

**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:**

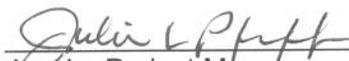
Ash removal activities have been completed in Above Segment 5 for complete dredge grids B127 & B-128 and planned portions of grids C-125, C-126, and A-127 & A-128.

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

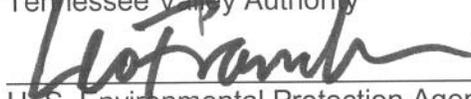
**Concurrence Comments:**

  
\_\_\_\_\_  
Jacobs Project Manager

5/14/10  
\_\_\_\_\_  
Date

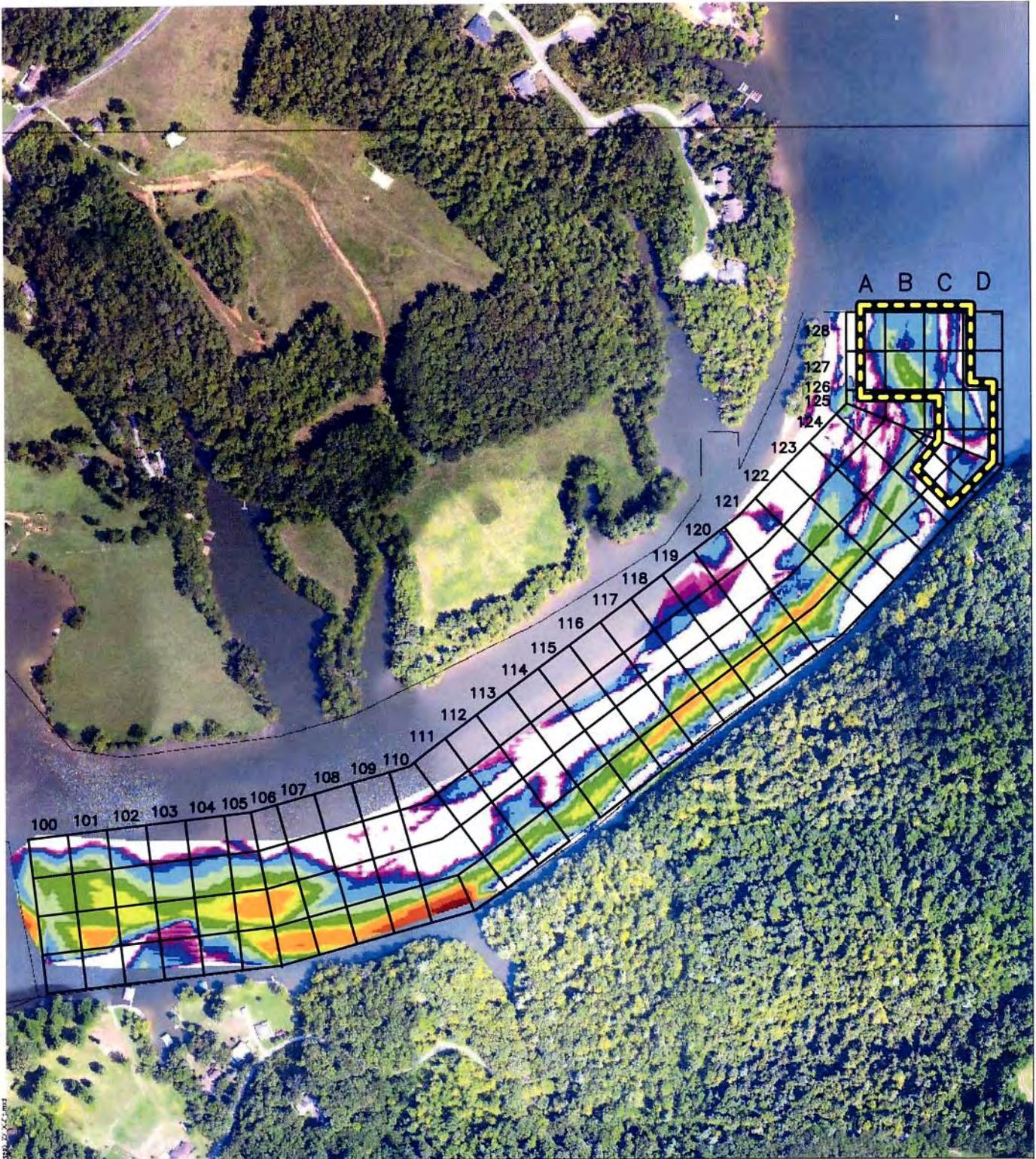
  
\_\_\_\_\_  
Tennessee Valley Authority

5/17/10  
\_\_\_\_\_  
Date

  
\_\_\_\_\_  
U. S. Environmental Protection Agency

5/17/10  
\_\_\_\_\_  
Date

*consulted w/ TDEC*



**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



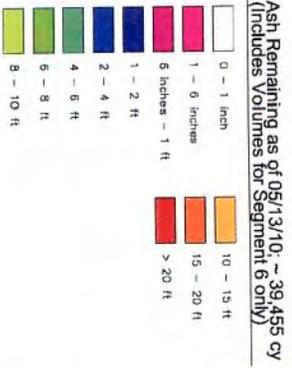
**JACOBS**

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

DATE 03/20/09

Figure 4

**Legend**



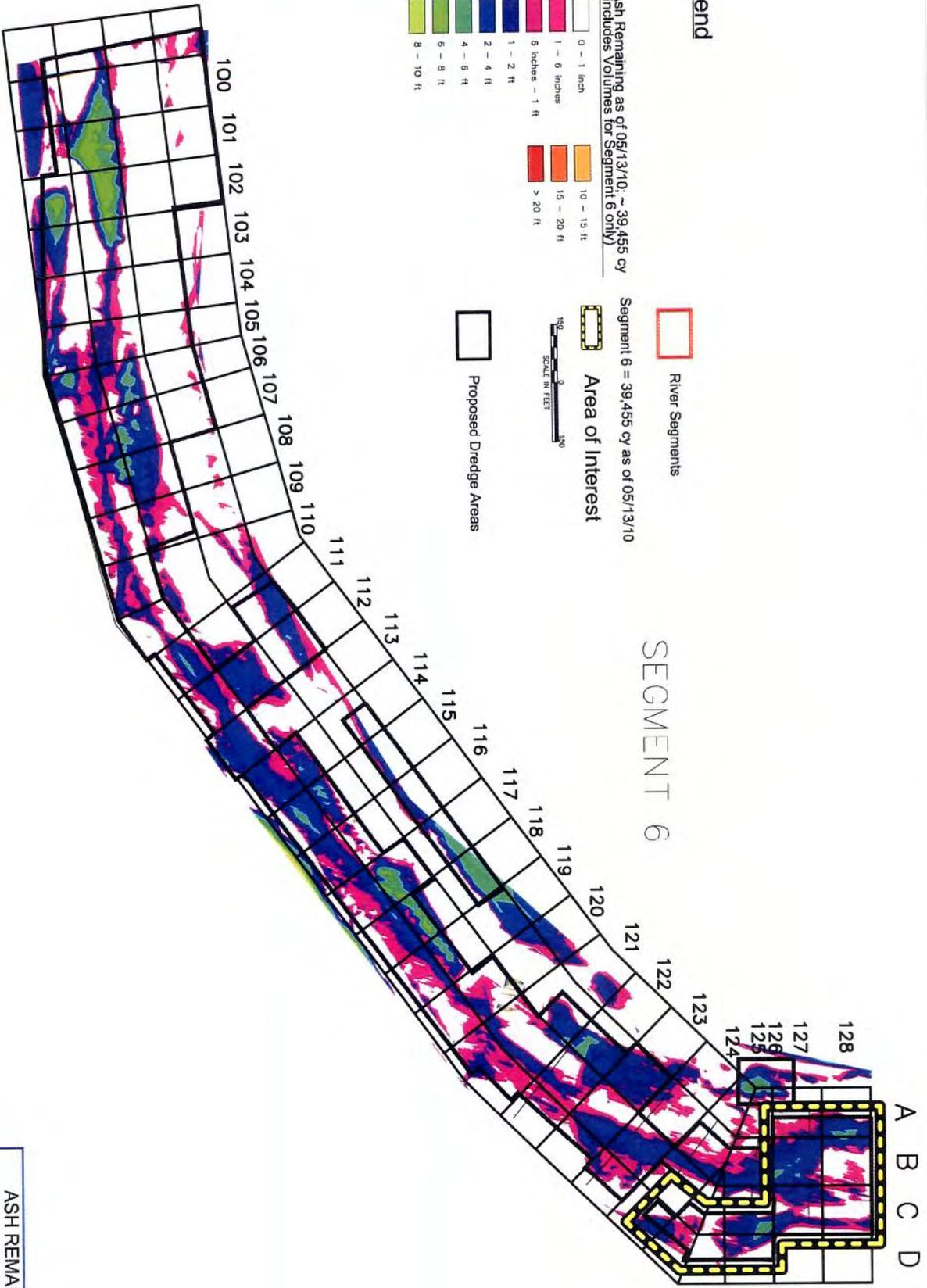
River Segments

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

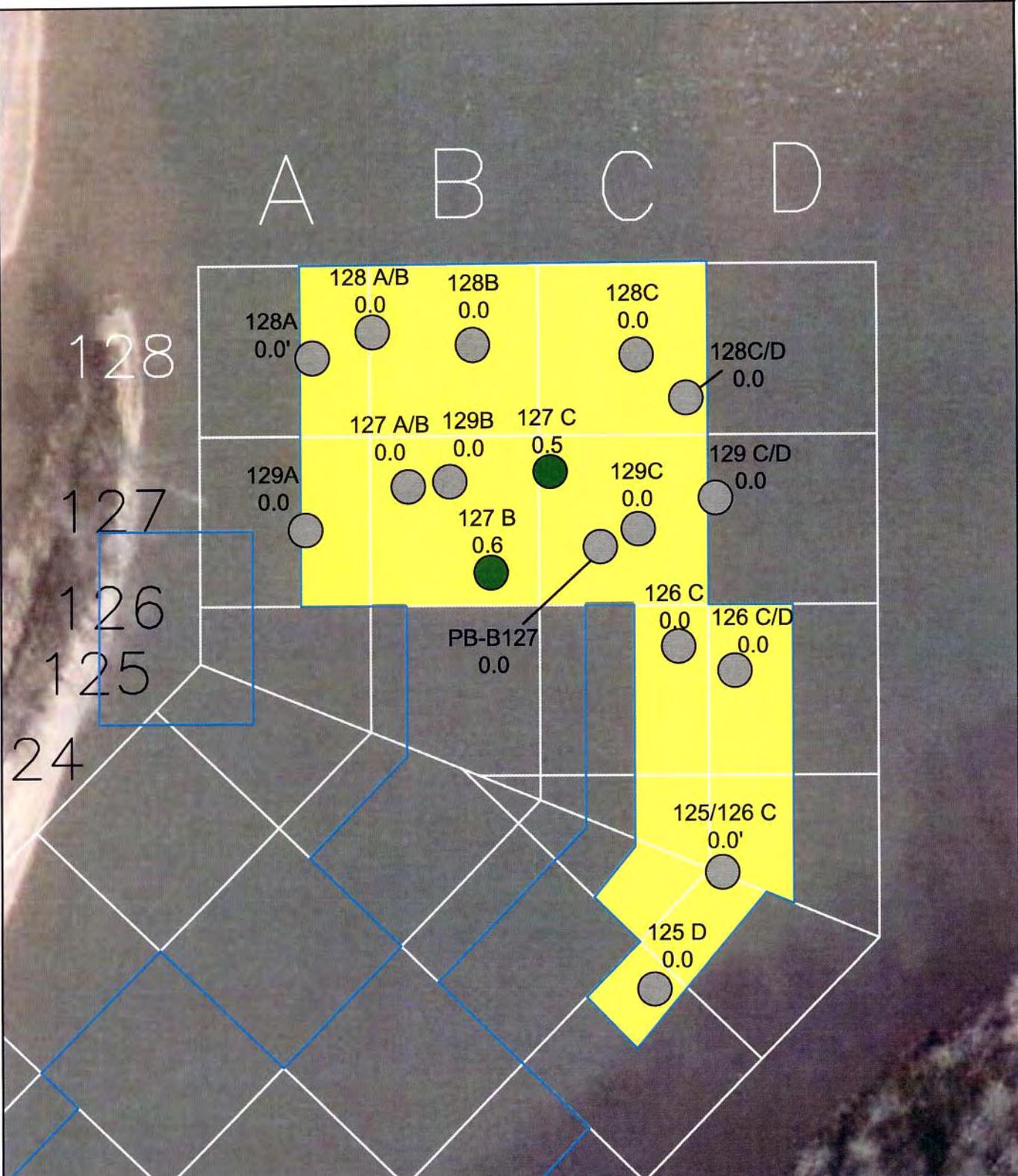
DRAWN BY: DAB

CHECKED BY: JB

CAD FILE: volume remaining 0513seg 6

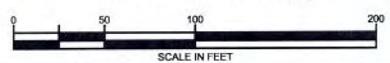
Figure 1

# VibeCore Concurrence Sampling Results - Above Segment 5



- Ash Recovered
- No Ash Present
- Removed From Plan
- Phase 2 Dredging Path

VibeCore Label Format:  
Core Number  
Ash Thickness (ft)



05/12/10

Figure 2



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

Deviations encountered: Core did not meet refusal

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

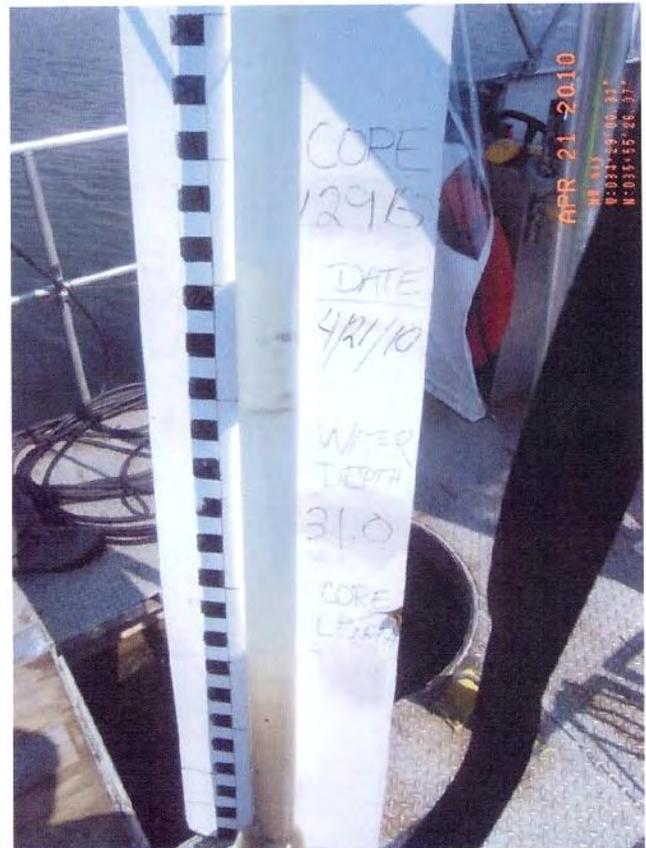


Core 129-A

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'



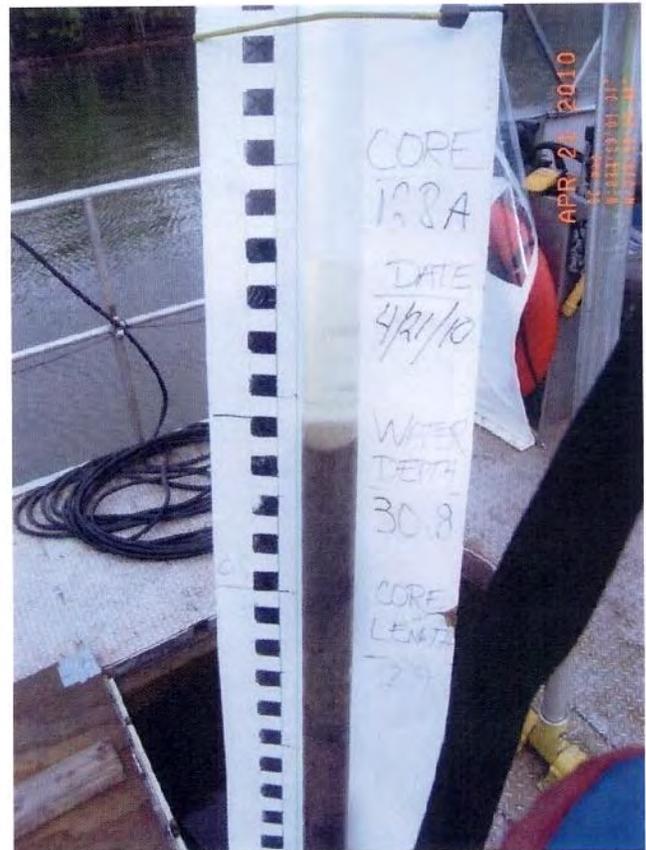
Core PB-B127  
Total core depth = 1.1'  
Ash thickness = 0.0'  
Water depth = 28.4'

# 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

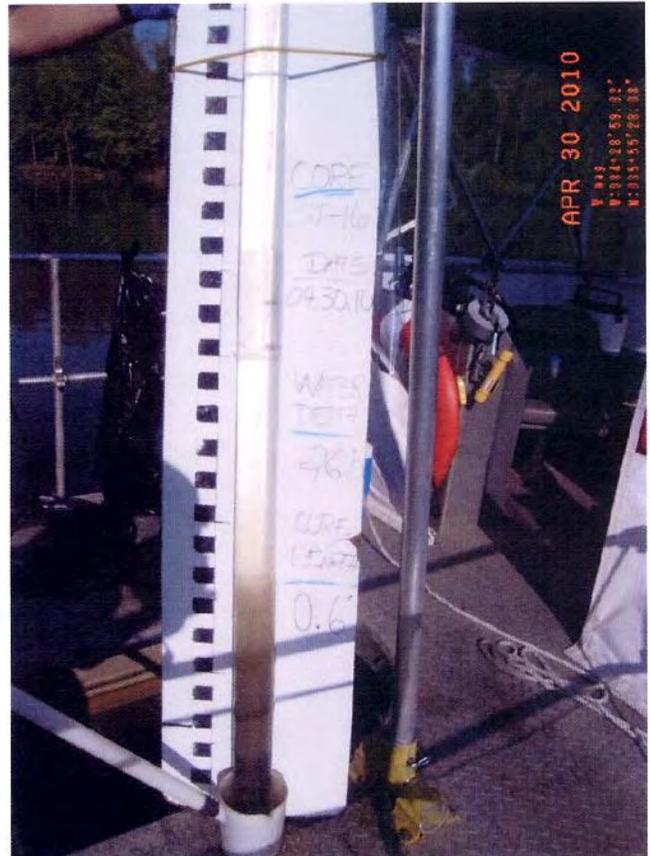


Core 128-CD

Total core depth = 5.4'

Ash thickness = 0.0'

Water depth = 12.8'



Core St-16

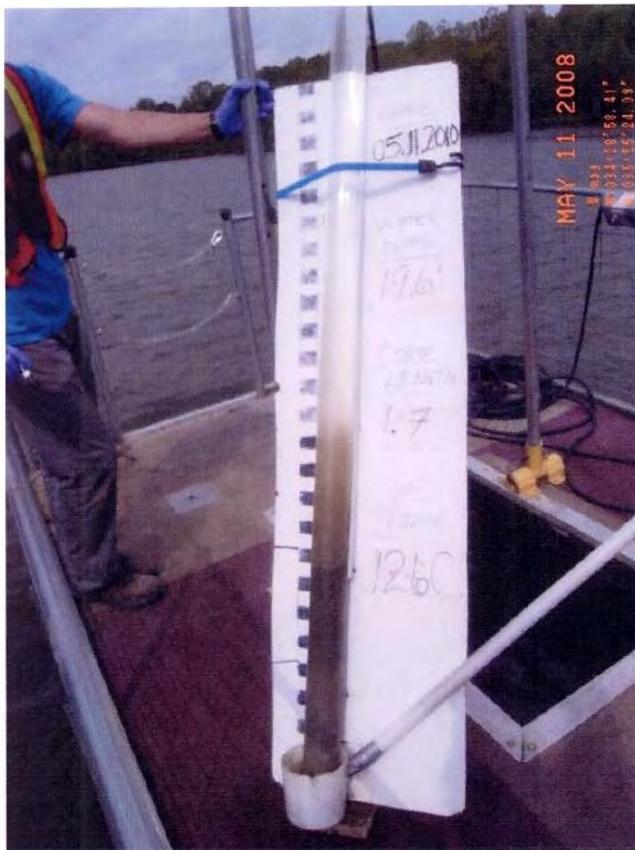
Total core depth = .6'

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

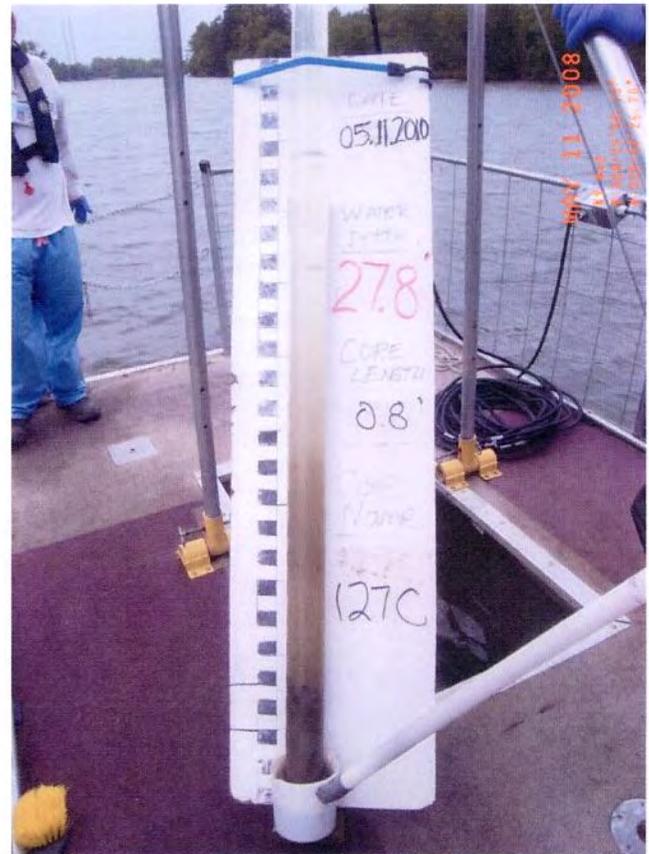


Core 127-A/B

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'