

REPORT ON
KETZA RIVER AREA, Y.T.

Return to A.E. Aho

014307

Submitted to British Yukon
Exploration Co., Vancouver, B.C.

Nov. 10, 1954.
Dr. A.E. Aho.

INTRODUCTION

The Ketzta River area lies in the Whitehorse Mining District 30 miles south of Ross River Post on Pelly River, 50 miles southeast of Prospectors Airways' Vangorda Creek showing, and 120 miles east of Whitehorse, Y.T. Silver-lead and gold-copper deposits discovered there in 1954 lie on the southwest side of the headwaters of Ketzta River, on ridges at elevations between 4000 and 6000 feet. Topography in the area is rugged and outcrops are abundant above timberline which is near 3500 feet. Water is available in most of the valleys. Snowfall in winter is probably moderate.

At present the area is accessible by 35 miles of trail from Ross Post on the Canol Road, or by 20 miles of trail from Bruce Lake, the nearest place a plane can land. A passable road could be built up the southeast side of Ketzta River but the first 15 miles of the route would have to be chosen carefully to avoid muskeg.

The rich silver-lead discoveries were staked and optioned in August, 1954, but no staking rush developed until late September. Now, more than 400 claims have been staked and numerous other discoveries of mineralization have been made. The reader is referred to the accompanying map for data on claim locations and ownership. Except for sampling and trenching on a few showings no exploration has been conducted yet.

GEOLOGY

The main staking and silver-lead showings lie within a competent or brittle section of quartzites, phyllites, slates, and limestones or dolomites which form a ridge extending above 6000 feet in elevation. Dips of these rocks vary, with considerable folding. Axes of the folds strike northwest. Faulting also trends generally northwest and the showings lie along some of these breaks.

This competent mineralized section of rocks continues to the northwest but not to the southeast into the valley of the Upper West fork of Ketzta River. As far as the head of this fork the valley shows almost continuous exposures of contorted slates and phyllites which apparently underlie the competent section. Only lenticular, discontinuous, barren-looking quartz-carbonate veins were seen in these rocks which extend several miles northwest and southeast. To the west the phyllites are overlain again by a competent section comprised at least partly of westward-dipping dolomite. This section probably extends through copper-gold, grey copper (tetrahedrite), and galena showings staked up the 2nd West Fork and it forms the high ridge at the head of the Upper West Fork where British Yukon

Exploration's Kay group of claims lie. These competent dolomite, quartzite or limestone sections are considered to be more favourable for continuity of vein type mineralization than the contorted phyllites.

MINERALIZATION

At the time of examination, Conwest's No.1 showing on the Key group of claims consisted of a couple of tons of blocks of massive galena dug from cuts in talus at 6000 feet elevation on a mountainside. Ore minerals are galena with minor tetrahedrite, chalcopryrite, pyrite and sphalerite. Assays gave from 0.04 to 0.16 oz Au, 80 to 165 oz Ag and 30-50% Pb. Gossanous mineralized zones extend at least several hundred feet to the northwest of these showings. The best cut was dug out and sampled in September by Conwest. An account in the Northern Miner describes even better assays and widths.

The other showings to the southeast, including those on the Galena group (Hoey's showings) consist of narrow or poorly exposed veins and float. These carry less galena, more pyrite and some arsenopyrite, as compared to the No. 1 showing, and their silver-lead ratio is lower.

Showings staked later on the Fury, Willa, Moon, and other groups to the southwest of the main showings consist of large gossans containing pyrite, pyrrhotite, arsenopyrite and chalcopryrite, some tetrahedrite float, galena float, and chalsopryrite float. Appreciable gold assays are reported from some of the float.

During a brief one-day scouting trip at the head of the Upper West Fork of Ketzka River, a short distance along stike from the above staking, Aho and Dodson discovered some mineralization. Small amounts of vein float containing galena were found in the lower part of the fork. At the head of the fork the rocks are extensively carbonatized, are cut by a 3-foot-wide gossan zone and contain a small amount of zinc mineralization. Some fluorite found irregularly scattered in an unusual, veried intrusive body, is slightly radioactive, giving a 70 to 80 count on a scintillometer (4 times background).

Dodson cut his head with an axe so Aho and Dodson were forced to return to Whitehorse without any opportunity to determine the extent of mineralization or to do any staking. Since snow blanketed the area to timberline, it seemed advisable to leave the Ketzka area until early next season, then to prospect the Upper West Fork and the adjoining head of White Creek as soon as feasible. However, staking of the Fury, Peel, Goat, Willa, Moon, Penguin, Pioneer, Quonchu, Boom and other groups along strike from this area shows that the region is more widely mineralized than previously anticipated. Since the pressure of staking would probably increase, Cox and Verslucce and two Indians were sent to stake the Kay group of 32 claims which we now hold in the mineralized area at the head of the Upper West Fork. Cox reports having found float of what he believes is grey copper (tetrahedrite) near the northeast boundary of Kay No. 11 claim.

The area covered by the Kay group (see enclosed map) contains the 3-foot gossan zone (A), the small amount of zinc and fluorite mineralization (B), and probably the source of the reported grey copper float (C). The rocks covered are part of the possibly favourable competent section lying southwest of the phyllites and lie along strike from the later discoveries on the Fury, Willa, and other groups. Furthermore, the rocks on the Kay group are cut by a highly varied and altered intrusive which has produced structural complexity and alteration. The rocks contain much quartz-carbonate vein matter and carbonatization, which are a general indication of mineralizing activity throughout the Ketzá area.

CONCLUSIONS AND RECOMMENDATIONS

The Ketzá River area contains rich silver-lead showings and copper-gold showings and is more extensively mineralized than anyone anticipated. Very little prospecting has been done outside the staked areas and the total extent of mineralization is unknown, thus this should be a very active prospecting area next season.

It is recommended that as early as is feasible next season, a prospecting party should carefully cover the general unstaked region around the headwaters of White Creek and the Ketzá River. Later in the season a geologist and prospector assistant should carefully prospect and geologically map the Kay group of claims.

Respectfully submitted,

Dr. A.E. Aho.

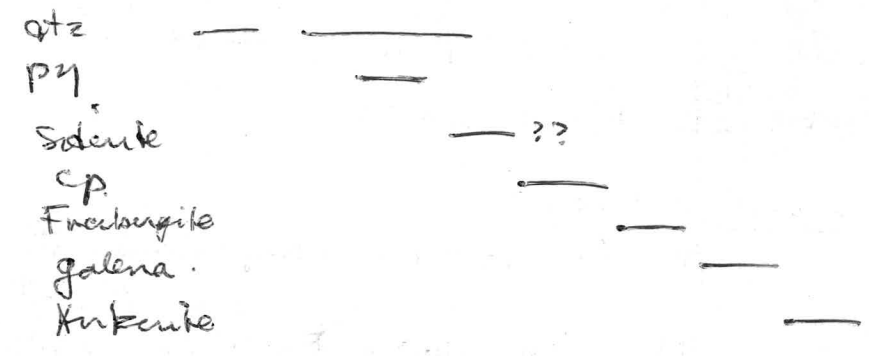
Mineragraphic Study of some ores from the Ketsa - Buer Area, Y.T.

Hence Peter ~~Smith~~ File

Geol 409, 1956 U.B.C.

- An. - always in Aspy 0.5-1.5 oz in one zone only.
with pyr, py minor cp.
- Ag - Mt Misery to Hacy showing (along Silver Ridge)
Silicified Argillite on Ag Ridge is best host rock.
Mt Misery several 100' fault - dol & qtz
Hacy's showings - in qtz mainly.

#1 Show



also

- sph.
cp
Freibergite
gn.

Jamesonite in galena
(Hacy's show)

Key 13A

grey-wh. incl in galena (tet??)

- sid
qtz
gn
ankerite

Strike 8A

- Freibergite
gn
Jamesonite (?)

Mt. Peel

- Aspy ^{py} sph, cp, gn, boulangierite
paragonite

Shanty showing

- pyrite, pyr, mt, gn.
(also unknown (sulfo salt) - Ag brg?)
qtz, ankerite, unknown gangue.
pyrr, py gn → ankerite
(mt)

(Sample #8 white cr)

Jamesonite with sphalerite containing cp in gangue qtz & sidelite, also calcite ^{exsolution}

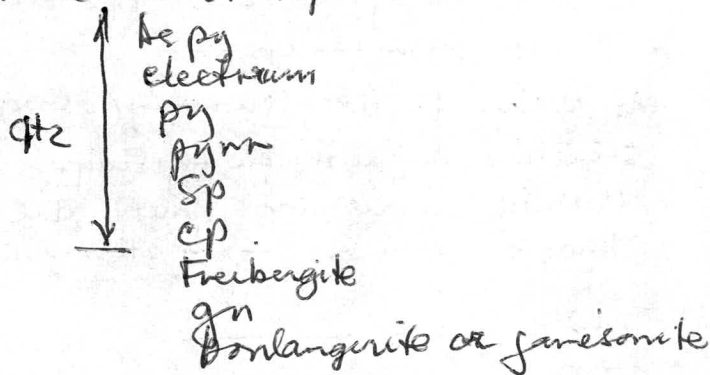
Spec A-H

Fricker's show

- qtz
py cp sp gn boulangierite, lg. incl in gn
py, pyr, gn.

Generalizations

Regional order of deposition



mt older than galena

4 periods of depth

- (1) Longest & most important - Fe mine characteristic
mt As py pyrr siderite
- (2) Zn with Fe & Cp (Sphalerite)
- (3) Cu with Fe → Cp plus Freibergite (Ag)
- (4) Pb in gn then in Boulangerite & Jamesonite

Cp exsoln in Sp @ $350^{\circ} \pm$ in middle of sequence

No zoning over 3000' depth.

Eq. incl in Ag Pb are very characteristic [N.F. Guild 1928 p. 215,]
[Pamder 1950 p. 450]

KETZA
RIVER

Return to AAO

Capital Hotel,
Whitehorse, Y.T.,
October 1, 1954.

Mr. F.V.C. Hewett,
902 Bank of Montreal Bldg.,
50 King Street West,
Toronto, Ontario.

Dear Mr. Hewett:

While busy with arrangements, I have waited a couple of days and obtained a claim map of the Ketzá staking with added information, which I enclose for your private files only. More ground has been staked but exact locations are not available yet. Rankin will probably give you details of Breakey's work.

The main staking and silver-lead showings lie within a competent section of quartzites, phyllites, slates, and limestones or dolomites which form a ridge extending above 6000 feet in elevation. Dips of the rocks vary, with considerable folding. Axes of the folds strike northwest. Faulting also trends generally northwest and the showings lie along some of these breaks.

I saw Conwest's No. 1 showing, elevation near 6000 ft, in two inches of snow. The talus there contains a 2-foot diameter block of massive gneissic galena. Cuts above this exposed numerous smaller blocks of massive galena with some tetrahedrite and minor chalcopyrite, pyrite and sphalerite. Rankin showed you assays of this material, which ran .04 oz gold, 80-90 oz silver, and 30-40% lead. Another cut over a hundred feet northwest revealed mineralization which gave the assay you saw of 0.16 oz gold, 165 oz silver, and 50% lead.

A gossan zone along which some mineralization can be seen extends a few hundred feet to the northwest, then is obscured by talus. At "A" a similar deeply-weathered gossan-breccia zone several feet wide is exposed -- this may be a continuation. Weak mineralization is found in sheared rocks between "A" and "B".

The other showings to the southwest, including Hoey's showings, consist of narrow or poorly exposed veins and float. These carry more pyrite and some arsenopyrite as well as galena with a low silver-lead ratio. Most of the silver-lead showings in the Ketzá area, including Conwest's No. 1 showing, classify as unexplored prospects which merit further work.

The competent mineralized section of rocks around Conwest's silver-lead showings continues to the northwest but not southeast into the valley of the Upper West fork where we were. As far as the head of this fork the valley shows almost continuous exposures of contorted slates and phyllites which apparently underlie the competent section. We saw only abundant lenticular, discontinuous quartz-carbonate veins in these rocks. The phyllites apparently extend several miles to the southeast and also northwest in a band between the main staking and the Fury and Willa Groups of claims which were staked later. Vein type mineralization, if encountered in these phyllites, is apt to be very discontinuous as compared to veins in the competent rocks such as the quartzites and dolomites or limestones.

To the west the phyllites are overlain again by a competent mineralized section consisting at least partly of westward-dipping dolomite. This section extends through the Fury and Willa groups of claims and forms a high ridge at the head of the upper west fork where we plan to stake 32 claims.

When Dodson and I entered the area, staking northwest of the Penny Group and in isolated localities to the southwest had not been completed and five individuals were staking up the second west fork. We went up the Upper West fork to scout, intending to check back on staking in progress before deciding on staking ourselves. However, Dodson's axe injury to his head forced us to return prematurely, having done only one day of scouting.

In the lower part of the Upper West fork we found a small amount of vein float containing galena. At the head of the fork we found extensive carbonate alteration, a 3-foot wide deeply oxidized gossan zone, a trace of zinc mineralization, and some fluorite irregularly scattered in an unusual, varied intrusive body. The fluorite is slightly radioactive, giving a 70 to 80 count on a scintillometer (4 times background). We had no opportunity to determine the extent of mineralization but the area merits careful prospecting. A reliable prospector friend of mine also reported seeing from a distance what appeared to be a gossan zone 3 miles to the southwest.

Since returning to Whitehorse I have found that the Fury and Willa groups were staked and that they contain chalcopyrite-pyrrhotite-arsenopyrite showings and sizeable gossans. Some tetrahedrite and more copper is also reported between these groups in an area that was being partly staked by the five individuals when we were going into the Ketzka. Prospecting is now curtailed by snow. I had considered leaving the Ketzka area for prospecting until early spring but since it is more extensively mineralized than previously anticipated, and the pressure of staking will probably increase, I have sent out

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a 4-man party to stake 32 claims, covering favourable prospecting ground and including the mineralized localities we found. Proposed staking, dependent on further information from the area, is shown on the enclosed map. The estimated cost is about \$2000 (very reasonable) but I wired Friesen for \$3000. Dr. Donald I. Kidd, deaf-mute, and a partner are going in with our party to stake 16 claims and split expenses, cutting down ours. He will get more data for me also. We are going to use the same packstring that Conwest used. They have now pulled out all their crew. Conwest are satisfied with their holdings and Alec Berry of Conwest is happy to have other companies in the area since it may press the Federal Government to help with a road into the Ketzka, if warranted, and to improve the Canal Road, which is at present an uncertainty.

Now for other news. Grove's nickel//lead turned out to be a wild goose chase. Although the Indian was perfectly sincere and I checked into his reliability, he became confused and finally concluded that the samples he showed me and the 4.5% nickel assay must have come from elsewhere when they got to his showing and found it was only pyrite in slate. Cox and Versluce found only small amounts of mineralization in the Swan Lake area.

Dodson and Forbes found nothing new on the Pelly River claims. I have recorded \$2052.26 assessment work for 20 claims instead of 19, the extra claim being the KK #5 -- on possibly favourable ground even though largely overlapped. Bill Emery says the geologic report can be submitted later so I will get it out when I get to Vancouver. I now have all the tags for the Pelly River claims and Emery says the tagging can wait until next season.

Thank you for the Hemsworth data which I return enclosed. Their anomaly is near their campsite on Jackknife Lake. In interpretation of the anomaly perhaps the possibility of high readings from gabbro or greenstone which I saw somewhere there might be considered, but then P.A.'s ground is also reported to contain such rocks. P.A. are apparently satisfied with results and plan to pull out about the middle of this month when the swamp they use for drill water will freeze.

There is no news from the Barymin Uranium showings apart from the Northern Miner Sept. 16. On Husselbee's showing Scotty Allen gets a broad scintillometer anomaly with counts up to 500 over a substantial area. However, his bulk samples from the best area give only a 100 count away from the showing so he expects poor assays. He thinks it may be radon gas coming up along fractures.

I have no news on Cassiar or United Keno Hill. Ask Bodie Hicks about Mackeno.

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Bell Asbestos have optioned T.C. Richard's asbestos showing near Big Salmon Lake for \$2000 down and \$25,000 in 30 days, and are preparing to drill. The showing reportedly has commercial grade and about a 7-foot section, then disappears under overburden. A couple of good prospectors had seen it before and hadn't thought it worth staking.

Hudson's Bay acquired warehousing ground in Haines, are hauling in machinery, and are pressing to have the Haines Road made an all-year road. I hear that commercial grade ore is persisting to depth with change into nickel instead of nickel-copper.

I plan to see Friesen who arrives Monday, then to leave for Vancouver, leaving recording and transferring of claims in the hands of our prospectors and company officials.

Best regards.

Yours very truly,

Dr. A.E. Aho.
British Yukon Exploration Co. Ltd.