

Table C-1
Subsurface Sediment Collection Summary

Core	Core Priority	Core Collection				Core Processing				
		Attempt	Drive Length (in)	Recovered Length (in)	Percent Recovery	Total Length Processed (cm)	Lithology			Notes
							Upper Depth	Lower Depth	USCS	
GC-01	Tier 3	1 of 1	51	46	90%	86.5	0	86.5	ML	
GC-02	Tier 2	1 of 1	35.5	26	73%	44	0	9	ML	Trace black, gritty, anthropogenic debris (coarse gravel sized)
							9	26	SM	
							36	44	ML	
GC-03	Tier 3	1 of 1	36	20	56%	30	0	24	ML	
							24	30	SM	
GC-04	Not Collected	--	--	--	--	--	--	--	--	
GC-05	Tier 1	1 of 1	53	51	96%	88	0	22	SM	
							22	32	ML	
							32	88	SM	
GC-06	Tier 3	1 of 1	54	43	79%	76	0	76	ML	
GC-07	Tier 3	1 of 1	61	55	90%	115	0	115	ML	
GC-08	Tier 2	2 of 2	49	40	82%	83	0	75	ML	
							75	88	SM	
GC-09	Tier 1	1 of 1	58	53.5	92%	105	0	60	ML	Trace fine to coarse gravel (subrounded, up to 20-cm diameter)
							60	75	SM	
							75	95	ML	
							95	105	SM	
GC-10	Tier 2	1 of 1	52.5	45	86%	92	0	92	ML	Trace to occasional coarse gravel (angular, 20-cm diameter), trace anthropogenic debris
GC-11	Tier 1	1 of 1	52	39	75%	77	0	77	ML	Trace fine gravel (subrounded, up to 20-cm diameter)
GC-12	Tier 1	1 of 1	50.5	45	89%	91	0	91	ML	Occasional anthropogenic debris
GC-13	Tier 1	1 of 1	57	55	96%	107	0	79	ML	
							79	107	SP	
GC-14	Tier 1	1 of 1	54	47	87%	91	0	23	ML	
							23	45	SM	
							45	91	ML	
GC-15	Tier 1	1 of 1	55	48	87%	99	0	99	ML	
GC-16	Tier 1	1 of 1	60.5	53.5	88%	104	0	104	ML	Trace fine gravel (subrounded)
GC-17	Not Collected	--	--	--	--	--	--	--	--	
GC-18	Tier 1	1 of 1	60	48	80%	100	0	100	ML	
GC-19A	Tier 1	1 of 2	--	33	--		0	65	ML	Trace anthropogenic debris and fine gravel (subangular)
GC-19B	Tier 1	2 of 2	60	48	80%	100	0	100	ML	Trace anthropogenic debris
GC-20	Tier 1	3 of 3	21	16	76%	17	0	10	ML	
							10	17	SM	
GC-21	Not Collected	--	--	--	--	--	--	--	--	
GC-22	Not Collected	--	--	--	--	--	--	--	--	

Note:
USCS = Unified Soil Classification System

Table C-2
Geochronology Sediment Sampling Results

Location ID Sample ID Sample Date Depth	GC-01 GC-01-20100203-S0002 2/3/2010 0 - 2 cm	GC-01 GC-01-20100203-S0608 2/3/2010 6 - 8 cm	GC-01 GC-01-20100203-S1214 2/3/2010 12 - 14 cm	GC-01 GC-01-20100203-S1820 2/3/2010 18 - 20 cm	GC-01 GC-01-20100203-S2426 2/3/2010 24 - 26 cm	GC-01 GC-01-20100203-S3032 2/3/2010 30 - 32 cm	GC-01 GC-01-20100203-S3638 2/3/2010 36 - 38 cm	GC-01 GC-01-20100203-S4244 2/3/2010 42 - 44 cm	GC-01 GC-01-20100203-S4448 2/3/2010 44 - 48 cm
Conventional Parameters (pct)									
Total organic carbon	0.722	1.31	0.896	0.798	0.613	0.707	0.695	0.789	0.763
Total solids	72.7	74.9	76.7	77.9	76.2	75.1	74.9	72.9	74.6
Grain Size (pct)									
Gravel	0.1	0.5	0.1 U	0.1 U	0.4	0.1 U	0.2	0.1	0.1 U
Sand, Coarse	0.4	1	0.7	0.9	0.8	0.8	0.5	0.4	0.5
Sand, Very Coarse	0.1	0.5	0.2	0.2	0.3	0.3	0.1	0.2	0.1
Sand, Medium	8.3	15.4	12.2	18.2	12.5	11.3	6.6	2.4	7.2
Sand, Fine	28.3	28.3	24.8	30.6	24.7	21.9	15.1	8.2	18.3
Sand, Very Fine	22.7	16.3	17	15.4	17.6	15.3	20.2	17.2	18.7
Silt, Coarse	13.5	9	13.9	10.7	13.9	15.2	20.9	25.4	17.3
Silt, Medium	6.6	5.6	7.3	5.8	7.6	8.5	10.2	13.3	10
Silt, Fine	5.3	5.4	5.9	4.8	5.9	6.9	7.3	9.5	7.2
Silt, Very Fine	4.9	5.6	5.7	4.4	5.3	6.2	6	7.4	6.2
Clay, Coarse	3.5	4.4	4.3	3.2	4	4.7	4.4	5.4	4.8
Clay, Medium	2.6	3.4	3.4	2.4	3.1	3.7	3.5	4.3	3.9
Clay, Fine	3.6	4.4	4.6	3.3	4.1	5	5.1	6.1	5.7
Radioisotopes (pci/g)									
Cesium-137	--	--	--	--	--	--	--	--	--
Lead-210	--	--	--	--	--	--	--	--	--

Notes:
Bold = Detected result
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 not detected above
 detection limit

Table C-2
Geochronology Sediment Sampling Results

Location ID Sample ID Sample Date Depth	GC-01 GC-01-20100203-S4850 2/3/2010 48 - 50 cm	GC-01 GC-01-20100203-S5456 2/3/2010 54 - 56 cm	GC-01 GC-01-20100203-S6062 2/3/2010 60 - 62 cm	GC-01 GC-01-20100203-S6668 2/3/2010 66 - 68 cm	GC-01 GC-01-20100203-S7274 2/3/2010 72 - 74 cm	GC-01 GC-01-20100203-S7880 2/3/2010 78 - 80 cm	GC-01 GC-01-20100203-S8486 2/3/2010 84 - 86 cm	GC-02 GC-02-20100203-S0002 2/3/2010 0 - 2 cm	GC-02 GC-02-20100203-S0608 2/3/2010 6 - 8 cm
Conventional Parameters (pct)									
Total organic carbon	0.663	0.764	0.21	0.838	0.783	0.485	0.532	0.705	0.456
Total solids	74.7	75.7	78.8	75.4	75.1	79.2	79.2	62.6	75.6
Grain Size (pct)									
Gravel	--	--	--	--	--	--	--	0.2	0.2
Sand, Coarse	--	--	--	--	--	--	--	0.7	0.5
Sand, Very Coarse	--	--	--	--	--	--	--	0.7	0.1
Sand, Medium	--	--	--	--	--	--	--	5.2	5.9
Sand, Fine	--	--	--	--	--	--	--	25.9	32.1
Sand, Very Fine	--	--	--	--	--	--	--	26.8	26.7
Silt, Coarse	--	--	--	--	--	--	--	13.7	12.4
Silt, Medium	--	--	--	--	--	--	--	5.5	5.1
Silt, Fine	--	--	--	--	--	--	--	5.2	4.5
Silt, Very Fine	--	--	--	--	--	--	--	5.4	4.3
Clay, Coarse	--	--	--	--	--	--	--	4	3
Clay, Medium	--	--	--	--	--	--	--	2.9	2.1
Clay, Fine	--	--	--	--	--	--	--	3.7	3
Radioisotopes (pci/g)									
Cesium-137	--	--	--	--	--	--	--	0.045 U	0.035 U
Lead-210	--	--	--	--	--	--	--	0.25	0.2

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Table C-2
Geochronology Sediment Sampling Results

Location ID Sample ID Sample Date Depth	GC-02 GC-02-20100203-S1214 2/3/2010 12 - 14 cm	GC-02 GC-02-20100203-S1820 2/3/2010 18 - 20 cm	GC-02 GC-02-20100203-S2426 2/3/2010 24 - 26 cm	GC-02 GC-02-20100203-S3032 2/3/2010 30 - 32 cm	GC-02 GC-02-20100203-S3638 2/3/2010 36 - 38 cm	GC-03 GC-03-20100203-S0002 2/3/2010 0 - 2 cm	GC-03 GC-03-20100203-S0608 2/3/2010 6 - 8 cm	GC-03 GC-03-20100203-S1214 2/3/2010 12 - 14 cm	GC-03 GC-03-20100203-S1820 2/3/2010 18 - 20 cm
Conventional Parameters (pct)									
Total organic carbon	0.916	1.14	1.44	1.02	1.14	1.31	1.98	1.53	1
Total solids	72.1	70.1	71.9	72	71.7	62.6	60.1	63.8	74.4
Grain Size (pct)									
Gravel	0.1	0.1	0.7	2	0.1 U	0.1 U	0.6	0.1 U	0.1 U
Sand, Coarse	0.4	0.5	0.7	0.7	0.7	0.3	1	0.8	0.3
Sand, Very Coarse	0.2	0.5	0.3	0.2	0.3	0.1 U	1.1	0.3	0.1 U
Sand, Medium	4.7	5.9	7	5.5	5.7	2.2	1.1	1.1	3.5
Sand, Fine	23.9	18.6	17.2	17.5	19	2.9	3.2	1.4	21.6
Sand, Very Fine	24.6	18.6	16.2	16.5	18.4	4.9	11.5	6.3	19.5
Silt, Coarse	15.7	14.8	15.8	16.6	14.7	17.1	15.8	21.2	15.1
Silt, Medium	7.5	8.5	9.6	9.5	9	14.8	13.4	14.6	8.8
Silt, Fine	6	7.5	7.7	7.6	7.3	13.2	12	12.5	7.3
Silt, Very Fine	5.8	7.9	7.5	7.5	7.5	13.3	12.1	12.7	7.2
Clay, Coarse	4.1	6.2	6.1	5.8	6	10.8	10	10.3	5.9
Clay, Medium	3	4.8	4.9	4.6	4.8	8.7	7.9	8.2	4.7
Clay, Fine	4	6.1	6.2	5.9	6.6	11.7	10.2	10.7	6.1
Radioisotopes (pci/g)									
Cesium-137	0.041 U	0.039 U	0.044 U	0.033 U	0.046 U	--	--	--	--
Lead-210	0.16	0.31	0.17	0.21	0.19	--	--	--	--

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Table C-2
Geochronology Sediment Sampling Results

Location ID Sample ID Sample Date Depth	GC-03 GC-03-20100203-S2426 2/3/2010 24 - 26 cm	GC-05 GC-05-20100203-S0002 2/3/2010 0 - 2 cm	GC-05 GC-05-20100203-S0608 2/3/2010 6 - 8 cm	GC-05 GC-05-20100203-S1214 2/3/2010 12 - 14 cm	GC-05 GC-05-20100203-S1820 2/3/2010 18 - 20 cm	GC-05 GC-05-20100203-S2426 2/3/2010 24 - 26 cm	GC-05 GC-05-20100203-S3032 2/3/2010 30 - 32 cm	GC-05 GC-05-20100203-S3638 2/3/2010 36 - 38 cm	GC-05 GC-05-20100203-S4244 2/3/2010 42 - 44 cm
Conventional Parameters (pct)									
Total organic carbon	0.896	1.34	0.973	1.26	0.7	0.627	0.384	0.281	0.35
Total solids	74.3	71.1	69.6	69.9	77.1	75.1	76.6	76.3	77.6
Grain Size (pct)									
Gravel	0.1	0.1 U	0.1	0.2	0.3	0.1 U	0.1 U	0.1 U	0.1 U
Sand, Coarse	0.3	1.5	0.4	0.8	0.3	0.3	0.3	0.2	0.3
Sand, Very Coarse	0.1	0.4	0.1	0.1	0.2	0.1	0.1 U	0.1	0.1
Sand, Medium	3.5	9.7	5.3	6.9	6	2.7	1.9	2	5.7
Sand, Fine	18.4	25.6	22.9	19.8	28.2	16.9	24.2	26.2	36.1
Sand, Very Fine	20.6	15.4	16.2	14.3	23.2	24.9	33.7	36.2	23.2
Silt, Coarse	16.1	11	10.1	10	10	16.4	14.8	7.4	7
Silt, Medium	8.7	7.1	8	8.5	7.1	9.6	6.4	7.2	7.4
Silt, Fine	7.2	7.7	8.4	8.4	6.3	7.6	5.1	6	6.3
Silt, Very Fine	7.4	7.6	9.1	9.2	6	6.9	4.5	5.2	5.3
Clay, Coarse	6.1	5.3	7.1	7.7	4.4	5.1	3.2	3.5	3.5
Clay, Medium	5	3.8	5.5	6.2	3.4	4.1	2.4	2.6	2.6
Clay, Fine	6.6	4.8	6.9	7.8	4.5	5.7	3.5	3.5	2.7
Radioisotopes (pci/g)									
Cesium-137	--	0.042 U	0.047 U	0.05 U	0.035 U	0.037 U	0.039 U	0.045 U	0.046 U
Lead-210	--	0.35	0.35	0.35	0.19	0.09	0.09 U	0.1	0.13

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Table C-2
Geochronology Sediment Sampling Results

Location ID Sample ID Sample Date Depth	GC-05 GC-05-20100203-S4850 2/3/2010 48 - 50 cm	GC-05 GC-05-20100203-S5456 2/3/2010 54 - 56 cm	GC-05 GC-05-20100203-S6062 2/3/2010 60 - 62 cm	GC-05 GC-05-20100203-S6668 2/3/2010 66 - 68 cm	GC-05 GC-05-20100203-S7274 2/3/2010 72 - 74 cm	GC-05 GC-05-20100203-S7880 2/3/2010 78 - 80 cm	GC-05 GC-05-20100203-S8486 2/3/2010 84 - 86 cm	GC-06 GC-06-20100203-S0002 2/3/2010 0 - 2 cm	GC-06 GC-06-20100203-S0608 2/3/2010 6 - 8 cm
Conventional Parameters (pct)									
Total organic carbon	0.341	0.617	1.87	0.415	0.443	0.429	0.131	1.65	1.55
Total solids	77.6	45.6	49	73.7	76.6	73.6	75.6	67.8	64
Grain Size (pct)									
Gravel	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.3	0.3
Sand, Coarse	0.2	0.2	0.3	0.2	0.2	0.4	0.1	1.6	1.4
Sand, Very Coarse	0.1	0.1 U	0.1 U	0.1 U	0.1	0.1 U	0.1 U	0.5	0.4
Sand, Medium	6.8	0.7	1.9	0.9	4.9	1.1	0.9	18.5	11.5
Sand, Fine	41.2	15.6	24.8	13.1	56.4	21.7	38.5	33.7	21.3
Sand, Very Fine	23.6	37.7	28.6	27.5	19.3	33.6	40.3	11.7	11.1
Silt, Coarse	8.5	19.1	17.2	22.1	5.7	17.2	7.8	5.9	8.2
Silt, Medium	4.9	7.7	7.5	10.1	3.5	6.8	3	4.9	8.3
Silt, Fine	3.9	6.3	5.8	7.4	2.9	5.5	2.7	5.4	8.7
Silt, Very Fine	3.5	4.6	4.8	6.2	2.5	4.6	2.3	5.9	9.2
Clay, Coarse	2.6	2.9	3.2	4.3	1.6	3.1	1.5	4.3	7.2
Clay, Medium	2	2.1	2.5	3.3	1.2	2.4	1.1	3.1	5.4
Clay, Fine	2.7	3.2	3.5	4.9	1.7	3.5	1.8	4	7
Radioisotopes (pci/g)									
Cesium-137	0.031 U	0.045 U	0.041 U	0.034 U	0.033 U	0.043 U	0.05 U	--	--
Lead-210	0.11	0.16	0.08	0.16	0.09 U	0.1 U	0.1 U	--	--

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Table C-2
Geochronology Sediment Sampling Results

Location ID Sample ID Sample Date Depth	GC-06 GC-06-20100203-S1214 2/3/2010 12 - 14 cm	GC-06 GC-06-20100203-S1820 2/3/2010 18 - 20 cm	GC-06 GC-06-20100203-S2426 2/3/2010 24 - 26 cm	GC-06 GC-06-20100203-S3032 2/3/2010 30 - 32 cm	GC-06 GC-06-20100203-S3638 2/3/2010 36 - 38 cm	GC-06 GC-06-20100203-S4244 2/3/2010 42 - 44 cm	GC-06 GC-06-20100203-S4448 2/3/2010 44 - 48 cm	GC-06 GC-06-20100203-S4850 2/3/2010 48 - 50 cm	GC-06 GC-06-20100203-S5456 2/3/2010 54 - 56 cm
Conventional Parameters (pct)									
Total organic carbon	1.97	2.17	2.22	2.08	1.91	1.97	1.77	1.25	0.417
Total solids	65.3	65.8	64.2	62.8	61.7	65.2	61.6	64.1	74
Grain Size (pct)									
Gravel	0.1	0.1 U	0.1 U	0.1 U	0.1 U	1.7	0.1 U	--	--
Sand, Coarse	1	0.9	0.9	0.5	0.5	0.6	0.3	--	--
Sand, Very Coarse	0.5	0.5	0.7	0.4	0.1	1.2	0.1	--	--
Sand, Medium	7.1	8.3	4.7	1.9	3	3.7	0.8	--	--
Sand, Fine	14.9	18.1	8.7	2.8	6.2	8.1	2	--	--
Sand, Very Fine	9.6	10.1	7.5	8.5	13.4	6.6	4.7	--	--
Silt, Coarse	11.3	10.5	12.9	16.8	12.9	14.9	16.1	--	--
Silt, Medium	9.6	9.9	11.9	15.4	12.8	14.4	15.8	--	--
Silt, Fine	9.9	9.9	11.9	12.3	12.6	11.9	14.3	--	--
Silt, Very Fine	10.8	10.2	12.5	11.5	12.4	11.2	14.1	--	--
Clay, Coarse	8.8	7.8	10	9.3	9.4	8.9	11.2	--	--
Clay, Medium	7.1	6	7.9	7.9	7.2	7.2	9	--	--
Clay, Fine	9.2	7.9	10.4	12.8	9.3	9.5	11.6	--	--
Radioisotopes (pci/g)									
Cesium-137	--	--	--	--	--	--	--	--	--
Lead-210	--	--	--	--	--	--	--	--	--

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Table C-2
Geochronology Sediment Sampling Results

Location ID Sample ID Sample Date Depth	GC-06 GC-06-20100203-S6062 2/3/2010 60 - 62 cm	GC-06 GC-06-20100203-S6668 2/3/2010 66 - 68 cm	GC-06 GC-06-20100203-S7274 2/3/2010 72 - 74 cm	GC-07 GC-07-20100203-S0002 2/3/2010 0 - 2 cm	GC-07 GC-07-20100203-S0608 2/3/2010 6 - 8 cm	GC-07 GC-07-20100203-S1214 2/3/2010 12 - 14 cm	GC-07 GC-07-20100203-S1820 2/3/2010 18 - 20 cm	GC-07 GC-07-20100203-S2426 2/3/2010 24 - 26 cm	GC-07 GC-07-20100203-S3032 2/3/2010 30 - 32 cm
Conventional Parameters (pct)									
Total organic carbon	0.74	0.527	0.662	1.27	1.72	1.67	1.58	2.54	3.36
Total solids	69.1	72.7	74.3	56.6	63.1	65	56.1	57.4	57.2
Grain Size (pct)									
Gravel	--	--	--	0.1	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
Sand, Coarse	--	--	--	1.3	1.1	0.8	0.2	0.4	0.5
Sand, Very Coarse	--	--	--	0.4	0.3	0.2	0.2	0.1	0.1
Sand, Medium	--	--	--	10.5	8.6	3.2	1.8	2.3	3.5
Sand, Fine	--	--	--	24.4	24.1	18.2	7.2	7.3	7.3
Sand, Very Fine	--	--	--	14.8	16.2	18.7	9.9	9.3	7.7
Silt, Coarse	--	--	--	6.1	6.9	11	9.8	11.8	11.6
Silt, Medium	--	--	--	6.9	7.3	10.1	11	12.2	12
Silt, Fine	--	--	--	8.4	8.2	9.9	12.3	12.8	12.7
Silt, Very Fine	--	--	--	9.4	9.2	9.8	14.4	13.7	14
Clay, Coarse	--	--	--	6.8	6.9	6.8	11.7	10.9	10.9
Clay, Medium	--	--	--	4.9	5	4.9	9.3	8.5	8.4
Clay, Fine	--	--	--	6.1	6.3	6.6	12.2	10.9	11.2
Radioisotopes (pci/g)									
Cesium-137	--	--	--	--	--	--	--	--	--
Lead-210	--	--	--	--	--	--	--	--	--

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Geochronology Sediment Sampling Results

Location ID Sample ID Sample Date Depth	GC-07 GC-07-20100203-S3638 2/3/2010 36 - 38 cm	GC-07 GC-07-20100203-S4244 2/3/2010 42 - 44 cm	GC-07 GC-07-20100203-S4850 2/3/2010 48 - 50 cm	GC-07 GC-07-20100203-S5456 2/3/2010 54 - 56 cm	GC-07 GC-07-20100203-S6062 2/3/2010 60 - 62 cm	GC-07 GC-07-20100203-S6668 2/3/2010 66 - 68 cm	GC-07 GC-07-20100203-S7274 2/3/2010 72 - 74 cm	GC-07 GC-07-20100203-S7880 2/3/2010 78 - 80 cm	GC-07 GC-07-20100203-S8486 2/3/2010 84 - 86 cm
Conventional Parameters (pct)									
Total organic carbon	2.95	1.78	2.15	1.8	3.75	4.8	2.48	2.37	2.07
Total solids	57	56.4	49.7	51.6	49.6	46.1	46.6	57	56.5
Grain Size (pct)									
Gravel	0.1 U	0.1 U	--	--	--	--	--	--	--
Sand, Coarse	0.6	0.2	--	--	--	--	--	--	--
Sand, Very Coarse	0.1	0.1	--	--	--	--	--	--	--
Sand, Medium	3.5	1.8	--	--	--	--	--	--	--
Sand, Fine	6.9	4.4	--	--	--	--	--	--	--
Sand, Very Fine	6.9	5.8	--	--	--	--	--	--	--
Silt, Coarse	12	11.5	--	--	--	--	--	--	--
Silt, Medium	12.8	13.7	--	--	--	--	--	--	--
Silt, Fine	13.2	14.9	--	--	--	--	--	--	--
Silt, Very Fine	14	15.2	--	--	--	--	--	--	--
Clay, Coarse	10.9	11.7	--	--	--	--	--	--	--
Clay, Medium	8.4	9.1	--	--	--	--	--	--	--
Clay, Fine	10.6	11.6	--	--	--	--	--	--	--
Radioisotopes (pci/g)									
Cesium-137	--	--	--	--	--	--	--	--	--
Lead-210	--	--	--	--	--	--	--	--	--

Notes:
Bold = Detected result
 U = Compound analyzed, but
 not detected above
 detection limit

Table C-2
Geochronology Sediment Sampling Results

Location ID Sample ID Sample Date Depth	GC-08 GC-08-20100202-S0002 2/2/2010 0 - 2 cm	GC-08 GC-08-20100202-S0608 2/2/2010 6 - 8 cm	GC-08 GC-08-20100202-S1214 2/2/2010 12 - 14 cm	GC-08 GC-08-20100202-S1820 2/2/2010 18 - 20 cm	GC-08 GC-08-20100202-S2426 2/2/2010 24 - 26 cm	GC-08 GC-08-20100202-S3032 2/2/2010 30 - 32 cm	GC-08 GC-08-20100202-S3638 2/2/2010 36 - 38 cm	GC-08 GC-08-20100202-S4244 2/2/2010 42 - 44 cm	GC-08 GC-08-20100202-S4448 2/2/2010 44 - 48 cm
Conventional Parameters (pct)									
Total organic carbon	1.75	1.77	1.35	1.3	1.41	0.109	0.723	0.468	0.738
Total solids	50.2	53.1	60.7	64.1	60.5	68.8	72.4	74.8	75
Grain Size (pct)									
Gravel	0.2	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
Sand, Coarse	1.6	1	0.8	0.6	0.8	0.7	0.4	0.2	0.2
Sand, Very Coarse	0.9	0.4	0.1	0.1	0.3	0.3	0.1	0.1 U	0.1
Sand, Medium	5.7	4.7	3.9	1.3	2.1	1.5	1.2	0.9	1.6
Sand, Fine	11.8	10.9	7.9	6.9	9.1	9.9	9.6	16.2	17.3
Sand, Very Fine	10.6	12.3	13.8	18.9	17.7	25.6	26.7	32	32.7
Silt, Coarse	10.1	11.5	15.6	18.4	15.7	17.3	19.2	17.4	14.3
Silt, Medium	11	11.1	11.7	12	11.8	10.1	9.5	7.4	7.2
Silt, Fine	11.8	11.7	10.7	10.2	11	8.1	7.6	5.9	5.7
Silt, Very Fine	12.4	12.3	10.9	9.9	10.4	7.9	7.4	5.8	5.8
Clay, Coarse	8.9	9	8.4	7.5	7.6	6.4	6.2	4.8	5
Clay, Medium	6.5	6.6	6.7	5.9	5.8	5.2	5.2	3.9	4.2
Clay, Fine	8.6	8.7	9.4	8.3	7.7	7	7	5.4	5.9
Radioisotopes (pci/g)									
Cesium-137	0.134	0.087	-- U	-- U	-- U	-- U	-- U	-- U	-- U
Lead-210	0.5	0.43	0.32	0.2	0.18	0.13	0.15	0.11	0.13

Notes:
Bold = Detected result
 U = Compound analyzed, but
 not detected above
 detection limit

Table C-2
Geochronology Sediment Sampling Results

Location ID Sample ID Sample Date Depth	GC-08 GC-08-20100202-S4850 2/2/2010 48 - 50 cm	GC-08 GC-08-20100202-S5456 2/2/2010 54 - 56 cm	GC-08 GC-08-20100202-S6062 2/2/2010 60 - 62 cm	GC-08 GC-08-20100202-S6668 2/2/2010 66 - 68 cm	GC-08 GC-08-20100202-S7274 2/2/2010 72 - 74 cm	GC-08 GC-08-20100202-S7880 2/2/2010 78 - 80 cm	GC-09 GC-09-20100202-S0002 2/2/2010 0 - 2 cm	GC-09 GC-09-20100202-S0608 2/2/2010 6 - 8 cm	GC-09 GC-09-20100202-S1214 2/2/2010 12 - 14 cm
Conventional Parameters (pct)									
Total organic carbon	0.574	0.717	0.846	0.438	0.253	0.556	1.71	1.98	2.37
Total solids	74.6	74.7	71	75.2	77.4	74.9	64.4	60.5	56.7
Grain Size (pct)									
Gravel	--	--	--	--	--	--	4.5	0.3	0.1 U
Sand, Coarse	--	--	--	--	--	--	1.8	1.7	0.8
Sand, Very Coarse	--	--	--	--	--	--	1.2	0.6	0.3
Sand, Medium	--	--	--	--	--	--	6.1	7.7	3.4
Sand, Fine	--	--	--	--	--	--	15.4	15.5	7.5
Sand, Very Fine	--	--	--	--	--	--	16.1	16.3	11.6
Silt, Coarse	--	--	--	--	--	--	10.9	10.3	14.4
Silt, Medium	--	--	--	--	--	--	7.5	8.6	12.4
Silt, Fine	--	--	--	--	--	--	8	9.1	12.5
Silt, Very Fine	--	--	--	--	--	--	9	10	12.6
Clay, Coarse	--	--	--	--	--	--	6.8	7.5	9.2
Clay, Medium	--	--	--	--	--	--	5.2	5.5	6.6
Clay, Fine	--	--	--	--	--	--	7.4	6.9	8.6
Radioisotopes (pci/g)									
Cesium-137	-- U	-- U	-- U	-- U	-- U	-- U	0.086	0.052 U	0.085
Lead-210	-- U	0.16	0.09	0.14	0.1	0.12	0.57	0.53	0.49

Notes:
Bold = Detected result
 U = Compound analyzed, but
 not detected above
 detection limit

Table C-2
Geochronology Sediment Sampling Results

Location ID Sample ID Sample Date Depth	GC-09 GC-09-20100202-S1820 2/2/2010 18 - 20 cm	GC-09 GC-09-20100202-S2426 2/2/2010 24 - 26 cm	GC-09 GC-09-20100202-S3032 2/2/2010 30 - 32 cm	GC-09 GC-09-20100202-S3638 2/2/2010 36 - 38 cm	GC-09 GC-09-20100202-S4244 2/2/2010 42 - 44 cm	GC-09 GC-09-20100202-S4448 2/2/2010 44 - 48 cm	GC-09 GC-09-20100202-S4850 2/2/2010 48 - 50 cm	GC-09 GC-09-20100202-S5456 2/2/2010 54 - 56 cm	GC-09 GC-09-20100202-S6062 2/2/2010 60 - 62 cm
Conventional Parameters (pct)									
Total organic carbon	2.4	2.68	2.36	2.3	3.36	3.27	3.38	1.26	1.48
Total solids	54	53.2	59.3	63.8	57.6	61.9	66.2	75.9	75.8
Grain Size (pct)									
Gravel	0.1 U	0.1 U	0.8	0.1	0.1 U	0.1 U	0.7	0.3	0.1 U
Sand, Coarse	0.8	0.6	5.4	4.9	1.3	4.2	8.7	4.5	0.2
Sand, Very Coarse	0.4	0.2	1.1	0.9	0.1	0.6	1	0.3	0.1 U
Sand, Medium	3.8	3.2	19.8	20.9	4.6	15.8	27.8	25.8	0.7
Sand, Fine	5.7	3.9	9	13.1	5.5	10.7	13.8	21.6	15.6
Sand, Very Fine	8.3	5.5	3.5	7.2	7.6	7.6	6.9	10.3	37.7
Silt, Coarse	12.3	11.1	5.9	8.3	9.7	9.3	6.2	6.5	8.5
Silt, Medium	11.9	13.8	8.3	7.8	11.6	9.6	6.5	5.1	7
Silt, Fine	13	14.6	9.9	8.2	12.1	9.2	7	5.3	6.4
Silt, Very Fine	14.3	15.8	11.3	9.1	14	10	7.5	6.1	7.1
Clay, Coarse	11	12.2	9.2	7.2	11.9	8.3	5.5	5.2	6.1
Clay, Medium	8.3	8.7	7.1	5.4	9.5	6.6	3.8	4.1	4.9
Clay, Fine	10.3	10.3	8.7	6.9	12	7.9	4.6	4.9	5.9
Radioisotopes (pci/g)									
Cesium-137	0.136	0.179	0.139	0.089	0.159	0.107	0.142	0.033 U	0.035 U
Lead-210	0.62	0.52	0.27	0.19	0.36	0.26	0.16	0.11 U	0.12

Notes:
Bold = Detected result
U = Compound analyzed, but
not detected above
detection limit

Table C-2
Geochronology Sediment Sampling Results

Location ID Sample ID Sample Date Depth	GC-09 GC-09-20100202-S6668 2/2/2010 66 - 68 cm	GC-09 GC-09-20100202-S7274 2/2/2010 72 - 74 cm	GC-09 GC-09-20100202-S7880 2/2/2010 78 - 80 cm	GC-09 GC-09-20100202-S8486 2/2/2010 84 - 86 cm	GC-10 GC-10-20100202-S0002 2/2/2010 0 - 2 cm	GC-10 GC-10-20100202-S0608 2/2/2010 6 - 8 cm	GC-10 GC-10-20100202-S1214 2/2/2010 12 - 14 cm	GC-10 GC-10-20100202-S1820 2/2/2010 18 - 20 cm	GC-10 GC-10-20100202-S2426 2/2/2010 24 - 26 cm
Conventional Parameters (pct)									
Total organic carbon	0.986	1.49	2.22	3.04	3.1	2.72	2.7	2.81	2.88
Total solids	80.1	73.6	75.1	70.9	45.8	49.3	50.2	46.2	46.1
Grain Size (pct)									
Gravel	0.5	0.4	5.1	0.4	43.2	2.4	28.1	0.6	4.6
Sand, Coarse	9.5	6.5	8.1	5.2	1.9	1.2	1.6	0.8	0.9
Sand, Very Coarse	0.9	0.6	0.6	0.3	4.1	1.1	3.8	0.3	0.8
Sand, Medium	38.6	29.2	31.4	22.1	2.6	3.2	5.1	2.4	3.4
Sand, Fine	19.3	12	12.1	10.5	2.5	3	4.1	4.9	5.2
Sand, Very Fine	8.1	5	6.1	4.6	9.5	6.3	5.2	5.5	4.8
Silt, Coarse	4.7	3	4.9	5.3	5.9	15.7	9.1	11.5	13.7
Silt, Medium	3.6	6	5.7	7.6	6.3	13.5	8.1	11.7	12.3
Silt, Fine	3.4	7.1	6	8.5	6.8	14	8.7	13.6	13.2
Silt, Very Fine	3.7	8.8	6.6	10.7	6.4	14	9	15.8	14
Clay, Coarse	2.9	7.7	5.2	9.3	4.1	9.7	6.4	12.2	10.2
Clay, Medium	2.2	6.4	3.9	7.2	2.8	6.9	4.5	9	7.4
Clay, Fine	2.6	7.4	4.4	8.2	3.9	9.1	6.2	11.8	9.7
Radioisotopes (pci/g)									
Cesium-137	0.029 U	0.04 U	0.028 U	0.04 U	-- U	0.077	0.128	0.138	0.181
Lead-210	0.09 U	0.19	0.13	0.16	0.62	0.59	0.73	0.62	0.53

Notes:
Bold = Detected result
U = Compound analyzed, but
not detected above
detection limit

Table C-2
Geochronology Sediment Sampling Results

Location ID Sample ID Sample Date Depth	GC-10 GC-10-20100202-S3032 2/2/2010 30 - 32 cm	GC-10 GC-10-20100202-S3638 2/2/2010 36 - 38 cm	GC-10 GC-10-20100202-S4244 2/2/2010 42 - 44 cm	GC-10 GC-10-20100202-S4850 2/2/2010 48 - 50 cm	GC-10 GC-10-20100202-S5456 2/2/2010 54 - 56 cm	GC-10 GC-10-20100202-S6062 2/2/2010 60 - 62 cm	GC-10 GC-10-20100202-S6668 2/2/2010 66 - 68 cm	GC-10 GC-10-20100202-S7274 2/2/2010 72 - 74 cm	GC-10 GC-10-20100202-S7880 2/2/2010 78 - 80 cm
Conventional Parameters (pct)									
Total organic carbon	3.36	3.58	3.71	11	6.59	5.63	4.94	2.68	2.32
Total solids	46	53.1	54.7	43.5	37.5	47.2	48.3	49.9	60.9
Grain Size (pct)									
Gravel	0.4	2.2	1.1	4.2	0.1	0.1	0.1 U	0.8	0.1 U
Sand, Coarse	1.2	2	1.4	2	1.2	1.3	1.5	0.6	0.8
Sand, Very Coarse	0.8	1.2	0.9	2	0.8	0.6	0.4	0.6	0.2
Sand, Medium	2.5	9	5	7	2.6	5.1	6.3	1.4	1.9
Sand, Fine	3.8	8.2	14.4	6.3	2.8	8.6	7.1	2.2	12.3
Sand, Very Fine	3.8	5.9	12.2	2.7	2	4.9	3.8	4.3	13.7
Silt, Coarse	12	11.2	10	11.3	14.5	11.7	11.6	13.2	14.6
Silt, Medium	12	11.8	10.1	12.8	14.9	11.9	11.4	13.8	11.9
Silt, Fine	13.8	12.2	10.4	13.1	15	12.6	12.6	14.5	10.9
Silt, Very Fine	16	12.6	11.3	13.9	16.2	14.3	14.7	15.5	10.9
Clay, Coarse	12.7	9.3	8.8	10.1	12.1	11.2	11.8	11.9	8.4
Clay, Medium	9.6	6.6	6.4	6.9	8.4	8.1	8.6	9.1	6.4
Clay, Fine	11.4	7.8	8	7.7	9.6	9.4	10.3	12	8.1
Radioisotopes (pci/g)									
Cesium-137	0.184	0.207	0.224	0.462	0.503	0.75	0.407	0.051 U	0.036 U
Lead-210	0.5	0.35	0.36	0.55	0.67	0.39	0.45	0.28	0.2

Notes:
Bold = Detected result
 U = Compound analyzed, but
 not detected above
 detection limit

Table C-2
Geochronology Sediment Sampling Results

Location ID Sample ID Sample Date Depth	GC-10 GC-10-20100202-S8486 2/2/2010 84 - 86 cm	GC-10 GC-10-20100202-S8690 2/2/2010 86 - 90 cm	GC-11 GC-11-20100202-S0002 2/2/2010 0 - 2 cm	GC-11 GC-11-20100202-S0608 2/2/2010 6 - 8 cm	GC-11 GC-11-20100202-S1214 2/2/2010 12 - 14 cm	GC-11 GC-11-20100202-S1820 2/2/2010 18 - 20 cm	GC-11 GC-11-20100202-S2426 2/2/2010 24 - 26 cm	GC-11 GC-11-20100202-S3032 2/2/2010 30 - 32 cm	GC-11 GC-11-20100202-S3638 2/2/2010 36 - 38 cm
Conventional Parameters (pct)									
Total organic carbon	4.48	5.63	1.55	1.98	2.27	2.47	1.88	4.16	4.31
Total solids	52.1	49.8	46.4	55.4	50.8	55.1	57	53.8	49.8
Grain Size (pct)									
Gravel	0.1 U	1.1	0.2	0.1 U	0.1 U	1.8	0.2	0.1 U	0.1 U
Sand, Coarse	0.6	1.9	1	0.7	0.3	1.1	1.4	1	1.2
Sand, Very Coarse	0.2	1.2	0.3	0.2	0.1 U	0.4	0.2	0.4	0.3
Sand, Medium	0.6	2.2	2.8	3.5	2	7.4	12.2	6.6	3.5
Sand, Fine	1.8	3.4	5.9	6.8	4.5	10.7	13.4	10.8	4.8
Sand, Very Fine	3.8	3.8	9.9	8.5	4.6	5.9	4.9	6.8	3.9
Silt, Coarse	10.3	12	15.3	13.7	12.4	8.8	9.1	8.9	9.4
Silt, Medium	13.5	12.8	12.8	13.1	13.6	11.3	10.4	9.6	12.3
Silt, Fine	14.9	13.5	13.5	13.2	15.2	12.3	11.4	11.1	14.1
Silt, Very Fine	17.2	15.4	13.3	13.5	15.7	13.4	12	13.8	16.4
Clay, Coarse	14	12.3	9.3	9.9	11.8	10.2	9.3	11.2	12.8
Clay, Medium	10.7	9.1	6.8	7.4	8.7	7.7	7	8.6	9.5
Clay, Fine	12.4	11.2	8.9	9.6	11	9	8.6	11.2	11.7
Radioisotopes (pci/g)									
Cesium-137	0.243	0.31	0.054 U	0.119	0.192	0.155	0.142	0.334	0.222
Lead-210	0.41	0.43	0.69	0.49	0.64	0.41	0.36	0.44	0.33

Notes:
Bold = Detected result
U = Compound analyzed, but
not detected above
detection limit

Table C-2
Geochronology Sediment Sampling Results

Location ID Sample ID Sample Date Depth	GC-11 GC-11-20100202-S4244 2/2/2010 42 - 44 cm	GC-11 GC-11-20100202-S4850 2/2/2010 48 - 50 cm	GC-11 GC-11-20100202-S5456 2/2/2010 54 - 56 cm	GC-11 GC-11-20100202-S6062 2/2/2010 60 - 62 cm	GC-11 GC-11-20100202-S6668 2/2/2010 66 - 68 cm	GC-11 GC-11-20100202-S7274 2/2/2010 72 - 74 cm	GC-12 GC-12-20100201-S0002 2/1/2010 0 - 2 cm	GC-12 GC-12-20100201-S0608 2/1/2010 6 - 8 cm	GC-12 GC-12-20100201-S1214 2/1/2010 12 - 14 cm
Conventional Parameters (pct)									
Total organic carbon	3.93	3.68	4.63	5.6	3.46	3	1.81	2.14	1.87
Total solids	50.7	49.9	54.4	54.3	55.9	60.4	47.6	52.2	50.5
Grain Size (pct)									
Gravel	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.9	0.2	0.1 U	0.1 U
Sand, Coarse	0.9	1.3	1.1	0.6	0.9	1.9	1.1	0.5	0.3
Sand, Very Coarse	0.2	1.1	0.6	0.4	0.6	1.2	0.2	0.1	0.1
Sand, Medium	4.7	1.2	0.9	0.6	0.8	5.5	2.1	0.9	0.7
Sand, Fine	6.3	1.3	0.8	0.7	0.9	9.5	4.7	2.4	1.8
Sand, Very Fine	3.2	1.9	1.4	1.4	1.9	7.8	11	5.8	3.5
Silt, Coarse	10	8.5	9.6	9.8	9.6	9.1	15.7	18.6	11.1
Silt, Medium	12.1	11.8	13.6	13.5	13.3	10.7	14.2	16.1	15.4
Silt, Fine	14.4	14.2	16.5	16.3	16	11.9	13.9	14.5	16.5
Silt, Very Fine	16.1	15.7	18	18.2	17.9	13.3	13.2	14	17
Clay, Coarse	12.4	13.3	14.1	14.2	14.1	10.5	8.8	9.8	12.5
Clay, Medium	9.1	11.5	10.6	10.9	10.7	8.1	6.3	7.3	9.3
Clay, Fine	10.8	18.1	12.8	13.5	13.3	9.7	8.5	9.9	11.8
Radioisotopes (pci/g)									
Cesium-137	0.072 U	0.063 U	0.067 U	0.078 U	0.058 U	0.25	0.129	0.132	0.16
Lead-210	0.37	0.31	0.32	0.26	0.38	0.31	0.72	0.71	0.72

Notes:
Bold = Detected result
U = Compound analyzed, but
not detected above
detection limit

Table C-2
Geochronology Sediment Sampling Results

Location ID Sample ID Sample Date Depth	GC-12 GC-12-20100201-S1820 2/1/2010 18 - 20 cm	GC-12 GC-12-20100201-S2426 2/1/2010 24 - 26 cm	GC-12 GC-12-20100201-S3032 2/1/2010 30 - 32 cm	GC-12 GC-12-20100201-S3638 2/1/2010 36 - 38 cm	GC-12 GC-12-20100201-S4244 2/1/2010 42 - 44 cm	GC-12 GC-12-20100201-S4850 2/1/2010 48 - 50 cm	GC-12 GC-12-20100201-S5456 2/1/2010 54 - 56 cm	GC-12 GC-12-20100201-S6062 2/1/2010 60 - 62 cm	GC-12 GC-12-20100201-S6668 2/1/2010 66 - 68 cm
Conventional Parameters (pct)									
Total organic carbon	2.24	1.79	1.9	2.32	2.7	2.03	1.47	0.508	2.8
Total solids	49.9	49.1	52.5	51.1	55.9	56.9	58	53.8	52.2
Grain Size (pct)									
Gravel	0.1 U	0.1 U	0.1 U	0.1	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
Sand, Coarse	0.2	0.5	0.6	0.6	0.7	0.7	0.5	1.3	1
Sand, Very Coarse	0.1	0.2	0.3	0.2	0.2	0.3	0.1	0.9	0.2
Sand, Medium	0.6	1.9	2.2	1.7	1.5	3.4	5.6	3.3	2
Sand, Fine	1.8	4.8	4.3	5.2	4.2	9.5	15.5	12.3	3.3
Sand, Very Fine	2.7	5.6	4.6	7.5	6.5	7.9	10	12	3.6
Silt, Coarse	7.6	11.4	9.9	9.8	14.2	11.3	10.6	4.2	15.2
Silt, Medium	15.2	13.6	13.7	12.5	14.9	12.9	11.5	10.7	14.4
Silt, Fine	17.3	15.2	15.3	14.6	14.9	12.5	11.9	11.4	15.2
Silt, Very Fine	18.5	16.1	16.3	15.9	14.9	13.5	11.5	12.9	15.4
Clay, Coarse	13.8	11.7	12.3	12.3	10.8	10.4	8.5	10.7	11.2
Clay, Medium	10.2	8.5	9.2	9.2	7.6	8.1	6.3	9	8.1
Clay, Fine	12	10.5	11.2	10.5	9.6	9.6	8	11.3	10.4
Radioisotopes (pci/g)									
Cesium-137	0.153	0.164	0.255	0.187	0.158	0.13	0.097	0.061 U	0.246
Lead-210	0.71	0.48	0.55	0.43	0.34	0.32	0.27	0.32	0.49

Notes:
Bold = Detected result
 U = Compound analyzed, but
 not detected above
 detection limit

Table C-2
Geochronology Sediment Sampling Results

Location ID Sample ID Sample Date Depth	GC-12 GC-12-20100201-S7274 2/1/2010 72 - 74 cm	GC-12 GC-12-20100201-S7880 2/1/2010 78 - 80 cm	GC-12 GC-12-20100201-S8486 2/1/2010 84 - 86 cm	GC-12 GC-12-20100201-S8690 2/1/2010 86 - 90 cm	GC-13 GC-13-20100202-S0002 2/2/2010 0 - 2 cm	GC-13 GC-13-20100202-S0608 2/2/2010 6 - 8 cm	GC-13 GC-13-20100202-S1214 2/2/2010 12 - 14 cm	GC-13 GC-13-20100202-S1820 2/2/2010 18 - 20 cm	GC-13 GC-13-20100202-S2426 2/2/2010 24 - 26 cm
Conventional Parameters (pct)									
Total organic carbon	4.57	3.29	3.57	3.74	2.12	2.42	2.49	2.41	1.46
Total solids	48.3	51.1	48.2	49.9	35.1	47.1	51.7	47.2	48.9
Grain Size (pct)									
Gravel	0.1 U	2.4	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
Sand, Coarse	0.5	1.6	0.7	1.1	0.5	0.6	0.4	0.7	0.3
Sand, Very Coarse	0.3	1.9	0.5	0.4	0.2	0.1	0.3	0.2	0.1
Sand, Medium	1.3	1.5	1.3	1.9	1.3	2.1	1.2	1.7	1.6
Sand, Fine	3.6	2.5	2.1	3.1	2	4.6	1.6	2.2	1.4
Sand, Very Fine	3.5	4.2	3.2	4.1	3.8	8	4.8	4.2	1.7
Silt, Coarse	8.5	10.7	6.9	11.1	12.6	15.1	16.8	13.4	9.3
Silt, Medium	14	12.9	14.3	13.9	15.5	15.2	16.4	15.4	12.8
Silt, Fine	16	14.3	15.3	15.3	18.3	15.5	16.2	16.7	15.9
Silt, Very Fine	17.6	15.5	17.1	16.2	17.4	14.3	15.1	16.3	18
Clay, Coarse	13.4	11.9	13.8	12.4	11	9.4	10.3	11.2	14.2
Clay, Medium	9.9	8.9	10.3	9.2	7.5	6.5	7.3	7.8	10.9
Clay, Fine	11.4	11.7	14.6	11.3	9.9	8.7	9.6	10.2	13.7
Radioisotopes (pci/g)									
Cesium-137	0.384	0.348	0.639	1.044	0.138	0.074 U	0.132	0.113	0.166
Lead-210	0.51	0.39	0.44	0.45	0.93	0.86	0.58	0.79	0.64

Notes:
Bold = Detected result
 U = Compound analyzed, but
 not detected above
 detection limit

Table C-2
Geochronology Sediment Sampling Results

Location ID Sample ID Sample Date Depth	GC-13 GC-13-20100202-S3032 2/2/2010 30 - 32 cm	GC-13 GC-13-20100202-S3638 2/2/2010 36 - 38 cm	GC-13 GC-13-20100202-S4244 2/2/2010 42 - 44 cm	GC-13 GC-13-20100202-S4448 2/2/2010 44 - 48 cm	GC-13 GC-13-20100202-S4850 2/2/2010 48 - 50 cm	GC-13 GC-13-20100202-S5456 2/2/2010 54 - 56 cm	GC-13 GC-13-20100202-S6062 2/2/2010 60 - 62 cm	GC-13 GC-13-20100202-S6668 2/2/2010 66 - 68 cm	GC-13 GC-13-20100202-S7274 2/2/2010 72 - 74 cm
Conventional Parameters (pct)									
Total organic carbon	2.68	2.49	2.19	2.72	2.34	1.73	3.3	2.23	2.06
Total solids	50	51.1	55.3	55.1	59	50.8	56	68.5	67.2
Grain Size (pct)									
Gravel	0.1 U	0.1 U	0.1 U	3	1.9	0.1 U	0.1 U	0.1 U	0.6
Sand, Coarse	0.2	0.5	0.8	1.7	3.1	0.4	1	4.5	6.2
Sand, Very Coarse	0.1	0.1	0.2	0.7	1	0.1	0.2	0.5	1.3
Sand, Medium	0.9	1.9	3.5	5	10.7	2.9	3.8	15.6	22.1
Sand, Fine	1.9	3.3	5.7	5.4	9.9	3.1	4.5	9.9	15.9
Sand, Very Fine	2.8	4.4	5	3.5	5.1	1.6	4	6.5	6.3
Silt, Coarse	10.9	12.3	9.9	10.5	7.7	2.6	9.8	10.1	7.2
Silt, Medium	13.5	13.5	12.4	11.3	9.6	7.1	12.5	10.4	7.7
Silt, Fine	16.1	15.3	14.6	13.3	11.7	12.4	15	10.8	8.2
Silt, Very Fine	17.8	16.3	15.7	14.4	12.8	18.9	16	10.6	8.2
Clay, Coarse	13.5	12.1	11.9	11.3	10	17.5	12.1	7.7	6
Clay, Medium	10	8.9	9	8.8	7.5	14.8	9.3	5.8	4.5
Clay, Fine	12.5	11.2	11.3	11.2	8.9	18.7	11.8	7.7	5.8
Radioisotopes (pci/g)									
Cesium-137	0.231	0.254	0.187	0.226	0.159	0.213	0.209	0.074	0.069
Lead-210	0.52	0.61	0.52	0.52	0.41	0.43	0.51	0.39	0.29

Notes:
Bold = Detected result
 U = Compound analyzed, but
 not detected above
 detection limit

Table C-2
Geochronology Sediment Sampling Results

Location ID Sample ID Sample Date Depth	GC-13 GC-13-20100202-S7880 2/2/2010 78 - 80 cm	GC-13 GC-13-20100202-S8486 2/2/2010 84 - 86 cm	GC-14 GC-14-20100201-S0002 2/1/2010 0 - 2 cm	GC-14 GC-14-20100201-S0608 2/1/2010 6 - 8 cm	GC-14 GC-14-20100201-S1214 2/1/2010 12 - 14 cm	GC-14 GC-14-20100201-S1820 2/1/2010 18 - 20 cm	GC-14 GC-14-20100201-S2426 2/1/2010 24 - 26 cm	GC-14 GC-14-20100201-S3032 2/1/2010 30 - 32 cm	GC-14 GC-14-20100201-S3638 2/1/2010 36 - 38 cm
Conventional Parameters (pct)									
Total organic carbon	0.505	0.677	2.15	2.18	2.19	2.25	0.842	0.998	1.31
Total solids	72.7	79.8	54.7	59.9	60.4	61.5	80.1	77	75
Grain Size (pct)									
Gravel	0.3	0.3	0.3	0.1 U	0.1 U	0.2	24.4	1.3	0.3
Sand, Coarse	3.5	11	1.7	2.6	2.2	3.3	4.4	3.4	4.1
Sand, Very Coarse	0.8	2.1	0.3	0.3	0.1	0.7	2.2	0.7	0.8
Sand, Medium	30.5	37.4	13.4	16.6	18.2	17.8	21.8	28.3	29.5
Sand, Fine	24.5	23.9	13.1	10.8	14	13.4	26.2	35.8	33.9
Sand, Very Fine	7.5	6.1	6.8	4.4	5.9	5.5	8.8	11.1	10
Silt, Coarse	4.2	3.3	12.5	10.4	8.9	8.1	1.6	4.5	5.7
Silt, Medium	4.7	2.8	11.4	10.6	9.9	9.2	2	3.2	3.4
Silt, Fine	5.2	2.9	11.3	11.3	10.2	10.2	2.1	3.1	3.3
Silt, Very Fine	5.6	3.1	10.5	11.2	10.3	10.5	2.2	3	3.2
Clay, Coarse	4.6	2.5	7	8	7.6	7.9	1.7	2.2	2.3
Clay, Medium	3.8	2	5	5.9	5.5	5.8	1.2	1.5	1.5
Clay, Fine	4.7	2.7	6.7	7.9	7	7.5	1.5	1.9	2
Radioisotopes (pci/g)									
Cesium-137	0.044 U	0.039 U	0.082	0.098	0.046 U	0.119	0.048 U	0.042 U	0.041 U
Lead-210	0.16	0.12	0.55	0.44	0.63	0.48	0.13	0.11 U	0.15

Notes:
Bold = Detected result
U = Compound analyzed, but
not detected above
detection limit

Table C-2
Geochronology Sediment Sampling Results

Location ID Sample ID Sample Date Depth	GC-14 GC-14-20100201-S4244 2/1/2010 42 - 44 cm	GC-14 GC-14-20100201-S4850 2/1/2010 48 - 50 cm	GC-14 GC-14-20100201-S5456 2/1/2010 54 - 56 cm	GC-14 GC-14-20100201-S6062 2/1/2010 60 - 62 cm	GC-14 GC-14-20100201-S6668 2/1/2010 66 - 68 cm	GC-14 GC-14-20100201-S7274 2/1/2010 72 - 74 cm	GC-14 GC-14-20100201-S7880 2/1/2010 78 - 80 cm	GC-14 GC-14-20100201-S8486 2/1/2010 84 - 86 cm	GC-14 GC-14-20100201-S8690 2/1/2010 86 - 90 cm
Conventional Parameters (pct)									
Total organic carbon	1.31	1.16	2.53	2.45	2.88	4.2	2.14	6.79	4.06
Total solids	73.5	67.9	62.1	51.2	51.2	46.8	58.2	41.7	53.8
Grain Size (pct)									
Gravel	0.7	0.5	0.1	0.1	1.9	0.1 U	0.1 U	0.3	0.5
Sand, Coarse	3.7	1.8	0.7	0.2	2.1	0.6	2.7	1.3	1.5
Sand, Very Coarse	1.2	0.4	0.2	0.1	1.8	0.2	0.4	0.6	0.5
Sand, Medium	30.3	13.6	6.6	0.8	4.5	7.4	20.1	7	12.1
Sand, Fine	36.5	18.3	13.1	2.4	7.8	9	13.1	5.7	9.2
Sand, Very Fine	7.8	9.4	9.7	3.1	8.8	3.3	2	2.5	2.5
Silt, Coarse	2.7	13.8	12.6	9	12.2	9.4	0.8	7.6	5.4
Silt, Medium	3.2	9.4	12.4	13.6	13.1	11.4	7.5	12.2	10.2
Silt, Fine	3.3	8	11.7	16.6	13.7	13.6	10.5	14.5	12.9
Silt, Very Fine	3.4	7.6	11.8	18.2	13.4	15.6	13.2	17	15.1
Clay, Coarse	2.7	6.1	8.2	13.9	9	12	11.5	12.8	12
Clay, Medium	2	4.8	5.7	10	5.5	8.3	9	8.8	8.6
Clay, Fine	2.6	6.4	7.3	12	6.3	9.2	9.2	9.6	9.5
Radioisotopes (pci/g)									
Cesium-137	0.056	0.184	0.575	0.381	0.289	0.193	0.254	0.19	0.14
Lead-210	0.11 U	0.26	0.49	0.42	0.25	0.38	0.38	0.35	0.35

Notes:
Bold = Detected result
U = Compound analyzed, but
not detected above
detection limit

Table C-2
Geochronology Sediment Sampling Results

Location ID Sample ID Sample Date Depth	GC-15 GC-15-20100201-S0002 2/1/2010 0 - 2 cm	GC-15 GC-15-20100201-S0608 2/1/2010 6 - 8 cm	GC-15 GC-15-20100201-S1214 2/1/2010 12 - 14 cm	GC-15 GC-15-20100201-S1820 2/1/2010 18 - 20 cm	GC-15 GC-15-20100201-S2426 2/1/2010 24 - 26 cm	GC-15 GC-15-20100201-S3032 2/1/2010 30 - 32 cm	GC-15 GC-15-20100201-S3638 2/1/2010 36 - 38 cm	GC-15 GC-15-20100201-S4244 2/1/2010 42 - 44 cm	GC-15 GC-15-20100201-S4850 2/1/2010 48 - 50 cm
Conventional Parameters (pct)									
Total organic carbon	2.31	2.68	1.87	2.24	1.74	0.594	0.578	3.04	4.05
Total solids	55.1	48.4	52.3	52.8	53.6	48	55.1	52.5	41.6
Grain Size (pct)									
Gravel	0.2	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.6
Sand, Coarse	3.2	0.5	1	1.1	0.1	0.1	0.1	0.5	0.7
Sand, Very Coarse	0.4	0.1	0.2	0.1	0.1	0.1	0.1 U	0.4	0.1
Sand, Medium	14	2.7	8	6.8	1.8	1.3	4.5	2.3	2.9
Sand, Fine	9.6	2.6	7.6	10	6.3	7.4	18.8	3.8	4.2
Sand, Very Fine	5.7	2.7	5.4	6.7	8.7	11.1	13.5	4.6	3.5
Silt, Coarse	6.8	10.2	6.3	4.3	9.4	9.7	8.5	12.4	10.7
Silt, Medium	10.9	14.1	11.3	10.5	12.4	12.7	9.6	13.3	14.2
Silt, Fine	12.3	16	14.4	12.9	13.9	13.3	9.9	14.2	16.1
Silt, Very Fine	12.6	16.7	15.3	15.3	15.1	13.4	10.5	16.1	17.4
Clay, Coarse	9.1	12.5	11.6	12.1	11.8	10.9	8.5	12.4	12.4
Clay, Medium	6.7	9.4	8.6	9.4	9.1	9	7	9	8.2
Clay, Fine	8.4	12.5	10.4	10.8	11.4	11.1	9.2	11	9
Radioisotopes (pci/g)									
Cesium-137	0.077	0.174	0.189	0.181	0.136	0.063 U	0.051 U	0.258	0.289
Lead-210	0.6	0.67	0.46	0.5	0.3	0.35	0.25	0.35	0.52

Notes:
Bold = Detected result
 U = Compound analyzed, but
 not detected above
 detection limit

Table C-2
Geochronology Sediment Sampling Results

Location ID Sample ID Sample Date Depth	GC-15 GC-15-20100201-S5456 2/1/2010 54 - 56 cm	GC-15 GC-15-20100201-S6062 2/1/2010 60 - 62 cm	GC-15 GC-15-20100201-S6668 2/1/2010 66 - 68 cm	GC-15 GC-15-20100201-S7274 2/1/2010 72 - 74 cm	GC-15 GC-15-20100201-S7880 2/1/2010 78 - 80 cm	GC-15 GC-15-20100201-S8486 2/1/2010 84 - 86 cm	GC-15 GC-15-20100201-S8690 2/1/2010 86 - 90 cm	GC-16 GC-16-20100201-S0002 2/1/2010 0 - 2 cm	GC-16 GC-16-20100201-S0608 2/1/2010 6 - 8 cm
Conventional Parameters (pct)									
Total organic carbon	3.63	1.79	3.76	4.28	3.74	4.39	5.35	3.18	2.8
Total solids	46.6	45.2	45.1	43.1	47.8	46.2	47.7	48.5	51.5
Grain Size (pct)									
Gravel	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.7	0.1 U
Sand, Coarse	0.7	0.3	0.5	0.5	0.6	0.5	0.4	0.9	0.7
Sand, Very Coarse	0.2	0.1	0.1	0.2	0.2	0.2	0.2	0.1	0.2
Sand, Medium	1.4	1.2	1.4	1.2	2.4	0.8	0.7	3.3	2.6
Sand, Fine	2.5	2.2	1.9	2	2.5	0.9	1.1	3.7	4.3
Sand, Very Fine	3.6	3.2	2.6	2.1	1.7	1.2	1.5	4.9	4.9
Silt, Coarse	12.1	11.7	9.5	10.1	8.4	8.8	9	14.4	14.1
Silt, Medium	14.4	14.4	13.8	13.3	12.9	11.4	14.6	14	14.8
Silt, Fine	15.4	16.6	16	15.7	15.4	14.3	16.4	15.1	15.3
Silt, Very Fine	16.9	17.9	18.4	18.7	18.2	17.9	18.1	14.8	14.8
Clay, Coarse	12.8	12.8	13.8	14.3	14.4	14.9	14.4	10.3	10.3
Clay, Medium	9.1	8.9	10	10.2	10.6	12.1	10.9	7.4	7.5
Clay, Fine	10.9	10.7	11.9	11.8	12.6	16.9	12.7	10.5	10.4
Radioisotopes (pci/g)									
Cesium-137	0.35	0.576	0.511	0.369	0.199	0.261	0.292	0.087	0.121
Lead-210	0.35	0.55	0.45	0.42	0.46	0.53	0.35	0.91	0.72

Notes:
Bold = Detected result
 U = Compound analyzed, but
 not detected above
 detection limit

Table C-2
Geochronology Sediment Sampling Results

Location ID Sample ID Sample Date Depth	GC-16 GC-16-20100201-S1214 2/1/2010 12 - 14 cm	GC-16 GC-16-20100201-S1820 2/1/2010 18 - 20 cm	GC-16 GC-16-20100201-S2426 2/1/2010 24 - 26 cm	GC-16 GC-16-20100201-S3032 2/1/2010 30 - 32 cm	GC-16 GC-16-20100201-S3638 2/1/2010 36 - 38 cm	GC-16 GC-16-20100201-S4244 2/1/2010 42 - 44 cm	GC-16 GC-16-20100201-S4850 2/1/2010 48 - 50 cm	GC-16 GC-16-20100201-S5456 2/1/2010 54 - 56 cm	GC-16 GC-16-20100201-S6062 2/1/2010 60 - 62 cm
Conventional Parameters (pct)									
Total organic carbon	2.55	0.388	0.341	0.268	0.331	0.711	0.083	0.845	3.59
Total solids	53.1	74.1	69.5	73	69.1	74.4	81.7	61.2	52.5
Grain Size (pct)									
Gravel	0.1 U	0.1 U	3	0.1 U	0.2	0.2	0.1 U	0.1 U	0.1 U
Sand, Coarse	0.9	0.3	3.7	1.9	0.5	6	7.4	0.7	1.3
Sand, Very Coarse	0.2	0.1 U	3.1	0.3	0.2	1.4	0.7	0.1	0.1
Sand, Medium	4	6.3	11.6	25.7	10.4	30.1	39.3	8.7	6.1
Sand, Fine	6.4	34.8	22.1	37.6	37.2	25.7	30.2	20.3	7.2
Sand, Very Fine	4.7	25.1	15.4	11.1	18.8	8.5	6	11.8	4.5
Silt, Coarse	7.4	5.5	3.8	1.7	5.9	2.1	2.7	4.7	10.3
Silt, Medium	10.5	5.4	4.9	2.6	4.3	4	2.2	6.9	12.4
Silt, Fine	13.1	3.6	5	2.7	4.2	4.2	2.5	7.6	13.5
Silt, Very Fine	15.4	4	6.3	3.5	4.5	4.8	2.7	9.3	15.2
Clay, Coarse	12.6	3.9	5.9	3.3	3.9	3.9	2.2	8.3	11.3
Clay, Medium	10.1	3.8	5.5	3.2	3.5	3.4	1.7	7.8	7.9
Clay, Fine	14.8	7.1	9.6	6.4	6.5	5.7	2.3	13.8	10.1
Radioisotopes (pci/g)									
Cesium-137	0.202	0.043 U	0.035 U	0.037 U	0.039 U	0.04 U	0.04 U	0.101	0.318
Lead-210	0.43	0.28	0.24	0.15	0.16	0.13	0.09 U	0.25	0.48

Notes:
Bold = Detected result
U = Compound analyzed, but
not detected above
detection limit

Table C-2
Geochronology Sediment Sampling Results

Location ID Sample ID Sample Date Depth	GC-16 GC-16-20100201-S6668 2/1/2010 66 - 68 cm	GC-16 GC-16-20100201-S7274 2/1/2010 72 - 74 cm	GC-16 GC-16-20100201-S7880 2/1/2010 78 - 80 cm	GC-16 GC-16-20100201-S8486 2/1/2010 84 - 86 cm	GC-18 GC-18-20100201-S0002 2/1/2010 0 - 2 cm	GC-18 GC-18-20100201-S0608 2/1/2010 6 - 8 cm	GC-18 GC-18-20100201-S1214 2/1/2010 12 - 14 cm	GC-18 GC-18-20100201-S1820 2/1/2010 18 - 20 cm	GC-18 GC-18-20100201-S2426 2/1/2010 24 - 26 cm
Conventional Parameters (pct)									
Total organic carbon	3.87	2.68	3.02	4.72	2.9	2.46	2.78	2.79	1.98
Total solids	57	54.6	50	50.6	50.1	52.6	51	51.9	53.5
Grain Size (pct)									
Gravel	0.1 U	0.1 U	0.1 U	0.3	0.1 U	32.1	0.1 U	0.1 U	4.2
Sand, Coarse	1.2	1	0.5	2	4.4	4.2	1.4	0.9	0.7
Sand, Very Coarse	0.3	0.1	0.1	0.6	1.6	0.7	0.8	0.3	0.7
Sand, Medium	5	3.5	1.2	4.1	10.5	10.5	6.8	5	1.8
Sand, Fine	8	3.9	1.2	3.4	5.9	5.3	5.4	5.6	2.7
Sand, Very Fine	5.2	4.2	1.1	2.6	2.8	2.4	2.8	3.6	3.4
Silt, Coarse	8	6.4	4.2	10.7	9.4	6.7	13.1	10.4	10.7
Silt, Medium	10.8	11.5	10.1	14.3	12.4	7.6	14	12.5	13.3
Silt, Fine	12.8	14.3	13.5	14.9	14	8.3	15.5	14.8	15.6
Silt, Very Fine	15.3	16.7	18.4	15.5	14	7.9	14.5	16.2	16.2
Clay, Coarse	12.4	13.5	16.9	11.6	9.7	5.4	9.9	11.8	11.8
Clay, Medium	9.3	10.5	14.7	8.2	6.8	3.8	7.2	8.5	8.5
Clay, Fine	11.7	14.2	18.2	12	8.6	5	8.7	10.3	10.5
Radioisotopes (pci/g)									
Cesium-137	0.344	0.402	0.278	0.148	0.1	0.111	0.176	0.223	0.212
Lead-210	0.39	0.26	0.4	0.29	0.85	0.75	0.59	0.72	0.47

Notes:
Bold = Detected result
 U = Compound analyzed, but
 not detected above
 detection limit

Table C-2
Geochronology Sediment Sampling Results

Location ID Sample ID Sample Date Depth	GC-18 GC-18-20100201-S3032 2/1/2010 30 - 32 cm	GC-18 GC-18-20100201-S3638 2/1/2010 36 - 38 cm	GC-18 GC-18-20100201-S4244 2/1/2010 42 - 44 cm	GC-18 GC-18-20100201-S4850 2/1/2010 48 - 50 cm	GC-18 GC-18-20100201-S5456 2/1/2010 54 - 56 cm	GC-18 GC-18-20100201-S6062 2/1/2010 60 - 62 cm	GC-18 GC-18-20100201-S6668 2/1/2010 66 - 68 cm	GC-18 GC-18-20100201-S7274 2/1/2010 72 - 74 cm	GC-18 GC-18-20100201-S7880 2/1/2010 78 - 80 cm
Conventional Parameters (pct)									
Total organic carbon	2.32	3.03	3.24	4.11	2.23	5.8	3.33	3.15	5.11
Total solids	51.6	54.2	52.3	48.6	51.7	39.5	36.6	44.6	44.4
Grain Size (pct)									
Gravel	10.3	0.1 U	0.1 U	0.1 U	3.1	0.1 U	0.1 U	0.1 U	0.1
Sand, Coarse	1.5	0.7	0.1 U	0.1	3.3	0.7	0.4	0.4	0.7
Sand, Very Coarse	0.6	0.1	0.1 U	0.1 U	2.1	0.1	0.1 U	0.1	0.2
Sand, Medium	4.2	6	0.3	0.5	2.5	3.1	2.1	1	2.7
Sand, Fine	3.4	7.3	1.1	1.5	2.4	4.7	4.3	1.6	3.9
Sand, Very Fine	3	4.7	3.3	5.6	4.8	4.5	5.3	2	2.8
Silt, Coarse	6.8	11.1	14.2	16.5	13.1	12.8	17	10.6	12.4
Silt, Medium	9.2	13.1	15.2	16.5	15.2	15.8	19.5	14.4	14.2
Silt, Fine	12.2	14	16.4	16	14.9	16.6	17.4	16.7	15.6
Silt, Very Fine	14.9	14.4	16.2	15.5	13.9	16.4	14.1	18.8	17.4
Clay, Coarse	12.1	10.7	12.1	11.2	9.8	11.1	8.6	14.1	12.5
Clay, Medium	9.7	7.9	9.2	7.7	6.8	6.8	5	9.6	8.3
Clay, Fine	12	9.8	11.9	8.9	8.2	7.4	6.5	10.6	9.2
Radioisotopes (pci/g)									
Cesium-137	0.156	0.162	0.175	0.217	0.085	0.208	0.198	0.34	0.446
Lead-210	0.58	0.43	0.45	0.47	0.53	0.41	0.31	0.44	0.39

Notes:
Bold = Detected result
 U = Compound analyzed, but
 not detected above
 detection limit

Table C-2
Geochronology Sediment Sampling Results

Location ID Sample ID Sample Date Depth	GC-18 GC-18-20100201-S8486 2/1/2010 84 - 86 cm	GC-18 GC-18-20100201-S8690 2/1/2010 86 - 90 cm	GC-19A GC-19A-20100203-S0002 2/3/2010 0 - 2 cm	GC-19A GC-19A-20100203-S0608 2/3/2010 6 - 8 cm	GC-19A GC-19A-20100203-S1214 2/3/2010 12 - 14 cm	GC-19A GC-19A-20100203-S1820 2/3/2010 18 - 20 cm	GC-19A GC-19A-20100203-S2426 2/3/2010 24 - 26 cm	GC-19A GC-19A-20100203-S3032 2/3/2010 30 - 32 cm
Conventional Parameters (pct)								
Total organic carbon	4.27	5.4	2.78	3.19	3.36	3.07	1.85	7.32
Total solids	47.3	45.1	54.1	46.8	50.4	52.9	55.1	47
Grain Size (pct)								
Gravel	0.2	0.1	15.9	0.1 U	0.1 U	22.4	1.1	6.3
Sand, Coarse	0.6	0.6	5.7	1.5	0.9	1.4	3.5	4.1
Sand, Very Coarse	0.2	0.2	2.9	1	0.5	0.7	1.2	2.9
Sand, Medium	1.2	1.3	8.9	3	2.3	4	10.1	10.8
Sand, Fine	1.6	2.9	4	2.5	2.4	4.2	6.2	8.3
Sand, Very Fine	1.8	3.2	2.9	3.6	3.1	4.3	6.3	5.8
Silt, Coarse	10.9	13.5	7.7	13.9	9.7	9.6	11.4	11.9
Silt, Medium	14.2	17.4	9	14.1	13.2	9.5	11.1	10.9
Silt, Fine	16.4	16.4	10.4	14.8	15.4	10.6	12	10.4
Silt, Very Fine	18.4	14.3	10.9	15.4	16.8	11.1	12.1	10
Clay, Coarse	13.6	12.5	8.2	11.6	13.2	8.5	9.3	7.2
Clay, Medium	9.4	8.9	6.1	8.4	10.2	6.4	7.2	5.2
Clay, Fine	11.5	8.5	7.3	10.2	12.3	7.5	8.7	6.3
Radioisotopes (pci/g)								
Cesium-137	0.542	0.57	0.111	0.116	0.207	0.267	0.103	0.064
Lead-210	0.57	0.58	0.57	0.77	0.81	0.67	0.26	0.22

Notes:
Bold = Detected result
U = Compound analyzed, but
not detected above
detection limit

Table C-2
Geochronology Sediment Sampling Results

Location ID Sample ID Sample Date Depth	GC-19A GC-19A-20100203-S3638 2/3/2010 36 - 38 cm	GC-19A GC-19A-20100203-S4244 2/3/2010 42 - 44 cm	GC-19A GC-19A-20100203-S4448 2/3/2010 44 - 48 cm	GC-19A GC-19A-20100203-S4850 2/3/2010 48 - 50 cm	GC-19A GC-19A-20100203-S5456 2/3/2010 54 - 56 cm	GC-19A GC-19A-20100203-S6062 2/3/2010 60 - 62 cm	GC-20 GC-20-20100202-S0002 2/2/2010 0 - 2 cm	GC-20 GC-20-20100202-S0608 2/2/2010 6 - 8 cm	GC-20 GC-20-20100202-S1214 2/2/2010 12 - 14 cm
Conventional Parameters (pct)									
Total organic carbon	5.15	2.14	4.61	3.56	5.29	3.87	3.19	2.39	4.91
Total solids	57.6	55.1	46.8	44.6	44.6	45.8	56.5	64.1	54.7
Grain Size (pct)									
Gravel	6.5	0.1	0.1 U	0.1	0.1 U	0.2	1.6	3.6	8.3
Sand, Coarse	6.3	1.7	2.9	2.4	2	1.3	9.6	9.6	12.4
Sand, Very Coarse	2.4	0.5	0.9	0.9	0.6	0.9	3.2	3.3	4
Sand, Medium	17.5	4.1	5.1	4.1	5.3	2	19.5	21.5	21.3
Sand, Fine	12.4	3.5	5.4	4.6	4.2	2.1	10.1	14.3	11
Sand, Very Fine	8.3	7.2	5.7	5.6	3.6	2.2	2.9	3.1	2.7
Silt, Coarse	9.6	18.6	10.9	11.4	10.6	9.8	6.3	3.4	6.9
Silt, Medium	8.3	13.2	13.4	13.7	13.2	12.3	7	4.9	7.5
Silt, Fine	7.6	12.6	14.7	15	14.9	15.4	8.6	6.8	7.7
Silt, Very Fine	7.5	12.9	15.3	15.4	16.3	18.2	10.4	9	7.1
Clay, Coarse	5.4	9.8	10.8	11	11.9	14.1	8.1	7.4	4.6
Clay, Medium	3.8	7.2	7.1	7.3	8	10	5.7	5.7	2.9
Clay, Fine	4.5	8.7	7.8	8.5	9.6	11.8	7	7.5	3.7
Radioisotopes (pci/g)									
Cesium-137	0.072	0.191	0.274	0.213	0.522	0.406	0.077	0.05 U	0.074
Lead-210	0.24	0.36	0.43	0.34	0.45	0.5	0.92	0.61	0.66

Notes:
 Bold = Detected result
 U = Compound analyzed, but
 not detected above
 detection limit

MEMORANDUM

To: Ravi Sanga, EPA

Date: March 3, 2010

From: Tom Wang and Dan Berlin, Anchor QEA **Project:** 060003-01

Re: East Waterway Sediment Transport Characterization – Core Collection and Processing Summary

This memorandum summarizes the core collection and processing activities that occurred as part of the East Waterway Sediment Transport Characterization for the Supplemental Remedial Investigation/Feasibility Study (SRI/FS). Descriptions of sampling deviations, core collection and processing activities, and sampling scheme are provided below.

SUMMARY OF SAMPLING DEVIATIONS

All collection, processing, and sampling activities were performed in accordance with the Quality Assurance Project Plan (Anchor QEA 2009), with the exception of the deviations approved by EPA on January 22, 2010. These deviations will be summarized in the forthcoming Data Report and included the following:

- Change in processing technique from hydraulic extruder jack to longitudinal cutting in order to better preserve the sediment profile and increase sample interval accuracy.
- Clarification regarding compaction correction such that field sampling would be conducted using recovered depths (ex situ) and compaction corrections would be applied later during the data analysis stage.

SUMMARY OF CORE COLLECTION AND PROCESSING

Eighteen sediment cores were collected by divers using manually operated slide-hammer methodology in order to minimize disturbance to the sediment. Cores were collected from January 25 to February 1, 2010. Cores were processed, logged, and sampled from February 1 to February 3, 2010. The collected cores included GC-01, GC-02, GC-03, GC-05, GC-06, GC-07, GC-08, GC-09, GC-10, GC-11, GC-12, GC-13, GC-14, GC-15, GC-16, GC-18, GC-19, and GC-20. An additional four cores were proposed (GC-04, GC-17, GC-21, and GC-22), but were unable to be collected due to difficulties penetrating into the substrate. Figure 1 depicts the location of each collected core, as well as the location of the four cores that were unable

to be collected (shown in gray). Table 1 summarizes the recovered sediment length and sampled length for the 18 cores that were collected, as well as a summary of the number of attempts and observations made regarding the subsurface texture for each of the four cores that were unable to be collected. For each of the four cores not collected, the diver attempted multiple times to retrieve an acceptable core; however, dense substrate near the surface at each of these locations prevented penetration. The diver also searched in the vicinity of the target core location for suitable substrate to core, but was unable to find suitable coring locations in the vicinity of GC-04, GC-17, GC-21, and GC-22.

It should be noted that the absence of soft substrate in the vicinity of each of these four core locations suggests the absence of recent sediment deposition, making it unlikely that radioisotope analysis of sediment in these areas would provide any useful sediment accumulation rates. These cores were identified as low-priority cores based on the low likelihood that they would provide useful sediment accumulation rate information.

Table 1
Summary of East Waterway Sediment Characterization Cores

Station ID	Collection Attempts ²	Core Collection Notes	Core Quality ¹	Length Processed (cm)	Bottom Sample Depth (cm)
GC-01	1	Successful collection, dense substrate prevented full penetration	good	86.5	86
GC-02	1	Short core, dense substrate prevented full penetration	good	44	42
GC-03	3	Short core, equipment malfunction prevented full penetration on first attempt; core tube broke on second attempt; third attempt yielded <1 foot of disturbed sediment. Restricted access from Coast Guard prevented recollection. The core from the first attempt was processed and sampled.	good	30	30
GC-04	1	Dense substrate prevented collection (e.g., sand substrate), no recent sediment deposition	not collected	0	0
GC-05	1	Successful collection	good	88	88
GC-06	1	Successful collection, dense substrate prevented full penetration	good	76	76
GC-07	1	Successful collection	good	115	90

Station ID	Collection Attempts ²	Core Collection Notes	Core Quality ¹	Length Processed (cm)	Bottom Sample Depth (cm)
GC-08	2	First attempt core was stuck in sediment after retrieval coupling broke; core extracted during second attempt	fair	83	82
GC-09	1	Successful collection	good	105	90
GC-10	1	Successful collection	good	92	90
GC-11	1	Successful collection, dense substrate prevented full penetration (sand and wood)	good	77	76
GC-12	1	Successful collection	good	91	90
GC-13	1	Successful collection	good	107	90
GC-14	1	Successful collection	good	91	90
GC-15	1	Successful collection	good	99	90
GC-16	1	Successful collection	good	104	90
GC-17	1	Short core (<30 cm) due to dense substrate, but core lost when core barrel failed on extraction, diver observed vessel scour (sand substrate); no recent sediment deposition	not collected	0	0
GC-18	1	Successful collection	good	100	90
GC-19	2	Two cores were collected (A and B). Core A may have experienced pile driving due to presence of wood below 33 inches, but upper interval is likely intact. A second collection (Core B) was partially transported horizontally, which may have compromised the sediment structure. During processing it was noted that Core A was intact and did not show any signs of pile driving; Core B was slightly disturbed. Based on processing observations, Core A was submitted for sampling.	good (A), disturbed (B)	65 (A) 89 (B)	64 (A) 88 (B)
GC-20	3	Successful collection, during processing it was noted that the sidewalls were encased with broken shells in the top two units; the sidewalls were not sampled	poor	17	16
GC-21	1	Diver noted impenetrable armoring with rock, shell, and debris; no recent sediment deposition	not collected	0	0
GC-22	1	Diver noted impenetrable armoring with rock and shells below approx. 1 foot of silty sand; no recent sediment deposition	not collected	0	0

Notes:

1. Core quality was assessed during processing after settling.
2. Number of times diver descended and surfaced. For cores unable to be collected, diver tried several times to acquire a core before surfacing.

SUMMARY OF SAMPLING APPROACH

A recommended tiered sampling approach is presented in Figure 1 based on field observations, presence of thick layers of undisturbed recent sediment deposition, and spatial location of collected cores. This sampling scheme prioritizes samples to be analyzed based on a three-tiered approach. Field samples were triggered for analysis as follows:

Tier #1 Samples (analyzed immediately):

- Cores include: GC-05, GC-09, GC-11, GC-12, GC-13, GC-14, GC-15, GC-16, GC-18, GC-19(A), and GC-20
- Sample intervals: triggered every 6 cm to a depth of 90 cm below mudline (or to refusal)
- Tier #1 Rationale:
 1. Core located outside of areas where propwash would be a significant factor in mixing
 2. Core located in an area where a high percent of fines is observed (potential deposition area)
 3. Core located within the sill area because no data are currently available in this location

Tier #2 Samples (analyzed second depending on Tier #1 results, prioritized vertically):

- Cores include: GC-02, GC-08, and GC-10
 - Sample intervals: triggered every 6 cm to a depth of 48 cm below mudline (or to refusal); depending on results, these could be triggered from 48 to 90 cm below mudline (or to refusal)
 - Tier #2 Rationale:
 1. Core located in slip area where propwash is anticipated to be less of a disturbance
 2. Core located in an area where a high percent of fines is observed (potential deposition area)
-

Tier #3 Samples (analyzed last if needed, prioritized vertically):

- Cores include: GC-01, GC-03, GC-06, and GC-07
- Sample intervals: triggered every 6 cm to a depth of 48 cm below mudline (or to refusal); depending on results, these could be triggered from 48 to 90 cm below mudline (or to refusal)
- Tier #3 Rationale:
 1. Core located in areas where propwash is expected to be a significant factor in subsurface mixing
 2. Core located in an area where a low percent of fines is observed

Analytical results from the geochronology testing laboratory will be received over the next several months. The East Waterway Group will summarize and provide the analytical results to EPA as data become available. Conference calls will be scheduled to discuss the analytical results, and to discuss the merits of conducting additional analysis of archived samples. Please contact us if you have any questions regarding this information.

Geochronology Core Profiles

C.1 SUMMARY

Cesium-137 (Cs-137) and Lead-210 (Pb-210) profiles were analyzed to better understand net sedimentation rates within the East Waterway (EW). The results of this evaluation are presented in the subsections below, organized by core location. Several physical, chemical, and biological factors affect these radioisotope profiles to various extents and, thus, introduce uncertainty into the net sedimentation rates estimated from these data. Potential factors affecting the estimated net sedimentation rates are discussed in Section 3.4 in the main body of the report. To account for these uncertainties, best estimates (where possible) and ranges of estimated net sedimentation rates are reported. Stations were grouped into areas based on location along the EW.

C.1.1 Core GC-01

This core was collected at the mouth of the EW in the vicinity of Harbor Island. Core GC-01 contained intact strata of very sandy silt, which is not the preferred substrate for radioisotope analysis. Core GC-01 was not analyzed based on the low data quality of adjacent core locations. Samples were archived as part of Tier 3.

C.1.2 Core GC-02

This core was collected from the mouth of the EW near the mouth of Slip 36. Core GC-02 had low recovery (73%) as a result of slow coring to refusal at 36 inches below mudline. This core contained primarily fine sandy silt and silty fine sand with gravel-sized asphalt pieces at depth. Core GC-02 was analyzed for Pb-210, Cs-137, total solids (TS), total organic carbon (TOC), and grain size as part of the Tier 2 testing group.

Evaluation of the Cs-137 and Pb-210 data was inconclusive due to low recovery. No Cs-137 peak signifying 1963 was detected, and the Pb-210 regression analysis resulted in a low correlation R^2 value of 0.21. The TOC and TS measurements are relatively uniform throughout the core, suggesting that these sediments have not experienced significant disturbance.

Geochronology Core Profiles

C.1.3 Core GC-03

This core was collected near the mouth of the EW in the middle of the waterway. Core GC-03 was not selected for radioisotope analysis based on poor recovery (56%) after three attempts and its proximity to core locations with poor data quality. This core contained primarily silt that grades to silty fine sand. Samples were archived as part of Tier 3.

C.1.4 Core GC-04

This core was attempted once near the mouth of the EW in the vicinity of Harbor Island. The core was not able to penetrate the dense fine sand at the mudline and encountered refusal. This location was not re-attempted based on the density of the substrate and available collection methods.

C.1.5 Core GC-05

This core was collected on the north end of the EW in the middle of the waterway. Core GC-05 had high recovery (96%), contained alternating beds of silty sand and sandy silt, and was analyzed for Pb-210, Cs-137, TS, TOC, and grain size as part of the Tier 1 testing group.

Evaluation of the Cs-137 data was inconclusive, with no 1963 peak identified and all activities below detection limits. The absence of a Cs-137 peak suggests that either it resides within a sample interval that was not analyzed, below the depth of the core, or that this area has experienced disturbance. Pb-210 regression analysis resulted in an R^2 value of 0.78 and a sedimentation range of 0.26 to 0.67 centimeters per year (cm/yr). The TOC measurements are relatively uniform throughout the core. TS measurements vary at 54 to 62 cm, suggesting a slight disturbance. Sediment grain sizes throughout this core vary in small layers, signifying short-term episodic disturbances of sand deposition above the lower alluvium.

C.1.6 Core GC-06

This core was collected on the north end of the EW in the middle of the waterway. Core GC-06 was not selected for radioisotope analysis based on an assumption that this core would likely exhibit the low data quality characteristic of adjacent core locations. This core contained homogenous sandy silt and was archived as part of Tier 3.

Geochronology Core Profiles

C.1.7 Core GC-07

This core was collected on the north end of the EW in the middle of the waterway. Core GC-07 was not selected for radioisotope analysis based on the assumption that this core would likely exhibit the low data quality characteristic of adjacent core locations. This core contained silt with trace sand and was archived as part of Tier 3.

C.1.8 Core GC-08

This core was collected on the north end of the EW in the vicinity of Harbor Island. Core GC-08 was attempted twice; the initial core was lost due to barrel failure. The accepted core had an adequate recovery (82%) and consisted of silt with increasing sand content at depth. Core GC-08 was analyzed for Pb-210, Cs-137, TS, TOC, and grain size as part of the Tier 2 testing group.

Evaluation of the Cs-137 data was inconclusive, with no 1963 peak identified and relatively low activities ranging from 0.03 U to 0.1 picocuries per gram dry weight (pCi/g dw). The absence of a Cs-137 peak suggests that either it resides within a sample interval that was not analyzed, below the depth of the core, or that this area has experienced disturbance. Pb-210 regression analysis resulted in an R^2 value of 0.92 and a sedimentation range of 0.20 to 0.48 cm/yr. The TOC measurements vary down the length of the core with intervals above 30 cm greater than 1.0% and lower intervals ranging from 0.1% to 0.86%, corresponding to a lower percentage of fines. TS measurements are relatively uniform throughout the core. Sediment grain sizes throughout the core grade from silts and clays at the surface to fine sand at depth.

C.1.9 Core GC-09

This core was collected in the central portion of the EW in the vicinity of Slip 27. Core GC-09 had a high recovery (92%) and consisted of alternating layers of sandy silt and silty sand. This core was analyzed for Pb-210, Cs-137, TS, TOC, and grain size as part of the Tier 1 testing group.

Evaluation of the Cs-137 data was inconclusive, with no 1963 peak identified and relatively low activities ranging from 0.03 U to 0.18 pCi/g dw. The absence of a Cs-137 peak suggests that either it resides within a sample interval that was not analyzed, below the depth of the core, or that this area has experienced disturbance. Pb-210 regression analysis resulted in an

Geochronology Core Profiles

R^2 value of 0.78 and a sedimentation range of 0.35 to 1.4 cm/yr. The TOC and TS measurements are relatively uniform throughout the core. Sediment grain sizes vary in thin layers throughout the core, indicating episodic sand deposition above the lower alluvium.

C.1.10 Core GC-10

This core was collected in the central portion of the EW, within Slip 27. Core GC-10 had an adequate recovery (86%) and consisted primarily of homogenous, slightly clayey silt with trace sand and trace anthropogenic debris below 53 cm in depth. This core was analyzed for Pb-210, Cs-137, TS, TOC, and grain size as part of the Tier 2 testing group.

Evaluation of the Cs-137 data indicated an average net sedimentation rate of 1.3 cm/yr with the 1963 peak identified at 60 to 62 cm below sediment surface. These rates are higher than those determined in the Pb-210 regression analysis (0.30 to 0.61 cm/yr, 0.63 R^2). The TOC and TS measurements are relatively uniform throughout the core. Sediment grain sizes are homogenous throughout the core, primarily consisting of clayey silt with occasional gravel. The presence of gravel and anthropogenic materials suggest the deposition in this area has been affected by input sources other than natural episodic deposition.

C.1.11 Core GC-11

This core was collected on the southern end of the EW in the vicinity of Harbor Island. Core GC-11 had moderate recovery (75%), consisted of homogenous silt with trace anthropogenic debris, and was analyzed for Pb-210, Cs-137, TS, TOC, and grain size as part of the Tier 1 testing group.

Evaluation of the Cs-137 data indicated an average net sedimentation rate of greater than 1.7 cm/yr with the 1963 peak estimated at 80 cm below sediment surface based on the activity trendline. The alternating pattern of high and low Cs-137 activity suggests that this core was subjected to disturbance as a result of an episodic event. The disturbance appears to be limited to a single event and coincides with the presence of a 4-cm layer of trace fine gravel from 26 to 30 cm below mudline. This rate corresponds to those determined in the Pb-210 regression analysis (0.27 to 1.8 cm/yr, 0.71 R^2). The TOC and TS measurements are relatively uniform throughout the core. Sediment grain sizes are homogenous throughout the core, primarily consisting of clayey silt with occasional gravel. The presence of gravel and

Geochronology Core Profiles

anthropogenic materials suggest the deposition in this area has been affected by input sources other than natural episodic deposition.

C.1.12 Core GC-12

This core was collected on the southern end of the EW in the middle of the channel. Core GC-12 had an adequate recovery (89%) and consisted primarily of homogenous sandy silt, with anthropogenic debris below 64 cm depth. This core was analyzed for Pb-210, Cs-137, TS, TOC, and grain size as part of the Tier 1 testing group.

Evaluation of the Cs-137 data indicated an average net sedimentation rate of greater than 1.9 cm/yr with the 1963 peak estimated at 90 cm below sediment surface based on the activity trendline. This rate corresponds to those determined in the Pb-210 regression analysis (0.27 to 1.8 cm/yr, 0.71 R^2). The TOC and TS measurements are relatively uniform throughout the core and vary according to the lithology. Sediment grain sizes are homogenous throughout the core, primarily consisting of clayey silt with occasional gravel. The presence of anthropogenic materials suggests the deposition in this area has been affected by input sources other than natural episodic deposition.

C.1.13 Core GC-13

This core was collected on the southern end of the EW in the vicinity of Terminal 25. Core GC-13 had high recovery (96%) and consisted of alternating layers of silt and sand, with dense, medium sand present at the base of the core. This core was analyzed for Pb-210, Cs-137, TS, TOC, and grain size as part of the Tier 1 testing group.

Evaluation of the Cs-137 data was inconclusive, with no 1963 peak identified. The absence of a Cs-137 peak suggests that either it resides within a sample interval that was not analyzed, below the depth of the core, or that this area has experienced disturbance. The depths below sediment surface with variations in activities correspond closely to observations of hydrocarbon-like odor. Pb-210 regression analysis resulted in an R^2 value of 0.63 and a sedimentation range of 0.34 to 0.69 cm/yr. The TOC and TS measurements are relatively uniform throughout the core and vary according to the lithology. Sediment grain sizes vary in thin layers throughout the core, primarily consisting of clayey silt with sand at depth, suggesting recent episodic deposition above the lower alluvium.

Geochronology Core Profiles

C.1.14 Core GC-14

This core was collected on the southern end of the EW in the vicinity of Harbor Island. Core GC-14 had an adequate recovery (87%) and consisted of alternating beds of sandy silt and silty sand with trace gravel. This core was analyzed for Pb-210, Cs-137, TS, TOC, and grain size as part of the Tier 1 testing group.

Evaluation of the Cs-137 data indicated an average net sedimentation rate of 1.2 cm/yr with the 1963 peak at 54 to 56 cm below sediment surface. Pb-210 regression analysis resulted in a low correlation R^2 value of 0.003 making the profile un-interpretable. The TOC and TS measurements are relatively uniform throughout the core and vary according to lithology and organic matter. Sediment grain sizes vary in large and thin layers throughout the core primarily consisting of silt with sand beds and trace gravel. The presence of gravel suggests the deposition in this area has been affected by input sources other than natural episodic deposition.

C.1.15 Core GC-15

This core was collected on the southern end of the EW in the middle of the channel. Core GC-15 had an adequate recovery (87%), consisted of homogenous silt, and was analyzed for Pb-210, Cs-137, TS, TOC, and grain size as part of the Tier 1 testing group.

Evaluation of the Cs-137 data indicated an average net sedimentation rate of 1.3 cm/yr with the 1963 peak at 60 to 62 cm below sediment surface. Pb-210 regression analysis resulted in a low correlation R^2 value of 0.45 making the profile un-interpretable. There is some variation in TOC and TS values with depth; however, the profiles do not provide any clear indications of episodic erosion or deposition events. Sediment grain sizes are homogenous throughout the core, primarily consisting of clayey silt.

C.1.16 Core GC-16

This core was collected on the southern end of the EW in the vicinity of Terminal 25. Core GC-16 had an adequate recovery (88%) and consisted primarily of silt with thin seams of fine

Geochronology Core Profiles

sand with trace gravel. This core was analyzed for Pb-210, Cs-137, TS, TOC, and grain size as part of the Tier 1 testing group.

Evaluation of the Cs-137 data indicated an average net sedimentation rate of 1.6 cm/yr with the 1963 peak at 72 to 74 cm below sediment surface. This rate corresponds to those determined in the Pb-210 regression analysis (0.09 to 4.2 cm/yr, 0.91 R^2). The TOC and TS measurements are relatively uniform throughout the core and vary according to the lithology. Sediment grain sizes vary in thin layers throughout the core, primarily consisting of silt with sand and gravel layers, suggesting episodic sand deposition.

C.1.17 Core GC-17

This core was attempted once on the southern end of the EW, in the vicinity of Harbor Island and the West Seattle Bridge. The core penetrated approximately 18 inches of dense fine sand at the mudline and encountered refusal. This location was not re-attempted based on the density of the substrate and observations of vessel scour at the sample location by the diver.

C.1.18 Core GC-18

This core was collected in the middle of the channel in the southern portion of the EW near the West Seattle Bridge. Core GC-18 had an adequate recovery (80%) and consisted of slightly clayey silt with thin seams of sand. This core was analyzed for Pb-210, Cs-137, TS, TOC, and grain size as part of the Tier 1 testing group.

Evaluation of the Cs-137 data indicated an average net sedimentation rate of greater than 1.9 cm/yr with the 1963 peak estimated at 90 cm below sediment surface based on the activity trendline. Pb-210 regression analysis resulted in a low correlation R^2 value of 0.48 making the profile un-interpretable. There is some variation in TOC and TS values with depth; however, the profiles do not provide any clear indications of episodic erosion or deposition events. Sediment grain sizes vary in thin layers throughout the core, indicating episodic sand deposition.

Geochronology Core Profiles

C.1.19 Core GC-19A

This core was collected in the southern portion of the EW in the vicinity of the West Seattle Bridge. Two attempts were made at this location (19A and 19B); however, Core GC-19B was disturbed during transport making it unusable for radioisotope analysis. Core GC-19A had an estimated recovery of 80% (penetration estimated) and consisted primarily of silt with trace sand, gravel, and anthropogenic material. This core was analyzed for Pb-210, Cs-137, TS, TOC, and grain size as part of the Tier 1 testing group.

Evaluation of the Cs-137 data indicated an average net sedimentation rate of 1.2 cm/yr with the 1963 peak at 54 to 56 cm below sediment surface. Pb-210 regression analysis resulted in a positive slope making the profile un-interpretable. The TOC and TS measurements are relatively uniform throughout the core and vary according to the lithology and organic matter. Sediment grain sizes are homogenous throughout the core, primarily consisting of silt with trace gravel. The presence of gravel and anthropogenic materials suggest the deposition in this area has been affected by input sources other than natural episodic deposition.

C.1.20 Core GC-20

This core was collected in the southern portion of the EW near the West Seattle Bridge. Three attempts were made in the vicinity of this location, the accepted core had moderate recovery (76%) and low penetration through the dense sand beneath the surface. Core GC-20 consisted of beds silt and sand with trace cobbles and was analyzed for Pb-210, Cs-137, TS, TOC, and grain size as part of the Tier 1 testing group.

Evaluation of the Cs-137 and Pb-210 data was inconclusive due to low recovery (14 cm). No Cs-137 peak signifying 1963 was detected, and the Pb-210 regression analysis resulted in a low correlation R^2 value of 0.25. The TOC and TS measurements are relatively uniform throughout the core and vary with the lithology and organic matter.

C.1.21 Core GC-21

No core was attempted for GC-21. Just north of the confluence of the EW and the West Waterway (WW), in the vicinity of the West Seattle Bridge, the dive report indicated that

Geochronology Core Profiles

the core location and surrounding area is armored, has abundant shell and debris, and resembles a rock bottom.

C.1.22 Core GC-22

No core was attempted for GC-22. Just north of the confluence of the EW and WW, in the vicinity of the West Seattle Bridge, the dive report indicated that the core location and surrounding area is in a narrow channel with significant riprap from adjacent banks, which would inhibit coring beyond 1 to 2 feet.

Sediment Core Log

Sheet 1 of 2

GC-01

Project: East Waterway - STE			Area: East Waterway		Drive Length (in): 51	
Project #: 060003-01			SW Elevation (ft MLLW): 7.45		Recovery Length (in): 46	
Client: Port of Seattle			Water Depth - LL (ft): 64.5		Core Quality: Good	
Collection Date: 2/1/2010			Mudline Elevation (ft MLLW): -57.1		Percent Recovery: 90%	
Contractor: RSS			Northing: 219169 Easting: 1267342		Process Date: 2/3/2010	
Vessel: Caroline Dow			Horiz. Datum: NAD 83 WA N US Ft Vert. Datum: MLLW		Process Method: Cut-Tube	
Operator: Parker			Method/Tube ID: Diver Core/ 4" Polycarbonate Tube		Logged By: LM/DP/AO	
Recovered Depth (cm) and Graphic Log	Sample Interval	Analysis	Sediment Description			Cs-137 Profile (pCi/g dry)
			Contacts are Recovered Depths. Classification Scheme: USCS			

0				
1		GC-01-S0002	TS, TOC, GS	ML: Moist, medium stiff, black, slightly clayey, very f-sandy SILT. Trace scattered shells, wood fragments, and biota (worm) in upper 18 cm.
2		GC-01-S0204	Archive	
3				
4		GC-01-S0406	Archive	
5				
6				
7		GC-01-S0608	TS, TOC, GS	
8				
9		GC-01-S0810	Archive	
10				
11		GC-01-S1012	Archive	
12				@12 cm: Horizontal seam of clay (2-cm wide) running down core
13		GC-01-S1214	TS, TOC, GS	
14				
15		GC-01-S1416	Archive	@15 cm: Wood fragment (3 cm-long)
16				
17		GC-01-S1618	Archive	
18				
19		GC-01-S1820	TS, TOC, GS	@18 cm: 1 worm (sipuncula)
20				
21		GC-01-S2022	Archive	
22				
23		GC-01-S2224	Archive	
24				
25		GC-01-S2426	TS, TOC, GS	
26				
27		GC-01-S2628	Archive	
28				
29		GC-01-S2830	Archive	
30				
31		GC-01-S3032	TS, TOC, GS	
32				
33		GC-01-S3234	Archive	
34				
35		GC-01-S3436	Archive	
36				
37		GC-01-S3638	TS, TOC, GS	
38				
39		GC-01-S3840	Archive	
40				
41		GC-01-S4042	Archive	
42				
43		GC-01-S4244	TS, TOC, GS	
44				
45				
46		GC-01-S4448	TS, TOC, GS	
47				
48				
49		GC-01-S4850	TS, TOC	
50				



Drive Notes (1): Attempt 1 of 1. Slow, steady coring.

Notes (2): GC-01 was not analyzed for geochronology.

Calculated Recovery
Sample Length/Penetration Length:

46/51 in = 90%

Sediment Core Log

Sheet 2 of 2

GC-01

Project: East Waterway - STE			Area: East Waterway		Drive Length (in): 51	
Project #: 060003-01			SW Elevation (ft MLLW): 7.45		Recovery Length (in): 46	
Client: Port of Seattle			Water Depth - LL (ft): 64.5		Core Quality: Good	
Collection Date: 2/1/2010			Mudline Elevation (ft MLLW): -57.1		Percent Recovery: 90%	
Contractor: RSS			Northing: 219169 Easting: 1267342		Process Date: 2/3/2010	
Vessel: Caroline Dow			Horiz. Datum: NAD 83 WA N US Ft Vert. Datum: MLLW		Process Method: Cut-Tube	
Operator: Parker			Method/Tube ID: Diver Core/ 4" Polycarbonate Tube		Logged By: LM/DP/AO	
Recovered Depth (cm) and Graphic Log	Sample Interval	Analysis	Sediment Description			Cs-137 Profile (pCi/g dry)
			Contacts are Recovered Depths. Classification Scheme: USCS			

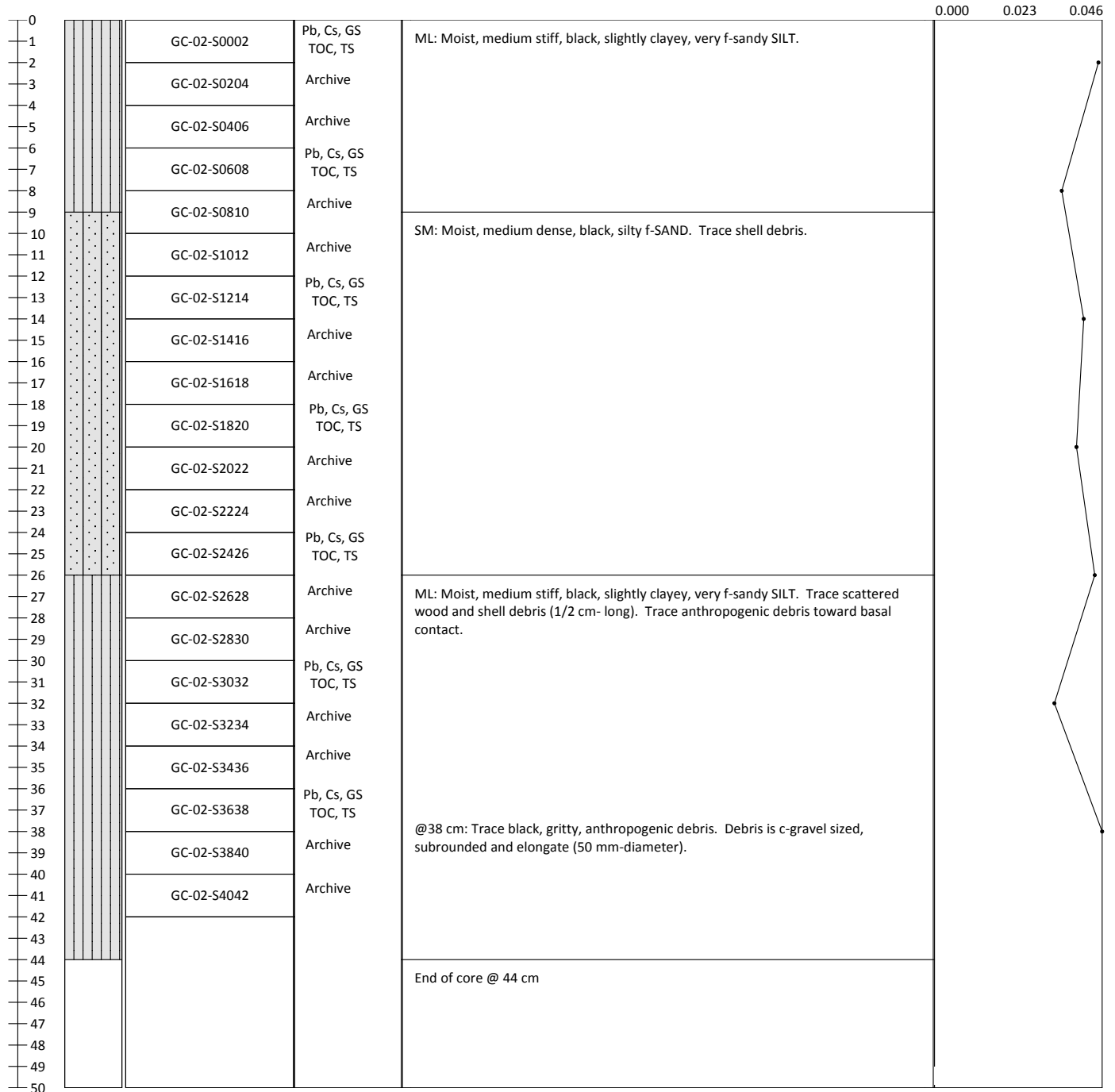
50				
51	GC-01-S5052	Archive	ML: Moist, medium stiff, black, slightly clayey, very f-sandy SILT.	
52				
53	GC-01-S5254	Archive		
54				
55	GC-01-S5456	TS, TOC		
56				
57	GC-01-S5658	Archive		
58				
59	GC-01-S5860	Archive		
60				
61	GC-01-S6062	TS, TOC		
62				
63	GC-01-S6264	Archive		
64				
65	GC-01-S6466	Archive		
66				
67	GC-01-S6668	TS, TOC		
68				
69	GC-01-S6870	Archive		
70				
71	GC-01-S7072	Archive		
72				
73	GC-01-S7274	TS, TOC		
74				
75	GC-01-S7476	Archive		
76				
77	GC-01-S7678	Archive		
78				
79	GC-01-S7880	TS, TOC		
80				
81	GC-01-S8082	Archive	ML: Moist, stiff, black, slightly sandy, SILT. Slight H2S-like odor.	
82				
83	GC-01-S8284	Archive		
84				
85	GC-01-S8486	TS, TOC		
86				
87			End of core @ 86.5 cm	
88				
89				
90				
91				
92				
93				
94				
95				
96				
97				
98				
99				
100				

Sediment Core Log

Sheet 1 of 1

GC-02

Project: East Waterway - STE			Area: East Waterway		Drive Length (in): 35.5	
Project #: 060003-01			SW Elevation (ft MLLW): 4.21		Recovery Length (in): 26	
Client: Port of Seattle			Water Depth - LL (ft): 44.8		Core Quality: Good	
Collection Date: 2/1/2010			Mudline Elevation (ft MLLW): -40.6		Percent Recovery: 73%	
Contractor: RSS			Northing: 1267893 Easting: 218988		Process Date: 2/3/2010	
Vessel: Caroline Dow			Horiz. Datum: NAD 83 WA N US Ft Vert. Datum: MLLW		Process Method: Cut-Tube	
Operator: Parker			Method/Tube ID: Diver Core/ 4" Polycarbonate Tube		Logged By: LM/DP/AO	
Recovered Depth (cm) and Graphic Log	Sample Interval	Analysis	Sediment Description			Cs-137 Profile (pCi/g dry)
			Contacts are Recovered Depths. Classification Scheme: USCS			



Sediment Core Log

Sheet 1 of 1

GC-03

Project: East Waterway - STE			Area: East Waterway			Drive Length (in): 36		
Project #: 060003-01			SW Elevation (ft MLLW): 10.28			Recovery Length (in): 20		
Client: Port of Seattle			Water Depth - LL (ft): 67.7			Core Quality: Good		
Collection Date: 1/26/2010			Mudline Elevation (ft MLLW): -57.4			Percent Recovery: 56%		
Contractor: RSS			Northing: 1267424 Easting: 218519			Process Date: 2/3/2010		
Vessel: Caroline Dow			Horiz. Datum: NAD 83 WA N US Ft Vert. Datum: MLLW			Process Method: Cut-Tube		
Operator: Parker			Method/Tube ID: Diver Core/ 4" Polycarbonate Tube			Logged By: LM/DP/AO		
Recovered Depth (cm) and Graphic Log	Sample Interval	Analysis	Sediment Description				Cs-137 Profile (pCi/g dry)	
			Contacts are Recovered Depths. Classification Scheme: USCS					

0				
1		GC-03-S0002	☺☺☺/ID{	ML: Moist, soft, black, SILT. SILT is smooth and homogenous. Trace shell and wood debris, trace septic odor with 1 cm brown staining to 12 cm. Competency increases toward basal contact.
2		GC-03-S0204	Archive	
3		GC-03-S0406	Archive	
4				
5		GC-03-S0608	☺☺☺/ID{	
6		GC-03-S0810	Archive	
7		GC-03-S1012	Archive	
8		GC-03-S1214	☺☺☺/ID{	
9		GC-03-S1416	Archive	
10		GC-03-S1618	Archive	
11		GC-03-S1820	☺☺☺/ID{	@13 cm: Broken razor clam shell (3 cm-long). Strong decomposing odor. @16-18 cm: Fresh wood debris
12		GC-03-S2022	Archive	
13		GC-03-S2224	Archive	
14				
15		GC-03-S2426	☺☺☺/ID{	
16		GC-03-S2628	Archive	
17		GC-03-S2830		
18				
19				
20				
21				SM: Moist, medium dense, black, silty f-SAND. Trace wood fragments (up to 5 cm-long). End of core @ 30 cm
22				
23				
24				
25				
26				
27				
28				
29				
30				
31				
32				
33				
34				
35				
36				
37				
38				
39				
40				
41				
42				
43				
44				
45				
46				
47				
48				
49				
50				



Drive Notes (1): Attempt 1 of 3. Moderately easy drive on top, stiffer below. Diver reported a problem with piston which limited recovery.

Notes (2): GC-03 was not analyzed for geochronology.

Calculated Recovery
Sample Length/Penetration Length:
20/36 in = 56%

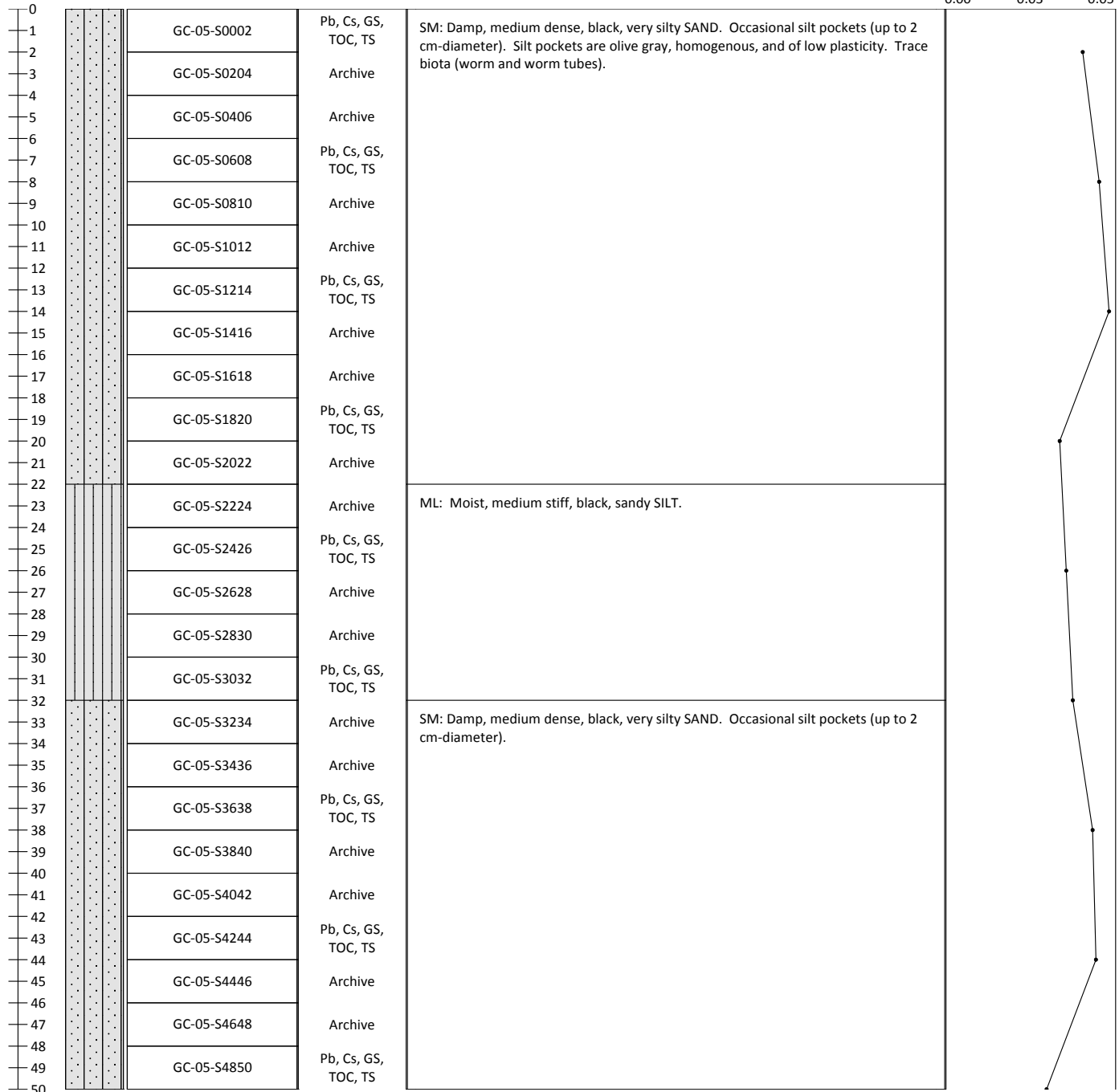
Sediment Core Log

Sheet 1 of 2

GC-05

Project: East Waterway - STE			Area: East Waterway			Drive Length (in): 53		
Project #: 060003-01			SW Elevation (ft MLLW): 7.98			Recovery Length (in): 51		
Client: Port of Seattle			Water Depth - LL (ft): 61.8			Core Quality: Good		
Collection Date: 1/29/2010			Mudline Elevation (ft MLLW): -53.8			Percent Recovery: 96%		
Contractor: RSS			Northing: 1267593 Easting: 217952			Process Date: 2/3/2010		
Vessel: Caroline Dow			Horiz. Datum: NAD 83 WA N US Ft Vert. Datum: MLLW			Process Method: Cut-Tube		
Operator: Parker			Method/Tube ID: Diver Core/ 4" Polycarbonate Tube			Logged By: LM/DP/AO		
Recovered Depth (cm) and Graphic Log	Sample Interval	Analysis	Sediment Description				Cs-137 Profile (pCi/g dry)	
			Contacts are Recovered Depths. Classification Scheme: USCS					

0.00 0.03 0.05



Drive Notes (1): Attempt 1 of 1. Steady coring.

Notes (2): No Cs-137 peak observed.

Calculated Recovery
Sample Length/Penetration Length:

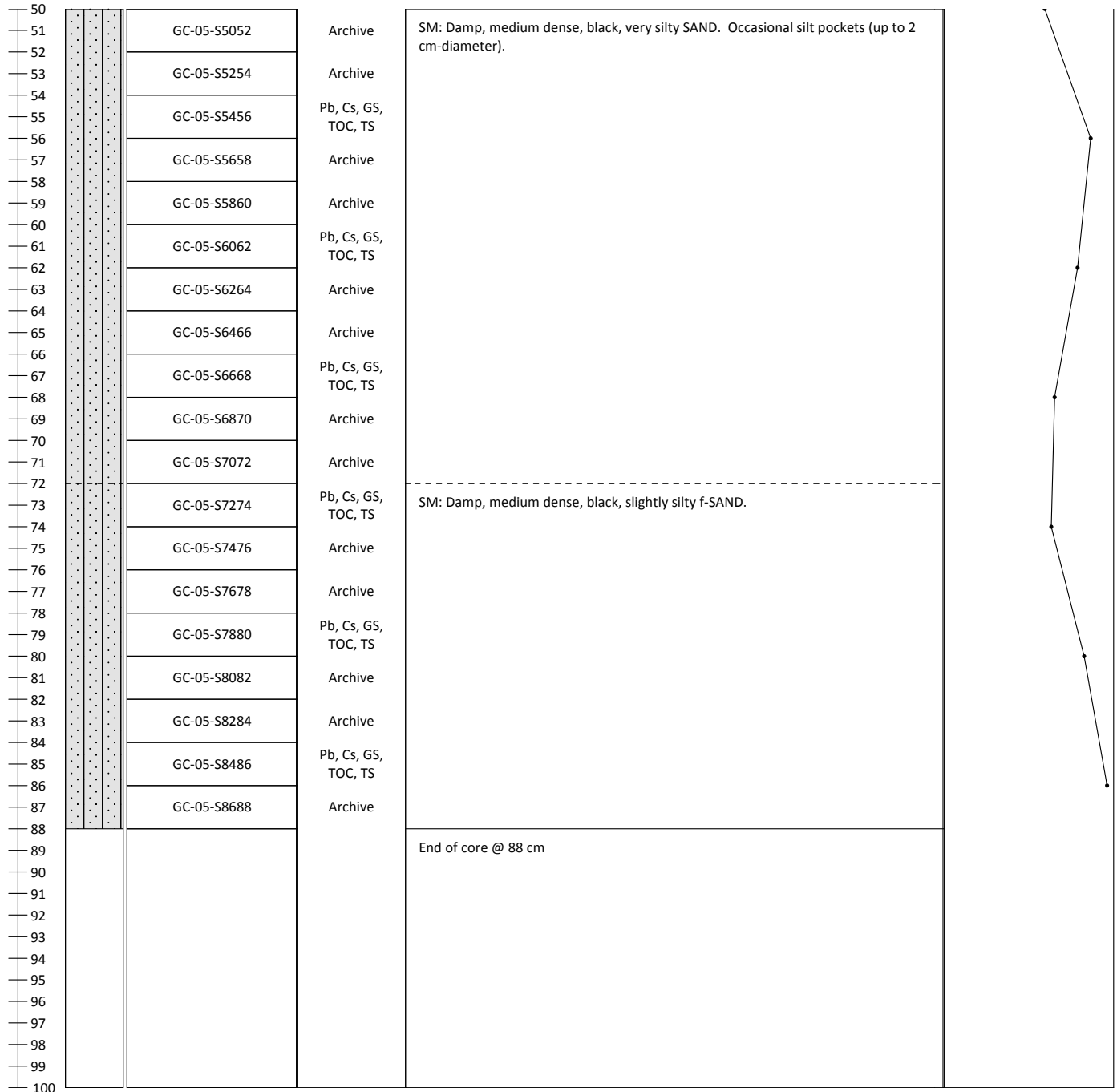
51/53 in = 96%

Sediment Core Log

Sheet 2 of 2

GC-05

Project: East Waterway - STE			Area: East Waterway		Drive Length (in): 53	
Project #: 060003-01			SW Elevation (ft MLLW): 7.98		Recovery Length (in): 51	
Client: Port of Seattle			Water Depth - LL (ft): 61.8		Core Quality: Good	
Collection Date: 1/29/2010			Mudline Elevation (ft MLLW): -53.8		Percent Recovery: 96%	
Contractor: RSS			Northing: 1267593 Easting: 217952		Process Date: 2/3/2010	
Vessel: Caroline Dow			Horiz. Datum: NAD 83 WA N US Ft Vert. Datum: MLLW		Process Method: Cut-Tube	
Operator: Parker			Method/Tube ID: Diver Core/ 4" Polycarbonate Tube		Logged By: LM/DP/AO	
Recovered Depth (cm) and Graphic Log	Sample Interval	Analysis	Sediment Description			Cs-137 Profile (pCi/g dry)
			Contacts are Recovered Depths. Classification Scheme: USCS			



Drive Notes (1): Attempt 1 of 1. Steady coring.

Notes (2): No Cs-137 peak observed.

Calculated Recovery
Sample Length/Penetration Length:

51/53 in = 96%

Sediment Core Log

Sheet 1 of 2

GC-06

Project: East Waterway - STE			Area: East Waterway		Drive Length (in): 54	
Project #: 060003-01			SW Elevation (ft MLLW): 9.06		Recovery Length (in): 43	
Client: Port of Seattle			Water Depth - LL (ft): 66		Core Quality: Good	
Collection Date: 1/27/2010			Mudline Elevation (ft MLLW): -56.9		Percent Recovery: 79%	
Contractor: RSS			Northing: 1267409 Easting: 217524		Process Date: 2/3/2010	
Vessel: Caroline Dow			Horiz. Datum: NAD 83 WA N US Ft Vert. Datum: MLLW		Process Method: Cut-Tube	
Operator: Parker			Method/Tube ID: Diver Core/ 4" Polycarbonate Tube		Logged By: LM/DP/AO	
Recovered Depth (cm) and Graphic Log	Sample Interval	Analysis	Sediment Description			Cs-137 Profile (pCi/g dry)
			Contacts are Recovered Depths. Classification Scheme: USCS			

0					
1		GC-06-S0002	TS, TOC, GS	ML: Moist, medium stiff, black, f-sandy SILT. Sand grains are black and white. No odor.	
2					
3		GC-06-S0204	Archive		
4					
5		GC-06-S0406	Archive	@5 cm: Slight H2S-like odor.	
6					
7		GC-06-S0608	TS, TOC, GS		
8					
9		GC-06-S0810	Archive		
10					
11		GC-06-S1012	Archive	ML: Moist, soft, black, slightly vf-sandy SILT. Silt is smooth. Trace silt pockets. Trace wood fragments (twigs). Slight HC-like odor.	
12					
13		GC-06-S1214	TS, TOC, GS		
14					
15		GC-06-S1416	Archive		
16					
17		GC-06-S1618	Archive		
18					
19		GC-06-S1820	TS, TOC, GS		
20					
21		GC-06-S2022	Archive		
22					
23		GC-06-S2224	Archive		
24					
25		GC-06-S2426	TS, TOC, GS	@26-28 cm: Silt pocket	
26					
27		GC-06-S2628	Archive	@28 cm: Competency increases, very homogenous	
28					
29		GC-06-S2830	Archive		
30					
31		GC-06-S3032	TS, TOC, GS		
32					
33		GC-06-S3234	Archive		
34					
35		GC-06-S3436	Archive		
36					
37		GC-06-S3638	TS, TOC, GS		
38					
39		GC-06-S3840	Archive		
40					
41		GC-06-S4042	Archive	@40 cm: Twig (4 cm-long)	
42					
43		GC-06-S4244	TS, TOC, GS		
44					
45					
46		GC-06-S4448	TS, TOC, GS QC		
47					
48					
49		GC-06-S4850	TS, TOC		
50					



Drive Notes (1): Attempt 1 of 1. Rapid coring to 42", slower coring to 54".

Notes (2): GC-06 was not analyzed for geochronology.

Calculated Recovery
Sample Length/Penetration Length:

43/54 in = 79%

Sediment Core Log

Sheet 2 of 2

GC-06

Project: East Waterway - STE			Area: East Waterway		Drive Length (in): 54	
Project #: 060003-01			SW Elevation (ft MLLW): 9.06		Recovery Length (in): 43	
Client: Port of Seattle			Water Depth - LL (ft): 66		Core Quality: Good	
Collection Date: 1/27/2010			Mudline Elevation (ft MLLW): -56.9		Percent Recovery: 79%	
Contractor: RSS			Northing: 1267409 Easting: 217524		Process Date: 2/3/2010	
Vessel: Caroline Dow			Horiz. Datum: NAD 83 WA N US Ft Vert. Datum: MLLW		Process Method: Cut-Tube	
Operator: Parker			Method/Tube ID: Diver Core/ 4" Polycarbonate Tube		Logged By: LM/DP/AO	
Recovered Depth (cm) and Graphic Log	Sample Interval	Analysis	Sediment Description			Cs-137 Profile (pCi/g dry)
			Contacts are Recovered Depths. Classification Scheme: USCS			

50				
51		GC-06-S5052	Archive	ML: Moist, soft, black, slightly vf-sandy SILT. Silt is smooth. Trace silt pockets. Trace wood fragments (twigs). Slight HC-like odor.
52		GC-06-S5254	Archive	
53				
54		GC-06-S5456	TS, TOC	
55				
56		GC-06-S5658	Archive	
57				
58		GC-06-S5860	Archive	
59				
60		GC-06-S6062	TS, TOC	
61				
62		GC-06-S6264	Archive	
63				
64		GC-06-S6466	Archive	
65				
66		GC-06-S6668	TS, TOC	@58 cm: Scattered broken shells on sidewalls @60 cm: Competency increases to medium stiff ML: Moist, soft, light gray, SILT. SILT is smooth and homogenous. Slight H2S-like odor. ML: Moist, soft, black, slightly vf-sandy SILT. Slight H2S-like odor. End of core @ 76 cm
67		GC-06-S6870	Archive	
68				
69		GC-06-S7072	Archive	
70				
71		GC-06-S7274	TS, TOC	
72				
73		GC-06-S7476	Archive	
74				
75				
76				
77				
78				
79				
80				
81				
82				
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Sediment Core Log

Sheet 1 of 3

GC-07

Project: East Waterway - STE			Area: East Waterway		Drive Length (in): 61	
Project #: 060003-01			SW Elevation (ft MLLW): 9.38		Recovery Length (in): 55	
Client: Port of Seattle			Water Depth - LL (ft): 66.2		Core Quality: Good	
Collection Date: 1/29/2010			Mudline Elevation (ft MLLW): -57.61		Percent Recovery: 90%	
Contractor: RSS			Northing: 1267547 Easting: 216964		Process Date: 2/3/2010	
Vessel: Caroline Dow			Horiz. Datum: NAD 83 WA N US Ft Vert. Datum: MLLW		Process Method: Cut-Tube	
Operator: Parker			Method/Tube ID: Diver Core/ 4" Polycarbonate Tube		Logged By: LM/DP/AO	
Recovered Depth (cm) and Graphic Log	Sample Interval	Analysis	Sediment Description			Cs-137 Profile (pCi/g dry)
			Contacts are Recovered Depths. Classification Scheme: USCS			

0					
1		GC-06-S0002	TS, TOC, GS	ML: Moist, soft, black with olive gray mottling, slightly vf-f-sandy SILT.	
2					
3		GC-06-S0204	Archive		
4					
5		GC-06-S0406	Archive		
6					
7		GC-06-S0608	TS, TOC, GS		
8					
9		GC-06-S0810	Archive		
10				@10 cm: Increase in sand content	
11		GC-06-S1012	Archive		
12					
13		GC-06-S1214	TS, TOC, GS		
14					
15		GC-06-S1416	Archive	ML: Moist, medium stiff, black, slightly vf-f sandy SILT. SILT is homogenous and smooth. Moderate H2S-like odor.	
16					
17		GC-06-S1618	Archive		
18					
19		GC-06-S1820	TS, TOC, GS		
20					
21		GC-06-S2022	Archive		
22					
23		GC-06-S2224	Archive		
24					
25		GC-06-S2426	TS, TOC, GS		
26					
27		GC-06-S2628	Archive		
28					
29		GC-06-S2830	Archive		
30					
31		GC-06-S3032	TS, TOC, GS		
32					
33		GC-06-S3234	Archive		
34					
35		GC-06-S3436	Archive		
36					
37		GC-06-S3638	TS, TOC, GS		
38					
39		GC-06-S3840	Archive		
40					
41		GC-06-S4042	Archive		
42					
43		GC-06-S4244	TS, TOC, GS		
44					
45			Archive		
46		GC-06-S4448	Archive		
47					
48			Archive		
49		GC-06-S4850	TS, TOC		
50					



Drive Notes (1): Attempt 1 of 1. Steady coring.

Notes (2): GC-07 was not analyzed for geochronology.

Calculated Recovery

Sample Length/Penetration Length:

55/61 in = 90%

Sediment Core Log

Sheet 2 of 3

GC-07

Project: East Waterway - STE			Area: East Waterway		Drive Length (in): 61	
Project #: 060003-01			SW Elevation (ft MLLW): 9.38		Recovery Length (in): 55	
Client: Port of Seattle			Water Depth - LL (ft): 66.2		Core Quality: Good	
Collection Date: 1/29/2010			Mudline Elevation (ft MLLW): -57.61		Percent Recovery: 90%	
Contractor: RSS			Northing: 1267547 Easting: 216964		Process Date: 2/3/2010	
Vessel: Caroline Dow			Horiz. Datum: NAD 83 WA N US Ft Vert. Datum: MLLW		Process Method: Cut-Tube	
Operator: Parker			Method/Tube ID: Diver Core/ 4" Polycarbonate Tube		Logged By: LM/DP/AO	
Recovered Depth (cm) and Graphic Log	Sample Interval	Analysis	Sediment Description			Cs-137 Profile (pCi/g dry)
			Contacts are Recovered Depths. Classification Scheme: USCS			

50				
51		GC-06-S5052	Archive	ML: Moist, medium stiff, black, slightly vf-f sandy SILT. SILT is homogenous and smooth. Moderate H2S-like odor.
52		GC-06-S5254	Archive	
53				
54		GC-06-S5456	TS, TOC	
55				
56		GC-06-S5658	Archive	
57				
58		GC-06-S5860	Archive	
59				
60		GC-06-S6062	TS, TOC	
61				@60 cm: Strong H2S-like odor.
62		GC-06-S6264	Archive	
63				
64		GC-06-S6466	Archive	
65				
66		GC-06-S6668	TS, TOC	
67				
68		GC-06-S6870	Archive	
69				
70				
71		GC-06-S7072	Archive	ML: Moist, medium stiff, black with olive gray mottling, slightly vf-f sandy SILT. Trace wood fragments (twigs up to 8 cm). Moderate H2S-like odor.
72				
73		GC-06-S7274	TS, TOC	
74				
75		GC-06-S7476	Archive	
76				
77		GC-07-S7678	Archive	
78				
79		GC-07-S7880	TS, TOC	
80				
81		GC-07-S8082	Archive	
82				
83		GC-07-S8284	Archive	
84				
85		GC-07-S8486	TS, TOC	
86				
87		GC-07-S8688	Archive	
88				
89		GC-07-S8890	Archive	
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95				
96				
97				
98				
99				
100				

Sediment Core Log

Sheet 3 of 3

GC-07

Project: East Waterway - STE			Area: East Waterway		Drive Length (in): 61	
Project #: 060003-01			SW Elevation (ft MLLW): 9.38		Recovery Length (in): 55	
Client: Port of Seattle			Water Depth - LL (ft): 66.2		Core Quality: Good	
Collection Date: 1/29/2010			Mudline Elevation (ft MLLW): -57.61		Percent Recovery: 90%	
Contractor: RSS			Northing: 1267547 Easting: 216964		Process Date: 2/3/2010	
Vessel: Caroline Dow			Horiz. Datum: NAD 83 WA N US Ft Vert. Datum: MLLW		Process Method: Cut-Tube	
Operator: Parker			Method/Tube ID: Diver Core/ 4" Polycarbonate Tube		Logged By: LM/DP/AO	
Recovered Depth (cm) and Graphic Log	Sample Interval	Analysis	Sediment Description			Cs-137 Profile (pCi/g dry)
			Contacts are Recovered Depths. Classification Scheme: USCS			

100			ML: Moist, medium stiff, black with olive gray mottling, slightly vf-f sandy SILT. Trace wood fragments (twigs up to 8 cm). Moderate H2S-like odor. @100 cm: Black seam with strong HC-like odor (1/2 cm-thick)	
101				
102				
103				
104				
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115				
116			End of core @ 115 cm	
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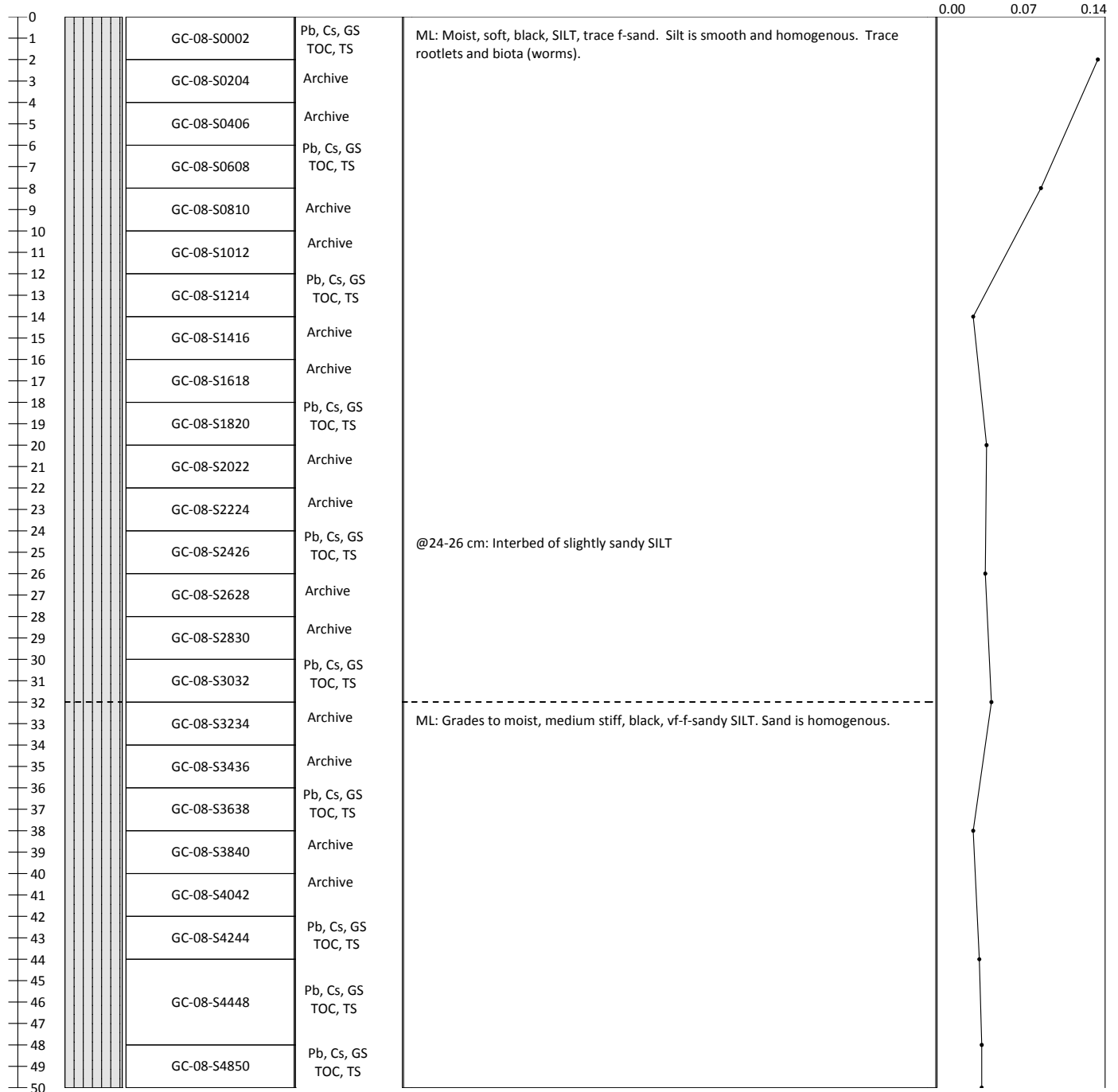
End of core @ 115 cm

Sediment Core Log

Sheet 1 of 2

GC-08

Project: East Waterway - STE			Area: East Waterway		Drive Length (in): 49	
Project #: 060003-01			SW Elevation (ft MLLW): 5.74		Recovery Length (in): 40	
Client: Port of Seattle			Water Depth - LL (ft): 62.7		Core Quality: Fair	
Collection Date: 2/1/2010			Mudline Elevation (ft MLLW): -57		Percent Recovery: 81.6%	
Contractor: RSS			Northing: 1267297 Easting: 216725		Process Date: 2/2/2010	
Vessel: Caroline Dow			Horiz. Datum: NAD 83 WA N US Ft Vert. Datum: MLLW		Process Method: Cut-Tube	
Operator: Parker			Method/Tube ID: Diver Core/ 4" Polycarbonate Tube		Logged By: LM/DP/AO	
Recovered Depth (cm) and Graphic Log	Sample Interval	Analysis	Sediment Description			Cs-137 Profile (pCi/g dry)
			Contacts are Recovered Depths. Classification Scheme: USCS			



Drive Notes (1): Attempt 2 of 2. Core stuck from previous drive (extracted).

Notes (2): No Cs-137 peak observed.

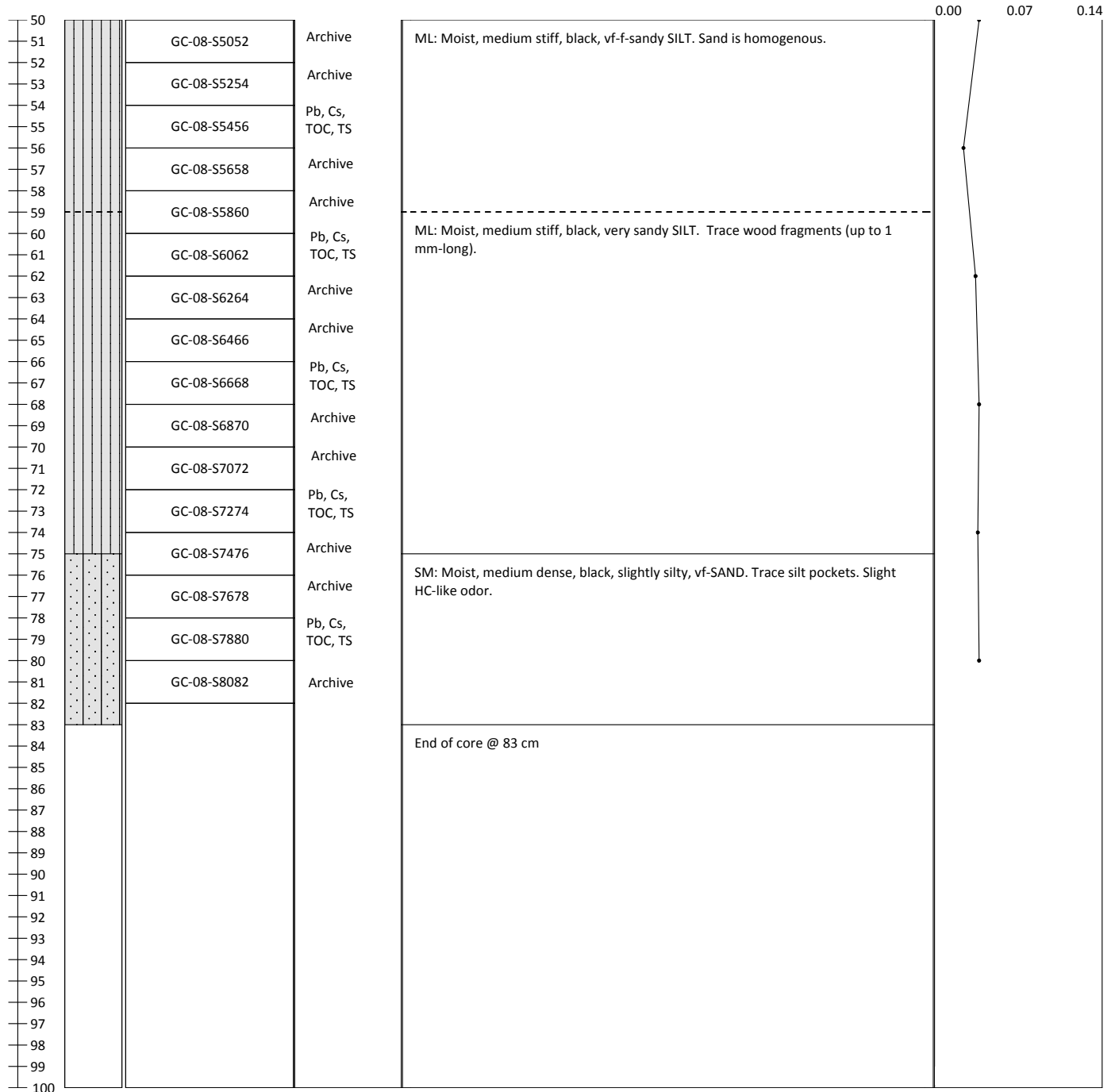
Calculated Recovery
Sample Length/Penetration Length:
40/49 in = 81.6%

Sediment Core Log

Sheet 2 of 2

GC-08

Project: East Waterway - STE			Area: East Waterway		Drive Length (in): 49	
Project #: 060003-01			SW Elevation (ft MLLW): 5.74		Recovery Length (in): 40	
Client: Port of Seattle			Water Depth - LL (ft): 62.7		Core Quality: Fair	
Collection Date: 2/1/2010			Mudline Elevation (ft MLLW): -57		Percent Recovery: 81.6%	
Contractor: RSS			Northing: 1267297 Easting: 216725		Process Date: 2/2/2010	
Vessel: Caroline Dow			Horiz. Datum: NAD 83 WA N US Ft Vert. Datum: MLLW		Process Method: Cut-Tube	
Operator: Parker			Method/Tube ID: Diver Core/ 4" Polycarbonate Tube		Logged By: LM/DP/AO	
Recovered Depth (cm) and Graphic Log	Sample Interval	Analysis	Sediment Description			Cs-137 Profile (pCi/g dry)
			Contacts are Recovered Depths. Classification Scheme: USCS			



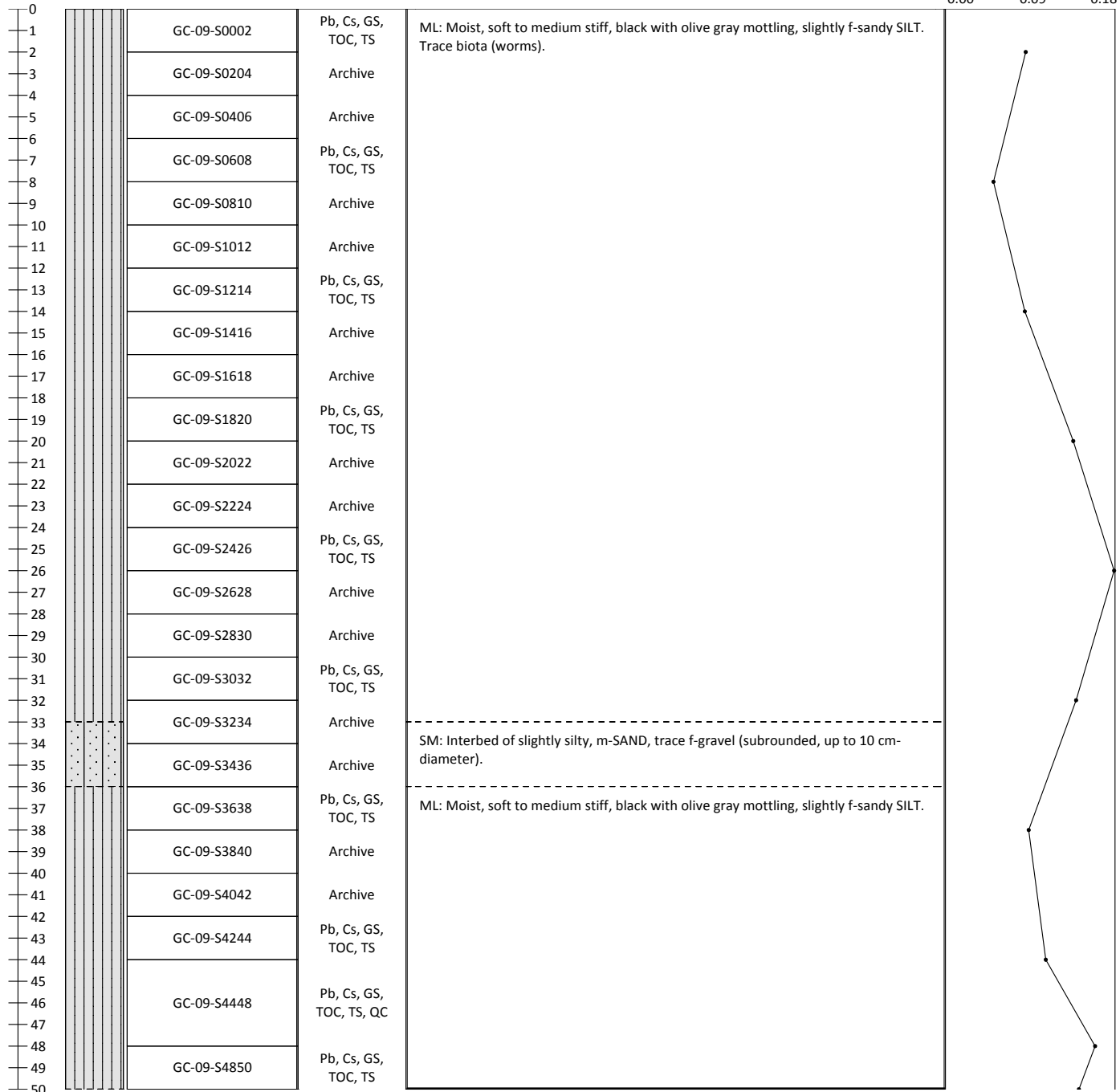
Sediment Core Log

Sheet 1 of 3

GC-09

Project: East Waterway - STE			Area: East Waterway		Drive Length (in): 58	
Project #: 060003-01			SW Elevation (ft MLLW): 8.74		Recovery Length (in): 53.5	
Client: Port of Seattle			Water Depth - LL (ft): 40.7		Core Quality: Good	
Collection Date: 1/28/2010			Mudline Elevation (ft MLLW): -32.0		Percent Recovery: 92%	
Contractor: RSS			Northing: 1267872 Easting: 215110		Process Date: 2/2/2010	
Vessel: Caroline Dow			Horiz. Datum: NAD 83 WA N US Ft Vert. Datum: MLLW		Process Method: Cut-Tube	
Operator: Parker			Method/Tube ID: Diver Core/ 4" Polycarbonate Tube		Logged By: LM/DP/AO	
Recovered Depth (cm) and Graphic Log	Sample Interval	Analysis	Sediment Description			Cs-137 Profile (pCi/g dry)
			Contacts are Recovered Depths. Classification Scheme: USCS			

0.00 0.09 0.18



Drive Notes (1): Attempt 1 of 1. Steady coring.

Notes (2): No Cs-137 peak observed.

Calculated Recovery
Sample Length/Penetration Length:

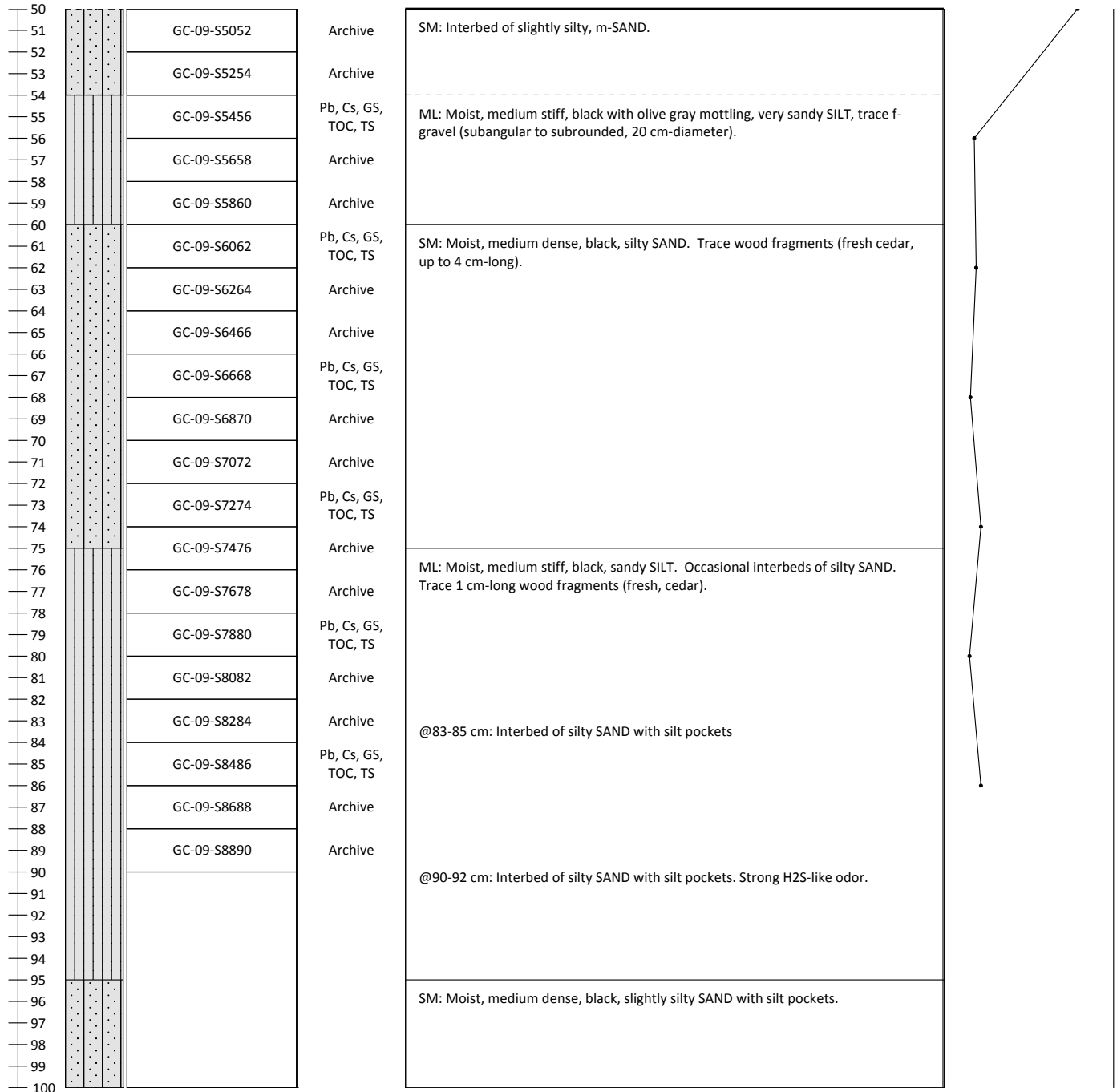
53.5/58 in = 92%

Sediment Core Log

Sheet 2 of 3

GC-09

Project: East Waterway - STE			Area: East Waterway			Drive Length (in): 58		
Project #: 060003-01			SW Elevation (ft MLLW): 8.74			Recovery Length (in): 53.5		
Client: Port of Seattle			Water Depth - LL (ft): 40.7			Core Quality: Good		
Collection Date: 1/28/2010			Mudline Elevation (ft MLLW): -32.0			Percent Recovery: 92%		
Contractor: RSS			Northing: 1267872 Easting: 215110			Process Date: 2/2/2010		
Vessel: Caroline Dow			Horiz. Datum: NAD 83 WA N US Ft Vert. Datum: MLLW			Process Method: Cut-Tube		
Operator: Parker			Method/Tube ID: Diver Core/ 4" Polycarbonate Tube			Logged By: LM/DP/AO		
Recovered Depth (cm) and Graphic Log	Sample Interval	Analysis	Sediment Description				Cs-137 Profile (pCi/g dry)	
			Contacts are Recovered Depths. Classification Scheme: USCS					

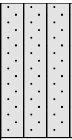


Sediment Core Log

Sheet 3 of 3

GC-09

Project: East Waterway - STE			Area: East Waterway			Drive Length (in): 58		
Project #: 060003-01			SW Elevation (ft MLLW): 8.74			Recovery Length (in): 53.5		
Client: Port of Seattle			Water Depth - LL (ft): 40.7			Core Quality: Good		
Collection Date: 1/28/2010			Mudline Elevation (ft MLLW): -32.0			Percent Recovery: 92%		
Contractor: RSS			Northing: 1267872 Easting: 215110			Process Date: 2/2/2010		
Vessel: Caroline Dow			Horiz. Datum: NAD 83 WA N US Ft Vert. Datum: MLLW			Process Method: Cut-Tube		
Operator: Parker			Method/Tube ID: Diver Core/ 4" Polycarbonate Tube			Logged By: LM/DP/AO		
Recovered Depth (cm) and Graphic Log	Sample Interval	Analysis	Sediment Description				Cs-137 Profile (pCi/g dry)	
			Contacts are Recovered Depths. Classification Scheme: USCS					

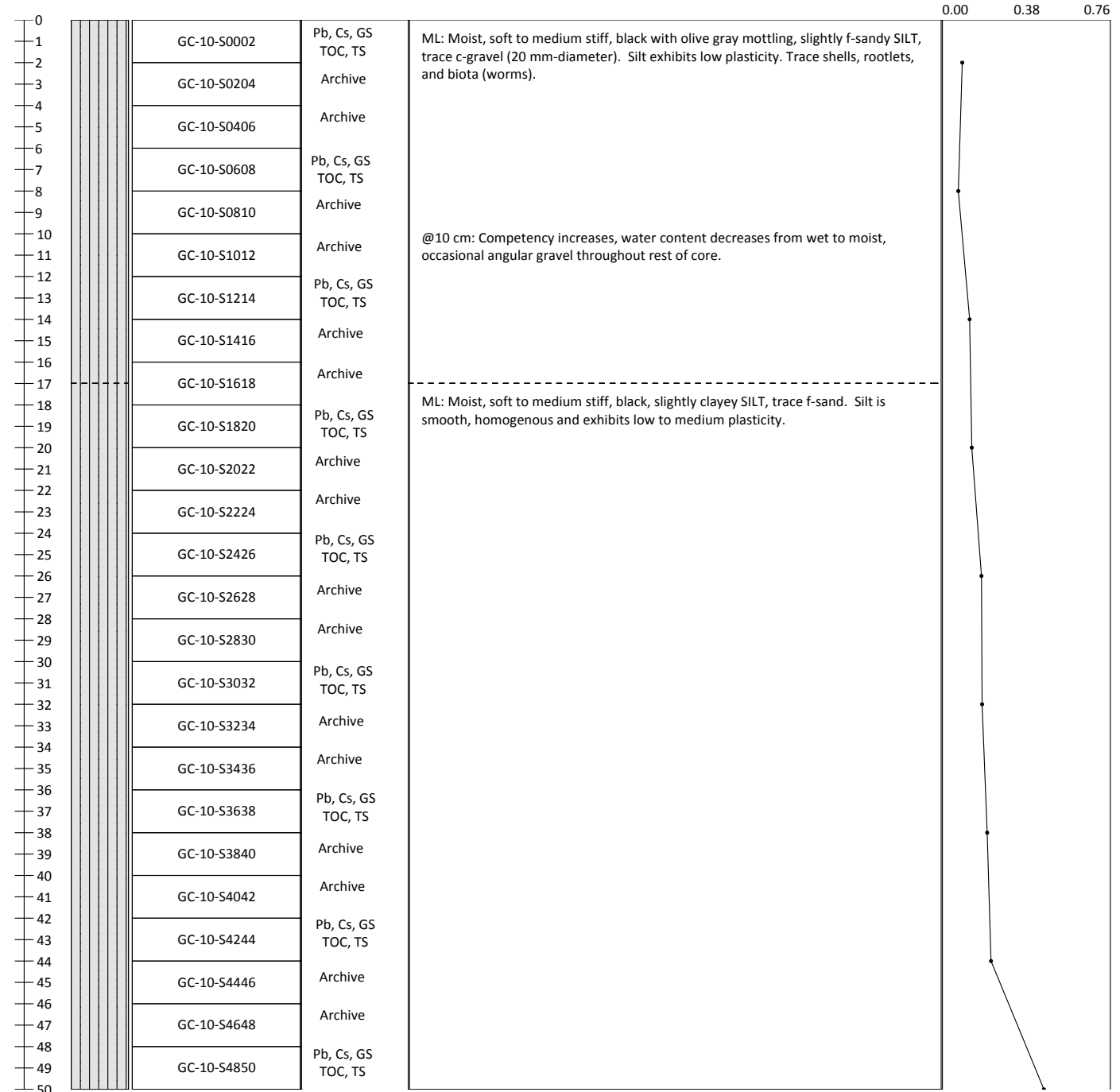
100				SM: Moist, medium dense, black, slightly silty SAND with silt pockets.	
101				End of core at 105 cm.	
102					
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Sediment Core Log

Sheet 1 of 2

GC-10

Project: East Waterway - STE			Area: East Waterway		Drive Length (in): 52.5	
Project #: 060003-01			SW Elevation (ft MLLW): 10.83		Recovery Length (in): 45	
Client: Port of Seattle			Water Depth - LL (ft): 39.8		Core Quality: Good	
Collection Date: 1/26/2010			Mudline Elevation (ft MLLW): -29.0		Percent Recovery: 86%	
Contractor: RSS			Northing: 1268220 Easting: 214736		Process Date: 2/2/2010	
Vessel: Caroline Dow			Horiz. Datum: NAD 83 WA N US Ft Vert. Datum: MLLW		Process Method: Cut-Tube	
Operator: Parker			Method/Tube ID: Diver Core/ 4" Polycarbonate Tube		Logged By: LM/DP/AO	
Recovered Depth (cm) and Graphic Log	Sample Interval	Analysis	Sediment Description			Cs-137 Profile (pCi/g dry)
			Contacts are Recovered Depths. Classification Scheme: USCS			

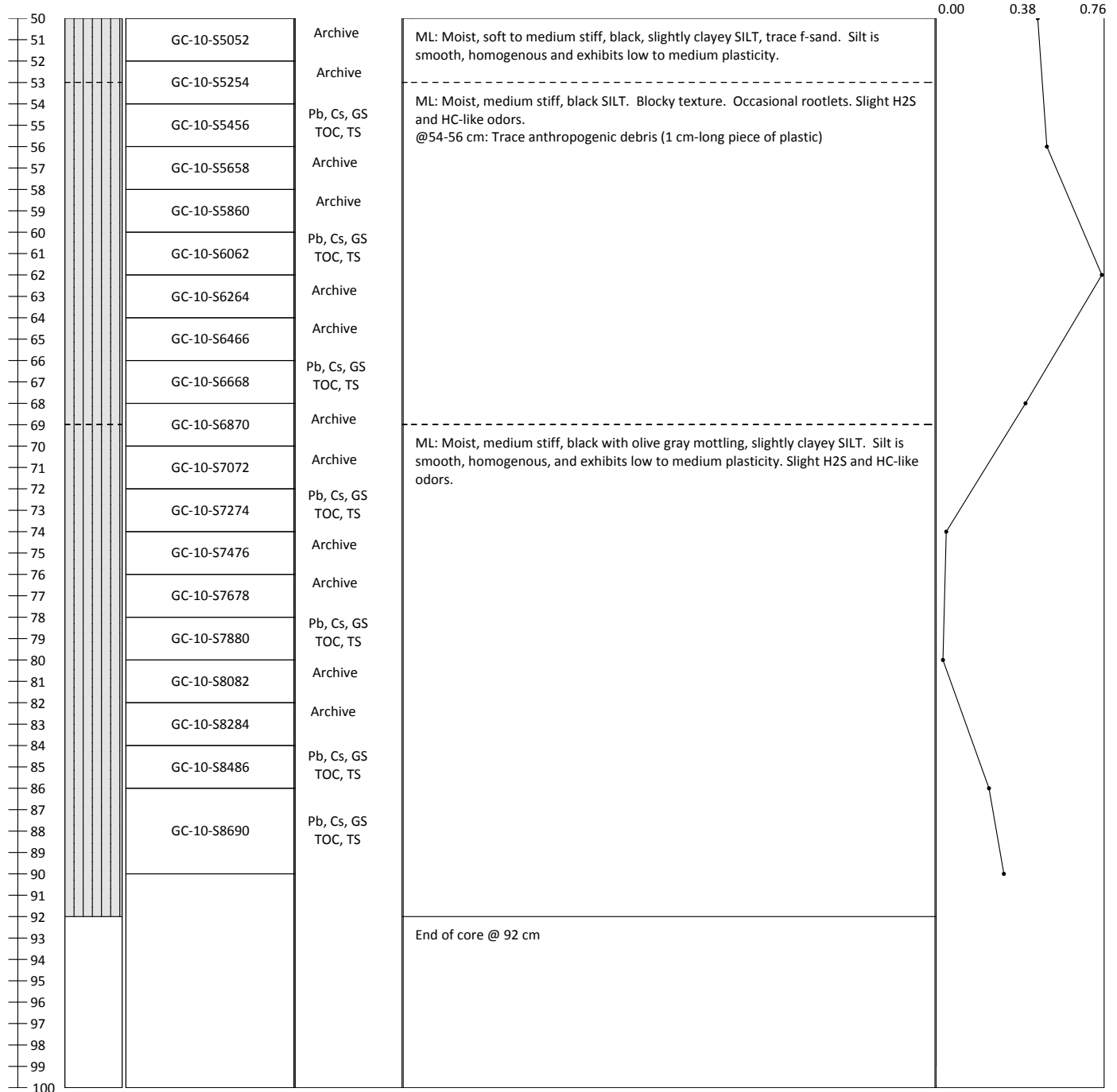


Sediment Core Log

Sheet 2 of 2

GC-10

Project: East Waterway - STE			Area: East Waterway		Drive Length (in): 52.5	
Project #: 060003-01			SW Elevation (ft MLLW): 10.83		Recovery Length (in): 45	
Client: Port of Seattle			Water Depth - LL (ft): 39.8		Core Quality: Good	
Collection Date: 1/26/2010			Mudline Elevation (ft MLLW): -29.0		Percent Recovery: 86%	
Contractor: RSS			Northing: 1268220 Easting: 214736		Process Date: 2/2/2010	
Vessel: Caroline Dow			Horiz. Datum: NAD 83 WA N US Ft Vert. Datum: MLLW		Process Method: Cut-Tube	
Operator: Parker			Method/Tube ID: Diver Core/ 4" Polycarbonate Tube		Logged By: LM/DP/AO	
Recovered Depth (cm) and Graphic Log	Sample Interval	Analysis	Sediment Description			Cs-137 Profile (pCi/g dry)
			Contacts are Recovered Depths. Classification Scheme: USCS			



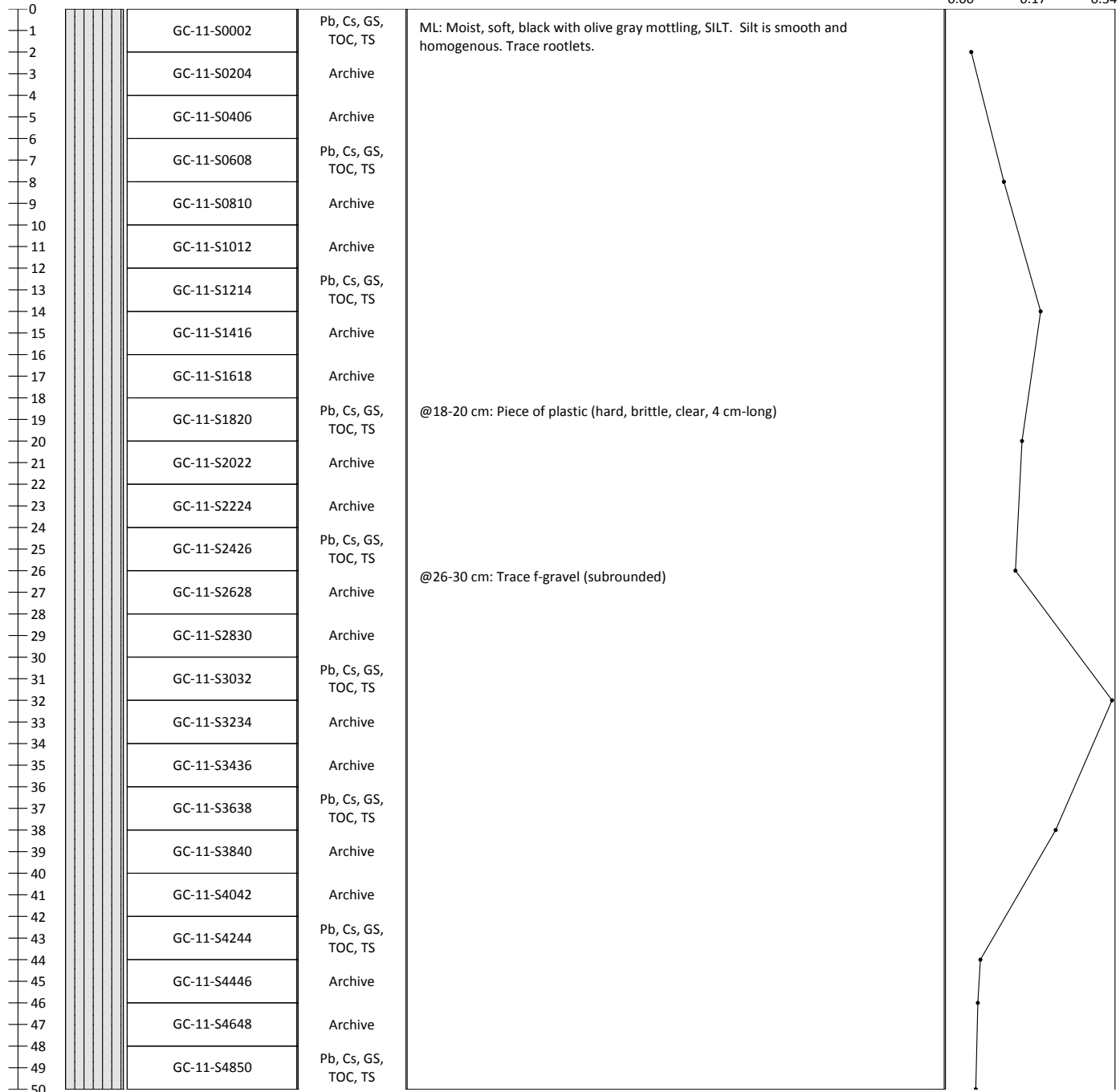
Sediment Core Log

Sheet 1 of 2

GC-11

Project: East Waterway - STE			Area: East Waterway		Drive Length (in): 52	
Project #: 060003-01			SW Elevation (ft MLLW): 10.25		Recovery Length (in): 39	
Client: Port of Seattle			Water Depth - LL (ft): 49.9		Core Quality: Good	
Collection Date: 1/28/2010			Mudline Elevation (ft MLLW): -39.7		Percent Recovery: 75%	
Contractor: RSS			Northing: 1267203 Easting: 213784		Process Date: 2/2/2010	
Vessel: Caroline Dow			Horiz. Datum: NAD 83 WA N US Ft Vert. Datum: MLLW		Process Method: Cut-Tube	
Operator: Parker			Method/Tube ID: Diver Core/ 4" Polycarbonate Tube		Logged By: LM/DP/AO	
Recovered Depth (cm) and Graphic Log	Sample Interval	Analysis	Sediment Description			Cs-137 Profile (pCi/g dry)
			Contacts are Recovered Depths. Classification Scheme: USCS			

0.00 0.17 0.34



Drive Notes (1): Attempt 1 of 1. Moderately easy coring.

Notes (2): A Cs-137 peak is estimated at greater than 80 cm below mudline.

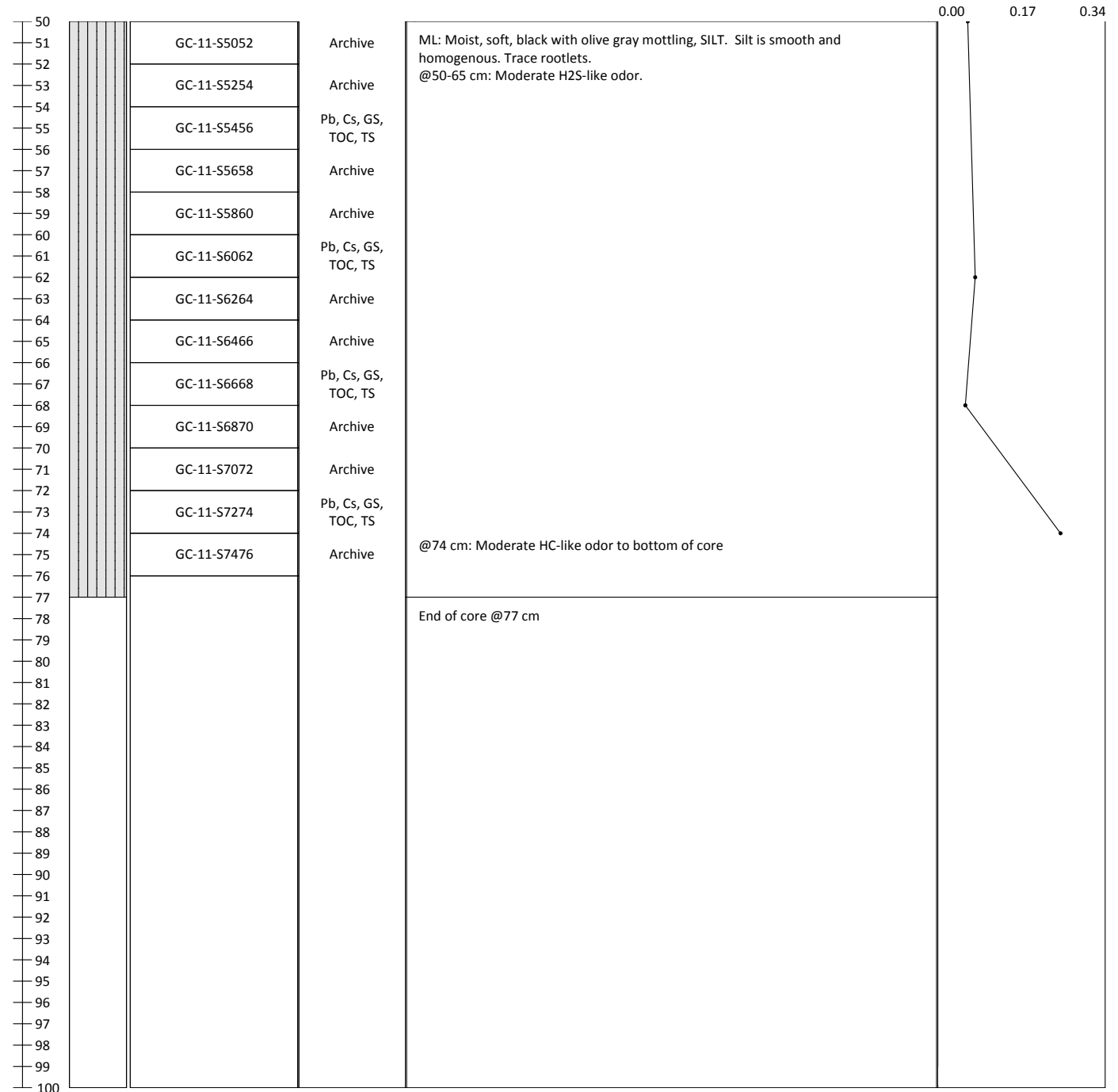
Calculated Recovery
Sample Length/Penetration Length:
39/52 in = 75%

Sediment Core Log

Sheet 2 of 2

GC-11

Project: East Waterway - STE			Area: East Waterway			Drive Length (in): 52		
Project #: 060003-01			SW Elevation (ft MLLW): 10.25			Recovery Length (in): 39		
Client: Port of Seattle			Water Depth - LL (ft): 49.9			Core Quality: Good		
Collection Date: 1/28/2010			Mudline Elevation (ft MLLW): -39.7			Percent Recovery: 75%		
Contractor: RSS			Northing: 1267203 Easting: 213784			Process Date: 2/2/2010		
Vessel: Caroline Dow			Horiz. Datum: NAD 83 WA N US Ft Vert. Datum: MLLW			Process Method: Cut-Tube		
Operator: Parker			Method/Tube ID: Diver Core/ 4" Polycarbonate Tube			Logged By: LM/DP/AO		
Recovered Depth (cm) and Graphic Log	Sample Interval	Analysis	Sediment Description				Cs-137 Profile (pCi/g dry)	
			Contacts are Recovered Depths. Classification Scheme: USCS					

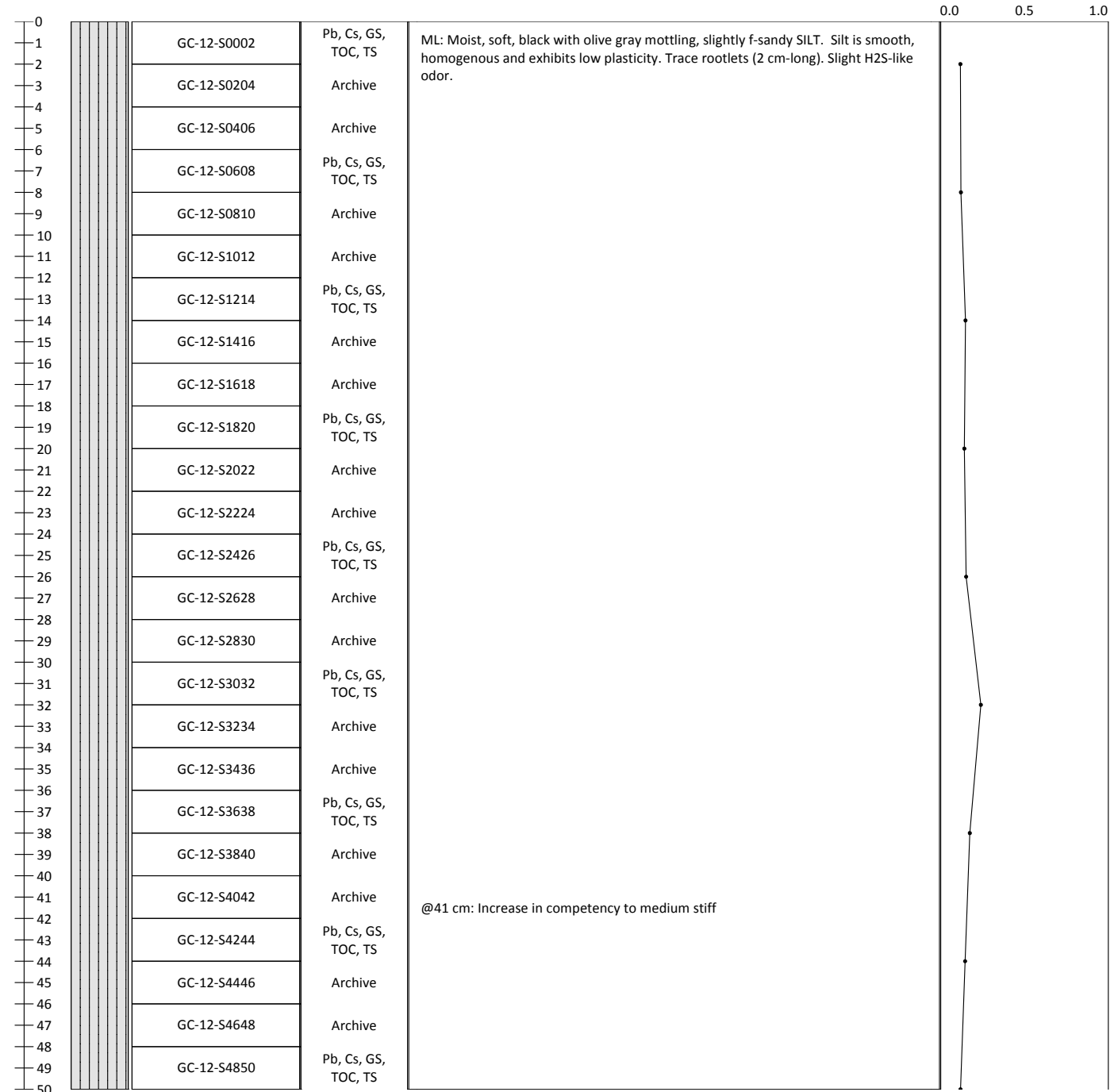


Sediment Core Log

Sheet 1 of 2

GC-12

Project: East Waterway - STE			Area: East Waterway		Drive Length (in): 50.5	
Project #: 060003-01			SW Elevation (ft MLLW): 11.14		Recovery Length (in): 45	
Client: Port of Seattle			Water Depth - LL (ft): 56.2		Core Quality: Good	
Collection Date: 1/26/2010			Mudline Elevation (ft MLLW): -45.1		Percent Recovery: 89%	
Contractor: RSS			Northing: 1267421 Easting: 213798		Process Date: 2/1/2010	
Vessel: Caroline Dow			Horiz. Datum: NAD 83 WA N US Ft Vert. Datum: MLLW		Process Method: Cut-Tube	
Operator: Parker			Method/Tube ID: Diver Core/ 4" Polycarbonate Tube		Logged By: LM/DP/AO	
Recovered Depth (cm) and Graphic Log	Sample Interval	Analysis	Sediment Description			Cs-137 Profile (pCi/g dry)
			Contacts are Recovered Depths. Classification Scheme: USCS			



Drive Notes (1): Attempt 1 of 1. Moderately steady coring.

Notes (2): A Cs-137 peak is estimated at greater than 90 cm below mudline.

Calculated Recovery
Sample Length/Penetration Length:

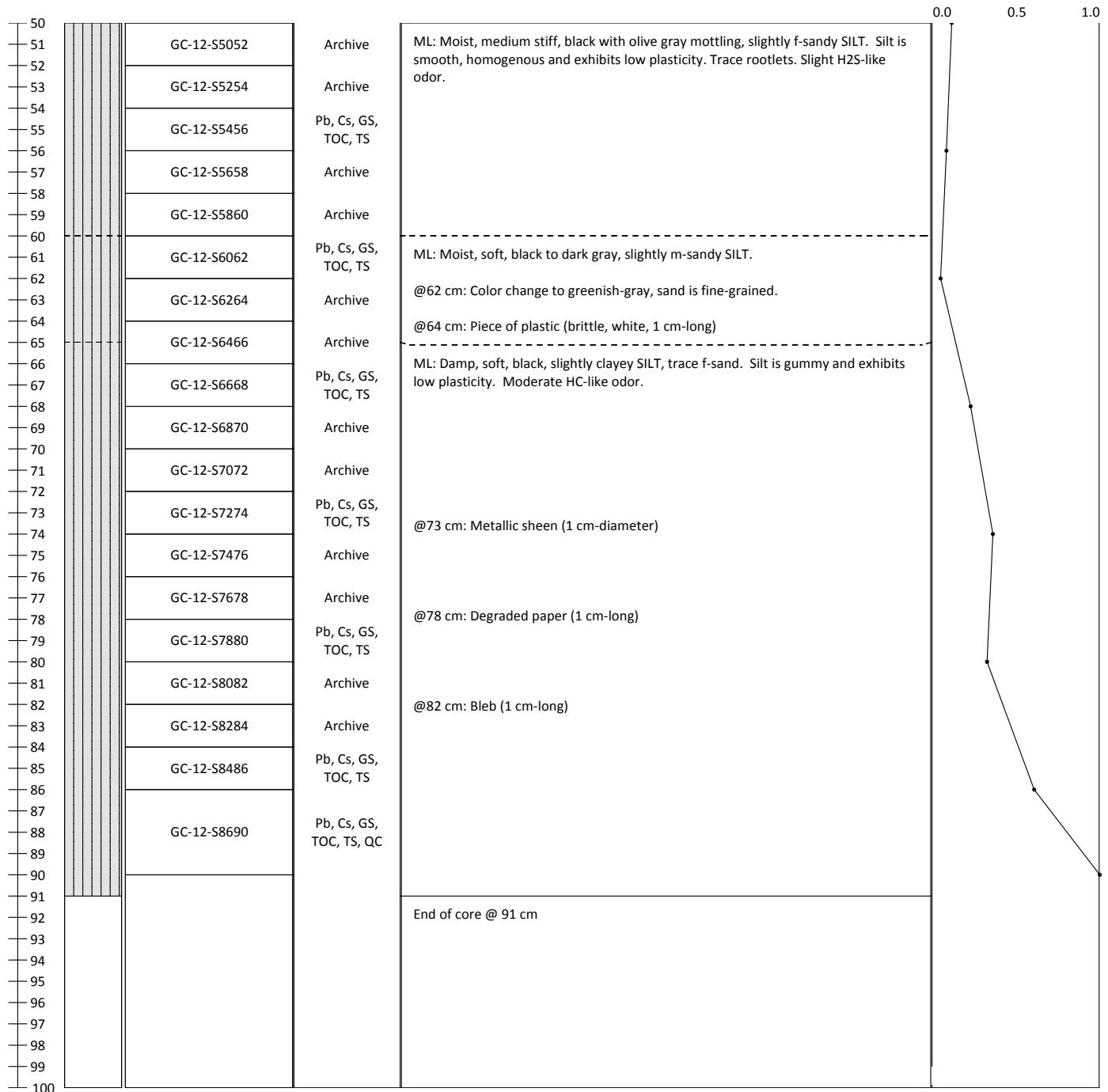
45/50.5 in = 89%

Sediment Core Log

Sheet 2 of 2

GC-12

Project: East Waterway - STE			Area: East Waterway		Drive Length (in): 50.5	
Project #: 060003-01			SW Elevation (ft MLLW): 11.14		Recovery Length (in): 45	
Client: Port of Seattle			Water Depth - LL (ft): 56.2		Core Quality: Good	
Collection Date: 1/26/2010			Mudline Elevation (ft MLLW): -45.1		Percent Recovery: 89%	
Contractor: RSS			Northing: 1267421 Easting: 213798		Process Date: 2/1/2010	
Vessel: Caroline Dow			Horiz. Datum: NAD 83 WA N US Ft Vert. Datum: MLLW		Process Method: Cut-Tube	
Operator: Parker			Method/Tube ID: Diver Core/ 4" Polycarbonate Tube		Logged By: LM/DP/AO	
Recovered Depth (cm) and Graphic Log	Sample Interval	Analysis	Sediment Description			Cs-137 Profile (pCi/g dry)
			Contacts are Recovered Depths. Classification Scheme: USCS			

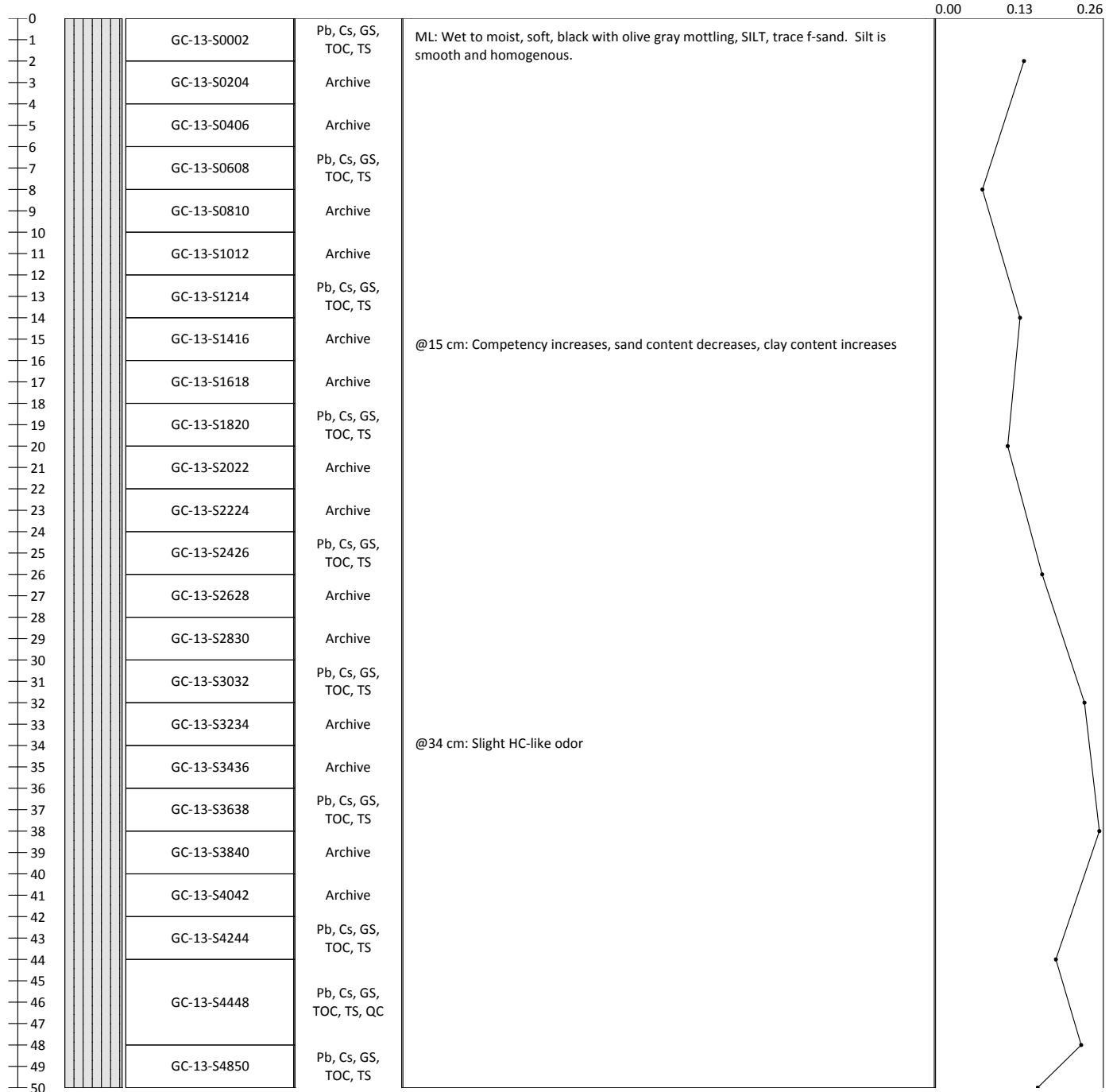


Sediment Core Log

Sheet 1 of 3

GC-13

Project: East Waterway - STE			Area: East Waterway		Drive Length (in): 57	
Project #: 060003-01			SW Elevation (ft MLLW): 11.45		Recovery Length (in): 55	
Client: Port of Seattle			Water Depth - LL (ft): 59.8		Core Quality: Good	
Collection Date: 1/28/2010			Mudline Elevation (ft MLLW): -48.4		Percent Recovery: 96%	
Contractor: RSS			Northing: 1267667 Easting: 213803		Process Date: 2/2/2010	
Vessel: Caroline Dow			Horiz. Datum: NAD 83 WA N US Ft Vert. Datum: MLLW		Process Method: Cut-Tube	
Operator: Parker			Method/Tube ID: Diver Core/ 4" Polycarbonate Tube		Logged By: LM/DP/AO	
Recovered Depth (cm) and Graphic Log	Sample Interval	Analysis	Sediment Description			Cs-137 Profile (pCi/g dry)
			Contacts are Recovered Depths. Classification Scheme: USCS			



Drive Notes (1): Attempt 1 of 1. Steady coring.

Notes (2): No Cs-137 peak observed.

Calculated Recovery
Sample Length/Penetration Length:

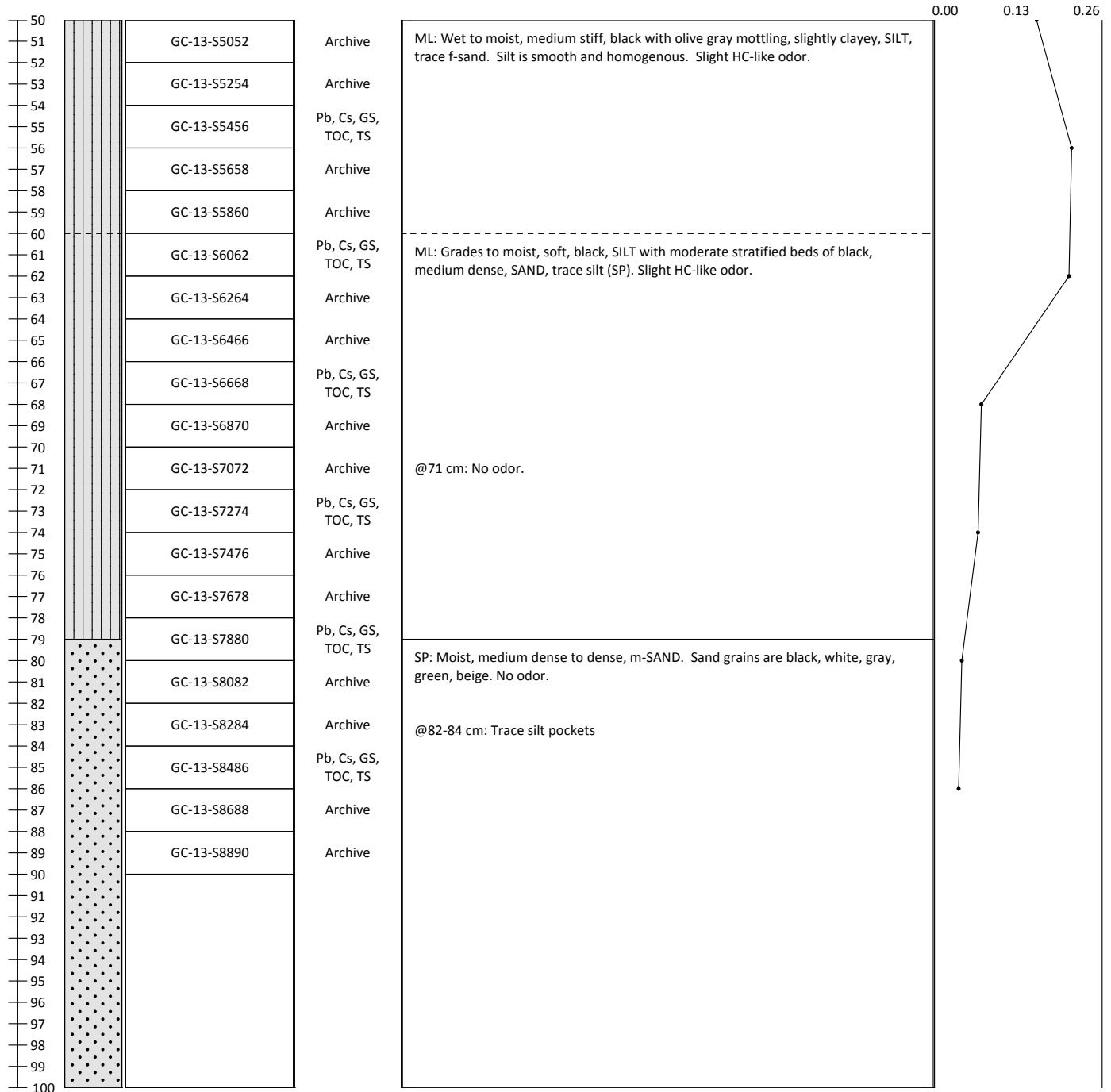
55/57 in = 96%

Sediment Core Log

Sheet 2 of 3

GC-13

Project: East Waterway - STE			Area: East Waterway		Drive Length (in): 57	
Project #: 060003-01			SW Elevation (ft MLLW): 11.45		Recovery Length (in): 55	
Client: Port of Seattle			Water Depth - LL (ft): 59.8		Core Quality: Good	
Collection Date: 1/28/2010			Mudline Elevation (ft MLLW): -48.4		Percent Recovery: 96%	
Contractor: RSS			Northing: 1267667 Easting: 213803		Process Date: 2/2/2010	
Vessel: Caroline Dow			Horiz. Datum: NAD 83 WA N US Ft Vert. Datum: MLLW		Process Method: Cut-Tube	
Operator: Parker			Method/Tube ID: Diver Core/ 4" Polycarbonate Tube		Logged By: LM/DP/AO	
Recovered Depth (cm) and Graphic Log	Sample Interval	Analysis	Sediment Description			Cs-137 Profile (pCi/g dry)
			Contacts are Recovered Depths. Classification Scheme: USCS			

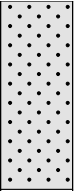


Sediment Core Log

Sheet 3 of 3

GC-13

Project: East Waterway - STE			Area: East Waterway			Drive Length (in): 57		
Project #: 060003-01			SW Elevation (ft MLLW): 11.45			Recovery Length (in): 55		
Client: Port of Seattle			Water Depth - LL (ft): 59.8			Core Quality: Good		
Collection Date: 1/28/2010			Mudline Elevation (ft MLLW): -48.4			Percent Recovery: 96%		
Contractor: RSS			Northing: 1267667 Easting: 213803			Process Date: 2/2/2010		
Vessel: Caroline Dow			Horiz. Datum: NAD 83 WA N US Ft Vert. Datum: MLLW			Process Method: Cut-Tube		
Operator: Parker			Method/Tube ID: Diver Core/ 4" Polycarbonate Tube			Logged By: LM/DP/AO		
Recovered Depth (cm) and Graphic Log	Sample Interval	Analysis	Sediment Description				Cs-137 Profile (pCi/g dry)	
			Contacts are Recovered Depths. Classification Scheme: USCS					

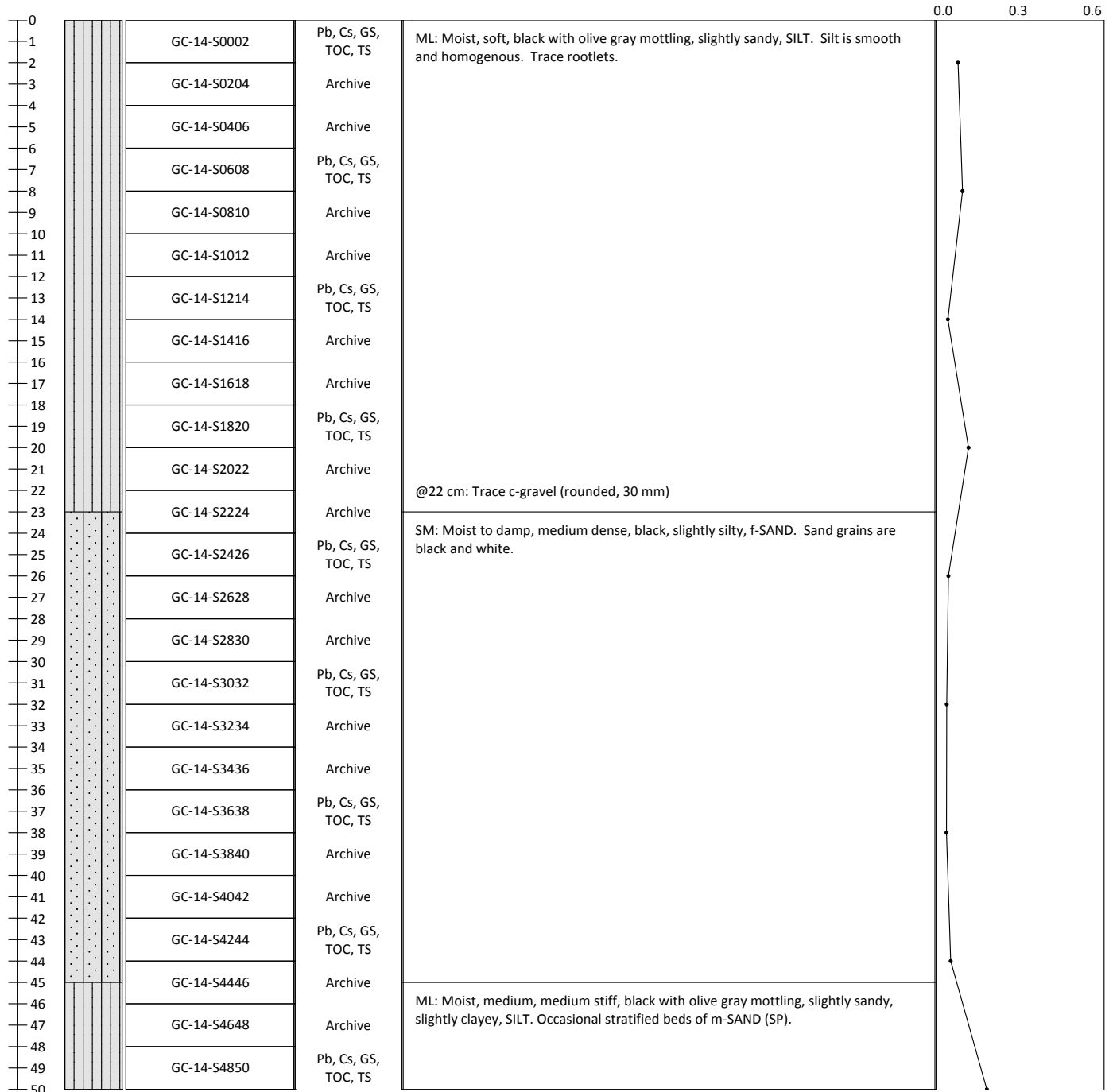
100				SP: Moist, medium dense to dense, m-SAND. Sand grains are black, white, gray, green, beige. No odor.	
101				End of core @ 107 cm	
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Sediment Core Log

Sheet 1 of 2

GC-14

Project: East Waterway - STE			Area: East Waterway		Drive Length (in): 54	
Project #: 060003-01			SW Elevation (ft MLLW): 10.78		Recovery Length (in): 47	
Client: Port of Seattle			Water Depth - LL (ft): 47.5		Core Quality: Good	
Collection Date: 1/27/2010			Mudline Elevation (ft MLLW): -36.7		Percent Recovery: 87%	
Contractor: RSS			Northing: 1267170 Easting: 213075		Process Date: 2/1/2010	
Vessel: Caroline Dow			Horiz. Datum: NAD 83 WA N US Ft Vert. Datum: MLLW		Process Method: Cut-Tube	
Operator: Parker			Method/Tube ID: Diver Core/ 4" Polycarbonate Tube		Logged By: LM/DP/AO	
Recovered Depth (cm) and Graphic Log	Sample Interval	Analysis	Sediment Description			Cs-137 Profile (pCi/g dry)
			Contacts are Recovered Depths. Classification Scheme: USCS			



Drive Notes (1): Attempt 1 of 1. Steady coring.

Notes (2): A Cs-137 peak of 0.575 pCi/g (dry) is observed at 56 cm below mudline.

Calculated Recovery
Sample Length/Penetration Length:

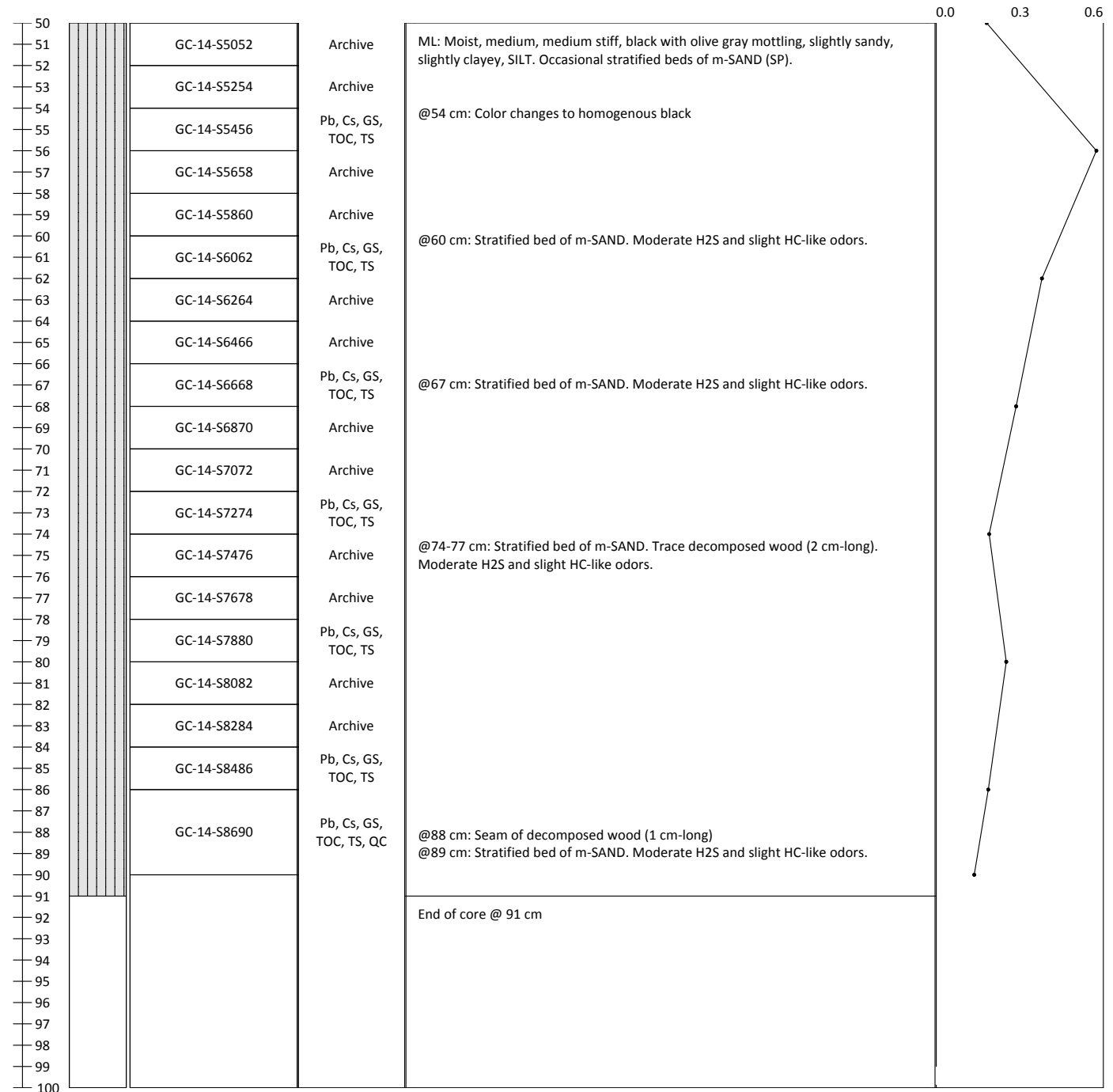
47/54 in = 87%

Sediment Core Log

Sheet 2 of 2

GC-14

Project: East Waterway - STE			Area: East Waterway			Drive Length (in): 54		
Project #: 060003-01			SW Elevation (ft MLLW): 10.78			Recovery Length (in): 47		
Client: Port of Seattle			Water Depth - LL (ft): 47.5			Core Quality: Good		
Collection Date: 1/27/2010			Mudline Elevation (ft MLLW): -36.7			Percent Recovery: 87%		
Contractor: RSS			Northing: 1267170 Easting: 213075			Process Date: 2/1/2010		
Vessel: Caroline Dow			Horiz. Datum: NAD 83 WA N US Ft Vert. Datum: MLLW			Process Method: Cut-Tube		
Operator: Parker			Method/Tube ID: Diver Core/ 4" Polycarbonate Tube			Logged By: LM/DP/AO		
Recovered Depth (cm) and Graphic Log	Sample Interval	Analysis	Sediment Description				Cs-137 Profile (pCi/g dry)	
			Contacts are Recovered Depths. Classification Scheme: USCS					

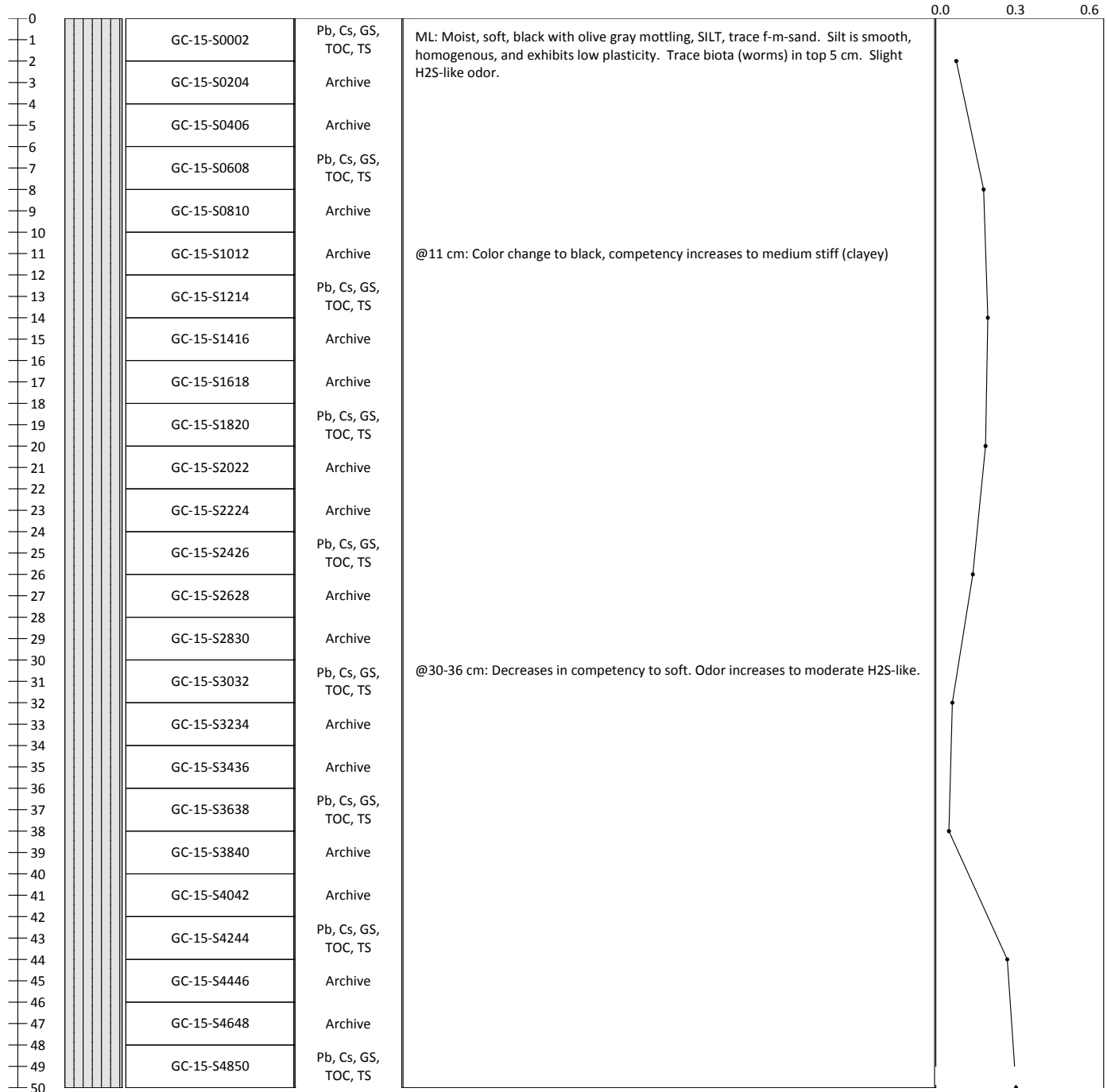


Sediment Core Log

Sheet 1 of 2

GC-15

Project: East Waterway - STE			Area: East Waterway			Drive Length (in): 55		
Project #: 060003-01			SW Elevation (ft MLLW): 10.96			Recovery Length (in): 48		
Client: Port of Seattle			Water Depth - LL (ft): 48			Core Quality: Good		
Collection Date: 1/27/2010			Mudline Elevation (ft MLLW): -37			Percent Recovery: 87%		
Contractor: RSS			Northing: 1267406 Easting: 213053			Process Date: 2/1/2010		
Vessel: Caroline Dow			Horiz. Datum: NAD 83 WA N US Ft Vert. Datum: MLLW			Process Method: Cut-Tube		
Operator: Parker			Method/Tube ID: Diver Core/ 4" Polycarbonate Tube			Logged By: LM/DP/AO		
Recovered Depth (cm) and Graphic Log	Sample Interval	Analysis	Sediment Description				Cs-137 Profile (pCi/g dry)	
			Contacts are Recovered Depths. Classification Scheme: USCS					



Drive Notes (1): Attempt 1 of 1. Steady, easy coring; slight brown material on surface of core.

Notes (2): A Cs-137 peak of 0.576 pCi/g (dry) is observed at 62 cm below mudline.

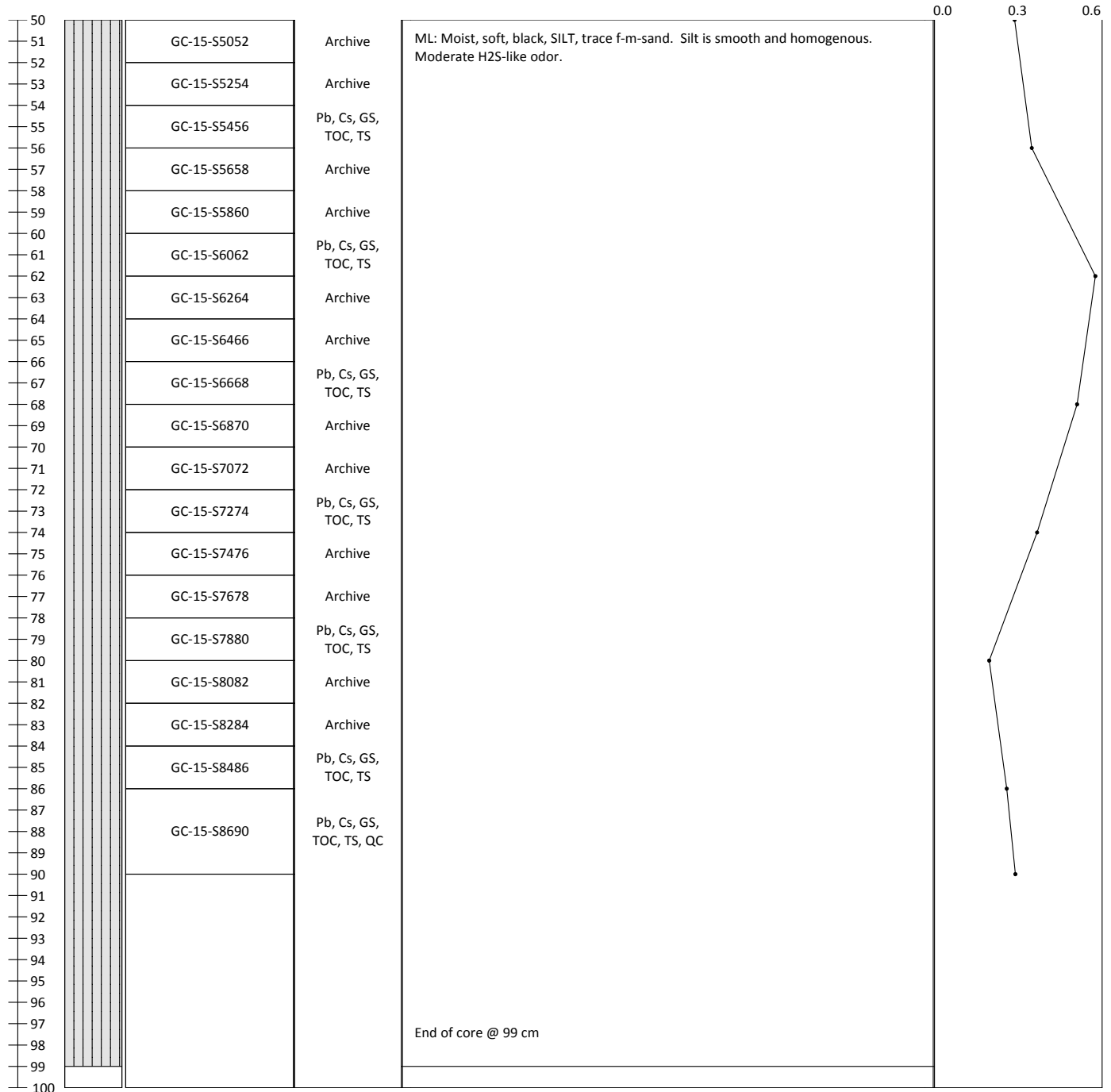
Calculated Recovery
Sample Length/Penetration Length:
48/55 in = 87%

Sediment Core Log

Sheet 2 of 2

GC-15

Project: East Waterway - STE			Area: East Waterway			Drive Length (in): 55		
Project #: 060003-01			SW Elevation (ft MLLW): 10.96			Recovery Length (in): 48		
Client: Port of Seattle			Water Depth - LL (ft): 48			Core Quality: Good		
Collection Date: 1/27/2010			Mudline Elevation (ft MLLW): -37			Percent Recovery: 87%		
Contractor: RSS			Northing: 1267406 Easting: 213053			Process Date: 2/1/2010		
Vessel: Caroline Dow			Horiz. Datum: NAD 83 WA N US Ft Vert. Datum: MLLW			Process Method: Cut-Tube		
Operator: Parker			Method/Tube ID: Diver Core/ 4" Polycarbonate Tube			Logged By: LM/DP/AO		
Recovered Depth (cm) and Graphic Log	Sample Interval	Analysis	Sediment Description				Cs-137 Profile (pCi/g dry)	
			Contacts are Recovered Depths. Classification Scheme: USCS					

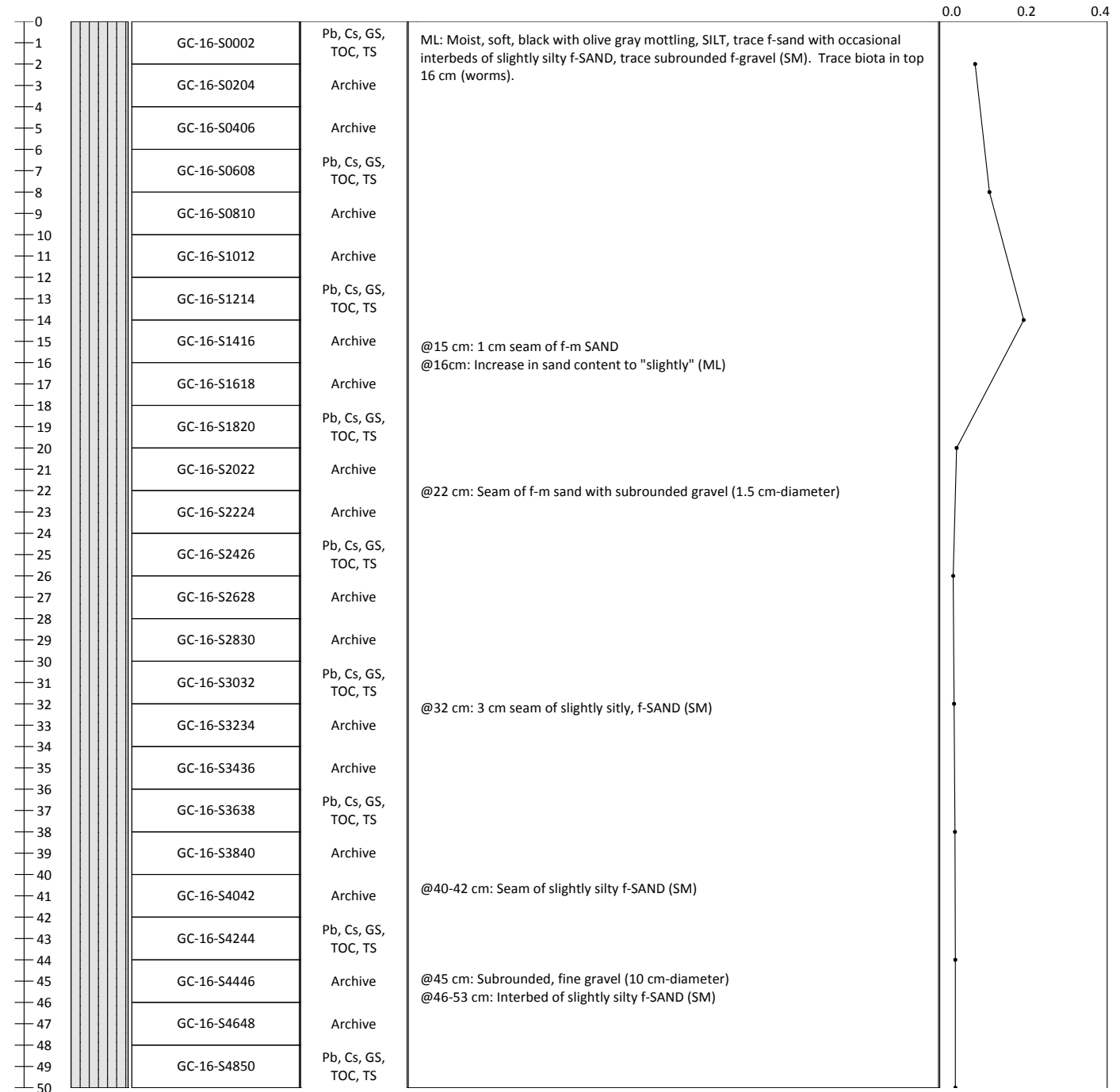


Sediment Core Log

Sheet 1 of 3

GC-16

Project: East Waterway - STE			Area: East Waterway		Drive Length (in): 60.5	
Project #: 060003-01			SW Elevation (ft MLLW): 8.08		Recovery Length (in): 53.5	
Client: Port of Seattle			Water Depth - LL (ft): 46.5		Core Quality: Good	
Collection Date: 1/26/2010			Mudline Elevation (ft MLLW): -38.4		Percent Recovery: 88%	
Contractor: RSS			Northing: 1267647 Easting: 213052		Process Date: 2/1/2010	
Vessel: Caroline Dow			Horiz. Datum: NAD 83 WA N US Ft Vert. Datum: MLLW		Process Method: Cut-Tube	
Operator: Parker			Method/Tube ID: Diver Core/ 4" Polycarbonate Tube		Logged By: LM/DP/AO	
Recovered Depth (cm) and Graphic Log	Sample Interval	Analysis	Sediment Description			Cs-137 Profile (pCi/g dry)
			Contacts are Recovered Depths. Classification Scheme: USCS			



Drive Notes (1): Attempt 1 of 1. Smooth coring.

Notes (2): A Cs-137 peak of 0.402 pCi/g (dry) is observed at 74 cm below mudline.

Calculated Recovery
Sample Length/Penetration Length:

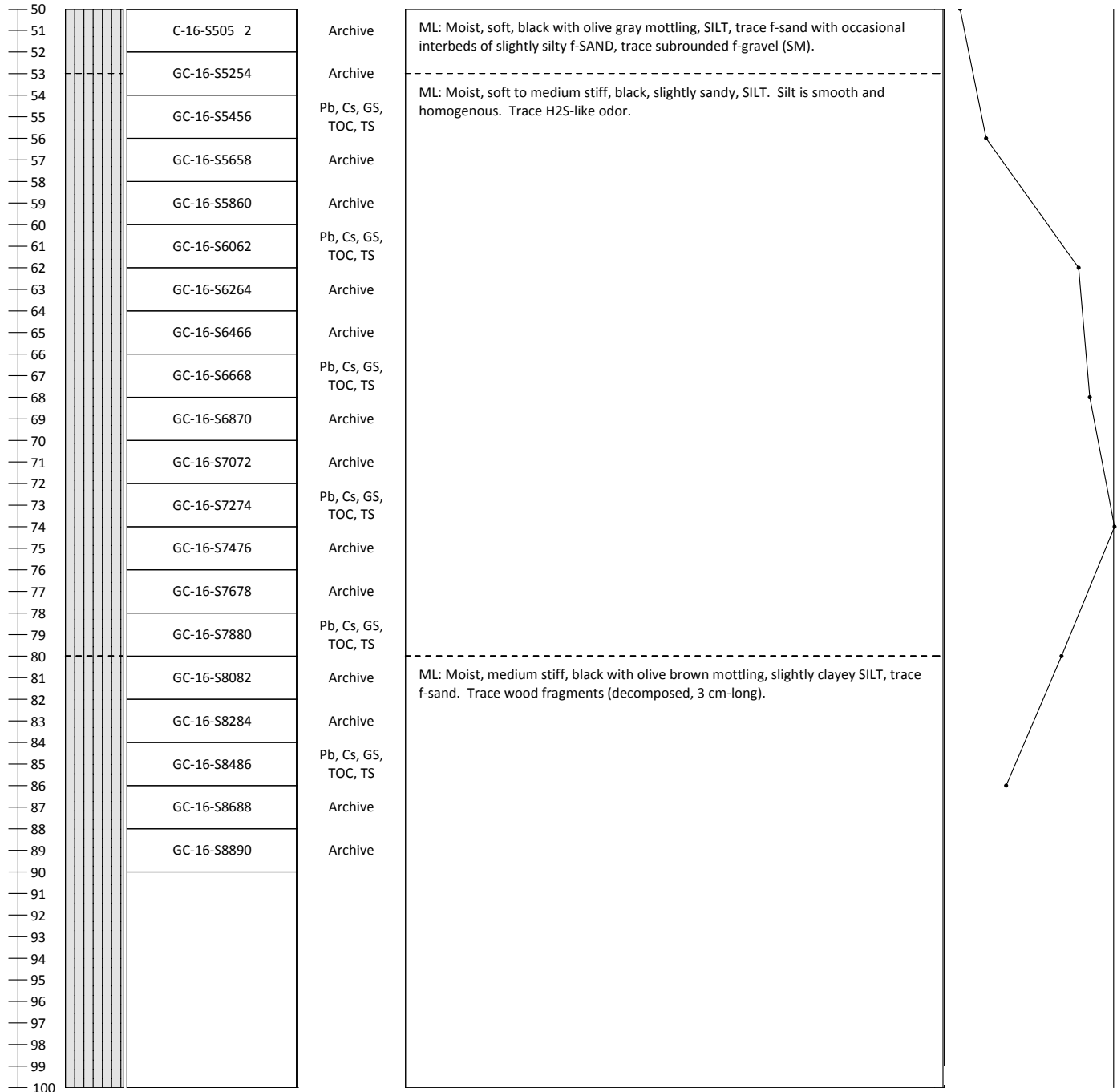
53.5/60.5 in = 88%

Sediment Core Log

Sheet 2 of 3

GC-16

Project: East Waterway - STE			Area: East Waterway		Drive Length (in): 60.5	
Project #: 060003-01			SW Elevation (ft MLLW): 8.08		Recovery Length (in): 53.5	
Client: Port of Seattle			Water Depth - LL (ft): 46.5		Core Quality: Good	
Collection Date: 1/26/2010			Mudline Elevation (ft MLLW): -38.4		Percent Recovery: 88%	
Contractor: RSS			Northing: 1267647 Easting: 213052		Process Date: 2/1/2010	
Vessel: Caroline Dow			Horiz. Datum: NAD 83 WA N US Ft Vert. Datum: MLLW		Process Method: Cut-Tube	
Operator: Parker			Method/Tube ID: Diver Core/ 4" Polycarbonate Tube		Logged By: LM/DP/AO	
Recovered Depth (cm) and Graphic Log	Sample Interval	Analysis	Sediment Description			Cs-137 Profile (pCi/g dry)
			Contacts are Recovered Depths. Classification Scheme: USCS			



Sediment Core Log

Sheet 3 of 3

GC-16

Project: East Waterway - STE			Area: East Waterway			Drive Length (in): 60.5		
Project #: 060003-01			SW Elevation (ft MLLW): 8.08			Recovery Length (in): 53.5		
Client: Port of Seattle			Water Depth - LL (ft): 46.5			Core Quality: Good		
Collection Date: 1/26/2010			Mudline Elevation (ft MLLW): -38.4			Percent Recovery: 88%		
Contractor: RSS			Northing: 1267647 Easting: 213052			Process Date: 2/1/2010		
Vessel: Caroline Dow			Horiz. Datum: NAD 83 WA N US Ft Vert. Datum: MLLW			Process Method: Cut-Tube		
Operator: Parker			Method/Tube ID: Diver Core/ 4" Polycarbonate Tube			Logged By: LM/DP/AO		
Recovered Depth (cm) and Graphic Log	Sample Interval	Analysis	Sediment Description				Cs-137 Profile (pCi/g dry)	
			Contacts are Recovered Depths. Classification Scheme: USCS					

0.0 0.2 0.4

100			ML: Moist, medium stiff, black with olive brown mottling, slightly clayey SILT, trace f-sand. Trace wood fragments (decomposed, 3 cm-long).	
101				
102				
103				
104				
105			End of core @ 104 cm	
106				
107				
108				
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119				
120				
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146				
147				
148				
149				
150				



Drive Notes (1): Attempt 1 of 1. Smooth coring.

Notes (2): A Cs-137 peak of 0.402 pCi/g (dry) is observed at 74 cm below mudline.

Calculated Recovery
Sample Length/Penetration Length:

53.5/60.5 in = 88%

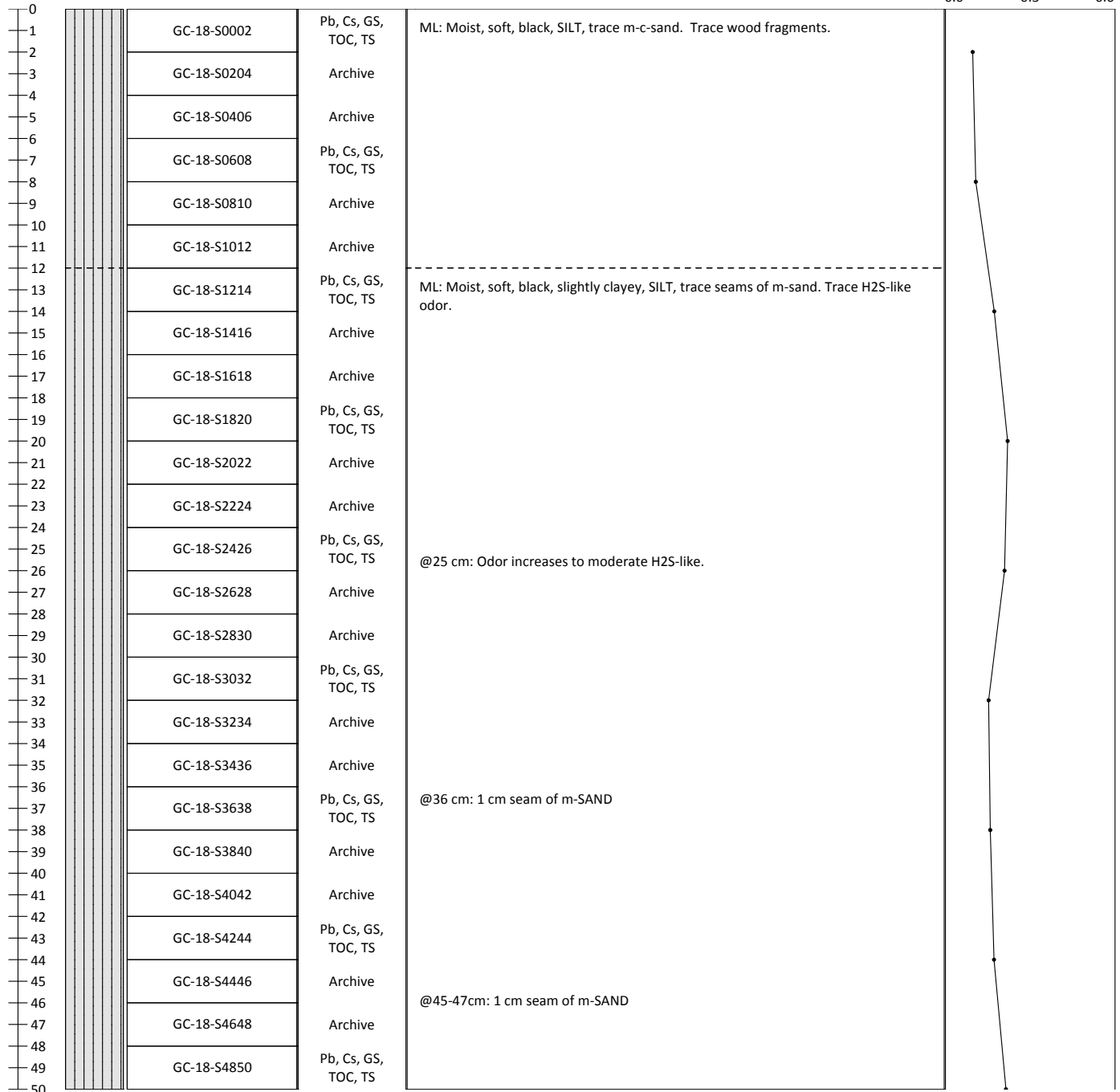
Sediment Core Log

Sheet 1 of 2

GC-18

Project: East Waterway - STE			Area: East Waterway		Drive Length (in): 60	
Project #: 060003-01			SW Elevation (ft MLLW): 9.11		Recovery Length (in): 48	
Client: Port of Seattle			Water Depth - LL (ft): 40.5		Core Quality: Good	
Collection Date: 1/28/2010			Mudline Elevation (ft MLLW): -31.4		Percent Recovery: 80%	
Contractor: RSS			Northing: 1267296 Easting: 212565		Process Date: 2/1/2010	
Vessel: Caroline Dow			Horiz. Datum: NAD 83 WA N US Ft Vert. Datum: MLLW		Process Method: Cut-Tube	
Operator: Parker			Method/Tube ID: Diver Core/ 4" Polycarbonate Tube		Logged By: LM/DP/AO	
Recovered Depth (cm) and Graphic Log	Sample Interval	Analysis	Sediment Description			Cs-137 Profile (pCi/g dry)
			Contacts are Recovered Depths. Classification Scheme: USCS			

0.0 0.3 0.6

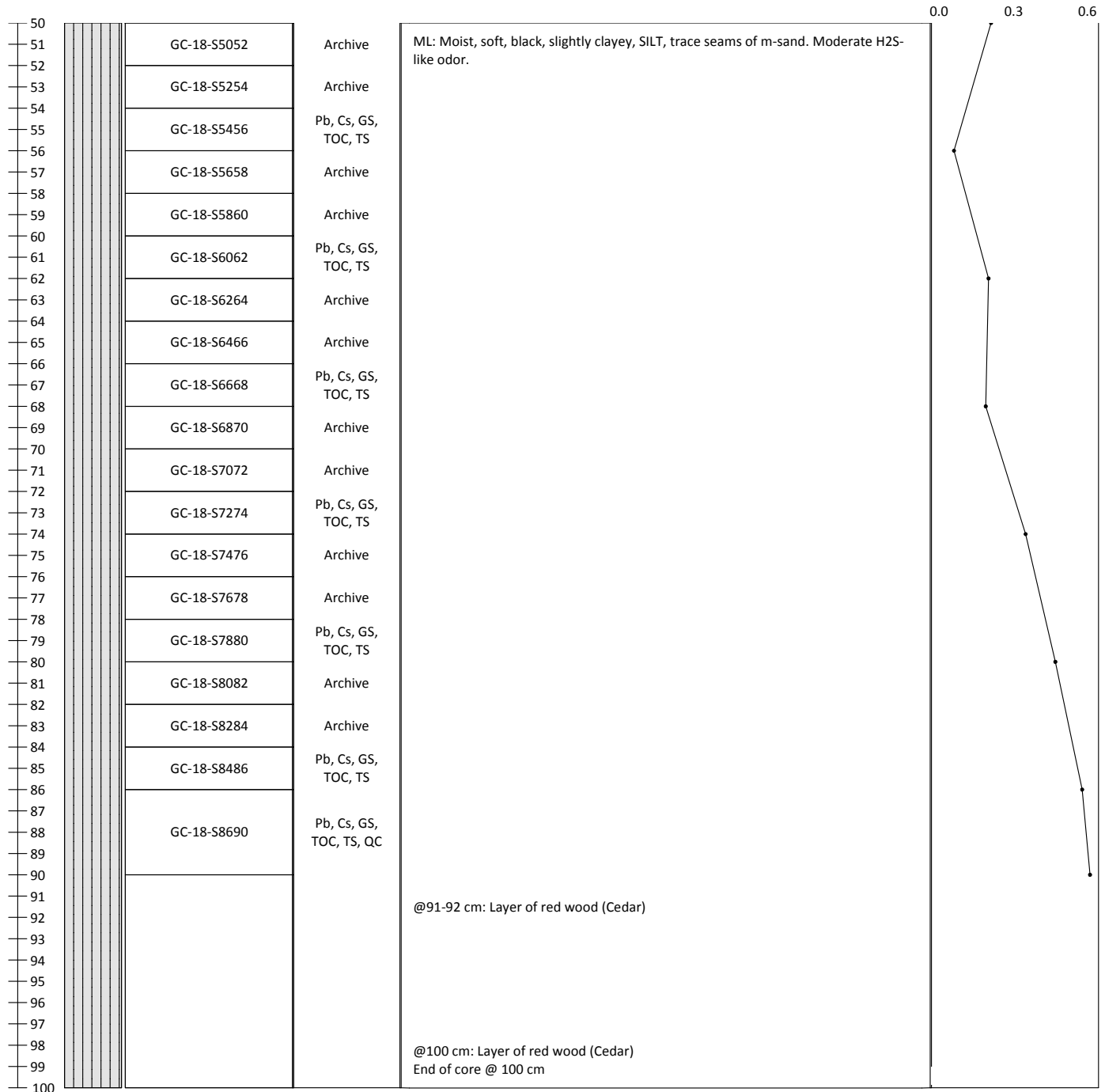


Sediment Core Log

Sheet 2 of 2

GC-18

Project: East Waterway - STE			Area: East Waterway		Drive Length (in): 60	
Project #: 060003-01			SW Elevation (ft MLLW): 9.11		Recovery Length (in): 48	
Client: Port of Seattle			Water Depth - LL (ft): 40.5		Core Quality: Good	
Collection Date: 1/28/2010			Mudline Elevation (ft MLLW): -31.4		Percent Recovery: 80%	
Contractor: RSS			Northing: 1267296 Easting: 212565		Process Date: 2/1/2010	
Vessel: Caroline Dow			Horiz. Datum: NAD 83 WA N US Ft Vert. Datum: MLLW		Process Method: Cut-Tube	
Operator: Parker			Method/Tube ID: Diver Core/ 4" Polycarbonate Tube		Logged By: LM/DP/AO	
Recovered Depth (cm) and Graphic Log	Sample Interval	Analysis	Sediment Description			Cs-137 Profile (pCi/g dry)
			Contacts are Recovered Depths. Classification Scheme: USCS			



Drive Notes (1): Attempt 1 of 1. Easy coring.

Notes (2): A Cs-137 peak of 0.57 pCi/g (dry) is observed at 90 cm below mudline.

Calculated Recovery
Sample Length/Penetration Length:

48/60 in = 80%

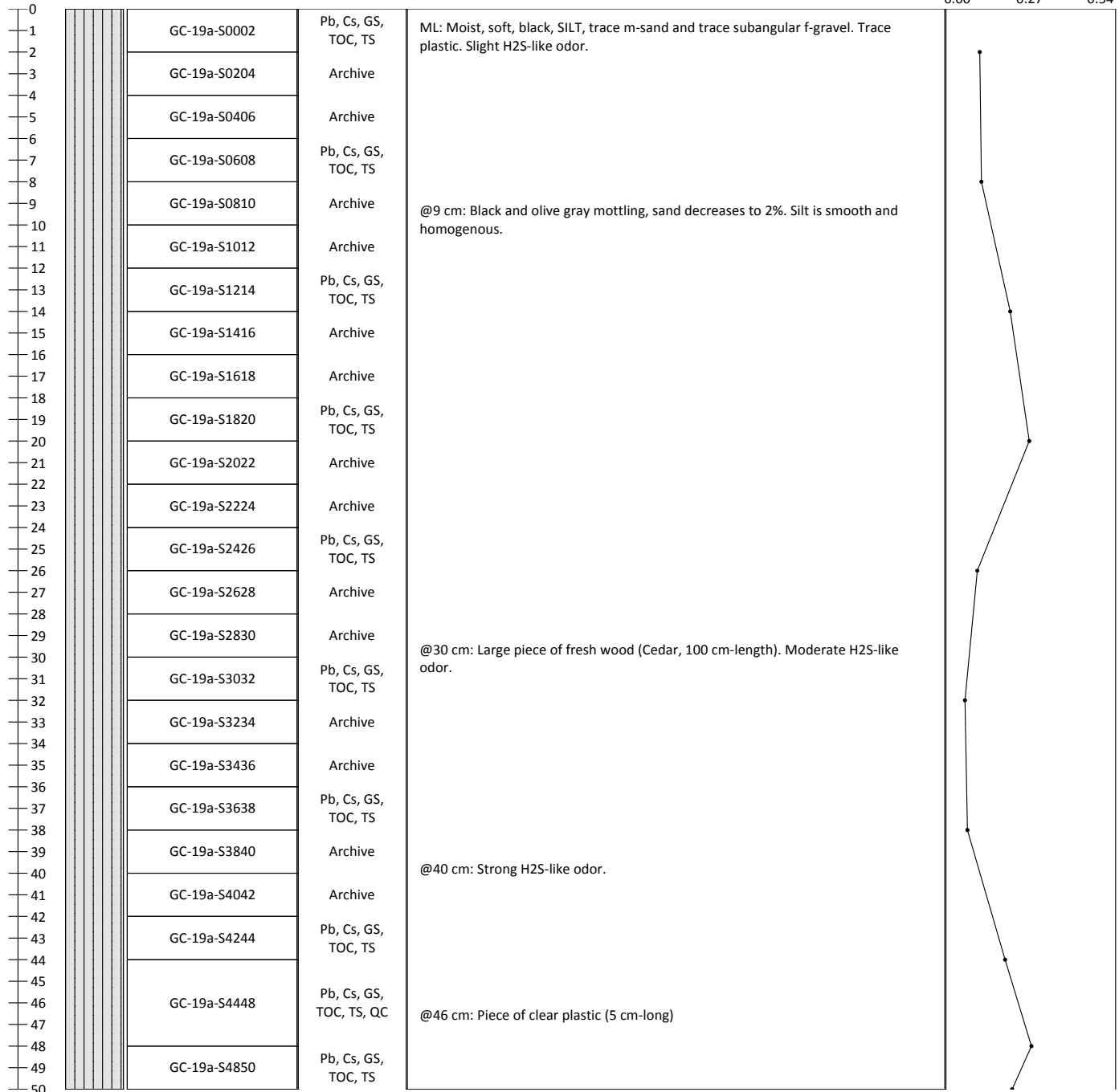
Sediment Core Log

Sheet 1 of 2

GC-19A

Project: East Waterway - STE			Area: East Waterway		Drive Length (in): -	
Project #: 060003-01			SW Elevation (ft MLLW): 11.16		Recovery Length (in): 33	
Client: Port of Seattle			Water Depth - LL (ft): 40.9		Core Quality: Good	
Collection Date: 1/28/2010			Mudline Elevation (ft MLLW): -29.7		Percent Recovery: -	
Contractor: RSS			Northing: 1267396 Easting: 212535		Process Date: 2/3/2010	
Vessel: Caroline Dow			Horiz. Datum: NAD 83 WA N US Ft Vert. Datum: MLLW		Process Method: Cut-Tube	
Operator: Parker			Method/Tube ID: Diver Core/ 4" Polycarbonate Tube		Logged By: LM/DP/AO	
Recovered Depth (cm) and Graphic Log	Sample Interval	Analysis	Sediment Description			Cs-137 Profile (pCi/g dry)
			Contacts are Recovered Depths. Classification Scheme: USCS			

0.00 0.27 0.54



Drive Notes (1): Attempt 1 of 2. Soft material driven to 3", diver reports that core is pushing soft sediment aside- penetration difficult to determine.

Notes (2): A Cs-137 peak of 0.522 pCi/g (dry) is observed at 56 cm below mudline.

Calculated Recovery
Sample Length/Penetration Length:

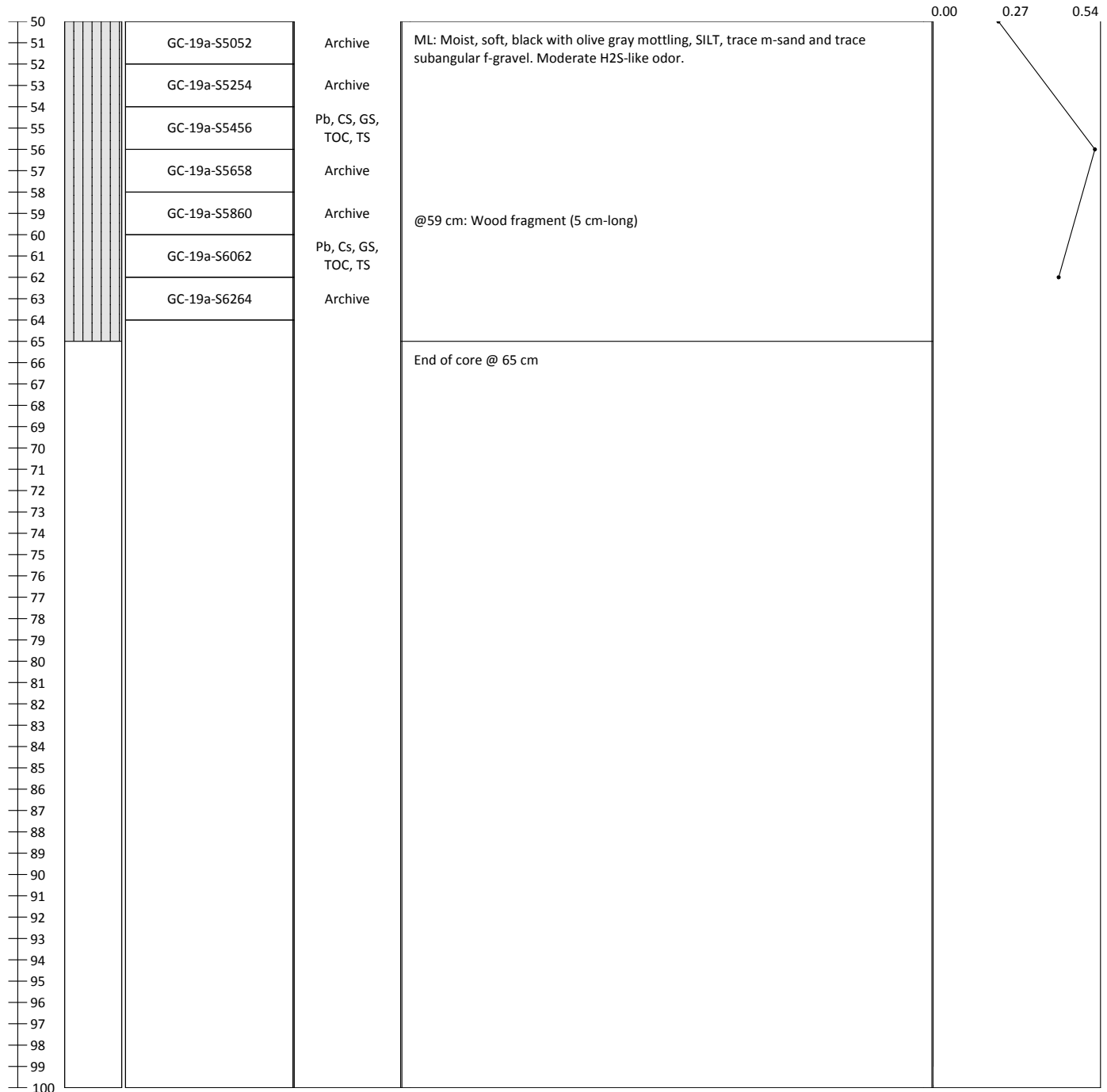
Estimated at 80%

Sediment Core Log

Sheet 2 of 2

GC-19A

Project: East Waterway - STE			Area: East Waterway		Drive Length (in): -	
Project #: 060003-01			SW Elevation (ft MLLW): 11.16		Recovery Length (in): 33	
Client: Port of Seattle			Water Depth - LL (ft): 40.9		Core Quality: Good	
Collection Date: 1/28/2010			Mudline Elevation (ft MLLW): -29.7		Percent Recovery: -	
Contractor: RSS			Northing: 1267396 Easting: 212535		Process Date: 2/3/2010	
Vessel: Caroline Dow			Horiz. Datum: NAD 83 WA N US Ft Vert. Datum: MLLW		Process Method: Cut-Tube	
Operator: Parker			Method/Tube ID: Diver Core/ 4" Polycarbonate Tube		Logged By: LM/DP/AO	
Recovered Depth (cm) and Graphic Log	Sample Interval	Analysis	Sediment Description			Cs-137 Profile (pCi/g dry)
			Contacts are Recovered Depths. Classification Scheme: USCS			



Drive Notes (1): Attempt 1 of 2. Soft material driven to 3", diver reports that core is pushing soft sediment aside- penetration difficult to determine.

Notes (2): A Cs-137 peak of 0.522 pCi/g (dry) is observed at 56 cm below mudline.

Calculated Recovery
Sample Length/Penetration Length:

Estimated at 80%

Sediment Core Log

Sheet 1 of 2

GC-19B

Project: East Waterway - STE			Area: East Waterway		Drive Length (in): 51.5	
Project #: 060003-01			SW Elevation (ft MLLW): 4.07		Recovery Length (in): 47	
Client: Port of Seattle			Water Depth - LL (ft): 36		Core Quality: Disturbed	
Collection Date: 2/2/2010			Mudline Elevation (ft MLLW): -31.9		Percent Recovery: 91.3%	
Contractor: RSS			Northing: 1267389 Easting: 212541		Process Date: 2/3/2010	
Vessel: Caroline Dow			Horiz. Datum: NAD 83 WA N US Ft Vert. Datum: MLLW		Process Method: Cut-Tube	
Operator: Parker			Method/Tube ID: Diver Core/ 4" Polycarbonate Tube		Logged By: LM/DP/AO	
Recovered Depth (cm) and Graphic Log	Sample Interval	Analysis	Sediment Description			Cs-137 Profile (pCi/g dry)
			Contacts are Recovered Depths. Classification Scheme: USCS			

0				
1		GC-19b-S0002	Archive	ML: moist, soft, black, SILT, trace m-sand and trace subangular f-gravel. From 0-4 cm the core was slightly disturbed due to handling.
2		GC-19b-S0204	Archive	
3		GC-19b-S0406	Archive	
4		GC-19b-S0608	Archive	
5		GC-19b-S0810	Archive	
6		GC-19b-S1012	Archive	
7		GC-19b-S1214	Archive	
8		GC-19b-S1416	Archive	
9		GC-19b-S1618	Archive	
10		GC-19b-S1820	Archive	
11		GC-19b-S2022	Archive	
12		GC-19b-S2224	Archive	
13		GC-19b-S2426	Archive	
14		GC-19b-S2628	Archive	
15		GC-19b-S2830	Archive	
16		GC-19b-S3032	Archive	
17		GC-19b-S3234	Archive	
18		GC-19b-S3436	Archive	
19		GC-19b-S3638	Archive	
20		GC-19b-S3840	Archive	
21		GC-19b-S4042	Archive	
22		GC-19b-S4244	Archive	
23		GC-19b-S4448	Archive, QC	ML: Moist, medium stiff, black, SILT, trace vf-sand. Trace wood fragments.
24		GC-19b-S4850	Archive	
25				
26				@37 cm: Piece of wood (3 cm-long, cedar).
27				
28				
29				
30				
31				
32				
33				
34				
35				
36				
37				
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41				
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46				
47				
48				
49				
50				



Drive Notes (1): Attempt 2 of 2. Steady, even coring. Stopped coring early because core tube began to compress.

Notes (2): GC-19B was not analyzed for geochronology.

Calculated Recovery
Sample Length/Penetration Length:
47/51.5 in = 91.3%

Sediment Core Log

Sheet 2 of 2

GC-19B

Project: East Waterway - STE			Area: East Waterway		Drive Length (in): 51.5	
Project #: 060003-01			SW Elevation (ft MLLW): 4.07		Recovery Length (in): 47	
Client: Port of Seattle			Water Depth - LL (ft): 36		Core Quality: Disturbed	
Collection Date: 2/2/2010			Mudline Elevation (ft MLLW): -31.9		Percent Recovery: 91.3%	
Contractor: RSS			Northing: 1267389 Easting: 212541		Process Date: 2/3/2010	
Vessel: Caroline Dow			Horiz. Datum: NAD 83 WA N US Ft Vert. Datum: MLLW		Process Method: Cut-Tube	
Operator: Parker			Method/Tube ID: Diver Core/ 4" Polycarbonate Tube		Logged By: LM/DP/AO	
Recovered Depth (cm) and Graphic Log	Sample Interval	Analysis	Sediment Description			Cs-137 Profile (pCi/g dry)
			Contacts are Recovered Depths. Classification Scheme: USCS			

50				
51	GC-19b-S5052	Archive	ML: Moist, medium stiff, black, SILT, trace vf-sand. Trace wood fragments.	
52				
53	GC-19b-S5254	Archive		
54				
55	GC-19b-S5456	Archive		
56				
57	GC-19b-S5658	Archive		
58				
59	GC-19b-S5860	Archive		
60				
61	GC-19b-S6062	Archive		
62				
63	GC-19b-S6264	Archive		
64				
65	GC-19b-S6466	Archive		
66				
67	GC-19b-S6668	Archive		
68				
69	GC-19b-S6870	Archive		
70				
71	GC-19b-S7072	Archive		
72				
73	GC-19b-S7274	Archive		
74				
75	GC-19b-S7476	Archive		
76				
77	GC-19b-S7678	Archive		
78				
79	GC-19b-S7880	Archive		
80				
81	GC-19b-S8082	Archive		
82				
83	GC-19b-S8284	Archive		
84				
85	GC-19b-S8486	Archive		
86				
87	GC-19b-S8688	Archive		
88				
89				
90			End of core @ 89 cm	
91				
92				
93				
94				
95				
96				
97				
98				
99				
100				



Drive Notes (1): Attempt 2 of 2. Steady, even coring. Stopped coring early because core tube began to compress.

Notes (2): GC-19B was not analyzed for geochronology.

Calculated Recovery
Sample Length/Penetration Length:

47/51.5 in = 91.3%

Sediment Core Log

Sheet 1 of 1

GC-20

Project: East Waterway - STE			Area: East Waterway		Drive Length (in): 21	
Project #: 060003-01			SW Elevation (ft MLLW): 8.38		Recovery Length (in): 16	
Client: Port of Seattle			Water Depth - LL (ft): 22.5		Core Quality: Poor	
Collection Date: 1/27/2010			Mudline Elevation (ft MLLW): -14.1		Percent Recovery: 76%	
Contractor: RSS			Northing: 1267239 Easting: 212264		Process Date: 2/2/2010	
Vessel: Caroline Dow			Horiz. Datum: NAD 83 WA N US Ft Vert. Datum: MLLW		Process Method: Cut-Tube	
Operator: Parker			Method/Tube ID: Diver Core/ 4" Polycarbonate Tube		Logged By: LM/DP/AO	
Recovered Depth (cm) and Graphic Log	Sample Interval	Analysis	Sediment Description			Cs-137 Profile (pCi/g dry)
			Contacts are Recovered Depths. Classification Scheme: USCS			

