

US EPA ARCHIVE DOCUMENT

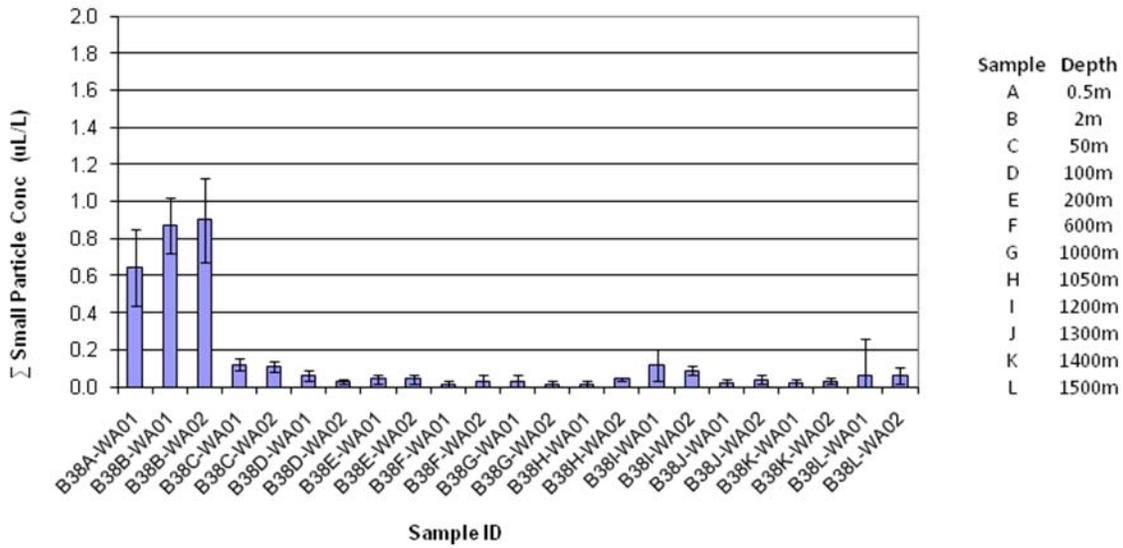
Daily Report: Evidence of Dispersed Oil using Particle Size Distribution Measurements

May 21, 2010

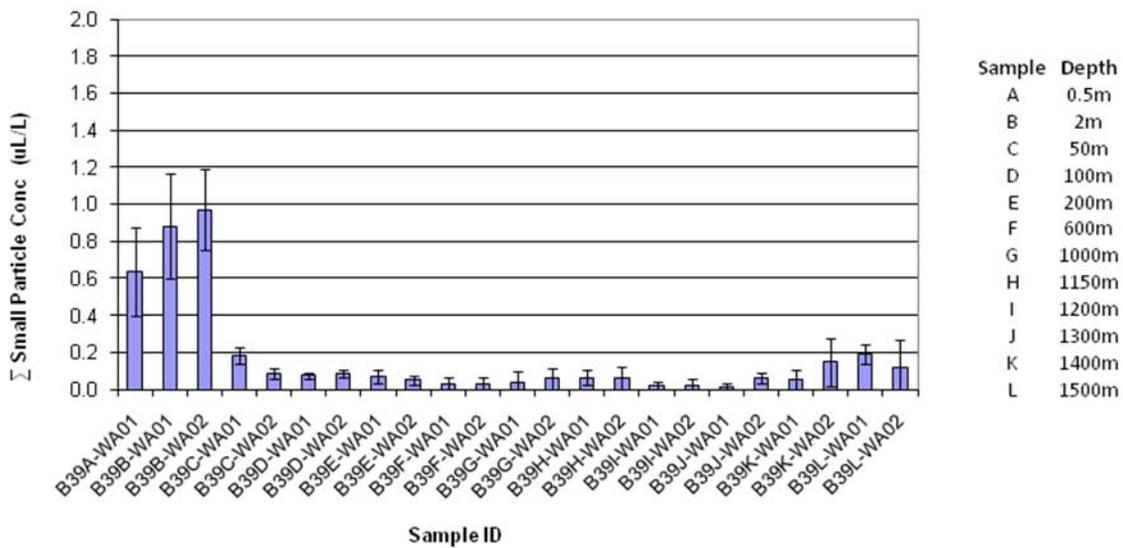
Water samples were collected at four stations for particle size distribution measurements using the LISST-100X particle counter. A total of 92 LISST samples were analyzed, including duplicates. Selected samples were also collected and stored for shore based fluorescence intensity ratio measurements.

Figure 1 presents the small droplet (Σ 2.5 - 60 μ m) particle size data for stations 38 through 41. Elevated concentrations of small particles were detected in the surface samples (0.5 to 2m) at all four stations. Consistent with observations made on May 19-20, slightly elevated concentrations of small particles were observed in the 1200m sample at stations 38 and 41. The increase in particles at this depth also corresponds to data from the *in situ* CTD fluorometer, which could indicate the presence of a plume of dispersed oil at this depth.

Small Particle Concentrations in Station 38



Small Particle Concentrations in Station 39



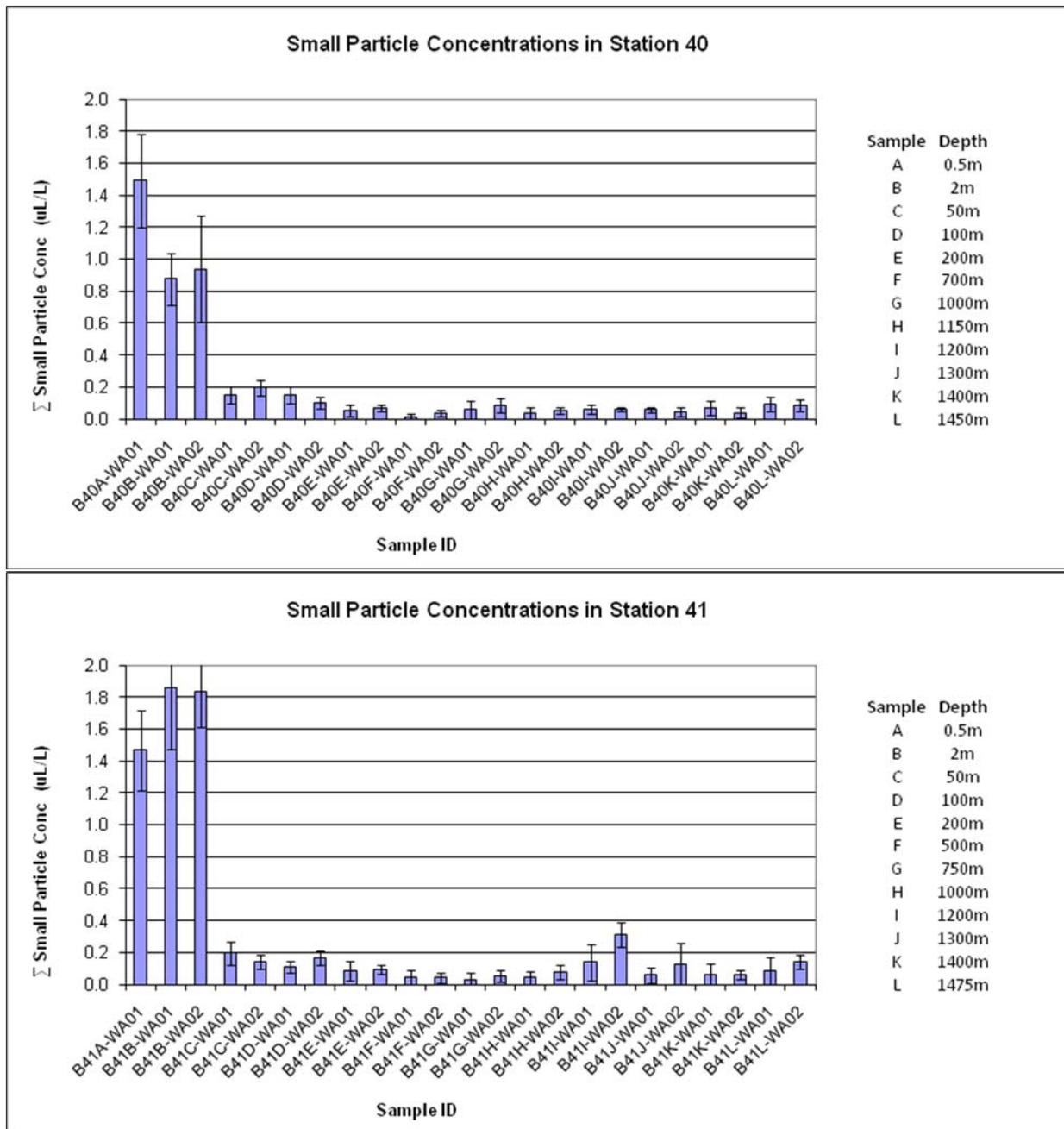


Figure 1: Average small particle concentrations as a function of depth from stations 38 to 41.