



Figure 6. See next page for caption.

Figure 6. Map showing the location of moorings deployed at site LT-A, the location of U.S. Coast Guard Boston Approach Buoy, and the location of sea-floor photographs (see figs. 7A, 7B). The water depth at the mooring site is nominally 32 meters. LT-A is located on the southern flank of a ridge that rises to within about 25 meters of the sea surface. All moorings were located within a circle about 500 meters in diameter. Water depth ranged from 29 to 34 meters.

The map shows sea-floor topography in shaded-relief view colored by backscatter intensity (from Butman and others, 2004). The backscatter intensity is represented by a suite of eight colors ranging from blue, which represents low intensity, to red, which represents high intensity. The shaded-relief image was created by vertically exaggerating the topography four times and then artificially illuminating the relief by a light source positioned 45 degrees above the horizon from an azimuth of 350 degrees. The resulting image displays light and dark intensities within each color band that result from a feature's position with respect to the light source. For example, north-facing slopes, receiving strong illumination, show as a light intensity within a color band, whereas south-facing slopes, being in shadow, show as a dark intensity within a color band. Site LT-A is located in a region of relatively high backscatter intensity. The sea floor at the long-term site is cobbles and gravel.

The 55 individual diffuser heads for the ocean outfall that discharges treated sewage effluent from the Boston metropolitan region into Massachusetts Bay extend across the northern part of this figure. The most notable features are two parallel rows of individual mounds of material; these mounds are the material discarded on the sea floor from the holes drilled for the risers that extend to the outfall tunnel below. The diffuser heads, about 3 meters high and 4 meters in diameter, are located between the rows and are not well resolved at this scale.