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1987 FINAL REPORT
ON THE
BALDWIN-MCVICAR CLAIMS

Squamish Area, Vancouver Mining Division

NTS 92G/11E *6/12*
Lat. 49°40'N Long. 123°~~23'~~^{01'30"}W

by

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Owned and Operated by:
Kidd Creek Mines Ltd.

Part 1 of 2

**GEOLOGICAL BRANCH
ASSESSMENT REPORT**

16,494

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SUMMARY

This report presents results of fieldwork completed on the Baldwin-McVicar property from July to November, 1987. The property comprises 4 MGS claims (29 units), located in the Coast Range of southwestern British Columbia, approximately 40 km north of Vancouver.

Fieldwork consisted of detailed geological mapping and litho-geochemical sampling of the volcanic units exposed in the McVicar Zone - a zone characterized by strong alteration, locally spectacular sulphide mineralization, and coincident with a high apparent IP chargeability response. A diamond drilling program was completed to test the Zone for base and precious metal mineralization.

The McVicar Zone is underlain by a northwest-trending, steeply west-dipping, calc-alkaline succession of andesite pyroclastics, intercalated with lenses of rhyolite pyroclastics, and intruded by Garibaldi dykes. Intense alteration has resulted in large increases in SiO_2 and K_2O , and decreases in Na_2O , Al_2O_3 , CaO , MgO , Fe_2O_3 , TiO_2 and P_2O_5 in andesite volcanics in the McVicar Zone. In rhyolite, this alteration is associated with an increase in SiO_2 and a decrease in Al_2O_3 . Because of the intensity of alteration, discrimination of rock types based solely on geochemistry is difficult, and must therefore be supported by field observations. Results of 2796 m of diamond drilling revealed discontinuous, low grade sulphide mineralization localized in quartz veining oriented parallel to foliation.

INTRODUCTION

Location, Access and Terrain

"The Baldwin-McVicar property (Lat. 49°40'N, Long. 123°03'W) is located in southwestern British Columbia, about 8 km east-southeast of the port of Squamish (Figure 1). The claims are situated between two major, northwest-flowing drainages: the Stawamus River and Raffuse Creek (Figure 2).

Access is by 4-wheel drive vehicle along a logging road heading east from Squamish and thence up the Raffuse Creek valley (Figure 2).

The terrain is mountainous and rugged, with elevations ranging from 600 m in the main valley to 1,500 m along the ridge top. The property lies on the east-facing slope of the Raffuse Creek valley, with McVicar Creek forming a large basin at its headwater. Tributary streams to Raffuse Creek are deeply incised. Many dangerous cliffs are present on the property, making fieldwork particularly difficult during wet weather.

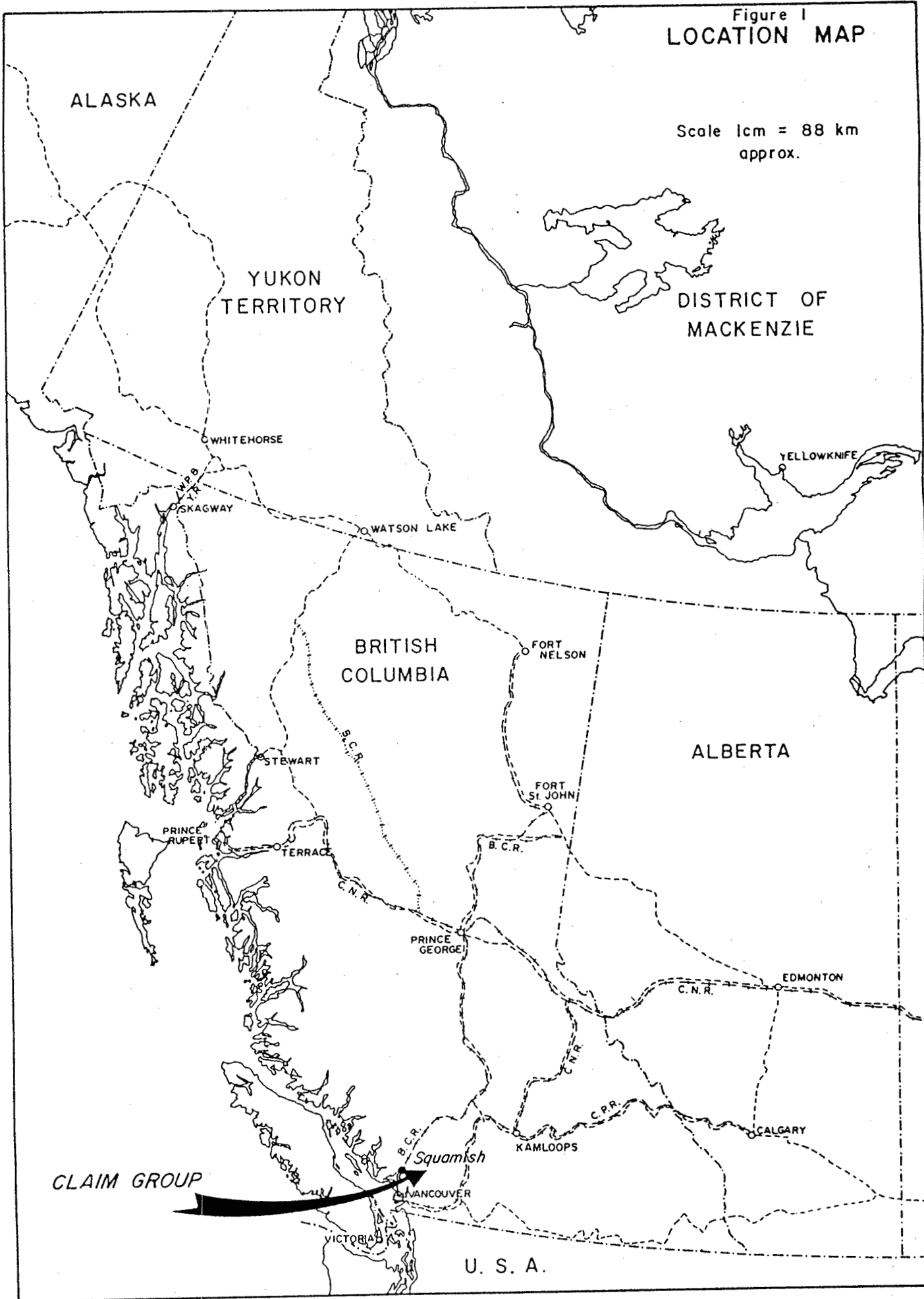
About half the property has been logged off by clear cutting; thick secondary underbrush accompanies regenerated timber at lower elevations (below 800 m), impeding foot travel. Above the 1200 m elevation, the coniferous timber stands give way to sub alpine, more open vegetation.

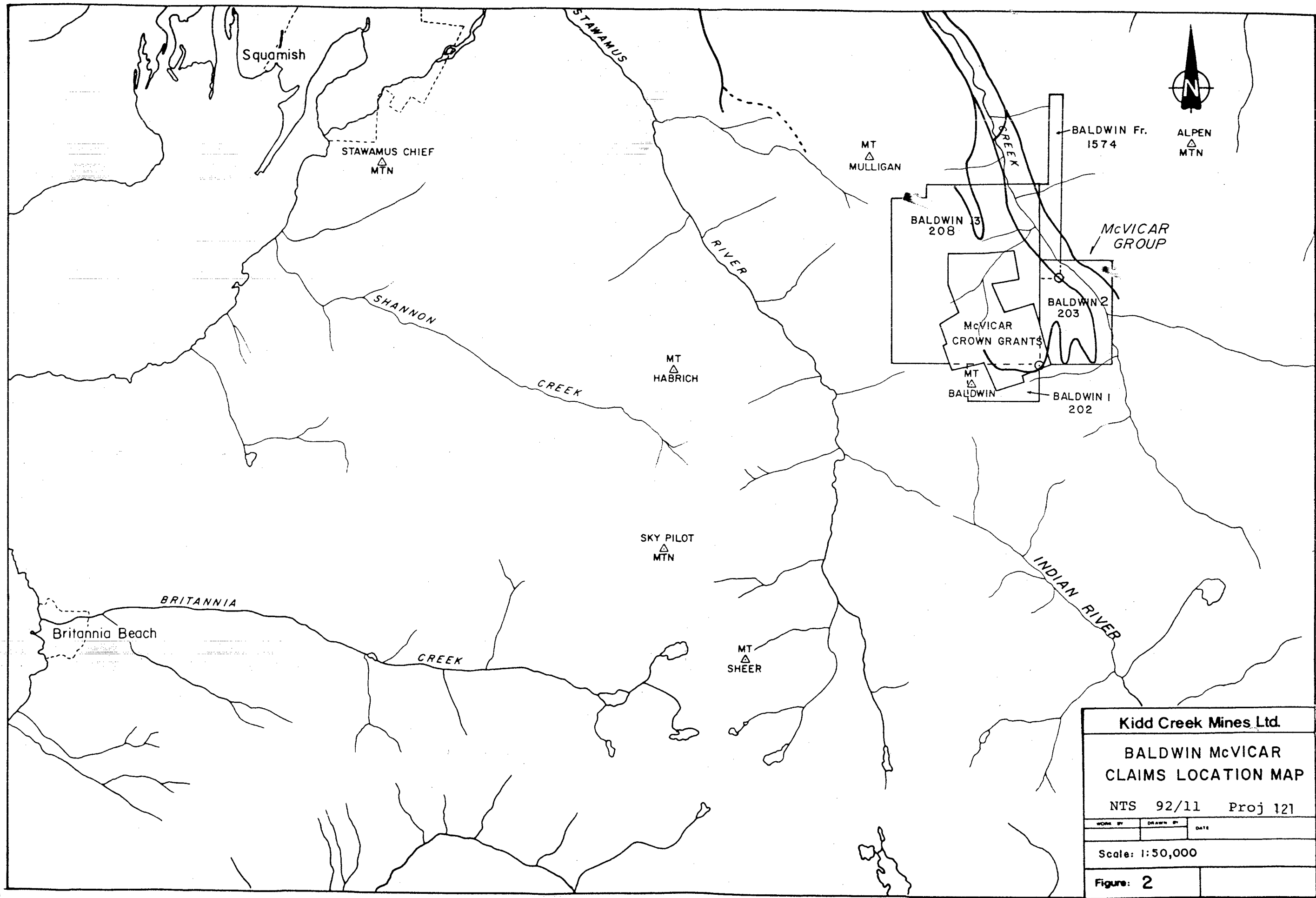
The moderate climate is characterized by annual periods of heavy rainfall in spring and late fall. Elevations above 1200 m receive thick accumulations of snowpack which remain well into July. By late July to early August, all of the property is effectively clear of snow. At the upper elevations, significant snowfall can be expected anytime after mid October." (Enns, 1983)

Claims

"The Baldwin-McVicar property (Figure 2), consists of 2^o units in 4 MGS claims - Baldwin 1,2,3 and Baldwin Fraction, and 12 Crown Granted claims known as the McVicar claims. All claims are owned 70% by Kidd Creek Mines Ltd. (a wholly owned subsidiary of Falconbridge Ltd) and 30% by Matachewan Consolidated Mines Ltd. Relevant claims data are given in Table I." (Enns, 1983)

Figure 1
LOCATION MAP





Kidd Creek Mines Ltd.		
BALDWIN McVICAR CLAIMS LOCATION MAP		
NTS 92/11 Proj 121		
WORK BY	DRAWN BY	DATE
Scale: 1:50,000		
Figure: 2		

TABLE I

McVicar Group - Claim Status

Claim	Units	Record No.	Recording Date	Expiry Date
Baldwin 1	2	202	Aug 30/77	1998
Baldwin 2	6	203	Aug 30/77	1998
Baldwin 3	20	208	Oct 7/77	1998
Baldwin Fraction	1	1514	July 4/83	1998

		Annual Taxes
Cabin Fraction	L6158	due July 2
Grouse Fraction	L6157	" " "
Harding	L6152	" " "
Heather	L6159	" " "
Lily	L6161	" " "
Mamquam	L6155	" " "
Noonday	L6154	" " "
Rainstorm	L6153	" " "
Rose	L6163	" " "
Slide Fraction	L6156	" " "
Violet	L6162	" " "
Whistler	L6160	" " "

1987 Programme

Field work - from July 9 to November 6, 1987 - was directed at :

1. defining the extent and type of alteration in the McVicar Zone,
2. determining the nature and attitude of the volcanic stratigraphy underlying the McVicar Zone,
3. drill-testing the Zone, at depth - in areas of high IP chargeability response - for base metal and gold mineralization.

The work involved detailed geological mapping, at a scale of 1:1000, and extensive litho-geochemical sampling of the volcanic units. A pre-existing cut grid, with tie lines spaced at 200 m intervals, provided a control fabric. Tie lines, spaced at 50 m intervals, were flagged over the McVicar Zone to improve this control fabric.

One hundred and twenty-six hand samples - taken from outcrops mapped in, and adjacent to, the McVicar Zone - were slabbed, examined using a binocular microscope, and then briefly described. Twelve of these hand samples were then sent to Vancouver Petrographics, to be made into thin sections, and described petrographically (Appendix 1).

A further twenty-five samples were collected for geochemical whole rock analysis, from areas outside of the McVicar Zone, to complement the sampling programs of Enns (1983) and VonFersen (1986).

Diamond drilling was contracted to D.W. Coates Enterprises of Vancouver, B.C., who completed 2796 meters of NQ coring between August 16, 1987 and October 16, 1987. The volcanic units were sampled for geochemical whole rock analysis, and sulphide mineralized zones were sampled and analysed for Cu, Pb, Zn, Ag, Cd, Co, Mn, Fe, Ni, As, Mo, Ba, and Au.

REGIONAL GEOLOGY

"As shown by Figure 3, the property lies within a belt of intermediate volcanic and volcanoclastic rocks belonging to the Cretaceous Gambier Group, which forms part of the Indian River Pendant. This pendant is one of many remnants of stratified rock within the Coast Crystalline Complex. Regional grade of metamorphism is generally greenschist grade, and strong contact metamorphism is present near some plutonic bodies.

The pendant, measuring about 4 km by 20 km, has a north-northwest trend, and is connected to the Britannia Belt (lying 10 km to the southwest) by a "bridge" of volcanic rock. The Indian River Pendant tapers to the southeast and is in contact with younger Garibaldi volcanic rocks to the north. Generally, this pendant contains a greater proportion of pyroclastic material and a smaller marine sedimentary component, than the Britannia Belt.

Rocks of the Indian River Pendant probably are correlative with the upper part of the Gambier Group of Upper Jurassic to Lower Cretaceous age. Details of regional geology are described by Roddick (1965) and James (1929), as listed in the Bibliography." (Enns, 1983)

PROPERTY GEOLOGY

Introduction

Previous work on the Baldwin-McVicar property (Appendix 2) has outlined a northwest-trending zone of strongly altered volcanic rocks, coincident with numerous surface showings of spectacular sulphide mineralization, and characterized by a high IP chargeability response (Enns, 1983) (Figure 4). Together, these features broadly define a 1200 m X 400 m area that has been termed the McVicar Zone.

Outcrop is well distributed throughout this Zone with 10% exposure occurring dominantly as cliffs, road-cuts, and in stream canyons. Approximately 95% of the bedrock in the McVicar Zone was examined.

Lithology

The McVicar Zone area is underlain by a bimodal sequence that includes pyroclastic andesite volcanics with lesser andesite volcanoclastics, and rhyolite (Figure 5). This sequence is in fault contact, at depth, with granodiorite of the Coast Range Intrusive Complex, and has been intruded by felsic, intermediate and mafic Garibaldi dykes. Eight volcanic units and one sedimentary unit were mapped on surface and/or in drill core; their descriptions are in Appendix 3.

A thick succession of Andesite Fine Ash to Lapilli-Ash Tuff and Feldspar Crystalline Andesite, intercalated with thin lenses of Rhyolite and Aphanitic Rhyolite, underlies the main part of the Zone. East of this, the volcanic succession is felsic and dominated by Feldspar Crystalline Rhyolite, with lesser Rhyolite, Aphanitic Rhyolite and Dacite.

Primary volcanic textures in andesite pyroclastics are poorly exposed at surface because of the intensity of overprinting alteration, and because a large percentage of the outcrops occur as poorly accessible, sheared and/or faulted, weathered cliff faces. These textures are, however, readily apparent in less altered sections of drill core. Felsic volcanics are dominantly characterized by homogeneous, non-fragmental textures.

Structure

The volcanic succession underlying the McVicar Zone is a tilted sequence striking 160 degrees and dipping steeply to the west at 75 degrees. Lithological contacts between the volcanic units are poorly exposed at surface, and the only non fault-related contact that was observed is oriented at 175/80 (5905N/2790W). In drill core, a large percentage of the observed contacts are sheared, faulted, or are

gradational, characterized by facies changes in andesite. Several contacts were observed to parallel the steeply-dipping foliation - as mapped on surface. No unequivocal top indicators were observed, and the limited evidence that does exist is conflicting. In BM87-5 - and in the north central part of the Zone (6200N/2810W) - andesite ash tuff exhibits a progressive fining, from coarse to fine ash (139.9-140.2), and indicates stratigraphic top is to the east. Conversely, Greywacke in BM87-3 (453.3-462.5) becomes coarser-grained and conglomeratic at 462.5 m, and indicates stratigraphic top is to the west.

A regional foliation of 350/85E has been imposed on the volcanic succession, and is best developed in the andesite units. In drill core, sericitized feldspar phenocrysts and lapilli-sized fragments are aligned parallel to foliation. Quartz veining is dominantly localized in fracture planes, also oriented parallel to foliation, and appears to be associated with this structural fabric.

Abundant shear zones (350/90), less than 0.1 m up to 3 m wide, are oriented parallel to the foliation, and are best exposed in Canyon Creek (ie. 5950N/2790W) where they are associated with intense sericitization. Feldspar phenocrysts in Feldspar Crystalline Rhyolite (6160N/Canyon Creek) are aligned parallel to the shear direction, and are characterized by indistinct crystal faces. Shear bands less than 1 cm wide were observed to cross-cut Coast Range Granodiorite that is in fault-contact with andesite volcanics (BM87-5, 258.5 m).

The structural complexity of the McVicar Zone is best represented by the numerous faults that transect the volcanic stratigraphy. These faults make delineation of units exposed on surface difficult, and inhibit the accurate correlation of units between drill hole and surface. Several fault attitudes have been mapped (Figure 6), and although examination of slickensides indicates that both normal and reverse movement did occur on the faults, the dominant movement was reverse dip-slip, with locally a small strike-slip component. This faulting is commonly expressed as steep cliff faces, and all of the creeks in the McVicar Zone appear to be controlled by fault structures. Lithological contacts are commonly fault-related (ie 5700N/2480W) and volcanic units are locally truncated by faults (ie. 6050N-6150N/Canyon Creek). Garibaldi dykes are dominantly localized along fault zones.

No evidence of folding was mapped in the McVicar Zone.

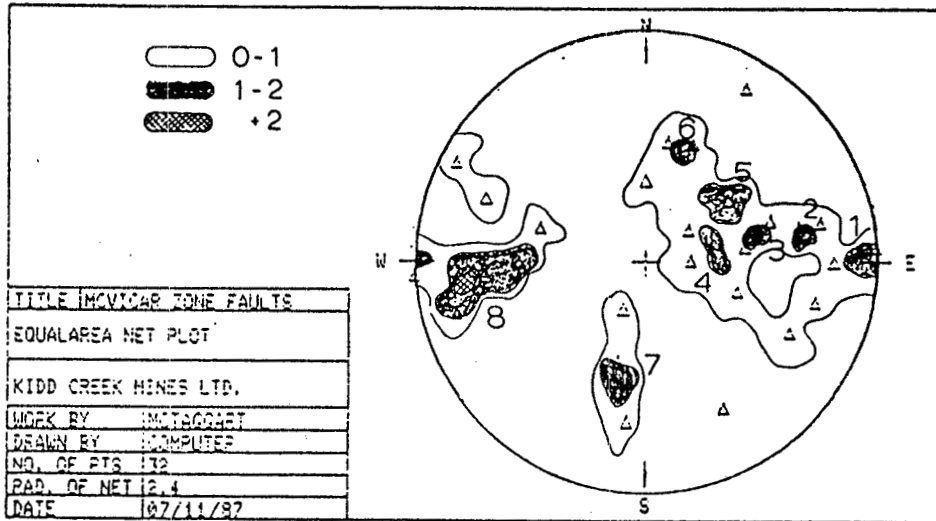


Figure 6 : Equal Area Net Plot of fault measurements in the McVicar Zone.

CLUSTER ATTITUDES:

- 1 358/84
- 2 351/78
- 3 348/45
- 4 349/35
- 5 323/35
- 6 290/42
- 7 105/44
- 8 174/76

Alteration

Five alteration facies recognizable in the McVicar Zone are:

1. silicification,
2. sericitization,
3. hematization,
4. chloritization,
5. epidotization

Although most of these facies can be seen on surface exposures, their characteristics are best observed in drill core.

Silicification is the most apparent, and easily recognizable, alteration facies in the Zone. This alteration occurs as two main types - stockwork and pervasive - and although they are both found throughout the Zone, they are characteristically discontinuous and/or patchy along the strike of, and across, the Zone.

Stockwork silicification varies in intensity from weak (<5% veinlets) to strong (15-30% veinlets), and occurs as irregular, stockwork, and net-textured quartz veinlets <1-20 mm in size that are dominantly oriented parallel, to subparallel to foliation. Locally, however, 1% of the veinlets may be up to 20 cm wide, or be composed of microcrystalline, grey-white chalcedony (?). Although individual zones of stockwork silicification vary in width from <1 m up to 24m (BM87-3, 141.0-165.0) they can be seen to define broader silicified zones up to 50 m wide (30 m true width) that trend northwest and dip steeply to the west at 60-80.

The margins of these zones are both gradational - exhibiting a progressive increase in the percentage of veins towards the centre of the zone - or sharp, with contacts parallel to the foliation (BM87-1, 24.0 m). Locally, this alteration type produces a fine, in-situ brecciated texture in andesite (BM87-3, 108m), or a shattered texture in Aphanitic Rhyolite, with bleached halos around the veinlets (BM87-2, 38.1-45.8). Orangey-brown jasper is uncommon, but occurs locally (ie.5580N/2595W) as up to 5% veinlets <1 cm associated with the margins of quartz veins. Feldspar Crystalline Andesite Tuff (5630N/2590W) exhibits moderately well defined, silicified polygonal fractures up to 2 mm wide.

Pervasive silicification also occurs throughout the McVicar Zone, and although it is often associated with stockwork silicification, the two alteration types are not mutually dependent. The intensity of pervasive silicification varies from weak - characterized by light grey colouration in the andesite volcanics - to strong, where it may obliterate the fine primary textures in andesite ash tuff. The margins of these altered zones may be gradational over 10-20 cm (ie.BM87-1, 93.0m) - exhibiting a progressive increase in the intensity of silicification towards the centre of the zone - or sharp,

with contacts terminated parallel to foliation (ie. BM87-5, 83.2-84.9 m). A distinctive blotchy alteration texture, comprising light grey to yellow-grey, sub-rounded, rectangular patches of silicification, localized around fractures, was observed in BM87-9 (32.3-34.1 m).

These two types of silicification are locally associated with a very distinct brecciation texture that - in logging drill core - was described as Intermediate Breccia. This breccia texture also appears on surface (ie. 5550N/2480W) and is characterized by 10-30% angular to irregular, locally sheared, non-sorted fragments 2 mm to 20 cm in size, that may locally be pieced back together (ie. BM87-2, 29.6-30.5). The composition of these fragments is similar to the surrounding unit, while the matrix is light grey to white in colour, and very intensely, pervasively silicified. These breccia zones generally have a true thickness <5 m (BM87-5, 6.7-25.7 m), average <2 m, and are characterized in drill core by the first appearance of fragments, and the intensely silicified matrix. Contacts with the volcanics are sharp, and are locally fault-related, or characterized by stockwork silicification. The northwest-trending, steeply west-dipping attitude of these zones is parallel to the dominant foliation of the McVicar Zone.

Sericitization is the most common alteration facies, but is less apparent than silicification. It is dominantly localized in the matrix, producing a light olive green to green-grey colour in andesite (ie. BM87-1, 54.6-58.5 m) or dacite (L6200N/2690W) volcanics and a soft texture (easily scratched with a knife). Within the McVicar Zone, discrete zones of intense sericitization are distinguished by the complete alteration of feldspar phenocrysts in Andesite Lapilli Ash Tuff, to glassy-textured sericite. The phenocrysts - in hand specimen - no longer resemble feldspar, but instead appear to be altered, coarse ash (Thin section HS 87-92). These zones are less than 0.2m up to 330 m (BM87-3, 62-392 m) in apparent thickness, and are in sharp contact with Feldspar Crystalline Andesite in which the feldspar crystals remain wholly unaltered. Elsewhere, zones of sericitization are associated with moderate to strong shearing, and where in contact with ground water (BM87-3, 0-24.6 m), are extremely soft and clay rich.

Chloritization is a weakly developed alteration facies, and is dominantly localized in the matrix of andesite volcanics. It can be observed in drill core, south of L5600N (ie. BM87-1, 87.6-90.5) where moderate to strong intensity pervasive chloritization has altered the matrix of Andesite Lapilli-Ash Tuff a dark green colour. The margins of this zone of chloritization are gradational over 30-40 cm. As well, minor, weakly developed (1-5%), stockwork to foliation-parallel chlorite veinlets, <2 mm wide, were observed in BM87-1,3, in zones 2-4 m wide.

Pinkish-purple to dark purple, patchy to pervasive hematization is dominantly associated with stockwork and/or pervasive silicification, but is not always of the same intensity as the silicification. Where associated with strong, pervasive silicification (ie. BM87-2, 168.5 m), weakly developed, patchy hematization is localized in the matrix of Andesite Lapilli-Ash Tuff, while the actual lapilli exhibit more intense hematization. Elsewhere (ie. BM87-2, 230.6-238.0 m), the matrix of 20% of the andesite ash tuff lapilli have been moderately to strongly hematized, while the remaining 80% of the lapilli appear unaltered. In BM87-1 (102.0-119.5 m), chloritized Andesite Lapilli-Ash Tuff exhibits three distinct zones where moderately intense hematization occurs variably as: patches, and contorted bands <1 cm wide, localized in the matrix; local, pervasive alteration of the matrix of andesite ash tuff lapilli; or pervasive alteration of the matrix of the unit. Zones of hematization are dominantly gradational, showing a progressive decrease in alteration intensity towards the alteration margin, but locally may be characterized by homogeneous alteration intensity, and exhibit sharp, regular to irregular contacts parallel to foliation.

Epidote alteration was not mapped on surface, but minor occurrences of it were observed in drill core from the north half of the McVicar Zone. Up to 5%, fine grained, apple green epidote occurs as subrounded to irregular blebs 1-30 mm (avg. <5 mm) in size that have selectively altered ash and feldspar in andesite ash tuff, or locally (ie. BM87-6, 57.9-61.8 m), partially to wholly altered up to 25% of andesite lapilli in Andesite Lapilli-Ash Tuff.

Mineralization

Extensive sulphide mineralization in the McVicar Zone has been exposed at surface in numerous pre-existing trenches and adits. Most of these showings are named after the mineral claims upon which they are located (Figure 4), and include the Whistler, South Harding, North Harding, Rainstorm, Cabin Fraction, Violet and Ruth (Enns, 1983). Each of these showings has been mapped and described in detail by previous exploration programs (Piroshco, 1982), and extensively sampled and drilled for base metal and gold mineralization.

Spectacular sphalerite, chalcopyrite and galena mineralization are particularly evident at the Whistler showing, where they occur dominantly as northwest-trending, steeply east dipping stringers, veins and pods that characteristically pinch and swell along strike. Stringers and veins may be localized in, or terminated by, shears, and are associated with intense pervasive and/or stockwork silicification. A zonation - from sphalerite margins to chalcopyrite cores - may be locally observed in these veins and stringers (5330N/2450W). The best result from Texasgulf's surface sampling program of the Whistler showing is 3.48% Cu, 10.20% Pb, 15.65% Zn, 2.79 oz/ton Ag, 0.010 oz/ton Au, over a true thickness of 1.3 m (Enns, 1983).

Moderately deformed stringers and lenses of massive chalcopyrite mineralization, oriented at approximately 320/90, are well preserved at the Rainstorm showing (6040N/2835W). These stringers and lenses form a continuous network of mineralization over the length of the outcrop (12 m), up to 1 m wide, that parallels a fault contact between the host Rhyolite and Andesite Iapilli-Ash Tuff.

The remainder of the showings are not as spectacular as the Whistler or Rainstorm, and generally comprise 5-10% semi-massive to massive chalcopyrite and sphalerite with lesser amounts of galena. This mineralization dominantly occurs as northwest-trending, subvertical stringers and veinlets, up to 20 cm wide (avg. 10 cm), associated with quartz veining in strongly silicified andesite volcanics (5720N/2730W). Chalcopyrite, and lesser amounts of sphalerite, are locally associated with north-trending, subvertical shear zones up to 1 m wide (5950N/2720W).

A more complete description of all of these showings, along with sample widths and assay values, is found in Enns, 1983.

Sulphide mineralization observed in drill core occurs as three main types: associated with silicification; as disseminations in the volcanics; as replacements of fragments.

Approximately 90% of the sulphide mineralization that was intersected in drilling is associated with silicification. The best

mineralization encountered is in BM87-2 (31.3-34.2), beneath the Whistler showing, in discrete zones 0.2-1.1 m in length. Here, up to 10% pyrite and chalcopyrite, and <5% (combined) sphalerite and galena occur as disseminations, blebs and stringers in quartz veining, in very strongly, stockwork and pervasively silicified Andesite Lapilli-Ash Tuff. The highest values from this zone are 2.40% Cu, 1.94% Pb, 1.86% Zn, 38 g/tonne Ag, 240 ppb Au, over a sample width of 0.3 m. Drill hole BM87-1 intersected a similar zone of alteration, directly below BM87-2, at 85 m below surface. The highest values from this zone (93.0-96.3) are 0.56% Cu, 0.91% Pb, 2.38% Zn, 12 g/tonne Ag, 65 ppb Au, over a sample width of 0.8 m. An existing trench at surface (5430N/2495W) exposes strongly silicified volcanics and has previously assayed 1.8 m of 1.6% Cu, 3.3% Zn, 48 g/tonne Ag, trace Au (Ingraham, 1950). These three occurrences of alteration and mineralization indicate the McVicar Zone dips steeply to the west (75°) in the Whistler showing region, and that sulphide mineralization decreases and/or is discontinuous down dip.

Volcanic rocks in the McVicar Zone contain up to 10% (avg. 1-2%) disseminations of euhedral pyrite up to 1 cm (avg. <1 mm) in size. Locally, pyrite may occur as disseminations <1 mm in irregular- to lensoidal to irregularly-shaped blebs, up to 3X2 cm in size, or in wisps or bands aligned parallel to foliation or shearing (ie. BM87-1, 92.9-93.0 m). Trace amounts of chalcopyrite can be locally observed as disseminated flecks, or associated with disseminated pyrite.

Lapilli, in Andesite Lapilli-Ash Tuff, are locally partially to wholly replaced by disseminations, blebs or bands of fine pyrite <1 mm. The pyrite is generally localized in the core of the fragment, but may occur as a dark brown corona along the margins of sheared and/or sericitized lapilli (ie. BM87-2, 19.9-22.5 m).

ROCK GEOCHEMISTRY

Introduction

One hundred and thirty-nine surface samples - comprising 1 kg of unweathered rock - were collected from the McVicar Zone for whole rock analysis (Figure 7). The sampling program was designed to provide an even distribution of samples throughout the Zone, from all of the volcanic lithologies.

Similarly, 156 samples were collected from drill core, of altered and unaltered volcanic lithologies. Samples comprised 3-5 pieces of drill core, each 3-10 cm in length, from zones of altered or unaltered rock.

Whole rock geochemical analyses were performed by X-Ray Assay Laboratories of Don Mills, Ontario. Major and minor oxides and selected trace elements (copper and zinc) were analysed by X-ray fluorescence spectrometry (XRF).

Bondar-Clegg of North Vancouver analysed 174 samples of split core by geochemical methods for Cu, Pb, Zn, Mo, Ag, Fe, Mn, Cd, Co, Ni, As and Ba. An HNO₃-HCl hot extraction and analysis by DC Plasma were used for analysis of all elements except Au and Ba. A fire assay preparation with AA finish was used for Au, and X-Ray Fluorescence was used to give a total analysis for Ba. An assay preparation method was applied to all samples. Base metal levels exceeding 3000 ppm were re-analysed.

Results for base metal analyses are listed in Appendix 4, and in the drill logs (Appendix 5). Major oxide and trace element analytical results are listed in Appendix 6 with sample plots shown on appropriate drill sections keyed to lithology.

Results

Geochemical data from samples of volcanic rock that underlie the McVicar Zone plot in the calc-alkaline field on an AFM ternary diagram (Figure 8) and an SiO₂-FeO/MgO diagram (Figure 9). Field observations of strong alteration in this Zone are supported by an A/CNK vs SiO₂ plot (Figure 10) in which most of the samples plot outside the unaltered field, as defined by Keith (1984).

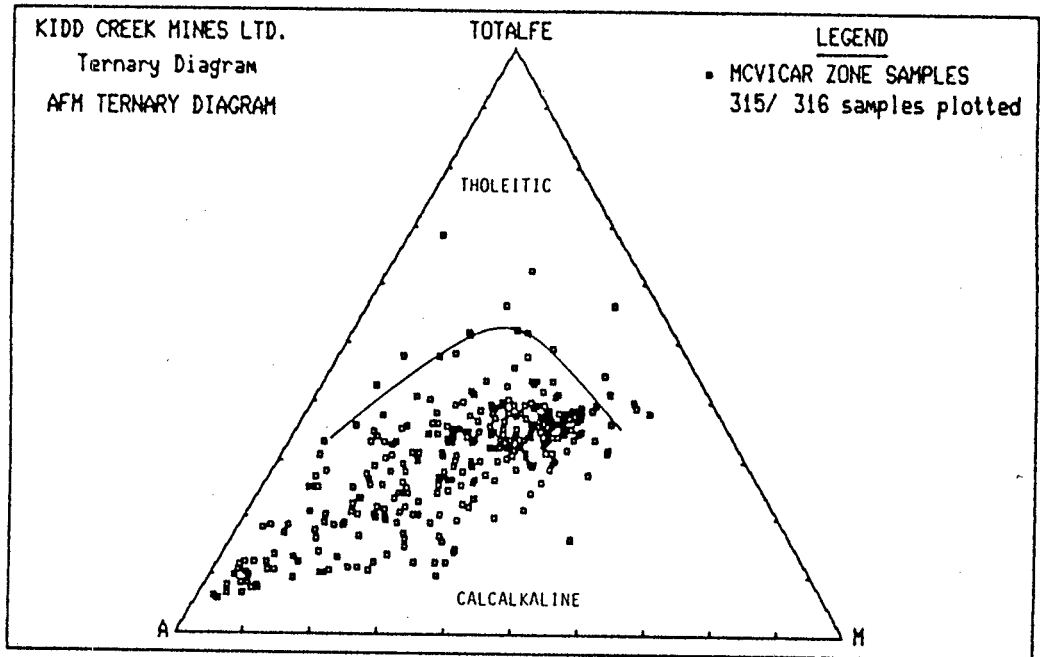


Figure 8 : AFM Ternary Diagram - McVicar Zone Samples.
 A= $\text{Na}_2\text{O} + \text{K}_2\text{O}$
 F= $0.8998 \times \text{Fe}_2\text{O}_3$
 M= MgO

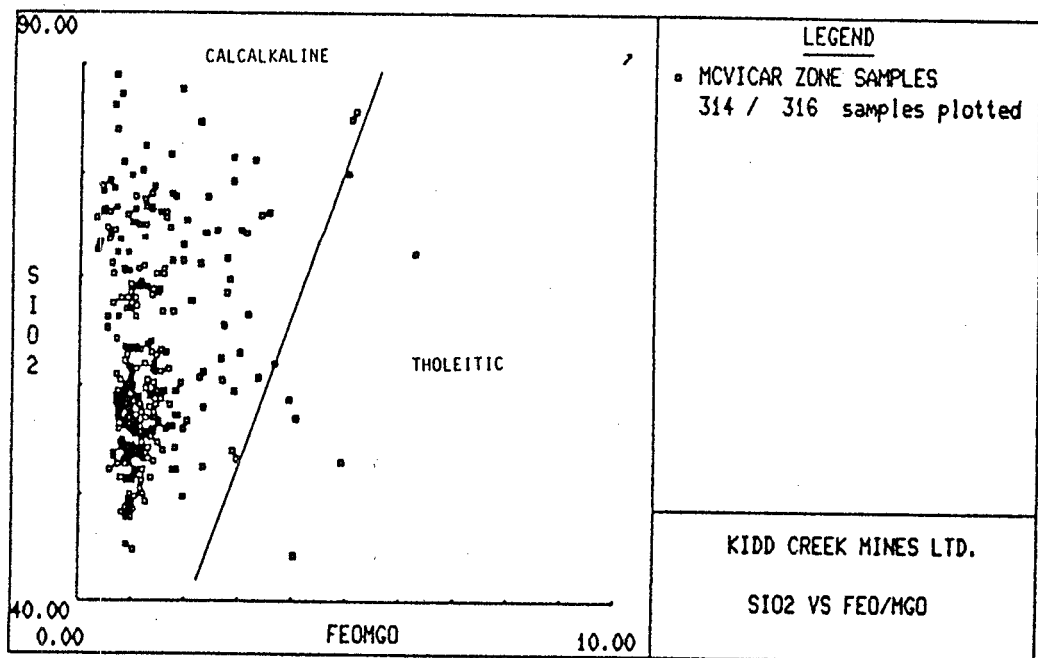


Figure 9 : SiO_2 vs. FeO/MgO - McVicar Zone Samples.

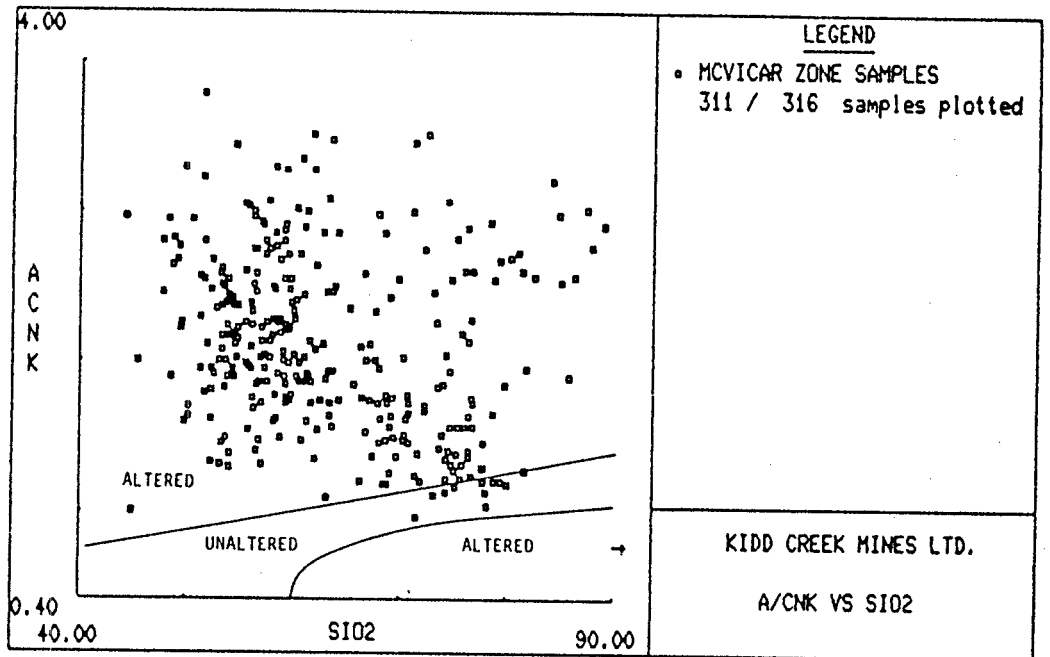


Figure 10: A/CNK vs. SiO₂ for McVicar Zone Samples

$$A/CNK = (Al_2O_3/102) / ((CaO/56) + (Na_2O/62) + (K_2O/94))$$

Rock classification of intermediate composition volcanics, based solely on field observations, is difficult in the McVicar Zone because of intense silicification. Many of the units that were mapped as andesite have geochemical signatures similar to dacite (ie. $\text{SiO}_2 = 65\%$, $\text{TiO}_2 = 0.58\%$) (Best, 1980). In order to classify these units properly, 35 samples of relatively unaltered andesite were selected from outside the McVicar Zone to provide a basis for geochemical comparison. It is evident (Table 2) that unaltered andesites from outside the McVicar Zone are geochemically quite dissimilar to those mapped as andesites in the Zone. Alteration is associated with an increase in the elements Si and K, and a decrease in Al, Na, Ca, Fe, Mg, Ti and P. A continuum of alteration intensity exists, and is particularly evident in the plots of the different oxides versus SiO_2 (Appendix 7). It is apparent that SiO_2 and K_2O vary inversely with Al_2O_3 , Na_2O , CaO , Fe_2O_3 , MgO , TiO_2 and P_2O_5 , and that some of these oxides (TiO_2 , Al_2O_3 , MgO , Fe_2O_3) show a relatively systematic variation with SiO_2 and K_2O , while others (Na_2O , P_2O_5) exhibit a less systematic variation. Gibson et al (1983) have shown that TiO_2 - often used as a guide in classifying rock types - is susceptible to remobilization during intense alteration associated with hydrothermal activity, and that reductions of up to 40% TiO_2 are not uncommon in andesitic rocks. The observed changes in wt.% TiO_2 between unaltered andesite and strongly silicified andesite in the McVicar Zone are consistent with the findings of Gibson et al, and, in conjunction with observed volcanic textures, indicate the units are properly classified as andesites.

The alteration patterns recognized in andesite are more complex than those in rhyolite. Geochemical analyses of altered rhyolite samples in the McVicar Zone show only an elemental increase in Si and decrease in Al relative to unaltered rhyolite from outside the Zone. (Table 3). A systematic decrease of Al_2O_3 with increasing SiO_2 is apparent (Appendix 7). The distinction of Feldspar Crystalline Rhyolite on the basis of field observations is supported by geochemistry. This unit has a more intermediate affinity than Rhyolite and Aphanitic Rhyolite, and is characterized by relatively lower SiO_2 and higher TiO_2 , P_2O_5 and Fe_2O_3 (Table 3).

Mean Wt. %	Unaltered Andesite	Std. Dev'n	Strongly Altered Andesite	Std. Dev'n
SiO ₂	55.09	4.72	67.69	2.83
Na ₂ O	4.02	1.49	1.08	1.80
K ₂ O	2.16	1.61	4.53	2.02
CaO	1.46	1.34	0.33	0.22
MgO	5.85	1.63	3.16	1.39
Al ₂ O ₃	18.23	1.52	13.34	2.14
Fe ₂ O ₃	7.39	1.65	4.79	2.18
TiO ₂	0.80	0.12	0.51	0.11
P ₂ O ₅	0.23	0.07	0.15	0.04
Totals	95.23		95.58	
n	35		37	

TABLE 2 . Mean weight percent oxides of unaltered andesite from outside the McVicar Zone, and strongly silicified andesite from within the McVicar Zone.
n = number of samples.

Mean Wt. %	Unaltered Rhyolite	Std. Dev'n	Altered Rhyolite	Std. Dev'n	Fsp Xtal Rhyolite	Std Dev'n
SiO ₂	73.16	2.98	77.54	4.01	70.11	1.84
Na ₂ O	2.65	1.57	1.44	1.53	2.74	1.62
K ₂ O	3.64	1.37	3.95	1.71	3.56	1.25
CaO	0.20	0.17	0.20	0.38	0.34	0.25
MgO	1.81	0.78	1.23	0.96	2.68	0.84
Al ₂ O ₃	13.60	1.06	11.65	2.05	14.61	0.83
Fe ₂ O ₃	1.97	0.88	1.34	0.57	2.80	0.44
TiO ₂	0.25	0.11	0.20	0.09	0.43	0.07
P ₂ O ₅	0.06	0.03	0.04	0.03	0.10	0.02
Totals	97.34		97.59		97.37	
n	37		69		10	

TABLE 3. Mean weight percent oxides of unaltered rhyolite (outside the McVicar Zone), altered rhyolite (within the McVicar Zone), and Feldspar Crystalline Rhyolite (on the eastern margin of the McVicar Zone).
n = number of samples.

DIAMOND DRILLING

Work between August 12, 1987 and October 13, 1987 consisted of 2796 meters of NQ diamond drilling in nine inclined holes (Figure 4). D.W. Coates Enterprises of Vancouver, B.C. were contracted to do this work with a Longyear 38 drill. A D7 Cat, in addition to a D5 Cat, were required to move the drill between set-ups, clear drill sites, and maintain the roads. Limited helicopter support was required to access water supply and to remove drill core from one of the sites.

Previous drilling programs in the McVicar Zone have been restricted to the areas of the surface showings, and have been directed at discovering down-dip extensions to sulphide mineralization exposed in trenches. With the exception of Texasgulf's 1981 drill program, this drilling has been relatively shallow, with holes dominantly less than 45 in inclination, and less than 100 m in length (ie. less than 70 m below surface) (Ingraham, 1950). None of these programs achieved any success in locating significant sulphide mineralization, and their failure to do so has been previously attributed to the erratic, pinching and swelling of the stringers, veins and pods of mineralization, both along strike and down dip. Geological reserves of 132,000 tons of ore averaging 2% copper with minor amounts of lead, zinc and silver have been reported for the area underlying the Rainstorm and North Harding showings (Dolmage, 1954). No significant gold values have been reported from these programs.

The objectives of the 1987 drill program were to test the McVicar Zone for base metals and gold mineralization :

1. at depths greater than /250 m below surface,
2. below areas of high chargeability response (Enns, 1983),
3. along its full 1200 m strike length.

BM87-1 (060/-75) and BM87-2 (060/-55) (Figure 11) were collared from the same site, adjacent to a trench at the Whistler showing with chalcopyrite-rich stringers. Two holes were drilled to determine the attitude of the stratigraphy, and each intersected numerous zones of intense silicification, with minor, associated sulphide mineralization. Both holes were terminated after they had passed through the geological and geophysical limits of the Zone. Although the correlation of units between holes and surface is made difficult by the occurrence of faults and shears and the numerous facies changes within the andesite tuffs, the volcanic stratigraphy dips to the west at 75 degrees.

The objective of BM87-3 (074/-70) (Figure 12) was to test the central part of the Zone. This hole was the longest of the nine (483.1 m) and tested the Zone to a depth of 340 m below surface.

Hole deviation was not significant in BM87-1,2,3, however, drilling rates were extremely slow (ie. 37m/day, BM87-1) due to the blocky, faulted nature of the rock. This was most evident in the first 100 m of these holes, where cave-in was common, and large quantities of additives (drilling mud) had to be used for stabilization. Poor ground conditions also decreased the meterage per bit significantly.

BM87-4 (076/-71) (Figure 13) was also drilled to test the central part of the McVicar Zone. Although sulphide mineralization is exposed in shears in Canyon Creek, this area is not characterized by a high chargeability response. This hole did not intersect any significant sulphide mineralization, and was terminated at 279.5 m because of deviation (hole flattened 22" and deviated to the south 16.5). In order to meet our objective of testing the Zone at depth, BM87-5 (060/-80) (Figure 14) was collared 30 m northwest of the previous site. The deviation encountered in BM87-5 was also significant, and the hole was terminated at 288.7 m in Coast Range Granodiorite - in fault contact with andesite tuffs - without intersecting significant sulphide mineralization.

Two holes - BM87-6 (050/-72) and BM87-7 (040/-72) (Figure 15) - were collared from the same site, 90 m northwest of the main Rainstorm showing. The first of these holes was terminated at 163.7 m as deviation precluded the testing of the eastern-most chargeability high, in this, the widest portion of the McVicar Zone. BM87-7 was drilled to 368.2 m, and was terminated in Coast Range Granodiorite without intersecting significant sulphide mineralization.

The high chargeability response at L56N/2650W was originally intended to be drilled from the west, however, steep, wet terrain prevented this and necessitated drilling down-dip, from the east. BM87-8 (263/-72) (Figure 16) intersected strongly silicified andesite tuffs, but no sulphide mineralization, and was ended at 373.7 m.

A final hole - BM87-9 (240/-55, 321.9 m) (Figure 17) was drilled to test the north end of the McVicar Zone. The inclination of this hole was set relatively flat because of the belief that Coast Range Granodiorite - intersected in BM87-5,7 - would truncate the Zone at shallow depths. This intrusive was not encountered, and the hole intersected strongly altered - silicified and sericitized - andesite and dacite tuffs, with minor sulphide mineralization.

Threaded plastic pipe was put down all of the 1987 holes - upon completion of drilling - to prevent blockage prior to geophysical testing. White Geophysical of Vancouver, B.C., was contracted to do Crone Pulse EM surveys of BM87-1,3,4,7,8,9 (Appendix 8). Although several hundred feet of plastic pipe was left in the bottom of BM87-3,6,7 due to blockage and breakage, pipe was removed from the BM87-2,4,5,8, and left in holes BM87-1,9 for future geophysical testing.

Drill core - from 1987 drilling - is stored on the property, on racks located at 5520N/2565W.

DISCUSSION

The volcanic succession that underlies the McVicar Zone area was deposited as a series of andesitic and rhyolitic pyroclastic flows and falls. A distal, shallow-subaqueous to subaerial environment of deposition is interpreted here based on the overall fine grain size of the units, the absence of graded bedding in the coarser andesitic pyroclastics, and the apparent lack of marine sediments and massive flows in the succession. These units were likely deposited on the flanks of a volcano.

A north to northwest-trending break separates the andesitic sequence that underlies the McVicar Zone, from the succession of rhyolitic volcanics to the east of the Zone, and is localized along a north to northwest-trending fault structure. This break may represent an unconformity that was characterized by a change from intermediate to felsic volcanism, or may simply have been a lithological contact that acted as a locus for deformation.

At depth (ie. BM87-5, 240 m below surface), the volcanic stratigraphy underlying the McVicar Zone is truncated by fault-bounded blocks of Coast Range Granodiorite. The occurrence of weakly mineralized, shear-related, stockwork silicification in the intrusive indicates deformation and hydrothermal alteration continued after its emplacement.

Gross chemical changes that took place in the volcanics in the McVicar Zone are a result of intense silicification. If alteration took place under constant volume conditions, it is expected that primary volcanic textures would be relatively preserved (Gibson *et al.*, 1983). This was not observed in the most silicified andesites, where textures are commonly destroyed. It is proposed that dilution, under non-constant volume conditions, resulted in the significant reduction of Na, Ca, Al, Fe, Mg, Ti and P in andesite volcanics in the McVicar Zone. Partial remobilization of silica, into fractures aligned parallel to foliation, occurred during a later period of alteration that may have been related to deformation associated with the emplacement of the Coast Range Intrusive Complex. Anomalous molybdenum values (Mo=15-60 ppm) associated with higher-grade sulphide mineralization suggest the hydrothermal fluids were at least partially derived from a magmatic source.

Macroscopic geochemical changes apparent in andesite samples taken from BM87-9, indicate that hydrothermal alteration in the McVicar Zone was most intense to the north. In drill core, this observation is supported by the occurrence of unique alteration textures and by the almost pervasive obliteration of primary volcanic textures. The abrupt termination of the McVicar Zone /150 m north of this drill hole is coincident with the east to northeast-trending McVicar Break (as

mapped by Enns, 1983), and suggests that a large volume of hydrothermal solutions may have been localized in this region.

A large percentage of sulphide mineralization in the McVicar Zone occurs as stringers and disseminations associated with, and hosted by, stockwork silicification. However, spectacular sulphide mineralization does occur as lenses and stringers, aligned parallel to foliation, at the Whistler and Rainstorm showings. These large quantities of sulphide mineralization may be interpreted to be related to the formation of a volcanogenic massive sulphide deposit. Lead isotope dating from the Whistler showing indicates sulphide mineralization is approximately synchronous with the ores at Britannia (Sinclair, 1986). However, the distal, shallow-subaqueous to subaerial environment of deposition of the volcanic pile at the McVicar Zone, the lack of a recognizable hydrothermal alteration pipe, and the apparent absence of a heat source to drive a hydrothermal system suggest this mineralization has been remobilized from its original depositional environment.

Because detailed geological mapping was restricted to the McVicar Zone area, the nature of the volcanic succession stratigraphically above and below this Zone is poorly understood. Mapping by Enns (1983) indicates the stratigraphy underlying the rest of the claim group comprises a dominantly felsic succession of pyroclastics and flows. He too proposes a subaerial environment of deposition for the volcanics based on the lack of significant deep marine sediments and pillow flows in the succession, the common occurrence of welded ash and lapilli tuffs, and the presence of hematized clasts in andesite pyroclastics.

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STATEMENT OF QUALIFICATIONS

I, George McTaggart, an employee of Falconbridge Limited, with offices at 701-1281 West Georgia Street, Vancouver, B.C., do hereby declare that:

1. I am a graduate of Queen's University, Kingston, Ontario (1985) with an Honours B.Sc. degree in Geology.
2. I have practised my profession as an exploration geologist for 2 years since graduation, in Ontario and British Columbia.
3. I supervised the work described in this report.

Dated at Vancouver, B.C. this 30th day of November, 1987

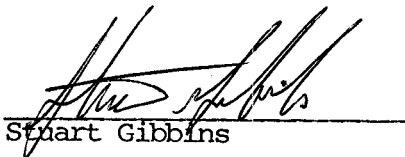

George McTaggart

STATEMENT OF QUALIFICATIONS

I, Stuart Gibbins, an employee of Falconbridge Limited, with offices at 701-1281 West Georgia Street, Vancouver, B.C., do hereby declare that:

1. I am a graduate of Carleton University, Ottawa, Ontario (1987) with an Honours B.Sc. degree in Geology.
2. I have practised my profession as an exploration geologist since graduation, in British Columbia.
3. I assisted with the work described in this report.

Dated at Vancouver, B.C. this 30th day of November, 1987



Stuart Gibbins

STATEMENT OF EXPENDITURES

Salaries

G. McTaggart, Associate Geologist 123 days @ \$131/day	16,113.00
S. Gibbins, Assistant Geologist 127 days @ \$108/day	13,716.00
D. Cochrane, Assistant 52 days @ \$84/day	4,368.00
M. Whiting, Cook 105 days @ \$30/day	3,150.00
N. von Fersen, Senior Project Geologist 4 days @ \$200/day	800.00
	<u>38,147.00</u>

Travel Expenses	278.28
-----------------------	--------

Field Expenses

Room & Board 306 days @ \$40/man/day	12,240.00
Truck rental, repair, fuel	6,119.64
Helicopter charter	1,382.92
Core Racks	3,003.62
Sperry Sun Rental	4,833.67
Roto Dip Rental	750.00
Road Building	1,140.00
Petrographic Studies	668.83
Sample Shipment	500.00
Communications	500.00
	<u>31,138.68</u>

Geochemistry

Bondar Clegg & Co. 175 rock @ \$22.75/s	3,981.25
X-Ray Labs 310 rock @ \$21.65/s	6,603.00
	<u>10,584.25</u>

Drilling

Coates Drilling 2796m @ \$82.02/m	229,637.30
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Total Expenditure:	\$309,785.51
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PERSONNEL

<u>NAME</u>	<u>POSITION</u>	<u>DATES ON PROPERTY</u>
G. McTaggart	Associate Geologist	July 9 - Nov. 20, 1987
S. Gibbins	Assistant Geologist	July 8 - Nov. 20, 1987
N. von Fersen	Senior Project Geologist	Aug. 14, 28, Sept. 16, Oct. 12, 1987
M. Whiting	Cook	July 12 - Oct. 30, 1987
D. Cochrane	Assistant	Aug. 17 - Oct. 9, 1987

APPENDIX 1
THIN SECTION DESCRIPTIONS



Vancouver Petrographics Ltd.

JAMES VINNELL, Manager
JOHN G. PAYNE, Ph.D. Geologist
A.L. LITTLEJOHN, M.Sc. Geologist
JEFF HARRIS, Ph.D. Geologist

P.O. BOX 39
8887 NASH STREET
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PHONE (604) 888-1323

Invoice #6688

August 28th, 1987

Report for: George McTaggart,
Falconbridge Ltd.,
701-1281 West Georgia St.,
Vancouver, B.C.
V6E 3J7

Samples:

12 rock samples from Project 121 for thin sectioning and petrographic examination.

Samples are numbered HS 87-9, 11, 13, 42, 43, 54, 92, 103, 109, 114, 118 and 124.

Summary:

The predominant rock type in this suite is a fine-grained porphyritic andesite. Several sub-types are recognizable:

Samples 42 and 114 are normal andesites of relatively chlorite-rich composition.

Samples 11 and 124 are rocks of similar composition to the above, but showing perceptibly flow-oriented, possibly autobrecciated textures.

Samples 54 and 103 are leucocratic varieties of andesite, consisting essentially of plagioclase and sericite, with only minor chlorite.

Sample 92 is of similar general type, but unique in the suite in showing strong carbonate alteration.

Sample 43 is a similar porphyritic volcanic, but of somewhat potassic composition. It is classified as a trachyandesite.

Sample 109 contains appreciable primary quartz along with the plagioclase (no K-spar). It is classified as a dacite.

Sample 13 is rich in K-spar and quartz and is classified as a rhyolite.

Samples 9 and 118 are lithic lapilli tuffs, the first of felsic composition and the second of andesitic type.

Alteration throughout the suite is of a rather consistent type. Plagioclase phenocrysts are typically sericitized, though often to a highly variable degree within any one sample. In some cases they are totally altered. Groundmass plagioclase is generally only weakly altered. Mafic phenocrysts are always totally altered, generally to chlorite, rutile and occasional quartz. Groundmass mafics are represented by chlorite and rutile.

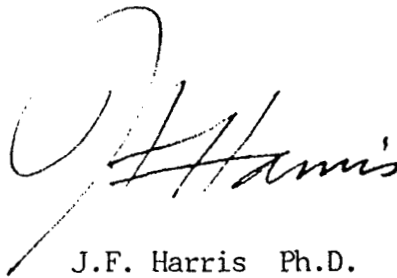
Sulfides are rare to absent.

A few rocks host sparse hairline veinlets of quartz.

Samples 54 and 114 contain traces of epidote as an alteration of plagioclase phenocrysts.

Where twinning is sufficiently preserved to enable measurement to be made, the plagioclase phenocrysts generally appear to be of albitic composition. This is an unexpected feature in rocks of quartz-poor, andesitic composition.

Individual petrographic descriptions are attached.



J.F. Harris Ph.D.

Sample HS-87-9

LITHIC LAPILLI TUFF

5905N/2788W

mapped unit: Heterolithic Andesite Volcaniclastic (2d)

Mineralogically this rock is composed mainly of sericite, with some quartz and plagioclase. Chlorite is rare, and the composition is probably felsic rather than andesitic.

It is clearly a lithic tuff composed of fragments 0.2 - 5.0mm in size.

The clasts are mainly composed of very fine-grained, felted, brownish-green sericite, possibly representing altered glass. Some contain small, more or less altered, plagioclase phenocrysts.

Other fragments are composed of felsitic and trachytic-textured plagioclase, or of microgranular siliceous material. Rare broken crystal clasts of quartz are seen.

The interstices between the lithic clasts are filled by cryptocrystalline felsite and pockets of microgranular quartz.

At one end of the slide there is a possible gradation to a finer bedded tuff, or possibly a large fragment of that material.

The rock shows a distinct foliation defined by a preferred elongation of the constituent clasts, especially the elongate, streaky, sericitized glass variety.

Rare traces of disseminated pyrite are present.

Sample HS-87-11

ANDESITE FLOW BRECCIA(?)

5957N/2722W

mapped unit: Andesite Lapilli - Ash Tuff (2a)

Estimated mode

Phenocrysts	
Sericite	40
Chlorite (sericite-rutile)	15
Groundmass	
Plagioclase	24
Sericite	10
Chlorite	8
Rutile	2
Veinlets	
Quartz	1

This is a rock of apparent porphyritic type which, however, shows some features which distinguish it from others of the suite, and cast some doubt on its actual mode of formation.

The abundant phenocryst-like bodies are of two kinds. The commonest is made up totally of minutely fine-grained sericite. Some of these are of diffuse, somewhat streaky form (rather like altered glassy fragments), whilst others show angular shapes suggestive of feldspars, or elongate clumps of feldspar. They range in size from 0.2 - 2.0mm, and typically show a strong preferred elongation.

The other type of altered phenocrysts is made up of intergrowths of two types of chlorite, respectively showing brown and blue interference colours, sometime containing included small pseudomorph-like patches of sericite and fine-grained rutile.

The chlorite patches are somewhat irregular/fragmented to elongate in form, and generally better defined than the sericite type. Sometimes the two types are intergrown to form composite clumps, ranging up to 4mm or so in size.

The groundmass is of felsitic to meshwork-textured plagioclase, more or less strongly sericitized and with abundant interstitial chlorite.

There is a continuous gradation in size from groundmass plagioclase to totally sericitized patches of altered micro-phenocryst type.

A distinct, small-scale, streakily oriented fabric is discernable in the groundmass, combined with an obscure crypto-fragmental texture. However, the material is all of the same kind, and no obvious lithic clasts are recognizable.

The rock is cut by occasional, discrete, sub-concordant hairline veinlets of quartz.

This strongly altered rock may be an autobrecciated or partially sheared andesite flow.

Sample HS-87-13

RHYOLITE

5370N/2445W

mapped unit: Aphanitic Rhyolite (4b)

Estimated mode

K-feldspar	40
Plagioclase	40
Quartz	20
Sericite	trace
Rutile	trace
Pyrite	trace

This is a fresh rock of simple composition and with no indication of fragmental or oriented textures.

It consists predominantly of a minutely fine-grained, felsitic matrix of grain size 5 - 50 microns. This is estimated, from observation of the stained cut-off chip, to be composed of approximately equal proportions of plagioclase and K-spar, evenly and intimately intergrown.

The rock contains rare tiny euhedral phenocrysts, up to 0.5mm in size, of fresh plagioclase.

Quartz is abundant. It occurs randomly scattered through the feldspathic matrix as small, irregular-shaped, polygranular segregations, ranging in size from about 0.1mm up to diffuse streaks and patches of several mm. The latter consist of aggregates of anhedral grains up to 0.5mm in size, commonly showing strong strain polarization.

The rock is cut by a few diffuse-margined, hairline veinlets of quartz, and by rare stylolite-like sericitic wisps. Sericite also occurs as a sparse dusting of minute flecks in the feldspathic groundmass.

Traces of randomly disseminated pyrite are seen, as tiny, individual euhedra.

Sample HS-87-42

PORPHYRITIC ANDESITE

5790N/2470W

mapped unit: Feldspar Crystalline Rhyolite (4c)

Estimated mode

Phenocrysts	
Sericitized feldspars	28
Altered mafics	7
Quartz	trace
Groundmass	
Plagioclase	28
Sericite	10
Chlorite	24
Rutile	3
Veinlets	
Quartz	trace
Sericite	trace

This is a porphyritic volcanic in which the phenocrysts are almost entirely altered.

Phenocrysts range in size from 0.2 - 2.0mm. They are of two main kinds. The commonest are euhedral pseudomorphs of minutely felted sericite, apparently after feldspar. Recognizable remnants sometimes appear to be K-spar; however the majority probably originated as plagioclase.

A second type of altered phenocrysts is made up of irregular intergrowths of chlorite and granular quartz, in various proportions, often with clusters of fine-grained rutile. These are presumably after some form of mafic.

Other phenocrysts of rare occurrence are corroded remnants of primary quartz; altered biotite (now represented by lamellar intergrowths of rutile and sericite); and tiny equant clusters or compact masses of fine-grained rutile/leucosene.

The groundmass is an even, microgranular aggregate of plagioclase, of grain size 5 - 30 microns. Chlorite is intimately intergrown throughout. Other constituents are rutile, as minute disseminated flecks, and sericite, as a pervasive dusting and intergranular wisps.

The rock is cut by a single, irregular hairline veinlet of quartz.

Sample HS-87-43

PORPHYRITIC TRACHYANDESITE

5755N/2420W

mapped unit: Feldspar Crystalline Rhyolite (4c)

Estimated mode

Phenocrysts		
Plagioclase	}	38
Sericite		
Altered (rutilized) mafics		2
Groundmass		
Plagioclase	}	30
K-feldspar		
Sericite		30
Rutile		trace

This is a strongly porphyritic rock of leucocratic composition.

The prominent, rather abundant phenocrysts are of albitic plagioclase. They are euhedral to subhedral in form, 0.2 - 2.0mm in size, and show a varying degree of pervasive sericitization. Many are essentially unaltered; others show patchy replacement by minutely fine-grained, felted sericite; and a few of the smallest phenocrysts are totally pseudomorphed by sericite.

The sericitization of the phenocrysts seems to extend as (or develop from) wispy concentrations of similar sericite in the groundmass.

A small proportion of phenocrysts are composed of pseudomorphs of finely granular rutile and/or sphene, with intergrown sericite. These presumably represent original accessory mafics.

The groundmass is an even-textured aggregate of tiny, equant feldspar granules, 10 - 50 microns in size, set in a matrix of cryptocrystalline, brownish material. The latter is now largely sericite, and possibly represents original potassic glass.

Sericite forms sub-parallel, sinuous, wispy segregations through the groundmass which may delineate an incipient flow fabric - though no preferred orientation is recognizable in the phenocrysts, nor in the microgranular feldspar of the groundmass.

The rock appears to be free of quartz. The groundmass takes a weak overall positive cobaltinitrite stain. Together with the abundance of sericite, this suggests a somewhat potassic composition (trachyandesite).

Sample HS-87-54

FINE-GRAINED ANDESITE

5967N/2460W

mapped unit: Rhyolite (4a)

Estimated mode

Plagioclase	90
Chlorite	3
Sericite	2
Epidote	4
Rutile	1
Pyrite	trace

This is a very fine-grained, sparsely microporphyritic rock of leucocratic, feldspar-rich composition.

It consists essentially of a homogenous, non-oriented aggregate of microgranular to meshwork-textured feldspar of grain size 10 - 100 microns. Chlorite and sericite form evenly distributed interstitial flecks, and chlorite also forms irregular segregated wisps and pockets, to 0.3mm in size, sometimes with associated clusters of fine-grained rutile.

The rock contains scattered, tiny phenocrysts, 0.1 - 1.0mm in size. Occasionally these are recognizable as plagioclase, but for the most part they are strongly altered to fine-grained epidote. This material is apparently fragile, and has been partially plucked during slide preparation; alternatively the voids in these altered microphenocrysts represent a natural vugginess.

Like many others of the suite, this rock is deficient in mafics. Rare clusters of epidote and/or rutile and chlorite in the groundmass may represent original minor mafics.

The rock appears quartz free. The feldspathic matrix takes a very slight K-stain, but there appears no reason to classify the rock as anything other than an andesite.

Sample HS-87-92

ALTERED PORPHYRITIC ANDESITE

5983N/2696W

mapped unit: Andesite Lapilli - Ash Tuff (2a)

Estimated mode

Altered phenocrysts	
Sericite	40
Carbonate-chlorite-quartz	10
Groundmass	
Plagioclase	20
Carbonate	18
Sericite	3
Chlorite	3
Rutile	6

This is a prominently porphyritic rock containing strongly altered phenocrysts of two different kinds.

The commonest phenocrysts are euhedral-subhedral, prismatic pseudomorphs, 0.1 - 1.0mm in size, composed of felted sericite with minor flecks of carbonate. They are probably after original plagioclase. They often contain minor chlorite and micron-sized rutile in the form of diffuse, tiny pockets or hairline networks. This looks like admixed groundmass material and many either be indicative of incipient assimilation, or represent included groundmass wisps in the original feldspar phenocrysts.

The other type of altered phenocrysts are more irregular in shape, range up to 2.0mm or more in size, and are composed of granular intergrowths of carbonate, chlorite, fine-grained rutile and secondary quartz. They are presumably derived from some form of mafic silicate.

The groundmass is a turbid, strongly altered, fine-grained aggregate of felsitic plagioclase, sericite, chlorite and abundant fine-grained rutile/leucoxene. It is strongly pervaded by diffuse carbonate. An incipient sub-trachytic fabric tangential to the outlines of the coarse phenocrysts is locally discernable.

Rare, tiny, chlorite-filled amygdüles are present.

6100N/2657W

mapped unit: Feldspar Crystalline Rhyolite (4c)

Estimated mode

Phenocrysts	
Plagioclase	15
Sericite	14
Rutile	1
Groundmass	
Plagioclase	52
Sericite	18
Veinlets	
Quartz	trace

This is a fine-grained, microporphyritic volcanic showing a weak foliation possibly related to flow or incipient shearing.

It has a very simple composition and, like many of the rocks of the suite, is of highly leucocratic character.

Phenocrysts of subhedral (sometimes somewhat rounded, sometimes strongly elongate) plagioclase, 0.2 - 3.0mm in size, show variable degrees of alteration to very fine-grained felted sericite. This alteration takes the form of patchy, irregular replacements enclosing unaltered plagioclase remnants which are strikingly fresh and clear. Some phenocrysts are barely altered, others are almost totally replaced. The plagioclase composition appears to be albite.

Typically the sericitization of the phenocrysts overlaps or extends into the groundmass as sinuous, wispy schlieren. The phenocrysts themselves show a partial tendency towards a preferred orientation of long axes, or are aligned in roughly parallel strings. Some of them appear, in fact, to be semi-coalescent clumps, linked by sinuous envelopes of sericite. Tiny pseudomorphic clusters of rutile and sphene constitute another form of phenocryst, often more or less associated with the plagioclase.

The groundmass is a notably homogenous, even-grained, microgranular, felsitic aggregate of fresh plagioclase with interstitial sericite. As mentioned above, sericite also forms wispy sub-parallel segregations related to the altered phenocrysts.

Except for rare, irregular hairline veinlets, the rock appears devoid of quartz though a little could be present as an intergrown accessory with the groundmass felsite. It is tentatively classed as an andesite - though its leucocratic character, and the sodic composition of the phenocrysts, suggests more alkalic, felsic affinities.

Sample HS-87-109

DACITE

6187N/2643W

mapped unit: Dacite (3)

Estimated mode

Phenocrysts	
Plagioclase	12
Quartz	3
Groundmass	
Plagioclase	53
Sericite	22
Quartz	10
Rutile	trace

This is another sparsely microporphyritic volcanic.

Phenocrysts are principally of albitic plagioclase, 0.1 - 1.0mm in size. They are typically fresh except for occasional marginal replacement by groundmass sericite.

Phenocrysts of quartz, up to 0.5mm in size and showing typical sub-rounded outlines indicative of incipient resorption, are also seen. Some 'phenocrysts' appear to be intergrown clumps of plagioclase and quartz.

The groundmass is of microgranular plagioclase and minor quartz, of grain size 0.02 - 0.1mm. The equant feldspar grains are set in a matrix of very fine-grained sericite.

A small-scale micro-lenticular texture, in the size range 0.05 - 0.2mm, is discernable within the groundmass. This consists of individual grains and small clumps of plagioclase outlined by wisps of sericite which define a distinct foliatic

This fabric is rather like that of a fine-grained tuff, but the distinct porphyritic character of the rock clearly categorizes it as of effusive type. Possibly the texture in question is flow-related.

The groundmass also contains diffuse segregations of microgranular quartz, with or without intergrown plagioclase, which commonly show streaky elongation parallel to the incipient foliation.

The only mafics are rare, scattered wisps and clumps of micron-sized rutile.

The rock is relatively enriched in quartz compared with the majority of the suite. K-feldspar, however, is totally absent, so the rock most likely falls in the compositional field of dacite.

Sample HS-87-114

PORPHYRITIC ANDESITE

6233N/2636W

mapped unit: Feldspar Crystalline Rhyolite (4c)

Estimated mode

Phenocrysts	
Plagioclase)	
Sericitic)	28
Altered mafics	
(chlorite-sericitic-rutile)	7
Quartz	1
Groundmass	
Plagioclase	42
Chlorite	18
Sericitic	3
Rutile	1

This is another partially altered, porphyritic volcanic similar to several other rocks of the suite.

Phenocrysts are of two kinds. The commonest are subhedral, somewhat rounded crystals of albitic plagioclase, 0.2 - 2.0mm in size. These show a varying degree of pervasive sericitization, from essentially fresh to almost totally altered. A few have small clusters of granular epidote.

The other type of phenocryst consists of irregular intergrowths of chlorite and sericitic, often with clumps of granular rutile. They are presumably pseudomorphs of some form of mafic. Sometimes this material cements or is composite with plagioclase - representing original phenocryst clusters.

Rare corroded quartz phenocrysts are present.

The groundmass is an even, felsitic aggregate of equant plagioclase grains, 10 - 30 microns in size, interstitially cemented by chlorite. Minor flecks and wisps of sericitic are present, as well as sparsely disseminated specks of rutile, but the groundmass is notably fresh and clear.

Sample HS-87-118

ANDESITE LAPILLI TUFF

6308N/2642W

mapped unit: Feldspar Crystalline Rhyolite (4c)

This sample is a coarse lapilli tuff, like 87-9, composed of fragments up to 10mm or more in size.

The clasts are elongate to somewhat rounded in form and packed closely, with minimal matrix. They include various types, such as microporphyritic rocks made up of abundant fresh to partially sericitized plagioclase phenocrysts in a very fine sericitic/chloritic groundmass; similar rocks with swarms of streaked-out deformed chlorite amygdules; and felsitic to meshwork-textured plagioclase-rich rocks with fresh plagioclase phenocrysts and occasional microgranular quartz.

The rock probably also contains a proportion of disaggregated plagioclase crystals, though it is sometimes difficult to distinguish these from randomly oriented phenocrysts within coarse fragments, the outlines of which are frequently ill-defined.

The overall composition of this tuff is more chloritic, less siliceous than 87-9, and it is probably of andesitic type.

Sample HS-87-124

FLOW-TEXTURED ANDESITE

5863N/2812W

mapped unit: Heterolithic Andesite Volcaniclastic (2d)

Estimated mode

Phenocrysts	
Plagioclase-sericite	34
Quartz	2
Groundmass	
Plagioclase	23
Sericite	10
Chlorite	27
Rutile)	
Sphene)	4

This is a rock of somewhat enigmatic origin, possibly of similar type to 87-11.

The principal type of phenocryst is plagioclase, as subhedral grains 0.2 - 3.0mm in size. These show variable degrees of diffuse sericitization, from essentially nil to almost complete replacement. They tend to show a partial parallelism of orientation, which is emphasized by the fact that the sericitization, in some cases, appears to extend into the adjacent groundmass as diffuse elongate streaks.

Some of the plagioclase phenocrysts show partial replacement by, or intergrowth with, quartz, and a few appear to consist of granular aggregates of quartz or quartz and plagioclase.

The groundmass consists of lightly sericitized plagioclase laths and equant subhedral grains 0.05 - 0.2mm, forming a continuous size range with the smallest phenocrysts, set in a matrix of chlorite.

There is a general preferred orientation within the groundmass, with the elongate plagioclase laths disposed in flow-type relation between and around the coarser, stumpy sub-phenocrysts.

The directional texture is emphasized by the common occurrence of elongate/lenticular segregations of foliaceous chlorite or chlorite and sericite, which have somewhat the aspect of deformed, streaked-out amygdules. These commonly contain clumps and granules of sphene and rutile, constituents which also occur randomly disseminated throughout the groundmass and, surprisingly, in many of the more strongly sericitized plagioclase phenocrysts.

Ill-defined clast-like forms are sometimes faintly distinguishable in this rock, and it is tentatively classified as a flow-textured, possibly autobrecciated, andesite.

APPENDIX 2
PROPERTY HISTORY AND PREVIOUS EXPLORATION

APPENDIX 2

Property History and Previous Exploration

"The McVicar showings were discovered and explored in the early 1900's. Work included trenching and the driving of short adits. Britannia Mining and Smelting Company optioned the 'McVicar' properties, and eventually tested the more impressive showings by diamond drilling. In 1946, the 'McVicar' properties were acquired by Western Surf Inlet Company and diamond drilling was carried out during the summers of 1953 and 1954. Reports on the property by Victor Dolmage, consulting geologist, summarize this work. In 1969, the property was optioned to Croydon Mines, who conducted a TURAM-EM survey in the immediate area of the McVicar showings. During the 1971-72 season, 4072 feet of NQ diamond drilling was carried out under the joint venture agreement between Croydon Mines and Dow Mining Company of Japan; results were generally disappointing.

In 1977, Texasgulf Canada Ltd. staked the Baldwin 1,2, and 3 Claims adjoining the McVicar Crown Grants and subsequently optioned the Crown Grants from Matachewan Consolidated Mines Ltd., who acquired the interests of Western Surf Inlet.

During 1978, geological mapping (1:5000 and 1:500), trench sampling, soil and silt sampling and geophysical orientation surveys were conducted by Texasgulf Canada Ltd. over selected portions of the area.

In 1981, 855.5 m of BQ diamond drilling was carried out by Texasgulf in the vicinity of the Whistler showings with discouraging results.

A combined electromagnetic, magnetic, VLF-EM aerodat survey was flown by Kidd Creek Mines Ltd. (formerly Texasgulf Canada Ltd.) in 1982, and located several weak anomalies. Some of the better anomalies were checked by magnetic, horizontal loop EM and IP resistivity surveys with disappointing results. A limited IP/Resistivity survey was also conducted over a portion of the 'old grid' in the Whistler showings area. During the geophysical follow-up surveys, a chance sample of mineralized float collected in the Camp Creek area, some distance from any known showing, assayed 0.952 oz/ton Au." (Enns, 1983)

In 1983, Kidd Creek Mines Ltd. cut 37 km of grid line over the entire property. Work included 1:2500 scale geological mapping, rock and soil sampling, IP/Resistivity and magnetometer surveys along the grid lines, and limited mechanical trenching. Results of this program indicated the best targets on the property are structurally controlled replacement sulphide lenses, pods and stringers. Recommendations, at this time, included drill testing the McVicar Zone, at depth, along its full strike length.

APPENDIX 3
DESCRIPTION OF LITHOLOGIES

APPENDIX 3

Description of Lithologies

Greywacke/Conglomerate (1) is very restricted in occurrence in the McVicar Zone. Although it was not observed in outcrop, two occurrences were noted in drill core. In BM87-3 (453.3-463.6) the unit exhibits a progression from light to olive green-coloured greywacke with 1-5% subrounded, very siliceous cobbles up to 4X3 cm, to a polymictic conglomerate with 50% boulders and cobbles in a sand-sized matrix. The clasts comprise : rounded, pinkish-white, igneous-looking cobbles; light olive green, mottled igneous boulders up to 15X6 cm, with 10% dark green sericitic phenocrysts ; ovoid, white, very siliceous cobbles up to 4X2 cm; and andesite tuff cobbles up to 4X2 cm. A similar conglomeratic unit was intersected in BM87-2, and has a patchy, orange/black colouration.

The well-rounded, polymictic nature of the clasts, and the limited occurrence of this unit suggest it formed by the accumulation of eroded, lithic, volcanic fragments, possibly as a channel-type deposit.

Andesite Lapilli-Ash Tuff (2a) is areally the most extensive unit mapped in the McVicar Zone, and occurs as a thick sequence - with an apparent thickness of up to 220 m - in the centre of the Zone (6400N/2900-3100W to 5600N/2500W). Weathered surfaces are buff-brown to bleached white in colour and do not give a good indication of the highly variable, tuffaceous nature of this unit. This is best observed in drill core where thick sequences are seen to comprise numerous distinct facies of andesite ash, lapilli, and lapilli-ash, tuff units. Contacts between the individual facies are dominantly gradational, and are often marked by the appearance and/or disappearance of the different fragment types and sizes.

Ash tuff facies are light to medium green/grey, or olive green to dark green in colour on fresh surfaces, with 5-25% (avg. 10-15%), angular to shard-like, glassy-textured, sericitic fragments <1-3 mm (avg. 1-2 mm). These fragments are clearly (thin section HS 87-92) sericitized feldspar crystals. As well, this unit may contain 5% dark green, subangular to ovoid, chloritic ash fragments, 1-2 mm in size.

Lapilli-ash tuff facies contain 5-20% (avg. 10%) ash to block (dominantly lapilli) - sized fragments, including : angular to subrounded andesite ash tuff lapilli to blocks - texturally similar to the ash tuff facies - 1X1 cm to 8X3 cm in size; angular to subangular, dark green to dark grey, chloritic ash to blocks up to 10X3 cm (avg. 1X1 cm); dark to olive green coloured, glassy-textured, angular to subangular, soft, sericitic lapilli up to 3X0.5 cm; 20% glassy, sericitized feldspar crystals up to 3X2 mm, and up to 5-10% subangular to subrounded, dark green, chloritic lapilli (with fine, white, feldspar-mottled texture) up to 2.0X0.5 cm (avg. 5X5 mm). The matrix of this facies is a fine grained, medium to dark

green coloured, andesite ash.

This unit, with its tuffaceous texture and moderately well-sorted nature, likely formed by the accumulation of andesite ash and lapilli tephra, and can be classified as a pyroclastic fall deposit.

A lens of Andesite Fine Ash Tuff (2b) is exposed in the north-central part of the mapped area, between Canyon Creek and the eastern-most branch of McVicar Creek, with an apparent thickness up to 140 m. Thin lenses of this unit were also observed in drill holes BM87-4 through BM87-9. Weathered surfaces are greyish-green, light to dark brownish-green, or dark green in colour, and are characteristically fine grained. Fresh surfaces are light to dark green in colour, and are comprised wholly of well sorted, light to dark green, andesitic ash <1 mm. This unit is similar to the matrix of much of the Andesite Lapilli-Ash Tuff, however, because of its homogeneous, fine-grained texture, and occurrence as a distinct lens, it has been distinguished from unit 2a.

The good sorting exhibited by this unit indicates it is an ash-fall tuff.

Feldspar Crystalline Andesite Tuff (2c) has a buff-brown coloured, fine white-speckled weathered surface, and is exposed along the southwest margin of the McVicar Zone (6000N/2980W to 5480N/2500W). Fresh surfaces are medium to dark green in colour, and contain 5-25% (avg. 15%), randomly oriented, subhedral to euhedral, white feldspar crystals <1 to 2 mm (avg. 1 mm) in size that may locally exhibit broken crystal faces (ie. BM87-7, 128.5-133.1). Contacts with other andesite units are dominantly gradational over 10 to 20 cm, and are locally (ie. BM87-3, 446-450m) characterized by a decrease in size and percentage of feldspar crystals towards the contact. Although this unit contains only 1% fragments overall, it does contain discrete interbeds (ie. BM87-3, 409-436) with up to 60% (avg. 1-5%) lapilli to blocks. The fragment types within these individual interbeds tend to be monolithic, however, overall they include: subangular to subrounded, homogeneous, sericitized andesite lapilli <1x1 cm; subangular to subrounded andesite ash tuff lapilli to blocks 1.0x0.3 cm, up to 40 cm thick; dark green, finely feldspar crystalline, andesite lapilli (avg. 1.0x0.3 cm); subangular, white, rhyolitic lapilli <5 mm.

The local, fragmental texture of this unit, and its relative absence of internal stratification suggests it formed by pyroclastic flow mechanisms.

Although Feldspar Crystalline Andesite and Andesite Lapilli-Ash Tuff are undoubtedly genetically related, the two units have been distinguished by the less fragmental nature of Feldspar Crystalline Andesite, and by the strong, almost ubiquitous sericitization of feldspar crystals in Andesite Lapilli-Ash Tuff.

Heterolithic Andesite Volcaniclastic (2d) is exposed at surface in the Canyon Creek area, at L58N. Outcrops (along the road) have dark green weathered surfaces, a feldspar crystalline matrix (up to 40% feldspar crystals <3 mm in size), and a weakly discernible (heterolithic) fragmental texture. This texture is more apparent in drill core (ie. BM87-3, 76.7-80.0), where the unit contains up to 40% fragments comprising: angular to subrounded, medium green to light olive green coloured, andesite ash tuff lapilli to blocks up to 60 cm thick (avg. 4x2 cm), 1-2% of which have been hematized; angular, homogeneous, dark green, sericitic lapilli up to 3x3 cm (avg. 1.0x0.5 cm). Other, minor fragment types include: subangular, jasperoidal lapilli <4x4 mm; light grey to green-grey, rhyolitic lapilli up to 3x1 cm. A similar, thin, fragmental unit was encountered in BM87-9 (18.4-31.7), with 30-80% angular to subangular, heterolithic (rhyolitic, andesite ash tuff, and chloritic) lapilli.

The dominantly rounded to subangular shape of the fragments, and their poorly sorted, heterolithic nature, suggest this unit is reworked a volcaniclastic.

Dacite (3) outcrops along the western side of Canyon Creek (6060N/6300W) in the northeast portion of the mapped area. Weathered surfaces are white to light blue-grey in colour, while fresh surfaces are very fine grained, light greenish-white to bluish-grey in colour, and contain up to 10% dark green, sericitic flecks, and <1% finely disseminated euhedral pyrite <1 mm. Locally (6270N/2670W) this unit exhibits regular to contorted flow bands (147/78), with up to 5% feldspar crystals 2-3 mm in size. This unit can be distinguished from rhyolite in the field by its softer nature (easily scratched with a knife), and in thin section by its total absence of K-feldspar, which categorizes it as a dacite (Harris, 1987).

The flow banded texture suggests this unit is a tuff, and possibly an ash-flow tuff.

Rhyolite (4a) is exposed throughout the McVicar Zone as thin lenses, with an apparent thickness less than approximately 30 m. Weathered surfaces are brownish white to medium grey in colour, and locally exhibit dark brown, dendritic, biotite growths, radiating from fractures (5550N/2400W), or regular to contorted flow banding (5580N/2420W). Fresh surfaces are white to light blue-green in colour, with up to 1% disseminated euhedral pyrite <1 mm. This unit is generally fine grained - but, where spatially associated with Aphanitic Rhyolite (ie. 5990N/2600W), may be locally aphanitic - and contains 1-2% euhedral feldspar crystals 1-2 mm in size, and 5% equant quartz crystals - average 1 mm in size. Exposures along the cliff, in the southeast portion of the Zone (5600N-5700N/2440W) contain up to 20%, minute (<0.5 mm), snowflake-textured feldspar crystals.

The fine grained nature of this unit, and the local presence of flow banding suggest it is a well-sorted, rhyolite ash-flow tuff.

Aphanitic Rhyolite (4b) is exposed south of L60N, dominantly in the eastern half of the McVicar Zone, in thin lenses with an apparent thickness less than 30 m. This unit characteristically outcrops as resistant knolls, with fine, white, gritty- to knobby-textured, jointed, weathered surfaces. Fresh surfaces are very hard, light to medium olive green or light grey in colour - with 1% translucent quartz crystals <1 mm - and are so fine grained they appear "cherty". This texture, however, is produced by a minutely fine-grained, felsitic matrix of grain size 5-50 microns (Harris, 1987;HS-87-13). Contacts observed in drill core (ie.BM87-1, 151.5-159.4) are locally characterized by white colouration bands, approximately 5 mm wide, or up to 50 cm, strongly brecciated zones comprising 20% angular, aphanitic rhyolite fragments up to 2.5x1.0 cm, in a lighter grey, siliceous matrix.

The absence of fragments in the matrix of this unit, and its homogeneous, microcrystalline texture suggest it formed as a very fine, well sorted, rhyolite ash fall deposit.

Feldspar Crystalline Rhyolite (4c) outcrops along the eastern margin of the mapped area, from 5700N to 6300N. Weathered surfaces are light green to brownish-white in colour, while fresh surfaces are light to medium blue-green or medium green in colour. This unit is characterized by the presence of 5-50% (avg.20%), white to light green/grey-coloured feldspar crystals 1-5 mm (avg.2 mm) in size, that locally exhibit broken crystal faces. The matrix comprises very fine grained, sericitized plagioclase feldspar (thin section HS 87-43). Where this unit has been sheared (ie.Canyon Creek/6160N) the feldspar crystals are less discernible, and have indistinct crystal boundaries. Locally (ie.6045N/2530W), the unit contains up to 10% (avg. 2-3%), dark green to brown (chloritic to sericitic) ash-sized shards, and/or 2-3% broken quartz crystals 1-2 mm in size.

The broken nature of the quartz and feldspar crystals, and the local presence of well sorted, ash-sized shards suggest this unit was deposited as an air-fall ash tuff.

Coast Range Granodiorite (5) is not exposed at surface in the McVicar Zone, but was intersected in BM87-5 (258.5 m) and BM87-7 (321.1 m), where it is in fault contact with the older volcanic units. The fresh surface is white with a green mottled appearance, and is medium grained (2-7 mm) with 55-60% light green, strongly sauseritized/sericitized, amorphous feldspar masses, 30% anhedral quartz crystals, and up to 10% dark green to black, chloritized, euhedral hornblende, 2-4 mm in size. Further from the contact with the volcanics, the granodiorite is less altered and 2-3% alkali feldspar become apparent. Although the unit is only weakly foliated, it does contain up to 10% shear bands, 2 cm wide, @30-50 to the core axis, with 3-5% quartz veinlets, 5% finely disseminated euhedral pyrite, and trace chalcopyrite, in 1 to 5 cm zones associated with the shears.

Three types of late-stage Garibaldi dykes have been observed in the McVicar Zone. These dykes are generally north-trending, subvertical, and are localized along shears and faults.

Rhyolite Garibaldi Dyke (6a) is restricted in occurrence to the area south of L56N. One small outcrop - with a homogeneous, massive, white weathered surface - is exposed on the south edge of the road, at 2440W. In drill core (ie. BM87-2, 143.9-159.1), this dyke is observed to dip subvertically, with sharp, flow banded contacts. The margins of this unit contain 5-10% subangular, andesite ash tuff inclusions up to 2X1 cm, and angular, aphanitic rhyolite inclusions up to 6X5 mm. Fresh surfaces are white to light green/white in colour, and exhibit regular to highly contorted flow bands.

Intermediate Garibaldi Dyke (6b) is limited in occurrence to RM87-4 (8.1-10.4 m). Fresh surfaces are brownish grey in colour with up to 10% light blue/white-coloured feldspar crystals <2 mm, and 2% quartz crystals, 1-2 mm in size. The margins of this dyke exhibit 2 cm chilled zones.

Weakly magnetic Mafic Garibaldi Dykes (6c) - up to 1.5 m wide - were occur throughout the McVicar Zone (ie. L62N/2700W) are the most common type of dyke mapped. Weathered surfaces are dark brown in colour, and may exhibit polygonal jointing, perpendicular to the strike of the dyke (L62N/2640W). Fresh surfaces are hard, fine grained, and dark brown to black in colour with up to 1-5% round, white feldspar amygdules up to 5 mm in size. The dykes often have 2 cm, light beige/brown-coloured chilled margins.

APPENDIX 4
GEOCHEMICAL RESULTS (METAL ANALYSES)

**DIAMOND DRILL CORE LITHOGEOCHEMICAL RECORD
(MINOR ELEMENTS)**

SAMPLE NUMBER	FROM	TO	BA (ppm)	CU (ppm)	ZN (ppm)	AG (ppm)	AU (ppb)	CO (ppm)	NI (ppm)	PB (ppm)	AS (ppm)	CD (ppm)	MO (ppm)	MN (ppm)	ALTE	MINE	CUZN
AE08001	37.70	38.60	3500.0	2450.0	6100.0	6.9	130.0	25.0	11.0	590.0	391.0	43.0	7.0	273.0	EQS	SDH	29.
AE08002	38.80	39.80	4700.0	210.0	270.0	2.7	70.0	15.0	8.0	40.0	120.0	1.0	7.0	206.0	EQS	SDH	44.
AE08003	45.90	46.50	1100.0	9800.0	1950.0	12.0	110.0	19.0	14.0	955.0	151.0	11.0	15.0	615.0	EQS	SDP	83.
AE08004	93.00	93.60	3600.0	1050.0	680.0	1.4	15.0	31.0	12.0	530.0	24.0	5.0	1.0	1422.0	EQS	DDP	61.
AE08005	93.60	94.00	2100.0	690.0	5100.0	1.4	25.0	23.0	12.0	2350.0	20.0	43.0	1.0	1439.0	EQS	SDH	12.
AE08006	94.00	94.50	4000.0	370.0	800.0	0.5	45.0	11.0	15.0	177.0	10.0	6.0	1.0	1480.0	EQS	DCP	32.
AE08007	94.50	95.30	3000.0	5600.0	23800.0	12.0	65.0	30.0	17.0	9100.0	24.0	202.0	9.0	825.0	EQS	SDP	19.
AE08008	95.30	96.30	3400.0	940.0	2100.0	2.6	30.0	17.0	15.0	4800.0	17.0	19.0	6.0	782.0	EQS	SCC	31.
AE08009	120.30	121.30	2800.0	59.0	250.0	0.8	25.0	10.0	8.0	275.0	28.0	2.0	3.0	872.0	PQS	DCB	19.
AE08010	121.30	122.30	2100.0	55.0	6700.0	0.9	35.0	16.0	11.0	265.0	24.0	38.0	3.0	1096.0	PQS	DCB	1.
AE08011	122.30	123.30	2300.0	20.0	1050.0	0.9	30.0	17.0	7.0	300.0	36.0	6.0	5.0	1050.0	PQS	DCB	2.
AE08012	123.30	124.30	3800.0	37.0	148.0	0.6	10.0	15.0	8.0	285.0	22.0	<1.0	2.0	935.0	PQS	DCB	20.
AE08013	124.30	125.00	3700.0	20.0	570.0	0.6	20.0	15.0	10.0	225.0	21.0	1.0	1.0	1638.0	PQS	DCB	3.
AE08014	125.00	125.40	3700.0	46.0	580.0	0.6	10.0	20.0	12.0	370.0	21.0	1.0	1.0	2429.0	PSW	D	7.
AE08015	125.40	126.50	3100.0	92.0	2200.0	1.0	10.0	12.0	6.0	470.0	10.0	11.0	<1.0	1137.0	PQS	DCP	4.
AE08016	131.80	133.30	3000.0	6.0	120.0	0.4	<5.0	14.0	5.0	43.0	15.0	<1.0	1.0	678.0	PQS	DCP	5.
AE08017	133.30	134.30	1300.0	20.0	164.0	0.4	5.0	13.0	4.0	62.0	9.0	<1.0	1.0	1334.0	PQS	DCP	11.

**DIAMOND DRILL CORE LITHOGEOCHEMICAL RECORD
(MINOR ELEMENTS)**

SAMPLE NUMBER	FROM	TO	BA (ppm)	CU (ppm)	ZN (ppm)	AG (ppm)	AU (ppb)	CO (ppm)	NI (ppm)	PB (ppm)	AS (ppm)	CD (ppm)	MO (ppm)	MN (ppm)	ALTE	MINE	CUZN
AE08018	29.60	30.50	580.0	3200.0	4300.0	6.2	170.0	10.0	8.0	6750.0	278.0	26.0	13.0	2676.0	QOS	DDH	43.
AE08024	31.30	31.50	440.0	7000.0	14500.0	18.0	140.0	14.0	13.0	12200.0	206.0	94.0	20.0	1887.0	EQS	DDH	33.
AE08019	32.50	32.80	200.0	24000.0	18600.0	38.0	240.0	23.0	3.0	19400.0	212.0	146.0	26.0	2023.0	EQS	SDH	56.
AE08020	32.80	33.10	800.0	1700.0	1150.0	4.3	280.0	17.0	5.0	1350.0	168.0	8.0	23.0	1865.0	EQS	DBP	60.
AE08021	33.10	34.20	590.0	4000.0	2500.0	6.6	320.0	12.0	6.0	850.0	112.0	15.0	16.0	1911.0	EQS	DCH	62.
AE08022	87.90	88.40	730.0	100.0	290.0	0.4	<5.0	18.0	8.0	67.0	<5.0	<1.0	<1.0	1953.0	EHW	DDP	26.
AE08023	88.40	88.80	690.0	166.0	220.0	0.4	25.0	9.0	12.0	34.0	<5.0	<1.0	<1.0	1769.0	PSW	DBP	43.
AE08025	88.80	89.30	650.0	41.0	186.0	0.3	40.0	15.0	11.0	68.0	16.0	<1.0	<1.0	1364.0	EQW	DCP	18.
AE08026	103.40	103.70	800.0	5600.0	13000.0	11.0	25.0	4.0	5.0	130.0	8.0	114.0	2.0	353.0	QOS	DCI	30.
AE08027	126.20	126.40	600.0	3800.0	15500.0	7.4	540.0	10.0	11.0	1100.0	19.0	109.0	20.0	533.0	QOS	DCL	20.

**DIAMOND DRILL CORE LITHOGEOCHEMICAL RECORD
(MINOR ELEMENTS)**

SAMPLE NUMBER	FROM	TO	BA (ppm)	CU (ppm)	ZN (ppm)	AG (ppm)	AU (ppb)	CO (ppm)	NI (ppm)	PB (ppm)	AS (ppm)	CD (ppm)	MO (ppm)	MN (ppm)	ALTE	MINE	CUZN
AE08028	57.50	58.00	37000.0	1703.0	113.0	2.8	95.0	6.0	7.0	74.0	<5.0	<1.0	16.0	382.0	FAS	DCP	94.
AE08029	120.90	121.70	3900.0	2699.0	167.0	2.6	5.0	21.0	13.0	16.0	21.0	<1.0	3.0	1848.0	FOS	DDC	94.
AE08030	121.70	122.20	3600.0	1116.0	159.0	<0.5	5.0	19.0	11.0	8.0	18.0	<1.0	3.0	1935.0	FQM	DDC	88.
AE08031	122.20	123.10	1900.0	6300.0	230.0	6.1	10.0	20.0	13.0	17.0	21.0	<1.0	4.0	2361.0	FOS	DDC	96.
AE08032	123.10	124.00	1300.0	416.0	225.0	<0.5	5.0	15.0	14.0	<5.0	9.0	<1.0	3.0	2388.0	PSW	DCP	65.
AE08033	124.00	124.40	1900.0	228.0	319.0	<0.5	<5.0	19.0	13.0	8.0	10.0	<1.0	4.0	3190.0	PSW	DBP	42.
AE08034	124.40	125.30	1100.0	33.0	237.0	<0.5	<5.0	15.0	10.0	9.0	6.0	<1.0	4.0	2383.0	PSW	DBP	12.
AE08035	125.30	126.00	950.0	2452.0	244.0	0.5	<5.0	14.0	9.0	<5.0	9.0	<1.0	4.0	2417.0	FOS	DCC	91.
AE08036	141.00	141.30	1100.0	117.0	686.0	<0.5	30.0	19.0	11.0	112.0	34.0	<1.0	19.0	2593.0	FQM	DDP	15.
AE08037	148.30	148.80	970.0	6800.0	313.0	5.3	35.0	18.0	14.0	74.0	21.0	<1.0	39.0	592.0	PQS	DCP	96.
AE08038	148.80	149.80	960.0	951.0	109.0	0.6	25.0	13.0	10.0	65.0	10.0	<1.0	18.0	575.0	PQS	DDP	90.
AE08039	149.80	150.30	920.0	1189.0	647.0	2.2	30.0	16.0	15.0	97.0	19.0	1.0	17.0	1042.0	FOS	DDP	65.
AE08040	151.10	152.10	2900.0	213.0	466.0	<0.5	25.0	13.0	14.0	127.0	22.0	1.0	18.0	1476.0	FOS	DCP	31.
AE08041	155.00	156.00	1900.0	238.0	178.0	0.7	45.0	19.0	15.0	51.0	9.0	<1.0	33.0	1139.0	PQS	DDP	57.
AE08042	156.00	157.00	780.0	1595.0	29.0	2.2	35.0	22.0	13.0	29.0	7.0	<1.0	40.0	389.0	PQS	DDP	98.
AE08043	157.00	158.00	650.0	3800.0	390.0	3.6	40.0	20.0	5.0	118.0	19.0	1.0	19.0	197.0	PQS	DDP	91.
AE08044	158.00	159.00	740.0	2350.0	48.0	1.5	30.0	16.0	8.0	31.0	10.0	<1.0	23.0	583.0	PQS	DDP	98.
AE08045	159.00	160.00	550.0	2624.0	529.0	2.5	40.0	18.0	8.0	35.0	12.0	2.0	24.0	250.0	PQS	DDP	83.
AE08046	160.00	161.00	770.0	427.0	54.0	<0.5	20.0	17.0	6.0	43.0	<5.0	<1.0	7.0	380.0	PQS	DDP	89.
AE08047	161.00	162.00	770.0	2000.0	28.0	2.7	35.0	32.0	7.0	44.0	16.0	<1.0	6.0	354.0	PQS	DCC	99.
AE08048	162.00	162.60	520.0	3500.0	2.0	2.9	30.0	46.0	7.0	30.0	16.0	<1.0	4.0	85.0	FQM	DCC	100.
AE08049	162.60	163.20	420.0	9800.0	50.0	6.4	55.0	53.0	9.0	56.0	49.0	<1.0	7.0	329.0	PQS	VDC	99.
AE08050	163.20	163.30	920.0	3700.0	126.0	2.0	15.0	25.0	13.0	25.0	6.0	<1.0	5.0	1164.0	FQM	DCC	97.
AE08051	163.30	164.30	850.0	3100.0	36.0	2.8	30.0	37.0	11.0	31.0	15.0	<1.0	6.0	455.0	PQS	DCC	99.
AE08052	164.30	164.90	840.0	3900.0	103.0	3.6	80.0	41.0	12.0	34.0	49.0	<1.0	18.0	667.0	PQS	DDP	97.

**DIAMOND DRILL CORE LITHOGEOCHEMICAL RECORD
(MINOR ELEMENTS)**

SAMPLE NUMBER	FROM	TO	BA (ppm)	CU (ppm)	ZN (ppm)	AG (ppm)	AU (ppb)	CO (ppm)	NI (ppm)	PB (ppm)	AS (ppm)	CD (ppm)	MO (ppm)	MN (ppm)	ALIE	MINE	CUZN
AE08053	179.70	180.70	500.0	767.0	298.0	<0.5	15.0	19.0	17.0	239.0	21.0	<1.0	7.0	1881.0	FQS	DCP	72.
AE08054	180.70	181.70	480.0	179.0	272.0	<0.5	10.0	16.0	20.0	87.0	22.0	<1.0	5.0	2402.0	FQS	DCP	40.
AE08055	181.70	182.70	550.0	63.0	216.0	<0.5	10.0	15.0	14.0	113.0	22.0	<1.0	6.0	1690.0	FQS	DCP	23.
AE08056	182.70	183.10	580.0	1935.0	697.0	1.0	15.0	14.0	14.0	29.0	13.0	3.0	15.0	913.0	FQS	DCP	74.
AE08057	183.10	184.10	470.0	53.0	11.0	<0.5	45.0	35.0	7.0	56.0	30.0	<1.0	40.0	183.0	FQS	DDP	83.
AE08058	187.10	188.10	490.0	153.0	166.0	<0.5	70.0	16.0	11.0	35.0	25.0	<1.0	15.0	1279.0	FQS	DCP	48.
AE08059	188.10	189.80	450.0	633.0	154.0	<0.5	20.0	16.0	11.0	34.0	15.0	<1.0	18.0	924.0	FQS	DCP	80.
AE08060	245.80	246.50	740.0	238.0	403.0	<0.5	10.0	18.0	19.0	22.0	6.0	<1.0	6.0	3253.0	FQS	DCP	37.
AE08061	246.50	247.00	680.0	622.0	123.0	<0.5	10.0	16.0	14.0	22.0	13.0	<1.0	5.0	1291.0	FQS	DDP	83.
AE08062	248.30	249.00	820.0	3000.0	156.0	2.4	20.0	18.0	19.0	20.0	9.0	<1.0	7.0	1643.0	FQS	DDP	95.
AE08063	249.00	249.60	650.0	1347.0	174.0	<0.5	10.0	15.0	15.0	20.0	16.0	<1.0	7.0	1788.0	FQS	DDP	89.
AE08064	262.60	263.30	200.0	62.0	266.0	<0.5	25.0	22.0	14.0	37.0	30.0	<1.0	42.0	2253.0	FQS	DDP	19.
AE08065	278.30	278.90	250.0	135.0	2046.0	0.5	45.0	30.0	10.0	40.0	37.0	10.0	49.0	1263.0	FQM	DDP	6.
AE08066	278.90	279.90	200.0	49.0	547.0	<0.5	10.0	11.0	14.0	17.0	9.0	1.0	16.0	2343.0	FQM	DCP	8.
AE08067	285.80	286.60	170.0	53.0	1553.0	<0.5	15.0	7.0	7.0	51.0	<5.0	7.0	18.0	1435.0	FQS	DCP	3.

**DIAMOND DRILL CORE LITHOGEOCHEMICAL RECORD
(MINOR ELEMENTS)**

SAMPLE NUMBER	FROM	TO	BA (ppm)	CU (ppm)	ZN (ppm)	AG (ppm)	AU (ppb)	CO (ppm)	NI (ppm)	PB (ppm)	AS (ppm)	CD (ppm)	MO (ppm)	MN (ppm)	ALTE	MINE	CUZN
AE08068	20.60	21.60	760.0	939.0	523.0	1.6	55.0	19.0	20.0	88.0	19.0	1.0	3.0	2640.0	PQM	VDX	64.
AE08069	26.60	27.40	1400.0	945.0	633.0	1.8	15.0	4.0	6.0	296.0	<5.0	4.0	1.0	206.0	PBS	VCC	60.
AE08070	36.30	37.30	810.0	3500.0	8600.0	3.5	45.0	12.0	19.0	580.0	16.0	52.0	4.0	1165.0	PQM	SDA	29.
AE08071	39.20	40.00	790.0	3500.0	12700.0	5.3	65.0	30.0	25.0	365.0	50.0	95.0	7.0	1086.0	PQM	SDA	22.
AE08072	49.40	49.90	770.0	304.0	2965.0	<0.5	5.0	16.0	20.0	220.0	8.0	13.0	2.0	2842.0	PQS	VDA	9.
AE08073	56.60	57.60	3200.0	351.0	416.0	<0.5	15.0	22.0	18.0	37.0	22.0	<1.0	6.0	3007.0	PQM	DDA	46.
AE08074	145.30	146.00	460.0	72.0	178.0	0.5	10.0	9.0	4.0	42.0	<5.0	<1.0	4.0	210.0	PBS	VDP	29.
AE08075	146.00	146.70	340.0	39.0	118.0	0.7	15.0	11.0	3.0	36.0	7.0	<1.0	31.0	222.0	PQS	VDP	25.
AE08076	147.10	148.00	410.0	45.0	47.0	0.9	10.0	10.0	2.0	105.0	5.0	<1.0	14.0	360.0	PQS	VDP	49.
AE08077	148.90	149.90	610.0	58.0	891.0	<0.5	15.0	21.0	6.0	45.0	22.0	4.0	20.0	493.0	PQS	VDP	6.
AE08078	163.60	164.50	580.0	2800.0	423.0	0.7	9.0	22.0	21.0	19.0	<5.0	<1.0	2.0	3718.0	PQM	DDP	87.
AE08079	171.50	172.20	740.0	2895.0	151.0	0.8	20.0	26.0	18.0	21.0	11.0	<1.0	13.0	1726.0	PQM	DEA	95.
AE08080	172.20	173.10	720.0	1537.0	105.0	<0.5	20.0	35.0	12.0	29.0	22.0	<1.0	17.0	1016.0	PQM	DEA	94.
AE08081	192.20	193.20	480.0	2781.0	728.0	<0.5	15.0	13.0	13.0	112.0	<5.0	2.0	14.0	3437.0	PQM	DCP	79.
AE08082	207.50	208.20	630.0	297.0	261.0	<0.5	15.0	17.0	17.0	33.0	<5.0	<1.0	1.0	2308.0	PQM	DCP	53.
AE08083	223.10	223.80	1600.0	135.0	1863.0	<0.5	260.0	11.0	4.0	54.0	10.0	11.0	7.0	1661.0	PQM	VDA	7.
AE08084	225.80	226.70	890.0	1061.0	5900.0	2.6	30.0	9.0	6.0	299.0	7.0	31.0	11.0	1544.0	PQM	VCP	15.
AE08085	230.00	230.80	5400.0	22.0	228.0	<0.5	20.0	14.0	6.0	50.0	11.0	<1.0	16.0	2853.0	PQM	VCP	9.
AE08086	247.20	248.00	610.0	11.0	116.0	<0.5	40.0	9.0	4.0	13.0	<5.0	<1.0	6.0	1179.0	PQM	DCP	9.
AE08087	250.80	252.00	740.0	10.0	246.0	<0.5	10.0	11.0	4.0	17.0	7.0	2.0	25.0	1127.0	PQM	DDP	4.
AE08088	276.80	277.60	730.0	381.0	214.0	<0.5	10.0	13.0	6.0	21.0	<5.0	<1.0	3.0	2539.0	PEW	DCP	64.

**DIAMOND DRILL CORE LITHOGEOCHEMICAL RECORD
(MINOR ELEMENTS)**

SAMPLE NUMBER	FROM	TO	BA (ppm)	CU (ppm)	ZN (ppm)	AG (ppm)	AU (ppb)	CO (ppm)	NI (ppm)	PB (ppm)	AS (ppm)	CD (ppm)	MO (ppm)	MN (ppm)	ALIE	MINE	CUZN
AE08090	30.70	31.70	1400.0	913.0	887.0	3.0	50.0	16.0	7.0	92.0	52.0	4.0	58.0	910.0	PQM	DCP	51.
AE08089	32.10	33.10	3600.0	14.0	139.0	<0.5	80.0	23.0	12.0	32.0	46.0	<1.0	10.0	1573.0	PQM	DCP	9.
AE08091	35.10	36.20	3200.0	43.0	926.0	<0.5	30.0	19.0	7.0	300.0	56.0	4.0	10.0	1134.0	PQM	DCP	4.
AE08092	36.90	37.80	2700.0	3500.0	20400.0	6.4	30.0	29.0	11.0	16500.0	86.0	156.0	6.0	602.0	PQM	DCX	15.
AE08093	37.80	38.70	2900.0	4500.0	26200.0	8.3	30.0	22.0	8.0	20400.0	73.0	226.0	6.0	647.0	PQM	DCX	15.
AE08094	56.00	57.00	3600.0	112.0	1121.0	<0.5	5.0	20.0	20.0	354.0	22.0	5.0	1.0	3144.0	PQM	DCP	9.
AE08095	83.90	84.90	460.0	44.0	881.0	<0.5	15.0	31.0	33.0	62.0	31.0	5.0	11.0	2475.0	PQM	DCP	5.
AE08096	103.40	104.30	540.0	139.0	953.0	<0.5	15.0	24.0	17.0	87.0	16.0	3.0	4.0	4632.0	SEW	DCP	13.
AE08097	131.70	132.70	320.0	145.0	252.0	<0.5	10.0	15.0	15.0	29.0	13.0	<1.0	3.0	2542.0	PQM	DCX	37.
AE08098	244.30	245.20	930.0	526.0	147.0	<0.5	5.0	10.0	9.0	23.0	<5.0	<1.0	1.0	1758.0	PQM	DCX	78.
AE08099	245.80	246.80	670.0	40.0	151.0	<0.5	<5.0	10.0	13.0	11.0	<5.0	<1.0	1.0	2023.0	PQM	DCX	21.
AE08100	254.40	255.40	850.0	175.0	42.0	<0.5	25.0	25.0	8.0	23.0	23.0	<1.0	3.0	462.0	PQM	DCP	81.
AE08101	256.50	257.50	490.0	24.0	51.0	0.6	25.0	33.0	4.0	24.0	11.0	<1.0	38.0	431.0	PQM	DCP	32.
AE08102	263.70	265.00	810.0	701.0	102.0	<0.5	10.0	8.0	8.0	13.0	<5.0	<1.0	4.0	1461.0	PQM	DCP	87.
AE08103	277.60	278.60	570.0	11500.0	108.0	4.4	40.0	10.0	6.0	27.0	16.0	<1.0	38.0	899.0	PQS	DDX	99.
AE08104	281.90	282.90	140.0	454.0	90.0	<0.5	15.0	9.0	7.0	19.0	7.0	<1.0	19.0	1149.0	PQM	DCX	83.

DIAMOND DRILL CORE LITHOGEOCHEMICAL RECORD
(MINOR ELEMENTS)

SAMPLE NUMBER	FROM	TO	BA (ppm)	CU (ppm)	ZN (ppm)	AG (ppm)	AU (ppb)	CO (ppm)	NI (ppm)	PB (ppm)	AS (ppm)	CD (ppm)	MO (ppm)	MN (ppm)	ALTE	MINE	CUZN
AE08105	145.90	146.80	280.0	49.0	309.0	<0.5	10.0	19.0	19.0	142.0	<5.0	9.0	<1.0	2398.0	PQW	DCP	14.
AE08106	155.10	156.20	620.0	393.0	259.0	<0.5	15.0	16.0	16.0	35.0	9.0	5.0	11.0	2746.0	PQW	DCP	60.

**DIAMOND DRILL CORE LITHOGEOCHEMICAL RECORD
(MINOR ELEMENTS)**

SAMPLE NUMBER	FROM	TO	BA (ppm)	CU (ppm)	ZN (ppm)	AG (ppm)	AU (ppb)	CO (ppm)	NI (ppm)	PB (ppm)	AS (ppm)	CD (ppm)	MO (ppm)	MN (ppm)	ALIE	MINE	CUZN
AE08107	28.30	29.10	700.0	559.0	253.0	<0.5	25.0	15.0	15.0	17.0	9.0	7.0	7.0	3312.0	PQM	DCP	69.
AE08108	44.60	45.60	1500.0	747.0	1598.0	<0.5	<5.0	16.0	16.0	64.0	6.0	<1.0	1.0	3898.0	PQM	DCP	32.
AE08109	45.90	47.00	910.0	635.0	723.0	<0.5	10.0	15.0	13.0	60.0	6.0	<1.0	6.0	2907.0	PQM	DCP	47.
AE08110	47.60	48.20	850.0	1276.0	1376.0	<0.5	5.0	19.0	10.0	15.0	13.0	<1.0	1.0	4328.0	PQM	DCP	48.
AE08111	89.70	90.70	390.0	97.0	354.0	<0.5	<5.0	11.0	11.0	102.0	10.0	<1.0	3.0	2020.0	PQM	DCP	22.
AE08112	92.30	93.30	690.0	8.0	188.0	<0.5	5.0	17.0	17.0	11.0	6.0	<1.0	2.0	2164.0	PQM	DCP	4.
AE08113	93.50	94.50	530.0	12.0	209.0	<0.5	10.0	17.0	16.0	25.0	27.0	<1.0	9.0	2123.0	PQM	DCP	5.
AE08114	103.50	104.50	360.0	79.0	139.0	<0.5	<5.0	14.0	16.0	78.0	6.0	<1.0	<1.0	1820.0	*	AA	36.
AE08115	142.10	143.20	310.0	14.0	217.0	<0.5	15.0	21.0	31.0	22.0	13.0	<1.0	3.0	3824.0	PQM	DCP	6.
AE08116	164.80	165.80	660.0	23.0	140.0	<0.5	20.0	13.0	18.0	15.0	13.0	<1.0	5.0	1857.0	PQM	DDA	14.
AE08117	165.80	166.80	140.0	60.0	86.0	<0.5	5.0	6.0	8.0	9.0	9.0	<1.0	4.0	1220.0	PQM	DDA	41.
AE08118	167.10	168.10	550.0	1049.0	89.0	0.6	15.0	12.0	11.0	20.0	13.0	<1.0	7.0	1189.0	PQM	DDA	92.
AE08119	168.10	169.30	610.0	11.0	130.0	<0.5	<5.0	8.0	12.0	6.0	7.0	<1.0	5.0	1669.0	PQM	DDA	8.
AE08120	169.30	170.30	600.0	10.0	144.0	<0.5	20.0	14.0	15.0	15.0	15.0	<1.0	13.0	1694.0	PQM	DDA	6.
AE08121	188.20	189.20	960.0	8.0	24.0	<0.5	65.0	42.0	16.0	17.0	21.0	<1.0	9.0	353.0	PQS	DDP	25.
AE08122	189.20	190.20	620.0	9.0	6.0	<0.5	40.0	65.0	15.0	22.0	31.0	<1.0	6.0	78.0	PQS	DDP	60.
AE08123	190.50	191.50	480.0	333.0	37.0	0.9	15.0	19.0	12.0	15.0	19.0	<1.0	18.0	525.0	PQS	DDP	90.
AE08124	191.50	193.40	440.0	222.0	148.0	<0.5	15.0	18.0	21.0	32.0	19.0	<1.0	12.0	1523.0	PQS	DDP	60.
AE08125	197.20	198.20	720.0	882.0	163.0	<0.5	15.0	21.0	20.0	33.0	13.0	<1.0	5.0	2226.0	PQM	SCP	84.
AE08126	214.00	215.00	870.0	31.0	198.0	<0.5	5.0	21.0	26.0	10.0	<5.0	<1.0	3.0	3294.0	PQM	DDP	14.
AE08127	219.20	220.50	700.0	8.0	199.0	<0.5	5.0	15.0	12.0	12.0	13.0	<1.0	4.0	3394.0	PQM	DCP	4.
AE08128	262.70	263.90	520.0	304.0	171.0	<0.5	20.0	13.0	4.0	30.0	21.0	<1.0	25.0	1661.0	PQM	DDP	64.

**DIAMOND DRILL CORE LITHOGEOCHEMICAL RECORD
(MINOR ELEMENTS)**

SAMPLE NUMBER	FROM	TO	BA (ppm)	CU (ppm)	ZN (ppm)	AG (ppm)	AU (ppb)	CO (ppm)	NI (ppm)	PR (ppm)	AS (ppm)	CD (ppm)	MO (ppm)	MN (ppm)	ALIE	MINE	CUZN
AE08129	27.20	28.20	2700.0	2500.0	79.0	4.1	75.0	13.0	8.0	112.0	103.0	<1.0	8.0	762.0	PQM	DDA	97.
AE08130	48.10	49.10	560.0	211.0	576.0	0.6	30.0	14.0	11.0	902.0	30.0	3.0	6.0	1727.0	PQS	BCP	27.
AE08131	109.00	110.00	580.0	815.0	150.0	<0.5	5.0	10.0	8.0	34.0	15.0	<1.0	1.0	1938.0	PQM	DCP	84.
AE08132	126.10	127.10	790.0	14300.0	248.0	13.7	30.0	23.0	12.0	32.0	19.0	<1.0	5.0	2369.0	PQM	DDA	98.
AE08133	134.60	135.60	810.0	2900.0	9900.0	4.9	15.0	18.0	11.0	154.0	18.0	57.0	2.0	1182.0	PQM	DDA	23.
AE08134	136.00	137.00	850.0	900.0	15900.0	2.6	10.0	14.0	12.0	239.0	13.0	92.0	1.0	1766.0	PQM	DDA	5.
AE08135	146.40	147.40	3400.0	412.0	370.0	1.2	20.0	14.0	15.0	52.0	12.0	1.0	13.0	1374.0	PQS	DDA	53.
AE08136	147.40	148.70	880.0	655.0	6800.0	2.3	40.0	13.0	12.0	119.0	21.0	40.0	29.0	874.0	PQS	DDA	9.
AE08137	148.70	149.70	900.0	1314.0	13600.0	3.1	20.0	10.0	8.0	174.0	15.0	83.0	5.0	465.0	PQS	DDA	9.
AE08138	149.70	150.70	1100.0	404.0	4900.0	1.6	20.0	11.0	7.0	151.0	13.0	30.0	4.0	613.0	PQS	DDA	8.
AE08139	150.70	151.70	900.0	87.0	3800.0	1.4	70.0	10.0	7.0	173.0	21.0	24.0	9.0	804.0	PQS	DDA	2.
AE08140	165.40	166.40	700.0	108.0	257.0	<0.5	15.0	22.0	11.0	18.0	28.0	<1.0	6.0	1918.0	PQS	DCP	30.
AE08141	169.80	170.80	690.0	236.0	176.0	<0.5	15.0	15.0	13.0	19.0	33.0	<1.0	10.0	1383.0	PQS	DDA	57.
AE08142	184.00	185.00	680.0	216.0	1981.0	<0.5	<5.0	17.0	31.0	31.0	19.0	12.0	2.0	1845.0	PQM	DCP	10.
AE08143	198.80	200.80	500.0	3700.0	195.0	4.0	<5.0	15.0	14.0	18.0	13.0	<1.0	2.0	1198.0	PQS	DCC	95.
AE08144	225.00	226.00	430.0	227.0	1094.0	<0.5	5.0	21.0	12.0	32.0	12.0	4.0	2.0	1851.0	PQM	DDA	17.
AE08145	286.40	287.50	2000.0	973.0	375.0	0.5	15.0	23.0	21.0	39.0	15.0	<1.0	6.0	2415.0	PQM	BCP	72.
AE08146	289.10	290.10	2800.0	2448.0	178.0	2.3	35.0	28.0	21.0	51.0	21.0	<1.0	8.0	2008.0	PQM	DCP	93.

**DIAMOND DRILL CORE LITHOGEOCHEMICAL RECORD
(MINOR ELEMENTS)**

SAMPLE NUMBER	FROM	TO	BA (ppm)	CU (ppm)	ZN (ppm)	AG (ppm)	AU (ppb)	CO (ppm)	NI (ppm)	PB (ppm)	AS (ppm)	CD (ppm)	MO (ppm)	MN (ppm)	ALTE	MINE	CUZN
AE08147	42.60	43.40	720.0	2.0	34.0	<0.5	<5.0	1.0	5.0	7.0	<5.0	<1.0	7.0	538.0	PQS	DCP	6.
AE08148	76.40	77.40	540.0	2800.0	2644.0	4.7	85.0	7.0	4.0	847.0	17.0	23.0	56.0	403.0	PQS	DDP	51.
AE08149	78.40	79.40	730.0	756.0	398.0	0.7	10.0	4.0	1.0	113.0	7.0	2.0	26.0	689.0	PQS	DDP	66.
AE08150	79.40	80.40	1100.0	339.0	2808.0	0.7	15.0	9.0	3.0	998.0	13.0	23.0	52.0	731.0	PQS	DDP	11.
AE08155	89.70	90.80	470.0	1427.0	1907.0	1.5	45.0	6.0	5.0	66.0	16.0	11.0	30.0	892.0	PQM	VCA	43.
AE08156	94.00	95.20	630.0	505.0	2354.0	<0.5	35.0	2.0	2.0	43.0	<5.0	15.0	9.0	1094.0	PQS	DCP	18.
AE08157	116.30	117.30	570.0	1421.0	2877.0	1.1	15.0	4.0	2.0	90.0	<5.0	18.0	20.0	426.0	PQS	DCA	33.
AE08158	135.10	136.10	650.0	5200.0	20400.0	3.1	50.0	15.0	14.0	60.0	23.0	120.0	36.0	1115.0	PQS	DEA	20.
AE08159	180.80	181.80	550.0	4800.0	26400.0	3.4	60.0	15.0	14.0	61.0	17.0	147.0	32.0	1093.0	PQS	DCA	15.
AE08160	183.70	184.70	610.0	756.0	400.0	0.7	15.0	3.0	5.0	14.0	6.0	1.0	15.0	193.0	PQS	DCA	65.
AE08161	223.00	224.30	420.0	79.0	176.0	<0.5	20.0	17.0	7.0	26.0	24.0	<1.0	34.0	1251.0	PQM	DDP	31.
AE08162	225.70	226.70	700.0	40.0	99.0	<0.5	15.0	15.0	8.0	22.0	17.0	<1.0	11.0	1195.0	PQM	DDP	29.
AE08163	238.50	239.40	580.0	24.0	123.0	<0.5	15.0	41.0	13.0	39.0	24.0	<1.0	6.0	1517.0	PQM	DDP	16.
AE08164	239.40	240.00	590.0	13.0	108.0	<0.5	5.0	43.0	14.0	24.0	27.0	<1.0	2.0	1513.0	PQM	DDP	11.
AE08165	240.80	241.60	890.0	862.0	110.0	<0.5	5.0	28.0	16.0	18.0	20.0	<1.0	7.0	1451.0	PQM	DDP	89.
AE08166	241.60	242.60	1100.0	649.0	82.0	<0.5	<5.0	29.0	14.0	27.0	16.0	<1.0	4.0	1090.0	PQM	DDP	89.
AE08167	251.50	252.30	1200.0	7100.0	321.0	8.0	15.0	17.0	23.0	30.0	17.0	<1.0	3.0	2940.0	PQM	DEA	96.
AE08168	282.10	283.20	590.0	715.0	449.0	<0.5	15.0	17.0	16.0	20.0	36.0	<1.0	17.0	1655.0	PQS	DEP	61.
AE08169	287.60	288.50	870.0	655.0	7600.0	1.5	580.0	14.0	16.0	360.0	14.0	54.0	9.0	1901.0	PQM	DDA	8.
AE08170	288.50	289.50	640.0	143.0	1677.0	3.0	20.0	15.0	16.0	747.0	23.0	14.0	11.0	2179.0	PQM	DDA	8.
AE08171	290.80	291.70	240.0	118.0	1100.0	2.1	110.0	15.0	4.0	183.0	40.0	4.0	37.0	144.0	PQS	DEA	10.
AE08172	291.70	292.50	240.0	27.0	476.0	1.5	160.0	18.0	11.0	218.0	49.0	<1.0	26.0	602.0	PQS	DEA	5.
AE08173	292.50	293.20	350.0	17.0	2847.0	1.2	120.0	23.0	9.0	280.0	49.0	12.0	10.0	965.0	PQS	DEA	1.
AE08174	297.00	297.80	380.0	61.0	100.0	<0.5	40.0	20.0	4.0	45.0	37.0	<1.0	10.0	129.0	PQM	DDP	38.
AE08175	297.80	298.80	490.0	325.0	143.0	<0.5	15.0	12.0	6.0	27.0	20.0	<1.0	12.0	598.0	PQM	DDP	69.

**DIAMOND DRILL CORE LITHOGEOCHEMICAL RECORD
(MINOR ELEMENTS)**

SAMPLE NUMBER	FROM	TO	BA (ppm)	CU (ppm)	ZN (ppm)	AG (ppm)	AU (ppb)	CO (ppm)	NI (ppm)	PB (ppm)	AS (ppm)	CD (ppm)	MO (ppm)	MN (ppm)	ALIE	MINE	CUZN
AE08176	304.10	304.90	710.0	51.0	56.0	<0.5	25.0	15.0	5.0	28.0	34.0	<1.0	21.0	227.0	PQH	DEP	48.
AE08177	314.00	315.00	790.0	1735.0	78.0	<0.5	20.0	30.0	7.0	29.0	37.0	<1.0	23.0	469.0	PGS	DEA	96.
AE08178	315.00	316.00	540.0	17800.0	104.0	4.8	70.0	24.0	7.0	32.0	33.0	<1.0	31.0	702.0	PGS	DEA	99.

APPENDIX 6

MAJOR OXIDE AND TRACE ELEMENT ANALYTICAL RESULTS

**LITHOGEOCHEMICAL RECORD
(MAJOR ELEMENTS)**

SAMPLE NUMBER	XSI02	XAL203	XCA0	XMG0	XNA20	XK20	XFE203	XTI02	XP205	XMNO	XL01	SUM	CU	ZN	BA
AD02951	76.40	12.20	0.02	0.39	0.19	7.96	0.69	0.10	0.03	0.02	1.00	99.00	<10.	20.	5200.
AD02952	76.60	13.00	0.02	0.91	0.17	4.99	1.34	0.28	0.06	0.01	2.47	99.85	<10.	16.	1550.
AD02953	72.20	11.80	0.10	3.87	0.04	3.73	3.92	0.58	0.13	0.14	3.54	100.05	80.	147.	1590.
AD02954	58.30	16.50	0.16	6.24	0.08	5.77	6.36	0.78	0.18	0.33	4.85	99.55	27.	328.	3110.
AD02955	76.80	13.20	0.04	0.95	0.15	4.39	1.40	0.28	0.05	0.02	2.70	99.98	<10.	18.	1200.
AD02956	67.10	14.80	0.15	3.66	0.36	5.66	3.86	0.67	0.16	0.19	3.23	99.84	21.	106.	3750.
AD02957	84.80	7.22	0.09	0.70	0.01	2.07	1.73	0.31	0.18	0.04	1.85	99.00	85.	44.	541.
AD02958	56.10	17.70	0.20	6.78	1.08	5.02	7.17	0.81	0.19	0.42	4.62	100.09	25.	212.	3100.
AD02959	78.70	11.30	0.06	0.71	2.73	4.43	1.09	0.10	0.03	0.05	0.77	99.97	<10.	23.	1580.
AD02960	58.00	18.50	0.18	5.04	0.93	6.17	5.41	0.83	0.19	0.33	4.23	99.81	84.	139.	2610.
AD02961	63.60	16.10	0.19	3.33	0.22	8.92	3.38	0.71	0.18	0.23	2.54	99.40	<10.	94.	4780.
AD02962	44.90	18.10	5.33	6.93	2.12	4.54	7.95	1.03	0.27	0.48	7.23	98.88	41.	614.	2520.
AD02963	53.50	17.30	0.37	7.09	0.13	7.90	7.06	0.85	0.32	0.30	4.39	99.21	186.	197.	3640.
AD02964	81.60	9.39	0.04	0.28	1.03	5.23	0.89	0.10	0.03	0.02	0.85	99.46	<10.	32.	3520.
AD02965	84.10	8.53	0.04	1.25	0.07	2.27	0.95	0.30	0.08	0.03	1.85	99.47	<10.	26.	526.
AD02966	69.10	11.80	0.06	3.68	0.12	6.45	4.43	0.55	0.13	0.21	3.00	99.53	44.	116.	3780.
AD02967	59.60	16.70	0.19	5.63	0.51	7.75	4.49	0.76	0.18	0.33	3.39	99.53	296.	149.	3500.
AD02968	72.30	11.80	0.12	0.54	0.11	6.20	3.74	0.54	0.16	0.02	3.00	98.53	515.	1090.	2450.
AD02969	58.70	16.70	0.21	6.64	1.49	4.42	6.23	0.78	0.19	0.39	4.08	99.83	185.	175.	1830.
AD02970	77.80	12.00	0.05	0.32	2.28	5.79	0.85	0.11	0.02	0.08	0.77	100.07	73.	44.	2100.
AD02971	98.30	0.23	0.14	0.01	<0.01	0.06	0.15	0.06	0.02	<0.01	0.08	99.06	21.	<10.	87.
AD02972	52.30	18.80	0.33	10.00	2.32	2.91	6.39	0.88	0.20	0.33	5.39	99.85	183.	274.	1410.
AD02973	61.30	15.90	0.22	4.77	0.19	7.01	5.12	0.75	0.18	0.28	3.70	99.42	133.	131.	3790.
AD02974	59.10	19.10	0.12	4.12	1.05	5.15	6.09	0.76	0.15	0.18	4.62	100.44	87.	96.	660.
AD02975	59.20	17.80	0.05	3.35	0.17	9.02	5.80	0.73	0.08	0.17	3.47	99.84	69.	106.	3130.

**LITHOGEOCHEMICAL RECORD
(MAJOR ELEMENTS)**

SAMPLE NUMBER	XSI02	XAL203	XCAO	XMG0	XNA20	XK20	XFE203	XII02	XP205	XMN0	XLOI	SUM	CU	ZN	BA
AD02976	87.90	6.33	0.04	0.45	0.05	1.97	0.93	0.22	0.05	0.02	1.47	99.43	33.	26.	621.
AD02977	59.80	15.80	0.20	6.78	1.69	3.20	6.55	0.75	0.17	0.34	4.39	99.67	86.	151.	1280.
AD02978	71.50	12.40	2.69	1.45	3.56	1.85	3.09	0.23	0.04	0.18	2.93	99.92	74.	119.	671.
AD02979	63.10	16.40	3.39	1.42	3.45	3.05	4.71	0.70	0.27	0.16	3.70	100.35	46.	72.	657.
AD02980	86.20	8.21	0.03	0.64	0.04	2.83	0.45	0.29	0.03	0.01	1.47	100.20	13.	15.	1210.
AD02981	87.40	8.00	0.03	0.39	0.02	2.36	0.32	0.27	0.02	<0.01	1.54	100.35	<10.	11.	479.
AD02982	69.30	14.90	0.31	2.96	1.86	4.45	3.09	0.38	0.10	0.13	2.54	100.02	48.	73.	1620.
AD02983	60.60	16.70	0.20	5.94	0.38	4.77	5.09	0.78	0.22	0.30	5.16	100.14	37.	152.	2400.
AD02984	51.50	20.00	0.40	7.79	0.41	4.42	7.50	0.86	0.33	0.60	6.00	99.81	71.	277.	954.
AD02985	53.90	17.40	0.48	10.20	2.70	1.42	7.42	0.85	0.29	0.27	5.39	100.32	49.	175.	279.
AD02986	66.20	17.20	0.72	2.99	7.31	0.97	1.75	0.77	0.18	0.07	2.00	100.16	26.	56.	221.
AD02987	59.30	19.40	0.15	4.63	0.26	5.52	4.39	0.88	0.20	0.11	5.16	100.00	21.	176.	894.
AD02988	54.30	19.10	0.29	7.36	2.28	3.34	6.90	0.88	0.21	0.29	5.16	100.11	41.	177.	864.
AD02989	89.00	6.89	0.03	0.51	0.02	2.11	0.37	0.12	0.02	0.01	1.39	100.47	<10.	11.	527.
AD02990	61.20	16.60	0.12	2.25	2.04	6.30	5.79	0.81	0.21	0.11	4.31	99.74	99.	140.	2850.
AD02991	57.00	16.80	0.30	7.71	3.89	0.86	7.86	0.74	0.19	0.33	4.47	100.15	18.	239.	280.
AD02992	61.60	17.40	0.34	4.09	2.47	4.27	4.84	0.85	0.28	0.22	3.93	100.29	19.	120.	1520.
AD02993	60.00	17.50	0.46	4.98	2.28	3.65	5.67	0.83	0.28	0.29	4.16	100.10	26.	151.	1170.
AD02994	67.40	15.20	0.82	2.89	3.89	3.06	3.48	0.42	0.12	0.11	2.54	99.93	18.	49.	957.
AD02995	69.40	14.90	0.37	2.59	3.95	2.60	3.24	0.42	0.12	0.09	2.47	100.15	<10.	48.	798.
AD02996	69.00	15.00	0.53	2.56	5.49	1.86	2.99	0.49	0.15	0.16	1.85	100.08	<10.	69.	824.
AD02997	79.80	11.80	0.05	0.55	0.45	5.15	0.58	0.19	0.04	0.02	1.39	100.02	<10.	27.	3410.
AD02998	70.30	15.90	0.52	1.29	3.85	3.26	2.24	0.44	0.15	0.14	1.85	99.94	29.	287.	1690.
AD02999	58.50	16.60	0.25	5.83	0.12	6.16	6.58	0.58	0.20	0.20	4.54	99.56	28.	132.	2350.
AD03000	56.80	18.10	0.47	4.25	1.56	5.77	7.08	0.83	0.32	0.29	4.39	99.86	34.	161.	1750.

Location: SURFACE SAMPLES

LITHOGEOCHEMICAL RECORD
(MAJOR ELEMENTS)

SAMPLE NUMBER	XS102	XAL203	XCAO	XMG0	XNA20	XK20	XFE203	XI102	XP205	XMNO	XL01	SUM	CU	ZN	BA
AD03001	52.70	16.70	0.22	11.40	0.04	2.26	9.27	0.79	0.19	0.63	6.39	100.59	39.	359.	466.
AD03002	76.60	12.50	0.07	0.69	2.58	5.32	0.79	0.11	0.02	0.04	0.93	99.65	<10.	39.	5680.
AD03003	48.80	19.30	0.27	9.34	0.10	5.72	8.99	0.88	0.25	0.65	5.77	100.07	32.	404.	3220.
AD03004	71.60	11.50	0.17	1.95	0.10	7.26	3.75	0.50	0.17	0.11	2.77	99.88	<10.	71.	2840.
AD03005	55.80	19.40	0.86	4.43	4.60	3.26	6.92	0.90	0.27	0.32	3.23	99.99	20.	173.	1540.
AD03006	70.80	12.00	0.09	2.14	0.12	6.36	3.73	0.48	0.12	0.20	2.85	98.89	<10.	55.	4270.
AD03007	58.50	17.50	0.18	5.85	0.27	7.67	4.65	0.80	0.19	0.21	3.93	99.75	11.	137.	3010.
AD03008	65.20	14.60	0.10	6.06	0.06	5.47	3.55	0.71	0.16	0.18	3.85	99.94	<10.	133.	1780.
AD03009	67.10	13.20	0.08	4.47	0.13	6.66	4.35	0.65	0.15	0.22	3.23	100.24	<10.	150.	2950.
AD03010	70.40	12.30	0.17	2.25	0.14	6.99	3.57	0.55	0.20	0.11	2.93	99.61	<10.	59.	3630.
AD03011	61.00	16.30	0.26	5.86	0.78	3.58	6.44	0.61	0.23	0.30	4.62	99.98	<10.	166.	549.
AD03012	74.20	13.50	0.50	0.74	5.17	2.38	1.95	0.22	0.06	0.08	1.16	99.96	<10.	47.	1110.
AD03013	78.40	12.20	0.05	1.87	0.05	3.69	0.88	0.19	0.04	0.07	2.54	99.98	<10.	39.	695.
AD03014	60.30	16.30	0.20	6.23	0.79	3.45	6.52	0.62	0.22	0.34	5.16	100.13	42.	194.	673.
AD03015	52.30	19.40	0.35	5.80	2.07	6.22	7.77	0.74	0.28	0.35	4.54	99.82	22.	199.	2410.
AD03016	57.50	16.50	0.28	7.45	0.11	6.12	6.32	0.65	0.24	0.36	4.16	99.69	<10.	221.	2680.
AD03017	77.70	12.40	0.05	0.66	1.47	5.58	0.76	0.11	0.02	0.03	1.08	99.86	<10.	24.	5820.
AD03018	59.10	17.00	0.18	4.81	0.14	7.75	6.00	0.64	0.20	0.27	3.77	99.86	<10.	131.	4040.
AD03019	56.80	18.30	0.40	3.82	3.48	5.54	6.41	0.62	0.26	0.27	3.85	99.75	56.	194.	2920.
AD03020	58.80	14.30	0.30	6.91	0.53	4.51	8.60	0.65	0.18	0.45	4.70	99.93	42.	357.	2680.
AD03021	53.50	17.60	0.33	10.40	3.17	1.15	7.45	0.87	0.17	0.26	5.31	100.21	<10.	250.	311.
AD03022	52.20	19.10	1.83	6.48	3.14	3.13	7.77	0.76	0.19	0.45	4.85	99.90	83.	165.	1370.
AD03023	56.50	17.60	0.33	6.70	0.15	5.82	6.40	0.90	0.29	0.37	4.62	99.68	<10.	149.	3730.
AD03024	73.90	13.60	0.06	1.10	1.09	6.55	1.47	0.29	0.06	0.05	1.93	100.10	<10.	27.	4130.
AD03025	57.70	15.70	0.16	7.63	0.13	6.28	6.31	0.73	0.17	0.42	4.54	99.77	24.	241.	3780.

**LITHOGEOCHEMICAL RECORD
(MAJOR ELEMENTS)**

SAMPLE NUMBER	%SI02	%AL2O3	%CAO	%MGO	%NA2O	%K2O	%FE2O3	%TI02	%P2O5	%MNO	%LOI	SUM	CU	ZN	BA
AD03026	59.00	17.10	0.21	6.41	2.57	3.60	5.56	0.81	0.19	0.38	4.23	100.06	<10.	161.	1540.
AD03027	61.00	15.80	0.22	5.73	1.56	3.25	6.41	0.77	0.18	0.53	4.39	99.84	35.	204.	959.
AD03028	59.80	15.10	0.17	5.87	1.91	4.69	6.55	0.72	0.17	0.40	4.16	99.54	<10.	159.	3060.
AD03029	80.30	10.80	0.03	1.15	0.09	3.52	1.48	0.18	0.04	0.04	2.54	100.17	<10.	29.	853.
AD03030	67.60	14.50	0.16	5.45	2.27	2.02	3.82	0.40	0.11	0.20	3.54	100.07	<10.	126.	465.
AD03031	63.60	16.30	0.31	4.67	1.68	4.71	4.35	0.64	0.22	0.12	3.70	100.30	<10.	101.	1430.
AD03032	78.60	11.10	0.10	1.27	1.13	4.36	0.89	0.10	0.02	0.07	1.39	99.03	19.	151.	11400.
AD03033	53.30	18.50	0.54	8.48	3.48	1.72	7.95	0.74	0.18	0.30	4.93	100.12	29.	223.	800.
AD03034	57.40	18.10	0.42	7.07	0.74	4.14	5.62	0.90	0.29	0.40	5.08	100.16	<10.	183.	2150.
AD03035	74.00	13.50	0.09	2.38	2.49	2.79	1.52	0.33	0.06	0.16	2.70	100.02	29.	62.	742.
AD03036	63.40	17.10	0.35	3.84	3.99	2.58	4.18	0.85	0.25	0.23	3.47	100.24	<10.	160.	815.
AD03037	75.00	12.40	0.20	1.65	4.80	1.40	2.23	0.27	0.06	0.16	1.93	100.10	<10.	55.	720.
AD03038	61.60	15.50	0.24	3.50	0.19	7.62	6.53	0.73	0.16	0.43	3.39	99.89	27.	197.	4200.
AD03039	67.60	13.70	0.37	4.27	0.20	5.39	4.63	0.49	0.17	0.31	2.93	100.06	11.	169.	3100.
AD03040	59.00	17.80	0.70	5.53	1.97	3.80	5.43	0.79	0.32	0.26	4.62	100.22	<10.	136.	906.
AD03041	55.50	16.70	0.26	6.90	1.99	2.46	9.78	0.85	0.18	0.70	4.77	100.09	38.	299.	633.
AD03042	70.30	14.90	0.19	3.53	2.08	3.29	2.45	0.41	0.11	0.16	2.93	100.35	<10.	93.	1150.
AD03043	70.60	15.00	0.20	2.44	2.65	3.42	2.28	0.39	0.11	0.10	2.62	99.81	<10.	72.	1670.
AD03044	75.20	12.70	0.07	2.15	0.17	3.77	2.34	0.23	0.07	0.05	3.16	99.91	<10.	62.	589.
AD03045	68.10	15.10	0.42	3.38	3.41	2.77	3.38	0.41	0.11	0.15	2.70	99.93	<10.	96.	1000.
AD03046	81.00	10.20	0.03	1.56	0.25	3.02	1.40	0.16	0.04	0.06	2.23	99.95	<10.	66.	563.
AD03047	71.20	14.10	0.09	4.09	0.12	3.42	2.74	0.37	0.10	0.12	3.47	99.82	<10.	72.	958.
AD03048	72.50	13.50	0.06	5.18	0.09	3.30	1.90	0.22	0.05	0.16	3.47	100.43	<10.	114.	704.
AD03049	68.60	15.20	0.70	2.81	3.30	3.43	3.01	0.42	0.11	0.10	2.39	100.07	<10.	70.	1260.
AD03050	59.60	18.10	0.42	4.31	1.40	3.92	7.00	0.78	0.29	0.22	4.16	100.20	17.	135.	746.

Location: SURFACE SAMPLES

**LITHOGEOCHEMICAL RECORD
(MAJOR ELEMENTS)**

SAMPLE NUMBER	ZSI02	ZAL203	ZCA0	ZMG0	ZNA20	ZK20	ZFE203	ZTI02	ZP205	ZMNO	ZLOI	SUM	CU	ZN	BA
AD03051	55.80	18.00	0.40	6.25	4.20	1.36	8.57	0.81	0.19	0.43	4.23	100.24	20.	391.	363.
AD03052	49.70	19.70	2.03	7.65	4.19	1.56	8.95	0.96	0.23	0.72	4.54	100.23	80.	398.	909.
AD03053	57.80	16.80	0.24	7.81	1.56	2.87	6.79	0.64	0.16	0.39	5.23	100.29	<10.	240.	792.
AD03054	56.30	18.50	0.72	5.42	2.25	5.52	6.23	0.71	0.19	0.35	3.77	99.96	26.	203.	3440.
AD03055	60.00	15.80	0.14	5.82	0.14	5.81	6.13	0.75	0.18	0.38	4.77	99.92	21.	137.	3530.
AD03056	63.40	16.40	0.09	2.92	0.20	8.79	3.34	0.76	0.18	0.11	3.70	99.89	<10.	72.	3470.
AD03058	72.20	14.60	0.17	2.63	3.06	2.97	2.05	0.33	0.08	0.12	2.23	100.44	<10.	66.	1260.
AD03059	73.50	14.80	0.15	1.53	2.17	3.93	1.27	0.20	0.04	0.07	2.16	99.82	<10.	63.	1620.
AD03060	78.80	11.10	0.05	2.40	0.67	2.93	1.09	0.17	0.03	0.08	2.47	99.79	<10.	660.	1020.
AD03061	79.20	12.40	0.03	1.19	0.24	3.85	0.75	0.18	0.04	0.03	2.31	100.22	<10.	79.	795.
AD03062	76.60	13.10	0.09	1.90	2.57	2.86	0.98	0.18	0.04	0.10	1.85	100.27	<10.	38.	985.
AD03063	75.40	13.80	0.08	1.03	3.14	3.31	1.16	0.12	0.02	0.03	1.70	99.79	<10.	37.	2280.
AD03064	53.00	19.00	0.53	7.59	3.91	1.95	8.07	0.82	0.23	0.45	4.39	99.94	51.	339.	682.
AD03065	59.20	13.80	0.17	5.69	0.15	3.35	9.83	0.61	0.15	0.32	6.77	100.04	46.	191.	654.
AD03066	53.70	18.80	0.44	6.74	2.06	3.88	8.29	0.81	0.21	0.48	4.47	99.88	17.	276.	1650.
AD03067	54.00	20.90	1.83	3.93	5.56	2.43	6.90	0.67	0.24	0.46	3.00	99.92	75.	618.	1290.
AD03068	54.00	19.30	2.98	5.51	4.16	2.55	7.08	0.70	0.19	0.24	3.31	100.02	<10.	197.	1160.
AD03069	61.30	5.12	0.17	5.18	0.71	0.21	8.79	0.14	0.05	0.29	6.23	88.19	12000.	37600.	549.
AD03070	53.60	18.50	1.70	6.37	3.36	3.54	7.71	0.73	0.19	0.47	3.70	99.87	90.	543.	3140.
AD03071	68.60	12.90	0.32	2.97	1.81	3.40	4.89	0.44	0.18	0.28	3.31	99.10	247.	4340.	1800.
AD03072	69.00	12.60	0.23	2.84	0.15	6.83	3.70	0.51	0.19	0.28	2.85	99.18	94.	268.	4120.
AD03073	74.20	12.10	0.04	0.39	0.20	7.95	1.34	0.29	0.05	0.02	1.62	98.20	<10.	50.	6660.
AD03074	76.40	11.80	0.03	0.31	0.19	7.49	1.21	0.27	0.02	0.02	1.54	99.28	<10.	58.	5990.
AD03075	62.00	16.50	0.17	1.11	0.30	10.60	4.50	0.56	0.21	0.06	3.47	99.48	11.	276.	4520.
AD03076	58.40	16.50	0.18	4.86	0.81	3.96	9.10	0.77	0.21	0.38	4.70	99.87	118.	198.	748.

**LITHOGEOCHEMICAL RECORD
(MAJOR ELEMENTS)**

SAMPLE NUMBER	%SI02	%AL2O3	%CAO	%MGO	%NA2O	%K2O	%FE2O3	%TI02	%P2O5	%MNO	%LOI	SUM	CU	ZN	BA
AD03077	57.20	21.60	0.45	2.17	1.61	7.00	4.49	0.85	0.23	0.10	4.23	99.93	10.	84.	2150.
AD03078	53.90	17.80	1.08	6.87	0.14	4.70	7.98	1.09	0.39	0.76	5.00	99.71	143.	301.	1530.
AD03079	66.70	16.40	0.29	1.48	0.86	8.17	2.55	0.65	0.25	0.07	2.54	99.96	<10.	38.	3850.
AD03080	81.40	9.04	0.04	0.72	0.04	3.08	2.59	0.27	0.05	0.02	2.23	99.48	15.	32.	664.
AD03081	64.20	15.40	0.25	4.41	0.12	7.56	3.48	0.52	0.21	0.25	3.08	99.48	<10.	138.	2750.
AD03082	50.10	16.20	2.58	8.50	0.14	4.65	9.10	1.04	0.39	1.05	4.62	98.37	33.	602.	5340.
AD03083	54.50	16.30	1.14	9.96	0.05	2.37	8.76	0.56	0.20	0.60	5.70	100.14	39.	398.	620.
AD03084	49.40	18.70	0.31	10.20	0.05	3.38	10.60	0.80	0.21	0.69	5.93	100.27	173.	332.	983.
AD03085	57.00	16.70	0.26	6.28	0.50	4.06	8.69	0.72	0.20	0.35	5.70	100.46	<10.	185.	1140.
AD03086	51.60	19.50	0.38	8.03	2.04	3.32	8.46	0.82	0.22	0.64	5.23	100.24	16.	292.	1090.
AD03087	76.30	13.00	0.06	2.67	0.12	3.86	1.25	0.17	0.04	0.12	2.62	100.21	<10.	63.	781.
AD03088	76.40	12.80	0.13	1.74	2.94	2.58	1.06	0.18	0.04	0.07	1.85	99.79	<10.	43.	952.
AD03089	74.60	12.30	0.05	0.70	0.23	6.82	1.98	0.60	0.06	0.01	2.31	99.66	<10.	93.	2570.
AD03090	70.70	14.60	0.17	2.21	3.78	3.26	2.69	0.39	0.10	0.12	2.12	100.14	<10.	67.	1090.
AD03091	57.40	18.50	0.55	6.09	2.95	2.81	6.23	0.81	0.20	0.15	4.31	100.00	14.	180.	691.
AD03092	74.80	13.30	0.05	1.13	1.81	3.38	2.18	0.47	0.09	0.02	2.62	99.85	<10.	27.	1490.
AD03093	78.70	12.30	<0.01	1.07	0.05	4.00	0.65	0.19	0.03	<0.01	2.39	99.39	<10.	20.	3780.
AD03094	53.00	17.70	2.30	8.13	5.27	0.19	7.96	0.70	0.26	0.12	4.39	100.02	24.	72.	182.
AD03095	52.00	18.00	0.30	9.94	1.85	2.55	8.28	0.82	0.19	0.25	5.70	99.88	23.	306.	953.
AD03096	55.00	17.90	0.52	7.00	4.38	1.86	8.04	0.78	0.19	0.22	3.93	99.82	45.	301.	1260.
AD03097	51.40	18.80	4.49	6.05	2.67	2.57	8.33	0.72	0.29	0.10	4.85	100.27	33.	69.	955.
AD03098	50.60	19.10	0.41	6.68	0.13	9.42	8.28	0.86	0.23	0.22	4.31	100.24	<10.	140.	2440.
AD03099	75.70	13.30	0.11	1.19	5.05	1.55	1.66	0.17	0.04	0.08	1.08	99.93	<10.	48.	579.
AD03100	50.10	20.80	1.95	6.38	3.99	2.20	9.15	0.86	0.16	0.24	4.23	100.06	<10.	175.	815.
AE08201	56.30	18.10	3.37	4.44	6.32	0.37	7.43	0.71	0.20	0.14	2.77	100.15	<10.	92.	294.

**LITHOGEOCHEMICAL RECORD
(MAJOR ELEMENTS)**

SAMPLE NUMBER	%SI02	%AL2O3	%CAO	%MGO	%NA2O	%K2O	%FE2O3	%TI02	%P2O5	%MNO	%LOI	SUM	CU	ZN	BA
AE08202	55.50	18.10	0.50	7.44	3.02	2.02	7.37	0.87	0.21	0.21	5.08	100.32	<10.	254.	545.
AE08203	76.60	13.40	0.04	1.68	0.04	4.10	1.62	0.15	0.04	0.12	2.47	100.26	<10.	50.	807.
AE08204	75.70	13.10	0.60	0.91	2.97	3.15	1.24	0.15	0.04	0.03	1.96	99.85	<10.	59.	1370.
AE08205	51.80	19.80	1.65	6.38	3.32	3.53	7.93	1.04	0.28	0.33	4.23	100.29	32.	394.	1170.
AE08206	75.70	13.30	0.15	0.92	2.87	4.63	0.68	0.15	0.04	0.05	1.16	99.65	<10.	146.	2640.
AE08207	59.20	16.10	3.82	3.16	3.57	1.35	8.30	1.08	0.50	0.29	2.93	100.30	41.	282.	511.
AE08208	75.40	13.80	0.39	0.96	2.66	3.25	1.21	0.21	0.06	0.03	2.00	99.97	<10.	53.	891.
AE08209	76.30	13.00	0.06	0.92	0.17	6.03	1.38	0.16	0.03	0.06	1.62	99.73	<10.	33.	3060.
AE08210	60.60	18.00	0.32	4.44	4.30	2.67	5.21	0.71	0.19	0.17	3.39	100.00	<10.	285.	911.
AE08211	78.40	10.80	<0.01	0.52	0.04	3.45	4.22	0.15	0.04	0.02	2.47	100.11	142.	50.	1670.
AE08212	48.00	22.90	0.16	5.05	3.37	4.08	10.10	1.06	0.05	0.30	4.93	100.00	27.	303.	1460.
AE08213	73.80	14.10	0.09	3.03	0.74	3.81	1.67	0.23	0.05	0.10	2.85	100.47	<10.	90.	971.
AE08214	62.70	16.60	0.45	5.00	4.51	1.50	5.07	0.76	0.26	0.17	3.16	100.18	41.	184.	609.
AE08215	73.00	13.40	0.14	3.00	4.15	1.63	2.08	0.21	0.05	0.16	2.16	99.98	11.	211.	554.

**DIAMOND DRILL CORE LITHOGEOCHEMICAL RECORD
(MAJOR ELEMENTS)**

SAMPLE NUMBER	FROM	TO	%SI02	%AL2O3	%CAO	%MGO	%NA2O	%K2O	%FE2O3	%TI02	%P2O5	%MNO	%LOI	SUM	CU	ZN	BA
AD02814	5.20	8.20	76.40	12.10	0.17	1.21	0.49	4.19	2.00	0.29	0.06	0.05	2.77	99.73	39.	312.	1300.
AD02815	17.40	20.50	62.10	19.20	0.24	2.42	0.05	6.26	3.79	0.63	0.14	0.07	4.54	99.44	20.	82.	849.
AD02816	32.70	35.10	67.90	13.40	0.57	1.88	0.10	6.09	4.34	0.63	0.21	0.16	3.23	98.51	26.	95.	2410.
AD02817	49.00	53.00	58.10	19.70	0.46	3.66	0.61	6.28	5.36	0.84	0.22	0.20	4.54	99.97	56.	108.	1920.
AD02818	54.10	57.10	59.10	17.30	0.48	6.42	0.11	4.58	4.89	0.81	0.26	0.27	4.93	99.15	12.	147.	997.
AD02819	60.20	63.20	61.90	13.50	0.53	7.02	0.05	2.83	7.18	0.60	0.18	0.33	5.23	99.35	86.	691.	584.
AD02820	65.10	67.70	56.50	22.00	0.26	4.06	0.15	6.72	4.03	0.72	0.13	0.16	4.93	99.66	21.	81.	1340.
AD02821	70.00	73.00	59.10	20.70	0.21	3.51	0.07	6.39	4.13	0.64	0.10	0.13	4.54	99.52	46.	70.	1130.
AD02822	77.40	80.90	63.90	16.90	0.44	2.94	0.10	5.35	4.16	0.68	0.15	0.13	3.93	98.68	56.	282.	837.
AD02823	87.60	90.50	49.80	18.60	0.32	5.56	0.07	4.54	12.10	0.91	0.17	0.31	6.16	98.54	4750.	223.	693.
AD02824	90.50	93.00	53.10	19.50	0.48	5.43	0.19	5.85	8.47	0.83	0.22	0.30	5.00	99.37	235.	237.	1130.
AD02825	102.70	105.70	53.30	18.90	0.36	3.42	0.09	5.90	11.20	0.78	0.22	0.18	6.16	100.51	84.	127.	669.
AD02826	110.00	113.00	52.40	20.80	0.38	4.33	0.15	6.29	8.47	0.80	0.21	0.27	5.00	99.10	346.	168.	650.
AD02827	126.50	129.50	56.10	17.20	0.53	5.42	0.82	6.88	6.10	0.68	0.21	0.36	3.93	98.23	62.	186.	4320.
AD02828	135.00	138.00	62.00	16.70	0.44	4.11	1.78	3.99	5.57	0.66	0.17	0.30	3.85	99.57	37.	169.	585.
AD02829	139.80	142.80	63.20	15.10	0.46	3.73	1.59	4.04	6.29	0.63	0.18	0.26	4.00	99.48	123.	309.	1240.

**DIAMOND DRILL CORE LITHOGEOCHEMICAL RECORD
(MAJOR ELEMENTS)**

SAMPLE NUMBER	FROM	TO	%SI02	%AL2O3	%CAO	%MGO	%NA2O	%K2O	%FE2O3	%TI02	%P2O5	%MNO	%L0I	SUM	CU	ZN	BA
AD02830	154.00	157.00	79.40	10.30	0.22	0.29	1.06	6.00	0.92	0.09	0.02	0.03	1.00	99.33	<10.	60.	4030.
AD02831	160.00	163.00	57.00	18.40	0.55	3.57	1.04	7.41	5.68	0.79	0.23	0.22	3.93	98.82	226.	358.	2570.
AD02832	171.00	174.00	74.70	12.00	0.43	0.69	0.17	7.49	1.29	0.13	0.03	0.08	1.47	98.48	29.	195.	4670.
AD02833	181.00	184.00	54.80	18.50	0.46	6.09	2.48	3.38	7.96	0.84	0.20	0.38	4.54	99.63	317.	222.	547.
AD02834	194.00	197.00	53.20	20.00	0.66	5.43	2.60	3.83	7.76	0.89	0.33	0.42	4.23	99.35	86.	206.	528.
AD02835	207.00	210.00	54.40	18.70	0.88	5.96	3.36	2.49	8.52	0.80	0.32	0.48	4.08	99.99	61.	257.	478.
AD02836	212.00	215.00	61.50	15.80	0.47	4.53	2.07	2.90	6.91	0.64	0.23	0.31	3.93	99.29	229.	168.	461.
AD02837	237.50	240.20	55.50	18.10	0.64	7.04	2.61	2.39	8.27	0.77	0.24	0.30	4.39	100.25	43.	163.	381.
AD02838	252.10	255.10	47.80	20.40	0.51	9.67	2.01	2.84	9.82	0.97	0.19	0.38	5.77	100.36	59.	233.	434.

**DIAMOND DRILL CORE LITHOGEOCHEMICAL RECORD
(MAJOR ELEMENTS)**

SAMPLE NUMBER	FROM	TO	XSI02	XAL203	XCA0	XMG0	XNA20	XK20	XFE203	XTI02	XP205	XMN0	XLOI	SUM	CU	ZN	BA
AD02839	3.70	6.70	45.40	20.80	1.50	8.79	1.52	4.75	8.83	1.14	0.28	0.40	5.93	99.34	99.	272.	1790.
AD02840	9.40	12.50	82.50	8.95	0.07	0.73	0.04	3.05	0.97	0.15	0.04	0.02	2.00	98.52	25.	300.	692.
AD02841	19.90	22.50	66.80	14.20	0.95	2.34	0.07	4.80	4.58	0.74	0.18	0.33	3.85	98.84	67.	748.	1330.
AD02842	25.30	28.30	69.00	14.80	0.28	1.98	0.09	5.03	2.77	0.53	0.10	0.16	3.47	98.21	49.	1620.	1380.
AD02843	35.80	38.10	59.70	18.80	0.34	4.28	0.73	5.13	5.99	0.77	0.17	0.20	4.16	100.27	50.	161.	884.
AD02844	39.20	42.20	74.30	12.80	0.35	0.52	2.15	5.89	1.35	0.11	0.02	0.05	1.54	99.08	12.	504.	3370.
AD02845	62.20	65.20	75.60	12.00	0.30	0.47	1.92	5.62	1.03	0.11	0.02	0.05	1.16	98.28	23.	173.	3150.
AD02846	78.20	81.20	56.10	20.50	0.45	3.64	1.64	5.19	6.54	0.85	0.26	0.18	3.93	99.28	53.	133.	944.
AD02847	84.00	86.90	56.20	20.20	0.41	3.79	0.84	5.46	7.42	0.77	0.22	0.22	4.23	99.76	22.	151.	878.
AD02848	90.00	93.00	59.50	19.20	0.41	3.09	2.66	4.15	6.24	0.76	0.19	0.23	3.31	99.74	179.	176.	714.
AD02849	99.00	102.00	60.50	18.70	0.45	1.76	2.28	5.07	5.24	0.79	0.20	0.10	4.08	99.17	129.	267.	814.
AD02850	106.00	109.00	77.60	11.50	0.34	0.75	2.01	4.63	1.01	0.12	0.03	0.07	1.39	99.45	<10.	158.	2350.
AD02851	124.20	126.20	59.60	16.80	0.38	3.34	0.64	5.33	6.73	0.67	0.20	0.24	4.39	98.32	86.	583.	1400.
AD02852	126.80	131.00	65.60	15.50	0.47	1.54	0.08	6.80	4.64	0.59	0.21	0.11	4.08	99.62	26.	97.	2870.
AD02853	132.00	134.90	75.70	12.10	0.10	0.51	0.17	8.12	0.90	0.10	0.02	0.05	1.23	99.00	24.	165.	4690.
AD02854	140.00	143.00	55.50	17.80	0.64	5.79	1.70	4.64	7.35	0.71	0.22	0.43	4.70	99.48	129.	556.	2100.

**DIAMOND DRILL CORE LITHOGEOCHEMICAL RECORD
(MAJOR ELEMENTS)**

SAMPLE NUMBER	FROM	TO	%SI02	%AL2O3	%CAO	%MGO	%NA2O	%K2O	%FE2O3	%TI02	%P2O5	%MNO	%LOI	SUM	CU	ZN	BA
AD02855	145.00	148.00	71.90	15.40	0.80	0.21	4.35	3.91	0.65	0.04	0.08	0.12	1.93	99.39	<10.	56.	2030.
AD02856	160.00	163.00	54.00	16.90	0.41	3.39	1.43	4.36	10.80	0.69	0.20	0.22	6.16	98.56	157.	180.	659.
AD02857	186.00	189.00	57.00	16.40	0.66	1.63	0.24	10.10	7.34	0.64	0.24	0.11	4.54	98.90	41.	120.	3120.
AD02858	203.00	206.00	57.20	18.40	0.45	4.05	2.53	3.71	8.16	0.80	0.18	0.26	3.54	99.28	127.	155.	362.
AD02859	218.40	221.40	62.50	15.30	0.59	2.39	0.49	6.36	7.04	0.62	0.20	0.17	4.39	100.05	19.	83.	1730.
AD02860	222.00	225.00	57.50	18.80	0.42	4.67	1.76	5.88	6.06	0.74	0.23	0.27	3.70	100.03	67.	152.	1570.
AD02861	227.00	230.00	57.00	18.20	0.35	4.93	2.22	3.61	7.65	0.72	0.21	0.29	3.93	99.11	104.	165.	393.
AD02862	240.30	243.50	68.80	12.40	0.46	3.23	0.17	5.67	4.94	0.52	0.17	0.20	3.08	99.64	43.	110.	2730.

**DIAMOND DRILL CORE LITHOGEOCHEMICAL RECORD
(MAJOR ELEMENTS)**

SAMPLE NUMBER	FROM	TO	%SI02	%AL2O3	%CAO	%MGO	%NA2O	%K2O	%FE2O3	%TI02	%P2O5	%MNO	%LOI	SUM	CU	ZN	BA
AD02863	20.00	23.00	44.30	34.20	0.13	0.63	0.22	10.10	2.82	1.51	0.04	<0.01	5.85	99.80	40.	12.	1390.
AD02864	29.00	32.00	56.00	20.80	0.69	3.18	2.09	4.78	6.91	0.87	0.28	0.44	4.08	100.12	181.	159.	1940.
AD02865	33.00	36.00	80.00	10.70	0.22	0.27	4.30	1.44	1.50	0.24	0.05	0.02	1.39	100.13	31.	218.	1370.
AD02866	54.60	57.50	62.80	16.70	0.89	3.35	0.45	5.11	5.44	0.65	0.24	0.21	4.16	100.00	59.	396.	1850.
AD02867	58.50	61.50	63.20	15.10	0.26	5.03	0.04	4.02	6.48	0.64	0.14	0.26	4.70	99.87	<10.	275.	898.
AD02868	71.00	74.00	59.20	17.20	0.57	4.43	2.90	3.27	6.76	0.87	0.23	0.28	4.00	99.71	<10.	134.	848.
AD02869	80.00	83.00	54.40	19.50	0.42	4.69	2.54	3.69	9.31	0.93	0.20	0.37	3.93	99.98	<10.	152.	653.
AD02870	90.00	93.00	55.40	18.30	0.37	6.09	0.42	4.27	9.21	0.89	0.22	0.34	4.70	100.21	12.	147.	633.
AD02871	130.00	133.00	58.40	18.10	1.31	3.27	0.90	6.82	5.25	0.67	0.26	0.27	3.85	99.10	117.	341.	3110.
AD02872	141.30	144.30	53.70	18.10	0.60	7.35	1.92	3.81	8.13	0.89	0.21	0.53	4.85	100.09	63.	350.	2280.
AD02873	168.00	171.00	53.60	18.70	0.42	7.42	2.64	2.49	8.81	0.83	0.24	0.49	4.62	100.26	35.	254.	672.
AD02874	193.20	196.20	56.50	18.00	0.33	8.00	1.88	3.00	6.61	0.70	0.18	0.46	4.77	100.43	19.	251.	680.
AD02875	225.00	228.00	54.80	18.30	0.43	7.77	2.06	3.72	6.76	0.70	0.20	0.35	4.77	99.86	89.	206.	1290.
AD02876	279.00	282.00	56.00	18.50	0.42	7.56	2.27	3.02	6.41	0.69	0.17	0.36	4.62	100.02	25.	244.	543.
AD02877	314.00	317.00	54.50	19.60	0.53	6.39	2.76	3.49	7.19	0.73	0.18	0.32	4.31	100.00	140.	769.	685.
AD02878	347.00	350.00	54.20	19.70	0.71	6.02	2.76	4.24	6.80	0.91	0.21	0.34	4.16	100.05	138.	232.	1370.

**DIAMOND DRILL CORE LITHOGEOCHEMICAL RECORD
(MAJOR ELEMENTS)**

SAMPLE NUMBER	FROM	TO	%SI02	%AL2O3	%CAO	%MGO	%NA2O	%K2O	%FE2O3	%TI02	%P2O5	%MNO	%LOI	SUM	CU	ZN	BA
AD02879	370.00	373.00	52.30	18.40	0.80	7.46	2.01	4.29	8.47	0.86	0.18	0.53	4.54	99.84	156.	371.	2930.
AD02880	400.00	403.00	58.30	16.90	0.58	6.52	4.17	1.50	6.92	0.61	0.20	0.46	4.00	100.16	15.	282.	528.
AD02881	480.00	483.00	75.10	12.50	0.52	0.61	1.39	6.94	0.74	0.11	0.02	0.07	0.93	98.93	14.	122.	4770.

Hole No. BM87-3

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**DIAMOND DRILL CORE LITHOGEOCHEMICAL RECORD
(MAJOR ELEMENTS)**

SAMPLE NUMBER	FROM	TO	%SIO2	%AL2O3	%CAO	%MGO	%NA2O	%K2O	%FE2O3	%TI02	%P2O5	%MNO	%L01	SUM	CU	ZN	BA
AD02882	11.70	13.20	77.80	12.30	0.14	0.62	4.37	1.92	1.22	0.24	0.06	0.03	1.39	100.09	<10.	38.	425.
AD02883	24.80	26.20	51.60	18.80	0.31	6.53	0.93	4.28	9.82	0.83	0.20	0.54	5.70	99.54	188.	300.	1390.
AD02884	26.20	28.90	63.60	19.10	0.32	2.34	0.04	6.55	2.48	0.88	0.22	0.10	3.77	99.40	82.	320.	2050.
AD02885	36.30	50.90	60.30	15.00	0.29	5.50	1.45	3.08	8.62	0.67	0.15	0.44	4.39	99.89	39.	219.	1050.
AD02886	82.30	89.30	47.70	19.60	0.58	9.09	1.85	3.56	9.85	0.88	0.24	0.62	5.23	99.20	31.	490.	1610.
AD02887	105.90	106.90	56.20	16.90	0.35	6.86	1.38	3.01	8.68	0.78	0.18	0.48	4.70	99.52	382.	421.	948.
AD02888	107.60	116.70	49.10	19.50	0.55	8.98	1.71	3.18	9.60	0.90	0.23	0.55	5.47	99.77	63.	342.	1190.
AD02889	116.70	130.90	51.20	19.30	0.38	7.93	3.10	2.41	8.79	0.88	0.21	0.48	4.54	99.22	59.	306.	726.
AD02890	144.50	150.50	67.90	11.60	0.23	3.40	<0.01	3.22	7.99	0.42	0.15	0.15	5.31	100.38	130.	183.	855.
AD02891	193.40	194.60	58.30	16.40	0.40	8.15	0.38	3.33	6.62	0.67	0.18	0.46	5.23	100.12	28.	297.	663.
AD02892	218.80	233.80	63.00	15.40	0.39	3.77	0.66	5.91	5.64	0.51	0.19	0.24	3.93	99.64	<10.	101.	2760.
AD02893	255.90	258.40	56.30	16.60	0.35	8.13	0.75	3.37	8.11	0.51	0.18	0.35	5.54	100.19	22.	200.	800.
AD02894	273.00	278.70	59.50	20.10	0.48	2.72	1.21	5.73	4.83	0.88	0.28	0.11	4.00	99.84	<10.	64.	955.

**DIAMOND DRILL CORE LITHOGEOCHEMICAL RECORD
(MAJOR ELEMENTS)**

SAMPLE NUMBER	FROM	TO	%SI02	%AL2O3	%CAO	%MGO	%NA2O	%K2O	%FE2O3	%TI02	%P2O5	%MNO	%LOI	SUM	CU	ZN	BA
AD02895	24.80	25.30	53.60	23.30	0.61	3.28	1.90	6.77	4.30	1.07	0.40	0.13	4.23	99.59	<10.	63.	1270.
AD02896	27.20	29.30	63.10	19.10	0.17	1.88	0.08	6.79	3.38	0.69	0.11	0.05	4.31	99.66	<10.	38.	1130.
AD02897	34.00	34.80	53.10	14.70	0.32	2.22	0.34	9.40	12.10	0.63	0.13	0.12	6.47	99.53	<10.	63.	4060.
AD02898	39.90	40.70	76.80	12.30	0.18	1.31	2.78	2.75	1.79	0.26	0.06	0.09	1.85	100.17	<10.	125.	671.
AD02899	45.20	46.00	53.80	19.30	0.72	5.57	2.56	4.30	7.74	0.87	0.20	0.39	4.00	99.45	32.	217.	1370.
AD02900	57.40	58.80	63.50	11.50	0.36	7.22	0.07	2.33	8.64	0.53	0.13	0.59	4.47	99.34	218.	543.	1090.
AD02901	73.00	74.30	49.40	19.60	0.51	6.99	0.05	7.18	9.75	0.86	0.23	0.61	4.47	99.65	86.	286.	2890.
AD02902	83.20	83.90	71.10	12.20	0.27	4.00	<0.01	3.31	5.33	0.55	0.14	0.32	3.23	100.45	22.	202.	596.
AD02903	102.70	104.80	54.40	17.40	0.52	8.79	2.61	1.93	7.93	0.79	0.19	0.64	4.77	99.97	14.	693.	492.
AD02904	124.60	126.00	49.20	20.60	0.46	7.99	0.99	4.59	8.95	0.96	0.24	0.47	5.31	99.76	79.	216.	1490.
AD02905	141.60	143.50	55.80	18.20	0.39	7.18	0.70	3.81	7.97	0.63	0.25	0.40	4.70	100.03	22.	190.	605.
AD02906	193.20	194.00	48.50	21.10	0.62	7.89	5.19	1.30	9.01	0.87	0.32	0.47	4.47	99.74	<10.	227.	249.
AD02907	214.50	215.30	56.50	19.20	0.78	5.62	3.93	2.31	6.67	0.87	0.19	0.36	3.62	100.05	<10.	175.	415.
AD02908	234.00	235.00	58.20	17.30	0.52	5.76	0.34	4.21	7.45	0.61	0.19	0.31	5.31	100.20	99.	258.	1020.
AD02911	248.00	250.00	53.20	20.20	0.35	6.82	2.06	3.70	7.16	0.73	0.19	0.40	4.77	99.58	<10.	204.	1090.
AD02909	254.40	256.50	68.50	10.80	0.15	2.84	0.25	2.86	8.65	0.36	0.09	0.14	5.23	99.87	<10.	64.	707.

**DIAMOND DRILL CORE LITHOGEOCHEMICAL RECORD
(MAJOR ELEMENTS)**

SAMPLE NUMBER	FROM	TO	%SI02	%AL2O3	%CAO	%MGO	%NA2O	%K2O	%FE2O3	%TI02	%P2O5	%MNO	%L01	SUM	CU	ZN	BA
AD02910	266.70	270.00	68.00	14.70	0.53	3.37	4.35	1.89	3.92	0.45	0.17	0.19	2.62	100.19	<10.	92.	774.
AD02912	282.90	283.80	66.40	14.60	0.34	4.35	3.40	1.92	5.07	0.46	0.17	0.29	3.08	100.08	<10.	133.	446.

**DIAMOND DRILL CORE LITHOGEOCHEMICAL RECORD
(MAJOR ELEMENTS)**

SAMPLE NUMBER	FROM	TO	%SI02	%AL2O3	%CAO	%MGO	%NA2O	%K2O	%FE2O3	%TI02	%P2O5	%MNO	%LOI	SUM	CU	ZN	BA
AD02913	15.10	29.20	54.60	18.80	0.52	7.55	3.81	1.91	7.56	0.69	0.18	0.45	4.31	100.38	16.	259.	527.
AD02914	39.80	44.20	51.60	20.00	0.80	6.96	3.68	3.39	7.77	0.72	0.20	0.51	4.16	99.79	309.	295.	2180.
AD02915	97.40	113.90	53.30	18.20	0.49	8.55	2.63	2.30	8.09	0.85	0.20	0.38	5.00	99.99	145.	233.	598.
AD02916	113.90	122.70	58.30	16.60	0.70	7.04	4.43	0.76	7.32	0.78	0.19	0.36	3.85	100.33	<10.	190.	250.
AD02917	144.80	146.50	61.00	15.90	0.34	6.97	3.27	1.69	5.54	0.68	0.15	0.33	4.00	99.87	<10.	171.	352.
AD02918	146.10	151.20	48.30	20.70	0.44	9.47	1.26	3.81	8.38	0.94	0.20	0.52	5.77	99.79	<10.	258.	629.
AD02919	155.80	163.70	61.70	14.30	0.25	6.72	0.04	3.27	7.11	0.55	0.15	0.36	5.31	99.76	33.	225.	696.

**DIAMOND DRILL CORE LITHOGEOCHEMICAL RECORD
(MAJOR ELEMENTS)**

SAMPLE NUMBER	FROM	TO	%SiO2	%Al2O3	%CaO	%MgO	%Na2O	%K2O	%Fe2O3	%TiO2	%P2O5	%MnO	%LOI	SUM	CU	ZN	BA
AD02920	89.70	94.60	57.10	16.90	0.28	7.22	0.91	3.53	7.56	0.60	0.17	0.31	5.39	99.97	<10.	169.	625.
AD02921	99.20	100.80	52.80	18.80	0.53	7.85	2.06	3.39	7.58	0.86	0.21	0.41	5.00	99.49	119.	281.	1400.
AD02922	126.20	127.30	53.30	18.90	2.04	5.99	4.24	2.24	8.00	0.86	0.23	0.40	3.62	99.82	90.	240.	1340.
AD02923	160.20	173.10	51.50	18.30	0.32	10.20	0.39	3.33	8.81	0.81	0.19	0.53	5.85	100.23	60.	318.	825.
AD02924	198.40	196.30	56.20	16.50	0.28	5.31	0.37	4.11	9.99	0.72	0.18	0.27	6.39	100.22	94.	144.	916.
AD02925	213.90	220.00	50.50	18.80	0.39	7.73	0.82	4.00	9.83	0.77	0.23	0.45	6.16	99.68	14.	223.	915.
AD02926	230.00	242.30	68.00	14.70	0.33	4.47	2.32	2.84	3.86	0.44	0.17	0.18	3.16	100.47	<10.	100.	665.
AD02927	259.10	280.90	57.70	17.40	0.43	6.28	2.53	3.33	6.56	0.58	0.21	0.35	4.08	99.45	<10.	165.	1060.
AD02928	352.60	359.70	62.20	17.00	1.06	4.74	3.81	2.61	4.52	0.56	0.21	0.24	3.16	100.11	<10.	121.	946.

DIAMOND DRILL CORE LITHOGEOCHEMICAL RECORD
(MAJOR ELEMENTS)

SAMPLE NUMBER	FROM	TO	ZS102	ZAL203	ZCAO	ZHG0	ZNA20	ZK20	ZFE203	ZTI02	ZP205	ZMN0	ZLOI	SUM	CU	ZN	BA
AD02929	3.90	16.50	58.10	18.70	0.70	2.29	2.27	6.14	5.90	0.70	0.25	0.19	3.70	98.94	<10.	279.	2170.
AD02930	17.40	18.00	52.50	21.10	0.49	3.30	2.48	5.53	8.55	0.80	0.24	0.30	4.93	100.22	<10.	131.	1130.
AD02931	25.10	33.30	60.90	18.00	0.37	2.37	1.76	5.61	5.93	0.71	0.20	0.15	3.77	99.76	<10.	93.	1730.
AD02932	55.20	61.70	59.20	18.80	0.64	3.98	4.31	2.51	6.10	0.77	0.33	0.29	3.08	100.01	51.	132.	441.
AD02933	63.40	64.60	54.80	21.00	0.56	4.60	1.81	4.49	7.55	0.83	0.31	0.28	4.16	100.39	<10.	134.	706.
AD02934	146.70	152.30	69.70	12.50	0.28	1.99	0.11	3.88	6.22	0.48	0.18	0.12	4.23	99.69	144.	500.	1010.
AD02935	161.20	168.60	58.70	17.40	0.29	4.72	0.96	4.04	8.00	0.74	0.19	0.34	4.62	100.00	103.	235.	727.
AD02936	175.90	178.50	66.60	14.10	0.24	1.86	0.09	4.50	6.53	0.60	0.13	0.09	4.70	99.44	45.	2830.	698.
AD02937	186.80	188.10	57.60	19.50	0.50	4.77	0.05	4.94	7.38	0.79	0.35	0.28	4.16	100.32	29.	168.	720.
AD02938	195.00	199.30	64.10	16.90	0.41	3.82	0.26	4.37	5.75	0.68	0.28	0.22	3.54	100.33	328.	316.	630.
AD02939	220.80	233.40	49.50	18.80	0.50	9.23	3.12	2.14	9.47	0.86	0.20	0.52	5.08	99.42	49.	385.	996.
AD02940	313.10	325.00	57.40	18.20	0.36	6.32	1.54	3.26	7.49	0.67	0.22	0.34	4.31	100.11	879.	689.	545.

**DIAMOND DRILL CORE LITHOGEOCHEMICAL RECORD
(MAJOR ELEMENTS)**

SAMPLE NUMBER	FROM	TO	%SI02	%AL2O3	%CAO	%MGO	%NA2O	%K2O	%FE2O3	%TI02	%P2O5	%MNO	%LOI	SUM	CU	ZN	BA
AD02941	9.80	18.40	73.40	14.10	0.08	2.95	1.17	3.83	1.25	0.17	0.04	0.12	2.85	99.96	<10.	52.	730.
AD02942	32.80	34.40	73.60	13.40	0.28	2.54	3.65	2.73	1.57	0.14	0.04	0.19	1.85	99.99	<10.	59.	1550.
AD02943	45.00	46.30	74.20	13.30	0.16	2.85	1.72	3.13	1.74	0.17	0.05	0.09	2.47	99.88	<10.	48.	780.
AD02944	57.70	59.00	75.70	13.10	0.15	2.77	1.33	3.27	0.90	0.16	0.03	0.09	2.47	99.97	<10.	36.	725.
AD02945	82.70	84.20	73.10	14.10	0.42	2.85	0.14	4.36	1.14	0.17	0.04	0.20	2.70	99.22	<10.	63.	1610.
AD02946	130.20	132.00	74.80	13.50	0.09	2.71	0.53	3.94	1.51	0.15	0.04	0.08	2.70	100.05	<10.	46.	1000.
AD02947	188.60	191.80	74.40	13.30	0.11	3.28	0.15	3.60	1.98	0.24	0.07	0.18	2.93	100.24	<10.	108.	714.
AD02948	214.50	219.50	74.60	13.40	0.13	2.33	1.88	3.33	1.67	0.16	0.05	0.10	2.39	100.04	<10.	52.	1470.
AD02949	243.70	246.00	51.30	18.60	0.64	8.97	1.75	2.98	8.83	0.75	0.20	0.63	5.62	100.27	168.	395.	1170.
AD02950	317.30	318.70	62.80	12.40	0.62	6.45	0.22	2.62	6.47	0.49	0.15	0.30	4.93	97.45	66.	206.	7470.

**DIAMOND DRILL CORE LITHOGEOCHEMICAL RECORD
(MAJOR ELEMENTS)**

SAMPLE NUMBER	FROM	TO	%SI02	%AL2O3	%CAO	%MGO	%NA2O	%K2O	%FE2O3	%TI02	%P2O5	%MNO	%LOI	SUM	CU	ZN	BA
AE08216	50.90	51.00	70.50	14.50	0.17	2.69	2.68	3.97	2.74	0.36	0.10	0.13	2.16	100.00	25.	111.	1450.
AE08217	106.70	106.80	56.00	20.20	0.65	4.42	2.94	3.93	6.75	0.87	0.27	0.15	3.85	100.03	11.	109.	503.

Hole No. BM71-1

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**DIAMOND DRILL CORE LITHOGEOCHEMICAL RECORD
(MAJOR ELEMENTS)**

SAMPLE NUMBER	FROM	TO	%SiO2	%Al2O3	%CaO	%MgO	%Na2O	%K2O	%Fe2O3	%TiO2	%P2O5	%MnO	%LOI	SUM	CU	ZN	BA
AE08218	24.40	24.50	76.70	9.92	0.80	2.80	0.18	3.71	2.10	0.40	0.11	0.09	2.47	99.28	<10.	107.	1910.

Hole No. BM71-2

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DIAMOND DRILL CORE LITHOGEOCHEMICAL RECORD
(MAJOR ELEMENTS)

SAMPLE NUMBER	FROM	TO	XSI02	XAL203	XCA0	XMG0	XNA20	XK20	XFE203	XI102	XP205	XMN0	XLOI	SUM	CU	ZN	BA
AE08219	88.40	88.50	70.70	13.60	0.34	2.89	0.71	5.65	2.68	0.38	0.10	0.11	2.23	99.39	<10.	74.	4680.

Hole No. BM71-3

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**DIAMOND DRILL CORE LITHOGEOCHEMICAL RECORD
(MAJOR ELEMENTS)**

SAMPLE NUMBER	FROM	TO	%SI02	%AL2O3	%CAO	%MGO	%NA2O	%K2O	%FE2O3	%TI02	%P2O5	%MNO	%LOI	SUM	CU	ZN	BA
AE08220	11.60	11.70	66.20	16.00	0.16	4.27	2.03	3.71	3.40	0.40	0.11	0.12	3.39	99.79	36.	151.	860.

Hole No. BM71-6

Page No. 1

**DIAMOND DRILL CORE LITHOGEOCHEMICAL RECORD
(MAJOR ELEMENTS)**

SAMPLE NUMBER	FROM	TO	%SI02	%AL2O3	%CAO	%MGO	%NA2O	%K2O	%FE2O3	%TI02	%P2O5	%MNO	%LOI	SUM	CU	ZN	BA
AE08221	50.90	51.00	59.50	11.20	0.32	3.96	0.64	2.31	12.80	0.56	0.14	0.26	7.62	99.31	21.	1380.	599.
AE08222	55.20	55.30	74.50	9.89	0.21	0.59	2.92	1.77	1.97	0.24	0.06	0.03	2.00	94.18	7400.	20300.	596.
AE08223	68.60	68.70	85.80	6.80	0.05	0.25	1.08	1.57	1.42	0.13	0.04	0.01	1.54	98.69	1240.	277.	377.
AE08224	115.20	115.30	52.20	18.00	0.30	3.77	0.24	11.60	7.65	0.67	0.20	0.24	4.23	99.10	<10.	163.	4950.
AE08225	116.70	116.80	56.50	18.80	0.34	2.82	0.20	11.60	4.70	0.71	0.21	0.14	3.23	99.25	<10.	93.	3900.
AE08226	123.70	123.80	56.70	16.70	0.23	3.19	0.14	9.87	7.18	0.59	0.17	0.17	4.39	99.33	75.	137.	4040.
AE08227	137.80	137.90	55.10	15.40	0.26	10.40	0.53	2.01	9.61	0.67	0.15	0.69	5.54	100.36	<10.	459.	843.
AE08228	152.90	153.00	51.20	20.60	0.57	5.98	3.14	3.98	7.84	0.82	0.33	0.36	4.70	99.52	<10.	190.	1590.
AE08229	182.30	182.40	48.60	19.50	0.50	9.55	2.17	2.68	9.93	1.00	0.24	0.45	5.54	100.16	670.	301.	1140.
AE08230	234.70	234.80	54.30	19.20	0.47	6.50	2.79	4.04	7.02	0.69	0.20	0.35	4.16	99.72	51.	184.	1690.

**DIAMOND DRILL CORE LITHOGEOCHEMICAL RECORD
(MAJOR ELEMENTS)**

SAMPLE NUMBER	FROM	TO	%SI02	%AL2O3	%CAO	%MGO	%NA2O	%K2O	%FE2O3	%TI02	%P2O5	%MNO	%L0I	SUM	CU	ZN	BA
AE08151	68.00	71.00	76.00	13.60	0.11	1.36	0.02	4.60	1.33	0.18	0.06	0.08	2.70	100.04	<10.	109.	1040.
AE08152	197.00	200.00	73.10	14.60	1.05	0.28	4.42	3.70	0.60	0.02	0.08	0.12	1.85	99.82	<10.	49.	1240.
AE08153	342.90	345.90	51.90	19.40	0.77	7.08	3.13	2.44	9.14	0.71	0.27	0.32	4.85	100.01	64.	245.	489.
AE08154	437.00	450.00	68.70	15.00	1.05	1.97	4.55	3.20	3.27	0.37	0.11	0.18	1.70	100.10	<10.	123.	1640.

SURFACE SAMPLES

SAMPLE	RB ppm	SR ppm	Y ppm	ZR ppm	NB ppm
AD02951	104.00	120.00	22.00	57.00	20.00
AD02952	84.00	-10.00	11.00	155.00	12.00
AD02953	71.00	-10.00	-10.00	59.00	18.00
AD02954	94.00	17.00	15.00	76.00	-10.00
AD02955	81.00	25.00	18.00	144.00	-10.00
AD02956	81.00	53.00	-10.00	74.00	12.00
AD02957	51.00	-10.00	-10.00	25.00	25.00
AD02958	74.00	76.00	-10.00	69.00	12.00
AD02959	60.00	83.00	15.00	61.00	16.00
AD02960	111.00	60.00	34.00	88.00	12.00
AD02961	113.00	125.00	15.00	71.00	15.00
AD02962	68.00	141.00	28.00	62.00	16.00
AD02963	91.00	90.00	25.00	117.00	15.00
AD02964	62.00	65.00	14.00	54.00	17.00
AD02965	53.00	-10.00	-10.00	63.00	-10.00
AD02966	80.00	79.00	-10.00	55.00	17.00
AD02967	106.00	99.00	-10.00	71.00	26.00
AD02968	97.00	45.00	-10.00	18.00	20.00
AD02969	73.00	39.00	14.00	91.00	-10.00
AD02970	69.00	126.00	-10.00	50.00	32.00
AD02971	14.00	24.00	-10.00	72.00	-10.00
AD02972	-10.00	60.00	-10.00	101.00	19.00
AD02973	149.00	61.00	29.00	89.00	-10.00
AD02974	128.00	-10.00	20.00	66.00	-10.00
AD02975	127.00	125.00	14.00	22.00	14.00
AD02976	51.00	15.00	-10.00	24.00	-10.00

SURFACE SAMPLES

SAMPLE	RB ppm	SR ppm	Y ppm	ZR ppm	NB ppm
AD02977	55.00	13.00	11.00	80.00	22.00
AD02978	53.00	77.00	19.00	112.00	-10.00
AD02979	77.00	144.00	31.00	139.00	13.00
AD02980	61.00	12.00	-10.00	46.00	-10.00
AD02981	44.00	15.00	-10.00	55.00	-10.00
AD02982	84.00	80.00	14.00	118.00	12.00
AD02983	83.00	40.00	-10.00	50.00	-10.00
AD02984	99.00	-10.00	-10.00	76.00	-10.00
AD02985	53.00	72.00	23.00	113.00	25.00
AD02986	34.00	180.00	24.00	76.00	22.00
AD02987	118.00	10.00	-10.00	92.00	13.00
AD02988	70.00	26.00	-10.00	88.00	20.00
AD02989	54.00	-10.00	-10.00	26.00	13.00
AD02990	109.00	171.00	-10.00	15.00	-10.00
AD02991	24.00	65.00	27.00	56.00	15.00
AD02992	77.00	62.00	43.00	110.00	12.00
AD02993	75.00	69.00	-10.00	136.00	-10.00
AD02994	50.00	105.00	25.00	120.00	13.00
AD02995	63.00	58.00	-10.00	126.00	12.00
AD02996	34.00	134.00	-10.00	125.00	20.00
AD02997	76.00	49.00	-10.00	94.00	-10.00
AD02998	68.00	130.00	13.00	160.00	18.00
AD02999	104.00	35.00	-10.00	22.00	29.00
AD03000	107.00	84.00	18.00	93.00	19.00
AD03001	55.00	-10.00	-10.00	29.00	30.00
AD03002	66.00	204.00	21.00	47.00	32.00

SURFACE SAMPLES

SAMPLE	RB ppm	SR ppm	Y ppm	ZR ppm	NB ppm
AD03003	117.00	53.00	15.00	29.00	11.00
AD03004	90.00	47.00	34.00	29.00	13.00
AD03005	54.00	238.00	-10.00	54.00	20.00
AD03006	87.00	70.00	19.00	61.00	22.00
AD03007	108.00	65.00	-10.00	81.00	24.00
AD03008	78.00	22.00	21.00	83.00	10.00
AD03009	87.00	54.00	-10.00	18.00	-10.00
AD03010	90.00	54.00	12.00	28.00	12.00
AD03011	85.00	117.00	-10.00	47.00	25.00
AD03012	49.00	329.00	18.00	148.00	-10.00
AD03013	73.00	154.00	-10.00	87.00	12.00
AD03014	94.00	-10.00	-10.00	50.00	-10.00
AD03015	87.00	220.00	-10.00	46.00	-10.00
AD03016	95.00	97.00	-10.00	34.00	13.00
AD03017	106.00	106.00	-10.00	44.00	26.00
AD03018	103.00	93.00	17.00	39.00	19.00
AD03019	79.00	265.00	-10.00	69.00	32.00
AD03020	58.00	90.00	15.00	28.00	20.00
AD03021	24.00	54.00	21.00	108.00	16.00
AD03022	69.00	274.00	-10.00	32.00	-10.00
AD03023	104.00	69.00	-10.00	126.00	29.00
AD03024	99.00	130.00	-10.00	142.00	-10.00
AD03025	73.00	169.00	-10.00	83.00	19.00
AD03026	66.00	173.00	19.00	91.00	-10.00
AD03027	75.00	167.00	12.00	86.00	25.00
AD03028	68.00	145.00	-10.00	79.00	22.00

SURFACE SAMPLES

SAMPLE	RB ppm	SR ppm	Y ppm	ZR ppm	NB ppm
AD03029	87.00	160.00	-10.00	95.00	22.00
AD03030	36.00	30.00	42.00	122.00	20.00
AD03031	95.00	41.00	24.00	108.00	19.00
AD03032	61.00	343.00	16.00	60.00	-10.00
AD03033	55.00	60.00	-10.00	40.00	23.00
AD03034	85.00	54.00	17.00	133.00	21.00
AD03035	57.00	101.00	26.00	174.00	20.00
AD03036	61.00	149.00	14.00	125.00	16.00
AD03037	50.00	140.00	-10.00	144.00	-10.00
AD03038	106.00	221.00	-10.00	18.00	-10.00
AD03039	84.00	150.00	-10.00	46.00	18.00
AD03040	73.00	14.00	22.00	118.00	10.00
AD03041	67.00	64.00	13.00	32.00	-10.00
AD03042	68.00	78.00	-10.00	110.00	15.00
AD03043	62.00	74.00	-10.00	125.00	-10.00
AD03044	89.00	-10.00	-10.00	111.00	18.00
AD03045	63.00	80.00	-10.00	121.00	14.00
AD03046	83.00	122.00	-10.00	81.00	-10.00
AD03047	72.00	151.00	-10.00	125.00	-10.00
AD03048	56.00	101.00	34.00	121.00	-10.00
AD03049	45.00	273.00	24.00	117.00	-10.00
AD03050	82.00	169.00	22.00	33.00	-10.00
AD03051	43.00	101.00	-10.00	35.00	23.00
AD03052	53.00	202.00	-10.00	57.00	19.00
AD03053	74.00	13.00	-10.00	41.00	15.00
AD03054	87.00	128.00	-10.00	53.00	10.00

SURFACE SAMPLES

SAMPLE	RB ppm	SR ppm	Y ppm	ZR ppm	NB ppm
AD03055	85.00	104.00	18.00	72.00	14.00
AD03056	121.00	83.00	24.00	75.00	18.00
AD03058	64.00	87.00	-10.00	133.00	-10.00
AD03059	77.00	63.00	22.00	118.00	21.00
AD03060	60.00	26.00	20.00	82.00	12.00
AD03061	79.00	-10.00	20.00	102.00	-10.00
AD03062	67.00	64.00	-10.00	126.00	-10.00
AD03063	53.00	141.00	23.00	86.00	12.00
AD03064	50.00	115.00	-10.00	37.00	18.00
AD03065	70.00	11.00	-10.00	29.00	17.00
AD03066	67.00	64.00	22.00	30.00	-10.00
AD03067	60.00	345.00	11.00	55.00	14.00
AD03068	56.00	361.00	-10.00	45.00	-10.00
AD03069	-10.00	15.00	-10.00	-10.00	-10.00
AD03070	41.00	240.00	-10.00	29.00	12.00
AD03071	79.00	58.00	-10.00	51.00	16.00
AD03072	93.00	62.00	-10.00	29.00	-10.00
AD03073	-10.00	129.00	-10.00	118.00	-10.00
AD03074	111.00	118.00	-10.00	116.00	22.00
AD03075	133.00	116.00	-10.00	52.00	15.00
AD03076	105.00	17.00	-10.00	18.00	16.00
AD03077	165.00	120.00	12.00	40.00	-10.00
AD03078	92.00	18.00	36.00	136.00	18.00
AD03079	112.00	85.00	17.00	107.00	15.00
AD03080	83.00	-10.00	-10.00	41.00	13.00
AD03081	108.00	122.00	-10.00	111.00	18.00

SURFACE SAMPLES

SAMPLE	RB ppm	SR ppm	Y ppm	ZR ppm	NB ppm
AD03082	65.00	207.00	23.00	100.00	18.00
AD03083	67.00	28.00	17.00	38.00	-10.00
AD03084	71.00	-10.00	20.00	42.00	20.00
AD03085	87.00	36.00	-10.00	34.00	-10.00
AD03086	80.00	74.00	12.00	35.00	-10.00
AD03087	85.00	40.00	-10.00	77.00	14.00
AD03088	70.00	162.00	19.00	108.00	15.00
AD03089	103.00	95.00	-10.00	84.00	-10.00
AD03090	46.00	80.00	-10.00	124.00	19.00
AD03091	78.00	70.00	15.00	86.00	20.00
AD03092	82.00	24.00	-10.00	68.00	-10.00
AD03093	78.00	-10.00	-10.00	82.00	18.00
AD03094	-10.00	349.00	-10.00	62.00	-10.00
AD03095	55.00	15.00	11.00	117.00	14.00
AD03096	33.00	48.00	17.00	91.00	15.00
AD03097	51.00	546.00	18.00	42.00	12.00
AD03098	144.00	36.00	12.00	31.00	22.00
AD03099	56.00	107.00	11.00	111.00	18.00
AD03100	56.00	190.00	18.00	38.00	16.00
AE08201	14.00	359.00	17.00	61.00	21.00
AE08202	42.00	35.00	-10.00	105.00	-10.00
AE08203	86.00	-10.00	28.00	103.00	11.00
AE08204	62.00	142.00	-10.00	98.00	19.00
AE08205	51.00	208.00	17.00	69.00	12.00
AE08206	53.00	138.00	-10.00	85.00	-10.00
AE08207	28.00	276.00	28.00	80.00	25.00

SURFACE SAMPLES

SAMPLE	RB ppm	SR ppm	Y ppm	ZR ppm	NB ppm
AE08208	67.00	76.00	-10.00	130.00	-10.00
AE08209	84.00	51.00	13.00	102.00	16.00
AE08210	46.00	77.00	26.00	150.00	21.00
AE08211	80.00	-10.00	-10.00	87.00	-10.00
AE08212	89.00	52.00	34.00	47.00	-10.00
AE08213	63.00	-10.00	-10.00	126.00	-10.00
AE08214	33.00	84.00	28.00	117.00	29.00
AE08215	60.00	97.00	18.00	148.00	16.00

DRILL HOLE BM87-1

SAMPLE	FROM metres	TO metres	RB ppm	SR ppm	Y ppm	ZR ppm	NB ppm
AD02814	5.20	8.20	86.00	-10.00	-10.00	138.00	-10.00
AD02815	17.40	20.50	120.00	-10.00	10.00	97.00	22.00
AD02816	32.70	35.10	102.00	36.00	15.00	79.00	18.00
AD02817	49.00	53.00	133.00	15.00	13.00	76.00	16.00
AD02818	54.10	57.10	93.00	-10.00	23.00	116.00	21.00
AD02819	60.20	63.20	66.00	-10.00	16.00	22.00	-10.00
AD02820	65.10	67.70	151.00	-10.00	-10.00	84.00	18.00
AD02821	70.00	73.00	132.00	-10.00	-10.00	83.00	13.00
AD02822	77.40	80.90	123.00	-10.00	-10.00	57.00	-10.00
AD02823	87.60	90.50	-10.00	-10.00	-10.00	31.00	-10.00
AD02824	90.50	93.00	124.00	-10.00	20.00	41.00	-10.00
AD02825	102.70	105.70	131.00	-10.00	21.00	38.00	15.00
AD02826	110.00	113.00	146.00	-10.00	15.00	51.00	-10.00
AD02827	126.50	129.50	99.00	170.00	12.00	49.00	13.00
AD02828	135.00	138.00	95.00	33.00	-10.00	51.00	-10.00
AD02829	139.80	142.80	91.00	28.00	15.00	32.00	-10.00
AD02830	154.00	157.00	89.00	77.00	14.00	50.00	-10.00
AD02831	160.00	163.00	117.00	64.00	24.00	59.00	18.00
AD02832	171.00	174.00	106.00	97.00	15.00	56.00	11.00
AD02833	181.00	184.00	83.00	21.00	17.00	31.00	-10.00
AD02834	194.00	197.00	69.00	40.00	12.00	54.00	-10.00
AD02835	207.00	210.00	52.00	73.00	28.00	52.00	15.00
AD02836	212.00	215.00	62.00	25.00	18.00	33.00	21.00
AD02837	237.50	240.20	50.00	31.00	22.00	56.00	25.00
AD02838	252.10	255.10	59.00	12.00	12.00	36.00	15.00

DRILL HOLE BM87-2

SAMPLE	FROM metres	TO metres	RB ppm	SR ppm	Y ppm	ZR ppm	NB ppm
AD02839	3.70	6.70	93.00	67.00	32.00	86.00	-10.00
AD02840	9.40	12.50	60.00	-10.00	-10.00	41.00	16.00
AD02841	19.90	22.50	100.00	33.00	-10.00	78.00	21.00
AD02842	25.30	28.30	121.00	-10.00	-10.00	57.00	17.00
AD02843	35.80	38.10	108.00	-10.00	-10.00	94.00	-10.00
AD02844	39.20	42.20	87.00	114.00	21.00	68.00	33.00
AD02845	62.20	65.20	71.00	78.00	15.00	62.00	-10.00
AD02846	78.20	81.20	121.00	-10.00	12.00	47.00	-10.00
AD02847	84.00	86.90	136.00	114.00	-10.00	31.00	13.00
AD02848	90.00	93.00	94.00	103.00	-10.00	26.00	11.00
AD02849	99.00	102.00	130.00	123.00	-10.00	36.00	10.00
AD02850	106.00	109.00	77.00	166.00	17.00	37.00	14.00
AD02851	124.20	126.20	110.00	110.00	-10.00	33.00	11.00
AD02852	126.80	131.00	112.00	149.00	42.00	40.00	-10.00
AD02853	132.00	134.90	93.00	213.00	-10.00	50.00	23.00
AD02854	140.00	143.00	89.00	92.00	17.00	81.00	22.00
AD02855	145.00	148.00	97.00	300.00	-10.00	-10.00	35.00
AD02856	160.00	163.00	105.00	85.00	25.00	38.00	-10.00
AD02857	186.00	189.00	162.00	170.00	-10.00	29.00	17.00
AD02858	203.00	206.00	100.00	111.00	14.00	26.00	11.00
AD02859	218.40	221.40	119.00	64.00	-10.00	27.00	16.00
AD02860	222.00	225.00	107.00	92.00	15.00	63.00	-10.00
AD02861	227.00	230.00	80.00	22.00	27.00	46.00	11.00
AD02862	240.30	243.50	103.00	24.00	16.00	43.00	13.00

DRILL HOLE BM87-3

SAMPLE	FROM metres	TO metres	RB ppm	SR ppm	Y ppm	ZR ppm	NB ppm
AD02863	20.00	23.00	147.00	34.00	24.00	171.00	-10.00
AD02864	29.00	32.00	117.00	61.00	26.00	76.00	-10.00
AD02865	33.00	36.00	49.00	77.00	-10.00	118.00	23.00
AD02866	54.60	57.50	113.00	43.00	19.00	44.00	12.00
AD02867	58.50	61.50	96.00	16.00	-10.00	44.00	12.00
AD02868	71.00	74.00	86.00	73.00	15.00	56.00	-10.00
AD02869	80.00	83.00	89.00	54.00	12.00	17.00	-10.00
AD02870	90.00	93.00	106.00	-10.00	23.00	41.00	20.00
AD02871	130.00	133.00	127.00	124.00	10.00	27.00	-10.00
AD02872	141.30	144.30	65.00	71.00	21.00	19.00	-10.00
AD02873	168.00	171.00	59.00	51.00	-10.00	36.00	17.00
AD02874	193.20	196.20	62.00	46.00	11.00	34.00	13.00
AD02875	225.00	228.00	73.00	94.00	23.00	35.00	11.00
AD02876	279.00	282.00	76.00	54.00	-10.00	41.00	-10.00
AD02877	314.00	317.00	85.00	67.00	-10.00	37.00	19.00
AD02878	347.00	350.00	94.00	116.00	14.00	46.00	16.00
AD02879	370.00	373.00	72.00	124.00	24.00	44.00	-10.00
AD02880	400.00	403.00	28.00	111.00	11.00	60.00	15.00
AD02881	480.00	483.00	77.00	206.00	14.00	59.00	13.00

DRILL HOLE BM87-4

SAMPLE	FROM metres	TO metres	RB ppm	SR ppm	Y ppm	ZR ppm	NB ppm
AD02882	11.70	13.20	51.00	68.00	15.00	136.00	-10.00
AD02883	24.80	26.20	101.00	12.00	-10.00	39.00	-10.00
AD02884	26.20	28.90	134.00	-10.00	-10.00	26.00	12.00
AD02885	36.30	50.90	60.00	-10.00	-10.00	21.00	-10.00
AD02886	82.30	89.30	78.00	67.00	18.00	35.00	-10.00
AD02887	105.90	106.90	70.00	18.00	16.00	26.00	15.00
AD02888	107.60	116.70	76.00	29.00	-10.00	45.00	-10.00
AD02889	116.70	130.90	55.00	58.00	11.00	24.00	13.00
AD02890	144.50	150.50	70.00	-10.00	-10.00	30.00	11.00
AD02891	193.40	194.60	75.00	-10.00	13.00	41.00	10.00
AD02892	218.80	233.80	102.00	40.00	-10.00	41.00	14.00
AD02893	255.90	258.40	81.00	28.00	-10.00	45.00	-10.00
AD02894	273.00	278.70	127.00	28.00	21.00	50.00	11.00

DRILL HOLE BM87-5

SAMPLE	FROM metres	TO metres	RB ppm	SR ppm	Y ppm	ZR ppm	NB ppm
AD02895	24.80	25.30	148.00	49.00	48.00	167.00	11.00
AD02896	27.20	29.30	143.00	-10.00	-10.00	72.00	11.00
AD02897	34.00	34.80	108.00	117.00	-10.00	17.00	11.00
AD02898	39.90	40.70	66.00	40.00	17.00	151.00	15.00
AD02899	45.20	46.00	87.00	67.00	-10.00	24.00	17.00
AD02900	57.40	58.80	56.00	16.00	-10.00	15.00	24.00
AD02901	73.00	74.30	106.00	63.00	-10.00	24.00	16.00
AD02902	83.20	83.90	113.00	20.00	14.00	-10.00	22.00
AD02903	102.70	104.80	53.00	48.00	23.00	34.00	-10.00
AD02904	124.60	126.00	99.00	30.00	14.00	28.00	-10.00
AD02905	141.60	143.50	91.00	-10.00	22.00	47.00	-10.00
AD02906	193.20	194.00	44.00	118.00	30.00	107.00	25.00
AD02907	214.50	215.30	53.00	99.00	16.00	33.00	12.00
AD02908	234.00	235.00	87.00	-10.00	22.00	37.00	-10.00
AD02911	248.00	250.00	98.00	16.00	-10.00	56.00	-10.00
AD02909	254.40	256.50	68.00	-10.00	20.00	328.00	-10.00
AD02910	266.70	270.00	44.00	144.00	-10.00	39.00	13.00
AD02912	282.90	283.80	43.00	64.00	12.00	80.00	-10.00

DRILL HOLE BM87-6

SAMPLE	FROM metres	TO metres	RB ppm	SR ppm	Y ppm	ZR ppm	NB ppm
AD02913	15.10	29.20	31.00	84.00	-10.00	35.00	-10.00
AD02914	39.80	44.20	94.00	127.00	-10.00	51.00	-10.00
AD02915	97.40	113.90	57.00	65.00	-10.00	45.00	-10.00
AD02916	113.90	122.70	30.00	81.00	18.00	40.00	11.00
AD02917	144.80	146.50	50.00	46.00	-10.00	15.00	-10.00
AD02918	146.10	151.20	82.00	21.00	-10.00	41.00	-10.00
AD02919	155.80	163.70	81.00	-10.00	-10.00	21.00	-10.00

DRILL HOLE BM87-7

SAMPLE	FROM metres	TO metres	RB ppm	SR ppm	Y ppm	ZR ppm	NB ppm
AD02920	89.70	94.60	81.00	-10.00	16.00	39.00	-10.00
AD02921	99.20	100.80	83.00	64.00	24.00	34.00	20.00
AD02922	126.20	127.30	55.00	260.00	22.00	56.00	18.00
AD02923	160.20	173.10	70.00	13.00	22.00	38.00	15.00
AD02924	188.40	196.30	87.00	-10.00	21.00	25.00	-10.00
AD02925	213.90	220.00	94.00	15.00	21.00	43.00	-10.00
AD02926	230.00	242.30	53.00	46.00	-10.00	82.00	-10.00
AD02927	259.10	280.90	68.00	74.00	24.00	53.00	-10.00
AD02928	352.60	359.70	51.00	255.00	-10.00	65.00	-10.00

DRILL HOLE BM87-8

SAMPLE	FROM metres	TO metres	RB ppm	SR ppm	Y ppm	ZR ppm	NB ppm
AD02929	3.90	16.50	112.00	79.00	-10.00	50.00	21.00
AD02930	17.40	18.00	109.00	58.00	18.00	58.00	-10.00
AD02931	25.10	33.30	115.00	38.00	19.00	57.00	11.00
AD02932	55.20	61.70	66.00	79.00	18.00	53.00	-10.00
AD02933	63.40	64.60	95.00	14.00	29.00	83.00	19.00
AD02934	146.70	152.30	80.00	-10.00	-10.00	10.00	17.00
AD02935	161.20	168.60	93.00	-10.00	25.00	23.00	13.00
AD02936	175.90	178.50	89.00	-10.00	11.00	-10.00	-10.00
AD02937	186.80	188.10	111.00	-10.00	24.00	62.00	-10.00
AD02938	195.00	199.30	99.00	-10.00	17.00	58.00	-10.00
AD02939	220.80	233.40	49.00	60.00	18.00	32.00	-10.00
AD02940	313.10	325.00	-10.00	29.00	-10.00	37.00	-10.00

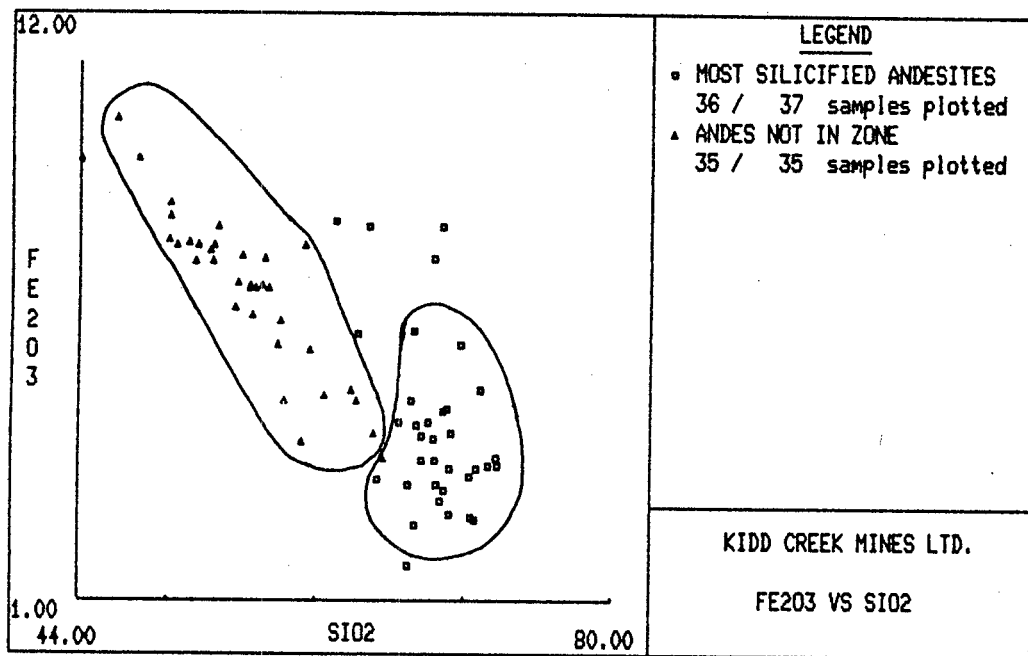
DRILL HOLE BH87-9

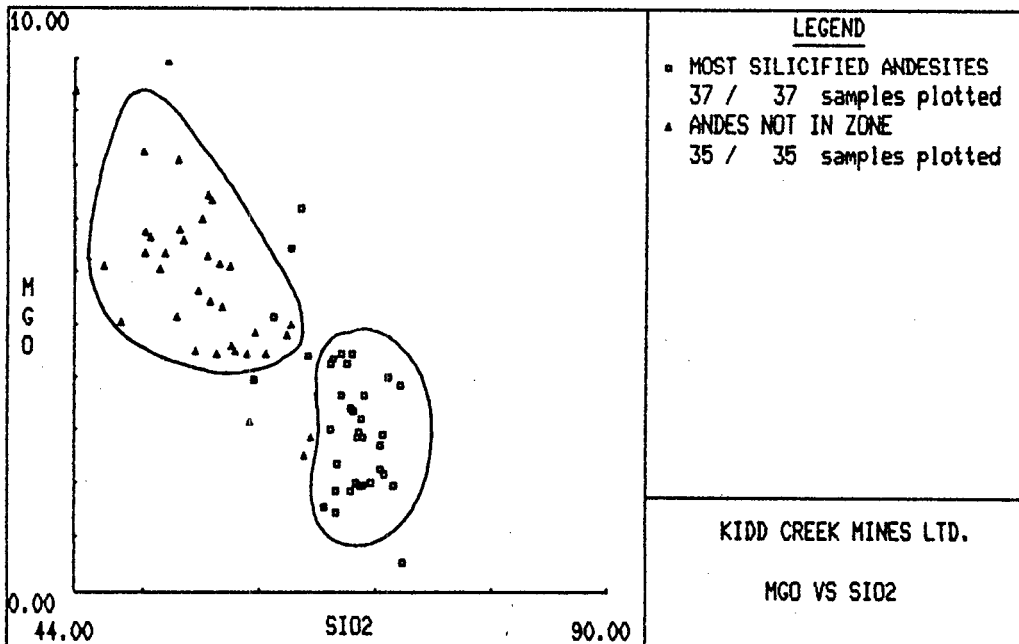
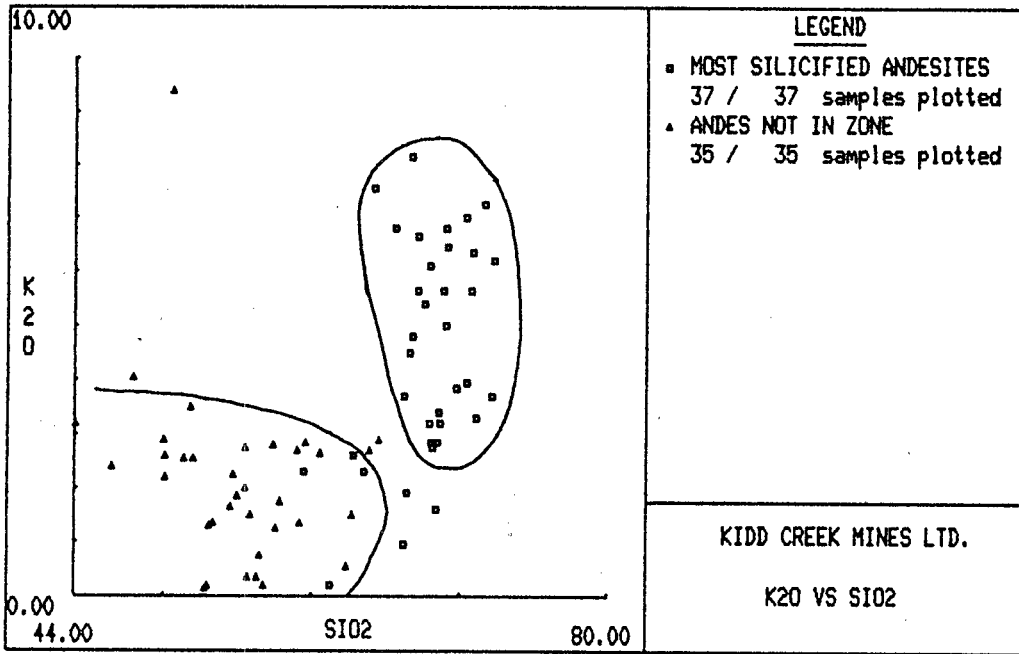
SAMPLE	FROM metres	TO metres	RB ppm	SR ppm	Y ppm	ZR ppm	NB ppm
AD02941	9.80	18.40	79.00	-10.00	14.00	108.00	13.00
AD02942	32.80	34.40	54.00	114.00	14.00	111.00	-10.00
AD02943	45.00	46.30	72.00	48.00	-10.00	95.00	19.00
AD02944	57.70	59.00	64.00	34.00	14.00	100.00	-10.00
AD02945	82.70	84.20	90.00	31.00	-10.00	102.00	23.00
AD02946	130.20	132.00	72.00	-10.00	29.00	102.00	15.00
AD02947	188.60	191.80	77.00	-10.00	-10.00	110.00	18.00
AD02948	214.50	219.50	74.00	39.00	-10.00	103.00	16.00
AD02949	243.70	246.00	70.00	39.00	-10.00	41.00	-10.00
AD02950	317.30	318.70	72.00	1300.00	20.00	-10.00	-10.00

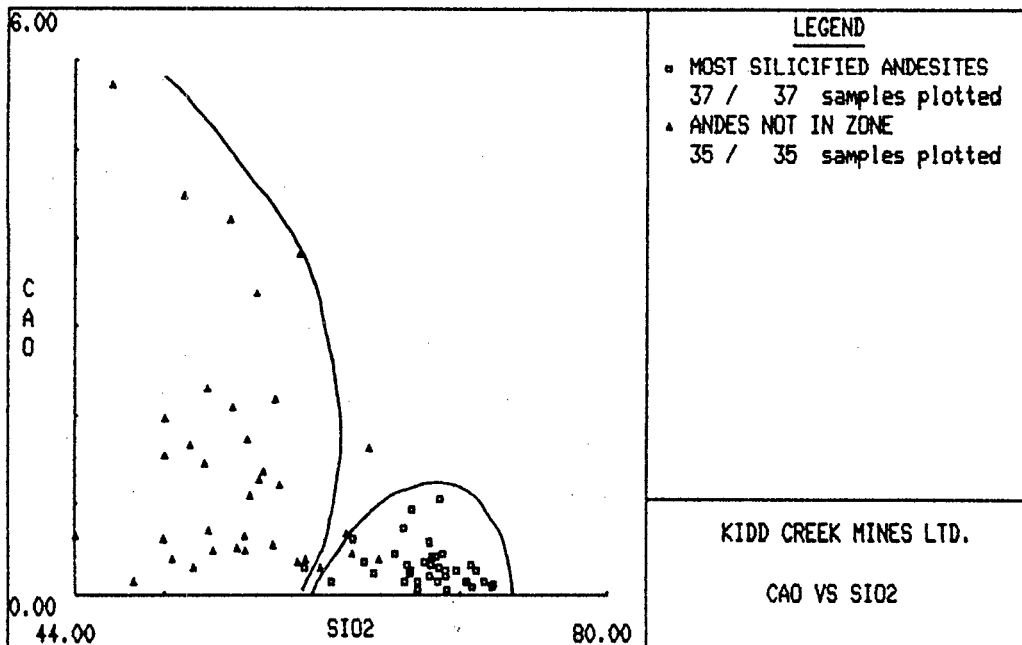
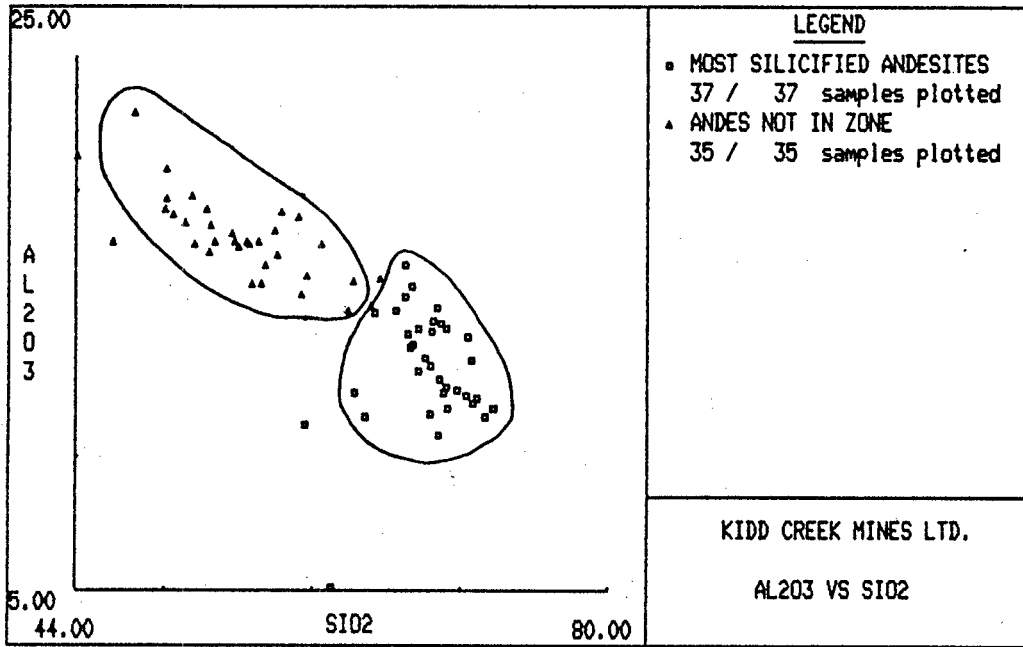
- 1971 AND 1981 DRILL HOLES - DATA ANALYZED IN 1987

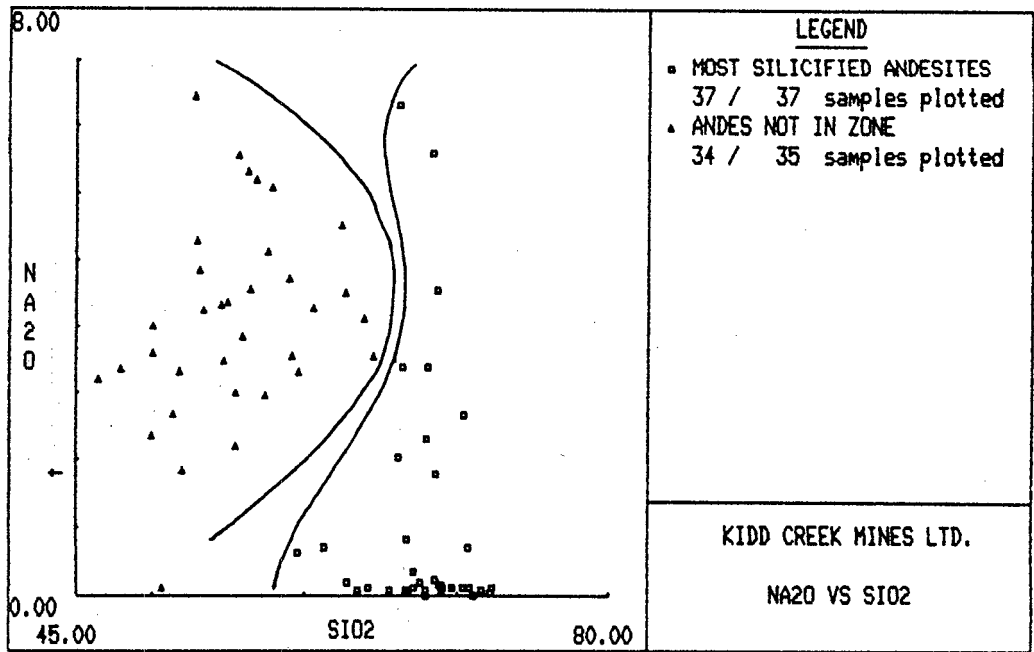
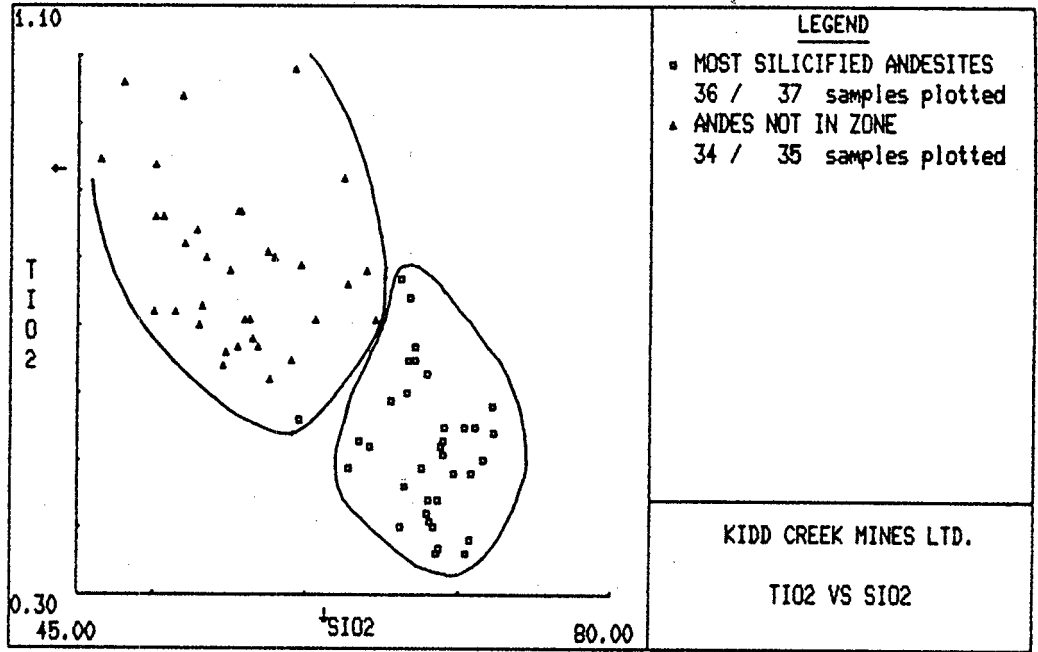
SAMPLE	HOLE #	FROM metres	TO metres	RB ppm	SR ppm	Y ppm	ZR ppm	NB ppm
AE08216	BH71-1	50.90	51.00	63.00	16.00	22.00	117.00	-10.00
AE08217	BH71-1	106.70	106.80	90.00	26.00	21.00	67.00	19.00
AE08218	BH71-2	24.40	24.50	73.00	40.00	22.00	39.00	-10.00
AE08219	BH71-3	88.40	88.50	92.00	44.00	-10.00	109.00	18.00
AE08220	BH71-6	11.60	11.70	94.00	10.00	20.00	137.00	15.00
AE08221	BH71-9	50.90	51.00	57.00	-10.00	-10.00	63.00	21.00
AE08222	BH71-9	55.20	55.30	-10.00	29.00	-10.00	66.00	26.00
AE08223	BH71-9	68.60	68.70	-10.00	-10.00	-10.00	57.00	18.00
AE08224	BH71-9	115.20	115.30	130.00	169.00	-10.00	26.00	-10.00
AE08225	BH71-9	116.70	116.80	157.00	139.00	14.00	53.00	-10.00
AE08226	BH71-9	123.70	123.80	132.00	155.00	24.00	29.00	-10.00
AE08227	BH71-9	137.80	137.90	53.00	-10.00	-10.00	32.00	-10.00
AE08228	BH71-9	152.90	153.00	82.00	111.00	14.00	65.00	11.00
AE08229	BH71-9	182.30	182.40	52.00	82.00	22.00	42.00	-10.00
AE08230	BH71-9	234.70	234.80	72.00	115.00	-10.00	41.00	-10.00
AE08151	BH-1-81	68.00	71.00	116.00	-10.00	17.00	84.00	14.00
AE08152	BH-1-81	197.00	200.00	92.00	206.00	13.00	12.00	31.00
AE08153	BH-1-81	342.90	345.90	72.00	212.00	-10.00	30.00	19.00
AE08154	BH-1-8 1	437.00	450.00	57.00	119.00	11.00	131.00	15.00

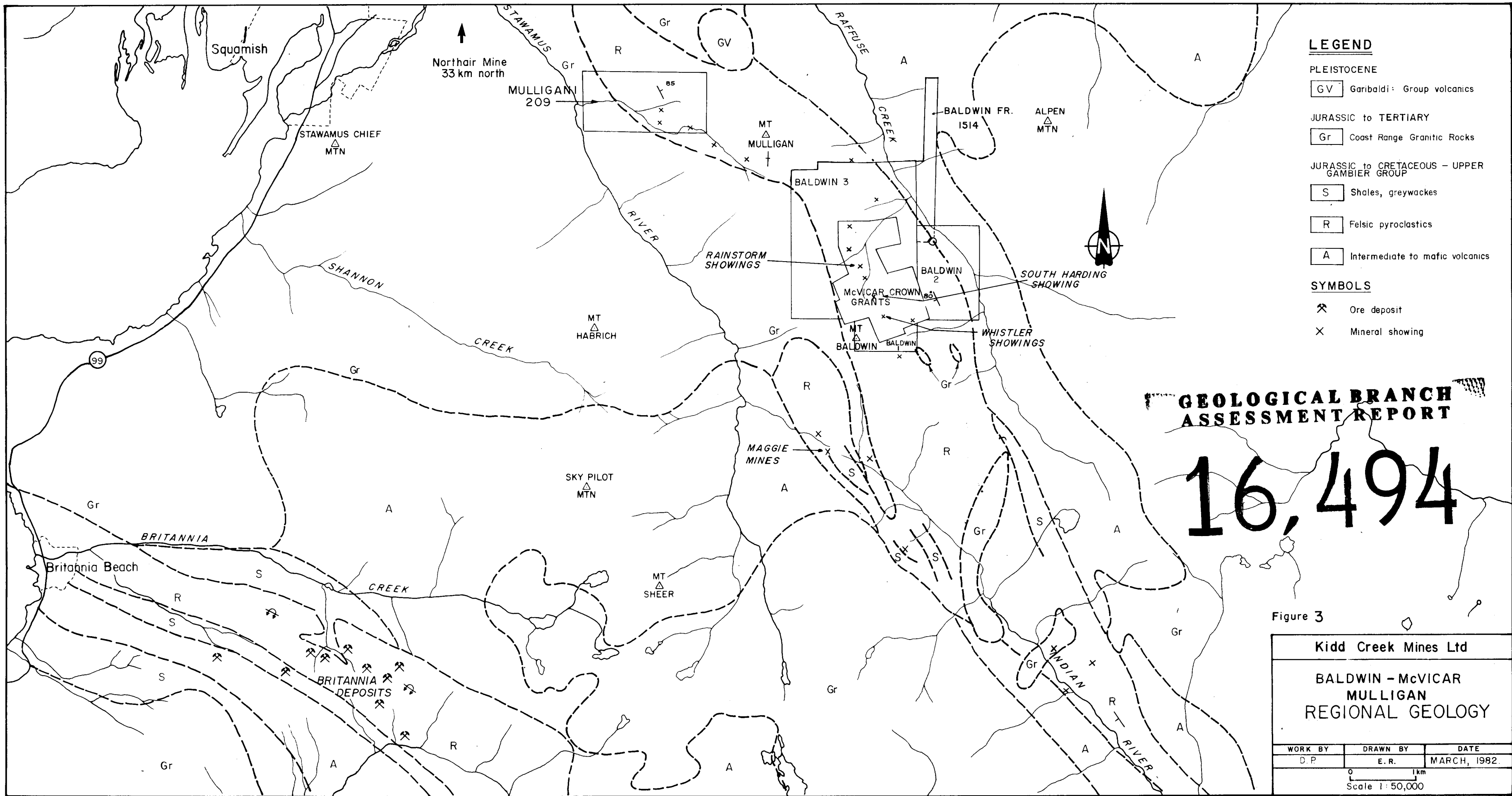
APPENDIX 7
MAJOR OXIDE VARIATION DIAGRAMS

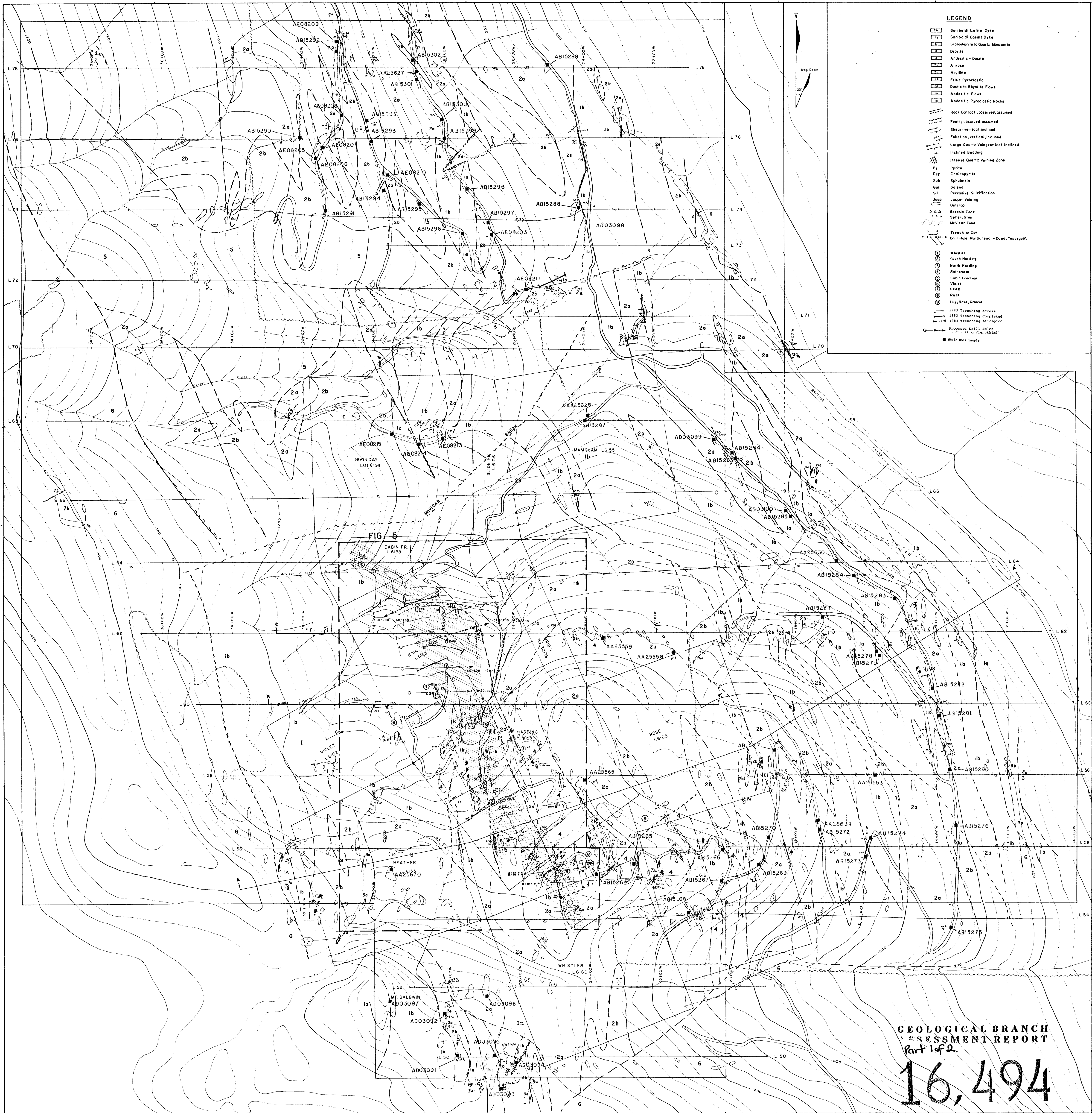












GEOLOGICAL BRANCH
ASSESSMENT REPORT
Part 1 of 2

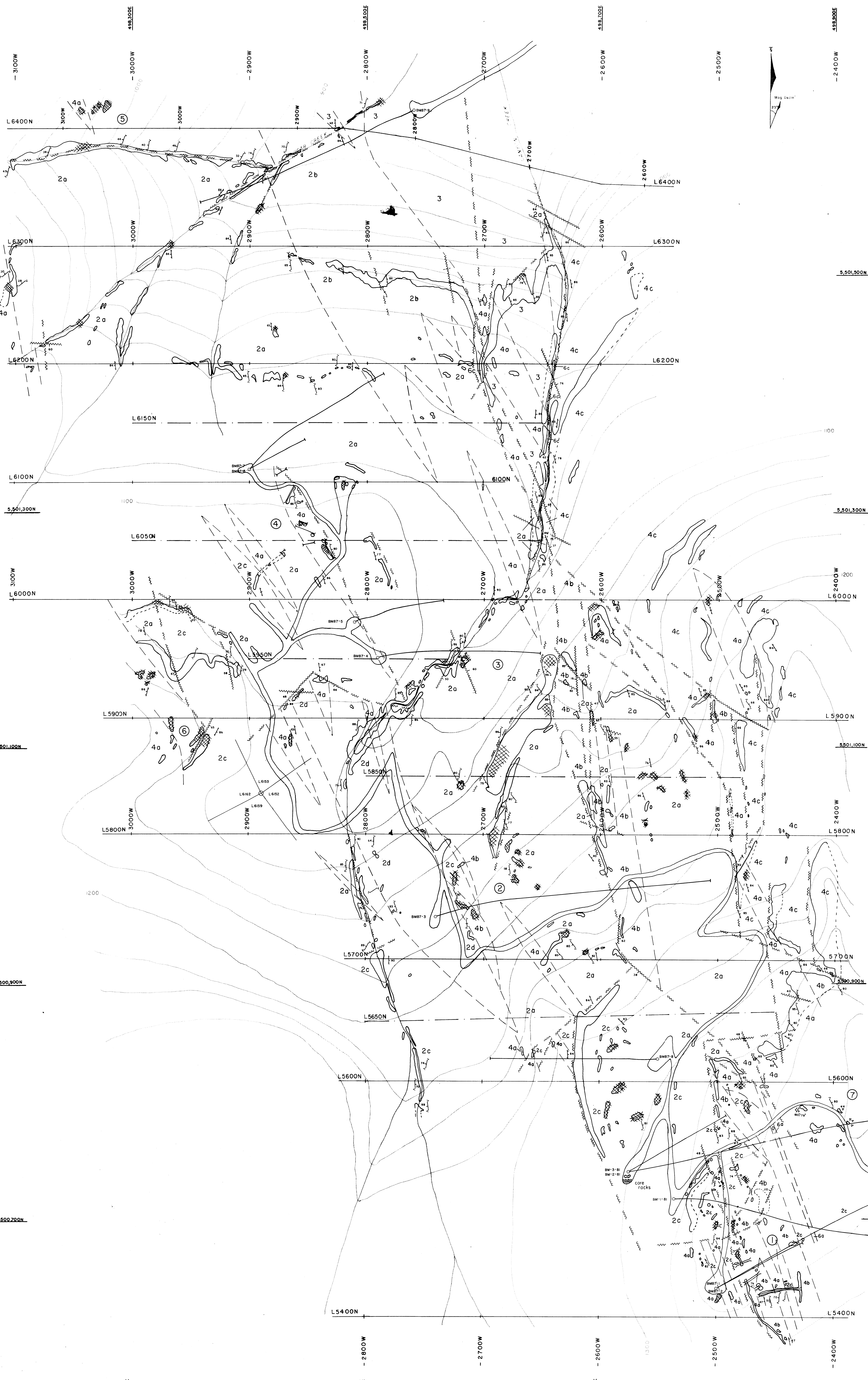
16,494

FALCONBRIDGE LTD.
BALDWIN McVICAR
GEOLOGY
WHOLE ROCK SAMPLING LOCATIONS

815 92 6111 Proj. 97

DATE	BY	DATE	BY
SE	OC	08/11/28	

Scale 1:5000
Figure: 4

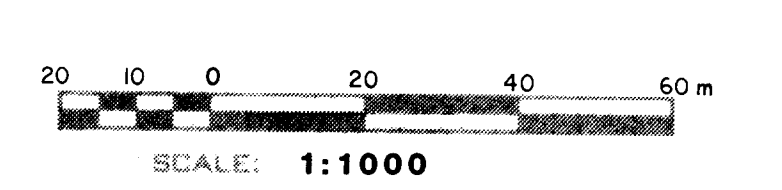


LEGEND

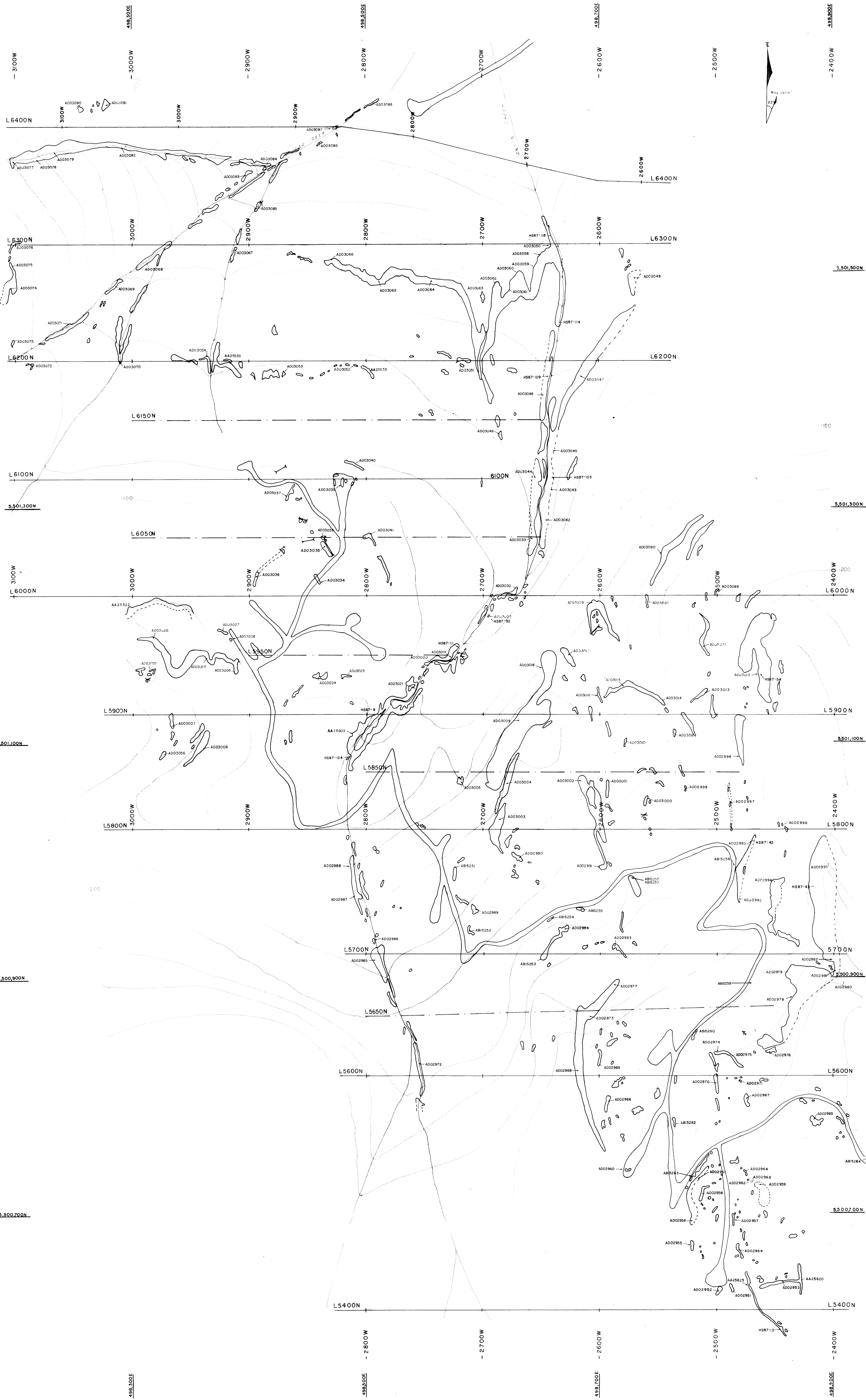
- TERTIARY TO RECENT**
 - 6c Garibaldi Rocks
 - 6b Mafic Dyke
 - 6a Intermediate Dyke
 - 6c Felsic Dyke
- CRETACEOUS TO TERTIARY**
 - 5 Coast Range Plutonic Rocks
 - Gambier Group
- LOWER CRETACEOUS**
 - 4c Feldspar Crystalline Rhyolite
 - 4b Aphanitic Rhyolite
 - 4a Rhyolite
 - 3 Dacite
 - 2d Heterolithic Andesite Volcanoclastic
 - 2c Feldspar Crystalline Andesite Tuff
 - 2b Andesite Fine Ash Tuff
 - 2a Andesite Lapilli - Ash Tuff
 - 1 Greywacke / Conglomerate
- Rock Contact; observed, assumed**
- Fault; observed (dip known, unknown) assumed**
- Shear, inclined, vertical, dip unknown**
- Foliation; inclined, vertical, dip unknown**
- Banding; inclined, convoluted**
- Rock Outcrop, Probable Outcrop**
- Intense Quartz Veining Zone**
- Breccia Zone**
- Access Road**
- Adit**
- Cut**
- Trench**
- Drill Hole; Falconbridge, Texasgulf**

- 1 Whistler
- 2 South Harding
- 3 North Harding
- 4 Rainstorm
- 5 Cabin Fraction
- 6 Violet
- 7 Ruth

**GEOLOGICAL BRANCH
ASSESSMENT REPORT
Part 1 of 2**
16,494



FALCONBRIDGE LTD.	
BALDWIN-McVICAR	121
SQUAMISH, BRITISH COLUMBIA	
GEOLOGY & DRILL HOLE LOCATIONS	
WORKING PLACE:	
BASED ON: FIELD MAPPING	
DATE OF WORK: SEPT. 1987	MAP REF. NO.:
DRAWN BY: G.M. S.G.	FIG. NO.:
NOV. 1987	92 G/11



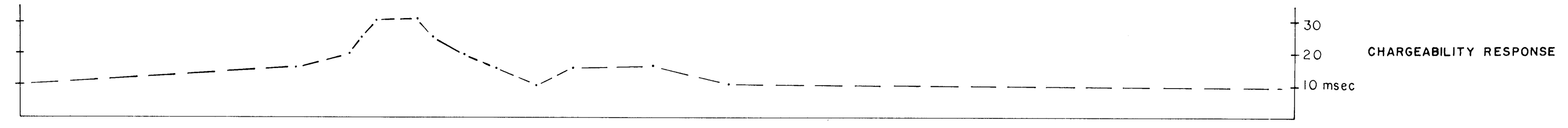
**GEOLOGICAL BRANCH
ASSESSMENT REPORT**
Part 1 of 2
16,494

SCALE: 1:1000
20 0 20 40 60 m

FALCONBRIDGE LTD. PROJECT NO. 121
BALDWIN-McVICAR
SQUAMISH, BRITISH COLUMBIA
WHOLE ROCK SAMPLE LOCATIONS

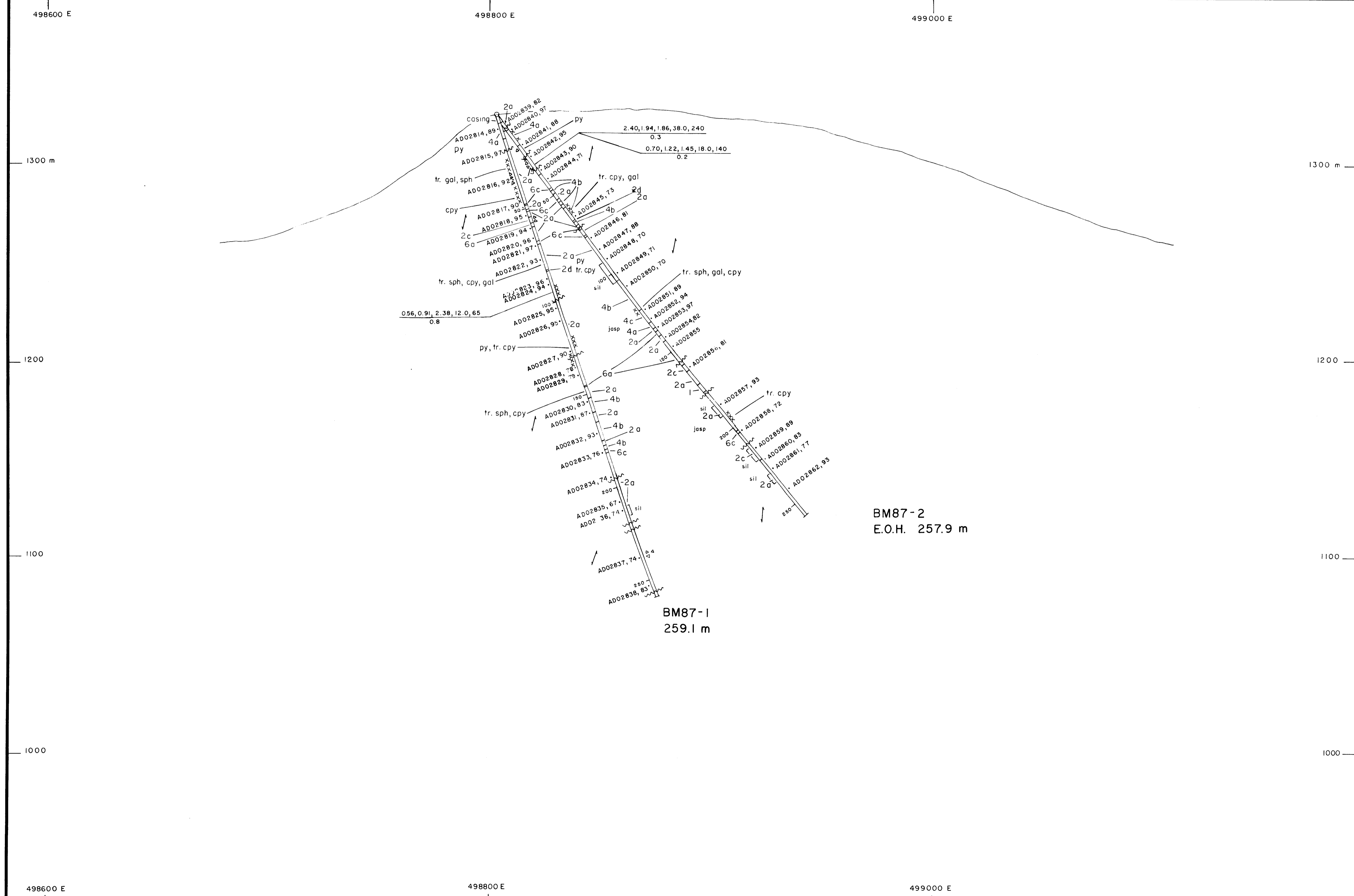
WORKING PLACE: FIELD MAPPING
DATED IN: SEPT., 1987
DATE OF WORK: SEPT., 1987
DRAWN BY: S.G.
DATE: NOV., 1987

FIG. NO. 7



LEGEND

- TERTIARY TO RECENT**
- 6c Mafic Dyke
 - 6b Intermediate Dyke
 - 6a Felsic Dyke
- CRETACEOUS TO TERTIARY**
- 5 Coast Range Plutonic Rocks
Granodiorite
- LOWER CRETACEOUS**
- Gambier Group
 - 4c Feldspar Crystalline Rhyolite
 - 4b Aphanitic Rhyolite
 - 4a Rhyolite
 - 3 Dacite
 - 2d Heterolithic Andesite Volcaniclastic
 - 2c Feldspar Crystalline Andesite Tuff
 - 2b Andesite Fine Ash Tuff
 - 2a Andesite Lapilli - Ash Tuff
 - 1 Greywacke/ Conglomerate
- Fault; observed (dip known, unknown)
- Foliation
- xxx Intense Quartz Veining Zone
- Py Pyrite
- Cpy Chalcopyrite
- Sph Sphalerite
- Gal Galena
- Sil Pervasive Silicification
- Jasp Jasper Veining
- 4d Breccia Zone
- 403051.65 whole rock sample, Ishikawa Index > 60
- 0.35, 1.09, 0.12, 2.2, 45 %Cu, %Pb, %Zn, g/t Ag, ppb Au
1.2 meter interval



*Ishikawa, 1976

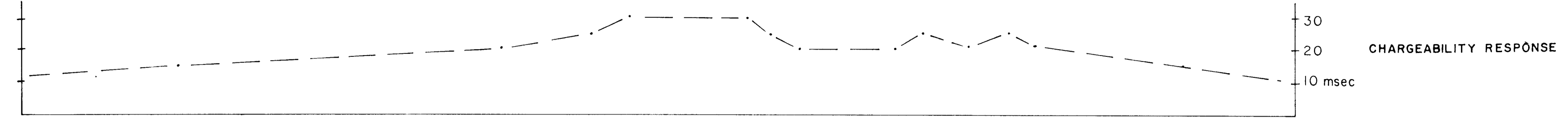
**GEOLOGICAL BRANCH
ASSESSMENT REPORT**

Part 1 of 2

16,494

SCALE: 1:1000

FALCONBRIDGE LTD.		
PROPERTY: BALDWIN-McVICAR		
LOCATION: SQUAMISH, BRITISH COLUMBIA		
TYPE OF MAP: SECTION BM87-1, 2		
WORK BY: G.M., S.G.	PROJECT NO. 121	FIG. NO.: 11
DATE OF WORK: SEPT., 1987		
DRAWN BY: S.G.		
DATE: NOV., 1987	N.T.S. NO.: 92 G/11	



LEGEND

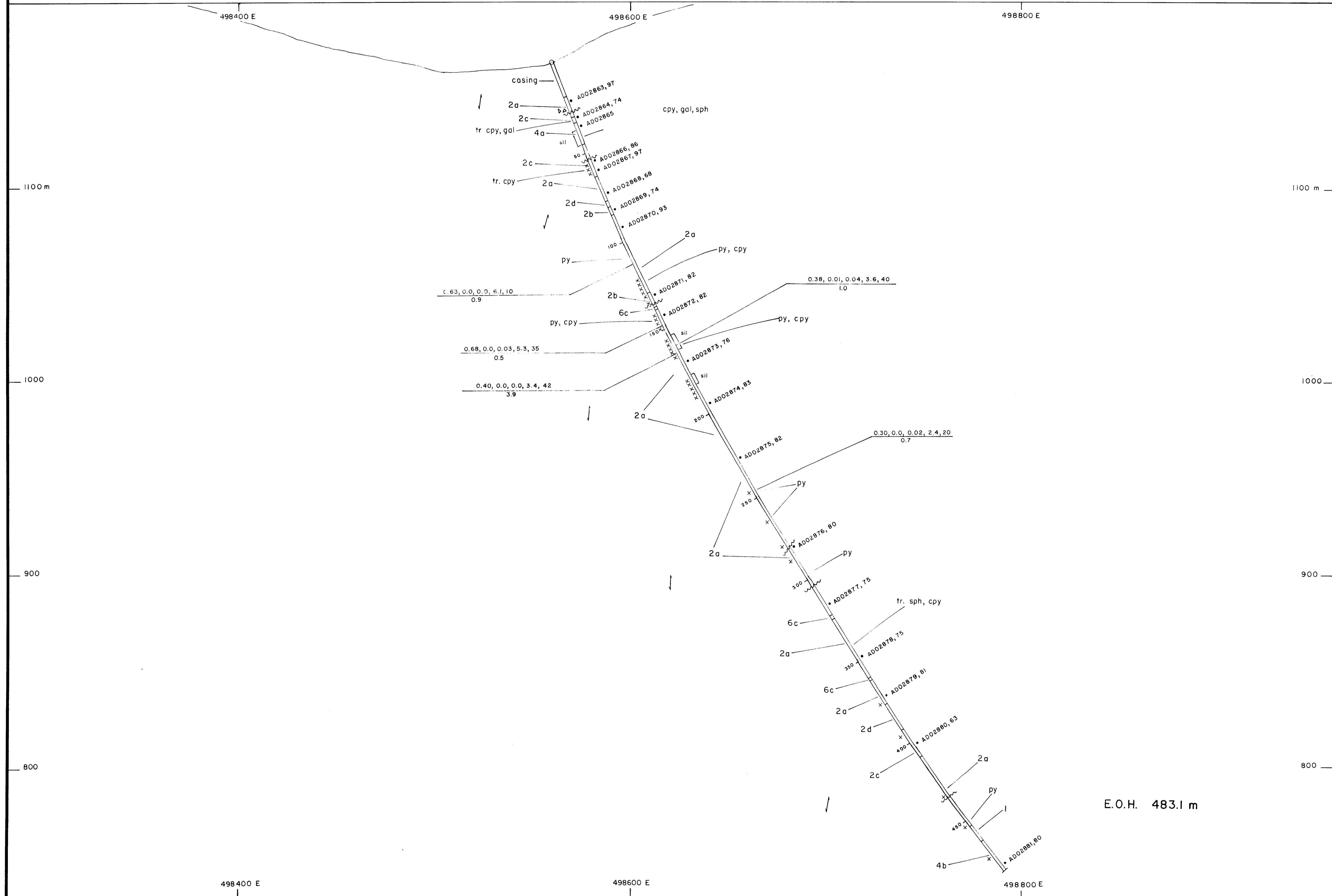
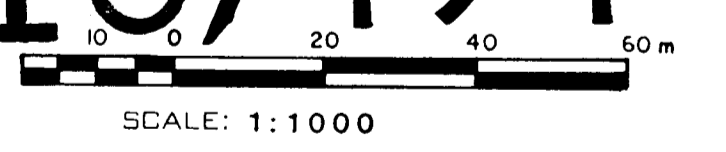
- TERTIARY TO RECENT
 - 6c Mafic Dyke
 - 6b Intermediate Dyke
 - 6a Felsic Dyke
- CRETACEOUS TO TERTIARY
 - 5 Coast Range Plutonic Rocks
Granodiorite
- LOWER CRETACEOUS
 - 4c Gambier Group
Feldspar Crystalline Rhyolite
 - 4b Aphanitic Rhyolite
 - 4a Rhyolite
 - 3 Dacite
 - 2d Heterolithic Andesite Volcaniclastic
 - 2c Feldspar Crystalline Andesite Tuff
 - 2b Andesite Fine Ash Tuff
 - 2a Andesite Lapilli - Ash Tuff
 - 1 Greywacke/ Conglomerate

- Fault; observed (dip known, unknown)
- Foliation
- xxx Intense Quartz Veining Zone
- Py Pyrite
- Cpy Chalcopyrite
- Sph Sphalerite
- Gal Galena
- Sil Pervasive Silicification
- Jasp Jasper Veining
- 4d Breccia Zone
- A003051,65 whole rock sample, Ishikawa Index > 60

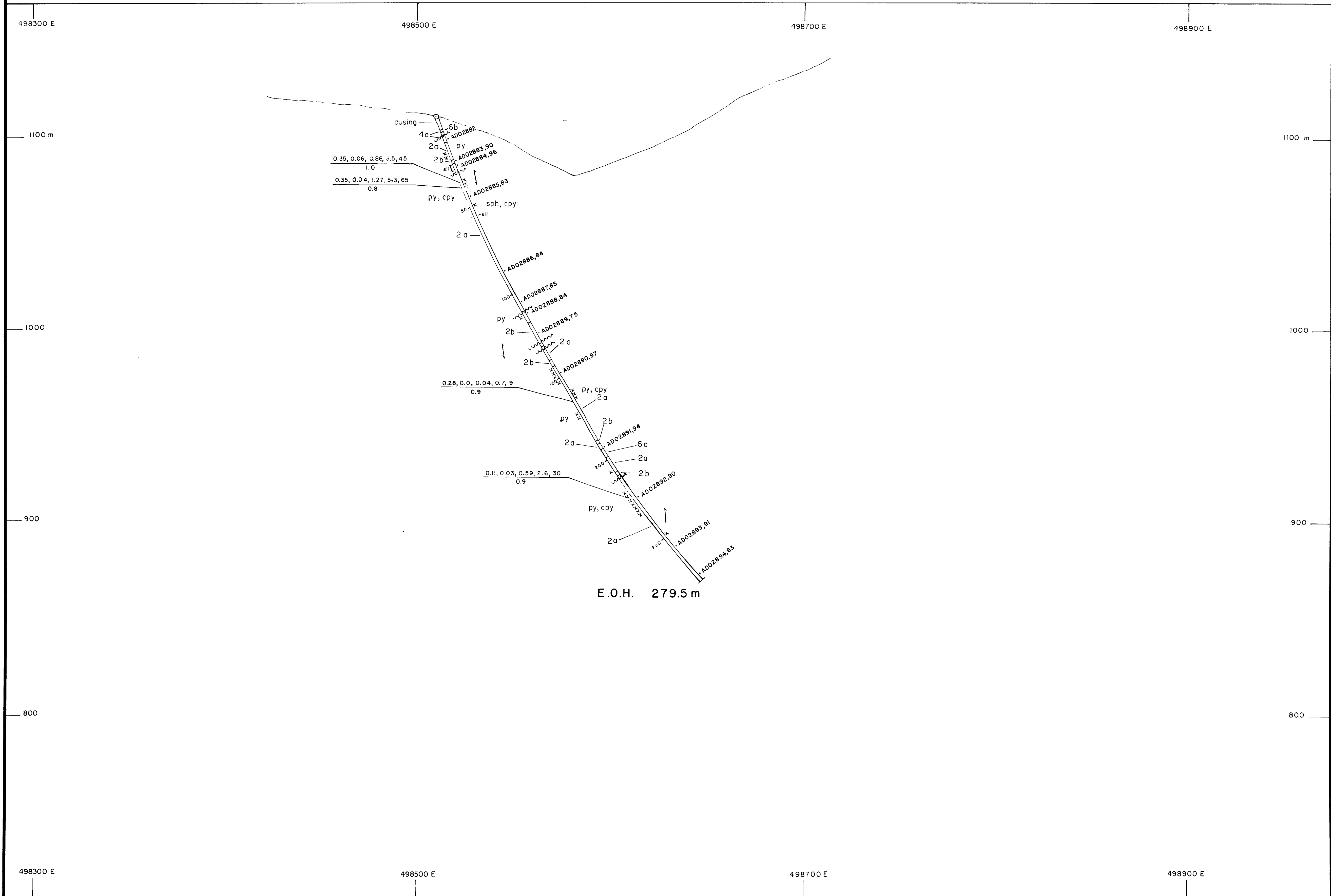
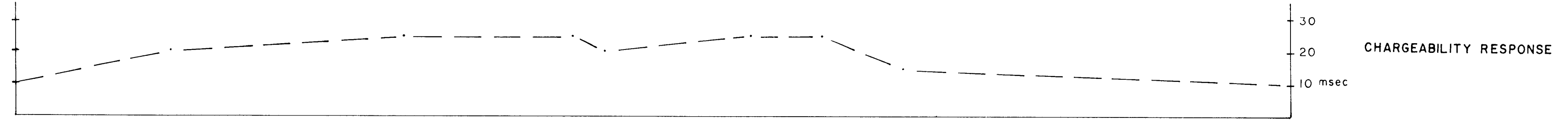
0.35, 1.09, 0.12, 2.2, 45
1.2 %Cu, %Pb, %Zn, g/t Ag, ppb Au
meter interval

Ishikawa, 1976
GEOLOGICAL BRANCH
ASSESSMENT REPORT

Part 1 of 2
16,494



FALCONBRIDGE LTD.	
PROPERTY: BALDWIN-McVICAR	
LOCATION: SQUAMISH, BRITISH COLUMBIA	
TYPE OF MAP: SECTION BM87- 3	
WORK BY: G.M., S.G.	PROJECT NO. 121
DATE OF WORK: SEPT., 1987	FIG. NO.: 12
DRAWN BY: S.G.	
DATE: NOV., 1987	N.T.S. NO.: 92 G/11

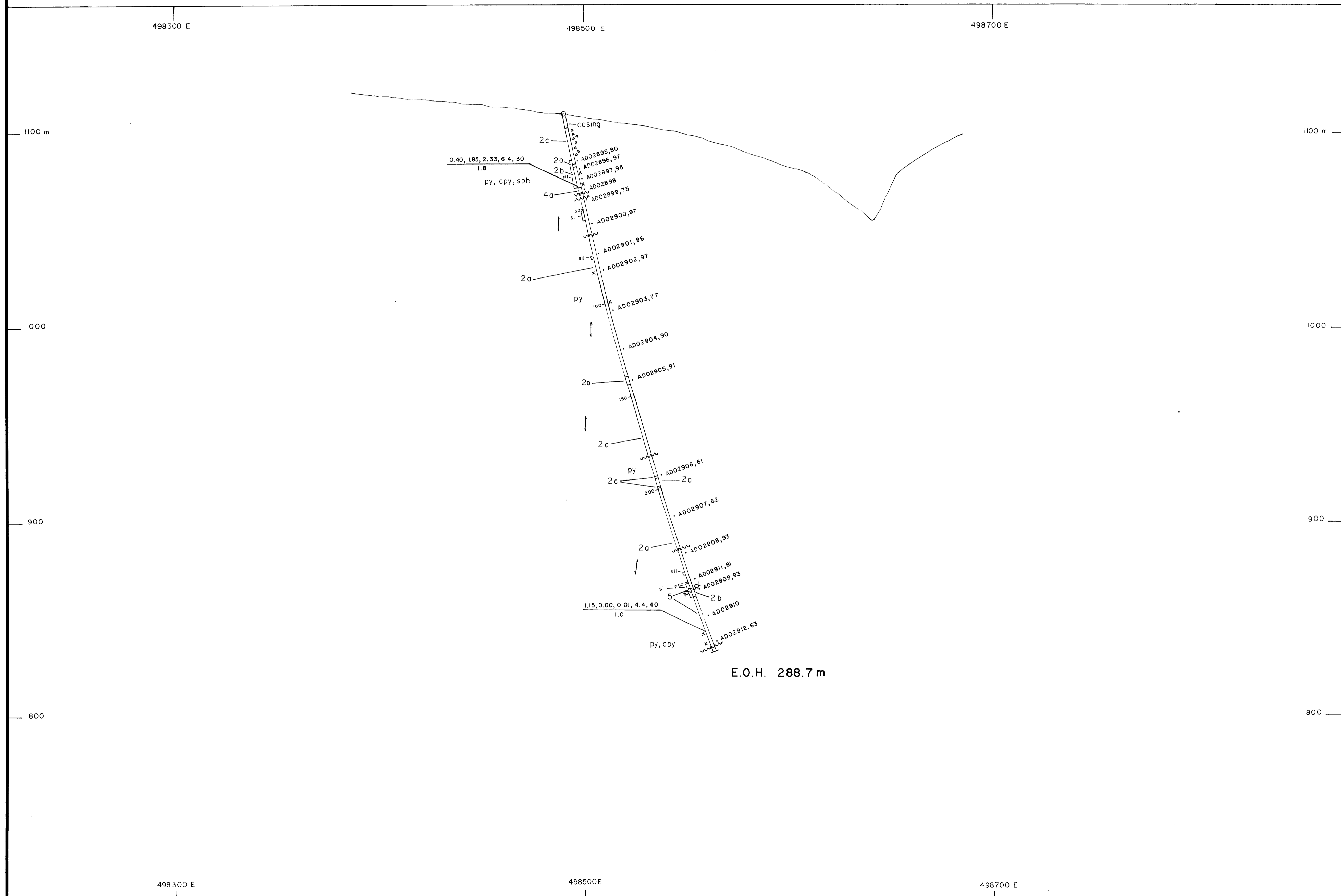
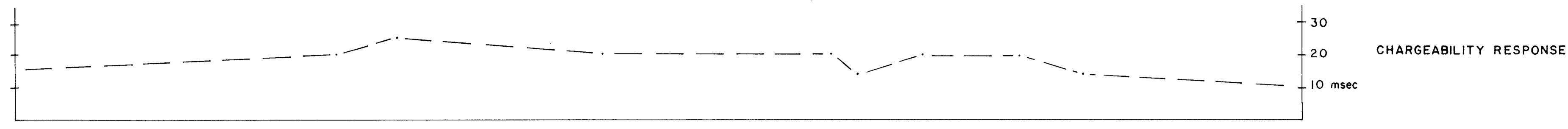


LEGEND

- TERTIARY TO RECENT
 - Garibaldi Group
 - 6c Mafic Dyke
 - 6b Intermediate Dyke
 - 6a Felsic Dyke
- CRETACEOUS TO TERTIARY
 - Coast Range Plutonic Rocks
 - 5 Granodiorite
- LOWER CRETACEOUS
 - Gambier Group
 - 4c Feldspar Crystalline Rhyolite
 - 4b Aphanitic Rhyolite
 - 4a Rhyolite
 - 3 Dacite
 - 2d Heterolithic Andesite - Volcaniclastic
 - 2c Feldspar Crystalline Andesite Tuff
 - 2b Andesite Fine Ash Tuff
 - 2a Andesite Lapilli - Ash Tuff
 - 1 Greywacke/ Conglomerate
- Fault; observed (dip known, unknown)
 - Foliation
 - xxx Intense Quartz Veining Zone
 - Py Pyrite
 - Cpy Chalcopyrite
 - Sph Sphalerite
 - Gal Galena
 - Sil Pervasive Silicification
 - Jasp Jasper Veining
 - 4d Breccia Zone
 - ADO3051,65 whole rock sample, Ishikawa Index > 60

Ishikawa, 1976
GEOLOGICAL BRANCH
ASSESSMENT REPORT
Rt 10f2
16,494
 20 10 0 20 40 60m
 SCALE: 1:1000

FALCONBRIDGE LTD.			
BALDWIN-McVICAR			
SQUAMISH, BRITISH COLUMBIA			
SECTION			
BM87-4			
WORK BY:	G.M., S.G.	PROJECT NO.:	
DATE OF WORK:	SEPT., 1987	PROJECT NO.:	121
DRAWN BY:	S.G.	FIG. NO.:	13
DATE:	NOV., 1987	N.T.S. NO.:	92 G/11

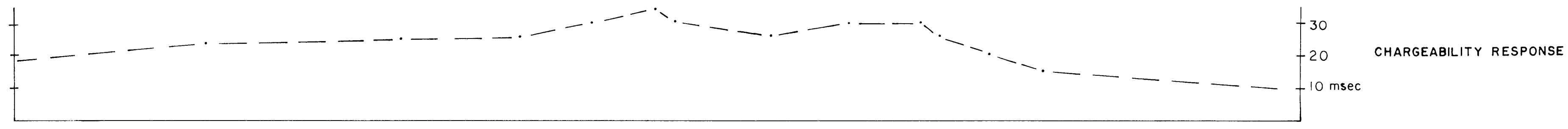


LEGEND

- TERTIARY TO RECENT
 - Garibaldi Group
 - 6c Mafic Dyke
 - 6b Intermediate Dyke
 - 6a Felsic Dyke
- CRETACEOUS TO TERTIARY
 - Coast Range Plutonic Rocks
 - 5 Granodiorite
- LOWER CRETACEOUS
 - Gambier Group
 - 4c Feldspar Crystalline Rhyolite
 - 4b Aphanitc Rhyolite
 - 4a Rhyolite
 - 3 Dacite
 - 2d Heterolithic Andesite Volcaniclastic
 - 2c Feldspar Crystalline Andesite Tuff
 - 2b Andesite Fine Ash Tuff
 - 2a Andesite Lapilli - Ash Tuff
 - 1 Greywacke/Conglomerate
- Geological Symbols:
 - Fault; observed (dip known, unknown)
 - Foliation
 - Intense Quartz Veining Zone (xxx)
 - Pyrite (Py)
 - Chalcopyrite (Cpy)
 - Sphalerite (Sph)
 - Galena (Gal)
 - Pervasive Silicification (sil)
 - Jasper Veining (Jasp)
 - Breccia Zone (4d)
 - whole rock sample. Ishikawa Index > 60 (AD03051.65)
- Assay Data:
 - 0.35, 1.09, 0.12, 2.2, 45 %Cu, %Pb, %Zn, g/t Ag, ppb Au
 - 1.2 meter interval

Ishikawa, 1976
GEOLOGICAL BRANCH
ASSESSMENT REPORT
 Part 1 of 2
16,494
 SCALE: 1:1000

FALCONBRIDGE LTD.		
PROPERTY: BALDWIN-McVICAR		
LOCATION: SQUAMISH, BRITISH COLUMBIA		
TYPE OF MAP: SECTION BM87-5		
WORK BY: G.M., S.G.	PROJECT NO. 121	FIG. NO.: 14
DATE OF WORK: SEPT., 1987	DRAWN BY: S.G.	DATE: NOV., 1987
N.T.S. NO.: 92 G/11		



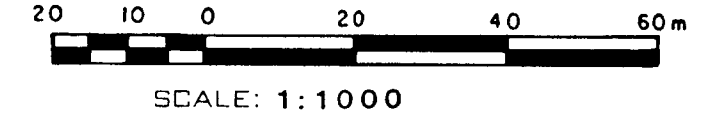
LEGEND

- TERTIARY TO RECENT
 - 6c Mafic Dyke
 - 6b Intermediate Dyke
 - 6a Felsic Dyke
- CRETACEOUS TO TERTIARY
 - 5 Coast Range Plutonic Rocks
Granodiorite
- LOWER CRETACEOUS
 - 4c Gambier Group
Feldspar Crystalline Rhyolite
 - 4b Aphanitic Rhyolite
 - 4a Rhyolite
 - 3 Dacite
 - 2d Heterolithic Andesite Volcaniclastic
 - 2c Feldspar Crystalline Andesite Tuff
 - 2b Andesite Fine Ash Tuff
 - 2a Andesite Lapilli - Ash Tuff
 - 1 Greywacke/ Conglomerate

- Fault; observed (dip known, unknown)
 - Foliation
 - xxx Intense Quartz Veining Zone
 - Py Pyrite
 - Cpy Chalcopyrite
 - Sph Sphalerite
 - Gal Galena
 - Sil Pervasive Silicification
 - Jasp Jasper Veining
 - 4d Breccia Zone
 - AD03051,65 whole rock sample, Ishikawa Index > 60
- 0.35, 1.09, 0.12, 2.2, 45
1.2 %Cu, %Pb, %Zn, g/l Ag, ppb Au
meter interval

**GEOLOGICAL BRANCH
ASSESSMENT REPORT
Part 1 of 2**

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FALCONBRIDGE LTD.

PROPERTY: **BALDWIN-McVICAR**

LOCATION: **SQUAMISH, BRITISH COLUMBIA**

TYPE OF MAP: **SECTION
BM87-6,7**

WORK BY: **G.M., S.G.**

DATE OF WORK: **SEPT., 1987**

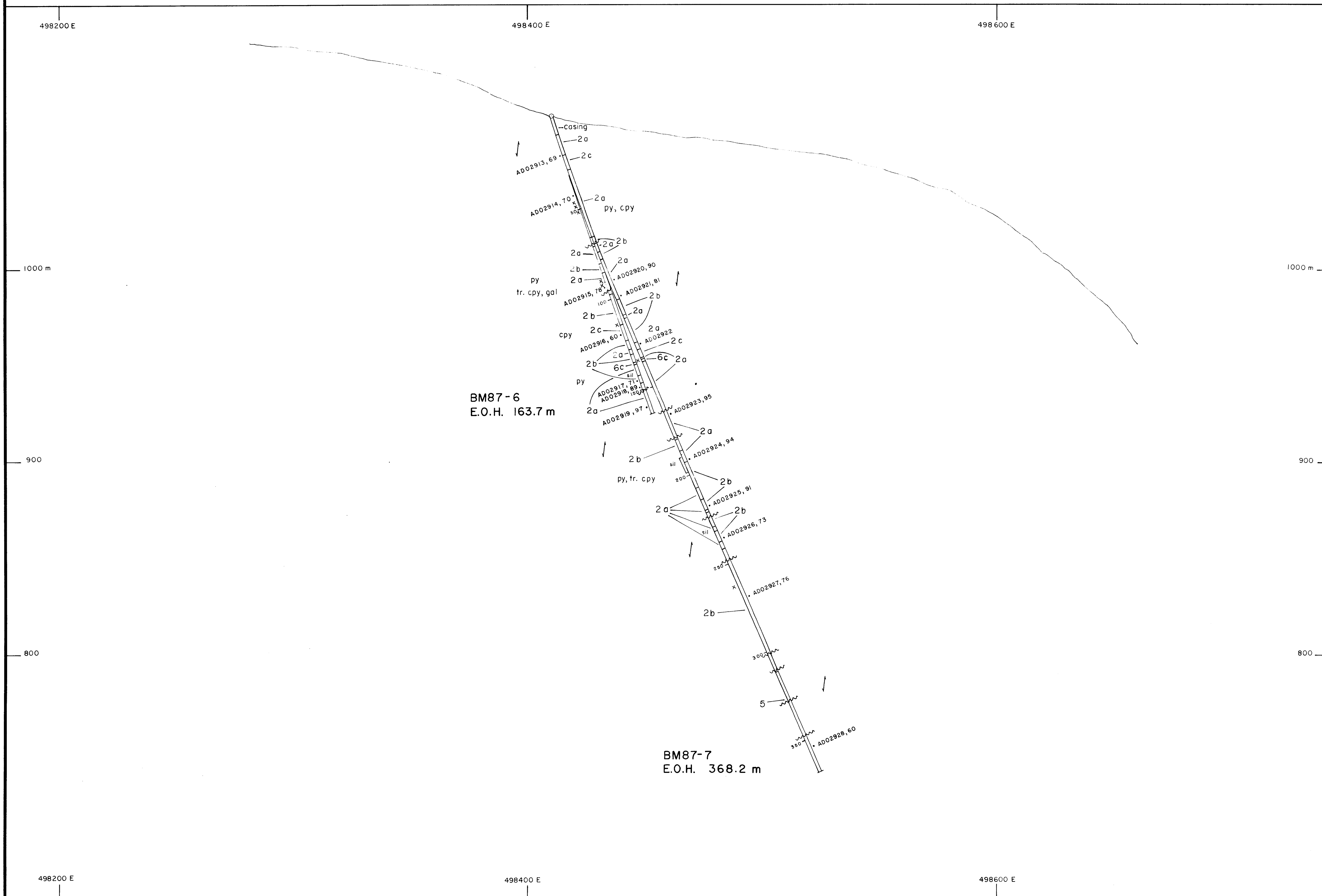
DRAWN BY: **S.G.**

DATE: **NOV., 1987**

PROJECT NO. **121**

N.T.S. NO.: **92 G/11**

FIG. NO.: **15**



498200 E

498400 E

498600 E

1000 m

900

800

1000 m

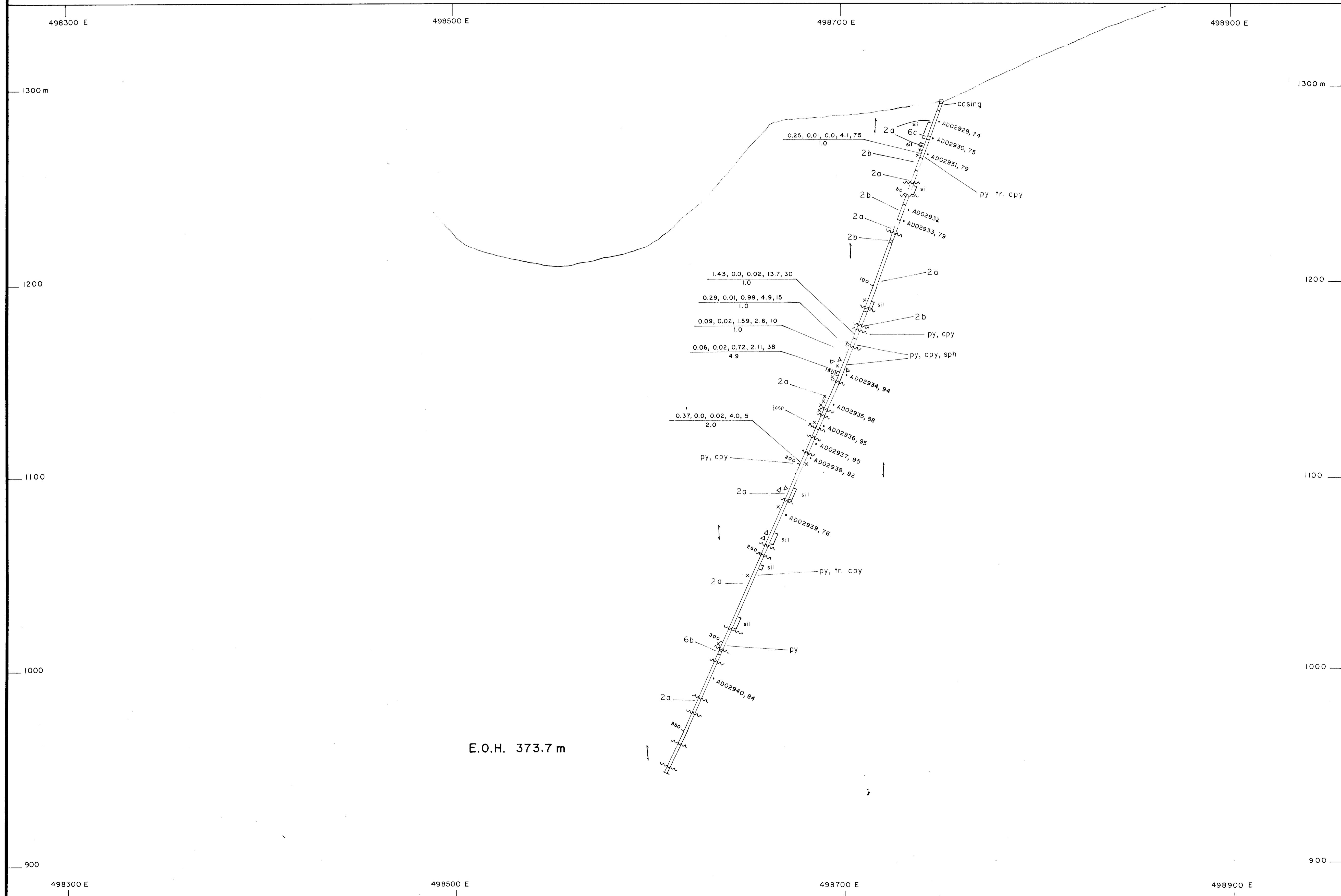
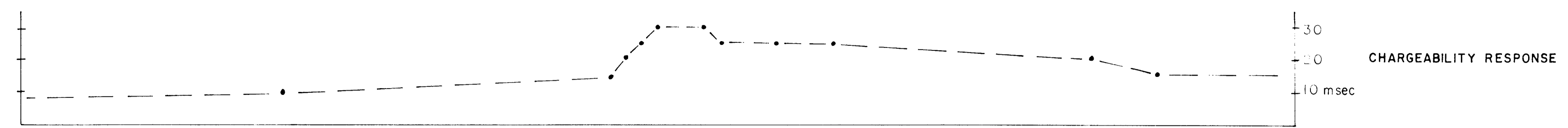
900

800

498200 E

498400 E

498600 E



LEGEND

- TERTIARY TO RECENT
 - Garibaldi Rocks
 - 6c Mafic Dyke
 - 6b Intermediate Dyke
 - 6a Felsic Dyke
- CRETACEOUS TO TERTIARY
 - Coast Range Plutonic Rocks
 - 5 Granodiorite
- LOWER CRETACEOUS
 - Gambier Group
 - 4c Feldspar Crystalline Rhyolite
 - 4b Aphanitic Rhyolite
 - 4a Rhyolite
 - 3 Dacite
 - 2d Heterolithic Andesite Volcaniclastic
 - 2c Feldspar Crystalline Andesite Tuff
 - 2b Andesite Fine Ash Tuff
 - 2a Andesite Lapilli - Ash Tuff
 - 1 Greywacke/ Conglomerate
- Fault; observed (dip known, unknown)
 - Foliation
 - xxx Intense Quartz Veining Zone
 - Py Pyrite
 - Cpy Chalcopyrite
 - Sph Sphalerite
 - Gal Galena
 - Sil Pervasive Silicification
 - Jasp Jasper Veining
 - qg Breccia Zone
 - 4003051,65 whole rock sample, Ishikawa Index > 60

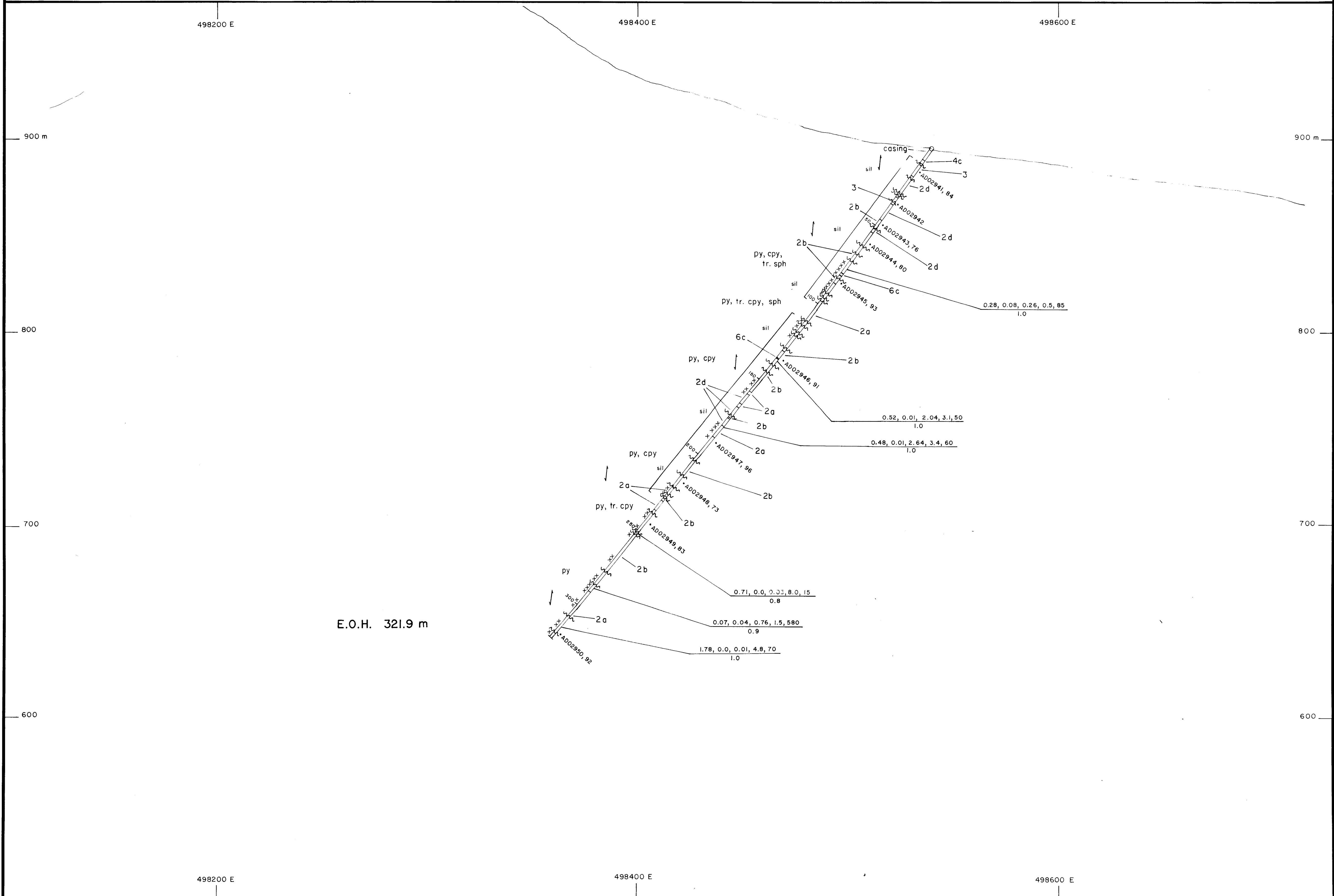
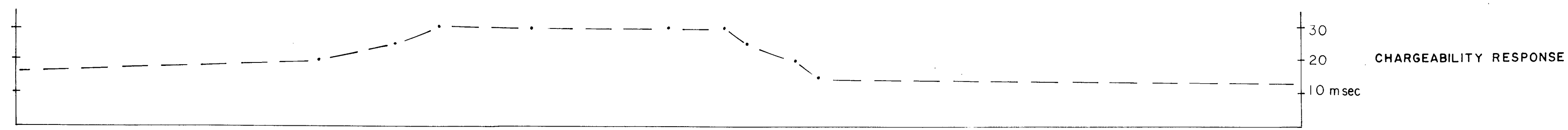
0.35, 1.09, 0.12, 2.2, 45
1.2 %Cu, %Pb, %Zn, g/l Ag, ppb Au
meter interval

¹Ishikawa, 1976
**GEOLOGICAL BRANCH
ASSESSMENT REPORT**
Part 1 of 2

16,494

SCALE: 1:1000

FALCONBRIDGE LTD.	
PROPERTY: BALDWIN-McVICAR	
LOCATION: SQUAMISH, BRITISH COLUMBIA	
TYPE OF MAP: SECTION BM87- 8	
WORK BY: G.M., S.G.	
DATE OF WORK: SEPT., 1987	PROJECT NO. 121
DRAWN BY: S.G.	FIG. NO.: 16
DATE: NOV., 1987	N.T.S. NO.: 92 G/11



LEGEND

- TERTIARY TO RECENT
 - Garibaldi Rocks
 - 6c Mafic Dyke
 - 6b Intermediate Dyke
 - 6a Felsic Dyke
- CRETACEOUS TO TERTIARY
 - Coast Range Plutonic Rocks
 - 5 Granodiorite
- LOWER CRETACEOUS
 - Gambier Group
 - 4c Feldspar Crystalline Rhyolite
 - 4b Aphanitic Rhyolite
 - 4a Rhyolite
 - 3 Dacite
 - 2d Heterolithic Andesite Volcaniclastic
 - 2c Feldspar Crystalline Andesite Tuff
 - 2b Andesite Fine Ash Tuff
 - 2a Andesite Lapilli - Ash Tuff
 - 1 Greywacke / Conglomerate
- Fault; observed (dip known, unknown)
- - - Foliation
- xxx Intense Quartz Veining Zone
- py Pyrite
- cpy Chalcopyrite
- sph Sphalerite
- gal Galena
- sil Pervasive Silicification
- Jasp Jasper Veining
- 4d Breccia Zone
- A003051, 65 whole rock sample, Ishikawa Index > 60

0.35, 1.09, 0.12, 2.2, 45 / 1.2 %Cu, %Pb, %Zn, g/l Ag, ppb Au
meter interval

**GEOLOGICAL BRANCH
ASSESSMENT REPORT**
Part 10/2
16,494

SCALE: 1:1000

FALCONBRIDGE LTD.		
PROPERTY: BALDWIN-McVICAR		
LOCATION: SQUAMISH, BRITISH COLUMBIA		
TYPE OF MAP: SECTION BM87- 9		
WORK BY: G.M., S.G.	PROJECT NO. 121	FIG. NO. 17
DATE OF WORK: SEPT., 1987	DRAWN BY: S.G.	DATE: NOV., 1987
		N.T.S. NO.: 92 G/11