

PROJECT #224

93-F-15

REPORT ON

104-H-13

NORTHERN BRITISH COLUMBIA

and YUKON PROSPECTING

SUMMER ACTIVITIES, 1955

J.J. MCDUGALL - GEOLOGIST

EALUE LAKE PROJECT #224 Report on Northern
British Columbia and Yukon Prospecting
Summer Activities, 1955 J.J. McDougall

104-H-13
B.C.

LAKE GROUP CLAIMS

OWNERS: S. G. Bridcut of Lower Post, and
Glen Hope of Cassiar.

LOCATION: Approximately 55 miles east of Telegraph Creek on the north shore of Ealue Lake approximately $1\frac{1}{2}$ miles from its head. Access by trail or float-plane to the lake and 1 mile trail to property. Main showing near the top of a gentle open ridge at approximate elevation 3800-4000 feet (about 1000 feet above lake level). Property consists of three staked claims.

HISTORY AND DEVELOPMENT: Copper showings discovered in the 1920's. Development work by J.G.Hope includes a 100' crosscut on the main showing and a 10' adit on the upper showing plus several open cuts along a 3000' length. Surface stripping was carried out on the main showing (see Map LG 1).

ORE: Copper-gold (chalcopyrite).

GEOLOGY: Chalcopyrite mineralization occurs in a narrow (1-200'(?)) band of northwesterly striking metamorphosed sedimentary rocks over and underlain by volcanics.

The area has not yet been geologically mapped.

The age of the rocks is unknown but they are believed to be Permian or Triassic. Unidentified cephalopod(?) fossils were found in float near the claim posts above the main showing.

The sedimentary rocks, now largely altered, consist of limestone, dolomite, calcareous shales and argillites, and thin-bedded cherts. Cherty fragments were noted in a small outcrop of conglomerate on the trail below the showings.

The volcanic rocks examined are largely andesites which are tuffaceous in part. Local alteration consists of chlor-

itization, silicification and epidotization. Thickness is believed to be several thousand feet, although this may include minor sediments.

No granitic rocks were seen in the area except for a poorly exposed, pink orthoclase-bearing pegmatite dyke a few feet west of the main showing. Original reports mention "felsite and feldspar porphyry dykes cutting dolomitic limestone."

The rocks strike northwesterly and dip easterly at the main showing and westerly at the upper showing. Regional dip is not known. Folding is indicated at the main showing by a change in dip of 20° between the portal and the sample area.

Mineralization, consisting of chalcopyrite, pyrite, hematite, and pyrrhotite, has been localized by folding within the favorable skarn above the adit. Most of the skarn exposed is barren of copper and contains only rosettes of specularite although its surface has been coated with copper carbonates originating above.

The 100' adit was driven in the skarn (and minor volcanics?) to intersect the 20' square(?) chalcopyrite body exposed above. No copper values were encountered by it. However, if the deposit is a bedded replacement, as is suggested, and surface dips of 40 to 45° near it hold at depth, the crosscut stopped a few feet short of the ore (see cross-section).

The upper and lower showings are geologically similar to the main showing, and appear to be on strike with it. However, copper mineralization is much less intensive.

ASSAYS AND RESERVES:

A chip sample taken across a 15' cut on the high grade assayed 3.9% copper, 0.10 oz gold and 0.5 oz silver (present value approx. \$36.00/ton). A picked sample assayed

21.9% copper, 0.16 oz gold and 4.3 oz silver. No assays were made on samples taken from other showings.

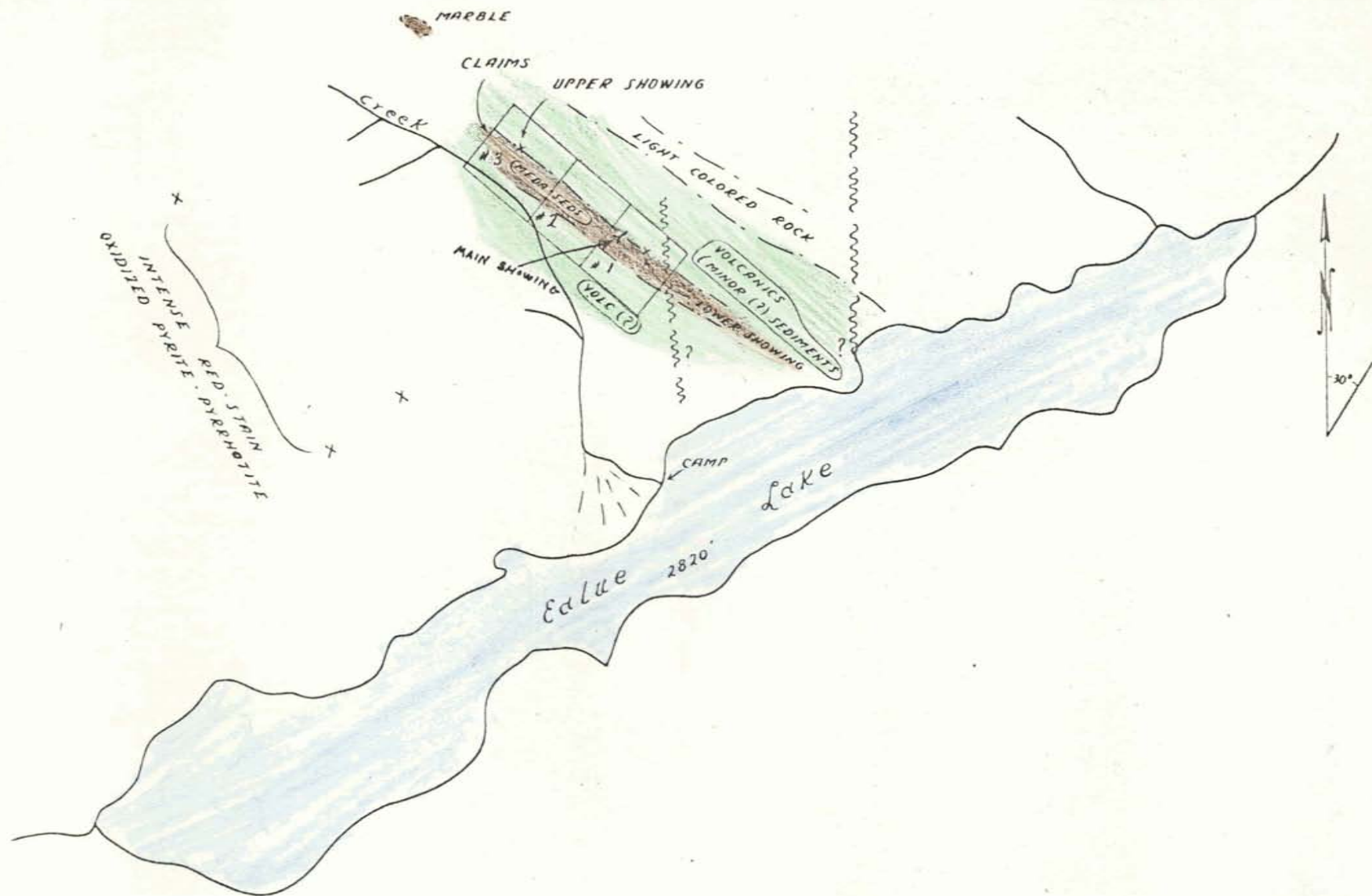
CONCLUSIONS:

A discouraging lack of continuity along strike of the chalcopyrite-rich section offsets any possibilities at depth despite the favorable change in dip noted in enclosing rocks. Although copper mineralization occurs at intervals for 2000' along the ridge, exposures to date show extreme irregularity and no commercial deposit is indicated. Much of the area is covered by overburden which probably hides other high-grade ore shoots. As the Cassiar-Stewart road will pass within a few miles of the deposit, the claims should be held by the owners pending greater future interest and the possibility of "high-grading."

REFERENCES:

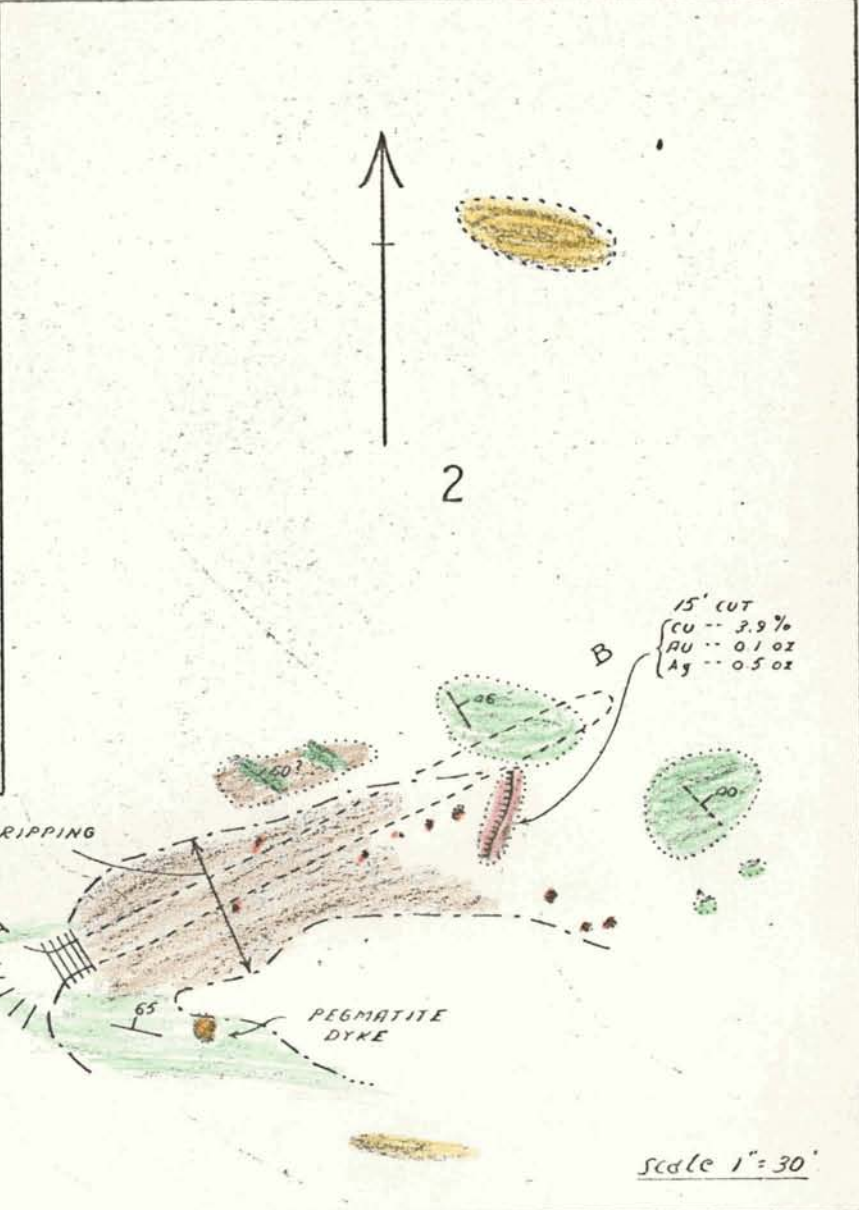
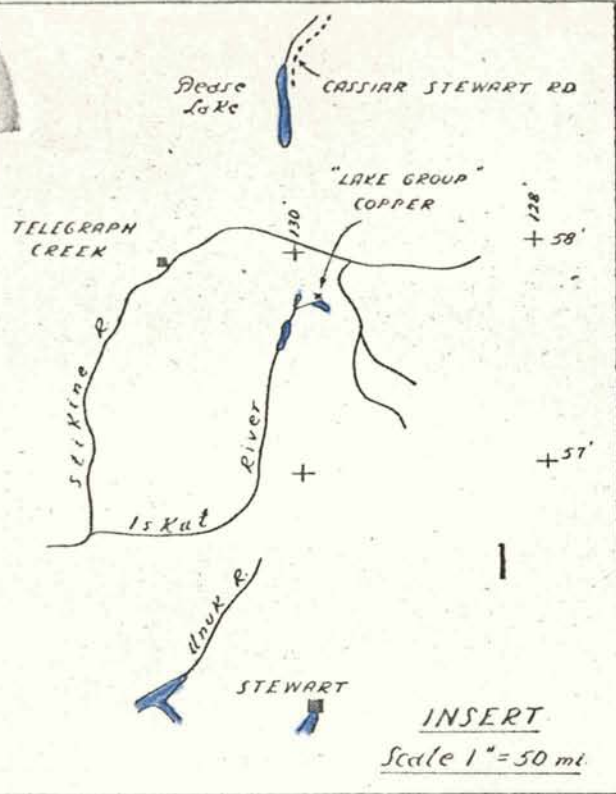
B. C. Dept. of Mines Annual Reports 1926, 1931, 1932.

(Regarding the Cassiar-Stewart Road, and in view of the route to be followed, it is the opinion of many that, under present rate of construction, it will not be completed for 20 years).



AIR - PHOTO LOCATION
LAKE GROUP COPPER

Approx Scale 1" = 2800'



- META-SEDIMENTS (SKARN, etc.)
- CHERTY SEDIMENTS
- CHALCOPYRITE MINERALIZATION
- VOLCANICS (SILICEOUS ANDESITIC TUFFS, etc.)

GEOLOGICAL SKETCH MAP
 - OF -
LAKE GROUP
COPPER-MAIN SHOWING
EALUE LAKE BC.

JAMES J MC DOUGALL
 QUEBEC MET IND. LTD.
 JULY 22 1955.

