Agreement Log #: KIF-10-019

Time-Critical Concurrence

Area:

Emory River, Segment "Above Segment 5", Dredge Areas A-100, A-101 & A-102

Agreement:

Eliminate planned dredging of dredge grid areas A-100, A-101 & A-102.

Based on results of upstream vibracore data indicating absence of ash along grids near the edge of the sandbar to the north, the vibracore sampling was extended downstream to these grids. The vibracore samples were spaced to take a sample within each grid and reported zero ash.

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 (dredge plan addendum), Ash Remaining to Pre-Spill Surface Above Segment 5, dated 3/3/10
Figure 1, Ash Remaining to Pre-Spill Surface Above Segment 5, dated 4/13/10
Figure 2, Vibracore Concurrence Sampling Results with Eliminated Grids
Vibecore Sampling Logs and Photos

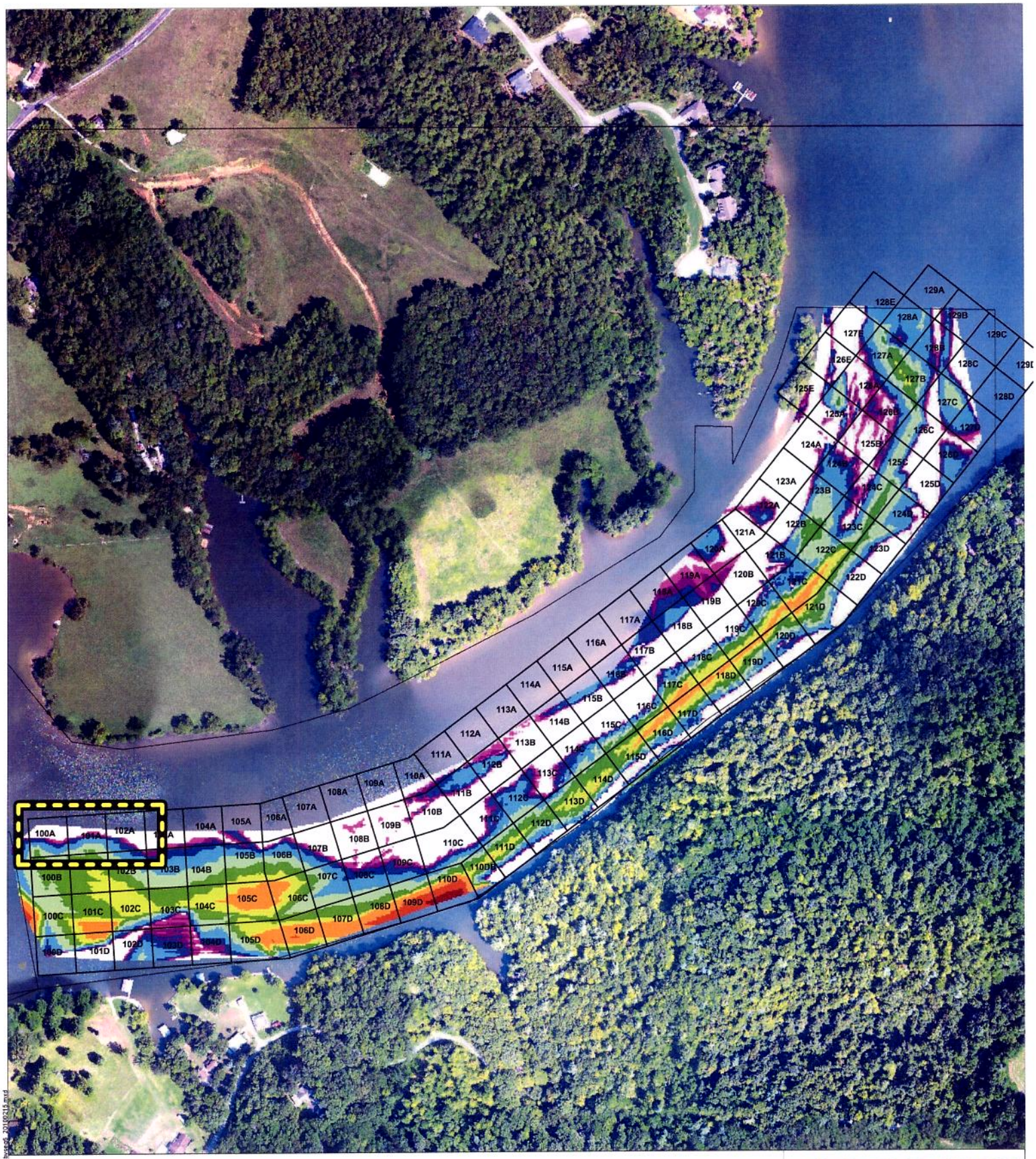
Concurrence Comments:

Jacobs Project Manager — 4/20/10 Date

Tennessee Valley Authority — 4/23/10 Date

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

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

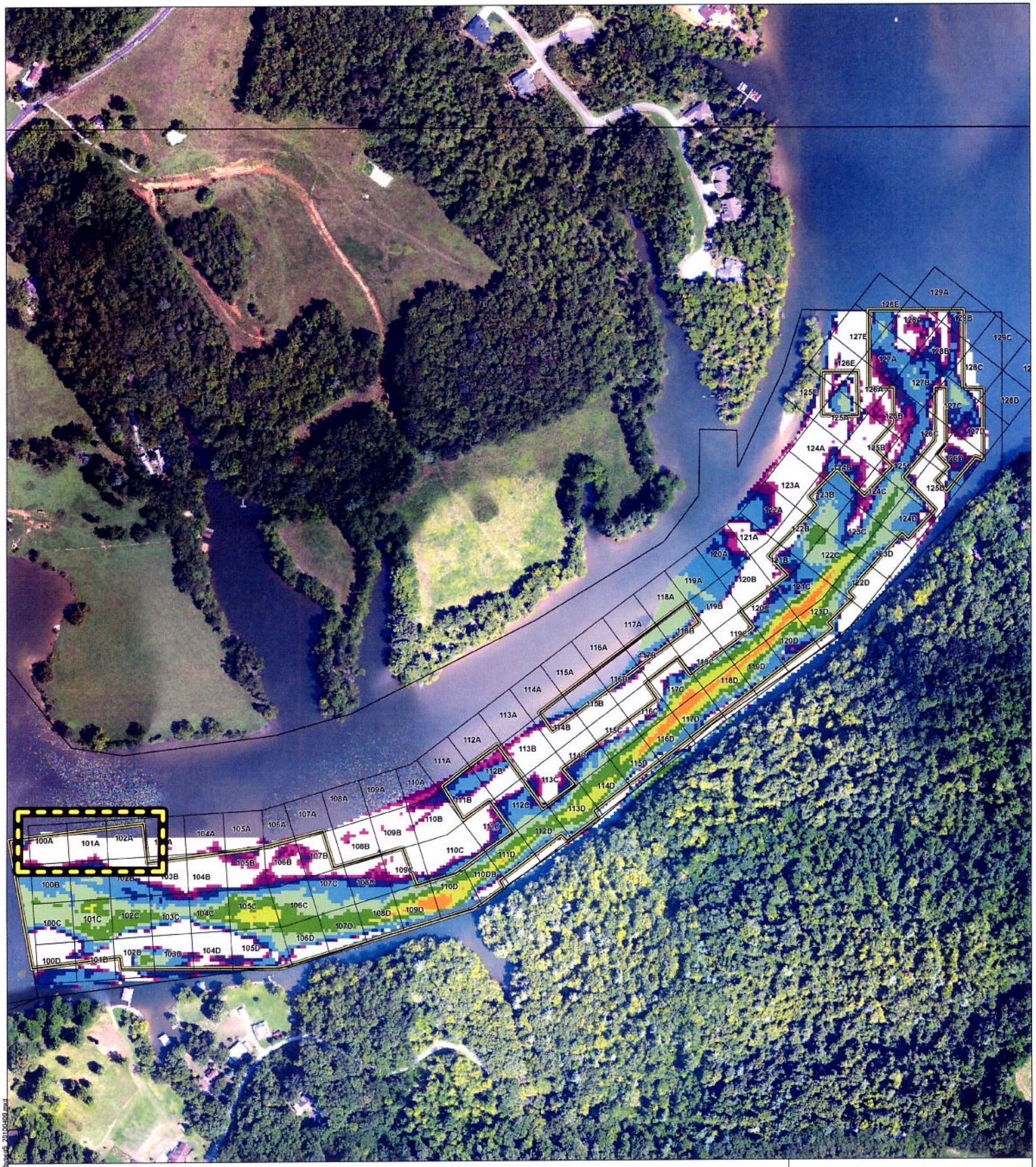
1:1,200

JACOBS

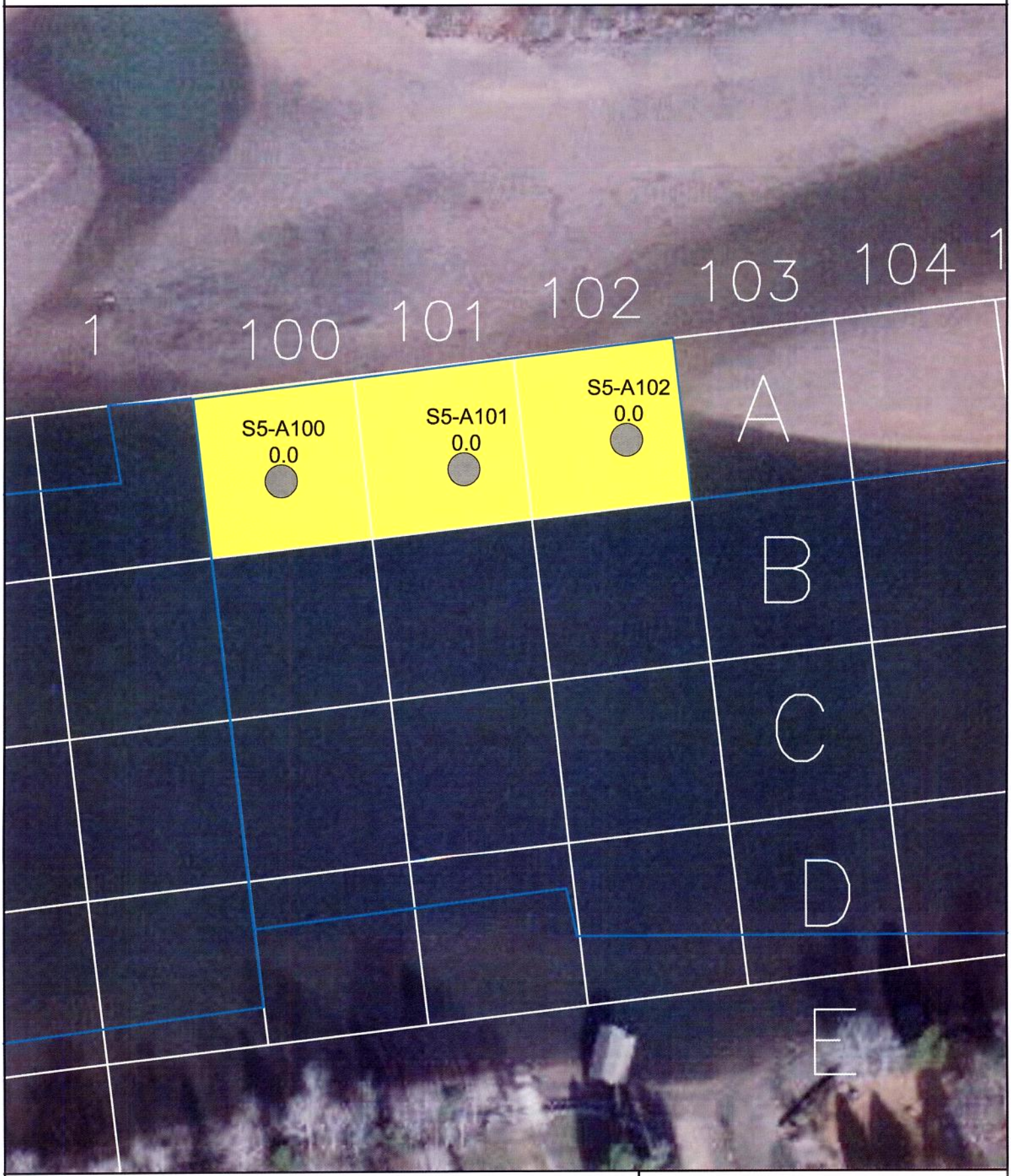
Ash Remaining to Pre-Spill Surface Above Segment 5

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

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

04/20/10

Figure 2

TVA JACOBS

Vibecore Documentation

Date: 04/13/2010 Weather: Sunny and breezy Location: Post Bathymetry and 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'

Core #	Photo #	Tube Type	Core Coordinates	River Depth	Time
S5-A100	R0010483	Acrylic	N: 559465.53' E: 2446312.5'	16.7'	13:08

Deviations encountered:

Core Description	Interval (ft)
Brown coarse sand with coal	0.0-0.4
Brown fines and sand with organic matter	0.4-1.0
Total Depth	1.'

Core #	Photo #	Tube Type	Core Coordinates	River Depth	Time
S5-A102	R0010484	Acrylic	N: 559494.55' E: 2446580.8'	10.2'	13:22

Deviations encountered: Location is directly beneath a dredge pipe.

Core Description	Interval (ft)
Brown coarse sand	0.0-1.2
Brown fine sand	1.2-1.9
Brown coarse sand	1.9-4.4
Total Depth	4.4'

Core #	Photo #	Tube Type	Core Coordinates	River Depth	Time
S5-A101	R0010485	Acrylic	N: 559473.66' E: 2446454.01'	14.7'	13:46

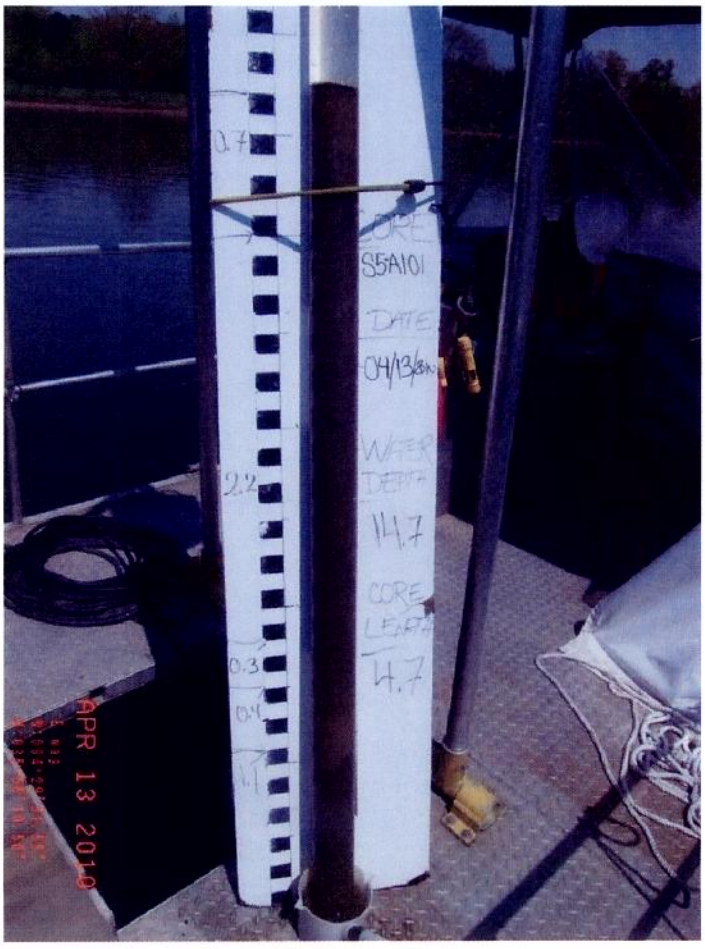
Deviations encountered: Location is directly beneath a dredge pipe.

Core Description	Interval (ft)
Coarse brown sand	0.0-0.7
Brown medium to fine sand	0.7-2.9
Coarse brown sand	2.9-3.6
Brown medium sand	3.6-4.7
Total Depth	4.7'

Vibecore Sampling Photos

Above Segment 5 Dredge Areas A-100 to A-102

Core S5-A100
Total core depth =1.0'
Ash thickness = 0.0'
Water depth = 16.7'



Core S5-A101
Total core depth = 4.7'
Ash thickness = 0.0'
Water depth = 14.7'

Vibecore Sampling Photos

Above Segment 5 Dredge Areas A-100 to A-102

Core S5-A102

Total core depth =4.4’

Ash thickness = 0.0’

Water depth = 10.2’