85-177-14216

# CHUTINE 1,2,3 MINERAL CLAIMS
# (CONOVER CREEK)

LIARD MINING DIVISION
NTS 104G12E

C. GRAF JANUARY 1985

| WORK PERFORMED ON | RECORD NO. | DATE RECORDED | NO. OF UNITS |
|---|---|---|---|
| Chutine 1 | 2368 | 11/8/82 | 4 |
| Chutine 2 | 2369 | 11/8/82 | 2 |
| Chutine 3 | 2370 | 11/8/82 | 2 |

| Latitude | Longitude |
|---|---|
| 57° 41' N | 131° 42' W |



OPERATOR:
ACTIVE MINERALS LTD.

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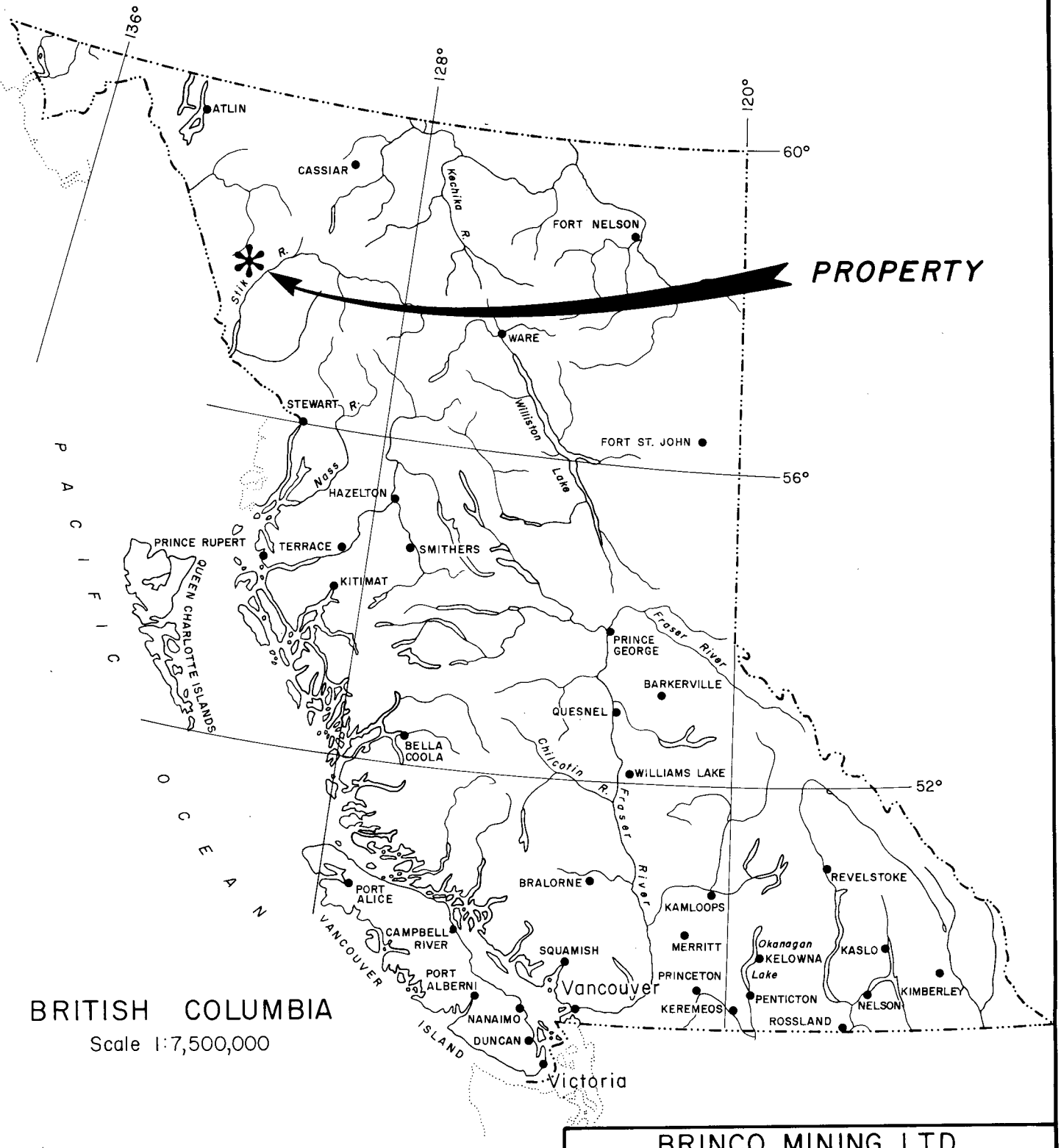



BRINCO MINING LTD.

CHUTINE CLAIMS

# LOCATION MAP

| WORK BY | DRAWN | DATE | FIGURE |
|---|---|---|---|
| C. GRAF | | Jan. 1985 | 1 |
| Revised _____ | | N.T.S. 106 G/12 | |

ACTIVE MINERAL EXPLORATIONS LTD.

# CHUTINE CLAIMS

## Liard Mining Division

## NTS 104G

## SUMMARY

A mineral exploration program consisting mainly of geochemical soil sampling, rock sampling and prospecting, was carried out on the Chutine Claims during September 18 - 21, 1984. The exploration work was funded by Brinco Ltd. and carried out by Active Minerals Ltd. personnel.

The claims were originally staked by the writer (C. Graf) to cover a target of previously discovered mineral showings and an extensive alteration zone, thought to have precious metal potential.

Two soil sampling lines were run along the strike of the mineralized zone for a distance of 2 km. In addition, other short soil sampling lines were made across the two groups of mineral showings (Lady Jane and Jackson). All samples were taken at 10 m spacings.

A total of 99 soil samples were taken and their mean and high values for various elements are listed as follows:

| | |
|---|---|
| Gold: | 48 ppb, 1700 ppb |
| Silver: | .77 ppm, 12.3 ppm |
| Arsenic: | 33.6 ppm, 178 ppm |
| Copper: | 50.2 ppm, 424 ppm |
| Lead: | 115.4 ppm, 1650 ppm |
| Zinc: | 245 ppm, 2980 ppm |

Eleven rock samples were collected for assay from 11 separate mineral showings, and their high values are listed below:

| | |
|---|---|
| Gold: | 1080 ppb |
| Silver: | 165 ppm |
| Arsenic: | 755 ppm |
| Copper: | 46,100 ppm |
| Lead: | 45,400 ppm |
| Zinc: | 120,000 ppm |

Although the gold values are generally low and spotty, the results for other elements, particularly silver, are sufficiently high to warrant further work. This work should involve more soil and rock sampling, both along strike to the north and south, where the shear-alteration zone extends for many miles.

## LOCATION AND ACCESS

The Chutine mineral claims are located at 57° 41'N Latitude and 131° 42'W Longitude in Liard Mining Division (NTS 104G 12E) (Figure 1). The LCP is at 3100 feet elevation and the property varies from 1500 feet to 5000 feet elevation asl. Although the claims only lie 6 km west of the Stikine River, the nearest access road is north of the Chutine River and exploration work requires helicopter support.

The nearest town which could provide supplies, manpower and other services is Telegraph Creek, B.C., which lies 36 km north up the Stikine River. Helicopters are only available for Charter from the town of Dease Lake which lies a further 100 km east. Air B.C. operates a twin otter service on a daily basis from Terrace, B.C. to either Telegraph Creek or Dease Lake.

## CLAIMS INFORMATION

Claims comprising the Chutine property are listed below:

| Claim Name | No. of Units | Record No. | Date Recorded |
|---|---|---|---|
| Chutine 1 | 4 | 2368 | 11/8/82 |
| Chutine 2 | 2 | 2369 | 11/8/82 |
| Chutine 3 | 2 | 2370 | 11/8/82 |

## HISTORY AND PREVIOUS WORK

The original mineral discovery was made in 1929 by a Local Stikine River prospector Frank Jackson. Dr. F. Kerr of the Geological Survey of Canada visited the property in 1929 during his Stikine River geological mapping survey and discusses it in GSC memoir 246, p. 76-77.

Dr. Kerr was impressed with an extensive alteration zone within which the veins and mineralization were located. He describes the altered zone as follows:

> "From a point on the ridge at an elevation of about 1,750 feet, a rusty zone can be traced southwesterly for about 3 miles, mainly just south of the crest of the ridge, but on the southwest end it falls considerably below the crest and is lost beneath the drift filling the wide valley of Conover Creek. Near the head of the creek, however, a zone of somewhat similar nature, with about the same strike appears; so that the zone may be continuous for several miles beneath the valley, and, in fact, may have determined the position of the valley, as the most altered sections are highly fissile and more easily eroded than the adjacent rocks.
>
> The width of the zone is not definitely known at any place, but appears to have a maximum width of 1,500 feet. The rock materials of the zone have

been partly replaced by carbonates, quartz, white mica, and chlorite, and are locally impregnated with pyrite and other sulphides. In places replacement has been most intense near the centre of the zone, and becomes gradually less toward the edges. In other places intense alteration may be confined to bands of varying size, separated by bands or horses of relatively unaltered rock. The addition of pyrite is not dependent on the extent of alteration; the pyrite-rich parts may or may not be extensively altered.

Within this great zone there are irregular, quartzone masses carrying much chalcopyrite, galena and sphalerite. These, by reason of their quartz content, are resistant to erosion and hence stand high. Many of them resemble boulders in a matrix of the fissile, rusty, volcanic rocks. Others, larger, are more or less lenticular. In place, similar material occurs as a cement for breccia, or in irregular veins that may extend beyond the zone into apparently unaltered rock. There is no apparent system to their distribution.

It would appear that the altered zone was formed first, and that at some later date it was broken by further movements that permitted access of the sulphide-bearing solutions. These movements, however, do not seem to have formed any well-defined channel in which a body of commercial size might be deposited.

He also reports a representative assay of the better material to contain: .01 oz/ton Au, 1.74 oz/ton Ag, 1.03% Cu, 5.5% Pb, 7.76% Zn.

The prospect was examined by J.D. Mandy of the B.C. Department of Mines and is described by him in the 1929 Annual Report, p. 115 as follows:

"Three well-defined shear-zones occur in a light-coloured pyritized volcanic associated with gabbro. Two of the zones, 3 to 4 feet in width and

several hundred feet apart, strike northwesterly and dip steeply south. What appears to be the main zone, in which undelimited widths up to 10 feet are exposed, strikes approximately northeast along the crest of the ridge for a distance of about 700 feet. The outcrops are intensely oxidized, but in the solid places show encouraging mineralization of zinc-blende, some galena, chalcopyrite, malachite, and azurite, with a little grey copper. A sample across 3.5 feet of quartz vein mineralized with pyrite, chalcopyrite, specularite, and some galena assayed: Gold, 0.02 oz to the ton; silver, 2.4 oz to the ton, copper, 0.4 per cent; lead, trace. A sample of the solid material on the dump from an oxidized outcrop 7.5 feet wide assayed: Gold, trace; silver, 3 oz to the ton; lead, 1 per cent; zinc, 6 per cent. A sample from 4 feet of solid vein-matter from a heavily oxidized outcrop totalling 10.2 feet in width assayed: Gold, trace; silver, 3 oz to the ton; copper, 0.4 per cent; lead, 0.8 per cent; zinc, 6 per cent. The showing warrants systematic exploration and the area, particularly the lower elevations, should be further prospected."

In 1964, during the Stikine porphyry copper rush, the property was restaked and prospected by Silver Standard Company and Asarco Ltd. (BCDM Assessment Report #591). Their geologist also recognized the alteration zones, one of which is described as;

"... a conspicuous zone of silicification and pyritization at least 1000' wide which trends northeasterly and outcrops along the north ridge. This zone includes both flows and pyroclastics. Alteration and pyritization vary widely. There is no obvious structural control, for example, extensive or intensive shearing and/or shattering and brecciation. Alteration, etc., may be due to proximity to underlying hidden intrusives which have selectively altered and pyritized certain horizons in the general area of the axial place of the assumed tight syncline. The alteration also seems to be locally controlled by transverse fault

structures. Sulphide mineralization is confined to pyrite which occurs as disseminations and on joint places. Minor barren or pyritized quartz gashes and bunches are scattered throughout these zones of alteration. Grains of accessory magnetite occur in the loss altered tuffs and flows but progressively decrease with the degree of alteration. Weathering and forest fires have accentuated the pyritized zones into rather conspicuous, rusty outcrops".

The Asarco assessment report also describes the mineralization and workings in detail:

"**Lady Jane** - vein has been explored by a series of open cuts for a strike distance of 1100' and vertical range of just under 300'. Main open cut is at 3600' elevation. There is evidence that a tunnel was started 50' southeast of this to crosscut this showing at about 25' depth but the tunnel is caved and probably was short of its objective. Some cuts on the southern projection of the vein apparently failed to pick up any strong extension in this direction, although these cuts are not partially covered. To the north the various workings, some in poor shape, show the irregular nature of the quartz-carbonate and sulphide mineralization. Although irregular in detail, the trace of this vein is amazingly straight and hence it is felt that it follows a minor transverse fault structure. Maximum average width of vein would be less than 5' and average value not more than 0.005 oz Au, 0.50 oz Ag, and 2% combined Pb, Zn, Cu. Both extensions are drift covered but there is no reason to expect anything better than already exposed. Average strike of vein is northerly and dips about 60° westerly. The only other fracture material in the Lady Jane area are some inconsequential occurrences which seem to go nowhere. The silicified and pyritized replacement alteration hereabouts is of no economic importance.

For the sake of description, the **Jackson Showings** are considered to include all those east of the crest of the ridge around 3800' elevation, that is,

those in the eastern half of the map. Three unimportant veins, under 0.5' in width at best as exposed, occur in the western 900' and show typical gangue and sulphide mineralization. Several veins occur 500' to 1300' further east and have been explored by open cuts which are not partly sloughed. The strongest of these (Sample No. 87) has not been traced beyond the single open cut on it. In this several lenses and stringers of typical vein filling occur in twisted fashion with no assurance that these extend any distance. On a bluff 500' east of the above series of fractures, there is a vague zone up to 100' wide made up of a discontinuous main vein up to 5' wide (Samples 91, 92 and 93) and some minor, likewise discontinuous fractures. About 500' northeast of this, there is a bunchy occurence of typical vein material. The majority of the Jackson veins strike northwest to northerly in contrast to the Lady Jane where the strikes are generally northerly to north northeast".

Various claims have been staked on the property in the 1960's and 1970's, however, there is no record of any exploration work having been performed. The prospect was staked by C. Graf in August 1982 and optioned to Brinco Mining Ltd. in 1984.

## GEOCHEMISTRY AND MINERALIZATION

The 1984 geochemical exploration of the Chutine claim group consisted of C-horizon soil sampling and rock sampling. The location of all samples are shown on Figure 2.

A total of 99 C-horizon samples were taken with a mattock at 50 and 75 m spacing along 3 parallel lines. The sample lines and stations were oriented and measured using topofil and silva compass. The soils are immature and would best be defined as C-horizon on talus fines.

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 analyzed for gold using acid digestion and atomic absorption techniques. They were also analyzed for a suite of 10 other elements using the inductively coupled plasma (ICP) emission spectroscopy techniques. Any samples which did not provide at least 1 gram of -80 mesh material, were subsequently sieved at -40 mesh and if necessary -20 mesh. These mesh sizes should always be noted when comparing gold contents between various samples or properties.

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

No large mineral occurences are indicated by the results of the soil sampling survey. Also, no new mineral discoveries are indicated in the area sampled.

## CONCLUSIONS

1. A number of base and precious metal vein occurences are localized within a major shear-alteration zone along a strike length of 1 km. The showings are all small and do not contain significant gold values (maximum 1080 ppb).

2. A corresponding C-horizon soil sampling survey did not outline any obvious gold targets for further exploration.

3. The mineral showings occur within an extensive structure and alteration zone, and further work should be oriented towards finding new mineralization along its strike.

## RECOMMENDATIONS

The only recommendation is to perform stream silt and talus fines sampling along the strike of the altered shear zone which controls the structure of Conover Creek Valley. This structure is related to the mineral showings presently known, and it is possible that other mineralized zones occur along it. It is one of a system of faults that form a parallel series of grabens and control the structure of the Stikine Valley for 30 km north from the lower Chutine valley.

# APPENDIX I

# GEOCHEMICAL RESULTS

COMPANY: ACTIVE MINERALS | MIN-EN LABS ICP REPORT | (ACT:GEO38) PAGE 1 OF 1

PROJECT No: | 705 WEST 15th ST., NORTH VANCOUVER, B.C. V7M 1T2 | FILE No: 4-1100S/F5&6

ATTENTION: C.GRAF | (604)980-5814 OR (604)988-4524 | *TYPE SOIL GEOCHEM* | DATE: OCTOBER 5, 1984

| (REPORT VALUES IN PPM) | AG | AS | B | CU | FE | MN | PB | SB | ZN | BA | AU-PPB |
|---|---|---|---|---|---|---|---|---|---|---|---|
| C84008 | .0 | 14 | 25 | 27 | 35600 | 321 | 23 | 8 | 63 | 177 | 10 |
| C84009 | .0 | 28 | 13 | 35 | 42500 | 2820 | 34 | 6 | 118 | 309 | 5 |
| C84010 | .4 | 8 | 23 | 23 | 59800 | 976 | 30 | 5 | 88 | 272 | 5 |
| C84011 | .7 | 29 | 23 | 40 | 69900 | 1730 | 40 | 9 | 106 | 333 | 5 |
| C84012 | .8 | 17 | 18 | 11 | 59600 | 529 | 25 | 3 | 95 | 143 | 10 |
| C84013 | .4 | 40 | 19 | 13 | 51100 | 550 | 37 | 9 | 92 | 144 | 5 |
| C84014 | .5 | 26 | 17 | 15 | 55400 | 253 | 23 | 5 | 51 | 232 | 5 |
| C84015 | .6 | 75 | 20 | 40 | 75400 | 612 | 66 | 11 | 97 | 207 | 10 |
| C84016 | .7 | 141 | 22 | 223 | 152000 | 638 | 252 | 17 | 312 | 427 | 75 |
| C84017 | .5 | 71 | 23 | 223 | 78500 | 5720 | 343 | 15 | 755 | 387 | 10 |
| C84018 | 1.9 | 174 | 27 | 277 | 99600 | 3760 | 1650 | 25 | 1870 | 487 | 290 |
| C84019 | 2.0 | 72 | 30 | 100 | 126000 | 975 | 237 | 19 | 468 | 142 | 110 |
| C84020 | .0 | 49 | 19 | 93 | 76400 | 2510 | 128 | 10 | 307 | 734 | 10 |
| C84021 | 1.0 | 105 | 25 | 149 | 171000 | 527 | 628 | 27 | 473 | 418 | 110 |
| C84022 | .8 | 0 | 19 | 7 | 69900 | 393 | 26 | 0 | 74 | 124 | 5 |
| C84023 | 1.4 | 50 | 12 | 24 | 62700 | 985 | 191 | 6 | 182 | 230 | 5 |
| C84024 | .8 | 0 | 24 | 23 | 63000 | 494 | 45 | 3 | 388 | 161 | 5 |
| C84025 | .4 | 42 | 13 | 21 | 58500 | 1590 | 89 | 9 | 260 | 365 | 20 |
| C84026 | .8 | 72 | 8 | 11 | 45300 | 257 | 102 | 11 | 84 | 495 | 80 |
| C84027 | .4 | 34 | 14 | 54 | 39200 | 2730 | 48 | 5 | 2980 | 218 | 5 |
| C84028 | .5 | 54 | 18 | 45 | 76100 | 2860 | 352 | 10 | 527 | 478 | 5 |
| C84029 | 1.0 | 65 | 23 | 71 | 96200 | 3240 | 90 | 11 | 395 | 760 | 10 |
| C84030 | .8 | 47 | 16 | 20 | 56900 | 489 | 104 | 14 | 158 | 574 | 5 |
| C84031 | 1.6 | 72 | 25 | 114 | 85600 | 2520 | 308 | 67 | 625 | 424 | 35 |
| C84032 | 3.3 | 3 | 25 | 37 | 72700 | 331 | 46 | 3 | 93 | 83 | 30 |
| C84033 | .1 | 115 | 23 | 0 | 273000 | 125 | 98 | 16 | 18 | 166 | 20 |
| C84034 | 1.0 | 22 | 21 | 47 | 67900 | 418 | 76 | 7 | 1450 | 208 | 10 |
| C84035 | .5 | 40 | 22 | 29 | 77400 | 625 | 76 | 11 | 135 | 240 | 10 |
| C84036 | .8 | 39 | 29 | 20 | 109000 | 464 | 56 | 7 | 62 | 313 | 45 |
| C84037 | .3 | 38 | 18 | 6 | 80300 | 250 | 39 | 7 | 55 | 219 | 5 |
| C84038 | .5 | 0 | 31 | 30 | 80500 | 338 | 33 | 4 | 59 | 163 | 10 |
| C84039 | .7 | 0 | 26 | 22 | 64000 | 440 | 31 | 1 | 87 | 145 | 5 |
| C84040 | 1.5 | 0 | 19 | 10 | 111000 | 935 | 18 | 0 | 90 | 137 | 25 |
| C84041 | .4 | 2 | 20 | 57 | 72700 | 2960 | 35 | 10 | 111 | 444 | 1700 |
| C84042 | .0 | 3 | 25 | 39 | 80600 | 4580 | 45 | 5 | 112 | 1140 | 15 |
| C84043 | 1.2 | 0 | 16 | 15 | 59700 | 774 | 14 | 0 | 39 | 159 | 25 |
| C84044 | .0 | 8 | 17 | 29 | 28700 | 2940 | 25 | 7 | 69 | 346 | 5 |
| C84045 | .2 | 0 | 18 | 17 | 54300 | 1420 | 21 | 1 | 62 | 202 | 5 |
| C84046 | .4 | 0 | 23 | 29 | 79900 | 1260 | 31 | 3 | 121 | 210 | 5 |
| C84047 | .0 | 16 | 18 | 27 | 72700 | 3700 | 46 | 6 | 114 | 429 | 5 |
| C84048 | .0 | 15 | 21 | 41 | 85100 | 4260 | 53 | 7 | 142 | 755 | 10 |
| C84049 | .0 | 8 | 15 | 28 | 62200 | 1780 | 33 | 6 | 109 | 425 | 5 |
| C84050 | .0 | 0 | 23 | 23 | 64000 | 1600 | 32 | 6 | 95 | 300 | 5 |
| C84051 | .6 | 12 | 21 | 24 | 57700 | 1760 | 30 | 7 | 109 | 384 | 10 |
| C84052 | .1 | 23 | 16 | 34 | 77000 | 2220 | 34 | 9 | 109 | 1020 | 5 |
| C84053 | .6 | 53 | 17 | 47 | 74100 | 513 | 49 | 7 | 106 | 442 | 5 |
| C84054 | .8 | 20 | 25 | 73 | 142000 | 349 | 57 | 10 | 80 | 500 | 25 |
| C84055 | .3 | 38 | 16 | 50 | 100000 | 781 | 43 | 9 | 77 | 211 | 10 |
| C84056 | .7 | 57 | 22 | 98 | 98500 | 1810 | 124 | 14 | 178 | 448 | 5 |
| C84057 | 1.2 | 41 | 24 | 85 | 81900 | 487 | 86 | 11 | 177 | 249 | 25 |
| C84058 | .4 | 54 | 18 | 65 | 80200 | 1360 | 75 | 8 | 132 | 428 | 60 |
| C84059 | 12.3 | 178 | 24 | 424 | 174000 | 1760 | 565 | 71 | 490 | 179 | 1030 |
| C84060 | .3 | 41 | 16 | 59 | 83500 | 2810 | 125 | 9 | 290 | 332 | 15 |
| C84061 | 2.3 | 108 | 15 | 93 | 71000 | 845 | 478 | 48 | 395 | 277 | 120 |
| C84062 | 1.0 | 28 | 21 | 41 | 60100 | 1070 | 168 | 10 | 165 | 327 | 35 |
| C84063 | .6 | 17 | 22 | 52 | 65800 | 1540 | 65 | 11 | 128 | 323 | 5 |
| C84064 | .5 | 14 | 23 | 56 | 63900 | 3250 | 81 | 11 | 303 | 394 | 5 |
| C84065 | 1.2 | 0 | 26 | 75 | 60100 | 4910 | 186 | 3 | 2350 | 272 | 15 |
| C84066 | .5 | 11 | 21 | 39 | 76100 | 355 | 42 | 8 | 75 | 100 | 5 |
| C84067 | .9 | 8 | 24 | 66 | 69600 | 768 | 47 | 13 | 402 | 259 | 40 |

COMPANY: ACTIVE MINERALS | MIN-EN LABS ICP REPORT | (ACT:GEO3B) PAGE 1 OF 1

PROJECT No: | 705 WEST 15th ST., NORTH VANCOUVER, B.C. V7M 1T2 | FILE No: 4-1100/P7&8

ATTENTION: C.GRAF | (604)980-5814 OR (604)988-4524 | *TYPE SOIL GEOCHEM* | DATE: OCTOBER 5, 1984

| (REPORT VALUES IN PPM) | AG | AS | B | CU | FE | MN | PB | SB | ZN | BA | AU-PPB |
|---|---|---|---|---|---|---|---|---|---|---|---|
| C84068 | .1 | 4 | 19 | 39 | 79800 | 557 | 98 | 1 | 107 | 155 | 20 |
| C84069 | .3 | 25 | 24 | 37 | 96400 | 851 | 186 | 7 | 173 | 112 | 10 |
| C84070 | .0 | 10 | 17 | 59 | 72400 | 2540 | 42 | 5 | 76 | 161 | 5 |
| C84071 | .2 | 0 | 22 | 34 | 91400 | 709 | 99 | 2 | 165 | 97 | 20 |
| C84072 | .0 | 54 | 24 | 62 | 98900 | 8470 | 95 | 9 | 144 | 250 | 60 |
| C84073 | 1.7 | 42 | 24 | 86 | 104000 | 1290 | 239 | 26 | 183 | 133 | 20 |
| C84074 | .3 | 29 | 23 | 56 | 90700 | 1030 | 169 | 6 | 252 | 191 | 5 |
| C84075 | .9 | 0 | 16 | 33 | 57600 | 735 | 29 | 0 | 572 | 261 | 5 |
| C84076 | .4 | 22 | 22 | 114 | 89800 | 2110 | 103 | 7 | 251 | 407 | 5 |
| C84077 | 1.1 | 0 | 25 | 39 | 96900 | 541 | 45 | 0 | 67 | 98 | 5 |
| C84078 | 1.6 | 3 | 22 | 59 | 75800 | 645 | 274 | 11 | 127 | 121 | 15 |
| C84079 | 1.4 | 42 | 25 | 13 | 91200 | 544 | 82 | 6 | 52 | 100 | 20 |
| C84080 | .6 | 65 | 30 | 26 | 95800 | 822 | 76 | 7 | 61 | 114 | 10 |
| C84081 | .4 | 113 | 25 | 43 | 142000 | 783 | 124 | 7 | 121 | 76 | 70 |
| C84082 | .5 | 0 | 16 | 8 | 57300 | 252 | 20 | 0 | 37 | 82 | 5 |
| C84083 | .4 | 9 | 17 | 19 | 77300 | 223 | 283 | 3 | 221 | 113 | 10 |
| C84084 | 1.0 | 0 | 24 | 49 | 62200 | 1690 | 22 | 0 | 381 | 111 | 5 |
| C84085 | 1.7 | 0 | 26 | 14 | 102000 | 411 | 82 | 3 | 209 | 91 | 5 |
| C84086 | .4 | 48 | 12 | 19 | 74800 | 93 | 220 | 7 | 33 | 243 | 5 |
| C84087 | .4 | 0 | 16 | 6 | 40600 | 120 | 18 | 0 | 13 | 95 | 5 |
| C84088 | .4 | 2 | 14 | 17 | 74200 | 373 | 42 | 1 | 80 | 253 | 10 |
| C84089 | .0 | 17 | 13 | 11 | 25500 | 215 | 26 | 3 | 45 | 93 | 5 |
| C84090 | .0 | 18 | 16 | 7 | 63100 | 1070 | 44 | 3 | 58 | 149 | 5 |
| C84091 | 1.2 | 32 | 25 | 39 | 85300 | 378 | 132 | 15 | 166 | 110 | 5 |
| C84092 | .8 | 19 | 31 | 66 | 119000 | 723 | 82 | 10 | 96 | 182 | 30 |
| C84093 | .9 | 6 | 18 | 8 | 42100 | 146 | 33 | 0 | 18 | 99 | 10 |
| C84094 | .8 | 0 | 28 | 18 | 69900 | 324 | 38 | 1 | 72 | 154 | 10 |
| C84095 | .2 | 38 | 25 | 66 | 55400 | 587 | 105 | 12 | 337 | 286 | 5 |
| C84096 | 1.3 | 23 | 19 | 28 | 68100 | 1780 | 253 | 12 | 118 | 187 | 5 |
| C84097 | 2.6 | 113 | 22 | 49 | 105000 | 1950 | 105 | 13 | 100 | 192 | 40 |
| C84098 | 1.0 | 68 | 14 | 40 | 69700 | 438 | 62 | 7 | 63 | 92 | 15 |
| C84099 | .0 | 43 | 15 | 65 | 58900 | 1620 | 51 | 6 | 234 | 310 | 5 |
| C84001 | .0 | 42 | 17 | 22 | 47200 | 1120 | 41 | 8 | 69 | 112 | 15 |
| C84002 | .0 | 3 | 24 | 20 | 74500 | 589 | 24 | 1 | 73 | 184 | 15 |
| C84003 | .0 | 37 | 24 | 25 | 64000 | 2810 | 38 | 10 | 84 | 500 | 25 |
| C84004 | .0 | 34 | 21 | 39 | 41400 | 726 | 27 | 10 | 68 | 188 | 40 |
| C84005 | .0 | 28 | 17 | 21 | 27000 | 636 | 28 | 9 | 41 | 202 | 5 |
| C84006 | .0 | 2 | 30 | 35 | 63000 | 552 | 25 | 5 | 55 | 158 | 5 |
| C84007 | .0 | 38 | 16 | 33 | 36800 | 1780 | 31 | 10 | 71 | 263 | 5 |
| CH001 | .0 | 37 | 18 | 54 | 66700 | 2090 | 44 | 7 | 131 | 459 | 20 |
| CH002 | 1.2 | 0 | 15 | 51 | 45100 | 809 | 212 | 1 | 186 | 231 | 5 |
| CH003 | 3.0 | 0 | 27 | 168 | 47800 | 1490 | 103 | 4 | 184 | 257 | 25 |
| CH004 | .3 | 18 | 16 | 40 | 56900 | 1170 | 76 | 6 | 3280 | 183 | 5 |
| CH005 | .7 | 3 | 21 | 91 | 55200 | 1460 | 88 | 5 | 1230 | 308 | 5 |
| CH006 | .7 | 20 | 15 | 107 | 51200 | 1170 | 36 | 4 | 1030 | 176 | 5 |
| DOC | 1.5 | 0 | 22 | 49 | 92200 | 648 | 51 | 0 | 63 | 74 | 15 |

COMPANY: ACTIVE MINERALS
PROJECT NO.

ATTENTION: C. GRAF

MIN-EN LABS ICP REPORT
705 WEST 15TH STREET,
NORTH VANCOUVER, B.C. V7M LT2

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

*TYPE ROCK GEOCHEM*

(ACT: GE03B) PAGE 1 of 1
File No. 4-1173R
Date: October 12, 1984

| (REPORT VALUES IN PPM | AG | AS | BI | CU | K | MO | NA | PB | SB | ZN | AU-PPB |
|---|---|---|---|---|---|---|---|---|---|---|---|
| CC84001 | 10.4 | 3 | 51 | 2340 | 430 | 3 | 59 | 11700 | 69 | 12800 | 83 |
| CC84002 | 125.8 | 188 | 748 | 46100 | 760 | 14 | 51 | 45400 | 1440 | 120000 | 115 |
| CC84003 | 8.2 | 70 | 35 | 1700 | 429 | 2 | 54 | 5500 | 104 | 5320 | 52 |
| CC84004 | 11.2 | 755 | 70 | 4060 | 236 | 3 | 114 | 7870 | 1010 | 13500 | 23 |
| CC84005 | 6.5 | 47 | 32 | 1630 | 523 | 3 | 52 | 17600 | 44 | 4950 | 42 |
| CC84006 | 165.0 | 713 | 105 | 6190 | 484 | 5 | 51 | 22500 | 2410 | 25200 | 73 |
| CC84007 | 39.7 | 439 | 93 | 5570 | 158 | 4 | 38 | 20200 | 710 | 11100 | 46 |
| CC84008 | 12.1 | 71 | 21 | 734 | 2140 | 5 | 45 | 1120 | 79 | 3450 | 350 |
| CC84009 | 60.4 | 144 | 42 | 2090 | 891 | 5 | 43 | 5710 | 392 | 13200 | 1080 |
| CC84010 | 2.6 | 54 | 14 | 371 | 1790 | 7 | 113 | 3840 | 22 | 17400 | 33 |
| CC84011 | 15.8 | 22 | 22 | 709 | 338 | 22 | 20 | 17200 | 40 | 26700 | 360 |

MIN-EN Laboratories Ltd.
*Specialists in Mineral Environments*
705 WEST 15th STREET NORTH VANCOUVER, B.C. CANADA V7M 1T2

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

# *CERTIFICATE OF ASSAY*

COMPANY: ACTIVE MINERALS
PROJECT:
ATTENTION: C. GRAF

FILE: 4-1173R
DATE: OCTOBER 12/84
TYPE: ROCK ASSAY

*We hereby certify* that the following are assay results for samples submitted.

| SAMPLE NUMBER | AU G/TONNE | AU OZ/TON |
|---|---|---|
| CC84009 | 1.20 | 0.03% |
| SC84004 | 20.30 | 0.59% |
| SC84005 | 7.92 | 0.23% |
| IM TREM | 15.70 | 0.458 |

*Certified by*

MIN-EN LABORATORIES LTD.

# APPENDIX II

## PEARSON CORRELATION COEFFICIENTS,

## CUMULATIVE PROBABILITY PLOTS, 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#: 4-1100

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

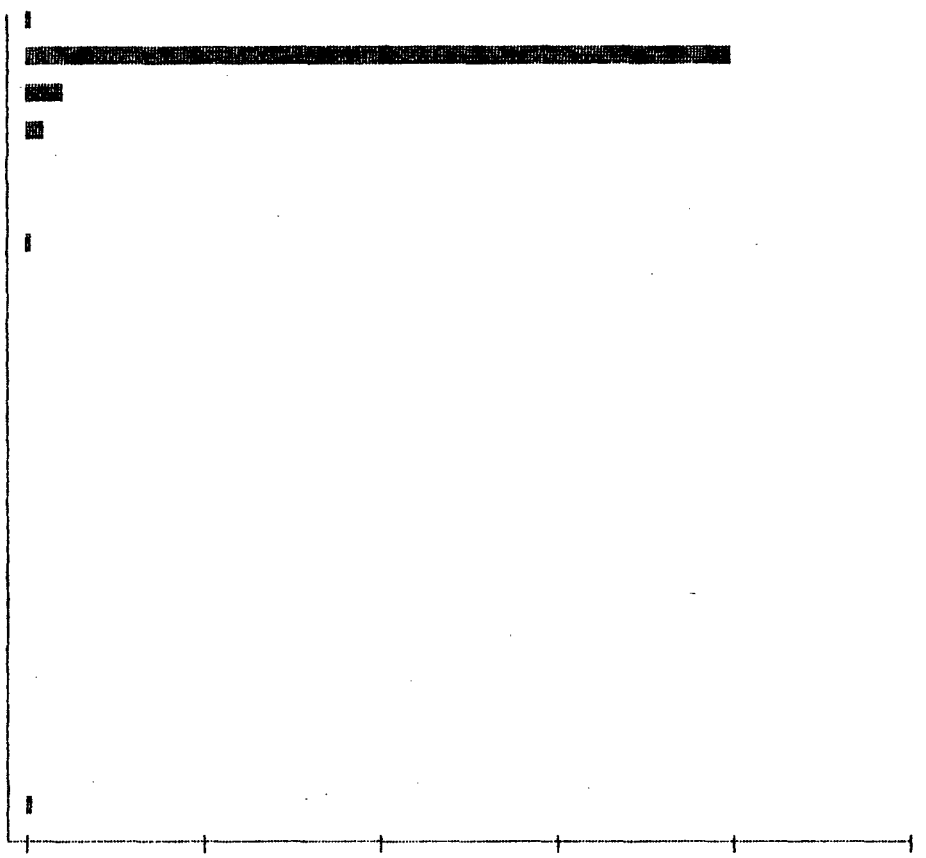
| | |
|---|---|
| NUMBER OF SAMPLES: | 99 |
| MAXIMUM VALUE: | 1700.00 PPB |
| MINIMUM VALUE: | 5.00 PPB |
| MEAN: | 47.98 PPB |
| STD. DEVIATION: | 199.26 PPB |
| COEFF. OF VARIATION: | 4.15 |

5 HIGHEST AU VALUES:

| | |
|---|---|
| C84041 | 1700.00 PPB |
| C84059 | 1030.00 PPB |
| C84018 | 290.00 PPB |
| C84061 | 120.00 PPB |
| C84019 | 110.00 PPB |

HISTOGRAM FOR AU  CLASS INTERVAL = 51.25

| MID CLASS PPM | CLASS % |
|---|---|
| < 5.00 | 1.01 |
| 30.63 | 88.89 |
| 81.88 | 5.05 |
| 133.13 | 3.03 |
| 184.38 | 0.00 |
| 235.63 | 0.00 |
| 286.88 | 1.01 |
| 338.13 | 0.00 |
| 389.38 | 0.00 |
| 440.63 | 0.00 |
| 491.88 | 0.00 |
| 543.13 | 0.00 |
| 594.38 | 0.00 |
| 645.63 | 0.00 |
| 696.88 | 0.00 |
| 748.13 | 0.00 |
| 799.38 | 0.00 |
| 850.63 | 0.00 |
| 901.88 | 0.00 |
| 953.13 | 0.00 |
| 1004.38 | 0.00 |
| > 1030.00 | 1.01 |



# MIN-EN LABORATORIES LTD.

*SPECIALISTS IN MINERAL ENVIRONMENTS*

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

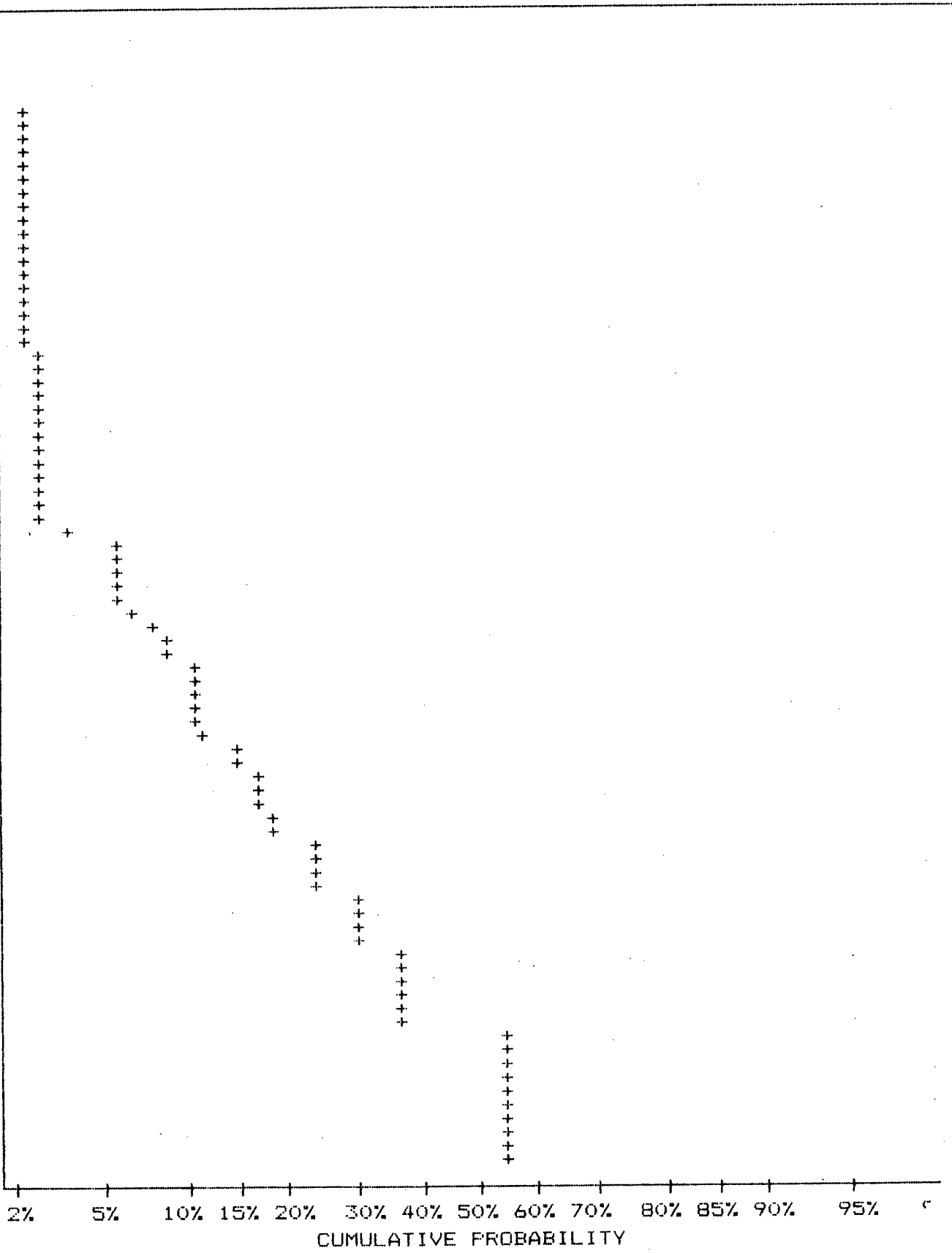
TELEX: 04-352828 PHONE:(604)980-5814 OR (604)988-4524


## CUMMULATIVE PROBABILITY PLOT ON AU

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

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

| UPPER LIMIT (PPB) | CUMMUL. FREQ. (%) |
|---|---|
| 914.05 | 2.02 |
| 799.78 | 2.02 |
| 699.80 | 2.02 |
| 612.31 | 2.02 |
| 535.76 | 2.02 |
| 468.78 | 2.02 |
| 410.17 | 2.02 |
| 358.89 | 2.02 |
| 314.03 | 2.02 |
| 274.77 | 3.03 |
| 240.42 | 3.03 |
| 210.37 | 3.03 |
| 184.06 | 3.03 |
| 161.06 | 3.03 |
| 140.92 | 3.03 |
| 123.30 | 3.03 |
| 107.88 | 6.06 |
| 94.40 | 6.06 |
| 82.60 | 6.06 |
| 72.27 | 8.08 |
| 63.23 | 9.09 |
| 55.33 | 11.11 |
| 48.41 | 11.11 |
| 42.36 | 12.12 |
| 37.06 | 15.15 |
| 32.43 | 17.17 |
| 28.38 | 19.19 |
| 24.83 | 24.24 |
| 21.73 | 24.24 |
| 19.01 | 30.30 |
| 16.63 | 30.30 |
| 14.55 | 37.37 |
| 12.73 | 37.37 |
| 11.14 | 37.37 |
| 9.75 | 55.56 |
| 8.53 | 55.56 |
| 7.46 | 55.56 |
| 6.53 | 55.56 |
| 5.71 | 55.56 |
| 5.00 | 98.99 |



# 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#: 4-1100

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

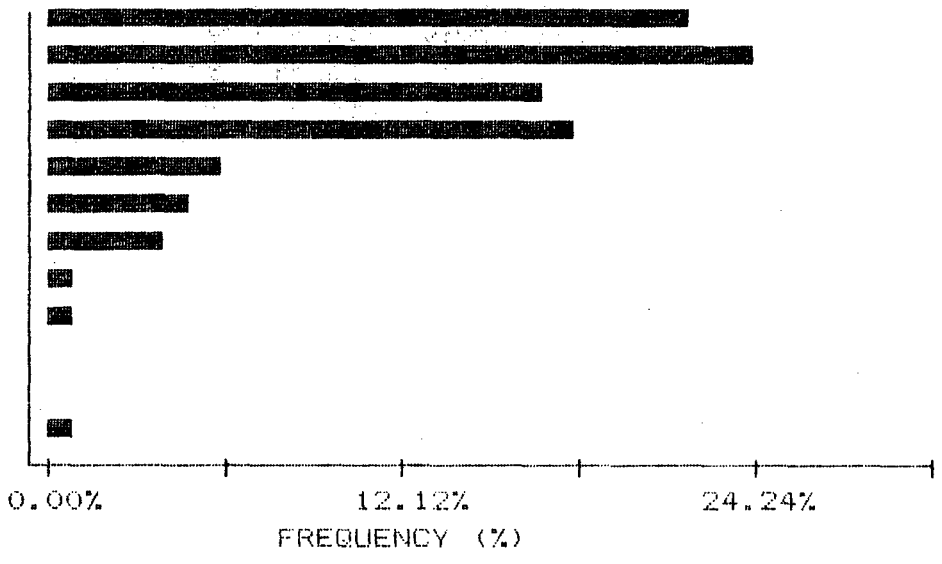
| | |
|---|---|
| NUMBER OF SAMPLES: | 99 |
| MAXIMUM VALUE: | 12.30 PPM |
| MINIMUM VALUE: | .10 PPM |
| MEAN: | .77 PPM |
| STD. DEVIATION: | 1.33 PPM |
| COEFF. OF VARIATION: | 1.73 |

5 HIGHEST AG VALUES:

| | |
|---|---|
| C84059 | 12.30 PPM |
| C84032 | 3.30 PPM |
| C84097 | 2.60 PPM |
| C84061 | 2.30 PPM |
| C84019 | 2.00 PPM |

HISTOGRAM FOR AG  CLASS INTERVAL = .32

| MID CLASS PPM | CLASS % |
|---|---|
| < .10 | 22.22 |
| .26 | 24.24 |
| .58 | 17.17 |
| .90 | 18.18 |
| 1.22 | 6.06 |
| 1.54 | 5.05 |
| 1.86 | 4.04 |
| 2.18 | 1.01 |
| 2.50 | 1.01 |
| 2.82 | 0.00 |
| 3.14 | 0.00 |
| > 3.30 | 1.01 |



# MIN-EN LABORATORIES LTD.

*SPECIALISTS IN MINERAL ENVIRONMENTS*

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

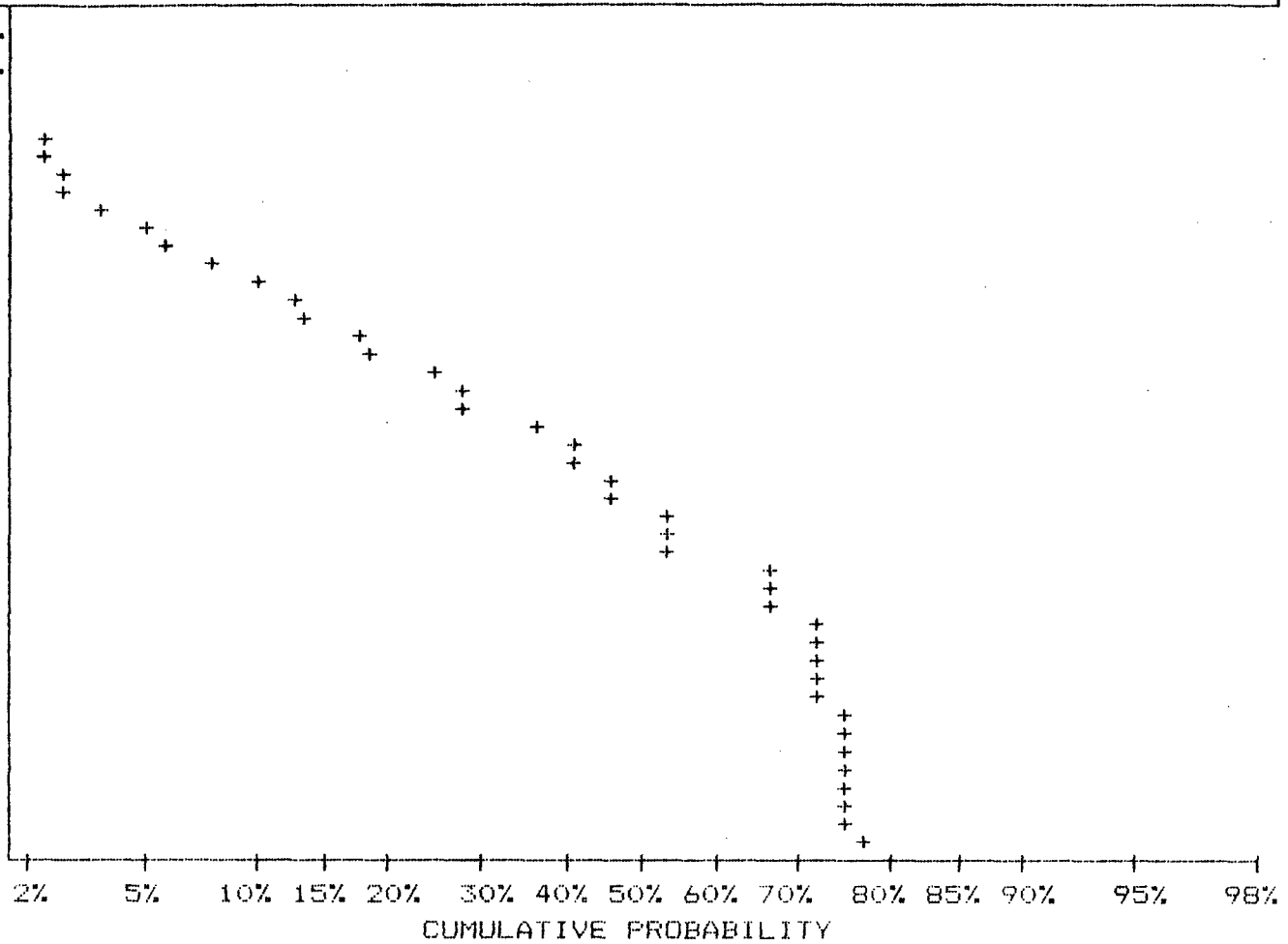
TELEX: 04-352828 PHONE: (604)980-5814 OR (604)988-4524


## CUMMULATIVE PROBABILITY PLOT ON AG

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

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

| UPPER LIMIT (PPM) | CUMMUL. FREQ. (%) |
|---|---|
| 2.78 | 2.02 |
| 2.33 | 3.03 |
| 1.96 | 5.05 |
| 1.64 | 8.08 |
| 1.38 | 13.13 |
| 1.16 | 18.18 |
| .97 | 25.25 |
| .82 | 28.28 |
| .69 | 41.41 |
| .58 | 46.46 |
| .48 | 54.55 |
| .41 | 54.55 |
| .34 | 67.68 |
| .29 | 72.73 |
| .24 | 72.73 |
| .20 | 72.73 |
| .17 | 75.76 |
| .14 | 75.76 |
| .12 | 75.76 |
| .10 | 77.78 |



# 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#: 4-1100

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

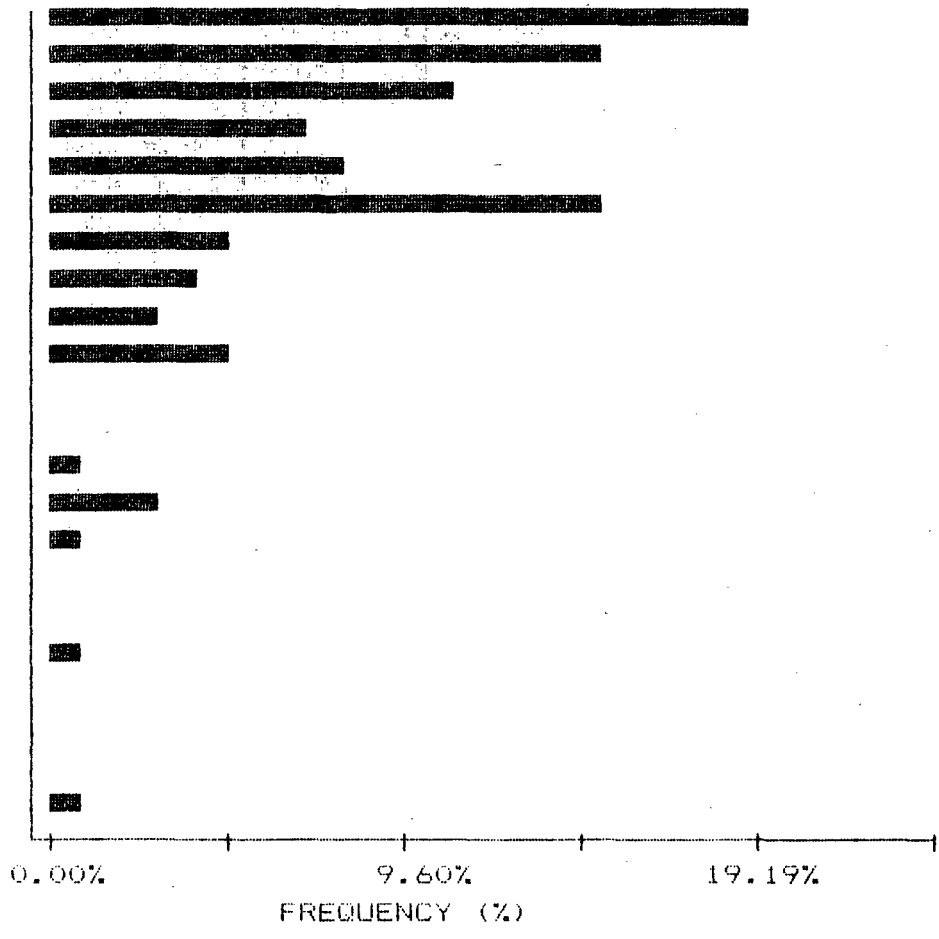
| | |
|---|---|
| NUMBER OF SAMPLES: | 99 |
| MAXIMUM VALUE: | 178.00 PPM |
| MINIMUM VALUE: | 2.00 PPM |
| MEAN: | 33.60 PPM |
| STD. DEVIATION: | 36.91 PPM |
| COEFF. OF VARIATION: | 1.10 |

5 HIGHEST AS VALUES:

| | |
|---|---|
| C84059 | 178.00 PPM |
| C84018 | 174.00 PPM |
| C84016 | 141.00 PPM |
| C84033 | 115.00 PPM |
| C84081 | 113.00 PPM |

HISTOGRAM FOR AS  CLASS INTERVAL = 8.6

| MID CLASS PPM | CLASS % |
|---|---|
| < 2.00 | 19.19 |
| 6.30 | 15.15 |
| 14.90 | 11.11 |
| 23.50 | 7.07 |
| 32.10 | 8.08 |
| 40.70 | 15.15 |
| 49.30 | 5.05 |
| 57.90 | 4.04 |
| 66.50 | 3.03 |
| 75.10 | 5.05 |
| 83.70 | 0.00 |
| 92.30 | 0.00 |
| 100.90 | 1.01 |
| 109.50 | 3.03 |
| 118.10 | 1.01 |
| 126.70 | 0.00 |
| 135.30 | 0.00 |
| 143.90 | 1.01 |
| 152.50 | 0.00 |
| 161.10 | 0.00 |
| 169.70 | 0.00 |
| > 174.00 | 1.01 |



# MIN-EN LABORATORIES LTD.

*SPECIALISTS IN MINERAL ENVIRONMENTS*

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

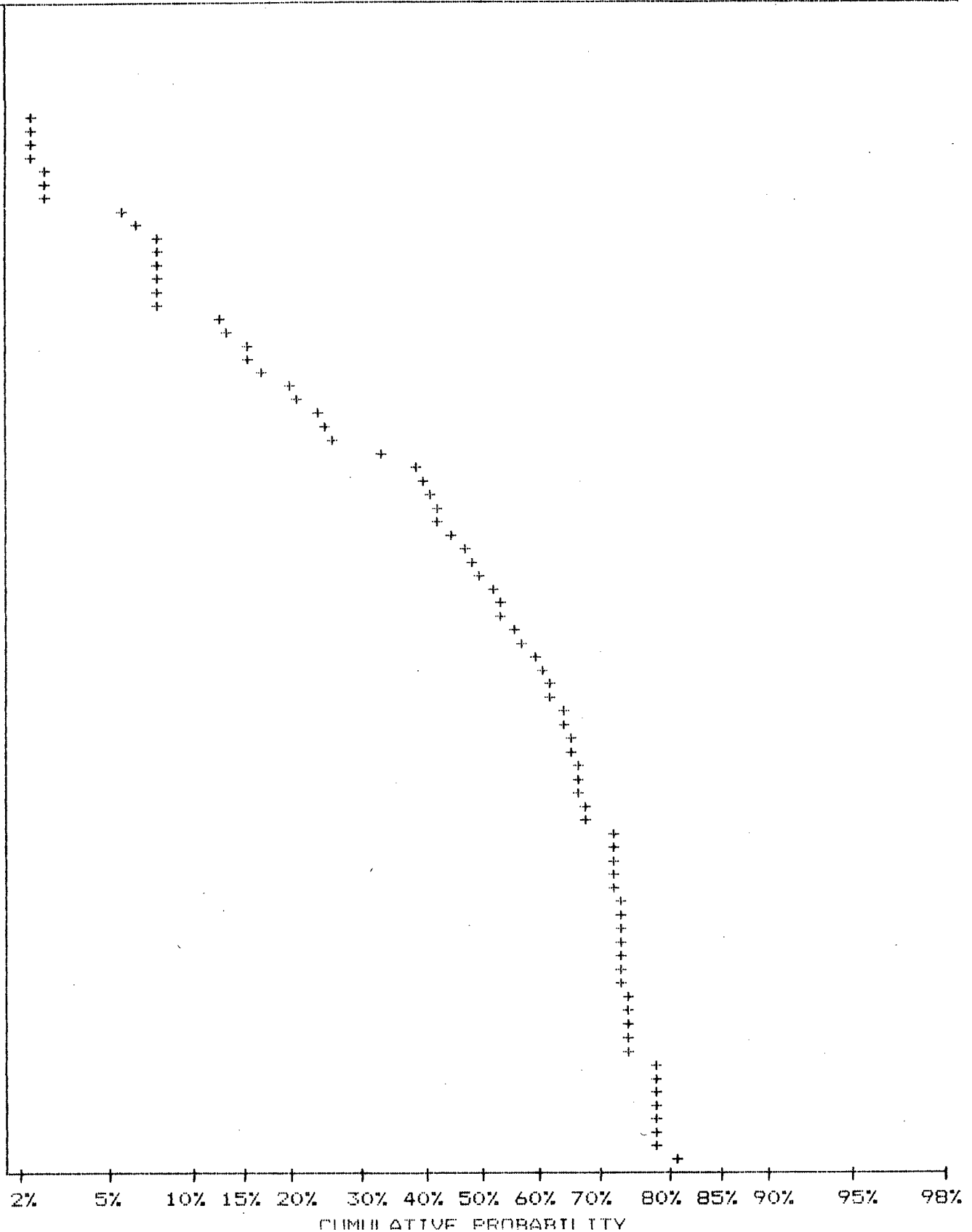
TELEX: 04-352828 PHONE:(604)980-5814 OR (604)988-4524


## CUMMULATIVE PROBABILITY PLOT ON AS

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

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

| UPPER LIMIT (PPM) | CUMMUL. FREQ. (%) |
|---|---|
| 178.25 | 0.00 |
| 158.87 | 2.02 |
| 141.59 | 2.02 |
| 126.19 | 3.03 |
| 112.47 | 6.06 |
| 100.24 | 8.08 |
| 89.34 | 8.08 |
| 79.62 | 8.08 |
| 70.96 | 13.13 |
| 63.25 | 16.16 |
| 56.37 | 17.17 |
| 50.24 | 21.21 |
| 44.77 | 25.25 |
| 39.91 | 34.34 |
| 35.57 | 40.40 |
| 31.70 | 43.43 |
| 28.25 | 45.45 |
| 25.18 | 49.49 |
| 22.44 | 52.53 |
| 20.00 | 54.55 |
| 17.83 | 57.58 |
| 15.89 | 61.62 |
| 14.16 | 62.63 |
| 12.62 | 64.65 |
| 11.25 | 65.66 |
| 10.02 | 66.67 |
| 8.93 | 68.69 |
| 7.96 | 72.73 |
| 7.10 | 72.73 |
| 6.32 | 72.73 |
| 5.64 | 73.74 |
| 5.02 | 73.74 |
| 4.48 | 73.74 |
| 3.99 | 74.75 |
| 3.56 | 74.75 |
| 3.17 | 74.75 |
| 2.83 | 78.79 |
| 2.52 | 78.79 |
| 2.24 | 78.79 |
| 2.00 | 80.81 |



# 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#: 4-1100

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

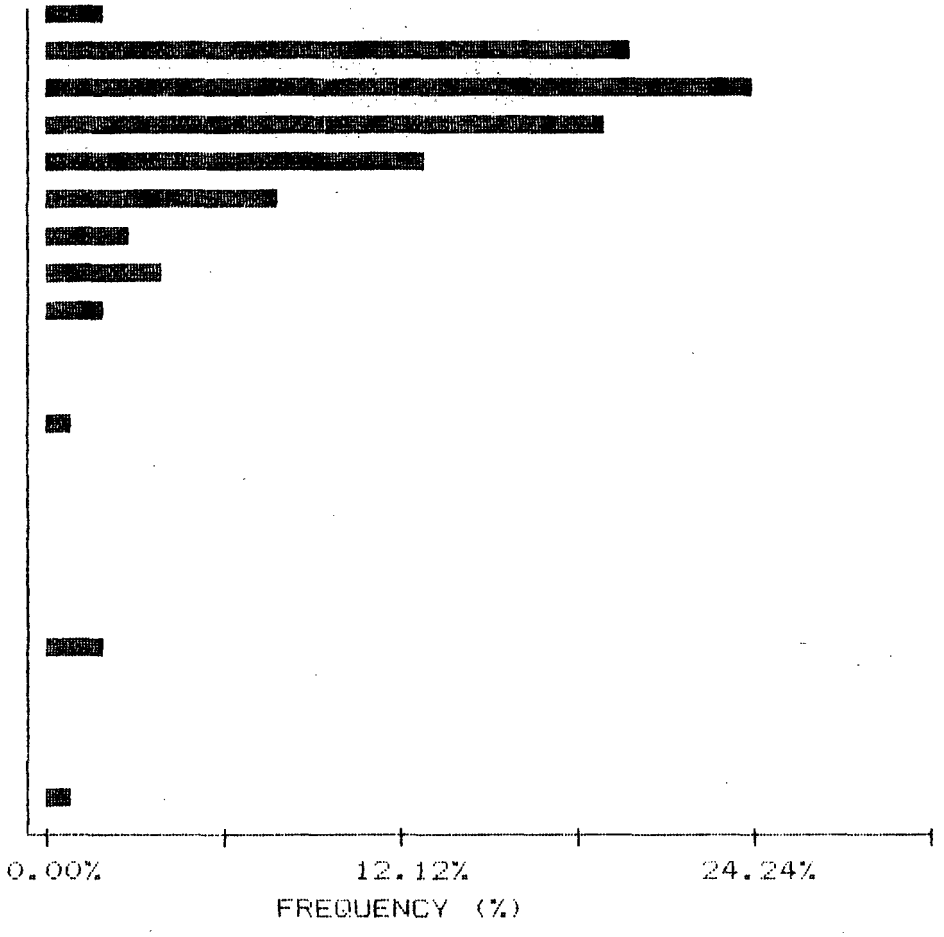
| | |
|---|---|
| NUMBER OF SAMPLES: | 99 |
| MAXIMUM VALUE: | 424.00 PPM |
| MINIMUM VALUE: | 6.00 PPM |
| MEAN: | 50.20 PPM |
| STD. DEVIATION: | 58.26 PPM |
| COEFF. OF VARIATION: | 1.16 |

5 HIGHEST CU VALUES:

| | |
|---|---|
| C84059 | 424.00 PPM |
| C84018 | 277.00 PPM |
| C84016 | 223.00 PPM |
| C84017 | 223.00 PPM |
| C84021 | 149.00 PPM |

HISTOGRAM FOR CU  CLASS INTERVAL = 13.55

| MID CLASS PPM | CLASS % |
|---|---|
| < 6.00 | 2.02 |
| 12.78 | 20.20 |
| 26.33 | 24.24 |
| 39.88 | 19.19 |
| 53.43 | 13.13 |
| 66.98 | 8.08 |
| 80.53 | 3.03 |
| 94.08 | 4.04 |
| 107.63 | 2.02 |
| 121.18 | 0.00 |
| 134.73 | 0.00 |
| 148.28 | 1.01 |
| 161.83 | 0.00 |
| 175.38 | 0.00 |
| 188.93 | 0.00 |
| 202.48 | 0.00 |
| 216.03 | 0.00 |
| 229.58 | 2.02 |
| 243.13 | 0.00 |
| 256.68 | 0.00 |
| 270.23 | 0.00 |
| > 277.00 | 1.01 |



# MIN-EN LABORATORIES LTD.

*SPECIALISTS IN MINERAL ENVIRONMENTS*

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

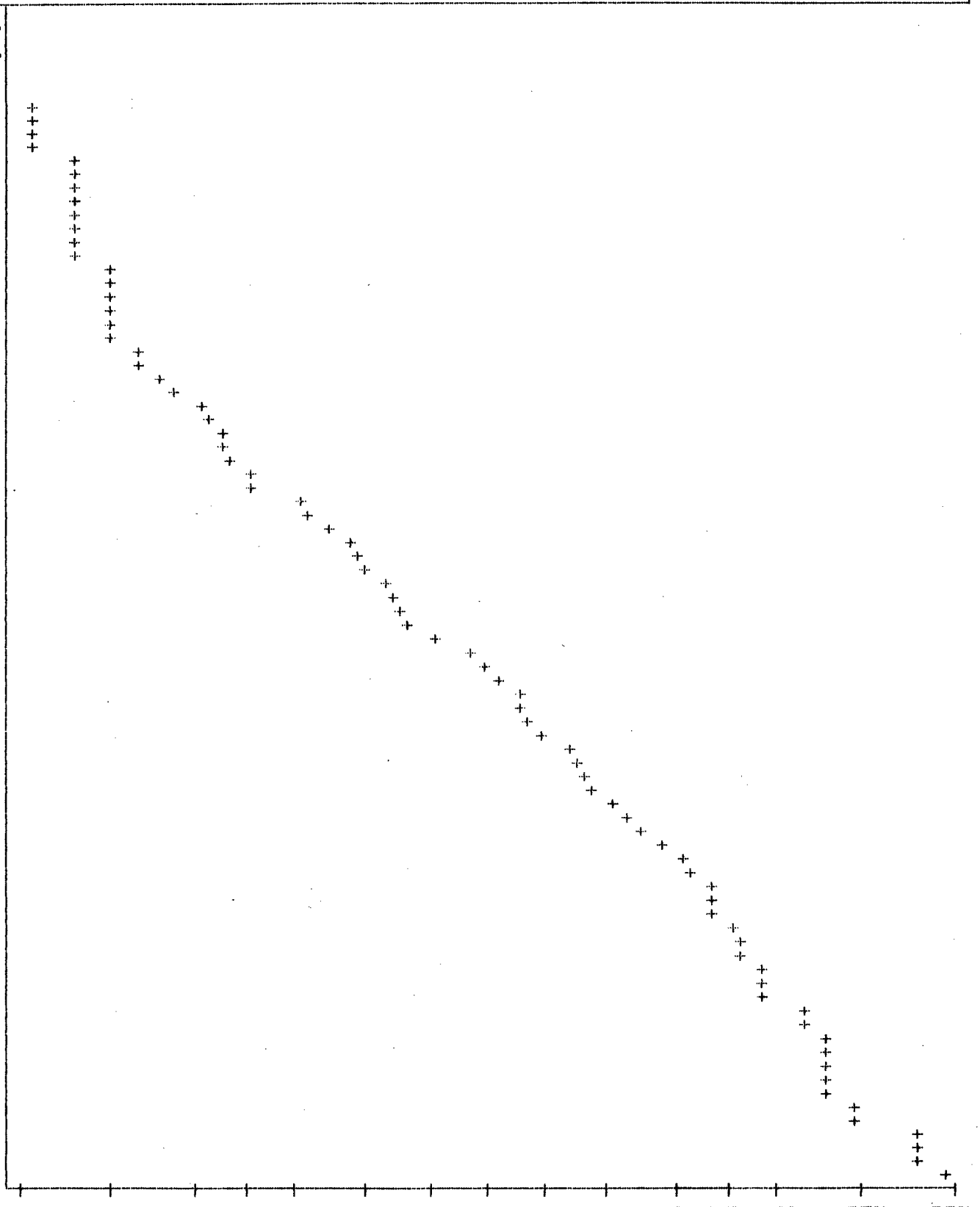
TELEX: 04-352828 PHONE: (604)980-5814 OR (604)988-4524


## CUMMULATIVE PROBABILITY PLOT ON CU

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

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

| UPPER LIMIT (PPM) | CUMMUL. FREQ. (%) |
|---|---|
| 260.71 | 2.02 |
| 236.68 | 2.02 |
| 214.86 | 4.04 |
| 195.05 | 4.04 |
| 177.07 | 4.04 |
| 160.75 | 4.04 |
| 145.93 | 5.05 |
| 132.48 | 5.05 |
| 120.27 | 5.05 |
| 109.18 | 7.07 |
| 99.12 | 8.08 |
| 89.98 | 11.11 |
| 81.68 | 13.13 |
| 74.15 | 14.14 |
| 67.32 | 16.16 |
| 61.12 | 22.22 |
| 55.48 | 28.28 |
| 50.37 | 30.30 |
| 45.73 | 35.35 |
| 41.51 | 37.37 |
| 37.69 | 48.48 |
| 34.21 | 52.53 |
| 31.06 | 56.57 |
| 28.19 | 60.61 |
| 25.60 | 65.66 |
| 23.24 | 68.69 |
| 21.10 | 73.74 |
| 19.15 | 78.79 |
| 17.38 | 81.82 |
| 15.78 | 83.84 |
| 14.33 | 85.86 |
| 13.01 | 86.87 |
| 11.81 | 88.89 |
| 10.72 | 91.92 |
| 9.73 | 92.93 |
| 8.83 | 92.93 |
| 8.02 | 92.93 |
| 7.28 | 94.95 |
| 6.61 | 96.97 |
| 6.00 | 97.98 |



# 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#: 4-1100

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

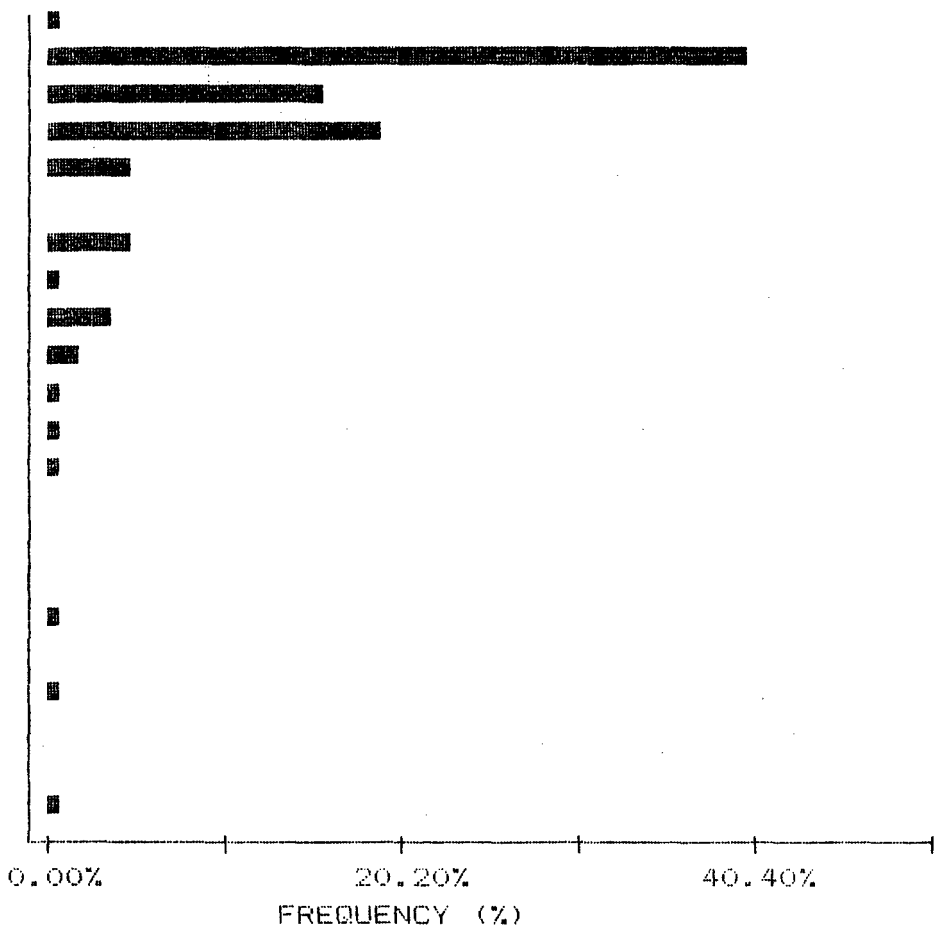
| | |
|---|---|
| NUMBER OF SAMPLES: | 99 |
| MAXIMUM VALUE: | 1650.00 PPM |
| MINIMUM VALUE: | 14.00 PPM |
| MEAN: | 115.42 PPM |
| STD. DEVIATION: | 192.08 PPM |
| COEFF. OF VARIATION: | 1.66 |

5 HIGHEST PB VALUES:

| | |
|---|---|
| C84018 | 1650.00 PPM |
| C84021 | 628.00 PPM |
| C84059 | 565.00 PPM |
| C84061 | 478.00 PPM |
| C84028 | 352.00 PPM |

HISTOGRAM FOR PB  CLASS INTERVAL = 30.7

| MID CLASS PPM | CLASS % |
|---|---|
| < 14.00 | 1.01 |
| 29.35 | 40.40 |
| 60.05 | 16.16 |
| 90.75 | 19.19 |
| 121.45 | 5.05 |
| 152.15 | 0.00 |
| 182.85 | 5.05 |
| 213.55 | 1.01 |
| 244.25 | 4.04 |
| 274.95 | 2.02 |
| 305.65 | 1.01 |
| 336.35 | 1.01 |
| 367.05 | 1.01 |
| 397.75 | 0.00 |
| 428.45 | 0.00 |
| 459.15 | 0.00 |
| 489.85 | 1.01 |
| 520.55 | 0.00 |
| 551.25 | 1.01 |
| 581.95 | 0.00 |
| 612.65 | 0.00 |
| > 628.00 | 1.01 |



# MIN-EN LABORATORIES LTD.

*SPECIALISTS IN MINERAL ENVIRONMENTS*

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

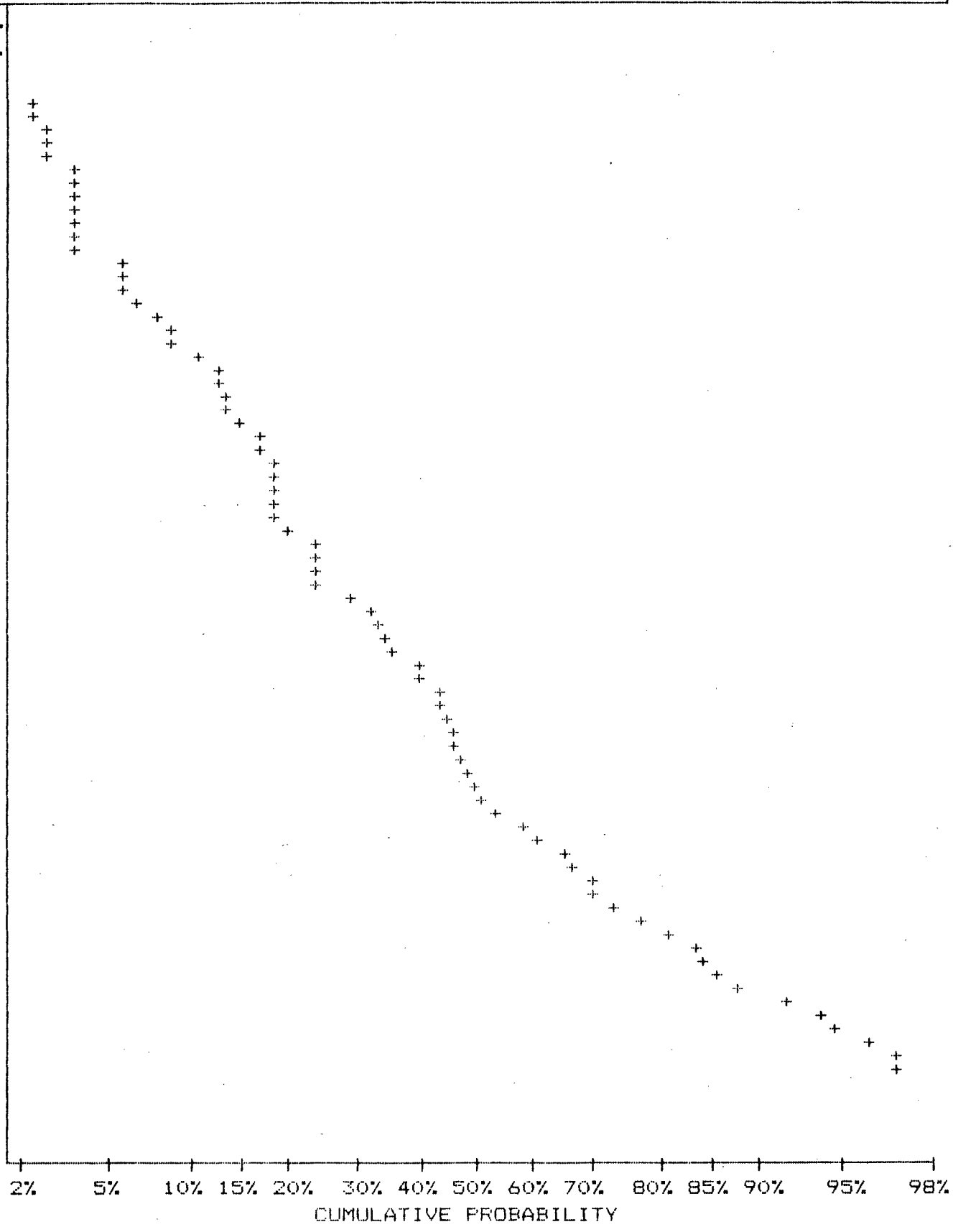
TELEX: 04-352828 PHONE: (604)980-5814 OR (604)988-4524


## CUMMULATIVE PROBABILITY PLOT ON PB

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

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

| UPPER LIMIT (PPM) | CUMMUL. FREQ. (%) |
|---|---|
| 608.31 | 2.02 |
| 552.24 | 3.03 |
| 501.34 | 3.03 |
| 455.13 | 4.04 |
| 413.17 | 4.04 |
| 375.09 | 4.04 |
| 340.51 | 6.06 |
| 309.12 | 6.06 |
| 280.63 | 8.08 |
| 254.76 | 9.09 |
| 231.28 | 13.13 |
| 209.96 | 14.14 |
| 190.60 | 15.15 |
| 173.03 | 17.17 |
| 157.08 | 19.19 |
| 142.60 | 19.19 |
| 129.46 | 20.20 |
| 117.53 | 24.24 |
| 106.69 | 24.24 |
| 96.85 | 32.32 |
| 87.93 | 35.35 |
| 79.83 | 40.40 |
| 72.46 | 44.44 |
| 65.79 | 45.45 |
| 59.72 | 47.47 |
| 54.22 | 49.49 |
| 49.22 | 51.52 |
| 44.69 | 59.60 |
| 40.56 | 65.66 |
| 36.82 | 70.71 |
| 33.43 | 73.74 |
| 30.35 | 80.81 |
| 27.55 | 84.85 |
| 25.00 | 87.88 |
| 22.71 | 93.94 |
| 20.61 | 95.96 |
| 18.72 | 96.97 |
| 16.98 | 98.99 |
| 15.43 | 98.99 |
| 14.00 | 98.99 |



# 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#: 4-1100

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

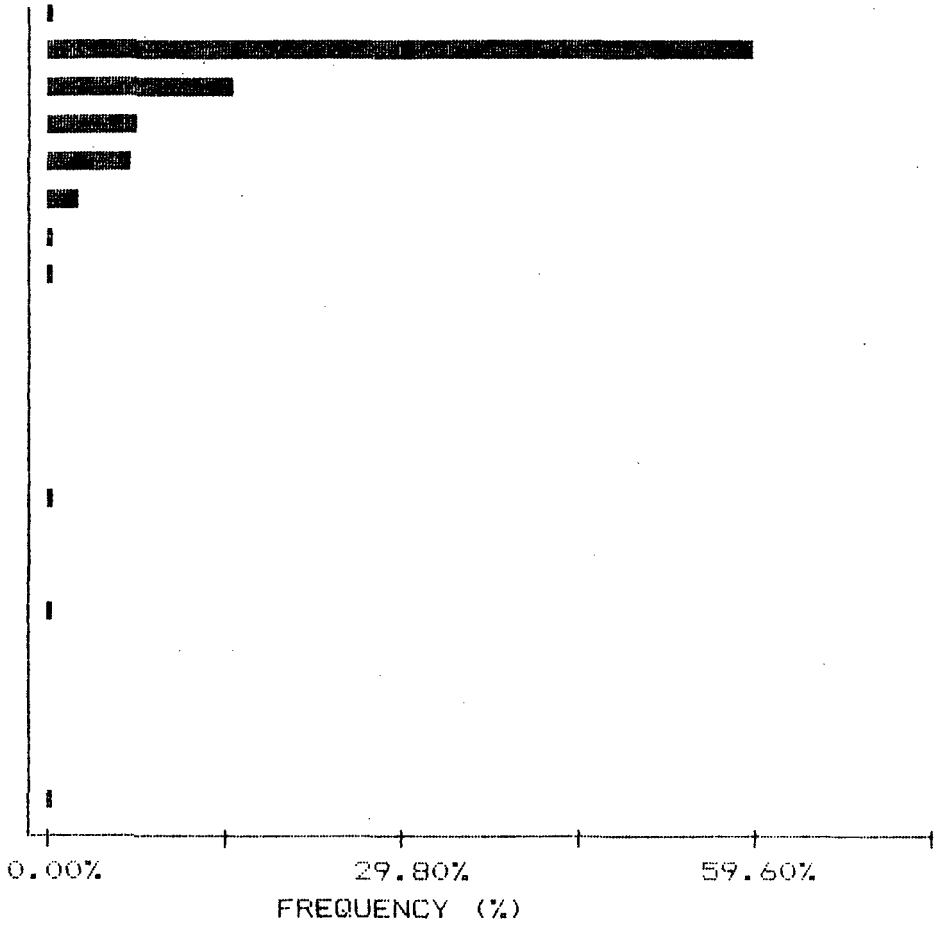
| | |
|---|---|
| NUMBER OF SAMPLES: | 99 |
| MAXIMUM VALUE: | 2980.00 PPM |
| MINIMUM VALUE: | 13.00 PPM |
| MEAN: | 245.15 PPM |
| STD. DEVIATION: | 436.28 PPM |
| COEFF. OF VARIATION: | 1.78 |

5 HIGHEST ZN VALUES:

| | |
|---|---|
| C84027 | 2980.00 PPM |
| C84065 | 2350.00 PPM |
| C84018 | 1870.00 PPM |
| C84034 | 1450.00 PPM |
| C84017 | 755.00 PPM |

HISTOGRAM FOR ZN  CLASS INTERVAL = 116.85

| MID CLASS PPM | CLASS % |
|---|---|
| < 13.00 | 1.01 |
| 71.43 | 59.60 |
| 188.28 | 16.16 |
| 305.13 | 8.08 |
| 421.98 | 7.07 |
| 538.83 | 3.03 |
| 655.68 | 1.01 |
| 772.53 | 1.01 |
| 889.38 | 0.00 |
| 1006.23 | 0.00 |
| 1123.08 | 0.00 |
| 1239.93 | 0.00 |
| 1356.78 | 0.00 |
| 1473.63 | 1.01 |
| 1590.48 | 0.00 |
| 1707.33 | 0.00 |
| 1824.18 | 1.01 |
| 1941.03 | 0.00 |
| 2057.88 | 0.00 |
| 2174.73 | 0.00 |
| 2291.58 | 0.00 |
| > 2350.00 | 1.01 |



# MIN-EN LABORATORIES LTD.

*SPECIALISTS IN MINERAL ENVIRONMENTS*

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

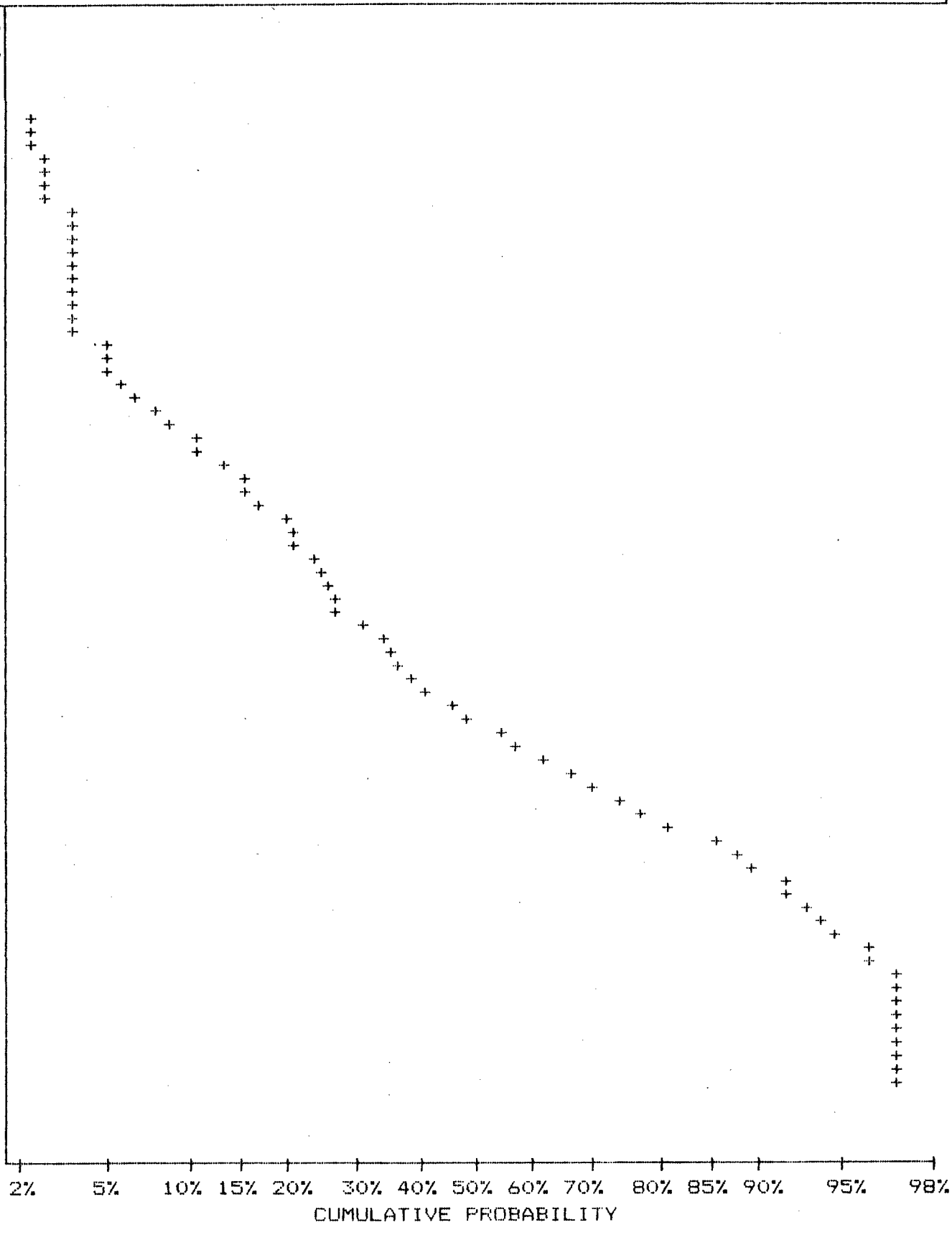
TELEX: 04-352828 PHONE:(604)980-5814 OR (604)988-4524


## CUMMULATIVE PROBABILITY PLOT ON ZN

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

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

| UPPER LIMIT (PPM) | CUMMUL. FREQ. (%) |
|---|---|
| 2376.53 | 1.01 |
| 2079.43 | 2.02 |
| 1819.47 | 3.03 |
| 1592.01 | 3.03 |
| 1392.98 | 4.04 |
| 1218.83 | 4.04 |
| 1066.45 | 4.04 |
| 933.13 | 4.04 |
| 816.48 | 4.04 |
| 714.40 | 5.05 |
| 625.09 | 5.05 |
| 546.95 | 7.07 |
| 478.57 | 9.09 |
| 418.74 | 11.11 |
| 366.39 | 16.16 |
| 320.58 | 17.17 |
| 280.50 | 21.21 |
| 245.44 | 24.24 |
| 214.76 | 26.26 |
| 187.90 | 27.27 |
| 164.41 | 35.35 |
| 143.86 | 37.37 |
| 125.88 | 42.42 |
| 110.14 | 49.49 |
| 96.37 | 57.58 |
| 84.32 | 66.67 |
| 73.78 | 74.75 |
| 64.56 | 80.81 |
| 56.48 | 87.88 |
| 49.43 | 91.92 |
| 43.25 | 92.93 |
| 37.84 | 94.95 |
| 33.11 | 95.96 |
| 28.96 | 96.97 |
| 25.35 | 96.97 |
| 22.18 | 96.97 |
| 19.41 | 96.97 |
| 16.98 | 98.99 |
| 14.86 | 98.99 |
| 13.00 | 98.99 |



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## CORRELATION COEFFICIENTS

COMPANY: ACTIVE MINERALS
ATTN: C. GRAF
PROJECT:
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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 | **.459** | **.665** | **.374** | .139 | **.459** |
| AS | | 1.000 | **.680** | **.648** | .208 | **.239** |
| CU | | | 1.000 | **.686** | **.366** | **.428** |
| PB | | | | 1.000 | **.429** | **.230** |
| ZN | | | | | 1.000 | .059 |
| AU | | | | | | 1.000 |

# APPENDIX III

# COST STATEMENT

ACTIVE MINERALS EXPLORATIONS LTD.

Suite 1013 - 837 West Hastings Street, Vancouver, B.C. V6C 1C4 (604) 681-4402

## COST STATEMENT

| | | |
|---|---|---|
| 1. | **Salaries** | |
| | C. Graf and P. Kulich (Field) | |
| | 4 days: September 15-18, 1984 | $ 1,500.00 |
| | C. Graf (Office) | |
| | 2 days: December 1984 | $ 500.00 |
| 2. | **Helicopter** (Northern Mountain Helicopters) | |
| | (Camp mobilization and demobilization) | |
| | Rental @ $400/hr and fuel $450/gal (4 hrs) | $ 2,050.00 |
| 3. | **Geochemical Analyses** (Min-En Labs) | |
| | (10 element ICP plus gold sample preparation) | |
| | 105 soil samples @ $11.60/sample | $ 1,218.00 |
| | 11 rock samples @ $15.50/sample | $ 170.50 |
| | 6 element statistics - 99 samples | $ 118.80 |
| 4. | **Camp Staples** (Groceries, fuel, etc.) | $ 293.14 |
| 5. | **Equipment Rental** | |
| | 4 days @ $600/day | $ 24.00 |
| 6. | **Map Reproduction and Drafting** | $ 500.00 |
| 7. | **Report Typing and Photocopying** | $ 112.79 |
| TOTAL | | $ 6,487.23 |

# 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 pEng.

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

## LEGEND

### Sedimentary and Volcanic Rocks

**CENOZOIC**

MODERN

RECENT AND PLEISTOCENE

18 — *Olivine basalt*

TERTIARY

EOCENE

17 — *UPPER EOCENE: basalt, andesite, latite, rhyolite, tuff, breccia, conglomerate, agglomerate, sandstone, shale*

**MESOZOIC**

CRETACEOUS (?)

UPPER CRETACEOUS (?)

16 — *HELVEKER VOLCANICS: trachyandesite, andesite, basalt, tuff*

CRETACEOUS

UPPER CRETACEOUS

15 — *15A, mainly conglomerate interbedded with other clastic sediments, rhyolite tuff and andesite tuff, and accompanied with lavas or intrusives; 15B, mainly coarse sandstone interbedded with conglomerate other clastic sediments and, probably, tuff*

JURASSIC (or, and) CRETACEOUS

UPPER JURASSIC (?) LOWER CRETACEOUS

14 — *Andesite, tuff, breccia, greywacke, shale, jasper*

JURASSIC

13 — *Conglomerate, arkose, grit, greywacke; dacite tuff, andesite tuff, quartzite, argillite, limestone, shale, sandstone; andesite, dacite*

TRIASSIC

12 — *Argillite, shale, limestone, conglomerate, greywacke, andesite tuff, dacite tuff, and, probably, lavas*

11 — *Andesite, keratophyre, basalt, tuff, breccia, agglomerate, conglomerate and greywacke; minor amounts of argillite, quartzite, shale and limestone; many small stocks, necks, sills and dykes of rock types mainly allied to the effusives*

**PALAEOZOIC**

PERMIAN

10 — *Mainly white limestone; minor amounts of chert, quartzite, argillite, slate and schist*

PRE - PERMIAN

9 — *Quartzite, schist, slate, argillite, limestone; schistose tuff; highly altered extrusives, and/or, intrusives*

### Intrusive Rocks

**MESOZOIC**

TRIASSIC To CRETACEOUS

8 — *Quartz monzonite*

7 — *Biotite-andesine granodiorite and some quartz monzonite*

5 — *Oligoclase granodiorite; rare quartz diorite and diorite*

4 — *Hornblende-andesine granodiorite; rare quartz diorite, diorite and quartz monzonite*

3 — *Orthoclase porphyry; pulaskite, nordmarkite, nepheline syenite, syenite, and, locally, pyrozenite*

1 — *Not subdivided; quartz monzonite, granodiorite, quartz diorite, diorite*

Note: Geology by F. A. Kerr




2 1 0 2 4 6 Miles

2 1 0 2 4 6 8 Kilometres

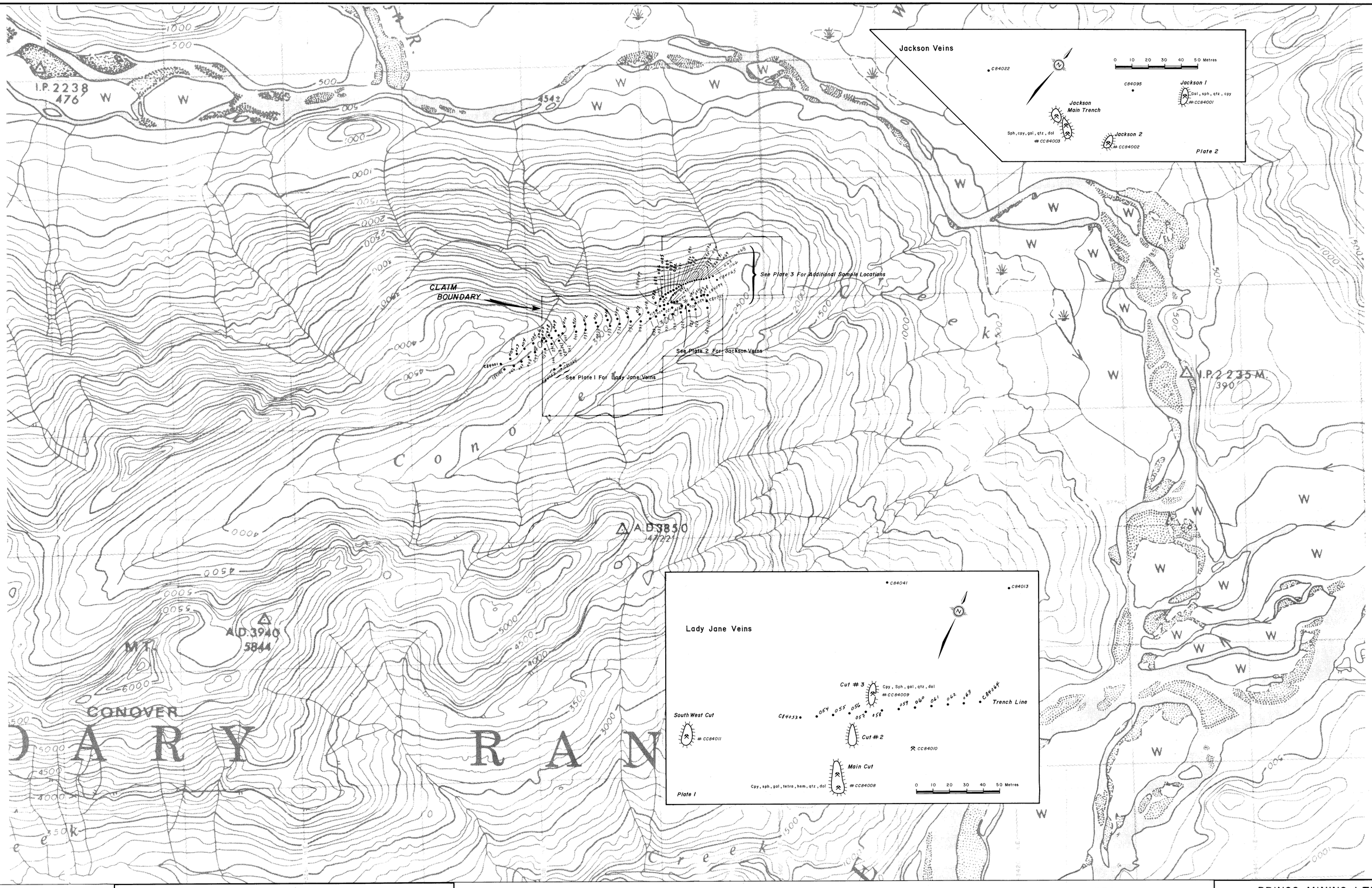
BRINCO MINING LTD.

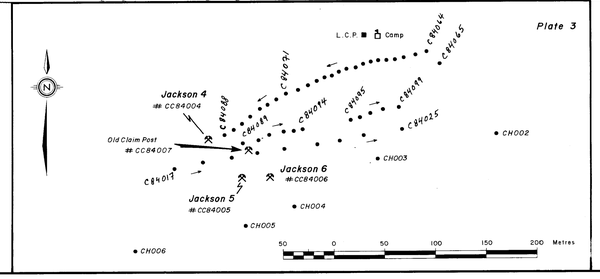
CHUTINE CLAIMS

# GEOLOGY
# CHUTINE - STIKINE RIVER AREA

| PLAN No. | DRAWN | DATE JANUARY 1985 | FIGURE 2 |
|---|---|---|---|
| Revised | | N.T.S. 106 G/12 | |

ACTIVE MINERAL EXPLORATIONS LTD.




• C84054 Sample location and number

SCALE 1:12500

500 0 500 1000 Metres

GEOLOGICAL BRANCH
ASSESSMENT REPORT

14,216

BRINCO MINING LTD.

CLAIM

# SAMPLE LOCATIONS AND NUMBERS

| WORK BY | DRAWN | DATE | FIGURE |
|---|---|---|---|
| C. GRAF | | JANUARY 1985 | 3 |
| REVISED | | N.T.S. | |

ACTIVE MINERAL EXPLORATIONS LTD.

EXCLUSIVE DRAFTING SERVICES LTD.