

# KERR ADDISON MINES LIMITED

(FOR INTER-OFFICE USE ONLY)

NOV 28 1973

82L

823647

To G. M. Hogg From W. M. Sirola

Subject ✓ COLBY MINES LIMITED  
KINGFISHER CREEK DEPOSIT, VERNON, B. C. 82-L Date November 26, 1973

✓ W.S.  
P.M.K.  
G.M.H. ✓  
R.D.S.  
B.C.B.  
I.D.B.  
✓ M.D.R.  
H.F.  
✓ Dent  
E.C.J.

I understand from Dale Hendrick that this is one of the properties that Dr. James had inquired about.

### Location

On Kingfisher Creek, west shore of Mabel Lake, thirty-four miles northeast of Vernon, B. C.

### History

Property originally acquired by Bright Star Trio Mining Ltd. Date unknown.

In 1964 Sheep Creek optioned the property, drilled six short diamond drill holes totalling 642 feet and excavated bulldozer cuts totalling 2400 feet. This work exposed a replacement of pyrrhotite, sphalerite, galena and minor chalcopyrite and crystalline limestone. The limestone is part of a biotite gneiss-quartzite metamorphic rock sequence. Metamorphic rocks form part of the Shuswap complex (Precambrian?). Near the showing the bedded rocks have been intruded by quartz-gabbro, biotite, granite and pegmatite. The best mineralization occurs in the apices of tight folds and the mineralization varies from 1 foot to 20 feet in thickness.

### Current Work

On the basis of a report by Ted Chisholm dated September 15, 1973, Colby is trying to raise \$200,000 by an offering of shares. Mr. Chisholm's report mentions a 200-300 foot thickness of crystalline limestone which carries mineralization of economic tenor in places. He also states that a substantial base metal deposit has been indicated (GCNL No. 220).

### Summary and Conclusions

I understand from Bob Beaton who worked on the showing in 1964 for Sheep Creek Mines that the fold structure in which the mineralization occurs is quite persistent and could be, in all probability, traced by magnetometer. He mentions however that the grade is quite low (3-4% zinc with minor galena) and that the actual mineralization was very lensey and consequently hard to drill.

# KERR ADDISON MINES LIMITED

(FOR INTER-OFFICE USE ONLY)

To G. M. Hogg From W. M. Sirola  
COLBY MINES LIMITED  
Subject KINGFISHER CREEK DEPOSIT, VERNON, B. C. 82-L Date November 26, 1973

- 2 -

Mineralization in the highly metamorphosed Shuswap complex has a history of being generally too thin to mine but thickens locally in close folding. This particular showing appears to have been investigated to a point where the character of the mineralization is well established. The possibility of finding similar showings may be quite good but the tonnage and grade outlook is poor. Further interest should be limited to checking results of work done by Colby Mines.

WMS/rb

I agree with Bill Sirola's comments on the erratic nature of the mineralization and that the Colby property is of very doubtful interest. We have recently evaluated a property in the same belt in northern Washington and reached the conclusion that the exploration investment was not warranted.

*Bill*

W. M. Sirola

*Just* Nov 28/73.

are cut by massive pyrrhotite, chalcocite and the greenstone of about 100 feet by Quinalta Pass.

skarn which also, though to a much lesser extent, occurs in the intrusive mass. The crystalline limestone occurs in one principal band, which exposures may be more than 150 feet thick but which appears to have a relatively limited strike length. The sediments strike a few degrees east and west of north and dip about 40 degrees westward.

Only one fault was seen; it is about 6 inches wide, strikes north 25 degrees west and dips 40 degrees southwestward. It is not mineralized.

Tongues of diorite up to 200 feet wide occupy the northerly end of the area of exposures. They are conformable with the bedding, or nearly so.

Mineralization consists of erratic concentrations of molybdenite in the skarn, with minor chalcocopyrite and pyrite. It is almost wholly confined to the altered sediments. There are two principal exposures of molybdenite. The first, on the west side of the working area, is exposed in old rock trenches and is in skarn at and near contacts with crystalline limestone. The second is 1,200 feet distant to the north-west and is exposed in two old rock trenches about 150 feet apart. It is in skarn in part and statements of width have no meaning.

The writer was unable to recognize any structures which might control the distribution of mineral.

Two diamond-drill holes were drilled—one on the western side, the other on the eastern. The core was not accessible at the time of the writer's visit.

SALMON ARM

Wick

(50° 119° N.E.) Company office, 1686 West 69th Avenue, Vancouver 14. Fourteen recorded claims, the Galaxy Lake Mines Ltd.\* 1-10 and Mark 1-4, were held under option from C. Bloomer, 1821 Fleetwood Avenue, North Kamloops. The property is on upper Gordon Creek, 3 miles west of Salmon Arm, and is reached a 7 miles by the Fly Hill forestry access road. Two diamond-drill holes, totalling 50 feet, were drilled. A crew of two was employed under the direction of T. Marc.

SICAMOUS

Lead-Zinc-Copper

(50° 119° N.E.) Company office, 1413 Tranquille Road, Brocklehurst, Kamloops. J. S. McKechnie, Kamloops, president. This property of 17 recorded claims lies on the south shore of Shuswap Lake, 3½ miles west of Sicamous. Access is by one-half mile of logging-road from the Trans-Canada Highway. In 1958 an adit 85 feet long was driven to intersect the continuation of a surface showing. No mineralization is indicated in this adit. In 1964 several surface trenches were dug through the overburden with a bulldozer. Lead-zinc mineralization with some copper is indicated in these trenches. The country rocks are quartzites and schists. A crew of two was employed under the direction of D. Spankes.

MABEL LAKE

Lead-Zinc

(51° 118° N.W.) Company office, c/o W. Goebels, Enderby. The property includes 28 claims held by record and by bill of sale, comprising the Len, Deer, Rich, and Silver King groups. The property lies northwest of the east fork

\* By David Smith.

† By N. D. McKechnie and David Smith.

of Kingfisher Creek, a southward-flowing tributary which joins the Shuswap River about one-half mile downstream from Mabel Lake. The property is reached by a logging-road which turns northward from the Enderby-Mabel Lake road about 1 mile west of Hupel. At 9 miles on the logging-road a jeep-road in very poor condition leads  $1\frac{1}{2}$  miles to the showings.

The general geology is shown on Geological Survey of Canada Map 1059A, Vernon. The region is underlain by metamorphic rocks of the Monashee Group, of which a carbonate member is shown on the map on the east side of Kingfisher Creek and extending, from a point about 6 miles from its mouth, northward and eastward across the creek's east fork for a distance of about 4 miles. Sulphide mineralization occurs along this carbonate member.

During 1964 work was done under option agreement by Sheep Creek Mines Limited. Six diamond-drill holes, totalling 642 feet, were drilled, and several open cuts were made by bulldozer and blasting over a distance of some 2,400 feet between elevations of 3,500 and 3,750 feet. A crew of four men was employed under the direction of R. H. Beaton. The option has been dropped.

The carbonate member is exposed at intervals from Silver King No. 21 mineral claim northeastward to Rich No. 1 mineral claim, from which it passes outside the group. The member here is comprised of recrystallized impure limestone, biotite gneiss, and calcareous quartzite. The recrystallized limestone is composed chiefly of calcite with subordinate diopside, tremolite, biotite, apatite, and fluorite. All the exposures tested effervesced freely with cold hydrochloric acid.

The bedded rocks are intruded by quartz-gabbro, biotite-granite, and pegmatite. The gabbro and granite are slightly gneissic; the granite contains noticeable amounts of red garnet. The pegmatite is comparatively massive and appears to be a sill. The exposures of gabbro and granite are too limited to show whether they are dykes or sills. One andesite dyke striking slightly west of north and dipping steeply northeastward was seen to cut the pegmatite and the granite.

Minor folds were seen on axes striking north 25 to 35 degrees east. Two faults striking north to northeastward cut the sediments and pegmatite at the northern end of the workings. The displacements are not known.

Mineralization includes pyrrhotite, sphalerite, galena, and minor chalcopyrite and pyrite. Pyrrhotite occurs in masses in the recrystallized limestone and locally may almost wholly replace it. It occurs also with the other sulphides but usually in minor quantities. The other sulphides are found sparingly in the recrystallized limestone, and their best concentration is in highly silicified rock close to the pegmatite.

The showings will be described from the lowest elevation to the highest, numbered 1 to 5.

Showing No. 1 is at 3,520 feet elevation. A rock composed chiefly of quartz and pyroxene is mineralized with sphalerite, chalcopyrite, and pyrite. The mineralized bed is about 10 feet thick and is overlain by recrystallized limestone; the contact strikes north 40 degrees east and dips 35 degrees southeast. At 125 feet to the northeast on strike the mineralized bed has thinned to less than 1 foot.

Showing No. 2 is 250 feet northeast of No. 1 at 3,565 feet elevation. A bed of silicified limy quartzite about 3 feet thick is strongly mineralized with pyrrhotite and sparsely with sphalerite. The footwall is a similar highly siliceous but finer-grained rock lightly mineralized with both pyrrhotite and sphalerite. The contact strikes north 15 degrees east and dips 50 degrees southeast. The hangingwall side is quartz gabbro.

Showir  
rock is expc  
exposed by  
folded on a  
fragments i  
exposed on  
along fractu  
degrees nor  
north 15 de  
no apparen  
west and di  
to the other  
Showir  
A bed of sil  
20 feet. Ir  
tongue of p  
degrees eas





Showing No. 3 is 1,700 feet northeast of No. 2 at 3,660 feet elevation. The rock is exposed in a vertical face about 20 feet high; at the top the rock is further exposed by stripping. Interbedded recrystallized limestone and gneiss are tightly folded on axes striking north 35 degrees east, and boudinage structure of limestone fragments in gneiss is common. The principal mineralization is in a rusty zone exposed on the vertical face. Sphalerite, galena, and chalcopyrite are concentrated along fractures having the following attitudes: Strike north 25 degrees west, dip 82 degrees northeast; strike north 80 degrees west, dip 85 degrees south; and strike north 15 degrees east, dip 45 degrees northwest. Pyrrhotite is prominent but bears no apparent relationship to this fracturing. A fracture striking north 18 degrees west and dipping 80 degrees southwest contains pyrrhotite only, but its relationship to the other fractures is not known.

Showing No. 4 is 350 feet northeast of No. 3 and at 3,665 feet elevation. A bed of silicified quartzite in contact with pegmatite is exposed for a width of about 20 feet. In the hangingwall a band of gneiss is separated from the quartzite by a tongue of pegmatite. A thin limestone bed within the quartzite strikes north 39 degrees east and dips 85 degrees northwest. The quartzite is mineralized with

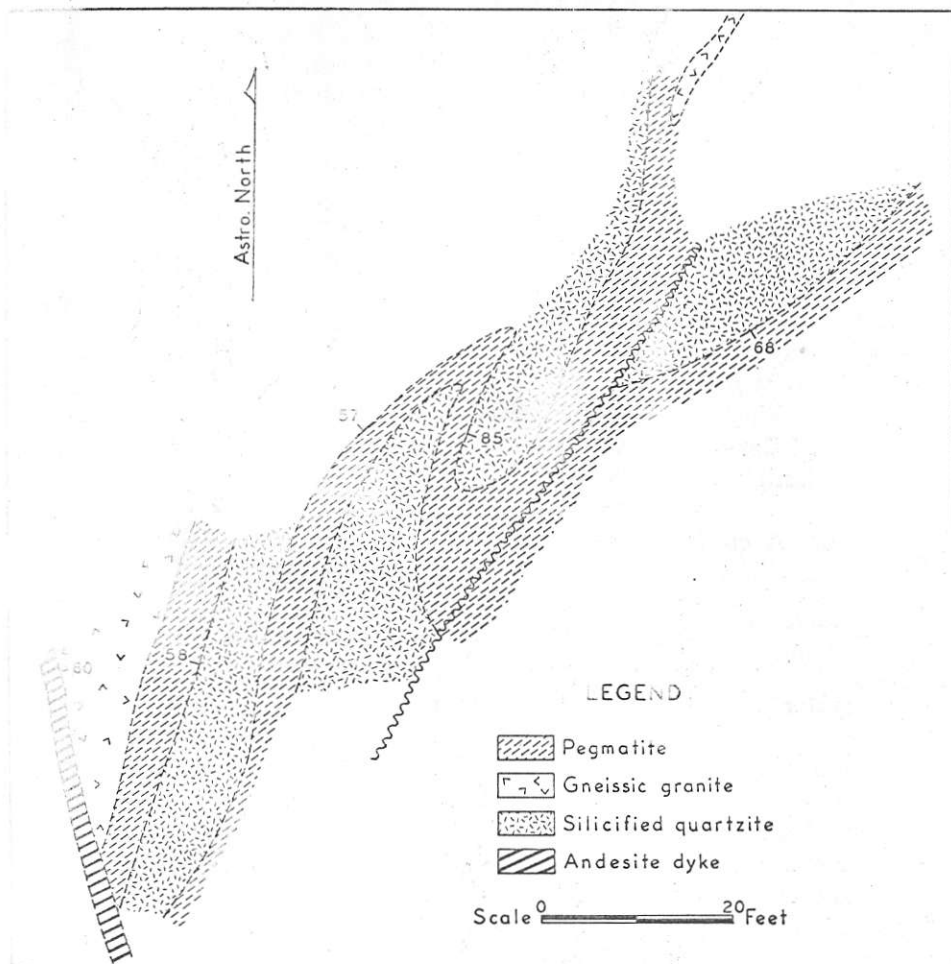


Figure 12. Bright Star Trio. Geology at main showing.

sphalerite, galena, and chalcopyrite; most of the sulphides are in and near a narrow zone of fracturing striking north 40 degrees west and dipping 65 degrees southwest.

Showing No. 5 is the principal one and is illustrated by Figure 12. It is 250 feet northeast of No. 4 at an elevation of 3,730 feet. The showing consists of a fold-like structure in a highly silicified rock consisting of quartz with remnants of diopside and a few grains of zoisite. The silicified rock is intruded by a body of pegmatite. On the western side the pegmatite is in contact with a gneissic biotite granite containing red garnets. An andesite dyke striking north 15 degrees west and dipping 65 degrees northeastward cuts all the other rocks. The fold-like structure is offset by a northeast-striking zone of discontinuous fractures which dip nearly vertical. The sphalerite-galena-chalcopyrite mineralization is confined to the quartz-diopside rock and is best developed in and near the apices of the folds. Pyrrhotite is minor in amount but appears to be confined to the same rock as the other sulphides.

The bearing of a line joining showing No. 1 to showing No. 5 is north 30 degrees east, in general parallel to observed bedding. There is no good evidence that the mineralization follows any one horizon aside from the major one of the carbonate member itself. It is possible, in view of the tight folding and the quite consistent association of the zinc-lead-copper mineralization with fractures, that the occurrences are on a zone of movement which has its principal expression in the tight folds. Such a zone would have a width of at least 400 feet if all five mineral showings were assumed to be included in it.

Pyrrhotite is of common occurrence, but it does not appear to bear any direct relationship to the distribution of other sulphides, save that in nearly massive bodies of pyrrhotite there are almost invariably no other sulphides. This would have a bearing on the application of magnetic survey methods.

**Kingfisher (The Consolidated Mining and Smelting Company of Canada, Limited)\***

were drilled. A crew of two men was employed under the direction of R. G. Gifford.

**Gold-Silica**

**Smuggler\***

(50° 118° N.W.) Company office, 1150 Bay Avenue, Trail. This property consists of 65 recorded claims in the Mabel Lake area. Access is by the logging-road that passes the Bright Star property. The claims lie on the east fork of Kingfisher Creek at an elevation of 2,600 feet. In 1964 a magnetometer survey accompanied by geological mapping was carried out. Four diamond-drill holes totalling 370 feet were drilled. A crew of two men was employed under the direction of R. G. Gifford.

(49° 119° S.W.) Mine office, Box 106, Okanagan Falls. This property, of seven recorded claims and the leased Powis Crown-granted claim, lies just west of the golf course, about 4 miles southwest of Oliver. Trenching along the strike of the exposed vein was continued to an approximate depth of 8 feet. About 20 tons of ore has been hand-cobbed and stockpiled for shipment to Trail. In October, 1964, this property was sold by the owner, K. G. Ewers, to World Wide Development Company, Toronto. A diamond drill was placed on the property and several holes drilled; results were not available. Two men were employed on the property under the direction of Mr. Ewers.

\* By David Smith.

OLIVER

Susi

Mining is ca  
and silver va  
as a flux. A  
were employ

Copper-Mo

Gem, Di  
Lakev

Internationa  
dropped. V  
men were er  
pp. 65-67.)

Silver-Lead

Highlar  
(Mast  
Highlar  
Mines Li

2900 adit.  
1964 norma  
through the  
by 6-foot b  
ing is a sum

Driftin  
Raisin  
Diamo

A tota  
An average

Copper

Van, Roc  
(Red Roc  
Ltd

of Minex I  
worth, con

\* By Davie





Colby Mines  
9-2-47

80-4

Scale 1 = 4 mi

CREIGHTON VALLEY