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3280 Chesterfield Avenue North Vancouver, B.C.

February 28, 1962

Mr. S.A. Perry, President Britmont Mines Limited Suite 405, 25 Adelaide Street West Toronto 1, Ontario

Dear Mr. Perry:

With this my "Report and Recommendations Following Britmont Mines Assessment-Exploration Program, Lower Nicola, B.C., September to November, 1961."

A considerable amount of time was required for the recalculation of transit traverse data, balancing of subsidiary geological traverses, and in the examination of records of previous field work for the preparation of the text and maps comprising this report.

I hope the report will assist in future planning with regard to the property, as it appears to have sufficient ore potential to justify the additional exploratory effort and expense involved.

Respectfully submitted,

W.H. Sharp

WMS/hb

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#### REPORT AND RECOMMENDATIONS

## FOLLOWING

# BRITMONT MINES ASSESSMENT - EXPLORATION PROGRAM LOWER NICOLA, B.C., SEPTEMBER - NOVEMBER, 1961

#### INTRODUCTION

Authority to commence work at the property was given via letter from Mr. H.D. Forman to Mr. S.A. Perry, President, dated August 18, 1961. This letter directed that investigation of geochemical anomalies on Hank No. 13 M.C. be done by bulldozer stripping, with further stripping to be done at four other points to provide the necessary assessment to maintain all 100 claims in good standing for another year.

Following the shut-down at Ganam Gopper property on September 7, 1961, the writer started a program of geological mapping of the west half of the claims area in addition to that of stripping for limited exploration and assessment only. This was decided by the obvious lack of detailed geological information concerning the immediate target area and other areas in which exploration--geophysical and otherwise--had been done during the preceding three years.

During the 1961 season the Promontory Ridge area surrounding Graigmont Mine area was the site of considerable exploratory activity. Canex Aerial Explorations, General Resources, Peel, Torwest, and Rio Canadian Companies were engaged in geological-geophysical programs. In addition, Craigmont Mines conducted confirmatory geophysical tests within their ore zone using McPhar geophysical crew and Induced Polarization (I.P.) equipment. It is understood that this equipment gave anomalies generally comparable with previous Hunting Corp. I.P. results.

## SUMMARY AND RECOMMENDATIONS

Work on the west half of Britmont Mines Ltd. property was started September 8, 1961, following a familiarization trip by the writer under the guidance of F.J. Hemsworth, P.Eng., during which areas producing geochemical anomalies were briefly inspected.

The program of assessment stripping and trenching was started, using equipment rented from Canam Copper Company Limited. Due to a lack of detailed geological information to assist in selecting areas for assessment work, geological mapping was started on a scale of 100 feet to one inch and continued along with stripping operations.

A trip to Craigmont open pit area was made by courtesy of Canex staff, during which mineralization and associated geological features were described and discussed. A second trip was made to note Induced Folarization survey techniques, during which time procedures were cutlined by the McPhar operators. Additional data were supplied by E. Grogetski of Hunting Survey Corporation.

The geological mapping-assessment program was terminated on November 15th due to winter weather and other commitments at the Canam mine property. It is believed this field work has permitted the selection of three areas of sufficient potential for additional exploration--subsequently recommended--and has defined other broader areas as being unfavourable for further investigation.

Preferred host rocks for copper replacement are moderately-limy, porous andestic tuffs, and agglomerates, gray wackes, and argillites in association with strong, dense or brittle units such as massive red tuffs, flows, and gramitic sills or, in certain cases, massive limestone units.

Wall-rock alterations which are associated with mineralization generally, involve introductions of quarts, epidote, calcite, chlorite, etc., or the skarn types consisting of rather crystalline aggregates of the above minerals in conjunction with garnet and other lime silicates.

Optimum structural conditions include contact zones adjacent to major intrusive bodies, prominent drag folds or flexures, and faulting both along and across other units. *Phersence of A content of Struct. Undern Turk* 

Mineralization consists of chalcopyritic replacements and intergrowths with magnetite-specularite masses, or as simple chalcopyrite disseminations with small amounts of disseminated specularite in favourable rock types. Both types are present at Graigmont Mine---the latter forming the bulk of the west ore zone. Magnetic and Induced Polarization methods are considered the most applicable geophysical tools in the search for non-outcropping ore bodies. Geochemical methods are similarly accepted for the detection of covered ore or mineralised zones. - Geochem. Fund endput, or molecting - I least on per guid spacing employed.

The three zones over which further exploration is recommended are (Maps No. 1, 2 and 3):

- (A) <u>Hank 19-13 Zone</u> A favourable zone of mixed limy porous tuffs with appreciable chloritic alteration and visually small amounts of disseminated, fine-grained chalcopyrite and specularite, and containing three geochemically anomalous areas. It is recommended that further exploration be done by magnetometer - I.P. Methods.
- (B) <u>Hank 1-4 Zone</u> A favourable zone located at a major contact flexure and cross fault intersection, showing extensive chertyepidotic alteration and considerable soft chloritic alteration. Appreciable amounts of disseminated chalcopyrite -- minor specularite have been exposed at the site of the old Taylor trenches. Recommended exploration is by magnetometer -- I.F. methods.
- (C) <u>Domino Zone</u> A mone of fair potential situated apparently on the southwesterly extension of the formations which were briefly tested in 1955 in the vicinity of the Hank 30 magnetic anomaly. This zone, approximately 3500 feet long, is marked by strong chertepidote and green skarn types of alteration, and with sparse but widely-scattered occurrences of chalcopyrite -- minor specularite as disseminations and fracture-fillings.

The cost of the proposed geological-geophysical program is estimated at \$20,000.00 The provisional allowance for drilling is <u>14,000.00</u> Total \$34,000.00

#### PROPERTY

The areal extent and position of Britmont claims relative to Craigmont and other properties are shown on the supplementary map No. 4 For assessment purposes, the same grouping as set up in the previous year was used and consists of the Freda, Domino, Hank, P.C.M., and Cap groups of 20 claims each. All claims are in good standing until December 23, 1962 - the earliest anniversary date for assessment.

Geologically, the property contains a great extent of favourablyassociated rock types and structures - particularly in the west half under present consideration. The most notable omission is that of a major intrusive contact as at Craigmont and, until recently, considered to be a prime factor in localizing ore deposition. However recent developments at Graigmont mine indicate important belts of mineralization at 1000 feet and one mile, approximately, south of the Guichon batholitic contact and current ore zone. These occurrences are as yet only in a preliminary stage of development, and due to the adequate ore reserves on hand, may not be explored and developed very rapidly.

Drilling of the large I.P. anomaly on General Resources ground to the south of the Hank group and continued exploration of the minor I.P. anomaly on Canax's Betty Lou claims, to the north of the Domino group, should furnish additional useful geological data for use on Eritmont's exploration programs.

Topography over the claims group is generally rounded or with only moderately steep slopes. It is typical "range land" consisting of almost park-like expanses of range grass dotted with a sparse to moderate growth of fir and pine. Access for geological and geophysical/ mapping is relatively easy. However the southerly margins of the property --in particular the Hank 19-13 prospect zone-- consists of rock bluffs and steep talus slopes with locally thick forest growth. Consequently exploration is slower and more difficult in this particular area.

Water for diamond drilling is rather scarce and generally involves laying one-half to one mile of plastic pipe-line.

Vehicular access to all parts of the area is provided by the main Fromontory Lookout road with branch logging roads leading off to most parts of the claims area.

Good accommodation may be had at the Kinvig Ranch which is situated within the P.G.M. claim group.

#### REGIONAL GEOLOGY

Almost all of the west half of the property is underlain by Upper Triassic, Nicola volcanics and sediments distributed in rather distinctive belts. The assemblage consists of andesitic tuffs and agglomerates with minor flows, crystalline limestone, argillites, and gray wackes. The sedimentary and bedded fragmental types frequently contain calcareous material, and are commonly described as limy-tuffs, limy-argillites, etc. Transitional or mixed varieties are common and are designated as tuffaceous argillites, tuffaceous gray wackes, etc. A minor proportion of intrusives occur within the claims as small quartz-porphyry sills, dykes, or stocks.

In general, structural trends are easterly to northeasterly with vertical, or steep northerly to southerly dips. Frequent local variations of strike indicate or suggest drag-folding on a major or minor scale with a pattern -- at least in the mapped area -- developed by differential strike-slip movements in which south sides has moved northeasterly with respect to north sides. This "counter-clockwise" pattern of deformation appears to carry through to associated crossfaults with indicated "left-hand" displacements. This harmonious pattern of flexuring and faulting produces steeply-penetrating zones of intersecting structures -- as indicated by the marked belt of wall rock alteration extending morth and south of the Hank 4 mineralized showings.

Wall rock alterations accompanying mineralization within the claims area are marked, typically by the development of epidote, chlorite, calcite, within the tuffaceous rocks, or by simple bleaching and silicification of these and other rock types. Locally, the green-mineral type of alteration has progressed to a higher degree in which the whole mass is distinctly crystalline in texture to form "green skarns". Small amounts of garnet, green pyroxene, etc. are often present in these higher-grade types of alteration.

Mineralized sections generally show chalcopyrite associated with more or less specularite-magnetite, with the copper minerals oxidized to green malachite on surface exposures. Although the association of copper with magnetic iron minerals has been well publicized by the original Graigmont discovery, recent work shows almost half of the deposit to contain no magnetic iron, and in which chalcopyrite occurs as simple fillings or replacements. Hence the absence of a magnetic anomaly does not rule out further exploration. — My a grant contain model

A fuller description of the regional geology of the Promontory Hills area is contained in the 1961 Annual Report of the Minister of Wines for British Columbia. By Mike Carr - mit the a final second Mines for British Columbia.

#### 1961 FIELDWORK

Stripping accomplished for assessment purposes:

| Freda Group  | 5,852 c.y.  |         |                 |
|--------------|-------------|---------|-----------------|
| Domino Group | 4,717 c.y.  |         |                 |
| Hank Group   | 2,066 c.y.  |         |                 |
| P.C.M. Group | 3,290 c.y.  |         |                 |
| CAP Group    | 1,060 c.y.  | (coarse | boulder - till) |
| Total        | 16,985 c.y. |         |                 |

Several of the trenches on the Freda, Domino, and Hank groups were side-sloped or partly back-filled due to their situation with respect to open range land and consequent hazard to range cattle. However all trenches were mapped in detail before this was done.

Slightly over two miles of transit-chain survey line was run to provide adequate control for Brunton-tape geological traverses and to tie in doubtful claim corners and boundaries. In addition, approximately 5% miles of Brunton-tape traverses were run in the course of the 100-scale mapping program. Subsidiary pace-and-compass surveys were employed within areas lacking in sufficient geological information to warrant standard compass-tape procedure.

As a number of geochemical anomalies were situated on steep, slippery talus slopes below the Hank 13 bluffs, stripping by bulldoser was not practical. Following one attempt, a day was lost in replacing cat tracks and winching the machine back off the slope. If secure tailline anchors could be obtained it is <u>possible</u> that more stripping could be done with a smaller winch-equipped bulldozer.

Work during the final three weeks within the higher areas was hindered to some extent by an early snowfall and freezing weather. In all geological traverses evidences of mineralization were thoroughly investigated by hend lens and pendulum magnet examination of numerous chip samples. A few occurrences with quite appreciable amounts of copper mineralization were sampled and some of these plotted on the 100and 400-scale map sheets. Geochemical and prominent geophysical (magnetic) anomalies indicated by earlier field work are similarly shown.

Because of discrepancies in apparent position due to the sarlier pace-and-compare method of locating geochemical picket points (these carried up to 5000 feet south of the main base-line) the geochemical grid-points could not be used for geological traverse control. However, the 1961 work established a sufficient number of accurate control points to the in secondary traverses and to more accurately locate the points at which geochemical anomalies were obtained. Similarly, additional survey line and possible geophysical base lines-grids may be projected from the existing control.

#### DETAILED GEOLOGY

## (A) HANK 19-13 ZONE (Area No. 1)

Geological details are shown on 100-scale map No. 2 and within the limits defined by the shaded outline and proposed geophysical grid lines on 400-scale map No. 3. Additional mapping to the east and northeast and along the steep slopes occupying the lower part of the belt within Hank 13-14 M.C.'s is required to completely define the structure.

The zone of interest is approximately 5000 feet long by 1000 feet wide and is bounded on the north and south by wide bands of relatively clean white limestone -- these usually considered unfavourable for ore occurrences within the district.

A typical N-S cross-section is composed of the following steeply-dipping units:

- (a) Sandy gray to white crystalline limestone. Salt take to.
- (b) Thin band mixed limestone argillite.
- (c) Quartz-porphyry sill 10'-50' thick.
- (d) Narrow irregular section of argillite-gray wacke, locally contorted. to parish while sect
- (c) Major section of lightly-chloritized green tuffs containing sections of gray wacke or argillite, the whole dury with zone being strongly contorted with frequent small interbed faults. Practically all geochemical anomalies and visible evidences of copper mineralization occur within this band. Lime content from band to band is variable; locally folding is accompanied by considerable calcite veining -- commonly in sections showing evidence of mineralization.

Sparse to trace amounts of copper mineralization occur as widely-disseminated small grains of fresh chalcopyrite and occasional bornite, or rarely as malachite surface stain. A few chip specimens exhibited slight magnetic attraction. Occasional grains of specularite were noted, but it would appear that the magnetic iron minerals occur, like the copper content, as very fine-grained disseminations. It would also appear that mineralization was sufficient to produce the geochemical anomalous zones -- although several of the anomalies could not be directly related to actual exposures.

A dip-needle survey by Centennial Mines during the fall of 1958 has indicated a magnetic zone along the south edge of the prospect area. Because of the known unreliability of the dip-needle method in areas of rough topography, this will have to be classified as "possible", until checked by a "Vertical Force" (Variometer) type of magnetometer. It is noted here that field tests by Canex indicate the 3-lb. Gaylander Flux-Gate model to be most satisfactory for rapid reconnaissance by usual geological field crew. It is as fully sensitive as earlier semiportable units and does not require orientation at each point of observation.

No previous first-order geophysical work or diamond drilling has been done within this area. In view of the difficulty of doing normal stripping and trenching, and the fact that such methods would not pick up sub-surface mineralization of ore grade - similar to the association of barren outgrop areas with non-outgropping ore bodies at Craigmont, it is hereby recommended that geophysical methods be employed during the next phase of exploration.

Map No. 3 shows the outline of the proposed grid to be tested by portable flux-gate magnetometer and/or I.P. surveys done by professional operators.

The occurrence of even sparsely disseminated mineralization over widely scattered areas, lengthy geochemical anomalies, and the favourable assemblage of mixed limy to non-limy chloritized tuffs, graywackes, quartz porphyry, and limestone, involved within a zone of strong crumpling are considered sufficient reason for further exploration.

It should be noted here that the easterly end of the proposed grid is only tentative, and that if further structural mapping suggests advantageous changes, these will be made. Of particular interest at present is the southerly projection of the indicated N-S fault lineament lying closely west of the Hank 4 showings.

#### (B) HANK 1-4 ZONE (Area No. 2)

This area is the site of considerable trenching undertaken by Mm. Taylor and Associates during the early part of the 1958 season. Geological details and the proposed geophysical grid are shown on maps No. 1-2, and 3 respectively.

A typical N.W. - S.E. section across this area starts within a variably-altered thick section of red-green andesitic tuffs and agglomerates in curved and steeply-dipping contact with a major belt of sandy gray to white crystalline limestone. Within the limestone are two rather closely-spaced bands of chloritized limy green to brown tuff. The larger amount of bulldozer stripping was done in the wider southerly band while less, but considerable, work was done in the narrow band. In addition, a small shaft, of unknown depth but now caved to within ten feet of the collar, was sunk in a zone of streaky oxidized copper mineralization.

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Structurally, the area is marked by a major bend in the red tuff-limestone contact apparently located in close proximity to a N-S fault of undetermined length or width. Evidence for the existence of this fault is supplied by the amount of apparent shearing within wall rocks here and to the north, the presence of a sharp lineament (cross draw) on this trend, and by evidence from an E-M survey conducted by Centennial Mines in 1958. Less direct evidence is deduced from the apparent displacement of the tuff-limestone contact across this sharp draw.

Detailed mapping over the Taylor trenches shows a sharp dragfold involving tuffs and limestone, and within which there are appreciable bands of disseminated chalcopyrite mineralization of local extent. Wall-rock alteration is locally pronounced -- the tuffs being variably silicified and chloritized, and the limestones only bleached and silicified.

A magnetometer survey by Centennial Mines over parts of the whole area brought out a pronounced anomaly (map No. 3) which appears to be generally conformable to the inferred tuff-limestone contact, with one of the pronounced "highs" (at the extreme east edge of their grid) lying close to the shaft and inferred fault line. Another grid covering the southeasterly group of workings showed nothing of particular interest. More conclusive information would have been obtained from a single large magnetometer grid covering the whole area, although this in itself would not rule out possible occurrences of copper mineralization not associated with magnetic iron oxides.

Because of the possible existence of a major structural focus within this area, the widespread zones of alteration, and the actual occurrence of appreciable amounts of disseminated copper minerals, it would be advisable to re-check the magnetometer work and/or run I.P. geophysical over the tentative grid outlined on map No. 3.

Prior to the above program, additional detailed mapping should be done along and adjacent to the inferred fault line south and southwest of the Taylor trench area. This done during grid layout

In spite of the fair spread of copper mineralization over the Taylor trench area, the geochemical survey gave little indication of it. The sampling pattern must have been so spaced as to bridge all occurrences, although indications as weak as two parts per million produced anomalies elsewhere, where there was much less visible mineralization. More puolobly the improvisioners of officient masked keduch occurrence

No diamond drilling has been done within this prospect area. Centennial Mines' plans to drill were dropped when drilling on the major anomaly at Hank 30 M.C. picked up only trace mineralization. However, the two areas markedly differ in lithology and structure, so their decision not to drill for this reason was geologically unsound.

#### (C) DOMINO ZONE (Area No. 3)

This zone, shown on maps No. 1 and 3, lies within the broad belt of red andesitic tuffs and agglomerates occupying the north-westerly part of the claims area. In particular the area of present interest lies west-southwest of the major Hank 30 magnetic anomaly previously drilled by Centennial Mines with largely negative results.

The zone of interest involves an area of alteration 3500 feet long by 200-550 feet wide, in which the red volcanics have been extensively bleached and replaced by chert-epidote-minor chlorite alteration. Certain limy bands within this zone have been more intensely altered to soft green skarns which consist of intergrowths of coarse calcite, epidote, quartz, minor pale green to white silicates, and occasional grains of brown garnet. Within the latter type of alteration sparselydisseminated clots of malachite-specularite occur. Within the harder chert-epidote zones malachite and specularite occur within narrow crossjoints and veinlets.

Occasional gobs of softer, more chloritic material contain good method concentrations of highly oxidized copper mineralization -- one 12" piece assaying 1.50% copper. This piece, containing a few reddish fragments, was apparently formed by strong chloritic - epidotic alteration of the original red volcanic rock. Mineralization consists of fine-grained disseminations of chalcopyrite-specularite in which it is impossible to visually estimate the copper content. The total amount of magnetic specularite is small and would not, in all probability, produce a pronounced magnetic anomaly even in large volumes. This point should be noted with respect to earlier evaluations of the area as based on magnetometer surveys and diamond drill results on localized "highs".

Within and adjacent to the area of alteration are lenses and bands of softer dark tuffaceous material which may be particularly susceptible to replacement within favourable zones.

At the north margin of the chert-epidote zone is an extensive band of soft powdery purple-colored rock. It is possible that this represents the complete exide-alteration of a zone originally containing appreciable amounts of disseminated specular hematite. Map No. 3 indicates that this zone would lie between the north boundary of the chertepidote alteration zone and the south contact of the wide tuff band projected southwesterly from the Hank 30 area. This unit was not exposed by the pattern of trenches excavated within the prospect area. Trenching northward of present limits is impractical due to thickening of the tough buolder-till cover in this direction. The few tuff exposures lying between our most easterly trench and the Hank 30 anomaly contained strongly-chloritized or epidotized sections veined by quartz and/or calcite with sparse disseminated specularite.

Some features of the Hank 30 magnetic anomaly and associated mineralization are noted. First the 25,000-30,000 gamma maximum range is concentrated to a very restricted strip or ridge along the axis of

the anomaly. The significant feature is the trand of the larger 800gamma outline. This, like the Hank 1-4 anomaly, has a distinctly more northeasterly trend than the general local bedding strikes. Like the other area this suggests bending of bedding adjacent to a fault-line, or flegue and as a secondary effect, the spread of hematite mineralization into sentific align fractures within this zone. Consequently, there is direct con- a furged timuity between the Hank 30 anomalous zone and the general Domino zone gratful of alteration -- mineralization, and the spread of copper mineralization westward through the latter zone, without corresponding amounts of fracture-filling magnetic specularite. is a reasonable possibility. The distribution of several of the magnetic anomalies outlined within the west half of the claims area suggests they are largely due to spreads of magnetic iron through fissured or crackled hard red, but otherwise unaltered, tuffs and flows. Prior geological mapping to establish their relationship to favourable rock zones would undoubtedly have causes major revisions or abandonments of drill-hole locations. In short, a good number of them are in no way associated with rock units particularly susceptible to large scale replacements by copper-bearing solutions.

Terro Logs of the two vertical and one inclined drill holes on the Hank 30 anomaly -- all closely restricted to a very central area of "highs" -- shows strong to moderate magnetic specularite mineralization to a depth of 200 feet. From 200 feet to 700 feet mineralization is negligible. This feature, together with the locally higher concentration in steeply-dipping fractures, could account for the locally high gamma readings which have little areal significance.

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Sections of drill core in otherwise fresh red tuffs contain local concentrations of a purplish red alteration product closely associated with hydrothermal chlorite-epidote-calcite, etc. This material is similar to that previously described in the band along the north edge of the Domino sone, and was similarly inferred to be the The association of copper minerals with the alteration minerals epidote and chlorite. In summary, the pattern of deili batton minerals epidote unsuitable for a test of the cross-sectional potential of the anomalous area or its extensions, so cannot be considered conclusive. This conclusion is particularly evident now that the existence of a major alteration zone, on the southwesterly trend of formations out of the anomalous area, has been mapped.

It is recommended that additional exploration be done using I.P. equipment and professional operators on the grid shown on map No. 3. Modifications to the grid may be made as tests progress. As it is not likely that possible ore sections will be closely associated with detectable amounts of magnetic minerals, magnetometer work may be eliminated in this locality. The I.P. method, as shown by work at Craigmont and elsehwere, has sufficiently deep penetration to explore all depth possibilities -- which would appear to be the obvious target

zones in the Domino area. In conclusion, it should be noted that E.M. and Self-Fotential methods have proved definitely unsuitable for the exploration of the deep, relatively-unoxidized, disseminated chalcopyrite replacements of the district. Serpentine, which may produce false I.F. amomalies, is not present. Variable depths of overburden, which can produce local chargeability effects, can be checked rapidly.

## SUMMARY OF PREVIOUS WORK

The conclusion reached, following the program of detailed mapping completed last fall, together with a study of previous exploration efforts, is that all geophysical-geochemical investigation would have been better deferred until detailed geological mapping had been completed and thoroughly studied. This is apparent when one estimates the amount of geophysical work that has been done in obviously unfavorable rock belts. It is further apparent from an inspection of drilling procedures with respect to particular anomalous zones. However, it should be noted that the geophysical apparatus now in use, and considered most applicable to this area, was not available until quite recently.

## ESTIMATED COSTS OF PROPOSED EXPLORATION

|      | ESTIMATED COSTS OF PROPOSED EXPI   | LORATION  |               |
|------|--|---|---------------|
|      | purchase or rent Valander  | going C   | 2000 2 - 3mo. |
|      |  |   | acong/col.    |
|      | Purchase Gaylander Portable Flux-gate Magnetone  | stor  | \$2,000.00    |
|      | Preliminary 100-scale mapping, etc. Hank 4-14  | area  | 900.00        |
| (A)  | Area No. 1   |   |               |
|      | Line cutting, contract, base-line<br>Line cutting, contract, X-lines<br>Picketing<br>Magnetometer surveys<br>I.P. Survey | \$ 50.00<br>100.00<br>50.00<br>500.00<br>2,800.00 | 8 - 200.00    |
|      | Add 10% for exigencies<br>General geological-engineering   | 350.00<br>900.00                                  | 4,750.00      |
| (B)  | Area No. 2   |   |               |
|      | Line cutting, contract, base-line<br>Line cutting, contract, X-lines<br>Ficketing<br>Magnetometer surveys                | \$ 35.00<br>115.00<br>50.00<br>500.00             | 3 - 200.00    |
|      | 1.P. Survey<br>Add 10%<br>General geological-engineering   | 4,000.00<br>450.00<br>600.00                      | 5,750.00      |
| (c)  | Area No. 3   |   |               |
|      | Line-cutting, contract, base-line<br>Line-cutting, contract, X-lines<br>Picketing<br>I.P. Survey                         | \$ 35.00<br>150.00<br>50.00<br>4,000.00           | 235           |
|      | General geological-engineering   | 900.00  | 5,535.00      |
| -    | Add - additional geological-engineering  |   | 1,065.00      |
|      | Estimated, approx. 2 months; sub total   |   | \$20,000.00   |
|      | Provisional allowance for d.drill - 1500' @ 8.0<br>Provisional allowance for d.drill engineering,                        | ))<br>etc.  | 12,000.00     |
| ph.  | ne Est tet lenie aut " picket Total<br>nong small gred - 68500   |   | \$34,000.00   |
| Ford | 15 mile 55° - 825 Respectfully su  | ubmitted,   |               |

February 28, 1962

W.N. Sharp, P. Eng. BRITHONT MINES LTD.





