

Base from U.S. Geological Survey, 1956.
Universal Transverse Mercator projection.

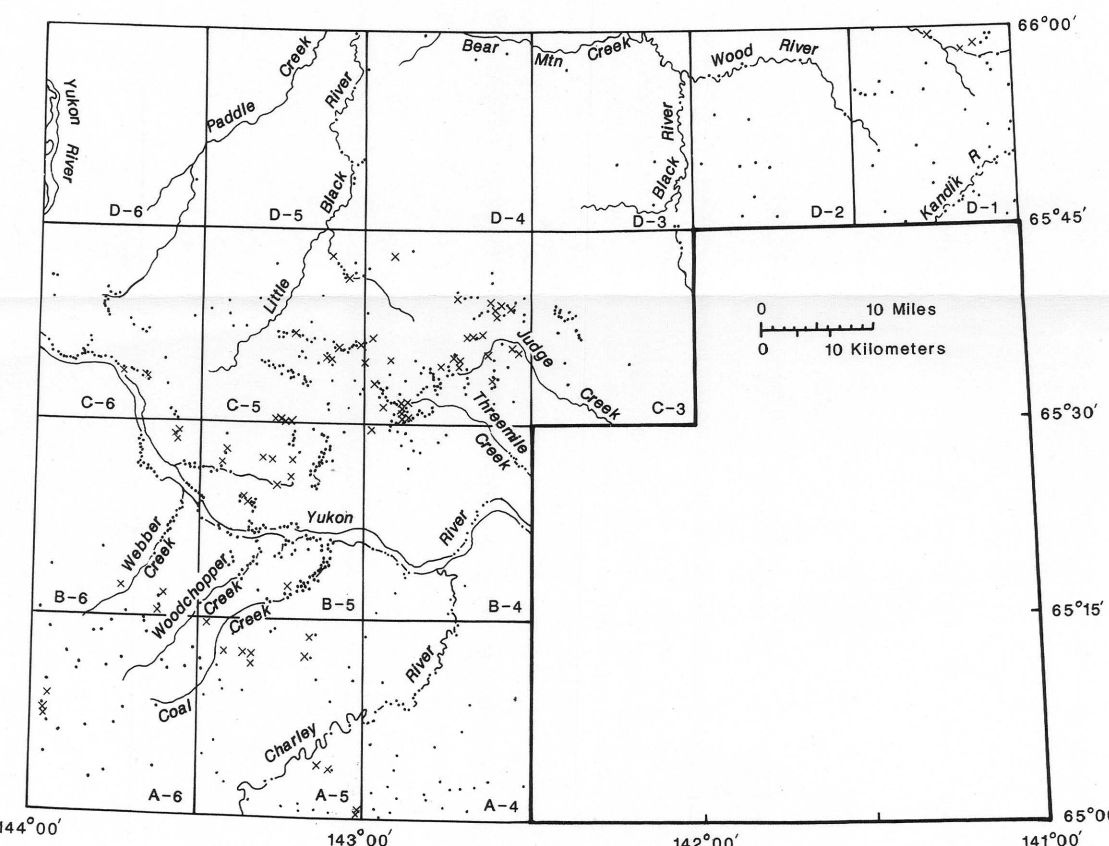
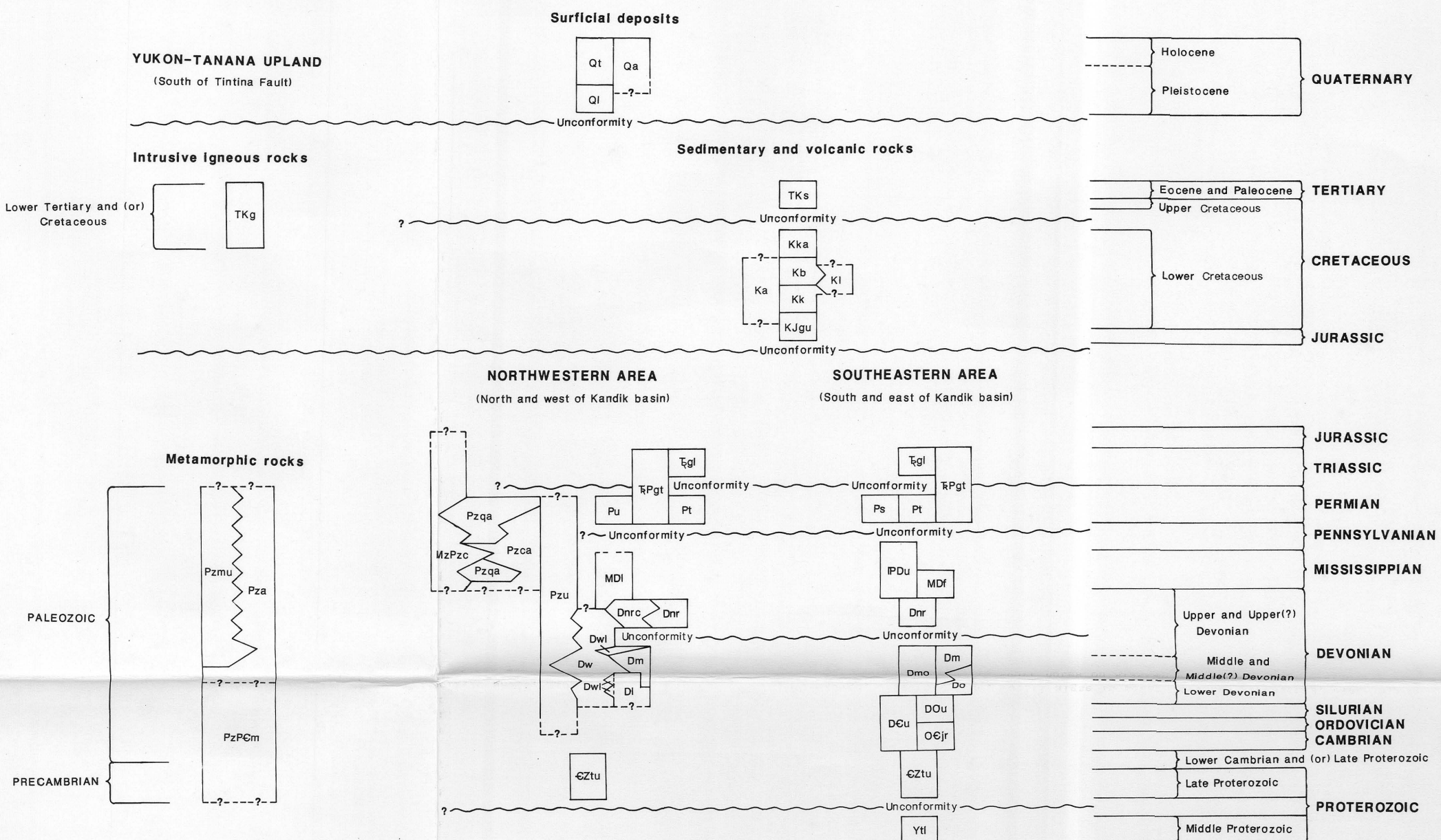


Figure 1. Distribution of field stations in part of the Charley River quadrangle. Dot, locality occupied by Earl E. Brabb, Michael Churkin, Jr., or co-workers, 1960-1980; X, locality occupied by James H. Dover and Ronny T. Miyaoka, 1982-1985.

REINTERPRETED GEOLOGIC MAP AND FOSSIL DATA, CHARLEY RIVER QUADRANGLE, EAST-CENTRAL ALASKA

By
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1988

CORRELATION OF MAP UNITS

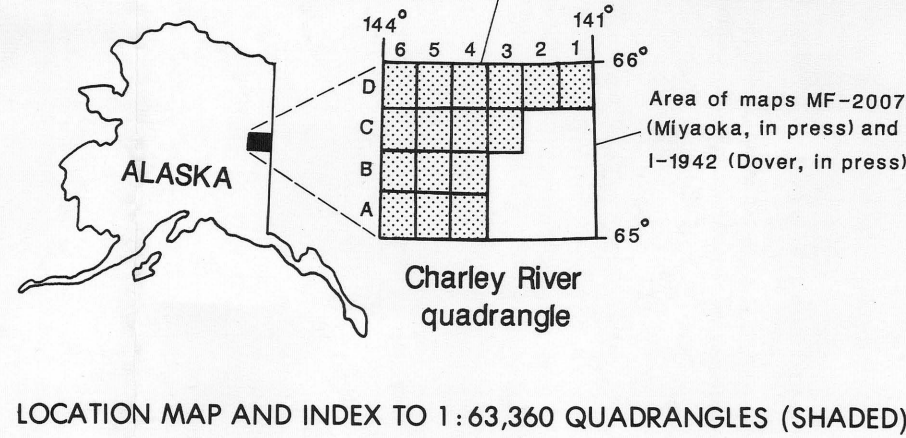


DESCRIPTION OF MAP UNITS

- Quaternary surficial deposits**
- Qa Alluvium (Holocene and Pleistocene)—Silt, sand, and gravel deposited as channel fill, flood plain, alluvial fan, and deltaic deposits.
 - Qd Terrace deposits (Holocene and Pleistocene)—Alluvium in terraces standing as much as 150 m above present stream level.
 - Qe Loose (Pleistocene)—Wind-blown silt and sand; includes alluvium, colluvium, or other surficial materials in places.
 - Qi Tertiary and Cretaceous sedimentary rocks.
 - Qj Mesozoic sedimentary rocks.
 - Qk Kandik Group.
 - Ql Kaskin Group.
 - Qm Argillite (Lower Cretaceous)—Stratigraphic position within Kandik Group is uncertain.
 - Qn Limestone (Lower Cretaceous)—Composed mainly of *Linoceras* prisms; stratigraphic position within Kandik Group is uncertain.
 - Qo Glenn Shale.
 - Qp Upper part (Lower Cretaceous to Middle Jurassic)—Carbonaceous shale, and subordinate siltstone and sandstone; unconformity suspected at base.
 - Qq Lower part (Upper and Middle Triassic)—Thin-bedded, fossiliferous limestone and calcareous shale.
 - Qr Mesozoic and Paleozoic sedimentary rocks.
 - Qs Lower part of Glenn Shale (Upper and Middle Triassic) and Tahkandit Limestone (Permian), undivided.
 - Qt Cretaceous Volcanics (Tertiary and upper Paleozoic)—Intrusive and extrusive rocks of mafic to intermediate composition, and interlayered chert, carbonaceous argillite, and quartzite; subordinate chert, limestone, and sandstone occur.
 - Qu Paleozoic sedimentary and igneous rocks.
 - Qv Tahkandit Limestone (Permian)—Massive bioclastic limestone, locally containing chert-pebble-conglomerate.
 - Qw Step Conglomerate (Permian)—Chert- and quartzite-clast pebble- and cobble-conglomerate and quartz-chert arenite; locally contains limestone lenses with Tahkandit fauna.
 - Qx Sedimentary rocks, undivided (Permian)—Mainly sandstone, siltstone, and quartzite.
 - Qy Quartzite and argillite (Upper Paleozoic).
 - Qz Classic rocks, undivided (Paleozoic)—Mainly carbonaceous argillite, subordinate quartzite, and minor chert; associated with mafic volcanic rocks, and assigned to the Woodchopper Volcanics near Wood River, along the northeastern edge of the map, and contains minor gabbro along Edwards Creek in the west-central part of the map.
 - Qa Marble and ultramafic rocks, undivided (Paleozoic)—Contains abundant chert, siliceous argillite, and tuff in places; typically biotaxylonic or phyllitic.
 - Qb Phyllitic argillite (Paleozoic)—Mainly siliceous argillite or argillaceous chert, locally containing abundant greenstone interlayers and lenses; typically converted to biotaxylonic phyllite.
 - Qc Metamorphic rocks (Paleozoic and Precambrian)—Mainly medium- to high-grade pelitic schists; locally migmatitic.
 - Qd Ford Lake Shale (Upper Mississippian to Upper Devonian)—Laminated siliceous shale and chert.
 - Qe Calico Bluff Formation (Lower Pennsylvanian and Upper Mississippian) and Ford Lake Shale (Mississippian to Upper Devonian)—Rhythmically interbedded limestone and shale, and laminated siliceous shale and chert.
 - Qf Limestone and dolomite (Ordovician and Upper Devonian).
 - Qg Nanton River Formation (Upper Devonian)—Interbedded mudstone, chert-quartzite arenite and wacke, grit, and pebble- to cobble-conglomerate containing quartzite and multicolored chert clasts.
 - Qh Conglomerate (Upper Devonian?)—Contains pebble- to boulder-sized clasts of quartzite and multicolored chert, and subordinate interbedded quartz-chert-arenite and wacke, and siltstone; poorly dated. Previously mapped as Permian Step Conglomerate (Brabb and Churkin, 1969), but tentatively assigned here to a more coarsely conglomeratic facies of the Devonian Nanton River Formation based on lithologic similarities and stratigraphic association.
 - Qi Woodchopper Volcanics (Upper?, Middle?, and Lower Devonian)—Aegyradial basalt, pillow basalt, and aegyradite tuff, and subordinate interbedded chert, argillite, quartzite and limestone.
 - Qj Limestone (Upper?, Middle?, and Lower Devonian)—Occurs as locally mappable lenses in Woodchopper Volcanics.
 - Qk McGinn Hill Chert (Upper to Lower Devonian)—Chert and siliceous argillite; locally contains bioclastic limestone in lower part.
 - Ql McGinn Hill Chert and Ogilvie Formation of Clough (1980), undivided (Devonian).
 - Qm Ogilvie Formation of Clough (1980) (Middle? and Lower Devonian).
 - Qn McGinn Hill Chert (Upper to Lower Devonian) and Road River Formation (Lower Devonian to Lower Ordovician), undivided—Chert, siliceous argillite, and granoblastic schists, mapped only at VABR Cassa; near west-central edge of the map.
 - Qo Road River Formation (Lower Devonian to Lower Ordovician), Hillard Limestone (Lower Ordovician to Lower Cambrian), Adams Argillite (Lower Cambrian), and Fumal Creek Limestone (Lower Cambrian), undivided—Limestone, dolomite, chert, and argillite.
 - Qp Jones Ridge Limestone (Upper or Middle Ordovician to Lower Cambrian)—Massive, oolitic, typically silicified limestone and dolomite.
 - Qq Lower Cambrian? and Precambrian sedimentary and igneous rocks.
 - Qr Tindir Group (Lower Cambrian? to Middle Proterozoic).
 - Qs Upper part (Lower Cambrian? and Late Proterozoic)—Unit of highly varied lithologies and abrupt facies changes; consists mainly of argillite, quartzite, dolomite, dolerite, basalt, red beds, black limestone, carbonaceous conglomerate, and chert.
 - Qt Lower part (Middle Proterozoic)—Intertwining stromatolitic limestone, carbonaceous argillite, and diamictite.
 - Qu Intrusive igneous rocks.
 - Qv Granite rocks (Lower Tertiary and/or Cretaceous).

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LOCATION MAP AND INDEX TO 1:63,360 QUADRANGLES (SHADED)