



42A03NW0112 63.892 MUSGROVE

010

Report on Geological
and Electromagnetic
Surveys.

1957

SUMMARY AND RECOMMENDATIONS

Two copper showings of massive or nearly massive sulphides about 300 feet apart are associated with a granite-peridotite contact. The electromagnetic survey shows a continuous conductor between the showings but this conductor does not extend more than 100 feet beyond the showings. Other conductors indicated are too small and weak to be of interest.

The showings suggested the possibility of ore on the claims. The work failed to indicate anything better than the showings.

It is therefore recommended that the option be dropped.

PREVIOUS WORK

Shallow test pits and trenches have been blasted into two sulphide showings on the south shore of the small lake in claim No. 41399.

The two sulphide showings contain a few tenths of 1% of fine chalcopyrite. The most westerly showing consists of a triangle of massive pyrrhotite about 4 feet on a side on the edge of an outcrop of granite near its contact with peridotite. At the easterly showing a shallow trench and stripping shows from south to north a few feet of disseminated sulphides in granite, then about 10 feet of 60-80% pyrrhotite with low chalcopyrite mineralization in granite, then peridotite with occasional sulphide grains. At or near the granite peridotite contact there is a few inches which are 50-75% black, sooty material, possibly graphite.

Grab samples by the owners are reported to give Nil to 1.46% copper, Nil to 0.09% nickel, 0.84 to 1.16 ozs. silver, Nil to 70¢ in gold and 26-32% sulphur.

THE PROPERTY

The claims total 15 and are owned by Mr. Anthony Sanderelli, 3 Riverside Drive, Mountjoy Township, Mr. Anthony A. Guolla, 467 Pine Street, North, Timmins, Ontario, and Mr. Jack Zander, 268 Hamlock Street, Timmins, Ontario. The claims held in Musgrove Township are numbered 41401, 41402, 41407, 41400, 41399, 41406, 41397, 41398 and 41405 and those in Fripp Township are numbered 41411, 41410, 41409, 41396, 41395 and 41408.

The claims were optioned to Kerr-Addison Gold Mines Limited, Virginia-town, Ontario on June 5th, 1957. Between June 5th and June 28th a geological and electromagnetic survey was done on the property by geologists and prospectors employed by the optionee.

LOCATION AND MEANS OF ACCESS

The claims are traversed by a gravel timber road which runs south from the Buffalo Ankerite property near Timmins. This road is maintained by the Wicks Lumber Company and the Feldman Lumber Company from whom a pass may be obtained to go through a gate which is maintained on the road about 2 1/2 miles south of Timmins. The claims are about 1/2 miles south of the gate.

PRESENT WORK

The work described in this report consists of 18, 675' of line-cutting which was done to serve as a grid system for use in carrying out a limited geological and electromagnetic survey in the vicinity of the showings in order to indicate whether the showings might be part of or near a larger body of sulphides.

The base line has a bearing of 283° astronomic and roughly parallels the granite peridotite contact with which the sulphide showings are associated. Picket lines at 300 foot intervals and picketed at 100 foot intervals were run at right angles to the base line.

In addition to the detailed survey of the showing area the rest of the claims were prospected and nothing of interest was found.

The work was done on 6 claims in Musgrove Township numbered P41397 to P41402 inclusive and 1 claim in Fripp Township numbered P41395 during the period June 5th to 28th. Some work on the report and maps was done on July 29th and 30th, 1957.

GEOLOGICAL SURVEY

The geological survey was carried out by pace and compass and all outcrops tied in to the picket line grid. Results of this work are shown on the accompanying geological map. The area mapped is underlain by grey granite, peridotite and diabase. The following table summarizes the geological successions

QUATERNARY: Sand and gravel

Great Unconformity

PRE-CAMBRIAN

Keeweenawen: Diabase dike

Intrusive Contact

Algoman: Granite

Intrusive Contact

Keewatin(?): Peridotite

The peridotite is a dark green, fine grained massive rock with some

weak sheeting. One dike-like part of the peridotite contained visible crystals, possibly a pyroxene.

The granite is a grey, medium to coarse-grained rock. The feldspars are grey to milky white. This is probably the same rock described by Bruce (1). Near the contact of the granite with peridotite, more acidic pink phases of the granite were noted in a few places. This phase was noted as dike-like masses in the granite and peridotite. Some parts of the pink granite resemble graphic granite and other parts are pegmatitic or aplitic. The geiger counter does not record any counts above average in these areas. The granites are cut by small barren quartz stringers and veins in places. About 100 feet south of the east showing a 2 foot light grey felsitic dike intrudes the grey granite and is strike slip faulted about 8 inches. The dike contains finely disseminated pyrite. A granite outcrop on the base line south and east of the west showing shows gneissic structure.

The diabase is a medium grained rock similar to occurrences elsewhere and needs no detailed description.

Near the east showing the peridotite contains disseminated pyrrhotite and gives a positive nickel test with dimethylglyoxime powder.

A 2 foot wide band of peridotite with disseminated pyrrhotite occurs on L-14, 3400 N. Specimens give a positive nickel test with dimethylglyoxime powder.

Specimens of massive pyrrhotite from the west showing do not give a positive nickel test.

(1) Bruce E.L., McArthur, Bartlett, Douglas and Geikie Townships; Ontario Department of Mines, Vol. XXXV, Part VJ, 1926, P. 47.

ELECTROMAGNETIC SURVEY

The electromagnetic survey was carried out using a Doolimeter electromagnetic prospecting device. This is a battery operated instrument which uses a vertical transmitting loop and a horizontal receiving loop. The operating frequency of the transmitter is rigidly controlled at 1000 C.P.S. The receiving unit is sharply tuned to this frequency. Field operation requires at least 2 men, one man operates the transmitter and the other operates the receiver. To take a reading the transmitter is held exactly in a vertical position and pointed directly at the receiver with the current turned on. The operator with the receiver coil faces the transmitter while holding the receiver coil in a horizontal position. The receiver coil is then tilted right or left to determine the position where the operator hears a minimum of sound. This position is known as the null point and is read from the levelling device in number of degrees to right or left. This reading is plotted at the station where the receiver is located. The transmitter was set up at a number of positions beginning with the showings and at other positions which had previously been found to be underlain by conductors while the receiver moved along picket lines or traverse lines taking readings at regular intervals. The presence of a conductor is indicated when the readings change from left to right as the operator traverses from left to right or when readings change from right to left as the operator moves from right to left.

The accompanying map shows the positions of the transmitter, the readings made and the position of the conductors indicated by the survey.

The survey was carried out over parts of claims numbered P41397 to P41401 inclusive. The number of electromagnetic readings made is 198.

The survey indicated that the showings are part of a continuous zone of sulphides but that this zone dies out within 100 feet east of the east showing and within 100 feet west of the west showing. Other conductors found are short and weak and are not thought to represent a significant amount of sulphide mineralization.

MAPS

Two maps accompanying this report are a geological map on a scale of 1" = 200' and an electromagnetic map on a scale of 1" = 200'.

L. Wilton
S. P. Saffmanale

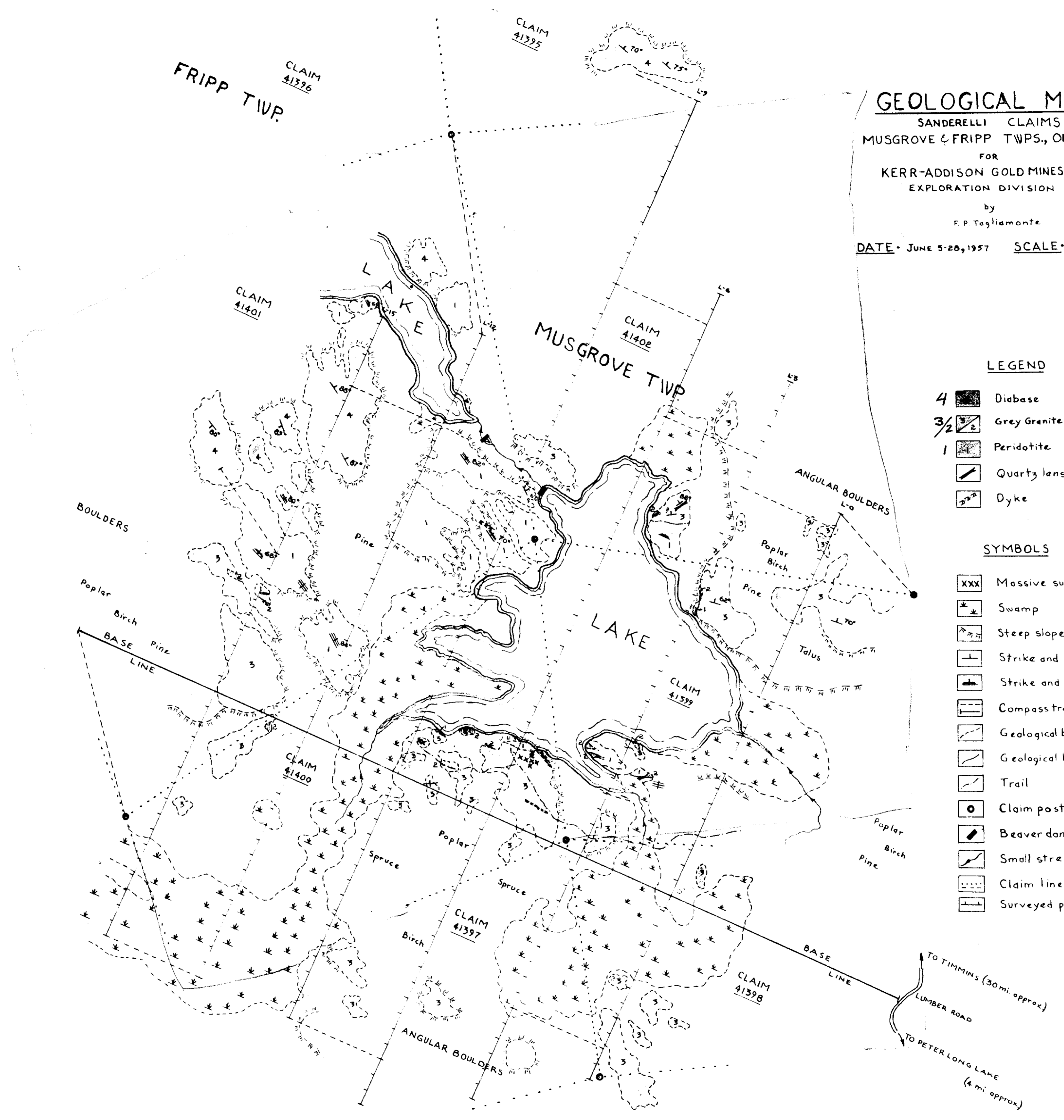
GEOLOGICAL MAP
 SANDRELLI CLAIMS
 MUSGROVE & FRIPP TOWNSHIPS, ONTARIO
 FOR
 KERR-ADDISON GOLD MINES LTD.
 EXPLORATION DIVISION
 by
 F. P. Tagliamonte
 DATE - JUNE 5-20, 1957 SCALE - 1" = 200'

LEGEND

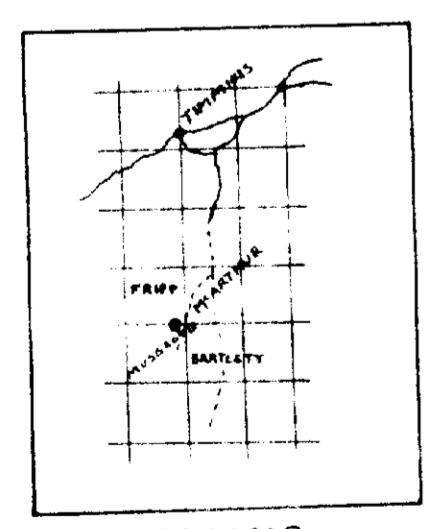
- 4 Diabase
- 3/2 Grey Granite, Pink Granite and Pegmatite
- 1 Peridotite
- Quartz lens or vein
- Dyke

SYMBOLS

- XXX Massive sulphides, pits
- Swamp
- Steep slopes and hills
- Strike and dip of jointing
- Strike and dip of sheeting
- Compass traverses, picket lines
- Geological boundary, assumed
- Geological boundary, defined
- Trail
- Claim posts
- Beaver dam
- Small stream
- Claim lines (approx. position)
- Surveyed picket lines



Approx. Magnetic Declination 10° West



INDEX MAP
 SCALE - 1" = 20 mi.



42A83N6112 63.882 MUSGROVE

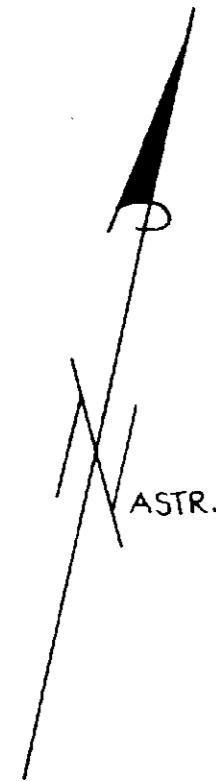
ELECTROMAGNETIC MAP

SANDERELLI CLAIMS
MUSGROVE & FRIPP TOWNSHIPS, ONTARIO

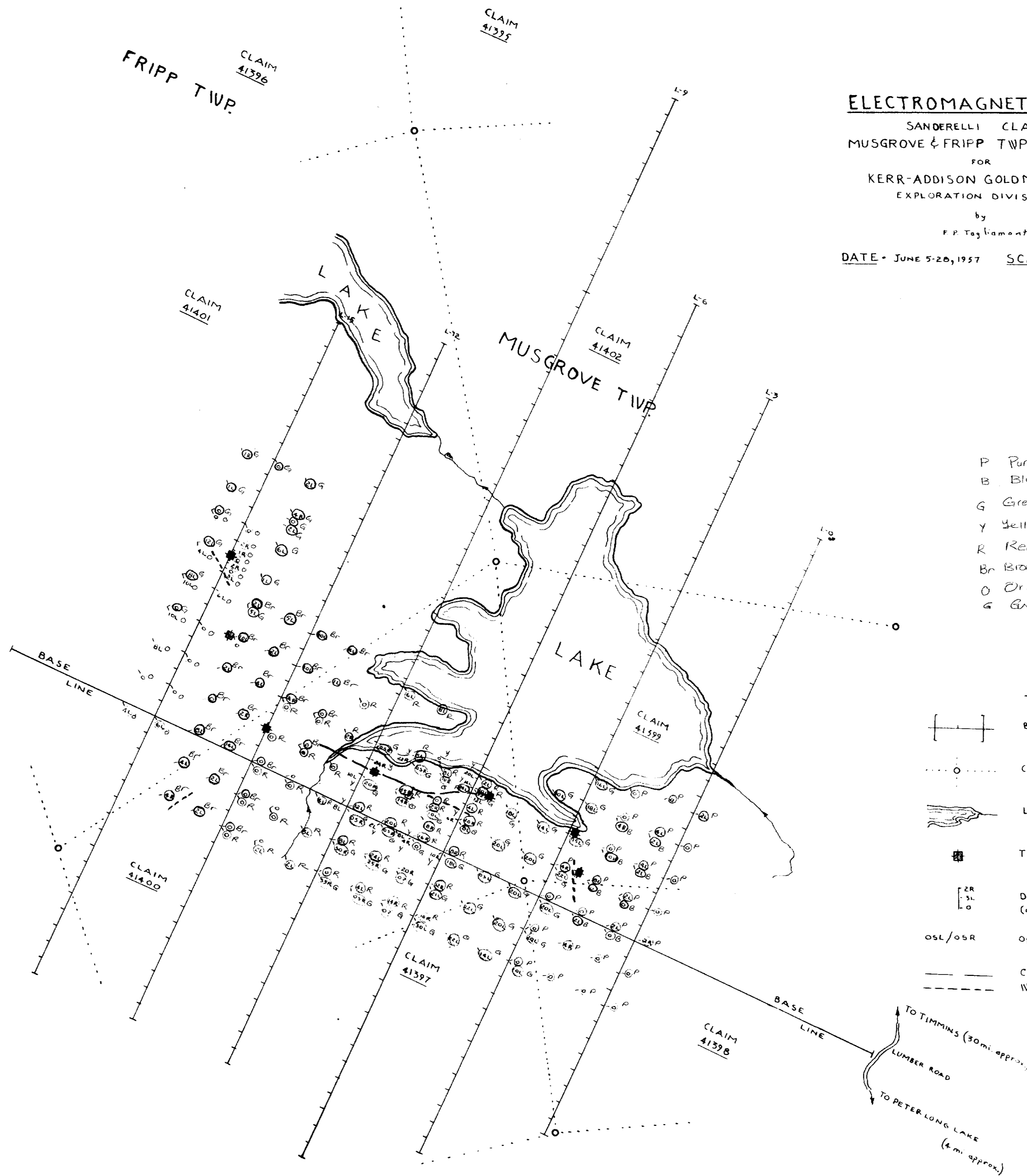
FOR
KERR-ADDISON GOLDMINES LTD.
EXPLORATION DIVISION

by
F. P. Tagliamonte

DATE - JUNE 5-20, 1957 SCALE - 1" = 200'



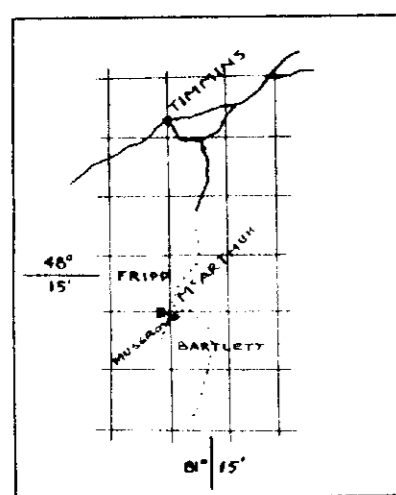
Approx. Magnetic Declination 10° West



- P Purple
- B Blue
- G Green
- Y Yellow
- R Red
- Br Brown
- O Orange
- G Grey

SYMBOLS

- Base and picket lines
- Claim lines and posts
- Lake and stream
- Transmitter locations
- Dip angles as read
(opposite to dip of receiver coil)
- Off scale readings (Right or Left)
- Conductor Axis
- Weak conductor axis



INDEX MAP
SCALE - 1" = 20 mi.

BASE LINE
TO TIMMINS (30 mi. approx.)
LUMBER ROAD
TO PETER LONG LAKE
(4 mi. approx.)



42A03W0112 63.882 MUSGROVE

Frank P. Tagliamonte