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**GEOLOGICAL AND GEOCHEMICAL REPORT
ON THE IAN 1 TO 4 CLAIMS,
ISKUT RIVER AREA,
LIARD MINING DIVISION, B.C.**

Latitude: 56°43'N
Longitude: 130°59'W

FILMED

NTS 104B/10W and 104B/11E

For

Ashburton Oil Ltd.
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Vancouver, B.C.
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GEOLOGICAL BRANCH
ASSESSMENT REPORT

16,955

November 1987

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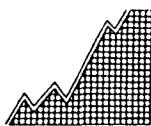


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1.0 SUMMARY

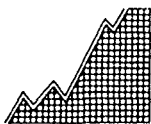
Pursuant to a request by the directors of Ashburton Oil Ltd., an exploration program including prospecting, geological mapping and geochemical sampling was carried out on the Ian 1 to 4 mineral claims, in June and July of 1987. The author was active in this program in the capacity of project geologist, and has researched literature pertaining to the area.

The property is located in the western Iskut River area of northwestern British Columbia. This area has been the focus of an active mining exploration scene for the past several years, and several discoveries have been made. The most significant of these are Skyline Exploration Ltd.'s Reg Property, which is currently being put into production, and the Delaware Resources-Cominco Ltd.'s Snip property near Bronson Creek.

The property lies within the westernmost part of the Intermontane Tectonic Belt, close to its boundary with the Coastal Crystalline Tectonic Belt. The property itself is underlain by a sequence of volcanic and sedimentary rocks which are intruded by several small igneous bodies which represent a variety of lithologies.

Highly anomalous base metal values, and anomalous precious metal values have been recorded from rock grab samples taken from two minor showings on the Ian 4 claim. One of these showings occurs in a localized skarn, and the other in a shear zone in silicified argillite. Elevated gold values were also recorded in stream sediment samples from the Ian 2 claim.

The northern part of the Ian 4 claim, and the northeastern part of the Ian 2 claim appear to have potential



for base and precious metal mineralization. Further exploration work will be necessary in order to fully evaluate this potential. A program of airborne and ground Mag and EM surveys, soil geochemistry, and further geological mapping and prospecting has been recommended. One or more areas should be cleared to facilitate practical helicopter access.

2.0 INTRODUCTION

Pursuant to a request by the Directors of Ashburton Oil Ltd., an exploration program involving geological mapping, prospecting and stream sediment geochemistry was conducted by Hi-Tec Resource Management Ltd. during June and July of 1987. The purpose of this program was to evaluate the precious metal and/or base metal potential of the property to the fullest extent possible within the given time and budget constraints.

2.1 Property and Ownership

The property is recorded as follows:

<u>Claim Name</u>	<u>Record No.</u>	<u>No. Units</u>	<u>Record Date</u>	<u>Mining Div.</u>	<u>Recorded Owner</u>
Ian 1	3730	10	Dec. 5/86	Liard	I. Hagemoen
Ian 2	3731	20	Dec. 5/86	Liard	I. Hagemoen
Ian 3	3732	10	Dec. 5/86	Liard	I. Hagemoen
Ian 4	3733	<u>20</u>	Dec. 5/86	Liard	I. Hagemoen

Total: 60 Units

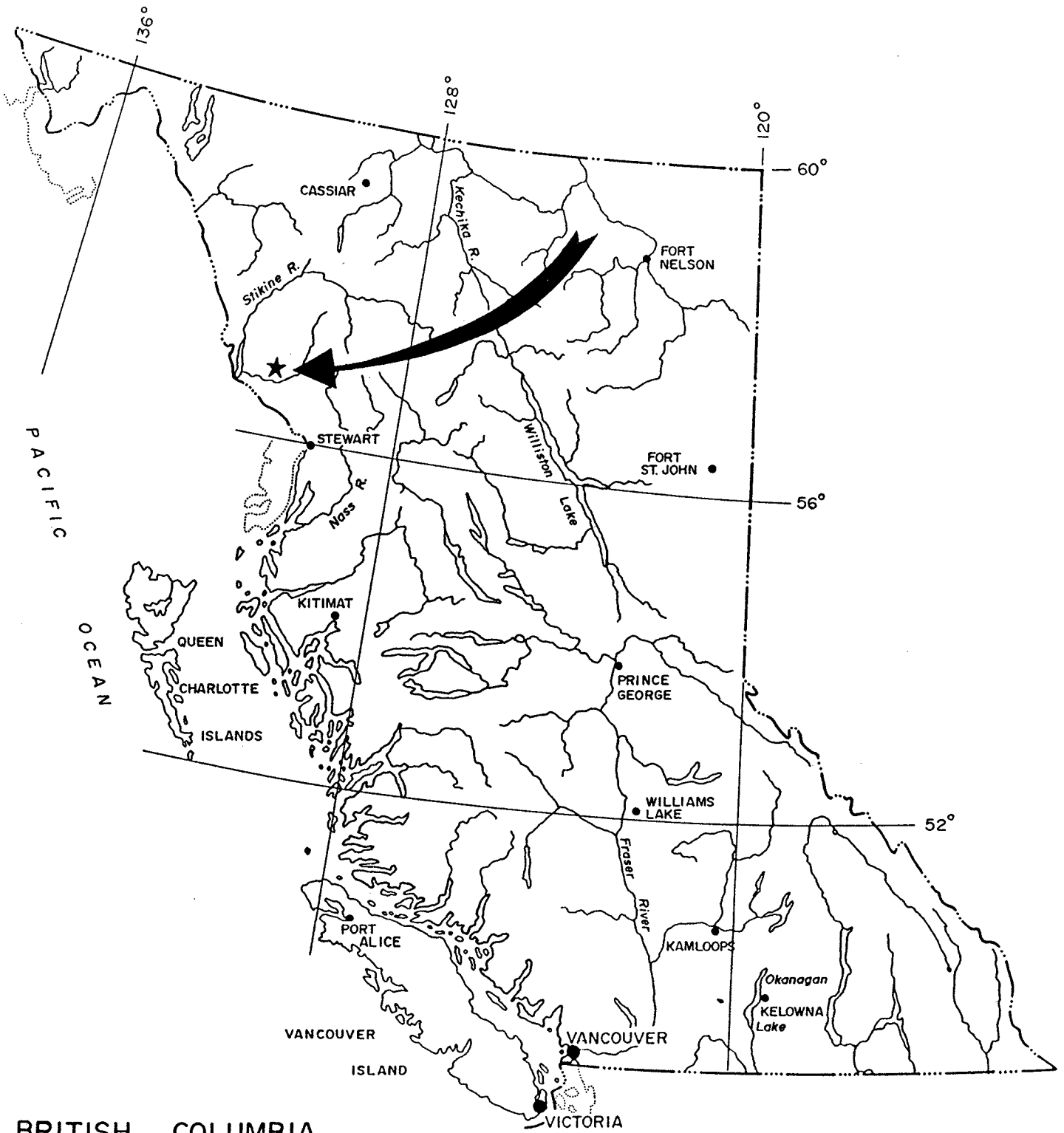
The Ian claim group consists of 4 contiguous mineral claims totalling 60 units. All of the claims are held by I. Hagemoen for Ashburton Oil Ltd.

2.2 Location and Access

The Ian 1 to 4 mineral claims are located close to the Alaska panhandle boundary in the western Iskut River area of northwestern British Columbia (see Figure 1). The property is approximately 110 air kilometers northwest of Stewart, 80 air kilometers east of Wrangell, Alaska and 4.5 air miles northeast of the Bronson Creek Air Strip. It is located immediately north of the Iskut River, and is bisected by the Verrett River, which runs almost due south into the Iskut River through the east central-portion of the Ian 1 and 2 claims (see Figure 2). This location is in NTS map area 104B/10W and 104B/11E at latitude $56^{\circ}43'N$ and longitude $130^{\circ}59'W$.


The area is accessible by air from Smithers, Wrangell, Terrace or Stewart to gravel air strips at Bronson Creek, Johnny Mountain or Snippaker Creek. The nearest road is Highway 37, which is roughly 40 miles away at Bob Quinn Lake. A proposal has been made for a road to be built from Bob Quinn Lake to Skyline's Reg property, along the south side of the Iskut River.

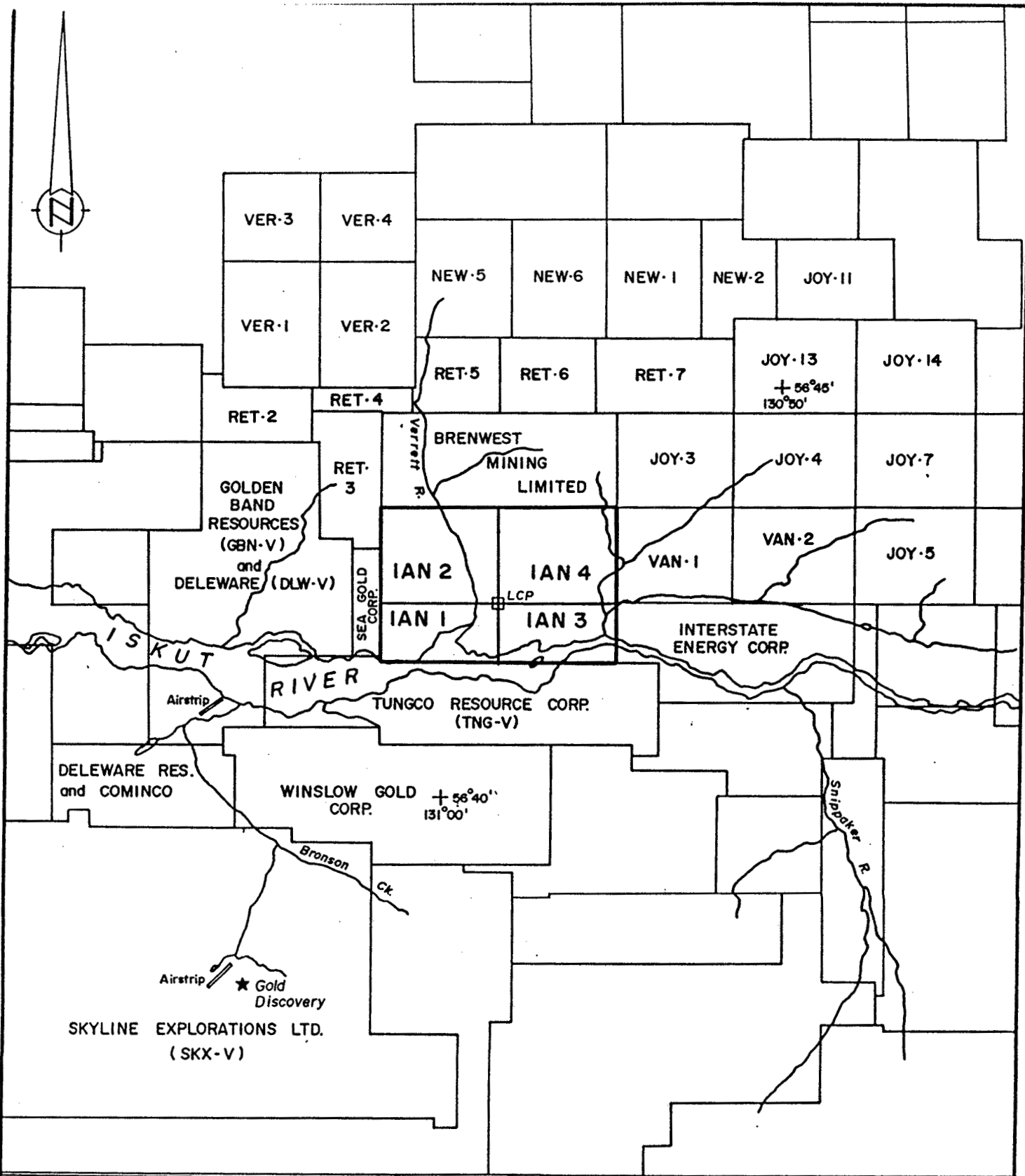
Immediate access to the Ian 1 to Ian 4 mineral claims can be practically facilitated only by helicopter. As a result of the rigorous forest and topographical regime, landing sites for helicopters are not plentiful. However, access may be achieved from a small lake immediately to the west of the property at 3,200 foot elevation, from various open knolls immediately north of the property boundary, and from various sandbars and gravel flats along the north bank of the Iskut River and the lower reaches of the Verrett River.



BRITISH COLUMBIA

Scale 1:7,500,000 approx.

ASHBURTON OIL LTD.		
lan 1,2,3, & 4 Claims LIARD M.D., B.C.		
GENERAL LOCATION MAP		
 HI-TEC RESOURCE MANAGEMENT LIMITED	By:	Date: Nov '87
	N.T.S. 104 B/10,11	Figure:
	Scale: see above	1



ASHBURTON OIL LTD.

Ian 1, 2, 3 & 4 Claims
LIARD M.D., B.C.

CLAIM LOCATION MAP



By: G. KING	Date: Oct. '87
N.T.S. 104-B/10,11	Figure: 2
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2.3 Physiography

Topographic relief on the Ian 1 to Ian 4 mineral claims is, for the most part, moderate to steep. The only exception to this is the area immediately adjacent to the Iskut River, which is relatively flat. The Verrett River cuts a vertically walled gorge in the northern part of the Ian 2 claim. Elevation on the property ranges from about 300 feet at the Iskut River to about 3300 feet at the north boundary of the Ian 4 claim.

Much of the property supports an over mature forest of spruce, fir and hemlock. Slide areas on some of the steeper slopes are covered with dense growths of alder. A luxuriant undergrowth of devil's club, huckleberries, ferns and various other types of shrubbery and greenery is to be found on the forest floor in most parts of the property. In the southern part of the Ian 3 claim, in the floodplain of the Iskut River, traversing is very difficult and unpleasant due to extremely swampy conditions and a remarkably dense growth of willow and alder. Surface exploration is also quite challenging in areas which sport a profusion of deadfall resulting from insect damage. Such situations are to be found in the western part of the Ian 1 claim, and in the southeastern part of the Ian 3 claim.

The area in which the Ian claim group is situated lies within the coastal wet belt. Hence, rainfall and snowfall tend to range from heavy to extreme. Winter snowpack at higher elevations is commonly several meters deep. The highest elevations in the Ian claim group were snow free in 1987 from late June to mid-October.

2.4 History and Previous Work

Although the Stikine River served as the access route to the placer deposits of the Cassiar area which were discovered in 1873, there is no record of any prospecting activity in the western Iskut River area until 1907. In that year, F.E. Bronson and Associates of Wrangell, Alaska staked nine claims on the lower reaches of Bronson Creek, to the north of Johnny Mountain. The Iskut Mining Company was incorporated in 1910, and in 1911 it undertook a program of trenching and drifting on the Iskoot and Red Bluff claims. A report from that program states that a ton of ore from one cut yielded \$1.20 in gold, 44.2 ounces of silver and 12.45% of copper.

The Iskut Mining Company's claims were subsequently crown granted in 1914 and 1915 and by 1920, numerous trenches had been dug on these claims, along with a 30 foot adit. The latter revealed a number of veins and stringers hosting galena and gold-silver mineralization.

In 1929, Consolidated Mining and Smelting staked 48 claims on Johnny Mountain. There is no record of any further work on these properties until 1954. In that year, prospectors from Hudson's Bay Mining and Smelting located the Pickaxe showing, and found high grade gold-silver-lead-zinc float on the open, upper slopes of Johnny Mountain. Today, these showings are part of Skyline Exploration's Reg property. Hudson's Bay Mining and Smelting allowed these claims to lapse after performing exploration work on them in the mid-1950's.

In the 1960's a number of major mining companies conducted helicopter borne reconnaissance surveys in this



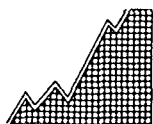
area for potential porphyry copper-molybdenum deposits. Several new claims were staked on Johnny Mountain and along Sulphurets Creek during that period, while Kennco and Noranda investigated the original showings on Johnny Mountain. The original crown grants and surrounding claims were explored in 1965 by a consortium of Cominco, Copper Soo Mining Ltd., and Tuksi Mining and Development Ltd. Some 1,800 feet of diamond drilling in 10 holes was completed by this group. Further geological work was done on these properties in 1968.

Texas Gulf Inc. investigated the porphyry copper potential of Johnny Mountain in 1974. Numerous mining companies conducted exploration work elsewhere in the Iskut River area in the 1960's and 1970's. Among these were Iskut Silver Mines, which conducted programs involving geological and geochemical surveys, trenching and packsack drilling on a property located north of the Iskut River and between the Twin and Verrett Rivers.

On various occasions between 1962 and 1972, Newmont Exploration of Canada Ltd. conducted exploration programs involving geological mapping, geophysics and limited diamond drilling on several prospects in an area near the headwaters of Forrest Kerr Creek.

In 1965, Silver Standard Mines commenced work on the E & L prospect, a nickel-copper deposit on Nickel Mountain near the headwaters of Snippaker Creek. This prospect was later optioned by Sumitomo Metal Mining, and by the end of 1971, 1,500 feet of underground work had been completed in addition to intensive trenching, and surface and underground drilling programs.

In 1969, Skyline Explorations Ltd. restaked the Inel property, after having discovered massive sulphide float



originating from the head of Bronson Glacier. The Reg property was restaked by Skyline in 1980, and in 1981, a program of trenching and limited diamond drilling was carried out on this property. The Reg property was optioned to Placer Developments Ltd. in 1982, which formed a joint venture program with Anaconda Canada Ltd. to carry out various surveys in addition to trenching and diamond drilling in 1983. Exploration was continued on the property by Anaconda in 1984, after which it reverted to Skyline Explorations Ltd.

By the end of 1986, Skyline had completed 1,500 feet of underground cross-cutting and drifting in addition to extensive drilling on the Stonehouse Gold Zone. This work confirmed the presence of high grade gold mineralization in addition to silver and copper with good lateral and depth continuity over mineable widths.

Further exploration and development work has been carried out in 1987, as Skyline prepares to bring the Reg Deposit into production. The success of Skyline's program has provided the impetus for an extremely active mining exploration scene in the Iskut River area over the past few years. In 1987, companies such as Western Canadian Mining Corporation, Gulf International Minerals Ltd., Tungco Resources, and Newhawk Gold Mines among others, have carried out extensive drilling programs in the area. Delaware Resources Corporation, in joint venture with Cominco Limited, has carried out a major drilling program on the Snip Property near Bronson Creek, and a production decision is believed to be imminent.

There is no record of extensive exploration work having been done on the area now occupied by the Ian Claim group prior to 1987. However, the BAX claims of Dupont

of Canada Exploration Ltd. occupied in 1980 much of the ground that now is within the Ian 4 claim. A two day program of geochemical sampling was completed by Dupont that year, along with a minor geological examination.

3.0 GEOLOGY

3.1 Regional Geology and Mineraliation

The subject property lies within the western most part of the Intermontane Tectonic Belt, close to its boundary with the Coastal Crystalline Tectonic Belt. As a result of the proximity of this area to a regional tectonic boundary, geologic relationships tend to be quite complex. The geology of this area has been studied by Kerr (1930, 1948), and by Grove (1986), and is represented in Geological Survey of Canada Maps 9-1957, 1418A and 1505A. Figure 3 in this report is a generalized map of regional geology for the area.

The oldest rocks in the area are complexly folded and metamorphosed schists and gneisses of probable mid-Paleozoic age. Metamorphism occurs predominantly within and adjacent to plutonic systems. The metamorphic rock is commonly overlain by a white to grey crystalline limestone which is believed to belong to a Late Paleozoic sedimentary sequence that includes some minor greenstone units. This oceanic assemblage is part of the Stewart Complex, a tectonic unit which has been correlated with the Cache Creek Group.

The principal component of the Intermontane Tectonic Belt in the Iskut River area is a Mesozoic volcanic and sedimentary sequence. This was originally regarded as a Late Triassic sequence, co-relative with the time equivalent Stuhini Volcanics; a theory which is sup-

ported by the presence of *Monotis* fossils on the north slope of Snippaker Peak and to the west of Newmont Lake. Grove (1986), however, correlates this unit with the Middle Jurassic Unuk River Formation of the Stewart Complex.

On the north slopes of Johnny Mountain and Snippaker Peak, Paleozoic metasedimentary rocks are found to overlie the Mesozoic sequence. These apparently represent the upper plate of a regional, east-west trending thrust fault, which pushed up and over to the south in a manner similar to that of the King Salmon Thrust Fault.

In the Coast Crystalline Tectonic Belt, Paleozoic and Mesozoic sequences are commonly intruded by plutonic rocks of quartz monzonite to quartz diorite composition. These intrusions are Late Cretaceous to Early Tertiary in age. To the east of the main intrusive complex, smaller granitic plugs and stocks are prevalent.

Quaternary flows and ash deposits of olivine basalt are the youngest rocks in the area. Hoodoo Mountain is underlain by this unit, which also occurs in parts of the valleys of the Iskut River and Snippaker Creek.

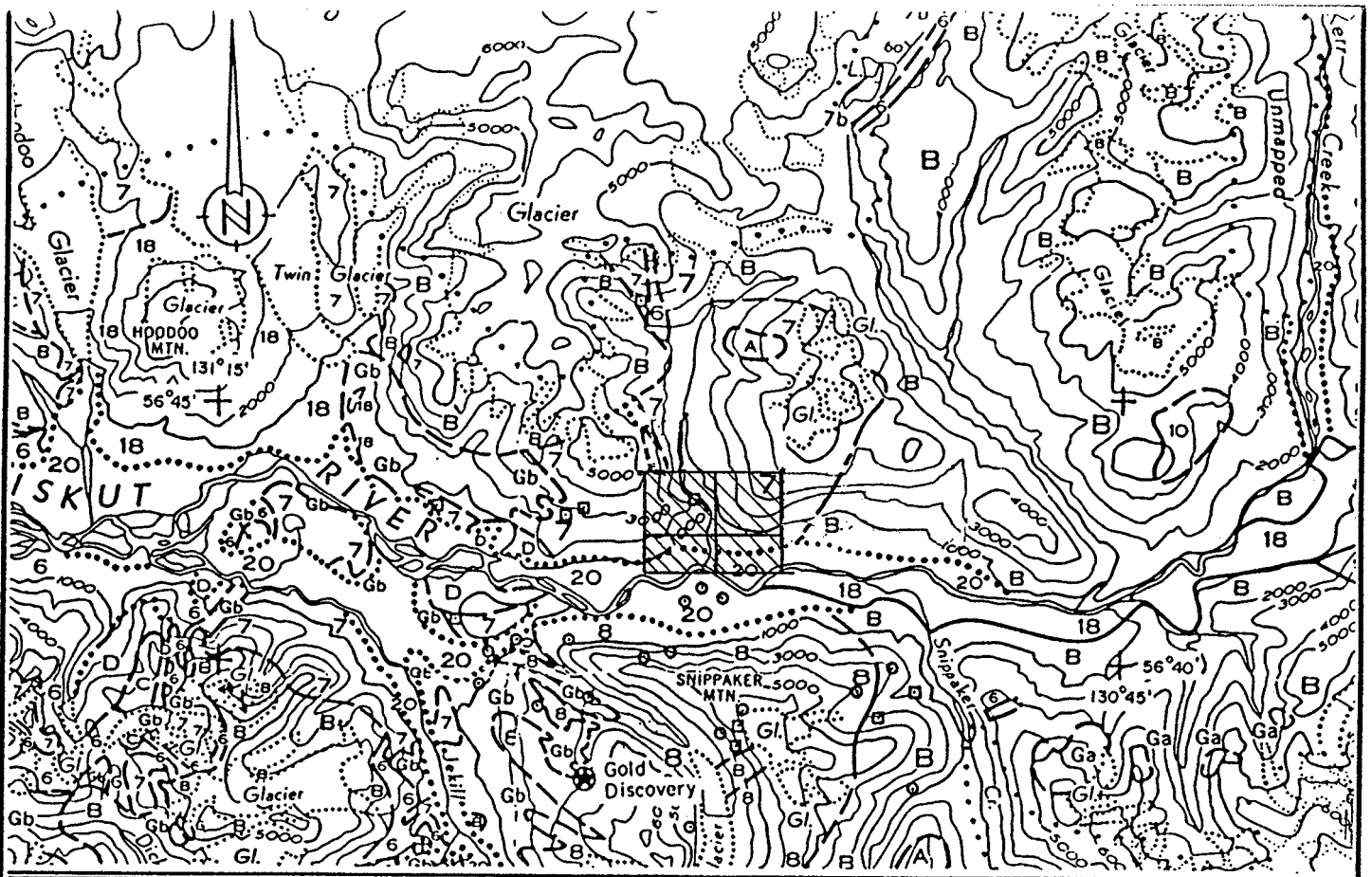
The first mineral showing to be discovered in the western Iskut River area was located on Bronson Creek, two miles upstream from its confluence with the Iskut River. This is in the vicinity of the property currently being explored by the Delaware Resources-Cominco Ltd. joint venture. The original showing was marked by a prominent zone of gossan and extensive alteration peripheral to an orthoclase porphyry intrusion. In this vicinity, there is a zone of sheared and altered volcanic and sedimentary rocks which is two miles long by 1,000 to 2,000 feet wide. In this alteration zone,

pyrite abundances vary being from fracture fillings and disseminations to nearly massive pyrite. Other sulfides which occur in lesser abundance include arsenopyrite, chalcopyrite, galena, sphalerite, tetrahedrite and molybdenite in fractures and quartz veinlets within the adjacent to the intrusion. Significant values of gold, copper and silver were revealed by early work on this zone.

Numerous quartz-sulfide veins and skarn deposits have been reported from various locations along the Iskut River. Low gold values, and good grades of silver, copper, lead, and zinc occur in many of these. Mineralized float has been observed below several glaciers in the area.

Near the headwaters of Snippaker Creek, Silver Standard Mines Ltd. and later Sumitomo Metal Mining did extensive surface and underground work on a copper and nickel bearing gabbro intrusion. A total of 3.2 million tons of 0.80% nickel and 0.60% copper have been confirmed in this deposit. However, this has been a low priority target over the past several years, as a result of depressed base metal prices and the relative remoteness of the location.

The two most significant mineral deposits subject to current investigation in the Iskut River area are the Skyline Explorations Ltd. Reg property on the north slope of Johnny Mountain and the Snip property of the Delaware Resources-Cominco Ltd. joint venture, which is located near Bronson Creek. These properties are only five kilometers apart and appear to be quite similar in nature.



SEDIMENTARY and VOLCANIC ROCKS

QUATERNARY RECENT

- 20** Unconsolidated glacial and fluvial clay, silt, sand, gravel, till; peat, muskeg.
- 18** Olivine basalt, ash, cinders

UPPER JURASSIC and LOWER CRETACEOUS

- 12** Argillite, greywacke, conglomerate, coal.

JURASSIC and/or EARLIER PRE-UPPER JURASSIC

- 10** Mainly sedimentary rocks
- 9** Mainly volcanic rocks; minor conglomerate; greywacke, argillite.

TRIASSIC

- 8** Tuff, siltstone, limestone, conglomerate, breccia

PERMIAN and/or TRIASSIC

- 7** Volcanic and sedimentary rocks undivided; 7 b) mainly greywacke, siltstone, conglomerate

PERMIAN and (?) EARLIER

- 6** Limestone, greenstone, chert, argillite, phyllitic quartzite, greywacke; meta-andesite and meta-diorite locally abundant near ultramafic bodies. May include younger greenstone.

- Geological boundary (defined, approximate, assumed)
- Bedding (inclined)
- Heavy mineral concentrate
- Mineral occurrence

INTRUSIVE ROCKS


- A** Felsite, felsite porphyry
- B** Mainly quartz monzonite, granodiorite, granite
- C** Mainly diorite; minor gabbro
- D** Granite porphyry, granophyre, syenite and related rocks

METAMORPHIC ROCKS

PERMIAN and/or EARLIER PRE MIDDLE PERMIAN

- G** Ga) Gneiss Gb) phyllite, quartzite, minor crystalline limestone, highly altered and sheared greywacke and volcanic rock.



ASHBURTON OIL LTD.							
Ian 1, 2, 3 & 4 Claims LIARD M.D.; B.C.							
REGIONAL GEOLOGY							
 <p>HI-TEC RESOURCE MANAGEMENT LIMITED</p>	<table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 50%;">By: G. KING</td> <td style="width: 50%;">Date: Oct. '87</td> </tr> <tr> <td>N.T.S. 104-B/10,11</td> <td>Figure: 3</td> </tr> <tr> <td>Scale: 1: 250,000</td> <td></td> </tr> </table>	By: G. KING	Date: Oct. '87	N.T.S. 104-B/10,11	Figure: 3	Scale: 1: 250,000	
By: G. KING	Date: Oct. '87						
N.T.S. 104-B/10,11	Figure: 3						
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At least seven auriferous, mineral rich quartz veins are known to occur on Skyline's Reg property. These are collectively known as the Stonehouse Gold Zone. This zone is hosted in an east-west striking, northerly dipping sequence of Jurassic volcanoclastics and porphyritic flows. A sequence of Middle Jurassic volcanic breccias and well stratified volcanic tuffs and sediments unconformably overlie the mineralized unit. Steeply dipping northeast trending fractures are the only known mineralization environment in the Stonehouse Gold Zone. These are developed in a zone some 4,700 feet long and 900 feet wide. The mineralized zones consist of pods, lenses and quartz veins which contain a variety of sulfide and sulfosalt mineralization in addition to native gold and electrum. Adjacent to these zones, extensive K-feldspar alteration occurs in the wallrock.

In addition to gold, copper and silver also occur in significant quantities. Grove (1986) estimated the known reserves at that time to be 938,446 tons grading 0.73 oz Au/ton, 0.85 oz Ag/ton and 0.76% Cu.

On the Delaware-Cominco joint venture's Snip property, four quartz-carbonate-pyrite shear veins with high gold values have been discovered. These strike 110° to 120° and dip 65° to the southwest, and occur in Mesozoic tuffs and arenites that have been intruded by a dike-like orthoclase porphyry. Extensive K-feldspar, silica, and pyrite alteration is associated with these zones.

3.2 Property Geology

Geological mapping conducted by the author on the Ian 1 to 4 claims has delineated a sequence of sedimentary and volcanic rocks which have been intruded by several small

igneous bodies, which represent a variety of lithologies. Bedding is seldom well defined in the sedimentary rocks, and is virtually indistinguishable in the majority of the volcanics. There appears to be no evidence of any identifiable features that could serve to indicate the stratigraphic facing of the sequence. These conditions, in addition to the irregular and discontinuous distribution of outcrops on the Ian claims, have prevented a clear and detailed picture of the stratigraphy of the Ian property.

The dominant lithology in that part of the property which lies to the west of the Verrett River is a volcanic unit of probable andesitic composition. This rock type has been observed elsewhere in the region, and has been referred to as the "West Ashburton Unit", as it was first described in the western part of the Ian claim group of Ashburton Oil Ltd. Its most characteristic feature is the presence of rounded inclusions of plagioclase porphyry which occur in various sizes and abundances throughout most of the unit. These volcanics are generally grey-green in color and very rich in magnetite. This abundance of magnetite, in addition to the lack of any visible volcanic texture, has led to the suggestion that this unit is, in fact, doleritic or microdioritic in composition. The author, however, is of the opinion that this lithology represents the hypabyssal component of an extensive flow sequence.

There appears to be a mild, pervasive epidote-chlorite alteration in most of this unit. Saussurization of plagioclase phenocrysts is a common feature in these volcanics.

The "West Ashburton Unit" is also found outcropping in various places along the northern boundary of the Ian 4

claim. Aside from this, volcanic rocks are relatively rare in the eastern part of the property, although a few minor outcroppings of rhyolitic or dacitic material have been noted. There is also a single, isolated occurrence of tuffaceous material of intermediate composition outcropping near the east boundary of the Ian 2 claim.

Many of the outcrops which occur in the Ian 3 claim, and in the lower part of the Ian 1 claim, have been designated as argillites in the accompanying map (see Figure 4). These are essentially devoid of any bedding or textural features, and display a moderate to strong degree of propylitic alteration. Weathered surfaces are strongly bleached, these two latter characteristics have led to the author to conclude that these rocks are either a volcanically derived sediment, or a very fine grained volcanic rock of intermediate composition.

Argillite is the most common type of sedimentary rock on the property. This material is generally quite homogeneous in character, although intensely fractured in some outcrops, it is generally grey-black in color, without significant alteration, although oxidation is locally pronounced. There are zones of intensely silicified material adjacent to the contact between the argillites and the "West Ashburton Unit" volcanics. Hornfels occur in argillites peripheral to some of the intrusive bodies. Intense silicification and minor chloritization is associated with some of these hornfelsed zones.

Limestone is frequently interbedded with argillites on the property, and minor outcroppings of siltstone and chert are found in the northern part of the Ian 4 claim.

There is a massive unit of buff-colored crystalline limestone which outcrops adjacent to the Verrett River in the Ian 2 claim. This is a resistive unit, and forms the vertical walls of the gorge at the Verrett River, along with some pronounced hummocks adjacent to the river. There is some minor development of karst features in this unit adjacent to the river. The mode of outcropping of this lithology, and the confinement of its occurrence to the bottom of the Verrett River Valley, leads the author to conclude that this unit may be unconformable with the other volcanic and sedimentary lithologies which are present on the property.

There are a number of small, medium grained intrusions which outcrop in the Ian 4 claim and in the eastern part of the Ian 2 claim. These represent a variety of lithologies, ranging in composition from granitic or syenitic to dioritic.

The paucity and irregularity of outcrop on the Ian claims makes structural interpretation highly problematic. Very few pronounced structural features were encountered in the mapping program. However, a linear, north-south trending depression was encountered at 1,900 foot elevation in the Ian 2 claim. This seems to be indicative of a major fault zone. The Verrett River Valley very probably represents a graben or rift structure of regional extent.

3.3 Mineralization

Two minor occurrences of base metal mineralization were discovered on the Ian 4 claim. Grab samples from these showings yielded substantial assay values for copper and zinc, and anomalous gold and silver values.

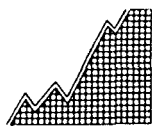
Near the middle of the Ian 4 claim, at 1900 foot elevation, there is a minor development of skarn in a limestone outcrop which is in close proximity to intermediate volcanics. A grab sample of this material, which contained a significant amount of pyrite, and minor sphalerite, yielded assay values of 3.05% zinc and 0.27% copper.

In the northeast corner of the property, at 2700 foot elevation, a showing with pyrite, chalcopyrite and minor sphalerite mineralization was found associated with a shear zone in siliceous argillites. This shear zone strikes 091° and dips 55° to the north. It has been traced over a distance of 15 meters, although outcrop exposure is not continuous over that distance, a number of grab samples taken from this shear zone yielded anomalous gold and silver values and assays of up to 4.04% zinc and 2.99% copper were recorded in samples taken from a small section of this zone.

Elsewhere in the Ian claims, pyritization is frequently encountered in oxidized argillites. One grab sample of this material, which was described as being rich in quartz and epidote, yielded an anomalous assay value of 375 ppb.

4.0 PROPERTY GEOCHEMISTRY

The objective of the 1987 program was to identify areas of interest on the property on which to focus future exploration efforts. A total of 36 rock grab samples, 18 stream sediment samples and 2 pan concentrate stream sediment samples were taken on the Ian 1 to 4 mineral properties.



An effort was made during the 1987 field season to collect stream sediment samples from all drainages on the property. These samples generally consisted of silt and/or fine sand taken from stream beds. Pan concentrates were taken in situations where sediment volume was sufficient to make panning practical.

Rock grab samples were taken in the course of the prospecting and geological mapping program. These samples generally contained sulphide mineralization and a majority of them were procured from quartz veins and stringers.

All samples collected were analyzed for copper, lead, zinc, silver, arsenic and antimony at Min-En Laboratories Ltd. of 750 West 15th Street, North Vancouver, B.C.

4.1 Discussion of Geochemical Results

4.1.1 Rock Geochemistry

Anomalous precious and base metal assay values were obtained from some of the rock grab samples taken on the Ian claims. Results for each analyzed element are discussed below:

- i) **Gold:** Eight samples show anomalous gold values ranging from 40 ppb to 375 ppb. Four of these are multi-element anomalies, with associated anomalous values of silver and copper and/or lead and zinc.
- ii) **Silver:** Five anomalous silver values were recorded. These values range from 3.2 to 24.8 ppm.

- iii) **Arsenic:** No anomalous arsenic values were recorded, although eight samples had values which ranged from 21 ppm to 30 ppm, which are slightly above background levels.
- iv) **Copper:** Seven anomalous values exceeding 200 ppm were recorded for this element. Four of these were highly anomalous: sample 87-AGR-017 with a value of 2,727 ppm, and samples 87-AMR-011, 012 and 013, which yielded values of 29,873 ppm, 12,286 ppm and 2,927 ppm Cu respectively.
- v) **Lead:** Two anomalous lead values were recorded: 70 ppm in AMR-11 and 146 ppm in AMR-12.
- vi) **Zinc:** Seven anomalous zinc values exceeding 150 ppm were recorded. Two of these are highly anomalous: 30,511 ppm in 87-AGR-017 and 40,414 ppm in 87-AMR-012.
- vii) **Antimony:** Four slightly anomalous antimony values, ranging from 8 ppm to 29 ppm, were recorded.

4.1.2 Stream Sediment Geochemistry

Results for each analyzed element of the stream sediment sampling survey are discussed below. The two pan concentrate stream sediment samples were fire assayed for gold, but failed to yield anomalous values. The threshold was calculated as being equal to the mean plus 2.5 times the standard deviation (see Appendix V).

- i) **Gold:** There was one anomalous gold value. An assay value of 33 ppb was recorded in sample 87-AKL-004.

- ii) **Silver:** There were no anomalous silver values. The highest recorded value in silver was 2.1 ppm in sample 87-AKL-005.
- iii) **Arsenic:** There were no anomalous arsenic values. The highest recorded arsenic value was 21 ppm in sample 87-AKL-001.
- iv) **Copper:** One anomalous value of copper was recorded: 206 ppm in sample 87-AGL-013.
- v) **Lead:** An anomalous lead value of 100 ppm was recorded in sample 87-AKL-005
- vi) **Antimony:** There were no anomalous antimony values. Recorded values ranged from 1 ppm to 4 ppm.
- vii) **Zinc:** There were no zinc anomalies. The highest recorded zinc value was 336 ppm in sample 87-AML-005.

5.0 CONCLUSIONS

The Ian 1 to Ian 4 claims are underlain by a volcanic and sedimentary sequence which is intruded by several small igneous bodies. Some very elevated copper and zinc values have been recorded in rock grab samples from the Ian 4 claim, with anomalous values in gold and silver occurring in these same samples. Enhanced values in gold from stream sediment samples from the eastern part of the Ian 2 claim indicate potential for mineralization in this area of the property also.

The two significant showings found on the property were of minor dimensions. However, these appear to represent two distinct mineralization environments: a base metal skarn and an east-west trending shear zone. The terrain

in the Ian claims presents some formidable obstacles for surface exploration. However the present findings are encouraging and therefore further work is recommended.

6.0 RECOMMENDATIONS

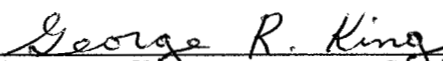
In order to more clearly investigate the mineral potential of the Ian claim group, a program of airborne and ground geophysics, further geological mapping and prospecting, and soil geochemistry should be undertaken.

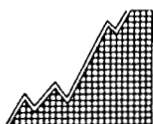
An airborne Mag and EM survey should be conducted over the entire property in order to identify plausible exploration targets and to delineate any significant structures.

An extensive grid should be established in the north-eastern part of the Ian 4 claim, and soil geochemistry, ground magnetometer and VLF surveys, and geological mapping and prospecting should be conducted on this grid. The choice of orientation of the grid might be augmented by the results of the airborne geophysical program.

In order to facilitate proper access to this area for surface exploration purposes, one or more areas should be cleared for helicopter access at or near the 2000 foot elevation level. The services of an experienced faller should be enlisted for this purpose, as the size of the timber in this area is considerable.

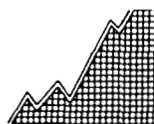
Respectfully submitted


George King, B.Sc., Geologist
Hi-Tec Resource Management Ltd.



APPENDIX I

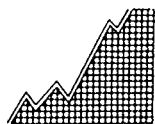
References



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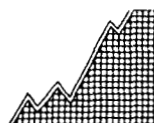
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- Toduruk, S.L. and Ikona, C.K. (1987). Geological Report on the JP 3 and 4 and Cam 9 & 10 Mineral Claims, Iskut River Area, Liard Mining Division. Private Report for Norman Resources Ltd.



APPENDIX II

Statement of Qualifications



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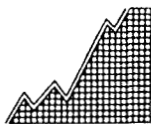
STATEMENT OF QUALIFICATIONS

I, GEORGE R. KING, of Suite 5, 736 West 14th Avenue, Vancouver, British Columbia, do hereby certify:

1. That I am a geologist in the employment of Hi-Tec Resource Management Ltd., with offices at Suite 1500 - 609 Granville Street, Vancouver, British Columbia.
2. That I am a graduate from the University of Saskatchewan in Saskatoon (1985) with a Bachelor of Science Degree in Geology.
3. That my primary employment since 1981 has been in the field of mineral exploration.
4. That my experience has encompassed a wide range of geologic environments, and has allowed considerable familiarization with geological mapping, prospecting, geochemical and geophysical techniques.
5. That I have no interest in the property described herein, nor in securities of any company associated with the property, nor do I expect to receive any such interest.
- 6) That I hereby grant permission to Ashburton Oil Ltd. for the use of this report in any prospectus or other documentation required for any regulatory authority.

Dated at Vancouver, British Columbia this 13th day of November, 1987.

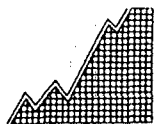
George R. King
George R. King, B.Sc.,
Geologist



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APPENDIX III

**Geochem Results and Laboratory
Analytical Methods**



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**GEOCHEM RESULTS AND LABORATORY
ANALYTICAL METHODS**

After initial preparation, all samples were analyzed by the Inductively Coupled Plasma (ICP) method for Ag, As, Cu, Pb, Sb and Zn. Gold was determined by the fire assay and atomic absorption method.

After drying soil and stream sediment samples at 95°C, they were screened with an 80 mesh sieve to obtain the minus 80 mesh fraction for analysis. For some of the silt samples, 40 mesh or 20 mesh sieves were used. Rock samples were put through a jaw crusher and a ceramic-plated pulverizer.

For ICP analyses, 1.0 gram of sample material was digested for 6 hours with a hot HNO₃ - HClO₄ mixture. After cooling, samples were diluted to a standard volume. The solutions were then analyzed by a computer-operated Jarrell Ash ICP Analyzer. Reports are formatted by a route computer dotline printout.

For Au analyses, a suitable sample weight of 15 or 30 grams was fire assay preconcentrated. Samples were then digested with an Aqua Regia solution and then taken up to suitable volume by adding a 25% HCl solution. Further oxidation and treatment of at least 75% of the original sample solutions are made suitable for extraction of gold with methyl isobutyl ketone. Gold is analyzed by Atomic Absorption instruments using a suitable standard solution. The detection limit is 1 ppb.

(VALUES IN PPM)	AG	AS	CU	PB	SB	ZN	AU-PPB
87 AGR1	1.4	9	77	3	2	82	3
87 AGR2	1.4	11	64	9	2	60	2
87 AGR3	.6	11	4	4	2	50	3
87 AGR4	1.8	11	79	10	2	94	4
87AGR7	1.5	12	35	10	3	71	375
87AGR8	1.2	15	38	6	4	59	6
87AGR9	2.0	10	46	10	4	65	4
87AGR010	.8	5	29	10	1	35	2
87AGR011	1.3	18	91	4	3	85	15
87AGR012	1.2	10	97	12	2	48	3
87AGR014	1.9	8	124	8	2	35	4
87AGR-15	.2	12	14	9	2	115	5
87AGR17	9.8	2	2727	30	4	30511	22
87AGR18	1.8	5	119	12	2	200	3
87AGR19	1.5	11	109	12	2	59	1
87AGR20	.5	21	7	18	2	47	1

(VALUES IN PPM)	AG	AS	CU	PB	SB	ZN	AU-PPB
87AKR006	1.2	11	14	4	2	41	25
87AKR007	.6	8	13	17	1	11	21
87AKR8	2.3	7	165	23	3	31	40
87AKR-9	.3	27	88	5	4	44	3
87AKR-11	1.5	1	181	10	3	140	3
87AKR-12	5.0	15	20	30	11	67	67
87AKR13	1.6	28	165	17	1	460	2
87AKR14	.6	2	17	8	1	47	1

(VALUES IN PPM)	AG	AS	CU	PB	SB	ZN	AU-PPB
87AMR6	.9	13	52	9	2	68	6
87AMR7	1.1	10	44	5	1	46	2
87AMR-8	.4	22	121	12	3	60	8
87AMR-9	2.4	4	21	14	1	46	95
87AMR-10	1.1	24	56	29	8	80	80
87AMR-11	24.8	18	29873	70	29	201	115
87AMR-12	20.2	28	12286	146	11	40414	70
87AMR-13	3.2	21	2927	8	2	252	86
87AMR-14	1.6	9	266	6	2	145	14
87AMR-15	.6	8	210	7	2	111	5
87AMR-16	1.3	30	226	15	5	135	3
87AMR-17	.7	2	195	4	3	100	4

(VALUES IN PPM)	AG	AS	CU	PB	SB	ZN	AU-PPB
87ASR-1	.2	14	9	22	2	41	8

(VALUES IN PPM)	AG	AS	CU	PB	SB	ZN	AU-PPB
87AGL5	1.5	12	82	7	3	104	5
87AGL6	1.5	11	63	14	1	127	5
87AGL013	1.4	13	206	6	4	119	8
87AGL-16	.7	4	40	12	2	157	5
87AKL1 40M	1.0	21	31	12	1	151	5
87AKL2 20M	.8	14	55	21	2	214	5
87AKL3 40M	1.0	16	30	9	1	145	20
87AKL004	.8	8	88	12	3	101	33
87-AKL-005 40M	2.1	7	66	100	1	82	10
87AKL-10 40M	.8	16	36	11	1	215	5
87AML001 40M	.9	10	11	6	1	77	4
87AML002	.8	10	52	19	2	94	16
87AML003	1.4	10	73	16	3	59	4
87AML004	1.1	17	46	10	1	75	3
87AML005 20M	.9	10	29	16	1	336	4
87ASL-2	.2	14	38	12	2	322	5
87ASL-3	.6	18	53	18	4	272	10
87ASL-4 40M	.2	10	25	14	2	186	5

Sample
Number

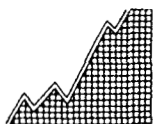
AU-FIRE
PPB

87AGP5
87AGP6

2
3

APPENDIX IV

Statistical Analysis of Data for
Stream Sediment Geochem Survey



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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

DATE: NOV 11/87

ATTN: GEORGE KING

SAMPLE TYPE: SILT

PROJECT: 87BC014

ANALYSIS TYPE: ICP

FILE#: 7-709 7-746 7-964

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	-.160	.426	<u>.531</u>	-.096	-.590	-.041
AS		1.000	-.080	-.309	-.108	.247	-.159
CU			1.000	0.000	<u>.600</u>	-.273	.176
PB				1.000	-.131	-.148	.053
SB					1.000	-.0010	.158
ZN						1.000	-.204
AU							1.000

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STATISTICAL SUMMARY ON AG

COMPANY: HI-TEC RESOURCES

DATE: NOV 11/87

ATTN: GEORGE KING

SAMPLE TYPE: SILT

PROJECT: 87BC014

ANALYSIS TYPE: ICP

FILE#: 7-709 7-746 7-964

NUMBER OF SAMPLES: 18
 MAXIMUM VALUE: 2.10 PPM
 MINIMUM VALUE: .20 PPM
 MEAN: .98 PPM
 STD. DEVIATION: .47 PPM
 COEFF. OF VARIATION: .48

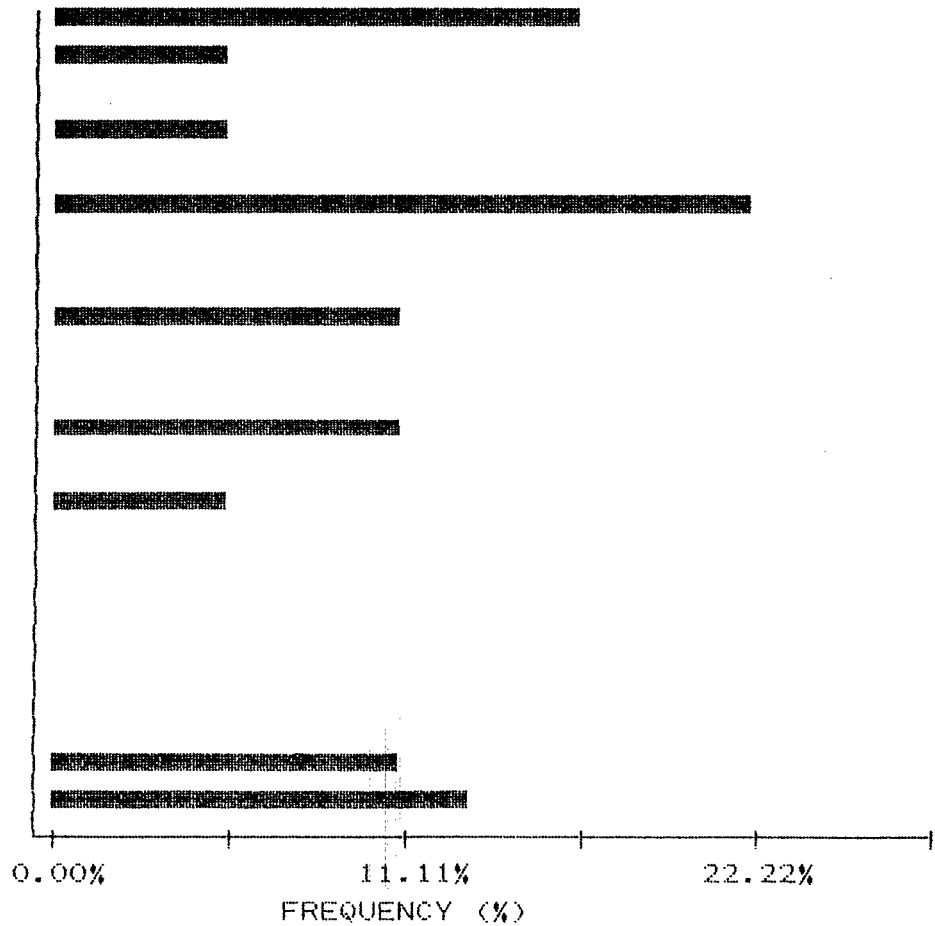
5 HIGHEST AG VALUES:
 87-AKL-005 40M 2.1 PPM
 87A6L5 1.5 PPM
 87A6L6 1.5 PPM
 87A6L013 1.4 PPM
 87AML003 1.4 PPM

HISTOGRAM FOR AG

CLASS INTERVAL = .04

MID CLASS CLASS
 PPM %

<	.60	16.67
	.62	5.56
	.66	0.00
	.70	5.56
	.74	0.00
	.78	22.22
	.82	0.00
	.86	0.00
	.90	11.11
	.94	0.00
	.98	0.00
	1.02	11.11
	1.06	0.00
	1.10	5.56
	1.14	0.00
	1.18	0.00
	1.22	0.00
	1.26	0.00
	1.30	0.00
	1.34	0.00
	1.38	11.11
>	1.50	13.33



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CUMMULATIVE PROBABILITY PLOT ON AG

COMPANY: HI-TEC RESOURCES

DATE: NOV 11/87

ATTN: GEORGE KING

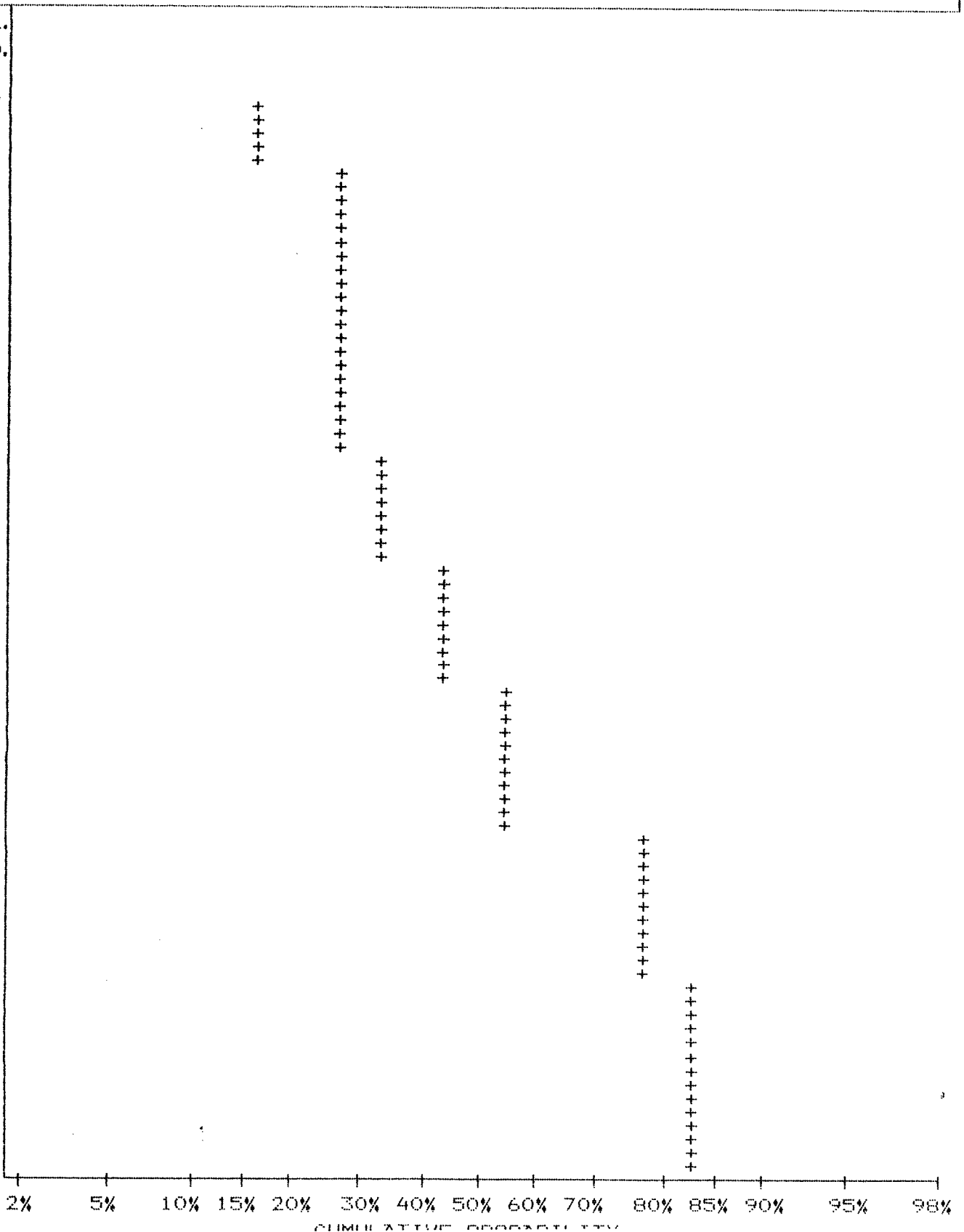
SAMPLE TYPE: SILT

PROJECT: 87BC014

ANALYSIS TYPE: ICP

FILE#: 7-709 7-746 7-964

UPPER LIMIT (PPM)	CUMMUL. FREQ. (%)
1.47	16.67
1.44	16.67
1.41	16.67
1.37	27.78
1.34	27.78
1.31	27.78
1.28	27.78
1.25	27.78
1.23	27.78
1.20	27.78
1.17	27.78
1.14	27.78
1.12	27.78
1.09	33.33
1.07	33.33
1.04	33.33
1.02	33.33
1.00	44.44
.97	44.44
.95	44.44
.93	44.44
.91	44.44
.89	55.56
.87	55.56
.85	55.56
.83	55.56
.81	55.56
.79	77.78
.77	77.78
.76	77.78
.74	77.78
.72	77.78
.71	77.78
.69	83.33
.67	83.33
.66	83.33
.64	83.33
.63	83.33
.61	83.33
.60	83.33



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

STATISTICAL SUMMARY ON AS

COMPANY: HI-TEC RESOURCES

DATE: NOV 11/87

ATTN: GEORGE KING

SAMPLE TYPE: SILT

PROJECT: 87BC014

ANALYSIS TYPE: ICP

FILE#: 7-709 7-746 7-964

NUMBER OF SAMPLES: 18
 MAXIMUM VALUE: 21.00 PPM
 MINIMUM VALUE: 4.00 PPM
 MEAN: 12.28 PPM
 STD. DEVIATION: 4.25 PPM
 COEFF. OF VARIATION: .35

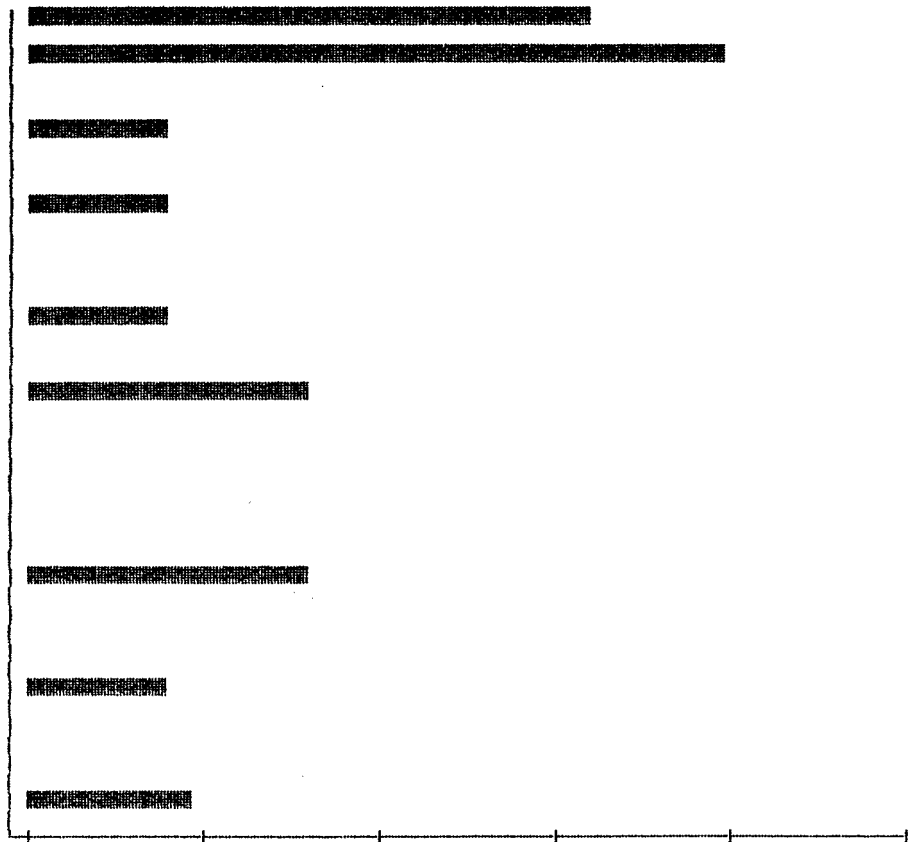
5 HIGHEST AS VALUES:
 87AKL1 40M 21 PPM
 87ASL-3 18 PPM
 87AML004 17 PPM
 87AKL3 40M 16 PPM
 87AKL-10 40M 16 PPM

HISTOGRAM FOR AS

CLASS INTERVAL = .4

MID CLASS CLASS
 PPM %

<	10.00	22.22
	10.20	27.78
	10.60	0.00
	11.00	5.56
	11.40	0.00
	11.80	5.56
	12.20	0.00
	12.60	0.00
	13.00	5.56
	13.40	0.00
	13.80	11.11
	14.20	0.00
	14.60	0.00
	15.00	0.00
	15.40	0.00
	15.80	11.11
	16.20	0.00
	16.60	0.00
	17.00	5.56
	17.40	0.00
	17.80	0.00
>	18.00	6.67



0.00% 13.89% 27.78%
 FREQUENCY (%)

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

CUMMULATIVE PROBABILITY PLOT ON AS

COMPANY: HI-TEC RESOURCES

DATE: NOV 11/87

ATTN: GEORGE KING

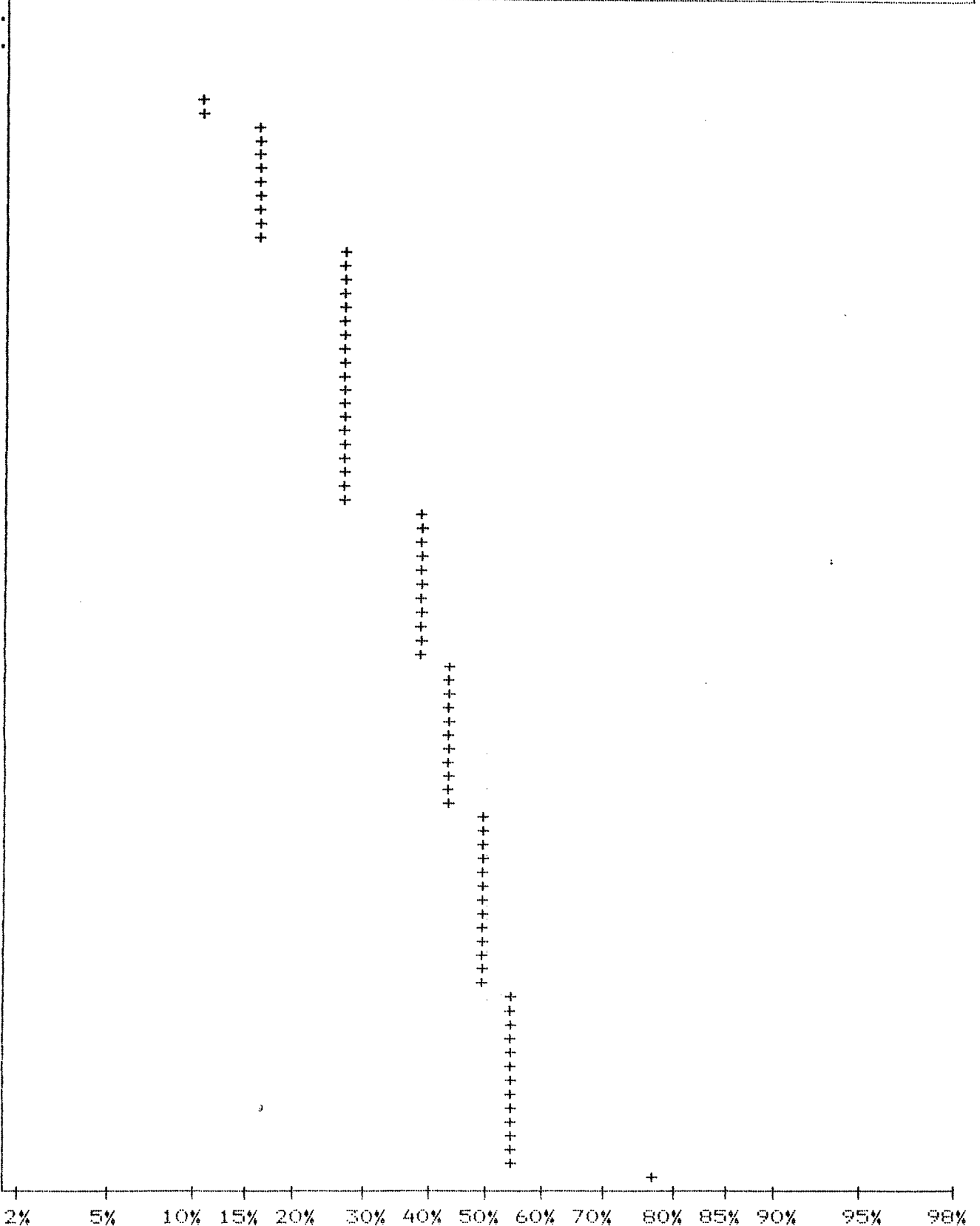
SAMPLE TYPE: SILT

PROJECT: 87BC014

ANALYSIS TYPE: ICP

FILE#: 7-709 7-746 7-964

UPPER LIMIT (PPM)	CUMMUL. FREQ. (%)
17.14	11.11
16.90	16.67
16.67	16.67
16.44	16.67
16.22	16.67
16.00	16.67
15.78	27.78
15.56	27.78
15.35	27.78
15.14	27.78
14.93	27.78
14.72	27.78
14.52	27.78
14.32	27.78
14.13	27.78
13.93	38.89
13.74	38.89
13.55	38.89
13.37	38.89
13.18	38.89
13.00	38.89
12.82	44.44
12.65	44.44
12.47	44.44
12.30	44.44
12.13	44.44
11.97	50.00
11.80	50.00
11.64	50.00
11.48	50.00
11.32	50.00
11.17	50.00
11.02	50.00
10.86	55.56
10.72	55.56
10.57	55.56
10.42	55.56
10.28	55.56
10.14	55.56
10.00	77.78



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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

DATE: NOV 11/87

ATTN: GEORGE KING

SAMPLE TYPE: SILT

PROJECT: 87BC014

ANALYSIS TYPE: ICP

FILE#: 7-709 7-746 7-964

NUMBER OF SAMPLES: 18
 MAXIMUM VALUE: 206.00 PPM
 MINIMUM VALUE: 11.00 PPM
 MEAN: 56.89 PPM
 STD. DEVIATION: 42.53 PPM
 COEFF. OF VARIATION: .75

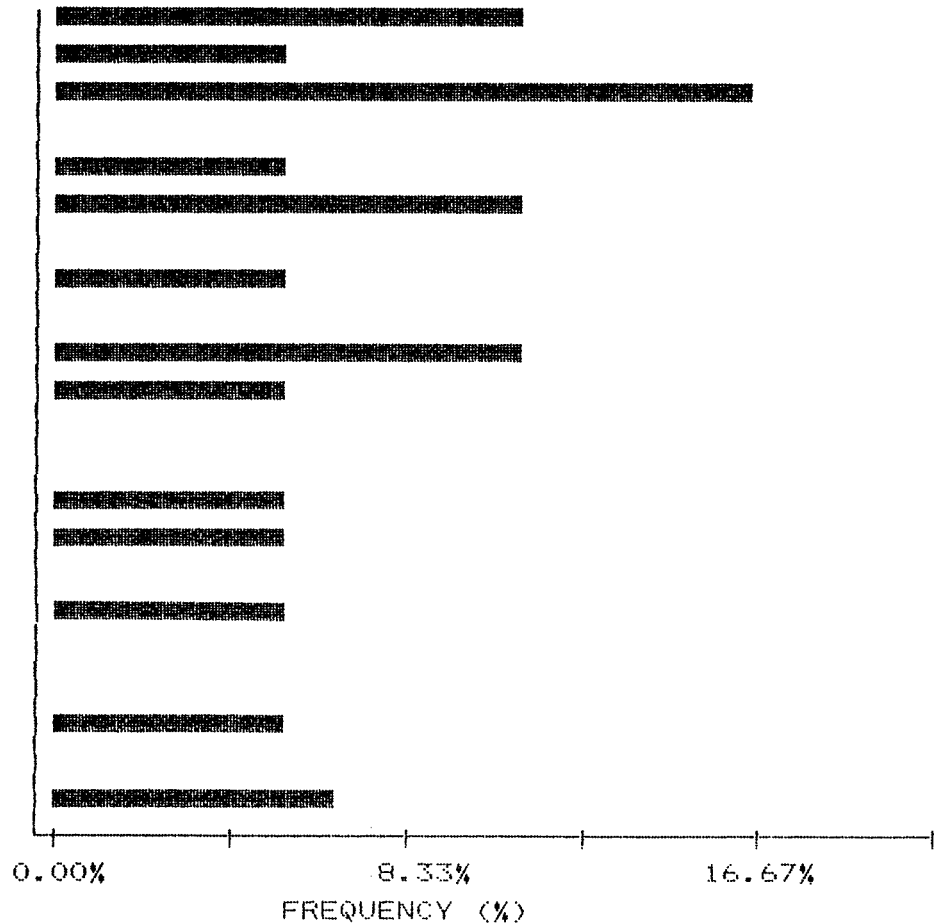
5 HIGHEST CU VALUES:
 87AGL013 206 PPM
 87AKL004 88 PPM
 87AGL5 82 PPM
 87AML003 73 PPM
 87-AKL-005 40M 66 PPM

HISTOGRAM FOR CU

CLASS INTERVAL = 3.15

MID CLASS	CLASS
PPM	%

<	25.00	11.11
	26.58	5.56
	29.73	16.67
	32.88	0.00
	36.03	5.56
	39.18	11.11
	42.33	0.00
	45.48	5.56
	48.63	0.00
	51.78	11.11
	54.93	5.56
	58.08	0.00
	61.23	0.00
	64.38	5.56
	67.53	5.56
	70.68	0.00
	73.83	5.56
	76.98	0.00
	80.13	0.00
	83.28	5.56
	86.43	0.00
>	88.00	6.67



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

CUMMULATIVE PROBABILITY PLOT ON CU

COMPANY: HI-TEC RESOURCES

DATE: NOV 11/87

ATTN: GEORGE KING

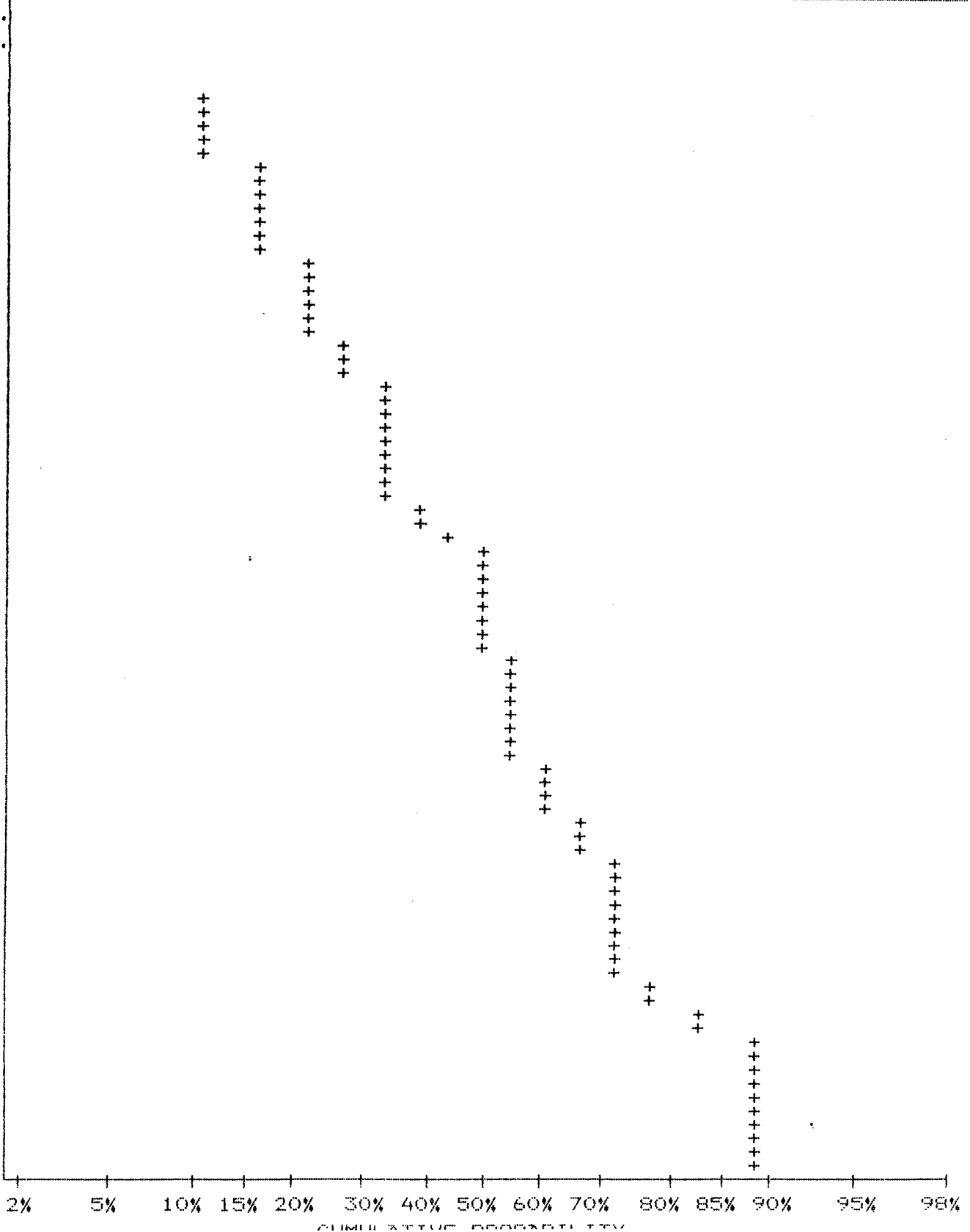
SAMPLE TYPE: SILT

PROJECT: 87BC014

ANALYSIS TYPE: ICP

FILE#: 7-709 7-746 7-964

UPPER LIMIT (PPM)	CUMMUL. FREQ. (%)
87.90	11.11
85.10	11.11
82.40	11.11
79.80	16.67
77.25	16.67
74.80	16.67
72.43	22.22
70.13	22.22
67.90	22.22
65.75	27.78
63.67	27.78
61.65	33.33
59.70	33.33
57.80	33.33
55.97	33.33
54.20	38.89
52.47	44.44
50.80	50.00
49.20	50.00
47.63	50.00
46.13	50.00
44.65	55.56
43.25	55.56
41.88	55.56
40.55	55.56
39.25	61.11
38.03	61.11
36.80	66.67
35.65	72.22
34.50	72.22
33.42	72.22
32.35	72.22
31.32	72.22
30.33	77.78
29.37	83.33
28.45	88.89
27.55	88.89
26.67	88.89
25.82	88.89
25.00	88.89



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

DATE: NOV 11/87

ATTN: GEORGE KING

SAMPLE TYPE: SILT

PROJECT: 87BC014

ANALYSIS TYPE: ICP

FILE#: 7-709 7-746 7-964

NUMBER OF SAMPLES: 18
MAXIMUM VALUE: 100.00 PPM
MINIMUM VALUE: 6.00 PPM
MEAN: 17.50 PPM
STD. DEVIATION: 21.03 PPM
COEFF. OF VARIATION: 1.20

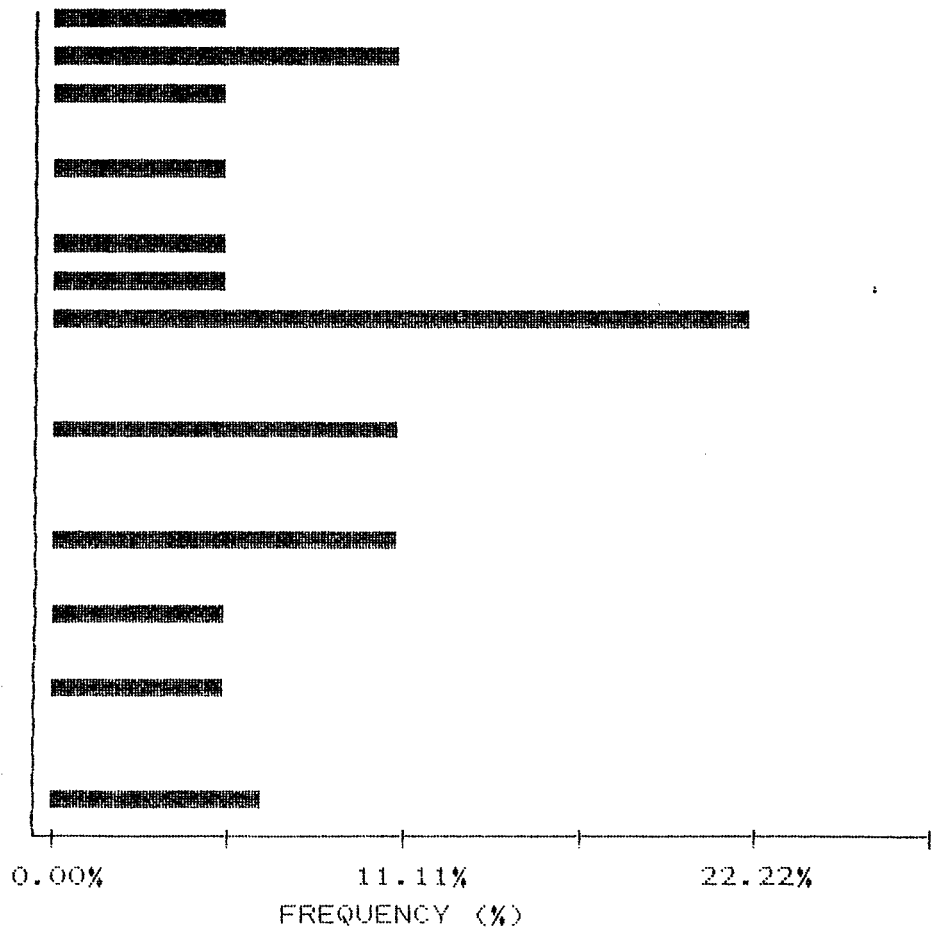
5 HIGHEST PB VALUES:
87-AKL-005 40M 100 PPM
87AKL2 20M 21 PPM
87AML002 19 PPM
87ASL-3 18 PPM
87AML003 16 PPM

HISTOGRAM FOR PB

CLASS INTERVAL = .75

MID CLASS CLASS
PPM %

<	6.00	5.56
	6.38	11.11
	7.13	5.56
	7.88	0.00
	8.63	5.56
	9.38	0.00
	10.13	5.56
	10.88	5.56
	11.63	22.22
	12.38	0.00
	13.13	0.00
	13.88	11.11
	14.63	0.00
	15.38	0.00
	16.13	11.11
	16.88	0.00
	17.63	5.56
	18.38	0.00
	19.13	5.56
	19.88	0.00
	20.63	0.00
>	21.00	6.67



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 PE

COMPANY: HI-TEC RESOURCES

DATE: NOV 11/87

ATTN: GEORGE KING

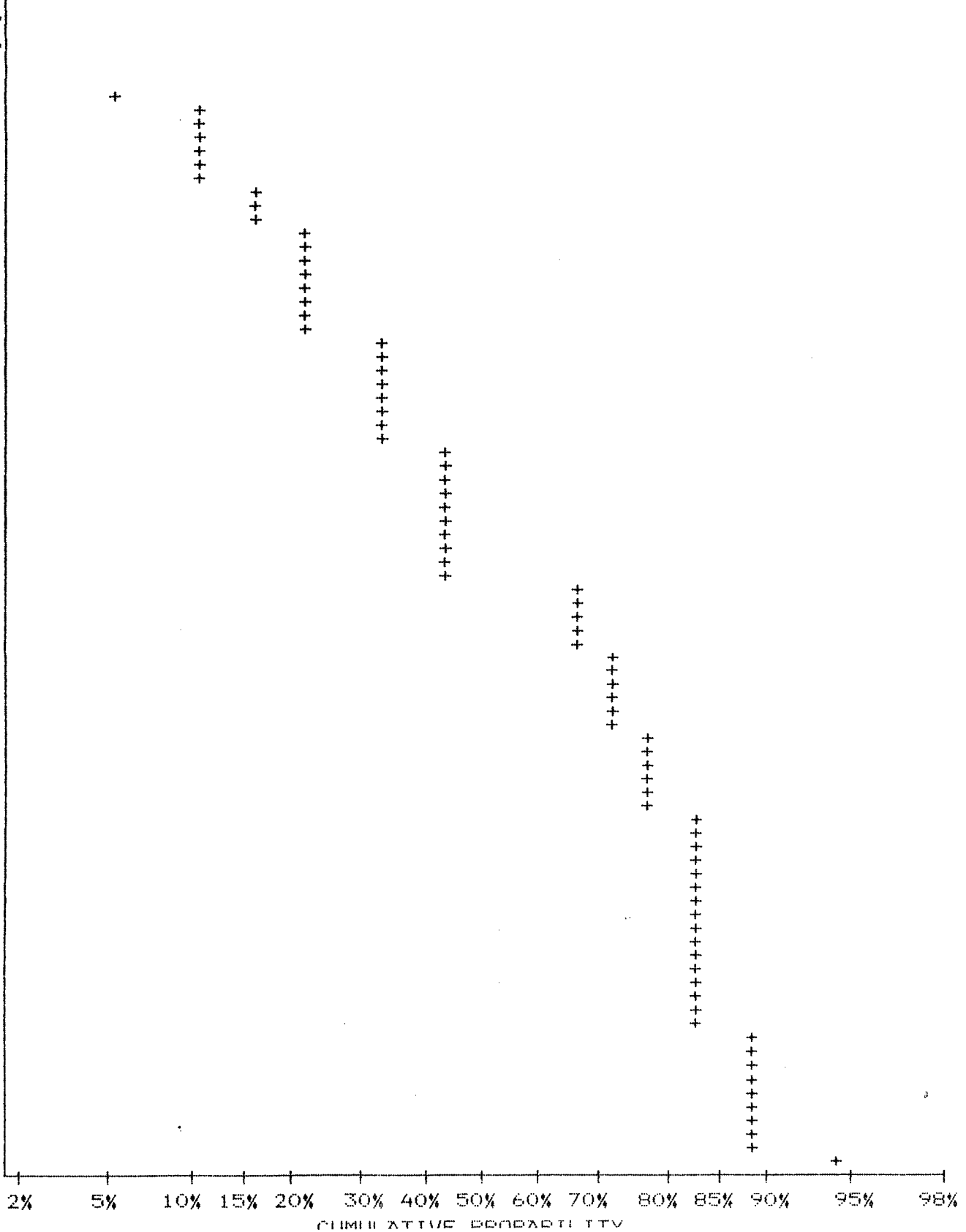
SAMPLE TYPE: SILT

PROJECT: 87BC014

ANALYSIS TYPE: ICP

FILE#: 7-709 7-746 7-964

UPPER LIMIT (PPM)	CUMMUL. FREQ. (%)
21.10	5.56
20.42	11.11
19.78	11.11
19.15	11.11
18.54	16.67
17.95	22.22
17.38	22.22
16.83	22.22
16.30	22.22
15.78	33.33
15.28	33.33
14.80	33.33
14.33	33.33
13.87	44.44
13.43	44.44
13.01	44.44
12.59	44.44
12.19	44.44
11.81	66.67
11.43	66.67
11.07	66.67
10.72	72.22
10.38	72.22
10.05	72.22
9.73	77.78
9.42	77.78
9.13	77.78
8.83	83.33
8.56	83.33
8.28	83.33
8.02	83.33
7.76	83.33
7.52	83.33
7.28	83.33
7.05	83.33
6.83	88.89
6.61	88.89
6.40	88.89
6.20	88.89
6.00	94.44



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

DATE: NOV 11/87

ATTN: GEORGE KING

SAMPLE TYPE: SILT

PROJECT: 87BC014

ANALYSIS TYPE: ICP

FILE#: 7-709 7-746 7-964

NUMBER OF SAMPLES: 18
MAXIMUM VALUE: 4.00 PPM
MINIMUM VALUE: 0.00 PPM
MEAN: 1.78 PPM
STD. DEVIATION: 1.26 PPM
COEFF. OF VARIATION: .71

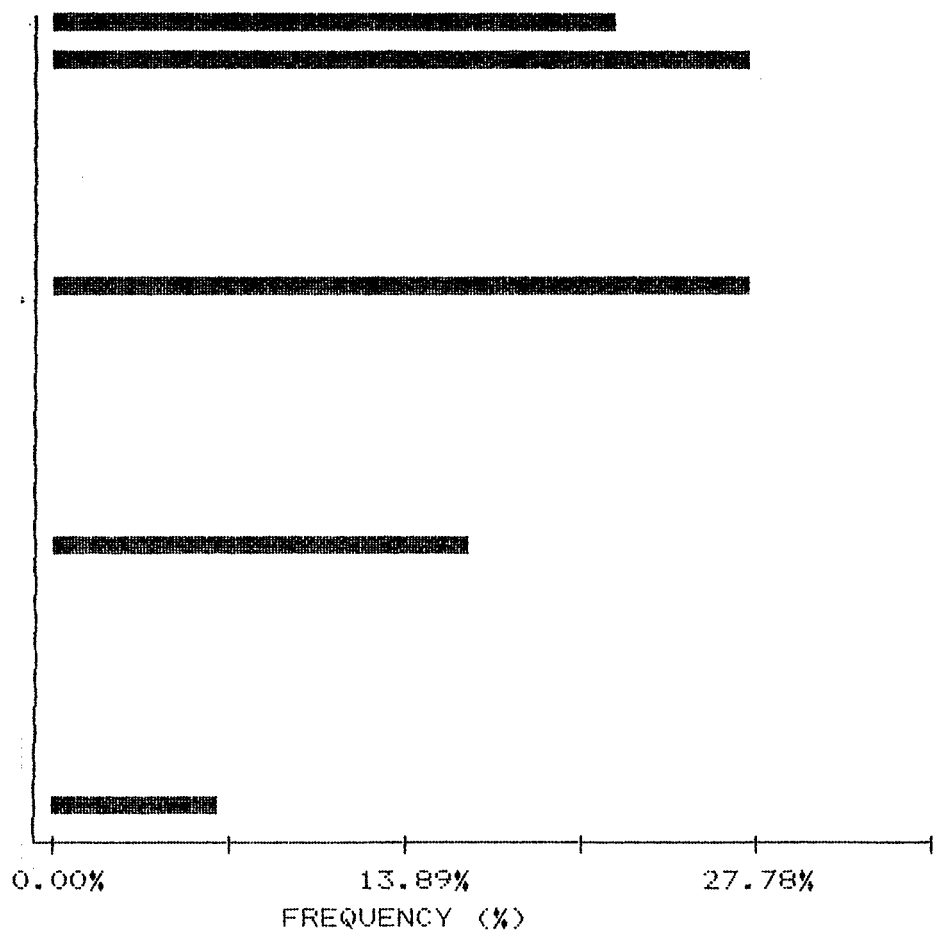
5 HIGHEST SB VALUES:
87A6L013 4 PPM
87ASL-3 4 PPM
87A6L5 3 PPM
87AKL004 3 PPM
87AML003 3 PPM

HISTOGRAM FOR SB

CLASS INTERVAL = .15

MID CLASS CLASS
PPM %

<	1.00	22.22
	1.08	27.78
	1.23	0.00
	1.38	0.00
	1.53	0.00
	1.68	0.00
	1.83	0.00
	1.98	27.78
	2.13	0.00
	2.28	0.00
	2.43	0.00
	2.58	0.00
	2.73	0.00
	2.88	0.00
	3.03	16.67
	3.18	0.00
	3.33	0.00
	3.48	0.00
	3.63	0.00
	3.78	0.00
	3.93	0.00
>	4.00	6.67



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

DATE: NOV 11/87

ATTN: GEORGE KING

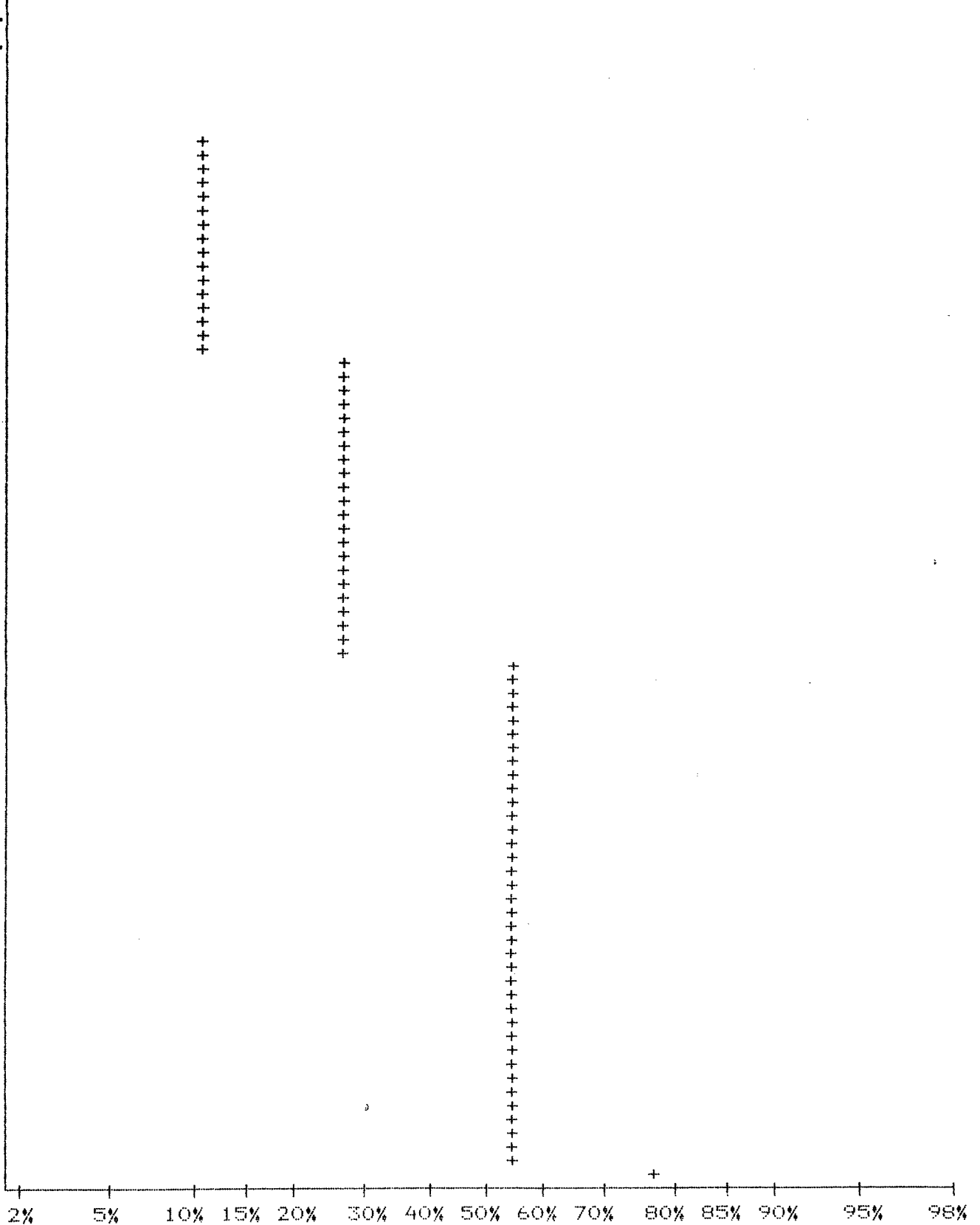
SAMPLE TYPE: SILT

PROJECT: 87BC014

ANALYSIS TYPE: ICP

FILE#: 7-709 7-746 7-964

UPPER LIMIT (PPM)	CUMMUL. FREQ. (%)
4.21	0.00
4.05	0.00
3.91	11.11
3.77	11.11
3.63	11.11
3.50	11.11
3.37	11.11
3.25	11.11
3.13	11.11
3.02	11.11
2.91	27.78
2.80	27.78
2.70	27.78
2.61	27.78
2.51	27.78
2.42	27.78
2.33	27.78
2.25	27.78
2.17	27.78
2.09	27.78
2.01	27.78
1.94	55.56
1.87	55.56
1.80	55.56
1.74	55.56
1.67	55.56
1.61	55.56
1.56	55.56
1.50	55.56
1.44	55.56
1.39	55.56
1.34	55.56
1.29	55.56
1.25	55.56
1.20	55.56
1.16	55.56
1.12	55.56
1.08	55.56
1.04	55.56
1.00	77.78



MIN-EN LABORATORIES LTD.

SPECIALISTS IN MINERAL ENVIRONMENTS

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

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

STATISTICAL SUMMARY ON ZN

COMPANY: HI-TEC RESOURCES

DATE: NOV 11/87

ATTN: GEORGE KING

SAMPLE TYPE: SILT

PROJECT: 87BC014

ANALYSIS TYPE: ICP

FILE#: 7-709 7-746 7-964

NUMBER OF SAMPLES: 18
 MAXIMUM VALUE: 336.00 PPM
 MINIMUM VALUE: 59.00 PPM
 MEAN: 157.56 PPM
 STD. DEVIATION: 84.27 PPM
 COEFF. OF VARIATION: .53

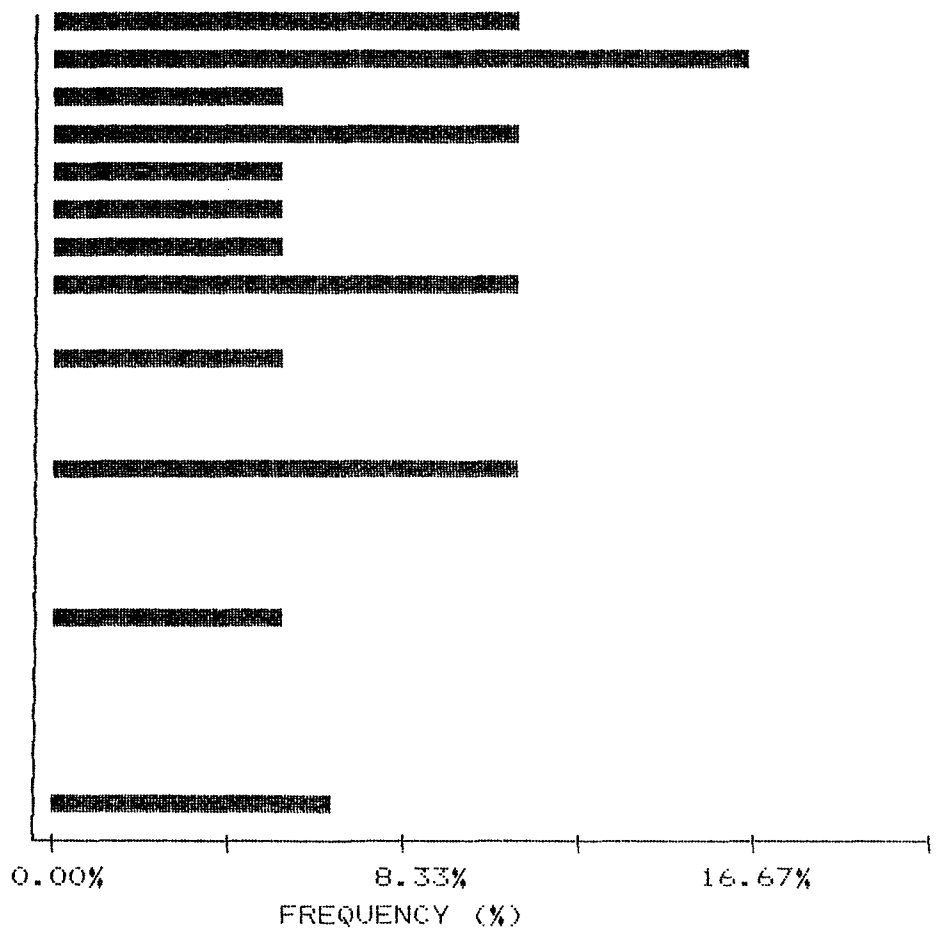
5 HIGHEST ZN VALUES:
 87AML005 20M 336 PPM
 87ASL-2 322 PPM
 87ASL-3 272 PPM
 87AKL-10 40M 215 PPM
 87AKL2 20M 214 PPM

HISTOGRAM FOR ZN

CLASS INTERVAL = 12.35

MID CLASS	CLASS
PPM	%

< 75.00	11.11
81.18	16.67
93.53	5.56
105.88	11.11
118.23	5.56
130.58	5.56
142.93	5.56
155.28	11.11
167.63	0.00
179.98	5.56
192.33	0.00
204.68	0.00
217.03	11.11
229.38	0.00
241.73	0.00
254.08	0.00
266.43	5.56
278.78	0.00
291.13	0.00
303.48	0.00
315.83	0.00
> 322.00	6.67



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

DATE: NOV 11/87

ATTN: GEORGE KING

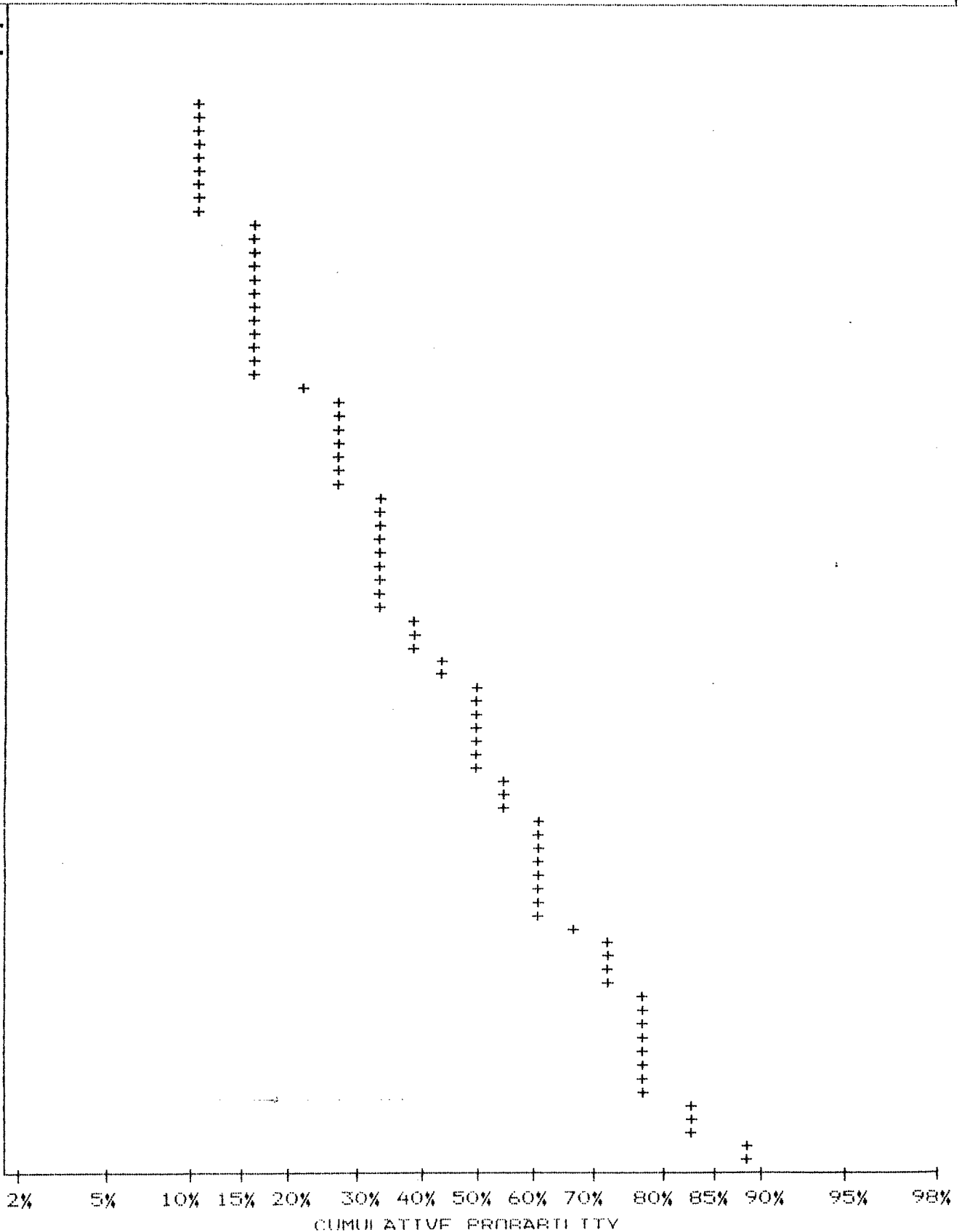
SAMPLE TYPE: SILT

PROJECT: 87BC014

ANALYSIS TYPE: ICP

FILE#: 7-709 7-746 7-964

UPPER LIMIT (PPM)	CUMMUL. FREQ. (%)
315.52	11.11
304.13	11.11
293.10	11.11
282.52	11.11
272.32	11.11
262.42	16.67
252.97	16.67
243.82	16.67
234.97	16.67
226.50	16.67
218.32	16.67
210.38	27.78
202.80	27.78
195.45	27.78
188.40	27.78
181.57	33.33
174.97	33.33
168.68	33.33
162.60	33.33
156.67	38.89
151.05	38.89
145.57	44.44
140.32	50.00
135.22	50.00
130.35	50.00
125.63	55.56
121.05	55.56
116.70	61.11
112.50	61.11
108.38	61.11
104.47	61.11
100.72	72.22
97.05	72.22
93.53	77.78
90.15	77.78
86.93	77.78
83.77	77.78
80.70	83.33
77.85	83.33
75.00	88.89



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

DATE: NOV 11/87

ATTN: GEORGE KING

SAMPLE TYPE: SILT

PROJECT: 87BC014

ANALYSIS TYPE: ICP

FILE#: 7-709 7-746 7-964

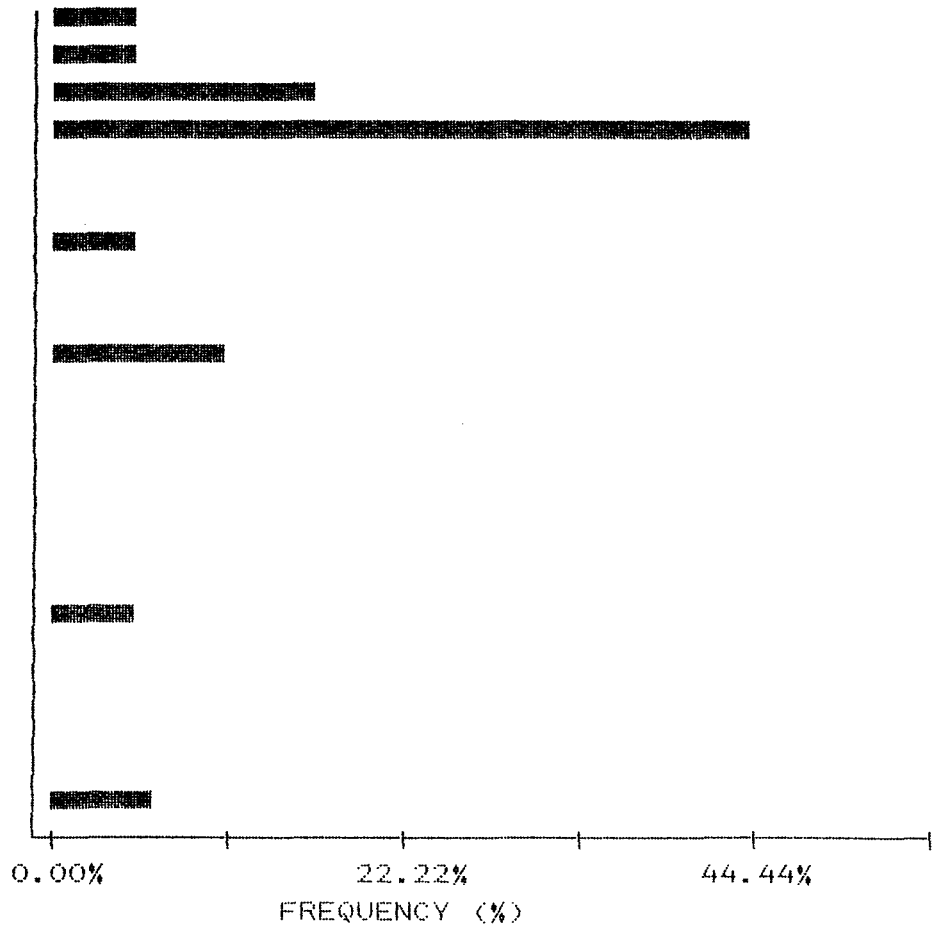
NUMBER OF SAMPLES: 18
 MAXIMUM VALUE: 33.00 PPB
 MINIMUM VALUE: 3.00 PPB
 MEAN: 8.44 PPB
 STD. DEVIATION: 7.60 PPB
 COEFF. OF VARIATION: .90

5 HIGHEST AU VALUES:
 87AKL004 33 PPB
 87AKL3 40M 20 PPB
 87AML002 16 PPB
 87-AKL-005 40M 10 PPB
 87ASL-3 10 PPB

HISTOGRAM FOR AU CLASS INTERVAL = .85

MID CLASS	CLASS
PPB	%

<	3.00	5.56
	3.42	5.56
	4.27	16.67
	5.12	44.44
	5.97	0.00
	6.82	0.00
	7.67	5.56
	8.52	0.00
	9.37	0.00
	10.22	11.11
	11.07	0.00
	11.92	0.00
	12.77	0.00
	13.62	0.00
	14.47	0.00
	15.32	0.00
	16.17	5.56
	17.02	0.00
	17.87	0.00
	18.72	0.00
	19.57	0.00
>	20.00	6.67



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

DATE: NOV 11/87

ATTN: GEORGE KING

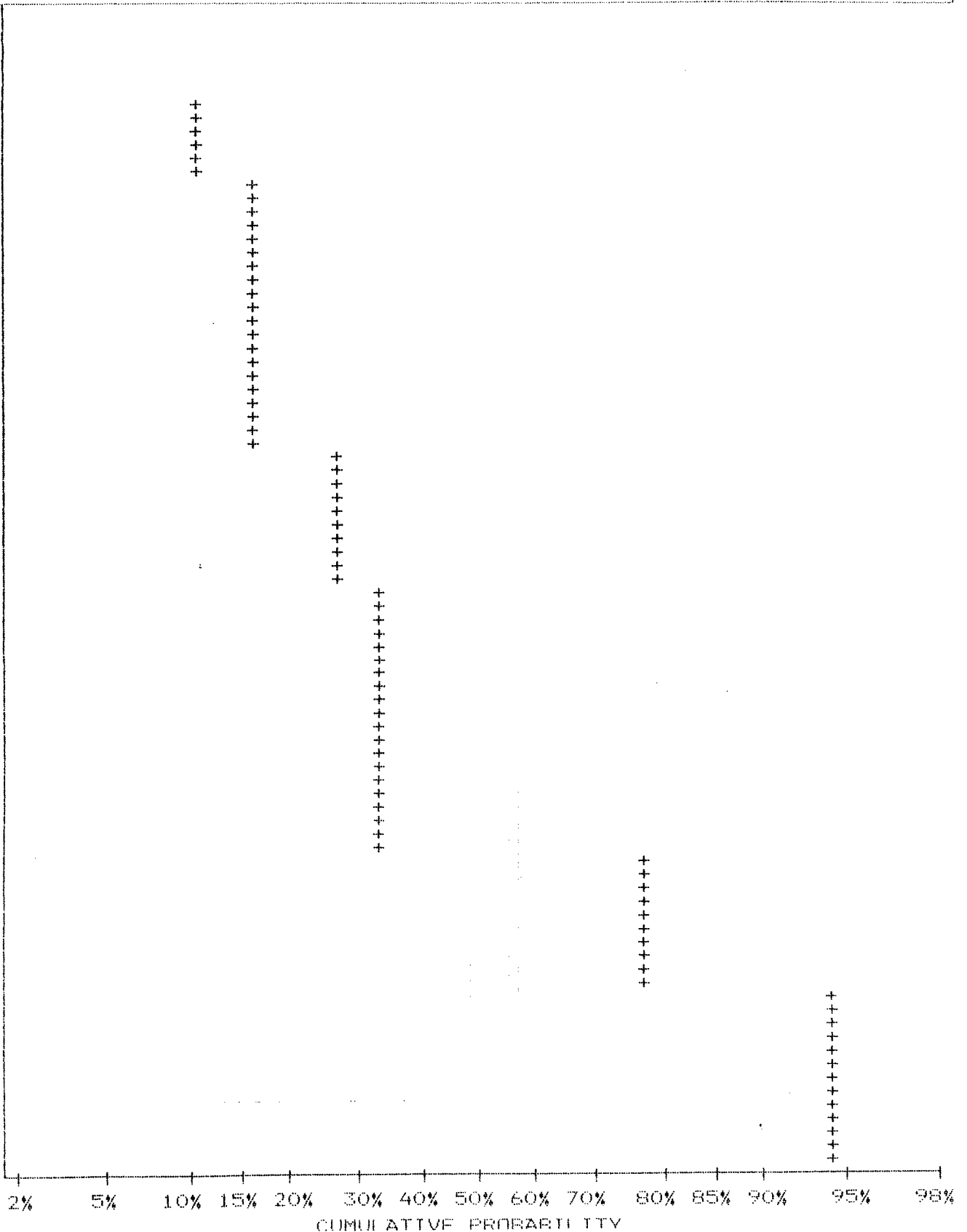
SAMPLE TYPE: SILT

PROJECT: 87BC014

ANALYSIS TYPE: ICP

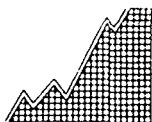
FILE#: 7-709 7-746 7-964

UPPER LIMIT (PPB)	CUMMUL. FREQ. (%)
18.08	11.11
17.26	11.11
16.48	11.11
15.74	16.67
15.04	16.67
14.36	16.67
13.71	16.67
13.09	16.67
12.51	16.67
11.94	16.67
11.41	16.67
10.89	16.67
10.40	16.67
9.93	27.78
9.49	27.78
9.06	27.78
8.65	27.78
8.26	27.78
7.89	33.33
7.54	33.33
7.20	33.33
6.87	33.33
6.56	33.33
6.27	33.33
5.98	33.33
5.71	33.33
5.46	33.33
5.21	33.33
4.98	77.78
4.76	77.78
4.54	77.78
4.33	77.78
4.14	77.78
3.95	94.44
3.78	94.44
3.61	94.44
3.44	94.44
3.29	94.44
3.14	94.44
3.00	94.44



APPENDIX V

Description of Rock Grab Samples



HI-TEC
RESOURCE
MANAGEMENT
LIMITED

DESCRIPTION OF ROCK GRAB SAMPLES

87-AGR-1 andesite with minor pyrite

87-AGR-2

87-AGR-3 feldspar porphyry with minor pyrite, K-spar alt.

87-AGR-4 green, slightly magnetic rock

87-AGR-7 pyrite, epidote, quartz in rusty rock

87-AGR-8 sulfides taken between contact of granite and argillite/andesite

87-AGR-9 argillite with disseminated pyrite

87-AGR-10 massive sulfide - boulder float

87-AGR-11 argillite-heavily rusted

87-AGR-12 copper, arsenopyrite and other sulfides in quartz stringers

87-AGR-14 pyrite encrusted in soft weathered green/yellow rock

87-AGR-15 outcrop; disseminated pyrite in sed. rock

87-AGR-17 outcrop, disseminated pyrite in limestone

87-AGR-18 outcrop, limestone with pyrite and sphalerite

87-AGR-20 outcrop, disseminated pyrite in argillite

87-ASR-02 pyrite, epidote rich quartz veinlet from shear zone in silicified argillite

87-AKR-03 pyrite-bearing quartz veinlet from shear zone in silicified argillite

87-AKR-08 pyrite, epidote bearing fracture in intermediate intrusive

87-AKR-19 pyrite bearing fracture in cherty argillite

87-AKR-11 pyritiferous argillite

87-AKR-12 pyritiferous argillite



87-AKR-13 pyritiferous argillite

87-AKR-14 quartz stringers in argillite, with pyrite and chalcopyrite

87-AMR-6 o/c contact intrusive and argillite, pyrite, small quartz stringers

87-AMR-7 o/c - same as above, random grab

87-AMR-8 o/c - minor pyrite in cherty argillite

87-AMR-9 o/c - north end of shear; abundant pyrite, occasional chalcopyrite in good quartz vein material

87-AMR-10 o/c - south end of shear, same as R-9

87-AMR-11 o/c - sulphides in quartz filled altered sediments, good pyrite, some chalcopyrite

87-AMR-13 o/c - contact limestone/argillite massive pyrite, chalcopyrite, bornite, magnetite

87-AMR-14 o/c - pyrite and arsenopyrite in siliceous andesite, trending northwest

87-AMR-15 o/c - pyrite in intrusive

87-AMR-16 float - not well travelled; massive pyrite with some magnetite skarn, heavy overburden.

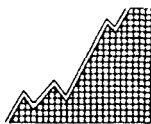
87-AMR-17 o/c - same as R-16 along limestone contact

87-ASR-1 o/c - silic. cherty argillite with disseminated pyrite.



APPENDIX VI

Statement of Costs

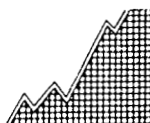


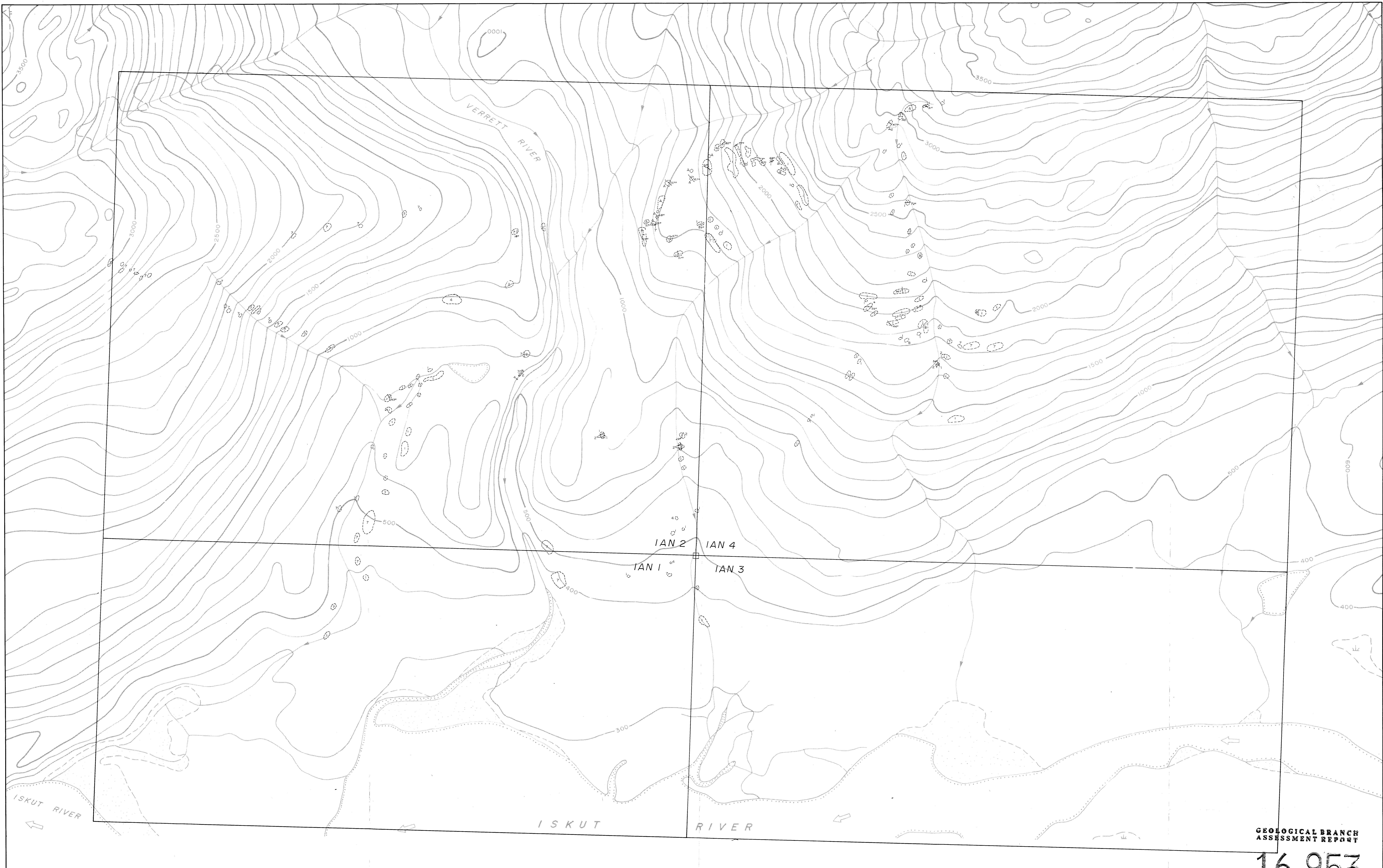
HI-TEC
RESOURCE
MANAGEMENT
LIMITED

STATEMENT OF COSTS

Ashburton Oil Ltd. - Project 87BC014

Personnel - Field Days		
A. Smallwood, Project Manager	14.0 days @ \$250.00/day	\$3,500.00
G. King, Project Geologist	14.0 days @ \$375.00/day	5,250.00
J. McCaffrey, Prospector	14.0 days @ \$250.00/day	3,500.00
G. Mowatt, Technican	14.0 days @ \$175.00/day	2,450.00
J. Shields, Cook	14.0 days @ \$200.00/day	<u>2,800.00</u>
		\$17,500.00
Supervision		
J.P. Sorbara	2.0 days @ \$400.00/day	800.00
Project Preparation		
		2,000.00
Mobilization/Demobilization		
		6,000.00
Geochemistry		
37 rocks	6 element ICP FA Au @ \$14.25	\$ 527.25
8 silts	6 element ICP FA Au @ \$12.15	97.20
10 silts	6 element ICP AA Au @ \$ 9.90	99.00
2 pan concentrates		
	6 element ICP FA Au @ \$ 7.60	15.20
Freight		<u>29.25</u>
		797.90
Statistical Analysis		
		52.00
Camp Costs		
Food - 5 men x 14.0 days @ \$ 25.00/day		\$1,750.00
Camp Rental 14.0 days @ \$175.00/day		2,450.00
Supplies, Fuel		1,010.00
Freight		155.00
Expediting and Communications		690.00
Radio Rental		<u>595.00</u>
		6,650.00
Air Support - Helicopter - 10.6 hours		
		\$6,720.00
- Fixed Wing		<u>547.00</u>
		7,267.00
Office Overhead		
		3,864.00
Report Compilation and Drafting		
		4,000.00
Stand-by and Camp Days - 2 days @ \$1,550.00/day		
		<u>3,100.00</u>
	TOTAL:	<u>\$52,000.00</u>



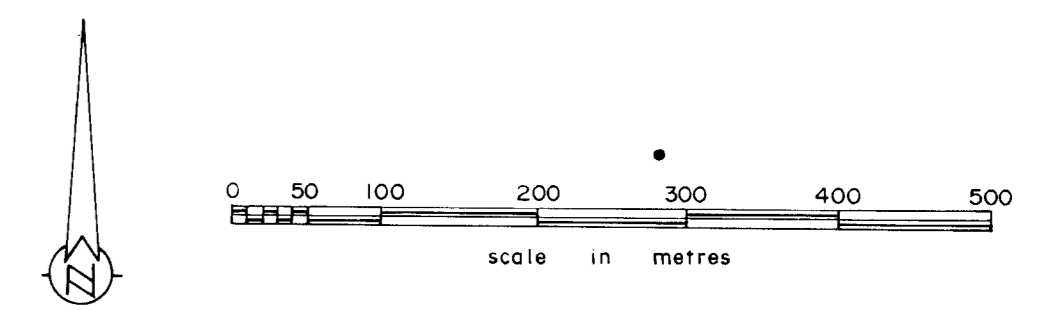


GEOLOGICAL BRANCH
ASSESSMENT REPORT

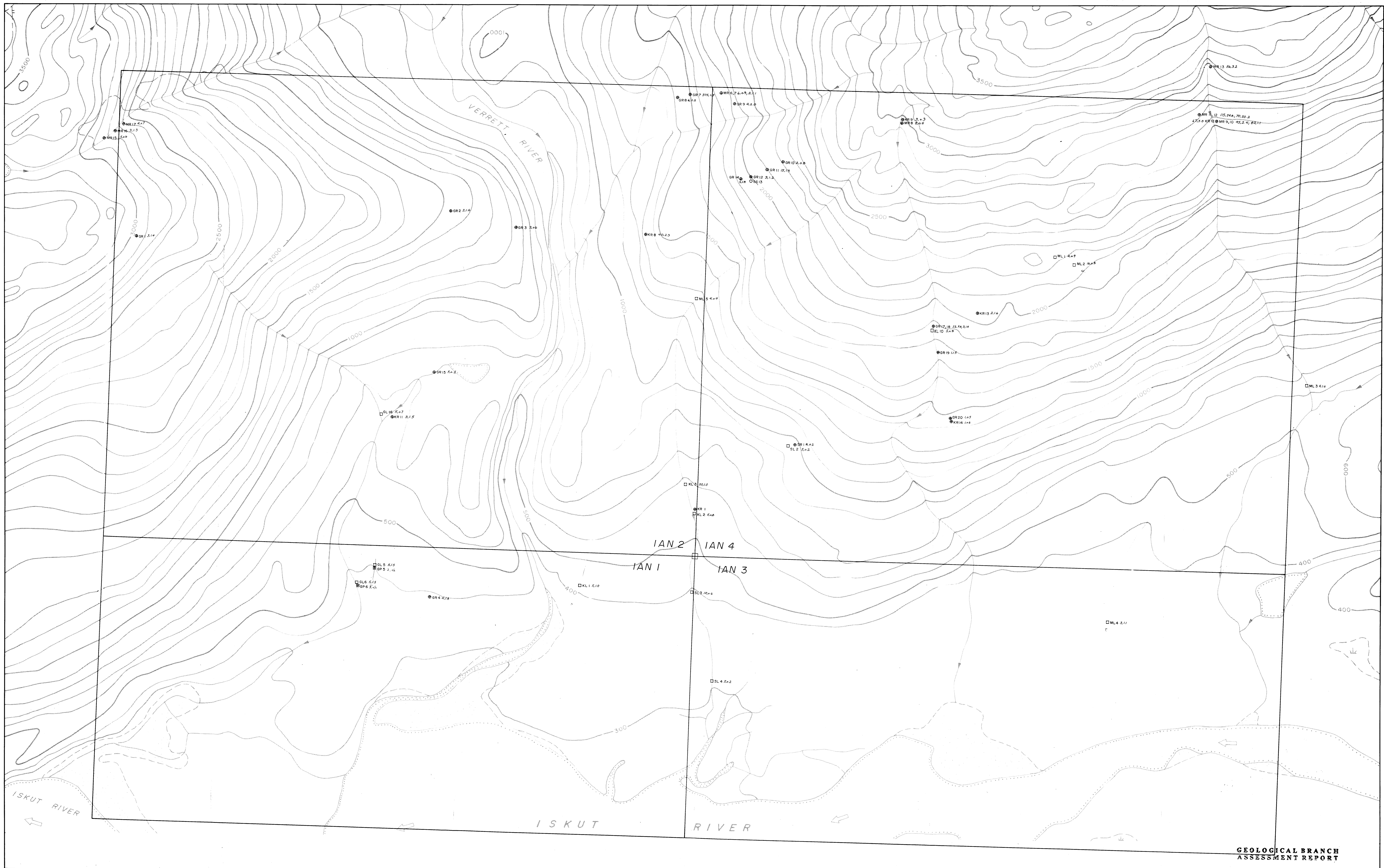
16,953

LEGEND

- | | |
|---|-------------------|
| A felsic intrusive; granite, monzonite, syenite, etc. | --- shear zone |
| B intermediate to mafic intrusive; diorite, etc. | - - - fault |
| Ad felsic dykes | ⌒ anticline |
| C mafic dykes | ∩ syncline |
| 6 rhyolite, dacite (felsic volcanics) | ↖↘ dip and strike |
| 7 andesites, etc; intermediate mafic volcanics | |
| 9 basalt | |
| 2 limestone | |
| 1 argillite, phyllite, etc; siltstone, meta-sediments | |
| 4 quartzite | |

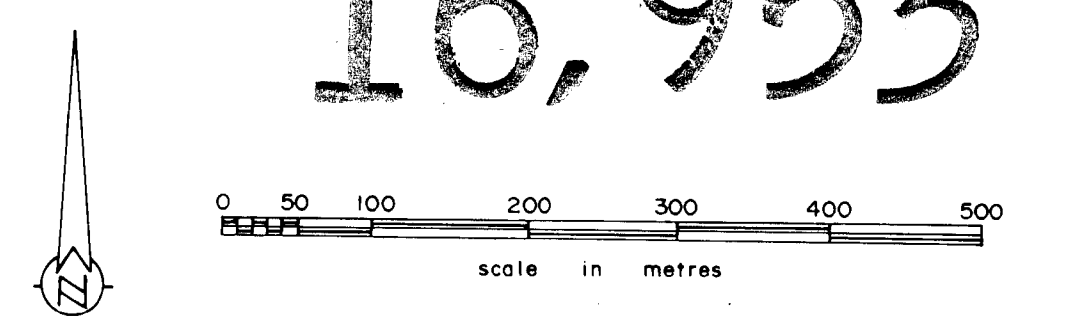


ASHBURTON OIL LTD.		
IAN 1, 2, 3 & 4 CLAIMS		
Laird Mining Division, B.C.		
PROPERTY GEOLOGY		
HI-TEC RESOURCE MANAGEMENT LIMITED	DWN BY N.T.S. 104 B/10,11 SCALE: 1:5000	DATE: Nov '87 FIGURE NO. 4



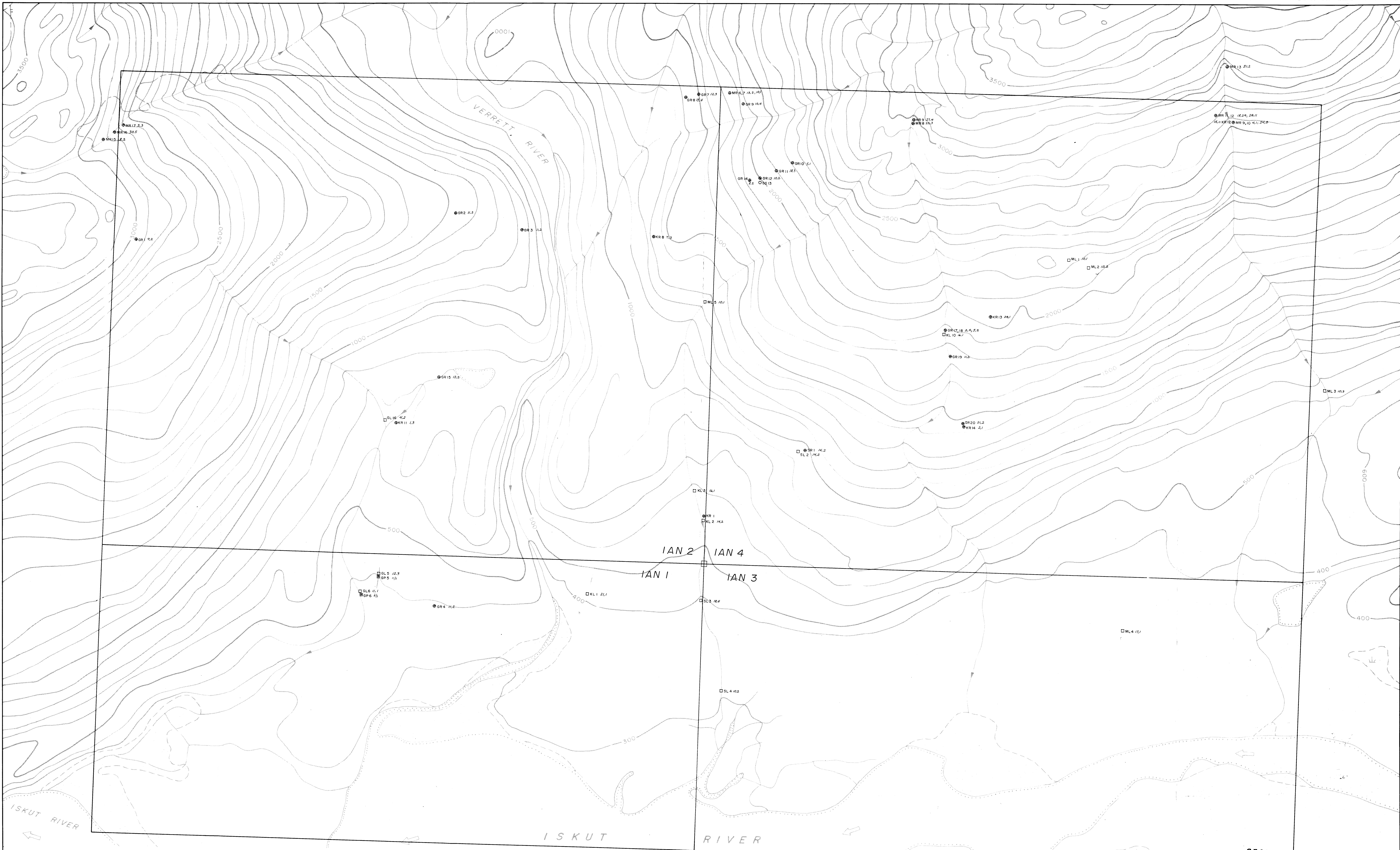
GEOLOGICAL BRANCH
ASSESSMENT REPORT

16,953



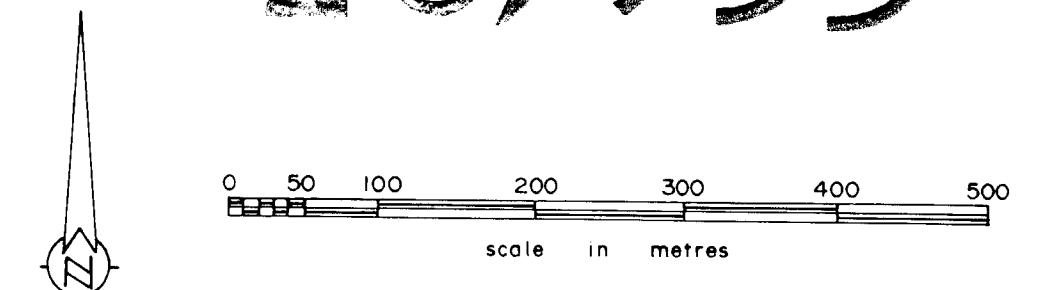
- rock sample
- soil sample
- silt sample
- pan sample

ASHBURTON OIL LTD.	
IAN 1, 2, 3 & 4 CLAIMS Liard Mining Division, B.C.	
GEOCHEMISTRY Gold (ppb) & Silver (ppm)	
HI-TEC RESOURCE MANAGEMENT LIMITED	DWN BY: N.T.S. 1048/10,11 SCALE: 1:5000
DATE: Nov '87	FIGURE NO. 5



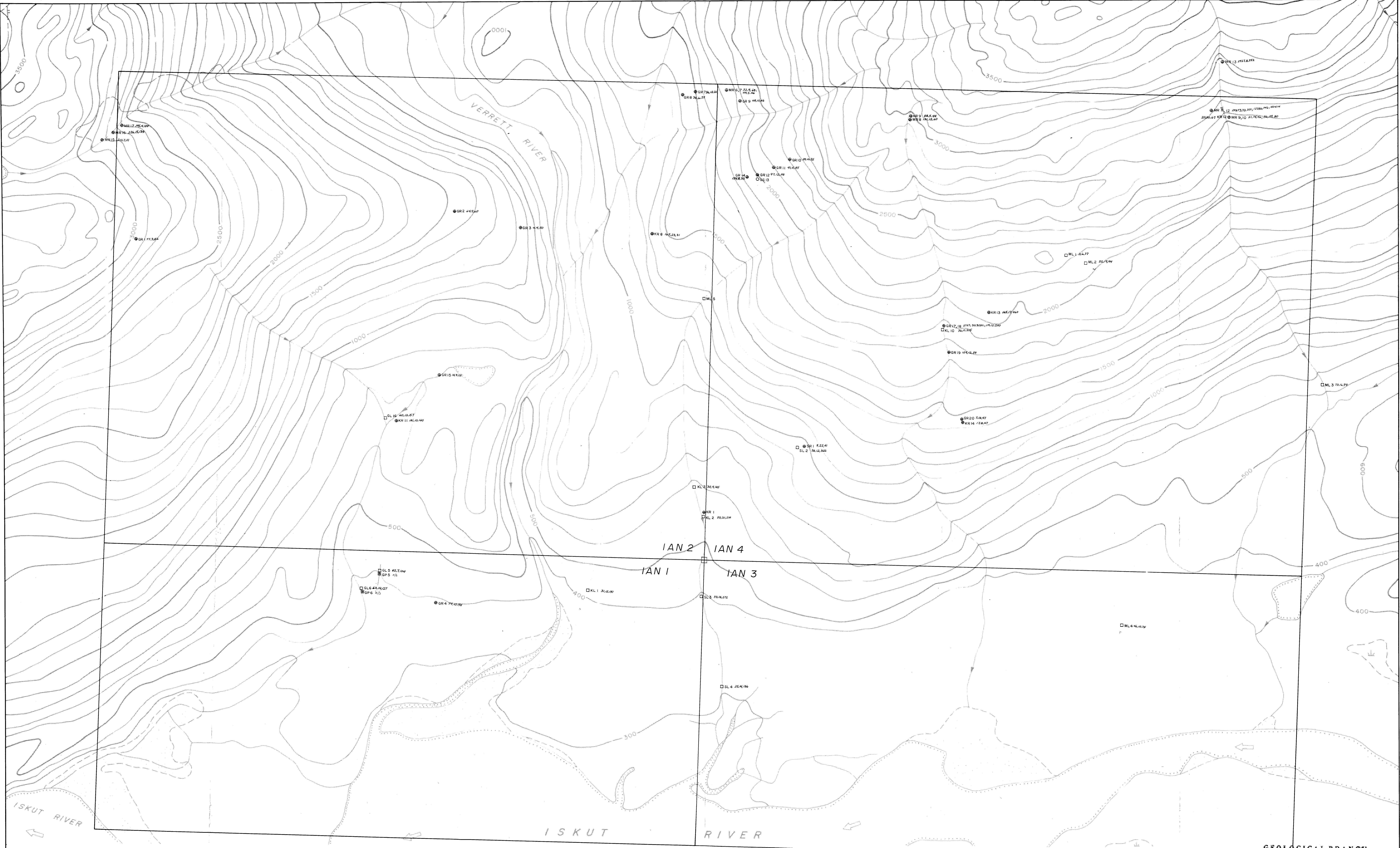
GEOLOGICAL BRANCH
ASSESSMENT REPORT

16,953



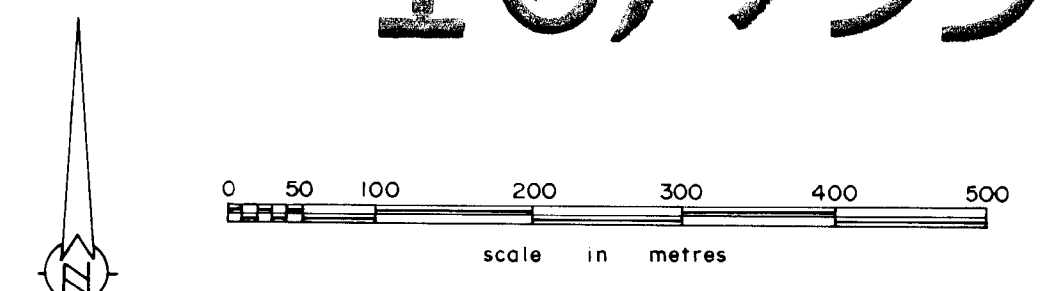
- ARSENIC (ppm)
- ANTIMONY (ppm)
- rock sample
- soil sample
- silt sample
- pan sample

ASHBURTON OIL LTD.		
IAN 1, 2, 3 & 4 CLAIMS		
Liard Mining Division, B.C.		
GEOCHEMISTRY		
Arsenic (ppm) & Antimony (ppm)		
HI-TEC RESOURCE MANAGEMENT LIMITED	OWN BY: N.T.S. 104B/10,11 SCALE: 1:5000	DATE: Nov '87 FIGURE NO. 6



GEOLOGICAL BRANCH
ASSESSMENT REPORT

16,953



ASHBURTON OIL LTD.		
IAN 1, 2, 3 & 4 CLAIMS Liard Mining Division, B.C.		
GEOCHEMISTRY Copper (ppm), Lead (ppm) & Zinc (ppm)		
HI-TEC RESOURCE MANAGEMENT LIMITED	OWN BY: N.T.S. 1048/10,11 SCALE: 1:5000	DATE: Nov. '87 FIGURE NO. 7

- rock sample
- soil sample
- silt sample
- pan sample

COPPER (ppm)
GR20 1.0E-07 — ZINC (ppm)
LEAD (ppm)