	12.80	8.90	4.10	7.40
2	CSA0103.D	GB602-NF-B03	12.30	12.50	10.10	3.10	6.30
2	CSA0104.D	GB602-NF-B04	6.80	8.20	3.10	1.50	2.70
2	CSA0105.D	GB602-NF-B05	5.20	5.30	0.30	2.00	0.15
2	CSA0106.D	GB602-NF-B06	11.40	12.30	8.00	2.60	6.40
2	CSA0107.D	GB602-NF-B07	6.00	8.20	4.70	1.50	3.70
2	CSA0108.D	GB602-NF-B08	16.40	10.90	8.10	3.90	7.00
2	CSA0109.D	GB602-NF-B09	4.30	4.40	3.60	2.10	4.70
2	CSA0110.D	GB602-NF-B10	9.40	13.20	7.70	4.60	7.50
2	CSA0111.D	GB602-NF-B11	6.00	6.00	3.90	2.30	5.10
2	CSA0112.D	GB602-NF-B12	4.20	5.80	3.30	1.70	3.40
2	CSA0086.D	GB602-NF-DS-1(0-2cm)	15.00	11.70	6.60	4.60	6.60
2	CSA0087.D	GB602-NF-DS-1(2-4cm)	11.20	9.70	0.30	0.10	0.15
2	CSA0088.D	GB602-NF-DS-1(4-6cm)	8.60	6.50	3.50	0.10	0.15
2	CSA0089.D	GB602-NF-DS-1(6-8cm)	3.20	3.90	0.30	0.10	0.15
2	CSA0090.D	GB602-NF-DS-1(8-10cm)	1.90	2.90	1.90	1.10	1.30
2	CSA0093.D	GB602-NF-DS-2 (4-6cm)	5.50	6.70	1.70	1.40	3.90
2	CSA0091.D	GB602-NF-DS-2(0-2cm)	16.00	16.30	0.30	0.10	0.15
2	CSA0092.D	GB602-NF-DS-2(2-4cm)	10.70	12.20	0.30	1.60	4.30
2	CSA0094.D	GB602-NF-DS-2(6-8cm)	2.30	2.90	1.80	0.90	1.30
2	CSA0095.D	GB602-NF-DS-2(8-10cm)	1.60	2.00	1.40	0.60	0.80
2	CSA0096.D	GB602-NF-DS-3(0-2cm)	5.00	5.70	4.30	1.90	4.10
2	CSA0097.D	GB602-NF-DS-3(2-4cm)	3.90	5.00	3.60	1.50	3.50
2	CSA0098.D	GB602-NF-DS-3(4-6cm)	1.60	2.40	1.80	0.80	1.10
2	CSA0099.D	GB602-NF-DS-3(6-8cm)	1.60	2.40	1.00	0.90	1.50
2	CSA0100.D	GB602-NF-DS-3(8-10cm)	2.10	2.80	2.40	0.80	0.80
2	CSA0125.D	MC292-DS-1(0-2cm)	5.90	6.60	2.80	2.40	3.20
2	CSA0126.D	MC292-DS-1(2-4cm)	8.70	13.20	6.10	3.90	5.80
2	CSA0127.D	MC292-DS-1(4-6cm)	7.00	6.50	4.40	2.10	2.60
2	CSA0128.D	MC292-DS-1(6-8 cm)	7.40	7.10	4.50	2.20	2.40
2	CSA0129.D	MC292-DS-1(8-10cm)	6.60	7.10	4.10	1.70	2.20
2	CSA0130.D	MC292-DS-2(0-2cm)	16.10	12.70	7.70	7.00	4.20
2	CSA0131.D	MC292-DS-2(2-4cm)	7.50	6.50	4.40	2.90	2.70
2	CSA0132.D	MC292-DS-2(4-6cm)	5.40	5.50	2.50	1.90	1.70
2	CSA0133.D	MC292-DS-2(6-8cm)	3.40	3.40	2.10	1.20	1.60
2	CSA0134.D	MC292-DS-2(8-10cm)	2.10	1.80	1.30	0.80	0.90
2	CSA0135.D	MC292-DS-3(0-2cm)	13.20	13.90	9.30	5.70	5.50
2	CSA0136.D	MC292-DS-3(2-4cm)	9.60	9.70	4.20	3.80	4.10
2	CSA0137.D	MC292-DS-3(4-6cm)	7.00	5.70	3.80	2.30	2.40
2	CSA0138.D	MC292-DS-3(6-8cm)	3.40	3.20	1.60	0.90	1.00
2	CSA0139.D	MC292-DS-3(8-10cm)	2.70	2.50	1.20	0.60	0.70
2	CSA0152.D	MC292-FF1-B01	12.70	9.40	4.50	3.80	4.10
2	CSA0158.D	MC292-FF1-B02	31.00	20.50	11.90	12.80	8.60
2	CSA0153.D	MC292-FF2-B01	16.40	14.90	6.40	5.40	6.60

Table H.3. Sediment polycyclic aromatic hydrocarbon data for Cruise 2B.

Cruise	Sample	Station	C1-FluorPyr	C2-FluorPyr	C3-FluorPyr	Naphthoben	C1-Naphth
2	CSA0159.D	MC292-FF2-B02	15.20	11.80	6.80	5.00	6.80
2	CSA0154.D	MC292-FF3-B01	9.00	8.50	3.90	3.10	3.90
2	CSA0160.D	MC292-FF3-B02	7.90	9.10	6.00	2.60	4.00
2	CSA0155.D	MC292-FF4-B01	9.40	9.60	4.20	3.30	3.50
2	CSA0161.D	MC292-FF4-B02	8.50	10.70	6.60	2.80	4.30
2	CSA0156.D	MC292-FF5-B01	7.40	6.70	3.30	2.70	3.00
2	CSA0162.D	MC292-FF5-B02	8.50	11.00	7.60	3.00	5.10
2	CSA0157.D	MC292-FF6-B01	6.40	5.80	3.20	2.30	2.70
2	CSA0163.D	MC292-FF6-B02	6.90	6.40	3.80	2.20	2.80
2	CSA0140.D	MC292-NF-B01	10.40	9.40	4.70	4.10	5.70
2	CSA0141.D	MC292-NF-B02	7.50	8.30	5.00	2.10	2.10
2	CSA0142.D	MC292-NF-B03	8.70	9.00	5.00	2.70	3.50
2	CSA0143.D	MC292-NF-B04	9.20	10.90	6.80	3.80	4.40
2	CSA0144.D	MC292-NF-B05	24.80	13.40	5.60	12.40	5.50
2	CSA0145.D	MC292-NF-B06	4.80	4.60	2.50	1.70	1.90
2	CSA0146.D	MC292-NF-B07	6.60	6.40	5.10	2.40	2.60
2	CSA0147.D	MC292-NF-B08	11.10	11.20	8.50	3.60	4.80
2	CSA0148.D	MC292-NF-B09	6.80	7.10	5.60	2.40	2.70
2	CSA0149.D	MC292-NF-B10	7.90	8.90	6.10	2.80	3.30
2	CSA0150.D	MC292-NF-B11	9.00	7.20	3.40	3.40	3.00
2	CSA0151.D	MC292-NF-B12	7.80	9.10	7.50	2.60	2.70

Table H.3. Sediment polycyclic aromatic hydrocarbon data for Cruise 2B.

Cruise	Sample	Station	C2-Naphth	C3-Naphth	Benz(a)ant	Chrysene	C1-Chrysen
2	CSA0074.D	GB516-FF1-B01	10.00	9.30	3.00	5.60	8.10
2	CSA0080.D	GB516-FF1-B02	9.70	8.90	2.80	5.60	8.40
2	CSA0075.D	GB516-FF2-B01	3.10	3.10	2.00	4.20	4.20
2	CSA0081.D	GB516-FF2-B02	8.70	7.30	2.50	4.80	7.80
2	CSA0076.D	GB516-FF3-B01	9.40	10.00	2.70	7.10	8.60
2	CSA0082.D	GB516-FF3-B02	7.00	6.00	2.20	5.20	6.70
2	CSA0077.D	GB516-FF4-B01	15.10	11.10	2.00	4.30	9.20
2	CSA0083.D	GB516-FF4-B02	9.80	9.70	3.20	5.30	6.70
2	CSA0078.D	GB516-FF5-B01	8.30	7.30	2.30	4.70	7.60
2	CSA0084.D	GB516-FF5-B02	17.30	13.70	2.50	5.40	10.10
2	CSA0079.D	GB516-FF6-B01	9.30	8.10	2.20	5.10	8.10
2	CSA0085.D	GB516-FF6-B02	13.20	10.40	2.40	5.80	11.70
2	CSA0062.D	GB516-NF-B01	0.15	0.15	3.30	4.90	0.25
2	CSA0063.D	GB516-NF-B02	0.15	0.15	3.50	7.00	0.25
2	CSA0064.D	GB516-NF-B03	0.15	0.15	2.80	4.00	0.25
2	CSA0065.D	GB516-NF-B04	9.20	8.70	2.50	5.00	6.40
2	CSA0066.D	GB516-NF-B05	10.70	10.40	6.30	10.70	9.70
2	CSA0067.D	GB516-NF-B06	0.15	0.15	5.00	11.90	0.25
2	CSA0068.D	GB516-NF-B07	23.10	18.30	7.50	12.70	0.25
2	CSA0069.D	GB516-NF-B08	10.50	9.70	3.10	6.10	7.60
2	CSA0070.D	GB516-NF-B09	5.60	5.50	2.90	5.00	0.25
2	CSA0071.D	GB516-NF-B10	8.90	8.80	2.20	4.90	6.40
2	CSA0072.D	GB516-NF-B11	6.20	7.10	2.60	5.30	5.00
2	CSA0073.D	GB516-NF-B12	3.90	4.30	2.90	5.60	4.60
2	CSA0047.D	GB516-NF-DS-1 (0-2cm)	0.15	0.15	5.60	3.20	0.25
2	CSA0048.D	GB516-NF-DS-1 (2-4cm)	0.15	0.15	5.50	2.70	0.25
2	CSA0049.D	GB516-NF-DS-1 (4-6cm)	0.15	0.15	2.50	3.40	0.25
2	CSA0050.D	GB516-NF-DS-1 (6-8cm)	11.80	6.70	3.40	11.20	21.20
2	CSA0051.D	GB516-NF-DS-1 (8-10cm)	0.15	0.15	3.50	7.70	17.30
2	CSA0053.D	GB516-NF-DS-2 (2-4cm)	1.25	1.25	55.70	16.50	1.75
2	CSA0054.D	GB516-NF-DS-2 (4-6cm)	1.15	1.15	58.80	14.10	1.60
2	CSA0055.D	GB516-NF-DS-2 (6-8cm)	1.10	1.10	50.20	15.80	1.55
2	CSA0056.D	GB516-NF-DS-2 (8-10cm)	0.15	0.15	6.40	4.00	0.25
2	CSA0052.D	GB516-NF-DS-2(0-2cm)	1.25	1.25	48.10	13.60	1.70
2	CSA0057.D	GB516-NF-DS-3 (0-2cm)	0.15	0.15	5.70	3.10	0.25
2	CSA0058.D	GB516-NF-DS-3 (2-4cm)	4.10	5.20	2.00	4.10	5.20
2	CSA0059.D	GB516-NF-DS-3 (4-6cm)	6.40	8.60	2.10	4.40	6.80
2	CSA0060.D	GB516-NF-DS-3 (6-8cm)	0.15	0.15	0.40	1.70	0.25
2	CSA0061.D	GB516-NF-DS-3 (8-10cm)	1.90	2.10	0.40	1.10	2.20
2	CSA0113.D	GB602-FF1-B01	2.60	2.30	1.20	2.70	2.70
2	CSA0119.D	GB602-FF1-B02	5.00	3.70	1.50	3.50	3.80
2	CSA0114.D	GB602-FF2-B01	2.80	2.90	3.20	5.00	3.60
2	CSA0120.D	GB602-FF2-B02	3.70	3.70	4.10	7.60	5.50
2	CSA0115.D	GB602-FF3-B01	3.50	3.00	3.70	5.70	4.00
2	CSA0121.D	GB602-FF3-B02	2.50	2.10	1.20	2.60	2.30
2	CSA0116.D	GB602-FF4-B01	2.20	2.20	1.20	2.90	2.30
2	CSA0122.D	GB602-FF4-B02	7.30	8.70	1.30	3.20	3.10
2	CSA0117.D	GB602-FF5-B01	2.70	2.00	1.50	3.20	3.30

Table H.3. Sediment polycyclic aromatic hydrocarbon data for Cruise 2B.

Cruise	Sample	Station	C2-Naphth	C3-Naphth	Benz(a)ant	Chrysene	C1-Chrysen
2	CSA0123.D	GB602-FF5-B02	3.60	4.90	2.60	4.50	4.40
2	CSA0118.D	GB602-FF6-B01	5.80	6.30	1.60	3.60	4.40
2	CSA0124.D	GB602-FF6-B02	3.50	3.30	1.30	3.10	3.20
2	CSA0101.D	GB602-NF-B01	2.50	3.20	1.30	3.10	0.25
2	CSA0102.D	GB602-NF-B02	12.60	9.60	3.40	8.00	10.20
2	CSA0103.D	GB602-NF-B03	8.90	8.70	4.20	10.00	0.25
2	CSA0104.D	GB602-NF-B04	4.70	3.10	3.30	6.00	8.20
2	CSA0105.D	GB602-NF-B05	0.15	0.15	3.00	4.70	0.25
2	CSA0106.D	GB602-NF-B06	13.00	7.40	4.40	8.60	10.00
2	CSA0107.D	GB602-NF-B07	2.70	2.90	3.50	6.10	0.25
2	CSA0108.D	GB602-NF-B08	10.30	5.00	3.20	7.40	0.25
2	CSA0109.D	GB602-NF-B09	5.60	4.50	1.80	2.70	0.25
2	CSA0110.D	GB602-NF-B10	10.40	8.50	4.70	8.60	9.70
2	CSA0111.D	GB602-NF-B11	6.80	4.20	2.50	4.30	5.60
2	CSA0112.D	GB602-NF-B12	5.00	4.10	1.70	4.30	5.10
2	CSA0086.D	GB602-NF-DS-1(0-2cm)	9.50	8.10	4.40	6.50	0.25
2	CSA0087.D	GB602-NF-DS-1(2-4cm)	0.15	0.15	1.90	3.50	0.25
2	CSA0088.D	GB602-NF-DS-1(4-6cm)	0.15	0.15	1.70	3.30	0.25
2	CSA0089.D	GB602-NF-DS-1(6-8cm)	0.15	0.15	0.80	3.00	0.25
2	CSA0090.D	GB602-NF-DS-1(8-10cm)	2.20	1.50	0.60	2.20	2.80
2	CSA0093.D	GB602-NF-DS-2 (4-6cm)	3.70	3.50	1.70	4.50	0.25
2	CSA0091.D	GB602-NF-DS-2(0-2cm)	0.15	0.15	2.40	6.70	0.25
2	CSA0092.D	GB602-NF-DS-2(2-4cm)	6.70	0.15	2.50	8.10	0.25
2	CSA0094.D	GB602-NF-DS-2(6-8cm)	1.20	2.20	0.70	2.20	3.10
2	CSA0095.D	GB602-NF-DS-2(8-10cm)	1.20	1.60	0.50	1.90	2.60
2	CSA0096.D	GB602-NF-DS-3(0-2cm)	6.30	5.00	1.90	5.80	6.40
2	CSA0097.D	GB602-NF-DS-3(2-4cm)	5.10	3.80	1.40	3.70	5.50
2	CSA0098.D	GB602-NF-DS-3(4-6cm)	1.70	1.50	0.70	2.40	2.30
2	CSA0099.D	GB602-NF-DS-3(6-8cm)	2.10	1.70	0.60	2.10	2.70
2	CSA0100.D	GB602-NF-DS-3(8-10cm)	2.30	2.00	1.20	3.10	3.40
2	CSA0125.D	MC292-DS-1(0-2cm)	3.50	2.70	3.50	7.00	6.30
2	CSA0126.D	MC292-DS-1(2-4cm)	6.20	4.60	5.50	11.00	12.50
2	CSA0127.D	MC292-DS-1(4-6cm)	3.00	3.30	4.90	7.90	6.70
2	CSA0128.D	MC292-DS-1(6-8 cm)	3.10	3.70	4.50	7.10	6.20
2	CSA0129.D	MC292-DS-1(8-10cm)	2.80	3.10	3.30	5.30	4.80
2	CSA0130.D	MC292-DS-2(0-2cm)	4.00	2.50	12.20	17.00	13.60
2	CSA0131.D	MC292-DS-2(2-4cm)	3.60	2.80	4.40	8.20	6.70
2	CSA0132.D	MC292-DS-2(4-6cm)	2.30	1.40	2.90	5.00	4.30
2	CSA0133.D	MC292-DS-2(6-8cm)	1.50	1.30	1.50	2.90	2.60
2	CSA0134.D	MC292-DS-2(8-10cm)	0.90	0.60	0.50	1.80	1.80
2	CSA0135.D	MC292-DS-3(0-2cm)	6.40	4.30	5.10	9.30	9.20
2	CSA0136.D	MC292-DS-3(2-4cm)	4.30	3.80	5.20	10.20	9.20
2	CSA0137.D	MC292-DS-3(4-6cm)	2.70	2.10	4.30	6.60	5.50
2	CSA0138.D	MC292-DS-3(6-8cm)	1.20	1.00	1.70	2.80	2.30
2	CSA0139.D	MC292-DS-3(8-10cm)	0.50	0.50	1.20	1.90	2.00
2	CSA0152.D	MC292-FF1-B01	4.80	4.20	9.60	14.50	13.30
2	CSA0158.D	MC292-FF1-B02	9.50	7.90	25.30	36.00	23.50
2	CSA0153.D	MC292-FF2-B01	7.20	6.80	12.20	20.10	15.50

Table H.3. Sediment polycyclic aromatic hydrocarbon data for Cruise 2B.

Cruise	Sample	Station	C2-Naphth	C3-Naphth	Benz(a)ant	Chrysene	C1-Chrysen
2	CSA0159.D	MC292-FF2-B02	7.80	6.40	8.90	15.30	16.60
2	CSA0154.D	MC292-FF3-B01	5.50	5.00	7.80	11.30	9.90
2	CSA0160.D	MC292-FF3-B02	5.30	5.10	4.90	8.00	9.40
2	CSA0155.D	MC292-FF4-B01	5.40	4.50	8.00	12.70	11.60
2	CSA0161.D	MC292-FF4-B02	6.90	7.50	5.20	9.40	10.60
2	CSA0156.D	MC292-FF5-B01	4.30	3.30	5.60	9.10	8.60
2	CSA0162.D	MC292-FF5-B02	8.80	8.40	5.60	10.00	11.10
2	CSA0157.D	MC292-FF6-B01	3.20	3.80	3.60	6.90	6.20
2	CSA0163.D	MC292-FF6-B02	2.90	2.50	4.00	7.30	7.10
2	CSA0140.D	MC292-NF-B01	6.50	0.15	5.20	9.00	13.30
2	CSA0141.D	MC292-NF-B02	3.50	3.90	2.80	4.90	5.00
2	CSA0142.D	MC292-NF-B03	3.40	4.00	5.10	8.50	6.80
2	CSA0143.D	MC292-NF-B04	5.40	5.50	3.70	7.40	8.70
2	CSA0144.D	MC292-NF-B05	5.10	4.30	38.00	43.70	21.20
2	CSA0145.D	MC292-NF-B06	2.20	1.60	2.90	5.30	5.10
2	CSA0146.D	MC292-NF-B07	3.10	3.70	5.00	9.30	8.70
2	CSA0147.D	MC292-NF-B08	5.10	4.20	5.60	11.00	12.60
2	CSA0148.D	MC292-NF-B09	3.10	2.90	4.90	7.20	6.80
2	CSA0149.D	MC292-NF-B10	4.70	4.20	5.80	9.80	9.90
2	CSA0150.D	MC292-NF-B11	3.30	2.40	8.10	12.70	9.40
2	CSA0151.D	MC292-NF-B12	4.80	4.30	5.40	9.30	10.20

Table H.3. Sediment polycyclic aromatic hydrocarbon data for Cruise 2B.

Cruise	Sample	Station	C2-Chrysen	C3-Chrysen	C4-Chrysen	Benzo(b)fl	Benzo(k)fl
2	CSA0074.D	GB516-FF1-B01	10.40	0.25	0.25	5.00	3.70
2	CSA0080.D	GB516-FF1-B02	7.90	4.50	1.80	6.30	4.10
2	CSA0075.D	GB516-FF2-B01	5.40	0.25	0.25	4.60	3.20
2	CSA0081.D	GB516-FF2-B02	7.50	4.70	2.40	7.10	4.20
2	CSA0076.D	GB516-FF3-B01	9.20	0.25	0.25	8.40	3.10
2	CSA0082.D	GB516-FF3-B02	6.30	1.90	2.80	5.40	2.00
2	CSA0077.D	GB516-FF4-B01	9.70	7.80	2.70	4.80	3.10
2	CSA0083.D	GB516-FF4-B02	5.50	6.70	1.60	7.00	5.40
2	CSA0078.D	GB516-FF5-B01	6.90	3.30	1.50	5.50	3.70
2	CSA0084.D	GB516-FF5-B02	9.90	6.40	3.60	6.00	3.40
2	CSA0079.D	GB516-FF6-B01	7.30	5.00	1.60	6.60	3.80
2	CSA0085.D	GB516-FF6-B02	10.90	7.70	2.50	6.60	3.30
2	CSA0062.D	GB516-NF-B01	0.25	0.25	0.25	6.10	1.90
2	CSA0063.D	GB516-NF-B02	0.25	0.25	0.25	8.00	3.30
2	CSA0064.D	GB516-NF-B03	0.25	0.25	0.25	3.40	1.70
2	CSA0065.D	GB516-NF-B04	6.70	0.25	0.25	6.10	2.30
2	CSA0066.D	GB516-NF-B05	0.25	0.25	0.25	9.10	3.70
2	CSA0067.D	GB516-NF-B06	0.25	0.25	0.25	0.15	0.15
2	CSA0068.D	GB516-NF-B07	0.25	0.25	0.25	12.00	5.00
2	CSA0069.D	GB516-NF-B08	0.25	0.25	0.25	8.10	3.50
2	CSA0070.D	GB516-NF-B09	0.25	0.25	0.25	5.70	1.80
2	CSA0071.D	GB516-NF-B10	7.00	0.25	0.25	5.80	2.00
2	CSA0072.D	GB516-NF-B11	0.25	0.25	0.25	5.70	2.10
2	CSA0073.D	GB516-NF-B12	6.20	0.25	0.25	5.90	1.80
2	CSA0047.D	GB516-NF-DS-1 (0-2cm)	0.25	0.25	0.25	0.15	0.15
2	CSA0048.D	GB516-NF-DS-1 (2-4cm)	0.25	0.25	0.25	0.15	0.15
2	CSA0049.D	GB516-NF-DS-1 (4-6cm)	0.25	0.25	0.25	0.15	0.15
2	CSA0050.D	GB516-NF-DS-1 (6-8cm)	26.00	6.40	0.25	7.30	2.90
2	CSA0051.D	GB516-NF-DS-1 (8-10cm)	0.25	0.25	0.25	7.70	5.60
2	CSA0053.D	GB516-NF-DS-2 (2-4cm)	1.75	1.75	1.75	0.95	1.05
2	CSA0054.D	GB516-NF-DS-2 (4-6cm)	1.65	1.65	1.65	0.85	0.95
2	CSA0055.D	GB516-NF-DS-2 (6-8cm)	1.55	1.55	1.55	0.85	0.95
2	CSA0056.D	GB516-NF-DS-2 (8-10cm)	0.25	0.25	0.25	0.15	0.15
2	CSA0052.D	GB516-NF-DS-2(0-2cm)	1.75	1.75	1.75	0.95	1.00
2	CSA0057.D	GB516-NF-DS-3 (0-2cm)	0.25	0.25	0.25	0.15	0.15
2	CSA0058.D	GB516-NF-DS-3 (2-4cm)	9.40	0.25	0.25	5.40	3.50
2	CSA0059.D	GB516-NF-DS-3 (4-6cm)	10.20	0.25	0.25	5.20	3.50
2	CSA0060.D	GB516-NF-DS-3 (6-8cm)	0.25	0.25	0.25	2.70	1.60
2	CSA0061.D	GB516-NF-DS-3 (8-10cm)	0.25	0.25	0.25	2.10	1.00
2	CSA0113.D	GB602-FF1-B01	2.60	2.30	0.90	3.20	1.80
2	CSA0119.D	GB602-FF1-B02	4.10	2.60	1.70	3.40	1.90
2	CSA0114.D	GB602-FF2-B01	3.20	2.50	0.90	4.50	2.70
2	CSA0120.D	GB602-FF2-B02	5.50	5.00	1.30	5.20	3.70
2	CSA0115.D	GB602-FF3-B01	3.20	2.20	1.20	5.00	2.90
2	CSA0121.D	GB602-FF3-B02	3.20	1.80	0.60	2.60	1.60
2	CSA0116.D	GB602-FF4-B01	2.20	2.40	1.40	3.30	1.80
2	CSA0122.D	GB602-FF4-B02	3.60	3.40	2.60	2.80	1.90
2	CSA0117.D	GB602-FF5-B01	3.50	2.80	1.30	4.00	2.10

Table H.3. Sediment polycyclic aromatic hydrocarbon data for Cruise 2B.

Cruise	Sample	Station	C2-Chrysen	C3-Chrysen	C4-Chrysen	Benzo(b)fl	Benzo(k)fl
2	CSA0123.D	GB602-FF5-B02	4.00	5.60	1.60	4.40	2.90
2	CSA0118.D	GB602-FF6-B01	4.60	3.60	1.90	4.00	2.10
2	CSA0124.D	GB602-FF6-B02	3.30	3.00	1.80	3.50	2.00
2	CSA0101.D	GB602-NF-B01	0.25	0.25	0.25	2.80	1.10
2	CSA0102.D	GB602-NF-B02	12.00	2.50	0.25	9.20	2.60
2	CSA0103.D	GB602-NF-B03	0.25	0.25	0.25	8.80	2.80
2	CSA0104.D	GB602-NF-B04	0.25	0.25	0.25	5.30	1.30
2	CSA0105.D	GB602-NF-B05	0.25	0.25	0.25	4.70	1.40
2	CSA0106.D	GB602-NF-B06	0.25	0.25	0.25	6.80	2.50
2	CSA0107.D	GB602-NF-B07	0.25	0.25	0.25	5.20	1.80
2	CSA0108.D	GB602-NF-B08	0.25	0.25	0.25	5.90	3.10
2	CSA0109.D	GB602-NF-B09	0.25	0.25	0.25	1.40	0.70
2	CSA0110.D	GB602-NF-B10	13.50	0.25	0.25	7.50	4.60
2	CSA0111.D	GB602-NF-B11	8.20	0.25	0.25	4.10	2.80
2	CSA0112.D	GB602-NF-B12	7.20	0.25	0.25	6.40	4.10
2	CSA0086.D	GB602-NF-DS-1(0-2cm)	0.25	0.25	0.25	8.00	4.90
2	CSA0087.D	GB602-NF-DS-1(2-4cm)	0.25	0.25	0.25	3.70	0.70
2	CSA0088.D	GB602-NF-DS-1(4-6cm)	0.25	0.25	0.25	3.60	1.20
2	CSA0089.D	GB602-NF-DS-1(6-8cm)	0.25	0.25	0.25	1.90	0.80
2	CSA0090.D	GB602-NF-DS-1(8-10cm)	3.10	0.25	0.25	4.20	1.80
2	CSA0093.D	GB602-NF-DS-2 (4-6cm)	0.25	0.25	0.25	3.50	1.30
2	CSA0091.D	GB602-NF-DS-2(0-2cm)	0.25	0.25	0.25	4.30	2.20
2	CSA0092.D	GB602-NF-DS-2(2-4cm)	0.25	0.25	0.25	5.60	1.70
2	CSA0094.D	GB602-NF-DS-2(6-8cm)	3.40	1.20	0.25	3.20	1.10
2	CSA0095.D	GB602-NF-DS-2(8-10cm)	2.60	1.90	0.50	2.10	0.80
2	CSA0096.D	GB602-NF-DS-3(0-2cm)	6.40	2.90	2.10	12.50	7.70
2	CSA0097.D	GB602-NF-DS-3(2-4cm)	5.70	0.25	0.25	11.70	5.40
2	CSA0098.D	GB602-NF-DS-3(4-6cm)	2.10	0.25	0.25	2.70	0.90
2	CSA0099.D	GB602-NF-DS-3(6-8cm)	3.10	1.70	0.25	2.20	0.80
2	CSA0100.D	GB602-NF-DS-3(8-10cm)	3.10	1.50	0.70	3.30	1.20
2	CSA0125.D	MC292-DS-1(0-2cm)	6.30	4.10	2.30	5.70	3.80
2	CSA0126.D	MC292-DS-1(2-4cm)	11.80	9.50	3.30	9.90	6.60
2	CSA0127.D	MC292-DS-1(4-6cm)	6.00	1.60	2.50	9.10	7.50
2	CSA0128.D	MC292-DS-1(6-8 cm)	5.60	2.10	3.20	8.20	7.20
2	CSA0129.D	MC292-DS-1(8-10cm)	5.10	3.00	3.10	7.20	5.50
2	CSA0130.D	MC292-DS-2(0-2cm)	12.10	4.30	3.60	14.40	13.10
2	CSA0131.D	MC292-DS-2(2-4cm)	9.00	2.80	2.90	8.90	6.60
2	CSA0132.D	MC292-DS-2(4-6cm)	4.30	2.60	2.30	6.00	4.70
2	CSA0133.D	MC292-DS-2(6-8cm)	2.50	1.70	2.10	4.20	2.90
2	CSA0134.D	MC292-DS-2(8-10cm)	2.40	2.20	1.20	3.00	2.00
2	CSA0135.D	MC292-DS-3(0-2cm)	10.10	3.80	3.10	8.60	7.50
2	CSA0136.D	MC292-DS-3(2-4cm)	8.70	3.20	3.40	9.80	7.50
2	CSA0137.D	MC292-DS-3(4-6cm)	5.00	2.40	1.80	7.80	6.50
2	CSA0138.D	MC292-DS-3(6-8cm)	2.50	1.40	1.60	4.30	3.50
2	CSA0139.D	MC292-DS-3(8-10cm)	1.90	1.80	1.40	3.00	1.30
2	CSA0152.D	MC292-FF1-B01	8.90	3.00	7.00	17.80	10.00
2	CSA0158.D	MC292-FF1-B02	11.60	6.00	5.10	43.70	14.40
2	CSA0153.D	MC292-FF2-B01	12.10	6.60	6.80	23.40	12.90

Table H.3. Sediment polycyclic aromatic hydrocarbon data for Cruise 2B.

Cruise	Sample	Station	C2-Chrysen	C3-Chrysen	C4-Chrysen	Benzo(b)fl	Benzo(k)fl
2	CSA0159.D	MC292-FF2-B02	8.40	2.50	6.80	21.20	7.80
2	CSA0154.D	MC292-FF3-B01	8.30	4.30	5.10	13.40	8.80
2	CSA0160.D	MC292-FF3-B02	6.60	6.90	2.40	13.30	4.20
2	CSA0155.D	MC292-FF4-B01	8.10	5.80	3.20	15.50	9.20
2	CSA0161.D	MC292-FF4-B02	8.60	5.10	4.20	14.70	4.80
2	CSA0156.D	MC292-FF5-B01	6.20	2.50	3.80	12.20	6.20
2	CSA0162.D	MC292-FF5-B02	8.00	2.00	4.30	14.30	5.10
2	CSA0157.D	MC292-FF6-B01	3.90	2.30	2.40	11.20	3.90
2	CSA0163.D	MC292-FF6-B02	4.10	1.30	2.10	11.30	3.50
2	CSA0140.D	MC292-NF-B01	10.50	0.25	0.25	7.60	3.30
2	CSA0141.D	MC292-NF-B02	5.30	2.80	2.20	7.40	3.50
2	CSA0142.D	MC292-NF-B03	4.80	2.00	3.30	8.20	8.50
2	CSA0143.D	MC292-NF-B04	7.20	4.20	0.25	6.50	2.40
2	CSA0144.D	MC292-NF-B05	9.10	4.20	5.70	36.00	21.20
2	CSA0145.D	MC292-NF-B06	3.50	2.00	3.70	7.10	3.20
2	CSA0146.D	MC292-NF-B07	5.70	2.20	4.20	9.30	6.00
2	CSA0147.D	MC292-NF-B08	9.50	4.80	2.20	12.70	7.60
2	CSA0148.D	MC292-NF-B09	5.80	3.00	3.80	8.10	4.50
2	CSA0149.D	MC292-NF-B10	7.80	4.30	4.60	9.00	5.80
2	CSA0150.D	MC292-NF-B11	6.60	2.60	3.90	13.20	7.90
2	CSA0151.D	MC292-NF-B12	9.70	7.30	5.40	9.60	6.20

Table H.3. Sediment polycyclic aromatic hydrocarbon data for Cruise 2B.

Cruise	Sample	Station	Benzo(e)py	Benzo(a)py	Perylene	Indeno(1,2	Dibenzo(a,
2	CSA0074.D	GB516-FF1-B01	4.00	3.50	10.80	5.80	1.20
2	CSA0080.D	GB516-FF1-B02	4.70	4.00	18.70	7.00	1.00
2	CSA0075.D	GB516-FF2-B01	3.00	1.90	25.90	5.40	0.90
2	CSA0081.D	GB516-FF2-B02	5.20	3.10	19.50	7.00	1.20
2	CSA0076.D	GB516-FF3-B01	5.10	2.90	24.70	6.50	1.20
2	CSA0082.D	GB516-FF3-B02	3.50	2.40	11.60	4.60	0.80
2	CSA0077.D	GB516-FF4-B01	3.80	3.50	10.50	4.70	1.00
2	CSA0083.D	GB516-FF4-B02	4.90	4.40	12.30	5.70	1.10
2	CSA0078.D	GB516-FF5-B01	4.10	3.70	13.20	5.40	1.00
2	CSA0084.D	GB516-FF5-B02	4.30	3.60	19.90	6.20	1.00
2	CSA0079.D	GB516-FF6-B01	4.50	3.00	26.70	6.50	1.00
2	CSA0085.D	GB516-FF6-B02	5.20	3.40	34.20	6.40	1.20
2	CSA0062.D	GB516-NF-B01	8.30	3.20	53.20	4.40	0.10
2	CSA0063.D	GB516-NF-B02	6.50	4.00	85.20	5.10	0.10
2	CSA0064.D	GB516-NF-B03	9.00	6.90	52.10	1.80	0.10
2	CSA0065.D	GB516-NF-B04	3.90	2.10	13.30	5.60	1.00
2	CSA0066.D	GB516-NF-B05	6.70	4.20	56.60	6.60	1.20
2	CSA0067.D	GB516-NF-B06	0.10	0.10	71.20	0.15	0.10
2	CSA0068.D	GB516-NF-B07	8.40	5.30	23.30	7.30	0.10
2	CSA0069.D	GB516-NF-B08	5.00	3.00	84.60	7.00	1.50
2	CSA0070.D	GB516-NF-B09	12.20	4.50	76.40	3.80	0.10
2	CSA0071.D	GB516-NF-B10	3.30	2.40	17.80	5.00	0.80
2	CSA0072.D	GB516-NF-B11	3.60	2.20	15.40	5.30	0.80
2	CSA0073.D	GB516-NF-B12	3.10	2.30	16.20	5.20	0.90
2	CSA0047.D	GB516-NF-DS-1 (0-2cm)	0.10	0.10	26.20	0.15	0.10
2	CSA0048.D	GB516-NF-DS-1 (2-4cm)	0.10	0.10	19.10	0.15	0.10
2	CSA0049.D	GB516-NF-DS-1 (4-6cm)	0.10	0.10	56.70	0.15	0.10
2	CSA0050.D	GB516-NF-DS-1 (6-8cm)	7.70	3.80	93.70	5.30	1.50
2	CSA0051.D	GB516-NF-DS-1 (8-10cm)	7.50	3.30	63.70	6.80	1.30
2	CSA0053.D	GB516-NF-DS-2 (2-4cm)	0.90	0.90	0.65	1.10	0.75
2	CSA0054.D	GB516-NF-DS-2 (4-6cm)	0.80	0.85	0.60	1.00	0.70
2	CSA0055.D	GB516-NF-DS-2 (6-8cm)	0.80	0.80	0.60	1.00	0.70
2	CSA0056.D	GB516-NF-DS-2 (8-10cm)	0.10	0.10	0.10	0.15	0.10
2	CSA0052.D	GB516-NF-DS-2(0-2cm)	0.90	0.90	0.65	1.10	0.75
2	CSA0057.D	GB516-NF-DS-3 (0-2cm)	0.10	0.10	0.10	0.15	0.10
2	CSA0058.D	GB516-NF-DS-3 (2-4cm)	5.00	2.60	12.00	6.30	1.30
2	CSA0059.D	GB516-NF-DS-3 (4-6cm)	3.90	2.90	16.50	6.40	0.90
2	CSA0060.D	GB516-NF-DS-3 (6-8cm)	2.70	1.20	14.80	2.70	0.50
2	CSA0061.D	GB516-NF-DS-3 (8-10cm)	1.30	0.50	11.00	1.80	0.40
2	CSA0113.D	GB602-FF1-B01	1.80	1.20	24.90	4.10	0.60
2	CSA0119.D	GB602-FF1-B02	2.20	1.20	25.70	4.10	0.70
2	CSA0114.D	GB602-FF2-B01	2.80	2.20	11.00	4.40	0.60
2	CSA0120.D	GB602-FF2-B02	4.50	3.00	12.60	5.70	0.80
2	CSA0115.D	GB602-FF3-B01	2.90	2.40	11.80	4.70	0.70
2	CSA0121.D	GB602-FF3-B02	1.60	1.00	11.00	3.00	0.50
2	CSA0116.D	GB602-FF4-B01	1.80	1.30	15.20	4.00	0.60
2	CSA0122.D	GB602-FF4-B02	2.20	1.00	16.90	3.60	0.50
2	CSA0117.D	GB602-FF5-B01	2.40	1.80	10.30	4.30	0.80

Table H.3. Sediment polycyclic aromatic hydrocarbon data for Cruise 2B.

Cruise	Sample	Station	Benzo(e)py	Benzo(a)py	Perylene	Indeno(1,2	Dibenzo(a,
2	CSA0123.D	GB602-FF5-B02	3.30	2.90	13.00	5.70	0.70
2	CSA0118.D	GB602-FF6-B01	2.70	1.80	18.60	4.80	0.90
2	CSA0124.D	GB602-FF6-B02	2.40	1.60	18.80	4.40	0.70
2	CSA0101.D	GB602-NF-B01	1.90	0.30	6.70	1.90	0.10
2	CSA0102.D	GB602-NF-B02	8.60	2.80	87.10	7.20	5.70
2	CSA0103.D	GB602-NF-B03	19.00	8.10	35.40	4.50	0.10
2	CSA0104.D	GB602-NF-B04	3.80	1.40	75.40	3.50	0.10
2	CSA0105.D	GB602-NF-B05	12.90	6.50	9.10	4.10	0.10
2	CSA0106.D	GB602-NF-B06	16.70	7.10	97.20	3.90	0.10
2	CSA0107.D	GB602-NF-B07	5.60	1.60	69.60	3.30	1.50
2	CSA0108.D	GB602-NF-B08	13.10	2.20	135.00	3.00	0.10
2	CSA0109.D	GB602-NF-B09	4.40	0.70	41.70	1.80	0.10
2	CSA0110.D	GB602-NF-B10	8.70	3.20	23.90	6.30	2.20
2	CSA0111.D	GB602-NF-B11	3.90	2.50	33.10	4.30	2.40
2	CSA0112.D	GB602-NF-B12	5.70	3.00	15.10	7.40	3.80
2	CSA0086.D	GB602-NF-DS-1(0-2cm)	40.90	12.70	121.00	4.70	2.50
2	CSA0087.D	GB602-NF-DS-1(2-4cm)	25.90	8.30	89.70	2.40	0.10
2	CSA0088.D	GB602-NF-DS-1(4-6cm)	17.50	7.80	57.30	3.20	0.10
2	CSA0089.D	GB602-NF-DS-1(6-8cm)	7.60	1.60	20.90	1.70	0.10
2	CSA0090.D	GB602-NF-DS-1(8-10cm)	2.20	0.90	15.00	2.80	0.10
2	CSA0093.D	GB602-NF-DS-2 (4-6cm)	4.00	1.20	54.20	2.70	0.90
2	CSA0091.D	GB602-NF-DS-2(0-2cm)	19.90	7.30	130.00	3.50	0.10
2	CSA0092.D	GB602-NF-DS-2(2-4cm)	14.60	4.20	115.00	3.40	0.10
2	CSA0094.D	GB602-NF-DS-2(6-8cm)	2.00	0.90	17.90	3.00	0.70
2	CSA0095.D	GB602-NF-DS-2(8-10cm)	1.00	0.40	37.30	1.30	0.30
2	CSA0096.D	GB602-NF-DS-3(0-2cm)	8.80	2.40	23.90	10.60	0.10
2	CSA0097.D	GB602-NF-DS-3(2-4cm)	7.50	2.20	18.00	8.40	3.10
2	CSA0098.D	GB602-NF-DS-3(4-6cm)	1.40	0.60	27.30	2.10	0.30
2	CSA0099.D	GB602-NF-DS-3(6-8cm)	1.30	0.50	38.30	2.30	0.30
2	CSA0100.D	GB602-NF-DS-3(8-10cm)	1.60	0.90	26.80	2.60	0.20
2	CSA0125.D	MC292-DS-1(0-2cm)	5.30	2.50	76.50	6.20	1.10
2	CSA0126.D	MC292-DS-1(2-4cm)	8.60	3.90	99.70	10.90	1.90
2	CSA0127.D	MC292-DS-1(4-6cm)	7.60	6.00	45.20	10.60	1.80
2	CSA0128.D	MC292-DS-1(6-8 cm)	6.80	5.40	26.90	10.50	1.60
2	CSA0129.D	MC292-DS-1(8-10cm)	6.00	4.60	26.90	9.20	1.40
2	CSA0130.D	MC292-DS-2(0-2cm)	12.10	12.90	154.00	13.50	4.00
2	CSA0131.D	MC292-DS-2(2-4cm)	7.50	5.60	74.80	9.40	1.80
2	CSA0132.D	MC292-DS-2(4-6cm)	4.60	3.60	36.70	6.70	1.10
2	CSA0133.D	MC292-DS-2(6-8cm)	3.00	2.10	26.50	4.40	0.90
2	CSA0134.D	MC292-DS-2(8-10cm)	1.80	1.20	19.10	2.80	0.50
2	CSA0135.D	MC292-DS-3(0-2cm)	10.40	5.10	113.00	10.00	3.40
2	CSA0136.D	MC292-DS-3(2-4cm)	9.50	5.90	91.70	10.40	1.90
2	CSA0137.D	MC292-DS-3(4-6cm)	6.40	5.20	33.90	10.00	1.70
2	CSA0138.D	MC292-DS-3(6-8cm)	3.20	2.30	23.70	5.50	0.70
2	CSA0139.D	MC292-DS-3(8-10cm)	2.10	1.50	26.50	3.60	0.50
2	CSA0152.D	MC292-FF1-B01	13.20	10.10	61.80	20.70	3.60
2	CSA0158.D	MC292-FF1-B02	26.20	26.10	60.20	26.00	4.40
2	CSA0153.D	MC292-FF2-B01	16.80	13.20	82.70	22.30	4.20

Table H.3. Sediment polycyclic aromatic hydrocarbon data for Cruise 2B.

Cruise	Sample	Station	Benzo(e)py	Benzo(a)py	Perylene	Indeno(1,2	Dibenzo(a,
2	CSA0159.D	MC292-FF2-B02	14.40	11.70	68.80	14.40	2.90
2	CSA0154.D	MC292-FF3-B01	10.10	7.60	34.00	16.40	2.70
2	CSA0160.D	MC292-FF3-B02	8.50	6.40	34.60	9.40	1.50
2	CSA0155.D	MC292-FF4-B01	11.60	7.90	52.40	17.00	3.00
2	CSA0161.D	MC292-FF4-B02	9.80	6.30	59.90	10.90	1.70
2	CSA0156.D	MC292-FF5-B01	8.40	6.70	26.00	13.10	1.90
2	CSA0162.D	MC292-FF5-B02	10.10	6.20	47.60	10.50	1.60
2	CSA0157.D	MC292-FF6-B01	7.00	5.40	24.10	8.90	1.20
2	CSA0163.D	MC292-FF6-B02	6.80	5.20	25.60	8.10	1.20
2	CSA0140.D	MC292-NF-B01	6.20	3.90	64.60	7.30	0.10
2	CSA0141.D	MC292-NF-B02	5.90	4.40	25.60	7.20	1.80
2	CSA0142.D	MC292-NF-B03	8.10	6.30	36.40	11.20	2.20
2	CSA0143.D	MC292-NF-B04	4.80	3.50	42.80	5.50	1.00
2	CSA0144.D	MC292-NF-B05	22.50	27.60	40.10	30.30	6.40
2	CSA0145.D	MC292-NF-B06	4.50	3.60	24.00	7.70	1.30
2	CSA0146.D	MC292-NF-B07	7.00	5.40	25.60	10.70	1.60
2	CSA0147.D	MC292-NF-B08	10.60	3.60	63.20	12.70	4.70
2	CSA0148.D	MC292-NF-B09	5.90	4.90	23.10	9.30	1.60
2	CSA0149.D	MC292-NF-B10	7.00	4.10	59.40	10.90	2.20
2	CSA0150.D	MC292-NF-B11	9.10	8.20	23.20	13.90	2.20
2	CSA0151.D	MC292-NF-B12	8.70	5.00	35.80	10.80	2.00

Table H.3. Sediment polycyclic aromatic hydrocarbon data for Cruise 2B.

Cruise	Sample	Station	C1-Dibenzo	C2-Dibenzo	C3-Dibenzo	Benzo(g,h,	Total PAHs	D2/P2
2	CSA0074.D	GB516-FF1-B01	0.20	0.20	0.20	6.10	193.10	0.50
2	CSA0080.D	GB516-FF1-B02	0.20	0.20	0.20	7.20	204.60	0.38
2	CSA0075.D	GB516-FF2-B01	0.20	0.20	0.20	5.00	161.60	0.40
2	CSA0081.D	GB516-FF2-B02	0.20	0.20	0.20	7.20	203.40	0.50
2	CSA0076.D	GB516-FF3-B01	0.20	0.20	0.20	6.90	198.50	0.37
2	CSA0082.D	GB516-FF3-B02	0.20	0.20	0.20	4.80	151.60	0.30
2	CSA0077.D	GB516-FF4-B01	0.20	0.20	0.20	5.10	202.50	0.52
2	CSA0083.D	GB516-FF4-B02	0.20	0.20	0.20	7.10	191.50	0.40
2	CSA0078.D	GB516-FF5-B01	0.20	0.20	0.20	6.20	175.10	0.49
2	CSA0084.D	GB516-FF5-B02	0.20	0.20	0.20	6.60	248.50	0.42
2	CSA0079.D	GB516-FF6-B01	0.20	0.20	0.20	6.70	216.70	0.49
2	CSA0085.D	GB516-FF6-B02	0.20	0.20	0.20	6.90	249.80	0.49
2	CSA0062.D	GB516-NF-B01	0.20	0.20	0.20	4.60	170.50	NA
2	CSA0063.D	GB516-NF-B02	0.20	0.20	0.20	6.10	215.20	NA
2	CSA0064.D	GB516-NF-B03	0.20	0.20	0.20	3.60	404.80	NA
2	CSA0065.D	GB516-NF-B04	0.20	0.20	0.20	5.30	190.90	0.96
2	CSA0066.D	GB516-NF-B05	0.20	0.20	0.20	7.50	334.50	0.64
2	CSA0067.D	GB516-NF-B06	0.20	0.20	0.20	0.15	430.70	NA
2	CSA0068.D	GB516-NF-B07	0.20	0.20	0.20	8.20	350.90	1.01
2	CSA0069.D	GB516-NF-B08	0.20	0.20	0.20	8.10	350.60	2.00
2	CSA0070.D	GB516-NF-B09	0.20	0.20	0.20	4.00	306.20	0.90
2	CSA0071.D	GB516-NF-B10	0.20	0.20	0.20	5.10	165.20	0.44
2	CSA0072.D	GB516-NF-B11	0.20	0.20	0.20	5.30	150.90	0.69
2	CSA0073.D	GB516-NF-B12	0.20	0.20	0.20	4.90	142.10	0.42
2	CSA0047.D	GB516-NF-DS-1 (0-2cm)	0.20	0.20	0.20	2.40	87.40	NA
2	CSA0048.D	GB516-NF-DS-1 (2-4cm)	0.20	0.20	0.20	0.15	146.20	NA
2	CSA0049.D	GB516-NF-DS-1 (4-6cm)	0.20	0.20	0.20	2.40	122.90	NA
2	CSA0050.D	GB516-NF-DS-1 (6-8cm)	0.20	0.20	0.20	14.70	701.10	0.37
2	CSA0051.D	GB516-NF-DS-1 (8-10cm)	0.20	0.20	0.20	11.20	331.00	NA
2	CSA0053.D	GB516-NF-DS-2 (2-4cm)	1.50	1.50	1.50	1.20	19213.90	NA
2	CSA0054.D	GB516-NF-DS-2 (4-6cm)	1.40	1.40	1.40	1.15	18041.10	NA
2	CSA0055.D	GB516-NF-DS-2 (6-8cm)	1.35	1.35	1.35	1.10	16878.10	NA
2	CSA0056.D	GB516-NF-DS-2 (8-10cm)	0.20	0.20	0.20	0.15	1666.60	NA
2	CSA0052.D	GB516-NF-DS-2(0-2cm)	1.50	1.50	1.50	1.20	23839.50	NA
2	CSA0057.D	GB516-NF-DS-3 (0-2cm)	0.20	0.20	0.20	0.15	43.00	NA
2	CSA0058.D	GB516-NF-DS-3 (2-4cm)	0.20	0.20	0.20	6.60	214.70	0.82
2	CSA0059.D	GB516-NF-DS-3 (4-6cm)	0.20	0.20	0.20	6.30	194.00	0.39
2	CSA0060.D	GB516-NF-DS-3 (6-8cm)	0.20	0.20	0.20	3.40	98.30	0.33
2	CSA0061.D	GB516-NF-DS-3 (8-10cm)	0.20	0.20	0.20	1.90	88.90	0.54
2	CSA0113.D	GB602-FF1-B01	0.20	0.20	0.20	3.70	117.60	0.28
2	CSA0119.D	GB602-FF1-B02	0.20	0.20	0.20	3.90	126.90	0.23
2	CSA0114.D	GB602-FF2-B01	0.20	0.20	0.20	4.50	115.40	0.23
2	CSA0120.D	GB602-FF2-B02	0.20	0.20	0.20	7.10	152.30	0.21
2	CSA0115.D	GB602-FF3-B01	0.20	0.20	0.20	4.40	119.30	0.27
2	CSA0121.D	GB602-FF3-B02	0.20	0.20	0.20	2.90	93.80	0.29
2	CSA0116.D	GB602-FF4-B01	0.20	0.20	0.20	3.60	98.20	0.25
2	CSA0122.D	GB602-FF4-B02	0.20	0.20	0.20	3.90	118.50	0.31
2	CSA0117.D	GB602-FF5-B01	0.20	0.20	0.20	4.40	110.20	0.24

Table H.3. Sediment polycyclic aromatic hydrocarbon data for Cruise 2B.

Cruise	Sample	Station	C1-Dibenzo	C2-Dibenzo	C3-Dibenzo	Benzo(g,h,	Total PAHs	D2/P2
2	CSA0123.D	GB602-FF5-B02	0.20	0.20	0.20	6.60	142.50	0.26
2	CSA0118.D	GB602-FF6-B01	0.20	0.20	0.20	4.80	136.00	0.26
2	CSA0124.D	GB602-FF6-B02	0.20	0.20	0.20	4.20	128.20	0.33
2	CSA0101.D	GB602-NF-B01	0.20	0.20	0.20	2.00	131.80	0.51
2	CSA0102.D	GB602-NF-B02	0.20	0.20	0.20	7.20	494.50	0.86
2	CSA0103.D	GB602-NF-B03	0.20	0.20	0.20	5.20	551.50	0.59
2	CSA0104.D	GB602-NF-B04	0.20	0.20	0.20	3.90	255.90	0.49
2	CSA0105.D	GB602-NF-B05	0.20	0.20	0.20	4.50	207.90	2.36
2	CSA0106.D	GB602-NF-B06	0.20	0.20	0.20	4.90	498.50	0.88
2	CSA0107.D	GB602-NF-B07	0.20	0.20	0.20	4.10	244.70	0.69
2	CSA0108.D	GB602-NF-B08	0.20	0.20	0.20	6.00	539.20	0.76
2	CSA0109.D	GB602-NF-B09	0.20	0.20	0.20	2.10	169.80	0.65
2	CSA0110.D	GB602-NF-B10	0.20	0.20	0.20	6.60	404.80	0.39
2	CSA0111.D	GB602-NF-B11	0.20	0.20	0.20	4.80	219.40	0.43
2	CSA0112.D	GB602-NF-B12	0.20	0.20	0.20	7.20	189.13	0.64
2	CSA0086.D	GB602-NF-DS-1(0-2cm)	0.20	0.20	0.20	5.90	582.10	2.94
2	CSA0087.D	GB602-NF-DS-1(2-4cm)	0.20	0.20	0.20	4.00	652.70	1.13
2	CSA0088.D	GB602-NF-DS-1(4-6cm)	0.20	0.20	0.20	4.50	435.60	1.63
2	CSA0089.D	GB602-NF-DS-1(6-8cm)	0.20	0.20	0.20	2.00	150.30	1.01
2	CSA0090.D	GB602-NF-DS-1(8-10cm)	0.20	0.20	0.20	2.70	136.00	1.04
2	CSA0093.D	GB602-NF-DS-2 (4-6cm)	0.20	0.20	0.20	2.90	219.80	0.61
2	CSA0091.D	GB602-NF-DS-2(0-2cm)	0.20	0.20	0.20	6.50	436.40	0.72
2	CSA0092.D	GB602-NF-DS-2(2-4cm)	0.20	0.20	0.20	5.70	357.40	0.54
2	CSA0094.D	GB602-NF-DS-2(6-8cm)	0.20	0.20	0.20	2.30	123.30	0.51
2	CSA0095.D	GB602-NF-DS-2(8-10cm)	0.20	0.20	0.20	1.40	134.10	0.37
2	CSA0096.D	GB602-NF-DS-3(0-2cm)	0.20	0.20	0.20	10.70	358.00	2.60
2	CSA0097.D	GB602-NF-DS-3(2-4cm)	0.20	0.20	0.20	9.20	221.00	1.42
2	CSA0098.D	GB602-NF-DS-3(4-6cm)	0.20	0.20	0.20	2.00	122.50	0.72
2	CSA0099.D	GB602-NF-DS-3(6-8cm)	0.20	0.20	0.20	2.00	135.50	0.37
2	CSA0100.D	GB602-NF-DS-3(8-10cm)	0.20	0.20	0.20	2.40	135.00	0.30
2	CSA0125.D	MC292-DS-1(0-2cm)	0.20	0.20	0.20	7.00	302.30	0.30
2	CSA0126.D	MC292-DS-1(2-4cm)	0.20	0.20	0.20	11.70	521.40	0.32
2	CSA0127.D	MC292-DS-1(4-6cm)	0.20	0.20	0.20	10.30	280.20	0.27
2	CSA0128.D	MC292-DS-1(6-8 cm)	0.20	0.20	0.20	9.90	233.00	0.22
2	CSA0129.D	MC292-DS-1(8-10cm)	0.20	0.20	0.20	8.70	209.70	0.24
2	CSA0130.D	MC292-DS-2(0-2cm)	0.20	0.20	0.20	14.80	551.50	0.48
2	CSA0131.D	MC292-DS-2(2-4cm)	0.20	0.20	0.20	10.50	329.20	1.09
2	CSA0132.D	MC292-DS-2(4-6cm)	0.20	0.20	0.20	6.80	202.50	0.32
2	CSA0133.D	MC292-DS-2(6-8cm)	0.20	0.20	0.20	4.30	154.60	0.29
2	CSA0134.D	MC292-DS-2(8-10cm)	0.20	0.20	0.20	2.60	94.10	0.29
2	CSA0135.D	MC292-DS-3(0-2cm)	0.20	0.20	0.20	11.40	524.40	1.46
2	CSA0136.D	MC292-DS-3(2-4cm)	0.20	0.20	0.20	11.40	397.50	0.45
2	CSA0137.D	MC292-DS-3(4-6cm)	0.20	0.20	0.20	9.40	285.40	0.36
2	CSA0138.D	MC292-DS-3(6-8cm)	0.20	0.20	0.20	4.70	139.90	0.30
2	CSA0139.D	MC292-DS-3(8-10cm)	0.20	0.20	0.20	3.00	129.90	0.30
2	CSA0152.D	MC292-FF1-B01	0.20	0.20	0.20	21.90	395.30	0.21
2	CSA0158.D	MC292-FF1-B02	0.20	0.20	0.20	25.80	748.00	0.21
2	CSA0153.D	MC292-FF2-B01	0.20	0.20	0.20	23.80	545.10	0.26

Table H.3. Sediment polycyclic aromatic hydrocarbon data for Cruise 2B.

Cruise	Sample	Station	C1-Dibenzo	C2-Dibenzo	C3-Dibenzo	Benzo(g,h,	Total PAHs	D2/P2
2	CSA0159.D	MC292-FF2-B02	0.20	0.20	0.20	16.90	452.90	0.22
2	CSA0154.D	MC292-FF3-B01	0.20	0.20	0.20	15.00	305.10	0.26
2	CSA0160.D	MC292-FF3-B02	0.20	0.20	0.20	10.00	279.00	0.24
2	CSA0155.D	MC292-FF4-B01	0.20	0.20	0.20	16.00	338.60	0.23
2	CSA0161.D	MC292-FF4-B02	0.20	0.20	0.20	11.30	328.60	0.22
2	CSA0156.D	MC292-FF5-B01	0.20	0.20	0.20	13.00	249.20	0.23
2	CSA0162.D	MC292-FF5-B02	1.50	1.50	1.50	10.90	332.60	0.15
2	CSA0157.D	MC292-FF6-B01	0.20	0.20	0.20	9.40	210.10	0.24
2	CSA0163.D	MC292-FF6-B02	0.20	0.20	0.20	8.00	218.20	0.20
2	CSA0140.D	MC292-NF-B01	0.20	0.20	0.20	8.50	562.80	0.41
2	CSA0141.D	MC292-NF-B02	0.20	0.20	0.20	6.60	199.50	0.44
2	CSA0142.D	MC292-NF-B03	0.20	0.20	0.20	11.20	296.90	0.48
2	CSA0143.D	MC292-NF-B04	0.20	0.20	0.20	7.50	256.30	0.23
2	CSA0144.D	MC292-NF-B05	0.20	0.20	0.20	24.70	742.80	0.51
2	CSA0145.D	MC292-NF-B06	0.20	0.20	0.20	7.20	174.20	0.25
2	CSA0146.D	MC292-NF-B07	0.20	0.20	0.20	11.60	246.70	0.23
2	CSA0147.D	MC292-NF-B08	0.20	0.20	0.20	12.80	452.00	0.49
2	CSA0148.D	MC292-NF-B09	0.20	0.20	0.20	8.90	221.90	0.20
2	CSA0149.D	MC292-NF-B10	0.20	0.20	0.20	11.30	309.50	0.43
2	CSA0150.D	MC292-NF-B11	0.20	0.20	0.20	13.50	271.80	0.22
2	CSA0151.D	MC292-NF-B12	0.20	0.20	0.20	10.80	268.60	0.24

Table H.3. Sediment polycyclic aromatic hydrocarbon data for Cruise 2B.

Cruise	Sample	Station	D3/P3	D2/C2	D3/C3	2-Methylna	1-Methylna	2,6-Dimeth
2	CSA0074.D	GB516-FF1-B01	0.97	0.35	NA	2.50	1.60	2.00
2	CSA0080.D	GB516-FF1-B02	0.76	0.32	0.84	2.80	1.60	1.90
2	CSA0075.D	GB516-FF2-B01	0.50	0.41	NA	3.10	1.70	2.20
2	CSA0081.D	GB516-FF2-B02	1.02	0.39	1.06	2.70	1.60	1.80
2	CSA0076.D	GB516-FF3-B01	0.89	0.24	NA	2.00	1.20	1.20
2	CSA0082.D	GB516-FF3-B02	0.86	0.27	2.00	1.90	1.20	1.00
2	CSA0077.D	GB516-FF4-B01	1.27	0.29	1.03	2.10	1.30	1.20
2	CSA0083.D	GB516-FF4-B02	0.84	0.42	NA	2.30	1.60	1.60
2	CSA0078.D	GB516-FF5-B01	0.93	0.42	1.52	2.50	1.60	1.60
2	CSA0084.D	GB516-FF5-B02	1.22	0.29	1.39	3.00	1.80	1.90
2	CSA0079.D	GB516-FF6-B01	1.03	0.42	1.22	2.70	1.60	1.80
2	CSA0085.D	GB516-FF6-B02	0.85	0.30	0.58	3.30	1.80	2.20
2	CSA0062.D	GB516-NF-B01	NA	NA	NA	2.90	1.60	4.80
2	CSA0063.D	GB516-NF-B02	NA	NA	NA	3.90	3.00	5.70
2	CSA0064.D	GB516-NF-B03	NA	NA	NA	7.00	2.90	47.60
2	CSA0065.D	GB516-NF-B04	1.93	1.18	NA	3.20	1.80	5.00
2	CSA0066.D	GB516-NF-B05	1.42	NA	NA	6.10	3.80	6.70
2	CSA0067.D	GB516-NF-B06	NA	NA	NA	11.10	9.20	15.20
2	CSA0068.D	GB516-NF-B07	1.39	NA	NA	0.10	0.10	0.10
2	CSA0069.D	GB516-NF-B08	3.08	NA	NA	5.60	4.20	9.00
2	CSA0070.D	GB516-NF-B09	2.16	NA	NA	4.90	3.20	22.10
2	CSA0071.D	GB516-NF-B10	0.80	0.37	NA	2.40	1.40	1.50
2	CSA0072.D	GB516-NF-B11	1.22	NA	NA	2.40	1.50	2.00
2	CSA0073.D	GB516-NF-B12	0.79	0.40	NA	2.50	1.50	2.20
2	CSA0047.D	GB516-NF-DS-1 (0-2cm)	NA	NA	NA	11.00	3.90	10.10
2	CSA0048.D	GB516-NF-DS-1 (2-4cm)	NA	NA	NA	7.80	5.00	17.10
2	CSA0049.D	GB516-NF-DS-1 (4-6cm)	NA	NA	NA	6.80	3.60	6.30
2	CSA0050.D	GB516-NF-DS-1 (6-8cm)	0.33	0.69	2.63	12.70	8.60	10.60
2	CSA0051.D	GB516-NF-DS-1 (8-10cm)	NA	NA	NA	7.20	4.80	8.30
2	CSA0053.D	GB516-NF-DS-2 (2-4cm)	NA	NA	NA	103.00	234.00	2740.00
2	CSA0054.D	GB516-NF-DS-2 (4-6cm)	NA	NA	NA	63.90	160.00	2100.00
2	CSA0055.D	GB516-NF-DS-2 (6-8cm)	NA	NA	NA	73.70	113.00	2190.00
2	CSA0056.D	GB516-NF-DS-2 (8-10cm)	NA	NA	NA	26.60	38.60	603.00
2	CSA0052.D	GB516-NF-DS-2(0-2cm)	NA	NA	NA	99.70	225.00	2740.00
2	CSA0057.D	GB516-NF-DS-3 (0-2cm)	NA	NA	NA	3.90	3.60	15.80
2	CSA0058.D	GB516-NF-DS-3 (2-4cm)	0.75	0.67	NA	3.30	2.10	7.70
2	CSA0059.D	GB516-NF-DS-3 (4-6cm)	0.80	0.29	NA	4.00	2.30	6.80
2	CSA0060.D	GB516-NF-DS-3 (6-8cm)	0.78	NA	NA	2.70	1.70	4.30
2	CSA0061.D	GB516-NF-DS-3 (8-10cm)	1.00	NA	NA	3.50	2.10	6.30
2	CSA0113.D	GB602-FF1-B01	0.58	0.62	0.91	2.80	1.40	1.60
2	CSA0119.D	GB602-FF1-B02	0.45	0.34	0.88	2.40	1.30	1.50
2	CSA0114.D	GB602-FF2-B01	0.39	0.41	0.60	1.80	1.10	1.20
2	CSA0120.D	GB602-FF2-B02	0.51	0.24	0.42	2.30	1.30	1.50
2	CSA0115.D	GB602-FF3-B01	0.46	0.44	0.77	2.00	1.20	1.30
2	CSA0121.D	GB602-FF3-B02	0.73	0.44	0.89	1.90	1.10	1.40
2	CSA0116.D	GB602-FF4-B01	0.37	0.59	0.58	1.90	1.10	1.10
2	CSA0122.D	GB602-FF4-B02	0.50	0.42	0.50	2.30	1.30	1.70
2	CSA0117.D	GB602-FF5-B01	0.44	0.34	0.57	2.20	1.30	1.50

Table H.3. Sediment polycyclic aromatic hydrocarbon data for Cruise 2B.

Cruise	Sample	Station	D3/P3	D2/C2	D3/C3	2-Methylna	1-Methylna	2,6-Dimeth
2	CSA0123.D	GB602-FF5-B02	0.40	0.40	0.29	2.60	1.40	1.60
2	CSA0118.D	GB602-FF6-B01	0.46	0.35	0.61	3.20	1.80	2.10
2	CSA0124.D	GB602-FF6-B02	0.46	0.64	0.60	2.20	1.40	1.50
2	CSA0101.D	GB602-NF-B01	1.21	NA	NA	1.80	1.10	3.80
2	CSA0102.D	GB602-NF-B02	0.78	2.58	12.32	5.10	3.10	4.40
2	CSA0103.D	GB602-NF-B03	0.88	NA	NA	10.10	5.10	6.80
2	CSA0104.D	GB602-NF-B04	1.03	NA	NA	4.80	2.10	4.70
2	CSA0105.D	GB602-NF-B05	1.71	NA	NA	1.40	1.20	3.90
2	CSA0106.D	GB602-NF-B06	1.20	NA	NA	5.40	3.70	5.10
2	CSA0107.D	GB602-NF-B07	1.16	NA	NA	3.90	2.20	3.60
2	CSA0108.D	GB602-NF-B08	1.72	NA	NA	0.10	0.10	0.10
2	CSA0109.D	GB602-NF-B09	1.32	NA	NA	3.00	2.50	0.10
2	CSA0110.D	GB602-NF-B10	0.49	1.20	NA	13.60	8.40	6.30
2	CSA0111.D	GB602-NF-B11	0.81	1.17	NA	3.10	1.60	4.70
2	CSA0112.D	GB602-NF-B12	0.76	1.36	NA	3.00	1.90	2.30
2	CSA0086.D	GB602-NF-DS-1(0-2cm)	1.28	NA	NA	7.40	7.00	71.60
2	CSA0087.D	GB602-NF-DS-1(2-4cm)	1.88	NA	NA	4.80	3.90	30.90
2	CSA0088.D	GB602-NF-DS-1(4-6cm)	1.42	NA	NA	3.60	2.50	12.90
2	CSA0089.D	GB602-NF-DS-1(6-8cm)	1.31	NA	NA	2.80	1.30	4.40
2	CSA0090.D	GB602-NF-DS-1(8-10cm)	1.80	3.13	NA	2.50	1.40	2.60
2	CSA0093.D	GB602-NF-DS-2 (4-6cm)	0.87	NA	NA	3.50	1.70	2.20
2	CSA0091.D	GB602-NF-DS-2(0-2cm)	0.99	NA	NA	5.20	3.70	5.30
2	CSA0092.D	GB602-NF-DS-2(2-4cm)	0.81	NA	NA	4.90	3.80	6.20
2	CSA0094.D	GB602-NF-DS-2(6-8cm)	0.69	1.35	3.83	2.10	1.20	1.70
2	CSA0095.D	GB602-NF-DS-2(8-10cm)	0.89	0.88	1.79	2.20	1.20	1.30
2	CSA0096.D	GB602-NF-DS-3(0-2cm)	1.96	6.02	6.41	6.70	3.60	4.70
2	CSA0097.D	GB602-NF-DS-3(2-4cm)	1.61	2.77	NA	3.80	2.20	2.40
2	CSA0098.D	GB602-NF-DS-3(4-6cm)	1.32	2.43	NA	2.50	1.30	1.80
2	CSA0099.D	GB602-NF-DS-3(6-8cm)	0.65	0.87	2.06	2.90	1.60	1.90
2	CSA0100.D	GB602-NF-DS-3(8-10cm)	0.44	0.65	1.40	3.00	1.50	2.10
2	CSA0125.D	MC292-DS-1(0-2cm)	0.63	0.60	1.39	5.50	3.50	4.50
2	CSA0126.D	MC292-DS-1(2-4cm)	0.76	0.49	0.82	12.70	7.60	9.60
2	CSA0127.D	MC292-DS-1(4-6cm)	0.25	0.38	0.63	6.30	3.60	4.60
2	CSA0128.D	MC292-DS-1(6-8 cm)	0.29	0.30	0.71	4.40	2.70	3.20
2	CSA0129.D	MC292-DS-1(8-10cm)	0.41	0.31	0.57	4.00	2.30	2.90
2	CSA0130.D	MC292-DS-2(0-2cm)	0.58	0.79	2.19	6.10	4.10	5.00
2	CSA0131.D	MC292-DS-2(2-4cm)	0.63	1.43	1.93	5.20	2.80	3.60
2	CSA0132.D	MC292-DS-2(4-6cm)	0.33	0.56	0.65	4.40	2.50	3.20
2	CSA0133.D	MC292-DS-2(6-8cm)	0.36	0.64	0.71	3.60	1.90	2.80
2	CSA0134.D	MC292-DS-2(8-10cm)	0.35	0.42	0.27	2.00	1.20	1.80
2	CSA0135.D	MC292-DS-3(0-2cm)	1.13	3.02	5.61	7.10	4.30	5.60
2	CSA0136.D	MC292-DS-3(2-4cm)	0.49	0.91	2.16	7.00	4.10	5.50
2	CSA0137.D	MC292-DS-3(4-6cm)	0.42	0.66	0.92	7.80	3.90	5.80
2	CSA0138.D	MC292-DS-3(6-8cm)	0.45	0.56	0.71	3.40	1.70	2.80
2	CSA0139.D	MC292-DS-3(8-10cm)	0.39	0.68	0.39	3.00	1.60	2.50
2	CSA0152.D	MC292-FF1-B01	0.25	0.30	0.77	6.30	3.80	3.80
2	CSA0158.D	MC292-FF1-B02	0.27	0.39	0.62	10.50	6.60	6.30
2	CSA0153.D	MC292-FF2-B01	0.31	0.39	0.62	10.40	5.60	7.10

Table H.3. Sediment polycyclic aromatic hydrocarbon data for Cruise 2B.

Cruise	Sample	Station	D3/P3	D2/C2	D3/C3	2-Methylna	1-Methylna	2,6-Dimeth
2	CSA0159.D	MC292-FF2-B02	0.31	0.51	1.40	7.90	4.70	5.60
2	CSA0154.D	MC292-FF3-B01	0.45	0.37	0.79	5.80	3.30	3.70
2	CSA0160.D	MC292-FF3-B02	0.48	0.50	0.65	4.20	2.50	2.90
2	CSA0155.D	MC292-FF4-B01	0.32	0.31	0.41	6.50	3.80	3.90
2	CSA0161.D	MC292-FF4-B02	0.36	0.28	0.53	5.60	3.30	3.70
2	CSA0156.D	MC292-FF5-B01	0.36	0.35	0.84	5.20	3.20	3.10
2	CSA0162.D	MC292-FF5-B02	0.32	0.41	1.35	5.90	3.40	3.90
2	CSA0157.D	MC292-FF6-B01	0.34	0.54	0.74	4.00	2.50	2.50
2	CSA0163.D	MC292-FF6-B02	0.30	0.44	1.15	4.60	2.80	3.00
2	CSA0140.D	MC292-NF-B01	0.55	1.66	NA	15.00	8.90	11.80
2	CSA0141.D	MC292-NF-B02	1.05	0.77	2.14	4.20	2.60	2.90
2	CSA0142.D	MC292-NF-B03	1.00	1.08	3.85	9.20	6.40	4.90
2	CSA0143.D	MC292-NF-B04	0.24	0.39	0.57	4.40	2.60	2.50
2	CSA0144.D	MC292-NF-B05	1.05	0.90	2.48	10.00	5.40	4.30
2	CSA0145.D	MC292-NF-B06	0.29	0.49	0.60	3.10	1.80	2.10
2	CSA0146.D	MC292-NF-B07	0.34	0.53	1.41	4.60	2.90	2.50
2	CSA0147.D	MC292-NF-B08	0.45	1.36	1.71	14.10	9.20	9.90
2	CSA0148.D	MC292-NF-B09	0.31	0.31	0.63	3.80	2.30	2.30
2	CSA0149.D	MC292-NF-B10	0.72	0.58	1.26	5.20	3.00	3.10
2	CSA0150.D	MC292-NF-B11	0.32	0.33	0.73	4.50	2.80	2.70
2	CSA0151.D	MC292-NF-B12	0.26	0.21	0.22	4.90	2.70	2.70

Table H.3. Sediment polycyclic aromatic hydrocarbon data for Cruise 2B.

Cruise	Sample	Station	1,6,7-Trim	1-Methylph	17a, 21b (	Surrogate	Naphthalen
2	CSA0074.D	GB516-FF1-B01	0.80	1.30	383.00	Su Recovery (%)	81.00
2	CSA0080.D	GB516-FF1-B02	0.70	1.40	483.00	Su Recovery (%)	82.00
2	CSA0075.D	GB516-FF2-B01	0.70	1.10	309.00	Su Recovery (%)	85.00
2	CSA0081.D	GB516-FF2-B02	0.70	1.30	358.00	Su Recovery (%)	84.00
2	CSA0076.D	GB516-FF3-B01	0.90	0.80	751.00	Su Recovery (%)	66.00
2	CSA0082.D	GB516-FF3-B02	1.00	0.90	689.00	Su Recovery (%)	67.00
2	CSA0077.D	GB516-FF4-B01	0.60	1.00	306.00	Su Recovery (%)	83.00
2	CSA0083.D	GB516-FF4-B02	0.70	1.30	310.00	Su Recovery (%)	87.00
2	CSA0078.D	GB516-FF5-B01	0.70	1.40	331.00	Su Recovery (%)	87.00
2	CSA0084.D	GB516-FF5-B02	0.80	1.30	553.00	Su Recovery (%)	84.00
2	CSA0079.D	GB516-FF6-B01	0.70	1.20	380.00	Su Recovery (%)	90.00
2	CSA0085.D	GB516-FF6-B02	0.80	1.30	441.00	Su Recovery (%)	92.00
2	CSA0062.D	GB516-NF-B01	0.10	1.60	343.00	Su Recovery (%)	86.00
2	CSA0063.D	GB516-NF-B02	0.10	2.10	359.00	Su Recovery (%)	82.00
2	CSA0064.D	GB516-NF-B03	30.10	2.70	639.00	Su Recovery (%)	72.00
2	CSA0065.D	GB516-NF-B04	1.90	1.60	406.00	Su Recovery (%)	79.00
2	CSA0066.D	GB516-NF-B05	5.00	3.20	461.00	Su Recovery (%)	62.00
2	CSA0067.D	GB516-NF-B06	77.80	0.10	2860.00	Su Recovery (%)	68.00
2	CSA0068.D	GB516-NF-B07	0.10	3.60	661.00	Su Recovery (%)	53.00
2	CSA0069.D	GB516-NF-B08	2.20	2.50	521.00	Su Recovery (%)	84.00
2	CSA0070.D	GB516-NF-B09	9.80	2.40	527.00	Su Recovery (%)	87.00
2	CSA0071.D	GB516-NF-B10	0.70	1.10	413.00	Su Recovery (%)	90.00
2	CSA0072.D	GB516-NF-B11	1.00	1.40	428.00	Su Recovery (%)	81.00
2	CSA0073.D	GB516-NF-B12	0.90	1.20	337.00	Su Recovery (%)	79.00
2	CSA0047.D	GB516-NF-DS-1 (0-2cm)	0.10	8.80	1360.00	Su Recovery (%)	85.00
2	CSA0048.D	GB516-NF-DS-1 (2-4cm)	66.30	6.10	5300.00	Su Recovery (%)	76.00
2	CSA0049.D	GB516-NF-DS-1 (4-6cm)	0.10	0.10	749.00	Su Recovery (%)	87.00
2	CSA0050.D	GB516-NF-DS-1 (6-8cm)	2.50	7.10	616.00	Su Recovery (%)	85.00
2	CSA0051.D	GB516-NF-DS-1 (8-10cm)	4.10	4.70	677.00	Su Recovery (%)	88.00
2	CSA0053.D	GB516-NF-DS-2 (2-4cm)	314.00	21.90	<7.3	Su Recovery (%)	89.00
2	CSA0054.D	GB516-NF-DS-2 (4-6cm)	279.00	25.40	<6.8	Su Recovery (%)	95.00
2	CSA0055.D	GB516-NF-DS-2 (6-8cm)	272.00	0.55	<6.6	Su Recovery (%)	98.00
2	CSA0056.D	GB516-NF-DS-2 (8-10cm)	93.10	6.40	523.00	Su Recovery (%)	65.00
2	CSA0052.D	GB516-NF-DS-2(0-2cm)	381.00	29.00	<7.2	Su Recovery (%)	91.00
2	CSA0057.D	GB516-NF-DS-3 (0-2cm)	52.90	0.10	0.50	Su Recovery (%)	69.00
2	CSA0058.D	GB516-NF-DS-3 (2-4cm)	1.40	1.00	517.00	Su Recovery (%)	81.00
2	CSA0059.D	GB516-NF-DS-3 (4-6cm)	1.00	1.30	577.00	Su Recovery (%)	78.00
2	CSA0060.D	GB516-NF-DS-3 (6-8cm)	0.60	0.80	216.00	Su Recovery (%)	87.00
2	CSA0061.D	GB516-NF-DS-3 (8-10cm)	0.90	1.00	207.00	Su Recovery (%)	80.00
2	CSA0113.D	GB602-FF1-B01	0.60	1.00	237.00	Su Recovery (%)	82.00
2	CSA0119.D	GB602-FF1-B02	0.60	0.90	235.00	Su Recovery (%)	81.00
2	CSA0114.D	GB602-FF2-B01	0.50	0.90	311.00	Su Recovery (%)	86.00
2	CSA0120.D	GB602-FF2-B02	0.60	1.00	276.00	Su Recovery (%)	81.00
2	CSA0115.D	GB602-FF3-B01	0.50	0.80	253.00	Su Recovery (%)	82.00
2	CSA0121.D	GB602-FF3-B02	0.60	0.80	211.00	Su Recovery (%)	81.00
2	CSA0116.D	GB602-FF4-B01	0.50	0.80	385.00	Su Recovery (%)	87.00
2	CSA0122.D	GB602-FF4-B02	0.60	0.90	798.00	Su Recovery (%)	84.00
2	CSA0117.D	GB602-FF5-B01	0.60	1.00	234.00	Su Recovery (%)	88.00

Table H.3. Sediment polycyclic aromatic hydrocarbon data for Cruise 2B.

Cruise	Sample	Station	1,6,7-Trim	1-Methylph	17a, 21b (	Surrogate	Naphthalen
2	CSA0123.D	GB602-FF5-B02	0.60	1.00	451.00	Su Recovery (%)	89.00
2	CSA0118.D	GB602-FF6-B01	0.60	0.90	293.00	Su Recovery (%)	80.00
2	CSA0124.D	GB602-FF6-B02	0.60	0.90	311.00	Su Recovery (%)	90.00
2	CSA0101.D	GB602-NF-B01	1.30	1.00	165.00	Su Recovery (%)	90.00
2	CSA0102.D	GB602-NF-B02	1.60	4.10	927.00	Su Recovery (%)	74.00
2	CSA0103.D	GB602-NF-B03	0.10	8.20	1400.00	Su Recovery (%)	108.00
2	CSA0104.D	GB602-NF-B04	0.10	2.80	478.00	Su Recovery (%)	98.00
2	CSA0105.D	GB602-NF-B05	1.00	1.20	218.00	Su Recovery (%)	109.00
2	CSA0106.D	GB602-NF-B06	2.50	5.60	1730.00	Su Recovery (%)	102.00
2	CSA0107.D	GB602-NF-B07	0.10	2.50	416.00	Su Recovery (%)	106.00
2	CSA0108.D	GB602-NF-B08	0.10	6.70	717.00	Su Recovery (%)	101.00
2	CSA0109.D	GB602-NF-B09	0.10	1.90	290.00	Su Recovery (%)	97.00
2	CSA0110.D	GB602-NF-B10	3.20	4.80	2620.00	Su Recovery (%)	94.00
2	CSA0111.D	GB602-NF-B11	0.10	2.80	922.00	Su Recovery (%)	96.00
2	CSA0112.D	GB602-NF-B12	1.20	1.90	533.00	Su Recovery (%)	105.00
2	CSA0086.D	GB602-NF-DS-1(0-2cm)	28.80	6.10	567.00	Su Recovery (%)	77.00
2	CSA0087.D	GB602-NF-DS-1(2-4cm)	13.00	4.90	455.00	Su Recovery (%)	93.00
2	CSA0088.D	GB602-NF-DS-1(4-6cm)	4.00	2.20	388.00	Su Recovery (%)	92.00
2	CSA0089.D	GB602-NF-DS-1(6-8cm)	1.10	1.30	184.00	Su Recovery (%)	104.00
2	CSA0090.D	GB602-NF-DS-1(8-10cm)	1.00	1.30	132.00	Su Recovery (%)	103.00
2	CSA0093.D	GB602-NF-DS-2 (4-6cm)	0.10	2.40	1170.00	Su Recovery (%)	97.00
2	CSA0091.D	GB602-NF-DS-2(0-2cm)	0.10	5.10	1000.00	Su Recovery (%)	111.00
2	CSA0092.D	GB602-NF-DS-2(2-4cm)	0.10	5.00	1390.00	Su Recovery (%)	100.00
2	CSA0094.D	GB602-NF-DS-2(6-8cm)	0.70	1.10	430.00	Su Recovery (%)	88.00
2	CSA0095.D	GB602-NF-DS-2(8-10cm)	0.90	1.20	94.10	Su Recovery (%)	94.00
2	CSA0096.D	GB602-NF-DS-3(0-2cm)	0.10	2.80	451.00	Su Recovery (%)	101.00
2	CSA0097.D	GB602-NF-DS-3(2-4cm)	1.70	1.30	252.00	Su Recovery (%)	99.00
2	CSA0098.D	GB602-NF-DS-3(4-6cm)	0.40	1.20	148.00	Su Recovery (%)	81.00
2	CSA0099.D	GB602-NF-DS-3(6-8cm)	1.20	1.20	132.00	Su Recovery (%)	88.00
2	CSA0100.D	GB602-NF-DS-3(8-10cm)	0.50	1.10	130.00	Su Recovery (%)	82.00
2	CSA0125.D	MC292-DS-1(0-2cm)	1.50	1.80	291.00	Su Recovery (%)	48.00
2	CSA0126.D	MC292-DS-1(2-4cm)	2.10	2.80	398.00	Su Recovery (%)	53.00
2	CSA0127.D	MC292-DS-1(4-6cm)	1.20	1.40	351.00	Su Recovery (%)	82.00
2	CSA0128.D	MC292-DS-1(6-8 cm)	1.00	1.30	355.00	Su Recovery (%)	85.00
2	CSA0129.D	MC292-DS-1(8-10cm)	0.60	1.10	321.00	Su Recovery (%)	81.00
2	CSA0130.D	MC292-DS-2(0-2cm)	1.40	3.40	452.00	Su Recovery (%)	104.00
2	CSA0131.D	MC292-DS-2(2-4cm)	1.50	2.00	356.00	Su Recovery (%)	88.00
2	CSA0132.D	MC292-DS-2(4-6cm)	1.00	1.30	303.00	Su Recovery (%)	85.00
2	CSA0133.D	MC292-DS-2(6-8cm)	0.60	1.00	217.00	Su Recovery (%)	87.00
2	CSA0134.D	MC292-DS-2(8-10cm)	0.60	0.50	129.00	Su Recovery (%)	85.00
2	CSA0135.D	MC292-DS-3(0-2cm)	2.20	2.60	527.00	Su Recovery (%)	93.00
2	CSA0136.D	MC292-DS-3(2-4cm)	1.60	3.90	411.00	Su Recovery (%)	84.00
2	CSA0137.D	MC292-DS-3(4-6cm)	0.60	1.80	360.00	Su Recovery (%)	84.00
2	CSA0138.D	MC292-DS-3(6-8cm)	0.90	0.90	141.00	Su Recovery (%)	77.00
2	CSA0139.D	MC292-DS-3(8-10cm)	0.90	1.00	104.00	Su Recovery (%)	93.00
2	CSA0152.D	MC292-FF1-B01	1.90	2.50	410.00	Su Recovery (%)	95.00
2	CSA0158.D	MC292-FF1-B02	2.10	4.60	456.00	Su Recovery (%)	87.00
2	CSA0153.D	MC292-FF2-B01	2.90	3.70	646.00	Su Recovery (%)	102.00

Table H.3. Sediment polycyclic aromatic hydrocarbon data for Cruise 2B.

Cruise	Sample	Station	1,6,7-Trim	1-Methylph	17a, 21b (	Surrogate	Naphthalen
2	CSA0159.D	MC292-FF2-B02	1.80	4.10	874.00	Su Recovery (%)	91.00
2	CSA0154.D	MC292-FF3-B01	1.10	2.30	425.00	Su Recovery (%)	96.00
2	CSA0160.D	MC292-FF3-B02	1.10	2.10	316.00	Su Recovery (%)	95.00
2	CSA0155.D	MC292-FF4-B01	1.30	2.20	423.00	Su Recovery (%)	90.00
2	CSA0161.D	MC292-FF4-B02	1.20	2.20	308.00	Su Recovery (%)	90.00
2	CSA0156.D	MC292-FF5-B01	1.00	2.00	335.00	Su Recovery (%)	91.00
2	CSA0162.D	MC292-FF5-B02	0.60	2.90	410.00	Su Recovery (%)	99.00
2	CSA0157.D	MC292-FF6-B01	0.90	1.70	278.00	Su Recovery (%)	87.00
2	CSA0163.D	MC292-FF6-B02	1.00	1.90	236.00	Su Recovery (%)	89.00
2	CSA0140.D	MC292-NF-B01	3.60	7.50	447.00	Su Recovery (%)	105.00
2	CSA0141.D	MC292-NF-B02	1.40	1.70	792.00	Su Recovery (%)	106.00
2	CSA0142.D	MC292-NF-B03	1.30	2.40	476.00	Su Recovery (%)	91.00
2	CSA0143.D	MC292-NF-B04	0.80	1.70	560.00	Su Recovery (%)	102.00
2	CSA0144.D	MC292-NF-B05	0.40	2.90	791.00	Su Recovery (%)	111.00
2	CSA0145.D	MC292-NF-B06	1.10	1.40	255.00	Su Recovery (%)	97.00
2	CSA0146.D	MC292-NF-B07	1.00	1.60	376.00	Su Recovery (%)	99.00
2	CSA0147.D	MC292-NF-B08	2.30	4.80	419.00	Su Recovery (%)	91.00
2	CSA0148.D	MC292-NF-B09	0.80	1.00	278.00	Su Recovery (%)	96.00
2	CSA0149.D	MC292-NF-B10	0.70	2.00	642.00	Su Recovery (%)	102.00
2	CSA0150.D	MC292-NF-B11	1.00	1.20	317.00	Su Recovery (%)	96.00
2	CSA0151.D	MC292-NF-B12	0.90	1.20	383.00	Su Recovery (%)	99.00

Table H.3. Sediment polycyclic aromatic hydrocarbon data for Cruise 2B.

Cruise	Sample	Station	Acenaphthe	Phenanthre	Chrysene-D	Perylene-D
2	CSA0074.D	GB516-FF1-B01	93.00	70.00	75.00	81.00
2	CSA0080.D	GB516-FF1-B02	88.00	72.00	78.00	50.00
2	CSA0075.D	GB516-FF2-B01	95.00	72.00	76.00	35.00
2	CSA0081.D	GB516-FF2-B02	85.00	73.00	72.00	39.00
2	CSA0076.D	GB516-FF3-B01	76.00	73.00	81.00	41.00
2	CSA0082.D	GB516-FF3-B02	80.00	71.00	84.00	69.00
2	CSA0077.D	GB516-FF4-B01	93.00	71.00	74.00	80.00
2	CSA0083.D	GB516-FF4-B02	75.00	70.00	72.00	74.00
2	CSA0078.D	GB516-FF5-B01	95.00	76.00	78.00	74.00
2	CSA0084.D	GB516-FF5-B02	83.00	74.00	82.00	48.00
2	CSA0079.D	GB516-FF6-B01	97.00	73.00	79.00	37.00
2	CSA0085.D	GB516-FF6-B02	99.00	81.00	87.00	29.00
2	CSA0062.D	GB516-NF-B01	94.00	94.00	87.00	104.00
2	CSA0063.D	GB516-NF-B02	93.00	94.00	85.00	103.00
2	CSA0064.D	GB516-NF-B03	85.00	80.00	85.00	100.00
2	CSA0065.D	GB516-NF-B04	89.00	71.00	84.00	87.00
2	CSA0066.D	GB516-NF-B05	68.00	68.00	87.00	88.00
2	CSA0067.D	GB516-NF-B06	95.00	73.00	92.00	108.00
2	CSA0068.D	GB516-NF-B07	62.00	83.00	87.00	96.00
2	CSA0069.D	GB516-NF-B08	109.00	83.00	104.00	88.00
2	CSA0070.D	GB516-NF-B09	93.00	79.00	89.00	96.00
2	CSA0071.D	GB516-NF-B10	94.00	78.00	83.00	49.00
2	CSA0072.D	GB516-NF-B11	89.00	73.00	83.00	58.00
2	CSA0073.D	GB516-NF-B12	87.00	81.00	83.00	60.00
2	CSA0047.D	GB516-NF-DS-1 (0-2cm)	100.00	94.00	91.00	103.00
2	CSA0048.D	GB516-NF-DS-1 (2-4cm)	96.00	87.00	96.00	109.00
2	CSA0049.D	GB516-NF-DS-1 (4-6cm)	96.00	92.00	93.00	107.00
2	CSA0050.D	GB516-NF-DS-1 (6-8cm)	96.00	73.00	84.00	107.00
2	CSA0051.D	GB516-NF-DS-1 (8-10cm)	98.00	77.00	86.00	110.00
2	CSA0053.D	GB516-NF-DS-2 (2-4cm)	96.00	103.00	100.00	100.00
2	CSA0054.D	GB516-NF-DS-2 (4-6cm)	98.00	106.00	100.00	103.00
2	CSA0055.D	GB516-NF-DS-2 (6-8cm)	100.00	107.00	90.00	91.00
2	CSA0056.D	GB516-NF-DS-2 (8-10cm)	100.00	80.00	100.00	104.00
2	CSA0052.D	GB516-NF-DS-2(0-2cm)	100.00	108.00	96.00	101.00
2	CSA0057.D	GB516-NF-DS-3 (0-2cm)	98.00	95.00	96.00	105.00
2	CSA0058.D	GB516-NF-DS-3 (2-4cm)	96.00	72.00	80.00	102.00
2	CSA0059.D	GB516-NF-DS-3 (4-6cm)	95.00	67.00	82.00	77.00
2	CSA0060.D	GB516-NF-DS-3 (6-8cm)	101.00	80.00	77.00	57.00
2	CSA0061.D	GB516-NF-DS-3 (8-10cm)	97.00	69.00	79.00	84.00
2	CSA0113.D	GB602-FF1-B01	89.00	80.00	92.00	25.00
2	CSA0119.D	GB602-FF1-B02	89.00	85.00	95.00	26.00
2	CSA0114.D	GB602-FF2-B01	89.00	80.00	98.00	58.00
2	CSA0120.D	GB602-FF2-B02	91.00	86.00	86.00	50.00
2	CSA0115.D	GB602-FF3-B01	90.00	88.00	94.00	57.00
2	CSA0121.D	GB602-FF3-B02	91.00	81.00	96.00	50.00
2	CSA0116.D	GB602-FF4-B01	93.00	83.00	93.00	42.00
2	CSA0122.D	GB602-FF4-B02	93.00	86.00	94.00	33.00
2	CSA0117.D	GB602-FF5-B01	96.00	90.00	92.00	66.00

Table H.3. Sediment polycyclic aromatic hydrocarbon data for Cruise 2B.

Cruise	Sample	Station	Acenaphthe	Phenanthre	Chrysene-D	Perylene-D
2	CSA0123.D	GB602-FF5-B02	97.00	84.00	98.00	51.00
2	CSA0118.D	GB602-FF6-B01	92.00	88.00	93.00	38.00
2	CSA0124.D	GB602-FF6-B02	92.00	77.00	90.00	40.00
2	CSA0101.D	GB602-NF-B01	100.00	112.00	113.00	105.00
2	CSA0102.D	GB602-NF-B02	72.00	70.00	73.00	89.00
2	CSA0103.D	GB602-NF-B03	96.00	100.00	97.00	106.00
2	CSA0104.D	GB602-NF-B04	99.00	109.00	107.00	101.00
2	CSA0105.D	GB602-NF-B05	112.00	113.00	90.00	100.00
2	CSA0106.D	GB602-NF-B06	96.00	107.00	106.00	104.00
2	CSA0107.D	GB602-NF-B07	100.00	108.00	94.00	105.00
2	CSA0108.D	GB602-NF-B08	95.00	85.00	102.00	101.00
2	CSA0109.D	GB602-NF-B09	100.00	84.00	98.00	98.00
2	CSA0110.D	GB602-NF-B10	97.00	90.00	107.00	102.00
2	CSA0111.D	GB602-NF-B11	95.00	102.00	116.00	102.00
2	CSA0112.D	GB602-NF-B12	99.00	85.00	90.00	105.00
2	CSA0086.D	GB602-NF-DS-1(0-2cm)	88.00	78.00	86.00	103.00
2	CSA0087.D	GB602-NF-DS-1(2-4cm)	102.00	75.00	92.00	101.00
2	CSA0088.D	GB602-NF-DS-1(4-6cm)	97.00	80.00	86.00	105.00
2	CSA0089.D	GB602-NF-DS-1(6-8cm)	106.00	93.00	113.00	101.00
2	CSA0090.D	GB602-NF-DS-1(8-10cm)	100.00	91.00	109.00	99.00
2	CSA0093.D	GB602-NF-DS-2 (4-6cm)	99.00	113.00	113.00	104.00
2	CSA0091.D	GB602-NF-DS-2(0-2cm)	110.00	96.00	116.00	103.00
2	CSA0092.D	GB602-NF-DS-2(2-4cm)	101.00	108.00	112.00	103.00
2	CSA0094.D	GB602-NF-DS-2(6-8cm)	89.00	60.00	63.00	68.00
2	CSA0095.D	GB602-NF-DS-2(8-10cm)	101.00	109.00	101.00	21.00
2	CSA0096.D	GB602-NF-DS-3(0-2cm)	99.00	114.00	114.00	79.00
2	CSA0097.D	GB602-NF-DS-3(2-4cm)	86.00	97.00	99.00	78.00
2	CSA0098.D	GB602-NF-DS-3(4-6cm)	90.00	88.00	93.00	27.00
2	CSA0099.D	GB602-NF-DS-3(6-8cm)	93.00	83.00	89.00	16.00
2	CSA0100.D	GB602-NF-DS-3(8-10cm)	92.00	97.00	92.00	25.00
2	CSA0125.D	MC292-DS-1(0-2cm)	55.00	70.00	85.00	27.00
2	CSA0126.D	MC292-DS-1(2-4cm)	53.00	76.00	77.00	24.00
2	CSA0127.D	MC292-DS-1(4-6cm)	99.00	79.00	75.00	50.00
2	CSA0128.D	MC292-DS-1(6-8 cm)	99.00	84.00	84.00	83.00
2	CSA0129.D	MC292-DS-1(8-10cm)	99.00	75.00	77.00	76.00
2	CSA0130.D	MC292-DS-2(0-2cm)	97.00	82.00	80.00	77.00
2	CSA0131.D	MC292-DS-2(2-4cm)	97.00	86.00	74.00	72.00
2	CSA0132.D	MC292-DS-2(4-6cm)	99.00	81.00	80.00	78.00
2	CSA0133.D	MC292-DS-2(6-8cm)	91.00	73.00	79.00	79.00
2	CSA0134.D	MC292-DS-2(8-10cm)	86.00	80.00	75.00	76.00
2	CSA0135.D	MC292-DS-3(0-2cm)	87.00	67.00	86.00	78.00
2	CSA0136.D	MC292-DS-3(2-4cm)	90.00	93.00	85.00	65.00
2	CSA0137.D	MC292-DS-3(4-6cm)	92.00	83.00	85.00	77.00
2	CSA0138.D	MC292-DS-3(6-8cm)	93.00	92.00	93.00	89.00
2	CSA0139.D	MC292-DS-3(8-10cm)	88.00	100.00	97.00	92.00
2	CSA0152.D	MC292-FF1-B01	88.00	84.00	85.00	69.00
2	CSA0158.D	MC292-FF1-B02	84.00	93.00	99.00	78.00
2	CSA0153.D	MC292-FF2-B01	99.00	77.00	88.00	91.00

Table H.3. Sediment polycyclic aromatic hydrocarbon data for Cruise 2B.

Cruise	Sample	Station	Acenaphthe	Phenanthre	Chrysene-D	Perylene-D
2	CSA0159.D	MC292-FF2-B02	85.00	94.00	88.00	83.00
2	CSA0154.D	MC292-FF3-B01	94.00	80.00	81.00	82.00
2	CSA0160.D	MC292-FF3-B02	91.00	89.00	85.00	78.00
2	CSA0155.D	MC292-FF4-B01	86.00	83.00	82.00	46.00
2	CSA0161.D	MC292-FF4-B02	80.00	97.00	87.00	34.00
2	CSA0156.D	MC292-FF5-B01	86.00	77.00	76.00	70.00
2	CSA0162.D	MC292-FF5-B02	92.00	99.00	91.00	39.00
2	CSA0157.D	MC292-FF6-B01	83.00	89.00	86.00	73.00
2	CSA0163.D	MC292-FF6-B02	90.00	105.00	99.00	80.00
2	CSA0140.D	MC292-NF-B01	101.00	86.00	92.00	89.00
2	CSA0141.D	MC292-NF-B02	89.00	78.00	97.00	74.00
2	CSA0142.D	MC292-NF-B03	94.00	80.00	90.00	67.00
2	CSA0143.D	MC292-NF-B04	90.00	76.00	113.00	62.00
2	CSA0144.D	MC292-NF-B05	99.00	101.00	95.00	82.00
2	CSA0145.D	MC292-NF-B06	91.00	80.00	85.00	79.00
2	CSA0146.D	MC292-NF-B07	90.00	82.00	82.00	69.00
2	CSA0147.D	MC292-NF-B08	84.00	80.00	93.00	63.00
2	CSA0148.D	MC292-NF-B09	89.00	85.00	95.00	88.00
2	CSA0149.D	MC292-NF-B10	91.00	99.00	102.00	31.00
2	CSA0150.D	MC292-NF-B11	86.00	86.00	86.00	86.00
2	CSA0151.D	MC292-NF-B12	95.00	83.00	80.00	49.00

Table H.4. Sediment total petroleum hydrocarbon data for Cruise 2B.

Cruise	Sample Name	Station	Collection Date	Received Date	Extraction Date	Extraction Batch	Date Acquired
2	CSA0047	GB516-NF-DS-1 (0-2cm)	07/13/01	08/17/01	09/21/01	ENV453	11/24/01
2	CSA0048	GB516-NF-DS-1 (2-4cm)	07/13/01	08/17/01	09/21/01	ENV453	11/24/01
2	CSA0049	GB516-NF-DS-1 (4-6cm)	07/13/01	08/17/01	09/21/01	ENV453	11/25/01
2	CSA0050	GB516-NF-DS-1 (6-8cm)	07/13/01	08/17/01	09/21/01	ENV453	11/25/01
2	CSA0051	GB516-NF-DS-1 (8-10cm)	07/13/01	08/17/01	09/21/01	ENV453	11/25/01
2	CSA0052	GB516-NF-DS-2 (2-4cm)	07/13/01	08/17/01	12/11/02	ENV501	01/04/02
2	CSA0053	GB516-NF-DS-2 (4-6cm)	07/13/01	08/17/01	12/11/02	ENV501	01/07/02
2	CSA0054	GB516-NF-DS-2 (6-8cm)	07/13/01	08/17/01	12/11/02	ENV501	01/04/02
2	CSA0055	GB516-NF-DS-2 (8-10cm)	07/13/01	08/17/01	12/11/02	ENV501	01/04/02
2	CSA0056	GB516-NF-DS-2 (0-2cm)	07/13/01	08/17/01	09/21/01	ENV453	11/25/01
2	CSA0057	GB516-NF-DS-3 (0-2cm)	07/13/01	08/17/01	09/21/01	ENV453	11/25/01
2	CSA0058	GB516-NF-DS-3 (2-4cm)	07/13/01	08/17/01	09/21/01	ENV453	10/07/01
2	CSA0059	GB516-NF-DS-3 (4-6cm)	07/13/01	08/17/01	09/21/01	ENV453	10/07/01
2	CSA0060	GB516-NF-DS-3 (6-8cm)	07/13/01	08/17/01	09/21/01	ENV453	10/07/01
2	CSA0061	GB516-NF-DS-3 (8-10cm)	07/13/01	08/17/01	09/21/01	ENV453	10/07/01
2	CSA0062	GB516-NF-B01	07/13/01	08/17/01	09/21/01	ENV453	11/25/01
2	CSA0063	GB516-NF-B02	07/13/01	08/17/01	09/21/01	ENV453	11/25/01
2	CSA0064	GB516-NF-B03	07/13/01	08/17/01	09/21/01	ENV453	11/25/01
2	CSA0065	GB516-NF-B04	07/13/01	08/17/01	09/21/01	ENV453	10/07/01
2	CSA0066	GB516-NF-B05	07/13/01	08/17/01	09/21/01	ENV453	10/07/01
2	CSA0067	GB516-NF-B06	07/13/01	08/17/01	09/21/01	ENV453	11/25/01
2	CSA0068	GB516-NF-B07	07/13/01	08/17/01	09/21/01	ENV453	11/25/01
2	CSA0069	GB516-NF-B08	07/13/01	08/17/01	09/21/01	ENV453	10/07/01
2	CSA0070	GB516-NF-B09	07/13/01	08/17/01	09/25/01	ENV454	11/25/01
2	CSA0071	GB516-NF-B10	07/13/01	08/17/01	09/25/01	ENV454	10/08/01
2	CSA0072	GB516-NF-B11	07/13/01	08/17/01	09/25/01	ENV454	10/08/01
2	CSA0073	GB516-NF-B12	07/13/01	08/17/01	09/25/01	ENV454	10/08/01
2	CSA0074	GB516-FF1-B01	07/14/01	08/17/01	09/25/01	ENV454	10/08/01
2	CSA0075	GB516-FF2-B01	07/12/01	08/17/01	09/25/01	ENV454	10/08/01
2	CSA0076	GB516-FF3-B01	07/12/01	08/17/01	09/25/01	ENV454	10/08/01
2	CSA0077	GB516-FF4-B01	07/12/01	08/17/01	09/25/01	ENV454	10/08/01
2	CSA0078	GB516-FF5-B01	07/12/01	08/17/01	09/25/01	ENV454	10/08/01
2	CSA0079	GB516-FF6-B01	07/12/01	08/17/01	09/25/01	ENV454	10/08/01
2	CSA0080	GB516-FF1-B02	07/14/01	08/17/01	09/25/01	ENV454	10/08/01
2	CSA0081	GB516-FF2-B02	07/12/01	08/17/01	09/25/01	ENV454	10/08/01
2	CSA0082	GB516-FF3-B02	07/12/01	08/17/01	09/25/01	ENV454	10/08/01
2	CSA0083	GB516-FF4-B02	07/12/01	08/17/01	09/25/01	ENV454	10/08/01
2	CSA0084	GB516-FF5-B02	07/12/01	08/17/01	09/25/01	ENV454	10/08/01
2	CSA0085	GB516-FF6-B02	07/12/01	08/17/01	09/25/01	ENV454	10/08/01
2	CSA0086	GB602-NF-DS-1(0-2cm)	07/19/01	08/17/01	09/25/01	ENV454	11/25/01
2	CSA0087	GB602-NF-DS-1(2-4cm)	07/19/01	08/17/01	09/25/01	ENV454	11/25/01
2	CSA0088	GB602-NF-DS-1(4-6cm)	07/19/01	08/17/01	09/25/01	ENV454	11/25/01
2	CSA0089	GB602-NF-DS-1(6-8cm)	07/19/01	08/17/01	10/04/01	ENV460	12/10/01
2	CSA0090	GB602-NF-DS-1(8-10cm)	07/19/01	08/17/01	10/04/01	ENV460	10/19/01
2	CSA0091	GB602-NF-DS-2 (4-6cm)	07/19/01	08/17/01	10/04/01	ENV460	12/10/01
2	CSA0092	GB602-NF-DS-2(0-2cm)	07/19/01	08/17/01	10/04/01	ENV460	12/10/01
2	CSA0093	GB602-NF-DS-2(2-4cm)	07/19/01	08/17/01	10/04/01	ENV460	12/10/01

Table H.4. Sediment total petroleum hydrocarbon data for Cruise 2B.

Cruise	Sample Name	Station	Collection Date	Received Date	Extraction Date	Extraction Batch	Date Acquired
2	CSA0094	GB602-NF-DS-2(6-8cm)	07/19/01	08/17/01	10/04/01	ENV460	10/20/01
2	CSA0095	GB602-NF-DS-2(8-10cm)	07/19/01	08/17/01	10/04/01	ENV460	10/20/01
2	CSA0096	GB602-NF-DS-3(0-2cm)	07/19/01	08/17/01	10/04/01	ENV460	12/10/01
2	CSA0097	GB602-NF-DS-3(2-4cm)	07/19/01	08/17/01	10/04/01	ENV460	10/20/01
2	CSA0098	GB602-NF-DS-3(4-6cm)	07/19/01	08/17/01	10/04/01	ENV460	10/20/01
2	CSA0099	GB602-NF-DS-3(6-8cm)	07/19/01	08/17/01	10/04/01	ENV460	10/20/01
2	CSA0100	GB602-NF-DS-3(8-10cm)	07/19/01	08/17/01	10/04/01	ENV460	10/20/01
2	CSA0101	GB602-NF-B01	07/14/01	08/17/01	10/04/01	ENV460	12/10/01
2	CSA0102	GB602-NF-B02	07/15/01	08/17/01	10/04/01	ENV460	10/20/01
2	CSA0103	GB602-NF-B03	07/15/01	08/17/01	12/11/02	ENV501	01/09/02
2	CSA0104	GB602-NF-B04	07/19/01	08/17/01	10/04/01	ENV460	12/10/01
2	CSA0105	GB602-NF-B05	07/14/01	08/17/01	10/04/01	ENV460	12/11/01
2	CSA0106	GB602-NF-B06	07/15/01	08/17/01	10/04/01	ENV460	12/11/01
2	CSA0107	GB602-NF-B07	07/15/01	08/17/01	10/04/01	ENV460	12/11/01
2	CSA0108	GB602-NF-B08	07/19/01	08/17/01	10/05/01	ENV461	11/24/01
2	CSA0109	GB602-NF-B09	07/14/01	08/17/01	10/05/01	ENV461	11/24/01
2	CSA0110	GB602-NF-B10	07/15/01	08/17/01	10/05/01	ENV461	11/24/01
2	CSA0111	GB602-NF-B11	07/19/01	08/17/01	10/05/01	ENV461	11/24/01
2	CSA0112	GB602-NF-B12	07/19/01	08/17/01	10/05/01	ENV461	11/24/01
2	CSA0113	GB602-FF1-B01	07/19/01	08/17/01	10/05/01	ENV461	10/31/01
2	CSA0114	GB602-FF2-B01	07/20/01	08/17/01	10/05/01	ENV461	10/31/01
2	CSA0115	GB602-FF3-B01	07/19/01	08/17/01	10/05/01	ENV461	10/31/01
2	CSA0116	GB602-FF4-B01	07/15/01	08/17/01	10/05/01	ENV461	10/31/01
2	CSA0117	GB602-FF5-B01	07/15/01	08/17/01	10/05/01	ENV461	10/31/01
2	CSA0118	GB602-FF6-B01	07/20/01	08/17/01	10/05/01	ENV461	10/31/01
2	CSA0119	GB602-FF1-B02	07/19/01	08/17/01	10/05/01	ENV461	10/31/01
2	CSA0120	GB602-FF2-B02	07/20/01	08/17/01	10/05/01	ENV461	10/31/01
2	CSA0121	GB602-FF3-B02	07/19/01	08/17/01	10/05/01	ENV461	10/31/01
2	CSA0122	GB602-FF4-B02	07/15/01	08/17/01	10/05/01	ENV461	10/31/01
2	CSA0123	GB602-FF5-B02	07/15/01	08/17/01	10/05/01	ENV461	10/31/01
2	CSA0124	GB602-FF6-B02	07/20/01	08/17/01	10/05/01	ENV461	10/31/01
2	CSA0125	MC292-DS-1(0-2cm)	07/24/01	08/17/01	10/05/01	ENV461	10/31/01
2	CSA0126	MC292-DS-1(2-4cm)	07/24/01	08/17/01	10/05/01	ENV461	10/31/01
2	CSA0127	MC292-DS-1(4-6cm)	07/24/01	08/17/01	10/15/01	ENV462	11/04/01
2	CSA0128	MC292-DS-1(6-8 cm)	07/24/01	08/17/01	10/15/01	ENV462	11/04/01
2	CSA0129	MC292-DS-1(8-10cm)	07/24/01	08/17/01	10/15/01	ENV462	11/04/01
2	CSA0130	MC292-DS-2(0-2cm)	07/24/01	08/17/01	10/15/01	ENV462	12/11/01
2	CSA0131	MC292-DS-2(2-4cm)	07/24/01	08/17/01	10/15/01	ENV462	11/04/01
2	CSA0132	MC292-DS-2(4-6cm)	07/24/01	08/17/01	10/15/01	ENV462	11/05/01
2	CSA0133	MC292-DS-2(6-8cm)	07/24/01	08/17/01	10/15/01	ENV462	11/05/01
2	CSA0134	MC292-DS-2(8-10cm)	07/24/01	08/17/01	10/15/01	ENV462	11/05/01
2	CSA0135	MC292-DS-3(0-2cm)	07/24/01	08/17/01	10/15/01	ENV462	12/11/01
2	CSA0136	MC292-DS-3(2-4cm)	07/24/01	08/17/01	10/15/01	ENV462	11/05/01
2	CSA0137	MC292-DS-3(4-6cm)	07/24/01	08/17/01	10/15/01	ENV462	11/05/01
2	CSA0138	MC292-DS-3(6-8cm)	07/24/01	08/17/01	10/15/01	ENV462	11/05/01
2	CSA0139	MC292-DS-3(8-10cm)	07/24/01	08/17/01	10/15/01	ENV462	11/05/01
2	CSA0140	MC292-NF-B01	07/23/01	08/17/01	10/15/01	ENV462	12/11/01

Table H.4. Sediment total petroleum hydrocarbon data for Cruise 2B.

Cruise	Sample Name	Station	Collection Date	Received Date	Extraction Date	Extraction Batch	Date Acquired
2	CSA0141	MC292-NF-B02	07/22/01	08/17/01	10/15/01	ENV462	12/11/01
2	CSA0142	MC292-NF-B03	07/23/01	08/17/01	10/15/01	ENV462	11/05/01
2	CSA0143	MC292-NF-B04	07/23/01	08/17/01	12/11/02	ENV501	01/04/02
2	CSA0144	MC292-NF-B05	07/22/01	08/17/01	10/15/01	ENV462	12/11/01
2	CSA0145	MC292-NF-B06	07/22/01	08/17/01	10/15/01	ENV462	11/05/01
2	CSA0146	MC292-NF-B07	07/23/01	08/17/01	10/23/01	ENV467	11/08/01
2	CSA0147	MC292-NF-B08	07/23/01	08/17/01	10/23/01	ENV467	12/11/01
2	CSA0148	MC292-NF-B09	07/23/01	08/17/01	10/23/01	ENV467	11/08/01
2	CSA0149	MC292-NF-B10	07/22/01	08/17/01	10/23/01	ENV467	11/08/01
2	CSA0150	MC292-NF-B11	07/23/01	08/17/01	10/23/01	ENV467	11/09/01
2	CSA0151	MC292-NF-B12	07/23/01	08/17/01	10/23/01	ENV467	11/09/01
2	CSA0152	MC292-FF1-B01	07/21/01	08/17/01	10/23/01	ENV467	11/09/01
2	CSA0153	MC292-FF2-B01	07/22/01	08/17/01	10/23/01	ENV467	11/09/01
2	CSA0154	MC292-FF3-B01	07/23/01	08/17/01	10/23/01	ENV467	11/09/01
2	CSA0155	MC292-FF4-B01	07/22/01	08/17/01	10/23/01	ENV467	11/09/01
2	CSA0156	MC292-FF5-B01	07/22/01	08/17/01	10/23/01	ENV467	11/09/01
2	CSA0157	MC292-FF6-B01	07/24/01	08/17/01	12/11/02	ENV501	01/04/02
2	CSA0158	MC292-FF1-B02	07/13/01	08/17/01	12/11/02	ENV501	01/04/02
2	CSA0159	MC292-FF2-B02	07/22/01	08/17/01	12/11/02	ENV501	01/04/02
2	CSA0160	MC292-FF3-B02	07/23/01	08/17/01	12/11/02	ENV501	01/04/02
2	CSA0161	MC292-FF4-B02	07/22/01	08/17/01	12/11/02	ENV501	01/04/02
2	CSA0162	MC292-FF5-B02	07/22/01	08/17/01	12/11/02	ENV501	01/04/02
2	CSA0163	MC292-FF6-B02	07/24/01	08/17/01	12/11/02	ENV501	01/04/02

Table H.4. Sediment total petroleum hydrocarbon data for Cruise 2B.

Cruise	Sample Name	Station	Method	Dry Wt (g)	% Moisture	% Dry	Dilution
2	CSA0047	GB516-NF-DS-1 (0-2cm)	ALI_COMP.M	15.0	61	39	50x
2	CSA0048	GB516-NF-DS-1 (2-4cm)	ALI_COMP.M	15.0	56	44	100x
2	CSA0049	GB516-NF-DS-1 (4-6cm)	ALI_COMP.M	15.1	55	45	10x
2	CSA0050	GB516-NF-DS-1 (6-8cm)	ALI_COMP.M	15.1	55	45	10x
2	CSA0051	GB516-NF-DS-1 (8-10cm)	ALI_COMP.M	15.1	61	39	10x
2	CSA0052	GB516-NF-DS-2 (2-4cm)	ALI_COMP.M	2.1	69	31	200x
2	CSA0053	GB516-NF-DS-2 (4-6cm)	ALI_COMP.M	2.1	66	34	50x
2	CSA0054	GB516-NF-DS-2 (6-8cm)	ALI_COMP.M	2.2	60	40	200x
2	CSA0055	GB516-NF-DS-2 (8-10cm)	ALI_COMP.M	2.3	57.1	42.9	200x
2	CSA0056	GB516-NF-DS-2 (0-2cm)	ALI_COMP.M	15.0	36	64	100x
2	CSA0057	GB516-NF-DS-3 (0-2cm)	ALI_COMP.M	15.0	57	43	10x
2	CSA0058	GB516-NF-DS-3 (2-4cm)	ALI_COMP.M	15.1	60	40	NA
2	CSA0059	GB516-NF-DS-3 (4-6cm)	ALI_COMP.M	15.1	59	41	NA
2	CSA0060	GB516-NF-DS-3 (6-8cm)	ALI_COMP.M	15.2	58	42	NA
2	CSA0061	GB516-NF-DS-3 (8-10cm)	ALI_COMP.M	15.1	58	42	NA
2	CSA0062	GB516-NF-B01	ALI_COMP.M	15.1	61	39	10x
2	CSA0063	GB516-NF-B02	ALI_COMP.M	15.0	62	39	10x
2	CSA0064	GB516-NF-B03	ALI_COMP.M	15.2	52	48	25x
2	CSA0065	GB516-NF-B04	ALI_COMP.M	15.0	70	30	NA
2	CSA0066	GB516-NF-B05	ALI_COMP.M	15.2	59	41	NA
2	CSA0067	GB516-NF-B06	ALI_COMP.M	15.0	52	48	100x
2	CSA0068	GB516-NF-B07	ALI_COMP.M	15.2	67	33	50x
2	CSA0069	GB516-NF-B08	ALI_COMP.M	15.1	64	36	NA
2	CSA0070	GB516-NF-B09	ALI_COMP.M	15.2	60	40	100x
2	CSA0071	GB516-NF-B10	ALI_COMP.M	15.2	67	33	NA
2	CSA0072	GB516-NF-B11	ALI_COMP.M	15.2	66	34	NA
2	CSA0073	GB516-NF-B12	ALI_COMP.M	15.4	65	35	NA
2	CSA0074	GB516-FF1-B01	ALI_COMP.M	15.2	71	29	NA
2	CSA0075	GB516-FF2-B01	ALI_COMP.M	15.3	65	35	NA
2	CSA0076	GB516-FF3-B01	ALI_COMP.M	15.5	67	33	NA
2	CSA0077	GB516-FF4-B01	ALI_COMP.M	15.2	66	34	NA
2	CSA0078	GB516-FF5-B01	ALI_COMP.M	15.2	70	30	NA
2	CSA0079	GB516-FF6-B01	ALI_COMP.M	15.0	66	34	NA
2	CSA0080	GB516-FF1-B02	ALI_COMP.M	15.0	65	35	NA
2	CSA0081	GB516-FF2-B02	ALI_COMP.M	15.2	64	36	NA
2	CSA0082	GB516-FF3-B02	ALI_COMP.M	15.2	66	34	NA
2	CSA0083	GB516-FF4-B02	ALI_COMP.M	15.5	69	31	NA
2	CSA0084	GB516-FF5-B02	ALI_COMP.M	15.3	73	27	NA
2	CSA0085	GB516-FF6-B02	ALI_COMP.M	15.2	69	31	NA
2	CSA0086	GB602-NF-DS-1(0-2cm)	ALI_COMP.M	15.3	50	50	100x
2	CSA0087	GB602-NF-DS-1(2-4cm)	ALI_COMP.M	15.5	56	44	100x
2	CSA0088	GB602-NF-DS-1(4-6cm)	ALI_COMP.M	15.7	61	39	10x
2	CSA0089	GB602-NF-DS-1(6-8cm)	ALI_COMP.M	15.0	60	40	10x
2	CSA0090	GB602-NF-DS-1(8-10cm)	ALI_COMP.M	15.2	60	40	NA
2	CSA0091	GB602-NF-DS-2 (4-6cm)	ALI_COMP.M	15.1	57	43	20x
2	CSA0092	GB602-NF-DS-2(0-2cm)	ALI_COMP.M	15.1	57	43	20x
2	CSA0093	GB602-NF-DS-2(2-4cm)	ALI_COMP.M	15.2	61	39	10x

Table H.4. Sediment total petroleum hydrocarbon data for Cruise 2B.

Cruise	Sample Name	Station	Method	Dry Wt (g)	% Moisture	% Dry	Dilution
2	CSA0094	GB602-NF-DS-2(6-8cm)	ALI_COMP.M	15.2	63	37	NA
2	CSA0095	GB602-NF-DS-2(8-10cm)	ALI_COMP.M	15.2	63	37	NA
2	CSA0096	GB602-NF-DS-3(0-2cm)	ALI_COMP.M	15.1	66	34	10x
2	CSA0097	GB602-NF-DS-3(2-4cm)	ALI_COMP.M	15.1	65	35	NA
2	CSA0098	GB602-NF-DS-3(4-6cm)	ALI_COMP.M	15.1	64	36	NA
2	CSA0099	GB602-NF-DS-3(6-8cm)	ALI_COMP.M	15.3	62	38	NA
2	CSA0100	GB602-NF-DS-3(8-10cm)	ALI_COMP.M	15.0	62	38	NA
2	CSA0101	GB602-NF-B01	ALI_COMP.M	15.0	63	37	10x
2	CSA0102	GB602-NF-B02	ALI_COMP.M	15.2	59	41	NA
2	CSA0103	GB602-NF-B03	ALI_COMP.M	15.1	55	45	50x
2	CSA0104	GB602-NF-B04	ALI_COMP.M	15.1	63	37	10x
2	CSA0105	GB602-NF-B05	ALI_COMP.M	15.0	66	34	50x
2	CSA0106	GB602-NF-B06	ALI_COMP.M	15.3	74	26	20x
2	CSA0107	GB602-NF-B07	ALI_COMP.M	15.1	58	42	10x
2	CSA0108	GB602-NF-B08	ALI_COMP.M	15.2	54	46	25x
2	CSA0109	GB602-NF-B09	ALI_COMP.M	15.3	66	34	10x
2	CSA0110	GB602-NF-B10	ALI_COMP.M	15.2	61	39	10x
2	CSA0111	GB602-NF-B11	ALI_COMP.M	15.2	66	34	10x
2	CSA0112	GB602-NF-B12	ALI_COMP.M	15.1	65	35	10x
2	CSA0113	GB602-FF1-B01	ALI_COMP.M	15.1	63	37	NA
2	CSA0114	GB602-FF2-B01	ALI_COMP.M	15.3	64	36	NA
2	CSA0115	GB602-FF3-B01	ALI_COMP.M	16.0	64	36	NA
2	CSA0116	GB602-FF4-B01	ALI_COMP.M	15.1	68	32	NA
2	CSA0117	GB602-FF5-B01	ALI_COMP.M	15.0	64	36	NA
2	CSA0118	GB602-FF6-B01	ALI_COMP.M	15.1	66	34	NA
2	CSA0119	GB602-FF1-B02	ALI_COMP.M	15.2	66	34	NA
2	CSA0120	GB602-FF2-B02	ALI_COMP.M	15.1	64	36	NA
2	CSA0121	GB602-FF3-B02	ALI_COMP.M	15.2	64	36	NA
2	CSA0122	GB602-FF4-B02	ALI_COMP.M	15.2	65	35	NA
2	CSA0123	GB602-FF5-B02	ALI_COMP.M	15.1	63	37	NA
2	CSA0124	GB602-FF6-B02	ALI_COMP.M	15.2	65	35	NA
2	CSA0125	MC292-DS-1(0-2cm)	ALI_COMP.M	15.3	65	35	NA
2	CSA0126	MC292-DS-1(2-4cm)	ALI_COMP.M	15.2	60	40	NA
2	CSA0127	MC292-DS-1(4-6cm)	ALI_COMP.M	15.2	67	33	NA
2	CSA0128	MC292-DS-1(6-8 cm)	ALI_COMP.M	15.1	62	38	NA
2	CSA0129	MC292-DS-1(8-10cm)	ALI_COMP.M	15.1	63	37	NA
2	CSA0130	MC292-DS-2(0-2cm)	ALI_COMP.M	15.1	63	37	10x
2	CSA0131	MC292-DS-2(2-4cm)	ALI_COMP.M	15.2	63	37	NA
2	CSA0132	MC292-DS-2(4-6cm)	ALI_COMP.M	15.4	63	37	NA
2	CSA0133	MC292-DS-2(6-8cm)	ALI_COMP.M	15.2	61	39	NA
2	CSA0134	MC292-DS-2(8-10cm)	ALI_COMP.M	15.1	63	37	NA
2	CSA0135	MC292-DS-3(0-2cm)	ALI_COMP.M	15.4	64	36	10x
2	CSA0136	MC292-DS-3(2-4cm)	ALI_COMP.M	15.1	66	34	NA
2	CSA0137	MC292-DS-3(4-6cm)	ALI_COMP.M	15.1	55	45	NA
2	CSA0138	MC292-DS-3(6-8cm)	ALI_COMP.M	15.4	62	38	NA
2	CSA0139	MC292-DS-3(8-10cm)	ALI_COMP.M	15.2	61	39	NA
2	CSA0140	MC292-NF-B01	ALI_COMP.M	15.2	61	39	20x

Table H.4. Sediment total petroleum hydrocarbon data for Cruise 2B.

Cruise	Sample Name	Station	Method	Dry Wt (g)	% Moisture	% Dry	Dilution
2	CSA0141	MC292-NF-B02	ALI_COMP.M	15.1	64	36	10x
2	CSA0142	MC292-NF-B03	ALI_COMP.M	15.3	69	31	NA
2	CSA0143	MC292-NF-B04	ALI_COMP.M	15.1	67	33	NA
2	CSA0144	MC292-NF-B05	ALI_COMP.M	15.2	65	35	10x
2	CSA0145	MC292-NF-B06	ALI_COMP.M	15.3	63	37	NA
2	CSA0146	MC292-NF-B07	ALI_COMP.M	15.1	65	35	NA
2	CSA0147	MC292-NF-B08	ALI_COMP.M	15.1	62	38	10x
2	CSA0148	MC292-NF-B09	ALI_COMP.M	15.0	66	34	NA
2	CSA0149	MC292-NF-B10	ALI_COMP.M	15.0	68	32	NA
2	CSA0150	MC292-NF-B11	ALI_COMP.M	15.0	65	35	NA
2	CSA0151	MC292-NF-B12	ALI_COMP.M	15.0	63	37	NA
2	CSA0152	MC292-FF1-B01	ALI_COMP.M	15.0	64	36	NA
2	CSA0153	MC292-FF2-B01	ALI_COMP.M	15.1	59	41	NA
2	CSA0154	MC292-FF3-B01	ALI_COMP.M	15.0	66	34	NA
2	CSA0155	MC292-FF4-B01	ALI_COMP.M	15.0	68	32	NA
2	CSA0156	MC292-FF5-B01	ALI_COMP.M	15.0	68	32	NA
2	CSA0157	MC292-FF6-B01	ALI_COMP.M	15.4	70	30	NA
2	CSA0158	MC292-FF1-B02	ALI_COMP.M	15.1	65	35	NA
2	CSA0159	MC292-FF2-B02	ALI_COMP.M	15.0	64	36	NA
2	CSA0160	MC292-FF3-B02	ALI_COMP.M	15.1	67	33	NA
2	CSA0161	MC292-FF4-B02	ALI_COMP.M	15.1	70	30	NA
2	CSA0162	MC292-FF5-B02	ALI_COMP.M	2.1	67	33	NA
2	CSA0163	MC292-FF6-B02	ALI_COMP.M	15.1	66	34	NA

Table H.4. Sediment total petroleum hydrocarbon data for Cruise 2B.

Cruise	Sample Name	Station	Target Compounds	Total Petroleum Hydrocarbon	Total Resolved Hydrocarbon
2	CSA0047	GB516-NF-DS-1 (0-2cm)	Su Corrected	5359	4946
2	CSA0048	GB516-NF-DS-1 (2-4cm)	Su Corrected	23673	21496
2	CSA0049	GB516-NF-DS-1 (4-6cm)	Su Corrected	4199	3938
2	CSA0050	GB516-NF-DS-1 (6-8cm)	Su Corrected	1184	1018
2	CSA0051	GB516-NF-DS-1 (8-10cm)	Su Corrected	1293	1148
2	CSA0052	GB516-NF-DS-2 (2-4cm)	Su Corrected	176431	167944
2	CSA0053	GB516-NF-DS-2 (4-6cm)	Su Corrected	151719	142650
2	CSA0054	GB516-NF-DS-2 (6-8cm)	Su Corrected	171210	167982
2	CSA0055	GB516-NF-DS-2 (8-10cm)	Su Corrected	140970	137343
2	CSA0056	GB516-NF-DS-2 (0-2cm)	Su Corrected	19624	17623
2	CSA0057	GB516-NF-DS-3 (0-2cm)	Su Corrected	3889	3518
2	CSA0058	GB516-NF-DS-3 (2-4cm)	Su Corrected	252	196
2	CSA0059	GB516-NF-DS-3 (4-6cm)	Su Corrected	94	62
2	CSA0060	GB516-NF-DS-3 (6-8cm)	Su Corrected	62	41
2	CSA0061	GB516-NF-DS-3 (8-10cm)	Su Corrected	74	52
2	CSA0062	GB516-NF-B01	Su Corrected	1418	1225
2	CSA0063	GB516-NF-B02	Su Corrected	1203	1048
2	CSA0064	GB516-NF-B03	Su Corrected	6014	5272
2	CSA0065	GB516-NF-B04	Su Corrected	253	200
2	CSA0066	GB516-NF-B05	Su Corrected	531	460
2	CSA0067	GB516-NF-B06	Su Corrected	30773	28977
2	CSA0068	GB516-NF-B07	Su Corrected	6708	5928
2	CSA0069	GB516-NF-B08	Su Corrected	609	435
2	CSA0070	GB516-NF-B09	Su Corrected	7790	6890
2	CSA0071	GB516-NF-B10	Su Corrected	28	4
2	CSA0072	GB516-NF-B11	Su Corrected	247	212
2	CSA0073	GB516-NF-B12	Su Corrected	90	65
2	CSA0074	GB516-FF1-B01	Su Corrected	19	2
2	CSA0075	GB516-FF2-B01	Su Corrected	22	6
2	CSA0076	GB516-FF3-B01	Su Corrected	29	3
2	CSA0077	GB516-FF4-B01	Su Corrected	17	2
2	CSA0078	GB516-FF5-B01	Su Corrected	22	2
2	CSA0079	GB516-FF6-B01	Su Corrected	25	4
2	CSA0080	GB516-FF1-B02	Su Corrected	26	4
2	CSA0081	GB516-FF2-B02	Su Corrected	31	7
2	CSA0082	GB516-FF3-B02	Su Corrected	19	1
2	CSA0083	GB516-FF4-B02	Su Corrected	18	1
2	CSA0084	GB516-FF5-B02	Su Corrected	28	4
2	CSA0085	GB516-FF6-B02	Su Corrected	27	4
2	CSA0086	GB602-NF-DS-1(0-2cm)	Su Corrected	12729	11216
2	CSA0087	GB602-NF-DS-1(2-4cm)	Su Corrected	10178	8977
2	CSA0088	GB602-NF-DS-1(4-6cm)	Su Corrected	4157	3694
2	CSA0089	GB602-NF-DS-1(6-8cm)	Su Corrected	1367	1188
2	CSA0090	GB602-NF-DS-1(8-10cm)	Su Corrected	358	260
2	CSA0091	GB602-NF-DS-2 (4-6cm)	Su Corrected	3835	3126
2	CSA0092	GB602-NF-DS-2(0-2cm)	Su Corrected	3040	2405
2	CSA0093	GB602-NF-DS-2(2-4cm)	Su Corrected	941	595

Table H.4. Sediment total petroleum hydrocarbon data for Cruise 2B.

Cruise	Sample Name	Station	Target Compounds	Total Petroleum Hydrocarbon	Total Resolved Hydrocarbon
2	CSA0094	GB602-NF-DS-2(6-8cm)	Su Corrected	118	46
2	CSA0095	GB602-NF-DS-2(8-10cm)	Su Corrected	59	16
2	CSA0096	GB602-NF-DS-3(0-2cm)	Su Corrected	1050	763
2	CSA0097	GB602-NF-DS-3(2-4cm)	Su Corrected	623	456
2	CSA0098	GB602-NF-DS-3(4-6cm)	Su Corrected	69	30
2	CSA0099	GB602-NF-DS-3(6-8cm)	Su Corrected	36	7
2	CSA0100	GB602-NF-DS-3(8-10cm)	Su Corrected	44	8
2	CSA0101	GB602-NF-B01	Su Corrected	500	398
2	CSA0102	GB602-NF-B02	Su Corrected	898	434
2	CSA0103	GB602-NF-B03	Su Corrected	9008	7872
2	CSA0104	GB602-NF-B04	Su Corrected	1961	1635
2	CSA0105	GB602-NF-B05	Su Corrected	4707	4203
2	CSA0106	GB602-NF-B06	Su Corrected	3934	2978
2	CSA0107	GB602-NF-B07	Su Corrected	2146	1780
2	CSA0108	GB602-NF-B08	Su Corrected	18434	16440
2	CSA0109	GB602-NF-B09	Su Corrected	1803	1595
2	CSA0110	GB602-NF-B10	Su Corrected	1596	1151
2	CSA0111	GB602-NF-B11	Su Corrected	2264	1908
2	CSA0112	GB602-NF-B12	Su Corrected	1079	928
2	CSA0113	GB602-FF1-B01	Su Corrected	33	6
2	CSA0114	GB602-FF2-B01	Su Corrected	29	2
2	CSA0115	GB602-FF3-B01	Su Corrected	17	1
2	CSA0116	GB602-FF4-B01	Su Corrected	37	4
2	CSA0117	GB602-FF5-B01	Su Corrected	38	5
2	CSA0118	GB602-FF6-B01	Su Corrected	31	7
2	CSA0119	GB602-FF1-B02	Su Corrected	30	4
2	CSA0120	GB602-FF2-B02	Su Corrected	24	3
2	CSA0121	GB602-FF3-B02	Su Corrected	21	4
2	CSA0122	GB602-FF4-B02	Su Corrected	46	6
2	CSA0123	GB602-FF5-B02	Su Corrected	32	4
2	CSA0124	GB602-FF6-B02	Su Corrected	27	3
2	CSA0125	MC292-DS-1(0-2cm)	Su Corrected	90	52
2	CSA0126	MC292-DS-1(2-4cm)	Su Corrected	135	78
2	CSA0127	MC292-DS-1(4-6cm)	Su Corrected	41	19
2	CSA0128	MC292-DS-1(6-8 cm)	Su Corrected	29	11
2	CSA0129	MC292-DS-1(8-10cm)	Su Corrected	26	10
2	CSA0130	MC292-DS-2(0-2cm)	Su Corrected	812	630
2	CSA0131	MC292-DS-2(2-4cm)	Su Corrected	91	51
2	CSA0132	MC292-DS-2(4-6cm)	Su Corrected	35	15
2	CSA0133	MC292-DS-2(6-8cm)	Su Corrected	26	15
2	CSA0134	MC292-DS-2(8-10cm)	Su Corrected	20	9
2	CSA0135	MC292-DS-3(0-2cm)	Su Corrected	695	499
2	CSA0136	MC292-DS-3(2-4cm)	Su Corrected	157	85
2	CSA0137	MC292-DS-3(4-6cm)	Su Corrected	56	29
2	CSA0138	MC292-DS-3(6-8cm)	Su Corrected	30	16
2	CSA0139	MC292-DS-3(8-10cm)	Su Corrected	24	14
2	CSA0140	MC292-NF-B01	Su Corrected	2491	2178

Table H.4. Sediment total petroleum hydrocarbon data for Cruise 2B.

Cruise	Sample Name	Station	Target Compounds	Total Petroleum Hydrocarbon	Total Resolved Hydrocarbon
2	CSA0141	MC292-NF-B02	Su Corrected	829	663
2	CSA0142	MC292-NF-B03	Su Corrected	125	75
2	CSA0143	MC292-NF-B04	Su Corrected	21	1
2	CSA0144	MC292-NF-B05	Su Corrected	669	498
2	CSA0145	MC292-NF-B06	Su Corrected	25	7
2	CSA0146	MC292-NF-B07	Su Corrected	41	12
2	CSA0147	MC292-NF-B08	Su Corrected	1009	807
2	CSA0148	MC292-NF-B09	Su Corrected	36	12
2	CSA0149	MC292-NF-B10	Su Corrected	166	91
2	CSA0150	MC292-NF-B11	Su Corrected	32	8
2	CSA0151	MC292-NF-B12	Su Corrected	38	10
2	CSA0152	MC292-FF1-B01	Su Corrected	33	7
2	CSA0153	MC292-FF2-B01	Su Corrected	60	23
2	CSA0154	MC292-FF3-B01	Su Corrected	40	9
2	CSA0155	MC292-FF4-B01	Su Corrected	43	10
2	CSA0156	MC292-FF5-B01	Su Corrected	31	7
2	CSA0157	MC292-FF6-B01	Su Corrected	24	1
2	CSA0158	MC292-FF1-B02	Su Corrected	34	1
2	CSA0159	MC292-FF2-B02	Su Corrected	47	1
2	CSA0160	MC292-FF3-B02	Su Corrected	36	1
2	CSA0161	MC292-FF4-B02	Su Corrected	35	1
2	CSA0162	MC292-FF5-B02	Su Corrected	210	23
2	CSA0163	MC292-FF6-B02	Su Corrected	27	1

Table H.4. Sediment total petroleum hydrocarbon data for Cruise 2B.

Cruise	Sample Name	Station	Unresolved Complex Mixture	Total Petroleum Hydrocarbon (Non-SBM Range)
2	CSA0047	GB516-NF-DS-1 (0-2cm)	413	212
2	CSA0048	GB516-NF-DS-1 (2-4cm)	2177	1765
2	CSA0049	GB516-NF-DS-1 (4-6cm)	261	216
2	CSA0050	GB516-NF-DS-1 (6-8cm)	166	112
2	CSA0051	GB516-NF-DS-1 (8-10cm)	145	120
2	CSA0052	GB516-NF-DS-2 (2-4cm)	8487	59151
2	CSA0053	GB516-NF-DS-2 (4-6cm)	9070	15422
2	CSA0054	GB516-NF-DS-2 (6-8cm)	3228	51218
2	CSA0055	GB516-NF-DS-2 (8-10cm)	3628	42030
2	CSA0056	GB516-NF-DS-2 (0-2cm)	2001	6353
2	CSA0057	GB516-NF-DS-3 (0-2cm)	371	536
2	CSA0058	GB516-NF-DS-3 (2-4cm)	56	90
2	CSA0059	GB516-NF-DS-3 (4-6cm)	32	57
2	CSA0060	GB516-NF-DS-3 (6-8cm)	21	41
2	CSA0061	GB516-NF-DS-3 (8-10cm)	22	49
2	CSA0062	GB516-NF-B01	193	135
2	CSA0063	GB516-NF-B02	155	111
2	CSA0064	GB516-NF-B03	742	1494
2	CSA0065	GB516-NF-B04	53	92
2	CSA0066	GB516-NF-B05	71	112
2	CSA0067	GB516-NF-B06	1797	1607
2	CSA0068	GB516-NF-B07	780	2042
2	CSA0069	GB516-NF-B08	174	192
2	CSA0070	GB516-NF-B09	900	1620
2	CSA0071	GB516-NF-B10	24	21
2	CSA0072	GB516-NF-B11	35	95
2	CSA0073	GB516-NF-B12	25	33
2	CSA0074	GB516-FF1-B01	17	16
2	CSA0075	GB516-FF2-B01	16	17
2	CSA0076	GB516-FF3-B01	25	25
2	CSA0077	GB516-FF4-B01	16	14
2	CSA0078	GB516-FF5-B01	20	17
2	CSA0079	GB516-FF6-B01	22	22
2	CSA0080	GB516-FF1-B02	22	22
2	CSA0081	GB516-FF2-B02	23	24
2	CSA0082	GB516-FF3-B02	18	16
2	CSA0083	GB516-FF4-B02	17	16
2	CSA0084	GB516-FF5-B02	24	24
2	CSA0085	GB516-FF6-B02	22	22
2	CSA0086	GB602-NF-DS-1(0-2cm)	1513	2157
2	CSA0087	GB602-NF-DS-1(2-4cm)	1201	1380
2	CSA0088	GB602-NF-DS-1(4-6cm)	463	415
2	CSA0089	GB602-NF-DS-1(6-8cm)	179	74
2	CSA0090	GB602-NF-DS-1(8-10cm)	98	68
2	CSA0091	GB602-NF-DS-2 (4-6cm)	709	356
2	CSA0092	GB602-NF-DS-2(0-2cm)	634	334
2	CSA0093	GB602-NF-DS-2(2-4cm)	346	177

Table H.4. Sediment total petroleum hydrocarbon data for Cruise 2B.

Cruise	Sample Name	Station	Unresolved Complex Mixture	Total Petroleum Hydrocarbon (Non-SBM Range)
2	CSA0094	GB602-NF-DS-2(6-8cm)	72	56
2	CSA0095	GB602-NF-DS-2(8-10cm)	43	35
2	CSA0096	GB602-NF-DS-3(0-2cm)	287	120
2	CSA0097	GB602-NF-DS-3(2-4cm)	168	92
2	CSA0098	GB602-NF-DS-3(4-6cm)	39	31
2	CSA0099	GB602-NF-DS-3(6-8cm)	28	24
2	CSA0100	GB602-NF-DS-3(8-10cm)	35	32
2	CSA0101	GB602-NF-B01	102	38
2	CSA0102	GB602-NF-B02	464	313
2	CSA0103	GB602-NF-B03	1136	562
2	CSA0104	GB602-NF-B04	327	83
2	CSA0105	GB602-NF-B05	504	367
2	CSA0106	GB602-NF-B06	956	671
2	CSA0107	GB602-NF-B07	366	192
2	CSA0108	GB602-NF-B08	1995	4642
2	CSA0109	GB602-NF-B09	208	374
2	CSA0110	GB602-NF-B10	446	245
2	CSA0111	GB602-NF-B11	356	237
2	CSA0112	GB602-NF-B12	151	94
2	CSA0113	GB602-FF1-B01	27	26
2	CSA0114	GB602-FF2-B01	28	25
2	CSA0115	GB602-FF3-B01	16	15
2	CSA0116	GB602-FF4-B01	33	31
2	CSA0117	GB602-FF5-B01	32	28
2	CSA0118	GB602-FF6-B01	24	23
2	CSA0119	GB602-FF1-B02	26	25
2	CSA0120	GB602-FF2-B02	20	19
2	CSA0121	GB602-FF3-B02	17	17
2	CSA0122	GB602-FF4-B02	40	38
2	CSA0123	GB602-FF5-B02	28	26
2	CSA0124	GB602-FF6-B02	23	21
2	CSA0125	MC292-DS-1(0-2cm)	38	31
2	CSA0126	MC292-DS-1(2-4cm)	57	59
2	CSA0127	MC292-DS-1(4-6cm)	23	23
2	CSA0128	MC292-DS-1(6-8 cm)	18	19
2	CSA0129	MC292-DS-1(8-10cm)	16	17
2	CSA0130	MC292-DS-2(0-2cm)	182	98
2	CSA0131	MC292-DS-2(2-4cm)	39	30
2	CSA0132	MC292-DS-2(4-6cm)	19	19
2	CSA0133	MC292-DS-2(6-8cm)	11	12
2	CSA0134	MC292-DS-2(8-10cm)	11	11
2	CSA0135	MC292-DS-3(0-2cm)	196	78
2	CSA0136	MC292-DS-3(2-4cm)	71	54
2	CSA0137	MC292-DS-3(4-6cm)	27	24
2	CSA0138	MC292-DS-3(6-8cm)	14	15
2	CSA0139	MC292-DS-3(8-10cm)	9	11
2	CSA0140	MC292-NF-B01	313	82

Table H.4. Sediment total petroleum hydrocarbon data for Cruise 2B.

Cruise	Sample Name	Station	Unresolved Complex Mixture	Total Petroleum Hydrocarbon (Non-SBM Range)
2	CSA0141	MC292-NF-B02	166	47
2	CSA0142	MC292-NF-B03	50	39
2	CSA0143	MC292-NF-B04	21	21
2	CSA0144	MC292-NF-B05	171	85
2	CSA0145	MC292-NF-B06	17	17
2	CSA0146	MC292-NF-B07	28	28
2	CSA0147	MC292-NF-B08	202	89
2	CSA0148	MC292-NF-B09	24	23
2	CSA0149	MC292-NF-B10	75	65
2	CSA0150	MC292-NF-B11	24	23
2	CSA0151	MC292-NF-B12	28	28
2	CSA0152	MC292-FF1-B01	26	27
2	CSA0153	MC292-FF2-B01	37	41
2	CSA0154	MC292-FF3-B01	32	32
2	CSA0155	MC292-FF4-B01	34	35
2	CSA0156	MC292-FF5-B01	24	25
2	CSA0157	MC292-FF6-B01	24	24
2	CSA0158	MC292-FF1-B02	34	34
2	CSA0159	MC292-FF2-B02	47	47
2	CSA0160	MC292-FF3-B02	36	36
2	CSA0161	MC292-FF4-B02	35	35
2	CSA0162	MC292-FF5-B02	187	182
2	CSA0163	MC292-FF6-B02	27	27

Table H.4. Sediment total petroleum hydrocarbon data for Cruise 2B.

Cruise	Sample Name	Station	Total Resolved Hydrocarbon (Non-SBM Range)	Unresolved Complex Mixture (Non-SBM Range)
2	CSA0047	GB516-NF-DS-1 (0-2cm)	105	107
2	CSA0048	GB516-NF-DS-1 (2-4cm)	300	1465
2	CSA0049	GB516-NF-DS-1 (4-6cm)	24	192
2	CSA0050	GB516-NF-DS-1 (6-8cm)	5	106
2	CSA0051	GB516-NF-DS-1 (8-10cm)	19	101
2	CSA0052	GB516-NF-DS-2 (2-4cm)	53188	5963
2	CSA0053	GB516-NF-DS-2 (4-6cm)	14774	648
2	CSA0054	GB516-NF-DS-2 (6-8cm)	49071	2147
2	CSA0055	GB516-NF-DS-2 (8-10cm)	41594	437
2	CSA0056	GB516-NF-DS-2 (0-2cm)	5441	912
2	CSA0057	GB516-NF-DS-3 (0-2cm)	445	91
2	CSA0058	GB516-NF-DS-3 (2-4cm)	48	42
2	CSA0059	GB516-NF-DS-3 (4-6cm)	29	27
2	CSA0060	GB516-NF-DS-3 (6-8cm)	22	20
2	CSA0061	GB516-NF-DS-3 (8-10cm)	29	20
2	CSA0062	GB516-NF-B01	36	99
2	CSA0063	GB516-NF-B02	16	95
2	CSA0064	GB516-NF-B03	1170	324
2	CSA0065	GB516-NF-B04	50	41
2	CSA0066	GB516-NF-B05	64	48
2	CSA0067	GB516-NF-B06	431	1176
2	CSA0068	GB516-NF-B07	1699	343
2	CSA0069	GB516-NF-B08	100	92
2	CSA0070	GB516-NF-B09	1095	524
2	CSA0071	GB516-NF-B10	0.4	21
2	CSA0072	GB516-NF-B11	64	32
2	CSA0073	GB516-NF-B12	18	15
2	CSA0074	GB516-FF1-B01	0.2	16
2	CSA0075	GB516-FF2-B01	4	14
2	CSA0076	GB516-FF3-B01	1.4	23
2	CSA0077	GB516-FF4-B01	<1.4	14
2	CSA0078	GB516-FF5-B01	<1.4	17
2	CSA0079	GB516-FF6-B01	2	20
2	CSA0080	GB516-FF1-B02	2	21
2	CSA0081	GB516-FF2-B02	3	21
2	CSA0082	GB516-FF3-B02	<1.4	16
2	CSA0083	GB516-FF4-B02	<1.4	16
2	CSA0084	GB516-FF5-B02	3	21
2	CSA0085	GB516-FF6-B02	3	20
2	CSA0086	GB602-NF-DS-1(0-2cm)	1316	841
2	CSA0087	GB602-NF-DS-1(2-4cm)	742	638
2	CSA0088	GB602-NF-DS-1(4-6cm)	127	288
2	CSA0089	GB602-NF-DS-1(6-8cm)	2	72
2	CSA0090	GB602-NF-DS-1(8-10cm)	6	62
2	CSA0091	GB602-NF-DS-2 (4-6cm)	36	320
2	CSA0092	GB602-NF-DS-2(0-2cm)	37	297
2	CSA0093	GB602-NF-DS-2(2-4cm)	14	163

Table H.4. Sediment total petroleum hydrocarbon data for Cruise 2B.

Cruise	Sample Name	Station	Total Resolved Hydrocarbon (Non-SBM Range)	Unresolved Complex Mixture (Non-SBM Range)
2	CSA0094	GB602-NF-DS-2(6-8cm)	2	54
2	CSA0095	GB602-NF-DS-2(8-10cm)	2	33
2	CSA0096	GB602-NF-DS-3(0-2cm)	5	115
2	CSA0097	GB602-NF-DS-3(2-4cm)	9	83
2	CSA0098	GB602-NF-DS-3(4-6cm)	2	29
2	CSA0099	GB602-NF-DS-3(6-8cm)	1	24
2	CSA0100	GB602-NF-DS-3(8-10cm)	1	31
2	CSA0101	GB602-NF-B01	2	36
2	CSA0102	GB602-NF-B02	61	252
2	CSA0103	GB602-NF-B03	140	423
2	CSA0104	GB602-NF-B04	11	71
2	CSA0105	GB602-NF-B05	115	252
2	CSA0106	GB602-NF-B06	125	546
2	CSA0107	GB602-NF-B07	13	179
2	CSA0108	GB602-NF-B08	3950	693
2	CSA0109	GB602-NF-B09	244	130
2	CSA0110	GB602-NF-B10	4	241
2	CSA0111	GB602-NF-B11	44	193
2	CSA0112	GB602-NF-B12	1	93
2	CSA0113	GB602-FF1-B01	3	23
2	CSA0114	GB602-FF2-B01	0.3	24
2	CSA0115	GB602-FF3-B01	0	14
2	CSA0116	GB602-FF4-B01	1	30
2	CSA0117	GB602-FF5-B01	3	25
2	CSA0118	GB602-FF6-B01	4	19
2	CSA0119	GB602-FF1-B02	2	23
2	CSA0120	GB602-FF2-B02	2	18
2	CSA0121	GB602-FF3-B02	3	14
2	CSA0122	GB602-FF4-B02	4	34
2	CSA0123	GB602-FF5-B02	2	24
2	CSA0124	GB602-FF6-B02	1	20
2	CSA0125	MC292-DS-1(0-2cm)	6	25
2	CSA0126	MC292-DS-1(2-4cm)	22	37
2	CSA0127	MC292-DS-1(4-6cm)	5	18
2	CSA0128	MC292-DS-1(6-8 cm)	4	15
2	CSA0129	MC292-DS-1(8-10cm)	4	13
2	CSA0130	MC292-DS-2(0-2cm)	2	96
2	CSA0131	MC292-DS-2(2-4cm)	6	25
2	CSA0132	MC292-DS-2(4-6cm)	4	15
2	CSA0133	MC292-DS-2(6-8cm)	3	9
2	CSA0134	MC292-DS-2(8-10cm)	2	8
2	CSA0135	MC292-DS-3(0-2cm)	4	74
2	CSA0136	MC292-DS-3(2-4cm)	9	45
2	CSA0137	MC292-DS-3(4-6cm)	7	17
2	CSA0138	MC292-DS-3(6-8cm)	4	11
2	CSA0139	MC292-DS-3(8-10cm)	4	7
2	CSA0140	MC292-NF-B01	27	55

Table H.4. Sediment total petroleum hydrocarbon data for Cruise 2B.

Cruise	Sample Name	Station	Total Resolved Hydrocarbon (Non-SBM Range)	Unresolved Complex Mixture (Non-SBM Range)
2	CSA0141	MC292-NF-B02	1	47
2	CSA0142	MC292-NF-B03	8	31
2	CSA0143	MC292-NF-B04	1	21
2	CSA0144	MC292-NF-B05	1	85
2	CSA0145	MC292-NF-B06	2	14
2	CSA0146	MC292-NF-B07	4	23
2	CSA0147	MC292-NF-B08	1	88
2	CSA0148	MC292-NF-B09	3	20
2	CSA0149	MC292-NF-B10	7	58
2	CSA0150	MC292-NF-B11	3	20
2	CSA0151	MC292-NF-B12	4	24
2	CSA0152	MC292-FF1-B01	5	23
2	CSA0153	MC292-FF2-B01	9	31
2	CSA0154	MC292-FF3-B01	5	27
2	CSA0155	MC292-FF4-B01	6	29
2	CSA0156	MC292-FF5-B01	4	20
2	CSA0157	MC292-FF6-B01	1	24
2	CSA0158	MC292-FF1-B02	1	34
2	CSA0159	MC292-FF2-B02	1	47
2	CSA0160	MC292-FF3-B02	1	36
2	CSA0161	MC292-FF4-B02	1	35
2	CSA0162	MC292-FF5-B02	1	182
2	CSA0163	MC292-FF6-B02	1	27

Table H.4. Sediment total petroleum hydrocarbon data for Cruise 2B.

Cruise	Sample Name	Station	Total Petroleum Hydrocarbon (SBM Range)	Total Resolved Hydrocarbon (SBM Range)
2	CSA0047	GB516-NF-DS-1 (0-2cm)	5148	4841
2	CSA0048	GB516-NF-DS-1 (2-4cm)	21908	21196
2	CSA0049	GB516-NF-DS-1 (4-6cm)	3984	3914
2	CSA0050	GB516-NF-DS-1 (6-8cm)	1073	1013
2	CSA0051	GB516-NF-DS-1 (8-10cm)	1173	1128
2	CSA0052	GB516-NF-DS-2 (2-4cm)	117280	114756
2	CSA0053	GB516-NF-DS-2 (4-6cm)	136297	127876
2	CSA0054	GB516-NF-DS-2 (6-8cm)	119992	118911
2	CSA0055	GB516-NF-DS-2 (8-10cm)	98940	95749
2	CSA0056	GB516-NF-DS-2 (0-2cm)	13271	12182
2	CSA0057	GB516-NF-DS-3 (0-2cm)	3353	3072
2	CSA0058	GB516-NF-DS-3 (2-4cm)	162	148
2	CSA0059	GB516-NF-DS-3 (4-6cm)	37	33
2	CSA0060	GB516-NF-DS-3 (6-8cm)	21	19
2	CSA0061	GB516-NF-DS-3 (8-10cm)	25	23
2	CSA0062	GB516-NF-B01	1283	1190
2	CSA0063	GB516-NF-B02	1093	1032
2	CSA0064	GB516-NF-B03	4520	4102
2	CSA0065	GB516-NF-B04	162	150
2	CSA0066	GB516-NF-B05	420	396
2	CSA0067	GB516-NF-B06	29167	28546
2	CSA0068	GB516-NF-B07	4666	4228
2	CSA0069	GB516-NF-B08	418	335
2	CSA0070	GB516-NF-B09	6170	5794
2	CSA0071	GB516-NF-B10	7	4
2	CSA0072	GB516-NF-B11	152	148
2	CSA0073	GB516-NF-B12	56	47
2	CSA0074	GB516-FF1-B01	3	1
2	CSA0075	GB516-FF2-B01	4	2
2	CSA0076	GB516-FF3-B01	4	2
2	CSA0077	GB516-FF4-B01	3	2
2	CSA0078	GB516-FF5-B01	5	2
2	CSA0079	GB516-FF6-B01	4	2
2	CSA0080	GB516-FF1-B02	3	2
2	CSA0081	GB516-FF2-B02	7	4
2	CSA0082	GB516-FF3-B02	3	1
2	CSA0083	GB516-FF4-B02	3	1
2	CSA0084	GB516-FF5-B02	4	2
2	CSA0085	GB516-FF6-B02	4	2
2	CSA0086	GB602-NF-DS-1(0-2cm)	10572	9901
2	CSA0087	GB602-NF-DS-1(2-4cm)	8798	8235
2	CSA0088	GB602-NF-DS-1(4-6cm)	3742	3567
2	CSA0089	GB602-NF-DS-1(6-8cm)	1293	1187
2	CSA0090	GB602-NF-DS-1(8-10cm)	291	254
2	CSA0091	GB602-NF-DS-2 (4-6cm)	3479	3090
2	CSA0092	GB602-NF-DS-2(0-2cm)	2706	2369
2	CSA0093	GB602-NF-DS-2(2-4cm)	764	581

Table H.4. Sediment total petroleum hydrocarbon data for Cruise 2B.

Cruise	Sample Name	Station	Total Petroleum Hydrocarbon (SBM Range)	Total Resolved Hydrocarbon (SBM Range)
2	CSA0094	GB602-NF-DS-2(6-8cm)	62	43
2	CSA0095	GB602-NF-DS-2(8-10cm)	24	13
2	CSA0096	GB602-NF-DS-3(0-2cm)	930	758
2	CSA0097	GB602-NF-DS-3(2-4cm)	532	447
2	CSA0098	GB602-NF-DS-3(4-6cm)	37	28
2	CSA0099	GB602-NF-DS-3(6-8cm)	11	7
2	CSA0100	GB602-NF-DS-3(8-10cm)	12	7
2	CSA0101	GB602-NF-B01	462	396
2	CSA0102	GB602-NF-B02	585	373
2	CSA0103	GB602-NF-B03	8446	7732
2	CSA0104	GB602-NF-B04	1878	1623
2	CSA0105	GB602-NF-B05	4339	4087
2	CSA0106	GB602-NF-B06	3263	2853
2	CSA0107	GB602-NF-B07	1954	1767
2	CSA0108	GB602-NF-B08	13792	12490
2	CSA0109	GB602-NF-B09	1430	1351
2	CSA0110	GB602-NF-B10	1351	1146
2	CSA0111	GB602-NF-B11	2027	1864
2	CSA0112	GB602-NF-B12	985	927
2	CSA0113	GB602-FF1-B01	6	3
2	CSA0114	GB602-FF2-B01	5	1
2	CSA0115	GB602-FF3-B01	3	1
2	CSA0116	GB602-FF4-B01	5	3
2	CSA0117	GB602-FF5-B01	10	2
2	CSA0118	GB602-FF6-B01	8	3
2	CSA0119	GB602-FF1-B02	5	2
2	CSA0120	GB602-FF2-B02	4	2
2	CSA0121	GB602-FF3-B02	4	2
2	CSA0122	GB602-FF4-B02	8	2
2	CSA0123	GB602-FF5-B02	6	2
2	CSA0124	GB602-FF6-B02	5	2
2	CSA0125	MC292-DS-1(0-2cm)	59	46
2	CSA0126	MC292-DS-1(2-4cm)	76	56
2	CSA0127	MC292-DS-1(4-6cm)	18	14
2	CSA0128	MC292-DS-1(6-8 cm)	10	7
2	CSA0129	MC292-DS-1(8-10cm)	9	6
2	CSA0130	MC292-DS-2(0-2cm)	714	628
2	CSA0131	MC292-DS-2(2-4cm)	60	46
2	CSA0132	MC292-DS-2(4-6cm)	16	11
2	CSA0133	MC292-DS-2(6-8cm)	14	12
2	CSA0134	MC292-DS-2(8-10cm)	9	7
2	CSA0135	MC292-DS-3(0-2cm)	618	496
2	CSA0136	MC292-DS-3(2-4cm)	103	76
2	CSA0137	MC292-DS-3(4-6cm)	33	23
2	CSA0138	MC292-DS-3(6-8cm)	15	12
2	CSA0139	MC292-DS-3(8-10cm)	12	10
2	CSA0140	MC292-NF-B01	2408	2151

Table H.4. Sediment total petroleum hydrocarbon data for Cruise 2B.

Cruise	Sample Name	Station	Total Petroleum Hydrocarbon (SBM Range)	Total Resolved Hydrocarbon (SBM Range)
2	CSA0141	MC292-NF-B02	782	663
2	CSA0142	MC292-NF-B03	86	67
2	CSA0143	MC292-NF-B04	1	1
2	CSA0144	MC292-NF-B05	584	498
2	CSA0145	MC292-NF-B06	8	5
2	CSA0146	MC292-NF-B07	13	8
2	CSA0147	MC292-NF-B08	920	806
2	CSA0148	MC292-NF-B09	12	9
2	CSA0149	MC292-NF-B10	101	85
2	CSA0150	MC292-NF-B11	9	5
2	CSA0151	MC292-NF-B12	10	6
2	CSA0152	MC292-FF1-B01	6	3
2	CSA0153	MC292-FF2-B01	19	14
2	CSA0154	MC292-FF3-B01	8	4
2	CSA0155	MC292-FF4-B01	8	4
2	CSA0156	MC292-FF5-B01	6	2
2	CSA0157	MC292-FF6-B01	1	1
2	CSA0158	MC292-FF1-B02	1	1
2	CSA0159	MC292-FF2-B02	1	1
2	CSA0160	MC292-FF3-B02	1	1
2	CSA0161	MC292-FF4-B02	1	1
2	CSA0162	MC292-FF5-B02	28	23
2	CSA0163	MC292-FF6-B02	1	1

Table H.4. Sediment total petroleum hydrocarbon data for Cruise 2B.

Cruise	Sample Name	Station	Unresolved Complex Mixture (SBM Range)	EOM (mg/g dry)
2	CSA0047	GB516-NF-DS-1 (0-2cm)	306	6844
2	CSA0048	GB516-NF-DS-1 (2-4cm)	712	29141
2	CSA0049	GB516-NF-DS-1 (4-6cm)	69	6746
2	CSA0050	GB516-NF-DS-1 (6-8cm)	60	2050
2	CSA0051	GB516-NF-DS-1 (8-10cm)	44	2297
2	CSA0052	GB516-NF-DS-2 (2-4cm)	2524	177846
2	CSA0053	GB516-NF-DS-2 (4-6cm)	8421	160461
2	CSA0054	GB516-NF-DS-2 (6-8cm)	1081	128407
2	CSA0055	GB516-NF-DS-2 (8-10cm)	3191	140183
2	CSA0056	GB516-NF-DS-2 (0-2cm)	1089	23627
2	CSA0057	GB516-NF-DS-3 (0-2cm)	281	6566
2	CSA0058	GB516-NF-DS-3 (2-4cm)	14	736
2	CSA0059	GB516-NF-DS-3 (4-6cm)	4	286
2	CSA0060	GB516-NF-DS-3 (6-8cm)	2	223
2	CSA0061	GB516-NF-DS-3 (8-10cm)	2	189
2	CSA0062	GB516-NF-B01	94	2415
2	CSA0063	GB516-NF-B02	61	1898
2	CSA0064	GB516-NF-B03	418	8312
2	CSA0065	GB516-NF-B04	12	563
2	CSA0066	GB516-NF-B05	23	1003
2	CSA0067	GB516-NF-B06	621	40219
2	CSA0068	GB516-NF-B07	437	7438
2	CSA0069	GB516-NF-B08	83	1014
2	CSA0070	GB516-NF-B09	376	9822
2	CSA0071	GB516-NF-B10	3	318
2	CSA0072	GB516-NF-B11	4	541
2	CSA0073	GB516-NF-B12	9	342
2	CSA0074	GB516-FF1-B01	2	271
2	CSA0075	GB516-FF2-B01	2	228
2	CSA0076	GB516-FF3-B01	2	336
2	CSA0077	GB516-FF4-B01	2	237
2	CSA0078	GB516-FF5-B01	3	283
2	CSA0079	GB516-FF6-B01	1	248
2	CSA0080	GB516-FF1-B02	1	271
2	CSA0081	GB516-FF2-B02	2	269
2	CSA0082	GB516-FF3-B02	2	305
2	CSA0083	GB516-FF4-B02	2	229
2	CSA0084	GB516-FF5-B02	2	311
2	CSA0085	GB516-FF6-B02	2	254
2	CSA0086	GB602-NF-DS-1(0-2cm)	671	16733
2	CSA0087	GB602-NF-DS-1(2-4cm)	563	11467
2	CSA0088	GB602-NF-DS-1(4-6cm)	175	6637
2	CSA0089	GB602-NF-DS-1(6-8cm)	107	2315
2	CSA0090	GB602-NF-DS-1(8-10cm)	36	945
2	CSA0091	GB602-NF-DS-2 (4-6cm)	389	5275
2	CSA0092	GB602-NF-DS-2(0-2cm)	337	3860
2	CSA0093	GB602-NF-DS-2(2-4cm)	183	1682

Table H.4. Sediment total petroleum hydrocarbon data for Cruise 2B.

Cruise	Sample Name	Station	Unresolved Complex Mixture (SBM Range)	EOM (mg/g dry)
2	CSA0094	GB602-NF-DS-2(6-8cm)	19	636
2	CSA0095	GB602-NF-DS-2(8-10cm)	11	275
2	CSA0096	GB602-NF-DS-3(0-2cm)	172	1888
2	CSA0097	GB602-NF-DS-3(2-4cm)	85	1100
2	CSA0098	GB602-NF-DS-3(4-6cm)	10	333
2	CSA0099	GB602-NF-DS-3(6-8cm)	5	239
2	CSA0100	GB602-NF-DS-3(8-10cm)	5	237
2	CSA0101	GB602-NF-B01	66	535
2	CSA0102	GB602-NF-B02	212	2071
2	CSA0103	GB602-NF-B03	713	15292
2	CSA0104	GB602-NF-B04	255	3664
2	CSA0105	GB602-NF-B05	252	7083
2	CSA0106	GB602-NF-B06	410	6282
2	CSA0107	GB602-NF-B07	187	3586
2	CSA0108	GB602-NF-B08	1302	22621
2	CSA0109	GB602-NF-B09	79	2163
2	CSA0110	GB602-NF-B10	205	2298
2	CSA0111	GB602-NF-B11	163	3204
2	CSA0112	GB602-NF-B12	58	1324
2	CSA0113	GB602-FF1-B01	4	159
2	CSA0114	GB602-FF2-B01	3	226
2	CSA0115	GB602-FF3-B01	2	217
2	CSA0116	GB602-FF4-B01	3	221
2	CSA0117	GB602-FF5-B01	7	240
2	CSA0118	GB602-FF6-B01	5	199
2	CSA0119	GB602-FF1-B02	3	196
2	CSA0120	GB602-FF2-B02	2	209
2	CSA0121	GB602-FF3-B02	2	199
2	CSA0122	GB602-FF4-B02	5	353
2	CSA0123	GB602-FF5-B02	4	260
2	CSA0124	GB602-FF6-B02	4	168
2	CSA0125	MC292-DS-1(0-2cm)	14	260
2	CSA0126	MC292-DS-1(2-4cm)	20	280
2	CSA0127	MC292-DS-1(4-6cm)	5	NA
2	CSA0128	MC292-DS-1(6-8 cm)	3	NA
2	CSA0129	MC292-DS-1(8-10cm)	3	NA
2	CSA0130	MC292-DS-2(0-2cm)	86	NA
2	CSA0131	MC292-DS-2(2-4cm)	14	NA
2	CSA0132	MC292-DS-2(4-6cm)	4	NA
2	CSA0133	MC292-DS-2(6-8cm)	2	NA
2	CSA0134	MC292-DS-2(8-10cm)	2	NA
2	CSA0135	MC292-DS-3(0-2cm)	122	NA
2	CSA0136	MC292-DS-3(2-4cm)	27	NA
2	CSA0137	MC292-DS-3(4-6cm)	10	NA
2	CSA0138	MC292-DS-3(6-8cm)	3	NA
2	CSA0139	MC292-DS-3(8-10cm)	2	NA
2	CSA0140	MC292-NF-B01	258	NA

Table H.4. Sediment total petroleum hydrocarbon data for Cruise 2B.

Cruise	Sample Name	Station	Unresolved Complex Mixture (SBM Range)	EOM (mg/g dry)
2	CSA0141	MC292-NF-B02	118	NA
2	CSA0142	MC292-NF-B03	19	NA
2	CSA0143	MC292-NF-B04	1	1968
2	CSA0144	MC292-NF-B05	86	NA
2	CSA0145	MC292-NF-B06	3	NA
2	CSA0146	MC292-NF-B07	5	301
2	CSA0147	MC292-NF-B08	114	2027
2	CSA0148	MC292-NF-B09	4	216
2	CSA0149	MC292-NF-B10	17	500
2	CSA0150	MC292-NF-B11	4	230
2	CSA0151	MC292-NF-B12	4	204
2	CSA0152	MC292-FF1-B01	3	221
2	CSA0153	MC292-FF2-B01	5	300
2	CSA0154	MC292-FF3-B01	4	258
2	CSA0155	MC292-FF4-B01	4	289
2	CSA0156	MC292-FF5-B01	4	245
2	CSA0157	MC292-FF6-B01	1	224
2	CSA0158	MC292-FF1-B02	1	319
2	CSA0159	MC292-FF2-B02	1	335
2	CSA0160	MC292-FF3-B02	1	253
2	CSA0161	MC292-FF4-B02	1	305
2	CSA0162	MC292-FF5-B02	5	451
2	CSA0163	MC292-FF6-B02	1	237

Table H.4. Sediment total petroleum hydrocarbon data for Cruise 2B.

Cruise	Sample Name	Station	*Surrogate (Su)*	n-dodecane-d34	n-eicosane-d42
2	CSA0047	GB516-NF-DS-1 (0-2cm)	Su Recovery (%)	96	106
2	CSA0048	GB516-NF-DS-1 (2-4cm)	Su Recovery (%)	100	102
2	CSA0049	GB516-NF-DS-1 (4-6cm)	Su Recovery (%)	98	99
2	CSA0050	GB516-NF-DS-1 (6-8cm)	Su Recovery (%)	108	96
2	CSA0051	GB516-NF-DS-1 (8-10cm)	Su Recovery (%)	99	107
2	CSA0052	GB516-NF-DS-2 (2-4cm)	Su Recovery (%)	96	94
2	CSA0053	GB516-NF-DS-2 (4-6cm)	Su Recovery (%)	100	100
2	CSA0054	GB516-NF-DS-2 (6-8cm)	Su Recovery (%)	101	100
2	CSA0055	GB516-NF-DS-2 (8-10cm)	Su Recovery (%)	101	102
2	CSA0056	GB516-NF-DS-2 (0-2cm)	Su Recovery (%)	105	109
2	CSA0057	GB516-NF-DS-3 (0-2cm)	Su Recovery (%)	101	104
2	CSA0058	GB516-NF-DS-3 (2-4cm)	Su Recovery (%)	78	81
2	CSA0059	GB516-NF-DS-3 (4-6cm)	Su Recovery (%)	89	89
2	CSA0060	GB516-NF-DS-3 (6-8cm)	Su Recovery (%)	78	85
2	CSA0061	GB516-NF-DS-3 (8-10cm)	Su Recovery (%)	94	92
2	CSA0062	GB516-NF-B01	Su Recovery (%)	101	102
2	CSA0063	GB516-NF-B02	Su Recovery (%)	105	105
2	CSA0064	GB516-NF-B03	Su Recovery (%)	102	102
2	CSA0065	GB516-NF-B04	Su Recovery (%)	77	103
2	CSA0066	GB516-NF-B05	Su Recovery (%)	95	93
2	CSA0067	GB516-NF-B06	Su Recovery (%)	102	102
2	CSA0068	GB516-NF-B07	Su Recovery (%)	116	103
2	CSA0069	GB516-NF-B08	Su Recovery (%)	99	106
2	CSA0070	GB516-NF-B09	Su Recovery (%)	97	102
2	CSA0071	GB516-NF-B10	Su Recovery (%)	88	94
2	CSA0072	GB516-NF-B11	Su Recovery (%)	80	76
2	CSA0073	GB516-NF-B12	Su Recovery (%)	78	81
2	CSA0074	GB516-FF1-B01	Su Recovery (%)	87	90
2	CSA0075	GB516-FF2-B01	Su Recovery (%)	89	90
2	CSA0076	GB516-FF3-B01	Su Recovery (%)	93	94
2	CSA0077	GB516-FF4-B01	Su Recovery (%)	85	92
2	CSA0078	GB516-FF5-B01	Su Recovery (%)	82	85
2	CSA0079	GB516-FF6-B01	Su Recovery (%)	82	87
2	CSA0080	GB516-FF1-B02	Su Recovery (%)	89	88
2	CSA0081	GB516-FF2-B02	Su Recovery (%)	92	87
2	CSA0082	GB516-FF3-B02	Su Recovery (%)	87	87
2	CSA0083	GB516-FF4-B02	Su Recovery (%)	86	85
2	CSA0084	GB516-FF5-B02	Su Recovery (%)	93	91
2	CSA0085	GB516-FF6-B02	Su Recovery (%)	87	93
2	CSA0086	GB602-NF-DS-1(0-2cm)	Su Recovery (%)	102	99
2	CSA0087	GB602-NF-DS-1(2-4cm)	Su Recovery (%)	94	96
2	CSA0088	GB602-NF-DS-1(4-6cm)	Su Recovery (%)	99	91
2	CSA0089	GB602-NF-DS-1(6-8cm)	Su Recovery (%)	100	101
2	CSA0090	GB602-NF-DS-1(8-10cm)	Su Recovery (%)	84	95
2	CSA0091	GB602-NF-DS-2 (4-6cm)	Su Recovery (%)	110	102
2	CSA0092	GB602-NF-DS-2(0-2cm)	Su Recovery (%)	97	88
2	CSA0093	GB602-NF-DS-2(2-4cm)	Su Recovery (%)	93	100

Table H.4. Sediment total petroleum hydrocarbon data for Cruise 2B.

Cruise	Sample Name	Station	*Surrogate (Su)*	n-dodecane-d34	n-eicosane-d42
2	CSA0094	GB602-NF-DS-2(6-8cm)	Su Recovery (%)	80	90
2	CSA0095	GB602-NF-DS-2(8-10cm)	Su Recovery (%)	99	93
2	CSA0096	GB602-NF-DS-3(0-2cm)	Su Recovery (%)	100	106
2	CSA0097	GB602-NF-DS-3(2-4cm)	Su Recovery (%)	89	86
2	CSA0098	GB602-NF-DS-3(4-6cm)	Su Recovery (%)	80	96
2	CSA0099	GB602-NF-DS-3(6-8cm)	Su Recovery (%)	85	99
2	CSA0100	GB602-NF-DS-3(8-10cm)	Su Recovery (%)	85	91
2	CSA0101	GB602-NF-B01	Su Recovery (%)	86	96
2	CSA0102	GB602-NF-B02	Su Recovery (%)	79	91
2	CSA0103	GB602-NF-B03	Su Recovery (%)	109	105
2	CSA0104	GB602-NF-B04	Su Recovery (%)	104	95
2	CSA0105	GB602-NF-B05	Su Recovery (%)	98	103
2	CSA0106	GB602-NF-B06	Su Recovery (%)	106	92
2	CSA0107	GB602-NF-B07	Su Recovery (%)	102	88
2	CSA0108	GB602-NF-B08	Su Recovery (%)	85	97
2	CSA0109	GB602-NF-B09	Su Recovery (%)	95	101
2	CSA0110	GB602-NF-B10	Su Recovery (%)	109	106
2	CSA0111	GB602-NF-B11	Su Recovery (%)	92	102
2	CSA0112	GB602-NF-B12	Su Recovery (%)	100	106
2	CSA0113	GB602-FF1-B01	Su Recovery (%)	80	98
2	CSA0114	GB602-FF2-B01	Su Recovery (%)	79	94
2	CSA0115	GB602-FF3-B01	Su Recovery (%)	80	96
2	CSA0116	GB602-FF4-B01	Su Recovery (%)	79	90
2	CSA0117	GB602-FF5-B01	Su Recovery (%)	81	99
2	CSA0118	GB602-FF6-B01	Su Recovery (%)	82	92
2	CSA0119	GB602-FF1-B02	Su Recovery (%)	81	95
2	CSA0120	GB602-FF2-B02	Su Recovery (%)	85	99
2	CSA0121	GB602-FF3-B02	Su Recovery (%)	81	100
2	CSA0122	GB602-FF4-B02	Su Recovery (%)	94	98
2	CSA0123	GB602-FF5-B02	Su Recovery (%)	90	91
2	CSA0124	GB602-FF6-B02	Su Recovery (%)	89	96
2	CSA0125	MC292-DS-1(0-2cm)	Su Recovery (%)	71	103
2	CSA0126	MC292-DS-1(2-4cm)	Su Recovery (%)	72	87
2	CSA0127	MC292-DS-1(4-6cm)	Su Recovery (%)	79	97
2	CSA0128	MC292-DS-1(6-8 cm)	Su Recovery (%)	75	96
2	CSA0129	MC292-DS-1(8-10cm)	Su Recovery (%)	77	96
2	CSA0130	MC292-DS-2(0-2cm)	Su Recovery (%)	94	102
2	CSA0131	MC292-DS-2(2-4cm)	Su Recovery (%)	90	94
2	CSA0132	MC292-DS-2(4-6cm)	Su Recovery (%)	79	101
2	CSA0133	MC292-DS-2(6-8cm)	Su Recovery (%)	81	105
2	CSA0134	MC292-DS-2(8-10cm)	Su Recovery (%)	79	96
2	CSA0135	MC292-DS-3(0-2cm)	Su Recovery (%)	93	103
2	CSA0136	MC292-DS-3(2-4cm)	Su Recovery (%)	81	86
2	CSA0137	MC292-DS-3(4-6cm)	Su Recovery (%)	77	105
2	CSA0138	MC292-DS-3(6-8cm)	Su Recovery (%)	82	95
2	CSA0139	MC292-DS-3(8-10cm)	Su Recovery (%)	80	102
2	CSA0140	MC292-NF-B01	Su Recovery (%)	106	106

Table H.4. Sediment total petroleum hydrocarbon data for Cruise 2B.

Cruise	Sample Name	Station	*Surrogate (Su)*	n-dodecane-d34	n-eicosane-d42
2	CSA0141	MC292-NF-B02	Su Recovery (%)	102	98
2	CSA0142	MC292-NF-B03	Su Recovery (%)	98	109
2	CSA0143	MC292-NF-B04	Su Recovery (%)	86	94
2	CSA0144	MC292-NF-B05	Su Recovery (%)	97	101
2	CSA0145	MC292-NF-B06	Su Recovery (%)	82	107
2	CSA0146	MC292-NF-B07	Su Recovery (%)	79	100
2	CSA0147	MC292-NF-B08	Su Recovery (%)	103	99
2	CSA0148	MC292-NF-B09	Su Recovery (%)	80	96
2	CSA0149	MC292-NF-B10	Su Recovery (%)	113	119
2	CSA0150	MC292-NF-B11	Su Recovery (%)	80	92
2	CSA0151	MC292-NF-B12	Su Recovery (%)	87	100
2	CSA0152	MC292-FF1-B01	Su Recovery (%)	81	99
2	CSA0153	MC292-FF2-B01	Su Recovery (%)	79	101
2	CSA0154	MC292-FF3-B01	Su Recovery (%)	82	94
2	CSA0155	MC292-FF4-B01	Su Recovery (%)	84	92
2	CSA0156	MC292-FF5-B01	Su Recovery (%)	80	92
2	CSA0157	MC292-FF6-B01	Su Recovery (%)	80	84
2	CSA0158	MC292-FF1-B02	Su Recovery (%)	90	94
2	CSA0159	MC292-FF2-B02	Su Recovery (%)	88	94
2	CSA0160	MC292-FF3-B02	Su Recovery (%)	97	94
2	CSA0161	MC292-FF4-B02	Su Recovery (%)	87	89
2	CSA0162	MC292-FF5-B02	Su Recovery (%)	97	98
2	CSA0163	MC292-FF6-B02	Su Recovery (%)	87	89

Table H.4. Sediment total petroleum hydrocarbon data for Cruise 2B.

Cruise	Sample Name	Station	n-triacontane-d62
2	CSA0047	GB516-NF-DS-1 (0-2cm)	101
2	CSA0048	GB516-NF-DS-1 (2-4cm)	99
2	CSA0049	GB516-NF-DS-1 (4-6cm)	97
2	CSA0050	GB516-NF-DS-1 (6-8cm)	98
2	CSA0051	GB516-NF-DS-1 (8-10cm)	99
2	CSA0052	GB516-NF-DS-2 (2-4cm)	92
2	CSA0053	GB516-NF-DS-2 (4-6cm)	94
2	CSA0054	GB516-NF-DS-2 (6-8cm)	97
2	CSA0055	GB516-NF-DS-2 (8-10cm)	97
2	CSA0056	GB516-NF-DS-2 (0-2cm)	98
2	CSA0057	GB516-NF-DS-3 (0-2cm)	103
2	CSA0058	GB516-NF-DS-3 (2-4cm)	89
2	CSA0059	GB516-NF-DS-3 (4-6cm)	83
2	CSA0060	GB516-NF-DS-3 (6-8cm)	85
2	CSA0061	GB516-NF-DS-3 (8-10cm)	88
2	CSA0062	GB516-NF-B01	98
2	CSA0063	GB516-NF-B02	100
2	CSA0064	GB516-NF-B03	97
2	CSA0065	GB516-NF-B04	99
2	CSA0066	GB516-NF-B05	101
2	CSA0067	GB516-NF-B06	101
2	CSA0068	GB516-NF-B07	94
2	CSA0069	GB516-NF-B08	117
2	CSA0070	GB516-NF-B09	98
2	CSA0071	GB516-NF-B10	93
2	CSA0072	GB516-NF-B11	81
2	CSA0073	GB516-NF-B12	89
2	CSA0074	GB516-FF1-B01	92
2	CSA0075	GB516-FF2-B01	87
2	CSA0076	GB516-FF3-B01	90
2	CSA0077	GB516-FF4-B01	85
2	CSA0078	GB516-FF5-B01	85
2	CSA0079	GB516-FF6-B01	89
2	CSA0080	GB516-FF1-B02	89
2	CSA0081	GB516-FF2-B02	88
2	CSA0082	GB516-FF3-B02	84
2	CSA0083	GB516-FF4-B02	86
2	CSA0084	GB516-FF5-B02	96
2	CSA0085	GB516-FF6-B02	86
2	CSA0086	GB602-NF-DS-1(0-2cm)	96
2	CSA0087	GB602-NF-DS-1(2-4cm)	95
2	CSA0088	GB602-NF-DS-1(4-6cm)	100
2	CSA0089	GB602-NF-DS-1(6-8cm)	91
2	CSA0090	GB602-NF-DS-1(8-10cm)	88
2	CSA0091	GB602-NF-DS-2 (4-6cm)	93
2	CSA0092	GB602-NF-DS-2(0-2cm)	87
2	CSA0093	GB602-NF-DS-2(2-4cm)	91

Table H.4. Sediment total petroleum hydrocarbon data for Cruise 2B.

Cruise	Sample Name	Station	n-triacontane-d62
2	CSA0094	GB602-NF-DS-2(6-8cm)	88
2	CSA0095	GB602-NF-DS-2(8-10cm)	99
2	CSA0096	GB602-NF-DS-3(0-2cm)	95
2	CSA0097	GB602-NF-DS-3(2-4cm)	88
2	CSA0098	GB602-NF-DS-3(4-6cm)	94
2	CSA0099	GB602-NF-DS-3(6-8cm)	97
2	CSA0100	GB602-NF-DS-3(8-10cm)	91
2	CSA0101	GB602-NF-B01	85
2	CSA0102	GB602-NF-B02	99
2	CSA0103	GB602-NF-B03	96
2	CSA0104	GB602-NF-B04	92
2	CSA0105	GB602-NF-B05	90
2	CSA0106	GB602-NF-B06	92
2	CSA0107	GB602-NF-B07	90
2	CSA0108	GB602-NF-B08	99
2	CSA0109	GB602-NF-B09	99
2	CSA0110	GB602-NF-B10	98
2	CSA0111	GB602-NF-B11	99
2	CSA0112	GB602-NF-B12	100
2	CSA0113	GB602-FF1-B01	95
2	CSA0114	GB602-FF2-B01	96
2	CSA0115	GB602-FF3-B01	88
2	CSA0116	GB602-FF4-B01	94
2	CSA0117	GB602-FF5-B01	97
2	CSA0118	GB602-FF6-B01	90
2	CSA0119	GB602-FF1-B02	98
2	CSA0120	GB602-FF2-B02	97
2	CSA0121	GB602-FF3-B02	91
2	CSA0122	GB602-FF4-B02	99
2	CSA0123	GB602-FF5-B02	93
2	CSA0124	GB602-FF6-B02	91
2	CSA0125	MC292-DS-1(0-2cm)	101
2	CSA0126	MC292-DS-1(2-4cm)	77
2	CSA0127	MC292-DS-1(4-6cm)	102
2	CSA0128	MC292-DS-1(6-8 cm)	117
2	CSA0129	MC292-DS-1(8-10cm)	111
2	CSA0130	MC292-DS-2(0-2cm)	91
2	CSA0131	MC292-DS-2(2-4cm)	117
2	CSA0132	MC292-DS-2(4-6cm)	106
2	CSA0133	MC292-DS-2(6-8cm)	108
2	CSA0134	MC292-DS-2(8-10cm)	119
2	CSA0135	MC292-DS-3(0-2cm)	90
2	CSA0136	MC292-DS-3(2-4cm)	95
2	CSA0137	MC292-DS-3(4-6cm)	98
2	CSA0138	MC292-DS-3(6-8cm)	109
2	CSA0139	MC292-DS-3(8-10cm)	117
2	CSA0140	MC292-NF-B01	92

Table H.4. Sediment total petroleum hydrocarbon data for Cruise 2B.

Cruise	Sample Name	Station	n-triacontane-d62
2	CSA0141	MC292-NF-B02	92
2	CSA0142	MC292-NF-B03	119
2	CSA0143	MC292-NF-B04	99
2	CSA0144	MC292-NF-B05	93
2	CSA0145	MC292-NF-B06	117
2	CSA0146	MC292-NF-B07	102
2	CSA0147	MC292-NF-B08	92
2	CSA0148	MC292-NF-B09	94
2	CSA0149	MC292-NF-B10	117
2	CSA0150	MC292-NF-B11	94
2	CSA0151	MC292-NF-B12	101
2	CSA0152	MC292-FF1-B01	95
2	CSA0153	MC292-FF2-B01	109
2	CSA0154	MC292-FF3-B01	102
2	CSA0155	MC292-FF4-B01	101
2	CSA0156	MC292-FF5-B01	103
2	CSA0157	MC292-FF6-B01	88
2	CSA0158	MC292-FF1-B02	91
2	CSA0159	MC292-FF2-B02	82
2	CSA0160	MC292-FF3-B02	98
2	CSA0161	MC292-FF4-B02	95
2	CSA0162	MC292-FF5-B02	95
2	CSA0163	MC292-FF6-B02	99

Table H.5. Sediment polycyclic aromatic hydrocarbon data for Cruise 3B.

Cruise	Sample Name	Station	Collection Date	Received Date	Extraction Date	Extraction Batch	Date Acquired
3B	CSA0253.D	VK916-DC-B1(0-2)	08/08/02	08/15/02	08/28/02	ENV 631	10/11/02
3B	CSA0254.D	VK916-DC-B1(2-4)	08/08/02	08/15/02	08/28/02	ENV 631	10/11/02
3B	CSA0255.D	VK916-DC-B1(4-6)	08/08/02	08/15/02	08/28/02	ENV 631	10/11/02
3B	CSA0256.D	VK916-DC-B1(6-8)	08/08/02	08/15/02	08/28/02	ENV 631	10/08/02
3B	CSA0257.D	VK916-DC-B1(8-10)	08/08/02	08/15/02	08/28/02	ENV 631	10/08/02
3B	CSA0258.D	VK916-DC-B2(0-2)	08/08/02	08/15/02	08/28/02	ENV 631	10/11/02
3B	CSA0259.D	VK916-DC-B2(2-4)	08/08/02	08/15/02	08/28/02	ENV 631	10/11/02
3B	CSA0260.D	VK916-DC-B2(4-6)	08/08/02	08/15/02	08/28/02	ENV 631	10/07/02
3B	CSA0261.D	VK916-DC-B2(6-8)	08/08/02	08/15/02	08/28/02	ENV 631	10/08/02
3B	CSA0262.D	VK916-DC-B2(8-10)	08/08/02	08/15/02	08/28/02	ENV 631	10/08/02
3B	CSA0263.D	VK916-DC-B3(0-2)	08/08/02	08/15/02	08/28/02	ENV 631	10/11/02
3B	CSA0264.D	VK916-DC-B3(2-4)	08/08/02	08/15/02	08/28/02	ENV 631	10/11/02
3B	CSA0265.D	VK916-DC-B3(4-6)	08/08/02	08/15/02	08/28/02	ENV 631	10/11/02
3B	CSA0266.D	VK916-DC-B3(6-8)	08/08/02	08/15/02	08/28/02	ENV 631	10/11/02
3B	CSA0267.D	VK916-DC-B3(8-10)	08/08/02	08/15/02	08/28/02	ENV 631	10/11/02
3B	CSA0241.D	VK916-FF1-B01	08/07/02	08/15/02	08/28/02	ENV 630	10/06/02
3B	CSA0242.D	VK916-FF1-B02	08/07/02	08/15/02	08/28/02	ENV 630	10/06/02
3B	CSA0243.D	VK916-FF2-B01	08/07/02	08/15/02	08/28/02	ENV 630	10/06/02
3B	CSA0244.D	VK916-FF2-B02	08/07/02	08/15/02	08/28/02	ENV 630	10/06/02
3B	CSA0245.D	VK916-FF3-B01	08/09/02	08/15/02	08/28/02	ENV 630	10/06/02
3B	CSA0246.D	VK916-FF3-B02	08/09/02	08/15/02	08/28/02	ENV 630	10/06/02
3B	CSA0247.D	VK916-FF4-B01	08/09/02	08/15/02	08/28/02	ENV 630	10/06/02
3B	CSA0248.D	VK916-FF4-B02	08/09/02	08/15/02	08/28/02	ENV 630	10/06/02
3B	CSA0249.D	VK916-FF5-B01	08/09/02	08/15/02	08/28/02	ENV 630	10/06/02
3B	CSA0250.D	VK916-FF5-B02	08/09/02	08/15/02	08/28/02	ENV 630	10/06/02
3B	CSA0251.D	VK916-FF6-B01	08/09/02	08/15/02	08/28/02	ENV 630	10/06/02
3B	CSA0252.D	VK916-FF6-B02	08/09/02	08/15/02	08/28/02	ENV 630	10/06/02
3B	CSA0229.D	VK916-NF-B01	08/07/02	08/15/02	09/02/02	ENV 632	10/11/02
3B	CSA0230.D	VK916-NF-B02	08/08/02	08/15/02	09/02/02	ENV 632	10/10/02
3B	CSA0231.D	VK916-NF-B03	08/08/02	08/15/02	09/02/02	ENV 632	10/10/02
3B	CSA0232.D	VK916-NF-B04	08/08/02	08/15/02	09/02/02	ENV 632	10/10/02
3B	CSA0233.D	VK916-NF-B05	08/08/02	08/15/02	09/02/02	ENV 632	10/11/02
3B	CSA0234.D	VK916-NF-B06	08/08/02	08/15/02	09/02/02	ENV 632	10/17/02
3B	CSA0235.D	VK916-NF-B07	08/08/02	08/15/02	09/02/02	ENV 632	10/11/02
3B	CSA0236.D	VK916-NF-B08	08/08/02	08/15/02	09/02/02	ENV 632	10/10/02
3B	CSA0237.D	VK916-NF-B09	08/08/02	08/15/02	08/28/02	ENV 631	10/08/02
3B	CSA0238.D	VK916-NF-B10	08/09/02	08/15/02	09/02/02	ENV 632	10/10/02
3B	CSA0239.D	VK916-NF-B11	08/09/02	08/15/02	09/02/02	ENV 632	10/10/02
3B	CSA0240.D	VK916-NF-B12	08/10/02	08/15/02	09/02/02	ENV 632	10/10/02

Table H.5. Sediment polycyclic aromatic hydrocarbon data for Cruise 3B.

Cruise	Sample Name	Station	Method	Dry Wt (g)	%Moisture	%Dry	Dilution	Targ_Comp
3B	CSA0253.D	VK916-DC-B1(0-2)	PAH-2002	5.1	50	50	10x	Su Corrected
3B	CSA0254.D	VK916-DC-B1(2-4)	PAH-2002	5.0	62	38	NA	Su Corrected
3B	CSA0255.D	VK916-DC-B1(4-6)	PAH-2002	15.1	68	32	NA	Su Corrected
3B	CSA0256.D	VK916-DC-B1(6-8)	PAH-2002	15.0	65	35	NA	Su Corrected
3B	CSA0257.D	VK916-DC-B1(8-10)	PAH-2002	15.1	61	39	NA	Su Corrected
3B	CSA0258.D	VK916-DC-B2(0-2)	PAH-2002	5.0	69	31	100X	Su Corrected
3B	CSA0259.D	VK916-DC-B2(2-4)	PAH-2002	5.1	73	27	10x	Su Corrected
3B	CSA0260.D	VK916-DC-B2(4-6)	PAH-2002	15.1	69	31	10x	Su Corrected
3B	CSA0261.D	VK916-DC-B2(6-8)	PAH-2002	15.1	65	35	NA	Su Corrected
3B	CSA0262.D	VK916-DC-B2(8-10)	PAH-2002	15.0	64	36	NA	Su Corrected
3B	CSA0263.D	VK916-DC-B3(0-2)	PAH-2002	5.1	68	32	100x	Su Corrected
3B	CSA0264.D	VK916-DC-B3(2-4)	PAH-2002	5.1	72	28	10x	Su Corrected
3B	CSA0265.D	VK916-DC-B3(4-6)	PAH-2002	15.1	67	33	10x	Su Corrected
3B	CSA0266.D	VK916-DC-B3(6-8)	PAH-2002	15.2	64	36	10x	Su Corrected
3B	CSA0267.D	VK916-DC-B3(8-10)	PAH-2002	15.1	63	37	10x	Su Corrected
3B	CSA0241.D	VK916-FF1-B01	PAH-2002	15.0	76	24	NA	Su Corrected
3B	CSA0242.D	VK916-FF1-B02	PAH-2002	15.0	78	22	NA	Su Corrected
3B	CSA0243.D	VK916-FF2-B01	PAH-2002	15.1	71	29	NA	Su Corrected
3B	CSA0244.D	VK916-FF2-B02	PAH-2002	15.3	78	22	NA	Su Corrected
3B	CSA0245.D	VK916-FF3-B01	PAH-2002	15.1	72	28	NA	Su Corrected
3B	CSA0246.D	VK916-FF3-B02	PAH-2002	15.0	74	26	NA	Su Corrected
3B	CSA0247.D	VK916-FF4-B01	PAH-2002	15.1	77	23	NA	Su Corrected
3B	CSA0248.D	VK916-FF4-B02	PAH-2002	15.2	78	23	NA	Su Corrected
3B	CSA0249.D	VK916-FF5-B01	PAH-2002	15.3	72	28	NA	Su Corrected
3B	CSA0250.D	VK916-FF5-B02	PAH-2002	15.2	70	30	NA	Su Corrected
3B	CSA0251.D	VK916-FF6-B01	PAH-2002	15.2	66	34	NA	Su Corrected
3B	CSA0252.D	VK916-FF6-B02	PAH-2002	15.0	75	25	NA	Su Corrected
3B	CSA0229.D	VK916-NF-B01	PAH-2002	15.0	75	25	100x	Su Corrected
3B	CSA0230.D	VK916-NF-B02	PAH-2002	15.2	76	24	NA	Su Corrected
3B	CSA0231.D	VK916-NF-B03	PAH-2002	15.0	77	23	NA	Su Corrected
3B	CSA0232.D	VK916-NF-B04	PAH-2002	15.0	75	25	NA	Su Corrected
3B	CSA0233.D	VK916-NF-B05	PAH-2002	15.0	70	30	100x	Su Corrected
3B	CSA0234.D	VK916-NF-B06	PAH-2002	15.2	53	47	100x	Su Corrected
3B	CSA0235.D	VK916-NF-B07	PAH-2002	15.4	68	32	100x	Su Corrected
3B	CSA0236.D	VK916-NF-B08	PAH-2002	15.1	72	28	NA	Su Corrected
3B	CSA0237.D	VK916-NF-B09	PAH-2002	15.1	69	31	NA	Su Corrected
3B	CSA0238.D	VK916-NF-B10	PAH-2002	15.0	73	27	NA	Su Corrected
3B	CSA0239.D	VK916-NF-B11	PAH-2002	15.0	81	19	NA	Su Corrected
3B	CSA0240.D	VK916-NF-B12	PAH-2002	15.2	78	22	NA	Su Corrected

Table H.5. Sediment polycyclic aromatic hydrocarbon data for Cruise 3B.

Cruise	Sample Name	Station	Naphthal	C1-Naphth	C2-Naphth	C3-Naphth	C4-Naphth
3B	CSA0253.D	VK916-DC-B1(0-2)	18.1	9.8	5.0	5.0	5.0
3B	CSA0254.D	VK916-DC-B1(2-4)	8.0	6.1	0.5	0.5	0.5
3B	CSA0255.D	VK916-DC-B1(4-6)	32.0	37.0	1.7	1.7	1.7
3B	CSA0256.D	VK916-DC-B1(6-8)	4.7	9.0	6.6	8.5	15.8
3B	CSA0257.D	VK916-DC-B1(8-10)	7.3	13.3	8.3	10.1	15.7
3B	CSA0258.D	VK916-DC-B2(0-2)	141.5	63.3	50.1	50.1	50.1
3B	CSA0259.D	VK916-DC-B2(2-4)	14.1	6.3	5.0	5.0	5.0
3B	CSA0260.D	VK916-DC-B2(4-6)	5.2	9.4	12.1	8.4	18.0
3B	CSA0261.D	VK916-DC-B2(6-8)	7.1	9.8	10.2	6.1	7.4
3B	CSA0262.D	VK916-DC-B2(8-10)	3.4	7.1	7.7	7.4	3.7
3B	CSA0263.D	VK916-DC-B3(0-2)	138.7	62.0	49.1	49.1	49.1
3B	CSA0264.D	VK916-DC-B3(2-4)	14.0	6.3	5.0	5.0	5.0
3B	CSA0265.D	VK916-DC-B3(4-6)	5.3	2.1	1.7	1.7	1.7
3B	CSA0266.D	VK916-DC-B3(6-8)	3.5	2.1	1.7	1.7	1.7
3B	CSA0267.D	VK916-DC-B3(8-10)	1.4	2.1	1.7	1.7	1.7
3B	CSA0241.D	VK916-FF1-B01	5.7	8.8	10.0	8.0	6.8
3B	CSA0242.D	VK916-FF1-B02	2.2	7.4	6.5	5.5	4.6
3B	CSA0243.D	VK916-FF2-B01	2.9	8.2	8.8	5.2	8.0
3B	CSA0244.D	VK916-FF2-B02	6.2	9.2	12.5	12.1	22.1
3B	CSA0245.D	VK916-FF3-B01	3.7	9.3	10.5	6.8	9.0
3B	CSA0246.D	VK916-FF3-B02	3.9	11.2	12.1	6.8	6.0
3B	CSA0247.D	VK916-FF4-B01	1.5	4.3	6.8	3.6	4.2
3B	CSA0248.D	VK916-FF4-B02	3.7	8.3	7.7	6.3	6.0
3B	CSA0249.D	VK916-FF5-B01	3.1	8.1	6.4	3.6	4.4
3B	CSA0250.D	VK916-FF5-B02	2.8	6.0	6.3	4.6	4.0
3B	CSA0251.D	VK916-FF6-B01	5.6	16.3	12.8	7.6	5.9
3B	CSA0252.D	VK916-FF6-B02	3.5	9.1	8.0	6.0	5.8
3B	CSA0229.D	VK916-NF-B01	47.5	21.2	16.8	16.8	16.8
3B	CSA0230.D	VK916-NF-B02	5.5	7.9	7.8	8.3	14.4
3B	CSA0231.D	VK916-NF-B03	4.7	4.5	12.4	1.7	1.7
3B	CSA0232.D	VK916-NF-B04	7.8	4.2	8.1	5.1	4.4
3B	CSA0233.D	VK916-NF-B05	47.4	21.2	16.8	16.8	16.8
3B	CSA0234.D	VK916-NF-B06	46.8	20.9	16.6	16.6	16.6
3B	CSA0235.D	VK916-NF-B07	46.3	20.7	16.4	16.4	16.4
3B	CSA0236.D	VK916-NF-B08	5.9	7.0	8.5	7.4	7.4
3B	CSA0237.D	VK916-NF-B09	7.6	9.1	9.1	5.9	3.1
3B	CSA0238.D	VK916-NF-B10	8.8	7.8	8.5	6.9	4.7
3B	CSA0239.D	VK916-NF-B11	7.9	7.6	8.0	5.8	5.5
3B	CSA0240.D	VK916-NF-B12	1.9	7.6	10.2	10.9	13.4

Table H.5. Sediment polycyclic aromatic hydrocarbon data for Cruise 3B.

Cruise	Sample Name	Station	Biphenyl	Acena_lene	Acen_thene	Fluorene	C1-Fluor	C2-Fluor
3B	CSA0253.D	VK916-DC-B1(0-2)	4.4	2.5	3.2	1.8	3.5	3.6
3B	CSA0254.D	VK916-DC-B1(2-4)	23.6	0.3	0.3	0.2	0.4	0.4
3B	CSA0255.D	VK916-DC-B1(4-6)	1.5	0.9	1.1	0.1	1.2	1.2
3B	CSA0256.D	VK916-DC-B1(6-8)	9.0	1.6	9.1	0.6	1.2	1.2
3B	CSA0257.D	VK916-DC-B1(8-10)	6.7	1.1	5.3	17.2	1	1
3B	CSA0258.D	VK916-DC-B2(0-2)	44.6	25.1	32.4	17.7	35.5	35.8
3B	CSA0259.D	VK916-DC-B2(2-4)	4.4	2.5	3.2	1.8	3.5	3.6
3B	CSA0260.D	VK916-DC-B2(4-6)	2.3	2.5	10.5	0.1	1	1
3B	CSA0261.D	VK916-DC-B2(6-8)	4.6	1.8	3.6	12.2	1.2	1.2
3B	CSA0262.D	VK916-DC-B2(8-10)	7.8	1.6	9.2	12.5	1.2	1.2
3B	CSA0263.D	VK916-DC-B3(0-2)	43.7	24.6	31.7	17.4	35	35
3B	CSA0264.D	VK916-DC-B3(2-4)	4.4	2.5	3.2	1.8	3.5	3.6
3B	CSA0265.D	VK916-DC-B3(4-6)	1.5	0.9	1.1	0.1	1.2	1.2
3B	CSA0266.D	VK916-DC-B3(6-8)	1.5	0.9	1.1	0.1	1.2	1.2
3B	CSA0267.D	VK916-DC-B3(8-10)	1.5	0.9	1.1	0.1	1.2	1.2
3B	CSA0241.D	VK916-FF1-B01	3.6	0.8	6.9	4.9	3.8	4.5
3B	CSA0242.D	VK916-FF1-B02	2.9	0.2	4.2	3.0	1	1
3B	CSA0243.D	VK916-FF2-B01	4.4	2.6	6.3	4.2	7.3	1.2
3B	CSA0244.D	VK916-FF2-B02	18.6	2.6	18.8	13.2	16.6	16.7
3B	CSA0245.D	VK916-FF3-B01	3.8	2.5	11.5	7.9	4.1	5.9
3B	CSA0246.D	VK916-FF3-B02	3.8	2.4	13.7	10.2	5.4	6.4
3B	CSA0247.D	VK916-FF4-B01	2.0	1.8	1.7	1.6	1.2	1.2
3B	CSA0248.D	VK916-FF4-B02	2.7	2.3	7.5	5.8	3.2	5.3
3B	CSA0249.D	VK916-FF5-B01	2.4	2.0	9.7	6.6	3.3	3.6
3B	CSA0250.D	VK916-FF5-B02	2.4	2.2	5.3	4.0	2.1	3.7
3B	CSA0251.D	VK916-FF6-B01	3.8	2.3	6.2	5.5	3.9	6.6
3B	CSA0252.D	VK916-FF6-B02	3.2	1.7	14.6	10.0	3.9	3.7
3B	CSA0229.D	VK916-NF-B01	15.0	8.4	10.9	6.0	11.9	12.00
3B	CSA0230.D	VK916-NF-B02	6.6	2.5	8.7	9.5	8	13
3B	CSA0231.D	VK916-NF-B03	14.8	1.1	12.3	10.4	1.2	1.2
3B	CSA0232.D	VK916-NF-B04	3.0	1.9	4.3	3.2	3.0	3.4
3B	CSA0233.D	VK916-NF-B05	15.0	8.4	10.9	6.0	12	12
3B	CSA0234.D	VK916-NF-B06	14.8	8.3	10.7	5.9	11.7	11.9
3B	CSA0235.D	VK916-NF-B07	14.6	8.2	10.6	0.8	11.6	11.7
3B	CSA0236.D	VK916-NF-B08	15.2	1.3	5.8	4.4	1.2	1.2
3B	CSA0237.D	VK916-NF-B09	3.2	2.4	6.5	5.0	1.2	1.2
3B	CSA0238.D	VK916-NF-B10	3.3	2.3	4.1	3.6	1.2	1.2
3B	CSA0239.D	VK916-NF-B11	2.5	1.7	5.3	4.2	1.2	1.2
3B	CSA0240.D	VK916-NF-B12	0.5	1.6	14.9	9.4	1.2	1.2

Table H.5. Sediment polycyclic aromatic hydrocarbon data for Cruise 3B.

Cruise	Sample Name	Station	C3-Fluor	Anthracene	Phenanthre	C1-PhenAnt	C2-PhenAnt
3B	CSA0253.D	VK916-DC-B1(0-2)	3.6	2.2	23.0	20.7	5.0
3B	CSA0254.D	VK916-DC-B1(2-4)	0.4	0.2	15.3	18.7	0.5
3B	CSA0255.D	VK916-DC-B1(4-6)	1.2	8.0	104	92.5	48.5
3B	CSA0256.D	VK916-DC-B1(6-8)	1	1.1	8.6	8.2	3.5
3B	CSA0257.D	VK916-DC-B1(8-10)	1	0.6	8.8	8.3	3.0
3B	CSA0258.D	VK916-DC-B2(0-2)	35.8	22.4	25.4	50.1	50.7
3B	CSA0259.D	VK916-DC-B2(2-4)	4	2.2	2.5	5.0	5.1
3B	CSA0260.D	VK916-DC-B2(4-6)	1	1.1	9.6	9.1	6.5
3B	CSA0261.D	VK916-DC-B2(6-8)	1.2	1.8	9.7	11.1	3.9
3B	CSA0262.D	VK916-DC-B2(8-10)	1.2	1.1	7.7	9.1	3.7
3B	CSA0263.D	VK916-DC-B3(0-2)	35	22.0	24.9	49.1	49.7
3B	CSA0264.D	VK916-DC-B3(2-4)	3.6	2.2	2.5	5.0	5.0
3B	CSA0265.D	VK916-DC-B3(4-6)	1.2	0.8	0.9	1.7	1.7
3B	CSA0266.D	VK916-DC-B3(6-8)	1.2	0.6	7.0	1.7	1.7
3B	CSA0267.D	VK916-DC-B3(8-10)	1.2	0.8	3.0	1.7	1.7
3B	CSA0241.D	VK916-FF1-B01	1.20	2.3	9.2	11.6	5.4
3B	CSA0242.D	VK916-FF1-B02	1	2.0	8.6	10.5	4.7
3B	CSA0243.D	VK916-FF2-B01	1.2	2.4	9.1	10.9	5.1
3B	CSA0244.D	VK916-FF2-B02	10.0	7.0	10.4	12.0	6.0
3B	CSA0245.D	VK916-FF3-B01	1.2	2.8	15.8	17.6	7.3
3B	CSA0246.D	VK916-FF3-B02	1.2	1.9	13.4	14.8	6.6
3B	CSA0247.D	VK916-FF4-B01	1.2	2.1	8.6	9.7	4.0
3B	CSA0248.D	VK916-FF4-B02	1.2	1.9	14.0	11.9	5.7
3B	CSA0249.D	VK916-FF5-B01	1.2	2.3	14.4	13.1	5.7
3B	CSA0250.D	VK916-FF5-B02	1.2	1.9	10.4	12.5	5.0
3B	CSA0251.D	VK916-FF6-B01	1.2	3.3	14.1	18.9	11.4
3B	CSA0252.D	VK916-FF6-B02	1.2	2.1	13.3	15.2	7.2
3B	CSA0229.D	VK916-NF-B01	12.00	7.5	8.5	16.8	17.0
3B	CSA0230.D	VK916-NF-B02	19	1.8	11.0	11.7	5.5
3B	CSA0231.D	VK916-NF-B03	1.2	1.3	10.1	10.7	4.8
3B	CSA0232.D	VK916-NF-B04	1.2	1.2	8.8	10.5	4.5
3B	CSA0233.D	VK916-NF-B05	12	7.5	8.5	16.8	17.0
3B	CSA0234.D	VK916-NF-B06	12	7.4	8.4	16.6	16.8
3B	CSA0235.D	VK916-NF-B07	11.7	7.3	8.3	16.4	16.6
3B	CSA0236.D	VK916-NF-B08	1.2	1.4	9.4	11.0	4.8
3B	CSA0237.D	VK916-NF-B09	1	2.1	11.7	11.0	12.6
3B	CSA0238.D	VK916-NF-B10	1.2	2.3	11.6	11.5	6.0
3B	CSA0239.D	VK916-NF-B11	1.2	1.8	11.1	12.5	5.5
3B	CSA0240.D	VK916-NF-B12	1.2	1.4	9.7	11.4	4.6

Table H.5. Sediment polycyclic aromatic hydrocarbon data for Cruise 3B.

Cruise	Sample Name	Station	C3-PhenAnt	C4-PhenAnt	Dibenzothi	C1-Dibenz	C2-Dibenz
3B	CSA0253.D	VK916-DC-B1(0-2)	5.0	5.0	2.3	4.6	4.6
3B	CSA0254.D	VK916-DC-B1(2-4)	0.5	0.5	0.3	0.5	0.5
3B	CSA0255.D	VK916-DC-B1(4-6)	31.4	1.7	0.8	1.6	1.6
3B	CSA0256.D	VK916-DC-B1(6-8)	2.6	1.1	0.6	1.6	1.6
3B	CSA0257.D	VK916-DC-B1(8-10)	0.9	1.2	0.3	1.6	1.6
3B	CSA0258.D	VK916-DC-B2(0-2)	50.7	50.7	23.5	46.9	46.2
3B	CSA0259.D	VK916-DC-B2(2-4)	5.1	5.1	2.3	4.7	4.6
3B	CSA0260.D	VK916-DC-B2(4-6)	1.7	1.7	0.8	1.6	1.6
3B	CSA0261.D	VK916-DC-B2(6-8)	2.6	1.2	1.0	1.6	1.6
3B	CSA0262.D	VK916-DC-B2(8-10)	2.8	1.9	1.1	1.6	1.6
3B	CSA0263.D	VK916-DC-B3(0-2)	49.7	49.7	23.0	46.0	45.3
3B	CSA0264.D	VK916-DC-B3(2-4)	5.0	5.0	2.3	4.7	4.6
3B	CSA0265.D	VK916-DC-B3(4-6)	1.7	1.7	0.8	1.6	1.6
3B	CSA0266.D	VK916-DC-B3(6-8)	1.7	1.7	0.8	1.6	1.6
3B	CSA0267.D	VK916-DC-B3(8-10)	1.7	1.7	0.8	1.6	1.6
3B	CSA0241.D	VK916-FF1-B01	4.0	1.7	1.4	3.3	2.7
3B	CSA0242.D	VK916-FF1-B02	3.2	2.7	1.1	2.5	2.8
3B	CSA0243.D	VK916-FF2-B01	3.3	2.4	1.0	3.2	2.9
3B	CSA0244.D	VK916-FF2-B02	5.0	2.4	1.5	13.4	8.0
3B	CSA0245.D	VK916-FF3-B01	4.7	3.9	2.2	5.2	6.0
3B	CSA0246.D	VK916-FF3-B02	4.3	1.8	1.8	4.5	4.8
3B	CSA0247.D	VK916-FF4-B01	2.8	2.3	1.0	1.7	1.9
3B	CSA0248.D	VK916-FF4-B02	3.9	1.7	1.6	3.9	3.0
3B	CSA0249.D	VK916-FF5-B01	3.2	2.5	1.4	3.7	4.1
3B	CSA0250.D	VK916-FF5-B02	4.2	1.3	1.4	2.6	3.3
3B	CSA0251.D	VK916-FF6-B01	7.3	3.8	1.7	4.4	5.0
3B	CSA0252.D	VK916-FF6-B02	5.3	3.2	1.4	5.8	5.1
3B	CSA0229.D	VK916-NF-B01	17.0	17.0	7.9	15.7	15.5
3B	CSA0230.D	VK916-NF-B02	4.0	1.7	3.9	22.2	48.5
3B	CSA0231.D	VK916-NF-B03	3.9	1.1	1.7	1.6	1.6
3B	CSA0232.D	VK916-NF-B04	3.8	2.4	1.0	1.4	2.5
3B	CSA0233.D	VK916-NF-B05	17.0	17.0	7.9	15.7	15.5
3B	CSA0234.D	VK916-NF-B06	16.8	16.8	7.8	15.5	15.3
3B	CSA0235.D	VK916-NF-B07	16.6	16.6	7.7	15.4	15.2
3B	CSA0236.D	VK916-NF-B08	3.6	1.7	1.3	1.6	1.6
3B	CSA0237.D	VK916-NF-B09	5.8	3.3	1.2	1.6	1.6
3B	CSA0238.D	VK916-NF-B10	3.8	1.0	1.0	1.4	1.6
3B	CSA0239.D	VK916-NF-B11	3.7	0.5	1.4	1.2	2.5
3B	CSA0240.D	VK916-NF-B12	4.4	2.2	1.7	1.6	1.6

Table H.5. Sediment polycyclic aromatic hydrocarbon data for Cruise 3B.

Cruise	Sample Name	Station	C3-Dibenz	Fluoranth	Pyrene	C1-FluorPyr	C2-FluorPyr
3B	CSA0253.D	VK916-DC-B1(0-2)	4.6	9.2	7.3	20.3	9.0
3B	CSA0254.D	VK916-DC-B1(2-4)	0.5	9.7	12.7	13.2	4.7
3B	CSA0255.D	VK916-DC-B1(4-6)	1.6	95.5	122.0	78.6	55.7
3B	CSA0256.D	VK916-DC-B1(6-8)	1.6	6.9	8.7	4.8	4.0
3B	CSA0257.D	VK916-DC-B1(8-10)	1.6	4.2	5.3	0.5	2.5
3B	CSA0258.D	VK916-DC-B2(0-2)	46.2	45.8	73.8	91.5	91.0
3B	CSA0259.D	VK916-DC-B2(2-4)	4.6	7.3	8.9	9.1	9.0
3B	CSA0260.D	VK916-DC-B2(4-6)	1.6	7.1	9.7	5.2	4.5
3B	CSA0261.D	VK916-DC-B2(6-8)	1.6	7.9	11.4	6.1	5.3
3B	CSA0262.D	VK916-DC-B2(8-10)	1.6	6.2	9.5	5.1	4.3
3B	CSA0263.D	VK916-DC-B3(0-2)	45.3	44.9	72.3	89.7	89.2
3B	CSA0264.D	VK916-DC-B3(2-4)	4.6	4.5	7.3	9.1	9.0
3B	CSA0265.D	VK916-DC-B3(4-6)	1.6	6.8	11.0	4.3	3.1
3B	CSA0266.D	VK916-DC-B3(6-8)	1.6	4.8	7.5	3.8	3.0
3B	CSA0267.D	VK916-DC-B3(8-10)	1.6	1.6	2.5	3.1	3.1
3B	CSA0241.D	VK916-FF1-B01	2.5	9.9	12.1	6.1	6.1
3B	CSA0242.D	VK916-FF1-B02	2.4	9.2	10.4	5.2	5.0
3B	CSA0243.D	VK916-FF2-B01	1.6	9.2	11.6	5.1	5.0
3B	CSA0244.D	VK916-FF2-B02	7.5	8.5	10.1	5.6	5.5
3B	CSA0245.D	VK916-FF3-B01	3.3	12.7	18.3	6.9	6.2
3B	CSA0246.D	VK916-FF3-B02	3.7	10.4	13.2	5.8	5.7
3B	CSA0247.D	VK916-FF4-B01	1.6	7.5	9.3	3.8	3.6
3B	CSA0248.D	VK916-FF4-B02	2.8	9.6	12.1	5.0	4.7
3B	CSA0249.D	VK916-FF5-B01	2.7	11.8	14.5	5.7	4.6
3B	CSA0250.D	VK916-FF5-B02	2.5	10.3	11.7	5.0	4.7
3B	CSA0251.D	VK916-FF6-B01	4.2	12.3	14.7	7.1	7.0
3B	CSA0252.D	VK916-FF6-B02	3.9	11.1	12.2	4.8	4.5
3B	CSA0229.D	VK916-NF-B01	15.5	15.4	24.8	30.7	30.5
3B	CSA0230.D	VK916-NF-B02	33.9	11.5	11.5	7.4	5.1
3B	CSA0231.D	VK916-NF-B03	1.6	9.8	10.7	6.3	7.0
3B	CSA0232.D	VK916-NF-B04	2.0	9.5	11.1	6.4	6.5
3B	CSA0233.D	VK916-NF-B05	15.5	15.3	24.7	30.7	30.5
3B	CSA0234.D	VK916-NF-B06	15.3	15.1	24.4	30.3	30.1
3B	CSA0235.D	VK916-NF-B07	15.2	15.0	24.2	30.0	29.8
3B	CSA0236.D	VK916-NF-B08	1.6	10.6	12.4	6.4	5.6
3B	CSA0237.D	VK916-NF-B09	1.6	10.9	14.0	7.8	8.8
3B	CSA0238.D	VK916-NF-B10	1.6	12.0	14.0	7.7	7.1
3B	CSA0239.D	VK916-NF-B11	2.0	11.6	12.4	6.5	6.3
3B	CSA0240.D	VK916-NF-B12	1.6	9.4	11.2	6.2	5.4

Table H.5. Sediment polycyclic aromatic hydrocarbon data for Cruise 3B.

Cruise	Sample Name	Station	C3-FluorPyr	Naphthoben	C1-Naphth	C2-Naphth	C3-Naphth
3B	CSA0253.D	VK916-DC-B1(0-2)	9.0	2.5	5.0	5.0	5.0
3B	CSA0254.D	VK916-DC-B1(2-4)	2.2	0.3	0.5	0.5	0.5
3B	CSA0255.D	VK916-DC-B1(4-6)	31.4	0.9	1.7	1.7	1.7
3B	CSA0256.D	VK916-DC-B1(6-8)	2.2	1.5	1.6	2.1	1.7
3B	CSA0257.D	VK916-DC-B1(8-10)	0.8	0.6	0.6	0.7	1.7
3B	CSA0258.D	VK916-DC-B2(0-2)	91.0	25.4	50.7	50.7	50.7
3B	CSA0259.D	VK916-DC-B2(2-4)	9.0	2.5	5.1	5.1	5.1
3B	CSA0260.D	VK916-DC-B2(4-6)	4.9	0.9	1.7	1.7	1.7
3B	CSA0261.D	VK916-DC-B2(6-8)	2.2	1.6	2.4	2.1	1.1
3B	CSA0262.D	VK916-DC-B2(8-10)	2.2	1.2	1.5	1.6	1.0
3B	CSA0263.D	VK916-DC-B3(0-2)	89.2	24.9	49.7	49.7	49.7
3B	CSA0264.D	VK916-DC-B3(2-4)	9.0	2.5	5.0	5.0	5.0
3B	CSA0265.D	VK916-DC-B3(4-6)	3.1	0.9	1.7	1.7	1.7
3B	CSA0266.D	VK916-DC-B3(6-8)	3.0	0.9	1.7	1.7	1.7
3B	CSA0267.D	VK916-DC-B3(8-10)	3.1	0.9	1.7	1.7	1.7
3B	CSA0241.D	VK916-FF1-B01	3.2	1.9	2.9	5.1	3.7
3B	CSA0242.D	VK916-FF1-B02	3.8	2.3	3.4	3.9	4.3
3B	CSA0243.D	VK916-FF2-B01	2.8	2.5	2.6	3.4	3.6
3B	CSA0244.D	VK916-FF2-B02	2.8	2.3	3.2	3.8	2.9
3B	CSA0245.D	VK916-FF3-B01	3.0	2.9	3.4	4.0	4.8
3B	CSA0246.D	VK916-FF3-B02	2.6	2.2	3.4	4.2	3.6
3B	CSA0247.D	VK916-FF4-B01	1.5	1.7	1.8	1.9	2.3
3B	CSA0248.D	VK916-FF4-B02	3.1	2.2	2.8	3.4	3.1
3B	CSA0249.D	VK916-FF5-B01	2.2	2.6	2.1	3.0	1.2
3B	CSA0250.D	VK916-FF5-B02	2.7	2.7	2.0	2.8	2.3
3B	CSA0251.D	VK916-FF6-B01	4.0	3.4	4.7	4.9	5.2
3B	CSA0252.D	VK916-FF6-B02	2.2	2.4	2.5	3.6	3.5
3B	CSA0229.D	VK916-NF-B01	30.5	8.5	17.0	17.0	17.0
3B	CSA0230.D	VK916-NF-B02	2.9	0.9	1.7	1.7	1.7
3B	CSA0231.D	VK916-NF-B03	4.8	1.9	2.4	2.9	2.6
3B	CSA0232.D	VK916-NF-B04	3.2	2.5	3.3	5.1	3.7
3B	CSA0233.D	VK916-NF-B05	30.5	8.5	17.0	17.0	17.0
3B	CSA0234.D	VK916-NF-B06	30.1	8.4	16.8	16.8	16.8
3B	CSA0235.D	VK916-NF-B07	29.8	8.3	16.6	16.6	16.6
3B	CSA0236.D	VK916-NF-B08	3.1	0.9	1.7	1.7	1.7
3B	CSA0237.D	VK916-NF-B09	4.9	2.4	3.4	3.7	2.4
3B	CSA0238.D	VK916-NF-B10	2.9	2.2	3.1	3.1	3.0
3B	CSA0239.D	VK916-NF-B11	2.5	2.8	2.5	3.4	2.2
3B	CSA0240.D	VK916-NF-B12	2.2	2.3	2.0	3.0	1.8

Table H.5. Sediment polycyclic aromatic hydrocarbon data for Cruise 3B.

Cruise	Sample Name	Station	Benz(a)ant	Chrysene	C1-Chrysen	C2-Chrysen	C3-Chrysen
3B	CSA0253.D	VK916-DC-B1(0-2)	2.7	3.5	7.0	7.1	7.1
3B	CSA0254.D	VK916-DC-B1(2-4)	4.4	7.2	6.9	0.7	0.7
3B	CSA0255.D	VK916-DC-B1(4-6)	38.5	62.1	60.6	53.4	2.4
3B	CSA0256.D	VK916-DC-B1(6-8)	2.7	4.6	4.0	4.9	2.4
3B	CSA0257.D	VK916-DC-B1(8-10)	1.3	2.3	2.2	4.7	2.4
3B	CSA0258.D	VK916-DC-B2(0-2)	27.1	35.5	70.9	71.6	71.6
3B	CSA0259.D	VK916-DC-B2(2-4)	1.1	12.9	7.1	7.1	7.1
3B	CSA0260.D	VK916-DC-B2(4-6)	3.2	4.3	2.4	2.4	2.4
3B	CSA0261.D	VK916-DC-B2(6-8)	3.7	6.0	5.9	4.3	2.4
3B	CSA0262.D	VK916-DC-B2(8-10)	2.7	4.9	4.6	5.3	2.4
3B	CSA0263.D	VK916-DC-B3(0-2)	26.6	34.8	69.5	70.2	70.2
3B	CSA0264.D	VK916-DC-B3(2-4)	2.7	3.5	7.0	7.1	7.1
3B	CSA0265.D	VK916-DC-B3(4-6)	3.0	3.8	2.4	2.4	2.4
3B	CSA0266.D	VK916-DC-B3(6-8)	2.5	3.7	2.4	2.4	2.4
3B	CSA0267.D	VK916-DC-B3(8-10)	1.3	2.0	2.4	2.4	2.4
3B	CSA0241.D	VK916-FF1-B01	5.7	9.3	9.2	6.3	2.4
3B	CSA0242.D	VK916-FF1-B02	5.4	10.6	10.0	9.6	2.4
3B	CSA0243.D	VK916-FF2-B01	4.9	8.4	8.3	7.5	2.4
3B	CSA0244.D	VK916-FF2-B02	5.9	10.2	9.4	8.1	2.4
3B	CSA0245.D	VK916-FF3-B01	5.6	8.5	8.0	7.3	2.4
3B	CSA0246.D	VK916-FF3-B02	5.9	9.9	10.3	8.7	2.4
3B	CSA0247.D	VK916-FF4-B01	4.4	7.7	6.7	6.9	2.4
3B	CSA0248.D	VK916-FF4-B02	6.6	10.9	8.7	7.7	2.4
3B	CSA0249.D	VK916-FF5-B01	7.6	12.0	9.8	7.2	2.4
3B	CSA0250.D	VK916-FF5-B02	6.8	10.2	8.8	8.0	2.4
3B	CSA0251.D	VK916-FF6-B01	7.0	10.2	10.3	11.8	0.3
3B	CSA0252.D	VK916-FF6-B02	5.6	9.7	9.5	11.5	0.3
3B	CSA0229.D	VK916-NF-B01	9.1	11.9	23.8	24.0	24.0
3B	CSA0230.D	VK916-NF-B02	5.4	7.9	7.2	3.7	2.4
3B	CSA0231.D	VK916-NF-B03	4.9	7.6	7.0	4.1	2.4
3B	CSA0232.D	VK916-NF-B04	5.3	7.4	6.9	5.3	2.4
3B	CSA0233.D	VK916-NF-B05	9.1	11.9	23.8	24.0	24.0
3B	CSA0234.D	VK916-NF-B06	9.0	11.7	23.4	23.7	23.7
3B	CSA0235.D	VK916-NF-B07	8.9	11.6	23.2	23.4	23.4
3B	CSA0236.D	VK916-NF-B08	4.4	7.3	8.4	7.7	2.4
3B	CSA0237.D	VK916-NF-B09	4.4	7.6	8.0	9.8	7.0
3B	CSA0238.D	VK916-NF-B10	5.0	8.2	6.9	5.5	2.4
3B	CSA0239.D	VK916-NF-B11	4.7	7.5	7.2	5.0	2.4
3B	CSA0240.D	VK916-NF-B12	4.2	6.1	5.4	4.7	2.4

Table H.5. Sediment polycyclic aromatic hydrocarbon data for Cruise 3B.

Cruise	Sample Name	Station	C4-Chrysen	Benzo(b)fl	Benzo(k)fl	Benzo(e)py	Benzo(a)py
3B	CSA0253.D	VK916-DC-B1(0-2)	7.1	3.8	4.2	3.6	3.7
3B	CSA0254.D	VK916-DC-B1(2-4)	0.7	10.1	1.6	9.7	3.6
3B	CSA0255.D	VK916-DC-B1(4-6)	2.4	107.0	53.3	79.0	40.0
3B	CSA0256.D	VK916-DC-B1(6-8)	2.4	9.9	4.0	6.7	3.8
3B	CSA0257.D	VK916-DC-B1(8-10)	2.4	5.6	1.6	3.0	1.6
3B	CSA0258.D	VK916-DC-B2(0-2)	71.6	38.3	42.2	36.2	36.9
3B	CSA0259.D	VK916-DC-B2(2-4)	7.1	3.8	4.2	3.6	3.7
3B	CSA0260.D	VK916-DC-B2(4-6)	2.4	6.4	4.8	8.1	5.8
3B	CSA0261.D	VK916-DC-B2(6-8)	2.4	9.5	7.1	7.4	4.8
3B	CSA0262.D	VK916-DC-B2(8-10)	2.4	11.3	3.1	6.4	3.5
3B	CSA0263.D	VK916-DC-B3(0-2)	70.2	37.5	41.4	35.5	36.2
3B	CSA0264.D	VK916-DC-B3(2-4)	7.1	3.8	4.2	3.6	3.7
3B	CSA0265.D	VK916-DC-B3(4-6)	2.4	1.3	1.4	1.2	1.3
3B	CSA0266.D	VK916-DC-B3(6-8)	2.4	1.3	1.4	1.2	1.2
3B	CSA0267.D	VK916-DC-B3(8-10)	2.4	1.3	1.4	1.2	1.3
3B	CSA0241.D	VK916-FF1-B01	2.4	9.3	3.9	5.5	4.8
3B	CSA0242.D	VK916-FF1-B02	2.4	10.8	5.1	7.1	5.7
3B	CSA0243.D	VK916-FF2-B01	2.4	10.8	4.1	6.3	5.6
3B	CSA0244.D	VK916-FF2-B02	2.4	10.8	5.2	6.7	5.3
3B	CSA0245.D	VK916-FF3-B01	2.4	13.3	6.5	8.0	7.0
3B	CSA0246.D	VK916-FF3-B02	2.4	13.5	6.9	8.6	7.5
3B	CSA0247.D	VK916-FF4-B01	2.4	9.6	4.6	6.0	4.9
3B	CSA0248.D	VK916-FF4-B02	2.4	12.2	6.3	7.8	6.8
3B	CSA0249.D	VK916-FF5-B01	2.4	15.3	10.7	10.0	11.2
3B	CSA0250.D	VK916-FF5-B02	2.4	12.7	7.2	7.8	7.0
3B	CSA0251.D	VK916-FF6-B01	0.3	11.3	6.6	6.9	6.6
3B	CSA0252.D	VK916-FF6-B02	0.3	13.6	8.0	9.2	7.1
3B	CSA0229.D	VK916-NF-B01	24.0	12.9	14.2	12.2	12.4
3B	CSA0230.D	VK916-NF-B02	2.4	11.0	4.3	7.0	3.5
3B	CSA0231.D	VK916-NF-B03	2.4	11.2	5.1	7.7	3.5
3B	CSA0232.D	VK916-NF-B04	2.4	10.3	5.0	6.9	4.5
3B	CSA0233.D	VK916-NF-B05	24.0	12.8	14.1	12.1	12.4
3B	CSA0234.D	VK916-NF-B06	23.7	12.7	14.0	12.0	12.2
3B	CSA0235.D	VK916-NF-B07	23.4	12.5	13.8	11.9	12.1
3B	CSA0236.D	VK916-NF-B08	2.4	12.6	3.2	8.0	5.6
3B	CSA0237.D	VK916-NF-B09	2.4	12.4	5.7	8.3	6.1
3B	CSA0238.D	VK916-NF-B10	2.4	14.1	3.7	8.2	6.1
3B	CSA0239.D	VK916-NF-B11	2.4	13.9	5.1	8.6	5.0
3B	CSA0240.D	VK916-NF-B12	2.4	12.5	4.3	6.7	4.7

Table H.5. Sediment polycyclic aromatic hydrocarbon data for Cruise 3B.

Cruise	Sample Name	Station	Perylene	Indeno(1,2	Dibenzo(a,	C1-Dibenzo	C2-Dibenzo
3B	CSA0253.D	VK916-DC-B1(0-2)	365	4.4	3.1	6.1	6.1
3B	CSA0254.D	VK916-DC-B1(2-4)	237	6.8	0.3	0.1	0.1
3B	CSA0255.D	VK916-DC-B1(4-6)	705	94.9	12.0	2.1	2.1
3B	CSA0256.D	VK916-DC-B1(6-8)	29.3	7.5	1.2	2.1	2.1
3B	CSA0257.D	VK916-DC-B1(8-10)	27.1	4.0	0.8	2.1	2.1
3B	CSA0258.D	VK916-DC-B2(0-2)	27.1	44.6	30.8	61.7	61.7
3B	CSA0259.D	VK916-DC-B2(2-4)	2.7	4.4	3.1	6.1	6.1
3B	CSA0260.D	VK916-DC-B2(4-6)	14.2	6.5	1.1	2.1	2.1
3B	CSA0261.D	VK916-DC-B2(6-8)	21.9	8.5	1.4	2.1	2.1
3B	CSA0262.D	VK916-DC-B2(8-10)	27.1	8.1	1.4	2.1	2.1
3B	CSA0263.D	VK916-DC-B3(0-2)	26.6	43.7	30.2	60.5	60.5
3B	CSA0264.D	VK916-DC-B3(2-4)	2.7	4.4	3.1	6.1	6.1
3B	CSA0265.D	VK916-DC-B3(4-6)	0.9	1.5	1.1	2.1	2.1
3B	CSA0266.D	VK916-DC-B3(6-8)	0.9	1.5	1.0	2.1	2.1
3B	CSA0267.D	VK916-DC-B3(8-10)	0.9	1.5	1.1	2.1	2.1
3B	CSA0241.D	VK916-FF1-B01	24.5	8.1	1.8	2.1	2.1
3B	CSA0242.D	VK916-FF1-B02	28.5	11.2	1.9	2.1	2.1
3B	CSA0243.D	VK916-FF2-B01	23.6	10.2	1.8	2.1	2.1
3B	CSA0244.D	VK916-FF2-B02	30.9	9.1	1.8	2.1	2.1
3B	CSA0245.D	VK916-FF3-B01	18.2	11.7	2.0	2.1	2.1
3B	CSA0246.D	VK916-FF3-B02	21.4	12.3	2.9	2.1	2.1
3B	CSA0247.D	VK916-FF4-B01	11.9	9.0	1.7	2.1	2.1
3B	CSA0248.D	VK916-FF4-B02	23.1	12.9	3.4	2.1	2.1
3B	CSA0249.D	VK916-FF5-B01	21.3	15.2	3.1	2.1	2.1
3B	CSA0250.D	VK916-FF5-B02	18.9	11.4	2.0	2.1	2.1
3B	CSA0251.D	VK916-FF6-B01	21.7	10.5	2.1	2.1	2.1
3B	CSA0252.D	VK916-FF6-B02	20.7	11.5	2.0	2.1	2.1
3B	CSA0229.D	VK916-NF-B01	9.1	15.0	10.4	20.7	20.7
3B	CSA0230.D	VK916-NF-B02	22.0	7.9	1.7	2.1	2.1
3B	CSA0231.D	VK916-NF-B03	26.6	8.0	1.7	2.1	2.1
3B	CSA0232.D	VK916-NF-B04	32.0	7.6	1.4	2.1	2.1
3B	CSA0233.D	VK916-NF-B05	9.1	15.0	10.3	20.7	20.7
3B	CSA0234.D	VK916-NF-B06	9.0	14.8	10.2	20.4	20.4
3B	CSA0235.D	VK916-NF-B07	8.9	14.6	10.1	20.2	20.2
3B	CSA0236.D	VK916-NF-B08	40.8	10.1	2.0	2.1	2.1
3B	CSA0237.D	VK916-NF-B09	20.1	8.4	1.0	2.1	2.1
3B	CSA0238.D	VK916-NF-B10	24.7	10.6	2.0	2.1	2.1
3B	CSA0239.D	VK916-NF-B11	28.5	10.1	1.8	2.1	2.1
3B	CSA0240.D	VK916-NF-B12	24.5	8.9	1.8	2.1	2.1

Table H.5. Sediment polycyclic aromatic hydrocarbon data for Cruise 3B.

Cruise	Sample Name	Station	C3-Dibenzo	Benzo(g,h,	Total PAHs	D2/P2	D3/P3	D2/C2
3B	CSA0253.D	VK916-DC-B1(0-2)	6.1	5.0	473	.	.	.
3B	CSA0254.D	VK916-DC-B1(2-4)	0.1	8.9	410	.	.	.
3B	CSA0255.D	VK916-DC-B1(4-6)	2.1	121.0	2163	.	.	.
3B	CSA0256.D	VK916-DC-B1(6-8)	2.1	9.4	212	.	.	.
3B	CSA0257.D	VK916-DC-B1(8-10)	2.1	4.5	182	.	.	.
3B	CSA0258.D	VK916-DC-B2(0-2)	61.7	50.0		.	.	.
3B	CSA0259.D	VK916-DC-B2(2-4)	6.1	5.0	30.2	.	.	.
3B	CSA0260.D	VK916-DC-B2(4-6)	2.1	8.3	190	.	.	.
3B	CSA0261.D	VK916-DC-B2(6-8)	2.1	10.3	225	.	.	.
3B	CSA0262.D	VK916-DC-B2(8-10)	2.1	8.9	208	.	.	.
3B	CSA0263.D	VK916-DC-B3(0-2)	60.5	49.1		.	.	.
3B	CSA0264.D	VK916-DC-B3(2-4)	6.1	5.0		.	.	.
3B	CSA0265.D	VK916-DC-B3(4-6)	2.1	1.7	34.2	.	.	.
3B	CSA0266.D	VK916-DC-B3(6-8)	2.1	1.7	33.4	.	.	.
3B	CSA0267.D	VK916-DC-B3(8-10)	2.1	1.7	11.8	.	.	.
3B	CSA0241.D	VK916-FF1-B01	2.1	8.2	257	.	.	.
3B	CSA0242.D	VK916-FF1-B02	2.1	12.1	243	.	.	.
3B	CSA0243.D	VK916-FF2-B01	2.1	10.0	247	.	.	.
3B	CSA0244.D	VK916-FF2-B02	2.1	9.0	399	.	.	.
3B	CSA0245.D	VK916-FF3-B01	2.1	11.3	315	.	.	.
3B	CSA0246.D	VK916-FF3-B02	2.1	12.4	316	.	.	.
3B	CSA0247.D	VK916-FF4-B01	2.1	9.6	181	.	.	.
3B	CSA0248.D	VK916-FF4-B02	2.1	13.1	278	.	.	.
3B	CSA0249.D	VK916-FF5-B01	2.1	15.6	297	.	.	.
3B	CSA0250.D	VK916-FF5-B02	2.1	11.7	248	.	.	.
3B	CSA0251.D	VK916-FF6-B01	2.1	10.2	335	.	.	.
3B	CSA0252.D	VK916-FF6-B02	2.1	12.9	305	.	.	.
3B	CSA0229.D	VK916-NF-B01	20.7	16.8		.	.	.
3B	CSA0230.D	VK916-NF-B02	2.1	9.3	437	.	.	.
3B	CSA0231.D	VK916-NF-B03	2.1	10.6	275	.	.	.
3B	CSA0232.D	VK916-NF-B04	2.1	9.5	244	.	.	.
3B	CSA0233.D	VK916-NF-B05	20.7	16.8		.	.	.
3B	CSA0234.D	VK916-NF-B06	20.4	16.6		.	.	.
3B	CSA0235.D	VK916-NF-B07	20.2	16.4		.	.	.
3B	CSA0236.D	VK916-NF-B08	2.1	12.5	252	.	.	.
3B	CSA0237.D	VK916-NF-B09	2.1	11.7	268	.	.	.
3B	CSA0238.D	VK916-NF-B10	2.1	12.6	254	.	.	.
3B	CSA0239.D	VK916-NF-B11	2.1	12.5	254	.	.	.
3B	CSA0240.D	VK916-NF-B12	2.1	10.1	250	.	.	.

Table H.5. Sediment polycyclic aromatic hydrocarbon data for Cruise 3B.

Cruise	Sample Name	Station	D3/C3	2-Methylna	1-Methylna	2,6-Dimeth	1,6,7-Trim
3B	CSA0253.D	VK916-DC-B1(0-2)	.	12.1	4.7	2.5	2.3
3B	CSA0254.D	VK916-DC-B1(2-4)	.	6.5	3.8	0.3	0.3
3B	CSA0255.D	VK916-DC-B1(4-6)	.	36.0	28.4	0.9	0.8
3B	CSA0256.D	VK916-DC-B1(6-8)	.	14.2	3.2	3.7	2.2
3B	CSA0257.D	VK916-DC-B1(8-10)	.	21.6	3.3	4.6	0.3
3B	CSA0258.D	VK916-DC-B2(0-2)	.	36.2	27.1	25.1	22.9
3B	CSA0259.D	VK916-DC-B2(2-4)	.	3.6	2.7	2.5	2.3
3B	CSA0260.D	VK916-DC-B2(4-6)	.	11.0	3.4	4.5	1.2
3B	CSA0261.D	VK916-DC-B2(6-8)	.	15.1	3.4	4.1	0.9
3B	CSA0262.D	VK916-DC-B2(8-10)	.	10.8	2.4	2.8	1.2
3B	CSA0263.D	VK916-DC-B3(0-2)	.	35.5	26.6	24.6	22.4
3B	CSA0264.D	VK916-DC-B3(2-4)	.	3.6	2.7	2.5	2.3
3B	CSA0265.D	VK916-DC-B3(4-6)	.	4.2	3.2	0.9	0.8
3B	CSA0266.D	VK916-DC-B3(6-8)	.	2.0	1.1	0.9	0.8
3B	CSA0267.D	VK916-DC-B3(8-10)	.	1.2	1.2	0.9	0.8
3B	CSA0241.D	VK916-FF1-B01	.	15.5	4.3	4.0	1.9
3B	CSA0242.D	VK916-FF1-B02	.	11.4	3.6	3.1	1.5
3B	CSA0243.D	VK916-FF2-B01	.	15.0	4.4	4.0	1.0
3B	CSA0244.D	VK916-FF2-B02	.	17.5	4.4	4.9	1.2
3B	CSA0245.D	VK916-FF3-B01	.	17.1	3.8	4.5	0.5
3B	CSA0246.D	VK916-FF3-B02	.	17.0	4.1	4.7	0.5
3B	CSA0247.D	VK916-FF4-B01	.	7.7	2.8	2.6	0.6
3B	CSA0248.D	VK916-FF4-B02	.	11.9	3.3	3.8	0.5
3B	CSA0249.D	VK916-FF5-B01	.	11.4	2.7	3.1	0.5
3B	CSA0250.D	VK916-FF5-B02	.	9.0	2.6	3.1	0.4
3B	CSA0251.D	VK916-FF6-B01	.	22.6	8.7	6.3	0.6
3B	CSA0252.D	VK916-FF6-B02	.	14.0	3.3	3.7	1.1
3B	CSA0229.D	VK916-NF-B01	.	12.2	9.1	8.4	7.7
3B	CSA0230.D	VK916-NF-B02	.	10.9	3.8	4.2	1.4
3B	CSA0231.D	VK916-NF-B03	.	5.2	3.4	4.3	0.8
3B	CSA0232.D	VK916-NF-B04	.	4.7	2.9	3.2	1.1
3B	CSA0233.D	VK916-NF-B05	.	12.1	9.1	8.4	7.7
3B	CSA0234.D	VK916-NF-B06	.	12.0	9.0	8.3	7.6
3B	CSA0235.D	VK916-NF-B07	.	11.9	8.9	8.2	7.5
3B	CSA0236.D	VK916-NF-B08	.	7.7	2.7	3.6	0.9
3B	CSA0237.D	VK916-NF-B09	.	12.6	4.1	4.5	1.4
3B	CSA0238.D	VK916-NF-B10	.	8.4	3.2	3.8	0.8
3B	CSA0239.D	VK916-NF-B11	.	10.2	3.3	3.7	1.3
3B	CSA0240.D	VK916-NF-B12	.	10.4	3.3	5.4	1.5

Table H.5. Sediment polycyclic aromatic hydrocarbon data for Cruise 3B.

Cruise	Sample Name	Station	1-Methylph	17a, 21b	Surrogate	Naphthalen	Acenaphthe
3B	CSA0253.D	VK916-DC-B1(0-2)	7.6	14.7	Su Recovery (%)	84	88
3B	CSA0254.D	VK916-DC-B1(2-4)	2.2	42.1	Su Recovery (%)	84	89
3B	CSA0255.D	VK916-DC-B1(4-6)	24.4	442.0	Su Recovery (%)	79	81
3B	CSA0256.D	VK916-DC-B1(6-8)	1.5	32.0	Su Recovery (%)	97	88
3B	CSA0257.D	VK916-DC-B1(8-10)	1.2	14.9	Su Recovery (%)	89	84
3B	CSA0258.D	VK916-DC-B2(0-2)	25.1	149.1	Su Recovery (%)	97	97
3B	CSA0259.D	VK916-DC-B2(2-4)	2.5	14.8	Su Recovery (%)	91	91
3B	CSA0260.D	VK916-DC-B2(4-6)	3.2	5.0	Su Recovery (%)	86	94
3B	CSA0261.D	VK916-DC-B2(6-8)	1.7	32.0	Su Recovery (%)	86	81
3B	CSA0262.D	VK916-DC-B2(8-10)	1.8	25.8	Su Recovery (%)	64	61
3B	CSA0263.D	VK916-DC-B3(0-2)	24.6	146.2	Su Recovery (%)	81	86
3B	CSA0264.D	VK916-DC-B3(2-4)	2.5	14.8	Su Recovery (%)	87	93
3B	CSA0265.D	VK916-DC-B3(4-6)	0.9	5.0	Su Recovery (%)	82	88
3B	CSA0266.D	VK916-DC-B3(6-8)	0.9	5.0	Su Recovery (%)	90	94
3B	CSA0267.D	VK916-DC-B3(8-10)	0.9	5.0	Su Recovery (%)	87	91
3B	CSA0241.D	VK916-FF1-B01	1.9	23.5	Su Recovery (%)	84	80
3B	CSA0242.D	VK916-FF1-B02	1.8	32.3	Su Recovery (%)	91	95
3B	CSA0243.D	VK916-FF2-B01	1.6	28.8	Su Recovery (%)	86	77
3B	CSA0244.D	VK916-FF2-B02	1.7	30.7	Su Recovery (%)	69	63
3B	CSA0245.D	VK916-FF3-B01	3.0	32.4	Su Recovery (%)	75	72
3B	CSA0246.D	VK916-FF3-B02	2.3	40.4	Su Recovery (%)	64	74
3B	CSA0247.D	VK916-FF4-B01	1.7	25.9	Su Recovery (%)	96	83
3B	CSA0248.D	VK916-FF4-B02	2.6	0.5	Su Recovery (%)	71	84
3B	CSA0249.D	VK916-FF5-B01	2.2	50.6	Su Recovery (%)	71	89
3B	CSA0250.D	VK916-FF5-B02	2.1	38.4	Su Recovery (%)	81	89
3B	CSA0251.D	VK916-FF6-B01	3.5	35.6	Su Recovery (%)	76	84
3B	CSA0252.D	VK916-FF6-B02	3.0	67.7	Su Recovery (%)	70	79
3B	CSA0229.D	VK916-NF-B01	8.4	50.0	Su Recovery (%)	85	91
3B	CSA0230.D	VK916-NF-B02	2.0	55.0	Su Recovery (%)	95	93
3B	CSA0231.D	VK916-NF-B03	1.7	42.8	Su Recovery (%)	89	83
3B	CSA0232.D	VK916-NF-B04	1.6	36.2	Su Recovery (%)	91	89
3B	CSA0233.D	VK916-NF-B05	8.4	50.0	Su Recovery (%)	87	91
3B	CSA0234.D	VK916-NF-B06	8.3	49.3	Su Recovery (%)	82	89
3B	CSA0235.D	VK916-NF-B07	8.2	48.8	Su Recovery (%)	75	90
3B	CSA0236.D	VK916-NF-B08	2.2	51.9	Su Recovery (%)	67	82
3B	CSA0237.D	VK916-NF-B09	2.0	49.9	Su Recovery (%)	95	90
3B	CSA0238.D	VK916-NF-B10	2.0	50.8	Su Recovery (%)	70	84
3B	CSA0239.D	VK916-NF-B11	1.9	58.1	Su Recovery (%)	88	89
3B	CSA0240.D	VK916-NF-B12	1.8	39.4	Su Recovery (%)	91	91

Table H.5. Sediment polycyclic aromatic hydrocarbon data for Cruise 3B.

Cruise	Sample Name	Station	Phenanthre	Chrysene-d	Perylene-d
3B	CSA0253.D	VK916-DC-B1(0-2)	94	92	101
3B	CSA0254.D	VK916-DC-B1(2-4)	96	87	90
3B	CSA0255.D	VK916-DC-B1(4-6)	84	87	94
3B	CSA0256.D	VK916-DC-B1(6-8)	96	96	99
3B	CSA0257.D	VK916-DC-B1(8-10)	93	95	90
3B	CSA0258.D	VK916-DC-B2(0-2)	85	88	90
3B	CSA0259.D	VK916-DC-B2(2-4)	87	90	100
3B	CSA0260.D	VK916-DC-B2(4-6)	85	98	99
3B	CSA0261.D	VK916-DC-B2(6-8)	97	92	88
3B	CSA0262.D	VK916-DC-B2(8-10)	70	69	72
3B	CSA0263.D	VK916-DC-B3(0-2)	88	87	94
3B	CSA0264.D	VK916-DC-B3(2-4)	82	82	92
3B	CSA0265.D	VK916-DC-B3(4-6)	78	82	94
3B	CSA0266.D	VK916-DC-B3(6-8)	81	80	92
3B	CSA0267.D	VK916-DC-B3(8-10)	79	79	90
3B	CSA0241.D	VK916-FF1-B01	89	99	52
3B	CSA0242.D	VK916-FF1-B02	99	87	46
3B	CSA0243.D	VK916-FF2-B01	88	85	70
3B	CSA0244.D	VK916-FF2-B02	89	80	48
3B	CSA0245.D	VK916-FF3-B01	71	80	85
3B	CSA0246.D	VK916-FF3-B02	89	73	72
3B	CSA0247.D	VK916-FF4-B01	81	68	67
3B	CSA0248.D	VK916-FF4-B02	90	73	54
3B	CSA0249.D	VK916-FF5-B01	95	68	71
3B	CSA0250.D	VK916-FF5-B02	83	70	68
3B	CSA0251.D	VK916-FF6-B01	76	82	78
3B	CSA0252.D	VK916-FF6-B02	83	65	59
3B	CSA0229.D	VK916-NF-B01	83	89	96
3B	CSA0230.D	VK916-NF-B02	89	96	48
3B	CSA0231.D	VK916-NF-B03	100	93	47
3B	CSA0232.D	VK916-NF-B04	94	89	50
3B	CSA0233.D	VK916-NF-B05	95	99	100
3B	CSA0234.D	VK916-NF-B06	89	98	75
3B	CSA0235.D	VK916-NF-B07	89	90	96
3B	CSA0236.D	VK916-NF-B08	90	92	72
3B	CSA0237.D	VK916-NF-B09	95	97	91
3B	CSA0238.D	VK916-NF-B10	91	97	74
3B	CSA0239.D	VK916-NF-B11	84	85	49
3B	CSA0240.D	VK916-NF-B12	89	88	75

Table H.6. Sediment total petroleum hydrocarbon data for Cruise 3B.

Cruise	Sample No.	Station	Collection Date	Received Date	Extraction Date	Extraction Batch	Date Acquired
3B	CSA0229	VK916-NF-B01	8/7/2002	8/15/2002	9/2/2002	ENV632	10/1/2002
3B	CSA0230	VK916-NF-B02	8/8/2002	8/15/2002	9/2/2002	ENV632	9/7/2002
3B	CSA0231	VK916-NF-B03	8/8/2002	8/15/2002	9/2/2002	ENV632	9/7/2002
3B	CSA0232	VK916-NF-B04	8/8/2002	8/15/2002	9/2/2002	ENV632	9/7/2002
3B	CSA0233	VK916-NF-B05	8/8/2002	8/15/2002	9/2/2002	ENV632	10/1/2002
3B	CSA0234	VK916-NF-B06	8/8/2002	8/15/2002	9/2/2002	ENV632	10/1/2002
3B	CSA0235	VK916-NF-B07	8/8/2002	8/15/2002	9/2/2002	ENV632	10/1/2002
3B	CSA0236	VK916-NF-B08	8/8/2002	8/15/2002	9/2/2002	ENV632	9/7/2002
3B	CSA0237	VK916-NF-B09	8/8/2002	8/15/2002	8/28/2002	ENV631	9/6/2002
3B	CSA0238	VK916-NF-B10	8/9/2002	8/15/2002	9/2/2002	ENV632	9/7/2002
3B	CSA0239	VK916-NF-B11	8/9/2002	8/15/2002	9/2/2002	ENV632	9/7/2002
3B	CSA0240	VK916-NF-B12	8/10/2002	8/15/2002	9/2/2002	ENV632	9/7/2002
3B	CSA0241	VK916-FF1-B01	8/7/2002	8/15/2002	8/28/2002	ENV630	9/3/2002
3B	CSA0242	VK916-FF1-B02	8/7/2002	8/15/2002	8/28/2002	ENV630	9/3/2002
3B	CSA0243	VK916-FF2-B01	8/7/2002	8/15/2002	8/28/2002	ENV630	9/4/2002
3B	CSA0244	VK916-FF2-B02	8/7/2002	8/15/2002	8/28/2002	ENV630	9/4/2002
3B	CSA0245	VK916-FF3-B01	8/9/2002	8/15/2002	8/28/2002	ENV630	9/4/2002
3B	CSA0246	VK916-FF3-B02	8/9/2002	8/15/2002	8/28/2002	ENV630	9/4/2002
3B	CSA0247	VK916-FF4-B01	8/9/2002	8/15/2002	8/28/2002	ENV630	9/4/2002
3B	CSA0248	VK916-FF4-B02	8/9/2002	8/15/2002	8/28/2002	ENV630	9/4/2002
3B	CSA0249	VK916-FF5-B01	8/9/2002	8/15/2002	8/28/2002	ENV630	9/4/2002
3B	CSA0250	VK916-FF5-B02	8/9/2002	8/15/2002	8/28/2002	ENV630	9/4/2002
3B	CSA0251	VK916-FF6-B01	8/9/2002	8/15/2002	8/28/2002	ENV630	9/4/2002
3B	CSA0252	VK916-FF6-B02	8/9/2002	8/15/2002	8/28/2002	ENV630	9/4/2002
3B	CSA0253	VK916-DC-B1 (0-2)	8/8/2002	8/15/2002	8/28/2002	ENV631	10/1/2002
3B	CSA0254	VK916-DC-B1 (2-4)	8/8/2002	8/15/2002	8/28/2002	ENV631	10/1/2002
3B	CSA0255	VK916-DC-B1 (4-6)	8/8/2002	8/15/2002	8/28/2002	ENV631	9/5/2002
3B	CSA0256	VK916-DC-B1 (6-8)	8/8/2002	8/15/2002	8/28/2002	ENV631	9/5/2002
3B	CSA0257	VK916-DC-B1 (8-10)	8/8/2002	8/15/2002	8/28/2002	ENV631	9/5/2002
3B	CSA0258	VK916-DC-B2 (0-2)	8/8/2002	8/15/2002	8/28/2002	ENV631	10/1/2002
3B	CSA0259	VK916-DC-B2 (2-4)	8/8/2002	8/15/2002	8/28/2002	ENV631	9/6/2002
3B	CSA0260	VK916-DC-B2 (4-6)	8/8/2002	8/15/2002	8/28/2002	ENV631	9/5/2002
3B	CSA0261	VK916-DC-B2 (6-8)	8/8/2002	8/15/2002	8/28/2002	ENV631	9/5/2002
3B	CSA0262	VK916-DC-B2 (8-10)	8/8/2002	8/15/2002	8/28/2002	ENV631	9/5/2002
3B	CSA0263	VK916-DC-B3 (0-2)	8/8/2002	8/15/2002	8/28/2002	ENV631	10/1/2002
3B	CSA0264	VK916-DC-B3 (2-4)	8/8/2002	8/15/2002	8/28/2002	ENV631	9/6/2002
3B	CSA0265	VK916-DC-B3 (4-6)	8/8/2002	8/15/2002	8/28/2002	ENV631	9/5/2002
3B	CSA0266	VK916-DC-B3 (6-8)	8/8/2002	8/15/2002	8/28/2002	ENV631	9/5/2002
3B	CSA0267	VK916-DC-B3 (8-10)	8/8/2002	8/15/2002	8/28/2002	ENV631	9/5/2002

Table H.6. Sediment total petroleum hydrocarbon data for Cruise 3B.

Cruise	Sample No.	Station	Method	Dry Wt (g)	% Moisture	% Dry	Dilution
3B	CSA0229	VK916-NF-B01	ALI_COMP.M	15.0	75	25	20x
3B	CSA0230	VK916-NF-B02	ALI_COMP.M	15.2	76	24	NA
3B	CSA0231	VK916-NF-B03	ALI_COMP.M	15.0	77	23	NA
3B	CSA0232	VK916-NF-B04	ALI_COMP.M	15.0	75	25	NA
3B	CSA0233	VK916-NF-B05	ALI_COMP.M	15.0	70	30	20x
3B	CSA0234	VK916-NF-B06	ALI_COMP.M	15.2	53	47	40x
3B	CSA0235	VK916-NF-B07	ALI_COMP.M	15.4	68	32	NA
3B	CSA0236	VK916-NF-B08	ALI_COMP.M	15.1	72	28	NA
3B	CSA0237	VK916-NF-B09	ALI_COMP.M	15.1	69	31	NA
3B	CSA0238	VK916-NF-B10	ALI_COMP.M	15.0	73	27	NA
3B	CSA0239	VK916-NF-B11	ALI_COMP.M	15.0	81	19	NA
3B	CSA0240	VK916-NF-B12	ALI_COMP.M	15.2	78	22	NA
3B	CSA0241	VK916-FF1-B01	ALI_COMP.M	15.0	76	24	NA
3B	CSA0242	VK916-FF1-B02	ALI_COMP.M	15.0	78	22	NA
3B	CSA0243	VK916-FF2-B01	ALI_COMP.M	15.1	71	29	NA
3B	CSA0244	VK916-FF2-B02	ALI_COMP.M	15.3	78	22	NA
3B	CSA0245	VK916-FF3-B01	ALI_COMP.M	15.1	72	28	NA
3B	CSA0246	VK916-FF3-B02	ALI_COMP.M	15.0	74	26	NA
3B	CSA0247	VK916-FF4-B01	ALI_COMP.M	15.1	77	23	NA
3B	CSA0248	VK916-FF4-B02	ALI_COMP.M	15.2	78	23	NA
3B	CSA0249	VK916-FF5-B01	ALI_COMP.M	15.3	72	28	NA
3B	CSA0250	VK916-FF5-B02	ALI_COMP.M	15.2	70	30	NA
3B	CSA0251	VK916-FF6-B01	ALI_COMP.M	15.2	66	34	NA
3B	CSA0252	VK916-FF6-B02	ALI_COMP.M	15.0	75	25	NA
3B	CSA0253	VK916-DC-B1 (0-2)	ALI_COMP.M	5.1	50	50	10x
3B	CSA0254	VK916-DC-B1 (2-4)	ALI_COMP.M	5.0	62	38	10x
3B	CSA0255	VK916-DC-B1 (4-6)	ALI_COMP.M	15.1	68	32	NA
3B	CSA0256	VK916-DC-B1 (6-8)	ALI_COMP.M	15.0	65	35	NA
3B	CSA0257	VK916-DC-B1 (8-10)	ALI_COMP.M	15.1	61	39	NA
3B	CSA0258	VK916-DC-B2 (0-2)	ALI_COMP.M	5.0	69	31	20x
3B	CSA0259	VK916-DC-B2 (2-4)	ALI_COMP.M	5.1	73	27	NA
3B	CSA0260	VK916-DC-B2 (4-6)	ALI_COMP.M	15.1	69	31	NA
3B	CSA0261	VK916-DC-B2 (6-8)	ALI_COMP.M	15.1	65	35	NA
3B	CSA0262	VK916-DC-B2 (8-10)	ALI_COMP.M	15.0	64	36	NA
3B	CSA0263	VK916-DC-B3 (0-2)	ALI_COMP.M	5.1	68	32	20x
3B	CSA0264	VK916-DC-B3 (2-4)	ALI_COMP.M	5.1	72	28	NA
3B	CSA0265	VK916-DC-B3 (4-6)	ALI_COMP.M	15.1	67	33	NA
3B	CSA0266	VK916-DC-B3 (6-8)	ALI_COMP.M	15.2	64	36	NA
3B	CSA0267	VK916-DC-B3 (8-10)	ALI_COMP.M	15.1	63	37	NA

Table H.6. Sediment total petroleum hydrocarbon data for Cruise 3B.

Cruise	Sample No.	Station	Target Compounds	Total Petroleum Hydrocarbon	Total Resolved Hydrocarbon
3B	CSA0229	VK916-NF-B01	Su Corrected	10908	9980
3B	CSA0230	VK916-NF-B02	Su Corrected	271	207
3B	CSA0231	VK916-NF-B03	Su Corrected	841	690
3B	CSA0232	VK916-NF-B04	Su Corrected	20	6
3B	CSA0233	VK916-NF-B05	Su Corrected	7041	6466
3B	CSA0234	VK916-NF-B06	Su Corrected	21678	20138
3B	CSA0235	VK916-NF-B07	Su Corrected	50460	47222
3B	CSA0236	VK916-NF-B08	Su Corrected	52	31
3B	CSA0237	VK916-NF-B09	Su Corrected	32	16
3B	CSA0238	VK916-NF-B10	Su Corrected	33	8
3B	CSA0239	VK916-NF-B11	Su Corrected	29	6
3B	CSA0240	VK916-NF-B12	Su Corrected	132	84
3B	CSA0241	VK916-FF1-B01	Su Corrected	28	9
3B	CSA0242	VK916-FF1-B02	Su Corrected	23	7
3B	CSA0243	VK916-FF2-B01	Su Corrected	30	12
3B	CSA0244	VK916-FF2-B02	Su Corrected	149	103
3B	CSA0245	VK916-FF3-B01	Su Corrected	31	12
3B	CSA0246	VK916-FF3-B02	Su Corrected	30	13
3B	CSA0247	VK916-FF4-B01	Su Corrected	10	2
3B	CSA0248	VK916-FF4-B02	Su Corrected	25	10
3B	CSA0249	VK916-FF5-B01	Su Corrected	27	10
3B	CSA0250	VK916-FF5-B02	Su Corrected	19	5
3B	CSA0251	VK916-FF6-B01	Su Corrected	29	11
3B	CSA0252	VK916-FF6-B02	Su Corrected	29	13
3B	CSA0253	VK916-DC-B1 (0-2)	Su Corrected	11095	10398
3B	CSA0254	VK916-DC-B1 (2-4)	Su Corrected	4324	3849
3B	CSA0255	VK916-DC-B1 (4-6)	Su Corrected	967	901
3B	CSA0256	VK916-DC-B1 (6-8)	Su Corrected	297	264
3B	CSA0257	VK916-DC-B1 (8-10)	Su Corrected	195	161
3B	CSA0258	VK916-DC-B2 (0-2)	Su Corrected	29650	27829
3B	CSA0259	VK916-DC-B2 (2-4)	Su Corrected	1712	1599
3B	CSA0260	VK916-DC-B2 (4-6)	Su Corrected	500	449
3B	CSA0261	VK916-DC-B2 (6-8)	Su Corrected	173	147
3B	CSA0262	VK916-DC-B2 (8-10)	Su Corrected	298	260
3B	CSA0263	VK916-DC-B3 (0-2)	Su Corrected	28900	27105
3B	CSA0264	VK916-DC-B3 (2-4)	Su Corrected	1471	1338
3B	CSA0265	VK916-DC-B3 (4-6)	Su Corrected	813	741
3B	CSA0266	VK916-DC-B3 (6-8)	Su Corrected	804	744
3B	CSA0267	VK916-DC-B3 (8-10)	Su Corrected	608	559

Table H.6. Sediment total petroleum hydrocarbon data for Cruise 3B.

Cruise	Sample No.	Station	Unresolved Complex Mixture	Total Petroleum Hydrocarbon (Non-SBM Range)
3B	CSA0229	VK916-NF-B01	928	625
3B	CSA0230	VK916-NF-B02	64	42
3B	CSA0231	VK916-NF-B03	151	89
3B	CSA0232	VK916-NF-B04	14	13
3B	CSA0233	VK916-NF-B05	575	481
3B	CSA0234	VK916-NF-B06	1540	1314
3B	CSA0235	VK916-NF-B07	3238	2541
3B	CSA0236	VK916-NF-B08	21	16
3B	CSA0237	VK916-NF-B09	16	14
3B	CSA0238	VK916-NF-B10	25	24
3B	CSA0239	VK916-NF-B11	23	22
3B	CSA0240	VK916-NF-B12	48	34
3B	CSA0241	VK916-FF1-B01	19	18
3B	CSA0242	VK916-FF1-B02	16	16
3B	CSA0243	VK916-FF2-B01	18	17
3B	CSA0244	VK916-FF2-B02	45	38
3B	CSA0245	VK916-FF3-B01	19	19
3B	CSA0246	VK916-FF3-B02	17	17
3B	CSA0247	VK916-FF4-B01	8	8
3B	CSA0248	VK916-FF4-B02	15	16
3B	CSA0249	VK916-FF5-B01	17	16
3B	CSA0250	VK916-FF5-B02	13	13
3B	CSA0251	VK916-FF6-B01	18	18
3B	CSA0252	VK916-FF6-B02	16	15
3B	CSA0253	VK916-DC-B1 (0-2)	698	665
3B	CSA0254	VK916-DC-B1 (2-4)	475	421
3B	CSA0255	VK916-DC-B1 (4-6)	66	28
3B	CSA0256	VK916-DC-B1 (6-8)	33	15
3B	CSA0257	VK916-DC-B1 (8-10)	34	17
3B	CSA0258	VK916-DC-B2 (0-2)	1820	1511
3B	CSA0259	VK916-DC-B2 (2-4)	113	40
3B	CSA0260	VK916-DC-B2 (4-6)	51	40
3B	CSA0261	VK916-DC-B2 (6-8)	26	14
3B	CSA0262	VK916-DC-B2 (8-10)	38	20
3B	CSA0263	VK916-DC-B3 (0-2)	1796	1581
3B	CSA0264	VK916-DC-B3 (2-4)	133	46
3B	CSA0265	VK916-DC-B3 (4-6)	72	25
3B	CSA0266	VK916-DC-B3 (6-8)	59	33
3B	CSA0267	VK916-DC-B3 (8-10)	50	23

Table H.6. Sediment total petroleum hydrocarbon data for Cruise 3B.

Cruise	Sample No.	Station	Total Resolved Hydrocarbon (Non-SBM Range)	Unresolved Complex Mixture (Non-SBM Range)
3B	CSA0229	VK916-NF-B01	1.0	625.0
3B	CSA0230	VK916-NF-B02	1.0	42.0
3B	CSA0231	VK916-NF-B03	1.0	89.0
3B	CSA0232	VK916-NF-B04	1.0	13.0
3B	CSA0233	VK916-NF-B05	1.0	481.0
3B	CSA0234	VK916-NF-B06	1.0	1314.0
3B	CSA0235	VK916-NF-B07	1.0	2541.0
3B	CSA0236	VK916-NF-B08	1.0	16.0
3B	CSA0237	VK916-NF-B09	1.0	14.0
3B	CSA0238	VK916-NF-B10	1.0	24.0
3B	CSA0239	VK916-NF-B11	1.0	22.0
3B	CSA0240	VK916-NF-B12	1.0	34.0
3B	CSA0241	VK916-FF1-B01	1.0	18.0
3B	CSA0242	VK916-FF1-B02	1.0	16.0
3B	CSA0243	VK916-FF2-B01	1.0	17.0
3B	CSA0244	VK916-FF2-B02	1.0	38.0
3B	CSA0245	VK916-FF3-B01	1.0	19.0
3B	CSA0246	VK916-FF3-B02	1.0	17.0
3B	CSA0247	VK916-FF4-B01	1.0	8.0
3B	CSA0248	VK916-FF4-B02	1.0	16.0
3B	CSA0249	VK916-FF5-B01	1.0	16.0
3B	CSA0250	VK916-FF5-B02	1.0	13.0
3B	CSA0251	VK916-FF6-B01	1.0	18.0
3B	CSA0252	VK916-FF6-B02	1.0	15.0
3B	CSA0253	VK916-DC-B1 (0-2)	176.0	488.0
3B	CSA0254	VK916-DC-B1 (2-4)	79.0	342.0
3B	CSA0255	VK916-DC-B1 (4-6)	1.0	28.0
3B	CSA0256	VK916-DC-B1 (6-8)	1.0	15.0
3B	CSA0257	VK916-DC-B1 (8-10)	1.0	17.0
3B	CSA0258	VK916-DC-B2 (0-2)	1.0	1511.0
3B	CSA0259	VK916-DC-B2 (2-4)	1.0	40.0
3B	CSA0260	VK916-DC-B2 (4-6)	1.0	40.0
3B	CSA0261	VK916-DC-B2 (6-8)	1.0	14.0
3B	CSA0262	VK916-DC-B2 (8-10)	1.0	20.0
3B	CSA0263	VK916-DC-B3 (0-2)	1.0	1581.0
3B	CSA0264	VK916-DC-B3 (2-4)	1.0	46.0
3B	CSA0265	VK916-DC-B3 (4-6)	1.0	25.0
3B	CSA0266	VK916-DC-B3 (6-8)	1.0	33.0
3B	CSA0267	VK916-DC-B3 (8-10)	1.0	23.0

Table H.6. Sediment total petroleum hydrocarbon data for Cruise 3B.

Cruise	Sample No.	Station	Total Petroleum Hydrocarbon (SBM Range)	Total Resolved Hydrocarbon (SBM Range)
3B	CSA0229	VK916-NF-B01	10283	9980
3B	CSA0230	VK916-NF-B02	228	207
3B	CSA0231	VK916-NF-B03	753	690
3B	CSA0232	VK916-NF-B04	7	6
3B	CSA0233	VK916-NF-B05	6560	6466
3B	CSA0234	VK916-NF-B06	20364	20138
3B	CSA0235	VK916-NF-B07	47920	47222
3B	CSA0236	VK916-NF-B08	36	31
3B	CSA0237	VK916-NF-B09	18	16
3B	CSA0238	VK916-NF-B10	9	8
3B	CSA0239	VK916-NF-B11	8	6
3B	CSA0240	VK916-NF-B12	98	84
3B	CSA0241	VK916-FF1-B01	10	9
3B	CSA0242	VK916-FF1-B02	7	7
3B	CSA0243	VK916-FF2-B01	13	12
3B	CSA0244	VK916-FF2-B02	111	103
3B	CSA0245	VK916-FF3-B01	12	12
3B	CSA0246	VK916-FF3-B02	13	13
3B	CSA0247	VK916-FF4-B01	2	2
3B	CSA0248	VK916-FF4-B02	10	10
3B	CSA0249	VK916-FF5-B01	11	10
3B	CSA0250	VK916-FF5-B02	6	5
3B	CSA0251	VK916-FF6-B01	12	11
3B	CSA0252	VK916-FF6-B02	14	13
3B	CSA0253	VK916-DC-B1 (0-2)	10431	10221
3B	CSA0254	VK916-DC-B1 (2-4)	3903	3770
3B	CSA0255	VK916-DC-B1 (4-6)	940	901
3B	CSA0256	VK916-DC-B1 (6-8)	283	264
3B	CSA0257	VK916-DC-B1 (8-10)	178	161
3B	CSA0258	VK916-DC-B2 (0-2)	28138	27829
3B	CSA0259	VK916-DC-B2 (2-4)	1673	1599
3B	CSA0260	VK916-DC-B2 (4-6)	459	449
3B	CSA0261	VK916-DC-B2 (6-8)	159	147
3B	CSA0262	VK916-DC-B2 (8-10)	278	260
3B	CSA0263	VK916-DC-B3 (0-2)	27319	27105
3B	CSA0264	VK916-DC-B3 (2-4)	1425	1338
3B	CSA0265	VK916-DC-B3 (4-6)	788	741
3B	CSA0266	VK916-DC-B3 (6-8)	771	744
3B	CSA0267	VK916-DC-B3 (8-10)	585	559

Table H.6. Sediment total petroleum hydrocarbon data for Cruise 3B.

Cruise	Sample No.	Station	Unresolved Complex Mixture (SBM Range)	EOM (mg/g dry)
3B	CSA0229	VK916-NF-B01	303.0	14480
3B	CSA0230	VK916-NF-B02	21.0	520
3B	CSA0231	VK916-NF-B03	62.0	930
3B	CSA0232	VK916-NF-B04	1.0	333
3B	CSA0233	VK916-NF-B05	94.0	9733
3B	CSA0234	VK916-NF-B06	226.0	27296
3B	CSA0235	VK916-NF-B07	697.0	79077
3B	CSA0236	VK916-NF-B08	5.0	282
3B	CSA0237	VK916-NF-B09	2.0	333
3B	CSA0238	VK916-NF-B10	1.0	256
3B	CSA0239	VK916-NF-B11	1.0	364
3B	CSA0240	VK916-NF-B12	14.0	339
3B	CSA0241	VK916-FF1-B01	0.0	341
3B	CSA0242	VK916-FF1-B02	1.0	392
3B	CSA0243	VK916-FF2-B01	0.0	241
3B	CSA0244	VK916-FF2-B02	7.0	405
3B	CSA0245	VK916-FF3-B01	0.0	280
3B	CSA0246	VK916-FF3-B02	0.0	262
3B	CSA0247	VK916-FF4-B01	0.0	192
3B	CSA0248	VK916-FF4-B02	0.7	320
3B	CSA0249	VK916-FF5-B01	1.0	264
3B	CSA0250	VK916-FF5-B02	0.0	282
3B	CSA0251	VK916-FF6-B01	0.0	278
3B	CSA0252	VK916-FF6-B02	1.0	282
3B	CSA0253	VK916-DC-B1 (0-2)	209.0	16247
3B	CSA0254	VK916-DC-B1 (2-4)	133.0	4372
3B	CSA0255	VK916-DC-B1 (4-6)	38.0	1441
3B	CSA0256	VK916-DC-B1 (6-8)	18.0	422
3B	CSA0257	VK916-DC-B1 (8-10)	17.0	297
3B	CSA0258	VK916-DC-B2 (0-2)	309.0	37664
3B	CSA0259	VK916-DC-B2 (2-4)	74.0	166
3B	CSA0260	VK916-DC-B2 (4-6)	10.0	722
3B	CSA0261	VK916-DC-B2 (6-8)	12.0	290
3B	CSA0262	VK916-DC-B2 (8-10)	18.0	352
3B	CSA0263	VK916-DC-B3 (0-2)	214.0	36158
3B	CSA0264	VK916-DC-B3 (2-4)	87.0	2122
3B	CSA0265	VK916-DC-B3 (4-6)	47.0	1155
3B	CSA0266	VK916-DC-B3 (6-8)	26.0	1038
3B	CSA0267	VK916-DC-B3 (8-10)	26.0	485

Table H.6. Sediment total petroleum hydrocarbon data for Cruise 3B.

Cruise	Sample No.	Station	*Surrogate (Su)*	n-dodecane-d34	n-eicosane-d42
3B	CSA0229	VK916-NF-B01	Su Recovery (%)	100	100
3B	CSA0230	VK916-NF-B02	Su Recovery (%)	86	93
3B	CSA0231	VK916-NF-B03	Su Recovery (%)	98	96
3B	CSA0232	VK916-NF-B04	Su Recovery (%)	88	93
3B	CSA0233	VK916-NF-B05	Su Recovery (%)	100	101
3B	CSA0234	VK916-NF-B06	Su Recovery (%)	98	98
3B	CSA0235	VK916-NF-B07	Su Recovery (%)	97	101
3B	CSA0236	VK916-NF-B08	Su Recovery (%)	89	93
3B	CSA0237	VK916-NF-B09	Su Recovery (%)	174	200
3B	CSA0238	VK916-NF-B10	Su Recovery (%)	89	93
3B	CSA0239	VK916-NF-B11	Su Recovery (%)	89	94
3B	CSA0240	VK916-NF-B12	Su Recovery (%)	89	95
3B	CSA0241	VK916-FF1-B01	Su Recovery (%)	85	92
3B	CSA0242	VK916-FF1-B02	Su Recovery (%)	85	93
3B	CSA0243	VK916-FF2-B01	Su Recovery (%)	85	92
3B	CSA0244	VK916-FF2-B02	Su Recovery (%)	87	88
3B	CSA0245	VK916-FF3-B01	Su Recovery (%)	86	92
3B	CSA0246	VK916-FF3-B02	Su Recovery (%)	88	93
3B	CSA0247	VK916-FF4-B01	Su Recovery (%)	83	90
3B	CSA0248	VK916-FF4-B02	Su Recovery (%)	86	93
3B	CSA0249	VK916-FF5-B01	Su Recovery (%)	86	92
3B	CSA0250	VK916-FF5-B02	Su Recovery (%)	86	92
3B	CSA0251	VK916-FF6-B01	Su Recovery (%)	88	94
3B	CSA0252	VK916-FF6-B02	Su Recovery (%)	88	93
3B	CSA0253	VK916-DC-B1 (0-2)	Su Recovery (%)	102	98
3B	CSA0254	VK916-DC-B1 (2-4)	Su Recovery (%)	93	98
3B	CSA0255	VK916-DC-B1 (4-6)	Su Recovery (%)	78	103
3B	CSA0256	VK916-DC-B1 (6-8)	Su Recovery (%)	87	99
3B	CSA0257	VK916-DC-B1 (8-10)	Su Recovery (%)	88	92
3B	CSA0258	VK916-DC-B2 (0-2)	Su Recovery (%)	86	94
3B	CSA0259	VK916-DC-B2 (2-4)	Su Recovery (%)	85	106
3B	CSA0260	VK916-DC-B2 (4-6)	Su Recovery (%)	88	97
3B	CSA0261	VK916-DC-B2 (6-8)	Su Recovery (%)	91	96
3B	CSA0262	VK916-DC-B2 (8-10)	Su Recovery (%)	62	75
3B	CSA0263	VK916-DC-B3 (0-2)	Su Recovery (%)	102	101
3B	CSA0264	VK916-DC-B3 (2-4)	Su Recovery (%)	84	99
3B	CSA0265	VK916-DC-B3 (4-6)	Su Recovery (%)	88	100
3B	CSA0266	VK916-DC-B3 (6-8)	Su Recovery (%)	75	100
3B	CSA0267	VK916-DC-B3 (8-10)	Su Recovery (%)	83	99

Table H.6. Sediment total petroleum hydrocarbon data for Cruise 3B.

Cruise	Sample No.	Station	n-triacontane-d62
3B	CSA0229	VK916-NF-B01	99
3B	CSA0230	VK916-NF-B02	101
3B	CSA0231	VK916-NF-B03	99
3B	CSA0232	VK916-NF-B04	98
3B	CSA0233	VK916-NF-B05	100
3B	CSA0234	VK916-NF-B06	100
3B	CSA0235	VK916-NF-B07	103
3B	CSA0236	VK916-NF-B08	96
3B	CSA0237	VK916-NF-B09	202
3B	CSA0238	VK916-NF-B10	98
3B	CSA0239	VK916-NF-B11	100
3B	CSA0240	VK916-NF-B12	97
3B	CSA0241	VK916-FF1-B01	99
3B	CSA0242	VK916-FF1-B02	98
3B	CSA0243	VK916-FF2-B01	98
3B	CSA0244	VK916-FF2-B02	95
3B	CSA0245	VK916-FF3-B01	97
3B	CSA0246	VK916-FF3-B02	101
3B	CSA0247	VK916-FF4-B01	96
3B	CSA0248	VK916-FF4-B02	101
3B	CSA0249	VK916-FF5-B01	98
3B	CSA0250	VK916-FF5-B02	97
3B	CSA0251	VK916-FF6-B01	99
3B	CSA0252	VK916-FF6-B02	101
3B	CSA0253	VK916-DC-B1 (0-2)	99
3B	CSA0254	VK916-DC-B1 (2-4)	97
3B	CSA0255	VK916-DC-B1 (4-6)	101
3B	CSA0256	VK916-DC-B1 (6-8)	97
3B	CSA0257	VK916-DC-B1 (8-10)	95
3B	CSA0258	VK916-DC-B2 (0-2)	97
3B	CSA0259	VK916-DC-B2 (2-4)	103
3B	CSA0260	VK916-DC-B2 (4-6)	103
3B	CSA0261	VK916-DC-B2 (6-8)	96
3B	CSA0262	VK916-DC-B2 (8-10)	70
3B	CSA0263	VK916-DC-B3 (0-2)	102
3B	CSA0264	VK916-DC-B3 (2-4)	98
3B	CSA0265	VK916-DC-B3 (4-6)	99
3B	CSA0266	VK916-DC-B3 (6-8)	94
3B	CSA0267	VK916-DC-B3 (8-10)	97

APPENDIX I1

Taxa Identified in Meiofaunal Samples

Appendix I1. Taxa identified in meiofaunal samples.

PHYLUM PROTOZOA
Order Foraminiferida
Foraminiferida (LPIL)

PHYLUM CNIDARIA
CLASS ANTHOZOA
Order Actiniaria
Actiniaria (LPIL)
CLASS HYDROZOA
Hydrozoa (LPIL)

PHYLUM PLATYHELMINTHES
CLASS TURBELLARIA
Turbellaria (LPIL)

PHYLUM RHYNCHOCOELA
Rhynchocoela (LPIL)

PHYLUM GASTROTRICHA
Gastrotricha (LPIL)

PHYLUM KINORHYNCHA
Kinorhyncha (LPIL)

PHYLUM PRIAPULIDA
Priapulida (LPIL)

PHYLUM NEMATODA
Nematoda (LPIL)
FAMILY AXONOLAIMIDAE
Axonolaimidae (LPIL)
FAMILY COMESOMATIDAE
Comesomatidae (LPIL)
FAMILY ENOPLIDAE
Enoplidae (LPIL)
FAMILY MEYLIIDAE
Meyliidae (LPIL)
FAMILY MONHYSTERIDAE
Monhysteridae (LPIL)
FAMILY ONCHOLAIMIDAE
Oncholaimidae (LPIL)
FAMILY SPHAEROLAIMIDAE
Sphaerolaimidae (LPIL)

FAMILY THORACOSTOMATIDAE
Thoracostomatidae (LPIL)

PHYLUM ANNELIDA

Annelida (LPIL)
CLASS OLIGOCHAETA
Oligochaeta (LPIL)
CLASS POLYCHAETA
Polychaeta (LPIL)

PHYLUM ARTHROPODA

CLASS COPEPODA
Copepoda (LPIL)
Order HARPACTICOIDA
Harpacticoida (LPIL)

CLASS MALACOSTRACA
Order AMPHIPODA
Amphipoda (LPIL)
Order CUMACEA
Cumacea (LPIL)
Order ISOPODA
Isopoda (LPIL)
Order TANAIDACEA
Tanaidacea (LPIL)

CLASS OSTRACODA
Ostracoda (LPIL)

CLASS ARACHNIDA
Order ACARI
Acari (LPIL)

PHYLUM TARDIGRADA

Tardigrada (LPIL)

PHYLUM MOLLUSCA

CLASS APLACOPHORA
Aplacophora (LPIL)

CLASS BIVALVIA
Bivalvia (LPIL)

CLASS GASTROPODA
Gastropoda (LPIL)

Appendix I1. (continued).

CLASS SCAPHOPODA
Scaphopoda (LPIL)
PHYLUM ECHINODERMATA
CLASS HOLOTHUROIDEA
Holothuroidea (LPIL)
CLASS OPHIUROIDEA
Ophiuroidea (LPIL)

LPIL = lowest practical identification level.

APPENDIX I2

Taxonomic Listing for the Detailed Macroinfaunal Taxonomic Analysis

Appendix I2. Taxonomic listing for the detailed macroinfaunal taxonomic analysis.

PHYLUM ANNELIDA
CLASS OLIGOCHAETA
Order TUBIFICIDA
FAMILY TUBIFICIDAE
Tubificidae (LPIL)

CLASS POLYCHAETA
FAMILY A
Polychaeta Family A
FAMILY B
Polychaeta Family B
Order AMPHINOMIDA
FAMILY AMPHINOMIDAE
Amphinomidae Genus A
Paraeurythoe sp. B
Paramphinome sp. A
Paramphinome sp. B
Order CAPITELLIDA
FAMILY CAPITELLIDAE
Capitella capitata
Heteromastus filiformis
Mediomastus (LPIL)
Notomastus americanus
Notomastus hemipodus
Notomastus lineatus
Notomastus sp. F
FAMILY MALDANIDAE
Maldane sp. A
Sabaco americanus
Order COSSURIDA
FAMILY COSSURIDAE
Cossura delta
Cossura soyeri
Order EUNICIDA
FAMILY DORVILLEIDAE
Dorvillea sociabilis
Ophryotrocha sp. D
Ophryotrocha sp. E
Parougia sp. B
Pettiboneia duofurca
Pettiboneia sp. E
Schistomeringos rudolphi

Appendix I2. (continued).

FAMILY LUMBRINERIDAE
Lumbrinerides acuta
Lumbrineris sp. AF
Lumbrineris sp. AG
Ninoe nigripes
Paraninoe brevipes
Scoletoma sp. AB
Scoletoma verrilli
FAMILY ONUPHIDAE
Kinbergonuphis sp. O
Kinbergonuphis sp. P
Nothria sp. A
Onuphidae Genus A
Sarsonuphis sp. K
Order FLABELLIGERIDA
FAMILY FAUVELIOPSIDAE
Fauveliopsis sp. H
FAMILY FLABELLIGERIDAE
Diplocirrus sp. F
Flabelligeridae Genus D
Pherusa sp. A
Order OPHELIIDA
FAMILY OPHELIIDAE
Opheliidae Genus A
Opheliidae sp. A
Ophelina sp. F
Ophelina sp. G
FAMILY SCALIBREGMATIDAE
Scalibregma inflatum
Order ORBINIIDA
FAMILY ORBINIIDAE
Orbiniidae Genus F
Scoloplos rubra
FAMILY PARAONIDAE
Aricidea catherinae
Aricidea simplex
Aricidea sp. AP
Aricidea suecica
Aricidea taylori
Cirrophorus sp. D
Cirrophorus sp. E
Levensenia gracilis
Levensenia sp. T
Paraonidae Genus B
Sabidus sp. B

Appendix I2. (continued).

Order OWENIIDA
FAMILY OWENIIDAE
Galathowenia sp. B
Order PHYLLODOCIDA
FAMILY GLYCERIDAE
Glycera sp. R
Glycera tesselata
FAMILY GONIADIDAE
Goniada maculata
Goniadella gracilis
Goniadidae Genus A
FAMILY HESIONIDAE
Hesionidae Genus I
FAMILY LACYDONIIDAE
Paralacydonia paradoxa
FAMILY NEPHTYIDAE
Micronephtys sp. A
Nephtys (LPIL)
FAMILY NEREIDAE
Ceratacephale oculata
FAMILY PHOLOIDAE
Pholoe sp. C
FAMILY PHYLLODOCIDAE
Hesionura sp. B
Phyllodocidae Genus E
FAMILY PILARGIIDAE
Ancistrosyllis hartmanae
Ancistrosyllis sp. A
Ancistrosyllis sp. G
Ancistrosyllis sp. J
Ancistrosyllis sp. K
Sigambra tentaculata
Synelmis klatti
FAMILY POLYNOIDAE
Harmothoe sp. K
Polynoidae Genus M
FAMILY SIGALIONIDAE
Sigalionidae Genus H
Sthenolepis sp. A
Sthenolepis sp. D
FAMILY SPHAERODOROPIDAE
Sphaerodoropsis sp. H
FAMILY SYLLIDAE
Ehlersia ferrugina
Exogone sp. U
Pionosyllis spinisetosa

Appendix I2. (continued).

Sphaerosyllis labyrinthophila
Sphaerosyllis sp. K
Syllidae Genus H
Syllis (LPIL)
Order SABELLIDA
FAMILY SABELLIDAE
Sabellidae (LPIL)
Order SPIONIDA
FAMILY ACROCIRRIDAE
Macrochaeta sp. A
Macrochaeta sp. B
FAMILY CHAETOPTERIDAE
Spiochaetopterus oculatus
FAMILY CIRRATULIDAE
Aphelochaeta sp. B
Aphelochaeta sp. C
Caulleriella sp. S
Caulleriella sp. T
Chaetozone sp. P
Chaetozone sp. Q
Cirratulidae Genus D
Monticellina dorsobranchialis
Tharyx kirkegaardi
FAMILY HETEROSPIONIDAE
Heterospio longissima
FAMILY POECILOCHAETIDAE
Poecilochaetidae Genus C
FAMILY SPIONIDAE
Lindaspio sp. A
Prionospio sp. O
Prionospio sp. P
Spionidae Genus K
Spiophanes sp. A
Spiophanes sp. F
Order TEREBELLIDA
FAMILY AMPHARETIDAE
Ampharetidae Genus B
FAMILY TEREBELLIDAE
Lysilla sp. B
Polycirrus sp. T
FAMILY TRICHOBRANCHIDAE
Terebellides parvus

Appendix I2. (continued).

PHYLUM ARTHROPODA

CLASS COPEPODA

Order HARPACTICOIDA

Harpacticoida (LPIL)

CLASS MALACOSTRACA

Order AMPHIPODA

FAMILY J

Amphipoda Family J

FAMILY AMPELISCIDAE

Haploops (LPIL)

FAMILY AORIDAE

Aoridae Genus A

FAMILY DEXAMINIDAE

Dexaminidae (LPIL)

FAMILY ISAEIDAE

Isaeidae (LPIL)

FAMILY LYSIANASSIDAE

Lysianassidae (LPIL)

Harpiniopsis sp. A

Harpiniopsis sp. B

Harpiniopsis sp. C

Harpiniopsis sp. D

Hippomedon sp. E

Valetiopsis sp. A

FAMILY MELITIDAE

Dulichiella sp. D

Eriopisa elongata

FAMILY OEDICEROTIDAE

Bathymedon sp. C

Bathymedon sp. D

Monoculodes (LPIL)

Oedicerotidae Genus B

FAMILY PHOXOCEPHALIDAE

Leptophoxoides molaris

Metaphoxus sp. A

Paraphoxus sp. C

Phoxocephalidae Genus F

Phoxocephalus sp. C

Phoxocephalus sp. D

FAMILY STEGOCEPHALIDAE

Stegocephalidae Genus A

FAMILY SYNOPIIDAE

Synopiidae Genus E

FAMILY URISTIDAE

Uristes sp. A

Appendix I2. (continued).

FAMILY VITJAZIANIDAE
Vemana sp. A
Order CUMACEA
FAMILY BODOTRIIDAE
Bodotriidae Genus B
FAMILY DIASTYLIDAE
Leptostylis sp. C
FAMILY LEUCONIDAE
Leucon homorhynchus
Leuconidae Genus B
FAMILY NANNASTACIDAE
Campylaspis sp. AB
Campylaspis sp. AC
Campylaspis sp. AD
Campylaspis sp. AE
Order DECAPODA
FAMILY AXIIDAE
Axiidae Genus A
Order ISOPODA
FAMILY ANTHURIDAE
Anthuridae (LPIL)
FAMILY CIROLANIDAE
Cirolanidae Genus A
FAMILY DESMOSOMATIDAE
Desmosoma sp. D
Pseudomesus sp. A
FAMILY EURYCOPIDAE
Eurycope sp. A
FAMILY GNATHIIDAE
Gnathia (LPIL)
FAMILY HAPLONISCIDAE
Haploniscus sp. A
FAMILY HYSSURIDAE
Hyssuridae Genus A
FAMILY ILYARACHNIDAE
Ilyarachna sp. B
FAMILY ISCHNOMESIDAE
Ischnomesus sp. A
Stylomesus sp. A
FAMILY MACROSTYLIDAE
Macrostylis sp. A
FAMILY NANNONISCIDAE
Nannoniscus sp. A
FAMILY PARANTHURIDAE
Leptanthura sp. A

Appendix I2 (continued).

Order TANAIDACEA
FAMILY A
Tanaidacea Family A
FAMILY B
Tanaidacea Family B
FAMILY D
Tanaidacea Family D
FAMILY AGATHOTANAIDAE
Agathotanais (LPIL)
Paragathotanais (LPIL)
Paranarthrura (LPIL)
FAMILY APSEUDIDAE
Leviapseudes sp. A
FAMILY COLLETTEIDAE
Centiopyge mira
Centiopyge sp. A
Collettea sp. A
Collettea sp. B
Colletteidae Genus A
Colletteidae Genus B
FAMILY LEPTOGNATHIIDAE
Insociabilitanais (LPIL)
Leptognathia sp. K
Leptognathia sp. L
Leptognathia sp. M
Parafilitanais mexicana
FAMILY NEOTANAIDAE
Neotanais armiger
FAMILY PSEUDOTANAIDAE
Pseudotanaidae Genus A
Pseudotanais sp. A
FAMILY SPHYRAPIDAE
Pseudosphyrapus sp. A

CLASS OSTRACODA
Order MYODOCOPINA
FAMILY CYLINDROLEBERIDIDAE
Cylindroleberididae Genus C
FAMILY CYPRIDINIDAE
Paracypridina sp. B
Paracypridina sp. C
FAMILY PHILOMEDIDAE
Philomedes sp. A
Pseudophilomedes sp. D
FAMILY SARSIELLIDAE
Sarsiellidae (LPIL)

Order PODOCOPIDA
Podocopa Family H
Podocopa Family I
Podocopa Family J
Podocopa Family K
Podocopa Family L
Podocopa Family M
FAMILY BARDIIDAE
Paranesidea sp. B
FAMILY TRACHYLEBERIDIDAE
Actinocythereis sp. E
Reticulocythereis sp. D

PHYLUM CNIDARIA
CLASS ANTHOZOA
Order ACTINIARIA
Actiniaria (LPIL)

PHYLUM ECHINODERMATA
CLASS HOLOTHUROIDEA
Holothuroidea (LPIL)

CLASS OPHIUROIDEA
Ophiuroidea (LPIL)

PHYLUM HEMICHORDATA
CLASS ENTEROPNEUSTA
Enteropneusta (LPIL)

PHYLUM MOLLUSCA
CLASS APLACOPHORA
Aplacophora (LPIL)

CLASS BIVALVIA
FAMILY B
Bivalvia Family B
Order ARCOIDA
FAMILY ARCIDAE
Bathyarca glomerula
Bentharca (LPIL)
FAMILY LIMOPSIDAE
Limopsis sp. D
Order LIMOIDA
FAMILY LIMIDAE
Lima (LPIL)

Appendix I2. (continued).

Order MYTILOIDA
FAMILY MYTILIDAE
Crenella sp. C
Mytilidae Genus B
Order NUCULOIDA
FAMILY MALLETIIDAE
Tindaria sp. A
FAMILY NUCULANIDAE
Nuculana sp. L
Nuculana sp. M
FAMILY NUCULIDAE
Nucula sp. I
FAMILY YOLDIIDAE
Portlandia sp. A
Portlandia sp. B
Order PHOLADOMYOIDA
FAMILY CUSPIDARIIDAE
Cuspidaria sp. D
Order SOLEMYOIDA
FAMILY SOLEMYACIDAE
Solemyacidae (LPIL)
Order VENEROIDA
FAMILY ASTARTIDAE
Astarte sp. B
FAMILY CARDITIDAE
Carditidae (LPIL)
FAMILY KELLIIDAE
Aligena sp. A
FAMILY LUCINIDAE
Lucinidae (LPIL)
FAMILY MESODESMATIDAE
Mesodesmatidae (LPIL)
FAMILY MONTACUTIDAE
Mysella sp. A
FAMILY SEMELIDAE
Semele (LPIL)
FAMILY THYASIRIDAE
Thyasira sp. B
FAMILY VENERIDAE
Agripoma sp. B
FAMILY VESICOMYIDAE
Calyptogena sp. A
Vesicomya vesica

Appendix I2 (continued).

CLASS GASTROPODA
  Order ACHAEOGASTROPODA
    FAMILY SKENEIDAE
      Ganesa sp. A
    FAMILY TROCHIDAE
      Solariella sp. A
  Order CEPHALASPIDEA
    FAMILY ACTEONIDAE
      Acteon incisus
      Rictaxis punctostriatus
    FAMILY HAMINEIDAE
      Hamineidae (LPIL)
    FAMILY PHILINIDAE
      Philine quadrata
      Philine sp. B
    FAMILY SCAPHANDRIDAE
      Acteocina (LPIL)
  Order MESOGASTROPODA
    FAMILY ASSIMINEIDAE
      Assimineidae Genus A
    FAMILY EULIMIDAE
      Strombiformis (LPIL)
    FAMILY RISSOIDAE
      Benthonella sp. A
    FAMILY VITRINELLIDAE
      Episcynia sp. A
      Vitrinellidae Genus A
  Order NEOGASTROPODA
    FAMILY BUCCINIDAE
      Buccinidae Genus B
    FAMILY COLUMBELLIDAE
      Columbellidae (LPIL)
    FAMILY TURRIDAE
      Daphnella pompholyx
      Leucosyrinx verrillii
      Mangelia (LPIL)
      Turridae Genus Q
  Order NUDIBRANCHIA
      Nudibranchia (LPIL)
  Order PYRAMIDELLOIDA
    FAMILY PYRAMIDELLIDAE
      Turbonilla (LPIL)

Appendix I2. (continued).

CLASS SCAPHOPODA
Scaphopoda (LPIL)
Order DENTALIIDA
FAMILY DENTALIIDAE
Antalis ceratum
Dentalium sp. O

PHYLUM NEMATODA
Nematoda (LPIL)

PHYLUM PLATYHELMINTHES
CLASS TURBELLARIA
Turbellaria (LPIL)

PHYLUM PORIFERA
Porifera (LPIL)

PHYLUM RHYNCHOCOELA
CLASS ANOPLA
Order HETERONEMERTEA
FAMILY LINEIDAE
Lineidae (LPIL)
Order PALEONEMERTEA
FAMILY TUBULANIDAE
Tubulanus (LPIL)

PHYLUM SIPUNCULA
Sipuncula (LPIL)

LPIL = lowest practical identification level.

APPENDIX J1

Sediment Toxicity Testing Data for Batch 1 (Mississippi Canyon Block 292)

Battelle
. . . Putting Technology To Work

Marine Sciences Laboratory
1529 West Sequim Bay Road
Sequim, WA 98382

Project: CSA_MMS Drilling Mud Toxicity Testing
Project No. 42903
Duration: 10 Day Batch 1
Test Type: Solid-Phase Static
Species: *Leptocheirus plumulosus* Source: MSL Cultures
Dates: August 7-17, 2001

Table J-1. Batch 1 Test Results Summary

Name (Sample ID)	Rep	Number Alive	Number Dead or Missing	Proportion Surviving	Mean Proportion Surviving	SD Proportion Surviving	CV
MC292-NF-B01	1	8	12	0.40			
MC292-NF-B01	2	6	14	0.30			
MC292-NF-B01	3	17	3	0.85			
MC292-NF-B01	4	8	12	0.40			
MC292-NF-B01	5	8	12	0.40	0.47	0.22	46
MC292-NF-B02	1	8	12	0.40			
MC292-NF-B02	2	12	8	0.60			
MC292-NF-B02	3	11	9	0.55			
MC292-NF-B02	4	3	17	0.15			
MC292-NF-B02	5	7	13	0.35	0.41	0.18	43
MC292-NF-B03	1	16	4	0.80			
MC292-NF-B03	2	20	0	1.00			
MC292-NF-B03	3	16	4	0.80			
MC292-NF-B03	4	14	6	0.70			
MC292-NF-B03	5	18	2	0.90	0.84	0.11	14
MC292-NF-B04	1	18	2	0.90			
MC292-NF-B04	2	14	6	0.70			
MC292-NF-B04	3	16	4	0.80			
MC292-NF-B04	4	17	3	0.85			
MC292-NF-B04	5	19	1	0.95	0.84	0.10	11
MC292-NF-B05	1	11	9	0.55			
MC292-NF-B05	2	14	6	0.70			
MC292-NF-B05	3	14	6	0.70			
MC292-NF-B05	4	18	2	0.90			
MC292-NF-B05	5	14	6	0.70	0.71	0.12	18
MC292-NF-B06	1	21	0	1.00			
MC292-NF-B06	2	17	3	0.85			
MC292-NF-B06	3	20	0	1.00			
MC292-NF-B06	4	20	0	1.00			
MC292-NF-B06	5	17	3	0.85	0.94	0.08	9
MC292-NF-B07	1	17	3	0.85			
MC292-NF-B07	2	19	1	0.95			
MC292-NF-B07	3	18	2	0.90			
MC292-NF-B07	4	19	1	0.95			
MC292-NF-B07	5	19	1	0.95	0.92	0.04	5

Marine Sciences Laboratory
1529 West Sequim Bay Road
Sequim, WA 98382

Project: CSA_MMS Drilling Mud Toxicity Testing
Project No. 42903
Duration: 10 Day Batch 1
Test Type: Solid-Phase Static
Species: *Leptocheirus plumulosus* Source: MSL Cultures
Dates: August 7-17, 2001

Table J-1. Batch 1 Test Results Summary

Name (Sample ID)	Rep	Number Alive	Number Dead or Missing	Proportion Surviving	Mean Proportion Surviving	SD Proportion Surviving	CV
MC292-NF-B08	1	13	7	0.65			
MC292-NF-B08	2	12	8	0.60			
MC292-NF-B08	3	18	2	0.90			
MC292-NF-B08	4	16	4	0.80			
MC292-NF-B08	5	12	8	0.60	0.71	0.13	19
MC292-NF-B09	1	9	11	0.45			
MC292-NF-B09	2	15	5	0.75			
MC292-NF-B09	3	12	8	0.60			
MC292-NF-B09	4	18	2	0.90			
MC292-NF-B09	5	20	0	1.00	0.74	0.22	30
MC292-NF-B10	1	16	4	0.80			
MC292-NF-B10	2	11	9	0.55			
MC292-NF-B10	3	7	13	0.35			
MC292-NF-B10	4	19	1	0.95			
MC292-NF-B10	5	18	2	0.90	0.71	0.25	36
MC292-NF-B11	1	19	1	0.95			
MC292-NF-B11	2	19	1	0.95			
MC292-NF-B11	3	19	1	0.95			
MC292-NF-B11	4	20	0	1.00			
MC292-NF-B11	5	19	1	0.95	0.96	0.02	2
MC292-NF-B12	1	13	7	0.65			
MC292-NF-B12	2	14	6	0.70			
MC292-NF-B12	3	18	2	0.90			
MC292-NF-B12	4	19	1	0.95			
MC292-NF-B12	5	17	3	0.85	0.81	0.13	16
MC292-FF1-B01	1	18	2	0.90			
MC292-FF1-B01	2	20	0	1.00			
MC292-FF1-B01	3	20	0	1.00			
MC292-FF1-B01	4	19	1	0.95			
MC292-FF1-B01	5	15	5	0.75	0.92	0.10	11
MC292-FF1-B02	1	19	1	0.95			
MC292-FF1-B02	2	15	5	0.75			
MC292-FF1-B02	3	20	0	1.00			
MC292-FF1-B02	4	20	0	1.00			
MC292-FF1-B02	5	19	1	0.95	0.93	0.10	11

Battelle
. . . Putting Technology To Work
Marine Sciences Laboratory
1529 West Sequim Bay Road
Sequim, WA 98382

Project:	CSA_MMS Drilling Mud Toxicity Testing
Project No. 42903	
Duration:	10 Day Batch 1
Test Type:	Solid-Phase Static
Species:	*Leptocheirus plumulosus* Source: MSL Cultures
Dates: August 7-17, 2001	

Table J-1. Batch 1 Test Results Summary

Name (Sample ID)	Rep	Number Alive	Number Dead or Missing	Proportion Surviving	Mean Proportion Surviving	SD Proportion Surviving	CV
MC292-FF2-B01	1	17	3	0.85			
MC292-FF2-B01	2	20	0	1.00			
MC292-FF2-B01	3	18	2	0.90			
MC292-FF2-B01	4	17	3	0.85			
MC292-FF2-B01	5	20	0	1.00	0.92	0.08	8
MC292-FF2-B02	1	15	5	0.75			
MC292-FF2-B02	2	16	4	0.80			
MC292-FF2-B02	3	19	1	0.95			
MC292-FF2-B02	4	24	1	0.96			
MC292-FF2-B02	5	20	0	1.00	0.892	0.11	12
MC292-FF3-B01	1	18	2	0.90			
MC292-FF3-B01	2	18	2	0.90			
MC292-FF3-B01	3	19	1	0.95			
MC292-FF3-B01	4	19	1	0.95			
MC292-FF3-B01	5	20	0	1.00	0.94	0.04	4
MC292-FF3-B02	1	19	1	0.95			
MC292-FF3-B02	2	20	0	1.00			
MC292-FF3-B02	3	12	8	0.60			
MC292-FF3-B02	4	19	1	0.95			
MC292-FF3-B02	5	18	2	0.90	0.88	0.16	18
MC292-FF4-B01	1	17	3	0.85			
MC292-FF4-B01	2	20	0	1.00			
MC292-FF4-B01	3	20	0	1.00			
MC292-FF4-B01	4	16	4	0.80			
MC292-FF4-B01	5	20	0	1.00	0.93	0.10	10
MC292-FF4-B02	1	20	0	1.00			
MC292-FF4-B02	2	38	2	0.95			
MC292-FF4-B02	3	19	1	0.95			
MC292-FF4-B02	4	20	0	1.00			
MC292-FF4-B02	5	20	0	1.00	0.98	0.03	3
MC292-FF5-B01	1	19	1	0.95			
MC292-FF5-B01	2	20	0	1.00			
MC292-FF5-B01	3	20	0	1.00			
MC292-FF5-B01	4	20	0	1.00			
MC292-FF5-B01	5	20	0	1.00	0.99	0.02	2

Battelle
. . . Putting Technology To Work
Marine Sciences Laboratory
1529 West Sequim Bay Road
Sequim, WA 98382

Project: CSA_MMS Drilling Mud Toxicity Testing
Project No. 42903
Duration: 10 Day Batch 1
Test Type: Solid-Phase Static
Species: *Leptocheirus plumulosus* Source: MSL Cultures
Dates: August 7-17, 2001

Table J-1. Batch 1 Test Results Summary

Name (Sample ID)	Rep	Number Alive	Number Dead or Missing	Proportion Surviving	Mean Proportion Surviving	SD Proportion Surviving	CV
MC292-FF5-B02	1	18	2	0.90			
MC292-FF5-B02	2	17	3	0.85			
MC292-FF5-B02	3	16	4	0.80			
MC292-FF5-B02	4	20	0	1.00			
MC292-FF5-B02	5	20	0	1.00	0.91	0.09	10
MC292-FF6-B01	1	18	2	0.90			
MC292-FF6-B01	2	19	1	0.95			
MC292-FF6-B01	3	20	0	1.00			
MC292-FF6-B01	4	18	2	0.90			
MC292-FF6-B01	5	19	1	0.95	0.94	0.04	4
MC292-FF6-B02	1	19	1	0.95			
MC292-FF6-B02	2	20	0	1.00			
MC292-FF6-B02	3	18	2	0.90			
MC292-FF6-B02	4	20	0	1.00			
MC292-FF6-B02	5	20	0	1.00	0.97	0.04	5
Sequim Bay	1	20	0	1.00			
Sequim Bay	2	20	0	1.00			
Sequim Bay	3	20	0	1.00			
Sequim Bay	4	19	1	0.95			
Sequim Bay	5	20	0	1.00	0.99	0.02	2

Battelle
. . . Putting Technology To Work
Marine Sciences Laboratory
1529 West Sequim Bay Road
Sequim, WA 98382

Project Title: CSA_MMS Drilling Mud Toxicity Testing
Project No. 42903
Test Species: *Leptocheirus plumulosus* Source: MSL Cultures
Test Type: Solid-Phase Static
Duration: 10 Days
Date: Batch 1 August 7-17, 2001

Table J-2. Batch 1 Water Quality Summary

Treatment	Temperature (° C) Min	Temperature (° C) Max	Salinity (ppt) Min	Salinity (ppt) Max	Dissolved Oxygen (mg/L) Min	Dissolved Oxygen (mg/L) Max	pH (units) Min	pH (units) Max
target range:	23	27	18	22	4.2	7.4	7.3	8.3
MC292-NF-B01	24.6	25.2	19.4	21.4	7.0	8.0	7.8	8.1
MC292-NF-B02	24.6	25.2	19.4	21.0	7.1	7.9	7.9	8.1
MC292-NF-B03	24.6	25.3	19.1	21.2	7.3	8.0	7.9	8.1
MC292-NF-B04	24.5	25.2	19.3	21.3	7.3	7.9	7.9	8.1
MC292-NF-B05	24.7	25.2	19.3	21.4	7.1	7.9	7.8	8.2
MC292-NF-B06	24.5	25.1	19.3	21.0	7.1	7.9	7.9	8.1
MC292-NF-B07	24.5	25.3	19.4	20.8	7.2	7.9	7.9	8.1
MC292-NF-B08	24.6	25.2	19.2	21.1	7.2	7.8	7.9	8.1
MC292-NF-B09	24.6	24.9	19.2	21.1	6.9	7.9	7.8	8.2
MC292-NF-B10	24.6	25.3	19.5	21.4	7.2	7.9	7.9	8.2
MC292-NF-B11	24.6	25.2	19.4	21.4	7.2	7.9	7.9	8.2
MC292-NF-B12	24.5	25.1	19.1	20.5	7.3	7.9	7.9	8.2
MC292-FF1-B01	24.6	25.1	19.3	21.3	7.1	7.9	7.9	8.2
MC292-FF1-B02	24.6	25.0	19.1	21.0	7.0	7.9	7.8	8.1
MC292-FF2-B01	24.6	25.1	19.1	20.5	7.2	7.9	7.9	8.1
MC292-FF2-B02	24.6	25.0	19.3	21.3	7.2	7.8	7.9	8.1
MC292-FF3-B01	24.7	25.1	19.4	21.1	7.1	7.9	7.9	8.1
MC292-FF3-B02	24.6	25.0	19.4	21.3	7.3	7.9	7.9	8.1
MC292-FF4-B01	24.8	25.2	19.4	21.0	7.0	7.9	7.9	8.1
MC292-FF4-B02	24.4	25.2	19.3	21.1	7.1	7.9	7.9	8.2
MC292-FF5-B01	24.8	25.2	19.4	21.2	7.2	7.9	7.9	8.2
MC292-FF5-B02	24.7	25.1	18.8	21.4	7.1	7.9	7.9	8.1
MC292-FF6-B01	24.5	25.0	19.1	21.0	6.9	7.9	7.8	8.2
MC292-FF6-B02	24.4	25.3	19.2	21.2	7.2	7.9	7.9	8.2
Sequim Bay	24.5	25.2	19.2	20.8	6.9	7.9	7.7	8.1

Battelle
. . . Putting Technology To Work
Marine Sciences Laboratory
1529 West Sequim Bay Road
Sequim, WA 98382
(360) 683-4151

Project: CSA_MMS Drilling Mud Toxicity Testing
Project No. 42903
Duration: 4 Days Batch 1
Test Type: Cadmium Reference Toxicant
Species: *Leptocheirus plumulosus* Source: MSL Cultures
Dates: August 7-11, 2001

Table J-3. Batch 1 Test Results Summary

Treatment	Concentration mg/L Cd	Rep	Number Alive	Number Dead or Missing	Proportion Surviving
0	mg/L Cd	1	19	1	0.95
0.156	mg/L Cd	1	19	1	0.95
0.312	mg/L Cd	1	13	7	0.65
0.625	mg/L Cd	1	12	8	0.60
1.25	mg/L Cd	1	4	16	0.20
2.5	mg/L Cd	1	0	20	0
5	mg/L Cd	1	0	20	0
7	mg/L Cd	1	0	20	0

LC50 = 0.64 mg/L Cd
95% confidence intervals = 0.05 - 1.38 mg/L Cd

APPENDIX J2

Sediment Toxicity Testing Data for Batch 2
(Garden Banks Block 602)

Battelle
. . . Putting Technology To Work

Marine Sciences Laboratory
1529 West Sequim Bay Road
Sequim, WA 98382

Project: CSA_MMS Drilling Mud Toxicity Testing
Project No. 42903
Duration: 10 Day Batch 2
Test Type: Solid-Phase Static
Species: *Leptocheirus plumulosus* Source: Chesapeake Cultures
Dates: August 20-30, 2001

Table J-4. Batch 2 Test Results Summary

Name (Sample ID)	Rep	Number Alive	Number Dead or Missing	Proportion Surviving	Mean Proportion Surviving	SD Proportion Surviving	CV
GB602-NF-B01	1	8	12	0.40			
GB602-NF-B01	2	4	16	0.20			
GB602-NF-B01	3	6	14	0.30			
GB602-NF-B01	4	15	5	0.75			
GB602-NF-B01	5	3	17	0.15	0.36	0.24	66
GB602-NF-B02	1	12	8	0.60			
GB602-NF-B02	2	9	11	0.45			
GB602-NF-B02	3	6	14	0.30			
GB602-NF-B02	4	8	12	0.40			
GB602-NF-B02	5	6	14	0.30	0.41	0.12	30
GB602-NF-B03	1	5	15	0.25			
GB602-NF-B03	2	11	9	0.55			
GB602-NF-B03	3	4	16	0.20			
GB602-NF-B03	4	7	13	0.35			
GB602-NF-B03	5	0	20	0.00	0.27	0.20	75
GB602-NF-B04	1	2	18	0.10			
GB602-NF-B04	2	3	17	0.15			
GB602-NF-B04	3	2	18	0.10			
GB602-NF-B04	4	1	19	0.05			
GB602-NF-B04	5	6	14	0.30	0.14	0.10	69
GB602-NF-B05	1	4	16	0.20			
GB602-NF-B05	2	0	20	0.00			
GB602-NF-B05	3	2	18	0.10			
GB602-NF-B05	4	14	6	0.70			
GB602-NF-B05	5	0	20	0.00	0.20	0.29	146
GB602-NF-B06	1	3	17	0.14			
GB602-NF-B06	2	1	19	0.05			
GB602-NF-B06	3	0	20	0.00			
GB602-NF-B06	4	0	20	0.00			
GB602-NF-B06	5	0	20	0.00	0.04	0.06	161
GB602-NF-B07	1	0	20	0.00			
GB602-NF-B07	2	0	20	0.00			
GB602-NF-B07	3	0	20	0.00			
GB602-NF-B07	4	0	20	0.00			
GB602-NF-B07	5	0	20	0.00	0	0.00	

Battelle
. . . Putting Technology To Work

Marine Sciences Laboratory
1529 West Sequim Bay Road
Sequim, WA 98382

Project: CSA_MMS Drilling Mud Toxicity Testing
Project No. 42903
Duration: 10 Day Batch 2
Test Type: Solid-Phase Static
Species: *Leptocheirus plumulosus* Source: Chesapeake Cultures
Dates: August 20-30, 2001

Table J-4. Batch 2 Test Results Summary

Name (Sample ID)	Rep	Number Alive	Number Dead or Missing	Proportion Surviving	Mean Proportion Surviving	SD Proportion Surviving	CV
GB602-NF-B08	1	0	20	0.00			
GB602-NF-B08	2	0	20	0.00			
GB602-NF-B08	3	0	20	0.00			
GB602-NF-B08	4	0	20	0.00			
GB602-NF-B08	5	0	20	0.00	0	0.00	
GB602-NF-B09	1	0	20	0.00			
GB602-NF-B09	2	0	20	0.00			
GB602-NF-B09	3	0	20	0.00			
GB602-NF-B09	4	2	18	0.10			
GB602-NF-B09	5	6	14	0.30	0.08	0.13	163
GB602-NF-B10	1	1	19	0.05			
GB602-NF-B10	2	5	15	0.25			
GB602-NF-B10	3	6	14	0.30			
GB602-NF-B10	4	2	18	0.10			
GB602-NF-B10	5	6	14	0.30	0.20	0.12	59
GB602-NF-B11	1	3	17	0.15			
GB602-NF-B11	2	0	20	0.00			
GB602-NF-B11	3	2	18	0.10			
GB602-NF-B11	4	2	18	0.10			
GB602-NF-B11	5	1	19	0.05	0.08	0.06	71
GB602-NF-B12	1	5	15	0.25			
GB602-NF-B12	2	7	13	0.35			
GB602-NF-B12	3	2	18	0.10			
GB602-NF-B12	4	3	17	0.15			
GB602-NF-B12	5	6	14	0.30	0.23	0.10	45
GB602-FF1-B01	1	18	2	0.90			
GB602-FF1-B01	2	14	6	0.70			
GB602-FF1-B01	3	14	6	0.70			
GB602-FF1-B01	4	12	8	0.60			
GB602-FF1-B01	5	13	7	0.65	0.71	0.11	16
GB602-FF1-B02	1	15	5	0.75			
GB602-FF1-B02	2	6	14	0.30			
GB602-FF1-B02	3	10	10	0.50			
GB602-FF1-B02	4	13	7	0.65			
GB602-FF1-B02	5	15	5	0.75	0.59	0.19	32

Battelle
. . . Putting Technology To Work

Marine Sciences Laboratory
1529 West Sequim Bay Road
Sequim, WA 98382

Project: CSA_MMS Drilling Mud Toxicity Testing
Project No. 42903
Duration: 10 Day Batch 2
Test Type: Solid-Phase Static
Species: *Leptocheirus plumulosus* Source: Chesapeake Cultures
Dates: August 20-30, 2001

Table J-4. Batch 2 Test Results Summary

Name (Sample ID)	Rep	Number Alive	Number Dead or Missing	Proportion Surviving	Mean Proportion Surviving	SD Proportion Surviving	CV
GB602-FF2-B01	1	12	8	0.60			
GB602-FF2-B01	2	14	6	0.70			
GB602-FF2-B01	3	16	4	0.80			
GB602-FF2-B01	4	9	11	0.45			
GB602-FF2-B01	5	13	7	0.65	0.64	0.13	20
GB602-FF2-B02	1	14	6	0.70			
GB602-FF2-B02	2	13	7	0.65			
GB602-FF2-B02	3	10	10	0.50			
GB602-FF2-B02	4	11	9	0.55			
GB602-FF2-B02	5	18	2	0.90	0.66	0.16	24
GB602-FF3-B01	1	16	4	0.80			
GB602-FF3-B01	2	13	7	0.65			
GB602-FF3-B01	3	14	6	0.70			
GB602-FF3-B01	4	15	5	0.75			
GB602-FF3-B01	5	15	5	0.75	0.73	0.06	8
GB602-FF3-B02	1	13	7	0.65			
GB602-FF3-B02	2	14	6	0.70			
GB602-FF3-B02	3	16	4	0.80			
GB602-FF3-B02	4	14	6	0.70			
GB602-FF3-B02	5	17	3	0.85	0.74	0.08	11
GB602-FF4-B01	1	14	6	0.70			
GB602-FF4-B01	2	15	5	0.75			
GB602-FF4-B01	3	12	8	0.60			
GB602-FF4-B01	4	12	8	0.60			
GB602-FF4-B01	5	14	6	0.70	0.67	0.07	10
GB602-FF4-B02	1	15	5	0.75			
GB602-FF4-B02	2	16	4	0.80			
GB602-FF4-B02	3	13	7	0.65			
GB602-FF4-B02	4	15	5	0.75			
GB602-FF4-B02	5	15	5	0.75	0.74	0.05	7
GB602-FF5-B01	1	11	9	0.55			
GB602-FF5-B01	2	7	13	0.35			
GB602-FF5-B01	3	15	5	0.75			
GB602-FF5-B01	4	10	10	0.50			
GB602-FF5-B01	5	10	10	0.50	0.53	0.14	27

Battelle
. . . Putting Technology To Work

Marine Sciences Laboratory
1529 West Sequim Bay Road
Sequim, WA 98382

Project: CSA_MMS Drilling Mud Toxicity Testing
Project No. 42903
Duration: 10 Day Batch 2
Test Type: Solid-Phase Static
Species: *Leptocheirus plumulosus* Source: Chesapeake Cultures
Dates: August 20-30, 2001

Table J-4. Batch 2 Test Results Summary

Name (Sample ID)	Rep	Number Alive	Number Dead or Missing	Proportion Surviving	Mean Proportion Surviving	SD Proportion Surviving	CV
GB602-FF5-B02	1	18	2	0.90			
GB602-FF5-B02	2	15	5	0.75			
GB602-FF5-B02	3	16	4	0.80			
GB602-FF5-B02	4	15	5	0.75			
GB602-FF5-B02	5	17	3	0.85	0.81	0.07	8
GB602-FF6-B01	1	18	2	0.90			
GB602-FF6-B01	2	16	4	0.80			
GB602-FF6-B01	3	15	5	0.75			
GB602-FF6-B01	4	12	8	0.60			
GB602-FF6-B01	5	13	7	0.65	0.74	0.12	16
GB602-FF6-B02	1	14	6	0.70			
GB602-FF6-B02	2	18	2	0.90			
GB602-FF6-B02	3	12	8	0.60			
GB602-FF6-B02	4	7	13	0.35			
GB602-FF6-B02	5	11	9	0.55	0.62	0.20	33
Sequim Bay	1	20	0	1.00			
Sequim Bay	2	20	0	1.00			
Sequim Bay	3	20	0	1.00			
Sequim Bay	4	20	0	1.00			
Sequim Bay	5	20	0	1.00	1.00	0.00	0

Battelle
. . . Putting Technology To Work

Marine Sciences Laboratory
1529 West Sequim Bay Road
Sequim, WA 98382

Project Title: CSA_MMS Drilling Mud Toxicity Testing
Project No. 42903
Test Species: *Leptocheirus plumulosus* Source: Chesapeake Cultures
Test Type: Solid-Phase Static
Duration: 10 Days
Date: Batch 2 August 20-30, 2001

Table J-5. Batch 2 Water Quality Summary

Treatment	Temperature (° C) Min	Temperature (° C) Max	Salinity (ppt) Min	Salinity (ppt) Max	Dissolved Oxygen (mg/L) Min	Dissolved Oxygen (mg/L) Max	pH (units) Min	pH (units) Max
target range:	23	27	18	22	4.2	7.4	7.3	8.3
GB602-NF-B01	23.1	24.5	20.0	21.7	7.1	7.7	7.8	8.1
GB602-NF-B02	23.5	24.5	19.3	21.4	7.0	7.7	7.8	8.1
GB602-NF-B03	23.6	24.6	19.8	21.8	7.1	7.7	7.8	8.1
GB602-NF-B04	23.6	24.5	19.6	21.5	7.0	7.7	7.8	8.1
GB602-NF-B05	23.6	24.6	19.8	21.5	6.9	7.7	7.8	8.0
GB602-NF-B06	23.6	24.5	19.3	21.3	6.8	7.7	7.8	8.2
GB602-NF-B07	23.3	24.5	19.9	21.6	6.2	7.2	7.7	8.2
GB602-NF-B08	23.5	24.5	19.9	22.4	3.5	7.4	7.8	8.1
GB602-NF-B09	23.3	24.6	19.7	21.5	7.1	7.7	7.8	8.1
GB602-NF-B10	23.5	24.4	19.2	21.4	6.9	7.7	7.8	8.1
GB602-NF-B11	23.4	24.4	20.1	22.0	7.1	7.7	7.8	8.1
GB602-NF-B12	23.5	24.6	20.0	21.6	7.1	7.7	7.8	8.1
GB602-FF1-B01	23.4	24.4	19.9	21.3	7.2	7.7	7.8	8.1
GB602-FF1-B02	23.7	24.4	20.0	21.6	7.2	7.7	7.8	8.1
GB602-FF2-B01	23.5	24.5	19.4	21.4	7.2	7.8	7.8	8.1
GB602-FF2-B02	23.5	24.5	20.0	21.6	7.2	7.7	7.8	8.1
GB602-FF3-B01	23.5	24.4	19.7	21.5	7.2	7.8	7.8	8.1
GB602-FF3-B02	23.5	24.5	19.9	21.4	7.2	7.7	7.8	8.1
GB602-FF4-B01	23.6	24.5	20.1	21.5	7.2	7.8	7.8	8.1
GB602-FF4-B02	23.4	24.5	19.6	21.8	7.1	7.8	7.8	8.1
GB602-FF5-B01	23.6	24.5	19.7	21.7	7.2	7.8	7.8	8.1
GB602-FF5-B02	23.6	24.5	19.8	21.5	7.1	7.8	7.8	8.1
GB602-FF6-B01	23.5	24.5	19.7	21.4	7.2	7.8	7.8	8.1
GB602-FF6-B02	23.6	24.5	19.4	21.3	7.2	7.8	7.8	8.1
Sequim Bay	23.5	24.5	19.3	21.6	6.6	7.7	7.7	8.2

Battelle
. . . Putting Technology To Work
Marine Sciences Laboratory
1529 West Sequim Bay Road
Sequim, WA 98382
(360) 683-4151

Project: CSA_API Drilling Mud Toxicity Testing
Project No. 41202
Duration: 4 Days Batch 2 Run 1
Test Type: Cadmium Reference Toxicant
Species: *Leptocheirus plumulosus* Source: Chesapeake Cultures
Dates: August 20-24, 2001

Table J-6. Batch 2 Test Results Summary

Treatment	Concentration mg/L Cd	Rep	Number Alive	Number Dead or Missing	Proportion Surviving
0	mg/L Cd	1	9	11	0.45
0.156	mg/L Cd	1	14	6	0.70
0.312	mg/L Cd	1	3	17	0.15
0.625	mg/L Cd	1	3	17	0.15
1.25	mg/L Cd	1	4	16	0.20
2.5	mg/L Cd	1	1	19	0.05
5	mg/L Cd	1	0	20	0
7	mg/L Cd	1	0	20	0

LC50 = 0.57 mg/L Cd
95% confidence intervals = 0.11 - 1.36 mg/L Cd

APPENDIX K

Additional Synthesis Figures and Analyses

K.1 SIDE-SCAN SONAR MOSAICS

Figures K.1 through K.4 show side-scan sonar mosaics for the four study sites, as follows:

- Figure K.1 – Viosca Knoll (VK) 916, Cruise 3A (August 2002)
- Figure K.2 – Garden Banks (GB) 516, Cruise 2A (June-July 2001)
- Figure K.3 – Garden Banks (GB) 602, Cruise 2A (June-July 2001)
- Figure K.4 – Mississippi Canyon (MC) 292, Cruise 2A (June-July 2001)

These are reduced, annotated versions of the large maps produced from the geophysical surveys. Some features may be easier to see on the larger versions of these mosaics and/or the seafloor interpretation maps presented in the geophysical survey reports (*Appendix C*).

All of the mosaics are from post-drilling surveys. VK 916 was surveyed after drilling of a single exploration well, whereas the others were surveyed after drilling of multiple development wells (see *Chapters 2 and 3*). Wellsites and estimated anchor locations are shown, as well as the 500-m radius of the near-field site for chemical/biological sampling. Nearby well locations (i.e., those outside the 500-m radius) are also shown.

As noted in *Chapter 4*, side-scan sonar and chirp sonar subbottom records were used to map deposits of drilling mud and cuttings around the wellsites. A combination of a smooth seafloor (little backscatter on side-scan sonar records) and a high amplitude response at the seafloor on high resolution subbottom profiles was used to identify areas of probable drilling mud deposition.

On these mosaics, darker areas where side-scan sonar showed high reflectivity extending in a radial pattern around the wellsites were interpreted as cuttings. Cuttings are derived from subsurface sediments that are much more compacted and therefore denser than surface hemipelagic sediments that drape most of the northern Gulf continental slope. When deposited over hemipelagic sediments, cuttings create an acoustic impedance difference that translates into a higher amplitude reflection on subbottom profiler records.

In *Chapter 4*, it was noted that other processes could produce the reflectance patterns mapped as cuttings, including seafloor disturbances (grooves, furrows, etc.) caused by the process of setting anchors and the dropping of sediment clumps to the seafloor from the anchor cables as they are pulled into place. However, several lines of evidence suggest that the areas mapped as "cuttings" are cuttings rather than clumps or other seafloor disturbances (see *Chapter 15*).

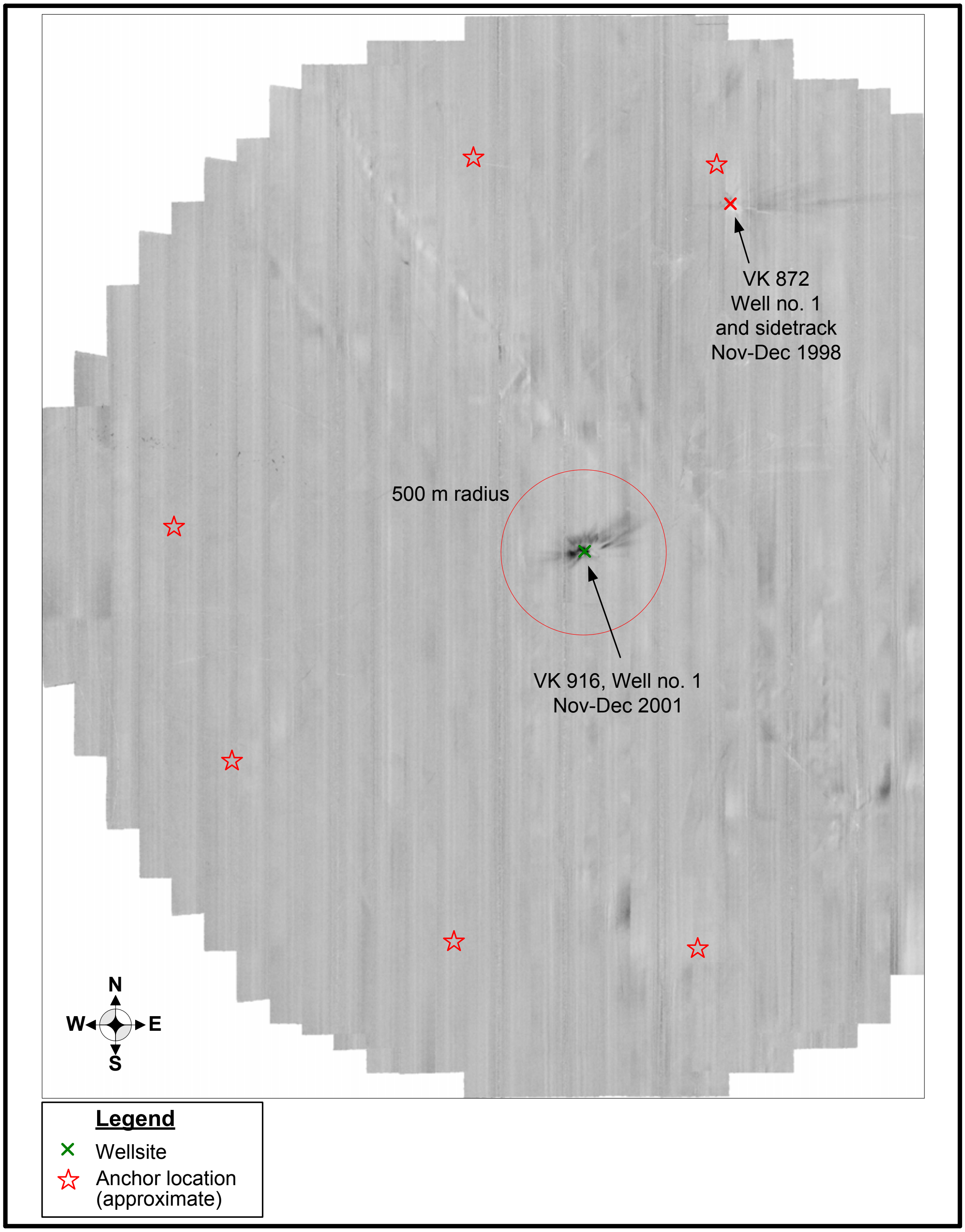


Figure K.1. Side-scan sonar mosaic showing highly reflective seafloor (dark areas, presumed cuttings) at Viosca Knoll 916 on Cruise 3A (post-exploration, August 2002). A similar but fainter pattern is evident around an older wellsite in VK 872. Anchor scars visible on an enlarged version of this mosaic include some associated with a well drilled in Viosca Knoll 873 in 1988 (14 years prior to this cruise).

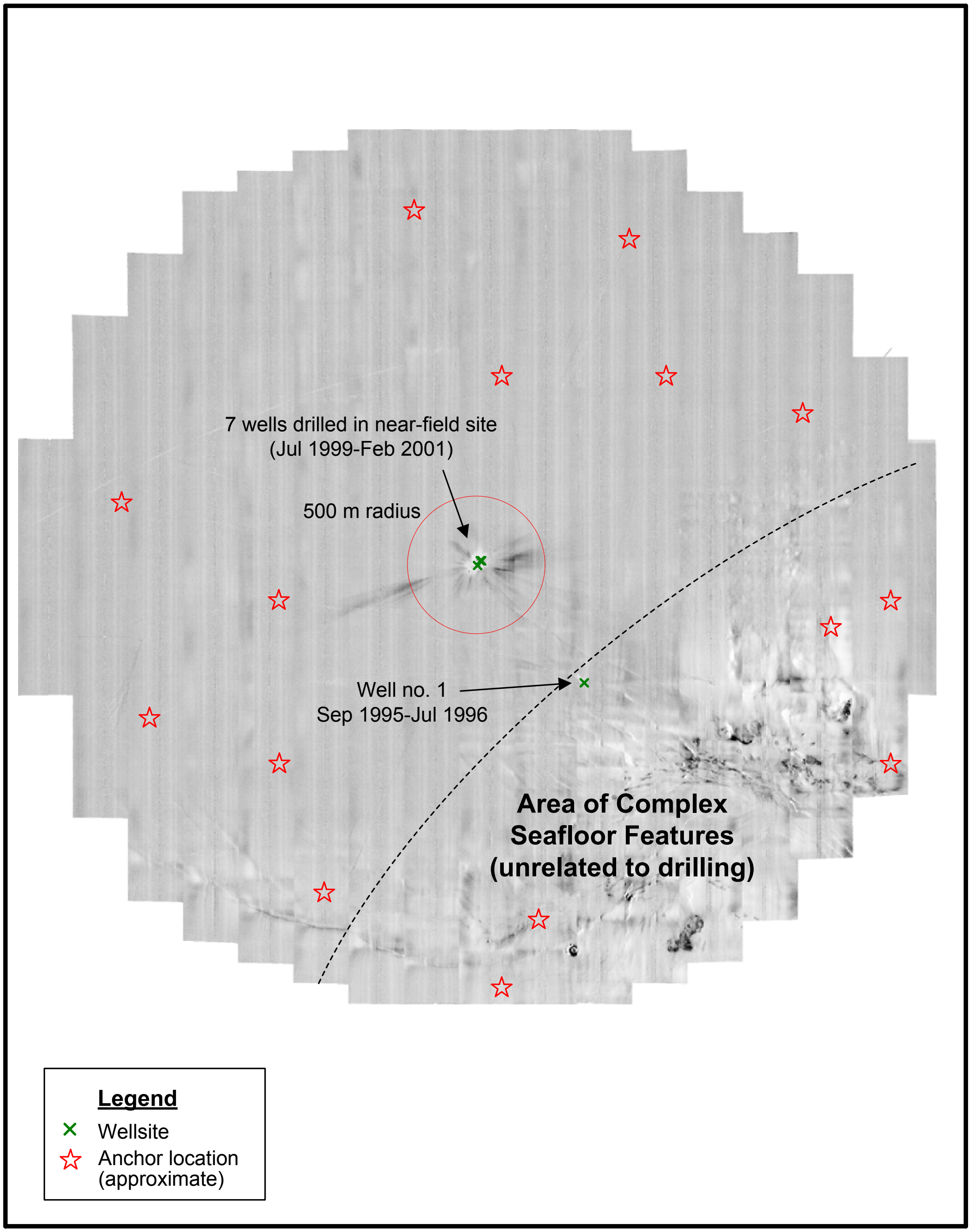


Figure K.2. Distribution of highly reflective seafloor (dark areas, presumed cuttings) at Garden Banks 516 on Cruise 2A (post-development, June-July 2001). Note that dark areas are predominantly oriented WSW to ENE around the wellsite and do not appear to be associated with anchor locations.

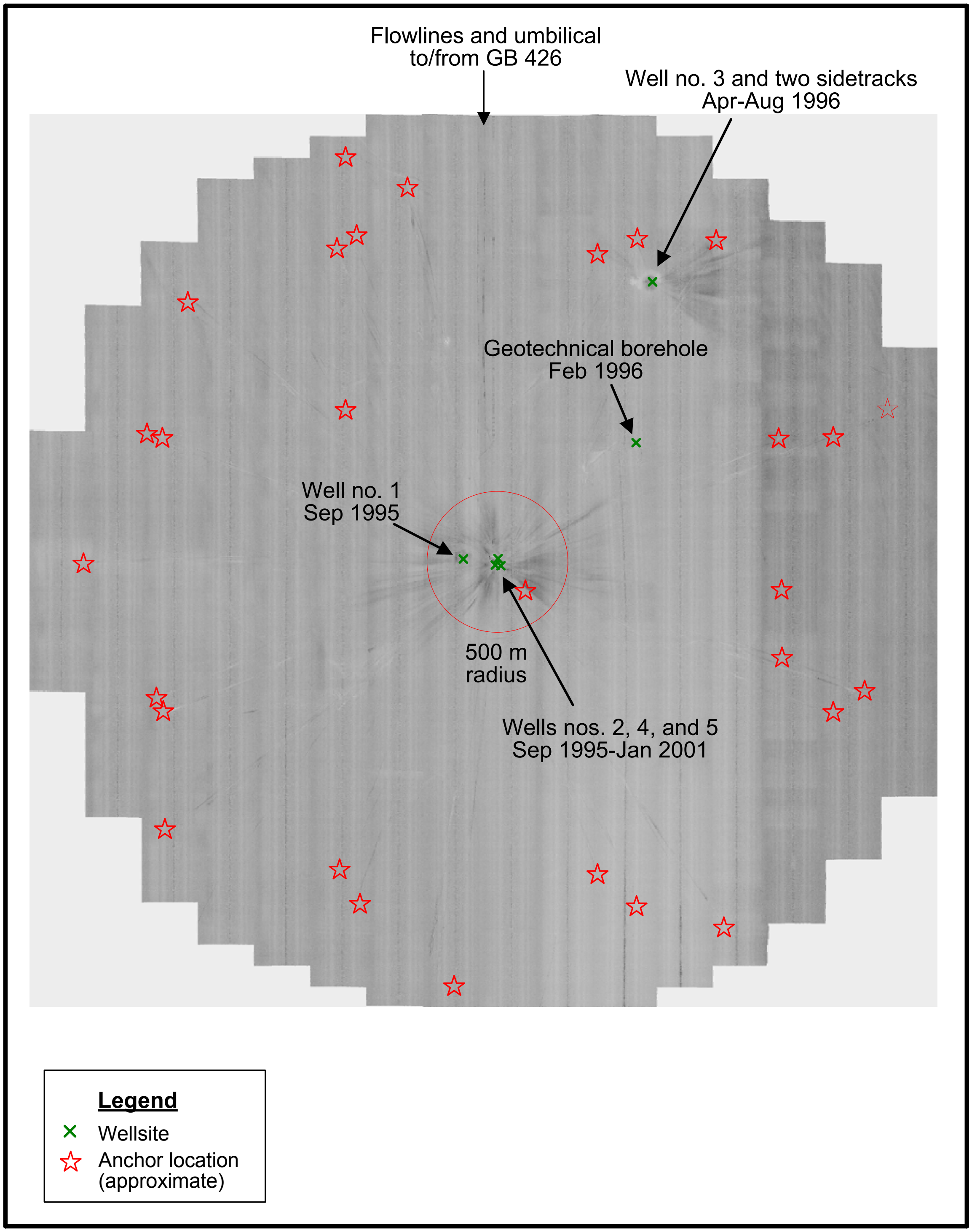


Figure K.3. Distribution of highly reflective seafloor (dark areas, presumed cuttings) at Garden Banks 602 on Cruise 2A (post-development, June-July 2001). Anchor scars associated with various drillsites, as well as flowlines and an umbilical connecting to the Auger platform in Garden Banks 426, are visible.

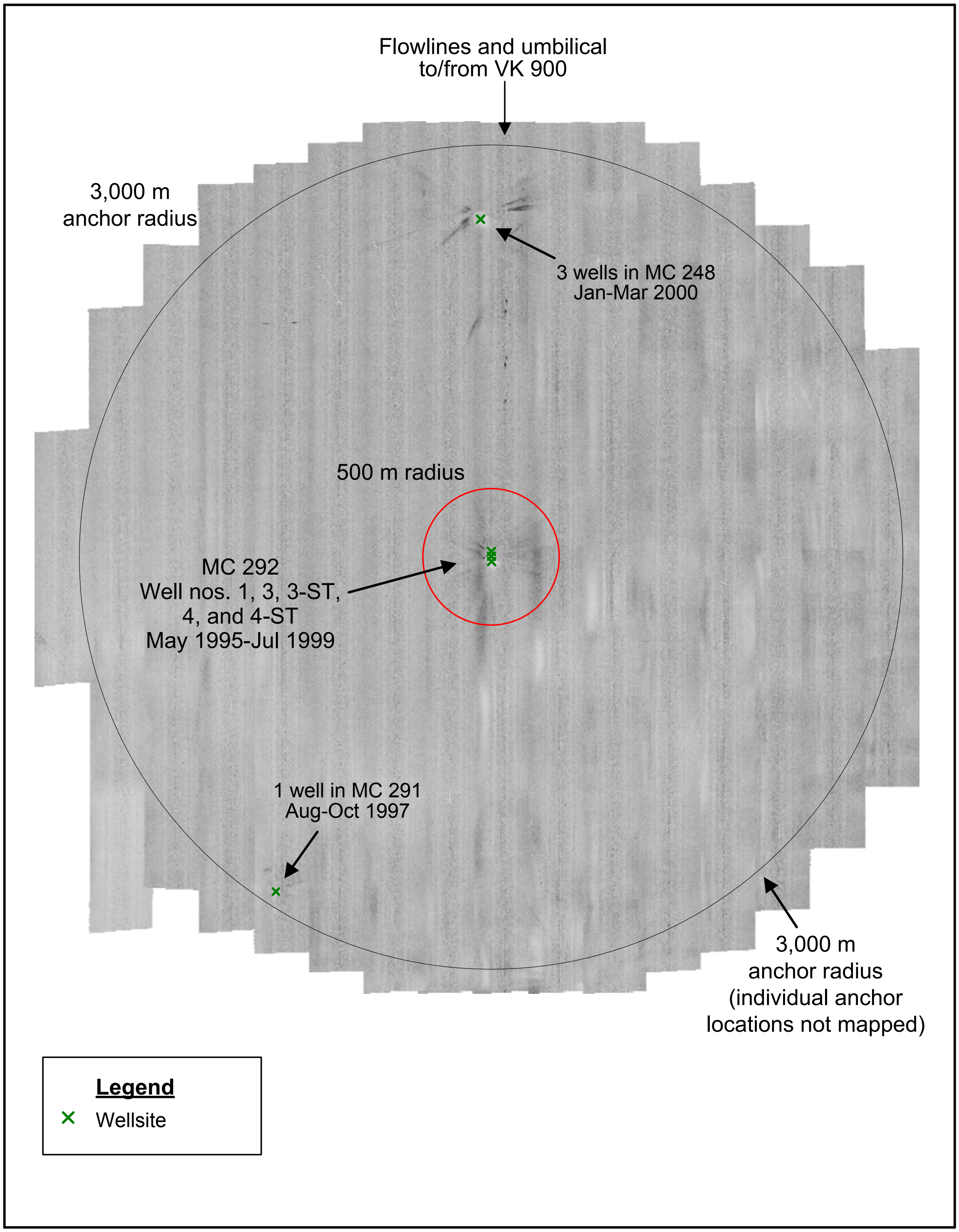


Figure K.4. Distribution of highly reflective seafloor (dark areas, presumed cuttings) at Mississippi Canyon 292 on Cruise 2A (post-development, June-July 2001). Note the similar but more prominent pattern around a more recently drilled wellsite in MC 248.

K.2 EVALUATION OF FAR-FIELD SITES

The six far-field sites for each near-field site were chosen to be at similar water depth and 10 to 25 km away. The intention also was to locate these sites away from other previous wells, to the extent possible. However, due to the large number of wells in the Gulf of Mexico, it was difficult to find far-field sites that were not within 10 km of previous drilling. This section summarizes the proximity of far-field sites to previous drilling and examines concentrations of drilling fluid tracers at those sites.

K.2.1 Proximity to Previous Drilling

Table K.1 summarizes the number of previous wells within 10 km of each far-field site center. Based solely on proximity to previous drilling, the far-field sites are rated as follows:

- Excellent – no previous wells within 10 km
- Good – no previous wells within 3 km, but one or more between 3 km and 10 km away
- Fair – previous well(s) between 1.5 km and 3 km away
- Poor – previous well(s) within 1.5 km

All of the far-field sites were rated as "excellent" or "good" with the following exceptions:

- VK 916, FF1 – rated fair; 4 wells were drilled only 1.9 km away, but the drilling occurred more than 10 years ago. This site also had a very large number of wells within 10 km (63).
- VK 916, FF2 – rated fair, with 4 recent wells (March-May 2002) located 2.6 km away and a total of 41 wells within 10 km.
- MC 292, FF1 – rated poor, with one well 1.1 km away (September-October 1994) and another 2.7 km away (August-September 1999).
- MC 292, FF2 – rated fair, with the nearest well 2 km away (August-September 1999).

K.2.2 Statistical Analysis

Based on the proximity of some individual far-field sites to previous drilling, VK 916 and MC 292 were selected for more detailed analysis focusing on two drilling fluid tracers: barium and synthetic based fluid (SBF) chemical.

On each cruise, sediment samples were collected using a box core at randomly selected locations within each near-field and far-field sites (see *Chapter 2*). For each near-field site, there were six far-field sites, with two box cores each, for a total of 12 far-field box cores. From each box core, a subsample of the top 2 cm was obtained for chemical analysis. See *Chapters 8 and 9* for description of analytical methods for barium and SBF, respectively.

Far-field barium and SBF concentrations at the VK 916 and MC 292 far-field sites are plotted in **Figure K.5**. ANOVA results comparing mean concentrations among sites are provided in **Table K.2**.

Table K.1. Previous wells near far-field (FF) sites.

Site	No. of Previous Wellsites		Distance to Nearest Well(s)	Block of Nearest Well(s)	Dates of Nearest Well(s)	Rating of FF Site[b]
	Within 10 km	Within 3 km				
Viosca Knoll Block 916 (exploration site)						
FF1	63	4	1.9 km	VK 957 (4 wells)	Jan-July 1989	Fair
FF2	41	4	2.6 km	VK 915 (4 wells)	Mar-May 2002	Fair
FF3	30	0	5.5 km	VK 829 (1 well)	June-Aug 1994	Good
FF4	26	0	5.7 km	VK 829 (1 well)	June-Aug 1994	Good
FF5	25	0	6.3 km	VK 786 (24 wells)	June 1995-June 2002	Good
FF6	25	0	6.7 km	VK 786 (24 wells)	June 1995-June 2002	Good
Garden Banks Block 516 (exploration/development site)						
FF1	19	0	4.6 km	GB 559 (6 wells)	Feb 1999-Oct 2000	Good
FF2	6	0	8.6-8.9 km	GB 386 (6 wells)	June 1997-Mar 1999	Good
FF3	6	0	8.5-8.6 km	GB 386 (6 wells)	June 1997-Mar 1999	Good
FF4	7	0	7.8 km	GB 386 (2 wells)	Nov 1998-Mar 1999	Good
FF5	12	0	7.5 km	GB 386 (2 wells)	Nov 1998-Mar 1999	Good
FF6	3	0	8.4-8.9 km	GB 386-387 (3 wells)	Apr 1990-Mar 1999	Good
Garden Banks Block 602 (post-development site)						
FF1	1	0	6.5 km	GB 600 (1 well)[a]	June-Aug 2001	Good
FF2	0	0	>10 km	--	--	Excellent
FF3	0	0	>10 km	--	--	Excellent
FF4	0	0	>10 km	--	--	Excellent
FF5	0	0	>10 km	--	--	Excellent
FF6	1	0	6.3 km	GB 562 (1 well)	Aug-Sep 2000	Good
Mississippi Canyon Block 292 (post-development site)						
FF1	12	2	1.1 km 2.7 km	MC 243 (1 well) MC 243 (1 well)	Sep-Oct 1994 Aug-Sep 1999	Poor
FF2	13	1	2.0 km	MC 243 (1 well)	Aug-Sep 1999	Fair
FF3	2	0	7.4 km 7.5 km	MC 201 (1 well) MC 160 (1 well)	Jan 1988 Sep-Nov 1989	Good
FF4	7	0	7.1 km	MC 201 (1 well)	Jan 1988	Good
FF5	9	0	4.6 km	MC 160 (1 well)	Sep-Nov 1989	Good
FF6	6	0	4.8 km	MC 160 (1 well)	Sep-Nov 1989	Good

[a] Drilling of this well was ongoing during Cruise 2B (8 to 25 July 2001).

[b] Excellent – no previous wells within 10 km; Good – no previous wells within 3 km, but one or more between 3 km and 10 km away; Fair – previous well(s) between 1.5 km and 3 km away; and Poor – previous well(s) within 1.5 km.

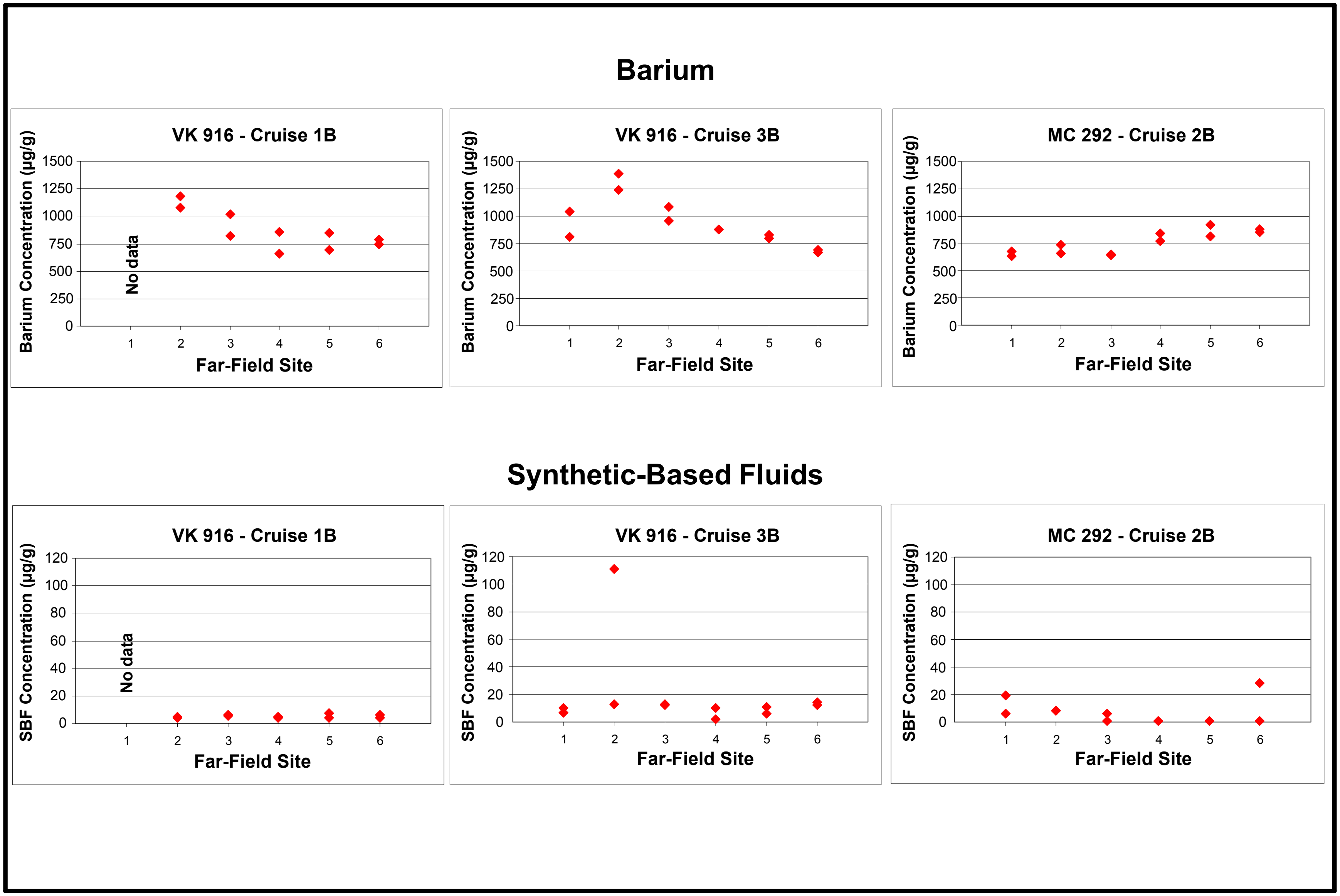


Figure K.5. Sediment concentrations of barium and synthetic-based fluids (SBF) at Viosca Knoll 916 and Mississippi Canyon 292 far-field sites. Points are individual stations within far-field sites.

Table K.2. Analysis of variance results for barium and synthetic-based fluid (SBF) concentrations at Viosca Knoll (VK) 916 and Mississippi Canyon (MC) 292 far-field sites.

Site	Barium			SBF		
	Source	Probability	Interp.	Source	Probability	Interp.
VK 916	Cruise	0.1191	n.s.	Cruise	0.1687	n.s.
	Sites	0.0002	FF2>others	Sites	0.4276	n.s.
	Interaction	0.4021	n.s.	Interaction	0.3339	n.s.
MC 292	Sites	0.0054	FF6>FF1,FF3 FF5>FF1,FF3	Sites	0.5495	n.s.

n.s. = not significant.

For barium, the ANOVA showed a significant difference among far-field sites (but not cruises) at VK 916. Site FF2 had higher barium concentrations than the other five far-field sites on both cruises:

- Cruise 1B: 1,130 µg/g vs. 805 µg/g average for the other far-field sites
- Cruise 3B: 1,315 µg/g vs. 866 µg/g average for the other far-field sites

At MC 292, barium concentrations at sites FF5 and FF6 were higher than at FF1 and FF3. However, the difference is not considered meaningful, as all of the values were fairly low (632 to 923 µg/g). There was no indication that either of the two sites suspected of being close to drilling discharges (FF1 and FF2) had elevated barium concentrations. Both FF5 and FF6 were rated as "good" with the nearest wells drilled over 4.5 km away (and more than 10 years earlier).

The ANOVA did not detect any significant differences for SBF concentrations for either VK 916 or MC 292. However, at VK 916, one of the FF2 stations had an SBF concentration of 111 µg/g, about 10 to 20 times higher than the other far-field values at this site (**Figure K.5**). The high single value apparently increased the "within" variance, making it difficult to detect differences among sites or cruises.

Although SBF concentrations did not differ significantly among MC 292 far-field sites, two stations appeared to have slightly elevated SBF concentrations. These were FF1-B02 (19 µg/g) and FF6-B01 (28 µg/g). Values at the other far-field stations ranged from 1 to 8 µg/g (**Figure K.5**). The low SBF concentrations measured at most far-field sites represent background concentrations of hydrocarbons that co-elute with SBF in the analytical procedure (*Chapter 9*).

K.2.3 Interpretation

The preliminary screening identified four far-field sites that had previous wells within 3 km. These were VK 916 FF1 and FF2, and MC 292 FF1 and FF2. Analysis of barium and SBF concentrations suggests that two of these (VK 916 FF2 and MC 292 FF1) may have been exposed to small amounts of drilling discharges.

VK 916 FF2 had slightly elevated barium and SBF concentrations. This site had significantly higher barium than the other VK 916 far-field sites on both Cruises 1B and 3B. On Cruise 3B, one of the FF2 stations had an SBF concentration of 111 µg/g, about 10 to 20 times higher than the other far-field values at this site. The data from VK 916 FF2 suggest that this site was exposed to drilling discharges from nearby wells. Potential sources include four wells drilled between March and May 2002 in VK 915, approximately 2.6 km away; and four wells drilled between April and July 1997 in VK 914, approximately 3.1 km away.

The other VK 916 site (FF1) did not appear to have elevated barium or SBF concentrations. Although this site was only 1.9 km from the site of four previous wells in VK 957, the drilling occurred more than 10 years before our first cruise, prior to the first use of SBMs in the Gulf of Mexico.

At MC 292, there is no indication that the FF2 site had elevated barium or SBF concentrations. However, there is some indication that the other site of interest (FF1) may have been affected. This site had elevated SBF concentrations (19 µg/g) compared to the other far-field stations (1 to 8 µg/g). Potential sources include a well drilled 1.1 km away in MC 243 (September-October 1994) and another 2.7 km away, also in MC 243 (August-September 1999). However, the SBF difference may or may not be meaningful, since another station (FF6) also had slightly elevated SBF concentrations (28 µg/g) even though the nearest well was nearly 5 km away and more than 10 years old (preceding the use of SBMs in the Gulf of Mexico).

Statistically, elevated levels of barium and SBF at some far-field sites could make it more difficult to detect near-vs.-far-field differences by increasing both the far-field mean and the variance among far-field sites. However, the far-field concentrations seen here are orders of magnitude lower than most barium and SBF concentrations seen in the near-field. For statistical comparisons of the near-field site *as a whole* vs. the far-field, their effect is negligible. For example, even though VK 916 FF2 and MC 292 FF1 were included in statistical analyses in *Chapters 8* and *9*, significant near-field vs. far-field differences for both barium and SBF were detected.

The elevated barium and/or SBF levels at some far-field sites represent very small amounts of drilling fluids or fine cuttings particles. For example, a barium increase of 500 µg/g would represent about 943 µg of industrial barite per gram of sediment, or 0.094% (assuming industrial barite averages 53% barium; *Chapter 8*). Similarly, an SBF increase of 100 µg/g would represent approximately 1,000 µg of cuttings particles per gram of sediment, or 0.1% (assuming retention on cuttings averages about 10% on a dry weight basis).

The Department of the Interior Mission

As the Nation's principal conservation agency, the Department of the Interior has responsibility for most of our nationally owned public lands and natural resources. This includes fostering sound use of our land and water resources; protecting our fish, wildlife, and biological diversity; preserving the environmental and cultural values of our national parks and historical places; and providing for the enjoyment of life through outdoor recreation. The Department assesses our energy and mineral resources and works to ensure that their development is in the best interests of all our people by encouraging stewardship and citizen participation in their care. The Department also has a major responsibility for American Indian reservation communities and for people who live in island territories under U.S. administration.

The Minerals Management Service Mission

As a bureau of the Department of the Interior, the Minerals Management Service's (MMS) primary responsibilities are to manage the mineral resources located on the Nation's Outer Continental Shelf (OCS), collect revenue from the Federal OCS and onshore Federal and Indian lands, and distribute those revenues.

Moreover, in working to meet its responsibilities, the **Offshore Minerals Management Program** administers the OCS competitive leasing program and oversees the safe and environmentally sound exploration and production of our Nation's offshore natural gas, oil and other mineral resources. The MMS **Minerals Revenue Management** meets its responsibilities by ensuring the efficient, timely and accurate collection and disbursement of revenue from mineral leasing and production due to Indian tribes and allottees, States and the U.S. Treasury.

The MMS strives to fulfill its responsibilities through the general guiding principles of: (1) being responsive to the public's concerns and interests by maintaining a dialogue with all potentially affected parties and (2) carrying out its programs with an emphasis on working to enhance the quality of life for all Americans by lending MMS assistance and expertise to economic development and environmental protection.