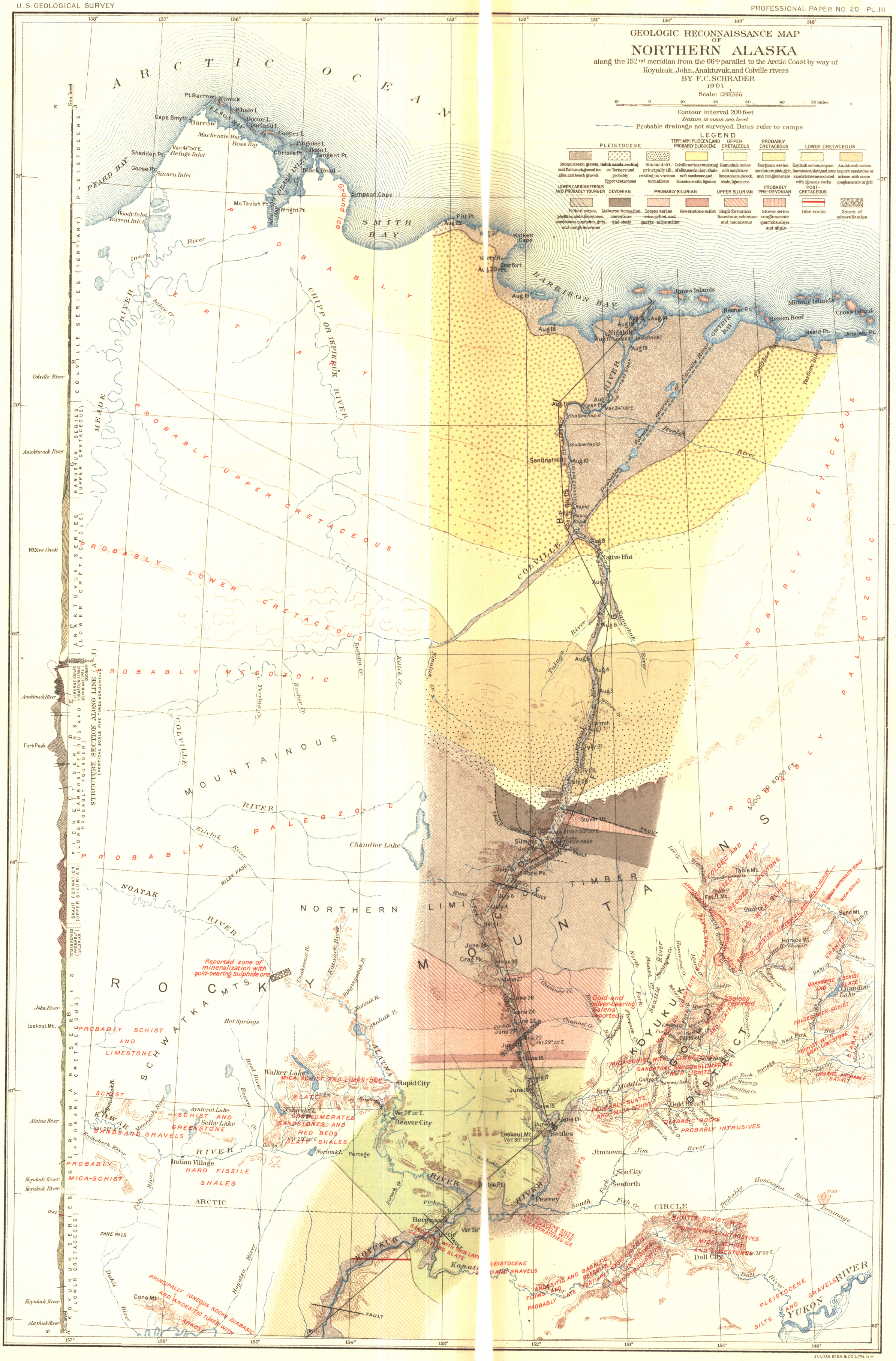
GEOLOGIC RECONNAISSANCE MAP
OF
NORTHERN ALASKA
along the 152nd meridian from the 66th parallel to the Arctic Coast by way of
Koyukuk, John, Anaktuvuk, and Colville rivers
BY F.C. SCHRADER
1901
Scale: 1/1,250,000
10 0 10 20 30 40 50 miles
Contour interval 200 feet
Datum is mean sea level.
Probable drainage not surveyed. Dates refer to camps
LEGEND
PLEISTOCENE
Recent stream gravels, mud flats, muck, ground ice, silts, and beach gravels
Gubik sands, resting on Tertiary and probably Upper Cretaceous
TERTIARY, PLIOCENE, AND PROBABLY OLIGOCENE
Glacial drift, principally till, resting on various formations
Colville series, consisting of silts, sands, clay, shale, soft sandstone, and limestone with lignites
UPPER CRETACEOUS
Nanushuk series soft sandstone limestone, mud-rock, shale, lignite, etc.
PROBABLY CRETACEOUS
Bergman series, sandstone, slate, grit, and conglomerate
LOWER CRETACEOUS
Koyukuk series, impure sandstones associated with igneous rocks
Anaktuvuk series arkose, with some impure sandstone or conglomerate or grit
LOWER CARBONIFEROUS AND PROBABLY YOUNGER
Fickett series, phyllites, slate, limestones, sandstones, quartzites, grits, and conglomerates
DEVONIAN
Lisburne formation limestone and shale
PROBABLY SILURIAN
Totsen series mica schist and quartz-mica schist
Greenstone-schist
UPPER SILURIAN
Skajit formation limestone, schistose and micaceous
PROBABLY PRE-DEVONIAN
Stuver series conglomerate quartzite, slate and shale
POST-CRETACEOUS
Dike rocks
Zones of mineralization
ARCTIC OCEAN
SMITH BAY
HARRISON BAY
Ground ice
Pt. Barrow
Nuvuk
Cape Smyth
Barrow
Elson Bay
Mackenzie Bay
Ross Bay
Pingokee I.
Ikalu I.
Tangent Pt.
Christie Pt.
Black Head
Simpson Cape
McTavish Pt.
Wright Pt.
Pitt Pt.
Hallett Cape
Comfort
Jones Islands
Midway Islands
Cross Island
Becher Pt.
Reurn Reef
Heald Pt.
Anxiety Pt.
Gwydir Bay
Prudhoe Bay
Yanbori Inlet
Niguanak
Colville River
Itivelik River
Sentinel Hill
Native Hut
Nanushuk River
Tuluga River
Canyon
Stuver Mt.
Summit
Fork Pk.
Crag Pk.
Table Mt.
Fault Mt.
Horace Mt.
Bend Mt.
Chandler Lake
Walker Lake
Rapid City
Beaver City
Bettles
Lookout Mt.
Jimtown
Soo City
Seaforth
Peavey
Bergman
Arctic
Kanuti
Dall City
Gold Bench
Portage
Indian Village
Selby Lake
Avaterut Lake
Hot Springs
Cone Mt.
Chandler Lake
Anaktuvuk River
Alatna River
Koyukuk River
Alashuk River
Dakli River
Hogatza River
Jim River
Hosianna River
Dall River
Yukon River
Seattle River
Reported zone of mineralization with gold-bearing sulphide ore
Gold-and silver-bearing galena reported
Galena reported
Probably Upper Cretaceous
Probably Lower Cretaceous
Probably Mesozoic
Probably Paleozoic
Probably Cretaceous
Colville Mountains
Northern Limit of Timber
Schwatka Mts.
Rocky Mts.
Kowak Mts.
Koyukuk Gold District
Colville Series (Tertiary)
Pleistocene
Nanushuk Series (Upper Cretaceous)
Anaktuvuk Series (Lower Cretaceous)
Lisburne Formation (Dev.)
Stuver Formation (Devonian)
Flickett Series (Probably Lower Carboniferous)
Skajit Formation (Upper Silurian)
Totsen Series (Probably Silurian)
Koyukuk Series (Lower Cretaceous)
Probably Cretaceous
Sea level
STRUCTURE SECTION ALONG LINE (A–J)
(VERTICAL SCALE FIVE TIMES HORIZONTAL)
Probably schist and limestone
Mica-schist and limestone
Slate
Sandstones and red beds
Slaty shales
Sands and gravels
Schist and greenstone
Hard fissile shales
Probably mica-schist
Principally igneous rocks diabasic and andesitic tuffs with arkose
Silt flats
Pleistocene silts and gravels with interstratified ice
Pleistocene silts and gravels
Mica-schist with limestone sandstone and conglomerate with lignite
Probably slate and mica-schist
Basic rocks probably intrusives
Biotite schist with porphyritic intrusives
Mica-schist and limestones
Granite probably basalt
Schist with gray limestone
Quartzite and slate
Folded mica-schist
Granite
Folded and heavy bedded limestone
Green amphibolite-schist
Mica-schist
Fault
Dike
Julius Bien & Co. Lith. N.Y.