

Time-Critical Concurrence

Area:

Emory River, Segment 4, D-66, E-63 through E-66, F-63 through F-70

Agreement:

Ash removal activities have been completed in Segment 4 for dredge grids D-66, E-63 through E-66, F-63 through F-70.

Vibecore samples indicate no recoverable ash (less than 1 ft) in grids E-63 through E-66, F-63 and F-67 through F-70. The remaining material shown on Figure 6 for grids D-66, E-65 through E-66 and F-63 through F-70 is proven to be an extension of the northern sand bar of native sediments, documented in Time-Critical Concurrence KIF-10-003, to the area represented by these 8 vibecore samples.

Attachments:

- Figure 6, Ash Remaining to Pre-Spill Surface Segment 4, dated 3/03/2010
- Figure 2, Bathymetric Removal Areas – Segment 4, D-66, E-63 through E-66, F-63 through F-70, dated 3/24/10
- Figure 3, Vibecore Concurrence Sampling Results - Vibecore #s E-63, E-64, E-65, E-66, F-67, F-67a, F-68a, Grid 55 Sampling Logs and Photos

Concurrence Comments:

Julia L. Papp
Jacobs Project Manager

5/16/10
Date

Kathryn Nash
Tennessee Valley Authority

5/17/10
Date

Leo Frank
U. S. Environmental Protection Agency

5/17/10
Date

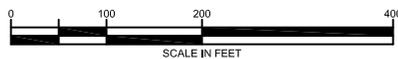
consulted w/ TDEC

Bathymetry Removal Areas - Segment 4



-  Removed From Plan
-  Phase 2 Dredging Path

VibeCore Label Format:
Core Number
Ash Thickness (ft)



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05/14/10

Figure 2

VibeCore Concurrence Sampling Results - Segment 4



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

VibeCore Label Format:
Core Number
Ash Thickness (ft)



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05/14/10

Figure 3



Vibecore Documentation

Date: 02/09/2010 Weather: Rain High temperature 43 degrees Location: Emory River Sediment Sampling down stream of Skimmer Wall.
 River Flow: 3520 cfs River Elevation: 741.15'
 Crew: Mark Greer, Travis Walls, Russ Vance

Core #	Photo #	Tube Type	Core Coordinates	River Depth	Time	Core Description	Interval (ft)
GRID55	R0010036	Acrylic	N: 35d54'14.145" W: 84d30'1.932"	29.7'	9:42	Coarse material brown in color with few large agrigates	0-1.4
Deviations encountered: refusal met (Coordinates converted to : N 553752.898 E:2444067.214)							
Total Depth							1.4'



Vibecore Documentation

Date: 03/11/2010 Weather: Cloudy. Highs mid 60's. SW winds at 10 mph. Chance of rain 60% Location: Segment 4
 River Flow: 551 cfs River Elevation: 735.82 at Watts Bar Dam
 Crew: David Mathis, Travis Walls, Chad Fairless

Core #	Photo #	Tube Type	Core Coordinates	River Depth	Time	Core Description	Interval (ft)
F-67	R0010354	6' Acrylic	N: 553910.51' E: 2443876.58'	15.8'	12:53	Orange and brown medium and fine grained sands. No ash	0-1.7
Deviations encountered: After the photo was taken and core extruded it became evident the top two layers were of the same material and lumped together.							1.7-2.4
Total Depth							2.4'
F-68	R0010355	6' Acrylic	N: 553890.91' E: 2443996.51'	12.6'	13:19	Brown fine and medium grained sands mixed with native fines. Approx 20% organics and 20% coal pieces. No ash.	0-0.6
Deviations encountered:							0.6-4.0
Total Depth							4.'
F-69	R0010356	6' Acrylic	N: 553840.84' E: 2444118.02'	10.4'	13:32	Brown medium and fine sands mixed with native fines. No ash.	0-0.6
Deviations encountered:							0.6-2.9
Total Depth							2.9'



Vibecore Documentation

Date: 03/23/2010 Weather: Overcast. 50's to lower 60's. W winds 10-20 mph; 30 mph gusts. Location: Segment 4 Grid
 River Flow: 2940 cfs River Elevation: 737.01'
 Crew: David, Mathis, James Mullins, Travis Walls

Core #	Photo #	Tube Type	Core Coordinates	River Depth	Time	Core Description	Interval (ft)
F-67a	R0010406	6' Acrylic	N: 553873.41' E: 2443819.09'	23.8'	10:09	Orange medium and coarse grained sand mixed with >10% organics. A very thin layer of ash was on the surface <0.01'.	0-1.4
Deviations encountered:						Orange sandy clay mixed with >10% organics. No ash.	1.4-3.9
						Total Depth	3.9'
F-68a	R0010407	6' Acrylic	N: 553815.35' E: 2443907.03'	25.7'	10:42	Brown medium and coarse grained sand mixed with >10% coal pieces. No ash.	0-1.6
Deviations encountered:						Orange medium grained sand mixed with clay. No ash.	1.6-4.6
						Total Depth	4.6'



Vibecore Documentation

Date: 03/24/2010 Weather: Sunny. Highs in the lower 70's. Light winds. Location: Segment 4 Grid
 River Flow: 2290 cfs River Elevation: 737.38'
 Crew: David, Mathis, James Mullins, Bailey Bunch, Chad Fairless

Core #	Photo #	Tube Type	Core Coordinates	River Depth	Time	Core Description	Interval (ft)
E-63	R0010410	5' Acrylic	N: 553979.19' E: 2443316.76'	36.3'	11:28	>50% Ash	0-0.5
Deviations encountered: Sediment description depths will be different than those seen in the photo.						Medium and fine grained brown sand with few pebbles and <10% organics. No ash.	0.5-1.7
						Total Depth	1.7'
E-64	R0010411	5' Acrylic	N: 553932.91' E: 2443417.98'	36.2'	12:38	Ash >50%	0-0.4
Deviations encountered:						Medium and coarse grained brown sand. Few pebbles. No ash.	0.4-3.0
						Native fines mixed with clay. <10% organics. No ash.	3.0-4.2
						Total Depth	4.2'
E-65	R0010412	5' Acrylic	N: 553869.03' E: 2443540.75'	35.1'	13:01	Ash >50%	0-0.1
Deviations encountered: Sediment description depths will be different than those seen in the photo.						>50% Ash mixed with clumps of clay and chert fragments and some brown native fines.	0.1-0.4
						Brown fine sands. No ash.	0.4-0.8
						Native brown fines. No ash.	0.8-1.5
						Total Depth	1.5'
E-66	R0010413	5' Acrylic	N: 553821.59' E: 2443623.75'	29.9'	13:28	Fine grained sand mixed with native fines. Light brown in color. No ash.	0-1.1
Deviations encountered:							
						Total Depth	1.1'



Vibecore Documentation

Date: 03/30/2010 Weather: Mostly sunny. Highs lower 60's. NW winds 10 mph or less. Location: Segment 4 Grid
 River Flow: 3150 cfs River Elevation: 737.65'
 Crew: David, Mathis, James Mullins, Greg Schwartz

Core #	Photo #	Tube Type	Core Coordinates	River Depth	Time	Core Description	Interval (ft)
F-63	R0010425	6' Acrylic	N: 554087.45' E: 2443380.1'	24.9'	13:53	A mixture of sand (various grain sizes) and ash >50% with pieces of clay and <10% organics.	0-0.5
Deviations encountered: Description will be different than boundaries noted in photo.						Ash >50%	0.5-0.9
						Total Depth	.9'

Vibecore Sampling Photos

Above Segment 4 Dredge Areas E-63 thru E-66, F-63,
F-67 thru F-70



Core E-63
Total core depth = 1.7'
Ash thickness = 0.5'
Water depth = 36.3'



Core E-64
Total core depth = 4.2'
Ash thickness = 0.4'
Water depth = 36.2'

Vibecore Sampling Photos

Above Segment 4 Dredge Areas E-63 thru E-66, F-63,
F-67 thru F-70



Core E-65

Total core depth = 1.5'

Ash thickness = 0.3'

Water depth = 35.1'



Core E-66

Total core depth = 1.1'

Ash thickness = 0.0'

Water depth = 29.9'

Vibecore Sampling Photos

Above Segment 4 Dredge Areas E-63 thru E-66, F-63, F-67 thru F-70

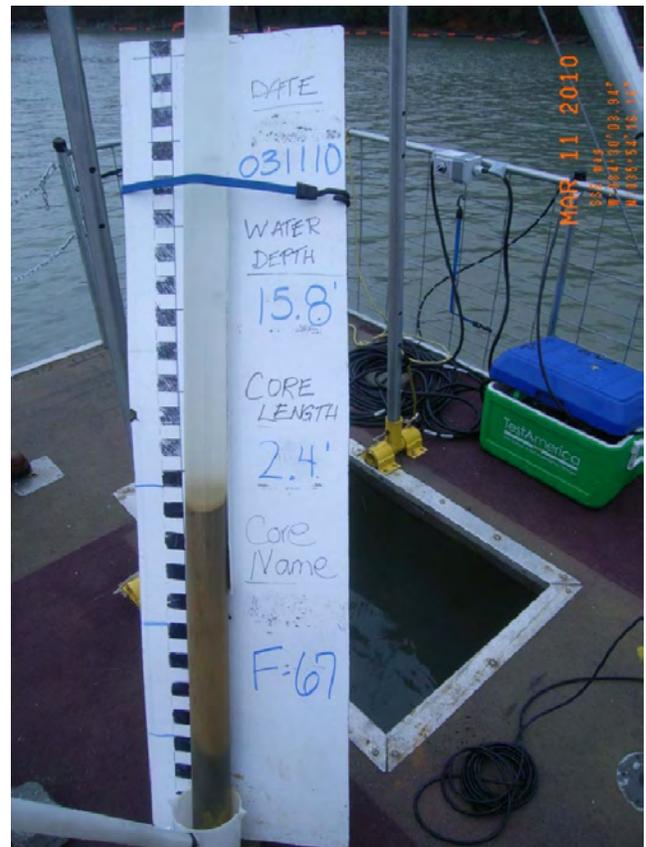


Core F-63

Total core depth = 0.9'

Ash thickness = 0.4'

Water depth = 24.9'



Core F-67

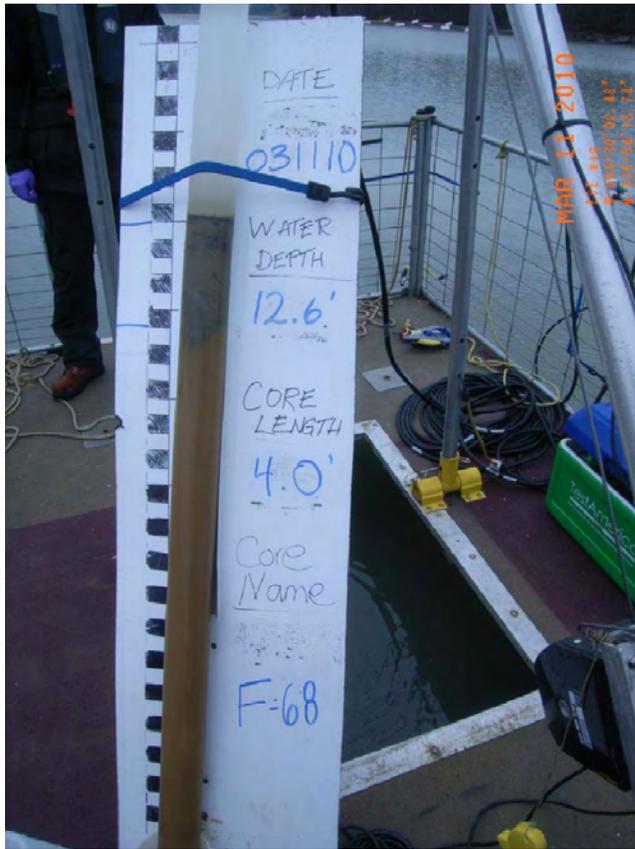
Total core depth = 2.4'

Ash thickness = 0.0'

Water depth = 15.8'

Vibecore Sampling Photos

Above Segment 4 Dredge Areas E-63 thru E-66, F-63, F-67 thru F-70

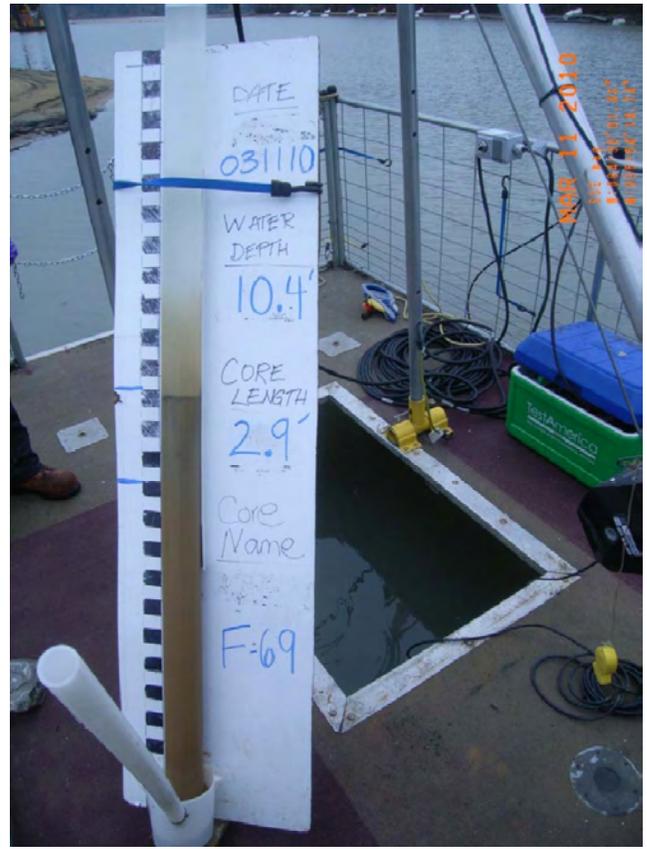


Core F-68

Total core depth = 4.0'

Ash thickness = 0.0'

Water depth = 12.6'



Core F-69

Total core depth = 2.9'

Ash thickness = 0.0'

Water depth = 10.4'

Vibecore Sampling Photos

Above Segment 4 Dredge Areas E-63 thru E-66, F-63, F-67 thru F-70

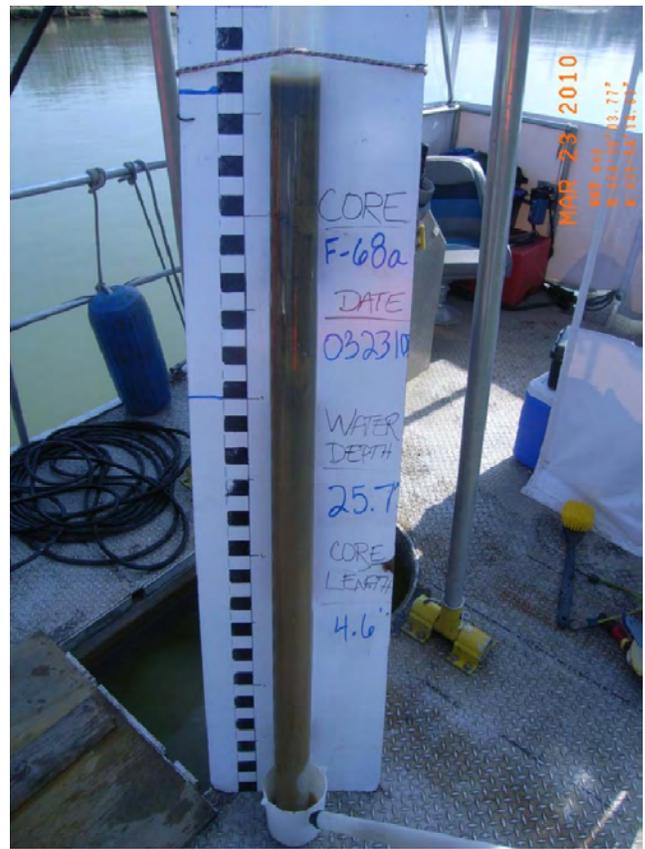


Core F-67a

Total core depth = 3.9'

Ash thickness = 0.0'

Water depth = 23.8'



Core F-68a

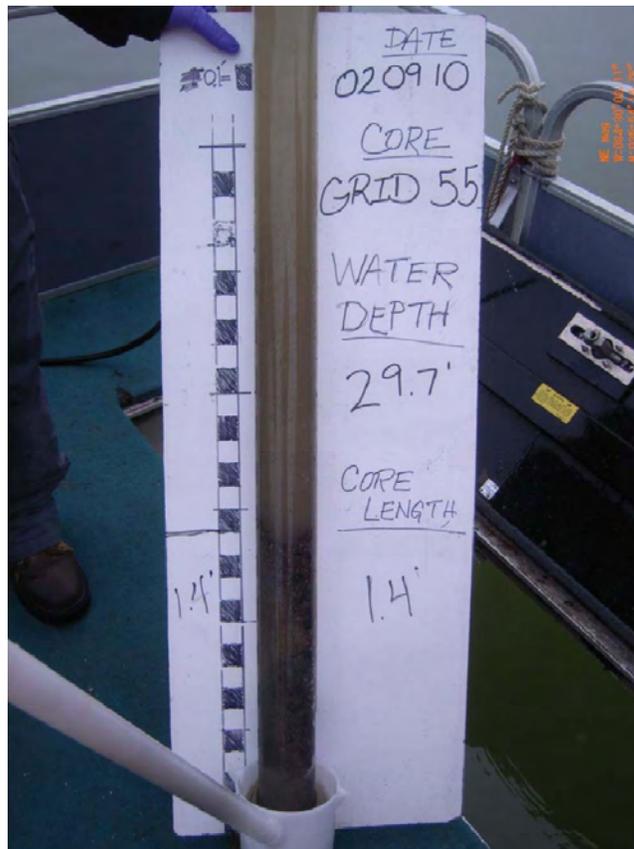
Total core depth = 4.6'

Ash thickness = 0.0'

Water depth = 25.7'

Vibecore Sampling Photos

Above Segment 4 Dredge Areas E-63 thru E-66, F-63,
F-67 thru F-70



Core Grid 55

Total core depth = 1.4'

Ash thickness = 0.0'

Water depth = 29.7'