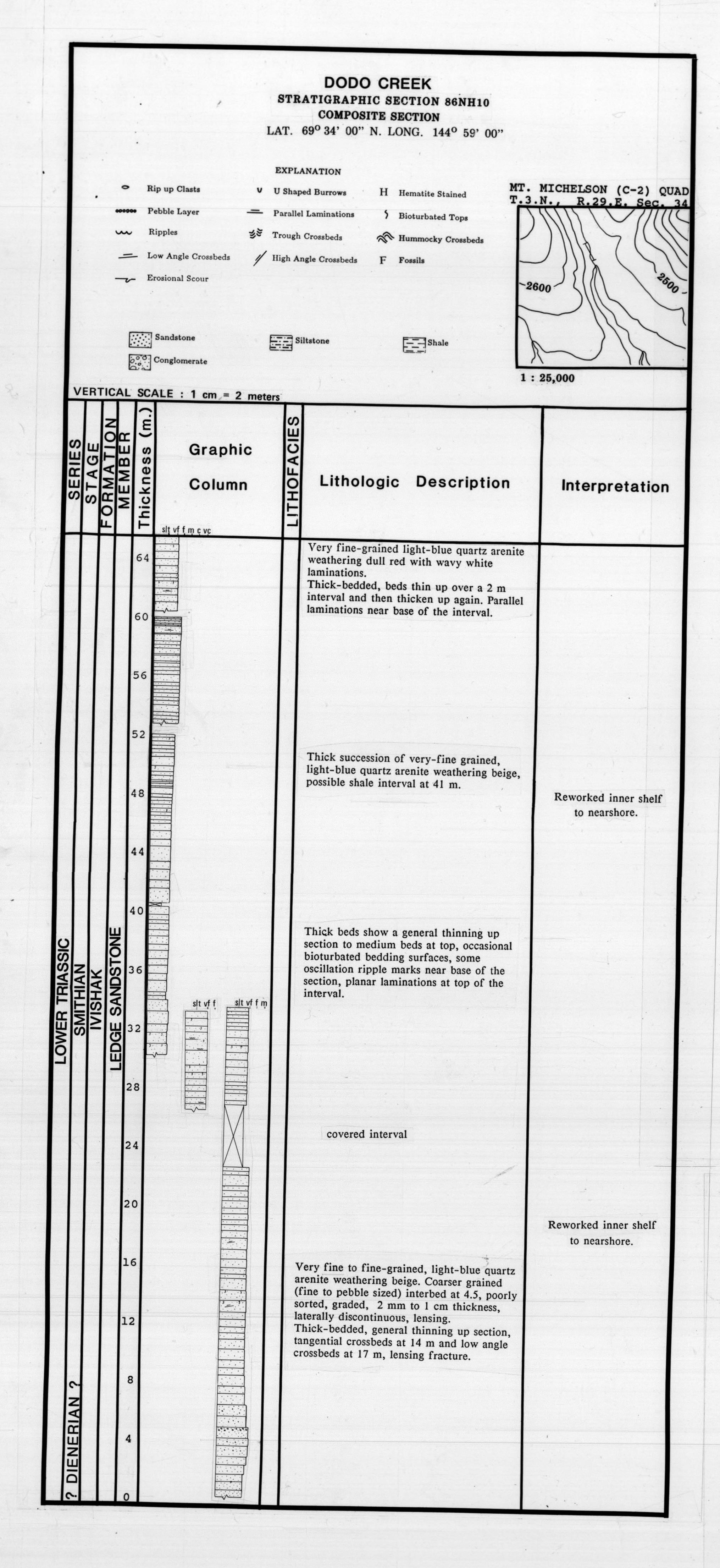
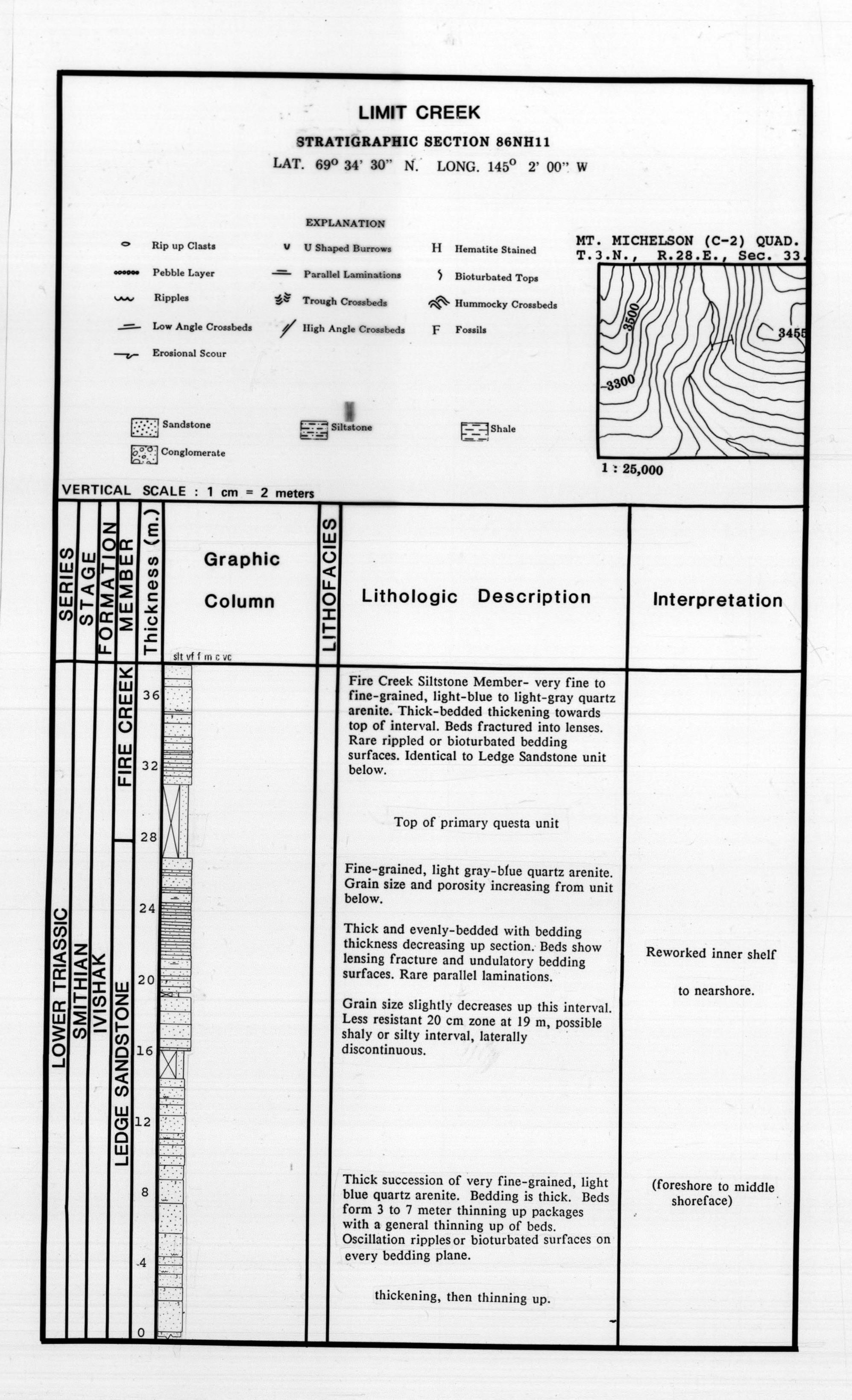
IVISHAK FORMATION MEASURED SECTIONS ARCTIC NATIONAL WILDLIFE REFUGE, NORTHEASTERN ALASKA

NINA T. HARUN





| | | SUNSET PASS | |
|--|---|--|--|
| | | STRATIGRAPHIC SECTION 86NH07 | |
| | LA | T. 69° 35' 00" N. LONG. 144° 49' 55" W. | |
| | | Parallel Laminations Figure 1: 3.N. Parallel Laminations Figure 2: 3.N. Parallel Laminations Hummocky Crossbeds High Angle Crossbeds Figure 2: 3.N. Siltstone Shale | CHELSON (C-2) QUAD. R.30.E., Sec. 29 25,000 |
| SERIES STAGE ORMATION MEMBER | SCALE : 1 cm = 2 me (a) Graphic Column | Lithologic Description | Interpretation |
| ONE ONE | 24 20 21 20 20 20 20 20 20 20 20 20 20 20 20 20 | very fine grained, light gray quartz arenite weathering bright orange red Thick beds thin upward, abundant ripples. Light gray, very fine grained to fine grained quart arenite weathering beigebrown red. | Reworked inner shelf |
| SMITHIAN SMITHIAN IVISHAK I FDGE SANDST | 12 8 | Thick bedded, coarser grained, thinning and fining upward. Low angle crossbeds, ripples and bioturbated tops. Light gray, very fine grained, quartz arenite weathering beige-dark red. Medium to thick bedded thicken upwards, abundant ripples and bioturbated tops. Rubblecrop - Light gray, very fine grained quartz arenite, hematite stained, abundant medium grained pyrite weathering to hematite. Bedding highly fractured parallel to bedding | to nearshore. |

| | EXPLANATION MT. MICHELSON Rip up Clasts V U Shaped Burrows H Hematite Stained T.3.N., R.29. | | | | |
|----------------|--|-----------------|--|--|---|
| | | •••• | Pebble Layer | — Parallel Laminations 5 Bioturbated Tops | .3.N., R.29.E., Sec. |
| | | | Ripples Low Angle Crossbeds Erosional Scour | Trough Crossbeds Hummocky Crossbeds High Angle Crossbeds F Fossils | 3400 |
| * | | | Sandstone Conglomerate | Siltstone Shale | 3500 |
| VE | RTIC | 1 | SCALE : 1 cm | 2 meters | 1: 25,000 |
| SERIES | FORMATION | MEMBER | Thickness (m.) Colu | Lithologic Description | n Interpretation |
| | SMITHIAN | | 36 | Fire Creek Member- Fine-grained, lig gray quartz arenite. Thick-bedded, this up section. Highly fractured perpendit to bedding. Rippled and bioturbated bedding planes and crossbedding near of interval. | nning cular |
| | | | 28 | | |
| LOWER TRIASSIC | IVISHAK | LEDGE SANDSTONE | 8 4 0 56 52 | Rubblecrop- very fine-grained light be quartz arenite. Succession of thick-bedded, light blue fine-grained grained quartz arenite. Abundant ripple marks, some low angicrossbeds. Some beds interrupted by thin shale par or siltstone beds. Near base of interval, thin 10 cm thick shale interval contains 2-3 cm thick si bed that pinches out laterally. Shale interval laterally continuous. Overlying sandstone bed contains abunshale rip up clasts. Interbedded siltstone and shale identical lithologically to below. Siltstone beds increase as shale intervals thin up section. Siltstone beds mark base of 1.5 m fining packages into predominantly shale beds. General coarsening up section. | Reworked inner shot to nearshore. le tings k ltstone Open marine- beneath weather wave base on. |
| | | | 24 24 24 24 24 24 24 24 24 24 24 24 24 2 | Thick succession of interbedded siltston and shale. Red siltstone thinly-laminated, contains abundant pyrite nodules. Black gray fissile shale, weathering light | |
| GRIESBACHIAN | | | 16 12 8 Marian 8 Marian 8 10 Marian 8 M | Thin-bedded siltstone 1-2 cm beds alter with 10-20 cm thick shale intervals. Slightly thicker siltstone beds define 1-2 packages. | rnate |
| | HOOKA | | 4 cover | Ikiakpauruak Member-Echooka Formation Black to gray silty to very fine-grained sandstone, weathering light gray, medium bedded. | |

