84-1271-13369

Kerr 7, 8, 9, 10, 12, 15, 41, 99 Claims
(Sulphurets Creek Property)

SKEENA MINING DIVISION

C. Graf

December 9, 1984

Work Performed on	Record No.	Date Recorded	No. of Units
Kerr 7	3662	Dec. 17, 1982	6
Kerr 8	3663	"	16
Kerr 9	3664	"	10
Kerr 10	3665	"	9
Kerr 12	3666	"	20
Kerr 15	3669	"	16
Kerr 41	3697	Dec. 20, 1982	20
			97

Latitude	Longitude
56° 28'N	130° 16'W

Operator: Active Minerals Ltd.

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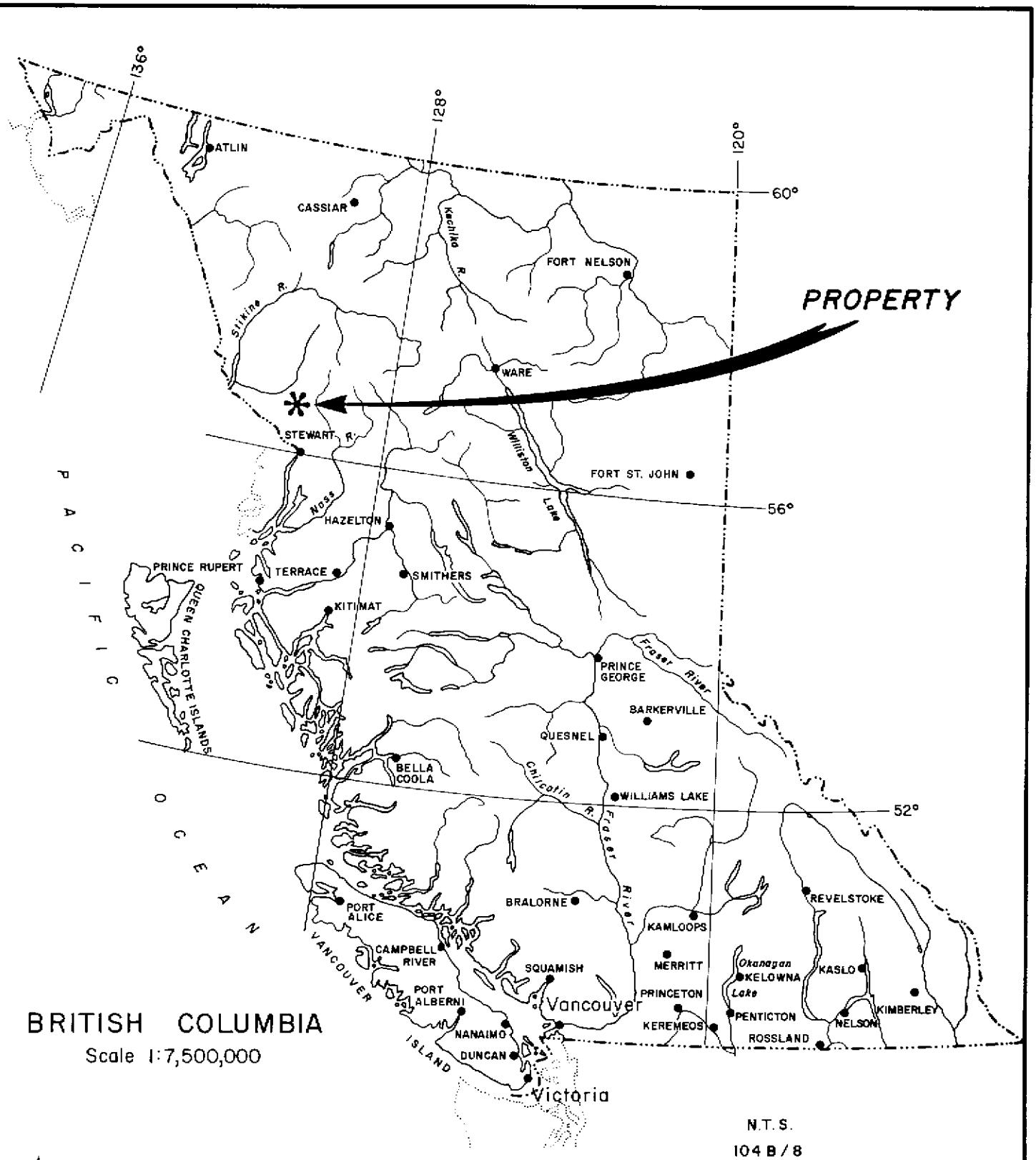

BRINCO MINING LTD.

KERR CLAIMS

LOCATION MAP

DRAWN	WORK BY	DATE	FIGURE
	C. GRAF	NOV. 1984	1

Revised

KERR CLAIMS 1

SKEENA MINING DIVISION

NTS 104B/8

SUMMARY

In September of 1984 a mineral exploration program, consisting of soil sampling, prospecting and geological mapping, was carried out on the Kerr Claims. The project was funded by Brinco Ltd. under an option agreement and the work carried out by the writer and one sampling assistant.

The property was originally staked by Alpha Joint Venture to cover possible extensions of the gold mineralization previously discovered on adjacent claims by Esso Minerals. Some high gold values in soils were obtained from the claims in 1983 by Alpha Joint Venture. Brinco Ltd. optioned the property in 1984, and funded the mineral exploration program described herein.

A soil grid consisting of 210 samples outlined a gold anomaly over 1 km long with a mean value of 429 ppb and a high value of 17,000 ppb. On this grid the mean and high values for other elements are as follows; silver (3.3 ppm, 96.5 ppm), arsenic (178 ppm, 4140 ppm), copper (293 ppm, 1900 ppm), zinc (289 ppm, 3380 ppm) and lead (172 ppm, 3290 ppm).

This geochemical enrichment occurs within a large (2 km x .5 km), bleached, phyllic (hypogen) alteration zone of pyrite-sericite ± chlorite ± mariposite schists (Plates 1,2). The general geology consists of a sequence of mixed sediments and an overlying thick massive volcanic unit both of which have been intruded by dikes and bodies of alaskite (orthoclase porphyry). A regional thrust fault zone cuts across the claim and the alaskite appears to have been intruded along it. The relative timing of the faulting, intrusion, volcanism, alteration and mineralization is uncertain.

Further exploration work is warranted and should consist of geological mapping, soil sampling and rock sampling.

INTRODUCTION

During September of 1984, the writer and a sampling assistant spent 11 days prospecting, soil geochemical sampling and geologically mapping the Kerr claim group at Sulphurets Creek in northwestern B.C.

A significant gold, silver, arsenic, copper, lead, zinc soil geochemical anomaly was discovered on the Kerr 9 claims (Plate 2). Gold values in soil ranged up to 17000 ppb (.5 oz/T). This anomaly is over 1 km in length and occurs in the phyllic alteration halo of alaskite (orthoclase porphyry) bodies that have been intruded along a regional thrust fault zone (Figure 3).

LOCATION AND ACCESS

The Kerr mineral claims are located at 56^{o} 28' N latitude and 130^{o} 15' W longitude on NTS map 104B/8 (Figure 1). The main discovery is above treeline, at 5000 feet elevation. The nearest town which could provide supplies, manpower and other services is Stewart, B.C. which lies 60 km due south.

Sulphurets glacier lies along the north and east sides of the geochemical discovery, and would not hinder road access up Sulphurets Creek. An alternative access route would be to drive an adit from the east underneath the glaciers. A similar procedure was used to access the nearby Granduc mine.

CLAIMS INFORMATION

Claims comprising the Sulphurets Property are listed below:

Claim Name	No. of Units	Record No.	Date Recorded
Kerr 7	6	3662	17/12/82
Kerr 8	16	3663	"
Kerr 9	10	3664	"
Kerr 10	9	3665	"
Kerr 12	20	3666	"
Kerr 15	16	3669	"
Kerr 41	20	3697	20/12/82
Kerr 99	20	?	30/10/84
	117		

The claims, Kerr 9, 10, 12, 13, 15, 41, have been grouped as Kerr Group #1866.

This group was recorded December 16, 1983.

HISTORY AND PREVIOUS WORK

Sulphurets Creek has a long history of placer gold mining dating from the 1880's. A major effort to develop the placer deposits was made in 1903 when a wagon road was built up the Unuk River from tidewater and a large amount of equipment brought along it. Unfortunately, the road construction was inadequate and all of the machinery had to be abandoned en route.

The next period of exploration was in the 1930's when more placer mining occured, and some hard rock claims were staked. Although good gold values were obtained by the prospectors, the remote location made exploration and development difficult and their claims were abandoned. Little further work was done until the 1960's porphyry copper rush.

During 1960, Newmont Mines conducted helicopter-borne geophysical surveys (magnetic) and staked ground at the headwaters of Sulphurets Creek on behalf of Granduc Mines Ltd. At this time preliminary geological and geophysical reconnaissance was performed. Also in 1960, D. Ross, S. Bishop, and W. Dawson located claims in the region.

Between 1961 and 1967, Newmont and Granduc continued geological and geophysical programs on their ground. The Ross-Bishop-Dawson owned claims were optioned to Phelps Dodge Corp. of Canada Ltd. in 1962, to the Meridian Syndicate in 1965, and to Granduc Mines Limited in 1968. Exploration by Granduc Mines continued until 1970.

R.V. Kirkham completed a M.Sc. thesis on the geology and mineral deposits of the region in 1963 and E.W. Grove compiled a regional geological study in 1968.

The Sulphurets Creek property was again explored by Granduc in 1975, 1976 and 1977, with the emphasis on molybdenum, and then optioned to Esso Resources Canada Limited in 1979.

With recent increases in precious metal values the area has received renewed attention.. Between 1979 and the present, Esso Resources Canada Limited has expended more than $2 million in exploration for precious metals. Most of this recent exploration, performed under the direction of D. Bridge, has occurred in the Southern portions of the property in the immediate vicinity of Brucejack Lake (Figure 2). Further information regarding Esso Resources work and results is presented in a later section of this report.

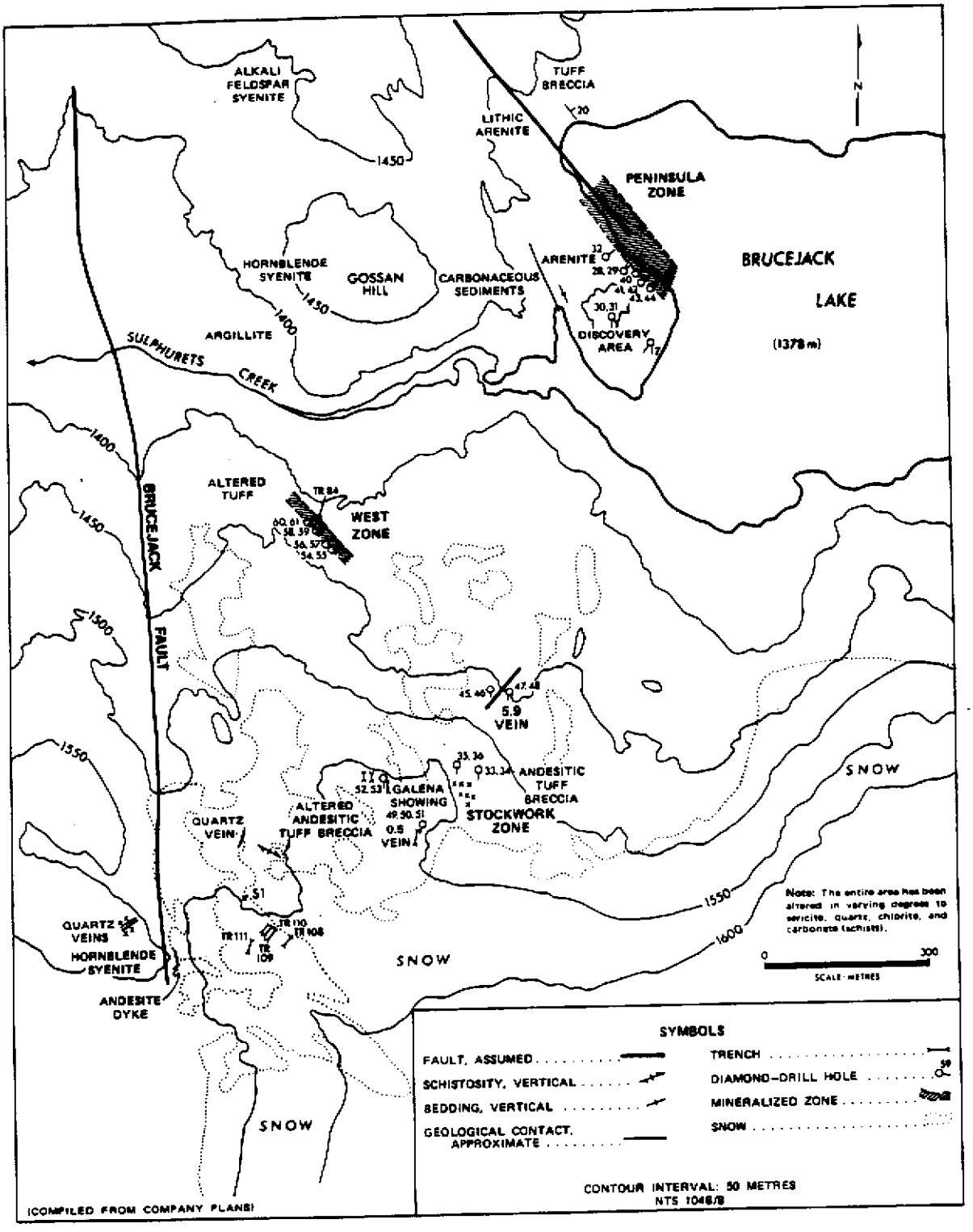

Figure 2 Brucejack Lake (Sulphurets) property (compiled from company plans). (Schroeter, 1982)

GEOLOGY

A. Introduction

A geology map of the general Sulphurets-Mitchell Creek areas has been compiled by Grove (1968) (Figure 3). This work was incorporated by Grove (1982) into a set of three 1:100,000 scale BCDM miscellaneous open file maps which extend southward to include the Stewart Mining district.

The Unuk River and Salmon River maps of this set are underlain by a belt of Jurassic age sedimentary and volcanic rocks that lie along the northeast margin of the Coast Batholith. The sedimentary rocks form an increasingly larger proportion of the section northeastward into the Bowser Basin. According to Alldrick (1983) the rocks in the Salmon River area near Stewart are dominantly volcanic, being 2,000 m of massive green andesitic tuffs and breccia. These are overlain by a 100 m thick sedimentary succession of siltstones, shales, sandstones, conglomerates and limestone lenses. The Unuk River and Salmon River geology maps show the stratigraphy that hosts the mineral deposits near Stewart to extend through to Sulphurets Creek. All across the map are large areas of "cataclasite" (felsic schist) which are particularly extensive in the Sulphurets Creek and Salmon River areas. These areas are herein regarded as phyllic alteration haloes which were formed during hydrothermal activity along regional fault zones. Many of these conspicuously colored areas are presently undergoing exploration as precious metal targets.

The entire Salmon River drainage is presently covered by mineral claims. Significant gold deposits such as the Silbak-Premier (Production 4mt @ .3oz/T Au, 7 oz/T Ag), Big Missouri (2mt @ .11oz/T Au), and Scottie Gold occur there. The dominant mining companies in the Stewart mining district are Westmin Resources and Esso Minerals.

B. Geology of Sulphurets-Mitchell Creeks Area

The general geology is shown on figure 3. The area is underlain by Jurassic age, green to grey volcanic epiclastics and a sequence of dominantly fine grained, marine sediments. A third sequence of massive red and green volcanic sandstones and conglomerates forms the highest peaks capping the stratigraphic section. A number of syenitic intrusive dikes and larger bodies intrude the older rocks and may have been the subvolcanic equivalents of the youngest volcanics. These intrusive rocks commonly contain porphyritic euhedral, white, feldspar phenocrysts up to 3 cm long in a finer grained matrix of chlorite, hornblende, quartz and feldspar. In the field these 2-feldspar rocks are called "orthoclase porphyry" following the terminology of Kerr (1948), but in fact many of the phenocrysts may be perthite. Some of the volcanic flows also contain these large euhedral feldspars and in individual outcrops on the claims, it is difficult to differentiate between volcanic and the subvolcanic or intrusive types.

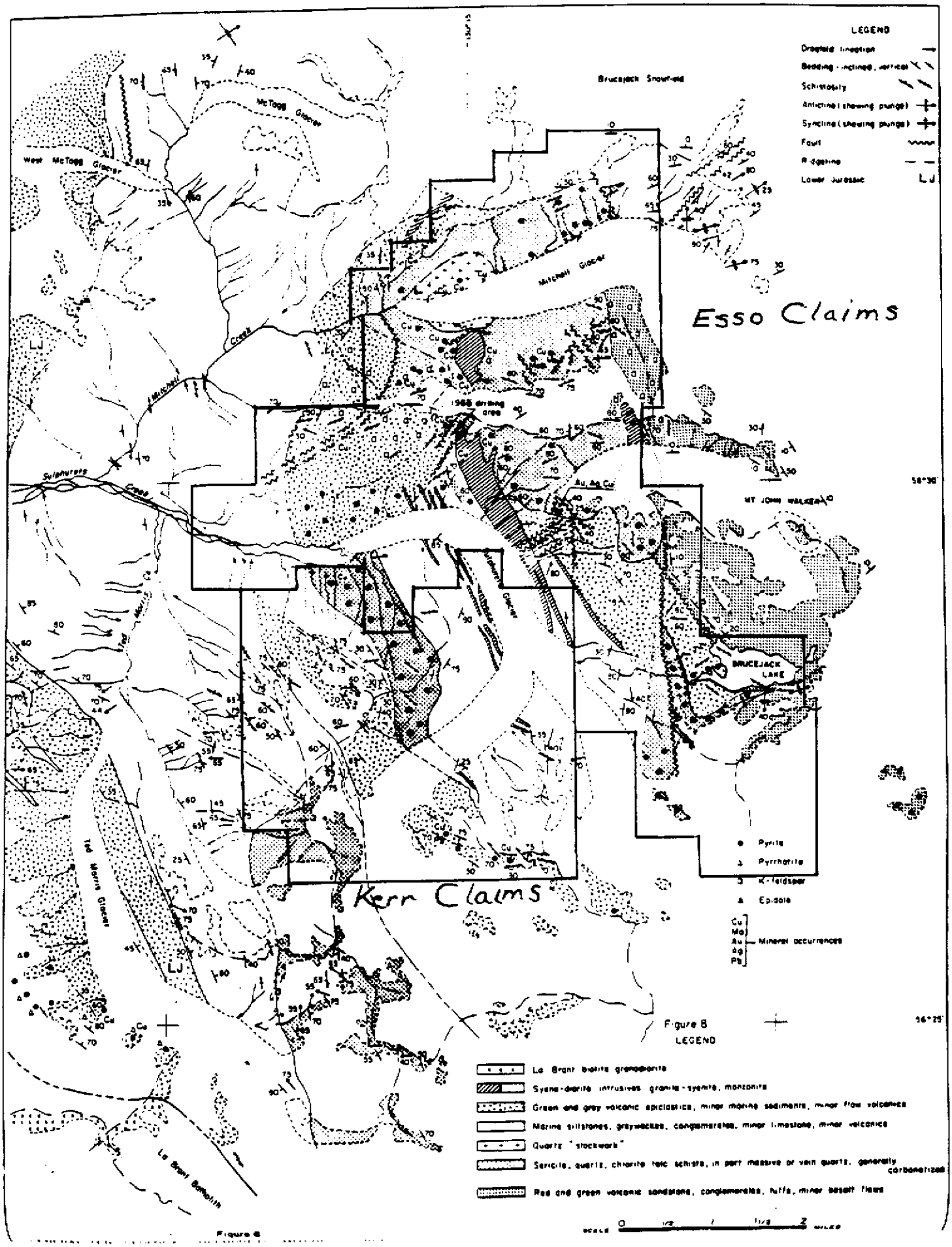

Figure 3 (Grove, 1968)

In the main geochemical discovery area there is much orthoclase porphyry which appears to have played an integral part in the intense alteration and metal enrichment that has occured. Similarly at the Silbak Premier mine in the Stewart mining district, an indistinguishable "orthoclase porphyry" rock (Premier Porphyry) is common and spatially related to if not responsible for the alteration and mineralization.

In the Snippaker-Bronson Creeks area 40 km west of Sulphurets Creek a similar relationship between "orthoclase porphyry", extensive phyllic alteration and gold mineralization occurs. There appears to be a significant, newly recognized, group of precious metal deposits in the Stewart-Iskut River area, that have a common association with Jurassic? submarine alkalic (orthoclase porphyry) intrusions and volcanism. These similarities indicate that a model exists which can be used regionally to explore for new precious deposits similar to the Premier mine, in northwestern British Columbia.

C. Geology of the Kerr Claim Group

Geology of the Kerr claims is shown on figures 3 and 11. On the west side of Sulphurets glacier, where the geochem discovery lies, the rocks are mainly andesitic volcanics of the lower-middle Jurassic Hazelton group. These are overlain by marine siltstones, grey wackes, conglomerates and minor limestone lenses of the Jurassic Bowser group. Highest in the section and forming the peaks at the south end of the discovery area is a second unit of green andesitic volcanic flows tuffs and breccias. This latter unit contains large euhedral feldspar (orthoclase?) phenocrysts.

Intrusive into all three units are bodies of "orthoclase porphyry" which may be the subvolcanic equivalent of the upper volcanics. Peripheral to the intrusive phases, particularly between branching "fingers" or dikes, the wallrocks are intensely bleached and altered to pyrite-quartz-sericite $\pm$ mariposite schists. A phyllic alteration zone 2 km long by .5 km wide has been formed and corresponds spacially with the geochemical soil anomaly.

A mapping traverse which was done across the bleached cirque, from east to west, is described below from field notes.

Rocks forming the east ridge at the start of the traverse and rhythmites, block argillite and interbedded brownish siltstones. These sediments are extensive, and moving 100 m west they become Mn stained (steely grey blue to black surface stains) and some narrow zones of greenish colored intrusive dike rock are encountered. Within some the igneous rock becomes more extensive and forms a body of light green grey colored massive weathering "orthoclase porphyry" 30 m by 50 m in area. Feldspar phenocrysts up to 2 cm long occur, and usually are partly resorbed. The surrounding sediments are Mn stained and some Mn stained quartz vein float occurs in talus. The sediments contain conglomerate beds here. They have a dark grey matrix and well rounded clasts to 4 cm long of four different lithologies. Some clasts may be igneous and others are black colored and cherty in appearance. The sediments (rhythmites, sandstones, conglomerates) are heavily Mn stained (black-blue) and apex's of "orthoclase porphyry" intrude them.

The east side of the bleached cirque begins 75 m further west. The first 100 m of bleached rock is a whitish-brown stained porous textured grey rock with abundant pyrite and mariposite. The original rock type is uncertain and could have been either sediments or intrusive. Continuously for 100 m west the rocks are strongly altered and massive pyrite veins continuously for 2 cm across occur with much associated mariposite. There is a lot of "orthoclase porphyry" here, strongly altered and rusty weathering. The intrusive rock forms many fingers or apex's intruding the sediments, and the strongest altered and most heavily pyritized zones occur between the fingers.

Veiwed looking southeast from the resistant knob in the centre of the bleached cirque, there is considerable malachite staining in three separate areas on the cliffs above. Float boulders containing chlorite-quartz-pyrite-chalcopyrite-malachite veins occur in talus here. On the west side of the knob there is an extensive zone of mariposite pyrite-sericite schist. Further west is much silicified and quartz veined light grey colored float containing chalcopyrite, pyrite and a steely grey mineral (hematite? molybdenite?).

The west side of the bleached zone occurs here but is lost beneath talus and snow cover. The rocks above are dominantly the same sediments as on the east side of the cirque and form the talus slopes here and to the west. End of traverse.

Although the intrusive rocks are intimately associated with this alteration zone, in many places on the Kerr 9 Claim, particularly along their northeast margin where they intrude sediments of the Bowser Group, the contacts are fresh and unaltered except for a conspicuous colored Mn oxide stain. On air photos and in the outcrop, a number of large northwest trending shear zones, faults and lineaments can be seen. The zone of phyllic alteration parallels this trend (Figure 11) and appears to have been formed by shearing and fluid movement along these faults rather than solely through contact metamorphism by the intrusives which may have been contemporaneous. These shears and lineaments form part of a regional, thrust fault controlled alteration zone that strikes north, dips west and trends for 10 km across the entire Mitchell-Sulphurets area (Figure 3). This zone of structural weakness may also have localized the intrusive "orthoclase porphyry" bodies in a subvolcanic environment, with volcanics extruding at a higher level.

Although there is a definite relationship between faulting, volcanism, intrusion and mineralization, the original sequence of events and the exact relationship of one process to another is unclear. With further geological mapping it will be possible to better understand the volcanic process which produced the mineralizing system and develop a model for future exploration.

The present geological model is that a Jurassic andesitic volcano formed along a deep zone of structural weakness on the western margin of the sedimentary Bowser Basin. Extensive areas of alteration and mineral enrichment were formed, in an active, shallow submarine volcanic environment, along this fault zone.

Esso Minerals has delineated a 5 km long zone of greater than .05 oz/t Au along this fault zone on strike with the northward extension of the Kerr 9 geochem anomaly. (Bridge 1982) The original mineralized (1 g/t Au) zone (including the Kerr 9 anomaly) may have been 10 km long and a potential exists that significant deposits of higher grade mineralization occur in localized structural zones within it.

GEOCHEMISTRY AND MINERALIZATION

A. Introduction

The 1984 geochemical exploration of the Kerr claim group consisted of stream silt and C-horizon soil sampling. The location of all samples is shown on figure 4.

The bulk of the soil sampling was concentrated on the large hypogen phyllic alteration zone on the Kerr 9 claim. A total of 210 C-horizon samples were taken with a mattock, at 50 and 75 m spacings in a grid pattern. The sample lines and stations were oriented and measured using topofil and silva compass. The soils are immature and would be best defined as C-horizon or talus lines.

For orientation purposes, a small soil grid consisting of 75 samples taken at 10 m spacings, was laid out across the Peninsula Zone of Esso Minerals (inset figure 11). The rest of the property was evaluated by taking stream silt samples and break-in slope talus fine samples.

All geochem samples were dried in the field and shipped to Min En laboratories in North Vancouver, B.C. They were then screened to isolate the -80 mesh fraction and analysed for gold using acid digestion and atomic absorption techniques. They were also analysed for a suite of 10 other elements using the inductively coupled plasma (ICP) emission spectoscopy techniques.

Statistical treatment included calculation of Pearson correlation coefficients as well as drawing cummulative probability plots and frequency distribution histograms (Appendix I). These calculations and plots were provided, for a fee, by Min En Labs, as part of their services.

B. Geochemistry Kerr 9 Claim Soil Grid

A broad area of metal enrichment was discovered within the large "bleached" phyllic alteration zone on the Kerr 9 claim. The soil is significantly anomalous in gold, silver, arsenic, lead, zinc and copper. The anomaly is over 2 km long (northwest) by 500 m wide and presents an attractive target for further mineral exploration. Possibly anomalous values are taken as gold (195 ppb), silver (1 ppm), arsenic (36 ppm), zinc (228 ppm) and lead (150 ppm) from cumulative probability plots. (Appendix II).

1. Kerr 9 Claim Soil Grid Gold Geochemistry

The mean and maximum values of gold in a soil grid consisting of 210 samples are 420 ppb and 17,000 ppb (Appendix II). The standard deviation is 1320 ppb, thus the standard procedure of selecting an anomalous level at mean plus 2 standard deviations (3060 ppb) is too high and inappropriate. This is because the data are positively skewed (histogram) and plot in a lognormal distribution as shown on the cummulative probability plot in Appendix II. The slope of the cummulative probability curve has an inflection point at 195 ppb and that value likely represents the lowest level or threshold of an upper (anomalous) population. When this group (line) is expanded using the method of analysis described by Sinclair 1974, the upper line or anomalous population itself shows a significantly anomalous level at 900 ppb (mean plus standard deviation). Samples containing gold of this value or greater should be considered significantly anomalous.

The data were contoured at three preset levels of 100 ppb, 300 ppb and 500 ppb in order to contour the entire package of raw data (Figure 5). The 100 ppb contour is 1 km wide by 2 km long and remains open to the south, north and west. The 300 ppb contour is restricted to the central portion of the grid covering an area 500 m wide by 1 km long and a second area 250 m wide by 600 m long. The 500 ppb contour outlines more restricted cores within the 300 ppb areas. The largest of which trends northwest, measures 50 m by 500 m and is open to the southeast. Two other 500 ppb areas occur further west and measure 300 m by 50 m.

The Pearson correlation coefficients for the grid are presented in Appendix II. They show that gold has the strongest correlations with arsenic (.219) and copper (.213). Silver (.195) also has a significant correlation with gold but lead and zinc do not. Some corresponding high silver and gold values occur on the ridge crest near the 17,000 ppb gold sample and to the northwest in the bleached cirque near the 5220 ppb gold sample.

2. Kerr 9 Claim Soil Grid Silver Geochemistry

The mean and maximum values of silver in the grid are 3.3 ppm and 96.5 ppm. The standard deviation is 8.37 ppm which at mean plus 2 standard deviations (20 ppm) is again too high and not usable (Appendix II).

The data plot in a lognormal distribution and are positively skewed. An inflection point occurs on the cummulative probability plot at 1 ppm and this value likely represents the lowest value (threshold) of an upper (anomalous) population.

The data were contoured at preset levels of 2 ppm, 3 ppm and 5 ppm using only raw data (Figure 6).

The general pattern of the 100 ppm arsenic contour forms two separate anomalies that correspond well with the two broad silver anomalies (2 ppm). The eastern arsenic zone measures 1.2 km by 500 m and the west one measures 1 km by 500 m. The 200 ppm contour outlines continuous areas within the larger anomalies, each measuring roughly 600 m by 200 m. The 500 ppm contour forms many isolated spot highs and is not extensive. The arsenic anomaly is open both to the northwest and southwest.

The Pearson correlation coefficients show that arsenic is associated with silver (.197), lead (.197) and gold (.219) but not with copper or zinc.

4. Kerr 9 Claim Soil Grid Zinc Geochemistry

The mean and maximum zinc values on the soil grid were 289 ppm and 3380 ppm. The 11,900 ppm zinc value came from a stream silt sample (S84283) off the claims to the west.

The standard deviation is 891 ppm, and a threshold level chosen at mean plus 2 standard deviations is 2071 ppm (Appendix II). This level is too high because the data are positively skewed and complex. They show a lognormal distribution on the cummulative probability plot and an inflection point is easily recognized at 228 ppm (Appendix II). This level is considered to be the lowest point (threshold) of the upper (anomalous) population.

The 2 ppm contour outlines 2 areas; an eastern zone measuring 1 km by 250 m and a western zone measuring roughly 1.5 km by 100 m. The 5 ppm contour forms many small patches within these areas. The largest occuring in the west central portion of the grid and measuring 200 m by ? 200 m. A second smaller zone of 5 ppm values occurs on the southeast portion of this grid and is open to the east as is a corresponding gold anomaly.

The Pearson correlation coefficients show the strongest correspondence of silver with lead (.396) and copper (.343). Gold (.195) and arsenic (.197) also have positive correlations with silver, but zinc does not.

3. Kerr 9 Claim Soil Grid Arsenic Geochemistry

The mean and maximum arsenic values on the grid are 178 ppm and 4140 ppm. The standard deviation is 410 ppm (Appendix II). The standard procedure of selecting a threshold level at mean plus 2 standard deviations (1000 ppm) is too high. This is because the data are positively skewed and plot in a lognormal distribution (Appendix II). An inflection point occurs at 36 ppm on the cummulative probability plot. This value represents the beginning of an upper (anomalous) population and is taken to be the threshold. The data were contoured at preset levels of 100 ppm, 200 ppm and 500 ppm (Figure 7).

The data were contoured at preset levels of 200 ppm, 500 ppm and 1000 ppm (Figure 10). The 200 ppm contour shows 2 anomalous areas. The eastern one measures 1 km by 200 m and is open to the southeast and the western one measures 500 m by 100 m and is open to the northwest. These two areas correspond well with the lead anomalies. The 1000 ppm zinc contour outlines a significant area in the eastern anomaly and is over 300 m long.

The Pearson correlation coefficients show zinc to correlate only with copper (.248) and lead (.193).

5. Kerr 9 Claim Soil Grid Copper Geochemistry

The mean and maximum values of copper in the soil grid are 293 ppm and 1900 ppm (Appendix II). The standard deviation is 311 ppm and selecting an anomalous level at mean plus 2 standard deviations (915 ppm) is somewhat high. These data, like all the rest, are positively skewed (histogram) and the cumulative probability plot shows a lognormal distribution (Appendix II).

It is difficult to select on inflection point on the cumulative probability plot as the grouping is very complex. The data were contoured at present levels of 100 ppm, 300 ppm and 500 ppm (Figure 8).

Except for a low central area, almost the entire grid is above 100 ppm copper. The 300 ppm copper contour defines 2 anomalous areas which correspond roughly with the anomalous areas defined by the 2 ppm silver and 100 ppm arsenic contours. The western copper anomly is the largest measuring 1 km long by 300 m wide and remains open to the north. A smaller 300 ppm area which occurs in the southeast corner of the grid is roughly 300 m by 300 m in size and remains open to the east. The 500 ppm copper contour defines more restricted, but significant areas within the 300 ppm contours.

The Pearson correlation coefficients show copper to have the most positive association with silver (.343) and lead (.304). Significant correlations also exist with zinc (.248) and gold (.213) but not arsenic.

6. Kerr 9 Claim Soil Grid Lead Geochemistry

The mean and maximum lead values on the soil grid are 172 ppm and 3290 ppm. The standard deviation is 285 ppm (Appendix II). Selecting a threshold level at mean plus 2 standard deviations (742 ppm) is very high and not appropriate. An inflection point occurs on the cummulative probability plot at 150 ppm, which indicates the lower end (threshold level) of an upper anomalous population (Appendix II).

The data were contoured at present levels of 100 ppm, 250 ppm and 500 ppm (Figure 9). The 100 ppm contour outlines 2 separate anomalous zones, an eastern one measuring 1 km by 500 km and a western one measuring 1 km by 300 m. The eastern zone is open to the southeast, and the western one is open to the north, west and southwest. The 500 ppm contour forms many isolated spot highs within the larger zones, but is not extensive. The most significant values occur in the extreme northwest and southeast portions of the grid, where the anomalies also remain open.

The Pearson correlation coefficients (Appendix II) show the strongest association with silver (.396) and copper (.304). Lead also correlates with arsenic (.197) and zinc (.193) but not with gold.

C. Kerr Claims - Secondary Geochemical Targets

A single sample on the east side of Kerr 8 claim (S84147) was significantly anomalous in gold, 3900 ppb, and should be followed up by further sampling and prospecting.

During 1983 a number of soil samples (K29-K41), taken on the south side of Kerr 15 claim, were moderately anomalous in gold (Figure 5). This area was not examined in 1984, but should be explored by further sampling, prospecting and geological mapping.

A number of soil and stream silt samples (S84323-327) on the Kerr 7 claim were anomalous in Cu, Zn, and As but not gold. They may lead to mineral discoveries, and should be followed up by prospecting and further sampling.

A stream silt sample S84283 was taken from an orange colored gully off the claims and contained 11900 ppm Zn. It was not anomalous in other metals, and should be ignored at present.

D. Esso Claims - Geochemistry

In 1984, two orientation lines of soil samples were taken at 10 m spacings across the Peninsula zone (Inset Figure II). The gold values ranged to 3000 ppb but were generally lower, in the 100 to 500 ppb range. Similarly, the silver showed spotty high values to 56.4 ppm, with the rest being lower in the 1 to 7 ppm range. Overall, these values are comparable to those obtained in the Kerr 9 claim discovery zone, which may represent underlying mineralization equivalent in grade to the Peninsula zone.

Stream silt samples taken near Esso's West Zone and further to the west are anomalous in gold (300-800 ppb) and silver (6 ppm) which are similar values to those from the Kerr 9 claim (Figures 5,6). This comparison also indicates that significant mineralization of values similar to the main Esso discovery zones, may underly the Kerr 9 claim. The absolute values of soil samples on the Kerr 9 claim ranged up to 17,000 ppb (.5oz/t) gold and 96.5 ppm (3oz/t) silver which actually are higher than any obtained from the Esso claims.

E. Esso Claims - Mineralization

Although no previous mineral occurrences have been documented on the Kerr claim group, the general Sulphurets-Mitchell Creek area has a long history of mineral exploration as previously discussed. The most recent work, by Esso Minerals, has been successful in discovering significant epithermal and porphyry-type gold and silver mineralization on their claims.

The porphyry-type gold mineralization occurs to the north of and on strike with the Kerr 9 claim geochemical discovery zone. Esso has outlined a mineralized zone (1 g/t Au) that occurs discontinuously for 5 km of strike length. Unconfirmed, indicated reserves of this mineralization are 10 - 30 million tons averaging .05 oz/t Au. To quote from Bridge 1982, "In the Sulphurets gold zone, mineralization is associated with fine grained syenodiorite, diorite porphyry, intrusive breccias and minor tourmaline breccia. In general the porphyry gold areas containing 2 to 3 g/t Au are pyritic alteration zones peripheral to Cu-Mo occurrences. The gold zones commonly contain 15-40% pyrite".

"The Sulphurets porphyry gold zones are unlike typical Au-rich porphyry Cu deposits in that they are associated with sericitic alteration, pervasive silicification but little quartz veining, contain no magnetite are very pyritic and do not have a Au-Cu correlation".

Epithermal stockwork - vein deposits which occur near Bruce Jack Lake (Figure 2) are more important than the porphyry type gold described above, in that they contain much higher grade mineralization. Economic minerals found in these systems include pyrite, chalcopyrite, molybdenite, ruby silver, stephanite, cerargyrite, electrum, native gold, tetrahedrite, freibergite, argentite, galena, sphalerite, and bornite in a gangue of quartz, calcite and barite.

Much of Esso's exploration work was done during the 1979-83 period, at the end of which they had completed 120 short hand blasted trenches, and 63 diamond drill holes. During 1982 trenching, geological mapping, geochemical surveys and 53 diamond drill holes (totalling 4633 m) outlined 12 gold-silver bearing zones. Most work was concentrated on two principal discoveries, the Peninsula Zone and the West Zone (Figure 2).

The Peninsula (Near Shore) Zone is multiple quartz-calcite veins and stockworks containing an average of 5% sulphides. This mineralized zone consists of prominent vertical veins (with lesser horizontal and randomly oriented veins) in a sericitic wallrock which is transected by a weak quartz stockwork. Zones of "high-grade" Ag-Au have a greater sulphide content (approximately 15%) with ore mineralization consisting of pyrite and lesser sphalerite, tetrahedrite, galena, electrum, chalcopyrite, and argentite.

In 1982, drilling traced the Peninsula Zone for a strike length of 265 metres and a depth of 140 metres. It has an apparent true width, ranging from .3 to 9.8 metres, averaging 2.4 metres in 17 drill intersections each of which have at least .1 oz. Au/ton and .60 to 2.62 oz. Ag/ton. During 1983, a step-out diamond drill hole (located 120 metres northwest of 1982 drilling) cut 1.34 metres and 1.77 metres of 2.33 oz. Ag/ton and .73 oz. Au/ton, at a depth of 122.1 metres.

The West Zone is a multiple vein and stockwork zone containing trace to semi-massive sulphides. Ore mineralogy includes pyrite, tetrahedrite, sphalerite, galena, pyrargyrite, argentite and electum. The silver chloride cerargyrite locally forms a distinctive purplish-gray rind on these veins at surface.

During 1982, the West Zone was outlined over a strike length of 310 metres and to a depth of 60 metres. Six of 21 drill holes had values ranging from 22.77 to 286 oz. Ag/ton and .1 to 3.81 oz. Au/ton over true widths of .6 to 4 metres.

Drilling during 1983 extended this zone to a depth of 152.4 metres and another 30.5 metres to the south. Examples of drill results in the 1983 drilling are as follows:

DDH	(Depth (metres)	Length (metres)	Oz. Ag/ton	Oz. Au/ton
101	(Depth Extension)			
	46.73 - 54.56	7.83	13.5	.167
	65.75 - 69.74	3.99	1.89	.351
102	(Depth Extension)			
	67.18 - 68.55	1.37	17.59	.217
	83.21 - 86.23	3.02	55.86	.466
103	(Depth Extension)			
	99.55 - 102.02	2.47	14.20	.074
	157.31 - 158.47	1.16	12.05	.342
104	(Southerly Extension)			
	74.28 - 75.29	1.01	127.95	.518
	88.15 - 93.51	5.36	35.88	.412
105	(Southerly Extension)			
	90.28 - 96.62	6.34	5.87	.106
	114.76 - 115.70	.94	14.34	.486

Schroeter reported grab samples from the West Zone with values up to 275. ppm Au, 67,525 ppm Ag, 2.74% Cu, 2.5 pb, and 4.5% Zn.

CONCLUSIONS

A significant precious-base metals soil geochemical anomaly has been discovered on the Kerr 9 claim. It is large in size (1 km x .5 km) and contains gold values up to .5 oz/t in soil.

This discovery occurs in a large bleached area (phyllic alteration) that has been formed by hydrothermal activity, along a major fault zone. Intrusive bodies of "orthoclase" porphyry have also been localized along this structure and the mineralization likely occured "sygenetically" in a submarine, subvolcanic environment.

As a result of the present work, a large geochemical anomaly has been discovered in a favourable geological setting. By further sampling and geological mapping it may be possible to outline higher grade structures (faults) of significant tonnage within this gold anomalous zone.

RECOMMENDATIONS

1. A picketed baseline should be laid out along the ridge across the Kerr 9 discovery area. It would be sufficient to place it by chain (topofil) and compass. This baseline will be needed to orient all future geological sampling, geophysical surveying, geological mapping and drilling and must be built secure for more than 1 season in an extremely windy environment.

2. Detailed (10 m spacing) soil sampling should be carried out across the gold anomalous areas outlined by the present (50 m spacing) grid. This 50 m grid should be tied in to the baseline.

3. The gold anomaly is presently open on three sides, and the (50m) grid should be extended to the south, east and northwest to close it off.

4. The highest value gold anomalies obtained by the present 10 m spaced soil sampling should be tested by rock chip sampling.

5. In the Stewart camp, both Westmin Resources and Esso Resources, after testing a variety of geophysical systems, have found that time-domain induced IP was most effective in following the disseminated to semi-massive mineralization. These IP surveys have allowed both companies to trace mineralized zones through overburden covered areas and to relocate mineral zones displaced by faults.

It is recommended to carry out an IP survey across the Kerr 9 claim if significant gold bearing zones are located by the rock chip sampling program.

6. The claims should be geologically mapped by a geologist capable of interpreting strongly altered rocks.

7. Any significant gold bearing zones outlined by rock geochemistry should be diamond drilled. There are 2 small ponds on top of the ridge which would provide a good water supply to drill sites located either to the east or west.

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APPENDIX I

GEOCHEMICAL RESULTS

COMPANY: ACTIVE MINERALS LTD.
PROJECT No:
ATTENTION: C. GRAF

MIN-EN LABS ICP REPORT
705 WEST 15th ST., NORTH VANCOUVER, B.C. V7M 1T2
(604)980-5814 OR (604)988-4524

(ACT:GE03B) PAGE 1 OF 1
FILE No: 4-1062/P3&4
TYPE SOIL GEOCHEM DATE: OCTOBER 3, 1984

(REPORT VALUES IN PPM)	AG	AS	B	CU	FE	MN	PB	SB	ZN	BA	AU-PPB
S84002	7.1	66	21	16	106000	391	136	10	46	214	75
S84003	9.3	61	10	19	58200	88	131	14	35	1830	230
S84004	39.1	112	6	7	30300	9	438	20	21	453	1500
S84005	4.3	62	19	33	94700	770	233	12	82	170	70
S84006	3.9	83	15	18	107000	219	85	14	49	212	120
S84007	11.7	81	11	22	77700	334	253	21	134	209	460
S84008	14.8	131	7	16	67500	16	557	23	45	215	320
S84009	12.3	72	6	19	41000	57	97	21	25	187	210
S84010 40M	4.5	91	6	8	49100	34	65	16	20	926	65
S84011	23.4	255	17	34	230000	0	133	32	10	195	140
S84012	24.4	111	9	19	52600	49	165	28	41	850	335
S84013	7.6	163	16	58	55100	1780	42	16	100	150	225
S84014	.7	39	18	25	66400	1120	45	13	86	133	50
S84015	3.6	30	21	43	69200	1220	53	13	102	88	650
S84016	1.9	0	28	8	71500	597	36	11	59	61	5
S84017	6.8	344	23	66	96300	1400	84	23	89	76	415
S84018	1.3	24	22	23	60100	978	43	12	86	182	10
S84019	5.6	23	30	26	65000	717	54	17	120	208	20
S84020	3.0	0	29	19	49800	415	33	10	161	331	5
S84021	2.4	0	25	20	54600	295	38	11	91	98	125
S84022	1.5	67	18	22	48600	501	36	12	53	80	45
S84023	9.3	155	16	25	53600	369	67	8	66	121	150
S84024	10.7	395	22	64	79400	2450	255	25	242	128	1250
S84025	8.5	262	8	102	52900	2250	76	19	142	168	500
S84026	6.4	0	42	41	47200	194	51	14	85	333	30
S84027	6.8	61	19	42	91900	1310	71	13	98	106	105
S84028	2.7	76	19	29	67500	1540	56	12	89	176	270
S84029	.9	13	23	31	59400	1100	51	12	220	270	15
S84030	.9	41	9	9	49200	102	41	9	28	93	90
S84031	2.7	8	20	6	68400	719	42	9	55	122	25
S84032	.9	2	18	25	69700	930	40	4	78	130	25
S84033	12.8	22	17	70	49700	195	125	8	44	220	265
S84034	48.9	291	19	102	132000	3120	101	38	122	267	1200
S84035	31.2	192	17	31	122000	576	83	15	76	292	2750
S84036	15.0	4740	15	28	129000	245	99	32	41	260	1650
S84037	3.5	78	14	11	83200	454	61	6	53	104	440
S84038	.4	4	16	9	70000	582	34	1	46	105	10
S84039	.6	36	13	13	67200	340	32	3	47	99	60
S84040	2.1	17	13	16	56600	299	40	5	75	80	65
S84041	.4	527	10	16	102000	132	80	8	68	118	15
S84042	18.7	214	7	30	43800	72	532	12	45	373	3000
S84043	7.2	111	19	44	79400	2710	174	11	711	179	275
S84044	12.3	312	20	64	134000	5210	129	25	376	202	900
S84045 40M	1.3	75	21	15	54100	598	42	10	132	152	15
S84046	6.4	51	26	46	57900	3780	99	14	568	160	45
S84047	1.2	30	20	30	66400	2480	44	7	105	104	10
S84048	1.1	13	16	10	59300	470	28	4	65	135	15
S84049	5.8	41	18	19	87000	990	79	9	89	295	55
S84050	2.4	30	12	9	89100	526	85	5	76	1000	70
S84051	6.2	64	13	15	63100	469	141	8	82	437	1050
S84052	4.4	5	18	34	63000	499	197	6	110	136	35
S84053	4.7	0	33	20	57000	430	75	12	84	353	5
S84054	5.2	0	30	63	58500	367	46	10	124	129	10
S84055	15.1	0	24	66	78900	262	98	17	79	110	180
S84056	1.6	0	26	42	63400	1170	43	8	140	208	15
S84057	1.5	0	19	16	77700	932	48	7	77	114	20
S84058	11.7	0	21	38	78800	839	47	9	48	80	155
S84059	6.1	0	33	12	59300	237	35	9	41	62	5
S84060	4.3	0	25	22	71800	740	43	9	91	88	170
S84061	13.6	99	22	28	48300	325	50	15	40	110	510

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(604)980-5814 OR (604)988-4524

(ACT:GE036) PAGE 1 OF 1
FILE No: 4-1062/P5&6
TYPE SOIL GEOCHEM DATE: OCTOBER 3, 1984

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S84062	49.0	94	12	85	59400	227	36	17	36	71	670
S84063	10.6	10	16	27	67000	829	29	1	39	56	550
S84064	4.5	39	20	40	68200	1000	40	2	63	72	110
S84065	13.2	170	21	113	82200	1360	58	9	129	119	200
S84066	1.3	6	18	35	70300	1510	52	4	109	142	15
S84067	2.5	0	22	28	80200	774	48	1	92	86	90
S84068	2.0	55	17	43	104000	2530	58	6	93	86	320
S84069	3.3	0	27	19	78300	536	44	7	97	84	10
S84070	3.4	6	17	32	71200	556	51	4	80	74	30
S84071	10.8	202	10	186	103000	5680	69	19	263	107	160
S84072	17.6	114	28	239	65000	4110	68	12	416	89	210
S84073	56.4	797	15	82	63100	926	266	49	165	315	370
S84074	7.7	146	12	27	66700	590	76	10	70	84	10
S84075	4.1	17	21	160	74600	918	97	13	145	161	180
S84076 ZOM	96.5	440	20	1380	111000	9470	425	168	215	182	1200
S84077	4.5	81	16	403	120000	577	90	16	89	878	290
S84078	2.1	48	18	397	95800	608	90	17	73	515	410
S84079	1.1	86	19	400	97600	1100	83	12	79	425	320
S84080	9.8	343	15	382	131000	559	120	13	115	443	17000
S84081	8.2	191	13	395	112000	154	198	33	53	503	740
S84082	2.0	58	11	208	84500	210	109	22	50	511	440
S84083	2.2	162	11	211	88700	515	289	31	73	834	950
S84084	.8	48	7	99	45900	73	86	18	25	174	290
S84085	1.4	36	9	151	57300	46	102	27	27	283	560
S84086	.3	164	8	187	85200	59	111	23	16	382	470
S84087	.5	38	5	91	36800	79	67	7	19	135	260
S84088	.3	86	6	66	64700	85	116	11	26	311	230
S84089	1.0	59	13	199	97400	186	92	13	45	458	420
S84090	.5	27	13	283	102000	283	73	10	52	471	200
S84091	.4	56	12	313	92600	138	77	19	37	706	150
S84092	2.4	0	19	195	108000	762	64	0	58	211	210
S84093	2.4	40	16	443	117000	889	102	21	45	362	510
S84094	5.0	21	19	572	177000	728	151	14	47	1080	940
S84095	3.0	24	22	595	149000	1190	80	13	75	895	740
S84096	2.7	41	21	325	164000	824	105	11	61	207	410
S84097	4.7	513	23	626	147000	804	204	41	160	269	200
S84098	2.1	316	22	430	84400	787	84	19	217	348	100
S84099	1.3	186	18	124	221000	52	102	3	33	378	60
S84100	2.8	94	16	273	180000	51	163	11	48	235	120
S84101	2.7	176	14	279	117000	130	131	15	100	212	2450
S84102	2.2	6	8	17	20200	288	31	17	35	1730	300
S84103	3.7	20	9	51	61200	131	110	8	73	1600	200
S84104	3.5	53	16	463	207000	39	85	29	25	282	130
S84105	1.1	47	7	84	61200	0	92	23	6	451	340
S84106	2.5	95	14	263	110000	102	101	30	30	311	250
S84107	.7	67	7	94	70700	96	93	22	37	245	245
S84108	2.5	137	13	101	111000	246	207	31	94	419	950
S84109	3.4	223	17	239	190000	1230	215	31	279	143	560
S84110	28.6	462	15	192	122000	918	788	29	308	251	1600
S84111	3.5	36	28	73	76300	695	114	7	296	94	110
S84112	.7	351	24	254	114000	15200	371	28	1080	383	245
S84113	.0	195	26	81	80600	5290	131	19	160	183	50
S84114	.9	164	21	227	67000	1310	66	14	156	162	10
S84115	.7	210	23	195	116000	5080	106	22	230	221	35
S84116	2.3	387	21	218	103000	3690	109	28	189	218	560
S84117	3.1	756	29	136	97100	4500	127	27	297	252	960
S84118	.0	423	18	202	131000	4110	94	29	89	207	120
S84119	.0	807	29	131	137000	4820	182	33	116	181	90
S84120	4.8	337	24	91	91700	3820	78	25	150	116	160
S84121	.0	102	10	63	55500	3930	58	15	159	146	5

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FILE No: 4-1062/P7
TYPE SOIL GEOCHEM
DATE: OCTOBER 3, 1984

(REPORT VALUES IN PPM)	AG	AS	B	CU	FE	MN	PB	SB	ZN	BA	AU-PPB
S84122	.8	141	13	130	75300	4080	70	16	63	221	20
S84123	1.0	174	17	115	92800	3550	72	18	146	311	45
S84124	.1	64	10	81	44900	1110	30	9	109	110	25
S84125	.0	88	15	105	68700	4250	51	15	121	199	30
S84126	.3	92	21	89	75900	1320	66	16	118	142	15
S84127	.2	32	15	91	52600	1480	49	10	138	128	5
S84128	1.4	66	15	188	64400	1710	83	16	173	180	10
S84129	.8	43	18	128	55100	720	55	12	134	134	10
S84130	.3	79	20	156	83200	3280	67	16	82	255	5
S84131	.2	31	18	83	61700	2450	67	14	101	148	5
S84132	.3	21	21	48	63200	402	45	8	48	105	5
S84133	.0	66	18	133	85000	2440	50	18	67	152	10
S84134	.3	72	21	79	74300	1450	59	16	106	118	5
S84135	.3	72	22	111	82600	1910	64	17	99	128	30
S84136	.2	34	23	71	87000	1010	59	16	58	78	5
S84137	15.8	762	24	181	128000	7860	1760	80	1930	376	200
S84138	.4	75	15	38	58800	1780	58	19	88	79	20
S84139	.2	79	10	33	43200	1500	45	20	57	137	5
S84140	1.7	68	27	53	63900	1070	73	20	157	93	130
S84141	2.2	0	28	126	114000	1870	48	5	111	138	50
S84142	2.0	0	32	105	103000	1400	35	5	82	94	20
S84143	1.9	15	31	149	97600	2360	80	31	167	191	135
S84144	2.3	25	24	112	89500	1990	68	26	138	155	70
S84145	1.9	0	32	115	113000	2190	36	0	103	130	10
S84146	2.1	441	28	146	106000	2180	51	10	124	138	270
S84147	11.2	4140	26	248	128000	2880	80	59	170	135	3900
S84148	1.0	155	19	148	79900	1330	51	25	89	152	40
S84149	.6	60	26	183	85400	2080	53	23	97	257	10
S84150	1.5	122	28	131	86500	1530	49	14	87	158	25
S84151	1.5	45	33	139	93000	2230	69	17	199	178	5
S84124B	.7	71	13	121	73000	548	60	16	139	212	5

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(ACT:GE03B) PAGE 1 OF 1
FILE No: 4-1062/P8&9
TYPE SOIL GEOCHEM DATE: OCTOBER 3, 1984

(REPORT VALUES IN PPM)	AG	AS	B	CU	FE	MN	PB	SB	ZN	BA	AU-PPB
S84152	1.1	34	29	123	80200	3180	86	35	133	169	35
S84153	1.0	127	27	123	80900	1850	62	21	127	158	80
S84154	5.3	322	25	169	98700	4280	323	42	744	346	460
S84155	1.5	69	24	86	74000	1160	41	13	85	129	55
S84156	3.8	76	27	87	77700	1230	76	13	133	114	130
S84157	1.7	96	32	109	79700	1520	59	19	112	214	45
S84158	3.6	43	41	192	81400	1400	87	22	199	316	10
S84159	3.5	9	20	38	31300	478	57	17	37	97	20
S84160	1.5	47	25	88	72300	1140	60	16	113	108	35
S84161	2.5	37	25	153	75100	2350	153	60	204	152	80
S84162	.9	18	28	79	59500	1500	62	22	89	97	30
S84163	.4	33	18	62	48800	496	51	18	69	102	10
S84164	.9	43	27	126	65100	2030	79	20	154	182	10
S84165	1.9	20	19	107	43100	980	70	18	136	256	5
S84166	.8	110	42	157	82500	3650	91	19	190	251	5
S84167	.7	166	25	145	66600	2080	72	20	162	180	80
S84168	.7	48	31	172	66900	1830	68	27	192	280	20
S84169	1.4	360	29	195	94900	3270	121	34	303	226	60
S84170	1.4	123	23	232	89900	2570	153	40	271	209	5
S84171	.9	81	28	154	77400	1990	66	16	193	172	5
S84172	.0	195	21	66	78800	4610	72	17	97	109	90
S84173	.0	204	18	66	65400	4940	76	17	123	150	45
S84174	.7	223	20	113	73400	5400	84	22	155	164	65
S84175	1.0	219	23	172	83100	5080	106	33	275	234	220
S84176	1.2	188	22	87	64900	2200	72	22	206	190	70
S84177	7.3	675	20	169	90600	6770	252	26	387	565	390
S84178	4.0	3960	23	294	119000	15100	305	52	518	656	1500
S84179	.0	665	23	153	101000	14200	287	32	294	419	190
S84180	4.6	247	29	309	94200	10100	258	34	838	218	1000
S84181	2.6	147	31	911	166000	16400	280	37	1380	149	900
S84182	2.4	146	33	1070	135000	7620	207	29	713	133	650
S84183	2.6	166	35	1530	180000	10100	269	30	1080	112	600
S84184	5.6	280	23	536	121000	3390	876	28	389	362	460
S84185	3.5	150	14	187	65300	845	246	28	128	117	400
S84186	2.2	33	10	86	39100	317	156	11	42	146	260
S84187	1.6	50	9	76	59000	289	131	8	51	189	190
S84188	1.3	55	12	94	72000	217	97	11	40	299	50
S84189	1.8	37	6	71	46100	94	98	14	26	378	240
S84190	1.1	43	8	133	78200	173	112	17	47	348	160
S84191	1.1	36	7	146	73400	149	112	16	46	300	100
S84192	2.8	37	7	84	54900	126	172	24	47	454	190
S84193	2.1	44	6	104	49500	135	108	27	50	457	160
S84194	1.3	38	7	123	55200	227	107	20	41	327	150
S84195	4.0	105	5	109	43100	400	186	74	38	229	650
S84196	1.9	28	10	261	72800	303	88	15	54	357	330
S84197	.2	157	56	1220	339000	0	109	21	10	82	10
S84198	2.3	23	43	146	62000	170	99	16	45	268	145
S84199	1.7	37	39	174	72100	199	114	17	58	347	200
S84200	1.5	54	39	147	73500	157	119	18	47	285	170
S84201	1.0	42	42	64	83600	1920	88	13	38	150	50
S84202	4.7	240	62	978	173000	4880	484	26	509	154	200
S84203	6.2	152	59	885	131000	6410	351	28	670	104	380
S84204	16.5	553	61	926	168000	12500	3290	35	1180	167	890
S84205	3.0	34	57	165	54900	533	231	11	95	40	30
S84206	6.3	221	68	672	88900	3010	258	25	376	91	220
S84207	4.6	293	57	727	129000	4940	500	29	498	197	530
S84208	2.8	159	57	572	108000	9510	230	27	1070	222	1200
S84209	4.1	85	15	410	150000	279	117	33	102	823	130
S84210	1.6	236	21	492	263000	145	91	24	103	382	185
S84211	.6	1	28	1900	267000	119	110	23	827	249	50

COMPANY: ACTIVE MINERALS LTD. | MIN-EN LABS ICP REPORT | (ACT:GE03B) PAGE 1 OF 1

PROJECT No: | 705 WEST 15th ST., NORTH VANCOUVER, B.C. V7M 1T2 | FILE No: 4-1062/P10&11

ATTENTION: C. GRAF | (604)980-5814 OR (604)988-4524 | *TYPE SOIL GEOCHEM* | DATE: OCTOBER 3, 1984

(REPORT VALUES IN PPM)	AG	AS	B	CU	FE	MN	PB	SB	ZN	BA	AU-PPB
S84212	5.2	66	55	758	173000	224	88	110	81	650	140
S84213	1.5	35	43	298	115000	355	113	27	60	594	200
S84214	1.8	10	43	152	69700	680	57	13	35	122	385
S84215	1.5	22	46	90	44400	382	51	16	79	95	40
S84216	1.7	14	42	359	89200	1130	70	9	70	521	400
S84217	.3	3	48	145	79100	3450	70	10	73	174	110
S84218	2.0	37	48	227	94300	3300	166	16	280	371	220
S84219	3.8	0	20	362	210000	413	97	11	64	302	290
S84220	.9	27	20	867	91000	14600	100	20	111	1190	190
S84221	.8	24	21	965	87800	13000	99	21	130	1190	110
S84222	3.8	71	24	882	195000	1280	165	38	155	550	350
S84223	.3	86	5	131	47800	5200	72	17	60	70	45
S84224	.8	140	10	126	68800	5370	129	17	290	139	30
S84225	4.0	89	8	40	39700	160	74	9	84	79	100
S84226	1.5	48	15	105	45200	899	76	10	190	169	25
S84227	.0	213	39	150	101000	9420	117	18	371	130	40
S84228	2.3	239	50	308	76800	6520	184	19	1720	193	200
S84229	7.6	334	15	217	105000	1650	354	31	644	123	190
S84230	6.8	450	13	349	106000	13000	357	26	3380	134	160
S84231	4.9	105	8	340	107000	964	244	23	1300	473	350
S84232	1.2	89	5	51	95700	60	84	33	59	204	310
S84233	.7	115	5	29	57300	36	78	45	29	1070	345
S84234	2.3	105	10	100	127000	258	146	26	128	372	500
S84235	2.0	59	9	885	121000	0	201	31	105	54	650
S84236	.2	107	3	42	56300	4	41	38	9	571	90
S84237	1.4	42	7	194	55500	81	59	13	41	1200	620
S84238	1.6	66	5	95	29300	96	49	16	40	1520	450
S84239	2.6	20	3	76	31300	12	74	9	17	285	690
S84240	1.8	176	5	90	53200	54	63	67	21	1030	325
S84241	2.3	110	4	161	23600	56	97	41	43	846	200
S84242	11.7	142	14	1220	116000	828	398	60	136	685	5220
S84243	6.0	233	12	1730	102000	3130	255	69	183	534	4400
S84244	8.1	162	22	881	226000	1340	146	116	76	591	1150
S84245	18.9	233	14	362	147000	799	551	101	121	586	1250
S84246	63.5	822	18	844	94100	11800	1090	231	655	408	1350
S84247	1.2	29	22	241	69700	4400	115	17	128	450	250
S84248	.4	272	21	251	77100	2980	105	20	283	364	210
S84249	1.1	126	23	242	78000	5160	181	25	409	443	225
S84250	3.0	284	17	440	102000	10600	481	36	1390	259	240
S84251	1.5	230	17	544	88500	5230	405	49	869	226	245
S84252	5.3	384	20	891	123000	8420	525	30	1140	231	280
S84253	3.1	267	22	322	114000	6240	352	18	511	210	215
S84254	2.9	193	16	330	116000	4700	366	22	331	211	210
S84255	4.5	357	16	916	107000	6620	491	31	1040	241	290
S84256	4.4	329	18	302	97300	7590	346	21	706	265	210
S84257	4.6	178	19	647	125000	9500	529	23	630	359	225
S84258	4.4	104	17	235	122000	5130	512	23	314	173	650
S84259	10.8	116	19	287	115000	7900	552	40	551	219	550
S84260	1.2	219	5	501	60600	145	78	48	68	199	450
S84261	1.0	377	5	97	55400	71	85	64	30	389	295
S84262	.4	307	4	29	39000	30	61	61	12	240	190
S84263	.6	194	2	30	33100	19	62	64	11	238	200

COMPANY: ACTIVE MINERALS LTD.
PROJECT No:
ATTENTION: C. GRAF

MIN-EN LABS ICP REPORT
705 WEST 15th ST., NORTH VANCOUVER, B.C. V7M 1T2
(604)980-5814 OR (604)988-4524 *TYPE SOIL GEOCHEM*

FILE No: 4-1062/P1&2
DATE: OCTOBER 3, 1984

(REPORT VALUES IN PPM)		AG	AS	B	CU	FE	MN	PB	SB	ZN	BA	AU-PPB
1	S84301	5.4	192	23	522	103000	1260	237	35	207	132	620
2	S84302	3.7	305	27	1650	158000	2840	134	45	144	185	1350
3	S84303	3.2	60	9	63	34200	253	122	18	101	373	600
4	S84304	.2	191	8	38	83700	33	93	36	14	737	430
5	S84305	1.9	192	24	94	216000	333	156	19	160	153	195
6	S84306	6.9	179	21	182	142000	651	297	17	410	163	410
7	S84307	2.2	348	26	230	159000	17500	787	26	1440	242	185
8	S84308	.1	139	37	171	92900	3660	93	22	242	287	15
9	S84309	.1	137	32	151	79200	2670	64	18	161	216	30
10	S84310	.3	192	28	134	79500	2160	71	20	177	185	90
11	S84311	2.9	23	39	163	198000	2190	54	0	196	126	100
12	S84312	1.0	100	27	146	104000	1860	105	23	244	102	25
13	S84313	.6	4	24	96	82800	1540	51	18	145	118	75
14	S84314	.8	27	28	142	111000	1910	72	25	210	146	40
15	S84315	1.1	73	22	92	90900	1480	33	5	116	53	160
16	S84316	6.0	161	22	40	148000	920	84	17	152	165	310
17	S84317	4.8	101	26	32	85200	1090	86	7	264	269	360
18	S84318	5.4	358	19	60	72900	2070	103	18	907	205	825
19	S84319	6.9	292	13	25	63800	523	161	20	156	132	315
20	S84320	19.3	1050	15	166	107000	4530	109	44	268	175	2700
21	S84321	6.6	275	14	57	67100	876	160	21	251	155	790
22	S84322	6.5	403	18	162	75900	1920	114	21	266	189	620
23	S84323	1.9	205	26	88	92100	2070	64	20	178	196	185
24	S84324	.9	128	36	188	109000	4940	246	25	370	141	110
25	S84325	1.5	29	35	442	130000	1760	72	16	217	105	170
26	S84326	3.1	139	70	531	101000	1200	100	12	617	74	45
27	S84327	2.9	215	82	760	183000	2010	501	26	578	58	235
28	S84328	.3	98	18	109	76600	1920	71	16	182	154	15
29	S84329	.8	130	18	104	75700	4360	88	14	427	297	60
30	S84330	3.2	316	27	210	130000	10300	334	19	918	216	110
31A	S84331A	1.5	43	8	268	59100	96	51	19	26	1270	720
31B	S84331B	1.2	137	9	66	88200	64	72	86	63	369	320
32	S84332	1.4	149	12	249	88100	86	99	28	42	1310	465
33	S84333	3.0	302	32	1320	244000	1050	182	59	179	381	640
34	S84331	15.5	1600	28	479	126000	8990	1260	71	1780	537	1550
35	S84335	2.2	176	23	210	86700	2420	174	43	378	271	80
36	S84336	1.6	53	33	476	86100	1700	112	21	252	275	85
[illegible]		.5	[illegible]	11	355	93500	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]		1.3	[illegible]	10	178	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]		.5	39	8	222	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]		1.3	38	10	181	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]		1.1	50	13	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]		2.6	46	11	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]		2.5	52	12	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	47	[illegible]	[illegible]
[illegible]		1.2	38	16	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]		[illegible]	33	[illegible]	513	94500	[illegible]	[illegible]	[illegible]	46	[illegible]	[illegible]
[illegible]		1.6	[illegible]	14	[illegible]	101000	[illegible]	74	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]		[illegible]	71	11	132	117000	649	49	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]		[illegible]	[illegible]	9	188	[illegible]	[illegible]	34	[illegible]	34	[illegible]	[illegible]
[illegible]		1.7	35	10	[illegible]	111000	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]		[illegible]	[illegible]	3	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]		[illegible]	85	[illegible]	[illegible]	[illegible]	[illegible]	197	17	[illegible]	[illegible]	[illegible]
[illegible]		[illegible]	156	15	180	[illegible]	[illegible]	751	15	[illegible]	[illegible]	[illegible]
[illegible]		[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	24	451	[illegible]	[illegible]
[illegible]		[illegible]	85	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	17	142	70	[illegible]
[illegible]		.7	[illegible]	16	137	[illegible]	[illegible]	[illegible]	[illegible]	79	[illegible]	[illegible]
[illegible]		.4	[illegible]	21	261	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	149	[illegible]
[illegible]		1.2	45	14	106	64500	[illegible]	50	[illegible]	[illegible]	[illegible]	[illegible]
S84001		37.5	208	13	40	75200	247	944	45	66	499	1000

COMPANY:

MIN-EN LABS ICP REPORT

(ACT:GEO3A+) PAGE 1 OF 1

PROJECT No: SULFERETTES CREEK

705 WEST 15th ST., NORTH VANCOUVER, B.C. V7M 1T2

FILE No: 3-1010S5+6

ATTENTION: CRIS GRAF

(604)980-5814 OR (604)988-4524

DATE: SEPTEMBER 26, 1983

(REPORT VALUES IN PPM)	AG	AS	BI	CU	MN	MO	PB	SB	ZN	BA	AU-PPB
K029	3.2	193	51	545	1750	61	147	63	58	527	130
K030	3.2	171	54	403	1420	46	132	52	32	708	125
K031	5.0	190	78	840	4340	87	223	70	101	274	220
K032	10.1	159	58	628	6580	55	189	70	421	976	190
K033	8.5	130	67	949	7850	65	256	45	1460	830	310
K034	14.1	157	75	1540	6250	59	183	49	561	433	245
K035	6.4	173	78	675	5470	88	502	51	393	274	285
K036	4.9	161	60	435	2690	65	275	49	630	159	335
K037	4.6	32	37	136	1880	51	143	24	203	290	20
K038	4.3	35	42	158	2540	56	185	26	168	271	10
K039	3.9	43	33	130	1820	44	143	20	195	244	35
K040	3.1	16	36	110	1540	43	97	24	167	243	15
K041	2.4	43	39	109	1380	48	138	22	172	195	75

APPENDIX II

CUMMULATIVE PROBABILITY PLOTS

PEARSON CORRELATION COEFFICIENTS

AND

FREQUENCY DISTRIBUTION HISTOGRAMS

MIN-EN LABORATORIES LTD.

SPECIALISTS IN MINERAL ENVIRONMENTS

705 WEST 15TH STREET NORTH VANCOUVER, B.C. CANADA V7M 1T2

TELEX: 04-352828   PHONE:(604)980-5814 OR (604)988-4524

STATISTICAL SUMMARY ON AU

COMPANY:ACTIVE MINERALS
ATTN:C. GRAF
PROJECT:
FILE#:4-1062/4-1100

DATE:NOVEMBER 13/84
SAMPLE TYPE:SOIL
ANALYSIS TYPE:GEOCHEM

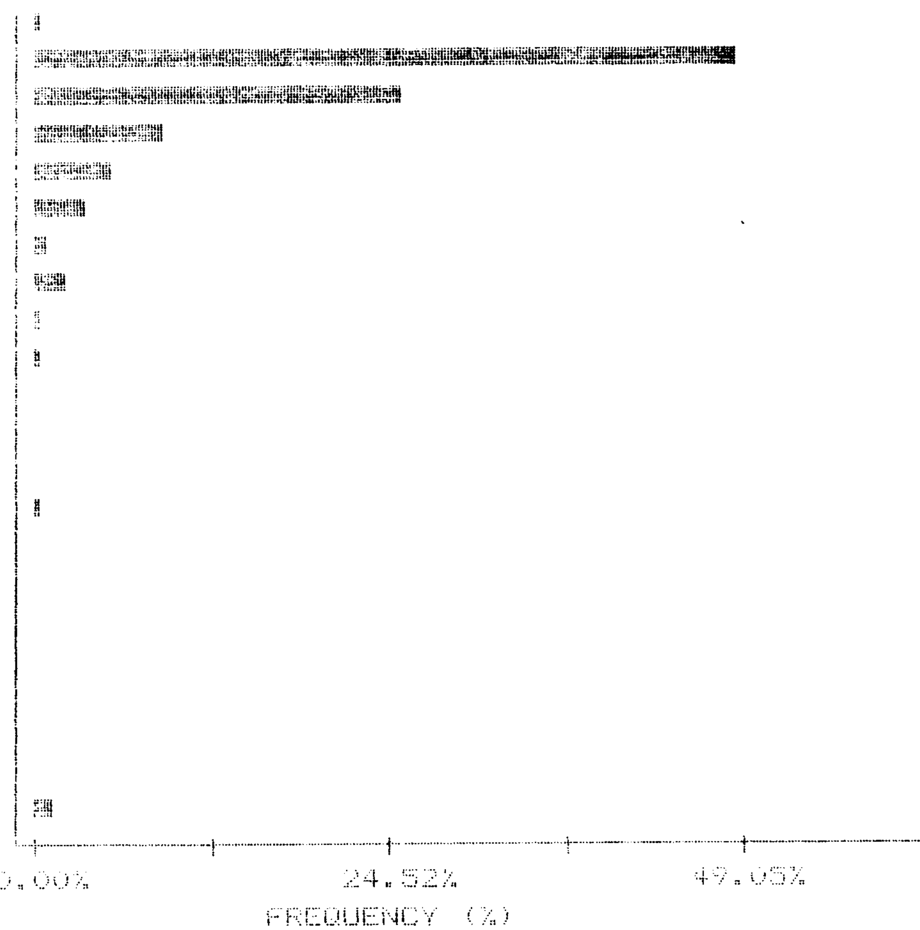
NUMBER OF SAMPLES: 210
MAXIMUM VALUE: 17000.00 PPM
MINIMUM VALUE: 5.00 PPM
MEAN: 429.05 PPM
STD. DEVIATION: 1302.07 PPM
COEFF. OF VARIATION:3.03

5 HIGHEST AU VALUES:

584080	17000.00 PPM
584242	5220.00 PPM
584243	4400.00 PPM
584147	3900.00 PPM
584101	2450.00 PPM

HISTOGRAM FOR AU   CLASS INTERVAL = 194.75

MID CLASS PPM	CLASS %
< 5.00	.48
102.38	49.05
297.13	25.71
491.88	9.05
686.63	5.71
881.38	3.81
1076.13	.95
1270.88	2.38
1465.63	.48
1660.38	.48
1855.13	0.00
2049.88	0.00
2244.63	0.00
2439.38	.48
2634.13	0.00
2828.88	0.00
3023.63	0.00
3218.38	0.00
3413.13	0.00
3607.88	0.00
3802.63	0.00
> 3900.00	1.43



MIN-EN LABORATORIES LTD.

SPECIALISTS IN MINERAL ENVIRONMENTS

705 WEST 15TH STREET NORTH VANCOUVER, B.C. CANADA V7M 1T2

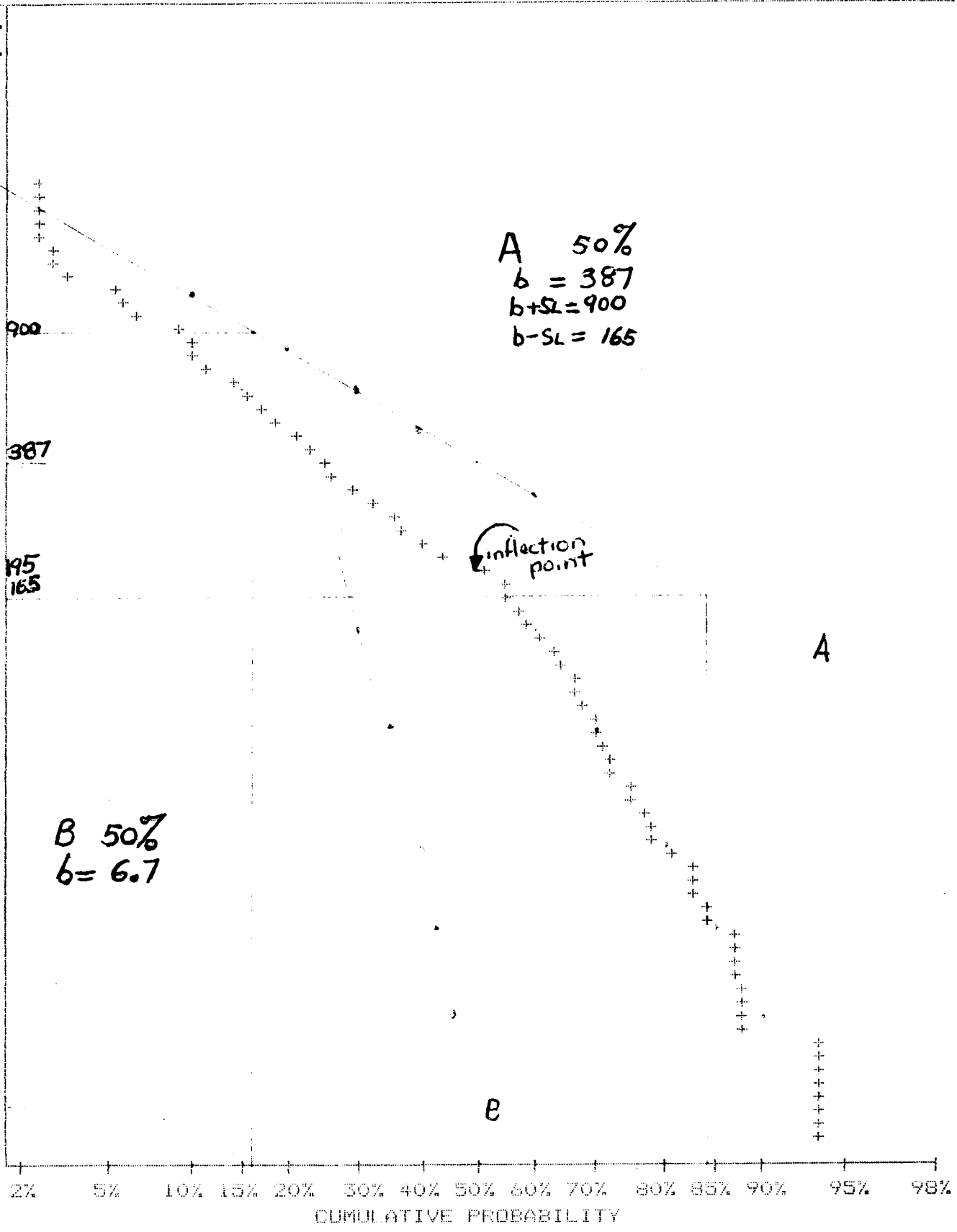
TELEX: 04-352828 PHONE:(604)980-5814 OR (604)988-4524

CUMMULATIVE PROBABILITY PLOT ON AU

COMPANY:ACTIVE MINERALS
ATTN:C. GRAF
PROJECT:
FILE#:4-1062/4-1100

DATE:NOVEMBER 13/84
SAMPLE TYPE:SOIL
ANALYSIS TYPE:GEOCHEM

UPPER LIMIT (PPM)	CUMMUL. FREQ. (%)
3845.65	1.90
3243.17	1.90
2735.08	1.90
2306.59	2.38
1945.22	2.38
1640.47	2.38
1383.47	3.33
1166.73	5.71
983.94	6.67
829.80	10.48
699.80	11.43
590.16	16.19
497.70	19.05
419.73	23.33
353.97	26.67
298.52	32.38
251.75	37.14
212.31	44.29
179.05	55.24
151.00	57.62
127.34	61.90
107.39	65.24
90.56	66.67
76.38	70.00
64.41	71.43
54.32	72.86
45.81	75.24
38.64	78.57
32.58	80.95
27.47	83.33
23.17	84.76
19.54	87.62
16.48	87.62
13.90	88.10
11.72	88.10
9.89	93.33
8.34	93.33
7.03	93.33
5.93	93.33
5.00	99.52



MIN-EN LABORATORIES LTD.

SPECIALISTS IN MINERAL ENVIRONMENTS

705 WEST 15TH STREET NORTH VANCOUVER, B.C. CANADA V7M 1T2

TELEX: 04-352828 PHONE:(604)980-5814 OR (604)988-4524

CORRELATION COEFFICIENTS

COMPANY:ACTIVE MINERALS
ATTN:C. GRAF
PROJECT:
FILE#:4-1062/4-1100

DATE:NOVEMBER 13/84
SAMPLE TYPE:SOIL
ANALYSIS TYPE:GEOCHEM

THE TABLE BELOW REPRESENTS THE PEARSON CORRELATION MATRIX, SHOWING THE INTER-ELEMENT CORRELATION COEFFICIENTS. THOSE VALUES THAT EXCEED THEIR CRITICAL VALUE FOR .01 LEVEL OF SIGNIFICANCE ARE SHOWN IN DARKER PRINT AND UNDERLINED.

	AG	AS	CU	PB	ZN	AU
AG	1.000	**.197**	**.343**	**.396**	.047	**.195**
AS		1.000	.057	**.197**	.066	**.219**
CU			1.000	**.304**	**.248**	**.213**
PB				1.000	**.193**	.085
ZN					1.000	-.017
AU						1.000

MIN-EN LABORATORIES LTD.

SPECIALISTS IN MINERAL ENVIRONMENTS

705 WEST 15TH STREET NORTH VANCOUVER, B.C. CANADA V7M 1T2

TELEX: 04-352828 PHONE:(604)980-5814 OR (604)988-4524

STATISTICAL SUMMARY ON AG

COMPANY:ACTIVE MINERALS
ATTN:C. GRAF
PROJECT:
FILE#:4-1062/4-1100

DATE:NOVEMBER 13/84
SAMPLE TYPE:SOIL
ANALYSIS TYPE:GEOCHEM

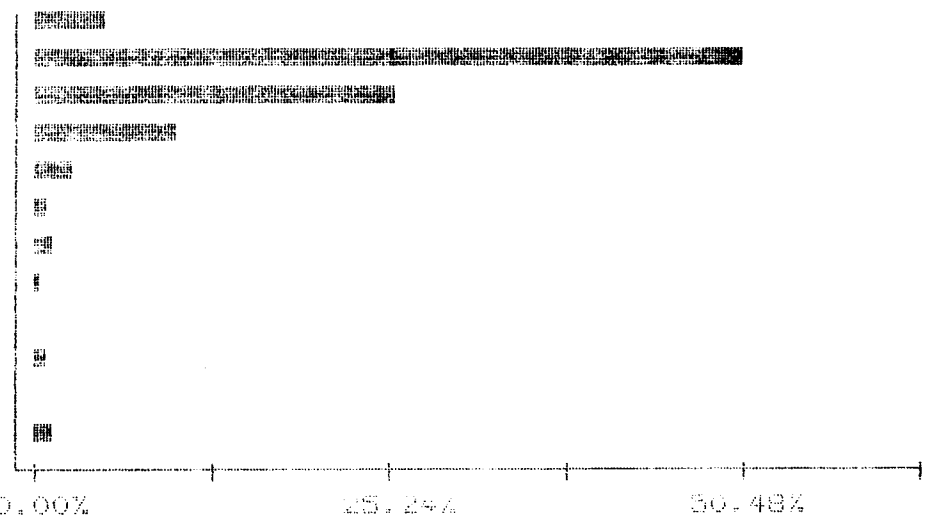
NUMBER OF SAMPLES:	210
MAXIMUM VALUE:	96.50 PPM
MINIMUM VALUE:	.10 PPM
MEAN:	3.30 PPM
STD. DEVIATION:	8.37 PPM
COEFF. OF VARIATION:	2.54

5 HIGHEST AG VALUES:

S84076 20M	96.50 PPM
S84246	63.50 PPM
S84110	28.60 PPM
S84245	18.90 PPM
S84204	16.50 PPM

HISTOGRAM FOR AG CLASS INTERVAL = 1.08

MID CLASS PPM	CLASS %
< .10	5.24
1.04	50.48
2.92	25.71
4.80	10.48
6.68	2.36
8.56	.95
10.44	1.43
12.32	.48
14.20	0.00
16.08	.95
17.96	0.00
> 18.90	1.43



MIN-EN LABORATORIES LTD.

SPECIALISTS IN MINERAL ENVIRONMENTS

705 WEST 15TH STREET NORTH VANCOUVER, B.C. CANADA V7M 1T2

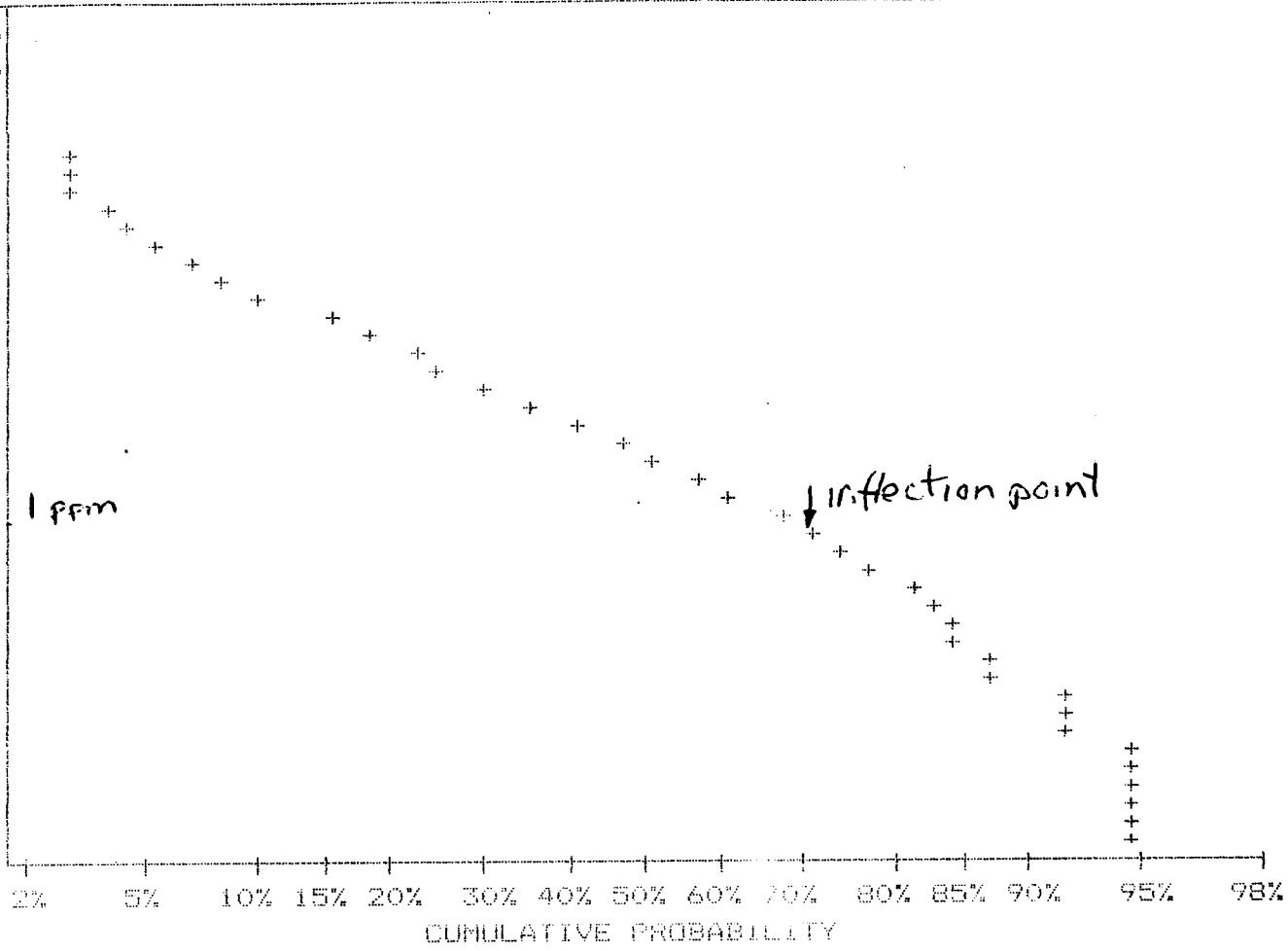
TELEX: 04-352828 PHONE:(604)980-5814 OR (604)988-4524

CUMMULATIVE PROBABILITY PLOT ON AG

COMPANY:ACTIVE MINERALS
ATTN:C. GRAF
PROJECT:
FILE#:4-1062/4-1100

DATE:NOVEMBER 13/84
SAMPLE TYPE:SOIL
ANALYSIS TYPE:GEOCHEM

UPPER LIMIT (PPM)	CUMMUL. FREQ. (%)
14.66	2.86
11.27	3.33
8.67	4.76
6.67	7.14
5.13	10.48
3.94	19.05
3.03	25.24
2.33	35.71
1.79	48.10
1.38	58.57
1.06	68.10
.82	74.76
.63	81.90
.48	84.76
.37	87.62
.29	91.90
.22	91.90
.17	94.76
.13	94.76
.10	94.76



MIN-EN LABORATORIES LTD.

SPECIALISTS IN MINERAL ENVIRONMENTS

705 WEST 15TH STREET NORTH VANCOUVER, B.C. CANADA V7M 1T2

TELEX: 04-352828 PHONE:(604)980-5814 OR (604)988-4524

STATISTICAL SUMMARY ON AS

COMPANY:ACTIVE MINERALS
ATTN:C. GRAF
PROJECT:
FILE#:4-1062/4-1100

DATE:NOVEMBER 13/84
SAMPLE TYPE:SOIL
ANALYSIS TYPE:GEOCHEM

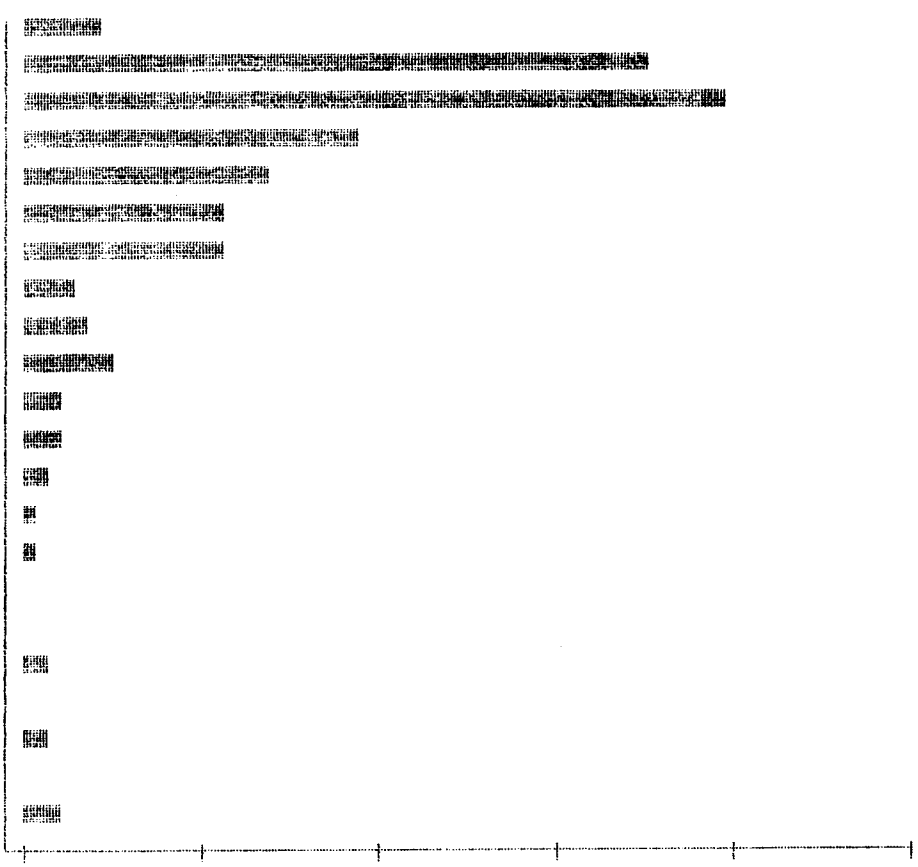
NUMBER OF SAMPLES:	210
MAXIMUM VALUE:	4140.00 PPM
MINIMUM VALUE:	1.00 PPM
MEAN:	178.38 PPM
STD. DEVIATION:	410.28 PPM
COEFF. OF VARIATION:	2.30

5 HIGHEST AS VALUES:

S84147	4140.00 PPM
S84178	3960.00 PPM
S84246	822.00 PPM
S84119	807.00 PPM
S84137	762.00 PPM

HISTOGRAM FOR AS CLASS INTERVAL = 40.3

MID CLASS PPM	CLASS %
< 1.00	2.86
21.15	21.90
61.45	24.76
101.75	11.90
142.05	8.57
182.35	7.14
222.65	7.14
262.75	1.90
303.25	2.38
343.55	3.33
383.85	1.43
424.15	1.43
464.45	.95
504.75	.48
545.05	.48
585.35	0.00
625.65	0.00
665.95	.95
706.25	0.00
746.55	.95
786.85	0.00
> 807.00	1.43



MIN-EN LABORATORIES LTD.

SPECIALISTS IN MINERAL ENVIRONMENTS

705 WEST 15TH STREET NORTH VANCOUVER, B.C. CANADA V7M 1T2

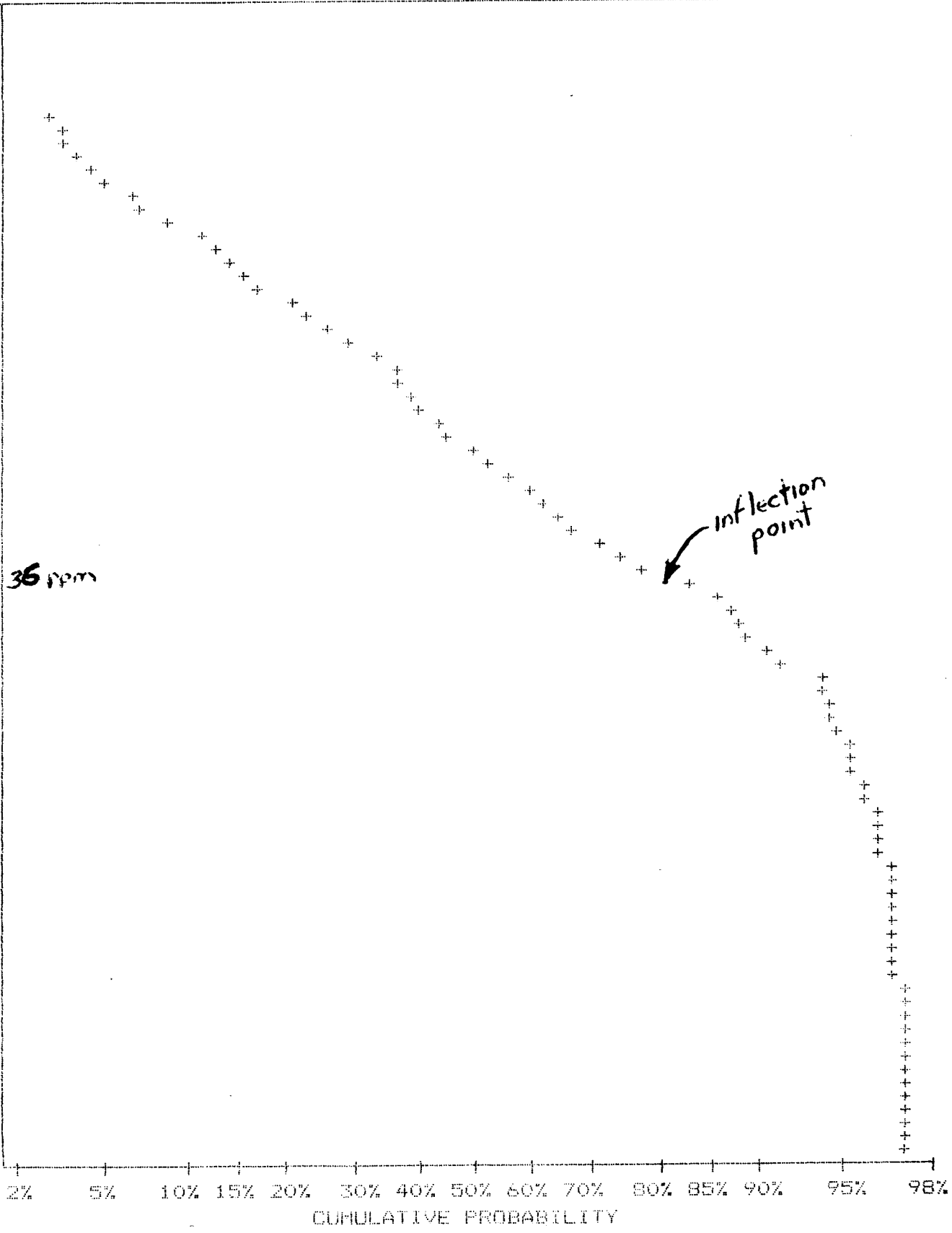
TELEX: 04-352828 PHONE:(604)980-5814 OR (604)988-4524

CUMMULATIVE PROBABILITY PLOT ON AS

COMPANY:ACTIVE MINERALS
ATTN:C. GRAF
PROJECT:
FILE#:4-1062/4-1100

DATE:NOVEMBER 13/84
SAMPLE TYPE:SOIL
ANALYSIS TYPE:GEOCHEM

UPPER LIMIT (PPM)	CUMMUL. FREQ. (%)
769.13	1.90
648.63	3.81
547.02	4.29
461.32	5.24
389.04	7.14
328.10	11.90
276.69	14.76
233.35	17.62
196.79	23.33
165.96	29.52
139.96	36.67
118.03	39.05
99.54	43.81
83.95	50.95
70.79	56.67
59.70	62.38
50.35	67.14
42.46	74.76
35.81	82.86
30.20	87.14
25.47	89.05
21.48	91.43
18.11	93.81
15.28	94.29
12.88	95.24
10.86	95.24
9.16	95.71
7.73	96.19
6.52	96.19
5.49	96.67
4.63	96.67
3.91	96.67
3.30	96.67
2.78	97.14
2.34	97.14
1.98	97.14
1.67	97.14
1.41	97.14
1.19	97.14
1.00	97.14



MIN-EN LABORATORIES LTD.

SPECIALISTS IN MINERAL ENVIRONMENTS

705 WEST 15TH STREET NORTH VANCOUVER, B.C. CANADA V7M 1T2

TELEX: 04-352828 PHONE:(604)980-5814 OR (604)988-4524

STATISTICAL SUMMARY ON CU

COMPANY:ACTIVE MINERALS
ATTN:C. GRAF
PROJECT:
FILE#:4-1062/4-1100

DATE:NOVEMBER 13/84
SAMPLE TYPE:SOIL
ANALYSIS TYPE:GEOCHEM

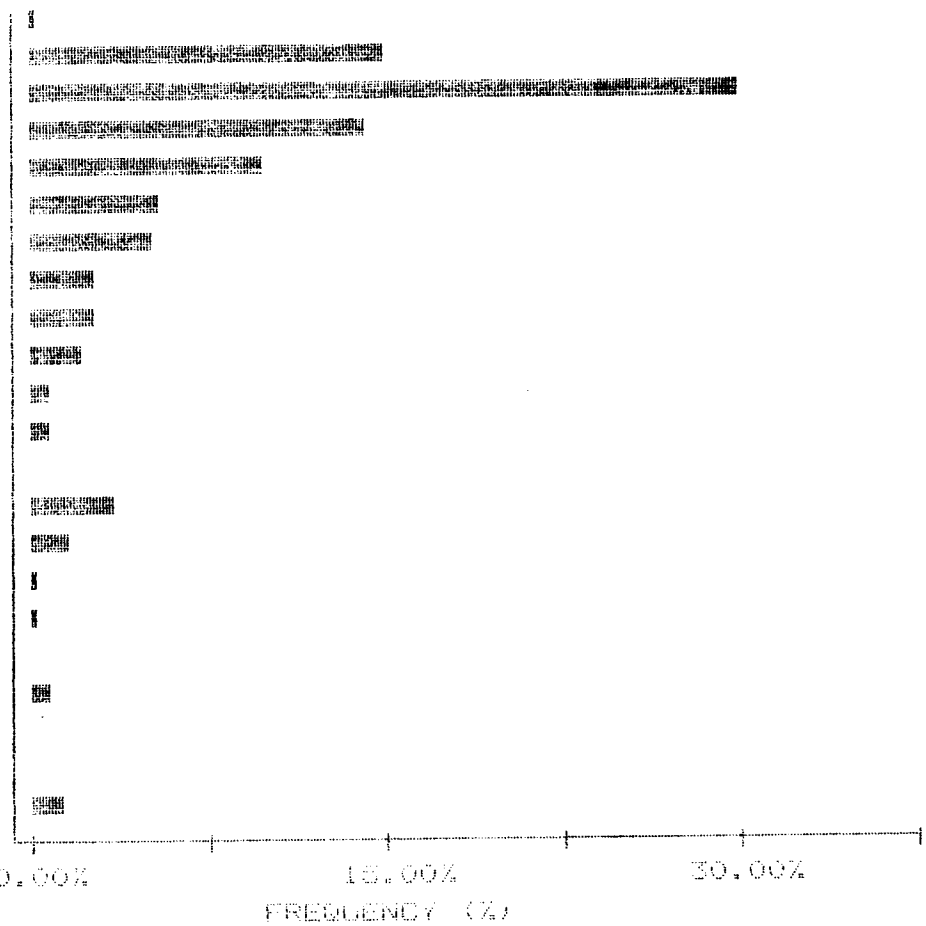
NUMBER OF SAMPLES:	210
MAXIMUM VALUE:	1900.00 PPM
MINIMUM VALUE:	17.00 PPM
MEAN:	293.26 PPM
STD. DEVIATION:	311.76 PPM
COEFF. OF VARIATION:	1.06

5 HIGHEST CU VALUES:

S84211		1900.00 PPM
S84243		1730.00 PPM
S84183		1530.00 PPM
S84076	20M	1380.00 PPM
S84197		1220.00 PPM

HISTOGRAM FOR CU CLASS INTERVAL = 68.15

MID CLASS PPM	CLASS %
< 17.00	.48
51.08	15.24
119.23	30.00
187.38	14.29
255.53	10.00
323.68	5.71
391.83	3.24
459.98	2.86
528.13	2.86
596.28	2.38
664.43	.95
732.58	.95
800.73	0.00
868.88	3.81
937.03	1.90
1005.18	.48
1073.33	.48
1141.48	0.00
1209.63	.95
1277.78	0.00
1345.93	0.00
> 1380.00	1.43



MIN-EN LABORATORIES LTD.

SPECIALISTS IN MINERAL ENVIRONMENTS

705 WEST 15TH STREET NORTH VANCOUVER, B.C. CANADA V7M 1T2

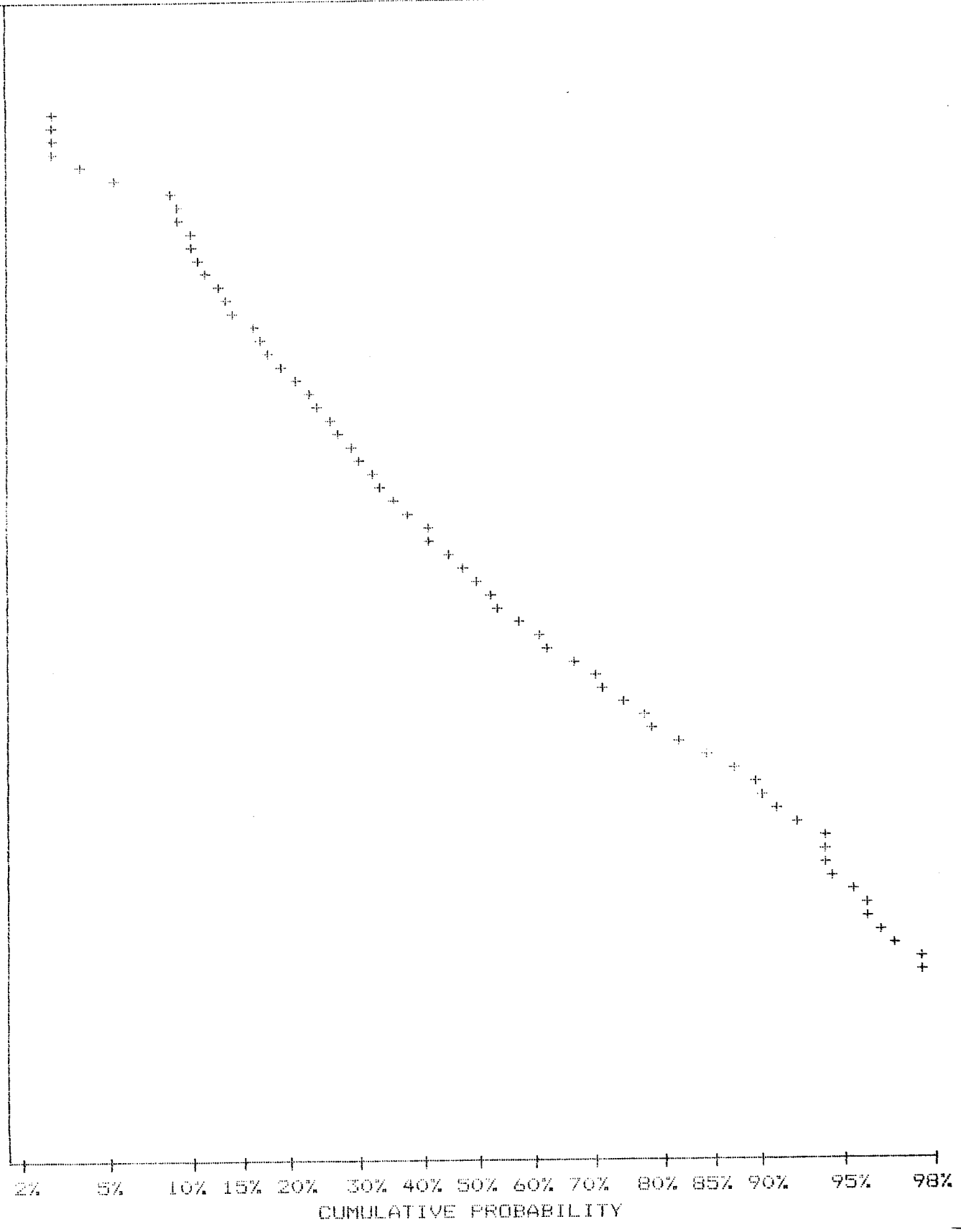
TELEX: 04-352828 PHONE:(604)980-5814 OR (604)988-4524

CUMMULATIVE PROBABILITY PLOT ON CU

COMPANY:ACTIVE MINERALS
ATTN:C. GRAF
PROJECT:
FILE#:4-1062/4-1100

DATE:NOVEMBER 13/84
SAMPLE TYPE:SOIL
ANALYSIS TYPE:GEOCHEM

UPPER LIMIT (PPM)	CUMMUL. FREQ. (%)
1266.04	1.90
1133.58	2.86
1014.97	3.33
908.75	5.71
813.67	9.52
728.53	10.00
652.31	10.95
584.05	12.86
522.94	14.76
468.21	17.62
419.22	19.52
375.36	23.33
336.09	26.19
300.92	29.52
269.43	32.86
241.25	36.19
216.00	41.43
193.39	45.24
173.16	50.48
155.04	54.29
138.82	61.43
124.29	67.14
111.28	71.90
99.64	77.14
89.22	81.43
79.88	87.62
71.52	90.00
64.04	92.38
57.34	93.81
51.34	94.29
45.97	95.71
41.16	96.19
36.86	97.62
33.00	98.10
29.55	98.57
26.45	99.52
23.68	99.52
21.20	99.52
18.99	99.52
17.00	99.52



MIN-EN LABORATORIES LTD.

SPECIALISTS IN MINERAL ENVIRONMENTS

705 WEST 15TH STREET NORTH VANCOUVER, B.C. CANADA V7M 1T2

TELEX: 04-352828 PHONE:(604)980-5814 OR (604)988-4524

STATISTICAL SUMMARY ON PB

COMPANY:ACTIVE MINERALS
ATTN:C. GRAF
PROJECT:
FILE#:4-1062/4-1100

DATE:NOVEMBER 13/84
SAMPLE TYPE:SOIL
ANALYSIS TYPE:GEOCHEM

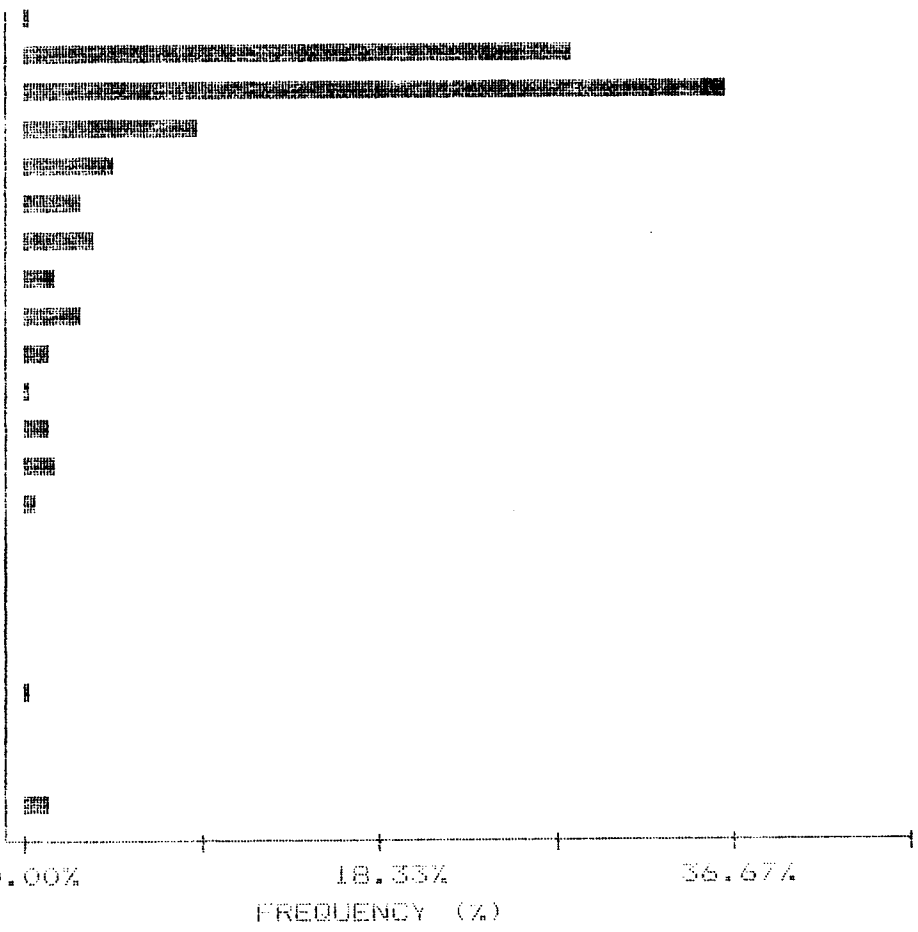
NUMBER OF SAMPLES:	210
MAXIMUM VALUE:	3290.00 PPM
MINIMUM VALUE:	30.00 PPM
MEAN:	171.60 PPM
STD. DEVIATION:	284.77 PPM
COEFF. OF VARIATION:	1.66

5 HIGHEST PB VALUES:

S84204	3290.00 PPM
S84137	1760.00 PPM
S84246	1090.00 PPM
S84184	876.00 PPM
S84110	788.00 PPM

HISTOGRAM FOR PB CLASS INTERVAL = 42.3

MID CLASS PPM	CLASS %
< 30.00	.48
51.15	28.57
93.45	36.67
135.75	9.05
178.05	4.76
220.35	3.33
262.65	3.81
304.95	1.90
347.25	3.33
389.55	1.43
431.85	.48
474.15	1.43
516.45	1.90
558.75	.95
601.05	0.00
643.35	0.00
685.65	0.00
727.95	0.00
770.25	.48
812.55	0.00
854.85	0.00
> 876.00	1.43



MIN-EN LABORATORIES LTD.

SPECIALISTS IN MINERAL ENVIRONMENTS

705 WEST 15TH STREET NORTH VANCOUVER, B.C. CANADA V7M 1T2

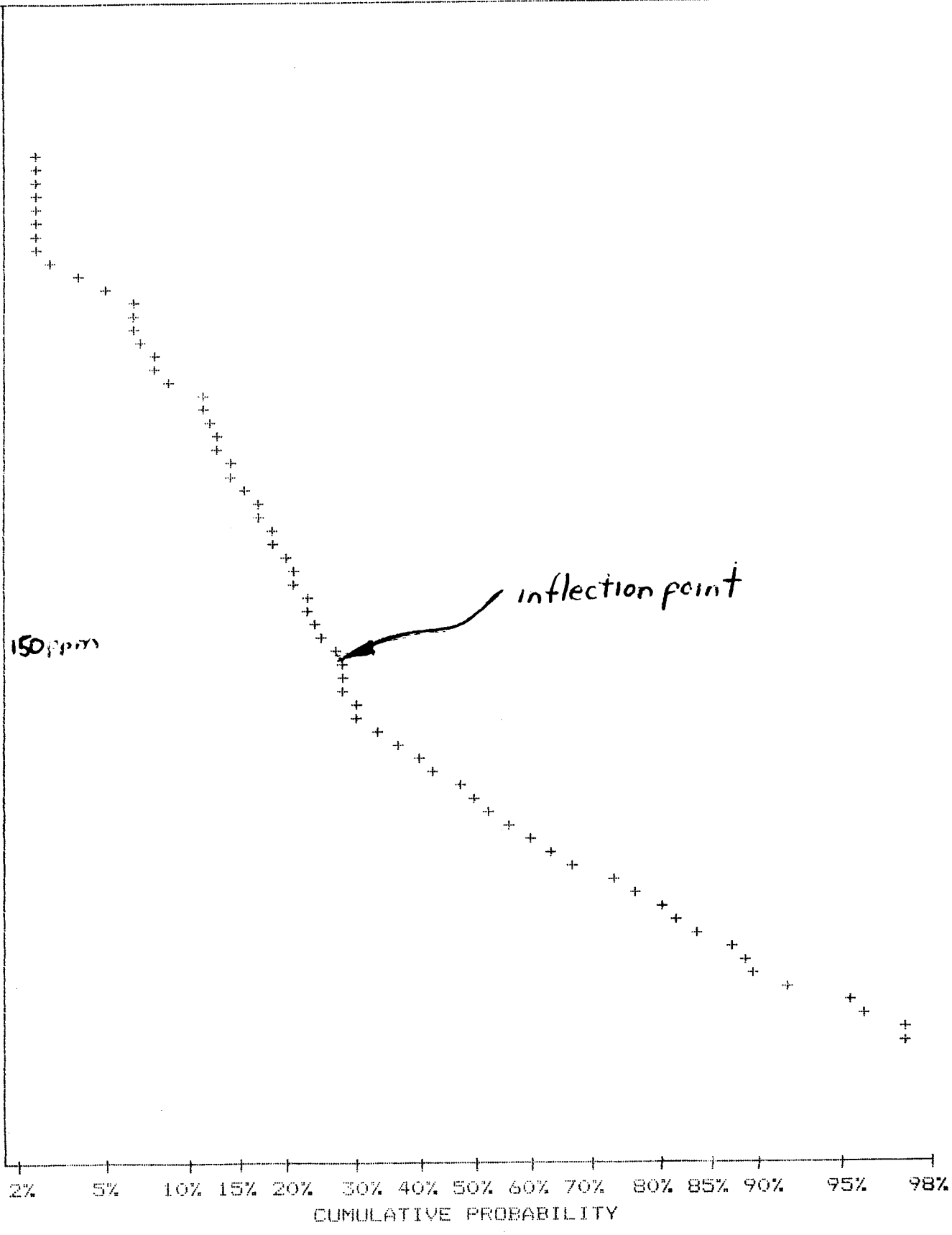
TELEX: 04-352828 PHONE:(604)980-5814 OR (604)988-4524

CUMMULATIVE PROBABILITY PLOT ON PB

COMPANY:ACTIVE MINERALS
ATTN:C. GRAF
PROJECT:
FILE#:4-1062/4-1100

DATE:NOVEMBER 13/84
SAMPLE TYPE:SOIL
ANALYSIS TYPE:GEOCHEM

UPPER LIMIT (PPM)	CUMMUL. FREQ. (%)
910.17	1.43
833.91	1.90
764.04	2.38
700.05	2.38
641.40	2.38
587.64	2.38
538.41	3.33
493.32	5.24
451.98	6.67
414.12	7.14
379.41	8.10
347.64	11.43
318.51	12.38
291.81	12.86
267.39	14.76
244.98	17.14
224.46	18.57
205.65	20.00
188.43	21.90
172.62	23.81
158.16	25.71
144.93	28.57
132.78	28.57
121.65	30.95
111.45	37.14
102.12	42.86
93.57	50.00
85.74	56.67
78.54	63.81
71.97	73.81
65.94	80.00
60.42	83.81
55.35	88.57
50.70	91.90
46.47	95.71
42.57	97.14
39.00	98.10
35.73	98.57
32.73	99.05
30.00	99.52



MIN-EN LABORATORIES LTD.

SPECIALISTS IN MINERAL ENVIRONMENTS

705 WEST 15TH STREET NORTH VANCOUVER, B.C. CANADA V7M 1T2

TELEX: 04-352828 PHONE:(604)980-5814 OR (604)988-4524

STATISTICAL SUMMARY ON ZN

COMPANY:ACTIVE MINERALS
ATTN:C. GRAF
PROJECT:
FILE#:4-1062/4-1100

DATE:NOVEMBER 13/84
SAMPLE TYPE:SOIL
ANALYSIS TYPE:GEOCHEM

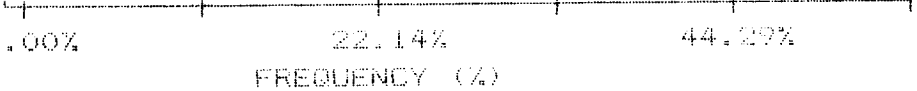
NUMBER OF SAMPLES:	210
MAXIMUM VALUE:	11900.00 PPM
MINIMUM VALUE:	6.00 PPM
MEAN:	289.42 PPM
STD. DEVIATION:	891.06 PPM
COEFF. OF VARIATION:	3.08

5 HIGHEST ZN VALUES:

S84283	11900.00 PPM
S84230	3380.00 PPM
S84137	1930.00 PPM
S84228	1720.00 PPM
S84250	1390.00 PPM

HISTOGRAM FOR ZN CLASS INTERVAL = 85.7

MID CLASS PPM	CLASS %
< 6.00	.48
48.85	44.29
134.55	26.19
220.25	6.67
305.95	6.19
391.65	2.38
477.35	2.38
563.05	.48
648.75	2.38
734.45	1.43
820.15	.95
905.85	.48
991.55	0.00
1077.25	1.90
1162.95	.95
1248.65	0.00
1334.35	.48
1420.05	.95
1505.75	0.00
1591.45	0.00
1677.15	0.00
> 1720.00	1.43



MIN-EN LABORATORIES LTD.

SPECIALISTS IN MINERAL ENVIRONMENTS

705 WEST 15TH STREET NORTH VANCOUVER, B.C. CANADA V7M 1T2

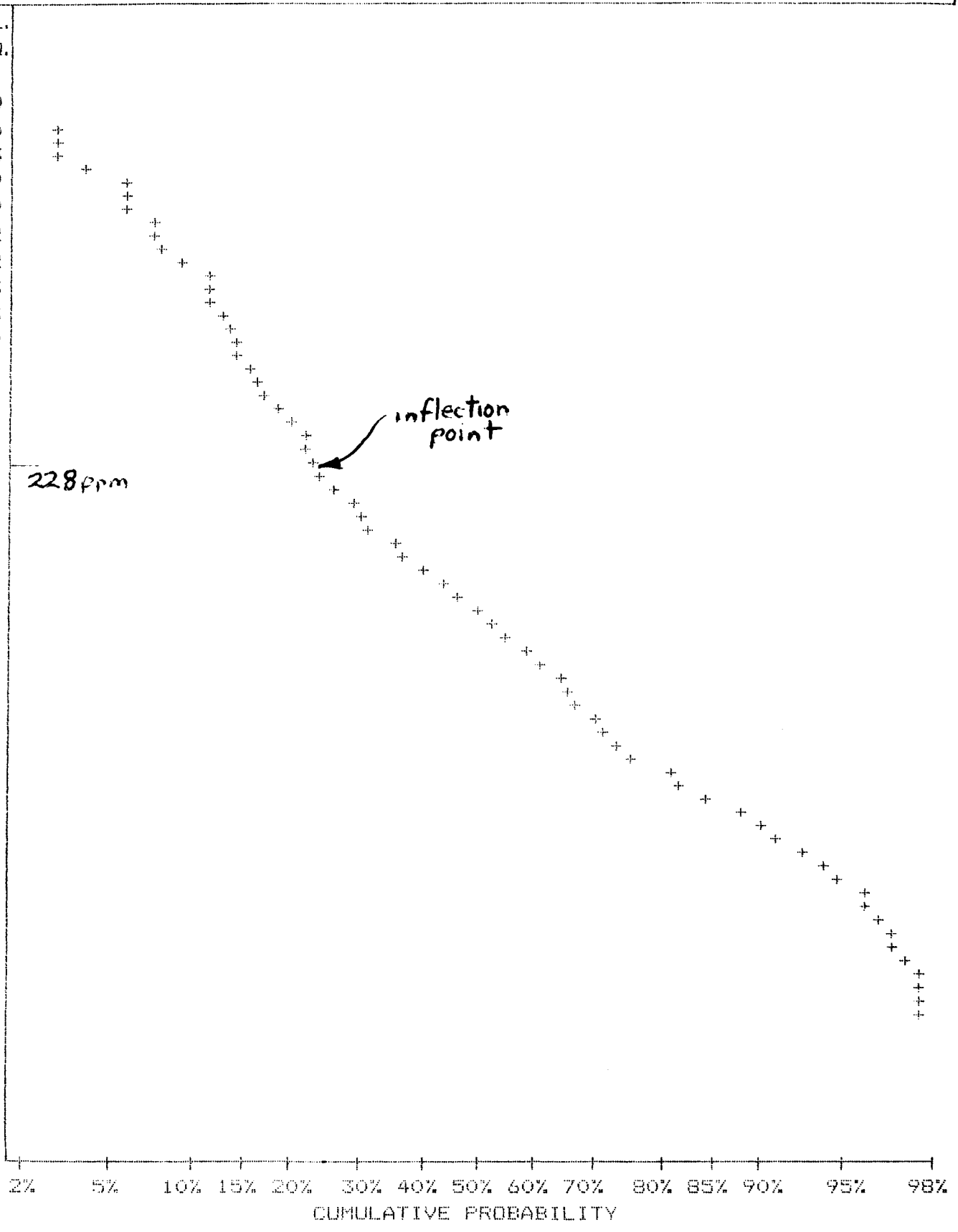
TELEX: 04-352828 PHONE:(604)980-5814 OR (604)988-4524

CUMMULATIVE PROBABILITY PLOT ON ZN

COMPANY:ACTIVE MINERALS
ATTN:C. GRAF
PROJECT:
FILE#:4-1062/4-1100

DATE:NOVEMBER 13/84
SAMPLE TYPE:SOIL
ANALYSIS TYPE:GEOCHEM

UPPER LIMIT (PPM)	CUMMUL. FREQ. (%)
1570.91	1.90
1361.92	2.86
1180.73	3.33
1023.65	6.19
887.47	6.19
769.40	7.62
667.04	9.52
578.30	11.43
501.36	13.33
434.66	14.29
376.84	15.71
326.70	17.62
283.24	20.48
245.56	22.86
212.89	24.29
184.57	29.05
160.01	31.43
138.73	37.14
120.27	44.76
104.27	50.00
90.40	55.71
78.37	61.90
67.94	66.19
58.90	70.00
51.07	73.33
44.27	80.95
38.38	84.76
33.28	90.00
28.85	92.86
25.01	94.76
21.68	95.71
18.80	96.67
16.30	97.14
14.13	97.62
12.25	97.62
10.62	98.57
9.21	99.05
7.98	99.52
6.92	99.52
6.00	99.52



APPENDIX III

COST STATEMENT

COST STATEMENT

1.	SALARIES (Field) 11 days, September 4-25, 1984	
	C. Graf and P. Kulich	$ 4,125.00
	C. Graf (Office) 10 days, November, 1984	$ 2,500.00
2.	HELICOPTER (Northern Mountain Helicopters)	
	(Daily flights to claims from Snippaker Airstrip)	$ 3,382.00
	Rental @ $400/hr. and fuel @ $4.50/gal. (6.6 hrs.)	
3.	GEOCHEMICAL ANALYSIS (MinEn Laboratories)	
	(10 element ICP plus gold, sample preparation)	
	323 soil samples @ $11.60	$ 3,746.80
	5 rock samples @ $15.50	$ 77.50
	6 element statistics 210 samples	$ 252.00
4.	CAMP STAPLES (Groceries, fuel, etc.)	
	22 man day @ $20/man day	$ 440.00
5.	CAMP SUPPLIES AND GROCERY AIR FREIGHT CHARGES	$ 329.88
6.	CAMP EXPEDITING (J. Black Terrace, B.C.)	$ 230.00
7.	EQUIPMENT RENTAL	
	11 days @ $6.00/day	$ 66.00
8.	MAP REPRODUCTION AND DRAFTING	$ 1,800.00
9.	TRAVEL (Air transportation, Vancouver-Snippaker -Vancouver)	$ 1,347.80
10.	MANAGEMENT AND ACCOUNTING	$ 3,400.00
11.	AIRFREIGHT (Air B.C., MinEn)	
	(Transportation of equipment and samples)	$ 1,093.40
12.	OFFICE SUPPLIES	$ 379.85
13.	REPORT TYPING AND PHOTOCOPYING	$ 500.00
	TOTAL	$23,670.23

APPENDIX IV

STATEMENT OF QUALIFICATIONS

STATEMENT OF QUALIFICATIONS

I, CHRIS GRAF, do hereby declare that:

(1) I graduated from the University of British Columbia, Vancouver British Columbia in 1974 with a B.Ap.Sc. Degree in Geological Engineering.

(2) That I am a registered Professional Engineer in the Province of British Columbia.

(3) That I have practised my profession for ten years with numerous mining companies in British Columbia.

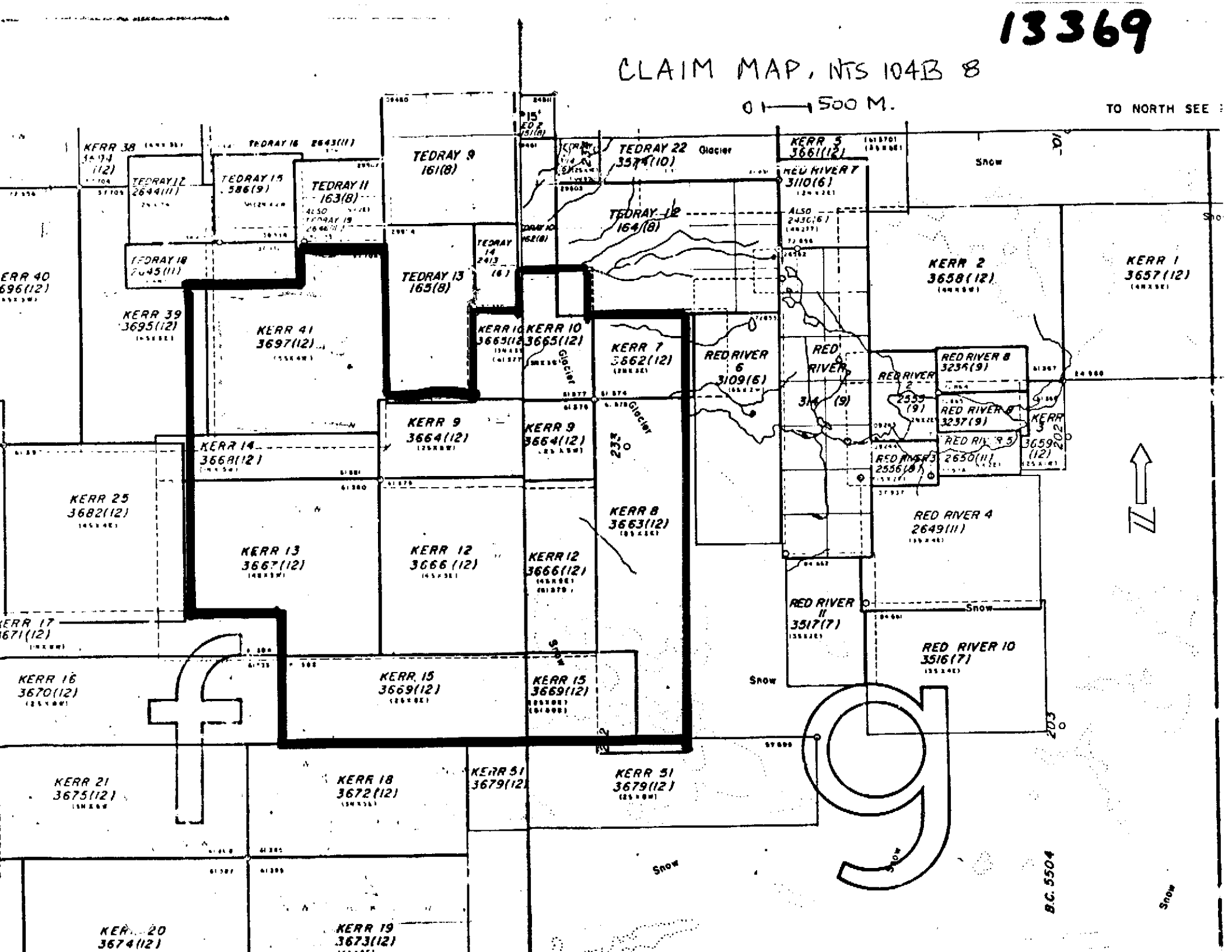
Chris Graf
1015-837 West Hastings Street
Vancouver, British Columbia
V6C 1C4

13369

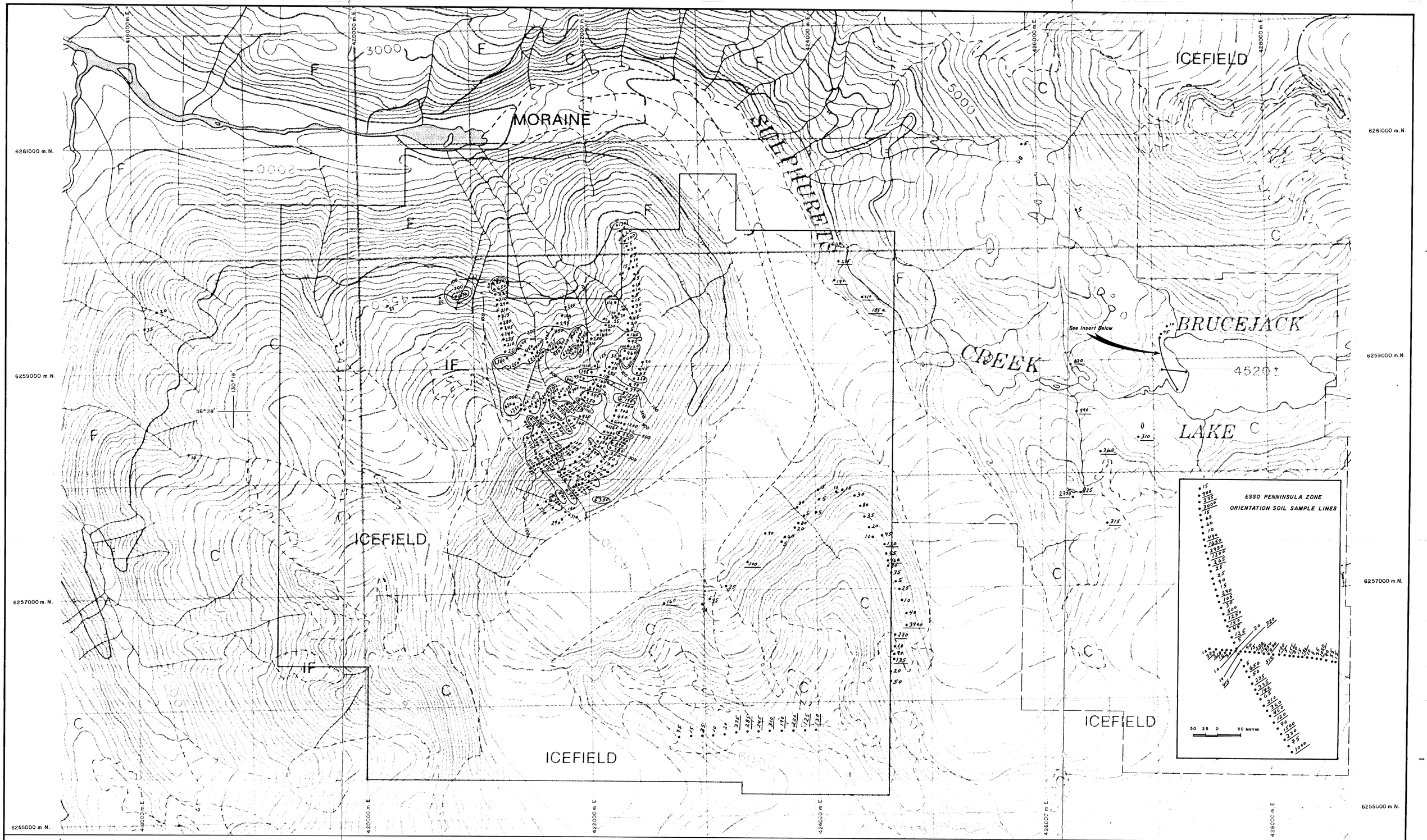
CLAIM MAP, NTS 104B 8

0 ⟵ 500 M.

TO NORTH SEE



418000 m.E
420000 m.E
422000 m.E
424000 m.E
426000 m.E
428000 m.E
6261000 m.N
6259000 m.N
6257000 m.N
6255000 m.N
56° 28'
130° 19'
MORAINE
ICEFIELD
BRUCEJACK
RIVER
See Insert Below
Sample Numbers K029 - K041 Taken During 1983 Programme
ESSO PENNINSULA ZONE
ORIENTATION SOIL SAMPLE LINES
50 25 0 50 Metres
LEGEND
• 215 ····· Sample location and number
Note : All sample location numbers are prefixed by S840
GEOLOGICAL BRANCH
ASSESSMENT REPORT
13,369
Claims held by BRINCO
Claims held by ESSO
SCALE 1:12500
500 0 500 1000 Metres
BRINCO MINING LTD.
KERR CLAIMS
SAMPLE LOCATIONS AND NUMBERS (1)
WORK BY C. GRAF
DRAWN
DATE NOV. 1984
FIGURE 4
REVISED
N.T.S. 104 B/12 E
ACTIVE MINERAL EXPLORATIONS LTD.
EXCLUSIVE DRAFTING SERVICES LTD.



LEGEND

- 325 ··· ppb Au
- 100 ··· 100 ppb Au
- 300 ··· 300 ppb Au
- 500 ··· 500 ppb Au
- 220 ··· Results ≥ 100 ppb

GEOLOGICAL BRANCH
ASSESSMENT REPORT
13,369

Claims held by BRINCO

Claims held by ESSO

SCALE 1:12500
500 0 500 1000 Metres

BRINCO MINING LTD.
KERR CLAIMS
ppb Au
Au CONTOURED (2)

WORK BY	DRAWN	DATE	FIGURE
C. GRAF		NOV. 1984	5
REVISED		N.T.S. 104 B/8	

ACTIVE MINERAL EXPLORATIONS LTD.

EXCLUSIVE DRAFTING SERVICES LTD.

MORAINE

SUTHERLAND CREEK

BRUCEJACK CREEK

LAKE

ICEFIELD

See Insert Below

418000 m.E | 420000 m.E | 422000 m.E | 424000 m.E | 426000 m.E | 428000 m.E

6261000 m.N.

6259000 m.N.

6257000 m.N.

6255000 m.N.

56° 28'

130° 18'

LEGEND

- 2.8 ···· ppm Ag
- 3 ···· 3 ppm Ag
- 5 ···· 5 ppm Ag
- 3.6 ···· Results ≥ 3 ppm

Claims held by BRINCO

Claims held by ESSO

SCALE 1:12500

500 0 500 1000 Metres

ESSO PENNINSULA ZONE
ORIENTATION SOIL SAMPLE LINES

50 25 0 50 Metres

GEOLOGICAL BRANCH
ASSESSMENT REPORT

13,369

BRINCO MINING LTD.

KERR CLAIMS

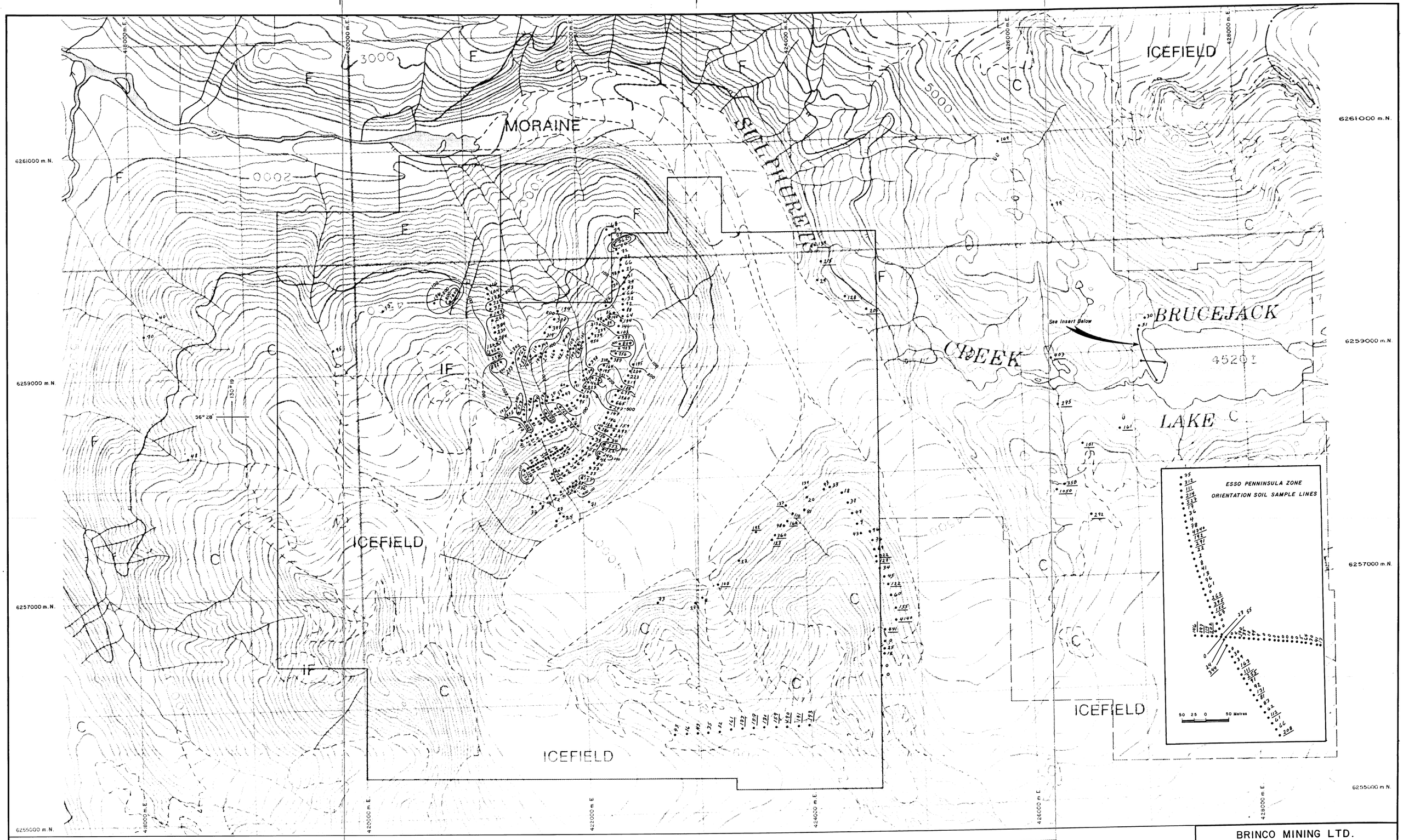
ppm Ag

Ag CONTOURED (3)

WORK BY	DRAWN	DATE	FIGURE
C. GRAF		NOV. 1984	6
REVISED		N.T.S. 104 B/8	

ACTIVE MINERAL EXPLORATIONS LTD.

EXCLUSIVE DRAFTING SERVICES LTD.



GEOLOGICAL BRANCH
ASSESSMENT REPORT

13,369

LEGEND

- •/47 ··· ppm As
- 100 ··· 100 ppm As
- 200 ··· 200 ppm As
- 500 ··· 500 ppm As
- •/37 ··· Results ≥ 100 ppm

Claims held by BRINCO

Claims held by ESSO

SCALE 1:12500

500 0 500 1000 Metres

BRINCO MINING LTD.

KERR CLAIMS

ppm As

As CONTOURED (4)

WORK BY	DRAWN	DATE	FIGURE
C. GRAF		NOV. 1984	7
REVISED		N.T.S. 104 B/8	

ACTIVE MINERAL EXPLORATIONS LTD.

EXCLUSIVE DRAFTING SERVICES LTD.

MORAINE

SUSPECTURE L.

ICEFIELD

BRUCEJACK CREEK

LAKE C

See Insert Below

ICEFIELD

ICEFIELD

ICEFIELD

6261000 m.N.

6259000 m.N.

6257000 m.N.

6255000 m.N.

416000 m.E.

420000 m.E.

422000 m.E.

424000 m.E.

426000 m.E.

428000 m.E.

56° 28'

130° 19'

ESSO PENNINSULA ZONE
ORIENTATION SOIL SAMPLE LINES

50 25 0 50 Metres

GEOLOGICAL BRANCH
ASSESSMENT REPORT

13,369

LEGEND

- •133 ··· ppm Cu
- 100 ··· 100 ppm Cu
- 300 ··· 300 ppm Cu
- 500 ··· 500 ppm Cu
- •123 ··· Results ≥ 100 ppm

Claims held by BRINCO

Claims held by ESSO

SCALE 1:12500

500 0 500 1000 Metres

BRINCO MINING LTD.

KERR CLAIMS

ppm Cu

Cu CONTOURED (5)

WORK BY	DRAWN	DATE	FIGURE
C. GRAF		NOV. 1984	8
REVISED		N.T.S. 104 B/8	

ACTIVE MINERAL EXPLORATIONS LTD.

EXCLUSIVE DRAFTING SERVICES LTD.

MORAINE

SULPHURET

ICEFIELD

BRUCEJACK

CREEK

LAKE

4520 f

See Insert Below

ICEFIELD

ICEFIELD

ICEFIELD

7563

56°28'

130°19'

418000 m.E

420000 m.E

422000 m.E

424000 m.E

426000 m.E

428000 m.E

6261000 m.N.

6259000 m.N.

6257000 m.N.

6255000 m.N.

3000

5000

6000

ESSO PENNINSULA ZONE
ORIENTATION SOIL SAMPLE LINES

50 25 0 50 Metres

GEOLOGICAL BRANCH
ASSESSMENT REPORT

13,369

LEGEND

- ·109 ··· ppm Pb
- 100 ··· 100 ppm Pb
- 250 ··· 250 ppm Pb
- 500 ··· 500 ppm Pb
- ·153 ··· Results ≥ 100 ppm

Claims held by BRINCO

Claims held by ESSO

SCALE 1:12500

500 0 500 1000 Metres

BRINCO MINING LTD.

KERR CLAIMS

ppm Pb

Pb CONTOURED (6)

WORK BY	DRAWN	DATE	FIGURE
C. GRAF		NOV. 1984	9
REVISED		N.T.S. 104 B/8	

ACTIVE MINERAL EXPLORATIONS LTD.

MORAINE

SULPHURETTE

ICEFIELD

BRUCEJACK

CREEK

LAKE

45201

See Insert Below

ESSO PENNINSULA ZONE
ORIENTATION SOIL SAMPLE LINES

50 25 0 50 Metres

418000 m.E. 420000 m.E. 422000 m.E. 424000 m.E. 426000 m.E. 428000 m.E.

6261000 m.N.
6259000 m.N.
6257000 m.N.
6255000 m.N.

56° 28'
130° 19'

GEOLOGICAL BRANCH
ASSESSMENT REPORT

13,369

LEGEND

- /31 ··· ppm Zn
- 200 ··· 200 ppm Zn
- 500 ··· 500 ppm Zn
- 1000 ··· 1000 ppm Zn
- 303 ··· Results ≥ 200 ppm

Claims held by BRINCO

Claims held by ESSO

SCALE 1:12500

500 0 500 1000 Metres

BRINCO MINING LTD.

KERR CLAIMS

ppm Zn

Zn CONTOURED (7)

WORK BY	DRAWN	DATE	FIGURE
C. GRAF		NOV. 1984	10
REVISED		N.T.S. 104 B/8	

ACTIVE MINERAL EXPLORATIONS LTD.

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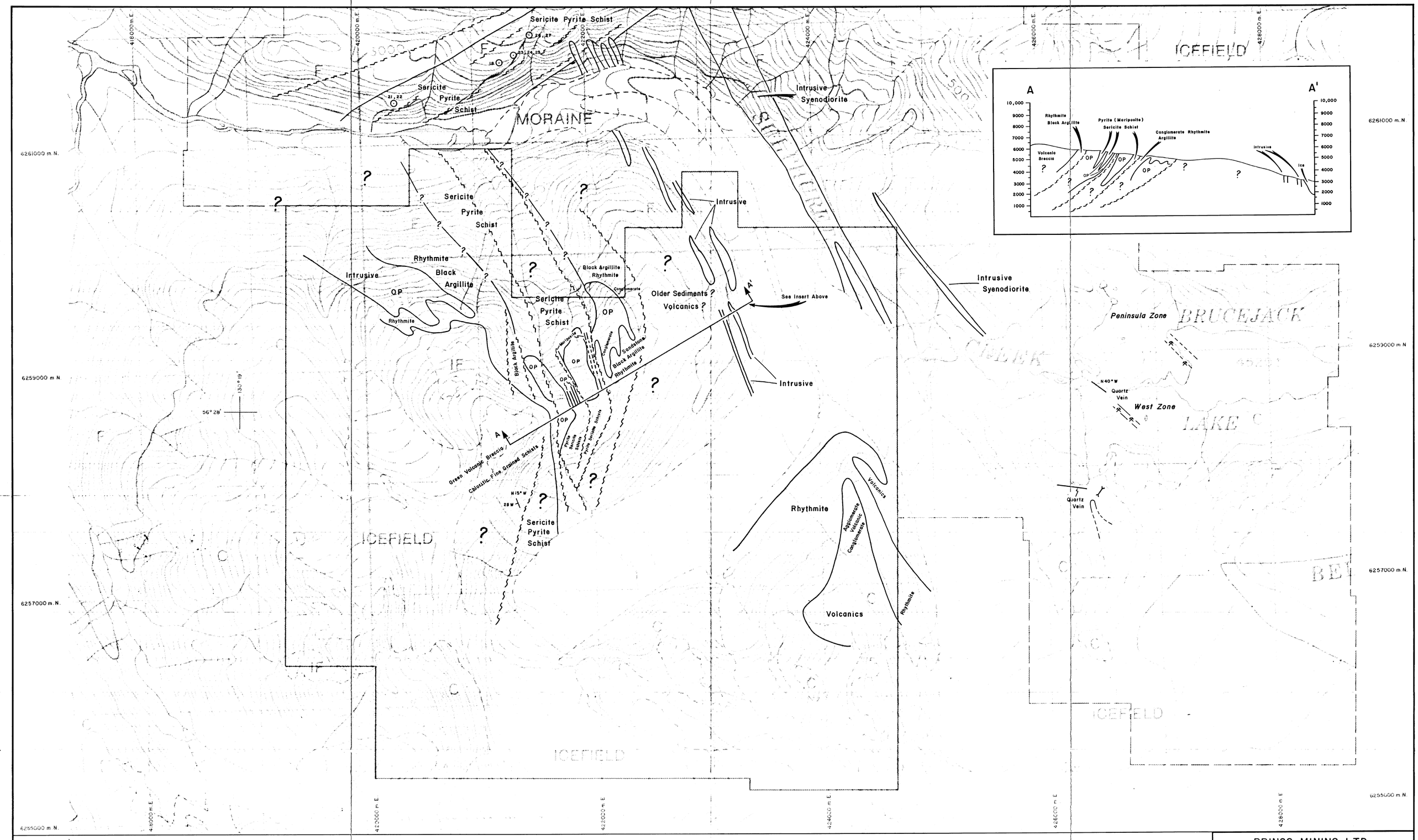

GEOLOGICAL BRANCH
ASSESSMENT REPORT

13,369

○18 ····· Esso Diamond Drill Hole Previously Drilled

Claims held by BRINCO

Claims held by ESSO

SCALE 1:12500

500 0 500 1000 Metres

BRINCO MINING LTD.

KERR CLAIMS

GEOLOGY

(8)

WORK BY	DRAWN	DATE	FIGURE
C. GRAF		NOV. 1984	11
REVISED		N.T.S. 104 B/8	

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