

Ash Deposition Survey Results

Approximate River Mile	Grab #	Time	May 22, 2009				January 26, 2009		
			Water Depth (summer pool)	Total Depth of Eckman Content	Ash Thickness		Water Depth (winter pool)	Ash Thickness	
			ft	mm	mm	inches	ft	inches	
ERM 1.0	1	10:30	11.7	45	25	1.0	Dusting of silt on surface		
ERM 1.0	2		8.8	45	≥ 45	≥ 1.8	Dusting of silt on surface		
ERM 1.0	3		10.2	45	≥ 45	≥ 1.8	Dusting of silt on surface		
ERM 1.0	4		26.4	60	≥ 60	≥ 2.4	3 drops; substrate composed of 80 to 85% detritus/leaves mixed with ash		
ERM 1.0	5		12.7	20	5	0.2	Layer of ash about 5 mm; the remainder of sample appears to be a mix of approximately 70% sand and 30% silt		
ERM 1.0	6		9.1	20	≥ 20	≥ 0.8	Mixed substrate that appears to be approximately 60% sand, 30% silt, and 10% ash (gray color with mottling)		
ERM 1.0	7		8	25	≥ 25	≥ 1.0	Dusting of silt on surface		
ERM 1.0	8		5.5	50	≥ 50	≥ 2.0	Ash mixed with detritus/leaves		
ERM 1.0	9		5.7	70	40	1.6	Ash appears mixed with silt (gray-brown coloration and mottling)		
ERM 1.0	10		7.9	45	25	1.0	<5 mm of silt on surface		
CRM 5.0	1							30.7	no ash
CRM 4.5	1							36.2	4
CRM 4.0	1	11:50	31	35	30	1.2	Thin surface layer of silt followed by ash, then ash mixed with detritus/leaves		
CRM 4.0	2		32.2	50	≥ 45	≥ 1.8	5 mm of silt on surface		
CRM 4.0	3		31.2	65	≥ 65	≥ 2.6	Surface layer of silt		
CRM 4.0	4		28	55	≥ 55	≥ 2.2	Dusting of silt on surface		
CRM 4.0	5		23.5	80	≥ 75	≥ 3.0	5 mm of silt on surface	19.3	3
CRM 4.0	6		12.3	75	15	0.6	Surface layer of silt		
CRM 4.0	7		8.6	70	20	0.8	Surface layer of silt		
CRM 4.0	8		7.5	75	15	0.6	Surface layer of silt		
CRM 4.0	9		6	60	10	0.4	Surface layer of silt		
CRM 4.0	10		7.4	65	10	0.4	Thin surface layer of silt		
CRM 3.0	1	12:45	9.8	50	10	0.4	Dusting of silt on surface		
CRM 3.0	2		14.2	60	2	0.1			
CRM 3.0	3		34	65	≥ 65	≥ 2.6	Dusting of silt on surface		
CRM 3.0	4		35.1	60	≥ 60	≥ 2.4	Dusting of silt on surface		
CRM 3.0	5		34.5	70	≥ 68	≥ 2.7	Surface layer of silt ~2mm	16.9	2.5
CRM 3.0	6		34.5	80	30	1.2	Dusting of silt on surface		
CRM 3.0	7		11.1	35	20	0.8	Dusting of silt on surface		
CRM 3.0	8		8.5	45	7	0.3			
CRM 2.0								38.1	2.5
CRM 1.5	1	13:35	6.5	60	15	0.6	15 mm of ash-silt mix		
CRM 1.5	2		5.2	75	20	0.8	20 mm of ash-silt mix	10.1	0.5
CRM 1.5	3		8.5	75	20	0.8	3 mm of silt on surface		
CRM 1.5	4		22.7	75	15	0.6	5 mm of silt on surface		
CRM 1.5	5		33.3	60	15	0.6	10 mm of silt on surface	29.5	1
CRM 1.5	6		39	60	15	0.6	15 mm of ash-silt mix		
CRM 1.5	7		39.2	75	8	0.3	8 mm of ash-silt mix		
CRM 1.5	8		40.2	65	5	0.2	<5 mm of ash-silt mix	35.4	2
CRM 1.5	9		39	45	1	0.04			
CRM 1.25								34.9	2
CRM 1.0								33.5	1
CRM 0.75								33.6	2
CRM 0.5	1	14:35	8.2	15	1	0.04	<1 mm of ash		
CRM 0.5	2		32.8	55	1	0.04	<1 mm of ash; 5 mm of silt on surface		
CRM 0.5	3		38.2	60	15	0.59	15 mm of ash-silt mix; 10 mm of silt on surface		
CRM 0.5	4		36.1	80	30	1.18	30 mm of ash-silt mix	34.5	2
CRM 0.5	5		24	55	12	0.5			
CRM 0.5	6		15.9	70	30	1.2	Dusting of silt on surface		
CRM 0.5	7		9.2	70	22	0.9	Remainder silt and detritus/leaf mix; 2 mm of silt on surface		
CRM 0.5	8		7.6	55	15	0.6	Remainder silt and detritus/leaf mix; 1 mm of silt on surface		
CRM 0.5	9		7.7	55	18	0.7	Remainder silt and detritus/leaf mix; 1 mm of silt on surface		
CRM 0.25								28.8	2
CRM 0.0								16.9	1
TRM 566.3	1	15:10	8.5	30	5	0.2	Ash present in "strips/streaks" with thickness ranging from about 1 to 5 mm; 5 mm of silt on surface		
TRM 566.3	2		12.7	45	3	0.1	Ash in two layers of 1 to 2 mm each; 2 mm of silt on surface		
TRM 566.3	3		25.8	75	10	0.4	5 mm of silt on surface		
TRM 566.3	4		50.9	30	7	0.3	Required several drops to get a "good" sample		
TRM 566.3	5		65	30	4	0.2	Sample did not appear to have a solid layer of ash; Ash appeared in two "strips/streaks", each about 4 mm thick.		
TRM 566.3	6		54.4	70	18	0.7	Surface layer of silt; one grab sample contained only gravel (about 20 mm) - the ash/silt may have washed out -this sample was discarded.		
TRM 566.3	7		54	45	3	0.1	Sample did not appear to have a solid layer of ash; Ash thickness varied from 2 to 3 mm and appeared in strips/streaks; Surface layer of silt		
TRM 566.3	8		51.5	50	20	0.8	Surface layer of silt		
TRM 566								49	1
TRM 564.6	1	16:10	46.6	45	2	0.1	1 to 2 mm of ash; Surface layer of silt		
TRM 564.6	2		66.9	35	8	0.3	Surface layer of silt		
TRM 564.6	3		14.2	60	7	0.3	Surface layer of silt		
TRM 564.6	4		7.3	45	0	0.0	No ash		
TRM 564.0								44.2	0.5 inches of ash - trace amounts
TRM 563.0	1	16:31	25.5	18	1	0.04	Surface layer of silt		
TRM 563.0	2		36.8	20	1	0.04	Surface layer of silt		
TRM 563.0	3		37.5	70	6	0.2	Ash hard to characterize; Surface layer of silt	35.1	no ash
TRM 563.0	4		28.8	45	1	0.04	Sample did not appear to have a solid layer of ash; Ash appeared in two "strips/streaks" each about 1mm thick; surface layer of silt		
TRM 563.0	5		18.5	72	1	0.04	<1 mm of ash in "strips/streaks"; surface layer of silt		
ERM 0.1	1	9:50		60	58	2.28	Surface layer of silt, remaining found all ash		02-Jun-2009
ERM 0.1	2	10:16	30.5	50	40	1.57	Top 1/3 all ash, middle 1/3 ash/leaves mix, bottom 1/3 ash/sand mix. Surface layer of silt, 15mm ash, 1/4 sample was leaf/organic mix, thin layer of sediment on bottom		
ERM 0.1	3	10:28	25	60	15	0.59	Surface layer silt. 25mm ash, lower 40 mm almost solid leaves		
ERM 0.1	4	10:46	18	65	25	0.98	Surface layer of silt. 30 mm ash, followed by 25mm leaves, 5mm layer of clay/mud of thicker consistency (in one corner of sample).		
ERM 0.1	5	10:56	16	55	30	1.18	20 mm ash, bottom 35 leaves, leaf layer difficult to characterize.		
ERM 0.1	6	11:08	16.2	55	20	0.79	Appeared less "silvery" than ash, 10% leaves, remaining was sediment/organic mix very dark grey.		
ERM 0.1	7	11:21	12.8	80	10	0.39	90% sediment, sticks, leaves. "Soupy" consistency top 15mm, then gelatinous rest of sample.		
ERM 0.1	8	11:37	12	55	5	0.20	Appeared to be ash/leaf mix.		
ERM 0.1	9	11:54	10.8	55	25	0.98	Surface layer of silt, 20 mm ash soupy consistency, bottom layer of lighter colored sediment thought to be sand. 10% leaves.		
ERM 0.1	10	12:07	6.7	85	20	0.79			
ERM 0.3	1	12:41	9.4	70	50	1.97	Surface layer of silt, followed by ash and bottom layer 10- 20mm of leaves		
ERM 0.3	2	12:53	30.4	100	95	3.74	Surface layer of silt, rest all ash		
ERM 0.3	3	13:08	27.3	75	50	1.97	Surface layer of silt, bottom 15mm mixed with leaves.		
ERM 0.3	4	13:38	15	80	40	1.57	10-15% leaves/debris mixed, sandy, thicker sed bottom layer.		
ERM 0.3	5	13:42	10	76	30	1.18	Ash mixed with detritus/leaves, remaining sediment.		
ERM 0.3	6	13:45	9.1	78	40	1.57	Top layer of ash, 40mm of leaves/organic mix.		
ERM 0.3	7	13:50	7.6	68		0.00	All organic/leaves strong odor. Difficult to characterize if ash or sed. Mixed		
ERM 0.3	8	13:55	6	22	11	0.43	All ash/organic mix		
ERM 0.3	9	14:01	8.4	87	57	2.24	Top layer uniform consistency of ash, remaining 30mm thicker consistency sediment.		
ERM 0.3	10	14:06	8.4	78	70	2.76	Surface layer silt, middle 70mm ash, bottom 5-10mm sed./thicker consistency.		
ERM 0.5	1	14:15	9.6	75	50	1.97	20mm sediment, 5mm leaves		
ERM 0.5	9	14:21	6.5	73	63	2.48	bottom layer 10mm sediment, thicker consistency/clay mix		
ERM 0.5	8	14:27	6	48	35	1.38	Strong odor, bottom layer of leaves/organic mix.		
ERM 0.5	7	14:32	8.3	81		0.00	No distinct layers, mostly sandy/silty (over sandbar) w		
ERM 0.5	6	14:39	9	55		0.00	Used ponar, eckman mech. Issues 70% sand mixed with ash.		
ERM 0.5	5	14:53	10.1	53		0.00	Eckman used. Mixture of what appeared to be sand/leaves/ash (10% ash)		
ERM 0.5	4	15:14	15.1	60	47	1.85	Top layer ash/sand mixture, bottom 13mm sediment.		
ERM 0.5	3	15:20	23	50	10	0.39	surface silt layer, sand/leaves/ash mix(15-20% ash)		
ERM 0.5	2	15:25	22.9	68	68	2.68	All Ash		
ERM 0.5	1	15:29	17.5	78	78	3.07	All Ash		