

Time-Critical Concurrence

Area:

Emory River, Above Segment 5, A-127 & A-128, B127 & B-128, C-125 through C-128; D-125 & D-126

Agreement:

Ash removal activities have been completed in Above Segment 5 for complete dredge grids B127 & B-128 and planned portions of grids C-125, C-126, and A-127 & A-128.

Completion is determined by results of vibecore samples collected within each of the grids to discern the presence of ash material. Sample results (see attached logs and photos) indicate no recoverable ash was found.

Attachments:

Figure 4, Ash Remaining to Pre-Spill Surface in Above Segment 5, dated 2/25/10
Figure 1, Ash Remaining to Pre-Spill Surface in Above Segment 5, dated 5/13/10
Figure 2, Vibecore Concurrence Sampling Results – Above Segment 5, dated 5/12/10
Vibecore #s 125/126-C, 125-D, 126-C/D, 129-A, 129-B, 129-C, PB-B127, 129-C/D, 128-A, 128-B, 128-C, 128-CD, 126-C, 127-B, 127-A/B, 127-C, 128-A/B Sampling Logs and Photos

Concurrence Comments:

Julie L. Puff
Jacobs Project Manager

5/14/10
Date

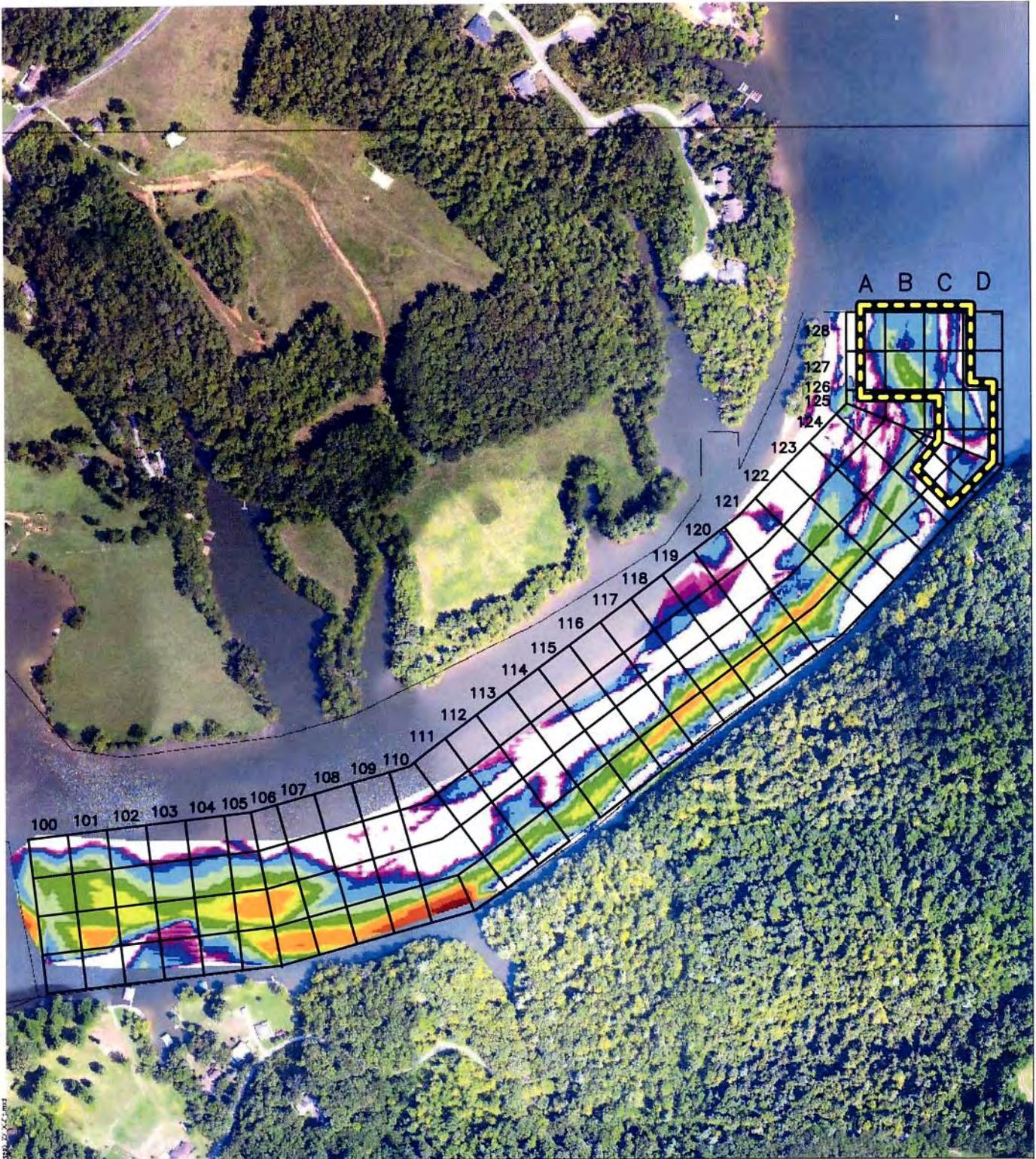
Kathryn Duesler
Tennessee Valley Authority

5/17/10
Date

[Signature]
U. S. Environmental Protection Agency

5/17/10
Date

consulted w/ TBEL



Legend

Ash Remaining: ~184,467 cy

- | | |
|----------------------------|------------------------|
| 0 - 1 inch; ~23 cy | 6 - 8 ft; ~41,299 cy |
| 1 - 6 inches; ~903 cy | 8 - 10 ft; ~34,748 cy |
| 6 inches - 1 ft; ~2,432 cy | 10 - 15 ft; ~28,775 cy |
| 1 - 2 ft; ~7,804 cy | 15 - 20 ft; ~6,673 cy |
| 2 - 4 ft; ~25,576 cy | >20 ft; 2,123 cy |
| 4 - 6 ft; ~34,111 cy | |

Area of Interest

DRAFT

0 200 400

Feet 1:1,200



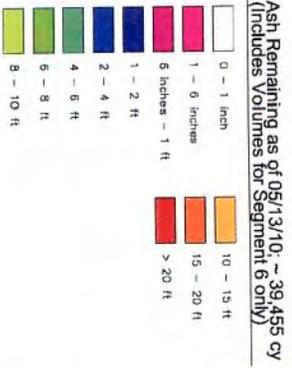
JACOBS

**Ash Remaining to Pre-Spill
Surface Above Segment 5**

DATE 03/20/09

Figure 4

Legend



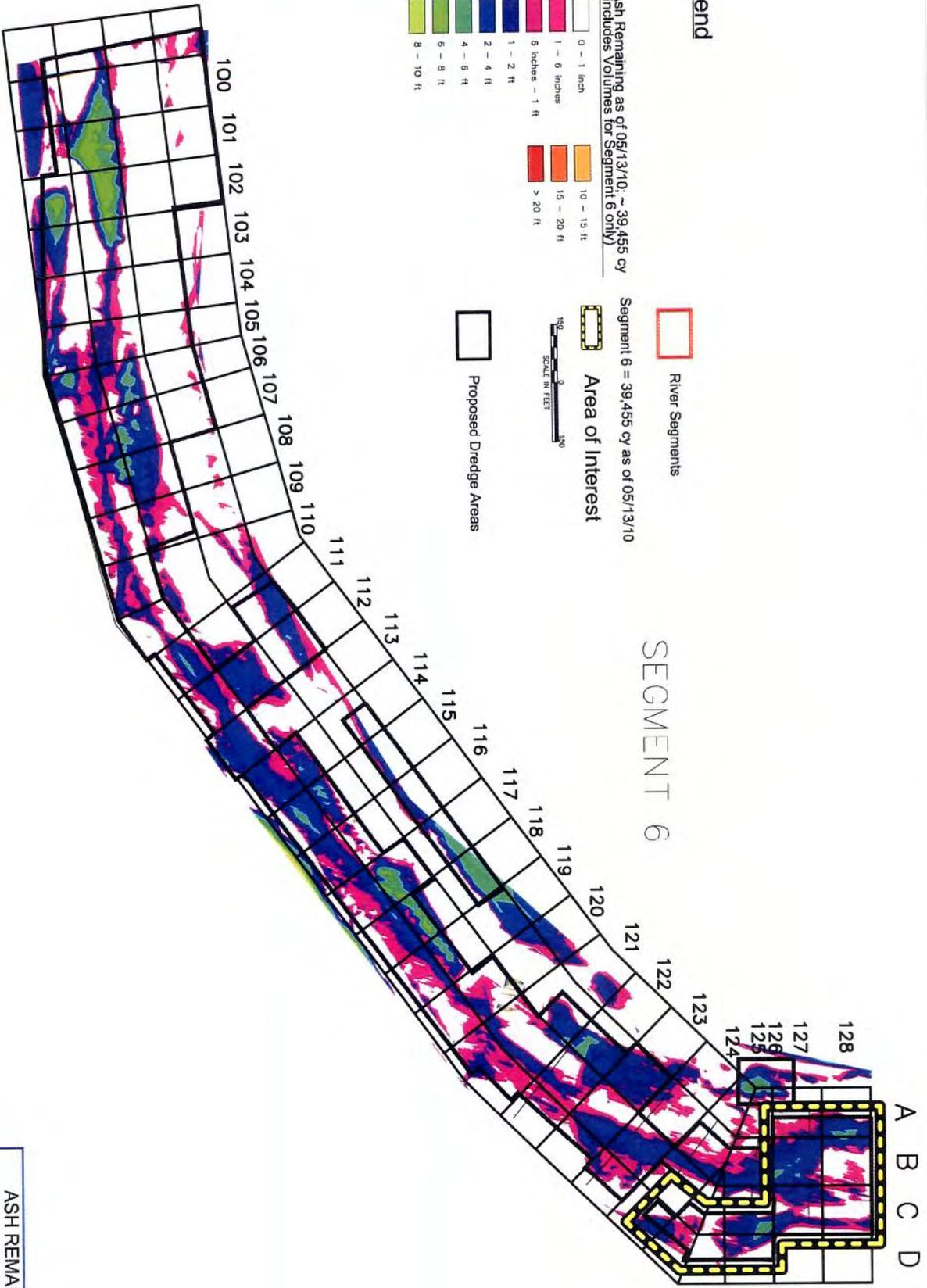
River Segments

Segment 6 = 39,455 cy as of 05/13/10

Area of Interest



Proposed Dredge Areas



SEGMENT 6

A B C D

ASH REMAINING THROUGH SEVENSON 05-13 SURVEY

TVA
DREDGING OF THE EMORY RIVER
AND ASH PROCESSING
HARRISMAN, TN

SEVENSON ENVIRONMENTAL SERVICES, INC.

DRAWING DATE: MAY 13, 2010

DRAWN BY: DAB

CHECKED BY: JB

CAD FILE: volume remaining 0513seg 6

Figure 1



Vibecore Documentation

Date: 04/13/2010		Weather: Sunny and breezy		Location: Post Bathymetry Above Segment 5	
River Flow: 687cfs		River Elevation: 738.88'			
Crew: E. Arnold, T. Davis, K. Gassaway					
Core #	Photo #	Tube Type	Core Coordinates	River Depth	Time
PB-B127	R0010482	Acrylic	N: 560994.31' E: 2449161.38'	28.4'	12:28
Deviations encountered: Core met refusal. Organic mat encountered. Dredge discharge pipe was directly over point.					
Location moved ~17m N					
Core Description					Interval (ft)
Brown fines mixed with ash (<50%)					0.0-0.4
Brown fines and organic matter					0.4-1.1
Total Depth					1.1'



Vibecore Documentation

Date: 04/21/2010 Weather: Mostly Sunny

River Flow: 384cfs River Elevation: 739.02'

Crew: E. Arnold, T. Davis

Location: Above Segment 5

Core #	Photo #	Tube Type	Core Coordinates	River Depth	Time	Core Description	Interval (ft)
128A	R0010511	Acrylic	N: 561133.71' E: 2448949.03'	30.8'	9:24	Sand mixed with ash (<50%)	0.0-0.9
Deviations encountered: Refusal met						Coarse sand with coal fragments	0.9-2.9
						Total Depth	2.9'
Core #	Photo #	Tube Type	Core Coordinates	River Depth	Time	Core Description	Interval (ft)
128B	R0010512	Acrylic	N: 561142.72' E: 2449067.35'	27.3'	9:45	Brown coarse sand with coal	0.0-1.0
Deviations encountered: Refusal met							
						Total Depth	1.0'
Core #	Photo #	Tube Type	Core Coordinates	River Depth	Time	Core Description	Interval (ft)
128C	R0010513	Acrylic	N: 561135.03' E: 2449188.55'	21.4'	10:02	Brow coarse sand with OM	0.0-0.1
Deviations encountered: Refusal not met						Brown medium sand with ash (<50%)	0.1-0.9
						Brown mixed fines	0.9-5.5
						Total Depth	5.5'
Core #	Photo #	Tube Type	Core Coordinates	River Depth	Time	Core Description	Interval (ft)
128C/D	R0010514	Acrylic	N: 561103.58' E: 2449225.25'	12.8'	10:35	Coarse brown sand	0.0-0.3
Deviations encountered: Refusal not met						Medium sand	0.3-2.0
						Brown native fines	2.0-5.0
						Light brown fines	5.0-5.4
						Total Depth	5.4'
Core #	Photo #	Tube Type	Core Coordinates	River Depth	Time	Core Description	Interval (ft)
129A	R0010515	Acrylic	N: 561007.57' E: 2448943.64'	29.5'	10:53	Coarse sand with ash (<50%)	0.0-0.5
Deviations encountered: Refusal met						Brown coarse sand and coal	0.5-1.5
						Total Depth	1.5'
Core #	Photo #	Tube Type	Core Coordinates	River Depth	Time	Core Description	Interval (ft)
129B	R0010516	Acrylic	N: 561042.86' E: 2449050.23'	31.1'	11:19	Brown coarse sand with coal	0.0-0.3
Deviations encountered: Refusal met						Light brown coarse sand	0.3-0.6
						Total Depth	0.6'
Core #	Photo #	Tube Type	Core Coordinates	River Depth	Time	Core Description	Interval (ft)
129C	R0010517	Acrylic	N: 561007.42' E: 2449189.55'	20.6'	11:50	Brown medium sand and fines	0.0-1.0
Deviations encountered: Refusal not met						Brown fines	1.0-5.5
						Total Depth	5.5'



Vibecore Documentation

Date: 04/21/2010 Weather: Sunny, 69 deg. F Location: Above Segment 5, Emory River
 River Flow: 384 cfs River Elevation: 739.02'
 Crew: Greg Schwartz, Stacy Goss, James Mullins

Core #	Photo #	Tube Type	Core Coordinates	River Depth	Time	Core Description	Interval (ft)
125/126 C	R0010520	Acrylic	N: 560755.21' E: 2449250.8'	8.5'	10:56	Native Fines w/ Organics	0.0 - 2.7

Deviations encountered: Core met refusal

Total Depth								2.7'
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Deviations encountered: Core met refusal

Core #	Photo #	Tube Type	Core Coordinates	River Depth	Time	Core Description	Interval (ft)
126 C/D	R0010521	Acrylic	N: 560903.49' E: 2449260.64'	15.3'	11:08	Mixed Native Fines	0.0 - 1.4

Deviations encountered: Core did not meet refusal

Total Depth								1.4'
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Core #	Photo #	Tube Type	Core Coordinates	River Depth	Time	Core Description	Interval (ft)
129 C/D	R0010523	Acrylic	N: 561030.11' E: 2449246.82'	17.1'	11:44	Brown Native Fines	0.0 - 2.0

Total Depth								2.0'
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Vibecore Documentation

Date: 05/11/2010 Weather: 75 deg, Winds up to 30 mph
 River Flow: 645 cfs River Elevation: 739.08'
 Crew: Greg Schwartz, Stacy Goss, Daniel Craze

Location: Emory River Above Segment 5 and

Core #	Photo #	Tube Type	Core Coordinates	River Depth	Time	Core Description	Interval (ft)	Top/Bottom of Ash
126 C	R0010565	6' Acrylic	N: 560921.42' E: 2449219.04'	19.6'	10:38	Brown Native Fines Clay w/ Sand	0.0 - 0.8 0.8 - 1.7	N/A
Deviations encountered: Core met refusal								
Total Depth						1.7'		

Core #	Photo #	Tube Type	Core Coordinates	River Depth	Time	Core Description	Interval (ft)	Top/Bottom of Ash
127 B	R0010566	6' Acrylic	N: 560975.72' E: 2449080.43'	33.2'	11:23	Ash > 50 % Organic Material	0.0 - 0.6 0.6 - 0.7	6'
Deviations encountered: Core met refusal								
Total Depth						.7'		

Core #	Photo #	Tube Type	Core Coordinates	River Depth	Time	Core Description	Interval (ft)	Top/Bottom of Ash
127 A/B	R0010567	6' Acrylic	N: 561039.28' E: 2449019.45'	32.5'	11:53	Organic Material Sand w/ Organic Material	0.0 - 0.5 0.5 - 1.7	NA
Deviations encountered: Core met refusal								
Total Depth						1.7'		

Core #	Photo #	Tube Type	Core Coordinates	River Depth	Time	Core Description	Interval (ft)	Top/Bottom of Ash
127 C	R0010568	6' Acrylic	N: 561050.06' E: 2449124.53'	27.8'	12:53	Organic Materials w/ Fines Ash > 50%	0.0 - 0.3 0.3 - 0.8	8'
Deviations encountered: Core met refusal. Bottom of ash not found								
Total Depth						.8'		

Core #	Photo #	Tube Type	Core Coordinates	River Depth	Time	Core Description	Interval (ft)	Top/Bottom of Ash
128 A/B	R0010569	6' Acrylic	N: 561152.38' E: 2448993.46'	31.6'	13:34	Organic Material Sand with Loam Sand w/ Organics	0.0 - 0.5 0.5 - 1.1 1.1 - 2.3	NA
Deviations encountered: Core met refusal								
Total Depth						2.3'		

Vibecore Sampling Photos

Above Segment 5 Dredge Areas A-127 & A-128, B-127 & B-128, C-125 thru C-128; D-125 & D-126



Core 125/126-C
Total core depth = 2.7'
Ash thickness = 0.0'
Water depth = 8.5'



Core 126-C/D
Total core depth = 1.4'
Ash thickness = 0.0'
Water depth = 15.3'

Vibecore Sampling Photos

Above Segment 5 Dredge Areas A-127 & A-128, B-127 & B-128, C-125 thru C-128; D-125 & D-126

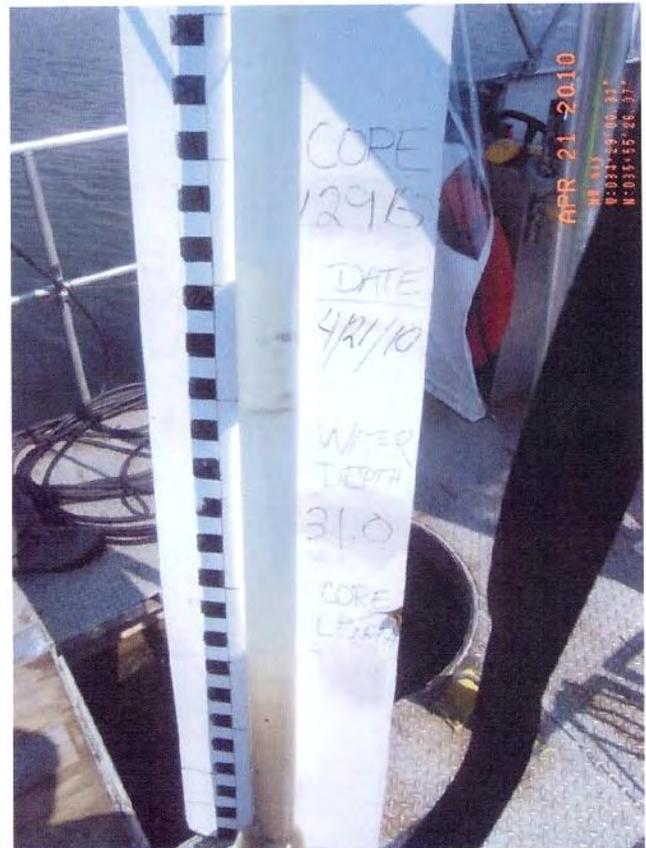


Core 129-A

Total core depth = 1.5'

Ash thickness = 0.0'

Water depth = 29.5'



Core 129-B

Total core depth = 0.6'

Ash thickness = 0.0'

Water depth = 31.0'

Vibecore Sampling Photos

Above Segment 5 Dredge Areas A-127 & A-128, B-127 & B-128, C-125 thru C-128; D-125 & D-126



Core 129 -C
Total core depth = 5.5'
Ash thickness = 0.0'
Water depth = 20.6'



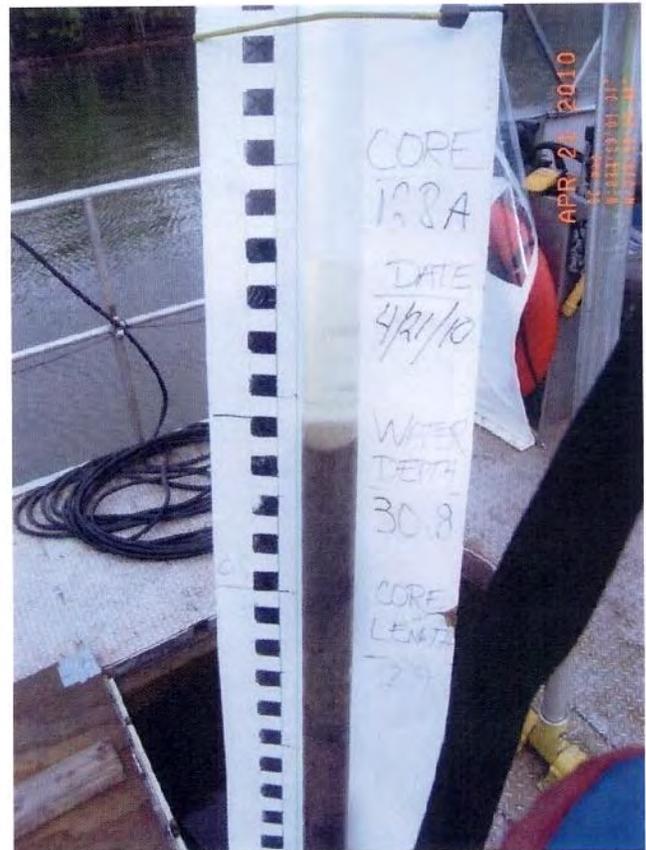
Core PB-B127
Total core depth = 1.1'
Ash thickness = 0.0'
Water depth = 28.4'

Vibecore Sampling Photos

Above Segment 5 Dredge Areas A-127 & A-128, B-127 & B-128, C-125 thru C-128; D-125 & D-126



Core 129 -C/D
Total core depth = 2.0'
Ash thickness = 0.0'
Water depth = 17.0'



Core 128-A
Total core depth = 2.9'
Ash thickness = 0.0'
Water depth = 30.8'

Vibecore Sampling Photos

Above Segment 5 Dredge Areas A-127 & A-128, B-127 & B-128, C-125 thru C-128; D-125 & D-126

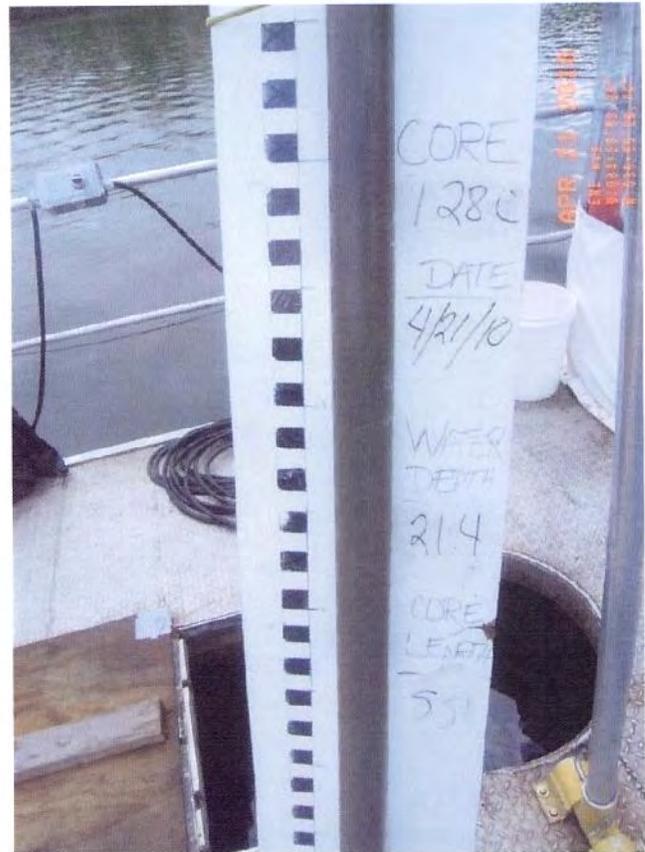


Core 128-B

Total core depth = 1.0'

Ash thickness = 0.0'

Water depth = 27.3'



Core 128-C

Total core depth = 5.5'

Ash thickness = 0.0'

Water depth = 21.4'

Vibecore Sampling Photos

Above Segment 5 Dredge Areas A-127 & A-128, B-127 & B-128, C-125 thru C-128; D-125 & D-126

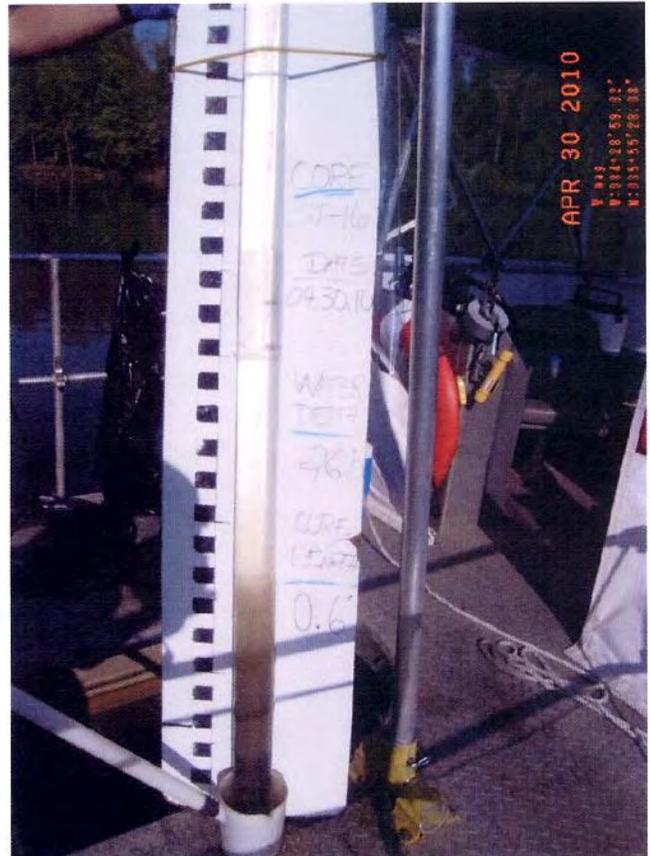


Core 128-CD

Total core depth = 5.4'

Ash thickness = 0.0'

Water depth = 12.8'



Core St-16

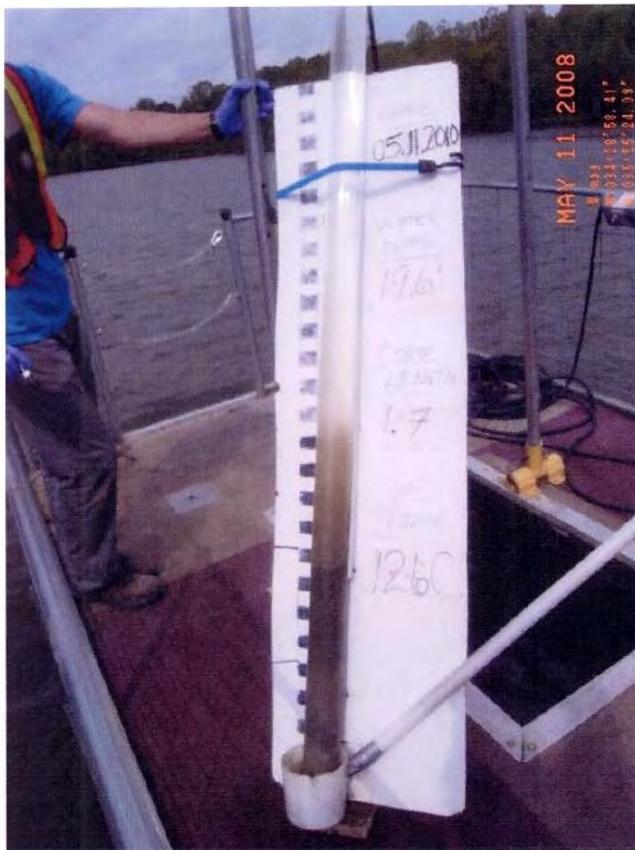
Total core depth = .6'

Ash thickness = 0.0'

Water depth = 26.0'

Vibecore Sampling Photos

Above Segment 5 Dredge Areas A-127 & A-128, B-127 & B-128, C-125 thru C-128; D-125 & D-126



Core 126-C

Total core depth = 1.7'

Ash thickness = 0.0'

Water depth = 19.6'



Core 127-B

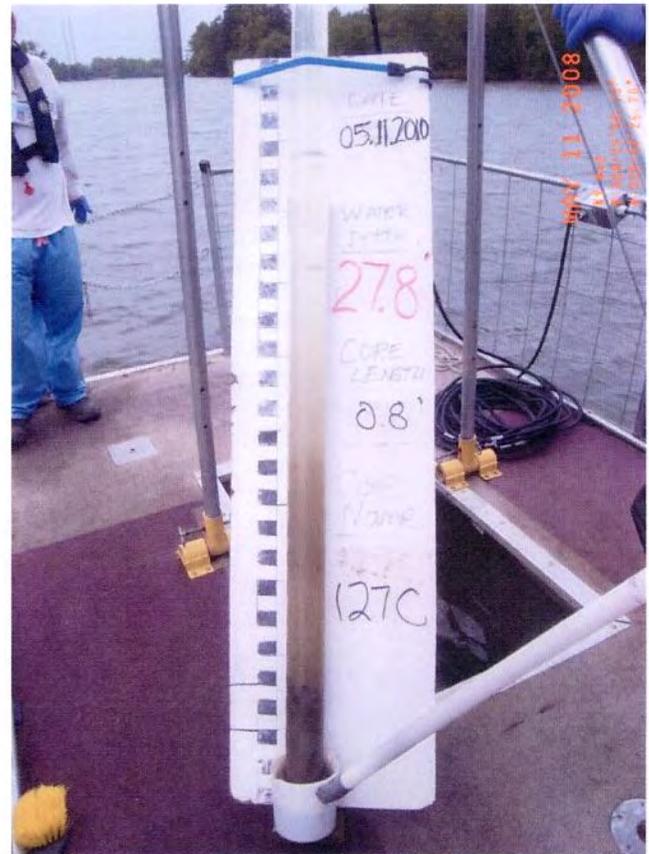
Total core depth = .7'

Ash thickness = 0.6'

Water depth = 33.2'

Vibecore Sampling Photos

Above Segment 5 Dredge Areas A-127 & A-128, B-127 & B-128, C-125 thru C-128; D-125 & D-126



Core 127-A/B

Total core depth = 1.7'
Ash thickness = 0.0'
Water depth = 32.5'

Core 127-C

Total core depth = .8'
Ash thickness = 0.5'
Water depth = 27.8'

Vibecore Sampling Photos

Above Segment 5 Dredge Areas A-127 & A-128, B-127 & B-128, C-125 thru C-128; D-125 & D-126



Core 128-A/B

Total core depth = 2.3'

Ash thickness = 0.0'

Water depth = 31.6'