## THE KOTSINA MINERAL DISTRICT

## Chitina Precinct

Examined by J. G. Shepard, July, 1926.

The country known as the Kotsina mineral district embraces a region which contains the watershed of the Kotsina River and its tributaries. There are several ways of

ingress to the district; one is by way
of Strelna across the range and down Rock
Creek; and another by way of the Kuskulana valley, across the range and down
Roaring Creek. Still another is by way
of Elliot Creek, across the range and down
Copper Creek. All of these routes necessitate the crossing of high divides of





6,000 feet altitude. The Alaska Road Commission has recently constructed a winter trail from Strelna to the

Kotsina which is bridged by a cable suspension bridge near the mouth of Cow Creek. The district may also be entered by crossing the Copper River at the mouth of Horse Creek and following a pack trail which serves the entire water shed of the Kotsina valley.

All trails which must be traversed in reaching the mineralized area are from 20 to 30 miles in length. The district is dealt with exhaustively by Moffit and Mertie in U. S. G. S. Bulletin 745.

Three types of mineralization occur throughout the region . First, as disseminations and blebes of copper, both native and sulphide in the Nicolai greenstone. Second, massive sulphides and carbonates of copper in the chitistone limestone at points of fracture.

Third, gold and silver bearing minerals in the greenstone near granitic intrusives.



So far no ore body of a commercial size has been disclosed although considerable exploratory work has been done. Patently, the mineralization occurs along fracture planes and at places of major movements. It has been demonstrated by development that the Chitistone limestone is the most favorable of the formation for the deposition of copper ores.

At the present time a number of groups of claims are being held but only one group is under active development. The Alaska Pioneer Copper Company, otherwise known as the Hurlock Syndicate, is prosecuting development of a group of claims on Copper Creek.

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Should an orebody of commercial size be discovered, the problem of transportation would be a paramount issue as the nearest point of the Copper River & Northwestern Railroad is fully 20 miles distant.

Raw Knows as Copper Creek Muning Ca, - (Jan 1946)

THE MULLIN PROSPECT, -

Chitina Precinct.

Examined July, 1926 by J. G. Shepard.

The Mullin Claim is situated on the west side of Copper Creek at an elevation of 3600 feet. At this point a bed of chitistone limestone is thrust up between the Nicolai greenstone and the shales.

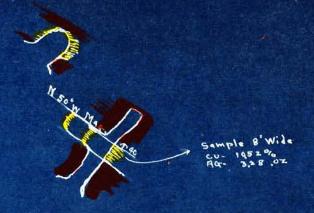
A good double ender road has been built by the Alaska

Pioneer Copper Company from its camp on Kotsina River to within a few
yards of the showings.

The showings consist of mineralized fractures in the limestone on which opencuts and short tunnels have been made. This work was all in the nature of assessment requirements and no serious attempt has been made to develop the showings.

The minerals consist of bornite, azurite and malachite, more or less massive, with bornite the predominant mineral.

SKETCH of SHOWLINGS OF THE MULLIN CLAIM Copper Creek-Kotsinz District Chitina Precinct. scale I'=40' July 1926 by J.G. Shepard.





LEGEND

Mineralized fissure S Chitistone limestone



THE ALASKA PIONEER COPPER CO., COPPER CREEK, KOTSINA DISTRICT,

Chitina Precinct.

Examined by J. G. Shepard, July, 1926.

The Alaska Pioneer Copper Company, otherwise known as the Hurlock Syndicate, is developing a group of claims on the west side of Copper Creek, adjoining the Mullin group. These claims cover the bed of chitistone limestone and the greenstone contact which is present at that point.

the main camp and 2 men doing assessment work on outside claims. 6 men were employed driving a crosscut tunnel which was designed to cut the same set of fractures which the Mullin showings expose. The tunnel was 165 feet long at time of visit with 275 feet yet to be driven. It is planned to sink 300 feet of shaft during the following year. The claims being developed are bonded from Adolph Amman, a pioneer prospector of the district.

THE SILVER STAR PROSPECT,

KOTSINA DISTRICT,

Chitina Precinct.

Examined by J. G. Shepard, July, 1926.

The Silver Star prospect is located high on the mountain above the Kotsina River a short distance upstream from the mouth of Rock Creek.

The showings are mineralized veins occupying fault zones in the Strelna formation a few hundred yards west of the contact of a granodiorite mass. At surface the veins are quartz, mineralized with galena, baryte, and tetrahedrite. Assays of 700 ounces of silver to the ton have been obtained.

about 275 feet long and follows a fault plane. The upper tunnel was caved at the time of visit. This outcrop shows a width of 30 inches of mineralized vein. Insufficient work has been done on the exposures to accurately determine the dips and strikes of the different showings so that their relations to one another may be definitely determined. Some post mineral faulting is undoubtedly present which will have a bearing on future development. It is planned by the owners, Finnesand and Breedman, to sink a short distance on the upper showing.

SKETCH SILVER STAR WORKINGS Kotsina District Chitina Precinct By J. G. Shepard. July 1926 scale I"=40' Fruit striking N.55°W. Mar. Sample 30" Wide Silver 0.40.02 Gold . tr. CU . tr. Sample 18 Wide Silver - 1910.02 gold - th co. 105 % Sample Maride
Silver-360.0X
achd - tr.
Co. - tr. estimated Position of upper vein aftower tunnel level PLAN VPP et EL. ZS 19 Sample 30" Wide silver 55, 40, 0x Qold . th Cu. - 2:82% Sample 30" wide 61 Lvet - 22.40.0x Guld - th. Lower tunnel EL. 2500

Sket ch 5 how ing Workings N55°W Mag. Silver Stat Prospect Kotsina District. John 1926 By J. G. Shepard Striking Scale 1 = 401 #35ample 30" wide | Silver - 0.40.03 | Crobd - Trace | Cu. - Trace \*Z Sample 18" Wide Silver - 1910.05 R Quld - Trace Cu. - 1.05% #1 Sample - 14" Wide Silver - 3.60.08 Gold - Trace Cu. - Trace Position Where. UPPER VEIN Should Have been cut City + caved Muck Pile #5- Sample (surface) 30 Wide Silver - 55.40.03 Gold - Trace Cu. \_ 2,82% EL. 2579 Position of Upper STrike N 50°E Mag. + cuts on Sufface Sample # 4-30 Wide 5:LUEL - 22.40.03 Gold - Trace Cu. - 0.70%

JEL 2500

THE IRON DYKE,

KOTSINA DISTRICT,

Chitina Precinct.

Examined July, 1926 by J. G. Shepard.

The Iron Dyke prospect is situated about midway between the Silver Star showings and the Kotsina River. The prospect consists of a dioritic dyke in the Strelna formation which is mineralized with pyrite. Assays show traces of gold and silver.

THE CANNING PROPERTY,

K+86-139

BENITO CREEK - STRELNA,

Chitina Precinct.

Examined July, 1926 by J. G. Shepard.

The Canning prospect is situated about 12 miles from Strelna on Benito Creek. It may be reached by following the Hubbard Elliot trail to Cow Creek and then following a branch trail used by Canning.

The showings consist of quarta veins from which the over-burden has been ground sluiced away in places. The principal vein has been traced by shallow pits for a distance of 600 feet and shows an average width of 30 inches. Metalic minerals are pyrite, chalco-pyrite, arsenopyrite and free gold. The vein stands vertically in country rocks of diorite and basalt.

This prospect is notable for the fact that a discovery of high grade gold ore from which an assay of \$225,000 per ton was made. A few hundred pounds of this ore was taken from a shallow pit. Free gold hand specimens are not uncommon, but the gold is not evenly distributed through the quartz. Insufficient work has been done on the vein to determine its true value.

CANNING PROSPECT

Strelna

Chitina Precinct

July 1926

scale ["=40" by J. G. Shepard.

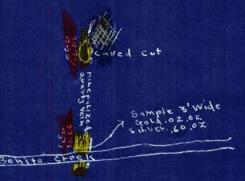




PLAN



Symple 30"Wide Gold-oc.ox Screen 90.0x



THE PANDORA PROSPECT.

KOTSINA RIVER,

Chitina Precinct.

Examined July, 1926 by J. G. Shepard.

The Pandora group of claims lies along the granodiorite contact a short distance east of the Silver Star group. The showings consist of stringers of azurite and baryte which vary in width from an inch to 8 inches. No development work has been done on the showings. Assays show values of 12 ounces of silver and traces of gold per ton.