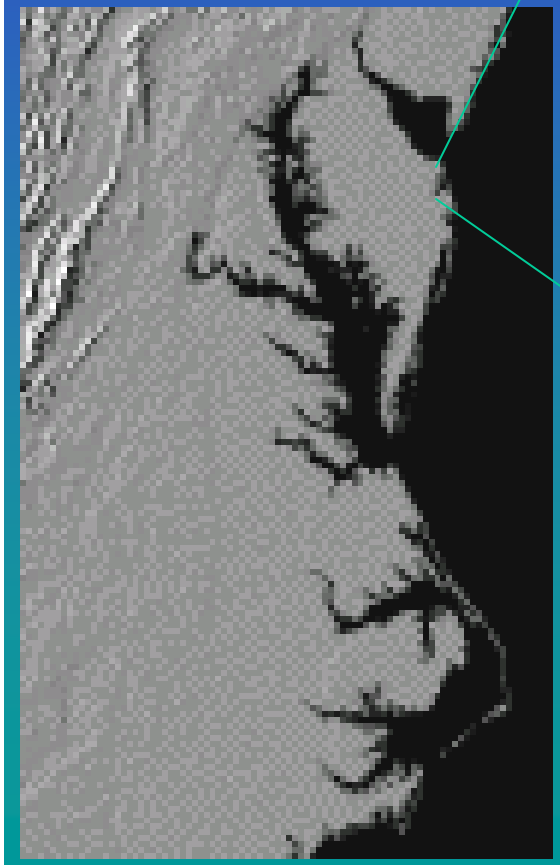

Subaqueous Soil Work at Rehoboth Bay
UNIVERSITY OF
MARYLAND

Summary

Logistics and Technical aspects of study
Sources of preliminary data
Tools and practices that work…..
And some that don’t
Some images to explain the work

Rehoboth Bay, Delaware

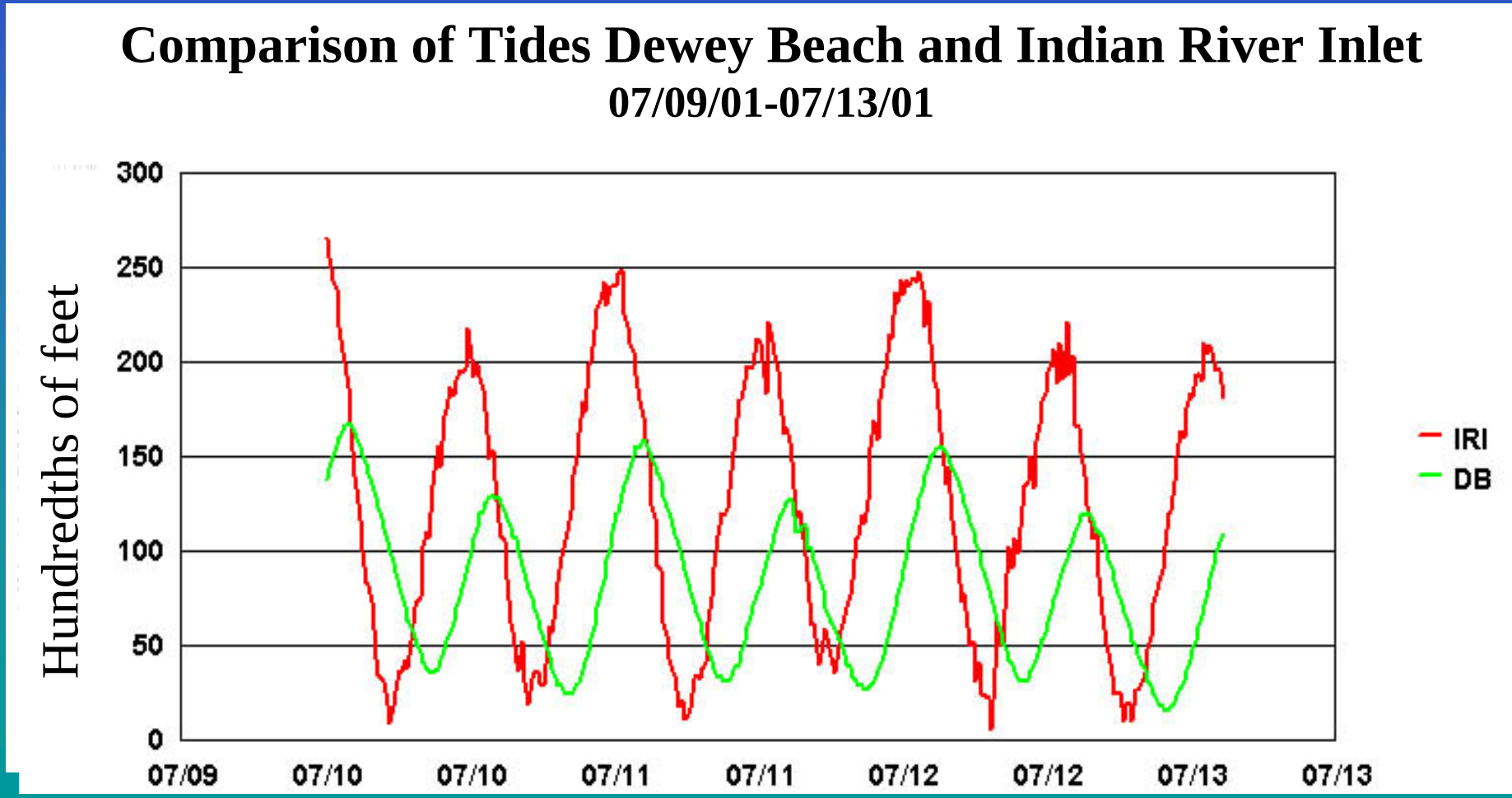


Indian River Inlet

Compile a Bathymetry Map

Methods: Terrain analysis

Need for Tidal Correction,
Tide stage varies by location



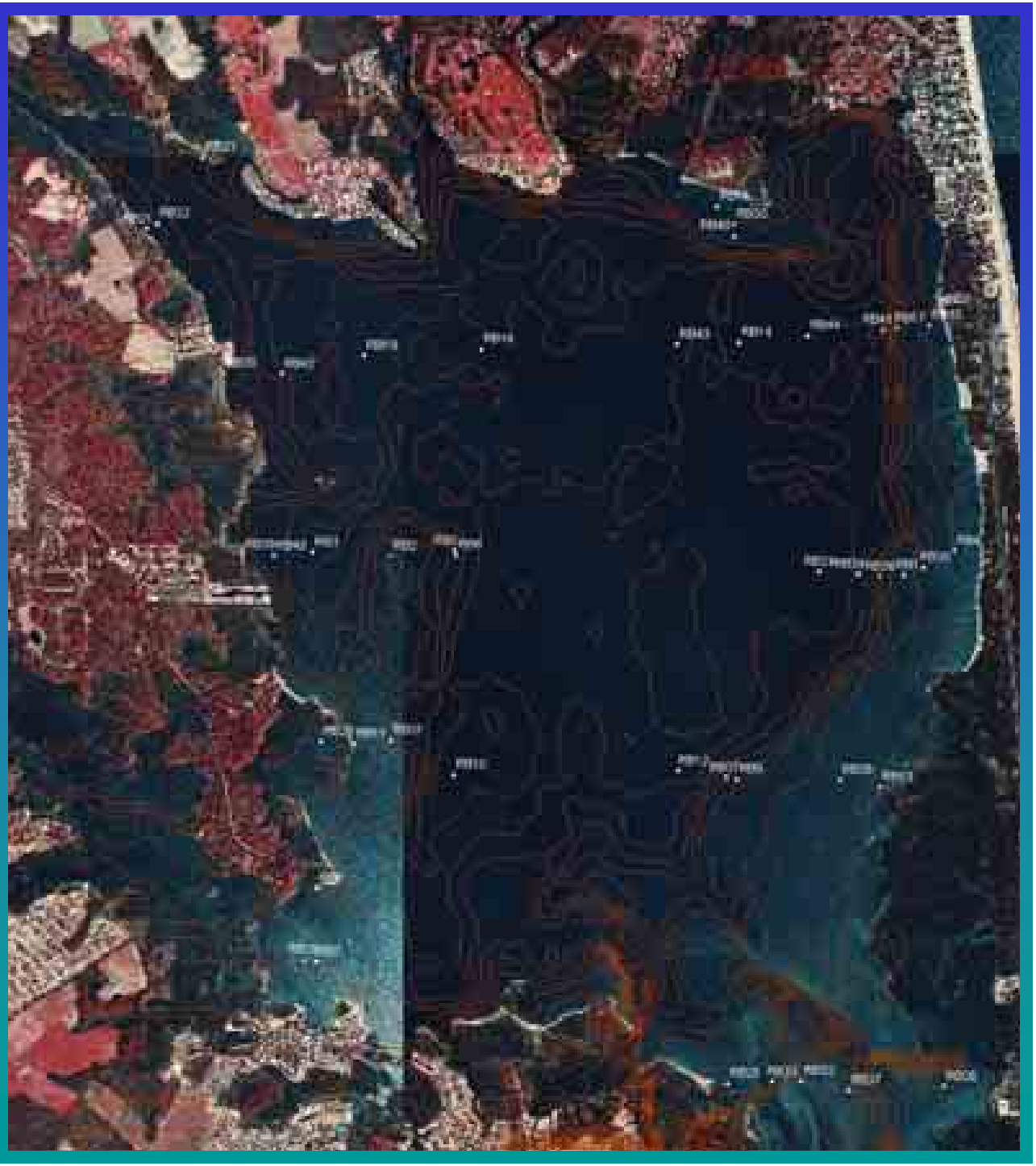
Bathyemtry Transects For Rehoboth Bay Delaware

Current Bathymetry Iteration

Soil Core Collection

Vibracoring awakens birds

Rehoboth Bay Soil Profile Locations



Oxidized Soil Surface

Bioturbation

Worm tubes: common feature of solum in many profiles


~3cm: usually 2-3mm
Oxidized surface deeper
near worm tube and roots

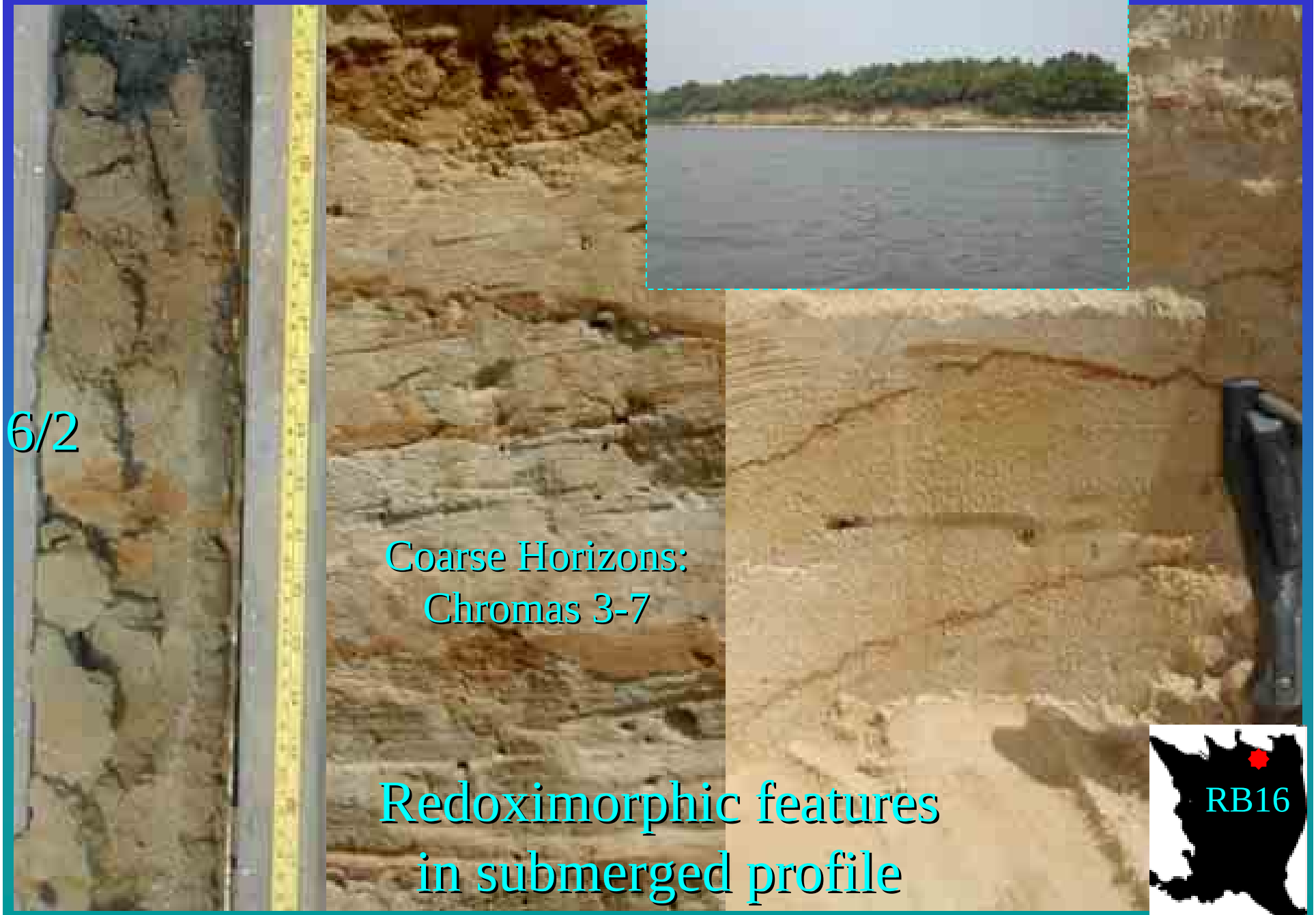
Eroded Cove

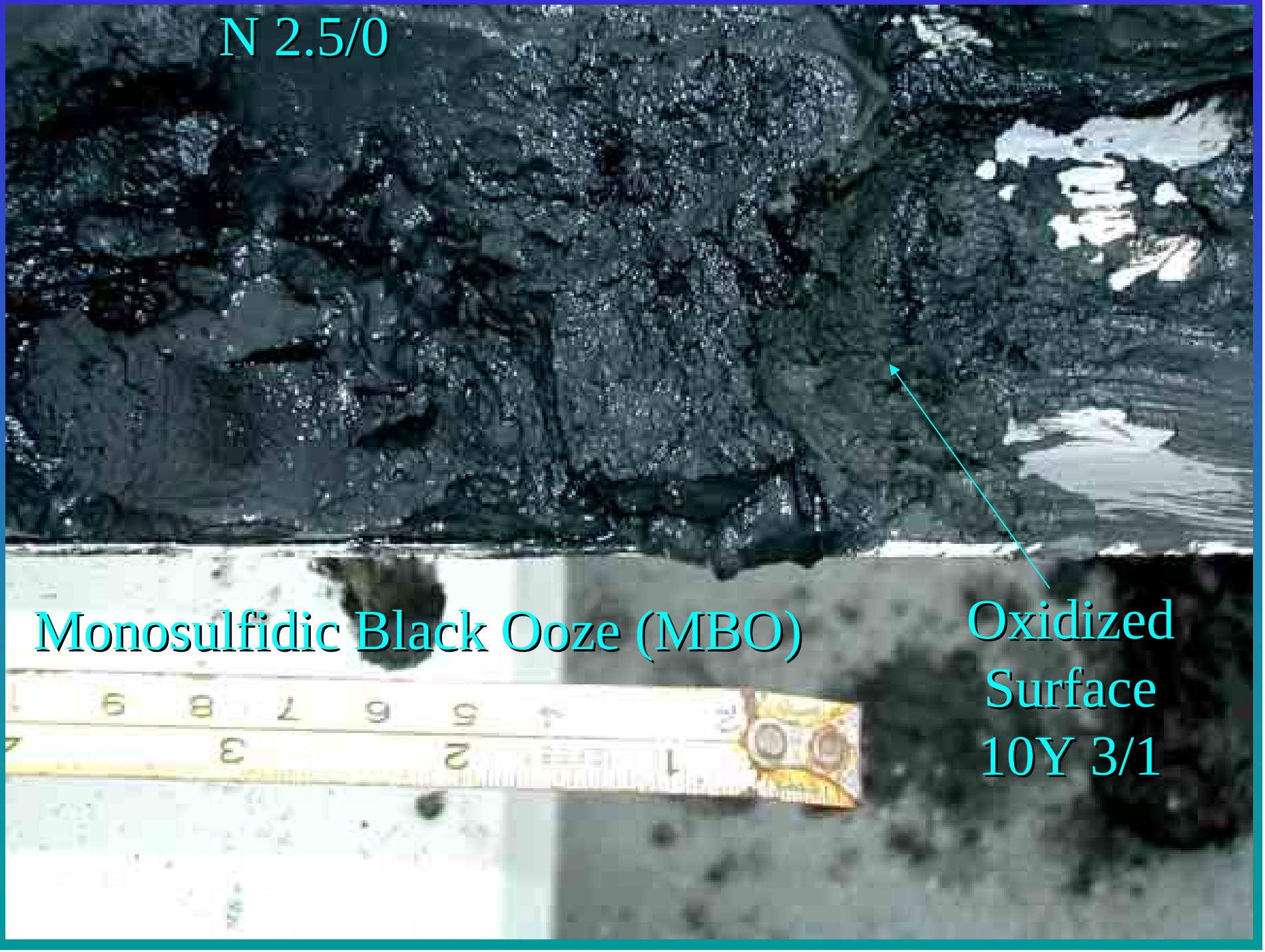
Fluvaquentic Haplofibrist


Relict redox features
+ alpha alpha dipyradyl


RB025


RB011

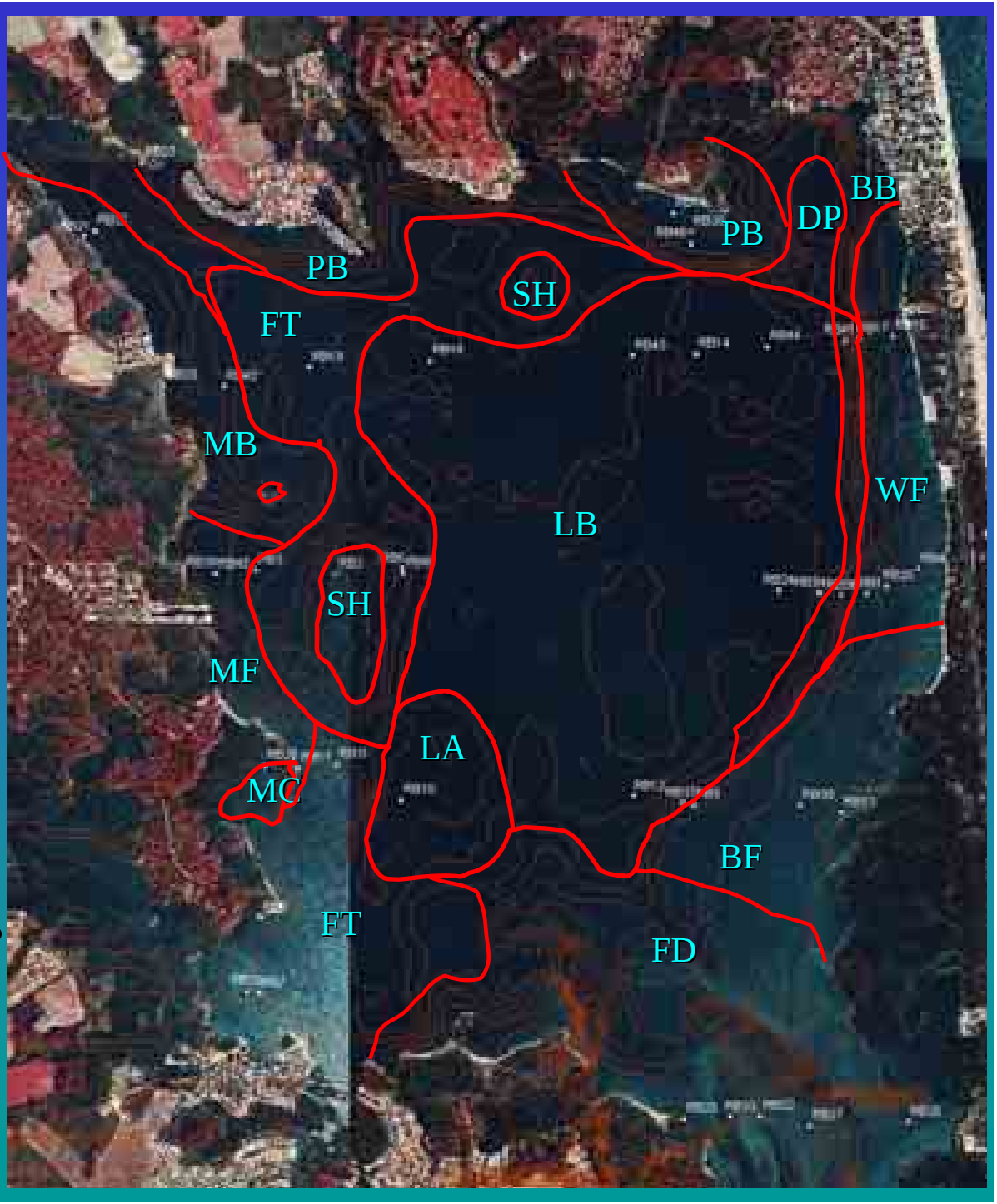

6/2
Coarse Horizons:
Chromas 3-7
Redoximorphic features
in submerged profile
RB16

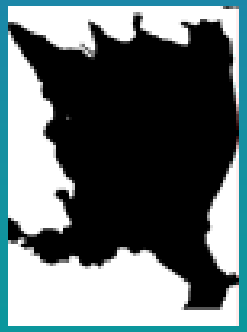

N 2.5/0
Monosulfidic Black Ooze (MBO)
Oxidized
Surface
10Y 3/1

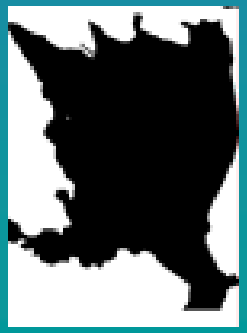
Rehoboth Bay Subaqueous Landforms

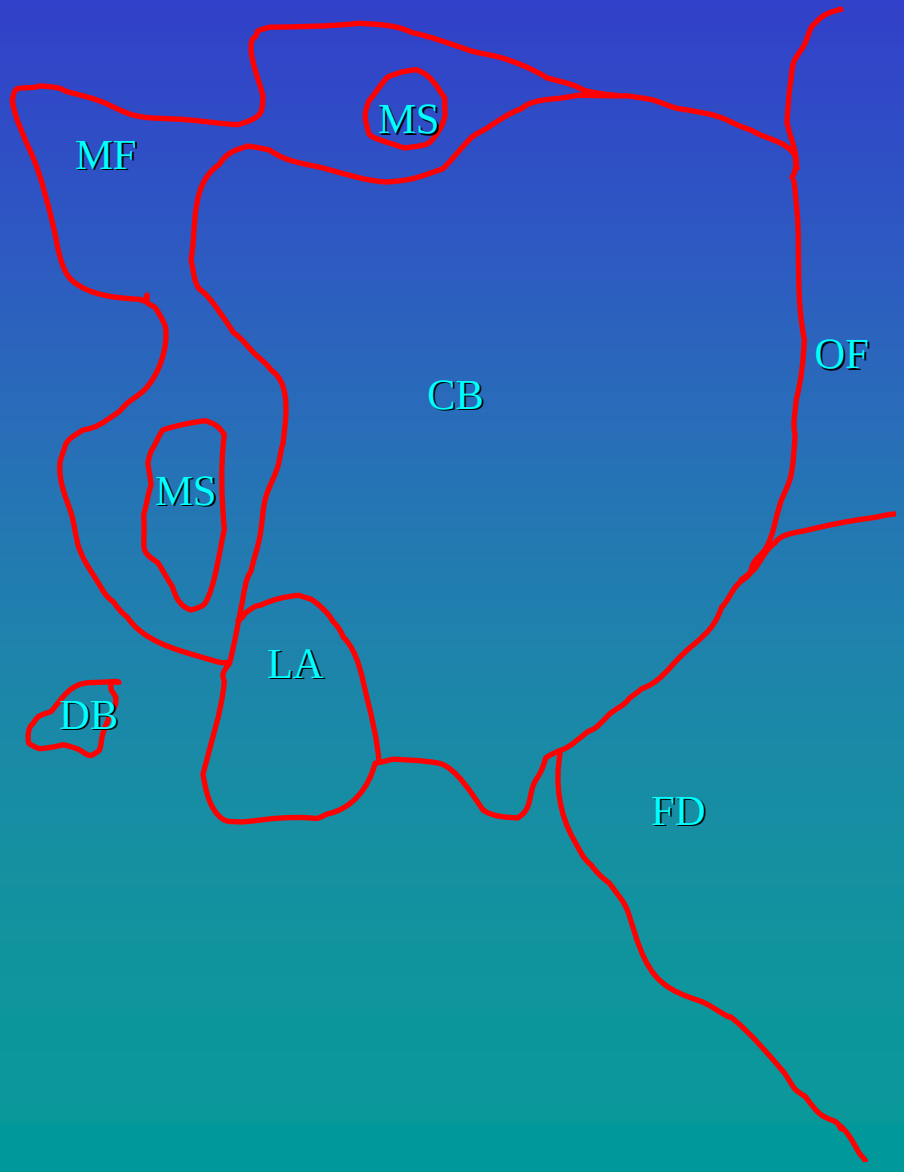
Barrier flat – BF
Dredge pit - DP
Eroded coves – EC
Flood tide delta complex– FD
Fluviomarine Terrace – FT
Lagoonal abyss – LA
Lagoon bottom – LB
Mainland Cove – MC
Shoal – SH
Submerged barrier beach - BB
Submerged depression – SD
Submerged point bar - PB
Submerged mainland beach – SB
Washover fans – WF

Based on Stolt (2001)








MS
MF
OF
CB
MS
LA
DB
FD