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# HISLOP GOLD PROJECT
# REPORT ON
# 1980-81 EXPLORATION PROGRAMS

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## SUMMARY

This report presents and summarizes the exploration program which was carried out on the Hislop Gold Project. The program presented in this report commenced in September, 1980 and was terminated on May 31, 1981. The initial Pancontinental diamond drilling intersected several economic grade gold zones adjacent to a previously outlined area of mineralization. Post-drilling interpretation and synthesis has indicated that the intersections encountered are contiguous with the previously encountered zones. A second phase of diamond drilling is warranted to further test this occurrence for possible ore extensions in the southerly direction, as well as, at depth.

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## 1.0 INTRODUCTION

### 1.1 Objectives of Program

A diamond drilling program was initiated in September, 1980 to further evaluate the gold potential of land in Hislop township in the Province of Ontario. Accompanying this program, detailed geochemical sampling and geophysical surveying was carried out to locate other potentially mineralized zones and/or structures. The analysis of the 1980 results which included lithogeochemistry and petrology, eventually led to the recommendation of a follow-up diamond drilling program.

### 1.2 Location - Access (Fig. 1)

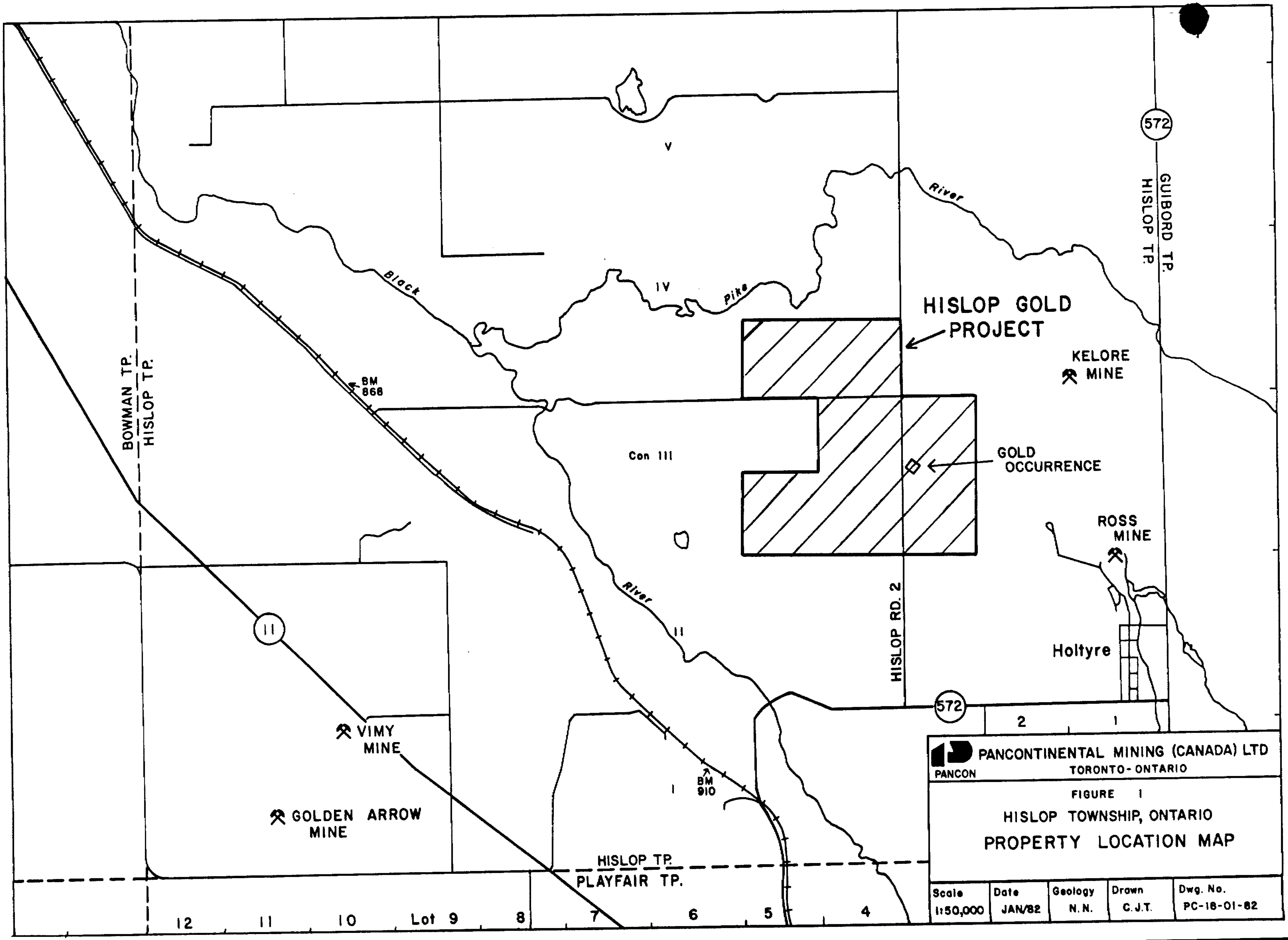
The Hislop gold project is located approximately 3 km. northwest of Holtyre, Ontario, in Lots 3, 4, and 5, concession III and IV of Hislop Twp. Hislop Twp. is midway between Kirkland Lake and Timmins along High No. 11.

Access to the property is gained by travelling along highway number 11 to Ramore, (junction of Highway No. 572 and 11) travelling 10.8 km east along 572 to Hislop Twp. Rd. #2, north along Rd. #2 for 1.6 km. This location is approximately the centre of the project area.

### 1.3 Land Status

Lots 3 and 4, Concession III of Hislop Twp. are registered as patent land held by Gunnex Ltd. The south half of Lot 5, Concession IV was acquired by staking during September 1980 and is included in the project area. The south half of Lot 4, Concession IV and the south half of Lot 5, Concession IV of Hislop Twp. were acquired through option agreements dated June 1, 1981.

Total property area involved in this project now stands at 456 hectares ($4.56 km^2$).



**PANCONTINENTAL MINING (CANADA) LTD**
TORONTO - ONTARIO
PANCON

FIGURE 1

HISLOP TOWNSHIP, ONTARIO

## PROPERTY LOCATION MAP

| Scale | Date | Geology | Drawn | Dwg. No. |
|---|---|---|---|---|
| 1:50,000 | JAN/82 | N. N. | C. J. T. | PC-18-01-82 |

## 1.4 Contractor Services

Heath and Sherwood Diamond Drilling, based in Kirkland Lake, Ontario provided equipment and personnel for the diamond drilling.

Scintrex Limited, based in Concord, Ontario, provided equipment and personnel to carry out an Induced Polarization test survey over the property.

Swastika Laboratories, based in Swastika, Ontario conducted fire assaying of all core samples submitted for routine gold analysis.

Barringer Magenta, based in Rexdale, Ontadio was utilized for the lithogeochemical multi-element analysis of the core samples.

Thin section preparation and petrologic studies were carried out at the University of Western Ontario, under the supervision of Robert Valliant (Ph.D.), acting in a consulting capacity.

Raoul Poirier based in Amos, Quebec provided men for line cutting duties, in prepration for the start up of the next phase of exploration.

## 1.5 Personnel

The exploration program took place during the fall-winter of 1980. Personnel involved in this phase included Bill Dix, a geologist with Barymin (Gunnex Ltd.) and the writer, a geologist with Pancontinental. Four local men were hired for various field duties.

## 1.6 Brief History

Exploration drilling along the inferred strike of the host rocks for the Ross Mine, by Hollinger Consolidated Gold Mines Limited in 1940, resulted in the discovery of this gold project. Gunnar Gold Mines Limited, in 1946 acquired through option, three parcels of land comprising 480 acres within the Hollinger drilling area. Gunnar verified the gold occurrence by completing 7 additional holes in 1947 (holes C-1 to C-7).

Gunnex Limited (formerly wholly-owned exploration subsidiary of Gunnar) was acquired by Barymin Explorations Limited in 1973. In 1974 Gunnex opted to re-evaluate the gold prospect by drilling 32 holes for a total of 8428 feet (holes G-1 to G-32), to test tonnage and grade potential over a portion of the mineralized zone. " Tonnage and grade of 'possible' ore within a strike length of 150 feet of the gold zone, drilled at 50 foot and then 25 foot centres to a maximum depth of 300 feet is 61,000 tons averaging 0.21 oz Au/ton. This includes a provision for 10% dilution"... (Dix report, 1980).

Two geological models were presented in Dix's report to explain this particular gold occurrence.

1. Exhalative volcanogenic model would explain the lower chert band with subsequent emplacement of the upper chert breccias by a similar process, with later deformation by bedding plane faulting.

2. The lower chert could have been formed by fumarolic action in conjunction with the emplacement of the upper chert beds.

With these models in mind, plus the proven tonnage, Gunnex, in 1975-76 purchased an additional 160 acres of freehold land to provide additional exploration room along strike of the geological trend. The property then comprised all of lots 3 and 4, Conc. III, Hislop Twp.

Pancontinental Mining (Canada) Ltd., entered into a joint venture agreement with Gunnex in mid-1980.

# 2.0 EXPLORATION PROGRAM (1980)

## 2.1 Introductory Statement

The exploration program consisted of a diamond drilling program intended to test for any down-dip and/or northern extensions of the mineralized zone.

At the bedrock - overburden interface in the vicinity of the mineralized zone a geochemical halo could be traceable by an overburden sampling program.

A detailed till geochemistry survey was completed over the inferred mineralized zone to test this hypothesis, bearing in mind that if this method yielded positive results, a further regional till-geochemistry survey would be initiated to cover the entire property to aid in the regional evaluation of this area.

A reconnaissance magnetometer orientation survey over the northeastern portion of the property, was undertaken to geophysically map geological contacts and structures which might influence gold mineralization.

An I.P. test survey was carried out over the mineralized area to ascertain the I.P. response of the disseminated sulphides within the mineralized zone, and to determine the usefulness of this geophysical system in delineating other potentially mineralized areas, in this geologic setting.

With the knowledge gained from the first phase of exploration on this project, Pancon decided to re-assess the available data in an effort to develop a new working model to adequately explain the localization of gold in this environment.

A lithogeochemical analysis of the core from section 963mN accompanied by petrological and thin section analysis, was undertaken to aid in deciphering the volcanic history of the units within the mineralized environment.

This analysis enabled an excellent interpretation of the geology of the mineralized zone and ultimately led to recommending **another diamond** drilling program.

## 2.2 Data Presentation

### 2.2.1 Geophysics

The geophysical program during this phase of activity, consisted of two orientation surveys using electrical (I.P.) and magnetic methods to ascertain the geophysical responsiveness of this type of gold occurrence and to substantiate a detailed survey if favourable results were obtained.

### 2.2.1.1 Induced Polarization Survey (Appendix 1)

The gold mineralization in this area is thought to be related to the sulphide mineralization. These sulphides occur as euhedral crystals and local concentrations of finely disseminated pyrite and chalcopyrite, which may occasionally approach concentrations of 1-2%, within certain interflow units. I.P. surveys can respond to concentrations in this range, if the zones maintain continuity.

Scintrex Limited was contracted to do this survey, the results of which are appended. Summarizing the conclusions of the survey, two zones of interest were located in this orientation survey.

Zone 1 represents a weak chargeability anomaly which is indicated coincidental with the base of the gold-pyrite zone on lines 960mN and 990mN, between 60 and 90m east. This zone is apparently at shallow depth (30m) and has a 30-60m strike length. It was noted that the response was quite low, and therefore probably not significant.

The second zone of interest is located on line 1080mN at 120mW. A high chargeability anomaly is located near the surface, correlating with an outcrop containing 1-2% sulphides in an intermediate volcanic unit.

This survey was generally inconclusive, in that the base of the ore zone has a very subtle I.P. response, and probably would not be noticed in a regional I.P. assessment of the property. The results of the survey do, however, suggest a lack of continuity of the mineralized zone within this geological setting.

### 2.2.1.2 Magnetic Survey (PC-18-14-81)

A feature common to many gold occurrences in the area is the presence of a rapidly changing acid-basic volcanic pile. Acidic (felsic) volcanics are typified by a general magnetic low, while more basic (mafic) volcanics tend to be expressed by magnetic highs.

A reconnaissance type magnetic survey was carried out over the north-eastern portion of the property in an attempt to magnetically map the overburden covered volcanic sequences, and to aid in unravelling any geological structures.

A noticeable magnetic low is evident parallelling the base line. This low is approximately 180 metres wide in the extreme SE, narrowing to approximately 60 metres wide to the NW. Complimentary high belts are noticeable on the north and south flanks of this low zone. This pattern seems to reflect a felsic-intermediate unit, flanked by more mafic units on either side. Diamond drilling and outcrop examination has confirmed the interpretation, indicating the usefulness of magnetics in this environment. A detailed magnetometer survey covering the entire property was recommended.

### 2.2.2 Geochemistry

The geochemical survey completed on this property was a basal till survey. Past work has indicated a gold-sulphide association in this area (Ross Mine). It was anticipated that the Cu, Pb, and Zn sulphides would produce a suitable geochemical halo indicative of a glacially weathered subcrop of the mineralized zone. Basal till samples were collected at or near the till-bedrock interface using a portable, hydraulic-powered, Holman flow-through till sampler which has been used by Barymin in other project areas.

An orientation survey was conducted over the known mineralized zone to test the effectiveness of this type of survey in this environment, before covering the entire favourable geological trend. The samples were procured at 15 metre intervals along 30 metre centres, and were analyzed for Cu, Pb, and Zn. The assays obtained were treated statistically to determine anomalous values.

Several second order anomalies were located within the surveyed area, when individual elemental analyses were plotted. Due to the anticipated Cu, Pb, and Zn association with the Au in this area, tri-elemental anomalies were expected as indicators of Au mineralization. Only one such anomaly exists within the survey area. This anomaly extends from line 930mN, 15mW to 960mN, Baseline. This zone being approximately 60m long and 10m wide with major axis parallel to the glacial transport direction of SSE.

This survey was terminated midway through the program due to a malfunction in the equipment. The results of the survey were inconclusive because of the inability of the sampler to penetrate the overburden and also due to the limited survey area tested.

### 2.2.3 Geology

#### 2.2.3.1 Regional Geology - Table I

The Hislop gold project lies within the Abitibi orogenic belt within the Superior Province of the Canadian Shield. This large east-west trending belt consists of mafic to felsic volcanic rocks (with coeval intrusions), volcanoclastic and chemical sediments, and several large granitic batholiths. (Goodwin and Ridler, 1970). The geology of Hislop township was described by the Ontario Department of Mines in an annual report by Prest (1955). The following is a compilation of Prest's early work, followed by Ploeger's (1978) interpretation and a glacial interpretation by Baker (1979).

## Keewatin

Northern Keewatin metavolcanics consist of a series of folded and contorted NW striking, north-facing andesite pillowed and spheroidal lavas cut by dikes and irregular shaped diabase bodies. Conformably overlying this is a metasedimentary series of interbedded argillite, quartzite and greywackes.

Separating the northern rocks from the southern rocks is the Destor-Porcupine fault zone, trending 125°-305°. Sub-parallel to this trending at 150°-330° the Hislop fault subdivides the Southern Keewatin series. East of the Hislop fault rocks appear tightly folded and faulted. Geological trending is in a north-south direction. The metavolcanic rocks include felsic to mafic lavas, flow breccias and subvolcanics. The metasedimentary rocks include greywacke, argillite, quartzite, slate cherts and minor conglomerates.

West of the Hislop fault rocks are generally less folded and faulted. Overall geological trend is west to southwest with indications of south facing rock units.

## Timiskaming

Timiskaming age metasediments are confined to a north-northwest trending wedge in the southeast corner of Hislop township. The sediments are predominantly conglomerates, agglomerates, greywackes, and quartzites intimately associated with trachyte and trachyte breccia.

## Haileyburian

Older rocks throughout the entire township have been intruded by dikes sills and irregular bodies of mafic to ultramafic rocks. These rocks have been described as diabase, quartz diabase, diorite, quartz diorite, periodotite, and gabbro. Diabase rocks described in the Keewatin volcanic complex may, in fact, be Haileyburian in age.

TABLE 1

## TABLE OF FORMATIONS: HISLOP TOWNSHIP

| | |
|---|---|
| PHANEROZOIC | |
| Cenozoic | |
| Quaternay | |
| Recent: | Mine excavations, tailings, etc. Alluvial deposits: mainly sand, silt, gravel. Swamp deposits: mud, peat. |
| Pleistocene: | Glaciolacustrine deep-water deposits: clay, varved clay, silt. Ice contact deposits: eskers, deltas, Bedrock - drift complex: local boulders resting on bedrock. |
| | great unconformity |
| PRECAMBRIAN | |
| Archean | |
| Matachewan: | Mafic intrusive rocks: diabase, quartz diabase, porphyritic diabase. |
| | intrusive contact |
| Algoman: | Felsic intrusive rocks: granite, syenite (includes porphyritic phases) quartz and feldspar porphyries, lamprophyres. |
| | intrusive contact |
| Haileyburian? | Mafic to ultramafic intrusive rocks: dunite, gabbro, peridotite, diurite. |
| | intrusive contact |
| Temiskaming: | Metasedimentary and volcanic rocks: conglomerate, agglomerate, greywacke, quartzite, trachyte, trachyte breccia. |
| | unconformity |
| Keewatin: | Metavolcanic and metasedimentary rocks.<br>Southern sediments; greywacke, argillite, quartzite, slate cherts, minor conglomerate.<br>Southern volcanics; intermediate-mafic volcanics:<br>andesite-decite (lavas, flow breccias, subvolcanics).<br>basalt flows.<br>Felsic-intermediate volcnics:<br>rhyodacite (lavas, flow breccias, subvolcanics).<br>Northern sediments;<br>greywacke, quartzites and argillites.<br>Northern mafic-intermediate volcanics;<br>andesite (lavas, flow breccias) diabase. |

after Prest (55), Ploeger (78), Baker (79).

### Algoman

Algoman volcanics are represented by granites, syenites (porphyritic phases), quartz and feldspar porphyries and lamprophyre. The effect of the Algoman intrusions is seen in the intense alteration of the older rocks. Types of alteration associated with Algoman intrusions include syenitization, hematization, anhydritization, carbonatization, silicification, albitization and sericitization.

### Matachewan

The Matachewan diabase dike swarm is represented in Hislop Township by north trending dikes. These dikes intersect all older rock units in the area with varying degrees of alteration of the wall rock.

### Phanerozoic - Cenozoic

Hislop township is predominantly covered by glaciolacustrine deep-water deposits including thick sequences of clays, varved clays and silt. Other glacial deposits include various ice-contact deposits (eskers and deltas) as well as a bedrock-drift complex in the vicinity of bedrock exposures. Glacial straie have been observed at several locations indicating a glacial transport direction from the NNW. Shore bluffs and/or scarps have been recognized in the township. These are very weakly developed and are probably related to the shoreline of a small lobe of glacial lake Barlow and Ojibway.

### 2.2.3.2 Local Geology (Drg. PC-18-15-81)

Several elements of the regional geology are represented on this property at the local scale. The property is located in the Southern Keewatin volcanics and sediments, as described in Section 2.2.3.1. The interbedded volcanics and subvolcanics range in composition from mafic to felsic, with the majority of the rocks being of rhyodacite affinities. Algoman age felsic intrusions are thought to have been emplaced in this area as they were in the neighbouring Ross Mine situation. Matachewan age diabase dikes are exposed in a fairly large outcrop in the central portion of the property.

Prest (1955), followed by other authors have mapped this area and from their structural analysis of pillowed lavas and core observations, (have implied a complex history of tight recumbent folding and much faulting. The tight recumbent fold patterns in the vicinity of the Ross Mine as mapped by Ploeger (1978) have been extrapolated to the northwest and appear to pass through this particular project area. The noses of these folds exhibit high brecciation, resulting in high porosity. Auriferous sulphide fluids could flow into these brecciated zones and be emplaced as gold bearing veins and veinlets. This model suggests gold zones having a long cylindrical shape reflecting the plunge of the foldnose, as seen at the Ross Mine. The source for the gold in the Ross setting has been attributed to a deep-seated syenitic intrusion, with the syngenetic releasal of auriferous sulphide fluids into the most susceptible zones of the country rock.

The structure inferred by the 1940-1974 diamond drilling over the project area indicates a steeply dipping, (65° to the southwest) perhaps, slightly plunging (to the northwest) limb of a large fold. The mineralized zone of this limb is constituted by a continuous black cherty-quartz zone, and several discontinuous cherty lenses and brecciated quartz zones. Rhyodacite is the host rock for the chert zones.

The hypothesis presented by Dix (1980) to explain this occurrence is as follows. "The undersigned (Dix) considers the "A" zone chert band at the Barymin prospect to be exhalative volcanogenic in origin and the hanging wall chert breccias to have either a similar origin with later deformation by bedding plane faulting or to have formed by fumarolic action in conjunction with the emplacement of higher hanging wall chert beds".

The extension of these chert beds to depth (down dip) and along strike (to the northwest and southeast) was the primary objective of the 1980 drilling program.

### 2.2.4 Diamond Drilling (Drg. PC-18-13-81, Appendix III)

A total of 1714.2m was drilled in 14 holes, to test the along-strike and down dip potential of the gold bearing horizon located between 917.7mN and 1025mN. Previously inferred grade and tonnage in this area was 61,000 tons averaging 0.21 oz Au/ton (Dix, 1980).

Table II summarizes each hole, presenting individual highlights. The logs of the individual holes are appended, and the sectional plots are presented in the map portfolio.

The drilling results are presented on a sectional appraisal, which is followed by an overview of the drilling program.

### 2.2.4.1 Sectional Appraisal

Section 1010mN (Holes P-1, P-2, P-3) (Drg. PC-18-11-81)

These three holes were drilled to test a 15 metre extension, to the northwest of the previously inferred mineralized trend (1974 Gunnex drilling). The footwall zone was intersected in each hole. In holes P-1 and P-3 it was present as a silicified and highly brecciated intermediate-mafic tuff, while in hole P-2 it was present as the typical dark cherty-quartz breccia. Several thin, discontinuous mineralized lenses were encountered in the upper mineralized zone.

Section 1025mN (Holes P-4, P-5) (Drg. PC-18-12-81)

These two holes were drilled to test for a further 15 metre extension along the mineralized trend to the northwest. A few discontinuous, slightly mineralized zones were encountered, reflecting a continuity in the mineralizing environment, to at least this section. The low assays results obtained, discouraged any further drilling along this section and also to the northwest.

Section 994mN (Hole P-6) (Drg. PC-18-10-81)

Hole number P-6 was designed to test a down-dip, south extension of a mineralized lense encountered in P-2, and also to test for down dip extensions of lenses encountered in the Gunnex G-28 holes. Neither lense was intersected with this hole.

TABLE II

## 1980 DIAMOND DRILL RESULTS ... SUMMARY

| DDH # | SECT. | STN. | ELEV. | DECLIN. | AZIM. | T.D. | Oz. Au/ton/Core Length | Rock Type |
|---|---|---|---|---|---|---|---|---|
| P-1 | 1010 | 3.2E | 0.6 | -45 | 045 | 83.8 | 0.1/1.57m | sericitic sil. bx. int. tuff. |
| | | | | | | | 0.08/6.0m | silicified bx. int. tuff |
| P-2 | 1010 | 3.2E | 0.6 | -60 | 045 | 97.4 | 0.21/2.97m | graphitic chert (upper zone) |
| | | | | | | | 0.15/1.94m | chert breccia (lower zone) |
| | | | | | | | 0.05/2.15m | int. tuff with qtz. vein |
| P-3 | 1010 | 3.2E | 0.6 | -75 | 045 | 112.8 | 0.14/2.2m | silicified, brecciated int.-maf. tuff |
| P-4 | 1025 | 5.0W | 0.36 | -45 | 045 | 84.8 | 0.06/0.98m | int. brecciated tuff |
| P-5 | 1025 | 5.0W | 0.36 | -66 | 045 | 107.3 | 0.05/3.17m | ser. int. brecciated tuff with qtz |
| | | | | | | | 0.04/1.89m | brecciated dk cherty qtz. (upper?) |
| P-6 | 994 | 6.0W | 0.34 | -65 | 045 | 75.3 | 0.24/0.46m | sil. brecciated felsic tuff |
| P-7 | 986 | 13.5W | 1.0 | -65 | 045 | 127.1 | 0.21/0.92m | brecciated int. tuff |
| | | | | | | | 0.13/3.79m | brecciated dk cherty qtz (lower) |
| P-8 | 979 | 21.5W | 0.7 | -62 | 045 | 90.2 | 0.4/4.8m | int. tuff and bx. with qtz. veining. |
| P-9 | 971 | 5.0E | 0.21 | -90 | - | 181.4 | 0.29/0.33m | felsic tuff and bx. with qtz. veining. |
| | | | | | | | 0.15/2.03m | int. tuff and bx. with qtz. veining. |
| | | | | | | | 0.1/0.45m | qtz. vein in int. brecciated tuff |
| P-10 | 963 | 5.0E | 0.15 | -90 | - | 138.4 | 0.09/0.9m | brecciated cherty qtz. (upper) |
| | | | | | | | 0.14/1.62m | int. tuff with minor cherty qtz. (lower) |
| P-11 | 956 | 5.0E | 0.08 | -90 | - | 152.4 | 0.06/3.92m | brecciated cherty qtz. (upper) |
| P-12 | 948 | 64W | 0.7 | -65 | 045 | 24.7 | abandoned ------------------------------------ | |
| P-13 | 948 | 90W | 0.75 | -55 | 045 | 184.8 | 0.07/2.17m | brecciated cherty qtz. (upper) |
| | | | | | | | 0.13/2.13m | brecciated cherty qtz. with int. tuff (lower) |
| P-14 | 963 | 91.2W | 0.78 | -80 | 045 | 254.9 | 0.06/5.0m | feldspathized int. brecciated tuff with cherty qtz. (upper) |

### Section 986mN (Hole P-7) (Drg. PC-18-30-81)

This hole was designed to test down-dip extensions of the three lenses encountered in hole G-25. The main lower lense was encountered, and was found to contain significant mineralization. Three other weakly mineralized, and discontinuous lenses were encountered within the upper mineralized zone.

### Section 979mN (Hole P-8) (Drg. PC-18-31-81)

This hole was designed to test for the down-dip extensions of several lenses previously encountered in hole G-21. One significant intersection of a brecciated intermediate tuff with quartz veining was encountered. This zone is thought to be a down-dip extension of the upper lense, making this a continuous mineralized unit from the G-21 intersection.

### Section 971mN (Hole P-9) (Drg. PC-18-07-81)

This hole was designed to test for down-dip extensions of several lenses encountered in hole G-17. A few discontinuous, weakly mineralized lenses were encountered within the mineralized zone. The mineralization in this hole appears to be influenced by the intrusion of quartz vein material.

### Section 963mN (Holes P-10, P-14) (Drg. PC-18-06-81)

These two holes were designed to test the down-dip continuation of three mineralized lenses encountered in hole G-5. The uppermost lense was intersected in P-10, although thinning and depletion of gold is evident. The middle lense appears to be discontinuous. The lower lense was intersected, and appears to maintain its grade.

Hole P-14 encountered only one small discontinuous lense with minor mineralization. This hole is however, very interesting in a geological sense, as it intersects an entire geological succession, through the mineralized zone. This information proved very useful in deciphering the geological history of this mineralizing environment.

### Section 956mN (Hole P-11) (Drg. PC-18-05-81)

This hole tested the down-dip continuation of the mineralized lenses encountered in G-13. The brecciated cherty quartz intersected appears to be a continuation of the upper lense encountered in G-13, and G-12. This lense appears to pinch and loses its enrichment in gold. The lower lense was also intersected but yielded only low assay results.

### Section 948mN (Holes P-12, P-13) (Drg. PC-18-04-81)

Hole P-12 was designed to test the down-dip extension of three lenses encountered in G-9. This hole was abandoned in overburden due to technical difficulties encountered in overburden penetration, and was relocated as P-13 further west.

Hole P-13 re-tested the target originally planned for P-12. This hole encountered the upper cherty lense as well as a significant lower lense intersection.

### 2.2.4.2 Diamond Drilling Overview

Although the 1980 diamond drilling program was not as successful as anticipated, geological information gained from the program was indeed significant. The mineralization zone appears to "grade out" in the north-westerly direction, but there are still definite indications of the existence of the mineralized environments in this direction (several intersections in 1940 Hollinger work). The continuation of the lower lense to depth was quite encouraging in that this zone was picked up in seven out of eleven attempts, although depletion of gold in the zone is evident as depth increases. Several intersections of the upper lense type of mineralization was encountered but they appear to "grade out" with depth. A factor which may prejudice the overview of the drilling program is the high drill hole density of the near surface (-15m to -75m level) compared with the relative paucity of information below the -75m level.

Further drilling is recommended at this time to test the deep, down-dip extensions and to assess the economic significance of the quartz-feldspar porphyry intersected in hole P-14.

## 2.5 Lithogeochemical Stratigraphy and Petrology (Fig. 2)

As an aid in understanding the mineralization controls in this area a lithogeochemical and petrologic study of a typical section through the ore zone was undertaken.

Pulp samples from section 963mN were selected for a semi-quantative, multi-element analysis. This would determine if any geochemical trends and/or relationships were detectable in this section which may reflect geological continuity of various lithologies as well as indicate alteration zones.

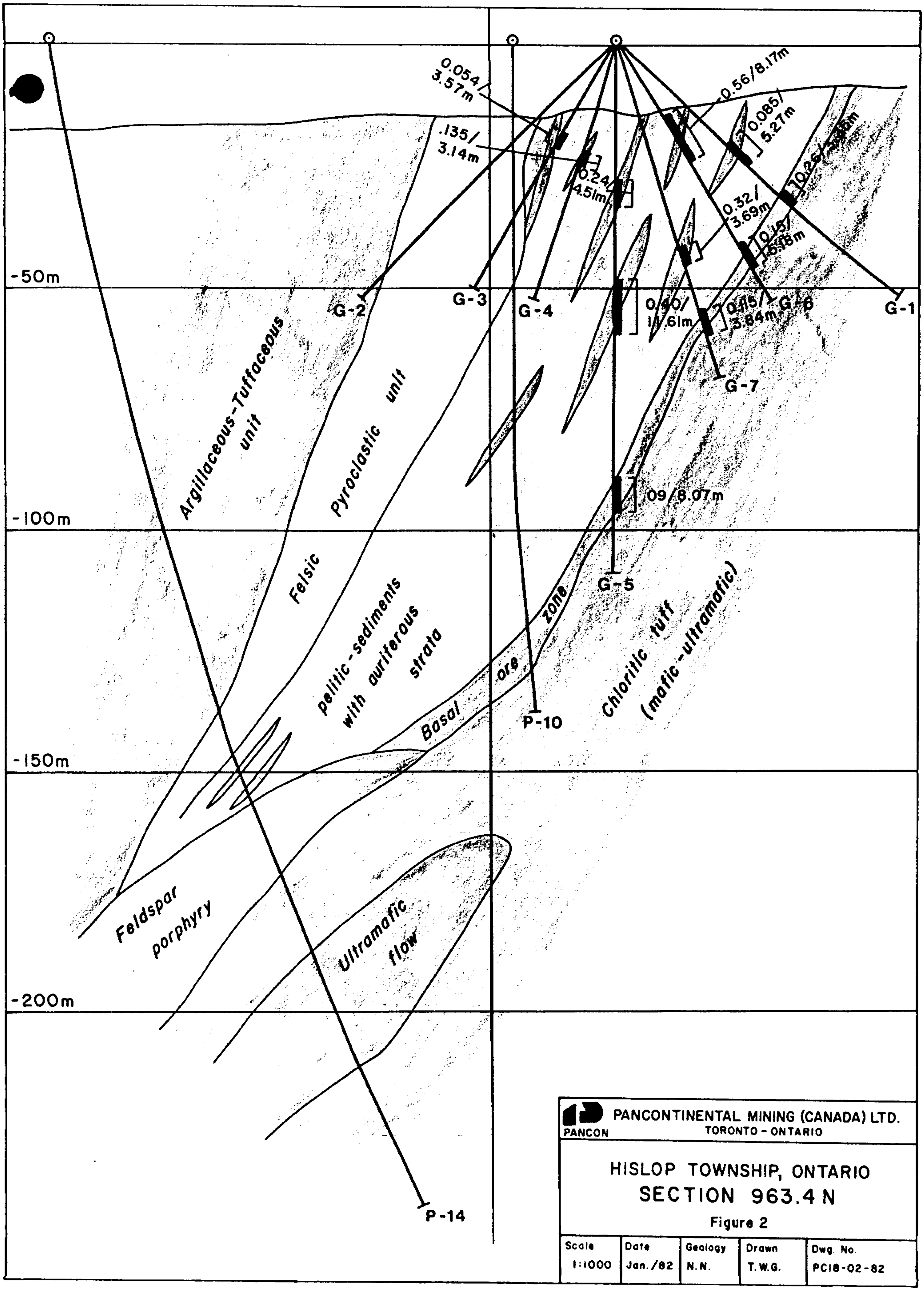
The following is a brief summary of the results of this investigation. The various lithologic units are presented and described in a chronological order, oldest first. The thin section descriptions and geochemical discussions are appended (Appendix II).

### Chloritic Tuff; Ultramafic Flows

The basal unit is basically a chlorite-rich mafic to ultramafic suite of pyroclastic fragments within an ultrafine ash tuff matrix.

Geochemically, it was disclosed that this unit is enriched in Ca, Mg, Co, Ni, ±Cr, ±Zn. This analysis reflects the high chlorite content of the rock, indicating mafic to ultramafic affinities. Near surface (no reference to oxidizing environment intended or implied) sericitic alteration was observed in the hand specimen and thin seciton descriptions. Geochemically, there is a notable increase in Al and K, as well as $P_2O_5$, Cu, ±Be, ±Zr. Associated with this enrichment was a striking depletion of CaO, MgO, MnO, $\pm Fe_2O_3$. This geochemical evidence indicates a pervasive sericitization of the rock unit at the near surface level, gradually decreasing with depth.

As depth increases the chloritic tuffaceous unit grades into what appears to be an ultramafic flow (located in 1980 drilling hole P-14). Three separate flows were traceable, in that, three flow top breccias were observed.



**PANCONTINENTAL MINING (CANADA) LTD.**
TORONTO - ONTARIO
PANCON

HISLOP TOWNSHIP, ONTARIO

SECTION 963.4 N

Figure 2

| Scale | Date | Geology | Drawn | Dwg. No. |
|---|---|---|---|---|
| 1:1000 | Jan./82 | N.N. | T.W.G. | PC18-02-82 |

## Basal Ore Zone

This thin unit (3 metres) overlies the chloritic tuff unit. It is typically a very fine grained chert/carbonate rich brecciated horizon. Two distinct types of rock are present in this zone.

The first consists of white, carbonate-rich angular fragments surrounded by black (graphitic) chert containing up to 8% disseminated pyrite. The second rock type consists of finely laminated silicious chert-carbonate occurring as grey to black angular fragments reminiscent of previous bedding. The fragments are surrounded by quartz-carbonate veinlets and dusted with up to 5% fine disseminated pyrite. Numerous thin interbeds of light green fine volcano-sediments, and plagioclase rich chloritic tuff form the matrix.

Geochemically the basal ore zone shows an outstanding enrichment in $Al_2O_3$, $K_2O$, $P_2O_5$, Th, Zr, Mo, ±Sr, ±Be; with a notable decrease detected in $Fe_2O_3$, CaO, MgO, $TiO_2$, MnO, Co, V, Zn, ±Ni; with respect to the adjacent rocks.

## Pelitic Sedimentary Strata

Overlying the basal ore zone is a thick sequence (40m) of grey-green intermediate-mafic tuffs with minor flow rocks. Chlorite is a common constituent of this unit, occurring as ragged flakes in a very fine-grained matrix of muscovite, carbonate, quartz and feldspar. Numerous carbonate veinlets crosscut the pelitic strata.

This zone was tested geochemically, in conjunction with the upper auriferous strata contained within this zone.

## Upper Auriferous Strata

Numerous discontinuous lenses of auriferous cherts are contained within the pelitic sedimentary strata. Two types of chert occur in this zone.

The first is a creamy-white coloured chert usually quite deficient in its gold content.

The second type constitutes the main auriferous units typical of this particular occurrence. The chert is finely banded and brecciated (once again reminiscent of previous bedding) surrounded by a very silicious matrix.

Both types of chert as well as the surrounding pelitic rocks are transected by white, occasionally auriferous quartz-carbonate veinlets.

Geochemically the upper gold bearing strata is quite different than the basal ore zone. It was recognized that this unit is enriched in Ag, ±Mo, ±Cu, ±Pb and depleted in $A1_2O_3$, $K_2O$, FeO, $TiO_2$, MnO, MgO, CaO, Be, Co, Zr, Zn, V, Sr; when compared with the basal ore zone.

This low abundance of the major elements suggests a very silicious rock, which was apparent in the thin section and hand specimen examination. Perhaps the most distinguishing feature between this zone and the lower ore zone is the low phosphate and low molybdenum observed in the upper zone.

## Felsic Pyroclastic Rock

Overlying the pelitic sedimentary unit ± chert lenses is a discontinuous accumulation of creamy-white, lenticular, broken, quartz and feldspar porphyritic lithic fragments, set in a matrix of ultrafine quartz and feldspar grains. This unit has been termed a felsic lithic tuff.

No geochemical data is available for this unit.

## Feldspar Porphyry

The "at depth" along strike equivalent of the felsic pyroclastic rock is a feldspar porphyry which is strongly hematized, fractured, veined and contains anhydrite.

## Argillaceous-Tuffaceous Unit

Overlying this entire volcano-sedimentary pile is a discontinuous "valley filling" group of interbedded argillites (minor chert) and felsic tuffs.

## GENERAL DISCUSSION AND INTERPRETATION OF DATA

The 1980-81 exploration program on the Hislop Gold project was designed to thoroughly test the significance and nature of the gold mineralization in the Hislop occurrence, by evaluating the down-dip, as well as north and south extension of the Hislop gold occurrence. Several other exploration tests were carried out to assess the property in a regional sense.

The diamond drilling in September and October 1980 intersected several interesting and significant gold occurrences. The overall results however, indicated that the mineralization was weakening in all directions.

The geophysical portion of the 1980 program was primarily a number of orientation surveys to test for geophysical responsiveness of the known occurrence, and apply this knowledge to the property in the regional exploration sense. Magnetic methods provided a favourable response and were deemed useful in delineating the auriferous strata bearing pelitic sediments A distinguishable airborne magnetic low extends from the Ross Mine site through the project area, indicating a continuity in the geologic units hosting the Ross and also the known Hislop occurrence. (This unit is traceable with ground magnetics and a detailed ground magnetic survey was substantiated).

Lithogeochemical stratigraphic mapping and petrology indicated that the gold zones are stratiform, and are products of specific geochemical environments related to the volcanic cycle. Geochemical and geological evidence resultant from this survey confirms continuity of various interflow units along sections, and also aided in deciphering the geological history of the occurrence.

# CONCLUSIONS

The exploration methods utilized during this program have illustrated that an economic grade occurrence exists within the limits of the property area. This deposit has been sampled in detail and attempts have been made to locate its boundaries.

The occurrence is apparently bounded in the southern direction by a quartz feldspar porphyritic unit. This unit is locally mineralized with average grades of the upper surface being in the order of 0.05 oz Au/ton (sub-economic). The depth extension of the mineralized zone has been tested (with limited success) but the testing does not appear to be cost effective. The gold intersections at depth are lower grade and are quite erratic.

The northern extension of the deposit has also been tested, but the gold values appear to grade out. Much notable encouragement exists further on in this direction. Historical drilling (1940) has indicated erratic gold values along the entire strike of this environment.

## 5.0 RECOMMENDATIONS

In light of the conclusions presented in Section 4.0 (this report) further exploration work is warranted.

Further diamond drilling will continue the assessment of this gold occurrence at depth, as well as along strike.

A regional assessment of the property is, indeed warranted as much mineralization has been reported in the northerly direction.

A reverse circulation overburden sampling program would adequately test the regional potential of the property by determining if the gold horizon is geochemically traceable, and areas of similar geology exist along strike of the known occurrence.

A detailed magnetic survey is also recommended, as the orientation survey indicated that the favourable horizon had a particular magnetic response.

B.Sc.

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# REPORT ON
# AN INDUCED POLARIZATION SURVEY
# MATHESON AREA, ONTARIO

On Behalf of

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P. LaFleche
PL/cc
November, 1980

## TABLE OF CONTENTS

# REPORT ON
# AN INDUCED POLARIZATION SURVEY
# MATHESON AREA, ONTARIO

## 1. INTRODUCTION

In late October/early November 1980, Scintrex Limited conducted a time domain induced polarization survey in the Matheson Area of Northeastern Ontario, on behalf of Pancontinental Mining (Canada) Limited.

The survey area lies in Hislop Township and crosses Hislop Road Number 2. A total survey coverage of about 2.24 line km was carried out on 4 grid lines.

The object of the survey was to produce induced polarization and resistivity profiles over a pyrite gold occurrence to determine if the mineralized zone gives a recognizable geophysical response. Further lines were run over a zone of favorable geology in order to locate and map a suspected pyrite occurrence.

A dipole-dipole electrode array was used. Array parameters were a = 30 m with n = 1,2,3,4,5,6 and a = 60 m with n = 1,2,3,4.

At each station the primary voltage (Vp) and three slices of the IP effect (chargeability M) were measured and recorded. The apparent resistivity was calculated and is presented with chargeability as drafted pseudo sections. The pseudo sections are plotted at a scale of 1:1500. Also presented are contoured plan maps of the 30 m, n = 2 and n = 4 induced polarization and resistivity data.

The results are discussed in this report.

## 2. LOCATION OF THE SURVEY AREA

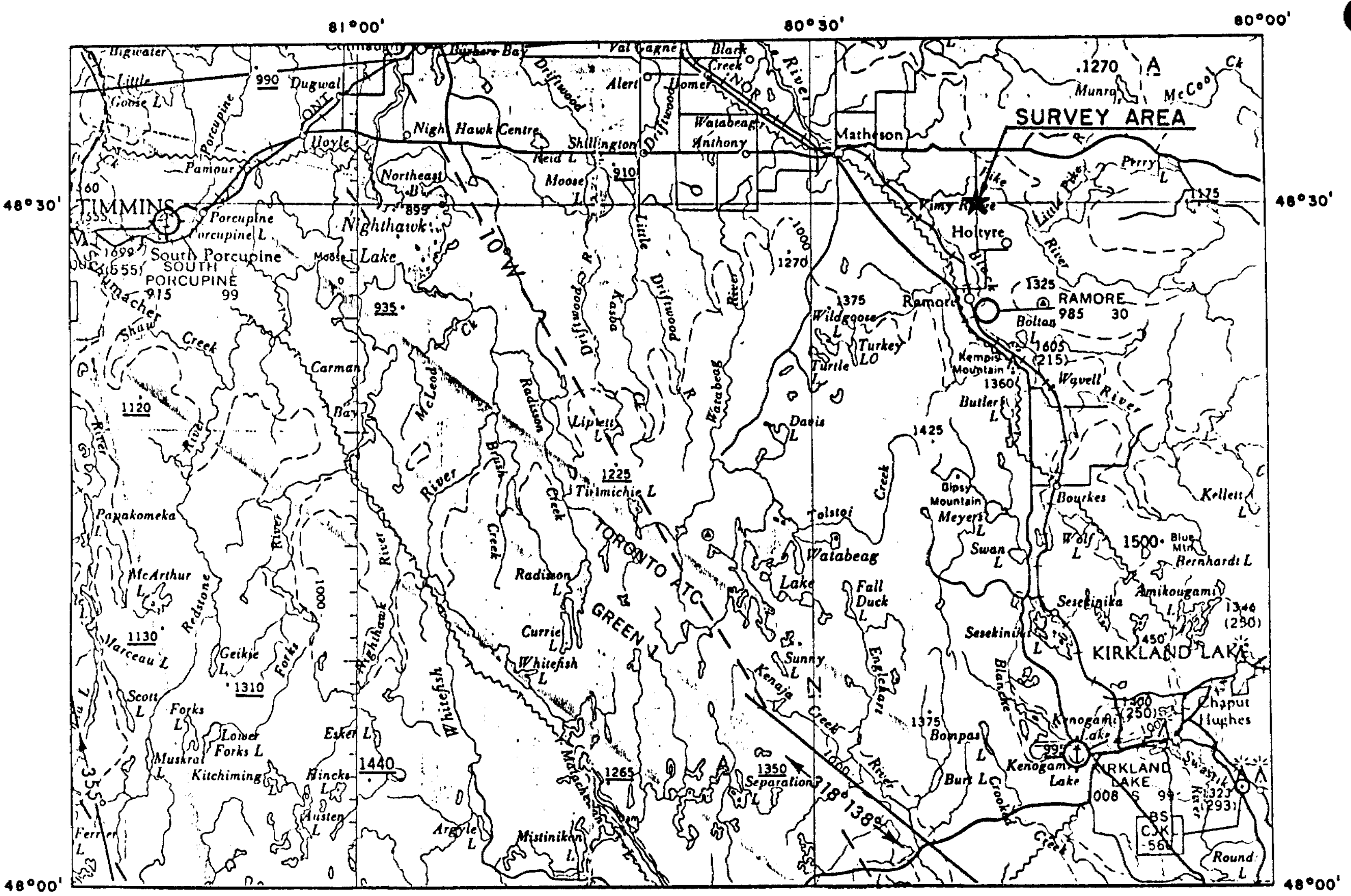
The survey area is located in Hislop Township, Northeastern Ontario. It is approximately 12 km east of the town of Matheson. The grid is cut across by Hislop Road Number 2.

## 3. DESCRIPTION OF THE GRID

The grid consists of a base line striking 315°. Lines are cut perpendicular to the base line at 30 meters spacing in the area of interest and at 60 meters elsewhere. The lines extend to a maximum length of 240 meters east and west of the base line.

## 4. SURVEY PERSONNEL

The personnel directly involved with this survey included:
Paul LaFleche - party chief and geophysicist
Hermann Mueller - operator
Raymond Bouchard - field assistant.



# LOCATION MAP

## PANCONTINENTAL MINING CANADA LTD.

MATHESON AREA, HISLOP TOWNSHIP, NORTHEASTERN ONTARIO

## INDUCED POLARIZATION SURVEY

Scale : 1 : 500,000

80-T2080

FIGURE 1

## 5. EQUIPMENT

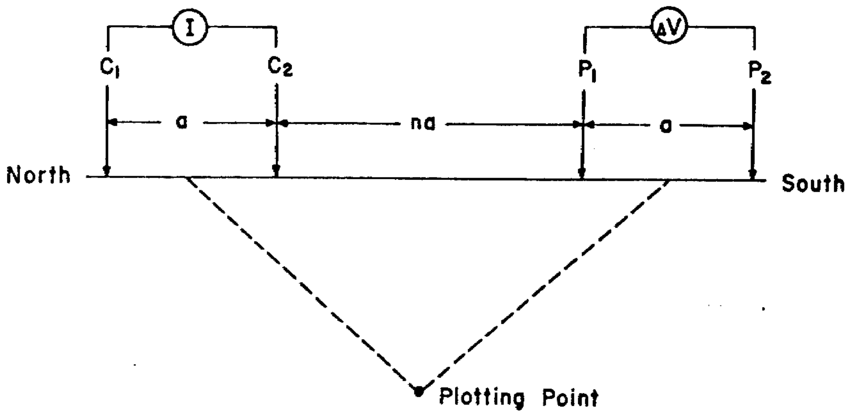
Equipment used in carrying out this survey included:
Scintrex IPR-8 Time Domain Receiver
Scintrex IPR-10 Time Domain Receiver
Scintrex IPC-7 2.5 kw Time Domain Transmitter

Specification sheets describing the above instrumentation are included in Appendix C.

## 6. SURVEY PROCEDURES

The electrode array chosen for this survey was the dipole-dipole array. This array consists of two electrode dipoles in line, as shown in Figure 2.

Figure 2: DIPOLE - DIPOLE ELECTRODE ARRAY



Electrical current provided by the transmitter is introduced through the first dipole ($C_1C_2$). The potential field created by the current is measured across the second dipole ($P_1P_2$) using the IP receiver. The receiver also measures the over voltage effect.

The apparent resistivity of the ground is given by:

$$\rho_a = \pi a n(n+1)(n+2)\frac{\Delta V}{I} = \frac{K\Delta V}{I}$$

The factors to the left of $\Delta V/I$ are related to the geometry of the array and have been calculated in Table 1 for the two dipole spreads (60 and 30 meters).

## TABLE 1
## GEOMETRICAL CONSTANTS FOR DIPOLE-DIPOLE ARRAY

| n | K | |
|---|---|---|
| | 30 n | 60 n |
| 1 | .565 | 1.130 |
| 2 | 2.262 | 4.530 |
| 3 | 5.655 | 11.310 |
| 4 | 11.310 | 22.620 |
| 5 | 19.792 | |
| 6 | 31.667 | |

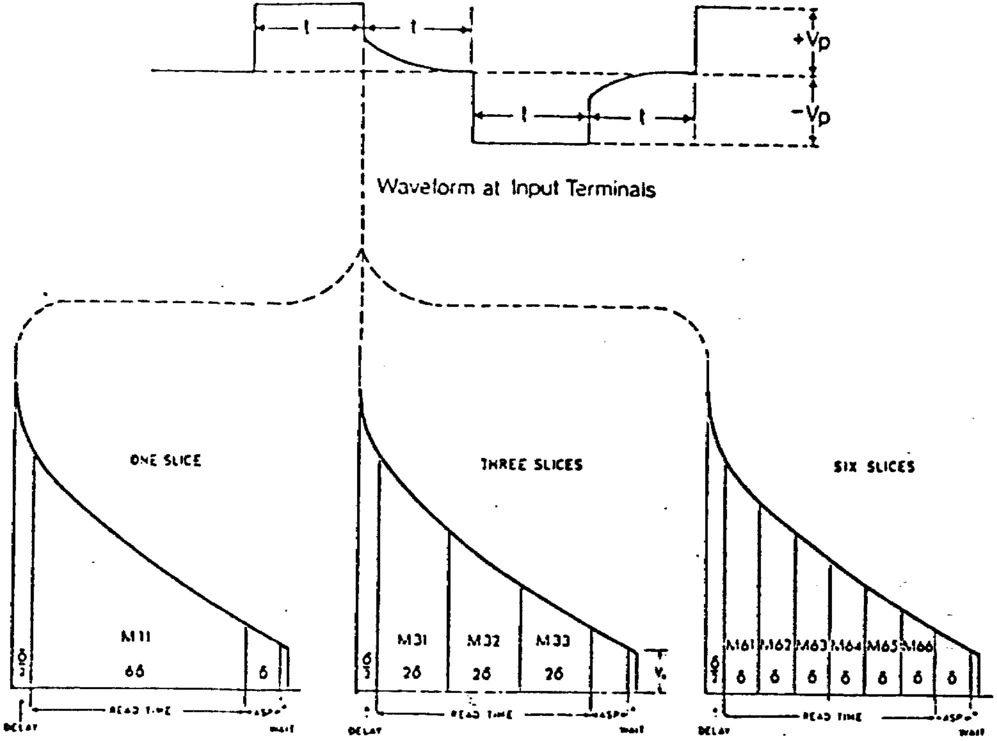
The IPR-8 measures the voltage (Vp) across the potential electrodes when the current is on. It also measures the decay voltage (Vc), created by the over voltage effect, after the current has been switched off. The parameter measured is known as the chargeability and is defined as:

$$M = \frac{Vs}{V_{px1000}} \text{ in millivolts per volt}$$

$$\text{where } Vs = \frac{1}{T_r} \quad \overset{T^2}{\underset{T_1}{}} Vs\ dt + Vx$$

Tr = Integrating Period $T_2$-$T_1$
$T_1$ = Time at beginning of slice
$T_2$ = Time at end of slice
Vx = Residual transient voltage at end of automatic self-potential correction

Figure 3 shows the shape of the decay curve and the slices measured. $M_{232}$ was plotted on the chargeability pseudo sections.



Secondary Decay Curve Shapes as Applies to the Integrators

| t sec | δ | delay time | waiting time | M11 | | | | M31 | | | M32 | | | M33 | | | length |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | from | to | mean | length | from | to | mean | from | to | mean | from | to | mean | |
| 1 | 130 | 65 | 25 | 65 | 845 | 455 | 780 | 65 | 325 | 195 | 325 | 585 | 455 | 585 | 845 | 715 | 260 |
| 2 | 260 | 130 | 50 | 130 | 1690 | 910 | 1560 | 130 | 650 | 390 | 650 | 1170 | 910 | 1170 | 1690 | 1430 | 520 |

| t sec | M61 | | | M62 | | | M63 | | | M64 | | | M65 | | | M66 | | | length |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | from | to | mean | from | to | mean | from | to | mean | from | to | mean | from | to | mean | from | to | mean | |
| 1 | 65 | 195 | 130 | 195 | 325 | 260 | 325 | 455 | 390 | 455 | 585 | 520 | 585 | 715 | 650 | 715 | 845 | 780 | 130 |
| 2 | 130 | 390 | 260 | 390 | 650 | 520 | 650 | 910 | 780 | 910 | 1170 | 1040 | 1170 | 1430 | 1300 | 1430 | 1690 | 1560 | 260 |

Figure 3 - Parameters measured with times of receiver program in milliseconds

The waveform of the primary field, as generated by the IPC-7, has a square wave form as illustrated in Figure 4.

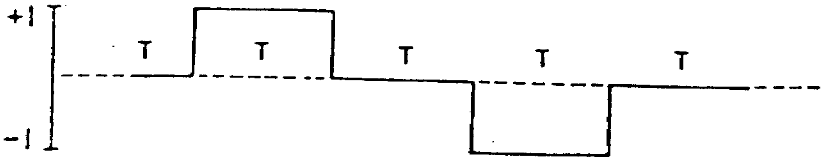


Figure 4 - Transmitter output waveform

A two second current on-off rate was used.

Chargeability readings were averaged over several cycles to ensure optimum noise rejection.

Porous pots containing a saturated copper sulphate solution were used to avoid spurious potentials at the input. Steel stakes were used as current electrodes. The following values were read on each line.

| | a = 60m | a = 30m |
|---|---|---|
| Line | n Value | n Value |
| 960N | 1-4 | 1-5 |
| 990N | 1-4 | 1-5 |
| 1020N | 2-4 | 1-5 |
| 1080N | 2-4 | 1-5 |

In addition line 960N was read a second time with the power in the roadside hydroline turned off to investigate the possible interference effect of this line.

## 7. DATA PRESENTATION

The data is presented in pseudo section form at a scale of 1:1500. Contoured resistivity and chargeability (n=2 and n=4) are presented at a scale of 1:1000.

TABLE 2

| Plate No. | Line No. | Parameter Measured |
|---|---|---|
| 1 | 960N | a Resistivity & Chargeability $M_{232}$ a=30 m |
| 2 | 960N (Hydro Power Off) | Resistivity & Chargeability $M_{232}$ a=30 m |
| 3 | 990N | Resistivity & Chargeability $M_{232}$ a=30 m |
| 4 | 1020N | Resistivity & Chargeability $M_{232}$ a=30 m |
| 5 | 1080N | Resistivity & Chargeability $M_{232}$ a=30 m |
| 6 | 960N | Resistivity & Chargeability $M_{232}$ a=60 m |
| 7 | 990N | Resistivity & Chargeability $M_{232}$ a=60 m |
| 8 | 1020N | Resistivity & Chargeability $M_{232}$ a=60 m |
| 9 | 1080N | Resistivity & Chargeability $M_{232}$ a=60 m |
| 10 | Chargeability Contour | $M_{232}$ n=2 a=30 m |
| 11 | Resistivity Contours | a n=2 a=30 m |
| 12 | Chargeability Contours | $M_{232}$ n=4 a=30 m |
| 13 | Resistivity Contours | a n=4 a=30 m |
| 14 | 960N+990N | Metal Factor a=30 m |
| 15 | 1020N+1080N | Metal Factor a=30 m |
| 16 | 960N+990N | Metal Factor a=60 m |
| 17 | 1020N+1080N | Metal Factor a=60 m |

## 8. TOPOGRAPHY AND GEOLOGY

The grid area is covered by a clay overburden varying between 0 to 30 m thick. There are several small outcrops in the center of the survey area. A diabase dike, approximately 30 m wide, cuts across the baseline and parallels the area bounded by lines 1050N and 1080N. It is exposed in outcrops on several locations west of the baseline. North of the dike the outcrops of intermediate-to-acid fragmental volcanics occur. Minor pyrite and chalcopyrite mineralization is scattered throughout the outcrop.

A mineralized zone containing 1 to 2% pyrite has been delineated by drilling on the east side of the baseline between lines 960N and 1020N.

## 9. INTERPRETATION

Several observations can be made upon the examination of the pseudo sections and plan maps.

### 9.1 Resistivity

Apparent resistivity values are uniform to the east of the baseline on all lines. The apparent resistivities decrease to the east indicating a possible thickening of the conductive clay overburden east of the outcrop area. Apparent resistivities vary widely in the outcrop area. In general, a higher apparent resistivity value is expected in the area of outcrop due to the thinning or disappearance of the conductive overburden. An approximate apparent resistivity value of 70 ohm-m can be assigned to the overburden upon examination of the n=1 apparent resistivities east of the baseline.

Line 1080N shows the existence of a dome shaped resistivity low at depth. There is not a chargeability response associated with this feature on the 30 m dipole; however, a small (1.0 mV/V) chargeability anomaly was indicated by the 60 m dipole. The resistivity low is an interesting feature because it is bounded by extremely high resistivities. The low is not found on the adjoining line 1020N suggesting the source may be of short strike length (cylinder), or that it strikes sub-parallel to the grid lines.

### 9.2 Induced Polarization

Between lines 960N and 990N the chargeability backgrounds are slightly higher where the overburden thins reflecting the higher chargeability of the bedrock versus that of the clay.

Four zones of anomalous chargeability are indicated on the pseudosections.

#### Zone A (Auriferous Pyrite Zone) 960N (60E to 90E)

On the 30 m separation a small chargeability anomaly occurs coincident with the 1-2% pyrite occurrence found by drilling.

The anomaly was not located on the 60 m dipole pseudosection, however it was located on the two surveys of line 960N (hydro line test) on the a=30 m separation. The associated low apparent resistivities indicate the source of the chargeability anomaly subcrops below the highly conductive clay. Drilling of the auriferous pyrite zone indicated the mineralization subcrops.

Line 990B shows a similar chargeability anomaly; however the response is slightly lower.

### Zone B Line 1080N (45W to 105W)

The anomaly shows a typical pantleg pattern with the largest chargeabilities being located near surface. It correlates with 1 to 2% pyrite in intermediate to acidic volcanics exposed in outcrops. A 1500 ohm-m resistivity high is also coincident to the anomaly.

### Zone C Line 1080N (60W to 15W)

Zone C is a linear zone of chargeabilities located beneath Zone B. Poor porous pot contact at receiver station 120W/90W resulted in these erratic negative chargeabilities. Poor contact arises from the difficulty of placing the pots in an area of outcrop. Although the 30 m spacing indicates the zone extends to depth it is not detected on the 60 m dipole.

### Zone D Line 1020N (225W to 150W)

This zone consists of high chargeability values. As these anomalous readings were all read from two receiver positions, the possibility exists that the chargeability high could be associated with high magnetics. An apparent resistivity high is coincident with this zone for both the 30 m and 60 m dipoles.

## 9.3 Metal Factors

Pseudosections with the readings calculated as metal factors have been provided on plates 14 to 17. The metal factor is calculated by dividing the chargeability at a point by its associated apparent resistivity and multiplying by a suitable scaling factor. In this case the scaling factor was one hundred. This in effect is a correction for the variation of chargeability with resisitivity.

The metal factor pseudosection for L960N enhances anomaly A. The area of chargeability high west of the baseline has disappeared. A metal factor high exists between 30W and 30E at the n3 and n4 spacing for the 30 meter dipole. A similar structure exists on the 60 meter dipole pseudosection. The existence of Zone A on L990N is also outlined by the metal factor pseudosections.

A near surface anamalous area appears on line 1020N between 45E and 210E.

### [illegible]4 Plan Maps

Plan maps for n = 2 and n = 4 have been prepared on plates 10 to 13. Both chargeability and resistivity maps show the area east of the baseline to be relatively inactive. The northwest quadrant of the surveyed area shows the most anomalous activity. The abrupt change in the contour pattern between lines 1080N and 990N indicates a possible lithologic change. A near surface apparent resistivity high is associated with the outcrops; however, at depth this area exhibits a dome shaped resistivity low.

A weak resistivity low is associated with the mineralized zone on line 960N and 990N.

9.5 A magnetic plan map has been supplied by Pancontinental Mining (Canada) Ltd. Profiles have been drawn for the area of interest (L960N - L1080N). Several magnetic peaks are evident. Some of these can be correlated with known geologic structure or the induced polarization data.

A magnetic peak is coincident with the mineralized zone on line 960N. An 1800 gamma anomaly on line 990N is situated off the west side of the mineralized zone.

A wider peak on line 1080N is coincident with the outcrops on line 1080N. Hence it is also situated over the zone of resistivity low on the pseudosections.

A broad peak lies between 240W and 405W on line 20N this could possibly have caused the anomalous readings of Zone D. The width of the peak indicates a relatively deep source.

## 10. CONCLUSIONS AND RECOMMENDATIONS

The induced polarization (n = 1 and 2) data indicated a weak chargeability anomaly coincident with the gold-pyrite zone or line 960 and 990N.

Additional work is recommended in the area of this zone to trace the possible strike extension of the deposit.

A second zone of interest was located at 120W on line 1080N in an area of rhyolite-dacite outcrops. The shallow resistivity data indicate "high resistivity" in the near surface strata. The resistivity decreases markedly with depth indicating a conductive zone at depth. Due to the low primary voltages associated with the resistivity low the chargeability data is unreliable. The feature correlates directly with a magnetic anomaly with an apparent depth of 70 meters.

Geochemical and geological data should be reviewed for this area. Additional I.P./Resistivity and/or electromagnetic surveys should be conducted to extend the geophysical features. In discussion with PANCON it has been suggested this feature may be associated with argillacious sediments.

Geochemical and geological data should be reviewed for the survey area. Additional induced polarization and possibly an electromagnetic survey should be conducted to extend the two main geophysical responses to other areas of the property.

Respectfully submitted,

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## APPENDIX A

Line by Line Discussion of Results

Line 960E Plates 1, 2, 6, 16

Chargeability:

a = 30 m

A small chargeability response (n = 1, 2, 3), anomaly A, is associated with the gold-pyrite mineralization of 775E. West of 00 background chargeabilities increase to 2.0 mV/V and are steady. East of 00 chargeabilities are variable.

a = 60 m

Chargeabilities are small varying between 0 and 1.5 mv/v to the east increasing to 33 to the west. The gold-pyrite zone was not detected.

Resistivity:

a = 30 m

A horizontal layering of the resistivity contours is caused by the highly conductive clay overburden. Resistivities increase with depth and also increase west of 00.

The indicated resistivity of the clay overburden is 60 ohm-m.

a = 60 m

Resistivities increase with depth and also increase to the west of the baseline.

Metal Factor:

a = 30 m

The 1.0 contour is horizontal with anomaly A giving the main response, (n = 1, 2), correlating directly to the gold pyrite mineralization.

a = 60 m

No anomalies present.

Line 990N Plates 3, 7, 14, 16

Chargeability:

a = 30 m

A weak chargeability response, anomaly A, is associated with a gold/pyrite mineral occurence. The chargeabilities increase to the west with a maximum of 3.4 mv/v occuring at 210W.

a - 60 m

The main chargeability response occurs between 120 and 180W.

Resistivity:

a = 30 m and a = 60 m

at 180W. A marked layering of the resistivities is observed in the area of thick clay overburden.

Metal Factor:

at 180W. A marked layering of the resistivities is observed in the area of thick

a = 30 m

A weak metal factor response is associated with anomaly A on the n = 1, 2 separations and correlates to the sulphide zone at 60E.

a = 60 m

No response is observed.

Line 1020 Plates 4, 8, 15, 17

Chargeability:

a = 30 m

A small shallow chargeability anomaly occurs at 172.5E on the n = 1, 2 separation. The anomaly is of a similar form as anomaly A on lione 960N that correlates to the gold-pyrite zone.

depth.

Large erratic chargeabilities occur between 140W and 270W. The cause of these readings is poor pot contact on the outcrop.

depth.

a = 60 m

Large chargeabilities occur between 120W and 180W and are thought to be caused by poor pot contact.

Resistivity:

a = 30 m

cated resistivity of the clay is 75 ohm-m. West of the baseline the resistivity increases as the overburden thins.

cated resistivity of the clay is 75 ohm-m. West of the baseline the resistivity

a = 60 m

A marked increase of resistivities is noted over the 30 m data due to the increased depth penetration.

Metal Factors:

a = 30 m

Weak anomalies occur between 60 and 220E. Also a very weak metal factor anomaly occurs between 180W and 240W.

a = 60 m

Between 60W and 220W two anomalies occur, however the original data appears noisey therefore the reliability of the data is unknown.

<u>Line 1080E</u>

Chargeability:

a = 30 m

The chargeabilities are weak and erratic. Anomaly B occurs between 30W and 90W on the n = 1 data with support on the n = 2, 3, 4, and 5 values.

The chargeabilities again follow the resistivities.

Parallel small vertical dike model given similar results. A single dike model is given in Figure .

A small chargeability anomaly occurs between 210W and 270W. May be the northern extention of anomaly "D".

a = 60 m

A single chargeability response again correlates with anomaly sources B. Also a weak response is indicated on anomaly D at 210W.

Resistivity:

a = 30 m

Three shallow resistivity anomalies are indicated. The first and third occur from 00 to 120E and west of 240W respectively is caused by conductive clay overburden. The second has a source at 60W and correlates to an andesite breccia-decite breccia contact. This anomaly extends to depth.

A second deep resistivity anomaly occurs between 90 and 150W correlating to the decitic outcrops.

a = 60 m

A resistivity low occurs between 60 and 150W. In discussion with PANCON this feature may be caused by "Argillacious" sediments.

Metal Factors:

The a = 30 m and 60 m data indicate a weak anomaly occuring at 120W.

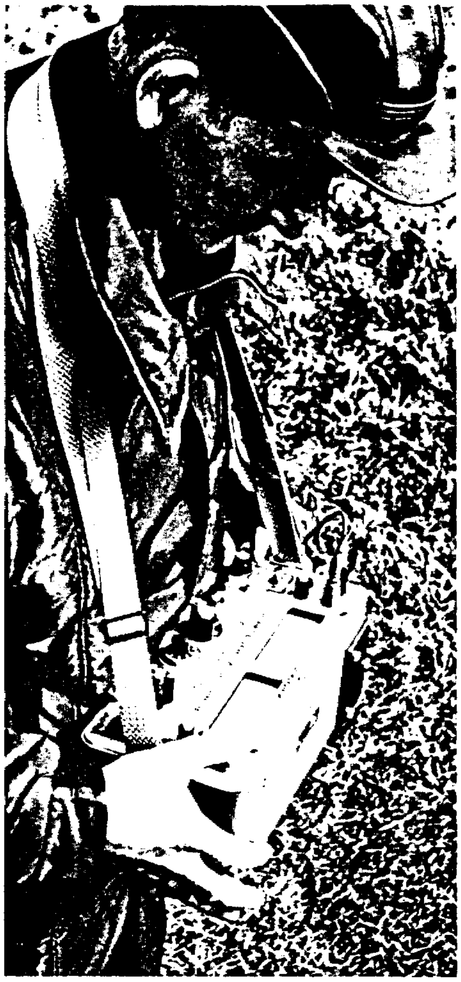
## APPENDIX B

Correlation of Induced polarization/resistivity results with magnetic anomalies.

### Table B1

| Anomaly Location | | Depth | Anomaly Amplitude | DIP | Remarks |
|---|---|---|---|---|---|
| Line | Station | | | | |
| 960N | 15E- 90W | 20 m | 500 | Vertical | Correlates to anomaly A and gold/pyrite zone. |
| 960N | 15E- 30W | 18 m | 700 | Vertical | Correlates to 2.5 Mv/v chargeabilities and to a resistivity high. |
| 960N | 135E-165E | 7.5 m | 1300 | Vertical | A one reading magnetic anomaly. Correlates to slightly higher chargeabilities and to a resistivity high. |
| 960N | 240W-270W | 15 m | 300 | Vertical | Not covered. |
| 990N | 0- 60E | 15 m | 1800 | Vertical | Correlates to weak chargeability anomaly which is coincident to the gold pyrite mineralized zone.<br>Only a one reading magnetic anomaly. |
| 990N | 180W-240W | 10 m | 1000 | Steeply Dipping to West | Correlates to broad I.P. high and resistivity high. Main geophysical feature on line. |
| 990N | 270W-330W | 25 m | 300 | Dipping West (?) | On edge of coverage. Resistivity low maybe due to clay overburden. |
| 1020N | 00 | 15 m | 700 | Vertical | One reading magnetic anomaly - no I.P./Resistivity anomalies correlate with this feature |
| 1020N | 210W-390W | ? | 900 | Vertical | High chargeabilities with a resistivity low correlate to the magnetic anomaly. The data appears noisey. |
| 1080N | 0 - 90E | ? | 200 | Steady Dipping to West | No I.P./Resistivity anomaly correlate to magnetic feature. |
| 1080N | 60W-165W | 75 M | 1800 | Vertical | Both I.P. and resistivity surveys give anomalous response coincident to this magnetic anomaly.<br>Note: This feature must be explained. It has been suggested this may be caused by argillaceous sediments. |

# SCINTREX IPR-8 Induced Polarization Time Domain Receiver



## Function

The IPR-8 Time Domain Induced Polarization receiver provides a maximum of transient curve shape information in a remarkably small and flexible format. Many calculations are automatically performed, including normalization for channel width, pulse number and standard decay curve form. The use of state-of-the-art COS/MOS circuitry permits long battery life using universally available D cells.

## Features

Up to 20 standard selectable integration channels

1, 3 or 6 channels simultaneously integrated

Automatic memory register storage for up to 6 channels

Reads directly in Vs/Vp, normalized for channel width and number of pulses selected

Automatic programmer for averaging 2, 4 or 8 cycles

Multiple channel readouts normalized for standard decay curve shape, providing immediate field indication of anomalous curve shape

Synchronous gating to reduce mistriggering by noise

Automatic self-potential tracking

Calibrated manual S.P. bucking for S.P. measurements

Useable with any time domain transmitter

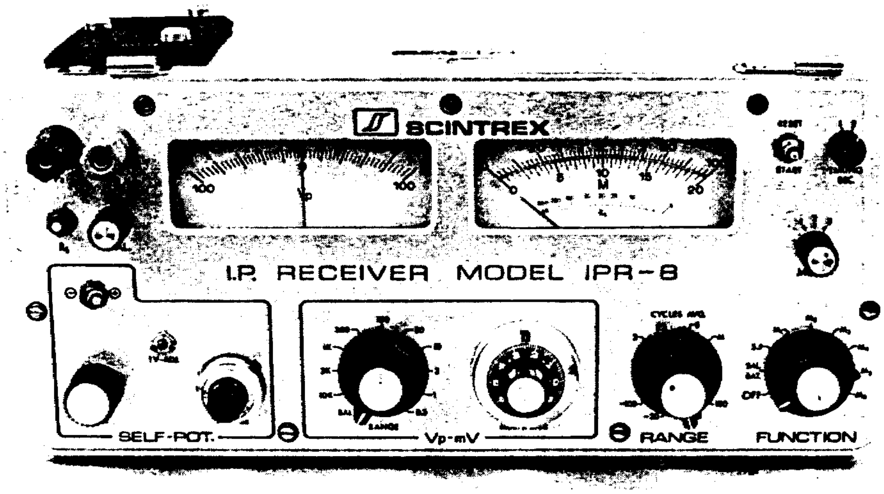
High input impedance

Built in external circuit tester

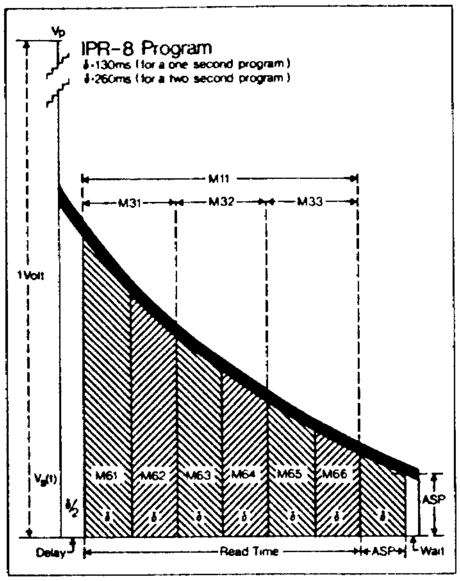
Excellent power line noise rejection

Latest COS/MOS circuitry permits long battery life using dry cells

Very lightweight



# Technical Description of IPR-8 Receiver

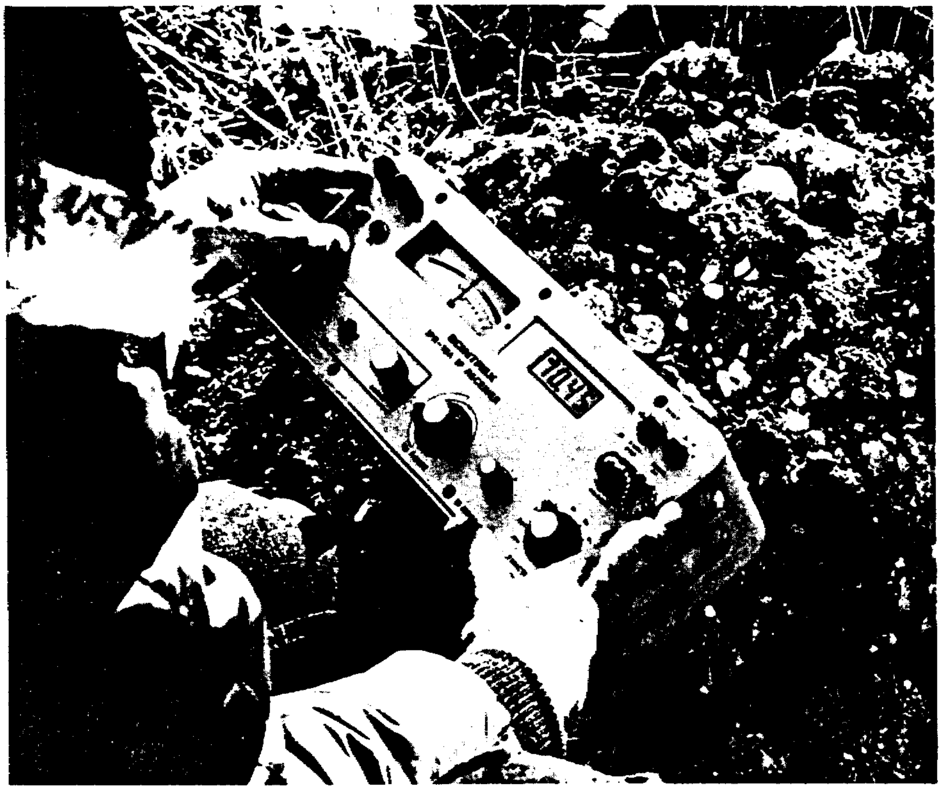


| | |
|---|---|
| Input Impedance | 3.3 megohms |
| 50 or 60 Hz Powerline Rejection | -50 db (300x) |
| Primary Voltage Range | 300 microvolts to 40 volts in 10 ranges |
| Accuracy of Vp Measurement | ±3% of full scale |
| Vs/Vp Range | 2% and 10% (20 and 100 per mil) full scale |
| Vs/Vp Accuracy | 3% of full scale |
| SP Accuracy | 3% |
| SP Resolution | 1mv |
| Primary SP Buckout Range | ±1 volt |
| Automatic SP Tracking Range | 6 x Vp, maximum ±1 volt |
| Continuity Meter Reading | 0 - 500 K ohms |
| Required Stability of Transmitter Timing | Need only exceed measuring program selected (1 second or 2 seconds) |
| Operating Temperature Range | -30°C to +60°C |
| Dimensions | 310 mm x 150 mm x 170 mm |
| Weight, Complete with Lid and Batteries | 3.6 kg |
| Power Supply | 4 D cells; estimated battery life 2 months intermittent duty at 25°C |

Scintrex Limited
222 Snidercroft Road
Concord (Toronto) Ontario
Canada L4K 1B5
Tel.: (416) 669-2280
Telex: 06-964570
Cable: Scintrex Toronto

Complete Geophysical
Instrumentation
and Services

# SCINTREX IPR-10A Digital Time Domain Induced Polarization Receiver



## Function

Scintrex has improved the successful IPR-10 Digital Time Domain Receiver to give new advantages to the explorationist and researcher alike. The new IPR-10A includes all the features of the IPR-10 plus: 1) an analogue output for recording on a chart recorder, 2) an expanded programme allowing for pulses of up to 8 seconds, twice as long as with the IPR-10 and 3) a longer integrating time for Vp, totalling 40 percent of the current on (pulse) time.

Packaged in a lightweight, portable format, this reliable receiver allows a new ease of operation due to the semi-automatic primary voltage (Vp) ranging, the digital display and the continuous averaging of Vp and IP transient values. An analogue meter has been retained so that the operator still has visual confirmation that signal levels are adequate and that the transmitter is operating properly.

The IPC-10A is principally used in electrical (EIP) and magnetic (MIP) induced polarization surveys for disseminated base metal occurrences such as porphyry copper in acidic intrusives and lead-zinc deposits in carbonate rocks. In addition, the IPR-10A receiver can be used in high accuracy resistivity surveying where its automatic commutated DC resistivity measurement, automatic SP buckout and digital read-out offer distinct advantages over other techniques. Also, it is often useful to measure induced polarization in addition to resistivity as a second physical parameter for interpretation. It often happens that geological materials have IP contrasts when resistivity contrasts are absent.

## Advantages

***Digital display.*** Battery voltage ($V_{BAT}$), self potential (SP), primary voltage (Vp) and chargeability (M) values are read out on a high legibility digital display in volts, millivolts, microvolts or millivolts/volt.

A low power consumption Liquid Crystal display is standard while a Light Emitting Diode display is optional for cold weather operation.

***Continuous averaging.*** Vp and M values are continuously averaged and the display is automatically updated for each pulse pair.

***Full operator control.*** Reading may be terminated at any time that the operator feels that the values have adequately converged. The instrument will then automatically bring the average to a pulse pair. It will automatically shut off at a pulse pair after a maximum of 31 cycles.

***Multiple channel selection.*** Forty standard switch selectable IP integration channels with either 1, 3 or 6 channels integrated simultaneously.

***Vp integration.*** The Vp is integrated for 40% of the current on time, enough to average out random noise but sufficiently removed from the on and off parts of the pulse which may be distorted by coupling or IP effects.

***Analogue recorder output.*** While the digital averaging is usually sufficient to yield convergence to a noise free reading, in areas of very low signal or for research purposes, the entire curve form can be recorded on an analogue chart recorder for later analysis.

***Reading recall.*** Any value can be called up repeatedly at any time after a reading has been completed simply by manipulating a function switch. The values are only erased when a new reading is begun or when the receiver is turned off.

***Semi-automatic Vp ranging.*** The semi-automatic primary voltage ranging means that the operator need only select the appropriate one of twelve Vp ranges for inputs between 30 microvolts and 30 volts. There is no manual fine adjustment for Vp.

***Normalized chargeability readout.*** M is read directly in Vs/Vp, normalized for the integration time. The multiple channel M readouts are normalized for standard decay curve shape, providing immediate field indication of anomalous curve shape.

***Continuous Vp monitor.*** An analogue meter is used for continuous operator monitoring of transmitted signal as well as for the external circuit resistance.

***Positive self triggering.*** Synchronous gating and a restriction on triggering to

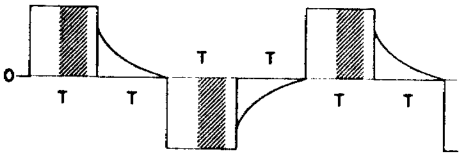
# IPR-10A Digital Time Domain Induced Polarization Receiver

the final 2.5% of the current on time reduce the possibility of mistriggering by noise provided that the transmitter and receiver timings are equal.

***Expanded self potential tracking.*** Automatic self potential tracking down to 30$\mu$V Vp with a range up to 20 x Vp.

***Versatile.*** Useable with any time domain transmitter.

***Plus.*** External circuit ohmmeter, high input impedance, excellent power line noise rejection, CMOS circuitry, long life from only four dry cells, lightweight, robust construction.



*Time domain wave form. The shaded area represents the Vp integration time. For each current pulse, integration starts at .45T and ends at .85T so that 40% of the area of the pulse is averaged. The Vp values are normalized for time. T can be 1, 2, 4 or 8 seconds.*

**Operation**

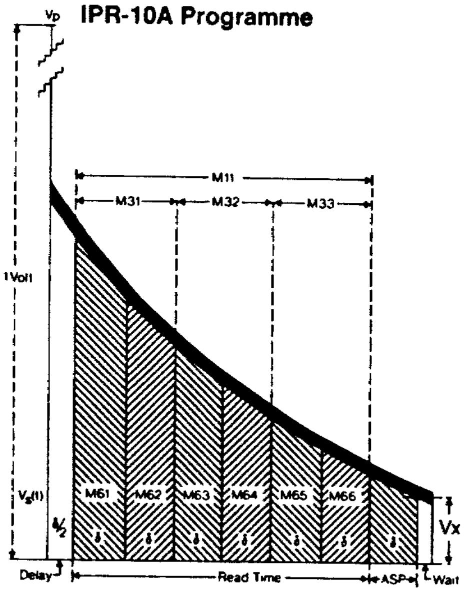
The IPR-10A is simple to operate. First, the operator selects the measuring programme desired, that is whether the area under the decay curve is to be integrated in one, three or six slices and whether the value of δ (shown in the IPR-10A programme diagram) is 130, 260, 520 or 1040 milliseconds. The potential circuit resistance may be checked using the built-in ohmmeter.

Both the Transmitter and Receiver are then turned on. The SP control and Vp range switch are adjusted for symmetrical deflection, within an indicated range on the analogue meter. The SP can then be read on the digital display in millivolts. The polarity depends on the position of a toggle switch.

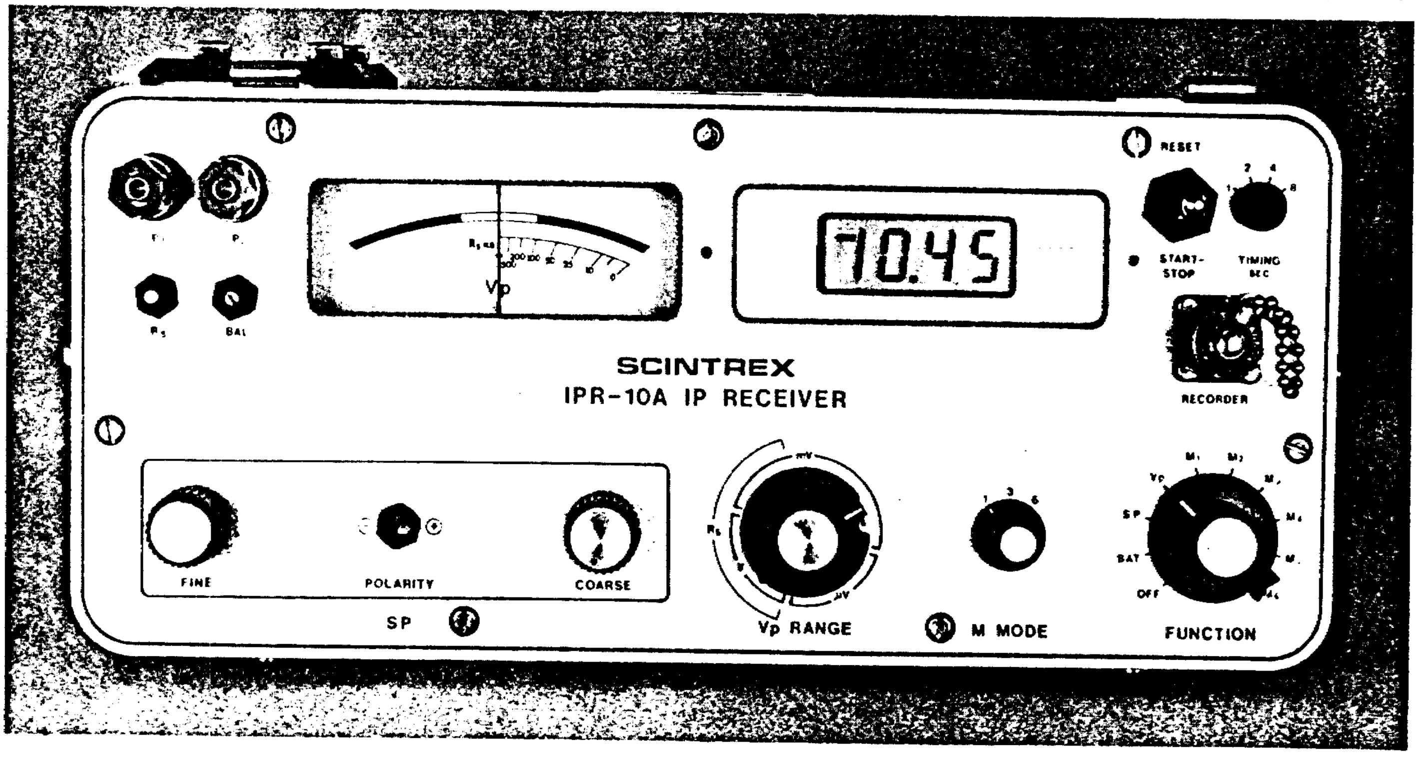
After the integration is initiated, the values of the primary voltage (Vp) and the chargeability (M) are averaged and updated after each pulse pair (i.e. cycle). Depending on the position of the Function Switch, the current average of: Vp, $M_{11}$, $M_{31}$, or $M_{61}$ (see programme diagram), is displayed on the digital display, while the values of the additional M slices are stored in the memory for recall when the reading is complete. The M values are in millivolts/volt, i.e. they are normalized for Vp, slice width, number of pulses and curve shape.

The curve shape normalization is to a standard decay form. All six channel outputs should be approximately equal provided that there is no electromagnetic

**IPR-10A Programme**



δ = 130 ms (for a one second programme)
δ = 260 ms (for a two second programme)
δ = 520 ms (for a four second programme)
δ = 1040 ms (for an eight second programme)



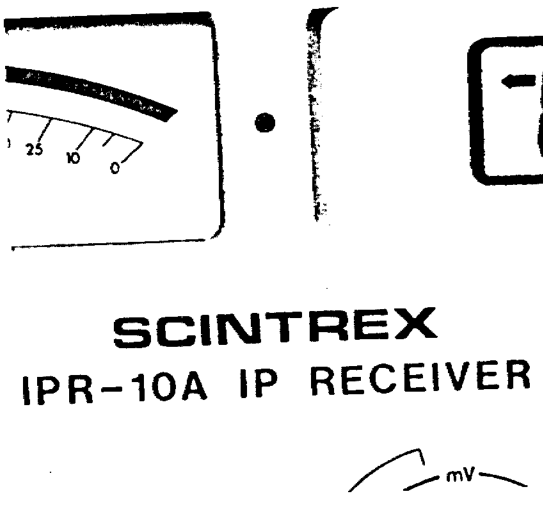
# IPR-10A Digital Time Domain Induced Polarization Receiver

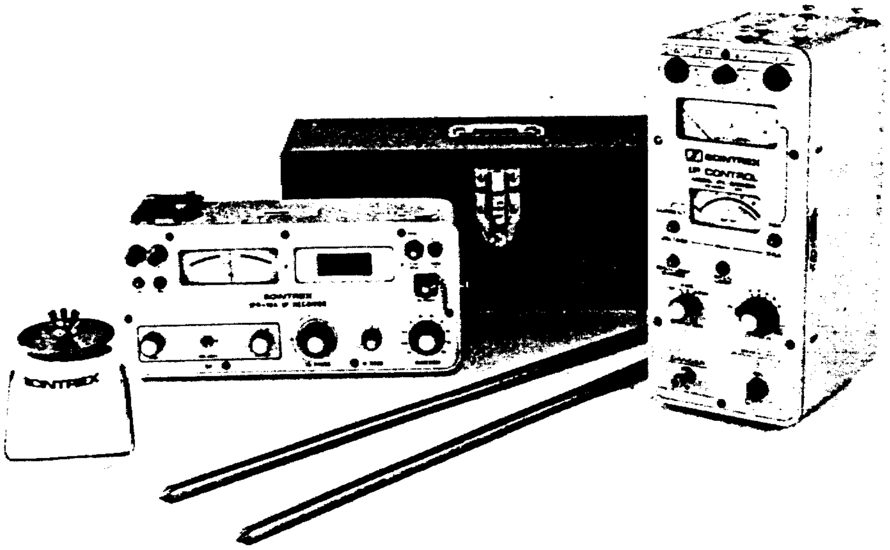
coupling or IP effects with anomalous decay time constants. This allows the operator to attack coupling problems immediately, for example, by changing the electrode array. The actual curve shape can be restored, if desired, using the normalizing constants given in the manual.

### Digital Displays

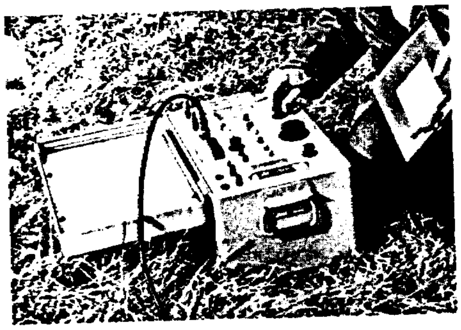
The IPR-10A is available with either a standard Liquid Crystal (LCD) or an optional Light Emitting Diode (LED) display. The LCD display has much lower power consumption than the LED and far superior readability in high ambient light. This display has been programmed to continuously read out the $V_{BAT}$, Sp, Vp or M values according to the Function Switch setting. To conserve battery power, the LED option is programmed to display these values for .2 seconds per cycle during measurement and for 2 seconds during read-out. The display is then shut off until the Function Switch is moved to a new position.

Both displays offer good legibility, even in direct sunlight. While Scintrex employs the best available low-temperature specification LCD's, these displays become sluggish at temperatures below 0°C so that the use of this display is recommended down to − 10°C only. For lower temperature operation, the LED option is recommended. If the standard LCD display is purchased initially, a conversion to LED's can be made at a later date, if it becomes desirable to use the IPR-10A in a sub-zero environment.





*IPR-10A Time Domain Receiver and battery powered 250 watt IPC-8 / 250 Transmitter.*



*The TSQ-3 Time and Frequency Domain, 3000 W, IP and Resistivity Transmitter, one of five different Scintrex Transmitters compatible with the IPR-10A.*

*Actual size of LCD digital display.*

A chargeability reading is defined by the following formula:

$$M = \frac{Vs \cdot 1000}{Vp} \text{ in mV/V}$$

$$Vs = \frac{1}{t_r}\int_{t_1}^{t_2} Vs\,dt + Vx$$

$t_1$ = time at beginning of slice.

$t_2$ = time at end of slice.

Vx = residual transient voltage at the end of the automatic self potential correction.

$t_r = t_2 - t_1$, i.e. the integrating period.

Vp = primary voltage.

# Technical Description of the IPR-10A Digital Time Domain Induced Polarization Receiver

| | |
|---|---|
| **Input Impedance** | 3.0 megohms. |
| **50 or 60 Hz Powerline Rejection** | −50 db (300x). Client should specify power line frequency in area of application so proper filter can be installed. |
| **Primary Voltage Range** | 30 microvolts to 30 volts in 12 ranges. |
| **Accuracy of Vp Measurement** | ±3% full scale; 0.1% resolution. |
| **Vs/Vp Range** | 100 mV/V (100‰) full scale. |
| **Vs/Vp Accuracy** | 3% of full scale, 0.1 mV/V resolution. |
| **SP Accuracy** | 1%. |
| **SP Resolution** | 1 mV. |
| **Primary SP Buckout Range** | ±1 V. |
| **Automatic SP Tracking Range** | 20 x Vp, maximum ± 1 V, minimum 30$\mu$V. |
| **External Circuit Ohmmeter** | 0 to 500 K ohms. |
| **Analogue Recorder Output** | ±4V Full Scale. 1 K$\Omega$ source resistance. |
| **Digital Display** | Liquid Crystal (LCD) is standard, Light Emitting Diode (LED) is optional. 3½ digits in both cases. LCD display stays on continuously. LED display displays for .2 seconds each cycle during measurement and for 2 seconds during readout then shuts off to conserve power. The LED display is recommended mainly for operation below −10°C. |
| **Required Stability of Transmitter Timing** | Need only exceed measuring programme selected (1, 2, 4 or 8 second programme, see diagram) however, deviation from nominal time may affect the accuracy of measurement. |
| **Operating Temperature Range** | For standard LCD model; −10° to +60 °C.<br>For optional LED model; −30° to +60 °C. |
| **Storage Temperature Range** | For standard LCD model; −20° to +75°C.<br>For optional LED model; −60° to +75°C. |
| **Dimensions** | 310 mm x 150 mm x 170 mm. |
| **Weight, Complete with Lid and Batteries** | 3.6 kg. |
| **Power Supply** | 4 D cells; estimated battery life 1 month intermittent duty at 25°C with LCD display, 1 week with LED display plus 1 Alkaline cell, Eveready E91 or equivalent; estimated life, 1 year. |

SCINTREX

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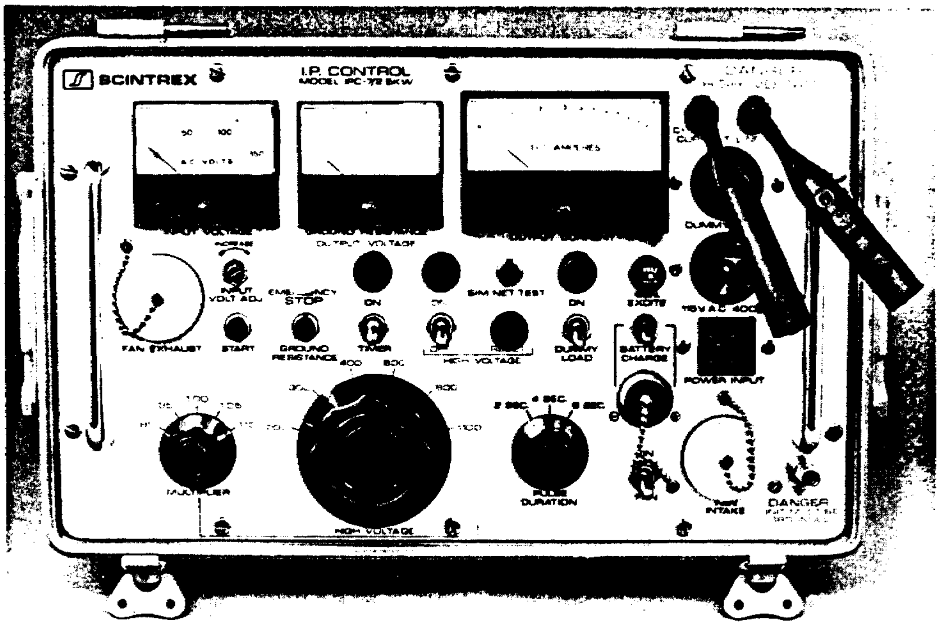
Geophysical and Geochemical
Instrumentation and Services

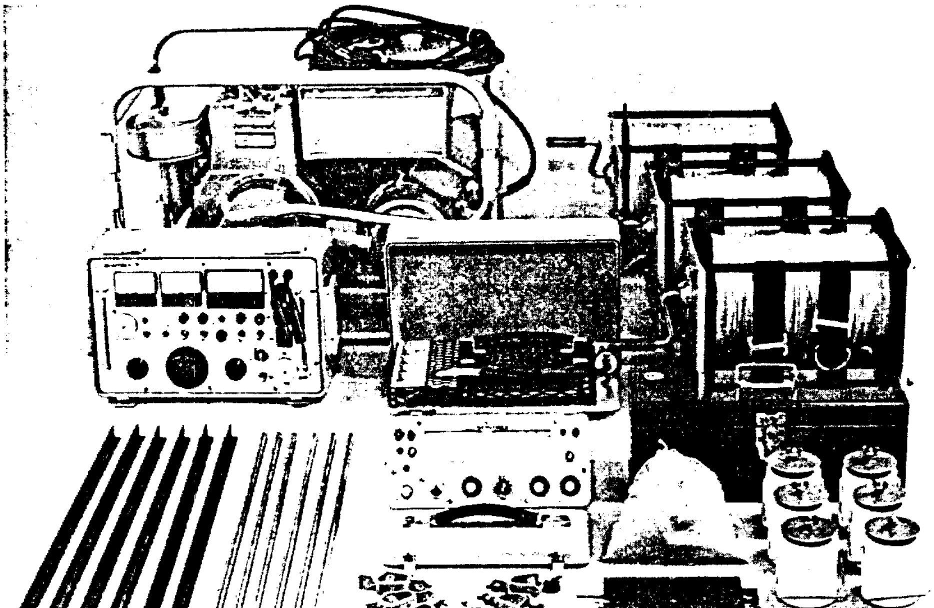
# SCINTREX IPC-7/2.5kW Induced Polarization and Commutated DC Resistivity Transmitter System

## Function

The IPC-7/2.5 kW is a medium power transmitter system designed for time domain induced polarization or commutated DC resistivity work. It is the standard power transmitting system used on most surveys under a wide variety of geophysical, topographical and climatic conditions.

The favourable power-weight ratio and compact design of this system make it portable and highly versatile for use with a wide variety of electrode arrays.





Complete 2.5kW induced polarization system including motor-generator, reels with wire, tool kit, porous pots, simulator circuit, copper sulphate, IPR-8 receiver, dummy load, transmitter, electrodes and clips.

## Features

Maximum power 2.5 kilowatts; maximum current output 10 amperes; Maximum voltage output 1210 volts DC.

System consists of two modules; Control unit with dummy load and motor generator set.

All circuits, including high voltage switching, are solid state.

Removable circuit boards.

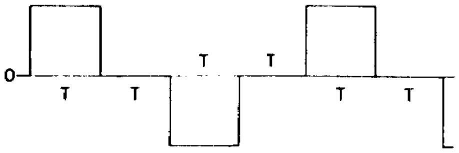
Automatic on-off and polarity cycling with selectable cycling rates.

Overload and underload protection circuits and other safety features.

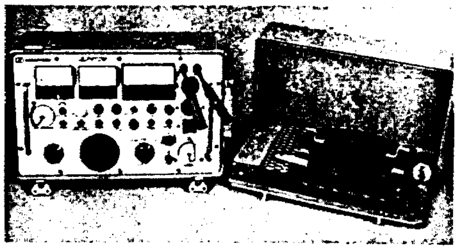
Primary and secondary of transformer are switch selectable for power matching to ground load.

Built-in ohm-meter for checking external circuit resistance.

# Technical Description of IPC-7/2.5 kW Transmitter System



Time Domain Waveform



IPC-7/2.5kW transmitter console with lid and dummy load.

| | |
|---|---|
| ***Control Unit*** | |
| **Output Current** | 10 Amperes maximum |
| **Output Voltage** | Switch selectable up to 1210 volts DC |
| **Automatic Cycle Timing** | T:T:T:T; on: off: on: off |
| **Automatic Polarity Change** | Each 2T |
| **Pulse Durations** | Standard: T=2, 4 or 8 seconds, switch selectable<br>Optional: T=1, 2 or 4 seconds, switch selectable<br>Optional: T=4, 8 or 16 seconds, switch selectable |
| **Voltage Meter** | 1500 volts full scale logarithmic |
| **Current Meter** | Standard: 10.0 A full scale logarithmic<br>Optional: 0.3, 1.0, 3.0 or 10.0 A full scale linear, switch selectable |
| **Dimensions** | 280 mm x 460 mm x 310 mm |
| **Dummy Load** | Mounted in control unit cover |
| **Temperature Range** | −30°C to +55°C |
| **Weight** | 30 kg |
| **Shipping Weight** | 41 kg includes reusable wooden crate |
| ***Motor Generator Set*** | |
| **Maximum Output Power** | 2.5 kVA, single phase |
| **Output Voltage** | 110 volts, AC |
| **Output Frequency** | 400 Hz |
| **Motor** | 4 stroke, 8 hp Briggs and Stratton |
| **Weight** | 59 kg |
| **Shipping Weight** | 90 kg includes reusable wooden crate |

SCINTREX

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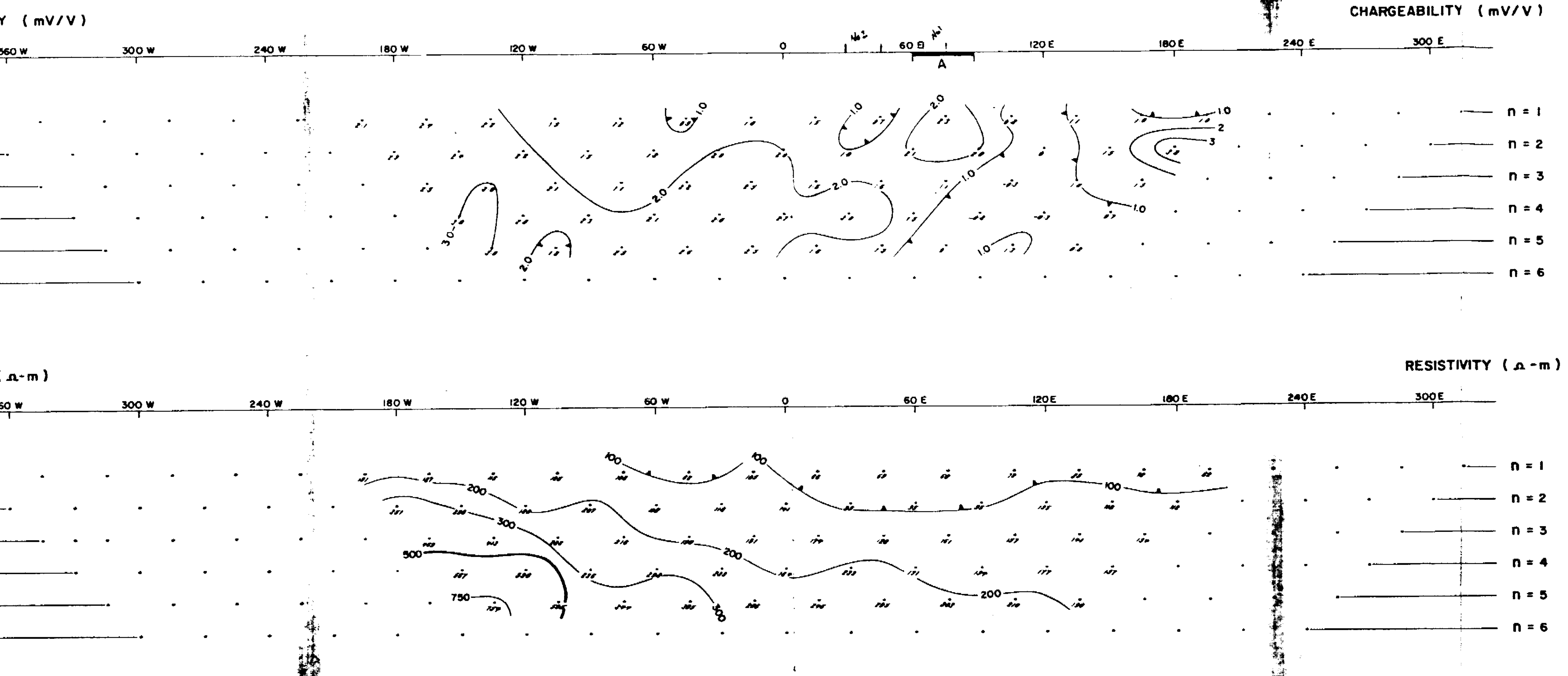


## PANCONTINENTAL MINING CANADA LTD.

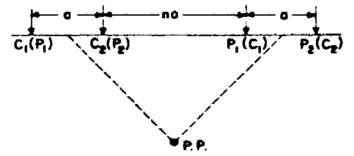
MATHESON AREA, HISLOP TOWNSHIP
NORTHEASTERN ONTARIO

## LINE No. 960 N

## INDUCED POLARIZATION SURVEY

a = 30 m, n = 1,2,3,4,5,6
Pulse time : 2 sec.
IPR-10 I. P. RECEIVER
IPC-7 2.5kW TRANSMITTER

DIPOLE-DIPOLE ELECTRODE ARRAY



SCALE : 1 : 1500
not to scale

**LEGEND**

CHARGEABILITY (mV/V) Mzsz
1, 2, 3, 7.5
5, 10
DEPRESSION

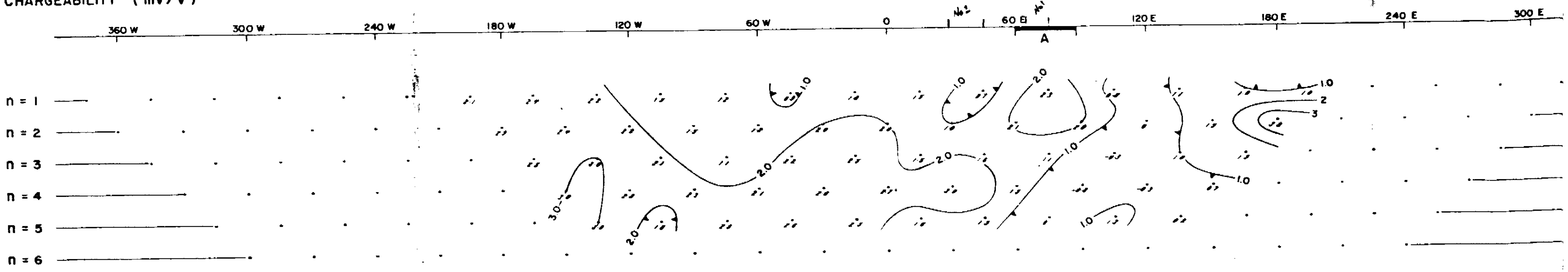
RESISTIVITY (Ω-m)
100, 200, 300, 750
500, 1000
DEPRESSION

SURVEY BY
SCINTREX LIMITED
OCT. - NOV. 1980

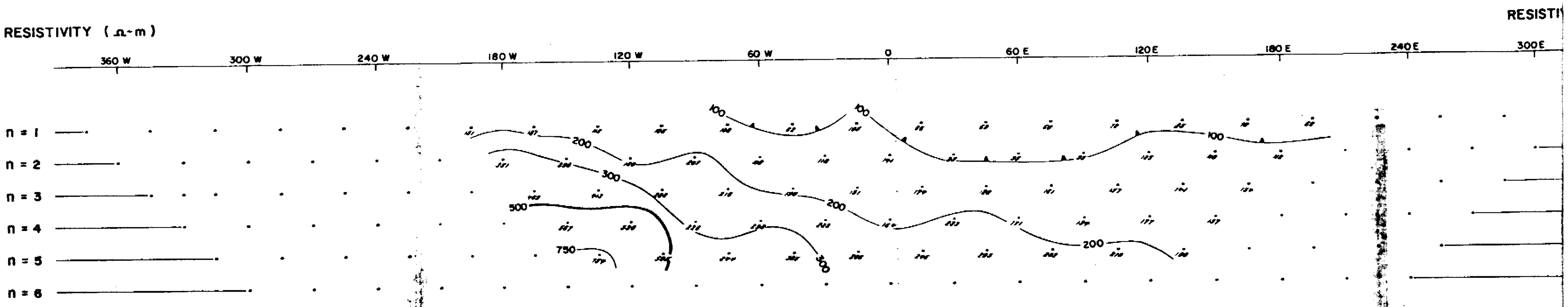
PLATE 1

80-T 2080-01

CHARGEABILITY ( mV/V )

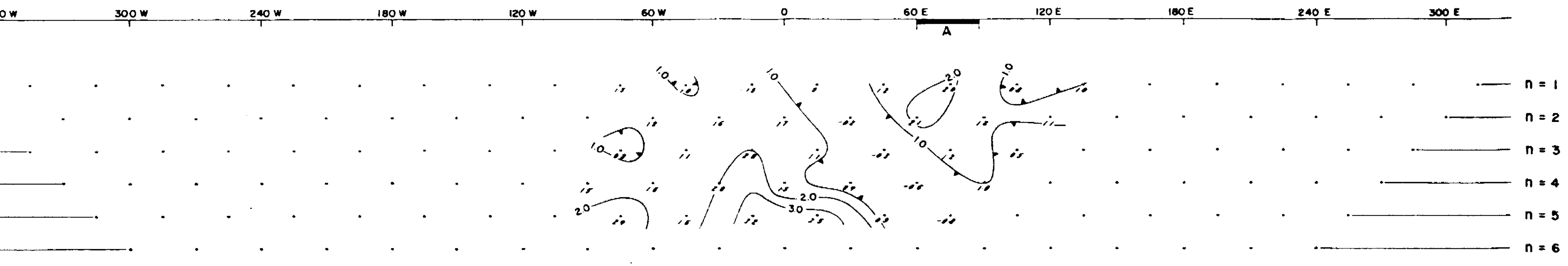


RESISTIVITY ( Ω-m )



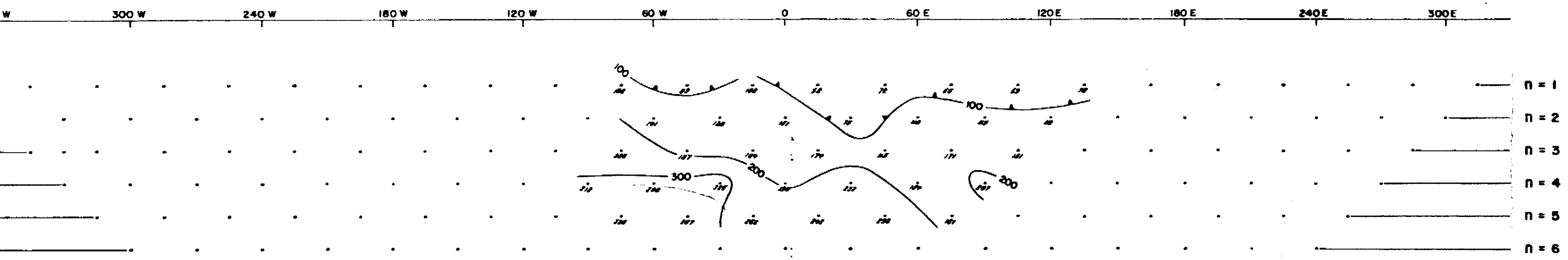
( mV/V )

CHARGEABILITY ( mV/V )



Ω-m )

RESISTIVITY ( Ω-m )



# PAN CONTINENTAL MINING CANADA LTD.

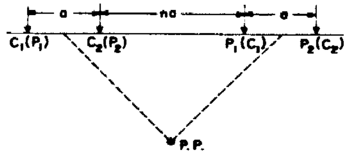
MATHESON AREA, HISLOP TOWNSHIP
NORTHEASTERN ONTARIO

## LINE No. 960 N

## INDUCED POLARIZATION SURVEY

a = 30 m, n = 1,2,3,4,5,6
Pulse time : 2 sec.
IPR-10 I.P. RECEIVER
IPC-7 2.5 kW TRANSMITTER

DIPOLE - DIPOLE ELECTRODE ARRAY



SCALE : 1 : 1500
not to scale

**LEGEND**

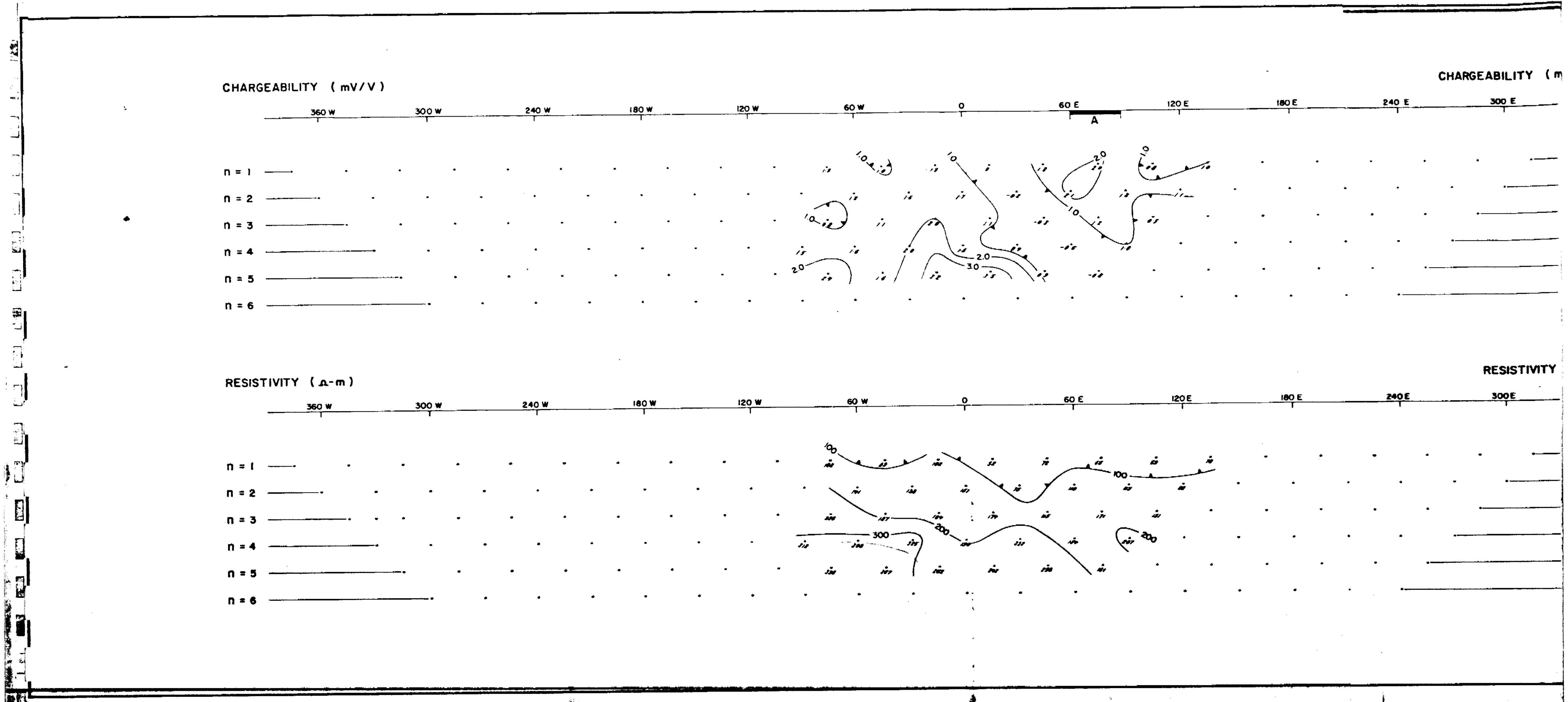
CHARGEABILITY ( mV/V ) M2S2
1, 2, 3, 7.5 ————
5, 10 ————
DEPRESSION ————

RESISTIVITY ( Ω-m )
100, 200, 300, 750 ————
500, 1000 ————
DEPRESSION ————

SURVEY BY
SCINTREX LIMITED
OCT. - NOV. 1980

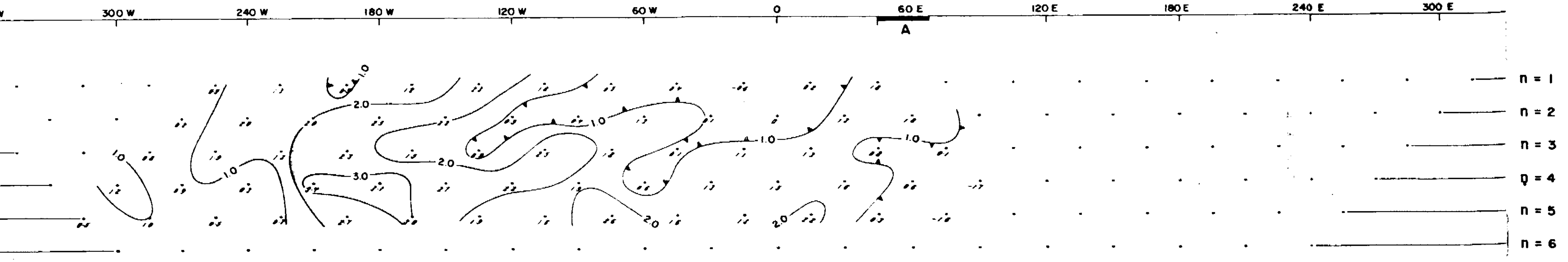
PLATE 2

80-T 2080-02

CHARGEABILITY ( mV/V )
360 W
300 W
240 W
180 W
120 W
60 W
0
60 E
A
120 E
180 E
240 E
300 E
n = 1
n = 2
n = 3
n = 4
n = 5
n = 6
1.0
2.0
3.0
CHARGEABILITY ( m
RESISTIVITY ( Ω-m )
360 W
300 W
240 W
180 W
120 W
60 W
0
60 E
120 E
180 E
240 E
300 E
n = 1
n = 2
n = 3
n = 4
n = 5
n = 6
100
200
300
RESISTIVITY

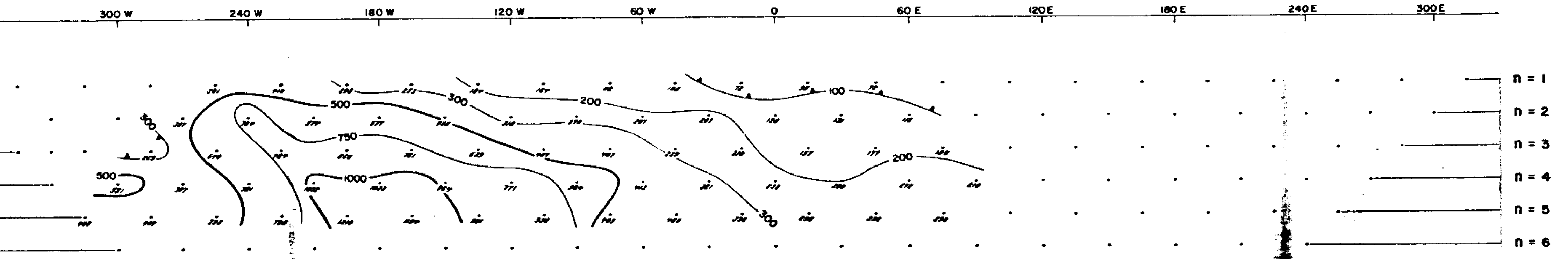
( mV/V )

CHARGEABILITY ( mV/V )



m )

RESISTIVITY ( Ω - m )



# PANCONTINENTAL MINING CANADA LTD.

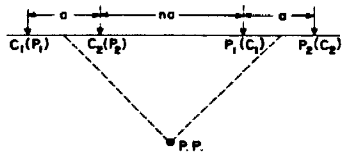
MATHESON AREA, HISLOP TOWNSHIP
NORTHEASTERN ONTARIO

## LINE No. 990 N

## INDUCED POLARIZATION SURVEY

a = 30 m, n = 1,2,3,4,5,6
Pulse time : 2 sec.
IPR-10 I.P. RECEIVER
IPC-7 2.5 kW TRANSMITTER

DIPOLE-DIPOLE ELECTRODE ARRAY



SCALE : 1 : 1500
not to scale

**LEGEND**

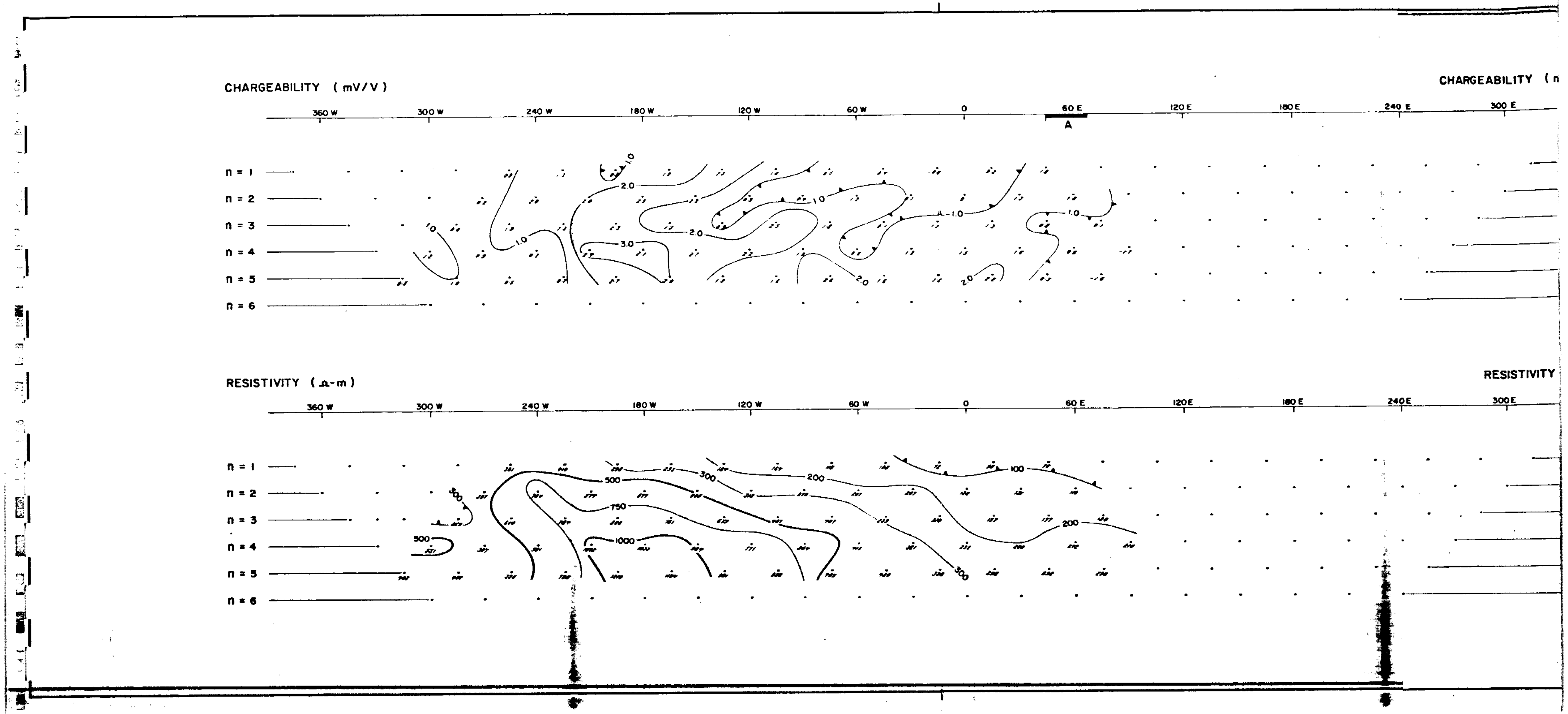
CHARGEABILITY ( mV/V ) M232
1, 2, 3, 7.5 ————
5, 10 ————
DEPRESSION ————

RESISTIVITY ( Ω - m )
100, 200, 300, 750 ————
500, 1000 ————
DEPRESSION ————

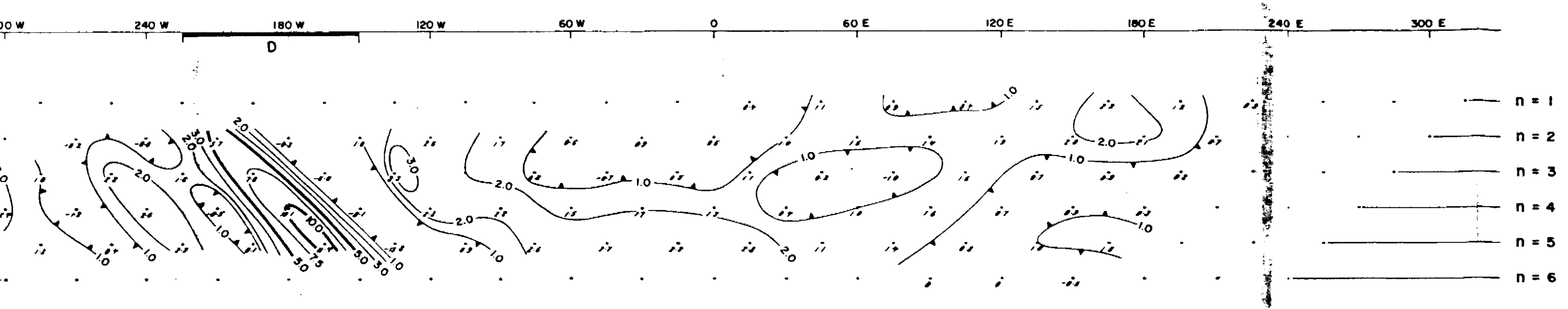
SURVEY BY
SCINTREX LIMITED
OCT. - NOV. 1980

PLATE

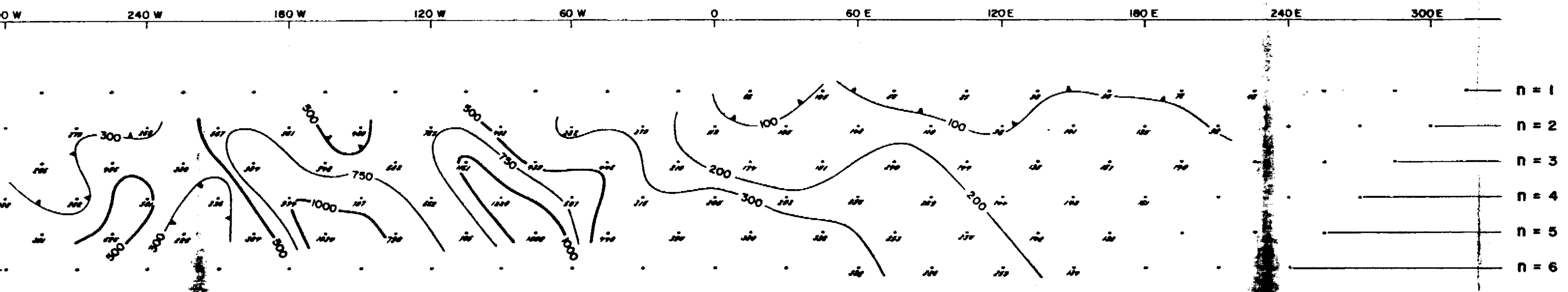
80 - T 2


CHARGEABILITY ( mV/V )
360 W
300 W
240 W
180 W
120 W
60 W
0
60 E
120 E
180 E
240 E
300 E
A
n = 1
n = 2
n = 3
n = 4
n = 5
n = 6
1.0
2.0
3.0
RESISTIVITY ( Ω-m )
100
200
300
500
750
1000
CHARGEABILITY ( n
RESISTIVITY

CHARGEABILITY ( mV/V )



RESISTIVITY ( Ω -m )



# PANCONTINENTAL MINING CANADA LTD.

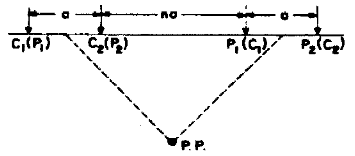
MATHESON AREA, HISLOP TOWNSHIP
NORTHEASTERN ONTARIO

## LINE No. 1020 N

## INDUCED POLARIZATION SURVEY

a = 30 m, n = 1,2,3,4,5,6
Pulse time : 2 sec.
IPR-10 I.P. RECEIVER
IPC-7 2.5kW TRANSMITTER

DIPOLE-DIPOLE ELECTRODE ARRAY



SCALE : 1 : 1500
not to scale

**LEGEND**

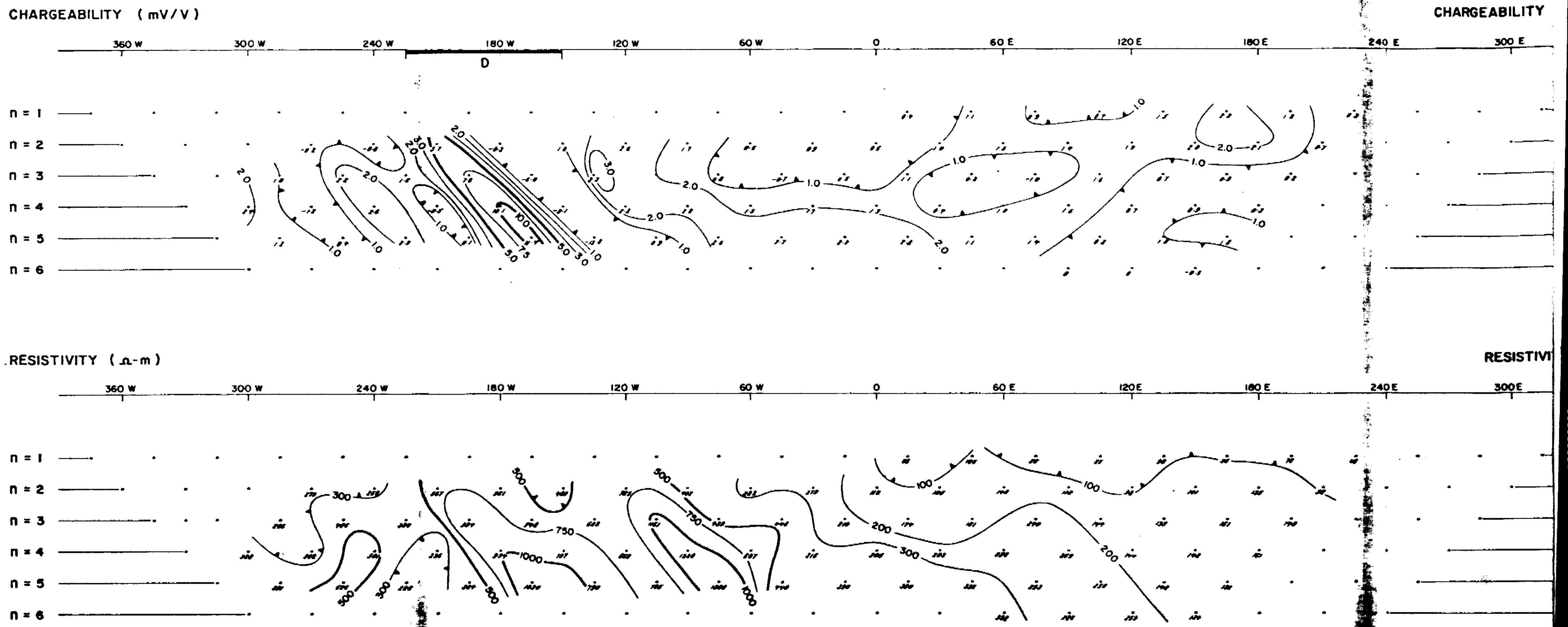
CHARGEABILITY ( mV/V ) M232
1, 2, 3, 7.5 ———
5, 10 ———
DEPRESSION ———

RESISTIVITY ( Ω - m )
100, 200, 300, 750 ———
500, 1000 ———
DEPRESSION ———

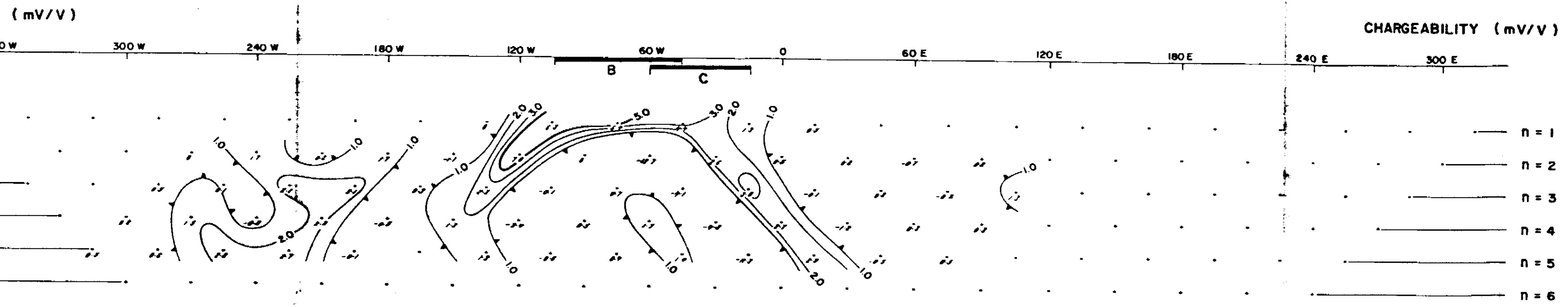
SURVEY BY
SCINTREX LIMITED
OCT. - NOV. 1980

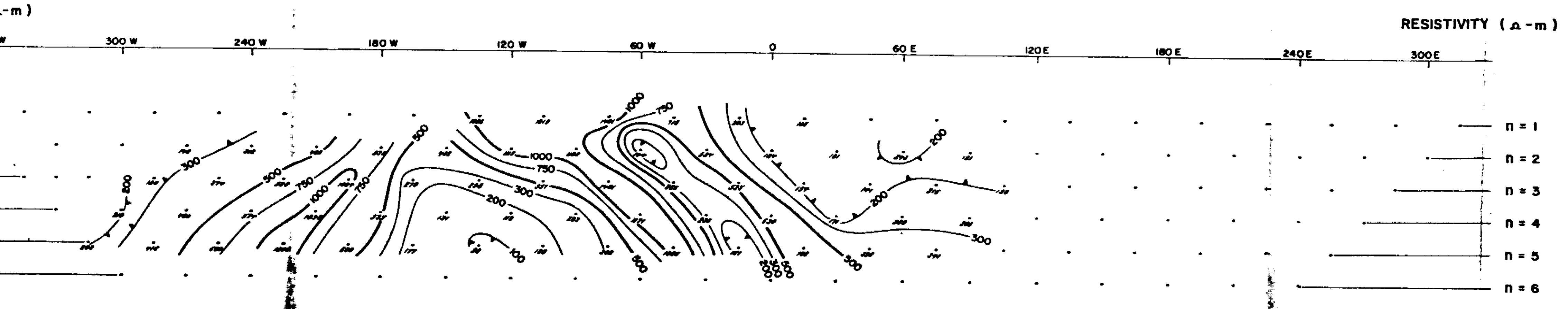
PLATE 4

80-T 2080-04


CHARGEABILITY ( mV/V )

RESISTIVITY ( Ω-m )





## PANCONTINENTAL MINING CANADA LTD.

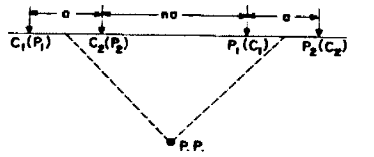
MATHESON AREA, HISLOP TOWNSHIP
NORTHEASTERN ONTARIO

## LINE No. 1080 N

## INDUCED POLARIZATION SURVEY

a = 30 m, n = 1,2,3,4,5,6
Pulse time : 2 sec.
IPR-10 I.P. RECEIVER
IPC-7 2.5kW TRANSMITTER

DIPOLE-DIPOLE ELECTRODE ARRAY



SCALE : 1 : 1500

not to scale

**LEGEND**

CHARGEABILITY ( mV/V) Mzsz
1, 2, 3, 7.5 ————
5, 10 ————
DEPRESSION ————

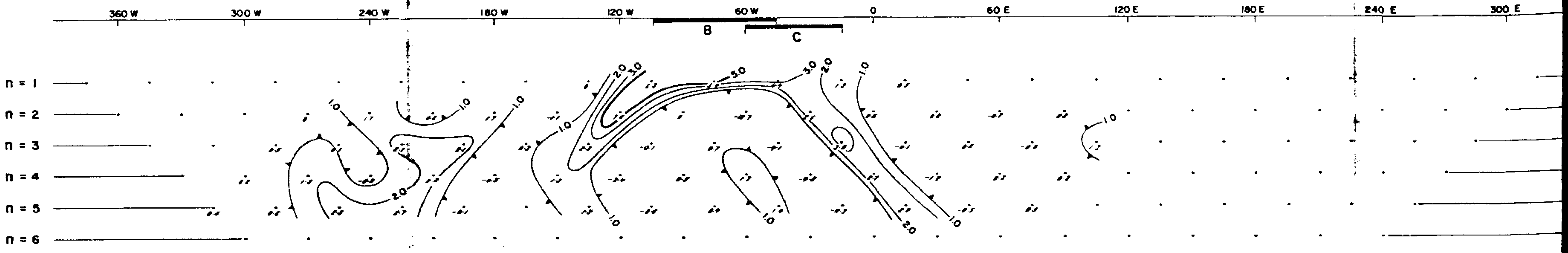
RESISTIVITY ( Ω-m )
100, 200, 300, 750 ————
500, 1000 ————
DEPRESSION ————

SURVEY BY
SCINTREX LIMITED
OCT. - NOV. 1980

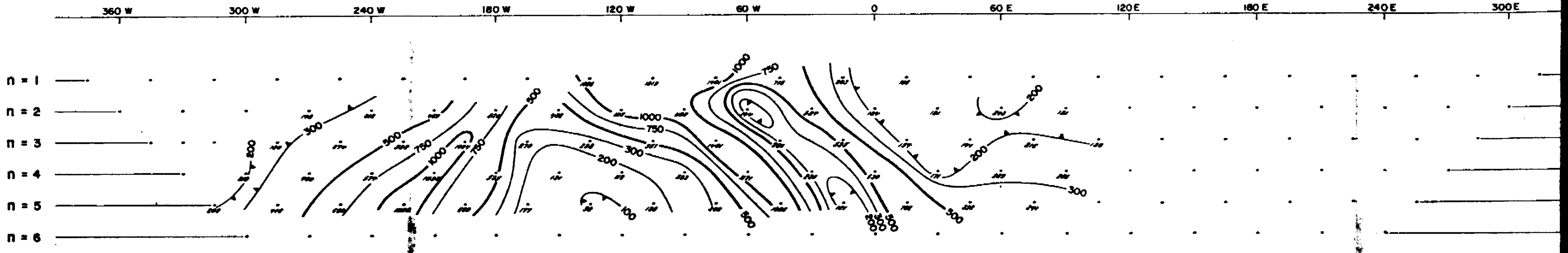
PLATE 5

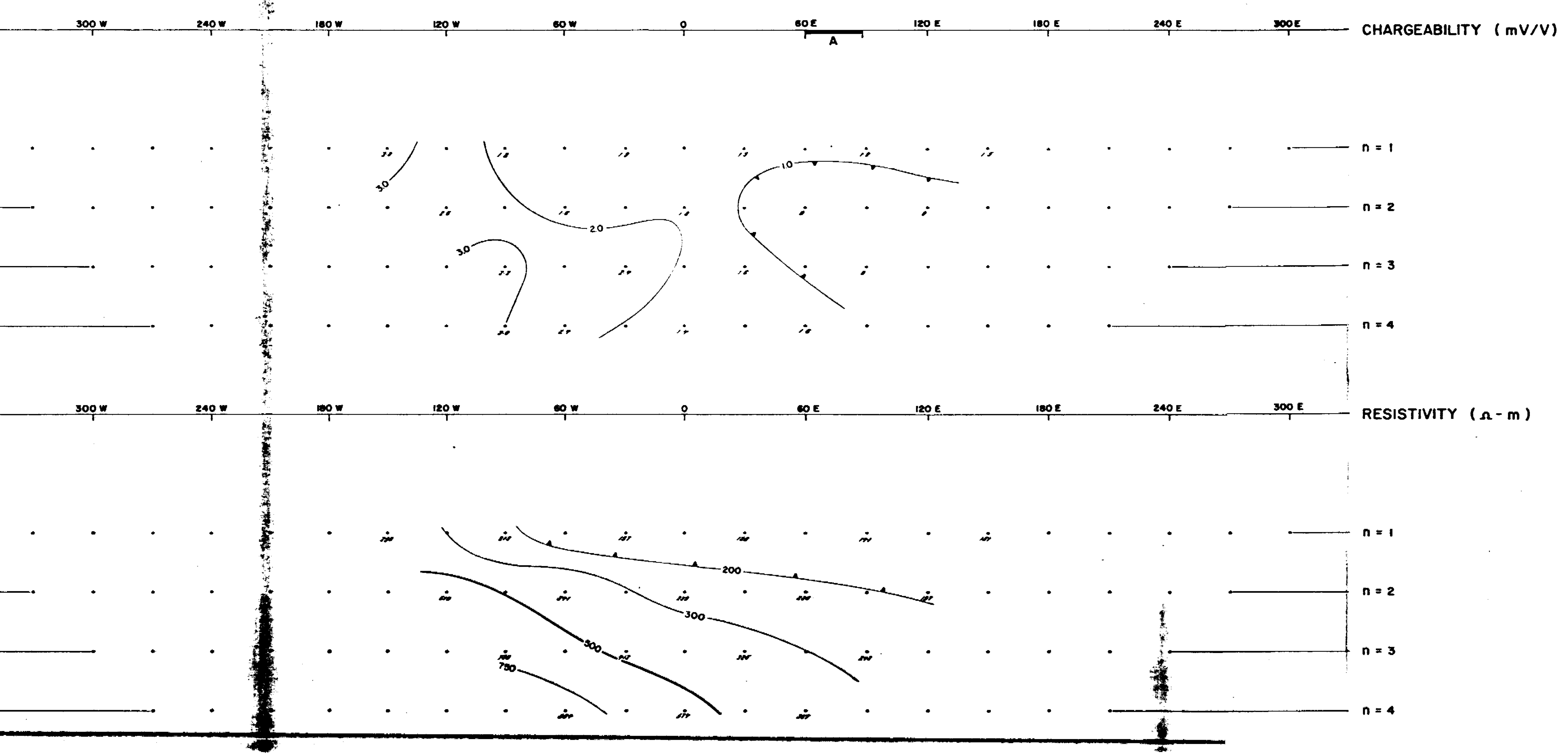
80-T 2080-05

CHARGEABILITY (mV/V)



RESISTIVITY (Ω-m)





## PANCONTINENTAL MINING CANADA LTD.

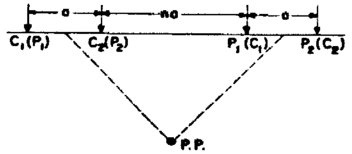
MATHESON AREA, HISLOP TOWNSHIP
NORTHEASTERN ONTARIO

## LINE No. 960 N

## INDUCED POLARIZATION SURVEY

a = 60 m, n = 1,2,3,4
Pulse time : 2 sec.
IPR-10 I.P. RECEIVER
IPC-7 2.5kW TRANSMITTER

DIPOLE - DIPOLE ELECTRODE ARRAY



SCALE : 1 : 1500
not to scale

**LEGEND**

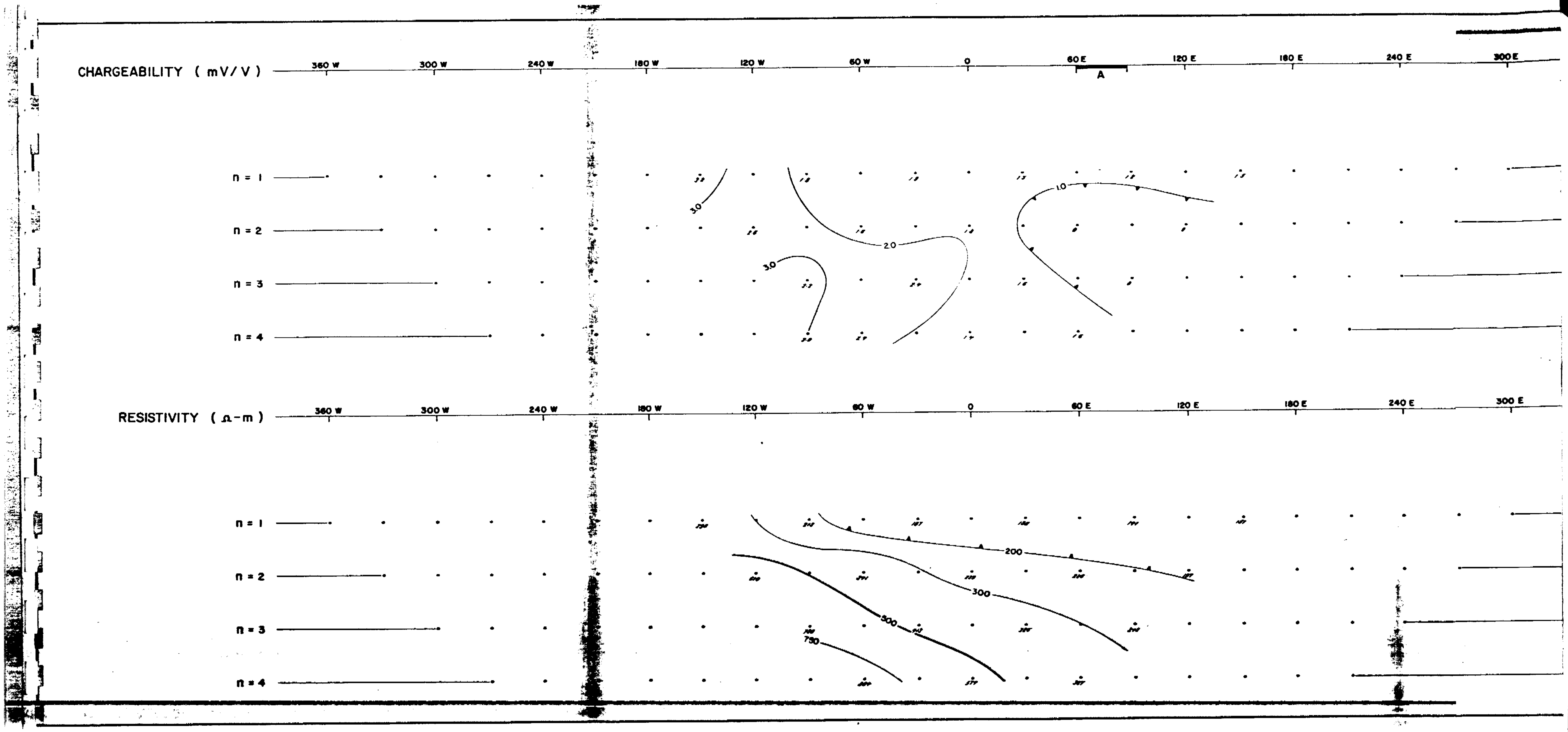
CHARGEABILITY ( mV/V ) Mz3E
1, 2, 3, 7.5 ———
5, 10 ———
DEPRESSION ———

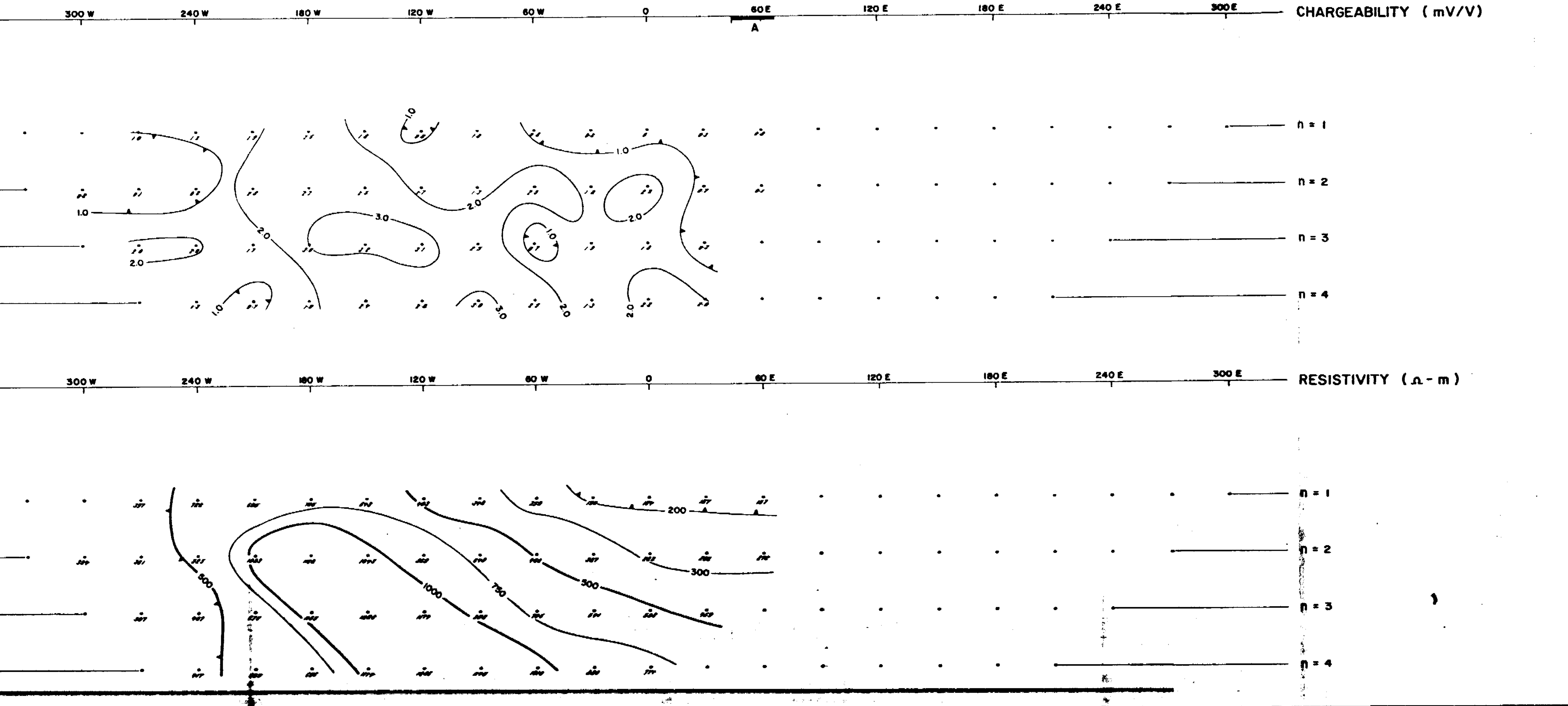
RESISTIVITY ( Ω - m )
100, 200, 300, 750 ———
500, 1000 ———
DEPRESSION ———

SURVEY BY
SCINTREX LIMITED
OCT. - NOV. 1980

PLATE 6

80-T2080-06


CHARGEABILITY ( mV/V )
360 W
300 W
240 W
180 W
120 W
60 W
0
60 E
120 E
180 E
240 E
300 E
A
n = 1
n = 2
n = 3
n = 4
3.0
2.0
1.0
3.0
RESISTIVITY ( Ω-m )
360 W
300 W
240 W
180 W
120 W
60 W
0
60 E
120 E
180 E
240 E
300 E
n = 1
n = 2
n = 3
n = 4
200
300
500
750



## PANCONTINENTAL MINING CANADA LTD.

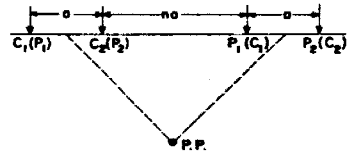
MATHESON AREA, HISLOP TOWNSHIP
NORTHEASTERN ONTARIO

# LINE No. 990 N

## INDUCED POLARIZATION SURVEY

a = 60 m, n = 1,2,3,4
Pulse time : 2 sec.
IPR-10 I.P. RECEIVER
IPC-7 2.5kW TRANSMITTER

DIPOLE-DIPOLE ELECTRODE ARRAY



SCALE : 1 : 1500
not to scale

**LEGEND**

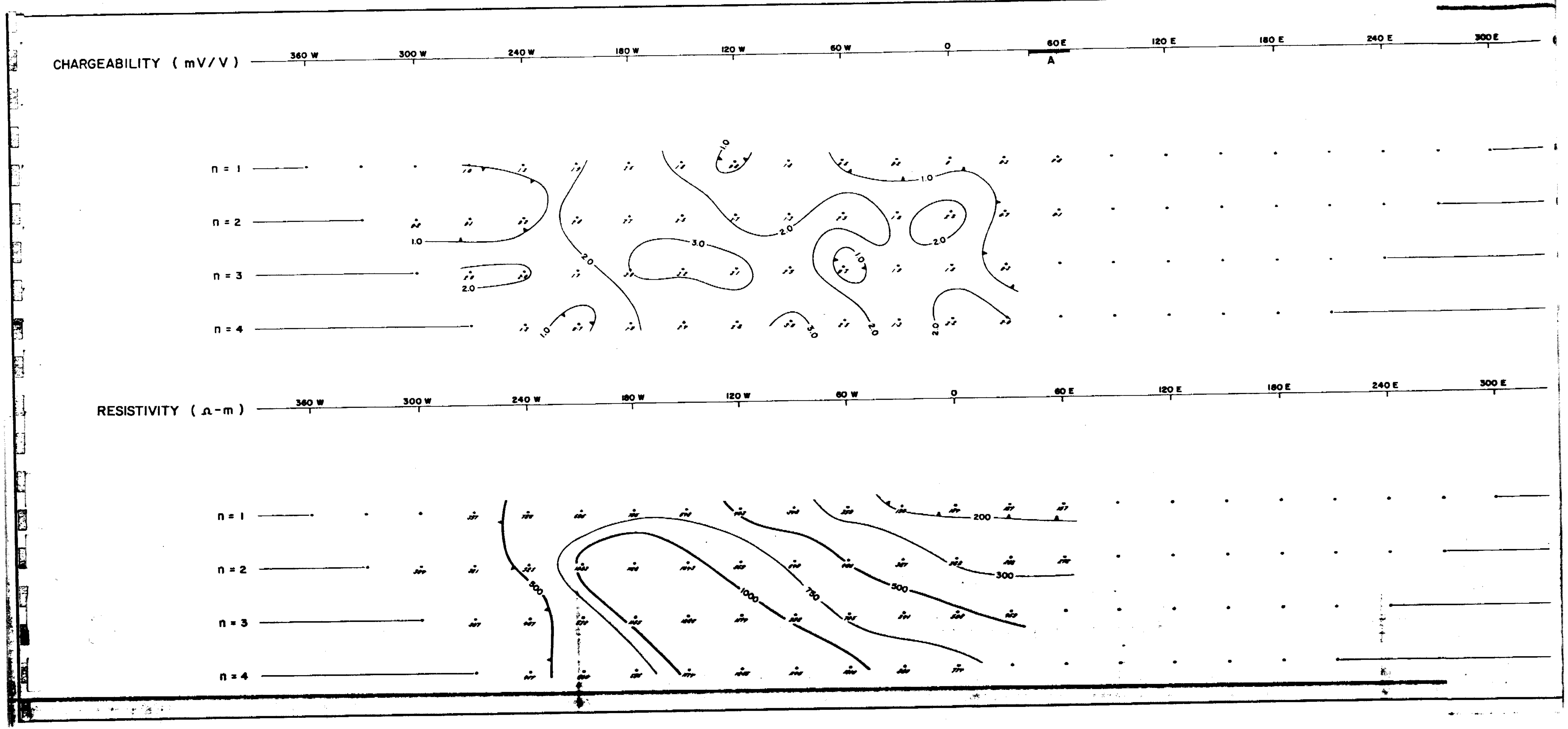
CHARGEABILITY (mV/V) Mzaz
1, 2, 3, 7.5
5, 10
DEPRESSION

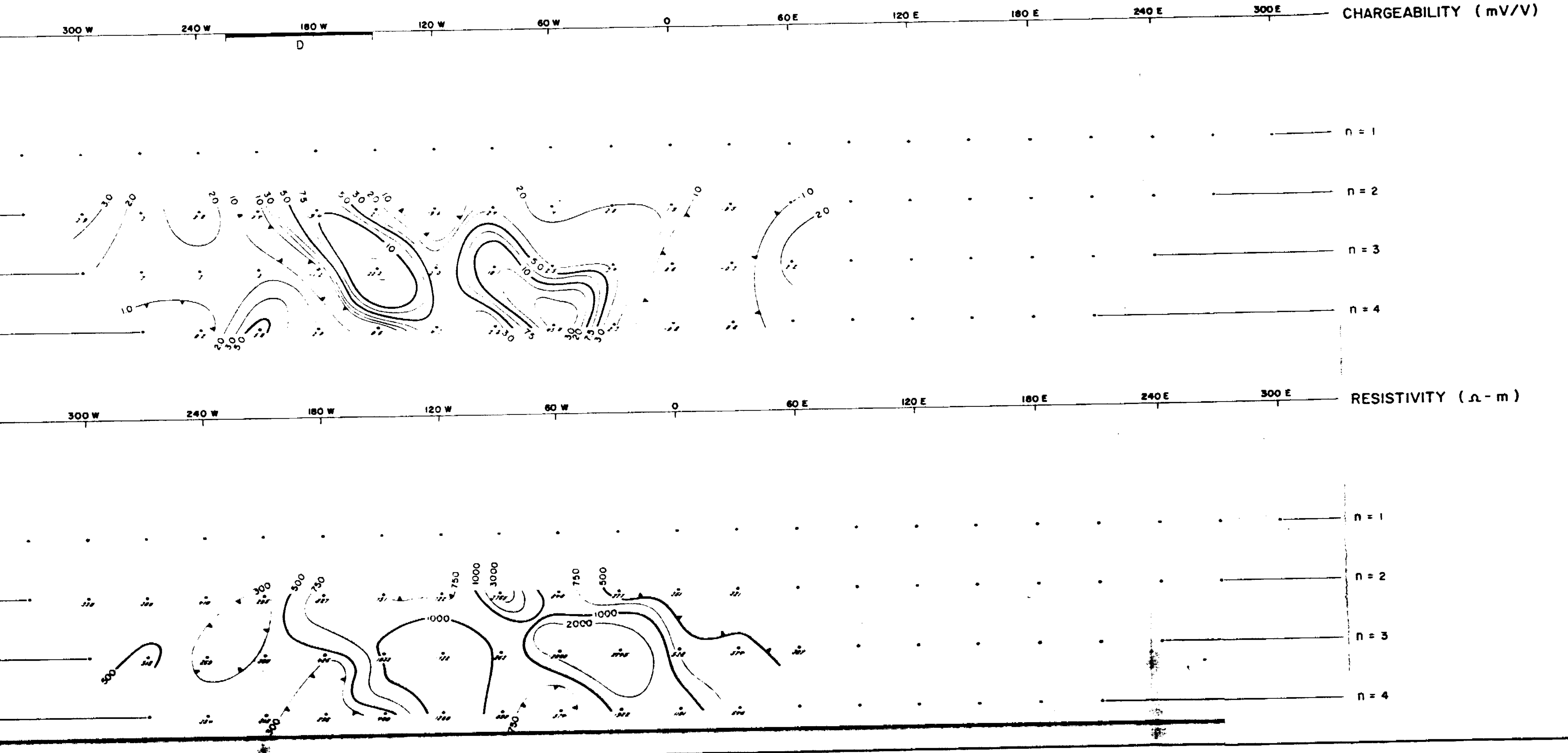
RESISTIVITY (Ω-m)
100, 200, 300, 750
500, 1000
DEPRESSION

SURVEY BY
SCINTREX LIMITED
OCT.- NOV. 1980

PLATE 7

80-T2080-07


CHARGEABILITY ( mV/V )
360 W
300 W
240 W
180 W
120 W
60 W
0
60 E
A
120 E
180 E
240 E
300 E
n = 1
n = 2
n = 3
n = 4
1.0
2.0
3.0
RESISTIVITY ( Ω-m )
200
300
500
750
1000



# PANCONTINENTAL MINING CANADA LTD.

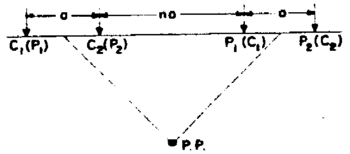
MATHESON AREA, HISLOP TOWNSHIP
NORTHEASTERN ONTARIO

# LINE No. 1020 N

## INDUCED POLARIZATION SURVEY

a = 60 m, n = 1,2,3,4
Pulse time : 2 sec.
IPR-10 I.P. RECEIVER
IPC-7 2.5 kW TRANSMITTER

DIPOLE - DIPOLE ELECTRODE ARRAY



SCALE : 1 : 1500
not to scale

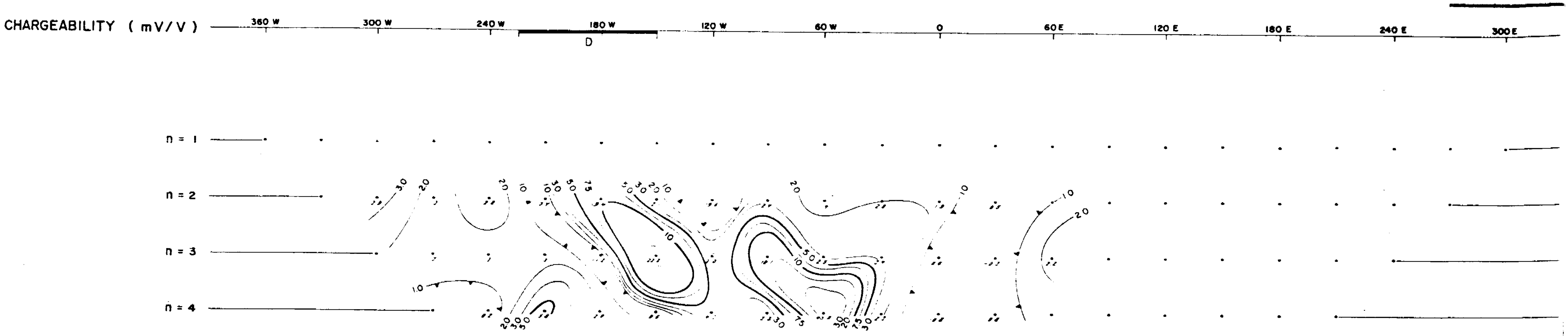
**LEGEND**

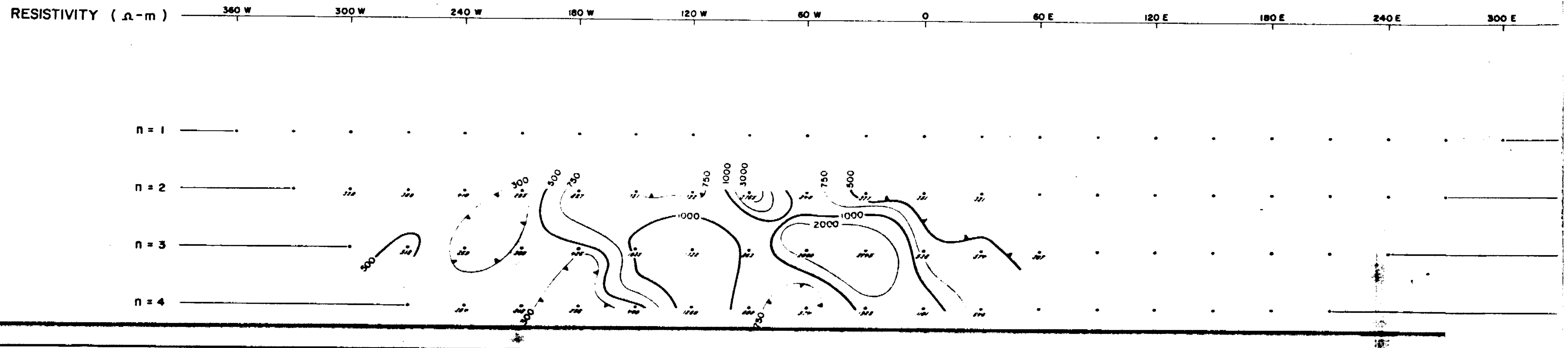
CHARGEABILITY (mV/V) M232
1, 2, 3, 7.5
5, 10
DEPRESSION

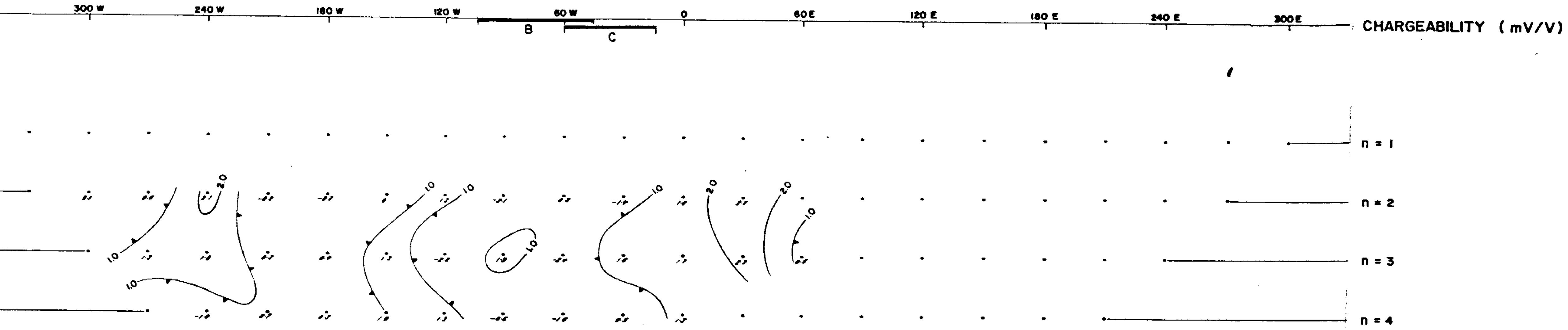
RESISTIVITY (Ω - m)
100, 200, 300, 750
500, 1000
DEPRESSION

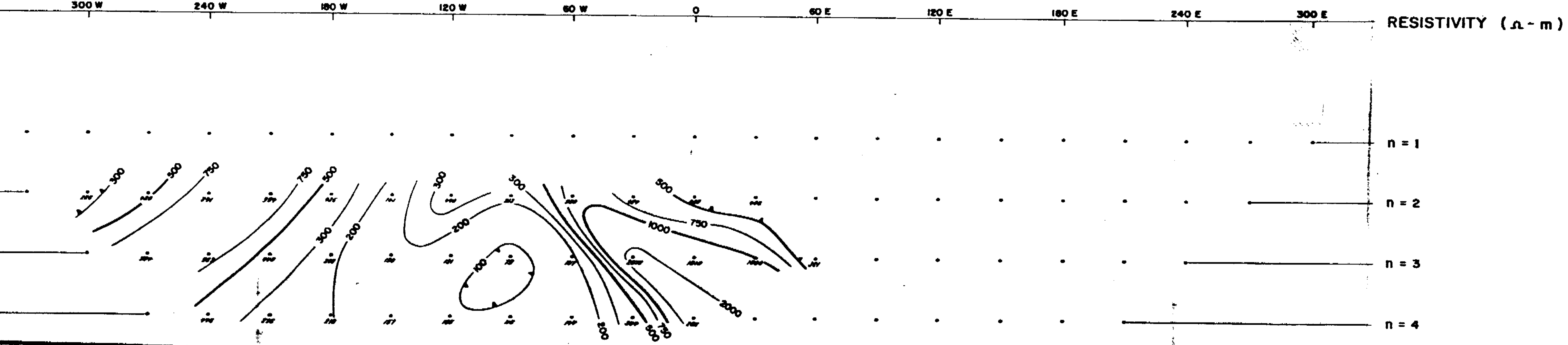
SURVEY BY
SCINTREX LIMITED
OCT. - NOV. 1980

PLATE 8


CHARGEABILITY ( mV/V )
360 W
300 W
240 W
180 W
120 W
60 W
0
60 E
120 E
180 E
240 E
300 E
D
n = 1
n = 2
n = 3
n = 4
30
20
10
50
75
10
20


RESISTIVITY ( Ω-m )
360 W
300 W
240 W
180 W
120 W
60 W
0
60 E
120 E
180 E
240 E
300 E
n = 1
n = 2
n = 3
n = 4
300
500
750
1000
3000
2000
500
300
750





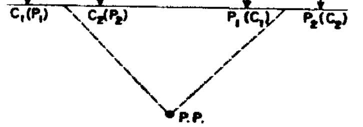
# PANCONTINENTAL MINING CANADA LTD.

MATHESON AREA, HISLOP TOWNSHIP
NORTHEASTERN ONTARIO

## LINE No. 1080 N

INDUCED POLARIZATION SURVEY
a = 60 m , n = 1,2,3,4
Pulse time : 2 sec.
IPR-10 I.P. RECEIVER
IPC-7 2.5 kW TRANSMITTER

DIPOLE-DIPOLE ELECTRODE ARRAY



SCALE : 1 : 1500
not to scale

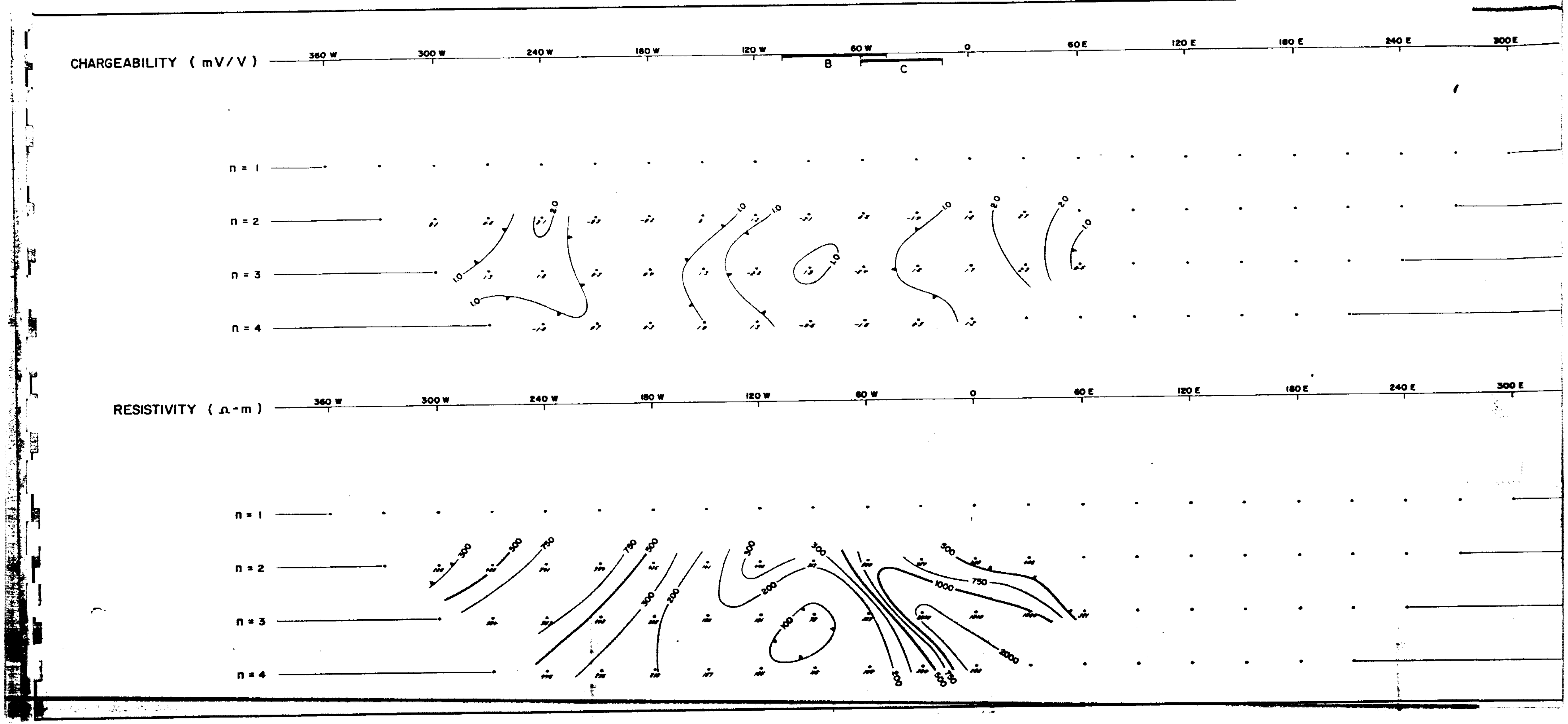
**LEGEND**

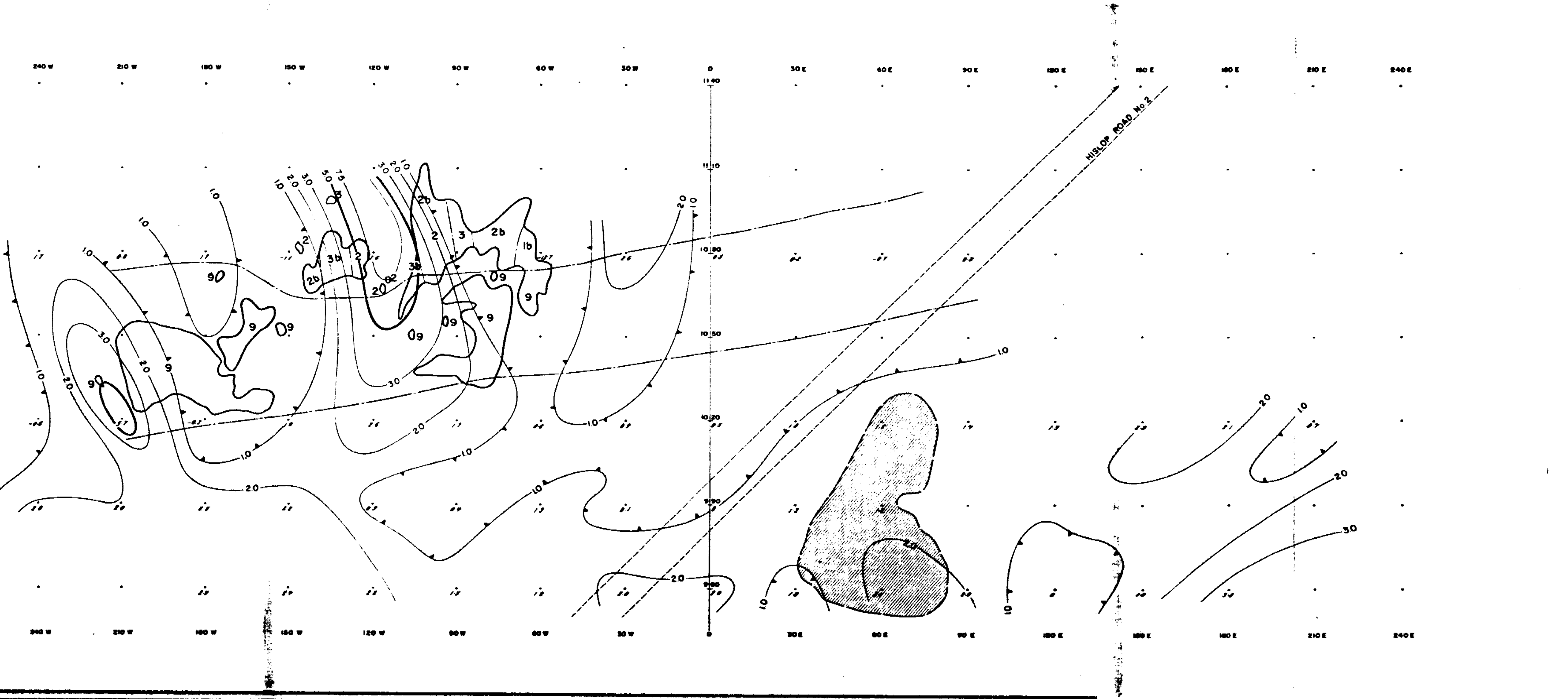
CHARGEABILITY ( mV/V ) Mzsz
1, 2, 3, 7.5
5, 10
DEPRESSION

RESISTIVITY ( Ω - m )
100, 200, 300, 750
500, 1000
DEPRESSION

SURVEY BY
SCINTREX LIMITED
OCT. - NOV. 1980

PLATE 9


CHARGEABILITY ( mV/V )
360 W
300 W
240 W
180 W
120 W
60 W
0
60 E
120 E
180 E
240 E
300 E
B
C
n = 1
n = 2
n = 3
n = 4
1.0
2.0
RESISTIVITY ( Ω-m )
360 W
300 W
240 W
180 W
120 W
60 W
0
60 E
120 E
180 E
240 E
300 E
n = 1
n = 2
n = 3
n = 4
100
200
300
500
750
1000
2000



## PANCONTINENTAL MINING CANADA LTD.

MATHESON AREA, HISLOP TOWNSHIP
NORTHEASTERN ONTARIO

## PLAN MAP

CHARGEABILITY

$a = 30\text{ m},\ n = 2$

DIPOLE - DIPOLE ELECTRODE ARRAY

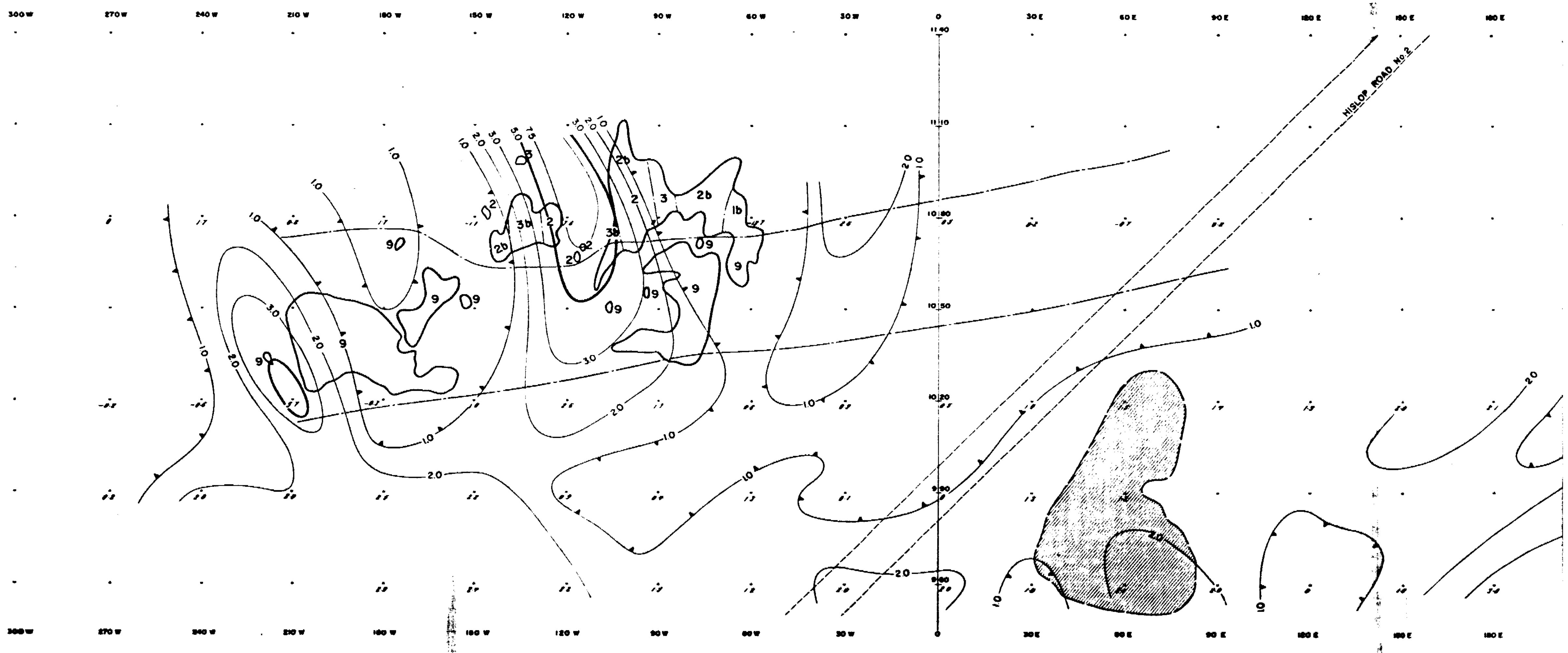
SCALE : 1 : 1000
not to scale

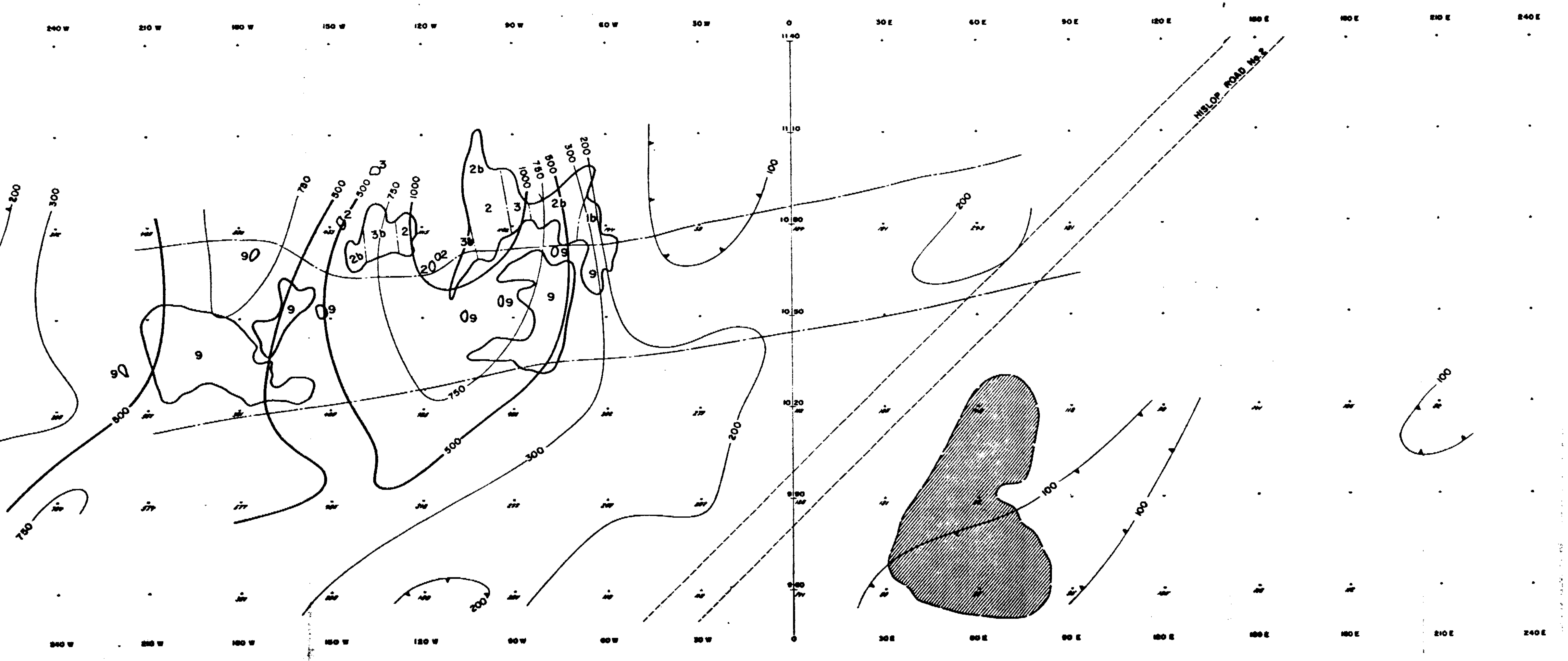
**LEGEND**

CHARGEABILITY ( mV/V )
1, 2, 3, 7.5 ______
5, 10 ______
OUTCROP ______ ☐
1 - ANDESITE
2 - DACITE
3 - RHYOLITE
9 - DIABASE
} a - TUFF, b - BRECCIA
MINERALIZED ZONE (1%-2%) ______ ▨
ROAD ______ / /

SURVEY BY
SCINTREX LIMITED
OCT. - NOV. 1980

PLATE 10


300W
270W
240W
210W
180W
150W
120W
90W
60W
30W
0
30E
60E
90E
120E
150E
180E
11+40
11+10
10+80
10+50
10+20
9+90
9+60
HISLOP ROAD No 2
1.0
2.0
3.0
5.0
7.5
2b
3b
2
3
1b
9



## PANCONTINENTAL MINING CANADA LTD.

MATHESON AREA, HISLOP TOWNSHIP
NORTHEASTERN ONTARIO

# PLAN MAP

## APPARENT RESISTIVITY

a = 30 m, n = 2

DIPOLE - DIPOLE ELECTRODE ARRAY

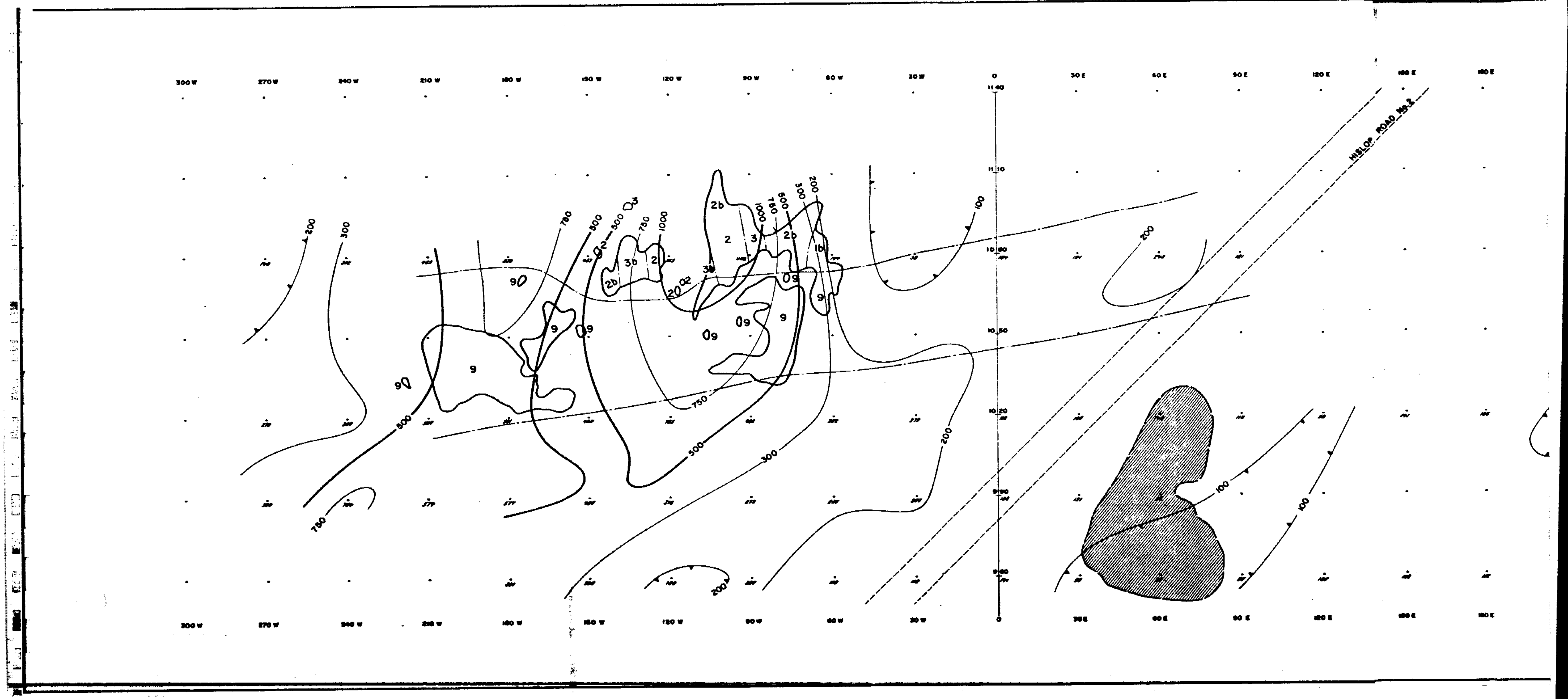
SCALE : 1 : 1000
not to scale

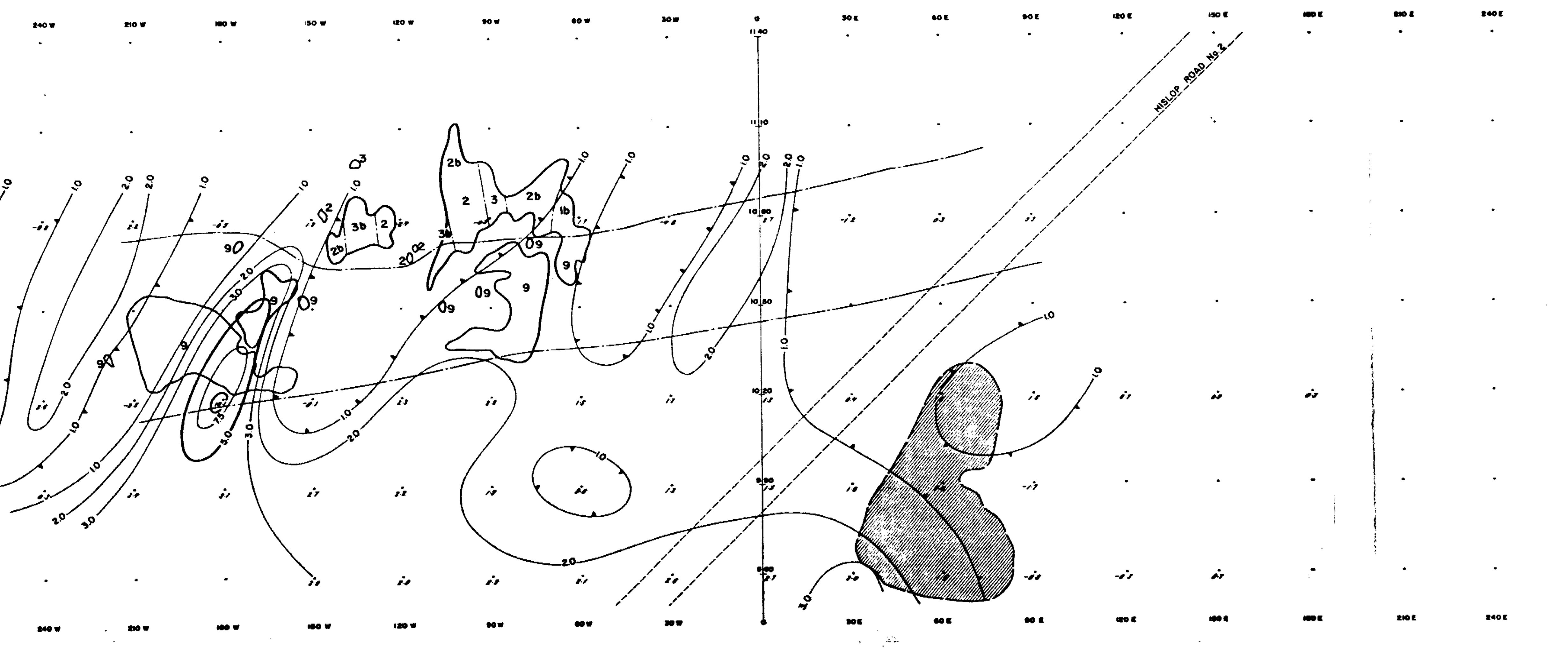
**LEGEND**

RESISTIVITY ( Ω - m )
100, 200, 300, 750 ____________ —
500, 1000 ____________ ━
OUTCROP ____________ ▭
1 - ANDESITE
2 - DACITE
3 - RHYOLITE
9 - DIABASE
} a - TUFF, b - BRECCIA
MINERALIZED ZONE (1% - 2%) ____________ ▨
ROAD ____________ / /

SURVEY BY
SCINTREX LIMITED
OCT. - NOV. 1980

PLATE 11


300 W
270 W
240 W
210 W
180 W
150 W
120 W
90 W
60 W
30 W
0
30 E
60 E
90 E
120 E
150 E
180 E
11+40
11+10
10+80
10+50
10+20
9+90
9+60
HISLOP ROAD No 2
100
200
300
500
750
1000
2b
2
3
3b
1b
9



## PANCONTINENTAL MINING CANADA LTD.

MATHESON AREA, HISLOP TOWNSHIP
NORTHEASTERN ONTARIO

## PLAN MAP

### CHARGEABILITY

a = 30 m, n = 4

DIPOLE - DIPOLE ELECTRODE ARRAY

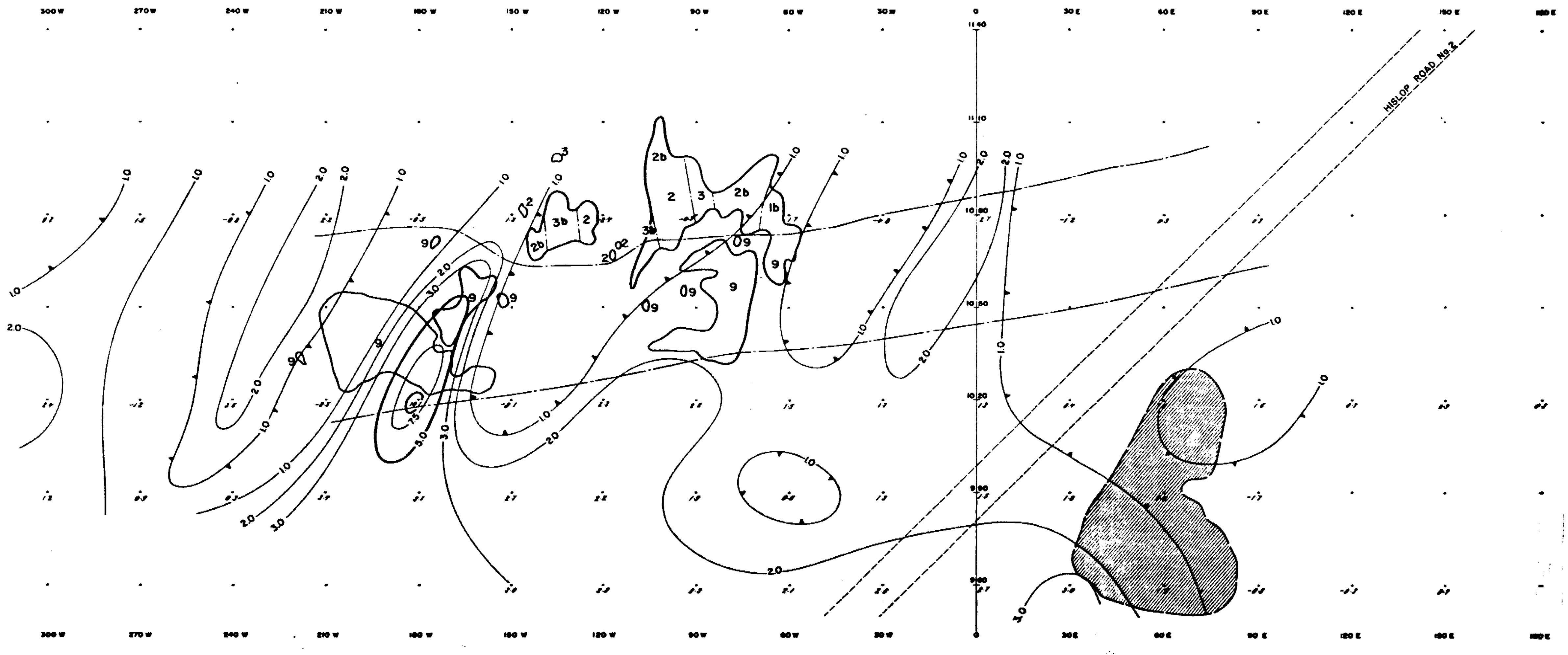
SCALE : 1 : 1000
not to scale

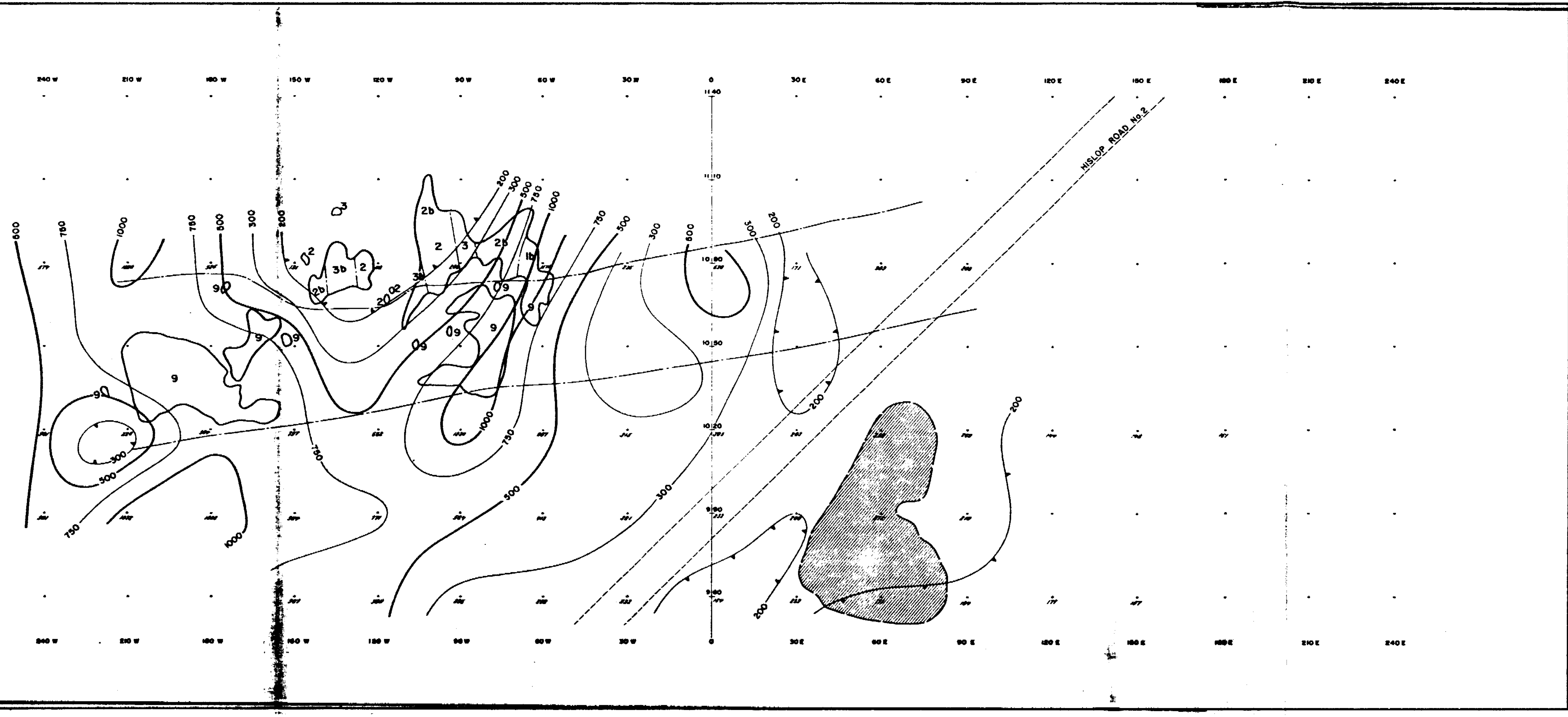
**LEGEND**

CHARGEABILITY ( mV/V )
1, 2, 3, 7.5 ________
5, 10 ________
OUTCROP ________ ☐
1 - ANDESITE
2 - DACITE
3 - RHYOLITE
9 - DIABASE
a - TUFF, b - BRECCIA
MINERALIZED ZONE (1%-2%) ________ ▨
ROAD ________ / /

SURVEY BY
SCINTREX LIMITED
OCT. - NOV. 1980

PLATE 12


300 W
270 W
240 W
210 W
180 W
150 W
120 W
90 W
60 W
30 W
0
30 E
60 E
90 E
120 E
150 E
180 E
11 40
11 10
10 80
10 50
10 20
9 90
9 60
HISLOP ROAD No. 2
1.0
2.0
3.0
5.0
7.5
2b
3b
2
3
1b
3b
9



## PANCONTINENTAL MINING CANADA LTD.

MATHESON AREA, HISLOP TOWNSHIP
NORTHEASTERN ONTARIO

# PLAN MAP

## APPARENT RESISTIVITY

a = 30 m, n = 4

DIPOLE - DIPOLE ELECTRODE ARRAY

SCALE : 1 : 1000

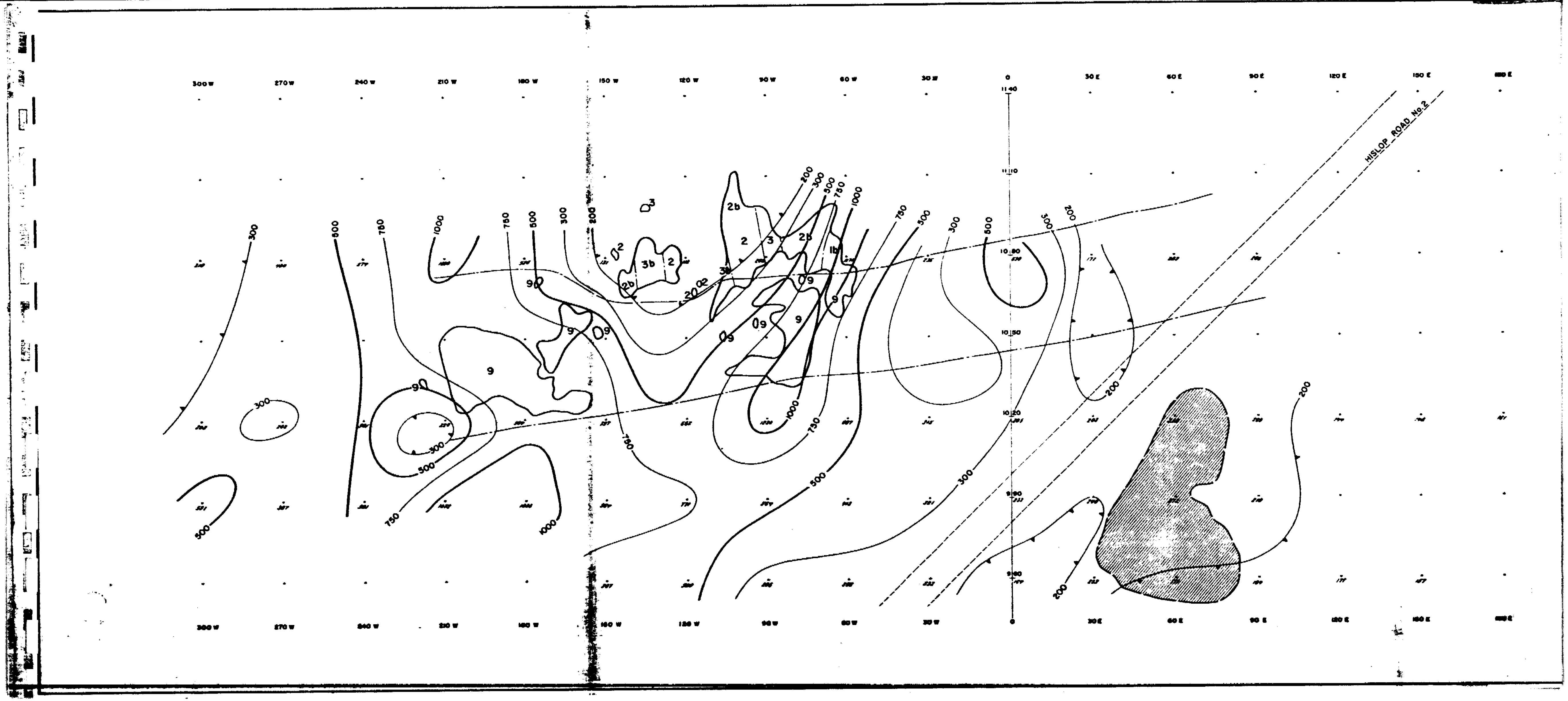
not to scale

**LEGEND**

RESISTIVITY (Ω-m)
100, 200, 300, 750 ______ —
500, 1000 ______ ━
OUTCROP ______ ▭
1 - ANDESITE
2 - DACITE
3 - RHYOLITE
9 - DIABASE
} a - TUFF, b - BRECCIA
MINERALIZED ZONE (1%-2%) ______ ▨
ROAD ______ / /

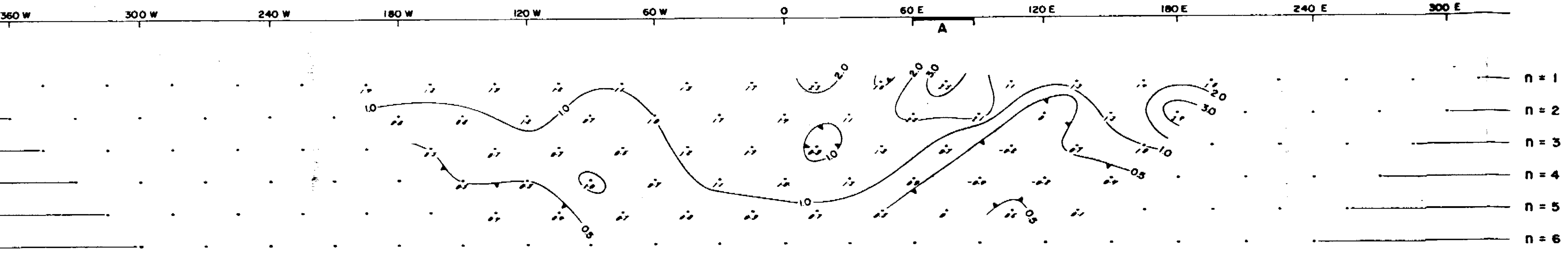
SURVEY BY
SCINTREX LIMITED
OCT. - NOV. 1980

PLATE 13

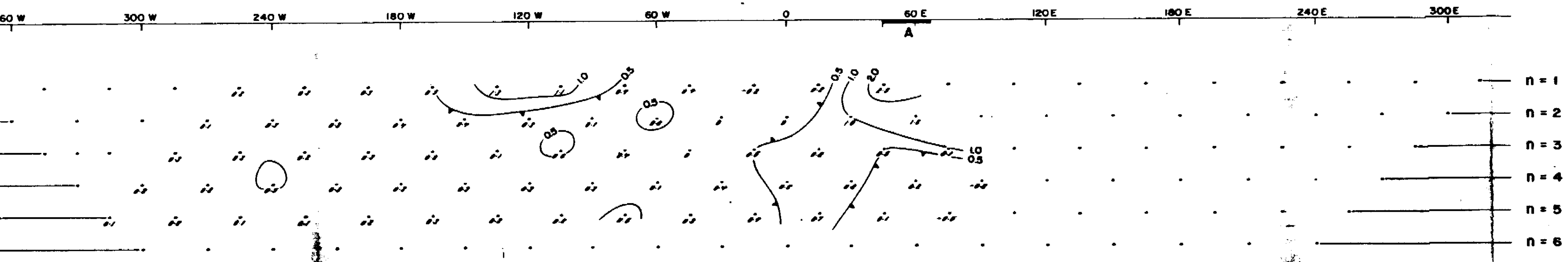


300 W
270 W
240 W
210 W
180 W
150 W
120 W
90 W
60 W
30 W
0
30 E
60 E
90 E
120 E
150 E
180 E
11+40
11+10
10+80
10+50
10+20
9+90
9+60
HISLOP ROAD No. 2
200
300
500
750
1000
2b
3
2
3b
1b
9

**L. 960 N**



**L. 990 N**



# PANCONTINENTAL MINING CANADA LTD.

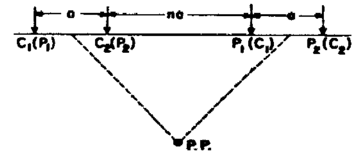
MATHESON AREA, HISLOP TOWNSHIP
NORTHEASTERN ONTARIO

LINE Nos. : 960 N
990 N

## INDUCED POLARIZATION SURVEY

a = 30 m, n = 1, 2, 3, 4, 5, 6
Pulse time : 2 sec.
IPR-10 I.P. RECEIVER
IPC-7 2.5 kW TRANSMITTER

DIPOLE - DIPOLE ELECTRODE ARRAY



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not to scale

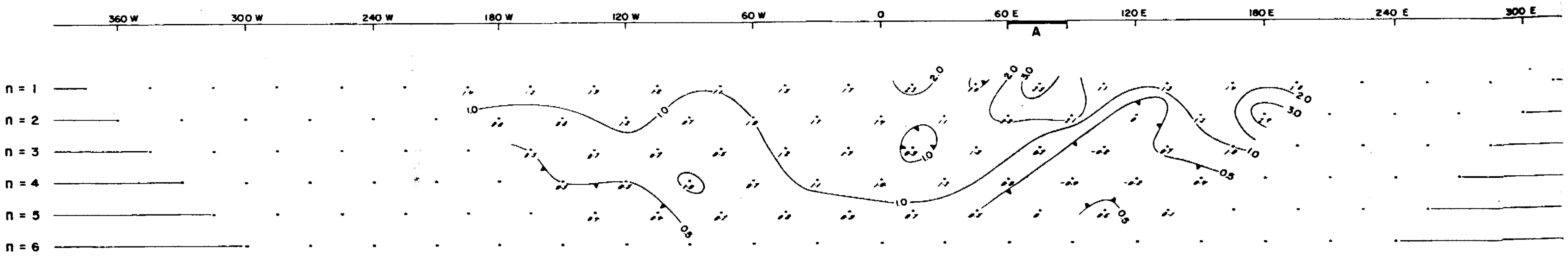
**LEGEND**

METAL FACTOR : ( $\frac{\text{CHARGEABILITY}}{\text{RESISTIVITY}}$ x 100 )

0.5, 1, 2, 3, 5, 7.5 ____________ ∼

SURVEY BY
SCINTREX LIMITED
OCT.- NOV. 1980

PLATE 14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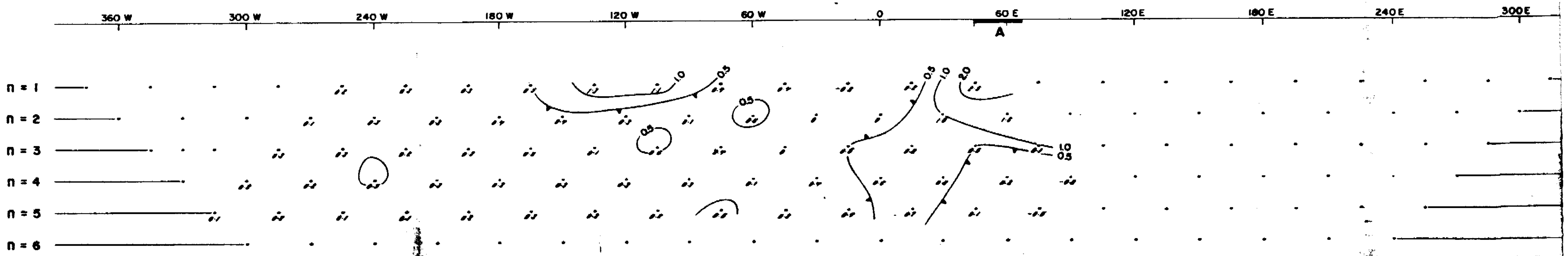
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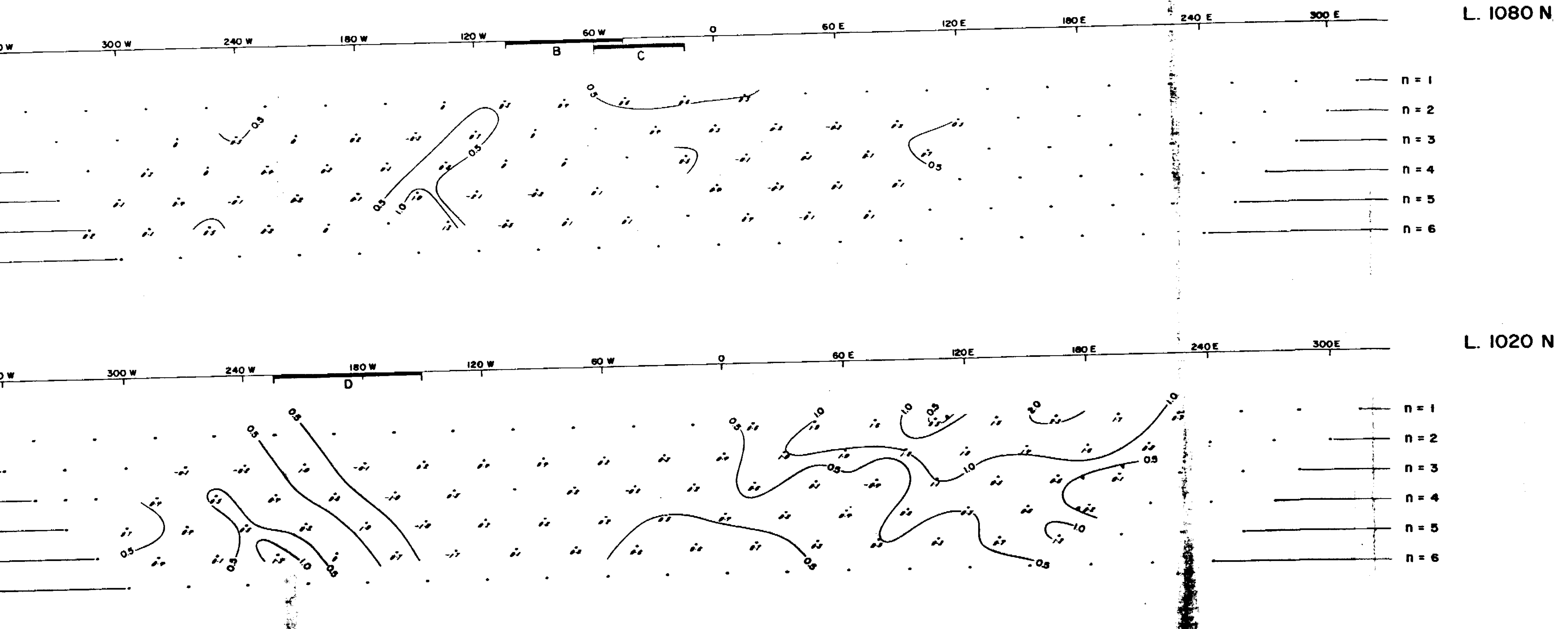


## PANCONTINENTAL MINING CANADA LTD.

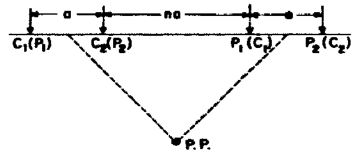
MATHESON AREA, HISLOP TOWNSHIP
NORTHEASTERN ONTARIO

LINE Nos. : 1080 N
1020 N

## INDUCED POLARIZATION SURVEY

a = 30 m, n = 1,2,3,4,5,6
Pulse time : 2 sec.
IPR-10 I.P. RECEIVER
IPC-7 2.5kW TRANSMITTER

DIPOLE - DIPOLE ELECTRODE ARRAY



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not to scale

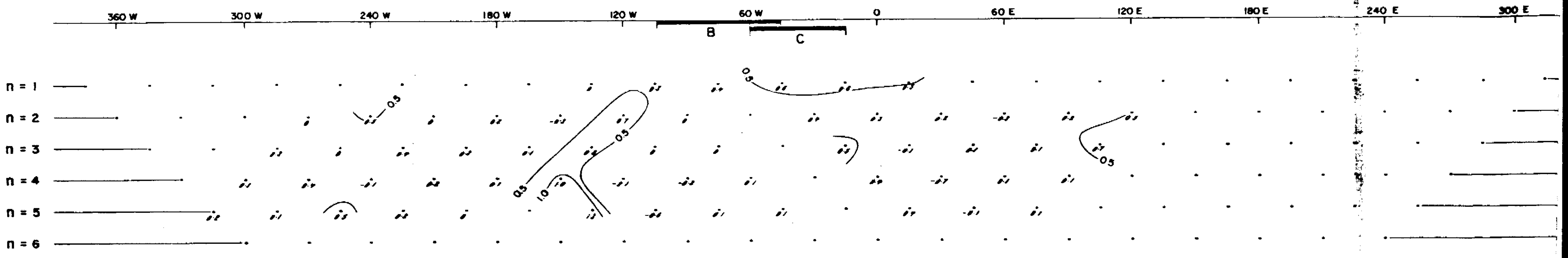
**LEGEND**

METAL FACTOR : $\left( \frac{\text{CHARGEABILITY}}{\text{RESISTIVITY}} \times 100 \right)$

0.5, 1, 2, 3, 5, 7.5 ______________ ~

SURVEY BY
SCINTREX LIMITED
OCT. - NOV. 1980

PLATE 15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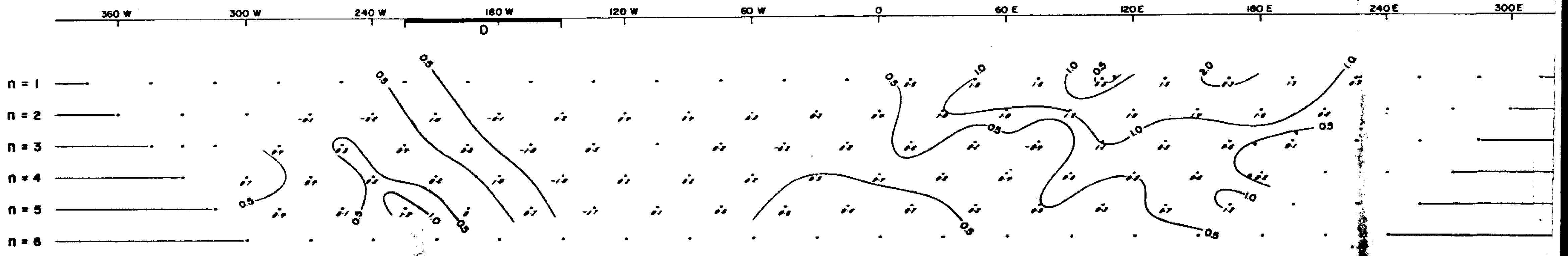
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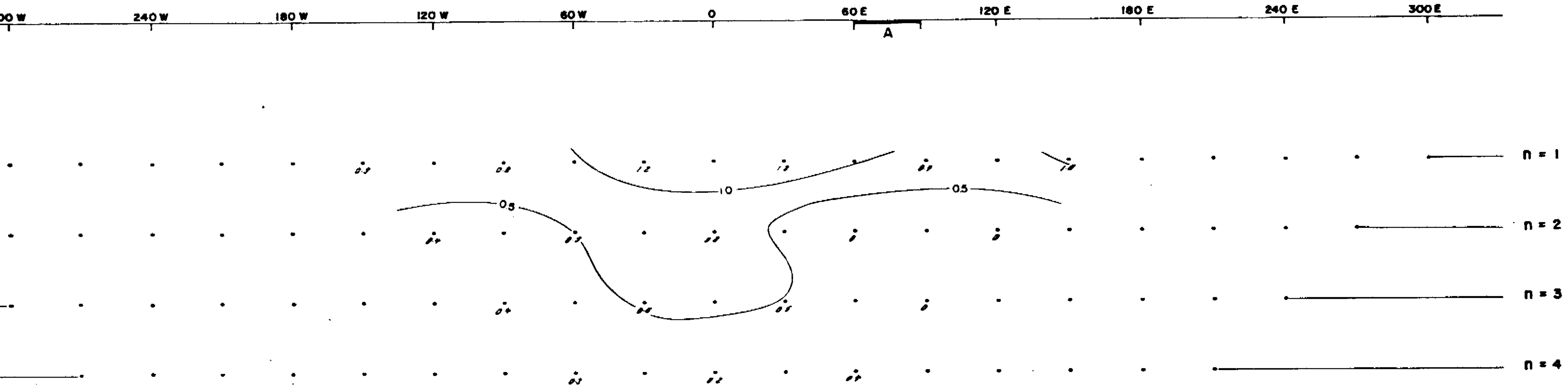
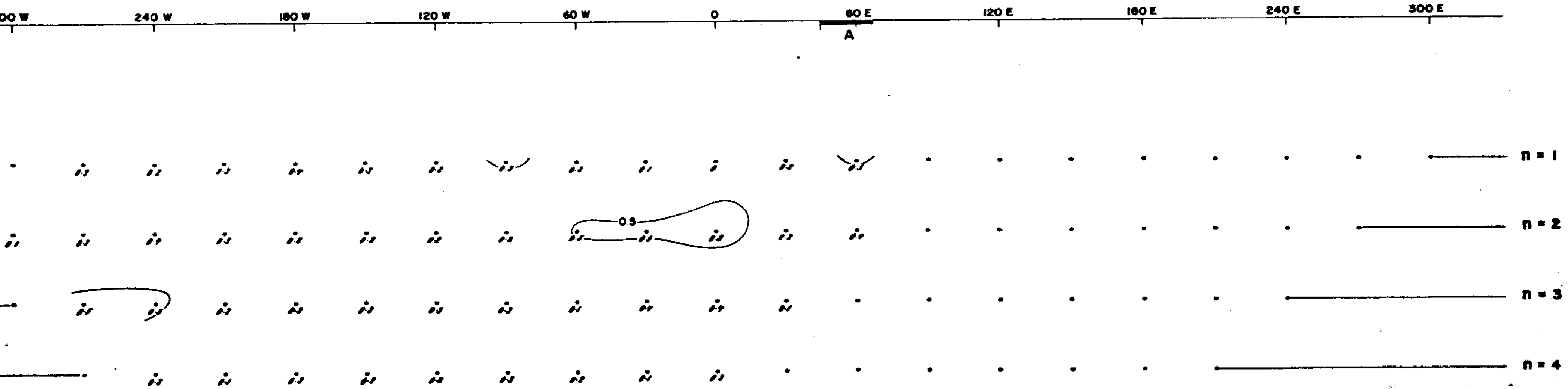
L. 960 N



L. 990 N



## PANCONTINENTAL MINING CANADA LTD.

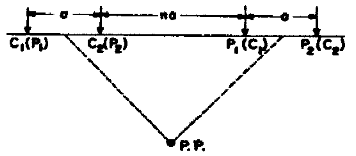
MATHESON AREA, HISLOP TOWNSHIP
NORTHEASTERN ONTARIO

LINE Nos. : 960 N
990 N

## INDUCED POLARIZATION SURVEY

a = 60 m, n = 1,2,3,4
Pulse time : 2 sec.
IPR-10 I.P. RECEIVER
IPC-7 2.5 kW TRANSMITTER

DIPOLE-DIPOLE ELECTRODE ARRAY



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not to scale

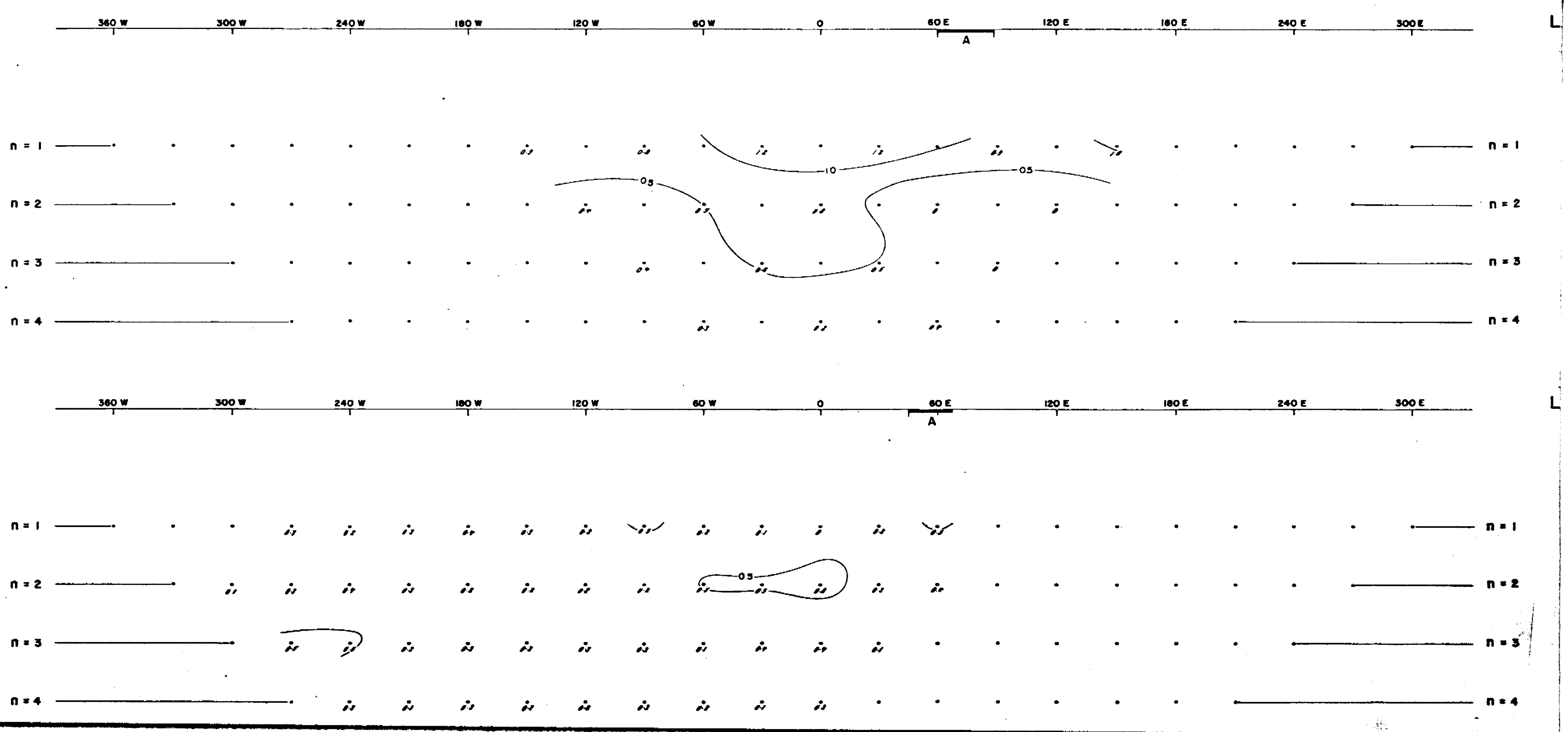
**LEGEND**

METAL FACTOR : $\left( \frac{\text{CHARGEABILITY}}{\text{RESISTIVITY}} \times 100 \right)$

0.5, 1, 2, 3, 5, 7.5 ———— ∼

SURVEY BY
SCINTREX LIMITED
OCT.- NOV. 1980

PLATE 16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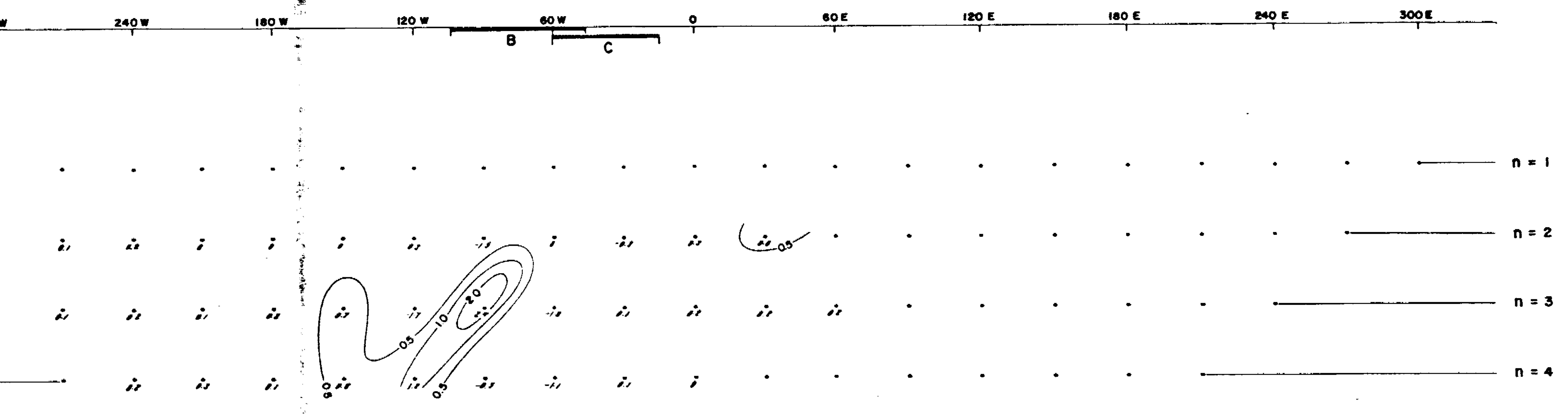
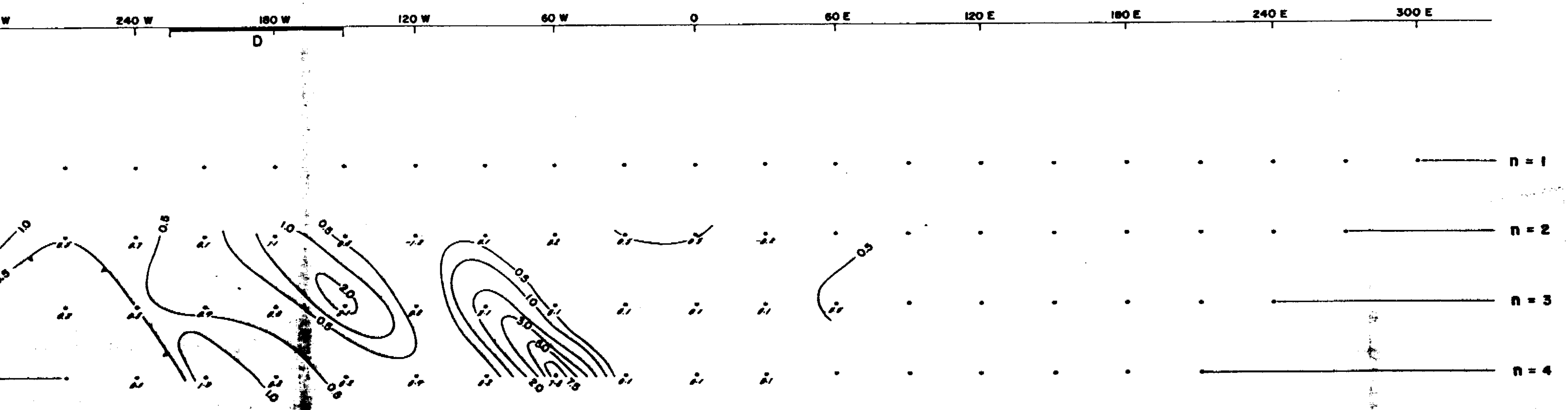
L. 1080 N



L. 1020 N



## PANCONTINENTAL MINING CANADA LTD.

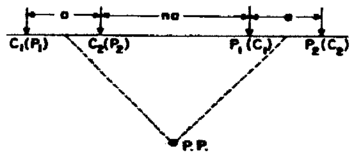
MATHESON AREA, HISLOP TOWNSHIP
NORTHEASTERN ONTARIO

LINE Nos. : 1080 N
1020 N

## INDUCED POLARIZATION SURVEY

a = 60 m, n = 1, 2, 3, 4
Pulse time : 2 sec.
IPR-10 I. P. RECEIVER
IPC-7 2.5 kW TRANSMITTER

DIPOLE - DIPOLE ELECTRODE ARRAY



SCALE : 1 : 1500
not to scale

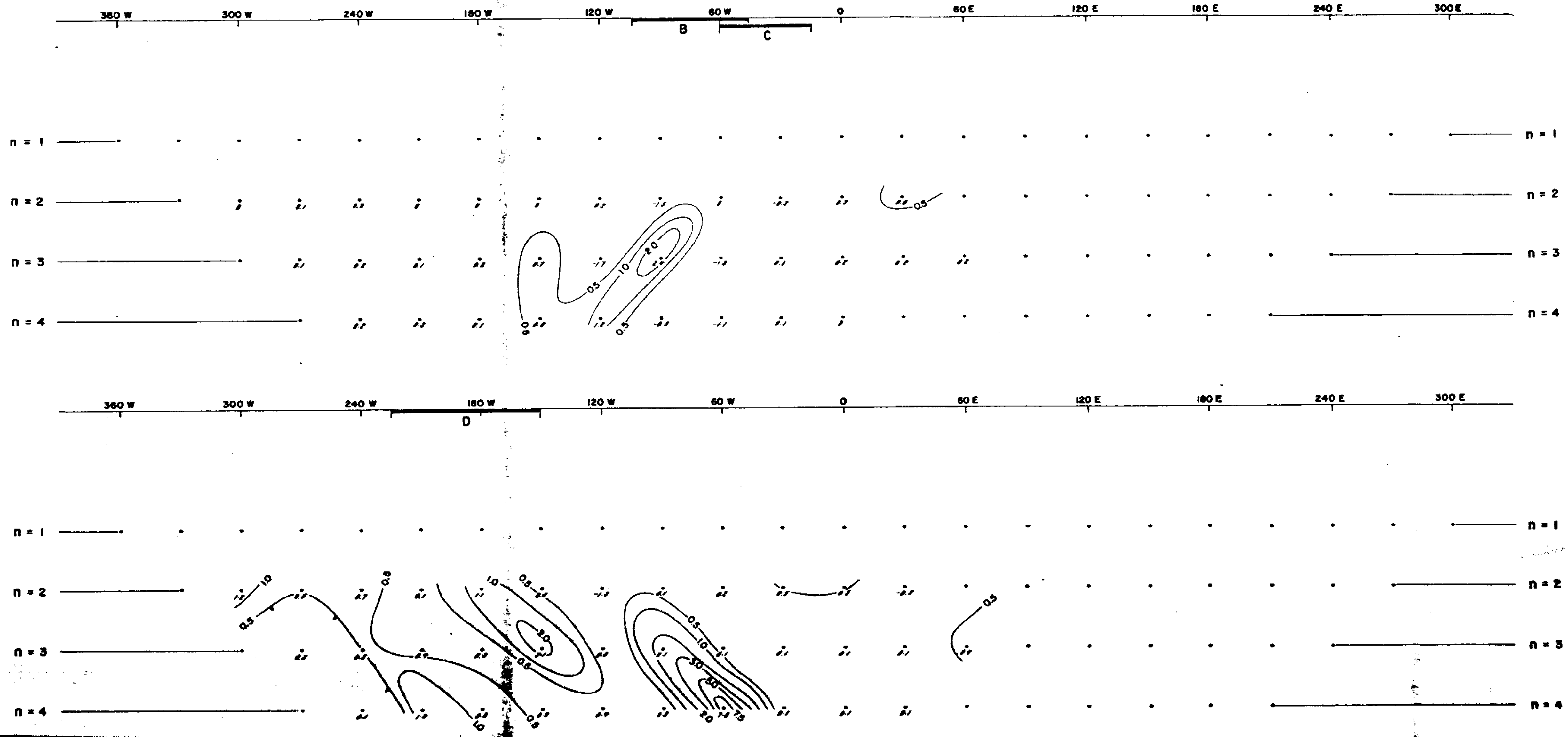
**LEGEND**

METAL FACTOR : ( CHARGEABILITY / RESISTIVITY X 100 )

0.5, 1, 2, 3, 5, 7.5 ____________

SURVEY BY
SCINTREX LIMITED
OCT. - NOV. 1980

PLATE 17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n = 4
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5.0
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030

0M9-PE7-C-80

## Appendix II
## Pan Continental Mining Limited

# REPORT ON HISLOP TOWNSHIP GOLD PROPERTY

Robert Valliant
University of Western Ontario
London, Ontario

April 6, 1981

Pan Continental Mining Limited

# Report Concerning the Hislop Township Gold Property

## Introduction

This report states the results of a short study of the Hislop township gold property which was undertaken to aid in the correlation of lithostratigraphic units, to qualify some of the effects of rock alteration and to determine the nature of gold-bearing strata. The Hislop township property was visited on March 8th and 9th, 1981 where diamond drill core and available geological plans and sections were examined. Subsequently, 20 thin and polished thin sections of ore and country rock were examined at the University of Western Ontario.

## Stratigraphy

Examination of diamond drill core from holes G-1, G-5, G-6, G-7, P-10 and P-14 in section 963.4 N permitted the following stratigraphic section to be compiled:

| | West | East |
|---|---|---|
| Youngest | greywacke | greywacke |
| | felsic pyroclastic rocks | felsic pyroclastic rocks |
| | felsic, feldspar porphyry | interbedded pelite and ash tuff, -numerous auriferous cherts |
| | | auriferous chert |
| | U.M. flows and flow breccias | chloritic tuff |
| Oldest | | |

These rock units strike approximately E-W and dip 60°SE. The units were delineated based on the relative abundance of a particular rock type within any stratigraphic section. This allows a general understanding of the stratigraphic sequence before attempting to map individual beds in detail. The rocks at the base of the sequence are relatively undeformed but pelite and greywacke in the southwest, near the top of the sequence are brecciated, faulted and exhibit numerous small scale folds indicative of synsedimentary slumping. The correlation of units in the upper part of the stratigraphic section is difficult due to this soft sediment deformation.

## Rock Descriptions

A total of 35 hand samples, 11 thin sections and 7 polished thin sections were examined and the following is a summary of sample descriptions.

### Chloritic tuff

(Thin sections G6-194, G6-196, G1-200, G1-248, G5-318, G7-223)

The rock is dark green and contains irregular, ragged, chloritic fragments from 0.4 to 4 mm long which constitute from 3 to 11 percent of the sample. Disseminated, pale-pink anhedral grains are 7 percent of the rock and average 0.5 mm in maximum dimension. Sample G1-248 contains 15 percent of brick red, anhedral grains which average 0.5 mm in diameter.

Light green laths of plagioclase comprise the majority of the matrix and in places fracture controlled hematite and chlorite alteration is 1 percent of the rock. In thin section the chloritic fragments are pale green, poikilitic, irregular flakes with red-brown or dark blue birefringence. Subrounded, broken and in places, prismatic quartz grains comprise 10 percent of the rock and are up to 200 μm in diameter. Randomly oriented, resorbed, lath-shaped grains of plagioclase comprise 50 percent of the rock and are up to 250 μm long. The plagioclase contains inclusions of muscovite, epidote and carbonate and in places, only relict lath-shaped aggregates of muscovite, epidote and carbonate dusted by opaque minerals (hematite?) occur. The hematite may be so abundant that it defines skeletal, feathery, pink-coloured grains. The matrix is very fine grained, inhomogeneous and consists of carbonate, epidote, chlorite, muscovite and quartz. Anhedral, poikilitic hematite grains are up to 3 percent of the rock and are the pink grains visible in hand sample.

Samples G1-200 and G6-194 are both from the chloritic tuff unit but have a bleached light green to cream colour. In hand sample the dark-green chloritic fragments and pale-pink grains are visible however in thin section the rock has been pervasively altered to muscovite, epidote, minor carbonate and anhedral quartzo-feldspathic aggregates. Subround and broken quartz grains are preserved as are the skeletal hematite grains.

## Basal ore zone

(Thin sections G1-148, G1-153, G5-301, G6-172, G7-196)

Auriferous rock overlying the chloritic tuff is very fine grained, chert-/carbonate-rich and usually brecciated. Two varieties of this rock occur. The first contains white, carbonate-rich angular fragments up to 1.5 cm in maximum dimension surrounded by aphanitic, black (graphitic) chert which contains up to 8 percent disseminated pyrite. The second consists of finely laminated, dark grey to black, angular fragments which appear to be broken beds. These fragments are very siliceous and surrounded by quartz-/carbonate-veinlets and contain an average of 5 percent disseminated pyrite. In places, these chert-/carbonate rocks contain numerous thin interbeds of light-green pelite or form the matrix to plagioclase-rich tuffaceous rocks.

The quartz-carbonate rock consists of an interlocking matrix of up to 42 percent of recrystallized, irregular, quartz grains averaging 20 μm in maximum dimension and up to 33 percent of anhedral patches and grains of carbonate which are, in places distributed in subparallel layers. Muscovite is from 2 percent to 15 percent of the rock as very fine disseminated grains and anastomosing layers in the chert matrix. Black, opaque, carbonaceous material is from 3 to 20 percent of the rock as a fine dusting throughout the chert matrix or as thin layers within muscovite-rich layers. Disseminated, subhedral pyrite grains are from 3 to

18 percent of the matrix and range from 10 to 200 μm in maximum dimension. Epidote, apatite, sphene, chlorite and albite are accessory minerals.

Sample G7-196 is a feldspar porphyritic auriferous rock which contains 22 percent of subhedral and broken recrystallized albite grains up to 2 mm long which are surrounded by 33 percent of tabular grains and radiating sheaves of albite which average 150 μm in maximum dimension. This rock has a similar texture as unaltered chloritic tuff but the plagioclase is supported in a black, chert-/carbonate-matrix.

## Upper gold-bearing rocks

(Thin sections G5-106, G5-191.5, G1-108)

Gold-bearing rocks in the pelitic sedimentary strata are predominately banded and brecciated black chert with less than 2 percent very fine grained, disseminated sulphide or cream-coloured chert with approximately 5 percent pyrite. Both types of chert as well as nearby pelite are transected by white, in places auriferous, quartz-/carbonate-veinlets.

In thin section the chert consists of 54 percent recrystallized, slightly elongated, strained, quartz grains from 10 to 60 μm in diameter, 19 percent anhedral, resorbed grains up to 600 μm in maximum dimension and 18 percent, anhedral carbonate grains up to 150 μm in diameter and veinlets up to 100 μm thick. Fine disseminated flakes and wispy aggregates of muscovite comprise up to 5 percent of the rock. Epidote and apatite together form approximately 1 percent as 10 to 20 μm in diameter, subhedral grains.

Auriferous quartz veins which crosscut the chert layers are comprised of coarse, broken and resorbed quartz grains which are transected by anastomosing to subparallel shears. These shears grade inwards from unaffected quartz to a border zone of finely recrystallized subgrains which are elongated perpendicular to the boundary of the shear to a center zone of strained, recrystallized and elongated carbonate grains. In places, the orientation of the elongated grains suggests a sinistral movement on the shear. Where the quartz veins transect pelite, the pelite is chloritized and contains up to 3 percent pyrite.

## Pelitic sedimentary rock

(Thin section G7-134)

This rock is massive, grey-green and contains up to 20 percent of ragged and fiamme-shapped, blue birefringent, chlorite flakes which are up to 50 μm long. The matrix consists of very fine grained muscovite and carbonate with isolated relict patches of ultrafine quartz and feldspar. Veinlets of carbonate up to 300 μm thick crosscut the pelite. These veinlets contain thin ladder veins of quartz. Narrow fractures which are bordered by muscovite crosscut the quartz veinlets and in places are offset by the quartz veinlets.

## Feldspar porphyry

(Thin section P14-172)

Subhedral albite phenocrysts comprise approximately 65 percent of the sample and have a maximum length of 6 mm. These are well zoned, twinned, poikilitic grains containing numerous muscovite and carbonate inclusions. The matrix consists of equal proportions of anhedral carbonate grains and tabular flakes of muscovite which are up to 600 μm in maximum dimension. Epidote is a minor proportion of the rock as 30 μm long rhombic grains. Hematite occurs as ultrafine anhedral to subhedral, disseminated grains which impart a deep-red colour to the matrix as well as subhedral, disseminated grains up to 0.5 mm in diameter which comprise 2 percent of the rock. Randomly oriented muscovite-/and carbonate-filled fractures transect the rock.

## Felsic pyroclastic rock

(Thin sections G2-131, P14-143)

Cream and white, lenticular and broken quartz and feldspar porphyritic lithic fragments from 50 μm to 1.3 cm in maximum dimension comprise up to 65 percent of the samples. The coarser-grained fragments have a thin pyrite-/chlorite-rich rim. In general, the fragments contain inclusions of muscovite and carbonate however in places only relict poikilitic fragments are recognizable which consist of aggregates of muscovite, carbonate and epidote. Lenticular quartz grains up to 1 mm in maximum dimension comprise

10 percent of the rock and Fe-oxide-/pyrite-bearing chert fragments are a minor component in most samples. The matrix consists of ultrafine quartz and feldspar grains within anastomosing, foliated layers of yellow muscovite. The foliation is most prominent in zones containing microscopic laminations of chlorite. Sample P14-143 contains 1 percent of anhedral patches of lime green (Cr-rich) muscovite which range up to 1.5 mm thick by 1.5 cm long as well as 1 percent of irregular, black fragments of similar dimensions.

## Geochemistry

Semi-quantitative, multi-element geochemistry (Barringer document: S03, Pan Con Mining Ltd.) of samples from diamond drill holes G-1, G-5, G-6 and G-7 verifies and distinguishes the stratigraphic units identified during diamond drill core and sample examination. Both the chloritic tuff and basal ore zone exhibit distinct chemical changes along strike which relate to facies changes within the unit as well as effects of alteration. Gold-bearing rock in the top half of the stratigraphic sequence is clearly different in major and trace element geochemistry than adjacent pelitic rock. These upper auriferous zones are also significantly different than the basal ore zone. The pelitic sedimentary rock exhibits some variability in its chemistry and can probably be subdivided into useful stratigraphic marker horizons during detailed core logging.

## Chloritic tuff

The chloritic tuff in D.D.H. G-5, which is petrographically the least altered of the drill core examined, is a relatively Ca-/Mg-/Co-/Ni-/(±Cr, ±Zn)-rich rock. The chemistry reflects the high chlorite content of the rock and suggests that it is mafic, or even ultramafic in composition. Samples from D.D.H. G-1 and G-6 are much more aluminous and potassic and in general contain a greater abundance of $P_2O_5$, Cu, (±Be, ±Zr) and a lesser abundance of CaO, MgO, MnO, (±$Fe_2O_3$) than the chloritic tuff in D.D.H. G-5. These changes reflect a lower abundance of carbonate, chlorite and a pervasive sericitization of the rock. Rock samples from D.D.H. G-7 have intermediate chemical and mineralogical properties to G-1 and G-5.

## Basal ore zone

Gold-bearing rock immediately overlying the chloritic tuff is distinguished by a relatively great abundance of $Al_2O_3$, $K_2O$, $P_2O_5$, Th, Zr, Mo, (±Sr, ±Be) and a low abundance of $Fe_2O_3$, CaO, MgO, $TiO_2$, MnO, Co, V, Zn, (±Ni) relative to adjacent rocks. The apatite and molybdenite content of these rocks distinguish them from gold-bearing rocks higher in the stratigraphic sequence. Samples from diamond drill hole G-6 are less aluminous and potassic and contain more CaO, MgO, Cr, Ni and Ag. These changes in major element concentration are due to a facies change along the strike of the ore zone to a muscovite-poor, carbonate-rich rock. Petrographically these rocks are variable and contain mixtures of tuffaceous material and chemical sediment (sample G7-196) which grade into inhomogeneous aggregates of predominately chemical sedimentary material including chert, carbonate minerals, carbonaceous material, pyrite and minor amounts of muscovite. Although $SiO_2$ and $Na_2O$ analyses are not available, these two elements would more readily indicate the relative abundances of the cherty and tuffaceous (plagioclase-rich) components of these rocks.

## Upper auriferous strata

Most Au-bearing strata in the upper parts of the stratigraphic sequence are distinct in their geochemical signature from the basal ore zone. In general, they contain a low abundance of $Al_2O_3$, $K_2O$, FeO, $TiO_2$, MnO, MgO, CaO, Be, Co, Zr, Zn, V, Sr and a greater abundance of Ag (±Mo, ±Cu, ±Pb) relative to the basal ore zone. The Ag probably occurs within the sulphosalts pearceite and proustite which were not observed in the basal ore zone. Variations occur which may be due to admixture of a tuffaceous component to the auriferous rock or metal zoning during Au deposition. Also, samples were not taken according to lithologic type and therefore any sample interval may represent a contamination of two or more rock types. This makes correlation between the upper, narrow auriferous layers from drill hole to drill hole difficult.

The low abundance of major elements in the upper gold-bearing rocks suggests that the auriferous rock is very siliceous however sample collection was not rigorous enough to determine whether the Au was contained within quartz veins or chert beds. The relatively low $TiO_2$ and Zr suggests that these rocks are not siliceous felsic tuffs.

## Discussion

The stratigraphic sequence exposed by diamond drilling at the Hislop property consists of a basal mafic tuff rich in hematite and iron-magnesium chlorite. This mafic tuff may be stratigraphically equivalent to the andesite tuff hosting gold mineralization at the Ross Mine (Akande, 1977) and hence its complete thickness should be tested by diamond drilling. The tuff is transected by a zone of pervasive sericite alteration which occurs at the upper part of the unit and is thickest near surface and thins progressively with depth. Sericite alteration is similarly associated with other gold deposits (Boyle, 1979, pg. 209; Bain, 1933) and is clearly a hydrothermal alteration associated with gold deposition. The formation of sericite, dissolution of carbonate and destruction of chlorite in this alteration zone implies that the hydrothermal fluids were heated and acidic whereas the hematite requires oxidizing conditions. Hematite alteration is also present at the Ross Mine, Hislop township and at many gold occurrences in the

Timmins area.

The basal gold-bearing zone overlying the chloritic tuff is a stratiform quartz-carbonate rock which has many similarities to the number 14 vein system at the Ross Mine (Akande, 1977). Assay values on section 963.4 North illustrate that the highest grade parts of the zone are near surface and overly the most intense and thickest sections of sericitized mafic tuff. Assay values decrease with depth and therefore this zone may not continue much deeper than -127 m where it was intersected by D.D.H. P-10.

Lenticular, discontinuous auriferous zones reoccur higher in the stratigraphic sequence within interbedded pelitic sedimentary rocks and ash tuffs. These stratiform zones have a higher Au and Ag content than the basal ore zone but they lack down-dip continuity. The possibility that these zones may continue as elongate "shoots" plunging to the N.W. or S.E. should be investigated through further drill core examination and geochemical work on other sections. The brecciated and slumped nature of the hosting pelitic sedimentary rock suggests that the auriferous rock may once have had a greater lateral extent but was also slumped and dismembered into isolated smaller auriferous accumulations. In this case closely spaced drilling is necessary to delineate ore-bearing units and large tonnage-low grade mining may be the only method to recover these reserves.

Felsic, lithic tuffs overly the gold-bearing strata.

These tuffs were not observed to contain Au-mineralization and may therefore serve as a useful hanging wall marker to the gold-bearing rocks during exploration drilling. The coarse grain size of these rocks indicate that they were deposited relatively proximal to an eruptive vent. Felsic volcanic and pyroclastic rocks have a close spatial association to other gold deposits and cap Au-bearing stratigraphic sequences at Timmins (Roberts, 1980), Bousquet township, Quebec (Valliant and Hutchinson, in press), Joutel, Quebec (Barnett, 1979) and the Uchi Lake volcanic belt (Thurston, 1979). The pyroclastic rocks are overlain by a thick sequence of parallel laminated, graded, cross-laminated and slumped greywackes indicative of a turbidity fan depositional environment (Bouma, 1962; Dimroth and Rocheleau, 1979).

The stratigraphic sequence transected by D.D.H. P-14 at the S.W. part of the section is significantly different than that to the N.E. The base of the section is mafic rock of the chloritic tuff unit. This is overlain by thin, ultramafic flows and flow breccias. The basal ore zone does not appear in this drill hole and it is not known whether it should occur at the base of the flow sequence or onlapping the flows. Feldspar porphyry overlies the ultramafic rock and is strongly hematized, fractured, veined and contains anhydrite. This rock is very similar to "syenite" described at the Ross mine (Akande, 1977) which hosts the

18 vein system. These are described as stockwork quartz veinlets with minor amounts of sericite, dolomite, calcite, anhydrite, chalcopyrite, pyrite, bornite, chalcocite, tennantite and gold as native metal and calaverite. Gold-bearing intermediate to felsic porphyritic intrusive rocks are common within the Abitibi greenstone belt (Latulippe, 1976; Abel, 1967) however more recent interpretation of some of these rocks suggests that they are hypabyssal or extrusive lava domes rather than late stocks or plugs intruded during regional deformation (Valliant and Hutchinson, in press; Roberts, 1980). Although seafloor, exhalative hydrothermal activity has been proposed as a genetic model to explain stratiform Au-deposits (Ridler, 1970, 1976; Fryer and Hutchinson, 1976; Karvinen, 1976; Barnett et al., in press) only minor mention has been made of the end of volcanic cycle felsic "domes". These felsic rocks appear to be genetically important and are common hosts for Au-mineralization as at the Ross mine, Camflo mine, Quebec and Schumaker mine, Timmins.

Felsic pyroclastic rocks which constitute the top part of the volcanic sequence correlate with the pyroclastic rocks at the N.E. part of section 963.4 N. These rocks contain felsic lithic fragments and in places, hematized fragments. This suggests that they are genetically related to the underlying feldspar porphyry and they may represent the extrusive pyroclastic equivalent to the "lava dome".

The interpretation is that ultramafic flows and associated mafic-ultramafic chloritic tuffs were erupted onto the seafloor and were overlain by a felsic lava dome. Hydrothermal activity related to the emplacement of the dome resulted in deposition of an auriferous chert bed which onlapped the edge of the dome. Volcaniclastic sedimentary rocks, probably derived from nearby volcanic topographic highs filled topographic depressions and abutted the dome. Intercalated auriferous cherts were deposited during short-lived periods of hydrothermal exhalative activity. The continuing growth of the dome during sedimentation resulted in slumping and brecciation of the sedimentary strata adjacent to the dome. Volcanism ended with a violent eruption of felsic pyroclastic material from the dome itself or from a nearby vent area.

## Recommendations

1. Deep drilling to establish stratigraphy down-dip from the felsic porphyry and to determine whether auriferous sediments reoccur at deeper levels.
2. Drilling and assaying of the porphyritic rock to determine its gold content.
3. Re-evaluation of past drilling and further exploration drilling along strike to determine the extent and re-occurrences of the basal auriferous chert and auriferous cherts in the pelitic sedimentary rocks.

4. Deep stratigraphic drilling to probe the chloritic tuff which may be the host to the 14 vein system at the Ross mine as well as to test for the repetition of gold-bearing rocks below the chloritic tuff.

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OM9-PE7-C-80

# HISLOP GOLD PROJECT

## Diamond Drill Logs for 1980 Exploration Program.
## Appendix III

Prepared by: Neil Novak
Project Geologist

CM9 - PE7 - C -80

GUNNEX LIMITED.

D.D-Hole No. P - 1

PROJECT HISLOP TWP. (PANCONTINENTAL - GUNNEX)

Sheet No.

LOCATION HISLOP TWP.
LOTS 3 & 4, CON. 3
HOLE STARTED 30 Sept./80
HOLE COMPLETED 3 Oct./80
CORE RECOVERY 99%
DRILLED BY HEATH & SHERWOOD
LOGGED BY W. F. DIX

| SURVEY | | |
|---|---|---|
| DEPTH | DIP | AZIMUTH |
| COLLAR | -45° | |
| 16.5 | -41° | |
| 61.0 | -36.25° | |
| | | |
| | | |
| | | |

COLLAR. LAT. 1010 N
DEP. 3.2 E
ELEV. 5000.6 m
AZIMUTH 045° T
DIP -45°
LENGTH 83.8 m
HOR. PROJ. VERT. PROJ.

| FOOTAGE | | DESCRIPTION. | SAMPLING | | | | | Au. | | |
|---|---|---|---|---|---|---|---|---|---|---|
| FROM m | TO m | | NO | FROM | TO | FEET | | | | |
| 0 | 16.5 | Cading | | | | | | | | |
| 16.5 | 31.95 | dacite - pale grey green, m. grained, foliated at 60° CA. - scattered white qtz - feld veins to ½" conformable to foliation. | | | | | | | | |
| | | 21.16 - 20.42 - 40% sericite with some bx, grey qtz-feld veining in fractures visible py. | 3501<br>3608 | 20.17<br>20.53 | 20.53<br>21.20 | 0.36<br>0.67 | | 0.01<br>0.05 | | |
| | | 21.2 - 21.5 - bx with 20% dk grey qtz and some fine py along qtz rims | 3502<br>3609 | 21.20<br>22.1 | 22.1<br>23.1 | 0.9<br>1.0 | | 0.14<br>0.005 | | |
| | | 21.68 - 21.92 40% sericite with lenses and blebs of dk dk grey qtz - carb. Few grains py. | | | | | | | | |
| | | 22.0 - 2 cm dk grey qtz lenses in bx with fine py around edges. | | | | | | | | |

GUNNEX LIMITED

PROJECT HISLOP TWP.(PANCONTINENTAL - GUNNEX)

HOLE NO. P - 1

SHEET NO. 2

| FOOTAGE | | DESCRIPTION | SAMPLING | | | | | Au. | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| FROM | TO | | NO. | FROM | TO | FEET | | | | | |
| | | 25.8 - 28.7 - possibly tuff - buff grey green and strongly foliated. | | | | | | | | | |
| | | 27.9 - 5cm brown non-carb. cutting foliation. | | | | | | | | | |
| | | 30.6 - 20cm brown non-carb. cutting foliation. | | | | | | | | | |
| | | 31.6 - 31.95 - possible tuff, buff-green & foliated. | | | | | | | | | |
| 31.95 | 36.60 | Andesite or dacitic andesite, grey-green & darker than above. Numerous narrow veinlets white qtz-feld-carb. conformable to foliation at 65° to CA. Some carb. alteration on fractures. | | | | | | | | | |
| 36.6 | 46.3 | Dacite tuff & bx - grey green, flow bx - shaped frags. Foliation at 70° to CA. | | | | | | | | | |
| | | 396 - 40.2 - qtz.-feld. veining to 8cm no vis sulphide, minor maripozite | | | | | | | | | |
| | | 40.6 - few py grains along foliation planes. | | | | | | | | | |
| | | 44.25 - 44.5 - white qtz.-feld vein with brown oxide stain and vis. py. | 3503 | 44.25 | 45.20 | 0.95 | | 0.03 | | | |
| | | 44.5 - 45.2 - scattered grains py | | | | | | | | | |
| 46.3 | 47.5 | Altered (feldspathization?) dacite bx, buff-grey, partial obliteration of texture. some pale reddish-brown colouration. Probably incipient syenitization. | | | | | | | | | |
| 47.5 | 50.6 | Dacite - foliated at 70° to CA. grey-green, some bx texture | | | | | | | | | |
| 50.6 | 51.5 | Andesite, f.g., dk green, sharp contacts (dike?). Irregular qtz.- feld. veining. | | | | | | | | | |

GUNNEX LIMITED

HOLE NO. P - 1

PROJECT HISLOP TWP. (PANCONTINENTAL - GUNNEX)

SHEET NO. 3

| FOOTAGE | | DESCRIPTION | SAMPLING | | | | | Au. | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| FROM | TO | | NO. | FROM | TO | FEET | | | | | |
| 51.5 | 56.28 | Dacite, foliated, flow bx texture, pale grey-green. | | | | | | | | | |
| | | 52.8 - 5cm grey qtz with vis. py. | | | | | | | | | |
| | | 53.26 - 53.56 - brown Fe-carb alteration. | | | | | | | | | |
| | | 55.18 - 55.50 - brown Fe-carb alteration | | | | | | | | | |
| 56.28 | 70.90 | dacite bx - grey-green strongly foliated at 70° to CA. Frags pale green to grey & silicous. Stretched(?) paralle parallel to foliation. scattered grains & fine seams py associated with whitish grey qtz as a silicification of the bx. | 3504 | 56.26 | 57.30 | 1.04 | | 0.08 | | | |
| | | | 5 | 57.3 | 58.9 | 1.60 | | 0.02 | | | |
| | | | 6 | 58.90 | 60.43 | 1.53 | | 0.04 | | | |
| | | | 7 | 60.43 | 61.68 | 1.25 | | 0.25 | | | |
| | | | 3508 | 61.68 | 62.20 | 0.52 | | 0.04 | | | |
| | | 56.28 - 57.28 - scattered narrow seams grey to white qtz with fine py. | | | | | | | | | |
| | | 61.4 - 61.7 - dk grey cherty qtz - 3% py | 3610 | 63.86 | 64.86 | 1.00 | | 0.005 | | | |
| | | 62.25 - 5cm grey cherty qtz bx - no py | 3509 | 64.86 | 64.96 | 0.10 | | 0.13 | | | |
| | | 64.9 - 8cm grey cherty qtz bx - 2% py | 3611 | 64.96 | 65.95 | 0.90 | | 0.002 | | | |
| | | 67.53 - 20cm grey cherty qtz bx -3% py | 3510 | 66.45 | 67.10 | 0.55 | | 0.03 | | | |
| | | 69.5 - 70.2 - Fe-carb. alteration | 3511 | 67.52 | 67.86 | 0.34 | | 0.05 | | | |
| | | 70.24 - 71.02 - grey cherty qtz - 1% py. | 3512 | 68.51 | 68.64 | 0.13 | | 0.005 | | | |
| | | 70.89 - 20cm Fe-carb. alteration | 3513 | 70.24 | 71.02 | 0.78 | | 0.01 | | | |
| 70.90 | 71.4 | Dacite dike (?) - less foliated than above | | | | | | | | | |
| 71.4 | 78.7 | Dacite - foliated at 65° to CA. greygreen, short sections bx to 10cm. with secondary silification, amy a daloidal sections with qtz filling. | | | | | | | | | |
| | | 72.04 - 72.24 - Fe- carb. alteration | | | | | | | | | |

GUNNEX LIMITED

HOLE NO. P - 1

PROJECT HISLOP TWP. (PANCONTINENTAL - GUNNEX)

SHEET NO. 4

| FOOTAGE | | DESCRIPTION | SAMPLING | | | | | Au. | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| FROM | TO | | NO. | FROM | TO | FEET | | | | | |
| | | 72.50 - 72.68 - Fe.-carb. alteration | | | | | | | | | |
| | | 74.52 - 74.59 - sil. tuff with 3% py. | 3514 | 74.80 | 75.04 | 0.24 | | 0.07 | | | |
| | | 74.8 - 75.04 - cherty qtz in dacite bx 3% py | 3515 | 75.37 | 75.62 | 0.25 | | 0.03 | | | |
| | | 75.33 - 75.60 - siliceous zone with 2% py | | | | | | | | | |
| | | 76.23 - 77.12 - bx with sil frags and secondary qtz. - 2% py along fol. planes | 3516 | 76.30 | 77.16 | 0.86 | | 0.01 | | | |
| | | 77.37 - 77.49 - bx with sil.-frags, + 1% py | 3517 | 77.37 | 77.49 | 0.12 | | 0.01 | | | |
| | | 78.13 - 78.26 - bx with sil.-frags, + 1% py | | | | | | | | | |
| 78.7 | 79.2 | Andesite dike | | | | | | | | | |
| 79.2 | 79.7 | Dacite - amygdaloidal | | | | | | | | | |
| 79.7 | 80.8 | Dacite bx, tuff accous, pale grey - green. fol. at 70° to CA. | | | | | | | | | |
| | | 80.0 - 80.4 - sil stringers & blebs with 1% py. | 3518 | 79.99 | 80.40 | 0.41 | | 0.01 | | | |
| 80.8 | 83.8 | Dacite, amygd. some sections bx, foliated at 70° to CA. | | | | | | | | | |
| EHO | | | | | | | | | | | |

# DRILL HOLE RECORD

**PANCONTINENTAL MINING (CANADA) LTD.**

PROJECT Hislop TWP.
PROPERTY LCT 3+4 Con. 3
CASING LEFT
HOLE Nº P-1
TOTAL DEPTH 83.8 m.
Date Commenced 30 Sept 1980
LOCATION 1010 NW 3.2 NE
Date Completed 3 Oct. 1980
Initial Azimuth 045° T
INITIAL DIP -45°
CORE STORAGE On site
LATITUDE
DEPARTURE
ELEVATION 5000.6 M

HOLE SURVEY

| DEPTH | DIP | AZIMUTH |
|---|---|---|
| Collar | -45° | |
| 16.5 | -41°00 | |
| 61.0 | -46°15 | |
| | | |
| | | |

HOLE Nº P-1 SHEET Nº 1 of 5
DRILL H15 10-11
DRILLER Heath & Sherwood
GEOLOGICAL LOG
RADIOMETRIC LOG
SAMPLED N. Nord [illegible]
ASSAYED

Weathering / Casing / Core size / Core Recovery % / Core / Colour / Core Cuttings / Rock Unit / Depth

LITHOLOGY: Graphic Log / Constituents %: Mica, Chlorite, Graphite, Carbon, Clay, Qtz./Chert, Carbonate / Rock Type

STRUCTURE: Bedding fol. / Schistosity / Brecciation / Faulting / Quartz vein

TEXTURE: Ign. / Met. / Sed.

ALTERATION: Chloritization / Sericitization / Silicification

MINERALIZATION %: Sphalerite / Pyrrhotite / Pyrite / Chalcopyrite / Galena / $U_3O_8$

RADIOMETRIC DATA: Inst. Nº: / Cal. In: Out: / Meter / Graph 2 4 6 8

Sample Interval / Sample Number

ASSAY: $U_3O_8$ %

0
1
2
3
4
5
6
7
8
9
10 Casing
1
2
3
4
5
6
7
8 2
9
20

Additional Data

# DRILL HOLE RECORD

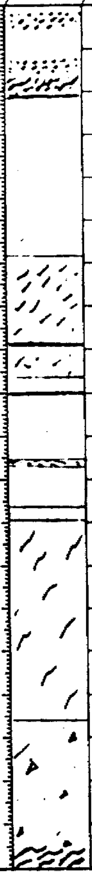
**PANCONTINENTAL MINING (CANADA) LTD.**

PROJECT ........ PROPERTY ........ CASING LEFT ........
HOLE NO ........ TOTAL DEPTH ........ Date Commenced ........
LOCATION ........ Date Completed ........
Initial Azimuth ........ INITIAL DIP ........ CORE STORAGE ........
LATITUDE ........ DEPARTURE ........ ELEVATION ........

HOLE SURVEY

| DEPTH | DIP | AZIMUTH |
|---|---|---|
| 16.5 | 41°00' | |
| 40.0 | 36°15' | |
| | | |
| | | |
| | | |

HOLE NO P-1 SHEET NO 2 of 5
DRILL
DRILLER
GEOLOGICAL LOG
RADIOMETRIC LOG
SAMPLED
ASSAYED



| Depth | Rock Type |
|---|---|
| 20 – | 2 |
| | 2a(?) |
| | 2 |
| | 2a |
| | 1 |
| – 40 | 2a+b |

ASSAY

| Sample Number | From | To | Width | Au | Ag |
|---|---|---|---|---|---|
| 3501 | 20.17 | 20.53 | 0.36 | 0.01 | |
| 3608 | 20.55 | 21.2 | 0.67 | 0.05 | |
| 3502 | 21.20 | 22.10 | 0.9 | 0.14 | .06/193 |
| 3605 | 23.1 | 23.1 | 1.0 | 0.0[illegible] | |

Additional Data

**PANCONTINENTAL MINING (CANADA) LTD.**

# DRILL HOLE RECORD

PROJECT
PROPERTY
CASING LEFT
HOLE NO
TOTAL DEPTH
Date Commenced
LOCATION
Date Completed
Initial Azimuth
INITIAL DIP
CORE STORAGE
LATITUDE
DEPARTURE
ELEVATION

HOLE SURVEY

| DEPTH | DIP | AZIMUTH |
|---|---|---|
| | | |
| | | |
| | | |
| | | |
| | | |

HOLE NO P.1 SHEET NO 3 of 5
DRILL
DRILLER
GEOLOGICAL LOG
RADIOMETRIC LOG
SAMPLED
ASSAYED

LITHOLOGY — Constituents %: Mica, Chlorite, Graphite, Carbon, Clay, Qtz./Chert, Carbonate; Rock Type

STRUCTURE: Bedding, Schistosity, Brecciation, Faulting, Quartz vein

TEXTURE: Ign., Met., Sed.

ALTERATION — MINERALIZATION %: Sphalerite, Pyrrhotite, Pyrite, Chalcopyrite, Galena, $U_3O_8$

RADIOMETRIC DATA: Inst. No: Col. In: Out: Meter, Graph 2 4 6 8

Weathering, Colour, Rock Unit, Depth, Graphic Log

| Depth | Rock Type | Sample Number | $U_3O_8$ % 1/15 pl | Tr | Width | |
|---|---|---|---|---|---|---|
| 400 | 2a+b | | | | | |
| 1 | | | | | | |
| 2 | | | | | | |
| 3 | | | | | | |
| 4 | | 3503 | 44.6 | 45.2 | 0.7 | 0.03 |
| 5 | | | | | | |
| 6 | | | | | | |
| 7 | fld 2a+b | | | | | |
| 8 | | | | | | |
| 9 | 2 minor 2b | | | | | |
| 50 | | | | | | |
| 1 | 1 (dike?) | | | | | |
| 2 | 2-2b | | | | | |
| 3 | | | | | | |
| 4 | | | | | | |
| 5 | | | | | | |
| 6 | | 3504 | 56.26 | 57.30 | 1.04 | 0.08 |
| 7 | 2b | 3505 | 57.3 | 58.9 | 1.60 | 0.02 |
| 8 | | | | | | |
| 9 | | 3506 | 58.9 | 60.43 | 1.53 | 0.04 |
| 60 | | | | | | |

Additional Data

## DRILL HOLE RECORD

**PANCONTINENTAL MINING (CANADA) LTD.**

PROJECT ........ PROPERTY ........ CASING LEFT ........
HOLE NO ........ TOTAL DEPTH ........ Date commenced ........
LOCATION ........ Date completed ........
Initial Azimuth ........ INITIAL DIP ........ CORE STORAGE ........
LATITUDE ........ DEPARTURE ........ ELEVATION ........

HOLE SURVEY

| DEPTH | DIP | AZIMUTH |
|---|---|---|
| | | |

HOLE NO P-1 SHEET NO 4 of 5
DRILL ........
DRILLER ........
GEOLOGICAL LOG ........
RADIOMETRIC LOG ........
SAMPLED ........
ASSAYED ........

LITHOLOGY — Graphic Log, Constituents % (Mica, Chlorite, Graphite, Carbon, Clay, Qtz./Chert, Carbonate), Rock Type · STRUCTURE · TEXTURE (Ign., Met., Sed.) · ALTERATION · MINERALIZATION % (Sphalerite, Pyrrhotite, Pyrite, Chalcopyrite, Galena, U3O8) · RADIOMETRIC DATA (Inst. No., Col. In, Out, Meter, Graph 2 4 6 8) · Sample Interval · Sample Number · ASSAY

| Depth | Rock Type | Pyrite |
|---|---|---|
| 60 | 2b | |
| 1 | | 3 |
| 2 | | 0 |
| 3 | | |
| 4 | | 2 |
| 5 | | |
| 6 | | |
| 7 | | 3 |
| 8 | | |
| 9 | | |
| 70 | | 1 |
| 1 | 2 dike? | |
| 2 | 2 | |
| 3 | | |
| 4 | Tuff. | 3 |
| 5 | | 3<br>2 |
| 6 | | 2 |
| 7 | | 1 |
| 8 | 1 dike | 1 |
| 9 | 2<br>2b + 2a | |
| 80 | | |

| Sample Number | U3O8 % From | To | Width | H:l |
|---|---|---|---|---|
| 3507 | 60.43 | 61.68 | 1.25 | 0.25 |
| 3508 | 61.68 | 62.20 | 0.52 | 0.04 |
| 3610 | 63.86 | 64.80 | 1.0 | 0.005 |
| 3509 | 64.86 | 64.96 | 0.10 | 0.13 |
| 3611 | 64.96 | 65.95 | 0.99 | 0.002 |
| 3510 | 66.45 | 67.10 | 0.65 | 0.03 |
| 3511 | 67.52 | 67.86 | 0.34 | 0.05 |
| 3512 | 68.51 | 68.64 | 0.13 | 0.005 |
| 3513 | 70.24 | 71.02 | 0.78 | 0.01 |
| 3514 | 74.80 | 75.04 | 0.24 | 0.07 |
| 3515 | 75.37 | 75.62 | 0.25 | 0.03 |
| 3516 | 76.30 | 77.16 | 0.86 | 0.01 |
| 3517 | 77.37 | 77.49 | 0.12 | 0.01 |
| 3518 | | | | |

.12/5

Additional Data

## DRILL HOLE RECORD

**PANCONTINENTAL MINING (CAN** … **LTD**

PROJECT ..........
HOLE Nº ..........
LOCATION ..........
initial azimuth ..........
LATITUDE ..........

PROPERTY ..........
TOTAL DEPTH ..........
INITIAL DIP ..........
DEPARTURE ..........

CASING LEFT ..........
Date commenced ..........
Date completed ..........
CORE STORAGE ..........
ELEVATION ..........

HOLE SURVEY

| DEPTH | DIP | AZIMUTH |
|---|---|---|
|  |  |  |
|  |  |  |
|  |  |  |
|  |  |  |
|  |  |  |

HOLE Nº P-1 SHEET Nº 5 of 5
DRILL ..........
DRILLER ..........
GEOLOGICAL LOG ..........
RADIOMETRIC LOG ..........
SAMPLED ..........
ASSAYED ..........

| Depth | Rock Type |
|---|---|
| 40 | 2b + 2a |
| 1–3 | 2<br>minor 2b |
| 4 | EOH |

Weathering, Caving, Core size, Lith, Core Recovery %, Core, Colour, Core Cuttings, Rock Unit, Depth, Graphic Log

LITHOLOGY — Constituents %: Mica, Chlorite, Graphite, Carbon, Clay, Qtz./Chert, Carbonate; Rock Type

STRUCTURE: Bedding, Schistosity, Brecciation, Faulting, Quartz vein

TEXTURE: Ign., Met., Sed.

ALTERATION

MINERALIZATION %: Sphalerite, Pyrrhotite, Pyrite, Chalcopyrite, Galena, $U_3O_8$

RADIOMETRIC DATA: Inst. Nº: Col. In: Out: Meter, Graph 2 4 6 8

| Sample Interval | Sample Number | From ($U_3O_8$ %) | To | Width | Au |  |
|---|---|---|---|---|---|---|
|  | 3510 | 79.94 | 80.40 | 0.41 | 0.01 |  |

0 1 2 3 4 5 6 7 8 9 0 1 2 3 4 5 6 7 8 9 0

Additional Data

OM9-PE7-C-80

GUNNEX LIMITED.

D.D-Hole No. P - 2

PROJECT HISLOP TWP. (PANCONTINENTAL - GUNNEX)

Sheet No. 1

LOCATION HISLOP TWP.
LOTS 3 & 4, CON. 3
HOLE STARTED OCTOBER 3, 1980
HOLE COMPLETED October 7, 1980
CORE RECOVERY %
DRILLED BY HEATH & SHERWOOD
LOGGED BY W. F. DIX

| SURVEY | | |
|---|---|---|
| DEPTH | DIP | AZIMUTH |
| COLLAR | -60°.0' | |
| 12.2 | -60°.0' | |
| 61.0 | 46°.0' | |
| | | |
| | | |
| | | |

COLLAR. LAT. 1010 N
DEP. 3.2 E
ELEV. 5000.6 m
AZIMUTH 045° T
DIP -60°.0'
LENGTH 97.4 m
HOR. PROJ. VERT. PROJ.

| FOOTAGE | | DESCRIPTION. | SAMPLING | | | | | Au. | | |
|---|---|---|---|---|---|---|---|---|---|---|
| FROM m | TO m | | NO | FROM | TO | FEET | | | | |
| 0 | 12.4 | Casing | | | | | | | | |
| 12.4 | 16.95 | dacite - grey green - sl. foliation at 50° to CA. | | | | | | | | |
| | | 13.28 - 13.57 - fractured with white qtz -feld. infill. miner py. along foliation plane. | 36.12 | 15.95 | 16.95 | 1.00 | | NIL | | |
| 16.95 | 19.96 | Quartz bx - whitish fragments in dark grey cherty matrix with graphite - a few short sections with sericitie dacite carrying 40% white qtz. (30% sericite) | 35.19 | 16.95 | 18.22 | 1.27 | | 0.19 | | 0.206/2.97 |
| | | -disseminated 3% py in narrow seams & disseminations | 35.20 | 18.22 | 19.70 | 1.48 | | 0.20 | | |
| | | in the matrix. | 35.21 | 19.70 | 19.92 | 0.22 | | 0.35 | | |
| | | 18.5 - 20cm brown Fe. Carb. | 35.22 | 19.92 | 20.72 | 0.80 | | 0.01 | | |
| 19.96 | 20.7 | Rhyolite - felsic volanic bx, grey, folicated at 50° to CA. siliceous pale grey rounded fragments, scattered fine py. - 2% | | | | | | | | |

GUNNEX LIMITED

HOLE NO. P - 2

PROJECT HISLOP TWP. (PANCONTINENTAL - GUNNEX)

SHEET NO. 2

| FOOTAGE | | DESCRIPTION | SAMPLING | | | | | Au. | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| FROM | TO | | NO. | FROM | TO | FEET | | | | | |
| 20.7 | 24.5 | Dacite - pale grey green, sl. folicated at 50° to CA. -minor white qtz - feld. veins & blebs. | | | | | | | | | |
| | | 22.35 - 2cm brown Fe -carb. alteration | | | | | | | | | |
| 24.5 | 31.0 | Dacite tuff - grey green, folicated at 55° to CA. scattered qtz.-feld. porphyroblasts (rounded and elongated) - narrow sericitie bank at lower contact- | 36.12<br>35.23 | 23.53<br>24.53 | 24.53<br>24.67 | 1.00<br>0.14 | | Nil<br>0.10 | | | |
| | | 25.10 - 25.40 - scattered seams py (3%) in sericitie dacite and some grey qtz. | 36.14<br>35.24 | 24.67<br>25.10 | 25.10<br>25.40 | 0.43<br>0.30 | | Nil<br>0.03 | | | |
| | | 27.75 - 28.08 - dacite and some grey qtz. | 35.25 | 27.75 | 28.08 | 0.33 | | 0.02 | | | |
| | | 29.2 - 29.8 - pinkish alteration. | | | | | | | | | |
| 31.0 | 34.1 | andesitic tuff (?) - grey green- ferromag. grains in dark grey green matrix - foliated at 55° to CA. - numerous fine qtz-feld strs.// to folication - 6 cm brown Fe- at lower contact, 334 - 20 cm of white qtz-feld | | | | | | | | | |
| 34.1 | 36.5 | dacite - grey green, med. grained, only slight folication - scattered qtz-feld veinlets. - brown Fe-carb. at lower contact. | | | | | | | | | |
| 36.5 | 42.0 | dacite and dacite bx (flow tops?) - amygdaloidal | | | | | | | | | |
| | | 39.3 - 39.47 - diss. py | 35.26 | 39.30 | 39.47 | 0.17 | | Tr. | | | |
| | | 39.7 - 40.1 - 30% white qtz-feld. | | | | | | | | | |
| 42.0 | 46.4 | dacite tuff - part bx, foliated at 55° CA, granular & closely foliated. - elongated whitish qtz blebs & porphyroblasts | | | | | | | | | |
| 46.4 | 47.8 | feldspathized dacite bx - reddish brown to green alteration. mottled. | | | | | | | | | |
| 47.8 | 50.3 | dacite tuff, strongly foliated at 56° to CA. 20% light grey silicous material. | | | | | | | | | |

GUNNEX LIMITED

PROJECT HISLOP TWP.(PANCONTINENTAL-GUNNEX)

HOLE NO. P - 2

SHEET NO. 3

| FOOTAGE | | DESCRIPTION | SAMPLING | | | | | Au. | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| FROM | TO | | NO. | FROM | TO | FEET | | | | | |
| 50.3 | 51.0 | Silicified shear (?) with thin streaks of sericite - probably dacite tuff. -40% whitish qtz. - 12cm Fe-carb. at lower contact. | | | | | | | | | |
| 51.0 | 51.56 | dacite -green-grey, amygdaloidal, foliated, scattered whitish qtz-feld veinging parallel to foliation. | 36.15 | 50.56 | 51.56 | 1.00 | | Nil | | | |
| 51.56 | 51.95 | Mainly whitish qtz with 20% dark material. few fine seams diss. py. | 35.27 | 51.56 | 51.95 | 0.39 | | 0.13 | | | |
| | | | 36.16 | 51.95 | 52.95 | 1.00 | | 0.002 | | | |
| 51.95 | 56.2 | dacite - sections bx, amygdaloidal, grey-green, 30% siliceous blebs & streaks, foliated at 55° to CA. | | | | | | | | | |
| 56.2 | 61.3 | Andesite--dark grey-green, sl. foliation, numerous narrow veinlets qtz -feld with x-cutting nature. | | | | | | | | | |
| 61.3 | 63.87 | dacite tuff - light grey-green in inner anclesite. fol. at 55° to CA. | | | | | | | | | |
| 63.87 | 64.37 | Quartz bx (50%) and sericitie schist, 2% py in streaks & disseminations in schist. | 35.28 | 63.87 | 64.37 | 0.50 | | 0.03 | | | |
| | | | 35.29 | 64.37 | 65.20 | 0.83 | | Tr. | | | |
| 64.37 | 65.2 | dacite bx with siliceous light grey-green frags or porphyroblasts in grey-green matix. foliation at 65° to CA. sparse py. | | | | | | | | | |
| 65.2 | 65.5 | siliceous fine qtz bx. Both light and dark qtz. 3% diss py in streaks | 35.30 | 65.2 | 65.5 | 0.3 | | 0.11 | | | |
| | | | 35.31 | 65.50 | 66.93 | 1.43 | | 0.03 | | | |
| 65.5 | 68.1 | dacite bx - 40% siliceous fragments & porphyroblasts in grey-green matrix. Folicated at 65° to CA. | | | | | | | | | |
| | | 65.5 - -6.93 - scattered grains & streaks py. | | | | | | | | | |
| | | 66.93 - 3cm white qtz. | | | | | | | | | |
| 68.1 | 73.27 | dacite tuff & bx - grey-green with whitish siliceous frags. or porp. folicated at 65° to CA. short sections with diss py | 35.33 | 71.86 | 72.76 | 0.90 | | 0.07 | | | |
| | | 71.0 - 5cm gouge | 36.17 | 72.76 | 73.27 | 0.51 | | 0.10 | | | |

GUNNEX LIMITED

HOLE NO. P - 2

PROJECT HISLOP TWP.(PANCONTINENTAL-GUNNEX)

SHEET NO. 4

| FOOTAGE | | DESCRIPTION | SAMPLING | | | | | Au. |
|---|---|---|---|---|---|---|---|---|
| FROM | TO | | NO. | FROM | TO | FEET | | |
| 73.27 | 73.8 | dark grey cherty qtz with some white qtz in dacite. 2% py | 35.34 | 73.27 | 73.80 | 0.53 | | 0.35 |
| 73.8 | 75.3 | dacite bx, pale green to white sil. frags. foliated at 60° to CA. 74.7 4cm with dark qtz and diss. py 75.1 6cm with dk qtz & diss. py. | | | | | | |
| 75.3 | 79.4 | dacite, possibly tuff, some bx frags. foliated | 36.19<br>35.35 | 74.7<br>75.60 | 75.60<br>75.85 | 0.90<br>0.25 | | 0.005<br>0.10 |
| | | 75.7 10cm with dark grey qtz & diss. py. | 36.20 | 75.85 | 77.10 | 1.25 | | 0.002 |
| | | 77.1 - -7.4 → stringers dark grey qtz & diss. py | 35.36 | 77.10 | 77.75 | 0.65 | | 0.14 |
| | | 77.53 - 77.73 - stringers dark grey qtz & diss py | 36.21 | 77.75 | 78.75 | 1.00 | | 0.005 |
| 79.4 | 82.9 | feldspathized dacite, pale buff with relict structurs as above | | | | | | |
| 82.9 | 85.7 | dacite tuff and bx | | | | | | |
| | | 83.42 - 84.24 - 40% whitish qtz in sericetic dacite bx scattered seams 2% py. | 35.37 | 83.42 | 84.24 | 0.82 | | 0.02 |
| 85.7 | 88.4 | felsite on feldspathized dacite, massive, pale grey-green, soft. scattered narrow veinlets qtz.-feld. - becomes buff coloured in centre of section, sharp contacts. - odd grain of py. | | | | | | |
| 88.4 | 90.3 | dacite- grey-green- non foliated, massive, veinlets qtz-feld. -minor py at upper contact. | | | | | | |
| 90.3 | 91.1 | dacite tuff & bx, pale-green-grey 25% whithish sil.frags, foliated at 60° to CA. - 8cm of vein qtz at lower contact. | | | | | | |
| 91.1 | 97.38 | dacite, slight bx in sections. poorly foliated. | | | | | | |
| EOH | | 92.2 - 93.0 - scattered diss. py in silicified dacite (20% grey qtz - blebs) | 35.38<br>36.27 | 92.2<br>96.25 | 93.0<br>97.25 | 0.8<br>1.00 | | 0.04<br>0.002 |
| | | 97.25 - 97.38 - 60% qtz in dacite with 1% py | 35.39 | 97.25 | 97.38 | 0.13 | | 0.10 |

**PANCONTINENTAL MINING (CANADA) L**

# DRILL HOLE RECORD

PROJECT PC-18 [illegible]
HOLE Nº P-2
LOCATION 1010 NW 3.2 m NE
Initial Azimuth 045
LATITUDE

PROPERTY [illegible]
TOTAL DEPTH 97.38
INITIAL DIP -60°
DEPARTURE

CASING LEFT
Date commenced 7 Oct 1980
Date completed 7 Oct 1980
CORE STORAGE on site
ELEVATION 5002.6 m

**HOLE SURVEY**

| DEPTH | DIP | AZIMUTH |
|---|---|---|
| collar | -60° | 045° |
| 12.3 | -60° | |
| 61.0 | -46° | |
| | | |
| | | |

HOLE Nº P-2 SHEET Nº 1 of 5
DRILL HQ BQ-11
DRILLER [illegible]
GEOLOGICAL LOG W. [illegible]
RADIOMETRIC LOG
SAMPLED [illegible]
ASSAYED

**LITHOLOGY** — Core Cuttings Colour / Rock Unit / Depth / Graphic Log / Constituents % (Mica, Chlorite, Graphite, Carbon, Clay, Qtz/Chert, Carbonate, Sericite) / Rock Type

**STRUCTURE** — Bedding fol., Schistosity, Fracturing, Faulting, Quartz vein

**TEXTURE** — Ign., Met., Sed.

**ALTERATION**

**MINERALIZATION %** — Sphalerite, Pyrrhotite, Pyrite, Chalcopyrite, Galena, $U_3O_8$

**RADIOMETRIC DATA** — Inst. Nº, Col. In, Out, Meter, Graph 2 4 6 8

**ASSAY**

| Depth | Colour | Rock Unit | Constituents % | Rock Type | Structure | Mineralization % |
|---|---|---|---|---|---|---|
| 0 – 12.4 | | | | Clay | | |
| 12.4 – 16.95 | grey-green | 2 | | dacite, slightly foliated, white qtz-[illegible] [illegible] and minor py along foliation plane | 50° | |
| 16.95 – 18.22 | white to grey black | 4b | | Qtz. [illegible] white fragments in dark cherty grey matrix, minor graphite, short sections sericitized | | 1% |
| 18.22 – 19.7 | | | 40 | | | 1% |

BW (0 – 12.4)
BQ; Ecy 40; No 2

| Sample Number | From | To | Width | Au | |
|---|---|---|---|---|---|
| 3612 | 15.05 | 16.95 | 1.0 | NIL | |
| 3519 | 16.95 | 18.22 | 1.27 | 0.19 | .204<br>2.97 |
| 3520 | 18.22 | 19.7 | 1.48 | 0.2 | |
| 3521 | 19.7 | 19.92 | 0.22 | 0.35 | |

2.97

Additional Data

**PANCONTINENTAL-MINING (CANADA) LTD.**

# DRILL HOLE RECORD

PROJECT PC-18 [illegible]
PROPERTY [illegible]
HOLE Nº P-2
TOTAL DEPTH 97.38
LOCATION 1012 N.W. [illegible]
initial Azimuth 045
INITIAL DIP -60°
LATITUDE
DEPARTURE
CASING LEFT —
Date Commenced 7 Oct 1980
Date completed 7 Oct 1980
CORE STORAGE on site
ELEVATION 5030.6

HOLE SURVEY

| DEPTH | DIP | AZIMUTH |
|---|---|---|
| | | |

HOLE Nº P-2 SHEET Nº 2 of
DRILL
DRILLER
GEOLOGICAL LOG
RADIOMETRIC LOG
SAMPLED
ASSAYED

LITHOLOGY — STRUCTURE — TEXTURE — ALTERATION — MINERALIZATION % — RADIOMETRIC DATA — ASSAY

| Depth (m) | Core Box | Colour | Rock Unit | Depth | Rock Type | Bedding |
|---|---|---|---|---|---|---|
| 20 | | grey | 3b | 20.7 | [illegible] | 50° |
| | Box 2 | pale grey-green | 2b | 24.5 | foliated dacite minor white qtz-fspar veins and blebs | 50° |
| | Box No 3 | grey-green | 2a | 25.1<br>25.4<br>31.0 | dacite tuff foliated with scattered qtz-fspar porphyroblasts (rounded and elongated) narrow Sericitic band near base of section | 55° |
| | Box No 4 | grey green | 1a | 34.1 | andesitic tuff c̄ black ferromag grains numerous qtz fspar stringers // to foliation | 55° |
| | | | 2 | 36.6 | slightly foliated dacite c̄ few scattered qtz-fspar veinlets | |
| 40 | Box No 5 | | 2b | 39.1<br>39.47 | amygdaloidal flow top dacite ba | |

Mineralization (Pyrite): 2% ; 1% ; 3% ; 1% ; tr.

ASSAY

| Sample Number | | | U3O8 % | |
|---|---|---|---|---|
| 3622 | 19.92 | 20.72 | 0.2 | 0.01 |
| 3613 | 23.53 | 24.53 | 1.0 | NIL |
| 3523 | 24.53 | 24.67 | 0.14 | 0.1 |
| 3614 | 24.67 | 25.1 | 0.57 | NIL |
| 3524 | 25.1 | 25.4 | 0.3 | 0.03 |
| 3526 | 27.35 | 28.05 | 0.33 | 0.02 |
| 3536 | 39.3 | 39.47 | 0.17 | 0.005 |

Additional Data

# DRILL HOLE RECORD

**PANCONTINENTAL-MINING (CANADA) LTD.**

PROJECT
HOLE Nº P-2
LOCATION
Initial Azimuth
LATITUDE

PROPERTY
TOTAL DEPTH
INITIAL DIP
DEPARTURE

CASING LEFT
Date commenced
Date completed
CORE STORAGE
ELEVATION

HOLE SURVEY

| DEPTH | DIP | AZIMUTH |
|---|---|---|
| | | |

HOLE Nº P-2 SHEET Nº 2 of
DRILL
DRILLER
GEOLOGICAL LOG
RADIOMETRIC LOG
SAMPLED
ASSAYED

| Core Size | Core Box | Colour | Rock Unit | Depth | Qtz/Chert % | Rock Type | Bedding | Pyrite |
|---|---|---|---|---|---|---|---|---|
| EQ | Box No 6 | | 2b | 40–42.0 | | dacite & dacite bx. | | |
| | | | 2ab | 42.0–46.4 | | dacite tuff with short bx sections closely foliated c̄ elongated qtz blebs & porphyroblasts | 55° | |
| | Box No 7 | | 2b (?) | 46.4–47.6 | | feldspathized dacite bx mottled | | |
| | | | 2a | 47.6–50.3 | 20% | dacitic tuff strongly foliated | 56° | |
| | | | | 50.3–51.0 | 40% | silicified shear sericitic dacitic tuff | | |
| | | grey-green | | 51.0–51.56 | | dacite, amygd. foliated | | [illegible] |
| | | white | 2 | 51.56–51.95 | | white qtz c̄ py. | | |
| | | grey green | 2b | 51.95–56.2 | 30% | dacite c̄ bx sections, amygdaloidal foliated | 55° | |
| | Box No 8 | dk grey green | 1 | 56.2–60 | | slightly foliated andesite c̄ numerous narrow veinlets qtz-feldspar x-cutting core | | |

ASSAY

| Sample Number | U3O8 % | | | |
|---|---|---|---|---|
| 3615 | 50.56 | 51.56 | 1.0 | NIL |
| 3527 | 51.56 | 51.95 | 0.39 | 0.13 |
| 3616 | 51.95 | 52.95 | 1.0 | 0.002 |

Additional Data

**DRILL HOLE RECORD** — **PANCONTINENTAL MINING (CANADA) LTD.**

PROJECT ........ PROPERTY ........ CASING LEFT ........

HOLE NO. P-2 TOTAL DEPTH ........ Date commenced ........

LOCATION ........ Date completed ........

Initial Azimuth ........ INITIAL DIP ........ CORE STORAGE ........

LATITUDE ........ DEPARTURE ........ ELEVATION ........

| HOLE SURVEY | | |
|---|---|---|
| DEPTH | DIP | AZIMUTH |
| | | |

HOLE NO. P-2 SHEET NO. 4 of 5

DRILL ........

DRILLER ........

GEOLOGICAL LOG ........

RADIOMETRIC LOG ........

SAMPLED ........

ASSAYED ........

LITHOLOGY · STRUCTURE · TEXTURE · ALTERATION · MINERALIZATION % · RADIOMETRIC DATA · ASSAY

| Depth | Core Recovery | Colour | Rock Unit | Rock Type | Constituents % Qtz/Chert | Bedding | Pyrite |
|---|---|---|---|---|---|---|---|
| 60 – 61.3 | | | 1 | andesite | | | |
| 61.3 – 63.87 | Box No 9 | lt grey-green | 2a<br>a-b<br>1 | dacite tuff & minor andesite | | 55° | |
| 63.87 – 64.37 | | | 2b | qtz. bx and sericite schist | 50% | | 2% |
| 64.37 – 65.2 | | lt grey-green | | dacite bx & poorly foliated | | 65° | tr<br>3% |
| 65.2 – 65.5 | | | | siliceous qtz. bx | | | |
| 65.5 – 68.1 | Box No 10 | grey green | 2b | dacite bx & siliceous fragments and porphyroblasts<br>scattered grains of pyrite | 40% | 65° | |
| 68.1 – 71.80 – 72.76 – 73.27 | Box No 11 | grey green | 2ab | dacite tuff & bx & whitish siliceous frags short sections & disseminated pyrite. | | 65° | tr<br>2% |
| 73.27 – 73.8 | | dk grey | 4a | dk. grey sulphide quartz & py | | | |
| 73.8 – 75.3 | | green-white | 2b | dacite bx & sil. frags - small sec & dk qtz and fill py | | 60° | |
| 75.3 – 75.6 – 75.85 – 77.1 – 77.75 – 79.4 | | | 2a | dacite tuff & bx sections minor foliation several small sections & dk grey qtz & diss pyrite | | | diss<br>dis |
| 79.4 – 80 | | | 2 | feldspathised dacite | | | |

BQ

| Sample Number | U3O8 % | | | | Additional Samples |
|---|---|---|---|---|---|
| 3520 | 63.87 | 64.17 | 0.10 | 0.03 | |
| 3529 | 64.37 | 65.2 | 0.83 | 0.005 | |
| 3530 | 65.2 | 65.5 | 0.3 | 0.11 | |
| 3531 | 65.5 | 66.93 | 1.43 | 0.03 | |
| 3533 | 71.80 | 72.76 | 0.9 | 0.07 | |
| 3617 | 72.76 | 73.27 | 0.51 | 0.1 | |
| 3534 | 73.27 | 73.8 | 0.53 | 0.35 | |
| 3618 | 73.8 | 74.7 | 0.9 | 0.005 | .07<br>5.89 |
| 3619 | 74.7 | 75.6 | 0.9 | 0.005 | |
| 3535 | 75.6 | 75.85 | 0.25 | 0.1 | |
| 3620 | 75.85 | 77.1 | 1.25 | 0.002 | |
| 3536 | 77.1 | 77.75 | 0.65 | 0.14 | |
| 3621 | 77.75 | 78.75 | 1.0 | 0.005 | |

Additional Data

**PANCONTINENTAL MINING (CANADA) LTD.**

## DRILL HOLE RECORD

PROJECT

PROPERTY

HOLE NO. P-2

TOTAL DEPTH

LOCATION

Initial Azimuth

INITIAL DIP

LATITUDE

DEPARTURE

CASING LEFT

Date Commenced

Date Completed

CORE STORAGE

ELEVATION

HOLE SURVEY

| DEPTH | DIP | AZIMUTH |
|---|---|---|
| | | |
| | | |
| | | |
| | | |

HOLE NO. P-2 SHEET NO. 5 of 5

DRILL

DRILLER

GEOLOGICAL LOG

RADIOMETRIC LOG

SAMPLED

ASSAYED

| Depth | Colour | Rock Unit | Depth | Qtz/Chert % | Rock Type | Bedding | Mineralization % |
|---|---|---|---|---|---|---|---|
| 80 | | | | | Sapothized dacite with relict structure as above. | | |
| 81 | pale buff | 2 4d | | | | | |
| 83 | | | 83.9<br>83.45 | 40 | dacite tuff & bx white qtz as indicated is sericitic & scattered seams 1% py | | 20% |
| 84 | | 2a | 84.04 | | | | |
| 85 | | | 85.7 | | felsite or feldspathic dacite, massive & scattered narrow veinlets of qtz type, occasional pyrite. | | |
| 87 | pale grey green | 2 4d | | | | | |
| 88 | | | 88.4 | | non foliated grey green dacite minor pyrite at upper contact | | |
| 89 | grey green | 2 | | | | | |
| 90 | pale grey green | 2a | 90.3 | | dacite tuff & bx 15% siliceous frags | 60 | |
| 91 | | | 91.1 | | poorly foliated slightly bx dacite | | dia |
| 92 | | | 92.5 | | | | |
| 93 | | | 93.0 | | | | |
| 94 | | 2b | | | | | |
| 96 | | | | | | | 15 |
| 97 | | | 97.4<br>97.6 | | | | |

Core size: BQ

| Sample Number | | | | |
|---|---|---|---|---|
| 3537 | 83.42 | 84.24 | 0.82 | 0.02 |
| 3538 | 92.2 | 93.0 | 0.8 | 0.04 |
| 3622 | 96.35 | 97.35 | 1.0 | 0.002 |
| 3539 | 97.3[illegible] | 97.3[illegible] | 0.1[illegible] | 0.1 |

Printed column headings: Weathering, Cores, Core size, Lith, Core Recovery %, Core Cuttings, Colour, Rock Unit, Depth, Graphic Log, LITHOLOGY — Constituents %: Mica, Chlorite, Graphite, Carbon, Clay, Qtz/Chert, Carbonate; Rock Type; STRUCTURE: Bedding, Schistosity, Brecciation, Faulting, Quartz vein; TEXTURE: Ign., Met., Sed.; ALTERATION; MINERALIZATION %: Sulphide, Pyrrhotite, Pyrite, Chalcopyrite, Galena, $U_3O_8$; RADIOMETRIC DATA: Inst. No., Col. In, Out, Meter, Graph 2 4 6 8; Sample Interval, Sample Number, $U_3O_8$ %; ASSAY

100 Additional Data

OM9-PE7-C-80

GUNNEX LIMITED.

D.D-Hole No. P - 3

PROJECT HISLOP TWP.(PANCONTINENTAL-GUNNEX)

Sheet No.

LOCATION Hislop Twp.

Lots 3 & 4, Con. 3

HOLE STARTED Oct.7/1980

HOLE COMPLETED Oct.10/1980

CORE RECOVERY %

DRILLED BY HEATH & SHERWOOD

LOGGED BY W. F. DIX

| | | SURVEY |
|---|---|---|
| DEPTH | DIP | AZIMUTH |
| COLLAR | -75° | |
| 12.5 | -73.5° | |
| 61.0 | -63.5° | |
| 110.0 | -65° | |
| | | |
| | | |

COLLAR. LAT. 1010 N

DEP. 3.2 E

ELEV. 5000.6 m

AZIMUTH 045° T

DIP -75°

LENGTH 112.8

HOR. PROJ. VERT. PROJ.

| FOOTAGE | | DESCRIPTION. | SAMPLING | | | | | Au. | | |
|---|---|---|---|---|---|---|---|---|---|---|
| FROM | TO | | NO | FROM | TO | FEET | | | | |
| 0 | 12.5 | Casing | | | | | | | | |
| 12.5 | 17.7 | dacite - grey-green, foliated at 50° to CA. | | | | | | | | |
| | | 15.0 - 16.7 - 3 narrow Fe-carb. zones. | | | | | | | | |
| 17.7 | 22.9 | dacite - doliated, sections bx with sil. frags. | | | | | | | | |
| | | 19.3 - 30cm Fe-carb. alteration | | | | | | | | |
| | | 20.0 - 30cm Fe-carb. alteration | | | | | | | | |
| 22.9 | 25.5 | dacite tuff - med-grain to c. grain, stongly fol. at 45° to CA. grey to grey-green. | | | | | | | | |
| 25.5 | 30.75 | dacite, tuffaceous - with siliceous frags. fine grained grey-green | | | | | | | | |
| | | 26.6 - 26cm Fe-carb. alteration | | | | | | | | |
| | | 27.7 - 5cm Fe-carb. alteration. | | | | | | | | |

GUNNEX LIMITED

HOLE NO. P - 3

PROJECT HISLOP TWP.(PANCONTINENTAL-GUNNEX)

SHEET NO. 2

| FOOTAGE | | DESCRIPTION | SAMPLING | | | | | Au. | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| FROM | TO | | NO. | FROM | TO | FEET | | | | | |
| | | 28.8 - 8cm Fe-carb. alteration | | | | | | | | | |
| | | 29.5 - 4cm Fe-carb. alteration. | | | | | | | | | |
| | | 29.8 - 8cm Fe-carb. | | | | | | | | | |
| | | 30.3 - 10cm Fe-carb. | | | | | | | | | |
| 30.75 | 31.6 | dacite - massive, unfoliated, grey-green | | | | | | | | | |
| 31.6 | 31.8 | dacite - fine grained, foliated. | | | | | | | | | |
| 31.8 | 32.0 | andisite dike - fine grained, dark green, irregular qtz.-feld.veining | | | | | | | | | |
| 32.0 | 34.4 | dacite, tuff- (amygd.) and bx. amygdules in part angular & chlorite(?) filled and in part rimmed by zoned pinkish feld. - - - foliated at 50° to CA. | 36.23 | 33.4 | 34.4 | 1.00 | | 1.002 | | | |
| 34.4 | 35.06 | Quartz and dark grey cherty qtz. (70%) in foliated sericitic dacite.Min 1% py. | 35.42<br>36.24 | 34.4<br>35.06 | 35.06<br>36.06 | 0.66<br>1.00 | | 0.14<br>0.002 | | | |
| 35.06 | 36.7 | dacite - f.g. foliated, some dacite bx | | | | | | | | | |
| | | 35.4 - 10cm Fe-carb. | | | | | | | | | |
| | | 36.5 - 8cm Fe-carb. | | | | | | | | | |
| 36.7 | 39.5 | dacite tuff & bx - sections with sil. whitish frags. Foliated at 50° to CA. | | | | | | | | | |
| | | 38.7 - 38.82 - 50% qtz 2% py. | 35.40 | 38.7 | 38.82 | 0.12 | | Tr. | | | |
| | | 38.82 - 39.5 - scatt-grains py | 1 | 38.82 | 40.4 | 1.58 | | 0.01 | | | |
| 39.5 | 47.0 | dacite tuff - m.g., grey to grey green fol. at 50° to CA. | | | | | | | | | |
| | | 40.1 - 40.4 - scattered py 1% | | | | | | | | | |
| | | 40.5 - 8cm Fe-carb. | | | | | | | | | |

GUNNEX LIMITED

HOLE NO. P - 3

PROJECT HISLOP TWP.(PANCONTINENTAL-GUNNEX)

SHEET NO. 3

| FOOTAGE | | DESCRIPTION | SAMPLING | | | | | Au. | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| FROM | TO | | NO. | FROM | TO | FEET | | | | | |
| 47.0 | 47.7 | dacite - c.grained, grey-green, reddish, toward lower contact. fol. at 55° to CA. | | | | | | | | | |
| 47.7 | 49.0 | dacite,tuff & bx, - 30% sil. white frags. foliated at 55° to CA. | | | | | | | | | |
| | | 49.0 - 18cm Fe-carb. | | | | | | | | | |
| | | 49.5 - 10cm Fe-carb. | | | | | | | | | |
| 49.0 | 50.05 | Andisite tuff. - e.g. foliated 55° to CA. dark grey-green | | | | | | | | | |
| 50.05 | 51.2 | Andisite bx - flow tap, whitish sil. frags. or porph. blasts. | | | | | | | | | |
| 51.2 | 56.7 | Andisite tuff- c.g. foliated at 55° to CA. - up to 10% whitish qtz. blebs & streaks | | | | | | | | | |
| | | 53 - 53.4 - 30% sericite along fol. planes | | | | | | | | | |
| | | 54.4 - 56.4 - 20% sericite | | | | | | | | | |
| | | 52.64 - 53.22 - 40% qtz 2% py | 35.43 | 52.64 | 53.22 | 0.58 | | 0.005 | | | |
| | | 55.4 - 8cm 50% qtz 1% | 4 | 55.36 | 56/40 | 1.04 | | Tr. | | | |
| | | 56.1 - 12cm 60% qtz trace py | | | | | | | | | |
| | | 56.37 - 6cm 50% qtz 2% py | | | | | | | | | |
| 56.7 | 59.0 | Andesite - sil. foliated, dark grey-green m.g. out by qtz-feld. veinlets to 1/8cm. 6% leucoxene in small grains. | | | | | | | | | |
| 59.0 | 60. | dacite tuff & bx - fol. 45° to CA. | | | | | | | | | |
| | | 59.9 - 9cm Fe-carb. | 35.45 | 59.5 | 60.0 | 0.50 | | Tr. | | | |
| | | 59.5 - 60 - 50% qtz 1% py. | | | | | | | | | |
| 60 | 63.67 | dacite - possibly tuff. grey-green, sl. foliated at 50° to CA. | | | | | | | | | |

GUNNEX LIMITED

PROJECT (HISLOP TWP.(PANCONTINENTAL-GUNNEX)

HOLE NO. P - 3

SHEET NO. 4

| FOOTAGE | | DESCRIPTION | SAMPLING | | | | | Au. | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| FROM | TO | | NO. | FROM | TO | FEET | | | | | |
| | | 62.5 - 63.0 - 60% white qtz with sericite. no py | 36.25 | 63.40 | 63.67 | .27 | | 0.005 | | | |
| 63.67 | 64.06 | Quartz - grey white, 70% in foliated dacite. 1% py | 35.46<br>36.26 | 63.67<br>64.06 | 64.06<br>65.06 | 0.39<br>1.00 | | 0.16<br>0.002 | | | |
| 64.06 | 66.6 | dacite tuff & bx - fol. at 45% to CA. grey-green. 30% sil. frags scattered narrow veinlets qtz-feld. | | | | | | | | | |
| 66.6 | 69.15 | dacite - folicated. grey-green. sections poss. tuff & bx | | | | | | | | | |
| 69.15 | 69.8 | Andisite dike - f.g. massive. dk green, irregular qtz-feld veinlets. | | | | | | | | | |
| 69.8 | 73.7 | dacite - fol. grey-green, sections tuff & bx. | | | | | | | | | |
| | | 71.5 - 71.7 - 2% py in xls | 35.47 | 71.5 | 71.7 | 0.2 | | Tr | | | |
| | | 72.9 - 73.1 - Fe-carb. alteration | | | | | | | | | |
| 73.7 | 75.4 | andesite dike - massive, f.g. grey-green. qtz-feld veinlets | | | | | | | | | |
| 75.4 | 76.1 | dacite bx - sil grey fragments, foliated 45° to core. | | | | | | | | | |
| 76.1 | 79.44 | andesite - dark green, foliated. sections tuff & bx | | | | | | | | | |
| | | 76.70 - 76.82 - 70% qtz 1% py | 35.48 | 76.7 | 76.82 | 0.12 | | 0.005 | | | |
| 79.44 | 79.96 | Qtz-feld -(60%)in foliated dacite tuff, fol. 50° to CA. - 1% py. along fol. planes and as disseminations in qtz. | 35.49 | 79.44 | 79.96 | 0.52 | | 0.02 | | | |
| 79.96 | 84.1 | Andesite - sl. foliated. dk green, sections amygd. possibly tuff. - numerous qtz-feld stringers to 1cm. | | | | | | | | | |
| | | 83.4 - 84.1 - Tracers py | 35.50 | 83.40 | 84.10 | 0.70 | | 0.005 | | | |
| 84.1 | 86.3 | andesite bx - fol. 50° to CA. 20% qtz-feld stringers & blebs parallel to foliation. | | | | | | | | | |
| | | 84.1 - 85.59 - trace py | 35.51 | 84.1 | 85.59 | 1.49 | | Tr. | | | |
| | | 85.59 - 85.82 - 40% grey qtz-feld veining with 1% py. | 2 | 85.59 | 85.82 | 0.23 | | 0.06 | | | |

GUNNEX LIMITED

HOLE NO. P - 3

PROJECT HISLOP TWP.(PANCONTINENTAL - GUNNEX)

SHEET NO. 5

| FOOTAGE | | DESCRIPTION | SAMPLING | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| FROM | TO | | NO. | FROM | TO | FEET | | | | | |
| 86.3 | 87.7 | Andesite - foliated 45° to CA. green | | | | | | | | | |
| 87/7 | 93.34 | Andesite bx - green, foliated, 25% qtz-feld blebs | | | | | | | | | |
| | | 91.1 - 93.34 - 25% sericite | | | | | | | | | |
| | | 87.7 - 88.93 - tr py | 35.53 | 87.70 | 88.95 | 1.23 | | 0.005 | | | |
| | | 89.37 - 90.94 - tr py | 4 | 89.37 | 90.94 | 1.57 | | 0.01 | | | |
| | | 93.04 - 93.34 - tr py | 5 | 93.04 | 93.34 | 0.30 | | 0.02 | | | |
| 93.34 | 93.96 | quartz bx - grey to dk grey in foliated sericite matrix - min. 3% py as disseminations and stringers in matrix | 6<br>7 | 93.34<br>93.96 | 93.36<br>95.48 | 0.62<br>1.52 | | 0.46<br>0.01 | | | |
| 93.36 | 99.08 | Andesite bx - foliated, green 30% greyish quartz, fragments and streaks foliated 45° to CA. - intermittant traces py in qtz-rich siclious to 17cm thick | | | | | | | | | |
| | | 95.48 - 95.56 - 2% py | 35.58 | 95.48 | 95.56 | 0.08 | | 0.19 | | | |
| | | 98.45 - 98.88 - 40% qtz 1% py | 9 | 95.56 | 97.40 | 1.84 | | 0.02 | | | |
| | | 98.88 - 99.08 - serititie alteration in dacite tuff. | 35.62 | 98.45 | 98.88 | 0.43 | | 0.09 | | | |
| 99.08 | 112.8 | Andesite, dk. green, mass. narrow qtz-feld veinlets to 0.5 cm. | | | | | | | | | |
| | | 99.37 - 99.60 - bx with 30% qtz and tr. py | 35.60 | 99.37 | 99.55 | 0.13 | | NIL | | | |
| | | 103.10 - 103.19 - bx 30% qtz tr py. | 1 | 103.10 | 103.18 | 0.08 | | 0.03 | | | |

# DRILL HOLE RECORD

**PANCONTINENTAL MINING (CANADA) LTD.**

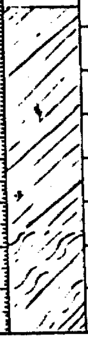
PROJECT Pr 18 Vicloe Tuese
PROPERTY Lot 3+4 Con III
CASING LEFT
HOLE Nº P-3
TOTAL DEPTH 112.8m
Date commenced 7 Oct 1980
LOCATION 10+0 NW 3+2 NE
Date completed 9 Oct 1980
Initial Azimuth 045°
INITIAL DIP -75°
CORE STORAGE on site core shack
LATITUDE
DEPARTURE
ELEVATION 5000.6m

**HOLE SURVEY**

| DEPTH | DIP | AZIMUTH |
|---|---|---|
| Collar | -75° | 045 |
| 12.8 | -73.5° | 045 |
| 61.0 | -63.5° | 045 |
| 112.8 | -65° | 045 |
| | | |

HOLE Nº P-3 SHEET Nº 1 of 6
DRILL H.Q.S. B10-11
DRILLER Heath and Sherwood
GEOLOGICAL LOG W. Dix N. Adler
RADIOMETRIC LOG -
SAMPLED W. Dix N. Adler
ASSAYED Swastika Laboratories

LITHOLOGY — Constituents % — STRUCTURE — TEXTURE (Ign. Met. Sed.) — ALTERATION — MINERALIZATION % — RADIOMETRIC DATA (Inst. Nº: Col. In: Out: Meter Graph 2 4 6 8) — Sample Number — ASSAY ($U_3O_8$ %)

| Depth | Rock Unit | Graphic Log | Rock Type | Bedding |
|---|---|---|---|---|
| 0–12.5 | | | CLAY OVERBURDEN | |
| 12.5–17.75 | 2a |  | Slightly foliated dacite tuff | 50° |
| 17.75– | 2ab | | Slightly foliated dacite tuff & minor bx 2a,b | |

Box #1

Additional Data

**DRILL HOLE RECORD** — **PANCONTINENTAL MINING (CANADA) LTD.**

PROJECT PC-1B Hislop Twnsp
PROPERTY Lot 3&4 Con III
CASING LEFT
HOLE NO P-3
TOTAL DEPTH
Date Commenced
LOCATION
Date Completed
Initial Azimuth
INITIAL DIP
CORE STORAGE
LATITUDE
DEPARTURE
ELEVATION

HOLE SURVEY

| DEPTH | DIP | AZIMUTH |
|---|---|---|
| | | |

HOLE NO P-3 SHEET NO . of 6
DRILL
DRILLER
GEOLOGICAL LOG
RADIOMETRIC LOG
SAMPLED
ASSAYED

Weathering / Casing / Core size / Lith / Core Recovery % / Core Box / Colour / Rock Unit / Depth / Graphic Log

LITHOLOGY — Constituents %: Mica / Chlorite / Graphite / Carbon / Clay / Qtz/Chert / Carbonate / Sericite — Rock Type

STRUCTURE: Bedding C.I. / Schistosity / Brecciation / Faulting / Quartz vein

TEXTURE: Ign. / Met. / Sed.

ALTERATION

MINERALIZATION %: Sphalerite / Pyrrhotite / Pyrite / Chalcopyrite / Galena / $U_3O_8$

RADIOMETRIC DATA: Inst. No. / Col. In / Out / Meter / Graph 2 4 6 8

Core Box: Box #1, Box #3, Box #4, Box #5

Colour: grey green

Lith: BQ

| Rock Unit | Depth | Rock Type | Bedding C.I. |
|---|---|---|---|
| 2ab | | foliated dacite tuff and bx<br>trace fefs | 50° |
| 2a | 30.3 | coarse grained dacite tuff<br>minor bx | 45 |
| 2ab | 35.5 | foliated dacite minor bx frags | |
| 2 | 30.75 | mass. mafic dacite | |
| 2a | 31.5 | fol dacite | |
| 1 | 31.8 | andesite dyke | |
| 2ab | 32.0 | bx ... dacite | 50° |
| | 34.4 | ser fol dacite 19.5 | |
| 2b | 35.0 | fg dacite & bx sections | |
| 2ab | 36.7 | dacite tuff and bx with siliceous ... | 30° |
| | 38.7<br>38.8 | | |
| 2a | | fg tuff | 50° |

Constituents at 34.4–35.0: Chlorite 5%; Qtz/Chert 10%

Pyrite: tr (at ~1 and ~2.5); 1% (at ~4.5–5); tr (at ~9)

ASSAY

| Sample Number | From $U_3O_8$ % | To | width | Au |
|---|---|---|---|---|
| 3623 | 33.4 | 34.4 | 1.0 | 0.002 |
| 3542 | 34.4 | 35.06 | 0.66 | 0.14 |
| 3624 | 35.06 | 36.06 | 1.0 | 0.002 |
| 3540 | 38.7 | 38.82 | .12 | 0.002 |
| 3541 | 38.82 | 40.4 | 2.2 | 0.01 |

.093 / 2.66

Additional Data

# DRILL HOLE RECORD

**PANCONTINENTAL · MINING (CANADA) LTD.**

PROJECT [illegible] Lisap Trust
PROPERTY L – 3 & 4 Con III
CASING LEFT
HOLE NO
TOTAL DEPTH
Date Commenced
LOCATION
Date Completed
Initial Azimuth
INITIAL DIP
CORE STORAGE
LATITUDE
DEPARTURE
ELEVATION

HOLE SURVEY

| DEPTH | DIP | AZIMUTH |
|---|---|---|
| | | |

HOLE NO P-3 SHEET NO 3 of 6
DRILL
DRILLER
GEOLOGICAL LOG
RADIOMETRIC LOG
SAMPLED
ASSAYED

| Depth | Colour | Rock Unit | Qtz/Chert % | Carbonate % | Rock Type | Bedding |
|---|---|---|---|---|---|---|
| 40–47.0 | | 2a b | | | m.g. dacite tuff ? minor bx and siliceous fragments<br>2a, b | |
| 47.0–47.7 | | 2a | | | c.g. dacite tuff<br>tuff | 55° |
| 47.7–49.0 | | 2a | 30% | | dacite tuff and minor qtz ? | |
| 49.0–50.0 | dk grey green | 1a | | | c.g. andesite tuff | 56° |
| 50.0–51.2 | | 1b | | | andesitic flow top bx & qtz pyroxene | |
| 51.2–52.64 | | 1a | | | c.g. andesitic tuff with qtz rich zone. | |
| 52.64–53.32 | | 1a | | | silicification as indicated in qtz rich zones | 55° |
| 55.4–56.33 | | 1a | 50 | 25 | | |
| 56.33–59.0 | | 1 | | | massive to slightly foliated andesite ? qtz | |
| 59.0–60 | | 2b | 50 | | dacite slightly foliated bx | 45° |

ASSAY

| Sample Number | from U3O8 % | to | width | Au |
|---|---|---|---|---|
| 3543 | 52.64 | 53.32 | 0.68 | 0.005 |
| 3544 | 55.36 | 56.4 | 1.04 | 0.002 |
| 3545 | 59.5 | 60.0 | 0.5 | 0.002 |

Additional Data

**DRILL HOLE RECORD** — **PANCONTINENTAL MINING (CANADA) LTD.**

PROJECT PC-18 Hislop Twnsp. PROPERTY Lot 3 & 4 Con III CASING LEFT
HOLE NO. TOTAL DEPTH Date Commenced
LOCATION Date Completed
Initial Azimuth INITIAL DIP CORE STORAGE
LATITUDE DEPARTURE ELEVATION

HOLE SURVEY

| DEPTH | DIP | AZIMUTH |
|---|---|---|
| | | |
| | | |
| | | |
| | | |
| | | |

HOLE NO. P-1 SHEET NO. 6 of 6
DRILL
DRILLER
GEOLOGICAL LOG
RADIOMETRIC LOG
SAMPLED
ASSAYED

Core size: BQ
Core recovery: 90-100% · 90%
Box # 9 · Box # 10 · Box # 11 · Box # 12
Colour: dk green-green

| Depth | Rock Unit | Constituents % | Rock Type | Structure | Mineralization % | Sample Number | U3O8 % from | to | Width | Au |
|---|---|---|---|---|---|---|---|---|---|---|
| 60–62.5 | 2a | | foliated tuffaceous dacite | 50° | | | | | | |
| 62.5–63.6 | 2b | Qtz/Chert 6?% · Sericite 10% | dacite bx | | | | | | | |
| 63.7–64.0 | qtz | Qtz 70 | qtz vein | | Pyrite 1% | 3625<br>3646<br>3626 | 63.4<br>63.67<br>64.06 | 63.67<br>64.06<br>65.06 | 0.27<br>0.39<br>1.0 | 0.005<br>0.16<br>0.002 |
| 64.0–66.5 | 2ab | | dacite tuff & bx amygdaloidal | 45° | | | | | | |
| 66.5–69 | 2 w/ 2ab | | foliated dacite with minor sections of tuff and bx | | | | | | | |
| 69–69.7 | 2 | | dacite dike minor qtz | | | | | | | |
| 69.7–73.6 | 2ab | | foliated dacite with minor sections of tuff and bx | | Pyrite 2% | 3547 | 71.5 | 71.7 | 0.2 | 0.002 |
| 73.6–75.4 | 1 | | massive andesite dike | | | | | | | |
| 75.4–76 | 2b | | foliated dacite bx | 45° | | | | | | |
| 76–79.4 | 1ab | Qtz 70 | foliated andesite tuff and bx possibly flow-top bx | | Pyrite 1% | 3548 | 76.7 | 76.82 | 0.12 | 0.005 |
| 79.4–80 | 2b | Qtz 60 | foliated dacite tuff. | 45° | 1% along ... | 3549 | 79.44 | 79.56 | 0.52 | 0.02 |

.04 / 1.6

Additional Data

minor [illegible] along [illegible]

## DRILL HOLE RECORD

**PANCONTINENTAL MINING (CANADA) LTD.**

PROJECT
HOLE NO
LOCATION
Initial Azimuth
LATITUDE

PROPERTY
TOTAL DEPTH
INITIAL DIP
DEPARTURE

CASING LEFT
Date Commenced
Date completed
CORE STORAGE
ELEVATION

| HOLE SURVEY | | |
|---|---|---|
| DEPTH | DIP | AZIMUTH |
| | | |

HOLE NO P-3 SHEET NO 5 of 6
DRILL
DRILLER
GEOLOGICAL LOG
RADIOMETRIC LOG
SAMPLED
ASSAYED

| Core Recovery | Rock Unit | Depth | Qtz/Chert | Carbonate | Sericite | Rock Type | Bedding | Pyrite |
|---|---|---|---|---|---|---|---|---|
| Box # 13 | 1 | 83.4 | | | | slightly foliated dk-green andesite & sections up to .5m foliated. Numerous irregular qtz-type stringers mm to cm-wide & diss. Fe-po at bottom | | |
| | 1b | 84.1 | | | | foliated andesite bx | 50° | tr |
| | | 85.50 | 30 | | | | | tr |
| | | 85.59 | | | | | | 1% |
| | 1 | 86.3 | | | | foliated andesite | 45° | |
| Box # 14 | 1b | 87.7 | | | | foliated andesite bx | | tr |
| | | 88.93 | | | | | | |
| | | 89.37 | | | | | | |
| | | 90.94 | | 25 | | sericitization over last 3m. 10-20% qtz-type porphyroblasts throughout | | tr |
| Box # 15 | 4b | 93.03 | 65 | 70 | | strongly qtz. & sericite (Fe-po) | | tr |
| | | 93.34 | | | | | | 0.5% |
| | 1b | 93.96 | 30 | | | foliated qtz. rich andesite bx fragments (broken) with streaks of qtz & intermittent traces of Fe-po. qtz rich sections ? | 45° | |
| | | 95.48 | | | | | | |
| | | 95.56 | | | | | | |
| Box # 16 | | 97.4 | 40 | | | | | |
| | | 98.85 | | | | | | 1% |
| | | 98.88 | | | | | | |
| | 1 | 99.37 | | | | dk green massive andesite | | |
| | | 99.5 | | | | | | |

| Sample Number | Fr— | U3O8 % / To | width | Au | |
|---|---|---|---|---|---|
| 3550 | 83.4 | 84.1 | 0.7 | 0.005 | |
| 3551 | 84.1 | 85.59 | 1.48 | 0.002 | |
| 3552 | 85.59 | 85.82 | 0.23 | 0.06 | |
| 3553 | 88.7 | 88.93 | 0.23 | 0.005 | |
| 3554 | 89.37 | 90.94 | 1.57 | 0.01 | |
| 3555 | 93.03 | 93.34 | 0.31 | 0.02 | |
| 3556 | 93.34 | 93.96 | 0.62 | 0.46 | |
| 3557 | 93.96 | 95.48 | 1.52 | 0.01 | .19/2.62 |
| 3558 | 95.48 | 95.56 | 0.08 | 0.19 | |
| 3559 | 95.56 | 97.40 | 1.84 | 0.02 | |
| 3562 | 98.45 | 98.88 | 0.43 | 0.03 | |
| 3560 | 99.37 | 99.5 | 0.13 | Nil | |

Additional Data

# DRILL HOLE RECORD

**PANCONTINENTAL-MINING (CANADA) LTD.**

PROJECT PC-18 Hislop Twp.
PROPERTY Lots 3,4 Con. III
CASING LEFT
HOLE NO
TOTAL DEPTH
Date Commenced
LOCATION
Date Completed
Initial Azimuth
INITIAL DIP
CORE STORAGE
LATITUDE
DEPARTURE
ELEVATION

| HOLE SURVEY | | |
|---|---|---|
| DEPTH | DIP | AZIMUTH |
| | | |
| | | |
| | | |
| | | |
| | | |

HOLE NO P-3 SHEET NO 6 of 6
DRILL
DRILLER
GEOLOGICAL LOG
RADIOMETRIC LOG
SAMPLED
ASSAYED

Weathering / Casing / Core size / Lith. / Core Recovery % / Core Loss / Colour / Core Cuttings / Rock Unit / Depth / Graphic Log

LITHOLOGY — Constituents %: Mica / Chlorite / Graphite / Carbon / Clay / Qtz./Chert / Carbonate — Rock Type

STRUCTURE: Bedding / Schistosity / Brecciation / Faulting / Quartz vein

TEXTURE: Ign. / Met. / Sed.

ALTERATION: Chloritization / Sericitization / Silicification

MINERALIZATION %: Sphalerite / Pyrrhotite / Pyrite / Chalcopyrite / Galena / $U_3O_8$

RADIOMETRIC DATA: Inst. No. / Col. In / Out / Meter / Graph 2 4 6 8

Sample Interval / Sample Number

ASSAY: From / $U_3O_8$ % / to / width / Au

Depth scale: 10 0, 1, 2, 3, 4, 5, 6, 7, 8, 9, 11 0, 1, 2, 3, 4, 5, 6, 7, 8, 9, 12 0

Core size: BQ

BOX # 16
BOX # 17
BOX # 18

Depth: 103.1 / 103.18
112.8

Rock Type: dk green mass andesite c narrow qtz. veinlets to ½ cm occasional traces of pyrite

| Sample Number | From | to | width | Au |
|---|---|---|---|---|
| 3561 | 103.1 | 103.18 | .08 | 0.03 |

Additional Data

0M9-PE7-C-80

# GUNNEX LIMITED.

D.D-Hole No. P - 4

PROJECT HISLOP TWP.(PANCONTINENTAL - GUNNEX)

Sheet No.

LOCATION HISLOP TWP.
LOTS 3 & 4 Con 3
HOLE STARTED October 10/80
HOLE COMPLETED October 12/80
CORE RECOVERY %
DRILLED BY HEATH & SHERWOOD
LOGGED BY W. F. DIX

| SURVEY | | |
|---|---|---|
| DEPTH | DIP | AZIMUTH |
| COLLAR | -45° | |
| 12.8 | -44.8° | |
| 61.0 | -38.0° | |
| | | |
| | | |
| | | |

COLLAR. LAT. 1025 N
DEP. 5.0 W
ELEV. 5000.36
AZIMUTH
DIP -45°
LENGTH 84.8
HOR. PROJ. VERT. PROJ.

| FOOTAGE | | DESCRIPTION. | SAMPLING | | | | | Au. | | |
|---|---|---|---|---|---|---|---|---|---|---|
| FROM | TO | | NO | FROM | TO | FEET | | | | |
| 0 | 13.1 | Casing | | | | | | | | |
| 13.1 | 13.4 | ciabase boulder | | | | | | | | |
| 13.4 | 16.65 | dacite bx - grey-green, sl. foliated at 70° to CA. with narrow parallel qtz-feld stringers | | | | | | | | |
| | | 13.4 - 13.5 - fe-carb alteration | | | | | | | | |
| | | 13.8 - 14.9 - 40% qtz bx, trace py some sericite | 35.63 | 13.8 | 14.9 | 1.1 | | 0.01 | | |
| 16.65 | 22.4 | dacite tuff - pale grey green, miner bx, foliated at 50° CA. some irregular qtz veinlets | | | | | | | | |
| | | 21.9 - 21.95 - qtz vein // foliation, no py | | | | | | | | |
| | | 16.95 - 17.23 - Fe-carb alteration | | | | | | | | |
| | | 17.35 - 3cm Fe-carb alteration | | | | | | | | |

GUNNEX LIMITED

HOLE NO. P - 4

PROJECT HISLOP TWP.(PANCONTINENTAL - GUNNEX)

SHEET NO. 2

| FOOTAGE | | DESCRIPTION | SAMPLING | | | | | Au. | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| FROM | TO | | NO. | FROM | TO | FEET | | | | | |
| | | 19.14 - 19.25 - 3cm Fe-carb alteration | | | | | | | | | |
| 22.4 | 24.4 | dacite tuff & bx - fol. at 50° CA. - silicified throughout | | | | | | | | | |
| | | 22.4 - 23.9 - 45% qtz, 5% sericite, 1% pyrite | 35.64 | 22.4 | 23.9 | 1.5 | | Tr | | | |
| | | 24.17 - 24.4 - siliceous bx zone, 30% qtz, 5% sericite, 1% py | 5 | 24.17 | 24.40 | 0.23 | | 0.005 | | | |
| 24.4 | 26.9 | dacite tuff - pale grey green, some bx qtz-rich zones; fol. at 55° CA. | | | | | | | | | |
| | | 24.51 - 24.78 - Fe-carb alteration | | | | | | | | | |
| | | 25.21 - 25.44 Fe-carb alteration | | | | | | | | | |
| 26.9 | 30.67 | dacite tuff & bx - fol. at 50° CA. qtz veins parallel fol. to 1 cm | | | | | | | | | |
| | | 27.66 - 29.0 - 40% qtz tr py | 35.66 | 27.66 | 29.00 | 1.34 | | 0.02 | | | |
| | | 29.0 - 30.2 - 35% qtz, tr py. | | | | | | | | | |
| | | 29.03 - 29.16 - Fe-carb alteration | 7 | 29.0 | 30.2 | 1.2 | | Tr | | | |
| 30.67 | 31.37 | dacite tuff - foliated. f.g. grey green | | | | | | | | | |
| 31.37 | 32.0 | dacite - non foliated, scattered fine qtz-feld, veinlets at 40 cm. | | | | | | | | | |
| 32.0 | 32.7 | dacite tuff bx - foliations disrupted by qtz frags or porphyroblasts | | | | | | | | | |
| | | 32.0 - 32.7 - 50% qtz & tr py | 8 | 32.0 | 32.7 | 0.7 | | Tr | | | |
| 32.7 | 34/34 | dacite tuff - f.g. fol. at 55° CA. - minor bx | | | | | | | | | |
| 34.34 | 35.43 | dacite bx & tuff - greygreen qtz-feld. stringers parallel fol. | | | | | | | | | |
| | | 34.34 - 34.6 - 35% qtz,1% py | 35.69 | 34.33 | 34.60 | 0.27 | | NIL | | | |
| 35.43 | 44.14 | dacite tuff- short alctions bx, fol. at 60° CA. light grey green | | | | | | | | | |

GUNNEX LIMITED

HOLE NO. P - 4

SHEET NO. 3

PROJECT HISLOP TWP. (PANCONTINENTAL -GUNNEX)

| FOOTAGE | | DESCRIPTION | SAMPLING | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| FROM | TO | | NO. | FROM | TO | FEET | | | | | |
| | | 35.85 - 36.33 - 40% qtz tr py | 35.70 | 35.85 | 36.33 | 0.18 | | 0.005 | | | |
| | | 41.48 - 41.83 - 25% qtz, 1% py | 1 | 41.48 | 41.83 | 0.35 | | 0.01 | | | |
| | | 37.37 - 37.69 - Fe-carb alteration | | | | | | | | | |
| 44.19 | 52.1 | dacite bx - light grey green, with qtz-feld veins to 10cm parallel to foliation at 60° CA. no py. | | | | | | | | | |
| | | 42.8 - 43.0 - Fe-carb ateration | | | | | | | | | |
| | | 43.9 - 44.1 - Fe-carb alteration | | | | | | | | | |
| | | 45.66 - 45.9 - Fe-carb alteration | | | | | | | | | |
| | | 46.63 - 46.75 - Fe-carb, alteration | | | | | | | | | |
| | | 46.08 - 46.37 - 30% qtz, tr py | 35.72 | 46.08 | 46.37 | 0.29 | | 0.005 | | | |
| | | 48.88 - 49.5 - 30% qtz, tr py | 3 | 48.88 | 49.50 | 0.62 | | 0.01 | | | |
| 52.1 | 53.29 | feldspathised dacite | | | | | | | | | |
| 53.29 | 56.3 | dacite tuff - light green-fol. at 65° CA. minor bx sections to 10cm wide - qtz-feld veins to 1cm // foliation | | | | | | | | | |
| 56.3 | 61.6 | dacite bx - short sections silicified, minor visible py. | | | | | | | | | |
| | | 56.3 - 56.50 - 50% qtz, 1% py | 35.74 | 56.30 | 56.56 | 0.26 | | 0.01 | | | |
| | | 58.94 - 59.37 - 30% qtz, tr py | 5 | 58.94 | 59.97 | 0.63 | | 0.02 | | | |
| | | 60.4 - 61.86 - 25% qtz, Tr py | 6 | 60.40 | 61.86 | 1.46 | | 0.04 | | | |
| | | 60.1 - 60.6 - Fe;carb alteration | | | | | | | | | |
| 61.6 | 65.55 | dacite tuff - short sect bx fol. at 55° CA. | | | | | | | | | |
| | | 62.9 - 63.5 - 40% qtz, tr py | 7 | 62.9 | 63.5 | 0.6 | | 0.03 | | | |

GUNNEX LIMITED

HOLE NO. P - 4

SHEET NO. 4

PROJECT HISLOP TWP. (PANCONTINENTAL - GUNNEX)

| FOOTAGE | | DESCRIPTION | SAMPLING | | | | | Au. | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| FROM | TO | | NO. | FROM | TO | FEET | | | | | |
| | | 64.98 - 65.8 - sl. min. py along fol. planes | 8 | 64.98 | 65.80 | 0.82 | | 0.03 | | | |
| 65.55 | 66.4 | dacite bx - cherty qtz fragments | | | | | | | | | |
| 66.4 | 69.78 | dacite tuff - sl. bx, fol. at 60° CA. qtz-feld veinlets to 0.5cm //fol. | | | | | | | | | |
| 69.78 | 74,83 | andesite, massive,minor irreg. qtz-feld veinlets | | | | | | | | | |
| | | 72.08 - 72.8 - sl. bx, tr. py | 35.79 | 72.08 | 0.72 | 0.01 | | | | | |
| 74.83 | 81.57 | dacite tuff - fol. at 70° to CA. short sections bx with siliceous frags | | | | | | | | | |
| | | 78.86 - 79.84 - bx & tuff with 1% py along fol. planes | 35.80 | 78.86 | 79.84 | 0.98 | | 0.06 | | | |
| 41.57 | 81.83 | Fe-carb in dacite sand minor py | | | | | | | | | |
| 81.83 | 84.8 | rhyolite tuff - fol at 65°, tr pyrite | | | | | | | | | |

# DRILL HOLE RECORD

**PANCONTINENTAL MINING (CANADA) LTD.**

PROJECT PC-18 Hislop Twp PROPERTY Lots 3 & 4 Con III
HOLE No P-4 TOTAL DEPTH 84.8 m
LOCATION 1025 NW 5.0m SW
Initial Azimuth 045 INITIAL DIP -45°
LATITUDE DEPARTURE
CASING LEFT
Date Commenced 9 Oct 1980
Date Completed 12 Oct 1980
CORE STORAGE on site
ELEVATION 5000-36

HOLE SURVEY

| DEPTH | DIP | AZIMUTH |
|---|---|---|
| collar | -45° | |
| 13.0 | -44.8° | |
| 61.0 | -38° | |
| | | |
| | | |

HOLE No P 4 SHEET No 1 of 5
DRILL H & S BIO-11
DRILLER HEATH & SHERWOOD
GEOLOGICAL LOG [illegible]
RADIOMETRIC LOG
SAMPLED N. [illegible]
ASSAYED SWASTIKA [illegible]

| Depth scale | Colour | Rock Unit | Depth | Qtz./Chert % | Rock Type | Bedding | Sample Number | from<br>U3O8 % | to | width | Au |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 8–10 | | | | | CLAY & OVERBURDEN | | | | | | |
| 13 | | 9 | 13.1 | | diabase boulder | | | | | | |
| | grey green | 2b | 13.4<br>13.6<br>14.9 | 40 | dacite bx slightly foliated & narrow ‖ quartz-feper stringers | 70° | 3562 | 13.8 | 14.9 | 1.1 | 0.01 |
| | pale grey green | 2a | 16.5 | | dacite tuff minor bx foliated & irregular qtz veinlets | 50° | | | | | |

LITHOLOGY: Graphic Log; Constituents %: Mica, Chlorite, Graphite, Carbon, Clay, Qtz./Chert, Carbonate. STRUCTURE: Bedding, Schistosity, Brecciation, Faulting, Quartz vein. TEXTURE: Ign., Met., Sed. ALTERATION. MINERALIZATION %: Sphalerite, Pyrrhotite, Pyrite, Chalcopyrite, Galena, U3O8. RADIOMETRIC DATA: Inst. No., Col. In, Out, Meter, Graph 2 4 6 8. Sample Interval. ASSAY.

Additional Data

# DRILL HOLE RECORD

**PANCONTINENTAL · MINING (CANADA) LTD.**

PROJECT ....................
HOLE Nº ....................
LOCATION ....................
Initial Azimuth ....................
LATITUDE ....................

PROPERTY ....................
TOTAL DEPTH ....................
INITIAL DIP ....................
DEPARTURE ....................

CASING LEFT ....................
Date commenced ....................
Date completed ....................
CORE STORAGE ....................
ELEVATION ....................

HOLE SURVEY

| DEPTH | DIP | AZIMUTH |
|---|---|---|
| | | |
| | | |
| | | |
| | | |

HOLE Nº P4 SHEET Nº 2 of 2
DRILL ....................
DRILLER ....................
GEOLOGICAL LOG ....................
RADIOMETRIC LOG ....................
SAMPLED ....................
ASSAYED ....................

| Depth | Colour | Rock Unit | Qtz/Chert | Carbonate | Rock Type | Bedding | Pyrite |
|---|---|---|---|---|---|---|---|
| | | 2a | | | dacite tuff as above. | | |
| 22.4 | | | | | | | |
| 23.9 | | | 45 | 5 | dacite tuff and bx highly silicified | 50° | 1% |
| 24.17 | | | 38 | 5 | | | [illegible] |
| 24.4 | pale grey-green | | | | dacite tuff c bx qtz rich zones slightly foliated | 55° | |
| 26.9 | | 2ab | | | | | |
| 27.66 | | | 40 | | dacite tuff c bx slightly foliated. few qtz veins // foliation | 50° | tr |
| 29.0 | | | | | | | |
| 30.3 | | | | | | | |
| 30.67 | grey green | 2a | | | foliated dacite tuff fg | | |
| 31.37 | | 2 | | | unfoliated dacite, fractured qtz-[illegible] | | |
| 32.0 | | | 50 | | dacite tuff c bx foliation disrupted | | tr |
| 32.7 | | 2b | | | dacite tuff f.g. foliation and minor bx | 55 | |
| 34.33 | grey green | 2b | 35 | | dacite - bx - tuff qtz-fspr stringers // fol | | [illegible] |
| 34.6 | | | | | | | |
| 35.40 | lt grey green | 2ab | | | dacite tuff, short bx sections fol | | |
| 35.85 | | | 40 | | | | tr |
| 36.33 | | | | | | 60° | |

ASSAY

| Sample Number | from U3O8 % | to | Width | Au |
|---|---|---|---|---|
| 3564 | 22.4 | 23.9 | 1.5 | .002 |
| 3565 | 24.17 | 24.4 | 0.23 | .005 |
| 3566 | 27.66 | 29.00 | 1.34 | .02 |
| 3567 | 29.0 | 30.2 | 1.2 | .002 |
| 3568 | 32.0 | 32.7 | 0.7 | .002 |
| 3569 | 34.33 | 34.60 | 0.27 | NIL |
| | 35.85 | 36.33 | 0.48 | .005 |

Additional Data

**DRILL HOLE RECORD** — **PANCONTINENTAL-MINING (CANADA) LTD.**

PROJECT ..........
HOLE NO ..........
LOCATION ..........
Initial Azimuth ..........
LATITUDE ..........
PROPERTY ..........
TOTAL DEPTH ..........
INITIAL DIP ..........
DEPARTURE ..........
CASING LEFT ..........
Date Commenced ..........
Date Completed ..........
CORE STORAGE ..........
ELEVATION ..........

HOLE SURVEY

| DEPTH | DIP | AZIMUTH |
|---|---|---|
| | | |

HOLE NO P4 SHEET NO 3 of 5
DRILL ..........
DRILLER ..........
GEOLOGICAL LOG ..........
RADIOMETRIC LOG ..........
SAMPLED ..........
ASSAYED ..........

| Depth | Colour | Rock Unit | Depth | Qtz/Chert % | Rock Type | Bedding | Pyrite | Sample Number | from U3O8 % | to | width | Au |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 40–44 | lt grey green | 2a | 41.48<br>41.83 | 25 | dacite tuff as above | | [illegible] | 3571 | 41.48 | 41.83 | 0.35 | .01 |
| 44–52.4 | lt grey green | 2b | 44.0<br>46.08<br>46.37<br>48.85<br>49.5 | 40<br>25 | dacite bx & qtz fspar veins to 10 cm parallel to foliation | 60° | tr<br>[illegible] | 3572<br>3573 | 46.08<br>48.85 | 46.37<br>49.5 | 0.29<br>0.62 | .005<br>.01 |
| 52.4–53.1 | | 2 feld | 52.4<br>53.1 | | feldspathized dacite | | | | | | | |
| 53.1–56.3 | lt green | 2b | | | dacite tuff foliated with minor bx sections to 1 cm wide. qtz fspar veinlets ∥ foliation | 65° | | | | | | |
| 56.3–60 | | 2b | 56.3<br>56.56<br>59.04<br>59.37 | 30<br>30 | dacite bx & chert silicified sections minor visible pyrite. | | [illegible]<br>tr | 3574<br>3575 | 56.3<br>59.04 | 56.56<br>59.37 | 0.26<br>0.33 | .01<br>.02 |

Additional Data

## DRILL HOLE RECORD

PANCONTINENTAL MINING (CANADA) LTD.

PROJECT
HOLE NO
LOCATION
Initial Azimuth
LATITUDE

PROPERTY
TOTAL DEPTH
INITIAL DIP
DEPARTURE

CASING LEFT
Date commenced
Date completed
CORE STORAGE
ELEVATION

HOLE SURVEY

| DEPTH | DIP | AZIMUTH |
|---|---|---|
| | | |

HOLE NO P.4 SHEET NO 4 of 5
DRILL
DRILLER
GEOLOGICAL LOG
RADIOMETRIC LOG
SAMPLED
ASSAYED

| Rock Unit | Depth | Qtz/Chert % | Rock Type | Bedding | Pyrite |
|---|---|---|---|---|---|
| 2b | 60.9 – 61.6 | | dacite bx. as above. | | |
| 2a | 61.6 – 65.55 (61.90, 62.9, 63.5, 64.90) | 25<br>40 | dacite tuff c short bx sections foliated pyrite along foliation planes | 55° | tr<br>tr |
| 4b | 65.55 – 66.4 (65.8) | | dacite bx c cherty qtz frags | | dis |
| 2ab | 66.4 – 69.70 | | dacite tuff slightly bx and foliated. qtz lenses ~~~ to 0.5cm ‖ fol | 60° | |
| 1 | 69.70 – 74.8 (72.1, 72.8) | | massive andesite minor irregular qtz lenses veinlets | | tr |
| 2ab | 74.8 – 79.79 (78.9) | | dacite tuff c short bx sections containing siliceous frags. pyrite along foliation planes | 70° | 1% |

| Sample Number | from | to | width | Au |
|---|---|---|---|---|
| 3576 | 60.4 | 61.96 | 1.46 | .04 |
| 3577 | 62.9 | 63.5 | 0.6 | .03 |
| 3578 | 64.98 | 65.8 | 0.82 | .03 |
| 3579 | 72.08 | 72.8 | 0.72 | .01 |
| 3580 | 78.86 | 79.84 | 0.98 | .06 |

Additional Data

# DRILL HOLE RECORD

**PANCONTINENTAL- MINING (CANADA)-LTD.**

PROJECT
PROPERTY
CASING LEFT
HOLE NO
TOTAL DEPTH
Date commenced
LOCATION
Date completed
Initial Azimuth
INITIAL DIP
CORE STORAGE
LATITUDE
DEPARTURE
ELEVATION

HOLE SURVEY

| DEPTH | DIP | AZIMUTH |
|---|---|---|
| | | |
| | | |
| | | |
| | | |
| | | |

HOLE NO P.4 SHEET NO 5 of 5
DRILL
DRILLER
GEOLOGICAL LOG
RADIOMETRIC LOG
SAMPLED
ASSAYED

LITHOLOGY — Constituents %: Mica, Chlorite, Graphite, Carbon, Clay, Qtz/Chert, Carbonate — Rock Type

STRUCTURE: Bedding, Schistosity, Brecciation, Faulting, Quartz vein

TEXTURE: Ign. Met. Sed.

ALTERATION

MINERALIZATION %: Scheelite, Pyrrhotite, Pyrite, Chalcopyrite, Galena, $U_3O_8$

RADIOMETRIC DATA: Inst. No: Col. In: Out: Meter, Graph 2 4 6 8

Sample Number

ASSAY: from $U_3O_8$ %, to, width, Au

| Colour | Rock Unit | Depth | Rock Type | Bedding |
|---|---|---|---|---|
| | 2cb | | dacite tuff as above. | |
| | 7 | 91.57 | dacite | |
| | 3a | 91.63 | rhyolite tuff foliated c tr pyrite. | 65° |
| | | 91.8 | | |

Additional Data

OM9-PE7-C-80

GUNNEX LIMITED.

D.D-Hole No. P - 5

Sheet No.

PROJECT HISLOP TWP.(PANCONTINENTAL - GUNNEX)

LOCATION HISLOP TWP.
LOTS 3 & 4 Con 3
HOLE STARTED Oct. 12/80
HOLE COMPLETED Oct. 15/80
CORE RECOVERY %
DRILLED BY HEATH & SHERWOOD
LOGGED BY W. F. DIX

| SURVEY | | |
|---|---|---|
| DEPTH | DIP | AZIMUTH |
| COLLAR | -65.75° | |
| 9.8 m | 62.25° | |
| 61.0 m | 61.25° | |
| 106.7 m | 58.25° | |
| | | |
| | | |

COLLAR. LAT. 1025 N
DEP. 5.0 W
ELEV.
AZIMUTH 045° T
DIP -65.75°
LENGTH 107.3
HOR. PROJ. VERT. PROJ.

| FOOTAGE | | DESCRIPTION. | SAMPLING | | | | | Au. | | |
|---|---|---|---|---|---|---|---|---|---|---|
| FROM | TO | | NO | FROM | TO | FEET | | | | |
| 0 | 9.6 | Casing | | | | | | | | |
| 9.6 | 17.1 | dacite bx - grey green, fol. at 35° CA. 40% sil frags. or porph. | | | | | | | | |
| | | 10.14 - 12.2 - sparse py with fleck of Jasper(?) & fine black veinlets | 35.81<br>36.63 | 10.14<br>13.73 | 12.20<br>14.73 | 2.06<br>1.00 | | 0.03<br>0.002 | 68% recovery | |
| | | 14.73 - 15.30 - sparse py | 35.82 | 14.73 | 15.30 | 0.57 | | 0.17 | | |
| | | 15.69 - 17.10 - sparse py in pale green yellow alt. (sericite ?) | 35.83 | 15.69 | 17.10 | 1.41 | | 0.01 | | |
| | | 12.1 - 6cm Fe-carb alteration | | | | | | | | |
| | | 16.45 - 12cm Fe-carb alteration | 36.65 | 17.10 | 17.78 | 0.68 | | NIL | | |
| 17.1 | 29.2 | dacite - greygreen, sl. fol. 45° CA. | | | | | | | | |
| | | 17.78 - 17.90 - 50% qtz bx, tr py | 35.84 | 17.78 | 17.90 | 0.12 | | 0.39 | | |
| | | 22.8 - 23.4 - occasional siliceous section and tr py | 36.66 | 17.90 | 18.90 | 1.00 | | NIL | | |

GUNNEX LIMITED

HOLE NO. P - 5

PROJECT HISLOP TWP.(PANCONTINENTAL - GUNNEX)

SHEET NO. 2

| FOOTAGE | | DESCRIPTION | SAMPLING | | | | | Au. |
|---|---|---|---|---|---|---|---|---|
| FROM | TO | | NO. | FROM | TO | FEET | | |
| | | | 35.85 | 22.80 | 23.40 | 0.60 | | Tr |
| 29.2 | 37.5 | dacite - sections to 0.5m dacite bx, fol. 45° CA. | | | | | | |
| 37.5 | 51.04 | dacite tuff & bx - grey-green, fol. at 45° to CA. whitish sil. frags or porph. occasional Tr. py. | | | | | | |
| | | 33.8 - 15cm Fe-carb alteration | | | | | | |
| | | 37.5 - 30cm Fe-carb alteration | | | | | | |
| | | 38.1 - 4cm Fe-carb alteration | | | | | | |
| | | 44.5 - 45.1 - Fe-carb alteration | | | | | | |
| | | 49% - 13cm Fe-carb alteration | | | | | | |
| | | 50.4 - 50.8 - Fe-carb alteration | | | | | | |
| 51.04 | 51.87 | dacite tuff & bx - 40% qtz frags - or streaks. one qtz-feld vein to ½cm at acute angle to fol. min. 1% py in short sect. | 35.86 | 51.04 | 51.87 | 0.83 | | 0.02 |
| 51.87 | 57.3 | andisite - brecciated over 20cm at upper contact with sil. frags sl. fol. at 45° CA. irregular narrow veinlets of qtz-feld- | | | | | | |
| 57.3 | 69.19 | andisite - foliated, dk. green, probably tuff. sections 40% qtz-feld over 0.5cm | | | | | | |
| | | 58.6 - 16cm Fe-carb akjacent to 8cm qtz-feld with sparse py. | 35.87 | 59.24 | 59.80 | 0.56 | | Tr. |
| | | 59.24 - 59.80 - 25% qtz-feld & sparse py. | 36.67<br>35.88 | 60.54<br>61.54 | 61.54<br>61.70 | 1.00<br>0.16 | | NIL<br>0.10 |
| 64.19 | 65.23 | quartz-feld (70%) with tuff. andisite (30%) 1% py | 36.68<br>35.89 | 61.70<br>64.19 | 62.70<br>65.03 | 1.00<br>0.84 | | NIL<br>Tr. |
| 65.23 | 67.0 | andesite, green - short sections with qtz frags or porphs. foliated | | | | | | |
| 67.0 | 67.7 | andesite bx - 30% sil. frags. foliated at 55° CA. Traces py along fol. planes | | | | | | |

GUNNEX LIMITED

HOLE NO. P - 5

PROJECT HISLOP TWP.(PANCONTINENTAL - GUNNEX)

SHEET NO. 3

| FOOTAGE | | DESCRIPTION | SAMPLING | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| FROM | TO | | NO. | FROM | TO | FEET | | | | | |
| 67.7 | 68.74 | Fe-carb. alteration of fol. andesite - possible tuff band | | | | | | | | | |
| 68.74 | 73.2 | andesite, green sections bx, sl. fol. narrow (1mm) black veinlets, closely spaced & oriented parallel core axis | | | | | | | | | |
| 73.2 | 73.7 | Fe-carb alterations | | | | | | | | | |
| 73.7 | 78.3 | dacite - greygreen, sl. fol. some bx, scattered narrow qtz-feld veins | | | | | | | | | |
| | | 74.65 - 75.26 - tr py with qtz-feld veinlets | 35.90 | 74.65 | 75.26 | 0.61 | | 0.005 | | | |
| | | 75.9 - 76.37 - 40% qtz frags & sparse py. | 1 | 75.90 | 76.37 | 0.47 | | 0.05 | | | |
| 78.3 | 78.8 | Fe-carb alterations | | | | | | | | | |
| 78.8 | 79.76 | dacite - with daciet bx, toward lower contact, sil light grey frags or porph. -narrow veinlets dk mineral parallel core axis. - - sections 1% py | 2 | 78.80 | 79.76 | 0.96 | | 0,07 | | | |
| 79.76 | 81.9 | andesite, dk. green, sl. foliation irregular narrow qtz-feld veinlets | | | | | | | | | |
| 81.9 | 82.8 | dacite bx, sil. frags | | | | | | | | | |
| | | 82.2 - 82.8 - 30% qtz, tr py | 35.93 | 82.20 | 82.80 | 0.60 | | 0.005 | | | |
| 82.8 | 88.56 | dacite bx with sections to ½m of andesite bx, up to 30% qtz frags or porph. with tr py. | | | | | | | | | |
| | | 83.0 - 84.71 tr py. | 35.94 | 83.0 | 84.71 | 1.71 | | 0.02 | | | |
| | | 86.15 - 86.43 - tr. py | 5 | 86.15 | 86.43 | 0.28 | | 0.002 | | | |
| | | 87.52 - 88.56 Tr. py | 6 | 87.52 | 88.56 | 1.04 | | 0.002 | | | |
| 88.56 | 90.45 | quartz bx - mixed dk. grey & white qtz totalling 80% - min 1% py diss. and along fol. planes | 7 | 88.56 | 90.45 | 1.89 | | 0.04 | | | |
| 90.45 | 92.0 | daciet bx, grey green 30% sil frags fol. 50° CA. very sparse py. | | | | | | | | | |

GUNNEX LIMITED

HOLE NO. P - 5

PROJECT HISLOP TWP.(PANCONTINENTAL - GUNNEX)

SHEET NO. 4

| FOOTAGE | | DESCRIPTION | SAMPLING | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| FROM | TO | | NO. | FROM | TO | FEET | | | | | |
| 92.0 | 97.0 | dacite - grey-green, poss. amygdaloidal fol. 50° CA. very sparse py | | | | | | | | | |
| 97.0 | 99.0 | dacite bx - light green with sil. frags. - f. g. bx - tr py over short sections | | | | | | | | | |
| | | 97.84 - 98.60 - 1% py | 35.98 | 97.84 | 98.60 | 0,76 | | 0.005 | | | |
| 99.0 | 102.4 | dacite - sections bx, grey-green, poor fol. some fine bx seems to be fracture filling | | | | | | | | | |
| | | 101.37 - 102.40 - Tr py | 35.99 | 101.37 | 102.40 | 1.03 | | 0.005 | | | |
| 102.4 | 106.05 | dacite, mass. unfol. grey green, occasional bx. | | | | | | | | | |
| 106.05 | 106,95 | dacite bx, 20% grey white qtz-feld frags or streaks. fol. 50° CA. | | | | | | | | | |
| | | 105.94 - 106.34 - tr py | 36.00 | 105.94 | 106.34 | 0.40 | | 0.005 | | | |
| 106.95 | 107.3 | feldspathized dacite, buff fine grained, unfoliated | | | | | | | | | |

# DRILL HOLE RECORD

**PANCONTINENTAL MINING (CANADA) LTD.**

PROJECT PC-18 Hislop Twp.
HOLE Nº P5
LOCATION
Initial Azimuth
LATITUDE

PROPERTY Lots 3 & 4 Con III
TOTAL DEPTH 107.3 m
INITIAL DIP -65.75°
DEPARTURE

CASING LEFT
Date Commenced Oct 12 1980
Date completed Oct 15 1980
CORE STORAGE RN. SITE
ELEVATION

**HOLE SURVEY**

| DEPTH | DIP | AZIMUTH |
|---|---|---|
| collar | -65.75° | |
| 9.8 m | -63.75 | |
| 61.0 m | -61.75 | |
| 106.7 m | -58.75 | |
| | | |

HOLE Nº P5 SHEET Nº 1 of 6
DRILL N & S P.10-11
DRILLER Heath & Sherwood
GEOLOGICAL LOG W. Dix N. Novak
RADIOMETRIC LOG
SAMPLED N. Novak W. Dix
ASSAYED Swastika Laboratories

| Depth | Core Size | Core Recovery % / Box No. | Colour | Rock Unit | Depth marks | Rock Type | Structure (Bedding / Foliation) | Mineralization % (Pyrite) |
|---|---|---|---|---|---|---|---|---|
| 0–9.6 | BW | | | | 9.6 | | | |
| 9.6–17.1 | BQ | 100% / Box No 1 | grey-green | 2b | 10.14<br>12.2<br>14.73<br>15.3<br>15.8<br>17.1 | dacite bx highly silicified with stretched qtz frags and/or porphyroblasts<br>foliated<br>minor flecks of red jasper at 12.05<br>pale green [illegible] sericite alt. | 35° | <1%<br><1%<br><1% |
| 17.1–20 | | Box No 2 | grey-green | 2 | 17.78 | slightly foliated dacite short sections of bx | 45° | |

Constituents % (Qtz/Chert): 40

**ASSAY**

| Sample Number | From U3O8 % | To | Width | Au | |
|---|---|---|---|---|---|
| 3581 | 10.14 | 13.2 | 3.06 | .03 | |
| 3663 | 13.73 | 14.73 | 1.0 | .002 | |
| 3582 | 14.73 | 15.30 | 0.57 | .17 | |
| 3664 | 15.3 | 15.69 | 0.39 | .002 | |
| 3583 | 15.69 | 17.1 | 1.41 | .01 | .09/3.17 |
| 3665 | 17.1 | 17.78 | 0.68 | NIL | |
| 3584 | 17.78 | 17.90 | 0.12 | .39 | |
| 3666 | 17.9 | 18.9 | 1.0 | NIL | |

Additional Data

## DRILL HOLE RECORD

**PANCONTINENTAL MINING (CANADA) LTD.**

PROJECT
PROPERTY
CASING LEFT
HOLE NO. P5
TOTAL DEPTH
Date commenced
LOCATION
Date completed
Initial Azimuth
INITIAL DIP
CORE STORAGE
LATITUDE
DEPARTURE
ELEVATION

HOLE SURVEY

| DEPTH | DIP | AZIMUTH |
|---|---|---|
| | | |
| | | |
| | | |
| | | |

HOLE NO. P5 SHEET NO. 2 of 6
DRILL
DRILLER
GEOLOGICAL LOG
RADIOMETRIC LOG
SAMPLED
ASSAYED

| Depth (m) | Core Size | Core Recovery % | Core Box No. | Rock Unit | Depth | Rock Type | Structure (Bedding/Fol.) | Mineralization % (Pyrite) |
|---|---|---|---|---|---|---|---|---|
| 20–22.9 | BQ | 100% | Box 2 | 2 | | slightly fol dacite. | | |
| 22.9 | | | | | 22.9 | | | |
| 23.4 | | | Box No 3 | | 23.4 | | | tr |
| 29.1 | | | Box No 4 | 2b | 29.1 | dacite c short sections (.5m) of bx slightly foliate<br>white fragments are very siliceous occasional spots pyrite | 45° | |
| 37.5 | | | Box No 5<br>Box 6 | 2ab | 37.5 | dacite tuff and bx | 45° | |

ASSAY

| Sample Number | from | to | Width | Au |
|---|---|---|---|---|
| 3585 | 22.8 | 23.4 | 0.6 | .002 |

Additional Data

**DRILL HOLE RECORD** — **PANCONTINENTAL-MINING (CANADA)-LTD.**

PROJECT ........ PROPERTY ........ CASING LEFT ........
HOLE NO ........ TOTAL DEPTH ........ Date commenced ........
LOCATION ........ Date completed ........
initial Azimuth ........ INITIAL DIP ........ CORE STORAGE ........
LATITUDE ........ DEPARTURE ........ ELEVATION ........

HOLE SURVEY

| DEPTH | DIP | AZIMUTH |
|---|---|---|
| | | |

HOLE NO ........ SHEET NO 3 of 6
DRILL ........
DRILLER ........
GEOLOGICAL LOG ........
RADIOMETRIC LOG ........
SAMPLED ........
ASSAYED ........

LITHOLOGY — Graphic Log; Constituents %: Mica, Chlorite, Graphite, Carbon, Clay, Qtz/Chert, Carbonate; Rock Type
STRUCTURE — Bedding, Schistosity, Foliation, Faulting, Quartz vein
TEXTURE — Ign., Met., Sed.
ALTERATION
MINERALIZATION % — Sphalerite, Pyrrhotite, Pyrite, Chalcopyrite, Galena, $U_3O_8$
RADIOMETRIC DATA — Inst. No: Cal. In: Out: Meter; Graph 2 4 6 8
Sample Interval; Sample Number
ASSAY — From / $U_3O_8$ %; To; Width; Au

| Depth | Core size / Recovery / Box | Rock Unit | Depth marks | Qtz/Chert % | Rock Type | Bedding | Mineralization % | Sample Number | From | To | Width | Au |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 40 | BQ, 100 %, Box No. 6 | | | | | | | | | | | |
| 41 | | 2ab | | | Foliated dacite tuff and tox | | | | | | | |
| 47 | Box No. 7 | | | | | | | | | | | |
| 51 | Box No. 8 | 2b | 51.04 | 40 | silicified dacite tx. many qtz. vein [illegible] | | 12 | 3586 | 51.04 | 51.87 | 0.83 | .02 |
| 51.87 | | 1b | 51.87<br>52.0 | | [illegible] andesite | | | | | | | |
| 52 | | 1 | | | Foliated andesite c̄ irregular qtz. fspar veinlets (<1cm) at various angles and slightly disrupted | 45° | | | | | | |
| 57 | Box No. 9 | 1a | | | Foliated andesite with some tuffaceous seams silicified over 50 8cm sparse qtz | | | | | | | |
| 59 | | | 59.24<br>59.8 | 25 | | | 1/4 | 3587 | 59.24 | 59.80 | 0.56 | .002 |
| 60 | | | | | | | | | | | | |

Additional Data

## DRILL HOLE RECORD

**PANCONTINENTAL MINING (CANADA) LTD.**

PROJECT Pc 18 Hislop Twnsp PROPERTY Lot 3+4 Con III
HOLE NO
LOCATION
Initial Azimuth
LATITUDE
TOTAL DEPTH
INITIAL DIP
DEPARTURE
CASING LEFT
Date Commenced
Date Completed
CORE STORAGE
ELEVATION

HOLE SURVEY

| DEPTH | DIP | AZIMUTH |
|---|---|---|
| | | |

HOLE NO P5 SHEET NO 4 of 6
DRILL
DRILLER
GEOLOGICAL LOG
RADIOMETRIC LOG
SAMPLED
ASSAYED

| Core Size | Core Recovery % | Core Box | Colour | Rock Unit | Depth | Qtz/Chert | Rock Type | Bedding | Pyrite | Sample Number | from | to | width | Au |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| BQ | 100% | Box 9 | | 1a | 61.54<br>61.7 | | foliate andesite c̄ tuffaceous sections | | tr. | 3667<br>3588<br>3668 | 60.54<br>61.54<br>61.7 | 61.54<br>61 70<br>62.7 | 1.0<br>0.16<br>1.0 | NIL<br>.10<br>NIL |
| | | Box 10 | | 1a<br>1aW | 64.10 | 70 | qtz-[illegible] rich andesite tuff | | <1% | 3583 | 64.10 | 65.03 | 0.94 | .002 |
| | | | | 1a | 65.03<br>65.35 | | foliated andesite tuffs | | | | | | | |
| | | | | 1b | 67.0 | 30° | bo andesite foliated | 55° | | | | | | |
| | | | | grey | 67.7 | | Fe-carb foliated tuff or shear zone | | | | | | | |
| | | Box 11 | | 1b | 68.7 | | foliated andesite with short siliceous bo sections closely spaced (1mm) dark [illegible] (1mm) [illegible] ⊼ CA | | | | | | | |
| | | | | | 73.2 | | Fe Carb altd | | | | | | | |
| | | Box 12 | | 2b | 73.7<br>74.6<br>75.2<br>75.9<br>76.3 | 30 | dacite with minor siliceous bo sections showing dr Py | | <1%<br><1% | 3590<br>3591 | 74.65<br>75.9 | 75.26<br>76.37 | 0.61<br>0.47 | 0.005<br>0.05 |
| | | | | | 78.3 | | Fe Carb altd | | | | | | | |
| | | | | | 78.6<br>79.2 | | dacite bo @ [illegible] ⊼ CA<br>andesite | | 1% | 3592 | 78.8 | 79.76 | 0.96 | 0.07 |

Additional Data

57.4

**DRILL HOLE RECORD** — **PANCONTINENTAL MINING (CANADA) LTD.**

PROJECT ........ PROPERTY ........ CASING LEFT ........
HOLE NO ........ TOTAL DEPTH ........ Date commenced ........
LOCATION ........ Date completed ........
Initial Azimuth ........ INITIAL DIP ........ CORE STORAGE ........
LATITUDE ........ DEPARTURE ........ ELEVATION ........

HOLE SURVEY

| DEPTH | DIP | AZIMUTH |
|---|---|---|
| | | |
| | | |
| | | |
| | | |
| | | |

HOLE NO. PS ........ SHEET NO. 5 of 6
DRILL ........
DRILLER ........
GEOLOGICAL LOG ........
RADIOMETRIC LOG ........
SAMPLED ........
ASSAYED ........

Woodlocks | Casing | Core Size: BQ | Core Recovery %: 100% | Core Box No.: Box 13, Box 14, Box 15, Box 16

| Depth (scale) | Colour | Rock Unit | Depth | Constituents % Qtz./Chert | Rock Type | Bedding | Pyrite |
|---|---|---|---|---|---|---|---|
| 80–81.9 | dk green | 1 | 81.9 | | andesite slightly foliated with siliceous bx many irregular narrow qtz. fract. veins. | | |
| 81.9–82.8 | | 2b | 82.1<br>82.8<br>83.0 | 30% | dacite bx. siliceous frags | | tr. |
| 82.8–88.56 | | 2b with 1b | 84.71<br>86.15<br>86.43<br>87.52<br>88.56 | | dacite bx with andesitic bx sections up to .5m in length more siliceous and bx sections contain py-mafics and 30% qtz. | | 4%<br>1%<br>4% |
| 88.56–90.45 | | 4a | 90.45 | | grey cherty qtz, highly siliceous & py | | 1% |
| 90.45–92.0 | | 2b | 92.0 | | dacite bx foliated, minor py. blebs. | 50° | |
| 92.0–97.0 | | 2 | 97.0 | | massive dacite slightly foliated occasional qtz-fspar stringers rounded qtz-fspar blebs (amygdules) elongated ∥ fol. | | |
| 97.0–99.0 | | 2b | 97.84<br>98.60<br>99.0 | | f.g. dacite bx fragments in in darker matrix minor Pyrite | | 4% |
| 99.0– | | | | | c.g. dacite and dacite bx. dacite foliated | | |

ASSAY

| Sample Number | | | | $U_3O_8$ % |
|---|---|---|---|---|
| 3593 | 82.2 | 82.8 | 0.6 | 0.005 |
| 3594 | 83.0 | 84.71 | 1.71 | 0.02 |
| 3595 | 86.15 | 86.43 | 0.28 | 0.002 |
| 3596 | 87.52 | 88.56 | 1.04 | 0.002 |
| 3597 | 88.56 | 90.45 | 1.89 | 0.04 |
| 3598 | 97.84 | 98.60 | 0.76 | 0.005 |

Additional Data

**DRILL HOLE RECORD** — **PANCONTINENTAL MINING (CANADA) LTD.**

PROJECT
HOLE No
LOCATION
Initial Azimuth
LATITUDE

PROPERTY
TOTAL DEPTH
INITIAL DIP
DEPARTURE

CASING LEFT
Date Commenced
Date Completed
CORE STORAGE
ELEVATION

| HOLE SURVEY | | |
|---|---|---|
| DEPTH | DIP | AZIMUTH |
| | | |
| | | |
| | | |
| | | |
| | | |

HOLE No P5 SHEET No 6 of 6
DRILL
DRILLER
GEOLOGICAL LOG
RADIOMETRIC LOG
SAMPLED
ASSAYED

| Core size | Core Recovery % | Core | Colour | Rock Unit | Depth | Rock Type | Bedding | Pyrite | Sample Interval | Sample Number | U3O8 % | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| BQ | 100% | Box 16 | | 2b | 101.39 | c.g. dacite and dacite bx | | | | | | | | |
| | | Box 17 | | 2 | 102.4 | dacite massive unfoliated occasional short bx sections. | | tr | ⎡⎤ | 3599 | 101.39 | 102.4 | 1.01 | 0.005 |
| | | | | 2b | 104.1 | | | | | | | | | |
| | | | | | 106.01 | dacite bx 50% qtz-[illegible] frags. | 50° | tr | ⎡⎤ | 3600 | 105.94 | 106.34 | 0.4 | 0.005 |
| | | | buff | [illegible] | 106.95 | [illegible] dacite f.g. | | | | | | | | |
| | | | | | 107.3 | | | | | | | | | |

Additional Data

OM9-PE7-C-80

GUNNEX LIMITED.

D.D-Hole No. P - 6

PROJECT HISLOP TWP.(PANCONTINENTAL - GUNNEX)

Sheet No. ____

LOCATION HISLOP TWP.

LOTS 3 & 4 Con. 3

HOLE STARTED October 15/80

HOLE COMPLETED Oct. 17/80

CORE RECOVERY ____ %

DRILLED BY HEATH & SHERWOOD

LOGGED BY W F DIX

| SURVEY | | |
|---|---|---|
| DEPTH | DIP | AZIMUTH |
| COLLAR | -65.25° | |
| 13.4 | 62.0 ° | |
| 61.0 | 60.5° | |
| | | |
| | | |
| | | |

COLLAR. LAT. 994 N

DEP. 6.0 W

ELEV. 5000.34 m

AZIMUTH 045° T

DIP -65.25°

LENGTH 75.3

HOR. PROJ. ____ VERT. PROJ. ____

| FOOTAGE | | DESCRIPTION. | SAMPLING | | | | | Au. | | |
|---|---|---|---|---|---|---|---|---|---|---|
| FROM | TO | | NO | FROM | TO | FEET | | | | |
| 0 | 13.1 | Casing | | | | | | | | |
| 13.1 | 32.0 | rhyolite bx - pale grey, whitish frags, in grey matrix, fol. at 40° to CA. - occasional py trace | | | | | | | | |
| | | 15.4 - 15.7 - Fe-carb alteration | 83.76 | 17.07 | 18.07 | 1.00 | | NIL | | |
| | | 18.07 - 18.16 - qtz bx & 2% py | 36.01 | 18.07 | 18.53 | 0.46 | | 0.24 | | |
| | | 18.33 - 18.53 - qtz bx & 3% py - grey & white qtz | 83.77 | 18.53 | 19.53 | 1.00 | | 0.002 | | |
| | | 21.1 - 21.4 - Fe-carb alteration | | | | | | | | |
| | | 25.4 - 7cm Fe-carb alteration | | | | | | | | |
| | | 26.87 - 27.72 - Tr py | 36.02 | 26.87 | 27.72 | 0.85 | | 0.05 | | |
| | | 29.13 - 29.69 - Tr py | 3 | 29.13 | 29.69 | 0.56 | | 0.01 | | |

GUNNEX LIMITED

HOLE NO. P - 6

PROJECT HISLOP TWP. (PANCONTINENTAL - GUNNEX)

SHEET NO. 2

| FOOTAGE | | DESCRIPTION | SAMPLING | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| FROM | TO | | NO. | FROM | TO | FEET | | | | | |
| 32.0 | 35.4 | dacite - grey green, fine grain, upper part unfoliated, lower part fol. | | | | | | | | | |
| 35.4 | 37.3 | rhyolite tuff - grey, strongly fol. at 50° CA. | | | | | | | | | |
| | | 36.7 - 36.8 white qtz. no py | | | | | | | | | |
| 37.3 | 44.0 | dacite - sections bx with sil. whitish frags; fol. at 50° Ca. | | | | | | | | | |
| | | 41.5 - 41.97 bx - siliceous with tr py | 36.04 | 41.50 | 41.97 | 0,47 | | 0.002 | | | |
| 44.0 | 46.4 | dacite - fol. grey-green, possible tuff | | | | | | | | | |
| 96.4 | 47.6 | mass. dacite - very slight fol. fine irregular qtz.-feld. veinlets | | | | | | | | | |
| 47.6 | 50.0 | daciet, grey-green, foliated & possibly tuff. fol. at 50° CA. | | | | | | | | | |
| 50.0 | 52.4 | dacite bx - greenish to grey, whitish sil. grags or porphyroblasts | | | | | | | | | |
| | | 51.0 - very sparse py over 14cm. | | | | | | | | | |
| 52.4 | 55.0 | rhyolite bx, tuffaceous, grey, coarse texture, fol at 50° CA. | | | | | | | | | |
| | | 53.17 - 53.50 sparse py | 36.05 | 53.17 | 53.50 | 0.33 | | 0.005 | | | |
| 55.0 | 57.4 | dacite bx- grey green up to 25% sil. frags, streaks etc. foliated | | | | | | | | | |
| 57.4 | 59.8 | dacite - grey-green, f.g. sl. foliation toward upper contact | | | | | | | | | |
| 59.8 | 60.6 | Fe-carb. alteration of dacite bx, with siliceous frags. or porph., some f.g. dacite at lower contact. | | | | | | | | | |
| 60.6 | 62.5 | dacite bx & tuff, grey-green, fol. 50° CA. | | | | | | | | | |
| 62.5 | 62.9 | grey-green, mass. dacite, sharp contacts | | | | | | | | | |
| 62.9 | 63.9 | dacite bx - fol. grey green | | | | | | | | | |
| 63.9 | 65.5 | andesite, green, foliation at 55° CA. numerous fine qtz-feld veinlets at random angles. | | | | | | | | | |

GUNNEX LIMITED

PROJECT HISLOP TWP.(PANCONTINENTAL-GUNNEX)

HOLE NO. P - 6

SHEET NO. 3

| FOOTAGE | | DESCRIPTION | SAMPLING | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| FROM | TO | | NO. | FROM | TO | FEET | | | | | |
| 65.5 | 66.5 | andesite bx, green with silious pale frags, foliated, tuff. toward lower contact. | | | | | | | | | |
| 66.5 | 75.3 | andesite, slight foliation, green, amygd. numerous qtz.-feld veinlets to 1cm. - becoming dacite toward lower section.<br>68.8 - 4cm white qtz<br>69.1 - 4cm white qtz<br>70.8 - 14cm Fe-carb<br>71.5 - 73.2 80% Fe-carb. | | | | | | | | | |
| | | **NOTE:** This hole was drilled to test for a southerly extension of the uppermost intersection in hole P.2 as well as down dip extensions of mineralization in hole G-78. | | | | | | | | | |

# DRILL HOLE RECORD

**PANCONTINENTAL MINING (CANADA) LTD.**

PROJECT Pc - 18 [illegible] PROPERTY [illegible]
HOLE NO P 6 TOTAL DEPTH 75.3
LOCATION 994 m N 6 m W
Initial Azimuth 045° INITIAL DIP 65.5°
LATITUDE DEPARTURE

CASING LEFT
Date Commenced Oct 15 1980
Date Completed Oct 17 1980
CORE STORAGE
ELEVATION 5000.34

HOLE SURVEY

| DEPTH | DIP | AZIMUTH |
|---|---|---|
| Collar | 65.75 | |
| 13.4m | 67.0 | |
| 61.0m | 60.5 | |
| | | |
| | | |

HOLE NO P 6 SHEET NO 1 of 4
DRILL H & S B 10 - 11
DRILLER [illegible]
GEOLOGICAL LOG W. Dix N. Novak
RADIOMETRIC LOG
SAMPLED N. Novak W. Dix
ASSAYED

| Core size | Box | Colour | Rock Unit | Depth | Rock Type | Bedding | Pyrite % |
|---|---|---|---|---|---|---|---|
| BW | | | | 0–13.1 | | | |
| BQ | Box No 1 | pale gray | 3b | 13.1 | Rhyolite bx white frags in lt green matrix foliated occasional tr of pyrite | 40° | 2% |

| Sample Number | From | To | Length | $U_3O_8$ % |
|---|---|---|---|---|
| 8376 | 17.07 | 18.07 | 1.0 | NIL |
| 3601 | 18.07 | 18.53 | 0.46 | 0.24 |
| 8377 | 18.53 | 19.53 | 1.0 | 0.002 |

Additional Data

**DRILL HOLE RECORD** — PANCONTINENTAL-MINING (CANADA) LTD.

PROJECT
PROPERTY
CASING LEFT
HOLE NO
TOTAL DEPTH
Date Commenced
LOCATION
Date Completed
Initial Azimuth
INITIAL DIP
CORE STORAGE
LATITUDE
DEPARTURE
ELEVATION

HOLE SURVEY

| DEPTH | DIP | AZIMUTH |
|---|---|---|
| | | |

HOLE NO P6 SHEET NO 2 of
DRILL
DRILLER
GEOLOGICAL LOG
RADIOMETRIC LOG
SAMPLED
ASSAYED

Core size: BQ

| Core Box No. | Colour | Rock Unit | Depth | Rock Type | Bedding | Pyrrhotite |
|---|---|---|---|---|---|---|
| Box No 2 | | 3b | | rhyolite bx as to above. | | |
| Box No 3 | | | 268.7 – 277.2 | | | tr |
| | | | 291.3 – 296.9 | | | tr |
| Box No 4 | pale green grey | 3a | 320 – 341 | rhyolite tuff m.g. foliated | 45°<br>45° | |
| | gray green | 2 | 341 – 354 | dacite f.g. massive to slightly foliated | | |
| | gray | 3ab | 354 – 373 | foliated rhyolite tuff & bx 30cm qtz vein. | 50° | |
| Box 5 | | 2ab | 373 – | dacite tuff & bx | | |

ASSAY

| Sample Number | | | U3O8 % | |
|---|---|---|---|---|
| 3602 | 26.87 | 27.72 | 0.85 | 0.06 |
| 3603 | 29.13 | 29.69 | 0.56 | 0.01 |

Additional Data

**DRILL HOLE RECORD** — **PANCONTINENTAL- MINING (CANADA)-LTD.**

PROJECT ............ PROPERTY ............ CASING LEFT ............
HOLE No ............ TOTAL DEPTH ............ Date commenced ............
LOCATION ............ Date completed ............
Initial Azimuth ............ INITIAL DIP ............ CORE STORAGE ............
LATITUDE ............ DEPARTURE ............ ELEVATION ............

HOLE SURVEY

| DEPTH | DIP | AZIMUTH |
|---|---|---|
| | | |
| | | |
| | | |
| | | |
| | | |

HOLE No 96 SHEET No 3 of
DRILL ............
DRILLER ............
GEOLOGICAL LOG ............
RADIOMETRIC LOG ............
SAMPLED ............
ASSAYED ............

| Depth scale | Lith | Core Box No. | Colour | Rock Unit | Depth | Rock Type | Bedding | Pyrite | Sample Number | U3O8 % | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 40 | RQ | 5 | | 2ab | | dacite tuff with minor bx sections | | | | | | | |
| | | | | 2b | 41.5 – 41.87 | dacite bx tr. py | | tr | 3604 | 41.5 | 41.87 | 0.47 | 0.002 |
| | | | | 2ab | 41.87 | dacite tuff ē minor bx sections | 50° | | | | | | |
| 44 | | Box 6 | gray green | 2 | 44.0 | foliated dacite | | | | | | | |
| 46 | | | dk green | | 46.4 | slightly foliated medium dacite (dike) 2 irregular qtz fingers [illegible] | | | | | | | |
| 48 | | | gray green | 2a | 47.6 | foliated tuff dacite. | 50° | | | | | | |
| 50 | | Box 7 | gray green | 2b | 50.0 – 51.0 | dacite bx with siliceous frags foliated | | tr | | | | | |
| 52 | | | | 3b | 52.4 – 53.17 – 53.5 | rhyolite bx foliated | 50° | tr | 3605 | 53.17 | 53.5 | 0.33 | 0.005 |
| 55 | | Box 8 | | 2b | 55.0 | dacite bx with siliceous section up to 35% | | | | | | | |
| 57 | | 9 | gray green | 2 | 57.4 – 59.8 | slightly foliated dacite | | | | | | | |
| 60 | | | | | | | | | | | | | |

Additional Data

# DRILL HOLE RECORD

**PANCONTINENTAL MINING (CANADA) LTD.**

PROJECT ...........
PROPERTY ...........
CASING LEFT ...........
HOLE No ...........
TOTAL DEPTH ...........
Date commenced ...........
LOCATION ...........
Date completed ...........
Initial Azimuth ...........
INITIAL DIP ...........
CORE STORAGE ...........
LATITUDE ...........
DEPARTURE ...........
ELEVATION ...........

HOLE SURVEY

| DEPTH | DIP | AZIMUTH |
|---|---|---|
| | | |

HOLE No P6 SHEET No 4 of 4
DRILL ...........
DRILLER ...........
GEOLOGICAL LOG ...........
RADIOMETRIC LOG ...........
SAMPLED ...........
ASSAYED ...........

| Core Size | Core Recovery % | Core Box No | Colour | Rock Unit | Depth | Rock Type | Bedding |
|---|---|---|---|---|---|---|---|
| BQ | 70 | Box No 9 | | 2b | | dacite [illegible] dacite at base | |
| | | | | | 636 | | |
| | | | | 2ab | | dacite bx with tuffaceous sections foliated | 50° |
| | | | | | 614 | | |
| | | | | 2 | | massive dacite fg | |
| | | | | | 625 | | |
| | | | | 2ab | | dacite bx with tuffaceous sections | |
| | | | | | 639 | | |
| | | Box No 10 | dk green | 1 | | foliated andesite irregular qtz fspar stringers [illegible] | 55° |
| | | | | | 654 | | |
| | | | | 1ab | | bx andesite with lge tuffaceous at base | |
| | | | | | 660 | | |
| | | Box No 11 | | 1 | | andesite slightly foliated with siliceous amygdules numerous qtz fspar veinlets up to 1cm wide | |
| | | | | | 763 | | |

LITHOLOGY — Graphic Log — Constituents %: Mica, Chlorite, Graphite, Carbon, Clay, Qtz/Chert, Carbonate — Rock Type
STRUCTURE: Bedding, Schistosity, Brecciation, Faulting, Quartz vein
TEXTURE: Ign., Met., Sed.
ALTERATION
MINERALIZATION %: Sphalerite, Pyrrhotite, Pyrite, Chalcopyrite, Galena, $U_3O_8$
RADIOMETRIC DATA: Inst. No: Cal. In Out; Meter; Graph 2 4 6 8
Sample Interval, Sample Number
ASSAY: $U_3O_8$ %

Additional Data

OM9-PE7-C-80

# GUNNEX LIMITED.

D.D-Hole No. P - 7

Sheet No.

PROJECT HISLOP TWP.(PANCONTINENTAL-GUNNEX)

LOCATION HISLOP TWP.

LOTS 3 & 4 Con. 3

HOLE STARTED Oct. 18/80

HOLE COMPLETED Oct. 22/80

CORE RECOVERY %

DRILLED BY HEATH & SHERWOOD

LOGGED BY W. F. DIX

| SURVEY | | |
|---|---|---|
| DEPTH | DIP | AZIMUTH |
| COLLAR | -65.0° | |
| 16.8 | -67.5° | |
| 76.2 | -56.0° | |
| 121.9 | -43° | |
| | | |
| | | |

COLLAR. LAT. 986 N

DEP. 13.5 W

ELEV. 5001.0 m

AZIMUTH 045° T

DIP -65.0°

LENGTH 127.1

HOR. PROJ.

VERT. PROJ.

| FOOTAGE | | DESCRIPTION. | SAMPLING | | | | | Au. | | |
|---|---|---|---|---|---|---|---|---|---|---|
| FROM m | TO m | | NO | FROM | TO | FEET | | | | |
| 0 | 16.5 | Casing | | | | | | | | |
| 16.5 | 25.1 | rhyolite bx - light grey, fol. at 45° CA.,slightly sericite, - occasional sparse py. | | | | | | | | 80% recovery |
| | | 17.5 - gouge | | | | | | | | |
| | | 20.6 - 20.9 - 25% grey qtz, short sections 1% py | 36.27 | 20.6 | 20.9 | 0.3 | | 0.002 | | |
| | | 20.4 - mud smear | | | | | | | | |
| 25.1 | 26.4 | rhyolite tuff & bx - strong fol. at 40° CA., green-yellow sericite alteration, (some mariposite?) - scattered py 1% | 8 | 25.1 | 26.4 | 1.3 | | 0.005 | | |
| 26.4 | 33.0 | rhyolite bx - darker grey, pale grey sil. fragments in dark argillaceous matrix - 80% qtz frags. - diss. 1% on foliation planes but decreasing to lower contact. | 9 | 26.40 | 27.85 | 1.45 | | 0.002 | | |
| | | | 36.30 | 27.85 | 29,52 | 1.67 | | 0.04 | | |

GUNNEX LIMITED

PROJECT HISLOP TWP. (PANCONTINENTAL - GUNNEX)

HOLE NO. P - 7

SHEET NO. 2

| FOOTAGE | | DESCRIPTION | SAMPLING | | | | | Au. |
|---|---|---|---|---|---|---|---|---|
| FROM | TO | | NO. | FROM | TO | FEET | | |
| | | 27.88 - 28.3 - light grey and sl. sericite - 14cm Fe-carb. at lower contact | 1 | 29.52 | 30.53 | 1.01 | | 0.005 |
| | | | 2 | 30.53 | 31.75 | 1.22 | | 0.005 |
| 33.0 | 36.02 | rhyolite tuff - some bx, light grey, some sericitic alt. fol. at $50^0$ to core. | 3 | 31.75 | 33.00 | 1.25 | | 0.005 |
| | | | 4 | 33.00 | 34.53 | 1.53 | | 0.03 |
| | | 33.0 - onward darker grey and 1% py | 5 | 34.53 | 36.02 | 1.49 | | 0.002 |
| 36.02 | 44.0 | rhyolite sericitic, pale greenish grey, fol. at 40° CA. sparse py | 6 | 36.02 | 37.00 | 0.98 | | Nil |
| | | 37.8 - 37.5 - Fe-carb. alt. | | | | | | |
| | | 38.1 - 10cm Fe-carb alt. | | | | | | |
| | | 41.6 - 42.1 - sparse py with streaks 20% grey qtz. | | | | | | |
| 44.0 | 46.0 | rhyolite bx - streaks grey qtz, - occasional sparse py | 7 | 44.0 | 44.6 | 0.6 | | 0.005 |
| | | | 8 | 44.60 | 46.03 | 1.43 | | 0.005 |
| | | 44.5 - 46.0 - yellow sericitic alteration becoming greenish toward lower contact | | | | | | |
| 46.0 | 98.2 | feldspathised rhyolite bx - 20% grey qtz in streaks, - traces py - visible graphite | 36.39 | 46.03 | 47.17 | 1.14 | | 0.03 |
| | | | 36.40 | 47.17 | 48.21 | 1.04 | | 0.002 |
| 48.2 | 49.05 | rhyolite bx - grey to dark grey qtz frags. - 1.5% py | 1 | 48.21 | 49.06 | 0.85 | | 0.05 |
| 49.05 | 56.8 | dacite bx - sericitic, pale grey-green, 25% qtz streaks, fol. at 50°CA. | | | | | | |
| | | 54.82 - 55.28 - 30% grey qtz and py traces | 2 | 54.82 | 55.28 | 0.46 | | 0.03 |
| | | 50.2 - 50.7 - f.g. dacite dike | | | | | | |
| 56.8 | 58.8 | dacite tuff - greenish grey fol. 45°CA. granular with some frags. | | | | | | |
| 58.8 | 60.1 | andesite tuff - dark grey green, strongly fol. as above. | | | | | | |
| 60.1 | 63.0 | dacite tuff - greyish, granular strong foliated, 15% small mafix xls. - 13cm white vein qtz at lower contact | 83.78 | 60.88 | 61.88 | 1.00 | | NIL |

GUNNEX LIMITED

HOLE NO. P - 7

PROJECT HISLOP TWP. (PANCONTINENTAL - GUNNEX)

SHEET NO. 3

| FOOTAGE | | DESCRIPTION | SAMPLING | | | | | Au. | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| FROM | TO | | NO. | FROM | TO | FEET | | | | | |
| | | 61.88 - 62.80 - tr. py | 36.43 | 61.88 | 62.80 | 0.92 | | 0.21 | | | |
| 63.0 | 67.36 | dacite - grey green, foliated, sections bx | 83.79 | 62.80 | 63.80 | 1.00 | | 0.002 | | | |
| | | 66.16 - 66.46 - white qtz and Fe-carb. | | | | | | | | | |
| 67.36 | 71.30 | dacite bx - grey green, 25% sil. grey frags or porphyroblasts - occasional Fe-carb alt over few cms - sections diss py to 1% | 4 | 67.35 | 68.15 | 0.80 | | 0.05 | | | |
| | | 67.35 - 68.15 - 30% qtz tr py | | | | | | | | | |
| | | 70.38 - 71.30 - 30% qtz tr py 1% | 5 | 70.38 | 71.30 | 0.92 | | 0.05 | | | |
| 71.30 | 74.80 | dacite - grey green, sections bx, foliated | | | | | | | | | |
| | | 74.6 - 6cm grey qtz tr py | | | | | | | | | |
| 74.80 | 75.3 | Fe-carb alteration | | | | | | | | | |
| 75.3 | 84.12 | andesite - green, pl. fol., numerous white qtz-feld veins to 10cm at various angles, sl. amygd. - some red Fe-stained of qtz veins. | | | | | | | | | |
| 84.12 | 85.0 | dacite bx - grey-green, fol. 60° CA. | | | | | | | | | |
| | | 84.3 - 84.6 - 50% qtz - 1% py | 36.46 | 84.3 | 84.6 | 0.30 | | 0.03 | | | |
| 85.0 | 87.8 | andesite, dark grey green, fol. 60°CA. sections fract. and slight bx, qtz-feld. veining to 1cm. | | | | | | | | | |
| 87.8 | 91.1 | dacite - foliated with short sections bx, qtz-feld veining to 1cm // foliation | | | | | | | | | |
| 91.1 | 93.65 | andesite - green, fractured with irregular narrow veinlets qtz-feld. to 2 cm. - 13cm grey qtz at lower contact with few patches dk grey qtz - no py | | | | | | | | | |
| 93.65 | 95.0 | dacite - grey green, foliated, minor bx | | | | | | | | | |

GUNNEX LIMITED

PROJECT HISLOP TWP.(PANCONTINENTAL - GUNNEX)

HOLE NO. P - 7

SHEET NO. 4

| FOOTAGE | | DESCRIPTION | SAMPLING | | | | | Au. | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| FROM | TO | | NO. | FROM | TO | FEET | | | | | |
| 95.0 | 99.14 | dacite bx - fol. 60° CA. 40% white qtz frags and blebs | | | | | | | | | |
| | | 95.0 - 95.54 - 1% py | 36.47 | 95.00 | 95.54 | 0.54 | | 0.02 | | | |
| | | 95.54 - 97.31 - tr py | 8 | 95.54 | 97.32 | 1.78 | | 0.005 | | | |
| | | 97.9 - 99.14 - tr py | 36.49 | 97.32 | 97.91 | 0.59 | | 0.002 | | | |
| 99.14 | 100.39 | Quartz bx - 40% whitish fragments in dk. grey cherty qtz matrix - 1 to 2% py. | 36.50 | 97.91 | 99.14 | 1.23 | | 0.05 | .0615 | | |
| | | | 1 | 99.14 | 100.39 | 1.25 | | 0.24 | .3000 | | |
| | | | 2 | 100.39 | 101.65 | 1.26 | | 0.10 | .1260 | | |
| 100.39 | 103.65 | dacite bx - foliated, grey green, whitish sil. frags and porphs. | 83.80 | 101.65 | 103.00 | 1.35 | | | .4875<br>3.74 | .13/3.74 | |
| | | 100.39 - 101.65 - siliceous with tr py | | | | | | | | | |
| 103.65 | 104.28 | quartz bx - 70% white and dk. grey qtz, sections fol. dacite bx - up to 4% py over 10cm. | 3 | 103.00 | 103.65 | 0.65 | | 0.02 | | | |
| | | | 4 | 103.65 | 104.28 | 0.63 | | 0.02 | | | |
| 104.28 | 105.6 | dacite bx - grey green, 20% qtz frags foliated 65° CA. | 5 | 104.28 | 105.15 | 0.87 | | NIL | | | |
| | | 105.2 - 15cm qtz - filled shear zone | | | | | | | | | |
| 105.6 | 106.6 | dacite bx - grey green, 20% siliceous frags. foliated | | | | | | | | | |
| 106.6 | 109.1 | dacite, grey green, fol. 60° CA. sections bx - very occasional tr py | | | | | | | | | |
| 109.1 | 113.2 | rhyolite, grey-buff, slightly foliated to 112 m , thereafter massive with fine irregular qtz - filled fratures | | | | | | | | | |
| | | 111.7 - 112.0 - qtz-filled bx with 1% py | 36.56 | 111.7 | 112.0 | 0.30 | | 0.002 | | | |
| 113.2 | 116.04 | dacite bx - grey green, fol. 60°CA. 10cm tr py at lower contact | | | | | | | | | |
| 116.04 | 117.3 | dacite, grey green, foliated | | | | | | | | | |
| 117.3 | 121.0 | andisite, sections bx, green, numerous qtz-feld. veins to 2cm wide - parallel fol. as well as x-cutting | | | | | | | | | |

GUNNEX LIMITED

HOLE NO. P - 7

PROJECT HISLOP TWP. (PANCONTINENTAL - GUNNEX)

SHEET NO. 5

| FOOTAGE | | DESCRIPTION | SAMPLING | | | | | Au. | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| FROM | TO | | NO. | FROM | TO | FEET | | | | | |
| 121.0 | 127.1 | andesite, green, m.g. massive, occasional veinlet qtz-feld. | | | | | | | | | |

## DRILL HOLE RECORD

**PANCONTINENTAL MINING (CANADA) LTD.**

PROJECT PC 18 Hislop Twp.
HOLE Nº P-7
LOCATION 986 m N 13.5 m W
Initial Azimuth 045
LATITUDE

PROPERTY Lots 3 & 4 Con III
TOTAL DEPTH 127.1
INITIAL DIP -65°
DEPARTURE

CASING LEFT -
Date Commenced Oct 18 1982
Date Completed Oct 22 1980
CORE STORAGE on site
ELEVATION 5001.0 m

HOLE SURVEY

| DEPTH | DIP | AZIMUTH |
|---|---|---|
| collar | 65.0 | 045. |
| 16.8 | 62.5 | |
| 76.2 | 56.0 | |
| 121.9 | 43.0 | |
| | | |

HOLE Nº P7 SHEET Nº 1 of 7
DRILL H & S B10-11
DRILLER Heath & Sherwood
GEOLOGICAL LOG W. Dix N. Novak
RADIOMETRIC LOG
SAMPLED W. Dix N. Novak
ASSAYED Swastika Laboratories

Column headings: Core size, Core Recovery %, Core Cuttings, Colour, Rock Unit, Depth | LITHOLOGY: Graphic Log, Constituents %: Mica, Chlorite, Graphite, Carbon, Clay, Qtz./Chert, Carbonate; Rock Type | STRUCTURE: Bedding, Schistosity, Brecciation, Faulting, Quartz vein | TEXTURE: Ign., Met., Sed. | ALTERATION | MINERALIZATION %: Sphalerite, Pyrrhotite, Pyrite, Chalcopyrite, Galena, $U_3O_8$ | RADIOMETRIC DATA: Inst. Nº:, Col. In: Out:, Meter, Graph 2 4 6 8 | Sample Interval | Sample Number | ASSAY: $U_3O_8$ %

Depth scale: 0 1 2 3 4 5 6 7 8 9 0 1 2 3 4 5 6 7 8 9 0

Core size: BX

0 – 16.5: Rock Type: CLAY

16.5 –

Depth: 16.5, n.s

Core Recovery %: 80

Box #1

Colour: lt. grey

Rock Unit: 3b

Rock Type: Rhyolite bx
slightly sericitic

Bedding: 45°

Additional Data

**DRILL HOLE RECORD** — **PANCONTINENTAL MINING (CANADA) LTD.**

PROJECT ............ PROPERTY ............ CASING LEFT ............
HOLE No ............ TOTAL DEPTH ............ Date commenced ............
LOCATION ............ Date completed ............
Initial Azimuth ............ INITIAL DIP ............ CORE STORAGE ............
LATITUDE ............ DEPARTURE ............ ELEVATION ............

HOLE SURVEY

| DEPTH | DIP | AZIMUTH |
|---|---|---|
| | | |
| | | |
| | | |
| | | |

HOLE No P 7 SHEET No 2 of 7
DRILL ............
DRILLER ............
GEOLOGICAL LOG ............
RADIOMETRIC LOG ............
SAMPLED ............
ASSAYED ............

| Core Size | Core Box | Colour | Rock Unit | Depth | Constituents % (Qtz/Chert) | Rock Type | Bedding | Mineralization % (Pyrite) |
|---|---|---|---|---|---|---|---|---|
| BQ | Box 1 | | | | | rhyolite bx ĉ sericite | | |
| | Box No 2 | | 3b wr | | | | | |
| | | | 3a+b | 25.1 | | rhyolite bx and tuff contains microporph. | 40° | |
| | Box No 3 | pale grey | 3b | 26.4 | | rhyolite bx ĉ strong foliation grey frags in darker "argillaceous" matrix. diss. py along foliations | 90° | |
| | Box No 4 | dark grey | 3b | 33.0 | 80 | dk grey rhyolite bx | | 1% |
| | No 5 | pale grey green | Ser. 3b | 36.0 | | Sericitic rhyolite slightly bx and foliated | | |

| | | | | |
|---|---|---|---|---|
| 3627 | 20.6 | 20.8 | 0.3 | 0.002 |
| 3628 | 25.1 | 26.4 | 1.3 | 0.005 |
| 3629 | 26.4 | 27.85 | 1.45 | 0.003 |
| 3630 | 27.85 | 29.52 | 1.67 | 0.09 |
| 3631 | 29.52 | 30.53 | 1.01 | 0.005 |
| 3632 | 30.53 | 31.75 | 1.22 | 0.005 |
| 3633 | 31.75 | 33.0 | 1.25 | 0.005 |
| 3634 | 33.0 | 34.53 | 1.53 | 0.03 |
| 3635 | 34.53 | 36.02 | 1.49 | 0.002 |
| 3636 | 36.02 | 37.0 | 0.98 | Nil |

Additional Data

**DRILL HOLE RECORD** — **PANCONTINENTAL-MINING (CANADA) LTD.**

PROJECT
PROPERTY
CASING LEFT
HOLE Nº
TOTAL DEPTH
Date commenced
LOCATION
Date completed
Initial Azimuth
INITIAL DIP
CORE STORAGE
LATITUDE
DEPARTURE
ELEVATION

HOLE SURVEY

| DEPTH | DIP | AZIMUTH |
|---|---|---|
| | | |

HOLE Nº P-7 SHEET Nº 3 of 7
DRILL
DRILLER
GEOLOGICAL LOG
RADIOMETRIC LOG
SAMPLED
ASSAYED

| Core Size | Box | Colour | Rock Unit | Depth | Qtz/Chert | Sericite | Rock Type | Bedding | Pyrite |
|---|---|---|---|---|---|---|---|---|---|
| BQ | Box No 5 | lt grey | 3a-b | | [illegible] | | rhyolite tuff slightly brecciated | 50° | tr |
| | | pale grey to lt green | 3b | 44.0<br>44.5 | | 10% | rhyolite bx ē grey porph. qtz. sericite | | tr. |
| | Box No 6 | buff pink & mauve chocolate | fel 3b & qtz etc | 46.0 | 20 | | feldspathized rhyolite bx ē dk grey qtz. & graphite? | | tr |
| | Box | grey to dk grey | 3b + 4b | 48.2 | | | bx. cherty rhyolite | | 2% |
| | | pale grey green | 3b | 49.0 | | | sericitic dacite' bx | 50 | |
| | | | 2?b | 50.2 | | | f.g. dacite dike | | |
| | Box No 7 | | 7b ser. | 50.7<br>54.82<br>55.28 | 30 | | sericitic dacite bx | 50 | tr |
| | Box No 8 | greenish grey | 3a | 56.6 | | | dacite tuff granular & siliceous frags | 45 | |
| | Box | dk grey green | 1a | 58.8 | | | andesite tuff strongly foliated | | |

| Sample Number | U₃O₈ % | | | |
|---|---|---|---|---|
| 3637 | 44.0 | 44.6 | 0.6 | 0.005 |
| 3638 | 44.6 | 46.03 | 1.43 | 0.005 |
| 3639 | 46.03 | 47.17 | 1.14 | 0.03 |
| 3640 | 47.17 | 48.21 | 1.04 | 0.002 |
| 3641 | 48.21 | 49.06 | 0.85 | 0.05 |
| 3642 | 54.82 | 55.28 | 0.46 | .03 |

Additional Data

**DRILL HOLE RECORD** **PANCONTINENTAL MINING (CANADA) LTD.**

PROJECT ..........
PROPERTY ..........
CASING LEFT ..........
HOLE Nº ..........
TOTAL DEPTH ..........
Date Commenced ..........
LOCATION ..........
Date Completed ..........
Initial Azimuth ..........
INITIAL DIP ..........
CORE STORAGE ..........
LATITUDE ..........
DEPARTURE ..........
ELEVATION ..........

HOLE SURVEY

| DEPTH | DIP | AZIMUTH |
|---|---|---|
| | | |

HOLE Nº P-7 SHEET Nº 4 of 7
DRILL ..........
DRILLER ..........
GEOLOGICAL LOG ..........
RADIOMETRIC LOG ..........
SAMPLED ..........
ASSAYED ..........

Core size: BQ

| Depth | Core Box | Core Colour | Rock Unit | Rock Type | Pyrite |
|---|---|---|---|---|---|
| 60.1 – 63.0 (61.81, 62.8) | Box 8 | gray | 3a | dacite tuff, granular & strong foliations and mafic streak | tr. |
| 63.0 – 67.30 (66.10, 66.40) | Box No 9 | gray-green | 3b | foliated dacite with bx sections | |
| 67.30 – 71.3 (68.05, 70.32) | Box No 10 | gray green | sl. 3b | dacite bx & 35% siliceous frags, minor thin seams of Fe Carb over a few cms. Qtz/Chert: 3a | tr |
| 71.3 – 74.8 | | gray green | 3b | foliated dacite with bx sections | tr |
| 74.8 – 75.3 | Box No. 11 | rusty | Fe Carb | Fe - Carb alth | tr |
| 75.3 – | Box No. 11 / No 12 | dk green | 1 | sl. foliated andesite & numerous qtz - f.spar veinlets at various angles. Slightly amygd. Calcite staining of qtz veins | |

ASSAY

| Sample Number | From | To | Length | $U_3O_8$ % |
|---|---|---|---|---|
| 8378 | 60 88 | 61.88 | 1.0 | NIL |
| 3643 | 61.88 | 62.8 | 0.92 | 0.21 |
| 8379 | 62.8 | 63 8 | 1.0 | 0.002 |
| 3644 | 67.35 | 68 15 | 0.8 | 0.05 |
| 3645 | 70.38 | 71.3 | 0.92 | 0.05 |

Additional Data

# DRILL HOLE RECORD

**PANCONTINENTAL MINING (CANADA) LTD.**

PROJECT
PROPERTY
CASING LEFT
HOLE NO
TOTAL DEPTH
Date Commenced
LOCATION
Date Completed
Initial Azimuth
INITIAL DIP
CORE STORAGE
LATITUDE
DEPARTURE
ELEVATION

HOLE SURVEY

| DEPTH | DIP | AZIMUTH |
|---|---|---|
| | | |
| | | |
| | | |
| | | |
| | | |

HOLE No P 7 SHEET No 5 of 7
DRILL
DRILLER
GEOLOGICAL LOG
RADIOMETRIC LOG
SAMPLED
ASSAYED

LITHOLOGY — STRUCTURE — TEXTURE — ALTERATION — MINERALIZATION % — RADIOMETRIC DATA — ASSAY

| Core Size | Core Box No | Colour | Rock Unit | Depth | Clay | Qtz/Chert | Rock Type | Bedding | Pyrrhotite | Sample Number | U3O8 % | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| BQ | Box No 12 | | 1 | | | | andesite 'chicken track' | | | | | | | |
| | | | 2b | 84.15<br>84.3<br>84.6 | | 35 | foliated dacite bx | 60 | | 3646 | 84.3 | 84.6 | 0.3 | 0.03 |
| | Box No 13 | dk grey green | 1b | 85.0 | | | andesite slightly foliated some bx, c̄ qtz. veining 1cm | 60 | | | | | | |
| | | | 2b | 87.8 | | | foliated dacite c̄ bx sections thin (1cm) qtz veining parallel foliation | | | | | | | |
| | Box No 14 | | 1 | 91.1 | | | andesite fractured c̄ narrow irregular veinlets (2cm) "chicken track" minor dk grey qtz. | | | | | | | |
| | | | 2b | 93.6 | 60 | | foliated dacite minor bx | | | | | | | |
| | Box No 15 | | 2b + qtz | 95.0<br>95.6 | | 90 | bx. dacite qtz frags and blobs slightly foliated | | 1% | 3647 | 95.0 | 95.59 | 0.54 | 0.02 |
| | | | | 97.32 | | 25 | | 60 | tr | 3648 | 95.59 | 97.32 | 1.78 | .005 |
| | | | | 97.91 | | | | | | 3649 | 97.32 | 97.91 | 0.59 | .002 |
| | | | | | | | | | tr | 3650 | 97.91 | 99.14 | 1.23 | .05 |
| | | dk grey | 4b | 99.14 | | | qtz bx white [illegible] | | tr | 3651 | 99.14 | 100.39 | 1.25 | .24 |

Additional Data

# DRILL HOLE RECORD

**PANCONTINENTAL-MINING (CANADA)-LTD.**

PROJECT
PROPERTY
CASING LEFT
HOLE NO
TOTAL DEPTH
Date commenced
LOCATION
Date completed
Initial Azimuth
INITIAL DIP
CORE STORAGE
LATITUDE
DEPARTURE
ELEVATION

HOLE SURVEY

| DEPTH | DIP | AZIMUTH |
|---|---|---|
| | | |

HOLE NO P-7 SHEET NO 6 of 7
DRILL
DRILLER
GEOLOGICAL LOG
RADIOMETRIC LOG
SAMPLED
ASSAYED

| Con. Box No | Colour | Rock Unit | Depth | Rock Type | Bedding | Pyrite % |
|---|---|---|---|---|---|---|
| Box No 16 | | 4b | 100.38 | qtz bx | | |
| | grey green | 2b | 101.65<br>103.0<br>103.65 | dacite bx foliated c white siliceous frags and section | | tr |
| | grey | 4b | 104.28 | qtz bx 90% c dacite bx | | 5% |
| | grey green | 2b | 105.15<br>105.62 | dacite bx sl. foliated | 65 | |
| | dk green | 1b | 105.86 | andesite dike 5 c. | | |
| | grey green | 2b | 106.6 | dacite bx | | |
| Box No 17 | grey green | 3 to 2b | 109.1 | foliated dacite. c sections bx minor py matrix | 60° | |
| | lt green -buff | 3 | 111.7 | rhyolite slightly foliated | | |
| | | 2b | 112 | rhyolite bx | | 1% |
| | lt green buff | 3 | 113.2 | massive rhyolite c Py irregular qtz by vein | | |
| Box No 18 | green-grey | 2b | 116.0 | dacite bx foliated occasional mm siliceous sections | 60° | |
| | | 2 | 117.3 | foliated dacite | | |
| | dk green | 1b | | andesite bx / qtz-fspar veins up to 5 cm. parallel to foliation and x cutting. | | |

ASSAY

| Sample Number | | | | U₃O₈ % |
|---|---|---|---|---|
| 3652 | 100.38 | 101.65 | 1.26 | 0.1 |
| 8380 | 101.65 | 103.0 | 1.38 | 0.005 |
| 3653 | 103.0 | 103.65 | 0.65 | .02 |
| 3654 | 103.65 | 104.28 | 0.63 | .02 |
| 3655 | 104.28 | 105.15 | 0.87 | nil |
| 3656 | 111.7 | 113.0 | 1.3 | .002 |

Additional Data

DRILL HOLE RECORD — PANCONTINENTAL MINING (CANADA) LTD.

PROJECT ............ PROPERTY ............ CASING LEFT ............
HOLE NO ............ TOTAL DEPTH ............ Date commenced ............
LOCATION ............ Date completed ............
Initial Azimuth ............ INITIAL DIP ............ CORE STORAGE ............
LATITUDE ............ DEPARTURE ............ ELEVATION ............

HOLE SURVEY

| DEPTH | DIP | AZIMUTH |
|---|---|---|
| | | |
| | | |
| | | |
| | | |
| | | |

HOLE NO P-7 SHEET NO 7 of 7
DRILL ............
DRILLER ............
GEOLOGICAL LOG ............
RADIOMETRIC LOG ............
SAMPLED ............
ASSAYED ............

| Core Recovery / Box No | Colour | Rock Unit | Depth | Graphic Log | Constituents % (Mica, Chlorite, Graphite, Carbon, Clay, Qtz/Chert, Carbonate) | Rock Type | Structure | Texture | Alteration | Mineralization % | Radiometric Data | Sample Number | ASSAY U3O8 % |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | 6 | 113 | | | | | | | | | | |
| Box 19<br>Box 20 | dk green | 1 | | | | massive andesite occasional qtz-epidote veinlet no preferred orientation | | | | | | | |
| | | | 117.1 | | | | | | | | | | |

Additional Data

0M9-PE7-C-80

GUNNEX LIMITED.

D.D-Hole No. P - 8

PROJECT HISLOP TWP.(PANCONTINENTAL - GUNNEX)

Sheet No.

LOCATION HISLOP TWP.
LOTS 3 & 4 CON. 3
HOLE STARTED OCT.23, 1980
HOLE COMPLETED OCT.25, 1980
CORE RECOVERY %
DRILLED BY HEATH & SHERWOOD
LOGGED BY W. F. DIX

| SURVEY | | |
|---|---|---|
| DEPTH | DIP | AZIMUTH |
| COLLAR | -62.5° | |
| 16.8 | -65.0° | |
| 61.0 | -51.5° | |
| | | |
| | | |
| | | |

COLLAR. LAT. 978.7 N
DEP. 21.5 W
ELEV. 5000.7 m
AZIMUTH 045° T
DIP -62.5 °
LENGTH 90.2
HOR. PROJ. VERT. PROJ.

| FOOTAGE | | DESCRIPTION. | SAMPLING | | | | | Au. | | |
|---|---|---|---|---|---|---|---|---|---|---|
| FROM | TO | | NO | FROM | TO | FEET | | | | |
| 0 | 16.5 | Casing | | | | | | | | |
| 16.5 | 18.0 | dacite - grey green, mg. fol. 50° CA. - some bx toward lower contact | | | | | | | | |
| 18.0 | 28.17 | rhyolite tuffe and bx - grey, strong fol. 40° CA. | | | | | | | | |
| | | 21.8 - 72.3 - Fe-carb. alteration | | | | | | | | |
| | | 22.3 - 23.7 - 25% sericite | | | | | | | | |
| 28.17 | 31.75 | rhyolite bx - dark grey, fol. 40° CA., fine bx. 35% grey qtz, tr. py. | 36.57<br>8 | 28.17<br>29.71 | 29.71<br>30.84 | 1.54<br>1.13 | | 0.02<br>0.04 | | |
| 31.75 | 32.91 | rhyolite tuff and bx - grey, 10% sericite, foliated | 9 | 30.84 | 31.75 | 0.91 | | 0.005 | | |
| 32.91 | 33.62 | rhyolite bx - dark grey, foliated. tr py. | 36.60 | 32.91 | 33.62 | 0.71 | | 0.005 | | |
| 33.62 | 34.87 | rhyolite bx - pale yellowish-grey, fol. 45° CA. 30% yellowish ser. | | | | | | | | |
| 34.87 | 35.96 | rhyolite bx - darker grey, whitish siliceous in dk. grey matrix tr py. | 36.61 | 34.87 | 35.96 | 1.09 | | 0.03 | | |

GUNNEX LIMITED

HOLE NO. P - 8
SHEET NO. 2

PROJECT HISLOP TWP.(PNACONTINENTAL - GUNNEX )

| FOOTAGE | | DESCRIPTION | SAMPLING | | | | | Au. | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| FROM | TO | | NO. | FROM | TO | FEET | | | | | |
| 35.96 | 36.34 | rhyolite tuff and bx - greenish, 30% sericite with mariposite or chlorite strongly foliated. | | | | | | | | | |
| 36.34 | 36.70 | rhyolite bx - dk. grey, foliated - tr py. | 36.62 | 36.34 | 36.70 | 0.36 | | 0.005 | | | |
| 36.70 | 41.5 | rhyolite tuff & bx - grey -yellow 25% sericite, foliated 50°CA. - sil. frags. in soft matrix | | | | | | | | | |
| | | 40.32 - 41.25 - Tr. py | 36.63 | 40.32 | 41.25 | 0.93 | | 0.002 | | | |
| 41.5 | 43.6 | as above with greenish yellow alteration - 25% pale grey qtz frags. or porphyroblasts | | | | | | | | | |
| | | 41.71 - 43.0 - tr py with short sections to 1% py | 36.64 | 41.71 | 43.00 | 1.29 | | 0.002 | | | |
| 43.6 | 44.6 | rhyolite bx - 25% sericite, 30% whitish qtz veins to 0.3 in wide no py | | | | | | | | | |
| 44.6 | 45.3 | rhyolite tuff & bx - fol. 55°CA. 15% sericite, grey buff | | | | | | | | | |
| 45.3 | 46.1 | rhyolite bx - 80% whitish quartz, no py some bx qtz at contacts | | | | | | | | | |
| 46.1 | 48.5 | rhyolite bx - grey buff, 25% siliceous frags. | | | | | | | | | |
| 48.5 | 50.4 | rhyolite tuff, sections with siliceous frags., foliated, grey buff, soft | | | | | | | | | |
| 50.4 | 51.8 | rhyolite bx, greenish grey, to 20% sericite, fol. 45°CA. | | | | | | | | | |
| | | 50.8 - 51.4 mainly qtz with minor sericitic bx. | | | | | | | | | |
| 51.8 | 54.5 | rhyolite bx - pale grey frags in dk. grey matrix, strongly bx, - tr py | 36.71<br>2 | 51.80<br>53.07 | 53.07<br>54.50 | 1.17<br>1.43 | | 0.002<br>0.005 | | | |
| | | 53.4 - 53.9 - mainly fract. qtz with sparse py. at lower contact | | | | | | | | | |
| 54.4 | 56.7 | rhyolite bx - whitish frags, in a greenish matrix, fol.45°CA. - -approaching silicious dacite bx. | | | | | | | | | |

GUNNEX LIMITED

HOLE NO. P - 8

PROJECT HISLOP TWP. (PANCONTINENTAL-GUNNEX)

SHEET NO. 3

| FOOTAGE | | DESCRIPTION | SAMPLING | | | | | Au. | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| FROM | TO | | NO. | FROM | TO | FEET | | | | | |
| 56.7 | 60.4 | rhyolite bx - grey-buff, somewhat feldspathized in appearance with brownish patches, some sections with dark grey sil. frags, foliated 50°CA. | | | | | | | | | |
| | | 57.9 - 6cm dark grey to black - cherty qtz. minor py | | | | | | | | | |
| | | 57.50 - 57.94 - tr. py | 36.73 | 57.50 | 57.94 | 0.44 | | 0.02 | | | |
| | | 58.42 - 59.50 - tr py | 4 | 58.42 | 59.50 | 1.08 | | 9.01 | | | |
| 60.4 | 61.3 | sericitic rhyolite tuff & bx, pale yellow - grey. sil frags in f.g. matrix -20% sericite | | | | | | | | | |
| 61.3 | 62.35 | rhyolite tuff & bx - as above, but lacking sericite, foliated | | | | | | | | | |
| 62.35 | 64.78 | feldspathized rhyolite tuff & bx - buff poor foliation | 5 | 62.43 | 63.70 | 1.27 | | 0.005 | | | |
| | | 62.83 - 64.78 - tr. py. -10cm white qtz at lower contact | 36.74 | 63.70 | 64.78 | 1.08 | | 0.33 | .3564 | | |
| 64.78 | 69.0 | dacite tuff & bx - strong fol. 60°CA., qtz-rich in blebs, stringers - traces py at intervals | 7 | 64.78 | 66.05 | 1.27 | | 0.03 | .0381 | 0.44/4.80m | |
| | | 66.05 - 66.45 - qtz-rich tr py. | 8 | 66.05 | 67.00 | 0.95 | | 1.63 | 1.5485 | | |
| | | 66.8 - 67.0 - qtz-rich bx, tr py | 9 | 67.00 | 68.50 | 1.50 | | 0.12 | .1800 | | |
| | | 67.3 - 67.7 - Fe-carb | 83.81 | 68.50 | 70.44 | 1.94 | | | 2.1230 | = 0.44 | |
| | | 67.95 - 68.50 - Fe-carb in dacite bx with qtz & tr py. | | | | | | | 4.80 | | |
| 69.0 | 69.8 | andesite - green, foliated, amygd. qtz-feld stringers to 1cm;possible dike | | | | | | | | | |
| 69.8 | 76.6 | dacite tuff- sections bx, fol. 60°CA. - occasional tr py. | | | | | | | | | |
| | | 70.44 - 70.82 - 30% dk grey qtz and tr py | 36.80 | 70.44 | 70.82 | 0.38 | | 0.06 | | | |
| | | 76.3 - 76.8 - Fe-carb | | | | | | | | | |
| | | 74.39 - 75.19 - Tr py | 1 | 74.39 | 75.19 | 0.80 | | 0.06 | | | |

GUNNEX LIMITED

HOLE NO. P - 8

PROJECT HISLOP TWP.(PANCONTINENTAL - GUNNEX)

SHEET NO. 4

| FOOTAGE |  | DESCRIPTION | SAMPLING |  |  |  |  | Au. |  |  |  |
|---|---|---|---|---|---|---|---|---|---|---|---|
| FROM | TO |  | NO. | FROM | TO | FEET |  |  |  |  |  |
| 76.6 | 88.2 | andesite - massive, fractured, numerous irregular qtz-feld-carb veinlets to 2 cm. |  |  |  |  |  |  |  |  |  |
| 88.2 | 90.2 | andesite tuff & bx - green, fol. 55°CA. - 10% qtz-feld veinlets with some carb. |  |  |  |  |  |  |  |  |  |

# DRILL HOLE RECORD

**PANCONTINENTAL MINING (CANADA) LTD.**

PROJECT PC 18 Hislop Twnp
PROPERTY Lots 3&4 Con III
CASING LEFT
HOLE NO P-8
TOTAL DEPTH 90.2 m
Date Commenced Oct 21 1980
LOCATION 978.7 m N 21.5 m W
Date Completed Oct 25 1980
Initial Azimuth 045
INITIAL DIP 62.5°
CORE STORAGE on site
LATITUDE
DEPARTURE
ELEVATION 5000.70 m

**HOLE SURVEY**

| DEPTH | DIP | AZIMUTH |
|---|---|---|
| COLLAR | 62.5 | 045 |
| 16.0 m | 62.0 | |
| 61.0 m | 51° | |
| | | |
| | | |

HOLE NO P-8 SHEET NO 1 of 5
DRILL HES B10-11
DRILLER Heath & Sherwood
GEOLOGICAL LOG W Dix N Novak
RADIOMETRIC LOG
SAMPLED W Dix N Novak
ASSAYED Swastika Laboratories

LITHOLOGY — Constituents % — STRUCTURE — TEXTURE (Ign. Met. Sed.) — ALTERATION — MINERALIZATION % — RADIOMETRIC DATA (Inst. No: Col. In: Out: Meter, Graph 2 4 6 8) — Sample Number — ASSAY ($U_3O_8$ %)

| Depth | Colour | Rock Unit | Rock Type | Bedding |
|---|---|---|---|---|
| 16.5–18.0 | | 2ah | foliated dacite (tuff?) to be sectioned | 50° |
| 18.0–20 | lt green gray | 3ab | rhyolite tuff ? to strongly foliated | 40° |

Fox Ale

Additional Data

**DRILL HOLE RECORD** — **PANCONTINENTAL MINING (CANADA) LTD.**

PROJECT ............ PROPERTY ............ CASING LEFT ............
HOLE NO ............ TOTAL DEPTH ............ Date commenced ............
LOCATION ............ Date completed ............
Initial Azimuth ............ INITIAL DIP ............ CORE STORAGE ............
LATITUDE ............ DEPARTURE ............ ELEVATION ............

HOLE SURVEY

| DEPTH | DIP | AZIMUTH |
|---|---|---|
| | | |
| | | |
| | | |
| | | |
| | | |

HOLE NO P-8 SHEET NO 2 of 5
DRILL ............
DRILLER ............
GEOLOGICAL LOG ............
RADIOMETRIC LOG ............
SAMPLED ............
ASSAYED ............

LITHOLOGY — Constituents % (Mica, Chlorite, Graphite, Carbon, Clay, Qtz/Chert, Carbonate, Sericite) — Rock Type; STRUCTURE (Bedding, Schistosity, Brecciation, Faulting, Quartz vein); TEXTURE (Ign., Met., Sed.); ALTERATION; MINERALIZATION % (Sphalerite, Pyrrhotite, Pyrite, Chalcopyrite, Galena, $U_3O_8$); RADIOMETRIC DATA (Inst. No, Cal. In, Out, Meter, Graph 2 4 6 8); ASSAY (Sample Number, $U_3O_8$ %)

| Core | Colour | Rock Unit | Depth | Qtz/Chert | Sericite | Rock Type | Bedding | Pyrite |
|---|---|---|---|---|---|---|---|---|
| Box No 2 | lt green - grey | 3a+b | 21.5<br>23.7 | | 25 | foliated rhyolite tuff and bx<br>sericitic alt. | 40° | |
| Box No 3 | dark grey | 3b | 28.17 | 35 | | rhyolite bx f.g. (micro bx) | 40° | tr |
| | lt. green | 3a+b | 31.75 | | 10 | foliated rhyolite tuff & bx | | |
| | dk. grey | 3b | 32.91 | 40 | | rhyolite bx | | tr |
| Box No 4 | med green | cor 3b | 33.63 | | 30 | rhyolite bx foliated sericitic | 45 | |
| | dk grey | 3b | 34.87 | | | rhyolite bx sl. foliated | | tr |
| | med green | cor 3b | 35.9 | | 20 | sericitic rhyolite bx | | tr |
| | | 3b | 36.34 | | | rhyolite bx | | |
| | | 3a+b | 36.7 | | 25 | rhyolite tuff & bx sil. frags in very soft matrix | 50 | |

| | | | | |
|---|---|---|---|---|
| 3657 | 28.17 | 29.71 | 1.54 | .02 |
| 3658 | 29.71 | 30.84 | 1.13 | .04 |
| 3659 | 30.84 | 31.75 | 0.91 | .005 |
| 3660 | 32.91 | 33.62 | 0.71 | .005 |
| 3661 | 34.87 | 35.96 | 1.09 | .03 |
| 3662 | 36.34 | 36.7 | 0.36 | .005 |

Additional Data

## DRILL HOLE RECORD

**PANCONTINENTAL MINING (CANADA) LTD.**

PROJECT ..........
PROPERTY ..........
CASING LEFT ..........
HOLE NO ..........
TOTAL DEPTH ..........
Date Commenced ..........
LOCATION ..........
Date completed ..........
Initial Azimuth ..........
INITIAL DIP ..........
CORE STORAGE ..........
LATITUDE ..........
DEPARTURE ..........
ELEVATION ..........

HOLE SURVEY

| DEPTH | DIP | AZIMUTH |
|---|---|---|
| | | |

HOLE NO P 8 SHEET NO 3 of 5
DRILL ..........
DRILLER ..........
GEOLOGICAL LOG ..........
RADIOMETRIC LOG ..........
SAMPLED ..........
ASSAYED ..........

LITHOLOGY — Constituents % — STRUCTURE — TEXTURE — ALTERATION — MINERALIZATION % — RADIOMETRIC DATA — ASSAY

| Box | Colour | Rock Unit | Depth | Qtz/Chert | Sericite | Rock Type | Bedding | Pyrite |
|---|---|---|---|---|---|---|---|---|
| Box No 5 | gray-yellow | 3a+b | 40.32 – 41.5 | | 25 | rhyolite tuff + bx | 50° | tr |
| | green-yellow | 3a+b | 41.5 – 43.6 | 25 | | rhyolite tuff & bx & pale gray qtz frags or porphyroblasts | | tr<br>1% |
| | | 3b | 43.6 – 44.6 | 30 | 26 | rhyolite bx qtz veins 1-3mm wide | | |
| Box No 6 | gray-buff | 3a+b | 44.6 – 45.3 | | 25 | rhyolite tuff & bx | 55 | |
| | | 3b | 45.3 – 46.1 | 40 | | rhyolite bx & qtz bx | | |
| | gray-buff | 3b | 46.1 – 48.3 | 25 | | rhyolite bx & siliceous frags | | |
| | gray-buff | 3a | 48.3 – 50.4 | | | rhyolite tuff & siliceous frags foliated | | |
| | greenish grey | 3b | 50.4 – 51.8 | 40 | 20 | rhyolite bx foliated qtz rich sections | 45 | |
| Box No 7 | pale gray to dk grey | 3b + qtz. | 51.8 – 54.5 | | | rhyolite bx pale frags in dk grey matrix strongly bx, & banded qtz sections | | |
| | light green | 3b | 54.5 – 56.7 | | | rhyolite bx (siliceous sects) white frags in green matrix | 45 | |
| Box No 8 | gray-buff | 3b f.ll. | 56.7 – 59.6 | | | rhyolite bx feldspathized & brown [illegible] and dk grey siliceous frags. [illegible] & bl. cherty qtz | 50 | tr<br>tr |

| Sample Number | | | | |
|---|---|---|---|---|
| 3669 | 40.32 | 41.25 | 0.93 | .002 |
| 3670 | 41.71 | 43.0 | 1.29 | .002 |
| 3671 | 51.8 | 53.07 | 1.17 | .002 |
| 3672 | 53.07 | 54.5 | 1.43 | .005 |
| 3673 | 57.5 | 57.91 | 0.44 | .02 |
| 3674 | 58.42 | 59.5 | 1.08 | .01 |

Additional Data

## DRILL HOLE RECORD

**PANCONTINENTAL MINING (CANADA) LTD.**

PROJECT
PROPERTY
CASING LEFT
HOLE No
TOTAL DEPTH
Date commenced
LOCATION
Date completed
Initial Azimuth
INITIAL DIP
CORE STORAGE
LATITUDE
DEPARTURE
ELEVATION

HOLE SURVEY

| DEPTH | DIP | AZIMUTH |
|---|---|---|
| | | |
| | | |
| | | |
| | | |

HOLE No P8 SHEET No 4 of 5
DRILL
DRILLER
GEOLOGICAL LOG
RADIOMETRIC LOG
SAMPLED
ASSAYED

| Depth | Core Recovery | Colour | Rock Unit | Depth | Constituents % | Rock Type | Bedding | Mineralization % |
|---|---|---|---|---|---|---|---|---|
| 60 | | | | 60.4 | | | | |
| 61 | | pale yellow | 2a 3ab | 61.3 | Sericite 20 | sericitic rhyolite tuff & bx at base qtz-chl matrix | | |
| 62 | | | 3ab | 62.35 | | rhyolite tuff & bx foliated | | |
| 63 | | buff | 6a 3ab | | | feldspathized rhyolite tuff & bx & qtz vein at lower contact | | |
| 64 | Box No 9 | | | 64.7 | | | | Pyrite tr |
| 65 | | | | | | dacite tuff & bx: strongly foliated & qtz. veining - some pigment & PY & some ... | | Pyrite tr |
| 66 | | | 2ab | | | | | Pyrite tr |
| 67 | | | | 67.0 | | | 60 | |
| 68 | | | | 68.5 | | | | Pyrite tr |
| 69 | Box No 10 | dk green | 1 dike | 69.0 | | andesite dike & qtz. fract. stringers (bx) | | |
| 70 | | | | 69.8 | | dacite tuff & bx sections & dk grey qtz. | | |
| 71 | | | | 70.44<br>70.82 | Qtz/Chert 30 | | 60 | Pyrite tr |
| 73 | | | 2ab | | | | | |
| 74 | | | | 74.30 | | | | |
| 75 | Box No 11 | | | 75.19 | | | | Pyrite tr |
| 77 | | dk green | 1 | 76.6 | | massive & fractured andesite, qtz. veins up to 2cm and carbonate + qtz. veinlets | | |
| 80 | | | | | | | | |

RADIOMETRIC DATA
Inst. No:
Col. In:
Out:
Meter
Graph 2 4 6 8

ASSAY

| Sample Number | | | | U₃O₈ % | |
|---|---|---|---|---|---|
| 3675 | 62.41 | 63.70 | 1.27 | .005 | |
| 3676 | 63.70 | 64.78 | 1.08 | .33 | |
| 3677 | 64.78 | 66.05 | 1.27 | .03 | |
| 3678 | 66.05 | 67.0 | 0.95 | 1.63 | 1.44/4.8 |
| 3679 | 67.0 | 68.5 | 1.5 | 0.12 | |
| 3681 | 68.5 | 70.44 | 1.94 | 0.02 | |
| 3680 | 70.44 | 70.82 | 0.38 | .06 | |
| 3681 | 74.39 | 75.19 | 0.8 | .06 | |

Additional Data

# DRILL HOLE RECORD

**PANCONTINENTAL MINING (CANADA) LTD.**

PROJECT
HOLE Nº
LOCATION
Initial Azimuth
LATITUDE

PROPERTY
TOTAL DEPTH
INITIAL DIP
DEPARTURE

CASING LEFT
Date Commenced
Date Completed
CORE STORAGE
ELEVATION

HOLE SURVEY

| DEPTH | DIP | AZIMUTH |
|---|---|---|
| | | |
| | | |
| | | |
| | | |

HOLE Nº P-8 SHEET Nº 5 of 5
DRILL
DRILLER
GEOLOGICAL LOG
RADIOMETRIC LOG
SAMPLED
ASSAYED

LITHOLOGY: Constituents % (Mica, Chlorite, Graphite, Carbon, Clay, Qtz/Chert, Carbonate); Graphic Log; Rock Type
STRUCTURE: Bedding, Schistosity, Brecciation, Faulting, Quartz veins
TEXTURE: Ign., Met., Sed.
ALTERATION
MINERALIZATION %: Scheelite, Pyrrhotite, Pyrite, Chalcopyrite, Galena, $U_3O_8$
RADIOMETRIC DATA: Inst. Nº, Cal. In, Out; Meter; Graph 2 4 6 8
Sample Interval; Sample Number
ASSAY: $U_3O_8$ %

| Depth scale | Core Recovery | Rock Unit | Depth | Rock Type | Bedding |
|---|---|---|---|---|---|
| 80 | Box No 12 | 1 | | massive andesite<br>[illegible]<br>[illegible] | |
| 84 | Box No 13 | | | | |
| 88 | | | 88.2 | slightly amygdaloidal at base | |
| 89 | | 4b | | andesitic tuff<br>[illegible] foliated<br>[illegible] quartz carb veining<br>or py | 55 |
| 90 | | | 90.2 | | |

Additional Data

OM9-PE7-C-80

GUNNEX LIMITED.

D.D-Hole No. P - 9

PROJECT HISLOP TWP.(PANCONTINENTAL-GUNNEX)

Sheet No.

LOCATION HISLOP TWP.

LOTS 3 & 4 CON. 3

HOLE STARTED OCT.26 1980

HOLE COMPLETED OCT. 30 1980

CORE RECOVERY 90%

DRILLED BY HEATH & SHERWOOD

LOGGED BY W. F. DIX

| | | SURVEY |
|---|---|---|
| DEPTH | DIP | AZIMUTH |
| COLLAR | -90° | |
| 12.2 | -90° | |
| 61.0 | -90° | |
| 122.0 | -82.5° | |
| 181.0 | -80.0° | |
| | | |

COLLAR. LAT. 971.04 N

DEP. 5.0 E

ELEV. 5000.21

AZIMUTH 0°

DIP -90°

LENGTH 181.4

HOR. PROJ. VERT. PROJ.

| FOOTAGE | | DESCRIPTION. | SAMPLING | | | | | Au. | | |
|---|---|---|---|---|---|---|---|---|---|---|
| FROM | TO | | NO | FROM | TO | FEET | | | | |
| 0 | 11.7 | Casing | | | | | | | | |
| 11.7 | 32.5 | rhyolite bx - pale grey, siliceous, slightly sericitic, 55% whitish qtz frags and streaks in greenish grey matrix, strong foliation 20° CA. -occasional fleck of mariposide. | | | | | | | | |
| | | 15.4 - 17.8 - 30% sericite | | | | | | | | |
| | | 11.7 - 17.1 - 15% lost core. | | | | | | | | |
| | | 15.8 - 16.5 - Fe-carb alteration | | | | | | | | |
| | | 28.4 - 29.3 - 90% whitish fractured qtz. | | | | | | | | |
| 32.5 | 41.4 | rhyolite tuff & bx - sericite, yellowish grey, 20% sericite, foliated 30° CA. 40% grey qtz frags in f.g. matrix. | | | | | | | | |

GUNNEX LIMITED

HOLE NO. P - 9

SHEET NO. 2

PROJECT HISLOP TWP.(PANCONTINENTAL - GUNNEX)

| FOOTAGE | | DESCRIPTION | SAMPLING | | | | Au. |
|---|---|---|---|---|---|---|---|
| FROM | TO | | NO. | FROM | TO | FEET | |
| 41.4 | 43.2 | rhyolite bx - sericitic, some rounded pebbles(?) dark grey qtz bx, strong foliation 20° CA. | 83.82 | 43.03 | 44.03 | 1.00 | NIL |
| 43.2 | 45.7 | rhyolite tuff & bx - 30% sericite, yellow-grey, foliated, -occasional trace py. | 83.83<br>36.82 | 44.36<br>44.03 | 45.70<br>44.36 | 1.34<br>0.33 | NIL<br>0.29 |
| 45.7 | 48.0 | quartz - white -grey vein with black streaks and patches - contacts // foliation - no visible mineralization | 3 | 45.7 | 48.0 | 2.3 | 0.005 |
| 48.0 | 48.6 | rhyolite tuff & bx - dark grey, foliated 25°CA., 40% qtz frags in grey f.g. tuffaceous, matrix | | | | | |
| 48.6 | 49.0 | quartz vein as above - no py | | | | | |
| 49.0 | 57.8 | rhyolite tuff & bx - dark grey foliated, 60% pale grey qtz frags & streaks | | | | | |
| | | 49.8 - 52.5 - tr py at intervals | 36.84 | 49.8 | 51.3 | 1.5 | 0.04 |
| | | 52.5 - 53.17 - tr py | 5 | 51.3 | 52.5 | 1.2 | 0.01 |
| | | 53.17 - 53.76 - tr py at intervals | 6 | 52.50 | 53.17 | 0.67 | 0.01 |
| | | 56.9 - 57.6 - white-pale grey qtz conformable to foliation | 7 | 53.17 | 53.76 | 0.59 | 0.005 |
| 57.8 | 64.46 | dacite bx - 30% sil frags in grey green matrix, fol. 20° CA. -very occasional tr py | | | | | |
| 64.46 | 65.3 | rhyolite, foliated, grey-buff f.g. possible dike | | | | | |
| 65.3 | 65.9 | dacite tuff & bx - grey green, fol. | | | | | |
| 65.9 | 66.5 | dacite - andesite, grey green, massive, amygd., sharp contacts | | | | | |
| 66.5 | 67.1 | dacite bx - grey green, foliated | | | | | |
| 67.1 | 75.8 | andesite, mass., green, f.g. short sections to 20cm of dacite, irregular veinlets qtz-feld to 4 cm | | | | | |

GUNNEX LIMITED

HOLE NO. P - 9

PROJECT HISLOP TWP.(PANCONTINENTAL - GUNNEX)

SHEET NO. 3

| FOOTAGE | | DESCRIPTION | SAMPLING | | | | | | Au. | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| FROM | TO | | NO. | FROM | TO | FEET | | | | | |
| | | 68.3 - 10cm Fe-carb alteration | | | | | | | | | |
| 75.8 | 80.5 | dacite tuff & bx - grey green, fol 20° CA. | 83.84 | 75.87 | 76.87 | 1.00 | | 0.002 | | | |
| | | 76.87 - 77.25 - tr to 1% py & 40% grey qtz | 36.88 | 76.87 | 77.25 | 0.38 | | 0.24 | | | |
| | | 77.5 - 78.2 - Fe-carb alterations | 83.85 | 77.25 | 78.20 | 0.95 | | 0.002 | | | |
| | | 78.2 78.93 - tr to 1% py and 30% grey qtz | 36.89 | 78.2 | 78.9 | 0.70 | | 0.31 | | | |
| | | | 83.86 | 78.90 | 79.90 | 1.00 | | 0.005 | | | |
| 80.5 | 88.6 | andesite, green, fract. with qtz filling as veinlets to 2cm. | | | | | | | | | |
| | | 80.5 - 80.9 - mainly white qtz | | | | | | | | | |
| | | 81.8 - 82.6 - mainly white qtz and tr py | 36.90 | 81.8 | 82.6 | 0,8 | | 0.01 | | | |
| | | 83.25 - 83.66 - tr py | 1 | 83.25 | 83.66 | 0.41 | | 0.002 | | | |
| | | 83.43 - specks and smears chalcopyrite | | | | | | | | | |
| 88.6 | 89.2 | andesite bx - grey green frags, in dk. green matrix. 15% white qtz & trace py. | 2 | 88.6 | 89.2 | 0.6 | | 0.005 | | | |
| 89.2 | 96.1 | andesite - green, some bx, massive and unfoliated, narrow qtz-feld veinlets. | | | | | | | | | |
| 96.1 | 107.5 | andesite bx - green with paler green frags. some sections to 0.5m are massive with a few amygdaloids. - irregular qtz-feld visible to 1cm. | | | | | | | | | |
| | | 100.0 - 101.0 - purple alteration of bx frags. - possibly due to iron -rare to intermittent tr py. | | | | | | | | | |
| 107.5 | 109.85 | andesite, green. sl.fol., short sections bx, narrow irregular veinlets qtz-feld. -occasional tr py. | 36.93 | 107.85 | 108.73 | 0.88 | | 0.01 | | | |
| 109.85 | 115.5 | dacite bx, greenish grey, fol. 25° CA. pale grey sil. frags. in greenish f.g. bx matrix - tr py | 4 | 109.85 | 111.48 | 1.63 | | NIL | | | |
| | | | 5 | 112.73 | 114.60 | 1.87 | | 0.005 | | | |

GUNNEX LIMITED

HOLE NO. P - 9

PROJECT HISLOP TWP.(PANCONTINENTAL-GUNNEX)

SHEET NO. 4

| FOOTAGE | | DESCRIPTION | SAMPLING | | | | | Au. | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| FROM | TO | | NO. | FROM | TO | FEET | | | | | |
| 115.5 | 117.13 | quartz bx - grey, 70% white, 25% dark grey | 6 | 115.50 | 117.13 | 1.63 | | 0.005 | | | |
| 117.3 | 119.2 | dacite bx - pale yellow-green frags in grey-green micro bx matrix. fol. | | | | | | | | | |
| 119.2 | 121.4 | andesite bx - grey green frags in green matrix, fol. 25°CA. | | | | | | | | | |
| | | 120.87 - 121.4 - tr py | 7 | 120.87 | 121.40 | 0.53 | | NIL | | | |
| 121.4 | 122.7 | dacite bx - yellow green, 25% sericite, irregular qtz-feld veins to 1 cm, foliated. - occasional tr py. | | | | | | | | | |
| 122.7 | 124.4 | rhyolite tuff & bx - pale grey, foliated, soft, 20% whitish qtz. | | | | | | | | | |
| | | 123.66 - 2 cm gouge | | | | | | | | | |
| | | 123.45 - 124.4 - tr py | 36.98 | 123.45 | 124.40 | 0.95 | | 0.005 | | | |
| 124.4 | 127.12 | rhyolite,- massive, sl. foliation, qtz-feld amygdules | | | | | | | | | |
| 127.12 | 128.43 | andesite dike - fine grained, sharp contacts, - narrow veinlets qtz-feld to 1 cm. | | | | | | | | | |
| 128.43 | 133.1 | rhyolite as above - amygdaloidal, occasional tr py. | | | | | | | | | |
| 133.1 | 133.7 | andesite, f.g. dark green, possible dike. | | | | | | | | | |
| 133.7 | 152.92 | dacite & dacite bx - sections tuff, grey green, fol. 30°CA. few stringers qtz-feld to 2 cm, 30 cm qtz at lower contacts. - occasional tr py. | | | | | | | | | |
| | | 134.33 - 135.22 - up to 1% py | 36.99 | 134.33 | 135.22 | 0.89 | | 0.002 | | | |
| | | 142,4 - 143.2 - tr py | 37.00 | 142.40 | 143.20 | 0.80 | | 0.005 | | | |
| | | 152.34 - 152.92 - tr py | 83.01 | 152.34 | 152.92 | 0.58 | | 0.005 | | | |
| 152.92 | 161.17 | dacite bx - sections dacite, some andesite. grey-green to green,fol. 30° cm. | | | | | | | | | |

GUNNEX LIMITED

HOLE NO. P - 9

SHEET NO. 5

PROJECT HISLOP TWP. (PANCONTINENTAL - GUNNEX)

| FOOTAGE | | DESCRIPTION | SAMPLING | | | | | Au. | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| FROM | TO | | NO. | FROM | TO | FEET | | | | | |
| | | 156.5 - 160.5 - 20% sericite | | | | | | | | | |
| | | 153.4 - 155.93 - andesite, tr py | 83.02 | 155.40 | 155,93 | 0.53 | | 0.005 | | | |
| | | 156.50 - 157.75 - 25% qtz, tr py | 3 | 156.50 | 157.75 | 1.25 | | 0.01 | | | |
| | | 160.53 - 160.98 - 40% qtz, tr py | 4 | 160.53 | 160.98 | 0.45 | | 0.10 | | | |
| 161.7 | 168.6 | andesite, massive, dk. green f.g. and becoming m.g. downhole. sl.fol at 30° CA. -qtz-feld veinlets to 1 cm. | | | | | | | | | |
| 168.6 | 179.6 | diabase, m.g., trachytic texture, contacts f.g. and // foliation. - qtz-feld feining to 1cm. | | | | | | | | | |
| 179.6 | 181.4 | andesite, NE green, m.g. no foliation, some sericite at upper contact. | | | | | | | | | |

# DRILL HOLE RECORD

**PANCONTINENTAL MINING (CANADA) LTD.**

PROJECT P.C. 18 HISLOP TWP.
HOLE Nº P-9
LOCATION 971.04 5mE
Initial Azimuth N/A
LATTITUDE

PROPERTY LOTS 3+4 CON III
TOTAL DEPTH 181.4
INITIAL DIP -90°
DEPARTURE

CASING LEFT
Date Commenced OCT 26
Date Completed OCT 29
CORE STORAGE on site
ELEVATION 5000.21 m

**HOLE SURVEY**

| DEPTH | DIP | AZIMUTH |
|---|---|---|
| COLLAR | -90 | |
| 17.2 | -90 | |
| 61.0 | -90 | |
| 122.0 | -87½ | |
| 181.4 | -80 | |

HOLE Nº P-9 SHEET Nº 1 of 10
DRILL H.E.S. B.10-11
DRILLER HEATH & SHERWOOD
GEOLOGICAL LOG [illegible]
RADIOMETRIC LOG
SAMPLED V. N[illegible] W. T[illegible]
ASSAYED SWASTIKA LABORATORIES

| Weathering | Casing | Core size | Lith | Core Recovery % | Core Box No | Colour | Core Cuttings | Rock Unit | Depth | Graphic Log | Mica | Chlorite | Graphite | Carbon | Clay | Qtz/Chert | Carbonate | Sericite | Rock Type | Bedding | Alteration |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | BX | | | | | | | | | | | | | | | | | | | |
| | | BQ | | 85% | Box No.1 | pale grey | | 1b | 11.7<br>17.3 | | | | | | | | | 20 | rhyolite bx highly silicious qtz. in a greenish grey matrix. strongly fol. with occasional fleck of mariposite | 20° | C |
| | | | | | No.2 | | | | | | | | | | | | | | | | |

STRUCTURE: Bedding, Schistosity, Faulting, Quartz vein

TEXTURE: Ign. Met. Sed.

ALTERATION

MINERALIZATION %: Sphalerite, Pyrrhotite, Pyrite, Chalcopyrite, Galena, $U_3O_8$

RADIOMETRIC DATA: Inst. Nº: Col. In: Out: Meter Graph 2 4 6 8

Sample Interval | Sample Number

ASSAY: $U_3O_8$ % | [illegible] | [illegible] | [illegible]

0 1 2 3 4 5 6 7 8 9 10 1 2 3 4 5 6 7 8 9 20

Additional Data

## DRILL HOLE RECORD

**PANCONTINENTAL MINING (CANADA) LTD.**

PROJECT ........ PROPERTY ........ CASING LEFT ........
HOLE Nº ........ TOTAL DEPTH ........ Date commenced ........
LOCATION ........ Date completed ........
Initial Azimuth ........ INITIAL DIP ........ CORE STORAGE ........
LATITUDE ........ DEPARTURE ........ ELEVATION ........

HOLE SURVEY

| DEPTH | DIP | AZIMUTH |
|---|---|---|
| | | |
| | | |
| | | |
| | | |

HOLE Nº P-9 SHEET Nº 2 of 10
DRILL ........
DRILLER ........
GEOLOGICAL LOG ........
RADIOMETRIC LOG ........
SAMPLED ........
ASSAYED ........

| Depth (m) | Core size | Core Box | Colour | Rock Unit | Depth | Qtz/Chert % | Rock Type | Bedding |
|---|---|---|---|---|---|---|---|---|
| 20 | | Box #2 | | | | | rhyolite bx as above. | |
| 25–27 | | Box No 3 | | 3b | | | | |
| 29 | | | | | | 90 | | |
| 30–32 | BQ | Box No 4 | | | | | | |
| 32.5 | | | | | 32.5 | | | |
| 33 | | | yellow-grey | Ser 3a+b | | | Sericitic rhyolite tuff and bx foliated grey qtz frags in a sericitic f.g. matrix | |
| 35–37 | | Box No 5 | | | | | | 30° |
| 40 | | | | | | | | |

LITHOLOGY — Constituents %: Mica, Chlorite, Graphite, Carbon, Clay, Qtz/Chert, Carbonate; Graphic Log; Rock Type
STRUCTURE — Bedding, Schistosity, Faulting, Quartz veins
TEXTURE — Ign., Met., Sed.
ALTERATION
MINERALIZATION % — Sphalerite, Pyrrhotite, Pyrite, Chalcopyrite, Galena, $U_3O_8$
RADIOMETRIC DATA — Inst. Nº; Cal. In, Out; Meter; Graph 2 4 6 8
Sample Number
ASSAY — Tr $U_3O_8$ %, Au, width, Ag

Additional Data

# DRILL HOLE RECORD

**PANCONTINENTAL-MINING (CANADA)-LTD.**

PROJECT
PROPERTY
CASING LEFT
HOLE NO P-9
TOTAL DEPTH
Date Commenced
LOCATION
Date Completed
Initial Azimuth
INITIAL DIP
CORE STORAGE
LATITUDE
DEPARTURE
ELEVATION

HOLE SURVEY

| DEPTH | DIP | AZIMUTH |
|---|---|---|
| | | |
| | | |
| | | |
| | | |
| | | |

HOLE NO P-9 SHEET NO 3 of 10
DRILL
DRILLER
GEOLOGICAL LOG
RADIOMETRIC LOG
SAMPLED
ASSAYED

| Depth (m) | Core | Colour | Rock Unit | Depth | Constituents % | Rock Type | Bedding |
|---|---|---|---|---|---|---|---|
| 40 – 41.4 | | | | | Sericite 20 | | |
| 41.4 – 43.2 | Box No 6 | | ser. 3b | 41.4 | | ser. rhyolite bx c rounded pebbles? to 1cm (qtz. bx) strongly foliated | 20° |
| 43.2 – 45.7 | | yellow grey | 3a-b | 43.2 | | ser. rhy. tuff & bx foliated c occ. tr. pyrite. | 30 |
| 45.7 – 48.0 | Box No 7 | white & grey streaks | qtz. | 45.7 | | quartz. vein c mafic veinlets contact parallel foliation no pyrite. | |
| 48.0 – 48.6 | | dk. grey | 3a-b | 48.0 | | rhy. tuff & bx qtz. frags in diff. matrix | 25 |
| 48.6 – 49.0 | | white | qtz | 48.6 | | qtz vein // fol. | |
| 49.0 – 57.8 | BQ<br>Box No 8 | dk grey | 3a-b | 49.0 | Qtz/Chert 80 | rhyolite tuff & bx foliated c pale grey qtz. frags and streaks | 60 |
| 57.8 – 60 | Box No 9 | grey green | 3b | 57.8 | | dacite bx c sil. frags in grey green matrix | |

ASSAY

| Sample Number | from | to | width | Au |
|---|---|---|---|---|
| 3682 | 43.03 | 44.03 | 1.0 | NIL |
| 3682 | 44.03 | 44.36 | 0.33 | .29 |
| 83-B3 | 44.36 | 45.7 | 1.34 | NIL |
| 3683 | 45.7 | 48.0 | 2.3 | .005 |
| 3684 | 49.8 | 51.3 | 1.5 | .04 |
| 3685 | 51.3 | 52.5 | 1.2 | .01 |
| 3686 | 52.5 | 53.17 | 0.67 | .01 |
| 3687 | 53.17 | 53.76 | 0.59 | .005 |

Additional Data

**DRILL HOLE RECORD** — **PANCONTINENTAL MINING (CANADA) LTD.**

PROJECT ........ PROPERTY ........ CASING LEFT ........
HOLE No ........ TOTAL DEPTH ........ Date Commenced ........
LOCATION ........ Date Completed ........
Initial Azimuth ........ INITIAL DIP ........ CORE STORAGE ........
LATITUDE ........ DEPARTURE ........ ELEVATION ........

HOLE SURVEY

| DEPTH | DIP | AZIMUTH |
|---|---|---|
| | | |

HOLE No P-9 SHEET No 4 of 10
DRILL ........
DRILLER ........
GEOLOGICAL LOG ........
RADIOMETRIC LOG ........
SAMPLED ........
ASSAYED ........

| Depth scale | Core Rec. | Box No. | Colour | Rock Unit | Depth | Rock Type | Bedding |
|---|---|---|---|---|---|---|---|
| 60–64 | 99% | Box No 10 | grey green | 2b | | dacite bx. foliated as to above occasional tr of pyrite. 30% qtz frags. | 20° |
| 64.4 | | | buff - grey | 1aba | 64.4–65.3 | foliated rhyolite fg (dike?) | |
| 65.3 | | | | 2aib | 65.3–65.8 | dacite tuff & bx | |
| 65.8 | | | | 1abg | 65.8–66.8 | andesite dike & dacite sediments | |
| 66.8 | | | | 2b | 66.8–67.1 | dacite? bx. | |
| 67.1 | 60 | Box No 11 | dk. green | 1 | 67.1–75.8 | massive andesite. with short (2cm) sections of dacite irregular fine veinlets qtz - fspar. minor qtz veining | |
| 75.8 | | Box No 12 | grey green | 2aib | 75.8–76.8–77.25–78.2–78.9 | dacite tuff and bx. | 20° |

Constituents %: Qtz/Chert 40 (77), 30 (79); Mineralization %: tr (77), tr (79)

LITHOLOGY — Graphic Log; Constituents %: Mica, Chlorite, Graphite, Carbon, Clay, Qtz/Chert, Carbonate; Rock Type
STRUCTURE — Bedding, Schistosity, Faulting
TEXTURE
ALTERATION
MINERALIZATION % — Sphalerite, Pyrrhotite, Pyrite, Chalcopyrite, Galena, $U_3O_8$
RADIOMETRIC DATA — Inst. No: Cal. In: Out: Meter Graph 2 4 6 8

ASSAY

| Sample Number | from | to | width | Au |
|---|---|---|---|---|
| 8384 | 75.87 | 76.87 | 1.0 | 0.002 |
| 3688 | 76.87 | 77.25 | 0.38 | .34 |
| 8385 | 77.25 | 78.2 | 0.95 | 0.002 |
| 3689 | 78.2 | 78.9 | 0.7 | .31 |
| 8386 | 78.9 | 79.9 | 1.0 | 0.005 |

Additional Data

# DRILL HOLE RECORD

**PANCONTINENTAL MINING (CANADA) LTD.**

PROJECT ..........
PROPERTY ..........
CASING LEFT ..........
HOLE NO P-9
TOTAL DEPTH ..........
Date commenced ..........
LOCATION ..........
Date completed ..........
Initial Azimuth ..........
INITIAL DIP ..........
CORE STORAGE ..........
LATITUDE ..........
DEPARTURE ..........
ELEVATION ..........

HOLE SURVEY

| DEPTH | DIP | AZIMUTH |
|---|---|---|
| | | |

HOLE NO P-9 SHEET NO 5 of 10
DRILL ..........
DRILLER ..........
GEOLOGICAL LOG ..........
RADIOMETRIC LOG ..........
SAMPLED ..........
ASSAYED ..........

Core Box No: Box No 13; Box No 14; Box No 15; Box No 16

Core size: BQ

| Depth | Colour | Rock Unit | Qtz/Chert % | Rock Type | Mineralization % |
|---|---|---|---|---|---|
| 80.5 | green | 1 | 90 | andesite ĉ fracture filling (qtz) as veinlets to 3cm. | |
| 81.8 | | | 90 | | tr |
| 82.6 | | | | | |
| 83.35 | | | | | tr — tr |
| 83.66 | | | | | |
| 88.6 | grey green | 1b | 15 | andesite bx | tr |
| 89.2 | green | 1b ĉ sh. | | andesite bx massive and unfoliated ĉ narrow qtz. fspar veinlets | |
| 96.1 | green and pale green | 1b amyd. | | andesite bx ĉ massive sections (.5m) are amygdaloidal ĉ irregular qtz. fspar veinlets. | |

ASSAY

| Sample Number | From ~~U3O8 %~~ | To | Width | Au |
|---|---|---|---|---|
| 3690 | 81.8 | 83.6 | 1.8 | .01 |
| 3691 | 83.35 | 83.66 | 0.41 | .002 |
| 3692 | 88.6 | 89.2 | 0.6 | .005 |

Additional Data

# DRILL HOLE RECORD

**PANCONTINENTAL-MINING (CANADA) LTD.**

PROJECT
PROPERTY
CASING LEFT
HOLE NO
TOTAL DEPTH
Date Commenced
LOCATION
Date completed
Initial Azimuth
INITIAL DIP
CORE STORAGE
LATITUDE
DEPARTURE
ELEVATION

HOLE SURVEY

| DEPTH | DIP | AZIMUTH |
|---|---|---|
| | | |

HOLE NO P-9 SHEET NO 6 of 10
DRILL
DRILLER
GEOLOGICAL LOG
RADIOMETRIC LOG
SAMPLED
ASSAYED

| Depth | Core size | Core Box No | Colour | Rock Unit | Rock Type | Bedding | Qtz/Chert | Pyrite |
|---|---|---|---|---|---|---|---|---|
| 100.0 – 101.0 | BQ | Box No 17 | dull purple | 1b | purple end of andesite bx | | | |
| 101.0 – 107.5 | | | green | 1b | andesite bx possibly agglomerate … bx. py. | | | |
| 107.5 – 110.0 | | Box No 18 | dk green | 1<br>…<br>1b | gl. foliated andesite & sheared bx sections narrow qtz layer … bx py | | | tr |
| 110.0 – 115.5 | | Box No 19 | gray-greenish grey | 2b | dacite bx foliated bx. pyrite in sections pale grey … frags, in a microbx. matrix. | 25° | | tr<br>tr |
| 115.5 – 117.0 | | | grey | 4b | quartz vn 90% white qtz 10% dk qtz | | 95 | tr |
| 117.0 – 119.2 | | | pale green | 2b | dacite bx with … green frags in dk grey microbx | | | tr |
| 119.2 – 120.0 | | 20 | | 1b | andesite bx | | | |

Depth marks: 100.0, 101.0, 107.5, 107.85, 108.73, 110.0, 111.48, 112.73, 114.6, 115.5, 117.0, 119.2

ASSAY

| Sample Number | from U3O8 % | to | width | Au |
|---|---|---|---|---|
| 3693 | 107.85 | 108.73 | 0.88 | .01 |
| 3694 | 109.85 | 111.48 | 1.63 | NIL |
| 3695 | 112.73 | 114.6 | 1.87 | .005 |
| 3696 | 115.5 | 117.13 | 1.63 | .005 |

Additional Data

**DRILL HOLE RECORD** — **PANCONTINENTAL MINING (CANADA) LTD.**

PROJECT ........ PROPERTY ........ CASING LEFT ........
HOLE No ........ TOTAL DEPTH ........ Date commenced ........
LOCATION ........ Date completed ........
Initial Azimuth ........ INITIAL DIP ........ CORE STORAGE ........
LATITUDE ........ DEPARTURE ........ ELEVATION ........

HOLE SURVEY

| DEPTH | DIP | AZIMUTH |
|---|---|---|
| | | |

HOLE No P-9 SHEET No 7 of 10
DRILL
DRILLER
GEOLOGICAL LOG
RADIOMETRIC LOG
SAMPLED
ASSAYED

| Depth scale | Core size | Box No | Colour | Rock Unit | Depth | Constituents % | Rock Type | Bedding | Mineralization % (Pyrite) |
|---|---|---|---|---|---|---|---|---|---|
| 120.0 | BQ | Box 20 | | 1b | 121.4 | | foliated andesite bx | 25° | tr |
| | | | yellow green | 2b | 122.7 | Clay 30<br>Carbonate 25 | dacite bx c qtz mixing irregularly as [illegible] foliated | | |
| | | Box No 21 | pale grey | 2ab | 124.9 | Clay 20 | strongly foliated rhyolite [illegible] fabric altered and [illegible] sheared | | tr<br>1% |
| | | | lt green grey | 3 | 127.7 | | massive to slt. foliated rhyolite c qtz filled amygdules | | |
| | | | dk green | [illegible] | 128.5 | | andesite dike v.f.g. [illegible] contacts sharp | | |
| 130.0 | | Box No 22 | grey | 3 | 133.1 | | massive rhyolite as above. [illegible] amygdaloidal [illegible] pyrite | | |
| | | | dk green | [illegible] | 133.7 | | andesite dike | | |
| | | Box No 23 | grey green | 3 & 2b | 134.33<br>[illegible] | | dacite and dacite bx<br>foliated qtz. [illegible] irregular with tuffaceous sections occasional to pyrite | 30° | [illegible] |
| 140.0 | | | | | | | | | |

| Sample Number | from | to | width | Au |
|---|---|---|---|---|
| 3697 | 120.87 | 121.4 | 0.53 | Nil |
| 3698 | 123.45 | 124.4 | 0.95 | .005 |
| 3699 | 134.33 | 136.22 | 0.89 | .002 |

Additional Data

## DRILL HOLE RECORD

**PANCONTINENTAL MINING (CANADA) LTD.**

PROJECT ........ PROPERTY ........ CASING LEFT ........
HOLE NO ........ TOTAL DEPTH ........ Date Commenced ........
LOCATION ........ Date Completed ........
Initial Azimuth ........ INITIAL DIP ........ CORE STORAGE ........
LATITUDE ........ DEPARTURE ........ ELEVATION ........

| HOLE SURVEY | | |
|---|---|---|
| DEPTH | DIP | AZIMUTH |
| | | |
| | | |
| | | |
| | | |
| | | |

HOLE NO P-9 SHEET NO 8 of 10
DRILL ........
DRILLER ........
GEOLOGICAL LOG ........
RADIOMETRIC LOG ........
SAMPLED ........
ASSAYED ........

Column headings: Recovery, Core Size, Core Size, Lith, Core Recovery %, Core Box No., Core Cuttings Colour, Rock Unit, Depth, LITHOLOGY (Graphic Log; Constituents %: Mica, Chlorite, Graphite, Carbon, Clay, Qtz./Chert, Carbonate, Sericite; Rock Type), STRUCTURE (Bedding, Schistosity, Brecciation, Faulting, Quartz vein), TEXTURE (Ign., Met., Sed.), ALTERATION, MINERALIZATION % (Sphalerite, Pyrrhotite, Pyrite, Chalcopyrite, Galena, $U_3O_8$), RADIOMETRIC DATA (Inst. No.; Col. In, Out; Meter; Graph 2 4 6 8), Sample Interval, Sample Number, ASSAY

Depth scale: 140 to 160

Core Size: BQ

| Core Box No. | Colour | Rock Unit | Depth | Constituents % | Rock Type | Bedding | Mineralization % |
|---|---|---|---|---|---|---|---|
| Box No 24 | grey green | 3<br>2b | 142.4<br>143.2 | | dacite and dacite bx as above | | tr |
| Box No 26 | | | | | | | |
| Box No 27 | grey green to green | 2b | 152.39<br>152.92<br>155.4<br>155.93<br>156.5<br>157.75 | Qtz./Chert 25<br>Sericite 20 | dacite bx c̄ dacite and andesite sed. | 30° | tr<br>tr<br>tr |
| 28 | | | | | | | |

| Sample Number | From ~~$U_3O_8$ %~~ | To | Width | Cu |
|---|---|---|---|---|
| 9300 | 142.4 | 143.2 | 0.8 | .005 |
| 9301 | 152.39 | 152.92 | 0.53 | .005 |
| 9302 | 155.4 | 155.93 | 0.53 | .005 |
| 9303 | 156.5 | 157.75 | 1.25 | .01 |

Additional Data

**DRILL HOLE RECORD** **PANCONTINENTAL-MINING (CANADA) LTD.**

PROJECT
HOLE Nº
LOCATION
Initial Azimuth
LATITUDE
PROPERTY
TOTAL DEPTH
INITIAL DIP
DEPARTURE
CASING LEFT
Date Commenced
Date Completed
CORE STORAGE
ELEVATION

**HOLE SURVEY**

| DEPTH | DIP | AZIMUTH |
|---|---|---|
| | | |

HOLE Nº P-9 SHEET Nº 9 of 10
DRILL
DRILLER
GEOLOGICAL LOG
RADIOMETRIC LOG
SAMPLED
ASSAYED

| Depth | Core Size | Core Recovery / Core Box No | Colour | Rock Unit | Depth | Constituents % | Rock Type | Bedding | Mineralization % | Sample Number | From | to | W | Au |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 160 | | | | | 160.15 | Sericite 20 | | | | | | | | |
| 1 | | Bx 28 | | 3b | 160.96 | Qtz/Chert 40 | | | Pyrite Tr | 8304 | 160.53 | 160.38 | 0.45 | .1 |
| 2 | | | dk green | | 161.7 | | massive andesite fg to m.g sl. foliated qtz. fspar veinlets to 1cm | 30° | | | | | | |
| 5 | | Bx No 29 | | 1 | | | | | | | | | | |
| 8 | | | | | 168.6 | | | | | | | | | |
| 9 | | | | | | | m.g. diabase trachyte. contacts v.f.g and ‖ foliation qtz. fspar veinlets to 1cm. | | | | | | | |
| 170 | BQ | Bx No 31 | dk green | 9 | | | | | | | | | | |
| 7 | | Bx No 32 | | | | | | | | | | | | |
| 9 | | | | 1 | 179.6 | | andesite | | | | | | | |
| 180 | | | | | | | | | | | | | | |

Additional Data

**DRILL HOLE RECORD**

**PANCONTINENTAL-MINING (CANADA) LTD.**

PROJECT ..........
PROPERTY ..........
CASING LEFT ..........
HOLE NO ..........
TOTAL DEPTH ..........
Date Commenced ..........
LOCATION ..........
Date Completed ..........
Initial Azimuth ..........
INITIAL DIP ..........
CORE STORAGE ..........
LATITUDE ..........
DEPARTURE ..........
ELEVATION ..........

HOLE SURVEY

| DEPTH | DIP | AZIMUTH |
|---|---|---|
| | | |
| | | |
| | | |
| | | |

HOLE NO. P-9 SHEET NO. 10 of 10
DRILL ..........
DRILLER ..........
GEOLOGICAL LOG ..........
RADIOMETRIC LOG ..........
SAMPLED ..........
ASSAYED ..........

| | Weathering | Core Size | Lith | Core Recovery % | Core Box No. | Colour | Rock Unit | Depth | Graphic Log | Mica | Chlorite | Graphite | Carbon | Clay | Qtz/Chert | Carbonate | Rock Type | STRUCTURE | TEXTURE | ALTERATION | MINERALIZATION % | RADIOMETRIC DATA | Sample Interval | Sample Number | U3O8 % |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 18 0 | | BA | | | Box 33 | dk green | 1 | | | | | | | | | | Andesite m.g. massive slightly sericitic | | | | | | | | |
| 1 | | | | | | | | 184 | | | | | | | | | | | | | | | | | |
| 2 | | | | | | | | | | | | | | | | | | | | | | | | | |
| 3 | | | | | | | | | | | | | | | | | | | | | | | | | |
| 4 | | | | | | | | | | | | | | | | | | | | | | | | | |
| 5 | | | | | | | | | | | | | | | | | | | | | | | | | |
| 6 | | | | | | | | | | | | | | | | | | | | | | | | | |
| 7 | | | | | | | | | | | | | | | | | | | | | | | | | |
| 8 | | | | | | | | | | | | | | | | | | | | | | | | | |
| 9 | | | | | | | | | | | | | | | | | | | | | | | | | |
| 19 0 | | | | | | | | | | | | | | | | | | | | | | | | | |
| 1 | | | | | | | | | | | | | | | | | | | | | | | | | |
| 2 | | | | | | | | | | | | | | | | | | | | | | | | | |
| 3 | | | | | | | | | | | | | | | | | | | | | | | | | |
| 4 | | | | | | | | | | | | | | | | | | | | | | | | | |
| 5 | | | | | | | | | | | | | | | | | | | | | | | | | |
| 6 | | | | | | | | | | | | | | | | | | | | | | | | | |
| 7 | | | | | | | | | | | | | | | | | | | | | | | | | |
| 8 | | | | | | | | | | | | | | | | | | | | | | | | | |
| 9 | | | | | | | | | | | | | | | | | | | | | | | | | |
| 200 | | | | | | | | | | | | | | | | | | | | | | | | | |

Additional Data

0M9 - PE7-C-80

# GUNNEX LIMITED.

D.D-Hole No. P - 10

Sheet No.

PROJECT HISLOP TWP.(PANCONTINENTAL - GUNNEX)

LOCATION HISLOP TWP.
LOTS 3 & 4, CON 3
HOLE STARTED Oct. 30 1980
HOLE COMPLETED Nov. 1 1980
CORE RECOVERY %
DRILLED BY HEATH & SHERWOOD
LOGGED BY W. F. DIX

| SURVEY | | |
|---|---|---|
| DEPTH | DIP | AZIMUTH |
| COLLAR | -90° | |
| 15.5 | -90° | |
| 61.0 | -90° | |
| 121.95 | -85° | |
| | | |
| | | |

COLLAR. LAT. 963.4 N
DEP. 5.0 E
ELEV. 5000.15
AZIMUTH
DIP -90°
LENGTH 138.40 m
HOR. PROJ. VERT. PROJ.

| FOOTAGE | | DESCRIPTION. | SAMPLING | | | | | Au. | | |
|---|---|---|---|---|---|---|---|---|---|---|
| FROM m | TO m | | NO | FROM | TO | FEET | | | | |
| 0 | 14.9 | Casing | | | | | | | | |
| 14.9 | 50.6 | rhyolite tuff & bx - yellow grey; 30% sericite, 30 to 40% whitish qtz streaks, blebs, porphyroblasts, stong foliation 20° CA. | | | | | | | | |
| | | 16.3 - 20cm white-grey qtz, no py | | | | | | | | |
| | | 31.35 - 33.40 - 40% grey qtz, tr py | 83.05 | 31.35 | 33.40 | 2.05 | | 0.002 | | |
| | | 39.3 - 40.3 - tr py in patches of dark grey qtz | 6 | 39.30 | 40.30 | 1.00 | | 0.04 | | |
| | | 41.0 - foliation 20CA | | | | | | | | |
| 50.6 | 57.7 | dacite tuff & bx - coarse grained, grey-green with 30% whitish sil frags in foliated greenish matrix. strong foliation at 20° CA. | | | | | | | | |
| | | 52.5 - 52.7 - 60% grey & white qtz 1% py | 7 | 52.5 | 52.7 | 0.2 | | 0.01 | | |

GUNNEX LIMITED

PROJECT HISLOP TWP.(PANCONTINENTAL-GUNNEX)

HOLE NO. P - 10

SHEET NO. 2

| FOOTAGE | | DESCRIPTION | SAMPLING | | | | | Au. | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| FROM | TO | | NO. | FROM | TO | FEET | | | | | |
| | | 56.1 - 56.5 - 50% white to grey qtz, no py | | | | | | | | | |
| | | 57.6 - tr py over 3cm | | | | | | | | | |
| 57.7 | 74.5 | andisite - massive, green, amygdaloidal with qtz fillings, unfoliated<br>- qtz feld veinlets toward lower contact | | | | | | | | | |
| | | 63.7 - 63.86 - grey & white qtz 1% py | 83.08 | 63.70 | 63.86 | 0.16 | | 0.09 | | | |
| | | 68.9 - 72.3 - some bx and possible tuff | | | | | | | | | |
| 74.5 | 77.1 | dacite bx and tuff - grey green, strong fol. 25° CA. | | | | | | | | | |
| | | 74.5 - 74.7 - 25% white-grey qtz & tr py | 9 | 74.5 | 74.7 | 0.2 | | 0.005 | | | |
| | | 75.5 - 76.4 - includes 0.4m grey qtz with tr py in qtz & wallrod | 83.10 | 75.5 | 76.4 | 0.9 | | 0.09 | | | |
| 77.1 | 78.1 | andesite dike- f.g. green, irregular qtz-feld veinlets | | | | | | | | | |
| 78.1 | 78.9 | mainly qtz - 90% white, 10% black tr py | 83.11 | 78.1 | 78.9 | 0.8 | | 0.005 | | | |
| 78.9 | 79.65 | dacite bx - grey green fol 20° CA. | | | | | | | | | |
| 79.65 | 80.05 | qtz bx - 70% white, 30% dark grey tr py | 2 | 79.65 | 80.05 | 0.40 | | 0.03 | | | |
| 80.05 | 81.9 | dacite - with sections bx, sl. amygd. grey green, foliated | | | | | | | | | |
| 81.9 | 86.8 | bo mixed core - dacite bx , 15% qtz-feld blebs and veinlets to 1cm, grey-green, parts tuff, no mineralization | | | | | | | | | |
| 86.8 | 90.5 | dacite - fol. sl. amygd. | | | | | | | | | |
| 90.05 | 92.6 | daicte bx - grey-green. fol. - 40% qtz, occassional tr py | 83.13 | 90.05 | 92.20 | 2.15 | | 0.01 | | | |
| 92.6 | | -box minxed core - dacite tuff & bx, 10% sericite, yellowish grey green, fol. 30%CA. no sulphides. | | | | | | | | | |
| | | -boxed mixed core - dacite, grey-green, foliated, sl. amygd. | | | | | | | | | |

GUNNEX LIMITED

HOLE NO. P -10

PROJECT HISLOP TWP.(PANCONTINENTAL-GUNNEX)

SHEET NO. 3

| FOOTAGE | | DESCRIPTION | SAMPLING | | | | | Au. | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| FROM | TO | | NO. | FROM | TO | FEET | | | | | |
| | | 0.36m -qtz bx 1% py & visible chalio. | 83.14 | | | 0.36 | | 0.01 | | | |
| - | 106.5 | dacite - grey-green, sl-amygd, foliated | | | | | | | | | |
| 106.5 | 119.7 | tuffaccous - dacite bx, grey green, G.9. fol 30° CA. sl. sericitic - 15% whitish qtz in bx sections. | | | | | | | | | |
| 119.7 | 121.65 | qtz-filled shear zone - // to CA. soft grey clay alteration with qtz | 7 | 123.43 | 125.05 | 1.62 | | 0.14 | | | |
| | | | 6 | 121.65 | 123.43 | 1.78 | | 0.005 | | | |
| 121.65 | 123.43 | dacite bx - foliated, 10% dericite, qtz-filled amygdules -tr py through | 8 | 125.05 | 126.90 | 0.85 | | 0.002 | | | |
| | | out | 9 | 126.90 | 129.03 | 2.13 | | 0.02 | | | |
| 123.43 | 125.05 | dacite tuff - with some qtz-bx sections to 15cm. - tr to 1% py | | | | | | | | | |
| 125.05 | 126.9 | rhyolite - foliated with minor feldspathization | | | | | | | | | |
| 126.9 | 129.03 | rhyolite bx - sl. foliated 25° CA. - tr py | | | | | | | | | |
| 129.03 | 131.44 | rhyolite - massive, occassional irregular qtz-feld veins to 5cm | | | | | | | | | |
| 131.44 | 131.95 | dacite bx - fol. 25°CA. | | | | | | | | | |
| 131.95 | 138.40 | rhyolite - massive, occasional qtz- - -- veinlets at odd angles. | | | | | | | | | |

**DRILL HOLE RECORD** — **PANCONTINENTAL MINING (CANADA) LTD.**

PROJECT PC 18 Lu do Twp
HOLE Nº P-10
LOCATION 963.41 m N
Initial Azimuth —
LATITUDE

PROPERTY lots 3 & 4 Con III
TOTAL DEPTH 138.4 m
5 m E
INITIAL DIP -90°
DEPARTURE

CASING LEFT —
Date commenced Oct 30 1980
Date completed Nov 1 1980
CORE STORAGE on site
ELEVATION 5000.15 m

**HOLE SURVEY**

| DEPTH | DIP | AZIMUTH |
|---|---|---|
| COLLAR | -90 | |
| 15.5 | -90 | |
| 61.0 | -90 | |
| 121.95 | -85 | |
| | | |

HOLE Nº P.10 SHEET Nº 1 of 7
DRILL H & S [illegible]
DRILLER Heath & Sherwood
GEOLOGICAL LOG N. Nivar & W. Dix
RADIOMETRIC LOG
SAMPLED N. Nivar & W. Dix
ASSAYED Swastika Laboratory

LITHOLOGY — Constituents %: Mica, Chlorite, Graphite, Carbon, Clay, Qtz/Chert, Carbonate; Colour; Rock Unit; Depth; Graphic Log; Rock Type
STRUCTURE: Bedding, Schistosity, Brecciation, Faulting, Quartz vein
TEXTURE: Ign. Met. Sed.
ALTERATION
MINERALIZATION %: Pyrrhotite, Pyrite, Chalcopyrite, Galena, U3O8
RADIOMETRIC DATA: Inst. Nº; Col. In; Out; Meter; Graph 2 4 6 8
Sample Number; U3O8 %
ASSAY

0
1
2
3
4
5
6
7
8
9 LX
10 CLAY
1
2
3
4
5 14.9
6 yellow green; 16.3; 16.5; rhyolite tuff c bx; quartz occurs as streaks, blobs and porphyroblasts
7 3ab; 20°
8 Bu; Bar 1/4
9
20 30; 30

Additional Data

# DRILL HOLE RECORD

**PANCONTINENTAL-MINING (CANADA) LTD.**

PROJECT
HOLE NO
LOCATION
Initial Azimuth
LATITUDE

PROPERTY
TOTAL DEPTH
INITIAL DIP
DEPARTURE

CASING LEFT
Date Commenced
Date Completed
CORE STORAGE
ELEVATION

HOLE SURVEY

| DEPTH | DIP | AZIMUTH |
|---|---|---|
| | | |

HOLE NO P10 SHEET NO 2 of 7
DRILL
DRILLER
GEOLOGICAL LOG
RADIOMETRIC LOG
SAMPLED
ASSAYED

LITHOLOGY — Constituents %: Mica, Chlorite, Graphite, Carbon, Clay, Qtz/Chert, Carbonate; Graphic Log; Rock Type
STRUCTURE — Bedding, Schistosity, Brecciation, Faulting, Quartz vein
TEXTURE — Ign., Met., Sed
ALTERATION
MINERALIZATION % — Scheelite, Pyrrhotite, Pyrite, Chalcopyrite, Galena, U3O8
RADIOMETRIC DATA — Inst. No: Col. In: Out: Meter; Graph 2 4 6 8
Sample Interval, Sample Number, U3O8 %
ASSAY

Depth scale: 20, 1, 2, 3, 4, 5, 6, 7, 8, 9, 30, 1, 2, 3, 4, 5, 6, 7, 8, 9, 40

Core size: BQ

Boxes: Box No 2; Box No 3; Box No 4; No 5

Rock Unit: 3+6

Depth: 31.35; 33.4; 39.20

Qtz/Chert: 40 (31.35–33.4); 30 (39.20–40)

Mineralization: tr (33.4); tr (39.20–40)

Rock Type: rhyolite tuff and bt c̄ quartz occuring as streaks, blebs and porphyroblasts.

| | | | | |
|---|---|---|---|---|
| 8305 | 31.35 | 33.4 | 2.05 | .002 |
| 8306 | 39.20 | 40.3 | 1.0 | .04 |

Additional Data

# DRILL HOLE RECORD

**PANCONTINENTAL MINING (CANADA) LTD.**

PROJECT
HOLE No
LOCATION
Initial Azimuth
LATITUDE
PROPERTY
TOTAL DEPTH
INITIAL DIP
DEPARTURE
CASING LEFT
Date commenced
Date completed
CORE STORAGE
ELEVATION

HOLE SURVEY

| DEPTH | DIP | AZIMUTH |
|---|---|---|
| | | |

HOLE No P10 SHEET No 3 of 7
DRILL
DRILLER
GEOLOGICAL LOG
RADIOMETRIC LOG
SAMPLED
ASSAYED

Weathering, Casing, Core size, Lith, Core Recovery %, Core Colour, Core Cuttings, Rock Unit, Depth
Graphic Log
LITHOLOGY — Constituents %: Mica, Chlorite, Graphite, Carbon, Clay, Qtz./Chert, Carbonate — Rock Type
STRUCTURE: Bedding, Schistosity, Brecciation, Faulting, Quartz vein
TEXTURE: Ign., Met., Sed.
ALTERATION
MINERALIZATION %: Sphalerite, Pyrrhotite, Pyrite, Chalcopyrite, Galena, U₃O₈
RADIOMETRIC DATA: Inst. No: Col. In: Out: Meter, Graph 2 4 6 8
Sample Interval, Sample Number
ASSAY: U₃O₈ %

40, 1, 2, 3, 4, 5, 6, 7, 8, 9, 50, 1, 2, 3, 4, 5, 6, 7, 8, 9, 60

| Core Recovery | Colour | Rock Unit | Depth | Clay | Rock Type | Bedding |
|---|---|---|---|---|---|---|
| Box 5 | | 2-4b | 40.3 | | rhyolite tuff and bx as above. | 20 |
| Box 6 | | | | | | |
| Box 7 | grey green | 2-4b | 50.6 | | dacite tuff & bx. a.g. with 30% white siliceous frags in foliated green matrix | |
| | | | 52.6<br>52.9 | AE | | 20 |
| 3 | | | 56.1<br>56.5 | 50 | | |
| Box | green | 1 | 57.7 | | massive andesite amygdaloidal & qtz. fillings qtz. [illegible] | |

| Sample Interval | Sample Number | U₃O₈ % | | | | |
|---|---|---|---|---|---|---|
| I | 8307 | 52.5 | 52.7 | 0.2 | .01 | |

Additional Data

# DRILL HOLE RECORD

**PANCONTINENTAL MINING (CANADA) LTD.**

PROJECT ..........
PROPERTY ..........
CASING LEFT ..........
HOLE NO ..........
TOTAL DEPTH ..........
Date commenced ..........
LOCATION ..........
Date completed ..........
Initial Azimuth ..........
INITIAL DIP ..........
CORE STORAGE ..........
LATITUDE ..........
DEPARTURE ..........
ELEVATION ..........

HOLE SURVEY

| DEPTH | DIP | AZIMUTH |
|---|---|---|
| | | |

HOLE NO P10 SHEET NO 4 of 7
DRILL ..........
DRILLER ..........
GEOLOGICAL LOG ..........
RADIOMETRIC LOG ..........
SAMPLED ..........
ASSAYED ..........

Core size: BQ

Box No 9 · Box No 10 · Box No 11 · Box No 12

| Depth | Colour | Rock Unit | Depth | Qtz/Chert | Rock Type | Bedding | Pyrrhotite |
|---|---|---|---|---|---|---|---|
| 60 | dk green | 1 | 63.7<br>63.86 | | massive andesite amygdaloidal qtz. filling minor qtz. fspar veining near lower contact | | tr |
| 69 | | 1a1b | 68.9 | | andesite tuff and bx | | |
| 72 | | 1 | 72.3 | | massive andesite. | | |
| 74.5 | gray green | 4a4b | 74.5<br>74.7<br>75.5<br>76.4 | 25 | dacite tuff & bx strongly foliated | 35° | tr<br>tr |
| 77 | green | 1a1a | 77.1 | | f.g. andesite dike c amygdules qtz. lime filled | | |
| 78 | gray | 4b | 78.1 | 100 | qtz bx 90% white 10% black | | tr |
| 79 | gray-green | 2b | 78.9 | | dacite bx foliated | 30 | |
| 79.65 | gray | 4b | 79.65 | 100 | qtz. bx 70% white 30% | | tr |

ASSAY

| Sample Number | | | $U_3O_8$ % | |
|---|---|---|---|---|
| 8308 | 63.7 | 63.86 | .16 | .03 |
| 8309 | 74.5 | 74.7 | .2 | .005 |
| 8310 | 75.5 | 76.4 | .9 | .09 |
| 8311 | 78.1 | 78.9 | .8 | .005 |
| 8312 | 79.65 | 80.05 | .4 | .03 |

Additional Data

**DRILL HOLE RECORD**

**PANCONTINENTAL-MINING (CANADA) LTD.**

PROJECT
HOLE No
LOCATION
Initial Azimuth
LATITUDE

PROPERTY
TOTAL DEPTH
INITIAL DIP
DEPARTURE

CASING LEFT
Date Commenced
Date Completed
CORE STORAGE
ELEVATION

HOLE SURVEY

| DEPTH | DIP | AZIMUTH |
|---|---|---|
| | | |

HOLE No R12 SHEET No 5 of 7
DRILL
DRILLER
GEOLOGICAL LOG
RADIOMETRIC LOG
SAMPLED
ASSAYED

| Core Size | Core Box No | Colour | Rock Unit | Depth | Rock Type |
|---|---|---|---|---|---|
| BQ | Box No 12 | grey green | 2b amygd. | 80.0 – 81.9 | dacite bx sl amygdaloidal and foliated. |
| | Box No 13 | grey green | 2b | 81.9 – 86.8 | dacite bx c 15% qtz.-feld. blebs and veinlets to 1cm |
| | Box No 14 | grey green | 2b amygd | 86.8 – 90.05 | foliated dacite bx. slightly amygdaloidal |
| | | grey green | 2b | 90.05 – 92.6 | dacite bx foliated c occasional tr pyrite |
| | Box No 15<br>16 | yellow-grey green | 2a+b | 92.6 – | dacite tuff and bx, minor sericitization, amygdaloidal and foliated |

Depth marks: 81.9, 86.8, 90.05, 92.2, 92.6

STRUCTURE – Bedding: 30° (at approx. 97 m)

MINERALIZATION % – Pyrite: tr (at approx. 92 m)

| Sample Number | From | To | Width | U₃O₈ % |
|---|---|---|---|---|
| 8313 | 90.05 | 92.2 | 2.15 | .01 |
| 8314 | ? | ? | 0.36 | .01 |

Additional Data 81.9m to 86.8 m core box fell off back of Timberjack and got mixed.
92.6 m to 106.5 m " " " " " " " " "
Sample 8314 0.36m of qtz. bx c 1% py minor chalco

## DRILL HOLE RECORD

## PANCONTINENTAL-MINING (CANADA) LTD.

PROJECT
HOLE NO
LOCATION
Initial Azimuth
LATITUDE

PROPERTY
TOTAL DEPTH
INITIAL DIP
DEPARTURE

CASING LEFT
Date Commenced
Date Completed
CORE STORAGE
ELEVATION

HOLE SURVEY

| DEPTH | DIP | AZIMUTH |
|---|---|---|
| | | |
| | | |
| | | |
| | | |
| | | |

HOLE NO P10 SHEET NO 6 of 7
DRILL
DRILLER
GEOLOGICAL LOG
RADIOMETRIC LOG
SAMPLED
ASSAYED

LITHOLOGY — Constituents %: Mica, Chlorite, Graphite, Carbon, Clay, Qtz./Chert, Carbonate — Rock Type
STRUCTURE: Bedding, Schistosity
TEXTURE: Ign., Met., Sed.
ALTERATION
MINERALIZATION %: Scheelite, Pyrrhotite, Pyrite, Chalcopyrite, Galena, $U_3O_8$
RADIOMETRIC DATA: Inst. No: Col. In: Out: Meter, Graph 2 4 6 8
Sample Number
ASSAY: $U_3O_8$ %

| Depth | Core box | Colour | Rock Unit | Depth | Carbonate | Rock Type | Bedding |
|---|---|---|---|---|---|---|---|
| 100 | Bx No 16 | | 2ab | | | dacite tuff and bx. as above. | |
| 106.5 | Bx No 17 | grey green | 2a and 2b | 106.5 | 10 | tuffaceous dacite bx e.g. slightly sericitic, foliated 15% white qtz in bx sections | 30° |
| 110 | 5A | | | | | | |
| 113 | Bx No 18 | | | | | | |
| 117 | Bx No 19 | | | | | | |
| 119.7 | | grey | 3b | 119.7 | | qtz shear zone. | |
| 120 | | | | | | | |

Additional Data

# DRILL HOLE RECORD

**PANCONTINENTAL-MINING (CANADA) LTD.**

PROJECT ............ PROPERTY ............ CASING LEFT ............

HOLE Nº ............ TOTAL DEPTH ............ Date Commenced ............

LOCATION ............ Date completed ............

Initial Azimuth ............ INITIAL DIP ............ CORE STORAGE ............

LATITUDE ............ DEPARTURE ............ ELEVATION ............

HOLE SURVEY

| DEPTH | DIP | AZIMUTH |
|---|---|---|
| | | |
| | | |
| | | |
| | | |
| | | |

HOLE Nº P 2 SHEET Nº 7 of 7

DRILL ............

DRILLER ............

GEOLOGICAL LOG ............

RADIOMETRIC LOG ............

SAMPLED ............

ASSAYED ............

| Core Size | Core Box No. | Colour | Rock Unit | Depth | Serecite | Rock Type | Bedding | Pyrite |
|---|---|---|---|---|---|---|---|---|
| BQ | 19 | grey | 4a | 121.65 | | quartz filled "shear zone" 11 to CA ī sill grey clay alt product | | tr |
| | Box No 20 | lt green | 3b | 123.43 | 10 | foliated dacite tuff ī qtz. filled amygd. | | |
| | | | 2a | 125.05 | | strongly fol. dacite tuff ī qtz. bx sections up to 15cm. | 15 | tr<br>tr<br>tr |
| | | grey-buff | bw 3 | 126.9 | | foliated rhyolite ī minor feldspathic alter. | | |
| | Box No 21 | | 3b | 129.03 | | sil. rhyolite tuff sl foliated | 35 | tr |
| | | | 3 | 131.44 | | massive rhyolite ī occ. qtz. veinlets 5mm wide irregular | | |
| | | lt green | 3b | 131.9 | | foliated dacite tuff | 25 | |
| | Box No 22<br>23 | grey buff | 3 | 138.9 | | massive rhyolite ī occasional qtz. veinlets cross-cutting core. | | |

ASSAY

| Sample Number | | | | U₃O₈ % | |
|---|---|---|---|---|---|
| 8315 | 119.7 | 121.65 | 1.95 | .02 | |
| 8316 | 121.65 | 123.43 | 1.78 | .005 | .07<br>3.4 |
| 8317 | 123.43 | 125.05 | 1.62 | .14 | |
| 8318 | 125.05 | 126.9 | 1.85 | .002 | |
| 8319 | 126.9 | 129.03 | 2.13 | .02 | |

Additional Data

OM9-PE7-C-80

GUNNEX LIMITED.

D. D-Hole No. P - 11

PROJECT HISLOP TWP.(PANCONTINENTAL-GUNNEX)

Sheet No.

LOCATION HISLOP TWP.
LOTS 3 & 4 CON 3

HOLE STARTED Nov. 2/80

HOLE COMPLETED Nov. 4/80

CORE RECOVERY %

DRILLED BY HEATH & SHERWOOD

LOGGED BY W. F. DIX

| SURVEY | | |
|---|---|---|
| DEPTH | DIP | AZIMUTH |
| COLLAR | -90° | |
| 15.2 | -86° | |
| 61.0 | -83° | |
| 122.0 | -79° | |
| | | |
| | | |

COLLAR. LAT. 955.79 N

DEP. 5.0 E

ELEV. 5000.08

AZIMUTH

DIP -90°

LENGTH 152.4 m

HOR. PROJ. VERT. PROJ.

| FOOTAGE | | DESCRIPTION. | SAMPLING | | | | | Au. | | |
|---|---|---|---|---|---|---|---|---|---|---|
| FROM m | TO m | | NO | FROM | TO | FEET | | | | |
| | 14.9 | Casing | | | | | | | | |
| 14.9 | 20.5 | Dacite - bright green chloritic (mariposite?) stron fol 20° CA. | | | | | | | | |
| | | 17.5 - 17.65 - Fe-carb alt. | 83.20 | 17.22 | 18.36 | 1.14 | | 0.002 | | |
| | | 18.5 - 18.6 - Fe- carb alt. | | | | | | | | |
| | | 19.9 - 20.5 - Fe-carb alt. | | | | | | | | |
| | | 17.72 - 18.36 - tr py | | | | | | | | |
| 20.5 | 24.18 | rhyolite tuff - sericitic with 1cm x 2cm bx inclusions. light green, strong fol. at 20° cm. | | | | | | | | |
| | | 22.1 - 22.25 - Fe-carb alt. | | | | | | | | |

GUNNEX LIMITED

PROJECT HISLOP TWP.(PANCONINTENTAL-GUNNEX)

HOLE NO. P - 11

SHEET NO. 2

| FOOTAGE |  | DESCRIPTION | SAMPLING |  |  |  |  | Au. |  |  |  |
|---|---|---|---|---|---|---|---|---|---|---|---|
| FROM | TO |  | NO. | FROM | TO | FEET |  |  |  |  |  |
| 24.18 | 28.65 | rhyolite bx - sericite, with light green bx frags, fol. 20°CA, |  |  |  |  |  |  |  |  |  |
|  |  | 24.4 - 1cm Fe-carb alt. |  |  |  |  |  |  |  |  |  |
|  |  | 27.5 - 27.8 - Fe-carb alt. |  |  |  |  |  |  |  |  |  |
|  |  | 28.3 - 28.65 - Tr py. | 83.21 | 28.30 | 28.65 | 0.35 |  | 0.002 |  |  |  |
| 28.65 | 42.0 | rhyolite tuff - sericitic, buff-green, fol. 20°CA. |  |  |  |  |  |  |  |  |  |
|  |  | 31.46 - 31.48 - Fe-carb alt. |  |  |  |  |  |  |  |  |  |
|  |  | 32.66 - 32.70 - Fe-carb alt. |  |  |  |  |  |  |  |  |  |
|  |  | 37.7 - 37.73 - Fe-carb alt. |  |  |  |  |  |  |  |  |  |
|  |  | 39.8 - 39.96 - Fe-carb alt. |  |  |  |  |  |  |  |  |  |
|  |  | 41.1 - 41.2 - Fe-carb alt. |  |  |  |  |  |  |  |  |  |
| 42.0 | 46.25 | rhyolite bx - sericitic, light green, fol. 25°CA. |  |  |  |  |  |  |  |  |  |
|  |  | 44.6 - 44.9 - Fe-carb alt. |  |  |  |  |  |  |  |  |  |
| 46.25 | 47.5 | quartz bx - minor py. 10% dark grey qtz, 90% whitish qtz. | 83.22 | 46.25 | 47.50 | 1.25 |  | 0.002 |  |  |  |
| 47.5 | 52.63 | dacite bx - sl. fol., sericitic, sil. bx frags. |  |  |  |  |  |  |  |  |  |
| 52.63 | 53.22 | dacite bx - qtz rich frags, 50% qtz - tr py | 3 | 52.63 | 53.22 | 0.59 |  | NIL |  |  |  |
| 53.22 | 57.8 | dacite bx - foliated, minor qtz-feld veinlets, minor py. | 4 | 53.80 | 53.20 | 1.40 |  | 0.002 |  |  |  |
|  |  | 53.8 - 55.2 - minor py |  |  |  |  |  |  |  |  |  |
| 57.8 | 60.2 | rhyolite bx - foliated 20°CA. |  |  |  |  |  |  |  |  |  |
| 60.2 | 62.87 | dacite bx - medium green, foliated |  |  |  |  |  |  |  |  |  |
| 62.87 | 63.34 | quartz bx - with tr py. | 83.25 | 62.87 | 63.34 | 0.47 |  | 0.02 |  |  |  |

GUNNEX LIMITED

HOLE NO. P - 11

PROJECT HISLOP TWP.(PANCONTINENTAL-GUNNEX)

SHEET NO. 3

| FOOTAGE | | DESCRIPTION | SAMPLING | | | | | Au. | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| FROM | TO | | NO. | FROM | TO | FEET | | | | | |
| 63.34 | 72.88 | dacite bx - foliated 20°CA. | | | | | | | | | |
| | | 65.72 - 65.81 - Fe-carb alt. | | | | | | | | | |
| | | 68.9 - 69.04 - Fe-carb alt | | | | | | | | | |
| | | 70.13 - 70.73 - Fe-carb alt. | | | | | | | | | |
| | | 71.4 - 71.5 - Fe-carb alt. | | | | | | | | | |
| | | 65.33 - 66.48 - tr py | 6 | 65.33 | 66.48 | 1.15 | | NIL | | | |
| 72.88 | 74.83 | quartz bx - slightly felds, scattered white/dark quartz 30/50 - tr to 1 % py. | 7 | 72.88 | 74.83 | 1.95 | | 0.08 | | | |
| 74.83 | 76.8 | rhyolite bx - with occasional fleck py. | 8 | 74.83 | 76.80 | 1.97 | | 0.04 | | | |
| 76.8 | 79.33 | andesite bx- with occasional qtz vein to 10cm | | | | | | | | | |
| | | 78.18 - 79.33 - occasional tr py | 9 | 78.18 | 79.33 | 1.15 | | 0.01 | | | |
| 79.33 | 87.8 | dacite bx - with occasional qtz-feld veinlet, minor py | | | | | | | | | |
| | | 87.27 - 87.80 - Tr py | 83.30 | 87.27 | 87.80 | 0.53 | | 0.002 | | | |
| | | 86.45 - 86.62 - ruggy carb. vein, no py | | | | | | | | | |
| 87.8 | 93.5 | dacite - foliated 25°CA, sericitic at lower contact. occasional qtz-feld veinlets. | | | | | | | | | |
| 93.5 | 95.26 | dacite bx - slightly sericitic qtz-feld stretched amygduled qtz-feld veinlets | | | | | | | | | |
| 95.26 | 97.0 | dacite micro - bx, silicified with dk grey oval amygdules | | | | | | | | | |
| 97.0 | 100.11 | dacite bx - slightly sericitic with irregular qtz-feld veinlets | | | | | | | | | |
| 100.11 | 106.1 | dacite - sl. foliation 25°CA. irregular qtz-feld feinlets, qtz-feld amygdules to 5cm. | | | | | | | | | |

GUNNEX LIMITED

HOLE NO. P -11

PROJECT HISLOP TWP. (PANCONTINENTAL-GUNNEX)

SHEET NO. 4

| FOOTAGE | | DESCRIPTION | SAMPLING | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| FROM | TO | | NO. | FROM | TO | FEET | | | | | |
| 106.1 | 108.16 | dacite - micro - bx, siliceous (rhyolite?) | | | | | | | | | |
| 108.16 | 113.6 | dacite - foliated, irregular qtz-feld veinlets | | | | | | | | | |
| 113.6 | 114.45 | dacite bx - 50% qtz frags or porph. sl. sericitic, tr py | 83.31 | 113.60 | 114.45 | 0.75 | | 0.002 | | | |
| 114.45 | 116.74 | dacite bx - sericitic, - tr py | 2 | 114.45 | 116.74 | 2.29 | | NIL | | | |
| 116.74 | 119.56 | dacite bx - sericitic, fol. 25°CA. amygdaloidal | | | | | | | | | |
| 119.56 | 121.77 | dacite tuff - silicified & feldspathised some by sections | | | | | | | | | |
| | | 119.56 - 120.84 - Tr py | 3 | 119.56 | 120.84 | 1.28 | | 0.002 | | | |
| | | 120.84 - 121.77 - Tr py | 4 | 120,84 | 121.77 | 0.93 | | 0.002 | | | |
| 121.-7 | 125.1 | dacite bx - yellow green, sericitic foliated 25°CA, numerous qtz-feld stringers to 2cm. | | | | | | | | | |
| 125.1 | 126.66 | dacite - grey-green, foliated, slights bx | | | | | | | | | |
| 126.66 | 128.48 | dacite tuff - fol. 20°CA., black pyritic bands // foliation, -less than 1% py. | 83.35 | 126.66 | 128.48 | 1.82 | | 0.005 | | | |
| 128.48 | 132.1 | dacite bx - tuff sections, fol, - occasional tr py | | | | | | | | | |
| 132.1 | 135.0 | rhyolite tuff with bx sections occasional vein unit to 6 cm | | | | | | | | | |
| 135.0 | 140.44 | rhyolite - massive, occasional black pyritic veinlets (irregular) | | | | | | | | | |
| | | 135.1 - 135.74 tr py | 6 | 135.10 | 135.74 | 0.64 | | 0.002 | | | |
| 140.44 | 141.13 | dacite bx - with 60% dark and white qtz bx, -tr to 1% py | 7 | 140.44 | 141.13 | 0.69 | | - | | | |
| 141.13 | 144.85 | dacite bx - medium green, sl. fol. 20°CA. irregular qtz-feld -veinlets, very occasional tr py. | | | | | | | | | |
| 144.85 | 152.4 | dacite - massive, occasional irregular qtz veinlet (Chicken Track?) | | | | | | | | | |

GUNNEX LIMITED

HOLE NO. P - 11
PROJECT HISLOP TWP. (PANCONTINENTAL -GUNNEX)
SHEET NO. 5

| FOOTAGE | | DESCRIPTION | SAMPLING | | | | | Au. | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| FROM | TO | | NO. | FROM | TO | FEET | | | | | |
| | | 146.8 - 147.3 - several qtz veinlets tr py. | 83.38 | 146.8 | 147.3 | 0.5 | | 0.01 | | | |
| | | 148.2 - 148.75 - qtz rich bx | 9 | 148.20 | 148.75 | 0.55 | | 0.01 | | | |

**DRILL HOLE RECORD** — **PANCONTINENTAL MINING (CANADA) LTD.**

PROJECT Pc-18 Hislop Twp
HOLE No P-11
LOCATION 955.8m N 5m E
Initial Azimuth —
LATITUDE 954.79 N

PROPERTY Lots 3 & 4 Con III
TOTAL DEPTH 152.4
INITIAL DIP -90°
DEPARTURE 5.0 E

CASING LEFT
Date Commenced Nov. 2 1980
Date Completed Nov. 4 1980
CORE STORAGE on site
ELEVATION 5000.08 m

**HOLE SURVEY**

| DEPTH | DIP | AZIMUTH |
|---|---|---|
| COLLAR | -90° | |
| 15.2 m | 84° | |
| 61.0 m | 83° | |
| 122.0 m | 79° | |

HOLE No P11 SHEET No 1 of 8
DRILL H&S BD-11
DRILLER HEATH & SHERWOOD
GEOLOGICAL LOG N. NOVAK
RADIOMETRIC LOG
SAMPLED N. NOVAK
ASSAYED SWASTIKA LABORATORY

LITHOLOGY — Constituents %: Mica, Chlorite, Graphite, Carbon, Clay, Qtz/Chert, Carbonate — Rock Type
STRUCTURE — Bedding, Schistosity, Faulting, Quartz vein
TEXTURE — Ign., Met., Sed.
ALTERATION
MINERALIZATION % — Sphalerite, Pyrrhotite, Pyrite, Chalcopyrite, Galena, U3O8
RADIOMETRIC DATA — Inst. No: Col. In: Out: Meter, Graph 2 4 6 8
ASSAY

| Depth | Core | Recovery % | Colour | Rock Unit | Rock Type | Bedding | Mineralization % |
|---|---|---|---|---|---|---|---|
| 0–14.9 | FH | | | | CLAY | | |
| 14.9 | EQ<br>EXK NQ | 50%<br>90% | bright green | chlor s | Strongly foliated dacite with chlorite alt'n along fol. plane | 20° | tr |
| 17.32 | | | | | | | |
| 18.30 | | | | | | | |

| Sample Number | from<br>U3O8 % | to | width | Au |
|---|---|---|---|---|
| B370 | 17.32 | 18.30 | 1.14 | .002 |

Additional Data

# DRILL HOLE RECORD

**PANCONTINENTAL MINING (CANADA) LTD.**

PROJECT
PROPERTY
CASING LEFT
HOLE NO
TOTAL DEPTH
Date commenced
LOCATION
Date completed
Initial Azimuth
INITIAL DIP
CORE STORAGE
LATITUDE
DEPARTURE
ELEVATION

HOLE SURVEY

| DEPTH | DIP | AZIMUTH |
|---|---|---|
| | | |

HOLE NO P11 SHEET NO 2 of 8
DRILL
DRILLER
GEOLOGICAL LOG
RADIOMETRIC LOG
SAMPLED
ASSAYED

Weathering / Grains / Core Size / Lith / Core Recovery % / Core Box No / Colour / Core Cuttings / Rock Unit / Depth / Graphic Log

LITHOLOGY — Constituents %: Mica / Chlorite / Graphite / Carbon / Clay / Qtz./Chert / Carbonate — Rock Type

STRUCTURE: Bedding / Schistosity / Brecciation / Faulting / Quartz vein

TEXTURE: Ign. / Met. / Sed.

ALTERATION

MINERALIZATION %: Sphalerite / Pyrrhotite / Pyrite / Chalcopyrite / Galena / $U_3O_8$

RADIOMETRIC DATA: Inst. No: / Col. In: Out: / Meter / Graph 2 4 6 8

Sample Interval / Sample Number

ASSAY: $U_3O_8$ % / Fr / Width / Au

Depth scale: 20, 1, 2, 3, 4, 5, 6, 7, 8, 9, 30, 1, 2, 3, 4, 5, 6, 7, 8, 9, 40

Core Size: BQ

Core Box: Box No 2 / Box No 3 / Box No 4 / No 5

| Depth | Rock Unit | Rock Type | Bedding |
|---|---|---|---|
| 20.5 | mr 3a<br>mr 3b | Sericitic rhyolite tuff c̄ small bx inclusions strongly foliated | 20° |
| 24.18 | mr 3b | Sericitic rhyolite bx with microbx inclusions foliated | 20° |
| 28.3<br>28.45 | mr 3a | Sericitic rhyolite tuff foliated | 20° |

tr

| Sample Number | $U_3O_8$ % | Fr | Width | Au |
|---|---|---|---|---|
| 8221 | 28.30 | 29.65 | 0.35 | .002 |

Additional Data

# DRILL HOLE RECORD

PROJECT
PROPERTY
HOLE No
TOTAL DEPTH
LOCATION
Initial Azimuth
INITIAL DIP
LATITUDE
DEPARTURE
CASING LEFT
Date commenced
Date completed
CORE STORAGE
ELEVATION

HOLE SURVEY

| DEPTH | DIP | AZIMUTH |
|---|---|---|
| | | |

PANCONTINENTAL MINING (CANADA) LT

HOLE No P.11 SHEET No 3 of 8
DRILL
DRILLER
GEOLOGICAL LOG
RADIOMETRIC LOG
SAMPLED
ASSAYED

LITHOLOGY — Constituents %: Mica, Chlorite, Graphite, Carbon, Clay, Qtz./Chert, Carbonate

STRUCTURE — TEXTURE — ALTERATION — MINERALIZATION % — RADIOMETRIC DATA (Inst. No: Col. In: Out: Meter, Graph 2 4 6 8)

| Depth (m) | Box | Core size | Rock Unit | Depth | Qtz./Chert | Rock Type | Bedding |
|---|---|---|---|---|---|---|---|
| 40–42 | Box 5 | | 10c 3b | 42.0 | | Sericitic rhyolite tuff foliated | |
| 42–46.25 | Box No 6 | | Ser 3b | 46.25 | | Sericitic rhyolite bx foliated | 25° |
| 46.25–47.5 | | | 9b | 47.5 | 100 | Quartz bx 90% white 10% grey | |
| 47.5–52.63 | Box No 7 | FG | 3b | 52.63 | | dacite bx slightly foliated and sericitized & qtz fspar bx frags. | |
| 52.63–53.22 | | | 3b qtz | 53.22 | 52 | qtz dacite bx | |
| 53.22–57.6 | | | 3b | 53.8<br>55.2<br>57.6 | | foliated dacite bx & minor qtz-carb veinlets & minor pyrite. | |
| 57.6–60 | Box No 8 | | 3b | | | foliated rhyolite bx | 20° |

ASSAY

| Sample Number | from | to | Width | Au |
|---|---|---|---|---|
| B322 | 46.25 | 47.5 | 1.25 | .002 |
| B323 | 52.63 | 53.22 | 0.59 | NIL |
| B324 | 53.8 | 55.2 | 1.4 | .002 |

Additional Data

# DRILL HOLE RECORD

**PANCONTINENTAL MINING (CANADA) LTD.**

PROJECT ........ PROPERTY ........ CASING LEFT ........
HOLE NO ........ TOTAL DEPTH ........ Date commenced ........
LOCATION ........ Date completed ........
Initial Azimuth ........ INITIAL DIP ........ CORE STORAGE ........
LATITUDE ........ DEPARTURE ........ ELEVATION ........

| HOLE SURVEY | | |
|---|---|---|
| DEPTH | DIP | AZIMUTH |
| | | |
| | | |
| | | |
| | | |

HOLE NO P11 SHEET NO 4 of 8
DRILL ........
DRILLER ........
GEOLOGICAL LOG ........
RADIOMETRIC LOG ........
SAMPLED ........
ASSAYED ........

Weathering / Casing / Core Size / Lith / Core Recovery / Core Box No / Colour / Core Cuttings / Rock Unit / Depth / Graphic Log

LITHOLOGY — Constituents %: Mica / Chlorite / Graphite / Carbon / Clay / Qtz/Chert / Carbonate — Rock Type

STRUCTURE: Bedding / Schistosity / Brecciation / Faulting / Quartz vein

TEXTURE: Ign. / Met. / Sed.

ALTERATION

MINERALIZATION %: Sphalerite / Pyrrhotite / Pyrite / Chalcopyrite / Galena / $U_3O_8$

RADIOMETRIC DATA: Inst. No: / Col. In: / Out: / Meter / Graph 2 4 6 8

Sample Interval / Sample Number

ASSAY

Core Size: FQ
Core Box: Box No 9 / Box No 10 / Box No 11 / No 12

Depth scale: 60, 1, 2, 3, 4, 5, 6, 7, 8, 9, 70, 1, 2, 3, 4, 5, 6, 7, 8, 9, 80

| Rock Unit | Depth | Rock Type | Qtz/Chert | Bedding | Pyrite | Sample Number | fr U3O8 % | t | Width | Au |
|---|---|---|---|---|---|---|---|---|---|---|
| 3b | 60.2 | foliated dacite bx | | | | | | | | |
| 4 | 62.87 | qtz bx | | | tr | 8325 | 62.49 | 63.34 | 0.47 | .02 |
| 3b | 63.34 | foliated dacite bx | | | | | | | | |
| | 65.33 | | | | tr | 8326 | 65.33 | 66.48 | 1.15 | Nil |
| 3b | 66.48 | | | 20° | | | | | | |
| 4b | 72.88 | Sl feldspathic qtz bx<br>30% white qtz<br>50% grey qtz | 80 | | tr<br>1% | 5327 | 72.88 | 74.83 | 1.95 | 0.08 |
| 3a | 74.83 | rhyolite bx | | | | 5328 | 74.83 | 76.8 | 1.97 | 0.04 |
| 1b | 76.8 | andesite bx<br>2 occ. qtz<br>veinlet to 1cm | | | Nil | | | | | |
| | 78.18 | | | | tr | 5329 | 78.18 | 79.33 | 1.15 | 0.01 |
| 3b | 79.52 | dacite bx | | | | | | | | |

Additional Data

# DRILL HOLE RECORD

**PANCONTINENTAL MINING (CANADA) LTD.**

PROJECT ........ PROPERTY ........ CASING LEFT ........
HOLE NO ........ TOTAL DEPTH ........ Date Commenced ........
LOCATION ........ Date Completed ........
Initial Azimuth ........ INITIAL DIP ........ CORE STORAGE ........
LATITUDE ........ DEPARTURE ........ ELEVATION ........

| HOLE SURVEY | | |
|---|---|---|
| DEPTH | DIP | AZIMUTH |
| | | |
| | | |
| | | |
| | | |

HOLE NO P11 SHEET NO 5 of 8
DRILL ........
DRILLER ........
GEOLOGICAL LOG ........
RADIOMETRIC LOG ........
SAMPLED ........
ASSAYED ........

Core size: EB

Core Box: Box No 12 (80–83); Box No 13 (83–88); Box No 14 (88–94); Box No 15 (94–99); 16 (99–100)

| Depth | Rock Unit | Rock Type | Bedding | Qtz/Chert | Pyrite % |
|---|---|---|---|---|---|
| 80–87.5 (87.37) | 2b | dacite bx. c occ. qtz fspar veinlets and minor pyrite. | | [illegible] | |
| 87.5 | 2 | foliated dacite occ. qtz. fspar veinlets, foliated becoming arkosic at lower contact | 25° | | tr |
| 93.5 | 2b | dacite bx c qtz. fspar veinlets bed, slightly sericitic c qtz amygdaloids | | | |
| 95.2b | 2b amyd | dacite microbx. very silicified c dk. grey (bed) amygdaloids | | | |
| 97.0 | 2b | dacite bx. sl. sericitic c irregular qtz. fspar veinlets criss-crossing core | | | |

| Sample Number | From<br>U3O8 % | To | W.I.H. | Au |
|---|---|---|---|---|
| 8330 | 87.37 | 87.8 | 0.53 | .002 |

Additional Data

# DRILL HOLE RECORD

**PANCONTINENTAL MINING (CANADA) LTD.**

PROJECT ........ PROPERTY ........ CASING LEFT ........
HOLE NO ........ TOTAL DEPTH ........ Date commenced ........
LOCATION ........ Date completed ........
Initial Azimuth ........ INITIAL DIP ........ CORE STORAGE ........
LATITUDE ........ DEPARTURE ........ ELEVATION ........

HOLE SURVEY

| DEPTH | DIP | AZIMUTH |
|---|---|---|
| | | |

HOLE NO. P11 SHEET NO. 6 of 8
DRILL
DRILLER
GEOLOGICAL LOG
RADIOMETRIC LOG
SAMPLED
ASSAYED

| Scale | Core size | Core Box | Rock Unit | Depth | Constituents % Qtz/Chert | Rock Type | Bedding | Mineralization % Pyrite | Sample Number | $U_3O_8$ % | L | width | Au |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 100 | BQ | Box No 16 | 2b | | | dacite bx as above | | | | | | | |
| 1 | | | 2b | 101·4 | | mildly foliated dacite c irregular qtz fspar veins and <5cm qtz-filled amygdules foliated | 25° | | | | | | |
| 6 | | Box No 17 | 1,1 (A) | 106·1 | | siliceous rhyodacite micro bx | | | | | | | |
| 8 | | | 2 | 108·1 | | foliated dacite c irregular qtz fspar veinlets | | | | | | | |
| 110 | | Box No 18 | | | | | | | | | | | |
| 3 | | | 2b | 113·6 | 50 | foliated dacite bx | | tr | 8331 | 113·6 | 114·45 | 0·75 | .002 |
| 4 | | | ser 2b | 114·45 | | sericitic dacite bx | | tr | 8332 | 114·45 | 116·74 | 2·29 | NIL |
| 6 | | Box No 19 | ser 2b | 116·74 | | sl. foliated sericitic dacite bx | 25 | | | | | | |
| 9 | | | 2a | 119·56 | | dacite tuff | | tr | 8333 | 119·56 | [illegible] | 1·78 | .002 |
| 120 | | | | | | | | | | | | | |

Additional Data

## DRILL HOLE RECORD

**PANCONTINENTAL-MINING (CANADA) LTD.**

PROJECT ........ PROPERTY ........ CASING LEFT ........
HOLE NO ........ TOTAL DEPTH ........ Date Commenced ........
LOCATION ........ Date Completed ........
Initial Azimuth ........ INITIAL DIP ........ CORE STORAGE ........
LATITUDE ........ DEPARTURE ........ ELEVATION ........

| HOLE SURVEY | | |
|---|---|---|
| DEPTH | DIP | AZIMUTH |
| | | |
| | | |
| | | |
| | | |

HOLE NO P11 SHEET NO 7 of 8
DRILL ........
DRILLER ........
GEOLOGICAL LOG ........
RADIOMETRIC LOG ........
SAMPLED ........
ASSAYED ........

Core size: AQ

Core boxes: Box No 19 · Box No 20 · Box No 21 · Box No 22 · 23

| Rock Unit | Depth | Rock Type | Bedding | Pyrite |
|---|---|---|---|---|
| 2a+b | 120.49 | silicified and feldspathized dacite tuff & bx | | tr |
| 2c<br>3b | 121.77 | foliated sericitic dacite bx c numerous qtz. Dyper disinfected and qtz filled amygdules | 25° | tr |
| 2b | 125.1 | foliated and slightly bx dacite | | |
| 3b | 126.66 | foliated dacite tuff c black pyritiferous bands ‖ foliation | 20° | tr<br>tr<br>1% |
| 3a+b | 128.48 | foliated dacite bx c tuffaceous sections wc. to pyrite. | | |
| 3a+b | 133.1 | rhyolite tuff c bx sections, occ. thin dacite unit (<6cm) | | |
| 3<br>+ ?? | 135.0<br>135.74 | massive rhyolite c occasional black pyritiferous seams | | tr |

RADIOMETRIC DATA
Inst. No:
Col. In:
Out:
Meter
Graph 2 4 6 8

| Sample Number | from<br>U3O8 % | to | width | | | |
|---|---|---|---|---|---|---|
| 8334 | 120.09 | 121.77 | 0.95 | .002 | | |
| 8335 | 126.66 | 128.48 | 1.82 | .006 | | |
| 8336 | 135.1 | 135.74 | 0.64 | .002 | | |

Additional Data

**DRILL HOLE RECORD** — **PANCONTINENTAL MINING (CANADA) LTD.**

PROJECT ..........
HOLE NO ..........
LOCATION ..........
Initial Azimuth ..........
LATITUDE ..........

PROPERTY ..........
TOTAL DEPTH ..........
INITIAL DIP ..........
DEPARTURE ..........

CASING LEFT ..........
Date Commenced ..........
Date completed ..........
CORE STORAGE ..........
ELEVATION ..........

HOLE SURVEY

| DEPTH | DIP | AZIMUTH |
|---|---|---|
| | | |

HOLE NO P11 SHEET NO 8 of 8
DRILL ..........
DRILLER ..........
GEOLOGICAL LOG ..........
RADIOMETRIC LOG ..........
SAMPLED ..........
ASSAYED ..........

| Depth scale | Core boxes | Rock Unit | Depth | Rock Type |
|---|---|---|---|---|
| 140 | Box 23 | 3 | 140.44 | mm of [illegible] to dacite [illegible] qtz [illegible] qtz |
| 141 | | 2b<br>4b | 141.13 | dacite as slightly foliated, [illegible] occ [illegible] pyrite & irregular qtz-felspar veinlets. |
| 144 | Box No 24 | 2 | 144.85 | massive dacite [illegible] occ irregular qtz-veinlets "chicken track" occ qtz [illegible] be sections |
| 146 | | | 146.8 | |
| 147 | | | 147.3 | |
| 148 | Box No 25 | | 148.2 | |
| 148 | | | 148.75 | |
| 152 | | | 152.4 | |

Core size: EQ

| Sample Number | From | To | Width | Au |
|---|---|---|---|---|
| 8337 | 140.44 | 141.13 | 0.69 | .002 |
| 8338 | 146.8 | 147.3 | 0.5 | .01 |
| 8339 | 148.2 | 148.75 | 0.55 | .01 |

Additional Data

OM9-PE7-C-80

GUNNEX LIMITED.

D.D-Hole No. P - 12

PROJECT HISLOP TWP. (PANCONTINENTAL-GUNNEX)

Sheet No.

LOCATION HISLOP TWP.
LOTS 3 & 4 CON 3

HOLE STARTED Nov. 5/80

HOLE COMPLETED Nov. 6/80

CORE RECOVERY %

DRILLED BY HEATH & SHERWOOD

LOGGED BY W. F. DIX

| SURVEY | | |
|---|---|---|
| DEPTH | DIP | AZIMUTH |
| COLLAR | -65° | |
| | | |
| | | |
| | | |
| | | |
| | | |

COLLAR. LAT. 948.2 N

DEP. 64.0 W

ELEV.

AZIMUTH

DIP -65°

LENGTH 24.7 m

HOR. PROJ. VERT. PROJ.

| FOOTAGE | | DESCRIPTION. | SAMPLING | | | | | Au. | | |
|---|---|---|---|---|---|---|---|---|---|---|
| FROM | TO | | NO | FROM | TO | FEET | | | | |
| 0 | 24.7 | Casing<br>Hole abandonded since overburden depth preluded intersection of one target zone. | | | | | | | | |

# DRILL HOLE RECORD

**PANCONTINENTAL-MINING (CANADA) LTD.**

PROJECT PC 18 Hislop Twp
PROPERTY Lots 3&4 Con III
CASING LEFT —
HOLE Nº P-12
TOTAL DEPTH 24.7m
Date Commenced 11/05/80
LOCATION 948.7 m N
64.0 m W
Date Completed 11/06/80
Initial Azimuth 045
INITIAL DIP -65°
CORE STORAGE —
LATITUDE
DEPARTURE
ELEVATION

**HOLE SURVEY**

| DEPTH | DIP | AZIMUTH |
|---|---|---|
| Collar | -65 | 045 |
|  |  |  |
|  |  |  |
|  |  |  |
|  |  |  |

HOLE Nº P12 SHEET Nº 1 of 2
DRILL H & S B10-11
DRILLER HEATH & SHERWOOD
GEOLOGICAL LOG U. ANUAR
RADIOMETRIC LOG
SAMPLED —
ASSAYED

Wellbore / Casing / Core Size / Lith / Core Recovery % / Core / Colour / Core Cuttings / Rock Unit / Depth

**LITHOLOGY** — Graphic Log; Constituents %: Mica, Chlorite, Graphite, Carbon, Clay, Qtz./Chert, Carbonate; Rock Type

**STRUCTURE** — Bedding, Schistosity, Brecciation, Faulting, Quartz vein

**TEXTURE** — Ign., Met., Sed.

**ALTERATION**

**MINERALIZATION %** — Sphalerite, Pyrrhotite, Pyrite, Chalcopyrite, Galena, $U_3O_8$

**RADIOMETRIC DATA** — Inst. Nº: Col. In: Out: Meter; Graph 2 4 6 8

Sample Interval, Sample Number

**ASSAY** — $U_3O_8$ %

0
1
2
3
4
5
6
7
8
9
0 BW
1
2
3
4
5
6
7
8
9
0

CLAY and TILL.

Additional Data

## DRILL HOLE RECORD

**PANCONTINENTAL MINING (CANADA) LTD.**

PROJECT ..........
PROPERTY ..........
CASING LEFT ..........
HOLE Nº ..........
TOTAL DEPTH ..........
Date Commenced ..........
LOCATION ..........
Date Completed ..........
Initial Azimuth ..........
INITIAL DIP ..........
CORE STORAGE ..........
LATITUDE ..........
DEPARTURE ..........
ELEVATION ..........

HOLE SURVEY

| DEPTH | DIP | AZIMUTH |
|---|---|---|
| | | |
| | | |
| | | |
| | | |

HOLE Nº P12 SHEET Nº 2 of 2
DRILL ..........
DRILLER ..........
GEOLOGICAL LOG ..........
RADIOMETRIC LOG ..........
SAMPLED ..........
ASSAYED ..........

Colour | Core Cuttings | Rock Unit | Depth | Graphic Log | LITHOLOGY: Constituents %: Mica, Chlorite, Graphite, Carbon, Clay, Qtz/Chert, Carbonate | Rock Type | STRUCTURE: Bedding, Schistosity, Faulting, Quartz vein | TEXTURE: Ign., Met., Sed. | ALTERATION | MINERALIZATION %: Pyrrhotite, Pyrite, Chalcopyrite, Galena, $U_3O_8$ | RADIOMETRIC DATA: Inst. Nº, Col. In, Out, Meter, Graph 2 4 6 8 | Sample Interval | Sample Number | $U_3O_8$ % | ASSAY

0 1 2 3 4 5 6 7 8 9 0 1 2 3 4 5 6 7 8 9 0

BW

247

Additional Data BW casing jammed at 24.0 m, drilled to 24.7m and were still in till, abandoned hole set up 23 m further West, felt that with this deep overburden the upper target would be missed.

OM9-PE7-C-80

# GUNNEX LIMITED.

D.D-Hole No. P - 13

Sheet No. ____

PROJECT HISLOP TWP.(PANCONTINENTAL - GUNNEX)

LOCATION HISLOP TWP.
LOTS 3 & 4 CON 3
HOLE STARTED Nov. 7/80
HOLE COMPLETED Nov. 13/80
CORE RECOVERY ____ %
DRILLED BY HEATH & SHERWOOD
LOGGED BY W. F. DIX

| | | SURVEY |
|---|---|---|
| | | |
| DEPTH | DIP | AZIMUTH |
| COLLAR | -55.0° | |
| 31.1 | -51.0° | |
| 61.0 | -50.5° | |
| 122.0 | -42.75° | |
| 182.9 | -37.5° | |
| | | |

COLLAR. LAT. 948.2 N
DEP. 89.9 W
ELEV. 5000.75
AZIMUTH ____
DIP -55.0°
LENGTH 184.8
HOR. PROJ. ____ VERT. PROJ. ____

| FOOTAGE | | DESCRIPTION. | SAMPLING | | | | | Au. | | |
|---|---|---|---|---|---|---|---|---|---|---|
| FROM m | TO m | | NO | FROM | TO | FEET | | | | |
| 0 | 31.1 | Casing | | | | | | | | |
| 31.1 | 36.27 | Cherty tuff bx - 50% grey chert interbedded with green-yellow rhyolite tuff. Bx is fine grained, grey-white silicous frags in the tuff, strongly foliate 40° CA. | | | | | | | | |
| | | 32.7 - grain of py in 2mm x-cut veinlet | 83.40 | 32.0 | 33.0 | 1.0 | | NIL | | |
| 36.27 | 36.37 | rhyolite tuff & bx - light grey-white siliceous frags. in sericitic metrix. | | | | | | | | |
| 36.37 | 36.6 | tuff - argillaccous sediment. f.g. bedding at 50°CA. 30% light green yellow tuff bands. | | | | | | | | |
| | | 36.57 - x-bedding, tops up-hole | | | | | | | | |
| 37.6 | 39.0 | ryholite tuff & bx - grey frag in green-yellow sericitic matrix with few small black frags. foliated | | | | | | | | |

GUNNEX LIMITED

PROJECT HISLOP TWP.(PANCONTINENTAL-GUNNEX)

HOLE NO. P - 13

SHEET NO. 2

| FOOTAGE | | DESCRIPTION | SAMPLING | | | | | Au. | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| FROM | TO | | NO. | FROM | TO | FEET | | | | | |
| 39.0 | 52.0 | cherty argillaccous sediment, sections rhyolite tuff which in turn contains short sections of chert bx. dark grey, bedding 40°CA. | | | | | | | | | |
| | | 47.6 - ½cm bleb of massive py. | | | | | | | | | |
| | | 49.7 - two tuff-sed contacts with tops-up hole., slump and soft- sed breccia structures in the argillite | | | | | | | | | |
| 52.0 | 52.7 | rhyolite tuff & bx - siliceous light grey to dark grey frags in green-yellow sericitic matrix. -one visible fleck py- | | | | | | | | | |
| 52.7 | 53.4 | tuff. argillite - finely bedded black argillite with rhyolitic tuff interbeds to 1cm. | | | | | | | | | |
| 53.4 | 53.8 | rhyolite tuff with minor dissoriented argillaccous frags. fol 40° CA. | | | | | | | | | |
| 53.8 | 54.5 | interbedded rhyolite tuff & argillite visible micre faulting to offset bedding. foliated or bedded at 40° CA. | | | | | | | | | |
| 54.5 | 57.17 | argillite with minor tuff sections to 1cm. slight moderate bx, qtz-feld fractures perpendular to folication. fol. 40°CA. | | | | | | | | | |
| 57.17 | 59.4 | rhyolite tuff & bx - short sections to 25cm of argillite bx. light grey green | 83.41 | 57.17 | 59.40 | 2.23 | | NIL | | | |
| | | 57.17 - 57.65 - tr py in rhyolite bx | | | | | | | | | |
| 59.4 | 68.8 | argillite fine bedding with micro-bx. -occasional rhyolite tuff band to ½ cm. - indicated tops up-hole. - bedding 45° CA. | | | | | | | | | |
| 68.8 | 71.0 | rhyolite tuff with beds black argillite to 1cm. occasional disrupted bedding. -bedding 60° CA. | | | | | | | | | |
| 71.0 | 74.40 | rhyolite tuff & bx - interbedded with black argillite; bx sections to 10 cm. | | | | | | | | | |
| 74.40 | 76.33 | interbedded sericitic rhyolite tuff & bx, with black argillaceous bx. | 83.42 | 75.76 | 76.33 | 0.57 | | NIL | | | |
| 76.33 | 77.0 | rhyolite tuff & bx, with main argidite, some sericite. | | | | | | | | | |

GUNNEX LIMITED

HOLE NO. P - 13

PROJECT HISLOP TWP.(PANCONTINENTAL-GUNNEX)

SHEET NO. 3

| FOOTAGE | | DESCRIPTION | SAMPLING | | | | | Au. | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| FROM | TO | | NO. | FROM | TO | FEET | | | | | |
| 77.0 | 83.5 | argillite bx & rhyolite tuff - sections bx, contains up to 50% dark qtz, no py. foliated 40° CA. | | | | | | | | | |
| 83.5 | 87.5 | rhyolite - light green-grey, slightly sericitic, fol. 50° CA. - tr py foliation planes. | 83.43 | 83.5 | 85.0 | 1.5 | | NIL | | | |
| | | | 4 | 85.0 | 86.0 | 1.0 | | NIL | | | |
| | | | 5 | 86.0 | 87.5 | 1.5 | | NIL | | | |
| 87.5 | 88.5 | rhyolite tuff with interbedded argillite - some bx. | | | | | | | | | |
| 88.5 | 92.9 | rhyolite tuff with some bx and sections argillite, slight sericite. | | | | | | | | | |
| | | 88.5 - 89.5 - tr py in tuff | 6 | 88.5 | 89.5 | 1.0 | | NIL | | | |
| | | 90.9 - 91.9 - tr py in tuff | 7 | 90.9 | 91.4 | 0.5 | | NIL | | | |
| 92.9 | 102.5 | rhyolite tuff & bx - with argillaccous sections. some dark grey cherty quartz | | | | | | | | | |
| | | 102.4 - 102.8 - mariposite with tr to 1% py | 8 | 102.4 | 102.8 | 0.4 | | NIL | | | |
| 102.5 | 105.8 | rhyolite tuff - fol 55°CA. light green mariposite along fol. planes - tr py throughwout | 83.49 | 102.8 | 103.5 | 0.7 | | NIL | | | |
| | | | 83.50 | 103.5 | 104.5 | 1.0 | | NIL | | | |
| | | | 1 | 104.5 | 105.8 | 1.3 | | NIL | | | |
| 105.8 | 106.25 | rhyolite tuff - sericitic, qtz-filled amygdules, fol. 60°CA. | 2 | 105.80 | 106.25 | 0.45 | | 0.002 | | | |
| | | 105.8 - 106.25 - tr. py | | | | | | | | | |
| 106.25 | 107.66 | rhyolite tuff & bx - slight sericite, some mariposite & grey qtz. | 3 | 106.25 | 107.66 | 1.41 | | NIL | | | |
| | | 106.25 - 107.66 - tr py | | | | | | | | | |
| 107.66 | 109.85 | rhyolite tuff - minor bx, sericitic, yellow-green. -very occasional tr py | | | | | | | | | |
| 109.85 | 110.83 | rhyolite tuff - chloritic, fo. 55°CA. -very occasional tr py. | | | | | | | | | |
| 110.83 | 114.0 | quartz bx - foliated, 50-50 dark grey & white qtz, minor rhyolite bx- | 83.54 | 110.83 | 111.83 | 1.0 | | 0.02 | | | |
| | | | 5 | 111.83 | 112.83 | 1.0 | | 0.04 | | | |
| 114.0 | 117.15 | rhyo-dacite tuff & bx - fol 75° CA. - occasional tr py. | 6 | 112.83 | 114.00 | 1.17 | | 0.10 | | | |

GUNNEX LIMITED

HOLE NO. P - 13

SHEET NO. 4

PROJECT HISLOP TWP. (PANCONTINENTAL-GUNNEX)

| FOOTAGE | | DESCRIPTION | SAMPLING | | | | | Au. | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| FROM | TO | | NO. | FROM | TO | FEET | | | | | |
| 117.15 | 120.8 | dacite tuff & bx - fol. 65° CA. - tr py throughout | 83,57<br>8 | 117.15<br>118.00 | 118.00<br>119.0 | 0.85<br>1.0 | | 0.005<br>NIL | | | |
| 120.8 | 125.2 | massive dacite, short sections tuff & bx | 9 | 119.0 | 120.0 | 1.0 | | NIL | | | |
| | | 121.18 - 121.40 - barren qtz veins | | | | | | | | | |
| 125.3 | 126.6 | dacite bx - greenish, chloritic -30% silocious frags & some grey qtz. foliated 55° CA. - occasional tr py. | | | | | | | | | |
| 126.6 | 131.63 | dacite bx - grey buff, 10% sericite, foliated. | | | | | | | | | |
| | | 127.74 - 129.34 - tr py | 8360 | 127.74 | 129.34 | 1.60 | | 0.002 | | | |
| 131.63 | 133.0 | rhyolite bx - siliceous, grey fol. 90%, qtz & 10% black matrix, 1-2% py along fol. planes | 1<br>2 | 131.63<br>133.00 | 133.00<br>134.97 | 1.37<br>1.97 | | 0.02<br>0.002 | | | |
| 133.0 | 141.44 | feldspathised rhyolite bx - buff-grey sections fine bx, rectangular frag. of pale grey chert to 1 cm. fol. 55° CA. & tr py throughout | 3<br>4<br>5<br>6 | 134.97<br>136.45<br>137.77<br>139.28 | 136.45<br>137.77<br>139.28<br>140.50 | 1.48<br>1.32<br>1.51<br>1.22 | | 0.01<br>0.005<br>0.002<br>0.005 | | | |
| 141.44 | 192.32 | feldspathized rock (syenite) -red to brown, poor foliations, probably feld. bx, no py | 83.67 | 140.50 | 141.44 | 0.94 | | 0.005 | | | |
| 142.32 | 145.50 | feldspathized bx, possibly rhyolite, sil. fragments, buff-grey, fol 60° - tr py throughout | 83.68<br>9 | 142.32<br>143.60 | 143.60<br>145.50 | 1.28<br>1.90 | | 0.005<br>0.005 | | | |
| 145.50 | 147.37 | dacite bx, grey green, fol. | | | | | | | | | |
| 147.37 | 149.0 | dacite micro -bx - felsic fragments, greenish grey, fol. - some grey qtz at upper contact - red alteration over 25cm at lower contact. -1% py | 83.70 | 147.37 | 149.00 | 1.63 | | 0.02 | | | |
| 149.0 | 154.4 | dacite tuff - greygreen, fol. 60°CA. -20% white qtz to 7cm in blebs & streaks | | | | | | | | | |
| 154.4 | 154.53 | qtz bx - grey & whitish qtz, sl. fol. -1% py | 83.71 | 154.04 | 154,53 | 0.49 | | 0.03 | | | |

# DRILL HOLE RECORD

**PANCONTINENTAL · MINING (CANADA) LTD.**

PROJECT PC 18 Hislop Twnsp PROPERTY Lots 3+4 Con III
HOLE NO P 13 TOTAL DEPTH 184.8
LOCATION 948.2 m N 89.9 m W
initial Azimuth 045 INITIAL DIP -55°
LATITUDE DEPARTURE

CASING LEFT
Date commenced Nov 07 1980
Date completed Nov 13 1980
CORE STORAGE on site
ELEVATION 5000.745

**HOLE SURVEY**

| DEPTH | DIP | AZIMUTH |
|---|---|---|
| Collar | 55 | |
| 31.1 | 51° | |
| 61.0 | 50.5 | |
| 122.0 | 42.75 | |
| 182.9 | 37.5 | |

HOLE NO P13 SHEET NO 1 of 10
DRILL H.S. BID-11
DRILLER Heath & Sherwood
GEOLOGICAL LOG N. Novak & [illegible]
RADIOMETRIC LOG
SAMPLED N. Novak & W. Dix
ASSAYED Swastika Laboratories

| Core Size | Core Recovery % | Colour | Core Cuttings | Rock Unit | Depth | Graphic Log | LITHOLOGY Constituents % Mica | Chlorite | Graphite | Carbon | Clay | Qtz/Chert | Carbonate | Rock Type | STRUCTURE Bedding | Schistosity | Brecciation | Faulting | Quartz vein | TEXTURE Ign. | Met. | Sed. | ALTERATION | MINERALIZATION % Scheelite | Pyrrhotite | Pyrite | Chalcopyrite | Galena | $U_3O_8$ | RADIOMETRIC DATA Inst. Nº: Col. In: Out: Meter | Graph 2 4 6 8 | Sample Interval | Sample Number | ASSAY $U_3O_8$ % |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|

Depth scale: 0 1 2 3 4 5 6 7 8 9 10 1 2 3 4 5 6 7 8 9 0

Additional Data

## DRILL HOLE RECORD

**PANCONTINENTAL MINING (CANADA) LTD.**

PROJECT ........ PROPERTY ........ CASING LEFT ........
HOLE No ........ TOTAL DEPTH ........ Date commenced ........
LOCATION ........ Date completed ........
Initial Azimuth ........ INITIAL DIP ........ CORE STORAGE ........
LATITUDE ........ DEPARTURE ........ ELEVATION ........

HOLE SURVEY

| DEPTH | DIP | AZIMUTH |
|---|---|---|
| | | |
| | | |
| | | |
| | | |

HOLE No P13 SHEET No 2 of 17
DRILL ........
DRILLER ........
GEOLOGICAL LOG ........
RADIOMETRIC LOG ........
SAMPLED ........
ASSAYED ........

| Core: Colour | Rock Unit | Depth | Lithology: Constituents % | Rock Type | Structure: Bedding | Mineralization % | Sample Interval | Sample Number | $U_3O_8$ % | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| grey black | | 31.1 | | interbedded chert - rhyolite tuff bx., 50% chert (grey). Very fine bx. slightly sericitic tuff with siliceous frags and highly almost matrix foliated | 40° | tr. | | 8340 | 32.0 | 33.0 | 1.0 | NIL |
| grey | | 31.7 | sl. | interbedded pelite-rhyolite tuff [illegible] minor X bedding [illegible] | 50° | | | | | | | |
| greenish yellow | | 31.6 | | rhyolitic tuff & bx. sericitic. minor manganese | | | | | | | | |
| grey-green black | | 30.0 | | interbedded rhyolite tuff - chert + pelite c siliceous chert bx. | 40° | | | | | | | |

RQ

Additional Data

## DRILL HOLE RECORD

**PANCONTINENTAL - MINING - (CANADA) - LTD.**

PROJECT ............ PROPERTY ............ CASING LEFT ............
HOLE NO ............ TOTAL DEPTH ............ Date commenced ............
LOCATION ............ Date completed ............
Initial Azimuth ............ INITIAL DIP ............ CORE STORAGE ............
LATITUDE ............ DEPARTURE ............ ELEVATION ............

HOLE SURVEY

| DEPTH | DIP | AZIMUTH |
|---|---|---|
| | | |
| | | |
| | | |
| | | |

HOLE NO P13 SHEET NO 3 of 10
DRILL ............
DRILLER ............
GEOLOGICAL LOG ............
RADIOMETRIC LOG ............
SAMPLED ............
ASSAYED ............

| Depth | Colour | Rock Type | Bedding | Mineralization % | Sample Interval | Sample Number | $U_3O_8$ % | | |
|---|---|---|---|---|---|---|---|---|---|
| | | interbedded rhyolite tuff with pelitic sediments | 40° | | | | | | |
| | | | | tr | | | | | |
| 497 | | tuff – pelitic contact [illegible] [illegible] [illegible] and [illegible] be [illegible] | | | | | | | |
| 510 | green - to grey | rhyolite tuff [illegible] [illegible] | | | | | | | |
| 52.7 | green - lt grey | rhyolite tuff – pelitic | | | | | | | |
| 534 | | ~~[illegible]~~ | 40° | | | | | | |
| 538 | | interbedded rhyolite tuff [illegible] [illegible] | 40° | | | | | | |
| 545 | | argillite & minor tuff sections to 1cm. [illegible] to [illegible] be [illegible] [illegible] features to foliation | 40° | | | | | | |
| 5717 | lt. grey green | rhyolite tuff & [illegible] short sections to 2cm. of argillite | | tr | | 8341 | 5717 | 59.4 | 2.33 NIL |
| 594 | grey | finely [illegible] arg | | | | | | | |

Core recovery at 50: 88

**Additional Data**

**DRILL HOLE RECORD** — **PANCONTINENTAL-MINING (CANADA)-LTD.**

PROJECT ........ PROPERTY ........ CASING LEFT ........
HOLE Nº ........ TOTAL DEPTH ........ Date commenced ........
LOCATION ........ Date completed ........
Initial Azimuth ........ INITIAL DIP ........ CORE STORAGE ........
LATITUDE ........ DEPARTURE ........ ELEVATION ........

HOLE SURVEY

| DEPTH | DIP | AZIMUTH |
|---|---|---|
| | | |

HOLE Nº P13 SHEET Nº [illegible] of 10
DRILL ........
DRILLER ........
GEOLOGICAL LOG ........
RADIOMETRIC LOG ........
SAMPLED ........
ASSAYED ........

Core size: BQ

| Scale | Colour | Depth | Rock Type | Bedding |
|---|---|---|---|---|
| 0–8 | gray | | finely bedded argillite c minor bx. occasional rhyolite tuff band to 5 cm. tops up hole indicated | 45° |
| 9–70 | lt green | 68.9 | rhyolite tuff c lam beds black argillite disrupted bedding indicated | 60° |
| 1–4 | lt green and black | 71.1 | rhyolite tuff & bx. interbedded c black argillite. bx sections to 10cm. | |
| 5–6 | yellow-green and black | 74.9 | interbedded sericitic rhyolite tuff and bx. c lt argillaceous bx | |
| 6–7 | lt green-grey | 75.76<br>76.33 | rhy. tuff & bx c min. arg. and sericite arg. bx c rhy tuff sections bx. c dk qtz. | 60 |
| | | 77.0 | | |

Mineralization %: tr

| Sample Number | | | | U3O8 % |
|---|---|---|---|---|
| 8342 | 75.76 | 76.33 | 0.57 | NIL |

Additional Data

DRILL HOLE RECORD — PANCONTINENTAL MINING (CANADA) LTD.

PROJECT ........ PROPERTY ........ CASING LEFT ........
HOLE Nº ........ TOTAL DEPTH ........ Date Commenced ........
LOCATION ........ Date Completed ........
Initial Azimuth ........ INITIAL DIP ........ CORE STORAGE ........
LATITUDE ........ DEPARTURE ........ ELEVATION ........

HOLE SURVEY

| DEPTH | DIP | AZIMUTH |
|---|---|---|
| | | |
| | | |
| | | |
| | | |

HOLE Nº P13 SHEET Nº 5 of 10
DRILL ........
DRILLER ........
GEOLOGICAL LOG ........
RADIOMETRIC LOG ........
SAMPLED ........
ASSAYED ........

| Core Size | Colour | Depth | Qtz/Chert | Rock Type | Bedding | Pyrite |
|---|---|---|---|---|---|---|
| | dk. gray | | 50 | arg. bx. and rhy. tuff sections bx content up to 50% dark qtz | | |
| | lt. green-gray | 83.5<br>85.0<br>86.0 | | rhyolite, slightly sericitic, and foliated | 50 | tr<br>tr |
| | lt green | 87.5 | | rhy. tuff c interbedded arg. some bx. | | tr |
| BQ | dk. green & black | 88.5<br>89.5<br>90.9<br>91.4 | | rhy. tuff c some bx and sections argillaceous, sl. sericitic | | tr<br>tr |
| | lt green and black | 93.0 | | rhyolite tuff and bx c argillaceous sections and minor dk gray cherty qtz. | | |

ASSAY

| Sample Number | | | | U3O8 % |
|---|---|---|---|---|
| 8343 | 83.5 | 85.0 | 1.5 | NIL |
| 8344 | 85.0 | 86.0 | 1.0 | NIL |
| 8345 | 86.0 | 87.5 | 1.5 | NIL |
| 8346 | 88.5 | 89.5 | 1.0 | NIL |
| 8347 | 90.9 | 91.4 | 0.5 | NIL |

Additional Data

# DRILL HOLE RECORD

**PANCONTINENTAL MINING (CANADA) LTD.**

PROJECT ..........
PROPERTY ..........
CASING LEFT ..........
HOLE NO ..........
TOTAL DEPTH ..........
Date commenced ..........
LOCATION ..........
Date completed ..........
Initial Azimuth ..........
INITIAL DIP ..........
CORE STORAGE ..........
LATITUDE ..........
DEPARTURE ..........
ELEVATION ..........

HOLE SURVEY

| DEPTH | DIP | AZIMUTH |
|---|---|---|
| | | |
| | | |
| | | |
| | | |

HOLE NO P13 SHEET NO 1 of 10
DRILL ..........
DRILLER ..........
GEOLOGICAL LOG ..........
RADIOMETRIC LOG ..........
SAMPLED ..........
ASSAYED ..........

Column headings: Weathering / Casing / Core size / Core Recovery % / Core Cuttings: Colour / Rock Unit / Depth / LITHOLOGY: Graphic Log, Constituents %: Mica, Chlorite, Graphite, Carbon, Clay, Qtz./Chert, Carbonate; Rock Type / STRUCTURE: Bedding, Schistosity, Brecciation, Faulting, Quartz vein / TEXTURE: Ign., Met., Sed. / ALTERATION / MINERALIZATION %: Pitchblende, Pyrite, Chalcopyrite, Galena, U3O8 / RADIOMETRIC DATA: Inst. No., Col. In, Out, Meter, Graph 2 4 6 8 / Sample Interval / Sample Number / ASSAY: U3O8 %

Depth scale: 0 1 2 3 4 5 6 7 8 9 110 1 2 3 4 5 6 7 8 9 0

Core size: EX

Depth marks: 102.3, 102.5, 103.1, 103.5, 104.5, 105.8, 106.25, 107.66, 109.85, 110.83, 111.83, 112.83, 114.0, 117.15, 118.0, 119.0, 120.0

| Depth | Colour | Rock Type | Bedding |
|---|---|---|---|
| | | rhyolite tuff & bx c argillite | |
| 102.5 | | rhyolite tuff c bright green mariposite along fol. planes | 55° |
| 105.8 | | rhy tuff sericitic and argillite | 60 |
| 106.25 | green to dk grey | rhy tuff & bx sl sericitic c mariposite & grey qtz. | |
| 107.66 | yellow green | rhyolite tuff mtn. bx. sericitic | |
| 109.85 | bright green | chloritic rhy. tuff | 55 |
| 110.83 | grey | bx. qtz foliated 50% dk. grey qtz 50% white qtz. & minor rhy. bx | |
| 114.0 | | rhyo-dacite tuff & bx c ore tr. py | 75 |
| 117.15 | | dacite tuff & bx | 65° |

Mineralization: tr (at about 102.5, 105.3, 106.0, 107.3, 113.5, 119.5)

| | | | | |
|---|---|---|---|---|
| 8348 | 102·4 | 102·8 | 0·4 | NIL |
| 8349 | 102 8 | 103·5 | 0·7 | NIL |
| 8350 | 103·5 | 104 5 | 1·0 | NIL |
| 8351 | 104 5 | 105·8 | 1·3 | NIL |
| 8352 | 105 8 | 106·25 | 0·45 | 0·002 |
| 8353 | 106·25 | 107·66 | 1·41 | NIL |
| 8354 | 110·83 | 111·83 | 1·0 | 0·02 |
| 8355 | 111·83 | 112·83 | 1·0 | 0·04 |
| 8356 | 112·83 | 114·0 | 1·17 | 0·1 |
| 8357 | 117·15 | 118·0 | 0·85 | 0·005 |
| 8358 | 118·0 | 119·0 | 1·0 | NIL |
| 8359 | 119·0 | 120·0 | 1·0 | NIL |

Additional Data

**DRILL HOLE RECORD** — **PANCONTINENTAL-MINING (CANADA) LTD.**

PROJECT ..........
PROPERTY ..........
CASING LEFT ..........
HOLE No ..........
TOTAL DEPTH ..........
Date commenced ..........
LOCATION ..........
Date completed ..........
Initial Azimuth ..........
INITIAL DIP ..........
CORE STORAGE ..........
LATITUDE ..........
DEPARTURE ..........
ELEVATION ..........

**HOLE SURVEY**

| DEPTH | DIP | AZIMUTH |
|---|---|---|
| | | |
| | | |
| | | |
| | | |
| | | |

HOLE No P13 SHEET No 7 of 10
DRILL ..........
DRILLER ..........
GEOLOGICAL LOG ..........
RADIOMETRIC LOG ..........
SAMPLED ..........
ASSAYED ..........

LITHOLOGY — STRUCTURE — TEXTURE — ALTERATION — MINERALIZATION % — RADIOMETRIC DATA — ASSAY

| Depth | Colour | Qtz/Chert | Rock Type | Bedding | Pyrite |
|---|---|---|---|---|---|
| [illegible] | | | dacite tuff & bx | | |
| | | | massive dacite & short tuffaceous and bx sections | | |
| 125.3 | green | | chloritic dacite bx 30% al.dacge ms tuff py | | |
| 126.6 | grey-buff | | dacite bx ser-sericitic | 55° | |
| 127.74 | | | | | |
| 129.34 | | | | | |
| 131.63 | grey | 80 | siliceous rhyolite bx & py | | 1-2 |
| 133.0 | grey-buff grey | | feldsparphyric clay bx & py grading to | | |
| 134.97 | | | | 55° | |
| 136.45 | | | | | |
| 137.77 | | | | | |
| 139.28 | | | | | |

**ASSAY**

| Sample Number | U3O8 % | | | |
|---|---|---|---|---|
| B360 | 127.74 | 129.34 | 1.6 | 0.002 |
| B361 | 131.63 | 133.0 | 1.37 | 0.02 |
| B362 | 133.0 | 134.97 | 1.97 | 0.002 |
| B363 | 134.97 | 136.45 | 1.48 | 0.01 |
| B364 | 136.45 | 137.77 | 1.32 | 0.005 |
| B365 | 137.77 | 139.28 | 1.51 | 0.002 |
| B366 | 139.28 | 140.5 | 1.22 | 0.005 |

Additional Data

**DRILL HOLE RECORD** — **PANCONTINENTAL MINING (CANADA) LTD.**

PROJECT ..........
HOLE NO ..........
LOCATION ..........
Initial Azimuth ..........
LATITUDE ..........

PROPERTY ..........
TOTAL DEPTH ..........
INITIAL DIP ..........
DEPARTURE ..........

CASING LEFT ..........
Date commenced ..........
Date completed ..........
CORE STORAGE ..........
ELEVATION ..........

HOLE SURVEY

| DEPTH | DIP | AZIMUTH |
|---|---|---|
| | | |
| | | |
| | | |
| | | |
| | | |

HOLE NO P13 SHEET NO 8 of 10
DRILL ..........
DRILLER ..........
GEOLOGICAL LOG ..........
RADIOMETRIC LOG ..........
SAMPLED ..........
ASSAYED ..........

| | Core Size | Colour | Depth | Qtz/Chert | Rock Type | Bedding | Pyrite |
|---|---|---|---|---|---|---|---|
| 0 | BQ | [illegible] grey | 140.5 | | feldspathised rhyolite bx | 55° | |
| 1 | | red | 141.04 | | "syenite" feldspathised bx | | tr |
| 2 | | grey [illegible] grn | 141.94 | | feldspathised clay bx grading to dacite bx | 60° | |
| 3 | | | 143.6 | | | | |
| 5 | | grey green | 145.5 | | dacite bx foliated | | tr |
| 7 | | greenish grey | 147.37 | [illegible] | foliated dacite micro bx & dacite frags | | |
| 9 | | green | 149.0 | | foliated dacite tuff and min. bx occasional dark 5mm qtz blebs (20%) | 60 | ½ |
| 14 | | black | 154.04 | 10 | qtz bx [illegible] | | ½ |
| | | green | 154.53 | | dacite tuff & bx | | tr |
| 15 | | grey | 155.1 | 80 | qtz bx feldspathised | | ½ |
| 16 | | green | 155.7 | | dacite tuff | | |
| | | grey | 156.41 | [illegible] | qtz bx | | 2% |
| | | Grey green | 156.66 | | tuffaceous dacite foliated | | tr |
| 17 | | | 157.6 | | | 60° | |

| Sample Number | U3O8 % | | | |
|---|---|---|---|---|
| 8367 | 140.5 | 141.94 | 0.34 | 0.005 |
| 8368 | 142.32 | 143.60 | 1.28 | 0.005 |
| 8369 | 143.6 | 145.5 | 1.9 | 0.005 |
| 8370 | 147.37 | 149.0 | 1.63 | 0.02 |
| 8371 | 154.04 | 154.53 | 0.29 | 0.03 |
| 8372 | 154.53 | 155.1 | 0.57 | 0.05 |
| 8373 | 155.1 | 155.7 | 0.6 | 0.37 |
| 8408 | 155.7 | 156.41 | 0.71 | 0.01 |
| 8374 | 156.41 | 156.66 | 0.25 | 0.06 |
| 8375 | 156.66 | 157.6 | 0.94 | 0.01 |

Additional Data

## DRILL HOLE RECORD

**PANCONTINENTAL-MINING (CANADA) LTD.**

PROJECT ..........
HOLE NO ..........
LOCATION ..........
Initial Azimuth ..........
LATITUDE ..........

PROPERTY ..........
TOTAL DEPTH ..........
INITIAL DIP ..........
DEPARTURE ..........

CASING LEFT ..........
Date Commenced ..........
Date Completed ..........
CORE STORAGE ..........
ELEVATION ..........

HOLE SURVEY

| DEPTH | DIP | AZIMUTH |
|---|---|---|
| | | |
| | | |
| | | |
| | | |
| | | |

HOLE NO P[illegible] SHEET NO 9 of [illegible]
DRILL ..........
DRILLER ..........
GEOLOGICAL LOG ..........
RADIOMETRIC LOG ..........
SAMPLED ..........
ASSAYED ..........

| Machine | Casing | Core Size | Lith | Core Recovery % | Core | Colour | Core Cuttings | Rock Unit | Depth | Graphic Log | Rock Type | Bedding |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | BQ | | | | dk green | | | 160 | | massive andesite ē upper contact foliated for 1m irregular qtz [illegible] [illegible] [illegible] phenocrysts and pale leucocene [illegible] | |
| | | | | | | dk green | | | 166.5 | | foliated andesite intermittent qtz stringers to 4cm. fine-m. grained. (tuffaceous) | 70° |
| | | | | | | dk green | | | 169.7 | | massive to sl. fol. f.g. andesite ē qtz stringers to 2cm [illegible] cutting foliation | |
| | | | | | | | | | 172.4 | | dacite ē sections m. foliated ē a "purple" alt to 175.0 possibly carbonate species minor alteration. | |

LITHOLOGY — Constituents %: Mica, Chlorite, Graphite, Carbon, Clay, Qtz./Chert, Carbonate

STRUCTURE: Bedding, Schistosity, Brecciation, Faulting, Quartz veins

TEXTURE: Ign., Met., Sed.

ALTERATION

MINERALIZATION %: Scheelite, Pyrrhotite, Pyrite, Chalcopyrite, Galena, $U_3O_8$

RADIOMETRIC DATA: Inst. No., Col. In, Out, Meter, Graph 2 4 6 8

Sample Interval, Sample Number

ASSAY: $U_3O_8$ %

0 1 2 3 4 5 6 7 8 9 0 1 2 3 4 5 6 7 8 9 0

Additional Data

## DRILL HOLE RECORD

**PANCONTINENTAL-MINING (CANADA) LTD.**

PROJECT ..........

PROPERTY ..........

CASING LEFT ..........

HOLE NO ..........

TOTAL DEPTH ..........

Date Commenced ..........

LOCATION ..........

Date Completed ..........

Initial Azimuth ..........

INITIAL DIP ..........

CORE STORAGE ..........

LATITUDE ..........

DEPARTURE ..........

ELEVATION ..........

HOLE SURVEY

| DEPTH | DIP | AZIMUTH |
|---|---|---|
| | | |
| | | |
| | | |
| | | |

HOLE NO P 13 SHEET NO 12 of 12

DRILL ..........

DRILLER ..........

GEOLOGICAL LOG ..........

RADIOMETRIC LOG ..........

SAMPLED ..........

ASSAYED ..........

Weathering / Core Recovery / Core Size: BQ

Core / Cuttings — Colour: lt [illegible]

Rock Unit

Depth: 184.1 / 184.8

Graphic Log

LITHOLOGY — Constituents %: Mica, Chlorite, Graphite, Carbon, Clay, Qtz./Chert, Carbonate

Rock Type:

dacite and dacite
b[illegible]

minor qtz veining
3cm.

[illegible]

STRUCTURE: Bedding, Schistosity, Brecciation, Faulting, Quartz vein

TEXTURE: Ign. / Met. / Sed.

ALTERATION

MINERALIZATION %: Sphalerite, Pyrrhotite, Pyrite, Chalcopyrite, Galena, $U_3O_8$

RADIOMETRIC DATA: Inst. No: / Col. In: / Out: / Meter / Graph 2 4 6 8

Sample Interval / Sample Number

ASSAY: $U_3O_8$ %

0
1
2
3
4
5
6
7
8
9
0
1
2
3
4
5
6
7
8
9
0

Additional Data

OM9-PE7-C-80

GUNNEX LIMITED.

D. D-Hole No. P - 14

PROJECT HISLOP TWP. (PANCONTINENTAL - GUNNEX)

Sheet No. ____

LOCATION HISLOP TWP.
LOTS # 3 & 4 CON. 3
HOLE STARTED Nov. 16, 1980
HOLE COMPLETED 21 Nov/80
CORE RECOVERY ____ %
DRILLED BY HEATH & SHERWOOD
LOGGED BY W. F. DIX

| | SURVEY | |
|---|---|---|
| DEPTH | DIP | AZIMUTH |
| COLLAR | -80.0° | |
| 18.9 | -79.0° | |
| 60.9 | -76.0° | |
| 122.0 | -73.5° | |
| 182.9 | -68.75° | |
| 243.4 | -66.0° | |

COLLAR. LAT. 963.4 N
DEP. 91.2 W
ELEV. 5000.78 m
AZIMUTH 045° T
DIP -80.0°
LENGTH 254.9
HOR. PROJ. ____ VERT. PROJ. ____

| FOOTAGE | | DESCRIPTION. | SAMPLING | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| FROM | TO | | NO | FROM | TO | FEET | | | | |
| 0 | 18.9 | Casing | | | | | | | | |
| 18.9 | 19.9 | Interbedded rhyolite - tuff & bx & black cherty argdlite, some bands to 1cm, bedding 20° CA. | | | | | | | | |
| 19.9 | 22.45 | rhyolite tuff - poorly sorted, in. g., grey, foliated, some fragments to 1 cm. | | | | | | | | |
| 22.45 | 26.5 | Interbedded thyolite tuff & bx - f.g. grey, sections sericitic with light grey chert & black argillite, argillite beds to 1cm and 20° CA. - mirco faulting at stego angles to beds. | | | | | | | | |
| | | 22.9 - 20 cm Fe-staining | | | | | | | | |
| 26.5 | 28.8 | rhyolite tuff & bx - pale grey siliceous frags, in yellowish sericite tuff matrix, fol. 25° CA. | | | | | | | | |
| 28.8 | 29.47 | cherty argillite - 30% rhyolite tuff in beds to 0.5 cm. | | | | | | | | |

GUNNEX LIMITED

HOLE NO. P - 14

PROJECT HISLOP TWP.(PANCONTINENTAL - GUNNEX)

SHEET NO. 2

| FOOTAGE | | DESCRIPTION | SAMPLING | | | | | Au. | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| FROM | TO | | NO. | FROM | TO | FEET | | | | | |
| 29.47 | 34.4 | rhyolite tuff & bx - as above with several sections to 17 cm of cherty argillite | | | | | | | | | |
| 34.4 | 41.2 | cherty arg with 20% narron bands to 0.5 cm of tuff - more cherty to lower contact. | | | | | | | | | |
| | | 34.8 - cross bedding with taps up-hole | | | | | | | | | |
| 41.2 | 44.9 | rhyolite tuff & bx - pale grey sil-frags. 20% sericite. Interbeds grey chert to 0.4 cm. | | | | | | | | | |
| 44.9 | 46.5 | interbedded arg. - chert & sericitic rhyolite tuff numerous hairline fractures at near rt. angles to bedding in the chert - probably due to solidification of chert gal. | | | | | | | | | |
| | | 45.0 - 10cm Fe staining, no carb. | | | | | | | | | |
| 46.5 | 48.7 | rhyolite bx & tuff - pale grey, sil frags in 20% sericite matrix. fol. - tops up-hole at lower contact where chert bed are-truncated by tuff. | | | | | | | | | |
| 48.7 | 49.8 | argillaceous chert - fine bedding, hairline fractures at rt.angles to beddings - bedding 20° CA. | | | | | | | | | |
| 49.8 | 50.2 | tuffaceous rhyolite bx. foliated | | | | | | | | | |
| 50.2 | 55.6 | argillaceous chert - finely bedded sections bx, hairline fractures as above. - sections to 0.3 m tuff. 20% sericite | | | | | | | | | |
| 55.6 | 59.2 | rhyolite tuff & bx - 10% sericite, pale grey frags, foliated & possibly slumped sections to 0.4 in bedded arg. chert & chert bx. | | | | | | | | | |
| 59.2 | 64.46 | cherty argillite, black - fine bedding. contacted. close tract with offsets to 2 cm. | | | | | | | | | |
| | | 63.8 - fleck.py. | | | | | | | | | |
| 64.46 | 65.6 | rhyolite tuff & bx - pale grey sil frags in sericitic matrix. fol 35°CA. | | | | | | | | | |

GUNNEX LIMITED

HOLE NO. P - 14

PROJECT HISLOP TWP. (PANCONTINTENTAL- GUNNEX)

SHEET NO. 3

| FOOTAGE | | DESCRIPTION | SAMPLING | | | | | Au. | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| FROM | TO | | NO. | FROM | TO | FEET | | | | | |
| | | 65.0 - fleck py. | | | | | | | | | |
| 65.6 | 69.8 | argillaceous chert bx - fol. sections to 0.4 m sericite rhy. tuff & bx | | | | | | | | | |
| 69.8 | 70.6 | rhyolite tuff & bx - 25% sericite. | | | | | | | | | |
| 70.6 | 78.8 | argillaceous chert - finely bedded, sect. bx. | | | | | | | | | |
| | | 75.84 - 77.16 - arg. chert with traces fine py. | 83.87 | 75.84 | 77.16 | 1.32 | | NIL | | | |
| 78.8 | 81.75 | rhyolite tuff & bx - pale grey sil frags in 20% sericitic matrix, odd fleck of mariposite, fol. 20° CA. some sections of arg. chert to-ward upper contact | | | | | | | | | |
| 81.75 | 105.9 | argollaceous chert,-sections to 20cm, in part contacted & with some bx. Fine fractures in chert beds at rt. angles to bedding. | | | | | | | | | |
| | | 82.3 - tr ace py. | | | | | | | | | |
| | | 83.3 - 83.63 - trace py. | 83.88 | 83.30 | 83.63 | 0.33 | | NIL | | | |
| | | After 90.4 becoming more argillaceous. | | | | | | | | | |
| 105.9 | 106.9 | rhyolite tuff & bx - 50% cherty argillite, foliated | | | | | | | | | |
| | | 106.6 - one grain py. | | | | | | | | | |
| 106.9 | 116.8 | cherty argillite - black to grey, finely bedded, sect. bx. -some tuff beds to 30 cm. - bedded 30° CA. | | | | | | | | | |
| | | 115.3 - 116.3 - trace py. | 83.89 | 115.3 | 116.3 | 1.0 | | NIL | | | |
| 116.8 | 118.5 | argillite with 10 to 15% fine tuff beds to 0.5 cm. bedded 30° CA. | | | | | | | | | |
| 118.5 | 121.3 | rhyolite tuff & bx - 5% sericite, yellow-grey, foliated. 20% interbeds of argillite and cherty argillite to 4 cm. thick | | | | | | | | | |
| 121.3 | 125.0 | argillite, finely bedded 25°CA. black - minor grey tuff bands to 3mm thick | | | | | | | | | |

GUNNEX LIMITED

HOLE NO. P - 14

PROJECT HISLOP TWP.(PANCONTINENTAL - GUNNEX)

SHEET NO. 4

| FOOTAGE | | DESCRIPTION | SAMPLING | | | | | Au. | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| FROM | TO | | NO. | FROM | TO | FEET | | | | | |
| 125.0 | 130.7 | interbedded sericitic rhyolite tuff & black argillite with 40 cm grey chert & tuff at upper contact. Closely fract. at steep angles to bedding with minor offsetting contored. | | | | | | | | | |
| 130.7 | 132.0 | argillite, black, finely bedded 25° CA. | | | | | | | | | |
| 132.0 | 136.5 | tuff - mudstone, olive green, f.g. fine bedding 30° CA. grey narrow tuff bands to 1 cm. - tuff at bottom contact | | | | | | | | | |
| | | 133.2 - 133.5 - grey tuff | | | | | | | | | |
| 136.5 | 139.6 | argillite, fine bedding 30° CA. grey - black | | | | | | | | | |
| | | 139.0 - 20 cm chert | | | | | | | | | |
| 139.6 | 140.6 | rhyolite tuff & bx - yellow - grey sericite, some argillite sections | | | | | | | | | |
| 140.6 | 142.55 | chert & cherty argillite, sections bx - fol. | | | | | | | | | |
| 142.55 | 153.4 | rhyolite, 70% silicous streaks, pale-grey 25% sericite in matrix, tr. mariposite, fol. 25° CA. bx at lower contact. - 60% lastccore at lower contact over 10 feet. | | | | | | | | | |
| | | 144.6 - 145.4 - off fleck py. | 83.90 | 144.6 | 145.4 | 0.8 | | NIL | | | |
| | | 149.8 - 20 cm sheared rhyolite & gouge minor white qtz at lower contact foliated at lower contact | | | | | | | | | |
| 153.4 | 155.65 | rhyo-dacite bx - pale grey green, some siliceous frags and streaks. foliated 40° CA. - tr py. | 83.91 | 153.40 | 155.65 | 2.25 | | 0.002 | | | |
| 155.65 | 156.11 | quartz bx - grey to dk grey qtz frags in dark siliceous matrix. -2 to 3% py. | 2 | 155.65 | 156.11 | 0.46 | | 0.20 | | | |
| 156.11 | 157.4 | dacite bx - green-grey, fol. 40° CA. | 3 | 156.11 | 157.00 | 0.89 | | 0.03 | | | |
| | | 156.11 - 157.0 - tr. py. | | | | | | | | | |
| 157.4 | 162.35 | dacite - sections bx, foliated, grey green. | | | | | | | | | |

GUNNEX LIMITED

HOLE NO. P - 14

PROJECT HISLOP TWP.(PANCONTINTENTAL - GUNNEX)

SHEET NO. 5

| FOOTAGE | | DESCRIPTION | SAMPLING | | | | | Au. | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| FROM | TO | | NO. | FROM | TO | FEET | | | | | |
| | | 158.80 - 162.35 - tr. py | 4 | 158.80 | 160.63 | 1.83 | | 0.09 | | | |
| 162.35 | 163.31 | feldspathised dacite & dacite bx, buff, fol. 35° CA. | 5<br>6 | 160.63<br>162.35 | 162.35<br>163.31 | 1.72<br>0.96 | | 0.005<br>0.01 | | | |
| | | 162.8 - 10 cm qtz bx - tr py throughout | | | | | | | | | |
| 163.31 | 179.4 | feldspathised rock ( syenite?) brownish red, irregular fracturing, no fol. red colour decreases toward lower contact, lower contact sharp | | | | | | | | | |
| | | 176.5 - fol. 60° CA. over 20 cm. | | | | | | | | | |
| | | 178.14 - 178.55 - tr. py | 83.97 | 178.14 | 178.55 | 0.41 | | 0.002 | | | |
| 179.4 | 182.67 | slightly feldspathised dacite tuff, sections bx, buff -green, fol. 35°CA | | | | | | | | | |
| | | 180.1 - 180.4 - shear, 40% white qtz | | | | | | | | | |
| | | 180.4 - 181.3 - 1% py | 8 | 180.4 | 181.3 | 0.9 | | 0.02 | | | |
| | | 181.3 - 182.67 - tr py | 9 | 181.30 | 182.67 | 1.37 | | 0.005 | | | |
| 182.67 | 185.12 | feldspathised dacite tuff & bx - brownish, foliated, occasional tr py, | 84.00 | 182.67 | 185.12 | 2.45 | | 0.005 | | | |
| 185.12 | 186.04 | dacite bx - grey green, fol. 15% sericite | | | | | | | | | |
| 186.04 | 186.9 | feldspathised dacite, brownish-grey, contacts sharp - tr py. | 84.01 | 186.04 | 186.90 | 0.86 | | 0.02 | | | |
| 186.9 | 191.5 | andisite, green, fol. 40° CA. sl. amygs., upper contact f.g. with increasing size down hole. | | | | | | | | | |
| | | 189.3 - 190.7 - tr py | 84.02 | 189.3 | 190.7 | 1.4 | | 0.005 | | | |
| 191.5 | 194.4 | dacite - grey-green, slight bx. | | | | | | | | | |
| 194.4 | 196.4 | dacite bx - grey green whitish sil. frags. fol. 30° CA. | | | | | | | | | |
| 196.4 | 211.0 | ultramafic volcanic (comatrite) in part fine bx, greenish black, soft, fol. 35° CA. irregular fracturing with qtz-carbonate felding to 1cm. sections with dusting of magnetic - upper part to 200 m with fine amygdules. | | | | | | | | | |

GUNNEX LIMITED

HOLE NO. P - 14

PROJECT HISLOP TWP. (PANCONTINTENTAL - GUNNEX)

SHEET NO. 7

| FOOTAGE | | DESCRIPTION | SAMPLING | | | | | Au. | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| FROM | TO | | NO. | FROM | TO | FEET | | | | | |
| | | 196.4 - 205.0 - serpentine -green alteration of matrix | | | | | | | | | |
| | | 205.0 - brownish alteration of matrix | | | | | | | | | |
| | | 200.0 - 201.0 - sample taken for Au. - assay - no sulphide - some magnetic | 84.03 | 200.0 | 201.0 | 1.0 | | NIL | | | |
| | | 202.0 - speciment collected | | | | | | | | | |
| 211.0 | 213.1 | ultramatic volcanic, dark green, sect-amygd. qtz-carb veining to 2cm. foliated - 40° CA. | | | | | | | | | |
| 213.1 | 222.3 | ultramatic fine bx - dark-green, olive grown alteration of matrix (serpentine?) - some sections foliated at 50° CA. - narrow qtz carb. veining to 0.5 cm. parallel to foliation | | | | | | | | | |
| 222.3 | 231.7 | andesite, green, fol. amygd., few bx frags. - qtz-veining to 2 cm. | | | | | | | | | |
| | | 222.3 - 222.98 - tr to 1% py | 84.04 | 222.3 | 222.98 | 0.68 | | 0.002 | | | |
| | | 228.1 - 231.3 - 40% qtz veining | | | | | | | | | |
| 231,7 | 235.36 | andesite bx - flow top, green fol. 40° CA. scattered qtz veins to 1 cm. | | | | | | | | | |
| | | 232.03 - 233.17 - tr py | 5 | 232.03 | 233.17 | 1.14 | | 0.005 | | | |
| 235.36 | 236.3 | massive andesite, dark green | | | | | | | | | |
| | | 235.36 - 235.71 - black chert white qtz and tr py. | 6 | 235.36 | 235.71 | 0.35 | | 0.002 | | | |
| 236.3 | 237.16 | white qtz 20% andesite frags. - few flecks py | 84.07 | 236.30 | 237.16 | 0.86 | | 0.002 | | | |
| 237.16 | 243.9 | massive andesite, sl. fol., irregular qtz veining to 7 cm. | | | | | | | | | |
| 243.9 | 246.0 | andesite bx - sections andesite, green, fol. 50° CA. - 10 to 15% white qtz in patched in bx. | | | | | | | | | |
| 246.0 | 252.5 | andesite, fol., green, minor qtz patches in fractured sections | | | | | | | | | |
| 252.5 | 254.9 | andesite bx, grey green, 15% siliceous frags, fol. 45° CA. - odd fleck py. | | | | | | | | | |

# DRILL HOLE RECORD

**PANCONTINENTAL-MINING (CANADA) LTD.**

PROJECT PC 1B Hislop Twp
HOLE NO P-14
LOCATION 963.4m N 91.2m W
Initial Azimuth 045
LATITUDE

PROPERTY Lots 3 & 4 Con II
TOTAL DEPTH 254.9 m.
INITIAL DIP -80°
DEPARTURE

CASING LEFT —
Date Commenced Nov 16 6PM
Date completed Nov. 21 1980
CORE STORAGE on site
ELEVATION 5000.78 m

HOLE SURVEY

| DEPTH | DIP | AZIMUTH |
|---|---|---|
| Collar | -80° | 045 |
| 18.9 | -79° | |
| 60.9 | -76° | |
| 122.0 | -73.5° | |
| 183.9 | -68.5° | |

HOLE NO P14 SHEET NO 1 of
DRILL H.S. 2.10-11
DRILLER HEATH & SHERWOOD
GEOLOGICAL LOG N NOVAK W. DIX
RADIOMETRIC LOG
SAMPLED N NOVAK W. DIX
ASSAYED SWASTIKA LABORATORIES

Colour · Core Cuttings · Rock Unit · Depth · Graphic Log

LITHOLOGY — Constituents %: Mica · Chlorite · Graphite · Carbon · Clay · Qtz./Chert · Carbonate · Rock Type

STRUCTURE: Bedding · Schistosity · Faulting · Quartz vein

TEXTURE: Ign. · Met. · Sed.

ALTERATION

MINERALIZATION %: Sphalerite · Pyrrhotite · Pyrite · Chalcopyrite · Galena · $U_3O_8$

RADIOMETRIC DATA: Inst. Nº: · Col. In: Out: · Meter · Graph 2 4 6 8

Sample Number

ASSAY: $U_3O_8$ %

0 1 2 3 4 5 6 7 8 9 10 1 2 3 4 5 6 7 8 9 20

Rock Type: clay.

Rock Type: boulders and sand

18.9 — Colour: gray to green — Rock Type: [illegible] fg [illegible] & some cherty bands — Bedding: 30°

19.9

Additional Data

# DRILL HOLE RECORD

**PANCONTINENTAL MINING (CANADA) LTD.**

PROJECT ........ PROPERTY ........ CASING LEFT ........
HOLE No ........ TOTAL DEPTH ........ Date commenced ........
LOCATION ........ Date completed ........
Initial Azimuth ........ INITIAL DIP ........ CORE STORAGE ........
LATITUDE ........ DEPARTURE ........ ELEVATION ........

HOLE SURVEY

| DEPTH | DIP | AZIMUTH |
|---|---|---|
| | | |
| | | |
| | | |
| | | |

HOLE No P.14 SHEET No 2 of
DRILL
DRILLER
GEOLOGICAL LOG
RADIOMETRIC LOG
SAMPLED
ASSAYED

LITHOLOGY: Graphic Log; Constituents %: Mica, Chlorite, Graphite, Carbon, Clay, Qtz./Chert, Carbonate; Rock Type
STRUCTURE: Bedding, Schistosity, Brecciation, Faulting, Quartz veins
TEXTURE: Ign., Met., Sed.
ALTERATION
MINERALIZATION %: Scheelite, Pyrrhotite, Pyrite, Chalcopyrite, Galena, $U_3O_8$
RADIOMETRIC DATA: Inst. No: Cal. In' Out: Meter, Graph 2 4 6 8
Sample Interval, Sample Number, $U_3O_8$ %
ASSAY

| Core Size | Core Box No | Colour | Depth | Rock Type | Bedding |
|---|---|---|---|---|---|
| BQ | Box No 1 | grey | 20–22.46 | poorly sorted m.g. rhyolite tuff c fragments to 1cm foliated | |
| | Box No 2 | lt. green grey | 22.46–26.5 | interbedded argillite, cherty argillite, rhy. tuffs f.g. c sections calcareous. beds to 1cm. minor micro faulting ⊥ bedding | 30° |
| | | lt green – pale grey | 26.5–28.9 | rhy. tuff ? to pale grey sl. [illegible] yellow sericitic tuffaceous matrix sl. foliated. | 25° |
| | | banded green-grey | 28.9–29.47 | interbedded cherty arg. tuff (50% argillite) | |
| | Box No 3 | | 29.47–34.4 | rhyolite tuff as above c occ. short (17cm) sections of argillite – chert [illegible] | |
| | Box No 4 | | 34.4– | cherty argillite c 20% narrow rhyolite tuff interbeds. to 5 cm. max. cross bedding and slump tops up [illegible] more siliceous at lower contact. | 35° |

Additional Data

**DRILL HOLE RECORD** — PANCONTINENTAL-MINING (CANADA) LTD.

PROJECT
HOLE Nº
LOCATION
Initial Azimuth
LATITUDE
PROPERTY
TOTAL DEPTH
INITIAL DIP
DEPARTURE
CASING LEFT
Date Commenced
Date Completed
CORE STORAGE
ELEVATION

HOLE SURVEY

| DEPTH | DIP | AZIMUTH |
|---|---|---|
| | | |
| | | |
| | | |
| | | |
| | | |

HOLE Nº P14 SHEET Nº 3 of
DRILL
DRILLER
GEOLOGICAL LOG
RADIOMETRIC LOG
SAMPLED
ASSAYED

| Core Size | Box No. | Colour | Depth | Rock Type | Bedding |
|---|---|---|---|---|---|
| BQ | 4 | | | [illegible] tuff | |
| | Box No 5 | pale yellow-green with gray beds | 41.2 | sericitic rhyolite tuff and tuff with pale gray siliceous frags interbedded with medium gray chert or siltstone | |
| | | gray-black and green beds | 44.9 | finely interbedded argillaceous chert and rhyolite tuff sericitic [illegible] fractures | |
| | | green-gray | 46.3 | rhyolite tuff with [illegible] siliceous frags in sericitic matrix. tops of beds at [illegible] | |
| | No 6 | gray | 48.7 | finely bedded argillaceous chert, fractured ⊥ bedding | 20° |
| | Box | lt green | 49.8 | [illegible] | |
| | | gray-black & green beds | 50.2 | argillaceous siltstone chert finely bedded & sections of [illegible] sections to 0.5 m of sericitic rhyolite tuff. | |
| | Box No 7 | | 55.6 | sericitic rhyolite tuff & sections of argillaceous chert with pale siliceous frags [illegible] bed after deposition. | |
| | No 8 | | 59.2 | cherty argillite finely bedded & [illegible] | |

Depth scale: 40, 1, 2, 3, 4, 5, 6, 7, 8, 9, 50, 1, 2, 3, 4, 5, 6, 7, 8, 9, 60

Column headings: Core Size, Box No., Core Recovery %, Colour, Core Cuttings, Rock Unit, Depth, Graphic Log, LITHOLOGY: Constituents % (Mica, Chlorite, Graphite, Carbon, Clay, Qtz/Chert, Carbonate), Rock Type; STRUCTURE (Bedding, Schistosity, Brecciation, Faulting, Quartz vein); TEXTURE (Ign., Met., Sed.); ALTERATION; MINERALIZATION % (Sphalerite, Pyrrhotite, Pyrite, Chalcopyrite, Galena, $U_3O_8$); RADIOMETRIC DATA (Inst. Nº, Cal. In, Out, Meter, Graph 2 4 6 8); Sample Interval; Sample Number; ASSAY ($U_3O_8$ %)

Additional Data

# DRILL HOLE RECORD

**PANCONTINENTAL-MINING (CANADA) LTD.**

PROJECT
PROPERTY
CASING LEFT
HOLE NO
TOTAL DEPTH
Date commenced
LOCATION
Date completed
Initial Azimuth
INITIAL DIP
CORE STORAGE
LATITUDE
DEPARTURE
ELEVATION

HOLE SURVEY

| DEPTH | DIP | AZIMUTH |
|---|---|---|
| | | |
| | | |
| | | |
| | | |

HOLE NO P14 SHEET NO 4 of
DRILL
DRILLER
GEOLOGICAL LOG
RADIOMETRIC LOG
SAMPLED
ASSAYED

| Core Size | Core Box No | Colour | Depth | Seric. % | Rock Type | Bedding |
|---|---|---|---|---|---|---|
| BQ | Box 8 | grey-black ē green bands | | | sandy argillite ē 60° cleav. space, streaking with ... to 2cm ... bedding contact at | |
| | | lt green | 64.46 | 20 | rhyolite tuff lt. gr foliated | 35° |
| | Box No 9 | grey & black | 65.6 | | argillaceous chert and chert bx interbedded ē rhyolite tuff & bx foliated | |
| | | green | 69.8 | 25 | rhyolite tuff & bx sericite | |
| | Box No 10 | grey | 70.6 | | argillaceous chert bedded; fractured | |
| | | | 75.84 | | | |
| | | | 77.16 | | | |
| | No 11 | green | 79.0 | | rhyolite tuff ē bx ē pale grey siliceous fragments | |

**ASSAY**

| Sample Number | | | | $U_3O_8$ % |
|---|---|---|---|---|
| 8387 | 75.84 | 77.16 | 1.32 | NIL |

Additional Data

# DRILL HOLE RECORD

**PANCONTINENTAL MINING (CANADA) LTD.**

PROJECT
HOLE No
LOCATION
Initial Azimuth
LATITUDE

PROPERTY
TOTAL DEPTH
INITIAL DIP
DEPARTURE

CASING LEFT
Date Commenced
Date Completed
CORE STORAGE
ELEVATION

HOLE SURVEY

| DEPTH | DIP | AZIMUTH |
|---|---|---|
| | | |
| | | |
| | | |
| | | |

HOLE No P14 SHEET No 5 of
DRILL
DRILLER
GEOLOGICAL LOG
RADIOMETRIC LOG
SAMPLED
ASSAYED

Bedrock / Casing / Core size / Lith / Core Recovery % / Core Box No / Core Cuttings Colour / Rock Unit / Depth / Graphic Log

LITHOLOGY — Constituents %: Mica / Chlorite / Graphite / Carbon / Clay / Qtz/Chert / Carbonate — Rock Type

STRUCTURE: Bedding / Schistosity / Brecciation / Faulting / Quartz veins

TEXTURE: Ign. / Met. / Sed.

ALTERATION

MINERALIZATION %: Scheelite / Pyrrhotite / Pyrite / Chalcopyrite / Galena / $U_3O_8$

RADIOMETRIC DATA: Inst. No: / Col. In: / Out: / Meter / Graph 2 4 6 8

Sample Interval / Sample Number / $U_3O_8$ %

ASSAY

Depth scale: 10, 1, 2, 3, 4, 5, 6, 7, 8, 9, 90, 1, 2, 3, 4, 5, 6, 7, 8, 9, 100

Core size: BQ

Core Box No: Box No 11 / Box No 12 / Box No 13 / Box No 14 / 15

Colour: grey-black & green [illegible]

Depth: 81.75 / 83.3 / 83.63

Rock Type:
[illegible]

argillaceous chert & [illegible] 80.[illegible] chlorite tuff & [illegible] chert finely bedded and other spots chert [illegible] & graded bedding.
Some fracturing & bedding in cherty horizons possibly shrinkage cracks.
becoming more argillaceous after 99.4m.

Bedding: 20° / 20°

Sample: 8306 83.3 83.63 0.33 NIL

Additional Data

**DRILL HOLE RECORD**

**PANCONTINENTAL-MINING (CANADA) LTD.**

PROJECT
PROPERTY
CASING LEFT
HOLE NO
TOTAL DEPTH
Date commenced
LOCATION
Date completed
Initial Azimuth
INITIAL DIP
CORE STORAGE
LATITUDE
DEPARTURE
ELEVATION

| HOLE SURVEY | | |
|---|---|---|
| DEPTH | DIP | AZIMUTH |
| | | |
| | | |
| | | |
| | | |

HOLE NO P14 SHEET NO 6 of
DRILL
DRILLER
GEOLOGICAL LOG
RADIOMETRIC LOG
SAMPLED
ASSAYED

Weathering / Casing / Core size / Lith. / Core Recovery % / Core Box No / Core Cuttings Colour / Rock Unit / Depth / Graphic Log / LITHOLOGY: Constituents % (Mica, Chlorite, Graphite, Carbon, Clay, Qtz./Chert, Carbonate), Rock Type / STRUCTURE: Bedding, Schistosity, Fracturing, Faulting, Quartz vein / TEXTURE: Ign., Met., Sed. / ALTERATION / MINERALIZATION %: Sphalerite, Pyrrhotite, Pyrite, Chalcopyrite, Galena, $U_3O_8$ / RADIOMETRIC DATA: Inst. No., Col. In, Out, Meter, Graph 2 4 6 8 / Sample Interval / Sample Number / ASSAY: $U_3O_8$ %

100, 1, 2, 3, 4, 5, 6, 7, 8, 9, 110, 1, 2, 3, 4, 5, 6, 7, 8, 9, 120

Core size: BQ

Core Box No: Box No 15; Box No 16; Box No 17; 18

Colour: lt green and grey; grey & green sections; black; grey-green

Depth: 105.9; 106.9; 115.3; 116.3; 116.8; 118.5

Rock Type:
argillaceous chert as above.
rhyolite tuff & bx ē 50% cherty arg.
cherty argillite ē sections fine bx and rhyolite tuff sections to 30cm
argillite with narrow rhyolitic tuff beds to 1cm
tuffaceous rhyolite bx (waterlain) ē occasional cherty argillite beds up to 5cm wide. Sheared

Bedding: 30°; 30°

Mineralization: tr Py

5383 115.3 116.3 1.0m nil

Additional Data

**DRILL HOLE RECORD** — **PANCONTINENTAL-MINING (CANADA) LTD.**

PROJECT
PROPERTY
CASING LEFT
HOLE NO
TOTAL DEPTH
Date commenced
LOCATION
date completed
initial Azimuth
INITIAL DIP
CORE STORAGE
LATITUDE
DEPARTURE
ELEVATION

HOLE SURVEY

| DEPTH | DIP | AZIMUTH |
|---|---|---|
| | | |

HOLE NO 9-14 SHEET NO 7 of
DRILL
DRILLER
GEOLOGICAL LOG
RADIOMETRIC LOG
SAMPLED
ASSAYED

| | Core Size | Core Box | Colour | Depth | Rock Type | Bedding |
|---|---|---|---|---|---|---|
| 120 | BQ | No 18 | gray - green | | tuffaceous rhyolite bx ? chert bds | |
| 1 | | | dk gray - black | 121.3 | argillite finely bedded & chert bds and tuffaceous beds to 3mm. | 25° |
| 5 | | Box No 19 | | | | |
| 6 | | | green - gray & black bds | 125.87 | interbedded sericitic rhyolite tuff & argillite with dk-gray chert near upper contact close space fracture to bedding. | 40° |
| 130 | | Box No 20 | black | 130.7 | finely bedded f.g argillite. | 25° |
| 2 | | | olive green | 132.0 | tuffaceous sandstone with rhyolite tuff interbeds | 30° |
| 3 | | | gray | 133.3 | rhyolite tuff | |
| 3 | | | olive green | 133.5 | tuffaceous sandstone finely bedded. tuff & some bx at bottom contact. | |
| 6 | | Box No 21 | black - gray | 136.6 | argillite finely bedded & chert at 138.0 | 30° |
| 9 | | | | 139.6 | sericitic rhyolite bx | |
| 140 | | | | | | |

**Additional Data**

# DRILL HOLE RECORD

**PANCONTINENTAL-MINING (CANADA) LTD.**

PROJECT ..........
HOLE NO ..........
LOCATION ..........
Initial Azimuth ..........
LATITUDE ..........

PROPERTY ..........
TOTAL DEPTH ..........
INITIAL DIP ..........
DEPARTURE ..........

CASING LEFT ..........
Date commenced ..........
Date completed ..........
CORE STORAGE ..........
ELEVATION ..........

HOLE SURVEY

| DEPTH | DIP | AZIMUTH |
|---|---|---|
| | | |
| | | |
| | | |
| | | |

HOLE NO 214 SHEET NO 8 of ..........
DRILL ..........
DRILLER ..........
GEOLOGICAL LOG ..........
RADIOMETRIC LOG ..........
SAMPLED ..........
ASSAYED ..........

Columns: Weathering, Grain size, Core size, Core Recovery %, Box No., Colour, Core Cuttings, Rock Unit, Depth, LITHOLOGY: Graphic Log, Constituents %: Mica, Chlorite, Graphite, Carbon, Clay, Qtz/Chert, Carbonate, Sericite; Rock Type; STRUCTURE: Bedding, Schistosity, Brecciation, Faulting, Quartz veins; TEXTURE: Ign., Met., Sed.; ALTERATION; MINERALIZATION %: Sphalerite, Pyrrhotite, Pyrite, Chalcopyrite, Galena, $U_3O_8$; RADIOMETRIC DATA: Inst. No., Cal. In, Out, Meter, Graph 2 4 6 8; Sample Interval; Sample Number; ASSAY: $U_3O_8$ %

Scale: 140, 1, 2, 3, 4, 5, 6, 7, 8, 9, 60, 1, 2, 3, 4, 5, 6, 7, 8, 9, 0

| Depth | Box No. | Colour | Rock Type | Bedding |
|---|---|---|---|---|
| | | Gt green | d ... | |
| 140.6 | Box No 22 | lt green grey | chert and cherty argillite ... of rhyolite tuff | |
| 142.5 | | grey-green yellow | sericitic rhyolite tuff ... Foliated. 148.8 – 150.0 ... material ... | 25° |
| 144.6 | | | | |
| 145.4 | Box No 23 | | | |
| | | | | 30° |
| 153.4 | | greenish grey | rhyodacite bx ... foliated | 40° |
| 155.65 | | dk grey | qtz bx dk. | |
| 156.11 | Box No 24 | green grey | dacite bx | 40° |
| 157.0 | | | | |
| 157.4 | | grey green | Foliated dacite ... sections bx | |
| 158.4 | | | | |

Grain size: vox; Core recovery: 1.6

Mineralization: tr, tr, tr

| | | | | |
|---|---|---|---|---|
| 8390 | 144.6 | 145.4 | 0.8 | NIL |
| 8391 | 153.4 | 155.65 | 2.25 | 0.002 |
| 8392 | 155.65 | 156.11 | 0.46 | 0.2 |
| 8393 | 156.11 | 157.0 | 0.89 | 0.03 |
| 8394 | 158.1 | 160.63 | 2.53 | 0.03 |

Additional Data

# DRILL HOLE RECORD

**PANCONTINENTAL-MINING-(CANADA)-LTD.**

PROJECT ..........
PROPERTY ..........
CASING LEFT ..........
HOLE NO ..........
TOTAL DEPTH ..........
Date commenced ..........
LOCATION ..........
Date completed ..........
Initial Azimuth ..........
INITIAL DIP ..........
CORE STORAGE ..........
LATITUDE ..........
DEPARTURE ..........
ELEVATION ..........

HOLE SURVEY

| DEPTH | DIP | AZIMUTH |
|---|---|---|
| | | |

HOLE NO. 214 SHEET NO. 9 of ..........
DRILL ..........
DRILLER ..........
GEOLOGICAL LOG ..........
RADIOMETRIC LOG ..........
SAMPLED ..........
ASSAYED ..........

| Depth | Core Size | Core Box No. | Colour | Depth | Rock Type | Bedding | Pyrite | Sample Number | | | U₃O₈ % | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 160 | | Box No 25 | | | foliated dacite ± dacite bx | | | | | | | |
| 162 | | | black | 162.16 | feldspathized dacite bx ± dacite | 35° | tr | 8395 | 160.43 | 162.35 | 1.72 | 0.005 |
| 163 | | | pink - brown | 163.11 | feldspathized rock "syenite." ? irregular fractures unfoliated. lower contact very sharp<br>Degree of feldspathization decreasing at lower contact | | tr | 8396 | 162.35 | 163.21 | 0.96 | 0.01 |
| 165 | | Box No 26 | | | | | | | | | | |
| 170 | AQ | | | | | | | | | | | |
| 171 | | Box No 27 | | | | | | | | | | |
| 176 | | | | | | 60° | | | | | | |
| 177 | | Box No 28 | | | | | | | | | | |
| 178 | | | | 178.19<br>178.55 | | | tr | 8397 | 178.14 | 178.55 | 0.41 | 0.002 |
| 179 | | | light grey | 179.4 | slightly feldspathized | | | | | | | |
| 180 | | | | | | | | | | | | |

Additional Data

# DRILL HOLE RECORD

**PANCONTINENTAL-MINING (CANADA) LTD.**

PROJECT ..........
HOLE NO ..........
LOCATION ..........
Initial Azimuth ..........
LATITUDE ..........

PROPERTY ..........
TOTAL DEPTH ..........
INITIAL DIP ..........
DEPARTURE ..........

CASING LEFT ..........
Date commenced ..........
Date completed ..........
CORE STORAGE ..........
ELEVATION ..........

HOLE SURVEY

| DEPTH | DIP | AZIMUTH |
|---|---|---|
|  |  |  |
|  |  |  |
|  |  |  |
|  |  |  |

HOLE NO P14 SHEET NO 10 of ..........
DRILL ..........
DRILLER ..........
GEOLOGICAL LOG ..........
RADIOMETRIC LOG ..........
SAMPLED ..........
ASSAYED ..........

Core Box: Box 28; Box No 29; Box No 30
Core size: BQ

| Depth | Core Colour | Rock Type | Bedding | Mineralization % Pyrrhotite |
|---|---|---|---|---|
| 180.1<br>180.4 |  | dacite tuff & bx | 35° | tr |
| 181.3 | brown gray -green | feldspathized dacite tuff | ,0 | tr |
| 184.0 | gray green | dacite bx slightly foliated & sericitic |  | tr |
| 184.9 | brown -buff | feldspathized dacite lower contact sharp |  |  |
| 185.4 | green | slightly amygdaloidal andesite upper contact & lower e.g. of sill leucoxene visible | 40 | tr |
| 188.3<br>188.7<br>189.5 | gray green | foliated dacite & minor bx | 30° | tr |
| 189.9 | grey green & white | dacite bx & siliceous & sericitic. Siliceous at lower contact. |  |  |
| 190.4 | greenish black | ultra mafic flow and in part a bx. fg (amphibole chlorite) matrix surrounding black fragments. one qtz-carb veinlet showing changing to brown matrix past 189.0m. | 40° |  |

ASSAY

| Sample Number | U3O8 % |  |  |  |
|---|---|---|---|---|
| B398 | 180.4 | 181.3 | 0.9 | 0.02 |
| B399 | 181.3 | 182.67 | 1.37 | 0.005 |
| B400 | 182.67 | 185.12 | 2.45 | 0.005 |
| B401 | 186.09 | 186.9 | 0.76 | 0.02 |
| B402 | 188.7 | 190.7 | 1.9 | 0.005 |

Additional Data

# DRILL HOLE RECORD

**PANCONTINENTAL-MINING (CANADA) LTD.**

PROJECT ........ PROPERTY ........ CASING LEFT ........
HOLE NO ........ TOTAL DEPTH ........ Date Commenced ........
LOCATION ........ Date Completed ........
Initial Azimuth ........ INITIAL DIP ........ CORE STORAGE ........
LATITUDE ........ DEPARTURE ........ ELEVATION ........

HOLE SURVEY

| DEPTH | DIP | AZIMUTH |
|---|---|---|
| | | |
| | | |
| | | |
| | | |
| | | |

HOLE NO D14 ........ SHEET NO 11 ........ of ........
DRILL ........
DRILLER ........
GEOLOGICAL LOG ........
RADIOMETRIC LOG ........
SAMPLED ........
ASSAYED ........

Column headings: Weathering, Grains, Core size, Lith, Core Recovery %, Core, Colour, Core Cuttings, Rock Unit, Depth, Graphic Log, LITHOLOGY – Constituents %: Mica, Chlorite, Graphite, Carbon, Clay, Qtz./Chert, Carbonate; Rock Type; STRUCTURE: Bedding, Schistosity, Fracturing, Faulting, Quartz vein; TEXTURE: Ign., Met., Sed.; ALTERATION; MINERALIZATION %: Sphalerite, Pyrrhotite, Pyrite, Chalcopyrite, Galena, $U_3O_8$; RADIOMETRIC DATA: Inst. No., Col. In, Out, Meter, Graph 2 4 6 8; Sample Interval; Sample Number; $U_3O_8$ %; ASSAY

| Row | Colour | Depth | Rock Type | Bedding | Sample Number | | | | |
|---|---|---|---|---|---|---|---|---|---|
| 0–1 | | 201.0 | very finely diss- magnetite, rock possibly komatiitic [illegible] bd. | | [illegible] | 200.0 | 201.0 | 1.0 | Nil |
| 1 | dk green | 211.0 | komatiitic flow top [illegible] sutures amygdaloidal c green carb qtz [illegible] | 40° | | | | | |
| 3 | dk green black | 213.1 | ultramafic flow As with yellow-brown altered f.g. matrix some sections foliated, qtz carb-veining | 50° | | | | | |

Additional Data

**DRILL HOLE RECORD** — PANCONTINENTAL MINING (CANADA) LTD.

PROJECT
PROPERTY
CASING LEFT
HOLE NO
TOTAL DEPTH
Date Commenced
LOCATION
Date Completed
Initial Azimuth
INITIAL DIP
CORE STORAGE
LATITUDE
DEPARTURE
ELEVATION

HOLE SURVEY

| DEPTH | DIP | AZIMUTH |
|---|---|---|
| | | |

HOLE NO P14 SHEET NO 17 of
DRILL
DRILLER
GEOLOGICAL LOG
RADIOMETRIC LOG
SAMPLED
ASSAYED

| Colour | Depth | Qtz/Chert % | Rock Type | Bedding | Pyrite | Sample Number | | | U₃O₈ % | |
|---|---|---|---|---|---|---|---|---|---|---|
| gray green | 222.3<br>222.98 | | foliated andesite with obvious brgs and qtz-veining to 3cm. white qtz-veining to ·8m. | | Py | 8404 | 222.3 | 222.98 | 0.68 | 0.002 |
| | | 90 | | | | | | | | |
| gray green | 231.7<br>232.03<br>233.0 | | andesite bx foliated, c scattered qtz veins to 1cm. | 90° | Py | 8405 | 232.03 | 233.47 | 1.14 | 0.002 |
| dk green | 235.36<br>235.71 | 100 | andesitic ~75% qtz breccia | | Py | 8406 | 235.36 | 235.71 | 0.35 | 0.002 |
| white | 236.3 | 80 | qtz c andesitic frags to 2cm | | | 8407 | 236.3 | 237.16 | 0.86 | 0.002 |
| dk green | 237.16 | | massive andesite slightly foliated in sections c qtz veining to 1cm | | | | | | | |

Additional Data

## DRILL HOLE RECORD

**PANCONTINENTAL-MINING (CANADA) LTD.**

PROJECT

HOLE NO

LOCATION

Initial Azimuth

LATITUDE

PROPERTY

TOTAL DEPTH

INITIAL DIP

DEPARTURE

CASING LEFT

Date Commenced

Date Completed

CORE STORAGE

ELEVATION

HOLE SURVEY

| DEPTH | DIP | AZIMUTH |
|---|---|---|
| | | |
| | | |
| | | |
| | | |
| | | |

HOLE NO P 14 SHEET NO 17 of 17

DRILL

DRILLER

GEOLOGICAL LOG

RADIOMETRIC LOG

SAMPLED

ASSAYED

| Depth | Colour | Rock Type | Qtz/Chert % | Bedding |
|---|---|---|---|---|
| | | massive andesite | | |
| 344.4 | dk green | andesite bx foliated | 15 | 50° |
| 346.0 | dk green | foliated andesite c short sections 30% quartz frags | | |
| 352.5 | med green | andesite bx 30% qtz frags | | 80° |
| 354.9 | | | | |

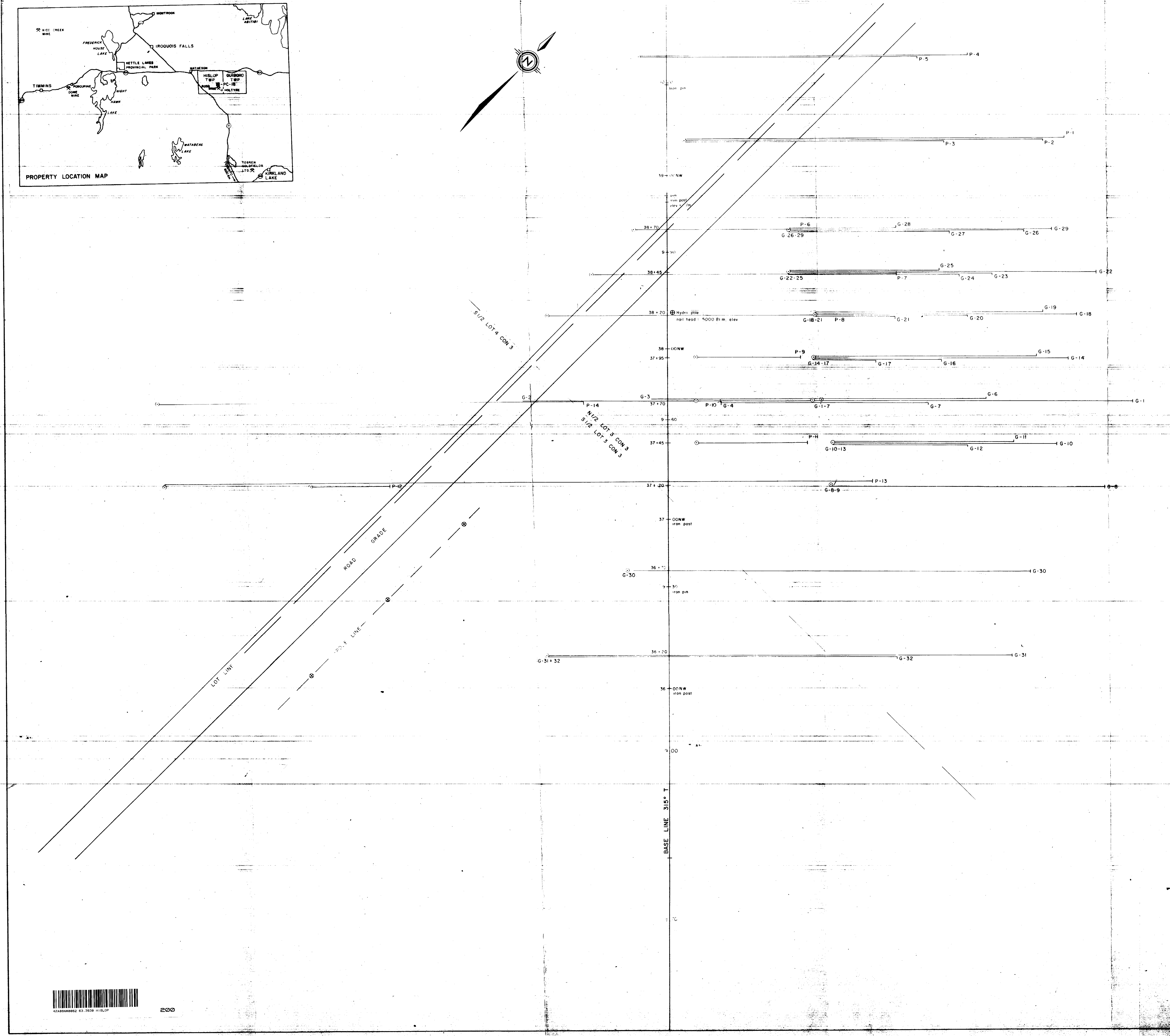
Additional Data

# HISLOP GOLD PROJECT
# MAP PORTFOLIO

PREPARED BY
NEIL NOVAK
PROJECT GEOLOGIST

# MAP PORTFOLIO

| Drg. No. | Description | Scale |
|---|---|---|
| PC-18-04-81 | Section 948.2N | 1:250 |
| PC-18-05-81 | Section 955.8N | 1:250 |
| PC-18-06-81 | Section 963.4N | 1:250 |
| PC-18-07-81 | Section 971.1N | 1:250 |
| PC-18-31-81 | Section 978.7N | 1:250 |
| PC-18-30-81 | Section 986.3N | 1:250 |
| PC-18-10-81 | Section 993.9N | 1:250 |
| PC-18-11-81 | Section 1010N | 1:250 |
| PC-18-12-81 | Section 1025N | 1:250 |
| PC-18-14-81 | Ground Magnetometer Survey | 1:1500 |
| PC-18-13-81 | Diamond Drill Plan | 1:250 |
| PC-18-15-81 | Regional Compilation Geology | 1:5000 |



63.3930

PANCON

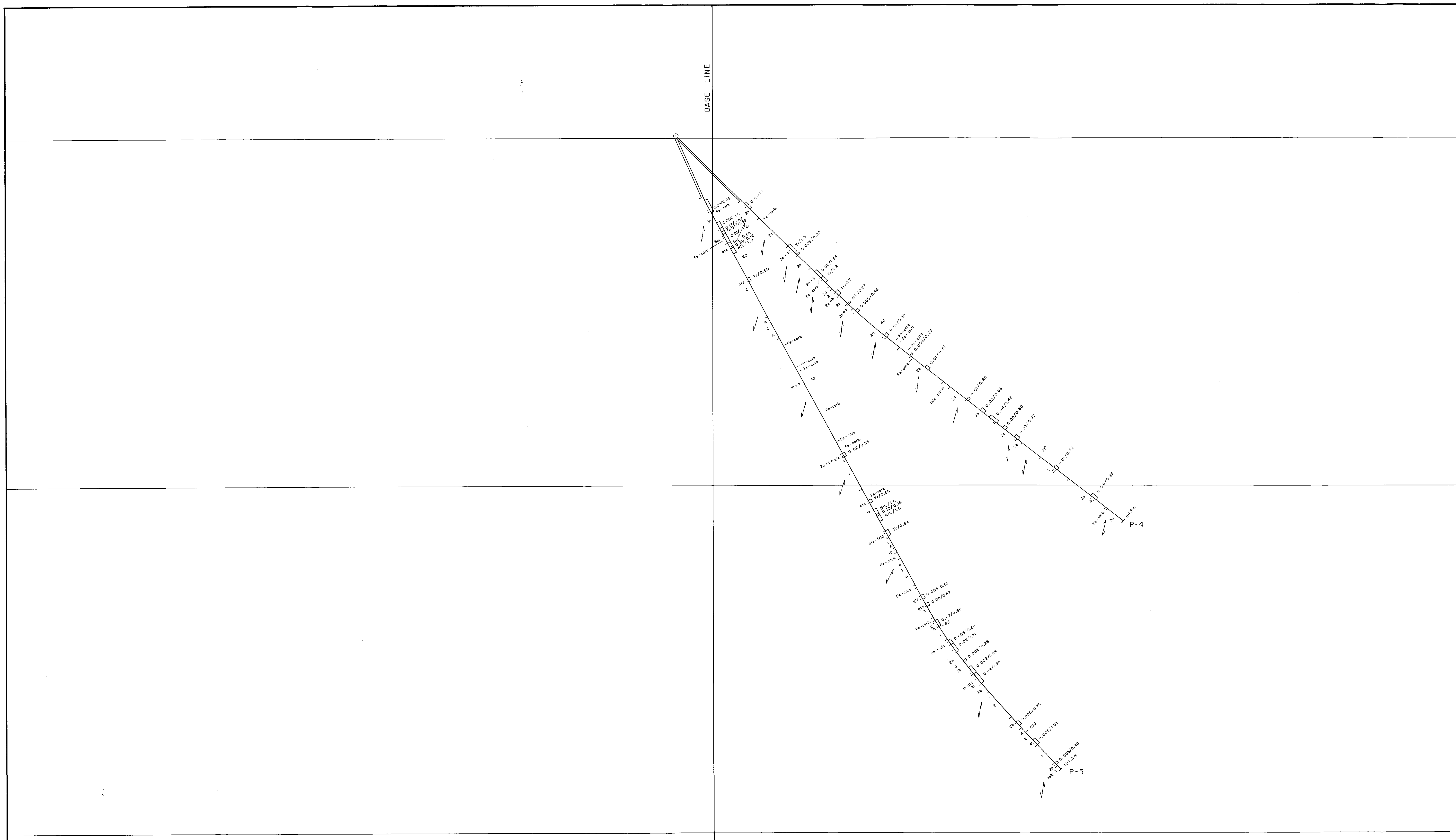
PANCONTINENTAL MINING (CANADA) LTD.
TORONTO - ONTARIO

HISLOP TOWNSHIP, ONTARIO

## DIAMOND DRILL PLAN

| Scale | Date | Geology | Compiled | Drawn | Drawing No. |
|---|---|---|---|---|---|
| 1:250 | Jan /81 | N.N., W.F.D. | [illegible] | [illegible] | PC-18-13-81 |

200



## LEGEND

| | |
|---|---|
| 10 | Altered Ultramafic |
| 9 | Diabase |
| 8 | Syenitic Hybrid rock, Feldspathized rock |
| 7 | Aplite |
| 5 | Argillite, Mudstone (pelite) |
| 4 | Chert, Chert Breccia, Banded Chert, 4a, 4b, 4c |
| 3 | Rhyolite, Rhyolite Tuff & Breccia, 3a & 3b |
| 2 | Dacite, Dacite Tuff & Breccia, 2a & 2b |
| 1 | Andesite, Andesite Tuff & Breccia, 1a & 1b |

## ROCK TYPES

| | |
|---|---|
| ⋯ | Pyrite Dissemination |
| ↔ | Foliation |
| 0.10/1.31 | Au Assay/metre |
| Q | Quartz |
| Ser. | Sericitic |
| Chl | Chlorite |
| Marip | Mariposite |
| Sil | Siliceous |
| Δ (Bx) | Breccia |
| Feld | Feldspathized |
| L.C. | Lost Core |
| Graph | Graphitic |
| Py | Pyrite |
| Fe-carb | Iron-Carbonate Weathering |
| Amyg | Amygdaloidal |
| hem | Hematitic |

63.3930

PANCONTINENTAL MINING (CANADA) LTD.
TORONTO - ONTARIO
PANCON

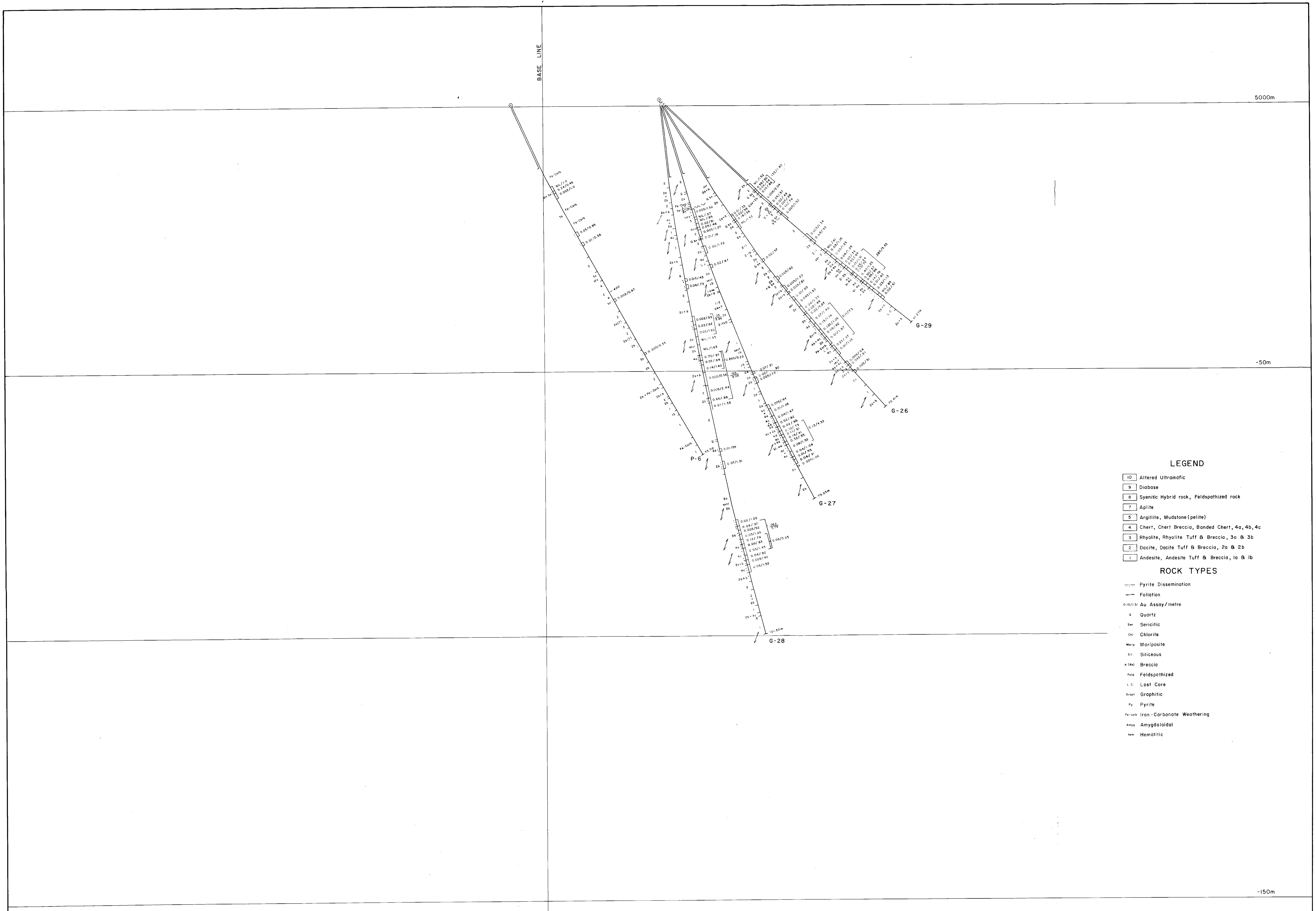
HISLOP TOWNSHIP, ONTARIO

# SECTION 1025 N

| Scale | Date | Geology | Compiled | Drawn | Drawing No. |
|---|---|---|---|---|---|
| 1:250 | Jan./81 | N.N., W.F.D. | N.N., W.F.D. | T.W.G. | PC-18-12-81 |

OM9-PE7-C-80

210



## LEGEND

| | |
|---|---|
| 10 | Altered Ultramafic |
| 9 | Diabase |
| 8 | Syenitic Hybrid rock, Feldspathized rock |
| 7 | Aplite |
| 5 | Argillite, Mudstone (pelite) |
| 4 | Chert, Chert Breccia, Banded Chert, 4a, 4b, 4c |
| 3 | Rhyolite, Rhyolite Tuff & Breccia, 3a & 3b |
| 2 | Dacite, Dacite Tuff & Breccia, 2a & 2b |
| 1 | Andesite, Andesite Tuff & Breccia, 1a & 1b |

## ROCK TYPES

| | |
|---|---|
| ⋯ | Pyrite Dissemination |
| ⟶ | Foliation |
| 0.10/1.31 | Au Assay/metre |
| Q | Quartz |
| Ser. | Sericitic |
| Chl | Chlorite |
| Marip | Mariposite |
| Sil | Siliceous |
| △ (Bx) | Breccia |
| Feld | Feldspathized |
| L.C. | Lost Core |
| Graph | Graphitic |
| Py | Pyrite |
| Fe-carb | Iron-Carbonate Weathering |
| Amyg | Amygdaloidal |
| hem | Hematitic |

63.3930

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PANCONTINENTAL MINING (CANADA) LTD.
TORONTO - ONTARIO

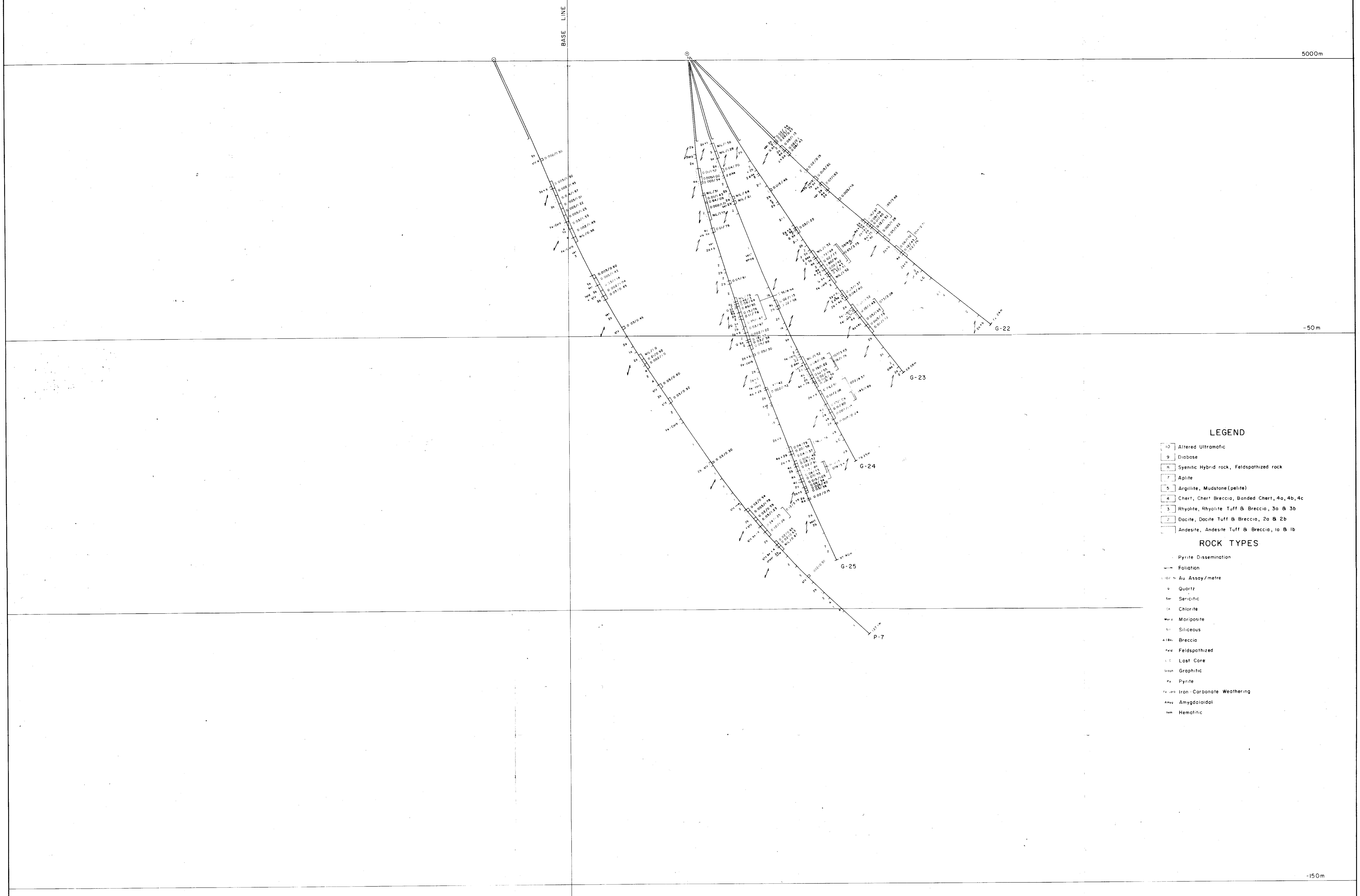
HISLOP TOWNSHIP, ONTARIO

# SECTION 993.9 N
(38 + 70 N.W.)

| Scale | Date | Geology | Compiled | Drawn | Drawing No. |
|---|---|---|---|---|---|
| 1:250 | Jan./81 | N.N., W.F.D. | N.N., W.F.D. | T.W.G. | PC-18-10-81 |

OM9-PE7-C-80

220



## LEGEND

| | |
|---|---|
| 10 | Altered Ultramafic |
| 9 | Diabase |
| 8 | Syenitic Hybrid rock, Feldspathized rock |
| 7 | Aplite |
| 5 | Argillite, Mudstone (pelite) |
| 4 | Chert, Chert Breccia, Banded Chert, 4a, 4b, 4c |
| 3 | Rhyolite, Rhyolite Tuff & Breccia, 3a & 3b |
| 2 | Dacite, Dacite Tuff & Breccia, 2a & 2b |
| | Andesite, Andesite Tuff & Breccia, la & lb |

## ROCK TYPES

| | |
|---|---|
| - | Pyrite Dissemination |
| ⟷ | Foliation |
| 0.107/.31 | Au Assay/metre |
| Q | Quartz |
| Ser | Sericitic |
| Ch | Chlorite |
| Marip | Mariposite |
| Sil | Siliceous |
| Δ (Bx) | Breccia |
| Feld | Feldspathized |
| L.C. | Lost Core |
| Graph | Graphitic |
| Py | Pyrite |
| Fe carb | Iron-Carbonate Weathering |
| Amyg | Amygdaloidal |
| hem | Hematitic |

63.3930

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PANCONTINENTAL MINING (CANADA) LTD.
TORONTO - ONTARIO

HISLOP TOWNSHIP, ONTARIO

# SECTION 986.3 N

| Scale | Date | Geology | Compiled | Drawn | Drawing No. |
|---|---|---|---|---|---|
| 1:250 | July /81 | N.N., D.W. | N.N., D.W. | T.W.G. | PC-18-30-81 |

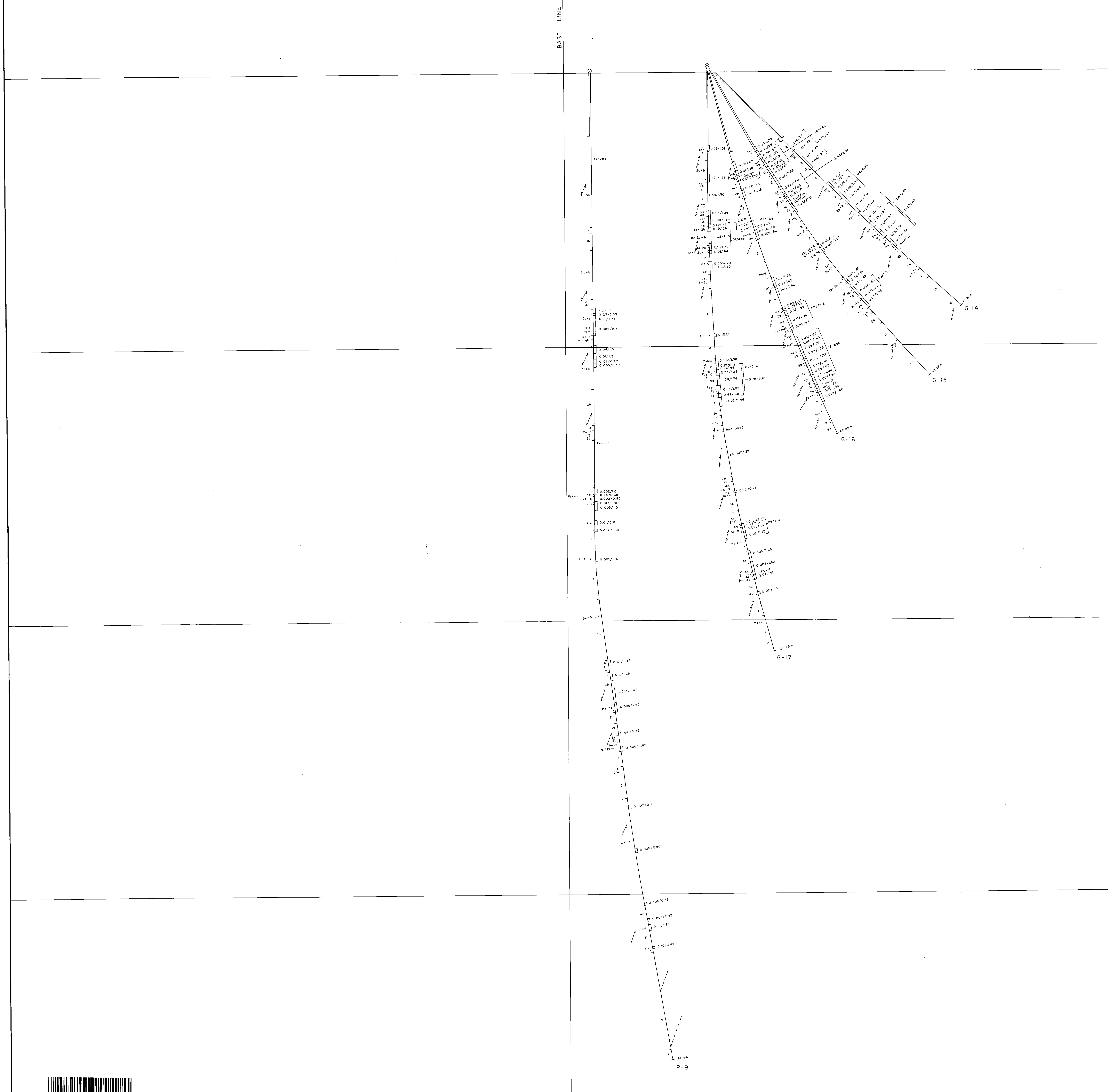
OM9-PE7-C-80

42A08NW0062 63.3930 HISLOP

230

42A08NW0052 63.3938 HISLOP

240



## LEGEND

| | |
|---|---|
| 10 | Altered Ultramafic |
| 9 | Diabase |
| 8 | Syenitic Hybrid rock, Feldspathized rock |
| 7 | Aplite |
| 5 | Argillite, Mudstone (pelite) |
| 4 | Chert, Chert Breccia, Banded Chert, 4a, 4b, 4c |
| 3 | Rhyolite, Rhyolite Tuff & Breccia, 3a & 3b |
| 2 | Dacite, Dacite Tuff & Breccia, 2a & 2b |
| 1 | Andesite, Andesite Tuff & Breccia, 1a & 1b |

## ROCK TYPES

| | |
|---|---|
| ⋯ | Pyrite Dissemination |
| ↽ | Foliation |
| 0.10/1.31 | Au Assay/metre |
| Q | Quartz |
| Ser. | Sericitic |
| Chl | Chlorite |
| Marip | Mariposite |
| Sil. | Siliceous |
| △ (Bx) | Breccia |
| Feld | Feldspathized |
| L.C. | Lost Core |
| Graph | Graphitic |
| Py | Pyrite |
| Fe-carb | Iron-Carbonate Weathering |
| Amyg | Amygdaloidal |
| hem | Hematitic |

63-3930

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PANCONTINENTAL MINING (CANADA) LTD.
TORONTO - ONTARIO

HISLOP TOWNSHIP, ONTARIO

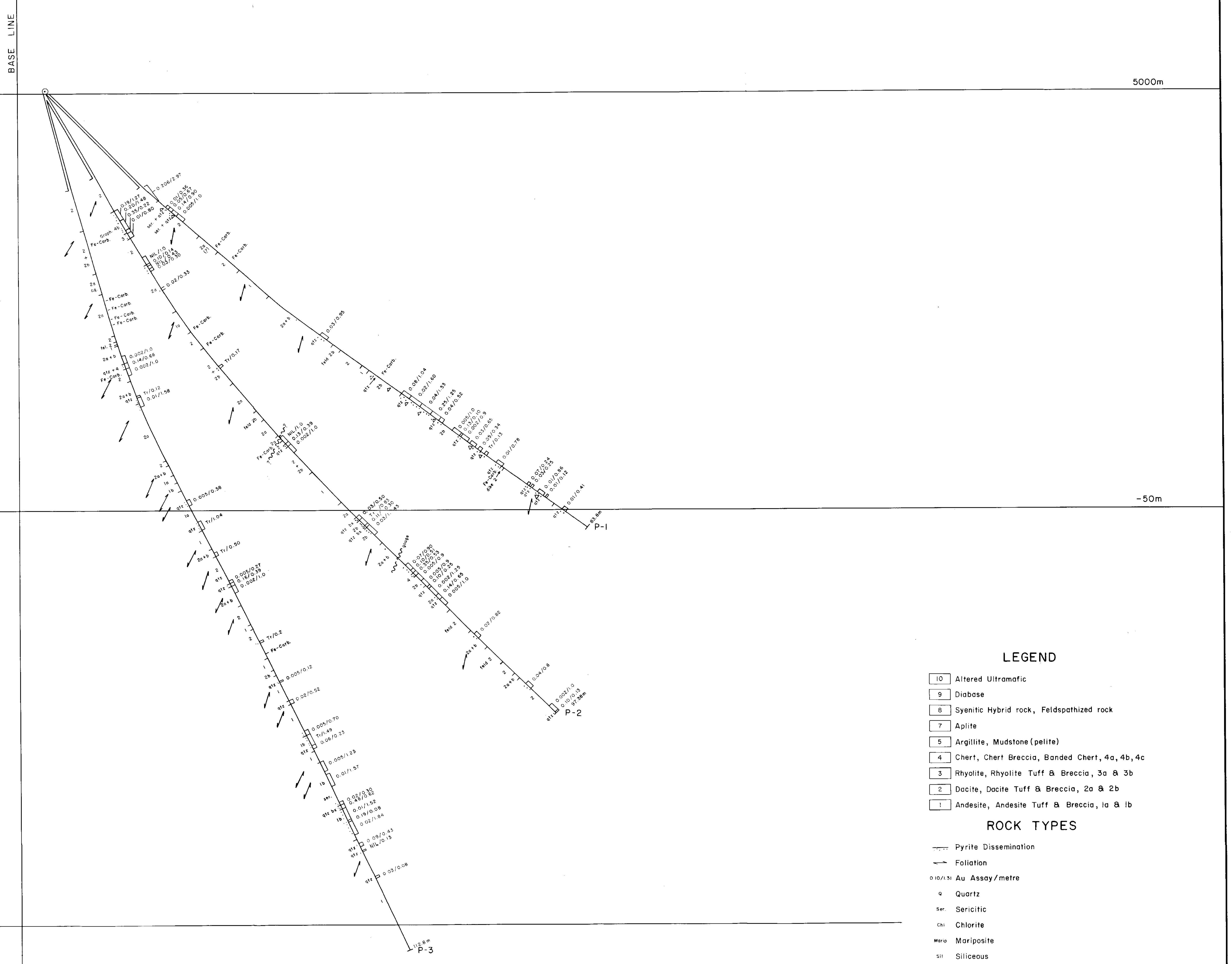
# SECTION 971.1 N
# (37 + 95 N.W.)

| Scale | Date | Geology | Compiled | Drawn | Drawing No. |
|---|---|---|---|---|---|
| 1:250 | Jan./81 | N.N., W.F.D. | N.N., W.F.D. | T.W.G. | PC-18-07-81 |

OM9-PE7-C-80

42A08NW0052 63.3930 HISLOP

250



## LEGEND

| | |
|---|---|
| 10 | Altered Ultramafic |
| 9 | Diabase |
| 8 | Syenitic Hybrid rock, Feldspathized rock |
| 7 | Aplite |
| 5 | Argillite, Mudstone (pelite) |
| 4 | Chert, Chert Breccia, Banded Chert, 4a, 4b, 4c |
| 3 | Rhyolite, Rhyolite Tuff & Breccia, 3a & 3b |
| 2 | Dacite, Dacite Tuff & Breccia, 2a & 2b |
| 1 | Andesite, Andesite Tuff & Breccia, 1a & 1b |

## ROCK TYPES

| | |
|---|---|
| ⋯ | Pyrite Dissemination |
| ⟵ | Foliation |
| 0.10/1.31 | Au Assay/metre |
| Q | Quartz |
| Ser. | Sericitic |
| Chl | Chlorite |
| Marip | Mariposite |
| Sil | Siliceous |
| △ (Bx) | Breccia |
| Feld | Feldspathized |
| L.C. | Lost Core |
| Graph | Graphitic |
| Py | Pyrite |
| Fe-carb | Iron-Carbonate Weathering |
| Amyg | Amygdaloidal |
| hem | Hematitic |

260

63.3930

PANCON

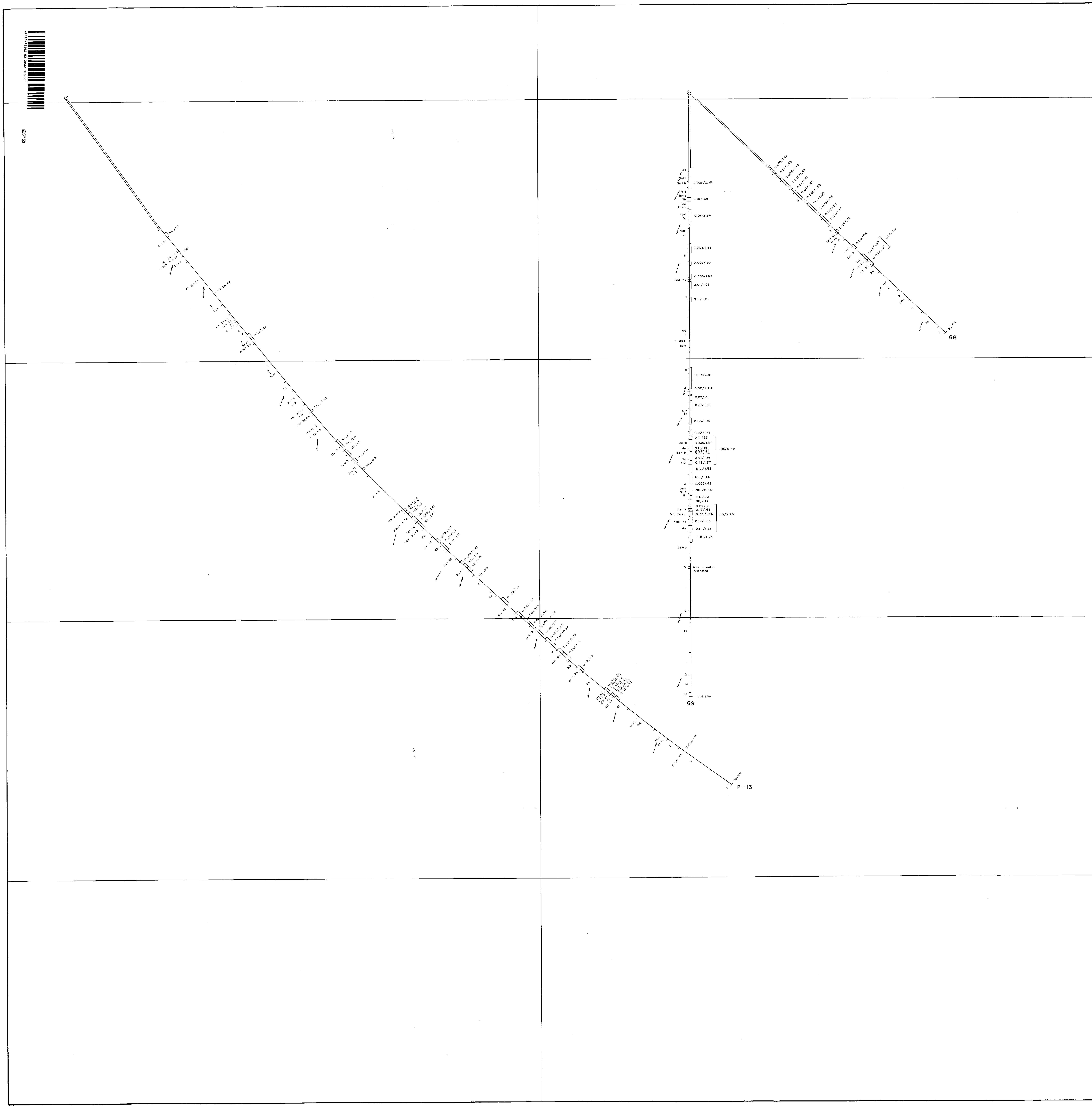
PANCONTINENTAL MINING (CANADA) LTD.
TORONTO - ONTARIO

HISLOP TOWNSHIP, ONTARIO

## SECTION 1010 N

| Scale | Date | Geology | Compiled | Drawn | Drawing No. |
|---|---|---|---|---|---|
| 1:250 | Jan./81 | N.N.,W.F.D. | N.N.,W.F.D. | T.W.G. | PC-18-11-81 |

OM9-PE7-C-80



## LEGEND

| | |
|---|---|
| 10 | Altered Ultramafic |
| 9 | Diabase |
| 8 | Syenitic Hybrid rock, Feldspathized rock |
| 7 | Aplite |
| 5 | Argillite, Mudstone (pelite) |
| 4 | Chert, Chert Breccia, Banded Chert, 4a, 4b, 4c |
| 3 | Rhyolite, Rhyolite Tuff & Breccia, 3a & 3b |
| 2 | Dacite, Dacite Tuff & Breccia, 2a & 2b |
| 1 | Andesite, Andesite Tuff & Breccia, 1a & 1b |

## ROCK TYPES

| | |
|---|---|
| ⋯ | Pyrite Dissemination |
| ⟵ | Foliation |
| 0.10/1.31 | Au Assay/metre |
| Q | Quartz |
| Ser. | Sericitic |
| Chl | Chlorite |
| Marip | Mariposite |
| Sil | Siliceous |
| Δ (Bx) | Breccia |
| Feld | Feldspathized |
| L.C. | Lost Core |
| Graph | Graphitic |
| Py | Pyrite |
| Fe-carb | Iron-Carbonate Weathering |
| Amyg | Amygdaloidal |
| hem | Hematitic |

63.3930

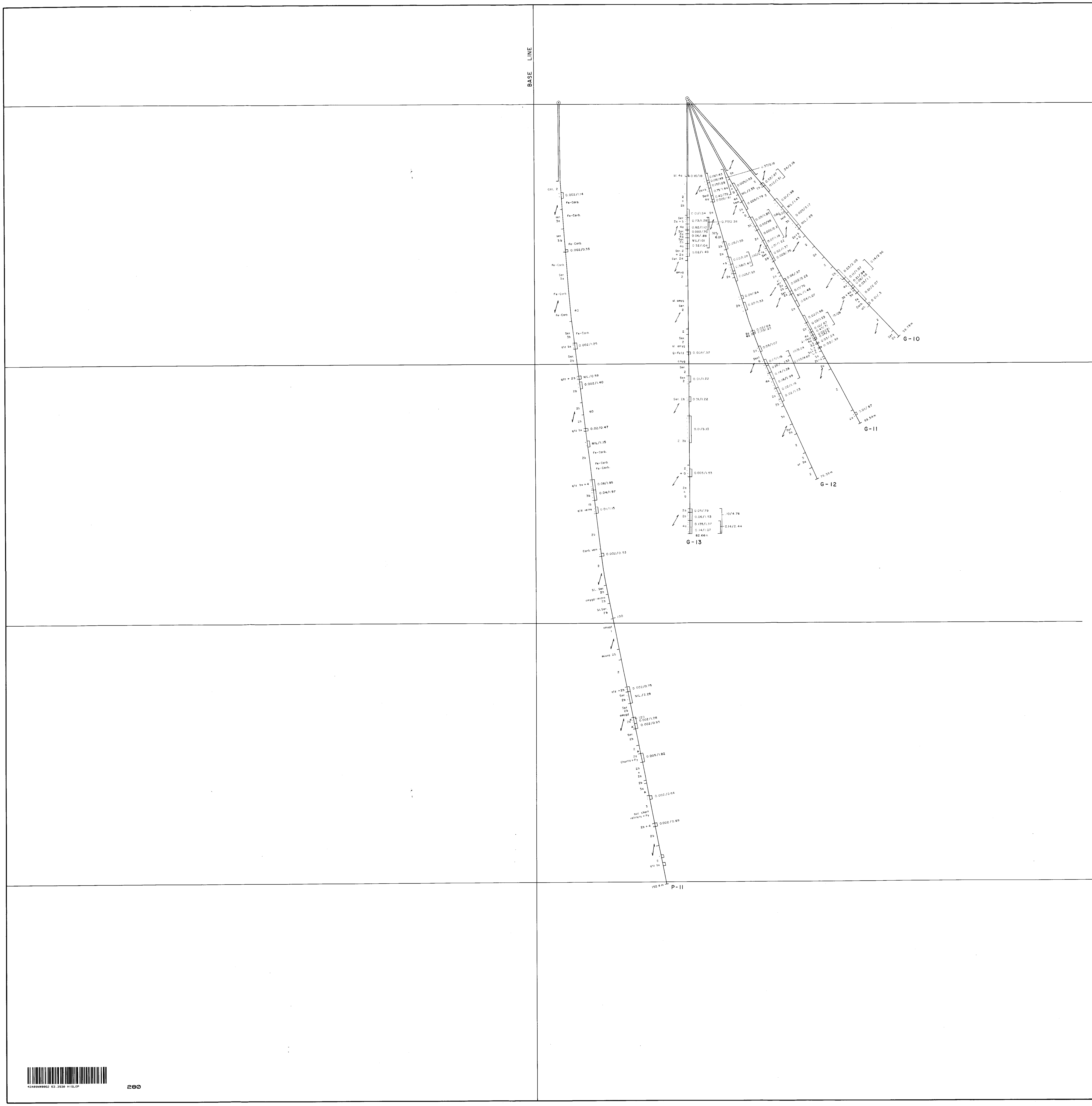
PANCONTINENTAL MINING (CANADA) LTD.
TORONTO - ONTARIO
PANCON

HISLOP TOWNSHIP, ONTARIO

# SECTION 948.2 N
# (37 +20 N.W.)

| Scale | Date | Geology | Compiled | Drawn | Drawing No. |
|---|---|---|---|---|---|
| 1:250 | Jan./81 | N.N.,W.F.D. | N.N.,W.F.D. | T.W.G. | PC-18-04-81 |

OM 9 - PE 7 - C - 80



## LEGEND

| | |
|---|---|
| 10 | Altered Ultramafic |
| 9 | Diabase |
| 8 | Syenitic Hybrid rock, Feldspathized rock |
| 7 | Aplite |
| 5 | Argillite, Mudstone (pelite) |
| 4 | Chert, Chert Breccia, Banded Chert, 4a, 4b, 4c |
| 3 | Rhyolite, Rhyolite Tuff & Breccia, 3a & 3b |
| 2 | Dacite, Dacite Tuff & Breccia, 2a & 2b |
| 1 | Andesite, Andesite Tuff & Breccia, Ia & Ib |

## ROCK TYPES

| | |
|---|---|
| ⋯ | Pyrite Dissemination |
| ⟶ | Foliation |
| 0.10/1.31 | Au Assay/metre |
| Q | Quartz |
| Ser. | Sericitic |
| Chl | Chlorite |
| Marip | Mariposite |
| Sil | Siliceous |
| Δ (Bx) | Breccia |
| Feld | Feldspathized |
| L.C. | Lost Core |
| Graph | Graphitic |
| Py | Pyrite |
| Fe-carb | Iron-Carbonate Weathering |
| Amyg | Amygdaloidal |
| hem | Hematitic |

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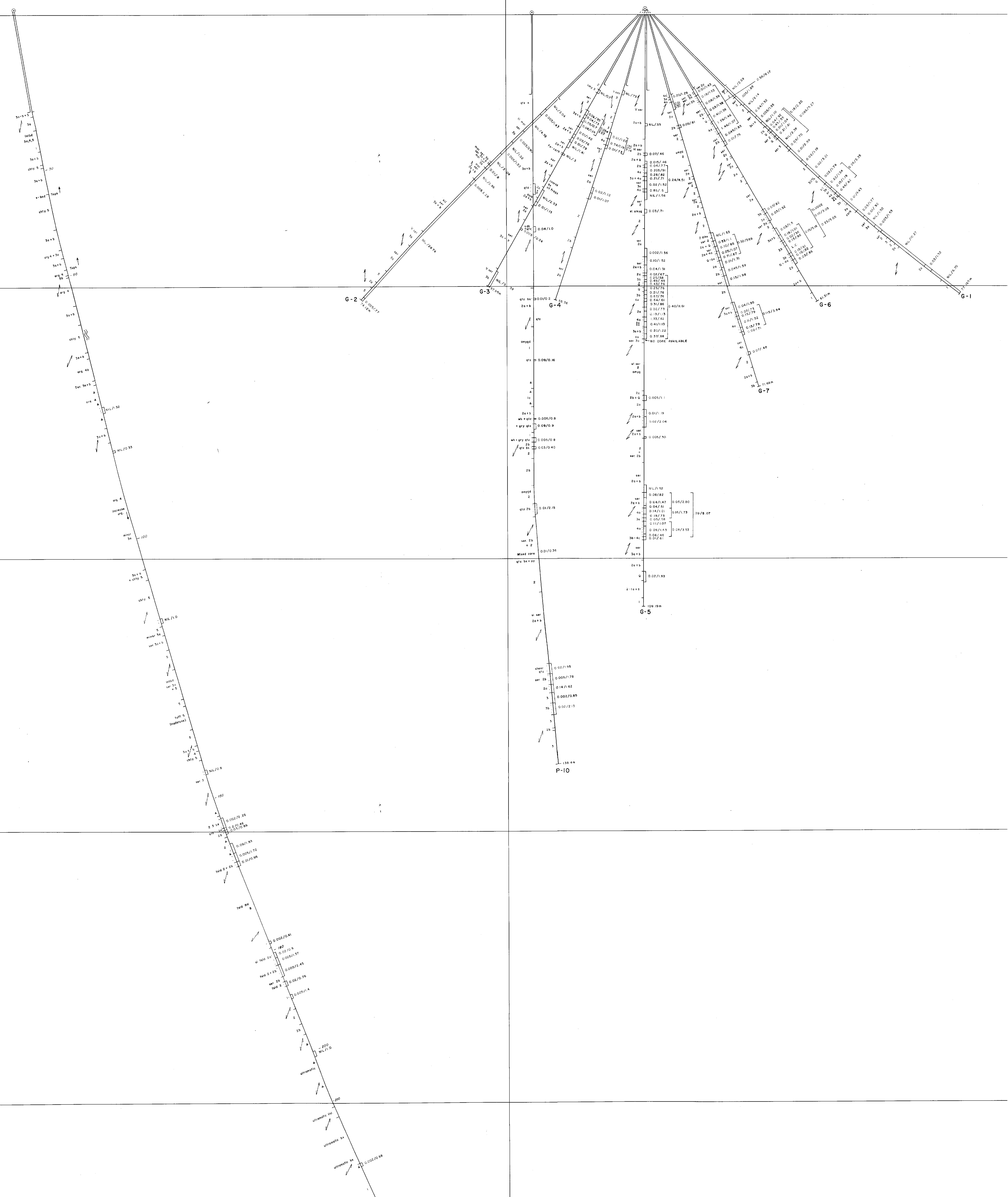
PANCONTINENTAL MINING (CANADA) LTD.
TORONTO – ONTARIO

HISLOP TOWNSHIP, ONTARIO

## SECTION 955.8 N
## (37 + 45 N.W.)

| Scale | Date | Geology | Compiled | Drawn | Drawing No. |
|---|---|---|---|---|---|
| 1:250 | Jan./81 | N.N., W.F.D. | N.N., W.F.D. | T.W.G. | PC-18-05-81 |

OM9-PE7-C-80


G-2
74.12m
G-3
57.95m
G-4
55.36
G-5
109.19m
NO CORE AVAILABLE
G-6
61.31m
G-7
71.68m
G-1
77.165m
SLUDGE
P-10
135.44
P-14
274.3m

290

NOTES:
Contour Interval: 100 Gammas
Instrument: Scintrex M.P. 2

63.3930

**PANCONTINENTAL MINING (CANADA) LTD.**
TORONTO - ONTARIO
PANCON

HISLOP TOWNSHIP, ONTARIO

## GROUND MAGNETOMETER SURVEY

| Scale | Date | Geology | Compiled | Drawn | Drawing No |
|---|---|---|---|---|---|
| 1:1500 | Jan./81 |  | N.N. | T.W.G. | PC-18-14-81 |

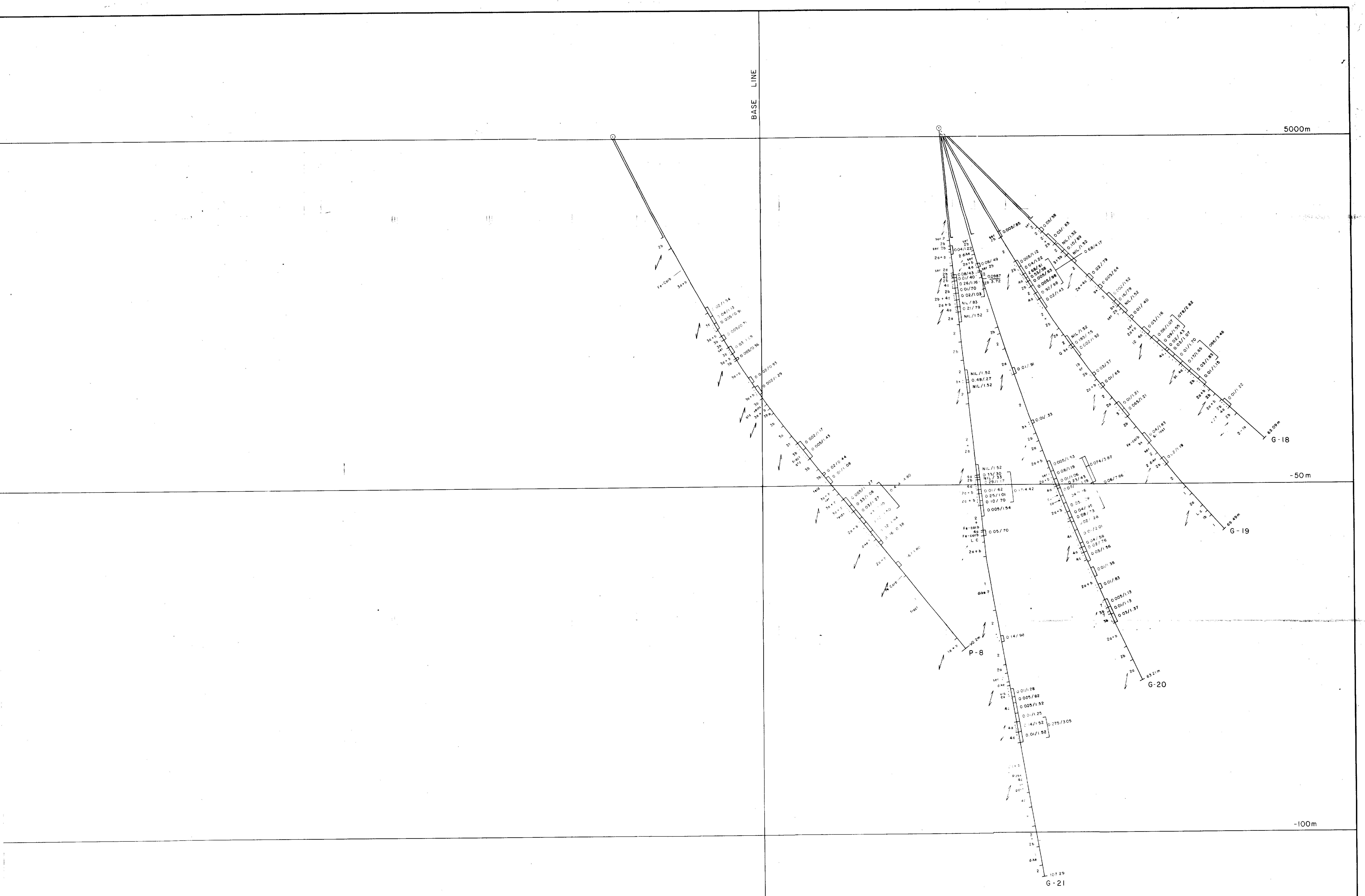
OM9-PE7-C-80

300

NOTE:

| PARTNERS | Equity % |
|---|---|
| Pancontinental Mining (Canada) Ltd. | 41.66% |
| Gunnex Ltd. | 58.34% |

Subject to Joint Venture Agreement



-200m

## LEGEND

| | |
|---|---|
| 10 | Altered Ultramafic |
| 9 | Diabase |
| 8 | Syenitic Hybrid rock, Feldspathized rock |
| 7 | Aplite |
| 5 | Argillite, Mudstone (pelite) |
| 4 | Chert, Chert Breccia, Banded Chert, 4a, 4b, 4c |
| 3 | Rhyolite, Rhyolite Tuff & Breccia, 3a & 3b |
| 2 | Dacite, Dacite Tuff & Breccia, 2a & 2b |
| 1 | Andesite, Andesite Tuff & Breccia, 1a & 1b |

## ROCK TYPES

| | |
|---|---|
| --- | Pyrite Dissemination |
| ⟵ | Foliation |
| 0.10/1.31 | Au Assay/metre |
| Q | Quartz |
| Ser | Sericitic |
| Ch | Chlorite |
| Marip | Mariposite |
| Sil | Siliceous |
| Δ (Bx) | Breccia |
| Feld | Feldspathized |
| L.C. | Lost Core |
| Graph | Graphitic |
| Py | Pyrite |
| Fe carb | Iron-Carbonate Weathering |
| Amyg | Amygdaloidal |
| hem | Hematitic |

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PANCONTINENTAL MINING (CANADA) LTD.
TORONTO - ONTARIO

HISLOP TOWNSHIP, ONTARIO

SECTION 978.7 N

| Scale | Date | Geology | Compiled | Drawn | Drawing No. |
|---|---|---|---|---|---|
| 1:250 | July/81 | N.N., D.W. | N.N., D.W. | T.W.G. | PC-18-31-81 |

OM9-PE7-C-80

## LEGEND

| | |
|---|---|
| 10 | Altered Ultramafic |
| 9 | Diabase |
| 8 | Syenitic Hybrid rock, Feldspathized rock |
| 7 | Aplite |
| 5 | Argillite, Mudstone (pelite) |
| 4 | Chert, Chert Breccia, Banded Chert, 4a, 4b, 4c |
| 3 | Rhyolite, Rhyolite Tuff & Breccia, 3a & 3b |
| 2 | Dacite, Dacite Tuff & Breccia, 2a & 2b |
| 1 | Andesite, Andesite Tuff & Breccia, 1a & 1b |

## ROCK TYPES

| | |
|---|---|
| | Pyrite Dissemination |
| | Foliation |
| 0.10/1.51 | Au Assay/metre |
| Q | Quartz |
| Ser | Sericitic |
| Chl | Chlorite |
| Mario | Mariposite |
| Sil | Siliceous |
| a (Bx) | Breccia |
| Feld | Feldspathized |
| L.C. | Lost Core |
| Graph | Graphitic |
| Py | Pyrite |
| Fe-carb | Iron-Carbonate Weathering |
| Amyg | Amygdaloidal |
| hem | Hematitic |

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PANCONTINENTAL MINING (CANADA) LIMITED
TORONTO - ONTARIO

HISLOP TOWNSHIP, ONTARIO

SECTION 963.4 N
(37 + 70 N.W.)

| Scale | Date | Geology | Compiled | Drawn | Drawing No |
|---|---|---|---|---|---|
| 1:250 | Jan./81 | N.N., W.F.D. | NN., W.F.D. | T.W.G. | PC-18-06-81 |

OM9-PE7-C-80

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PANCONTINENTAL MINING (CANADA) LTD.
TORONTO - ONTARIO

## HISLOP TOWNSHIP, ONTARIO

# REGIONAL COMPILATION GEOLOGY

| Scale | Date | Geology | Compiled | Drawn | Drawing No. |
|---|---|---|---|---|---|
| 1:5000 | Mar./81 | N.N. | N.N. | T.W.G. | PC-18-15-81 |

OM9-PE7-C-80