ASSESSMENT REPORT

TITLE: SOIL SAMPLING, MAGNETOMETER AND I.P.-RESISTIVITY SURVEYS ON THE THISTLE PROPERTY, VANCOUVER ISLAND, B. C., 1983: PART I.

MAGNETOMETER AND I.P.-RESISTIVITY SURVEYS ON THE THISTLE AND PANTHER GRIDS, L91, 92 93G AND RAND CLAIMS, THISTLE PROPERTY, 1983: PART II.

CLAIMS INVOLVED: L91G, L92G, L93G (CROWN GRANTS), CROW AND RAND CLAIMS OF THISTLE PROPERTY, WHICH INCLUDES SUE, LEVI, MUSEUM, QUILL #1-8, LORE #1-3, L95G AND L97G

TOTAL CLAIMS-UNITS OF PROPERTY: 103

LOCATION: ALBERNI AND VICTORIA MINING DISTRICTS

N.T.S.: 92F/2E
49° 06' LATITUDE
124° 39' LONGITUDE
FRANKLIN RIVER-RIFT CREEK AREA, 20 AIR-KMS SOUTHEAST OF PORT ALBERNI, SOUTH-CENTRAL VANCOUVER ISLAND, B.C.

OWNER OF CLAIMS: NEXUS RESOURCE CORPORATION

OPERATOR OF CLAIMS: WESTMIN RESOURCES LIMITED

WORK PERIOD: OCTOBER 29 TO NOVEMBER 22, 1983

REPORTS BY: PART I : GARY BENVENUTO (WESTMIN RESOURCES LIMITED)

PART II: PETER WALCOTT (AND ASSOCIATES LIMITED)

PART I

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PART I

SOIL SAMPLING, MAGNETOMETER AND I.P.-RESISTIVITY SURVEYS ON THE THISTLE PROPERTY, VANCOUVER ISLAND, B. C., 1983

INTRODUCTION

LOCATION (92F/2E)

The Thistle property is located 20 airkilometers southeast of Port Alberni, south-central Vancouver Island, B.C. The property encompasses the headwaters-area of the Franklin River and Rift Creek (also known as the West Fork of the Nitinat River) (see Figure 1). The approximate centre of the property is at 49° 06' latitude and 124° 39' longitude.

ACCESS

The Thistle property is accessible by truck, from Port Alberni via the Bamfield road, and the Museum Main road, both of which are unpaved logging roads. The Thistle mine grid, on which part of the surveys were conducted, is reached by following the Thistle Main road which branches to the north, off Museum Main road. The Panther grid is located 1.4 kms southeast of the Thistle mine grid, but is reached by following the Museum Main road to the M2A road (also known as the

Panther road), which branches to the north off Museum Main. By truck, it requires 40 minutes to travel the 31 kms to the Thistle grid from Port Alberni, and 45 minutes to travel to 34 kms from Port Alberni to the Panther grid.

Heavy, sustained rains during the Fall and Winter of 1982-83 and the Fall of 1983, wrecked havoc with the roads within the Thistle property. It was necessary to use a bulldozer to do road reconstruction on both the Thistle Main and Panther roads to gain access to the two grids.

PHYSIOGRAPHY

The topography and vegetation in the area of the property is relatively variable at both large and small scales. The Thistle mine grid is located at the headwaters of the Franklin River. It was cut on the westerly facing slope of the Franklin River valley, which, in the area of the grid has an average slope of about 40°. The Panther grid is separated from the Thistle grid by a broad, low relief saddle separating the Franklin River Valley from the Rift Creek Valley. This grid is located on the easterly flank of Limestone Mountain (peak at 1514 m) and covers an area of relatively low topographic relief, with slopes varying from 10 to 35°.

Much of the area of the property, at higher elevations, is covered by mature forest comprising Douglas Fir, Balsam Fir, Hemlock and Cedar. However, at lower elevations, below about 800 to 950 m, decades of periodic logging has resulted in areas covered by various

stages of second and probably third generation forest growth. Approximately half of the Thistle grid is within an area of mature forest. The other half covers part of an old logging slash, part of an area of immature, second growth forest and, in the area of Franklin River, incredibly dense thickets of salmonberry, alder, devil's club, blackberry and thimbleberry. With the exception of about 500 m of grid line within mature forest, the Panther grid covers part of an old logging slash that contains sparse, 2 m high evergreens, but abundant fireweed, huckleberry bushes and well-concealed deadfall.

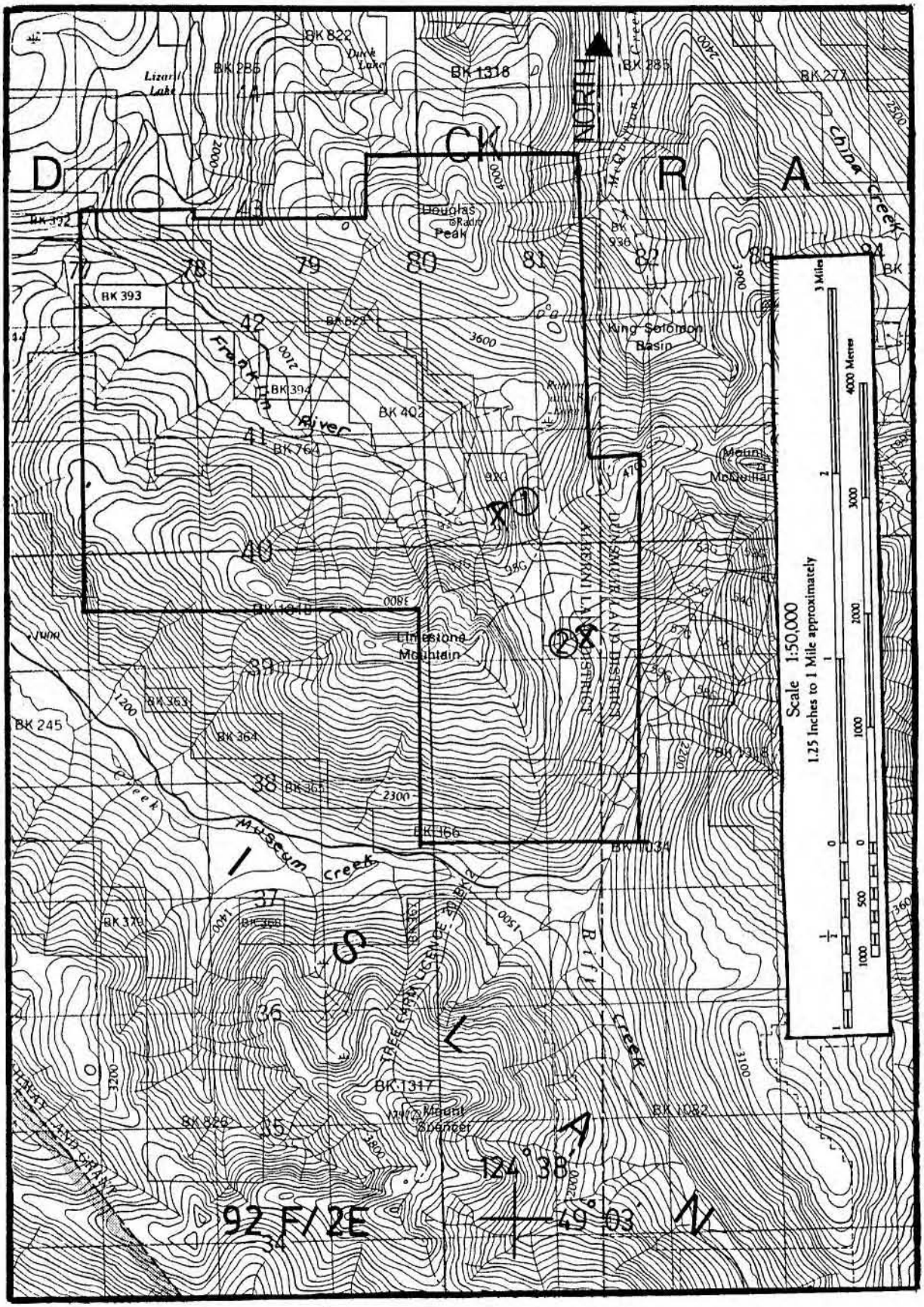


FIGURE 1: 1:50,000 scale topographic map showing the location of the Thistle property (outlined in black) and the Thistle mine (1) and Panther road showing (2). The property is located in the headwaters area of Franklin River and Rift Creek, 20 airkms. southeast of Port Alberni, south-central Vancouver Island, B.C.

GEOLOGY

The southwestern third of the Thistle property is underlain by basaltic flows and pillowed basalt of the Upper Triassic Karmutsen Formation. The Karmutsen Formation is underlain to the northeast by the limestones, marbles and bedded tuffs of the Early Permian to Pennsylvanian Buttle Lake Formation, which forms the top of the Sicker Group. The Buttle Lake Formation is underlain to the northeast and east by a complexly interlayered succession comprising predominantly basaltic to diabasic tuffaceous agglomerates and agglomeratic tuffs and secondarily, massive to thin-bedded tuffs. The part of the Sicker Group that underlies the Buttle Lake Formation, may range in age from Mississippian to Devonian or older. The Thistle and Panther grids are underlain by rocks of this complex succession.

The area of the Thistle grid is approximately 85% covered with soil, colluvium or glacial till. The area of the Panther grid is about 75 to 85% covered with similar types of overburden. Some, but not all, of the outcrops of bedrock are shown on the grid maps (Plates I and II).

PROPERTY DEFINITION

The Thistle property consists of 103 claim-units optioned by Westmin Resources Ltd. of 904 Four Bentall Centre, 1055 Dunsmuir Street, Vancouver, B.C., from Nexus Resource Corp. of 206-475 Howe Street, Vancouver, B.C., in April 26, 1983. The claims cover an area

of about 22 square kilometers on map sheet 92F/2E and are located in the Alberni Mining District, except for the southeastern corner of the property which straddles the boundary with the Victoria Mining Division (see Figure 2). The claims information is as follows:

Sue: 20 units, record number 488(6), recorded June 28, 1979; owned by Kargen Development Corp. of 9251 Beckwith Road, Richmond, B.C.; under option to Nexus Resource Corp.

Crow: 20 units, 489(6), recorded June 28, 1979; owned by Kargen; under option to Nexus.

Levi: 16 units, 490(6), recorded June 28, 1979; owned by Kargen; under option to Nexus.

Rand: 16 units, 731(2), recorded February 29, 1980; owned by Nexus.

Museum: 15 units, 1223(5), recorded May 6, 1981; owned by Nexus.

Quill #1-8: 8 units, 1391-1398(2), recorded February 11, 1982; owned by Nexus.

Lore #1-3: 3 units, 575-577(8), recorded August 17, 1981; owned by Nexus. (Victoria Mining District).

CROWN GRANTS:

L91G: lot number 242, Thistle mineral claims, 51.65 acres; base and precious metal rights owned by Nexus.

L92G: Lot number 240, Pansy claim, 49 acres; owned by Nexus.

L93G: Lot number 241, Primrose claim, 47 acres; owned by Nexus.

REVERTED CROWN GRANTS:

L95G: lot 244, Rose mineral claim, 378(2), 51 acres; owner of gold and silver rights: David Murphy; under option-to-purchase agreement with Nexus; recorded February 20, 1979.

L97G: lot 243, Jumbo mineral claim, 379(2), 40.5 acres; owner of gold and silver: David Murphy; under option-to-purchase agreement with Nexus; recorded February 20, 1979.

EXPLORATION AND MINING HISTORY

The area of Franklin River and Rift Creek has been relatively extensively prospected since the 1890's. Within the area, two small deposits were mined, producing small tonnages of high grade ore. The Thistle mine, at the head of Franklin River, is located within the Thistle property (approximately in the northwest corner of L91G) (see Plates I:A, II and Figure 1). It produced about 6,920 tons grading 4.9% Cu, 0.3 oz. Ag/t and 0.4 oz. Au/t from thin lenses and layers of chalcopyrite-pyrite-calcite-quartz, between 1938 and 1942 (under the ownership of United Prospectors Ltd. of Victoria). The Black Panther mine is located on the east side of Rift Creek, 2 km east of the Thistle mine and in claims held by Jan Resources Ltd. that adjoin the Thistle property to the east (Figure 1). This mine produced about 1,900 tons of ore grading 0.5 oz. Ag/t and 0.27 oz. Au/t, from 7 to 90 cm thick, quartz veins, between 1947 and 1950.

The Thistle property is located within the old E.&N. Railway Land Grant, which included the base metal rights. Between 1963 and 1967, Gunnex Ltd. optioned the base metal rights from E.&N. Railway, on the area of the Land Grant, and conducted regional exploration surveys. In the area of the Thistle property, Gunnex conducted an airbourne magnetometer survey, and some regional geologic mapping, prospecting and silt and rock sampling surveys, including a brief visit to the Thistle mine (located in Crown Grants that were not part of the original Land Grant).

FIGURE 2: Claims map of Thistle property.

In 1965, Vananda Exploration Ltd. conducted exploration surveys in the immediate area of the Thistle mine. The surveys included soil sampling (314 samples, 50 x 200 ft. grid, analyzed for Cu), and magnetometer and self-potential surveys. Vananda also drilled four holes (137.2, 145, 142.6 and 107 m long, B-Q core) to test the structure beneath the Thistle mine and the northwesterly strike-projection of the mineralization at the mine (see Plate II for location of drill holes). The drill hole core logs (which are supposed to be in open file in Victoria, but are missing, but were obtained from Nexus) indicate the holes intersected about 15 bands of massive pyrite, some with chalcopyrite, that varied in width from less than 2.5 cm up to 15 cm, in general. However, one band was 30 cm wide and another 76 cm wide (the only reported intersection that was assayed: 0.05% Cu and 0.01 oz. Au/t). In 1966, Vananda Exploration dropped their option on the five Crown Grants that encompass the Thistle mine, apparently because they were discouraged by the results of drilling.

After the exploration work by Vananda, there are no records of any exploration surveys having been conducted in the area of the Thistle property until 1979. In 1979 and 1980, Kargen Development Corp. conducted soil sampling surveys for Cu, Pb and Zn on a grid covering 0.9 x 1.4 km in the southwest corner of the Levi claim and east-central Sue claims. The survey detected a patchy area of soil samples with anomalous concentrations of Cu (250 to 650 ppm) that covers an area of about 250 x 1000 m.

In 1981, Western Geophysical Aero Data Ltd. conducted an airbourne V.L.F.E.M. and magnetometer survey over the Crow, Sue, Levi, Rand, Mar, Jan and Remy claims for Nexus Resource Corp. (who optioned the Crow, Sue and Levi claims from Kargen Development Corp.). Within the Thistle property one, strong V.L.F. anomaly was detected in the area about 500 m east of the Thistle mine, in the east-central Crow claim.

In 1982, Glen White Geophysical Consulting and Services, Ltd. of Vancouver, B.C., conducted I.P.-resistivity, Crone pulse E.M., magnetometer and soil sampling (Cu, Pb, Zn) surveys on a 250 x 600 m grid centred on the Thistle mine in L91G, for Nexus Resource Corp. The results of these surveys were filed as assessment work in early 1983, and will not be discussed in detail here other than to comment on several problems with the results. Firstly, we found that at least two of the grid lines are not plotted on the maps of the surveys, in their correct position relative to the Thistle mine, which, of course, hinders interpretation of the survey results. And secondly, our survey shows that the results of White's I.P.-resistivity survey are questionable because his apparent resistivity measurements are an order of magnitude lower, in general, compared to those of our survey, as well as compared to those of White's survey along the Thistle Main road which passes within 130 m of the Thistle mine.

In November, 1982, Sawyer Consultants Inc. of Vancouver, conducted geologic mapping and rock sampling in the Thistle mine area, for Nexus. The results of this work werealso filed for assessment purposes, in early 1983.

In July and August, 1981, Ashworth Explorations Ltd. conducted soil sampling and V.L.F. E.M. surveys for Nexus, on a grid centred on the Panther road showing in the northeast corner of the Rand claim and 1.4 km southeast of the Thistle mine. The Panther road showing was discovered in mid-1981, by Nexus (which they called the "New Vein" showing), and consists of a 2.2 m wide interval of pyritic basalt, including 80 cm of massive pyrite, which assayed 0.05 oz. Ag/t and 0.490 oz. Au/t with 900 ppm Cu, across the 2.2 m width. Ashworth collected 16 soil samples, 30 m apart, on two grid lines located 12.5 m to the north and to the south of the road showing (samples analyzed for Cu, Ag and As). In addition, Ashworth conducted a V.L.F. survey on 12 grid lines, trending east-west, spaced 25 m apart and, on the average, 240 m long. The survey covered about 100 m of the southeasterly, and 225 m of the northwesterly strike-projection of the mineralization at the showing, but did not appear to detect any significant anomalies. The soil sampling and V.L.F. surveys were filed as assessment work in early 1982.

SUMMARY OF SURVEYS AND WORK DONE BY WESTMIN IN 1983

LINECUTTING

Two small grids were cut for soil sampling, I.P.-resistivity and magnetometer surveys to attempt to locate possible strike-extensionsof the mineralized intervals at the Thistle mine and the Panther road showing.

Martinson Linecutting and Staking Ltd. of 6860 Fairmont St., Powell River, B.C., cut a total of 3.63 km of grid line on the Thistle grid, between October 29 to November 1, 1983, with a crew of 2 men. The Thistle grid is approximately centred on the Thistle mine, and is approximately located in L91G, southwestern L92G and eastern L93G (see Plate I:A), which are located in the centre of the Crow claim of 20 units. The grid consists of 6 lines from 425 to 500 m long (surface distance) and one line 300 m long, that, for the most part, trend 062° and are spaced 100 m apart. Four of the lines are somewhat irregular in order to circumvent cliffs and steep bluffs and to take advantage of more open bush. Pickets were set on the grid lines at 25 m intervals (surface distance, which is equivalent to about 19 m horizontal spacing, due to the 40° average slope on the northeastern two-thirds of the grid). The total length of the grid lines is 3.1 km. The linecutting also includes 110 m of baseline and about 400 m of the old Panther mine trail, which was overgrown in stretches and locally blocked with dead fall.

The Panther grid is centred on the Panther road showing and is located in the northeast corner of the Rand claim in the area of "Saddle" creek and Panther road, about 1.4 km southeast of the Thistle mine (Plate I:B). Three men from Martinson Linecutting cut a total of 3.9 km of grid line (including 110 m of baseline) on November 3 and 4, 1983. The grid consists of 8 lines that trend 078°, and that are, in general, 500 m long. The lines are spaced from 70 to 75 m apart, except for the central three lines

which are spaced at 50 m (Plate III). The total length of the grid lines is 3.8 km. Pickets were set at 15 m intervals (surface distance) along the central 210 m of each grid line, and at 25 m interval along the "outer" portions of the lines.

SOIL SAMPLING SURVEYS

Martinson Linecutting and Staking Ltd. also conducted the soil sampling surveys. A total of 327 soil samples were collected on the Thistle and Panther grids, from the "B" soil horizon with a mattock. One crewman from Martinson collected 128 soil samples from the Thistle grid between October 29 and November 1, 1983 (4 days). The samples were collected at 25 m intervals (surface distance). Three crewmen collected a total of 199 soil samples from the Panther grid, on November 5, 1983. The samples were collected at 15 m intervals along the central 210 m of each grid line, and at 25 m along the "outer" portions of the lines.

All the soil samples were analyzed at Min-En Labs Ltd. of 705 West 15th Street, North Vancouver, B.C., for Cu, Pb, Zn, Ag and Au. At the lab, the samples were dried at 95°C and screened with an 80 mesh sieve. 5 or 10 grams of the sample were pretreated with a nitric and perchloric acid solution, then digested with an Aqua Regia solution and finally diluted with HCl. The sample was then analysed for Cu, Pb, Zn and Ag by an atomic absorption spectrophotometer using a CH_2H_2-air flame. At

least 75% of the original sample solutions were oxidized, and treated with Methyl Iso-Butyl Ketone. The solution was then analyzed for Au by atomic absorption intruments, with a detection limit of 5 ppb. The results of the analyses for Cu, Pb, Zn and Ag are reported on Plates II and III in parts per million (ppm), and for Au in parts per billion (ppb).

INDUCED POLARIZATION-RESISTIVITY SURVEYS

Peter Walcott and Associates Ltd. of 605 Rutland Court, Coquitlam, B.C. conducted I.P.-resistivity surveys on the Thistle and Panther grids along a total of 8 grid lines totalling 3.4 kms, between November 9 and 23, 1983. The survey was conducted by four men, and utilized a pole-dipole array for four levels of readings (n=1 through 4), with readings taken at 15, 25 or 30 m intervals. The relatively low rate of progress (3,400 m/13 operating days = 260 m/day) is a consequence of negotiating steep slopes in exceptionally wet weather (it either rained or snowed on all but two days of the survey). Most of the Panther grid was surveyed in the snow, with accumulations of 15 to 60 cm of snow on the ground. It is remarkable that there were no equipment failures during the course of the survey, despite the heavy precipitation, and that the readings showed variations that could be correlated between successive grid lines, indicating the results were consistent and meaningful.

The I.P.-resistivity survey on the Thistle grid was conducted on five of the grid lines from 400 to 475 m long for a total of 2.2 km, from November 9 to 18, 1983. Readings were taken at an "a" spacing of 25 m (surface distance) for n=1 through 4.

The I.P.-resistivity survey on the Panther grid was conducted on the three central lines of the grid, between November 19 and 22, 1983. The three lines are 50 m apart and are 300, 435 and 450 m long for a total of 1.2 kms. Readings were taken along the central 210 m of each grid line, with an "a" spacing of 15 m, but along the "outer" portions with an "a" spacing of 30 m, for n=1 through 4 (note that this differs from the soil sample survey interval of 25 m).

MAGNETOMETER SURVEY

A magnetometer survey was conducted on the Thistle grid, concurrently with the I.P.-resistivity, between November 9 and 18, 1983, by Walcott and Associates. The survey was conducted on 5 grid lines totalling 2.2 km with readings taken at 12.5 m intervals (surface distance).

PHYSICAL WORK

Road repairs were made on the Thistle Main and Panther roads with a bulldozer, in order to provide access by truck, to the Thistle mine and Panther road showing areas. On May 28, 1983,

Joe Carvalho of 2171 Cameron Drive, Port Alberni, B.C., spent 3 1/2 hours with his bulldozer repairing a series of washouts on the Thistle Main road, about 900 m northwest of the Thistle mine. On May 30, 1983, Mr Carvalho spent 3 hours repairing several washouts on the Panther road, in the area 350 to 1,400 m southeast of the Panther road showing. The repairs to the two roads was necessitated by the washouts that resulted from exceptionally heavy, sustained rains during the late Fall of 1982.

In mid-November, 1983, heavy rains caused a series of washouts on the Panther road, once again. It was necessary to repair these washouts to provide the I.P. crew access to the Panther grid, by truck. On November 18, 1983, a bulldozer operator from Rayner and Bracht Ltd. of 4442 Tenth Avenue, Port Alberni, B.C., spent 6 hours repairing the washouts on Panther road, in the area 300 m east, to 1,400 m southeast of the Panther road showing.

DETAILED TECHNICAL DATA AND INTERPRETATION

GEOCHEMICAL SOIL SAMPLE SURVEY

The purpose of the soil sampling surveys for Cu, Pb, Zn, Ag and Au was to aid in the delineation of possible strike-extensions, beneath the overburden, of the mineralization exposed at the old Thistle mine workings and at the Panther road showing. It was hoped that the results of the survey, in conjunction with those of the

I.P.-resistivity survey, would facilitate the planning of diamond drill sites.

RESULTS

ANOMALOUS CONCENTRATION THRESHOLDS

Geochemical analyses of the 327 soil samples collected from the Thistle and Panther grids indicate that the concentrations of Cu in soil samples ranges from 4 to 4350 ppm, that of Pb from 6 to 38 ppm, that of Zn from 7 to 129 ppm, that of Ag from 0.3 to 12.0, and that of Au from less than 5 to 15,000 ppb. However, the highest concentrations of Cu, between 1200 and 4350 ppm are in soil samples collected from the area down slope of the waste dump of the Thistle mine. Furthermore, the highest concentrations of Au were in samples from this same area (2900 to 4900 ppb Au) and from the site of the Panther road showing (15,000 ppb Au).

Log probability plots of the cumulative percentage of soil sample versus concentration of Cu, Pb, Zn, Ag and Au, were drawn for all 327 soil samples collected on the Thistle and Panther grids in 1983, in order to determine possible thresholds for anomalous concentrations (Figures 3 through 7). Thresholds for anomalous concentrations were defined at either the concentration at the 98% cumulative or at obvious inflections in the curvature of the plots (as is the case for Cu and Au). The thresholds for the soil samples are given in Table 1 below.

TABLE 1: Thresholds for concentrations of Cu, Pb, Zn, Ag and Au in 327 soil samples from the Thistle and Panther grids, 1983

	Cu		Pb		Zn		Ag		Au	
THRESHOLDS	PPM	CUM. %	PPM	CUM. %	PPM	CUM. %	PPM	CUM. %	PPB %	CUM.
ANOMALOUS	220	95	28	98	105?	98	2.0	98	125	95.5
HIGH BACKGROUND	125	87			85	95			15	66
GEOMETRIC MEAN	45	50	17	50	37	50	1.0	50	10	50

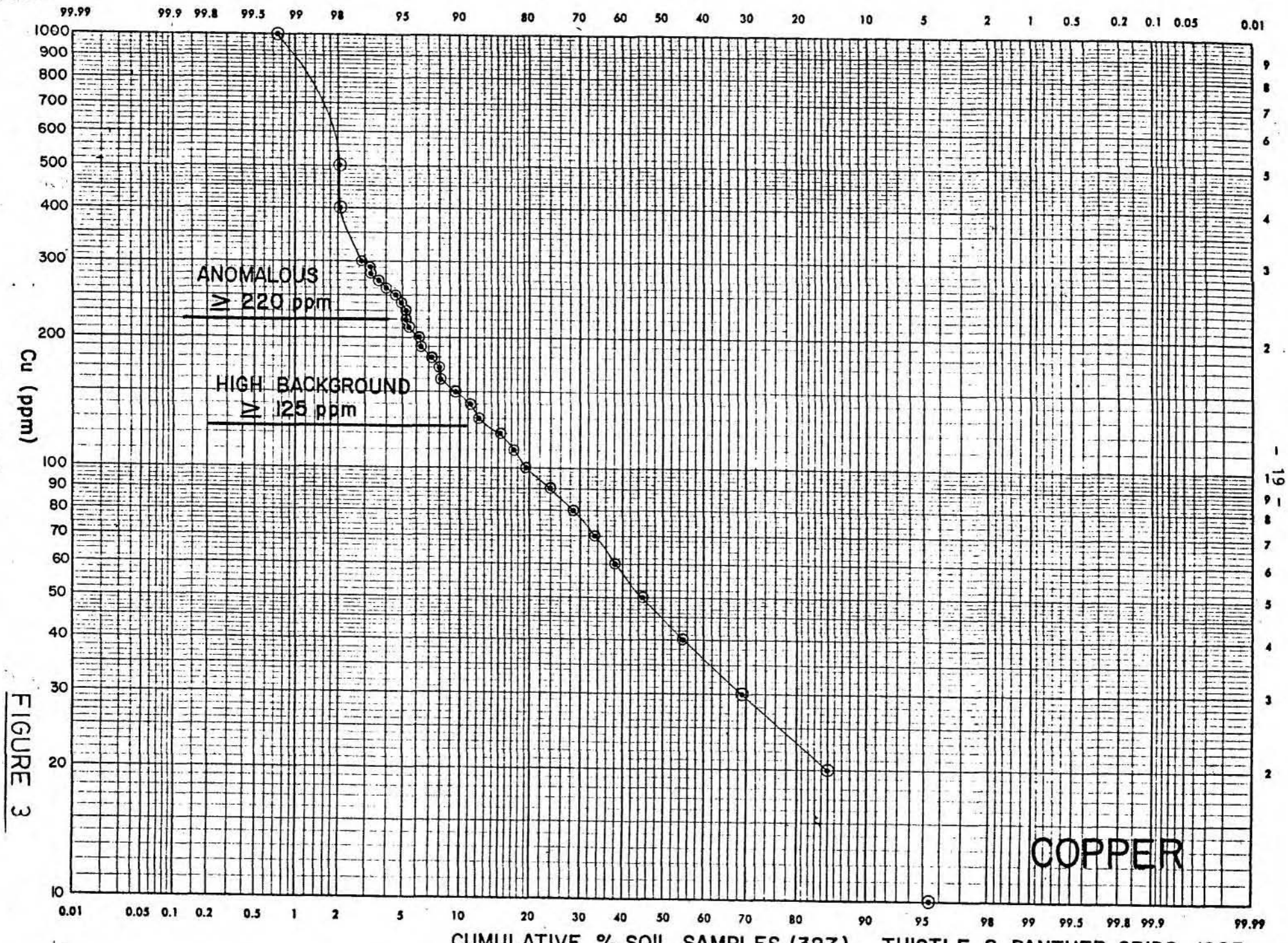

ANOMALOUS
≥ 220 ppm
HIGH BACKGROUND
≥ 125 ppm
COPPER
Cu (ppm)
CUMULATIVE % SOIL SAMPLES (327), THISTLE & PANTHER GRIDS, 1983

FIGURE 3

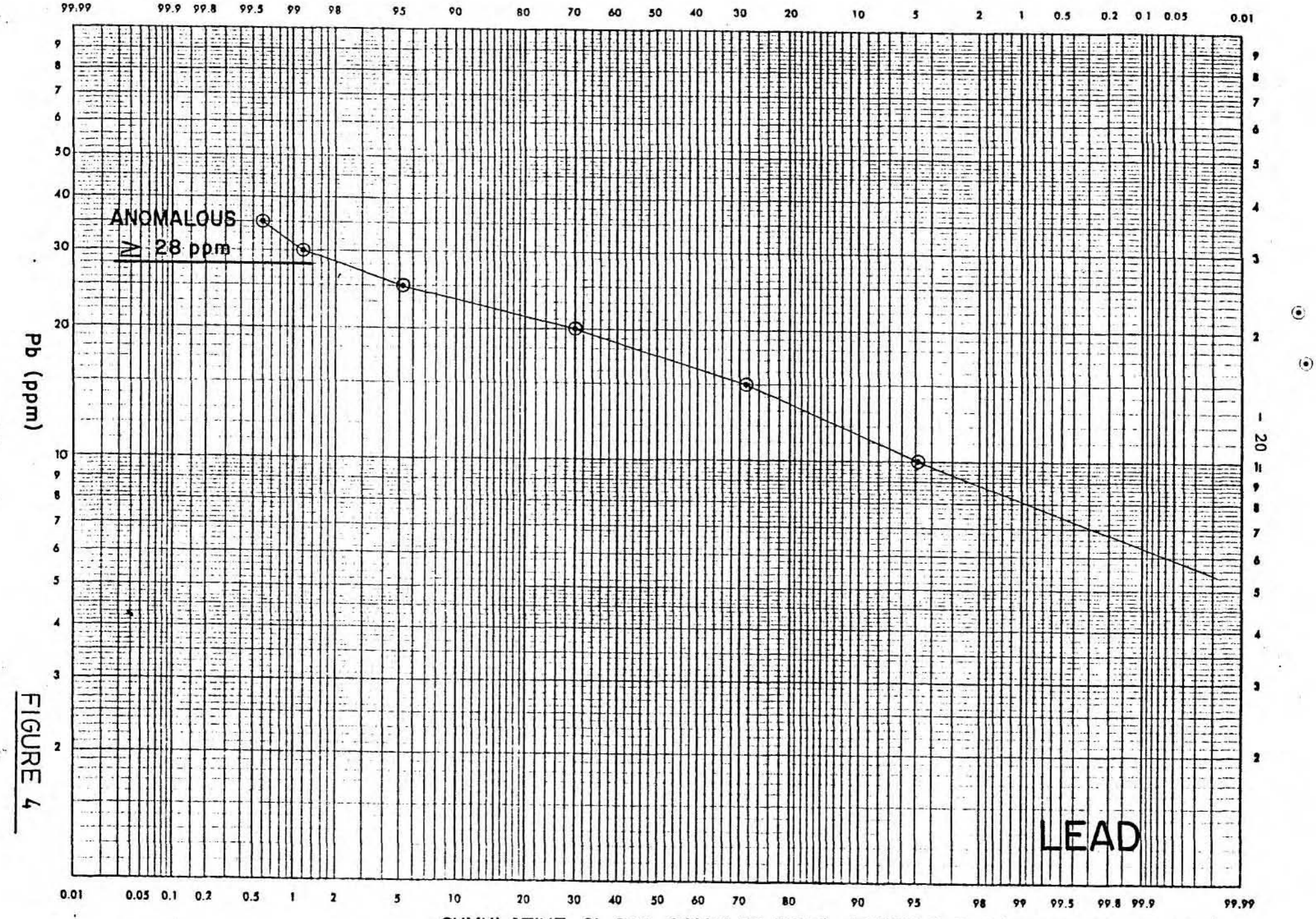

ANOMALOUS
≥ 28 ppm
LEAD
Pb (ppm)
CUMULATIVE % SOIL SAMPLES (327), THISTLE & PANTHER GRIDS, 1983

FIGURE 4

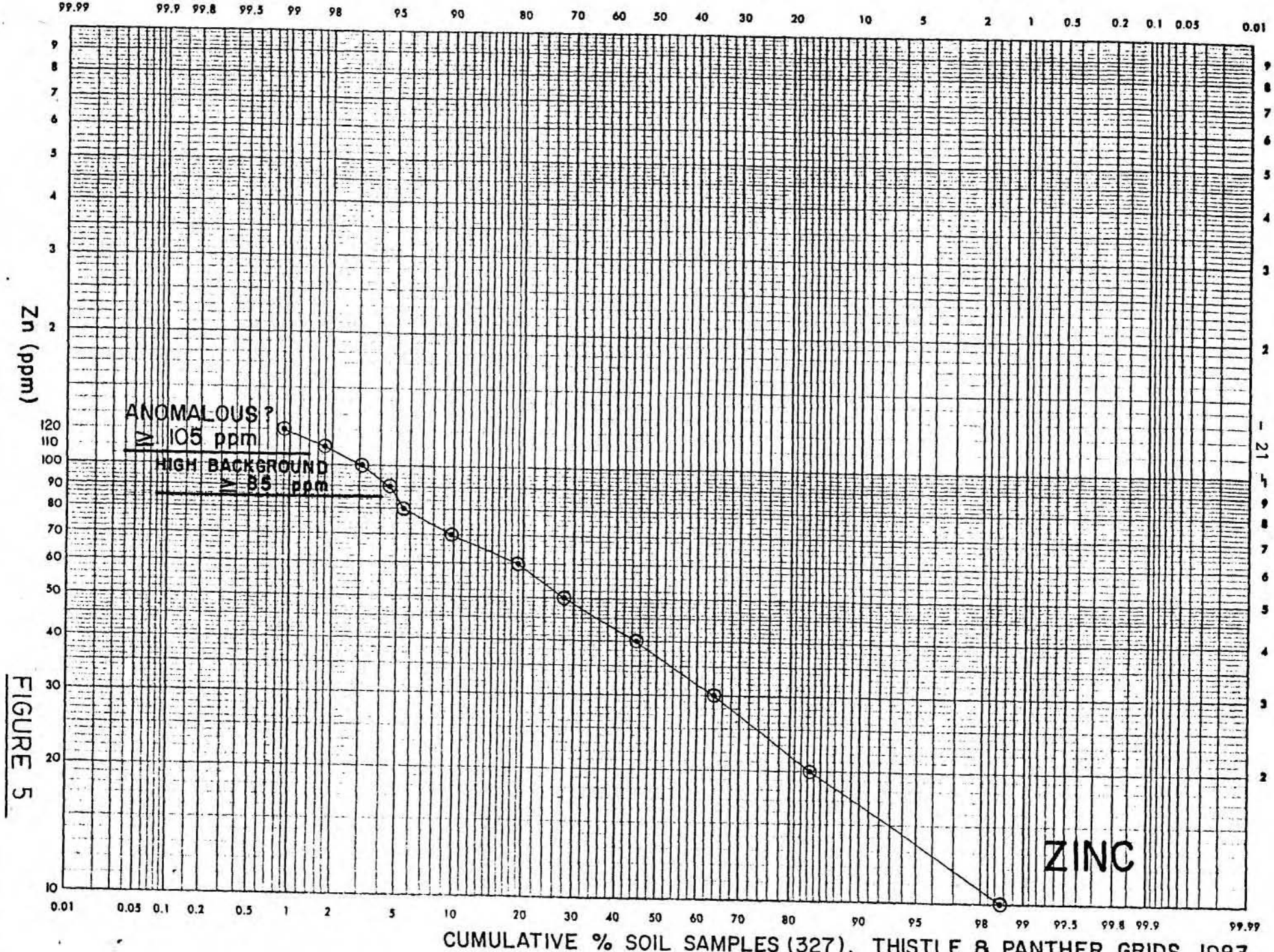

99.99 99.9 99.8 99.5 99 98 95 90 80 70 60 50 40 30 20 10 5 2 1 0.5 0.2 0.1 0.05 0.01
Zn (ppm)
ANOMALOUS?
≥ 105 ppm
HIGH BACKGROUND
≥ 85 ppm
ZINC
CUMULATIVE % SOIL SAMPLES (327), THISTLE & PANTHER GRIDS, 1983

FIGURE 5

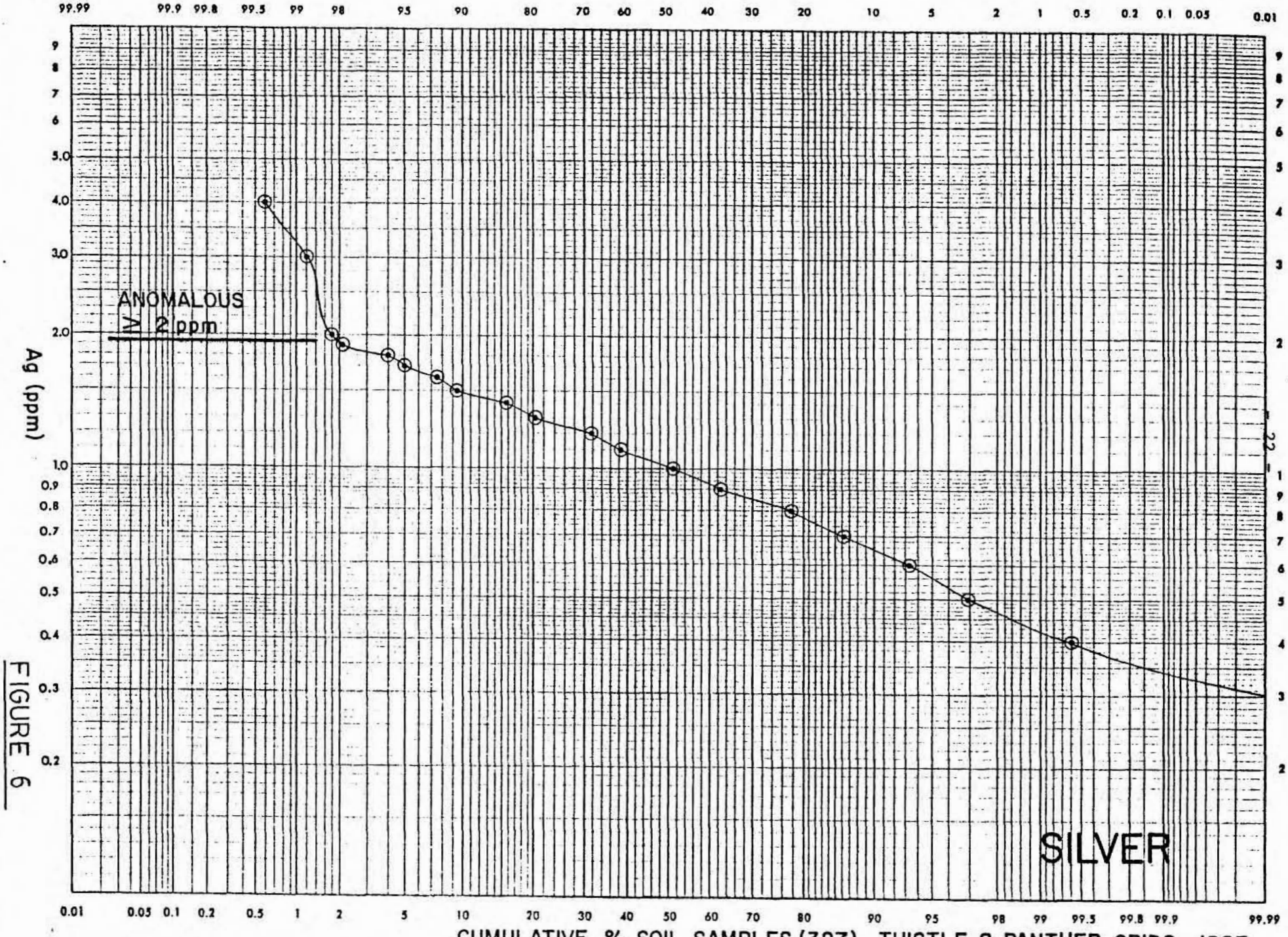

99.99 99.9 99.8 99.5 99 98 95 90 80 70 60 50 40 30 20 10 5 2 1 0.5 0.2 0.1 0.05 0.01
Ag (ppm)
ANOMALOUS
≥ 2 ppm
SILVER
0.01 0.05 0.1 0.2 0.5 1 2 5 10 20 30 40 50 60 70 80 90 95 98 99 99.5 99.8 99.9 99.99
CUMULATIVE % SOIL SAMPLES (327), THISTLE & PANTHER GRIDS, 1983

FIGURE 6

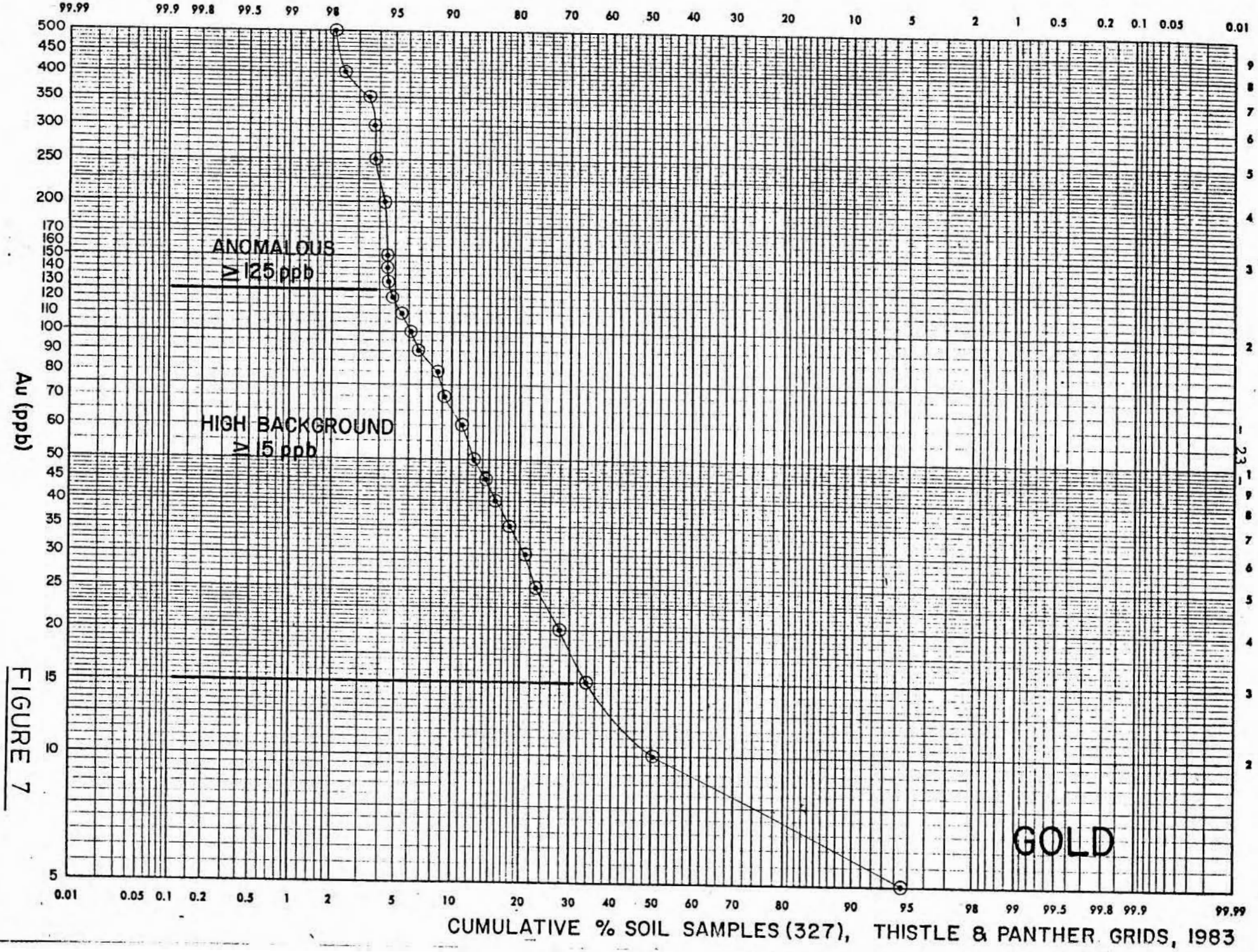

ANOMALOUS
≥ 125 ppb
HIGH BACKGROUND
≥ 15 ppb
GOLD
Au (ppb)
CUMULATIVE % SOIL SAMPLES (327), THISTLE & PANTHER GRIDS, 1983

FIGURE 7

The anomalous thresholds for Pb (28 ppm) and Zn (105 ppm) are significantly lower than those determined from 4,600 soil samples collected from Westmin Resurces' McLaughlin Ridge property adjoining the Thistle property to the north, and also underlain by rocks of the Sicker Group. At McLaughlin Ridge the thresholds for anomalous concentrations of Pb is 43 ppm and that for Zn is 200 ppm. The lower concentrations of Pb and Zn in the soil samples from the Thistle and Panther grids is consistent with the fact that the mineralization at the Thistle mine and at the Panther road showing contains low concentrations of Pb and Zn.

Plates I:A and I:B (in pocket) show the concentrations of Cu, Pb, Zn, Ag and Au at each soil sample site on topographic maps at a scale of 1:1,000, of the Thistle and Panther grids. Also shown on the map of the Thistle grid, are contours for the concentrations of Cu for 125 and 220 ppm, and for Au for 125 ppb. On the Panther grid, concentrations of greater than 30 and 125 ppb are contoured, and anomalous concentrations of Cu, Pb, Zn and Ag are underlined.

THISTLE GRID

The 128 soil samples collected at 25 m intervals on 7 lines of the Thistle grid delineate three areas of anomalous Cu and Au. The largest area contains the highest concentrations of Cu, Ag and Au, but is located down slope and to the west of

the waste dump from the old Thistle mine. The area extends 120 m, from the old mine road to the Thistle Main road, and clearly shows the effects of contamination from mineralization in the waste rock up slope from it. The area is defined by 8 soil samples with 213 to 4,825 ppm Cu, 1.3 to 3.8 ppm Ag, and 20 to 4,900 ppb Au.

15 m north of the upper glory hole of the Thistle mine (L 0,125E), a single, but significant soil sample contains highly anomalous Cu (575 ppm) and Au (470 ppb). This sample appears to be on the northwesterly strike-projection of the mineralization exposed in the upper glory hole, 15 m to the south. It also coincides with the northeast "flank" of the broad zone of high to anomalously high chargeabilities and lower resistivities detected by the I.P.-resistivity survey on this line.

The third area of soil samples with anomalous Cu and Au is delineated by samples collected on Lines 200N and 300N, in the area of Thistle Main road, and 200 to 320 m northwest, and on the strike-projection of the Thistle mine. The area is 50 m wide by at least 140 m long and elongate in a northwesterly direction. The area is defined by four samples with anomalous Cu (251 to 392 ppm), one of which also contains anomalous Au (370 ppb) and three of which also contain high concentrations of Au (95 to 100 ppb). A fifth sample in the area contains weakly anomalous Au (125 ppb). The significance of this area of anomalous Cu and Au is problematic in that there may be

contamination from spills of ore possibly transported along the old road from the Thistle mine. However, three of the anomalous samples were collected up slope to the northeast of the old mine road. These samples were collected from stations that coincide with the northeastern half of the broad zone of high to anomalous chargeabilities detected on Line 2N and 3N, by the I.P. survey, which can be traced southeastwards to the Thistle mine. Part of this area was tested with a diamond drill hole in 1965, by Vananda Exploration. This hole intersected 10.2 cm of pyrite which was not assayed. However, the area may warrant another test with a drill hole because the I.P. survey detected the highest chargeabilities for n=3 and 4, suggesting mineralization occurring at a greater depth than was tested with Vananda's shallow-plunging (-15°) drill hole.

The soil sample survey failed to detect any anomalous concentrations of Cu, Ag or Au along the three lines sampled in the area 45 m to 200 m southeast of the Thistle mine. This is consistent with the fact that the I.P. survey on L100S appears to have failed to detect the broad zone of anomalous and high chargeabilities and lower resistivities that was delineated at the mine site 50 to 100 m the northwest. However, I believe the area southeast of the mine still warrants further exploration because there is a good chance that fault offsets and folding had disrupted the continuity of the mineralized horizon to the southeast of the mine, such

that it occurs below the depth limit of detection of the I.P. survey (50 m or probably less).

Only five soil samples with weakly anomalous? concentrations of Zn were collected on the Thistle grid, from three widely scattered areas. One sample with 109 ppm Zn and background concentrations of Cu, Pb, Ag and Au, and a second sample with 126 ppm Zn and high background Cu, Pb, Ag and Au, were collected 50 m apart on L300N, or 300 m north-northwest of the Thistle mine. Two samples with 118 and 129 ppm Zn were collected 25 m apart on L200N, in the area 75 and 100 m southwest, and down slope from a galvanized culvert across Thistle Main road, which may be the source of the Zn in the soil samples.

One sample with weakly anomalous Pb (28 ppm) was collected from L200N, 200 m northwest of the Thistle mine. This sample also contains anomalous Cu (258 ppm) and high background Au (95 ppb).

PANTHER GRID

A total of 199 soil samples were collected from 8 lines, generally 500 m long and 50 to 75 m apart, on the Panther grid and analyzed for Cu, Pb, Zn, Ag and Au. The purpose of the survey was to determine whether the gold-bearing, pyritic interval exposed on Panther road, has any potential strike-length beneath the overburden northwest and southeast of the showing.

The soil sample collected at the showing contained highly anomalous Au (15,000 ppb) and Ag (4.3 ppm), but only high background Cu (155 ppm) and low background Pb (16 ppm) and Zn (24 ppm). These concentrations are commensurate to those of the same metals in the mineralized interval, which contains 0.05 oz. Ag/t, 0.49 oz. Au/t and 900 ppm Cu, 13 ppm Pb and 71 ppm Zn (across a 2.2 m width). The five soil samples collected along Panther road, 15 m southwest to 45 m east of the showing, contain high to anomalous concentrations of Au probably derived from mineralized rock that is scattered along the road, from the showing.

Apart from the soil samples with anomalous Au collected along Panther road near the showing, the following samples from the Panther grid were collected that contain anomalous metals: 3 samples with anomalous Au (155, 330 and 350 ppb); 25 samples with moderate to high background Au (9 with 60 to 85 ppb, and 16 with 30 to 55 ppb), 2 samples with anomalous Cu and Au; one sample with anomalous Cu only (267 ppm); 3 samples with weakly anomalous Pb (28, 28 and 38 ppm); 2 samples with weakly anomalous Zn (110 to 125 ppm); one sample with anomalous Cu and Pb (267 and 35 ppm); one sample with anomalous Cu, Pb, and Au (270 and 31 ppm, and 385 ppb); and finally, but not the least, one sample with anomalous Cu, Pb, Ag and Au (297, 34, 12.0 ppm and 200 ppb).

Soil samples containing higher background to anomalous concentrations of Au delineate seven areas that are all scattered along the central portion and southwestern half of the Panther grid. Three of these areas are strung out along the area of the baseline. Of these three areas, the middle one encompasses the road showing, as discussed above. The soil samples collected along the lines 50 m northwest and southeast, and crossing the northwesterly strike-projection, of the showing, contain only background concentrations of Au. This suggests that the mineralized interval at the showing does not extend as far as the grid lines 50 m on either side of it. This, unfortunately, is consistent with the results of the I.P.-resistivity survey on these two lines (50N and 50S), which failed to show any expression of the high chargeabilities and low resistivities measured over the road showing on Line 0.

The other two areas near and at the baseline, delineated by high background to anomalous Au in the soil samples, are located 185 m northwest and 200 m southeast of the road showing. If these samples indicate sub-surface gold mineralization at or near the same lithologic horizon as that of the road showing, then their distribution suggests that the gold mineralization is discontinuous along that horizon. One area is defined by five consecutive samples on L190N, from 15 m NE to 45 m SE (about 185 m northwest of the showing). Two of these samples contain high background Au (30 and 35

ppb) and three contain anomalous Au (330, 350 and 385 ppb). The sample with the highest Au (385 ppb) also contains weakly anomalous Cu (270 ppm) and Pb (31 ppm).

The second area of soil samples with high to anomalous concentrations of Au, is located 130 to 200 m southeast of the Panther road showing. It is defined by five samples with high background Au (4 with 70 to 85 ppb; one with 40 ppb) and one sample with anomalous Au (155 ppb) collected on Lines 125S and 200S. This area lies on the inferred southeasterly strike-projection of the road showing. However, it is uncertain whether the surface trace of the projected mineralized interval passes through the area because of uncertainties in the dip of the rocks in this area, which is 25 to 65 m higher in elevation than the showing.

A very significant appearing area is delineated by two samples with anomalous Au and Cu, and three samples with high background Au (35 to 85 ppb). The area is located 135 m southwest, to 265 m south-southwest of the road showing and 125 to 175 m southwest of the baseline. The area is elongate in a north-south direction, and delineated by samples collected on three successive lines: 50S, 125S, and 200S. The northernmost sample contains anomalous Cu, Pb, Ag and Au (297, 34, 12.0 ppm and 200 ppb); the middle sample 80 m to the south, contains highly anomalous Cu (554 ppm) and Au (750 ppb). The area of anomalous soil samples is inferred to occur at a higher lithostratigraphic level than that at the road

showing. The significance of this anomaly is enhanced by the fact that the soil sample with anomalous Cu, Pb, Ag and Au at 125W on Line 50S, approximately coincides with the area of two lower resistivities and the transition zone between lower chargeabilities to the east and higher chargeabilities to the west, detected by the I.P.-resistivity survey on Line 50S.

The soil sample with the highest concentration of Pb (38 ppm) collected on the Panther (and Thistle) grid, was collected next to a logging road spur off Panther road. The Pb probably is derived from contamination of a petroleum spill.

I.P.-RESISTIVITY AND MAGNETOMETER SURVEYS

THISTLE GRID

The I.P.-resistivity and magnetometer surveys on the Thistle grid were conducted on four lines northwest, and one line southeast of the old Thistle mine, for a total of 2.2 kms of grid line, between November 9 and 18, 1983. The results of the pole-dipole array (n=1 to 4) survey are shown in pseudo-sections (Part II, Appendix iv), on contoured maps of chargeability and resistivity (Part II, maps W-337-2 through 5), a contoured map of magnetometer readings (Part II, map W-337-1).

At the Thistle mine, four intervals containing stratabound layers of gold-bearing, chalcopyrite-pyrite-quartz-calcite mineralization are exposed. The mineralized layers are 5 to 45 cm thick and appear to be conductive relative to the intervening rocks (suggested by a field test with an ohm meter).

It is not possible to conduct an I.P. survey directly over the old workings of the Thistle mine because of the very steep to near vertical back walls of the two glory holes at the mine. However, a survey was conducted along a grid line that passes 11 m northwest of the mineralization in the lower glory hole and 12 m northwest of the mineralization at the upper glory hole (Line 0). The I.P.-resistivity survey on this line detected a transition from lower chargeabilities (4.5 to 5.6 m-sec.) to the northeast, to higher chargeabilities (9.7 to 15.8 m-sec.) to the southwest, and a concommitant decrease in apparent resistivities, ranging from 5000 to 9000 ohm-m in the northeast, to 3000 to 5500 ohm-m in the southwest, at the position of the projected mineralization at the upper glory hole 12 m to the southeast. However, at an "a"-spacing of 25 m, the survey failed to differentiate individual mineralized intervals, three of which are exposed at the upper glory hole. On Line 0, the survey delineated a broad (75 m for n=1, to 225 m for n=4) zone of higher chargeability (10 to 17 m-sec.) and lower resistivities (3000 to 5500 ohm-m) that is centred on the area between the mineralization exposed at the upper and lower glory holes. It is possible that this is a reflection of unexposed and unexplored

mineralization at depth between the two glory holes. However, it is more probable that this I.P.-resistivity anomaly results from disseminated and fracture-pyrite in the footwall of the mineralized intervals.

The broad zone of high to anomalous chargeabilities and lower resistivities detected on Line O near the mine workings, appears to persist to the northwest because similar appearing zones were detected on the three successive lines 90 to 300 m northwest of the Thistle mine, but not along the line 100 m southeast of the mine. It is interesting to note that within this zone, the highest chargeabilities appear to have a source at the greatest depth reached by the survey. Thus, it is possible that the shallow-plunging to horizontal holes drilled by Vananda Exploration in the area of the I.P. anomaly, in 1965, may not be deep enough to have reached the source of the highest chargeabilities.

The mineralized layers at the Thistle mine locally contain disseminated magnetite and thin layers of massive magnetite. In addition, some of the rocks in contact with the mineralized layers are moderately to strongly magnetic due to disseminated magnetite. Thus, I expected that a magnetometer survey would be able to detect the mineralized intervals at the mine. However, this was not the case, even with magnetometer readings taken at 12.5 m intervals. Perhaps part of the problem of obtaining a magnetic response from the mieralized intervals is that the rocks that occur to the northeast and southwest of the mine commonly

are moderately to strongly magnetic due to magnetite contained in altered hornblende grains within the rocks. On Line 200N the mag. survey detected a 100 m wide interval of erratic but somewhat high mag. readings that coincides with the broad zone of high to anomalous chargeabilities detected on the same line. In addition, two soil samples with anomalous Cu and high Au (95 and 100 ppb) and one soil sample with weakly anomalous Au (125 ppb) were collected from the northeastern part of this zone. This area along Line 200N appears to warrant testing with a diamond drill, as stated earlier, even though a portion of it (20 to 100 m northwest of the line) was previously tested by Vananda Exploration in 1965, because their hole may have been too shallow (-15°).

PANTHER GRID

An I.P. resistivity survey was conducted on the Panther grid, along three lines 300, 435 and 450 m long and 50 m apart, with a pole-dipole array, from n=1 to n=4, between November 19 and 22, 1983. The pseudo-section showing the results of the survey on Line O through the Panther road showing (Part II, Appendix iv), indicates that, along the line, the chargeabilities varied from 2.7 to 11.5 m-sec. (averaging 7.3 m-sec.) and resistivities varied from 1562 to 9886 ohm-m (averaging 5570 ohm-m). Within the 45 m wide interval centred on the showing, additional measurements were taken at 15 m intervals for n=1 and 2, but halfway between the 15 m spaced stations, to more accurately

delineate the geophysical response of the mineralization. The response of the mineralization appears to consist of a 37 m wide interval of higher chargeabilities (between 8.4 and 10.5 m-sec.) and low resistivities (1562 to 2720 ohm-m) for n=1. This interval forms the top of a zone, in pseudo-section, of higher chargeabilities (8.0 to 9.3 m-sec.) that resembles a tilted, inverted U, for n=2, 3 and 4. The centre of this inverted U is located about 15 m southwest of the road showing, which may be a reflection of the possible southwesterly dip of the mineralized interval at the showing (at one place the upper contact of the mineralized interval dips 40° to the west).

The inverted U-shaped distribution of higher chargeabilities in the pseuo-section for Line O, suggests the mineralized interval exposed at the Panther road showing is either very thin or not present at depth. However, at the showing, the mineralized interval is chopped up and disjointed by a complex series of cross-cutting faults which could also distrupt the continuity of the mineralization at depth, causing it to be a poor geophysical target.

The results of the I.P.-resistivity surveys on Lines 50N and 50S, which are 50 m to the northwest and southeast of the road showing, do not indicate that the mineralization has much, if any extension beyond the showing. This appears to be supported by the results of the soil sampling along these two lines, which failed to detect anomalous Au concentrations along the intervals covering the northwest and southeasterly strike-projection of the mineralization.

The overall pattern defined by higher and lower chargeabilities measured on the Panther grid, appears to be similar, in pseudo-section, for all three lines surveyed. The area covered by stations 75 m E to 255 m E is characterized by generally very low chargeabilities (2.7 to 5.6 m-sec.) and moderately high to very high resistivities. The area covered by stations 75 m E to about 135 m W is characterized by remarkably uniform, moderate chargeabilities (5.0 to 7.5 m sec., in general), except on Line 0 in the interval covering the road showing area. Within this area, however, the apparent resistivities are quite variable and range from 3000 to 18,000 ohm-m. Near the northeastern boundary of this area, at 52 to 67 m E, low resistivities for n=1, of 2450 to 2730 ohm-m, and a relatively narrow zone of somewhat higher chargeabilities, appear to approximately coincide with the southerly strike-projection of a 10 to 15 m wide zone of moderate schistosity exposed about 150 m to the north-northwest of Line 50N, in "Saddle" Creek. The schistosity may be the source of lower resistivities in this area.

The area in the southwestern part of the grid lines, from about 135 m W to 195 m W, is characterized by high to very high chargeabilities (7.9 to 12.4 m-sec.) and moderate resistivities. Within this area, at about 125 m W on Line 50S, two lower apparent resistivities (4687 and 4939 ohm-m) coincide with the site from which a soil sample with anomalous Cu, Pb, Ag, and Au (297, 34,

12.0 ppm and 200 ppb, respectively) was collected. This part of Line 50S should be re-surveyed with I.P.-resistivity at a smaller spacing of about 15 m, to more accurately delineate the interval of lower resistivities.

Gary Benvenuto
Project Geologist
Westmin Resources Limited

January, 1984

APPENDIX A

DETAILED LIST OF EXPENDITURES BY WESTMIN RESOURCES ON LINECUTTING, SOIL SAMPLING, I.P.-RESISTIVITY AND MAGNETOMETER SURVEYS ON THE THISTLE AND PANTHER GRIDS, THISTLE PROPERTY (92F/2E) IN 1983.

I. LINECUTTING

Martinson Linecutting and Staking Ltd. of Powell River, B.C. cut a total of 7.53 kms of line, and set and flagged pickets at 15 or 25 m intervals, as follows:

CLAIMS(S)	GRID NAME	KMS OF LINE CUT	WORK PERIOD
L91,92,93G (Crown Grants)	Thistle	3.63	October 20 - November 1, 1983
Rand	Panther	3.9	November 3,4, 1983

A. Cost of linecutting by Martinson:

Thistle grid:

2 men x 4 days x $215.00/man-day: $ 1,720. subtotal

Panther grid:

3 men x 2 days x $215.00/man-day: $ 1,290. subtotal

B. Accommodation supplied by Westmin:

14 man-days x $8.34/man-day: $ 117. subtotal

C. Total cost of linecutting: $ 3,127. TOTAL

D. Cost/km of linecutting: $3,127/7.53 km: $415./km

II. SOIL SAMPLING SURVEYS

Martinson Linecutting and Staking Ltd. collected a total of 327 soil samples at 15 or 25 m intervals as follows:

CLAIMS(S)	GRID NAME	# OF SAMPLES	WORK PERIOD
L91,92,93G	Thistle	128	October 29 - November 1, 1983
Rand	Panther	199	November 5, 1983

A. Cost of soil sampling by Martinson:

Thistle grid:

1 man x 4 days x $215/man-day $ 860 subtotal

Panther grid:

3 men x 1 day x $215/man-day: 645 subtotal

B. Accommodation supplied by Westmin:

7 man-days x $8.34/man-day: 58 subtotal

C. Stringing up and packing soil samples:

1 man-day x $165/man-day (G. Benvenuto, Project Geologist) 165 subtotal

D. Freight to Min-En Labs, Vancouver: 26 subtotal

E. Geochemical analyses of soil samples for Cu, Pb, Zn, Ag and Au, by Min-En Labs, Vancouver:

327 samples x $10.30/sample: 3,368 subtotal

F. Assessment report preparation

1. Drafting of geochemical soil survey topographic base maps by G. Benvenuto: 4 days x $165/day: 660 subtotal

2. Drafting of geochemical analyses onto base maps, and of log probability plots by V. Diaz: 5 days x $102/day: 510 subtotal

3. Preparation of assessment report by G. Benvenuto: 2 days x $165/day: 330 subtotal

G. Total cost of soil sample survey on Thistle and Panther grids:

TOTAL COST (A through F): $ 6,622

H. Cost per soil sample: $6,622/327 samples: $ 20.25/sample

1. Cost of soil sample survey on Thistle grid: $860 (A.1. above) + ((B thru F above)/ 327/samples) x 128 samples: $ 2,863 Total cost

2. Cost of soil sample survey on Panther grid: $645 (A.2. above) +(B thru F above)/ 327 samples) x 199 samples: $ 3,759 Total cost

III. I.P.-RESISTIVITY AND MAGNETOMETER SURVEYS

Peter Walcott and Associates Ltd. of 605 Rutland Court, Coquitlam, B.C., conducted an I.P.-resistivity and magnetometer survey on the Thistle grid and an I.P.-resistivity survey on the Panther grid between November 9 and 23, 1983. A total of 3.4 kms of grid line were surveyed using a pole-dipole array for n=1 through 4, as follows:

CLAIMS(S)	GRID NAME	TOTAL KMS SURVEYED	WORK PERIOD
L91,92,93G (Crown Grants)	Thistle	2.2	November 9-18, 1983
Rand	Panther	1.19	November 19-23, 1983

A. Costs billed to Westmin by P. Walcott (Invoice #1632):

1. Labour: senior geophysicist, 2 operators, 1 helper and I.P. equipment: November 8-23, 1983; 13 days at $900.00/day:	$11,700.00 subtotal
2. Labour and equipment for 3 standby days during period of November 8-23, 1983: 3 days x $700/day:	2,100.00 subtotal
3. Provision of proton magnetometer and recorder: 12 days x $75/day:	900.00 subtotal
4. Provision of truck and gasoline, etc.:	1,303.75 subtotal
5. Meals and groceries:	1,029.55 subtotal
6. Ferry charges:	48.70 subtotal
7. Interpretation and report writing:	810.96 subtotal
8. Drafting and report preparation:	480.00 subtotal
SUBTOTAL COST:	$18,372.96

B. Expenses incurred by Westmin Resources:

1. Accommodation: 15 days x 4 men x $8.34/man-day:	$ 500 subtotal
2. Preparation of assessment report by G. Benvenuto, project geologist: 2 days x $165/day:	330 subtotal
3. Drafting of Thistle and Panther grids location maps (Plates I:A and B) by V. Diaz: 4 days x $102/day:	408 subtotal
SUBTOTAL COST:	$ 1,238

C. TOTAL cost of I.P.-resistivity and magnetometer surveys on Thistle and Panther grids (A and B above): $19,610.96 TOTAL

D. Cost of I.P.-resistivity survey per day:

$19,611/16 days: $ 1,226/day

E. Cost of I.P.-resistivity survey on Thistle grid: $1,226/day x 11 days: $13,486

F. Cost of I.P.-resistivity survey on Panther grid: $1,226/day x 5 days: $ 6,130

IV. PHYSICAL WORK

This consists of repairing washouts on the Thistle Main road and Panther road with a bulldozer in order to provide access by truck to the Thistle and Panther grids, as follows:

A. Road repair on the Thistle Main road on May 28, 1983 and on the Panther road on May 30, 1983, by J. Carvalho of Port Alberni:

Total of 6 1/2 hours x $60/hr.: $ 390 subtotal

B. Road repair of washouts on the Panther road on November 18, 1983 by Rayner and Bracht Ltd. of Port Alberni with a TD-20-6 cat:
Total of 6 hours operating time plus 2 hours move time: $ 708 subtotal

C. Total cost of road repairs: $ 1,098 TOTAL

WESTMIN RESOURCES LIMITED

EXPLORATION VANCOUVER ISLAND REGION

STATEMENT OF QUALIFICATIONS

I, Gary Louis Benvenuto, of the town of Campbell River, British Columbia, hereby certify that:

1. I am a geologist, residing at 4125 Discovery Drive, #6, in Campbell River, B.C., with a business address of Westmin Resources Ltd., P.O. Box 8000, Campbell River, B.C., V9W 5E2.

2. I graduated with a B.Sc. degree in geology from California State University at Los Angeles in 1972, and with a Ph.D. degree in geology from Queen's University, Kingston, Ontario, in 1978.

3. I am an associate member of the Geological Association of Canada.

4. I have practiced exploration geology with Cominco Ltd. from May to October, 1979, and with Westmin Resources Ltd. from January, 1980 to present.

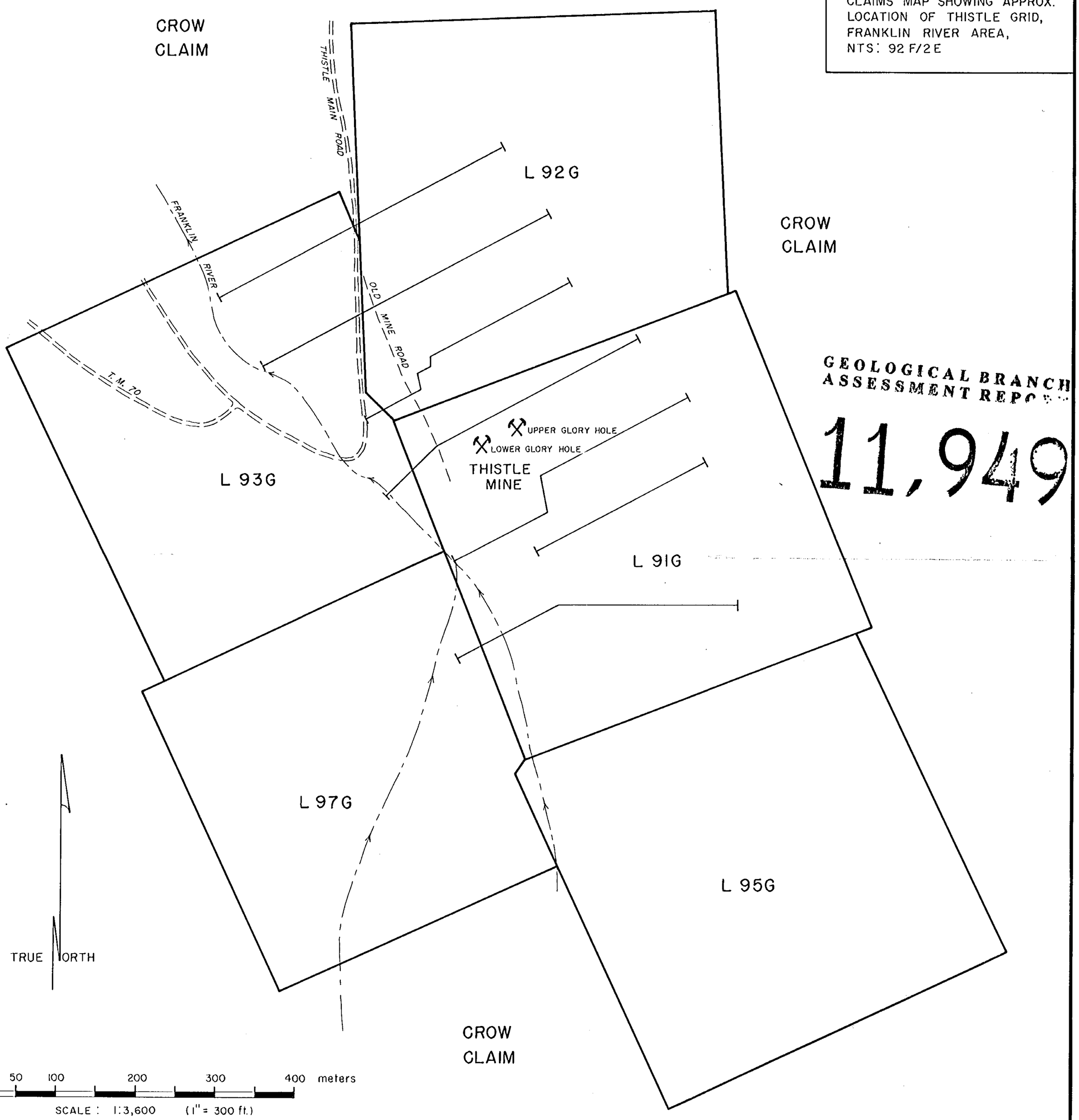
Dated: February 6, 1984

Signed: Gary Benvenuto

Gary Benvenuto
Project Geologist

PLATE I : A

CLAIMS MAP SHOWING APPROX. LOCATION OF THISTLE GRID, FRANKLIN RIVER AREA, NTS: 92 F/2 E



Drawn by V. Diaz for WESTMIN RESOURCES LTD., Jan., 1984

PLATE I: B:

LOCATION MAP OF THISTLE AND PANTHER GRIDS, FRANKLIN RIVER, RIFT CREEK AREA, N. T. S. 92 F/2 E

LEVI
CROW

SUE
MUSEUM

APRIL
RAND

B & M
CROW

CROW
RAND

MAR
JAN

FATHER & SON LAKE

"FATHER AND SON" CREEK

THISTLE MAIN ROAD

FRANKLIN RIVER

T. M. 70

L 92 G
L 93 G
L 91 G
L 97 G
L 95 G

THISTLE MINE
THISTLE GRID

PANTHER GRID

PANTHER ROAD SHOWING

LIMESTONE MOUNTAIN

SLASH FOREST

"SADDLE" CREEK

PANTHER ROAD

RIFT CREEK

650 700 800 900 950 1000 1100 1150 1200 1300 1400 1450 1500

0 100 200 300 400 500 meters

SCALE: 1:5000
CONTOUR INTERVAL: 100 m

Drawn by: G. L. B. and VdIRD for WESTMIN RESOURCES LTD.
January, 1984

PLATE III

SOIL GEOCHEMISTRY (Cu, Pb, Zn, Ag, Au) OF PANTHER ROAD GRID, RIFT CREEK AREA, 92 F/2E

GEOLOGICAL BRANCH
ASSESSMENT REPORT

11,949

LEGEND

- Logging road
- Creek
- Outcrop
- Topographic contour, 10m intervals
- Boundary between slash and forest
- Showing of mineralization
- Soil sample collection site

40, 18, 32, 0.9, 5 : Soil sample analysis :
Cu(ppm), Pb(ppm), Zn(ppm), Ag(ppm), Au(ppb)

Drawn by G. Benvenuto & VdlRD
Westmin Resources Ltd., 1983

"SADDLE" CREEK

PANTHER ROAD

PANTHER ROAD SHOWING

OUTCROP

NORTH

SCALE: 1:1,000

0 50 100 150 200 meters

FOREST SLASH

V. APPORTIONMENT OF COSTS OF SURVEYS TO CLAIMS OF THE THISTLE GROUP

Total cost of linecutting:	$ 3,127
Total cost of soil sampling surveys:	$ 6,622
Total cost of I.P.-resistivity and magnetometer surveys:	$19,611
Total cost of road repairs:	$ 1,098
TOTAL COST OF WORK:	$30,458
TOTAL P.A.C. WITHDRAWAL:	$ 7,742

Apportionment of the total cost of surveys to claims within the Thistle group:

CLAIM	RECORD NUMBER	UNITS	DATE RECORDED	PREVIOUS YEAR OF EXPIRY
Sue	488(6)	20	June 28, 1979	1984
Crow	489(6)	20	June 28, 1979	1984
Levi	490(6)	16*	June 28, 1979	1984
Rand	731(2)	16	February 29, 1980	1984
Museum	1223(5)	15	May 6, 1981	1984
Quill #1-8	1391-1398(2)	8	February 11, 1982	1984
Lore #1-3	575-577(8)	3	August 17, 1981	1984
Rose (L95G)	378(2)	1	February 20, 1979	1984
Jumbo (L97G)	379(2)	1	February 20, 1979	1984

* reduced from 20 units, February, 1984

CLAIM	COST OF WORK APPLIED*		NEW DATE OF EXPIRY
	1983-84	1984-85	
Sue	$4,000	$4,000	June 28, 1986
Crow	$4,000	$4,000	June 28, 1986
Levi	$3,200	$3,200	June 28, 1986
Rand	$3,200	$3,200	February 29, 1986
Museum	$1,500	$3,000	May 6, 1986
Quill #1-8	$ 800	$2,400(-'86)	February 11, 1987
Lore #1-3	$ 300	$ 600	August 17, 1986
Rose	$ 200	$ 200	February 20, 1986
Jumbo	$ 200	$ 200	February 20, 1986

* includes total P.A.C. withdrawal from Nexus Resources' account of $7,742.

A GEOPHYSICAL REPORT

ON

INDUCED POLARIZATION SURVEYS

Mt. McQuillan, Vancouver Island
British Columbia

FOR

WESTMIN RESOURCES LIMITED

Campbell River, B.C.

BY

PETER E.WALCOTT & ASSOCIATES LIMITED

Vancouver, B.C.

JANUARY 1984

INTRODUCTION.

Between November 8th and 23rd, 1983, Peter E. Walcott & Associates Limited carried out limited induced polarization surveys over two grids in the Mount McQuillan area, Vancouver Island, British Columbia, for Westmin Resources Limited.

The surveys were carried out over two grids called the Thistle and Panther grids respectively.

Measurements (first to fourth separation) of apparent chargeability - the I.P. response parameter - and resistivity were made over five lines on the Thistle grid 100 metres apart using the pole-dipole method of surveying with a 25 metre dipole.

Magnetic profiles were also made along the lines at 12.5 metre station intervals using a total field magnetometer.

On the Panther grid the central portion of three lines was read - first to fourth separation measurements - using the same array with a 15 metre dipole, whereas the outher portions were only read at 2 spacings (n= 1 & 2) with a 30 metre dipole.

The progress of the survey was severely impeded by the steepness and rugged nature of the terrain on the Thistle grid as well as by the horrendous amount of precipitation in the form of both rain and snow.

The data are presented in pseudo-section form on individual line profiles bound in this report. In addition the first and second separation resistivity and chargeability data together with the magnetic data have been contoured and presented in plan form on Maps W-337-1 to 5 that accompany this report.

PURPOSE.

The purpose of the survey was to determine the nature of the I.P. response - if any - over the small Thistle and Panther showings and determine if possible by the I.P. method the extent of the mineralization.

PREVIOUS WORK.

As the showings have been worked or known for many years a great deal of exploration work has been done over and around them over the years. Most recently an induced polarization survey was carried out over the Thistle Mine area by Glen E. White Consulting & Services Ltd. in 1982.

SURVEY SPECIFICATIONS.

The induced polarization (I.P.) survey was carried out using a pulse type system, the principal components of which are manufactured by Huntec Limited and Phoenix Geophysics Limited of Metropolitan Toronto, Ontario.

The system consists basically of three units: a receiver (Huntec), a transmitter and a motor generator (Phoenix). The transmitter which provides a maximum of 3.0 kw d.c. to the ground, obtains its power from a 3.0 400 c.p.s. three phase alternator driven by a gasoline engine. The cycling rate of the transmitter is 2 seconds "current-on" and 2 seconds "current-off" with the pulses reversing continuously in polarity. The data recorded in the field consists of careful measurements of the current (I) in amperes flowing through electrodes C_1 and C2, the primary voltage (V) appearing between the two potential electrodes, P_1 and P_2, during the "current-on" part of the cycle, and the apparent chargeability (M_a) presented as a direct readout using a 200 millisecond delay and a 1000 millisecond sample window.

The apparent resistivity (P_a) in ohm metres is proportional to the ratio of the primary voltage and the measured current, the proportionality factor depending on the geometry of the array used. The chargeability and resistivity are called apparent as they are values which that portion of the earth sampled would have if it were homogeneous. As the earth sampled is usually inhomogeneous the calculated apparent chargeability and resistivity are functions of the actual chargeability and resistivity of the rocks.

The survey was carried out using the "pole-dipole" method of surveying. In this method the current electrode C_1, and the two potential electrodes, P_1 and P_2, are moved in unison along the survey lines. The spacing "na" (n an integer) between C_1 and P_1 is kept constant for each traverse at a distance roughly equal to the depth to be explored by that traverse, while that of P_1 to P_2 (the dipole) is kept constant at "a". The second current electrode C_2 is kept constant at "infinity".

Thus usually on a "pole-dipole" array traverse with an electrode spacing of 50 metres a body lying at a depth of 25 metres will produce a strong response, whereas the same body lying at a depth of 50 metres will only just be detected. By running subsequent traverses at different electrode separations, more precise estimates can be made of depth, width, thickness and percentage of sulphides of causative bodies located by the I.P. method.

SURVEY SPECIFICATIONS cont'd

The survey over the Thistle grid was carried out using a 25 metre dipole, and first to fourth separation measurements were obtained over 5 survey lines, whereas on the Panther grid first to fourth separation measurements were taken with a 15 metre dipole over the central portion of 3 lines, and first and second separation work with a 30 metre dipole done on the balance of the 3 lines.

The magnetic survey on the Thistle grid was carried out using a GSM-8 proton precession magnetometer manufactured by GEM Systems Inc. of Don Mills, Ontario. This instrument measures variations in the earth's magnetic field to an accuracy of $\pm$ 1 gamma. Corrections for diurnal variations were made by comparison with readings obtained on a base magnetometer coupled to a MR 10 recorder, manufactured by Canadian Mining Geophysics Ltd. of Markham, Ontario.

In all some 3.7 kilometres of I.P. surveying and 2.3 kilometres of magnetic surveying were carried out.

DISCUSSION OF RESULTS.

1. Thistle Grid.

The results are best studied by aligning the pseudo-sections in order, duly noting that Line 1S has a different zero position and a 50 metre gap in its centre i.e. it must be aligned at either end for respective correlation.

Several anomalous and possible anomalous zones, labelled A through F, are discernible on the pseudo-section chargeability plots.

A chargeability low can be noted trending across the lines from 0 to 3 N at circa 200 E. This low is offset some 50 metres westwards on Line 1S.

Anomalous zones A,B & C on Line 0, A on Line 2 N and A & F on Line 3 N are associated with zones of magnetic relief immediately to the west of this low.

Zone E on Lines 1, 2 & 3 N respectively is associated with flat magnetic relief.

A smoother magnetic profile is observed on Line 1 N, the central portion of which exhibits some 100 gamma relief. Here the anomalous I.P. zone has a deeper causative source as indicated by its response on basically the third and fourth separation only.

The response over zone A on Line 0 appears to be that of a shallow flat lying body of limited depth extent.

Zone D occurs on Line 1 N and 1 S with a 50 metre or so westward shift on the latter. Again it is associated with magnetic activity. This zone is undefined to the east on Line 0 and 1 N respectively.

From the above a fault is interpreted striking through the grid between Lines 0 and 1 S. This is best seen on the n = 2 chargeability contour plan.

The resistivity data do little but reflect outcrop and overburden conductivity and are somewhat inaccurate due to the ruggedness of the terrain necessitating the somewhat jagged lines.

DISCUSSION OF RESULTS cont'd

The writer believes that the weak first separation chargeability response, anomaly C, on Line O is the expression of the economic mineralization mined at the Thistle as it is known to be narrow. This is also coincident with a magnetic dipole anomaly and a self potential anomaly of 60 millivolts. He was going to put in some 12.5 metre stations here before closing down the survey but the inclement weather dictated otherwise.

Another 30 millivolt S.P. anomaly is observed associated with anomaly B on Line O, but no anomaly is discernible over the projected lower Glory hole horizon. Unfortunately no further S.P. readings were taken as it was taking too long to obtain them with this receiver system.

The I.P. results did not compare favourably with those of the previous survey conducted by Glen E. White Geophysical Consulting & Services Ltd. who obtained resistivities of less than 100 ohmmetres over these outcropping and suboutcropping volcanics and volcaniclastics much to the writer's bewilderment. However their belief in their results was unshakeable despite the fact they obtained resistivities in the high thousands on their traverse on the adjoining Thistle Main road.

2. Panther Grid.

Again the results are best seen by aligning the pseudo sections as before.

The main area of interest was the small showing on the road on Line O. It appears as a shallow anomaly of limited extent on the 15 metre dipole work with maximum response of 10.5 milliseconds on the first separation - anomaly A.

The writer carried out two 7.5 metre n = 1 dipole measurements across the strike and one along the strike with the electrodes in the sulphides and obtained a maximum response of 22.1 milliseconds.

This further served to indicate the smallness of the showing - already limited as no corresponding anomalies are observed on the adjacent north and south fifty metre lines.

DISCUSSION OF RESULTS cont'd

The chargeability high is associated with a resistivity low with the peak of the latter offset some 15 metres eastwards over the exposed showing. Further cat work would be necessary to determine whether this resistivity is due to the shear zone or to the more massive-i.e. better conductive - parts of the mineralization as the chargeability peak occurs over unexposed material.

Overall the geology would appear to be resonably uniform with anomalies B, C and the chargeability low east of anomaly C all striking across the lines slightly to the west of the base line direction.

The possible anomalous zone D on Line 0 also would appear to be correlateable with the slightly higher chargeability readings at 150 W on Line 50 N.

Zone B, undefined to the west on all three lines, is the strongest anomaly and the only one worthy of further investigation.

SUMMARY, CONCLUSIONS & RECOMMENDATIONS.

Between November 8th and 23rd, Peter E. Walcott & Associates Limited carried out limited I.P. surveying over two grids - the Thistle and Panther - on Vancouver Island for Westmin Resources Limited.

The results, although somewhat disappointing as they did not give blinding signatures to the known mineralization on the grids for various reasons, did locate the presence of a number of chargeability anomalies as discussed in the previous section.

Whether these anomalies - the causative sources of which appear to be considerably larger than the known narrow reconcentration of sulphides along the shear zones at the Thistle and Panther - are related to the known mineralization or not is a subject fur further discussion and investigation. However it would appear that anomalies A and B on Line 0 and A and F on Lines 2 and 3 N could be related to different horizons within the underlying formation on the Thistle grid.

Of interest is the apparent S.P. signature associated with the upper Thistle showing.

The Panther showing proved to be very localized as shown by the 7.5 and 15 metre work.

In view of the size of the known mineralization the writer questions the use of the 50 and 100 metre line separations to attempt to trace the occurrence of such. Of course he realizes the economics of 25 metre work - particularly in areas of steep terrain - but feels the need for a recognizable signature.

He therefore recommends (a) at the very least that magnetic and S.P. measurements be taken at 12.5 metre intervals on flagged lines 25 metres apart in the vicinity of the showings - the S.P. survey to be done with a simple S.P. meter (sensitive voltmeter) and (b) the result of this report be perused in conjunction with those of geological and geochemical studies before further major expenditures be undertaken on the grids.

Respectfully submitted,

PETER E. WALCOTT & ASSOCIATES LIMITED

Peter E. Walcott, P.Eng.
Geophysicist

Vancouver, B.C.
January 1984

APPENDIX

COST OF SURVEY.

Peter E. Walcott & Associates Limited undertook the survey on a daily basis. Mobilization and interpretational costs were extra so that the total cost of the services provided was $18,372.96.

PERSONNEL EMPLOYED ON SURVEY.

Name	Occupation	Address	Dates
Peter E. Walcott	Geophysicist	Peter E. Walcott & Assoc. 605 Rutland Court, Coquitlam, B.C. V3J 3T8	Nov. 8th - 23rd Jan. 14 - 18th, 84
V. Pashniak	Geophysical Operator	"	Nov. 8th - 23rd, 84
Sloan D.	Geophysical Helper	"	"
J. Walcott	Typing	"	Jan. 18th, 1984
G. MacMillan	Draughting	"	Jan. 4th - 11th, 1984

CERTIFICATION.

I, Peter E. Walcott, of the Municipality of Coquitlam, British Columbia, hereby certify that:

1. I am a Graduate of the University of Toronto in 1962 with a B.A.Sc. in Engineering Physics, Geophysics Option.

2. I have been practising my profession for the last twenty two years.

3. I am a member of the Association of Professional Engineers of British Columbia and Ontario.

4. I hold no interest, direct or indirect in the Thistle and Panther properties nor do I expect to receive any.

Peter E. Walcott, P.Eng.

Vancouver, B.C.

January 1984

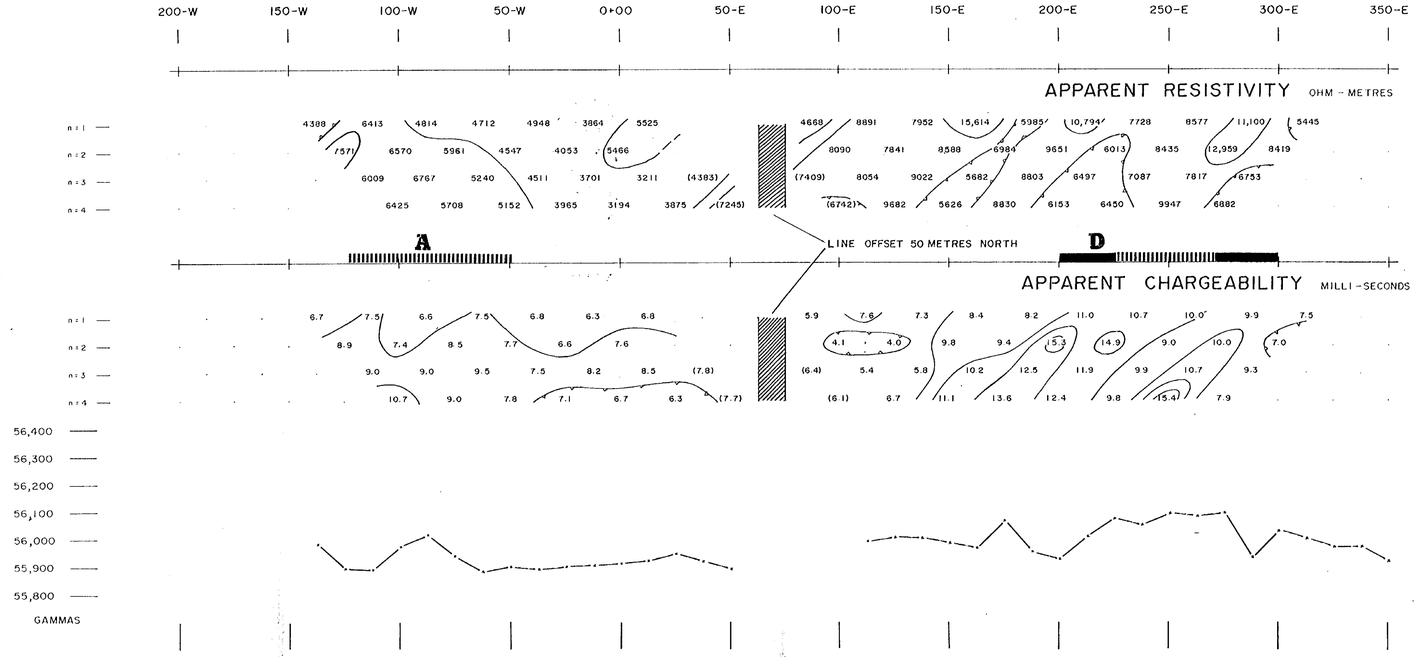
I.P. Pseudo Sections

Anomalous Zone.

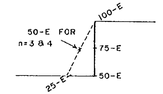
Possible Anomalous Zone.

Zone undefined at ends.


PLATE II
SOIL GEOCHEMISTRY (Cu, Pb, Zn, Ag, Au) OF THISTLE MINE GRID, FRANKLIN RIVER AREA, 92 F/2E
GEOLOGICAL BRANCH ASSESSMENT REPORT
11,949
LINE 3+00 N
LINE 2+00 N
LINE 1+00 N
LINE 0+00
LINE 1+00 S
LINE 2+00 S
LINE 3+00 S
FRANKLIN RIVER
THISTLE MINE MAIN ROAD
OLD THISTLE MINE ROAD
CULVERT
WASTE ROCK CONTAMINATION
WASTE ROCK
300 adit
500 adit
lower glory hole
upper glory hole
THISTLE MINE
PANTHER MINE
RAIL
cut
NORTH
750m
800m
850m
900
950
1000
LEGEND
Logging road
Creek or river
Outcrop
Topographic contour, 10m intervals
Diamond drill hole, Vananda Exploration, 1965
Mineralized interval
Soil sample location
99, 18, 37, 1.1, 60 Soil sample analysis:
Cu(ppm), Pb(ppm), Zn(ppm), Ag(ppm), Au(ppb)
Drawn by G. Benvenuto and VdIRD
Westmin Resources Ltd., 1983
0 50 100 150 200 meters
SCALE: 1: 1,000



LINE OFFSET



WESTMIN RESOURCES LTD.

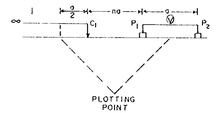
THISTLE MINE AREA
ALBERNI M.D., B.C.

LINE 1 - SOUTH

0 25 50 100 150
SCALE 1:1250

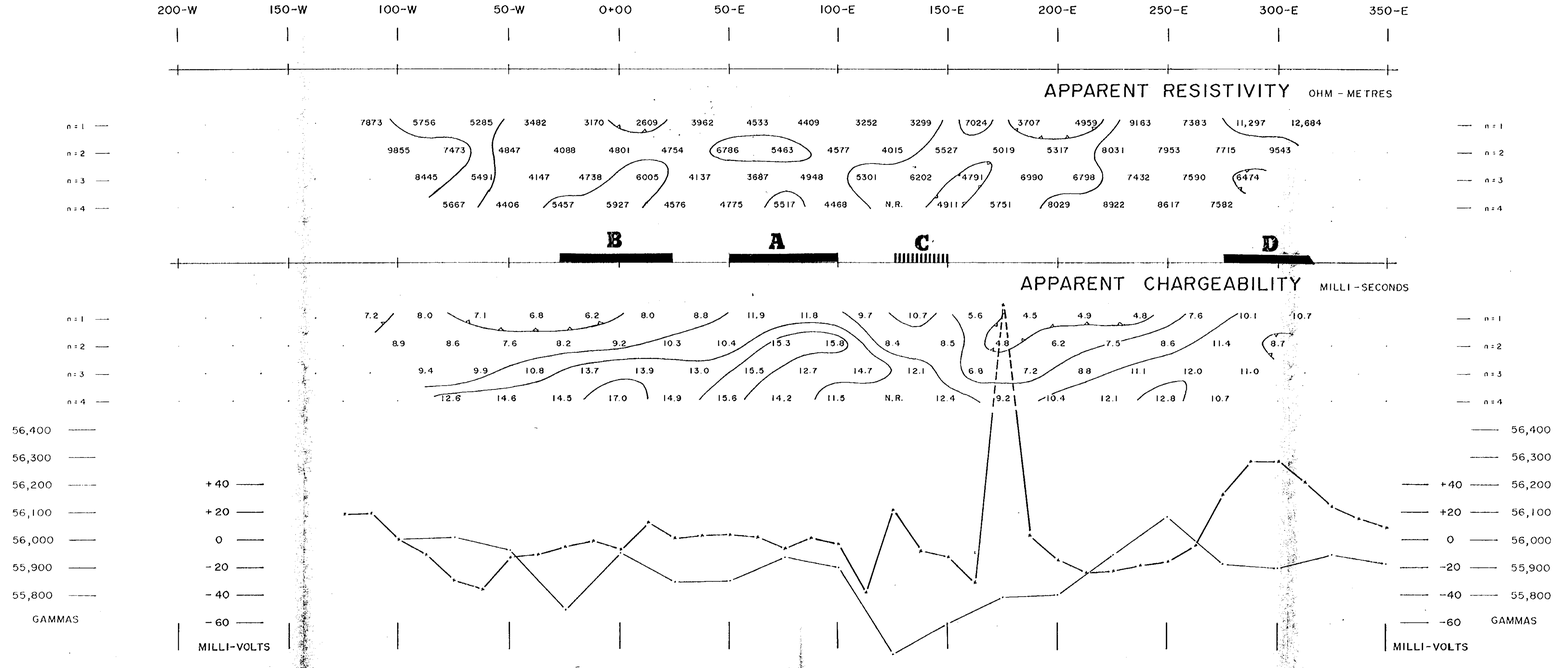
INDUCED POLARIZATION & MAGNETOMETER SURVEY

POLE-DIPOLE
ELECTRODE CONFIGURATION



CURRENT ELECTRODE WEST OF POTENTIAL ELECTRODE
DIPOLE SEPARATION "a" — 25 METRES
TIME DELAY — 200 MILLI-SECONDS
SAMPLING TIME — 1000 MILLI-SECONDS
TRANSMITTER — PHOENIX IPT1
RECEIVER — HUNTEC MARK IV, SERIAL No. 1030
CONTOUR INTERVAL
APPARENT RESISTIVITY — 5,7,10,20,30,50,70,100,200,300, 500,700,1000,2000 etc
APPARENT CHARGEABILITY — 0.2,5,5,7.5,10,12.5,15 etc.

SURVEY BY *PETER E. WALCOTT & ASSOCIATES LTD.*
NOVEMBER — 1983



PROFILES OF TOTAL FIELD INTENSITY

PROFILES OF SELF-POTENTIAL

WESTMIN RESOURCES LTD.

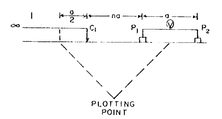
THISTLE MINE AREA
ALBERNI M.D., B.C.

LINE 0 + 00

0 25 50 100 150
SCALE 1:1250

INDUCED POLARIZATION & MAGNETOMETER SURVEY

POLE-DIPOLE
ELECTRODE CONFIGURATION



CURRENT ELECTRODE WEST OF POTENTIAL ELECTRODE
DIPOLE SEPARATION "a" — 25 METRES
TIME DELAY - 200 MILLI-SECONDS
SAMPLING TIME - 1000 MILLI-SECONDS
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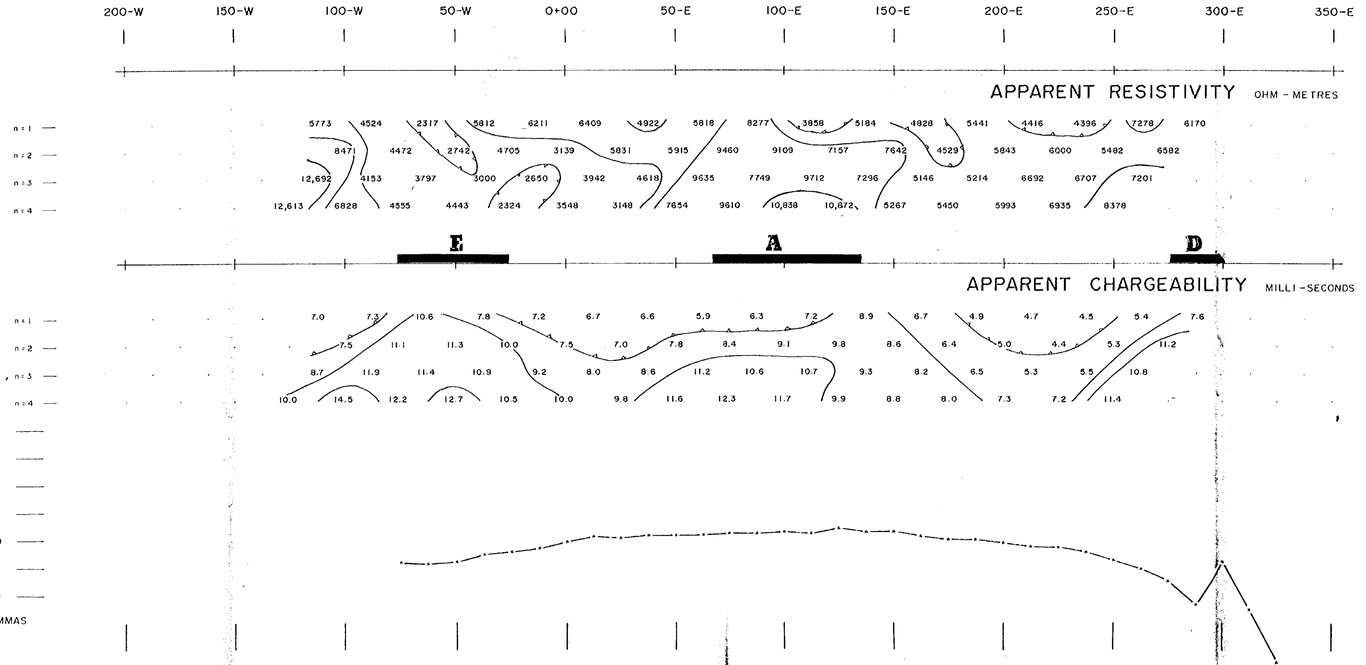
APPARENT CHARGEABILITY - 0.2,5,5,7.5,10,12.5,15 etc

SURVEY BY PETER E. WALCOTT & ASSOCIATES LTD.
NOVEMBER - 1983

GEOLOGICAL BRANCH
ASSESSMENT REPORT

11,949



PROFILES OF TOTAL FIELD INTENSITY

WESTMIN RESOURCES LTD.

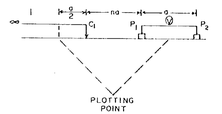
THISTLE MINE AREA
ALBERNI M.D., B.C.

LINE 1-NORTH

0 25 50 100 150
SCALE 1:1250

INDUCED POLARIZATION & MAGNETOMETER SURVEY

POLE-DIPOLE
ELECTRODE CONFIGURATION



CURRENT ELECTRODE WEST OF POTENTIAL ELECTRODE
DIPOLE SEPARATION "a" - 25 METRES
TIME DELAY - 200 MILLI-SECONDS
SAMPLING TIME - 1000 MILLI-SECONDS
TRANSMITTER - PHOENIX IPT1
RECEIVER - HUNTEC MARK IV, SERIAL No. 1030
CONTOUR INTERVAL
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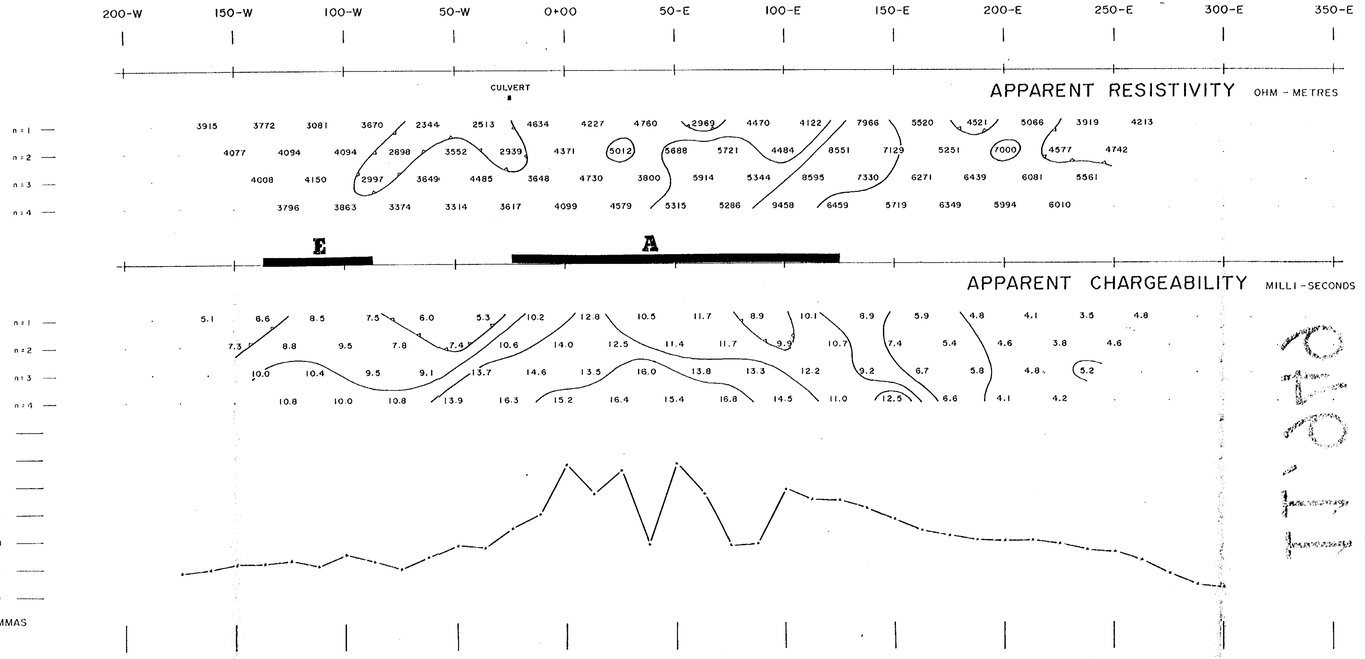
APPARENT CHARGEABILITY - 0.2,5,7.5,10,12.5,15 etc.

SURVEY BY PETER E. WALCOTT & ASSOCIATES LTD.
NOVEMBER - 1983



WESTMIN RESOURCES LTD.

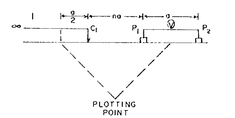
THISTLE MINE AREA
ALBERNI M.D., B.C.

LINE 2-NORTH

0 25 50 100 150
SCALE 1:1250

INDUCED POLARIZATION & MAGNETOMETER SURVEY

POLE-DIPOLE
ELECTRODE CONFIGURATION



CURRENT ELECTRODE WEST OF POTENTIAL ELECTRODE
DIPOLE SEPARATION "a" - 25 METRES
TIME DELAY - 200 MILLI-SECONDS
SAMPLING TIME - 1000 MILLI-SECONDS
TRANSMITTER - PHOENIX IPT1
RECEIVER - HUNTEC MARK IV, SERIAL No. 1030
CONTOUR INTERVAL
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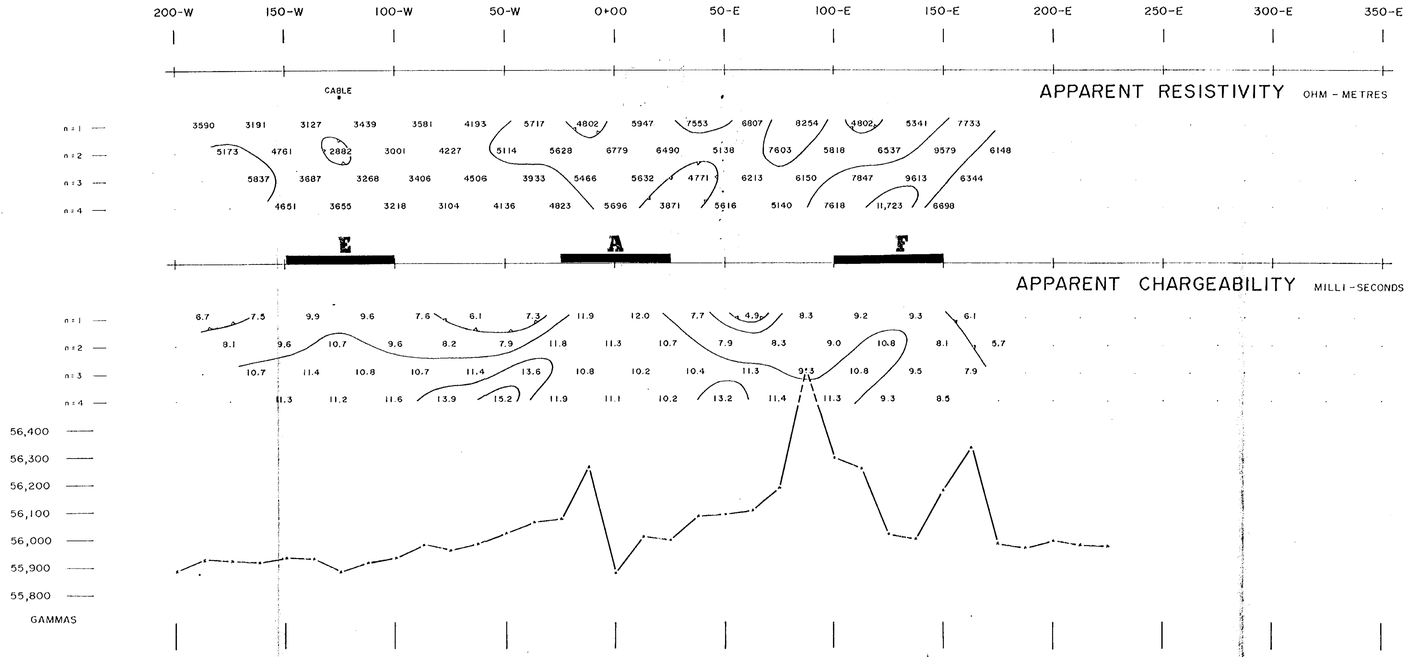
SURVEY BY *PETER E. WALCOTT & ASSOCIATES LTD.*
NOVEMBER - 1983

GEOLOGICAL BRANCH
ASSESSMENT REPORT

11,949



WESTMIN RESOURCES LTD.

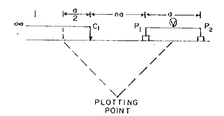
THISTLE MINE AREA
ALBERNI M.D., B.C.

LINE 3-NORTH

0 25 50 100 150
SCALE 1:1250

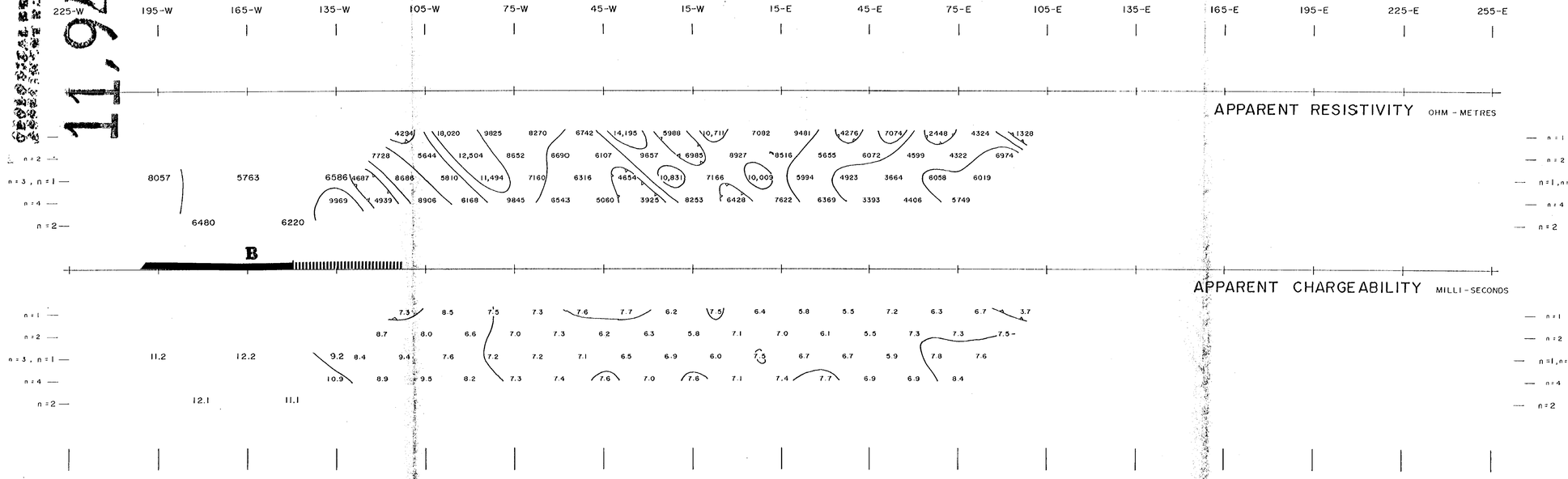
INDUCED POLARIZATION & MAGNETOMETER SURVEY

POLE-DIPOLE
ELECTRODE CONFIGURATION



CURRENT ELECTRODE WEST OF POTENTIAL ELECTRODE
DIPOLE SEPARATION "a" - 25 METRES
TIME DELAY - 200 MILLI-SECONDS
SAMPLING TIME - 1000 MILLI-SECONDS
TRANSMITTER - PHOENIX IPT1
RECEIVER - HUNTEC MARK IV, SERIAL No. 1030
CONTOUR INTERVAL
APPARENT RESISTIVITY - 5,7,10,20,30,50,70,100,200,300, 500,700,1000,2000 etc
APPARENT CHARGEABILITY - 0.2,5,5,7.5,10,12.5,15 etc.

SURVEY BY PETER E. WALCOTT & ASSOCIATES LTD.
NOVEMBER - 1983



WESTMIN RESOURCES LTD.

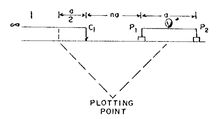
PANTHER MINE AREA
ALBERNI M.D., B.C.

LINE 50-SOUTH

0 15 30 60 90
SCALE 1:750

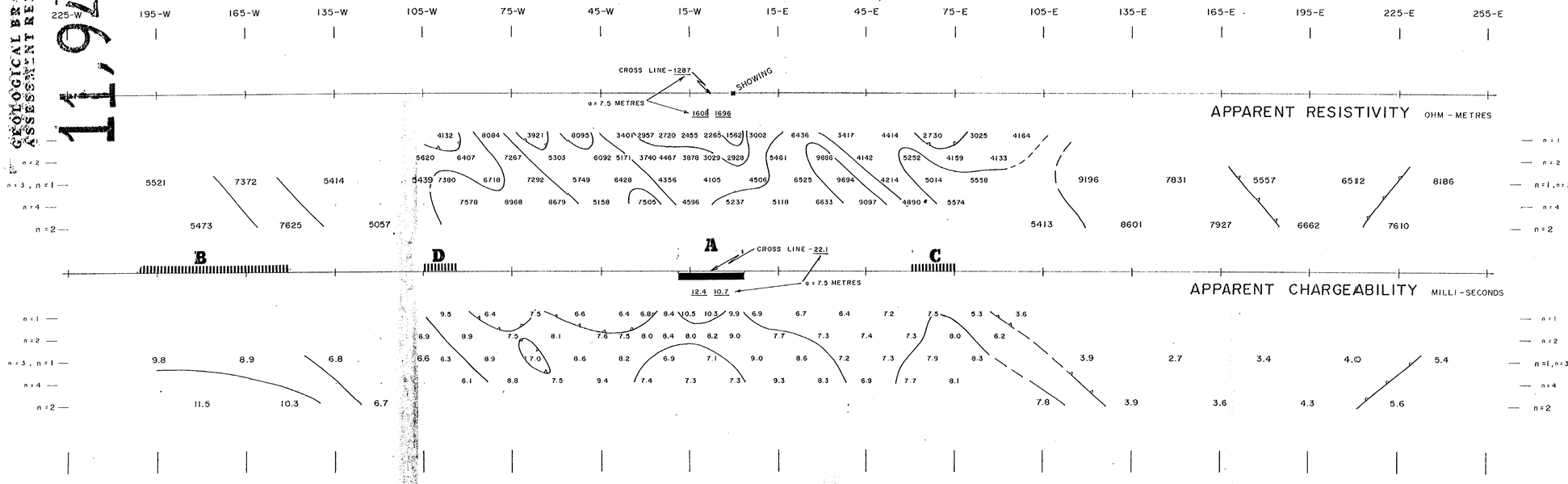
INDUCED POLARIZATION SURVEY

POLE-DIPOLE
ELECTRODE CONFIGURATION



CURRENT ELECTRODE EAST OF POTENTIAL ELECTRODE
DIPOLE SEPARATION "a" - 15 & 30 METRES
TIME DELAY - 200 MILLI-SECONDS
SAMPLING TIME - 1000 MILLI-SECONDS
TRANSMITTER - PHOENIX IPT1
RECEIVER - HUNTEC MARK IV, SERIAL No. 1030
CONTOUR INTERVAL
APPARENT RESISTIVITY - 5, 7, 10, 20, 30, 50, 70, 100, 200, 300, 500, 700, 1000, 2000 etc.
APPARENT CHARGEABILITY - 0, 2.5, 5, 7.5, 10, 12.5, 15 etc.

SURVEY BY PETER E. WALCOTT & ASSOCIATES LTD.
NOVEMBER - 1983



WESTMIN RESOURCES LTD.

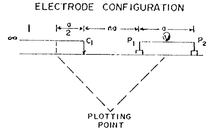
PANTHER MINE AREA
ALBERNI M.D., B.C.

LINE 0 + 00

0 15 30 60 90
SCALE 1:750

INDUCED POLARIZATION SURVEY

POLE - DIPOLE
ELECTRODE CONFIGURATION



CURRENT ELECTRODE EAST OF POTENTIAL ELECTRODE
DIPOLE SEPARATION "a" - 15 & 30 METRES
TIME DELAY - 200 MILLI-SECONDS
SAMPLING TIME - 1000 MILLI-SECONDS
TRANSMITTER - PHOENIX IPT1
RECEIVER - HUNTEC MARK IV , SERIAL No. 1030
CONTOUR INTERVAL
APPARENT RESISTIVITY - 5, 7, 10, 20, 30, 50, 70, 100, 200, 300, 500, 700, 1000, 2000 etc.
APPARENT CHARGEABILITY - 0.25, 5, 7.5, 10, 12.5, 15 etc.

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NOVEMBER - 1983

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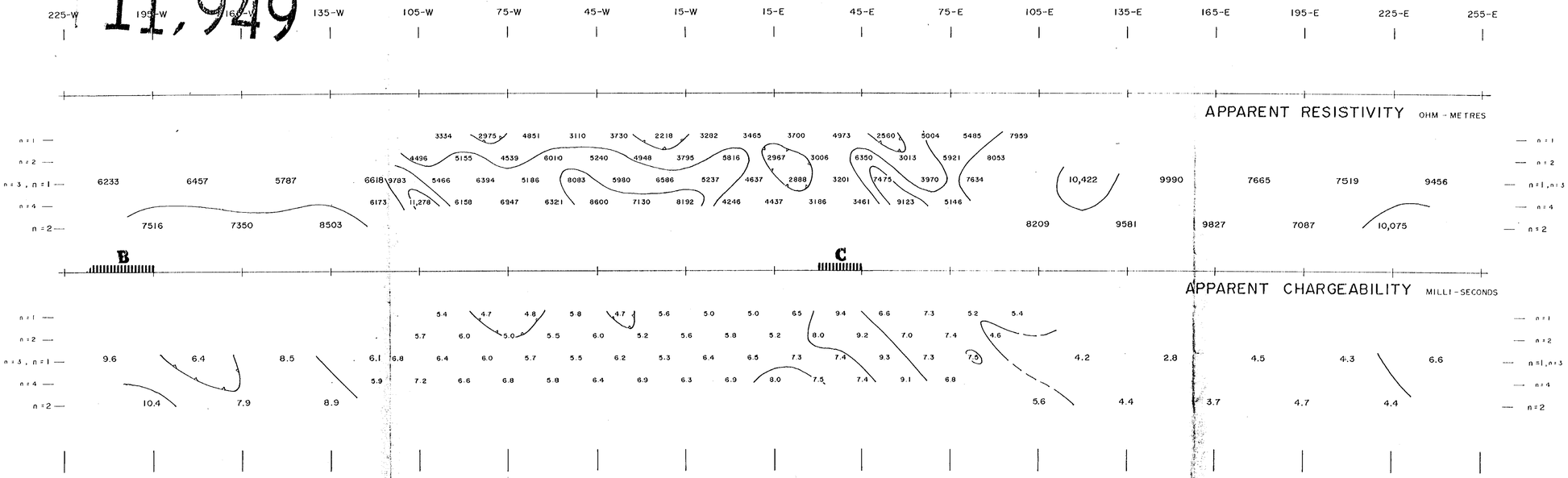

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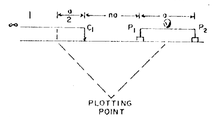
PANTHER MINE AREA
ALBERNI M.D., B.C.

LINE 50-NORTH

0 15 30 60 90
SCALE 1:750

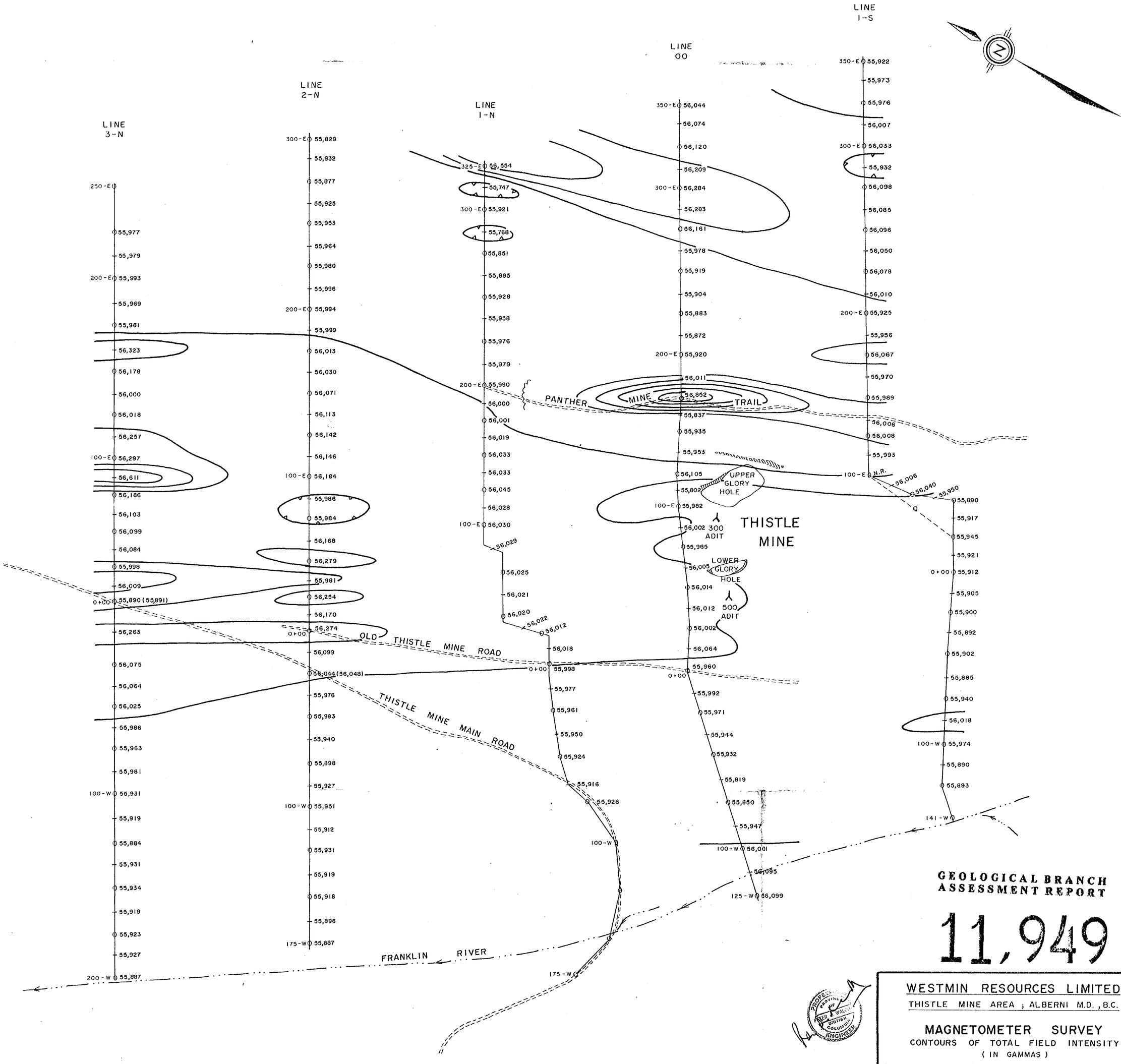
INDUCED POLARIZATION SURVEY

POLE-DIPOLE
ELECTRODE CONFIGURATION



CURRENT ELECTRODE EAST OF POTENTIAL ELECTRODE
DIPOLE SEPARATION "a" - 15 & 30 METRES
TIME DELAY - 200 MILLI-SECONDS
SAMPLING TIME - 1000 MILLI-SECONDS
TRANSMITTER - PHOENIX IPT1
RECEIVER - HUNTEC MARK IV, SERIAL No. 1030
CONTOUR INTERVAL
APPARENT RESISTIVITY - 5,7,10,20,30,50,70,100,200,300, 500,700,1000,2000 etc.
APPARENT CHARGEABILITY - 0,2.5,5,7.5,10,12.5,15 etc.

SURVEY BY PETER E. WALCOTT & ASSOCIATES LTD.
NOVEMBER - 1983



GEOLOGICAL BRANCH
ASSESSMENT REPORT

11,949

WESTMIN RESOURCES LIMITED

THISTLE MINE AREA ; ALBERNI M.D., B.C.

MAGNETOMETER SURVEY

CONTOURS OF TOTAL FIELD INTENSITY
(IN GAMMAS)

SCALE 1: 1,000

MAP No. W-337-1
TO ACCOMPANY A REPORT BY
PETER E. WALCOTT, P.Eng.

PETER E. WALCOTT & ASSOC. LTD.
NOVEMBER - 1983

LINE 3-N

LINE 2-N

LINE 1-N

LINE 00

LINE 1-S

250-E 200-E 100-E 0+00 100-W 200-W

300-E 200-E 100-E 0+00 100-W 175-W

325-E 300-E 200-E 100-E 0+00 100-W 175-W

350-E 300-E 200-E 100-E 0+00 100-W 125-W

350-E 300-E 200-E 100-E 0+00 100-W 141-W

7733 5341 4802 8254 6807 7553 5947 4802 5717 4193 3581 3439 3127 3191 3590

4213 3919 5066 4521 5520 7966 4122 4470 2969 4760 4227 4634 2513 2344 3670 3081 3772 3915

6170 7278 4396 4416 5441 4828 5184 3858 8277 5818 4922 6409 6211 5812 2317 4524 5773

12,684 11,297 7383 9163 4959 3707 7024 3299 3252 4409 4533 3962 2609 3170 3482 5285 5756 7873

5445 11,100 8577 7728 10,794 5985 15,614 7952 8891 4668 5525 3864 4948 4712 4814 6413 4388

PANTHER MINE TRAIL

UPPER GLORY HOLE

300 ADIT

LOWER GLORY HOLE

500 ADIT

THISTLE MINE

OLD THISTLE MINE ROAD

THISTLE MINE MAIN ROAD

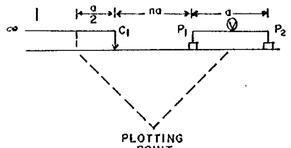
FRANKLIN RIVER

GEOLOGICAL BRANCH
ASSESSMENT REPORT

11,949

TIME DELAY - 200 MILLI-SECONDS
SAMPLING TIME - 1000 MILLI-SECONDS
TRANSMITTER - PHOENIX TERI
RECEIVER - HUNTEC MARK IIZ SERIAL No. 1030
CONTOUR INTERVAL - 100, 200, 300, 500, 700, 1,000, 2,000, 3,000, 4,000 etc.

POLE-DIPOLE
ELECTRODE CONFIGURATION



CURRENT ELECTRODE WEST OF POTENTIAL ELECTRODE

PROFESSIONAL ENGINEER PROVINCE OF BRITISH COLUMBIA

WESTMIN RESOURCES LIMITED

THISTLE MINE AREA ; ALBERNI M.D., B.C.

INDUCED POLARIZATION SURVEY

CONTOURS OF APPARENT RESISTIVITY
(IN OHM-METRES)
"a" = 25 METRES , n = 1

SCALE 1: 1,000

MAP No. W-337-2
TO ACCOMPANY A REPORT BY
PETER E. WALCOTT, P.Eng.

PETER E. WALCOTT & ASSOC. LTD.
NOVEMBER - 1983

LINE 3-N

LINE 2-N

LINE 1-N

LINE 00

LINE 1-S

250-E 0 200-E 0 6148 9579 6537 100-E 0 5818 7603 5138 6490 0+00 0 6779 5628 5114 4227 100-W 0 3001 2882 4761 5173 200-W 0

300-E 0 4742 4577 200-E 0 7000 6148 5251 7129 8551 100-E 0 4484 5721 5688 5012 0+00 0 4371 2939 3552 2898 100-W 0 4094 4094 4077 175-W 0

325-E 0 300-E 0 6582 5482 6000 200-E 0 5843 4529 7642 7157 100-E 0 9109 9460 5915 0+00 0 5831 4705 2742 4472 100-W 0 8471 175-W 0

350-E 0 300-E 0 9543 7715 7953 8031 200-E 0 5317 5019 5527 4015 100-E 0 4577 5463 6786 0+00 0 4754 4801 4088 4847 7473 100-W 0 9855 125-W 0

350-E 0 300-E 0 8419 12,959 8435 6013 200-E 0 9651 6984 8588 7841 100-E 0 8090 0+00 0 5466 4053 4547 5961 100-W 0 6570 7571 141-W 0

PANTHER MINE TRAIL

UPPER GLORY HOLE

300 ADIT

THISTLE MINE

LOWER GLORY HOLE

500 ADIT

OLD THISTLE MINE ROAD

THISTLE MINE MAIN ROAD

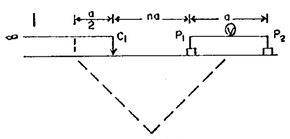
FRANKLIN RIVER

GEOLOGICAL BRANCH
ASSESSMENT REPORT

TIME DELAY - 200 MILLI-SECONDS
SAMPLING TIME - 1000 MILLI-SECONDS
TRANSMITTER - PHOENIX GDP-TI
RECEIVER - HUNTEC MARK IV SERIAL NO. 1030
CONTOUR INTERVAL - 100, 200, 300, 500, 700, 1,000, 2,000, 3,000 & 5000 ohm-m

11,949

POLE-DIPOLE
ELECTRODE CONFIGURATION



PLOTTING POINT

CURRENT ELECTRODE WEST OF POTENTIAL ELECTRODE

PROFESSIONAL ENGINEER PROVINCE OF BRITISH COLUMBIA PETER E. WALCOTT

WESTMIN RESOURCES LIMITED

THISTLE MINE AREA ; ALBERNI M.D., B.C.

INDUCED POLARIZATION SURVEY

CONTOURS OF APPARENT RESISTIVITY
(IN OHM-METRES)
"a" = 25 METRES , n = 2

SCALE 1: 1,000

MAP No. W-337 - 3
TO ACCOMPANY A REPORT BY
PETER E. WALCOTT, P.Eng.

PETER E. WALCOTT & ASSOC. LTD.
NOVEMBER - 1983

LINE 3-N

LINE 2-N

LINE 1-N

LINE 00

LINE 1-S

250-E 200-E 100-E 0+00 100-W 200-W

300-E 200-E 100-E 0+00 100-W 175-W

325-E 300-E 200-E 100-E 0+00 100-W 175-W

350-E 300-E 200-E 100-E 0+00 100-W 125-W

350-E 300-E 200-E 100-E 0+00 100-W 141-W

6.1 9.3 9.2 8.3 4.9 7.7 12.0 11.9 7.3 6.1 7.6 9.6 9.9 7.5 6.7

4.8 3.5 4.1 4.8 5.9 8.9 10.1 8.9 11.7 10.5 12.8 10.2 5.3 6.0 7.5 8.5 6.6 5.1

7.6 5.4 4.5 4.7 4.9 6.7 8.9 7.2 6.3 5.9 6.6 6.7 7.2 7.8 10.6 7.3 7.0

10.7 10.1 7.6 4.8 4.9 4.5 5.6 10.7 9.7 11.8 11.9 8.8 8.0 6.2 6.8 7.1 8.0 7.2

7.5 9.9 10.0 10.7 11.0 8.2 8.4 7.3 7.6 5.9 6.8 6.3 7.5 6.6 7.5 6.7

PANTHER MINE TRAIL

UPPER GLORY HOLE

THISTLE MINE

300 ADIT

LOWER GLORY HOLE

500 ADIT

OLD THISTLE MINE ROAD

THISTLE MINE MAIN ROAD

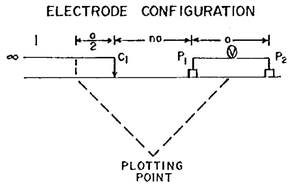
FRANKLIN RIVER

GEOLOGICAL BRANCH
ASSESSMENT REPORT

TIME DELAY - 200 MILLI-SECONDS
SAMPLING TIME - 1000 MILLI-SECONDS
TRANSMITTER - PHOENIX IPT1
RECEIVER - HUNTEC MARK III SERIAL NO.1030
CONTOUR INTERVAL - 0.25, 0.5, 0.75, 1.0, 1.25, 1.5, 2.0

11,949

POLE-DIPOLE
ELECTRODE CONFIGURATION



CURRENT ELECTRODE WEST OF POTENTIAL ELECTRODE

PROFESSIONAL ENGINEER PROVINCE OF BRITISH COLUMBIA PETER E. WALCOTT

WESTMIN RESOURCES LIMITED

THISTLE MINE AREA ; ALBERNI M.D., B.C.

INDUCED POLARIZATION SURVEY
CONTOURS OF APPARENT CHARGEABILITY
(IN MILLI-SECONDS)
"a" = 25 METRES , n = 1

SCALE 1:1,000

MAP No. W-337-4
TO ACCOMPANY A REPORT BY
PETER E. WALCOTT, P.Eng.

PETER E. WALCOTT & ASSOC. LTD.
NOVEMBER - 1983

LINE 3-N

LINE 2-N

LINE 1-N

LINE 00

LINE 1-S

250-E 200-E 100-E 100-W 200-W

300-E 200-E 100-E 175-W

325-E 300-E 200-E 100-E 100-W 175-W

350-E 300-E 200-E 100-E 100-W 125-W

350-E 300-E 200-E 100-E 0+00 100-W 141-W

5.7 8.1 10.8 9.0 8.3 7.9 10.7 11.3 11.8 7.9 8.2 9.6 10.7 9.6 8.1

4.6 3.8 4.6 5.4 7.4 10.7 9.9 11.7 11.4 12.5 14.0 0+00 10.6 7.4 7.8 9.5 8.8 7.3

11.2 5.3 4.4 5.0 6.4 8.6 9.8 9.1 8.4 7.8 7.0 7.5 0+00 10.0 11.3 11.1 7.5

8.7 11.4 8.6 7.5 6.2 4.8 8.5 8.4 15.8 15.3 10.4 10.3 9.2 0+00 8.2 7.6 8.6 8.9

7.0 10.0 9.0 14.9 15.3 9.4 9.8 4.0 4.1 0+00 7.6 6.6 7.7 8.5 7.4 8.9

PANTHER MINE TRAIL

UPPER GLORY HOLE

LOWER GLORY HOLE

300 ADIT

500 ADIT

THISTLE MINE

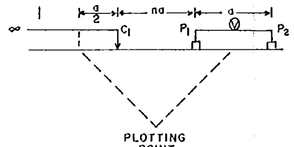
OLD THISTLE MINE ROAD

THISTLE MINE MAIN ROAD

FRANKLIN RIVER

N

POLE-DIPOLE
ELECTRODE CONFIGURATION



PLOTTING POINT

CURRENT ELECTRODE WEST OF POTENTIAL ELECTRODE

GEOLOGICAL BRANCH
ASSESSMENT REPORT

11,949

TIME DELAY - 200 MILLI-SECONDS
SAMPLING TIME - 1000 MILLI-SECONDS
TRANSMITTER - PHOENIX IPT1
RECEIVER - HUNTEC MARK IV SERIAL No. 1030
CONTOUR INTERVAL - 0, 2.5, 5, 7.5, 10, 12.5, 15 etc.

PROFESSIONAL ENGINEER PROVINCE OF BRITISH COLUMBA PETER E. WALCOTT

WESTMIN RESOURCES LIMITED

THISTLE MINE AREA ; ALBERNI M.D., B.C.

INDUCED POLARIZATION SURVEY
CONTOURS OF APPARENT CHARGEABILITY
(IN MILLI-SECONDS)
"a" = 25 METRES , n = 2

SCALE 1: 1,000

MAP No. W-337-5
TO ACCOMPANY A REPORT BY
PETER E. WALCOTT, P.Eng.

PETER E. WALCOTT & ASSOC. LTD.
NOVEMBER - 1983