File Princeton - Aspen Grove

Re. HN - W.E.N. W.A. recommends Fritz (Feb/65) that he hold HX #1 - #4 by 400 ozs pay't. Note HMcD has 10% interest in other "Co Syndicate" group.

* Fritz notes Harvey McDiarmid advises that additional staking should not overlap Douglas Lake Cattle Co. e.g. holdings.

January 25, 1965

Mr. F.A. McGonigle, President
Skeena Silver Mines Ltd.
844 West Hastings Street
Vancouver 1, B.C.

801029

Dear Mr. McGonigle:

Re-Summary Report on Tommy Group,
Aspen Grove Area, Nicola M.D.
January 19, 1965

REVISED AND SUPPLEMENTAL SUMMARY AND RECOMMENDATIONS

Preliminary Remarks:

The following are to supplement and supersede those contained in the current (January 19) report. The initial conclusions and consequent summary and recommendations were influenced by the relatively larger amount of detail available with respect to the Tommy group, the sparsity of detail concerning the easterly Nesbit group and locality, and the apparent necessity of an early spring exploration program to fulfil annual assessment requirements.

Along with several pertinent observations re the Aspen Grove area and properties, Mr. H. McDiarmid advised that the normal snow cover could impede exploration during the early spring months. Consequently, we agreed that if it was advantageous and practicable for Skeena to perform additional exploration this year, a start on field work would be best deferred until access was established by the loggers. It was also agreed that the Nesbit claim group could lapse without much danger of re-location by others. The writer suggested, also, that Skeena property in this area might be better located geologically (see General Geology). Consequently, with the idea of carrying out a broader reconnaissance investigation of the area before planning further localized physical exploration, the following schedule is suggested:

(A) Plan for exploration to commence during the resumption of local logging operations. The optimum period for bush work in this brushy, littered area normally occurs during the late spring months, when there is still a blanket of firm snow, but melting has progressed sufficiently to expose the larger rock outcrops.

(B) 1. Reconnaissance geological mapping based on regional map and air photo control;

2. Select a specific area for more detailed investigation, and locate a minimum protective claim block, if indicated;

3. Lay out a geophysical grid on a general reconnaissance spread to cover adjacent areas of preliminary interest;

4. Conduct helicopter-borne "Geomag" survey in coordination with geochemical surveys over the reconnaissance-grid;

5. Locate additional, or alternative claim blocks as indicated by results of (4).

6. Conduct localized detailed geological - geochemical - geophysical exploration within selected areas. This phase should include some geological re-examination of existing claim groups and adjacent areas;

7. Summarize and evaluate data accumulated with reference to further physical exploratory programs.

note gen. reservations re to geochem. methods

4: Substitute regional geochem: water + soil methods, using also pos. 1 mercury "Hg" method (see geochem. file)

Revised Cost Estimate

The contemplated program emphasizes general regional exploration, rather than more localized and costly physical exploration, i.e.; trenching and drilling. Hence provisions for the latter are not included in this schedule:

(a)	Provision for tent camp and operation 1 month - 6 weeks	$1,500.00
(b)	Preparation of reconnaissance control grid - possibly 30 mi.	2,000.00
(c)	Air-borne 'Geomag' survey, incl. mob. de-mob. costs	3,000.00
(d)	Provision for detailed control lines; 6 miles	500.00
(e)	Provision for ground "Geomag" survey 6 miles @ $400 plus mob.-demob. expense	3,000.00
(f)	General engineering and field supplies ...	2,000.00
(g)	Miscell. expense and contingencies	1,500.00
	TOTAL	$13,500.00

pros. subst. ground + detailed geochem + I.P. here

Respectfully submitted,

Seal

W.M. Sharp, P.Eng.

WMS/hb

January 19, 1965

Mr. F.A. McGonigle, President
Skeena Silver Mines Ltd.
844 West Hastings Street
Vancouver 1, B.C.

See January 25 Recommy.

Dear Mr. McGonigle:

SUMMARY REPORT OF EXPLORATION ON
TOMMY GROUP, NICOLA M.D. TO DECEMBER, 1962

PRELIM.- SUMMARY and RECOMMENDATIONS

The topography and average climate of the area are generally suitable for the performance of magnetic or electromagnetic geophysical surveys during the winter months — factors of access and ground control permitting.

The regional geological situation of the group, with respect to ore potential, is moderately favourable, but rather restricted to a relatively small claim area lying northwest, and outside of a major embayment of Nicola volcanics within the younger regional intrusives. If time limitations and weather permit, a geological- geochem. reconnaissance of the area to the southeast of the Tommy group is recommended prior to arranging for any specific geophysical survey which might be entirely restricted to the property.

Previous geophysical survey techniques have been generally suitable for the detection of near-surface mineral occurrences. Further exploration requires detection equipment with greater depth penetration, and not subject to interference by overburden, non-metallics, wet fractures, etc. A 'geomag' exploration program, with the emphasis on preliminary reconnaissance, followed by localized detailed exploration, is specifically recommended. If the factors of access and required ground control permit, the helicopter- } reconn

borne equipment would be less costly and more suitable for the scope of the program contemplated.

PRELIMINARY ESTIMATE OF COSTS

(a)	Access; road clearing and maintenance	$1,500.00
(b)	Layout of ground control for geophysical survey; 25 mi. @ 60.00	1,500.00
(c)	Helicopter 'geomag' 25 mi. @ 75.00/mi. (verbal quote) plus mob.-demob. exp.	2,500.00
(d)	General Engineering	1,000.00
(e)	Provision for trenching and diamond drilling	15,000.00
(f)	Crew transportation, camp, general board and lodging	1,500.00
(g)	Miscell. expense and contingencies	2,000.00
	Total, including diamond drilling	$25,000.00

Respectfully submitted,

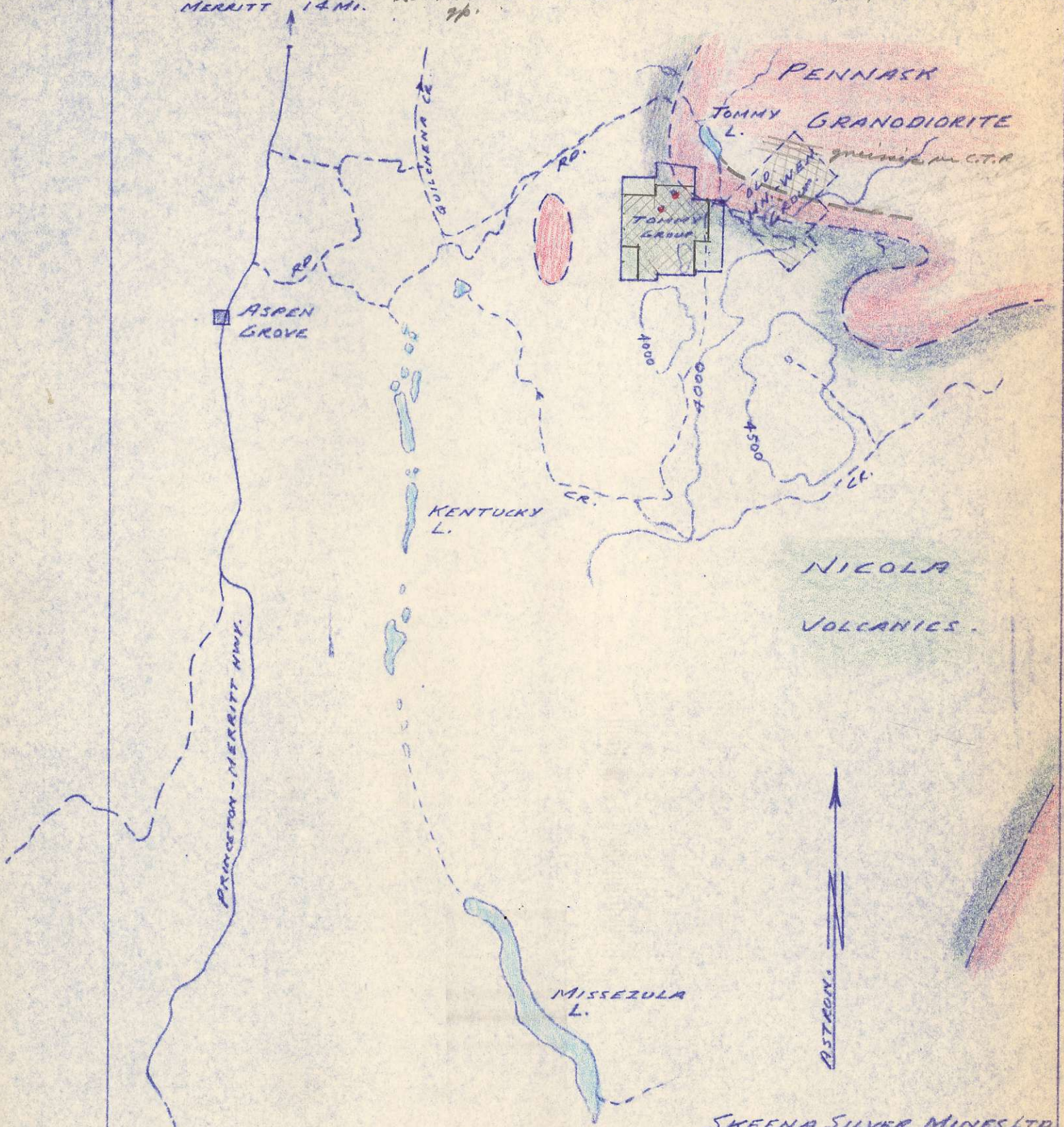
W.M. Sharp, P.Eng.

WMS/hb

B.C.D.M; JAN 19/65 - SHADED CLAIMS IN GOOD STANDING!

OCT 3, 1970 - TOMMY GROUP to NOVEMBER, 1970 D. DRILL

"Nesbitt Lee H.N.-W.E.N." " MARCH 30, 1965 E.M. SURVEY



SKEENA SILVER MINES LTD.
TOMMY GROUP. NICOLA M.D.
1" = 2 MI. JAN. 1965

* Spec. Ht. + diamond drilling noted in several places.
C. Rutherford Sept 19, Oct 5, 1961 / Sept. Aug 8, Aug 21

W.M.A.

CHALCOCITE – MALACHITE GROUP

INTRODUCTION

The following report is primarily a summary and evaluation of exploration accomplished to date over the claim group and immediate vicinity. It is based on earlier reports and maps by W.M. Sirola, P.Eng., Hill, Starck & Associates Ltd., and C. Rutherford, P.Eng., in association with P. Gottselig – then in charge of Skeena field exploration on the Tommy and adjacent properties. Reference has also been made to Annual Reports of the B.C. Minister of Mines, and to G.S.C. Memoir 243.

The 400-scale map accompanying this report illustrates the general lithology of the claim group, but contains no significant structural detail. Although rock exposures are sparse, further geological mapping should be done to obtain the general structural patterns. These are normally required for an efficient layout of control lines for geophysical exploration.

PROPERTY

now 20 cl's.

The group consists of 32 claims held by record. These are Chalcocite #1 - #14, and Malachite #1 - #18. Sufficient assessment work, in the form of geological-geophysical investigations and trenching and diamond drill exploration, has been accomplished to maintain the group in good standing. ~~20~~-CLAIM BLOCK.

A full claim schedule is contained in the report by W.M. Sirola, dated December, 1962, and is not repeated here. The present official status of the group may be ascertained from Skeena's records, or by an investigation of records at the B.C. Department of Mines Vancouver office.

LOCATION AND ACCESS

The center of the claim area lies one mile southwest of the south end of Tommy Lake which, in turn, is situated eight air miles E-NE of Aspen Grove — on the Princeton-Merritt Highway. Access is had by approximately ten miles of logging and property roads, over which 4 W.D. vehicles are usually required.

HISTORY
Skeena Silver interest in area

The claims were located for Skeena Silver Mines Ltd. by P. Gottselig during 1961-62, concurrent with, and following exploration of the H.N.-W.E.N. group, closely to the east of the present group.

The topography is typically gently-rolling and closely-forested, with elevations ranging between 3500 and 4000 feet.

GENERAL GEOLOGY

The group is situated mainly to the southwest of the inferred local contact (zone) of the younger Pennask granodiorite intrusive body and the older regional Nicola volcanic-sedimentary group, as shown on the accompanying 1" = 2 mi. map. On a regional scale the group is situated on the north side of a district reentrant structure with the intrusive locally occupying a major bulge and subordinate prong into the volcanic rocks. At approximately 2 miles distance, along the indicated W.S.W.-trending axis of the bulge is a ½ x 2 mi. granitic stock, the long axis of which trends N-S. On the property, and along this same general axis, two or more small outcrops of intrusive rock have been noted. This pattern of intrusions may be related to fracturing and/or crumpling within the "Nicola" rocks, and is possibly situated within the inferred W.S.W.-trending axial zone.

Past reconnaissances and localized detailed mapping throughout this general area — particularly within a range of a few miles to the southeast of the Tommy property — have disclosed

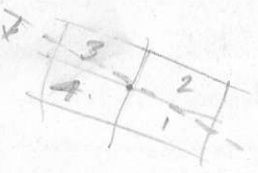
a rather complex pattern of bedding and fracture structures within the Nicola rocks. The predominant N- to NNW formational trends are complicated by warping, buckling, and drag-folding, and by associated cross-fracturing and shearing. The evidence is admittedly fragmentary, due to a general sparsity of outcrops, and the correlation of separate structural features is by general inference. However the generally complex lithologic - structural environment appears favourable for the occurrence of economic concentrations of copper - magnetite mineralization.

The geology of the property is only vaguely defined. From evidence furnished by a few, rather widely-separated outcrops, it appears to be principally underlain by dark green Nicola augite-andesite and augite-porphyry. These are frequently altered, principally by the formation of epidote and, more locally, by epidote-garnet or garnetite skarns. A later, closely-localized, alteration by introduction of pink potash feldspar has also been noted. Broad, northerly-striking (?) panels of argillite have been mapped within the southwest corner of the property. Very finely-disseminated pyrite occurs in these rocks. Dips, as inferred by drill-hole data, are steep to moderate westerly.

Three small widely-separated exposures of "quartz-diorite" have been mapped within the NE part of the property. These may exist as part of the main intrusive (bulge), or occur as closely-related outliers (map 1" = 2 mi.)

The principal mineralization discovered to date occurs within N - S trending skarn zones within limey horizons traversing the center of the claim group. These have been mineralized with disseminated to massive magnetite and minor chalcopyrite. Pyrite forms the conspicuous gangue sulphide within the skarns and adjacent less-altered volcanics and/or sediments. Narrow, rusty N - S shear zones have been noted in trenches excavated in the mineralized skarn section.

To date the most evident structural control of mineralization appears to be along N-S axes, and which, by general past experience in the area, have not proved notably productive. Ore occurrences on this N-S formational trend are typically lensy and discontinuous, and most apparently controlled by local variations of formational strike and dip, and the relative strength of local formational shears and fractures. The future of the property would appear to hinge on the discovery of possible major flexures related to this formational trend, or on the discovery of favourable cross-fold - fracture structures. Because of the sparsity of outcrops, further exploration should be by geophysical methods. It also appears that these surveys should be of a reconnaissance nature, and not necessarily confined within the perimeter of the claim group.



PREVIOUS EXPLORATION

(A) H.N.-W.E.N. Group (1" = 2 mi. map)

Skeena opened old adits and trenches on a N.W.-trending fracture zone. Sampling indicated some potential, and an E.M. survey was ordered and run over the group. The group was subsequently optioned by Noranda Mines Ltd., but dropped after doing 7200 L.F. of bulldozer trenching. No other geophysical work is recorded.

(B) Tommy Group

1. Diamond Drilling

Fifteen holes were drilled on the central ore zone for a total of close to 2800 L.F. W.M. Sirola quotes a total of 4000 L.F. The additional drill holes required for this larger footage may include No.'s 16 and 17, for which no records are on hand.

The above drilling delimits a single magnetite-chalcopyrite-pyrite lens striking NNW, dipping 60° W, with a 120' strike length, 180' dip-length, and probable 18' true width. The indicated tonnage and grade of the plunging elliptical ore shoot are estimated at 28,000 tons @ 1.48% Cu, and ± 25% magnetite.

2. Line-Cutting

A N-S base-line through the center of the group and E-W cross-lines at 400' centres were cut, and the cross-lines picketed at 100-foot intervals. The quality and accuracy of the base-line and cross-line, clearing and control is not given. A full grid would require additional cross-lines to the north of the present grid.

3. Self-Potential Survey

The maximum potential difference of -182 M.V. was obtained across the known ore zone. A number of other relatively weaker anomalies were obtained over the grid. The trend of a number of these would suggest a SW-NE orientation of the indicated sulphide zones. Apparently none of these was considered sufficiently strong to warrant trenching or drilling. There is a suggestion of a general SW-NE alignment of individual anomalies through the approximate center of the grid which warrants some further investigation.

The large irregular anomaly centering at 6+00 S; 3800W is probably due to oxidation of primary pyrite within argillaceous rocks.

4. Geochemical Survey

The generally negative results, even over areas of known copper mineralization, may be due to a deep impermeable overburden, leached silty cover-layer, some deficiency in the geochemical method, or a general absence of sub-surface mineralization. On the basis of the known extent of copper mineralization, together with the normally-expectable larger anomalous area around this metal source, it appears that either the rubeanic detection methods or sampling techniques were deficient. W.M. Sirola has pointed out the latter possibility.

5. Magnetic Survey

Individual anomalies are generally weak — generally less than 3000 gammas, and in weak contrast to a localized reading of 23,000 gammas over the known ore zone.

The pattern of anomalies indicates a central zone of widely-spaced weak magnetite lenses within the volcanic rocks and striking acutely across the formational trend. There is also a suggestion of random areas of disseminated magnetite extending northeasterly into the inferred volcanic-intrusive contact zone.

SUMMARY OF EXPLORATION TO DATE

The shallow exploration techniques described have not produced significant results. Future exploration should employ geophysical methods providing considerably deeper ranges of detection and not too susceptible to the usual sources of interference.

W.M. Sharp, P.Eng.

January 18, 1965

WMS/hb