APPENDIX A. SONAR TRACKLINE DATA

Line	Date	Start Time†	End Time	XTF File Size (KBytes)
1	08/13/2001	17:47:57	18:25:06	138637
2	08/13/2001	19:11:55	19:55:16	147689
3A	08/13/2001	19:56:50	20:21:29	87347
3B	08/13/2001	20:22:00	20:35:59	48247
4	08/13/2001	20:36:40	21:20:05	148675
5	08/14/2001	13:55:55	14:38:19	149482
6	08/14/2001	14:38:43	15:27:44	166912
7A	08/14/2001	16:40:05	17:04:53	118287
7_REP	08/15/2001	14:50:54	15:42:03	168199
8	08/14/2001	17:05:17	17:50:06	152381
9	08/14/2001	17:54:17	18:47:13	179948
10	08/14/2001	18:50:49	19:41:29	172262
11	08/15/2001	15:57:42	16:41:55	153588
12	08/15/2001	16:49:42	17:33:45	149805
13	08/15/2001	17:41:13	18:17:16	122313
14	08/15/2001	18:37:42	19:22:15	151477
15	08/15/2001	19:31:36	20:14:37	146278
16	08/15/2001	20:27:24	20:57:53	103633
17	08/16/2001	14:17:27	14:45:38	95799
18	08/16/2001	14:54:06	15:38:54	152279
19	08/16/2001	15:41:21	16:25:35	150428
20	08/16/2001	17:54:01	18:33:36	148522
21	08/16/2001	18:44:02	19:20:36	124319
22	08/16/2001	19:27:41	20:04:02	123566
23	08/16/2001	20:48:50	21:25:06	123444
24	08/17/2001	14:07:58	14:51:36	148370
25	08/17/2001	14:54:27	15:29:41	119826
26	08/17/2001	15:32:54	16:14:08	140209
27	08/17/2001	16:15:14	16:52:45	127856
28	08/17/2001	16:53:09	17:31:10	129295
29	08/17/2001	17:34:50	18:16:18	141025
30	08/17/2001	18:21:23	19:05:17	149287
31	08/17/2001	19:07:26	19:51:27	149663
32	08/20/2001	13:46:07	14:40:28	192713
32A	08/20/2001	15:18:23	15:36:20	61210
33	08/20/2001	15:38:59	16:43:50	220687
34	08/20/2001	16:48:34	17:50:25	210393
34A	08/20/2001	17:59:29	18:19:47	69106
35	08/20/2001	18:23:04	19:27:31	219267
36	08/20/2001	19:56:06	20:42:00	156206
37	08/21/2001	13:49:20	14:33:36	129550
38	08/21/2001	14:36:21	15:13:46	127246
39	08/21/2001	15:22:38	16:29:38	227801
40	08/21/2001	16:30:07	16:45:42	52982
41	08/21/2001	17:09:10	17:45:21	123047
42	08/21/2001	17:46:32	18:17:37	105665
43	08/21/2001	18:21:55	19:03:09	140141
44	08/21/2001	19:05:40	19:36:02	103217

Line	Date	Start Time†	End Time	XTF File Size (KBytes)
45	08/22/2001	14:04:49	14:41:49	125827
46	08/22/2001	14:44:43	15:20:13	120650
47	08/22/2001	15:23:50	15:56:59	112711
48	08/22/2001	16:09:13	16:41:25	109477
49	08/22/2001	16:42:24	17:01:32	65077
50	08/22/2001	17:04:57	17:27:21	76187
51	08/22/2001	17:27:39	17:42:28	50364
52	08/22/2001	17:46:57	17:54:04	24209
53	08/22/2001	17:58:32	18:05:40	24286
54	08/22/2001	18:09:55	19:09:05	201137
55	08/22/2001	19:11:50	19:57:06	153936
56	08/23/2001	14:11:14	14:41:38	103387
57	08/23/2001	14:45:15	15:12:26	92450
58	08/23/2001	15:16:57	15:34:30	59671
59	08/23/2001	15:41:10	15:54:57	46913
60	08/23/2001	16:13:14	16:26:49	46428
61	08/23/2001	16:42:22	17:03:34	72081
62	08/23/2001	17:21:43	17:56:36	118593
63	08/23/2001	18:00:51	18:11:40	36815
64	08/23/2001	18:16:44	18:51:16	117412
65	08/23/2001	19:00:10	19:34:54	118075
66	08/23/2001	19:36:26	19:57:09	70500
67	08/23/2001	20:03:53	20:14:10	34987
68	08/23/2001	20:22:05	20:29:42	25907
69	08/24/2001	14:33:16	14:53:20	68282
69A	08/24/2001	15:01:45	15:29:05	92906
70	08/24/2001	15:30:56	16:06:42	121577
70A	08/24/2001	16:07:17	16:20:15	44166
71	08/24/2001	16:22:58	16:52:20	99885
72	08/24/2001	16:53:07	16:53:39	1837
72A	08/24/2001	16:54:49	17:17:03	75634
73	08/24/2001	17:19:03	17:40:13	72005
74	08/24/2001	17:48:02	18:20:59	117140
75	08/24/2001	18:34:50	18:39:01	14264
76	08/24/2001	18:46:57	18:59:04	41235
77	08/24/2001	19:22:03	19:26:46	16032
78	08/24/2001	19:29:44	19:36:32	23138
79	08/24/2001	19:49:20	19:55:47	21948
80	10/22/2001	16:08:33	16:42:23	124518
81	10/22/2001	16:45:07	16:52:55	26538
82	10/22/2001	16:56:31	17:08:24	40359
83	10/22/2001	17:11:32	17:44:37	112431
84	10/22/2001	17:47:53	18:27:56	136120
85	10/22/2001	18:30:04	19:02:41	110875
86	10/22/2001	19:06:42	19:43:06	123744
87	10/22/2001	19:48:41	20:23:24	117990
88	10/23/2001	14:19:52	14:55:50	122274
89	10/23/2001	14:59:51	15:44:19	151131
90	10/23/2001	15:47:08	16:30:26	147162
91	10/23/2001	16:32:34	17:16:16	148530

Line	Date	Start Time†	End Time	XTF File Size (KBytes)
92	10/23/2001	17:31:42	17:45:32	47049
93	10/23/2001	17:48:07	18:03:41	52931
94	10/23/2001	19:17:57	19:31:06	122687
95	10/23/2001	19:32:58	20:03:51	139988
96	10/24/2001	19:36:16	20:20:57	284930
97	10/24/2001	20:21:21	21:07:39	295052
98	10/25/2001	13:26:39	14:13:25	159065
99	10/25/2001	14:16:15	15:06:05	169326
100	10/25/2001	15:12:19	15:53:27	139869
101	10/25/2001	15:55:02	16:11:57	57555
102	10/25/2001	16:15:35	16:25:59	35336
103	10/25/2001	16:34:36	17:17:25	145470
104	10/25/2001	18:33:22	19:15:27	143048
105	10/25/2001	19:35:08	19:49:16	48077
106	10/25/2001	19:54:24	20:15:30	71758
107	10/26/2001	14:02:25	15:08:52	225846
108	11/28/2001	17:04:15	18:58:57	391749
109	11/28/2001	19:35:31	20:41:13	313246
110	11/28/2001	20:44:23	21:10:07	87500
111	11/28/2001	21:12:12	21:33:08	71180
112	12/05/2001	16:40:36	16:56:53	69208
113	12/05/2001	16:59:06	17:16:03	76865
114	12/05/2001	17:20:15	17:43:38	105962
115	12/05/2001	17:52:54	18:02:55	45408
116	12/05/2001	18:13:27	18:21:57	38505
117	12/05/2001	18:29:14	18:36:01	30712
118	12/05/2001	18:41:58	18:47:08	23444
119	12/05/2001	18:59:22	19:06:39	32998
120	12/05/2001	19:13:35	19:25:42	54928
121	12/05/2001	19:30:09	19:38:45	39016
122	12/05/2001	19:46:27	19:57:09	48400

† All times are Greenwich Mean Time (+5 hours Eastern Standard Time)

APPENDIX B. GIS DATABASE ON CD-ROM

Two CD-ROMs are included with this report. CD-ROM #1 contains three folders: (1) Data, (2) Figures_Tables_Plots, and (3) GIS_ArcMap_Documents. The Data folder contains GIS-based files that were used in the generation of all maps in the report text. Details on these GIS-based files are provided below. The Figures_Tables_Plots folder contains *.jpg format files of figures presented in the report, tables in Excel format summarizing the sidescan and chirp tracklines, as well as grab and HDC sampling station details, and various plots in *.jpg format of the surveyed area. The GIS_ArcMap_Documents folder contains *.mxd format files that can be opened in ArcGIS 8.2 and that were used to generate figures in the report.

CD-ROM #2 contains one folder, SSS_Mosaics, containing all of the sidescan sonar mosaics georeferenced to the other datasets. To display files used in the *.mxd format files in ArcGIS 8.2, copy all data from the CD-ROMs onto the "hard" disk of a computer and then copy the SSS_Mosaics folder into the Data folder contained on CD-ROM #1. This GIS database may be viewed (but not modified) using Arc Explorer 2, free GIS software available for download from ESRI's website (www.esri.com/software.arcexplorer).

Note: All GIS-shapefiles therein are defined by UTM, WGS-84 Zone 18N, northing and easting meters coordinates.

The Data folder on CD-ROM #1 contains four folders: (1) Background_Data, (2) Grabs_and_Cores, and (3) Survey_Tracklines, and (4) Bathymetric soundings. The data within each of these folders is described in detail below.

Background Data Folder

The background data folder contains general files that were used in the generation of the figures/maps that were supplied in the report. These files include:

1) Within a subfolder, NOAA Charts within the survey area. These charts are included in a *.tif format with accompanying *.tfw files.
2) NOAA Medium-Resolution Digital Vector Coastline for the survey area. The coastline is included as GIS-shapefile coastline_med_utm.shp, *.shx, and *.dbf.

3) General start and end positions for all the major bridges crossing the river in the survey area. These files are included as GIS-shapefiles in a format of bridge_name.shp, *.shx, and *.dbf. For example, for the Commodore Barry Bridge the accompanying files are commodore_barry_bridge.shp, *.shx, and *.dbf. The bridges included are the: Ben Franklin Bridge, Betsy Ross Bridge, Burlington-Bristol Bridge, Commodore Barry Bridge, Delaware Memorial Bridge, Tacony_Palmyra Bridge, and Walt Whitman Bridge.
4) DRBC Zone boundaries within the survey area. These files are included as GIS-shapefiles in a format of boundary_name.shp, *.shx, and *.dbf. For example, for the DRBC Zone 2–Zone 3 boundary the accompanying files are drbc_zone2_zone3.shp, *.shx, and *.dbf. The boundaries included are the: DRBC Zone 2–Zone 3, DRBC Zone 3–Zone 4, and DRBC Zone 4–Zone 5 boundaries.
5) The position of the shipping (dredged) channel within the survey area. The channel is included as GIS-shapefile dredged_channel.shp, *.shx, and *.dbf.
6) The position of the 18' depth contour within the survey area. The 18' contour is included as GIS-shapefile contour_18.shp, *.shx, and *.dbf.

Grabs_and_Cores Folder

The grabs_and_cores folder contains files that were used to show the locations of the grab samples and slow cores that were collected in the survey area. These files include:

1) The locations of the grab samples. This file is included as GIS-shapefile dr_grab_cores.shp, *.shx, and *.dbf.
2) The locations of the HDC samples (a.k.a. slow cores). This file is included as GIS-shapefile dr_slow_cores.shp, *.shx, and *.dbf.
3) The sediment classifications for the grab samples. See the report for definitions of the abbreviations for the sediment classifications. This file is included as GIS-shapefile grab_cores_class.shp, *.shx, and *.dbf.
4) Tables of the sediment grain-size data. See the report text for a description of the sediment classifications scheme and sediment-type abbreviations. Percentage gravel, sand, mud, silt, clay, and sediment type are tabulated. This information

can be accessed also in an ArcGIS 8.2 session by loading this shapefile and, using the "information" button from the tools menu, "clicking" on a grab sample location. This file is included as GIS-shapefile dr_grab_cores_info.shp, *.shx, and *.dbf.

Survey_Tracklines Folder

The Survey_Tracklines folder contains files that provide the geographic position of the sidescan sonar and Chirp tracklines. These files also can be used to annotate at 1 minute, and/or 10 minute time-intervals along the tracklines:

1) Sidescan sonar and Chirp trackline positions. Files are included as GIS-shapefiles in a format of line_number.shp, *.shx, and *.dbf. For example, for trackline 122, the accompanying files are l122.shp, *.shx, and *.dbf.
2) One-minute time-interval waypoints along the sidescan sonar and Chirp tracklines. These files are included as GIS-shapefiles in a format of line_number_m.shp, *.shx, and *.dbf. For example, for Trackline 122, the accompanying one minute waypoint files are l122m.shp, *.shx, and *.dbf.
3) Ten-minute time interval waypoints along the sidescan sonar and Chirp tracklines. These files are included as GIS-shapefiles in a format of line_number_t.shp, *.shx, and *.dbf. For example, for Trackline 122, the accompanying ten minute waypoint files are l122t.shp, *.shx, and *.dbf.

Bathymetric Soundings Folder

The Bathymetry Folder contains a complete set of bathymetric soundings for the survey area collected during 1979–1982 by the National Ocean Service of NOAA. These data are in ASCII xyz format, where x=decimal degrees longitude, y=decimal degrees latitude, and z=depth in meters. The original source for these soundings is: NOS Hydrographic Survey Data, Version 4.1, 1998, CD-ROMs prepared by the National Geophysical Data Center. For more information see www.ngdc.noaa.gov/mgg/fliers/98mgg03.html.

SSS_Mosaics Folder on CD-ROM #2

The SSS_Mosaics folder contains the complete set of sidescan sonar mosaics processed at 1-m resolution. From south to north, the 12 sidescan mosaics are: 1) new_castle, 2) christina, 3) marcus_hook_bar, 4) marcus_hook, 5) tinicum, 6) airport, 7) schuylkill, 8) navy, 9) camden, 10) petty_island, 11) palmyra, and 12) burlington. For proper operation of the ArcGIS 8.2 *.mxd files included on CD-ROM, copy the SSS_Mosaics folder as a subfolder in the Data folder on CD-ROM #1. Files within the folder include:

1) Within a subfolder, outlines of the outer boundary of the sidescan mosaics. T hese files are included as GIS-shapefiles in a format of mosaic_name.shp, *.shx, and *.dbf. For example, for the sidescan mosaic near the Philadelphia International Airport the accompanying files are airport.shp, *.shx, and *.dbf.
2) The sidescan mosaics. These mosaics are included in a *.tif format with accompanying *.tfw files.

Questions concerning the information contained on these CD-ROMs should be addressed to Dr. John Madsen, Department of Geology, University of Delaware, Newark, DE 19716. Phone: 302-831-1608. E-mail: jmadsen@udel.edu.

APPENDIX C. SEDIMENT SAMPLING STATIONS

Sample† No.	Sampling Date	Time‡ (hr.min.)		Water Depth (m)	N Latitude (deg.min.)		W Longitude (deg.min.)	
Cruise CH0401								
C-1	04/11/2001	8	32	6.7	39°	53.1357	75°	9.5848
C-2	04/11/2001	9	43	6.1	39°	51.3448	75°	19.0823
C-3a	04/11/2001	10	20	5.5	39°	46.7921	75°	27.2000
C-3b	04/11/2001	10	45	6.7	39°	46.8605	75°	27.1974
C-4	04/11/2001	11	16	4.8	39°	44.6583	75°	29.3288
C-5	04/11/2001	12	2	6.1	39°	42.6700	75°	29.9190
C-6,7	04/11/2001	13	45	11.2	39°	27.5760	75°	33.9735
C-8	04/11/2001	14	50	5.2	39°	22.1459	75°	30.1677
C-9	04/11/2001	15	30	5.2	39°	22.1459	75°	28.1918
Cruise CH0701								
C-10	07/19/2001	22	45	4.2	40°	2.9780	74°	58.6671
C-11a	07/19/2001	23	10	4.5	40°	2.4470	74°	59.1740
C-11b	07/19/2001	23	35	4.5	40°	2.4470	74°	59.1740
C-12	07/20/2001	0	0	4.5	40°	1.4540	75°	0.4630
C-13	07/20/2001	0	23	5.5	40°	1.0400	75°	1.7020
C-14a	07/20/2001	3	0	4.5	39°	51.0230	75°	16.8600
C-14b	07/20/2001	3	0	4.5	39°	51.0230	75°	16.8600
C-15a	07/20/2001	3	50	9.1	39°	48.7790	75°	23.9750
C-15b	07/20/2001	3	50	9.1	39°	48.7790	75°	23.9750
C-16a	07/20/2001	11	0	6.1	39°	21.1650	75°	28.1570
C-16b	07/20/2001	11	30	6.1	39°	21.1650	75°	28.1570
Cruise CH01-28								
1G	11/17/2001	7	14	8.2	39°	59.4400	75°	3.6200
2G	11/17/2001	7	44	15.4	39°	59.4500	75°	3.6900
3G	11/17/2001	7	29	14.3	39°	59.4600	75°	3.7500
4G	11/17/2001	7	54	9.1	39°	59.4900	75°	3.8100
5S2	11/17/2001	8	23	8.9	39°	59.4500	75°	3.6000
5S1	11/17/2001	8	6	8.8	39°	59.4500	75°	3.6300
6S	11/17/2001	8	42	8.2	39°	59.4600	75°	3.6100
7S	11/17/2001	8	59	8.1	39°	59.5200	75°	3.5900
8S	11/17/2001	9	21	8.9	39°	59.7100	75°	3.5200
9G	11/17/2001	9	43	9.2	39°	58.5200	75°	4.8200
10G	11/17/2001	10	0	14.1	39°	58.5600	75°	4.8300
11G	11/17/2001	10	19	15.6	39°	58.6000	75°	4.8800
12G	11/17/2001	10	38	13.7	39°	58.6700	75°	4.8900
9G2	11/17/2001	10	58	8.0	39°	58.4600	75°	4.9700
13G	11/17/2001	11	17	11.3	39°	58.2500	75°	6.0900
14G	11/17/2001	11	31	12.3	39°	50.3200	75°	6.1300
15G	11/17/2001	11	51	13.7	39°	58.3600	75°	6.2100
16G	11/17/2001	12	2	15.6	39°	58.2400	75°	6.1570
17G	11/17/2001	12	18	7.3	39°	57.9100	75°	7.0200
18G	11/17/2001	12	31	7.7	39°	57.6600	75°	7.5000

Sample	Date	Time		Depth (m)		Lat N		Lon W
19G	11/17/2001	12	41	12.4	39°	57.7400	75°	7.5500
20G	11/17/2001	12	50	14.0	39°	57.7600	75°	7.6100
21G	11/17/2001	13	6	17.1	39°	57.8500	75°	7.6400
22G	11/17/2001	13	24	14.5	39°	56.5100	75°	8.0400
23G	11/17/2001	13	35	14.1	39°	56.5000	75°	8.1500
24G	11/17/2001	13	44	15.4	39°	56.5300	75°	8.2500
25G	11/17/2001	13	56	17.4	39°	56.5100	75°	8.3400
22S	11/17/2001	14	39	13.7	39°	56.4900	75°	8.0300
26G	11/17/2001	15	2	12.4	39°	55.4700	75°	7.8700
27G	11/17/2001	15	13	14.1	39°	55.4600	75°	7.9600
28G	11/17/2001	15	26	15.9	39°	55.4400	75°	8.0600
29G	11/17/2001	15	37	16.4	39°	55.4300	75°	8.1400
30G	11/17/2001	15	49	16.3	39°	54.4500	75°	7.6000
31G	11/17/2001	15	59	17.5	39°	54.4800	75°	7.7100
32G	11/17/2001	16	13	17.8	39°	54.4600	75°	7.7900
33G	11/17/2001	16	21	17.2	39°	54.4700	75°	7.8700
34G	11/17/2001	16	31	19.3	39°	53.9800	75°	7.8700
35G	11/17/2001	16	52	12.0	39°	53.2000	75°	8.2000
36G	11/17/2001	17	3	16.4	39°	53.2800	75°	8.3000
37G	11/17/2001	17	13	17.3	39°	53.3000	75°	8.3700
38G	11/17/2001	17	25	8.0	39°	53.3300	75°	8.4900
39G	11/17/2001	17	41	17.8	39°	52.8100	75°	9.8900
40G	11/17/2001	17	53	16.0	39°	52.8900	75°	9.8900
41G	11/17/2001	18	9	11.7	39°	52.5890	75°	9.5450
42G	11/17/2001	18	22	9.5	39°	53.0650	75°	9.8890
40S	11/17/2001	18	36	16.5	39°	52.8990	75°	9.8990
41S	11/17/2001	18	51	12.2	39°	52.9650	75°	9.9010
43G	11/17/2001	19	20	16.3	39°	52.7400	75°	11.4400
44G	11/17/2001	19	47	16.5	39°	52.8100	75°	11.4600
45G	11/17/2001	19	57	15.1	39°	52.8800	75°	11.5000
46G	11/17/2001	20	6	15.6	39°	52.9480	75°	11.5120
47G	11/17/2001	20	15	14.9	39°	53.0270	75°	11.5120
46S	11/17/2001	20	24	15.6	39°	52.9510	75°	11.5120
48G	11/17/2001	20	35	14.6	39°	52.8996	75°	11.7966
49G	11/17/2001	20	59	16.5	39°	52.7450	75°	11.8510
50G	11/17/2001	21	13	14.8	39°	52.6378	75°	11.9183
46S2	11/17/2001	21	44	14.9	39°	52.9426	75°	11.4995
51G	11/17/2001	22	10	14.4	39°	52.2098	75°	12.9231
52G	11/17/2001	22	21	15.3	39°	52.2013	75°	12.8421
53G	11/17/2001	22	35	15.6	39°	52.1548	75°	12.7995
54G	11/17/2001	22	46	14.5	39°	52.1006	75°	12.7234
55G	11/17/2001	23	6	15.4	39°	52.0432	75°	12.7199
56G	11/17/2001	23	17	15.1	39°	51.9637	75°	12.6402
57G	11/17/2001	23	30	16.3	39°	51.9461	75°	12.6169
55S	11/17/2001	23	44	15.8	39°	52.0557	75°	12.6938
58G	11/18/2001	0	10	13.4	39°	51.8374	75°	13.7329

Sample	Date	Time		Depth (m)		Lat N		Lon W
59G	11/18/2001	0	19	14.2	39°	51.7761	75°	13.6954
60G	11/18/2001	0	33	15.3	39°	51.7353	75°	13.6322
61G	11/18/2001	0	42	14.9	39°	51.6847	75°	13.5878
62G	11/18/2001	0	52	15.1	39°	51.6330	75°	13.5397
63G	11/18/2001	1	1	16.1	39°	51.5854	75°	13.4616
64G	11/18/2001	1	12	16.7	39°	51.5174	75°	13.4134
59S	11/18/2001	1	22	14.4	39°	51.7870	75°	13.6839
59S2	11/18/2001	1	31	14.6	39°	51.7790	75°	13.6899
65G	11/18/2001	1	55	10.7	39°	51.2769	75°	15.1740
66G	11/18/2001	2	8	14.3	39°	51.2242	75°	15.1515
67G	11/18/2001	2	20	16.2	39°	51.1693	75°	15.1163
68G	11/18/2001	2	36	16.3	39°	51.1153	75°	15.0792
69G	11/18/2001	3	29	16.9	39°	51.0576	75°	15.0650
67S	11/18/2001	3	37	16.1	39°	51.1677	75°	15.1250
70G	11/18/2001	3	59	11.7	39°	50.9798	75°	16.6653
71G	11/18/2001	4	7	17.4	39°	50.9177	75°	16.6905
72G	11/18/2001	4	23	18.6	39°	50.8802	75°	16.7084
73G	11/18/2001	4	33	17.7	39°	50.7845	75°	16.7033
74G	11/18/2001	4	39	18.2	39°	50.6838	75°	16.7098
70S	11/18/2001	4	51	9.8	39°	50.9903	75°	16.7029
75G	11/18/2001	5	20	11.8	39°	50.7893	75°	18.2094
76G	11/18/2001	5	43	15.2	39°	50.8468	75°	18.2002
77G	11/18/2001	5	55	16.7	39°	50.9409	75°	18.2103
78G	11/18/2001	6	30	15.7	39°	50.9900	75°	18.2000
79G	11/18/2001	6	38	11.0	39°	51.0600	75°	18.2000
80G	11/18/2001	6	53	14.8	39°	50.8600	75°	19.7700
81G	11/18/2001	7	3	14.9	39°	50.9200	75°	19.7500
82G	11/18/2001	7	13	15.1	39°	51.0000	75°	19.7300
83G	11/18/2001	7	24	10.5	39°	51.0700	75°	19.7100
84G	11/18/2001	7	33	11.1	39°	51.1300	75°	19.6600
85G	11/18/2001	7	52	13.7	39°	50.1900	75°	21.3400
86G	11/18/2001	8	6	14.8	39°	50.2500	75°	21.3800
87G	11/18/2001	8	25	16.5	39°	50.3100	75°	21.4500
88G	11/18/2001	8	38	10.8	39°	50.3800	75°	21.5000
87S	11/18/2001	8	52	16.2	39°	50.3000	75°	21.4500
89G	11/18/2001	9	10	9.9	39°	49.5800	75°	22.9300
90G	11/18/2001	9	22	11.6	39°	49.5400	75°	22.8800
91G	11/18/2001	9	29	10.8	39°	49.4700	75°	22.8300
92G	11/18/2001	9	47	14.2	39°	49.4300	75°	22.7700
93G	11/18/2001	9	55	14.7	39°	49.3700	75°	22.7100
94G	11/18/2001	10	4	10.3	39°	49.3000	75°	22.6300
95G	11/18/2001	10	13	10.3	39°	49.2500	75°	22.5900
96G	11/18/2001	10	45	15.8	39°	49.1100	75°	23.3500
97G	11/18/2001	10	52	15.6	39°	49.0200	75°	23.2300
98G	11/18/2001	11	0	15.6	39°	48.9000	75°	23.1100
99G	11/18/2001	11	16	14.4	39°	48.4800	75°	23.7000

Sample	Date	Time		Depth (m)		Lat N		Lon W
101G	11/18/2001	11	28	15.7	39°	48.6200	75°	23.8100
102G	11/18/2001	11	44	16.1	39°	48.6700	75°	23.8600
103G	11/18/2001	11	52	16.4	39°	48.7500	75°	23.9100
104G	11/18/2001	12	1	16.0	39°	48.7800	75°	23.9300
105G	11/18/2001	12	10	15.0	39°	48.8214	75°	23.9575
106G	11/18/2001	12	21	9.9	39°	48.8859	75°	24.0255
105S	11/18/2001	12	51	15.3	39°	48.8190	75°	23.9700
99S	11/18/2001	13	10	14.8	39°	48.4900	75°	23.7100
107G	11/18/2001	14	25	15.5	39°	48.3600	75°	23.9980
108G	11/18/2001	14	38	15.2	39°	48.5600	75°	24.1200
109G	11/18/2001	14	54	15.4	39°	48.5590	75°	24.5870
110G	11/18/2001	15	3	15.4	39°	48.4900	75°	24.4900
111G	11/18/2001	15	14	15.8	39°	48.4200	75°	24.4600
112G	11/18/2001	15	28	16.1	39°	48.3500	75°	24.4200
113G	11/18/2001	15	38	16.4	39°	48.2870	75°	24.3750
114G	11/18/2001	15	46	15.1	39°	48.2300	75°	24.3300
115G	11/18/2001	15	55	14.1	39°	48.1600	75°	24.2800
111S	11/18/2001	16	6	16.3	39°	48.4200	75°	24.4900
111S2	11/18/2001	17	7	15.3	39°	48.4000	75°	24.4600
116G	11/18/2001	17	21	13.7	39°	48.0000	75°	24.6600
117G	11/18/2001	17	34	16.4	39°	48.1800	75°	24.7300
118G	11/18/2001	17	44	15.0	39°	48.2300	75°	25.3300
119G	11/18/2001	17	53	16.6	39°	48.0900	75°	25.2100
120G	11/18/2001	18	5	14.5	39°	47.9695	75°	25.1161
121G	11/18/2001	18	15	12.4	39°	47.8587	75°	25.0099
121S	11/18/2001	18	20	12.2	39°	47.8851	75°	25.0099
122G	11/18/2001	18	34	11.0	39°	47.6756	75°	25.8096
123G	11/18/2001	18	47	16.6	39°	47.7992	75°	25.8980
124G	11/18/2001	19	13	11.7	39°	47.9423	75°	25.9996
125G	11/18/2001	19	34	8.8	39°	47.5525	75°	26.9600
126G	11/18/2001	19	47	14.3	39°	47.4376	75°	26.8405
127G	11/18/2001	20	1	12.6	39°	47.3188	75°	26.7549
128G	11/18/2001	20	10	8.7	39°	47.2298	75°	26.6153
128S	11/18/2001	20	25	8.6	39°	47.2311	75°	26.6144
129G	11/18/2001	20	48	8.4	39°	46.5379	75°	27.5139
130G	11/18/2001	21	1	8.3	39°	46.6459	75°	27.6617
131G	11/18/2001	21	18	14.5	39°	46.7571	75°	27.8334
132G	11/18/2001	21	29	10.1	39°	46.8507	75°	28.0023
130S	11/18/2001	21	41	8.5	39°	46.6459	75°	27.6755
133G	11/18/2001	22	0	10.0	39°	45.9181	75°	28.7878
134G	11/18/2001	22	16	16.0	39°	45.8432	75°	28.6084
135G	11/18/2001	22	22	9.2	39°	45.7361	75°	28.4015
136G	11/18/2001	22	33	10.2	39°	45.6541	75°	28.2372
135S	11/18/2001	22	41	9.5	39°	45.7450	75°	28.4029
137G	11/18/2001	22	58	8.1	39°	44.7132	75°	28.6986
138G	11/18/2001	23	12	8.9	39°	43.9025	75°	29.2493

Sample	Date	Time		Depth (m)		Lat N		Lon W
139G	11/18/2001	23	46	15.6	39°	45.0403	75°	29.3504
140G	11/18/2001	23	57	9.8	39°	44.9467	75°	29.1458
141G	11/19/2001	0	37	10.4	39°	44.2415	75°	29.7913
142G	11/19/2001	0	57	16.0	39°	44.2870	75°	29.9492
142S	11/19/2001	1	7	16.1	39°	44.2886	75°	29.9464
143G	11/19/2001	1	21	13.5	39°	44.0598	75°	30.1401
143S	11/19/2001	1	26	13.4	39°	44.0591	75°	30.1433
145G	11/19/2001	1	46	7.6	39°	43.4898	75°	29.8824
146G	11/19/2001	1	57	9.9	39°	43.4001	75°	29.5134
144G	11/19/2001	2	8	16.9	39°	43.5782	75°	30.2550
144S	11/19/2001	2	12	16.9	39°	43.5752	75°	30.2618
144S2	11/19/2001	2	18	16.9	39°	43.5784	75°	30.2541
147G	11/19/2001	2	33	15.4	39°	43.1722	75°	30.2719
147S	11/19/2001	2	36	13.8	39°	43.1804	75°	30.2637
148G	11/19/2001	3	11	12.6	39°	42.7922	75°	30.0604
149G	11/19/2001	3	22	14.3	39°	42.8373	75°	30.2234
150G	11/19/2001	3	49	16.6	39°	42.8925	75°	30.4005
150S	11/19/2001	4	7	16.4	39°	42.8863	75°	30.3960
151G	11/19/2001	2	49	14.7	39°	42.9701	75°	30.6491
151S	11/19/2001	2	51	15.4	39°	42.9774	75°	30.6546
151S2	11/19/2001	3	0	15.3	39°	42.9714	75°	30.6386
152G	11/19/2001	4	27	11.9	39°	42.4384	75°	30.8363
152S	11/19/2001	4	30	12.2	39°	42.4342	75°	30.8368
152S2	11/19/2001	4	39	12.2	39°	42.4404	75°	30.8318
153G	11/19/2001	4	50	18.4	39°	42.3752	75°	30.6661
154G	11/19/2001	5	5	19.7	39°	42.3175	75°	30.5058
155G	11/19/2001	5	15	17.9	39°	41.8671	75°	30.6784
156G	11/19/2001	5	22	19.2	39°	41.9193	75°	30.8565
157G	11/19/2001	5	39	13.3	39°	41.9891	75°	31.0606
157S	11/19/2001	5	52	13.3	39°	41.9817	75°	31.0629
158G	11/19/2001	8	6	10.7	39°	40.8400	75°	31.6300
158S	11/19/2001	9	3	10.7	39°	40.8500	75°	31.6300
159G	11/19/2001	8	15	12.7	39°	40.7670	75°	31.4930
160G	11/19/2001	8	24	15.8	39°	40.6950	75°	31.3640
161G	11/19/2001	8	34	13.6	39°	40.6270	75°	31.2150
161S	11/19/2001	8	51	13.6	39°	40.6300	75°	31.2080
162G	11/19/2001	8	42	8.9	39°	40.6700	75°	31.0990
163G	11/19/2001	10	12	9.8	39°	39.6400	75°	31.9000
163S	11/19/2001	11	22	10.3	39°	39.6400	75°	31.8800
164G	11/19/2001	10	23	10.8	39°	39.7300	75°	32.0280
165G	11/19/2001	10	36	15.5	39°	39.8000	75°	32.1500
166G	11/19/2001	10	43	9.4	39°	39.9000	75°	32.2800
166S	11/19/2001	11	9	8.4	39°	39.8000	75°	32.2800
167G	11/19/2001	10	52	8.5	39°	39.9800	75°	32.4200
168G	11/19/2001	11	44	9.5	39°	38.9674	75°	32.6395
169G	11/19/2001	11	54	13.0	39°	39.0878	75°	32.7690

Sample	Date	Time		Depth (m)		Lat N		Lon W
169S	11/19/2001	13	9	13.9	39°	39.0700	75°	32.7900
170G	11/19/2001	12	4	16.1	39°	39.1700	75°	32.9000
170S	11/19/2001	12	57	16.5	39°	39.1690	75°	32.9100
171G	11/19/2001	12	14	9.0	39°	39.2500	75°	33.0490
172G	11/19/2001	12	23	9.9	39°	39.3600	75°	33.1700
173G	11/19/2001	12	34	10.2	39°	39.4400	75°	33.3170
173S	11/19/2001	12	43	10.1	39°	39.4400	75°	33.3000
174G	11/19/2001	9	16	8.1	39°	40.2400	75°	32.0200
174S	11/19/2001	10	2	9.4	39°	40.2600	75°	31.9700
175G	11/19/2001	9	26	15.5	39°	40.1500	75°	31.7600
176G	11/19/2001	9	33	10.6	39°	40.0600	75°	31.6200
177G	11/19/2001	9	39	9.9	39°	39.9900	75°	31.4900
177S	11/19/2001	9	45	9.9	39°	39.9970	75°	31.4850
178G	11/19/2001	14	19	8.0	39°	31.1200	75°	32.3500
179G	11/19/2001	14	28	14.0	39°	31.2000	75°	32.6780
180G	11/19/2001	14	59	16.0	39°	31.2800	75°	33.0000
181G	11/19/2001	15	7	14.2	39°	31.3700	75°	33.1600
182G	11/19/2001	15	59	9.0	39°	31.3370	75°	33.3100
183S	11/19/2001	15	42	12.0	39°	27.9130	75°	34.0440
184S1	11/19/2001	16	18	9.4	39°	25.6300	75°	32.2280
184S2	11/19/2001	16	26	9.2	39°	25.6310	75°	32.2200
Cruise CH02-02								
MHW	3/22/2002	9	27	12.1	39°	48.7790	75°	23.9750
MHE	3/22/2002	10	02	12.6	39°	48.4900	75°	23.7100
Cruise CH02-09								
184G	06/12/2002	5	14	9.55	39°	38.6923	75°	33.9533
185G	06/12/2002	5	28	11.02	39°	38.6350	75°	33.8054
186G	06/12/2002	5	36	16.71	39°	38.5723	75°	33.6456
187G	06/12/2002	5	48	15.75	39°	38.5352	75°	33.5312
188G	06/12/2002	6	6	10.86	39°	38.5050	75°	33.4213
189S	06/12/2002	6	21	9.62	39°	38.4400	75°	34.2636
190G	06/12/2002	6	41	11.43	39°	37.7003	75°	34.8477
191G	06/12/2002	6	57	19.3	39°	37.6703	75°	34.6463
192G	06/12/2002	7	7	16.9	39°	37.6756	75°	34.5094
193G	06/12/2002	7	15	12.15	39°	37.6449	75°	34.4074
193G2	06/12/2002	7	22	13.47	39°	37.6623	75°	34.4179
194G	06/12/2002	7	33	16.24	39°	37.2446	75°	34.8930
195G	06/12/2002	7	44	16.51	39°	37.1960	75°	34.6271
196G	06/12/2002	7	58	11.08	39°	36.6870	75°	34.7882
197G	06/12/2002	8	19	17.07	39°	36.7326	75°	34.6376
198G	06/12/2002	8	40	16.09	39°	36.7722	75°	34.6502
199G	06/12/2002	8	54	13.05	39°	36.7804	75°	34.4774
200G	06/12/2002	9	12	13.25	39°	35.6628	75°	34.0842
201G	06/12/2002	9	30	14.77	39°	35.7001	75°	34.0109
202G	06/12/2002	9	47	14.71	39°	35.7291	75°	33.8947
203G	06/12/2002	10	0	13.36	39°	35.7832	75°	33.7720

Sample	Date	Time		Depth (m)		Lat N		Lon W
204G	06/12/2002	10	13	11.73	39°	34.6726	75°	33.4383
205G	06/12/2002	10	23	16.29	39°	34.6836	75°	33.2711
206G	06/12/2002	10	34	15.5	39°	34.7248	75°	33.2936
207G	06/12/2002	10	49	9.85	39°	34.7891	75°	33.1507
208G	06/12/2002	10	57	8.53	39°	34.8582	75°	32.9686
209S	06/12/2002	11	12	14.77	39°	34.4595	75°	33.1622
210G	06/12/2002	11	27	12.97	39°	33.9711	75°	33.3055
211G	06/12/2002	11	37	15.5	39°	34.0581	75°	33.0052
212G	06/12/2002	11	57	15.5	39°	34.0810	75°	32.8812
213G	06/12/2002	11	48	10.61	39°	34.1402	75°	32.6834
212S	06/12/2002	12	9	15	39°	34.0801	75°	32.8816
214G	06/12/2002	12	22	7.67	39°	33.2261	75°	33.2195
215G	06/12/2002	12	33	12.32	39°	33.2913	75°	32.9063
216G	06/12/2002	12	44	13.95	39°	33.3428	75°	32.7416
217G	06/12/2002	12	57	16	39°	33.3721	75°	32.6092
218G	06/12/2002	13	7	17.16	39°	33.4140	75°	32.4688
219G	06/12/2002	13	19	11.9	39°	33.4449	75°	32.3227
220G	06/12/2002	13	43	13.19	39°	32.4186	75°	32.9375
221G	06/12/2002	13	54	19.79	39°	32.4488	75°	32.6537
222G	06/12/2002	14	5	19.24	39°	32.4360	75°	32.5566
223G	06/12/2002	14	16	15.96	39°	32.4243	75°	32.3923
224G	06/12/2002	14	51	12.99	39°	30.1190	75°	33.6566
225G	06/12/2002	15	3	17.72	39°	30.0888	75°	33.4625
226G	06/12/2002	15	11	14.7	39°	30.0588	75°	33.3101
227G	06/12/2002	15	22	11.96	39°	29.9927	75°	32.9640
228G	06/12/2002	15	56	12.9	39°	28.6439	75°	34.0416
229G	06/12/2002	16	7	17.06	39°	28.6061	75°	33.8164
230G	06/12/2002	16	25	16.59	39°	28.5883	75°	33.7038
231G	06/12/2002	16	38	10.51	39°	28.5503	75°	33.2584
232G	06/12/2002	17	02	7.3	39°	27.4780	75°	33.9267
236G	06/12/2002	17	28	11.92	39°	27.6991	75°	33.0350
233G	06/12/2002	17	42	19.33	39°	27.5290	75°	33.6340
234G	06/12/2002	18	02		39°	27.5576	75°	33.6751
232S	06/12/2002	18	16	12.4	39°	27.4695	75°	33.8873
235G	06/12/2002	18	28	12.04	39°	27.5967	75°	33.3737
236S1	06/12/2002	18	35	12.38	39°	27.5988	75°	33.0396
236S2	06/12/2002	18	51	11.41	39°	27.6826	75°	33.0400
235S	06/12/2002	19	02	10.66	39°	27.6038	75°	33.2243
237S	06/12/2002	19	18	11.13	39°	26.8572	75°	32.3277
238G	06/12/2002	19	33	15.35	39°	26.6542	75°	32.7635
239G	06/12/2002	19	50	15.53	39°	26.6011	75°	32.8542
240S	06/12/2002	20	12	13.47	39°	26.4619	75°	33.1307
241S	06/12/2002	20	32	7.74	39°	24.8841	75°	31.2410
242S	06/12/2002	20	46	14.93	39°	25.0154	75°	31.0149
243S	06/12/2002	21	00	14.38	39°	25.0937	75°	30.8963
244S	06/12/2002	21	16	10.76	39°	25.3004	75°	30.5635

Sample	Date	Time		Depth (m)		Lat N		Lon W
245G	06/12/2002	21	35	7.51	39°	24.5391	75°	29.6837
246S	06/12/2002	21	58	16.4	39°	24.3043	75°	30.0283
248G	06/12/2002	22	42	6.92	39°	24.1198	75°	30.3575
248S	06/12/2002	22	49	6.83	39°	24.1143	75°	30.3658
247G	06/12/2002	22	58	14.85	39°	24.2251	75°	30.0975
245S	06/12/2002	23	10	7.7	39°	24.5338	75°	29.6878
249G	06/13/2002	23	35	7.42	39°	21.8820	75°	28.2742
249S	06/13/2002	23	46	8.98	39°	22.0404	75°	28.0138
250G	06/13/2002	00	02	14.83	39°	22.1889	75°	27.6901
251S	06/13/2002	00	12	14.78	39°	22.2691	75°	27.5913
252S	06/13/2002	00	25	9.15	39°	22.3947	75°	27.3317
253S	06/13/2002	00	50	11.65	39°	21.0635	75°	25.8632
254G	06/13/2002	01	04	18.09	39°	20.9113	75°	26.0765
257S	06/13/2002	01	24	9.44	39°	20.4151	75°	26.8451
256G	06/13/2002	01	35	12.55	39°	20.7040	75°	26.3068
255G	06/13/2002	01	47	18.26	39°	20.8431	75°	26.1932
258G	06/13/2002	02	13	6.85	39°	19.2133	75°	24.9381
259G	06/13/2002	02	30	19.6	39°	19.4536	75°	24.5984
260G	06/13/2002	02	39	22.2	39°	19.5522	75°	24.4675
261S	06/13/2002	02	52	14.68	39°	19.6630	75°	24.2711
262S	06/13/2002	03	19	14	39°	18.4486	75°	22.9280
263G	06/13/2002	03	39	19.07	39°	18.3236	75°	23.0667
264G	06/13/2002	04	00	18.3	39°	18.2330	75°	23.1665
265G	06/13/2002	04	15	15.88	39°	18.0647	75°	23.3652
264S	06/13/2002	04	31	18.3	39°	18.2263	75°	23.1555
265S	06/13/2002	04	51	10.99	39°	17.8567	75°	23.6289
266S	06/13/2002	05	14	10.6	39°	17.0295	75°	22.8259
267S	06/13/2002	05	32	12.33	39°	17.1469	75°	22.4437
268S	06/13/2002	05	43	17.17	39°	17.2451	75°	22.2253
269S	06/13/2002	06	07	16.02	39°	17.3280	75°	21.9799
270S	06/13/2002	06	33	8.68	39°	17.5340	75°	21.5387
271S	06/13/2002	06	55	10.1	39°	16.1561	75°	21.9896
272G1	06/13/2002	07	15	15.67	39°	16.4568	75°	21.2929
272G2	06/13/2002	07	23	16	39°	16.4710	75°	21.2723
274S	06/13/2002	07	45	10.13	39°	16.7775	75°	20.7248
273G	06/13/2002	08	16	16.06	39°	16.6319	75°	20.9825
275G	06/13/2002	08	48	7.17	39°	16.3273	75°	19.1835
276G	06/13/2002	09	05	8.15	39°	16.0444	75°	19.7667
277G	06/13/2002	09	20	16.33	39°	15.8155	75°	20.2524
278G	06/13/2002	09	43	11.68	39°	15.6541	75°	20.5779
279G	06/13/2002	10	01		39°	15.4668	75°	20.9568
280G	06/13/2002	10	10	7.14	39°	15.4305	75°	21.0855
281G	06/13/2002	10	22	7	39°	15.1467	75°	21.6664
282G	06/13/2002	10	30	6.54	39°	15.1474	75°	21.6628
283G	06/13/2002	10	42	7.04	39°	14.5564	75°	20.3673
284S	06/13/2002	10	53	11.67	39°	14.8579	75°	19.8271

Sample	Date	Time		Depth (m)		Lat N		Lon W
286G1	06/13/2002	11	05	12.54	39°	15.1769	75°	19.3323
286G2	06/13/2002	11	11	12.9	39°	15.1543	75°	19.3332
285G	06/13/2002	11	20	16.54	39°	15.0224	75°	19.5786
287G	06/13/2002	11	30	6.9	39°	15.5454	75°	18.6635
288G	06/13/2002	12	02	7.69	39°	13.5688	75°	20.1789
289G	06/13/2002	12	09	6.91	39°	13.7933	75°	19.7118
290G	06/13/2002	12	18	8.94	39°	13.9839	75°	19.2984
291G	06/13/2002	12	29	16.27	39°	14.3216	75°	18.5568
292G	06/13/2002	12	37	6.54	39°	14.6681	75°	17.8734
293G	06/13/2002	12	48	6.98	39°	14.9739	75°	17.2321
294S	06/13/2002	13	52	8.32	39°	13.0124	75°	18.3275
295G	06/13/2002	13	35	16.11	39°	13.3489	75°	17.7988
296G	06/13/2002	13	21	11.96	39°	13.5052	75°	17.4637
297G	06/13/2002	13	09	6.79	39°	13.8318	75°	16.8910
298G	06/13/2002	13	02	9.07	39°	14.1641	75°	16.3248

† "C" and "S" denote core samples, "G" grab samples

‡ Eastern Standard Time for CH0104, CH0107, CH02-02, and CH01-28; Greenwich Mean
Time for CH02-09

APPENDIX D. WATER CONTENT AND POROSITY DATA

Cruise	Sample ID	Interval (cm)	Water Content (%)	Porosity (%)
CH0103	C1	14-15	47.2	70.1
CH0103	C1	22-23	41.8	65.3
CH0103	C1	53-55	40.6	64.2
CH0103	C2	0-1	58.0	78.4
CH0103	C2	1-2	52.9	74.7
CH0103	C2	22-23	48.5	71.2
CH0103	C2	55-57	48.0	70.8
CH0103	C4	1-2	55.8	76.8
CH0103	C4	20-21	52.9	74.7
CH0103	C4	56-58	50.7	73.0
CH0103	C5	0-1	39.5	63.1
CH0103	C5	1-2	31.5	54.7
CH0103	C7	10-11	53.1	74.8
CH0103	C7	25-26	54.3	75.7
CH0103	C7	61-63	54.1	75.6
CH0103	C8	0-1	61.1	80.5
CH0103	C8	1-2	59.2	79.2
CH0103	C8	2-3	57.5	78.0
CH0103	C8	3-4	48.2	71.0
CH0103	C8	19-20	57.0	77.7
CH0103	C8	47-49	58.6	78.8
CH0103	C8	57-59	52.9	74.6
CH0103	C9	0-1	63.8	82.2
CH0103	C9	1-2	53.6	75.2
CH0103	C9	2-3	47.8	70.6
CH0103	C9	3-4	33.7	57.1
CH0103	C9	20-22	49.0	71.6
CH0103	C9	57-59	43.3	66.7
CH0701	C14B	0-2	45.0	68.2
CH0701	C14B	2-4	33.0	56.4
CH0701	C14B	4-6	27.1	49.4
CH0701	C14B	6-8	31.1	54.2
CH0701	C14B	8-10	34.5	58.0
CH0701	C14B	10-12	37.9	61.5
CH0701	C14B	14-16	33.0	56.4
CH0701	C14B	18-20	43.7	67.0
CH0701	C14B	22-24	31.7	54.9
CH0701	C14B	26-28	40.3	63.9
CH0701	C14B	30-32	33.2	56.6

Cruise	Sample ID	Interval (cm)	Water Content (%)	Porosity (%)
CH0701	C14B	34-36	30.7	53.8
CH0701	C14B	38-40	25.4	47.2
CH0701	C14B	42-44	25.4	47.1
CH0701	C14B	46-48	34.7	58.3
CH0701	C14B	50-52	33.4	56.8
CH0701	C14B	52-54	40.5	64.1
CH0701	C14B	12-14	33.5	56.9
CH0701	C14B	16-18	37.1	60.7
CH0701	C14B	20-22	44.9	68.2
CH0701	C14B	24-26	28.2	50.8
CH0701	C14B	28-30	38.9	62.6
CH0701	C14B	32-34	32.3	55.6
CH0701	C14B	36-38	24.9	46.5
CH0701	C14B	40-42	24.2	45.5
CH0701	C14B	44-46	23.1	44.1
CH0701	C14B	48-50	33.8	57.2
CH0701	C14B	54-56	45.4	68.5
CH0701	C15A	0-2	73.5	87.9
CH0701	C15A	32-34	61.6	80.8
CH0701	C15A	34-36	55.2	76.4
CH0701	C15A	36-38	38.3	62.0
CH0701	C15A	38-40	51.0	73.2
CH0701	C15A	40-42	54.7	76.0
CH0701	C15A	42-44	55.7	76.8
CH0701	C15A	44-46	56.4	77.2
CH0701	C15A	46-48	53.7	75.2
CH0701	C15A	48-50	55.7	76.7
CH0701	C15A	50-52	56.0	76.9
CH0701	C15A	52-54	57.4	77.9
CH0701	C15A	54-56	57.8	78.2
CH0701	C15A	56-58	57.3	77.9
CH0701	C15A	58-60	55.2	76.4
CH0701	C15A	60-62	55.1	76.3
CH0701	C15A	62-64	56.7	77.4
CH0701	C15A	64-66	55.1	76.3
CH0701	C15A	66-68	53.3	75.0
CH0701	C16B	0-1	46.2	69.2
CH0701	C16B	1-2	52.1	74.1
CH0701	C16B	2-3	54.0	75.5
CH0701	C16B	3-4	54.8	76.1
CH0701	C16B	4-6	37.7	61.4
CH0701	C16B	6-8	31.5	54.7
CH0701	C16B	8-10	35.7	59.3
CH0701	C16B	10-12	31.6	54.8
CH0701	C16B	12-14	55.1	76.3
CH0701	C16B	14-16	50.6	72.9

Cruise	Sample ID	Interval (cm)	Water Content (%)	Porosity (%)
CH0701	C16B	18-20	39.9	63.5
CH0701	C16B	22-24	45.9	69.0
CH0701	C16B	24-26	45.3	68.5
CH0701	C16B	26-28	45.1	68.3
CH0701	C16B	28-30	43.1	66.6
CH0701	C16B	30-32	43.4	66.8
CH0701	C16B	32-34	38.4	62.1
CH0701	C16B	34-36	42.8	66.2
CH0701	C16B	36-38	42.3	65.8
CH0701	C16B	38-40	44.2	67.5
CH0701	C16B	40-42	45.3	68.5
CH0701	C16B	42-44	56.5	77.3
CH0701	C16B	44-46	49.5	72.0
CH0701	C16B	46-48	35.9	59.5
CH0701	C16B	48-50	42.7	66.2
CH0701	C16B	50-52	40.3	63.9
CH0701	C16B	52-54	46.9	69.9
CH0701	C16B	54-56	53.2	74.9
CH01-28	111S	8-10	46.8	69.8
CH01-28	111S	22-24	57.1	77.8
CH01-28	111S	34-36	41.0	64.5
CH01-28	144S1	0-2	62.0	81.1
CH01-28	144S1	28-30	59.4	79.3
CH01-28	144S1	58-60	55.7	76.7
CH01-28	174S	0-1	59.5	79.4
CH01-28	174S	1-2	61.8	80.9
CH01-28	174S	2-3	66.0	83.6
CH01-28	174S	3-4	61.0	80.4
CH01-28	174S	4-6	63.1	81.8
CH01-28	174S	6-8	66.8	84.1
CH01-28	177S	6-8	52.5	74.4
CH01-28	177S	24-26	48.8	71.4
CH01-28	177S	40-42	44.1	67.4
MARSH	PC1	0-2	78.9	90.7
MARSH	PC1	28-30	49.9	72.3
MARSH	PC1	56-58	46.1	69.2
MARSH	PC3	0-2	58.0	78.4
MARSH	PC3	34-36	57.2	77.8
MARSH	PC3	58-60	48.5	71.2
MARSH	PC4	0-2	60.0	79.8
MARSH	PC4	2-4	63.5	82.1

Cruise	Sample ID	Interval (cm)	Water Content (%)	Porosity (%)
MARSH	PC4	4-6	62.9	81.6
MARSH	PC4	6-8	61.1	80.5
MARSH	PC4	8-10	60.8	80.3
MARSH	PC4	10-12	61.9	81.0
MARSH	PC4	12-14	60.5	80.1
MARSH	PC4	14-16	63.8	82.2
MARSH	PC4	16-18	61.0	80.4
MARSH	PC4	18-20	59.2	79.2
MARSH	PC4	20-22	60.9	80.3
MARSH	PC4	22-24	55.1	76.3
MARSH	PC4	24-26	56.7	77.4
MARSH	PC4	26-28	54.8	76.1
MARSH	PC4	28-30	51.0	73.2
MARSH	PC4	30-32	53.9	75.4
MARSH	PC4	32-34	57.0	77.6
MARSH	PC4	34-36	56.3	77.2
MARSH	PC4	36-38	53.4	75.1
MARSH	PC4	38-40	53.2	74.9
MARSH	PC4	40-42	56.6	77.4
MARSH	PC4	42-44	56.3	77.2
MARSH	PC4	44-46	53.2	74.9
MARSH	PC4	46-48	57.0	77.7
MARSH	PC4	48-50	56.2	77.1
MARSH	PC4	50-52	56.4	77.2
MARSH	PC6	0-2	52.1	74.1
MARSH	PC6	18-20	58.7	78.8
MARSH	PC6	36-38	52.4	74.3
MARSH	PC7	0-2	63.0	81.7
MARSH	PC7	2-4	60.8	80.3
MARSH	PC7	4-6	61.1	80.5
MARSH	PC7	6-8	61.3	80.6
MARSH	PC7	8-10	60.3	79.9
MARSH	PC7	10-12	63.2	81.8
MARSH	PC7	12-14	66.9	84.1
MARSH	PC7	14-16	64.7	82.8
MARSH	PC7	16-18	66.3	83.8
MARSH	PC7	18-20	66.4	83.8
MARSH	PC7	20-22	69.8	85.9
MARSH	PC7	22-24	68.1	84.9
MARSH	PC7	24-26	67.6	84.6
MARSH	PC7	28-30	67.1	84.2
MARSH	PC7	32-34	65.3	83.1
MARSH	PC7	36-38	65.8	83.5
MARSH	PC7	40-42	64.6	82.7
MARSH	PC7	42-44	63.5	82.0
MARSH	PC7	46-48	66.3	83.8

Cruise	Sample ID	Interval (cm)	Water Content (%)	Porosity (%)
MARSH	PC7	50-52	65.9	83.5
MARSH	PC7	54-56	65.4	83.2
MARSH	PC7	62-64	62.1	81.2
MARSH	PC9	0-2	50.7	73.0
MARSH	PC9	2-4	49.8	72.2
MARSH	PC9	4-6	49.4	72.0
MARSH	PC9	6-8	50.8	73.0
MARSH	PC9	28-30	52.7	74.5
MARSH	PC9	54-56	50.1	72.4
MARSH	PC9	56-58	50.2	72.6
MARSH	PC13	0-2	58.9	79.0
MARSH	PC13	2-4	59.3	79.2
MARSH	PC13	4-6	56.2	77.1
MARSH	PC13	6-8	53.8	75.3
MARSH	PC13	8-10	55.7	76.7
MARSH	PC13	10-12	55.5	76.6
MARSH	PC13	12-14	57.8	78.2
MARSH	PC13	14-16	57.6	78.1
MARSH	PC13	16-18	65.9	83.5
MARSH	PC13	18-20	63.8	82.2
MARSH	PC13	20-22	68.6	85.2
MARSH	PC13	22-24	66.8	84.1
MARSH	PC13	24-26	64.2	82.4
MARSH	PC13	26-28	69.3	85.5
MARSH	PC13	28-30	65.8	83.4
MARSH	PC13	32-34	58.2	78.5
MARSH	PC13	36-38	55.0	76.2
MARSH	PC13	40-42	51.7	73.7
MARSH	PC13	44-46	48.0	70.8
MARSH	PC13	48-50	47.5	70.3
MARSH	PC13	60-62	49.0	71.6
MARSH	PC13	62-64	48.9	71.5
MARSH	PC13	70-72	51.1	73.3
MARSH	PC13	80-82	50.1	72.5
MARSH	PC13	88-90	53.9	75.5
MARSH	PC13	90-92	51.7	73.7
MARSH	PC13	92-93.5	50.1	72.4
MARSH	PC14	0-2	55.5	76.6
MARSH	PC14	4-6	43.2	66.6
MARSH	PC14	6-8	43.8	67.2
MARSH	PC14	10-12	45.4	68.5
MARSH	PC14	14-16	46.9	69.9
MARSH	PC14	18-20	46.9	69.9
MARSH	PC14	20-22	46.1	69.2
MARSH	PC14	22-24	45.8	68.9

Cruise	Sample ID	Interval (cm)	Water Content (%)	Porosity (%)
MARSH	PC14	24-26	41.6	65.1
MARSH	PC14	26-28	45.5	68.6
MARSH	PC14	28-30	45.1	68.3
MARSH	PC14	30-32	37.3	61.0
MARSH	PC14	32-34	37.3	61.0
MARSH	PC14	34-36	36.1	59.7
MARSH	PC14	38-40	35.4	59.0
MARSH	PC14	42-44	37.5	61.2
MARSH	PC14	46-48	39.7	63.4
MARSH	PC14	50-52	41.4	65.0
MARSH	PC14	54-56	42.4	65.9
MARSH	PC14	58-60	44.9	68.1
MARSH	PC14	62-64	45.4	68.6
MARSH	PC14	66-68	47.1	70.0
MARSH	PC14	70-72	48.8	71.5
MARSH	PC14	74-76	46.1	69.2
MARSH	PC14	78-80	43.0	66.4
MARSH	PC14	82-84	44.7	67.9
MARSH	PC14	86-88	37.2	60.9
MARSH	PC14	92-94	44.1	67.4
MARSH	PC15	0-2	60.2	79.9
MARSH	PC15	4-6	61.8	80.9
MARSH	PC15	8-10	59.4	79.3
MARSH	PC15	12-14	62.1	81.2
MARSH	PC15	16-18	62.9	81.6
MARSH	PC15	18-20	64.9	82.9
MARSH	PC15	22-24	60.3	79.9
MARSH	PC15	26-28	56.2	77.1
MARSH	PC15	30-32	60.8	80.3
MARSH	PC15	34-36	59.3	79.2
MARSH	PC15	38-40	62.8	81.6
MARSH	PC15	42-44	57.4	78.0
MARSH	PC15	44-46	58.0	78.4
MARSH	PC15	46-48	58.6	78.8
MARSH	PC15	48-50	61.3	80.6
MARSH	PC15	52-54	61.3	80.6
MARSH	PC15	54-56	59.5	79.4
MARSH	PC15	56-58	59.8	79.6
MARSH	PC15	58-60	57.2	77.8
MARSH	PC15	60-62	56.7	77.5
MARSH	PC15	62-64	49.2	71.8
MARSH	PC15	64-66	50.4	72.7
MARSH	PC15	66-68	42.0	65.5
MARSH	PC15	68-70	46.2	69.3
MARSH	PC15	70-72	61.7	80.9
MARSH	PC15	74-76	55.4	76.5
MARSH	PC15	80-82	50.4	72.7

Cruise	Sample ID	Interval (cm)	Water Content (%)	Porosity (%)
MARSH	PC15	84-86	38.8	62.5
MARSH	PC15	90-92	39.2	62.9
MARSH	PC16A	0-2	61.8	80.9
MARSH	PC16A	2-4	57.1	77.8
MARSH	PC16A	4-6	54.9	76.2
MARSH	PC16A	8-10	65.9	83.5
MARSH	PC16A	12-14	67.4	84.5
MARSH	PC16A	14-16	71.4	86.7
MARSH	PC16A	16-18	70.9	86.5
MARSH	PC16A	20-22	71.8	87.0
MARSH	PC16A	24-26	68.4	85.0
MARSH	PC16A	28-30	63.3	81.9
MARSH	PC16A	32-34	48.7	71.4
MARSH	PC16A	36-38	40.9	64.5
MARSH	PC16A	40-42	40.3	63.9
MARSH	PC16A	44-46	42.5	66.0
MARSH	PC16A	48-50	44.7	67.9
MARSH	PC16A	50-52	45.0	68.2
MARSH	PC16A	52-54	44.8	68.1
MARSH	PC16A	56-58	46.3	69.4
MARSH	PC16A	58-60	46.3	69.3
MARSH	PC17	0-2	43.6	67.0
MARSH	PC17	20-22	38.8	62.5
MARSH	PC17	42-44	35.1	58.6
MARSH	PC17	60-62	32.8	56.2
CH02-02	MH-W	0-2	72.1	87.2
CH02-02	MH-W	10-12	53.7	75.3
CH02-02	MH-W	20-22	53.9	75.4
CH02-02	MH-W	40-42	56.2	77.1
CH02-02	MH-W	58-60	50.8	73.0
CH02-02	MH-E	0-2	73.2	87.7
CH02-02	MH-E	2-4	69.3	85.5
CH02-02	MH-E	6-8	62.8	81.6
CH02-02	MH-E	10-12	65.2	83.1
CH02-02	MH-E	14-16	63.2	81.9
CH02-02	MH-E	20-22	61.9	81.0
CH02-02	MH-E	30-32	39.0	62.6
CH02-02	MH-E	40-42	45.7	68.8
CH02-02	MH-E	46-48	44.3	67.6
CH02-02	MH-E	50-52	45.5	68.6
CH02-02	MH-E	52-54	41.7	65.3
CH02-09	257S	4-6	37.9	61.6
CH02-09	257S	20-22	58.2	78.5
CH02-09	257S	38-40	56.2	77.1

APPENDIX E. GRAIN SIZE DATA

Sample ID*	% Gravel	% Sand	% Mud	% Silt	% Clay	Class †
CH01-28 1G	0.16	30.37	69.48	54.7	14.78	sM
2G	65.39	34.01	0.6	nd	nd	sG
3G	0	99.8	0.2	nd	nd	S
4G	0	99.81	0.19	nd	nd	S
9G	22.85	76.09	1.06	nd	nd	S
9G2	46.5	42.24	11.26	5.33	5.93	sG
10G	4.56	41.49	53.95	4.56	49.39	sM
11G	0.96	98.53	0.51	nd	nd	S
12G	0.85	90.36	8.79	0.33	8.46	S
13G	0	99.65	0.35	nd	nd	S
14G	0	92.22	7.78	0.97	6.81	S
15G	2.92	96.84	0.24	nd	nd	S
16G	5.77	23.42	70.81	33.54	37.27	sM
17G	0	92.22	7.78	7.66	0.12	S
18G	21.42	67.00	11.58	4.07	7.51	gS
19G	0	99.93	0.07	nd	nd	S
20G	0	99.94	0.06	nd	nd	S
21G	61.36	30.77	7.87	1.75	6.12	sG
22G	0	13.48	86.52	nd	nd	M
23G	0.03	99.68	0.29	nd	nd	S
24G	5.08	85.7	9.22	nd	nd	S
25G	72.77	23.66	3.57	nd	nd	sG
26G	0	99.38	0.62	nd	nd	S
27G	26.17	62.84	10.99	10.88	0.11	gS
28G	42.46	56.93	0.61	nd	nd	gS
29G	0.08	98.84	1.08	nd	nd	S
30G	6.77	70.74	22.49	nd	nd	mS
31G	42.98	56.38	0.64	nd	nd	gS
32G	2.97	85.57	11.46	nd	nd	S
33G	0	99.06	0.94	nd	nd	S
34G	49.59	48.59	1.82	nd	nd	sG
35G	49.29	32.33	18.38	9.19	9.19	sG
36G	41.93	22.65	35.42	nd	nd	msG
37G	68.18	29.67	2.15	nd	nd	sG
38G	63.56	20.3	16.14	nd	nd	sG
39G	31.88	61.48	6.64	nd	nd	gS
40G	0	3.15	96.85	nd	nd	M
41G	0	21.06	78.94	48.24	30.7	scZ
42G	25.64	32.02	42.34	nd	nd	gsM
43G	0	13.31	86.69	54.75	31.94	cZ
45G	71.48	27.7	0.82	nd	nd	sG
46G	1.37	24.18	74.46	47.38	27.08	sM
47G	0	5.46	94.54	nd	nd	M
48G	4.9	86.97	8.13	nd	nd	S
49G	33.1	65.45	1.45	nd	nd	gS
50G	1.62	97.54	0.84	nd	nd	S
51G	0	13.79	86.21	51.73	34.48	cZ

Sample ID	% Gravel	% Sand	% Mud	% Silt	% Clay	Class
52G	58.98	38.29	2.73	nd	nd	sG
53G	5.51	37.38	57.11	nd	nd	sM
54G	0.71	62.73	36.56	nd	nd	mS
55G	0	54.94	45.06	33.89	11.17	zS
56G	4.03	89.36	6.61	nd	nd	S
57G	78.18	10.25	11.57	nd	nd	G
58G	0	11.91	88.09	63.73	24.36	cZ
59G	0	28.54	71.46	71.14	0.32	sZ
60G	0	43.92	56.08	nd	nd	sM
61G	4.14	94.84	1.02	nd	nd	S
62G	11.01	87.1	1.89	nd	nd	S
63G	0	20.88	79.12	62.17	16.95	sZ
64G	0.86	61.84	37.3	nd	nd	mS
65G	100	0	0	0	0	G
66G	54.14	29.29	16.57	nd	nd	sG
67G	0	5.06	94.94	37.97	56.96	zC
68G	54.11	27.55	18.34	2.62	15.72	sG
69G	72.06	12.88	15.06	2.15	12.91	mG
70G	0	40.03	59.97	29.99	29.99	czS
71G	0.15	81.44	18.41	7.36	11.05	S
72G	24.26	73.44	2.3	nd	nd	gS
73G	6.6	89.17	4.23	2.12	2.12	S
74G	11.19	82.19	6.62	0	6.62	S
75G	0.54	58.64	40.82	13.61	27.21	mS
76G	0.22	88.86	10.92	2.73	8.19	S
77G	0.25	62.65	37.1	12.37	24.73	mS
78G	1.56	92.2	6.24	3.12	3.12	S
79G	5.82	45.68	48.5	35.27	13.23	sM
80G	0	89.55	10.45	6.97	3.48	S
81G	100	0	0	0	0	G
82G	61.2	32.2	6.6	3.26	3.34	sG
83G‡	nd	nd	nd	nd	nd	R
84G	55.25	31.94	12.81	8.54	4.27	sG
85G	0	7.87	92.13	50.25	41.88	cZ
86G	100	0	0	0	0	G
87G	0	9.09	90.91	0	90.91	C
88G	0.77	86.41	12.82	nd	nd	S
89G	50.24	28.8	20.96	5.99	14.97	msG
90G	54.45	34.49	11.06	nd	nd	sG
91G	74.59	18.71	6.7	nd	nd	sG
92G	77.85	22.15	0	0	0	G
93G	0	3.31	96.69	nd	nd	M
94G	5.92	5.32	88.76	0	88.76	M
95G	11.32	56.63	32.05	nd	nd	mS
96G	45.19	40.23	14.58	nd	nd	sG
97G	0	5.66	94.34	20.96	73.38	zC
98G	0	29.7	70.3	17.56	52.72	sC
99G	0	20.42	79.58	nd	nd	sM
101G	5.23	70.98	23.79	4.76	19.03	mS

Sample ID	% Gravel	% Sand	% Mud	% Silt	% Clay	Class
102G	0	31.39	68.61	25.73	42.88	szC
103G	6.7	74.67	18.62	0	18.62	mS
104G	0	9.56	90.44	25.84	64.6	zC
105G	0	1.48	98.52	49.26	49.26	zC
106G	0	4.37	95.63	27.32	68.31	zC
107G	0	34.21	65.79	24.67	41.12	szC
108G	8.96	63.38	27.65	0	27.65	mS
109G	0	3.43	96.57	21.46	75.11	zC
110G	0	1.57	98.43	29.53	68.9	zC
111G	11.32	0.96	87.72	31.9	55.82	M
112G	1.85	64.15	34	0	34.73	mS
113G	0	55.75	44.25	0	44.25	cS
114G	0	19.61	80.39	24.12	56.27	zC
115G	0	14.68	85.32	51.19	34.13	zC
116G	0	26.74	73.26	18.32	54.95	sC
117G	0	9.09	90.91	30.3	60.61	zC
118G	62.32	14.3	23.38	6.68	16.7	mG
119G	33.33	23.63	43.04	11.74	31.3	gsM
120G	0	17.42	82.58	7.51	75.08	C
121G	0	26.87	73.13	18.28	54.84	zC
122G	15.17	24.43	60.4	20.13	40.27	sM
123G	0	0.72	99.28	27.08	72.2	zC
124G	84.48	7.9	7.62	1.52	6.1	G
125G‡	nd	nd	nd	nd	nd	R
126G	96.12	0.23	3.64	0	3.64	G
127G	0	66.28	33.72	4.82	28.9	cS
128G	0	7.98	92.02	61.35	30.67	cZ
129G	70.61	0.7	28.7	0	28.69	mG
130G	0	6.01	93.99	23.45	70.54	zC
131G‡	nd	nd	nd	nd	nd	R
132G	0	4.9	95.1	19.62	75.48	zC
133G	1.17	10.35	88.48	19.54	68.94	M
134G	0	2.8	97.2	28.75	68.45	zC
135G	0	6.39	93.61	21.06	72.55	zC
136G	3.82	23.06	73.13	13.96	59.17	sM
137G	1	78.3	20.7	0	20.7	S
138G	0	40.64	59.36	19.54	39.82	sC
139G	0	21.86	78.14	10.79	67.35	sC
140G	0	2.72	97.28	12.68	84.6	C
141G	19.26	36.88	43.87	4.19	39.67	sM
142G	0	2.98	97.02	22.59	74.42	zC
143G	0	5.72	94.28	21.32	72.96	zC
144G	0	2.52	97.48	20.07	77.41	C
145G	5.4	14.21	80.39	23.82	56.57	M
146G	18.08	1.78	80.14	21.75	58.39	M
147G	0	4.67	95.33	25.51	69.82	zC
148G	41.3	23.75	34.95	7.69	27.26	msG
149G	40.78	26.96	32.26	9.1	23.17	msG
150G	0	3.96	96.04	28.45	67.59	zC

Sample ID	% Gravel	% Sand	% Mud	% Silt	% Clay	Class
151G	0	7.25	92.75	30.86	61.89	zC
152G	0	56.1	43.9	5.27	38.63	cS
153G	0	1.88	98.12	36.5	61.62	zC
154G	11.24	31.72	57.03	21.91	35.12	sM
155G	26.64	28.19	45.17	12.41	32.76	gsM
156G	16.09	64.25	19.66	97.41	0	mS
157G	0	8.45	91.55	35.84	55.71	zC
158G	0	13.97	86.03	41.87	44.15	zC
159G	0	4.19	95.81	45.38	50.44	zC
160G	11.14	2.02	86.84	45.68	41.16	M
161G	0	2.22	97.78	47.42	50.36	zC
162G	0	5.07	94.93	40.64	54.29	zC
163G	0	1.28	98.72	42.42	56.3	zC
164G	0	13.71	86.29	28.95	57.35	zC
165G	0	8.36	91.64	30.35	61.3	zC
166G	0	20.72	79.28	30.69	48.59	szC
167G	3.89	13.79	82.32	33.28	49.04	M
168G	2.32	30.88	66.8	20.2	46.6	sM
169G	0	3.49	96.51	28.8	67.71	zC
170G	0	6.52	93.48	35.58	57.9	zC
171G	0.58	36.06	63.36	17.79	45.57	sM
172G	0.00	20.21	29.90	49.88	79.79	szC
173G	0.00	2.79	22.84	74.37	97.21	zC
174G	1.37	54.12	10.23	34.28	44.51	mS
175G	0.00	4.28	33.50	62.22	95.72	zC
176G	2.55	10.03	27.68	59.74	87.42	sM
177G	0.00	4.16	35.10	60.73	95.84	zC
178G	0.26	73.93	0.00	26.07	25.81	mS
179G	0.43	44.59	49.26	5.71	54.97	sM
180G	51.79	39.27	1.33	7.62	8.94	sG
181G	63.07	4.24	4.46	28.23	32.69	mG
182G	0.3	12.10	33.90	53.69	87.90	M

Sample ID	% Gravel	% Sand	% Mud	% Silt	% Clay	Class
CH09-02						
184G	0.66	66.21	33.12	5.35	27.78	mS
185G	0.00	38.32	61.68	27.15	34.53	czS
186G	0.00	5.45	94.55	34.28	60.27	zC
187G	0.00	29.54	70.46	23.40	47.06	szC
188G	16.67	18.45	64.88	22.01	42.87	sM
190G	0.00	5.80	94.20	26.86	67.34	zC
191G	0.00	0.44	99.56	93.18	6.38	Z
192G	73.14	15.95	10.90	0.54	10.37	sG
193G1	0.00	32.18	67.82	16.36	51.45	sC
193G2	0.00	35.52	64.48	18.64	45.85	sC
194G	62.51	20.90	16.59	3.00	13.59	sG
195G	1.02	81.72	17.26	0.95	16.31	s
196G	45.73	13.79	40.48	14.11	26.37	mG
197G	0.00	58.66	41.34	7.35	33.99	cS
198G	12.35	49.50	38.15	11.38	26.77	mS
199G	0.00	6.95	93.05	39.45	53.60	zC
200G	88.14	3.68	8.17	1.46	6.71	G
201G	64.43	22.95	12.63	1.14	11.48	sG
202G‡	nd	nd	nd	nd	nd	G
203G	51.60	33.94	14.47	1.82	12.64	sG
204G	0.00	18.72	81.28	32.48	48.80	zC
205G	0.00	9.68	90.32	22.54	67.78	zC
206G	22.67	57.59	19.74	1.82	17.92	gmS
207G	72.23	18.40	9.37	1.01	8.35	sG
208G	0.00	4.91	95.09	27.37	67.73	zC
210G	0.00	13.50	86.50	nd	nd	zC
211G	0.00	1.70	98.30	21.91	76.39	C
212G	0.17	29.36	70.48	15.21	55.26	sM
213G	6.71	22.39	70.90	26.41	44.49	sM
214G	0.00	14.78	85.22	31.59	53.63	zC
215G	0.56	79.50	19.94	1.08	18.86	S
216G	0.00	82.55	17.45	0.00	17.45	S
217G	50.44	31.92	17.64	2.19	15.45	sG
218G	0.00	5.29	94.71	23.80	70.92	zC
219G	0.00	12.39	87.61	38.28	49.32	zC
220G	1.64	73.71	24.65	3.78	20.86	mS
221G	0.00	4.99	95.01	38.79	56.22	zC
222G	67.35	22.38	10.27	0.83	9.44	sG
223G	57.35	28.20	14.45	2.00	12.45	sG
224G	0.00	7.02	92.98	33.78	59.20	zC
225G	3.81	79.22	16.97	nd	nd	S
226G‡	nd	nd	nd	nd	nd	sM
227G	42.59	36.40	21.01	3.96	17.05	msG

Sample ID	% Gravel	% Sand	% Mud	% Silt	% Clay	Class
228G	0.00	5.13	94.87	32.64	62.22	zC
229G	0.00	6.12	93.88	34.44	59.44	zC
230G	0.00	39.78	60.22	22.33	37.90	czS
230G	83.06	0.12	16.83	1.87	14.96	G
232G	0.00	16.96	83.04	23.31	59.73	zC
233G	0.00	1.04	98.96	30.86	68.10	zC
235G	0.00	73.16	26.84	3.19	23.65	cS
236G	0.59	34.66	64.74	19.90	44.84	sM
238G	0.00	86.67	13.33	0.44	12.89	S
239G	0.00	19.06	80.94	nd	nd	M
245G	4.82	71.78	23.40	5.61	17.79	mS
247G	0.00	20.23	79.77	18.95	60.82	sC
248G	0.00	43.50	56.50	13.40	43.10	cS
249G	0.00	2.34	97.66	86.43	11.23	Z
250G	0.02	21.97	78.01	74.08	3.93	sM
254G	0.00	2.82	97.18	23.44	73.74	zC
255G	0.00	3.82	96.18	25.99	70.20	zC
256G	0.00	81.11	18.89	1.40	17.49	S
258G	0.00	50.41	49.59	11.92	37.67	cS
259G	5.31	69.09	25.60	3.99	21.61	mS
260G	10.55	59.20	30.25	7.78	22.48	mS
263G‡	nd	nd	nd	nd	nd	R
264 top	0.95	78.02	21.03	1.03	20.00	S
264 bot	0.00	3.72	96.28	21.70	74.57	zC
265G	1.43	49.16	49.41	14.14	35.27	mS
272G2	0.39	64.06	35.55	5.17	30.38	mS
272G1	0.00	27.84	72.16	17.86	54.29	scZ
273G	2.35	81.55	16.09	0.19	15.90	S
275G	0.00	62.58	37.42	10.68	26.74	cS
276G‡	nd	nd	nd	nd	nd	SH
277G	3.91	84.50	11.58	0.00	12.19	S
278G	0.00	73.88	26.12	5.84	20.28	cS
279G	2.15	81.13	16.72	1.91	14.81	S
280G	0.00	69.72	30.28	6.62	23.66	cS
281G	0.00	54.76	45.24	13.24	32.01	cS
282G	0.00	45.29	54.71	20.00	34.71	cS
283G	0.00	80.19	19.81	0.36	19.45	S
285G	0.00	29.15	70.85	20.73	50.12	scZ
286G1	1.35	55.73	42.92	12.78	30.14	mS
286G2	1.00	46.20	52.80	13.21	39.58	sM
287G	0.00	49.02	50.98	18.34	32.64	cS
288G	0.00	60.20	39.80	13.94	25.86	cS
289G	0.00	77.84	22.16	4.67	17.50	cS
290G	0.12	76.75	23.13	3.74	19.39	S

Sample ID	% Gravel	% Sand	% Mud	% Silt	% Clay	Class
291G	16.34	70.33	13.32	0.00	13.76	gS
292G	0.00	70.67	29.33	12.33	17.00	cS
293G	0.00	68.96	31.04	2.77	28.27	cS
295G	0.00	80.20	19.80	0.00	19.80	S
296G	0.35	76.14	23.52	1.65	21.86	S
297G	2.72	58.16	39.12	7.79	31.33	mS
298G	0.75	70.92	28.33	0.79	27.54	mS

* See Appendix C for sample locations
† G, gravel; g, gravelly; S, sand; s, sandy; M, mud; m, muddy; Z, silt; z, silty; C, clay; c, clayey; R, rock; SH, shell
‡ No analysis performed; size class based on field observation
nd=not determined

APPENDIX F. Cs-137 and Pb-210 ACTIVITIES

Core[†]	Interval (cm)	Cs-137 (dpm/g)[‡]	Error (dpm/g)
C1	14-15	0.016	0.008
C1	22-23	0.008	0.007
C1	48-50	0.007	0.003
C2	0-1	0.029	0.013
C2	1-2	nd	-
C2	22-23	nd	-
C2	50-52	nd	-
C4	0-1	0.012	0.008
C4	1-2	0.001	0.004
C4	20-21	nd	-
C4	50-52	nd	-
C7	0-1	nd	-
C7	10-11	nd	-
C7	25-26	0.008	0.006
C7	50-52	nd	-
C8	0-1	0.131	0.024
C8	1-2	0.082	0.022
C8	2-3	0.079	0.022
C8	3-4	0.061	0.015
C8	19-20	0.039	0.009
C8	47-49	0.038	0.013
C8	57-59	0.005	0.005
C9	0-1	0.091	0.027
C9	1-2	0.057	0.015
C9	2-3	nd	-
C9	3-4	nd	-
C9	20-22	0.075	0.009
C9	50-52	0.019	0.007
C14b	0-2	0.075	0.023
C14b	2-4	0.057	0.013
C14b	4-6	0.051	0.012
C14b	6-8	0.072	0.012
C14b	8-10	0.018	0.006
C14b	10-12	0.059	0.011
C14b	12-14	0.041	0.009
C14b	14-16	nd	-
C14b	16-18	nd	-
C14b	18-20	0.105	0.020
C14b	20-22	0.082	0.012
C14b	22-24	0.063	0.014
C14b	24-26	0.021	0.007

Core	Interval (cm)	Cs-137 (dpm/g)‡	Error (dpm/g)
C14b	26-28	0.075	0.017
C14b	28-30	0.095	0.014
C14b	30-32	0.012	0.009
C14b	32-34	0.011	0.005
C14b	34-36	0.058	0.014
C14b	38-40	0.026	0.010
C14b	42-44	0.053	0.011
C14b	46-48	0.090	0.019
C14b	50-52	0.085	0.018
C14b	52-54	0.095	0.024
C14b	54-56	0.210	0.028
C15a	0-2	0.067	0.025
C15a	32-34	0.312	0.031
C15a	34-36	0.219	0.031
C15a	36-38	0.024	0.005
C15a	38-40	0.157	0.028
C15a	40-42	0.155	0.029
C15a	42-44	0.250	0.030
C15a	44-46	0.203	0.028
C15a	46-48	0.204	0.029
C15a	48-50	0.081	0.030
C15a	50-52	0.132	0.030
C15a	52-54	0.300	0.030
C15a	54-56	0.201	0.030
C15a	56-58	0.192	0.029
C15a	58-60	0.131	0.033
C15a	60-62	0.153	0.031
C15a	62-64	0.131	0.033
C15a	64-66	0.221	0.033
C15a	66-68	0.100	0.024
C16b	0-1	0.018	0.009
C16b	1-2	0.072	0.014
C16b	2-3	0.038	0.013
C16b	3-4	0.072	0.014
C16b	4-6	0.045	0.009
C16b	6-8	0.000	0.000
C16b	8-10	0.024	0.007
C16b	10-12	0.005	0.004
C16b	12-14	0.121	0.018
C16b	14-16	0.099	0.020
C16b	16-18	0.104	0.018
C16b	18-20	0.052	0.016
C16b	20-22	0.040	0.014
C16b	22-24	0.090	0.018
C16b	24-26	0.071	0.019
C16b	26-28	0.085	0.020

Core	Interval (cm)	Cs-137 (dpm/g)‡	Error (dpm/g)
C16b	28-30	0.080	0.013
C16b	30-32	0.089	0.019
C16b	32-34	0.105	0.018
C16b	34-36	0.054	0.017
C16b	36-38	0.033	0.015
C16b	38-40	0.084	0.021
C16b	40-42	0.116	0.020
C16b	42-44	0.230	0.025
C16b	44-46	0.124	0.019
C16b	46-48	0.083	0.016
C16b	48-50	0.137	0.020
C16b	50-52	0.028	0.014
C16b	52-54	0.050	0.016
C16b	54-56	0.085	0.015
PC4	0-2	0.022	0.016
PC4	2-4	0.148	0.020
PC4	4-6	0.220	0.021
PC4	6-8	0.095	0.018
PC4	8-10	0.207	0.019
PC4	10-12	0.205	0.021
PC4	12-14	0.133	0.018
PC4	14-16	0.185	0.027
PC4	16-18	0.126	0.019
PC4	18-20	0.318	0.025
PC4	20-22	0.181	0.024
PC4	22-24	0.190	0.027
PC4	24-26	0.127	0.017
PC4	26-28	0.142	0.018
PC4	28-30	0.121	0.016
PC4	30-32	0.168	0.024
PC4	32-34	0.173	0.018
PC4	34-36	0.141	0.022
PC4	36-38	0.119	0.018
PC4	38-40	0.125	0.020
PC4	40-42	0.188	0.025
PC4	42-44	0.148	0.016
PC4	44-46	0.107	0.019
PC4	46-48	0.085	0.017
PC4	48-50	0.093	0.024
PC4	50-52	0.059	0.018
PC7	0-2	0.653	0.033
PC7	2-4	0.234	0.029
PC7	4-6	0.150	0.016
PC7	6-8	0.121	0.018
PC7	8-10	0.149	0.019
PC7	10-12	0.089	0.015

Core	Interval (cm)	Cs-137 (dpm/g)‡	Error (dpm/g)
PC7	12-14	0.006	0.002
PC7	14-16	nd	-
PC7	16-18	0.100	0.017
PC7	18-20	0.216	0.027
PC7	20-22	0.063	0.014
PC7	22-24	0.170	0.022
PC7	24-26	0.202	0.022
PC7	28-30	0.123	0.018
PC7	32-34	0.069	0.013
PC7	36-38	nd	-
PC7	40-42	nd	-
PC7	42-44	nd	-
PC7	46-48	nd	-
PC7	50-52	nd	-
PC7	54-56	nd	-
PC7	62-64	nd	-
PC13	14-16	0.243	0.021
PC13	16-18	0.192	0.026
PC13	18-20	0.160	0.025
PC13	22-24	0.233	0.028
PC13	26-28	0.545	0.036
PC13	30-32	0.215	0.027
PC13	32-34	0.308	0.028
PC13	34-36	0.238	0.024
PC13	36-38	0.071	0.013
PC13	38-40	nd	-
PC13	42-44	0.057	0.015
PC13	46-48	nd	-
PC13	54-56	nd	-
PC14	0-2	0.253	0.047
PC14	4-6	0.349	0.055
PC14	6-8	0.547	0.052
PC14	10-12	0.389	0.062
PC14	14-16	0.677	0.076
PC14	18-20	0.657	0.064
PC14	20-22	0.787	0.065
PC14	22-24	0.703	0.062
PC14	24-26	0.734	0.058
PC14	26-28	0.246	0.045
PC14	28-30	0.296	0.047
PC14	30-32	0.021	0.017
PC14	32-34	nd	-
PC14	34-36	0.002	0.003
PC14	38-40	0.044	0.024
PC14	42-44	0.002	0.003
PC14	46-48	0.040	0.022

Core	Interval (cm)	Cs-137 (dpm/g)‡	Error (dpm/g)
PC14	50-52	nd	0.000
PC14	54-56	nd	-
PC14	58-60	nd	0.000
PC14	62-64	nd	0.000
PC14	66-68	0.163	0.038
PC14	70-72	0.009	0.009
PC14	74-76	0.572	0.060
PC14	78-80	0.387	0.050
PC14	82-84	0.060	0.029
PC14	86-88	nd	-
PC14	92-94	nd	-
PC15	0-2	0.230	0.040
PC15	4-6	0.221	0.049
PC15	8-10	0.341	0.061
PC15	12-14	0.324	0.056
PC15	16-18	0.378	0.049
PC15	18-20	0.348	0.055
PC15	22-24	0.377	0.051
PC15	26-28	0.387	0.057
PC15	30-32	0.477	0.047
PC15	34-36	0.598	0.059
PC15	38-40	0.842	0.065
PC15	42-44	0.773	0.060
PC15	44-46	0.736	0.062
PC15	46-48	1.007	0.067
PC15	48-50	0.678	0.069
PC15	52-54	0.699	0.067
PC15	54-56	0.921	0.068
PC15	56-58	0.993	0.071
PC15	58-60	1.142	0.072
PC15	60-62	1.286	0.075
PC15	62-64	1.123	0.069
PC15	64-66	0.573	0.059
PC15	66-68	0.110	0.041
PC15	68-70	nd	-
PC15	70-72	0.015	0.027
PC15	74-76	nd	-
PC15	80-82	nd	-
PC15	84-86	0.059	0.034
PC15	90-92	0.024	0.026
PC16	0-2	2.035	0.001
PC16	2-4	1.999	0.001
PC16	4-6	2.010	0.001
PC16	8-10	1.147	0.001
PC16	12-14	0.400	0.001
PC16	14-16	nd	-

Core	Interval (cm)	Cs-137 (dpm/g)[‡]	Error (dpm/g)
PC16	20-22	nd	-
PC16	32-24	nd	-
PC16	40-42	nd	-
PC16	44-46	nd	-
PC16	58-60	nd	-
MHW	0-2	0.226	0.045
MHW	10-12	0.119	0.026
MHW	20-22	0.062	0.032
MHW	40-42	0.050	0.037
MHW	58-60	0.131	0.040
MHE	2-4	0.102	0.023
MHE	10-12	0.097	0.024
MHE	14-16	0.128	0.022
MHE	20-22	0.184	0.028
MHE	30-32	0.040	0.014
MHE	40-42	0.150	0.027
MHE	46-48	nd	-
111S	8-10	0.051	0.019
111S	22-24	0.171	0.026
111S	34-36	0.133	0.026
144S1	0-2	0.089	0.023
144S1	28-30	0.127	0.023
144S1	58-60	0.060	0.024
177S	6-8	nd	-
177S	24-26	nd	-
177S	40-42	0.013	0.011
257S	4-6	0.056	0.56
257S	20-22	nd	nd
257S	38-40	0.039	0.039

[†] See Appendix C for core locations and details
[‡] Minimum detectible activity (MDA) = 0.05 dpm/g
nd= non-detectible (below MDA)

Core	Interval (cm)	xsPb-210 (dpm/g)	Error (dpm/g)
PC-14	0-2	4.16	0.40
PC-14	4-6	2.80	0.35
PC-14	6-8	2.22	0.33
PC-14	10-12	1.51	0.30
PC-14	14-16	2.21	0.35
PC-14	18-20	1.95	0.31
PC-14	20-22	1.30	0.28
PC-14	22-24	1.09	0.27
PC-14	24-26	1.34	0.28
PC-14	26-28	1.18	0.26
PC-14	28-30	0.63	0.25
PC-14	30-32	0.98	0.24
PC-14	32-34	0.57	0.24
PC-14	34-36	0.80	0.21
PC-15	0-2	5.66	0.72
PC-15	4-6	4.76	0.77
PC-15	8-10	2.27	0.67
PC-15	12-14	3.11	0.69
PC-15	16-18	3.76	0.77
PC-15	18-20	4.52	0.71
PC-15	22-24	3.09	0.63
PC-15	26-28	2.40	0.57
PC-15	30-32	2.38	0.57
PC-15	34-36	1.27	0.55
PC-15	38-40	2.28	0.63
PC-15	42-44	1.35	0.52
PC-15	44-46	1.42	0.54
PC-15	46-48	1.43	0.56
PC-15	48-50	0.96	0.55
PC-15	52-54	1.01	0.53
PC-15	56-58	0.46	0.45
PC-15	58-60	0.69	0.49
PC-15	60-62	0.50	0.45
PC-4	0-2	3.12	0.26
PC-4	2-4	2.54	0.19
PC-4	4-6	2.57	0.20
PC-4	6-8	2.21	0.19
PC-4	8-10	2.19	0.18
PC-4	10-12	3.28	0.21
PC-4	12-14	2.20	0.18
PC-4	14-16	2.93	0.22
PC-4	16-18	2.57	0.19
PC-4	18-20	2.02	0.21
PC-4	20-22	2.46	0.21
PC-4	22-24	2.21	0.22

Core	Interval (cm)	Pb-210 (dpm/g)	Error (dpm/g)
PC-4	28-30	0.93	0.1300
PC-4	32-34	1.71	0.16
PC-4	34-36	1.11	0.15
PC-4	42-44	1.31	0.14
PC-13	14-16	2.04	0.22
PC-13	16-18	3.17	0.26
PC-13	18-20	1.62	0.24
PC-13	20-22	1.73	0.24
PC-13	22-24	2.13	0.25
PC-13	24-26	1.97	0.24
PC-13	26-28	2.01	0.24
PC-13	28-30	1.15	0.22
PC-13	30-32	1.44	0.23
PC-13	32-34	2.09	0.23
PC-13	34-36	0.64	0.18
PC-13	36-38	1.13	0.20
PC-13	38-40	1.31	0.19
PC-13	42-44	0.68	0.20
PC-13	46-48	1.05	0.20
PC-13	54-56	0.39	0.18
MHE	2-4	1.94	0.25
MHE	10-12	3.32	0.29
MHE	14-16	3.67	0.30
MHE	20-22	2.47	0.26
MHE	30-32	1.13	0.19
MHE	40-42	2.09	0.25
MHE	46-48	1.00	0.21
MHE	52-54	1.47	0.25
C-14b	0-2	3.31	0.35
C-14b	2-4	1.42	0.23
C-14b	4-6	0.69	0.22
C-14b	6-8	1.72	0.23
C-14b	8-10	1.84	0.20
C-14b	10-12	2.42	0.23
C-14b	12-14	2.14	0.25
C-14b	14-16	1.18	0.23
C-14b	16-18	1.39	0.18
C-14b	18-20	2.82	0.33
C-14b	20-22	3.25	0.26
C-14b	22-24	1.70	0.25
C-14b	24-26	1.68	0.22
C-14b	26-28	2.74	0.32
C-14b	28-30	2.80	0.28
C-14b	30-32	2.48	0.30

Core	Interval (cm)	Pb-210 (dpm/g)	Error (dpm/g)
C-14b	32-34	2.38	0.27
C-14b	34-36	1.83	0.26
C-14b	38-40	0.84	0.18
C-14b	42-44	0.94	0.19
C-14b	46-48	2.18	0.31
C-14b	50-52	2.95	0.34
C-14b	52-54	4.37	0.43
C-14b	54-56	5.75	0.47