

*This report includes:
* Prelim. plans for full explor. of
property by Storrada*

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September 18, 1965

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Mr. J.R. Trepanier, President
Stellako Mining Co. Ltd., N.P.L.
716, 602 West Hastings Street
Vancouver 2, B.C.

Dear Mr. Trepanier:

PROGRESS REPORT — ROSCOE LAKE EXPLORATION

PRELIMINARY

The following will summarize engineering developments at the project following my previous geological report and recommendations submitted to you on August 6, 1965.

GENERAL PROGRESS

By September 6th the Skukun Creek new access road, from the '14-mile' turnoff on the Spences Bridge - Merritt highway to Roscoe Lake (approximately 21 miles) was generally completed. Camp construction, providing basic board and lodging facilities, was also completed. In addition, a 'portable' core-shack, to expedite the handling of drill cores and sludges, has been completed. A larger core shed, for logging, splitting, sampling, and storing drill cores, is being built at the camp-site. The above facilities are required for an anticipated 'winter' drilling program.

Additional exploratory trenching, by ripper-'dozer, was accomplished south of trench No. 1. Connected 'strike' and cross-trenches have increased the length of the known zone of alteration and mineralization by another 400 feet in this

direction. The zone continues southward beyond the most southerly cross-trench. The northerly continuation of the zone has been exposed by an additional cross-trench 150 feet north of the main strip area. Attempts to extend 'dozer exploration farther northward were unsuccessful because of soft, swampy ground conditions. Further strip and trench exploration, in general, have been suspended until such a time as geophysical exploration data are available to more efficiently control this work. To date, the general zone of alteration-mineralization has been opened over a N-S length of 1400 feet and average width of approximately 60 feet — including local expansions and contractions.

McElhanney Associates have completed field work in connection with a 'legal' survey of Stellako ground. Following office investigations and compilations, their reports and maps will be available for general exploration control.

Existing localized survey and geological maps will be replotted on this general control. *by Noranda & W.M.S.*

Noranda Exploration Co. Ltd., in participating in the major exploration program, plan to conduct geological, geophysical, and geochemical investigations throughout the claims area. This type of preliminary exploration is essential for control of subsequent surface and sub-surface exploration for possible non-outcropping disseminated sulphide zones.

SCHEDULED EXPLORATION

- (a) Preliminary Diamond Drilling: This preliminary drilling program is being done with the joint objectives of shallow depth exploration-evaluation of the relatively high-grade copper mineralization exposed during preliminary stripping, and also to meet the option commitment for 800 l.f. of core drilling. Subsequent holes, within the balance of the 2000 l.f. preliminary contract, will be located as indicated by further geological-geophysical information.

- (b) Exploration Grids: Following suggestions from Noranda's exploration staff, four parallel grids are planned. Parallel N-S base-lines will be situated on 3000-foot centers; grid cross-line spacing will vary from 800 feet for reconnaissance I.P., to 400 feet and 200 feet centres for detail and possible "fill-in" I.P.

The "Central" grid, for initial exploration of the known mineralized zone, contains $12\frac{1}{2}$ miles of cross-lines, extending 1500 feet east and west of the base-line. With the 0-0 reference cross-line through the collar of D.D.H. #5-1, cross-lines at 200-foot centers will cover the zone from 1400' S to 1000' N. The balance of the grid, tentatively from 4200 S to 2200 N will be cross-lined at 400-foot centers.

The adjoining westerly grids, No.'s 1-W and 2-W, tentatively contain 15 cross-line miles; and the easterly grid 8 line-miles. The total within the four grids tentatively amounts to 35.5 cross-line miles.

- (c) I.P. — Magnetometer Exploration:

1. Central Grid: $12\frac{1}{2}$ cross-line miles. The initial I.P. contract, for purposes of evaluation, should be based on a full survey of this grid. If feasible, subsequent I.P. work should be deferred until the cause of resultant anomalies is at least indicated.

The magnetometer survey, to correlate with the I.P. work, may be done by either Noranda personnel or by contract with an experienced group. Magnetometer surveys, preferably using speedier flux-gate equipment, should be done on all grids.

- (d) Geochemical Investigations:

Noranda Exploration plans to conduct further investigation of the indicated zones situated along drainage courses between the #1-W and #2-W grid base-lines.

Routine soil sampling of all grids, at least on wider reconnaissance spacing, is planned for all grids — in view of the known association of local float and bedrock mineralization.

(e) Reconnaissance Geological Mapping:

This is tentatively planned by Noranda — possibly in conjunction with an areal program of soil-sampling. This will be expedited by the provision of grid-line control, and also by provision of a small-scale photo-contour map of the general exploration area. The latter will also expedite geochemical investigations.

*Detail see
2000
enlarge
map by
McElhenny*

(f) Detailed Geological Mapping:

This will include additional 50-scale mapping within and along extensions of the known mineral zone, and will be based on drill-hole data and surface excavations.

(g) Survey Control:

Initial control for the location of drill holes, possible stripping, and preliminary location of base-lines generally provided by the Stellako's field engineer.

GENERAL SCHEDULE

(a) 4½ miles of base-line and 35½ miles grid line clearing and picketing, with two crews providing total 2 miles per day = 20 days — September 20th to October 10th.

(b) I.P. Survey:

Central grid; 12½ miles/15 days = October 1st to 15th.

(c) Diamond Drilling:

Preliminary 2000 l.f.

2000 l.f. @ 60'/2-sh. day = 33 days,

allow 38 days, incl. delays = Sept. 3 to Oct. 16.

*alt. f. gr (apltis) → alt aplite.
c. gr. Beths. → Skeletal phase*

CURRENT GEOLOGICAL MAPPING "

This includes recent mapping of exposures excavated since the writer's previous report.

Strongly-altered 'apltites', which may represent an extreme alteration product of the Bethsaida-type granitic country rock, in close association with similarly, but variably altered medium- to coarse-grained 'Bethsaida' granite, are seen to extend an additional 400 feet southward of trench No. 1. At roughly 200 feet south of trench No. 1 the so-called 'apltitic' body splits into two or more fingers within altered Bethsaida granite. Copper mineralization, ^{occurring as blebs, porphyries, pods, & locally as dissems} typically disseminated, bunched, or fracture-filling, does not appear to be fundamentally affected by these changes. The principal effects appear to consist of structural deflections and local complications within different phases of the intrusive. *also occur as*

Local accumulations of oxidized, well-mineralized float occur within erosional pockets and gulleys — particularly within a flooded cut to the west of sta. R30. Bedrock mineralization is typically highly-weathered to copper carbonates. Within the more southerly trenches fresh disseminated chalcopyrite occurs within ^{less} altered, relatively coarse-grained Bethsaida granite, thus providing additional exploration possibilities away from the central mineralized aplitic phase.

DIAMOND DRILLING

Location per plan 3-A, Inclination; - 40½ degrees
AX core planned length; 225'
Wire-line equipment Estim. Intersection; 95' - 195'

Abbreviated Log

Interval

- 0 - 64.6' Bethsaida granite; increasing siliceous and talc-carbonate alteration through section.
- 79.7' Sheared Bethsaida, considerable alteration, sparse disseminated magnetite.
- 100.8' Mixed firm and crushed altered granite; increasing silicification; appreciable disseminated magnetite.
- 105.0' Relatively firm white quartz and/or silic. aplite; sparse magnetite only.
- 127' As above with occasional rusty seams and trace Cu mineralization.
- 134.0' Broken, highly silic. aplite; minor patchy Cu stain.
- 138.5' White to plate watery-green hard silic. aplite; some quartz blebs; generally sparse Cu stain, increasing slightly to 138.5'.
- 225' Not logged.

221'
Remarks:

Core recovery fair to poor per individual sections.

GENERAL CONCLUSIONS

Mineralization within the area of the current drilling is obviously bumpy and erratic, as indicated by the rapid change within the small vertical interval between surface exposures and the drilled section. For the present it is planned to maintain the existing closely-spaced drilling pattern for a more thorough evaluation of this local zone of mineralization.

The overall potential of the property may depend largely on the possible occurrence of presently-undetected zones of lower-grade disseminated mineralization. For this reason the writer recommends that I.P. - magnetometer investigations of the Central grid be well advanced before drilling extensions of the zone beyond the immediate target area.

Sept 21 - ordered from Phil Bowen McElhenny Assoc.

Reverse copies of:

200 scale legal survey.

transparency of cards. to 0#00/20,000 N, 20,000 E.

50 scale enlargement of survey sheet -- 36" x 48"

100 " " " " " " " " " " " " -- 36" x 48"

Air photo set from Hendry via McElhenny.

Recap on 1000 scale enlargement of 927/7 + 2" = 1 mi

Dept. maps maps on order via A. Ranta.

Respectfully submitted,

Relayed copy to Randy re.

- lack of time - cut program.

WMS/hb

- John White's pre-occupation in non-survey duties.

W.M. Sharp, P.Eng.

- Visual copy of 5-2,

- Our info.