DIAGRAMMATIC COLUMNAR SECTION OF THE SIKSIKPUK FORMATION, EKOKPUK CREEK, CHANDLER LAKE (A-5) QUADRANGLE, NORTHCENTRAL BROOKS RANGE, ALASKA

LAT 68°4' 00" N., LONG 152°45'42" W.

EXPLANATION

ROCK TYPES

- Siltstone — Metasiltstone
- Silty shale — Silty slate
- Shale — Slate
- Dolostone
- Siliceous shale — Siliceous slate
- Chert

STRUCTURES

- Wispy lamination
- Concretion or nodule — May be combined with other symbols
- Vein — May be combined with other symbols

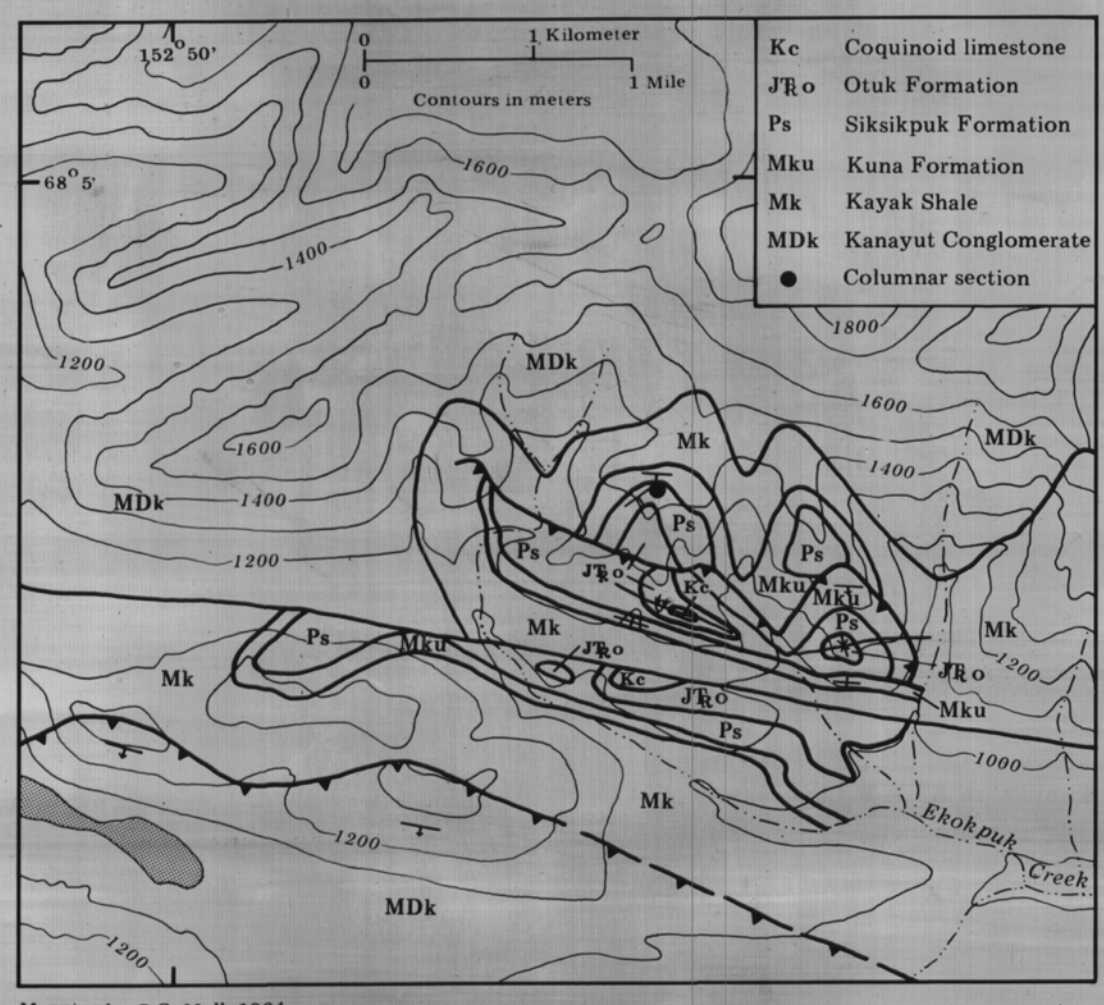
MINERALS

- B Barite
- Calcite
- Dolomite
- Pyrite
- Q Quartz

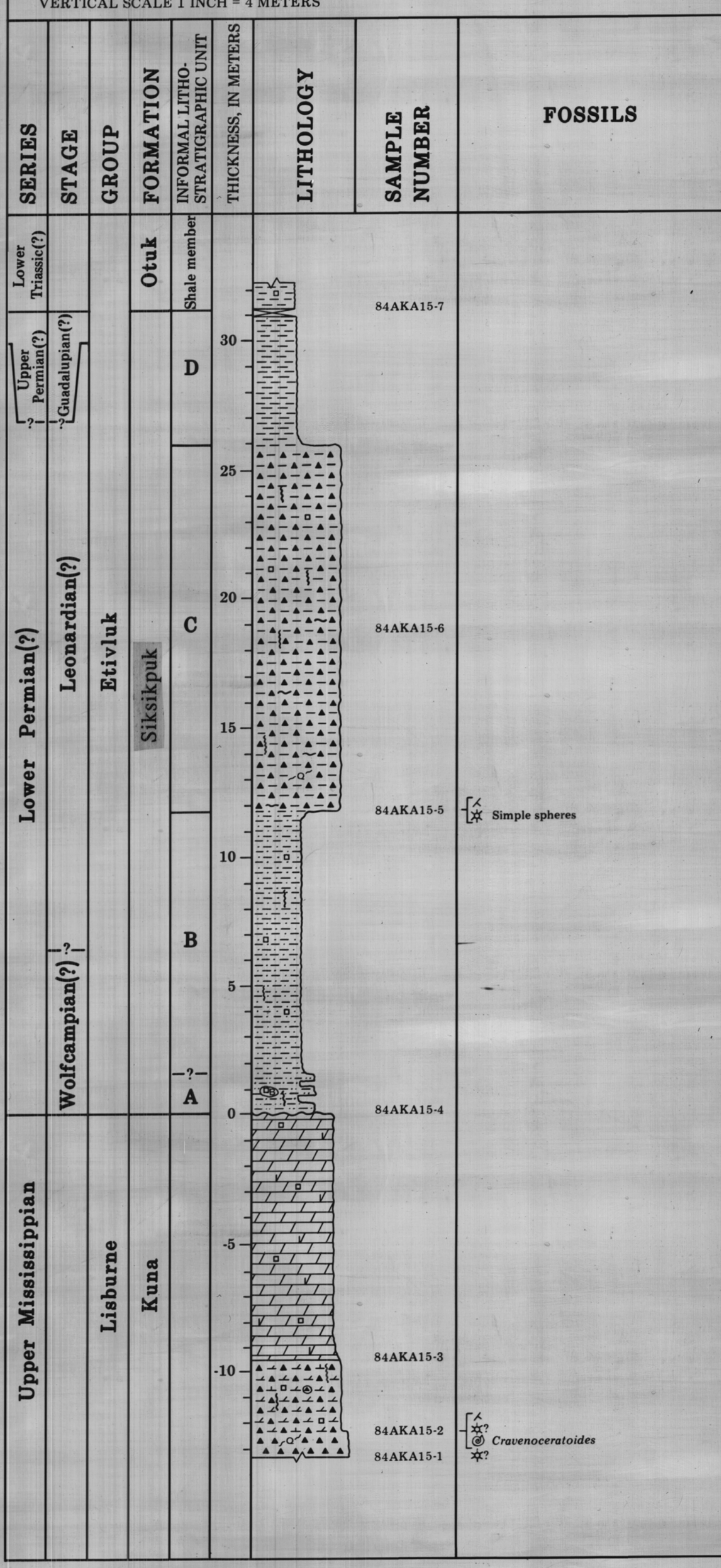
FOSSILS

- Ammonite
- Radiolarian
- Sponge spicule
- Burrow

STRIKE E.-W., DIP 30° S.
VERTICAL SCALE 1 INCH = 4 METERS



Mapping by C.G. Mull, 1984.



DESCRIPTION

SLIGHTLY METAMORPHOSED SHALE RUBBLE, dark-gray to black with satiny sheen, red-brown-weathering in part, pyritic

SLIGHTLY METAMORPHOSED SHALE RUBBLE, medium-gray to green-gray, dark-gray- and light-brown- to light-brown-green-weathering, and platy. Contact with overlying Otuk Formation covered with tundra but probably sharp

SLIGHTLY METAMORPHOSED SILICEOUS SHALE RUBBLE, medium- to dark-gray and gray-green, dark-green-brown- and red-brown- to orange-brown-weathering with white, orange, and yellow-brown specks. Contains pyrite nodules to 1 cm diam. Wispy lamination and burrows (2 cm long by 2 mm wide) preserved; simple radiolarian spheres and sponge spicules (K.M. Reed, written commun., 1985) recovered. Unit quartz veined. At base, breaks with blocky fracture; at top, breaks with spiky fracture. Contact with overlying unit D covered with rubble but probably gradational

SLIGHTLY METAMORPHOSED SILTY SHALE(?)

SLIGHTLY METAMORPHOSED SILTSTONE AND INTERBEDDED SILTY SHALE RUBBLE. Siltstone is medium gray, orange-brown weathering, and cherty; contains pyrite nodules to 1 cm diam that are rimmed with barite and weathering to natrojarosite. Breaks with hackly fracture and forms 2-cm-thick slabs. Silty shale is light gray to green, light-blue weathering in part, and fissile. Contains 1 cm long by 1 mm thick burrows. Unit A probably grades upward to silty shale of unit B

FINE- TO MEDIUM-CRYSTALLINE DOLOSTONE RUBBLE, dark-gray-brown, white-gray-weathering, slabby, pyritic, calcareous in part. Contact with overlying Siksikpuk Formation probably sharp

DOLOMITIC SPICULAR CHERT RUBBLE, medium-gray-brown, light-gray-brown-weathering, flaggy to slabby, calcareous in part; contains pyrite nodules to 1 cm diam and chert concretions to 0.5 cm diam. Along with abundant sponge spicules, also contains a very latest Mississippian goniatite cephalopod (J.T. Dutro, Jr., written commun., 1985) and recrystallized radiolarians(?). Burrows are present and average 0.5 cm diam. Contact with overlying unit probably gradational

CHERT (after limestone?), medium-gray to black. Contains carbonaceous(?) material that appears to be coating fossil fragments (echinoderms?); may also contain radiolarians. Shot with quartz veins. Forms blocky talus. Contact with overlying unit covered with rubble but probably sharp

Section measured down rubbly dip slope with Jacob's staff, and tape and Brunton compass, by K.E. Adams and Mike Condran, July 1984. Thicknesses are approximate.