Agreement Log #: KIF-10-016

Time-Critical Concurrence

Area:

Emory River, Segment "Above Segment 5", Dredge Areas B-111 and C-112

Agreement:

Eliminate planned dredging of dredge grid areas B-111and C-112.

Based on aerial maps and shoreline reconnaissance, the ash deposition targeted for removal in B-111 and C-112 was suspected to be native sediments rather than ash as indicated by comparing Pre-Spill and Post-Spill Bathymetry. A shoreline sediment inspection was conducted followed by the completion of vibracore samples. The vibracore samples were spaced to take a sample within each grid.

The resulting data indicates that the native sediments extend further into the channel than the bathymetry predicted and that there is no recoverable ash in these grids.

Attachments: Figure 5, Ash Remaining to Pre-Spill Surface Above Segment 5, dated 3/3/10 JLP
Ash Remaining to Pre-Spill Surface Above Segment 5, dated 4/13/10
Figure 1, ~~Vibracore Concurrence Sampling Results with Aerial Photo Details~~
Figure 2, Vibracore Concurrence Sampling Results with Eliminated Grids
Vibecore Sampling Logs and Photos

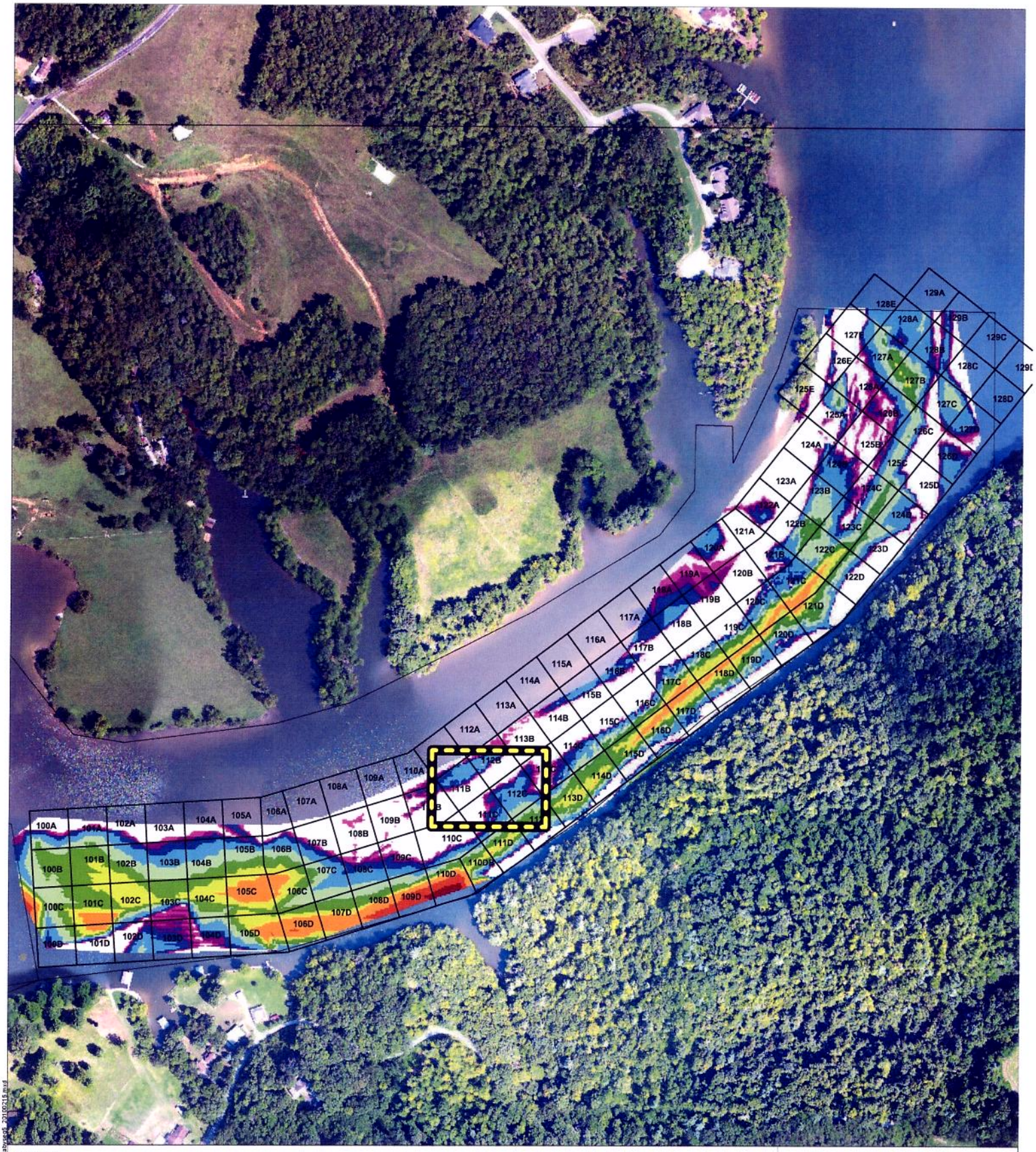
Concurrence Comments:

Julia L Pfeffer — 4/20/10
Jacobs Project Manager — Date

Michael T Scott — 4/20/10
Tennessee Valley Authority — Date

Leo Fox — 4/28/10
U. S. Environmental Protection Agency — Date

~~[illegible]~~ Consulted w/ TDEC



Legend

Ash Remaining: ~184,467 cy

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

Area of Interest

DRAFT

0 200 400 Feet

N

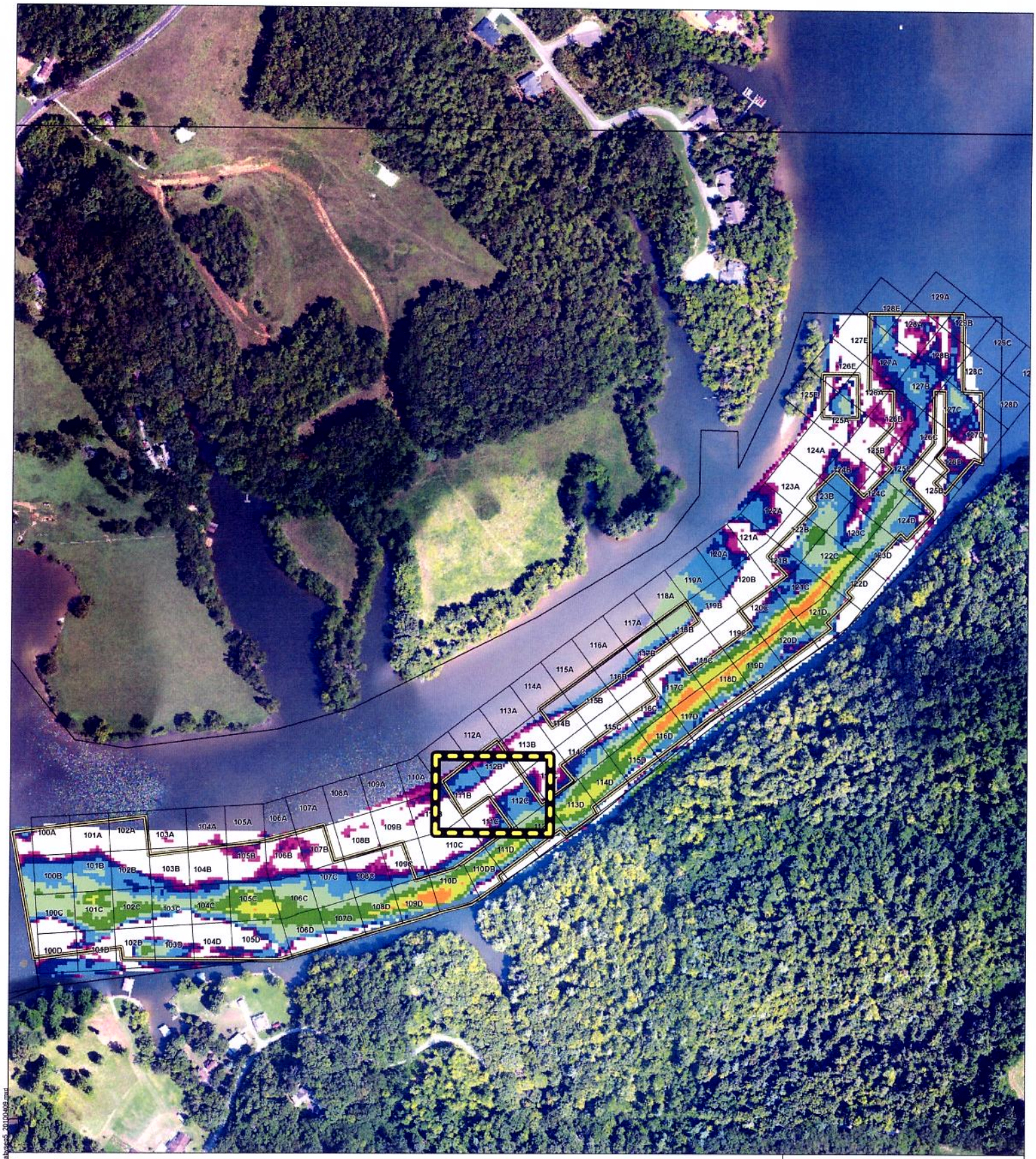
1:1,200

JACOBS

Ash Remaining to Pre-Spill Surface Above Segment 5

NAME: croberts DATE: 03/03/2010

Figure 5



Legend

Ash Remaining as of 04/09/10; ~114,274 cy

- 0 - 1 inch
- 1 - 6 inches
- 6 inches - 1 ft
- 1 - 2 ft
- 2 - 4 ft
- 4 - 6 ft
- 6 - 8 ft
- 8 - 10 ft
- 10 - 15 ft
- 15 - 20 ft
- > 20 ft

Proposed Dredge Area

Area of Interest

Note: The depiction of volume remaining on this figure is based off of limited bathymetry data. For blocks A100-A102, B111-B112, B114-B118, C112, and D100-D104, the volume shown in these grids was not added to the volume total because vibecore sampling resulted in no ash present in these areas.

DRAFT

0 200 400 Feet

1:1,200

N

JACOBS

Ash Remaining to Pre-Spill Surface Above Segment 5

NAME: croberts DATE: 04/13/2010

Figure 1

Y:\TVA\Projects\05DJ5400\20100413\ArcGIS\ashremaining_ahead5_20100408.mxd

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)

0 65 130 260
SCALE IN FEET

N

JACOBS™

04/19/10

Figure 2

TVA JACOBS

Vibecore Documentation

Date: 04/05/2010 Weather: Mostly Sunny Location: Above Segment 5
River Flow: 961cfs River Elevation: 738.58'
Crew: E. Arnold, J. Mullins, S. Whittier

Core #	Photo #	Tube Type	Core Coordinates	River Depth	Time
104-D	R0010442	6' Acrylic	N: 559126.99' E: 2446932.08'	5.4'	10:57

Deviations encountered:

Core Description	Interval (ft)
Orange sandy clay loam	0.0-2.0
Total Depth	2.'

Core #	Photo #	Tube Type	Core Coordinates	River Depth	Time
103-D	R0010443	6' Acrylic	N: 559128.21' E: 2446818.21'	5.8'	12:03

Deviations encountered:

Core Description	Interval (ft)
Orange sandy clay loam	0.0-2.2
Total Depth	2.2'

Core #	Photo #	Tube Type	Core Coordinates	River Depth	Time
102-D	R0010444	6' Acrylic	N: 559117.5' E: 2446682.29'	3.5'	12:21

Deviations encountered:

Core Description	Interval (ft)
Orange sandy clay	0.0-3.5
Total Depth	3.5'

Core #	Photo #	Tube Type	Core Coordinates	River Depth	Time
101-D	R0010445	6' Acrylic	N: 559125.31' E: 2446573.27'	11.8'	12:40

Deviations encountered:

Core Description	Interval (ft)
Orange coarse sand with trace cenospheres	0.0-0.1
Brown fine sand with fines	0.1-1.0
Coarse brown sand	1.0-3.4
Orange coarse sand	3.4-4.1
Total Depth	4.1'

Core #	Photo #	Tube Type	Core Coordinates	River Depth	Time
111B-1	R0010446	6'Acrylic	N: 559649.89' E: 2447633.95'	14.4'	13:35

Deviations encountered:

Core Description	Interval (ft)
Orange coarse sand	0.0-0.9
Brown fine sand with fines	0.9-5.1
Orange sandy clay	5.1-5.5
Total Depth	5.5'

Core #	Photo #	Tube Type	Core Coordinates	River Depth	Time
112C-1	R0010447	6' Acrylic	N: 559649.33' E: 2447814.1'	29.1'	14:05

Deviations encountered:

Core Description	Interval (ft)
Coarse brown sand	0.0-0.3
Sand with trace ash (<50%)	0.3-0.8
Brown mixed sand and fines	0.8-2.0
Total Depth	2.'

Core #	Photo #	Tube Type	Core Coordinates	River Depth	Time
117-C	R0010448	6' Acrylic	N: 560023.44' E: 2448305.86'	33.4'	14:40

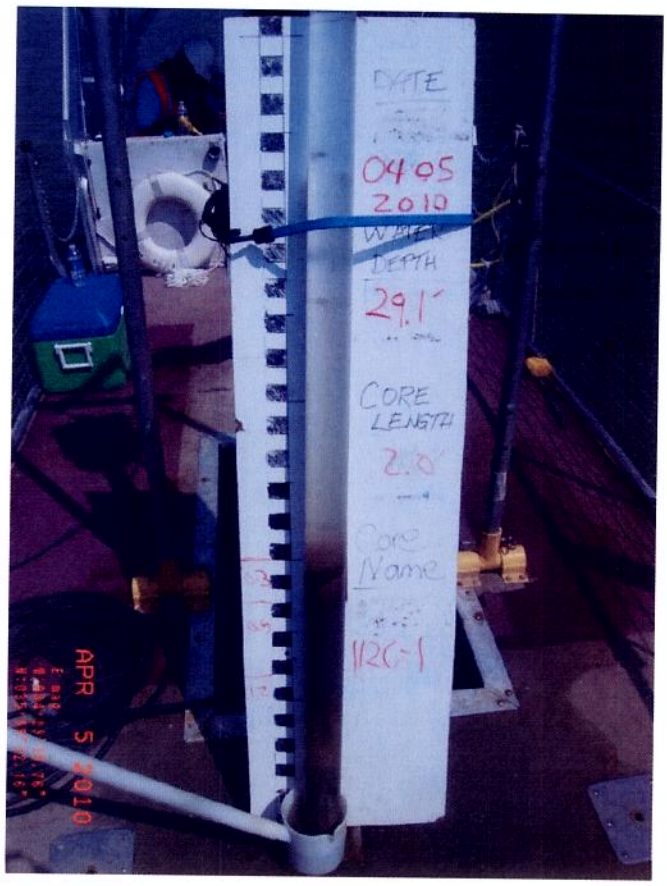
Deviations encountered:

Core Description	Interval (ft)
Ash (>50%)	0.0-3.5
Brown native fines	3.5-4.2
Total Depth	4.2'

Vibecore Sampling Photos

Above Segment 5 Dredge Areas B-111 & C-112

Core B-111
Total core depth =5.5'
Ash thickness = 0.0'
Water depth = 14.4'



Core C-112
Total core depth = 2.0'
Ash thickness = 0.5'
Water depth = 29.1'