84-#257 - 12618

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GEOLOGICAL BRANCH
ASSESSMENT REPORT

12,618

AJAX RESOURCES LTD.
100 - 450 WEST GEORGIA STREET
VANCOUVER, B.C.

GEOLOGICAL AND
GEOPHYSICAL SURVEY REPORT
on the
HANK CLAIM GROUP, CAYCUSE RIVER

VICTORIA MINING DIVISION
VANCOUVER ISLAND, B.C.

N. Latitude 48° 48' 21" W. Longitude 124° 29' 45"

92C 15E, 16W

by

M.W.M.P. HARRIS, B.Sc.

STRATO GEOLOGICAL ENGINEERING LTD.

103 - 709 DUNSMUIR STREET

VANCOUVER, B. C. V6C 1M9

March 10, 1984

STRATO GEOLOGICAL
ENGINEERING LTD.

SUMMARY

The Ajax Resources Ltd., Hank Claim is located near the headwaters of the Caycuse River, in the Cowichan-Nitinat logging district of Vancouver Island, B.C. Access to the property from the Village of Lake Cowichan is north for 27 km along paved and good logging roads to the Village of Caycuse, and thence via lesser logging roads for 23 km in a southwest direction to the property.

A mineral reconnaisance survey consisting of detailed geological mapping, VLF-EM and magnetometer grid surveys, and rock and soil geochemical sampling was carried out over a section of the property known as the "CR" Zone (as defined by Armstrong, 1982) by Strato Geological Engineering Ltd., during February, 1984.

The survey recognized irregularly shaped and distributed skarn zones within carbonate sequences of the Triassic Karmutsen Formation, providing a host for disconnected pods of massive and disemminated sulphide mineralization. These high grade pods were arranged in planar or tabular arrangements which paralleled the host rock's vertical bedding in an east-northeast direction.

Representative rock samples from the skarn pods yielded reported concentrations of 2.02% Cu, 0.045% Zn, and 0.213 oz/T Ag over a mean sample width of 1.55m. Rock samples from a potentially important, north-trending fault-brecciated zone yielded considerably higher values, including reported concentrations of 0.005 oz/T Au and 1.818 oz/T Ag.

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It is recommended that the magnetometer survey be extended for a further 200 m east of the eastern boundary of the established grid, to search for additional zones of subsurface skarn-type mineralizataion, together with a limited program of blasting and trenching to further reveal the extent of the known mineralization. Contingent upon the results of the previous two recommendations, a program of diamond drilling should be commenced with the view to testing the grade and extent of the best targets.

Respectfully submitted,
Strato Geological Engineering Ltd.

M.W.M.P. Harris, B.Sc.
Geologist

March 10, 1984

STRATO GEOLOGICAL ENGINEERING LTD.

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STRATO GEOLOGICAL ENGINEERING LTD.

INTRODUCTION

Pursuant to a request from the directors of Ajax Resources Ltd., a mineral reconnaissance survey was completed over a section of the Hank Claim by Strato Geological Engineering Ltd. during February 1984.

The work described in this report was conducted over the "CR Zone", a partially delineated, E-W trending zone of mineralization as outlined by Armstrong (1982). The purpose of this report is to present the results of detailed geological mapping, magnetometer and VLF-EM grid surveys, and trial soil and rock chip geochemical sampling performed over the zone, and to recommend further exploration where warranted.

PROPERTY - LOCATION AND ACCESS

The Ajax Resources Ltd., Hank Claim, Record No. 619(04), consists of twelve units, forming a rectangular property which encloses approximately 300 ha., in the Victoria Mining Division, Vancouver Island, B.C.

The property is located on a west-flowing section of the Caycuse River in the NW extremity of the Seymour Range, part of the Vancouver Island Ranges of the the Insular Mountain Group. The center of the property is located at approximately 48 degress 48' 21" North Latitude and 124 degrees 29' 45" West Longitude (Figure 2).

Access to the property from the Village of Lake Cowichan is via the paved Highway 18 at the east end of Cowichan lake, northwest for 10 kilometers to the Village of Honeymoon Bay. From Honeymoon Bay, proceed northwest to the village of Caycuse over 16 kilometers of good logging roads. At Caycuse, proceed west along the B.C. Forest Products Ltd. logging route "Caycuse Mainline" for 23 kilometers until reaching the south-branching "Hatton Main" logging route. This road leads, after 1 kilometer, to within 500 meters of the CR Zone located

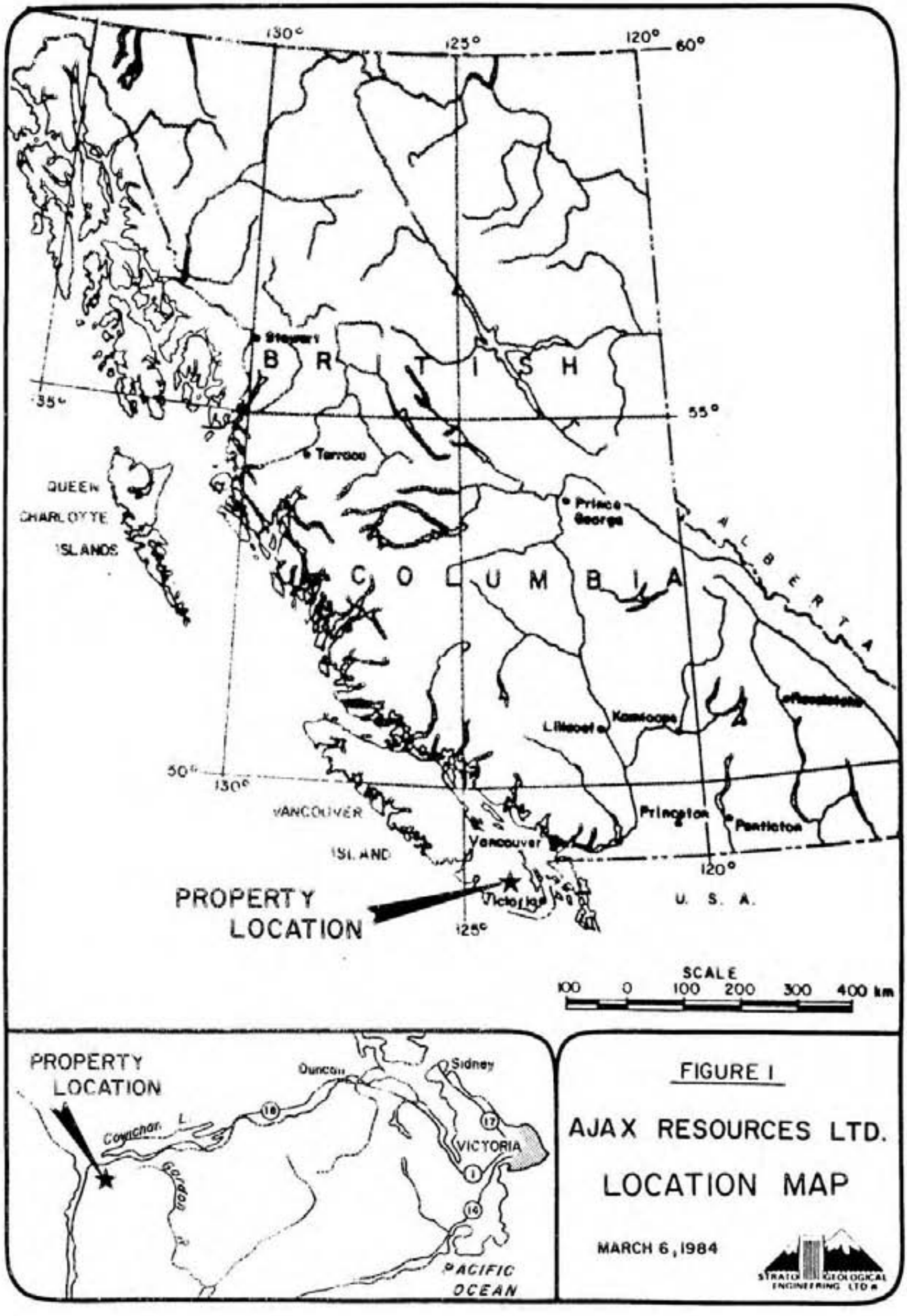

FIGURE 1

AJAX RESOURCES LTD.

LOCATION MAP

MARCH 6, 1984

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south of the road.

The Village of Lake Cowichan is 80 kilometers from the City of Nanaimo on Highway 18 West to 1 North. The City of Victoria is about 90 kilometers south along the same routes.

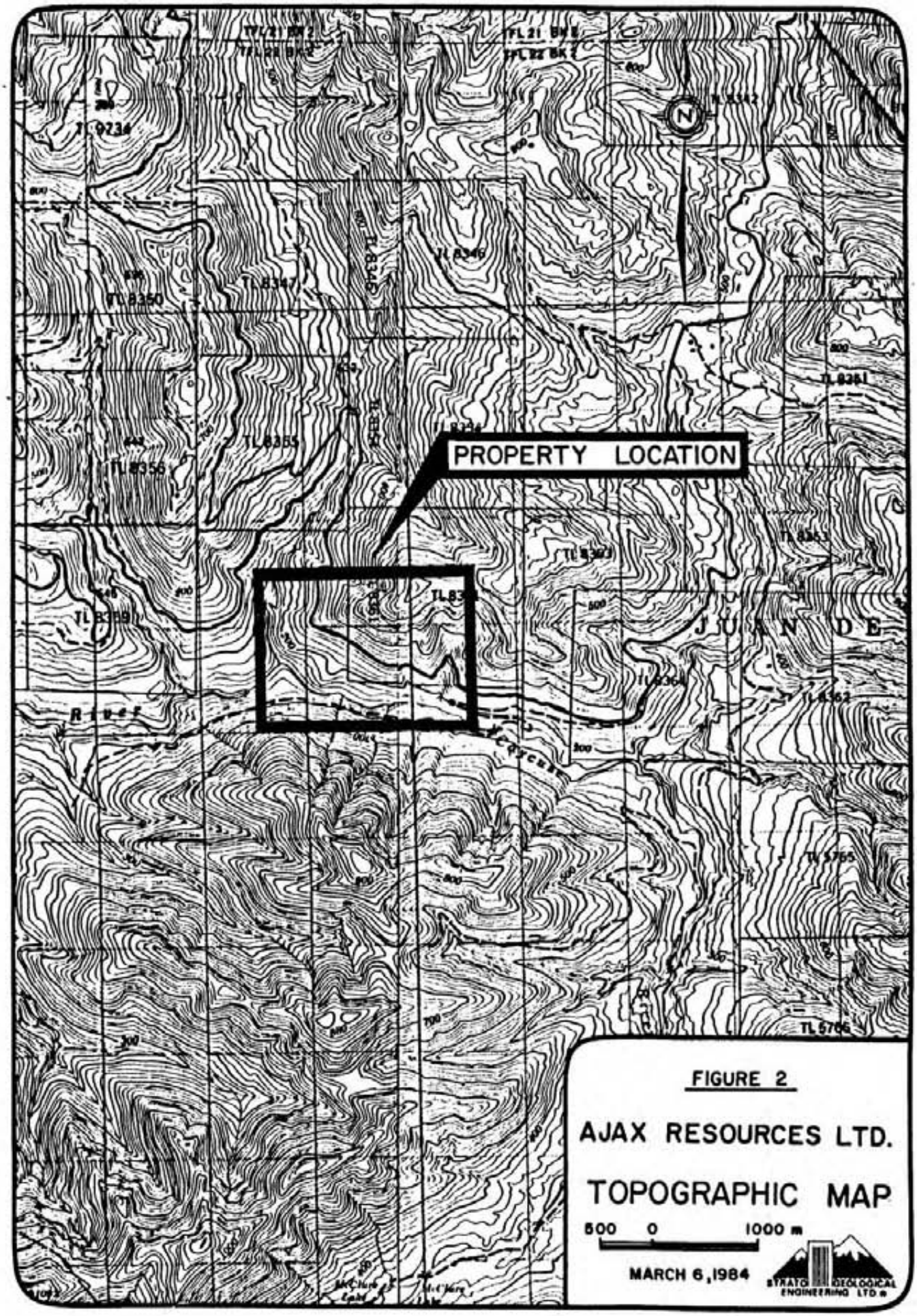
TOPOGRAPHY AND CLIMATE

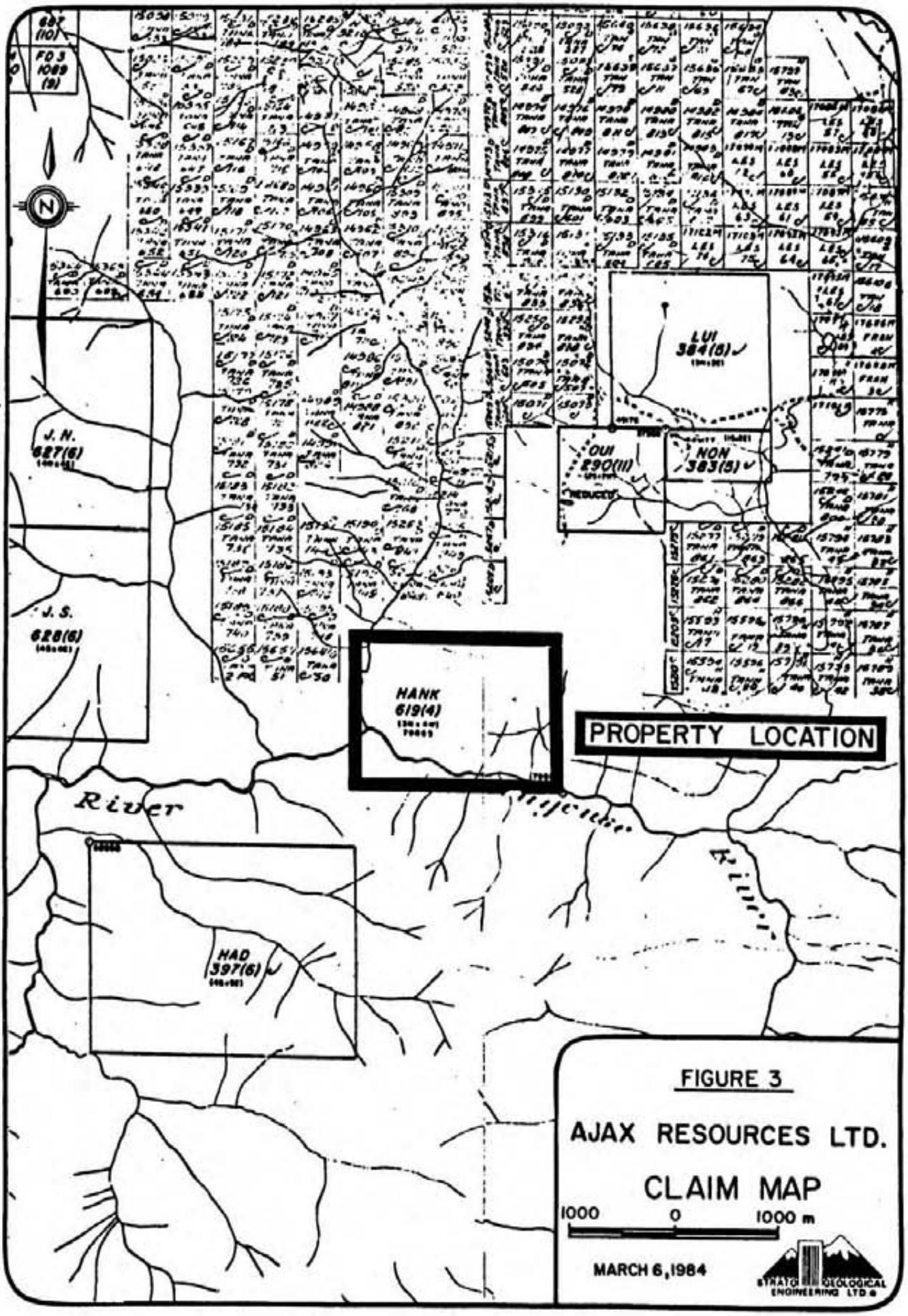
The property is located in a steep and rugged section of the Caycuse River headwaters. Elevations range from 110 meters on the level of the Caycuse River at the west property boundary, to 720 meters at the north boundary, a vertical relief in excess of 600 meters. Wilson Creek, a south-flowing tributary of the Caycuse River, parallels the west property boundary; Cougar Creek, also south-flowing, is on the east side of the property. A third south-draining tributary, Stormy Creek, roughly bisects the property.

The CR Zone is located in the south-central portion of the property, exposed in cliff-like outcrops on the north and south banks of the Caycuse River. The zone is approximately 150 meters west of the Caycuse River/Stormy Creek junction.

The topography over the CR Zone is steep and cliffy adjacent to the Caycuse River, becoming bench-like 70 meters to the north of the river. Exposures on the south side of the river in the vicinity of the zone are all cliff-like, making detailed examination difficult. Logging by B.C. Forest Products Ltd. has been carried out recently in the immediate area, resulting in the possible surface expression of the mineralized zone being entirely obscured by fallen timber.

The Caycuse area endures a wet, 'mesothermal-rainforest' type climate, with a mean annual precipitation of between 155 and 440 centimeters per annum. Vegetation is dense, being predominantly mature western hemlock, red cedar, and Douglas Fir.


PROPERTY LOCATION
JUAN DE
FIGURE 2
AJAX RESOURCES LTD.
TOPOGRAPHIC MAP
500 0 1000 m
MARCH 6, 1984
STRATO GEOLOGICAL ENGINEERING LTD.


LUI
384(6)
OUI
290(11)
REDUCED
NON
383(5)
J. N.
627(6)
J. S.
628(6)
HANK
619(4)
PROPERTY LOCATION
River
HAD
397(6)
FIGURE 3
AJAX RESOURCES LTD.
CLAIM MAP
1000 0 1000 m
MARCH 6, 1984
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HISTORY

(Taken from Armstrong, 1982)

Very little publicly available data was found pertaining to the Caycuse River copper showings, and the deposit was not listed in the Min File of the Ministry of Energy, Mines and Petroleum Resources. Some private information was obtained. F. and K. Hallberg reportedly discovered massive chalcopyrite mineralization in the Caycuse River in about 1920, but only a small amount of stripping was conducted.

Between 1956 and 1959, the Caycuse Copper Co. Ltd. conducted a modest amount of work on the known copper showings. By sluicing, the company traced and exposed the copper mineralization for a length of 275 meters on the north side of the Caycuse River. Intermittent sampling of the incompletely exposed mineralization along the 275 meter length yielded an average grade of 3.30% Cu over a mean sample width of 0.9 meters. The company reportedly did not receive adequate financing to continue the exploration program.

In 1965, D. C. Malcolm, P. Eng., prepared a "Progress Report" for Caycuse Mines Ltd. in which he recommended that a road be constructed both to the main Caycuse River showing and to the Cougar Creek shwoing, so that high grade copper ore could be shipped.

In 1971, J. M. McNulty took 5 representative samples of copper mineralization from various locations on the Caycuse River showing, that ranged from a low of 1.27% Cu to a high of 4.45% Cu, and averaged 3.20% Cu (plus 8.2g Ag/t). No samples widths were indicated.

In 1975, K. E. Northcote examined the showings, and reported additional sample results by J. M. McNulty, indicated averages of 4.01% Cu and 16.2g Ag/t from seven sample widths averaging 1.3 meters.

SURVEY PROCEDURES

Geophysical magnetic and VLF-EM surveys were carried out over the CR Zone in conjunction with the establishment of a chain and compass grid on the bench-like, narrow plateau to the immediate orth of the Caycuse River. The position of the grid was estimated to coincide with an inferred subsurface extension of the ENE-trending zone of mineralization, exposed in the north bank cliffs of the Caycuse River. The grid consisted of a baseline flagged on a bearing of 120 degrees, with crosslines being run at 25 meter intervals on a bearing of 030 degrees. Stations on the crosslines are numbered from the baseline north at 12.5 meter intervals.

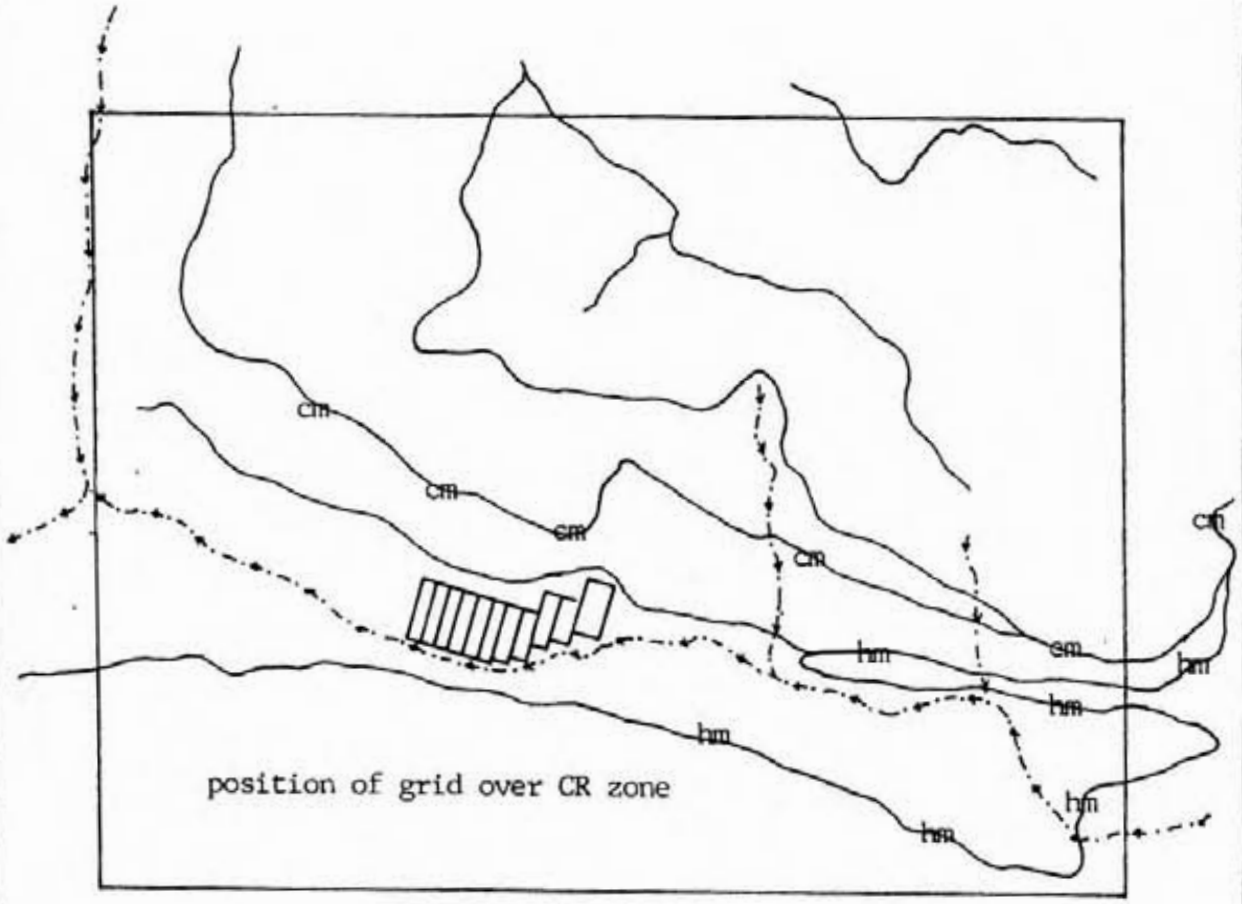
Detailed geological mapping over the established grid was not feasible due to the entire area being covered by newly felled timber. Consequently, a detailed river and cliff section encompassing the visible exposures of the CR Zone was completed for the north side of the Caycuse River. South bank exposures were not examined closely by the writer due to heavy flooding of the river. Observed geological features were tied into the baseline of the grid wherever possible.

The geomagnetics survey was conducted using a Scintrex Model MP-2 proton magnetometer. Station readings were taken at 12.5 meter intervals on the grid crosslines. A base station was maintained and lines were looped to allow for the correction of diurnal variations and magnetic interference. Maximum daily drift was generally not greater than 20 gammas.

An electromagnetic survey was also carried out over the grid using a Sabre Model 27 VLF-EM Receiver, employing the Seattle, Washington transmitter (24.8 kHz). Field data was filtered prior to plotting using the technique described by Frazer (1969).

One grid survey line was soil sampled (a total of 10 samples) to determine the usefulness of geochemistry in tracing the possible ENE extension of the mineral zone beneath heavy overburden cover.

Figure 4



river or creek
BCFP logging road
hm Hatton Mainline
cm Caycuse Mainline

N

Ajax Resources Ltd.		
HANK CLAIM : CAYCUSE RIVER		
"CR" Zone Location		
Feb.'84	1: 10 000	MH

REGIONAL GEOLOGY

A. Stratigraphy

The regional geology of the south Cowichan Lake district, as interpreted by Muller (1977), is shown in Figure 5. Igneous and sedimentary rocks of Middle to Upper Triassic and Jurassic age are found in the area, and are as follows:

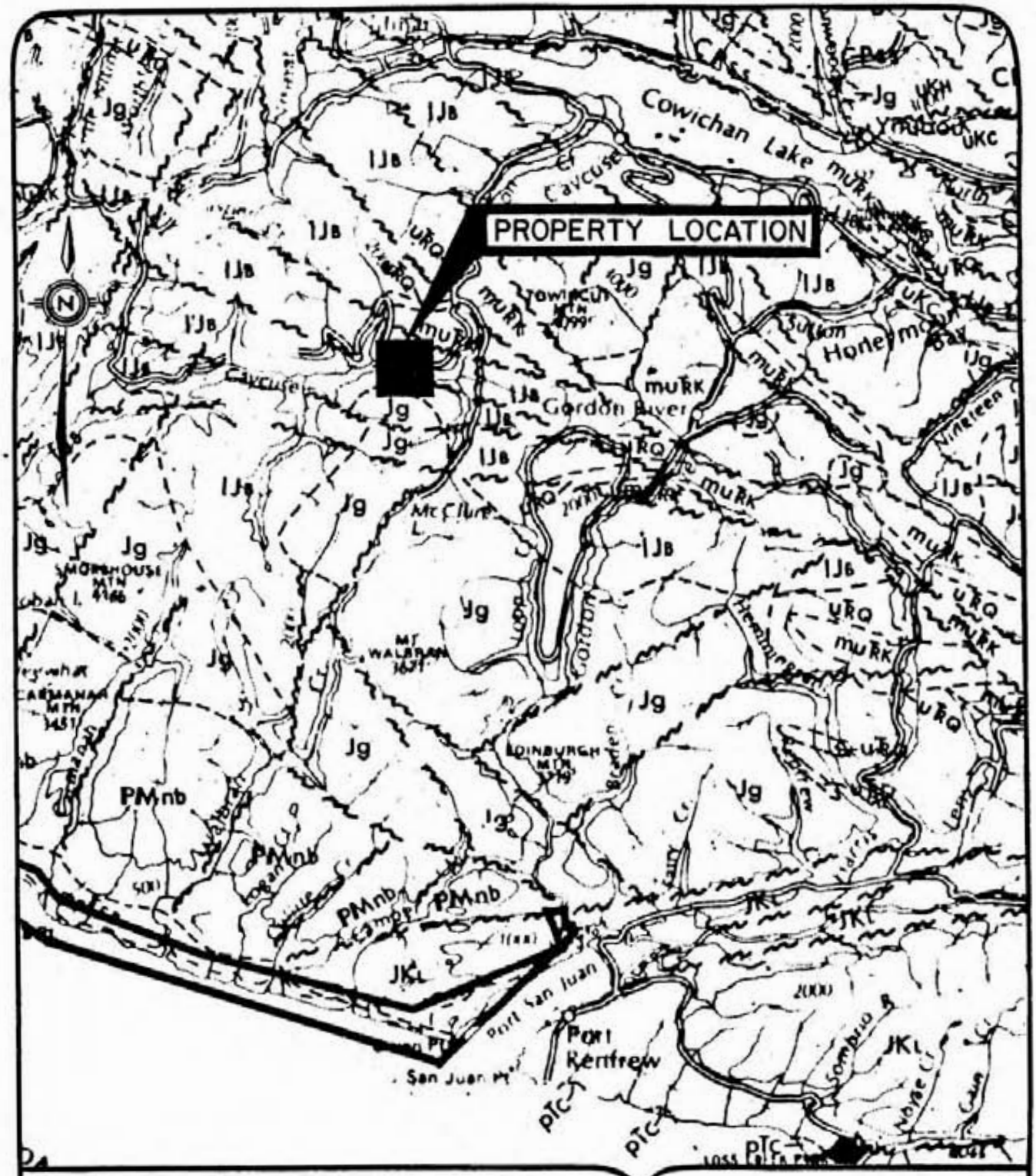
1. Vancouver Group

(a) Karmutsen Formation (muTr K): The Karmutsen Formation is the oldest part of the Vancouver Group, being of Middle Triassic age, and forms a west-northwest trending core-zone centered 8 to 10 kilometers south and west of Cowichan Lake. The formation is largely composed of tholeiitic volcanic rocks, up to 6000 meters thick. It is known to be composed of a lower member, about 2600 meters thick, of pillow lava, succeeded by varying types of breccia; a middle member, about 800 meters thick, of pillow breccia and aquagene tuff; and an upper member, about 2900 meters thick, of massive flows with minor interbedded pillow lava, breccia, and sedimentary layers.

The metamorphism of the Karmutsen rocks is generally low grade, being mostly massive and not to any extent converted to greenschist. However, partial albitization of plagioclase and the fairly common occurrance in amygdales of pumpellyite with quartz, carbonate and chlorite suggests a metamorphic grade up to the prehnite - pumpellyite facies. At contacts with granitic rocks, the basaltic members are converted to massive, dark-coloured hornfels, consisting mainly of horneblende with minor plagioclase.

The basaltic eruptions apparently started with pillow lavas in a deep, marine rift basin, continued with aquagene tuff as the basin became shallower, and terminated with the extrusion of subareal basaltic flows.

The Karmutsen rocks occur usually in thick, unfolded, evenly dipping sequences, although fault-bounded wedges of fractured and altered rocks occur adjacent to, and in the immediate vicinity of, granitic intrusions of Jurassic age.



JKL	Pacific Rim Complex and Leech River Formation
PMnb, Jg	Island Intrusions and Westcoast Complex
IJB	Bonanza Group
muRK	Karmutsen Formation
uRQ	Quatsino and Parsons Bay Formation
CPss	Sticker Group

AFTER J.E. MULLER, 1977

FIGURE 5

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REGIONAL GEOLOGY

0 5 km

MARCH 6, 1984

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(b) Quatsino Formation (uTr Q): The Quatsino Formation, being of Upper Triassic age and overlying the Karmutsen Formation, consists mainly of massive and thick bedded limestone ranging in thickness from 25 to 500 meters.

The limestone varies in its degree of purity, and is generally fine-grained to mcrocrystalline, weathering to a bluish-grey surface. Near intrusive contacts, the limestone is converted to coarsely crystalline marble and in many instances into skarn, with economic magnetite and chalcopyrite deposits.

The structure of the limestone is relatively undisturbed over large areas, where the beds are horizontal or gently dipping. In contrast intense disturbance, commonly with isoclinal folds a few feet in amplitude, is found in faulted zones up to a mile in width and along some intrusive contacts.

Deposition of the Quatsino Formation appears to have taken place on near and offshore shelfs, amongst the by now quiescent Karmutsen volcanic archipelago.

2. Bonanza Group

(a) Bonanza Volcanics Division (1JB): Rocks of this division are of Lower Jurassic age, and are composed of lava, tuff, and breccia of mainly basaltic and rhyolitic composition, with subordinate andesitic to dacitic units. It is known to contain intercalated beds and sequences of marine argillite and greywacke. The thickness is believed to exceed 1500 meters.

The Bonanza Group represents parts of several eruptive centers of an active volcanic arc and its stratigraphy is typically variable.

3. Island Intrusions (Jg,PMns,PMnb)

The Island Intrusions, also of Jurassic age, occur as batholiths and stocks of granitoid rocks ranging from quartz-diorite to granodiorite in composition. The intrusions appear to intrude units of both the Vancouver and Bonanza Groups.

Within the Bonanza Group, the Island Intrusions are known to form high-level stocks and dykes of hornblende-quartz-feldspar porphyry, and there appears to be an apparent comagmatic relationship between the intrusions and the Bonanza volcanics.

B. Structure

The structure of the south Cowichan Lake district is almost entirely dominated by steep faults, reflected in the obvious trellis-type drainage patterns and topographic features of the area.

Faulting and rifting probably occurred during the outflow of the Karmutsen lavas in Late Triassic time, establishing the north and west directed fault systems affecting the Vancouver Group rocks. Faulting in a northwest direction, accompanied by southwestward tilting in the west, and later by northeastward tilting in the east, occurred in Late Mesozoic to Early Tertiary time. Faulting in a northeasterly direction affected younger Mesozoic and Early Tertiary rocks.

The emplacement of the Island Intrusions during Jurassic time caused localized folding and faulting of the Vancouver and Bonanza Group rocks, as well as the establishment of prominent conjugate joint patterns in the vicinity of the igneous contacts.

C. Glaciation

The entire area was heavily glaciated during Pleistocene times. It has been reported (Muller, 1977) that an early glacial event covered the area with one southwest-flowing icesheet. Later glacial events probably then occurred, accumulating in several centers in the Nimpkish, Alberni, and Cowichan Valleys from which flowed many ice-tongues into valleys now occupied by rivers and finger lakes; evidence of this east-west ice movement is readily visible in the Caycuse River valley.

PROPERTY GEOLOGY

A. Stratigraphy

Lithologies on the "CR" Zone of Ajax Resources Ltd., Hank claim were divided into four mappable units. Exposure on the property is poor (up to 10%) with all mappable outcrops being restricted to cliff-like exposures and riverbank outcrops along the north and south banks of the Caycuse River. Any outcrops which may have been present on the bench-like area covered by the grid were entirely obscured by newly felled timber. The geological section was recorded and constructed at a scale of 1:650, and is presented as Figure 6. South bank exposures were not examined in detail by the writer due to intense flooding of the Caycuse River at the time of observation. Exposed units, from oldest to youngest, are as follows:

1. Karmutsen Formation (unit muTr K)

The Karmutsen Formation occurs as a fault-bounded, altered and sheared wedge of basic volcanic rocks and impure carbonates, within the Bonanza Volcanics (not exposed in the "CR" Zone); they form the host rocks to the Cu-Fe skarn-type mineralization found within the "CR" Zone.

It is thought by the writer that the impure carbonate units and intercalated volcanic interbeds are both part of the uppermost levels of the Karmutsen Formation, as opposed to being representatives of the Quatsino and Karmutsen Formations respectively. Similar sequences to those exposed in the Caycuse River gorge are found elsewhere, and are referred to as the Upper Limestone Member of the Karmutsen Formation.

(a) The sedimentary carbonate units consist of fine-grained to microcrystalline limestone and marble, with a dark grey fresh surface which weathers to a bluish-grey hue. The units contain variable amounts of lithic impurities, and occur mainly in massive beds or

in beds several meters thick. Contacts with interbedded volcanic units are sharp.

Partial to complete development of skarn has taken place in irregular, localized areas, the more impure limestone sections appearing to be more favourable for the formation of skarn than the comparatively more clean sections. These 'skarnified' zones are described as a separate mappable unit below.

(b) Volcanic interbeds lie between the calcareous units, and consist of highly altered and sheared, basic material. Fresh surfaces, difficult to find due to the unit's friable nature, are green to dark grey in colour, although this may be a reflection of its high degree of chloritization.

The unit is generally massive and heavily veined with calcite, with common amygdales of quartz, calcite, and chlorite. "Skarnification" does not seem to have taken place in any appreciable amounts.

2. Island Intrusions (unit Jg)

Exposure of this unit are restricted to the core of a folded zone on the south bank of the Caycuse River. The rock was seen to consist of partially 'skarnified' diorite. Sparsely disemminated pyrite and chalcopyrite were observed in the dark green, coarse-grained host rock, composed mainly of anhedral plagioclase feldspar crystals and minute, lath-like crystals of hornblende, with lesser biotite and potash feldspar. The rock was sparsely veined with quartz.

This unit is thought by many authors to be the primary sources of the skarn-type alteration and its associated mineralization.

3. 'Skarnified' Rocks

Skarn tends to occur in the "CR" Zone as pods and tabular vertical bodies, replacing impure limestone units preferentially to the more pure limestone or volcanic rocks. The overall pattern of the pods of skarn appears to roughly parallel the structure of the volcanic and sedimentary sequence, and hence the primary control of the development of skarn may have been the presence of

favourable or susceptible limestone beds for 'skarnification' within the sedimentary units, striking at an oblique angle to the contact with the diorite intrusion.

'Skarnified' carbonate rocks consist of a high temperature mineral assemblage of quartz, tremolite, and remnant marble, with lesser amounts of garnet, epidote, and ilvaite. Ore minerals were found within massive sulphide pods of irregular outline and extent, or in finely disemminated form throughout the skarn, giving rise to much supergene staining of the skarn exposures by iron oxides and malachite/azurite. Observed minerals included massive and disemminated pyrite and chalcopyrite (and possible disemminated sphalerite), together with magnetite being ubiquitously present in small amounts.

Where affected, volcanic rocks appear altered to a dark green, massive and dense hornfels. Massive and disemminated pyrite was observed in small lenses, along with minor chalcopyrite. Pegmatitic growths of tremolite were common. Comparatively, the mineralization of 'skarnified' volcanic rocks was insignificant compared to that noted in carbonate rocks.

B. Structure

The "CR" Zone occurs in a steeply dipping sequence of the Karmutsen Formation. Bedding generally dips 60 to 80 degrees to the north, striking towards 075. Prominent conjugate joint patterns have developed, possibly as a result of the intrusion of the Island Intrusions (Jg), and the zone has been affected by several directions of faulting. The sequence is also gently folded.

A regional, westnorthwest-trending, high-angle fault, projected by Muller (1977) to pass through the Hank Claim in the vicinity of this locality, is thought to possibly pass along the riverbed of the Caycuse River, through the Zone. Although the south bank exposures were not examined closely by the writer, apparent differences in the stratigraphy and structure between the north and south banks suggest the presence of a structural discontinuity of indeterminate size between them. The fault, however, is not exposed.

A well exposed normal fault was observed in the north side of the Caycuse gorge, just south of Station 0+00N, Line 1+00E. The throw of this fault was uncertain, due to the lack

of any marker horizons. The fault plane dipped by 75 degrees to the east, and striked towards 010. Gouge development and extensive brecciation was noted; a sample taken from this breccia yielded high reported concentrations of Au, Ag, and Cu, and is discussed in a later section.

Much shearing and fracturing of all lithologies was observed, especially in the case of volcanic interbed, reflecting their apparent incompetent nature.

A well developed joint system was observed, readily discernable in the more blocky carbonate units. The strike of the joints varied slightly from outcrop to outcrop, but were generally in the ranges indicated below:

(strong)	(i)	master joint direction = 350 to 355 degrees;
(moderate)	(ii)	secondary joint direction= 055 to 065 degrees;
(weak)	(iii)	tertiary joint direction = 095 to 120 degrees.

C. Alteration and Mineralization

The "CR" Zone is located within the alteration halo of a dioritic Island Intrusion; several types of alteration and mineralization are present within the Zone, partially caused by exchanges and fluid accessions from the diorite magma.

(1) Contact metasomatic alteration: This type of alteration was probably responsible for the spasmodically-distributed development of skarn. All limestone units have undergone varying degrees of recrystallization to marble, with carbonaceous material forming graphite; volcanic units tend to have become highly chloritized and altered to hornfels. Also, certain rock ions are though to have then recombined to form new minerals, under the influence of the introduction of magmatic fluids under raised temperature and pressure. Consequently, many new Ca-based silicate minerals formed - tremolite, wollastonite, garnet, etc.

As metasomatism continued, the skarn appears to have been replaced in preference to the unaltered country rocks, which suggests that the silicified material may have greater susceptibility or more favourable chemical properties.

Magnetite and haematite form with and after the silicates, but generally precede the formation of the sulphides, a common order being sphalerite, chalcopyrite, galena, with sulphosalts last. The skarn is hence replaced to varying degrees, giving rise to mineral concentrations from disemminations to massive sulphide pods.

(2) Fault-related mineralization: A rock sample (HCR-4) taken from a well exposed, north-striking normal fault zone exposed in the north bank of the Caycuse River, yielded reportedly high concentrations of Au, Ag, and Cu from its brecciated zone. Abnormally low Zn values were recorded, which is atypical of all other mineralized zones within the "CR" Zone.

Shearing along the fault plane resulted in the development of gouge and mylonitic textures. Skarn appears to be localized here also; this could possibly be of high importance as regards the development of massive sulphide pods along a plane of weakness. However, no major areas of high magnetic responses were detected across the fualt's inferred north-westerly extension by the magnetometer survey.

(3) 'Unskarnified' volcanic interbeds were noticeably sheared and chloritized, probably as a result of low-grade regional metamorphism.

GEOCHEMISTRY

A. Rock Chip Sampling Results

Rock chip samples from the Ajax Resources Ltd., Hank Claim ("CR" Zone), were analysed for gold, silver, copper, zinc, lead, and iron. All analyses were performed using the inductively-coupled argon plasma method with the exception of gold, which was analysed by the atomic absorption method. A total of fifteen samples were collected and analysed, including ten representative and five high-grade samples. The reported geochemical assay data is presented as Appendix A.

1. Representative Sampling

The intermittent representative sampling of the "CR" Zone mineralization, and of a previously undescribed mineralized zone 150 meters west of the "CR" Zone, yielded the following results:

Sample	Sample width(M)	Cu %	Zn %	Pb %	Fe %	Ag oz/T	Au oz/T
HCR 1	1.35	0.836	0.027	0.002	25.840	0.057	0.001
HCR 3	0.90	8.670	0.001	0.005	12.500	0.069	0.002
HCR 5	0.85	8.610	0.032	0.002	18.500	0.515	0.001
HCR 7	2.00	0.730	0.090	0.002	17.080	0.139	0.001
HCR 9	2.15	0.760	0.043	0.002	15.690	0.133	0.001
HCR 10	1.70	1.580	0.059	0.002	18.440	0.248	-
HCR 11	2.20	0.720	0.060	0.002	18.720	0.136	0.001
HCR 12	1.80	0.910	0.025	0.003	15.930	0.206	0.001
HCR 13	1.60	1.170	0.696	0.004	20.680	0.252	0.001
HCR 14	0.95	4.480	0.023	0.001	16.300	0.697	0.001

The above data was statistically analysed to discern a weighted average for each element examined. These are as follows:

Element	Weighted Average	Mean Sample Width
Cu	2.02 %	1.55 m
Zn	0.113 %	1.55 m
	**(cut average = 0.045%)	
Pb	0.003 %	1.55 m
Fe	18.034 %	1.55 m
Ag	0.213 oz/T	1.55 m
Au	0.001 oz/T	1.55 m

**(For statistical purposes, the cut average which excludes the high Zn value of 0.696% of HCR 13 is more feasible as a truer representation of the whole population.)

These calculated values are somewhat lower than those reported by McNulty (1971) and Northcote (1975). High grade samples collected by the writer show reported concentrations considerably higher than the above weighted averages, and are discussed separately below.

2. High-grade Sampling

The following samples were collected from areas with the highest visible concentrations of mineralization, and from zones of special interest, as discussed below:

Sample	Cu %	Zn %	Pb %	Fe %	Ag oz/T	Au oz/T
HCR 2	11.21	0.080	0.012	20.08	1.818	0.001
HCR 4	16.30	0.001	0.010	19.80	1.666	0.005
HCR 6	10.53	0.039	0.008	20.17	0.727	-
HCR 8	0.04	0.035	0.003	10.84	0.039	-
HCR 15	0.10	0.022	0.001	23.88	0.052	-

Samples HCR 2 and HCR 6 were both taken at separate localities from the more visibly rich zones of copper mineralization within the massive sulphide pods. Substantially higher concentrations than the weighted averages are noted for copper, lead, and especially silver.

Sample HCR 4 was collected from a heavily mineralized fault breccia, immediately adjacent to the gouge of a northwest-trending fault (see Figure 6). The mineralized zone was readily discernable for up to 30 cm on either side of the fault gouge, and contained good concentrations of disemminated pyrite, chalcopyrite and magnetite in a siliceous gangue. The sample yielded high reported concentrations of gold, copper, silver, and lead, with noticeably low concentrations of zinc.

Sample HCR 8 was taken from a lens-shaped tuff intercalation within skarnified limestone, to the immediate east of the above fault zone (see Figure 6). It is apparently devoid of high economic concentrations.

Sample HCR 15 was collected from within a large body of skarnified limestone. The mineral involved, subsequently identified by X-ray defraction as massive ilvaite, formed a homogeneous vein of vitreous black material, 15 cm in width, roughly parallel to the prevailing strike of the massive sulphide mineralization. The sample yielded low reported concentrations of all elements examined apart from iron, and is consequently not thought to be of economic significance.

B. Soil Sampling Results

A total of ten soil samples were collected from Line 2+75Em at intervals of 12.5 m. The line of samples was intended to cross the strike of the "CR" Zone mineralization as it extended in a eastnortheast direction. The purpose of this soil survey was to determine whether this type of sampling would be useful in future surveys as a tool in revealing the presence of overburden-covered massive sulphide bodies.

Soil samples were collected from "B" horizon soils at depths of about 30 cm., placed in standard kraft soil envelopes and delivered to Acme Analytical Laboratories Ltd. Results are plotted on Figure 7. The samples were analysed for gold, silver, copper, zinc, lead, and iron in the same manner as was employed in the case of the rock chip samples above. The reported geochemical assay data is also recorded in Appendix A.

The survey did not prove to be strikingly useful, for as can be seen from the results, the reported concentrations do not yield any highly anomalous concentrations in any one particular area, of any of the elements analysed. Slightly lower values than 'normal' occur at Station 87.5N for Cu, Zn, and Fe, with higher values in Ag and Au; the significance of these figures cannot be accurately interpreted due to the low number of samples taken.

It is assumed that thick blankets of glacial till have produced a masking effect on a zone which normally would have been an excellent area to analyse using soil geochemical techniques.

C. Fire Assay Results

Upon receipt of the geochemical assay results described above, the following samples were reanalysed for Cu, Zn, and Ag by the fire assay method, yielding reported concentrations which were similar, although generally slightly higher for Cu and Zn (c.5%) and slightly lower (c.5%) for Ag than those reported using the ICP and AA methods.

Sample	Cu %	Zn %	Ag oz/T
HCR 2	11.60	0.11	1.69
HCR 3	9.12	-	0.67
HCR 4	17.60	-	1.50
HCR 5	9.28	0.05	0.48
HCR 6	11.10	0.06	0.54
HCR 10	1.91	-	0.25
HCR 13	1.23	0.78	0.25
HCR 14	4.89	0.04	0.71

GEOPHYSICS

A. Geomagnetic Survey Results

A geomagnetic survey was conducted over the inferred subsurface expression of the "CR" Zone mineralization using a Scintrex Model MP-2 proton-precession magnetometer. The purpose of this survey was to attempt to detect the presence of massive sulphide pods which were obscured or covered by overburden, and to ascertain the trends of any major structural features across the zone of importance.

During the survey period, strong telluric activity took place which resulted in the incomplete coverage of the allotted grid. Consequently, only the western two-thirds of the intended area was surveyed; these results, contoured and corrected for diurnal variation, are presented in Figure 8.

This partial survey proved useful in the delineation of a eastnortheast trending zone of anomalously high magnetic response in the southeast section of the grid. This zone corresponds well with the inferred strike and the northermost limit of the exposed Cu-Fe mineralization, as suggested from geological mapping of the north-bank cliff face to the immediate south of the grid baseline.

The area of low magnetic response in the central and northwest sections of the grid are difficult to accurately interpret due to the presence in this area of thick glacial

overburden, observed in a roadcut 75 m to the north as being in excess of 6 m in thickness. However, it is possible that this low magnetic zone represents a northwest-trending structural discontinuity, also detected by the VLF-EM survey.

It is strongly recommended that the area not covered by this survey, namely lines 1+50E through 2+75E, be covered in a future survey to further outline zones of anomalously high mgnetic response which the writer believes to occur in that area, and to provide a complete coverage of the inferred eastnortheast extension of mineralization as a form of comparison to the results of the VLF-EM survey.

B. VLF-EM Survey Results

A VLF-EM electromagnetic survey was conducted over the inferred subsurface northeasterly extension of the exposed "CR" Zone mineralization using a Sabre Model 27 VLF-EM Receiver. The Seattle transmitter station was employed (24.8 kHz). Field data was filtered prior to plotting according to the technique outlined by Frazer (1969). The plotted field data and contour map is presented as Figure 7. Original dip angle and field strength measurements are presented as Field Notes in Appendix B.

Results are rather inconclusive because of limited southerly extension of the survey lines due to the Caycuse River Canyon. An anomalous trend (conductive zone) is noted along the southern extent of lines 1+75E through 2+75E and is interpreted to represent the probable east-northeasterly extension of mapped skarn zones on the north bank of the river.

An inferred, weakly anomalous trend, line 1+50E, 1+60N to line 2+25E, 2+00N is unexplained but may be attributable to variations in overburden thickness and/or groundwater effects in this area. Further work is required to clearly outline this zone.

CONCLUSIONS

1. The Hank Claim Group of Ajax Resources Ltd. in the Caycuse River area of Vancouver Island has favourable potential for the development of economic reserves of high grade copper mineralization.

2. Representative rock chip samples were taken from the exposed sections of the "CR" Zone mineralization, yielded the following reported weighted average concentrations (over an average width of 1.55 m.): 2.02% Cu, 0.045% Zn, 0.213 oz/T Ag.

3. High grade rock chip samples from the same area yielded considerably higher concentrations, ranging as high as 16.3% Cu, 0.696% Zn, 1.818 oz/T Ag and 0.005 oz/T Au.

4. The character and extent of the alteration of the rock units of the Karmutsen Formation may be dependent upon their composition, being particularly favourable in the case of impure limestone units.

5. The extent and location of the alteration of rock units may be in part dependent upon their structure. Disconnected pods and tabular bodies of massive sulphide mineralization generally occur in planar, subvertical arrangements, and closely follow the strike of bedding.

6. Disemminated Cu, Ag, and Au mineralization is present in the brecciated sections of a north-trending, normal fault, exposed in the north bank of the Caycuse River.

7. The magnetometer survey proved itself a useful tool for identifying possible subsurface zones of massive sulphide mineralization over the partial grid surveyed.

8. VLF-EM results have indicated a probable east-northeasterly extension of the mapped skarn zones. Further work is required to clearly determine the usefulness of the electromagnetic method for tracing the mineralized zones.

9. It is possible that the "CR" Zone mineralization does not extend on strike southwestward across the Caycuse River to its south bank, being laterally or vertically displaced for an indeterminate distance by an east-west, high-angle regional fault.

RECOMMENDATIONS

The following action is recommended to further define areas of high grade mineralization on the "CR" Zone of Hank Claim, Ajax Resources Ltd.:

1. Continuation of the magnetometer survey for a further 200 m east to adequately cover the original area intended, to attempt to detect further overburden-covered massive sulphide bodies which may lie on strike from the exposed mineralization on the Caycuse River north bank.

2. A program of blasting or trenching, with attendant representative rock chip sampling, be conducted over targets outlined by the VLF-EM and magnetometer surveys to further investigate the extent and grade of the skarn-type mineralization.

3. Contingent upon the results of 1 and 2 above, an IP-Resistivity survey be conducted over the established grid to attempt to outline the limits of the skarn-zone silicification.

4. Contingent upon the results of the above recommendations, a program of diamond drilling be conducted on the best targets, in the manner outlined in the preliminary report of Armstrong (1982).

5. Further representative sampling be conducted at the site of the north-trending normal fault, exposed on the north bank of the Caycuse River, to determine the nature and extent of its inherent mineralization.

6. Detailed examination of the Caycuse riverbed and the south bank exposures during periods of lower water, to ascertain and finalize the presence of the regional east-west fault along the riverbed, and to possibly estimate its offset of the "CR" Zone mineralization.

Respectfully submitted,
Strato Geological Engineering Ltd.

M.W.M.P. Harris, B.Sc.
Geologist

March 10, 1984

REFERENCES

Reports

"Prospectus - Caycuse Copper Co. Ltd.", Dec. 1956

Armstrong, C. M.
"Report on the Caycuse Property, Caycuse River, B.C.", April 1982.

Fyles, J. T.
"Geology of the Cowichan Lake Area, Vancovuer Island, B.C.", BCDM Bulletin 37, 1955.

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"Report to Shareholders - Caycuse Copper Mining Co. Ltd." April 1957.

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"Progress Report, Caycuse Mine Ltd.", 1965.

Muller, J. E. & Carson, D. J. T.
"Geology and Mineral Deposits of the Alberni Map-area, B.C." GSC, Paper 68-50, 1969.

Muller, J. E.
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Northcote, K. E.
"Kelly Claim, Caycuse Creek", 1975.

Maps

Aeromagnetic	1: 50 000	Cowichan Lake	92C/16W	1979
		Nitinat	92C/15E	1979
Claim	1: 50 000	ibid.	92C/15E & 16W	1982
Geology	1:250 000	Vancouver Island, East Half	O.F. 463	1977
Topography	1: 50 000	Cowichan Lake	92C/16	1980
		Little Nitinat River	92C/15	1980
	1:250 000	Cape Flattery	92C	1964

CERTIFICATE

I, Michael W.M.P. Harris, of the City of Victoria, British Columbia, Canada, do hereby certify the following:

1. I am a Consulting Geologist with offices at 103 - 709 Dunsmuir Street, Vancouver, British Columbia, V6C 1M9.

2. I received the degree of Bachelor of Science with Honours in Geology from the University of Durham, Durham City, England in July of 1982.

3. I have practiced my profession since graduation in both Canada and the United States of America.

4. I have no direct, indirect, or contingent interests, nor do I expect to receive any such interest, in the securities or properties of Ajax Resources Ltd.

5. This report is based upon field examinations made by myself and assistant John Gibson, Field Technician, during the month of February, 1984, evaluation of public and private data pertaining to the area, and on the results of geochemical and geophysical surveys conducted over the property.

Dated at Vancouver, Province of British Columbia, this 10th day of March, 1984.

M.W.M.P. Harris, B.Sc.
Geologist

TIME-COST DISTRIBUTION

The claim towards which work is being applied with this report is the HANK Mineral Claim, Record No. 619 (04). Exploration work was carried out by Strato Geological Engineering Ltd. during the period February 7-13, 1984.

A listing of personnel and distribution of costs are as follows:

Personnel

M.W.M.P. Harris, B.Sc.	Geologist
J. Gibson	Geophysical Operator, Field Assistant

Cost Distribution

Field Work (geological, geophysical and soils geochemistry)	$1,875.00
Transportation - 4WD (incl. gas, oil, etc.)	540.00
Room and Board	605.00
Equipment Rental (VLF-EM & Magnetometer)	270.00
Field Supplies, etc.	60.70
Assaying and Geochemical Analysis	421.80
Maps and Report - drafting, reproduction, copying, etc.	520.00
Report - data reduction and interpretation	1,700.00
Total	$5,992.50

Signed _____

Strato Geological Engineering Ltd.

STRATO GEOLOGICAL ENGINEERING LTD.

APPENDIX A

ACME ANALYTICAL LABORATORIES LTD.
852 E. HASTINGS, VANCOUVER B.C.
PH:253-3158 TELEX:04-53124

DATE RECEIVED FEB 14 1984

DATE REPORTS MAILED Feb 16/84

ICP GEOCHEMICAL ANALYSIS

A .500 GRAM SAMPLE IS DIGESTED WITH 3 ML OF 3:1:3 HCL TO HNO3 TO H2O AT 90 DEG.C. FOR 1 HOUR.
THE SAMPLE IS DILUTED TO 10 MLS WITH WATER.
THIS LEACH IS PARTIAL FOR: Ca,P,Mg,Al,Ti,La,Na,K,W,Ba,Si,Sr,Cr AND B. Au DETECTION 3 ppb.
AU* ANALYSIS BY AA FROM 10 GRAM SAMPLE.
SAMPLE TYPE - P1 ROCK P2 SOIL

ASSAYER D Toye DEAN TOYE, CERTIFIED B.C. ASSAYER

STRATO GEOLOGICAL LTD PROJECT # 503 FILE # 84-0191 PAGE# 1

SAMPLE	CU ppm	ZN ppm	PB ppm	AG ppm	FE %	Au* ppb
HCR 1	8257	267	23	1.9	25.84	30
HCR 2 10X	11207 x	80	12	6.0 x	2.08	25
HCR 3 10X	8668 x	1	5	2.3 x	1.25	80
HCR 4 10X	16302 x	1	10	5.5 x	1.98	180
HCR 5 10X	8613 x	32	2	1.7 x	1.85	20
HCR 6 10X	10526 x	39	8	2.4 x	2.17	15
HCR 7	7259	902	20	4.6	17.08	25
HCR 8	361	352	26	1.3	10.84	5
HCR 9	7559	431	19	4.4	15.69	20
HCR 10	15819	585	23	8.2	18.44	10
HCR 11	7210	600	20	4.5	18.72	25
HCR 12	9143	280	26	6.8	15.93	25
HCR 13	11704	6958	42	8.3	20.68	30
HCR 14 10X	4480 x	23	1	2.3 x	1.63	20
HCR 15	956	220	10	1.7	23.88	15
STD A-1/AU 0.5	31	190	39	.3	2.88	490

x Regular Assay Digestion Required.
10 X multiply all data except Au by 10.

SAMPLE	CU ppm	ZN ppm	PB ppm	AG ppm	FE %	Au* ppb
L275E 187.5N	54	79	18	.2	6.72	5
L275E 175N	32	80	11	.1	5.13	5
L275E 167.5N	62	75	22	.3	5.16	5
L275E 150N	31	72	7	.2	4.65	5
L275E 137.5N	28	75	13	.1	5.48	5
L275E 125N	23	42	10	.2	5.33	5
L275E 112.5N	64	105	19	.3	5.65	10
L275E 100N	33	50	11	.3	6.71	25
L275E 87.5N	16	28	14	.4	3.91	5
L275E 2N	37	75	21	.4	6.17	5
STD A-1/AU 0.5	30	181	40	.3	2.80	500

ACME ANALYTICAL LABORATORIES LTD.
852 E. HASTINGS, VANCOUVER B.C.
PH:253-3158 TELEX:04-53124

DATE RECEIVED FEB 1984

DATE REPORTS MAILED 7 Mar 1984

ASSAY CERTIFICATE

SAMPLE TYPE : PULP

ASSAYER B. Tsang for DEAN TOYE, CERTIFIED B.C. ASSAYER

STRATO GEOLOGICAL PROJECT # 503 FILE # 84-0191 RE

SAMPLE	CU %	ZN %	AG OZ/TON
HCR-2	11.60	.11	1.69
HCR-3	9.12	-	.67
HCR-4	17.60	-	1.50
HCR-5	9.28	.05	.48
HCR-6	11.10	.06	.54
HCR-10	1.91	-	.25
HCR-13	1.23	.78	.25
HCR-14	4.89	.04	.71

APPENDIX B

VLF-EM DATA (FIELD NOTES)

AJAX RESOURCES LTD.

HANK CLAIM

LINE 125E

Station	Field Strength	Dip Angle	Fraser Filter
0 + 00N	47	+7	
	53	+5	
			0
0 + 25N	50	+7	0
	53	+5	
			+1
0 + 50N	55	+7	+2
	57	+4	
			+2
0 + 75N	57	+6	+5
	57	+3	
			+5
1 + 00N	59	+2	+3
	59	+2	
1 + 25N	57	0	

LINE 150E

0 + 00	66	-5	
0 + 25N	66	+2	+1
	62	-1	
			+1
0 + 50N	64	-1	+1
	62	+3	
			+3
0 + 75N	60	2	+7
	57	3	
			+1
1 + 00N	55	3	+1
	60	+3	
1 + 25N	57	+4	

LINE 175E

Station	Field Strength	Dip Angle	Fraser Filter
0 + 25N			
	55	6	
0 + 50N	57	12	
	59	4	+6
			+1
0 + 75N	60	8	
	60	7	-3
			+3
1 + 00N	60	8	
	59	4	+8
			+5
1 + 25N	58	3	
	60	4	+3
1 + 50N	60	0	

LINE 200E

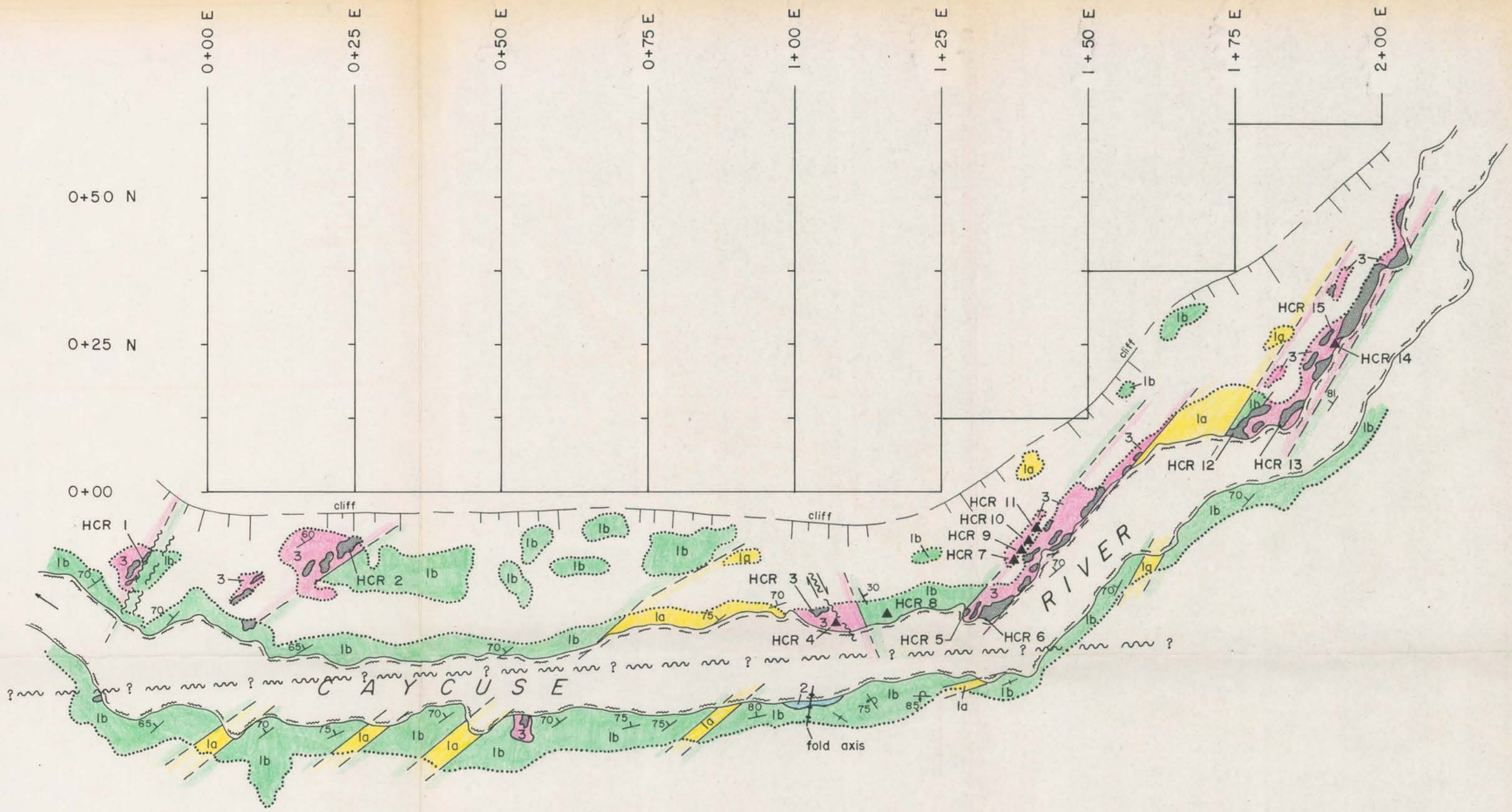
0 + 50N			
	72	19	
0 + 75N	76	20	
	67	15	+13
			+13
1 + 00N	64	11	
	60	11	+ 2
			- 2
1 + 25N	60	13	
	60	11	0
1 + 50N	60	13	
1 + 75N			

LINE 225E

Station	Field Strength	Dip Angle	Fraser Filter
0 + 75N			
	62	17	
1 + 00N	66	15	
	63	16	+ 5
			+ 8
1 + 25N	60	11	
	60	12	+ 5
			+ 2
1 + 50N	65	10	
	65	11	0
			+ 2
1 + 75N	62	11	
	60	8	+11
			+12
2 + 00N	63	3	
	62	4	+10
			+12
2 + 25N	60	- 3	
	62	- 2	+ 8
2 + 50N	59	- 5	

LINE 275E

Station	Field Strength	Dip Angle	Fraser Filter
0 + 75N			
1 + 00N			
1 + 25N	60	+17	
1 + 50N	60	+ 7	+12
	60	7	+ 6
1 + 75N	64	5	+ 5
	59	3	0
2 + 00N	60	4	+ 5
	60	+ 4	+ 7
2 + 25N	60	- 2	+11
	59	+ 3	
2 + 50N	62	-12	



GEOLOGICAL BRANCH
ASSESSMENT REPORT

12,618

FIGURE 6

LEGEND

3	Skarn		Outcrop
Island Intrusions		——, – –	Geological contact ; defined , assumed
2	Altered diorite (skarn ?)	~~~	Fault
Karmutsen Formation			Bedding (inclined , vertical, overturned)
1a	Chloritic and sheared volcanic unit		Fold axis
1b	Limestone / marble unit	HCR 7	Rock sample locations
	Massive sulphide pods		

AJAX RESOURCES LTD.

HANK CLAIM
VICTORIA M.D. N.T.S. 92C/15E-16W

GEOLOGY

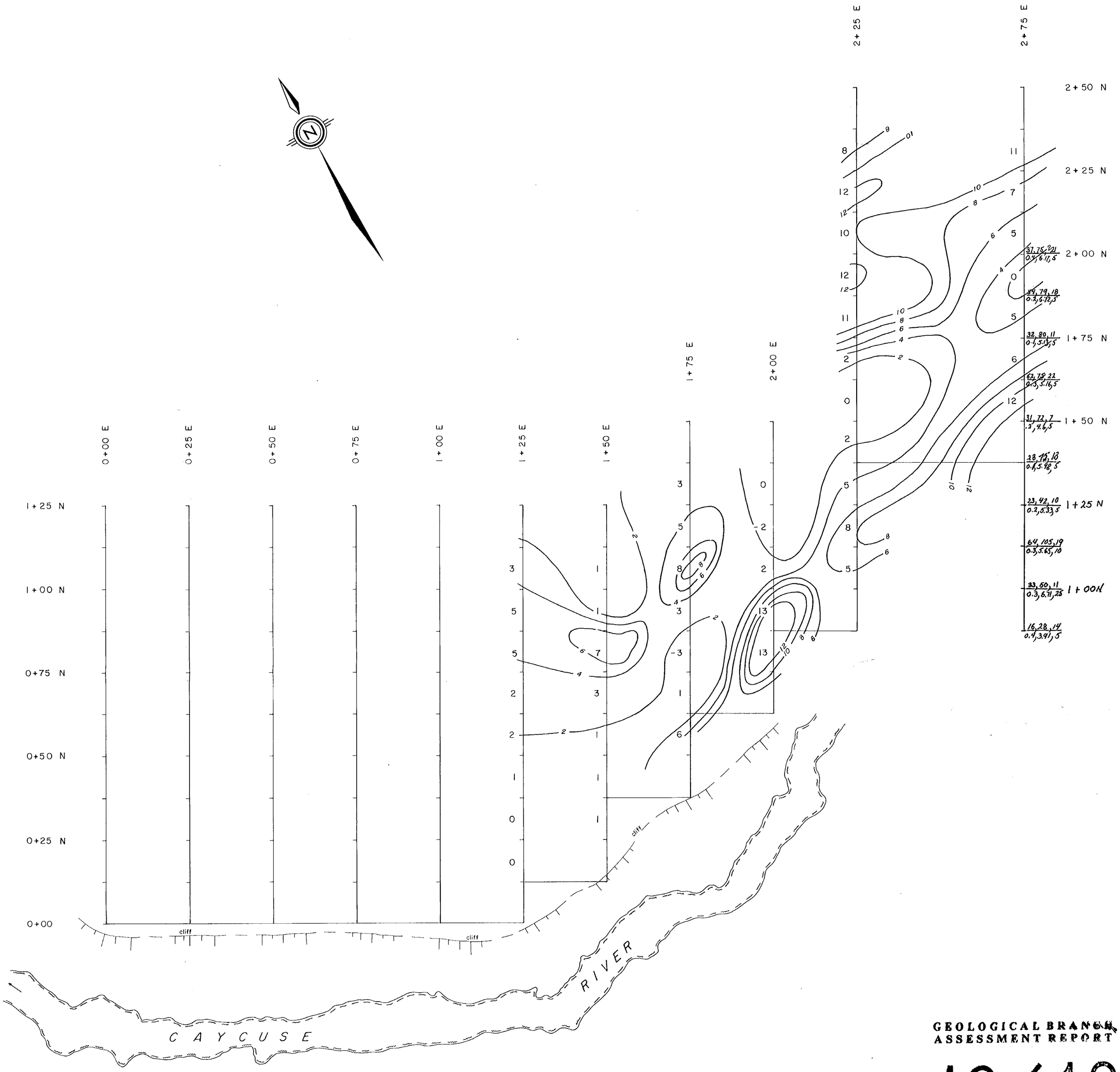
25 0 25 m

To accompany a report by: M.HARRIS , B.Sc.
STRATO GEOLOGICAL ENGINEERING LTD.

DRAWN: MH / DNH

DATED: MARCH 6 , 1984

STRATO GEOLOGICAL ENGINEERING LTD.



GEOLOGICAL BRANCH
ASSESSMENT REPORT

12,618

FIGURE 7

LEGEND

5 Fraser filter data

NOTES:

Instrument – Sabre Electronics, Model 27 receiver

Transmitter – NPG: Jim Creek, frequency 24.8 KHz

Contour interval 2,4,6...

AJAX RESOURCES LTD.

HANK CLAIM
VICTORIA M.D. N.T.S. 92C/15E-16W

VLF – EM SURVEY
(AND SOIL SAMPLING RESULTS)

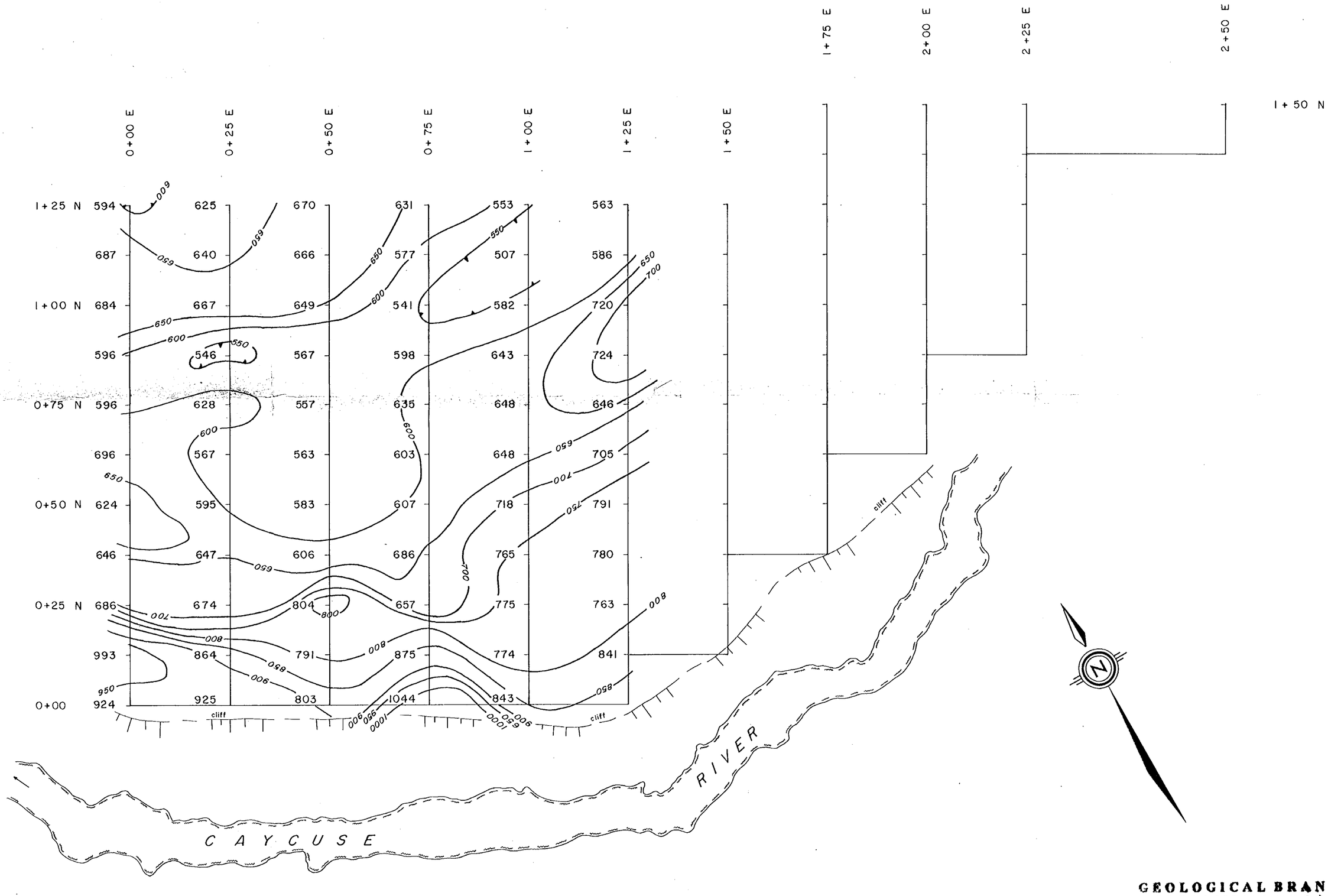
25 0 25 m

To accompany a report by: M.HARRIS, B.Sc.
STRATO GEOLOGICAL ENGINEERING LTD.

DRAWN: MH/DNH

DATED: MARCH 6, 1984

STRATO GEOLOGICAL ENGINEERING LTD.



GEOLOGICAL BRANCH
ASSESSMENT REPORT

12,618

FIGURE 8

LEGEND

775 / 774 — Station and magnetometer reading

NOTES:

Instrument - MP-2 Proton magnetometer
Total field magnetic survey datum - 55,000 gammas
Contour interval - 50 gammas
Data corrected for daily diurnal drift

AJAX RESOURCES LTD.

HANK CLAIM
VICTORIA M.D. N.T.S. 92C/15E-16W

MAGNETOMETER SURVEY

25 0 25 m

To accompany a report by: M.HARRIS, B.Sc.
STRATO GEOLOGICAL ENGINEERING LTD.

DRAWN: MH/DNH

DATED: MARCH 6, 1984

STRATO GEOLOGICAL ENGINEERING LTD.