

Time-Critical Concurrence

Area:

Emory River, Segment 5, Dredge Areas D-1, 2, 3, 4, 5, 6, 7 & 8

Agreement:

Eliminate planned dredging of dredge grid areas D-1, 2, 3, 4, 5, 6, 7 & 8.

This area was targeted for sampling based on Sevenson reports of dredging large volumes of native sediments on an adjacent pass completed during Phase 1 dredging. Core location targets were developed to sample from center of each grid. The area was sampled using the vibracore method which consists of apply high frequency vibrations on a weighted hollow sample collection tube which is lowered into the sediments. Sediment samples were recovered and no ash was present in the eight cores taken, logs and photo record attached. The core sampled depth ranged from 2.3' to 4.9' and sediments sampled were predominately an orange clay loam with areas of sand. Trace amounts of coal fragments were encountered on or near the sediment surface.

The results of the sediment sampling indicate that the targeted ash removal volume calculated by comparing the pre-spill bathymetry and the post-spill bathymetry surfaces was the result of sediment buildup prior to the post spill survey and that there is no recoverable ash in these grids.

Attachments:

Figure 1; Vibracore Concurrence Sampling Results

Figure 2: Vibcore Concurrence Sampling Results showing Adjusted Dredge Plan

Vibracore Sampling Logs and Photos

Concurrence Comments:


Jacobs Project Manager

4/7/10
Date


Tennessee Valley Authority

4/7/10
Date

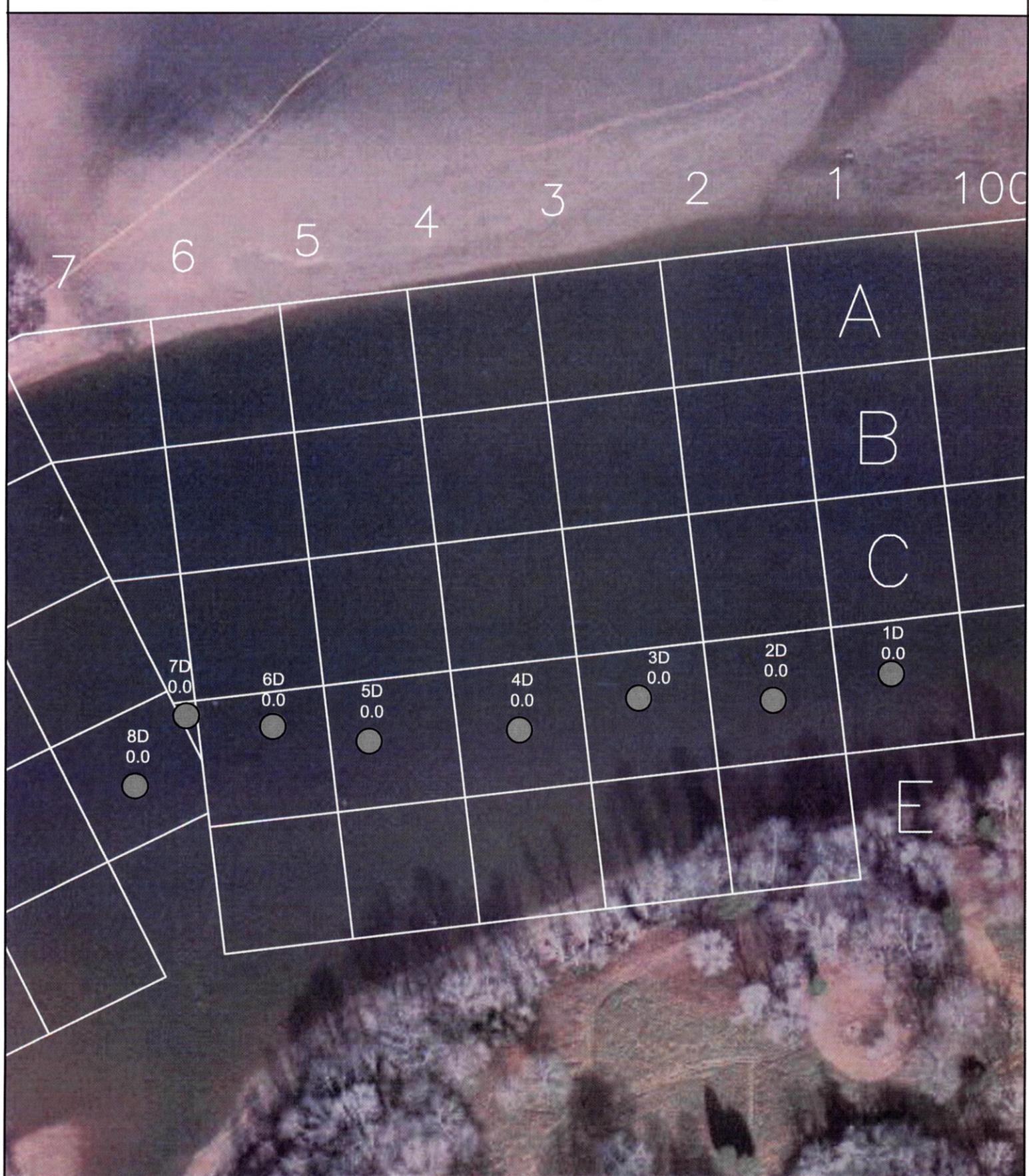

U. S. Environmental Protection Agency

4/8/10
Date



4-14-10

VibeCore Concurrence Sampling Results - Segment 5



● Ash Recovered
● No Ash Present

VibeCore Label Format:
Core Number
Ash Thickness (ft)

0 65 130 260
SCALE IN FEET

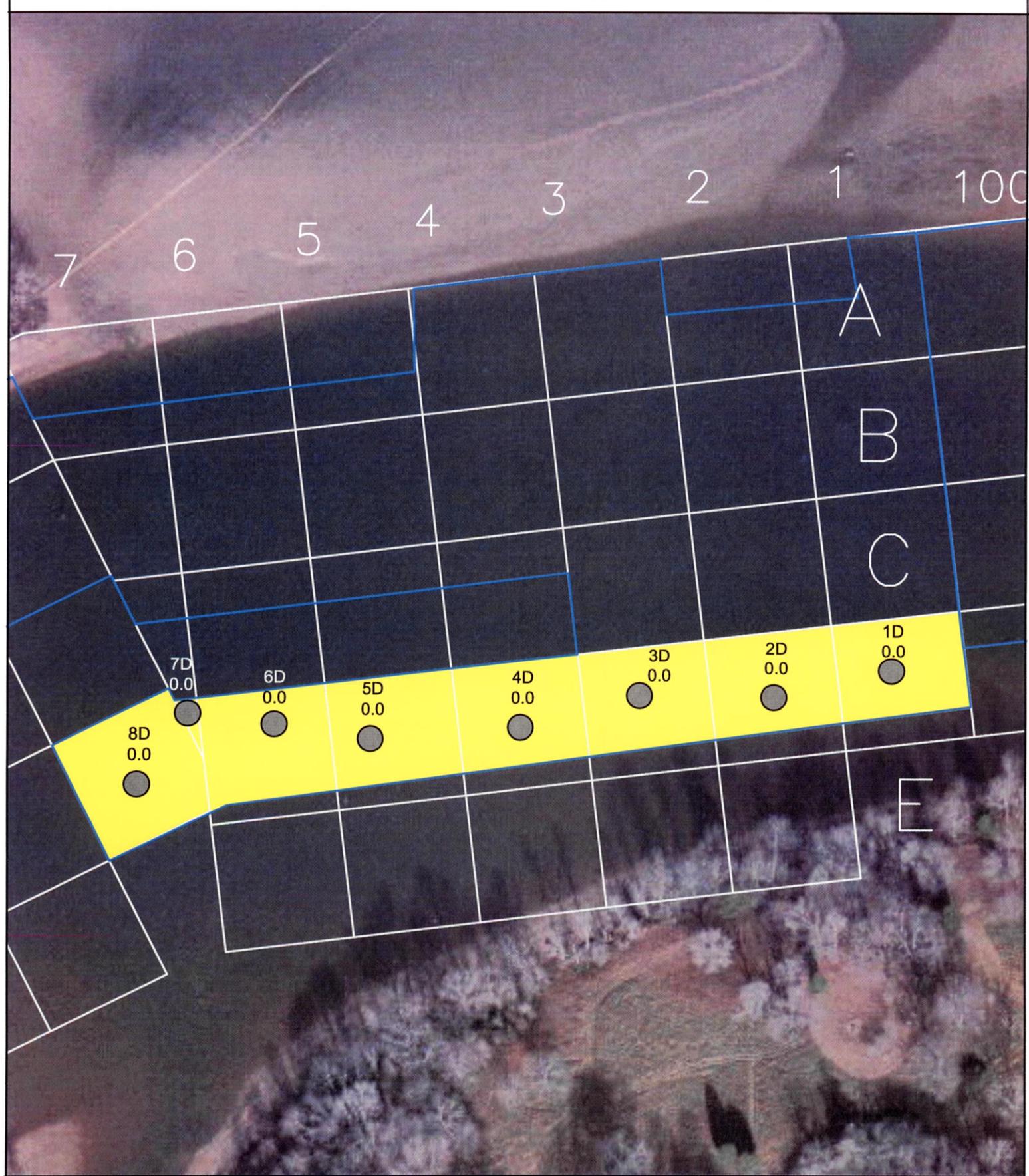


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Figure 1

VibeCore Concurrence Sampling Results - 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



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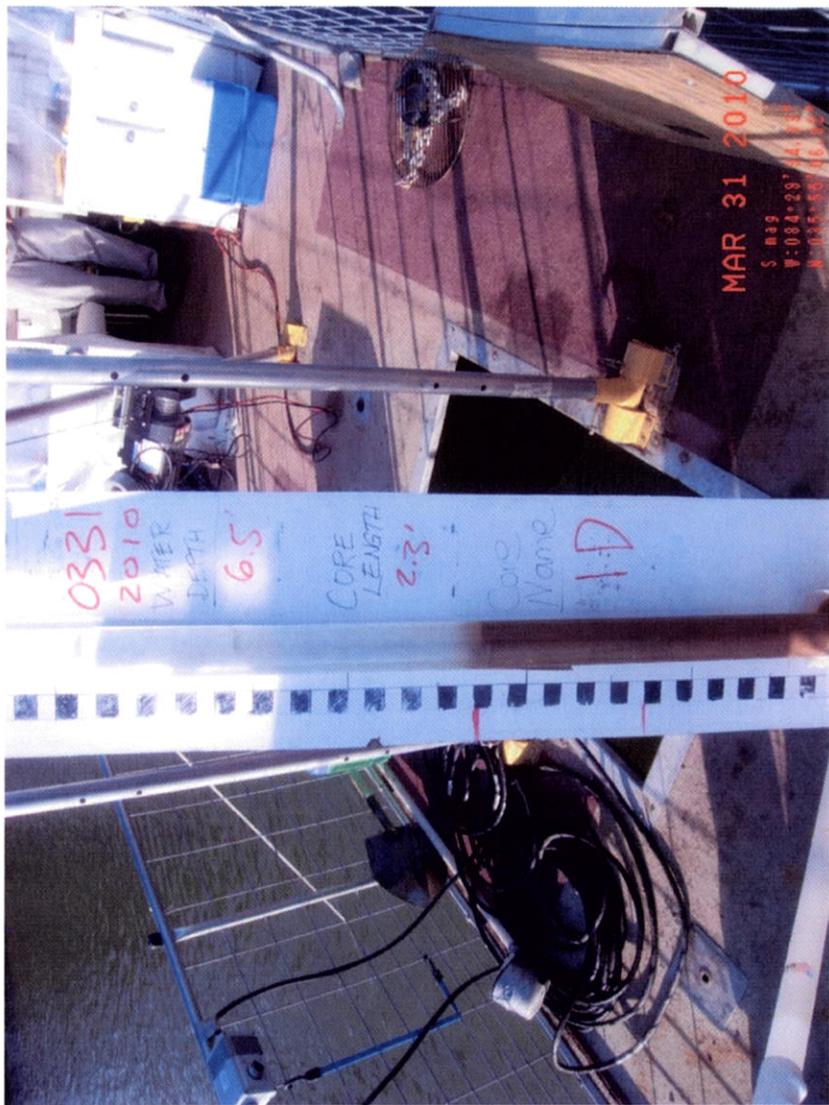
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Figure 2



Vibecore Documentation

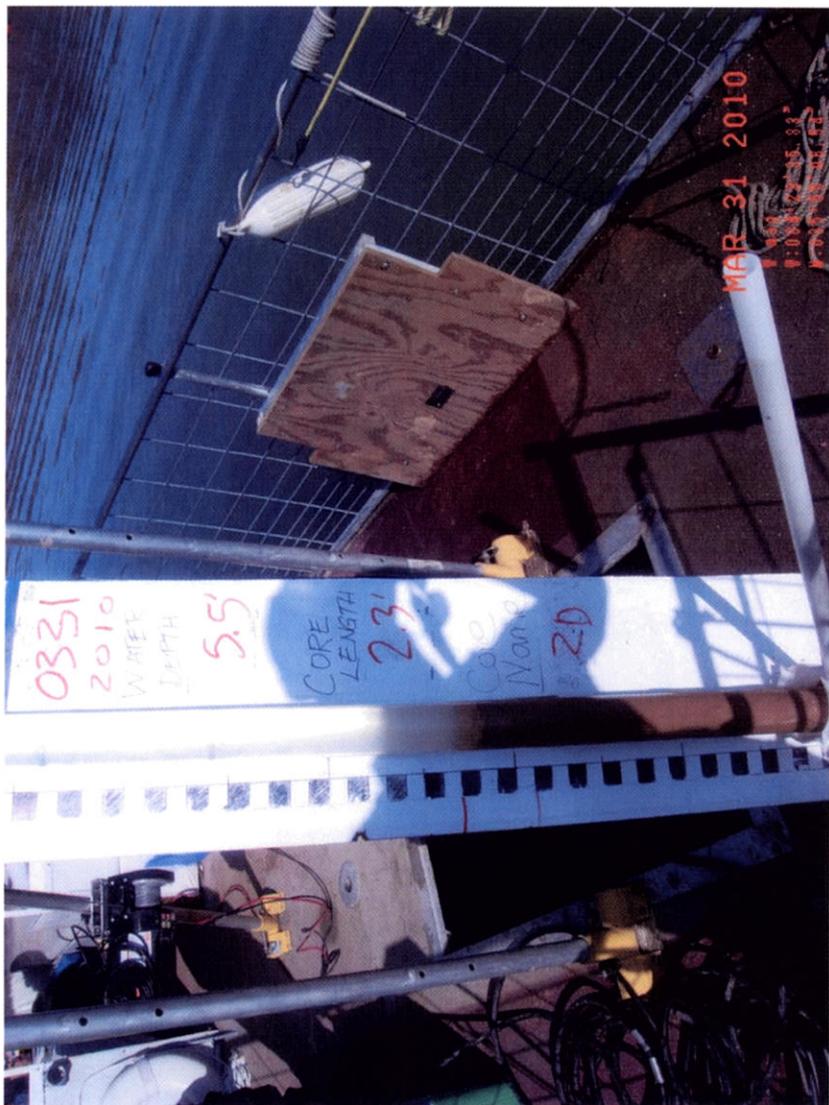
Sunny							Location:			Revised Segment 5 Coordinates		
Core #	Photo #	Tube Type	Core Coordinates	River Depth	Time	Core Description	Interval (ft)					
1D	R0010426	6' Acrylic	N: 559098.17' E: 2446220.93'	6.5'	8:48	Orange loam, some coal fragments Orange clay loam with sand	0.0-1.0	1.0-2.3				
Deviations encountered:												
Core #	Photo #	Tube Type	Core Coordinates	River Depth	Time	Core Description	Total Depth 2.3'			Interval (ft)		
8D	R0010427	6' Acrylic	N: 558986.49' E: 2445484.73'	7.'	9:21	Orange fine sediment with sand Orange fine sediment Orange clay loam	0.0-0.7	0.7-4.1	4.1-5.1			
Deviations encountered:										Total Depth 5.1'		
Core #	Photo #	Tube Type	Core Coordinates	River Depth	Time	Core Description	Interval (ft)			Interval (ft)		
2D	R0010428	6' Acrylic	N: 559071.74' E: 2446106.85'	5.5'	9:44	Orange fine sediments Orange clay loam	0.0-0.4	0.4-2.3	0.4-3.6	0.0-0.4	0.4-3.6	
Deviations encountered:												
Core #	Photo #	Tube Type	Core Coordinates	River Depth	Time	Core Description	Total Depth 2.3'			Interval (ft)		
3D	R0010429	6' Acrylic	N: 559073.29' E: 2445975.54'	6.7'	10:04	Orange fine sediment Orange clay loam	0.0-0.4	0.4-3.6	0.4-3.6	0.0-0.4	0.4-3.6	
Deviations encountered:										Total Depth 3.6'		
Core #	Photo #	Tube Type	Core Coordinates	River Depth	Time	Core Description	Interval (ft)			Interval (ft)		
4D	R0010430	6' Acrylic	N: 559041.89' E: 2445858.25'	6.5'	10:30	Orange fines with sand Orange clay loam	0.0-0.9	0.9-3.2	0.9-3.2	0.0-0.8	0.8-2.2	
Deviations encountered:												
Core #	Photo #	Tube Type	Core Coordinates	River Depth	Time	Core Description	Total Depth 3.2'			Interval (ft)		
5D	R0010431	6' Acrylic	N: 559030.68' E: 2445710.84'	6.9'	10:50	Orange brown fine sediment Orange clay loam	0.0-0.9	0.9-3.2	0.9-3.2	0.0-0.8	0.8-2.2	
Deviations encountered:												
Core #	Photo #	Tube Type	Core Coordinates	River Depth	Time	Core Description	Total Depth 2.2'			Interval (ft)		
6D	R0010432	6' Acrylic	N: 559045.07' E: 2445617.08'	8.7'	11:03	Orange fines with trace coal fragments Orange clay loam	0.0-0.9	0.9-4.5	0.9-4.5	0.0-0.9	0.9-4.5	
Deviations encountered:												
Core #	Photo #	Tube Type	Core Coordinates	River Depth	Time	Core Description	Total Depth 4.5'			Interval (ft)		
7D	R0010433	6' Acrylic	N: 559055.64' E: 2445533.53'	14.4'	11:17	Orange fines with coal fragments and OM Orange clay loam Orange clay	0.0-1.4	1.4-3.5	3.5-4.9	0.0-1.4	1.4-3.5	
Deviations encountered:										Total Depth 4.9'		



R0010426



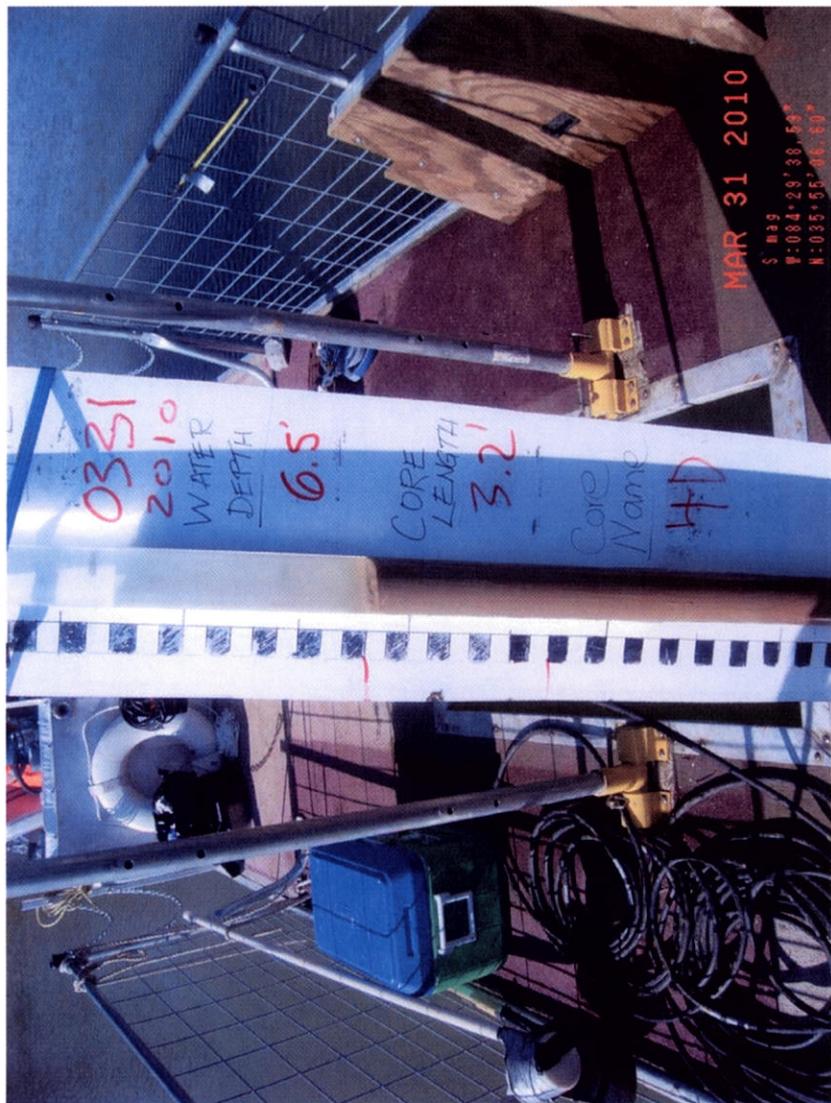
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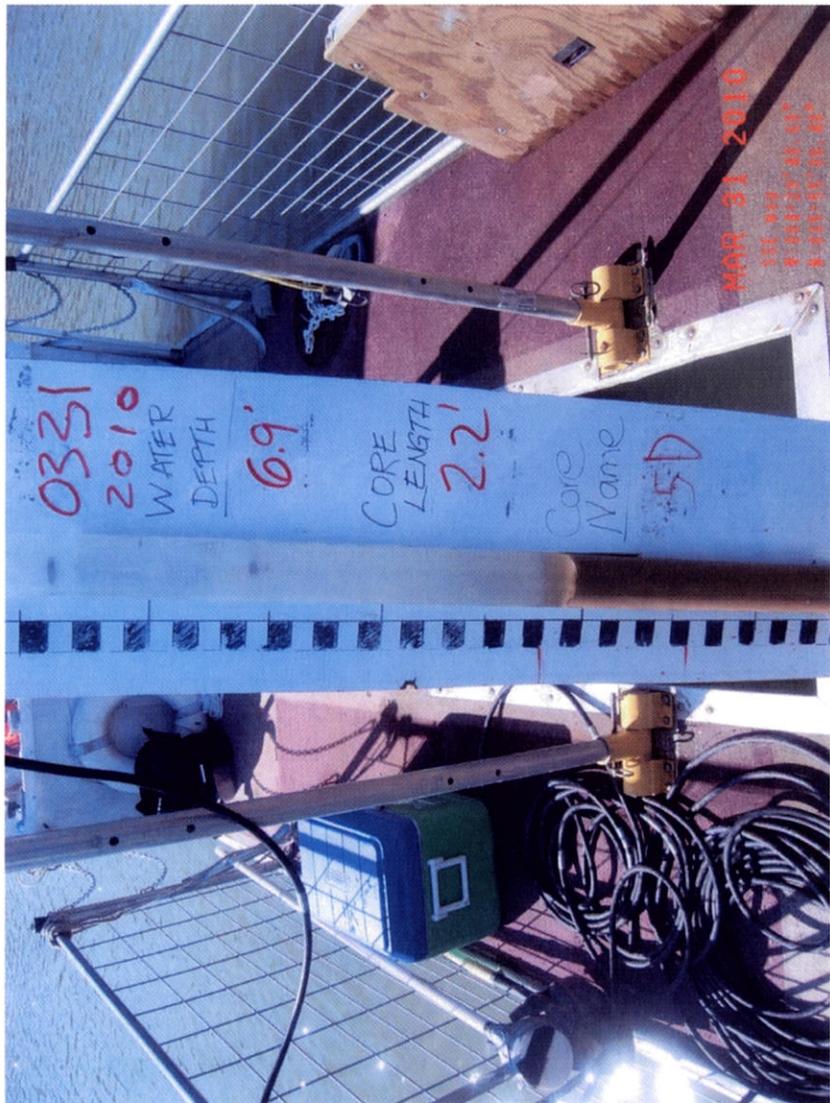
R0010428



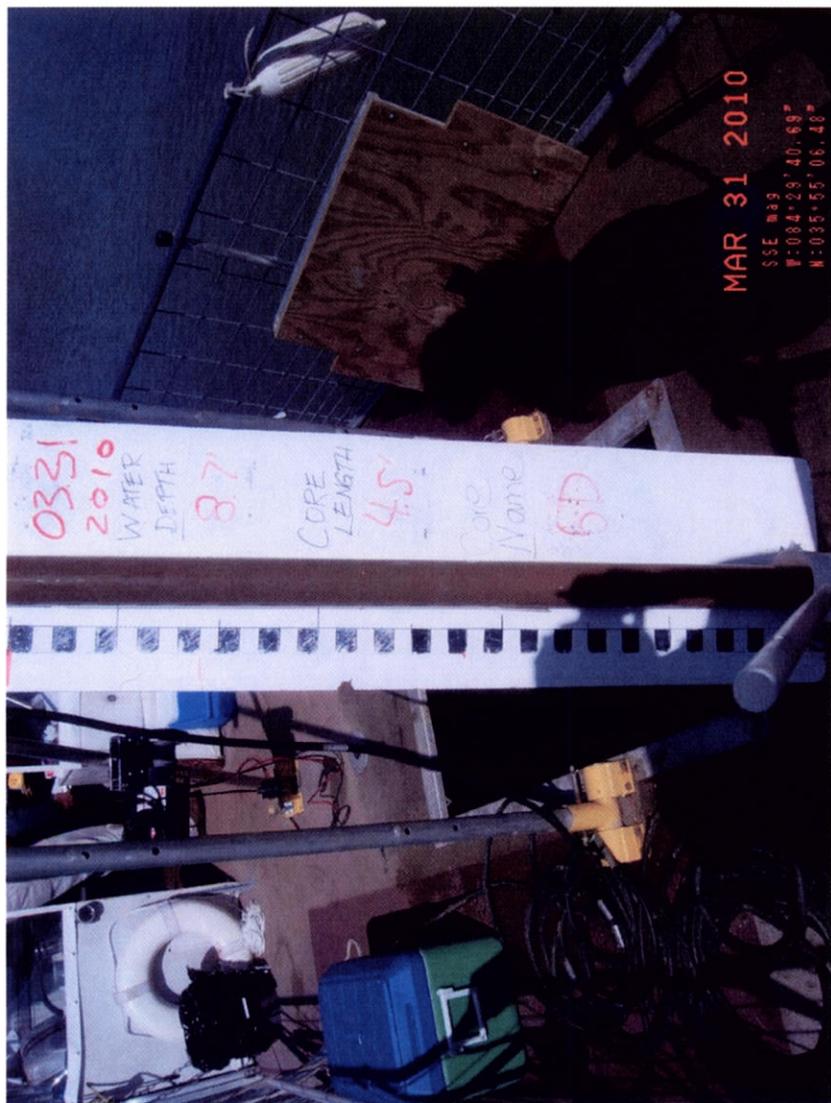
R0010429



R0010430



R0010431



R0010432



R0010433