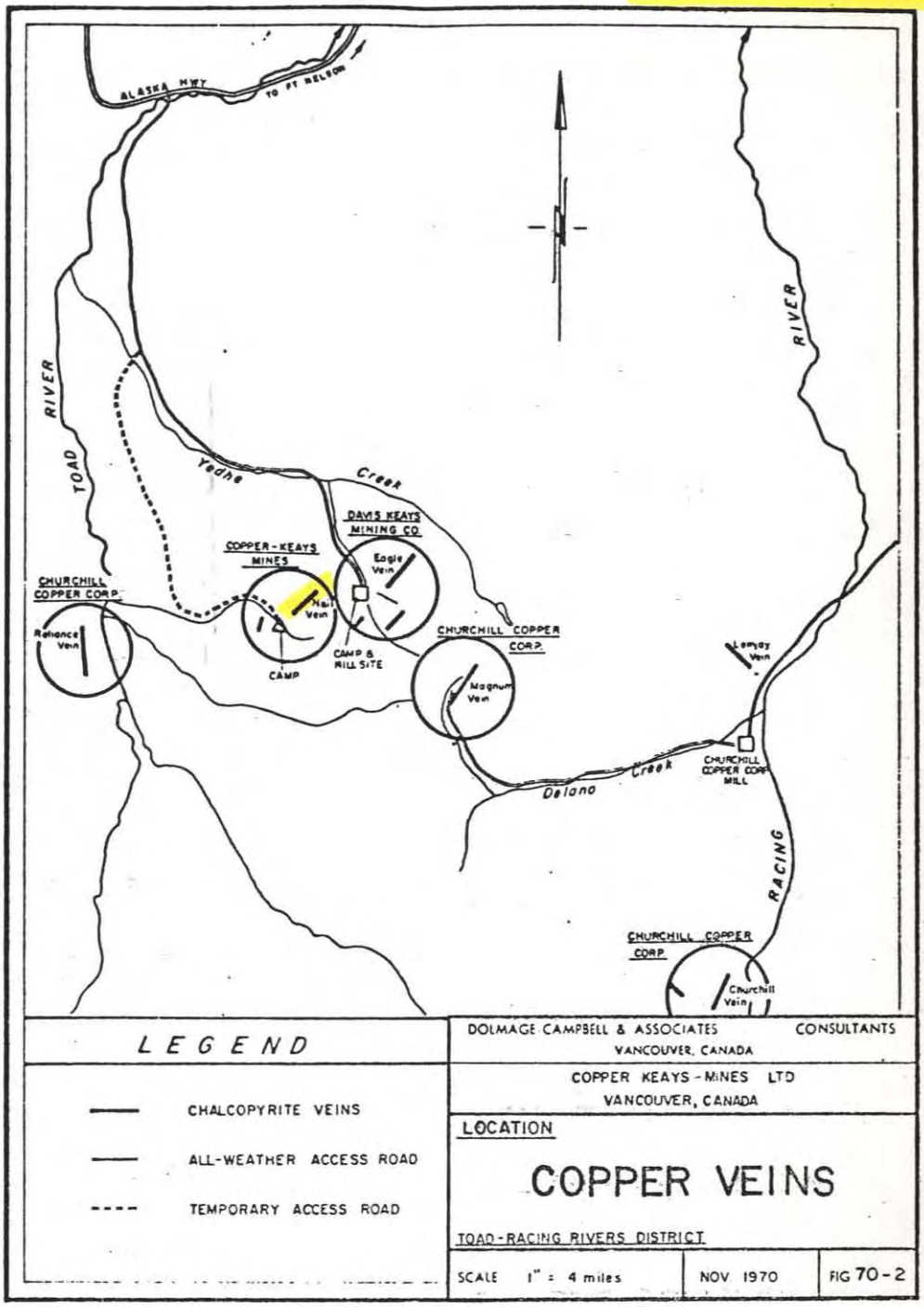
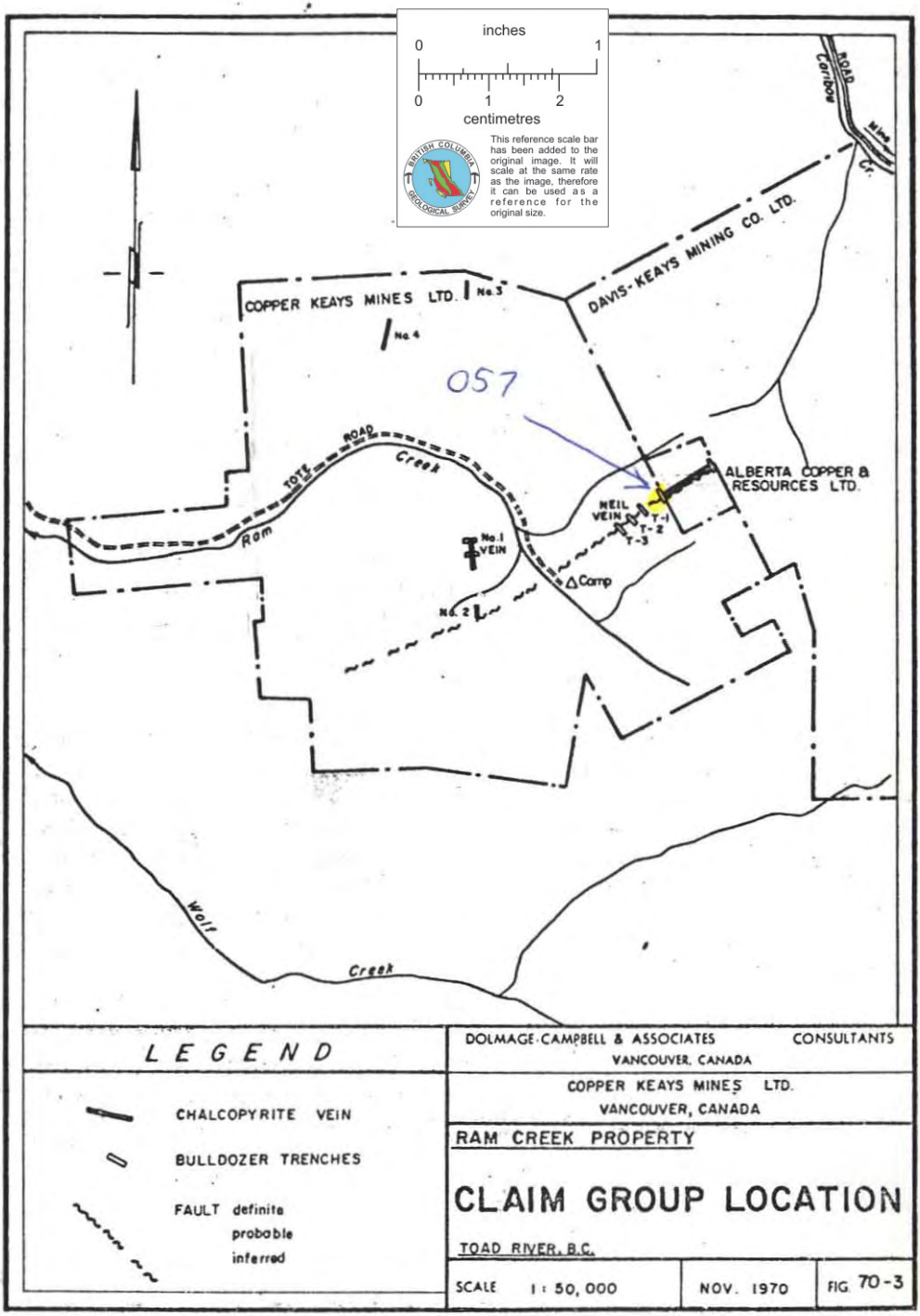
017024 094K 057



From Report by R.S. Adamson

(see Property File under 094K ~~057~~ 040)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0
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COPPER KEAYS MINES LTD.
No. 3
No. 4
DAVIS-KEAYS MINING CO. LTD.
057
ROAD
Caribou
Mine
Cr.
TOTE ROAD
Ram
Creek
ALBERTA COPPER & RESOURCES LTD.
NEIL VEIN
T-1
T-2
T-3
No. 1 VEIN
Camp
No. 2
Wolf
Creek
LEGEND
CHALCOPYRITE VEIN
BULLDOZER TRENCHES
FAULT definite
probable
inferred
DOLMAGE CAMPBELL & ASSOCIATES CONSULTANTS
VANCOUVER, CANADA
COPPER KEAYS MINES LTD.
VANCOUVER, CANADA
RAM CREEK PROPERTY
CLAIM GROUP LOCATION
TOAD RIVER, B.C.
SCALE 1 : 50,000
NOV. 1970
FIG. 70-3

pattern on the property.

Several chalcopyrite-bearing quartz-carbonate veins have been located on the property, (See Figure 70-3), two of which, the No. 1 and Neil veins, were examined by the writer. The other veins were not examined but at this time are considered to be of lesser interest.

No. 1 VEIN:

No. 1 Vein crops out on the south wall of the westerly trending Ram Creek valley. The vein has been traced by mapping and bulldozer trenching for a length of approximately 600 feet. It pinches down to a barren sheer to the north and may also pinch to the south but the vein extends onto inaccessible cliffs in that direction.

Chip sampling of the vein was carried out very thoroughly at three localities on the vein. Assay values over widths ranging from one to six feet averaged approximately 1.5% Cu across an average width of four feet, (See Figure 70-4).

Because of the relatively short strike length and the generally weak mineralization, No. 1 Vein is not of economic interest at this time. Ultimately some production may be realized from the higher grade sections of the vein if an economically viable operation can be developed from another vein elsewhere on the property.

NEIL VEIN:

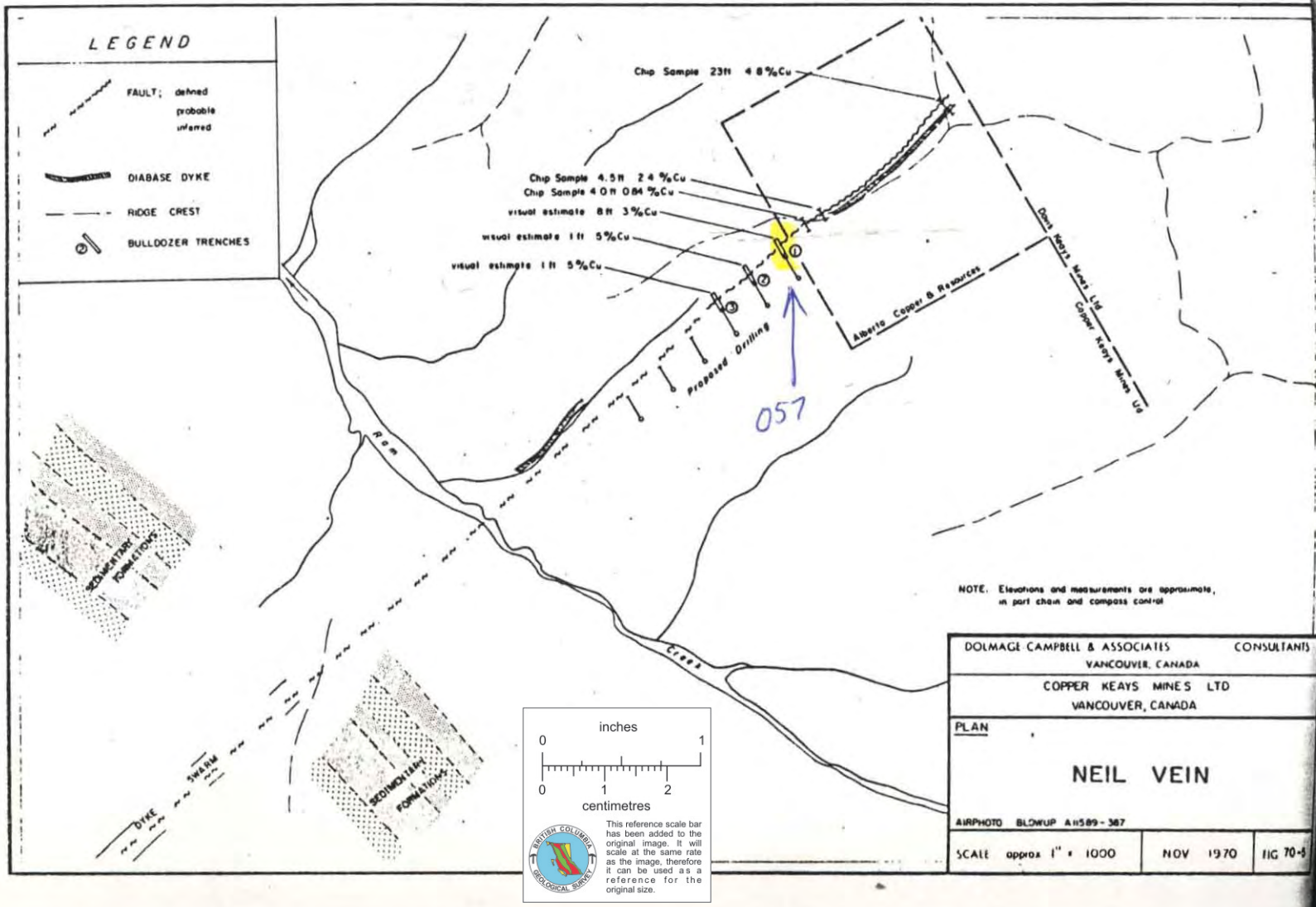
The Neil Vein crops out on a northeast-trending ridge on the northern slope of the westerly-trending Ram Creek valley (figure 70-3).

The vein can be traced visually along the ridge for 1500 feet on the Alberta Copper and Resources claims before disappearing beneath talus southwestward toward the Copper-Keays boundary. Copper Keays Mines Ltd. (N.P.L.) cut three trenches (designated No.s' 1, 2 and 3) by bulldozer and exposed the vein on their property. As a result of the trenching the total known length of the vein from the Davis-Keays-Alberta Copper boundary to the lowest Copper Keays trench is approximately 3650 feet. Approximately 2000 feet of this length lies on Alberta Copper & Resources claims and the remaining 1650 feet on Copper Keays (See Figure 70-6). The vein extends from elevation 7700 feet through a vertical interval of 1400 feet to elevation 6300 feet at Trench No. 3.

Because most of the exposed section of the vein lies on inaccessible cliffs on the Alberta Copper and Resources property, available surface sample localities are few in number. The width of the vein exposed on the cliffs and in the three trenches averages 4 - 5 feet, although wider and narrower intervals occur. The vein over its entire exposed strike length is copper-bearing. A sample, chipped by Dr. Halferdahl, returned 4.8% copper over a width of 23 feet at the northeastern end of the vein on Alberta Copper and Resources claims. Examination of this exposure by the writer generally confirmed the grade and width of this sample. Because of snow conditions comprehensive sampling of the vein exposed in the trenches on the southwestern extension was not possible. Visual estimate of the mineralization in the trenches was made, (Figure 70-5), before the trenches were covered with snow. The estimates are considered by the writer to be representative of the vein at their respective localities.

OTHER VEINS:

Several other veins have been found on the Ram Creek property but they do not appear to be of economic interest at this time. As in the case of the No. 1 Vein they may be worthy of further investigation should an economic operation be developed on the Neil Vein. However, additional prospecting may locate other veins of direct economic interest on the property.


LEGEND
FAULT; defined
probable
inferred
DIABASE DYKE
RIDGE CREST
BULLDOZER TRENCHES
Chip Sample 23ft 4.8%Cu
Chip Sample 4.5ft 2.4 %Cu
Chip Sample 4.0ft 0.84 %Cu
visual estimate 8ft 3%Cu
visual estimate 1ft 5%Cu
visual estimate 1ft 5%Cu
Proposed Drilling
057
Alberta Copper & Resources
Copper Keays Mines Ltd
Dome Keays Mines Ltd
SEDIMENTARY FORMATIONS
SEDIMENTARY FORMATIONS
DYKE SWARM
Creek
NOTE. Elevations and measurements are approximate, in part chain and compass control
DOLMAGE CAMPBELL & ASSOCIATES CONSULTANTS
VANCOUVER, CANADA
COPPER KEAYS MINES LTD
VANCOUVER, CANADA
PLAN
NEIL VEIN
AIRPHOTO BLOWUP A 15589 - 387
SCALE approx 1" = 1000
NOV 1970
FIG 70-5
inches
0 1
0 1 2
centimetres
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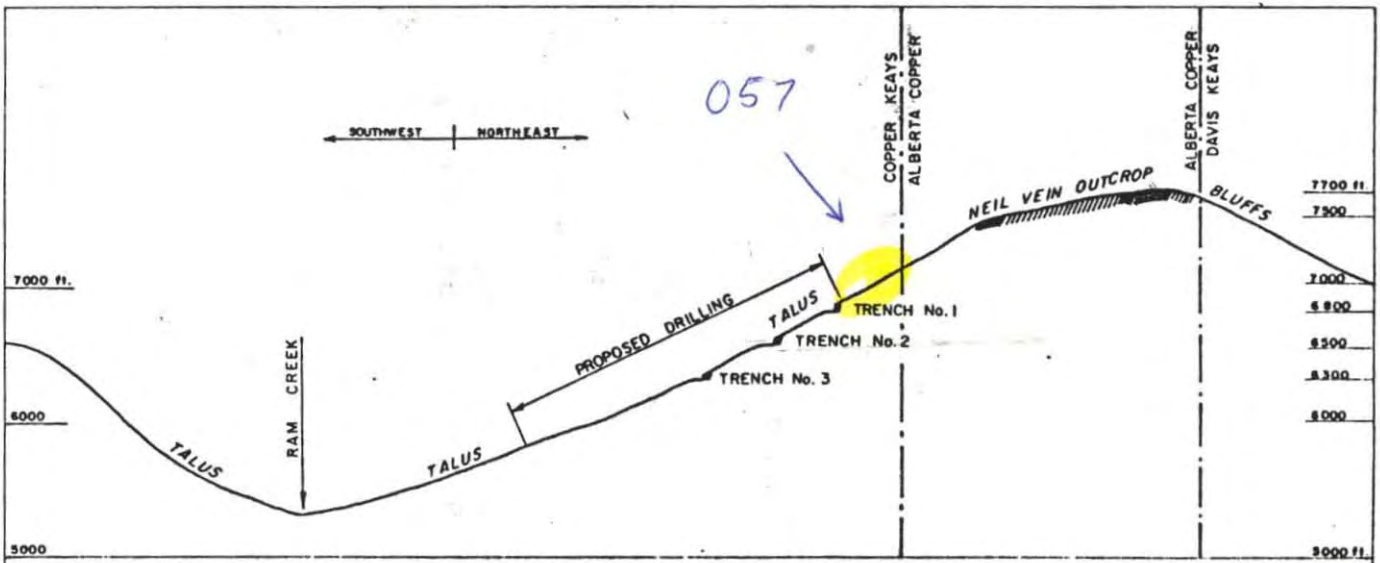
BRITISH COLUMBIA GEOLOGICAL SURVEY



NOTE: Elevations and measurements are approximate, in part chain and compass control

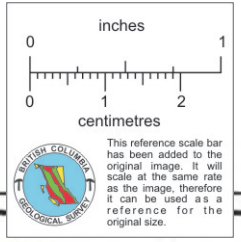
DOLMAGE-CAMPBELL & ASSOCIATES CONSULTANTS
VANCOUVER, CANADA

COPPER KEAYS MINES LTD.
VANCOUVER, CANADA

LONGITUDINAL SECTION

NEIL VEIN

SCALE 1" = 1000' | NOV. 1970 | FIG 70-6



ECONOMIC GEOLOGY

The copper-bearing vein structures on the Ram Creek property are typical of the other known veins in the Toad-Racing-Gataga Rivers district. Experience of Churchill Copper Corp. and Davis Keays to date indicates that for such an ore structure to support a mill the necessary reserve tonnage that must be developed should grade about 3-3.5% Cu. In the event that insufficient tonnage of such grade material is found on the property, then consideration can be given to possibly shipping the ore to a nearby mill for custom treatment. All ores in the district are of the same character so this option is a reasonable and logical one. Conceivably then in this eventuality, subject to distance to a mill and other related factors, 2% copper might be mined at a profit.

With the above factors in mind, it becomes clear that if economic tonnages are to be found on the known veins on the property, exploration should be directed primarily to those vein zones which reflect a persistent strike length and which exhibit an appreciable back or down-dip extent. On the Ram Creek property, the Neil Vein, occurring as it does on a very strong, northeast-striking, brecciated, fault structure, would appear to have an exploration potential equivalent to that of the Magnum and Eagle veins. Comparable strike length and vertical extent of the three veins are summarized as follows:

Magnum Vein;	4000 feet and 1200 feet.
Eagle Vein;	3400 feet and 1800 feet.
Neil Vein;	3650 feet and 1400 feet.

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Clearly then, the present length of the Neil Vein (3650) feet known on the Alberta Copper and Resources claims and the Copper Keays property should be explored and ultimately operated as a single entity. However, as in fact this is not the case, Copper Keays Mines Ltd. (N.P.L.) is presented with two alternatives. Either the company can deal with Alberta Copper and Resources for their section of the vein or else additional strike length available for at-depth exploration may be found by searching southwestward toward Ram Creek. Certainly, the first alternative is preferable; but failing that, very good chances for finding the vein extension down the hill exist because of the strength of the structure controlling the copper mineralization on the Neil Vein.

CONCLUSIONS

The Neil Vein comprises a very worthwhile exploration target for finding and developing sufficient tonnage of ore to support a moderate-tonnage mill.

The fault structure controlling the emplacement of the Neil Vein is traceable for a length of at least three miles by means of exposures of either vein or dyke that occupy the fault zone on the northeast side of Ram Creek valley, and by dyking and displacement of sedimentary formations on the opposite side of the valley. Copper mineralization has been traced as the Neil Vein by bulldozer trenching and continuous outcrop exposure for 3650 feet along the structure; approximately one third of which lies on Copper Keays claims. Northeast-striking fault zones of this particular district, where proven economic deposits are localized along the Eagle and Magnum structure on the Davis-Keays and Churchill Copper properties, respectively.

From experience with these comparable structures it is concluded that the Neil Fault represents an excellent exploration target in this district, and as such should be thoroughly prospected over its entire length; visually where exposed, by trenching where overburden thickness and permafrost permit, and by diamond drilling where trenching cannot be undertaken.