

Figure 1. Seismic reflection Profile USGS 95-1 was collected from the *Cape Hatteras* during ODP Leg 164. See Dillon et al. (this volume) for details on data collection and the location of the profile (Line 1 of Fig. 1). Positive values are red; negative, blue.



Figure 2. Photograph of a nearly pure piece of gas hydrate that is ~5 cm × 14 cm in size and coated by a thin veneer of a mud-rich slurry that presumably formed from the adjacent greenish gray nannofossil-rich clay (Section 164-997A-42X-3; 331 mbsf). Note the bubbles within the slurry.



Figure 3. Close-up photograph of a sample of gas hydrate that came from immediately above the piece of hydrate illustrated in Figure 2. White areas are composed of gas hydrate.



Figure 4. Stereophotographic pair showing freshly broken face of a white gas hydrate nodule hosted inside gray carbonate cemented crust (Section 164-996B-1H-3; 2.2 mbsf). The $\frac{3}{8}$ -in (0.95 cm) wrench is for scale.

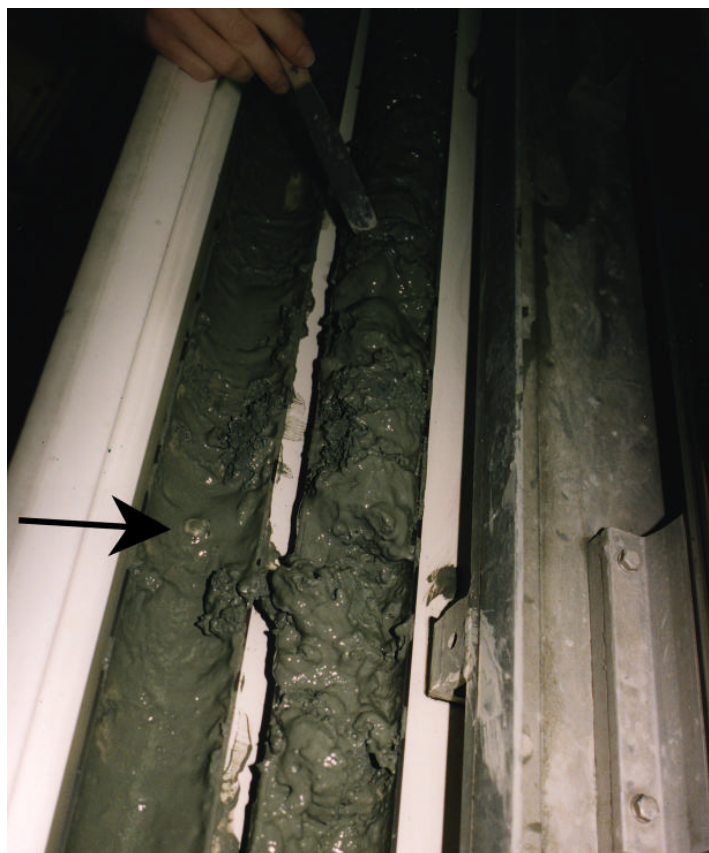


Figure 5. Soupy appearance of upper Pliocene dark greenish gray nannofossil-bearing clay (Section 164-994D-4X-3; 261 mbsf). The arrow indicates the location of a small fizzing piece of gas hydrate.

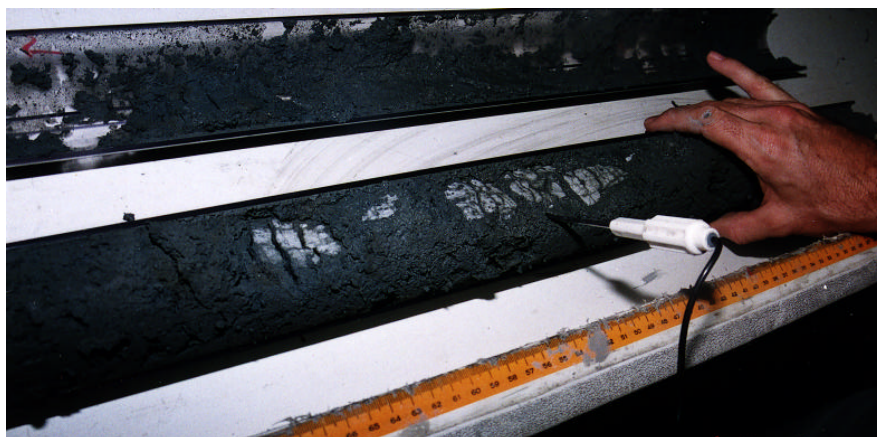


Figure 6. Photograph showing plates of gas hydrate exposed on the surface of Section 164-996D-6H-1 (~42 mbsf). The plates of gas hydrate are only a few millimeters thick and are believed to have developed in small fractures.

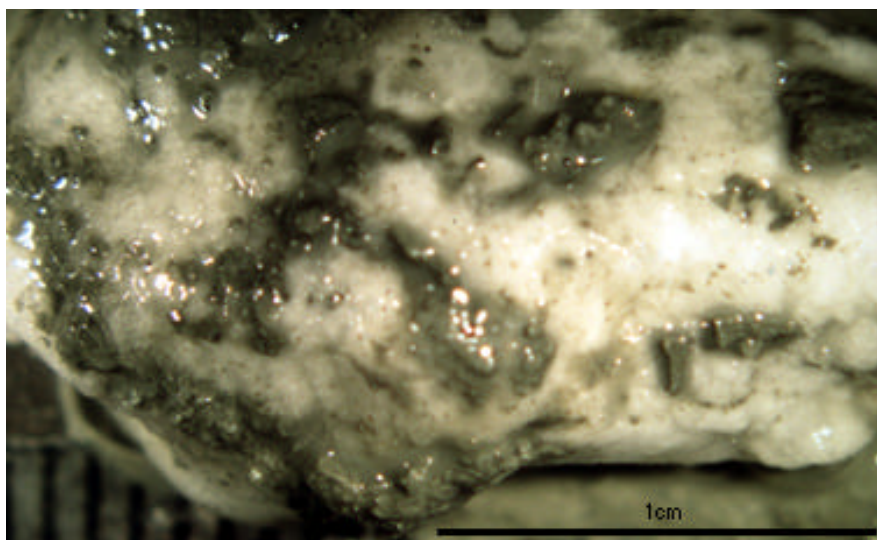


Figure 7. Photomicrograph of gas hydrate from Section 164-997A-42X-3 (330 mbsf). This view was taken after 9 min had elapsed during a photography session documenting the dissociation of gas hydrate. The scale visible in the lower left corner of the photomicrograph is in millimeters.



Figure 8. The face of a freshly broken nodule with a gas hydrate-filled core (Section 164-996B-1H-2; 1.92 mbsf). Note that the gas hydrate is cut by thin sediment-filled veins. The gloved hand is for scale.



Figure 9. Small pieces of gas hydrate surrounded by a greenish gray sediment slurry. The underlying cracker is ~4 cm in diameter.

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