



Figure 4.2 CSE Core Locations

4.4. Vibracores. Athena Technologies of Columbia S.C. obtained the vibracores in July 2002 under the direction of geologist from Coastal Planning & Engineering, Inc. The majority of the 5 vibracores were taken in two or three stages. The first stage was to vibrate a 3-inch or 5-inch diameter aluminum tubing into the sediment to a depth of 8 to 12 feet. This was followed by jetting a 3-inch galvanized steel tubing to the depth of recovery and then vibrating the 3-inch galvanized steel tubing into the sediment to a depth of 20 feet. If the first 3-inch galvanized steel tubing attempt did not recover a core of sufficient length, a second 3-inch galvanized steel tubing was jetted to the depth of recovery of the first galvanized steel tubing and then vibrated into the sediment to a depth of 20 feet. Each core was measured and labeled onboard the vessel. At the end of each day, the cores were transported to shore where they were cut lengthwise, visually inspected, and sealed in plastic. One-half of each core was shipped to the University of North Carolina at Wilmington for archiving while the other half was transported to the CPE lab in Boca Raton, Florida for detailed analysis. The layering of the sediment was recorded and samples obtained for grain size analysis from each distinct sediment type in the core. The grain size data for all of the samples obtained from the 5 vibracores is presented in Table 4.2.