

NOTES ON THE

ASPEN MINE

002678

SALMO-MALARTIC MINES LTD.

Correlation of Radiore Survey and Geology and
Recommendations for further Exploration.

Indication "A" This is very poor electrically. It follows the north contact of the ore bed, exposed in "G" tunnel, with the granite. This contact is known to carry very small amounts of pyrite and traces of galena. It offers no encouragement for further work.

Indication B-G-K(4-12)-L-K(18-28) This is probably one continuous conductor and represents the upper Ore Zone.

K(12-18) is, I believe, a separate conductor.

Beginning at the northwest end of the conductor, K(18-28) is weak electrically, lies beyond the area that has been studied geologically, and is still largely covered with snow. It is thought to be in an area of mixed granite and limestone, and is not thought to be of any special value.

L is rated as fair to strong electrically, and is especially strong at No. 6 flag, where the Radiore report suggests trenching. The depth of the conductor is here given as 80 ft.

The surface here shows a well defined bed of mineralized limestone 4 to 8 feet wide and dipping 70° eastward; it has been partially exposed by several shallow trenches, in which the visible mineralization is mostly oxidized iron with occasional small spots of galena. A small tunnel just southwest of L4, where the limestone is cut by granite, also shows strong pyrite mineralization with small amounts of lead and copper. I consider that the L conductor covers the most promising point on the property, and follows the mineralized limestone stratum quite closely.

I recommend the deepening of the existing trenches across the mineralized bed, and that a half dozen more be dug, blasting into the solid rock. Also I recommend the drilling of at least two flat-angle diamond drill holes from below into the ore-bed at approximately 120 feet depth.

K(12-10) Here the conductor follows closely along the known mineralized part of the ore-zone, but is weak although it is in places above strongly mineralized zones which occasionally are well up toward ore grade.

K(10-4) does not entirely follow what was formerly recognized as the Upper ore-zone, but cuts diagonally westward across the bedding to the contact with the schists at K4.

Note: "Schist" as used in these notes, signifies thin bedded argillites, quartzites, and limestones, with intimately associated basic dikes and sills accompanied by some pyrite at some points.

Just what happens here is not clear, - whether the mineralization crosses the bedding, following the conductor, or if pyrite mineralization that is known to exist some 30 to 50 feet west of K(9-2) has not influenced the Radiore reading and resulted in the locating of the conductor in an intermediate position between the upper ore-zone and the mineralization to the west. I am inclined to believe that the latter is the case.

K(4-5) lies along the limestone - schist contact. Electrically it is the strongest part of K and the indications are shallow. A small trench at this point might be advisable, but discovery of valuable mineral is hardly to be expected.

G is classed as fair, electrically. Along it occasional spots of limestone (probably in place) stick through the wash, some of which shows a little pyrite and occasional spots of galena. This area appears to me to be fairly favorable, and I recommend cross trenching and one or two diamond drill holes to cut the indication at a depth of 175 feet.

G5- B7 the conductor is weak, and the surface is consistently covered with soil.

B(7-6) the conductor is fair electrically, but the rocks are entirely concealed by soil which may be deep. I would recommend a little trenching if the soil be not found too deep.

B(6-9) is electrically weak. The soil is probably thin, as occasional spots of limestone appear but none of them show important mineralization.

B(9-10) is fair electrically, but the surface appears to be covered with a considerable depth of soil. I would not recommend any work unless other trenching on B and G is favorable in its results.

B(10-12) is weak electrically, mostly covered with soil, and of no apparent interest.

I think there is some possibility that parts of B conductor, and perhaps G conductor also, have been pulled somewhat to the westward of the true ore-zone by the attraction of the supposed contact of the limestones with the schist which should be close to the west; this possibility should be borne in mind while trenching.

Indication C This is rated as weak to fair electrically. It follows an un-conformable contact between limestones and schists, and other schists forming the ridge of the mountain. I suspect that this is a weak pyrite mineralization along the contact, or fault, and do not recommend any work at the present time. The actual contact is covered, but outcrops occur close by on either side.

Indication D Is rated poor electrically. The south part of the conductor is under deep soil, except that flag 3 is near a small cut in limestone showing pyrite and a little zinc, which is supposed to have little length or importance. The northern part of D is also covered by soil, but the character of the float indicates that it may be on a granite and schist contact. I do not recommend any work.

Indication E Electrically this is the best indication on the

property, and work there is recommended in the Radiore report. This lies mostly beyond the area studied and mapped geologically. The central part of E is still masked by snow but most of both ends show rock exposures.

The northwest flag of E is on a sharp turn in a granite and schist contact which can be traced southeast to a point midway between flags 7 and 1, where it becomes covered; from the northwest end of E the contact turns sharply southwest along indication F. The schist is somewhat mixed with intrusive rock, contains some pyrite, and tiny quartz veinlets.

The southeast end of E lies in a tongue of schist, fifty feet or more in width, and bordered by granite on the north and south, and ending against granite to the southeast. To the northeast of E the granite probably continues from end to end of the conductor, which appears to represent a granite-schist contact with the electrically strongest flag at the point where the contact turns sharply along F.

I am very sceptical of finding any commercial ore on E and F, but on account of the Radiore recommendation, and the fact that this appears to be the best of the schist-granite contacts, I would recommend that it be explored by a trench or two and a diamond drill hole.

Indication F is weak electrically except at the northeast end.

The upper end has been described in connection with E; the lower end is under soil and the conditions are not known.

Indication H is electrically poor. It follows irregularly along a seventy five foot bed of schist, with limestone to the west, and mostly granite to the east. It is not attractive for exploration.

Indication J is little known electrically. It lies across the same bed of schist as H is on and I suspect might properly be a continuation of H. There is reason to believe that the schists along E, H, and J are the same bed, broken by granite.

Indication K (referring only to part between K(12-18))

This is weak electrically; it chiefly follows a bed of schist. From geological conditions, I believe that this indication is entirely separate from other parts of K, and that its ends should be shown as more or less parallel to K(18-21) etc and to K(12-13) etc. and not joining them.

I believe this indication to be of no ore value.

Indication M This indication is still under snow and I have no comments to make at this time.

Indications N, O, & P Of no probable value.

Comments: An additional place which I believe it will be advisable to diamond drill is underneath the two small holes which have been dug in limestone showing a heavy limonite outcrop 125 feet east of G2 and on what was always supposed to be the upper ore-zone. I recommend that at least one

hole be drilled here.

I was much surprised that the Radiore was unable to pick up and trace the lower ore-zone, since the strongest galena ore on the property has been found in "G" tunnel in that zone. I presume that the failure probably means that the ore has no great length or continuity.

The general course of the upper ore-zone has been traced by the Radiore, but the accuracy is, I suspect, sometimes diminished by the conductivity of some parts of the schist a short distance to the westward, resulting in the placing of some of the flags slightly too far west.

It is worthy of note that nearly all of the strongest points electrically are either on granite contacts, or granite is exposed within not more than a hundred feet.

The Radiore survey, in connection with the geology, has given information that is apparently valuable but not so very encouraging to the economic future of the property. It has indicated (1) that the lower ore-zone is not worth further development, (2) it has traced the upper ore-zone and suggested favorable points for further exploration, (3) it has indicated several contacts which are conductive and are possible, though improbable, ore bearers.

It should be noted that no really "major" conductors were found. The upper ore-zone is reported as poor or fair, but some of the undeveloped parts are indicated to be better than those that have been developed.

Recommendations: The summary of my recommendations is as follows:

1. Trench and drill on L at and near flag #6.
2. Trench at K4 and 5.
3. Trench and drill at G4 to G6.
4. Trench at B7 to 6, if soil not too deep.
5. Trench and drill at junction of E and F.
6. Drill a short hole below mineralized limestone 125 ft east of G2.
7. Do not undertake any underground work at the present time.

Conclusion: The Radiore and geology together do not seem to give much encouragement to finding important ore-bodies; nevertheless I believe a limited expenditure to explore certain areas by trenching and diamond drilling is justified. If this is successful, underground work will be required to develop the finding, - if unsuccessful the property should be abandoned.

Respectfully submitted,

May 13, 1929.