10/88

GEOLOGICAL, GEOCHEMICAL AND GEOPHYSICAL ASSESSMENT REPORT ON THE MURTON CLAIM GROUP PORT RENFREW AREA VICTORIA MINING DIVISION

Latitude: 48°33'~~00~~24"N
Longitude: 124°22'~~00~~30"W
NTS 92-C/9W

FOR

Owner/Operator: Pan Island Resource Corp.
Ste. 250 - 1040 West Georgia St.
Vancouver, B.C.
V6E 4H2

BY

Robert R. Arnold, M.Sc., P.Geol., FGAC
and Ken L. Karchmar, B.Sc.,
Hi-Tec Resource Management Ltd.
Ste. 1500 - 609 Granville St.
Vancouver, B.C..
V7Y 1G5

September 10, 1987

HI-TEC RESOURCE MANAGEMENT LIMITED

TABLE OF CONTENTS

LIST OF APPENDICES

LIST OF FIGURES

SUMMARY

Pursuant to a request by the Directors of Pan Island Resource Corp., a combined geological, geochemical and geophysical program was carried out on the Murton Claim Group. The writers researched the literature pertaining to the area and examined the property during the month of July 1987.

The property is located approximately 10 kilometers east of Port Renfrew, southern Vancouver Island, south of the San Juan River. A good logging road network provides access to most of the claim area.

Placer gold was first discovered in the southern Vancouver Island area in the 1860's and recent exploration in the Jordan River and Valentine Creek areas showed that placer gold was related to gold bearing quartz veins occurring within the metasediments of Valentine Mountain, on the Beau-Pre property. Previous work along the south side of the San Juan River has disclosed an extensive "iron formation" unit with cobalt, nickel and vanadium anomalous values.

The geology underlying the property consists mainly of metamorphosed, folded and faulted sediments of the Triassic Leech River Formation, which have been intruded by east-west trending granodioritic and felsic dykes. The sedimentary sequence is dominated by slate, phyllite, argillite and greywacke.

The geochemical rock chip sampling program showed very encouraging gold values (up to 630 ppb Au) and several anomalous silver concentrations were also detected. The base metal content of the property appears to be relatively weak.

In the central grid area, the geophysical program noted the presence of several east-west trending conductive zones interpreted as lithologic changes within the metasediment assemblage.

In the southern surveyed area, a change in the direction of the dipolar magnetic anomalies as well as of the VLF-EM conductors may reflect the presence of a dyke swarms and/or a major north-westerly trending sheared zone.

In order to fully evaluate the mineral and economic potential of the Murton Claim Group and to delineate the source and nature of the geophysical and geochemical anomalies established during the present program additional exploration work is recommended and should consist of:

- Detailed geological mapping and rock chip sampling in the areas not covered by the present exploration program
- Trenching and channel sampling of the dykes swarm located in the southern Murton claim area
- Additional ground geophysical survey in the areas not covered by the 1987 survey.

Dependent upon positive results of the above exploration program and upon a review of the data, a drilling program should be established to define the geometry and grade characteristics of any identified mineralization.

1.0 INTRODUCTION

1.1 Objectives

Pursuant to a request by the directors of Pan Island Resource Corp., a geological examination and a limited geochemical rock sampling survey were carried out on the Murton claim group during July 1987. In addition a geophysical program, consisting of detailed VLF-electromagnetic and detailed magnetometer surveys, was performed on a 15 km cut grid over the eastern part of the Murton mineral claim. The purpose of the 1987 exploration program was to test the precious metal and/or base metal potential of selected areas of the property. This report is based on the results of the present surveys, on the previous surveys and on the available literature pertaining to the area.

1.2 Location and Access

Province:	British Columbia
Area:	Port Renfrew, southern Vancouver Island
Mining Division:	Victoria
NTS:	92-C/9
Longitude:	124°22'00" West
Latitude:	48°33'00" North
Claim Names:	Murton, Yauh, Pachena, Kuitsche, Park, Nine and Ren
Disposition Holders:	Pan Island Resource Corp.

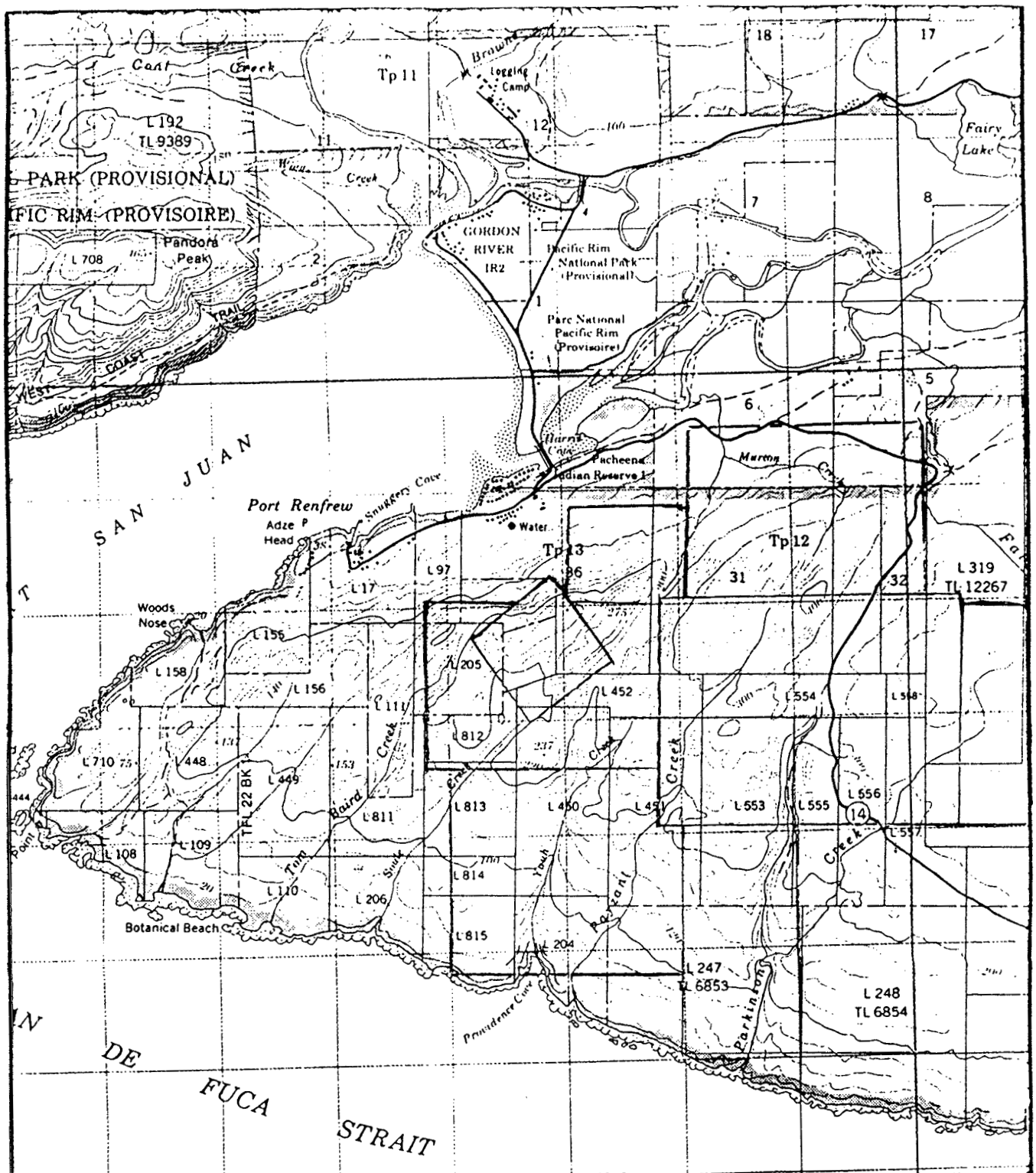
The property is located approximately 10 kilometers east of Port Renfrew, southern Vancouver Island, south of the San Juan River. The claims are accessed by 4 wheel-drive vehicle from the town of Port Renfew along a good logging road network, recently extended into the southern height-

PAN ISLAND RESOURCE CORP.

MURTON CLAIM GROUP

LOCATION MAP

HI-TEC RESOURCE MANAGEMENT LIMITED	DWN. BY:	DATE: AUG 87
	CHK. BY:	FIGURE NO. 1
	SCALE:	



Interim corrections 1982.

PAN ISLAND RESOURCE CORP.

MURTON CLAIM GROUP

TOPOGRAPHICAL MAP

HI-TEC RESOURCE MANAGEMENT LIMITED

DWN. BY	DATE AUG 87
CHK. BY	FIGURE NO. 2
SCALE	

of-land on the Murton Claim. Port Renfrew is about 100 road kilometers west of Victoria.

1.3 Property and Ownership

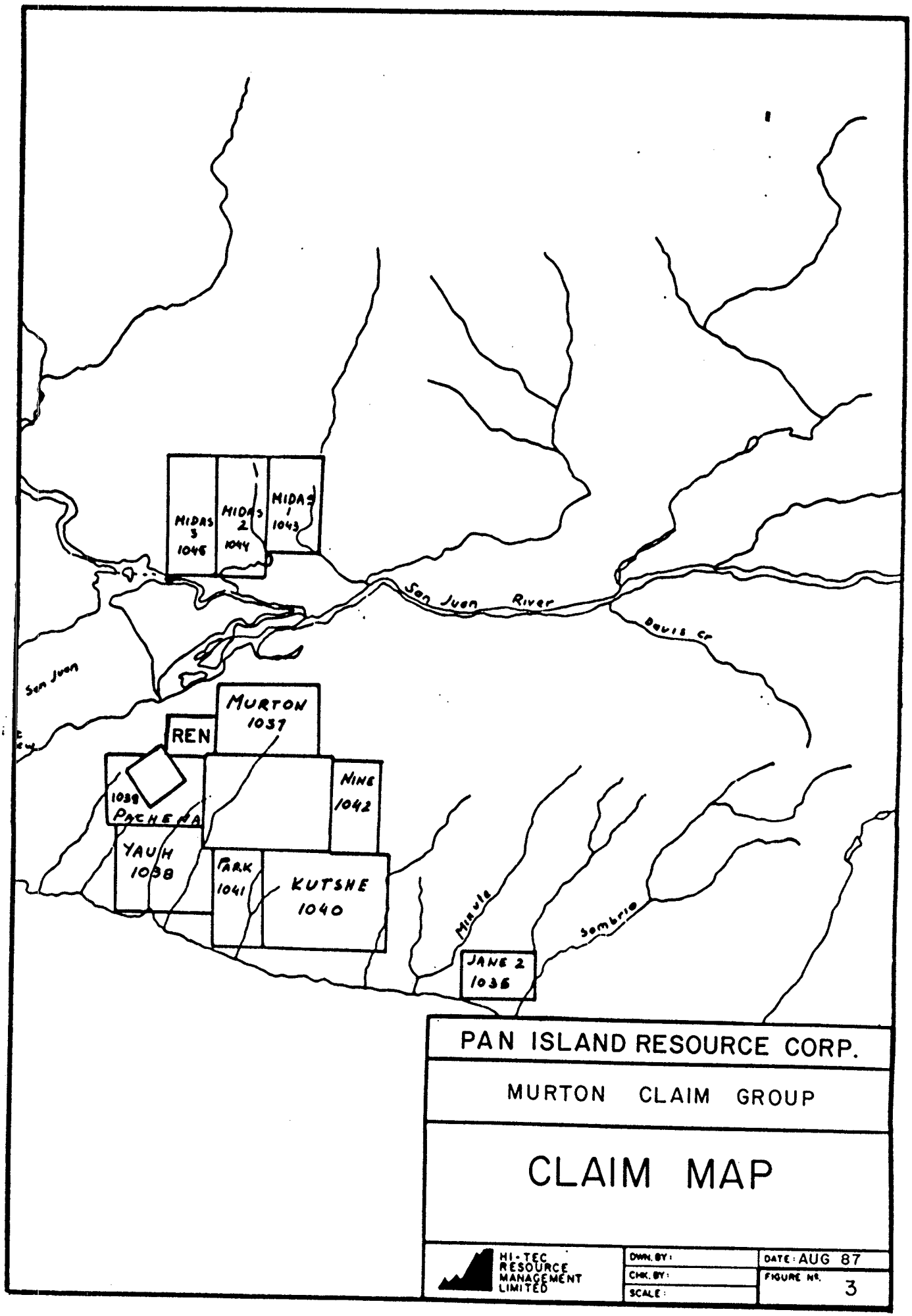
The property is recorded as follows:

Claim Name	Record No.	Units	Record Date
Murton	1037 (7)	12	July 19, 1983
Yauh	1038 (7)	16	July 19, 1983
Pachena	1039 (7)	12	July 19, 1983
Kuitshe	1040 (7)	20	July 19, 1983
Park	1041 (7)	8	July 19, 1983
Nine	1042 (7)	8	July 19, 1983
Ren	1726 (7)	4	July 8, 1986
	Total Units:	**80**	

The property consists of nine contiguous mineral claims, located in the Port Renfrew area, southern Vancouver Island. All of the claims are 100% owned by Pan Island Resource Corp.

1.4 Operations and Communications

The geophysical program, the geochemical examination and the geochemical survey were carried out during the month of July 1987. The field crew was based in Port Renfrew, southern Vancouver Island, B.C. and commuted daily to the property. Telephone communications were maintained with the office in Vancouver, B.C. on a regular basis. Transportation was provided by means of a 4 wheel-drive pick-up truck.


MIDAS 3 1046
MIDAS 2 1044
MIDAS 1 1043
San Juan River
Davis Cr
San Juan
MURTON 1037
REN
1039
PACHENA
NINE 1042
YAUH 1038
PARK 1041
KUTSHE 1040
Miguel
Sombrio
JANE 2 1036
PAN ISLAND RESOURCE CORP.
MURTON CLAIM GROUP
CLAIM MAP
HI-TEC RESOURCE MANAGEMENT LIMITED
DWN. BY:
CHK. BY:
SCALE:
DATE: AUG 87
FIGURE NO. 3

1.5 Physiography

The claim group, located between elevations 0 and 400m (0 and 1,312 feet) above sea level is situated on generally steeply sloping terrain.

Vegetation ranges from extremely heavy in second growth forest to light underbrush in areas of virgin timber. The property is timbered with cedar, spruce and is host to several logged areas.

2.0 HISTORY AND PREVIOUS WORK

Prospecting in 1864 on southern Vancouver Island began with the discovery of rich placer gold on the Leech River and other gravel creeks. Later, gold was discovered in quartz veins localized within metasediments above Loss Creek, Clapp Creek, Old Wolf Creek and other small unnamed creeks that cut across rocks of the San Juan Ridge.

Sporadic exploration activity led to the 1976 discovery of the Beau-Pre property of the "A" vein, a narrow quartz vein with visible (bright yellow) gold similar to the placer gold. In 1982 free gold in quartz was discovered by Ted Archibald on the Ox property located east of Port Renfrew, on the south side of the San Juan River.

Previous work along the south side of the San Juan River has disclosed an extensive "iron formation" unit with anomalous values of cobalt, nickel and vanadium. Base metal mineralization with some gold and silver content has been reported just north of the San Juan River.

Previous work on the Murton Claim includes limited soil and stream sediments geochemical surveys in 1983, and an air-

borne magnetic survey flown in 1983. Extensive rock, silt, pan and soil geochemistry with limited geological mapping conducted in 1986 revealed anomalous gold and arsenic values.

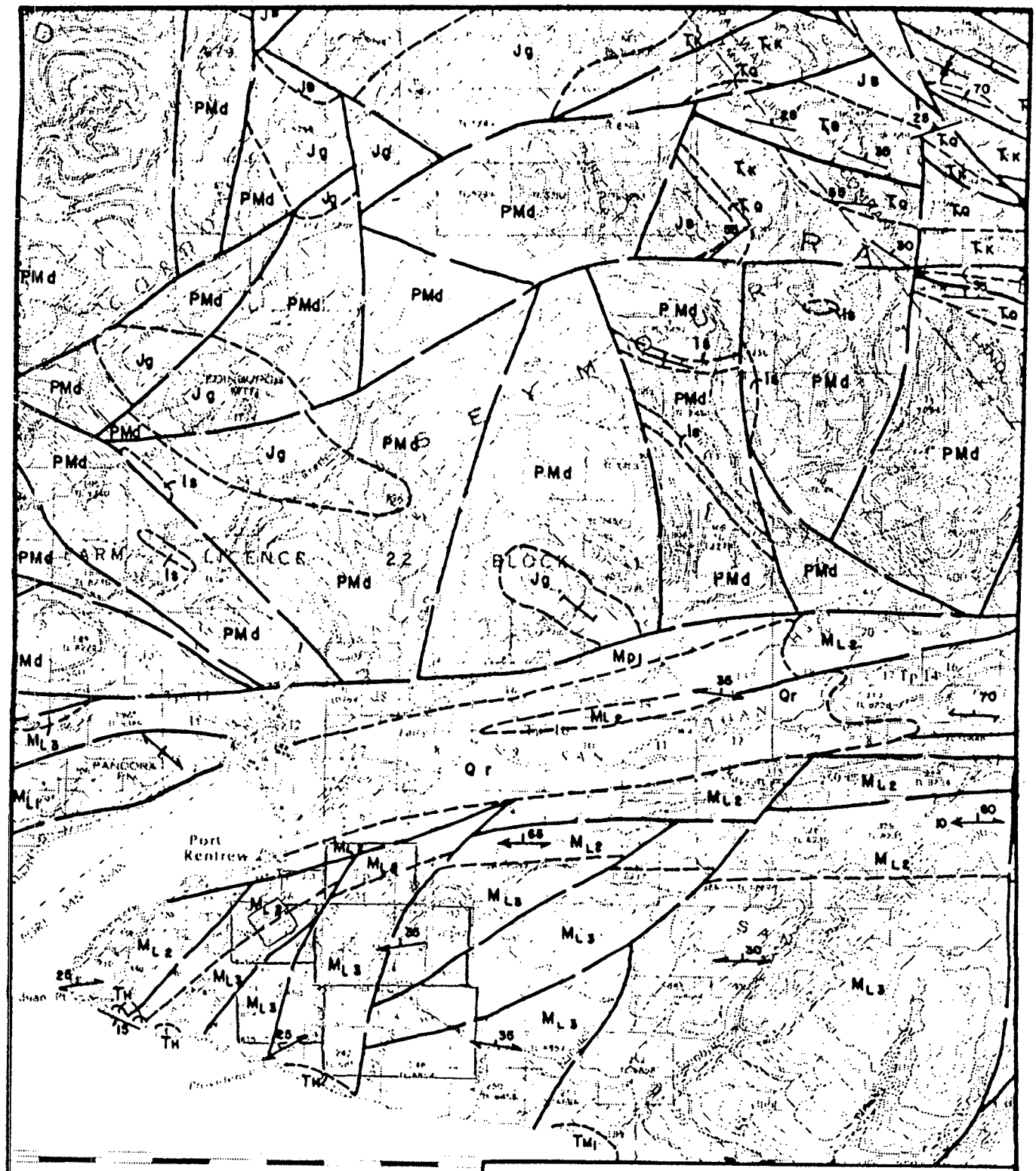
3.0 GEOLOGY

3.1 Regional Geology (see Figure 4)

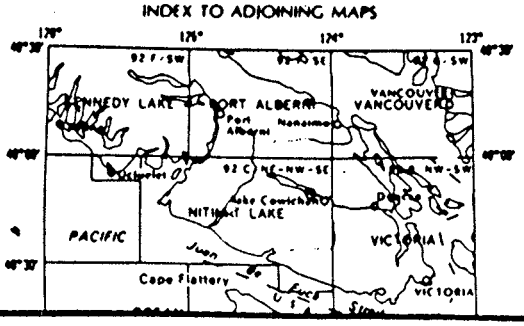
The southwest part of Vancouver Island is underlain by the Leech River Formation which is composed of folded volcanic and sedimentary units altered by regional metamorphism and cut by scattered swarms of Tertiary intrusives. Rocks forming the Leech River formation are dominated by thick sequences of metasandstone with intercalated metapelites, quartzites, metasandstone, iron formation and minor limestone. This assemblage has been folded by compressive forces into relatively simple, large open, easterly plunging folds. The fold geometry is controlled by the competent thick metasandstone units which express cylindrical fold geometry.

The Leech River Formation is in sharp contact with the Westcoast Complex to the west, Mesozoic and older Island Intrusions to the north and Metchosin Volcanics and Sooke Intrusions to the south.

The rocks of the Leech River Formation are considered to be the oldest on Vancouver Island (Dawson 1887, Clapp 1917). They are highly faulted and sheared, and in many places metamorphosed to schist. Metamorphic grades increase from phyllite in the north to garnet-biotite schist with andalusite porphyroblasts near Leech River Fault in the south. Rocks forming the Leech River Formation have undergone two well defined but overlapping periods of metamorphism followed by Eocene intrusion along the strong east-



INDEX TO ADJOINING MAPS



PAN ISLAND RESOURCE CORP.

MURTON CLAIM GROUP

REGIONAL GEOLOGY

HI-TEC RESOURCE MANAGEMENT LIMITED	DWN BY	DATE AUG 87
	CHK. BY	FIGURE NO. 4
	SCALE	

LEGEND

TERTIARY

EOCENE AND OLIGOCENE

TH: Hesquiat Formation:
siltstone, shale, sandstone, conglomerate.

EOCENE (AND OLDER ?)

TM_1-TM_2: Metchosin Volcanics:
basaltic lava, pillow basalt, breccia, tuff, schistose, metavolcanic rock.

TRIASSIC TO CRETACEOUS

LEECH RIVER FORMATION

ML_3: Metagreywacke-schist unit:
metagreywacke, meta-arkose, quartz-feldspar-(garnet)-biotite schist.

ML_2: Argillite-Metagreywacke unit:
thinly bedded greywacke and argillite, slate, phyllite, quartz-biotite schist.

west fold trends. The combination of regional metamorphism and late intrusive activity has culminated in upper amphibolite grade mineral assemblages (Grove, 1985).

The Leech River Formation is exposed in a belt 2 to 12 km wide between San Juan and Leech River Faults (Figure 4) and has regional east-west strike. The east end of the block which includes both metavolcanics and metasediments forms a large gently easterly plunging antiform (Fairchild, 1979).

There are numerous gold occurrences in the region. Most common is free gold in fracture controlled quartz veins associated with the high temperature mineral assemblage tourmaline, hornblende, calcite and biotite-magnetite-epidote. Gold mineralization associated with arsenopyrite in narrow diorite and aplite dikes was discovered on the OX property in 1982. Base metal mineralization has also been found just north of the San Juan River in an area of geological complexity comprising Paleozoic and younger country rocks and Mesozoic intrusives. Styles of mineralization include contact, metamorphic and stratabound deposits of pyrite, magnetite and chalcopyrite with some gold and silver values. In addition to the gold and base metal potential of the Leech River Formation east of Port Renfrew, an extensive "iron formation" unit has been discovered with significant cobalt, nickel and vanadium content.

3.2 Property Geology

The Murton and Ren claims are underlain by metamorphosed, folded and faulted sedimentary rocks of the Triassic Leech River Formation. These rocks have been intruded by east-west trending granodioritic and felsic assemblages of low grade (greenschist) metamorphic grade. The resulting sequence is dominated by slate, carbonaceous slate, and

graphitic phyllite. Abundant quartzitic intercalations and interbeds of argillite and metagreywacke, slate and phyllite units exhibit evidence of faulting, fracturing, shearing, emplacement of quartz veins and veinlets and intrusion by dykes and dyke swarms. Metagreywacke occurs in one to two meter thick, highly competent units which exhibit multiple stage fracturing and emplacement of quartz veins and veinlets, often hosting sulfide mineralization. Granodiorite dykes are buff to light grey in colour and weather to a distinctive white hue. The dykes are one to two meters in thickness, with the exception of a single, large (20 meter) granodiorite dyke located in the southeast corner of the Murton claim. They are occasionally fractured, containing quartz veins and veinlets hosting visible sulfides. Mapping in the southeast corner of the Murton claim revealed an east-west trending granodiorite dyke swarm intruding slates and phyllites.

The Ren claim is underlain by a similar assemblage, heavily dominated by slate and phyllite, and hosting fewer dykes. Lacking the visible quartz and mafics of the Murton claim dykes, the Ren claim dykes are more felsic in nature.

Structurally, the rocks trend east-west and dip steeply to the north. The metamorphic grade is low (greenschist), except where contact metamorphism has occurred in close proximity to intrusive bodies. The rocks are heavily faulted, folded and sheared and have been further deformed by the emplacement of quartz vein systems, granodiorite, and felsic dykes.

3.3 Lithology

Argillite, slate, phyllite (Unit 1)

The most common group of rocks on the property is a pelitic to semi-pelitic metasedimentary package of slates and phyllites with minor intercalated argillites and quartz stringers. Slates are dark grey to black, highly foliated with abundant quartz stringers and veinlets. The phyllites are of graphite to talc-chlorite composition, heavily foliated, with abundant intercalated quartz stringers and quartz veinlets. Argillites occur as small interbedded units lacking in foliation. All units are highly deformed and faulted and in places exhibit micro-folding.

Metagreywacke (Unit 2)

Metagreywacke occurs as medium-grey, fine grained, quartzose, argillitic beds in one to three meter thick interbeds. They are highly competent and exhibit two stages of fracturing and emplacement of sulfide bearing quartz veins and veinlets.

Granodiorite, quartz-diorite (Unit 3)

Intrusive dykes occur as one to three meter thick units, singly and in swarms. They are phaneritic with a "salt and pepper" appearance and weather to a uniform white colour. Composition consists of feldspar, hornblende, minor biotite, sericite, chlorite, and quartz varying from abundant to minor amounts. Fracturing and emplacement of sulfide bearing quartz veins and veinlets is common.

Felsic dykes (Unit 4)

Similar in composition to unit 3, these dykes lack the visible quartz component. They are phaneritic, light to medium grey in colour, containing feldspar, hornblende, minor biotite, chlorite and sericite. This unit lacks the well developed quartz veins and veinlets present in unit 3.

3.4 Mineralization

Sulfide mineralization occurs within the felsic and granodiorite dykes, within, and at the contact of quartz veins and the dykes, and within, and at the contact of quartz veins cutting through competent metagreywacke units. Pyrite and chalcopyrite dykes and in quartz veins within the dykes. Quartz veins in metagreywacke often carry abundant pyrite, chalcopyrite and occasionally galena.

4.0 GEOCHEMISTRY

The geochemical sampling program consisted primarily of rock chip sampling. A total of 73 rock samples were collected on selected areas of the Pan Island Resource Corp. property during the 1987 field season. A recently expanded logging road network allowed the sampling of previously inaccessible rock units. All of the samples were submitted to Min-En Laboratories Ltd., in North Vancouver, British Columbia. Gold was determined by the Fire Assay (F.A.) method and silver, arsenic, copper, lead, antimony and zinc were analyzed by the Induced Coupled Plasma (ICP) method.

Analytical procedures are reported in Appendix III and analytical data as well as sample descriptions can be found in Appendix IV-A and Appendix IV-B respectively.

Statistical treatment of data was possible for each analyzed element. Statistical results and histograms, correlation coefficients, and cumulative probability plots are listed in Appendix V-A to Appendix V-C respectively.

4.1 Rock Chip Sampling Survey

A total of 73 rock chip samples were collected within the surveyed area. Samples were taken mainly from quartz veins in dykes and metasediments, from dykes with visible mineralization and from contact zones between dykes and host rocks.

Results for each analyzed element are discussed below:

i) Gold: four samples (49, 41, 14, 32) show anomalous gold values between 100 ppb and 630 ppb. In addition, three samples have gold values of 70 ppb. The correlation coefficients show that gold and arsenic have a good affinity in the area.

ii) Silver: five samples present values in anomalous concentration (1.8 ppm to 6.4 ppm). Silver shows a moderate correlation with the lead and antimony concentrations.

iii) Arsenic: eleven samples show arsenic values comprise between 135 ppm and 5025 ppm.

iv) Copper: values for copper were relatively low, but for sample 63 (258 ppm). Correlation coefficients show a weak affinity with zinc.

v) Lead: very weak lead values were detected, the best lead value being 30 ppb.

vi) Zinc: twelve samples present values comprise between 105 ppm and 156 ppm. Zinc shows a weak correlation with copper, lead and antimony.

vii) Antimony: only weak values were detected for this element, the best value being 16 ppm (sample 23).

5.0 GEOPHYSICS

Detailed very low frequency electromagnetic and Proton Precession Magnetometer surveys were carried out on a 14.65 kilometer grid established over the eastern part of the Murton mineral claim. North-south survey lines were cut at 100 meter line separations from an east-west baseline. Stations were established at intervals of 25 meters. The field survey was carried out by Hi-Tec Resource Management Ltd. personnel.

5.1 VLF-EM Survey

Survey Procedures

The VLF-EM surveys were conducted with a Scintrex VLF-4 Model, Serial No. 705295. The following transmitter stations were used during the survey:

- VLF-EM #2: NSS, Annapolis, Maryland, U.S.A. at a frequency of 21.4 kilohertz and a radiated power of 400 kilowatts.
- VLF-EM #3: NLK, Seattle, Washington, U.S.A. at a frequency of 24.8 kilohertz and a radiated power of 125 kilowatts.

Both dip angle and horizontal field strength measurements, referred respectively as in-phase and quadrature on the maps, were recorded at 25 meter intervals. Dip angle

measurements were plotted in profile plot forms (Figures 8 and 10) and then filtered using the Fraser Filter Method to permit presentation of data in contour map form (Figures 9 and 11). This method is well known and fully described in the literature. The instrument specifications are described in Appendix VI.

Survey Interpretation

Several strong to weak conductive zones have been recorded within the surveyed area. The VLF-EM conductors generally trend east-west in the central grid area and are interpreted to reflect lithologic changes, folding and/or shearing within the metasedimentary rocks assemblage.

The northernmost grid area shows some discrepancy in the VLF-EM data due to the presence of a powerline following the main highway.

In the southern grid area the conductive zones show a direction's shift as well as a strength's change. This may be attributable to the presence of dyke swarm and/or a northwest-southeast trending fault.

5.2 Magnetometer Survey

Survey Procedures

The magnetic survey was conducted with a Scintrex MP-3 Proton Magnetometer, Serial No. 705295. A base station, Serial No. 8403205, was placed on Line 3+80E at 0+10S. A total of 13.75 line kilometers of magnetic field strength readings are presented in contour map form (Figure 12). A base value of 55,500 gammas was used for plotting the field strength and data was contoured at 50 gammas interval.

Data was collected at 25 meter intervals along the survey lines. All survey data was tied to a base station to allow for correction of diurnal drift in accordance to standard practice. This method is well known and fully described in the literature. The instrument specifications are described in Appendix VI.

Survey Interpretation

The total field magnetic results show several generally east-west trending dipolar magnetic anomalies in the central and northern grid area. This may be interpreted as lithologic changes within the metasedimentary rock units.

In the southern grid portion, the magnetic trend is shifted to the northwest-southeast and this shift may reflect the presence of a dyke swarm and/or a major sheared zone.

6.0 CONCLUSIONS AND RECOMMENDATIONS

Placer gold was first discovered in the southern Vancouver Island area in the 1860's and recent exploration in the Jordan River and Valentine Creek areas showed that placer gold was related to gold bearing quartz veins occurring within the metasediments of Valentine Mountain, on the Beau-Pre property. Previous work along the south side of the San Juan River has disclosed an extensive "iron formation" unit with cobalt, nickel, and vanadium anomalous values and located base metal mineralization with some gold and silver content just north of the San Juan River.

The geology underlying the property consists mainly of metamorphosed, folded and faulted sediments of the Triassic Leech River Formation, which have been intruded by east-west trending granodioritic and felsic dykes. The sedimentary sequence is dominated by slate, phyllite, argillite

and greywacke. Structurally the rock units trend east-west and dip steeply to the north. The metamorphic grade is low (greenschist).

The geochemical rock chip sampling program recorded very encouraging gold values (up to 630 ppb Au in sample 87M-49) and several anomalous silver concentrations were also detected. Arsenic shows a strong correlation with the gold and this element can be used as a pathfinder. The base metal content in the samples is overall relatively weak.

The geophysical program, consisting of VLF-EM and Magnetometer surveys, noted the presence of several east-west trending conductive zones in the central grid areas which may be interpreted as lithologic changes within the metasedimentary rock units. In the southern surveyed area a change in the direction of the dipolar magnetic anomalies as well as of the VLF conductors may reflect the presence of a major northwest-southeast trending sheared zone and/or a granodioritic dykes swarm.

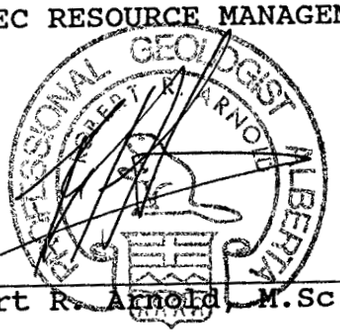
In order to fully evaluate the mineral and economic potential of the Murton Claim Group and to delineate the source and nature of the geophysical and geochemical anomalies established during the present program additional exploration work is recommended and should consist of:

- Detailed geological mapping and rock chip sampling in the areas not covered by the present exploration program
- Trenching and channel sampling of the dykes swarm located in the southern Murton claim area
- Additional ground geophysical surveys (VLF-EM and Magnetometer) in areas not covered by the 1987 survey.

Dependent upon positive results of the above exploration program and upon a review of the data, a drilling program should be established to define the geometry and grade characteristics of any identified mineralization.

Respectfully submitted,

HI-TEC RESOURCE MANAGEMENT LTD.



Robert R. Arnold, M.Sc., P.Geol., FGAC,

Ken L. Karchmar, B.Sc.

September 10, 1987

APPENDIX I

References

REFERENCES

Clapp, C.H. (1917). Sooke and Duncan map areas, Vancouver Island. Canada Dept. of Mines, Geological Survey, Memoir 96, pp. 66-73.

Cowan, D.S. and Fairchild, L.H. (1982). Structure, petrology, and tectonic history of the Leech River complex northwest of Victoria, Vancouver Island. Can. J. Earth Sci. vol 19, pp. 1817-1835.

Grove, E.W. (1985). Geological Report and Work Proposal on the San Juan River Property for Pan Island Resource Corp., February 5, 1985.

Muller, J.E. (1975). Victoria Map-Area, B.C. Geol. Survey, Canada., Paper 75-1, Part A, p. 21-26.

Muller, J.E. (1982). Geology of Nitimat Lake Map Area, Geological Survey of Canada, Open File 821.

APPENDIX II

Statement of Qualifications

STATEMENT OF QUALIFICATIONS

I, ROBERT R. ARNOLD, of the City of North Vancouver, Province of British Columbia, hereby certify that:

1. I am a geologist employed by Hi-Tec Resource Management Ltd. My office is at 1500 - 609 Granville Street, Vancouver, British Columbia, Canada, V7Y 1G5.

2. I obtained a Bachelor of Science degree in Geology from the University of Geneva, Switzerland in 1976 and a Master of Science degree in Geological Engineering from the same university in 1978.

3. I am a Registered Professional Geologist, in good standing, of the Association of Professional Engineers, Geologists and Geophysicists of Alberta since 1981.

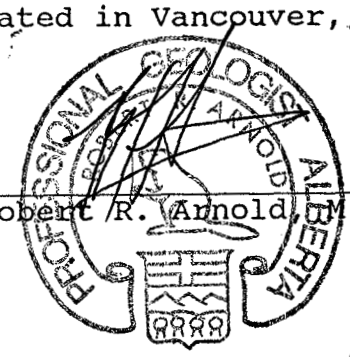
4. I am a Fellow Member of the Geological Association of Canada, in good standing since 1985. I am an associate member of the Mineralogical Association of Canada and of the Society of Economic Geologists.

5. I have been practising my profession as a geologist in Western Europe, West Africa, Southeast Asia and North America since 1978, both permanently since 1978 and seasonally since 1972.

6. I have not received, nor do I expect to receive any interests, direct or indirect, or contingent in the securities or properties of Pan Island Resource Corp. and that I am not an insider of any company having interest in the Murton, Yauh, Pachena, Kuitshe, Park, Nine and Ren mineral claims or any other property in that area.

7. I consent to the use of this report in a Prospectus or Statement of Material Facts for the purpose of a private or public financing.

Dated in Vancouver, this 10th day of September, 1987.



Robert R. Arnold, M.Sc., P.Geol., FGAC

STATEMENT OF QUALIFICATIONS

I, KENNETH L. KARCHMAR, of the City of Vancouver, Province of British Columbia, hereby certify that:

1. I am a geologist employed by Hi-Tec Resource Management Ltd. My office is at 1500-609 Granville Street, Vancouver, British Columbia, Canada V7Y 1G5

2. I obtained a Bachelor of Science degree in Geology at the University of Alberta, at Edmonton, Alberta in 1984.

3. I have been a registered Geologist-in-training, in good standing, of the Association of Professional Engineers, Geologists and Geophysicists of Alberta since 1984.

4. I have been practicing my profession as a geologist in Canada since 1984.

5. I have not received, nor do I expect to receive any interests, direct or indirect, or contingent in the securities or properties of Pan Island Resource Corp. and that I am not an insider of any company having interest in the Murton, Yauh, Pachena, Kuitshe, Park, Nine or Ren mineral claims or any other property in that area.

6. I consent to the use of this report in a Prospectus or Statement of Material Facts for the purpose of a private or public financing.

Ken L. Karchmar, B.Sc.

September 10, 1987

APPENDIX III

Geochemical Preparation and Analytical Procedures

PHONE 980-5814

MIN-EN Laboratories Ltd.

Specialists in Mineral Environments

Corner 15th Street and Bewicke
705 WEST 15TH STREET
NORTH VANCOUVER, B.C.
CANADA V7M 1T2

ANALYTICAL PROCEDURE REPORT FOR ASSESSMENT WORK - 26 ELEMENT ICP

Ag,Al,As,B,Bi,Ca,Cd,Co,Cu,Fe,K,Mg,Mn,Mo,
Na,Ni,P,Pb,Sb,Sr,Th,U,V,Zn

Samples are processed by Min-En Laboratories Ltd., at 705 W. 15th St., North Vancouver Laboratory employing the following procedures.

After drying the samples at 95°C soil and stream sedimint samples are screened by 80 mesh sieve to obtain the minus 80 mesh fraction for analysis. The rock samples are crushed by jaw crusher and pulverized by ceramic plated pulverizer.

1.0 gram of the samples are digested for 6 hours with HNO_3 and $HClO_4$ mixture.

After cooling samples are diluted to standard volume. The solutions are analysed by Computer operated Jarrell Ash 9000ICP. Inductively coupled Plasma Analyser. Reports are formated by routing computer dotline print out.

PHONE: (604) 980-5814 or 988-4524

TELEX: 04-352828

MIN-EN Laboratories Ltd.

Specialists in Mineral Environments

Corner 15th Street and Bewicke
705 WEST 15TH STREET
NORTH VANCOUVER, B.C.
CANADA V7M 1T2

FIRE GOLD GEOCHEMICAL ANALYSIS BY MIN-EN LABORATORIES LTD.

Geochemical samples for Fire Gold processed by Min-En Laboratories Ltd., at 705 W. 15th St., North Vancouver Laboratory employing the following procedures.

After drying the samples at 95°C soil and stream sediment samples are screened by 80 mesh sieve to obtain the minus 80 mesh fraction for analysis. The rock samples are crushed and pulverized by ceramic plated pulverizer.

A suitable sample weight 15.00 or 30.00 grams are fire assay preconcentrated.

After pretreatments the samples are digested with Aqua Regia solution, and after digestion the samples are taken up with 25% HCl to suitable volume.

Further oxidation and treatment of at least 75% of the original sample solutions are made suitable for extraction of gold with Methyl Iso-Butyl Ketone.

With a set of suitable standard solution gold is analysed by Atomic Absorption instruments. The obtained detection limit is 1 ppb.

APPENDIX IV-A

Analytical Data for Rock Samples

MIN-EN LABORATORIES LTD.

Specialists in Mineral Environments

705 West 15th Street North Vancouver, B.C. Canada V7M 1T2

PHONE:(604)980-5814 OR (604)988-4524 TELEX:VIA USA 7601067 UC

Certificate of ASSAY

Company:HI-TEC RESOURCES
Project:
Attention: B.ARNOLD

File:7-863/P1
Date:JULY 28/87
Type:ROCK ASSAY

We hereby certify the following results for samples submitted.

Sample Number	AU G/TONNE	AU OZ/TON
87M 01	.06	0.002
87M 02	.07	0.002
87M 03	.02	0.001
87M 04	.07	0.002
87M 05	.02	0.001
87M 06	.01	0.001
87M 07	.05	0.001
87M 08	.01	0.001
87M 09	.01	0.001
87M 10	.02	0.001
87M 11	.01	0.001
87M 12	.02	0.001
87M 13	.01	0.001
87M 14	.10	0.003
87M 15	.01	0.001
87M 16	.03	0.001
87M 17	.05	0.001
87M 18	.01	0.001
87M 19	.04	0.001
87M 20	.01	0.001
87M 21	.01	0.001
87M 22	.01	0.001
87M 23	.03	0.001
87M 24	.01	0.001
87M 25	.01	0.001
87M 26	.02	0.001
87M 27	.01	0.001
87M 28	.07	0.002
87M 29	.02	0.001
87M 30	.01	0.001

*Certified by*_____

MIN-EN LABORATORIES LTD.

MIN-EN LABORATORIES LTD.

Specialists in Mineral Environments

705 West 15th Street North Vancouver, B.C. Canada V7M 1T2

PHONE:(604)980-5814 OR (604)988-4524 TELEX:VIA USA 7601067 UC

Certificate of ASSAY

Company:HI-TEC RESOURCES
Project:
Attention: B.ARNOLD

File:7-863/P2
Date:JULY 28/87
Type:ROCK ASSAY

We hereby certify the following results for samples submitted.

Sample Number	AU G/TONNE	AU OZ/TON
87M 31	.01	0.001
87M 32	.10	0.003
87M 33	.02	0.001
87M 34F	.01	0.001
87M 35	.02	0.001
87M 36	.01	0.001
87M 37	.01	0.001
87M 38	.01	0.001
87M 39	.01	0.001
87M 40	.04	0.001
87M 41	.15	0.004
87M 42	.04	0.001
87M 43	.02	0.001
87M 44F	.01	0.001
87M 45	.03	0.001
87M 46	.01	0.001
87M 47	.02	0.001
87M 48	.01	0.001
87M 49	.63	0.018
87M 50	.01	0.001
87M 51	.05	0.001
87M 52	.01	0.001
87M 53	.01	0.001
87M 54	.01	0.001
87M 55	.02	0.001
87M 56	.01	0.001
87M 57	.02	0.001
87M 58	.01	0.001
87M 59	.02	0.001
87M 60	.01	0.001

Certified by _____

MIN-EN LABORATORIES LTD.

MIN-EN LABORATORIES LTD.

Specialists in Mineral Environments

705 West 15th Street North Vancouver, B.C. Canada V7M 1T2

PHONE:(604)980-5814 OR (604)988-4524 TELEX:VIA USA 7601067 UC

Certificate of ASSAY

ompany:HI-TEC RESOURCES
roject:
Attention: B.ARNOLD

File:7-863/P3
Date:JULY 28/87
Type:ROCK ASSAY

e hereby certify the following results for samples submitted.

ample umber	AU G/TONNE	AU OZ/TON
7M 61	.01	0.001
7M 62	.02	0.001
87M 63	.01	0.001
87M 64	.01	0.001
7M 65	.01	0.001
87M 66	.01	0.001
7M 67	.02	0.001
7R 02	.01	0.001
87R 03	.01	0.001
7R 04	.01	0.001
87R 05	.02	0.001
87R 06	.01	0.001
7R 07	.01	0.001

Certified by

MIN-EN LABORATORIES LTD.

COMPANY: HI-TEC RESOURCES | MIN-EN LABS ICP REPORT | (ACT:616) PAGE 1 OF 1

PROJECT NO: | 705 WEST 15TH ST., NORTH VANCOUVER, B.C. V7M 1T2 | FILE NO: 7-863/P1+2

ATTENTION: B. ARNOLD | (604)980-5814 OR (604)988-4524 | * TYPE ROCK ASSAY * | DATE:JULY 28, 1987

(VALUES IN PPM)	AG	AS	CU	PB	SB	ZN
87M 01	.6	487	16	4	1	43
87M 02	.6	134	5	4	1	6
87M 03	1.2	1	37	11	4	89
87M 04	.8	785	12	7	1	31
87M 05	1.4	36	62	18	6	125
87M 06	1.4	6	27	11	5	117
87M 07	1.0	16	23	6	1	44
87M 08	1.4	3	36	9	5	122
87M 09	.9	7	39	8	1	34
87M 10	1.4	9	34	4	1	111
87M 11	1.5	3	47	8	5	112
87M 12	1.1	17	20	7	1	35
87M 13	1.1	10	22	7	1	44
87M 14	1.7	36	60	12	1	156
87M 15	1.0	31	18	3	1	36
87M 16	.8	5	7	7	1	27
87M 17	1.3	21	94	11	1	83
87M 18	1.8	30	27	12	6	146
87M 19	.8	25	5	6	2	8
87M 20	1.1	12	24	3	1	57
87M 21	.9	6	26	8	1	54
87M 22	1.0	71	13	3	1	48
87M 23	6.4	92	1	30	16	14
87M 24	1.0	8	41	8	1	44
87M 25	.9	47	26	9	1	34
87M 26	1.5	26	34	5	1	113
87M 27	.8	8	16	6	2	41
87M 28	1.2	12	35	7	1	49
87M 29	1.8	17	24	11	1	41
87M 30	1.0	31	36	5	1	38
87M 31	.9	2	34	7	2	54
87M 32	.9	35	16	4	1	53
87M 33	1.2	55	29	6	2	57
87M 34F	1.1	155	84	8	2	50
87M 35	1.8	23	51	15	1	133
87M 36	.8	11	8	5	1	29
87M 37	.8	9	10	12	1	17
87M 38	1.9	7	35	4	4	77
87M 39	1.3	2	18	8	1	45
87M 40	.5	13	4	5	1	6
87M 41	.9	18	23	12	3	58
87M 42	.8	22	22	4	1	9
87M 43	1.0	9	8	8	1	18
87M 44F	1.1	3	24	3	1	38
87M 45	1.3	557	50	15	5	112
87M 46	1.0	8	22	3	1	43
87M 47	1.0	14	21	6	1	43
87M 48	1.4	10	40	7	6	120
87M 49	1.0	5025	5	10	2	21
87M 50	.9	93	18	6	1	39
87M 51	1.0	33	25	9	5	94
87M 52	.4	13	4	4	1	9
87M 53	.9	4	39	8	3	58
87M 54	.9	296	20	6	1	36
87M 55	.7	1248	6	5	1	36
87M 56	1.0	16	24	6	1	44
87M 57	.7	64	9	6	1	6
87M 58	.7	48	4	4	2	8
87M 59	.7	59	4	4	1	9
87M 60	.4	18	2	3	1	5

COMPANY: HI-TEC RESOURCES | MIN-EN LABS ICP REPORT | (ACT:G16) PAGE 1 OF 1

PROJECT NO: | 705 WEST 15TH ST., NORTH VANCOUVER, B.C. V7M 1T2 | FILE NO: 7-863/P3

ATTENTION: B. ARNOLD | (604)980-5814 OR (604)988-4524 | * TYPE ROCK ASSAY * | DATE:JULY 28, 1987

(VALUES IN PPM)	AG	AS	CU	PB	SB	ZN
87M 61	.5	22	6	4	1	9
87M 62	.7	19	8	4	1	23
87M 63	.9	186	258	9	1	34
87M 64	.7	22	4	5	2	14
87M 65	1.0	10	15	7	1	39
87M 66	.9	1	10	7	1	38
87M 67	1.1	974	15	9	1	31
87R 02	1.1	59	71	8	3	57
87R 03	1.3	15	85	14	1	105
87R 04	1.1	180	32	12	4	61
87R 05	.8	281	49	15	1	59
87R 06	1.0	69	31	12	1	26
87R 07	.7	50	38	4	1	21

APPENDIX IV-B

Description of Rock Samples

DESCRIPTION OF ROCK CHIP SAMPLES

Sample No.	Description
87-M1	Grab sample from granodiorite dyke near contact with phyllite host rock. No visible mineralization.
87-M2	Same location: grab sample of phyllite from contact with granodiorite dyke. No visible mineralization.
87-M3	Grab sample of phyllite from contact with granodiorite dyke. No visible mineralization.
87-M4	Same location: grab sample from granodiorite dyke near contact with phyllite host rock. No visible mineralization.
87-M5	Grab sample of graphitic phyllite with minor pyrite.
87-M6	Grab sample of chlorite-talc phyllite with intercalated quartz stringers, minor pyrite, abundant iron staining.
87-M7	Grab sample from granodiorite dyke with abundant quartz filled fractures containing pyrite, chalcopyrite, sericite.
87-M8	Same location: grab sample of host rock between two dykes, phyllite with abundant quartz intercalations, biotite.
87-M9	Grab sample from granodiorite dyke near contact with host rock. No visible mineralization.
87-M10	Same location: grab sample from phyllite host rock from contact with granodiorite dyke. No visible mineralization.
87-M11	Grab sample of phyllite host rock from contact with granodiorite dyke.
87-M12	Same location: grab sample of granodiorite dyke from contact with host rock, visible sulfide mineralization.
87-M13	Grab sample of granodiorite dyke from contact with host rock, visible sulfide mineralization.

87-M14	Grab samples of phyllite with intercalated quartz stringers, from contact with granodiorite dyke.
87-M15F	Grab sample of float from road, granodiorite dyke with quartz vein, abundant pyrite, chalcopyrite at vein-dyke contact.
87-M16	Grab sample of meta-greywacke with quartz filled fracture containing abundant sericite-chlorite.
87-M17	Grab sample of phyllite host rock from contact with granodiorite dyke. No visible mineralization.
87-M18	Same location: grab sample of granodiorite dyke from contact with phyllite host rock. No visible mineralization.
87-M19	Grab sample from 20 cm thick quartz vein in slate from shear-fault zone. No visible mineralization.
87-M20	Grab sample from granodiorite dyke, no visible mineralization.
87-M21	Grab sample of phyllite host rock between two granodiorite dykes. No visible mineralization.
87-M22	Grab sample from granodiorite dyke, no visible mineralization.
87-M23	Grab sample from granodiorite dyke, no visible mineralization.
87-M24	Grab sample of phyllite host rock between two dykes, contact metamorphosed, abundant chlorite, pyrite, chalcopyrite.
87-M25	Grab sample of granodiorite dyke with quartz vein, abundant sericite, minor sulfides.
87-M26	Grab sample of phyllite host rock from contact with granodiorite dyke. No visible mineralization.
87-M27	Same location: grab sample of granodiorite dyke from contact with phyllite host rock, sericite.

87-M28	Grab sample of granodiorite dykes from contact with phyllite host rock. No visible mineralization.
87-M29	Same location: grab sample of altered rock, sericite, chlorite, abundant iron staining.
87-M30	Grab sample from granodiorite dyke, granodiorite with quartz vein, abundant sericite.
87-M31	Grab sample from large granodiorite dyke, near contact with phyllite host rock. No visible mineralization.
87-M32	Same location: grab sample of granodiorite with quartz vein, minor chalcopyrite, abundant discontinuous quartz filled extensional fractures.
87-M33	Grab sample from large granodiorite dyke, granodiorite with quartz veins. No visible mineralization.
87-M34F	Grab sample of float from road, granodiorite with quartz vein, abundant biotite, chalcopyrite.
87-M35	Grab sample of phyllite host rock from contact with large granodiorite dyke, no visible mineralization.
87-M36	Same location: grab sample from large granodiorite dyke near contact with phyllite host rock, granodiorite with quartz vein, sericite.
87-M37	Grab sample from graphitic phyllite, concordant, discontinuous quartz vein, abundant iron staining.
87-M38	Grab sample of meta-greywacke, discontinuous 10-15 cm quartz filled fractures. No visible mineralization.
87-M39	Grab sample from phyllite, concordant, discontinuous quartz vein, abundant iron staining.
87-M40	Grab sample from phyllite, 3 cm wide quartz vein, discordant.
87-M41	Grab sample of meta-greywacke with quartz filled fractures goethite.

87-M42	Grab sample of meta-greywacke with quartz filled fractures. No visible mineralization.
87-M43	Grab sample of large quartz filled fracture in meta-greywacke, abundant biotite, iron staining, minor pyrite, chlorite.
87-M44F	Grab sample of float from road, quartz filled fracture in meta-greywacke, abundant chalcopyrite.
87-M45	Grab sample of phyllite host rock from contact with granodiorite dyke. No visible mineralization.
87-M46	Same location: grab sample from granodiorite dyke at contact with phyllite host rock. No visible mineralization.
87-M47	Grab sample from granodiorite dyke at contact with phyllite host rock. No visible mineralization.
87-M48	Same location: grab sample of phyllite host rock at contact with granodiorite dyke. No visible mineralization.
87-M49F	Grab sample of float from road, large quartz vein in granodiorite, sulfide mineralization.
87-M50	Grab sample from granodiorite dyke, near contact with phyllite host rock, sulfide mineralization.
87-M51	Same location: grab sample of phyllite host rock at contact with granodiorite dyke.
87-M52	Grab sample of 10 cm wide quartz vein in phyllite host, iron staining.
87-M53	Grab sample of sheared graphitic phyllite at contact with granodiorite dyke, abundant quartz veins with chalcopyrite, iron staining.
87-M54	Same location: grab sample from granodiorite dyke near contact with phyllite host rock, abundant 5-10 cm wide quartz filled fractures. No visible mineralization.
87-M55	Grab sample from granodiorite dyke with large quartz filled fracture, sheared, fractured, chlorite, sericite, sulfide mineralization.

87-M56	Grab sample from granodiorite dyke. No visible mineralization.
87-M57	Grab sample from granodiorite dyke, highly altered at contact, fractured, abundant iron staining.
87-M58	Grab sample from phyllite, quartz vein with abundant iron formation.
87-M59	Grab sample from phyllite, quartz vein with abundant iron staining, minor sulfide mineralization.
87-M60	Grab sample from phyllite, discordant quartz vein with abundant iron staining.
87-M61	Grab sample from phyllite, discordant quartz vein, 10 cm wide, no visible mineralization.
87-M62	Grab sample from phyllite, quartz vein with muscovite, galena.
87-M63	Grab sample from meta-greywacke, abundant quartz filled fractures, sulfide mineralization.
87-M64	Grab sample from phyllite, quartz vein. No visible mineralization.
87-M65	Grab sample from phyllite, quartz vein. No visible mineralization.
87-M66	Grab sample from phyllite, quartz vein. No visible mineralization.
87-M67	Grab sample from granodiorite dyke, granodiorite with quartz vein, arsenopyrite, pyrite, chalcopyrite.

REN

87-R1	No sample.
87-R2	Grab sample from felsic dyke. No visible mineralization.
87-R3	Grab sample from phyllite with abundant quartz veins. No visible mineralization.
87-R4	Grab sample from felsic dyke. No visible mineralization.

87-R5	Grab sample from graphitic phyllite with abundant quartz veins in shear zone. No visible mineralization.
87-R6	Grab sample from meta-greywacke, abundant quartz filled fractures with sulfide mineralization.
87-R7	Grab sample from granodiorite dyke, granodiorite with quartz filled fracture. No visible mineralization.

APPENDIX V-A

Statistical Results and Histograms

MIN-EN LABORATORIES LTD.

SPECIALISTS IN MINERAL ENVIRONMENTS

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

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

STATISTICAL SUMMARY ON AG

COMPANY:HI-TEC RESOURCES
ATTN:B. ARNOLD
PROJECT:
FILE#:7-863

DATE:AUG 18/87
SAMPLE TYPE:ROCK
ANALYSIS TYPE:ICP

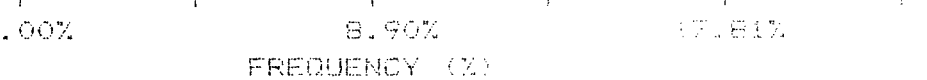
NUMBER OF SAMPLES:	73
MAXIMUM VALUE:	6.40 PPM
MINIMUM VALUE:	.40 PPM
MEAN:	1.10 PPM
STD. DEVIATION:	.71 PPM
COEFF. OF VARIATION:	.65

5 HIGHEST AG VALUES:

87M 23	6.4 PPM
87M 38	1.9 PPM
87M 18	1.8 PPM
87M 29	1.8 PPM
87M 35	1.8 PPM

HISTOGRAM FOR AG CLASS INTERVAL - .08

MID CLASS PPM	CLASS %	
< .40	1.37	
.44	1.37	
.52	2.74	
.60	4.11	
.68	9.59	
.76	10.96	
.84	0.00	
.92	15.07	
1.00	17.81	
1.08	10.96	
1.16	4.11	
1.24	0.00	
1.32	5.48	
1.40	6.85	
1.48	2.74	
1.56	0.00	
1.64	0.00	
1.72	1.37	
1.80	4.11	
1.88	0.00	
1.96	0.00	
> 1.90	1.37	



MIN-EN LABORATORIES LTD.

SPECIALISTS IN MINERAL ENVIRONMENTS

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

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

STATISTICAL SUMMARY ON AS

COMPANY:HI-TEC RESOURCES
ATTN:B. ARNOLD
PROJECT:
FILE#:7-863

DATE:AUG 18/87
SAMPLE TYPE:ROCK
ANALYSIS TYPE:ICP

NUMBER OF SAMPLES:	73
MAXIMUM VALUE:	5025.00 PPM
MINIMUM VALUE:	1.00 PPM
MEAN:	160.97 PPM
STD. DEVIATION:	616.53 PPM
COEFF. OF VARIATION:	3.83

5 HIGHEST AS VALUES:

87M 49	5025 PPM
87M 55	1248 PPM
87M 67	974 PPM
87M 04	785 PPM
87M 45	557 PPM

HISTOGRAM FOR AS CLASS INTERVAL = 39.2

MID CLASS PPM	CLASS %	
< 1.00	1.37	#
20.60	68.49	##########################
59.80	12.33	########
99.00	2.74	##
138.20	2.74	##
177.40	2.74	##
216.60	0.00	
255.80	0.00	
295.00	2.74	##
334.20	0.00	
373.40	0.00	
412.60	0.00	
451.80	0.00	
491.00	1.37	#
530.20	0.00	
569.40	1.37	#
608.60	0.00	
647.80	0.00	
687.00	0.00	
726.20	0.00	
765.40	0.00	
> 785.00	4.11	###

0.00% 34.25% 68.49%

FREQUENCY (%)

MIN-EN LABORATORIES LTD.

SPECIALISTS IN MINERAL ENVIRONMENTS

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

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

STATISTICAL SUMMARY ON AU

COMPANY:HI-TEC RESOURCES
ATTN:B. ARNOLD
PROJECT:
FILE#:7-863

DATE:AUG 18/87
SAMPLE TYPE:ROCK
ANALYSIS TYPE:ICP

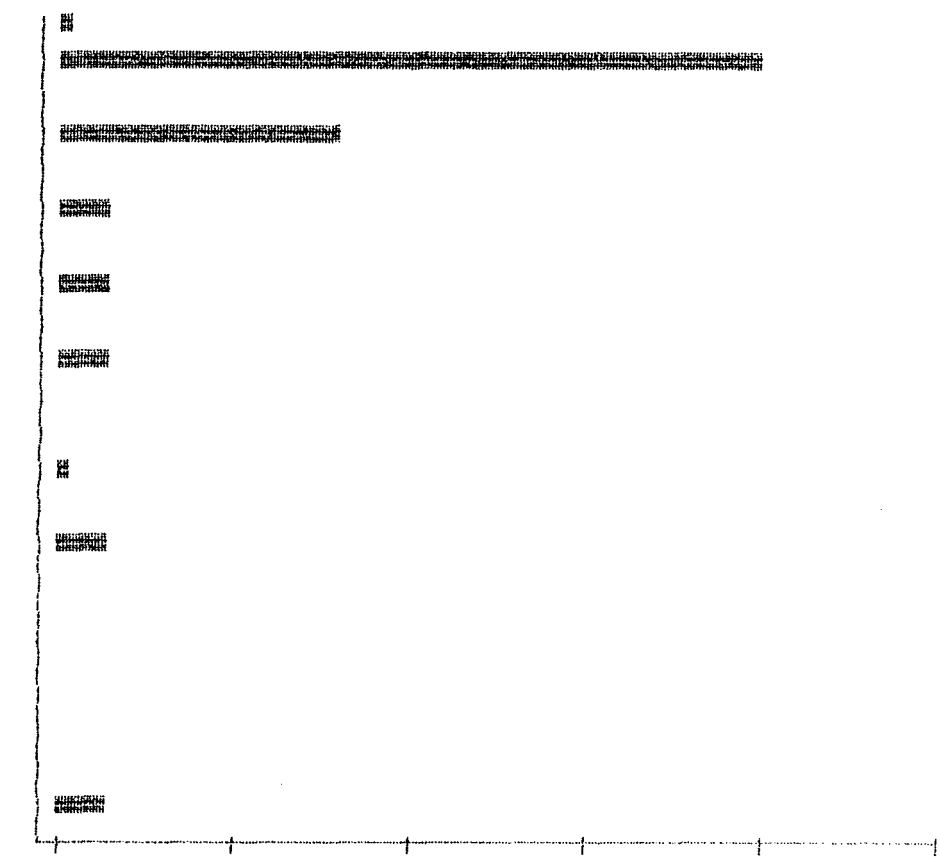
NUMBER OF SAMPLES:	73
MAXIMUM VALUE:	630.00 PPB
MINIMUM VALUE:	10.00 PPB
MEAN:	31.92 PPB
STD. DEVIATION:	75.34 PPB
COEFF. OF VARIATION:	2.36

5 HIGHEST AU VALUES:

87M 49	630 PPB
87M 41	150 PPB
87M 14	100 PPB
87M 32	100 PPB
87M 02	70 PPB

HISTOGRAM FOR AU CLASS INTERVAL = 4.5

MID CLASS PPB	CLASS %
< 10.00	1.37
12.25	54.79
16.75	0.00
21.25	21.92
25.75	0.00
30.25	4.11
34.75	0.00
39.25	4.11
43.75	0.00
48.25	4.11
52.75	0.00
57.25	0.00
61.75	1.37
66.25	0.00
70.75	4.11
75.25	0.00
79.75	0.00
84.25	0.00
88.75	0.00
93.25	0.00
97.75	0.00
> 100.00	4.11



MIN-EN LABORATORIES LTD.

SPECIALISTS IN MINERAL ENVIRONMENTS

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

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

STATISTICAL SUMMARY ON CU

COMPANY: HI-TEC RESOURCES
ATTN: B. ARNOLD
PROJECT:
FILE#: 7-863

DATE: AUG 18/87
SAMPLE TYPE: ROCK
ANALYSIS TYPE: ICP

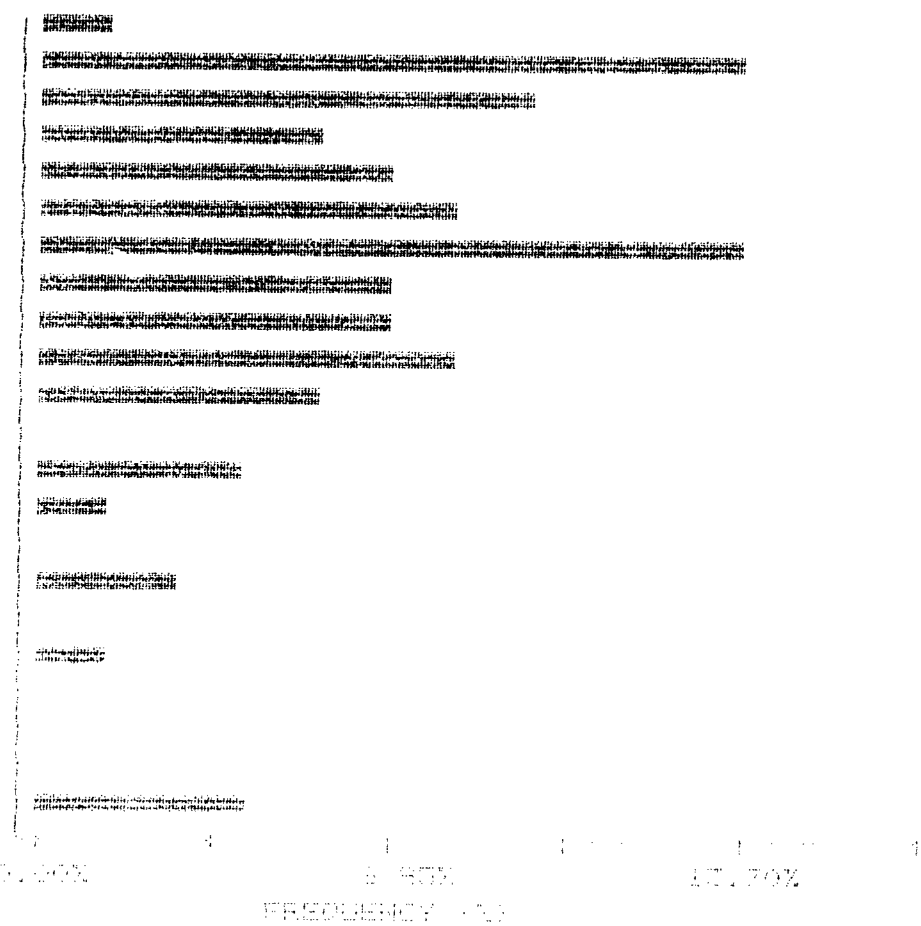
NUMBER OF SAMPLES: 73
MAXIMUM VALUE: 258.00 PPM
MINIMUM VALUE: 1.00 PPM
MEAN: 29.42 PPM
STD. DEVIATION: 33.73 PPM
COEFF. OF VARIATION: 1.15

5 HIGHEST CU VALUES:

87M 63	258 PPM
87M 17	94 PPM
87R 03	85 PPM
87M 34F	84 PPM
87R 02	71 PPM

HISTOGRAM FOR CU CLASS INTERVAL = 4.15

MID CLASS PPM	CLASS %
< 1.00	1.37
3.08	13.70
7.23	9.59
11.38	5.48
15.53	6.85
19.68	8.22
23.83	13.70
27.98	6.85
32.13	6.85
36.28	8.22
40.43	5.48
44.58	0.00
48.73	4.11
52.88	1.37
57.03	0.00
61.18	2.74
65.33	0.00
69.48	1.37
73.63	0.00
77.78	0.00
81.93	0.00
> 84.00	4.11



MIN-EN LABORATORIES LTD.

SPECIALISTS IN MINERAL ENVIRONMENTS

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

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

STATISTICAL SUMMARY ON PB

COMPANY:HI-TEC RESOURCES
ATTN:B. ARNOLD
PROJECT:
FILE#:7-863

DATE:AUG 18/87
SAMPLE TYPE:ROCK
ANALYSIS TYPE:ICP

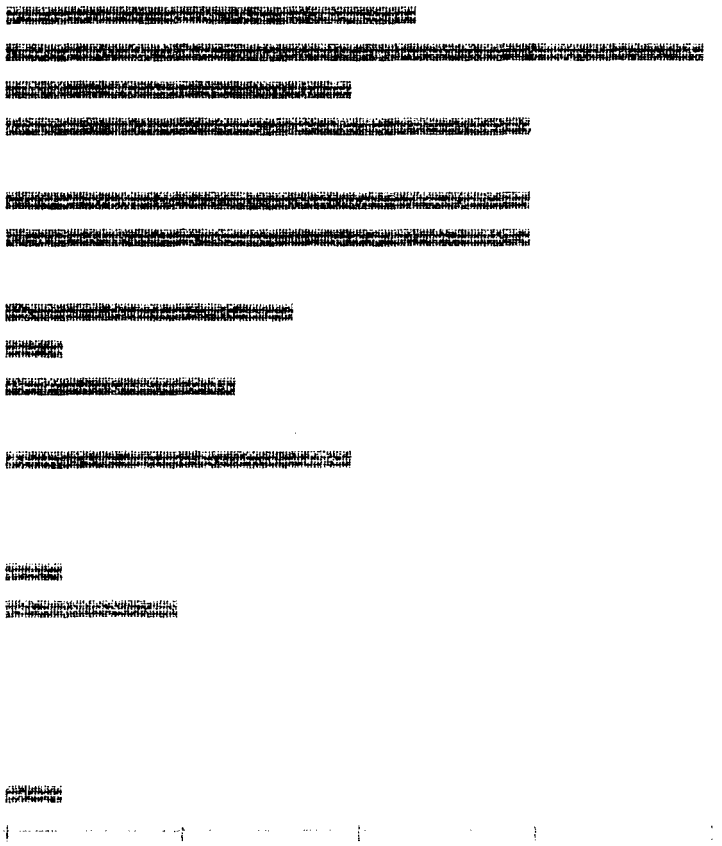
NUMBER OF SAMPLES:	73
MAXIMUM VALUE:	30.00 PPM
MINIMUM VALUE:	3.00 PPM
MEAN:	7.71 PPM
STD. DEVIATION:	4.32 PPM
COEFF. OF VARIATION:	.56

5 HIGHEST PB VALUES:

87M 25	30 PPM
87M 05	18 PPM
87M 35	15 PPM
87M 45	15 PPM
87R 05	15 PPM

HISTOGRAM FOR PB CLASS INTERVAL = .7

MID CLASS PPM	CLASS %
< 4.00	9.59
4.35	16.44
5.05	8.22
5.75	12.33
6.45	0.00
7.15	12.33
7.85	12.33
8.55	0.00
9.25	6.85
9.95	1.37
10.65	5.48
11.35	0.00
12.05	8.22
12.75	0.00
13.45	0.00
14.15	1.37
14.85	4.11
15.55	0.00
16.25	0.00
16.95	0.00
17.65	0.00
> 18.00	1.37



MIN-EN LABORATORIES LTD.

SPECIALISTS IN MINERAL ENVIRONMENTS

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

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

STATISTICAL SUMMARY ON SB

COMPANY:HI-TEC RESOURCES
ATTN:B. ARNOLD
PROJECT:
FILE#:7-863

DATE:AUG 18/87
SAMPLE TYPE:ROCK
ANALYSIS TYPE:ICP

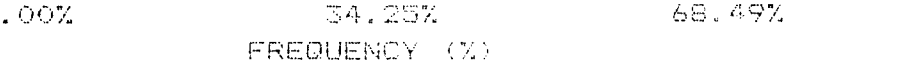
NUMBER OF SAMPLES:	73
MAXIMUM VALUE:	16.00 PPM
MINIMUM VALUE:	1.00 PPM
MEAN:	2.00 PPM
STD. DEVIATION:	2.22 PPM
COEFF. OF VARIATION:	1.11

5 HIGHEST SB VALUES:

87M 23	16 PPM
87M 05	6 PPM
87M 18	6 PPM
87M 48	6 PPM
87M 06	5 PPM

HISTOGRAM FOR SB CLASS INTERVAL = .25

MID CLASS PPM	CLASS %
< 1.00	1.37
1.13	68.49
1.38	0.00
1.63	0.00
1.88	10.96
2.13	0.00
2.38	0.00
2.63	0.00
2.88	4.11
3.13	0.00
3.38	0.00
3.63	0.00
3.88	4.11
4.13	0.00
4.38	0.00
4.63	0.00
4.88	6.85
5.13	0.00
5.38	0.00
5.63	0.00
5.88	0.00
> 6.00	4.11



MIN-EN LABORATORIES LTD.

SPECIALISTS IN MINERAL ENVIRONMENTS

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

TELEX: 04-352828 PHONE: (604)980-5814 OR (604)926-4524

STATISTICAL SUMMARY ON ZN

COMPANY: HI-TEC RESOURCES
ATTN: B. ARNOLD
PROJECT:
FILE#: 7-863

DATE: AUG 18/87
SAMPLE TYPE: ROCK
ANALYSIS TYPE: ICP

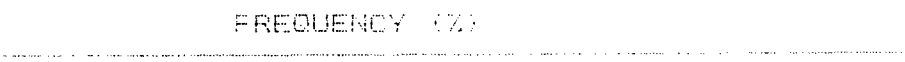
NUMBER OF SAMPLES:	73
MAXIMUM VALUE:	156.00 PPM
MINIMUM VALUE:	5.00 PPM
MEAN:	51.32 PPM
STD. DEVIATION:	37.60 PPM
COEFF. OF VARIATION:	.73

5 HIGHEST ZN VALUES:

87M 14	156 PPM
87M 18	146 PPM
87M 35	133 PPM
87M 05	125 PPM
87M 08	122 PPM

HISTOGRAM FOR ZN CLASS INTERVAL = 6.6

	MID CLASS PPM	CLASS %
<	14.00	15.07
	17.30	5.48
	23.90	6.85
	30.50	4.11
	37.10	16.44
	43.70	13.70
	50.30	5.48
	56.90	10.96
	63.50	1.37
	70.10	0.00
	76.70	1.37
	83.30	1.37
	89.90	1.37
	96.50	1.37
	103.10	1.37
	109.70	5.48
	116.30	1.37
	122.90	4.11
	129.50	0.00
	136.10	1.37
	142.70	0.00
>	146.00	1.37



APPENDIX V-B

Correlation Coefficients

MIN-EN LABORATORIES LTD.

SPECIALISTS IN MINERAL ENVIRONMENTS

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

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

CORRELATION COEFFICIENTS

COMPANY: HI-TEC RESOURCES
ATTN: B. ARNOLD
PROJECT:
FILE#: 7-863

DATE: AUG 18/87
SAMPLE TYPE: ROCK
ANALYSIS TYPE: ICP

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

	AG	AS	CU	PB	SB	ZN	AU
AG	1.000	-.040	.042	**.713**	**.804**	.260	-.013
AS		1.000	-.087	.074	-.015	-.117	**.895**
CU			1.000	.227	.002	**.337**	-.099
PB				1.000	**.680**	**.356**	.091
SB					1.000	**.321**	-.003
ZN						1.000	-.064
AU							1.000

APPENDIX V-C

Cumulative Probability Plots

MIN-EN LABORATORIES LTD.

SPECIALISTS IN MINERAL ENVIRONMENTS

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

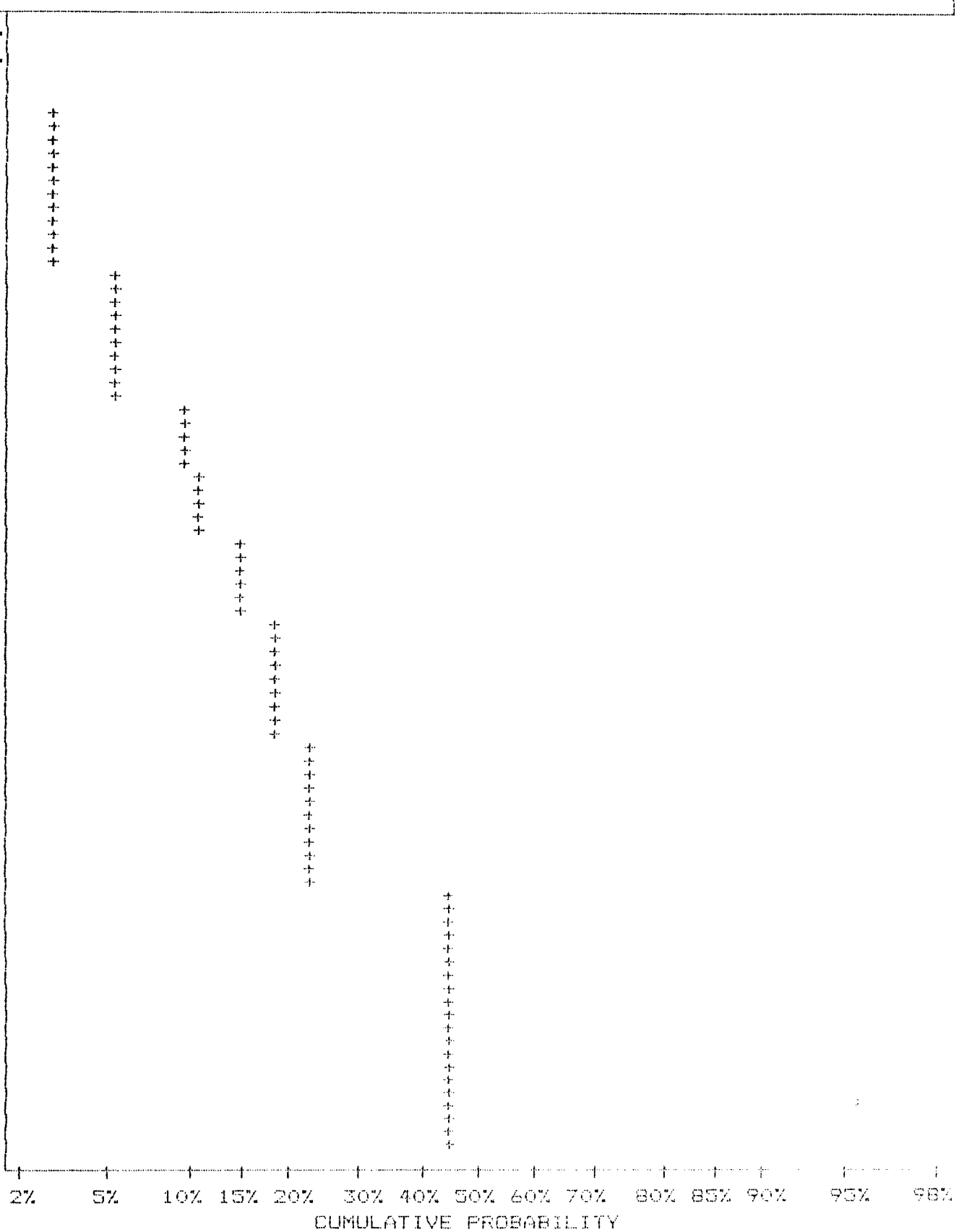
TELEX: 04-352828 PHONE:(604)980-5814 OR (604)988-4524

CUMMULATIVE PROBABILITY PLOT ON AU

COMPANY: HI-TEC RESOURCES
ATTN: B. ARNOLD
PROJECT:
FILE#: 7-863

DATE: AUG 18/87
SAMPLE TYPE: ROCK
ANALYSIS TYPE: ICP

UPPER LIMIT (PPB)	CUMMUL. FREQ. (%)
147.91	2.74
138.04	2.74
128.82	2.74
120.23	2.74
112.20	2.74
104.71	2.74
97.72	5.48
91.20	5.48
85.11	5.48
79.43	5.48
74.13	5.48
69.18	9.59
64.57	9.59
60.26	9.59
56.23	10.96
52.48	10.96
48.98	15.07
45.71	15.07
42.66	15.07
39.81	19.18
37.15	19.18
34.67	19.18
32.36	19.18
30.20	19.18
28.18	23.29
26.30	23.29
24.55	23.29
22.91	23.29
21.38	23.29
19.95	45.21
18.62	45.21
17.38	45.21
16.22	45.21
15.14	45.21
14.13	45.21
13.18	45.21
12.30	45.21
11.48	45.21
10.72	45.21
10.00	98.63



APPENDIX V-C

Cumulative Probability Plots

MIN-EN LABORATORIES LTD.

SPECIALISTS IN MINERAL ENVIRONMENTS

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

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

CUMMULATIVE PROBABILITY PLOT ON AU

COMPANY:HI-TEC RESOURCES

ATTN:B. ARNOLD

PROJECT:

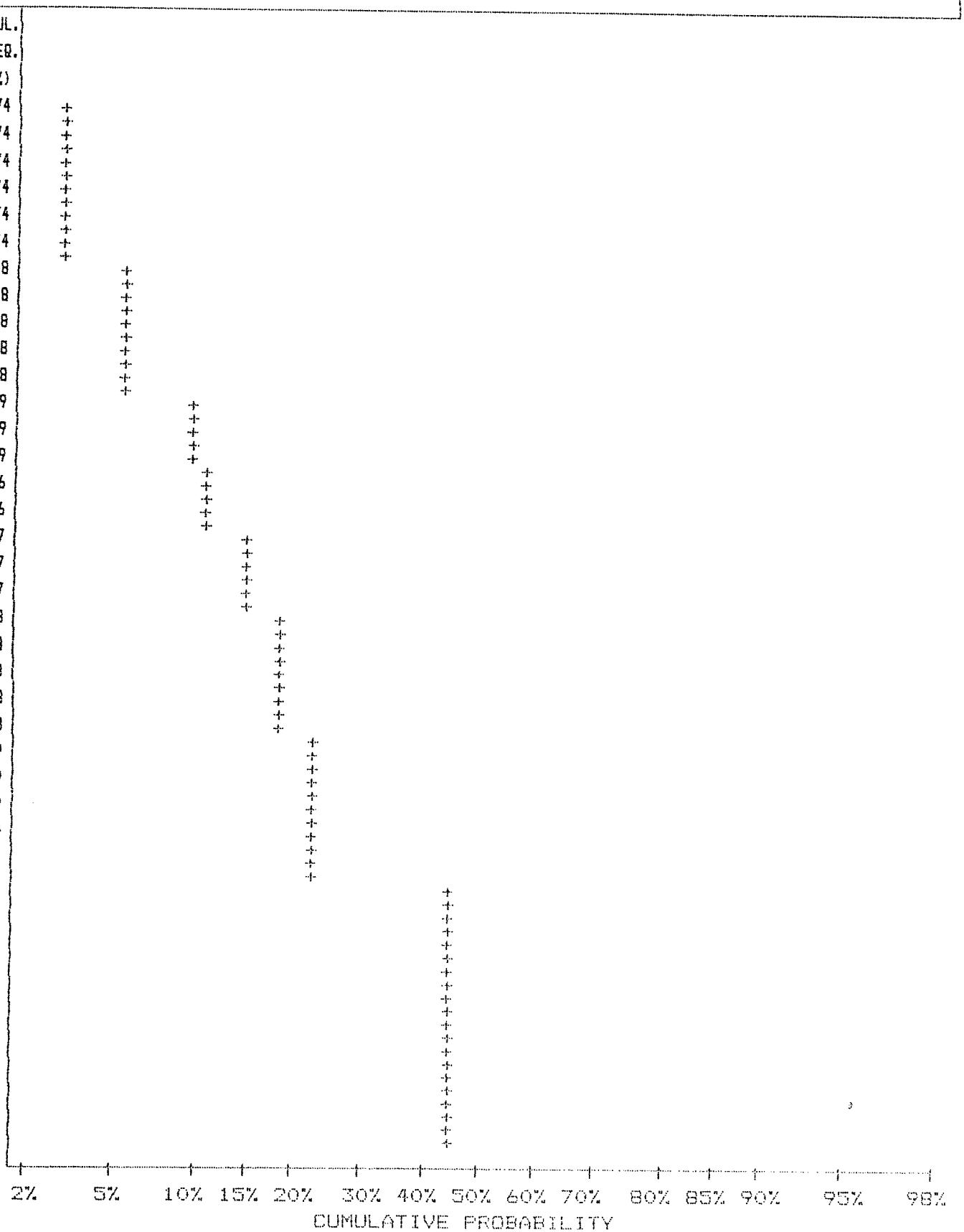
FILE#:7-863

DATE:AUG 18/87

SAMPLE TYPE:ROCK

ANALYSIS TYPE:ICP

UPPER LIMIT (PPB)	CUMMUL. FREQ. (%)
147.91	2.74
138.04	2.74
128.82	2.74
120.23	2.74
112.20	2.74
104.71	2.74
97.72	5.48
91.20	5.48
85.11	5.48
79.43	5.48
74.13	5.48
69.18	9.59
64.57	9.59
60.26	9.59
56.23	10.96
52.48	10.96
48.98	15.07
45.71	15.07
42.66	15.07
39.81	19.18
37.15	19.18
34.67	19.18
32.36	19.18
30.20	19.18
28.18	23.29
26.30	23.29
24.55	23.29
22.91	23.29
21.38	23.29
19.95	45.21
18.62	45.21
17.38	45.21
16.22	45.21
15.14	45.21
14.13	45.21
13.18	45.21
12.30	45.21
11.48	45.21
10.72	45.21
10.00	98.63



MIN-EN LABORATORIES LTD.

SPECIALISTS IN MINERAL ENVIRONMENTS

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

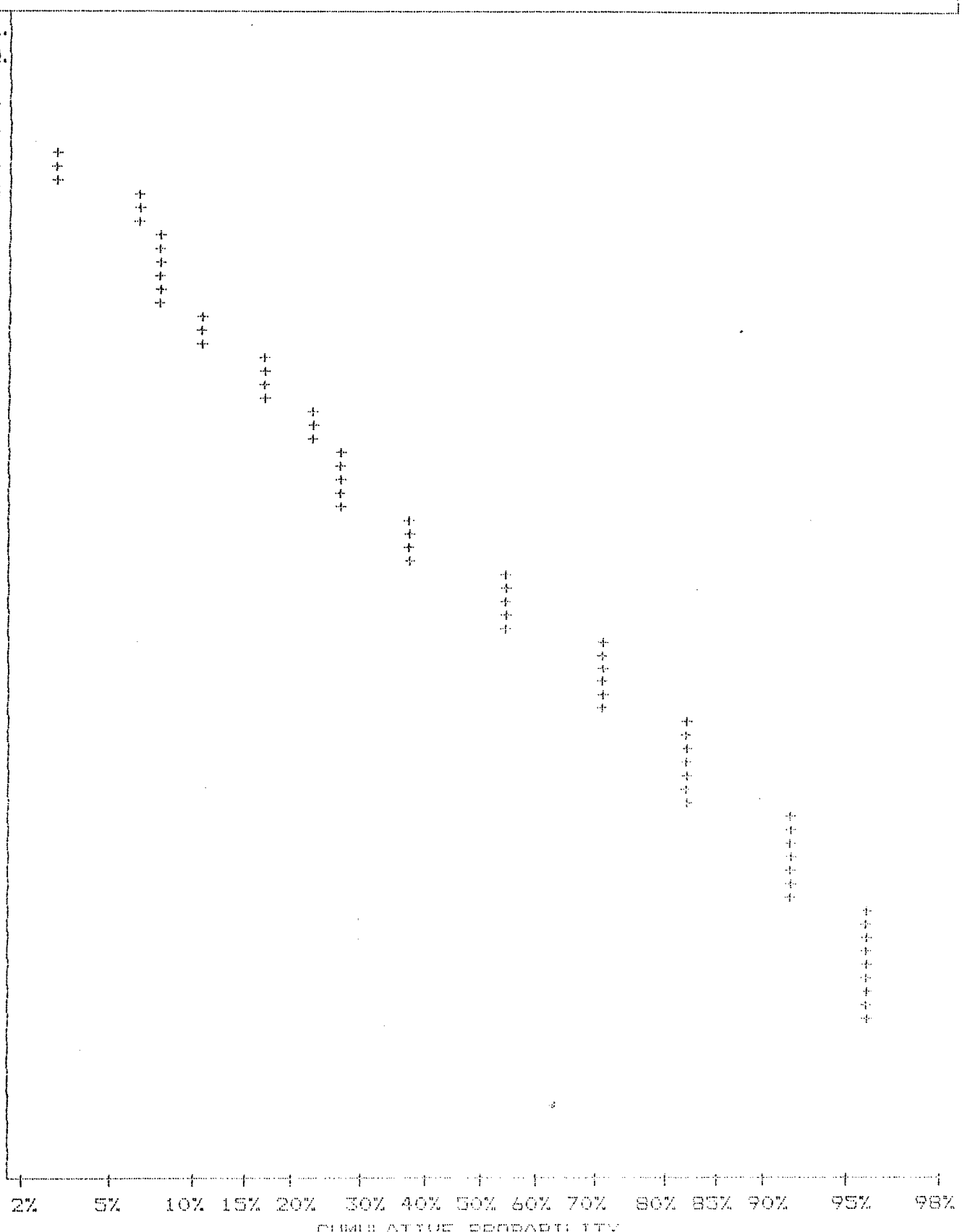
TELEX: 04-352828 PHONE:(604)980-5814 OR (604)988-4524

CUMMULATIVE PROBABILITY PLOT ON AG

COMPANY:HI-TEC RESOURCES
ATTN:B. ARNOLD
PROJECT:
FILE#:7-863

DATE:AUG 18/87
SAMPLE TYPE:ROCK
ANALYSIS TYPE:ICP

UPPER LIMIT (PPM)	CUMMUL. FREQ. (%)
2.01	1.37
1.93	1.37
1.85	2.74
1.78	6.85
1.71	6.85
1.64	8.22
1.57	8.22
1.51	8.22
1.45	10.96
1.39	17.81
1.33	17.81
1.28	23.29
1.22	23.29
1.18	27.40
1.13	27.40
1.08	38.36
1.04	38.36
1.00	56.16
.96	56.16
.92	56.16
.88	71.23
.84	71.23
.81	71.23
.78	82.19
.74	82.19
.71	82.19
.69	91.78
.66	91.78
.63	91.78
.61	91.78
.58	95.89
.56	95.89
.53	95.89
.51	95.89
.49	98.63
.47	98.63
.45	98.63
.43	98.63
.42	98.63
.40	98.63



MIN-EN LABORATORIES LTD.

SPECIALISTS IN MINERAL ENVIRONMENTS

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

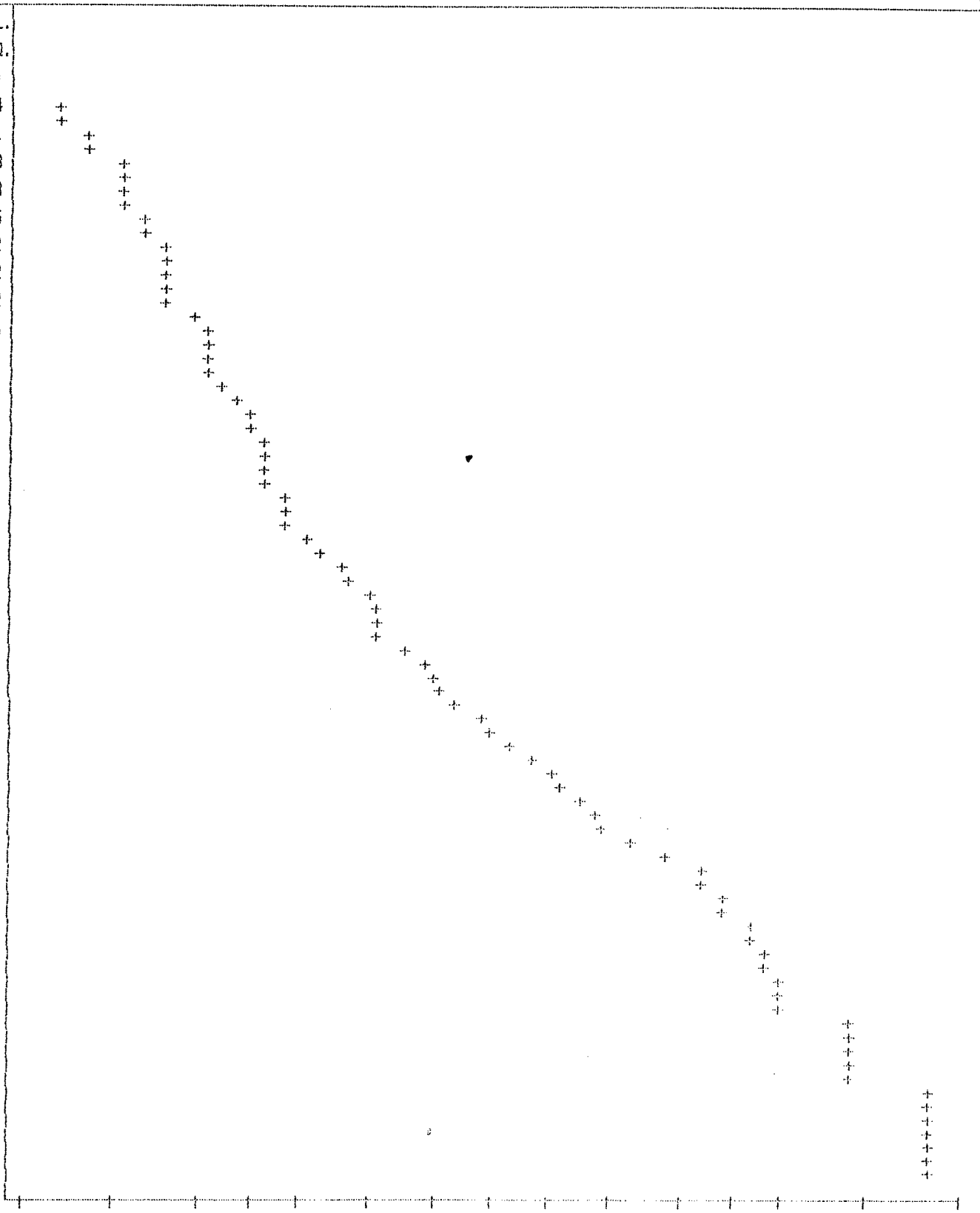
TELEX: 04-352828 PHONE:(604)980-5814 OR (604)988-4524

CUMMULATIVE PROBABILITY PLOT ON AS

COMPANY:HI-TEC RESOURCES
ATTN:B. ARNOLD
PROJECT:
FILE#:7-863

DATE:AUG 18/87
SAMPLE TYPE:ROCK
ANALYSIS TYPE:ICP

UPPER LIMIT (PPM)	CUMMUL. FREQ. (%)
1101.54	2.74
920.45	4.11
769.13	5.48
642.69	5.48
537.03	6.85
448.75	8.22
374.97	8.22
313.33	8.22
261.82	10.96
218.78	10.96
182.81	12.33
152.76	15.07
127.64	16.44
106.66	16.44
89.13	19.18
74.47	19.18
62.23	23.29
52.00	27.40
43.45	31.51
36.31	31.51
30.34	39.73
25.35	42.47
21.18	49.32
17.70	54.79
14.79	61.64
12.36	65.75
10.33	69.86
8.63	78.08
7.21	82.19
6.03	84.93
5.04	87.67
4.21	89.04
3.52	90.41
2.94	94.52
2.46	94.52
2.05	94.52
1.71	97.26
1.43	97.26
1.20	97.26
1.00	98.63



MIN-EN LABORATORIES LTD.

SPECIALISTS IN MINERAL ENVIRONMENTS

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

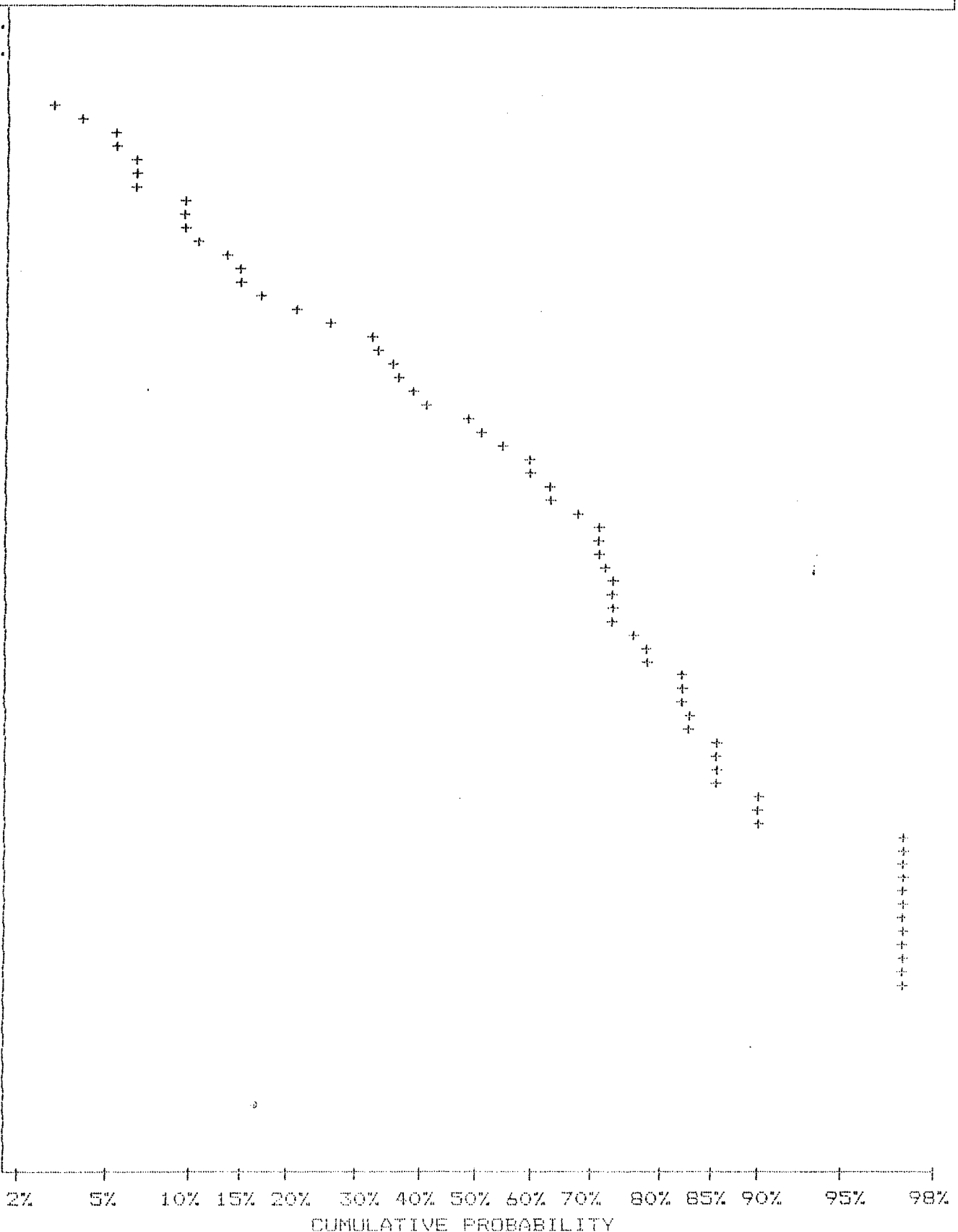
TELEX: 04-352828 PHONE: (604)980-5814 OR (604)988-4524

CUMMULATIVE PROBABILITY PLOT ON CU

COMPANY: HI-TEC RESOURCES
ATTN: B. ARNOLD
PROJECT:
FILE#: 7-863

DATE: AUG 18/87
SAMPLE TYPE: ROCK
ANALYSIS TYPE: ICP

UPPER LIMIT (PPM)	CUMMUL. FREQ. (%)
89.13	2.74
79.43	5.48
70.79	6.85
63.10	6.85
56.23	9.59
50.12	10.96
44.67	15.07
39.81	17.81
35.48	26.03
31.62	34.25
28.18	36.99
25.12	42.47
22.39	52.05
19.95	60.27
17.78	64.38
15.85	68.49
14.13	71.23
12.59	72.60
11.22	73.97
10.00	73.97
8.91	78.08
7.94	82.19
7.08	82.19
6.31	83.56
5.62	86.30
5.01	86.30
4.47	90.41
3.98	97.26
3.55	97.26
3.16	97.26
2.82	97.26
2.51	97.26
2.24	97.26
2.00	98.63
1.78	98.63
1.58	98.63
1.41	98.63
1.26	98.63
1.12	98.63
1.00	98.63



MIN-EN LABORATORIES LTD.

SPECIALISTS IN MINERAL ENVIRONMENTS

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

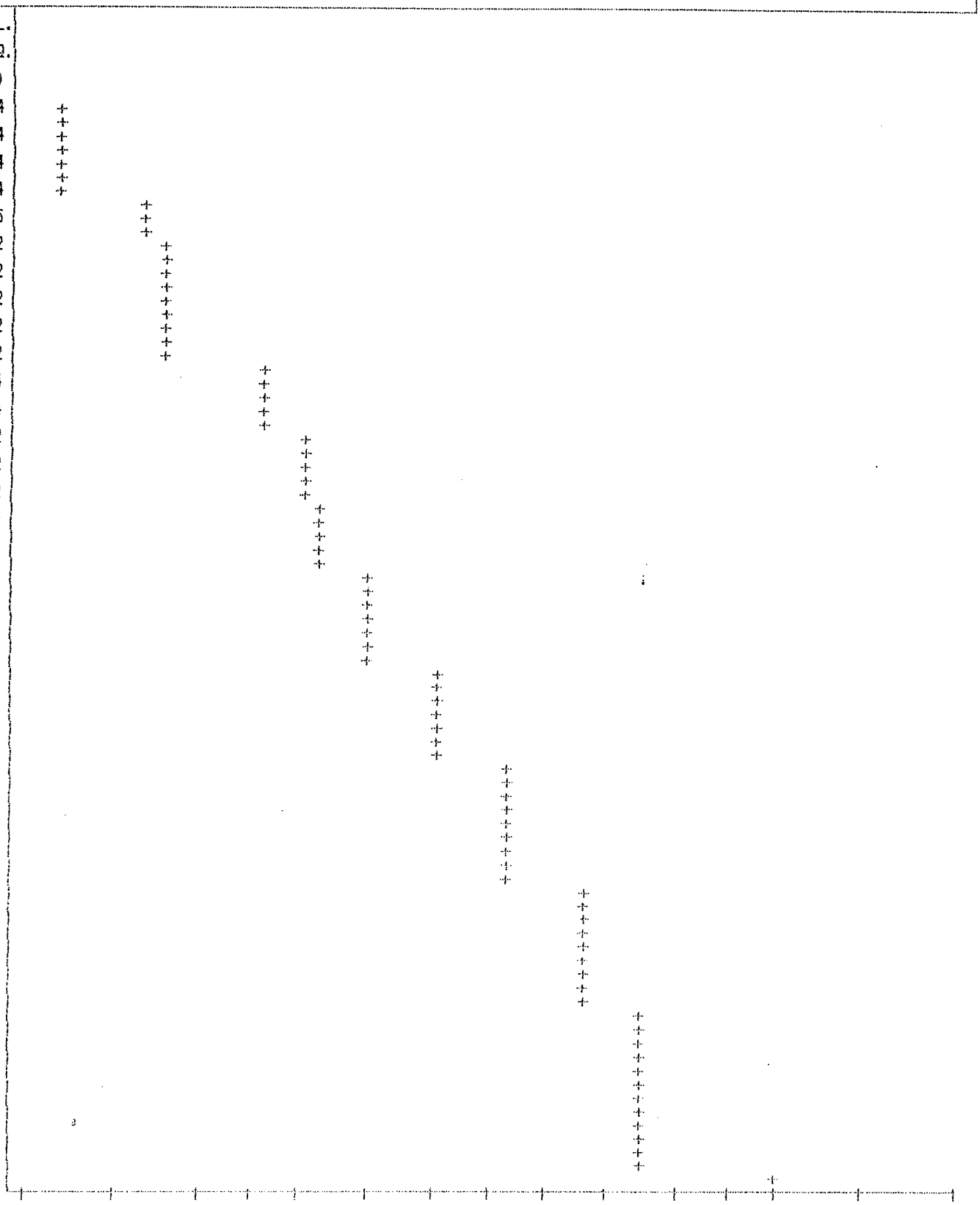
TELEX: 04-352828 PHONE:(604)980-5814 OR (604)988-4524

CUMMULATIVE PROBABILITY PLOT ON PB

COMPANY:HI-TEC RESOURCES
ATTN:B. ARNOLD
PROJECT:
FILE#:7-863

DATE:AUG 18/87
SAMPLE TYPE:ROCK
ANALYSIS TYPE:ICP

UPPER LIMIT (PPM)	CUMMUL. FREQ. (%)
16.83	2.74
16.22	2.74
15.63	2.74
15.07	2.74
14.52	6.85
14.00	8.22
13.49	8.22
13.00	8.22
12.53	8.22
12.08	8.22
11.64	16.44
11.22	16.44
10.82	21.92
10.42	21.92
10.05	21.92
9.68	23.29
9.33	23.29
9.00	30.14
8.67	30.14
8.36	30.14
8.06	30.14
7.76	42.47
7.48	42.47
7.21	42.47
6.95	54.79
6.70	54.79
6.46	54.79
6.22	54.79
6.00	54.79
5.78	67.12
5.57	67.12
5.37	67.12
5.18	67.12
4.99	75.34
4.81	75.34
4.64	75.34
4.47	75.34
4.30	75.34
4.15	75.34
4.00	90.41



MIN-EN LABORATORIES LTD.

SPECIALISTS IN MINERAL ENVIRONMENTS

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

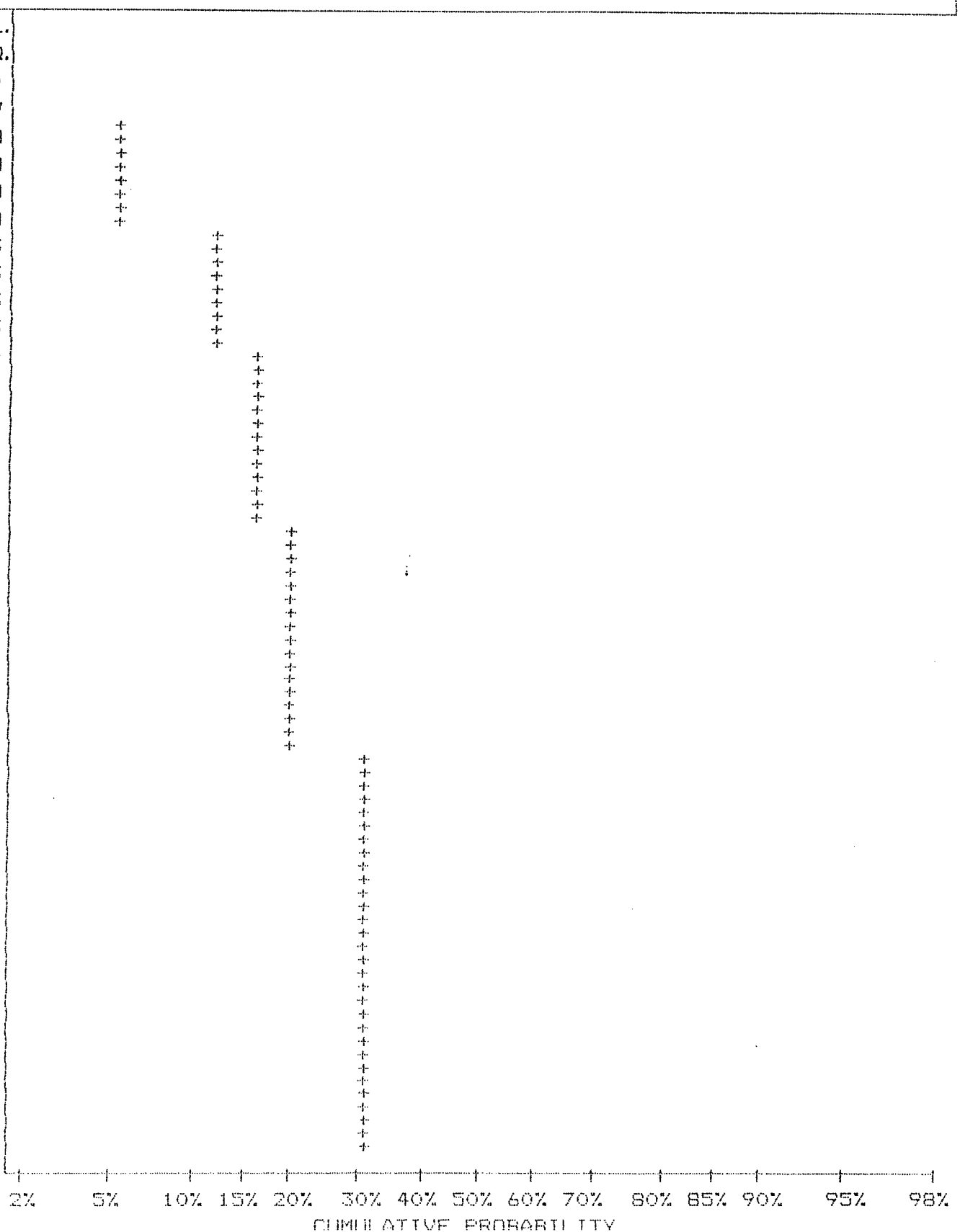
TELEX: 04-352828 PHONE: (604)980-5814 OR (604)988-4524

CUMMULATIVE PROBABILITY PLOT ON SB

COMPANY: HI-TEC RESOURCES
ATTN: B. ARNOLD
PROJECT:
FILE#: 7-863

DATE: AUG 18/87
SAMPLE TYPE: ROCK
ANALYSIS TYPE: ICP

UPPER LIMIT (PPM)	CUMMUL. FREQ. (%)
6.03	1.37
5.75	5.48
5.49	5.48
5.25	5.48
5.01	5.48
4.79	12.33
4.57	12.33
4.37	12.33
4.17	12.33
3.98	16.44
3.80	16.44
3.63	16.44
3.47	16.44
3.31	16.44
3.16	16.44
3.02	16.44
2.88	20.55
2.75	20.55
2.63	20.55
2.51	20.55
2.40	20.55
2.29	20.55
2.19	20.55
2.09	20.55
2.00	31.51
1.90	31.51
1.82	31.51
1.74	31.51
1.66	31.51
1.58	31.51
1.51	31.51
1.44	31.51
1.38	31.51
1.32	31.51
1.26	31.51
1.20	31.51
1.15	31.51
1.10	31.51
1.05	31.51
1.00	98.63



MIN-EN LABORATORIES LTD.

SPECIALISTS IN MINERAL ENVIRONMENTS

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

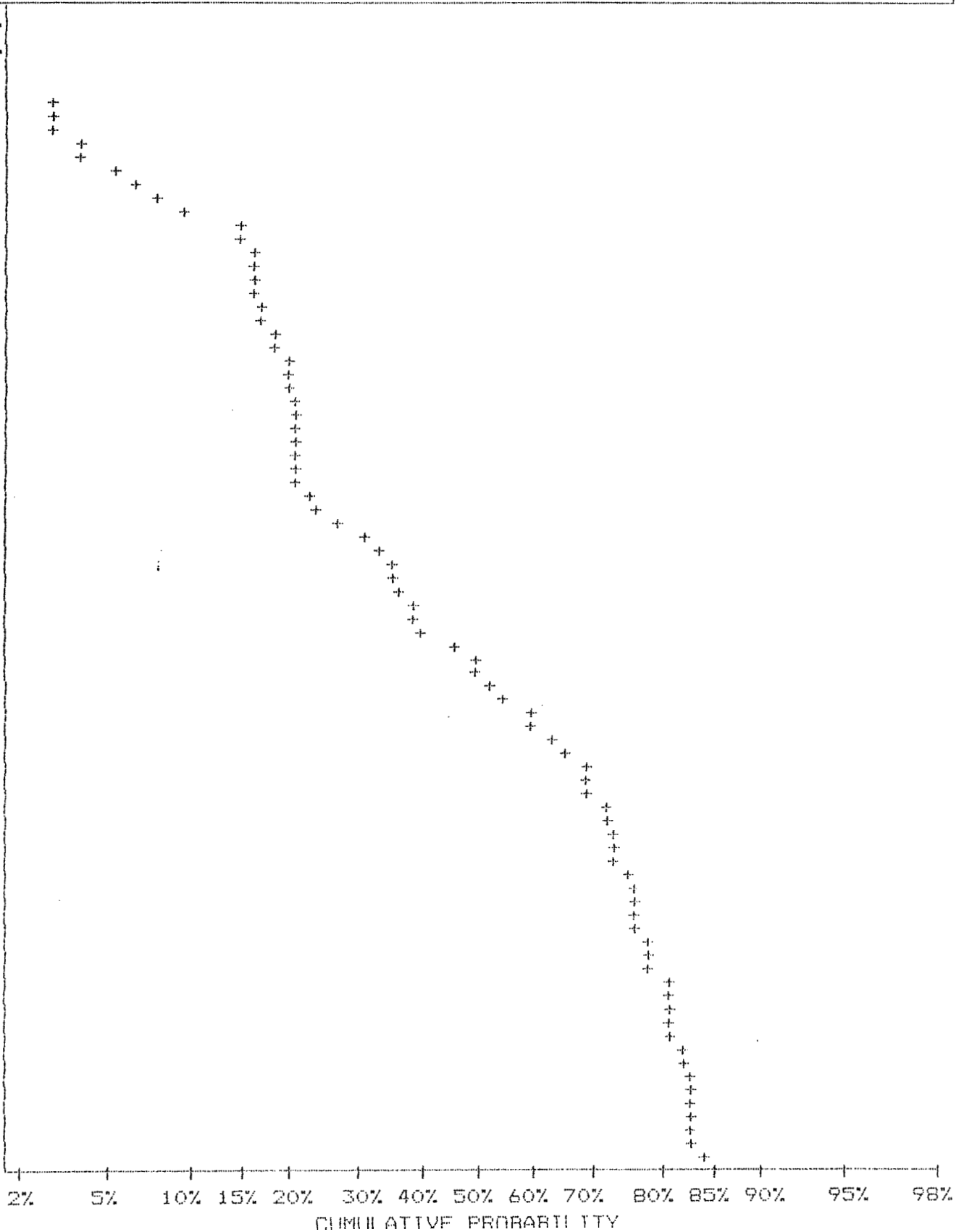
TELEX: 04-352828 PHONE:(604)980-5814 OR (604)988-4524

CUMMULATIVE PROBABILITY PLOT ON ZN

COMPANY:HI-TEC RESOURCES
ATTN:B. ARNOLD
PROJECT:
FILE#:7-863

DATE:AUG 18/87
SAMPLE TYPE:ROCK
ANALYSIS TYPE:ICP

UPPER LIMIT (PPM)	CUMMUL. FREQ. (%)
144.59	2.74
136.18	2.74
128.27	4.11
120.82	6.85
113.79	9.59
107.18	15.07
100.95	16.44
95.09	16.44
89.56	17.81
84.36	19.18
79.45	20.55
74.84	21.92
70.49	21.92
66.39	21.92
62.54	21.92
58.90	24.66
55.48	31.51
52.26	35.62
49.22	36.99
46.35	39.73
43.67	46.58
41.13	50.68
38.74	56.16
36.48	60.27
34.37	65.75
32.37	69.86
30.49	72.60
28.71	73.97
27.05	73.97
25.48	76.71
24.00	76.71
22.60	78.08
21.29	78.08
20.05	80.82
18.89	80.82
17.79	82.19
16.76	83.56
15.78	83.56
14.87	83.56
14.00	84.93



APPENDIX VI

Instruments Specifications

SPECIFICATIONS

Frequency Tuning	Automatic digital tuning. Can be tuned to any frequency in the range 15.0 to 29.0 kHz with a bandwidth of 150 Hz. Up to three frequencies can be chosen by keyboard entry for sequential measurements.
Field Strength Range	Fields as low as 100 mA/m can be received. In practice, background noise may require fields up to 5-10 times this level. Maximum received field is 2 mA/metre. These values are specified for 20 kHz. For any other frequency, calculate the above limits by multiplying by the station frequency in kHz and dividing by 20.
Signal Filtering	Narrow bandpass, low pass and sharp cut-off high pass filters.
Measuring Time	0.5 seconds sample interval. As many as 2^{16} samples can be stacked to improve measurement accuracy.
VLF-Magnetic Field Components Measured	1) Horizontal amplitude, 2) vertical in-phase component, and 3) vertical quadrature components. Vertical components are displayed as a percentage of horizontal component and are related in phase to the horizontal component. Their range is ±120%; reading resolution 1%.
VLF-Magnetic Field Sensor	Two air-cored coils in a backpack mounted housing with an electronic level for automatic tilt compensation. The error in the vertical in-phase component is less than 1% for tilts up to ±15°.

VLF-Electric Field Dipole	Two electrodes with integral preamplifiers and 5 m of cable. Probe input impedance exceeds 100 megaohms and capacitance is less than 1 picofarad.
VLF-Electric Field Components Measured	In-phase and quadrature components of the horizontal electric field phase-related to the horizontal VLF-magnetic field. These components are not recorded but are used in the calculations of resistivity and phase. The reading resolution is 1 ohmmeter.
Apparent Resistivity Calculation	$\rho = \frac{1}{2\pi f \mu_o} \left\| \frac{E_x}{H_y} \right\|^2$ where: ρ = apparent resistivity in ohmmeters E_x = horizontal electric amplitude, calculated. $E_x = (E_x(I)^2 + E_x(Q)^2)^{\frac{1}{2}}$ H_y = horizontal magnetic amplitude, measured f = VLF station frequency in Hertz μ_o = permeability of the ground in Henries/meter, a constant The resistivity calculation has a range of 1 to 100,000 ohmmeters with a resolution of 1 ohmmeter.
Phase Angle Calculation	The phase angle ϕ is expressed as: $\phi = \arctan \frac{E_x(Q)}{E_x(I)}$ where: $E_x(Q)$ = horizontal quadrature VLF electric field, measured

$E_x(I)$ = horizontal in-phase VLF electric field, measured

The phase angle calculation has a range of -180° to +180° with a resolution of 1°. By definition the angle is positive when the E field leads the H field.

MAGNETOMETER

SPECIFICATIONS

Magnetometry Specifications

Total Field Operating Range	20,000 to 100,000 nT (1 nT = 1 gamma).
Gradient Tolerance For Total Field:	±5000 nT/m.
Total Field Absolute Accuracy	±1 nT at 50,000 nT ±2 nT over total field operating and temperature range.
Resolution	0.1 nT.
Tuning	Fully solid-state. Manual or automatic mode is keyboard selectable.
Reading Time	2 seconds. For portable readings this is the time taken from the push of a button to the display of the measured value.
Continuous Cycle Times	Keyboard selectable in 1 second increments upwards from 2 seconds to 999 seconds.
Operating Temperature Range	-40°C to +50°C provided optional Display Heater is used below -20°C.

Sensor Options

In the following options the actual sensors are identical; however, mountings and cables vary.

Portable Total Field Sensor Option	Includes sensor, staff, two 2 m cables and backpack sensor harness. Weight of sensor, cable and staff is 1.9 kg.

	Staff is 30 x 600 mm collapsed and 1600 mm extended.
Base Station Sensor Option	Includes sensor, tripod, 50 m cable external power cable and analog chart recorder cable. Weight of sensor, cable and tripod is 6.5 kg. Tripod is 540 mm collapsed, 1650 mm extended.
Gradiometer Sensor Option	For use with the Portable Total Field Sensor Option, includes second sensor, cables and both a .5m and a 1m staff extender. Combined weight of Total Field and Gradiometer Sensor options with staff, extender and cables is 3.5 kg.

SPECIFICATIONS

Standard Console Specifications

Digital Display	32 character, 2 line LCD display
Keyboard Input	14 keys for entering all commands, coordinates, header and ancillary information.
Languages	English plus French is standard.
Standard Memory	16K RAM. More than sufficient for a day's data in most applications.
Clock	Real time clock with day, month, year, hour, minute and second. One second resolution, ±1 second stability over 12 hours. Needs keyboard initialization only after battery replacement.
Digital Data Output	RS-232C serial interface for digital printer, modem, microcomputer or cassette tape recorder. Data outputs in 7 bit ASCII, no parity format. Baud rate is keyboard selectable at 110, 300, 600 and 1200 baud. Carriage return delay is keyboard selectable in increments of one from 0 through 999. Handshaking is done through X-ON/X-OFF protocol. Allows IGS-2 to act as a master for other instrumentation.
Analog Output	For a strip chart recorder. 0 to 999 mV full scale with keyboard selectable sensitivities of 10, 100 or 1000 units full scale.

Console Dimensions	240 x 90 x 240 mm includes mounted battery pack.
Weights	Console: 2.2 kg Console with Non-rechargeable Battery Pack; 3.2 kg. Console with Rechargeable Battery Pack: 3.6 kg.
Operating Temperature Range	-40°C to +50°C provided optional Display Heater is used below -20°C.
Power Requirements	Can be powered by external 12 V DC or one of the Battery Pack Options listed below.

Battery Pack Options

Battery Pack lifetime depends on which Battery Pack is selected, sensor(s) used, reading time and ambient temperature. Life expectancy would be 1 to 10, eight hour survey days.

Non-Rechargeable Battery Pack	Includes battery holder and 10 disposable 'C' cell batteries for installation on console. Used in low sensitivity total field magnetometry or VLF in temperatures above 0°C. Weight is 0.9 kg.
Rechargeable Battery Pack and Charger	Includes battery holder, 6 rechargeable, non-magnetic, sealed lead-acid batteries and charger for installation on console. Best for high sensitivity total field measurements, all gradient measurements and operation below 0°C. Pack weighs 1.3 kg. Charger specifications are: 140 x 95 x 65 mm, 115/230 V AC, 50/60 Hz, 20 VA, overload protected.

Heavy Duty Rechargeable Battery Pack	Includes heavy duty rechargeable batteries installed in a console with a built-in charger. Used for rapid cycling base station or mobile applications. Total weight is 7.6 kg. Dimensions are 240 x 90 x 240 mm. Power requirements: 115/230 V AC, 50/60 Hz, 20 VA. Overload protected.
Low Temperature Battery Extender Kit	Designed so that the battery pack can be worn inside a coat during cold weather conditions. Kit includes a bottom cover for console, console to battery pack interconnecting cable, cover for the battery pack and waist belt.

Optional Accessories

Language Options	In addition to English, a second language using Latin characters can replace French.
RS-232C Cable and Adapter	Used for communicating between IGS-2 and peripheral devices such as an MP-3 magnetometer, a second IGS-2, digital printer, microcomputer, cassette recorder or modem.
Minor Spare Parts Kit	Includes 2 keyboard diaphragms and 2 fuses.
Carrying Cases	A variety of carrying cases are available to suit different combinations of console and sensor options.
Display Heater	Required for cold weather operation. Powered by main batteries, thermostatically controlled to turn off above -20°C.

APPENDIX VII

Statement of Costs

PAN ISLAND RESOURCE CORP.

Murton Claim Group - Project 87BC025
July 11 - July 21, 1987

Exploration Cost Breakdown

Linecutting (14.65 km @ $700.00/km)	$10,255.00
Magnetometer Survey (13.75 km @ $200.00/km)	2,750.00
VLF-EM Survey (13.75 km @ $200.00/km)	2,750.00
Mapping, Prospecting, Sampling K. Karchmar, Geologist (10 days @ $275.00/day)	2,750.00
Accomodation (20 man days @ $75.00/day)	1,500.00
Mobilization/Demobilization	1,750.00
Truck Rental and Fuel (11 days @ $100.00/day)	1,100.00
Rock Sample Analysis (73 samples for Au, Ag, As Pb, Sb, Zn, Cu + preparation @ $14.75/sample)	1,076.75
Project Preparation	1,500.00
Office Overheads and Communications	500.00
Assessment Requirement Documentation & Filing	750.00
Report Compilation and Drafting	3,500.00
Sub-total:	**$30,181.75**
Project Management Fee (18%)	5,432.70
TOTAL:	**$35,614.45**

L 3 + 00 W | L 2 + 00 W | L 1 + 00 W | 0 + 00 | L 1 + 00 E | L 2 + 00 E | L 3 + 00 E | L 4 + 00 E | L 5 + 00 E | L 6 + 00 E

L 2 + 00 N

L 1 + 00 N

L at N 90° 0 + 00

L 1 + 00 S

L 2 + 00 S

L 3 + 00 S

L 4 + 00 S

L 5 + 00 S

L 6 + 00 S

L 7 + 00 S

L 8 + 00 S

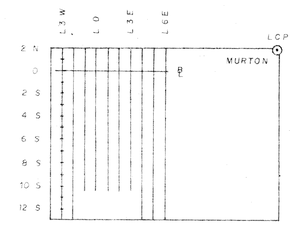
L 9 + 00 S

L 10 + 00 S

L 11 + 00 S

L 12 + 00 S

L 13 + 00 S



GRID LOCATION SKETCH
Scale 1:25,000

LEGEND :

- LEGAL CORNER POST
- CORNER POST
- IDENTIFICATION POST
- CLAIM BOUNDARY
- CLIFF
- CREEK
- HIGHWAY
- LOGGING ROAD

CONTOUR INTERVAL 20

0 25 50 100 150 200 250
METRES

GEOLOGICAL BRANCH ASSESSMENT REPORT 16,507

DAN ISLAND RESOURCE CORP.

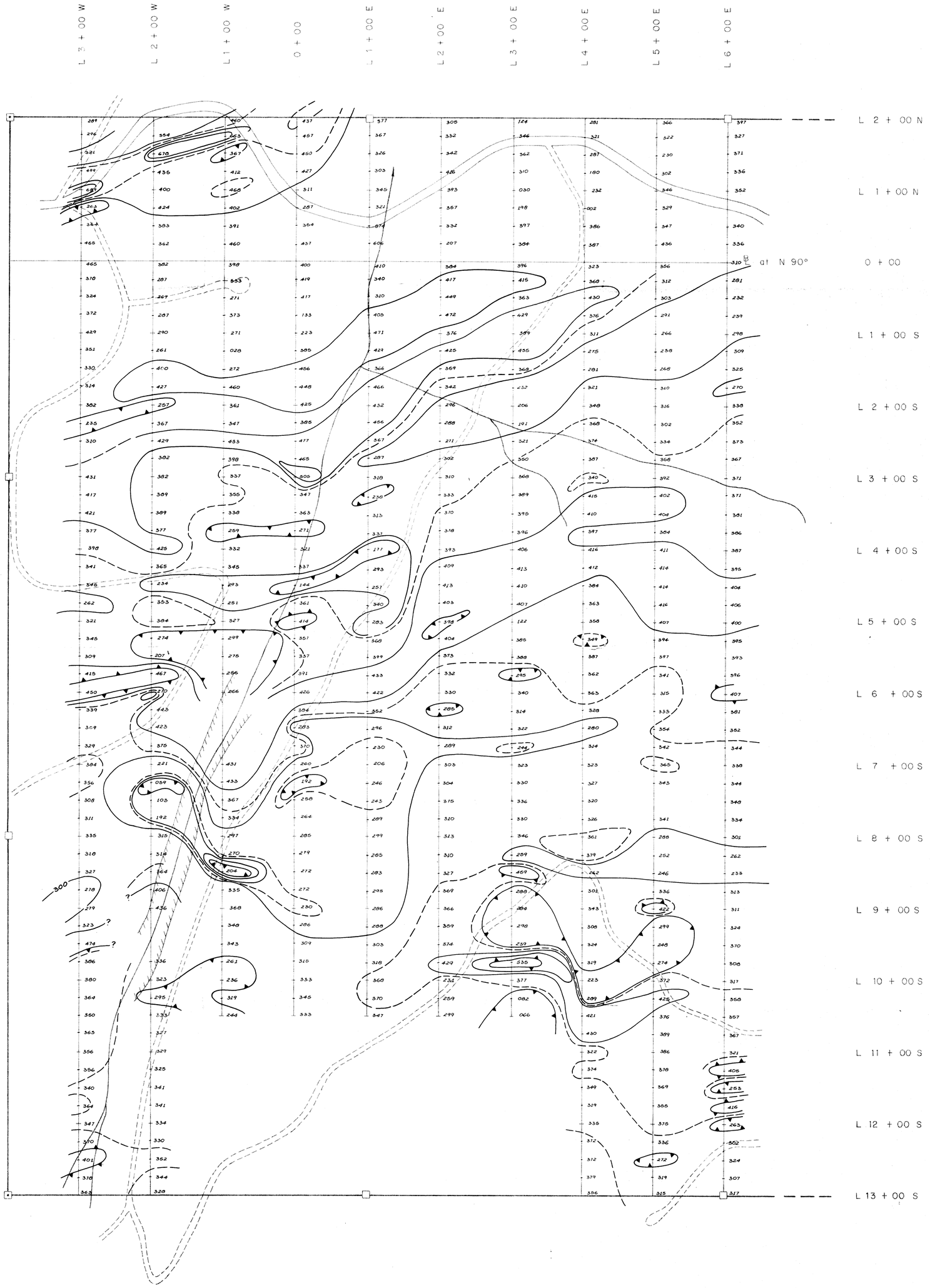
MURTON CLAIM GROUP

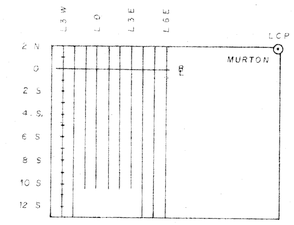
VLF-EM # 2 FRASER FILTERED CONTOUR MAP

PROFESSIONAL GEOLOGIST ALBERTA R. ARNOLD

HI-TEC RESOURCE MANAGEMENT LIMITED

DWN. BY: E.B.WYTRWAL	DATE: JULY 87
CHK. BY: R.ARNOLD	FIGURE No. 11
SCALE: 1:2500	





GRID LOCATION SKETCH
Scale 1: 25,000

LEGEND

- LEGAL CORNER POST
- CORNER POST
- IDENTIFICATION POST
- CLAIM BOUNDARY
- CLIFF
- CREEK
- HIGHWAY
- LOGGING ROAD

CONTOUR INTERVALS : 50 & 100 GAMMAS
BASE VALUE 55,500 GAMMAS

GEOLOGICAL BRANCH
ASSESSMENT REPORT

16,507

0 25 50 100 150 200 250
METRES

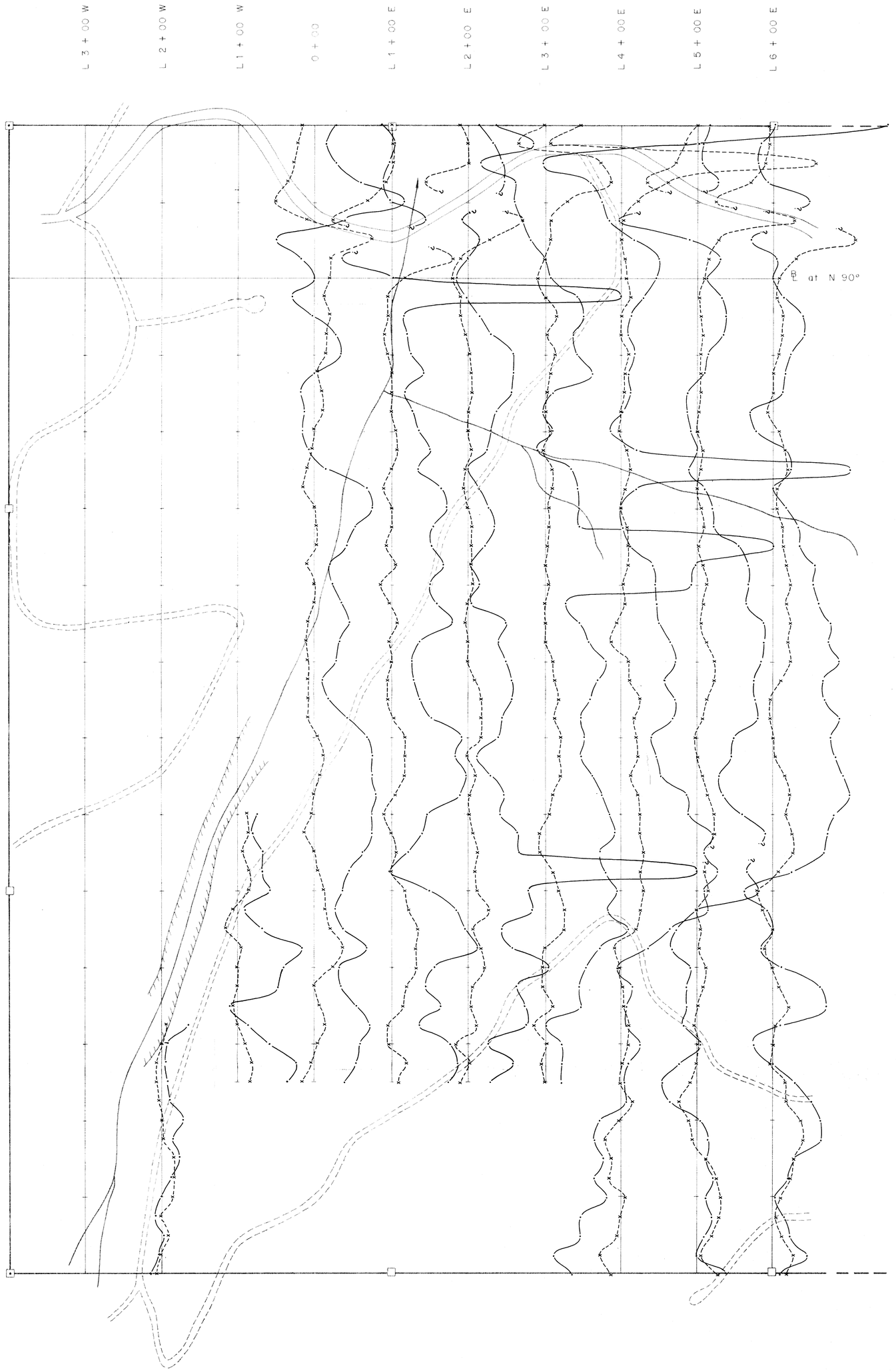
PAN ISLAND RESOURCE CORP.

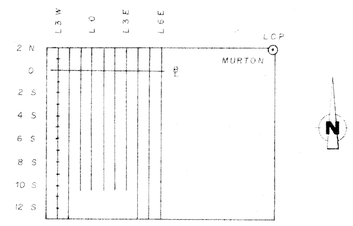
MURTON CLAIM GROUP

MAGNETOMETER TOTAL FIELD CONTOUR MAP

HI-TEC RESOURCE MANAGEMENT LIMITED	DWN. BY E.B.WYTRWAL	DATE JULY 87	
	CHK. BY R.ARNOLD	FIGURE No. 12	
	SCALE 1 : 2500		

PROFESSIONAL GEOLOGIST ALBERTA





GRID LOCATION SKETCH
Scale 1: 25,000

LEGEND :

- LEGAL CORNER POST
- CORNER POST
- IDENTIFICATION POST
- CLAIM BOUNDARY
- CLIFF
- CREEK
- HIGHWAY
- LOGGING ROAD

+10 %
0
-10 %
IN PHASE

+10 %
0
-10 %
QUADRATURE

VLF - EM # 3 ; 24.8 KHz, SEATTLE, WASHINGTON, USA

NOTE :
The operator faced the West to take the readings

GEOLOGICAL BRANCH
ASSESSMENT REPORT

16,507

0 25 50 100 150 200 250
METRES

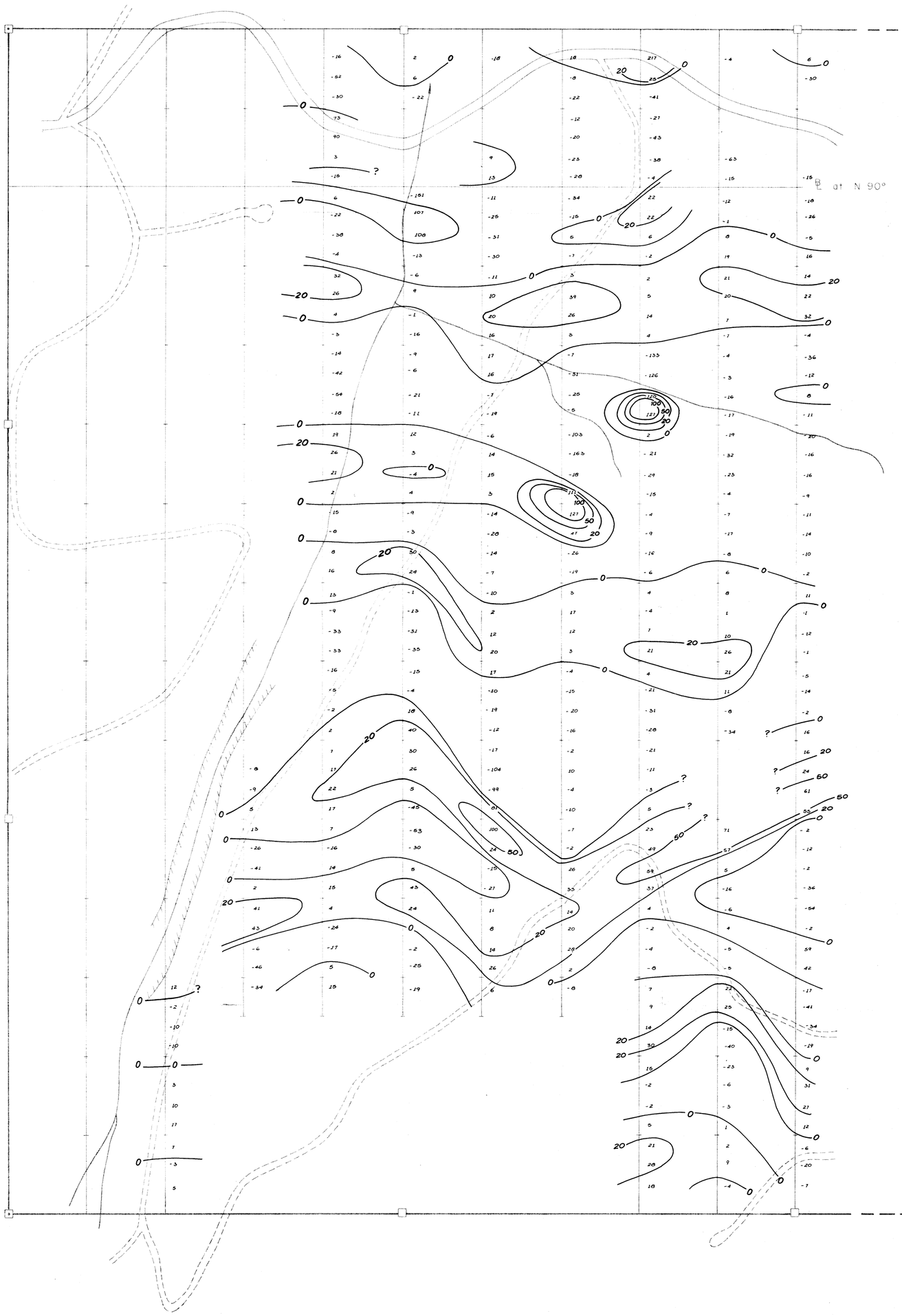
PAN ISLAND RESOURCE CORP.

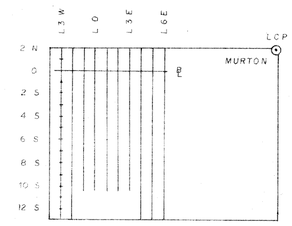
MURTON CLAIM GROUP

VLF-EM # 3 PROFILES

HI-TEC RESOURCE MANAGEMENT LIMITED	DWN. BY : E.B.WYTRWAL	DATE : JULY 87	
	CHK. BY : R.ARNOLD	FIGURE Nº.	8
	SCALE : 1 : 2500		

L 3 + 00 W | L 2 + 00 W | L 1 + 00 W | 0 + 00 | L 1 + 00 E | L 2 + 00 E | L 3 + 00 E | L 4 + 00 E | L 5 + 00 E | L 6 + 00 E





GRID LOCATION SKETCH
Scale 1: 25,000

N

LEGEND

- LEGAL CORNER POST
- CORNER POST
- IDENTIFICATION POST
- CLAIM BOUNDARY
- CLIFF
- CREEK
- HIGHWAY
- LOGGING ROAD

CONTOUR INTERVAL 20

0 25 50 100 150 200 250
METRES

GEOLOGICAL BRANCH
ASSESSMENT REPORT
16,507

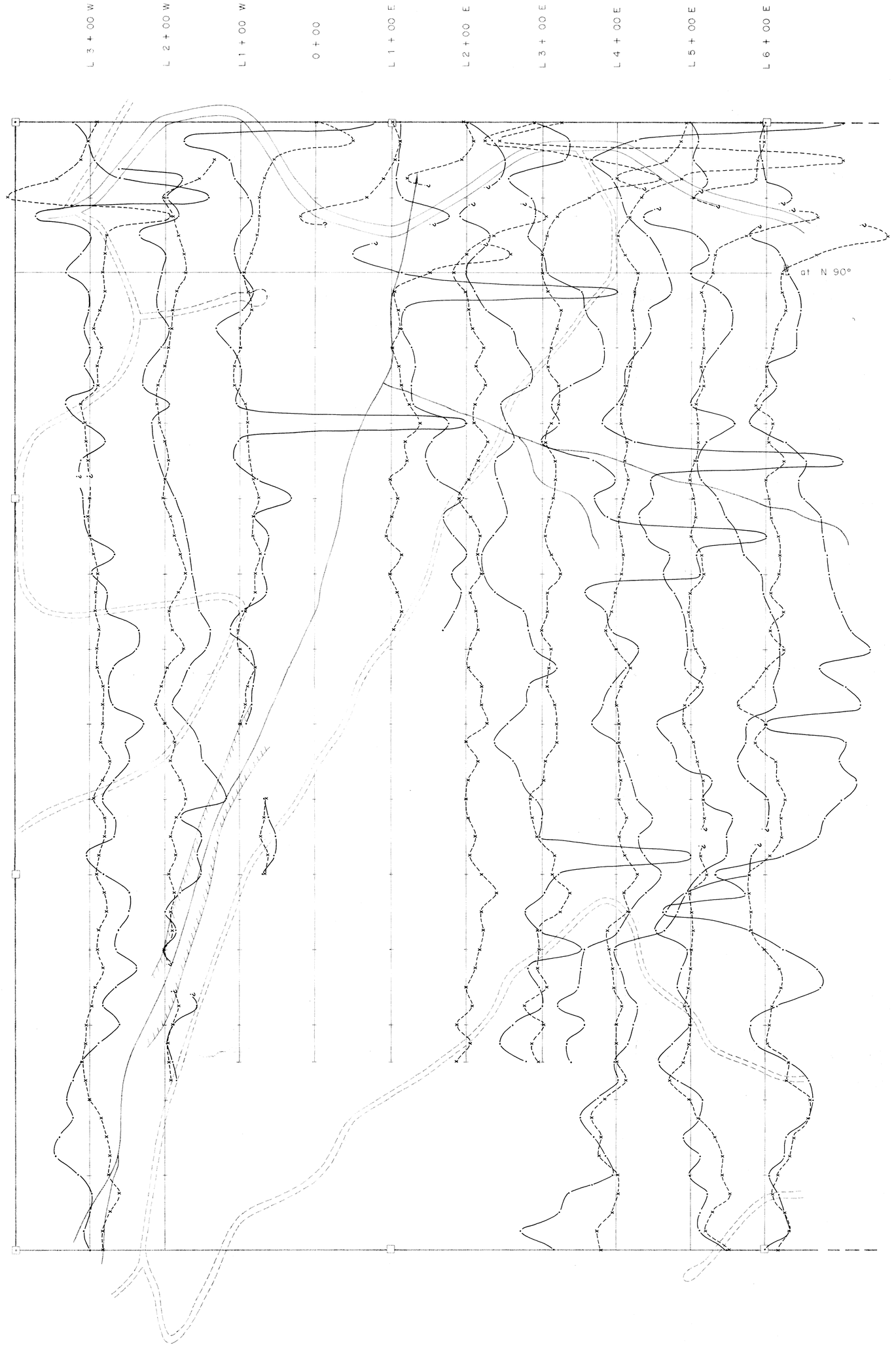
PAN ISLAND RESOURCE CORP.

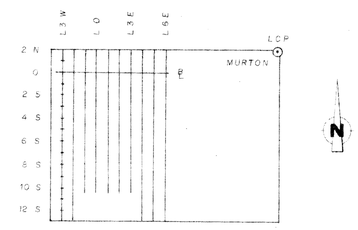
MURTON CLAIM GROUP

VLF-EM # 3 FRASER FILTERED CONTOUR MAP

PROFESSIONAL GEOLOGIST ALBERTA

HI-TEC RESOURCE MANAGEMENT LIMITED	DWN. BY: E.B.WYTRWAL	DATE: JULY 87	
	CHK. BY: R.ARNOLD	FIGURE NO.	9
	SCALE: 1:2500		





GRID LOCATION SKETCH
Scale 1:25,000

LEGEND

- LEGAL CORNER POST
- CORNER POST
- IDENTIFICATION POST
- CLAIM BOUNDARY
- CLIFF
- CREEK
- HIGHWAY
- LOGGING ROAD

+10 %
0
-10 %
IN PHASE

+10 %
0
-10 %
QUADRATURE

VLF - EM # 2 ; 21.4 KH z , ANNAPOLIS, MARYLAND, USA

NOTE :
The operator faced the West to take the readings

GEOLOGICAL BRANCH ASSESSMENT REPORT

16,507

0 25 50 100 150 200 250
METRES

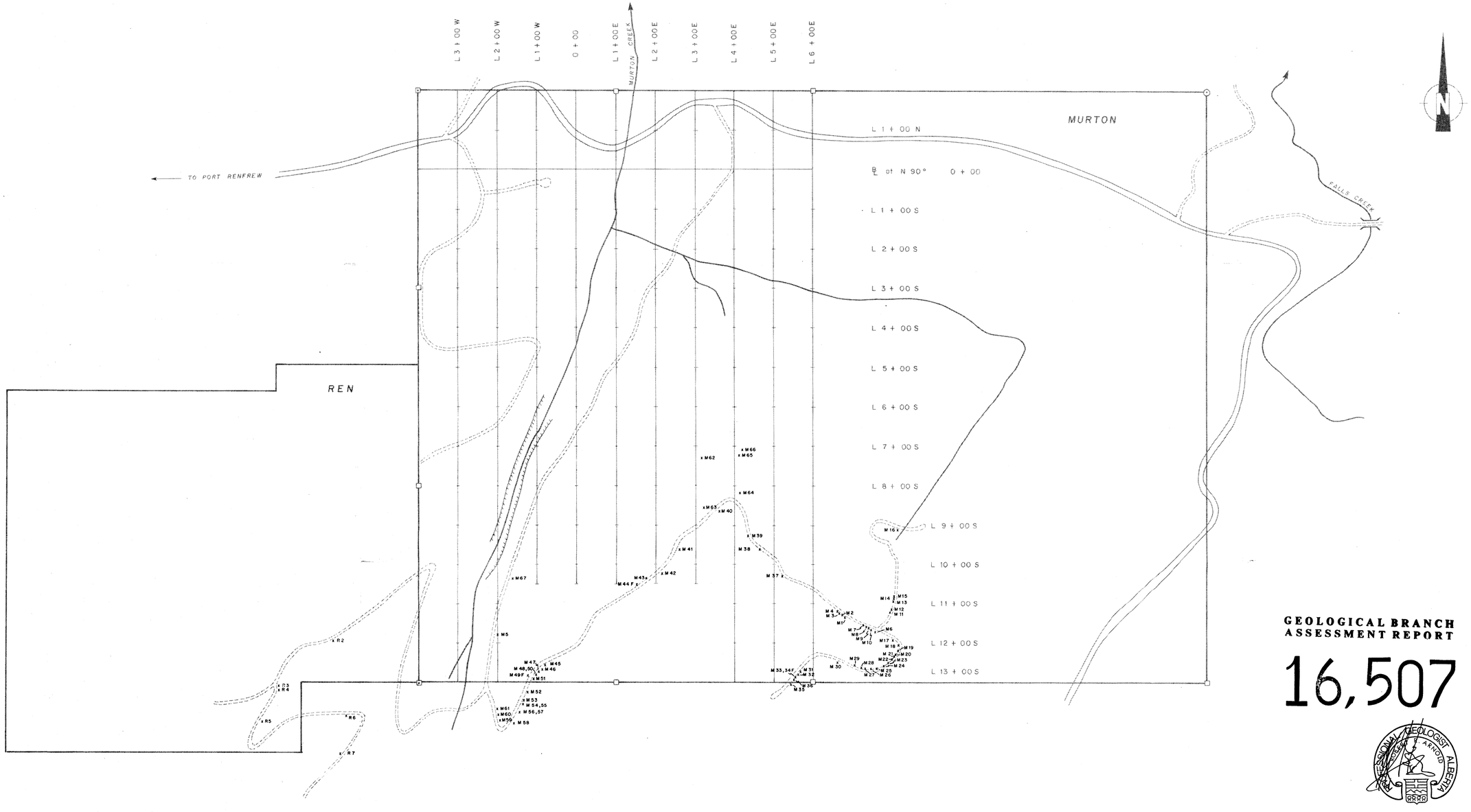
PAN ISLAND RESOURCE CORP.

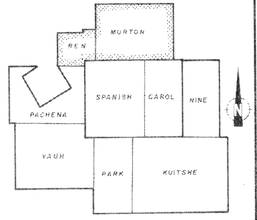
MURTON CLAIM GROUP

VLF-EM # 2 PROFILES

HI-TEC RESOURCE MANAGEMENT LIMITED	DWN. BY: E.B.WYTRWAL	DATE: JULY 87
	CHK. BY: R.ARNOLD	FIGURE NO. 10
	SCALE: 1:2500	

PROFESSIONAL GEOLOGIST ALBERTA





LOCATION MAP SCALE 1 : 76,000

LEGEND

- LEGAL CORNER POST
- CORNER POST
- IDENTIFICATION POST
- CLAIM BOUNDARY
- CLIFF
- CREEK
- HIGHWAY
- LOGGING ROAD

x M15 ROCK SAMPLE LOCATION & SAMPLE NUMBER

0 100 200 M

GEOLOGICAL BRANCH ASSESSMENT REPORT

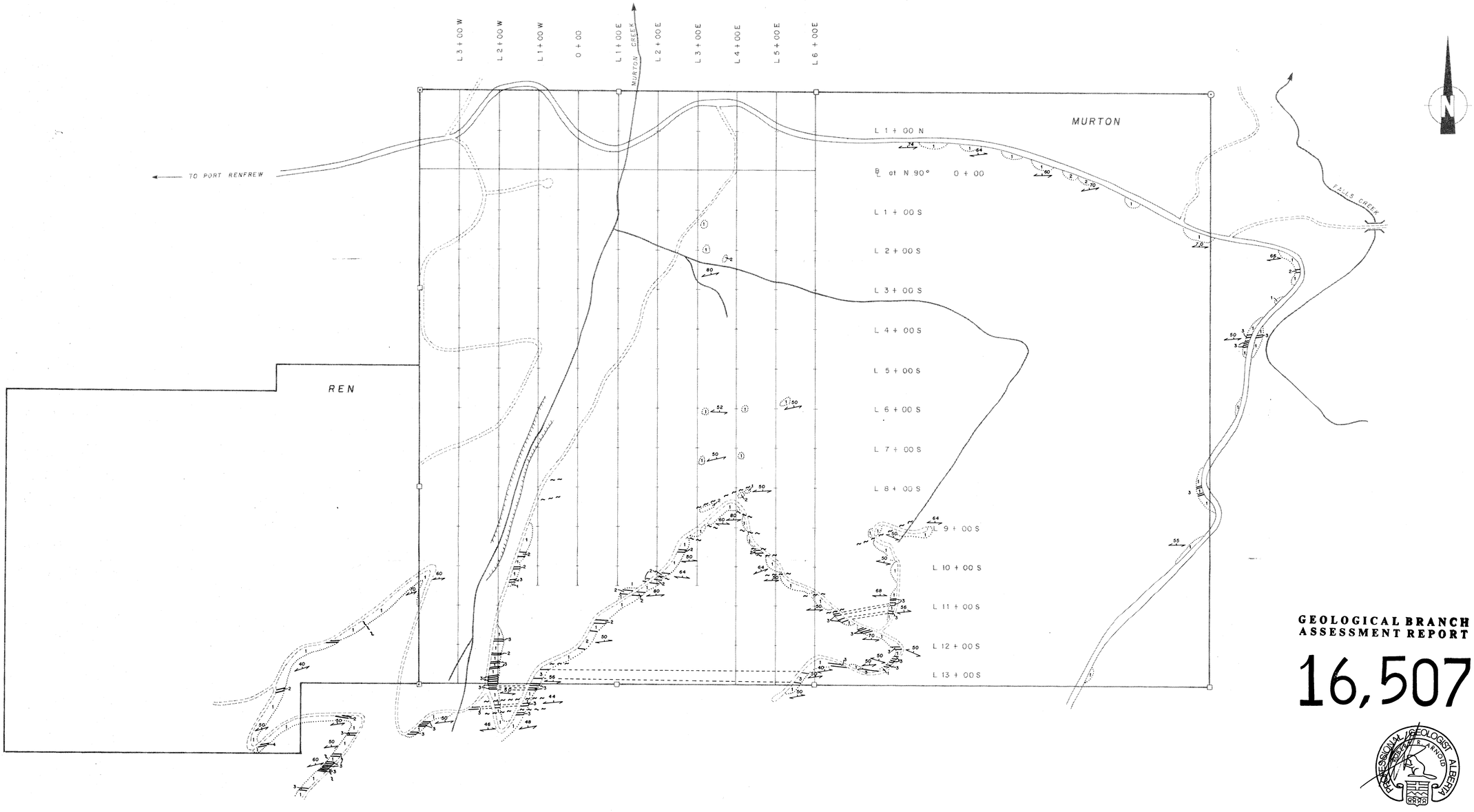
16,507

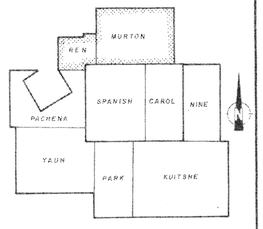
PAN ISLAND RESOURCE CORP.

MURTON CLAIM GROUP

ROCK SAMPLE LOCATION

MINERAL RESOURCE MANAGEMENT LTD.	DRAWN BY: E.B.W.	DATE: AUG. 87	
	CHK'D BY:	FIGURE NO.	6
	SCALE 1:5000		





LOCATION MAP SCALE 1 : 76,000

LEGEND

- LEGAL CORNER POST
- CORNER POST
- IDENTIFICATION POST
- CLAIM BOUNDARY
- CLIFF
- CREEK
- HIGHWAY
- LOGGING ROAD

4	FELSIC DYKES
3	GRANODIORITE, QUARTZ – DIORITE
2	META – GREYWACKE
1	ARGILLITE, SLATE, PHYLLITE

- LIMIT OF OUTCROP
- GEOLOGICAL CONTACT
- GEOLOGICAL CONTACT ASSUMED
- FOLIATION, INCLINED
- FAULT, ASSUMED, SHEER ZONE

NOTE:
DYKE SIZE EXAGGERATED FOR PRESENTATION

0 100 200 M

GEOLOGICAL BRANCH ASSESSMENT REPORT

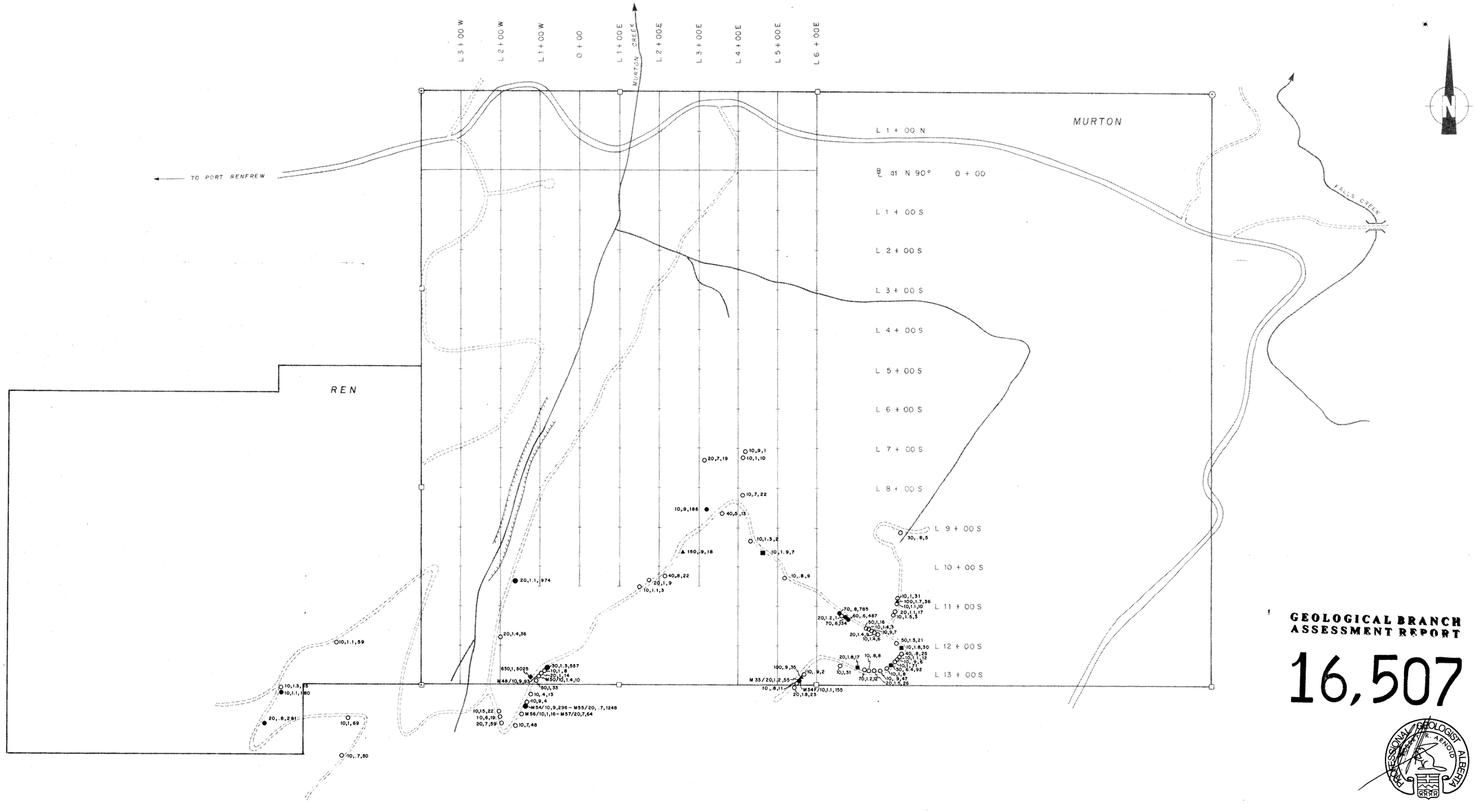
16,507

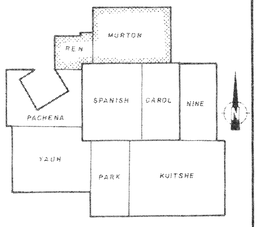
PAN ISLAND RESOURCE CORP.

MURTON CLAIM GROUP

GEOLOGY

MITEL RESOURCE MANAGEMENT LIMITED	DRAWN BY E.B.W.	DATE AUG 87
	DRN. BY K.KARCHMAR	FIGURE NO. 5
	SCALE 1 : 5000	





LOCATION MAP SCALE 1 : 76,000

LEGEND

- LEGAL CORNER POST
- CORNER POST
- IDENTIFICATION POST
- CLAIM BOUNDARY
- CLIFF
- CREEK
- HIGHWAY
- LOGGING ROAD

○ 70,8,110
SAMPLE LOCATION, Au(ppb), Ag(ppm), As(ppm)

- ▲ GOLD ANOMALY (> 100 ppb)
- ■ SILVER ANOMALY (> 1.7 ppm)
- ● ARSENIC ANOMALY (> 100 ppm)
- ◆ Au, As ANOMALY

0 100 200 M

GEOLOGICAL BRANCH ASSESSMENT REPORT

16,507

PROFESSIONAL GEOLOGIST ALBERTA

PAN ISLAND RESOURCE CORP.

MURTON CLAIM GROUP

GEOCHEMISTRY
GOLD, SILVER, ARSENIC

N. TAY RESOURCE MANAGEMENT LIMITED

DRAWN: E.B.W
CHK'D:
SCALE 1 : 5000

DATE AUG 87
FIGURE NO. 7