Siliciclastic mudstone with rare a) dispersed crinoid grains (cri) and b) siliceous sponge spicules (spsc). Insert illustrates the dolomitized matrix; the dolomite rhombs are the bright white rectangles.

Crinoid (cri) and siliceous sponge spicule (spsc) grainstone. The crinoid grain marked with spsc is probably a dropstone that can be used to orient this thin section. The sponge spicules are shown in transverse (white circle with light tan center) and longitudinal (white cylinder or needle with light tan center) views. Because the vast majority of the sponge spicules in Insert appear as circles, their overall orientation is perpendicular to the plane of the thin section.

Samples 4, 5, and 6 represent the variability in the composition of the siliciclastic mudstone that is immediately adjacent to the crinoid and bryozoan grainstones of Samples 1-3.

There is negligible change in composition and grain size from Sample 1 to Sample 3. There is essentially no secondary dolomitization in any of these three grainstone samples.

Section C1, Detail 1: Petrography. The downdip or distal tip of Bedset 1 appears to be a classic stratigraphic "pinch-out" of the crinoid/bryozoan grainstone (Samples 1-3) into the adjacent siliciclastic mudstone with dispersed crinoid grains (Samples 4-6). Section C1, Detail 1. However, a significant portion of the critical transition zone is, unfortunately, covered and thus the exact nature of this "pinch-out" cannot presently be determined. Based on transition zones observed in Sections C1, Detail 2; C1, Detail 3; D4; G3, and G5 there is a high probability that an interfingered relationship between the grainstone and siliciclastic mudstone exists in Section C1, Detail 1 as well.