Appendix A
Disposal Logs

Appendix Al, UDM Disposal at CHCP

1998 - 1999 CHCPl

Project: COHASSET CAPPING Permit Number: 1998C0010 Permittee: COE-COHASSET

		Scow logs		ADISS							
Log ID	Departure	Disposal	Return	Latitude	Longitude	Buoy's Vector	Volume (CY)	Trip Number	Latitude	Longitude	Phase
16158	11/30/1998	12/1/1998	12/1/1998	42.40765	-70.5784	100'N	1500	70	42.40799065	-70.5799522	DISPOSAL
16431	12/19/1998	12/19/1998	12119/1998	42.41083188	-70.5813005	75' NW	700	91	42.40803647	-70.5788138	DISPOSAL
16432	12/19/1998	12/20/1998	12120/1998	42.40849859	-70.5802171	100' NW	1500	92	42.40933043	-70.5775701	DISPOSAL
16433	12/20/1998	12/20/1998	12120/1998	42.4076486	-70.5800504	75' NW	700	93	42.40796661	-70.5791767	DISPOSAL
18178	12/22/1998	12/22/1998	12122/1998	42.40701667	-70.5788167	50'S	650				
16434	12/23/1998	12/23/1998	12J23/1998	42.40801527	-70.5798337	50' NW	1500	94	42.40859776	-70.5784559	DISPOSAL
16435	12/23/1998	12/24/1998	12/24/1998	42.40804859	-70.5806504	75' NW	750	95	42.40793122	-70.5785118	DISPOSAL
16302	17J26/1998	12/26/1998	17126/1998	42.40811526	-70.5804337	75' NW	750	96	42.40680033	-70.5797394	DISPOSAL
16303	12/26/1998	12/26/1998	12127/1998	42.40819859	-70.5802337	50' NW	1400	97	42.40681133	-70.5795025	DISPOSAL
16304	12/27/1998	12/27/1998	12J27/1998	42.40811526	-70.5804337	75' NW	700	98	42.40709343	-70.5797279	DISPOSAL
16305	12/28/1998	12/28/1998	12128/1998	42.40811526	-70.5804337	50' NW	1300	99	42.40649632	-70.5789915	DISPOSAL
16306	12/29/1998	12/29/1998	12/29/1998	42.40788193	-70.5802504	75' NW	1400	100	42.40675579	-70.5794386	DISPOSAL
16307	1/5/1999	1/5/1999	1/5/1999	42.40781527	-70.5804504	75'W	1200	101	42.40721899	-70.5791049	DISPOSAL
16308	1/5/1999	1/5/1999	1/6/1999	42.40826526	-70.5800171	50'W	700	102	42.40779305	-70.5789914	DISPOSAL
16309	1-/6/:999	1/6/1999	1/6/1999	42.40804859	-70.5806504	50' NW	1300	103	42.40683155	-70.5794621	DISPOSAL
17005	1/6/1999	1/6/1999	1/6/1999	42.40826526	-70.5800171	50' NW	700	104	42.40747325	-70.5802087	DISPOSAL
17006	1/8/1999	1/8/1999	1/8/1999	42.40811526	-70.5804337	50' NW	1450	105	42.40742651	-70.5786109	DISPOSAL
17007	1/8/1999	1/8/1999	1/8/1999	42.40788193	-70.5802504	50' NW	700	106	42.40739483	-70.5790693	DISPOSAL
17008	1/10/1999	1/10/1999	1/11/1999	42.40788193	-70.5802504	50' NW	700	107	42.40733688	-70.5789536	DISPOSAL
17009	1/11/1999	1/11/1999	1/11/1999	42.40811526	-70.5804337	50' NW	1500	108	42.40699946	-70.5794098	DISPOSAL
17010	1/11/1999	1/11/1999	1/11/1999	42.4076486	-70.5800504	50' NW	750	109	42.40724656	-70.5795996	DISPOSAL
17011	1/12/1999	1/12/1999	1/13/1999	42.40811526	-70.5804337	50' NW	1500	110	42.40768170	-70.578898	DISPOSAL
17012	1/13/1999	1/13/1999	1/13/1999	42.40819859	-70.5802337	50' NW	700	111	42.40822392	-70.5787403	DISPOSAL
17024	1/20/1999	1/20/1999	1/20/1999	42.40741527	-70.5798671	75' NW	1000	114	42.40719901	-70.5790761	DISPOSAL
17025	1/20/1999	1/20/1999	1/20/1999	42.40778193	-70.5796337	50' NW	700	115	42.40686544	-70.5797916	DISPOSAL
17026	1/21/1999	1/21/1999	1/21/1999	42.40788193	-70.5802504	50' NW	1500	116	42.40761023	-70.5783087	DISPOSAL

17027	1/21/1999	1/21/1999	1/21/1999	42.40771527	-70.5798504	50' NW 700	117	42.40632456	-70.5799807	DISPOSAL
17028	1/25/1999	1/25/1999	1/26/1999	42.4076486	-70.5800504	50' NW 1500	118	42.40704959	-70.5773732	DISPOSAL
17029	1/26/1999	1/26/1999	1/26/1999	42.4076486	-70.5800504	50' NW 700	119	42.40647710	-70.5792623	DISPOSAL
17030	1/26/1999	1/26/1999	1/27/1999	42.40788193	-70.5802504	50' NW 1500				
17031	1/27/1999	1/27/1999	1/27/1999	42.4079486	-70.5800337	50' NW 750	. 121	42.4066803	-70.5784537	DISPOSAL
17032	1/27/1999	1/27/1999	1/28/1999	42.40771527	-70.5798504	50' NW 1500				
17033	2/1/1999	2/1/1999	2/1/1999	42.40771527	-70.5798504	75' NW 1500				
17034	2/2/1999	2/2/1999	2/3/1999	42.40778193	-70.5796337	40' NW 750	124	42.40760723	-70.5796192	DISPOSAL
17035	2/3/1999	2/3/1999	2/3/1999	42.40771527	-70.5798504	75' NW 1500				
17036	2/4/1999	2/4/1999	2/4/1999	42.40788193	-70.5802504	50' NW 750	126	42.40697888	-70.5794759	DISPOSAL
17037	2/6/1999	2/6/1999	2/6/1999	42.40788193	-70.5802504	50' NW 1500	127	42.40898323	-70.5776978	DISPOSAL
17038	2/9/1999	2/9/1999	2/9/1999	42.40716528	-70.5796670	50' NW 700				
17039	2/9/1999	2/9/1999	2/10/1999	42.40771527	-70.5798504	50' NW 1500	129	42.40928343	-70.5773078	DISPOSAL
17040	2/10/1999	2/10/1999	2/10/1999	42.40771527	-70.5798504	50' NW 700	130	42.40738029	-70.5789101	DISPOSAL
17015	2/11/1999	2/11/1999	2/11/1999	42.40748193	-70.5796504	50' NW 1500	131	42.40776443	-70.5787455	DISPOSAL
17016	2/11/1999	2/11/1999	2/11/1999	42.4076486	-70.5800504	50' NW 700	132	42.40788854	-70.5796468	DISPOSAL
17017	2/11/1999	2/11/1999	2/12/1999	42.40811526	-70.5804337	75' NW 1500	133	42.4079272	-70.5782089	DISPOSAL
17018	2/13/1999	2/14/1999	2/14/1999	42.40819859	-70.5802337	75' NW 1500	134	42.40815735	-70.5788574	DISPOSAL
17019	2/15/1999	2/15/1999	2/15/1999	42.40788193	-70.5802504	50' NW 1500	135	42.40755844	-70.5786743	DISPOSAL
17020	2/15/1999	2/16/1999	2/16/1999	42.40811526	-70.5804337	50' NW 1500	136	42.40804672	-70.5780334	DISPOSAL
17021	2/16/1999	2/16/1999	2/16/1999	42.40788193	-70.5802504	50' NW 750	137	42.40793201	-70.5784225	DISPOSAL
17022	2/17/1999	2/17/1999	2/17/1999	42.4076486	-70.5800504	50' NW 1500	112	42.40705109	-70.5785721	DISPOSAL
17023	2/17/1999	2/17/1999	2/18/1999	42.40778193	-70.5796337	75' NW 700	113	42.40771389	-70.578795	DISPOSAL

Project Total Volume: 41,250 CM 53,950 CY

Buoy Total Volume: 41,250 CM 53,950 CY

Report Total Volume: 41,250 CM 53,950 CY

Appendix A2, MBDA Disposal Logs

1998 - 1999 MBDA98A
Project: COHASSET MAINT DREDGING
Permit Number: 1998C0010 Permittee: COE-COHASSET

Log ID	Departure	Disposal	Return	Latitude	Longitude	Buoy's Vector	Volume (CY)
15766	9/14/1998	9/15/1998	9/15/1998	42.4222	-70.5680333	300 090	600
15767	9/1G/1998	9/1G/1998	9/17/1998	42.42371667	-70.5727	50FT 270	700
157G8	9/17/1998	9/17/1998	9/18/1998	42.42388333	-70.573	100FT 290	750
15771	9/19/1998	9/19/1998	9/19/1998	42.42203173	-70.5723670	100FT 214	800
15770	9/19/1998	9/19/1998	9/20/1998	42.42281667	-70.5734333	100FT 270	650
15772	9/20/1998	9/20/1998	9/20/1998	42.42183333	-70.5723333	200FT 0	700
15773	9/21/1998	9/21/1998	9/21/1998	42.42434837	-70.5710670	100FT 315	750
15774	9/22/1998	9/22/1998	9/22/1998	42.42203172	-70.5731671	330FT 260	800
15775	9/24/1998	9/24/1998	9/24/1998	42.42379836	-70.5764338	50FT 315	775
15776	9/24/1998	9/24/1998	9/24/1998	42.42474834	-70.5772172	100F'T 270	800
15777	9/24/1998	9/24/1998	9/25/1998	42.42218173	-70.5722270	150FT SSE	750
15778	9/25/1998	9/25/1998	9/25/1998	42.42116508	-70.5721837	50FT VAR	750
15779	9/25/1998	9/25/1998	9/26/1998	42.42176507	-70.5716170	500FT SW	600
15780	9/2G/1998	9/2G/1998	9/26/1998	42.42144841	-70.5724170	50FT S	750
15781	9/2G/1998	9/2G/1998	9/27/1998	42.42234839	-70.5744671	50FT N	775
17045	9/28/1998	9/28/1998	9/29/1998	42.42163173	-70.5720337	75' E	775
17046	9/29/1998	9/29/1998	9/29/1998	42.42231506	-70.5720670	100' S	800
17047	9/29/1998	9/30/1998	9/30/1998	42.42444836	-70.5716671	100' SE	850
17048	9/30/1998	9/30/1998	9/30/1998	42.4215984	-70.5725337	300' S	800
17049	10/2/1998	10/2/1998	10/2/1998	42.4220984	-70.5724170	300' SW	600
17050	10/3/1998	10/3/1998	10/3/1998	42.42203173	-70.572G337	75' S	700
17051	10/3/1998	10/3/1998	10/3/1998	42.42298171	-70.5715504	75' NE	750
17052	10/4/1998	10/4/1998	10/4/1998	42.41984843	-70.5727170	150' S	600
17053	10/4/1998	10/4/1998	10/4/1998	42.42156507	-70.5722504	75' E	775
158G1	10/5/1998	10/5/1998	10/5/1998	42.42188173	-70.5714504	200' W	800
158G2	10/8/1998	10/8/1998	10/8/1998	42.42201507	-70.5713004	200' SE	750
158G3	10/8/1998	10/8/1998	10/8/1998	42.42316505	-70.5719504	75' E	650
158G4	10/13/1998	10/13/1998	10114/199	42.42189839	-70.5741004	350' E	700
15885	10/14/1998	10/15/1998	10/15/1998	42.42271506	-70.5723837	75' W	750
15884	10/1G/1998	10/1G/199	10116/199	42.42159841	-70.5711837	100' E	950
15883	10/1G/1998	10/1G/199	10/17/1998	42.4235317	-70.5735838	150' W	800
15882	10/17/1998	10/17/1998	10/17/1998	42.42073175	-70.5729004	250' S	700
15881	10/17/1998	10/17/1998	10/17/1998	42.42274838	-70.5732171	100' NW	700
15880	10/18/1998	10/18/1998	10/18/1998	42.4217484	-70.5726504	150' W	700
15879	10/18/1998	10/18/1998	10/18/1998	42.42131508	-70.5720504	100' E	500
15877	10/18/1998	10/19/1998	10119/199	42.42101508	-70.5728670	100' SE	700
15878	10/19/1998	10/19/1998	10/19/1998	42.4233317	-70.5742004	150' NE	700
15876	10/20/1998	10/20/1998	10/20/1998	42.42298171	-70.5734004	200' NE	750
15875	10/21/1998	10/21/1998	10/21/1998	42.42086508	-70.5727504	150' S	700
15865	10/21/1998	10/21/1998	10/21/1998	42.42231506	-70.5736504	200' W	700
15867	10/21/1998	10/22/199	10/22/199	42.42336504	-70.5731671	150' NW	750
15866	10/22/1998	10/22/199	10/22/199	42.42251506	-70.5711670	100' S	750
15868	10/23/1998	10/23/199	10/23/199	42.42073174	-70.5734337	200' W	700

15869	10/23/1998	10/23/199	10/23/199	42.42291505	-70.5736171	150' W		700
15870	10/24/1998	10/24/199	10/24/199	42.42118174	-70.5740504	200' W		650
15871	10/24/1998	10/24/199	10/24/199	42.42298171	-70.5734004	150' W		750
15872	10/25/1998	10/25/199	10/25/199	42.42188173	-70.5722504	200' SW		650
15873	10/25/1998	10/25/199	10/25/199	42.42271505	-70.5742338	200' W		750
15874	10/27/1998	10/27/199	10/27/199	42.42204839	-70.5737004	200' SW		600
15851	10/27/1998	10/27/199	10/27/199	42.42251506	-70.5730171	85' NW		700
15852	10/28/1998	10/28/199	10/28/199	42.42288171	-70.5727837	100' NW		750
15854	10/31/1998	11/1/1998	11/1/1998	42.42188173	-70.5717170	50' SE		600
15853	11/1/1998	11/1/1998	11/1/1998	42.42163173	-70.5720337	50' E		750
15855	11/2/1998	11/2/1998	11/3/1998	42.42114841	-70.5716503	75' NW		750
15857	11/3/1998	11/3/1998	11/3/1998	42.42144841	-70.5721504	75' SE		700
15856	11/3/1998	11/3/1998	11/3/1998	42.42294838	-70.5725837	100' NW		750
15858	11/4/1998	11/4/1998	11/4/1998	42.42261505	-70.5736337	100' NW		750
15860	11/5/1998	11/5/1998	11/5/1998	42.42264839	-70.5726004	75' NW		700
15859	11/5/1998	11/5/1998	11/5/1998	42.42188173	-70.5717170	100' SE		750
16102	11/6/1998	11/6/1998	11/6/1998	42.42281505	-70.5730004	50' W		750
						Project Total Volume:	33,184 CM	43,400 CY
						Buoy Total Volume:	33,184 CM	43,400 CY

1998 - 1999 MBDA98B

Project: COHASSET MAINT DREDGING

Permit Number: 1998C0010 Permittee: COE-COHASSET

Log ID	Departure	Disposal	Return	Latitude	Longitude	Buoy's Vector	Volume (CY)
16149	11/25/1998	11/25/1998	11/25/1998	42.42438169	-70.5718837	100' NW	1200
16150	11/25/1998	11/25/1998	11/25/1998	42.42464836	-70.5710504	25' NW	700
16152	11/28/1998	11/28/1998	11/28/1998	42.42401504	-70.5721171	25' NE	1500
16151	11/28/1998	11/28/1998	11/29/1998	42.42424837	-70.5704504	50' SE	750
16154	11/29/1998	11/29/1998	11/29/1998	42.42503169	-70.5708170	50' NW	700
16153	11/29/1998	11/29/1998	11/30/1998	42.41538186	-70.5635334	75' N	1500
16156	11/30/1998	11/30/1998	11/30/1998	42.42146508	-70.5697836	100' E	700
16155	11/30/1998	11/30/1998	12/1/1998	42.42468169	-70.5718671	50' N	1500
16157	11/30/1998	11/30/1998	12/1/1998	42.42533168	-70.5708004	75' W	1400
16159	12/2/1998	12/2/1998	12/2/1998	42.42474836	-70.5716504	50' NW	750
15967	12/2/1998	12/3/1998	12/3/1998	42.4243817	-70.5700337	75' E	1500
15969	12/2/1998	12/3/1998	12/3/1998	42.42366505	-70.5713004	75' E	1500
15968	12/3/1998	12/3/1998	12/3/1998	42.42383171	-70.5698503	25' NE	700
15970	12/4/1998	12/4/1998	12/4/1998	42.42451503	-70.5714670	75' NE	700
15971	12/4/1998	12/5/1998	12/5/1998	42.42379837	-70.5708837	75' E	1500
15972	12/5/1998	12/5/1998	12/5/1998	42.42349838	-70.5709004	50' S	1500
15973	12/5/1998	12/6/1998	12/6/1998	42.42389837	-70.5715004	75' NE	700
(5974	12/6/1998	12/6/1998	12/6/1998	42.42438169	-70.5718837	50' NW	750
15975	12/9/1998	12/9/1998	12/9/1998	42.42458169	-70.5712504	75' NW	1500
15976	12/9/1998	12/10/1998	12/10/1998	42.42474836	-70.5716504	75' NW	700
16422	12/10/1998	12/10/1998	12/10/1998	42.42458169	-70.5712504	50' NW	750
16423	12/11/1998	12/11/1998	12/11/1998	42.42474836	-70.5716504	100' NW	1500
16424	12J12/1998	12/12/1998	12/12/1998	42.42474836	-70.5716504	75' NW	750
16426	12/13/1998	12/13/1998	12/13/1998	42.42444836	-70.5716671		700
16425	12/13/1998	12/13/1998	12/14/1998	42.42499835	-70.5718504	50' NW	1550
16427	12/15/1998	12/15/1998	12/15/1998	42.42468169	-70.5718671	75' NW	700
16428	12/15/1998	12/16/1998	12/16/1998	42.42444836	-70.5716671	100' SE	1100
16429	12/16/1998	12/17/1998	12/17/1998	42.42458169	-70.5712504	25' NW	700
16430	12/17/1998	12/17/1998	12/17/1998	42.42444836	-70.5716671	50' NW	1000

Project Total Volume: 23,320 CM 30,500 CY

Buoy Total Volume: 23,320 CM 30,500 Cy

1999 - 2000 MBDA99D

Project: COHASSET MAINT DREDGING

Permit Number: 1998C0010 Permittee: COE-COHASSET

Log ID	Departure	Disposal	Return	Latitude	Longitude	Buoy's Vector	Volume (CY)
18494	2/12/2000	2/12/2000	2/13/2000	42.42448333	-70.5694667	50' SE	700
18495	2/15/2000	2/15/2000	2/15/2000	42.42433333	-70.58605	75' SE	700
18496	2/23/2000	2/23/2000	2/23/2000	42.42433333	-70.5845833	50' WS	1200
18497	2/24/2000	2/24/2000	2/24/2000	42.42528333	-70.5868167	150' W	600

Project Total Volume: 2,447 CM 3,200 Cy

Buoy Total Volume: 2,447 CM 3,200 Cy

Report Total Volume: 58,951 CM 77,100 Cy

Appendix A3, CDM Disposal from Cohasset Harbor

1999 - 2000 CHCP2

Project: COHASSET CAPPING

Permit Number: 1998C0010 Permittee: COE-COHASSET

Log ID	Departure	Disposal	Return	Latitude	Longitude	Buoy's Vector	Volume (CY)
18169	11/21/1999	11/21/1999	11/22/1999	42.40741667	-70.5789167	25' NW	550
18170	11/22/1999	11/23/1999	11/23/1999	42.40708333	-70.5798333	50' NW	550
18171	11/29/1999	11/29/1999	11/29/1999	42.40711667	-70.5788333	25' SE	600
18172	12/6/1999	12/7/1999	12/7/1999	42.40733333	-70.579666	50' N	700
18173	12/8/1999	12/9/1999	12/9/1999	42.40695	-70.5791167	100' SW	600
18174	12/9/1999	12/10/1999	12/10/1999	42.40733333	-70.5796667	75' N	750
18175	12/13/1999	12/13/1999	12/13/1999	42.40725	-70.5791667	50' SW	600
18176	12/18/1999	12/18/1999	12/18/1999	42.40708333	-70.5788333	75' SE	700
18177	12/19/1999	12/19/1999	12/19/1999	42.40725	-70.5789167	50' SE	650
18179	12/28/1999	12/28/1999	12/28/1999	42.40678333	-70.5780167	100' SE	740
18180	12/29/1999	12/29/1999	12/29/1999	42.40693333	-70.5797167	50' SW	740
18181	1/6/2000	1/6/2000	1/6/2000	42.40791667	-70.5796333	100' E	740
18653	1/7/2000	1/7/2000	1/8/2000	42.408133	-70.579416	125' SE	740
18182	1/8/2000	1/8/2000	I/8/2000	42.40691667	-70.5790333	50' SW	740
18183	1/9/2000	1/9/2000	1/9/2000	42.40685	-70.5790833	50' E	740
18184	1/9/2000	1/9/2000	1/9/2000	42.407	-70.5794167	75' SE	1000
18482	1/12/2000	1/12/2000	1/1 3/2000	42.40678333	-70.5790833	100' S	550
18483	1/15/2000	1/15/2000	1/16/2000	42.40713333	-70.5788	50' SE	550
18484	1/19/2000	1/19/2000	1/19/2000	42.40518333	-70.5794167	50' SE	1000
18485	1/30/2000	1/30/2000	1/30/2000	42.40366667	-70.578	75' S	740
18486	1/30/2000	1/30/2000		42.40716667	-70.58	75' W	1000
18487	2/3/2000	2/3/2000	2/4/2000	42.4072	-70.5792833	50' SE	600
18488	2/4/2000	2/4/2000	2/5/2000	42.4072	-70.5792833	50' SE	1300
18489	2/6/2000	2/6/2000	2/6/2000	42.40755	-70.5786833	100' NE	660
18490	2/8/2000	2/8/2000	2/8/2000	42.4075	-70.5786667	50' E	660
18491	2/8/2000	2/8/2000	2/8/2000	42.40766667	-70.5786667	50' E	660
18492	2/10/2000	2/10/2000	2J10/2000	42.40678333	-70.5788333	75' S	700
18493	2/l0/2000	Z/10/2000	Z/10/2000	42.40683333	-70.57875	100' S	700

Project Total Volume: 15,491 CM

Buoy Total Volume: 15,491 CM

Report Total Volume: 15,491 CM

20,260 Cy 20,260 Cy 20,260 CY

Appendix A4, CDM Disposal from Boston Harbor

1999 - 2000 CHCP2 Project: BOSTON HARBOR Permit Number: 1998C0008

Permittee: COE-BOSTON HARBOR

Log ID	Departure	Disposal	Return	Latitude	Longitude	Buoy's Vector	Volume (CY)
18722	3/1G/2000	3/16/2000	3/17/2000	42.40683	-70.59417	80 FT S	4500
18723	3/18/2000	3/18/2000	3/18/2000	42.40705	-70.57885	30 FT S	4500
18724	3/19/2000	3/19/2000	3/19/2000	42.40718	-70.57888	50 S	4200
18725	3/22/2000	3/22/2000	3/22/2000	42.40676	-70.57785	50 FT S	3500
1872G	3/22/2000	3/22/2000	3/22/2000	42.40678	-70.57802	75 NA	2800
18727	3/23/2000	3/23/2000	3/23/2000	42.40757	-70.57892	25 N	4500
18729	3/24/2000	3/24/2000	3/24/2000	42.40733	-70.57883	50 S	4700
18728	3/24/2000	3/24/2000	3/24/2000	42.40737	-70.579	25 FT S	4200
18730	3/25/2000	3/25/2000	3/25/2000	42.407	-70.57903	50 FT S	3800
18731	3/25/2000	3/25/2000	3/25/2000	42.40738	-70.5792	50 S	4300
18732	3/2G/2000	3/2G/2000	3/26/2000	42.40722	-70.57892	25 Fr S	4100
18733	3/2G/2000	3/27/2000	3/27/2000	42.40917	-70.57875	50 FT N	4200
18734	3/27/2000	3/27/2000	3/27/2000	42.40735	-70.57913	50 FT S	3500
18735	3/28/2000	3/28/2000	3/28/2000	42.40759	-70.57875	75 FT N	4200
1873G	3/29/2000	3/29/2000	3/29/2000	42.4071	-70.57885	50 S	3700
18737	3/29/2000	3/29/2000	3/29/2000	42.40705	-70.57872	50 FT S	4200
18738	3/30/2000	3/30/2000	3/30/2000	42.407	-70.57892	50 FT S	4000
18739	3/31/2000	3/31/2000	3/31/2000	42.40687	-70.578783	100 S	4200
18740	3/31/2000	3/31/2000	4/1/2000	42.40693	-70.578833	00 Fr S	4100
18741	4/1/2000	4/1/2000	4/1/2000	42.40705	-70.579	75 Fr S	4400
18742	4/2/2000	4/2/2000	4/2/2000	42.40759	-70.57892	50 N	4100
18743	4/3/2000	4/3/2000	4/3/2000	42.40692	-70.5789	75 S	4300
18744	4/3/2000	4/3/2000	4/4/2000	42.40735	-70.57893	75 S	4000
18745	4/4/2000	4/4/2000	4/4/2000	42.4075	-70.57892	65 FT N	4000
1874G	4/4/2000	4/5/2000	4/5/2000	42.40768	-70.5788	00 FT N	4100
18747	4/5/2000	4/5/2000	4/5/2000	42.40672	-70.57875	50 Fr N	4300
18748	4/6/2000	4/G/2000	4/6/2000	42.40778	-70.5788	75 Fr N	4000
18749	4/6/2000	4/7/2000	4/7/2000	42.4077	-70.57903	75 Fr N	4300
18750	4/7/2000	4/7/2000	4/7/2000	42.40775	-70.57896	75 FT N	4000
18751	4/8/2000	4/8/2000	4/8/2000	42.40787	-70.57892	75 ft N	4100
18753	4/10/2000	4/10/2000	4/10/2000	42.40762	-70.57896	50 Fr N	3600
18752	4/10/2000	4/10/2000	4/10/2000	42.40785	-70.5788	00 Fr N	3800
18754	4/11/2000	4/11/2000	4/12/2000	42.4076	-70.57892	50 Fr W	3200
18755	4/12/2000	4/12/2000	4/12/2000	42.40735	-70.57838	00 FT E	3000
18756	4/14/2000	4/14/2000	4/14/2000	42.40683	-70.57892	00 FT S	3700
18757	4/15/2000	4/15/2000	-' 4/15/2000	42.4069	-70.57872	75 Fr S	4400
18758	4/17/2000	4/17/2000	4/ l7%2000	42.40728	-70.57898	50 Fr S	4200
18759	4/18/2000	4/18/2000	4/!S/2000	42.40735	-70.5789	20 FT W	4200
187G0	4/20/2000	4/20/2000	4/20/2000	42.40693	-70.57888	25 FT W	4300
18761	4/20/2000	4/20/2000	4/20/2000	42.40688	-70.57925	50 FT N	4400

187G2	4/24/2000	4/24/2000	4/24/2000	42.4075	-70.57968	100 N N		4300
187G3	4/24/2000	4/24/2000	4/24/2000	42.40683	-70.57933	00 FT S		4200
187G4	4/24/2000	4/25/2000	4/25/2000	42.40693	-70.5795	75 S		4200
187G5	4/25/2000	4/25/2000	4/25/2000	42.40647	-70.58013	90 FT S		2400
18766	4/27/2000	4/27/2000	4/27/2000	42.40767	-70.57975	60 FT S		3500
187G7	4/27/2000	4/27/2000	4/27/2000	42.40773	-70.57933	25 FT S		2600
187G8	4/28/2000	4/28/2000	4/28/2000	42.40714	-70.5798	80 FT S		3000
187G9	4/28/2000	4/29/2000	4/29/2000	42.40732	-70.57954	30 FT N		2400
18770	4/29/2000	4/29/2000	4/29/2000	42.40665	-70.5797	90 FT S		2800
18771	4/29/2000	4/29/2000	4/29/2000	42.4084	-70.57943	30 Fr N		2300
18772	4/30/2000	4/30/2000	4/30/2000	42.40692	-70.57995	80 FT S		2600
18773	4/30/2000	4/30/2000	4/30/2000	42.40655	-70.5789	50 FT S		1800
18774	5/2/2000	5/2/2000	5/2/2000	42.4075	-70.579	75 FT N		4200
					Project Total Volume:		154,373 CM	201,900 CY
					Buoy Total Volume:		154,373 CM	201,900 CY
					Report Total Volume:		154,373 CM	201,900 CY

Appendix B
Cohasset Harbor Cores

Appendix B

Twenty-four cores were collected from various locations within Cohasset Harbor to provide a cross-section of the sediments to be removed as part of the 1998 dredging activity (Figure 2-2). A total of 60 sediment sub-samples were obtained from the cores for both grain size and microscopic analyses. Sub-samples were prepared from material from various depth intervals within the cores that corresponded to approximate depth of dredging and allowable overdepth. Any samples collected below the allowable overdepth were archived in the event future analysis was required. The core descriptions provided below were based on visual analysis corresponding with the collection of sediment sub-samples. The cores contained distinct lithological units, with surface sediments similar to those analyzed in the reconnaissance grab samples collected in July 1998.

B.1 Channel Core Results

The five cores collected from the channel contained significant variations in the depth or thickness of lithological units between stations. Cores located in the outer channel (1, 2, 4, 5, and 6) all contained dark gray to black fine sand. The primary component detected in all cores was fine sand (0.42-0.74 mm) with an average of 88%. Trace amounts (average 9%) of medium sand (2-0.42 mm) were detected in the channel cores, with the top interval of CO-5A displaying the largest fraction (26%; Table B-1).

There was no apparent difference between sediment types analyzed below allowable overdepth and those within the scope of the improvement dredging from the Channel cores. However, calculated averages are based on sediment analysis conducted within the material anticipated to be dredged as part of the maintenance project. Cores 1 and 4 had an allowable overdepth of 70 cm; sample results for these regions are listed in Table B-1. Samples were not collected below the allowable overdepth for Cores 2 and 5, 128 cm, and 180 cm respectively.

B.2 Channel-Harbor Transition Core Results

Cores collected near the breakwater exhibited characteristics of both the channel sands and fine-grained silty clay of the inner harbor areas. Cores 7, 8, and, 9 all contained significant percentages of fine sand (47-88%) with traces of coarser sand as well as quantities of silt and clay (Table B-2). Core 7 contained a slightly higher proportion of coarse to medium sand and less silt and clay than Cores 8 and 9. Core 8 consisted of primarily fine sand, however the core was dominated by silty clay below the allowable overdepth (152 cm). Organic matter and an associated sulphidic odor were apparent in Core 9. Core 9 was collected inside the harbor (behind the breakwater) and of the three channel-harbor transition cores, illustrated characteristics more similar to the harbor and cove cores. Core 9 also contained a gravel component in the allowable overdepth interval (140 cm). The area in which Cores 7, 8, and 9 were collected can be considered transitional between the sandy channel and silty harbor material.

Table B-1. Sediment Grain Size Results for the Cores Collected in the Outer Channel of Cohasset Harbor

Core	Depth Interval	% Cobble >75mm	% Gravel <75-4.76mm	% Coarse Sand <4.76-2.0mm	% Medium Sand <2.00-0.42mm	% Fine Sand <0.42-0.074mm	% Silt Clay <0.074mm
CO-1A	0-30	0	0	0	8	89	3
CO-1A	30-60	0	1	0	5	92	3
CO-1A	60-120	0	0	1	4	91	5
CO-2A	0-50	0	6	0	2	91	1
CO-2A	50-100	0	0	0	3	94	3
CO-4A	0-50	0	0	0	1	97	2
CO-4A	50-100	0	0	0	1	97	2
CO-5A	0-50	0	0	0	26	72	1
CO-5A	50-100	0	0	0	16	83	1
CO-6A	0-75	0	0	0	4	94	2
CO-6A	75-170	0	0	0	13	84	3
Calculated Average does not include results collected from below allowable overdepth (gray).							
Average		**0**	**1**	**0**	**9**	**88**	**2**

Table B-2. Sediment Grain Size Results for the Cores Collected in Channel-Harbor Transition Zone of Cohasset Harbor

Core	Depth Interval	% Cobble >75mm	% Gravel <75-4.76mm	% Coarse Sand <4.76-2.0mm	% Medium Sand <2.00-0.42mm	% Fine Sand <0.42-0.074mm	% Silt Clay <0.074mm
CO-7A	0-50	1	1	2	15	79	2
CO-7A	50-100	0	0	1	20	74	5
CO-7A	100-150	0	0	1	3	84	12
Average		**0**	**0**	**1**	**13**	**79**	**6**
CO-8A	0-150	0	0	0	1	88	11
CO-8A	150-180	0	0	0	7	41	50
CO-9A	0-30	0	0	0	2	68	30
CO-9A	30-60	0	0	0	1	61	38
CO-9A	60-90	0	0	0	0	47	53
CO-9A	110-170	6	1	0	11	65	17
Calculated Average does not include results collected from below allowable overdepth (gray).							
Average 8 & 9		**0**	**0**	**0**	**1**	**66**	**33**
Average 7, 8 & 9		**0**	**0**	**1**	**6**	**72**	**22**

B.3 Main Anchorage Area Core Results

Cores 11, 12, 14, 16, and 17 collected from the main anchorage area were primarily silts and clays (68% on average; Table B-3). The cores from the main anchorage area also contained significant quantities of fine sand (30%) with traces of medium sand (2%) at select sampling intervals above the allowable overdepth, as well as various amounts of organic material. Core sediments were frequently described as sulphidic in odor, mottled black to red-brown in color, with a silty-clay sediment composition.

In addition to characterizing the sediments targeted for removal, each core was also sampled below the allowable overdepth (penetration depths varying between 51-66 cm) to determine the composition of the underlying material. Core 11 displayed a similar dark gray silty clay at depth. Cores 12 and 14 contained dense peat below a thick surface interval of clay with shell fragments, while Core 16 contained olive-gray or olive-yellow clay (below 50 cm penetration depth). Although much of Core 17 was dominated by black silty clay, an interval of dark gray sand and gravel existed below 150 cm of penetration.

B.4 Cohasset Cove Core Results

Cohasset Cove core results are based upon Cores 20, 21, 22, and 24, collected in the Cohasset Cove dredging area (Figure 2-2). On average, the surface interval from the Cohasset Cove cores contained 95% silt and clay with traces of fine and medium sand (5%). Below a depth of approximately 70 cm, (allowable overdepth) the sediment within Cores 20 and 21 was predominately composed of yellow-olive gray clay (Table B-4). However, the results from Core 22 were quite similar to those of Core 17 above, displaying dark gray silty clay to a penetration depth of 130 cm, with a transition to a layer of gray sand and gravel at the bottom of the core. Grain size data from the bottom interval of Core 22 demonstrating this strong contrast in sediment composition are presented in Table B-4.

B.5 Government Island Cove Core Results

One core, Core 25, was collected from the Government Island Cove Area (Figure 2-2). Core 25 was collected on a mussel bed that extended to a depth of 110 cm. Above 100 cm, the sediment intermixed with the mussels was black silty sand with a high volume of cobble, gravel, and coarse sand. Below 110 cm the sediment consisted of brown clay with a negligible amount of silt (Table B-5). The approximate dredging depth at this site was 6 cm (0.2 ft) with an allowable overdepth of 36 cm (1.2 ft).

Table B-3. Sediment Grain size Results for the Cores Collected in the Main Anchorage Area within Cohasset Harbor

Core	Depth Interval	% Cobble >75mm	% Gravel <75-4.76mm	% Coarse Sand <4.76-2.0mm	% Medium Sand <2.00-0.42mm	% Fine Sand <0.42-0.074mm	% Silt Clay <0.074mm
CO-11A	0-52	0	0	0	1	34	65
CO-11A	57-97	1	0	0	1	24	74
CO-12A	0-45	0	0	0	2	23	75
CO-12A	45-90	0	0	0	2	18	80
CO-14A	0-30	0	0	0	3	50	47
CO-14A	30-60	0	0	0	1	39	60
CO-14A	60-90	0	0	0	1	26	73
CO-16A	0-50	0	0	1	3	27	69
CO-16A	50-170	0	0	0	0	2	98
CO-17A	0-60	0	0	0	0	9	91
CO-17A	65-145	0	0	0	2	12	86
Calculated Average does not include results collected from below allowable overdepth (gray).							
Average		**0**	**0**	**0**	**2**	**30**	**68**

Table B-4. Sediment Grain Size Results for the Cores Collected in Cohasset Cove

Core	Depth Interval	% Cobble >75mm	% Gravel <75-4.76mm	% Coarse Sand <4.76-2.0mm	% Medium Sand <2.00-0.42mm	% Fine Sand <0.42-0.074mm	% Silt Clay <0.074mm
CO-20A	0-40	0	0	0	1	7	92
CO-20A	60-90	0	0	0	7	12	81
CO-21A	0-30	0	0	0	0	3	97
CO-21A	30-60	0	0	0	0	4	96
CO-22A	0-50	0	0	0	0	5	95
CO-22A	60-95	0	0	0	1	9	90
CO-22A	100-130	0	2	1	6	11	80
CO-22A	135-155	16	12	13	53	5	1
CO-24A	0-30	0	0	0	0	3	97
CO-24B	30-60	0	0	0	0	4	96
CO-24B	60-90	0	0	0	1	5	94
Calculated Average does not include results collected from below allowable overdepth (gray).							
Average		**0**	**0**	**0**	**0**	**5**	**95**

Table B-5. Sediment Grain Size Results for the Cores Collected in the Government Island Cove Area of Cohasset Harbor

Core	Depth Interval	% Cobble >75mm	% Gravel <75-4.76mm	% Coarse Sand <4.76-2.0mm	% Medium Sand <2.00-0.42mm	% Fine Sand <0.42-0.074mm	% Silt Clay <0.074mm
CO-25A	0-50	39	11	14	20	6	10
CO-25A	50-100	19	16	12	19	20	14
CO-25A	120-136	0	0	0	0	5	95
CO-26A	0-30	21	0	1	8	20	50
CO-26A	30-60	5	4	3	11	17	60
CO-26A	60-90	26	6	7	16	19	26
Calculated Average does not include results collected from below allowable overdepth (gray).							
Average		**23**	**5**	**6**	**14**	**16**	**37**

B.6 Improvement Area A Core Results

Core 26 was collected in the Improvement Dredging Area A within Bailey's Creek and contained a mixture of sediment throughout the 180 cm of recovery. The surface interval was primarily composed of a dark, silty clay (50%) with a substantial amount of shells and shell fragments, which is reflected in the 21% value for cobble-sized particles. There was noticeably greater coarse material content at depth within Core 26 as the sediments transitioned from the silty clay surface interval to a sand, gravel, and clay layer (Table B-5). The approximate depth of dredging in the area surrounding Core 26 extended to 101 cm including the allowable overdepth. The last interval sampled (60–90 cm penetration depth) displayed a wide range of sediment types, with a substantial amount of larger grain size material.

B.7 Bailey's Creek Core Results

Bailey's Creek can be divided into an upper and lower reach based on sediment characteristics. The lower reach consisted of Cores 28 and 29 while the upper reach contained Cores 30, 31, and 32 (Figure 2-2). The sediments near the entrance of Bailey's Creek (lower) varied between the blackish brown silty clay observed in Core 28 and the black-to-dark gray clayey fine sand detected in Core 29. Both cores contained a firm, brown-gray clay lithological unit at depth 125 cm (below allowable overdepth) in Core 28 and 207 cm in Core 29. Both of these cores were dominated (average 71%) by fine sand with traces (3%) of medium sand. The silt-clay component made up 26% of the sediment sample for these cores (Table B-6).

Cores collected in the upper reach of Bailey's Creek (Cores 31, 30, and 32) contained surface sediments characterized as black-brown silty clay. The upper reach of Bailey's Creek was dominated by fine-grained sediments (88%), with 12% fine-medium grained sand (Table B-7). Cores 30 and 31 both contained black to black-brown silty clay above 100 cm, while below 100 cm was an interval dominated by gravel and coarse sand, followed by light blue-gray clay. Core 32 contained organic material mixed with black silty clay to the approximate dredging depth (131 cm). The sediment below the silty clay consisted of olive-gray clay. The sediment distinction between the upper and lower reach was related to the proportions of sand (74% lower, 12% upper) and fine-grained (26% lower, 88% upper) sediments.

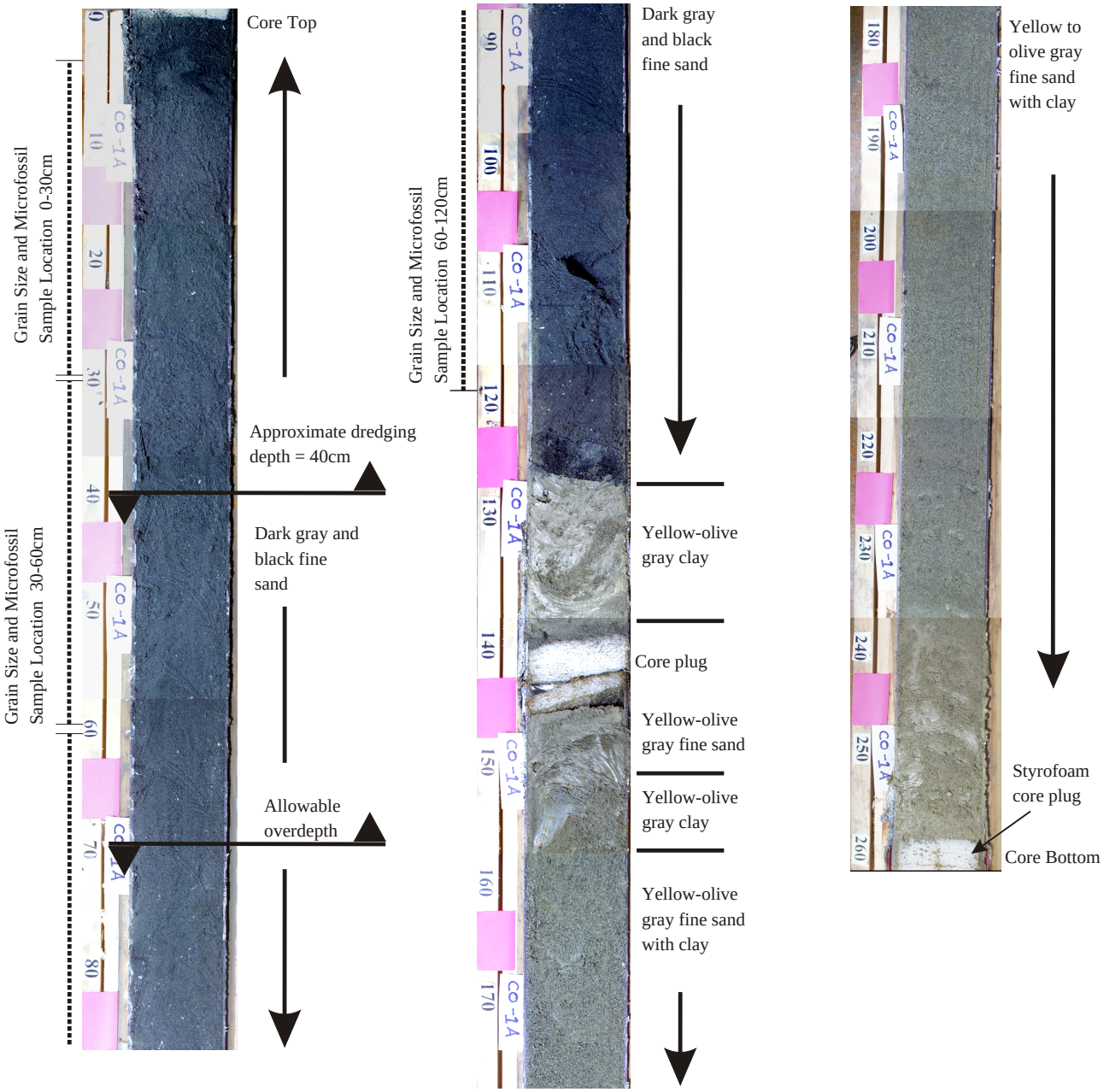
Table B-6. Sediment Grain Size Results for the Cores Collected in the Lower Portion of the Bailey's Creek Dredging Area of Cohasset Harbor

Core	Depth Interval	% Cobble >75mm	% Gravel <75-4.76mm	% Coarse Sand <4.76-2.0mm	% Medium Sand <2.00-0.42mm	% Fine Sand <0.42-0.074mm	% Silt Clay <0.074mm
CO-28A	0-50	0	0	0	1	32	67
CO-28A	50-100	0	0	0	1	18	81
CO-29A	0-50	0	0	0	4	90	6
CO-29A	50-90	0	0	0	5	92	3
CO-29A	90-130	0	0	0	2	69	29
Calculated Average does not include results collected from below allowable overdepth (gray).							
Average		**0**	**0**	**0**	**3**	**71**	**26**

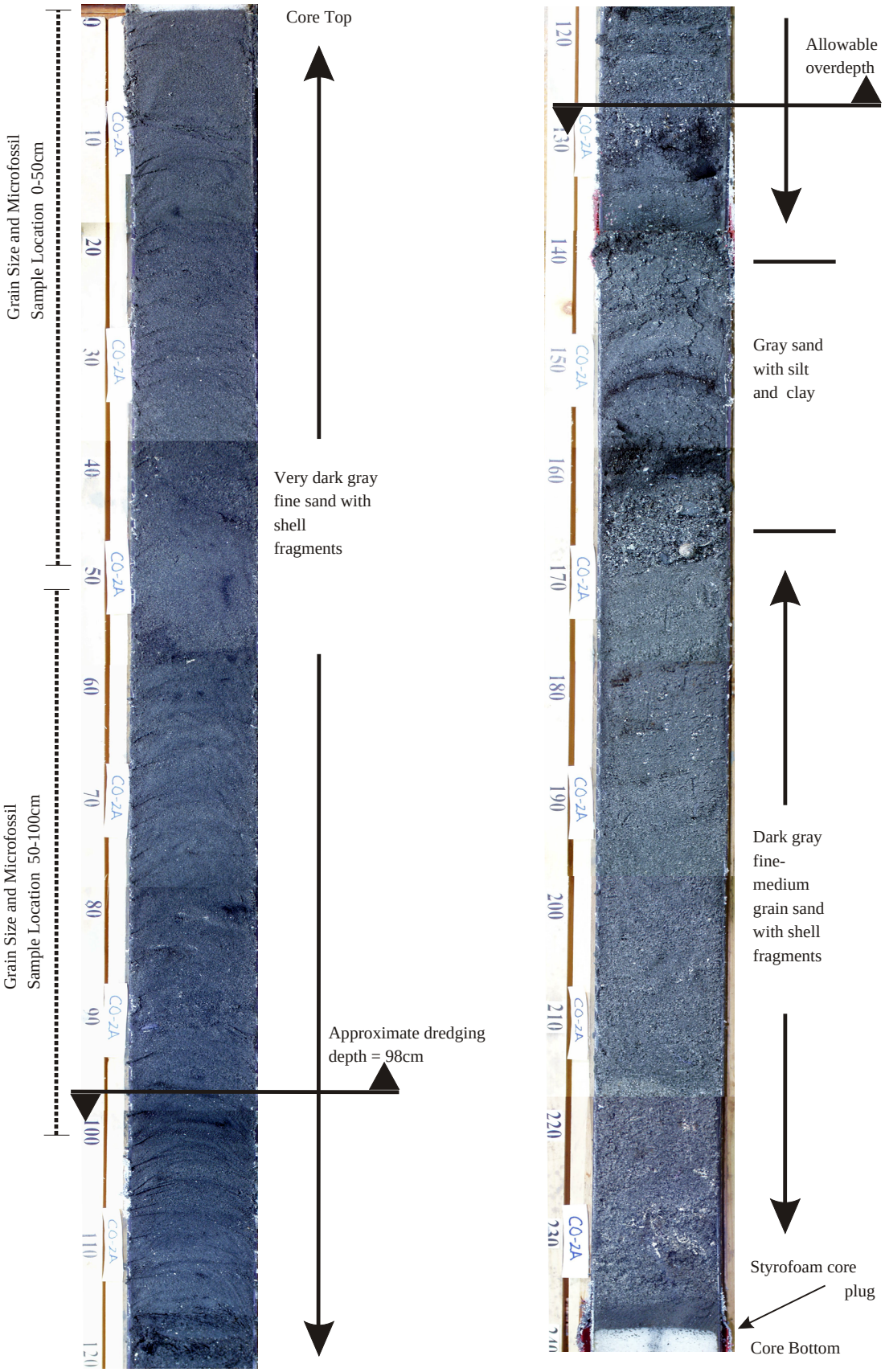
Table B-7. Sediment Grain Size Results for the Cores Collected in the Upper Portion of the Bailey's Creek Dredging Area of Cohasset Harbor

Core	Depth Interval	% Cobble >75mm	% Gravel <75-4.76mm	% Coarse Sand <4.76-2.0mm	% Medium Sand <2.00-0.42mm	% Fine Sand <0.42-0.074mm	% Silt Clay <0.074mm
CO-30A	0-45	0	0	0	0	2	98
CO-30A	45-90	0	0	0	1	4	95
CO-30A	90-100	50	14	11	12	11	2
CO-31A	0-50	0	0	0	1	5	94
CO-31A	50-90	0	0	0	2	19	79
CO-32A	0-50	0	0	1	5	23	71
CO-32A	50-100	0	0	0	1	15	84
Calculated Average does not include results collected from below allowable overdepth (gray).							
Average		**0**	**0**	**0**	**2**	**10**	**88**

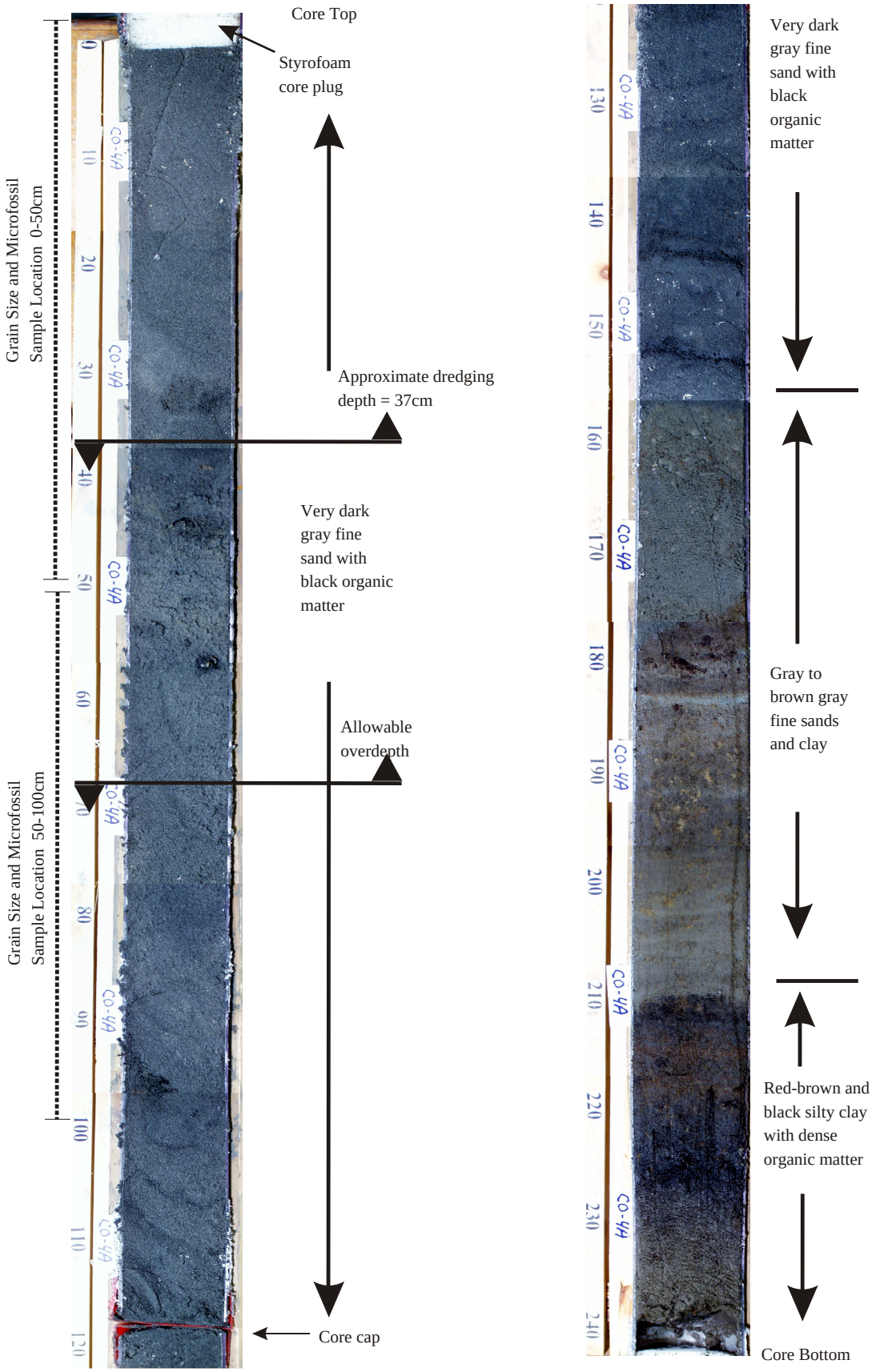
Core CO-1A


Core Top
Approximate dredging depth = 40cm
Dark gray and black fine sand
Allowable overdepth
Grain Size and Microfossil Sample Location 0-30cm
Grain Size and Microfossil Sample Location 30-60cm
Dark gray and black fine sand
Yellow-olive gray clay
Core plug
Yellow-olive gray fine sand
Yellow-olive gray clay
Yellow-olive gray fine sand with clay
Grain Size and Microfossil Sample Location 60-120cm
Yellow to olive gray fine sand with clay
Styrofoam core plug
Core Bottom

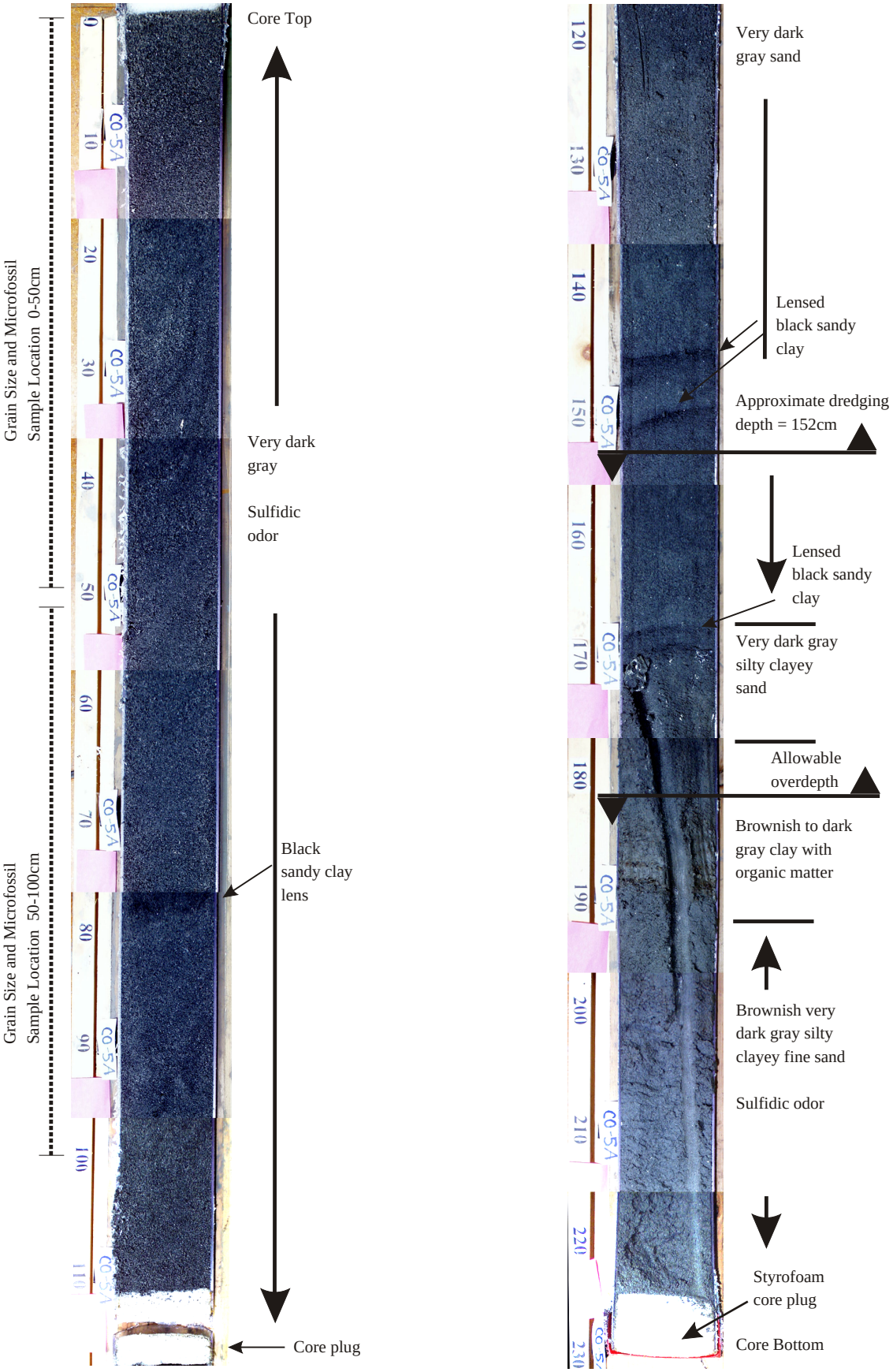
Core CO-2A


Core Top
Allowable overdepth
Grain Size and Microfossil Sample Location 0-50cm
Gray sand with silt and clay
Very dark gray fine sand with shell fragments
Grain Size and Microfossil Sample Location 50-100cm
Dark gray fine-medium grain sand with shell fragments
Approximate dredging depth = 98cm
Styrofoam core plug
Core Bottom

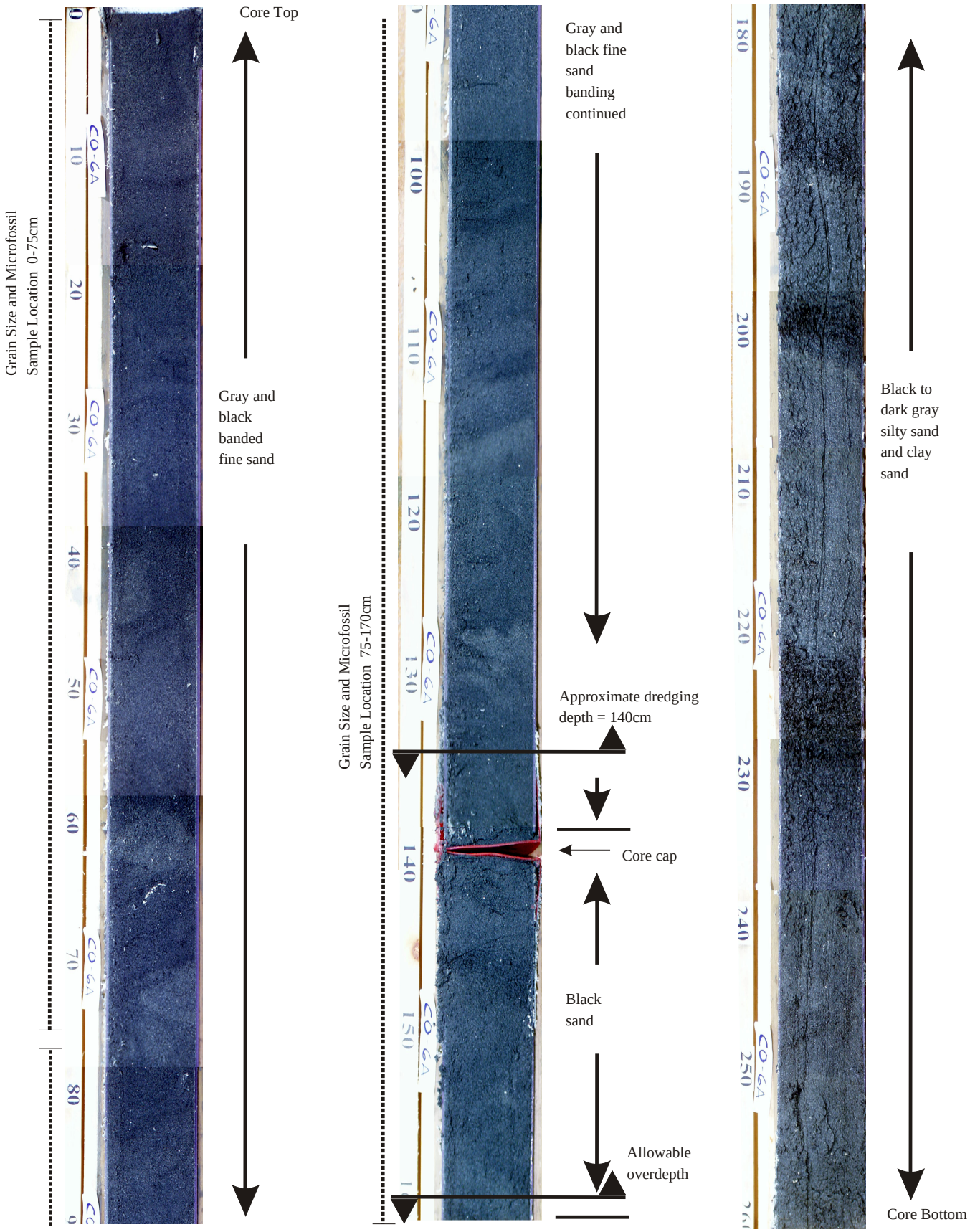
Core CO-4A


Core Top
Styrofoam core plug
Grain Size and Microfossil Sample Location 0-50cm
Approximate dredging depth = 37cm
Very dark gray fine sand with black organic matter
Grain Size and Microfossil Sample Location 50-100cm
Allowable overdepth
Core cap
Very dark gray fine sand with black organic matter
Gray to brown gray fine sands and clay
Red-brown and black silty clay with dense organic matter
Core Bottom

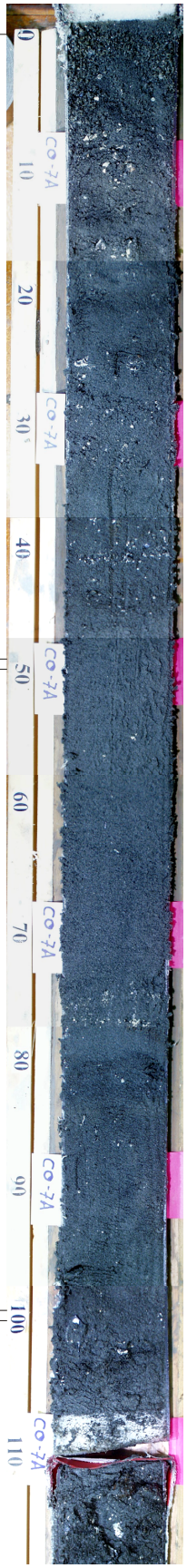
Core CO-5A


Core Top
Very dark gray
Sulfidic odor
Black sandy clay lens
Core plug
Grain Size and Microfossil Sample Location 0-50cm
Grain Size and Microfossil Sample Location 50-100cm
Very dark gray sand
Lensed black sandy clay
Approximate dredging depth = 152cm
Lensed black sandy clay
Very dark gray silty clayey sand
Allowable overdepth
Brownish to dark gray clay with organic matter
Brownish very dark gray silty clayey fine sand
Sulfidic odor
Styrofoam core plug
Core Bottom

Core CO-6A


Core Top
Grain Size and Microfossil
Sample Location 0-75cm
Gray and
black
banded
fine sand
Gray and
black fine
sand
banding
continued
Grain Size and Microfossil
Sample Location 75-170cm
Approximate dredging
depth = 140cm
Core cap
Black
sand
Allowable
overdepth
Black to
dark gray
silty sand
and clay
sand
Core Bottom

Core CO-7A



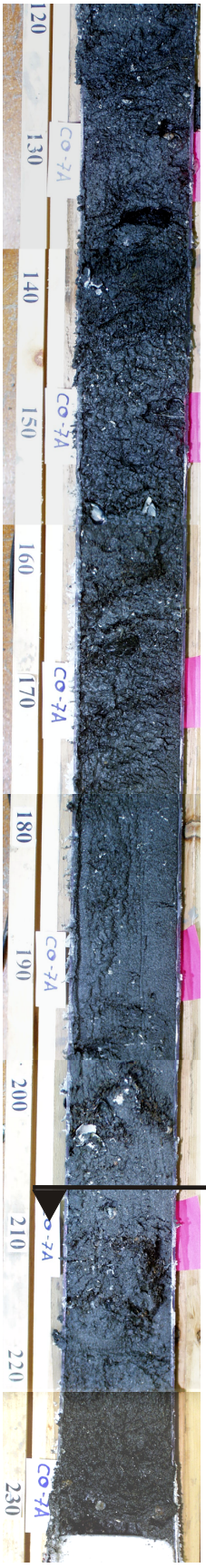
Core Top

Very dark gray silt and very fine sand with shell fragments

Core cap

Grain Size and Microfossil Sample Location 0-50cm

Grain Size and Microfossil Sample Location 50-100cm



Grain Size and Microfossil Sample Location 100-150cm

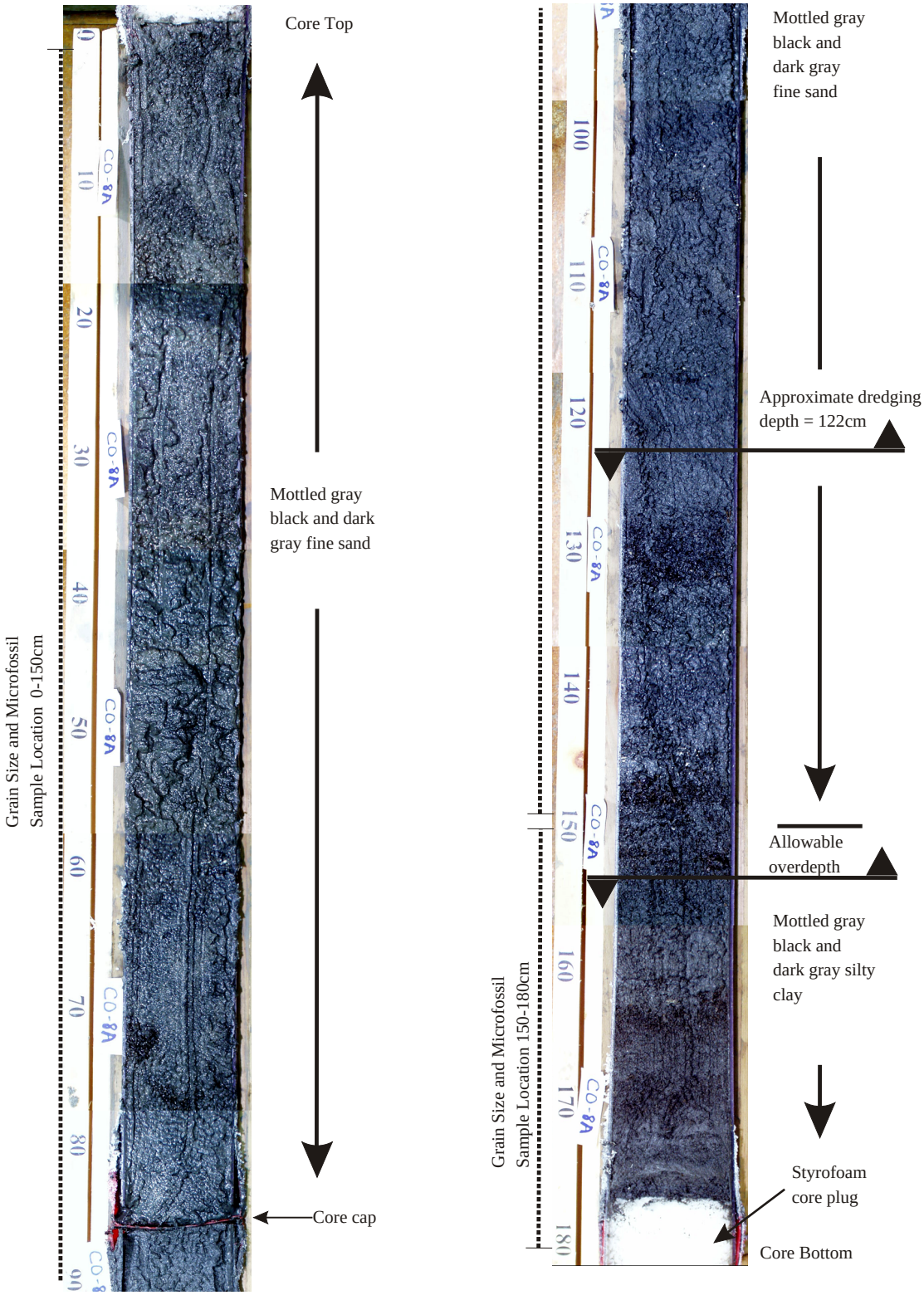
Very dark gray silt and very fine sand with shell fragments

Approximate dredging depth = 207cm

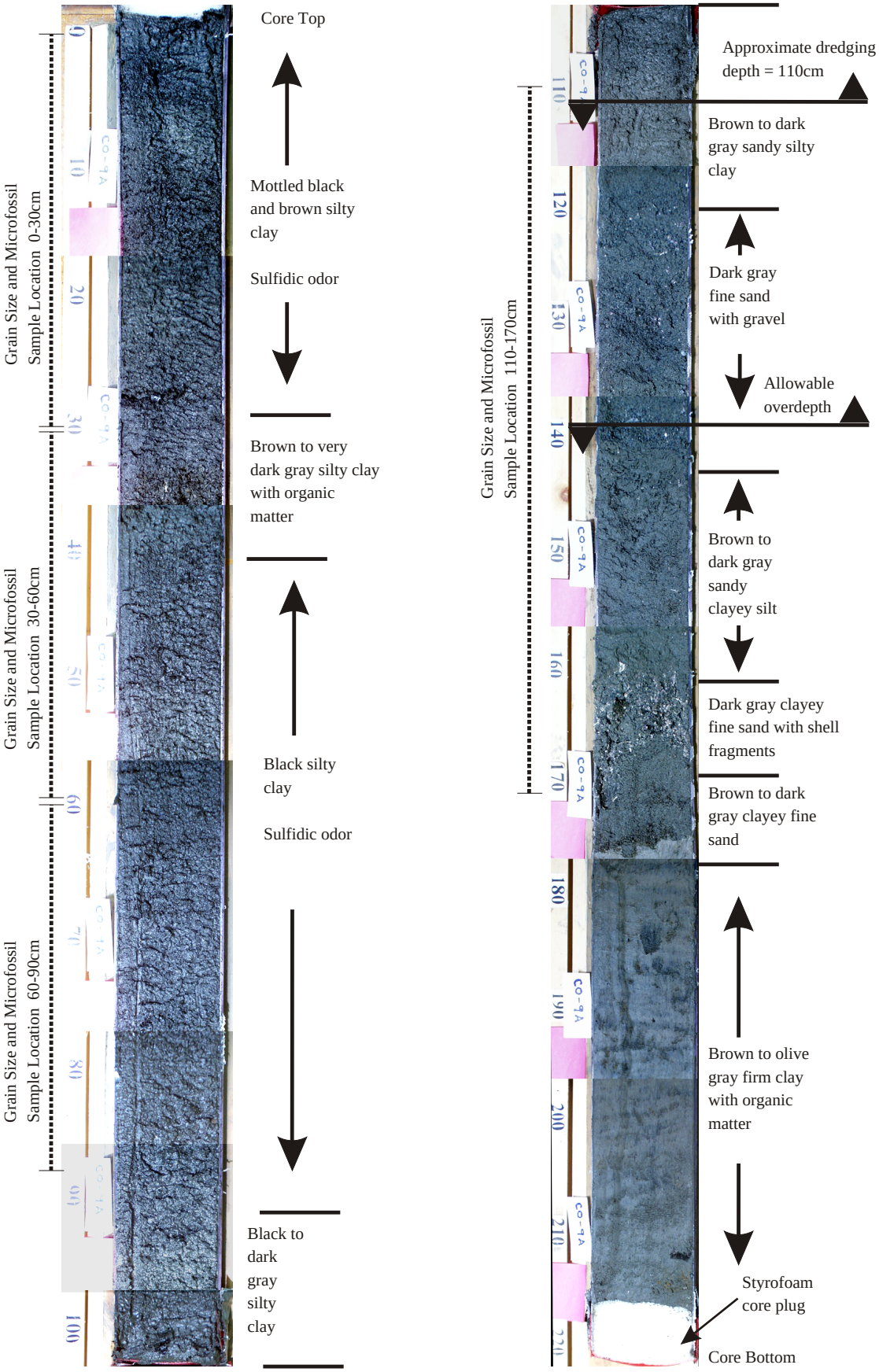
Black silty clayey fine sand with shell fragments and organic matter

Core Bottom

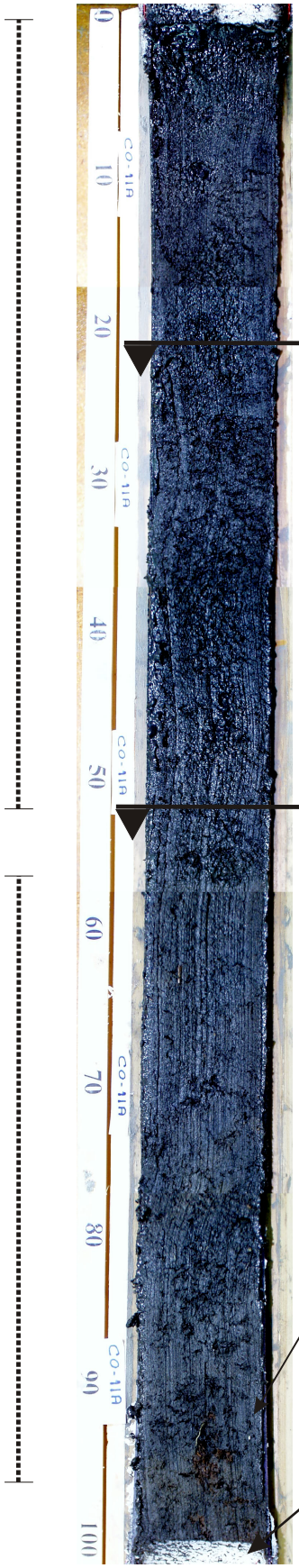
Core CO-8A


Core Top
Mottled gray black and dark gray fine sand
Core cap
Grain Size and Microfossil Sample Location 0-150cm
Mottled gray black and dark gray fine sand
Approximate dredging depth = 122cm
Allowable overdepth
Mottled gray black and dark gray silty clay
Grain Size and Microfossil Sample Location 150-180cm
Styrofoam core plug
Core Bottom

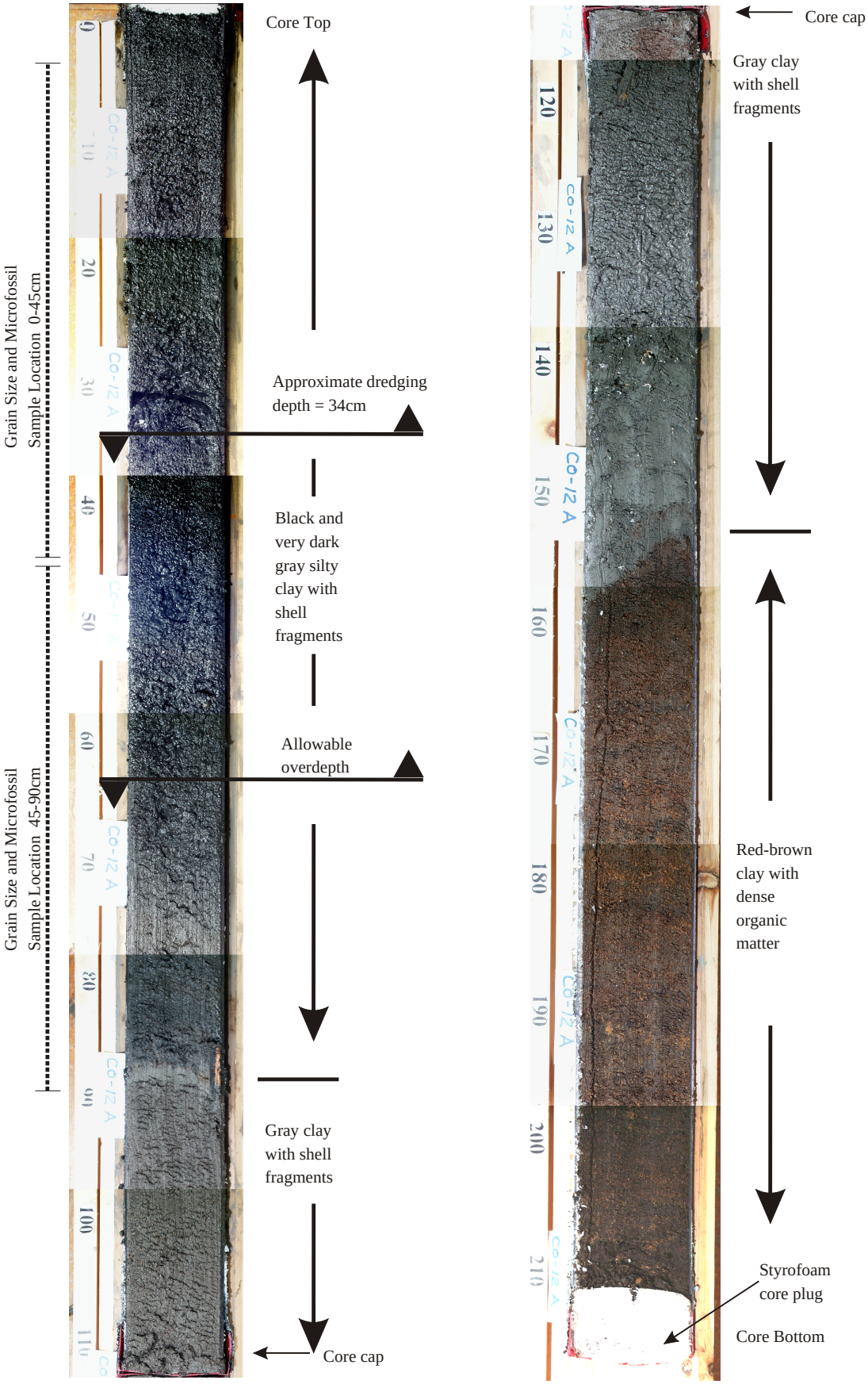
Core CO-9A


Core Top
Mottled black and brown silty clay
Sulfidic odor
Brown to very dark gray silty clay with organic matter
Black silty clay
Sulfidic odor
Black to dark gray silty clay
Grain Size and Microfossil Sample Location 0-30cm
Grain Size and Microfossil Sample Location 30-60cm
Grain Size and Microfossil Sample Location 60-90cm
Approximate dredging depth = 110cm
Brown to dark gray sandy silty clay
Dark gray fine sand with gravel
Allowable overdepth
Brown to dark gray sandy clayey silt
Dark gray clayey fine sand with shell fragments
Brown to dark gray clayey fine sand
Brown to olive gray firm clay with organic matter
Styrofoam core plug
Core Bottom
Grain Size and Microfossil Sample Location 110-170cm

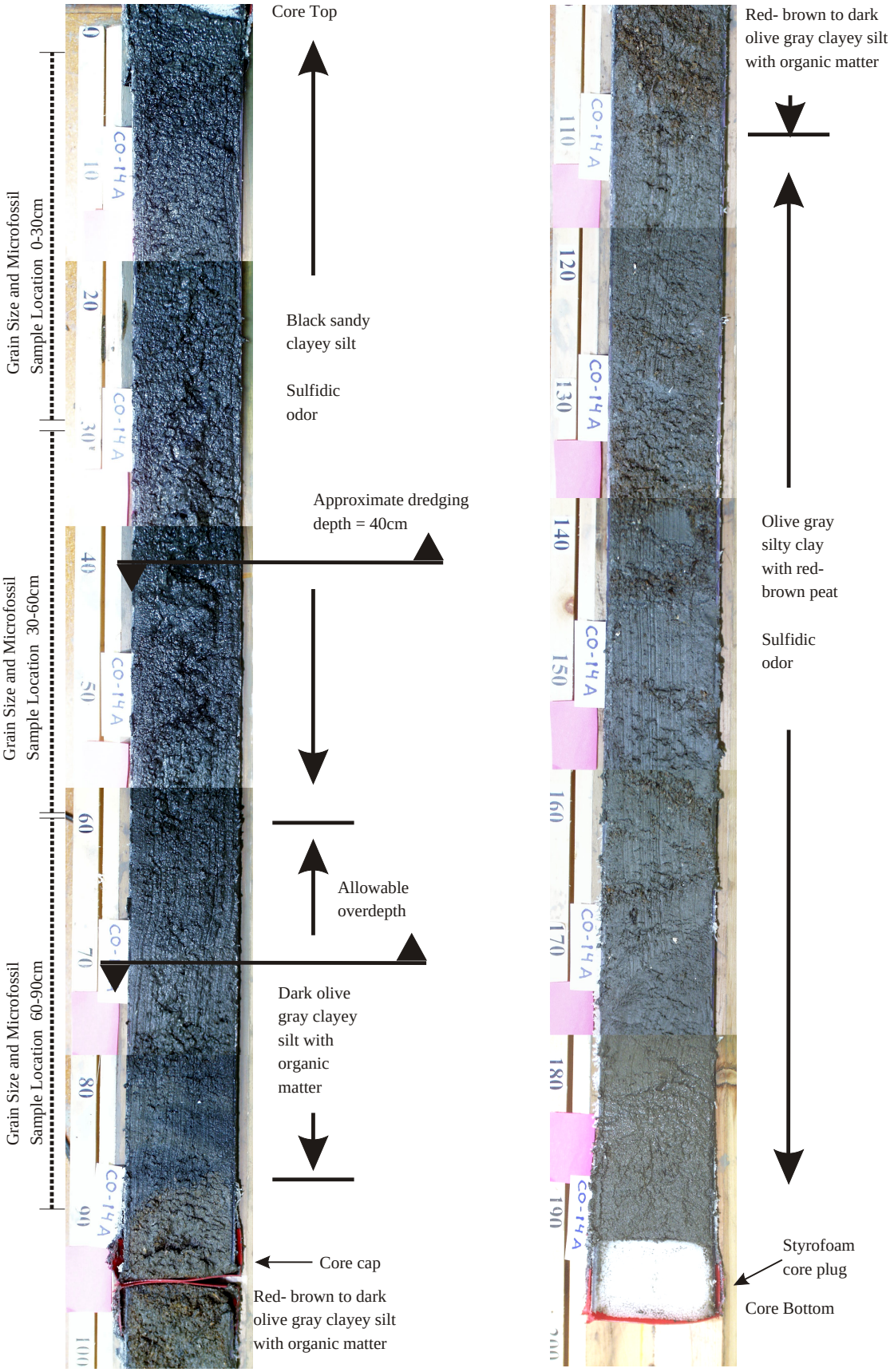
Core CO-11A


Core Top
Approximate dredging depth = 21cm
Mottled black and brownish black silty clay
Allowable overdepth
Brownish very dark gray silty clay
Plant root debris
Styrofoam core plug
Core Bottom
Grain Size and Microfossil Sample Location 0-52cm
Grain Size and Microfossil Sample Location 57-97cm

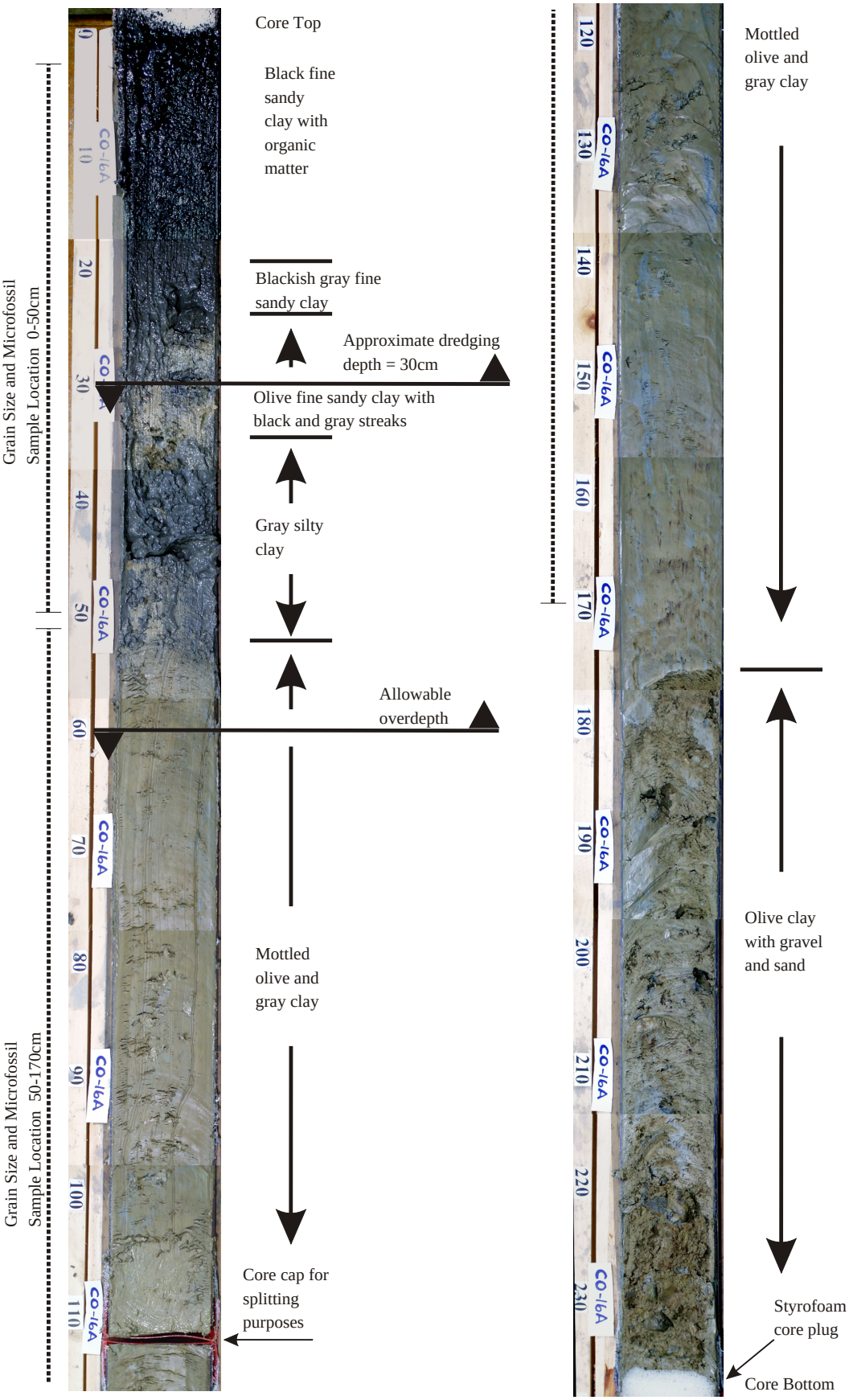
Core CO-12A


Core cap
Gray clay with shell fragments
Red-brown clay with dense organic matter
Styrofoam core plug
Core Bottom
Core Top
Approximate dredging depth = 34cm
Black and very dark gray silty clay with shell fragments
Allowable overdepth
Gray clay with shell fragments
Core cap
Grain Size and Microfossil Sample Location 0-45cm
Grain Size and Microfossil Sample Location 45-90cm

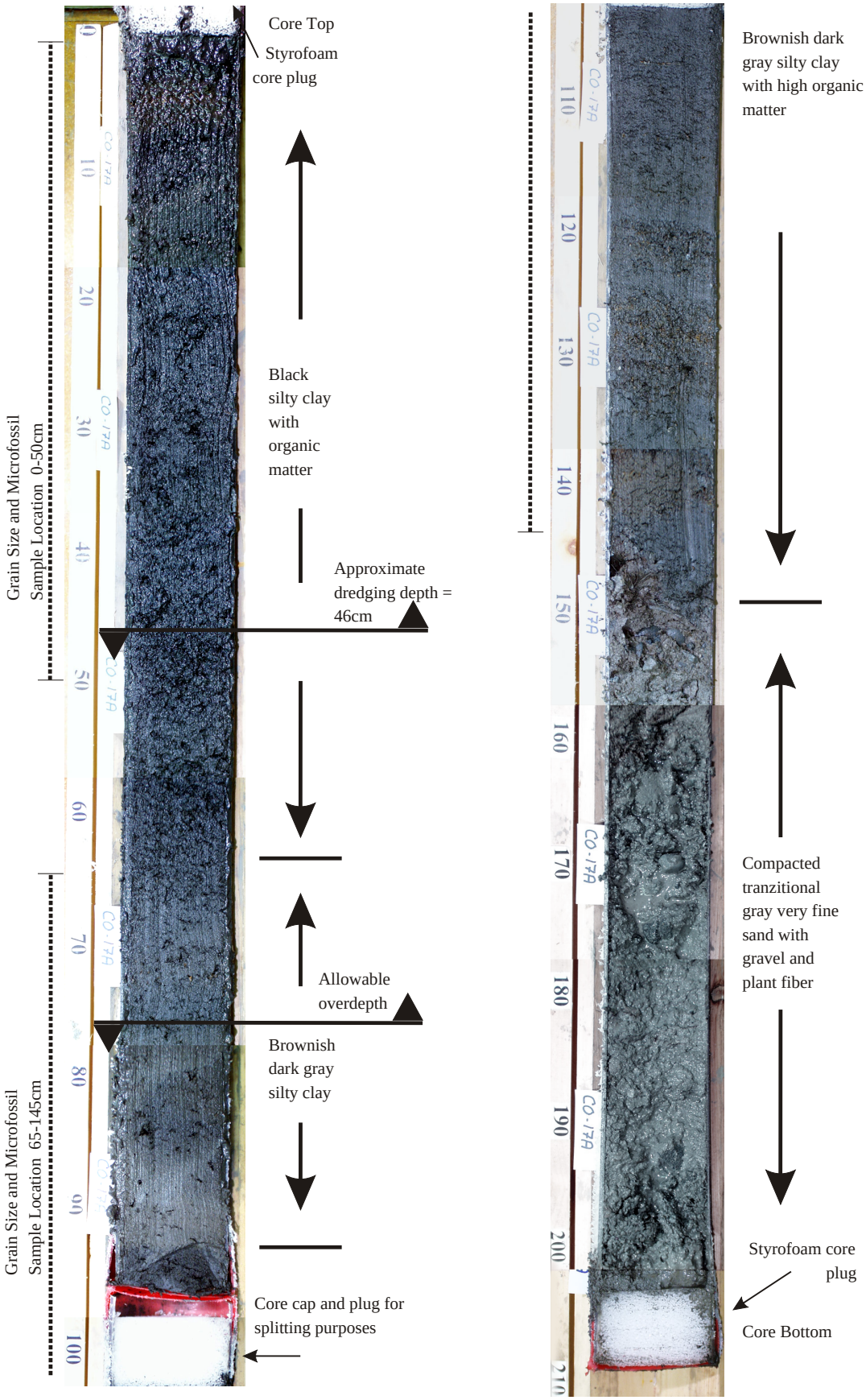
Core CO-14A


Core Top
Red- brown to dark olive gray clayey silt with organic matter
Grain Size and Microfossil Sample Location 0-30cm
Black sandy clayey silt
Sulfidic odor
Approximate dredging depth = 40cm
Olive gray silty clay with red-brown peat
Sulfidic odor
Grain Size and Microfossil Sample Location 30-60cm
Allowable overdepth
Grain Size and Microfossil Sample Location 60-90cm
Dark olive gray clayey silt with organic matter
Core cap
Red- brown to dark olive gray clayey silt with organic matter
Styrofoam core plug
Core Bottom

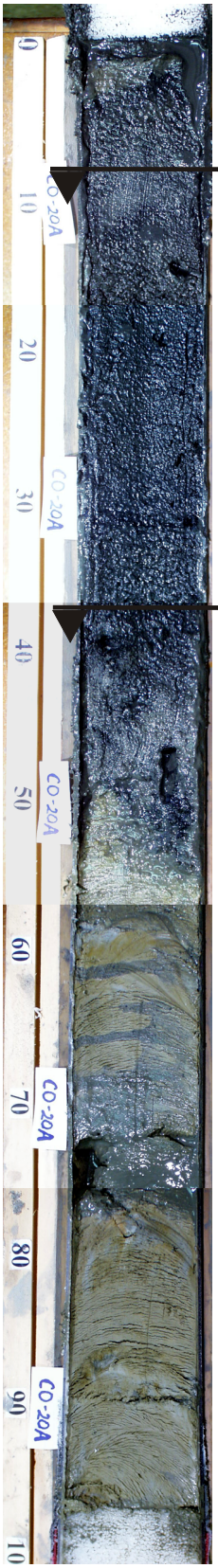
Core CO-16A


Core Top
Black fine sandy clay with organic matter
Blackish gray fine sandy clay
Approximate dredging depth = 30cm
Olive fine sandy clay with black and gray streaks
Gray silty clay
Allowable overdepth
Mottled olive and gray clay
Core cap for splitting purposes
Grain Size and Microfossil Sample Location 0-50cm
Grain Size and Microfossil Sample Location 50-170cm
Mottled olive and gray clay
Olive clay with gravel and sand
Styrofoam core plug
Core Bottom

Core CO-17A


Core Top
Styrofoam core plug
Black silty clay with organic matter
Approximate dredging depth = 46cm
Allowable overdepth
Brownish dark gray silty clay
Core cap and plug for splitting purposes
Grain Size and Microfossil Sample Location 0-50cm
Grain Size and Microfossil Sample Location 65-145cm
Brownish dark gray silty clay with high organic matter
Compacted tranzitional gray very fine sand with gravel and plant fiber
Styrofoam core plug
Core Bottom

Core CO-20A



Core Top

Styrofoam core plug

Approximate dredging depth = 9cm

Grain Size and Microfossil Sample Location 0-40cm

Mottled black and blackish-brown silty clay

Allowable overdepth

Transition zone mottled olive gray and black clay

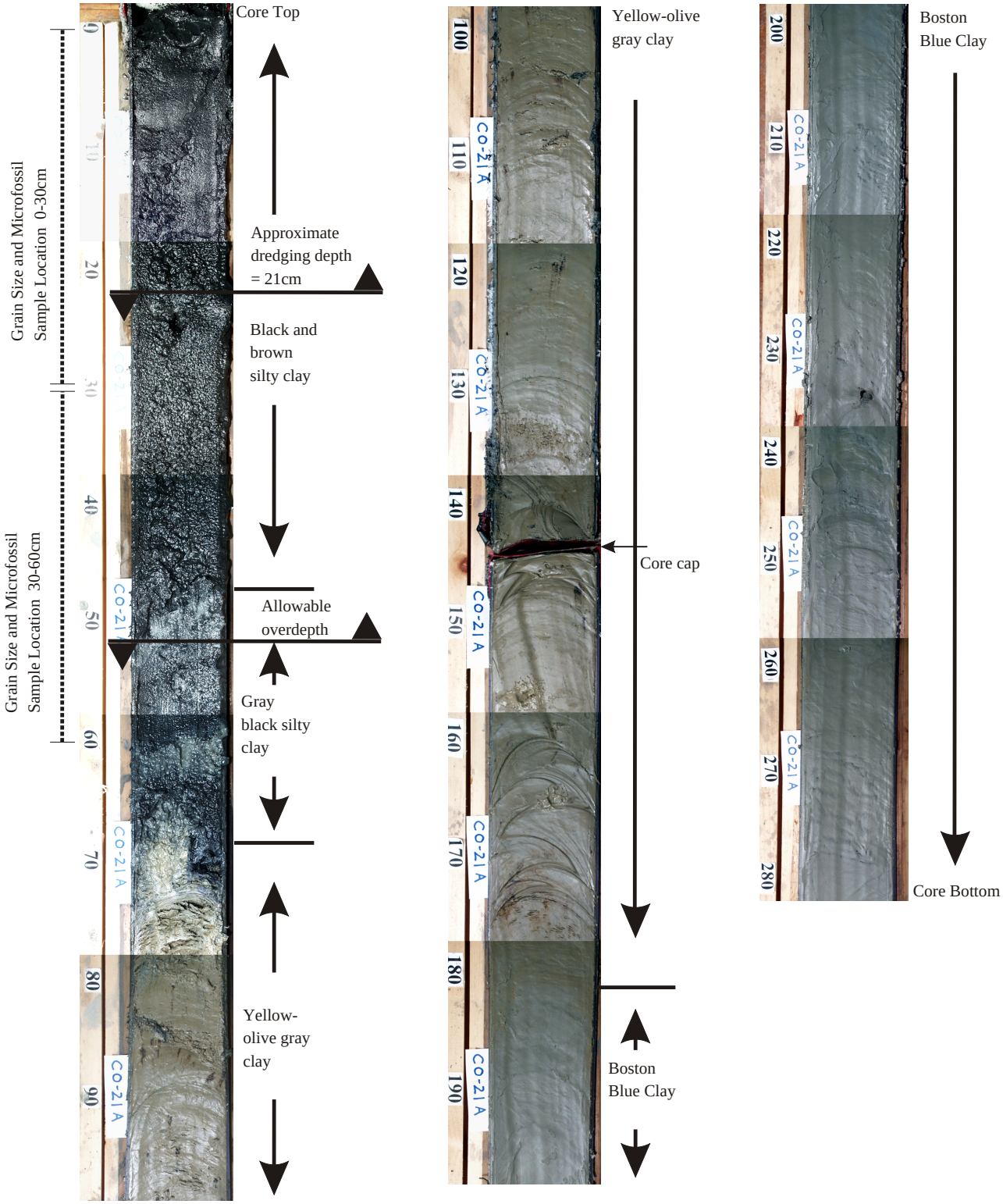
Grain Size and Microfossil Sample Location 60-90cm

Olive-yellow and gray clay

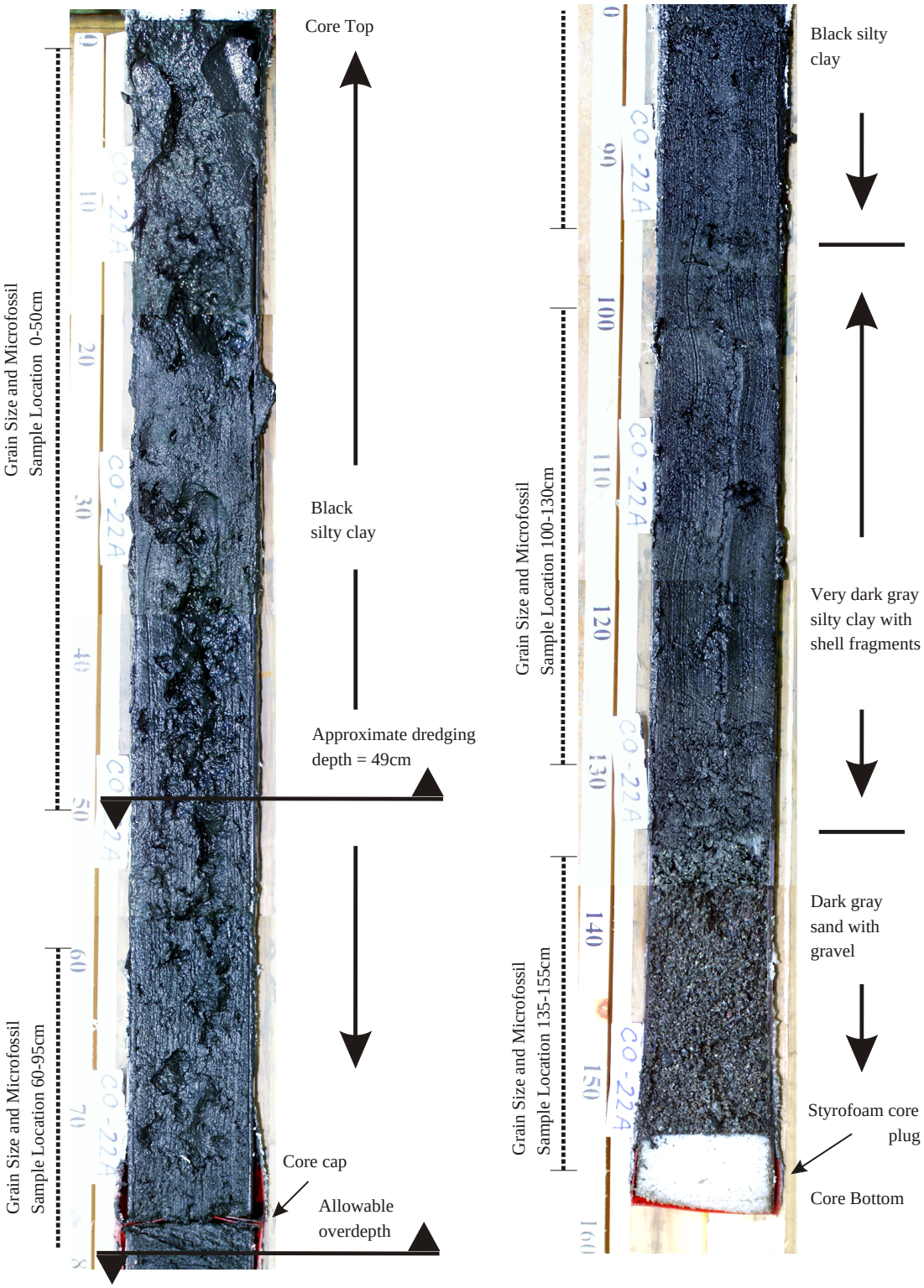
Styrofoam core plug

Core Bottom

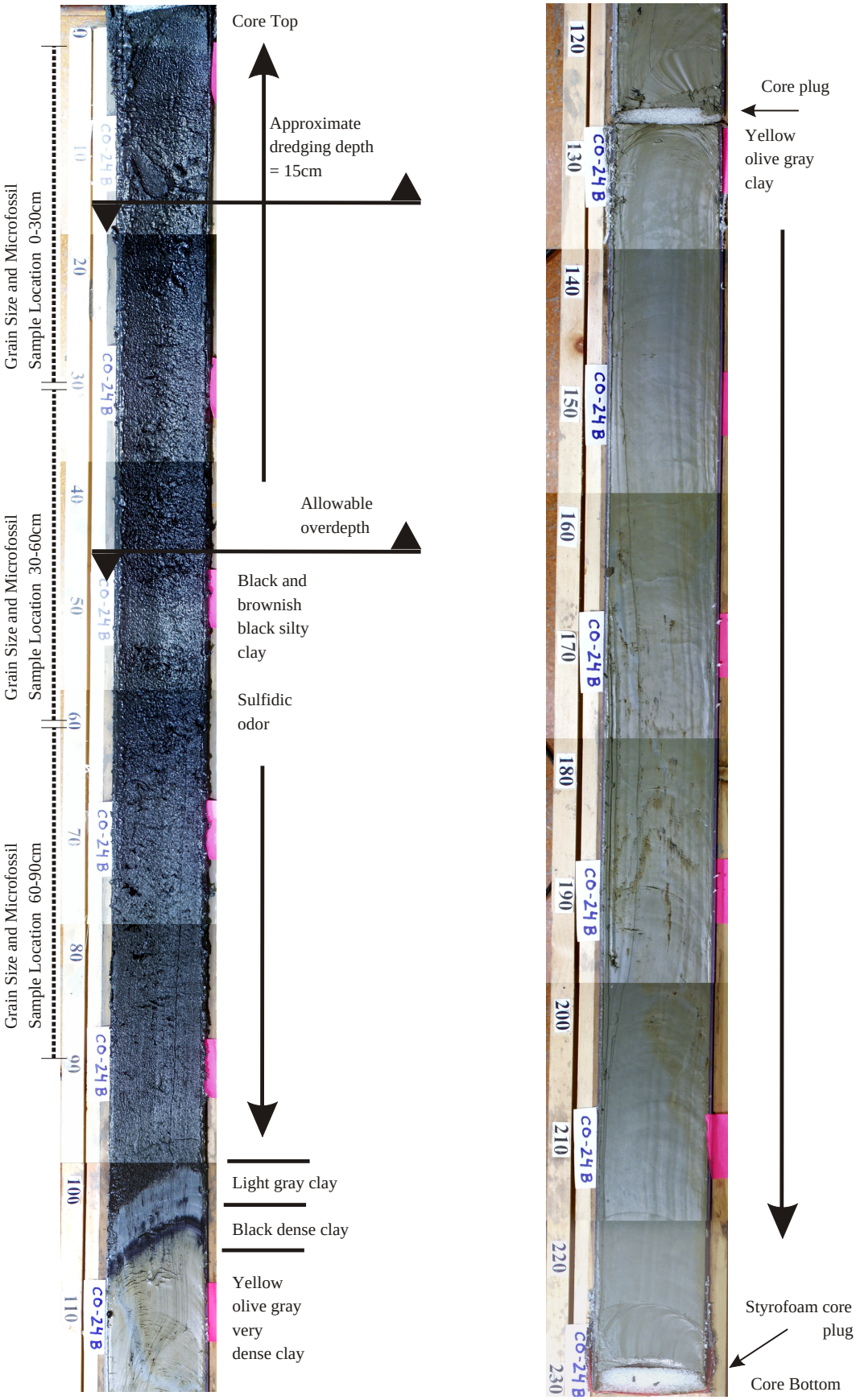
Core CO-21A


Core Top
Approximate dredging depth = 21cm
Black and brown silty clay
Allowable overdepth
Gray black silty clay
Yellow-olive gray clay
Grain Size and Microfossil Sample Location 0-30cm
Grain Size and Microfossil Sample Location 30-60cm
Yellow-olive gray clay
Core cap
Boston Blue Clay
Boston Blue Clay
Core Bottom

Core CO-22A


Core Top
Black silty clay
Approximate dredging depth = 49cm
Core cap
Allowable overdepth
Grain Size and Microfossil Sample Location 0-50cm
Grain Size and Microfossil Sample Location 60-95cm
Black silty clay
Very dark gray silty clay with shell fragments
Dark gray sand with gravel
Styrofoam core plug
Core Bottom
Grain Size and Microfossil Sample Location 100-130cm
Grain Size and Microfossil Sample Location 135-155cm
CO-22A

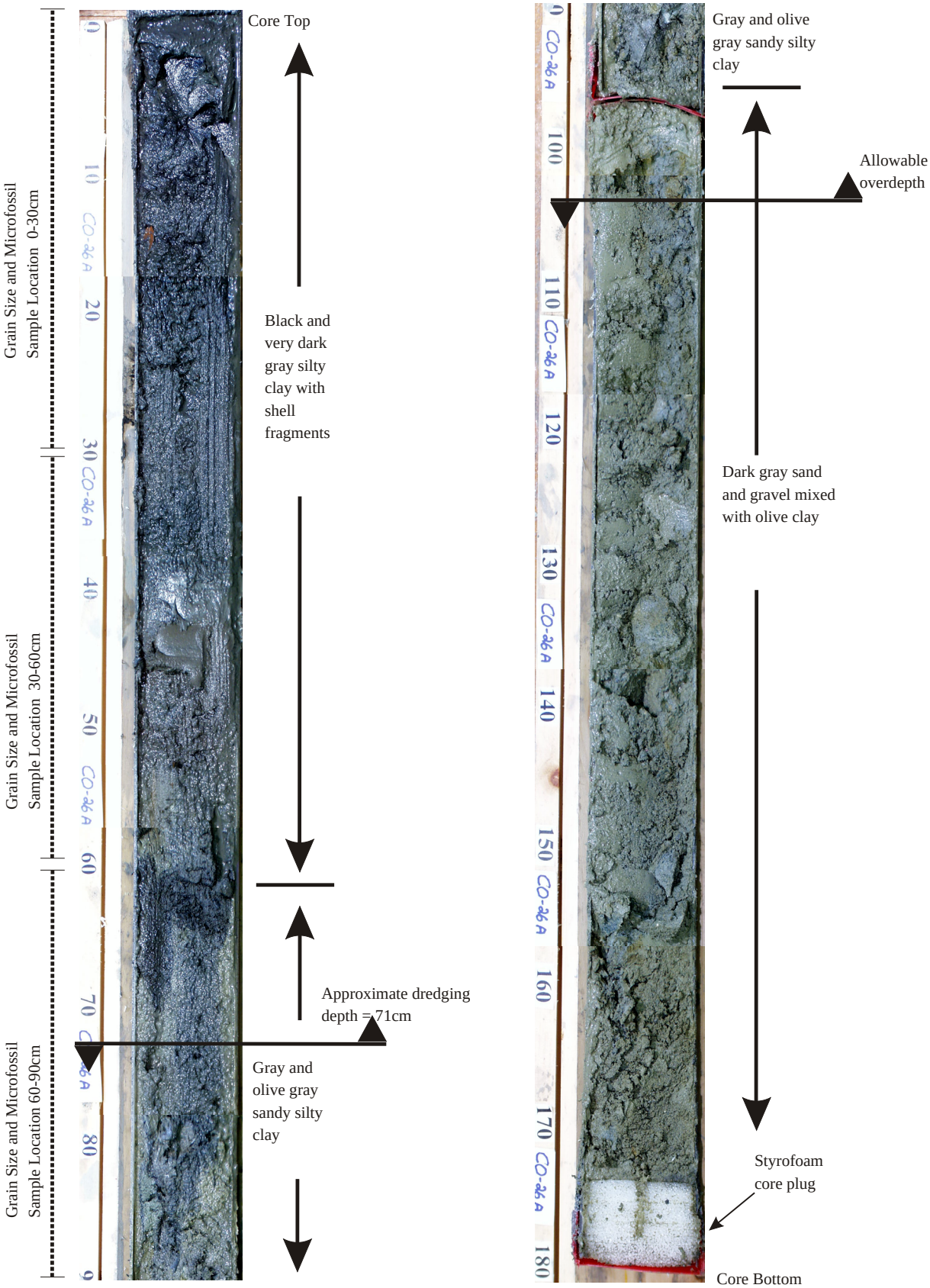
Core CO-24B


Core Top
Approximate dredging depth = 15cm
Allowable overdepth
Black and brownish black silty clay
Sulfidic odor
Light gray clay
Black dense clay
Yellow olive gray very dense clay
Grain Size and Microfossil Sample Location 0-30cm
Grain Size and Microfossil Sample Location 30-60cm
Grain Size and Microfossil Sample Location 60-90cm
Core plug
Yellow olive gray clay
Styrofoam core plug
Core Bottom
CO-24B
0
10
20
30
40
50
60
70
80
90
100
110
120
130
140
150
160
170
180
190
200
210
220
230

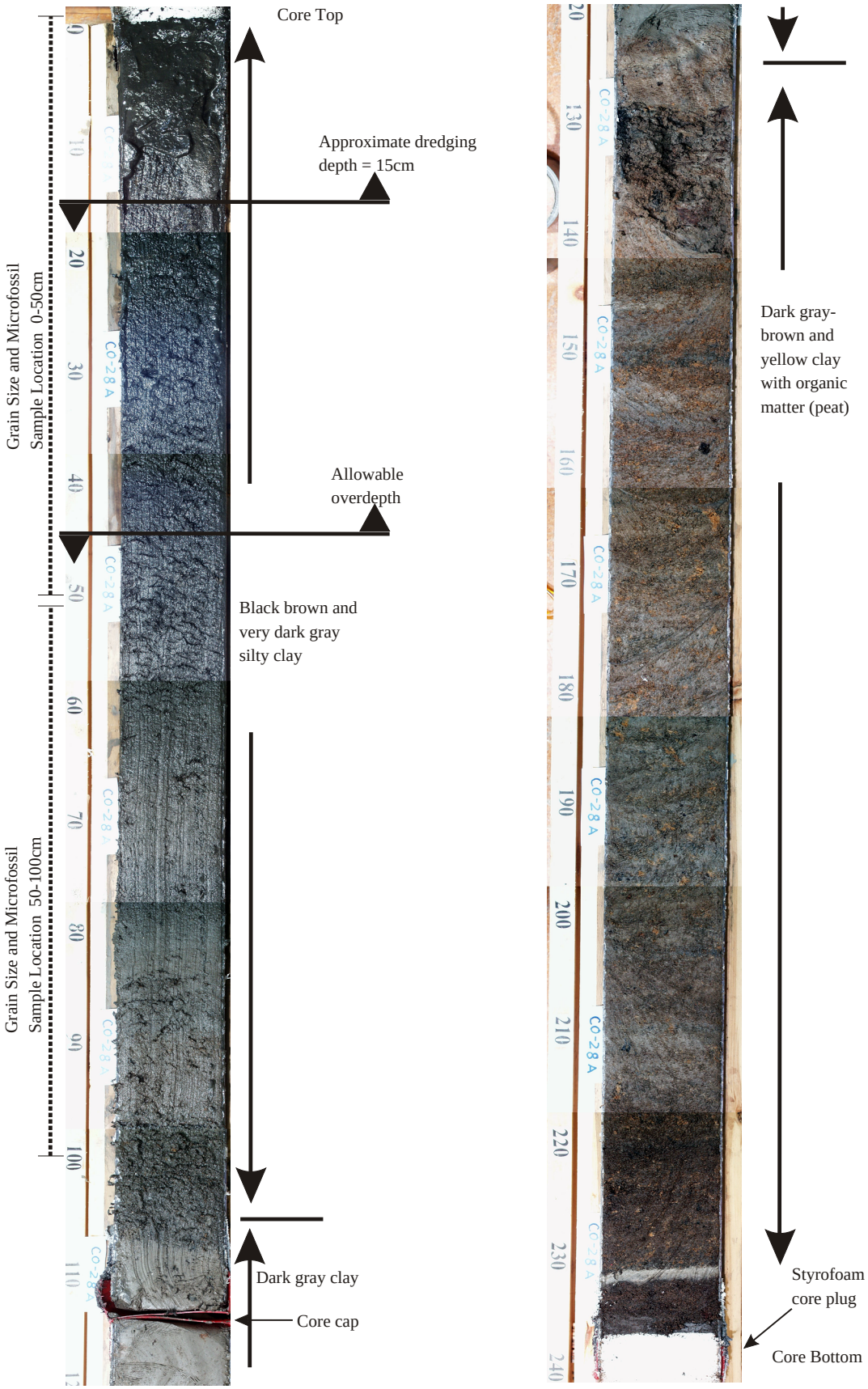
Core CO-25A

Core Top
Approximate dredging depth = 6cm
Allowable overdepth
Black silty sand and mussel bed
Very large oyster
Brown clay
Styrofoam core plug
Core Bottom
Grain Size and Microfossil Sample Location 0-50cm
Grain Size and Microfossil Sample Location 50-100cm
Grain Size and Microfossil Sample Location 120-136cm

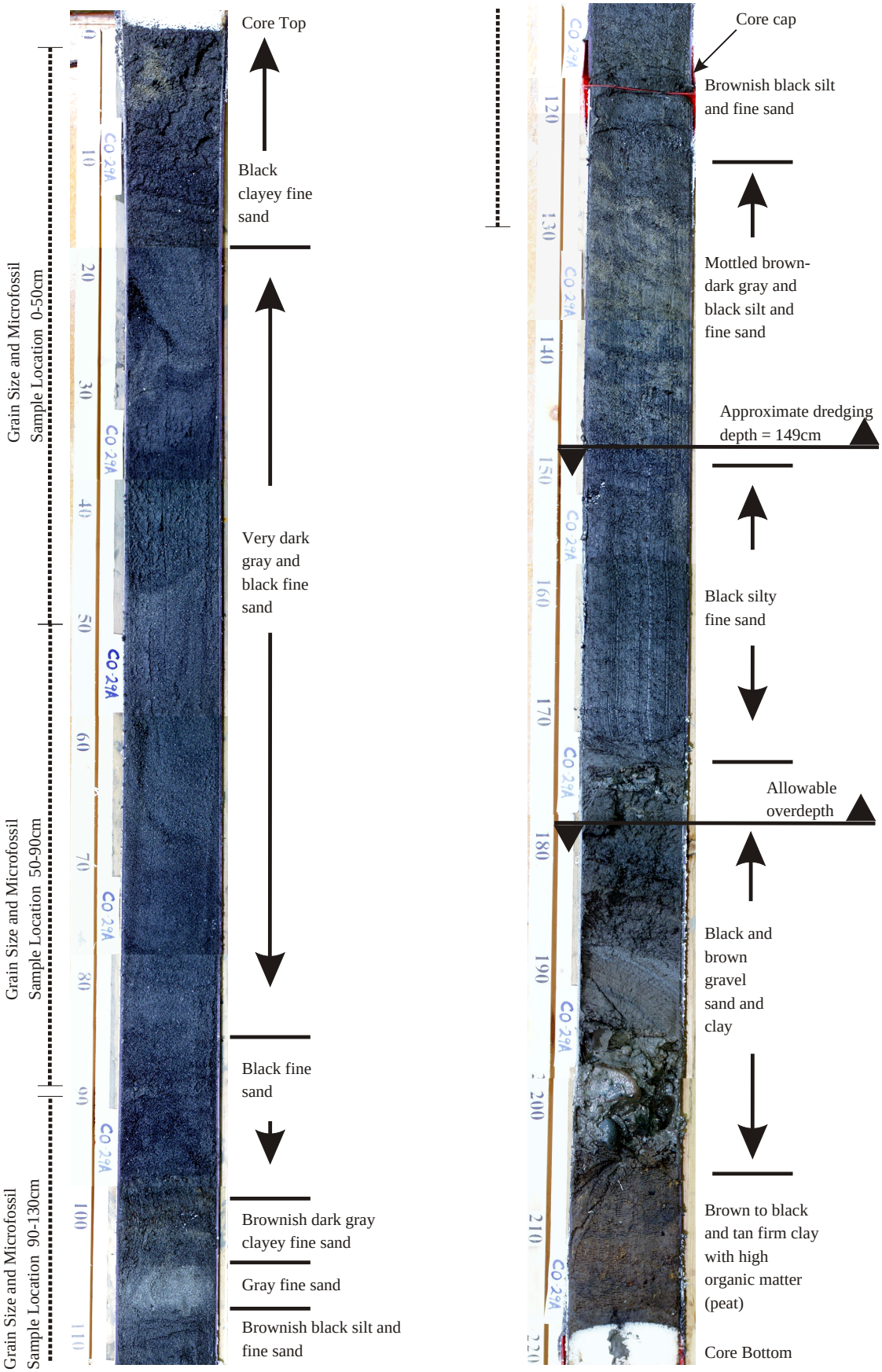
Core CO-26A


Core Top
Black and very dark gray silty clay with shell fragments
Approximate dredging depth = 71cm
Gray and olive gray sandy silty clay
Grain Size and Microfossil Sample Location 0-30cm
Grain Size and Microfossil Sample Location 30-60cm
Grain Size and Microfossil Sample Location 60-90cm
Gray and olive gray sandy silty clay
Allowable overdepth
Dark gray sand and gravel mixed with olive clay
Styrofoam core plug
Core Bottom

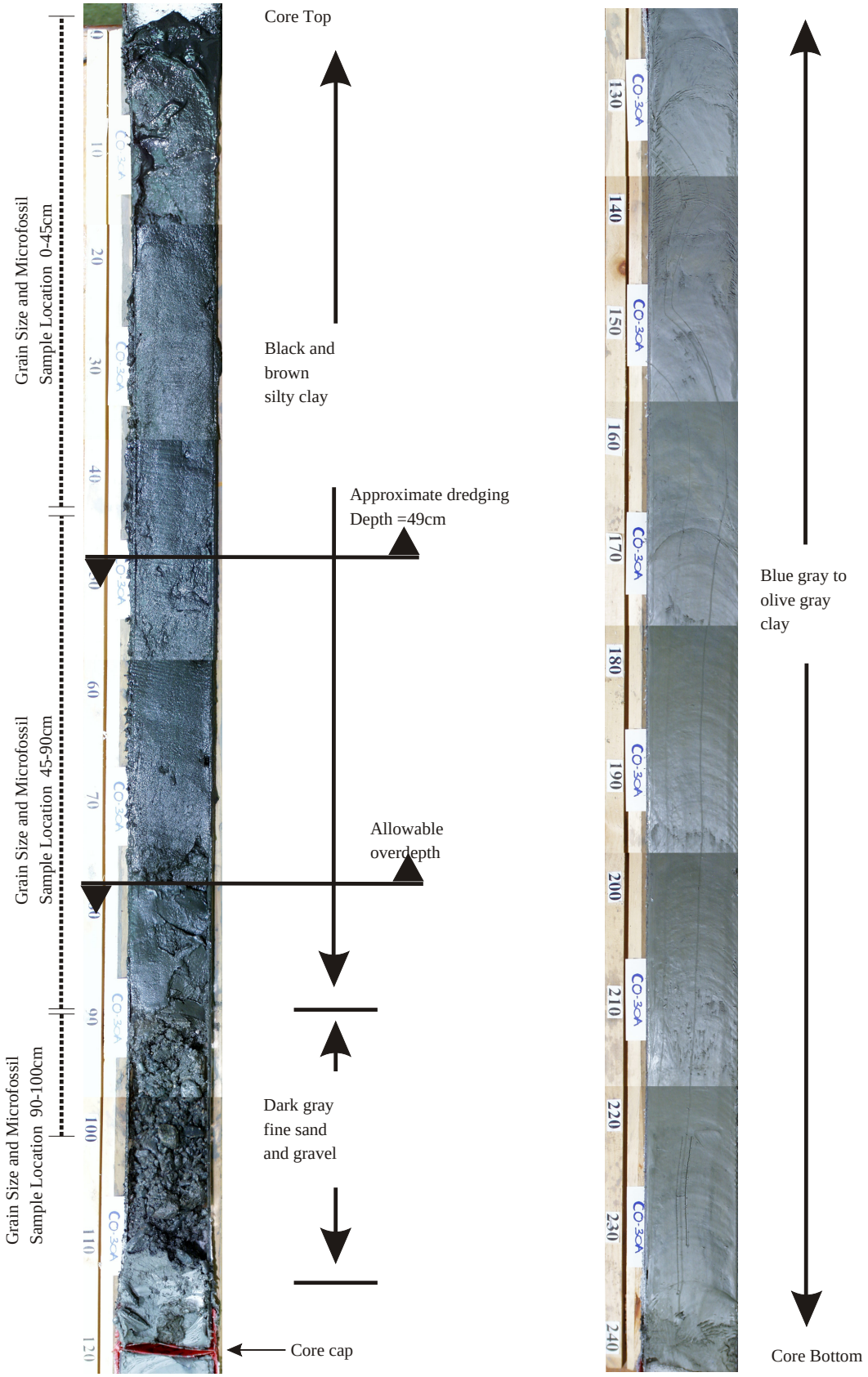
Core CO-28A


Core Top
Approximate dredging depth = 15cm
Allowable overdepth
Black brown and very dark gray silty clay
Dark gray clay
Core cap
Grain Size and Microfossil Sample Location 0-50cm
Grain Size and Microfossil Sample Location 50-100cm
Dark gray-brown and yellow clay with organic matter (peat)
Styrofoam core plug
Core Bottom

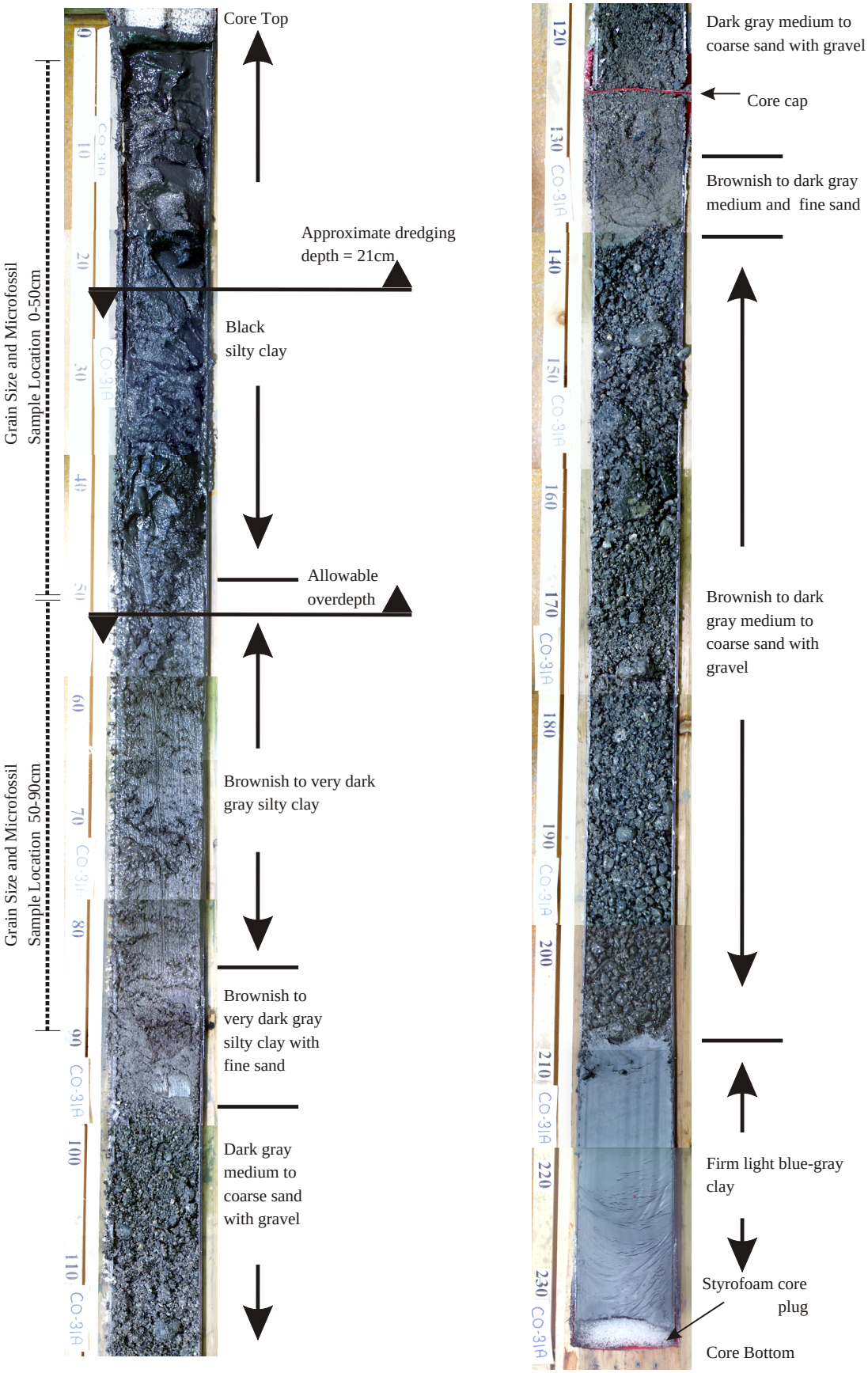
Core CO-29A


Core Top
Black clayey fine sand
Very dark gray and black fine sand
Black fine sand
Brownish dark gray clayey fine sand
Gray fine sand
Brownish black silt and fine sand
Grain Size and Microfossil Sample Location 0-50cm
Grain Size and Microfossil Sample Location 50-90cm
Grain Size and Microfossil Sample Location 90-130cm
Core cap
Brownish black silt and fine sand
Mottled brown-dark gray and black silt and fine sand
Approximate dredging depth = 149cm
Black silty fine sand
Allowable overdepth
Black and brown gravel sand and clay
Brown to black and tan firm clay with high organic matter (peat)
Core Bottom

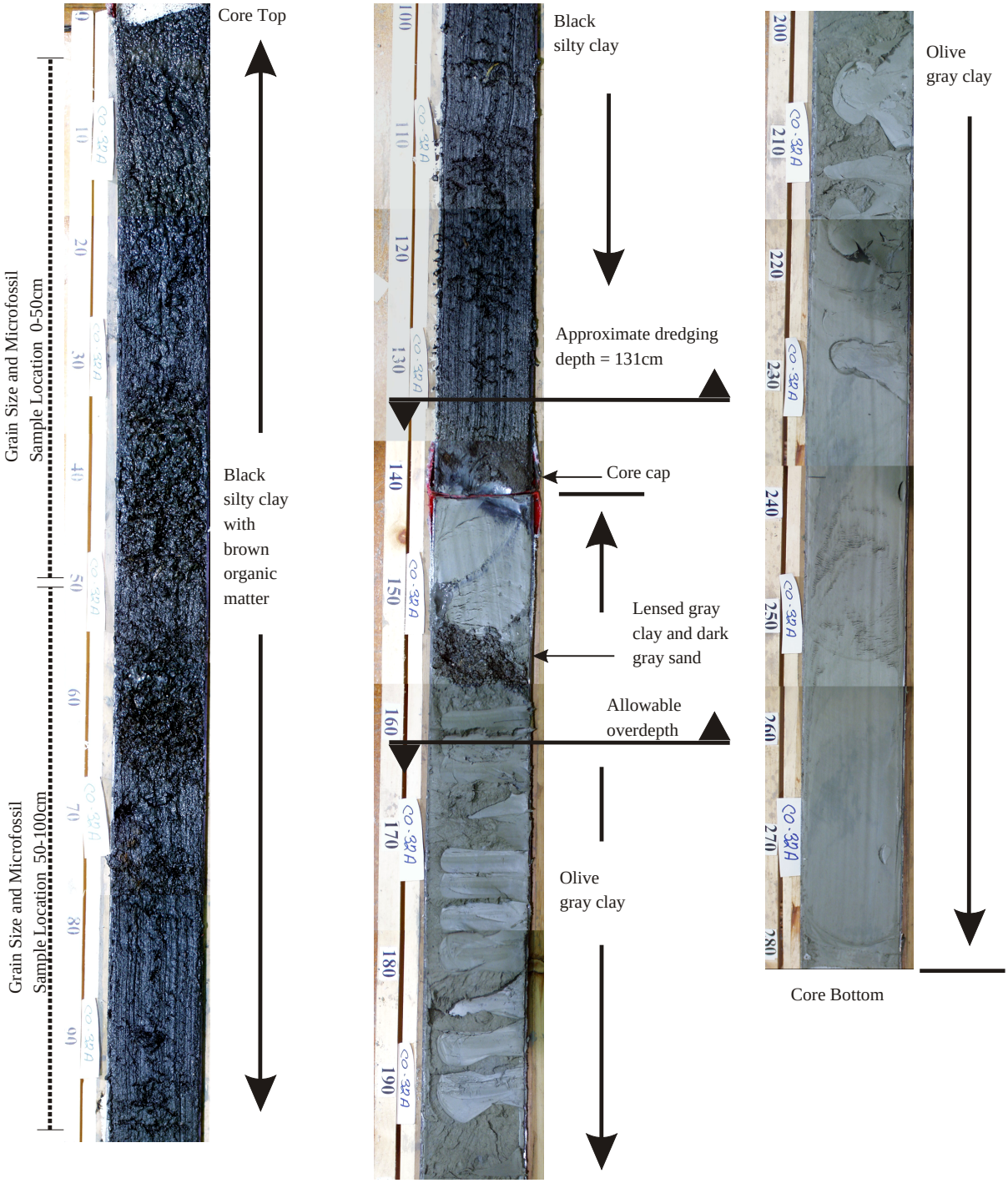
Core CO-30A


Core Top
Black and
brown
silty clay
Approximate dredging
Depth =49cm
Allowable
overdepth
Dark gray
fine sand
and gravel
Core cap
Grain Size and Microfossil
Sample Location 0-45cm
Grain Size and Microfossil
Sample Location 45-90cm
Grain Size and Microfossil
Sample Location 90-100cm
Blue gray to
olive gray
clay
Core Bottom

Core CO-31A


Core Top
Approximate dredging depth = 21cm
Black silty clay
Allowable overdepth
Brownish to very dark gray silty clay
Brownish to very dark gray silty clay with fine sand
Dark gray medium to coarse sand with gravel
Grain Size and Microfossil Sample Location 0-50cm
Grain Size and Microfossil Sample Location 50-90cm
Dark gray medium to coarse sand with gravel
Core cap
Brownish to dark gray medium and fine sand
Brownish to dark gray medium to coarse sand with gravel
Firm light blue-gray clay
Styrofoam core plug
Core Bottom

Core CO-32A


Core Top
Black silty clay with brown organic matter
Grain Size and Microfossil Sample Location 0-50cm
Grain Size and Microfossil Sample Location 50-100cm
Black silty clay
Approximate dredging depth = 131cm
Core cap
Lensed gray clay and dark gray sand
Allowable overdepth
Olive gray clay
Olive gray clay
Core Bottom

Appendix C
Sediment Tracer Analyses

C.1 Cohasset Harbor Sediment Characterization Study

For the purposes of this study, samples used for the sediment tracer analysis were collected from nine cores (CO-1, CO-7, CO-9 (upper and lower interval), CO-11, CO-14, CO-24, CO-29, CO-31, and CO-32), and two grab samples (BREAK 1 and ANCHOR 3) collected from Cohasset Harbor. Mineralogy as well as the coarse and fine fractions of the sediments was examined for the nine cores and two grabs.

C.1.1 Coarse Fraction

Overall, the most common components of the coarse fraction (>500 μm) were plant fragments, shell hash, sand, and gravel. Preliminary analyses of the coarse fraction provided no distinctive material that was isolated to a specific area of the harbor, or between Cohasset Harbor and the disposal site. As a result, the coarse fraction data were not considered useful as a tracer.

C.1.2 Fine Fraction

Two major components of the fine fraction (63 μm to 500 μm) were analyzed: the mineralogical content and the microfossil assemblages. Mineralogy did not provide sufficient distinction between the various dredging areas within Cohasset Harbor. However, analysis of the microfossil content did indicate sufficient differences in the composition of the microorganism populations to sub-divide the Cohasset Harbor dredging area. Microfossil species composition and abundance generally reflect differences in salinity and sediment-types in the intertidal, subtidal, and open water zones. The presence and relative abundance of two informal groups of microorganisms (foraminifera and thecamoebia) varied in the sediment originating from the different regions of Cohasset Harbor and that of the continental shelf environment.

In general, the sub-samples from the cores and grabs resulted in a low overall abundance of microfossils counted in the trays of material. Microfossil densities ranged from 1-74 individuals per 30-50 cm^2 in the samples examined as part of this study. The sediments collected in the harbor areas were finer-grained and better sorted relative to the Bailey's Creek material. The microfossil assemblages within the in-place sediments consisted primarily of salt marsh and mudflat foraminifera, with a small number of thecamoebians also detected. Slight differences in composition of the meiofaunal population were identified between the brackish and marine reaches of the harbor, as well as the open water environment of MBDS. Under the original Cohasset Harbor dredging plan described in Section 1.3, the individual layers of dredged material (UDM and CDM) could be differentiated from ambient sediment and traced back to a source area within the harbor. The composition and density of the foraminifera population in combination with grain size information would be useful in identifying the ambient/UDM and UDM/CDM interfaces, as well as the thickness of the dredged material layers placed on the MBDS seafloor.

A total of 18 different species of benthic foraminifera were recovered from the Cohasset Harbor sediment cores and grab samples collected in July 1998. Of these 18 species, five have a worldwide distribution (*Miliammina fusc*a, *Ammotium salsum*, *Trochammina inflata*, *Trochammina macrescens*, and *Tiphotrocha comprimata*), while four more (*Arenoparella mexicana*, *Haplophragmoides manilaensis*, *Eggerella advena, Textularia earlandi*) are considered common constituents in the estuarine environment. The common species are found in estuaries along the Atlantic seaboard of North America and have been used as ecological markers within sediments dated ~125,000 years before present as part of studies performed in Massachusetts Bay (Murray 1991).

Twelve samples at different intervals from the Cohasset Harbor cores were processed and sieved for microscopic inspection. The results indicate that the silty regions contained a significantly higher abundance of foraminifera. The channel areas contained fewer individuals and were mostly comprised of calcareous near-shore, open-ocean specimens and a larger marsh specimen (*T. inflata*). The Main Anchorage displayed a more transitional assemblage containing a combination of near shore, open ocean foraminifera, and mudflat and marsh foraminifera.

Core CO-1, collected in the outer channel and composed primarily of fine sand, had generally low numbers of foraminifera present with six different species represented (Tables B-1 and C-1). Mudflat calcareous species were most abundant dominated by *Elphidium excavatum*, followed closely by the salt marsh agglutinated species *T. inflata* (Figure C-1; Table C-1). This low diversity, high dominance assemblage in the outer channel is typical of a homogeneous sedimentary environment, which in this case consists primarily of fine sand. Low numbers of shelf calcareous species of *Elphidium* and *Buccella frigida* were also present in CO-1.

Similar to CO-1, CO-7 consisted primarily of sand and had both a low diversity assemblage with only a few species represented, and relatively few individual specimens within the sample (Figure C-1; Table C-1). This was primarily due to the homogenous environment which consisted of 1% cobble, 1% gravel, 2% coarse sand, 15% medium sand, 79% fine sand and 2% silt (Tables B-1 and B-2). In addition to the species present in CO-1, CO-7 sediments yielded one individual of *E. advena* (shelf agglutinated), and 2 individuals of *A. salsum* (marsh agglutinated) were detected.

The top interval of CO-9 (depth 0-30 cm) was dominated by marsh agglutinated foraminifera (Figure C-1). *T. inflata* was the primary constituent in this sample. The bottom interval of CO-9 contained mostly marsh agglutinated foraminifera, with a relatively high percentage of mudflat calcareous foraminifera and a presence of both shelf agglutinated foraminifera and shelf calcareous foraminifera (Table C-1). The mudflat calcareous forms (*Protelphidium orbiculare* and *E. excavatum*) occur only in the lower parts of the low marsh, and are most common on the mud flats below marsh areas.

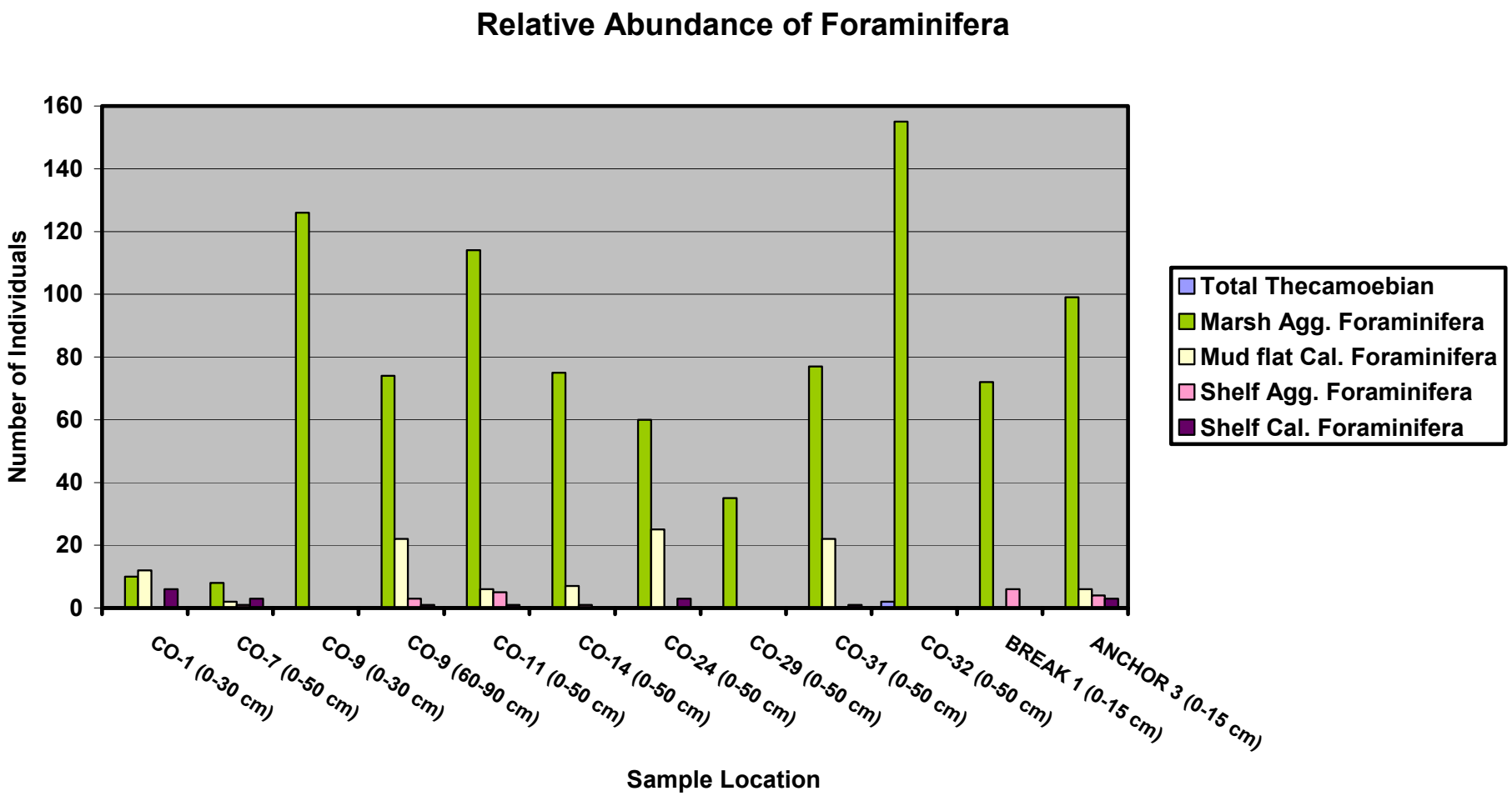


Figure C-1. Histogram showing the relative abundance of the four different types of foraminimera, as well as thecamoebians detected within the July 1998 Cohasset Harbor sediment samples

Table C-1. Abundance of the Various Species of Foraminifera Detected as part of the Cohasset Harbor Sediment Characterization Survey

		Benthic Foraminifera																							
Foraminifera Coastal Zonation		Salt Marsh Agglutinated Taxa							Mudflat Calcareous		Shelf Agglutinated Taxa						Shelf Calcareous								Freshwater
Core	Depth (cm)	Miliammina fusca	Ammotium salsum	Trochammina inflata	Tiphotrocha comprimata	Trochammina macrescens	Arenoparella mexicana	Haplophragmoides manilaensis	Protelphidium orbiculare	Elphidium excavatum	Haplophragmoides sp.	Eggerella advena	Textularia earlandi	Cribrostomoides jeffreysii	Rheophax scorpiurus	Trochammina squamata	Globobulimina sp.	Nonionella atlantisae	Elphidium sp.	Buccella frigida	Cibicides lobatulus	Rosalina sp.	Total foram	No. of Species	thecamoebian
CO-1	0-30			10					1	11									3	2		1	28	6	
CO-7	0-50		2	6						2		1								2		1	14	6	
CO-9	0-30	14	3	74	11	23	1																126	6	
CO-9	60-90	6	1	38	12	17			4	18		2	1							1			100	10	
CO-11	0-50	8	2	61	13	29	1		4	2		5										1	126	11	
CO-14	0-50	10	3	55	8	30	1		4	3			1										115	9	
CO-24	0-50	2		15	18	40			24	1									2		1		103	8	
CO-29	0-50			25	2	8																	35	3	
CO-31	0-50	5		20	26	26			15	7												1	100	8	
CO-32	0-50	30	1	59	5	57	3																155	8	2
BREAK 1	Grab	15		54	9	38	4	2				4	2										128	8	
ANCHOR 3	Grab	5	2	67	11	14				6		4								2		1	112	9	

A similar occurrence was noted in CO-11 and CO-14, which were also collected from the Main Anchorage Area. CO-11 contained a high number of *T. inflata,* as did CO-14 (Figure C-1; Table C-1). However, CO-11 also contained one individual representing shelf calcareous taxa (*Rosalina sp.*).

Core CO-24 collected from the silt and clay within Cohasset Cove contained mostly salt marsh agglutinated foraminifera and a rather high presence of mudflat calcareous foraminifera. Core CO-29 collected from the sandy sediments within the entrance to Bailey's Creek contained salt marsh agglutinated foraminifera only, likely influenced from the marshes on both sides of the inlet. (Table C-1).

Salt marsh agglutinated foraminifera dominated the fine-grained sediments within CO-31, as well as a relatively high percentage of mudflat calcareous foraminifera and a rare presence of shelf calcareous foraminifera (Figure C-1; Table C-1). Although the sediments displayed a higher sand component, the sub-sample from Core CO-32 displayed the largest amount of total foraminifera, with 100% being classified as salt marsh agglutinated foraminifera. Once again, *T. inflata* was the most dominant taxa in this group (Table C-1). Thecamoebians were also represented in CO-32, which was anticipated given its location relative to a fresh water source.

The surface grab sample BREAK 1 was obtained in the main anchorage area very close to shore and had salt marsh agglutinated foraminifera as its most dominant taxa (Figure C-1, Table C-1). There was a rare presence of shelf agglutinated foraminifera. Sample ANCHOR 3 is also located in this boundary and has representatives from all four types of foraminifera. The salt marsh agglutinated foraminifera was the dominant taxa, with *T. inflata* the most dominant species in this group. One species of mudflat calcareous foraminifera, specifically *E. excavatum*, was also present in the sediment sample. One species of shelf agglutinated foraminifera (*E. advena*) and two species of shelf calcareous foraminifera (*Elphidium sp.* and *Rosalina sp.*) were also present.

In general, the marsh agglutinated foraminifera dominated the harbor sediments, with *T. inflata* by far the most abundant species within that class (Figure C-1; Table C-1). A number of mudflat calcareous species (*E. excavatum* and *Protelphidium orbiculare*) were represented as well, but significantly lower in number relative to the marsh agglutinated forms. Several representatives of shelf agglutinated and shelf calcareous species of foraminifera were detected in samples. Agglutinated taxa (*Eggerella advena*) were found in relatively small numbers near the harbor entrance (Table C-1). *Cibicides lobatulus, B. frigida*, *Elphidium sp.*, and *Rosalina sp.* (calcareous continental shelf species) which were also present in small numbers, usually reside in an open ocean environment but may have been washed in or introduced into the harbor by sea-going vessels.

C.2 CHCP Baseline Survey

Thirteen gab samples were obtained from CHCP as part of the Baseline survey effort. For the purposes of this study, sub-samples used for the sediment tracer analysis were collected from the five grab samples collected at the CHCP study area (CTR, 200N, 200E, 200S, and 200W). As anticipated, benthic foraminifera species common in the sediments of the continental shelf were dominant in each sample collected at CHCP. Microfossil content indicated shelf agglutinated foraminifera were in abundance, with relatively small numbers of calcareous species present (Figure C-2 Table C-2). *Rheophax scorpiurus* was the most abundant, followed by *Cribrostomoides jefferysii*, *T. earlandi*, and *E. advena*. A small number of shelf calcareous foraminifera appeared in the sediments as well, but were limited to two species (*Globobulimina sp.* and *Nonionella atlantisae*). Marsh agglutinated and mud flat calcareous species were nearly absent and thecamoebian tests were a very minor component of the fine fraction sediment.

C.3 CHCP Precap Survey

A series of 13 sediment grab samples were collected over the UDM mound during the CHCP Precap Survey. Similar to the Baseline survey, five samples were subjected to sediment tracer analysis to verify the origin of the dredged material at the sediment-water interface. Within the fine fraction, microfossil analysis also detected a significant change in surface sediment composition, relative to the previous survey. In contrast to the Baseline survey, analysis of the ambient sediments indicated the foraminiferal community within the surface sediments sampled as part of the Precap survey contained many more species typical of marsh environments than the continental shelf (Table C-3). *T. inflata* was found to be the dominant salt marsh species represented in the surface sediment, followed by *T. macrescens* and *M. fusca*. Mud flat calcareous species were present as well, but sparse in comparison to the salt marsh varieties (Figure C-3).

The samples obtained from Stations CTR and 200N displayed the highest abundance of salt marsh agglutinated foraminifera, relative to the remainder of the samples analyzed. This indicates an abundance of Cohasset Harbor dredged material resides in the surficial sediment layers at these two stations. The remaining three Precap sediment samples also showed salt marsh species (*T. inflata*, *T. macrescens*, and *M. fusca*) on the seafloor in relative abundance. However, a significant number of shelf species (primarily *Rheophax scorpius*) were present at Stations 200E, 200S, and 200W (Figure C-3; Table C-3). This increased presence of both shelf agglutinated and shelf calcareous species in higher numbers suggests these stations received a lower volume of Cohasset Harbor sediment in comparison to CTR and 200N. In addition, given the length of time between the completion of UDM disposal and the Precap survey (60 days), the influx of shelf species may be the result of natural benthic transport and recolonization along the apron of the UDM mound

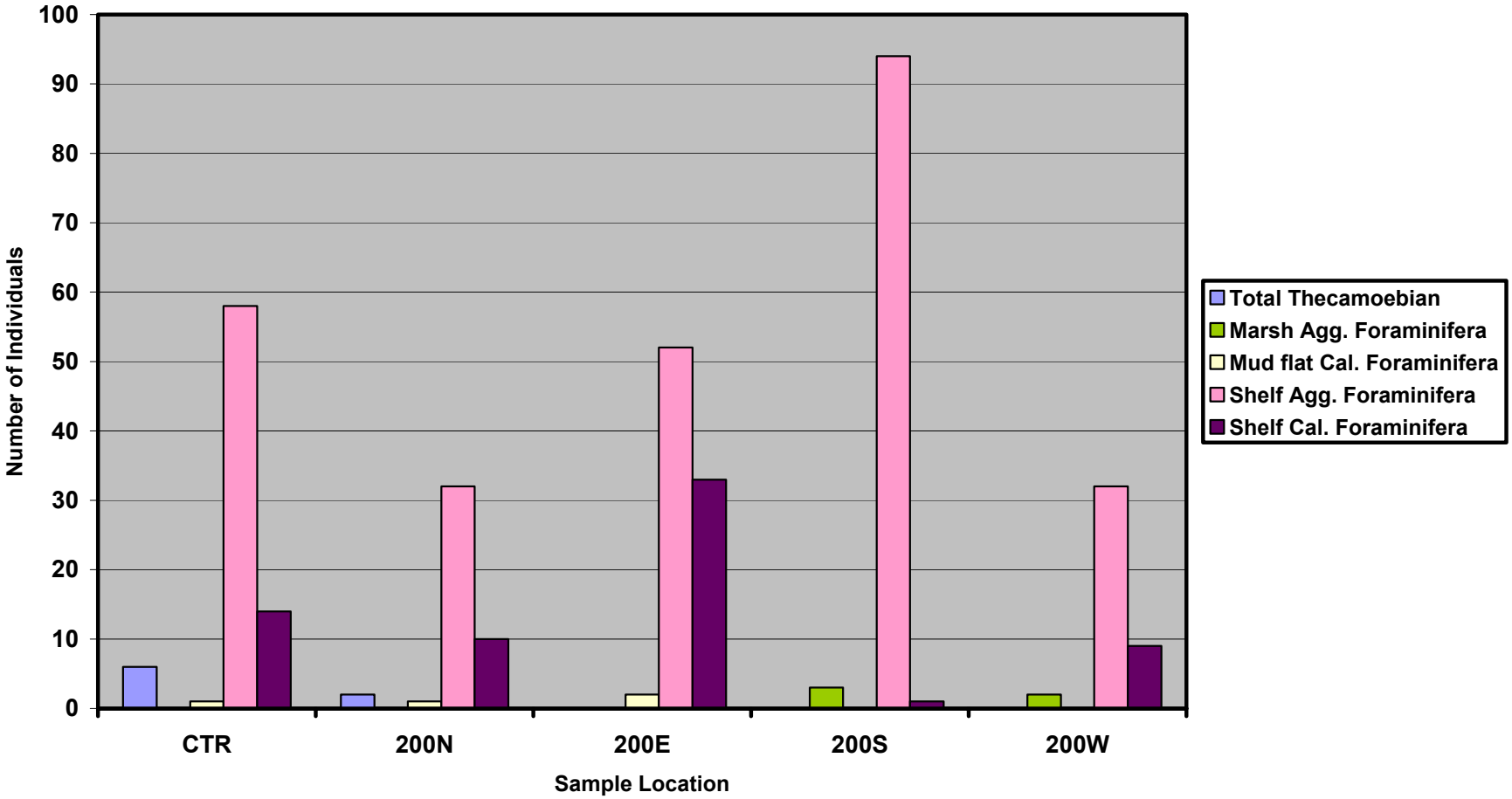


Figure C-2. Histogram showing the relative abundance of the four different types of foraminifera, as well as thecamoebians detected within the CHCP study area during the Baseline survey

Table C-2. Abundance of the Various Species of Foraminifera Detected as part of the CHCP Baseline Survey

		Benthic Foraminifera																							
Foraminifera Coastal Zonation		Salt Marsh Agglutinated Taxa							Mudflat Calcareous		Shelf Agglutinated Taxa						Shelf Calcareous								Freshwater
Grab Station	Material	Miliammina fusca	Ammotium salsum	Trochammina inflata	Tiphotrocha comprimata	Trochammina macrescens	Arenoparella mexicana	Haplophragmoides manilaensis	Protelphidium orbiculare	Elphidium excavatum	Haplophragmoides sp.	Eggerella advena	Textularia earlandi	Cribrostomoides jeffreysii	Rheophax scorpiurus	Trochammina squamata	Globobulimina sp.	Nonionella atlantisae	Elphidium sp.	Buccella frigida	Cibicides lobatulus	Rosalina sp.	Total foram	No. of Species	thecamoebian
CTR	Ambient									1	10	13	7		28		7	7					73	7	6
200N	Ambient									1		5	5	1	6	15	10						43	7	2
200E	Ambient									2	3	2	1	3	30	13	11	22					87	9	
200S	Ambient					3					3	11	17	12	45	6	1						98	8	
200W	Ambient			1		1					4		5	1	17	5	2	7					43	9	

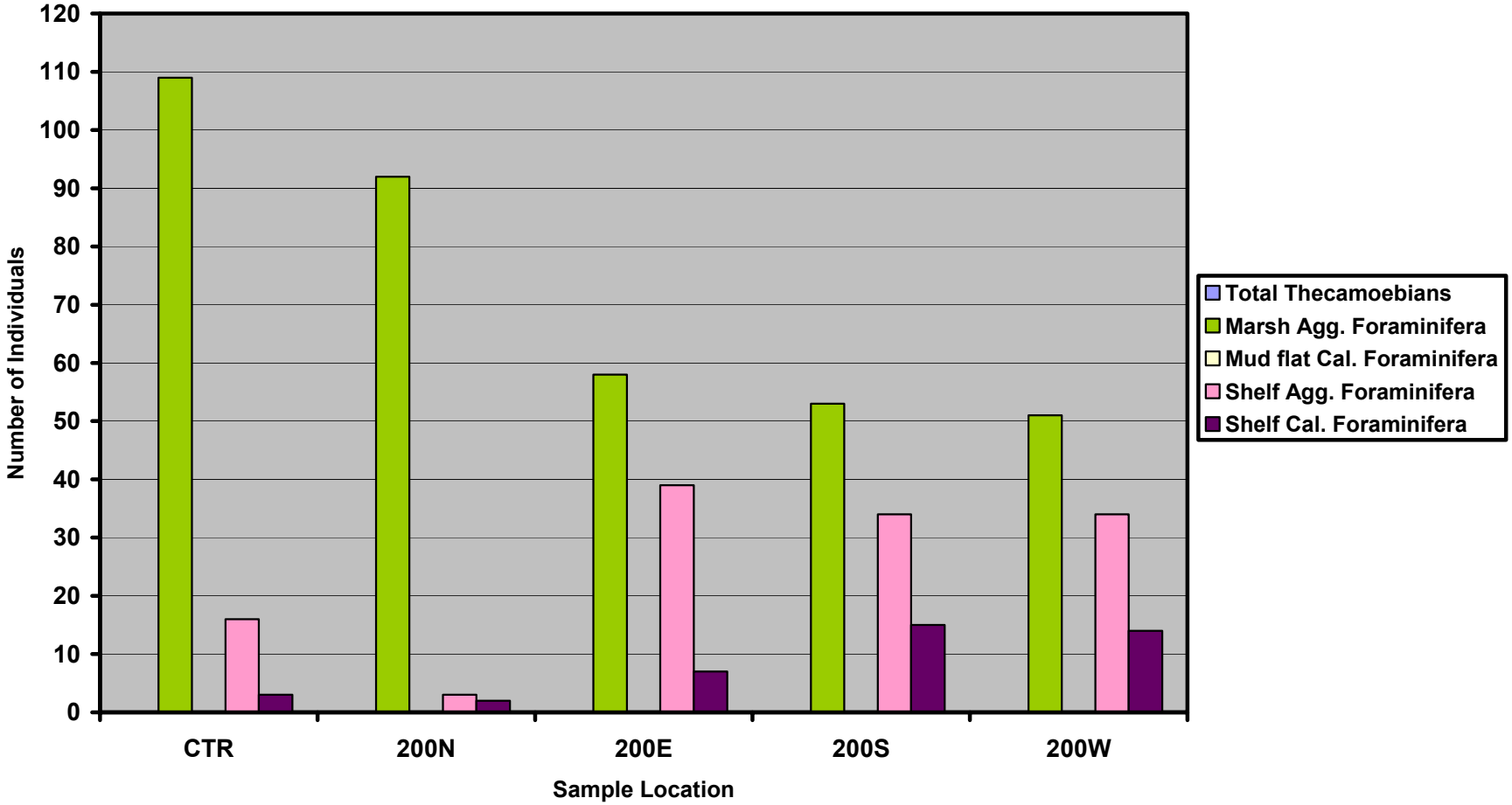


Figure C-3. Histogram showing the relative abundance of the four different types of foraminifera, as well as thecamoebians detected within the CHCP study area during the Precap survey

Table C-3. Abundance of the Various Species of Foraminifera Detected as part of the CHCP Precap Survey

		Benthic Foraminifera																							
Foraminifera Coastal Zonation		Salt Marsh Agglutinated Taxa							Mudflat Calcareous		Shelf Agglutinated Taxa						Shelf Calcareous								Freshwater
Grab Station	Material	Miliammina fusca	Ammotium salsum	Trochammina inflata	Tiphotrocha comprimata	Trochammina macrescens	Arenoparella mexicana	Haplophragmoides manilaensis	Protelphidium orbiculare	Elphidium excavatum	Haplophragmoides sp.	Eggerella advena	Textularia earlandi	Cribrostomoides jeffreysii	Rheophax scorpiurus	Trochammina squamata	Globobulimina sp.	Nonionella atlantisae	Elphidium sp.	Buccella frigida	Cibicides lobatulus	Rosalina sp.	Total foram	No. of Species	thecamoebian
CTR	UDM	9	6	58	3	29	2	2	11	13	10	2	1			3				3			152	14	
200N	UDM	1		67	3	16	5		1	11		3							1			1	109	10	
200E	UDM	5	5	34		13	1		3	1	3	4	6	1	20	5	3	3	1				108	16	
200S	UDM	6	2	27	1	17			6		3	5	8	1	14	3	8	7					108	14	
200W	Amb/UDM	6		34	3	8			5	4	4	2	6	3	15	4	7	7					108	14	

Appendix D
CHCP REMOTS® Results

Appendix D1
CHCP Baseline (COB) REMOTS® Sediment-Profile Imaging Data from the September 1998 Survey

Station	Replicate	Date	Camera Penetration Mean (cm)	Dredged Material	Grain Size Major Mode (phi)	RPD	Apparent RPD Thickness (cm)	Color	Sediment Description
CTR	A	9/1/1998	19.0	F	>4	T	9.0	tan	silt
CTR	B	9/1/1998	19.5	F	>4	T	8.0	tan	silt
CTR	D	9/2/1998	17.0	F	>4	T	8.0	tan	silt
CTR	E	9/2/1998	16.0	F	>4	T	7.0	tan	silt
50N	A	9/1/1998	18.0	F	>4	T	10.0	tan	silt
50N	B	9/1/1998	17.0	F	>4	T	9.0	tan	silt
50N	C	9/1/1998	18.0	F	>4	T	8.0	tan	silt
50NE	A	9/1/1998	19.0	F	>4	T	12.0	tan	silt
50NE	B	9/1/1998	15.0	F	>4	T	9.0	tan	silt
50E	D	9/2/1998	16.0	F	>4	T	7.0	tan	silt
50E	E	9/2/1998	15.0	F	>4	T	6.0	tan	silt
50E	F	9/2/1998	13.0	F	>4	T	5.0	tan	silt
50SE	C	9/1/1998	19.0	F	>4	T	8.0	tan	silt
50SE	D	9/2/1998	15.0	F	>4	T	7.0	black/tan	silt
50SE	E	9/2/1998	14.5	F	>4	T	5.0	tan	silt
50S	D	9/2/1998	14.0	F	>4	T	7.0	tan	silt
50S	E	9/2/1998	13.0	F	>4	T	7.0	tan	silt
50SW	B	9/1/1998	18.0	F	>4	T	7.0	tan	silt
50SW	C	9/1/1998	18.0	F	>4	T	9.0	tan	silt
50W	D	9/2/1998	15.0	F	>4	T	10.0	tan	silt
50W	E	9/2/1998	14.0	F	>4	T	5.0	tan	silt
50W	F	9/2/1998	14.5	F	>4	T	8.0	tan	silt
50NW	D	9/2/1998	13.5	F	>4	T	5.0	tan	silt
50NW	E	9/2/1998	14.0	F	>4	T	5.0	tan	silt
50NW	F	9/2/1998	14.0	F	>4	T	7.0	tan	silt
100N	A	9/1/1998	18.5	F	>4	T	5.0	tan	silt
100N	B	9/1/1998	19.0	F	>4	T	6.0	tan	silt
100N	C	9/1/1998	19.5	F	>4	T	10.0	tan	silt
100NE	D	9/2/1998	15.0	F	>4	T	6.0	tan	silt
100NE	E	9/2/1998	16.0	F	>4	T	10.0	tan	silt
100E	B	9/1/1998	19.0	F	>4	T	5.0	tan	silt
100E	C	9/1/1998	19.0	F	>4	T	12.0	tan	silt
100SE	C	9/1/1998	19.0	F	>4	T	9.0	tan	silt
100SE	D	9/2/1998	15.0	F	>4	T	8.0	tan	silt
100SE	E	9/2/1998	13.0	F	>4	T	5.0	tan	silt
100S	B	9/1/1998	18.5	F	>4	T	15.0	tan	silt
100S	E	9/2/1998	14.0	F	>4	T	5.0	tan	silt
100SW	A	9/1/1998	18.0	F	>4	T	12.0	tan	silt
100SW	C	9/1/1998	18.0	F	>4	T	12.0	tan	silt
100SW	D	9/2/1998	14.0	F	>4	T	6.0	tan	silt
100W	A	9/1/1998	17.0	F	>4	T	10.0	yellowish tan	silt
100W	B	9/1/1998	19.0	F	>4	T	7.0	tan	silt
100W	C	9/1/1998	16.0	F	>4	T	6.0	tan	silt
100NW	A	9/1/1998	18.0	F	>4	T	7.0	tan	silt
100NW	D	9/2/1998	14.0	F	>4	T	8.5	light tan	silt
100NW	E	9/2/1998	13.5	F	>4	T	4.0	tan	silt
200N	D	9/2/1998	15.0	F	>4	T	7.0	tan	silt
200N	E	9/2/1998	15.0	F	>4	T	6.0	tan	silt
200N	F	9/2/1998	14.0	F	>4	T	8.0	tan	silt

Appendix D1
CHCP Baseline (COB) REMOTS® Sediment-Profile Imaging Data from the September 1998 Survey

Station	Replicate	Date	Surface	Tubes	Feeding Voids	Burrow	Pebbles	Plant	Smears	Comments
CTR	A	9/1/1998	physical	T	T	F	F	F	F	ripple, worm @z
CTR	B	9/1/1998	physical	T	T	T	F	F	F	surface reworking?
CTR	D	9/2/1998	biogenic	T	F	F	F	F	F	Shell at surface, dense tubes
CTR	E	9/2/1998	physical	T	T	F	F	F	T	worm subsurface, ripple
50N	A	9/1/1998	physical	T	F	F	T	F	F	ripple, mud clasts
50N	B	9/1/1998	physical	T	F	F	T	F	T	clay clumps @ surf, ripple, fluid clast layer
50N	C	9/1/1998	physical	T	F	F	F	F	T	ripple
50NE	A	9/1/1998	physical	T	T	F	F	F	F	surface reworking
50NE	B	9/1/1998	physical	T	T	T	F	F	F	large mud clasts
50E	D	9/2/1998	physical	T	T	T	F	F	T	worm suburface, mud clasts
50E	E	9/2/1998	physical	T	T	F	F	F	T	ripple
50E	F	9/2/1998	physical	F	F	F	F	F	F	ripple, mud clasts
50SE	C	9/1/1998	physical	T	T	T	F	F	F	Clay clumps @ surf, ripple, worm @z
50SE	D	9/2/1998	biogenic	T	T	F	F	F	F	dense tubes
50SE	E	9/2/1998	physical	T	F	F	F	F	F	Spots of grey clay
50S	D	9/2/1998	physical	T	T	F	F	F	F	ripple, dense tubes
50S	E	9/2/1998	physical	T	T	F	F	F	F	dense tubes
50SW	B	9/1/1998	physical	T	T	F	F	F	F	Clumps of clay at surface
50SW	C	9/1/1998	physical	T	T	F	F	F	F	Clumps of clay at surface
50W	D	9/2/1998	physical	T	T	F	F	F	T	
50W	E	9/2/1998	physical	T	F	F	F	F	T	ripple, dense tubes
50W	F	9/2/1998	physical	T	T	F	F	F	T	Clumps of clay at surf, irregular topography
50NW	D	9/2/1998	physical	T	T	F	F	F	T	mud clasts
50NW	E	9/2/1998	biogenic	T	T	F	T	T	F	dense tubes
50NW	F	9/2/1998	biogenic	T	T	F	F	F	F	dense tubes
100N	A	9/1/1998	physical	T	F	F	F	F	T	Clay clumps @ surf, worm@z, irregular topography
100N	B	9/1/1998	physical	T	T	F	F	F	T	Clumps of clay at surface
100N	C	9/1/1998	physical	F	T	T	F	F	T	Clumps of clay at surface
100NE	D	9/2/1998	physical	T	F	F	T	F	F	
100NE	E	9/2/1998	physical	F	T	F	F	F	T	
100E	B	9/1/1998	biogenic	T	T	T	F	F	F	large filled vertical burrow
100E	C	9/1/1998	physical	T	F	F	F	F	F	ripple
100SE	C	9/1/1998	physical	F	T	F	F	F	F	
100SE	D	9/2/1998	physical	T	F	F	F	F	F	dense tubes, worm @z, ripple
100SE	E	9/2/1998	physical	T	F	F	F	F	F	dense tubes, ripple
100S	B	9/1/1998	physical	T	F	F	F	F	F	irregular topography
100S	E	9/2/1998	physical	T	F	F	F	F	F	
100SW	A	9/1/1998	physical	T	T	F	F	F	F	ripple
100SW	C	9/1/1998	physical	F	T	F	F	F	T	
100SW	D	9/2/1998	biogenic	T	T	T	F	F	F	clay clumps@surf, burrow opening, dense tubes
100W	A	9/1/1998	biogenic	T	T	T	F	F	T	worm @z, discolored void, sea cucumber, lg burrow
100W	B	9/1/1998	physical	T	T	T	F	F	T	Clumps of clay at surface, worm @z
100W	C	9/1/1998	physical	T	F	F	T	F	F	clay clast
100NW	A	9/1/1998	biogenic	T	F	T	F	F	F	sea cucumber
100NW	D	9/2/1998	biogenic	T	T	T	F	F	F	surface burrow opening, dense tubes
100NW	E	9/2/1998	physical	T	F	F	F	F	T	dense tubes
200N	D	9/2/1998	physical	T	F	F	F	F	F	ripple, dense tubes
200N	E	9/2/1998	physical	T	F	F	F	F	F	Clumps of clay at surface
200N	F	9/2/1998	physical	F	F	F	F	F	T	ripple

Appendix D1
CHCP Baseline (COB) REMOTS® Sediment-Profile Imaging Data from the September 1998 Survey

Station	Replicate	Date	Camera Penetration Mean (cm)	Dredged Material	Grain Size Major Mode (phi)	RPD	Apparent RPD Thickness (cm)	Color	Sediment Description
200NE	A	9/1/1998	19.5	F	>4	T	12.0	tan	silt
200NE	B	9/1/1998	19.0	F	>4	T	10.0	tan	silt
200NE	D	9/2/1998	15.0	F	>4	T	7.0	tan	silt
200NE	E	9/2/1998	17.0	F	>4	T	7.0	tan	silt
200E	A	9/1/1998	17.0	F	>4	T	13.0	tan	silt
200E	C	9/1/1998	17.5	F	>4	T	12.0	tan	silt
200SE	A	9/1/1998	19.0	F	>4	T	16.0	tan	silt
200SE	B	9/1/1998	17.5	F	>4	T	5.0	tan	silt
200SE	C	9/1/1998	19.0	F	>4	T	7.0	tan	silt
200S	D	9/2/1998	14.0	F	>4	T	7.0	tan	silt
200S	E	9/2/1998	13.5	F	>4	T	10.0	tan	silt
200S	F	9/2/1998	12.0	F	>4	T	7.0	tan	silt
200SW	A	9/1/1998	18.0	F	>4	T	10.0	tan	silt
200SW	D	9/2/1998	15.5	F	>4	T	6.0	tan	silt
200SW	E	9/2/1998	12.5	F	>4	T	5.0	tan	silt
200W	A	9/1/1998	17.0	F	>4	T	14.0	tan	silt
200W	B	9/1/1998	13.0	F	>4	T	10.0	tan	silt
200W	D	9/2/1998	11.0	F	>4	T	6.0	tan	silt
200W	E	9/2/1998	13.0	F	>4	T	8.0	tan	silt
200NW	A	9/1/1998	19.0	T	>4	T	9.0	tan	silt
200NW	B	9/1/1998	17.0	F	>4	T	9.0	tan	silt
200NW	C	9/1/1998	19.5	F	>4	T	7.0	tan	silt
300N	A	9/1/1998	18.0	F	>4	T	5.0	tan	silt
300N	B	9/1/1998	19.0	F	>4	T	5.0	tan	silt
300N	C	9/1/1998	18.0	F	>4	T	9.0	tan	silt
300NE	A	9/1/1998	17.0	F	>4	F	3.0	grey/tan	silt
300NE	B	9/1/1998	18.0	F	>4	T	5.0	tan	silt
300NE	D	9/2/1998	17.0	F	>4	T	7.0	tan	silt
300E	A	9/1/1998	18.0	F	>4	T	6.0	tan	silt
300E	C	9/1/1998	16.0	F	>4	T	5.0	tan	silt
300E	D	9/2/1998	14.5	F	>4	T	7.0	tan	silt
300SE	A	9/1/1998	19.0	F	>4	T	8.0	tan	silt
300SE	E	9/2/1998	14.5	F	>4	T	8.0	tan	silt
300SE	F	9/2/1998	15.0	F	>4	T	5.0	tan	silt
300S	C	9/1/1998	18.5	F	>4	T	6.0	tan	silt
300SW	A	9/1/1998	18.0	F	>4	T	10.0	tan	silt
300SW	D	9/2/1998	16.0	F	>4	T	6.0	tan	silt
300SW	E	9/2/1998	14.0	F	>4	T	5.0	tan	silt
300W	A	9/1/1998	18.5	F	>4	T	12.0	tan	silt
300W	B	9/1/1998	17.5	F	>4	T	7.0	tan	silt
300W	C	9/1/1998	18.0	F	>4	T	12.0	tan	silt
300NW	A	9/1/1998	16.0	F	>4	T	5.0	tan	silt
300NW	B	9/1/1998	17.5	F	>4	T	6.5	tan	silt
300NW	C	9/1/1998	16.5	T	>4	T	9.0	tan	silt

Appendix D1
CHCP Baseline (COB) REMOTS® Sediment-Profile Imaging Data from the September 1998 Survey

Station	Replicate	Date	Surface	Tubes	Feeding Voids	Burrow	Pebbles	Plant	Smears	Comments
200NE	A	9/1/1998	physical	F	T	F	F	F	F	worm subsurface, ripple
200NE	B	9/1/1998	physical	T	F	F	F	F	F	
200NE	D	9/2/1998	physical	F	T	F	F	F	F	disturbed surface
200NE	E	9/2/1998	biogenic	T	T	T	F	F	T	Large Burrow present
200E	A	9/1/1998	physical	T	T	F	F	F	F	ripple, dense tubes, worm @z
200E	C	9/1/1998	physical	T	T	T	F	F	T	Clumps of clay at surface, ripple
200SE	A	9/1/1998	physical	T	T	F	F	F	F	Shell Fragment at Surface
200SE	B	9/1/1998	physical	T	F	F	F	F	F	Clumps of clay at surface
200SE	C	9/1/1998	physical	T	F	F	F	F	T	ripple, worm @z
200S	D	9/2/1998	physical	T	F	F	F	F	F	dense tubes
200S	E	9/2/1998	physical	T	F	F	F	F	F	clay clumps @surf, sm ripple, dense tubes
200S	F	9/2/1998	physical	T	T	F	F	F	F	Clumps of clay at surface, sloping topography
200SW	A	9/1/1998	biogenic	T	T	F	T	F	F	mud clasts
200SW	D	9/2/1998	physical	T	T	T	F	F	T	dense tubes
200SW	E	9/2/1998	physical	T	T	F	F	F	T	sediment transport evident at surface, ripple
200W	A	9/1/1998	physical	T	F	F	T	T	T	large tubes, ripple
200W	B	9/1/1998	biogenic	T	T	T	F	F	F	sea cucumber @ surface, shell
200W	D	9/2/1998	biogenic	T	F	F	F	F	F	dense tubes
200W	E	9/2/1998	biogenic	T	T	T	F	F	T	sea cucumber, mud clasts
200NW	A	9/1/1998	biogenic	T	T	F	F	F	T	historic dredged material, clay chips
200NW	B	9/1/1998	physical	T	T	F	F	F	F	
200NW	C	9/1/1998	physical	T	T	F	F	F	T	Olive streaks
300N	A	9/1/1998	physical	T	T	T	F	F	F	
300N	B	9/1/1998	physical	T	T	T	F	F	F	Clumps of clay at surface
300N	C	9/1/1998	physical	F	T	F	F	F	T	reduced sediment, chaotic fabric, clay clasts
300NE	A	9/1/1998	physical	T	T	F	F	F	F	Fabric is Chaotic, sloping topography
300NE	B	9/1/1998	physical	T	T	T	F	F	T	worm subsurface
300NE	D	9/2/1998	physical	T	T	F	F	F	F	
300E	A	9/1/1998	physical	T	T	T	F	F	F	ripple
300E	C	9/1/1998	physical	T	T	F	F	F	F	Clumps of clay at surface
300E	D	9/2/1998	physical	T	T	F	F	F	T	sloping topography
300SE	A	9/1/1998	physical	T	F	F	F	F	T	sm ripple
300SE	E	9/2/1998	physical	T	T	F	F	F	F	ripple
300SE	F	9/2/1998	physical	T	T	F	F	F	F	Clumps of clay at surface, worm @z
300S	C	9/1/1998	biogenic	T	T	F	F	F	F	mud clasts
300SW	A	9/1/1998	physical	T	F	F	F	F	F	mud clasts
300SW	D	9/2/1998	physical	T	T	F	F	F	T	
300SW	E	9/2/1998	biogenic	T	F	F	T	F	F	Clumps of clay @ surf, dense tubes, worm @z
300W	A	9/1/1998	physical	T	T	T	F	F	T	ripple, irregular topo, chaotic fabric, reduced sed@z
300W	B	9/1/1998	physical	T	F	F	F	F	T	fluid clast layer
300W	C	9/1/1998	physical	T	T	T	F	F	T	Clumps of clay at surface, ripple
300NW	A	9/1/1998	biogenic	T	T	F	F	F	F	dense tubes
300NW	B	9/1/1998	physical	T	F	F	T	F	T	ripple, mud clasts
300NW	C	9/1/1998	physical	T	T	F	F	F	T	historic dredged material, chaotic fabric, clay

Appendix D2
CHCP Single Barge (COS) Tertiary Station REMOTS® Sediment-Profile Imaging Data from the December 1998 Survey

Station	Replicate	Date	Camera Penetration Mean (cm)	Dredged Material	Dredged Material Thickness Mean (cm)	Grain Size Major Mode (phi)	Apparent RPD Thickness (cm)	Color	Sediment Description
CTR	A	12/16/1998	10.00	T	0.50	>4	1.5	WHT/TAN/BLK	SILT
CTR	B	12/16/1998	5.00	T	>5	>4	0.25	WHT/TAN/BLK	CLAY
CTR	C	12/16/1998	20.00	T	>20	>4	INDET	WHT	CLAY
80N	A	12/16/1998	15.00	T	1.00	>4	INDET	WHT/TAN/BLK	SILT
80N	B	12/16/1998	15.00	F	0.00	>4	7.0	WHT/TAN/BLK	SILT
80N	C	12/16/1998	15.00	T	1.00	>4	3.5	WHT/TAN/BLK	SILT
80NE	A	12/16/1998	14.50	T	4.00	>4	1.0	WHT/TAN/BLK	CLAY
80NE	B	12/16/1998	15.00	F	0.00	>4	4.0	WHT/TAN/BLK	SILT
80NE	C	12/16/1998	14.00	T	4.00	>4	1.0	WHT/TAN/BLK	CLAY
80E	A	12/16/1998	14.50	T	2.00	>4	1.0	WHT/TAN/BLK	SILT
80E	B	12/16/1998	15.50	T	1.00	>4	2.0	WHT/TAN/BLK	SILT
80E	C	12/16/1998	15.00	F	0.00	>4	5.0	TAN/BLK	SILT
80SE	A	12/16/1998	13.50	T	1.00	>4	4.0	TAN/BLK	SILT
80SE	B	12/16/1998	18.50	T	1.00	>4	10.0	WHT/TAN/BLK	SILT
80SE	C	12/16/1998	15.00	T	1.00	>4	5.0	WHT/TAN/BLK	SILT
80S	A	12/16/1998	15.50	T	2.00	>4	1.0	WHT/TAN/BLK	SILT
80S	B	12/16/1998	13.50	T	8.00	>4	2.5	WHT/TAN/BLK	CLAY
80S	C	12/16/1998	15.00	T	1.00	>4	0.5	WHT/TAN/BLK	SILT
80SW	A	12/16/1998	18.00	T	10.00	>4	INDET	WHT/TAN/BLK	CLAY
80SW	B	12/16/1998	7.50	T	1.00	>4	1.5	WHT/TAN/BLK	SILT
80SW	C	12/16/1998	11.00	F	0.00	>4	1.5	TAN/BLK	SILT
80W	A	12/16/1998	9.00	T	>9	>4	1.5	WHT	CLAY
80W	B	12/16/1998	2.00	T	>2	>4	1.0	WHT	CLAY
80W	C	12/16/1998	8.00	T	>8	>4	2.0	WHT/TAN/BLK	CLAY
80NW	A	12/16/1998	14.00	F	0.00	>4	4.5	WHT/TAN/BLK	SILT
80NW	B	12/16/1998	15.00	F	0.00	>4	10.0	WHT/TAN/BLK	SILT
80NW	C	12/16/1998	15.50	F	0.00	>4	1.0	WHT/TAN/BLK	SILT
120N	A	12/16/1998	15.00	F	0.00	>4	5.0	TAN/BLK	SILT
120N	B	12/16/1998	16.00	T	4.00	>4	1.0	WHT/TAN/BLK	SILT
120N	C	12/16/1998	15.00	T	1.00	>4	3.0	WHT/TAN/BLK	SILT
120NE	A	12/16/1998	15.50	F	0.00	>4	11.0	TAN/BLK	SILT
120NE	B	12/16/1998	15.00	F	0.00	>4	5.0	TAN/BLK	SILT
120NE	C	12/16/1998	15.00	F	0.00	>4	5.0	TAN/BLK	SILT
120E	A	12/16/1998	15.00	T	1.00	>4	5.5	TAN/BLK	SILT
120E	B	12/16/1998	15.00	F	0.00	>4	5.0	TAN/BLK	SILT
120E	C	12/16/1998	12.50	F	0.00	>4	6.5	TAN/BLK	SILT
120SE	A	12/16/1998	15.00	T	1.00	>4	7.0	TAN/BLK	SILT
120SE	B	12/16/1998	15.00	T	1.00	>4	5.0	TAN/BLK	SILT
120SE	C	12/16/1998	14.50	T	1.00	>4	5.0	TAN/BLK	SILT

Appendix D2
CHCP Single Barge (COS) Tertiary Station REMOTS® Sediment-Profile Imaging Data from the December 1998 Survey

Station	Replicate	Date	Surface Roughness	Tubes	Feeding Voids	Burrow	Pebbles	Plant	W_Smears	Comments
CTR	A	12/16/1998	Physical	T	F	F	F	F	T	SM Clay balls under surface
CTR	B	12/16/1998	Physical	F	F	F	F	F	F	Big clump of clay
CTR	C	12/16/1998	Physical	F	F	F	F	F	F	Big clump of clay
80N	A	12/16/1998	Physical	T	T	F	F	F	F	counting surface clay as dredge, dense tubes
80N	B	12/16/1998	Physical	T	F	F	F	F	T?	Traces of wht clay, could be smears/ old stuff
80N	C	12/16/1998	Physical	T	T	F	F	F	T	a few clay balls w/in top 2cm, clay chips
80NE	A	12/16/1998	Physical	T	T	T	F	F	T	Clay dredge covered by sed
80NE	B	12/16/1998	Physical	T	T	F	F	F	T	Clay ball smears 5cm under surface, tubes
80NE	C	12/16/1998	Physical	T	T	T	F	F	T	Clay under 1cm of sed, tubes
80E	A	12/16/1998	Physical	F	F	F	F	F	T	Flecks of clay, surface chunks
80E	B	12/16/1998	Physical	F	T	F	F	F	T	Flecks of clay under sed, chips, lg worm, stick?
80E	C	12/16/1998	Physical	F	T	T	F	F	T	
80SE	A	12/16/1998	Physical	T	T	F	F	F	F	Sm clay ball on surface, chips
80SE	B	12/16/1998	Physical	T	T	F	F	F	T	Clay & smears 15cm w/ sed on top, tubes
80SE	C	12/16/1998	Physical	T	T	F	F	F	T	Patches of smeared clay, chips, lg worm, tubes
80S	A	12/16/1998	Physical	T	F	T	F	F	T	layer of clay under sed.
80S	B	12/16/1998	Physical	F	F	F	F	F	T	Big clump of clay
80S	C	12/16/1998	Physical	T	F	F	F	F	T	layer of clay under sed., dense tubes
80SW	A	12/16/1998	Physical	F	F	F	F	F	T	Big clump of clay
80SW	B	12/16/1998	Physical	F	F	F	F	F	T	SM Clay balls under surface
80SW	C	12/16/1998	Physical	F	F	F	F	F	T	
80W	A	12/16/1998	Physical	T	F	T	F	F	T	Big clump of clay, worm @z
80W	B	12/16/1998	Physical	F	F	F	F	F	T	Big clump of clay
80W	C	12/16/1998	Physical	F	F	T	F	F	T	Big clump of clay
80NW	A	12/16/1998	Physical	T	F	T	F	F	F	Burrow filled in; wht looks to be clay smears
80NW	B	12/16/1998	Physical	T	T	F	F	F	F	wht looks to be clay streaks, tubes, voids
80NW	C	12/16/1998	Physical	T	T	F	F	F	F	wht looks to be clay streaks, tubes, voids
120N	A	12/16/1998	Physical	T	T	F	F	F	T	Smears appear to be clay from last shot, worm@z
120N	B	12/16/1998	Physical	F	F	F	F	F	T	Clay dredge covered by sed
120N	C	12/16/1998	Physical	T	F	F	F	F	T	1 sm clay ball smeared about 5cm deep
120NE	A	12/16/1998	Physical	T	F	F	F	F	F	dense tubes
120NE	B	12/16/1998	Physical	T	T	F	F	F	F	Clay flecks appear 1cm below sed; lg worm@z
120NE	C	12/16/1998	Physical	T	T	F	F	F	F	worm @z
120E	A	12/16/1998	Physical	T	F	F	F	F	T	V.sm clay flecks smeared, chips, sm tubes
120E	B	12/16/1998	Physical	T	F	F	F	F	T	V.sm clay flecks smeared, lg dense tubes
120E	C	12/16/1998	Physical	T	T	F	F	F	T	dense tubes
120SE	A	12/16/1998	Physical	T	F	T	F	F	T	2 sm smeared clay flecks, chips, lg tubes
120SE	B	12/16/1998	Physical	T	F	F	F	F	F	clay chips
120SE	C	12/16/1998	Physical	T	F	F	F	F	F	worm @z

Appendix D2
CHCP Single Barge (COS) Tertiary Station REMOTS® Sediment-Profile Imaging Data from the December 1998 Survey

Station	Replicate	Date	Camera Penetration Mean (cm)	Dredged Material	Dredged Material Thickness Mean (cm)	Grain Size Major Mode (phi)	Apparent RPD Thickness (cm)	Color	Sediment Description
120S	A	12/16/1998	17.50	T	1.00	>4	1.0	WHT/TAN/BLK	SILT
120S	B	12/16/1998	13.50	T	3.00	>4	2.5	WHT/TAN/BLK	SILT
120S	C	12/16/1998	14.50	T	4.00	>4	1.5	WHT/TAN/BLK	SILT
120SW	A	12/16/1998	16.00	T	1.00	>4	1.0	WHT/TAN/BLK	SILT
120SW	B	12/16/1998	17.50	T	1.00	>4	3.0	TAN/BLK	SILT
120SW	C	12/16/1998	15.50	T	1.00	>4	1.5	WHT/TAN/BLK	SILT
120W	A	12/16/1998	10.00	T	3.00	>4	2.0	WHT/TAN/BLK	CLAY
120W	B	12/16/1998	14.00	T	4.00	>4	1.0	WHT/TAN/BLK	CLAY
120W	C	12/16/1998	14.00	T	3.00	>4	1.0	WHT/TAN/BLK	SILT
120NW	A	12/16/1998	12.50	F	0.00	>4	5.0	TAN/BLK	SILT
120NW	B	12/16/1998	14.00	F	0.00	>4	5.0	TAN/BLK	SILT
120NW	C	12/16/1998	15.00	F	0.00	>4	3.0	TAN/BLK	SILT
160N	A	12/16/1998	15.00	F	0.00	>4	3.0	WHT/TAN/BLK	SILT
160N	B	12/16/1998	12.50	F	0.00	>4	8.0	WHT/TAN/BLK	SILT
160N	C	12/16/1998	14.00	F	0.00	>4	4.0	TAN/BLK	SILT
160NE	A	12/16/1998	15.00	T	3.00	>4	5.0	TAN/BLK	SILT
160NE	B	12/16/1998	15.00	F	0.00	>4	10.0	TAN/BLK	SILT
160NE	C	12/16/1998	16.00	F	0.00	>4	10.0	TAN/BLK	SILT
160E	A	12/16/1998	14.00	F	0.00	>4	6.5	TAN/BLK	SILT
160E	B	12/16/1998	17.50	F	0.00	>4	6.0	TAN/BLK	SILT
160E	C	12/16/1998	15.00	F	0.00	>4	5.0	TAN/BLK	SILT
160SE	A	12/16/1998	17.00	F	0.00	>4	6.0	TAN/BLK	SILT
160SE	B	12/16/1998	15.00	F	0.00	>4	8.0	TAN/BLK	SILT
160SE	C	12/16/1998	16.50	F	0.00	>4	4.5	TAN/BLK	SILT
160S	A	12/16/1998	16.00	F	0.00	>4	5.0	TAN/BLK	SILT
160S	B	12/16/1998	14.00	F	0.00	>4	3.0	TAN/BLK	SILT
160S	C	12/16/1998	12.00	F	0.00	>4	3.0	TAN/BLK	SILT
160SW	A	12/16/1998	15.00	T	1.00	>4	5.0	TAN/BLK	SILT
160SW	B	12/16/1998	15.00	T	1.00	>4	5.0	TAN/BLK	SILT
160SW	C	12/16/1998	15.00	F	0.00	>4	5.0	TAN/BLK	SILT
160W	A	12/16/1998	14.50	F	0.00	>4	5.0	TAN/BLK	SILT
160W	B	12/16/1998	15.00	F	0.00	>4	5.0	TAN/BLK	SILT
160W	C	12/16/1998	14.00	F	0.00	>4	10.0	TAN/BLK	SILT
160NW	A	12/16/1998	11.00	F	0.00	>4	11.0	TAN/BLK	SILT
160NW	B	12/16/1998	15.00	F	0.00	>4	5.0	TAN/BLK	SILT
160NW	C	12/16/1998	12.50	F	0.00	>4	4.0	TAN/BLK	SILT

Appendix D2
CHCP Single Barge (COS) Tertiary Station REMOTS® Sediment-Profile Imaging Data from the December 1998 Survey

Station	Replicate	Date	Surface Roughness	Tubes	Feeding Voids	Burrow	Pebbles	Plant	W_Smears	Comments
120S	A	12/16/1998	Physical	T	T	F	F	F	T	SM Clay balls under surface, tubes, void
120S	B	12/16/1998	Physical	F	T	F	F	F	T	SM Clay balls under surface
120S	C	12/16/1998	Physical	T	F	T	F	F	T	SM Clay balls under surface, dense tubes
120SW	A	12/16/1998	Physical	T	F	F	F	F	T	SM Clay balls under surface
120SW	B	12/16/1998	Physical	T	T	F	F	F	T	SM Clay balls under surface, clay chips
120SW	C	12/16/1998	Physical	T	F	F	F	F	T	SM Clay balls under surface
120W	A	12/16/1998	Physical	T	T	F	F	F	T	Big clump of clay, dense tubes
120W	B	12/16/1998	Physical	T	F	F	F	F	T	layer of clay under dusting of sed.
120W	C	12/16/1998	Physical	T	T	F	F	F	T	layer of clay under dusting of sed., lg dense tubes
120NW	A	12/16/1998	Physical	T	F	F	F	F	F	lg dense tubes, worms @z
120NW	B	12/16/1998	Physical	T	F	F	F	F	F	Shell frag., dense tubes, clay clump on surface
120NW	C	12/16/1998	Physical	T	F	F	F	F	F	Clump of ? On surface, dense tubes
160N	A	12/16/1998	Physical	T	T	F	F	F	T	dense tubes, voids
160N	B	12/16/1998	Physical	T	F	F	F	F	T	1 sm smear area of clay flecks
160N	C	12/16/1998	Physical	T	F	F	F	F	T	tubes
160NE	A	12/16/1998	Physical	T	T	T	F	F	T	Clay ball 2 cm down below burrow & smeared
160NE	B	12/16/1998	Physical	T	F	F	F	F	T	Sed/clay balls on surface, dense tubes
160NE	C	12/16/1998	Physical	T	F	F	F	F	F	dense tubes
160E	A	12/16/1998	Physical	T	T	F	F	F	F	sloping topography, tubes, void
160E	B	12/16/1998	Physical	T	F	F	F	F	F	tubes
160E	C	12/16/1998	Physical	T	T	F	F	F	F	tubes
160SE	A	12/16/1998	Physical	T	T	T	F	F	F	lg burrowing worm @z, dense tubes
160SE	B	12/16/1998	Physical	T	F	F	F	F	F	tubes
160SE	C	12/16/1998	Physical	T	T	F	F	F	F	New tubes
160S	A	12/16/1998	Physical	T	F	F	F	F	T	1 clay fleck smeared, tubes, sea cucumber?
160S	B	12/16/1998	Physical	T	F	F	F	F	T	surface reworking?
160S	C	12/16/1998	Physical	T	T	F	F	F	T	large void
160SW	A	12/16/1998	Physical	T	F	F	F	F	T	clay flecks under sed, surf clay chips, tubes
160SW	B	12/16/1998	Physical	T	T	F	F	F	T	clay flecks under sed, surf clay chips, tubes
160SW	C	12/16/1998	Physical	F	F	F	F	F	T	wiper clast
160W	A	12/16/1998	Physical	T	F	F	F	F	T	clay flecks under sed, dense tubes
160W	B	12/16/1998	Physical	T	F	F	F	F	T	clay flecks under sed, dense tubes
160W	C	12/16/1998	Physical	F	F	F	F	F	T	clay flecks under sed, worm @z
160NW	A	12/16/1998	Physical	T	F	F	F	F	F	large tubes, worm @z
160NW	B	12/16/1998	Physical	T	F	F	F	F	F	dense tubes, reduced sediment @ surface
160NW	C	12/16/1998	Physical	T	F	F	F	F	F	

Appendix D3
CHCP Precap (COU) REMOTS® Sediment-Profile Imaging Data from the April 1999 Survey

Station	Replicate	Date	Camera Penetration Mean (cm)	Dredged Material	Dredged Material Thickness Mean (cm)	Grain Size Major Mode (phi)	Apparent RPD Thickness (cm)	Color	Sediment Description
50N	A	4/1/1999	0.5	T	>0.5	3-2	INDET	tan	sandy silt
50N	B	4/1/1999	INDET	T	INDET	>4	INDET	tan-yelo	silt/clay
50N	C	4/1/1999	0.5	T	INDET	>4	INDET	tan-yelo	silt/clay
50N	E	4/6/1999	5.6	T	>5.6	4-3	>5.6	tan/yelo/blk	sandy silt
50N	G	4/6/1999	3.0	T	>3.0	4-3	>3.0	tan	sandy silt
50N	H	4/6/1999	4.0	T	>4.0	4-3	1.5	tan/grey/blk	sandy silt
50NE	A	4/6/1999	2.9	T	>2.9	4-3	>2.9	tan	fine sand
50NE	B	4/6/1999	9.2	T	>9.2	4-3	3.0	tan/blk	sandy silt
50NE	D	4/6/1999	3.3	T	>3.3	4-3	1.8	tan/blk	sandy silt
50SE	B	4/6/1999	10.2	T	>10.2	4-3	5.0	tan/blk	sandy silt
50SE	C	4/6/1999	9.1	T	>9.1	4-3	1.8	tan/blk	sandy silt
50S	A	4/1/1999	4.0	T	>4.0	4-3	2.5	tan/blk	sandy silt
50S	B	4/1/1999	4.5	T	>4.5	4-3	2.0	tan/blk	sandy silt
50S	C	4/1/1999	4.8	T	>4.8	4-3	2.8	tan/blk	sandy silt
50S	D	4/6/1999	11.3	T	>11.3	4-3	1.0	tan/blk	sand/silt
50S	E	4/6/1999	7.8	T	>7.8	4-3	2.0	tan/blk	sandy silt
50S	F	4/6/1999	6.5	T	>6.5	>4	2.5	tan/blk	sandy silt
50SW	A	4/1/1999	6.1	T	>6.1	4-3	2.5	tan/blk	sandy silt
50SW	B	4/1/1999	3.8	T	>3.8	4-3	1.5	tan/blk	sandy silt
50SW	C	4/1/1999	0.5	F	0	4-3	INDET	tan	sandy silt
50W	A	4/1/1999	10.0	T	>10.0	4-3	1.5	tan/blk/tan	silt
50W	A	4/6/1999	12.7	T	>12.7	4-3	0.5	tan/blk/tan	sandy silt
50W	B	4/1/1999	7.8	T	>7.8	4-3	2.0	tan/blk/tan	silt
50W	B	4/6/1999	12.6	T	>12.6	4-3	1.0	tan/blk/tan	sandy silt
50W	C	4/1/1999	10.5	T	>10.5	>4	2.0	tan/blk	silt
50W	C	4/6/1999	10.9	T	>10.9	4-3	2.0	tan/blk	sandy silt
50W	D	4/6/1999	11.9	T	>11.9	4-3	1.2	tan/blk	sandy silt
50NW	A	4/1/1999	4.2	T	>4.2	4-3	1.5	tan/blk	sandy silt
50NW	B	4/1/1999	1.3	T	>1.3	4-3	1.2	tan/blk	sandy silt
50NW	C	4/1/1999	7.1	T	>7.1	4-3	2.5	tan/blk	sandy silt
100N	A	4/1/1999	2.0	T	>2.0	3-2	INDET	tan	fine sand
100N	B	4/1/1999	3.0	T	>3.0	3-2	0.5	tan	sandy silt
100N	C	4/1/1999	4.9	T	>4.9	4-3	4.0	tan/blk	sandy silt
100N	D	4/6/1999	8.8	T	>8.8	4-3	2.2	tan/blk	sandy silt
100N	E	4/6/1999	10.3	T	>10.3	4-3	3.0	tan/blk	sandy silt w/clay
100N	F	4/6/1999	5.5	T	>5.5	3-2	INDET	tan	med sand
100NE	B	4/6/1999	5.8	T	>5.8	3-2	1.0	tan/blk	silty sand
100NE	C	4/6/1999	7.6	T	>7.6	4-3	4.0	tan/blk	sandy silt
100NE	E	4/6/1999	11.4	T	>11.4	4-3	3.5	tan/blk/tan	sandy silt
100SE	A	4/6/1999	14.0	T	>14.0	4-3	1.0	tan/blk	sandy silt
100SE	B	4/6/1999	13.8	T	>13.8	4-3	2.0	tan/blk	sandy silt
100S	A	4/1/1999	9.5	T	8.0	3-2	3.0	tan/blk	fine sand
100S	B	4/1/1999	9.7	T	>9.7	3-2	1.5	tan/blk	fine sand/silt
100S	C	4/1/1999	9.1	T	>9.1	3-2	1.2	tan/grey/blk	fine sand/silt
100SW	A	4/6/1999	2.1	T	>2.1	4-3	>2.1	tan	sandy silt
100SW	C	4/6/1999	1.0	T	>1.0	4-3	>1.0	tan	sandy silt
100W	A	4/6/1999	13.3	T	>13.3	4-3	1.0	tan/blk/tan	sandy silt/silt
100W	B	4/6/1999	13.8	T	>13.8	4-3	2.2	tan/blk/tan	sandy silt
100W	B	4/6/1999	10.7	T	>10.7	4-3	4.0	tan/blk	silty sand
100W	C	4/6/1999	15.2	T	>15.2	4-3	1.5	tan/blk/tan	sandy silt/silt
100W	C	4/6/1999	8.8	T	>8.8	4-3	2.0	tan/blk	sandy silt
100W	F	4/6/1999	15.0	T	>15.0	>4	4.0	tan/blk	sandy silt
100W	I	4/6/1999	6.0	T	>6.0	3-2	3.0	tan/blk	silty sand
100W	J	4/6/1999	10.0	T	>10.0	3-2	3.0	tan/blk	silty sand
100W	K	4/6/1999	13.5	T	>13.5	4-3	1.3	tan/blk	sandy silt
100NW	A	4/6/1999	5.0	T	>5.0	3-2	INDET	tan	silty sand
100NW	B	4/6/1999	1.3	T	>1.3	3-2	INDET	tan	silty sand
100NW	D	4/6/1999	INDET	T	INDET	3-2	INDET	tan	silty sand

Appendix D3
CHCP Precap (COU) REMOTS® Sediment-Profile Imaging Data from the April 1999 Survey

Station	Replicate	Date	Surface Roughness	Tubes	Feeding Voids	Burrow	Pebble	Plant	Smears	Comments
50N	A	4/1/1999	physical	F	F	F	T	T	F	sm rocks
50N	B	4/1/1999	physical	F	F	F	F	F	F	no pen, lg yelo clayey rock shapes
50N	C	4/1/1999	physical	F	F	F	F	F	F	no pen, yelo clay in farfield
50N	E	4/6/1999	physical	F	F	F	F	F	F	lots yelo clay
50N	G	4/6/1999	physical	F	F	T	T	F	F	burrow opening, clumps of yelo clay
50N	H	4/6/1999	physical	T	T	T	F	F	F	chaotic, clumpy, sand pocket, yelo clay blobs
50NE	A	4/6/1999	physical	F	F	F	T	F	F	possible dm/possible ambient
50NE	B	4/6/1999	physical	F	F	F	F	F	F	blue clay blobs @ z
50NE	D	4/6/1999	physical	F	F	F	T	F	F	yellow clay blobs
50SE	B	4/6/1999	physical	T	F	F	F	F	F	yellow & blue clay blobs @ z
50SE	C	4/6/1999	physical	T	F	F	F	F	F	blue clay flecks
50S	A	4/1/1999	physical	F	F	F	F	F	F	
50S	B	4/1/1999	physical	F	F	T	F	F	F	
50S	C	4/1/1999	physical	T	F	F	F	F	F	
50S	D	4/6/1999	physical	T	F	F	F	F	F	blue clay streaking
50S	E	4/6/1999	physical	F	F	F	F	F	F	silt w/med sand mixed in, shell bits
50S	F	4/6/1999	biogenic	T	T	T	F	F	F	blue clay blobs @ z
50SW	A	4/1/1999	physical	F	F	F	F	F	F	white clay chips
50SW	B	4/1/1999	physical	F	F	F	T	F	F	lg org rich clayey cohesive blobs has worms
50SW	C	4/1/1999	physical	T	F	F	F	F	F	low/no pen
50W	A	4/1/1999	physical	F	T	T	F	F	F	org matter on surf, sloping surface
50W	A	4/6/1999	biogenic	T	F	F	F	F	F	possible ambient in lower L corner
50W	B	4/1/1999	physical	T	F	F	F	F	F	pulpy looking @ z
50W	B	4/6/1999	biogenic	T	F	F	F	F	F	blue clay flecks, possible ambient @ z, dense tubes
50W	C	4/1/1999	physical	T	T	F	F	F	F	blue clay flecks
50W	C	4/6/1999	physical	T	T	F	F	F	F	blue clay flecks @ z
50W	D	4/6/1999	biogenic	T	F	T	F	F	F	blue clay patches @ z, mature tubes
50NW	A	4/1/1999	physical	F	F	F	F	F	F	reduced mud clasts, burrow opening?, yellow clay
50NW	B	4/1/1999	physical	F	F	F	F	F	F	possible burrow opening, yellow clay
50NW	C	4/1/1999	physical	F	F	F	F	F	F	sm yellow clay blobs
100N	A	4/1/1999	physical	F	F	F	T	F	F	low pen, rocks, yellow clay blobs
100N	B	4/1/1999	physical	F	F	T	F	T	F	yellow clay blobs, burrow, plant
100N	C	4/1/1999	biogenic	T	T	F	F	T	F	sm yellow clay blobs
100N	D	4/6/1999	physical	T	T	T	T	F	F	yellow clay blob @ surf
100N	E	4/6/1999	physical	T	F	T	F	F	F	lg pocket of yellow clay w/burrow, coarse silt
100N	F	4/6/1999	physical	F	F	T	T	F	F	chaotic fabric, yelo clay, pebbles, blk sand, sandy w/silt
100NE	B	4/6/1999	physical	T	F	T	F	T	F	organic matter, blue clay
100NE	C	4/6/1999	physical	F	F	F	T	F	F	pebbles, large clump, yellow & blue clay
100NE	E	4/6/1999	physical	F	F	F	F	F	F	clay flecks @ z
100SE	A	4/6/1999	biogenic	T	T	T	F	F	F	smeared blue clay speckles, dense tubes
100SE	B	4/6/1999	physical	T	F	T	F	T	F	little blue clay smears, plant, sea cucumber in farfield
100S	A	4/1/1999	physical	T	F	T	F	F	F	lg burrow, worm @z
100S	B	4/1/1999	physical	F	T	F	F	F	F	few sm blue clay blobs
100S	C	4/1/1999	physical	T	T	F	F	F	F	
100SW	A	4/6/1999	physical	F	F	T	F	F	F	underpen
100SW	C	4/6/1999	physical	T	F	T	F	F	F	burrow opening, clay in farfield, underpen
100W	A	4/6/1999	biogenic	T	F	F	F	F	F	blue clay flecks @ z
100W	B	4/6/1999	physical	T	T	T	F	F	F	blue flecks
100W	B	4/6/1999	physical	T	T	T	F	F	F	
100W	C	4/6/1999	biogenic	T	F	F	F	F	F	large tubes
100W	C	4/6/1999	physical	F	F	F	F	F	F	pull away
100W	F	4/6/1999	physical	T	F	T	F	F	F	yellow & blue clay blobs
100W	I	4/6/1999	physical	F	F	T	F	F	F	yellow clay clumps
100W	J	4/6/1999	physical	T	F	T	F	F	F	sm yellow clay clumps
100W	K	4/6/1999	biogenic	T	F	F	F	F	F	yelo clay flecks @ z, worms @ z
100NW	A	4/6/1999	physical	F	F	T	F	T	F	chaotic, yellow clay
100NW	B	4/6/1999	physical	F	F	F	F	F	F	possible burrow opening, underpen
100NW	D	4/6/1999	physical	F	F	F	F	F	F	no pen, yellow clay in farfield, underpen

Appendix D3
CHCP Precap (COU) REMOTS® Sediment-Profile Imaging Data from the April 1999 Survey

Station	Replicate	Date	Camera Penetration Mean (cm)	Dredged Material	Dredged Material Thickness Mean (cm)	Grain Size Major Mode (phi)	Apparent RPD Thickness (cm)	Color	Sediment Description
200N	B	4/1/1999	9.4	T	>9.4	4-3	2.2	tan/blk	sandy silt
200N	C	4/1/1999	6.9	T	>6.9	4-3	3.0	tan/blk	sandy silt
200NE	A	4/6/1999	12.8	T	>12.8	>4	2.0	tan/blk	sandy silt
200NE	B	4/6/1999	1.9	T	>1.9	3-2	>1.9	tan/blk	silty sand
200NE	C	4/6/1999	7.5	T	>7.5	3-2	1.8	tan/blk	silty sand
200E	A	4/6/1999	14.9	T	8.0	4-3	2.0	tan/blk/grey	sandy silt/silt
200E	B	4/6/1999	15.9	T	8.0	4-3	0.8	tan/blk/grey	sandy silt/silt
200E	C	4/6/1999	14.9	T	8.0	3-2	1.2	tan/blk/grey	sandy silt/silt
200SE	A	4/6/1999	8.3	T	>8.3	>4	2.0	tan/grey	silt/sand
200SE	D	4/6/1999	9.9	T	>9.9	>4	1.0	tan/grey/blue clay	silt/clay
200SE	E	4/6/1999	9.0	T	>9.0	>4	0.5	tan/grey	sandy silt
200SE	F	4/6/1999	14.4	T	>14.4	>4	2.0	tan/grey/blue clay	sandy silt/clay
200S	A	4/1/1999	12.9	F	0	4-3	3.5	tan	sandy silt
200S	B	4/1/1999	13.8	F	0	4-3	2.0	tan	sand/silt
200S	C	4/1/1999	14.5	F	0	4-3	2.5	tan	sand/silt
200SW	A	4/6/1999	10.0	T	3.5	4-3	2.0	tan/grey	sand/silt
200SW	B	4/6/1999	11.0	T	7.0	4-3	1.5	tan/grey	sandy silt/silt
200SW	C	4/6/1999	8.2	T	2.0	4-3	1.8	tan/grey	sandy silt/silt
200W	A	4/6/1999	14.3	T	6.5	4-3	1.0	blk/grey	sandy silt/silt
200W	B	4/6/1999	15.9	T	7.0	4-3	1.7	blk/grey	sandy silt/silt
200W	C	4/6/1999	14.7	T	3.5	>4	1.4	blk/grey	sandy silt/silt
200NW	A	4/6/1999	12.6	T	4.0	4-3	2.5	grey	sandy silt/silt
200NW	B	4/6/1999	12.7	T	4.0	4-3	1.0	tan/blk/grey	sandy silt/silt
200NW	C	4/6/1999	12.5	T	8.0	4-3	1.6	tan/blk/grey	sandy silt/silt
200NW	D	4/6/1999	12.1	T	>12.1	4-3	2.4	tan/blk	silty sand
200NW	E	4/6/1999	11.3	T	>11.3	4-3	3.5	tan/blk	silty sand
300N	A	4/1/1999	13.5	T	6.0	4-3	2.0	tan	sand/silt
300N	B	4/1/1999	14.0	T	5.0	>4	2.0	tan	sand/silt
300N	C	4/1/1999	11.7	T	7.0	4-3	1.5	tan	sand/silt
300NE	A	4/6/1999	13.4	T	6.0	4-3	2.0	tan/blk/grey	sandy silt/silt
300NE	B	4/6/1999	10.3	T	5.0	4-3	1.0	tan/blk/grey	sandy silt/silt
300NE	C	4/6/1999	13.0	T	4.0	4-3	1.0	tan/blk/grey	sandy silt/silt
300NE	D	4/6/1999	12.2	T	3.5	4-3	0.8	tan/blk/grey	sandy silt/silt
300E	A	4/6/1999	15.8	T	4.5	>4	1.0	tan/blk/grey	sandy silt/silt
300E	B	4/6/1999	15.3	T	4.5	>4	2.0	tan/blk/grey	sandy silt/silt
300E	C	4/6/1999	15.1	T	4.0	>4	1.6	tan/blk/grey	sandy silt/silt
300SE	A	4/6/1999	14.8	F	0	>4	1.5	tan	sand/silt
300SE	B	4/6/1999	16.0	F	0	>4	1.3	tan	sand/silt
300SE	C	4/6/1999	12.3	F	0	>4	2.3	tan	sand/silt
300SE	D	4/6/1999	11.0	F	0	>4	4.5	tan	sand/silt
300S	A	4/1/1999	11.5	F	0	>4	1.5	tan	silt
300S	B	4/1/1999	12.6	F	0	>4	1.2	tan	silt
300S	C	4/1/1999	14.6	F	0	>4	1.0	tan	silt
300SW	A	4/6/1999	14.2	F	0	>4	1.2	grey	silt
300SW	B	4/6/1999	14.0	F	0	>4	1.0	grey	silt
300SW	C	4/6/1999	15.7	F	0	>4	1.5	grey	silt
300W	A	4/6/1999	13.9	F	0	>4	2.0	grey	silt
300W	B	4/6/1999	15.1	F	0	>4	1.3	grey	silt
300W	C	4/6/1999	15.8	F	0	>4	1.6	grey	silt
300NW	A	4/6/1999	5.2	T	4.0	4-3	1.2	tan/blk	sandy silt
300NW	B	4/6/1999	12.0	T	3.0	>4	1.0	tan/grey	sandy silt/silt
300NW	C	4/6/1999	14.4	T	3.5	>4	2.5	grey	sandy silt/silt

Appendix D3
CHCP Precap (COU) REMOTS® Sediment-Profile Imaging Data from the April 1999 Survey

Station	Replicate	Date	Surface Roughness	Tubes	Feeding Voids	Burrow	Pebble	Plant	Smears	Comments
200N	B	4/1/1999	physical	T	T	F	F	F	F	blue clay blobs
200N	C	4/1/1999	physical	T	F	F	T	T	F	
200NE	A	4/6/1999	physical	T	T	F	F	F	F	
200NE	B	4/6/1999	physical	T	F	F	T	F	F	low pen
200NE	C	4/6/1999	physical	T	T	T	F	F	F	sm blue clay blobs
200E	A	4/6/1999	biogenic	T	F	F	F	F	F	dm/ambient, dense tubes
200E	B	4/6/1999	biogenic	T	F	F	F	F	F	dm/ambient, dense tubes
200E	C	4/6/1999	physical	T	F	F	F	F	F	dm/ambient, some yelo clay
200SE	A	4/6/1999	physical	T	F	T	F	F	F	blue clay blob @ z
200SE	D	4/6/1999	biogenic	T	T	T	F	F	F	lg blue clay @ z
200SE	E	4/6/1999	physical	T	F	F	F	F	T	lg + sm blue clay blobs
200SE	F	4/6/1999	physical	T	T	T	F	F	T	lots blue clay
200S	A	4/1/1999	physical	T	F	F	F	F	F	clast
200S	B	4/1/1999	physical	F	F	F	F	F	F	worm@ z, sea cucumber @ z
200S	C	4/1/1999	biogenic	T	F	F	F	F	F	sea cucumber near surf, worm @ surface
200SW	A	4/6/1999	biogenic	T	F	F	F	F	F	dm/ambient
200SW	B	4/6/1999	physical	T	F	T	F	F	F	dm/ambient, white clay
200SW	C	4/6/1999	physical	T	F	F	F	F	F	lg clump clay/hit previous penetration
200W	A	4/6/1999	biogenic	T	T	F	F	T	F	dm/ambient, stick
200W	B	4/6/1999	physical	T	F	F	F	F	F	dm/ambient, clast
200W	C	4/6/1999	biogenic	T	F	F	F	F	F	dm/ambient, dense tubes
200NW	A	4/6/1999	biogenic	T	T	F	F	F	F	dm/ambient, irregular topography
200NW	B	4/6/1999	biogenic	T	F	F	F	F	F	dm/ambient
200NW	C	4/6/1999	biogenic	T	F	F	F	F	F	dm/ambient
200NW	D	4/6/1999	physical	T	F	F	F	F	F	
200NW	E	4/6/1999	physical	T	F	T	F	F	F	possible burrow opening
300N	A	4/1/1999	biogenic	T	T	F	F	F	F	lots tubes, some blk patches @ z
300N	B	4/1/1999	physical	T	F	F	F	F	F	
300N	C	4/1/1999	biogenic	T	T	F	F	T	F	tube mats, plant frags, stick
300NE	A	4/6/1999	physical	T	T	F	F	F	F	dm/ambient
300NE	B	4/6/1999	biogenic	T	T	T	F	F	F	dm/ambient, dense tubes
300NE	C	4/6/1999	biogenic	T	T	T	F	F	F	dm/ambient, clay chunk
300NE	D	4/6/1999	physical	T	F	F	F	F	F	dm/ambient
300E	A	4/6/1999	biogenic	T	F	F	F	F	F	dm/ambient, dense tubes
300E	B	4/6/1999	biogenic	T	F	F	F	F	F	dm/ambient, dense tubes
300E	C	4/6/1999	biogenic	T	F	F	F	F	F	dm/ambient, tubes
300SE	A	4/6/1999	physical	T	F	F	F	F	F	ambient sediment
300SE	B	4/6/1999	biogenic	T	F	F	F	F	F	ambient, lots tubes
300SE	C	4/6/1999	biogenic	T	F	T	F	F	T	ambient, blue clay blobs
300SE	D	4/6/1999	biogenic	T	F	T	F	F	F	ambient, dense tubes, sloping topography
300S	A	4/1/1999	physical	T	T	T	F	F	F	ambient sed, grey w/ blk smears
300S	B	4/1/1999	biogenic	T	F	F	F	F	F	ambient sed, shell frag, lots tubes
300S	C	4/1/1999	physical	T	F	F	T	F	F	ambient sediment
300SW	A	4/6/1999	biogenic	T	F	F	F	F	F	ambient, dense tubes
300SW	B	4/6/1999	biogenic	T	F	F	F	F	F	ambient, worms @ z, dense tubes
300SW	C	4/6/1999	biogenic	T	T	F	F	F	F	ambient sed, dense tubes, sloping topography
300W	A	4/6/1999	biogenic	T	F	F	F	F	F	ambient sed, mulinia?, dense tubes
300W	B	4/6/1999	biogenic	T	T	F	F	F	F	ambient sed, dense tubes
300W	C	4/6/1999	biogenic	T	F	F	F	F	F	ambient sed, worm @z, tubes
300NW	A	4/6/1999	biogenic	T	F	F	F	F	F	dm/ambient, dense tubes
300NW	B	4/6/1999	biogenic	T	F	T	F	F	F	dm/ambient, sloping topography, white clay
300NW	C	4/6/1999	biogenic	T	T	T	F	F	F	dm/ambient, white clay

Appendix D4
CHCP Postcap (COC) REMOTS® Sediment-Profile Imaging Data from the Summer 2000 Survey

Station	Replicate	Date	Successional Stage	Grain Size (phi)			Mud Clasts		Camera Penetration (cm)				Dredged Material Thickness (cm)				Redox Rebound Thickness		
				Min	Max	Maj Mode	Count	Avg. Diam	Min	Max	Range	Mean	Area	Min	Max	Mean	Min	Max	Mean
CTR	A	8/27/2000	ST_I	2	>4	>4	0	0	7.46	9.05	1.59	8.25	0	7.46	9.05	>8.25	0	0	0
CTR	B	8/27/2000	ST_I	3	>4	>4	0	0	5.61	6.67	1.06	6.14	0	5.61	6.67	>6.14	0	0	0
CTR	C	8/27/2000	ST_I	3	>4	>4	0	0	8.36	9.68	1.32	9.02	0	8.36	9.68	>9.02	0	0	0
50N	A	9/24/2000	ST_I	3	>4	>4	0	0	8.54	9.95	1.41	9.24	0	8.54	9.95	>9.24	0	0	0
50N	B	9/24/2000	ST_I_ON_III	2	>4	>4	1	0.66	9.85	10.4	0.56	10.13	0	9.85	10.4	>10.13	0	0	0
50N	C	9/24/2000	INDET	2	>4	>4	0	0	9.75	12.93	3.18	11.34	0	9.75	12.93	>11.34	0	0	0
50NE	B	8/27/2000	ST_I	3	>4	>4	0	0	4.34	6.93	2.59	5.63	0	4.34	6.93	>5.63	0	0	0
50NE	C	8/27/2000	ST_I	2	>4	>4	0	0	7.41	9.63	2.22	8.52	0	7.41	9.63	>8.52	0	0	0
50NE	D	9/24/2000	ST_I	2	>4	>4	0	0	8.1	9.35	1.25	8.73	0	8.1	9.35	>8.73	0	0	0
50E	A	8/27/2000	ST_I	3	4	>4	0	0	2.7	4.44	1.75	3.57	0	2.7	4.44	>3.57	0	0	0
50E	B	8/27/2000	ST_I	2	>4	>4	0	0	4.76	10.79	6.03	7.78	0	4.76	10.79	>7.78	0	0	0
50E	E	9/24/2000	ST_I	2	>4	>4	0	0	9.63	10.89	1.26	10.26	0	9.63	10.89	>10.26	0	0	0
50SE	B	9/24/2000	ST_I	2	>4	>4	0	0	11.72	12.88	1.16	12.3	0	11.72	12.88	>12.3	0	0	0
50SE	C	9/24/2000	ST_I	2	>4	>4	0	0	10	10.76	0.76	10.38	0	10	10.76	>10.38	0	0	0
50SE	D	9/24/2000	ST_I	2	>4	>4	0	0	6.87	7.63	0.76	7.25	0	6.87	7.63	>7.25	0	0	0
50S	A	9/24/2000	ST_I	2	>4	>4	0	0	5.4	7.58	2.17	6.49	0	5.4	7.58	>6.49	0	0	0
50S	E	10/24/2000	ST_I	3	>4	>4	0	0	11.84	12.89	1.05	12.37	0	11.84	12.89	>12.37	0	0	0
50S	F	10/24/2000	ST_I	3	>4	>4	0	0	10.84	14.21	3.37	12.53	0	10.84	14.21	>12.53	0	0	0
50SW	A	8/27/2000	ST_I	3	>4	>4	0	0	13.23	14.6	1.38	13.92	0	13.23	14.6	>13.92	0	0	0
50SW	B	8/27/2000	ST_I	3	>4	>4	0	0	11.64	12.86	1.22	12.25	0	11.64	12.86	>12.25	0	0	0
50SW	C	8/27/2000	ST_I	3	>4	>4	0	0	17.67	18.25	0.58	17.96	0	17.67	18.25	>17.96	0	0	0
50W	A	8/27/2000	ST_I	3	>4	>4	0	0	10.05	13.76	3.7	11.9	0	10.05	13.76	>11.9	0	0	0
50W	C	8/27/2000	ST_I	3	>4	>4	0	0	10.32	13.02	2.7	11.67	0	10.32	13.02	>11.67	0	0	0
50W	E	10/24/2000	ST_I	3	>4	>4	5	0.78	14.47	15.74	1.26	15.11	0	14.47	15.74	>15.11	0	0	0
50NW	A	9/24/2000	ST_I	2	>4	>4	0	0	10.1	10.81	0.71	10.45	0	10.1	10.81	>10.45	0	0	0
50NW	B	9/24/2000	ST_I	2	>4	>4	0	0	10.1	11.36	1.26	10.73	0	10.1	11.36	>10.73	0	0	0
50NW	C	9/24/2000	ST_I	2	>4	>4	0	0	11.06	12.37	1.31	11.72	0	11.06	12.37	>11.72	0	0	0
100N	C	9/24/2000	ST_I_ON_III	3	>4	>4	0	0	10.1	11.82	1.72	10.96	0	10.1	11.82	>10.96	0	0	0
100N	D	10/24/2000	ST_I	3	>4	>4	5	0.39	8.37	10.37	2	9.37	0	8.37	10.37	>9.37	0	0	0
100N	E	10/24/2000	INDET	2	>4	>4	0	0	17.11	18.53	1.42	17.82	0	17.11	18.53	>17.82	0	0	0
100NE	A	8/27/2000	ST_I	2	>4	>4	4	0.54	11.22	11.59	0.37	11.4	0	11.22	11.59	>11.4	0	0	0
100NE	B	8/27/2000	ST_I	2	>4	>4	0	0	8.57	9.79	1.22	9.18	0	8.57	9.79	>9.18	0	0	0
100NE	C	8/27/2000	ST_I	2	>4	>4	0	0	6.72	7.88	1.16	7.3	0	6.72	7.88	>7.3	0	0	0
100E	A	8/27/2000	ST_I	2	>4	4 to 3	0	0	10.05	10.53	0.48	10.29	0	10.05	10.53	>10.29	0	0	0
100E	B	8/27/2000	ST_I	2	>4	>4	0	0	11.53	12.43	0.9	11.98	0	11.53	12.43	>11.98	0	0	0
100E	D	9/24/2000	ST_I	3	>4	>4	0	0	10.25	10.9	0.65	10.58	0	10.25	10.9	>10.58	0	0	0
100SE	A	9/24/2000	ST_I	2	>4	>4	0	0	9.7	11.16	1.46	10.43	0	9.7	11.16	>10.43	0	0	0
100SE	B	9/24/2000	ST_I	2	>4	>4	4	0.68	9.65	11.52	1.87	10.58	0	9.65	11.52	>10.58	0	0	0
100SE	C	9/24/2000	ST_I	2	>4	>4	4	0.68	12.32	13.23	0.91	12.78	0	12.32	13.23	>12.78	0	0	0
100S	A	9/24/2000	ST_I	2	>4	>4	0	0	12.78	13.74	0.96	13.26	0	12.78	13.74	>13.26	0	0	0
100S	B	9/24/2000	ST_I	2	>4	>4	0	0	12.07	12.68	0.61	12.37	0	12.07	12.68	>12.37	0	0	0
100S	D	10/24/2000	ST_I	2	>4	>4	4	0.37	11.89	12.95	1.05	12.42	0	11.89	12.95	>12.42	0	0	0
100SW	A	8/27/2000	ST_I	4	>4	>4	0	0	7.04	7.88	0.85	7.46	0	7.04	7.88	>7.46	0	0	0
100SW	B	8/27/2000	ST_I	3	>4	>4	0	0	2.49	3.97	1.48	3.23	0	2.49	3.97	>3.23	0	0	0
100SW	D	9/24/2000	ST_I	3	>4	>4	0	0	12.7	13.2	0.5	12.95	0	12.7	13.2	>12.95	0	0	0
100W	D	9/24/2000	ST_I	3	>4	>4	0	0	10.2	11.6	1.4	10.9	0	10.2	11.6	>10.9	0	0	0
100W	F	9/24/2000	ST_I	3	>4	>4	0	0	6.25	7.15	0.9	6.7	0	6.25	7.15	>6.7	0	0	0
100W	E	10/24/2000	ST_I	3	>4	>4	0	0	5.68	12.37	6.68	9.03	0	5.68	12.37	>9.03	0	0	0

Appendix D4
CHCP Postcap (COC) REMOTS® Sediment-Profile Imaging Data from the Summer 2000 Survey

Station	Replicate	Date	Apparent RPD Thickness (cm) Min	Max	Mean	Count	Methane Min	Max	Mean	OSI	Surface Roughness	Low DO	Comments
CTR	A	8/27/2000	0.16	2.54	1.72	0	0	0	0	4	PHYSICAL	NO	CDM>P; COHESIVE CLAY @ Z; BROWN MUD @ SURFACE=RPD
CTR	B	8/27/2000	1.32	4.55	3.52	0	0	0	0	6	PHYSICAL	NO	CDM>P; COHESIVE CLAY CLASTS @ Z; BROWN MUD @ SURF=RPD
CTR	C	8/27/2000	0.32	3.39	1.98	0	0	0	0	4	PHYSICAL	NO	CDM>P; COHESIVE CLAY @ Z; BROWN MUD @ SURFACE=RPD
50N	A	9/24/2000	1.21	3.54	2.24	0	0	0	0	4	PHYSICAL	NO	CDM>PEN; BR MUD/GR&BK CLAY; SM SURF TUBES; BRN MUD @ SURFACE=RPD
50N	B	9/24/2000	2.37	5.56	3.95	0	0	0	0	11	PHYSICAL	NO	CDM>PEN; BR MUD/BK&GR MOTTLED CLAY; SM SURF TUBE; SM FEEDING VOID
50N	C	9/24/2000	1.3	6.58	3.5	0	0	0	0	99	PHYSICAL	NO	CDM>PEN; SAND/BR MUD/GR&BK CLAY; FRACTURES; BRN MUD @ SURF=RPD
50NE	B	8/27/2000	0.79	2.7	1.98	0	0	0	0	4	PHYSICAL	NO	CDM>P; CLAY CLAST & FISSURE FR PLACEMENT; BRN MUD @SURF=RPD
50NE	C	8/27/2000	1.53	4.44	3.35	0	0	0	0	6	PHYSICAL	NO	CDM>P; COHESIVE CLAY @ Z; BROWN MUD @ SURFACE=RPD
50NE	D	9/24/2000	0.9	5.55	3.27	0	0	0	0	6	PHYSICAL	NO	CDM>PEN; BR MUD/BK W/GR MOTTLES CLAY; SM SURF TUBES; BRN MUD=RPD
50E	A	8/27/2000	0.05	3.7	2.79	0	0	0	0	5	PHYSICAL	NO	CDM>P; COHESIVE CLAY @ Z; BROWN MUD @ SURFACE=RPD
50E	B	8/27/2000	0.11	4.66	2.08	0	0	0	0	4	PHYSICAL	NO	CDM>P; LG CLAY CHUNK ON SURF; COH CLAY @Z; POSS BURROWS?; BRN MUD @SURF
50E	E	9/24/2000	0.52	5.03	2.55	0	0	0	0	5	PHYSICAL	NO	CDM>P; BRN MUD/BLK GRY CLAY; COH CLAY; CLAY FRACTURE; BRN MUD @SURF=RPD
50SE	B	9/24/2000	1.82	5.81	2.52	0	0	0	0	5	PHYSICAL	NO	CDM>PEN; BR MUD/GR-BK CLAY
50SE	C	9/24/2000	1.87	3.59	2.88	0	0	0	0	5	PHYSICAL	NO	CDM>PEN; BR MUD/GR CLAY; BROWN MUD=RPD; THIN SURFACE VENEER OF SAND
50SE	D	9/24/2000	1.87	3.59	2.88	0	0	0	0	5	PHYSICAL	NO	CDM>PEN; BR MUD/DK GR CCLAY; FRACTURES; BRN MUD=RPD
50S	A	9/24/2000	0.81	3.28	2.1	0	0	0	0	4	PHYSICAL	NO	CDM>PEN; BR MUD/GR&BK CLAY; BROWN MUD=RPD
50S	E	10/24/2000	1.26	4.16	2.67	0	0	0	0	5	BIOGENIC	NO	CDM>P; BRN MUD/BLK GRY CLAY; COH CLAY; DENSE TUBES; WORM @Z; BRN MUD=RPD
50S	F	10/24/2000	0.95	2.5	1.5	0	0	0	0	3	PHYSICAL	NO	CDM>P; BRN MUD/BLK GRY MOTLD CLAY; COH CLAY; WORMS @Z;DIST SURF
50SW	A	8/27/2000	0.37	3.12	1.69	0	0	0	0	4	PHYSICAL	NO	CDM>P; SM COHESIVE CLAY CHUNKS @ Z; BRN MUD @ SURFACE=RPD
50SW	B	8/27/2000	0.26	5.03	2.44	0	0	0	0	5	PHYSICAL	NO	CDM>P; COH CLAY @ Z; BRN MUD @SURF=RPD; CLAST&FISSURE FR PLACEMNT
50SW	C	8/27/2000	0.11	4.07	2.13	0	0	0	0	4	PHYSICAL	NO	CDM>P; COHESIVE CLAY @ Z; BROWN MUD @ SURFACE=RPD
50W	A	8/27/2000	1.06	4.39	3.09	0	0	0	0	6	PHYSICAL	NO	CDM>P; COHESIVE CLAY @ Z; BROWN MUD @ SURFACE=RPD
50W	C	8/27/2000	0.05	3.33	1.62	0	0	0	0	4	PHYSICAL	NO	CDM>P; COHESIVE CLAY @ Z; BROWN MUD @ SURFACE=RPD
50W	E	10/24/2000	3.05	4.47	3.79	0	0	0	0	7	PHYSICAL	NO	CDM>P; BRN MUD/MOTLED GRY CLAY; COH CLAY; TUBES; OX CLSTS; BRN MUD=RPD
50NW	A	9/24/2000	1.41	6.47	3.5	0	0	0	0	6	PHYSICAL	NO	CDM>PEN; BR MUD/GR&BK MOTTLED CLAY; BROWN MUD=RPD
50NW	B	9/24/2000	0.5	4.5	2.5	0	0	0	0	5	PHYSICAL	NO	CDM>PEN; BR MUD/GR SILT W/SAND; FRACTURES; BRN MUD=RPD
50NW	C	9/24/2000	1.62	5.25	3.21	0	0	0	0	6	PHYSICAL	NO	CDM>PEN; BR MUD/GR&BK MOTTLED CLAY; BROWN MUD=RPD
100N	C	9/24/2000	0.05	2.88	1.52	0	0	0	0	8	PHYSICAL	NO	CDM>PEN; BR MUD/GR&BK MOTLED CLAY W/SAND; VOID ON RT; BRN MUD=RPD
100N	D	10/24/2000	2.5	2.5	2.5	0	0	0	0	5	INDET	NO	CDM>P; BRN SILTY CLAY/MOTLED BLK GRY CLAY; DIST SURF; TUBES;CLSTS;BR MUD=RPD
100N	E	10/24/2000	0.47	3.16	1.24	0	0	0	0	99	INDET	NO	CDM>P; BRN MUD/ BLK GRY MOTTLED CLAY; COH CLAY; DIST SURF; WORM @Z
100NE	A	8/27/2000	0.9	4.34	2.89	0	0	0	0	5	PHYSICAL	NO	CDM>P; OX CLASTS; COHESIVE CLAY @ Z; BRN MUD @ SURF=RPD
100NE	B	8/27/2000	0.74	3.86	2.12	0	0	0	0	4	PHYSICAL	NO	CDM>P; VOID SPACES @ Z; BROWN MUD @ SURFACE=RPD
100NE	C	8/27/2000	1.9	3.49	2.61	0	0	0	0	5	PHYSICAL	NO	CDM>P; COHESIVE CLAY @ Z; BROWN MUD @ SURFACE=RPD
100E	A	8/27/2000	0.9	3.7	2.16	0	0	0	0	4	PHYSICAL	NO	CDM>P; BRN MUD/MUDDY SAND; COHESIVE CLAY @ Z; BRN MUD = RPD
100E	B	8/27/2000	0.37	3.54	2.37	0	0	0	0	5	PHYSICAL	NO	CDM>P; COHESIVE CLAY @ Z; BROWN MUD @ SURFACE=RPD
100E	D	9/24/2000	2.1	6.45	4.1	0	0	0	0	7	PHYSICAL	NO	CDM>PEN; BR MUD/BK CLAY W/GR MOTTLES; BRN MUD @ SURFACE=RPD
100SE	A	9/24/2000	0.91	2.47	1.34	0	0	0	0	3	PHYSICAL	NO	CDM>PEN; BR MUD/DK GR/GRAY CLAY; FRACTURES
100SE	B	9/24/2000	1.11	4.75	2.97	0	0	0	0	5	PHYSICAL	NO	CDM>PEN; BR MUD/GR CLAY; BROWN MUD=RPD
100SE	C	9/24/2000	1.21	3.21	2.22	0	0	0	0	4	PHYSICAL	NO	CDM>PEN; BR MUD/MOTTLED GR-BK CLAY; WORM
100S	A	9/24/2000	1.36	5.91	2.78	0	0	0	0	5	PHYSICAL	NO	CDM>PEN; BR MUD/DK GR CLAY; SM SURF TUBES; BRN MUD=RPD
100S	B	9/24/2000	0.1	1	0.5	0	0	0	0	2	PHYSICAL	NO	CDM>PEN; GR CLAY; FRACTURES @Z; THIN RPD
100S	D	10/24/2000	0.95	4.37	2.38	0	0	0	0	5	PHYSICAL	NO	CDM>P; BRN MUD/BLK GRY MOTLD CLAY; COH CLAY; TUBES; OX CLSTS; BRN MUD=RPD
100SW	A	8/27/2000	0.05	2.86	1.46	0	0	0	0	3	PHYSICAL	NO	CDM>P; COHESIVE CLAY @ Z; BROWN MUD @ SURFACE=RPD
100SW	B	8/27/2000	0.16	2.91	1.95	0	0	0	0	4	PHYSICAL	NO	CDM>P; COHESIVE CLAY W/ BRN MUD @ SURFACE; TUBES ON CLAY
100SW	D	9/24/2000	0.15	4.8	2.95	0	0	0	0	5	PHYSICAL	NO	CDM>PEN; BR MUD/MOTTLED BK&GR CLAY; FRACTURES
100W	D	9/24/2000	0.5	3.5	2	0	0	0	0	4	PHYSICAL	NO	CDM>PEN; BR MUD/MOTTLED GR&BK CLAY; STIFF CLAY W/ FRACTURES
100W	F	9/24/2000	0.75	3.65	2.32	0	0	0	0	5	PHYSICAL	NO	CDM>PEN; BR MUD/BK&GR CLAY; BROWN MUD @SURF=RPD
100W	E	10/24/2000	0.42	4.42	2.53	0	0	0	0	5	PHYSICAL	NO	CDM>P; BRN MUD/ BLK GRY CLAY; COH CLAY; TUBES; RED SED?; DIST SURF; BRN MUD=RPD

Appendix D4
CHCP Postcap (COC) REMOTS® Sediment-Profile Imaging Data from the Summer 2000 Survey

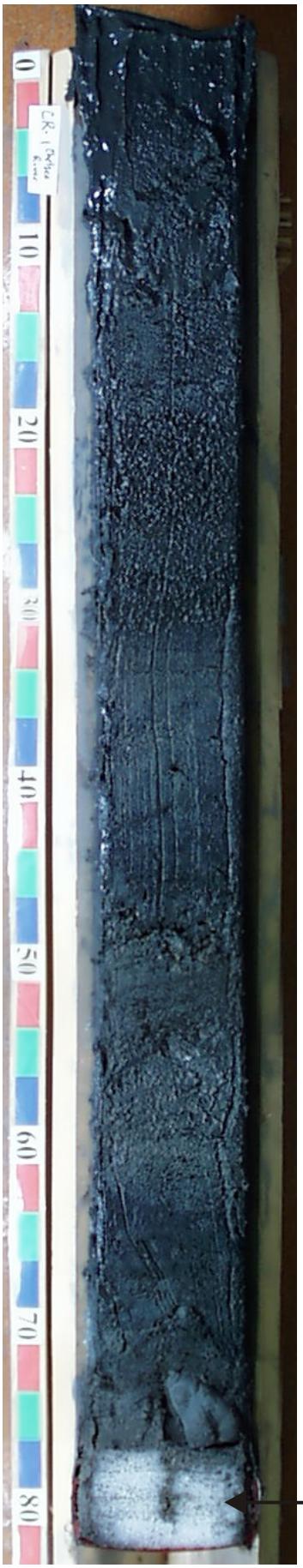
Station	Replicate	Date	Successional Stage	Grain Size (phi)			Mud Clasts		Camera Penetration (cm)				Dredged Material Thickness (cm)				Redox Rebound Thickness		
				Min	Max	Maj Mode	Count	Avg. Diam	Min	Max	Range	Mean	Area	Min	Max	Mean	Min	Max	Mean
100NW	A	9/24/2000	ST_I	3	>4	>4	0	0	8.95	11.05	2.11	10	0	8.95	11.05	>10	0	0	0
100NW	C	9/24/2000	ST_I	3	NA	>4	0	0	7.3	10.69	3.38	9	0	7.3	10.69	>9	0	0	0
100NW	E	10/24/2000	INDET	3	>4	>4	0	0	6.58	8.37	1.79	7.47	0	6.58	8.37	>7.47	0	0	0
200N	A	8/27/2000	ST_I	2	>4	>4	0	0	16.14	16.72	0.58	16.43	0	16.14	16.72	>16.43	0	0	0
200N	B	8/27/2000	ST_I	2	>4	>4	0	0	15.66	16.83	1.16	16.24	0	15.66	16.83	>16.24	0	0	0
200N	C	8/27/2000	ST_I	2	>4	>4	0	0	16.19	16.88	0.69	16.53	0	16.19	16.88	>16.53	0	0	0
200NE	A	8/27/2000	ST_I_ON_III	2	>4	>4	0	0	13.44	14.13	0.69	13.78	0	13.44	14.13	>13.78	0	0	0
200NE	B	8/27/2000	ST_I	2	>4	>4	5	0.28	11.85	13.44	1.59	12.65	0	11.85	13.44	>12.65	0	0	0
200NE	C	8/27/2000	ST_I	2	>4	>4	0	0	11.75	14.6	2.86	13.17	0	11.75	14.6	>13.17	0	0	0
200E	B	8/27/2000	ST_I	2	>4	>4	0	0	11.8	13.6	1.8	12.7	0	11.8	13.6	>12.7	0	0	0
200E	C	8/27/2000	ST_I	3	>4	>4	10	0.33	3.49	5.61	2.12	4.55	0	3.49	5.61	>4.55	0	0	0
200E	E	9/24/2000	ST_I	3	>4	>4	0	0	9.35	10.7	1.35	10.03	0	9.35	10.7	>10.03	0	0	0
200SE	A	9/24/2000	ST_I	3	>4	>4	4	0.29	11.26	11.84	0.58	11.55	0	11.26	11.84	>11.55	0	0	0
200SE	B	9/24/2000	ST_I	3	>4	>4	0	0	10.21	10.95	0.74	10.58	0	10.21	10.95	>10.58	0	0	0
200S	A	9/24/2000	ST_I	2	>4	>4	2	0.72	12.02	12.83	0.81	12.42	0	12.02	12.83	>12.42	0	0	0
200S	B	9/24/2000	ST_I	2	>4	>4	0	0	10.45	11.52	1.06	10.98	0	10.45	11.52	>10.98	0	0	0
200S	C	9/24/2000	ST_I	2	>4	>4	0	0	11.72	13.33	1.62	12.53	0	11.72	13.33	>12.53	0	0	0
200SW	B	8/27/2000	ST_I	3	>4	>4	0	0	5.19	6.14	0.95	5.66	0	5.19	6.14	>5.66	0	0	0
200SW	D	9/24/2000	ST_I	3	>4	>4	0	0	9.85	11	1.15	10.43	0	9.85	11	>10.43	0	0	0
200SW	E	9/24/2000	ST_I	3	>4	>4	0	0	12.8	13.7	0.9	13.25	0	12.8	13.7	>13.25	0	0	0
200W	A	8/27/2000	ST_I	3	>4	>4	0	0	10.9	13.97	3.07	12.43	0	10.9	13.97	>12.43	0	0	0
200W	B	8/27/2000	ST_I	3	>4	>4	0	0	6.98	12.01	5.03	9.5	0	6.98	12.01	>9.5	0	0	0
200W	C	8/27/2000	ST_I_ON_III	2	>4	>4	0	0	6.72	7.78	1.06	7.25	0	6.72	7.78	>7.25	0	0	0
200NW	D	10/24/2000	INDET	3	>4	>4	10	0.32	17.16	20.26	3.11	18.71	0	17.16	20.26	>18.71	0	0	0
200NW	F	10/24/2000	ST_I	3	>4	>4	15	0.22	14.26	15.79	1.53	15.03	0	14.26	15.79	>15.03	0	0	0
200NW	I	10/24/2000	ST_I	3	>4	>4	10	0.29	14.26	14.95	0.68	14.61	0	14.26	14.95	>14.61	0	0	0
300N	A	8/27/2000	ST_I	2	>4	>4	0	0	16.24	16.77	0.53	16.51	0	0	0	0	0	0	0
300N	B	8/27/2000	ST_I	2	>4	>4	0	0	16.3	17.04	0.74	16.67	0	0	0	0	0	0	0
300N	C	8/27/2000	ST_I	2	>4	>4	0	0	18.1	19.26	1.16	18.68	0	0	0	0	0	0	0
300NE	A	8/27/2000	ST_I	2	>4	>4	1	1.58	9.42	12.75	3.33	11.08	0	9.42	12.75	>11.08	0	0	0
300NE	B	8/27/2000	ST_I	2	>4	>4	0	0	13.02	16.3	3.28	14.66	0	13.02	16.3	>14.66	0	0	0
300NE	C	8/27/2000	ST_I_ON_III	2	>4	>4	0	0	12.54	13.65	1.11	13.1	0	0	0	0	0	0	0
300E	A	8/27/2000	ST_I_ON_III	2	>4	>4	0	0	5.56	9.79	4.23	7.67	0	5.56	9.79	>7.67	0	0	0
300E	B	8/27/2000	ST_I	2	>4	>4	0	0	14.23	14.76	0.53	14.5	0	14.23	14.76	>14.5	0	0	0
300E	C	8/27/2000	ST_I	2	>4	>4	0	0	7.94	13.55	5.61	10.74	0	7.94	13.55	>10.74	0	0	0
300SE	A	10/24/2000	ST_I	2	>4	>4	0	0	15.26	16.53	1.26	15.89	0	15.26	16.53	>15.89	0	0	0
300SE	B	10/24/2000	ST_I	3	>4	>4	3	0.25	12.74	13.26	0.53	13	0	12.74	13.26	>13	0	0	0
300SE	D	10/24/2000	ST_I	2	>4	>4	0	0	17.47	19.37	1.89	18.42	0	17.47	19.37	>18.42	0	0	0
300S	D	10/24/2000	ST_I	3	>4	>4	4	0.32	15.07	15.47	0.39	15.27	36.53	1.53	3.84	2.61	0	0	0
300S	F	10/24/2000	ST_I	3	>4	>4	0	0	14.16	16.63	2.47	15.39	16.65	0.05	3.99	1.61	0	0	0
300S	G	10/24/2000	ST_I_ON_III	2	>4	>4	0	0	15.89	16.89	1	16.39	14.15	0.3	1.58	0.97	0	0	0
300SW	A	8/27/2000	ST_I	3	>4	>4	0	0	17.94	19.95	2.01	18.94	0	17.94	19.95	>18.94	0	0	0
300SW	B	8/27/2000	ST_I	3	>4	>4	0	0	16.08	18.62	2.54	17.35	0	16.08	18.62	>17.35	0	0	0
300SW	C	8/27/2000	ST_I	3	>4	>4	0	0	15.77	18.15	2.38	16.96	0	15.77	18.15	>16.96	0	0	0
300W	F	9/24/2000	ST_I	3	>4	>4	0	0	8.25	9.6	1.35	8.93	0	8.25	9.6	>8.93	0	0	0
300NW	C	9/24/2000	ST_I	3	>4	>4	0	0	11.91	13.38	1.47	12.65	0	11.91	13.38	>12.65	0	0	0

Appendix D4
CHCP Postcap (COC) REMOTS® Sediment-Profile Imaging Data from the Summer 2000 Survey

Station	Replicate	Date	Apparent RPD Thickness (cm) Min	Max	Mean	Count	Methane Min	Max	Mean	OSI	Surface Roughness	Low DO	Comments
100NW	A	9/24/2000	NA	NA	NA	0	0	0	0	99	PHYSICAL	NO	CDM>P; BRN MUD/GRY CLAY; CLAY FRACTURE
100NW	C	9/24/2000	2.06	4.9	3.63	0	0	0	0	6	PHYSICAL	NO	DM>PEN; BR MUD/GREY CLAY
100NW	E	10/24/2000	NA	NA	NA	0	0	0	0	99	INDET	NO	CDM>P; BRN MUD/GRY CLAY; DISTURBED SURF; TUBES
200N	A	8/27/2000	0.48	5.93	1.99	0	0	0	0	4	PHYSICAL	NO	CDM>P; TUBES; WORMS & COHESIVE CLAY @ Z; BRN MUD @ SURF=RPD
200N	B	8/27/2000	0.42	4.18	2.12	0	0	0	0	4	PHYSICAL	NO	CDM>P; TUBES; COHESIVE CLAY @ Z; BRN MUD @ SURFACE=RPD
200N	C	8/27/2000	0.63	3.39	1.89	0	0	0	0	4	PHYSICAL	NO	CDM>P; DENSE TUBES; BROWN MUD @ SURFACE=RPD
200NE	A	8/27/2000	0.11	4.07	2.24	0	0	0	0	8	PHYSICAL	NO	CDM>P; VOIDS; BURROW?; COH CLAY @Z; WORMS @Z; BRN MUD @ SURF=RPD,YELLOW CLAY
200NE	B	8/27/2000	0.11	5.24	1.93	0	0	0	0	4	PHYSICAL	NO	CDM>P; OX CLASTS; WORM & COHESIVE CLAY @ Z; FISSURE; BRN MUD @SURF=RPD
200NE	C	8/27/2000	1.01	6.61	3.92	0	0	0	0	7	PHYSICAL	NO	CDM>P; TUBES; COH CLAY @ Z; FISSURES FR PLACEMENT; BRN MUD @ SURF=RPD
200E	B	8/27/2000	0.11	4.34	2.68	0	0	0	0	5	PHYSICAL	NO	CDM>P; CLAY CLASTS/CRACKS; COH CLAY@Z; POORLY SORTED; BRN MUD=RPD
200E	C	8/27/2000	0.74	3.86	2.22	0	0	0	0	4	PHYSICAL	NO	CDM>P; COHESIVE CLAY @ Z; BROWN MUD @ SURFACE=RPD
200E	E	9/24/2000	0.25	1.75	1	0	0	0	0	3	PHYSICAL	NO	CDM>PEN; BR MUD/GR CLAY/SAND; FRACTURES IN CLAY
200SE	A	9/24/2000	1.53	4.05	2.74	0	0	0	0	5	PHYSICAL	NO	CDM>P; BRN MUD/BLK CLAY; LENS CONDENSATION; OX CLASTS; WORMS @Z
200SE	B	9/24/2000	3.16	5.95	4.44	0	0	0	0	7	PHYSICAL	NO	CDM>P; BRN MUD/ BLK CLAY; LENS CONDENSATION; TUBES; WORMS @Z
200S	A	9/24/2000	0.5	4.5	2.5	0	0	0	0	5	PHYSICAL	NO	CDM>PEN; BR MUD/GR CLAY; SM SURF TUBES; BROWN MUD=RPD
200S	B	9/24/2000	1.32	5.91	2.26	0	0	0	0	5	PHYSICAL	NO	CDM>PEN; BR MUD/GR CLAY; SM SURF TUBES; BROWN MUD=RPD
200S	C	9/24/2000	1.31	5.1	2.86	0	0	0	0	5	PHYSICAL	NO	CDM>PEN; BR MUD/MOTTLED GR&DK GR CLAY; BRN MUD=RPD
200SW	B	8/27/2000	1.01	2.75	2.05	0	0	0	0	4	PHYSICAL	NO	CDM>P; COHESIVE CLAY; FISSURE DUE TO SETTLING; THIN BRN MUD @SURF=RPD
200SW	D	9/24/2000	1.5	3.65	2.58	0	0	0	0	5	PHYSICAL	NO	CDM>PEN; BR SILT/BK/GR CLAY; BRN MUD @SURFACE=RPD
200SW	E	9/24/2000	1.1	4	3.39	0	0	0	0	6	PHYSICAL	NO	CDM>PEN; BR SILT/BK/GR CLAY; CLAY FRACTURES; BRN MUD=RPD
200W	A	8/27/2000	0.26	3.07	2.15	0	0	0	0	4	PHYSICAL	NO	CDM>P; COHESIVE CLAY THROUGHOUT; BROWN MUD @ SURFACE=RPD
200W	B	8/27/2000	0.32	3.76	1.99	0	0	0	0	4	PHYSICAL	NO	CDM>P; COHESIVE CLAY; CRACKS FR PLACEMENT; BURROW?; BRN MUD @SURF=RPD
200W	C	8/27/2000	0.53	3.92	2.59	0	0	0	0	9	PHYSICAL	NO	CDM>P; COHESIVE CLAY @ Z; BURROW NEAR SURF; VOID; BRN MUD @SURF=RPD
200NW	D	10/24/2000	NA	NA	NA	0	0	0	0	99	INDET	NO	CDM>P; MOTTLED BLK&GRY CLAY; OVERPEN; COHESIVE CLAY; DIST SURF; OX&RED CLASTS
200NW	F	10/24/2000	0.21	2.05	1.15	0	0	0	0	3	INDET	NO	CDM>P; BRN MUD/MOTTLED BLK GRY CLAY; COH CLAY; DIST SURF; STICK
200NW	I	10/24/2000	NA	NA	NA	0	0	0	0	99	INDET	NO	CDM>P; BRN MUD/MOTTLED GRY CLAY; COH CLAY; DIST SURF; OX&RED CLASTS; TUBES
300N	A	8/27/2000	0.05	3.97	2.23	0	0	0	0	4	PHYSICAL	NO	UDM/AMBIENT MUD; SANDY MUD>P; TUBES
300N	B	8/27/2000	0.11	1.43	0.67	0	0	0	0	2	PHYSICAL	NO	UDM/AMBIENT MUD ; SANDY MUD>P; TUBES
300N	C	8/27/2000	0.11	2.49	0.7	0	0	0	0	2	PHYSICAL	NO	UDM/AMBIENT MUD, SANDY MUD>P; WORMS @ Z
300NE	A	8/27/2000	0.05	6.03	2.49	0	0	0	0	5	PHYSICAL	NO	CDM>P; TUBES; OX CLAST; COH CLAY @Z; LG BURROW?; BRN MUD @SURF=RPD
300NE	B	8/27/2000	0.11	2.86	0.83	0	0	0	0	3	PHYSICAL	NO	CDM>P; LG COHESIVE CLAY @ SURF; TUBES; THIN RPD; THIN BRN MUD
300NE	C	8/27/2000	0.05	3.7	1.46	0	0	0	0	7	BIOGENIC	NO	AMBIENT MUD>P; VOIDS; WORM @ Z; FECAL MOUND
300E	A	8/27/2000	0.05	6.03	3.29	0	0	0	0	10	PHYSICAL	NO	CDM>P; VOIDS; BURROW OPNG; COH CLAY @ Z; POORLY SORTED; BRN MUD
300E	B	8/27/2000	0.37	5.93	3.4	0	0	0	0	6	PHYSICAL	NO	CDM>P; POORLY SORTED; BURROW?; BRN MUD @ SURFACE
300E	C	8/27/2000	0.26	7.51	3.44	0	0	0	0	6	PHYSICAL	NO	CDM>P; DISTD SURF; COHESIVE CLAY @ Z; POORLY SORTED; BROWN MUD
300SE	A	10/24/2000	1.53	5.11	3.1	0	0	0	0	6	BIOGENIC	NO	CDM>P; BRN MUD @SURFACE; DENSE TUBES; WORMS @Z
300SE	B	10/24/2000	0.16	1.16	0.48	0	0	0	0	2	PHYSICAL	NO	CDM>P; GRY BRN MUD; TUBES; SHALLOW RPD; OX CLASTS
300SE	D	10/24/2000	1.05	2.5	2	0	0	0	0	4	PHYSICAL	NO	CDM>P; BRN MUD/BLK GRY CLAY; TUBES; WORM @Z
300S	D	10/24/2000	0.74	3.1	1.94	0	0	0	0	4	PHYSICAL	NO	CDM; BRN MUD/BK & GR CLAY; COHESIVE CLAY; DENSE TUBES; OX&RED CLSTS
300S	F	10/24/2000	0.05	3.99	1.61	0	0	0	0	4	PHYSICAL	NO	CDM; BRN MUD/BLK & GRY CLAY W/SAND; TUBES; RED SED @SURF?
300S	G	10/24/2000	0.34	1.82	1.24	0	0	0	0	7	BIOGENIC	NO	CDM; BRN MUD/MOTLED BLK&GRY CLAY; TUBES; VOID; COH CLAY; WORM@Z
300SW	A	8/27/2000	0.11	5.61	1.77	0	0	0	0	4	PHYSICAL	NO	CDM>P; TUBES; BROWN MUD @SURFACE=RPD
300SW	B	8/27/2000	0.16	2.96	1.51	0	0	0	0	4	PHYSICAL	NO	CDM>P; COHESIVE CLAY @ Z; WIPER CLASTS/SMEARS; THIN BRN MUD @SURF=RPD
300SW	C	8/27/2000	0.53	2.06	1.32	0	0	0	0	3	PHYSICAL	NO	CDM>P; COHESIVE CLAY @ Z; THIN BRN MUD @ SURF=RPD
300W	F	9/24/2000	1.95	7.2	3.67	0	0	0	0	6	PHYSICAL	NO	CDM>PEN; MOTTLED BK&GR CLAY; BROWN MUD @ SURFACE=RPD
300NW	C	9/24/2000	0.59	3.87	1.7	0	0	0	0	4	PHYSICAL	NO	DM>PEN; MOTTLED; DK SED; THIN RPD

Appendix E
Chelsea River Cores

Core CR-1



0-10cm

10-34cm

37-47cm

50-63cm

63-68cm

68-78cm

Core Top

black-gray, wet, very soft, clayey silt

brown-black, petroleum odor, moist,
soft (porous) clayey silt

brown-black, moist, soft-firm, clay with sand

46-50 cm Shell band

brown-gray tan, moist, firm, clayey sand

black banding in gray, moist, firm clay

gray, moist, firm-hard, clayey sand
with small pebbles
(includes some BBC from core catcher)

Styrofoam core plug

Core Bottom

Lab Sheet - Core Descriptions
Lab Analysis Date(s):
Lab Technician(s):

Site_Name	Chelsea River
Survey_name	
Replicate_id	CR-1
Data_Type	core description
Total_core_length_cm	78
Cap Material	

Core_Interval Lith_Top_Depth_cm	Core_Interval Lith_Bottom_Depth_cm	Core_Unit Top_Depth_cm	Core_Unit Bottom_Depth_cm	Subsample_ID	SAIC_lab_description	Lab_analysis
0	78				total core length	
0	10				black to gray, wet, soft, clayey SILT	
10	34				gray to black, petroleum odor, moist, porous texture, clayey SILT	
34	47				brown to black, moist, firm CLAY with SAND	
		40	40	CR-1-A		bulk density, water content
46	50				shell band	
50	63				brownish-gray to tan, moist, firm, clayey SAND	
		57	67	CR-1-B		grain size
		59	59	CR-1-C		bulk density, water content
63	68				gray, moist, firm, clayey SAND with black bands of clayey SAND	
		67	67	CR-1-D		bulk density, water content
68	78				gray, moist, hard, clayey SAND and GRAVEL	

Core Interval = major asspects of the core
Core Unit= descreate samples or subsets of the Core Interval, IF a sub sample is collected it goes under unit, IF the subsample is collect at 3cm both top and bottom unit are 3
Lab Description= follow SOP for visual description of sediment: Color, odor (if present), moisture, consistency, cementation, structure grain size

Core CR-2

Core Top

olive gray, wet, firm, silty sand,
with black mottles

Pebble at 14 cm

olive gray, moist, hard, silty-fine sand

Styrofoam core plug

Core Bottom

*11 cm of Boston Blue Clay
in core catcher (not shown)

Lab Sheet - Core Descriptions
Lab Analysis Date(s):
Lab Technician(s):

Site_Name	Chelsea River
Survey_name	
Replicate_id	CR-2
Data_Type	core description
Total_core_length_cm	35
Cap Material	

Core_Interval Lith_Top_Depth_cm	Core_Interval Lith_Bottom_Depth_cm	Core_Unit Top_Depth_cm	Core_Unit Bottom_Depth_cm	Subsample_ID	SAIC_lab_description	Lab_analysis
0	35				total core length	
0	35				olive-gray, moist, firm, silty fine SAND	
		1	2		band of mottled black and gray, wet, firm, silty SAND	
		5	15	CR-2-A		grain size, foram sample
		15	35			grain size, foram sample
		35	35		11 cm of BBC in core catcher	

Core Interval = major asspects of the core
Core Unit= descreate samples or subsets of the Core Interval, IF a sub sample is collected it goes under unit, IF the subsample is collect at 3cm both top and bottom unit are 3
Lab Description= follow SOP for visual description of sediment: Color, odor (if present), moisture, consistency, cementation, structure grain size

Core CR-3

0-5 cm

Core Top

blackish-brown, moist, hard, silty fine sand

Core Bottom

*8 cm of Boston Blue Clay
in core catcher (not shown)

Lab Sheet - Core Descriptions
Lab Analysis Date(s):
Lab Technician(s):

Site_Name	Chelsea River
Survey_name	
Replicate_id	CR-3
Data_Type	core description
Total_core_length_cm	5
Cap Material	

Core_Interval Lith_Top_Depth_cm	Core_Interval Lith_Bottom_Depth_cm	Core_Unit Top_Depth_cm	Core_Unit Bottom_Depth_cm	Subsample_ID	SAIC_lab_description	Lab_analysis
0	5				total core length	
0	5				black to brown, moist, firm, silty fine SAND	
		0	5	CR-3-A		grain size, foram sample
		5	5		8 cm of BBC in core catcher	

Core Interval = major asspects of the core
Core Unit= descreate samples or subsets of the Core Interval, IF a sub sample is collected it goes under unit, IF the subsample is collect at 3cm both top and bottom unit are 3
Lab Description= follow SOP for visual description of sediment: Color, odor (if present), moisture, consistency, cementation, structure grain size

Core CR-4

0-10 cm

10-24 cm

24-32 cm

32-34 cm

Core Top

black, sulfidic/petroleum odor,
moist, firm, silty sand

yellow-tan, moist, firm, coarse sand

mottled black and dark gray,
moist, hard, coarse sand

Half BBC and half dark-brown,
moist, hard gravel and sand
(Diagonal segment of Boston Blue Clay)

Styrofoam core plug

Core Bottom

*8.5 cm Boston Blue Clay
in core catcher (not shown)

Lab Sheet - Core Descriptions
Lab Analysis Date(s):
Lab Technician(s):

Site_Name	Chelsea River
Survey_name	
Replicate_id	CR-4
Data_Type	core description
Total_core_length_cm	44
Cap Material	

Core_Interval Lith_Top_Depth_cm	Core_Interval Lith_Bottom_Depth_cm	Core_Unit Top_Depth_cm	Core_Unit Bottom_Depth_cm	Subsample_ID	SAIC_lab_description	Lab_analysis
0	44				total core length	
0	10				black, sulfidic odor, moist, firm, silty medium SAND	
		0	10	CR-4-A		grain size, foram sample
10	20				black and tan, moist, firm, medium SAND	
		10	24	CR-4-B		grain size, foram sample
20	24				black, moist, firm, coarse SAND	
24	32				black, sulfidic odor, moist, firm, coarse SAND	
		24	32	CR-4-C		grain size, foram sample
		28	30		rock	
32	44				BBC and dark brown, moist, firm, gravelly SAND	
		32	44	CR-4-D		grain size, foram sample
		44	44		8.5 cm of BBC in core catcher	

Core Interval = major asspects of the core
Core Unit= descreate samples or subsets of the Core Interval, IF a sub sample is collected it goes under unit, IF the subsample is collect at 3cm both top and bottom unit are 3
Lab Description= follow SOP for visual description of sediment: Color, odor (if present), moisture, consistency, cementation, structure grain size

Lab Sheet - Core Descriptions
Lab Analysis Date(s):
Lab Technician(s):

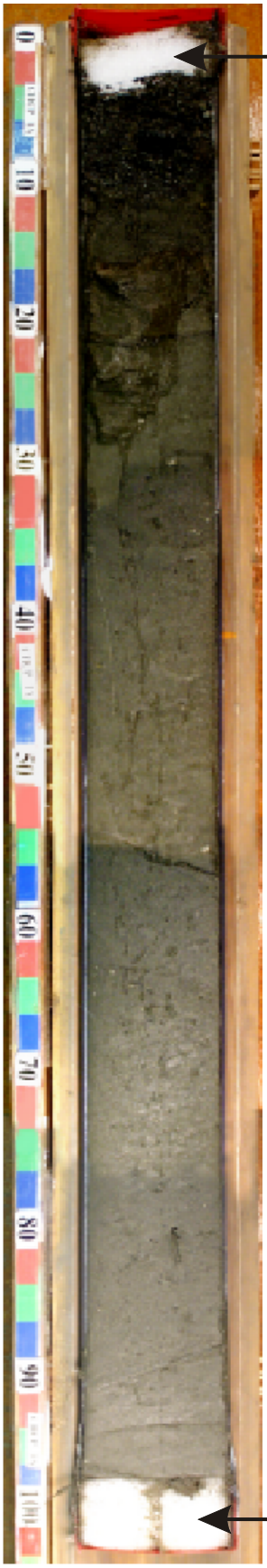
Site_Name	Chelsea River
Survey_name	
Replicate_id	CR-5a
Data_Type	core description
Total_core_length_cm	0
Cap Material	

Core_Interval Lith_Top_Depth_cm	Core_Interval Lith_Bottom_Depth_cm	Core_Unit Top_Depth_cm	Core_Unit Bottom_Depth_cm	Subsample_ID	SAIC_lab_description	Lab_analysis
0	0				damage to core cutter	
		0	0		7 cm of sand, gravel, rocks, and very dry coarse BBC in core catcher and cutter	

Core Interval = major asspects of the core
Core Unit= descreate samples or subsets of the Core Interval, IF a sub sample is collected it goes under unit, IF the subsample is collect at 3cm both top and bottom unit are 3
Lab Description= follow SOP for visual description of sediment: Color, odor (if present), moisture, consistency, cementation, structure grain size

Appendix F
CHCP Postcap Cores

Core Postcap-1A



microfossil, grain size & bulk density 4.5-10 cm

microfossil, grain size & bulk density 20-25 cm

Core Top

Styrofoam core plug

greenish-black, moist, hard, silty sand

greenish-black, moist, soft, silty clay

dark greenish-gray, organic odor, moist, firm, clay

Styrofoam core plug

Core Bottom

Lab Sheet - Core Descriptions

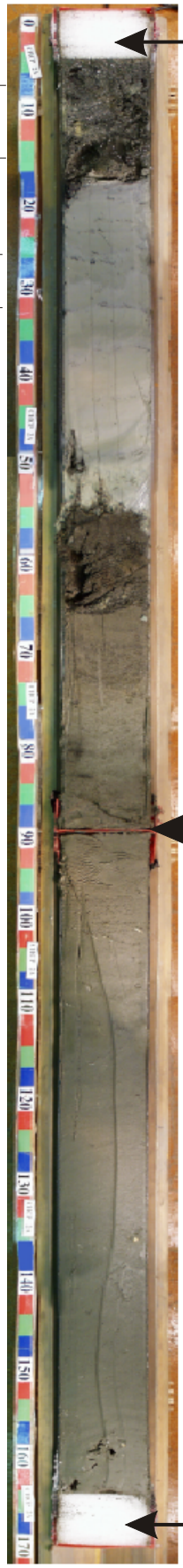
Lab Analysis Date(s): 11/16/2000
Lab Technician(s): Walter/Montgomery

Site_Name CHCP
Survey_name Post Post Cap
Replicate_id 1A
Data_Type core description
Total_core_length_cm 103

Core_Interval Lith_Top_Depth_cm	Core_Interval Lith_Bottom_Depth_cm	Core_Unit Top_Depth_cm	Core_Unit Bottom_Depth_cm	Subsample_ID	SAIC_lab_description	Lab_analysis
0	103				total core length	
0	4.5				foam plug	
4.5	12				greenish-black, moist, hard, silty SAND	
		4.5	10	COC 1A		microfossil
		4.5	10	CHCP 1A1		grain size/ bulk density
		7	7	COC 1A		smear slide
12	17				greenish-black, moist, soft, silty CLAY	
		15	15	COC 1A		smear slide
17	97				dark greenish-gray, organic, moist, firm, CLAY	
		20	25	COC 1A		microfossil
		20	25	CHCP 1A 2		grain size/ bulk density
		30	30	COC 1A		smear slide
		52	52	COC 1A		smear slide
		64	64	COC 1A		smear slide
		76	76	COC 1A		smear slide
97	103				foam plug	

Core Interval = major asspects of the core
Core Unit= descreate samples or subsets of the Core Interval, IF a sub sample is collected it goes under unit, IF the subsample is collect at 3cm both top and bottom unit are 3
Lab Description= follow SOP for visual description of sediment: Color, odor (if present), moisture, consistency, cementation, structure grain size

Core Postcap-2A



Core Top

Styrofoam core plug

dark greenish-gray, petroleum odor,
moist, firm-hard, silty sandy clay and gravel

microfossil
grain size &
bulk density
sample loc.
6-16 cm

microfossil
sample loc.
26-31 cm

greenish-gray, moist, firm, clay (BBC)

microfossil
grain size &
bulk density
sample loc.
56-66 cm

dark greenish-gray, petroleum odor,
moist, firm, sandy silty clay

microfossil
grain size &
bulk density
sample loc.
66-76 cm

dark greenish-gray,
moist, firm, silty clay

core cut for processing

Plant fiber at 108 cm

greenish-gray, organic odor,
moist, firm, clay with shell fragments

microfossil
grain size &
bulk density
sample loc.
140-150 cm

Styrofoam core plug

Core Bottom

Lab Sheet - Core Descriptions

Lab Analysis Date(s): 11/16/2000

Lab Technician(s): Walter/Montgomery

Site_Name CHCP

Survey_name Post Post Cap

Replicate_id 2A

Data_Type core description

Total_core_length_cm 169

Core_Interval Lith_Top_Depth_cm	Core_Interval Lith_Bottom_Depth_cm	Core_Unit Top_Depth_cm	Core_Unit Bottom_Depth_cm	Subsample_ID	SAIC_lab_description	Lab_analysis
0	169				total length of core	
0	6				foam plug	
6	20				dark greenish gray, petroleum odor, moist, firm-hard silty sandy CLAY and GRAVEL	
		16	16	COC 2A		smear slide
		6	12	COC 2A		microfossil
		6	16	CHCP 2A1		grain size/ bulk density
20	56				greenish gray, moist, firm CLAY (BBC)	
		26	31	COC 2A		microfossil
		39	39	COC 2A		smear slide
56	67				dark greenish gray, petroleum odor, moist, firm sandy silty CLAY	
		56	66	CHCP 2A2		grain size/ bulk density
		57	62	COC 2A		microfossil
		62	62	COC 2A		smear slide
		66	76	CHCP 2A3		grain size/ bulk density
67	76				dark greenish gray, moist, firm silty CLAY	
		68	73	COC 2A		microfossil
		72	72	COC 2A		smear slide
76	164				greenish gray, organic, moist, firm CLAY w/ shell fragments	
		90.5	90.5		core cut here for processing	
		100	100	COC 2A		smear slide
		108	108		plant fiber	
		133	133	COC 2A		smear slide
		140	145	COC 2A		microfossil
		140	150	CHCP 2A4		grain size/ bulk density
164	169				foam plug	

Core Interval = major asspects of the core

Core Unit= descreate samples or subsets of the Core Interval, IF a sub sample is collected it goes under unit, IF the subsample is collect at 3cm both top and bottom unit are 3

Lab Description= follow SOP for visual description of sediment: Color, odor (if present), moisture, consistency, cementation, structure grain size

Lab Sheet - Core Descriptions

Lab Analysis Date(s): 11/15/2000
Lab Technician(s): Walter/Montgomery

Site_Name CHCP
Survey_name Post Post Cap
Replicate_id 3A
Data_Type core description
Total_core_length_cm handful of gravel & clay

Core_Interval Lith_Top_Depth_cm	Core_Interval Lith_Bottom_Depth_cm	Core_Unit Top_Depth_cm	Core_Unit Bottom_Depth_cm	Subsample_ID	SAIC_lab_description	Lab_analysis

Core Interval = major asspects of the core
Core Unit= descreate samples or subsets of the Core Interval, IF a sub sample is collected it goes under unit, IF the subsample is collect at 3cm both top and bottom unit are 3
Lab Description= follow SOP for visual description of sediment: Color, odor (if present), moisture, consistency, cementation, structure grain size

Lab Sheet - Core Descriptions

Lab Analysis Date(s): 11/15/2000

Lab Technician(s): Walter/Montgomery

Site_Name CHCP

Survey_name Post Post Cap

Replicate_id 3B

Data_Type core description

Total_core_length_cm bag of BBC

Core_Interval Lith_Top_Depth_cm	Core_Interval Lith_Bottom_Depth_cm	Core_Unit Top_Depth_cm	Core_Unit Bottom_Depth_cm	Subsample_ID	SAIC_lab_description	Lab_analysis
0	21				greenish gray, organic, moist, firm-hard, CLAY	
		16	21		greenish gray, organic, moist, firm-hard, CLAY (BBC) & gravel 75% frequency	

Core Interval = major asspects of the core

Core Unit= descreate samples or subsets of the Core Interval, IF a sub sample is collected it goes under unit, IF the subsample is collect at 3cm both top and bottom unit are 3

Lab Description= follow SOP for visual description of sediment: Color, odor (if present), moisture, consistency, cementation, structure grain size

Postcap 4A Bag of Sediment

Top

0-5cm

Mottled; black and greenish-gray, strong petroleum odor, moist, firm-hard clay and sand

5-19cm

Greenish-gray, moist, hard, clay (BBC) and gravel

Bottom

Lab Sheet - Core Descriptions

Lab Analysis Date(s): 11/15/2000

Lab Technician(s): Walter/Montgomery

Site_Name CHCP

Survey_name Post Post Cap

Replicate_id 4A

Data_Type core description

Total_core_length_cm Bag of BBC mixed w/ gravel

Core_Interval Lith_Top_Depth_cm	Core_Interval Lith_Bottom_Depth_cm	Core_Unit Top_Depth_cm	Core_Unit Bottom_Depth_cm	Subsample_ID	SAIC_lab_description	Lab_analysis
0	19				greenish-gray, petroleum, moist, firm-hard, moderate cementation	
		0	5		mottled black & greenish-gray, strong petroleum, firm, moderate cementation, CLAY & SAND	
		5	19		greenish-gray, moist, hard, CLAY & GRAVEL 1-2cm	

Core Interval = major asspects of the core

Core Unit= descreate samples or subsets of the Core Interval, IF a sub sample is collected it goes under unit, IF the subsample is collect at 3cm both top and bottom unit are 3

Lab Description= follow SOP for visual description of sediment: Color, odor (if present), moisture, consistency, cementation, structure grain size

Lab Sheet - Core Descriptions

Lab Analysis Date(s): 11/15/2000
Lab Technician(s): Walter/Montgomery

Site_Name CHCP
Survey_name Post Post Cap
Replicate_id 5A
Data_Type core description
Total_core_length_cm Bag of mixed clay and gravel

Core_Interval Lith_Top_Depth_cm	Core_Interval Lith_Bottom_Depth_cm	Core_Unit Top_Depth_cm	Core_Unit Bottom_Depth_cm	Subsample_ID	SAIC_lab_description	Lab_analysis

Core Interval = major asspects of the core
Core Unit= descreate samples or subsets of the Core Interval, IF a sub sample is collected it goes under unit, IF the subsample is collect at 3cm both top and bottom unit are 3
Lab Description= follow SOP for visual description of sediment: Color, odor (if present), moisture, consistency, cementation, structure grain size

Lab Sheet - Core Descriptions

Lab Analysis Date(s): 11/15/2000
Lab Technician(s): Walter/Montgomery

Site_Name CHCP
Survey_name Post Post Cap
Replicate_id 6A
Data_Type core description
Total_core_length_cm Bag of BBC and gravel

Core_Interval Lith_Top_Depth_cm	Core_Interval Lith_Bottom_Depth_cm	Core_Unit Top_Depth_cm	Core_Unit Bottom_Depth_cm	Subsample_ID	SAIC_lab_description	Lab_analysis
0	13				greenish-gray, moist, firm, CLAY (BBC)	
		2	10		large brown rock 9x6cm	

Core Interval = major asspects of the core
Core Unit= descreate samples or subsets of the Core Interval, IF a sub sample is collected it goes under unit, IF the subsample is collect at 3cm both top and bottom unit are 3
Lab Description= follow SOP for visual description of sediment: Color, odor (if present), moisture, consistency, cementation, structure grain size

Postcap 6B Bag of Sediment

Top

0-18cm

Lensed: black and greenish-gray, petroleum odor, moist firm, clay w/ 1% shell fragments and gravel

18-32 cm

Greenish-gray, moist, firm, clay

32-35cm

Greenish-gray, moist, firm sandy, clay

35-35.5cm

35.5-38cm

Black, moist, firm sandy, clay

Greenish-gray, moist, firm sandy, clay

38-39cm

Black, moist, firm sandy, clay

Bottom

Lab Sheet - Core Descriptions

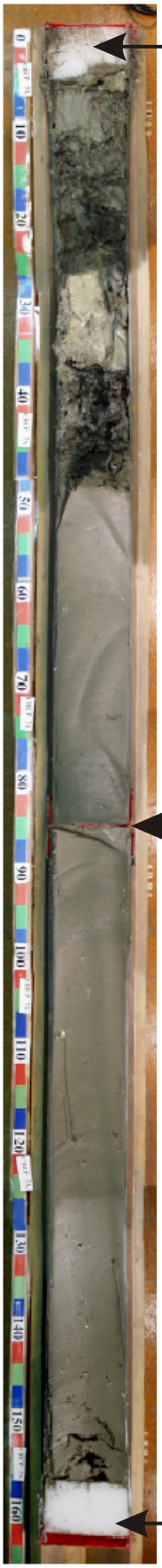
Lab Analysis Date(s): 11/15/2000
Lab Technician(s): Walter/Montgomery

Site_Name CHCP
Survey_name Post Post Cap
Replicate_id 6B
Data_Type core description
Total_core_length_cm Bag of material

Core_Interval Lith_Top_Depth_cm	Core_Interval Lith_Bottom_Depth_cm	Core_Unit Top_Depth_cm	Core_Unit Bottom_Depth_cm	Subsample_ID	SAIC_lab_description	Lab_analysis
0	39				total length, homogeneous, color & texture	
		0	18		lens-black & greenish-gray, petroleum, moist, firm, CLAY,w/ 1% shell & gravel	
		18	32		greenish-gray, moist, firm, CLAY	
		32	35		greenish-gray, moist, firm, sandy CLAY	
		35	35.5		black, moist, firm, sandy CLAY	
		35.5	38		greenish-gray, moist, firm, sandy CLAY	
		38	39		black, moist, firm, sandy CLAY	

Core Interval = major asspects of the core
Core Unit= descreate samples or subsets of the Core Interval, IF a sub sample is collected it goes under unit, IF the subsample is collect at 3cm both top and bottom unit are 3
Lab Description= follow SOP for visual description of sediment: Color, odor (if present), moisture, consistency, cementation, structure grain size

Core Postcap-7A



Core Top

Styrofoam core plug

greenish-gray, moist, firm, clay (BBC)

microfossil
grain size &
bulk density
sample loc.
12-25 cm

mottled; greenish-gray and black, petroleum odor,
moist, firm, silty sandy clay with rocks

microfossil
grain size &
bulk density
sample loc.
27-37 cm

greenish-gray, moist, firm, clay

microfossil
grain size &
bulk density
sample loc.
38-53 cm

mottled; greenish-gray and black, petroleum odor,
moist, firm-hard, silty sandy clay with gravel

Core cut for processing

greenish-gray, organic odor,
moist, firm, clay with shell fragments

Plant fiber at 119 cm

microfossil
grain size &
bulk density
sample loc.
140-150 cm

Styrofoam core plug

Core Bottom

Lab Sheet - Core Descriptions

Lab Analysis Date(s): 11/16/2000
Lab Technician(s): Walter/Montgomery

Site_Name CHCP
Survey_name Post Post Cap
Replicate_id 7A
Data_Type core description
Total_core_length_cm 162

Core_Interval Lith_Top_Depth_cm	Core_Interval Lith_Bottom_Depth_cm	Core_Unit Top_Depth_cm	Core_Unit Bottom_Depth_cm	Subsample_ID	SAIC_lab_description	Lab_analysis
0	162				total length of core	
0	5.5				foam plug	
5.5	12				greenish gray, moist, firm CLAY (BBC)	
		10	10	COC 7A		smear slide
12	26				mottled; greenish gray and black, petroleum odor, moist, firm silty sandy CLAY w/ rocks	
		17	19		rock	
		23	25		rock	
		15	20	COC 7A		microfossil
		12	25	CHCP 7A1		grain size/ bulk density
		21	21	COC 7A		smear slide
26	38				greenish gray, moist, firm CLAY	
		35	35	COC 7A		smear slide
		30	35	COC 7A		microfossil
		27	37	CHCP 7A2		grain size/ bulk density
38	49				mottled; greenish gray and black, pletroleum odor, moist, firm-hard silty sandy CLAY w/ gravel	
		45	45	COC 7A		smear slide
		47	53	COC 7A		microfossil
		38	48	CHCP 7A3		grain size/ bulk density
49	156				greenish gray, organic, moist, firm, CLAY w/ shell fragments	
		76	76	COC 7A		smear slide
		87	87		core cut here for processing	
		89	89	COC 7A		smear slide
		119	119		plant fiber	
		125	125	COC 7A		smear slide
		145	150	COC 7A		microfossil
		140	150	CHCP 7A4		grain size
		141	141	CHCP 7A4		bulk density plug
156	162				foam plug	

Core Interval = major asspects of the core
Core Unit= descreate samples or subsets of the Core Interval, IF a sub sample is collected it goes under unit, IF the subsample is collect at 3cm both top and bottom unit are 3
Lab Description= follow SOP for visual description of sediment: Color, odor (if present), moisture, consistency, cementation, structure grain size

Postcap 8A Bag of Sediment

Rock and gravel

Lab Sheet - Core Descriptions

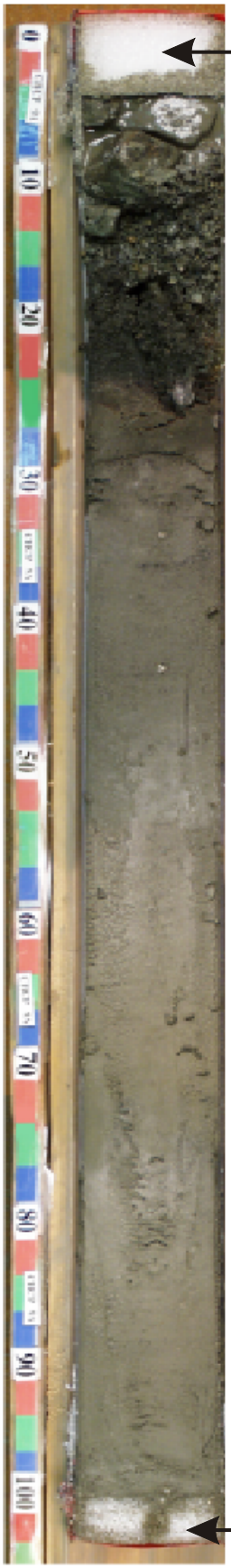
Lab Analysis Date(s): 11/15/2000
Lab Technician(s): Walter/Montgomery

Site_Name CHCP
Survey_name Post Post Cap
Replicate_id 8A
Data_Type core description
Total_core_length_cm Bag of gravel and clay

Core_Interval Lith_Top_Depth_cm	Core_Interval Lith_Bottom_Depth_cm	Core_Unit Top_Depth_cm	Core_Unit Bottom_Depth_cm	Subsample_ID	SAIC_lab_description	Lab_analysis

Core Interval = major asspects of the core
Core Unit= descreate samples or subsets of the Core Interval, IF a sub sample is collected it goes under unit, IF the subsample is collect at 3cm both top and bottom unit are 3
Lab Description= follow SOP for visual description of sediment: Color, odor (if present), moisture, consistency, cementation, structure grain size

Core Postcap-9A



Core Top

Styrofoam core plug

microfossil sample loc. 5.5-13 cm

rock (5.5-9 cm & 9-13cm) surrounded by:
greenish-gray, wet, soft, silty clay

mottled; black and greenish-gray, slight petroleum odor, moist, hard sandy gravel with shell fragments

microfossil, grain size & bulk density sample loc. 13-20 cm

microfossil, grain size & bulk density sample loc. 30-45 cm

greenish-gray, organic odor, moist, firm, clay with shell fragments

Styrofoam core plug

Core Bottom

Lab Sheet - Core Descriptions

Lab Analysis Date(s): 11/16/2000

Lab Technician(s): Walter/Montgomery

Site_Name CHCP

Survey_name Post Post Cap

Replicate_id 9A

Data_Type core description

Total_core_length_cm 103

Core_Interval Lith_Top_Depth_cm	Core_Interval Lith_Bottom_Depth_cm	Core_Unit Top_Depth_cm	Core_Unit Bottom_Depth_cm	Subsample_ID	SAIC_lab_description	Lab_analysis
0	103				total length	
0	5.5				foam plug	
5.5	13				rock (5.5-9cm & 9-13cm)surrounded by: greenish gray, wet, soft silty CLAY	
		5.5	13	COC 9A		microfossil
		9	9	COC 9A		smear slide
13	26				mottled; black and greenish gray, slight petroleum odor, moist, hard sandy GRAVEL w/ shell frags	
		13	20	COC 9A		microfossil
		13	20	CHCP 9A1		grain size/ bulk density
		18	18	COC 9A		smear slide
		19	26		rock surrounded by GRAVEL	
26	100				greenish gray, organic, moist, firm CLAY w/ shell fragments	
		30	40	COC 9A		microfossil
		30	45	CHCP 9A2		grain size
		40	40	CHCP 9A2		bulk density
		38	38	COC 9A		smear slide
		68	68	COC 9A		smear slide
		99	99	COC 9A		smear slide
100	103				foam plug	

Core Interval = major asspects of the core

Core Unit= descreate samples or subsets of the Core Interval, IF a sub sample is collected it goes under unit, IF the subsample is collect at 3cm both top and bottom unit are 3

Lab Description= follow SOP for visual description of sediment: Color, odor (if present), moisture, consistency, cementation, structure grain size

Core Postcap-10A

Core Top

Styrofoam core plug

Greenish-black, slight petroleum odor,
moist, firm-hard, clayey sand

microfossil, grain
size & bulk density
sample loc. 7-13 cm

Mottled; black and greenish-gray, petroleum odor
moist, soft-firm (pockets) sandy clay with gravel
and 1-2 cm blobs of BBC

Microfossil, grain
size & bulk density
sample loc. 16-22 cm

greenish-gray, slight petroleum odor,
moist, firm, clay (BBC)

dark greenish-gray,
moist, soft-firm, clay

microfossil, grain
size & bulk density
sample loc. 60-68 cm

Styrofoam core plug

Core Bottom

Lab Sheet - Core Descriptions

Lab Analysis Date(s): 11/16/2000

Lab Technician(s): Walter/Montgomery

Site_Name CHCP

Survey_name Post Post Cap

Replicate_id 10A

Data_Type core description

Total_core_length_cm 72

Core_Interval Lith_Top_Depth_cm	Core_Interval Lith_Bottom_Depth_cm	Core_Unit Top_Depth_cm	Core_Unit Bottom_Depth_cm	Subsample_ID	SAIC_lab_description	Lab_analysis
0	72				total length of core	
0	6.5				foam plug	
6.5	15				greenish black, slight petroleum odor, moist, firm-hard clayey SAND	
		7	13	COC 10A		microfossil
		7	13	CHCP 10A1		grain size/ bulk density
		8	8	COC 10A		smear slide
15	44				mottled; black and greenish gray, petroleum odor, moist, soft-firm (pockets) sandy CLAY with gravel and 1-2cm blobs of BBC	
		16	22	COC 10A		microfossil
		16	22	CHCP 10A2		grain size/ bulk density
		30	30	COC 10A		smear slide
		25	29		rock surrounded by sandy CLAY w/ gravel & BBC	
		32	36		rock surrounded by sandy CLAY w/ gravel & BBC	
44	56				greenish gray, slight petroleum, moist, firm, CLAY (BBC)	
		51	51	COC 10A		smear slide
		48	50		black, petroleum odor, moist, firm CLAY; 2cm wide streak next to core liner	
		60	68	COC 10A		microfossil
		60	68	CHCP 10A2		grain size/ bulk density
		65	65	COC 10A		smear slide
56	68				dark greenish gray, moist, soft-firm silty CLAY	
68	72				foam plug	

Core Interval = major asspects of the core

Core Unit= descreate samples or subsets of the Core Interval, IF a sub sample is collected it goes under unit, IF the subsample is collect at 3cm both top and bottom unit are 3

Lab Description= follow SOP for visual description of sediment: Color, odor (if present), moisture, consistency, cementation, structure grain size

Postcap 11A Bag of Sediment

Top

0-10cm

Mottled; black and greenish-gray, moist, firm clay

10-27cm

Greenish-gray, moist, firm, clay

27-35cm

Mottled; black and greenish-gray, light petroleum odor, moist, firm sandy clay with gravel

35-41cm

Mixed black and greenish-gray, strong petroleum odor, moist, firm clay

41cm

Bottom

Lab Sheet - Core Descriptions

Lab Analysis Date(s): 11/15/2000

Lab Technician(s): Walter/Montgomery

Site_Name CHCP

Survey_name Post Post Cap

Replicate_id 11A

Data_Type core description

Total_core_length_cm Bag of clay & gravel

Core_Interval Lith_Top_Depth_cm	Core_Interval Lith_Bottom_Depth_cm	Core_Unit Top_Depth_cm	Core_Unit Bottom_Depth_cm	Subsample_ID	SAIC_lab_description	Lab_analysis
0	41				total length, BBC	
		0	10		mottled black & greenish-gray, moist, firm, CLAY	
		10	27		greenish-gray, moist, firm, CLAY	
		27	35		mottled black & greenish-gray, light petroleum, moist, firm, sandy CLAY w/ small gravel	
		35	41		mixed black & greenish-gray, strong petroleum, moist, firm,CLAY	

Core Interval = major asspects of the core

Core Unit= descreate samples or subsets of the Core Interval, IF a sub sample is collected it goes under unit, IF the subsample is collect at 3cm both top and bottom unit are 3

Lab Description= follow SOP for visual description of sediment: Color, odor (if present), moisture, consistency, cementation, structure grain size

Core Postcap-12A

Core Top

Styrofoam core plug

microfossil, g rain
size & bulk density
sample loc. 10-20 cm

mottled; black and greenish-gray, petroleum odor
wet-moist, firm-hard, sandy clayey gravel

greenish-gray, moist, firm, clay (BBC) lens

microfossil, grain
size & bulk density
sample loc. 20-30 cm

dark greenish-gray, organic odor,
moist, firm, silty clay; plant debris

greenish-gray, organic odor, moist,
firm, clay with shell fragments

microfossil, grain
size & bulk density
sample loc. 75-85 cm

Styrofoam core plug

Core Bottom

Lab Sheet - Core Descriptions

Lab Analysis Date(s): 11/16/2000

Lab Technician(s): Walter/Montgomery

Site_Name CHCP

Survey_name Post Post Cap

Replicate_id 12A

Data_Type core description

Total_core_length_cm 98

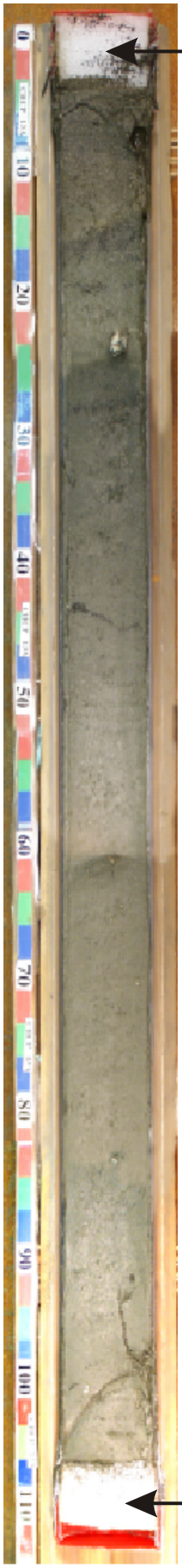
Core_Interval Lith_Top_Depth_cm	Core_Interval Lith_Bottom_Depth_cm	Core_Unit Top_Depth_cm	Core_Unit Bottom_Depth_cm	Subsample_ID	SAIC_lab_description	Lab_analysis
0	98				total length of core	
0	5.5				foam plug	
5.5	20				mottled; black and greenish gray, petroleum odor, wet-moist, firm-hard, sandy clayey GRAVEL	
		6	10		rock	
		10	15		rock	
		16	16	COC 12A		smear slide
		12	19	COC 12A		microfossil
		10	20	CHCP 12A1		grain size/ bulk density
		6	10		rock urrounded by sandy clayey GRAVEL	
20	22				greenish gray, moist, firm CLAY (BBC) lens	
		23	28	COC 12A		microfossil
		20	30	CHCP12A2		grain size/ bulk density
		71	71	COC 12A		smear slide
22	36.5				dark greenish gray, organic, moist, firm silty CLAY; plant debris	
		26.5	26.5	COC 12A		smear slide
36.5	94				greenish gray, organic, moist, firm CLAY w/ shell fragments	
		76	81	COC 12A		microfossil
		75	85	CHCP 12A3		grain size/ bulk density
94	98				foam plug	

Core Interval = major asspects of the core

Core Unit= descreate samples or subsets of the Core Interval, IF a sub sample is collected it goes under unit, IF the subsample is collect at 3cm both top and bottom unit are 3

Lab Description= follow SOP for visual description of sediment: Color, odor (if present), moisture, consistency, cementation, structure grain size

Core Postcap-13A



Core Top

Styrofoam core plug

dark greenish-gray, moist, soft-firm, clay

dark greenish-gray, organic odor, moist, soft-firm, clay

greenish-gray, organic odor,
moist, firm, clay with shell fragments

Styrofoam core plug

Core Bottom

microfossil, grain size & bulk density sample loc. 5-10 cm

microfossil, grain size & bulk density sample loc. 12-17 cm

microfossil, grain size & bulk density sample loc. 25-30 cm

microfossil, grain size & bulk density sample loc. 30-40 cm

Lab Sheet - Core Descriptions

Lab Analysis Date(s): 11/16/2000

Lab Technician(s): Walter/Montgomery

Site_Name CHCP

Survey_name Post Post Cap

Replicate_id 13A

Data_Type core description

Total_core_length_cm 112

Core_Interval Lith_Top_Depth_cm	Core_Interval Lith_Bottom_Depth_cm	Core_Unit Top_Depth_cm	Core_Unit Bottom_Depth_cm	Subsample_ID	SAIC_lab_description	Lab_analysis
0	112				total length; homogeneous	
0	5				foam plug	
5	10				dark greenish gray, moist, soft -firm CLAY	
		6	6		1X2 cm blob of BBC	
		5	10	COC 13A		microfossil
		6	6	COC 13A		smear slide
		5	10	CHCP 13A1		grain size/ bulk density
10	19				dark greenish gray, organic, moist, soft -firm CLAY	
		12	17	COC 13A		microfossil
		12	17	CHCP 13A2		grain size/ bulk density
		25	30	COC 13A		microfossil
		25	30	CHCP 13A3		grain size/ bulk density
		30	40	CHCP 13A4		grain size/ bulk density*bonus
		35	35	COC 13A		smear slide
19	106				greenish gray, organic, moist, firm CLAY w/ shell fragments	
		68	68	COC 13A		smear slide
106	112				foam plug	

Core Interval = major asspects of the core

Core Unit= descreate samples or subsets of the Core Interval, IF a sub sample is collected it goes under unit, IF the subsample is collect at 3cm both top and bottom unit are 3

Lab Description= follow SOP for visual description of sediment: Color, odor (if present), moisture, consistency, cementation, structure grain size

INDEX

aerobic, 35
azoic, 35
barge, xvi, 1, 6, 12, 14, 24, 26, 28, 29, 30, 32, 33, 37, 39, 41, 51, 65, 67, 68, 69, 70, 71, 72, 73, 74, 75, 76, 77, 78, 81, 82, 83, 86, 89, 93, 97, 102, 133, 135, 136, 139, 144, 149, 155
  disposal, xv, 6, 24, 26, 27, 90, 102, 135, 144
benthos, 8, 35, 36, 37, 60, 109, 114, 120, 124, 125, 146, 147, 156, 158
  mussels, 53
  polychaete, 79, 98, 119, 125
bioturbation, 125
  feeding void, 119, 125
boundary roughness, 35, 120
buoy, 12, 14, 37, 54, 65, 67, 68, 72, 73, 78, 79, 82, 86, 89, 93, 102, 104, 109, 111, 115, 120, 135, 136, 141, 144, 146, 152, 154, 155, 156
  disposal, xvi, 84, 102, 135, 153
capping, xv, xvi, 3, 4, 6, 7, 8, 10, 12, 14, 15, 23, 26, 28, 29, 37, 48, 51, 101, 102, 104, 125, 133, 135, 141, 144, 145, 146, 147, 152, 153, 155, 156, 157, 158, 159
Central Long Island Sound (CLIS)
  STNH-N, 3
  STNH-S, 3
conductivity, 31
consolidation, xvi, 29, 146
containment, 1, 3, 8, 153, 154, 156
contaminant, xv, 3, 133, 146, 153
convective descent, 109, 133
CTD meter, 31
density, 31, 35, 68, 136, 147
deposition, 79, 86, 98, 120, 139, 141, 144, 146, 156
dispersion, 133, 136
disposal site
  Boston Foul Ground (BFG), 6, 158
  Central Long Island Sound (CLIS), 3, 6
  Foul Area (FADS), 158
  Massachusetts Bay (MBDS), xv, xvi, 4, 5, 6, 7, 8, 9, 10, 12, 14, 15, 23, 24, 25, 26, 28, 29, 34, 37, 48, 51, 53, 93, 101, 102, 106, 109, 120, 124, 125, 133, 135, 136, 139, 141, 144, 146, 147, 149, 152, 153, 154, 155, 156, 157, 158, 159
  New London (NLDS), 158
  Portland (PDS), xv, 6, 23, 157, 159
dissolved oxygen (DO), 35, 120
dynamic collapse, 109, 133, 136, 141
erosion, 1, 29
feeding void, 119, 125
grain size, 22, 23, 35, 43, 47, 48, 51, 53, 54, 60, 65, 73, 79, 82, 89, 93, 98, 101, 102, 115, 127, 130, 132, 136, 138, 139, 141, 142, 152, 155
habitat, 8, 23, 35, 109, 114, 120, 124, 146
methane, 35, 120
mud clast, 115, 117
National Oceanic and Atmospheric Administration (NOAA), 26, 31
passive dispersion, 133
recolonization, 35, 37, 109, 120, 125, 146, 147
reference area, 37, 120, 125, 146
REMOTS®, xiv, 15, 26, 35, 36, 37, 38, 39, 40, 41, 54, 58, 59, 60, 62, 65, 73, 74, 75, 76, 78, 79, 80, 82, 89, 91, 92, 93, 95, 96, 97, 102, 109, 113, 115, 116, 117, 119, 121, 122, 123, 135, 136, 137, 139, 140, 141, 143, 144, 146, 147, 148, 149, 150, 151, 152, 155, 158

boundary roughness, 35, 120
Organism-Sediment Index (OSI), 18, 35, 120, 122, 125, 146
redox potential discontinuity (RPD), 35
sediment-profile camera, 36
RPD
REMOTS®, redox potential discontinuity (RPD), 35, 120, 122, 125, 146
sediment
clay, xvi, 1, 23, 37, 47, 48, 53, 54, 60, 62, 65, 68, 73, 78, 79, 82, 89, 92, 93, 96, 98, 99, 101, 102, 109, 115, 116, 117, 120, 125, 127, 130, 131, 132, 133, 136, 139, 141, 144, 148, 149, 150, 155
cobble, 23, 47, 53, 98, 127, 136
gravel, xvi, 1, 23, 47, 53, 65, 98, 99, 101, 102, 109, 127, 130, 131, 132, 136, 139, 144
sand, xvi, 1, 8, 12, 23, 47, 51, 53, 60, 65, 68, 86, 89, 92, 93, 96, 98, 99, 101, 102, 109, 115, 117, 127, 130, 131, 132, 135, 136, 139, 144, 149, 150
silt, xvi, 8, 12, 23, 51, 53, 54, 59, 60, 65, 68, 73, 79, 82, 89, 92, 93, 96, 98, 99, 101, 102, 115, 116, 117, 120, 127, 130, 131, 132, 133, 135, 136, 139, 141, 144, 148, 149, 150, 155
sulphidic, 99
transport, 67
sediment sampling, xvi, 146
cores, xvi, 18, 22, 43, 45, 47, 48, 49, 50, 51, 53, 65, 101, 102, 126, 127, 128, 129, 130, 131, 132, 138, 141, 142
grabs, xvi, 12, 14, 15, 16, 17, 23, 26, 34, 37, 42, 43, 47, 51, 52, 53, 60, 63, 64, 66, 82, 98, 99, 100, 136, 138, 152
vibracores, 12, 15, 18, 19, 20, 21, 22, 43, 47, 51, 53
side-scan sonar, xvi, 15, 26, 32, 33, 34, 37, 54, 56, 57, 60, 65, 68, 71, 72, 73, 82, 89, 90, 102, 104, 109, 110, 135, 136, 137, 139, 140, 141, 147, 155
stratigraphy, 22, 47, 48
succession
pioneer stage, 125
seres, 125
successional stage, 35, 123, 125
survey
baseline, xvi, 8, 12, 14, 26, 28, 29, 30, 32, 33, 37, 38, 40, 42, 47, 51, 53, 54, 55, 56, 58, 59, 60, 61, 62, 63, 64, 65, 66, 68, 70, 73, 86, 88, 89, 93, 98, 101, 104, 106, 109, 136, 138, 139, 148, 149, 150
bathymetry, xvi, 15, 26, 29, 30, 31, 34, 43, 54, 55, 65, 68, 69, 70, 82, 86, 87, 88, 89, 102, 104, 105, 106, 107, 125, 127, 135, 136, 137, 139, 140, 143, 144, 146, 147, 152, 153, 154, 155, 158
REMOTS®, 37, 54, 60, 78, 89, 122, 123
side-scan, 34, 68, 82, 104, 109
temperature, 31
tide, 8, 31, 146
topography, xvi, 3, 14, 28, 29, 32, 53, 54, 68, 79, 82, 98, 104, 133, 146
trace metals
lead (Pb), 133
vanadium (V), 26
waves, 8, 32