GEOLOGIC RECONNAISSANCE MAP OF THE FAIRBANKS QUADRANGLE, ALASKA

Alfred H. Brooks, Geologist in charge of division.
Topography and triangulation by T. G. Gerdine,
D. C. Witherspoon, R. B. Oliver, J. W. Bagley, and D. L. Reaburn.
Surveyed in 1902, 1903, 1905, 1906, 1907, 1908, and 1910.
Geodetic position from Astronomic Station at Fairbanks, by Coast and Geodetic Survey.
Note: Positions north of 64°20′ and Tanana River are approximately 7″ too far west.

Geology by L. M. Prindle, R. W. Stone, F. L. Hess, B. L. Johnson, F. J. Katz, and Alfred H. Brooks
Surveyed in 1902-1904 and 1906-1909

Scale 250000

1 0 5 10 15 Miles
5 0 5 10 15 20 Kilometers

Contour interval 200 feet.
Datum is mean sea level, assuming an elevation of 810 feet at Eagle
Dotted lines represent approximate topography

1913

APPROXIMATE MAGNETIC DECLINATION VICINITY OF FAIRBANKS, 1903.

ENGRAVED AND PRINTED BY THE U.S. GEOLOGICAL SURVEY

SEDIMENTARY

QUATERNARY

- Qal — *Recent* — **Alluvium** — *Silts, sands, and gravels*
- Qtd — *Pleistocene* — **Terrace deposits** — *Silts, sands, and gravels*

TERTIARY

- Te — *Eocene (?)* — **Undifferentiated** — *Friable conglomerate, sandstone, and clay, with some beds of lignite*

UPPER CRETACEOUS

- Ku — **Undifferentiated** — *Carbonaceous shales, sandstones, and conglomerates*

CARBONIFEROUS

- Cu — *Pennsylvanian (?)* — **Undifferentiated** — *Gray and black shales, siliceous slates, with some cherts*

DEVONIAN AND SILURIAN (?)

- Dt — **Tonzona group** — *Black, red, and green argillites, conglomerates, and sandstone. Locally includes some limestone and cherts*

DEVONIAN TO ORDOVICIAN

- up — **Undifferentiated Paleozoic limestones** — *Chiefly Devonian, with some Ordovician and Silurian*

ORDOVICIAN (?)

- tg — **Tatalina group** — *Made up chiefly of feldspathic fragmental rocks, including conglomerates, sandstones, and graywacken, with slates, limestones, and siliceous beds and cherts. Locally includes a large amount of greenstone consisting chiefly of basic tuffs and lavas*

PRE-ORDOVICIAN (?)

- sc — **Birch Creek schist** — *Consists chiefly of schistose quartzite and quartz-mica schist, with some graphitic siliceous schist, carbonaceous schist, greenstone schist, and a few lenses of crystalline limestone*

IGNEOUS

TERTIARY (?)

- b — **Basalt**
- in — **Intrusives** — *Chiefly gabbro-diorite and granite. There are also diabase dikes in the quadrangle which are not mapped*
- g — **Undifferentiated greenstone** — *Chiefly diabasic and basaltic lavas, tuffs, and breccias, but as mapped includes some basic intrusives and some limestones, cherts, and conglomerate*

- x — **Gold placer**
- \+ — **Metalliferous lode** — *Chiefly auriferous, but including also stibnite and galena deposits*
- * — **Lignite coal deposit**

FOSSIL LOCALITIES

O Ordovician
S Silurian
D Devonian
C Carboniferous

SECTION ON LINE A-B

SECTION ON LINE E-F

SECTION ON LINE C-D

Vertical scale of sections is double the horizontal