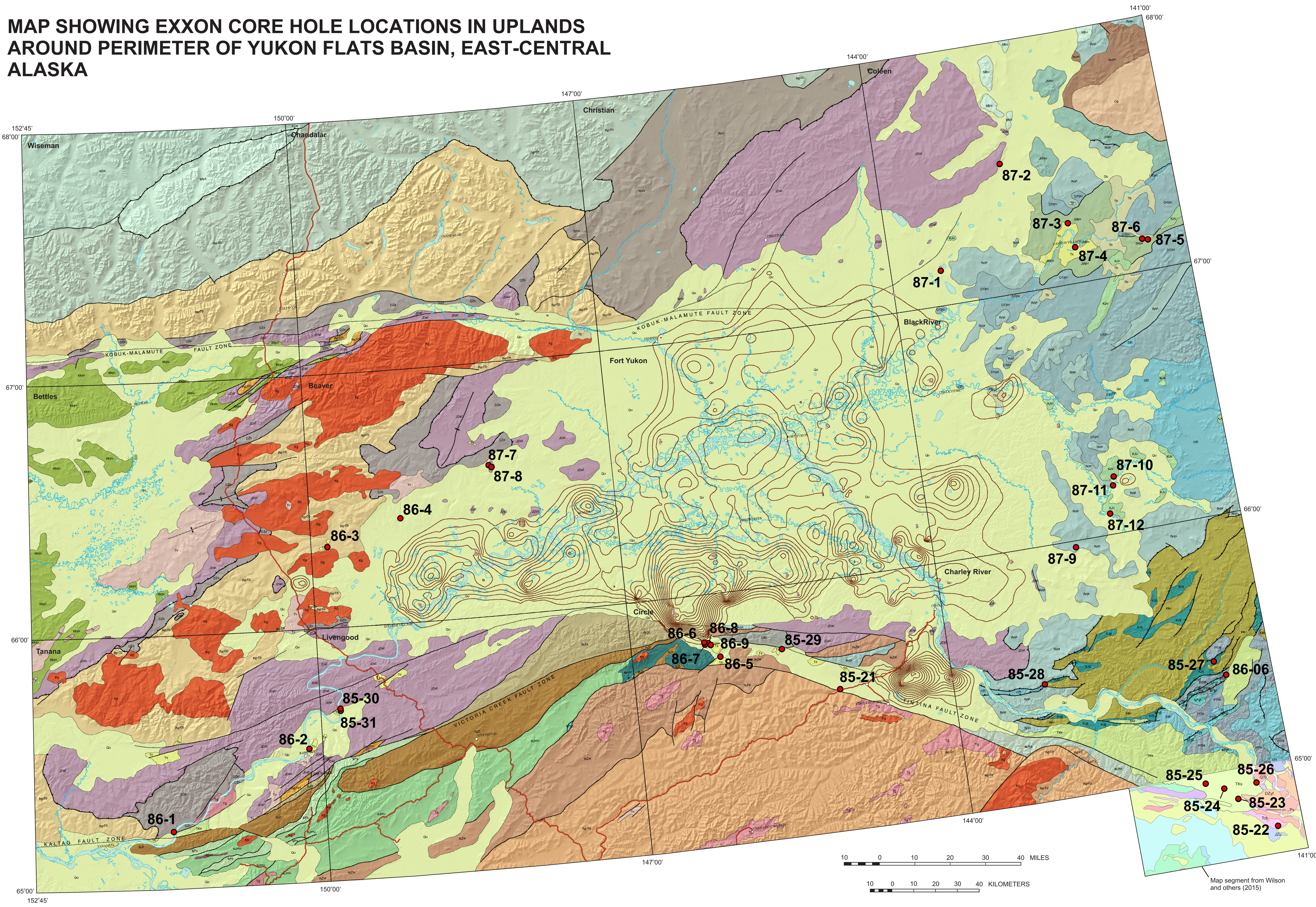


MAP SHOWING EXXON CORE HOLE LOCATIONS IN UPLANDS AROUND PERIMETER OF YUKON FLATS BASIN, EAST-CENTRAL ALASKA



LIST OF MAP UNITS

MAP UNITS FROM TILL AND OTHERS (2006)

UNITS PRESENT IN MORE THAN ONE PROVINCE

- Qu Unconsolidated and poorly consolidated sediments (Quaternary)
- Tb Basalt flows and rare cinder cones (Tertiary)
- Tg Granitic rocks (Tertiary)
- Ts Clastic sedimentary rocks (Tertiary)
- TKs Sedimentary rocks (Tertiary and Cretaceous)
- Kg Granitic rocks (Cretaceous)
- TpGt Glenn Shale, lower part, Tahkandit Limestone, undivided Triassic and Permian
- JDat Angayucham-Tozitna terrane, undivided (Early Jurassic to Devonian)

BROOKS RANGE PROVINCE

- Tv Volcanic rocks
- Kkyu Sedimentary rocks of the Yukon-Koyukuk basin, undivided (Cretaceous)
- KDe Sedimentary rocks of the Endicott Mountains allochthon (Cretaceous to Devonian)
- TpZd Metasedimentary, metavolcanic, and sedimentary rocks of the Doonerak Window (Triassic to lower Paleozoic)
- Mbu Brooks Range sequence, undivided (Mississippian)
- Pzvu Sedimentary rocks of the Venetie terrane, undivided (Paleozoic)
- DZa Metamorphosed sedimentary rocks (Devonian to Proterozoic)
- PzPcm Metamorphic rocks (Paleozoic? and (or) Precambrian?)
- PzPcb Metasedimentary and metigneous rocks of the southern Brooks Range and Ruby geanticline (Paleozoic and (or) Precambrian)
- PzPch Metasedimentary and metigneous rocks of the Hammon terrane (Paleozoic and (or) Precambrian)

PORCUPINE PROVINCE

- Kku Sedimentary rocks of the Kandik basin, undivided (Cretaceous)
- KJg Glenn Shale, upper part (Early Cretaceous and Jurassic?)
- KJu Sedimentary rocks, undifferentiated (Cretaceous? and Jurassic?)
- JMasu Strangle Women Creek sequence, undivided (Jurassic to Mississippian)
- Cg Granite and quartz monzonite (Carboniferous)
- Pzcm Metamorphic rocks (Paleozoic?)
- Pzqs Sedimentary and igneous rocks (Paleozoic?)
- JMpu Younger strata of the Porcupine River sequence, undivided (Jurassic to Mississippian)
- DCpu Older strata of the Porcupine River sequence, undivided (Devonian to Cambrian)
- PCla Sedimentary rocks of the Tatonduk area (Permian to Cambrian)
- Cpt Sedimentary rocks of the Tindir Group (Cambrian? and Proterozoic)

YUKON-TANANA PROVINCE

- KJmu Sedimentary rocks of the Manley basin, undivided (Lower Cretaceous and Jurassic)
- Mzmv Fine-grained sedimentary rocks and tuff (Mesozoic)
- TPa Sedimentary rocks (Triassic(?) to Early Permian)
- MzPza Low-grade metamorphic rocks (Mesozoic? and (or) Paleozoic?)
- DSc Metamorphosed sedimentary rocks (Devonian and Silurian)
- Pzum Ultramafic rocks (Paleozoic?)
- PzZs Sedimentary and igneous rocks corresponding to the older parts of the Schwatka-Rampart area sequence (Paleozoic to Proterozoic)
- PzZl Sedimentary and igneous rocks corresponding to the Livengood area sequence (Paleozoic to Proterozoic)
- PzZw Sedimentary and igneous rocks corresponding to the older parts of the Fairbanks-White Mountains area (Paleozoic to Proterozoic)
- PzPcy Metamorphic rocks of the Yukon-Tanana Upland, undivided (Paleozoic to Precambrian?)

SELECTED MAP UNITS FROM WILSON AND OTHERS (2015)

- QTs Poorly consolidated surficial deposits (Quaternary, Pleistocene, and uppermost Tertiary)
- TKs Conglomerate, sandstone, and lignite (lower Tertiary to upper Cretaceous)
- Tcb Coal-bearing sedimentary rocks (Tertiary, Pliocene to Eocene?)
- JZu Mafic and ultramafic rocks in central, western, and northern Alaska (Jurassic to late Proterozoic)
- DZyf Clastic and carbonate rock of Yukon Flats basin (Devonian to Neoproterozoic)
- Ev Basalt and red beds member (Tindir Group) and Mount Copleston volcanic rocks (Proterozoic)

Legend:

- Contact: depositional, intrusive, or metamorphic
- Fault: dashed where thought to be present in the subsurface
- Thrust fault; teeth on structurally higher side
- Antiform
- Synform; axis plunging west
- Contours in meters representing depth to basement, interpreted inverted gravity model (Phillips, unpub. data)
- Road
- Town or settlement
- 85-25 Core hole and core hole number

Modified from Till, A. B., Dumoulin, J.A., Phillips, J.D., Stanley, R.G., and Crews, J., 2006. Generalized bedrock geologic map, Yukon Flats region, east-central Alaska: U.S. Geological Survey Open-File Report 2006-1304, 1 sheet, scale 1:500,000. <http://pubs.usgs.gov/of/2006/1304/>

Small map segment shown in southeast corner was modified from Wilson, F.H., Hulst, C.P., Mull, C.G., and Karl, S.M., Geologic map of Alaska: U.S. Geological Survey Scientific Investigations Map 3340, 2 sheets, scale 1:584,000. doi: 10.3133/sim3340

Core hole locations provided by R.G. Stanley.