**Seabee and Tuluvak Formations**

(Section measured along bluff labeled “East” in figure 4)

- Delta front
- Channel-mouth bar or distributary-channel system
- Delta front
- Delta front
- Prodelta
- Distal offshore (oxygen depleted)
- Normal fault (~400-ft throw)
- Flooding surface
- Lower to middle shoreface
- Distal lower shoreface
- Lowershoreface systems tract
- Transgressive-systems tract
- Highstand-systems tract
- TOC 1.80%, HI 31, R 0.81%
- TOC 4.99%, HI 412, R 0.58%
- TOC 2.88%, HI 347, R 0.64%
- Parallel lamination (shale)
- Parallel lamination (mudstone)
- Shell hash
- Mudstone ripups
- Current ripples
- Wave ripples
- Plane-parallel lamination
- Irregular stratification
- Hummocky cross-stratification
- Swaley cross-stratification
- Graded bedding
- Tabular-planar crossbedding
- Tabular-tangential crossbedding
- Trough crossbedding

**Nanushuk Formation (Ninuluk sandstone)**

(Section measured along low bluff labeled “West” in figure 4)

- Delta front
- Channel-mouth bar or distributary-channel system
- Delta front
- Delta front
- Prodelta
- Distal offshore (oxygen depleted)
- Normal fault (~400-ft throw)
- Flooding surface
- Lower to middle shoreface
- Distal lower shoreface
- Lowershoreface systems tract
- Transgressive-systems tract
- Highstand-systems tract
- TOC 1.80%, HI 31, R 0.81%
- TOC 4.99%, HI 412, R 0.58%
- TOC 2.88%, HI 347, R 0.64%
- Parallel lamination (shale)
- Parallel lamination (mudstone)
- Shell hash
- Mudstone ripups
- Current ripples
- Wave ripples
- Plane-parallel lamination
- Irregular stratification
- Hummocky cross-stratification
- Swaley cross-stratification
- Graded bedding
- Tabular-planar crossbedding
- Tabular-tangential crossbedding
- Trough crossbedding

**EXPLANATION**

- Average grain size
  - Granule
  - Very coarse sand
  - Coarse sand
  - Medium sand
  - Fine sand
  - Very fine sand
  - Silt
  - Clay
  - Shale
  - Mudstone
  - Very fine grained sandstone
  - Fine-grained sandstone
  - Medium-grained sandstone
  - Width of graphic section represents average grain size of beds

**Bentonite**

**Organic Geochemical Analysis**

- TOC, total organic carbon, in weight percent
- HI, hydrogen index
- R, mean vitrinite reflectance, in percent

**Composite Stratigraphic Section and Gamma-Ray Profiles of Strata Exposed at Umiat Mountain, Northern Alaska (Lat 69.388° N., Long 151.995° W.)**

**U.S. DEPARTMENT OF THE INTERIOR**

**U.S. GEOLOGICAL SURVEY**

**PROFESSIONAL PAPER 1709–B**

**PLATE 1**

**COMPOSITE STRATIGRAPHIC SECTION AND GAMMA-RAY PROFILES OF STRATA EXPOSED AT UMIAIT MOUNTAIN, NORTHERN ALASKA (LAT 69.388° N., LONG 151.995° W.)**