

REPORT ON
GEOCHEMICAL, GEOLOGICAL, AND MAGNETOMETER SURVEYS
ON THE Ja AND P CLAIMS
NEW WESTMINSTER MINING DIVISION, B.C.

FOR
JAVELIN MINES LTD. (NPL)

Department of
Mines and Petroleum Resources
ASSESSMENT REPORT
NO. 2601 MAP.....

September 10, 1970
Vancouver, B.C.

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#5 Claim Map

REPORT ON

GEOCHEMICAL, GEOLOGICAL, AND MAGNETOMETER SURVEYS

ON THE Ja AND P CLAIMS

NEW WESTMINSTER MINING DIVISION, B.C.

INTRODUCTION:

The Ja and P claims comprise a group of 16 contiguous claims situated 8 miles northeast of Haney in southwestern British Columbia.

The claims were staked in 1969 to cover an occurrence of copper mineralization which had previously been explored by trenching.

A program of geological mapping, geochemical and magnetometer surveys was conducted during July, 1970. All work was carried out by personnel of Agilis Exploration Services Ltd. An evaluation report was also prepared in January, 1970 by Mr. W.G. Stevenson, P. Eng. and is appended to this report.

GENERAL:

The claims lie 8 miles northeast of Haney in the Fraser Valley region of southwestern British Columbia and are accessible by secondary roads from that center.

Topographic relief is low in the western portion of the claims but very steep in the eastern sections where rock bluffs are common. Timber and thick underbrush occur throughout the region.

Climate is moderate and exploration can be conducted throughout the year, with snow present at the lower elevations for only short periods during the winter months.

PROPERTY:

The property consists of the following 16 contiguous mineral claims located in the New Westminster Mining Division of British Columbia.

Ja 1 - 8

Record Numbers: 22881 - 22888

P 1 - 8

Record Numbers: 22096 - 22103

GEOLOGY:

Regional mapping including the claims area has been conducted by the Geological Survey of Canada and published as Map 1151A in Memoir 335 at a scale of 1 inch = 4 miles. This shows the claims area to be underlain by granitic rocks of the Coast Range Intrusions.

Outcrop on the Ja and P claims is confined to the central and eastern sections, increasing in abundance towards the east. This is essentially all the same rock type, consisting of a light grey, generally medium grained quartz-diorite. Main variations are in grain size with fine-grained and occasionally coarse grained sections present.

No major structures were noted. Northeast faulting is common in the region and may be present within the claims area as evidenced by topography.

An isolated outcrop approximately 30 feet in diameter, occurs in the western portion of the claims on P #6. This outcrop is more basic than most of the other rock and contains coarse grained pyroxene and feldspar segregations. Phyrrotite, pyrite and in places chalcopyrite, are abundant within this basic rock.

GEOCHEMICAL SURVEY:

Field Procedures:

A northwest trending base-line was established and cross-lines run at 400 foot intervals in the western portion of the claims.

Lines were established by chain and compass and marked by colored flagging with stations marked at 200 foot intervals, and 100 foot intervals in the vicinity of the copper showing. A total of 8 miles of crosslines and 1 mile of baseline was established and sampled.

Samples, which were collected with an auger, were taken from the soil horizon immediately underlying the surface humous layer. Notes were taken at each sample location regarding topography, soil type, depth taken, etc. and any other pertinent data that could be used later in interpreting the results.

Testing Procedures:

Samples were packaged in Kraft envelopes and sent to Chemex Labs Ltd. in North Vancouver for analysis. Here they were dried in an electric oven at 150°F, screened to -80 mesh, digested in a perchloric-nitric acid mixture and analyzed for total copper content by the atomic absorption method.

Results of Survey:

Geochemical values were plotted on a plan at a scale of 1 inch = 400 feet and contoured at 20 parts per million (ppm) intervals.

Background is estimated at 30 ppm copper or less and anomalous areas considered of significance are those over 60 ppm copper. The only anomalous areas are grouped in the central portion of the grid, mainly east of the copper showing.

These are grouped in an area measuring 200 feet in a northwest direction by about 900 feet wide and consist of 3 individual anomalous areas. Peak value is 156 ppm copper. The northwestern portion may be due to contamination along the road.

Two smaller and weaker northwest trending anomalies occur west of the base line.

MAGNETOMETER SURVEY:

A magnetometer survey was conducted over the southern portion of the claim group to outline the extent, and hopefully to detect any buried magnetite zones.

A total of approximately 5 miles of crosslines and approximately 1 mile of baseline have been surveyed.

Instrument Used:

The magnetometer survey was conducted using a Sharpe Model MF1 fluxgate magnetometer with readings taken on all base and crosslines.

This instrument is self-orienting, requires only coarse levelling, and has temperature compensations built into the instrument.

The magnetometer can be read to five gammas on the lowest scale range and scale ranges vary from a minimum of plus or minus 1,000 gammas on this scale to a maximum of plus or minus 100,000 gammas on the highest scale. A high latitude adjustment permit zeroing of the magnetometer at any location.

Field Procedure:

The magnetometer was zeroed for this property and base stations established at 200 foot intervals along base and tie lines. In establishing these base stations, each loop ended at the same station as it began and the average of three readings taken at each station, $\frac{1}{2}$ hour apart was used in subsequent calculations

Following this, magnetometer readings were taken at 100 foot intervals and when necessary because of a strong magnetic gradient 25 foot intervals along all cross lines.

Corrections:

Compensation built into the instrument eliminates any need for temperature corrections being applied to the field readings. Short term and long term time correction have been applied to all readings and were determined by the difference from the corrected reading between the initial and final base stations of each traverse.

This variation is assumed to be linear and the correction for any one reading in a traverse is the diurnal variation multiplied by the ratio, time elapsed when reading taken, divided by total time elapsed in the loop.

If:

V_c = corrected value

B_c = corrected base station reading

B_i = initial base station value when loop is started

B_f = final base station value when loop is finished

V_t = reading of station at time t when loop is run

t_i = time of initial base station value

t_f = time of final base station value

t = time when station is read

then the corrected value for a station read at time t is:

$$V_c = V_t + (B_c - B_i) + (B_i - B_f) \cdot \frac{t - t_i}{t_f - t_i}$$

INTERPRETATION AND RESULTS:

The magnetometer readings were plotted on a plan at a scale of 1 inch = 400 feet and contoured at 200 gammas interval.

Maximum magnetic relief obtains if 9200 gammas, from -964 gammas to + 8440 gammas in vicinity of the known showing.

An overlay of the magnetometer survey on the geochemical plot shows that the magnetic anomaly coincide with the geochemical anomaly, furthermore, since the copper mineralization is associated with pyrrhotite and more basic intrusive, the magnetometer survey outlined the area of interest very well.

CONCLUSIONS:

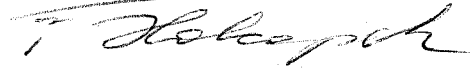
1. The copper-pyrrhotite mineralization on the Ja and P claims is associated with a more basic phase of the coast intrusion.
2. The mineralization could not be traced on the ground due to lack of outcrops.
3. The geochemical survey outlined an anomalous area, consisting of 3 closely spaced anomalies with dimensions of 200 feet by 900 feet.
4. The magnetometer survey outlined an anomalous area completely coinciding with the geochemical anomaly.

RECOMMENDATIONS:

1. Detail geological mapping of whole claim group.
2. Detail geochemical survey at 200 feet by 100 feet of anomalous area.
3. Detail magnetometer survey of same anomalous area.

4. Trenching or drilling as warranted.

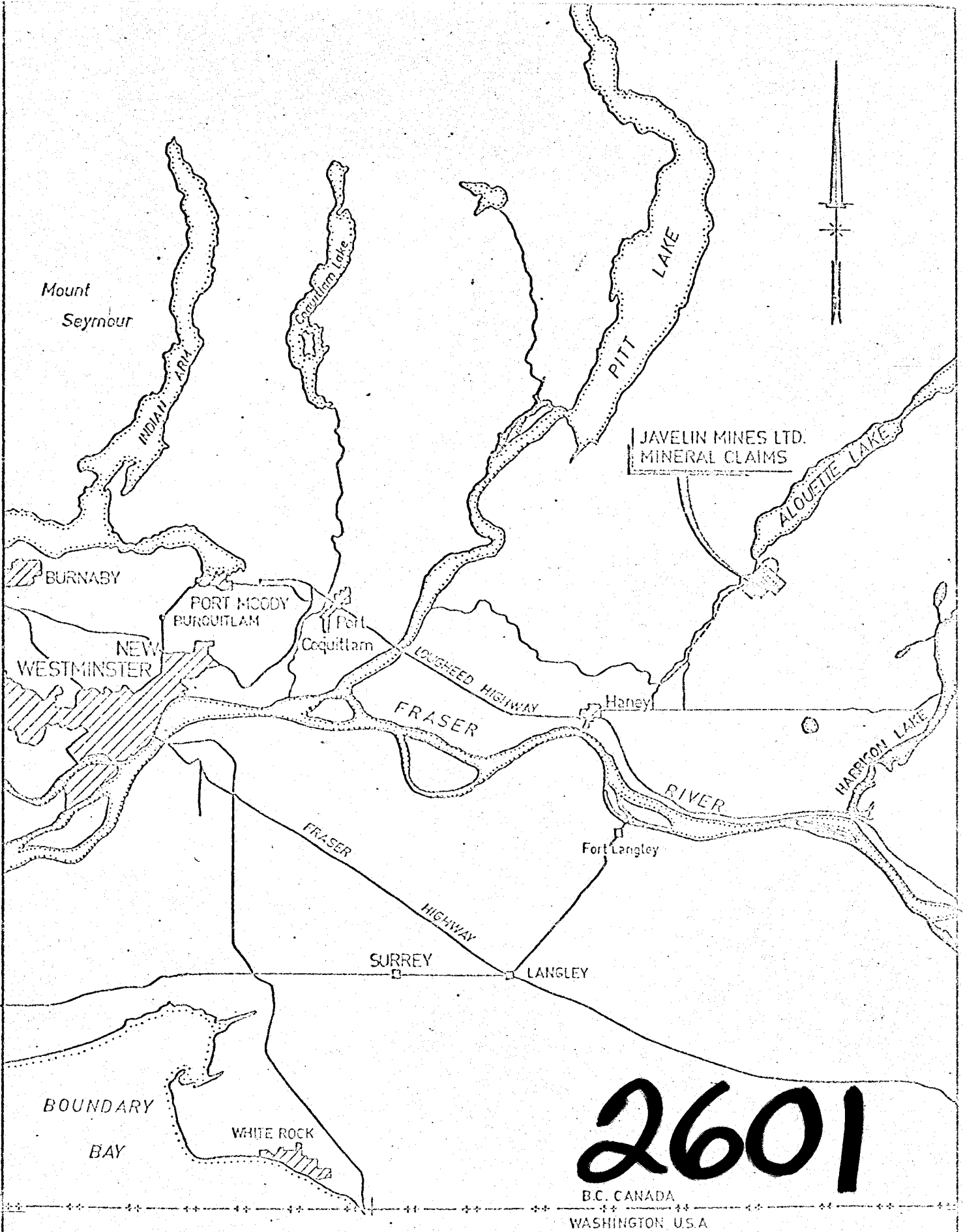
Respectively Submitted



F. Holcapek, Geologist

September 10, 1970

Vancouver, B.C.



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LOCATION MAP OF 'P' & 'JA' CLAIMS

ALOUETTE LAKE AREA

SCALE 1" = 4 MILES

ALOUETTE
LAKE

HANEY

CREEK

SEE DETAILED MAP
APPENDIX C & D

2601
APPENDIX 'B'

JAVELIN MINES LIMITED
NEW WESTMINSTER MD.

MAP SHOWING OUTLINE OF
P and JA MINERAL CLAIMS AND
CLAIM POSTS VERIFIED
(DETAILED GEOLOGICAL MAP APPENDIX "C")

0 1000 2000 3000
feet
scale

December 1959

W.G. STEVENSON & ASSOCIATES LTD.



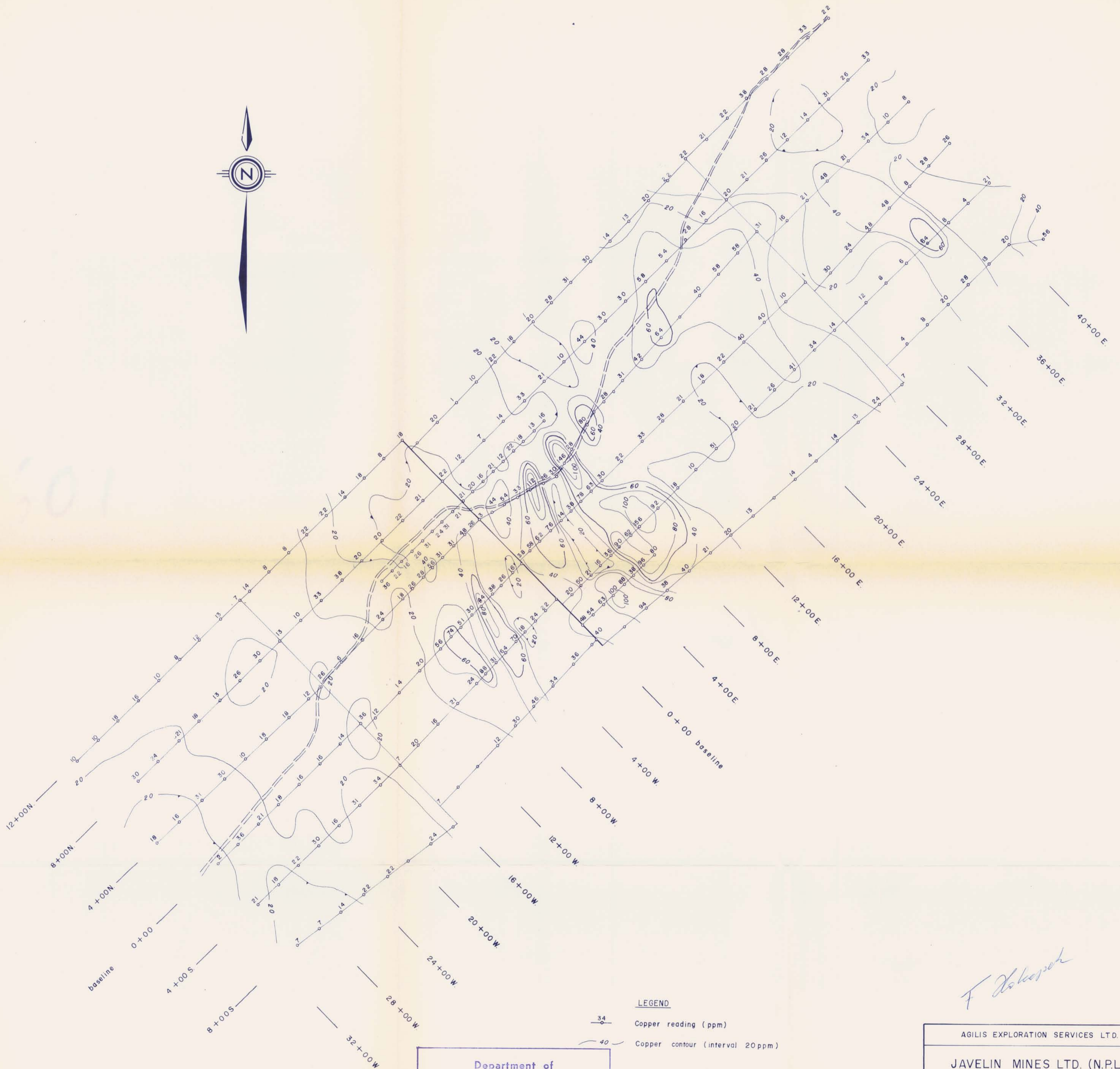
- LEGEND**
- Claim post
 - Road
 - ~ Swamp
 - Quartz diorite outcrop
 - Main showing

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F. J. Skopch

AGILIS EXPLORATION SERVICES LTD.	
JAVELIN MINES LTD. (N.P.L.)	
ALOUETTE LAKE	
Base Map & Geology	
DRAWN BY: L. M.	SCALE: 1" = 400'
CHECKED BY: R. P.	DATE: Aug., 1970

2601



LEGEND

- 34 — Copper reading (ppm)
- - - 40 - - - Copper contour (interval 20ppm)

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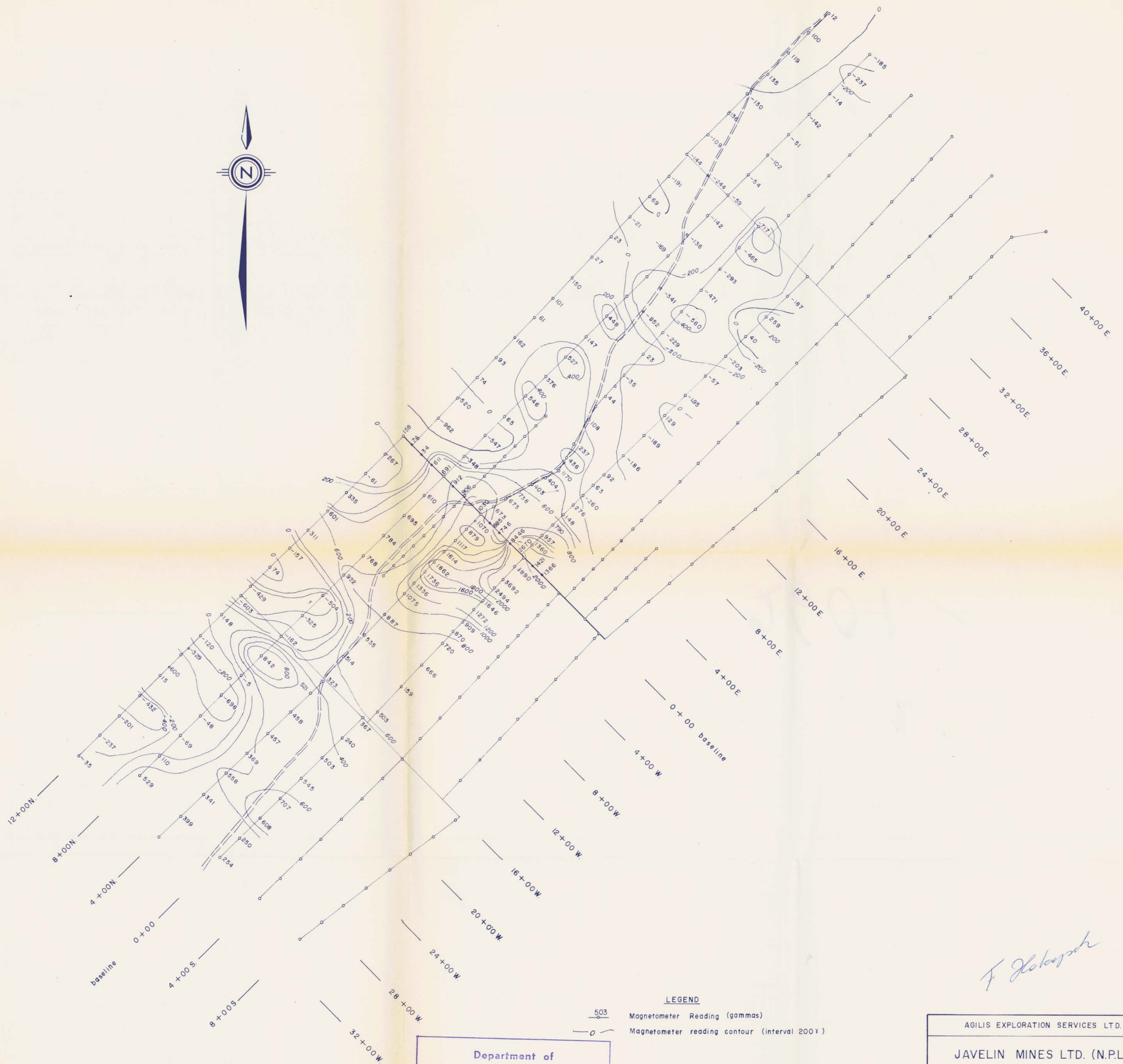
2601

F. Holmsted

AGILIS EXPLORATION SERVICES LTD.

JAVELIN MINES LTD. (N.P.L.)
ALOUETTE LAKE
Geochemical Survey

DRAWN BY: L.M. SCALE: 1" = 400'
CHECKED BY: R.P. DATE: Aug., 1970



LEGEND

- 503 Magnetometer Reading (gammas)
- - - Magnetometer reading contour (interval 200Y)

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AGILIS EXPLORATION SERVICES LTD.

JAVELIN MINES LTD. (N.P.L.)

ALOUETTE LAKE

Magnetometer Survey

DRAWN BY: L.M.	SCALE: 1" = 400'
CHECKED BY: R.P.	DATE: Aug., 1970