ENERGEX MINERALS LTD.

FAIR MINERAL CLAIMS
MAYO MINING DISTRICT, Y.T.

GEOLOGY AND RESULTS
OF SAMPLING PROGRAM

DECEMBER 1981

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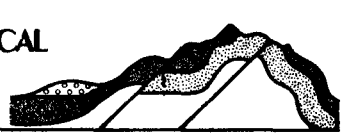

REPORT ON GEOLOGICAL MAPPING, SOIL SAMPLING AND ROCK SAMPLING OF THE FAIR PROPERTY; MINERAL CLAIMS 22,23,24,25,26,29,31,33.

Fairchild Lake, Bonnet Plume River
Mayo Mining District, Yukon Territory
N.T.S. Map Area 106 C/13
Latitude 64°57'N Longitude 133°45'

for

ENERGEX MINERALS LTD.
850 West Hastings St.
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by

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and

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December, 1981

091026

This report has been examined by
the Geological Section [illegible]
under Section 53 (4) Yukon Quartz
Mining Act and is allowed as
representation work in the amount
of $ 15,000

F. Watson

for Regional Manager, Exploration and
Geological Services for Commissioner
of Yukon Territory.

TABLE OF CONTENTS

TABLE OF CONTENTS

(continued)

TABLES

FIGURES

APPENDICES

1 INTRODUCTION

This report presents the results of the first stage of mineral exploration for copper on a portion of the Fair property, Yukon Territory. The work was done at the request of Energex Minerals Ltd. of Vancouver, B.C., the owners of the property, as part of their program of development recommended in May, 1981.

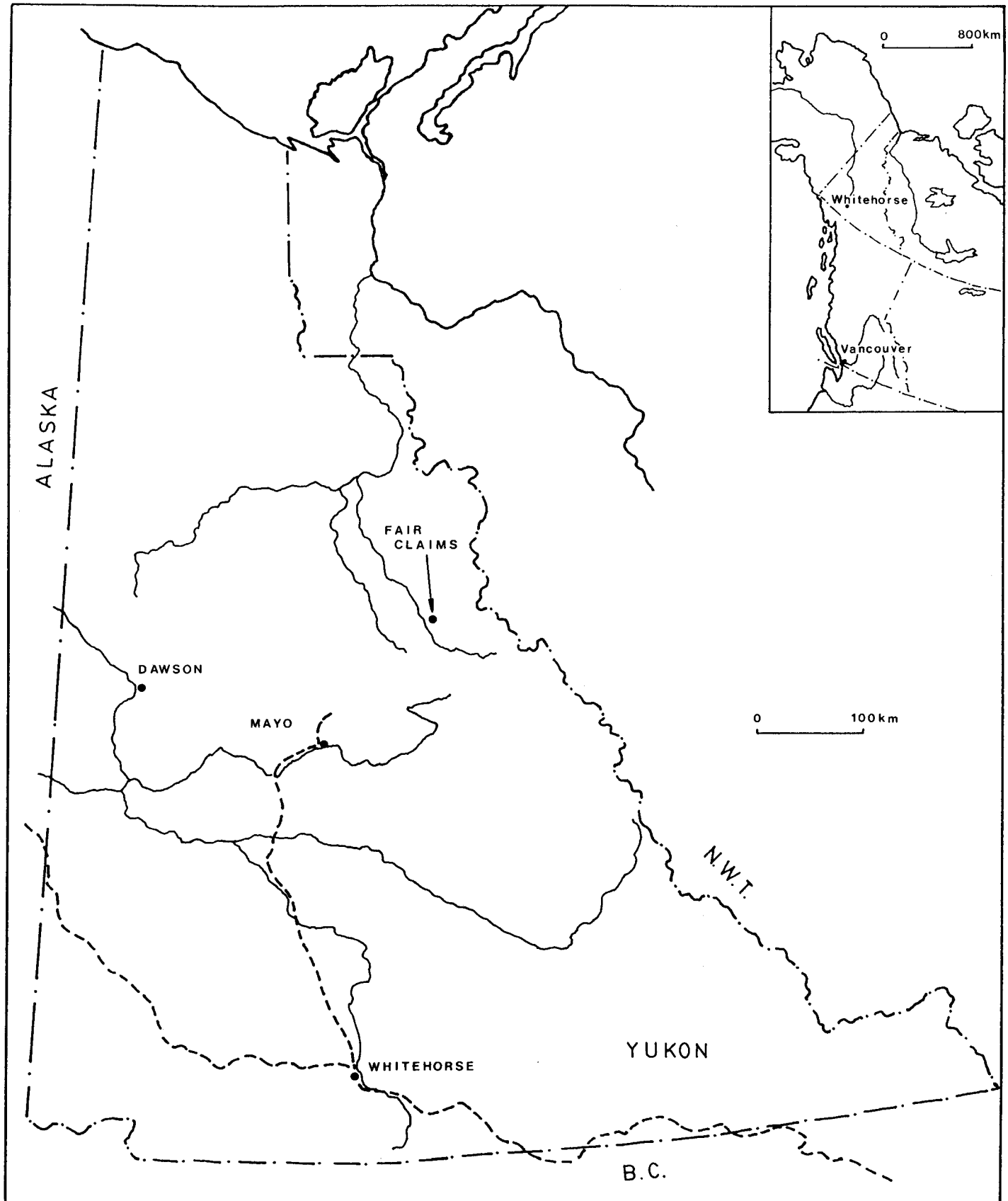
Field work was done in September, 1981 and the activities performed were geological mapping, geochemical soil and rock chip sampling, and detailed rock sampling of both mineralized areas and representative lithologies. These results were subsequently combined with a terrain analysis and geochemical gradient analysis for the purposes of outlining copper mineralization on the Fair claims and estimating the range of copper values that can be expected in the area.

1.1 Location and Access

The Fair claims are located at the south end of Fairchild Lake north of the Bonnet Plume River in northeastern Yukon Territory (Figure 1). The claims are situated within National Topographic System area 106 C/13 and are centered at approximately 64°57'N latitude and 133°45'W longitude.

Access to the property is by fixed wing aircraft from the town of Mayo to Fairchild Lk., a distance of approximately 190 km (120 mi). A rough tote road, about 0.8 km (0.5 mi) long, connects a campsite at the southeast side of Fairchild Lake with old trenches in the area where the present work was centered. There is a winter cat road from Hansen Lakes near Elsa, Y.T. to the Bonnet Plume River area by way of Braine Pass and McClusky Lake.

In general, the Wernecke Mountains area to the northeast of Mayo is receiving rapidly increasing attention in the



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Location of Fair Claims, Yukon.	Scale 1:500,000	Figure 1 Dec. 1/81 K.Y. Campbell

field of mineral exploration. A number of prospects are in advanced stages of investigation and may soon reach the development stage. Of these, the Prism Resources Ltd. Kathleen Lakes silver, lead, zinc deposit, through surface and underground diamond drilling as well as underground bulk sampling, has indicated sufficient grade and tonnage to be a potentially economic deposit. It is located only 70 km south of the Fair property. The Ortell Lake discovery belonging to Canadian Superior Exploration Ltd. is part of the same lead, zinc, silver belt and is located 105 km to the south-southeast of the Fair claims.

A number of other projects in the Bonnet Plume district show promising potential and were diamond drilled in 1981. These include Rio Tinto's massive sulphide lead, zinc prospect located 15 km southwest of the Fair claims; and Archer, Cathro and Associates Wernecke Joint Venture uranium property located 15 km to the east. In addition, extensive diamond drilling has been carried out since 1978 by Pan Ocean Oil Ltd. on a uranium prospect and on cobalt, copper prospects located 55 km and 5 km respectively to the northwest.

The development of all the above listed properties is contingent upon the development of power and transportation infrastructure in the area. To this end, Pan Ocean Oil Ltd. has been actively drilling the Bonnet Plume coal fields since 1978. Published figures as of 1981 show drill proven reserves of 120,000,000 tonnes of high quality thermal coal in the Illtyd Creek deposit; located 65 km northwest of the Fair claims; as well as in excess of 535,000,000 tonnes of indicated and inferred reserves in six other nearby deposit areas. A favourable preliminary mining feasibility study has been completed on the Illtyd Creek deposit. Pan Ocean has also been responsible for the re-opening of the Wind

River winter road into the Bonnet Plume area, which was used as recently as 1980 as a caterpillar tote road.

1.2 Ownership and Claims Status

The 32 mineral claims of the Fair property, shown in Figure 2, are held by Energex Minerals Ltd. Table 1 summarizes particulars of the claims. The geological work done for this report was on claims 22, 23, 24, 25, 26, 29, 31 and 33.

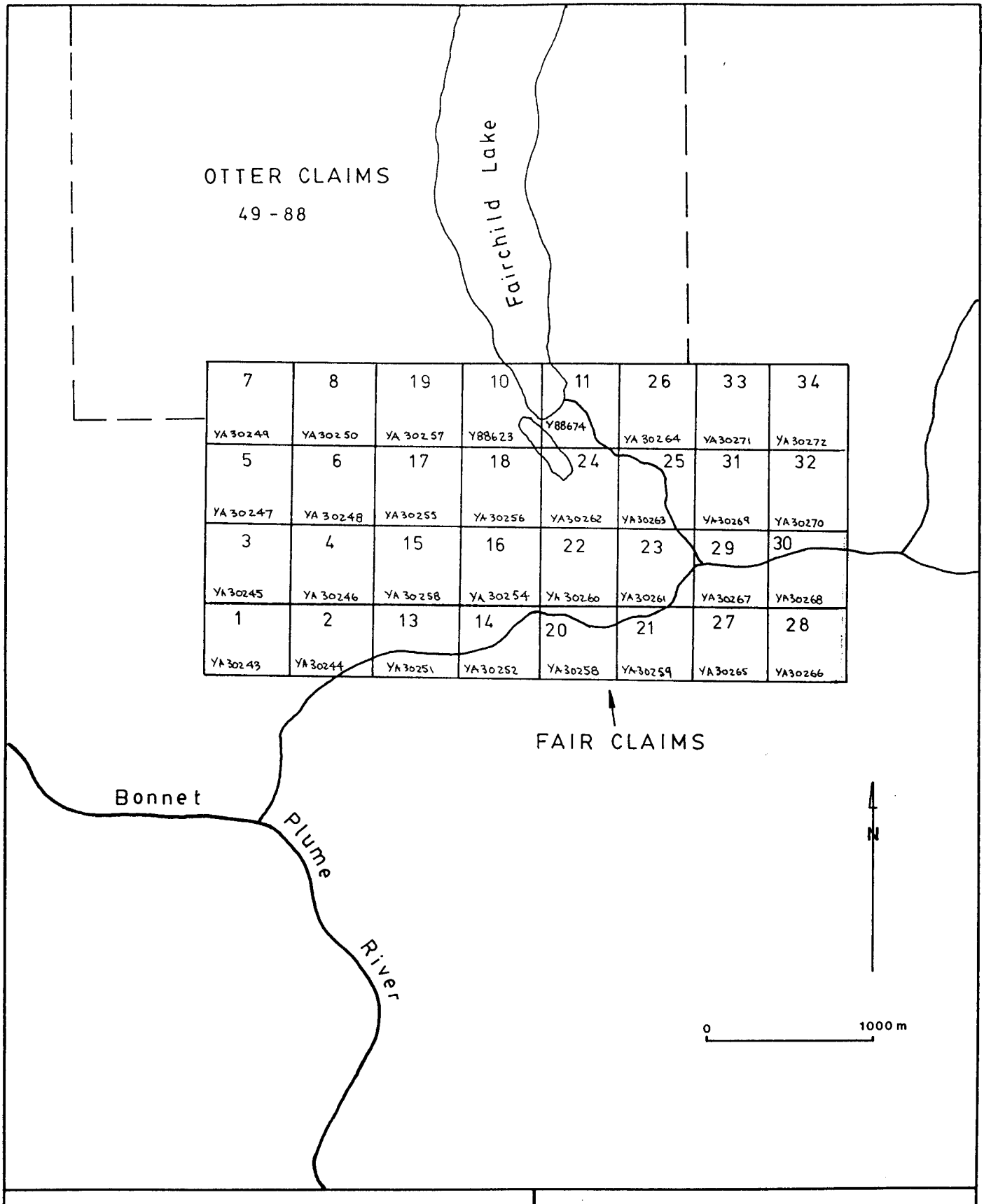
Table 1. Summary of claim information.

Claim Name	Recording Date	Grant Number	Recorded Holder
Fair 1-8	May 23, 1978	YA30243-YA30250	Energex Minerals Ltd
Fair 10,11	May 30, 1974	Y88673-Y88674	"
Fair 13-34	May 23, 1978	YA30251-YA30272	"

1.3 References

The following is a list of available public and private reports relevant to the Fair property.

- Archer, A.R. and Schmidt, U.; Mineralized Breccias of Early Proterozoic Age, Bonnet Plume River District, Yukon Territory, October 1977, 19 pp, Archer, Cathro and Associates Ltd.
- Delaney, G.D.; A progress Report on Stratigraphic Investigations of the Lowermost Succession of Proterozoic Rocks, Northern Wernecke Mountains, Yukon Territory, 1978, G.S.C. Open File Report EGS 1978-10.
- Ikona, C.K. and Yeager, D.; Compilation Report on the Fair Mineral Claims, May 1981, 17 pp, Pamicon Developments Ltd.



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Claim Plan 106 C/13	Scale 1:31,680	Figure 2 Dec.1/81

1.4 Previous Exploration and Development

The following history is based on that presented by Ikona and Yeager (1981) in their compilation report.

1.4.1 Regional

Copper showings in the area were noted by trappers in the early 1900's. Since then the area has received sporadic mineral exploration activity. In 1971, the discovery of lead and zinc showings in the region brought attention to the area once again. It was during this activity that the existence of uranium was recognized in the Proterozoic basin hosting the Fair claim group. Subsequent exploration work has discovered many copper, iron, uranium occurrences as well as a number of interesting cobalt prospects.

1.4.2 Property

The Fair claim group was originally acquired by Mr. C. Boitard for the copper showings which had been recognized for some time. In 1974, while under option to Menika Mining Ltd., an airborne magnetic and VLF-EM survey was carried out by Geotronics Surveys Ltd. The geophysical maps, by D.G. Mark, from this survey accompany the report of Ikona and Yeager (1981). In 1974 Menika Mining diamond drilled two holes located on EM anomalies that were identified by the geophysical survey. These holes were non-determinate and there is no known record of core logging at that time. The program then came to a halt and the property lay dormant until acquired by Energex in 1978.

In 1978 the exploration emphasis was for uranium. The ground south and west of Fairchild Ck. was the focus of much of the work, consisting of geological mapping, a ground spectrometer survey (U,K,Th) and geochemical soil sampling for uranium. At the same time drill core from the 1974

program was examined and logged.

All of the 1978 work is detailed in the 1981 report of Ikona and Yeager. The compilation map accompanying their report is included in Appendix I. In addition to compiling previous work on the property these authors reviewed the nature of mineral deposition in the area and recommended a three stage program of development, as follows:

Stage 1

a) The 1978 grid on the southwest side of Fairchild Ck. be extended northeast to include three areas of magnetic anomalies and one VLF-EM anomaly.

b) The new grid be geologically mapped and soil or rock chip sampled.

c) The copper showings northeast of Fairchild Ck. be sampled in detail.

Stage 2

a) More complete geophysical coverage be obtained.

b) Geochemical soil sampling of the property be completed.

Stage 3

Contingent upon the results of the earlier stages a program of diamond drilling could be started.

The work described in the present report is that of Stage 1. The focus of the work is on the ground northeast of Fairchild Ck. in the vicinity of one of the magnetic anomalies, that with the highest peak strength and steepest gradient, and known copper showings. Details of the previous work are incorporated into the descriptive sections of the report where applicable.

2 GEOMORPHOLOGY

2.1 Regional

The property is on the north flank of the Wernecke Mountains in north-central Yukon. The relief in these mountains is about 1750 m (5200 ft). The valleys of the larger rivers have elevations of about 600 m (2000 ft) and are broad and flat bottomed with braided drainage or U-shaped with more confined drainage. The latter have been formed or modified by valley glaciers but in general the region is characterized by a lack of glacial deposits. This is in part due to Cordilleran glaciers being restricted on the dry, eastern flank of the Rocky Mtns. and in part due to recent solifluction processes making the preservation of glacial deposits on the rugged terrain very unlikely.

Pleistocene continental galciation did not effect this part of the Yukon. Mass-wasting is the principal erosion process at these latitudes in eastern Yukon. Evidence of solifluction, the slow downhill movement of water saturated soil or regolith, is clearly seen on aerial photographs of the region as striped lobate forms on the more gentle slopes. The steep rocky slopes are characterized by talus with little soil profile or vegetation development. On the gentler slopes where soil has developed debris and earth flows are common. Periodic flooding during spring run-off and summer storms are effective agents in transporting much of the mass-wasted material. The mountainous areas have numerous steep V-shaped gullies with finely fluted sides.

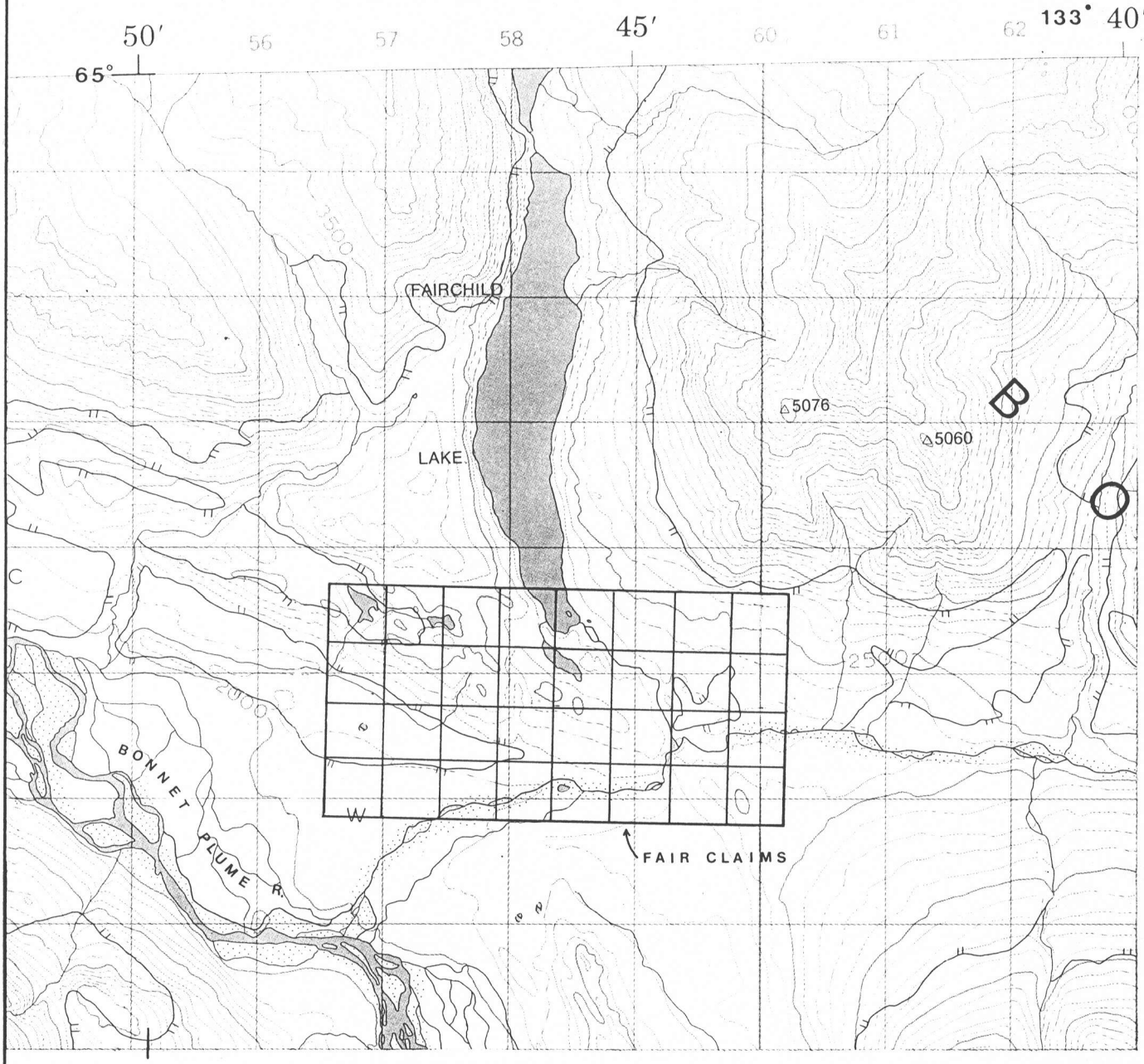
Treeline in the region is between 760 and 900 m (2500 to 3000 ft). Even in the most forested low lying areas the growth is sparse black spruce and low shrubs.

2.2 Property

Figure 3 is a portion of the 1:50,000 topographic map (N.T.S. 106 C/13) covering the property. Fairchild Creek, the creek draining south from Fairchild Lake, meanders through an open valley until it reaches a gorge cut in rock and drops about 20 m to a larger tributary river of the Bonnet Plume River. To the southwest of Fairchild Ck. are at least two structurally controlled depressions trending northwest. On the northeast side of the creek is a well defined talus fan developed on the southwest slope of hill 5076 and which has contributed material to the northeastern-most part of the grid area mapped in this study. There is a well developed bench underlain by thinly laminated lacustrine silts and clays in the northern part of the grid. Below the bench is a moderate slope of alluvial sands and gravels. A solifluction stream terminates very near the gorge on Fairchild Ck. and can be traced on air photos for about 1/2 km from its origin on the west flank of the large talus fan between hills 5076 and 5060. On the south side of this solifluction stream is an embankment of glacio-fluvial material, probably related to the wasting of the valley galcier that occupied the valley immediately to the south. There are a few occurrences of felsenmeer (frost boils of rock), at least two of which contain mineralized rock. These are not part of the larger talus lobes or solifluction streams and have a local origin. Soil profiles are shallow, less than 1/2 m, and are poorly developed.

3 BRIEF STATEMENT OF REGIONAL GEOLOGY

A thick succession of Proterozoic strata are exposed in the northern Wernecke Mountains. This succession, more than 13 km thick, is termed the Wernecke Supergroup (Delaney,



N.T.S. Map 106 C/13

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Topographic Map of Claim Group	Scale 1:50,000	Figure 3 | Dec.1/81

1978). These rocks underlie about 5000 square km and are of Helikian and possibly Late Aphebian age (Archer and Schmidt, 1977). They are unconformably overlain by Hadrynian strata of the Mackenzie Mtns. to the northeast and east. The Wernecke Supergroup is composed of three groups. From oldest to youngest these are the Fairchild Lake, Quartet, and Gillespie Lake Groups.

The Fairchild Lake Group is of at least 4 km of fine grained clastic sediments with interbedded carbonates. These are overlain conformably by up to 5 km of thinly interbedded slates, siltstones and argillites with minor sandstone of the Quartet Group. The Gillespie Group conformably overlies these and is of thick bedded dolomite. The clastic rocks of the Supergroup have been regionally dynamothermally metamorphosed to the lower greenschist facies.

Erratically distributed throughout the Wernecke Supergroup are irregular sheet-, dike-, or pipe-like breccia bodies. These range from a few meters to more than 800 meters in size. A wide variety of types are present, but all are composed of rocks found in the immediately adjacent or underlying ground. Copper and iron mineralization are directly related to these breccias. Uranium occurrences are in part spatially related to the breccias, particularly where potassium feldspar and/or hematite alteration is present. Cobaltite, fluorite, ilmenite, and molybdenum are associated with the breccia bodies in minor amounts (Archer and Schimdt, 1977).

Lamprophyre dikes and fine to medium grained gabbro and diorite dikes also occur in the region.

Rocks of the Wernecke Mountains have been deformed by two major deformations. The first of these involved Proterozoic strata and resulted in intense folding, faulting, the production of strong axial plane cleavage and

almost vertical foliation. The second episode of deformation affected both Proterozoic and Paleozoic strata. It was comparitively weak and resulted in broad open folding and minor overthrusting.

4 PROPERTY GEOLOGY

4.1 Introduction

Figure 4 shows the location of the grid established during the Stage 1 work, September 15 to 23, 1981. The location of "Grid A" (that of Ikona, 1978), trenches dating from 1974, the tote road, the campsite on Fairchild Lake and the approximate claim boundaries are indicated in this Figure.

The grid was tied into Grid A along the latter's northern limit, line 1+60 m N. Numbering of the grid stations was consecutive to that of Grid A. Stations were placed at 40 m intervals and located by compass and hip-chain. Slopes between grid stations were recorded and where slope reductions were greater than 1/2 m in a 40 m interval adjustments in the plotted position of a station were made. All work was plotted originally (in the field) at a scale of 1:500.

4.2 Lithology

Figure 5 is an outcrop map of the area examined. Present are clastic rocks of the Fairchild Lake Group; argillaceous limestone, calcareous siltite and slate, and sills of basic hornfels of unknown affiliation. North and south of Fairchild Ck. are brecciated outcrops of limestone. These represent the breccia bodies that are widespread throughout the Wernecke Mtns.

4.2.1 Clastic Rocks

Light to dark gray weathering, light pinkish to purplish gray or greenish gray argillaceous limestones and calcareous metasiltites are the most abundant clastic rocks in the area. These are fine grained to microcrystalline and commonly finely laminated. In places the limestones are crystalline, medium grained with a mottled aspect. Petrographic examination showed the calcareous rocks to consist mostly of fine grained anhedral quartz groundmass (30-50%) with interstitial calcite (20-35%). The remainder of the rock is made up of ragged biotite (less than 5%), hematite and magnetite (5-15%), and chlorite (less than 5%).

The rocks have been regionally dynamothermally metamorphosed to a medium grade and locally thermally metamorphosed also to a medium grade (hornblende hornfels facies). In most localities the thermal metamorphism is not readily apparent because the calcareous metasiltites lack sufficient reactive components. One particular site of calc-silicate hornfels is a felsenmeer some 12 by 6 m in area in the vicinity of 5+95 E, 3+00 N (assayed samples FS-1-1, 1-2, 1-3). This rock, whose parent is considered to have been a calcareous grit, is speckled white, green and brownish gray, medium grained and thinly layered. The rock consists of euhedral medium grained plagioclase porphyroblasts (25-30%) in a fine grained quartz groundmass with inclusion filled porphyroblasts of garnet (15%). Fine grained green diopside, pale to blue green actinolitic hornblende (pyroxene + amphibole 15-20%), biotite (5%), fine grained intergranular calcite (5-10%) and opaques (10-20%) make up the remainder of the rock. This hornfels is strongly magnetic and is shot with fine grained magnetite. Of lesser abundance is accessory hematite and minor amounts (5-10%) of disseminated fine grained chalcopyrite.

Alteration, including hematization and chloritization, of the calcareous rocks apparently increases with the degree of brecciation. The brecciated outcrops are commonly pink or purplish.

In the one outcrop where the calcareous rocks clearly overlie basic hornfels (4+00 E, 3+70 N) the metasiltites have been chloritized with fine grained chlorite forming about 30% of the groundmass. These same rocks ahve been carbonitized with numerous fine calcite stringers and patches crossing the bedding lamellae.

In the eastern part of the area is a low elongate knoll of medium gray to black slate with a widely spaced kink cleavage.

Noted in Figure 5 are outcrops of calcareous rocks that are brecciated. Nearly all outcrops southwest of Fairchild Ck. display sharply angular fragments 5 to 20 cm across. At several locations on this side of the creek bedding laminations in apparently unbrecciated outcrops can be measured but their attitudes, while consistent on the scale of the outcrop, are not consistent between outcrops. This gives rise to the speculation that this area has been brecciated on a very large scale. Brecciated argillaceous limestone and calcareous metasiltite form the conspicuous knolls along the southwest side of Fairchild Ck. Possibly these represent the breccia pipe-like bodies referred to by Archer and Schmidt (1977). Specular hematite is a widespread minor component of the breccias, developed along the numerous fracture surfaces.

4.2.2 Basic Hornfels

On the eastern side of Fairchild Ck. is an elongate knoll of basic hornfels. The two most common varieties are (1) medium grained, coarse light spotted, dark green,

compact to soft and crumbly, and (2) fine grained, dark green, hard and fairly massive. In places these rocks are clearly layered in composition, grain size, and color. These rocks are considered to be thermally metamorposed gabbroic sills. The grade of metamorphism is similar to that of the calc-silicate hornfels (hornblende hornfels facies).

A typical spotted basic hornfels consists of anhedral, inclusion filled plagioclase porphyroblasts 1 to 4 mm diameter (60-75%) with interstitial fine grained blue-green hornblende and brown biotite forming the remainder of the rock. The plagioclase porphyroblasts cause the spotted appearance of the rock which is developed to varying degrees. The mafic minerals show partial alteration to chlorite and epidote group minerals. In a few places biotite comprises more than 20% and the rocks are termed biotite hornfels.

A gabbroic origin is indicated by the fine grained basic hornfels. The texture of the plagioclase in these is a relict ophitic one, with small individual laths of feldspar set in a biotite and hornblende matrix formed from original pyroxene. In one specimen, on the scale of a thin section, a transition from a relict gabbro texture to the coarse spotted porphyroblastic texture was observed.

Magnetite and chalcopyrite are accessory and minor minerals (less than 5%) present in almost all outcrops of the basic hornfels. The magnetite is fine grained whereas chalcopyrite blebs range up to 1 cm in diameter. Commonly the biotite hornfels contain the coarser chalcopyrite, but not necessarily in greater abundance, compared to other basic hornfels rocks. Both the coarse spotted hornfels and the biotite hornfels are generally softer and more weathered than the hard fine grained varieties.

Compositional layering, 10 cm to 3 m thick, of the basic hornfels is seen in one of the trenches (6+20 E, 2+40 N) and on the bluffs in the southeast corner of the area. Most noticeable are layers with varying size of white plagioclase patches or spots and abundance of biotite. In the trench at 5+70 E, 2+60 N, the fine grained and massive basic hornfels are thouroughly brecciated with fine fractures filled with light colored amphibole and epidote.

4.3 Structure

Bedding attitudes in the brecciated calcareous rocks southwest of Fairchild Ck. are not consistent. Delaney (1978) shows a major fault trending through Fairchild Lake valley in this region and most probably the discordant attitudes reflect juxtaposition of fault blocks along this structure. Northeast of the creek attitudes in the limy rocks are more consistent and indicate a general east-west strike with a moderate to steep dip northwards. This attitude is also seen in the basic hornfels giving evidence for these rocks being sills within the Fairchild Group.

In addition to the major north-northwest structure referred to above, less than 1 km to the southwest of Fairchild Ck. are two prominent west-northwest trending faults (Ikona and Yeager, 1981). The course of Fairchild Ck. through the grid approximates this trend and it is considered to be the trace of a similar fault zone. Further evidence for faulting in this valley are the truncation of the lithologic trend of the layered basic hornfels and the presence of breccia bodies along the stream course.

There were several faults and shear zones seen in the outcrops. The most common fault orientation is N30-40°E with near vertical dips. Faults and shears of this

orientation invariably have copper mineralization. It is noteworthy that the one bornite-calcite vein seen had this orientation as did well developed malachite-bearing tension gashes in the basic hornfels.

A second set of faults trend west-northwest, parallel to one of the regional fault sets. In this set both copper mineralized and non-mineralized faults are represented.

Other non-mineralized faults seen do not fall into as well defined sets. These dip northwest, west and south.

There are numerous joint sets and several systems. Of these the only significant set is that striking northeast. Joints of this orientation are commonly malachite stained.

4.4 Mineralization

The report of Ikona and Yeager (1981) documents uranium occurrences in the argillaceous limestones southwest of the present work, particularly in rocks with a high degree of feldspathization and hematization. Northeast of Fairchild Ck. chalcopyrite and malachite are fairly common in the basic hornfels and to a lesser extent in the calcareous metasiltites.

Chalcopyrite occurs as an accessory mineral in some of the finer grained darker varieties of hornfels, as blebs to 1 cm diameter in the medium grained spotted hornfels and as fracture fillings with malachite in all varieties of the basic hornfels. Malachite is most abundant in shears and fracture zones exposed on the bluffs of basic hornfels in the southeast part of the area. At the base of these same bluffs a coarse bornite and calcite vein (sample FS-11-1), 4-5 cm wide, is developed along a prominent joint dipping steeply to the southeast. In the same general area tension gashes, up to 1/2 m long by 5 cm wide, contain feldspar, green actinolitic hornblende and malachite.

There are a few copper mineral occurrences in the calcareous rocks. With the exception of some minor malachite staining in the calcareous metasiltite, the copper mineralization is best developed in the calc-silicate hornfels. The most copper-rich of these is the felsenmeer of chalcopyrite-bearing calc-silicate hornfels (sample site FS-1) on the northeast side of the basic hornfels outcrops. The most copper mineralized outcrop of clastic rocks is that overlying the basic hornfels on grid line 4+00 E. This particular rock is a finely laminated, fine grained, chloritized calc-silicate assemblage (FS-15-3) with laminations of fine grained chalcopyrite making up 5-10% of the mode.

4.4.1 Results of Sampling

Samples were collected from three general situations; representative samples of common rock types, selected mineralized specimens, and interval chip samples across mineralized lithologies and structures. Sample locations are shown in Figure 6 by the solid triangles (rock chip samples), small open circles (selected specimens) and lines representing the interval (10-15 cm) chip samples. The rock chip samples that are un-numbered in Figure 6 are samples collected during the geochemical soil survey and are identified by their nominal grid coordinates.

The assays for all rock samples are given in Appendix II.

Representative samples and their assays are listed in Table 2. The results are summarized in Table 3. There is a clear and consistent difference in the copper content of the major rock types. Calc-silicate hornfels and the fine grained basic hornfels (which show the least thermal metamorphic differentiation) are the most copper rich.

Table 2. Copper analyses of representative samples.

Sample No.	Description	Area or Interval	Assay (%Cu)
1+60N,0+00E	mottled green, gray argill. lmst. breccia	1 m^2	0.0003
2+00N,0+00E	gray argill. lmst. breccia	1 m^2	0.0003
1+60N,0+40E	gray argill. lmst. breccia	1 m^2	0.0003
1+60N,0+80E	dark green chloritized argill. lmst. breccia	1 m^2	0.0004
2+40N,2+80E	greenish gray calcareous metasiltite breccia	1 m^2	0.0002
2+80N,2+80E	mottled green, pink calc. metasiltite breccia	1 m^2	0.0002
2+80N,3+20E	mottled green, pink calc. metasiltite breccia	1 m^2	0.0002
3+60N,4+40E	dark green, gray calc. metasiltite, thinly laminated, thin bedded	1 m^2	0.0008
FS-4	mottled gray, pink calc. metasiltite, thin bdd., magnetite streaks	2 m^2	0.02
FS-1-1	speckled brown, green, medium grained calc-sil. hornfels, thin bdd., dissem. chalcopyrite (<5%)	bldrs. on 12 m base line	0.29
FS-1-2	as above	bldrs. on grid, 6 x 12 m area	0.16
2+00N,5+60E	basic hornfels, dark green, fine grained	1 m^2	0.24
2+80N,6+00E	basic hornfels, dark green, fine grained	1 m^2	0.0345
FS-5	basic hornfels, dk.gr., fine grained, a few chalcopy. stringers and blebs to 0.5 cm	10 m^2	0.22
FS-16	basic hornfels, dk.gr., fine grained, relict gabbro texture	2 m^2	0.18

...cont'd

Table 2. (continued)

Sample No.	Description	Area or Interval	Assay (%Cu)
FS-7	basic hornfels, coarse spotted, chalcopy. blebs to 1 cm (<5%)	2 m^2	0.08
FS-10	basic hornfels, biotite-rich	2 m	0.05
FS-12-3-2	basic hornfels, coarse spotted, biotite-rich	4 m	0.06
FS-15-1	basic hornfels, coarse spotted, biotite-rich	3 m	0.03
FS-15-2	basic hornfels, coarse spotted, biotite-rich	3 m	0.16

Table 3. Summary of representative rock type assays.

Rock Type	No. Assays	Range (%Cu)	Average (%Cu)
Argillaceous limestone breccia south of Fairchild Ck.	7	0.0002-0.0004	< 0.003
Calcareous metasiltite	2	0.0008-0.02	< 0.02
Calc-silicate hornfels	2	0.16-0.29	0.22
Basic hornfels, coarse spotted, biotite-rich	5	0.05-0.16	0.76
Basic hornfels, fine grained	4	0.0345-0.24	0.169

Table 4 lists the selected samples and their copper assays. The copper mineralized coarse spotted basic hornfels that are common along the low bluffs northeast of Fairchild Ck. carry approximately ½ to 1½ % Cu. Malachite stains these rocks and partially fills the fine fractures, 1-2 mm wide, in them. Selected layers within these hornfels carry up to 2.75% Cu (FS-3-3) over a 0.3 m interval. The narrow vein sample, FS-11-1, with abundant coarse bornite was the only such vein found. Its presence indicates that copper has been mobilized and that there is a potential for other veins being found. The copper content of the calc-silicate hornfels felsenmeer, between 0.16 and 0.39%, encourages the effort to locate the same below the surface.

Table 5 summarizes the assay data for the chip samples taken across mineralized zones and structures. The copper mineralization consisted of chalcopyrite and malachite. The chalcopyrite occurred as disseminations, blebs to 1 cm diameter and fine fracture fillings. Malachite is a common associate staining or coating fracture surfaces. The samples are grouped by rock type and the final weighted average % Cu calculated for these groupings.

A comparison of the average assays of the two varieties of basic hornfels in Table 3 with the weighted average values for the same rock types in Table 5 indicates a close similarity. Representative samples of coarsely spotted basic hornfels average 0.076% Cu compared to 0.095% Cu for mineralized sections of the same rock type. Representative samples of fine grained basic hornfels average 0.169% Cu compared to 0.185% Cu for mineralized sections.

Table 4. Copper assays of selected mineralized samples.

Sample No.	Description	Area or Interval	Assay (%Cu)
FS-1-3	calc-silicate hornfels, speckled dk. brown, greenish gray, dissem. chalcopy. (<5%)	hand specimen	0.39
FS-11-1	bornite-calcite vein	4-5 cm wide	8.32
1+60N,6+00E	basic hornfels, coarse spotted, malachite stained	1 m^2	>1.0
FS-2-1	basic hornfels, coarse spotted, chalcopy. clots to 1 cm (<5%)	hand specimen	0.44
FS-12-1	basic hornfels, coarse spotted, biotite-rich, malachite stained	1 m^2	1.51
FS-12-2	basic hornfels, spotted, malachite stained	1 m^2	0.68
FS-14-2	basic hornfels, coarse spotted, biotite-rich, malachite stained, rusty, dissem. chalcopy. (<5%)	0.3 m	1.15
FS-3-3	basic hornfels, biotite-rich, rusty, brecciated layer, chalcopy. blebs to 1 cm and 1-2 mm stringers	0.3 m	2.75

Table 5. Copper assays of interval chip samples across mineralized lithologies and zones.

Rock Type (weighted average for type)	Sample Nos.	Distance Sampled (m)	Weighted Average (%Cu)	m x %Cu
Basic hornfels; spotted, biotite-rich varieties	FS-2-2(1-4)	12	0.04	0.48
	FS-3-1(1-5)	20	0.041	0.82
	FS-3-2(1-3)	12	0.04	0.48
	FS-3-2-4	4	0.32	1.28
	FS-8(1,2)	6	0.255	1.53
	FS-9(1,2)	6	0.11	0.66
	FS-12-3-1	0.6	0.70	0.42
	FS-13-1	1	0.2	0.2
(0.095 % Cu)	total	61.6		5.87
Basic hornfels; fine grained varieties	FS-2-2(5-7)	9	0.11	0.99
	FS-6(1,2)	7	0.22	1.54
	FS-13-2	1	0.61	0.61
(0.185 % Cu)	total	17		3.14
Fracture zones in basic hornfels	FS-11-2(1-4)	12	0.322	3.864
	FS-14-1	1	1.08	1.08
(0.38 % Cu)	total	13		4.944
Calcareous metasiltite (0.61 % Cu)	FS-15-3	3	0.61	1.83

5 GEOCHEMISTRY

5.1 Introduction

Soil samples were collected at the grid stations and analysed for copper. The assay certificates are given in Appendix III and the copper values in ppm are plotted in Figure 6. Where stations fell on outcrop or coarse talus with no fines rock chip samples were taken. The sample horizon and the parent material was noted at each location and this information is also presented in Figure 6.

The observations on the sample sites were used in a terrain analysis of the sample grid, which was divided into sub-areas of similar parent materials. These were alluvium, lake sediment, talus, bog and colluvium. Typical soil profiles developed on each of these materials in the Fairchild Lake area are described in Appendix IV. The classification alluvium includes areas of underlying sand and gravel, and the classification lake sediment includes areas of clay and silt at those sites where the parent material's origin was obscured. This is the case along the grid eastern lines where a solifluction stream enters the area.

The geochemical data were interpreted using a modified gradient analysis technique. This was done by (1) plotting all copper values in 'Clarke' (KK) units rather than parts per million and (2) using a factor of 2 between cell limits regardless of the statistical properties of the copper data set. The Clarke unit is an estimate of the abundance of an element in the Earth's crust and provides a convenient datum. The Clarke value used here for copper (68 ppm) is from Ronov and Yaroshevsky (1972). A KK of 1 indicates an average crustal abundance (68 ppm in the case of copper). A KK of 2 (136 ppm) indicates twice the average,

and so on. The KK intervals used for the Fair claims are listed in Table 6.

Table 6. Clarke unit intervals used in gradient analysis.

KK (Clarke) Unit Intervals	Copper (ppm)
> 8	> 544
4-8	272-544
2-4	136-272
1-2	68-136
0.5-1	34-68
0.25-0.5	17-34
0.125-0.25	8-17
0.06-0.125	4-8
< 0.06	< 4

5.2 Data Analysis

All samples falling within a particular KK interval were plotted as dots on separate transparencies. A scale of 1:4000 was used so that the resulting plots are page size. The interval dot maps were overlain onto a terrain classification base map of the same scale so that relations between parent materials and their copper content can be visualized. In this manner soil sites that have anomalous values for a particular terrain class can be recognized.

The resulting plots, termed gradient maps, for the KK intervals in Table 6 are presented in Appendix V. The data sets for each parent material were then evaluated so as to identify anomalous values for that particular material.

The data sets received two treatments; arithmetic histogram plots and KK interval frequency plots. Histograms of the entire data set and of individual data sets are given in Appendix VI. KK interval histograms, also for the entire data set and for individual sets, are given in Appendix VII. The results are summarized in Table 7.

Using the results in Table 7 it was possible to identify sample sites with copper values above the local threshold for a particular parent material. These sites are shown in Figure 7.

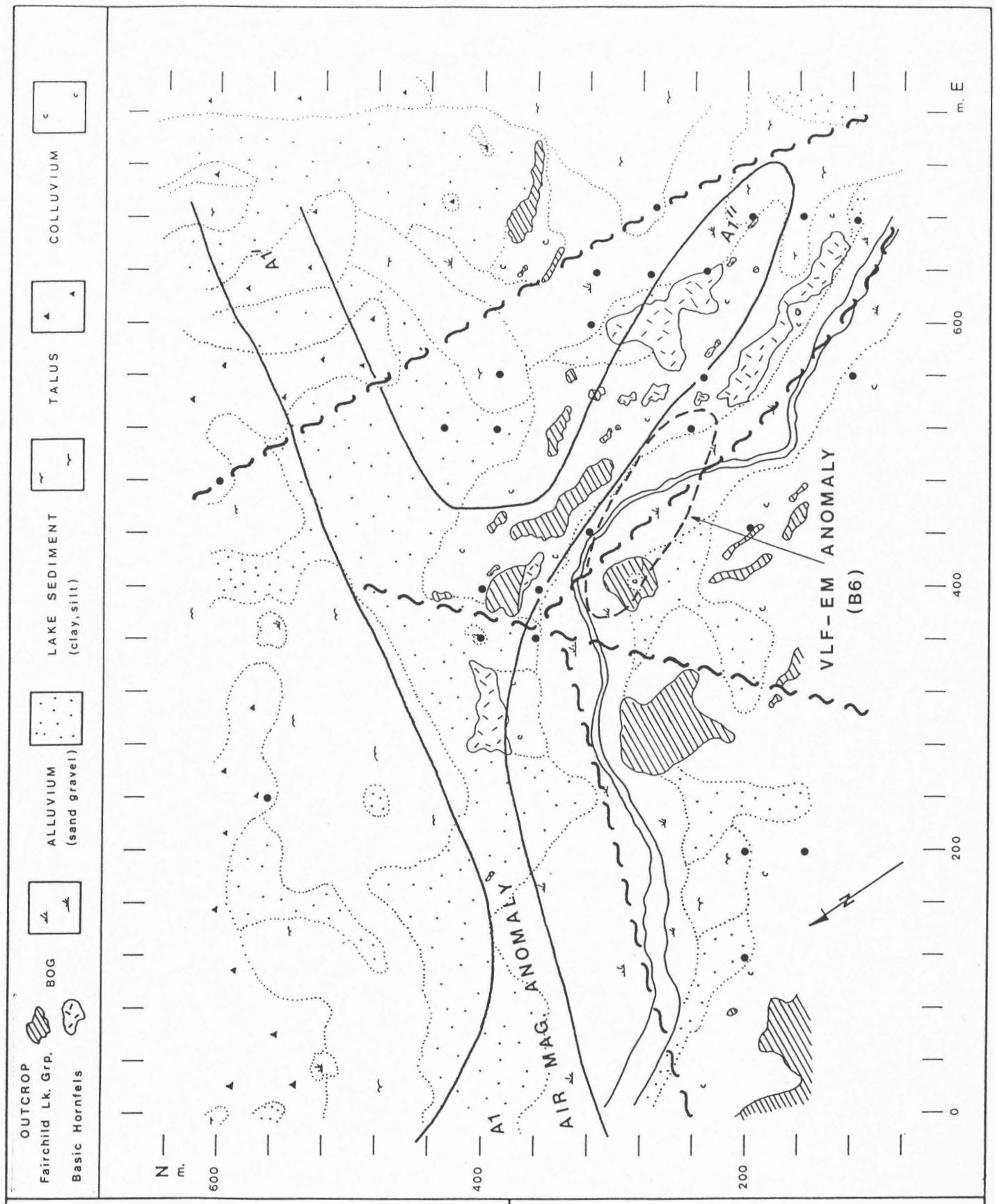
6 GEOPHYSICS

The geophysical surveys relevant to the grid area mapped in this work are reviewed by Ikona and Yeager, 1981. An airborne combined magnetic and VLF-EM survey in 1974 identified a prominent magnetic high along the northeast side of Fairchild Ck. This is the anomaly Al,Al',Al'' in the compilation figure, Figure 10, of Ikona and Yeager (Appendix I). A secondary VLF-EM anomaly was located along Fairchild Ck., anomaly B6 of the same figure.

Both of these geophysical anomalies are shown in Figure 7. The south fork of the linear northwest-southeast magnetic anomaly coincides with outcrops of magnetite-rich basic hornfels of a gabbroic sill(s) parentage, magnetite-rich calc-silicate hornfels and calcareous metasiltite. These same outcrops are the location of copper mineralization. Anomaly B6 is positioned on the western flank of the copper-bearing outcrops but does not have a correlation with either the copper-rich host rocks or the copper enhanced areas. The authors consider this anomaly due to increased conductivity along the fault zone(s) of Fairchild Creek.

Table 7. Summary of geochemical data analysis.

Soil Type	No. Samples	Mean (ppm)	Standard Deviation	Range (ppm)	Local Threshold	No. Samples > Local Threshold
Talus	25	34.3	23.7	11-114	50	2
Colluvium (south side creek)	22	40.9	61.4	6-290	50	3
Alluvium	69	41.9	37.0	10-200	80	6
Lake sediments	46	56.2	70.1	7-450	90	5
Bog	22	98.1	168.6	18-800	100	4
Colluvium (north side creek)	24	223.1	279	10-1150	300	5
All soil samples	208	70.9	129.8	6-1150	---	25



ENERGEX MINERALS LTD.

CARIBOO GEOTECHNICAL SERVICES LTD.

Fair Claims - Geochemical (●) and geophysical anomalies.

Scale 1:4,000

Figure 7 | Nov. 12/81

K. J. Campbell

7 DISCUSSION AND CONCLUSIONS

7.1 Geomorphology

Mass wasting and solifluction processes are the dominant erosion agents in the area. For this reason the geochemical analyses of soils developed on materials derived from outside the grid should be interpreted with caution. There are two categories of materials on the Fair claims that have recently been transported onto the grid; the coarse angular talus lobes on the north-northeast (grid north) and the fines of a solifluction stream that enters the grid on the east (grid east).

There is a well developed bench underlain by lacustrine silts and clays north of Fairchild Ck. Downslope from the bench are alluvial sands and gravels. The clays of the lake sediments are relatively impermeable, as evidenced by the perched and ponded drainage, and would form an effective geochemical mask over any mineralized rock.

Frost boils or rock, or felsenmeer, are not uncommon on the Fair claims. Two areas of particular interest (3+60 N, 4+00 E; 3+00 N, 5+90 E) have copper mineralized rock. Both of these rock boils are believed to be locally derived and not transported any great distance.

7.2 Lithology

Clastic rocks of the Proterozoic Fairchild Lake Group make up the country rock in the Fair claims. These are argillaceous limestone, calcareous metasiltite and slate which have been regionally metamorphosed to a medium grade. Northeast of Fairchild Ck. are occurrences of thermally metamorphosed calc-silicate hornfels derived from calcareous sedimentary rocks.

In Fairchild Creek valley are numerous outcrops of brecciated country rocks. Previous workers have termed these breccia-pipes, -dikes, or -sheets.

Basic hornfels underlie the clastic rocks and their metamorphosed equivalents on the east side of Fairchild Ck. These are compositionally layered and represent thermally metamorphosed gabbroic sills. Two main types can be distinguished; fine grained equigranular, and coarse spotted hornfels. In places rocks of the latter type are biotite-rich.

The close spatial relation of the calc-silicate hornfels to the northeast margin of the basic hornfels infers that the gabbroic rocks have thermally metamorphosed the calcareous rocks. In several places there is no consistent metamorphic progression of the clastic rocks as the contact with the basic rocks is approached, but this could be due to a lack of suitable reactive components. No conclusions can be made regarding the relation of metamorphism to the breccia bodies apart from the fact that brecciation and thermal metamorphism are found along the Fairchild Ck. valley.

7.3 Structure

The calcareous rocks are thouroughly brecciated on the southwest side of Fairchild Ck. On the northern side there is more structural consistency and the thin bedded, laminated strata have a general east-west strike with a moderate northerly dip. This attitude is parallel to the layering in the basic hornfels.

The major structure crossing the area is the north-northwest trending Fairchild Ck. fracture zone, marked by brecciation and truncation of lithologic trends. On an outcrop scale the most common fault orientation is N30-40° E with near vertical dips. Fractures of this orientation are commonly mineralized with copper. There is a second set of faults trending west-northwest, parallel to major faults

outside the claims area. Some of these faults were copper mineralized and some were not. There are other, less well developed, sets striking northeast, north, and east but they are not mineralized. Most outcrops are well fractured. Joints with a northeasterly strike are commonly malachite stained or coated.

7.4 Mineralization and Rock Sampling

There is widespread chalcopyrite and malachite mineralization on the northeast side of Fairchild Ck. in basic hornfels, calc-silicate hornfels, and calcareous metasiltite. Chalcopyrite occurs as fine grained disseminations (forming about 5-10% of mode), blebs or clots to 1 cm diameter, and as fine stringers 1-2 mm wide. Malachite is a common associate, occurring as stains or fracture fillings. One coarse bornite-calcite vein with 8.3% Cu was found in the basic hornfels. The presence of disseminated chalcopyrite in the fine grained fresh appearing, thermally metamorphosed but relatively unaltered basic hornfels suggests that copper was a primary constituent of the gabbroic parent rock. The common fracture fillings of copper minerals indicates that mobilization of copper has taken place.

Representative samples of the fine grained dark green basic hornfels contain about 0.17% Cu. Those hornfels showing a greater degree of metamorphic differentiation, manifested by the coarse spotted plagioclase porphyroblasts, carry about 0.08% Cu. In areas of more abundant copper mineralization the fine grained hornfels average about 0.19% Cu whereas the spotted hornfels average about 0.10% Cu. Selected specimens of the spotted hornfels carry 1 to 2.75% Cu over 0.3 m thick chalcopyrite-rich layers. A total of 107.2 m of interval chip sampling in the basic hornfels had a weighted average of 0.167% Cu.

Interval chip samples over a total distance of 13 m across copper mineralized fractures in the basic hornfels averaged 0.38% Cu. The majority of these fractures had a common orientation of N30-40°E. A ground VLF-EM survey could be useful in locating similar fractures in covered areas.

The calc-silicate hornfels is not as abundant as the basic hornfels but it contains more copper (chalcopyrite). A felsenmeer, 12 x 6 m, of these rocks averaged 0.29% Cu. Three meters of calcareous metasiltite overlying spotted basic hornfels averaged 0.61% Cu. As both of these occurrences are adjacent to basic hornfels the inference is that their mineralization is derived from the gabbroic rocks, presumably during the thermal metamorphic event. Both these occurrences of copper mineralized metasedimentary rocks have abundant magnetite and a ground magnetometer survey would be useful in determining if they have any extent.

Copper mineralization is associated with the entire hornfels body and what are believed to be overlying strata of calc-silicate hornfels. There is considerable potential for tonnage in the area examined in this work.

7.5 Geochemistry

The majority of geochemically copper anomalous sites lie near the mineralized hornfels outcrops on the northeast side of Fairchild Ck. There are two anomalous sites in the grid northern section. Both of these sites are on coarse angular talus derived from a hill more than 1 km to the northeast. One of these sites lies directly on a major northerly trending fault zone as does one anomalous site developed on silts and clays 400 m to the south. Possibly this structure is related to mineralization beneath these sites.

On the southwest side of Fairchild Ck. there are a few anomalous sites on or near colluvial slopes near brecciated argillaceous limestone or calcareous metasiltite. No copper mineralization was observed in this area during the field work and these locations should be examined for explanation of the anomalies.

7.6 Geophysics

Airborne geophysical surveys done in 1974 showed the presence of a prominent linear magnetic anomaly trending west-northwesterly along the northeast side of Fairchild Ck. A southeast fork of this anomaly coincides with the magnetite and chalcopyrite-bearing basic and calc-silicate hornfels and the associated geochemical anomalies. No anomalous copper values were found in soils along the west-northwest section of the magnetic anomaly.

An airborne VLF-EM survey, also done in 1974, showed the presence of a secondary anomaly along Fairchild Ck. near what is now known to be a breccia body. There is no obvious correlation of this anomaly to mineralization and it is considered to be related to a conductive zone(s) along a fault developed in Fairchild Ck. valley.

Given the positive correlation between copper mineralization and the southeast fork of the magnetic anomaly there is a strong inference that the remainder of the magnetic anomaly is also associated with mineralization.

8 RECOMMENDATIONS

Based on the results of the Stage 1 investigation it is recommended that Energex Minerals Ltd. proceed with Stage 2 of their proposed plan of exploration as follows.

Stage 2

1) The grid should be extended to the northwest (grid west) to encompass the remainder of the airborne magnetic anomaly.
2) A ground magnetometer survey should be done over the grid established during the present work as well as the proposed Stage 2 grid extension.
3) A geochemical survey should be done over the proposed grid extension.
4) A ground VLF-EM survey should be done over the grid for the purpose of locating northerly to northeasterly trending fractures.
5) An induced polarization survey should be done over the grid. The disseminated style of the copper mineralization is such that IP should be particularly effective in outlining metal rich zones.
6) The results of the field geophysical surveys should be combined with the geological field observations to target possible sites for diamond drilling should the results of the surveys warrant a drilling program. The target sites should meet the following objectives:
    a) test the continuity and depth of mineralized hornfels,
    b) locate the copper-bearing calc-silicate hornfels that forms the felsenmeer, and
    c) test the lithology beneath the linear magnetic anomaly.

PROJECT: ENERGEX MINERALS LTD. FAIR CLAIMS CODE: _____

MEMO		AMOUNT	TOTAL
011	Salaries and Burden	$25,200.00	
021	General Business Expense	100.00	
080	Communications and Telephone	200.00	
100	Accounting		
112	Insurance	200.00	
113	Professional Fees & Contract	13,800.00	
130	Travel, Accommodation, Meals	7,400.00	
131	Automotive Expense (Rentals, Fuel, Repairs)		
132-1	Aviation Expense (Camp)	6,600.00	
132-2	Aviation Expense (Contractors)	1,100.00	
132-3	Aviation Expense (Miscellaneous)		
133	Aviation Fuel		
140	Miscellaneous Expense	200.00	
180	Technical Information	100.00	
260	Outside Reproduction	300.00	
280	Commercial Freight	200.00	
281-1	Camp (Equipment & Machinery)	500.00	
281-2	Camp (Materials & Supplies)	300.00	
281-3	Camp (Food)	4,000.00	
281-4	Camp (Fuel)	500.00	
281-5	Camp (Expediting)	1,500.00	
324-1	Roads & Sites (Fuel)		
324-2	Roads & Sites (Material)		
325-1	Trenching (Fuel)		
325-2	Trenching (Material)		
330	Materials & Supplies Expended	300.00	
340	Equipment Expense & Rentals	3,200.00	
390	Assay and Geochem	1,000.00	
610-1	Drilling (Fuel)		
610-2	Drilling (Mud, Boxes, Miscellaneous)		
810	Environmental (Includes Permits)	100.00	
921	Property Carrying Costs		
	OTHER:		
	TOTAL DIRECT	$66,800.00	
132	Aviation Contracts		
324/325	Equipment (Roads, Sites/Trenching)		
610	Drill Contract		
	OTHER:		
	TOTAL INDIRECT		
	TOTAL FOR PERIOD		

CANADA) In the matter of Assesment work done on the Fair Claims - Fairchild Lake area - NTS 106-C-13 - Yukon Territory.
)
)
)

TO WIT) On behalf of ENERGEX MINERALS LIMITED

I, C.K. Ikona for Pamicon Developments Ltd., of 208, 850 West Hastings Street, Vancouver, B.C. do solemnly declare that a program of grid running, soil sampling, geologic mapping, prospecting, and assay sampling was carried out during the month of September 1981.

The following expenses were incurred during the course of this work and in the compilation and reporting of the results:

Equipment Rentals	$
Expendible Field Supplies	342.22
Office Supplies, Maps, Photos	81.04
Drafting and Reproduction	419.28
Equipment and Machinery	
Supplies	
Food	500.00
Expediting	
Freight	312.04
Travel and Accommodation	1,567.65
Prepaid Expenses	
Sundry	
Camp and Miscellaneous Fuels	
Camp Fixed Wing Support	2,041.36
Overhead	
Wages	8,657.10
Helicopter Support	
Assaying and Geochemistry	
Trenching	708.75
~~Contracting Fees~~ Compilation of Data	2,700.00
Report Preparation	500.00
~~Not Assigned~~ Telephone	123.38
TOTAL	$ 17,952.82

And I make this solemn declaration conscientiously believing it to be true and knowing that it is of the same force and effect as if made under oath and by virtue of the Canada Evidence Act.

Declared before me at Vancouver in the Province of British Columbia this 21 day of Dec, 1981

A Commissioner for Oaths for, or Notary Public for the Yukon.

CERTIFICATE

I, KENNETH VINCENT CAMPBELL, resident of Wells, Province of British Columbia, hereby certify as follows:

1. I am a Consulting Geologist with an office at the corner of Dawson and Blair Avenues, Wells, B.C.
2. I graduated with a degree of Bachelor of Science, Honours Geology, from the University of British Columbia in 1966, a degree of Master of Science, Geology, from the University of Washington in 1969, and a degree of Doctor of Philosophy, Geology, from the University of Washington in 1971.
3. I have practiced my profession for ten years. I have been a member of the Geological Association of Canada since 1969.
4. I have no direct, indirect, or contingent interest in shares or business of Energex Minerals Ltd., nor do I intend to have any such interest.
5. This report, dated December 21, 1981, is based on my field work on the Fair property of Energex Minerals Ltd. and my examination of analyses, assays, and available reports.

Dated at Wells, Province of British Columbia,
this 21st day of December, 1981

K.V. Campbell

K. Vincent Campbell, Ph.D.
Geologist

ENGINEERS CERTIFICATE

(1) I, Charles K. Ikona, of 5 Cowley Court, Port Moody in the province of British Columbia do hereby certify that:

(2) I am a Consulting Mining Engineer with offices at 208-850 W. Hastings Street, Vancouver. B.C.

(3) I am a graduate of the University of British Columbia with a degree in Mining Engineering.

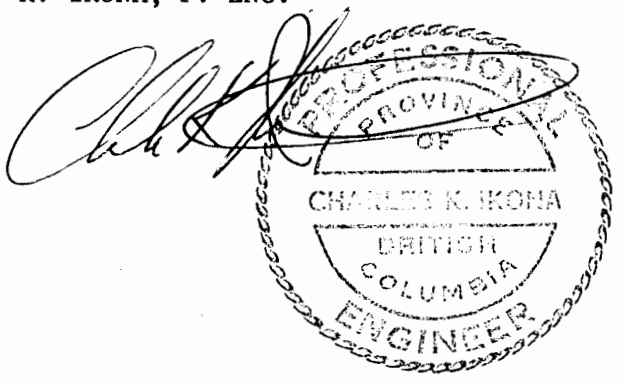
(4) I am a member in good standing of the Association of Professional Engineers of the Province of British Columbia.

(5) I have examined the property reported herein in August of 1978. The 1981 field examination was conducted by Vincent Campbell, Geologist whom I have previously worked with and I have full confidence in.

(6) I have no interest in the property reported on.

Dated this 18th day of December, 1981.

CHARLES K. IKONA, P. ENG.



camp

11

26

33

34

Approximate claim boundaries

Tote Road

Fairchild Lk.

0+00 E

True North

Grid North

3°

0 100m

24

25

31

32

N 0+00

1981 Grid

1978 Grid (Grid A)

091026

22

23

29

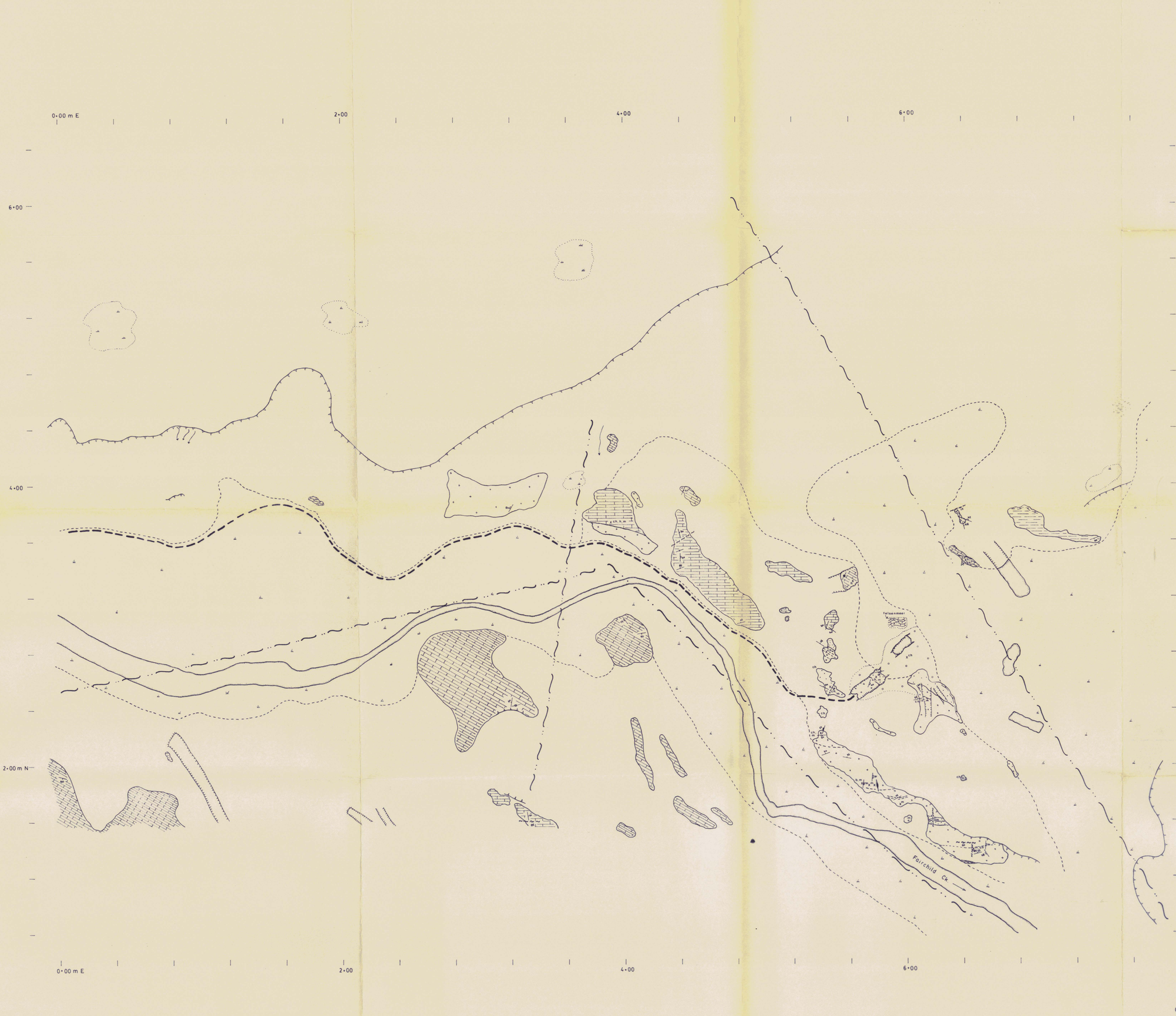
ENERGEX MINERALS LTD.

FAIR CLAIMS, YUKON

Location of 1981 Stage 1 grid.

Scale 1:5000	Dec. 2/81	Figure 4

CARIBOO GEOTECHNICAL SERVICES LTD.



LITHOLOGY

Fairchild Lk Group

- slate
- calcareous metasiltite, argillaceous limestone
- breccia
- calc-silicate hornfels

Basic Hornfels

- porphyroblastic, biotite-bearing varieties
- marker bed
- fine grained, equigranular varieties

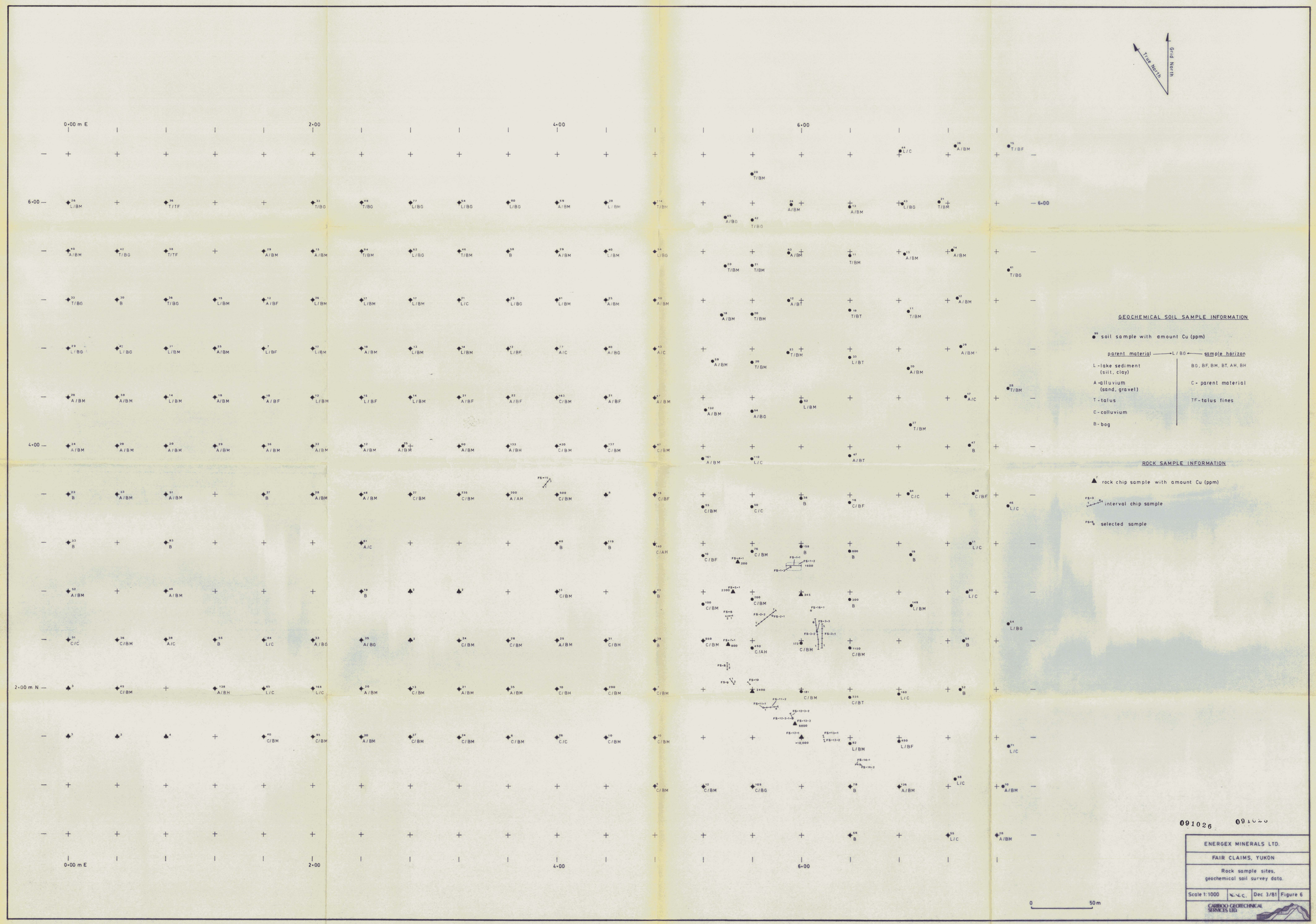
- bedding
- jointing
- vein
- tension gashes
- fault; observed / inferred
- mineral occurrence
  - ma malachite
  - cp chalcopyrite
  - bn bornite
  - sh specular hematite
- trench
- toe of slope
- scarp
- excavated rubble
- gully
- bog

0 50m

091026

ENERGEX MINERALS LTD.			
FAIR CLAIMS, YUKON			
Outcrop Map			
Scale 1:1000	K.K.C.	Dec. 2/81	Figure 5

CARIBOO GEOTECHNICAL SERVICES LTD.


0+00 m E
2+00
4+00
6+00
2+00 m N
True North
Grid North
GEOCHEMICAL SOIL SAMPLE INFORMATION
soil sample with amount Cu (ppm)
parent material → L / BG ← sample horizon
L - lake sediment (silt, clay)
A - alluvium (sand, gravel)
T - talus
C - colluvium
B - bog
BG, BF, BM, BT, AH, BH
C - parent material
TF - talus fines
ROCK SAMPLE INFORMATION
rock chip sample with amount Cu (ppm)
interval chip sample
selected sample
0
50m
091026
091026
ENERGEX MINERALS LTD.
FAIR CLAIMS, YUKON
Rock sample sites, geochemical soil survey data.
Scale 1: 1000
K.L.C.
Dec 3/81
Figure 6
CARIBOO GEOTECHNICAL SERVICES LTD.

APPENDIX I

Figure 10 - Compilation Study - from Compilation Report on the Fair Mineral Claims by Ikona, C.K. and Yeager, D., 1981.

FAIRCHILD LAKE

W.L. 727

A GRID

B GRID

CLAIM BOUNDARY

BONNET PLUME RIVER

7 204 000 N

7 203 000 N

7 202 000 N

556 000 E

557 000 E

559 000 E

560 000 E

A1 A2 A3 A4 A5 A6 A7

B1 B3 B4 B5 B6 B7

C1 C3

D1 D2 D3 D4 D5

DDH 1 DDH 2

Cu Cu Cu Cu Cu Cu

U U U U U U U U U U U U U U

LEGEND

- 1974 Airborne Mag.
- 1974 Airborne VLF-EM
- 1978 U/Th Spectrometer
- 1978 U in Soils
- ▲ Mineral Showings
  - U - Uranium
  - Cu - Copper
- Trenches
- ● DDH 1 Diamond Drill Collars

091026

ENERGEX MINERALS LTD.

FAIR MINERAL CLAIMS
NTS 106-C-13
YUKON TERRITORY

COMPILATION STUDY

SCALE 1:5000

PAMICON DEVELOPMENTS LTD.

DRAWN BY:	PROJECT:	DATE:	FIGURE NO.:
JW	FAIR	MAY '81	10

APPENDIX II

Rock sample assay certificates.

CHEMEX LABS LTD.

212 BROOKSBANK AVE
NORTH VANCOUVER, B.C.
CANADA V7J 2C1
TELEPHONE: (604)984-0221
TELEX: 043-52597

. ANALYTICAL CHEMISTS . GEOCHEMISTS . REGISTERED ASSAYERS

CERTIFICATE OF ANALYSIS

TO : PAMICON DEVELOPMENTS LTD.,
208 - 850 W. HASTINGS T.
VANCOUVER, B. C.
V6E 1E1

CERT. # : A8114371-001-A
INVOICE # : I8114371
DATE : 09-OCT-81
P.O. # : NONE

CC: CARIBOO GEO.

Sample description	Prep code	Cu ppm					
L 1+60N 0+00E	205	3	--	--	--	--	--
L 2+00N 0+00E	205	3	--	--	--	--	--
L 1+60N 0+40E	205	2	--	--	--	--	--
L 1+60N 0+80E	205	4	--	--	--	--	--
L 2+40N 2+80E	205	2	--	--	--	--	--
L 2+80N 2+80E	205	2	--	--	--	--	--
L 2+80N 3+20E	205	2	--	--	--	--	--
L 3+60N 4+40E	205	3	--	--	--	--	--
L 2+00N 5+60E	205	2400	--	--	--	--	--
L 1+60N 6+00E	205	>10000	--	--	--	--	--
L 2+80N 6+00E	205	345	--	--	--	--	--

CTA MEMBER CANADIAN TESTING ASSOCIATION

Certified by .....

CHEMEX LABS LTD.

212 BROOKSBANK AVE
NORTH VANCOUVER, B.C.
CANADA V7J 2C1
TELEPHONE (604)984-0221
TELEX: 043-52597

. ANALYTICAL CHEMISTS . GEOCHEMISTS . REGISTERED ASSAYERS

CERTIFICATE OF ASSAY

TO : PAMICON DEVELOPMENTS LTD.,
208 - 850 W. HASTINGS T.
VANCOUVER, B. C.
V6E 1E1

CERT. # : A8114378-001-A
INVOICE # : I8114378
DATE : 23-OCT-81
P.O. # : NONE

CC: CARIBOO GEO.

Sample description	Prep code	Cu %					
FS-1-1	208	0.29	--	--	--	--	--
FS-1-2	208	0.16	--	--	--	--	--
FS-1-3	208	0.39	--	--	--	--	--
FS-2-1	208	0.44	--	--	--	--	--
FS-2-2-1	208	0.09	--	--	--	--	--
FS-2-2-2	208	<0.01	--	--	--	--	--
FS-2-2-3	208	0.02	--	--	--	--	--
FS-2-2-4	208	0.04	--	--	--	--	--
FS-2-2-5	208	0.10	--	--	--	--	--
FS-2-2-6	208	0.12	--	--	--	--	--
FS-2-2-7	208	0.11	--	--	--	--	--
FS-3-1-1	208	0.05	--	--	--	--	--
FS-3-1-2	208	0.13	--	--	--	--	--
FS-3-1-3	208	0.01	--	--	--	--	--
FS-3-1-4	208	0.02	--	--	--	--	--
FS-3-1-5	208	0.03	--	--	--	--	--
FS-3-2-1	208	<0.01	--	--	--	--	--
FS-3-2-2	208	0.05	--	--	--	--	--
FS-3-2-3	208	0.08	--	--	--	--	--
FS-3-2-4	208	0.32	--	--	--	--	--
FS-3-2-5	208	0.03	--	--	--	--	--
FS-3-2-6	208	0.03	--	--	--	--	--
FS-3-3	208	2.75	--	--	--	--	--
FS-4	208	0.02	--	--	--	--	--
FS-5	208	0.22	--	--	--	--	--
FS-6-1	208	0.04	--	--	--	--	--
FS-6-2	208	0.40	--	--	--	--	--
FS-7	208	0.08	--	--	--	--	--
FS-8-1	208	0.48	--	--	--	--	--
FS-8-2	208	0.33	--	--	--	--	--
FS-9-1	208	0.15	--	--	--	--	--
FS-9-2	208	0.07	--	--	--	--	--
FS-10	208	0.05	--	--	--	--	--
FS-11-1	208	0.32	--	--	--	--	--
FS-11-2-1	208	0.32	--	--	--	--	--
FS-11-2-2	208	0.09	--	--	--	--	--
FS-11-2-3	208	0.15	--	--	--	--	--
FS-11-2-4	208	0.73	--	--	--	--	--
FS-12-1	208	1.91	--	--	--	--	--
FS-12-2	208	0.68	--	--	--	--	--

J. Gwarter

Registered Assayer, Province of British Columbia

CTA MEMBER CANADIAN TESTING ASSOCIATION

CHEMEX LABS LTD.

212 BROOKSBANK AVE
NORTH VANCOUVER, B.C.
CANADA V7J 2C1
TELEPHONE: (604)984-0221
TELEX: 043-52597

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TO : PAMICON DEVELOPMENTS LTD.,
208 - 350 W. HASTINGS T.
VANCOUVER, B. C.
V6E 1E1

CERT. # : A8114370-002-A
INVOICE # : I8114370
DATE : 23-OCT-81
P.O. # : NONE

CC: CARIBOO GEO.

Sample description	Prep code	Cu %					
FS-12-3-1	208	0.70	--	--	--	--	--
FS-12-3-2	208	0.06	--	--	--	--	--
FS-13-1	208	0.20	--	--	--	--	--
FS-13-2	208	0.61	--	--	--	--	--
FS-14-1	208	1.06	--	--	--	--	--
FS-14-2	208	1.15	--	--	--	--	--
FS-15-1	208	0.03	--	--	--	--	--
FS-15-2	208	0.16	--	--	--	--	--
FS-15-3	208	0.61	--	--	--	--	--
FS-16	208	0.13	--	--	--	--	--

B. Stewart

Registered Assayer, Province of British Columbia

APPENDIX III

Soil sample assay certificates.

CHEMEX LABS LTD.

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CANADA V7J 2C1
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TELEX: 043-52597

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TO : PAMICON DEVELOPMENTS LTD.,
208 - 850 W. HASTINGS T.
VANCOUVER, B. C.
V6E 1E1

CERT. # : A8114372-001-
INVOICE # : I8114372
DATE : 12-OCT-81
P.O. # : NONE

CC: CARIBOO GEO.

Sample description	Prep code	Cu ppm					
L 2+40N 0+00E	201	31	--	--	--	--	--
L 2+80N 0+00E	201	52	--	--	--	--	--
L 3+20N 0+00E	201	33	--	--	--	--	--
L 3+60N 0+00E	201	23	--	--	--	--	--
L 4+00N 0+00E	201	24	--	--	--	--	--
L 4+40N 0+00E	201	23	--	--	--	--	--
L 4+80N 0+00E	201	29	--	--	--	--	--
L 5+20N 0+00E	201	33	--	--	--	--	--
L 5+60N 0+00E	201	40	--	--	--	--	--
L 6+00N 0+00E	201	26	--	--	--	--	--
L 2+00N 0+40E	201	45	--	--	--	--	--
L 2+40N 0+40E	201	36	--	--	--	--	--
L 3+60N 0+40E	201	33	--	--	--	--	--
L 4+00N 0+40E	201	29	--	--	--	--	--
L 4+40N 0+40E	201	38	--	--	--	--	--
L 4+80N 0+40E	201	42	--	--	--	--	--
L 5+20N 0+40E	201	30	--	--	--	--	--
L 5+60N 0+40E	201	42	--	--	--	--	--
L 6+00N 0+40E	201	37	--	--	--	--	--
L 2+40N 0+80E	201	38	--	--	--	--	--
L 2+80N 0+80E	201	49	--	--	--	--	--
L 3+20N 0+80E	201	83	--	--	--	--	--
L 3+60N 0+80E	201	51	--	--	--	--	--
L 4+00N 0+80E	201	20	--	--	--	--	--
L 4+40N 0+80E	201	14	--	--	--	--	--
L 4+80N 0+80E	201	31	--	--	--	--	--
L 5+20N 0+80E	201	36	--	--	--	--	--
L 5+60N 0+80E	201	38	--	--	--	--	--
L 6+00N 0+80E	201	36	--	--	--	--	--
L 2+00N 1+20E	201	138	--	--	--	--	--
L 2+40N 1+20E	201	55	--	--	--	--	--
L 4+00N 1+20E	201	29	--	--	--	--	--
L 4+40N 1+20E	201	18	--	--	--	--	--
L 4+80N 1+20E	201	25	--	--	--	--	--
L 5+20N 1+20E	201	15	--	--	--	--	--
L 1+60N 1+60E	201	40	--	--	--	--	--
L 2+00N 1+60E	201	55	--	--	--	--	--
L 2+40N 1+60E	201	64	--	--	--	--	--
L 3+60N 1+60E	201	27	--	--	--	--	--
L 4+00N 1+60E	201	36	--	--	--	--	--

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CANADA V7J 2C1
TELEPHONE: (604)984-0221
TELEX: 043-52597

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CERTIFICATE OF ANALYSIS

TO : PAMICON DEVELOPMENTS LTD.,
208 - 850 W. HASTINGS T.
VANCOUVER, B. C.
V6E 1E1

CERT. # : A9114372-002-A
INVOICE # : I9114372
DATE : 12-OCT-91
P.O. # : NONE

CC: CARIBOO GEO.

Sample description	Prep code	Cu ppm					
L 4+40N 1+60E	201	18	--	--	--	--	--
L 4+80N 1+60E	201	7	--	--	--	--	--
L 5+20N 1+60E	201	12	--	--	--	--	--
L 5+60N 1+60E	201	29	--	--	--	--	--
L 6+00N 1+60E	201	34	--	--	--	--	--
L 1+60N 2+00E	201	95	--	--	--	--	--
L 2+00N 2+00E	201	168	--	--	--	--	--
L 2+40N 2+00E	201	33	--	--	--	--	--
L 3+60N 2+00E	201	28	--	--	--	--	--
L 4+00N 2+00E	201	32	--	--	--	--	--
L 4+40N 2+00E	201	12	--	--	--	--	--
L 4+80N 2+00E	201	17	--	--	--	--	--
L 5+20N 2+00E	201	26	--	--	--	--	--
L 5+60N 2+00E	201	15	--	--	--	--	--
L 6+00N 2+00E	201	33	--	--	--	--	--
L 1+60N 2+40E	201	20	--	--	--	--	--
L 2+00N 2+40E	201	20	--	--	--	--	--
L 2+40N 2+40E	201	35	--	--	--	--	--
L 2+80N 2+40E	201	19	--	--	--	--	--
L 3+20N 2+40E	201	61	--	--	--	--	--
L 3+60N 2+40E	201	48	--	--	--	--	--
L 4+00N 2+40E	201	12	--	--	--	--	--
L 4+40N 2+40E	201	15	--	--	--	--	--
L 4+80N 2+40E	201	18	--	--	--	--	--
L 5+20N 2+40E	201	17	--	--	--	--	--
L 5+60N 2+40E	201	94	--	--	--	--	--
L 6+00N 2+40E	201	48	--	--	--	--	--
L 1+60N 2+80E	201	37	--	--	--	--	--
L 2+00N 2+80E	201	13	--	--	--	--	--
L 3+60N 2+80E	201	27	--	--	--	--	--
L 4+00N 2+80E	201	25	--	--	--	--	--
L 4+40N 2+80E	201	14	--	--	--	--	--
L 4+80N 2+80E	201	13	--	--	--	--	--
L 5+20N 2+80E	201	17	--	--	--	--	--
L 5+60N 2+80E	201	62	--	--	--	--	--
L 6+00N 2+80E	201	77	--	--	--	--	--
L 1+60N 3+20E	201	24	--	--	--	--	--
L 2+00N 3+20E	201	21	--	--	--	--	--
L 2+40N 3+20E	201	24	--	--	--	--	--
L 3+60N 3+20E	201	285	--	--	--	--	--

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TELEPHONE: (604)984-0221
TELEX: 043-52597

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TO : PAMICON DEVELOPMENTS LTD.,
208 - 850 W. HASTINGS T.
VANCOUVER, B. C.
V6E 1E1

CERT. # : A8114372-003-A
INVOICE # : I8114372
DATE : 12-OCT-81
P.O. # : NONE

CC: CARIBOO GEO.

Sample description	Prep code	Cu ppm					
L 4+00N 3+20E	201	60	--	--	--	--	--
L 4+40N 3+20E	201	21	--	--	--	--	--
L 4+80N 3+20E	201	14	--	--	--	--	--
L 5+20N 3+20E	201	21	--	--	--	--	--
L 5+60N 3+20E	201	46	--	--	--	--	--
L 6+00N 3+20E	201	64	--	--	--	--	--
L 1+60N 3+60E	201	6	--	--	--	--	--
L 2+00N 3+60E	201	35	--	--	--	--	--
L 2+40N 3+60E	201	23	--	--	--	--	--
L 3+60N 3+60E	201	200	--	--	--	--	--
L 4+00N 3+60E	201	153	--	--	--	--	--
L 4+40N 3+60E	201	22	--	--	--	--	--
L 4+60N 3+60E	201	12	--	--	--	--	--
L 5+20N 3+60E	201	23	--	--	--	--	--
L 5+60N 3+60E	201	58	--	--	--	--	--
L 6+00N 3+60E	201	80	--	--	--	--	--
L 1+60N 4+00E	201	26	--	--	--	--	--
L 2+00N 4+00E	201	10	--	--	--	--	--
L 2+40N 4+00E	201	25	--	--	--	--	--
L 2+80N 4+00E	201	13	--	--	--	--	--
L 3+20N 4+00E	201	48	--	--	--	--	--
L 3+60N 4+00E	201	500	--	--	--	--	--
L 4+00N 4+00E	201	420	--	--	--	--	--
L 4+40N 4+00E	201	163	--	--	--	--	--
L 4+80N 4+00E	201	77	--	--	--	--	--
L 5+20N 4+00E	201	41	--	--	--	--	--
L 5+60N 4+00E	201	29	--	--	--	--	--
L 6+00N 4+00E	201	59	--	--	--	--	--
L 1+00N 4+40E	201	10	--	--	--	--	--
L 2+00N 4+40E	201	290	--	--	--	--	--
L 2+40N 4+40E	201	31	--	--	--	--	--
L 3+20N 4+40E	201	119	--	--	--	--	--
L 4+00N 4+40E	201	137	--	--	--	--	--
L 4+40N 4+40E	201	21	--	--	--	--	--
L 4+80N 4+40E	201	40	--	--	--	--	--
L 5+20N 4+40E	201	25	--	--	--	--	--
L 5+60N 4+40E	201	40	--	--	--	--	--
L 6+00N 4+40E	201	28	--	--	--	--	--
L 1+20N 4+80E	201	6	--	--	--	--	--
L 1+60N 4+80E	201	10	--	--	--	--	--

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208 - 850 W. HASTINGS T.
VANCOUVER, B. C.
V6E 1E1

CERT. # : A8114372-004-A
INVOICE # : I8114372
DATE : 12-OCT-81
P.O. # : NONE

CC: CARIBOO GEO.

Sample description	Prep code	Cu ppm					
L 2+00N 4+80E	201	7	--	--	--	--	--
L 2+40N 4+80E	201	39	--	--	--	--	--
L 2+80N 4+80E	201	43	--	--	--	--	--
L 3+20N 4+80E	201	140	--	--	--	--	--
L 3+60N 4+80E	201	18	--	--	--	--	--
L 4+00N 4+80E	201	47	--	--	--	--	--
L 4+40N 4+80E	201	47	--	--	--	--	--
L 4+80N 4+80E	201	43	--	--	--	--	--
L 5+20N 4+80E	201	50	--	--	--	--	--
L 5+60N 4+80E	201	54	--	--	--	--	--
L 6+00N 4+80E	201	114	--	--	--	--	--
L 1+20N 5+20E	201	12	--	--	--	--	--
L 2+40N 5+20E	201	850	--	--	--	--	--
L 2+80N 5+20E	201	100	--	--	--	--	--
L 3+20N 5+20E	201	10	--	--	--	--	--
L 3+60N 5+20E	201	55	--	--	--	--	--
L 4+00N 5+20E	201	161	--	--	--	--	--
L 4+40N 5+20E	201	132	--	--	--	--	--
L 4+80N 5+20E	201	59	--	--	--	--	--
L 5+20N 5+20E	201	18	--	--	--	--	--
L 5+60N 5+20E	201	20	--	--	--	--	--
L 6+00N 5+20E	201	45	--	--	--	--	--
L 1+20N 5+60E	201	105	--	--	--	--	--
L 2+40N 5+60E	201	450	--	--	--	--	--
L 2+80N 5+60E	201	200	--	--	--	--	--
L 3+20N 5+60E	201	73	--	--	--	--	--
L 3+60N 5+60E	201	50	--	--	--	--	--
L 4+00N 5+60E	201	110	--	--	--	--	--
L 4+40N 5+60E	201	54	--	--	--	--	--
L 4+80N 5+60E	201	20	--	--	--	--	--
L 5+20N 5+60E	201	20	--	--	--	--	--
L 5+60N 5+60E	201	21	--	--	--	--	--
L 6+00N 5+60E	201	42	--	--	--	--	--
L 6+40N 5+60E	201	20	--	--	--	--	--
L 20 6+00E	201	181	--	--	--	--	--
L 24 6+00E	201	172	--	--	--	--	--
L 32 6+00E	201	158	--	--	--	--	--
L 36 6+00E	201	38	--	--	--	--	--
L 44 6+00E	201	52	--	--	--	--	--
L 48 6+00E	201	23	--	--	--	--	--

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CERTIFICATE OF ANALYSIS

TO : PAMICON DEVELOPMENTS LTD.,
208 - 950 W. HASTINGS T.
VANCOUVER, B. C.
V6E 1E1

CERT. # : A8114372-001-A
INVOICE # : I8114372
DATE : 12-OCT-81
P.O. # : NONE

CC: CARIBOO GEO.

Sample description	Prep code	Cu ppm					
L 52 5+00E	201	12	--	--	--	--	--
L 5+60N 6+00E	201	63	--	--	--	--	--
L 6+00N 6+00E	201	24	--	--	--	--	--
L 0+80N 6+40E	201	56	--	--	--	--	--
L 12 6+40E	201	78	--	--	--	--	--
L 16 6+40E	201	82	--	--	--	--	--
L 20 6+40E	201	235	--	--	--	--	--
L 24 6+40E	201	1150	--	--	--	--	--
L 28 6+40E	201	300	--	--	--	--	--
L 32 6+40E	201	800	--	--	--	--	--
L 36 6+40E	201	15	--	--	--	--	--
L 40 6+40E	201	47	--	--	--	--	--
L 48 6+40E	201	33	--	--	--	--	--
L 52 6+40E	201	19	--	--	--	--	--
L 5+60N 6+40E	201	11	--	--	--	--	--
L 6+00N 6+40E	201	13	--	--	--	--	--
L 1+20N 6+80E	201	126	--	--	--	--	--
L 1+60N 6+80E	201	450	--	--	--	--	--
L 2+00N 6+80E	201	160	--	--	--	--	--
L 2+80N 6+80E	201	148	--	--	--	--	--
L 3+20N 6+80E	201	19	--	--	--	--	--
L 3+60N 6+80E	201	84	--	--	--	--	--
L 4+00N 6+80E	201	27	--	--	--	--	--
L 4+40N 6+80E	201	20	--	--	--	--	--
L 4+80N 6+80E	201	11	--	--	--	--	--
L 5+20N 6+80E	201	13	--	--	--	--	--
L 5+60N 6+80E	201	43	--	--	--	--	--
L 6+00N 6+80E	201	44	--	--	--	--	--
L 0+80N 7+20E	201	55	--	--	--	--	--
L 1+20N 7+20E	201	58	--	--	--	--	--
L 1+60N 7+20E	201	32	--	--	--	--	--
L 2+00N 7+20E	201	54	--	--	--	--	--
L 2+40N 7+20E	201	60	--	--	--	--	--
L 2+80N 7+20E	201	11	--	--	--	--	--
L 3+20N 7+20E	201	38	--	--	--	--	--
L 3+60N 7+20E	201	47	--	--	--	--	--
L 4+00N 7+20E	201	17	--	--	--	--	--
L 4+40N 7+20E	201	29	--	--	--	--	--
L 4+80N 7+20E	201	12	--	--	--	--	--
L 5+20N 7+20E	201	14	--	--	--	--	--

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CHEMEX LABS LTD.

212 BROOKSBANK AVE.
NORTH VANCOUVER, B.C.
CANADA V7J 2C1

TELEPHONE: (604)984-0221
TELEX: 043-52597

. ANALYTICAL CHEMISTS . GEOCHEMISTS REGISTERED ASSAYERS

CERTIFICATE OF ANALYSIS

TO : PAMICON DEVELOPMENTS LTD.,
208 - 850 W. HASTINGS T.
VANCOUVER, B. C.
V6E 1E1

CERT. # : A8114372-ZK6-A
INVOICE # : I8114372
DATE : 12-OCT-81
P.O. # : NONE

CC: CARIBOO GEO.

Sample description	Prep code	Cu ppm					
L 5+60N 7+20E	201	21	--	--	--	--	--
L 6+00N 7+20E	201	36	--	--	--	--	--
L 0+80N 7+60E	201	28	--	--	--	--	--
L 1+20N 7+60E	201	10	--	--	--	--	--
L 2+00N 7+60E	201	71	--	--	--	--	--
L 2+80N 7+60E	201	54	--	--	--	--	--
L 3+60N 7+60E	201	46	--	--	--	--	--
L 4+40N 7+60E	201	28	--	--	--	--	--
L 5+20N 7+60E	201	41	--	--	--	--	--
L 6+00N 7+60E	201	15	--	--	--	--	--

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APPENDIX IV

Soil Profiles.

The following descriptions are of typical soil profiles developed on the various parent materials seen on the Fair claims.

1. Alluvium

Profile development is poor and thin, generally less than 40 cm. Most commonly the well rounded gravels and sands are overlain by 15 to 35 cm of light brown brunisol (BM) only slightly different from the parent material. On well drained slopes a red-brown Fe-rich horizon (BF) is developed. In saturated areas a red-brown mottled layer (BG) is found. These different B horizons are covered by up to 10 cm of fibrous peaty organic matter.

With the exception of the flat valley bottom of Fairchild Ck. slopes on the alluvial materials are 10-20°.

2. Lake Sediment

These materials are firm, light gray to bluish gray clay, light brown silt and very fine sand. In many places, as for example on the bench northeast of Fairchild Ck., the sediments are well laminated. Slopes are less than 5° and the areas underlain by lake sediments are poorly drained.

The organic mat is less than 10 cm and in several places is only 1-2 cm thick. Profile development is practically nonexistent, but BM (brunisol), BF (red-brown Fe-rich), and BG (mottled) layers can be distinguished at different locations.

3. Talus

Coarse angular talus of gray argillite and siltstone occur along the northern part of the grid. The thickness of the soil decreases and the angularity of the talus increases as one proceeds north along the grid lines. The soil is thin and commonly up to 10 cm of moss overlies up to 5 cm of a brown silty sand (BM) with abundant angular rock fragments. In the wetter areas the thin soil is mottled red and brown gray (BG).

4. Bog

Where the bogs were deeper than 0.6 m and the underlying material could not be clearly identified the soils collected were treated as a separate class.

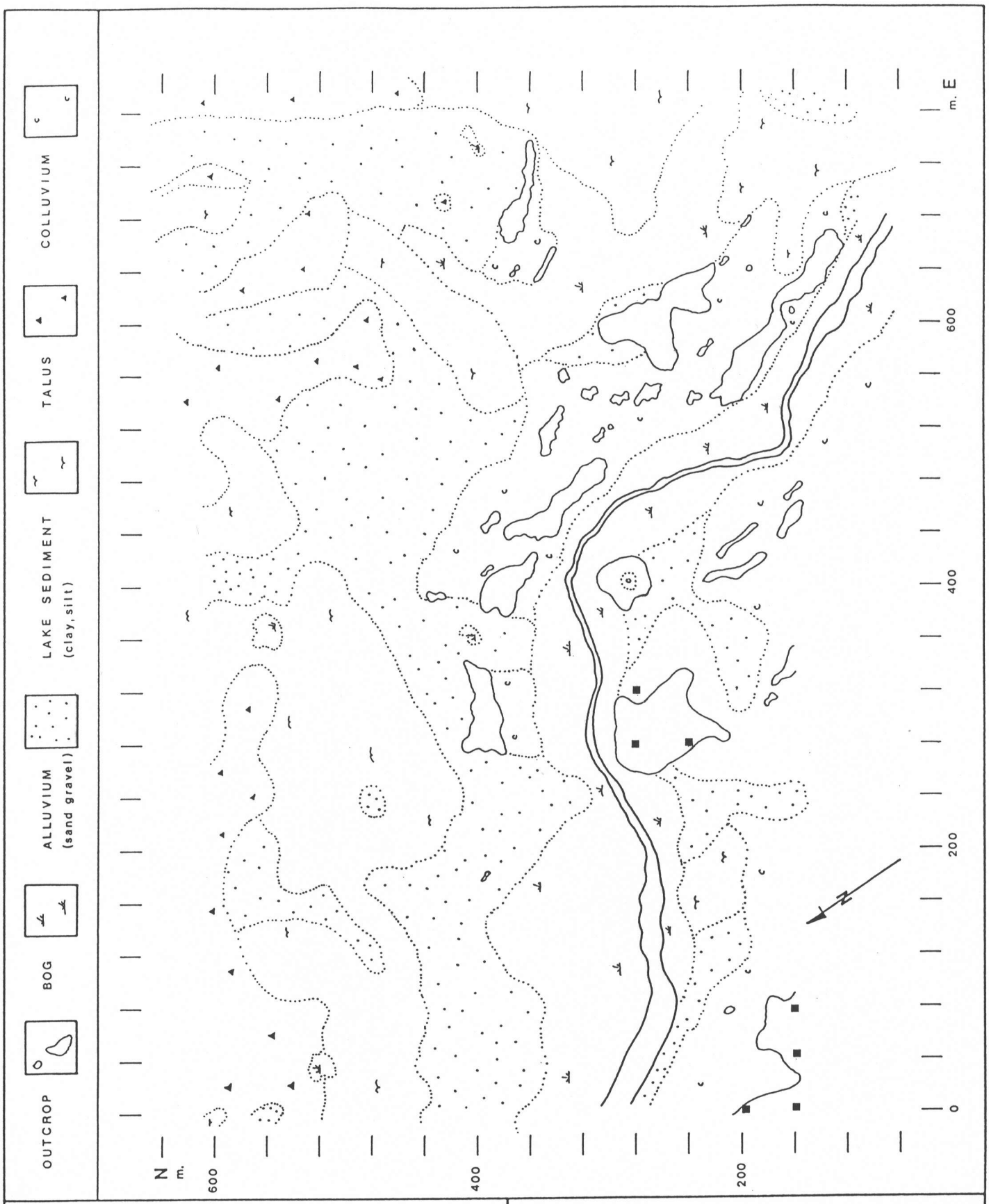
Commonly 15-20 cm of fibrous, peatly organic material was underlain by more than 40 cm of greasy black to gray clay. Where no profile was observed the muck was termed a "C" horizon. In a few places, particularly at the margins of the bogs, red-brown mottled clay was mixed in with the fibrous material. Samples of this were termed gleysols (BG).

5. Colluvium

This parent material class was present on slopes of more than 10 and included a mixture of soil and locally derived angular rock fragments. Typically 10-15 cm of moss overlies a brown sand and silt horizon (BM) up to 15 cm thick. In a few places where the soil is better drained a thin, less than 5 cm, BF horizon was seen above the BM layer. The BM horizon grades into the parent material.

APPENDIX V

Gradient Maps.



ENERGEX MINERALS LTD.

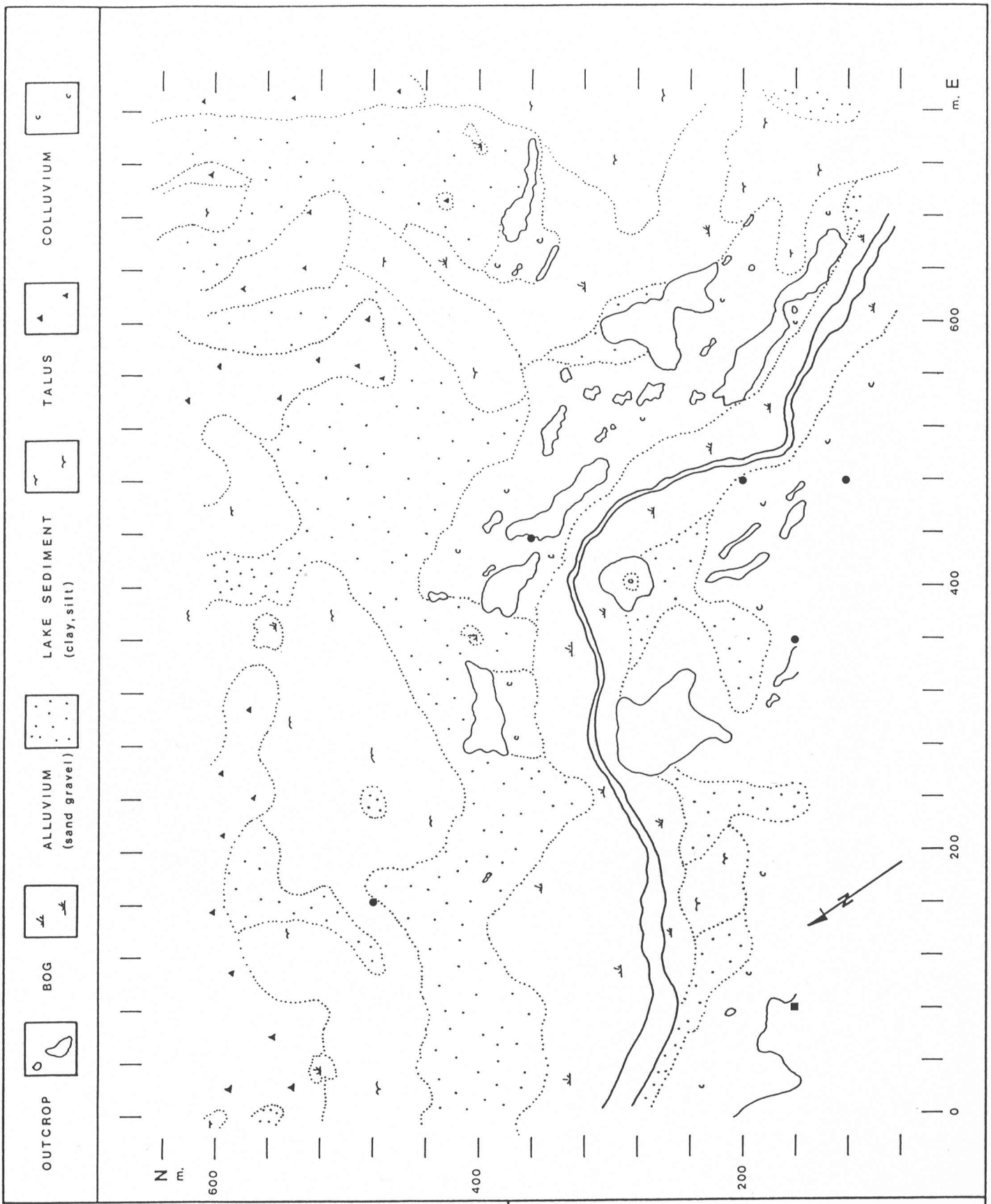
CARIBOO GEOTECHNICAL SERVICES LTD.

Fair Claims Cu Gradient Map
KK interval <0.06 (soil ●, rk. chips ■)

Scale 1:4,000

Figure V-1 | Nov. 12/81

K.V. Campbell



ENERGEX MINERALS LTD.

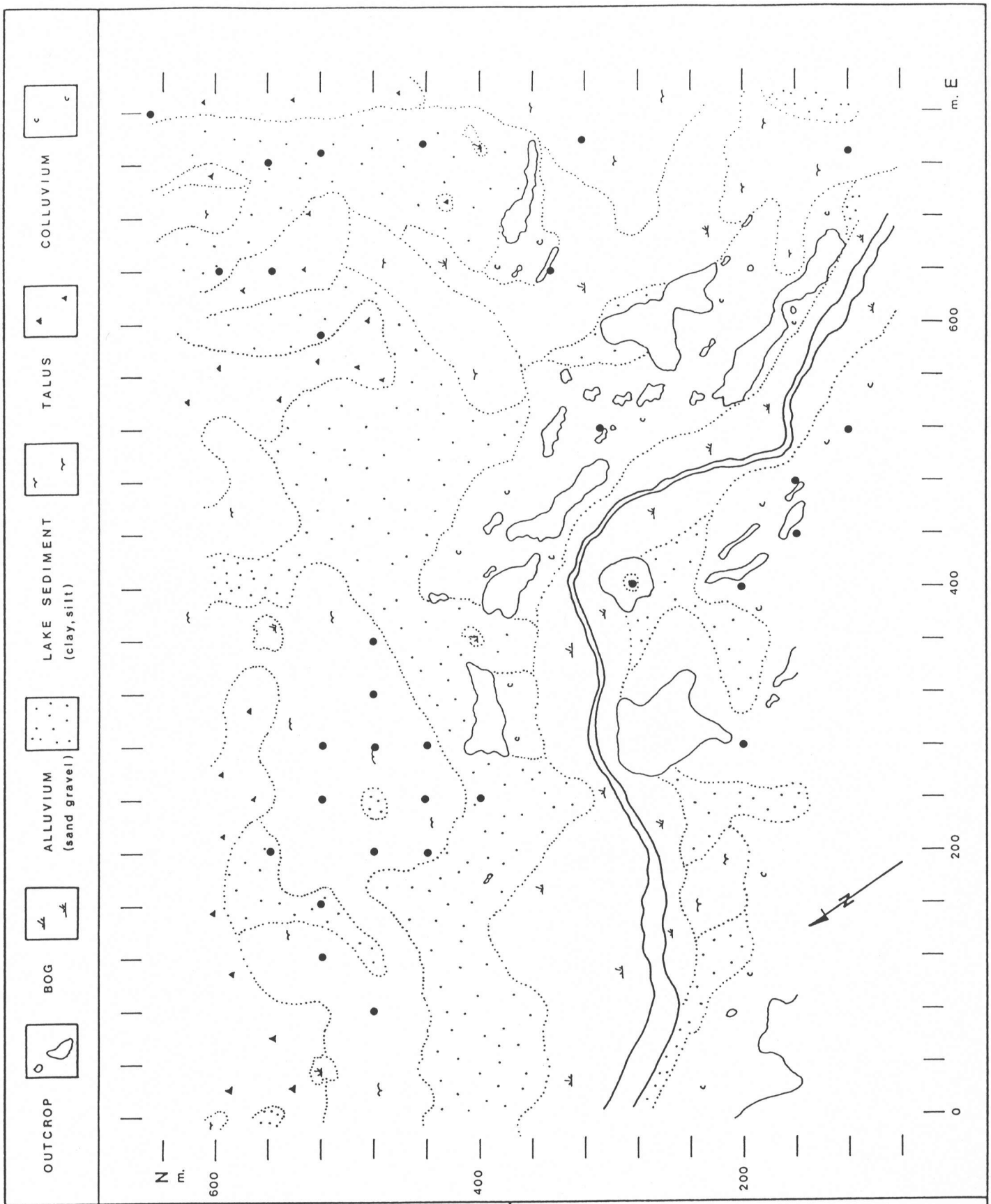
CARIBOO GEOTECHNICAL SERVICES LTD.

Fair Claims Cu Gradient Map
KK interval 0.06-.125 (soil ●, rk. chips ■)

Scale 1:4,000

Figure V-2 Nov. 12/81

K.V. Campbell



ENERGEX MINERALS LTD.

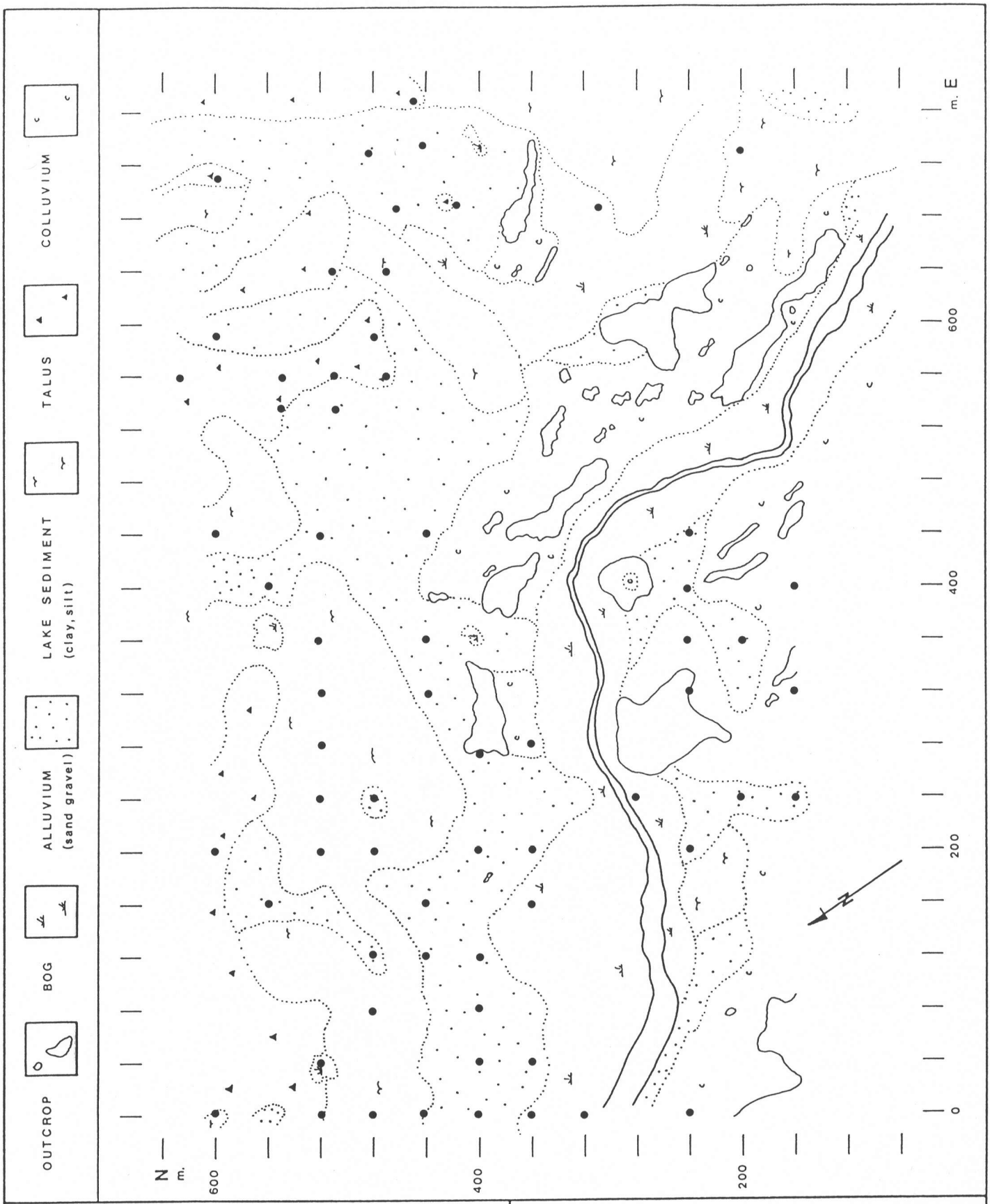
CARIBOO GEOTECHNICAL SERVICES LTD.

Fair Claims Cu Gradient Map
KK interval 0.125-.25 (soil ●, rk. chips ▪)

Scale 1:4,000

Figure V-3 Nov. 12/81

K.V. Campbell



ENERGEX MINERALS LTD.

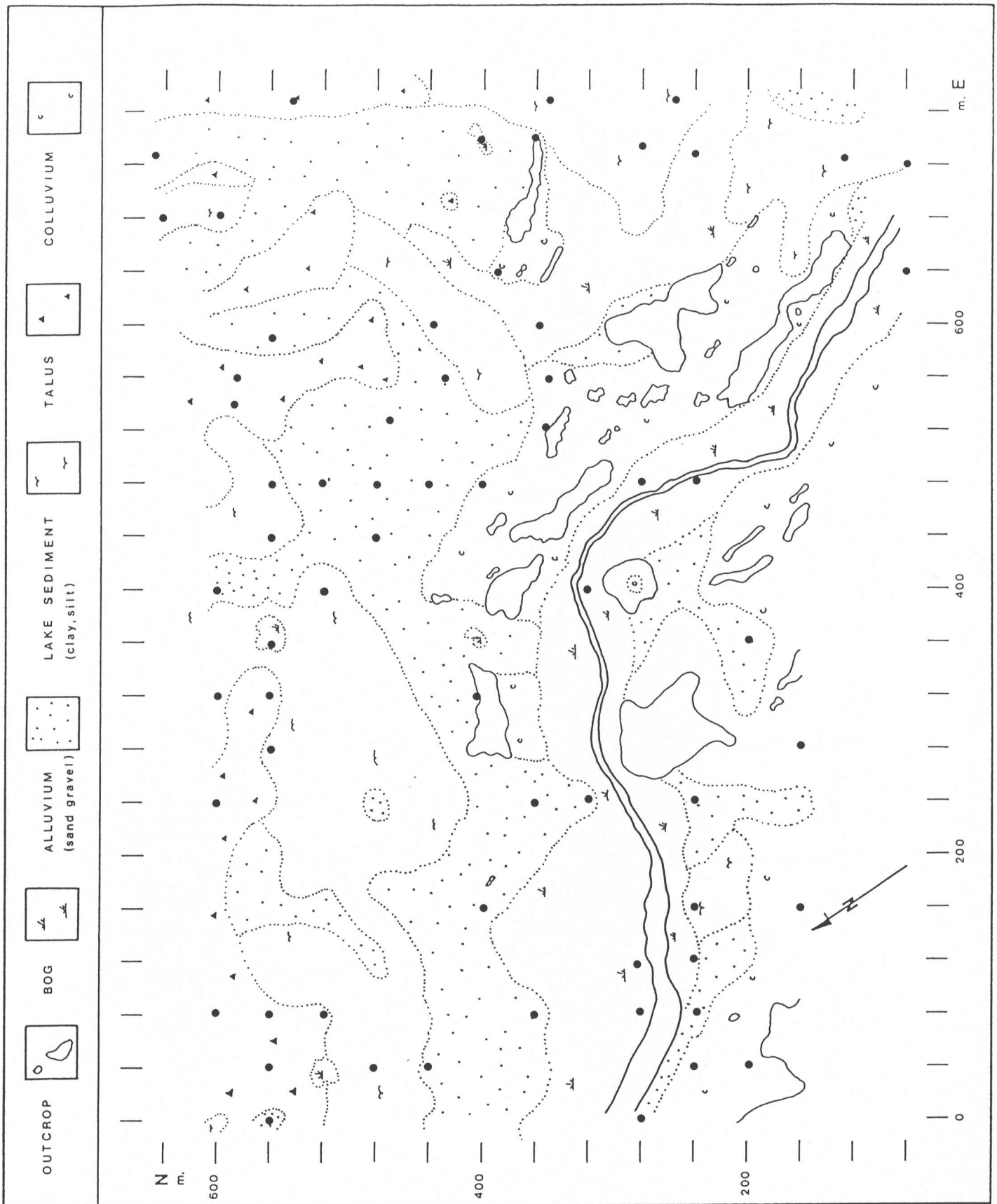
CARIBOO GEOTECHNICAL SERVICES LTD.

Fair Claims Cu Gradient Map
KK interval 0.25-.5 (soil ●, rk. chips ■)

Scale 1:4,000

Figure V-4 | Nov. 12/81

K.V. Campbell



ENERGEX MINERALS LTD.

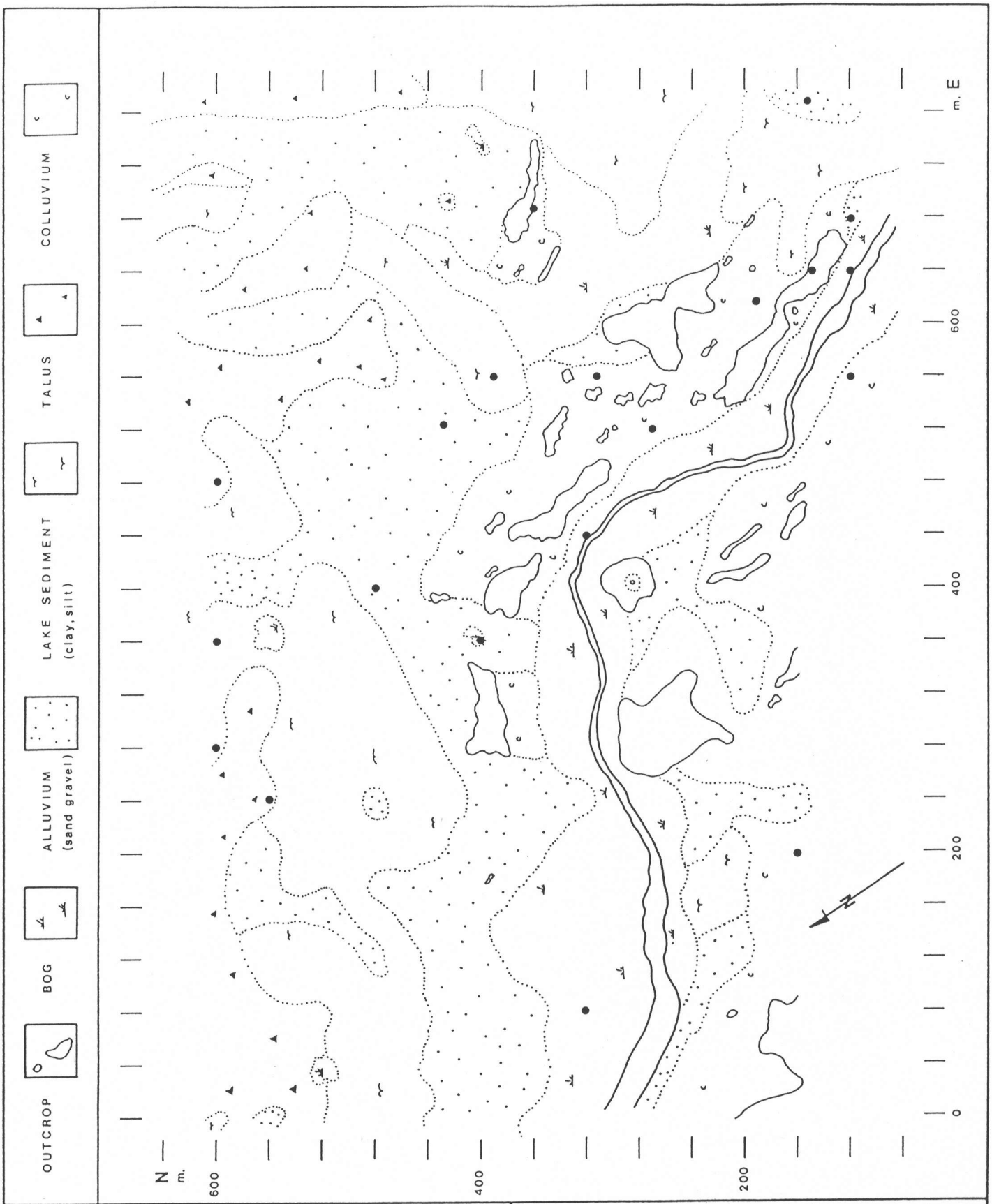
CARIBOO GEOTECHNICAL SERVICES LTD.

Fair Claims Cu Gradient Map
KK interval 0.5-1 (soil ●, rk. chips ▪)

Scale 1:4,000

Figure V-5 Nov. 12/81

K.V. Campbell



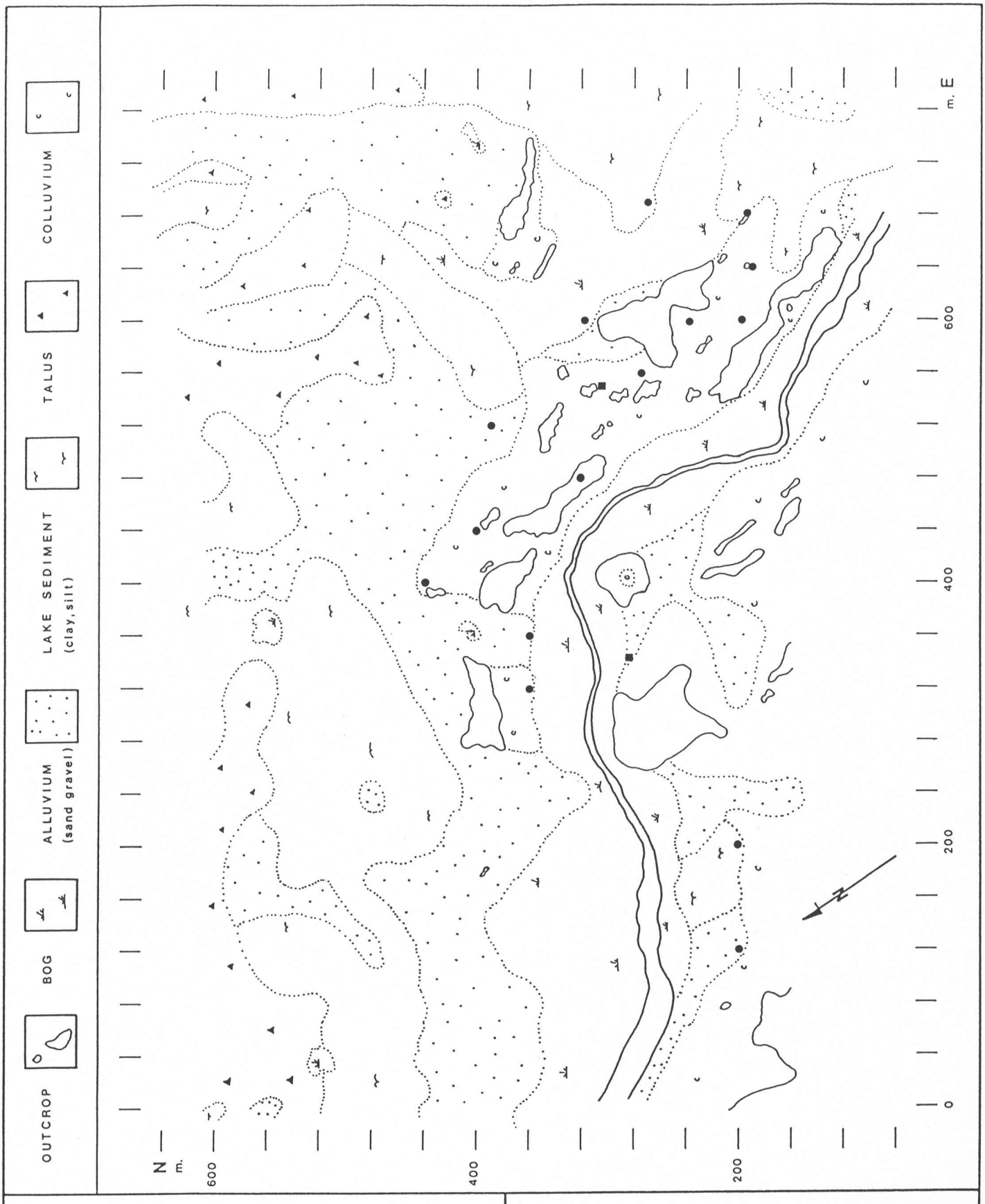
ENERGEX MINERALS LTD.

CARIBOO GEOTECHNICAL SERVICES LTD.

Fair Claims Cu Gradient Map
KK interval 1-2 (soil ●, rk. chips ■)

Scale 1:4,000

Figure V-6 Nov. 12/81



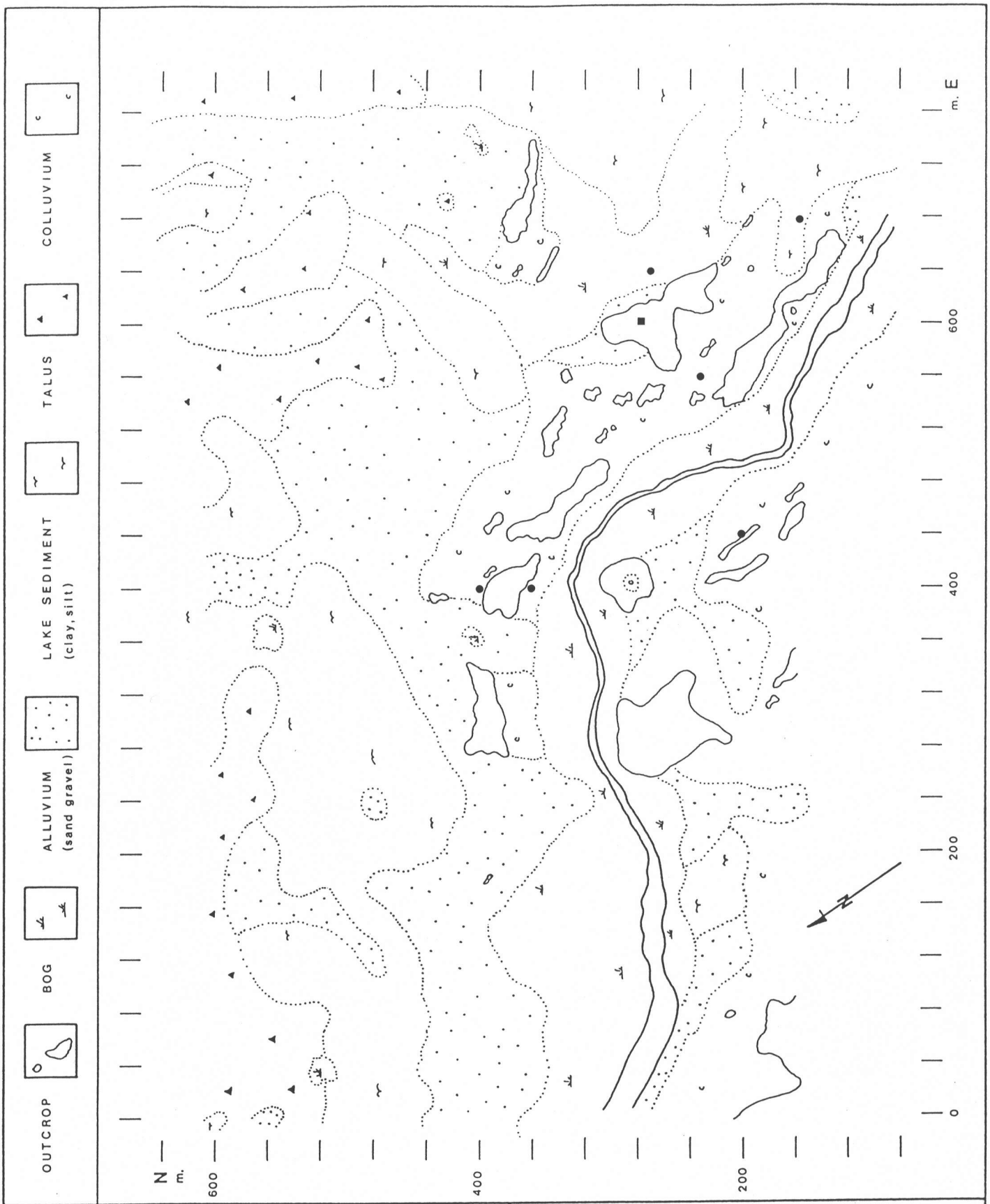
ENERGEX MINERALS LTD.

CARIBOO GEOTECHNICAL SERVICES LTD.

Fair Claims Cu Gradient Map
KK interval 2-4 (soil ●, rk. chips ■)

Scale 1:4,000

Figure V-7 Nov. 12/81



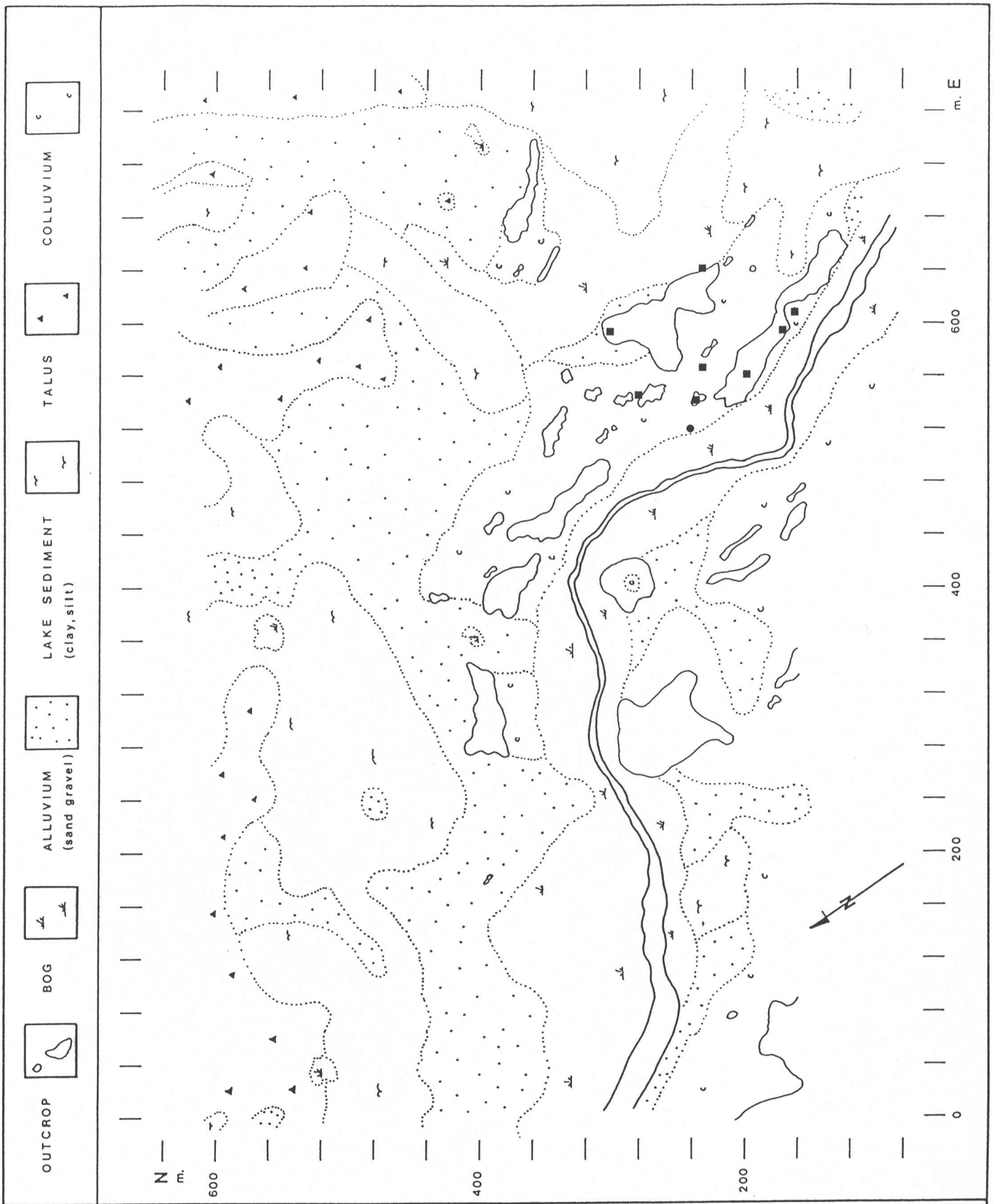
ENERGEX MINERALS LTD.

CARIBOO GEOTECHNICAL SERVICES LTD.

Fair Claims Cu Gradient Map
KK interval 4-8 (soil ●, rk. chips ■)

Scale 1:4,000

Figure V-8 Nov. 12/81



ENERGEX MINERALS LTD.

CARIBOO GEOTECHNICAL SERVICES LTD.

Fair Claims Cu Gradient Map
KK interval >8 (soil ●, rk. chips ■)

Scale 1:4,000

Figure V-9 | Nov. 12/81

APPENDIX VI

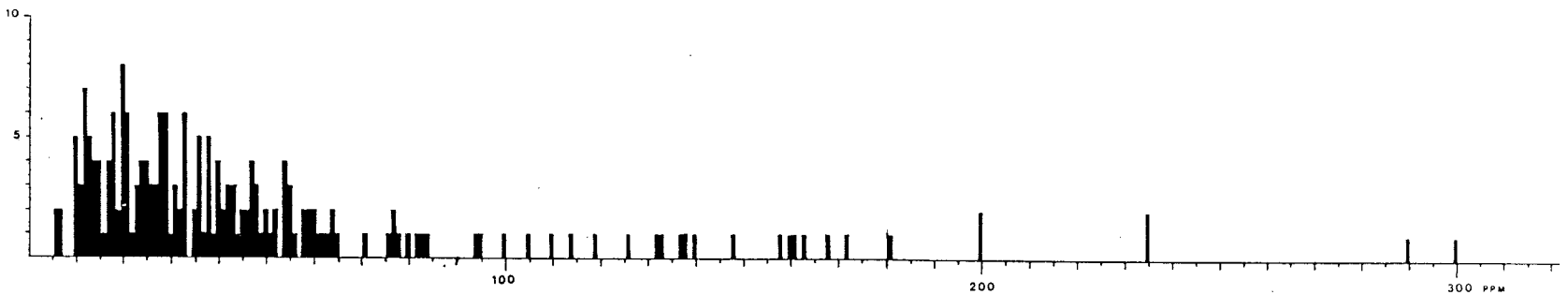
Histograms of Data Sets.

ALL SOIL SAMPLES FROM STAGE 1 GRID

Histogram of 208 Cu analyses

Mean = 70.91
Standard Deviation = 129.85
Range of assays = 6-1150 ppm

Note: Samples 420,450,450,500,800, 850 and 1150 ppm not shown on graph.

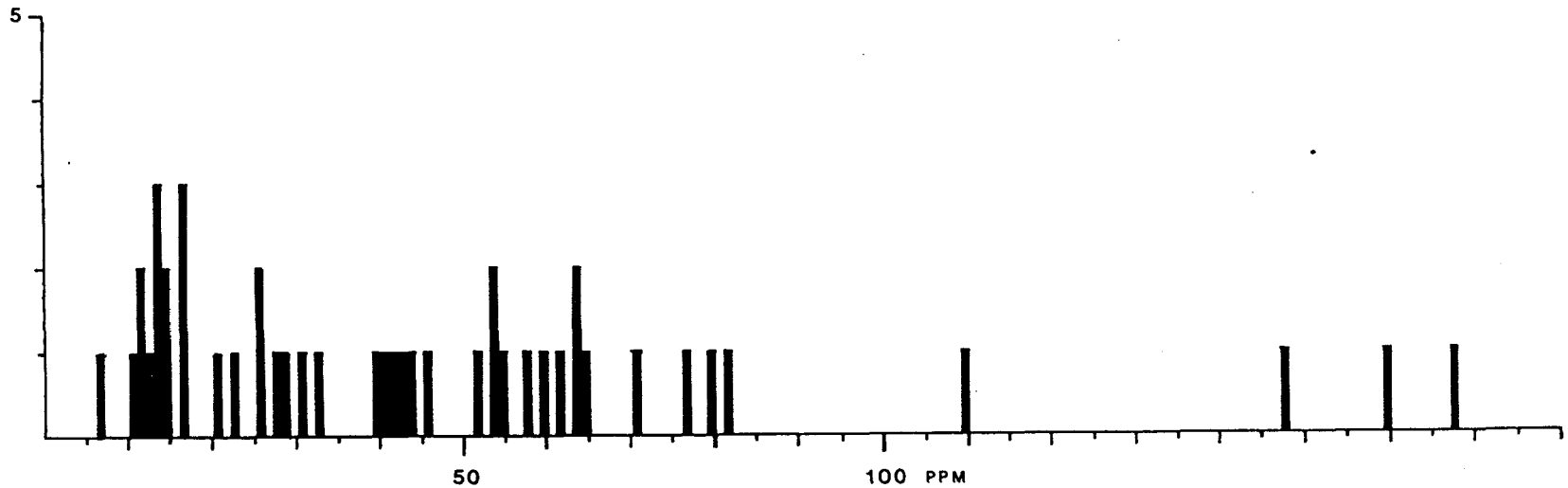


SOIL SAMPLES DERIVED FROM LAKE SEDIMENT
(includes clay, silt, soliflucted fines along eastern grid)

Histogram of 46 Cu analyses

Mean = 56.20
Standard Deviation = 70.46
Range of analyses = 7-450 ppm

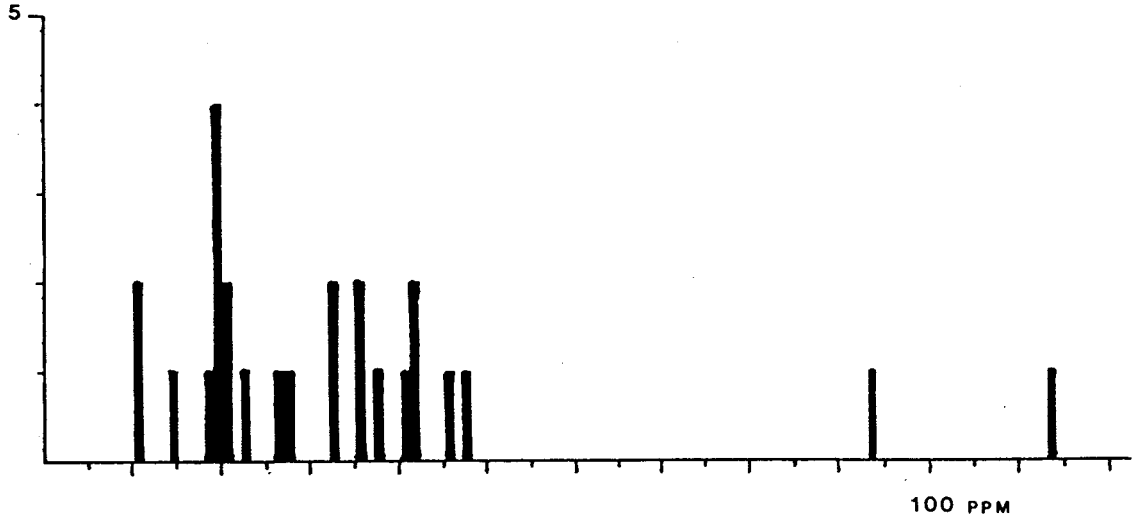
Note: Sample 450 ppm not shown on graph.



SOIL SAMPLES DERIVED FROM TALUS ALONG NORTHERN PART OF GRID

Histogram of 25 Cu analyses

Mean = 34.36
Standard Deviation = 23.73
Range of assays = 11-114 ppm



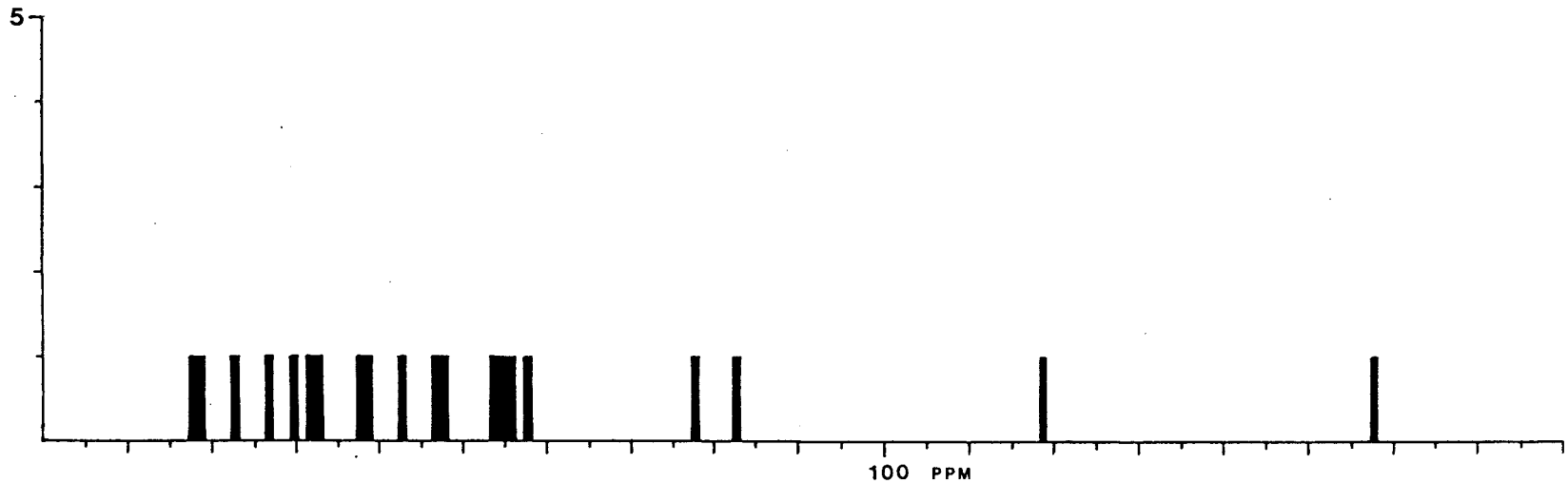
Cariboo Geotechnical Services Ltd.

SOIL SAMPLES DERIVED FROM BOG

Histogram of 22 Cu analyses

Mean = 98.09
Standard Deviation = 168.63
Range of assays = 18-800 ppm

Note: Samples 300 and 800 ppm not shown on graph.



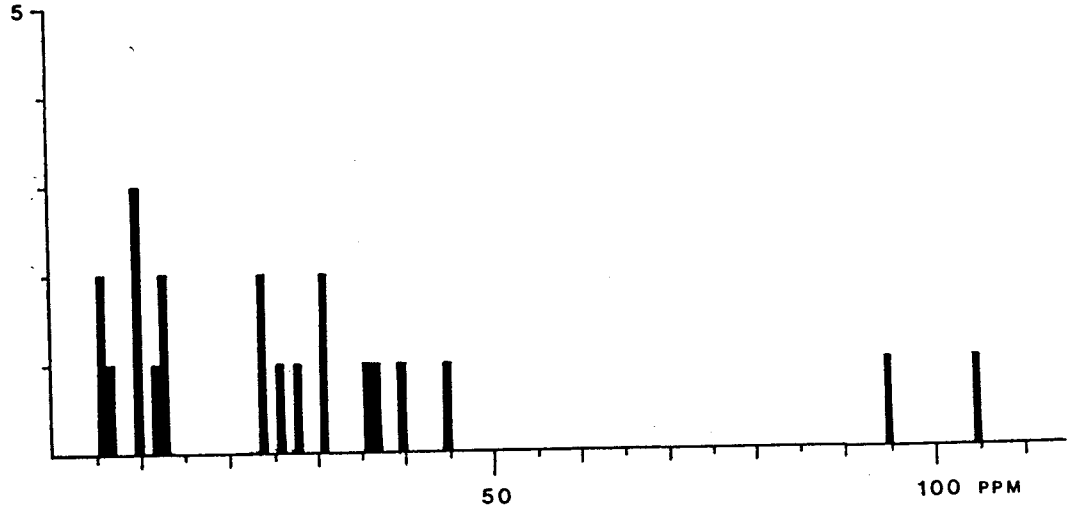
SOIL SAMPLES DERIVED FROM COLLUVIUM

SOUTHWEST OF FAIRCHILD CREEK

Histogram of 22 Cu analyses

Mean = 40.86
Standard Deviation = 61.39
Range of assays = 6-290 ppm

Note: Sample 290 ppm not shown on graph.



Cariboo Geotechnical Services Ltd.

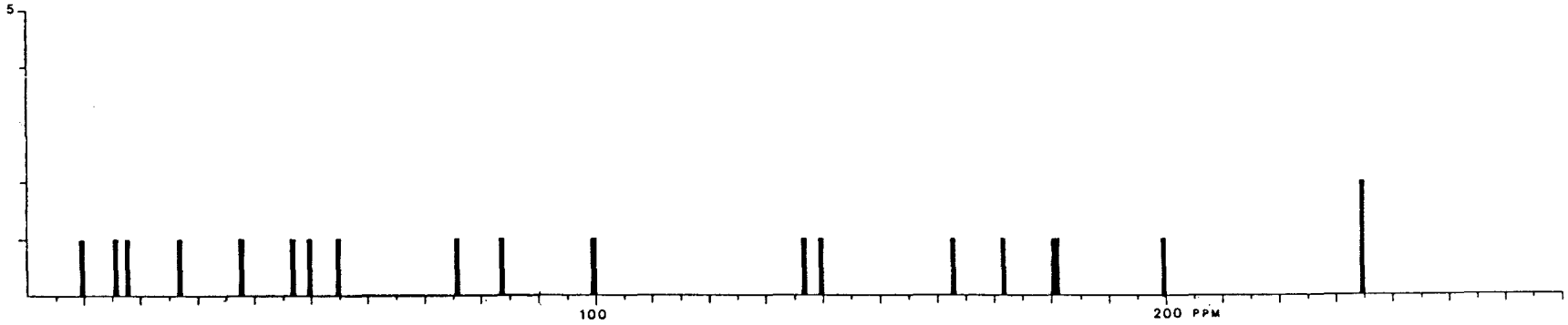
SOIL SAMPLES DERIVED FROM COLLUVIUM

NORTHEAST OF FAIRCHILD CREEK

Histogram of 24 Cu analyses

Mean = 223.08
Standard Deviation = 279.02
Range of assays = 10-1150 ppm

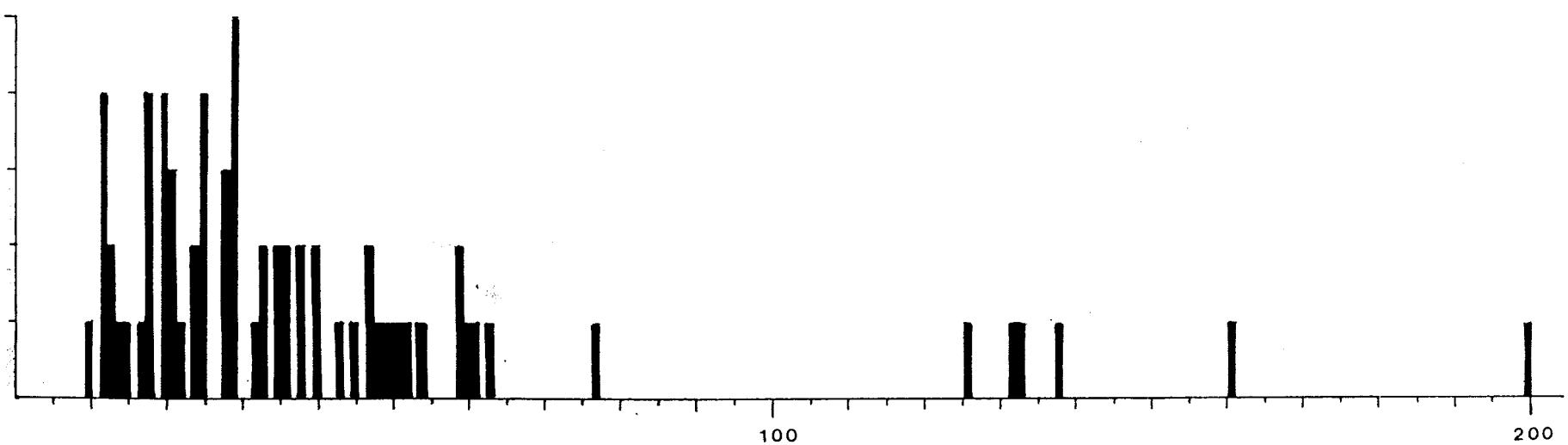
Note: Samples 420,450,500,850,1150 ppm not shown on graph.



SOIL SAMPLES DERIVED FROM ALLUVIUM

Histogram of 69 Cu analyses

Mean = 41.96
Standard Deviation = 37.05
Range of assays = 10-200 ppm



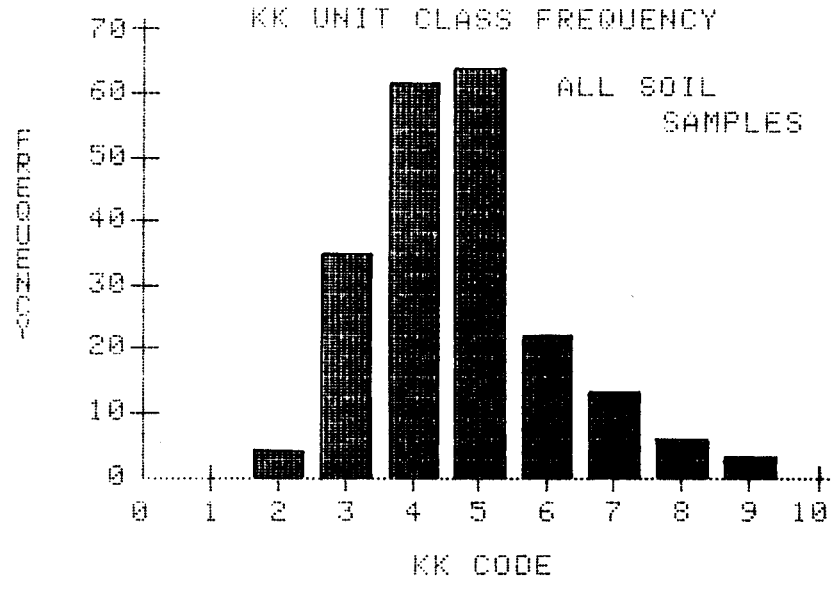
APPENDIX VII

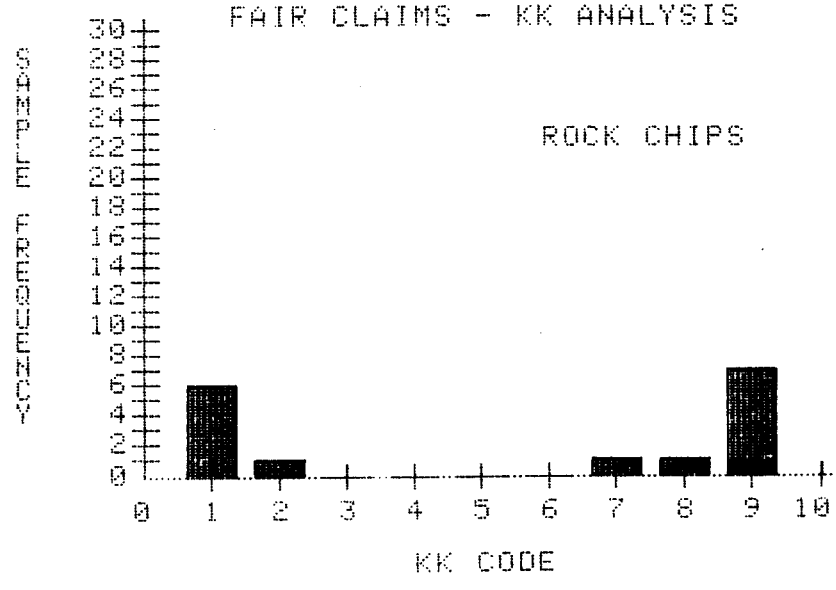
KK Interval Histograms.

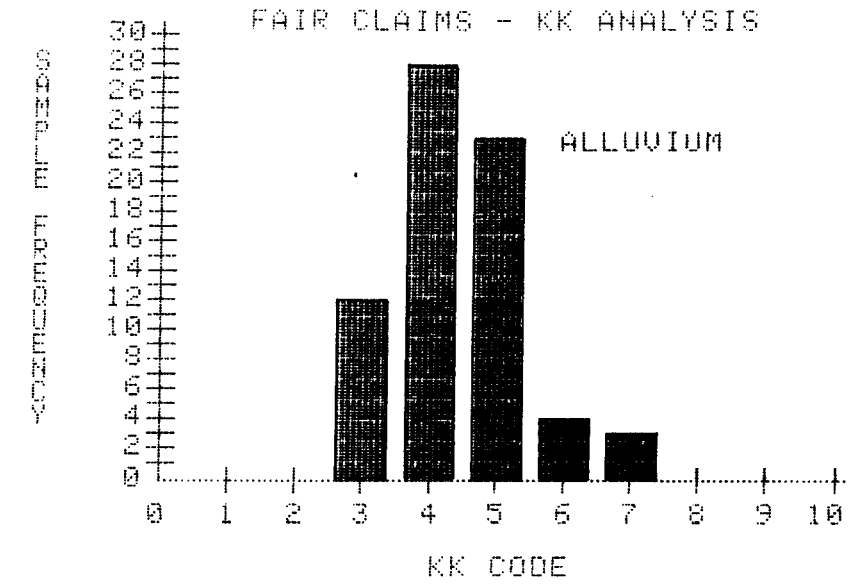
The following histograms illustrate the distribution of samples arranged by their respective KK intervals. For the sake of brevity the intervals are coded on the graphs as indicated below.

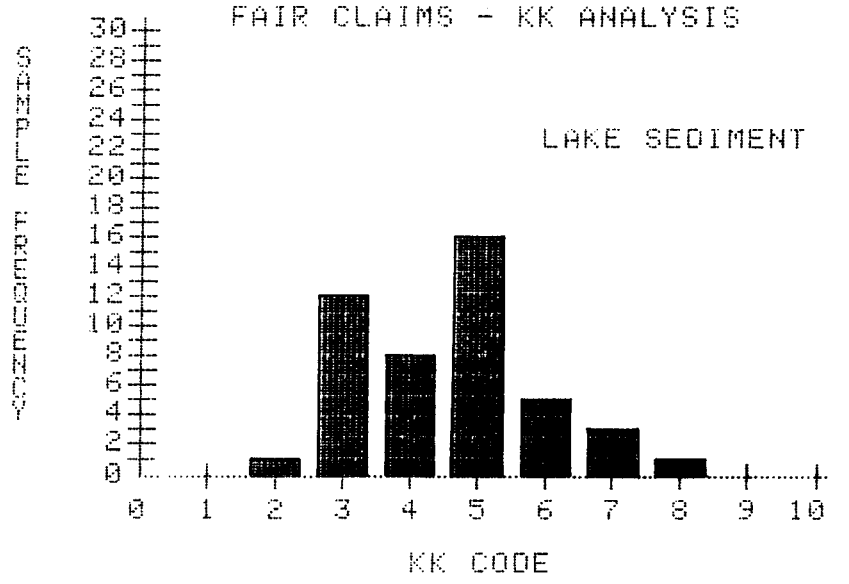
KK (Clarke) Unit Intervals	Copper (ppm)	KK Code
> 8	>544	9
4-8	272-544	8
2-4	136-272	7
1-2	68-136	6
0.5 - 1	34-68	5
0.25-0.5	17-34	4
0.125-0.25	8-17	3
0.06-0.125	4-8	2
< 0.06	< 4	1

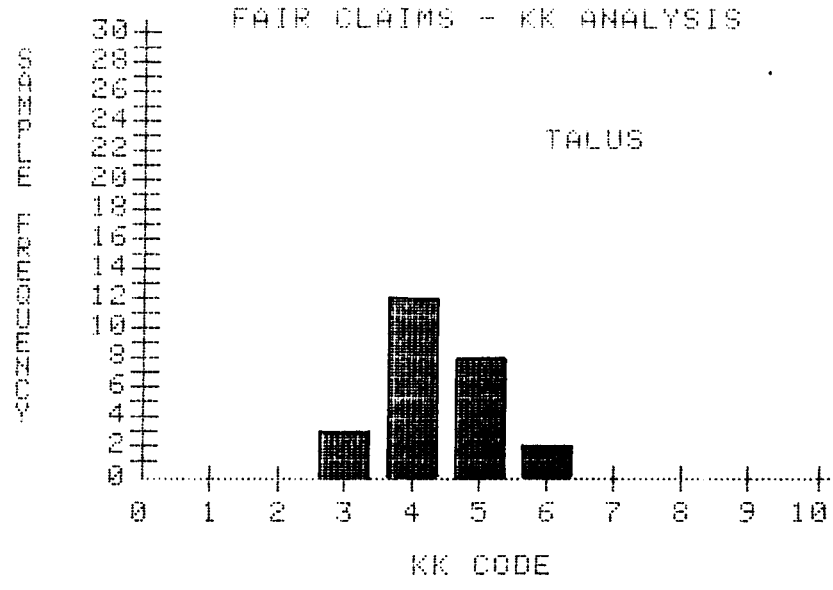
The analyses of rock chips are plotted separately. Those with the lowest values (KK interval less than 0.125) are of the calcareous rocks southwest of Fairchild Ck. Those with the highest values are of mineralized outcrops of basic hornfels. The rock chip analyses are the upper and lower limits of the entire data set.

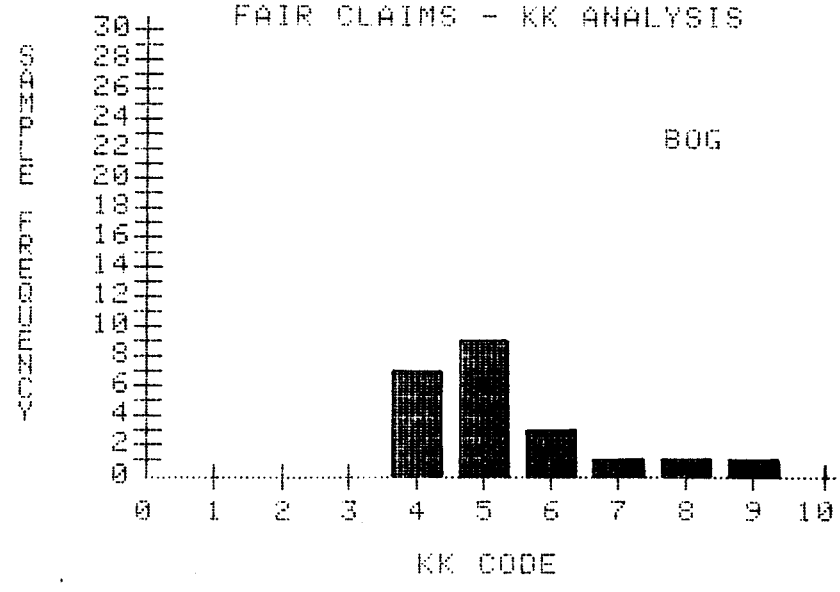

KK UNIT CLASS FREQUENCY
ALL SOIL
SAMPLES
FREQUENCY
70
60
50
40
30
20
10
0
0 1 2 3 4 5 6 7 8 9 10
KK CODE

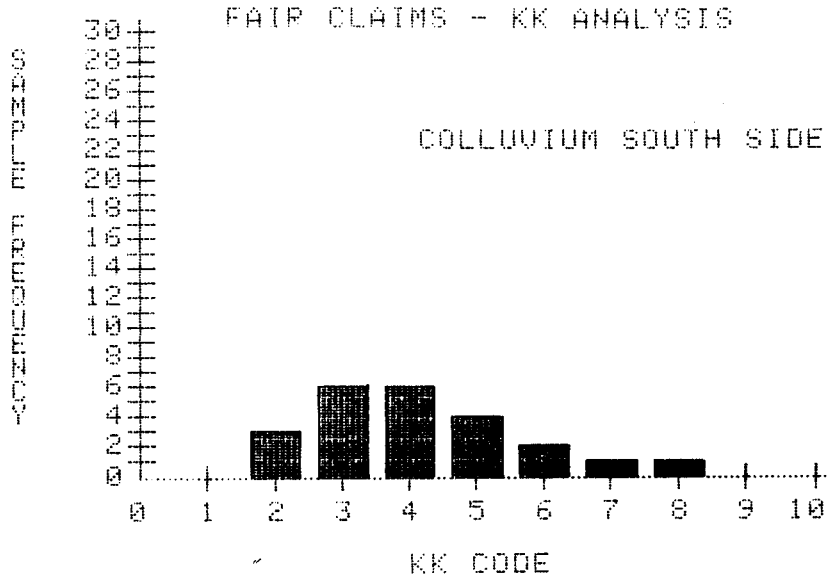

FAIR CLAIMS - KK ANALYSIS
ROCK CHIPS
SAMPLE FREQUENCY
30
28
26
24
22
20
18
16
14
12
10
8
6
4
2
0
0 1 2 3 4 5 6 7 8 9 10
KK CODE

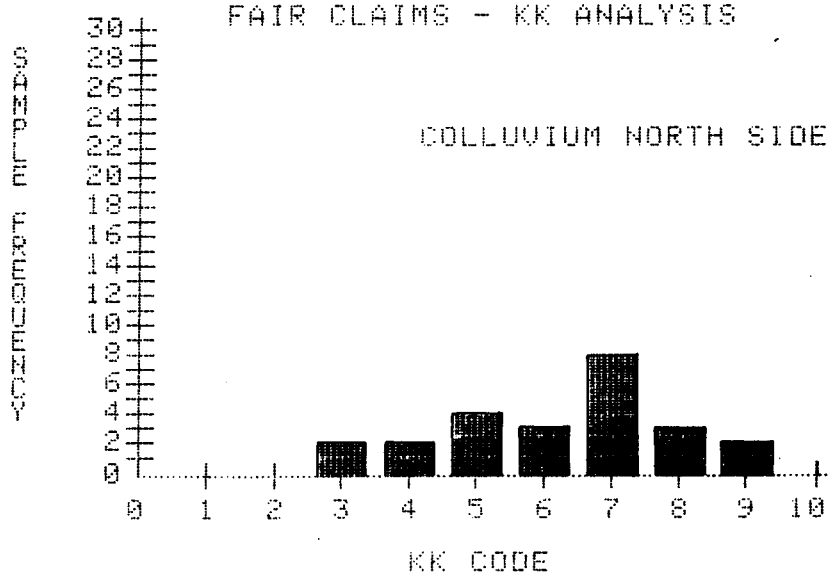

FAIR CLAIMS - KK ANALYSIS
ALLUVIUM
SAMPLE FREQUENCY
KK CODE
0 1 2 3 4 5 6 7 8 9 10
0 2 4 6 8 10 12 14 16 18 20 22 24 26 28 30


FAIR CLAIMS - KK ANALYSIS
LAKE SEDIMENT
SAMPLE FREQUENCY
KK CODE
0 1 2 3 4 5 6 7 8 9 10
0 2 4 6 8 10 12 14 16 18 20 22 24 26 28 30


FAIR CLAIMS - KK ANALYSIS
TALUS
SAMPLE FREQUENCY
0 2 4 6 8 10 12 14 16 18 20 22 24 26 28 30
0 1 2 3 4 5 6 7 8 9 10
KK CODE


FAIR CLAIMS - KK ANALYSIS
BOG
SAMPLE FREQUENCY
0 2 4 6 8 10 12 14 16 18 20 22 24 26 28 30
0 1 2 3 4 5 6 7 8 9 10
KK CODE


FAIR CLAIMS - KK ANALYSIS
COLLUVIUM SOUTH SIDE
NUMBER OF CLAIMS
0 2 4 6 8 10 12 14 16 18 20 22 24 26 28 30
0 1 2 3 4 5 6 7 8 9 10
KK CODE


FAIR CLAIMS - KK ANALYSIS
COLLUVIUM NORTH SIDE
NUMBER OF CLAIMS
0 2 4 6 8 10 12 14 16 18 20 22 24 26 28 30
0 1 2 3 4 5 6 7 8 9 10
KK CODE