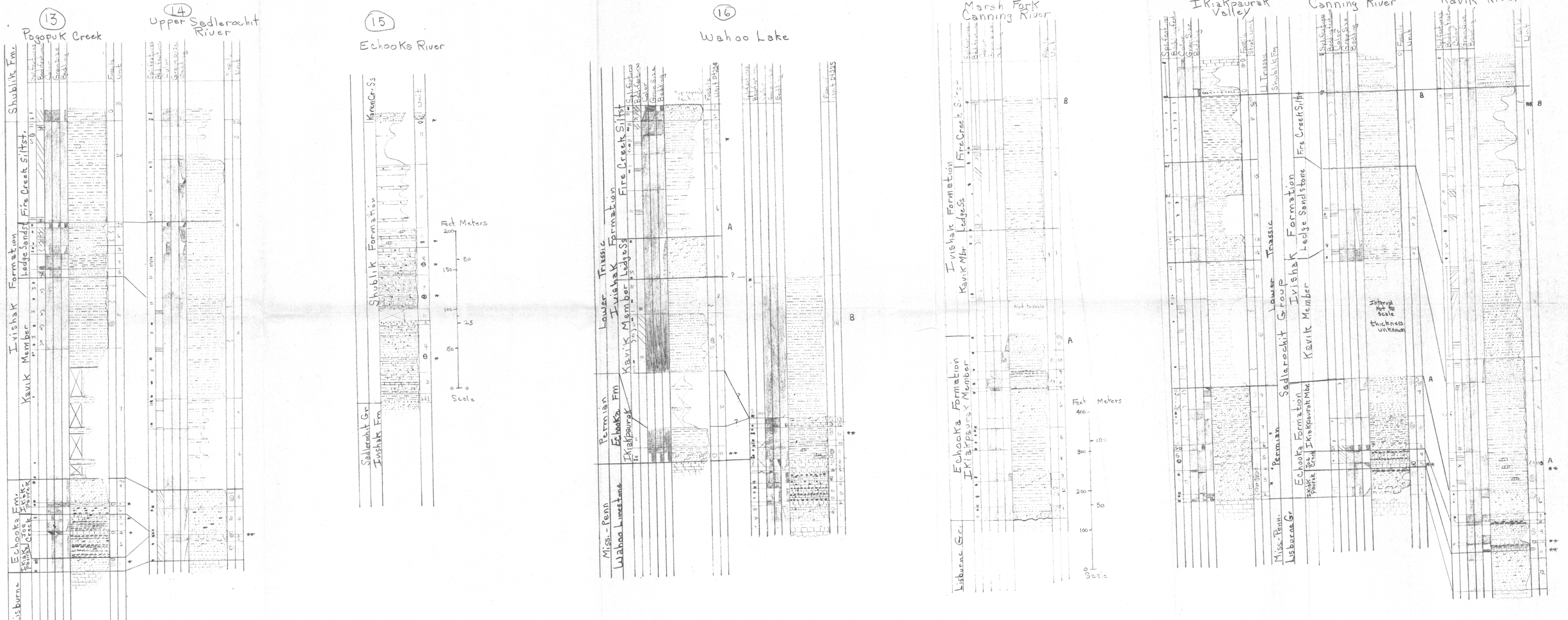
DEPARTMENT OF THE INTERIOR
UNITED STATES GEOLOGICAL SURVEY

OPEN—FILE REPORT 84-331
SHEET 2 OF 2



Introduction

Sections of Late Paleozoic and Mesozoic rocks were measured as part of the geologic investigations of the Mount Michelson quadrangle in 1969 to 1971. Some of the sections have been published in generalized form (Detterman 1974, 1976; Detterman and others, 1975). The sections presented here, in greater detail, are of the source beds and reservoir rocks that underlie the coastal plains a few miles north of the mountains in what may be a potential major petroleum province. All sections were measured with a Jacob's staff, and are plotted at a scale of 1 in to 100 ft, except for sections 5 and 15; section 5 is plotted at 1 in to 200 ft, and 15 is plotted at 1 in to 50 ft.

The location map shows the year the section was measured and the station number. Parts of a composite section are marked by the letters A and B; the same letters are used along the columnar sections to indicate where each was measured. Fossils collected from these sections and marked by an asterisk (*) are listed in Detterman and others, 1975 (p. 42-45). Fossils marked by a double asterisk (**) are listed below. All other indicators mean fossils are present but not collected. The geologic map for the area is by Reiser and others (1971).

References cited

Detterman, R. L., 1974, Fence diagram of the Sadlerochit Formation, northeastern Alaska: U.S. Geological Survey Miscellaneous Field Studies Map MF-584.

_____1976, Lithofacies fence diagram for the Philip Smith Mountains quadrangle and adjacent areas, northeastern Alaska: U.S. Geological Survey Miscellaneous Field Studies Map MF-744.

Detterman, R. L., Reiser, H. N., Brosgé, W. P., and Dutro, J. T., Jr., 1975, Post-Carboniferous stratigraphy, northeastern Alaska: U.S. Geological Survey Professional Paper 886, 46 p.

Reiser, H. N., Brosgé, W. P., Dutro, J. T., Jr., and Detterman, R. L., 1971, Preliminary geologic map, Mount Michelson quadrangle, Alaska: U.S. Geological Survey Open-File Report 71-490, scale 1:200,000.

List of fossils

Section 3.
Unit 2. Reticulatia sp., Muirwoodia sp., Neospirifer striato-paradoxus (Toula), Spiriferella sp.
Unit 3. Megousia weyprechti (Toula), Waagenoconcha sp., Spiriferella saranae (de Verneuil).
Unit 4. Megousia weyprechti (Toula), Neospirifer striato-paradoxus (Toula), Waagenoconcha irginae (Stuckenberg), Spiriferella saranae (de Verneuil).
Unit 6. Permophricadothyris sp., bryozoans.

Section 4.
Kingak Shale. Pentacrinus subangularis var. alaska Springer, Lima sp., Oxytoma sp., Camptonectes sp., Gastropoda, undet.

Section 5.
Shublik Formation. Hoplotropites sp., Trogites sp., Sirenitinid ammonite, Arcestid ammonite, Halobia sp., Monotis sp.

Section 8.
Unit 3. Waagenoconcha sp., Gastropod fragments.

Section 11.
Unit 3. Arctitreta cf. A. kempei (Wiman), Megousia sp.

Section 12.
Unit 5. Ophiceras sp.
Unit 10. Muirwoodia duplex (Wiman).
Unit 11. Choneteina cf. C. superba (Gobbett), Lissochonetes spitzbergianus (Toula), Lioscotella pseudohorrida (Wiman), Stenoscisma cf. S. multiplicata (King), Neophricodothyris asiatica (Chao), Spiriferella saranae (de Verneuil), bryozoans.

Section 14.
Unit 3. Kochiproductus sp., Neospirifer sp., sponge spicules.

Section 16A.
Unit 11. Megousia weyprechti (Toula), Muirwoodia sp., Spiriferella saranae (de Verneuil), Spiriferella keilhavii (von Buch), Punctospirifer sp.

Section 16B.
Unit 11. Megousia weyprechti (Toula), Megousia harlandi (Gobbett), Spiriferella saranae (de Verneuil), Spiriferella sp., Dielasma sp., Cooperina sp.

MEASURED SECTIONS OF LATE PALEOZOIC AND MESOZOIC ROCKS , MOUNT MICHELSON QUADRANGLE , ALASKA

By

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This map is preliminary and has not been reviewed for conformity with U.S. Geological Survey editorial standards and stratigraphic nomenclature