Site ID	**14CTB-13**		
Field Crew	Julie Bernier, Alisha Ellis, Scott Adams		
Date	3/30/14 --- JD 089		
Arrival Time	14:19 EDT	Departure Time	15:00 EDT
Latitude	N 38.14065	Longitude	W 075.18987
Water Depth (m)	---		
Handheld GPS used	Garmin GPSmap 76S	GPS Waypoint	021
YSI	Pro Plus	Camera	Nikon AW100, D5200
Sample Type/Sample	**X, Measure, Time**	**Sample Type/Sample**	**X, Measure, Time**
DGPS Positioning			
GPS Session ID	E421		
Occupation Time (min)	30 min		
Surface/Grab		***Sand Gouge Core:***	
Pentrometer (marsh sites only)	1.75	Barrel Length (cm)	
Shear Strength (marsh sites only)	1.5	ITGODS (bottom of weld ≈ top of barrel) (cm)	
Forams (preserved, x2)	√	Recovered Core Length (cm)	
Grain Size	√	Core Catcher Used?	
Stable Isotopes/Metals	√	Distance from GPS	
Distance from GPS	226 cm	Azimuth from GPS	
Azimuth from GPS			
Marsh Push Core		***Water Quality Parameters***	
Pentrometer	1.75	Water Type (Estuary, Marsh, Standing, Marsh Backfill)	Backfill
Shear Strength (kg/cm^2)	1.5	Temperature (°C)	8.9°
Vegetation Type	Spartina alterniflora?	Barometric Pressure (mmHg)	750.3
Barrel Length (cm)	125 cm	Dissolved Oxygen (DO) (%)	30.9
In-the-Ground Inside Depth to Surface (ITGIDS) (cm)	82 cm	DO (mg/L)	3.0
		Specific Conductance (mS/cm)	40.26
In-the-Ground Outside Depth to Surface (ITGODS) (cm)	76 cm	Salinity	25.55
		pH/pH (mV)	6.61 / -10.3
Recovered Core Length (cm)	44 cm	ORP (mV)	-238.0
Distance from GPS	272 cm		
Azimuth from GPS	ENE 060°		
Marsh Auger Core		***Radium Sampling***	
Number of Sections	1	Start Time	
Total Core Length (cm)	45 cm	Stop Time	
Distance from GPS	423 cm	Total Volume	
Azimuth from GPS	ENE 060°	Approximate Flow Rate	

Notes

DGPS rover located 195 cm WSW of SET GPS monument (azimuth from GPS to SET 240°)
Horse activity appears to be very frequent here - marsh grasses across entire area are commonly trampled
Poor penetration with push core and sand auger - hit subsurface sand layer and stop
Attempted 2x push cores, kept 1st attempt with best recovery

Peat auger - core description:
0 - 13 cm --- peat, olive-brown to brown fibric root mat
13 - 40 cm --- peat, olive-brown to greyish brown hemic peat; root fragments decrease in size and content down-core
40 - 45 cm --- sand, greyish-brown muddy sand, with root fragments

Photos

DSCN0933.JPG to DSCN0936.JPG --- N → E → S → W from site
DSCN0937.JPG --- looking NE to DGPS rover and SET (SET GPS monument is in center of plot marked by PVC pipe)

DSCN0938.JPG to DSCN0942.JPG --- abrupt ("cliffed") shoreline at estuary adjacent to site
DSCN0943.JPG to DSCN0949.JPG --- submerged shots in inlet across marsh