

DRAGON LAKE COPPER SHOWING  
PROPERTY EXAMINATION

By: T. Adamson  
1968

105-J-12

DRAGON LAKE COPPER SHOWING PROPERTY EXAMINATION

PRELIMINARY REPORT

The Dragon Lake Copper showings were investigated by T. Adamson and two assistants for the period June 5-9. The object of the examination was two-fold - to map the geology and determine the economic potential of the showings, and secondly, to collect silt samples in the area over mineralized and unmineralized areas as a check of the new analytical technique for silts at Atlas' Ross River laboratory.

Location and Access

The showings are located about 3/4 mile from the southwest shore of Dragon Lake, at latitude 62° 37' N., longitude 131° 32' W. Access is by float-plane or helicopter. The old Canol Road comes to within 8 miles of the showings. The nearest settlement is Ross River, about 50 miles to the southwest.

History

The earliest evidence of work done on the showings was the staking of the RAH Group in 1954. In February, 1960, Kennco Explorations staked a group of nine claims, the PAD Group. Kennco mapped the showings and ran a magnetometer survey over the area. In May, 1967, J. O'Neil of Ross River staked an 8-claim group covering the showings.

Geology

Four stratigraphic units were noted in the area. The general regional attitude of these sediments is about 060/20-60 NW, although this is very variable. The stratigraphic relationships between these units is not known. A description of the sedimentary units is as follows:

1. Quartzite

This is by far the predominant rock type in the area. It varies from very fine to coarse grained, and from pure quartz to very micaceous. There are a few chert lenses within the quartzite. The quartzite is in most locations very massive and blocky with little evidence of bedding. Near the intrusive the quartzite weathers quite rusty.

2. Phyllite

The phyllite is buff to dark grey and quite fissile with undulatory fracture surfaces. In placed, the phyllite is somewhat limy.

3. Finely Interbedded Shale and Limestone

A very minor unit. This unit was only seen near the intrusive where it was very coarsely recrystallized. Bedding varies from  $\frac{1}{2}$  to  $\frac{3}{4}$  inches thick.

4. Limestone

A very minor unit. The limestone was only seen near the intrusive where it was very coarsely recrystallized.

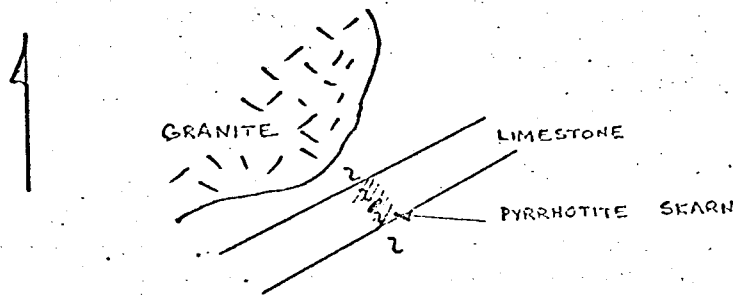
Hornfelsic alteration is quite distinct around the intrusive, with spotted hornfels being developed from the phyllite and the impure micaceous quartzites.

The above sequence is intruded by a small biotite granite body. This granite is medium grey in colour and the texture medium grained equigranular. A very small granitic orthoclase porphyry intrusive was noted intruding unit 2 about one mile south of the showings.

Description of Showings

Two small sulfide zones were noted in the area under investigation.

Showing A, the larger of the two, is a pyrrhotite skarn zone developed around a shear in the limestone unit. This is very close (approximately 150') to the intrusive contact. The recrystallized limestone is about 60' thick with an attitude of 080/90 at this point. The shear and skarn zone cut across the limestone at right angles (350/90). The skarn zone is about 10'-15' wide.



(Drawing not to scale)

The skarn is composed of pyrrhotite, carbonate, and very minor garnet, actinolite (?), and chalcopyrite.

Showing B is mineralized shear breccia in the quartzite unit. The shear is small varying from 1'-2' wide. Sulfides present are mainly pyrrhotite and pyrite, with minor chalcopyrite.

#### Geochemical Sampling

A total of 74 silt samples and 62 soil samples were taken. The silts were taken at 1000 foot intervals in all streams flowing into Dragon Lake for about 1½-2 miles on either side of the showings. The soil samples were taken at 300 foot intervals on 4 lines intended to cross the limestone unit in the vicinity of Showing A.

No anomalous values were obtained on any of the soil sample lines. This would tend to indicate that Showing A is only a very local feature. Both showings are located quite near the mouths of their respective streams. Because of this, the situation was not ideal for testing the effectiveness of silt sampling techniques. Below showing B only two samples were obtained. However, the copper values in these samples below the showing are in the order of 2 to 3 times greater than the copper values upstream from the showing.

In showing A stream, six silt samples were obtained below the showing. The two samples immediately downstream from the showing gave only background values in copper, while the other 4 samples were only slightly anomalous.

A rusty swamp seepage about one mile southeast of the showing area gave high values in copper and zinc (Cu 207 ppm, Zn 290 ppm). No mineralization was found in this vicinity.

#### Conclusions

Neither of the two sulfide showings located held any economic potential. Both are small very local shear controlled features. A visual estimate of grade of copper would put the maximum at less than 1 per cent.

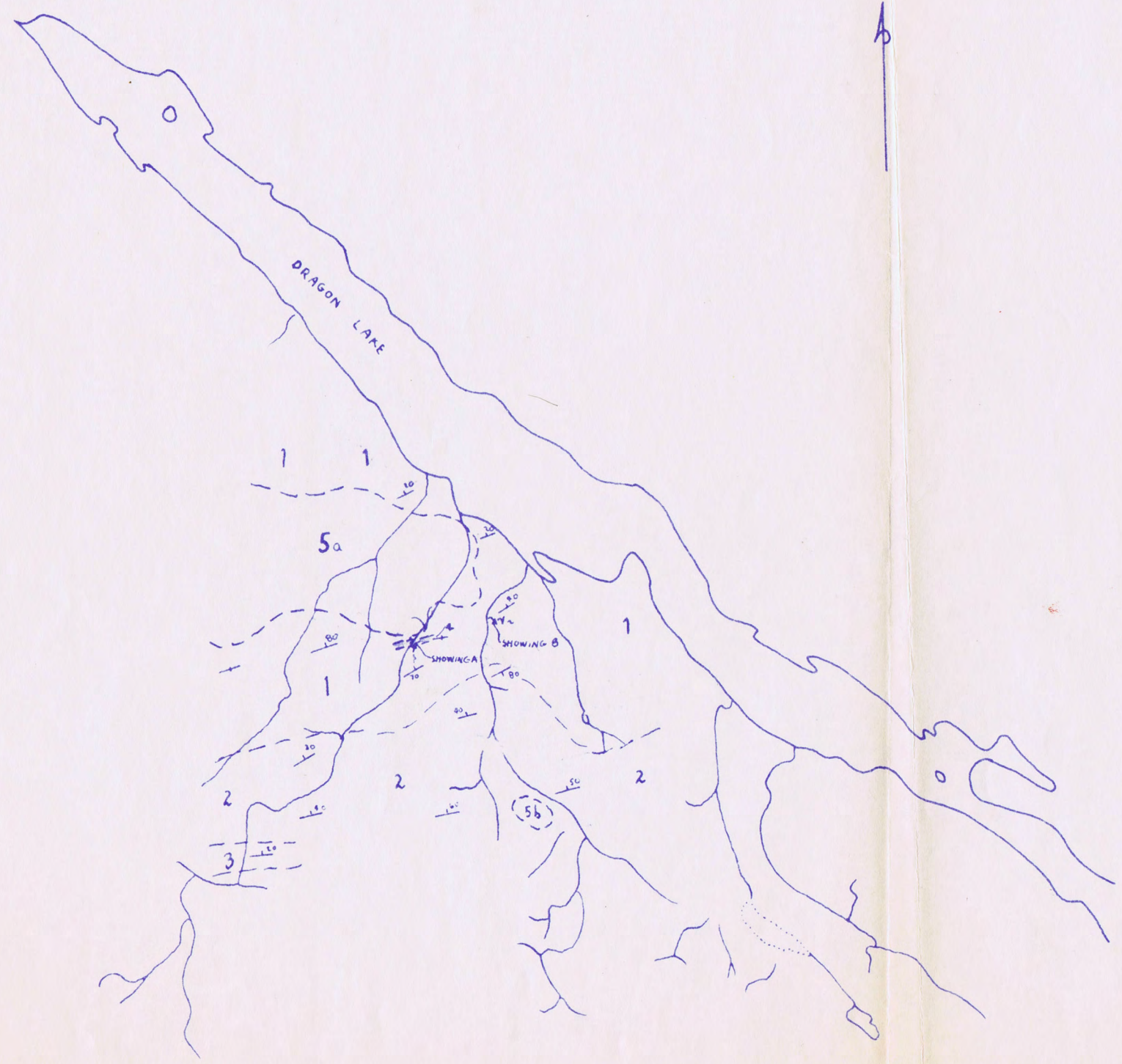
Both showings are located quite near the mouths of their respective streams. Because of this, the situation was not ideal for testing the effectiveness of our silt sampling techniques. However, I feel that we were able to obtain enough samples down-stream from the showings to be of some value.

Tom Adamson

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GEOLOGY

SCALE : 1" = 1/2 MILE  
 GEOLOGIST-PARTY CHIEF : T. ADAMSON  
 DATE : JUNE, 1968.



- 5b GRANITIC ORTHOCLASE PORPHYRY INTRUSIVE.
- 5a GRANITIC INTRUSIVE ; MEDIUM GRAINED EQUIGRANULAR.
- 4 LIMESTONE
- 3 FINELY INTERBEDDED SHALE + LIMESTONE.
- 2 PHYLLITE ; BUFF TO DARK GREY ; QUITE FISSILE
- 1 QUARTZITE ; FINE TO COARSE IN PLACES VERY MICACEOUS, MOSTLY MASSIVE, MINOR ~~CHALCOPHYRITIC~~ LENSES.

- CONTACT
- ~~~~~ FAULT SHEAR
- +— BEDDING ATTITUDE

SHOWINGS.

- A. PYRRHOTITE SKARN, MINOR CHALCOPHYRITE, AROUND A SHEAR IN THE LIMESTONE (UNIT 4) NEAR THE GRANITIC CONTACT. SMALL, LOW GRADE (< 1% Cu). NO ECONOMIC POTENTIAL.
- B. MINERALIZED SHEAR BRECCIA IN QUARTZITE UNIT. 1-2' WIDE. PYRITE, PYRRHOTITE, VERY MINOR CHALCOPHYRITE. NO ECONOMIC POTENTIAL.

DRAGON LAKE PROPERTY EXAMINATION

SILT SAMPLE RESULTS (Cu, Zn ppm)

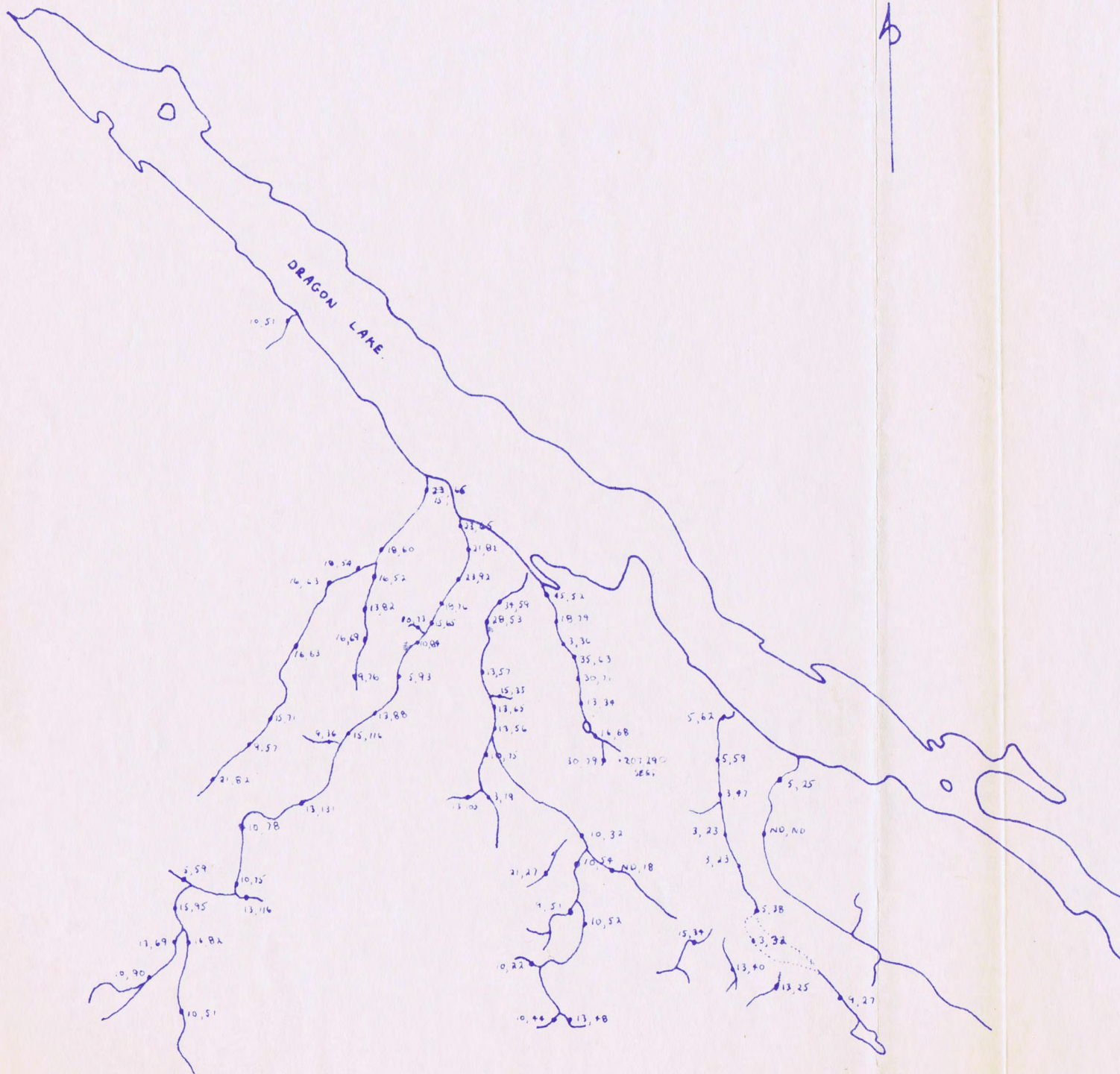
SCALE : 1" = 1/2 MILE

SAMPLERS: T BROCK  
M SIMPSON

PARTY CHIEF: T. ADAMSON

DATE: JUNE, 1968.

⊙ CU SULFIDE MINERALIZATION.



DRAGON LAKE PROPERTY EXAMINATION

SOIL SAMPLE RESULTS (Cu, Zn ppm)

SCALE : 1" : 1/2 MILE

SAMPLER : M. SIMPSON

PARTY CHIEF : T. ADAMSON

DATE : JUNE, 1968

Cu SULFIDE MINERALIZATION.

