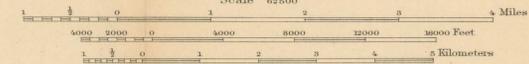


- NAME OF CLAIM OR OWNER
1. Lost Cabin extension
 2. Goodenough
 3. New Home
 4. Valdez
 5. Silver Star
 6. Joe Dandy
 7. Great Northern Development Co. (owner)
 8. Skyscraper
 - 9.
 - 10.
 - 11.
 12. A. Ammann (owner)
 13. Theo. Larson (owner)
 14. Bird Larsen
 15. Bunker Hill
 16. A. Ammann (owner)
 17. A. Ammann (owner)
 18. Mullen
 19. Albert Johnson
 20. Elizabeth
 21. Goodyear
 22. Mary Ellen
 23. Copper King
 24. Great Northern Development Co. (owner)
 25. Great Northern Development Co. (owner)
 26. Young & Barrett (owners)
 27. Young & Barrett (owners)
 28. Valdez (Alaska Copper Corporation)
 29. Bignora
 30. Young & Pierson (owners)
 31. Copper Queen
 32. North Midas Copper Co.
 33. Canning & Centino (owners)
 34. Warner
 35. Cave
 36. Mountain Sheep
 37. Forget-me-not
 38. Mountain Boy
 39. Great Northern Development Co.
 40. Mayflower
 41. London and Cape
 42. War Eagle

GEOLOGIC MAP AND SECTIONS OF THE KOTSINA-KUSKULANA DISTRICT COPPER RIVER REGION ALASKA



EXPLANATION

SEDIMENTARY ROCKS

Recent
Q_g Stream gravel
(Gravel, sand, and silt forming the stream flood plains)

Platensian and Recent
Q_g "Rock glacier"
(Angular debris with few fines, probably representing a final phase of glaciation, possibly in part contemporaneous with some of the terrace gravels)

Q_t Terrace gravel
(Stream-bank gravel, sand, and silt, in part outwash from former glaciers)

UNCONFORMITY

J₁ Light-colored, highly fossiliferous limestone, commonly peppered throughout with tiny black specks

Upper Jurassic
J₂ Sandstone, conglomerate, and shale
(Lower part may possibly correspond to part of the Kotsina conglomerate)

J₃ Kotsina conglomerate
(Dark massive conglomerate with rare shale lenses; locally made up of fine well-sorted pebbles)

UNCONFORMITY

T₁ Kuskulana formation
(Thin-bedded dark limestone with shale partings at base overlain by thin-bedded impure limestone or argillite and shale and this in turn by black shale)

Upper Triassic
T₂ Chittstone limestone
(Massive blue-gray limestone at base, overlain by thin-bedded dark-gray limestone)

Miocenipian
C₁ Strelina formation
(Stratified buff beds and dense fine-grained basalt with argillaceous and sandy shale and thin-bedded chert in minor amounts. Locally contains beds of limestone in its various stages of silicification, the more important of which are magnesian. In a number of places the rocks of the Strelina formation are cut by intrusive masses of diorite and gabbro, commonly more or less altered.)

Limestone beds in the Strelina formation
(Black limestone locally silicified and recrystallized)

IGNEOUS ROCKS

P Porphyritic dikes
(Chiefly quartz diorite porphyry, in part intercorrelated quartz latite)

B Basalt and basalt porphyry dikes
(Dark-gray to black and fine-grained)

q₁ Quartz latite
(Fine-grained light-colored intrusives)

g_d Granodiorite
(Light-gray granular intrusives of medium grain)

ng Nikolai greenstone
(Dark-green fine-grained lava flows with locally granular intrusives of basic diorite and gabbro; all more or less altered)

Formation or stratum

— Strike and dip of strata
— Strike of vertical bed
— Fault
* Gold and silver mine
□ Gold lode prospect
○ Copper lode prospect
1517 Fossil locality with number referred to in text

PERIODS OF GEOLOGIC TIME

QUATERNARY
CENOZOIC

JURASSIC

MESOZOIC

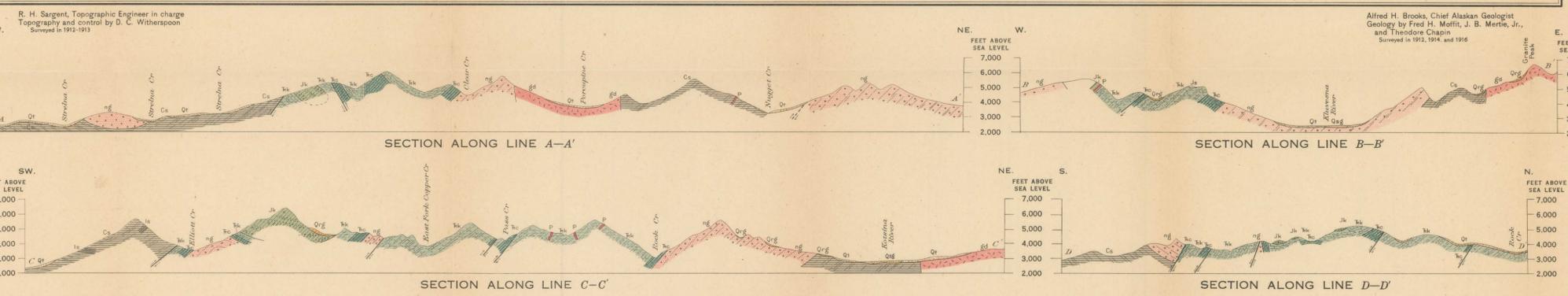
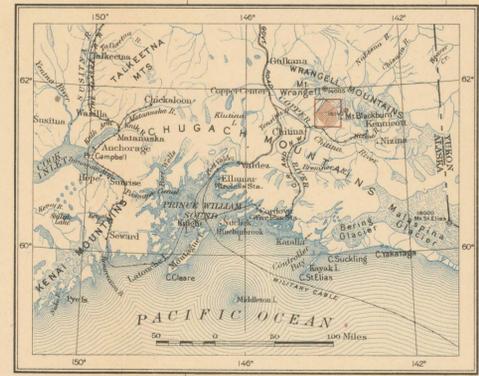
TRIASSIC

CARBONIFEROUS
PALEOZOIC

POST-JURASSIC
MESOZOIC OR YOUNGER

POST-TRIASSIC
MESOZOIC OR YOUNGER

TRIASSIC OR CARBONIFEROUS
MESOZOIC OR PALEOZOIC



R. H. Sargent, Topographic Engineer in charge
Topography and control by D. C. Witherspoon
Surveyed in 1912-1913

Alfred H. Brooks, Chief Alaskan Geologist
Geology by Fred H. Moffit, J. B. Merte, Jr.,
and Theodore Chapin
Surveyed in 1912, 1914, and 1916