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REPORT OF  
ASSESSMENT WORK  
BY GEOCHEMICAL SOIL SURVEYS

ON  
OLD ALAMEDA, DAM & DAM TWO,  
ALAMEDA A & ALAMEDA B CLAIMS  
IN THE CORONA GROUP  
ON SWAKUM MOUNTAIN

IN THE  
NICOLA MINING DIVISION, B.C.

BY  
SHERWIN F. KELLY, P.ENG.

NOVEMBER 22, 1985

**GEOLOGICAL BRANCH  
ASSESSMENT REPORT**

**14,117**

ASSESSMENT REPORT  
CORONA GROUP

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REPORT ON  
GEOCHEMICAL SURVEYS ON THE  
CORONA GROUP, NICOLA MINING DIVISION, B.C.  
BY  
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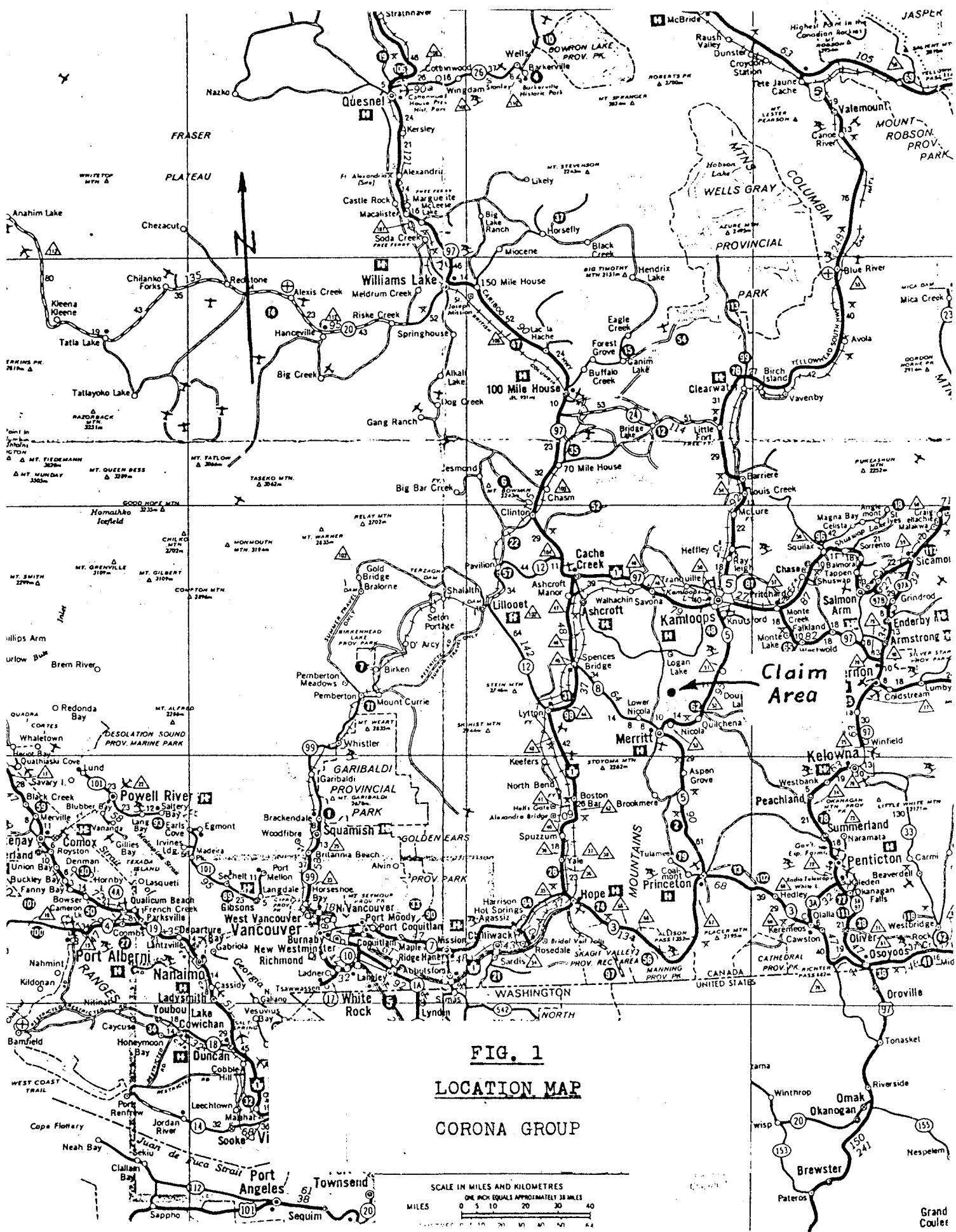
INTRODUCTION

Herein described is a soil sampling program on portions of the Irene claim, included in the Corona Group on the top of Swakum Mtn., some 20 km north of Merritt in southwestern B.C. Three hundred twenty-eight soil samples were taken, 317 of which were analysed for copper and zinc; of these, 105 were tested for silver and lead and 103 of those were analysed for tungsten. Numerous anomalies were revealed. The field work was carried out in July of 1985 by Pacific Northwest GeoTech Ltd. of Kamloops, B.C. The work was applied to 4 Old Alameda claims, 2 Dam claims and the Alameda A & Alameda B claims.

PROPERTY DESCRIPTION

The Corona Group consists of the reverted Crown Grants Old Corona #1 & #2, Old Complex #2 & #3, Old Alameda #2 to #7, two-post claims Swakum #1 to #3, Dam and Dam Two, plus modified grid claims Irene, Alameda A and Alameda B. The total number of units is 39. The claims are variously in the names of Gerald and Keith D'Angelo and Dirk Moraal of Kamloops, Sherwin F. Kelly of Merritt and Douglas Wyatt of Delta.

The Corona Group of mineral claims lies on and around the peak of Swakum Mtn., which is at an elevation of 1,723m. The peak is approximately  $120^{\circ} 42\frac{1}{2}'$  west longitude and  $50^{\circ} 17\frac{1}{2}'$  north latitude, about 21km slightly east of north from Merritt.



The City of Merritt lies 195 km NE of Vancouver. The Location Map, Fig. 1, faces this page.

#### PHYSIOGRAPHY

The general summit area of Swakum Mtn. is one of rolling, upland topography, cut by a few small streams and dotted with occasional small lakes. It was heavily forested but an on-going program of logging has cleared large areas and rendered access fairly easy. Summer is a dry season, but winter snows can be heavy.

#### ACCESS

The Corona Group is readily accessible from Merritt. About 4 km NE of Merritt on Highway #5 towards Kamloops, a well-graded gravel logging road turns off to the north (left) leading to Swakum Mtn. and the surrounding areas. At the 27 km sign the road forks, the left one continuing to the top of Swakum Mtn. About 3 km further, it traverses the peak area close to the east boundary of the Corona Group.

The Claim Map, Fig. 2, faces the following page.

#### PREVIOUS WORK

The general area of the mountain-top has been subjected to numerous sporadic, but shallow investigations since copper was discovered at the Lucky Mike (or Last Chance) deposit, by Oscar Schmidt in 1916. Soon thereafter, five shafts were sunk, the Lucky Mike, Old Alameda, Bernice, Thelma and Corona. The latter is on the claim Old Corona 1, now part of the Corona Group. The other shafts are on claims either adjacent, or very close to

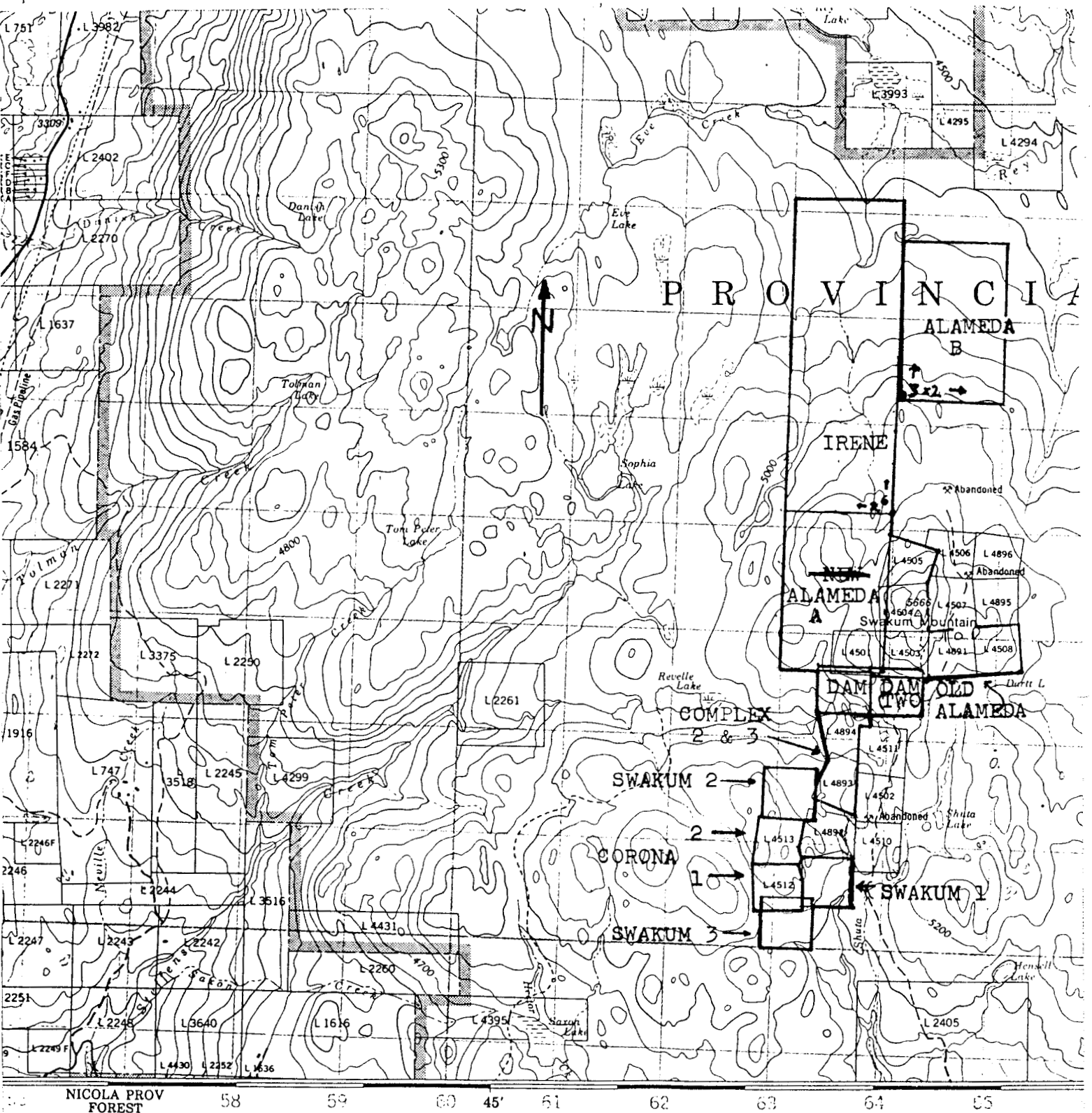


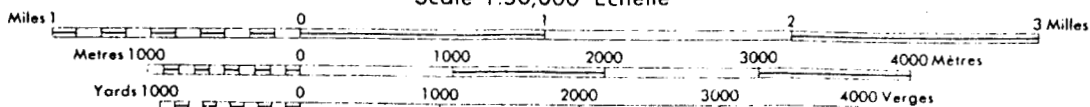
FIGURE  
2

**MAMIT LAKE**  
KAMLOOPS DIVISION OF YALE LAND DISTRICT  
BRITISH COLUMBIA

CLAIM MAP

CORONA  
GROUP

Scale 1:50,000 Échelle



the present Corona Group.

Small shipments of ore (from three, to 89 tons) were made from these shafts for test purposes, according to the Report on the Nicola Map Area made by W.E. Cockfield for the Geological Survey of Canada in 1948, (1). The content of copper was highest, 3.7%, at the Lucky Mike; no other metals were tested. From the Old Alameda, 800m south, the ore was the highest in lead, 9.6%, and in gold, 0.33 oz/ton. Two and a half kilometres further south, the Thelma produced the ore highest in zinc, 5.75%, and silver, 83.35 oz/ton. Some sacked ore was found by Cockfield in a cabin beside the shaft on the Old Corona 1 claim, which had never been tested but had mineralization in galena and sphalerite similar to the Thelma, plus a little tetrahedrite. He also recorded numerous other, minor shafts and many pits and trenches, nearly all showing similar mineralization. Many of these are within the boundaries of the Corona Group. A bismuth telluride, high in gold and silver, is reported to have been found in one of those old workings. Shortly before his death, some 20 years ago, Oscar Schmidt gave me a small cluster of crystals of the telluride which he told me he had found in one of the workings on Swakum Mtn.

In the fall and winter of 1958 or 1959, I conducted an electrical geophysical survey on a small area a short distance west of the Lucky Mike shaft and immediately north of the Swakum peak, when Torwest held a big block of claims covering the moun-

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(1) Figures in parentheses refer to similarly numbered references cited in the Bibliography of References bound in back of this report.

tain-top. The apparently interesting spontaneous polarization anomalies were vitiated, when it was discovered that an entirely unanticipated graphitic shear zone was apparently the major cause of the high readings. This is mentioned as a "caveat" for any operators contemplating electrical geophysical work in this region, - graphitic shears can occur here, although not mentioned by Cockfield! This one was completely concealed by overburden and hence invisible to his visual inspection.

Drilling under Government auspices in 1943 and by Torwest in 1965, close to and east and south of the Lucky Mike shaft, outlined two lenses of copper-tungsten ore containing some 350,000 tons. The upper one yielded an average of 0.318%  $WO_3$  over an average cored width of 22.3 ft. The lower yielded 0.282%  $WO_3$  and 0.56% copper across 19.5 ft. and 12.9 ft. respectively. At that time, these values were uneconomic.

The tungsten data are quoted, by permission, from my report of Oct. 4, 1968 to Darva Resources and Development, in which they were included by permission of Torwest Resources 1962 Ltd. The details were provided by the courtesy of W.G. Hainsworth, P.Eng., who supervised the work, (2).

The work by Cockfield (1) defined the fundamental geologic framework of this area. Later studies, as by N.D. McKechnie (3) and the firms and individuals who have explored in the area, have served to amplify the available data and formulate theories of mineral deposition.

The rocks underlying this area, the Nicola Series, extend in a broad band from the border north across the Thompson River, consisting of andesitic flows and tuffs, volcanic agglomerates,



occasional basalts and rhyolites, with intercalated sediments, usually limestone. They present favourable host rocks for the concentration of mineral deposits. They are of Triassic age.

At Swakum Mtn. these beds of Triassic volcanics and sediments are folded in a south-plunging, asymmetric anticline. The Lucky Mike copper-tungsten mineralization in a contact metasomatic skarn of garnet-epidote; the Old Alameda shaft to the south, where the hydrothermal copper-gold-lead-zinc deposit is in limey tuffs; and yet further south, where the lower temperature hydrothermal mineralization of zinc-silver-lead-copper at the Thelma and Bernice shafts is in quartz stringers and veins in greenstone (altered volcanics), are all on the east flank of the anticline. The beds strike northerly and dip easterly. They are intersected by west-dipping fractures.

Three-fourths of a mile west of the Thelma and Bernice, at the Corona shaft, the mineralization is similar to theirs, carrying sphalerite, galena and a little tetrahedrite and copper stain. The mineralization is in quartz veins and stringers in greenstone. Here, the deposits are on the west limb of the anticline and the beds strike northwesterly and dip gently southwest.

Throughout this area, disseminated mineralization is very evident in the country rock. Numerous veinlets of copper and some lead also occur.

Over a slightly arcuate length of more than four kilometres, there is evident a zonal pattern in the mineral distribution from high temperature contact metasomatic at the Lucky Mike, to lower temperature hydrothermal vein deposits at the Alameda and slightly lower temperature continuing south to the Thelma and Corona. W. E.

Cockfield, in his memoir of 1948 (1) commented on this zonal distribution and suggested "...a temperature zoning around a concealed body of intrusive rock."

There is no record of igneous outcroppings hereabouts which might be indicative of a source intrusive. I believe, however, that the clue is on the 1968 aeromagnetic map, Mamit Lake, Map 5212G (1 inch-1 mile). It depicts a strong, oval anomaly along the west side of the peak of Swakum Mtn., extending from the Dam claim north through the Irene claim almost to Rey Creek. Top values are 2,700 to 3,700 gammas, much like the anomalies typical of the Guichon batholith to the west (4). I believe the first reference to this situation was in my report of January 12, 1970, to D.W. McDermott on his LO claims, #1 to #12; they covered the area around the Lucky Mike, down to the Old Alameda Mine (5). I elaborated on the question in my assessment report of Sep. 30, 1981, on the Old Alameda claims (5). The Lucky Mike copper and tungsten deposit in garnet skarn is only about 1,000m east of the centre of the magnetic high lying at the south end of the Irene claim.

The horizontal zonation may be expected to occur also in the vertical plane, so that with depth the zinc-silver-lead mineralization will pass into copper-lead-gold-zinc which will in turn lead into high-temperature tungsten-copper near the igneous contact.

Between 1969 and 1973 a little geophysical and geochemical work was carried out around the the Swakum peak, for various owners. It was largely outside of the present Corona group.

An induced polarization survey in 1969 did, however, cover the Old Alameda claims (#2 to #7) and the Old Complex #2 & #3, now included in the Corona Group, (6). Unfortunately, the map of the grid is missing from the microfiche, so the location of the anomaly of principal interest is, for the moment, unknown. The author, J.G. Baird, P.Eng. stated,- "Since the present geophysical results were taken along randomly oriented lines rather than a system of parallel grid lines it is difficult to interpret the geological significance of the observed responses.....The chargeability peak with coincident resistivity low near the north end of L O appears more characteristic of an anomalous body which may contain sulphide mineralization."

A magnetometer survey was made in 1972 on the "Lo" claims, principally on the area of the present "Lucky Mike" claim, (7). The author, C.H. Donaldson, P. Eng. commented,- "The results do not show any pronounced magnetic highs but do indicate lineations of the underlying rocks. Three lineations are shown on the map with a west-of-north strike which may indicate fault zones. Other zones, especially of low intensity, are noted with a north-easterly strike." He also called attention to an increased magnetic intensity in the mid-portion of the western area of the grid, but offered no explanation for it. I surmise the highs are on the outskirts of the magnetic high shown on the aeromagnetic map of 1968, (4), underlying the present Irene and Alameda A claims.

In 1973 the area between the Old Alameda shaft and the Lucky Mike shaft was covered by geochemical and VLF electromagnetic surveys, (8). The western portion of the survey area

overlapped the Old Alameda L4505, the northeastern corner of Alameda A and the southeastern part of the Irene, all now in the Corona Group.

The author, C.H. Donaldson, P. Eng., notes that, in the southern part of the survey area, the geochemical and electromagnetic anomalies coincide exceptionally well. He calls attention to three lines of geochemical anomalies with a north-easterly trend, in the southwest portion of the survey area. They are probably on Alameda A and Old Alameda Lot 4505 of the Corona Group (his anomaly interpretation map shows no claim lines). All three represent "zinc-lead enrichment". All three carry geochemical highs associated with magnetic lows, while the two western ones are related to electro-magnetic anomalies. He believes the principal controls of mineralization are faults and magnetic lows, and notes a preponderance of lead and zinc in the southern area whereas copper is the dominant mineral in the northern section.

The present owners of the Corona Group have carried out geochemical surveys over the gradually expanding holdings, since 1980, as set forth in the cited reference, (5).

#### GEOCHEMICAL SURVEY

The grid lines for sample gathering were laid out on the southern part of the Irene claim between June 25 and July 1, 1985 and 328 soil samples were gathered. The program was carried out by Mr. Keith D'Angelo, Field Manager for Pacific Northwest Geo Tech Ltd., of Kamloops, B.C. Eight lines, 100m apart, were laid out, Lines 0 to 7+00N, with stations established at 25m

intervals. They extend 500m east and 500m west of a central, N-S Base Line and were numbered from 0 to 5+00W and 5+00E; see Fig. 3. A short line was run north along the east claim line, from 225N of the east end of Line 7+00N to 275N of it.

Eight kilometres of grid line were laid out and 328 soil samples gathered, @ \$225 per kilometre, for a total of \$1,800. This sum, for physical work, was applied July 2, 1985, for one year to each of the claims Old Complex #2 & #3, Old Corona #1 & #2, Swakum #1-#3 and Old Alameda #5 & #6. This expenditure does not fall within the purvue of this report, but the record is cited because it was the analyses of those samples with which the present report is concerned.

The samples were dug at 25m intervals from the "B" horizon around 25cm to 45cm depth, packed in brown paper sample bags and delivered to Eco-Tech Laboratories Ltd. in Kamloops for analysis.

The samples were dried and sieved through an 80-mesh screen, the fines being used for the analyses. For copper, lead, zinc and silver, extraction was by aqua regia and determination by atomic absorption. For tungsten, extraction was by methyl iso-butyl ketone and determination by atomic absorption.

Between July 30 and August 7, 1985, Eco-Tech Laboratories analysed 316 soil samples and one rock sample for copper and zinc, at a cost of \$1,238.65. This, plus the cost of the report, \$1,200, for a total of \$2,438.65 were filed Aug. 22, 1985. Of that total, \$1,200 were applied to the Old Alameda #2, #3, #4 & #7 (one year, \$200 each), Dam and Dam Two (two years, \$200 each). The remainder was to be applied at a later date. The

rock sample mentioned above, was actually included in the number of soil samples taken, mentioned in the Introduction.

From the balance remaining in the Aug. 22nd submission, \$1200 were applied on Oct. 17, 1985 to the Alameda A (6 units, one year) and Alameda B (6 units, one year).

In mid-September, 1985, Eco-Tech Labs. analysed 105 of the soil samples for silver and lead, 103 of those for tungsten and the same or another rock sample for silver, lead and tungsten. The total cost was \$606.25. This item was not included in the Oct. 17 submission; it will be applied later.

The objective of the program herein reported, is to continue the study of the Corona Group, which was reported in the assessment work descriptions previously cited (5). That work had revealed a strengthening of the geochemical anomalies from south to north, with a shift in emphasis from zinc and silver in the south to copper in the north. The present work reflects that phenomenon.

#### RESULTS

The analytical returns from the Eco-Tech Laboratory are enclosed in an envelope bound in the back of this report.

The values reported in those returns were reviewed and analysed to obtain values for each metal, which would define the background, or value of a metal widely distributed in the soil and unrelated to any bedrock concentration; threshold (double background), a value sufficiently above normal background to attract attention; anomalous (triple background), a reading so far above background as to be reasonably indicative of a concentration of that metal in the underlying bedrock.

Below are set forth the results of that analysis, in ppm.

<u>METAL</u>	<u>ANOMALOUS</u>	<u>THRESHHOLD</u>	<u>BACKGROUND</u>
COPPER	85 (rounded from 84)	56	28
ZINC	145 (rounded from 145.5)	97	48.5
SILVER	1.4	0.94	0.47
LEAD	33	22	11
TUNGSTEN	8 (rounded from 8.1)	5.4	2.7

These values are in ppm, or parts per million.  
10,000 ppm = 1%  
1 troy ounce/ton = 34.28 ppm

In evaluating the relative numbers of anomalous readings, discussed below, it is necessary to keep in mind the numbers of analyses on each metal involved. Analyses were run on 316 soil samples for copper and zinc (plus one rock sample). For silver and lead, however, 105 samples were analyzed (plus one rock sample). For tungsten, the figure was 103 (plus the rock sample). Most, but not all the anomalies were recorded in the **eastern** half of the survey area, which lies only about 500m west of the Lucky Mike shaft.

There were 13 anomalous readings for tungsten in the east half (west half not tested for tungsten) the large majority being in the midsection and north portions.

For copper, there were 20 anomalous readings, preponderantly in the southern portion of the east half.

Zinc produced three anomalies, located in the mid-section of the survey area, close to the south boundary.

Silver produced two anomalies, in the eastern portion of the south half of the area east of the Base Line.

Lead gave three anomalies, all close to the south border of the SE quadrant.

As for tungsten, the west half of the area was not tested for silver and lead. It should also be noted that, in the east half of the survey area, lines 5, 6, and 7 were not tested for tungsten, silver and lead, except for the three easternmost stations on line 5, on which no anomalies were found.

Also, a short line was run along the east claim boundary, beginning 225m north of line 7 and extending to 275m north. A copper anomaly and two of tungsten were observed; they were included in the figures recorded above.

Threshold values, singly and individually may not be particularly interesting, as they are assumed to represent only weak mineralization. Taken in conjunction with anomalous values, however, they can provide an indication of the spread of mineral deposition and, when occurring with anomalous readings of other metals, provide assurance of a multi-metal deposit.

Copper was responsible for 29 threshold readings, 10 in the west half and 19 in the east half. In the west, one was at a zinc anomaly and another was adjacent to a zinc anomaly; the remainder were isolated. In the east, however, four were adjacent to three copper anomalies and may be considered part of those anomalies. One was at the southern extension (on the south boundary) of a strong copper anomaly extending north across line 4,



at a station also marked by tungsten and lead anomalies and a threshold silver. Two copper thresholds at the east end of line 4 coincide with a tungsten anomaly and an adjacent zinc threshold and second tungsten anomaly.

Tungsten produced 8 threshold values, all in the east half, since samples from the west half were not run for tungsten. Four of them, along with two tungsten anomalies, are on line 0, the south border of the claim. One lies on line 1 and another on line 3, but the big show of tungsten is on line 4. On that line there are two thresholds and 8 anomalies. Whether or not this foreshadows extensive tungsten mineralization to the north, can only be determined when the tungsten assays are continued into that area. Of the tungsten thresholds, one lies within a copper anomaly at the east end of line 0 and another within a copper anomaly near the middle of line 3. Another is adjacent to a two-station tungsten anomaly at the east end of line 4, which also includes two thresholds of copper and one of zinc.

Zinc produced 11 threshold readings. Two, on line 1, lie within copper anomalies and coincide, in one case with a lead anomaly and the other with a silver threshold. On line 2, a zinc threshold is adjacent to a zinc anomaly and may be considered part of it; it coincides with a silver threshold. In the east-middle of line 3, two zinc thresholds lie between two copper anomalies and, on the next line north, #4, a zinc threshold lies within a copper anomaly and another lies between that and a tungsten anomaly. At the east end of the line, zinc and copper thresholds lie in another tungsten anomaly. Just to

the north, where line 5 meets the east claim line, there are threshold values of copper, zinc and lead.

The above, copper, tungsten and zinc, represent the predominant metals found in this soil sampling program.

Silver caused only 2 anomalies and six thresholds. A threshold, near the east end of line 0, coincides with anomalies in lead and tungsten and a threshold in copper, lying at the southern tip of the big and strong copper anomaly which stretches north across line 4. Just west of the middle of line 0 there is a silver threshold and another straight north on line 1, along with a zinc threshold, all lying within another copper anomaly which is open to the south. On line 2, there are two thresholds and an anomaly lying within the big copper anomaly mentioned above. West of it, a silver and a zinc threshold lie adjacent to a small zinc anomaly.

Lead yielded 3 anomalies and 2 thresholds. The three anomalies were;- on line 0, near the east end with the tungsten anomaly and the threshold silver and copper which lie off the south tip of the big copper anomaly; on line 0 close to the base line and coincident with a tungsten anomaly; and on line 1, just east of the middle, in the big copper anomaly. One threshold was at the east end of line 2, coinciding with a silver anomaly and adjacent to a copper threshold; the other was at the east end of line 5, adjacent to copper and zinc thresholds.

DISCUSSION

A firm and reliable evaluation of these survey results is hardly possible. Although the entire survey area was tested for copper and zinc, the other metals, tungsten, silver and lead, were the object of analysis in only the south half of the eastern half of the grid. Nevertheless, some trends seem to be apparent.

Copper decreases from line 0 to line 4, where there is the sudden appearance of abundant tungsten anomalies. Line 4 may lie in the transition zone from copper deposition in the south to higher-temperature, tungsten mineralization in the north. This suggests the desirability of continuing the tungsten analyses in that direction. In any event, the entire survey should, of course, be completed to the north boundary of the Irene claim.

The metals silver, zinc and lead frequently accompany copper, although their optimum temperature of deposition is usually a little lower than that for copper. They produce no striking anomalies in this area and it is noteworthy that what anomalies do show, lie on line 2 or south of it. This suggests that these metals may have more spectacular expression to the south.

The above expectation is confirmed by the results of the survey on the Old Alameda group, as described in my report of Sept. 30, 1981, (5). There are strong and persistent anomalies of silver and zinc which exhibit a roughly N-S strike and extend from the south boundary of Old Alameda 6, 1,500m north to the north boundary of Old Alameda 3. In fact, they actually start, in the threshold phase, in the Dam claim immediately south of Old Alameda 6. Copper anomalies are not prominent in this west-

ern portion of the Old Alameda group. In the eastern claims, copper is a little more prominent and the silver-zinc less so.

The Old Alameda claims are bounded on the west by the Alameda A, which was subjected to a rough, reconnaissance survey in 1981 as the New Alameda, as set forth in my report of Feb. 9, 1982, (5). Three-and-a-half lines were run, spaced 250m apart. A few copper anomalies were recorded, especially in the northern section, and some silver thresholds, especially in the south. In view of the wide spacing between lines of sampling, even these weak showings warrant more detailed work. This may be verified by examining the results of the present survey. If only lines 0, 250N and 500N had been tested, the copper, tungsten and lead anomalies on line 1 would have been missed. The silver and zinc anomalies on line 2 would probably have escaped detection, since they do not extend across to line 3. No zinc or copper readings of importance appear on line 5; as to the other metals, we do not know, as they were not subjected to those analyses on this line. The detail survey should be continued over the Alameda A as soon as possible.

Our knowledge of what happens in the west half of the survey area is incomplete, as those samples were tested only for zinc and copper. Does it lie outside of the zone of deposition? Or is it in the zone of higher temperature, where tungsten is to be expected? Samples from some of the western line-extensions deserve analysis, especially lines 3, 4 & 5.

Lines 5, 6 & 7 in the east half, should be tested for tungsten; possibly also in the west half. The high tungsten value in the rock sample (200 ppm), evidently from line 7, 1+25W offers encouragement for such a program in the west and north.

### CONCLUSIONS

The results of the geochemical soil surveys thus far conducted on the claims of the Corona Group, demonstrate that there is widespread mineralization present, principally of copper, lead, zinc, silver and tungsten. The soil anomalies are of a magnitude to arouse interest and the surveys should be completed, on a detail basis, of the balance of the holdings.

The pattern of the soil anomalies substantiates the hypothesis of a thermal gradient distribution, first enunciated by W. E. Cockfield. This lends support to my hypothesis that the same temperature gradient distribution will occur in the vertical plane and that the lead-silver-zinc mineralization will grade into copper-tungsten with depth, as the igneous source body is approached. Such a body, I assume, underlies the magnetic anomaly over which the Alameda A and Irene claims were staked.

A detail magnetic survey should be conducted, especially on the Irene and Alameda A claims, to enable calculations to be made as to the probable depths to the igneous body. This will be needed in order to guide the deeper drilling, when that stage is reached. Stronger concentration of mineralization and larger volume are to expected closer to the source body. Some deep drill holes must thus be envisaged.

Before drilling, however, electrical surveys should be made. These will outline areas of high conductivity, probably underlain by concentrations of sulphide mineralization; the larger ones should be the first drill targets.

The values encountered in the early workings of the Lucky Mike, Old Alameda, Thelma and the type of mineralization (although no shipments were tested) at the Bernice and Old Corona, amply warrant the search for larger deposits.

This is well-mineralized country and merits thorough and extensive exploration.

*Respectfully submitted*  
*Herbert F. Kelly, P. Eng*

STATEMENT OF EXPENDITURES

Preparing and analysing 317 samples  
for copper and zinc, by Eco-Tech Lab.....\$1,238.65

Analysing 105 samples for silver and lead.... 288.75  
Analysing 103 samples for tungsten..... 309.00

Preparing and analysing one rock sample  
for silver, lead and tungsten..... 8.50  
1,844.90

Cost of report.....1,200.00  
\$3,044.90

In the Statement filed Aug. 22, 1985,  
the sum of \$1200 was claimed..... 1,200.00

This was to be applied to:-

Old Alameda nos. 2,3,4,7  
record nos. 932(8), 933(8),  
934(8), 937(8) for one year, \$200 ea. 800.00

Dam & Dam Two, record nos. 1444(8)  
and 1545 (8), for two years, \$200 ea. 400.00  
\$1,200.00

The balance, it was stated, would be applied  
later. It should be noted that, at the time of  
this filing, the analyses for silver, lead and  
tungsten had not been included.  
Those analyses were not included in the Oct. 17  
filing, either.

In the Statement filed Oct. 17, 1985,  
the sum of \$1200 was claimed..... \$1,200.00

This was to be applied to:-

Alameda A, record no. 1575(10)  
6 units, one year..... \$ 600.00  
Alameda B, record no. 1576(10)  
6 units, one year..... 600.00  
\$1,200.00

That left an unclaimed balance of only \$38.65  
Since then, the \$606.25 for silver, lead and tungsten  
have been added, producing an unclaimed balance of.. \$644.90

This will be applied for at a later date and  
will be covered by the present report.

BIBLIOGRAPHY OF REFERENCES

- (1) Geology and Mineral Deposits of Nicola Map-Area, British Columbia; Memoir 249, Geological Survey of Canada, Ottawa, 1948; by W.E. Cockfield.
- (2) Report to Darva Resources and Development Ltd., Vancouver, B.C., on a Group of Mineral Claims on Swakum Mtn., Nicola Mining Division, B.C.; by Sherwin F. Kelly, P. Eng. October 4, 1978.
- (3) Swakum Mtn., Torwest Resources Ltd.; by N.D. McKechnie; in the 1959 Report of the B.C. Minister of Mines.
- (4) Aeromagnetic Series, Map 5212G, Mamit Lake, Sheet 92 I/7
- (5) Report to D.W. McDermott on Mineral Claims LO #1 to #12, Near Merritt, B.C.; by Sherwin F. Kelly, P.Eng. January 12, 1970.

Report on Assessment Work on Old Corona Claims 1 & 2, Near Merritt, Nicola Mining Division, B.C.; by Sherwin F. Kelly, P.Eng., June 30, 1981

Report on Assessment Work on Old Complex Claims 2 & 3, Near Merritt, B.C., Nicola Mining Division, B.C.; by Sherwin F. Kelly, P.Eng., July 1, 1981.

Report on Assessment Work on Old Alameda Claims 2 to 7, Near Merritt, Nicola Mining Division, B.C.; by Sherwin F. Kelly, P. Eng., Sept. 30, 1981.

Assessment Report to Pacific Northwest GeoTech Ltd. on New Alameda Mineral Claim, Nicola Mining Division, B.C.; by Sherwin F. Kelly, P. Eng., Feb. 9, 1982

Report on Assessment Work on Irene and Dam Mineral Claims Near Merritt, Nicola Mining Division, B.C.; by Sherwin F. Kelly, P. Eng., June 15, 1984

Report on Assessment Work on the Old Complex and Dam Mineral Claims NE of Merritt, Nicola Mining Division, B.C.; by Sherwin F. Kelly, P. Eng., Sept. 29, 1984.

Report on Assessment Work on the Old Alameda and Dam Two Mineral Claims NE of Merritt, Nicola Mining Division, B.C.; by Sherwin F. Kelly, P. Eng., Nov. 16, 1984.

- (6) Report on Induced Polarization Survey, Alameda Property, Merritt Area, British Columbia, on Behalf of Zulco Explorations Ltd.; by Jon G. Baird, B. Sc., P. Eng., April 3, 1969.

(Continued)



Bibliography of References (Cont.)

- (7) Report on Magnetometer Survey of Lo Claims, Swakum Mountain, Merritt Area, B.C., for Adar Resources Ltd.; by C.H. Donaldson, P. Eng., November 9, 1972
- (8) Lo, Amigo, Old Alameda; Adar Resources Ltd., Swakum Mountain Report of Assessment Work; by C.H. Donaldson, P. Eng., February 14, 1973

CERTIFICATE OF QUALIFICATIONS

I, Sherwin F. Kelly, P.Eng., residing in Merritt, B.C.,  
certify that:-


(1) I am a registered Professional Engineer in the Province  
of British Columbia

(2) I received the degree of B. Sc. in Mining Engineering  
from the University of Kansas in 1917. I pursued graduate  
studies at the University of Toronto, the University of Kansas,  
the Université de Paris (the Sorbonne), the Ecole des Mines  
and the Museum d'Histoire Naturelle, in Paris, in geology and  
mineralogy. I received my early instruction in geophysics  
from Prof. Conrad Schlumberger, of the Ecole des Mines.

(3) I have practised as a geophysicist and geologist in  
Europe, North Africa, North, Central and South America and  
the Caribbean, since 1920. Since 1936, my work has been as a  
consultant.

(4) I am the author of the accompanying "Report of Assess-  
ment Work by Geochemical Soil Surveys on Old Alameda, Dam  
& Dam Two, Alameda A & Alameda B Claims in the Corona  
Group on Swakum Mountain in the Nicola Mining Division, B.C."  
dated November 22, 1985.

(5) I am the owner of the claims Old Corona 1 & 2, and  
Old Complex 2 & 3.



Sherwin F. Kelly, P.Eng.

Box 277  
Merritt, B.C.  
VOK 2B0  
Nov. 22, 1985

# Corona Group Irene Claim

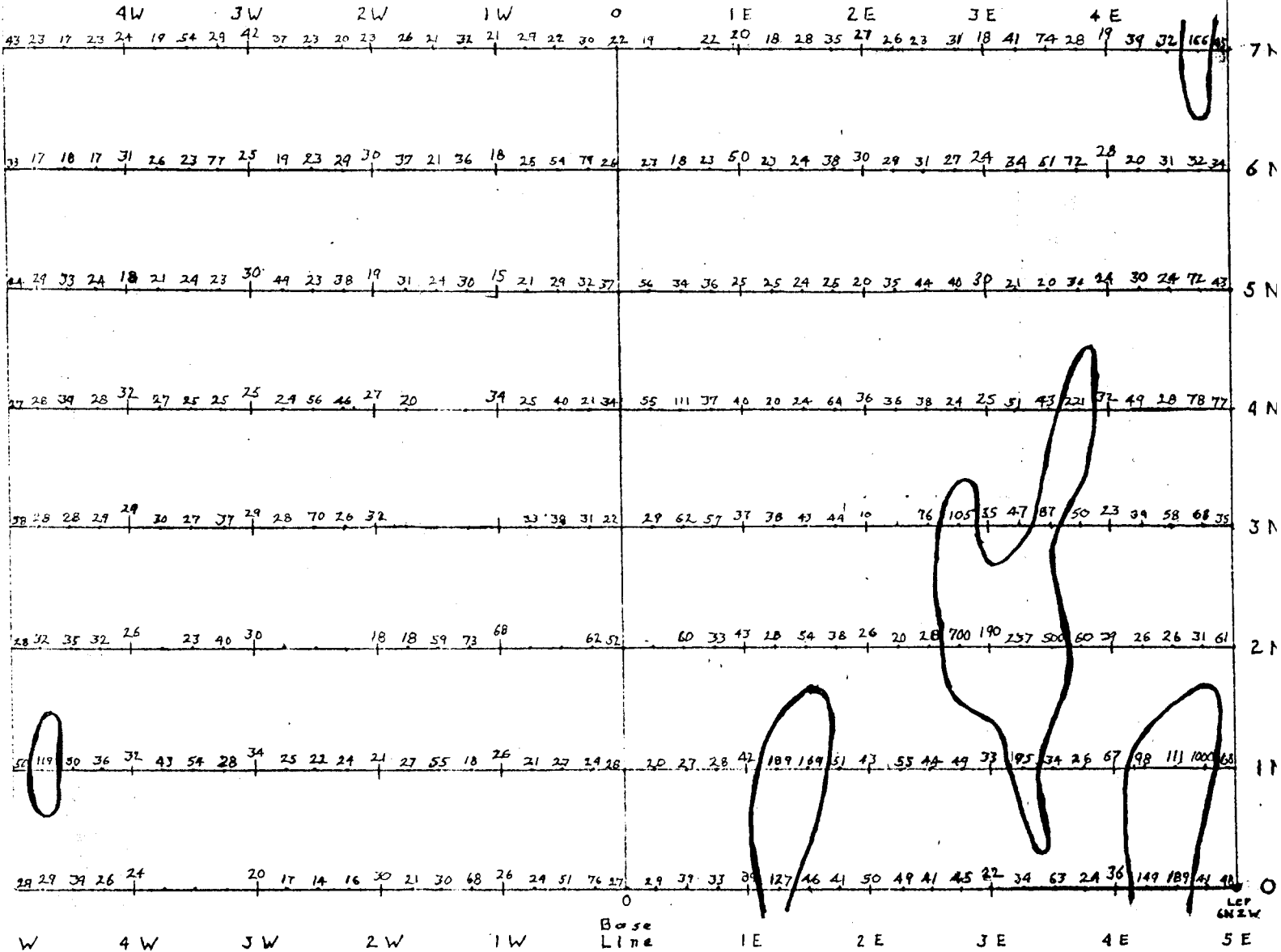
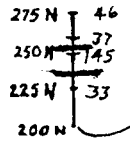
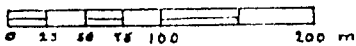


FIG. 3, MAP OF TEST RESULTS,  
GEOCHEMICAL SURVEY - COPPER

COPPER  
ppm

Background.....28  
Threshold.....56  
Anomalous.....85

SCALE



Anomalies  
are outlined.

Map to accompany assessment work report by  
Sherwin F. Kelly, P.Eng. Nov. 22, 1985

Corona Group  
Irene Claim

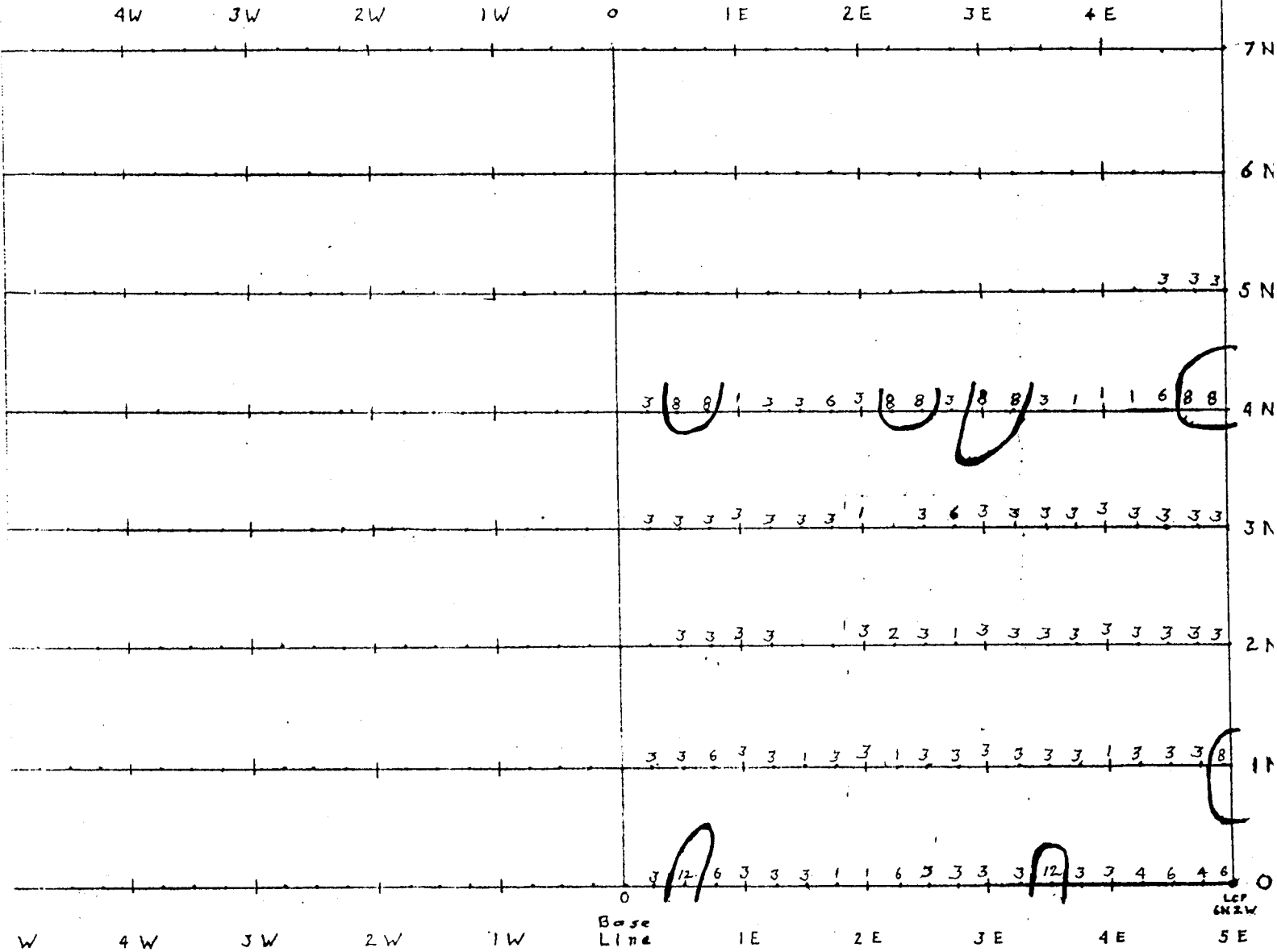
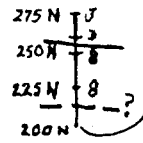
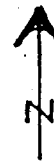
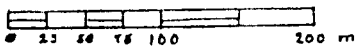


FIG. 4, MAP OF TEST RESULTS,  
GEOCHEMICAL SURVEY - TUNGSTEN

TUNGSTEN  
ppm

Background.....2.7  
Threshold.....5.4  
Anomalous.....8

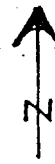
SCALE



Anomalies  
are outlined.

Map to accompany assessment work report by  
Sherwin F. Kelly, P.Eng. Nov. 22, 1985

Corona Group  
Irene Claim



275 N A  
250 N A  
225 N .6  
200 N

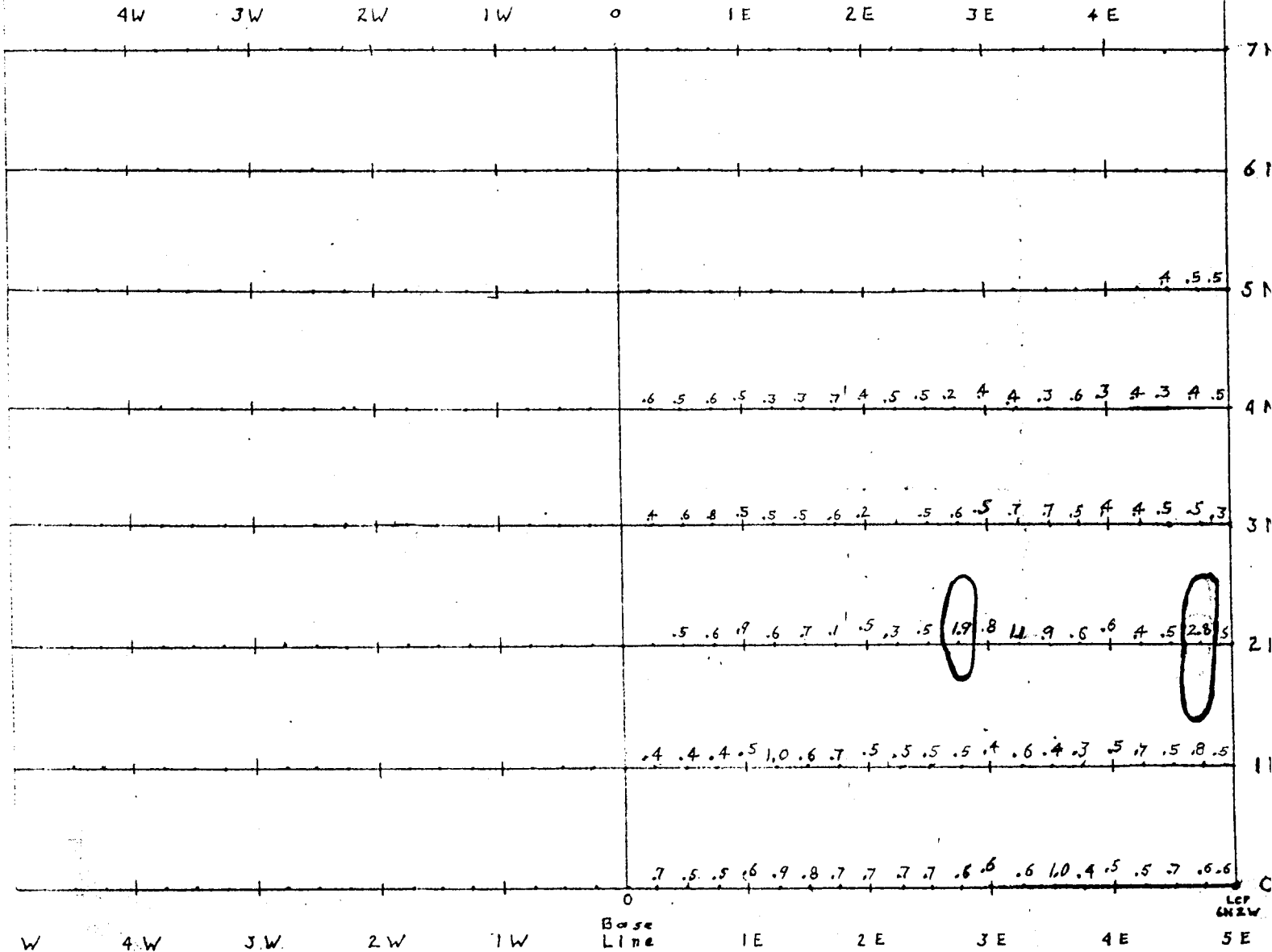
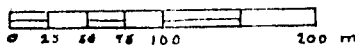


FIG. 5, MAP OF TEST RESULTS,  
GEOCHEMICAL SURVEY - SILVER

SILVER  
ppm

Background.....0.47  
Threshold.....0.94  
Anomalous.....1.4

SCALE



Anomalies  
are outlined.

Map to accompany assessment work report by  
Sherwin F. Kelly, P.Eng. Nov. 22, 1985

# Corona Group Irene Claim

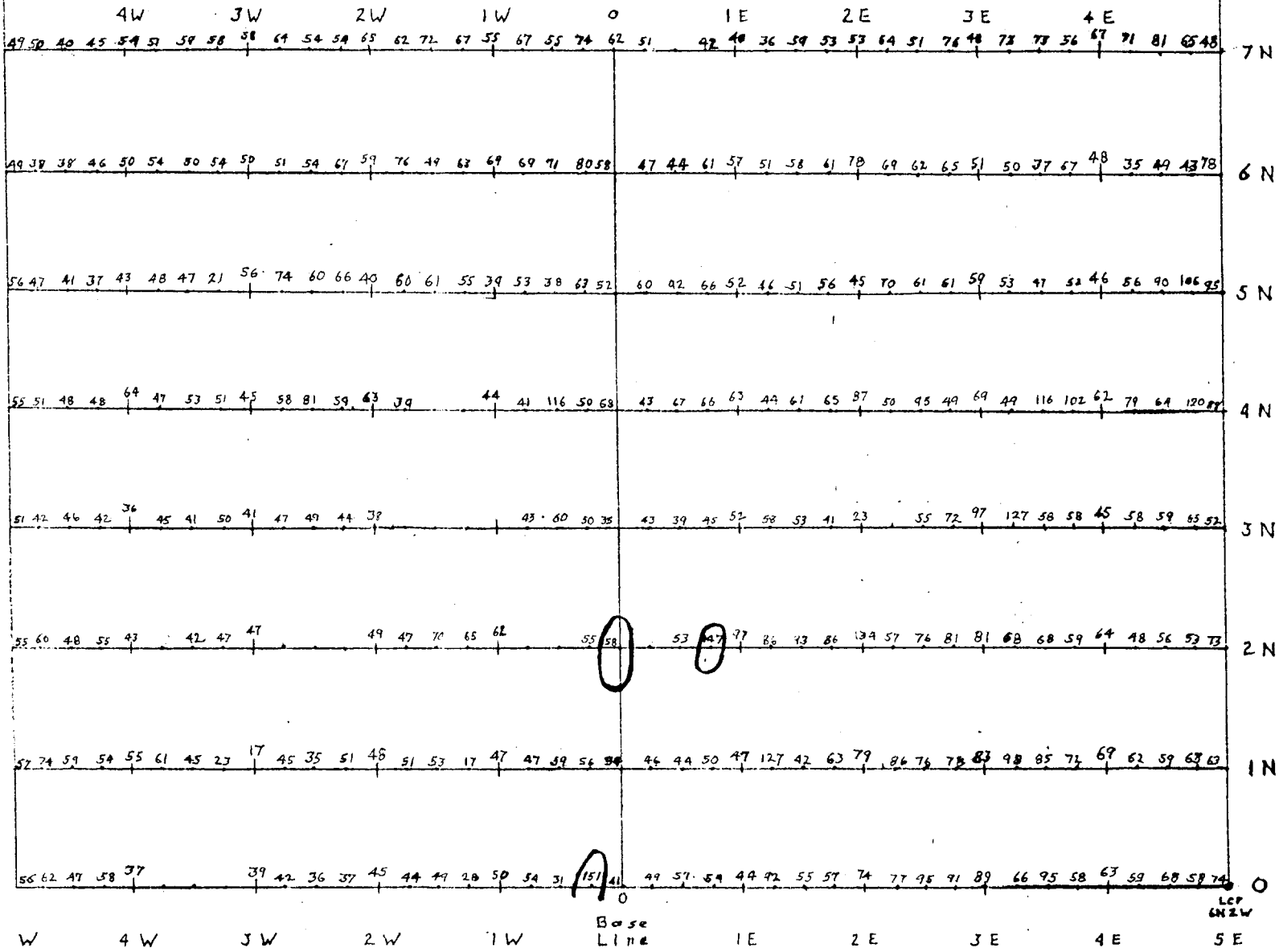
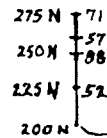
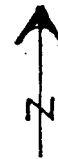


FIG. 6, MAP OF TEST RESULTS,  
GEOCHEMICAL SURVEY - ZINC

ZINC  
ppm



Background....48.5  
Threshold....97  
Anomalous....145

Anomalies  
are outlined.

Map to accompany assessment work report by  
Sherwin F. Kelly, P.Eng. Nov. 22, 1985

# Corona Group Irene Claim

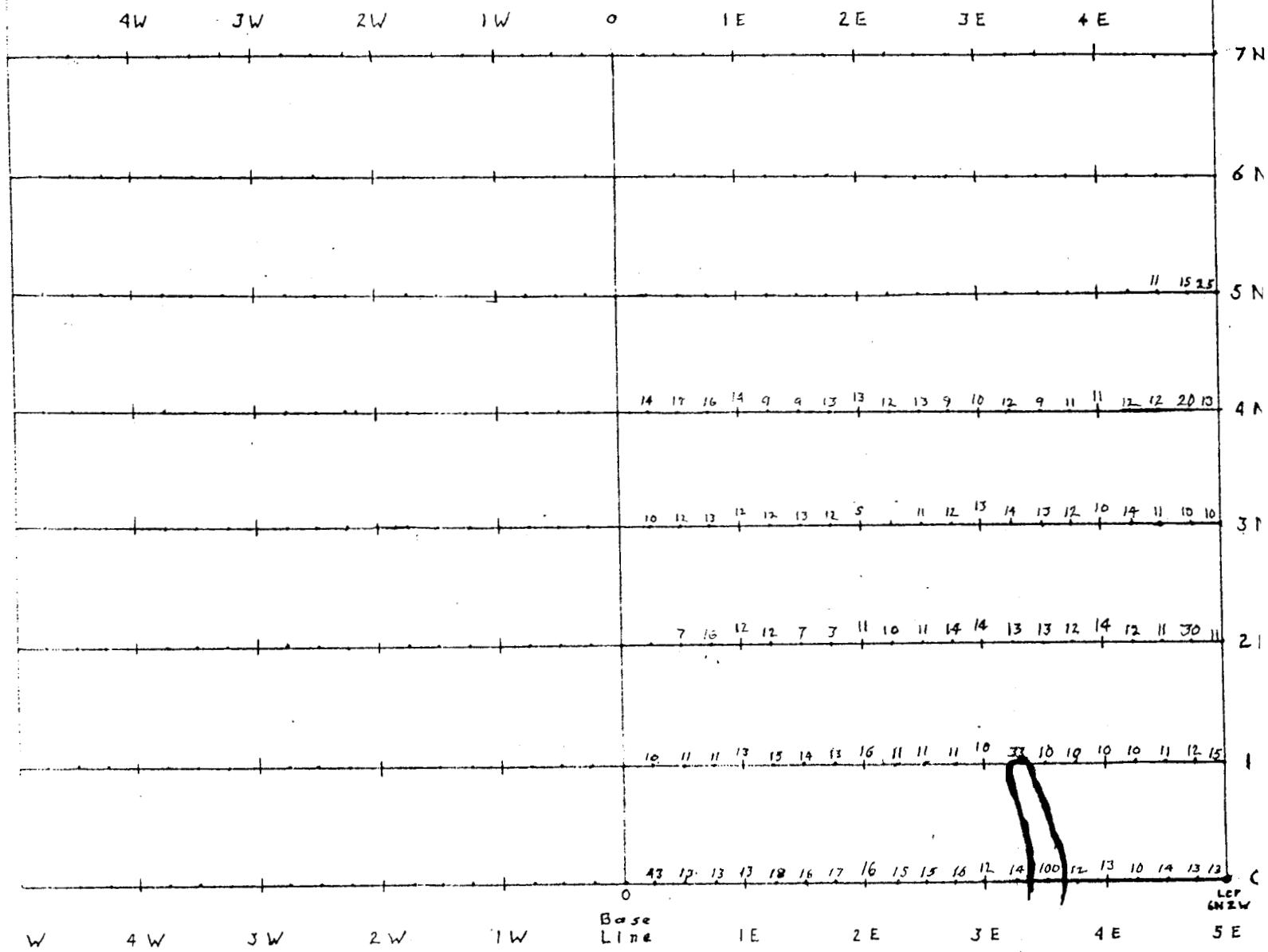
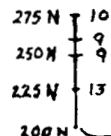
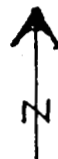
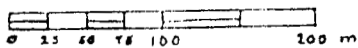


FIG. 7, MAP OF TEST RESULTS,  
GEOCHEMICAL SURVEY - LEAD

LEAD  
ppm

Background.....11  
Threshold.....22  
Anomalous.....33

SCALE



Anomalies  
are outlined

Map to accompany assessment work report by  
Sherwin F. Kelly, P.Eng. Nov. 22, 1985

ENVIRONMENTAL TESTING  
 GEOCHEMISTRY  
 ANALYTICAL CHEMISTRY  
 ASSAYING



10041 E. Trans Canada Hwy., R.R. #2, Kamloops, B.C. V2C 2J3 — Telephone (604) 573-5700 Telex 048 8393

DATE August 7 19 85

Attention: Mr. G. D'Angelo

CLIENT Pacific Northwest Geotech Ltd.  
P. O. Box 3064  
KAMLOOPS, B. C. V2C 6B7

INVOICE NO ETK85-45

DESCRIPTION	AMOUNT
316 Sample Preps @ \$0.90 ea.	\$ 284 40
1 Sample Prep @ \$3.25 ea. (rock)	3 25
317 Cu/Zn Geochems @ \$3.00 ea.	<u>951 00</u>
TOTAL DUE AND PAYABLE UPON RECEIPT	<u>\$ 1,238 65</u>

TERMS: Net 30 days. Interest at the rate of 1% per month may be charged on overdue accounts

KAMLOOPS -- CALGARY -- BURNABY



ENVIRONMENTAL TESTING  
GEOCHEMISTRY  
ANALYTICAL CHEMISTRY  
ASSAYING



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LABORATORIES LTD.

10041 E. Trans Canada Hwy., R.R. #2, Kamloops, B.C. V2C 2J3 — Telephone (604) 573-5700 Telex 048-8393

DATE September 13 19 85

Attention: Mr. G. D'Angelo

CLIENT Pacific Northwest Geotech Ltd.  
P. O. Box 3064  
KAMLOOPS, B. C. V2C 5B7

INVOICE NO. ETK85-45A

DESCRIPTION	AMOUNT	
105 Ag/Pb Geochems @ \$2.75 ea.	\$ 288	75
103 Tungsten Geochems @ \$3.00 ea.	<u>309</u>	<u>00</u>
TOTAL DUE AND PAYABLE UPON RECEIPT	\$ <u>597</u>	<u>75</u>

TERMS: Net 30 days. Interest at the rate of 1% per month may be charged on overdue accounts.

KAMLOOPS — CALGARY — BURNABY



**Eco-Tech**  
LABORATORIES LTD.

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ENVIRONMENTAL TESTING  
GEOCHEMISTRY  
ANALYTICAL CHEMISTRY  
ASSAYING

DATE September 13 19 85

Attention: Mr. G. D'Angelo

CLIENT

Pacific Northwest Geotech Ltd.

P. O. Box 3064

KAMLOOPS, B. C. V2C 6B7

INVOICE NO. ETK85-69

DESCRIPTION

AMOUNT

1 Rock Geochem Sample Prep @ \$2.75 ea.

\$ 2 75

1 Ag/Pb Geochems @ \$2.75 ea.

2 75

1 Tungsten Geochems @ \$3.00 ea.

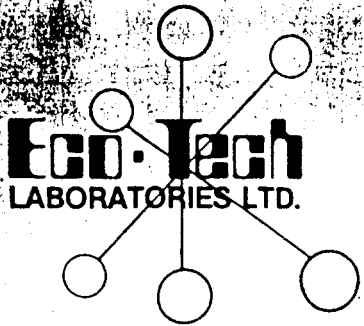
3 00

TOTAL DUE AND PAYABLE UPON RECEIPT

\$ 8 50

TERMS: Net 30 days. Interest at the rate of  
1% per month may be charged on  
overdue accounts.

KAMLOOPS — CALGARY — BURNABY



ENVIRONMENTAL TESTING  
GEOCHEMISTRY  
ANALYTICAL CHEMISTRY  
ASSAYING

10041 E. Trans Canada Hwy., R.R. #2, Kamloops, B.C. V2C 2J3 Phone (604) 573-5700  
Telex: 048-8393

September 13, 1985

CERTIFICATE OF ANALYSIS

CLIENT: Pacific Northwest GeoTech Ltd.  
Box 3064  
KAMLOOPS, B. C.  
V2C 6B7


ATTENTION: Mr. G. D'Angelo

SAMPLE IDENTIFICATION: 1 rock sample received September 6, 1985

CERTIFICATE OF ANALYSIS NUMBER: ETK85-69

<u>Description</u>	<u>Ag (ppm)</u>	<u>Pb (ppm)</u>	<u>W (ppm)</u>
Rock	1.6	95	200

Irene A.

  
ECO-TECH LABORATORIES LTD.  
Thomas J. Fletcher, B.Sc.  
Chief Assayer

TJF/mil

Sept. 15(?) 1985  
Irene Cl.

ECC-TECH LABORATORIES LTD  
10041 E. TRANS CANADA HWY. R.R. #2 KAMLOOPS B.C. V2C 2J3 573-5700

CERTIFICATE OF ANALYSIS ETK-85-45  
PACIFIC NW GEOTECH LTD.

ET#	LINE NUMBER	COPPER (ppm)	ZINC (ppm)	SILVER (ppm)	LEAD (ppm)	TUNGSTEN (ppm)
1	ON 0+00W	27	41			
2	0+25W	76	151			
3	0+50W	51	31			
4	0+75W	24	54			
5	1+00W	26	50			
6	1+25W	68	28			
7	1+50W	30	49			
8	1+75W	21	44			
9	2+00W	30	45			
10	2+25W	16	37			
11	2+50W	14	36			
12	2+75W	17	42			
13	3+00W	20	39			
14	4+00W	24	37			
15	4+25W	26	58			
16	4+50W	39	47			
17	4+75W	29	62			
18	5+00W	29	56			
19	0+25E	29	49	.7	43	3
20	0+50E	39	57	.3	13	12
21	0+75E	33	54	.5	13	6
22	1+00E	39	44	.6	13	3
23	1+25E	127	92	.9	18	3
24	1+50E	46	55	.8	16	3
25	1+75E	41	57	.7	17	1
26	2+00E	50	74	.7	16	1
27	2+25E	49	77	.7	15	6
28	2+50E	41	95	.7	15	3
29	2+75E	45	91	.6	16	3
30	3+00E	22	89	.6	12	3
31	3+25E	34	66	.6	14	3
32	3+50E	63	95	1.0	100	12
33	3+75E	24	58	.4	12	3
34	4+00E	36	63	.5	13	3
35	4+25E	149	59	.5	10	4
36	4+50E	189	68	.7	14	6
37	4+75E	41	58	.6	13	4
38	5+00E	48	74	.6	13	6

ECO-TECH LABORATORIES LTD  
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CERTIFICATE OF ANALYSIS ETK-85-45  
 PACIFIC NW SEOTECH LTD.

ET#	LINE NUMBER	COPPER (ppm)	ZINC (ppm)	SILVER (ppm)	LEAD (ppm)	TUNGSTEN (ppm)
39	1N 0+00W	28	54			
40	0+25W	24	56			
41	0+50W	27	59			
42	0+75W	21	47			
43	1+00W	26	47			
44	1+25W	18	17			
45	1+50W	55	53			
46	1+75W	27	51			
47	2+00W	21	48			
48	2+25W	24	51			
49	2+50W	22	35			
50	2+75W	25	45			
51	3+00W	34	17			
52	3+25W	28	23			
53	3+50W	54	45			
54	3+75W	43	61			
55	4+00W	32	55			
56	4+25W	36	54			
57	4+50W	50	59			
58	4+75W	119	74			
59	5+00W	50	57			
60	0+25E	20	46	.4	10	3
61	0+50E	27	44	.4	11	3
62	0+75E	28	50	.4	11	6
63	1+00E	42	47	.5	13	3
64	1+25E	189	127	1.0	15	3
65	1+50E	169	42	.6	14	1
66	1+75E	51	63	.7	13	3
67	2+00E	43	79	.5	16	3
68	2+25E	55	86	.5	11	1
69	2+50E	44	76	.5	11	3
70	2+75E	49	78	.5	11	3
71	3+00E	33	83	.4	10	3
72	3+25E	95	98	.6	33	3
73	3+50E	34	85	.4	10	3
74	3+75E	26	72	.3	10	3
75	4+00E	67	69	.5	10	1
76	4+25E	98	52	.7	10	3
77	4+50E	111	59	.5	11	3
78	4+75E	1000	63	.8	12	3
79	5+00E	68	63	.5	15	8

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CERTIFICATE OF ANALYSIS ETK-85-45  
 PACIFIC NW GEOTECH LTD.

ET#	LINE NUMBER	COPPER (ppm)	ZINC (ppm)	SILVER (ppm)	LEAD (ppm)	TUNGSTEN (ppm)
80	ZN 0+00W	52	158			
81	0+25W	62	55			
82	1+00W	68	62			
83	1+25W	73	65			
84	1+50W	59	70			
85	1+75W	18	47			
86	2+00W	18	49			
87	3+00W	30	47			
88	3+25W	40	47			
89	3+50W	23	42			
90	4+00W	26	43			
91	4+25W	32	55			
92	4+50W	35	48			
93	4+75W	32	60			
94	5+00W	28	55			
95	0+50E	60	53	.5	7	3
96	0+75E	33	147	.6	16	3
97	1+00E	43	97	.9	12	3
98	1+25E	28	86	.6	12	3
99	1+50E	54	93	.7	7	
100	1+75E	38	86	.1	3	
101	2+00E	26	134	.5	11	3
102	2+25E	20	57	.3	10	2
103	2+50E	28	76	.5	11	3
104	2+75E	700	81	1.9	14	1
105	3+00E	190	81	.8	14	3
106	3+25E	237	68	1.1	13	3
107	3+50E	500	68	.9	13	3
108	3+75E	60	59	.6	12	3
109	4+00E	39	64	.6	14	3
110	4+25E	26	48	.4	12	3
111	4+50E	26	56	.5	11	3
112	4+75E	31	53	2.8	30	3
113	5+00E	61	73	.6	11	3
114	3N 0+00W	29	53			
115	0+00W	22	35			
116	0+25W	31	50			

Thomas J. Fletcher, Chief Assayer

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CERTIFICATE OF ANALYSIS ETK-85-45  
 PACIFIC NW GEOTECH LTD.

ET#	LINE NUMBER	COPPER (ppm)	ZINC (ppm)	SILVER (ppm)	LEAD (ppm)	TUNGSTEN (ppm)
117	0+50W	3N 39	60			
118	0+75W	23	43			
119	2+00W	32	38			
120	2+25W	26	44			
121	2+50W	70	49			
122	2+75W	28	47			
123	3+00W	29	41			
124	3+25W	37	50			
125	3+50W	27	41			
126	3+75W	30	45			
127	3+75W	35	45			
128	4+00W	29	36			
129	4+25W	29	42			
130	4+50W	28	46			
131	4+75W	28	42			
132	5+00W	58	51			
133	0+25E	29	43	.4	10	3
134	0+50E	62	39	.6	12	3
135	0+75E	57	45	.8	13	3
136	1+00E	37	52	.5	12	3
137	1+25E	38	58	.5	12	3
138	1+50E	43	53	.5	13	3
139	1+75E	44	41	.6	12	3
140	2+00E	10	23	.2	5	1
141	2+50E	76	55	.5	11	3
142	2+75E	105	72	.6	12	6
143	3+00E	35	97	.5	13	3
144	3+25E	47	127	.7	14	3
145	3+50E	87	58	.7	13	3
146	3+75E	50	58	.5	12	3
147	4+00E	23	45	.4	10	3
148	4+25E	39	58	.4	14	3
149	4+50E	58	59	.5	11	3
150	4+75E	68	65	.5	10	3
151	5+00E	35	52	.3	10	3
152	4N 0+00W	34	68			
153	0+25W	21	50			

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CERTIFICATE OF ANALYSIS ETK-85-45  
 PACIFIC NW GEOTECH LTD.

ET#	LINE NUMBER	COPPER (ppm)	ZINC (ppm)	SILVER (ppm)	LEAD (ppm)	TUNGSTEN (ppm)
154	4N 0+50W	49	116			
155	0+75W	25	41			
156	1+00W	34	44			
157	1+75W	20	39			
158	2+00W	27	63			
159	2+25W	46	59			
160	2+50W	56	81			
161	2+75W	24	58			
162	3+00W	25	45			
163	3+25W	25	51			
164	3+50W	25	53			
165	3+75W	27	47			
166	4+00W	32	64			
167	4+25W	28	48			
168	4+50W	39	48			
169	4+75W	28	51			
170	5+00W	27	55			
171	0+25E	55	43	.6	14	3
172	0+50E	111	67	.5	17	8
173	0+75E	37	66	.6	16	8
174	1+00E	40	63	.5	14	1
175	1+25E	20	44	.3	9	3
176	1+50E	24	61	.3	9	3
177	1+75E	64	65	.7	13	6
178	2+00E	36	87	.4	13	3
179	2+25E	36	50	.5	12	8
180	2+50E	38	95	.5	13	8
181	2+75E	24	49	.2	9	3
182	3+00E	25	69	.4	10	8
183	3+25E	51	49	.4	12	8
184	3+50E	43	116	.3	9	3
185	3+75E	221	102	.6	11	1
186	4+00E	32	62	.3	11	1
187	4+25E	49	79	.4	12	1
188	4+50E	28	64	.3	12	6
189	4+75E	78	120	.4	20	8
190	5+00E	77	88	.5	13	8



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10041 E. TRANS CANADA HWY. R.R. #2 KAMLOOPS B.C. V2C 2J3 573-5700

CERTIFICATE OF ANALYSIS ETK-85-45  
PACIFIC NW GEOTECH LTD.

ET#	LINE NUMBER	COPPER (ppm)	ZINC (ppm)	SILVER (ppm)	LEAD (ppm)	TUNGSTEN (ppm)
191	5N 0+00W	37	52			
192	0+25W	32	63			
193	0+50W	29	38			
194	0+75W	21	53			
195	1+00W	15	39			
196	1+25W	30	55			
197	1+50W	24	61			
198	1+75W	31	60			
199	2+00W	19	40			
200	2+25W	38	66			
201	2+50W	23	60			
202	2+75W	49	74			
203	3+00W	30	56			
204	3+25W	23	21			
205	3+50W	24	47			
206	3+75W	21	48			
207	4+00W	18	43			
208	4+25W	24	37			
209	4+50W	33	41			
210	4+75W	29	47			
211	5+00W	24	56			
212	6N 0+00W	26	58			
213	0+25W	79	80			
214	0+50W	54	71			
215	0+75W	25	69			
216	1+00W	18	69			
217	1+25W	36	63			
218	1+50W	21	49			
219	1+75W	37	76			
220	2+00W	30	59			
221	2+25W	29	67			
222	2+50W	23	54			
223	2+75W	19	51			
224	3+00W	25	50			
225	3+25W	77	54			
226	3+50W	23	50			
227	3+75W	26	54			

ECC-TECH LABORATORIES LTD  
 10041 E. TRANS CANADA HWY. R.R. #2 KAMLOOPS B.C. V2C 2J3 573-5700

CERTIFICATE OF ANALYSIS ETK-85-45  
 PACIFIC NW GEOTECH LTD.

ET#	LINE NUMBER	CUPPER (ppm)	ZINC (ppm)	SILVER (ppm)	LEAD (ppm)	TUNGSTEN (ppm)
228	6N 4+00W	31	50			
229	4+25W	17	46			
230	4+50W	18	38			
231	4+75W	17	38			
232	5+00W	33	49			
233	0+25E	23	47			
234	0+50E	18	44			
235	0+75E	23	61			
236	1+00E	50	57			
237	1+25E	23	51			
238	1+50E	24	58			
239	1+75E	38	61			
240	2+00E	30	78			
241	2+25E	29	69			
242	2+50E	31	62			
243	2+75E	27	65			
244	3+00E	24	51			
245	3+25E	34	50			
246	3+50E	51	37			
247	3+75E	72	67			
248	4+00E	28	48			
249	4+25E	20	35			
250	4+50E	31	49			
251	4+75E	32	43			
252	5+00E	34	78			
253	7N 0+00W	22	62			
254	0+25W	30	74			
255	0+50W	22	55			
256	0+75W	29	67			
257	1+00W	21	55			
258	1+25W	32	67			
259	1+50W	21	72			
260	1+75W	26	62			
261	2+00W	23	65			
262	2+25W	20	54			
263	2+50W	23	54			
264	2+75W	37	64			

Thomas J. Fletcher, Chief Assayer

EDG-TECH LABORATORIES LTD  
 10041 E. TRANS CANADA HWY. R.R. #2 KAMLOOPS B.C. V2C 2J3 573-5700

CERTIFICATE OF ANALYSIS ETK-85-45  
 PACIFIC NW GEOTECH LTD.

ET#	LINE NUMBER	COPPER (ppm)	ZINC (ppm)	SILVER (ppm)	LEAD (ppm)	TUNGSTEN (ppm)
265	<i>74</i> 3+00W	42	58			
266	3+25W	29	58			
267	3+50W	54	59			
268	3+75W	19	51			
269	4+00W	24	54			
270	4+25W	23	45			
271	4+50W	17	40			
272	4+75W	23	50			
273	5+00W	43	49			
274	0+25E	19	51			
275	0+75E	22	42			
276	1+00E	20	40			
277	1+25E	18	36			
278	1+50E	28	59			
279	1+75E	35	53			
280	2+00E	27	53			
281	2+25E	26	64			
282	2+50E	23	51			
283	2+75E	31	76			
284	3+00E	18	48			
285	3+25E	41	73			
286	3+50E	74	75			
287	3+75E	28	56			
288	4+00E	19	67			
289	4+25E	39	71			
290	4+50E	32	81			
291	4+75E	166	65			
292	5+00E	45	48			
293	500E 2+25N	33	52	.6	13	8
294	2+50N	145	88	.3	9	8
295	2+60N	37	57	.4	9	3
296	2+75N	46	71	.4	10	3
297	7Nroc 1+25W	232	61			

ECO-TECH LABORATORIES LTD  
10041 E. TRANS CANADA HWY. R.R. #2 KAMLOOCS B.C. V2C 2J3 573-5700

CERTIFICATE OF ANALYSIS ETK-85-45  
PACIFIC NW GEOTECH LTD.

ET#	LINE NUMBER	COPPER (ppm)	ZINC (ppm)	SILVER (ppm)	LEAD (ppm)	TUNGSTEN (ppm)
298	5N 0+25E	56	60			
299	0+50E	34	92			
300	0+75E	36	66			
301	1+00E	25	52			
302	1+25E	25	46			
303	1+50E	24	51			
304	1+75E	25	56			
305	2+00E	20	45			
306	2+25E	35	70			
307	2+50E	44	61			
308	2+75E	40	61			
309	3+00E	30	59			
310	3+25E	21	53			
311	3+50E	20	47			
312	3+75E	34	52			
313	4+00E	24	46			
314	4+25E	30	56			
315	4+50E	24	90	.4	11	3
316	4+75E	72	106	.5	15	3
317	5+00E	43	95	.5	25	3