# 1977



517 · 602 West Hastings Street, Vancouver, British Golumbia, Ganada 🕸 Telephone 688-4342

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Department of
Mines and Petroleum Resources
ASSESSMENT REPORT

NO. 1977

MAP

#### E. P. SHEPPARD & ASSOCIATES LTD.

CONSULTING GEOLOGISTS

314-402 WEST PENDER STREET, VANCOUVER 3, B.C.

September 30, 1969

Mr. R. L. Kane, President Jumbo Mines Ltd 617-402 W. Pender Street Vancouver, B. C.

Re: TATLER #2 Group

Dear Sir:

As recommended in my Geological Report dated February 28, 1969, geophysical work has now been carried out on the Tatler Group.

The survey was carried out by Geotronics Surveys, 517-602 West Hastings Street, Vancouver, during July 1969, under the direct supervision of their Geophysicist, Robert H. Parker, B.Sc.

I have checked the results and am satisfied with the performance and accuracy of the survey.

Very truly yours,

E. P. Sheppard

(E. P. Sheppard), P. Eng. Consulting Geologist



Enc. EPS:d



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Very truly yours,

EPSIPPARA (E. P. Sheppard), P. Eng. Consulting Geologist E. P. SHEPPARD

Enc. EPS:d



FIELD REPORT WORK DONE! TOLY 8-17,1469

July 1969

ELECTRO-MAGNETIC SURVEY

JUMBO MINES LTD.

TATLER CLAIM GROUP

GOLDEN MINING DIVISION





GEOPHYSICIST'S FIELD REPORT

ELECTRO-MAGNETIC SURVEY, TATLER CLAIM GROUP, JUNDO MINES LTD.

July 1969

LOCATION:

The Tatler group of claims lies on the headwaters of Farnham Creek, extending to the headwaters of an unnamed creek that flows south into Jumbo Creek. It comprises a block of 40 claims.

GECLOGY:

The geology of the area is complex. Eroken Hill, the site of a crown grant, is comprised of shattered shale, sandstone and linestone with many scattered showings of ozurite, malachite, pyrite, and small amounts of galena and tetradhedrite. There are two pronounced showings of barite, with minor copper mineralization, plus a lot of barite float scattered on the hillside. The rock is greatly fractured and sheared in all locations. Mineralization appears to occur mainly in vein systems, often in areas of contact between shale and limestone. Both quarts and calcite appear in the vein system.

WEATHER:

The weather at the time of the survey varied widely. Surveying was carried out in sun, rain, sleet, hall and snow. The temperature varied from below freezing to around 60 degrees. The campsite had two inches of snow one morning.



### INSTRUMENTATION:

A V.L.F. electro-magnetic set manufactured by Geotronics Instruments
Ltd. of Vancouver, B.C. was used to locate conductive gones. This
instrument is designed to measure the electro-magnetic component of
the very low frequency field, transmitted at 18,6 KHs from Seattle,
Washington. The direction of this field, in particular the dip
angle, is distorted by the presence of a conductor within the earth.
Thus, by measuring the dip angle, the presence of a conductor can
be detected and its location determined. The normal V.L.F. field
is horizontal and the effect of a conductor is to distort this
horizontal field, causing a change in the direction and angle. Thus,
if dip angle measurements are made and plotted, they will produce a
profile with the conductor being located at the cross-ever point.

## ELECTRG-MAGNETIC SURVEY:

A total of 35,641 line feet, comprising 441 readings have been surveyed to date. Two base lines were run bearing 256-116 magnetic, with cross lines bearing 026-206 magnetic. These directions were chosen to coincide with the base line direction of the claim group. A big problem on this survey has been location control. Several posts of the old crown grants were located, however, and these with bearings sighted on Elsek Diamond Hountain and The Cleavers were used as location control. It must be stressed that the base line map location is approximate.

The base lines were flagged every 200 feet and labelled with red and blue flagging tape at the cross line locations. The cross lines were flagged and labelled every 100 feet. It should be noted that



lack of staking material and the presence of snow made this task almost impossible on some of the cross lines on base line #1. A major portion of this part of the survey was over apparently permanent snow.

The main base stations were located as follows:

(1) Base line i (upper base line)

The main base station for this line is located at a crown grant post, "Copper King-White Bear", situated approximately 350 feet W. 320 feet S of the old trench and 1968 DD site.

(2) Bese line 2

The main base station for this line is located at the campsite. The bearing to Black Diamond peak is 124 degrees true and to The Cleaver is 246 degrees true.

PLOTTING.

The grid system for both areas has been plotted on a scale of 1" = 400°.

Farnham Creek has been drawn in, as well as the location of the camp and the drill site on Broken Hill. An old adit discovered in the course of the survey was also plotted in, at 0+08 N, 06 W, HL \$2, as well as a 50 foot trench near the SB post, Iron Hask C.G.

The E.E. grid and claim location map is plotted at a scale of 1" = 400° and the profile map with values plotted at a scale of 1" = 20 degrees.

RESULTS:

Area 1. (Base line 1)

This area is almost entirely snow covered, with occasional outcrop of bare rock with the characteristic broken rock of the area.

Initially, lines were run at 400 foot intervals. Crossovers on line



0+16 5, and 0+04 5 dictated the running of two more lines, 0+14 5 and 0+06 5. On 0+14 5 a very deep negative was reached at 03 5, with the crossover point at 5+50 E. This trend is reflected in lines 0+12 3 and 0+16 5. The crossovers on these lines correspond roughly with a rock outcrop with gossan zones. This rock outcrop appears to trend almost due H-S (true). This area bears further investigation.

A similar trend exists on lines 0+04 3 and 0+06 5. The shape of the E.M. profile on line 0+08 8 is similar, although it does not exhibit a true crossover. The area here is mostly snow covered and what rock there is, is broken float. Bothing car be said geologically about this area.

On line 0+00, there is a crossover which appears to reflect the trend of lines 12, 14, and 16. This may be a continuation of the same some of pyrite mineralization. If so, this zone is some 1600 feet long. The presence of so such snow in the area makes any definite geological conclusion difficult.

Area 2.

This area can be broken into three somes for purposes of discussion.

Zone 1

lines 12-24, east side. This area is on the northern flank of Black Diamond Mountain. The conspicuous crossovers on lines 16, 18 and 20 reflected in the profile of line 12, coincide exactly with the location of a long sharp ridge of black shaly mud. It is thought that these crossovers are therefore a reflection of this topographical feature. There a few outcrops in the area.



Zone 2.

lines 12 to 24, west side. Lines 20, 22 and 24 are conspicnously noisy with many small crossovers. Much of these lines were ever snow. The areas free of snow contained a fair amount of broken float showing agurite. Torcasite and some barite. Line 22 runs over the site of old trenching work with fairly good showings. The shape of the profile here is reflected in line 24. slightly to the south, and indicates that the some of interest may trend to the south for at least 200 feet. Lines 12, 16 and 20 show only shallow crossovers with no apparent trends.

Zone 3.

lines 0+00 to 0+08 S. and the north continuation from 0+00 to 0+20 B. This area shows little in the way of conclusive results. There is a minor trend shown in the shape of the E.M. profiles for 0+00 and 0+04 5, on the west side. Some trenching has been done in this area, with minor showings of copper mineralization in narrow quarts veins.

#### SUMMARY:

Indications are that more work on the upper part of the property is justified. The presence of large areas of encw, and broken rock overburden make geologic work difficult. Drilling is indicated in the two sones mentioned; the sone including the old trench site, and the zone on the east side of lines 12. 14 and 16 S of base line one.

Respectfully submitted:

R.H. Parker, B.So.,

Geophysicist



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## RESUME OF ROBERT H. PARKER, B.SC.

- (1) Graduated from the University of British Columbia in 1961 with B.Sc. in mathematics and physics.
- (2) Total seven years teaching first year university physics.
- (3) Total three years teaching geophysical prospecting methods, at the British Columbia Institute of Technology.
- (4) Summer 1966 design and construction of earth resistivity meter.

  Geophysics Department, U.B.C.
- (5) Summer 1967 design and construction of E.M. model experiment, Geophysics Department, U.B.C.
- (6) Magnetometer survey, Geo-X Surveys Ltd., Vancouver, B.C., summer 1967
- (7) 1967 1968 Geo-X Surveys Ltd., part time during winter (while teaching), full time during summer exploration season; airborne and ground magnetometer and geochemical surveys.
- (8) From June 1, 1969; Geotromics Surveys Ltd., Vancouver, B.C.
  - (9) Member of American Association of Physics Teachers, Canadian Association of Physicists, B.C. Geophysical Society.
- (10) P. Eng. applied for with Association of Professional Engineers of B.C.

# GEOTRONICS

# SURVEYS 5107 VICTORY STREET, SOUTH BURNABY, B.C., PHONE 434-0137

Geophysical Surveys, Ground & Airborne 4.

RESUME OF TECHNICAL AND FIELD EXPERIENCE OF TOM ROLSTON, PRESIDENT AND FIELD MANAGER OF GEOTRONICS SURVEYS LTD.

- 1. Eleven years with R.C.A.F. as Instrument and Electronic.
  Technician with crew supervisory capacity in various electronic
  and instrumentation systems.
- 2. Two years with Kerr-Addison Mines Ltd. as Electronic Technician servicing, repair and maintenance of various types of geophysical instruments. Also, two seasons as Field Supervisior and geophysical instrument operator in mining exploration, including airborne and ground geophysical surveys, geochemical surveys, geophysical and geochemical drafting and mapping.
- 3. Three years Field Supervisor of geophysical and geochemical surveys, including instument operator of various geophysical instruments; airborne and ground systems magnetometer, electromagnetic, gravity meter, self potential meter, scintilometer, induced polarization.
- 4. Three years contracting geophysical geochemical surveys with close association with mining engineers for warious mining companies.
- 5. President and Manager of Geotronics Instruments Ltd., geophysical instrument design, manufacture and distributuon.
- 6. President and Project Manager of Geotronics Surveys Ltd. mining exploration, geophysics and services.
- 7. Electronics Engineering understudy with Cleveland Institue of Electronics.
- 8. Member of B.C. Geophysical Society.





