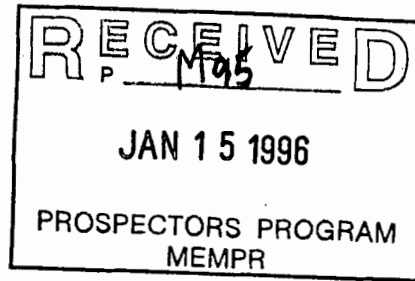


**Kamaka Resources Ltd.**  
6074, 45A Avenue, Delta B.C. Canada. V4K 1M7 Phone: (604) 940-1591



**REPORT OF**  
**GEOCHEMICAL AND GEOPHYSICAL SURVEYS**  
**ON THE**  
**KNOB HILL CLAIM GROUP**  
**NORTH VANCOUVER ISLAND, BRITISH COLUMBIA**

NTS: 102 I/16

Latitude: 50° 46' N  
Longitude: 128° 03' W

For

**B.C. Explore Program**  
Ministry of Mines and Petroleum Resources,  
Fifth Floor, 1810 Blanshard Street.  
Victoria, B.C. V8V 1X4

**GEOLOGICAL SURVEY BRANCH**  
**ASSESSMENT REPORT**

By

P. Dasler, P. geo.

25,354

January 6, 1996

## TABLE OF CONTENTS

	Page
SUMMARY	1
INTRODUCTION	2
LOCATION AND ACCESS	3
PROPERTY	3
HISTORY	3
REGIONAL GEOLOGY	4
PROPERTY GEOLOGY	6
1995 SOIL SAMPLE COLLECTION AND INTERPRETATION	8
MAGNETOMETER SURVEY	10
CONCLUSIONS AND RECOMMENDATIONS	10
BUDGET	12
CERTIFICATE OF QUALIFICATIONS	13
BIBLIOGRAPHY	14

### Appendices

- Appendix 1: Geochemical analysis certificates
- Appendix 2: Cost Statement
- Appendix 3: Petrological report, Assessment maps (old)

### List of Figures

Figure 1: Location Map	Following Page 2
Figure 2: Claim Map	Following Page 2
Figure 3: Regional Geology Map	Following Page 4
Figure 3a: Property Geology Sketch	Following Page 6
Figure 4a-b: Geochemical Survey (Plots) (1:10,000)	Map Pocket
Figure 5a-d: Geochemical Results (Contours)	Following Page 9
Figure 6a-c: Geophysical Survey (Plots) (1:10,000)	Map Pocket

## SUMMARY

The geology of northern Vancouver Island is typical of an emergent island arc. The thick succession of Karmutsen marine basalts, give way to moderate thicknesses of Quatsino limestone, followed by limey sediments, gradational into waterlaid ash fall, and finally a thick succession of subaerial basalts and andesites of the Bonanza Formation. Coeval Jurassic intrusives intrude the Bonanza rocks, and are the locus for extensive sulphide mineralization. These Bonanza volcanic rocks north of Holberg Inlet host the 55,000 tpd Island Copper mine. They also host the large Hushamu copper-gold deposit (over 191 million tons, 0.30 Cu, 0.010 opt Au), and the Hep and Red Dog porphyry copper deposits. Since 1980, and particularly since 1990, the sulphide rich and siliceous alteration caps overlying these porphyry deposits have also been shown to contain significant gold mineralization.

The Knob Hill property is located on the western end of the belt of rocks which host the majority of the major alteration zones and mineralized areas. The claims cover the central portion of a large area of 'tundra-like' plateau. Extensive areas of sulphide mineralization are evident from scattered outcrop, frost heave, and scattered drillholes.

During the summer of 1993 rock samples were collected and reconnaissance prospecting was carried out by the author. Four samples were submitted for petrological studies and one was assayed for copper, gold and trace elements. The prospecting programmes included panning for heavy mineral samples and visual gold, detailing of the geology, and sampling of mineralized zones. A suite of rock samples was collected and petrological work was carried out to determine mineralogy and alteration styles. This work indicated the potential for significant gold mineralization on the property.

The Knob Hill area is located on the south side of a strongly deformed 4000 gamma airborne magnetics anomaly. Locally there appears to be significant offset of the geology because of a NE trending structures. There is strong silicification in the volcanics and in the (Parsons Bay) sediments. Quartz veins are far more common than in other areas of Bonanza volcanic rocks to the east. Pyrrhotite is very common in the altered rocks, along with pyrite, and some chalcopyrite and sphalerite.

There are eleven old drill sites scattered across the property. The holes (AQ) are from 20 to 150 metres deep. There is ample evidence of a porphyry copper-gold related environment such as at Hushamu or Island Copper, however copper mineralization was only reported in the logs of one hole.

Inspection of the core (unassayed) shows extensive copper mineralization, biotite alteration, and locally tourmaline and arsenopyrite. Coarse calcite-arsenopyrite veining was noted in one hole,

associated with elevated gold values, (7200 ppm As, 410 ppb Au), other samples showing minor arsenopyrite veinlets have yet to be assayed.

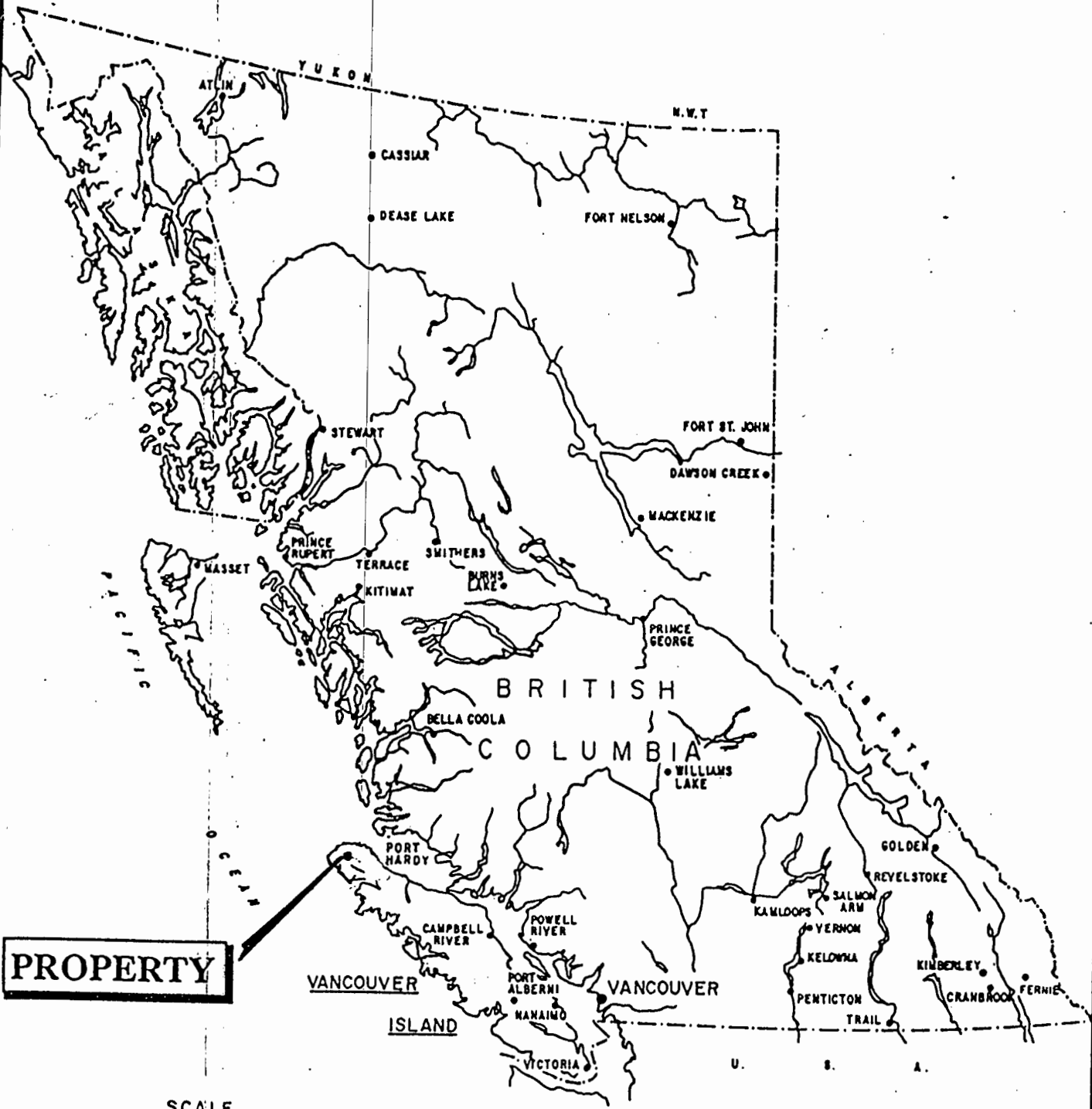
The most obvious exploration target on the property from previous work is the strong geochemical anomaly (200 ppm-1100 ppm Cu), which trends NW-SE across the south side of Knob Hill. The rocks in this area show strong biotite-chlorite-magnetite alteration, typical of the other porphyry copper targets in the belt. This first target area has two zones of 1,200 metres long by 400 metres wide within a broad area approximately 5000 metres by 1000 metres in extent.

In November 1995 a new grid was established over the property and soil sampling and magnetics surveys were carried out in the central portion of the grid. Approximately 42 km of grid was sampled and surveyed by magnetometer. Snow forced the termination of the programme on 9 December, however, at this stage the majority of the main zone of interest had been surveyed.

The geophysical and geochemical results combined provide a number of coincident base and precious metal anomalies surrounding and within a large central magnetic high. The perimeter of the magnetic high shows strong copper-zinc mineralization, with some lead and arsenic. The centre of the anomaly shows locally highly anomalous arsenic, gold and copper mineralization directly associated with the B horizon soil developed in this area. The high copper results from the current survey are not as extensive as those previously defined from basal till sampling. This can be also attributed to the area's thick overburden and humus cover resulting in areas lacking near surface "B" soil horizon development. The spotty gold but more extensive arsenic mineralization in the soils indicates a wider dispersion for some elements, but confirms the potential of the property to host a significant high-level epithermal sulphide-gold deposit.

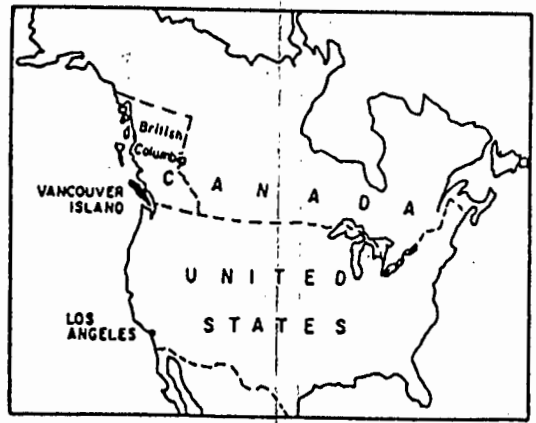
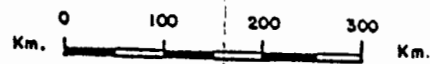
A Le Panto style gold target is strongly indicated by the arsenic-gold association, and the porphyry environment. Similar style high-level (epithermal) gold mineralization exists at Hushamu. Erosion has probably removed this zone from the Island Copper deposit, locally erosion has removed some of the zone at Hushamu. At Knob Hill the area is topographically higher, and probably will have more of the upper portion of the porphyry system intact. The extremely high number of gold particles reported from sampling by Placer Dome personnel indicates that a significant gold source is present locally.

There has been no previous exploration for gold in this area, although dredges are reported to have operated on the northwest coast at the turn of the century. The two most significant drainages in this area, the Stranby and Nahwitti rivers, have placer gold at their mouths. The Knob Hill area is a credible source for this gold.



**PROPERTY**

SCALE



**KNOB HILL PROPERTY**

**LOCATION MAP**

**KAMAKA RESOURCES LTD.**

Scale: 1:50,000

Date: FEB. 1994

This report prepared for the Explore BC programme details work carried out on the property in November and December 1995. The report also proposes a phased programme of exploration to determine the source of the gold and copper mineralization, and the dispersion of gold and other trace elements across the project area.

### LOCATION, ACCESS AND TOPOGRAPHY

The Knob Hill property is located 45km west of Port Hardy on northern Vancouver Island, within N.T.S. map-sheet 102 I/16. The claim area is accessed by helicopter or a long cross-country trek. The main area of exploration interest occupies the centre and south side of the Knob Hill plateau. The plateau has an elevation of 500-700 metres, and to the south, east and northeast is bounded by steep slopes and mature stands of fir, cedar and hemlock. Some logging activity has encroached on the northeastern and eastern forest, but stops short of the plateau top.

A large majority of the plateau is open and sometimes swampy grassland, with occasional scattered stands of stunted cedar. A moderate size lake exists on the plateau east of the summit of Knob hill, providing a source of running water year-round for the stream draining to the north. Other deeply incised streams drain the plateau to the west and southeast

### PROPERTY

The property consists of the following contiguous claims located within the Nanaimo Mining Division. The claims are shown on figure 2:

<u>Name</u>	<u>Tenure No.</u>	<u>Units</u>	<u>Expiry</u>	<u>Recorded Owner</u>
Knob 9-10	316284-85	2	Feb 15 1996	Peter Dasler
Knob 17-19	316292-94	3	Feb 15 1996	Peter Dasler
Knob #1	342338	12	Nov 16 1996	Peter Dasler
Knob #2	342339	16	Nov 16 1996	Peter Dasler
Knob #1	342340	12	Nov 17 1996	Peter Dasler
Knob 4	342341	20	Nov 18 1996	Peter Dasler

### HISTORY

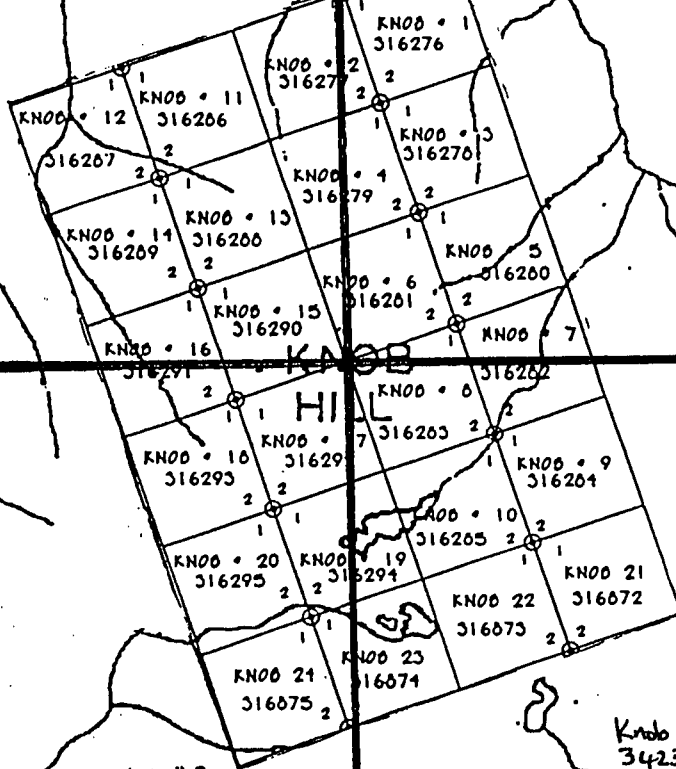
The area now covered by the Knob claims has been under almost continuous mineral tenure since 1968. The first significant work programmes on the property were carried out by Chevron Standard Limited between 1970 and 1975. The claims had been staked following the discovery of the Island

OBLING YI  
3647 (10)  
KXKSE

122438

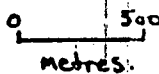
Knob #1  
342338

Knob #2  
342339



3478901	ELK
0107	
3478501	ELK
0108	
3470601	ELK
85	
3470701	ELK
86	
3465001	ELK
13	
3465101	ELK
14	
3465201	ELK
37	
3465301	ELK
38	
3465401	ELK
39	
3465501	ELK
40	
3465601	ELK
41	
3465701	ELK
42	
3465801	ELK
43	
3465901	ELK
44	
3466001	ELK
45	

3904



**KNOB HILL PROPERTY**

**CLAIM MAP**

**KAMAKA RESOURCES LTD.**

Scale: 1:50,000

Date: FEB 1996

Copper mine in 1968, from the realization that further large-scale alteration existed within the belt of Bonanza volcanic rocks that trended northwest from the Island Copper mine. Chevron carried out geological mapping, basal till sampling, and overburden drilling, magnetometer surveys, limited IP, and drilled four diamond drill holes in 1972 (3177 ft), and five diamond drill holes in 1976 (total 1989 ft AQ core).

The mineral claims reverted to Messrs Veerman and Botel as Chevron pulled out of mineral exploration, and in 1980 Teck Corporation carried out a small magnetometer survey and drilled three short holes (118ft, 90ft, 62 ft). Sub-economic copper mineralization in chlorite-magnetite altered volcanics was intercepted.

In 1989 Placer Dome staked the property following a regional reconnaissance programme for gold related to diorite intrusives. Placer staked the property, because of high concentrations of gold in the creeks draining the area (eg. Oblong Creek - 50 gold colours/pan).

Placer conducted a very limited programme on the claims in the three years they held them. Two reconnaissance soil sample lines of two kilometres length were carried out northeast of Knob Hill, along with some reconnaissance mapping. The gold from the reconnaissance sampling programme was also microprobed and showed signs of both mercury rich and copper rich grains, indicating both epithermal and mesothermal targets.

The current two post claims were staked by Kamaka Resources Ltd to cover the previously recognised copper anomalies (Chevron 1975), unrecognised gold anomalies (Placer 1990), and a coincident area of NW trending magnetics anomalies. The gold anomalies identified by Placer Dome (150, 105 ppb Au) are adjacent to the copper rich zone south of Knob Hill. An arsenic anomaly (100 ppm) was also identified by Placer Dome in this area. At the start of the current programme further claims were staked to cover the rest of the early anomalies.

## **REGIONAL GEOLOGY**

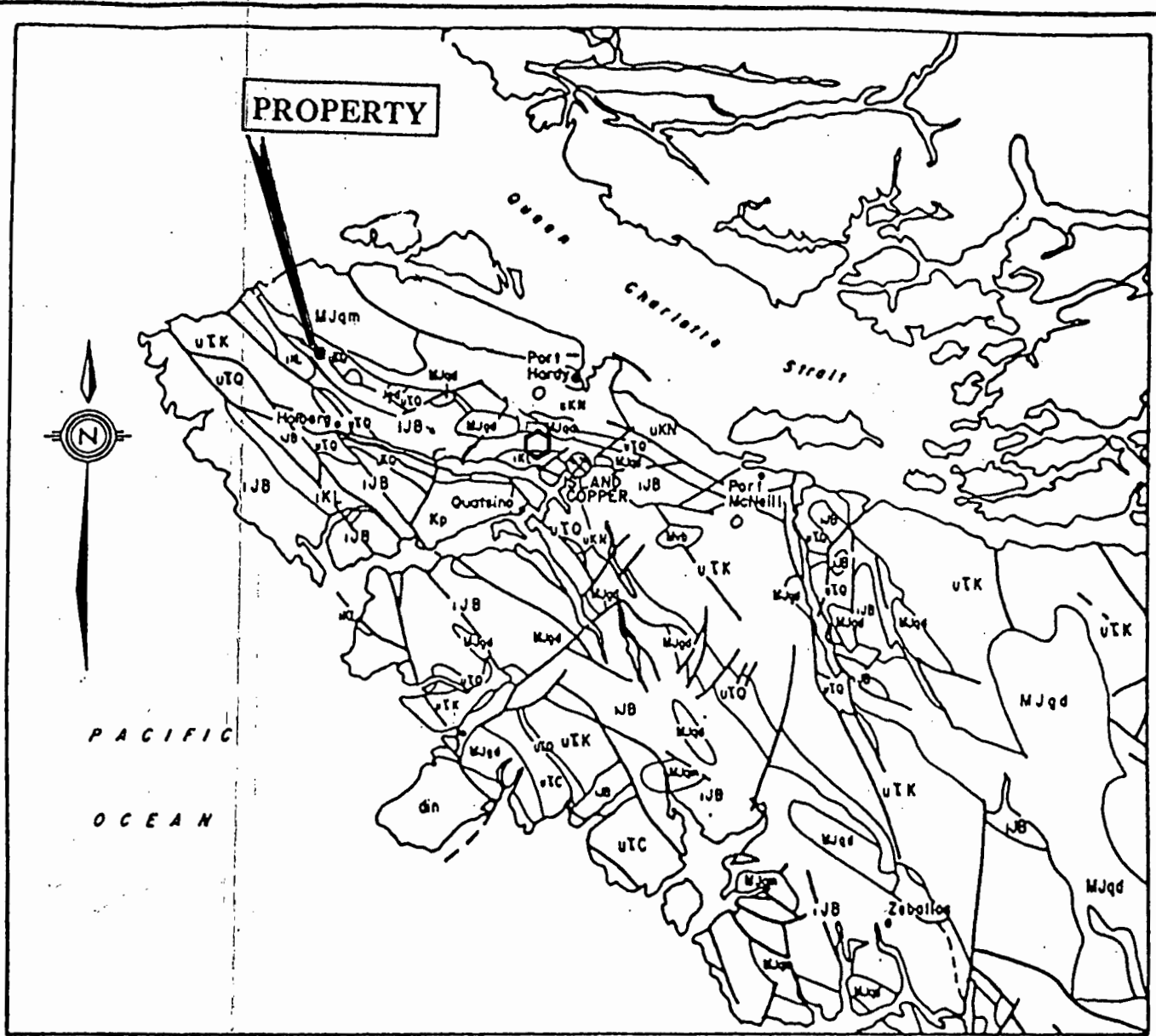
Vancouver Island north of Holberg and Rupert inlets is underlain by rocks of the Vancouver and Bonanza Groups (Muller et al 1974). These rocks range in age from Upper Triassic to Middle Jurassic, and appear to form part of an emergent island arc. They are intruded by dykes and stocks of Jurassic and Tertiary age, and overlain by Cretaceous sedimentary rocks. There is a pronounced northwest regional trend to all the major lithologic units. Figure 2 details the geology north of Holberg inlet.

The Vancouver Group is described as follows:

**Kamaka Resources Ltd.**

6074, 45A Avenue, Delta, B.C. V4K 1M7 Phone: (604) 940-1591

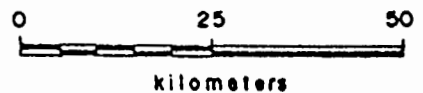




**LEGEND**

- MIOCENE**  
 Mvb basalt flows, sills and dykes
- UPPER CRETACEOUS, PALEOCENE, EOCENE**  
 Kp QUEEN CHARLOTTE GROUP: siltstone, shale, greywacke
- UPPER CRETACEOUS**  
 uKN NANAIMO GROUP: sandstone, shale, conglomerate
- LOWER CRETACEOUS**  
 iKL LONGARM: greywacke, conglomerate
- JURASSIC**  
 Jgd granodiorite, quartz diorite
- MIDDLE JURASSIC**  
 MJqm quartz monzonite, granite, monzonite  
 MJgd granodiorite  
 MJqd quartz diorite
- LOWER JURASSIC**  
 IJB BONANZA; andesite, dacite, rhyolite
- UPPER TRIASSIC**  
 uTQ QUATSINO and PARSON BAY: limestone, argillite  
 uTK KARMUTSEN: basalt, pillow lava

**SCALE**



**KNOB HILL PROPERTY**

**REGIONAL GEOLOGY**

**KAMAKA RESOURCES LTD.**

Scale: As Shown

Date: FEB. 1994

AFTER MULLER et al (1974)

- (a) Basal Sediment - Sill Unit: The so-called "Daonella" beds Middle Triassic
- (b) Karmutsen Formation: Basaltic flows and tuffs; Upper Triassic
- (c) Quatsino Formation: Limestone; Upper Triassic
- (d) Parson Bay Formation: Fine ash tuffs and sediments; Upper Triassic

The Bonanza Group consists of:

- (a) Harbledown Formation: Sediments; Lower Jurassic
- (b) Bonanza Volcanics: Andesitic ash tuff, and flows; Lower Jurassic

The Bonanza Group hosts the majority of the copper occurrences in the district with the large porphyry copper systems appearing in the lower part of the volcanic succession. Large diorite-quartz diorite stocks of the Island Plutonic suite or "Island Intrusions" intrude the Vancouver and Bonanza Group rocks. Quartz-feldspar porphyry (QFP) dikes and irregular bodies occur along the southern edge of the belt of stocks. The QFP dykes are characterized by coarse, subhedral quartz and plagioclase phenocrysts set in a grey or pink, very fine grained, quartz and feldspar matrix. They are commonly extensively altered and pyritized. At the Island Copper Mine, these porphyries are enveloped by altered, brecciated and mineralized Bonanza wallrocks. The porphyries are pyritized, extensively altered, mineralized where they have been brecciated, and are also cut by siliceous veins. The quartz-feldspar porphyries are thought to be differentiates of Middle Jurassic felsic intrusive rocks of the Island Intrusions (Muller et al 1974). Cretaceous sedimentary rocks locally overly the Bonanza volcanics; they have been variably referred to as the Longarm Formation (Kyuquot Group), Queen Charlotte Group, or Coal Harbour Group.

The most significant of the regional fault systems trends west to northwest following Rupert and Holberg inlets. Near the west end of Holberg inlet this fault splits, with the main branch following Holberg inlet, and the other branch passing through the west side of the Stranby River valley, east of the property. Another northwesterly to westerly fault system passes through William Lake, in the valley south of the Stranby River, and still another smaller system passes through Nahwitti Lake.

Northeasterly trending faults comprise a subordinate fault system. In some cases, apparent lateral displacement in the order of several hundred metres can be measured on certain horizons. The airborne magnetometer data clearly shows the major west-northwest trending breaks and the secondary conjugate sets of northeast faults. The intersections of these conjugate fault zones appear to coincide directly with the copper-gold occurrences at Hushamu, Hep, Red Dog, and the Island Copper orebody. Using these relationships further potential zones are evident.

## PROPERTY GEOLOGY AND MINERALIZATION

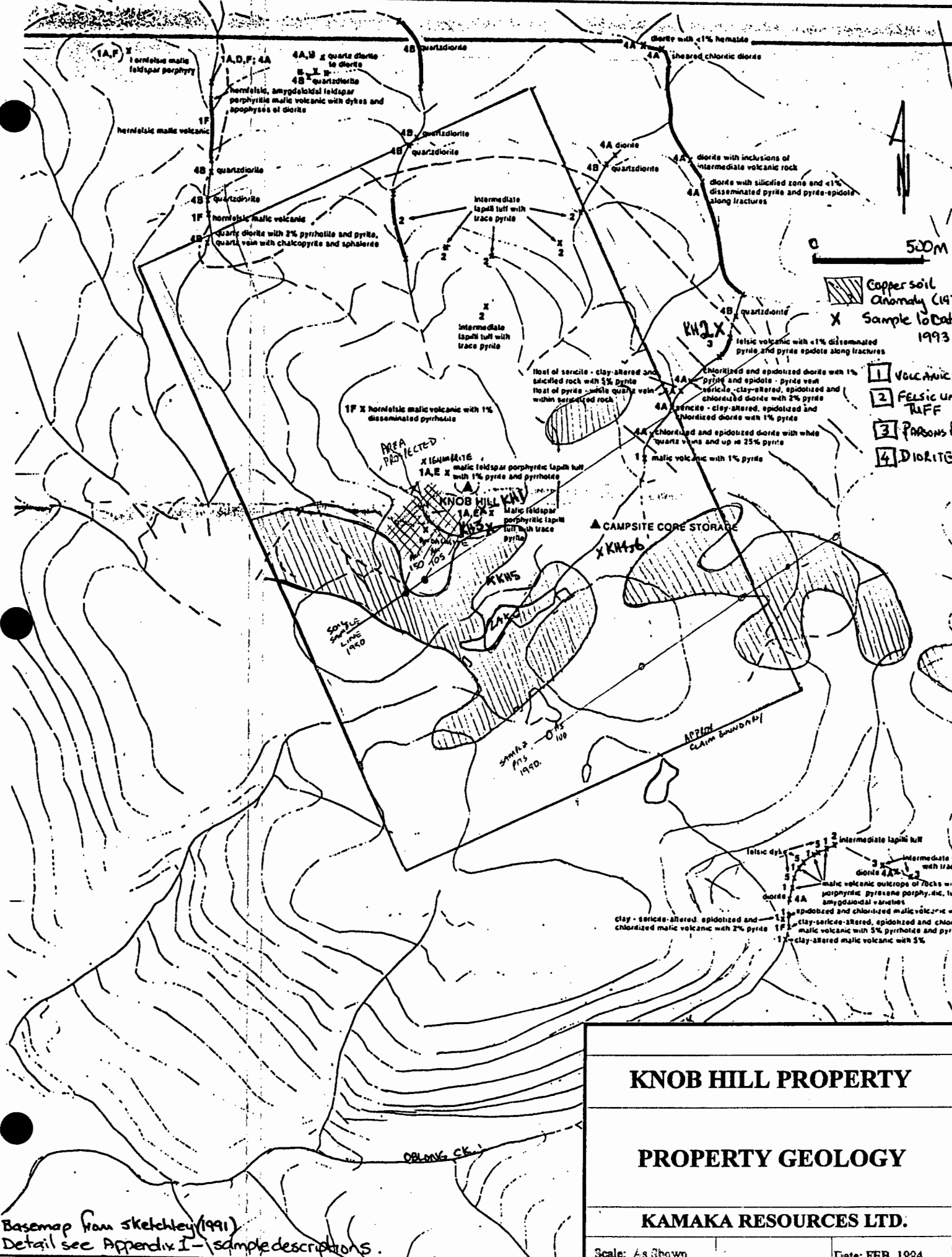
The whole Knob Hill area forms a gently rolling plateau at 500-700 metres elevation, only locally bush covered, but mainly marked by small ponds and swamps. Generally there is very little outcrop in the area, but frost boils provide numerous indications of shallow subcrop. An extensive basal till drilling and sampling programme was carried out by Chevron in 1972. Samples from this were assayed for copper, molybdenum and zinc. Extensive statistical evaluation was carried out, and conventional soil sampling was compared with the results (favourably).

Chevron's work identified a very large area with anomalous copper mineralization. The wide spaced sampling (300 foot spaced samples on 800 foot spaced lines) identified a zone approximately 5 km by 1 km that has values generally over 200 ppm copper. Within the broad zone (which may be two zones offset by a NE trending structure) are two areas which have anomalous values of 800-1100 ppm copper. These zones trend E-W across the property. Copies of Chevron's maps are included in Appendix 3. These show the extent of the main anomalies.

The Knob Hill area is located on the south side of a strongly deformed 4000 gamma airborne magnetics anomaly. West of Knob Hill summit there appears to be significant offset of the magnetics indicating a strong NE trending structure. This also shows up as offsets in the ground geophysics, and in the outcrop pattern of the granodiorite. There is strong silicification in the volcanics and in the (Parsons Bay) sediments (mapped as rhyolite) related to this and other structures. Pyrrhotite is very common in the altered rocks, along with pyrite, and some chalcopyrite and sphalerite.

To the north there is a large granodiorite-quartz diorite of the Island Intrusive suite. The narrow belt of "rhyolite" parallels the southern edge of the intrusive, and further south the scattered outcrop and subcrop indicate a 2-3 km wide zone of volcanics. This geology appears to be a continuation of the Bonanza Volcanic belt which is well recognised to the east.

There are eleven drill sites scattered across the property. The holes (AQ) are from 20 to 150 metres deep. From the drill core there is ample evidence for a porphyry environment similar to Island Copper or Hushamu. This can be seen from the extensive pyritization and zones of strong magnetite-chlorite-biotite alteration. Significant copper mineralization was only recorded by Chevron from hole 72-1 (80 feet of 0.10% Cu, incl. 10 feet of 0.2% Cu). The reports print an erroneous picture however, as the author, and staff geologists from BHP Minerals, inspected the unsplit core from Chevron's 1976 drill programme and noted further, widespread, low grade chalcopyrite mineralization.



0 500M

Copper soil Anomaly (1976)  
 Sample location 1993

- 1 VOLCANICS
- 2 FELSIC UNIT
- 3 PARSONS BR
- 4 DIORITE

<b>KNOB HILL PROPERTY</b>	
<b>PROPERTY GEOLOGY</b>	
<b>KAMAKA RESOURCES LTD.</b>	
Scale: As Shown	Date: FEB. 1994

Basemap from Sketchley (1991)  
Detail see Appendix I - sample descriptions.

Coarse calcite-arsenopyrite veining was noted in one hole from the 1972 programme. This arsenopyrite was assayed by Placer geologists in 1990, and was shown to contain elevated gold values, (7200 ppm As, 410 ppb Au). The author noted this arsenopyrite, and further arsenopyrite veining in the 1976 core. Unfortunately weathering of the core and boxes has obliterated the majority of the hole numbering and footage markers. A suite of core samples was collected for later microscope work, and two samples (KH4 and KH6) were submitted for petrological work reported and are detailed in the appendices of this report.

Mapping by the Chevron geologists also showed that there is significantly more quartz veining in the volcanics on the property than is recognised elsewhere in the belt. The author has had extensive experience mapping and supervising exploration on other properties to the east of Knob Hill, all the way east to Island Copper. It is very rare to see quartz veining in the Bonanza volcanics. Although the author has not visited the mapped sites, it is postulated that the increased quartz veining was caused by regional hornfelsing caused by the large intrusive body located to the north of the Knob Hill property. This (prior?) hornfelsing may be a significant event in relation to the increased gold values in the area.

#### Pre-Existing Exploration target:

The most obvious pre-existing exploration target on the property is the strong geochemical anomaly (200 ppm-400 ppm Cu), which trends NW-SE across the south side of Knob Hill. The rocks in this area show strong biotite-chlorite-magnetite alteration, typical of the other porphyry copper targets in the belt. This first target area has two zones of 1,200 metres X 400 metres within a broad area approximately 5000 metres X 1000 metres in extent see Appendix 3.

The exploration work by Placer focussed on the gold dispersion in Oblong creek. This creek drains the southeastern side of the Knob Hill area, and some low lying ground to the east. Placer's field crew identified a moss mat sample from the creek which contained 30-50 gold colours (pers comm, D. Sketchley). Further work was performed following the original discovery, and the gold mineralization was found to occur through to the headwaters of the creek. Microprobe analyses of the gold particles showed both a copper and a mercury rich gold, indication both a deep porphyry environment, and a high level epithermal environment. In August 1993 the author resampled the lower levels of Oblong creek, and obtained samples containing from 1-7 colours of gold in 10 different pannings of stream sediments. In the first sample there were six small gold particles (specks) and one 0.75 mm flat flake.

The level of gold mineralization noted in the drainages from the property is not recognised in drainages elsewhere in the belt. Oblong creek drains into the Stranby river, which was dredged for

gold at its mouth, some 10 km northwest. To the north of Knob Hill the Nahwitti river was also dredged for gold at the turn of the century. The Knob Hill property is partially underlain by what appears to be high level acid-sulphate altered rocks ( see " ignimbrite" location SE side of trig point, geol map Appendix 3). To the east there is strong acid sulphate alteration on the NW Expo property, and surrounding the Red Dog property.

A Le Panto-EL Indio style replacement sulphide-gold target is strongly indicated by the arsenic-antimony-gold association. Similar style high-level (epithermal) gold mineralization exists at Hushamu, and has recently been drilled by Moraga Resources. Erosion has probably removed this zone from the Island Copper deposit, locally erosion has removed some of the zone at Hushamu. At Knob Hill the area is topographically higher, but less incised and is likely to have more of the upper portion of the porphyry system intact.

### **1995 SOIL SAMPLE COLLECTION AND INTERPRETATION**

In 1990 Placer's geologists carried out soil sampling on one line on the east side of Knob Hill. Two nearby samples from this line assayed 105 and 150 ppb gold. An isolated sample pit approximately 300 m downhill to the NE showed 100 ppm arsenic when analysed. The 1995 soil sampling programme concentrated on providing a wide coverage centred on the anomalous samples collected by Placer Dome crews. A new grid (approx 51km, and 1.2 km baseline) was established across the property and soil samples were collected at 25 metre spacings on 100 metre spaced lines.

A total of 1657 samples were collected in 1995 on sample lines 4000N to 5400N. The samples collected were of both "A" and "B" horizons. The soil samples were obtained using a long handled auger from depths of 10 cm to 1.2 metre. Every effort was made to collect "B" horizon soils on a regular basis, however large areas of the property are covered with thick boggy humus, and the B horizon is either not developed or too deep to sample with the 1.2 metre long auger. Each sample was numbered using the grid co-ordinate and placed in a kraft envelope for drying and then transport to Acme Labs in Vancouver. The samples were further dried, screened at -100 mesh, and a .5 gm sample was taken for ICP analysis. The samples were digested in HCL-HNO<sub>3</sub>, and analysed for 30 elements, including copper, gold, lead, zinc and arsenic. Gold, copper, arsenic, lead, and zinc results are contoured and plotted in figures 5a-d, full plots showing assay values are included in the map pocket. A full listing of assay results is in appendix 1.

### **INTERPRETATION**

There are significant multi element anomalies trending across the survey area. These anomalies have been determined from statistics available for adjacent areas on northern Vancouver Island, combined

with the values obtained from the property. This is because of the strong weighting that is caused by the numerous "A" horizon samples in the sample suite, and their generally low values. The sample statistics are detailed in Table 1, and show the interpreted threshold value for each element, taking these locally derived comparable surveys into account.

The current survey results are dominated by an extensive copper anomaly, most pronounced in the southeastern portion of the grid, but also occurring in the northwestern portion of the grid, and sporadically in between. Most other elements mimic this distribution. Previous overburden sampling by Chevron in the early 1970's shows that the copper anomaly is more extensive in the centre of the property than is shown by the current survey.

The geochemical response from the most recent soil samples is clearly controlled by the presence or absence of the "B" horizon. The B horizon soil locations were plotted on an overlay and compared to the soil anomalies. This sketch overlay and the underlying copper anomaly map are included in appendix 1 along with assay results. There is a near 1:1 correlation of anomalous copper in soils to the "B" horizon soil samples.

Summary statistics are shown for the major anomalies in the table below:

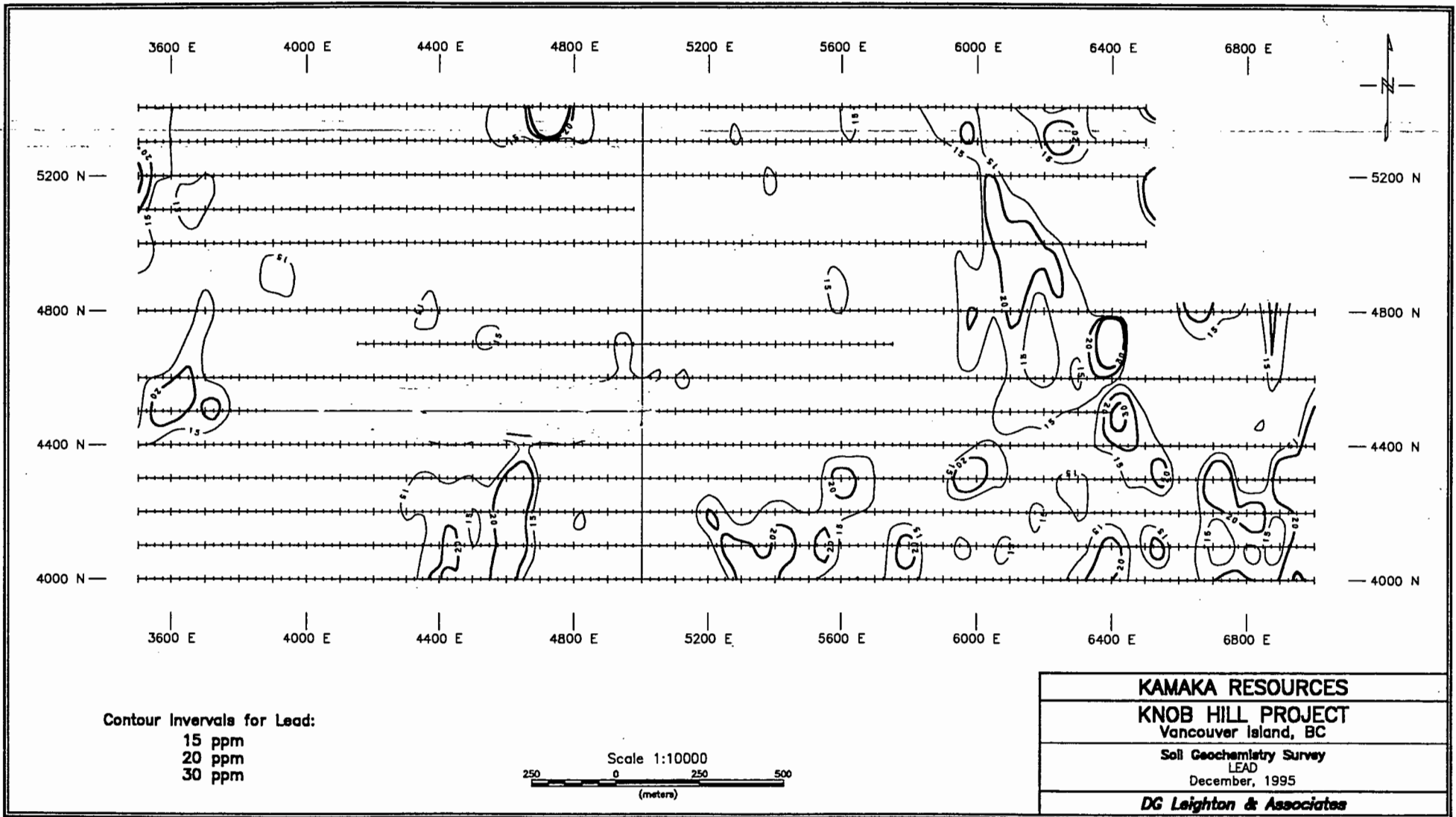
Table 1. Geochemical statistics

	<i>Copper</i>	<i>Lead</i>	<i>Zinc</i>	<i>Gold</i>	<i>Silver</i>	<i>Arsenic</i>
<i>Count**</i>	1650	1280	1653	1300	644	1279
<i>Min</i>	1	3	1	1	0.3	2
<i>Max</i>	300	4812	157	513	6.6	1594
<i>Mode</i>	3	3	7	1	0.3	2
<i>Median</i>	7	11	21	4	0.4	12
<i>Mean</i>	18.9	16.1	28.2	8.5	0.6	24.1
<i>Std Dev.</i>	23.0	136	23.1	24.8	0.4	63.9
<i>Anomaly*</i>	50	10	75	10	0.5	50

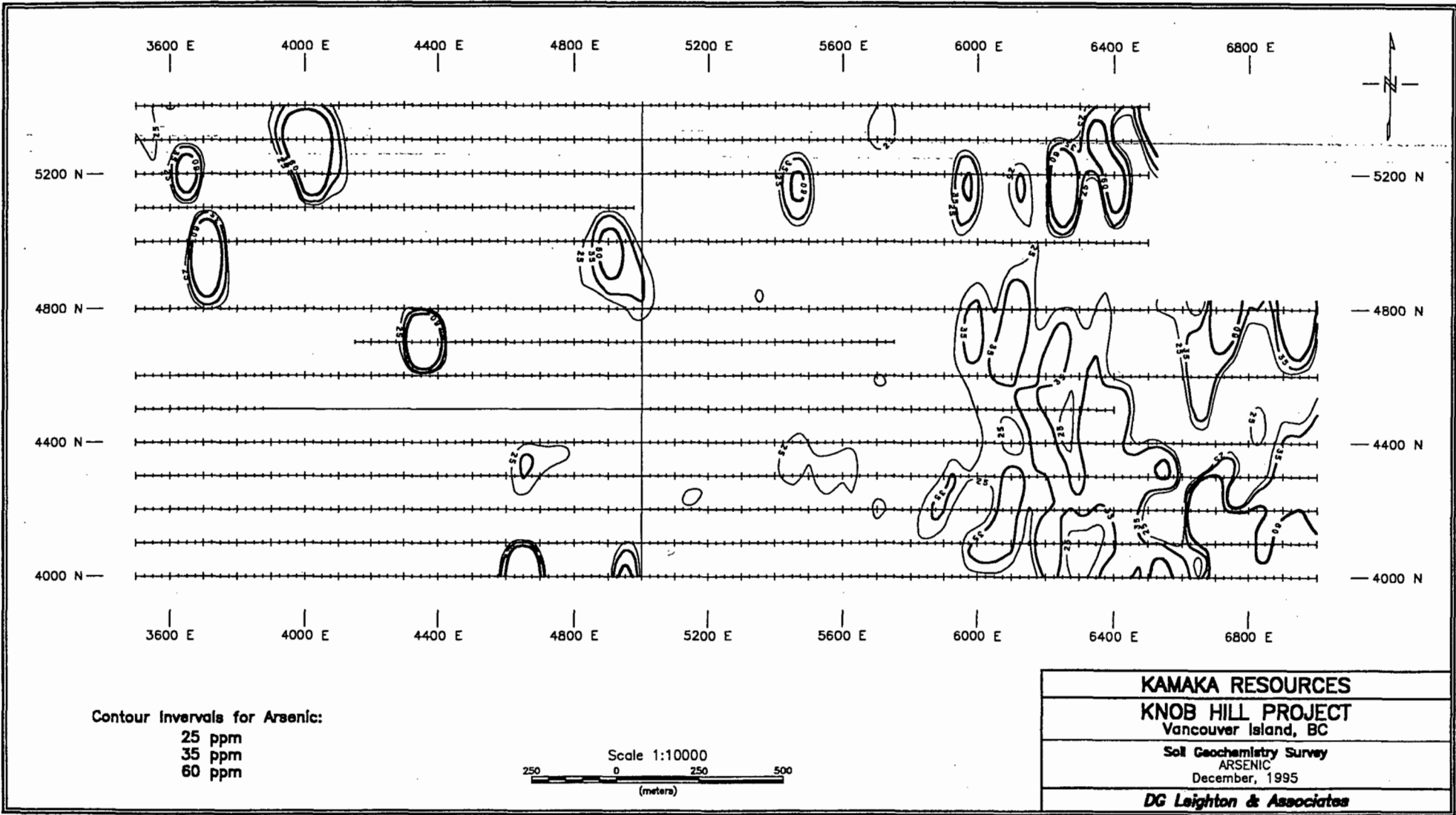
Notes: \* Anomaly definition influenced by statistics for north Vancouver Island region.

\*\* values above detection limit

The gold and arsenic mineralization identified first by Placer Dome's work occurs in conjunction with the copper anomaly, but also as significant spot highs in the centre of the property. These high values



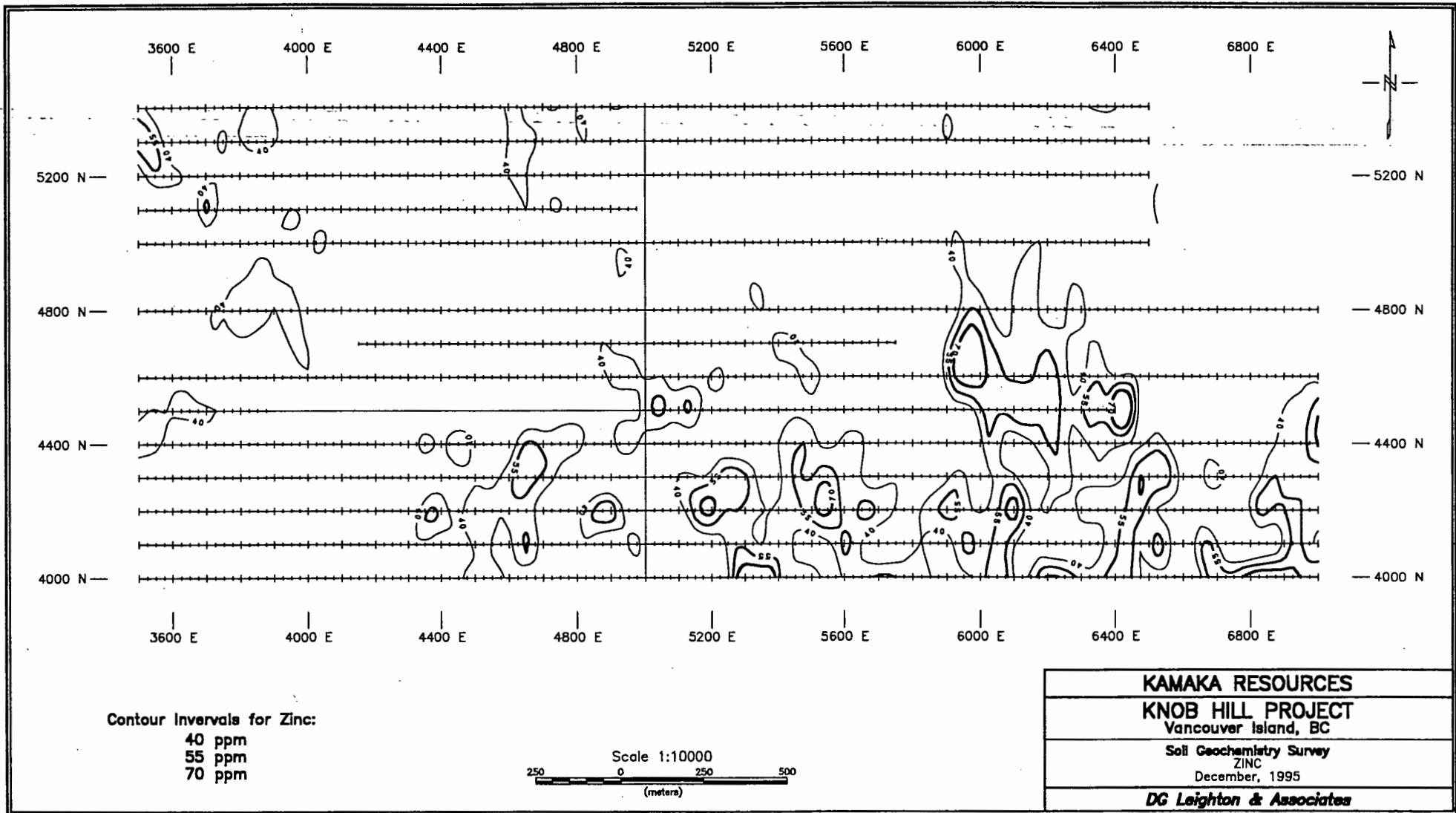


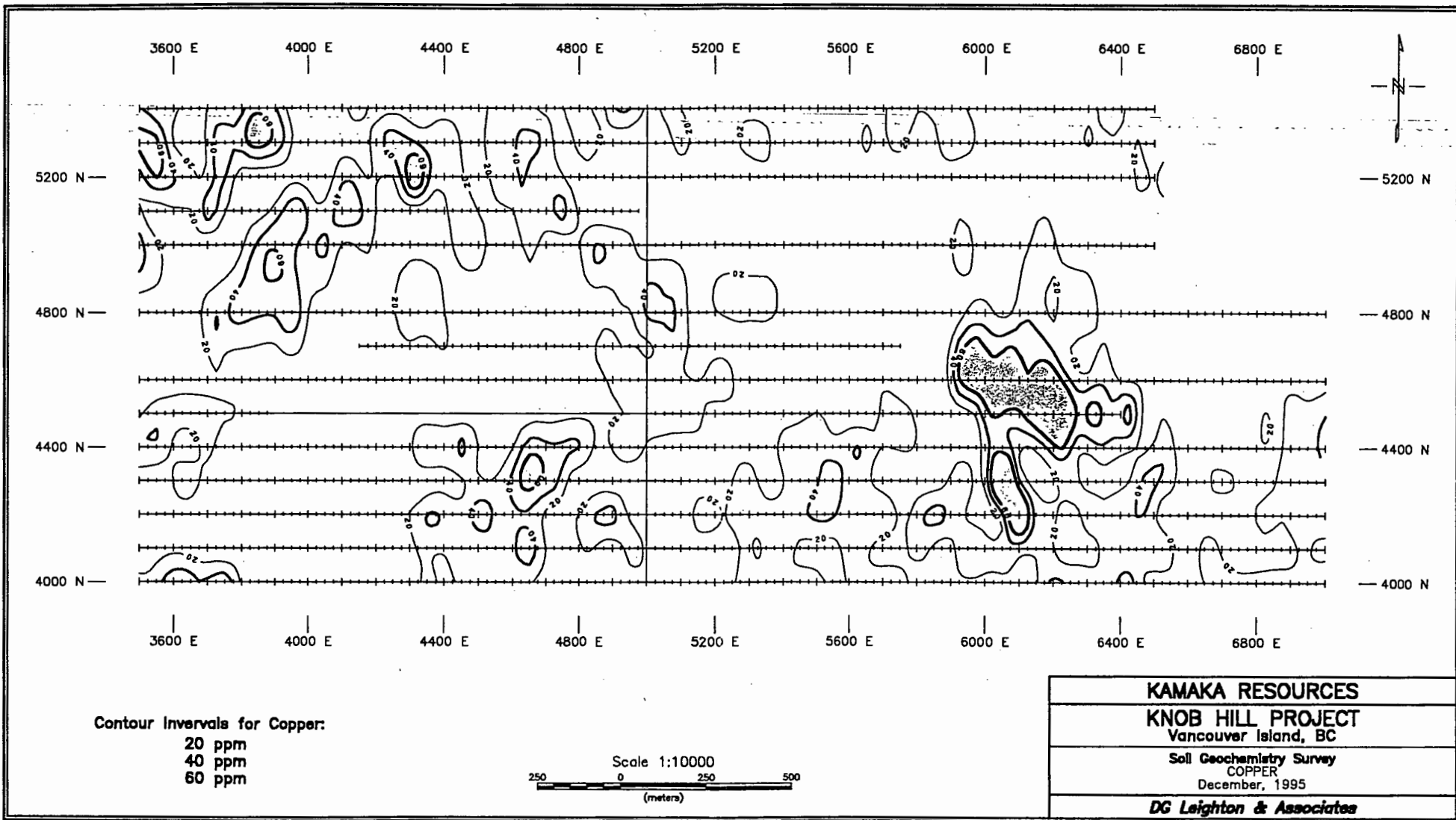


Contour Intervals for Arsenic:  
 25 ppm  
 35 ppm  
 60 ppm

Scale 1:10000  
 250 0 250 500  
 (meters)

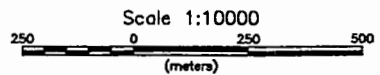
<b>KAMAKA RESOURCES</b>
<b>KNOB HILL PROJECT</b> Vancouver Island, BC
Soil Geochemistry Survey ARSENIC December, 1995
<b>DG Leighton &amp; Associates</b>



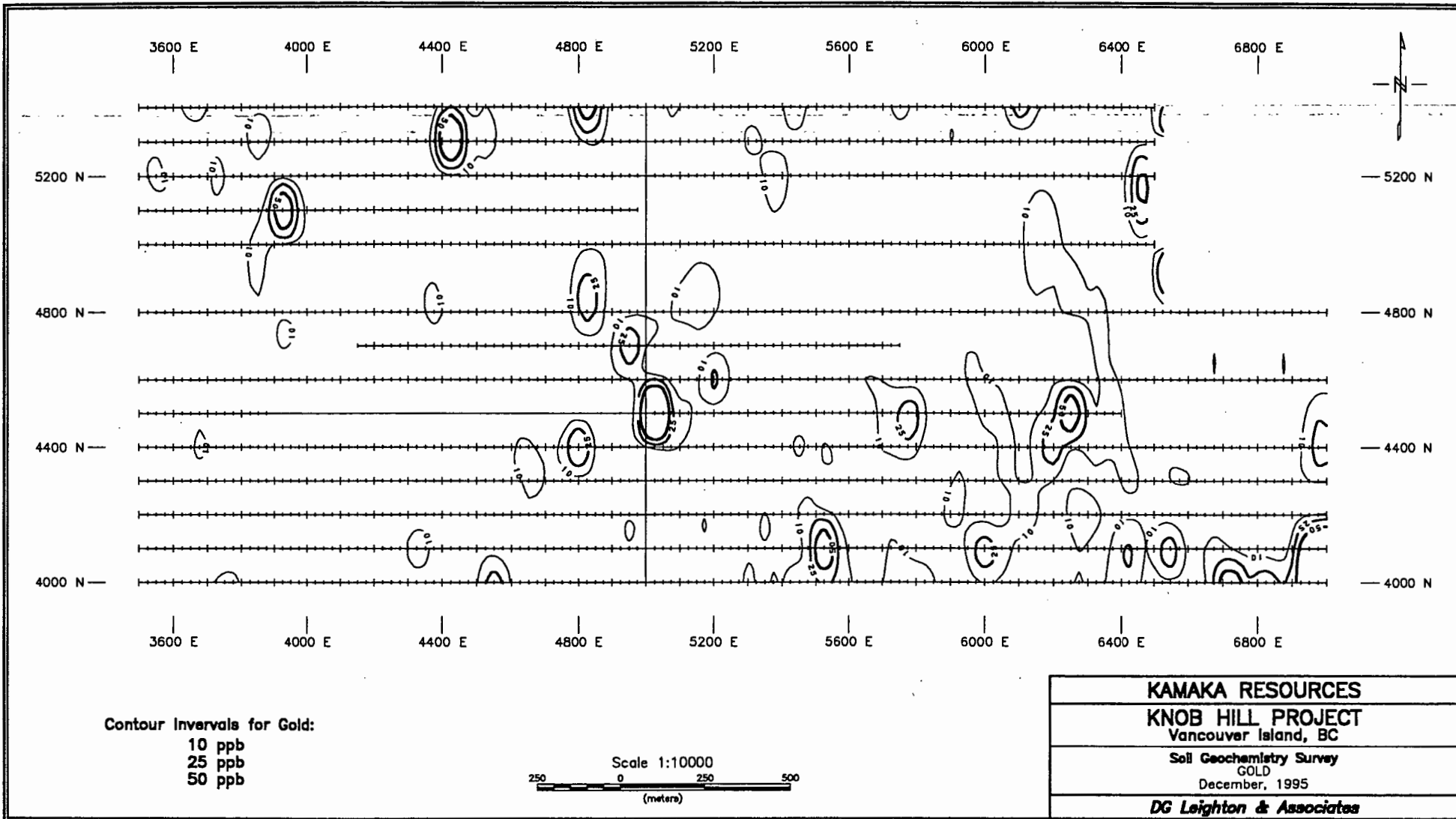


Contour Intervals for Copper:

- 20 ppm
- 40 ppm
- 60 ppm



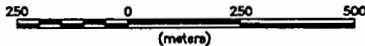
<b>KAMAKA RESOURCES</b>
<b>KNOB HILL PROJECT</b> Vancouver Island, BC
<b>Soil Geochemistry Survey</b> COPPER December, 1995
<b>DG Leighton &amp; Associates</b>



Contour Intervals for Gold:

- 10 ppb
- 25 ppb
- 50 ppb

Scale 1:10000



<b>KAMAKA RESOURCES</b>
<b>KNOB HILL PROJECT</b> Vancouver Island, BC
<b>Soil Geochemistry Survey</b> GOLD December, 1995
<b>DG Leighton &amp; Associates</b>

are clearly influenced by the soil profile, and would probably be more extensive except for the presence of swamp cover. These anomalies are clearly related to the large underlying magnetic anomaly.

### MAGNETOMETER SURVEY

At the conclusion of the soil sampling programme magnetometer readings were collected from the grid area. Fresh snow hindered the programme and forced it to be abbreviated to 200 metre spaced lines. The survey utilized a Scintrex, "MP2" proton precession magnetometer. Daily readings were taken of control stations at the base camp (4700N 5550E), and at the base line (4700N 5000E). Individual lines were looped back to common survey stations on the baseline.

The magnetometer results are plotted as read, less 55,000 nT (gammas), and with only minor baseline correction needed. The data was plotted at 1: 5000 scale. These maps in profile and plan form are included in this report. Preliminary colour plots were made of the survey. These show more clearly the central magnetic high and the flanking lows to the SE and NW. Further plotting, along with replotting of Chevron data is planned.

### CONCLUSIONS AND RECOMMENDATIONS

1. The extremely high number of gold particles reported from Placer Dome's sampling indicates that a significant gold source is present locally. (A reasonable target for a Le Panto style of deposit would be 1-30 million tonnes of 1-3 gram/tonne gold).
2. The new soil sampling over the central portion of the property has shown the association of strong arsenic and gold anomalies with the previously identified copper anomalies. These elements are indicative of an epithermal environment overlying the porphyry copper target, and are consistent with a high sulphidation gold target.
3. Breaks in the continuity of the geochemical data are readily explained by local swampy conditions and a lack of near surface "B" horizon. Earlier work by Chevron utilized a drill for basal till sampling. The copper anomalies generated from this work are generally coincident with the latest work, but tend to extend further into the areas overlain by swamp and lacking B horizon samples.

4. The magnetic survey indicates continuity to the geology underlying the copper, arsenic and gold anomalies. A NW trending magnetic high flanked by lows with local peak highs and lows, probably represents an underlying intrusive, with local magnetite/pyrrhotite mineralization.
4. The existing drill hole coverage is inadequate to evaluate the very large high sulphide alteration zone noted on the property. The existing holes only serve to show that the alteration is typical of Island Copper-Hushamu style, and that there is potential for high-level gold rich sulphide replacements.
5. The project now requires the correlation of previous geophysical and geochemical targets with the current surveys. Following this IP surveying would be of definite assistance to identify zones of sulphide lenses or alteration. Drilling will be required to determine the underlying geology and mineralization.

**Knob Hill Proposed Budget**

To carry out review of the mineralized zones and drill core on the property, IP surveying and drilling.

**PHASE 1**

Mob/demob. 4 men & vehicle	2,500.00
Helicopter, 6hr @ 850	5,100.00
Sampling core 4 mandays @ \$380	1,520.00
IP survey, 20 line km	25,000.00
Geologist 20 days @ \$380	7,600.00
Prospectors 40days @ \$275	11,000.00
Accommodation/food etc 100 @ \$55	5,500.00
Vehicles/airfares	1,260.00
Assays 200 samples @ \$16.50	3,300.00
Misc & shipping, supplies	1,000.00
Camp setup, rental etc	2,000.00
Equip rental, radios, field equip	1,200.00
Drafting	1,200.00
Report	<u>3,000.00</u>
Sub Total	71,180.00
Management Fees.	10,000.00
GST	5,683.00
Contingency 10%	<u>8,000.00</u>
<b>Total</b>	<b><u>\$94,863.00</u></b>

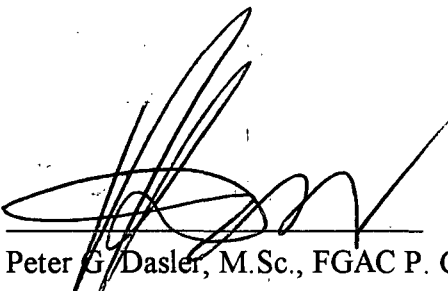
**PHASE TWO**

Drill contract	
3500 feet @ \$18.50	64,750.00
Drill Mob	5,000.00
Helicopter 30 hrs @\$850	25,500.00
Camp Accom 20 days X 11 men @ \$50	11,000.00
Assays 300 @ \$16.50	4,950.00
Geologist 25 days @ \$380	9,500.00
Assistant 22 days @ \$275	6,050.00
Vehicles	1,500.00
Supplies	1,000.00
Report	<u>3,000.00</u>
Subtotal	132,250.00
Contingency	10,000.00
GST	9960.00
<b>TOTAL</b>	<b><u>152,210.00</u></b>

**CERTIFICATE OF QUALIFICATIONS**

I, Peter G. Dasler, do hereby certify that:

1. I am a geologist and principal for Kamaka Resources Ltd. with offices at 6074, 45A Avenue, Delta, British Columbia, V4K 1M7.
2. I am a graduate of the University of Canterbury, Christchurch, New Zealand with the degree of M.Sc., Geology.
3. I am a Fellow of the Geological Association Of Canada, a Member, in good standing, of the Australasian Institute of Mining and Metallurgy, and a Member of the Geological Society of New Zealand and a registered Professional Geologist with the Province of British Columbia.
4. I have practised my profession continuously since 1975, and have held senior geological positions and managerial positions, including Mine Manager, with mining companies in Canada and New Zealand.
5. This report is based on my fieldwork, assisted by D. G Lawton. P. Eng, on the Knob Hill Property, and from reports of Professional Engineers and others working in the area.



Peter G. Dasler, M.Sc., FGAC P. Geo.  
January 1996



**REFERENCES**

- Arscott D. 1974 Elk Project, Geochemical Program. *BCDM Assessment Report 5352, November 30 1974.*
- BCDM/GSC 1963 Aeromagnetic Map Series, *Geol. Surv. Can. Geophysics papers and maps, 1733-1738, September, 1962.*
- Laforme G.W. 1976 Reconnaissance Exploration Program (1975) of the Elk Claim Group Project C415. *BCDM Assessment Report 5809. February 11 1976.*
- Laforme G.W. 1977 Exploration Program (1976) of the Elk Claim Group Project C415. January 1977. *BCDM Assessment Report 6170 January 1977.*
- Muller, J.E., Northcote, K. E. and Carlisle D. 1974 Geology and Mineral Deposits of Alert Bay-Cape Scott Map Area, Vancouver Island, British Columbia, *Geol. Surv. Can. Paper 74-8*
- McClymont B.I. 1980 Diamond Drilling and Geophysical Survey report on the Elk Property, Nanaimo Mining Division. *BCDM Assessment Report 9213, November 1980.*
- Nixon, G. T., Hammack, J.L., Koyanagi, V. M., Payie, G. J., Panteleyev, A., Massey, N.W.D., Hamilton, J.V., Haggart, J. W. 1994  
Preliminary Geology of the Quatsino - Port McNeill Map Areas, Northern Vancouver Island, (92L 12, 11) in Geological Fieldwork 1993, Grant B. and Newell, J. M. Editors, *British Columbia Ministry of Energy, Mines and Petroleum Resources*, Paper 1994-1 pp 63-110
- Perello, J.A. 1992 Comments on the Exploration Potential for Epithermal Au and Cu at McIntosh, South McIntosh, and West Pemberton, Expo Claims, Vancouver Island, British Columbia; *BHP Minerals Canada Ltd.*, unpublished company report, 19 pages.
- Panteleyev A. and Koyanagi, V. M. 1993 Advanced Argillic Alteration in Bonanza Volcanic Rocks, Northern Vancouver Island - Transitions Between Porphyry Copper and Epithermal Environments; in Geological Fieldwork, 1992, Grant, B. and Newell, J. M. Editors, *B.C. Ministry of Energy, Mines and Petroleum Resources*, Paper 1993-1, pages 287-293.

Panteleyev A. and Koyanagi, V. M. 1994 Advanced Argillic Alteration in Bonanza Volcanic Rocks, Northern Vancouver Island, Lithologic and Structural Controls *in* Geological Fieldwork, 1993, Grant, B. and Newell, J. M. Editors, *BC Ministry of Energy, Mines and Petroleum Resources*, Paper 1994-1, pp 101-109.

Sketchley, D. A. 1991 Oblong property, Geology and Geochemistry Nanaimo MD British Columbia. *BCDM Assessment Report 20766, January 4 1991*.

Young 1969 Geological and geochemical Assessment report on the Expo Claim group for Utah Mines Ltd. *BCDM Assessment report #21902*

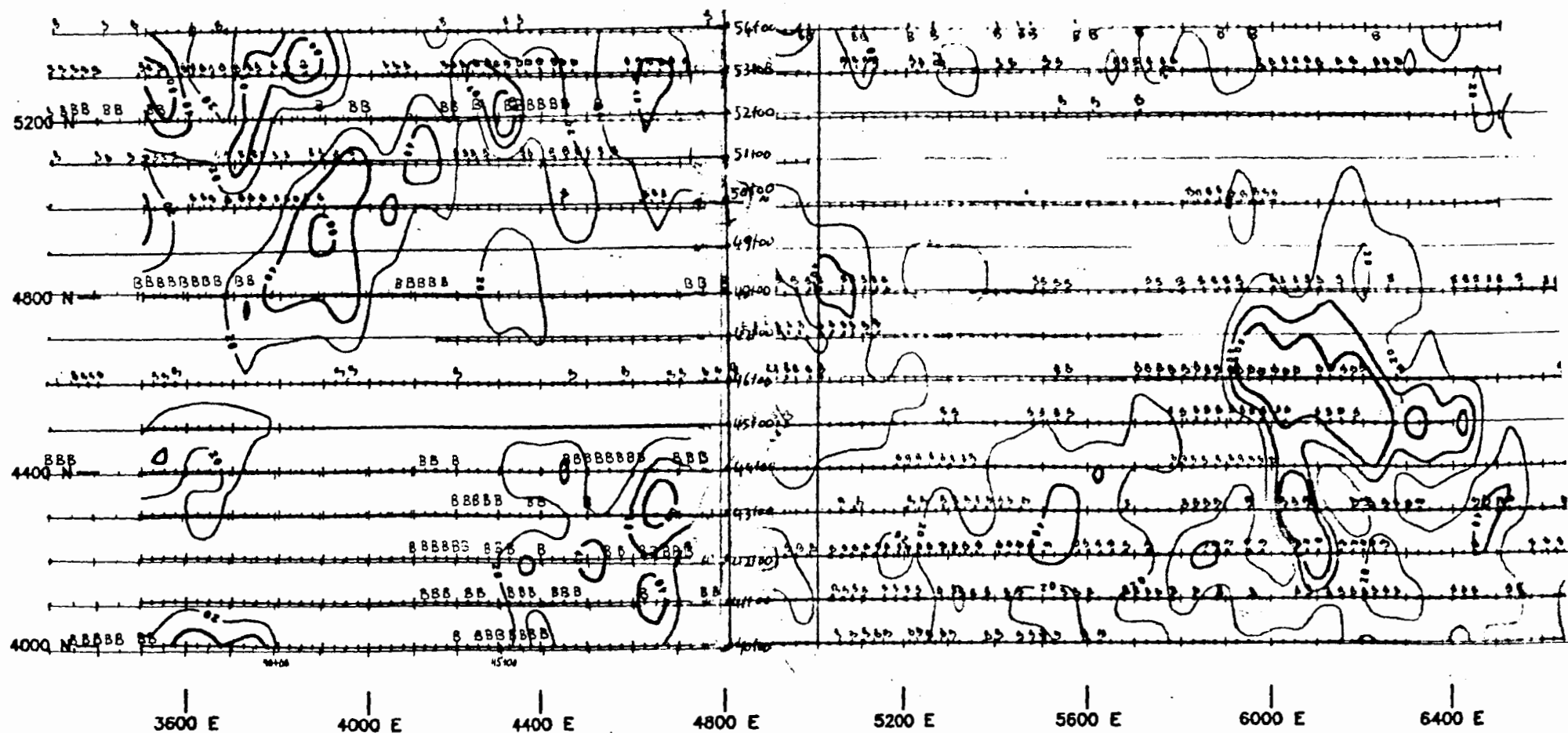
**APPENDIX 1**

**Certificates of Analysis**

**B Horizon soil map/copper anomalies map**

RELATIONSHIP OF "B" HORIZON SOILS  
TO COPPER GEOCHEMICAL ANOMALIES

B= "B" Horizon



Statistics

Summary Statistics	Grid East	Grid North	Grid Station	Mo ppm	Cu ppm	Pb ppm	Zn ppm	Ag ppm	Ni ppm	Co ppm	Mn ppm	Fe %
Count > D.L:	1577	1577	1577	1011	1557	1221	1560	616	1429	936	1562	1562
Min:	3500	4000	3500	1	1	3	1	0.3	1	1	2	0.04
Max:	7000	5400	7000	15	300	4812	157	6.6	20	9	7193	47.87
Range:	3500	1400	3500	14	299	4809	156	6.3	19	8	7191	47.83
Mode:				1	3	3	7	0.3	1	1	16	0.10
Median:				2	7	11	21	0.4	3	2	78	1.23
Average:				1.9	18.9	16.4	28.4	0.6	4.4	2.6	134.8	2.33
Std.Dev:				1.2	23.3	139.3	23.3	0.4	3.6	1.6	217.3	2.77

*Handwritten note:* ↓  
 1562  
 1562

Statistics

Summary Statistics	As ppm	U ppm	Au ppm	Th ppm	Sr ppm	Cd ppm	Sb ppm	Bi ppm	V ppm	Ca %	P %	La ppm
Count > D.L:	1206	148	1	503	1562	750	315	251	1562	1561.00	1561.00	1398
Min:	2	5	2	2	1	0.2	2	2	1	0.01	0.00	1
Max:	1594	11	2	6	75	3.3	8	8	231	0.88	0.09	15
Range:	1592	6	0	4	74	3.1	6	6	230	0.87	0.09	14
Mode:	2	5		2	9	0.2	2	2	2	0.14	0.02	1
Median:	13	6		2	14	0.3	2	2	30	0.13	0.02	3
Average:	24.9	6.2		2.6	16.6	0.4	2.5	2.7	58.7	0.15	0.03	3.4
Std.Dev:	65.7	1.4		0.8	9.8	0.4	0.9	1.1	58.3	0.10	0.01	2.2

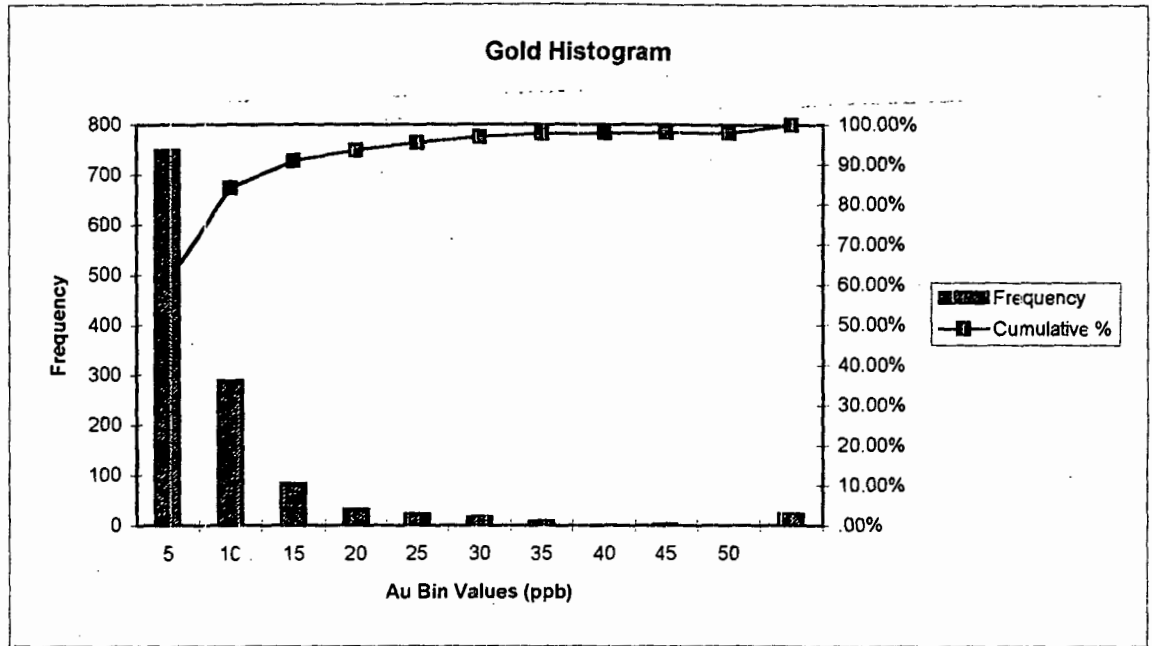
Statistics

Summary Statistics	Cr ppm	Mg %	Ba ppm	Ti %	B ppm	Al %	Na %	K %	W ppm	Au* Au (ppb)
Count > D.L:	1555	1561.00	1554	1191.00	309	1562.00	1498.00	1499.00	51	1236
Min:	1	0.01	1	0.01	3	0.04	0.01	0.01	2	1
Max:	106	1.50	85	0.35	196	8.19	0.17	0.24	3	513
Range:	105	1.49	84	0.34	193	8.15	0.16	0.23	1	512
Mode:	1	0.07	8	0.01	3	0.09	0.01	0.02	2	1
Median:	7	0.18	13	0.11	3	0.87	0.02	0.02	2	4
Average:	15.4	0.30	16.8	0.11	4.1	1.76	0.02	0.02	2.0	8.6
Std.Dev.	15.8	0.26	11.8	0.08	11.0	1.83	0.01	0.01	0.2	24.8

**KAMAKA RESOURCES - KNOB HILL PROPERTY**

**GOLD GEOCHEMISTRY**

<i>Bin (Au - ppb)</i>	<i>Frequency</i>	<i>Cumulative %</i>
5	750	60.68%
10	290	84.14%
15	84	90.94%
20	33	93.61%
25	23	95.47%
30	18	96.93%
35	10	97.73%
40	1	97.82%
45	3	98.06%
50	0	98.06%
More	24	100.00%

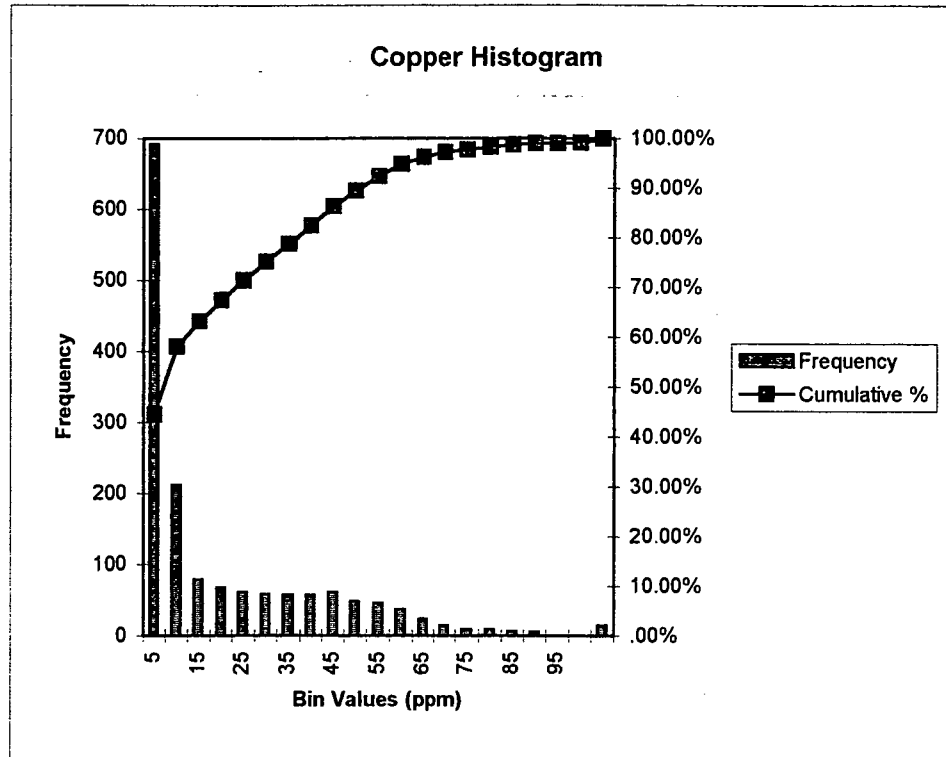




# KAMAKA RESOURCES - KNOB HILL PROPERTY

## COPPER GEOCHEMISTRY

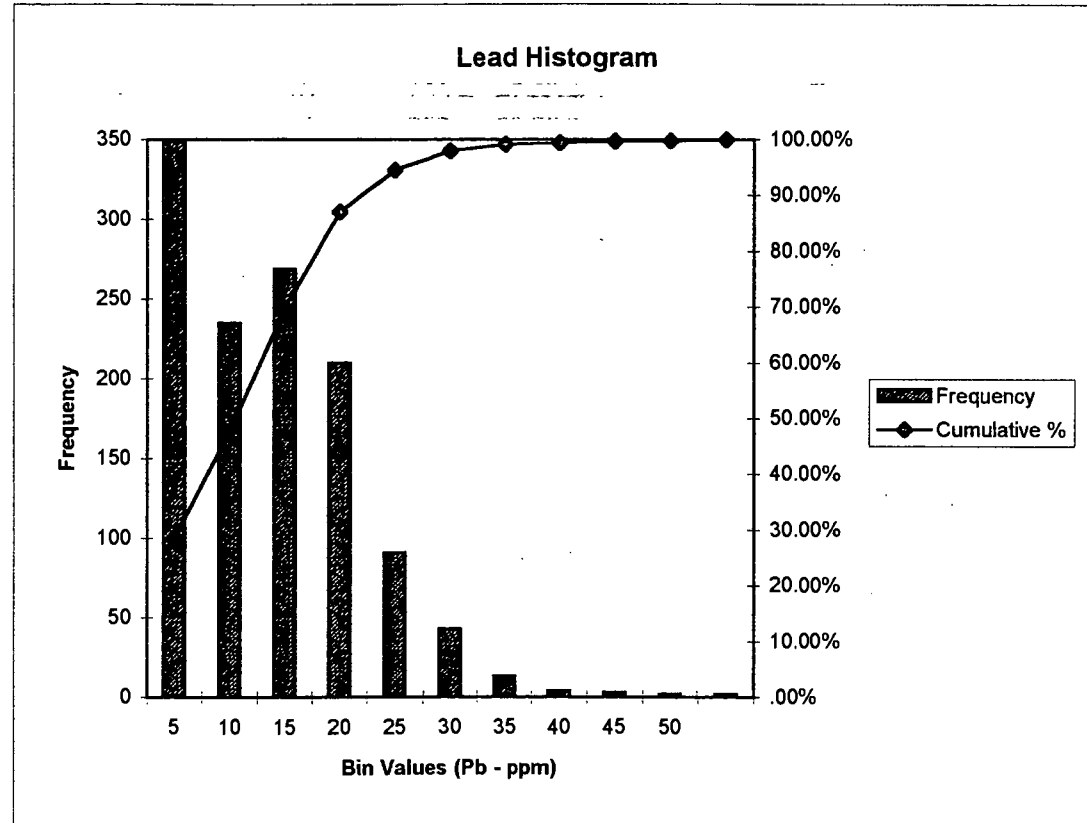
Bin	Frequency	Cumulative %
5	692	44.44%
10	212	58.06%
15	79	63.13%
20	68	67.50%
25	61	71.42%
30	58	75.14%
35	57	78.81%
40	57	82.47%
45	61	86.38%
50	48	89.47%
55	46	92.42%
60	37	94.80%
65	23	96.27%
70	14	97.17%
75	9	97.75%
80	9	98.33%
85	6	98.72%
90	5	99.04%
95	0	99.04%
100	1	99.10%
More	14	100.00%



# KAMAKA RESOURCES - KNOB HILL PROPERTY

## LEAD GEOCHEMISTRY

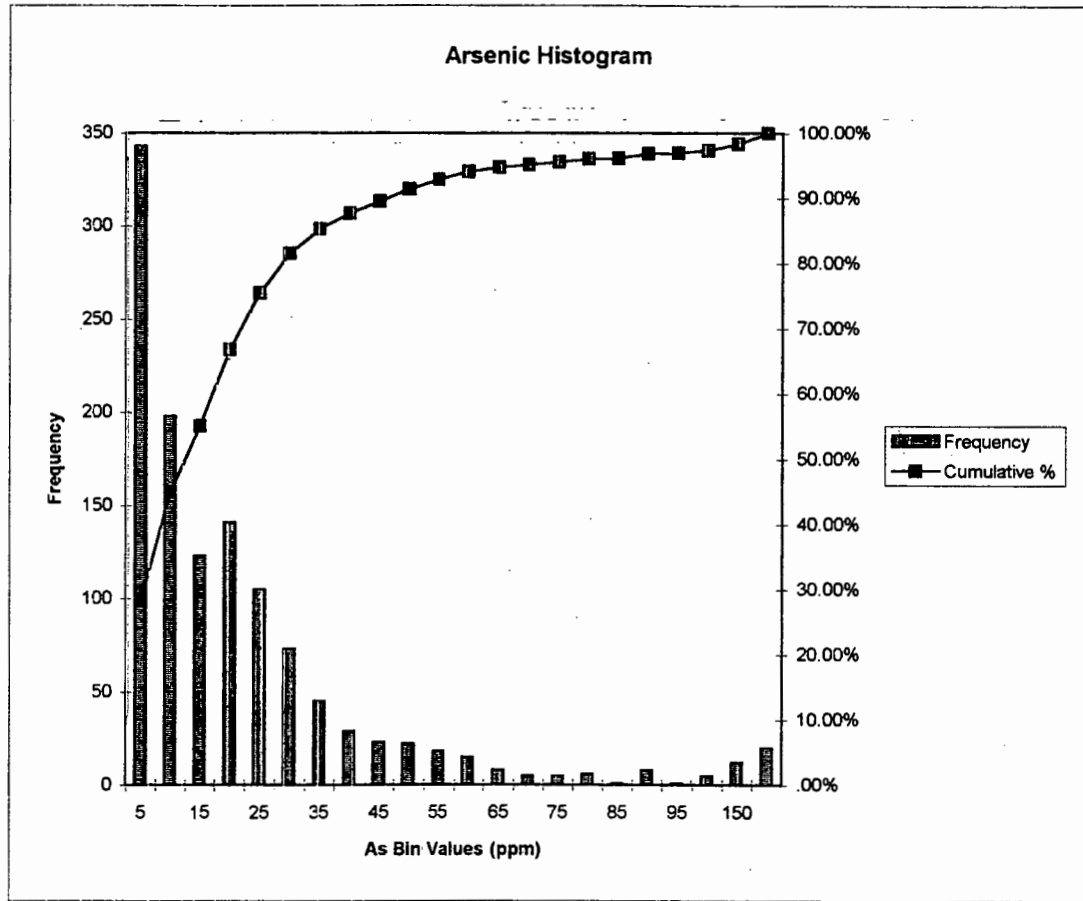
Bin	Frequency	Cumulative %
5	349	28.58%
10	235	47.83%
15	269	69.86%
20	210	87.06%
25	91	94.51%
30	43	98.03%
35	13	99.10%
40	4	99.43%
45	3	99.67%
50	2	99.84%
More	2	100.00%



# KAMAKA RESOURCES - KNOB HILL PROPERTY

## ARSENIC GEOCHEMISTRY

Bin (As - ppm)	Frequency	Cumulative %
5	343	28.44%
10	198	44.86%
15	123	55.06%
20	141	66.75%
25	105	75.46%
30	73	81.51%
35	45	85.24%
40	29	87.65%
45	23	89.55%
50	22	91.38%
55	18	92.87%
60	15	94.11%
65	8	94.78%
70	5	95.19%
75	5	95.61%
80	6	96.10%
85	1	96.19%
90	8	96.85%
95	1	96.93%
100	5	97.35%
150	12	98.34%
More	20	100.00%





GEOCHEMICAL ANALYSIS CERTIFICATE

Kamaka Resources Ltd. PROJECT KNOB HILL File # 95-4824 Page 1  
6074 - 45A Ave, Delta BC V4K 1M7



Table with columns: SAMPLE#, Mo, Cu, Pb, Zn, Ag, Ni, Co, Mn, Fe, As, U, Au, Th, Sr, Cd, Sb, Bi, V, Ca, P, La, Cr, Mg, Ba, Ti, B, Al, Na, K, W, Au\*. Rows include various sample IDs like L54+00N 35+00E and STANDARD C/AU-S.

ICP - .500 GRAM SAMPLE IS DIGESTED WITH 3ML 3-1-2 HCL-HNO3-H2O AT 95 DEG. C FOR ONE HOUR AND IS DILUTED TO 10 ML WITH WATER.  
THIS LEACH IS PARTIAL FOR MN FE SR CA P LA CR MG BA TI B W AND LIMITED FOR NA K AND AL.  
- SAMPLE TYPE: SOIL AU\* - IGNITED, AQUA-REGIA/MIBK EXTRACT, GF/AA FINISHED.  
Samples beginning 'RE' are Reruns and 'RRE' are Reject Reruns.

DATE RECEIVED: NOV 28 1995 DATE REPORT MAILED: Dec 18/95 SIGNED BY: [Signature] .D. TOYE, C. LEONG, J. WANG; CERTIFIED B.C. ASSAYERS



SAMPLE#	Mo	Cu	Pb	Zn	Ag	Ni	Co	Mn	Fe	As	U	Au	Th	Sr	Cd	Sb	Bi	V	Ca	P	La	Cr	Mg	Ba	Ti	B	Al	Na	K	W	Au*
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%	%	ppm	ppm	%	ppm	%	ppm	%	%	ppm	ppb	
L54+00N 52+00E	<1	2	4	17	<.3	1	1	2	8.87	24	5	<2	<2	22	.2	<2	<2	4	.18	.038	<1	<1	.04	8	<.01	5	.10	.02	.03	<2	3
L54+00N 52+50E	1	13	16	11	.4	2	1	86	.68	16	<5	<2	<2	16	<.2	<2	<2	50	.13	.008	4	12	.22	19	.09	5	1.79	.01	.03	<2	10
L54+00N 53+00E	2	23	12	40	.4	8	4	241	6.12	31	<5	<2	<2	18	.2	<2	<2	115	.18	.013	2	22	.76	21	.20	3	2.77	.01	.03	<2	5
L54+00N 53+50E	<1	4	<3	10	.4	1	1	16	2.64	14	6	<2	<2	14	<.2	2	<2	9	.12	.038	1	3	.06	8	.02	5	.21	.02	.03	<2	<1
L54+00N 54+00E	<1	3	<3	22	<.3	1	<1	8	.34	12	<5	<2	<2	21	<.2	2	<2	2	.08	.038	<1	1	.12	6	<.01	4	.08	.03	.03	<2	<1
L54+00N 54+50E	<1	14	18	29	.4	7	3	182	1.86	35	<5	<2	<2	16	.3	<2	<2	92	.20	.011	4	39	.41	20	.20	3	2.77	.01	.02	<2	27
L54+00N 55+00E	<1	3	3	13	<.3	2	1	17	1.02	23	<5	<2	<2	17	<.2	2	<2	19	.15	.034	1	6	.06	8	.02	4	.51	.01	.02	<2	1
L54+00N 55+50E	2	17	13	29	<.3	7	2	169	1.54	20	<5	<2	<2	12	.2	<2	<2	82	.14	.014	4	33	.48	21	.12	<3	2.18	.01	.02	<2	5
L54+00N 56+00E	1	6	16	20	.5	5	2	157	1.47	15	<5	<2	<2	14	.2	<2	<2	80	.15	.006	3	15	.32	16	.18	4	1.70	.01	.02	<2	2
L54+00N 56+50E	1	5	7	17	.5	2	1	9	2.44	18	<5	<2	<2	8	.2	<2	<2	34	.04	.036	4	6	.05	8	.03	<3	.74	.01	.02	<2	2
L54+00N 57+00E	3	21	15	38	.4	7	4	199	6.82	30	<5	<2	4	15	.3	<2	<2	155	.16	.017	2	38	.44	19	.26	<3	2.94	.01	.02	<2	5
L54+00N 57+50E	3	63	12	34	.6	19	9	260	6.51	22	<5	<2	2	11	.4	<2	<2	172	.14	.009	4	37	.98	17	.23	<3	3.57	.02	.02	<2	31
L54+00N 58+00E	2	12	11	24	.6	4	3	209	1.87	14	<5	<2	<2	16	.3	<2	2	87	.14	.013	2	16	.47	13	.17	<3	1.60	.01	.03	<2	4
L54+00N 58+50E	3	20	19	27	.5	5	4	199	2.50	17	<5	<2	<2	17	.3	<2	2	106	.20	.011	4	26	.42	17	.21	<3	2.78	.01	.03	<2	5
L54+00N 59+00E	2	8	17	23	.3	2	2	136	3.31	12	<5	<2	<2	11	.3	2	<2	117	.10	.006	4	19	.18	14	.14	<3	1.93	.01	.03	<2	7
L54+00N 59+50E	1	5	13	12	<.3	3	1	101	1.60	47	<5	<2	<2	15	<.2	<2	<2	60	.18	.010	<1	12	.22	24	.10	<3	1.17	.01	.02	<2	9
L54+00N 60+00E	1	8	13	7	.5	2	1	84	.63	10	<5	<2	<2	14	.2	3	<2	54	.14	.011	2	15	.14	13	.10	<3	1.49	.01	.02	<2	9
L54+00N 60+50E	1	14	12	26	.5	6	4	194	1.70	14	<5	<2	<2	15	.2	<2	<2	76	.18	.013	4	20	.44	17	.14	<3	1.92	.01	.02	<2	5
L54+00N 61+00E	3	30	13	36	.4	8	4	228	1.77	21	<5	<2	<2	22	.3	<2	<2	86	.26	.017	4	29	.55	20	.17	<3	3.51	.01	.02	<2	93
L54+00N 61+50E	1	12	17	31	.3	8	3	204	1.23	13	<5	<2	<2	16	.2	<2	<2	63	.22	.013	4	20	.48	31	.14	<3	2.71	.01	.02	<2	4
L54+00N 62+00E	1	6	4	15	<.3	2	1	21	.75	15	<5	<2	<2	13	<.2	2	<2	11	.11	.055	1	3	.08	11	.02	3	.34	.02	.02	<2	2
L54+00N 62+50E	2	5	9	8	.4	2	<1	15	.57	19	<5	<2	<2	13	<.2	2	<2	18	.09	.044	2	6	.05	15	.03	<3	.49	.02	.02	<2	1
L54+00N 63+00E	1	5	10	17	.6	2	1	22	.91	22	<5	<2	<2	12	.2	2	<2	41	.08	.030	3	9	.10	18	.03	<3	.75	.01	.03	<2	4
L54+00N 63+50E	3	32	9	32	.5	8	5	194	3.52	20	<5	<2	<2	17	.2	<2	<2	173	.19	.012	4	49	.44	18	.21	<3	4.35	.01	.03	<2	7
RE L54+00N 63+50E	2	31	7	30	.6	8	4	190	3.35	17	<5	<2	<2	16	.5	<2	<2	168	.19	.012	4	48	.42	17	.21	<3	4.09	.01	.03	2	5
L54+00N 64+00E	7	13	29	53	.4	8	5	181	6.91	100	<5	<2	<2	17	<.2	<2	<2	85	.18	.013	7	21	.41	31	.07	<3	2.64	.01	.02	<2	6
L54+00N 64+50E	3	25	21	48	<.3	13	6	274	1.82	16	<5	<2	<2	25	.3	<2	2	89	.28	.016	4	35	.72	41	.19	<3	4.00	.02	.02	<2	12
L54+00N 65+00E	12	3	16	16	.3	1	2	53	9.42	206	<5	<2	<2	11	<.2	<2	<2	231	.08	.011	4	16	.10	14	.07	<3	1.69	.01	.02	<2	7
L52+00N 35+00E	<1	4	<3	10	<.3	1	1	138	.75	7	<5	<2	<2	68	<.2	<2	<2	9	.41	.018	<1	1	.17	16	<.01	<3	.20	.02	<.01	<2	1
L52+00N 35+50E	3	66	11	61	.5	11	7	297	6.21	22	<5	<2	2	14	.4	<2	<2	138	.15	.022	1	37	.72	32	.27	<3	6.70	.01	.04	<2	25
L52+00N 36+00E	2	21	16	31	.3	6	3	264	2.62	8	<5	<2	<2	9	<.2	<2	<2	85	.12	.027	3	20	.73	18	.11	<3	2.13	.01	.04	<2	6
L52+00N 36+50E	3	33	11	50	.4	10	6	350	8.85	296	<5	<2	<2	17	<.2	<2	<2	149	.17	.014	3	23	.87	49	.15	<3	3.55	.01	.05	<2	5
L52+00N 37+00E	<1	6	<3	19	<.3	2	1	30	.69	12	<5	<2	<2	13	<.2	<2	<2	10	.10	.011	<1	4	.14	6	.01	3	.35	.02	.01	<2	1
L52+00N 37+50E	3	58	8	38	.3	7	5	254	5.38	9	<5	<2	<2	13	.5	<2	<2	107	.14	.031	2	26	.62	20	.16	<3	4.24	.02	.04	<2	6
L52+00N 38+00E	<1	5	3	7	<.3	2	<1	44	.34	<2	<5	<2	<2	22	.2	2	<2	6	.19	.024	<1	3	.13	8	.01	<3	.30	.02	.02	<2	1
STANDARD C/AU-S	21	55	36	131	6.3	70	33	973	3.90	38	19	6	37	54	18.3	18	24	59	.50	.089	36	55	.89	186	.09	24	1.85	.06	.16	12	50

Sample type: SOIL. Samples beginning 'RE' are Reruns and 'RRE' are Reject Reruns.



SAMPLE#	Mo	Cu	Pb	Zn	Ag	Ni	Co	Mn	Fe	As	U	Au	Th	Sr	Cd	Sb	Bi	V	Ca	P	La	Cr	Mg	Ba	Ti	B	Al	Na	K	W	Au*
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%	%	ppm	ppm	%	ppm	%	ppm	%	%	%	ppm	ppb
L52+00N 38+50E	<1	4	6	10	<.3	1	<1	26	.14	<2	<5	<2	<2	35	<.2	3	<2	2	.21	.030	<1	2	.21	8<.01	3	.12	.04	.03	3	2	
L52+00N 39+00E	<1	3	4	<1	<.3	1	<1	27	.37	2	<5	<2	<2	30	<.2	2	<2	4	.37	.014	<1	2	.08	12<.01	<3	.23	.02	<.01	2	2	
L52+00N 39+50E	1	18	7	3	.4	2	1	244	2.89	20	<5	<2	<2	42	.2	<2	<2	20	.88	.044	<1	3	.10	19	.01	<3	.63	.02	.01	<2	2
L52+00N 40+00E	1	7	10	3	.4	2	1	27	2.57	80	8	<2	<2	9	<.2	<2	2	26	.09	.056	2	6	.06	10	.02	<3	.69	.02	.04	<2	1
L52+00N 40+50E	<1	6	3	1	<.3	1	<1	13	.47	10	<5	<2	<2	13	<.2	2	<2	13	.11	.031	<1	3	.06	7	.01	<3	.31	.02	<.01	2	<1
L52+00N 41+00E	3	<1	8	<1	<.3	<1	3	405	47.87	66	5	<2	.3	9	<.2	<2	7	25	.03	.019	1	<1	<.01	6	.01	<3	.29	<.01	<.01	<2	1
L52+00N 41+50E	1	11	6	3	<.3	1	1	25	.70	6	<5	<2	<2	8	<.2	3	<2	18	.06	.036	1	2	.07	7	.01	3	.33	.02	<.01	<2	1
L52+00N 42+00E	3	34	14	38	.4	8	4	271	5.24	30	5	<2	2	12	.2	<2	<2	135	.14	.011	2	18	.78	39	.16	<3	3.30	.01	.02	<2	5
L52+00N 42+50E	1	8	7	3	<.3	1	1	17	.27	6	<5	<2	<2	8	<.2	2	<2	20	.08	.029	<1	4	.07	7	.02	<3	.52	.02	<.01	<2	<1
L52+00N 43+00E	4	116	13	35	.4	6	6	202	3.39	39	<5	<2	2	17	.2	<2	2	128	.21	.032	2	17	.99	75	.25	<3	3.97	.03	.24	<2	10
L52+00N 43+50E	1	28	12	7	.3	3	1	48	.52	9	<5	<2	<2	10	<.2	<2	<2	44	.08	.035	2	11	.17	22	.03	<3	1.81	.01	.03	<2	2
L52+00N 44+00E	3	26	13	24	.3	5	3	170	4.71	13	<5	<2	2	11	<.2	<2	2	99	.12	.014	2	14	.43	19	.14	<3	1.99	.01	.03	<2	3
RE L52+00N 44+00E	3	28	11	25	.4	5	3	185	5.10	13	<5	<2	2	12	<.2	<2	<2	107	.13	.015	3	14	.46	21	.15	<3	2.13	.01	.03	<2	4
L52+00N 44+50E	1	10	5	11	.3	3	1	89	2.99	11	5	<2	<2	13	.2	<2	<2	24	.14	.046	1	6	.21	13	.03	<3	.79	.02	.02	<2	2
L52+00N 45+00E	<1	4	4	1	.4	1	<1	11	.23	3	<5	<2	<2	6	<.2	2	<2	8	.04	.030	1	3	.04	7	.02	<3	.53	.01	.01	<2	1
L52+00N 45+50E	3	55	8	42	<.3	10	6	266	6.52	13	6	<2	4	14	<.2	<2	2	129	.18	.022	3	28	.64	34	.17	<3	4.94	.01	.02	<2	5
L52+00N 46+00E	3	23	12	32	.5	6	3	216	7.20	17	<5	<2	2	12	<.2	<2	<2	141	.13	.014	6	24	.61	28	.14	<3	3.67	.01	.02	<2	4
L52+00N 46+50E	3	40	10	46	<.3	11	5	294	3.20	18	<5	<2	2	19	<.2	<2	2	104	.23	.020	4	29	.83	40	.16	<3	4.84	.01	.02	<2	8
L52+00N 47+00E	2	11	11	19	<.3	3	2	177	1.17	7	<5	<2	<2	12	<.2	<2	<2	72	.11	.017	2	12	.58	15	.12	<3	1.86	.02	.02	<2	4
L52+00N 47+50E	1	11	8	13	.5	3	1	88	1.96	5	5	<2	<2	10	<.2	2	<2	33	.08	.042	2	8	.29	11	.05	<3	1.28	.02	.03	<2	2
L52+00N 48+00E	<1	5	5	14	<.3	1	<1	32	.51	2	<5	<2	<2	19	<.2	2	<2	5	.08	.041	<1	2	.17	10	.01	4	.27	.03	.03	2	3
L52+00N 48+50E	<1	2	4	3	<.3	1	<1	12	.10	<2	<5	<2	<2	32	<.2	2	<2	1	.18	.034	<1	1	.22	5	<.01	3	.08	.03	.02	2	2
L52+00N 49+00E	<1	2	4	4	<.3	1	<1	7	.10	<2	<5	<2	<2	29	<.2	<2	<2	1	.13	.036	<1	1	.22	4	<.01	5	.08	.04	.02	2	1
L52+00N 49+50E	<1	4	5	2	<.3	1	<1	19	1.48	4	<5	<2	<2	25	.2	<2	<2	3	.37	.022	<1	1	.05	8	<.01	3	.16	.02	<.01	<2	<1
L52+00N 50+00E	<1	3	4	6	<.3	1	<1	9	.30	2	<5	<2	<2	36	<.2	2	<2	1	.35	.038	<1	1	.19	4	<.01	3	.07	.03	.04	2	1
L52+00N 50+50E	<1	2	<3	7	<.3	1	<1	6	.11	<2	<5	<2	<2	27	<.2	2	<2	1	.12	.025	<1	1	.19	4	<.01	<3	.07	.03	.01	2	1
L52+00N 51+00E	<1	2	<3	8	<.3	1	<1	7	.14	<2	<5	<2	<2	23	<.2	2	<2	1	.24	.032	<1	1	.14	4	<.01	3	.09	.03	.01	2	4
L52+00N 51+50E	1	4	8	8	.3	1	<1	198	1.28	5	6	<2	<2	13	<.2	2	<2	44	.12	.025	1	6	.22	7	.09	<3	.93	.01	.02	2	3
L52+00N 52+00E	1	6	3	14	<.3	1	<1	93	2.85	7	11	<2	<2	37	.2	<2	<2	12	.35	.031	<1	2	.05	16	.01	<3	.31	.02	.01	<2	1
L52+00N 52+50E	1	7	4	8	<.3	2	<1	13	1.50	<2	<5	<2	<2	9	<.2	<2	<2	16	.07	.054	<1	3	.03	5	.01	<3	.28	.02	.01	<2	1
L52+00N 53+00E	1	4	4	5	<.3	2	<1	24	.27	2	6	<2	<2	10	<.2	<2	<2	7	.06	.026	<1	4	.11	9	.02	<3	.35	.02	.02	<2	2
L52+00N 53+50E	2	23	20	30	<.3	8	3	222	1.28	10	5	<2	<2	13	<.2	3	<2	95	.16	.009	3	24	.60	38	.13	<3	3.05	.01	.02	<2	8
L52+00N 54+00E	2	10	22	23	<.3	5	2	212	1.28	14	5	<2	<2	13	<.2	<2	<2	77	.15	.008	5	19	.50	21	.14	<3	2.29	.01	.02	2	7
L52+00N 54+50E	1	38	18	55	<.3	10	5	272	3.12	60	<5	<2	<2	18	.3	<2	<2	86	.27	.020	4	23	.61	45	.14	<3	3.00	.02	.02	<2	8
L52+00N 55+00E	<1	5	5	11	<.3	2	<1	21	.27	5	<5	<2	<2	11	<.2	<2	<2	8	.09	.028	<1	3	.09	10	.01	<3	.39	.02	.01	<2	2
STANDARD C/AU-S	22	56	39	131	6.4	66	30	983	4.02	41	16	6	38	54	18.9	17	23	57	.51	.093	37	57	.91	187	.09	27	1.87	.07	.15	10	47

Sample type: SOIL. Samples beginning 'RE' are Reruns and 'RRE' are Reject Reruns.



SAMPLE#	Mo	Cu	Pb	Zn	Ag	Ni	Co	Mn	Fe	As	U	Au	Th	Sr	Cd	Sb	Bi	V	Ca	P	La	Cr	Mg	Ba	Ti	B	Al	Na	K	W	Au*
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%	%	ppm	ppm	%	ppm	%	%	%	%	%	ppm	ppb
L52+00N 55+50E	1	3	4	6	<.3	2	<1	35	.74	3	<5	<2	<2	10	<.2	<2	<2	3	.09	.049	<1	2	.04	7<.01	<3	.14	.02	.02	<2	2	
L52+00N 56+00E	<1	3	5	6	<.3	1	<1	16	.25	2	<5	<2	<2	19	<.2	<2	<2	1	.15	.041	<1	1	.09	4<.01	<3	.09	.02	.01	<2	1	
L52+00N 56+50E	<1	3	3	9	<.3	1	<1	26	.18	<2	<5	<2	<2	18	<.2	<2	<2	1	.10	.032	<1	1	.12	4<.01	3	.08	.02	.01	<2	1	
L52+00N 57+00E	1	4	5	7	<.3	1	1	29	.12	2	<5	<2	<2	19	<.2	<2	<2	4	.18	.023	<1	1	.11	7 .01	3	.14	.03	.01	<2	2	
L52+00N 57+50E	<1	3	<3	5	<.3	1	<1	9	.10	2	<5	<2	<2	16	<.2	<2	<2	1	.08	.025	<1	2	.12	5<.01	<3	.09	.02	<.01	<2	1	
L52+00N 58+00E	1	3	6	11	<.3	2	1	26	2.02	11	<5	<2	<2	17	.2	<2	<2	5	.17	.079	<1	2	.07	10 .01	<3	.13	.04	.05	<2	<1	
L52+00N 58+50E	<1	3	3	5	<.3	<1	<1	16	.19	<2	<5	<2	<2	17	<.2	<2	<2	2	.14	.029	<1	2	.09	8 .01	4	.17	.02	.02	<2	3	
L52+00N 59+00E	<1	5	4	5	.4	2	1	9	.79	5	<5	<2	<2	5	<.2	<2	<2	6	.04	.053	1	2	.03	9 .01	<3	.39	.02	.02	<2	3	
L52+00N 59+50E	1	3	4	8	<.3	2	<1	24	.26	<2	<5	<2	<2	27	<.2	<2	<2	5	.12	.038	<1	3	.13	14 .01	3	.20	.03	.02	<2	2	
L52+00N 60+00E	<1	2	3	10	<.3	1	<1	24	.80	3	<5	<2	<2	23	.2	<2	<2	2	.19	.054	<1	2	.11	9 .01	3	.09	.02	.03	<2	1	
L52+00N 60+50E	1	8	22	20	2.1	3	2	120	1.24	10	<5	<2	<2	8	<.2	<2	<2	56	.07	.037	3	13	.31	16 .07	<3	1.55	.01	.03	<2	3	
L52+00N 61+00E	1	4	13	7	.3	5	2	35	5.56	25	<5	<2	<2	5	<.2	<2	<2	102	.05	.036	2	15	.16	11 .07	<3	.89	.01	.02	<2	4	
L52+00N 61+50E	1	3	8	7	.4	2	1	16	3.30	20	<5	<2	<2	9	<.2	<2	<2	31	.03	.050	3	6	.07	10 .02	<3	.40	.02	.03	<2	7	
L52+00N 62+00E	1	3	6	9	<.3	2	<1	24	.33	<2	<5	<2	<2	23	<.2	<2	<2	5	.21	.039	<1	2	.12	10 .01	<3	.14	.03	.03	<2	5	
L52+00N 62+50E	4	2	7	7	<.3	1	1	54	12.48	406	<5	<2	<2	22	<.2	<2	2	10	.23	.049	<1	2	.04	13 .01	<3	.13	.02	.04	<2	<1	
L52+00N 63+00E	1	3	12	6	.4	2	2	27	8.43	35	<5	<2	<2	6	<.2	<2	3	72	.04	.038	3	9	.09	9 .02	<3	1.08	.01	.02	<2	1	
L52+00N 63+50E	1	24	12	46	<.3	11	5	211	2.10	26	<5	<2	<2	11	.2	<2	<2	91	.19	.021	2	19	.54	22 .12	<3	2.47	.01	.01	<2	4	
L52+00N 64+00E	4	5	48	12	<.3	2	2	141	20.28	248	<5	<2	<2	13	<.2	<2	4	68	.08	.051	<1	7	.06	16 .02	196	.65	.17	.02	<2	2	
L52+00N 64+50E	4	41	14	50	<.3	11	6	222	5.71	20	<5	<2	2	10	<.2	<2	<2	151	.14	.017	1	37	.50	17 .18	<3	3.98	.01	<.01	<2	22	
L52+00N 65+00E	3	10	19	15	<.3	4	2	93	6.25	16	<5	<2	2	7	<.2	<2	<2	211	.09	.007	2	26	.21	9 .14	<3	1.64	.01	.01	<2	6	
L50+00N 35+00E	1	77	21	52	<.3	10	5	326	2.30	12	<5	<2	<2	10	<.2	<2	<2	127	.15	.021	3	30	1.00	40 .12	<3	4.03	.01	.03	<2	9	
L50+00N 35+50E	1	47	16	48	.3	12	5	312	1.79	5	<5	<2	<2	13	<.2	<2	<2	124	.15	.015	4	28	.92	55 .11	<3	3.60	.01	.01	<2	7	
L50+00N 36+00E	1	4	3	14	<.3	1	1	26	1.39	17	5	<2	<2	27	.2	<2	<2	6	.17	.054	<1	2	.19	6 .01	<3	.13	.02	.04	<2	1	
L50+00N 36+50E	1	11	14	27	<.3	7	2	247	1.33	5	<5	<2	<2	5	<.2	3	<2	110	.06	.016	1	20	1.15	11 .11	<3	2.24	.01	.02	<2	14	
RE L50+00N 36+50E	1	10	16	26	<.3	6	2	237	1.28	4	<5	<2	<2	4	<.2	<2	<2	106	.06	.016	2	17	1.10	11 .11	<3	2.14	.01	.02	<2	28	
L50+00N 37+00E	2	2	10	9	<.3	2	2	53	22.44	325	<5	<2	<2	13	<.2	<2	2	54	.09	.022	1	5	.12	14 .02	3	1.05	.01	.01	<2	4	
L50+00N 37+50E	1	2	<3	10	<.3	1	<1	11	.94	16	<5	<2	<2	20	.2	<2	<2	4	.04	.040	<1	1	.19	5 .01	<3	.13	.03	.02	<2	1	
L50+00N 38+00E	<1	3	<3	8	<.3	1	<1	13	.30	2	<5	<2	<2	15	<.2	<2	<2	6	.06	.032	<1	2	.10	7 .01	<3	.17	.02	<.01	<2	<1	
L50+00N 38+50E	3	31	15	26	.4	6	3	180	1.93	10	<5	<2	2	7	<.2	<2	<2	131	.09	.009	5	19	.54	22 .09	<3	3.02	.01	.01	<2	35	
L50+00N 39+00E	5	62	15	29	.5	6	4	176	5.39	17	<5	<2	4	6	.3	<2	2	127	.07	.015	4	25	.51	19 .11	<3	4.16	.01	.02	<2	7	
L50+00N 39+50E	4	57	12	38	<.3	8	4	266	1.86	7	<5	<2	<2	7	.2	<2	<2	91	.09	.020	4	18	.73	29 .10	<3	4.10	.01	.02	<2	8	
L50+00N 40+00E	1	24	8	24	<.3	6	3	175	2.21	3	<5	<2	<2	4	.2	2	<2	114	.06	.013	4	17	1.28	43 .11	<3	3.11	.01	.15	<2	8	
L50+00N 40+50E	3	58	10	41	.3	7	5	219	3.91	15	6	<2	3	6	<.2	<2	<2	131	.08	.023	5	32	.83	35 .18	<3	6.78	.01	.06	<2	8	
L50+00N 41+00E	2	9	14	10	.5	2	1	72	6.18	4	5	<2	2	5	<.2	3	<2	173	.05	.004	4	14	.20	9 .14	<3	1.46	<.01	.01	<2	3	
L50+00N 41+50E	<1	33	9	3	.8	2	1	10	.38	3	5	<2	<2	5	.2	2	<2	41	.07	.064	3	7	.02	6 .02	<3	1.98	.01	.01	<2	1	
STANDARD C/AU-S	21	53	39	123	6.4	64	33	1011	3.99	39	19	8	42	49	19.2	17	21	62	.46	.093	38	51	.87	185	.05	31	1.67	.06	.14	10	46

Sample type: SOIL. Samples beginning 'RE' are Reruns and 'RRE' are Reject Reruns.



SAMPLE#	Mo	Cu	Pb	Zn	Ag	Ni	Co	Mn	Fe	As	U	Au	Th	Sr	Cd	Sb	Bi	V	Ca	P	La	Cr	Mg	Ba	Ti	B	Al	Na	K	W	Au*	
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%	%	ppm	ppm	%	ppm	%	%	%	%	%	ppm	ppb	
L50+00N 42+00E	1	7	4	8	<.3	2	1	14	.38	6	<5	<2	<2	13	<.2	<2	<2	18	.11	.037	2	4	.04	6	.02	<3	.42	.02	<.01	<2	2	
L50+00N 42+50E	1	4	4	10	<.3	1	<1	34	.64	9	<5	<2	<2	9	<.2	<2	<2	20	.09	.046	1	3	.04	4	.01	3	.29	.02	<.01	<2	<1	
L50+00N 43+00E	1	4	5	7	.7	1	2	35	4.75	28	<5	<2	2	14	<.2	<2	<2	36	.11	.042	3	6	.05	13	.01	<3	.78	.02	.02	<2	1	
L50+00N 43+50E	1	5	4	16	<.3	2	1	60	.74	4	<5	<2	<2	25	.2	<2	<2	12	.29	.070	1	3	.10	16	.01	5	.26	.04	.07	<2	<1	
RE L50+00N 48+00E	3	27	8	39	.8	7	4	259	5.61	31	<5	<2	2	8	<.2	<2	2	176	.09	.017	4	20	.70	21	.07	<3	3.53	.01	.02	<2	9	
L50+00N 44+00E	2	9	10	13	.4	3	3	197	4.20	14	<5	<2	2	34	<.2	<2	<2	26	.39	.072	1	4	.07	16	.02	4	.68	.02	.02	<2	3	
L50+00N 44+50E	3	59	16	51	.6	12	5	303	2.10	20	<5	<2	3	15	.3	<2	<2	97	.18	.022	4	29	.89	39	.11	<3	4.57	.01	.02	<2	5	
L50+00N 45+00E	3	61	13	43	.5	9	4	260	1.96	16	<5	<2	<2	13	<.2	<2	<2	91	.12	.027	4	27	.82	32	.11	<3	6.37	.01	.02	<2	7	
L50+00N 45+50E	1	5	6	8	<.3	2	1	61	1.34	<2	<5	<2	<2	35	<.2	<2	<2	8	.43	.053	<1	2	.05	9	.01	<3	.25	.02	<.01	<2	<1	
L50+00N 46+00E	1	6	4	10	<.3	3	1	24	.60	5	<5	<2	<2	11	<.2	<2	<2	8	.11	.049	1	4	.08	9	.01	3	.37	.02	.01	<2	1	
L50+00N 46+50E	3	62	8	35	1.0	8	6	246	8.19	20	<5	<2	4	9	<.2	<2	2	166	.08	.027	2	38	1.02	19	.13	<3	8.19	.01	.02	<2	4	
L50+00N 47+00E	1	6	<3	10	<.3	3	1	16	1.56	7	<5	<2	<2	26	.4	<2	<2	11	.34	.043	<1	2	.07	15	.01	<3	.31	.02	<.01	<2	<1	
L50+00N 47+50E	<1	4	3	10	<.3	1	<1	190	.90	3	<5	<2	<2	17	<.2	<2	<2	4	.19	.043	<1	2	.09	7	.01	3	.23	.03	.03	<2	<1	
L50+00N 48+00E	2	27	12	39	1.0	6	4	268	5.66	29	<5	<2	3	8	<.2	3	<2	176	.09	.018	5	20	.71	21	.07	<3	3.52	.01	.02	<2	7	
L50+00N 48+50E	4	60	10	52	.7	10	7	314	7.10	29	<5	<2	5	13	.3	<2	<2	126	.14	.028	4	31	.72	22	.16	<3	6.22	.01	.02	<2	7	
L50+00N 49+00E	2	13	3	12	1.1	4	3	97	17.35	174	<5	<2	3	19	<.2	<2	<2	64	.20	.038	4	16	.19	25	.04	4	1.74	.02	<.01	<2	2	
L50+00N 49+50E	3	39	8	49	.8	8	5	302	6.02	49	<5	<2	4	10	.5	2	<2	137	.13	.021	5	26	.64	23	.13	<3	4.48	.01	.02	<2	11	
L50+00N 50+00E not rec.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
L50+00N 50+50E	2	19	14	21	.7	5	2	117	1.87	15	<5	<2	8	.2	<2	<2	120	.11	.016	5	23	.27	16	.08	<3	2.94	.01	<.01	<2	4		
L50+00N 51+00E	<1	5	3	25	.3	2	<1	14	.71	6	<5	<2	<2	12	<.2	<2	<2	8	.05	.055	1	4	.09	7	.01	4	.42	.02	.01	<2	1	
L50+00N 51+50E	2	23	16	38	.6	6	3	291	2.53	10	<5	<2	3	11	.3	2	<2	116	.14	.018	5	23	.63	25	.13	<3	2.42	.01	.03	<2	4	
L50+00N 52+00E	<1	4	4	19	<.3	2	<1	18	.52	2	<5	<2	<2	30	<.2	<2	<2	6	.22	.040	<1	3	.14	9	.01	<3	.20	.02	.01	<2	<1	
L50+00N 52+50E	<1	4	5	11	<.3	1	<1	16	.22	<2	<5	<2	<2	15	<.2	<2	<2	4	.10	.037	1	4	.09	12	.01	3	.33	.03	.05	<2	1	
L50+00N 53+00E	<1	3	4	20	<.3	1	<1	14	.10	<2	<5	<2	<2	36	<.2	<2	<2	2	.06	.034	<1	3	.23	16	.01	3	.14	.03	.02	<2	1	
L50+00N 53+50E	1	5	9	8	<.3	2	<1	27	.36	3	<5	<2	<2	6	<.2	<2	<2	21	.03	.021	6	8	.07	16	.02	<3	1.12	.01	.02	<2	2	
L50+00N 54+00E	1	6	4	12	<.3	2	1	21	.85	2	<5	<2	<2	20	<.2	<2	<2	13	.21	.032	1	3	.09	8	.02	<3	.30	.02	.01	<2	<1	
L50+00N 54+50E	1	4	5	17	<.3	1	<1	11	2.32	5	<5	<2	<2	11	<.2	<2	<2	19	.07	.045	1	3	.05	7	.01	<3	.24	.02	.02	<2	1	
L50+00N 55+00E	1	4	6	9	<.3	2	<1	11	.68	3	<5	<2	<2	8	<.2	<2	<2	9	.05	.041	1	4	.04	10	.01	<3	.38	.02	.01	<2	1	
L50+00N 55+50E	1	16	15	38	.5	9	4	266	3.08	15	<5	<2	<2	8	<.2	2	<2	99	.10	.015	4	24	.72	22	.11	<3	2.30	.01	.03	<2	3	
L50+00N 56+00E	1	4	6	8	<.3	2	1	15	.50	<2	<5	<2	<2	10	<.2	<2	<2	11	.05	.038	2	4	.06	9	.01	<3	.32	.02	.01	<2	<1	
L50+00N 56+50E	<1	3	5	13	<.3	2	<1	30	.30	6	<5	<2	<2	29	<.2	<2	<2	2	.21	.053	<1	2	.17	7	<.01	3	.07	.03	.07	<2	1	
L50+00N 57+00E not rec.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
L50+00N 57+50E	<1	2	4	15	<.3	2	<1	22	.42	2	<5	<2	<2	19	<.2	<2	<2	2	.12	.045	1	3	.08	10	<.01	3	.13	.02	.02	<2	1	
L50+00N 58+00E	<1	2	5	12	<.3	1	1	119	2.22	45	<5	<2	<2	25	<.2	<2	<2	5	.26	.048	<1	2	.07	9	<.01	<3	.11	.03	.05	<2	1	
L50+00N 58+50E	1	2	7	5	<.3	1	<1	18	.97	17	<5	<2	<2	8	<.2	<2	<2	22	.07	.033	4	8	.03	13	.03	<3	.62	.01	.02	<2	21	
STANDARD C/AU-S	20	57	38	127	7.5	67	31	1039	4.05	41	16	7	46	50	19.9	18	22	59	.48	.095	42	56	.90	186	.06	24	1.70	.06	.14	11	48	

Sample type: SOIL. Samples beginning 'RE' are Reruns and 'RRE' are Reject Reruns.





SAMPLE#	Mo	Cu	Pb	Zn	Ag	Ni	Co	Mn	Fe	As	U	Au	Th	Sr	Cd	Sb	Bi	V	Ca	P	La	Cr	Mg	Ba	Ti	B	Al	Na	K	W	Au*
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%	%	ppm	ppm	%	ppm	%	ppm	%	%	%	ppm	ppb
L50+00N 59+00E	<1	5	4	18	<.3	1	1	26	.77	2	<5	<2	<2	25	<.2	<2	<2	6	.16	.048	1	2	.09	23	.01	<3	.21	.02	.03	<2	8
L50+00N 59+50E	4	29	18	38	1.0	6	4	206	4.89	27	<5	<2	<2	12	<.2	<2	<2	125	.13	.014	4	28	.41	45	.16	<3	2.92	.01	.01	<2	9
L50+00N 60+00E	<1	5	6	13	<.3	1	1	50	1.31	12	<5	<2	<2	14	<.2	<2	<2	18	.11	.031	1	4	.05	16	.02	<3	.50	.01	<.01	<2	1
L50+00N 60+50E	3	14	26	26	1.3	4	2	135	4.66	25	<5	<2	<2	12	<.2	2	3	124	.14	.007	4	20	.27	17	.18	<3	1.64	.01	.01	<2	8
L50+00N 61+00E	2	9	28	14	.6	5	2	122	.84	9	<5	<2	<2	9	<.2	<2	<2	77	.11	.008	4	31	.28	15	.18	<3	1.56	.01	.02	<2	2
L50+00N 61+50E	4	32	35	35	.9	6	4	182	4.15	27	5	<2	3	13	<.2	<2	6	87	.18	.013	4	33	.41	20	.15	<3	3.12	.01	.02	<2	-27
L50+00N 62+00E	2	12	20	24	1.1	5	3	132	2.49	18	9	<2	4	12	<.2	<2	3	88	.15	.008	6	19	.28	19	.12	<3	1.84	.01	.02	<2	10
L50+00N 62+50E	2	10	18	16	1.0	3	2	107	3.36	21	<5	<2	3	8	<.2	2	<2	108	.11	.005	4	18	.16	13	.13	<3	1.94	.01	.01	<2	4
L50+00N 63+00E	<1	6	7	6	.3	1	<1	11	.32	7	<5	<2	<2	10	<.2	<2	<2	12	.05	.026	1	3	.05	12	.02	<3	.38	.01	<.01	<2	1
L50+00N 63+50E	<1	4	<3	9	<.3	1	<1	66	.94	6	<5	<2	<2	14	<.2	<2	<2	10	.12	.045	<1	3	.05	14	.01	<3	.24	.02	.01	<2	<1
L50+00N 64+00E	<1	3	3	18	<.3	<1	<1	29	.33	<2	<5	<2	<2	25	<.2	<2	<2	1	.23	.041	<1	1	.09	15	<.01	<3	.08	.02	.02	<2	<1
L50+00N 64+50E	<1	3	<3	29	<.3	1	<1	10	.13	<2	<5	<2	<2	22	<.2	<2	<2	1	.18	.031	<1	2	.10	12	.01	<3	.12	.02	<.01	<2	<1
L50+00N 65+00E	<1	4	4	14	<.3	1	<1	9	.17	7	<5	<2	<2	9	<.2	<2	<2	7	.06	.026	1	5	.03	11	.01	<3	.33	.01	<.01	<2	3
RE L48+00N 38+50E	4	50	17	56	.6	13	6	280	3.76	23	<5	<2	<2	18	<.2	<2	3	92	.25	.019	4	34	.71	40	.17	<3	3.91	.01	.02	<2	9
L48+00N 35+00E	<1	3	<3	6	<.3	1	<1	20	.28	<2	<5	<2	<2	23	<.2	<2	<2	2	.18	.018	<1	1	.08	8	.01	<3	.15	.02	<.01	<2	1
L48+00N 35+50E	<1	3	<3	7	<.3	1	<1	19	.19	<2	7	<2	<2	44	<.2	<2	<2	2	.39	.031	<1	2	.10	11	<.01	<3	.11	.02	.03	<2	1
L48+00N 36+00E	<1	3	5	5	<.3	1	1	12	.44	3	<5	<2	<2	16	<.2	<2	<2	3	.13	.045	<1	1	.06	9	.01	<3	.18	.02	.02	<2	<1
L48+00N 36+50E	1	3	<3	4	.3	1	1	11	.26	7	10	<2	<2	7	<.2	<2	3	3	.05	.026	2	1	.03	6	.01	<3	.20	.02	.01	<2	<1
L48+00N 37+00E	4	37	23	46	1.3	8	5	252	7.20	35	8	<2	4	10	<.2	<2	2	103	.11	.017	4	32	.69	21	.17	<3	3.20	.01	.03	<2	6
L48+00N 37+50E	2	12	11	14	.6	2	2	132	2.17	8	<5	<2	<2	5	<.2	<2	<2	71	.06	.006	4	8	.23	10	.07	<3	1.42	.01	.01	<2	1
L48+00N 38+00E	2	52	16	57	.7	10	5	322	4.19	23	<5	<2	<2	13	<.2	<2	<2	88	.17	.021	6	24	.86	49	.12	<3	3.47	.01	.03	<2	5
L48+00N 38+50E	3	50	13	56	.8	13	6	278	3.76	16	<5	<2	<2	18	<.2	<2	<2	91	.25	.019	5	34	.71	41	.17	<3	3.95	.01	.02	<2	5
L48+00N 39+00E	1	21	15	24	.5	7	4	190	2.04	3	<5	<2	<2	10	<.2	<2	<2	82	.12	.020	4	27	.68	18	.11	<3	2.53	.01	.02	<2	6
L48+00N 39+50E	3	56	18	46	.6	9	5	285	2.68	21	<5	<2	<2	14	<.2	<2	<2	91	.17	.017	4	24	.79	28	.15	<3	4.40	.01	.02	<2	8
L48+00N 40+00E	<1	8	4	11	<.3	2	1	51	.50	<2	<5	<2	<2	25	<.2	<2	<2	12	.14	.024	<1	4	.25	10	.03	<3	.59	.02	.01	<2	<1
L48+00N 40+50E	<1	2	<3	8	<.3	<1	<1	15	.08	<2	<5	<2	<2	43	<.2	<2	<2	1	.12	.021	<1	1	.27	6	<.01	<3	.09	.03	.02	<2	<1
L48+00N 41+00E	<1	2	<3	4	<.3	<1	<1	16	.23	4	<5	<2	3	19	<.2	<2	<2	2	.07	.030	2	2	.11	6	.01	<3	.12	.02	.02	<2	<1
L48+00N 41+50E	<1	3	4	5	.3	1	<1	11	.13	3	8	<2	<2	18	<.2	<2	<2	1	.07	.026	1	2	.12	5	<.01	<3	.09	.02	.02	<2	<1
L48+00N 42+00E	<1	3	4	6	<.3	<1	1	21	.76	7	5	<2	<2	11	<.2	<2	3	2	.11	.030	1	1	.05	4	.01	<3	.11	.02	.02	<2	<1
L48+00N 42+50E	1	5	<3	5	<.3	1	1	32	.71	17	<5	<2	<2	24	<.2	<2	<2	3	.28	.023	1	3	.05	9	.01	<3	.14	.02	.02	<2	<1
L48+00N 43+00E	3	52	14	39	1.2	6	4	211	4.88	22	<5	<2	2	9	<.2	2	<2	105	.11	.015	4	21	.56	35	.11	<3	3.66	.01	.03	<2	6
L48+00N 43+50E	3	23	17	30	1.0	4	3	182	3.09	8	<5	<2	2	9	<.2	<2	<2	107	.11	.011	6	22	.46	17	.14	<3	3.11	.01	.03	<2	9
L48+00N 44+00E	<1	5	<3	12	<.3	1	<1	35	.29	<2	<5	<2	<2	23	<.2	<2	<2	7	.12	.027	<1	3	.15	8	.02	<3	.23	.02	.01	<2	<1
L48+00N 44+50E	<1	4	<3	8	<.3	1	<1	20	.90	7	<5	<2	<2	14	<.2	<2	<2	2	.13	.045	<1	1	.06	6	.01	<3	.11	.02	.01	<2	<1
L48+00N 45+00E	<1	4	<3	6	<.3	<1	<1	15	.22	<2	<5	<2	<2	20	<.2	<2	<2	2	.08	.026	<1	1	.12	8	.01	<3	.13	.02	<.01	<2	<1
STANDARD C/AU-S	23	57	41	127	6.7	67	32	1003	4.07	44	17	8	45	53	18.9	17	18	57	.49	.093	41	59	.92	192	.07	28	1.80	.06	.15	11	49

Sample type: SOIL. Samples beginning 'RE' are Reruns and 'RRE' are Reject Reruns.



SAMPLE#	Mo	Cu	Pb	Zn	Ag	Ni	Co	Mn	Fe	As	U	Au	Th	Sr	Cd	Sb	Bi	V	Ca	P	La	Cr	Mg	Ba	Ti	B	Al	Na	K	W	Au*
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%	%	ppm	ppm	%	ppm	%	ppm	%	%	%	ppm	ppb
L48+00N 45+50E	1	3	<3	7	.4	1	1	33	1.04	11	<5	<2	<2	31	.2	2	<2	3	.28	.030	1	1	.11	9	<.01	<3	.11	.02	.03	<2	3
L48+00N 46+00E	<1	5	<3	7	<.3	1	<1	19	.98	10	<5	<2	<2	17	<.2	<2	<2	4	.16	.039	<1	2	.07	6	.01	<3	.17	.02	<.01	<2	1
L48+00N 46+50E	1	8	15	19	.6	5	2	139	.92	7	<5	<2	4	8	<.2	<2	<2	38	.10	.009	5	19	.41	13	.08	<3	1.78	.01	.02	<2	1
L48+00N 47+00E	<1	3	<3	7	<.3	1	<1	46	.30	<2	<5	<2	<2	14	<.2	<2	<2	2	.10	.030	1	2	.08	6	.01	<3	.13	.02	.02	<2	1
L48+00N 47+50E	<1	3	<3	7	<.3	1	<1	33	.27	2	<5	<2	<2	17	<.2	<2	<2	1	.13	.029	1	2	.10	4	<.01	<3	.08	.02	.03	<2	<1
L48+00N 48+00E	<1	4	4	8	.3	1	1	45	.45	2	<5	<2	<2	28	<.2	2	<2	3	.16	.045	1	3	.13	8	<.01	3	.12	.02	.02	<2	<1
L48+00N 48+50E	1	4	4	7	<.3	1	1	32	2.38	14	<5	<2	<2	15	<.2	2	<2	5	.17	.042	1	2	.04	5	.01	<3	.14	.02	.01	<2	<1
L48+00N 49+00E	1	8	5	10	.7	3	1	40	.66	6	<5	<2	2	14	<.2	2	<2	21	.08	.037	2	6	.13	11	.02	<3	.71	.01	.02	<2	1
L48+00N 49+50E	2	16	13	35	1.2	6	3	298	3.38	21	<5	<2	3	8	<.2	<2	<2	108	.11	.013	5	15	.53	19	.04	<3	2.36	.01	.03	<2	4
L48+00N 50+00E	2	71	14	58	1.2	13	7	302	5.13	40	<5	<2	2	10	<.2	<2	4	118	.13	.031	4	19	.85	65	.08	<3	3.98	.01	.03	<2	10
L48+00N 50+50E	1	8	3	23	.7	2	1	30	.70	4	<5	<2	2	5	.2	2	<2	14	.05	.052	2	4	.09	8	.02	<3	.52	.02	.02	<2	<1
L48+00N 51+00E	2	18	19	20	.9	4	2	180	1.69	8	<5	<2	2	7	<.2	<2	<2	112	.07	.009	3	10	.53	24	.19	<3	2.03	.01	.02	<2	16
L48+00N 51+50E	1	4	3	17	.5	1	1	16	.36	4	7	<2	3	18	.3	2	<2	6	.06	.043	2	2	.11	13	.01	<3	.26	.02	.04	<2	<1
L48+00N 52+00E	1	10	13	12	.7	2	2	101	1.24	6	<5	<2	<2	7	<.2	2	<2	95	.07	.012	3	18	.27	9	.08	<3	1.68	.01	.02	<2	2
L48+00N 52+50E	1	7	3	19	.8	2	1	25	.42	5	<5	<2	3	20	<.2	2	<2	10	.06	.035	2	4	.15	15	.02	<3	.36	.02	.04	<2	<1
RE L48+00N 53+00E	1	5	4	14	1.1	6	4	74	3.06	4	<5	<2	<2	12	<.2	<2	<2	99	.11	.017	3	13	.28	11	.13	<3	.66	.01	.04	<2	1
L48+00N 53+00E	1	5	5	14	1.3	6	3	72	2.97	3	<5	<2	3	11	<.2	4	<2	95	.10	.017	3	11	.27	11	.12	<3	.64	.01	.05	<2	2
L48+00N 53+50E	3	22	17	41	1.3	11	6	291	6.43	18	<5	<2	3	15	<.2	<2	<2	154	.16	.017	3	37	.58	21	.19	<3	2.60	.01	.04	<2	15
L48+00N 54+00E	1	8	3	14	.6	2	1	29	.60	6	<5	<2	<2	16	<.2	<2	<2	13	.11	.040	1	4	.10	18	.02	<3	.40	.02	.02	2	1
L48+00N 54+50E	1	7	4	12	.4	2	1	9	.43	6	<5	<2	<2	7	<.2	<2	<2	19	.06	.031	1	7	.03	11	.02	<3	.56	.01	.01	<2	1
L48+00N 55+00E	<1	3	3	11	.5	<1	<1	18	.25	4	<5	<2	2	14	<.2	3	2	3	.13	.024	2	2	.06	5	.01	<3	.10	.02	.02	<2	<1
L48+00N 55+50E	<1	2	<3	8	<.3	<1	<1	7	.16	<2	<5	<2	<2	40	<.2	<2	<2	2	.30	.024	<1	2	.22	6	.01	<3	.11	.02	<.01	<2	<1
L48+00N 56+00E	2	31	20	47	1.0	8	4	215	3.02	17	<5	<2	3	11	<.2	2	<2	103	.14	.013	5	26	.52	19	.14	<3	2.72	.01	.02	<2	4
L48+00N 56+50E	1	7	10	17	.8	3	2	221	.78	8	<5	<2	3	6	.3	3	3	56	.06	.018	4	18	.41	10	.05	<3	1.43	.01	.03	<2	8
L48+00N 57+00E	<1	4	<3	25	<.3	1	1	25	.27	7	<5	<2	<2	14	<.2	2	<2	5	.09	.035	1	3	.10	4	.01	<3	.14	.02	.02	<2	1
L48+00N 57+50E	<1	3	<3	26	.3	1	<1	13	.13	2	<5	<2	<2	14	<.2	2	<2	2	.07	.027	1	2	.11	4	<.01	<3	.10	.02	.01	<2	<1
L48+00N 58+00E	<1	2	<3	12	.3	1	<1	8	.13	2	<5	<2	2	22	<.2	2	<2	2	.11	.020	1	3	.15	3	<.01	<3	.09	.02	<.01	<2	1
L48+00N 58+50E	<1	3	<3	18	<.3	1	<1	186	.12	2	<5	<2	<2	43	<.2	<2	<2	1	.22	.032	<1	2	.17	15	<.01	<3	.08	.02	.04	<2	<1
L48+00N 59+00E	1	8	6	17	.8	2	1	171	.95	24	<5	<2	<2	31	.2	2	2	17	.31	.036	2	4	.07	14	.02	<3	.38	.01	.01	<2	1
L48+00N 59+50E	3	25	25	54	1.3	5	3	176	5.82	24	<5	<2	<2	10	.2	<2	<2	154	.12	.011	4	27	.37	18	.15	<3	2.32	.01	.01	<2	5
L48+00N 60+00E	3	31	26	59	1.3	7	4	235	7.62	46	<5	<2	4	9	.4	<2	<2	154	.11	.015	3	39	.40	15	.15	<3	2.83	.01	.02	<2	5
L48+00N 60+50E	<1	4	<3	30	.3	1	1	13	.64	19	<5	<2	<2	8	<.2	<2	<2	6	.06	.037	1	3	.06	6	.01	<3	.28	.02	.01	<2	<1
L48+00N 61+00E	2	47	29	58	1.0	6	4	314	5.71	102	<5	<2	2	7	<.2	<2	<2	115	.08	.017	4	18	.54	34	.11	<3	2.33	.01	.04	<2	5
L48+00N 61+50E	2	55	23	83	1.1	10	6	339	6.19	47	<5	<2	2	11	<.2	<2	<2	137	.14	.015	4	32	.67	34	.14	<3	3.68	.01	.02	<2	8
L48+00N 62+00E	<1	8	6	29	.9	3	1	35	2.12	11	<5	<2	3	6	<.2	<2	<2	22	.06	.044	3	6	.09	11	.02	<3	.60	.02	.03	<2	2
STANDARD C/AU-S	21	59	39	123	6.1	70	33	984	3.91	39	18	8	44	50	18.1	18	15	58	.47	.088	39	57	.88	178	.05	25	1.69	.06	.14	11	48

Sample type: SOIL. Samples beginning 'RE' are Reruns and 'RRE' are Reject Reruns.



AA ANALYTICAL

## Kamaka Resources Ltd. PROJECT KNOB HILL FILE # 95-4824

Page 8



AA ANALYTICAL

SAMPLE#	Mo ppm	Cu ppm	Pb ppm	Zn ppm	Ag ppm	Ni ppm	Co ppm	Mn ppm	Fe %	As ppm	U ppm	Au ppm	Th ppm	Sr ppm	Cd ppm	Sb ppm	Bi ppm	V ppm	Ca %	P %	La ppm	Cr ppm	Mg %	Ba ppm	Ti %	B ppm	Al %	Na %	K %	W ppm	Au* ppb
L48+00N 62+50E	2	10	16	19	1.1	4	2	102	6.90	20	<5	<2	3	9	.6	<2	<2	165	.11	.010	5	53	.18	11	.16	<3	1.99	.01	.01	<2	25
L48+00N 63+00E	2	24	21	43	.9	8	4	202	1.86	20	<5	<2	3	12	<2	<2	114	.19	.013	8	40	.51	23	.14	<3	3.58	.01	.02	<2	5	
L48+00N 63+50E	<1	6	5	13	.7	1	<1	47	.42	3	<5	<2	2	10	<2	<2	12	.20	.040	2	8	.06	10	.03	4	.75	.01	.02	<2	<1	
L48+00N 64+00E	<1	5	4	15	<.3	1	1	49	.35	5	<5	<2	2	38	.4	<2	<2	7	.31	.060	1	2	.11	22	.01	<3	.21	.03	.04	<2	<1
L48+00N 64+50E	<1	4	3	11	<.3	2	<1	20	.12	3	<5	<2	<2	13	.2	<2	<2	6	.09	.028	2	3	.05	10	.01	<3	.33	.02	<.01	<2	<1
L48+00N 65+00E	<1	3	<3	28	<.3	1	<1	15	.19	<2	<5	<2	2	.18	<.2	2	2	2	.08	.029	1	2	.09	8	<.01	3	.12	.02	.01	<2	<1
L48+00N 65+50E	<1	3	4	21	<.3	1	<1	70	3.31	34	<5	<2	<2	24	.3	2	<2	3	.20	.063	1	1	.07	8	<.01	<3	.07	.02	.04	<2	<1
L48+00N 66+00E	1	4	<3	15	<.3	1	<1	83	1.74	57	<5	<2	<2	13	.2	2	<2	10	.16	.044	1	3	.05	7	.01	<3	.19	.02	.01	<2	<1
L48+00N 66+50E	1	1	23	15	.7	1	1	163	2.68	9	<5	<2	2	7	<.2	<2	<2	99	.09	.010	3	10	.50	6	.15	<3	1.13	.01	.01	<2	3
L48+00N 67+00E	2	3	14	6	.5	4	1	23	.76	9	<5	<2	2	6	<.2	<2	<2	44	.05	.022	6	47	.12	8	.06	<3	.69	.01	.03	<2	4
L48+00N 67+50E	3	3	15	9	.6	3	1	62	1.66	100	<5	<2	2	8	.5	2	<2	49	.07	.023	5	36	.11	10	.05	<3	.72	.01	.03	<2	2
L48+00N 68+00E	1	4	8	11	.3	1	<1	10	.43	16	<5	<2	2	6	.2	<2	<2	20	.05	.035	4	7	.03	9	.02	<3	.66	.02	.02	<2	1
L48+00N 68+50E	4	18	20	54	1.2	9	5	251	3.91	20	<5	<2	3	18	.2	<2	<2	128	.22	.007	3	30	.64	19	.19	<3	2.65	.01	.02	<2	5
L48+00N 69+00E	3	10	19	25	1.1	4	2	120	4.02	9	<5	<2	3	11	.3	<2	<2	165	.13	.007	4	27	.29	13	.17	<3	2.13	.01	.02	<2	4
L48+00N 69+50E	3	2	10	15	<.3	2	4	98	8.40	629	<5	<2	<2	12	.6	<2	<2	78	.23	.022	4	18	.24	17	.05	<3	1.28	.01	.01	<2	3
L48+00N 70+00E	1	<1	9	10	.4	1	2	69	1.44	3	<5	<2	2	7	<.2	<2	<2	59	.08	.008	5	4	.18	9	.06	<3	1.07	.01	.02	<2	6
L46+00N 43+50E	1	3	5	19	<.3	1	<1	44	.67	5	<5	<2	<2	29	.2	<2	<2	4	.20	.048	1	2	.10	9	.01	3	.13	.03	.04	<2	1
L46+00N 44+00E	<1	2	<3	12	<.3	<1	<1	18	.10	5	6	<2	<2	13	<.2	2	3	3	.09	.022	2	2	.09	3	.01	<3	.11	.02	.02	<2	<1
L46+00N 44+50E	<1	2	<3	15	<.3	1	<1	40	.37	<2	<5	<2	<2	16	.2	<2	<2	1	.16	.035	1	1	.09	4	<.01	<3	.08	.03	.02	<2	<1
L46+00N 45+00E	<1	2	<3	12	<.3	<1	<1	10	.32	<2	<5	<2	<2	48	.3	<2	<2	1	.06	.032	1	1	.27	12	<.01	3	.07	.03	.03	<2	<1
L46+00N 45+50E	1	4	<3	20	<.3	1	<1	31	.29	<2	7	<2	<2	24	.2	<2	<2	1	.07	.048	1	2	.16	6	<.01	3	.07	.03	.05	<2	<1
RE L48+00N 67+00E	2	2	14	7	.7	4	1	24	.76	11	5	<2	2	6	<.2	<2	<2	45	.05	.022	6	49	.12	8	.06	<3	.70	.01	.03	<2	13
L46+00N 46+00E	<1	3	<3	12	<.3	<1	<1	15	.09	<2	7	<2	<2	38	.3	<2	<2	1	.16	.030	1	2	.22	6	<.01	5	.08	.03	.03	<2	<1
L46+00N 46+50E	<1	3	3	13	<.3	1	<1	10	.13	2	6	<2	<2	15	<.2	<2	<2	2	.19	.032	1	2	.07	5	<.01	<3	.10	.02	.03	<2	<1
L46+00N 47+00E	1	2	4	9	<.3	1	<1	22	.45	6	<5	<2	<2	11	<.2	<2	<2	6	.08	.037	2	4	.07	5	.01	<3	.27	.02	.03	<2	<1
L46+00N 47+50E	<1	3	3	9	<.3	1	<1	20	.12	2	<5	<2	<2	9	<.2	<2	<2	2	.07	.031	1	2	.06	9	<.01	<3	.14	.02	.03	<2	<1
L46+00N 48+00E	<1	4	5	17	<.3	1	<1	73	.75	6	6	<2	<2	34	.2	2	<2	4	.37	.027	1	1	.08	8	.01	<3	.16	.02	.02	<2	<1
L46+00N 48+50E	2	19	17	34	.9	6	2	197	1.99	11	<5	<2	4	9	.2	<2	<2	114	.11	.009	6	24	.53	22	.09	<3	2.46	.01	.03	<2	1
L46+00N 49+00E	3	28	16	46	1.0	5	3	230	4.02	15	6	<2	2	11	.2	<2	<2	143	.14	.014	6	24	.67	35	.16	<3	3.52	.01	.07	<2	7
L46+00N 49+50E	2	20	16	38	1.1	6	3	227	2.35	13	10	<2	2	13	.3	<2	<2	138	.16	.010	4	22	.68	23	.13	<3	2.80	.01	.04	<2	6
L46+00N 50+00E	2	19	13	29	1.2	4	3	203	5.40	12	<5	<2	<2	9	.5	<2	<2	152	.10	.010	4	23	.53	16	.11	<3	2.52	.01	.03	<2	6
L46+00N 50+50E	2	52	20	60	1.0	10	4	297	2.06	18	9	<2	3	13	.4	<2	<2	105	.15	.017	6	31	.75	36	.12	<3	4.02	.01	.04	<2	3
L46+00N 51+00E	2	21	17	22	.8	3	1	97	1.39	11	9	<2	2	9	<.2	<2	<2	74	.10	.012	6	20	.21	16	.14	<3	2.26	.01	.03	<2	4
L46+00N 51+50E	2	18	15	38	.9	5	3	222	5.51	14	<5	<2	3	9	<.2	<2	<2	130	.11	.008	3	23	.50	20	.15	<3	2.47	.01	.02	<2	5
L46+00N 52+00E	3	45	16	52	.7	7	5	268	5.79	28	5	<2	2	10	.2	<2	<2	144	.12	.011	2	32	.55	28	.19	<3	3.51	.01	.03	<2	66
STANDARD C/AU-S	23	56	41	135	6.4	68	32	1043	4.22	44	17	9	38	54	19.1	17	16	62	.50	.096	42	61	.94	178	.06	26	1.81	.06	.15	11	53

Sample type: SOIL. Samples beginning 'RE' are Reruns and 'RRE' are Reject Reruns.



SAMPLE#	Mo ppm	Cu ppm	Pb ppm	Zn ppm	Ag ppm	Ni ppm	Co ppm	Mn ppm	Fe %	As ppm	U ppm	Au ppm	Th ppm	Sr ppm	Cd ppm	Sb ppm	Bi ppm	V ppm	Ca %	P %	La ppm	Cr ppm	Mg %	Ba ppm	Ti %	B ppm	Al %	Na %	K %	W ppm	Au* ppb
L46+00N 52+50E	<1	6	5	26	.3	8	1	52	.80	4	<5	<2	<2	31	<.2	<2	<2	17	.42	.025	1	4	.10	9	.03	<3	.45	.02	.01	<2	2
L46+00N 53+00E	<1	2	3	18	.4	2	<1	10	.10	2	<5	<2	<2	18	.3	<2	<2	2	.15	.020	1	3	.12	4	<.01	<3	.10	.02	.02	<2	<1
L46+00N 53+50E	2	3	3	10	.3	1	<1	76	.69	10	<5	<2	<2	29	.2	<2	<2	8	.69	.028	1	4	.06	9	.01	<3	.34	.02	.02	<2	1
L46+00N 54+00E	<1	2	<3	27	.4	<1	<1	10	.15	3	<5	<2	<2	19	.3	2	4	1	.16	.019	1	2	.13	3	<.01	<3	.08	.02	.02	<2	1
L46+00N 54+50E	<1	2	4	32	.3	<1	<1	9	.10	2	<5	<2	<2	20	.3	<2	<2	1	.09	.019	1	2	.12	4	<.01	<3	.08	.02	.01	<2	<1
L46+00N 55+00E	<1	3	3	67	<.3	<1	<1	13	.21	2	5	<2	<2	16	.2	<2	<2	1	.14	.030	1	3	.09	5	<.01	<3	.07	.02	.02	<2	<1
RE L46+00N 56+50E	1	38	12	62	.9	9	5	285	1.95	48	7	<2	2	27	<.2	<2	<2	78	.41	.024	6	20	.65	54	.10	<3	2.93	.02	.03	<2	12
L46+00N 55+50E	<1	3	<3	37	.3	1	<1	11	.19	5	5	<2	<2	12	.3	<2	<2	2	.10	.029	1	3	.06	4	<.01	<3	.11	.02	.02	<2	1
L46+00N 56+00E	<1	2	3	21	.3	1	1	11	.11	5	<5	<2	<2	9	.2	<2	<2	4	.06	.021	2	2	.05	8	.01	<3	.19	.02	.02	<2	<1
L46+00N 56+50E	1	35	9	56	.7	9	4	268	1.81	41	<5	<2	<2	25	.3	<2	<2	72	.38	.021	6	19	.61	50	.09	<3	2.71	.02	.03	<2	12
L46+00N 57+00E	1	31	8	9	1.8	2	1	49	.42	30	<5	<2	<2	23	.7	3	<2	26	.26	.024	3	9	.08	19	.03	<3	1.01	.01	.01	<2	11
L46+00N 57+50E	<1	7	<3	12	.5	1	<1	18	.20	8	<5	<2	2	11	.4	2	<2	6	.09	.021	2	4	.06	8	.01	<3	.35	.01	.01	<2	1
L46+00N 58+00E	<1	3	<3	23	.3	<1	<1	8	.11	3	<5	<2	<2	16	<.2	<2	<2	2	.10	.021	1	2	.07	9	.01	<3	.16	.02	.01	<2	<1
L46+00N 58+50E	<1	4	5	17	<.3	<1	<1	20	.27	6	6	<2	<2	10	<.2	<2	2	7	.07	.021	2	3	.07	8	.01	<3	.32	.02	.01	<2	<1
L46+00N 59+00E	<1	2	<3	25	<.3	<1	<1	12	.26	9	5	<2	<2	11	.3	<2	<2	2	.11	.017	1	1	.05	2	<.01	<3	.11	.02	.01	<2	<1
L46+00N 59+50E	2	48	13	50	1.0	7	3	215	1.88	14	<5	<2	<2	9	<.2	<2	<2	104	.14	.020	5	28	.73	42	.13	<3	3.32	.01	.07	<2	15
L46+00N 60+00E	2	57	17	77	1.0	8	4	227	3.02	43	7	<2	3	10	<.2	<2	<2	102	.13	.016	5	30	.64	33	.10	<3	4.32	.01	.04	<2	13
L46+00N 60+50E	2	86	14	82	1.1	10	5	257	3.16	62	<5	<2	4	14	<.2	<2	<2	95	.24	.021	7	27	.61	41	.15	<3	4.13	.01	.04	<2	13
L46+00N 61+00E	3	63	20	48	1.2	6	4	178	6.72	43	<5	<2	3	10	.2	<2	<2	160	.14	.013	4	43	.38	21	.22	<3	3.11	.01	.02	<2	8
L46+00N 61+50E	4	72	14	34	.9	4	3	130	5.13	17	<5	<2	3	10	.2	<2	<2	129	.12	.011	4	25	.39	19	.17	<3	3.26	.01	.03	<2	4
L46+00N 62+00E	4	89	14	90	.9	12	7	287	4.95	51	<5	<2	3	16	<.2	<2	<2	132	.20	.032	2	35	.67	36	.22	<3	5.53	.01	.03	<2	13
L46+00N 62+50E	2	38	19	57	.9	8	4	185	5.66	55	<5	<2	<2	12	<.2	<2	<2	136	.18	.014	3	47	.43	21	.20	<3	3.33	.01	.03	<2	6
L46+00N 63+00E	<1	4	6	11	1.0	1	1	263	1.34	7	<5	<2	<2	31	.3	<2	<2	27	.39	.032	2	5	.06	20	.02	<3	.70	.01	.01	<2	<1
L46+00N 63+50E	3	39	26	69	1.4	11	5	236	2.80	49	<5	<2	5	15	<.2	<2	<2	134	.21	.013	3	47	.57	32	.17	<3	4.77	.01	.02	<2	12
L46+00N 64+00E	2	15	16	34	1.2	5	3	120	3.84	23	<5	<2	4	9	.3	<2	<2	108	.11	.010	3	26	.25	16	.13	<3	2.11	.01	.02	<2	11
L46+00N 64+50E	2	36	15	68	1.0	9	6	263	4.92	32	<5	<2	4	11	.2	<2	<2	106	.14	.018	3	46	.47	21	.16	<3	5.05	.01	.02	<2	11
L46+00N 65+00E	<1	4	<3	34	<.3	1	1	23	.44	4	<5	<2	<2	8	.2	2	<2	8	.07	.028	1	4	.04	9	.01	<3	.36	.01	.01	<2	5
L46+00N 65+50E	<1	2	<3	13	.3	<1	<1	12	.14	2	<5	<2	2	12	.3	<2	3	3	.08	.021	1	2	.07	8	.01	<3	.18	.01	.01	<2	3
L46+00N 66+00E	<1	3	<3	19	<.3	<1	<1	16	.11	6	<5	<2	<2	20	.2	<2	<2	2	.15	.023	1	2	.11	5	<.01	3	.17	.02	.02	<2	2
L46+00N 66+50E	<1	2	6	8	.5	<1	<1	57	.66	12	<5	<2	2	12	.2	<2	<2	7	.19	.032	2	5	.03	7	.01	<3	.39	.01	.01	<2	4
L46+00N 67+00E	<1	2	9	5	.5	1	<1	13	.53	26	<5	<2	<2	6	<.2	<2	<2	12	.07	.048	4	14	.02	8	.01	<3	1.04	.01	.02	<2	2
L46+00N 67+50E	<1	2	3	8	.3	<1	<1	26	.08	3	<5	<2	2	12	<.2	<2	<2	2	.06	.021	1	2	.07	5	<.01	4	.13	.02	.02	<2	1
L46+00N 68+00E	<1	2	<3	18	.3	<1	<1	13	.06	2	<5	<2	4	17	<.2	<2	3	3	.09	.018	1	3	.10	5	.01	<3	.15	.01	.01	<2	1
L46+00N 68+50E	2	23	9	24	1.6	1	<1	16	.05	19	<5	<2	2	6	.6	<2	3	25	.03	.039	2	11	.04	6	.02	<3	.55	.01	.02	<2	3
L46+00N 69+00E	12	19	13	19	1.9	3	1	25	.11	29	<5	<2	2	6	.6	<2	<2	75	.05	.051	5	16	.03	10	.03	<3	1.12	.01	.02	<2	3
STANDARD C/AU-S	22	56	37	134	6.5	65	31	1036	4.16	37	32	9	37	54	19.0	17	15	61	.51	.096	39	59	.93	197	.07	28	1.87	.06	.16	12	56

Sample type: SOIL. Samples beginning 'RE' are Reruns and 'RRE' are Reject Reruns.



SAMPLE#	Mo	Cu	Pb	Zn	Ag	Ni	Co	Mn	Fe	As	U	Au	Th	Sr	Cd	Sb	Bi	V	Ca	P	La	Cr	Mg	Ba	Ti	B	Al	Na	K	W	Au*
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%	%	ppm	ppm	%	ppm	%	%	%	%	%	ppm	ppb
L46+00N 69+50E	3	14	9	41	.7	11	5	337	4.09	19	9	<2	3	6	1.6	2	<2	109	.07	.019	2	64	.82	18	.17	3	1.54	.02	.04	<2	2
L46+00N 70+00E	2	12	16	28	.7	4	2	89	.78	20	<5	<2	<2	10	.4	<2	2	35	.14	.025	4	13	.20	25	.03	<3	.91	.01	.02	<2	5
L44+00N 35+00E	3	45	16	60	.9	11	7	383	4.42	26	6	<2	5	13	<2	<2	<2	115	.14	.016	4	32	.94	45	.14	<3	3.66	.01	.03	<2	3
L44+00N 35+50E	2	46	16	55	.5	10	6	348	4.39	26	6	<2	3	12	.3	<2	<2	102	.18	.016	5	26	.83	45	.12	<3	3.08	.01	.02	<2	16
L44+00N 36+00E	1	5	4	11	<.3	1	1	55	.86	6	<5	<2	<2	16	.3	<2	<2	15	.20	.033	1	4	.15	10	.02	<3	.37	.02	.04	<2	7
L44+00N 36+50E	1	6	17	19	.4	1	2	159	2.23	4	<5	<2	<2	5	<2	<2	<2	78	.07	.014	3	13	.38	10	.10	<3	1.26	.01	.02	<2	2
L44+00N 37+00E	3	61	17	55	.4	10	6	293	2.49	26	<5	<2	3	14	<2	<2	<2	95	.16	.020	5	27	.69	29	.13	<3	4.74	.01	.02	<2	8
L44+00N 37+50E	<1	2	<3	6	<.3	<1	<1	19	.19	<2	<5	<2	2	14	<2	<2	<2	2	.07	.027	<1	1	.13	3	<.01	<3	.09	.02	.02	<2	<1
L44+00N 38+00E	<1	1	<3	4	<.3	<1	<1	8	.18	<2	<5	<2	2	19	<2	<2	<2	1	.04	.017	<1	1	.15	3	<.01	<3	.08	.02	.02	<2	<1
L44+00N 38+50E	<1	2	<3	6	<.3	<1	<1	12	.10	<2	<5	<2	<2	35	<2	<2	3	1	.06	.022	<1	1	.20	7	<.01	<3	.07	.02	.03	<2	1
L44+00N 39+00E	<1	2	<3	3	<.3	<1	<1	7	.16	<2	<5	<2	<2	10	<2	<2	<2	1	.10	.023	<1	1	.07	3	<.01	<3	.09	.01	.01	<2	<1
RE L44+00N 44+50E	2	57	12	67	<.3	10	7	373	6.33	31	6	<2	<2	8	<2	<2	<2	94	.11	.030	4	20	1.01	56	.10	<3	3.85	.01	.03	<2	6
L44+00N 39+50E	<1	3	3	5	<.3	<1	<1	12	.31	<2	<5	<2	<2	13	<2	<2	<2	2	.09	.032	<1	2	.07	6	<.01	<3	.09	.02	.01	<2	1
L44+00N 40+00E	<1	2	<3	6	<.3	<1	<1	10	.33	<2	<5	<2	<2	9	<2	<2	2	1	.08	.031	<1	1	.07	3	<.01	<3	.08	.02	.03	<2	<1
L44+00N 40+50E	<1	2	<3	5	<.3	<1	<1	11	.10	<2	<5	<2	<2	19	.2	<2	<2	1	.48	.023	<1	2	.10	3	<.01	3	.07	.02	.02	<2	<1
L44+00N 41+00E	<1	1	<3	4	<.3	<1	<1	30	.04	<2	<5	<2	<2	35	<2	<2	<2	1	.13	.016	<1	1	.23	4	<.01	3	.07	.03	.01	<2	<1
L44+00N 41+50E	<1	2	<3	6	<.3	<1	<1	23	.23	<2	<5	<2	<2	14	<2	<2	<2	1	.13	.032	<1	1	.07	3	<.01	<3	.06	.02	.02	<2	<1
L44+00N 42+00E	<1	2	<3	10	<.3	<1	<1	13	.16	<2	<5	<2	<2	26	.2	<2	<2	1	.10	.026	<1	1	.16	6	<.01	<3	.06	.02	.03	<2	<1
L44+00N 42+50E	1	3	6	7	.6	<1	1	27	.26	2	<5	<2	3	6	<2	<2	<2	29	.04	.020	3	6	.10	11	.01	<3	1.02	.01	.02	<2	1
L44+00N 43+00E	<1	8	3	11	<.3	1	1	35	1.02	5	<5	<2	<2	9	.3	<2	<2	9	.06	.040	1	3	.12	11	.01	<3	.39	.01	.03	<2	<1
L44+00N 43+50E	2	64	9	51	.6	8	6	302	3.80	13	<5	<2	3	13	<2	<2	<2	82	.17	.027	5	20	.68	33	.11	<3	3.54	.01	.03	<2	4
L44+00N 44+00E	1	8	15	14	1.1	1	2	96	3.54	4	<5	<2	<2	6	<2	<2	<2	122	.05	.011	2	11	.20	12	.15	<3	1.46	.01	.02	<2	2
L44+00N 44+50E	2	58	13	68	.6	10	7	389	6.52	31	<5	<2	<2	8	<2	<2	<2	95	.10	.031	4	21	1.02	58	.10	<3	3.98	.01	.03	<2	5
L44+00N 45+00E	1	6	<3	10	.3	1	1	61	.58	2	<5	<2	<2	15	<2	<2	<2	17	.18	.035	1	6	.17	9	.02	<3	.68	.01	.02	<2	<1
L44+00N 45+50E	<1	3	<3	9	.5	<1	<1	66	.50	<2	<5	<2	2	18	<2	<2	<2	12	.04	.027	1	3	.22	9	.04	<3	.40	.01	.02	<2	5
L44+00N 46+00E	<1	9	9	15	.3	2	1	145	.96	2	<5	<2	<2	7	<2	<2	<2	27	.07	.020	2	9	.32	11	.05	<3	1.02	.01	.02	<2	1
L44+00N 46+50E	3	56	13	67	.6	9	6	359	9.07	42	5	<2	3	5	<2	<2	<2	82	.03	.029	3	18	1.09	81	.06	<3	6.39	.01	.02	<2	14
L44+00N 47+00E	2	27	6	29	1.0	4	3	164	4.99	16	<5	<2	3	6	<2	<2	<2	106	.06	.024	5	26	.46	16	.13	<3	4.92	.01	.02	<2	4
L44+00N 47+50E	2	40	11	48	.9	7	4	243	5.70	25	<5	<2	4	7	<2	<2	<2	118	.07	.020	3	25	.61	26	.12	<3	3.79	.01	.01	<2	16
L44+00N 48+00E	2	47	14	56	.7	8	6	332	5.48	25	<5	<2	3	6	<2	<2	<2	109	.14	.024	3	27	.79	39	.14	<3	4.15	.01	.02	<2	121
L44+00N 48+50E	<1	5	5	10	<.3	1	1	47	1.14	4	<5	<2	2	11	.2	<2	<2	12	.16	.034	1	4	.11	6	.02	<3	.35	.01	.02	<2	1
L44+00N 49+00E	1	28	10	38	.7	7	5	237	5.56	14	<5	<2	3	9	<2	<2	<2	90	.09	.010	4	20	.61	44	.07	<3	3.41	.01	.02	<2	10
L44+00N 49+50E	1	41	13	73	.8	9	6	360	5.28	23	<5	<2	4	7	<2	<2	<2	122	.09	.017	3	27	.81	36	.13	<3	3.95	.01	.02	<2	11
L44+00N 50+00E	1	24	10	27	.7	5	3	207	1.89	7	<5	<2	2	19	<2	<2	<2	82	.33	.007	3	17	.56	46	.10	<3	2.26	.01	.02	<2	4
L44+00N 50+00E dup.	1	15	10	28	1.0	7	4	254	2.37	10	<5	<2	3	13	<2	<2	<2	109	.22	.006	5	20	.65	42	.07	<3	2.50	.01	.02	<2	2
STANDARD C/AU-S	19	59	38	128	6.5	67	32	1099	4.11	37	21	8	44	50	17.6	18	20	63	.48	.096	40	54	.92	187	.06	28	1.79	.06	.14	12	51

Sample type: SOIL. Samples beginning 'RE' are Reruns and 'RRE' are Reject Reruns.



SAMPLE#	Mo	Cu	Pb	Zn	Ag	Ni	Co	Mn	Fe	As	U	Au	Th	Sr	Cd	Sb	Bi	V	Ca	P	La	Cr	Mg	Ba	Ti	B	Al	Na	K	W	Au*
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%	%	ppm	ppm	%	ppm	%	%	%	%	%	ppm	ppb
L44+00N 50+50E	1	9	3	17	1.1	4	2	130	.94	15	<5	<2	3	22	.2	<2	<2	46	.30	.016	4	12	.27	33	.06	<3	1.53	.01	.01	<2	15
L44+00N 51+00E not rec.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
L44+00N 51+50E not rec.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
L44+00N 52+00E	1	4	<3	11	<.3	2	1	89	1.27	18	<5	<2	3	15	<.2	2	<2	13	.18	.042	3	3	.13	15	.02	<3	.59	.01	.03	<2	1
L44+00N 52+50E	<1	3	<3	13	<.3	1	1	48	.39	6	<5	<2	<2	22	.2	2	<2	2	.26	.035	<1	1	.08	7	<.01	<3	.08	.01	.01	<2	1
L44+00N 53+00E	<1	2	<3	7	<.3	1	<1	7	.08	4	<5	<2	4	27	.3	2	<2	1	.06	.022	1	1	.22	6	<.01	3	.04	.02	.02	<2	<1
L44+00N 53+50E	<1	5	<3	22	<.3	1	1	9	1.35	16	<5	<2	4	32	.2	<2	2	4	.40	.036	1	1	.07	8	<.01	<3	.10	.02	.02	<2	1
L44+00N 54+00E	2	53	5	55	.8	10	4	312	5.18	23	<5	<2	4	16	<.2	<2	<2	118	.21	.019	3	30	.55	26	.21	<3	3.69	.01	.02	<2	6
L44+00N 54+50E	1	29	9	39	1.0	6	2	228	4.75	32	<5	<2	4	13	<.2	<2	<2	139	.15	.012	6	22	.35	21	.15	<3	2.62	.01	.01	<2	22
L44+00N 55+00E	2	39	7	45	1.0	7	3	225	5.76	28	<5	<2	4	11	<.2	<2	<2	132	.12	.016	4	26	.41	20	.17	<3	3.23	.01	.02	<2	4
L44+00N 55+50E	2	17	12	23	1.4	4	1	149	3.99	18	<5	<2	4	10	<.2	<2	<2	120	.11	.010	4	17	.27	12	.15	<3	1.80	.01	.02	<2	8
L44+00N 56+00E	2	31	5	34	1.5	7	3	213	5.61	21	<5	<2	5	11	<.2	<2	<2	136	.11	.013	4	33	.46	18	.18	<3	2.49	.01	.03	<2	3
L44+00N 56+50E	2	42	8	55	1.7	8	4	340	6.58	24	<5	<2	4	14	<.2	<2	<2	133	.14	.017	4	26	.60	27	.19	<3	3.33	.01	.04	<2	3
L44+00N 57+00E	2	19	20	22	1.0	5	1	141	2.22	12	<5	<2	5	14	<.2	<2	<2	103	.15	.007	6	23	.27	17	.20	<3	2.46	.01	.03	<2	15
L44+00N 57+50E	1	10	15	14	1.0	3	1	125	1.73	8	<5	<2	3	10	<.2	<2	<2	90	.12	.008	6	16	.19	13	.18	<3	1.65	.01	.02	<2	5
L44+00N 58+00E	2	15	10	24	1.4	5	2	167	7.16	22	<5	<2	6	10	<.2	<2	<2	166	.11	.007	3	24	.28	13	.26	<3	1.97	.01	.01	<2	8
L44+00N 58+50E	<1	5	<3	14	<.3	3	1	69	.93	8	<5	<2	<2	18	.6	2	<2	4	.15	.038	1	2	.09	11	.01	<3	.13	.02	.02	<2	<1
L44+00N 59+00E	<1	4	<3	14	<.3	2	1	20	.79	7	<5	<2	<2	19	.3	<2	<2	2	.22	.033	<1	1	.06	7	<.01	<3	.07	.01	.01	<2	<1
L44+00N 59+50E	<1	3	<3	18	<.3	1	<1	17	.14	4	<5	<2	<2	27	.4	<2	<2	1	.12	.030	1	2	.21	5	<.01	<3	.05	.02	.03	<2	1
RE L44+00N 60+50E	2	39	12	36	1.0	5	2	198	5.87	47	<5	<2	3	13	<.2	<2	<2	153	.15	.009	4	31	.32	18	.22	<3	2.79	.01	.01	<2	8
L44+00N 60+00E	<1	3	<3	13	<.3	1	<1	52	.17	4	<5	<2	2	27	<.2	<2	<2	2	.19	.030	<1	1	.19	4	<.01	<3	.07	.02	.02	<2	1
L44+00N 60+50E	2	40	13	36	.9	5	2	194	5.82	48	<5	<2	3	13	<.2	<2	<2	152	.15	.009	4	30	.31	18	.22	<3	2.79	.01	.01	<2	12
L44+00N 61+00E	<1	7	<3	12	<.3	1	<1	45	1.32	13	<5	<2	<2	18	<.2	<2	<2	11	.25	.024	1	3	.06	12	.02	<3	.34	.01	.01	<2	1
L44+00N 61+50E	2	23	10	26	1.3	4	2	144	3.96	38	<5	<2	4	11	<.2	<2	<2	135	.13	.008	5	26	.17	14	.14	<3	2.17	.01	.01	<2	22
L44+00N 62+00E	2	27	14	38	1.3	6	2	176	5.58	63	<5	<2	5	12	<.2	<2	<2	146	.14	.012	4	39	.24	16	.19	<3	2.66	.01	.01	<2	79
L42+00N 35+00E	1	5	4	6	<.3	1	1	26	3.77	4	<5	<2	<2	15	<.2	<2	2	8	.15	.045	<1	<1	.06	10	.01	<3	.18	.02	.02	<2	2
L42+00N 35+50E	<1	3	<3	6	<.3	2	<1	14	.73	4	<5	<2	<2	8	.2	<2	<2	4	.06	.030	<1	3	.05	6	<.01	<3	.11	.02	.01	<2	1
L42+00N 36+00E	<1	3	<3	5	<.3	1	<1	84	.27	5	<5	<2	<2	20	.2	<2	<2	3	.13	.019	<1	1	.11	7	<.01	<3	.11	.02	.01	<2	<1
L42+00N 36+50E	<1	3	3	4	<.3	1	<1	48	.36	4	<5	<2	<2	14	.2	<2	<2	2	.14	.025	<1	1	.07	4	<.01	<3	.07	.01	.01	<2	1
L42+00N 37+00E	<1	3	4	8	<.3	1	<1	146	.10	2	5	<2	<2	17	.2	<2	2	1	.10	.027	<1	1	.09	5	<.01	<3	.06	.02	.03	<2	<1
L42+00N 37+50E	1	5	4	9	<.3	2	1	36	.09	4	<5	<2	<2	23	1.4	<2	<2	3	.10	.025	1	2	.13	6	<.01	3	.12	.02	.03	<2	1
L42+00N 38+00E	1	3	3	7	<.3	2	1	55	.06	3	<5	<2	<2	29	.6	<2	<2	2	.24	.025	<1	2	.14	5	<.01	4	.08	.03	.03	<2	1
L42+00N 38+50E	<1	7	5	5	<.3	2	<1	40	.14	5	<5	<2	<2	17	.4	<2	<2	3	.15	.033	<1	3	.08	6	<.01	<3	.15	.02	.03	<2	<1
L42+00N 39+00E	1	16	9	9	.7	2	1	43	.36	8	<5	<2	2	21	<.2	<2	<2	27	.13	.028	2	7	.14	15	.02	<3	.67	.02	.02	<2	1
L42+00N 39+50E	<1	3	3	5	<.3	1	<1	19	.16	2	<5	<2	<2	11	.2	<2	<2	3	.07	.025	<1	2	.09	3	<.01	<3	.12	.02	.02	<2	<1
STANDARD C/AU-S	18	60	37	123	6.2	67	30	1069	3.91	39	17	7	36	49	16.1	19	22	59	.48	.090	38	55	.89	184	.08	26	1.84	.06	.14	12	48

Sample type: SOIL. Samples beginning 'RE' are Reruns and 'RRE' are Reject Reruns.



SAMPLE#	Mo ppm	Cu ppm	Pb ppm	Zn ppm	Ag ppm	Ni ppm	Co ppm	Mn ppm	Fe %	As ppm	U ppm	Au ppm	Th ppm	Sr ppm	Cd ppm	Sb ppm	Bi ppm	V ppm	Ca %	P %	La ppm	Cr ppm	Mg %	Ba ppm	Ti %	B ppm	Al %	Na %	K %	W ppm	Au* ppb
L42+00N 40+00E	<1	3	4	7	<.3	1	<1	77	.09	3	<5	<2	<2	33	.4	<2	<2	1	.19	.027	<1	1	.17	10	<.01	4	.07	.02	.03	<2	2
L42+00N 40+50E	<1	3	4	6	<.3	1	<1	17	.17	2	<5	<2	<2	14	.3	<2	<2	1	.16	.029	<1	1	.08	5	<.01	<3	.07	.02	.03	<2	1
L42+00N 41+00E	<1	2	6	8	<.3	1	<1	62	.22	3	<5	<2	<2	20	.2	<2	<2	1	.12	.025	<1	1	.13	5	<.01	<3	.05	.02	.03	<2	<1
L42+00N 41+50E	<1	2	<3	5	<.3	1	<1	18	.26	2	<5	<2	<2	14	<.2	<2	<2	1	.14	.026	<1	1	.07	3	<.01	<3	.07	.01	.01	<2	<1
L42+00N 42+00E	<1	3	5	9	.3	1	<1	26	.16	2	<5	<2	<2	28	<.2	<2	<2	2	.20	.032	<1	1	.17	4	<.01	<3	.10	.02	.03	<2	<1
RE L42+00N 44+00E	2	38	18	50	1.2	8	4	259	4.57	14	<5	<2	<2	11	<.2	<2	<2	96	.14	.021	4	26	.57	25	.15	<3	4.65	.01	.02	<2	10
L42+00N 42+50E	<1	6	5	11	.3	3	<1	57	.84	5	<5	<2	<2	17	.2	<2	<2	13	.14	.028	1	6	.13	8	.02	<3	.35	.02	.02	<2	1
L42+00N 43+00E	2	14	18	16	1.2	3	2	107	4.32	8	<5	<2	3	9	<.2	<2	<2	102	.09	.012	6	15	.20	15	.08	<3	2.45	.01	.01	<2	4
L42+00N 43+50E	3	58	12	68	.6	12	6	402	5.74	20	<5	<2	<2	17	<.2	<2	<2	95	.19	.031	5	28	.86	39	.18	<3	3.90	.01	.03	<2	8
L42+00N 44+00E	2	41	22	54	1.5	9	4	279	4.89	15	<5	<2	2	12	.2	<2	<2	104	.15	.021	5	30	.60	28	.17	<3	5.09	.01	.03	<2	11
L42+00N 44+50E	1	15	23	22	1.3	4	1	150	1.60	7	<5	<2	2	10	.2	<2	<2	85	.11	.011	7	16	.28	18	.13	<3	2.18	.01	.03	<2	6
L42+00N 45+00E	3	58	13	48	1.3	8	4	244	4.27	20	<5	<2	2	13	.2	<2	<2	102	.17	.020	4	30	.52	24	.18	<3	5.07	.01	.02	<2	8
L42+00N 45+50E	3	27	20	43	1.4	8	3	277	2.74	10	<5	<2	2	12	.3	<2	<2	94	.14	.016	6	24	.60	25	.15	<3	3.05	.01	.02	<2	7
L42+00N 46+00E	3	35	25	56	1.6	8	3	308	3.88	12	<5	<2	<2	12	<.2	<2	<2	133	.15	.013	6	25	.75	29	.18	<3	4.35	.01	.02	<2	7
L42+00N 46+50E	1	33	18	48	.8	10	4	306	1.72	3	<5	<2	<2	14	<.2	<2	<2	81	.16	.013	7	36	.74	25	.15	<3	4.00	.01	.02	<2	11
L42+00N 47+00E	<1	5	4	11	.3	3	1	49	.32	<2	<5	<2	<2	12	.3	2	<2	11	.04	.023	1	5	.19	6	.02	<3	.44	.02	.01	<2	1
L42+00N 47+50E	<1	4	3	4	<.3	1	<1	15	.13	<2	<5	<2	<2	18	<.2	<2	<2	4	.08	.023	1	2	.12	7	.01	<3	.22	.02	.02	<2	2
L40+00N 50+00E	<1	3	3	14	.3	1	<1	9	.28	<2	<5	<2	<2	10	.2	<2	2	1	.04	.026	1	1	.11	7	<.01	<3	.07	.02	.02	<2	3
L40+00N 50+50E	<1	2	4	32	.3	1	<1	9	.13	2	<5	<2	2	14	<.2	<2	<2	2	.06	.018	<1	1	.13	4	<.01	<3	.14	.02	.01	<2	2
L40+00N 51+00E	<1	2	<3	30	.3	1	<1	8	.21	<2	<5	<2	2	12	.3	<2	2	2	.08	.021	1	1	.08	5	<.01	<3	.11	.02	.01	<2	2
L40+00N 51+50E	<1	2	<3	15	.3	1	<1	19	.09	2	<5	<2	<2	25	<.2	<2	<2	1	.10	.019	1	<1	.14	4	<.01	3	.09	.02	.02	<2	1
L40+00N 52+00E	<1	4	5	21	.4	2	<1	33	.29	2	<5	<2	2	12	<.2	<2	<2	6	.07	.026	1	3	.10	7	.01	<3	.26	.02	.01	<2	2
L40+00N 52+50E	1	9	9	11	1.3	2	<1	33	.48	2	<5	<2	4	6	<.2	<2	<2	22	.05	.033	4	8	.06	10	.03	<3	1.39	.01	.02	<2	2
L40+00N 53+00E	2	31	27	131	1.2	8	5	434	3.68	16	<5	<2	<2	11	<.2	<2	<2	88	.13	.010	4	20	.76	31	.13	<3	3.52	.01	.02	<2	25
L40+00N 53+50E	2	38	24	67	1.1	7	4	316	5.55	20	<5	<2	3	11	<.2	<2	<2	128	.13	.011	3	30	.51	28	.18	<3	3.87	.01	.02	<2	8
L40+00N 54+00E	1	15	23	25	1.0	4	1	143	1.03	4	<5	<2	2	8	<.2	2	<2	56	.08	.011	5	21	.23	17	.14	<3	2.00	.01	.01	<2	7
L40+00N 54+50E	3	44	14	48	1.2	6	3	218	5.14	17	<5	<2	2	12	<.2	<2	<2	115	.16	.017	4	39	.37	22	.19	<3	4.96	.01	.02	<2	45
L40+00N 55+00E	2	37	17	61	1.0	7	4	308	6.32	26	<5	<2	<2	11	<.2	<2	<2	128	.16	.013	5	30	.45	28	.19	<3	3.70	.01	.01	<2	7
L40+00N 55+50E	<1	4	4	19	.5	1	<1	21	.34	<2	<5	<2	<2	15	.2	<2	<2	6	.03	.031	1	3	.13	13	.01	<3	.27	.02	.02	<2	2
L40+00N 56+00E	3	29	15	49	1.2	6	3	223	4.08	16	<5	<2	2	12	<.2	<2	<2	108	.15	.017	6	25	.39	26	.16	<3	3.89	.01	.02	<2	7
L40+00N 56+50E	2	17	18	36	1.3	6	2	216	1.82	13	<5	<2	4	11	<.2	<2	<2	84	.15	.016	6	25	.37	22	.16	<3	2.22	.01	.04	<2	10
L40+00N 57+00E	3	39	15	52	1.1	7	4	290	4.99	27	<5	<2	3	13	<.2	<2	<2	125	.17	.015	4	31	.40	25	.20	<3	3.31	.01	.02	<2	14
L40+00N 57+50E	2	30	15	60	1.2	8	6	366	4.28	26	<5	<2	4	12	<.2	<2	<2	104	.17	.012	6	25	.58	33	.19	<3	2.98	.01	.04	<2	27
L40+00N 58+00E	1	19	16	69	.9	9	9	439	3.44	27	<5	<2	2	10	<.2	<2	<2	79	.15	.010	8	19	.77	44	.17	<3	2.74	.01	.06	<2	15
L40+00N 58+50E	2	16	19	46	1.6	7	3	228	3.51	10	<5	<2	2	13	<.2	<2	2	86	.15	.010	7	23	.48	36	.13	<3	3.04	.01	.02	<2	10
STANDARD C/AU-S	19	61	39	129	7.2	68	31	1113	4.13	35	17	7	36	51	18.1	18	20	59	.51	.096	40	59	.93	191	.09	27	1.94	.06	.15	11	48

Sample type: SOIL. Samples beginning 'RE' are Reruns and 'RRE' are Reject Reruns.



SAMPLE#	Mo ppm	Cu ppm	Pb ppm	Zn ppm	Ag ppm	Ni ppm	Co ppm	Mn ppm	Fe %	As ppm	U ppm	Au ppm	Th ppm	Sr ppm	Cd ppm	Sb ppm	Bi ppm	V ppm	Ca %	P %	La ppm	Cr ppm	Mg %	Ba ppm	Ti %	B ppm	Al %	Na %	K %	W ppm	Au* ppb
L40+00N 59+00E	1	33	6	32	.4	3	1	55	1.02	5	<5	<2	3	24	.3	2	<2	7	.21	.058	2	4	.11	25	.01	<3	.32	.03	.04	<2	5
L40+00N 59+50E	1	21	<3	34	<.3	1	<1	25	.15	<2	<5	<2	<2	16	.4	2	<2	2	.10	.044	1	1	.11	6	<.01	<3	.12	.02	.02	<2	3
RE L40+00N 59+50E	<1	14	<3	34	<.3	2	<1	25	.15	2	<5	<2	2	17	.2	2	<2	2	.11	.046	1	2	.11	6	<.01	<3	.12	.02	.01	<2	3
STANDARD C/AU-S	21	57	35	130	6.8	70	32	1069	4.04	39	20	8	38	54	18.5	20	20	57	.50	.093	41	60	.92	181	.08	24	1.83	.06	.15	11	50

Sample type: SDIL. Samples beginning 'RE' are Reruns and 'RRE' are Reject Reruns.





GEOCHEMICAL ANALYSIS CERTIFICATE



Kamaka Resources Ltd. PROJECT KNOB HILL File # 95-4966 Page 1

6074 - 45A Ave, Delta BC V4K 1N7

Table with columns for SAMPLE# and elements Mo, Cu, Pb, Zn, Ag, Ni, Co, Mn, Fe, As, U, Au, Th, Sr, Cd, Sb, Bi, V, Ca, P, La, Cr, Mg, Ba, Ti, B, Al, Na, K, W, Au\*. Rows include various sample IDs like L53+00N 35+00E and a STANDARD C/AU-S.

ICP - .500 GRAM SAMPLE IS DIGESTED WITH 3ML 3-1-2 HCL-HNO3-H2O AT 95 DEG. C FOR ONE HOUR AND IS DILUTED TO 10 ML WITH WATER. THIS LEACH IS PARTIAL FOR MN FE SR CA P LA CR MG BA TI B W AND LIMITED FOR NA K AND AL. - SAMPLE TYPE: SOIL AU\* - IGNITED, AQUA-REGIA/MIBK EXTRACT, GF/AA FINISHED. Samples beginning 'RE' are Reruns and 'RRE' are Reject Reruns.

DATE RECEIVED: DEC 6 1995 DATE REPORT MAILED: Dec 19/95 SIGNED BY: [Signature] D.TOYE, C.LEONG, J.WANG; CERTIFIED B.C. ASSAYERS













AAL ANALYTICAL

## Kamaka Resources Ltd. PROJECT KNOB HILL FILE # 95-4966

Page 7



AAL ANALYTICAL

SAMPLE#	Mo	Cu	Pb	Zn	Ag	Ni	Co	Mn	Fe	As	U	Au	Th	Sr	Cd	Sb	Bi	V	Ca	P	La	Cr	Mg	Ba	Ti	B	Al	Na	K	W	Au*	
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%	%	ppm	ppm	%	ppm	%	%	%	%	%	%	ppm	ppb
L43+00N 62+50E	4	48	23	87	<.3	7	5	333	5.92	87	<5	<2	6	12	3.1	<2	3	118	.15	.023	5	48	.59	28	.20	<3	4.97	<.01	.02	<2	9	
L43+00N 63+00E	2	9	18	25	.4	2	2	111	3.65	18	<5	<2	3	6	2.1	<2	<2	122	.08	.006	4	14	.20	14	.16	<3	1.20	.01	.03	<2	6	
L43+00N 63+50E	<1	6	5	40	<.3	1	1	19	.24	<2	<5	<2	<2	33	.2	<2	<2	3	.16	.032	1	3	.13	25	.01	4	.14	.02	.02	<2	<1	
L43+00N 64+00E	2	21	16	37	<.3	3	1	129	6.19	56	<5	<2	3	5	3.0	<2	<2	158	.07	.009	3	35	.16	7	.13	<3	2.12	<.01	.02	<2	5	
L43+00N 64+50E	2	35	26	62	<.3	9	3	216	5.95	49	<5	<2	5	8	1.3	<2	2	138	.11	.009	4	45	.38	11	.15	<3	3.76	.01	.02	<2	4	
L43+00N 65+00E	3	44	14	68	.5	7	4	224	6.79	64	<5	<2	5	8	1.9	<2	<2	150	.12	.018	3	77	.43	17	.20	<3	6.81	<.01	.02	<2	4	
L43+00N 65+50E	2	48	36	101	<.3	12	4	256	4.72	126	<5	<2	4	9	2.3	<2	2	121	.14	.014	5	53	.49	21	.16	<3	5.14	.01	.02	<2	15	
L43+00N 66+00E	<1	3	3	32	<.3	1	<1	47	.12	2	<5	<2	<2	44	.8	<2	<2	2	.10	.026	1	2	.22	4	<.01	4	.10	.03	.02	<2	<1	
L43+00N 66+50E	<1	4	<3	27	<.3	<1	1	34	.13	2	<5	<2	<2	46	.2	<2	<2	2	.24	.031	<1	1	.21	14	.01	3	.11	.03	.02	<2	<1	
L43+00N 67+00E	3	30	29	55	.6	10	2	198	2.60	77	<5	<2	3	13	<.2	<2	<2	148	.18	.012	4	55	.46	25	.18	<3	4.67	.01	.01	<2	4	
L43+00N 67+50E	3	35	28	34	.4	6	3	156	4.42	58	<5	<2	3	9	2.6	<2	3	163	.14	.011	4	46	.34	18	.13	<3	3.53	.01	.02	<2	3	
L43+00N 68+00E	<1	4	7	16	<.3	2	<1	79	.22	3	<5	<2	<2	20	.4	<2	<2	4	.23	.027	1	2	.07	<1	.01	5	.22	.02	.01	<2	<1	
L43+00N 68+50E	<1	5	3	52	<.3	5	<1	42	.32	6	<5	<2	<2	27	.9	<2	<2	7	.35	.033	1	3	.09	14	.01	4	.29	.02	.02	<2	<1	
L43+00N 69+00E	2	24	43	45	<.3	5	2	160	3.46	49	<5	<2	3	9	.4	<2	<2	114	.14	.009	4	32	.28	18	.10	<3	3.18	.01	.02	<2	5	
L43+00N 69+50E	3	41	23	76	.5	15	6	310	7.20	72	<5	<2	4	11	<.2	<2	<2	135	.18	.012	5	57	.64	39	.16	4	3.53	.01	.02	<2	4	
L43+00N 70+00E	2	21	28	40	.5	4	2	167	3.01	58	<5	<2	2	15	2.0	<2	3	121	.41	.014	6	48	.52	11	.16	<3	2.63	<.01	.02	<2	3	
L42+00N 48+00E	<1	5	8	11	<.3	2	1	41	.62	4	<5	<2	<2	32	<.2	<2	<2	15	.30	.031	1	4	.17	7	.03	3	.43	.02	.02	<2	<1	
RE L42+00N 48+00E	1	4	<3	10	<.3	3	1	31	.53	<2	<5	<2	<2	28	.4	<2	<2	12	.26	.027	1	3	.15	11	.03	3	.36	.02	.02	<2	<1	
L42+00N 48+50E	3	51	14	60	.4	6	5	270	4.20	20	<5	<2	3	11	2.8	<2	<2	92	.14	.023	3	32	.66	28	.15	<3	4.77	.01	.02	<2	5	
L42+00N 49+00E	2	65	19	90	<.3	12	6	373	5.39	28	<5	<2	4	10	.3	<2	<2	106	.14	.021	4	32	.76	42	.18	<3	4.61	.01	.03	<2	2	
L42+00N 49+50E	<1	4	<3	6	<.3	1	<1	27	.39	2	<5	<2	<2	11	<.2	<2	<2	10	.08	.023	1	4	.06	14	.02	3	.84	.01	.01	<2	<1	
L42+00N 50+00E not rec.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
L42+00N 50+50E	<1	3	<3	62	<.3	2	1	20	.23	<2	<5	<2	<2	40	1.2	<2	<2	2	.35	.050	<1	1	.18	4	<.01	3	.11	.03	.05	<2	<1	
L42+00N 51+00E	<1	2	4	25	<.3	2	<1	21	.25	<2	<5	<2	<2	28	.8	<2	<2	4	.23	.025	<1	3	.19	7	.01	<3	.12	.03	.01	<2	<1	
L42+00N 51+50E	1	54	16	89	<.3	8	6	371	4.66	30	<5	<2	3	9	<.2	<2	<2	98	.12	.019	3	28	.60	32	.15	3	4.41	.01	.03	<2	7	
L42+00N 52+00E	1	43	30	132	<.3	9	8	446	5.37	21	<5	<2	3	8	<.2	<2	<2	105	.09	.018	4	31	1.11	29	.12	<3	4.63	<.01	.02	<2	3	
L42+00N 52+50E	2	23	10	54	<.3	6	2	275	5.16	18	<5	<2	3	9	1.0	<2	<2	120	.12	.005	4	24	.48	25	.14	<3	2.93	<.01	.02	<2	4	
L42+00N 53+00E	<1	9	3	47	<.3	2	1	110	.88	6	<5	<2	<2	19	.4	<2	<2	23	.16	.028	2	6	.20	18	.05	3	.86	.02	.02	<2	<1	
L42+00N 53+50E	3	43	17	49	<.3	4	3	252	5.96	25	<5	<2	4	8	1.8	<2	<2	126	.11	.015	3	35	.40	25	.15	<3	3.50	<.01	.02	<2	20	
L42+00N 54+00E	2	44	24	51	.3	4	2	253	6.05	23	5	<2	4	6	<.2	<2	<2	112	.08	.015	3	29	.40	18	.14	<3	3.60	.01	.03	<2	6	
L42+00N 54+50E	3	25	18	25	<.3	1	1	140	4.65	5	<5	<2	3	10	<.2	<2	<2	108	.17	.013	5	34	.26	15	.16	<3	3.21	<.01	.02	<2	6	
L42+00N 55+00E	4	48	16	52	<.3	11	4	240	5.11	12	<5	<2	4	12	.4	<2	<2	103	.17	.024	5	47	.47	25	.18	<3	5.52	.01	.02	<2	8	
L42+00N 55+50E	2	50	16	95	.4	8	4	397	5.78	21	5	<2	4	9	<.2	<2	<2	106	.14	.020	6	33	.72	36	.14	<3	3.93	.01	.03	<2	6	
L42+00N 56+00E	<1	3	<3	17	.3	3	<1	28	.76	<2	6	<2	<2	34	1.1	<2	<2	7	.05	.040	1	2	.18	8	.02	3	.33	.02	.02	<2	<1	
L42+00N 56+50E	3	36	11	64	1.0	10	3	279	2.63	14	<5	<2	3	11	<.2	<2	<2	95	.17	.021	6	31	.64	18	.15	<3	4.28	.01	.02	<2	5	
STANDARD C/AU-S	22	59	38	125	6.3	63	32	1004	4.07	41	16	9	44	51	19.4	16	19	58	.51	.094	40	57	.88	188	.05	27	1.88	.06	.14	13	51	

Sample type: SOIL. Samples beginning 'RE' are Reruns and 'RRE' are Reject Reruns.



SAMPLE#	Mo ppm	Cu ppm	Pb ppm	Zn ppm	Ag ppm	Ni ppm	Co ppm	Mn ppm	Fe %	As ppm	U ppm	Au ppm	Th ppm	Sr ppm	Cd ppm	Sb ppm	Bi ppm	V ppm	Ca %	P %	La ppm	Cr ppm	Mg %	Ba ppm	Ti %	B ppm	Al %	Na %	K %	W ppm	Au* ppb
L42+00N 57+00E	3	43	12	61	<.3	10	4	344	5.28	43	<5	<2	2	12	.3	<2	3	131	.11	.019	4	32	.70	44	.20	<3	4.31	.01	.06	<2	11
L42+00N 57+50E	1	6	8	39	.3	4	1	40	.46	12	<5	<2	<2	13	.3	<2	2	8	.07	.038	2	3	.07	19	.01	3	.32	.02	.02	<2	1
L42+00N 58+00E	3	51	12	47	<.3	10	3	219	3.38	25	<5	<2	<2	10	.4	<2	<2	125	.11	.015	4	31	.50	26	.17	<3	4.67	.01	.02	<2	6
L42+00N 58+50E	2	53	7	53	.3	7	6	255	4.36	38	<5	<2	<2	13	.5	<2	<2	111	.13	.020	5	38	.53	26	.16	<3	5.64	.01	.02	2	5
L42+00N 59+00E	2	43	18	64	<.3	12	3	288	5.15	55	<5	<2	3	11	<.2	<2	3	133	.13	.012	3	37	.43	26	.19	3	3.36	.01	.02	<2	18
L42+00N 59+50E	<2	27	14	32	<.3	4	1	175	3.56	19	<5	<2	<2	9	.4	<2	2	160	.09	.007	6	17	.37	23	.12	<3	2.64	<.01	.02	<2	7
L42+00N 60+00E	<1	4	<3	24	<.3	3	<1	128	.25	<2	<5	<2	<2	39	.2	<2	<2	5	.18	.021	1	3	.15	18	.01	4	.18	.02	.01	<2	1
L42+00N 60+50E	<1	5	4	29	<.3	5	<1	21	.10	<2	<5	<2	<2	47	.2	<2	<2	1	.41	.024	1	2	.17	17	<.01	3	.08	.03	.02	<2	1
L42+00N 61+00E	2	204	4	111	<.3	9	4	363	4.72	47	<5	<2	2	11	.6	<2	<2	105	.14	.015	7	26	.71	40	.15	<3	3.40	.01	.08	<2	18
L42+00N 61+50E	1	29	<3	22	.4	4	1	70	.22	8	<5	<2	<2	16	.2	<2	<2	24	.20	.029	2	6	.07	9	.03	3	.52	.02	.01	<2	1
L42+00N 62+00E	2	45	22	75	<.3	11	4	312	5.37	51	<5	<2	2	11	.3	<2	2	134	.14	.012	3	40	.51	22	.17	<3	2.99	.01	.01	<2	7
L42+00N 62+50E	1	7	8	17	<.3	2	<1	39	1.88	56	<5	<2	<2	13	.2	<2	<2	19	.09	.049	4	5	.05	17	.02	3	.60	.01	.03	<2	2
L42+00N 63+00E	3	37	18	51	.3	5	2	236	6.53	38	<5	<2	2	11	.6	<2	<2	136	.12	.016	3	36	.40	14	.19	<3	3.63	<.01	.02	<2	10
L42+00N 63+50E	<1	9	5	14	.3	5	<1	42	.59	3	<5	<2	<2	9	<.2	<2	<2	11	.04	.036	2	4	.04	9	.02	<3	.49	.02	.02	<2	<1
L42+00N 64+00E	3	44	9	52	.3	7	4	253	6.51	28	<5	<2	3	9	.5	<2	3	145	.11	.016	4	36	.43	14	.19	<3	3.96	.01	.02	<2	3
L42+00N 64+50E	4	42	3	44	<.3	6	1	230	7.42	20	<5	<2	3	7	.4	<2	<2	172	.07	.016	2	55	.33	13	.23	<3	2.85	.01	.02	<2	2
L42+00N 65+00E	<1	6	<3	22	<.3	3	1	33	.58	2	<5	<2	<2	17	<.2	<2	<2	9	.05	.020	1	4	.11	8	.02	<3	.36	.02	.01	<2	<1
L42+00N 65+50E	<1	4	6	32	<.3	2	<1	13	.13	<2	<5	<2	<2	26	<.2	<2	2	3	.17	.024	1	2	.13	8	.01	<3	.15	.02	.01	<2	1
L42+00N 66+00E	1	4	8	25	<.3	2	<1	9	.10	<2	<5	<2	<2	25	.2	<2	<2	2	.14	.019	<1	1	.13	8	<.01	<3	.09	.03	.01	<2	<1
L42+00N 66+50E	1	6	6	32	<.3	3	<1	53	.17	<2	<5	<2	<2	30	<.2	<2	<2	3	.17	.043	1	2	.15	15	.01	5	.23	.03	.04	<2	1
L42+00N 67+00E	1	5	13	17	.4	3	<1	135	1.19	86	<5	<2	<2	10	<.2	<2	4	33	.07	.018	6	9	.18	12	.02	4	.77	.01	.05	<2	11
RE L42+00N 67+00E	1	5	14	17	.5	4	<1	141	1.23	95	<5	<2	<2	10	.2	<2	<2	35	.07	.020	7	9	.19	20	.02	<3	.80	.01	.05	<2	12
L42+00N 67+50E	1	10	38	26	.3	6	1	171	.67	5	<5	<2	<2	8	<.2	<2	<2	31	.06	.016	5	22	.31	20	.04	<3	1.26	.01	.05	<2	6
L42+00N 68+00E	2	25	20	40	.3	6	2	174	3.72	58	<5	<2	2	10	.4	<2	3	132	.15	.009	5	36	.32	17	.15	<3	2.96	.01	.02	<2	8
L42+00N 68+50E	2	35	24	66	<.3	10	3	263	4.85	88	<5	<2	2	11	<.2	<2	<2	141	.17	.013	5	47	.44	27	.17	3	3.86	.01	.02	<2	11
L42+00N 69+00E	2	33	21	64	<.3	10	5	277	4.50	47	<5	<2	2	10	.9	<2	<2	135	.17	.014	3	45	.45	24	.16	<3	3.80	.01	.02	2	4
L42+00N 69+50E	2	39	21	60	<.3	8	3	275	5.78	71	<5	<2	2	11	.5	<2	<2	153	.16	.011	4	51	.44	27	.19	<3	3.98	.01	.02	2	4
L42+00N 70+00E	3	44	23	61	.3	12	3	263	4.53	44	<5	<2	2	12	<.2	<2	<2	123	.18	.015	5	49	.56	34	.19	<3	4.69	.01	.02	2	7
L41+00N 35+00E	1	6	6	9	<.3	2	1	23	.98	<2	<5	<2	<2	11	<.2	<2	<2	7	.13	.049	1	2	.05	16	.01	3	.18	.02	.02	<2	<1
L41+00N 35+50E	2	18	9	11	<.3	7	1	169	2.60	3	<5	<2	<2	26	<.2	<2	2	69	.41	.038	3	16	.23	18	.06	<3	1.00	.02	.02	<2	<1
L41+00N 36+00E	2	21	5	14	<.3	6	2	150	3.76	<2	<5	<2	<2	22	<.2	<2	<2	107	.22	.016	4	35	.41	26	.07	<3	1.94	.02	.02	<2	4
L41+00N 36+50E	1	4	8	8	<.3	1	1	18	.56	<2	<5	<2	<2	10	<.2	<2	<2	6	.05	.033	1	3	.07	5	.01	3	.19	.02	.02	<2	<1
L41+00N 37+00E	1	4	4	7	<.3	<1	<1	18	2.23	7	<5	<2	<2	11	<.2	<2	<2	3	.07	.047	1	1	.05	4	<.01	<3	.10	.03	.03	<2	<1
L41+00N 37+50E	1	4	6	5	<.3	1	<1	113	1.10	2	5	<2	<2	19	<.2	<2	5	4	.23	.031	1	2	.05	4	.01	<3	.18	.02	.01	<2	<1
L41+00N 38+00E	1	5	12	8	<.3	2	<1	26	.45	<2	<5	<2	<2	24	<.2	<2	<2	2	.21	.053	<1	1	.10	4	<.01	3	.08	.03	.04	<2	<1
STANDARD C/AU-S	20	60	37	120	6.0	63	30	1080	3.95	39	18	8	39	49	17.1	18	21	62	.50	.090	38	57	.86	183	.06	26	1.87	.06	.14	11	46

Sample type: SOIL. Samples beginning 'RE' are Reruns and 'RRE' are Reject Reruns.











SAMPLE#	Mo ppm	Cu ppm	Pb ppm	Zn ppm	Ag ppm	Ni ppm	Co ppm	Mn ppm	Fe %	As ppm	U ppm	Au ppm	Th ppm	Sr ppm	Cd ppm	Sb ppm	Bi ppm	V ppm	Ca %	P %	La ppm	Cr ppm	Mg %	Ba ppm	Ti %	B ppm	Al %	Si %	K %	W ppm	Au* ppb
L40+00N 64+00E	4	61	14	70	<.3	8	4	311	5.49	34	<5	<2	3	18	.5	<2	<2	138	.25	.013	6	38	.68	18	.25	<3	4.20	.01	.02	<2	10
L40+00N 64+50E	2	48	18	52	<.3	9	3	242	2.87	37	<5	<2	2	17	.2	<2	<2	156	.24	.008	7	45	.50	31	.23	<3	4.73	.01	.02	<2	13
L40+00N 65+00E	<1	3	3	21	<.3	1	<1	33	1.49	39	<5	<2	<2	19	.3	<2	<2	3	.30	.031	1	1	.04	8	<.01	<3	.12	.01	.01	<2	1
L40+00N 65+50E	<1	3	<3	47	<.3	1	<1	36	.18	<2	<5	<2	<2	19	<.2	<2	<2	2	.18	.021	1	2	.09	12	<.01	3	.13	.02	.01	<2	<1
RE L40+00N 66+00E	2	5	10	9	<.3	2	<1	44	1.76	117	<5	<2	<2	12	.9	<2	<2	20	.17	.057	4	8	.03	20	.01	<3	.82	.01	.02	<2	4
L40+00N 66+00E	2	5	10	9	<.3	2	<1	44	1.85	125	<5	<2	<2	13	.9	<2	<2	21	.17	.059	4	8	.03	18	.01	<3	.87	.02	.02	<2	5
L40+00N 66+50E	1	23	12	29	.3	3	<1	18	.10	3	<5	<2	<2	11	.5	<2	<2	21	.07	.061	4	19	.06	6	.01	3	.83	.02	.03	<2	3
L40+00N 67+00E	2	52	19	94	<.3	10	3	289	3.91	67	<5	<2	2	16	.5	<2	<2	99	.23	.009	5	40	.48	31	.19	<3	3.79	.01	.02	<2	44
L40+00N 67+50E	3	38	26	68	<.3	7	2	246	5.71	96	<5	<2	3	13	.7	<2	<2	146	.17	.012	3	41	.34	20	.19	3	3.78	.01	.02	<2	22
L40+00N 68+00E	3	36	20	99	<.3	5	2	270	6.33	106	<5	<2	3	13	.4	<2	<2	150	.17	.014	5	41	.38	23	.21	<3	3.19	.01	.02	<2	27
L40+00N 68+50E	4	51	19	99	<.3	10	5	280	4.51	106	<5	<2	2	17	.6	<2	<2	140	.20	.011	4	40	.54	31	.22	4	4.99	.01	.03	<2	16
L40+00N 69+00E	3	34	18	78	<.3	11	3	253	4.03	101	<5	<2	2	17	.5	<2	<2	110	.22	.015	5	41	.44	25	.19	<3	4.62	.01	.02	<2	52
L40+00N 69+50E	3	35	39	73	<.3	7	3	310	6.51	196	<5	<2	4	12	.2	<2	<2	118	.16	.016	6	41	.47	25	.16	<3	4.15	.01	.03	<2	176
L40+00N 70+00E	3	63	28	114	.4	9	4	359	5.23	274	<5	<2	4	15	.7	<2	<2	129	.20	.020	4	49	.61	19	.16	<3	4.82	.01	.03	<2	11

Sample type: SOIL. Samples beginning 'RE' are Reruns and 'RRE' are Reject Reruns.













SAMPLE#	Mo	Cu	Pb	Zn	Ag	Ni	Co	Mn	Fe	As	U	Au	Th	Sr	Cd	Sb	Bi	V	Ca	P	La	Cr	Mg	Ba	Ti	B	Al	Na	K	W	Au*
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%	%	ppm	ppm	%	ppm	%	%	%	%	ppm	ppb	
L44+00N 66+75E	<1	2	<3	21	<.3	1	<1	7	.13	5	<5	<2	<2	25	.2	<2	2	1	.06	.021	1	1	.19	6	<.01	4	.09	.03	.01	<2	<1
L44+00N 67+25E	<1	3	<3	9	<.3	2	<1	5	.05	2	<5	<2	<2	25	.2	<2	3	1	.11	.019	1	1	.13	6	<.01	5	.11	.02	.01	<2	1
L44+00N 67+75E	1	5	5	36	<.3	3	<1	29	.20	8	<5	<2	<2	23	.4	<2	3	5	.13	.028	1	3	.16	6	.01	<3	.34	.02	.02	<2	1
L44+00N 68+25E	1	46	21	59	<.3	12	4	263	1.80	59	<5	<2	2	21	<.2	<2	<2	79	.30	.023	7	46	.54	25	.16	3	5.02	.01	.02	<2	7
L44+00N 68+75E	<1	7	6	20	<.3	3	1	57	.71	7	<5	<2	<2	28	<.2	<2	<2	21	.19	.019	1	8	.17	14	.04	<3	.64	.02	.02	<2	2
L44+00N 69+25E	1	43	14	64	.3	11	4	447	2.08	47	<5	<2	<2	22	.3	<2	4	115	.31	.013	6	42	.43	50	.19	<3	4.90	.02	.02	<2	8
L44+00N 69+75E	2	43	23	64	<.3	12	3	358	4.56	49	<5	<2	3	21	<.2	<2	2	141	.29	.011	5	48	.48	36	.23	<3	4.06	.01	.02	<2	71
L43+00N 35+25E	<1	3	3	5	<.3	1	<1	13	.21	6	<5	<2	<2	23	.2	<2	<2	2	.12	.022	1	1	.11	6	<.01	3	.12	.02	.01	<2	6
L43+00N 35+75E	<1	3	3	7	<.3	1	<1	21	.11	2	<5	<2	<2	37	<.2	<2	<2	2	.12	.023	<1	1	.15	4	<.01	3	.10	.02	.03	<2	3
L43+00N 36+25E	2	90	16	35	<.3	8	3	273	1.31	13	<5	<2	<2	19	<.2	<2	<2	89	.20	.015	7	26	.63	30	.14	<3	3.61	.01	.03	<2	7
L43+00N 36+75E	2	40	10	37	<.3	8	1	208	1.67	19	<5	<2	<2	23	<.2	<2	<2	67	.23	.020	4	24	.40	20	.11	<3	2.47	.02	.02	<2	5
RE L43+00N 43+25E	1	5	14	12	.8	1	1	99	1.37	9	<5	<2	<2	7	<.2	<2	<2	59	.06	.021	4	8	.16	12	.08	<3	1.17	.01	.03	<2	2
L43+00N 37+25E	<1	3	5	8	<.3	<1	<1	37	.09	<2	<5	<2	<2	43	<.2	<2	2	2	.13	.031	1	1	.23	10	<.01	5	.09	.03	.03	<2	<1
L43+00N 37+75E	<1	4	3	11	<.3	1	<1	31	.10	4	<5	<2	<2	46	.3	<2	<2	1	.22	.038	1	1	.20	16	<.01	3	.09	.03	.05	<2	<1
L43+00N 38+25E	1	7	4	8	<.3	1	<1	18	.39	3	<5	<2	<2	25	.4	<2	2	5	.15	.057	1	2	.09	10	<.01	<3	.16	.02	.03	<2	<1
L43+00N 38+75E	1	4	3	5	<.3	2	<1	17	1.11	17	<5	<2	<2	15	.3	<2	2	7	.13	.046	2	2	.04	12	.01	<3	.25	.02	.02	<2	<1
L43+00N 39+25E	1	8	6	9	<.3	3	1	77	.54	9	<5	<2	<2	14	<.2	<2	2	18	.15	.026	2	4	.13	12	.02	3	.57	.02	.01	<2	<1
L43+00N 39+75E	<1	3	6	7	<.3	2	<1	17	.17	4	<5	<2	<2	38	.4	<2	2	2	.34	.031	<1	1	.15	8	<.01	3	.14	.02	.02	<2	<1
L43+00N 40+25E	<1	2	4	6	<.3	1	<1	12	.40	4	<5	<2	<2	13	<.2	<2	<2	1	.07	.039	1	1	.06	8	<.01	<3	.09	.02	.02	<2	<1
L43+00N 40+75E	<1	2	3	5	<.3	1	<1	17	.30	3	5	<2	<2	16	.2	<2	<2	2	.17	.024	1	1	.06	8	<.01	<3	.10	.02	.01	<2	1
L43+00N 41+25E	<1	2	4	6	<.3	1	<1	15	.17	<2	6	<2	<2	17	<.2	<2	2	2	.13	.027	1	1	.09	8	<.01	5	.11	.02	.01	<2	<1
L43+00N 41+75E	<1	1	5	6	<.3	<1	<1	28	.22	<2	<5	<2	<2	23	.3	<2	<2	1	.14	.043	1	1	.11	4	<.01	3	.09	.03	.03	<2	<1
L43+00N 42+25E	<1	4	<3	8	<.3	2	<1	30	.32	3	<5	<2	<2	24	<.2	<2	<2	1	.21	.048	1	1	.11	6	<.01	4	.09	.04	.05	<2	<1
L43+00N 42+75E	<1	4	4	7	<.3	<1	1	28	.39	8	<5	<2	<2	29	.2	<2	2	2	.11	.030	1	1	.11	16	<.01	4	.14	.03	.03	<2	<1
L43+00N 43+25E	1	4	17	12	.8	2	<1	94	1.34	4	<5	<2	<2	6	<.2	<2	2	58	.06	.022	4	7	.16	8	.08	<3	1.16	.01	.03	<2	2
L43+00N 43+75E	2	11	19	21	.6	3	1	143	2.44	15	<5	<2	<2	10	<.2	<2	<2	125	.12	.012	6	21	.30	14	.13	<3	2.50	.01	.02	<2	4
L43+00N 44+25E	2	12	12	22	.4	5	1	152	5.45	16	<5	<2	2	9	<.2	<2	<2	149	.11	.009	5	17	.29	10	.13	<3	2.10	<.01	.02	<2	2
L43+00N 44+75E	3	22	15	33	.8	6	3	219	4.44	10	<5	<2	2	12	<.2	<2	2	132	.15	.012	5	26	.44	18	.18	<3	3.15	.01	.03	<2	4
L43+00N 45+25E	2	16	13	23	.7	3	2	177	3.11	9	<5	<2	<2	10	<.2	<2	<2	116	.10	.014	4	16	.42	12	.14	<3	1.97	.01	.03	<2	2
L43+00N 45+75E	2	48	12	68	.3	10	5	369	5.30	26	<5	<2	2	13	<.2	<2	3	115	.16	.028	6	27	.81	46	.20	<3	4.35	.01	.03	<2	5
L43+00N 46+25E	3	80	20	78	.4	13	5	366	2.96	29	<5	<2	2	17	<.2	<2	<2	113	.23	.024	6	28	.91	41	.16	<3	4.78	.01	.03	<2	14
L43+00N 46+75E	3	67	19	55	<.3	10	4	282	2.99	24	<5	<2	2	12	.2	<2	<2	158	.16	.014	6	34	.69	37	.18	<3	5.47	.01	.03	<2	27
L43+00N 47+25E	3	83	16	64	<.3	12	4	332	2.44	20	5	<2	2	15	<.2	<2	<2	122	.20	.014	5	35	.87	43	.18	<3	5.82	.01	.03	<2	6
L43+00N 47+75E	<1	4	4	7	<.3	2	<1	28	.35	<2	9	<2	<2	20	.2	<2	<2	12	.05	.017	1	3	.11	17	.01	<3	.39	.02	.01	<2	<1
L43+00N 48+25E	<1	3	3	4	<.3	1	1	11	.08	<2	10	<2	<2	14	<.2	<2	<2	3	.09	.016	1	1	.07	6	<.01	<3	.19	.02	.01	<2	<1
STANDARD C/AU-S	20	58	38	121	5.7	67	30	1001	3.93	40	17	7	34	48	18.1	20	19	64	.52	.089	37	56	.88	172	.08	26	1.89	.06	.15	11	48

Sample type: SOIL. Samples beginning 'RE' are Reruns and 'RRE' are Reject Reruns.



SAMPLE#	Mo	Cu	Pb	Zn	Ag	Ni	Co	Mn	Fe	As	U	Au	Th	Sr	Cd	Sb	Bi	V	Ca	P	La	Cr	Mg	Ba	Ti	B	Al	Na	K	W	Au*
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%	%	ppm	ppm	%	ppm	%	%	%	%	%	ppm	ppb
L43+00N 48+75E	<1	4	<3	6	<3	2	<1	14	.09	<2	<5	<2	<2	18	<.2	<2	<2	2	.07	.018	1	2	.10	12	.01	3	.20	.03	.01	<2	3
L43+00N 49+25E	<1	5	<3	7	<3	2	<1	19	.16	6	<5	<2	<2	28	.3	<2	<2	4	.09	.025	1	2	.13	19	<.01	<3	.26	.03	.02	<2	1
L43+00N 49+75E	<1	3	<3	5	.3	2	<1	12	.23	<2	<5	<2	<2	6	.2	<2	<2	4	.03	.039	2	3	.05	7	.01	3	.58	.01	.02	<2	2
L43+00N 50+25E not rec.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
L43+00N 50+75E	<1	3	7	29	<3	<1	<1	19	.09	<2	<5	<2	<2	42	<.2	<2	<2	1	.23	.031	1	1	.27	7	<.01	4	.10	.04	.04	<2	1
L43+00N 51+25E	<1	2	<3	52	<3	1	<1	13	.09	<2	<5	<2	<2	48	.2	<2	.2	1	.11	.026	1	1	.31	5	<.01	4	.10	.03	.02	<2	1
L43+00N 51+75E	1	3	<3	28	<3	1	<1	35	.18	<2	<5	<2	<2	23	<.2	<2	<2	2	.14	.030	1	1	.12	8	.01	<3	.14	.02	.03	<2	<1
L43+00N 52+25E	<1	2	<3	72	<3	1	<1	25	.24	<2	<5	<2	<2	34	.2	<2	<2	3	.26	.033	1	1	.17	7	<.01	3	.18	.03	.02	<2	1
L43+00N 52+75E	3	53	13	75	<3	8	4	333	7.24	25	<5	<2	3	14	.6	<2	<2	136	.15	.018	4	36	.64	28	.23	<3	5.19	.01	.04	<2	4
L43+00N 53+25E	<1	3	6	59	<3	2	<1	19	.17	<2	<5	<2	<2	31	.2	<2	<2	2	.30	.037	1	1	.16	10	<.01	4	.15	.03	.04	<2	1
L43+00N 53+75E	<1	4	6	20	<3	3	<1	15	.27	<2	<5	<2	<2	16	.2	<2	<2	3	.08	.023	1	2	.09	12	.01	3	.20	.02	.02	<2	1
RE L43+00N 52+75E	3	53	22	74	<3	9	5	339	7.26	28	<5	<2	2	14	.5	<2	3	136	.15	.018	4	37	.64	28	.23	<3	5.19	.01	.04	<2	9
L43+00N 54+25E	4	53	12	58	<3	6	3	319	9.21	25	<5	<2	4	13	.4	<2	<2	150	.13	.017	5	48	.69	21	.28	<3	4.38	.01	.04	<2	7
L43+00N 54+75E	1	3	5	49	<3	1	<1	16	.43	<2	<5	<2	<2	16	<.2	<2	<2	5	.12	.033	1	2	.08	10	.01	<3	.23	.02	.01	<2	1
L43+00N 55+25E	3	55	16	67	.7	8	5	370	7.77	30	<5	<2	3	17	.4	3	<2	137	.20	.020	5	40	.76	23	.29	<3	4.12	.01	.04	<2	6
L43+00N 55+75E	3	43	22	58	.6	8	3	260	5.52	31	<5	<2	2	13	.7	2	6	124	.16	.018	6	36	.47	24	.18	<3	4.90	.01	.03	<2	8
L43+00N 56+25E	3	47	21	80	.3	11	5	376	6.94	49	<5	<2	4	16	.4	<2	7	119	.18	.014	6	52	.74	35	.29	<3	4.01	.01	.03	<2	6
L43+00N 56+75E	2	13	19	17	.9	3	<1	126	5.06	7	<5	<2	2	10	.4	<2	2	134	.10	.008	7	21	.18	17	.24	<3	1.55	.01	.03	<2	6
L43+00N 57+25E	<1	2	3	46	<3	1	<1	13	.41	<2	<5	<2	<2	41	.3	<2	<2	2	.07	.036	<1	1	.23	17	<.01	5	.10	.03	.02	<2	2
L43+00N 57+75E	1	3	3	33	<3	1	1	127	.34	<2	<5	<2	<2	27	<.2	<2	2	2	.22	.044	1	1	.09	7	<.01	3	.09	.02	.03	<2	1
L43+00N 58+25E	1	5	<3	22	<3	2	1	43	.20	4	<5	<2	<2	32	.2	<2	<2	6	.07	.034	2	4	.16	12	.02	3	.30	.03	.03	<2	1
L43+00N 58+75E	1	6	7	23	<3	3	<1	81	1.56	24	<5	<2	<2	24	.3	<2	<2	26	.24	.061	3	7	.07	21	.03	<3	.66	.02	.04	<2	4
L43+00N 59+25E	3	83	24	76	<3	6	2	258	9.18	78	<5	<2	5	10	.9	2	2	170	.12	.020	5	48	.48	19	.25	<3	4.67	.01	.04	<2	30
L43+00N 59+75E	<1	3	<3	24	<3	1	<1	23	.16	<2	<5	<2	<2	42	.2	<2	<2	4	.04	.031	1	3	.33	17	.01	3	.22	.03	.04	<2	3
L43+00N 60+25E	2	28	24	50	<3	4	2	169	2.65	35	<5	<2	2	15	.2	<2	2	115	.16	.009	8	34	.30	21	.19	<3	3.86	.02	.03	<2	13
L43+00N 60+75E	3	16	31	40	<3	4	2	223	2.63	27	<5	<2	2	16	.5	<2	<2	109	.18	.008	8	28	.40	21	.21	<3	3.31	.02	.03	<2	12
L43+00N 61+25E	1	3	12	8	<3	1	1	83	.39	<2	<5	<2	<2	3	<.2	2	<2	22	.02	.004	14	4	.10	19	.02	3	1.18	.01	.05	<2	8
L43+00N 61+75E	5	14	11	47	<3	1	2	362	11.61	63	<5	<2	4	9	.7	<2	<2	166	.11	.015	5	45	.33	16	.24	<3	4.59	.01	.03	<2	22
L43+00N 62+25E not rec.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
L43+00N 62+75E	2	11	14	17	.4	<1	1	137	1.99	5	<5	<2	2	10	.4	<2	<2	83	.11	.006	9	23	.21	14	.12	<3	2.68	.01	.02	<2	3
L43+00N 63+25E	2	18	22	35	.4	3	2	150	2.70	41	<5	<2	<2	10	.2	<2	<2	136	.12	.012	7	27	.25	23	.21	<3	2.66	.01	.02	<2	<1
L43+00N 63+25E dup.	<1	3	<3	65	<3	2	<1	32	.24	<2	<5	<2	<2	21	.2	<2	<2	2	.14	.033	1	1	.10	7	.01	<3	.13	.03	.02	<2	1
L43+00N 63+75E	1	3	3	39	<3	<1	<1	19	.19	<2	<5	<2	<2	19	.2	<2	<2	4	.05	.030	1	2	.10	14	.01	3	.21	.02	.02	<2	<1
L43+00N 64+25E	1	3	8	22	<3	1	<1	30	3.20	49	<5	<2	<2	8	<.2	<2	<2	36	.07	.037	4	10	.04	16	.04	<3	.94	.02	.03	<2	30
L43+00N 64+75E	3	65	12	91	<3	17	3	289	5.99	60	<5	<2	3	12	.5	<2	<2	108	.13	.011	3	106	.57	23	.23	<3	8.17	.01	.02	<2	7
STANDARD C/AU-S	22	59	35	134	6.3	68	33	1031	4.35	39	18	7	36	53	17.8	15	24	56	.49	.088	41	63	.97	190	.09	26	2.03	.07	.16	11	47

Sample type: SOIL. Samples beginning 'RE' are Reruns and 'RRE' are Reject Reruns.



Kamaka Resources Ltd. PROJECT KNOB HILL FILE # 95-4967



SAMPLE#	Mo ppm	Cu ppm	Pb ppm	Zn ppm	Ag ppm	Ni ppm	Co ppm	Mn ppm	Fe %	As ppm	U ppm	Au ppm	Th ppm	Sr ppm	Cd ppm	Sb ppm	Bi ppm	V ppm	Ca %	P %	La ppm	Cr ppm	Mg %	Ba ppm	Ti %	B ppm	Al %	Na %	K %	W ppm	Au* ppb
L43+00N 65+25E	3	30	18	51	.3	8	2	282	6.81	29	<5	<2	3	7	.7	2	3	158	.10	.015	4	59	.51	21	.22	<3	4.48	.01	.04	<2	4
L43+00N 65+75E	<1	2	<3	35	<.3	1	<1	26	.21	<2	<5	<2	<2	37	<.2	<2	3	5	.31	.027	<1	3	.23	4	<.01	<3	.17	.02	.01	<2	<1
L43+00N 66+25E	<1	2	<3	20	<.3	1	<1	12	.11	<2	<5	<2	<2	32	<.2	<2	<2	2	.31	.020	<1	1	.15	7	<.01	3	.11	.02	.01	<2	<1
L43+00N 66+75E	7	42	21	71	.4	9	3	234	2.20	70	<5	<2	<2	17	.5	<2	<2	119	.25	.017	5	40	.43	23	.20	<3	4.61	.01	.03	<2	6
L43+00N 67+25E	2	13	38	29	<.3	7	2	233	3.50	64	<5	<2	<2	20	1.1	<2	<2	109	.32	.006	6	30	.39	25	.15	<3	2.56	.02	.02	<2	5
L43+00N 67+75E	1	3	3	32	<.3	1	<1	45	.25	.5	<5	<2	<2	19	<.2	<2	<2	8	.23	.029	1	3	.09	9	.01	<3	.23	.02	.01	<2	<1
L43+00N 68+25E	<1	2	<3	27	<.3	2	<1	28	.10	3	<5	<2	<2	13	.3	<2	<2	8	.05	.023	1	3	.07	11	.01	<3	.33	.02	.01	<2	1
L43+00N 68+75E	2	47	16	72	.3	13	6	362	5.05	56	<5	<2	2	23	.6	<2	3	135	.32	.013	5	47	.54	31	.24	<3	4.23	.01	.04	<2	11
L43+00N 69+25E	1	9	27	23	<.3	5	2	177	2.83	23	<5	<2	<2	16	.7	<2	2	126	.20	.006	6	25	.17	17	.23	<3	1.77	.01	.03	<2	9
L43+00N 69+75E	3	35	26	44	.6	12	3	275	4.02	41	<5	<2	2	16	.5	2	<2	150	.23	.011	7	55	.49	21	.22	3	3.60	.01	.03	<2	26
L42+00N 47+75E	1	31	21	50	.3	6	4	288	4.59	20	<5	<2	2	17	.8	2	<2	130	.25	.015	6	30	.51	19	.27	<3	3.48	.01	.03	<2	4
RE L42+00N 47+75E	2	34	19	52	<.3	6	4	301	4.75	14	<5	<2	2	18	.5	<2	3	134	.26	.015	6	30	.53	17	.28	<3	3.63	.01	.03	<2	4
L42+00N 48+25E	1	41	21	63	<.3	8	5	377	7.18	20	<5	<2	3	16	.7	<2	<2	153	.22	.014	5	37	.60	21	.29	<3	3.49	.01	.03	<2	5
L42+00N 48+75E	2	37	14	69	<.3	11	6	398	6.48	18	<5	<2	2	17	.9	<2	<2	133	.25	.020	5	34	.68	25	.28	<3	4.05	.02	.04	<2	3
L42+00N 49+25E	2	47	11	61	<.3	10	3	346	5.52	17	<5	<2	2	16	.8	2	<2	117	.24	.015	6	36	.63	26	.25	<3	4.22	.01	.03	<2	11
L42+00N 49+75E	<1	1	<3	12	<.3	1	<1	21	.23	<2	5	<2	<2	27	.2	<2	<2	4	.03	.041	<1	2	.21	5	<.01	<3	.17	.03	.04	<2	<1
L42+00N 50+25E	<1	1	<3	10	<.3	<1	<1	10	.05	2	<5	<2	<2	45	<.2	<2	<2	1	.11	.033	<1	1	.25	7	<.01	3	.05	.03	.05	<2	<1
L42+00N 50+75E	<1	2	<3	19	<.3	2	<1	8	.14	<2	<5	<2	<2	17	<.2	<2	<2	2	.07	.027	1	1	.14	7	<.01	3	.11	.03	.02	<2	1
L42+00N 51+25E	<1	3	<3	37	<.3	1	<1	27	.24	<2	5	<2	<2	20	<.2	<2	<2	6	.09	.020	1	3	.15	9	.01	3	.24	.02	.01	<2	<1
L42+00N 51+75E	2	27	14	52	.3	6	4	310	5.52	19	<5	<2	3	15	1.3	3	<2	138	.20	.010	6	26	.46	26	.25	<3	2.98	.01	.04	<2	19
L42+00N 52+25E	<1	3	<3	23	<.3	2	<1	27	.25	<2	<5	<2	<2	32	<.2	<2	<2	6	.34	.023	1	3	.15	6	<.01	4	.22	.02	.02	<2	1
L42+00N 52+75E	2	50	17	66	<.3	10	4	365	4.07	15	<5	<2	2	19	.6	<2	<2	102	.29	.014	4	36	.57	30	.22	<3	4.60	.02	.03	<2	6
L42+00N 53+25E	2	25	14	39	<.3	4	2	293	6.74	19	<5	<2	2	14	.7	<2	<2	153	.19	.008	5	37	.38	22	.24	<3	3.32	.01	.03	<2	4
L42+00N 53+75E	2	15	14	29	.3	3	2	247	4.62	10	<5	<2	<2	14	.3	<2	2	140	.18	.010	7	18	.27	12	.19	<3	2.52	.01	.04	<2	5
L42+00N 54+25E	3	39	14	50	<.3	12	3	316	4.55	11	<5	<2	2	20	.7	<2	<2	107	.33	.019	6	42	.54	33	.21	<3	4.63	.02	.03	<2	3
L42+00N 54+75E	2	52	13	83	<.3	10	4	398	4.77	32	<5	<2	2	17	.7	<2	<2	108	.25	.018	5	32	.59	43	.20	<3	4.44	.02	.05	<2	34
L42+00N 55+25E	2	52	13	84	.3	8	5	392	5.42	18	<5	<2	2	15	.8	<2	<2	115	.21	.021	5	27	.59	35	.15	<3	5.37	.01	.03	<2	15
L42+00N 55+75E	3	43	15	71	.5	10	5	412	5.37	20	<5	<2	2	20	.7	<2	2	124	.29	.014	7	33	.69	32	.22	<3	3.63	.01	.04	<2	6
L42+00N 56+25E	2	39	18	62	.6	8	4	359	6.19	25	<5	<2	3	18	.7	2	<2	134	.25	.012	7	34	.54	27	.24	<3	2.98	.01	.04	<2	6
L42+00N 56+75E	3	46	18	65	.5	8	5	421	5.37	18	<5	<2	2	18	.7	3	2	113	.23	.018	5	33	.70	29	.22	3	4.81	.02	.04	<2	4
L42+00N 57+25E	2	40	17	52	<.3	9	3	324	4.68	29	<5	<2	2	17	.8	<2	2	120	.23	.013	5	31	.45	27	.24	<3	4.84	.01	.04	<2	6
L42+00N 57+75E	<1	4	<3	22	<.3	2	<1	86	1.50	7	5	<2	<2	28	<.2	<2	<2	6	.40	.039	1	2	.05	10	<.01	3	.24	.02	.02	<2	1
L42+00N 58+25E	3	38	8	32	<.3	5	3	248	4.83	16	<5	<2	2	12	.5	2	2	104	.15	.013	6	27	.37	21	.18	<3	3.17	.01	.04	<2	8
L42+00N 58+75E	2	54	18	61	<.3	10	4	330	3.97	41	<5	<2	<2	20	.6	<2	<2	107	.31	.011	6	30	.47	31	.22	<3	3.86	.02	.03	<2	8
L42+00N 59+25E	<1	5	3	74	<.3	4	<1	49	.80	6	<5	<2	<2	10	.2	<2	2	5	.10	.047	2	2	.05	10	.01	<3	.23	.02	.03	<2	<1
STANDARD C/AU-S	20	58	35	123	5.6	69	31	1080	3.94	36	17	7	34	50	17.7	20	23	59	.55	.087	39	59	.90	180	.09	26	1.98	.06	.17	11	47

Sample type: SOIL. Samples beginning 'RE' are Reruns and 'RRE' are Reject Reruns.



SAMPLE#	Mo	Cu	Pb	Zn	Ag	Ni	Co	Mn	Fe	As	U	Au	Th	Sr	Cd	Sb	Bi	V	Ca	P	La	Cr	Mg	Ba	Ti	B	Al	Na	K	W	Au*
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%	%	ppm	ppm	%	ppm	%	ppm	%	%	%	ppm	ppb
L42+00N 59+75E	<1	3	4	48	<.3	1	<1	90	.33	5	<5	<2	<2	38	.2	<2	<2	5	.39	.022	1	1	.10	20	.01	3	.19	.02	.01	<2	3
L42+00N 60+25E	<1	4	3	53	<.3	1	<1	98	.35	5	<5	<2	<2	32	.4	<2	<2	4	.26	.038	1	2	.14	14	.01	4	.14	.03	.06	<2	2
L42+00N 60+75E	3	54	12	78	.3	7	2	361	6.25	51	<5	<2	3	15	.2	<2	<2	146	.20	.015	5	43	.55	27	.26	<3	3.72	.01	.03	<2	9
L42+00N 61+25E	1	31	14	62	<.3	8	3	316	2.15	39	<5	<2	<2	14	.4	<2	<2	94	.26	.013	8	32	.50	33	.14	<3	3.59	.02	.03	<2	31
L42+00N 61+75E	1	11	16	34	<.3	5	2	224	1.62	21	<5	<2	<2	14	.2	<2	<2	114	.22	.010	7	28	.33	19	.22	4	3.01	.01	.03	<2	9
L42+00N 62+25E	1	5	7	16	.4	3	<1	44	.57	13	<5	<2	<2	8	.3	<2	<2	17	.07	.032	5	8	.05	14	.02	3	1.07	.01	.02	<2	6
L42+00N 62+75E	2	15	14	31	<.3	5	1	179	2.26	20	<5	<2	<2	12	.2	<2	2	89	.14	.014	7	21	.28	17	.16	<3	2.55	.01	.03	<2	41
L42+00N 63+25E	2	42	20	83	<.3	9	2	351	5.77	66	<5	<2	3	14	<.2	<2	<2	129	.22	.012	7	42	.54	24	.24	<3	3.94	.02	.03	<2	14
L42+00N 63+75E	4	56	15	52	.4	7	2	241	5.90	38	<5	<2	3	12	.2	<2	<2	160	.14	.020	3	37	.35	26	.21	<3	5.84	.01	.03	<2	5
L42+00N 64+25E	2	25	14	54	<.3	5	1	220	7.12	74	<5	<2	3	10	<.2	<2	<2	167	.15	.009	6	40	.32	20	.21	<3	3.32	.01	.02	<2	13
L42+00N 64+75E	3	63	18	98	<.3	13	2	333	6.11	57	<5	<2	3	14	.4	<2	3	138	.20	.019	3	66	.55	22	.30	<3	5.89	.01	.02	<2	13
RE L42+00N 64+75E	3	66	20	103	<.3	10	3	347	6.33	64	<5	<2	3	14	.5	<2	<2	143	.21	.020	3	69	.57	24	.31	<3	6.13	.02	.02	<2	22
L42+00N 65+25E	<1	4	<3	38	<.3	1	<1	19	.25	<2	<5	<2	<2	26	<.2	<2	2	4	.10	.026	1	2	.15	8	.01	<3	.22	.03	.02	<2	1
L42+00N 65+75E	<1	2	3	33	<.3	<1	<1	18	.12	<2	<5	<2	<2	34	<.2	<2	<2	3	.18	.023	<1	2	.20	8	<.01	3	.14	.03	.01	<2	<1
L42+00N 66+25E	1	6	<3	20	<.3	1	<1	21	.17	8	<5	<2	<2	13	<.2	<2	<2	3	.08	.022	1	1	.07	16	<.01	<3	.12	.02	.01	<2	<1
L42+00N 66+75E	4	4	28	18	.6	2	3	652	3.30	592	<5	<2	2	11	.6	<2	2	66	.11	.012	8	10	.08	22	.04	<3	1.18	.01	.04	<2	4
L42+00N 67+25E	<1	5	9	30	.4	4	1	216	.41	15	<5	<2	<2	18	.2	<2	<2	16	.27	.032	2	7	.14	14	.03	<3	.68	.02	.03	<2	7
L42+00N 67+75E	2	2	11	10	<.3	1	<1	83	.90	8	<5	<2	<2	7	.3	2	<2	49	.12	.014	4	5	.13	16	.09	3	.68	.01	.04	<2	1
L42+00N 68+25E	3	46	41	92	.3	11	3	334	6.48	89	<5	<2	3	17	<.2	<2	3	156	.25	.013	5	54	.53	32	.23	<3	5.07	.02	.03	<2	13
L42+00N 68+75E	<1	4	5	29	.3	3	3	253	1.80	13	<5	<2	<2	7	<.2	<2	<2	48	.06	.020	3	7	.54	13	.03	<3	1.17	.02	.02	<2	1
L42+00N 69+25E	3	52	13	67	.5	13	3	280	6.32	53	<5	<2	4	15	.5	<2	<2	160	.20	.018	3	67	.47	28	.23	3	4.97	.02	.02	<2	5
L42+00N 69+75E	4	21	25	36	.4	7	1	196	6.16	54	<5	<2	3	14	<.2	<2	<2	171	.19	.011	6	42	.30	24	.21	<3	3.18	.01	.03	<2	5
L41+00N 35+25E	1	4	4	8	<.3	3	<1	39	.76	<2	<5	<2	<2	11	<.2	<2	<2	16	.12	.030	1	7	.09	11	.02	<3	.31	.02	.02	<2	1
L41+00N 35+75E	1	5	3	5	<.3	3	<1	26	3.32	<2	<5	<2	<2	13	.2	<2	<2	11	.15	.044	2	4	.04	5	.01	3	.35	.02	.02	<2	<1
L41+00N 36+25E	1	16	5	14	<.3	6	1	110	1.69	<2	<5	<2	<2	37	.3	<2	<2	62	.18	.030	3	23	.42	19	.08	<3	1.17	.03	.03	<2	2
L41+00N 36+75E	<1	4	<3	5	<.3	3	1	17	.65	3	<5	<2	<2	11	.2	<2	2	9	.06	.021	2	3	.06	17	.01	<3	.35	.02	.01	<2	<1
L41+00N 37+25E	<1	3	<3	5	<.3	1	1	45	.86	4	<5	<2	<2	13	<.2	<2	<2	9	.11	.032	2	3	.04	9	.02	<3	.31	.01	.01	<2	1
L41+00N 37+75E	<1	3	<3	5	<.3	2	<1	28	.42	<2	<5	<2	<2	11	<.2	<2	<2	2	.09	.034	1	2	.05	5	<.01	<3	.09	.02	.02	<2	1
L41+00N 38+25E	<1	3	<3	6	<.3	1	1	12	.14	<2	<5	<2	<2	14	.2	<2	<2	2	.05	.029	1	1	.09	9	<.01	4	.10	.02	.02	<2	<1
L41+00N 38+75E	<1	3	3	4	<.3	<1	<1	9	.16	<2	<5	<2	<2	15	.2	<2	<2	1	.13	.022	1	1	.07	7	<.01	3	.10	.02	.01	<2	<1
L41+00N 39+25E	<1	3	<3	4	<.3	1	<1	9	.17	<2	<5	<2	<2	13	<.2	<2	<2	2	.09	.030	1	1	.07	7	<.01	<3	.11	.02	.02	<2	<1
L41+00N 39+75E	<1	3	<3	4	<.3	1	<1	8	.12	<2	<5	<2	<2	25	<.2	<2	<2	2	.07	.017	1	1	.16	9	<.01	4	.12	.02	.01	<2	<1
L41+00N 40+25E	<1	10	<3	5	<.3	2	1	12	.28	5	<5	<2	<2	18	.2	<2	<2	17	.14	.033	2	3	.07	7	.01	<3	.35	.02	.01	<2	<1
L41+00N 40+75E	<1	3	<3	6	<.3	<1	<1	16	.15	<2	<5	<2	<2	17	<.2	<2	<2	2	.08	.017	1	1	.08	5	<.01	<3	.12	.02	.01	<2	<1
L41+00N 41+25E	<1	3	3	7	<.3	1	1	16	.13	3	<5	<2	<2	23	.2	<2	<2	3	.21	.022	1	1	.10	13	<.01	3	.11	.03	.03	<2	<1
STANDARD C/AU-S	21	57	42	122	6.4	68	30	1027	3.89	36	18	7	34	49	16.1	16	23	65	.52	.090	37	58	.89	177	.08	23	1.89	.06	.15	10	45

Sample type: SOIL. Samples beginning 'RE' are Reruns and 'RRE' are Reject Reruns.



SAMPLE#	Mo ppm	Cu ppm	Pb ppm	Zn ppm	Ag ppm	Ni ppm	Co ppm	Mn ppm	Fe %	As ppm	U ppm	Au ppm	Th ppm	Sr ppm	Cd ppm	Sb ppm	Bi ppm	V ppm	Ca %	P %	La ppm	Cr ppm	Mg %	Ba ppm	Ti %	B ppm	Al %	Na %	K %	W ppm	Au* ppb
L41+00N 41+75E	<1	4	3	6	<.3	2	1	51	.24	<2	<5	<2	<2	19	.2	<2	<2	3	.15	.026	1	2	.07	9	<.01	4	.18	.02	.03	<2	1
L41+00N 42+25E	<1	3	<3	5	<.3	2	1	19	.18	<2	<5	<2	<2	35	<.2	<2	<2	1	.25	.035	<1	1	.16	10	<.01	5	.06	.02	.02	<2	<1
L41+00N 42+75E	<1	3	<3	4	<.3	1	<1	99	.62	<2	<5	<2	<2	33	<.2	<2	<2	1	.27	.045	<1	1	.07	5	<.01	3	.05	.02	.02	<2	1
L41+00N 43+25E	2	32	12	65	.4	8	5	346	4.12	35	<5	<2	2	13	.5	<2	<2	119	.17	.013	6	28	.82	40	.16	<3	3.86	.01	.03	<2	29
L41+00N 43+75E	2	28	11	30	.3	4	2	172	4.93	23	<5	<2	2	14	.8	<2	<2	142	.15	.012	4	31	.29	17	.19	<3	3.35	.01	.03	<2	4
L41+00N 44+25E	2	45	18	57	.4	8	5	323	5.17	27	<5	<2	2	14	.6	<2	<2	119	.17	.017	5	29	.70	27	.18	3	3.45	.01	.04	<2	6
L41+00N 44+75E	1	24	13	27	<.3	5	2	196	1.25	13	<5	<2	<2	11	.3	2	<2	97	.13	.011	7	25	.45	27	.10	<3	2.36	.01	.03	<2	2
L41+00N 45+25E	2	35	9	52	.4	8	5	305	5.38	27	<5	<2	2	14	.4	2	3	146	.17	.017	5	25	.69	24	.19	<3	3.03	.01	.03	<2	3
L41+00N 45+75E	1	19	14	25	.4	2	1	196	2.94	9	<5	<2	<2	12	.5	<2	<2	128	.16	.012	6	16	.41	17	.18	<3	2.80	.01	.03	<2	1
L41+00N 46+25E	2	57	17	68	.4	8	5	347	5.24	33	<5	<2	2	15	.4	3	4	123	.18	.024	6	32	.71	41	.20	<3	4.59	.01	.03	<2	5
L41+00N 46+75E	3	55	19	74	<.3	10	6	370	5.79	30	<5	<2	3	15	.9	<2	<2	131	.19	.024	6	39	.72	28	.24	<3	4.18	.01	.03	<2	5
L41+00N 47+25E	<1	5	4	9	<.3	<1	<1	36	.71	2	<5	<2	<2	16	<.2	<2	<2	4	.12	.049	1	2	.08	11	<.01	<3	.18	.02	.02	<2	1
L41+00N 47+75E	<1	5	<3	8	<.3	1	<1	20	.30	<2	<5	<2	<2	11	.3	<2	<2	2	.08	.052	1	1	.08	7	<.01	3	.11	.02	.02	<2	1
L41+00N 48+25E	2	53	16	78	<.3	9	6	354	5.32	30	<5	<2	2	17	.2	<2	<2	109	.22	.018	5	32	.68	32	.22	<3	4.36	.01	.03	<2	5
L41+00N 48+75E	<1	5	3	7	<.3	1	<1	76	1.36	6	<5	<2	<2	33	.2	<2	<2	4	.52	.040	1	2	.08	8	.01	<3	.19	.02	.03	<2	1
L41+00N 49+25E	<1	3	6	7	<.3	3	<1	24	.34	<2	<5	<2	<2	27	<.2	<2	<2	1	.24	.044	<1	2	.12	7	<.01	3	.09	.02	.03	<2	<1
L41+00N 49+75E	1	45	19	76	<.3	9	6	341	5.04	38	<5	<2	3	13	.7	<2	<2	113	.18	.017	4	42	.61	26	.22	<3	4.47	.01	.03	<2	9
L41+00N 50+25E	<1	5	5	26	<.3	1	1	28	.47	<2	<5	<2	<2	32	<.2	<2	<2	3	.24	.033	1	2	.16	10	<.01	4	.14	.03	.03	<2	<1
L41+00N 50+75E	<1	3	<3	9	<.3	2	1	26	.10	<2	<5	<2	<2	48	<.2	<2	<2	1	.14	.028	1	2	.18	8	<.01	4	.08	.03	.03	<2	<1
L41+00N 51+25E	<1	3	3	12	<.3	2	<1	24	.10	<2	<5	<2	<2	37	.2	<2	<2	1	.50	.024	<1	1	.20	8	<.01	4	.09	.04	.02	<2	<1
L41+00N 51+75E	<1	3	4	22	<.3	2	1	47	.17	3	<5	<2	<2	19	.3	<2	<2	1	.15	.043	1	1	.13	10	<.01	4	.09	.03	.02	<2	<1
L41+00N 52+25E	<1	3	<3	22	<.3	1	<1	36	.35	5	<5	<2	<2	10	<.2	<2	<2	3	.08	.028	1	2	.06	10	<.01	<3	.16	.02	.02	<2	<1
L41+00N 52+75E	1	28	20	66	<.3	10	5	389	2.67	24	<5	<2	<2	24	.2	2	<2	124	.38	.006	6	34	.79	42	.17	<3	3.15	.02	.02	<2	4
L41+00N 53+25E	1	17	28	43	.3	6	3	231	1.71	27	<5	<2	<2	16	.3	<2	<2	105	.23	.013	7	24	.39	20	.17	3	2.99	.01	.03	<2	10
RE L41+00N 53+75E	3	47	12	68	<.3	9	4	359	5.10	26	<5	<2	3	18	.5	<2	<2	134	.25	.030	4	39	.57	27	.25	<3	4.57	.01	.03	<2	6
L41+00N 53+75E	3	47	14	68	.3	10	5	361	5.09	31	<5	<2	2	18	.3	3	<2	133	.25	.030	4	39	.57	27	.24	<3	4.50	.01	.03	<2	10
L41+00N 54+25E	2	28	18	69	<.3	8	4	285	4.98	24	<5	<2	2	16	.5	2	<2	141	.23	.020	6	32	.43	19	.23	<3	2.87	.01	.03	<2	2
L41+00N 54+75E	1	7	13	17	<.3	4	2	120	1.47	6	<5	<2	<2	9	<.2	<2	<2	53	.10	.009	8	13	.24	31	.06	<3	1.87	.01	.04	<2	1
L41+00N 55+25E	2	8	19	31	<.3	5	1	198	1.29	19	<5	<2	<2	11	.2	<2	<2	66	.14	.009	5	14	.31	19	.14	<3	1.83	.01	.03	<2	218
L41+00N 55+75E	2	11	17	27	<.3	3	2	192	2.57	17	<5	<2	<2	12	.3	2	<2	118	.14	.008	6	18	.27	17	.16	<3	1.86	.01	.03	<2	2
L41+00N 56+25E	2	37	10	49	<.3	9	3	290	1.46	18	<5	<2	<2	19	.4	<2	<2	88	.27	.022	7	26	.56	27	.15	3	3.43	.01	.02	<2	4
L41+00N 56+75E	2	18	11	26	<.3	5	2	155	2.27	13	<5	<2	<2	14	<.2	<2	<2	98	.17	.010	6	17	.25	19	.14	3	2.95	.01	.03	<2	5
L41+00N 57+25E	<1	6	8	15	.3	5	1	126	1.01	9	<5	<2	<2	9	<.2	<2	<2	51	.09	.015	4	15	.27	15	.07	3	1.21	.01	.03	<2	18
L41+00N 57+75E	2	29	16	37	.4	7	2	203	4.49	35	<5	<2	2	14	<.2	<2	<2	123	.19	.013	6	30	.31	21	.20	<3	3.49	.01	.03	<2	8
L41+00N 58+25E	2	43	18	60	<.3	7	4	295	5.39	36	<5	<2	3	16	.4	<2	<2	127	.21	.013	4	34	.47	32	.27	<3	3.44	.01	.03	<2	7
STANDARD C/AU-S	19	56	38	122	5.7	65	30	1017	3.84	41	14	6	34	49	18.0	17	19	63	.51	.090	37	56	.87	184	.08	23	1.86	.06	.15	11	46

Sample type: SOIL. Samples beginning 'RE' are Reruns and 'RRE' are Reject Reruns.



SAMPLE#	Mo ppm	Cu ppm	Pb ppm	Zn ppm	Ag ppm	Ni ppm	Co ppm	Mn ppm	Fe %	As ppm	U ppm	Au ppm	Th ppm	Sr ppm	Cd ppm	Sb ppm	Bi ppm	V ppm	Ca %	P %	La ppm	Cr ppm	Mg %	Ba ppm	Ti %	B ppm	Al %	Na %	K %	W ppm	Au* ppb
L41+00N 58+75E	<1	3	5	20	<.3	2	<1	18	.35	<2	<5	<2	<2	20	.4	<2	<2	5	.18	.036	1	3	.07	5	<.01	3	.18	.03	.02	<2	4
L41+00N 59+25E	2	30	22	45	.8	7	4	244	2.00	11	<5	<2	<2	18	1.2	<2	<2	86	.26	.012	7	25	.57	27	.19	<3	3.75	.01	.03	<2	7
L41+00N 59+75E	2	52	24	69	<.3	8	5	281	4.87	49	<5	<2	2	16	1.2	<2	3	130	.22	.011	5	40	.44	29	.22	<3	4.18	.01	.03	<2	17
L41+00N 60+25E	<1	4	5	17	<.3	<1	1	71	.47	<2	<5	<2	<2	40	.3	<2	2	8	.62	.037	2	4	.09	11	.01	3	.34	.02	.02	<2	2
L41+00N 60+75E	1	15	19	31	.9	2	2	179	1.38	14	<5	<2	<2	9	.5	<2	3	50	.14	.030	6	14	.27	21	.07	<3	1.69	.02	.04	<2	5
L41+00N 61+25E	1	11	9	19	.3	4	2	128	1.58	12	<.5	<2	<2	18	.4	<2	2	53	.17	.029	4	11	.17	13	.08	3	1.15	.02	.03	<2	4
L41+00N 61+75E	3	63	25	59	.3	8	5	263	6.60	43	<.5	<2	3	14	.8	<2	<2	141	.18	.016	4	45	.45	22	.25	<3	4.45	.01	.03	<2	6
L41+00N 62+25E	<1	5	5	13	<.3	1	1	35	2.50	90	<.5	<2	<2	22	.2	<2	<2	7	.29	.049	2	1	.06	17	.01	<3	.27	.02	.03	<2	1
L41+00N 62+75E	2	18	8	32	<.3	4	3	208	4.43	19	<.5	<2	2	14	1.0	2	4	136	.19	.009	8	28	.30	16	.22	<3	2.58	.01	.02	<2	23
L41+00N 63+25E	1	5	8	10	<.3	1	1	46	1.72	18	<.5	<2	<2	14	.3	<2	<2	17	.13	.057	3	6	.06	16	.03	3	.48	.02	.04	<2	3
L41+00N 63+75E	4	47	25	55	.3	6	5	256	6.45	31	<.5	<2	3	16	1.2	<2	<2	158	.20	.019	5	42	.44	26	.27	<3	4.93	.01	.04	<2	8
L41+00N 64+25E	2	36	25	90	.8	10	6	328	3.19	45	<.5	<2	<2	19	.6	<2	<2	99	.27	.011	8	25	.60	28	.21	<3	3.11	.02	.04	<2	56
L41+00N 64+75E	1	11	8	15	.4	4	2	95	.47	<2	<.5	<2	<2	13	.3	<2	2	28	.12	.025	5	17	.15	16	.05	<3	1.73	.01	.03	<2	5
L41+00N 65+25E	3	69	26	104	<.3	14	7	371	4.89	50	<.5	<2	3	19	.9	<2	2	118	.26	.019	4	42	.57	33	.23	<3	5.82	.02	.04	<2	16
L41+00N 65+75E	1	6	12	15	<.3	1	1	172	1.80	8	<.5	<2	<2	9	.4	<2	2	93	.09	.005	7	7	.12	10	.16	<3	1.38	.01	.03	<2	2
L41+00N 66+25E	<1	3	4	19	<.3	2	1	19	.14	<2	<.5	<2	<2	39	.2	<2	<2	4	.36	.026	<1	2	.19	6	<.01	3	.15	.03	.03	<2	<1
L41+00N 66+75E	3	49	26	103	.4	7	4	327	3.42	46	<.5	<2	2	15	.9	<2	2	138	.21	.015	7	31	.74	33	.22	<3	4.67	.01	.03	<2	25
L41+00N 67+25E	<1	1	<3	21	<.3	1	<1	20	.12	<2	<.5	<2	<2	26	.2	<2	<2	3	.14	.030	1	1	.15	7	<.01	<3	.13	.02	.02	<2	1
L41+00N 67+75E	3	3	30	13	.4	1	1	39	3.19	508	<.5	<2	<2	10	.3	<2	2	60	.09	.042	7	13	.05	25	.01	<3	1.46	.01	.04	<2	3
L41+00N 68+25E	1	9	9	32	.6	<1	1	20	.44	21	<.5	<2	<2	9	.3	<2	2	6	.07	.042	2	4	.05	15	.01	<3	.36	.02	.02	<2	2
RE L41+00N 68+25E	1	9	7	32	.7	<1	1	20	.43	17	<.5	<2	<2	9	.3	<2	<2	6	.07	.042	2	4	.05	15	.01	<3	.36	.02	.02	<2	1
L41+00N 68+75E	1	5	5	18	<.3	3	1	28	.21	<2	<.5	<2	<2	22	.3	<2	<2	4	.12	.035	1	2	.09	23	<.01	3	.30	.02	.02	<2	3
L41+00N 69+25E	3	30	25	62	<.3	6	3	212	6.02	167	<.5	<2	3	13	.9	<2	3	138	.16	.011	5	49	.37	21	.20	<3	2.78	.01	.03	<2	11
L41+00N 69+75E	2	5	18	14	<.3	2	1	107	4.12	47	<.5	<2	<2	8	.7	<2	<2	133	.09	.008	7	17	.10	13	.12	<3	1.72	.01	.02	<2	7
L40+00N 35+25E	1	5	4	8	<.3	4	1	59	.52	<2	<.5	<2	<2	10	.3	<2	<2	31	.09	.036	3	15	.16	11	.07	<3	.93	.02	.03	<2	3
L40+00N 35+75E	6	49	12	27	<.3	10	5	208	5.11	5	<.5	<2	2	25	1.2	<2	<2	128	.26	.021	5	45	.52	25	.27	<3	3.94	.02	.03	<2	7
L40+00N 36+25E	5	68	7	30	<.3	11	6	219	6.15	6	<.5	<2	3	26	1.1	<2	2	148	.30	.021	4	59	.50	20	.29	<3	4.37	.01	.03	<2	6
L40+00N 36+75E	3	29	11	26	<.3	10	4	193	2.67	2	<.5	<2	<2	26	1.1	<2	<2	158	.35	.014	7	57	.45	18	.25	<3	4.03	.02	.02	<2	6
L40+00N 37+25E	6	52	13	31	<.3	9	4	207	5.66	5	<.5	<2	2	30	1.2	<2	2	111	.26	.028	6	46	.54	34	.26	<3	5.55	.02	.03	<2	14
L40+00N 37+75E	6	46	10	31	<.3	11	5	229	3.13	5	<.5	<2	2	33	1.1	<2	2	126	.31	.021	6	48	.66	34	.26	<3	4.88	.02	.03	<2	30
L40+00N 38+25E	<1	3	<3	5	<.3	2	<1	22	.41	<2	<.5	<2	<2	15	<.2	<2	<2	5	.08	.029	1	3	.09	8	<.01	<3	.19	.02	.02	<2	1
L40+00N 38+75E	<1	3	4	5	<.3	2	<1	28	.29	<2	<.5	<2	<2	28	<.2	<2	<2	2	.21	.033	1	2	.13	10	<.01	<3	.10	.03	.02	<2	<1
L40+00N 39+25E	<1	4	3	7	<.3	2	1	24	.52	<2	<.5	<2	<2	23	<.2	<2	<2	2	.12	.036	1	1	.10	12	<.01	<3	.11	.02	.03	<2	<1
L40+00N 39+75E	<1	3	4	6	<.3	3	<1	17	.12	<2	<.5	<2	<2	30	.2	<2	<2	2	.06	.026	1	1	.16	12	<.01	<3	.11	.03	.03	<2	<1
L40+00N 40+25E	<1	4	<3	4	<.3	3	1	7	.10	2	<.5	<2	<2	15	<.2	<2	<2	2	.04	.021	1	2	.12	10	<.01	3	.12	.03	.01	<2	<1
STANDARD C/AU-S	20	55	39	130	6.1	65	32	1034	4.11	35	18	7	37	53	17.9	18	18	65	.57	.091	40	61	.93	192	.10	24	2.11	.06	.16	10	46

Sample type: SOIL. Samples beginning 'RE' are Reruns and 'RRE' are Reject Reruns.



ACRE ANALYTICAL



ACRE ANALYTICAL

SAMPLE#	Mo ppm	Cu ppm	Pb ppm	Zn ppm	Ag ppm	Ni ppm	Co ppm	Mn ppm	Fe %	As ppm	U ppm	Au ppm	Th ppm	Sr ppm	Cd ppm	Sb ppm	Bi ppm	V ppm	Ca %	P %	La ppm	Cr ppm	Mg %	Ba ppm	Ti %	B ppm	Al %	Na %	K %	W ppm	Au* ppb
L40+00N 40+75E	<1	3	6	4	<.3	2	<1	7	.10	<2	<5	<2	2	14	<.2	<2	<2	8	.07	.026	1	3	.05	12	.01	<3	.66	.02	.01	<2	3
L40+00N 41+25E	<1	2	<3	6	<.3	2	<1	11	.13	<2	<5	<2	<2	25	.2	<2	<2	3	.12	.026	1	1	.12	8	<.01	3	.15	.03	.02	<2	2
L40+00N 41+75E	<1	2	<3	7	<.3	2	<1	16	.19	<2	<5	<2	<2	15	.3	<2	<2	4	.08	.030	1	1	.07	6	<.01	<3	.15	.02	.02	<2	<1
L40+00N 42+25E	1	26	20	41	<.3	10	3	258	2.15	24	<5	<2	<2	28	.7	<2	<2	104	.38	.009	7	28	.55	55	.14	<3	3.74	.02	.04	<2	9
L40+00N 42+75E	1	7	5	9	.4	2	<1	29	2.31	13	<5	<2	<2	12	.4	<2	2	18	.11	.060	2	4	.07	16	.02	<3	.42	.02	.03	<2	1
L40+00N 43+25E	1	5	<3	9	.3	4	1	48	.88	9	<5	<2	<2	28	.6	2	<2	7	.29	.042	2	3	.06	19	<.01	<3	.28	.02	.02	<2	1
L40+00N 43+75E	2	9	19	13	<.3	3	1	107	.76	7	<5	<2	<2	9	.3	2	<2	52	.11	.014	5	11	.15	19	.13	3	1.16	.01	.04	<2	3
L40+00N 44+25E	<1	7	5	7	.4	3	1	27	.36	6	<5	<2	<2	9	.3	<2	<2	17	.07	.037	2	8	.06	16	.03	<3	.97	.01	.03	<2	4
L40+00N 44+75E	3	43	20	56	.3	10	3	285	6.34	31	<5	<2	3	15	.6	<2	<2	104	.20	.015	6	39	.65	34	.17	<3	4.56	.01	.03	<2	8
RE L40+00N 44+75E	3	46	16	58	.3	10	2	296	6.57	30	<5	<2	3	16	.9	<2	<2	108	.20	.016	6	41	.67	36	.18	4	4.77	.01	.03	<2	7
L40+00N 45+25E	2	13	17	28	<.3	3	1	173	3.02	9	<5	<2	<2	11	.3	<2	6	95	.13	.006	5	19	.30	17	.11	<3	2.62	.01	.02	<2	7
L40+00N 45+75E	2	29	21	48	<.3	7	2	269	4.21	17	<5	<2	2	18	.4	<2	<2	117	.25	.015	7	32	.56	29	.20	<3	4.15	.01	.03	<2	7
L40+00N 46+25E	1	5	10	14	<.3	4	1	87	1.22	6	<5	<2	<2	9	.3	<2	<2	42	.10	.031	2	10	.17	16	.06	<3	.92	.02	.03	<2	4
L40+00N 46+75E	<1	2	3	6	<.3	2	<1	32	.73	2	<5	<2	<2	19	.2	<2	<2	6	.12	.028	1	2	.09	8	.01	3	.18	.03	.03	<2	<1
L40+00N 47+25E	<1	5	<3	13	<.3	1	1	239	.11	5	<5	<2	<2	30	.5	<2	<2	4	.18	.039	1	2	.13	12	<.01	4	.14	.03	.04	<2	<1
L40+00N 47+75E	<1	2	<3	5	<.3	2	<1	16	.11	3	<5	<2	<2	16	.2	<2	<2	3	.08	.025	1	2	.06	11	<.01	3	.31	.02	.02	<2	<1
L40+00N 48+25E	<1	2	<3	9	<.3	<1	<1	31	.08	<2	<5	<2	<2	35	.2	<2	<2	1	.13	.028	<1	1	.21	12	<.01	3	.10	.02	.03	<2	<1
L40+00N 48+75E	<1	3	<3	6	<.3	<1	1	11	.10	4	<5	<2	<2	25	.2	<2	<2	3	.08	.022	1	2	.11	16	<.01	4	.15	.03	.01	<2	1
L40+00N 49+25E	<1	3	<3	6	<.3	1	<1	17	.41	2	<5	<2	<2	16	.2	<2	<2	1	.09	.042	1	1	.09	11	<.01	<3	.09	.02	.03	<2	1
L40+00N 49+75E	1	6	5	21	<.3	2	1	140	1.30	4	<5	<2	<2	7	.3	<2	<2	27	.07	.039	2	7	.22	16	.04	<3	.69	.02	.03	<2	1
L40+00N 60+25E	1	6	13	32	<.3	3	2	376	2.17	11	<5	<2	<2	13	.4	<2	<2	84	.15	.011	8	11	.59	20	.13	3	1.78	.01	.05	<2	7
L40+00N 60+75E	3	33	10	64	<.3	6	2	284	6.85	24	<5	<2	3	10	.8	<2	<2	146	.14	.016	5	28	.99	39	.30	<3	6.09	.02	.09	<2	7
L40+00N 61+25E	<1	2	<3	38	<.3	2	<1	27	.37	3	<5	<2	<2	6	<.2	<2	<2	7	.05	.025	1	3	.07	6	.01	<3	.44	.02	.01	<2	<1
L40+00N 61+75E	3	40	19	70	<.3	5	3	262	6.39	22	<5	<2	3	14	.7	<2	<2	140	.17	.013	5	34	.48	23	.20	3	5.29	.01	.03	<2	9
L40+00N 62+25E	3	63	16	108	.3	17	6	352	4.65	51	<5	<2	2	17	.9	<2	<2	114	.22	.018	3	41	.59	34	.22	<3	7.61	.01	.03	<2	8
L40+00N 62+75E	2	61	15	92	<.3	14	5	356	5.20	39	<5	<2	2	20	.8	<2	<2	123	.25	.015	4	48	.62	27	.24	4	7.09	.01	.03	<2	22
L40+00N 63+25E	3	38	20	58	<.3	9	3	262	5.27	29	<5	<2	3	21	.7	<2	2	140	.28	.016	6	47	.47	17	.29	3	4.36	.02	.03	<2	9
L40+00N 63+75E	1	24	26	56	<.3	8	2	235	5.09	65	<5	<2	3	19	.6	2	<2	141	.26	.010	6	45	.31	24	.28	<3	2.97	.01	.03	<2	21
L40+00N 64+25E	2	52	20	66	<.3	7	4	283	4.75	54	<5	<2	2	18	.5	<2	<2	133	.24	.013	4	43	.42	23	.24	<3	4.64	.01	.03	<2	19
L40+00N 64+75E	<1	5	4	46	<.3	2	1	34	.43	6	<5	<2	<2	14	.4	<2	<2	10	.10	.025	1	5	.09	16	.02	3	.33	.02	.02	<2	1
L40+00N 65+25E	<1	5	5	13	1.0	2	<1	128	2.63	136	<5	<2	<2	23	.5	<2	<2	14	.46	.038	4	5	.06	16	.01	<3	.65	.02	.03	<2	1
L40+00N 65+75E	<1	3	<3	17	<.3	2	<1	37	.23	13	<5	<2	<2	13	.2	<2	<2	4	.05	.024	1	2	.08	15	<.01	<3	.23	.02	.01	<2	1
L40+00N 66+25E	<1	4	<3	9	<.3	1	<1	9	.07	2	<5	<2	<2	41	.2	<2	<2	1	.08	.021	1	1	.22	12	<.01	6	.11	.02	.01	<2	1
L40+00N 66+75E	3	18	17	51	.3	4	1	191	6.51	99	<5	<2	3	13	.4	<2	<2	172	.17	.007	5	48	.33	22	.22	<3	4.05	.01	.02	<2	18
L40+00N 67+25E	2	22	31	49	<.3	4	<1	213	7.37	89	<5	<2	3	14	.5	2	<2	172	.17	.008	7	38	.30	24	.22	3	3.19	.01	.03	<2	204
STANDARD C/AU-S	20	55	36	125	6.7	71	32	957	3.94	37	16	6	36	52	17.7	17	20	61	.54	.090	40	62	.87	190	.09	23	1.95	.06	.16	10	44

Sample type: SOIL. Samples beginning 'RE' are Reruns and 'RRE' are Reject Reruns.



SAMPLE#	Mo ppm	Cu ppm	Pb ppm	Zn ppm	Ag ppm	Ni ppm	Co ppm	Mn ppm	Fe %	As ppm	U ppm	Au ppm	Th ppm	Sr ppm	Cd ppm	Sb ppm	Bi ppm	V ppm	Ca %	P %	La ppm	Cr ppm	Mg %	Ba ppm	Ti %	B ppm	Al %	Na %	K %	W ppm	Au* ppb
L40+00N 67+75E	2	28	24	80	<.3	7	1	268	4.55	73	<5	<2	2	13	.3	<2	4	152	.24	.013	5	31	.45	19	.20	<3	3.72	.01	.03	<2	14
L40+00N 68+25E	3	35	25	98	<.3	6	3	275	5.34	96	<5	<2	2	13	.8	<2	<2	136	.20	.011	4	39	.35	31	.19	<3	4.16	.02	.03	2	92
L40+00N 68+75E	3	31	19	96	<.3	5	5	370	5.48	76	<5	<2	2	15	.5	<2	<2	133	.19	.013	4	39	.40	17	.22	<3	3.78	.01	.03	<2	12
L40+00N 69+25E	3	35	31	89	.3	8	2	253	4.96	115	<5	<2	3	13	.2	<2	2	142	.16	.016	5	42	.31	21	.17	<3	3.01	.01	.02	<2	15
L40+00N 69+75E	4	28	28	44	<.3	<1	1	253	7.34	111	<5	<2	3	11	.4	<2	<2	151	.13	.018	5	38	.28	19	.23	<3	3.67	.01	.03	<2	16
RE L40+00N 69+75E	4	28	24	44	<.3	4	<1	259	7.38	111	<5	<2	3	11	<.2	<2	<2	155	.13	.018	5	38	.28	21	.23	<3	3.70	.02	.03	<2	30

Sample type: SOIL. Samples beginning 'RE' are Reruns and 'RRE' are Reject Reruns.





GEOCHEMICAL ANALYSIS CERTIFICATE

Kamaka Resources Ltd. PROJECT KNOB HILL File # 95-4987 Page 1

6074 - 45A Ave, Delta BC V4K 1M7

SAMPLE#	Mo ppm	Cu ppm	Pb ppm	Zn ppm	Ag ppm	Ni ppm	Co ppm	Mn ppm	Fe %	As ppm	U ppm	Au ppm	Th ppm	Sr ppm	Cd ppm	Sb ppm	Bi ppm	V ppm	Ca %	P %	La ppm	Cr ppm	Mg %	Ba ppm	Ti %	B ppm	Al %	Na %	K %	W ppm	Au* ppb
L51+00N 38+25E	<1	4	<3	6	<3	3	1	13	.19	4	<5	<2	<2	11	.2	<2	<2	3	.07	.026	1	3	.07	15	.01	<3	.26	.03	.02	<2	1
L51+00N 38+50E	1	6	<3	6	<3	<1	1	13	.44	5	<5	<2	<2	17	<.2	<2	<2	8	.13	.031	2	3	.07	15	.01	<3	.35	.02	.02	<2	<1
L51+00N 38+75E	1	13	7	14	<3	4	2	127	2.11	5	<5	<2	<2	7	.3	2	<2	120	.08	.009	6	11	.26	23	.12	<3	1.72	<.01	.02	<2	12
L51+00N 39+00E	1	23	7	26	<3	5	3	197	1.82	<2	<5	<2	<2	8	.2	<2	<2	90	.13	.016	4	18	.59	23	.16	<3	2.60	.01	.05	<2	1
RE L51+00N 46+50E	2	61	<3	56	<3	9	6	380	6.93	25	<5	<2	2	11	.6	<2	3	127	.16	.023	5	32	.85	36	.19	<3	5.03	.01	.03	<2	4
L51+00N 39+25E	3	50	10	38	.3	8	5	270	5.16	15	<5	<2	<2	13	.4	<2	<2	113	.17	.017	7	23	.66	33	.12	<3	3.80	.01	.04	<2	202
L51+00N 39+50E	3	50	8	47	<3	9	5	301	3.93	20	<5	<2	2	12	<.2	<2	2	128	.18	.015	6	25	.76	33	.14	<3	4.08	.01	.03	<2	37
L51+00N 39+75E	3	84	<3	50	<3	9	6	355	6.17	18	<5	<2	4	12	.5	<2	2	140	.15	.023	4	38	.85	36	.23	<3	5.54	.01	.06	<2	6
L51+00N 40+00E	2	27	5	26	.5	4	4	223	4.03	13	<5	<2	2	8	<.2	<2	<2	168	.11	.010	5	21	.59	18	.22	<3	2.98	.01	.04	<2	4
L51+00N 40+25E	3	12	14	21	<3	4	3	218	2.65	7	<5	<2	<2	9	<.2	<2	<2	118	.10	.010	6	14	.55	23	.14	<3	2.35	<.01	.04	<2	4
L51+00N 40+50E	3	26	12	31	.3	6	2	247	4.42	11	<5	<2	2	9	<.2	<2	<2	150	.12	.015	7	25	.61	23	.13	<3	3.48	<.01	.04	<2	6
L51+00N 40+75E	3	31	8	34	.3	7	4	252	4.84	18	<5	<2	3	10	.4	<2	<2	148	.13	.017	8	27	.60	33	.14	3	4.02	.01	.03	<2	5
L51+00N 41+00E	10	75	8	54	<3	11	6	379	6.44	17	<5	<2	2	10	.2	<2	<2	111	.15	.030	6	31	.89	51	.14	<3	5.59	.01	.04	<2	3
L51+00N 41+25E	2	55	3	34	<3	6	5	251	6.39	14	<5	<2	3	9	<.2	<2	<2	149	.13	.015	5	24	.52	28	.17	3	3.39	.01	.04	<2	3
L51+00N 41+50E	3	44	<3	32	<3	7	4	230	5.68	19	<5	<2	2	11	.2	<2	2	121	.16	.021	4	18	.51	25	.14	<3	2.65	.01	.04	<2	1
L51+00N 41+75E	3	43	6	35	.3	7	4	249	5.45	23	<5	<2	2	11	.4	<2	2	115	.16	.021	4	21	.56	28	.14	3	2.74	.01	.04	<2	2
L51+00N 42+00E	<1	10	<3	5	<3	2	1	15	.25	<2	<5	<2	<2	7	<.2	<2	<2	15	.05	.035	2	4	.06	12	.01	<3	.41	.02	.01	<2	<1
L51+00N 42+25E	<1	9	<3	8	<3	2	1	22	.37	4	<5	<2	<2	16	<.2	<2	<2	10	.14	.051	1	2	.06	12	.01	6	.28	.02	.02	<2	<1
L51+00N 42+50E	1	10	<3	6	<3	4	1	24	.39	8	<5	<2	<2	14	.2	<2	<2	16	.13	.065	2	3	.05	14	.01	4	.33	.02	.02	<2	<1
L51+00N 42+75E	1	8	<3	5	<3	4	1	20	.93	9	<5	<2	<2	10	<.2	<2	<2	23	.08	.065	2	3	.04	9	.02	3	.39	.02	.02	<2	<1
L51+00N 43+00E	1	9	3	5	.3	4	1	36	.45	4	<5	<2	<2	19	<.2	<2	<2	17	.16	.051	2	4	.05	14	.02	3	.46	.02	.03	<2	<1
L51+00N 43+25E	1	7	4	8	<3	3	<1	26	1.00	<2	<5	<2	<2	21	<.2	<2	<2	8	.17	.061	2	3	.05	17	.01	3	.27	.03	.03	<2	<1
L51+00N 43+50E	1	4	3	6	.3	1	<1	15	1.19	<2	<5	<2	<2	7	<.2	<2	2	7	.05	.069	2	2	.04	9	.01	<3	.28	.03	.03	<2	<1
L51+00N 43+75E	1	6	<3	5	.4	3	1	21	.24	3	<5	<2	<2	11	.2	<2	<2	6	.08	.046	2	2	.04	19	.01	4	.38	.02	.03	<2	1
L51+00N 44+00E	1	12	3	8	.6	4	2	67	.72	3	<5	<2	<2	7	.2	<2	<2	22	.07	.046	3	11	.16	14	.03	3	1.08	.02	.03	<2	1
L51+00N 44+25E	1	24	10	14	1.1	5	1	75	.49	3	<5	<2	<2	11	.3	<2	<2	60	.07	.024	6	17	.20	25	.07	<3	2.65	.01	.03	<2	8
L51+00N 44+50E	2	49	8	47	<3	11	4	348	2.49	7	<5	<2	<2	11	.2	<2	<2	116	.17	.018	5	27	.94	57	.13	<3	4.26	.01	.04	<2	8
L51+00N 44+75E	1	25	<3	23	.3	8	3	166	1.32	2	<5	<2	<2	11	<.2	<2	<2	71	.13	.024	4	21	.42	27	.12	3	2.33	.01	.03	<2	2
L51+00N 45+00E	2	18	9	11	.8	4	2	60	.42	<2	<5	<2	<2	9	.2	<2	<2	47	.05	.023	5	14	.16	19	.05	<3	2.03	.01	.02	<2	2
L51+00N 45+25E	1	7	<3	6	.3	1	2	26	.35	<2	<5	<2	<2	9	<.2	<2	<2	15	.07	.043	3	4	.06	11	.02	<3	.67	.01	.02	<2	1
L51+00N 45+50E	2	16	8	23	.4	5	1	178	6.35	21	<5	<2	<2	8	.5	<2	3	242	.09	.010	5	23	.44	16	.12	<3	2.68	<.01	.03	<2	3
L51+00N 45+75E	2	26	5	24	.3	9	3	197	2.33	6	<5	<2	<2	12	.4	<2	2	123	.13	.027	5	29	.61	16	.12	4	4.26	.01	.02	<2	3
L51+00N 46+00E	<1	5	<3	7	<3	4	1	22	.73	<2	<5	<2	<2	5	.2	<2	<2	7	.05	.052	2	3	.04	14	.01	3	.40	.01	.02	<2	1
L51+00N 46+25E	2	29	8	29	.5	6	2	253	4.44	6	<5	<2	<2	10	<.2	<2	<2	137	.13	.019	5	23	.83	17	.12	<3	4.43	.01	.03	<2	9
L51+00N 46+50E	2	64	<3	55	<3	12	5	377	6.81	24	<5	<2	2	12	.7	<2	<2	126	.16	.025	5	32	.82	40	.20	4	5.09	.01	.04	<2	4
STANDARD C/AU-S	20	60	33	125	6.0	68	31	1077	3.97	40	16	7	35	50	15.9	17	25	61	.52	.092	39	58	.89	185	.08	26	1.95	.07	.15	12	49

ICP - .500 GRAM SAMPLE IS DIGESTED WITH 3ML 3-1-2 HCL-HNO3-H2O AT 95 DEG. C FOR ONE HOUR AND IS DILUTED TO 10 ML WITH WATER.

THIS LEACH IS PARTIAL FOR MN FE SR CA P LA CR MG BA TI B W AND LIMITED FOR NA K AND AL.

- SAMPLE TYPE: SOIL AU\* - IGNITED, AQUA-REGIA/MIBK EXTRACT, GF/AA FINISHED.

Samples beginning 'RE' are Reruns and 'RRE' are Reject Reruns.

DATE RECEIVED: DEC 7 1995 DATE REPORT MAILED: *Dec 7/95* SIGNED BY: *C.R.* D.TOYE, C.LEONG, J.WANG; CERTIFIED B.C. ASSAYERS

AA  
LL  
ACME ANALYTICAL

## Kamaka Resources Ltd. PROJECT KNOB HILL FILE # 95-4987

Page 2

AA  
LL  
ACME ANALYTICAL

SAMPLE#	Mo ppm	Cu ppm	Pb ppm	Zn ppm	Ag ppm	Ni ppm	Co ppm	Mn ppm	Fe %	As ppm	U ppm	Au ppm	Th ppm	Sr ppm	Cd ppm	Sb ppm	Bi ppm	V ppm	Ca %	P %	La ppm	Cr ppm	Mg %	Ba ppm	Ti %	B ppm	Al %	Na %	K %	W ppm	Au* ppb
L51+00N 46+75E	1	27	16	42	<.3	9	5	353	2.68	9	<5	<2	<2	15	.7	<2	<2	142	.23	.014	6	26	.92	35	.16	<3	3.66	.02	.05	<2	8
L51+00N 47+00E	1	5	7	15	<.3	3	1	212	.93	6	<5	<2	<2	9	.6	2	<2	78	.11	.007	5	15	.40	8	.11	<3	1.60	.01	.02	<2	7
L51+00N 47+25E	2	60	11	47	.4	7	5	338	6.24	17	<5	<2	3	11	.6	<2	<2	148	.14	.025	4	30	.78	23	.18	<3	4.95	.01	.04	<2	4
L51+00N 47+50E	2	59	13	66	<.3	15	6	450	2.68	8	<5	<2	<2	16	.7	<2	<2	122	.24	.018	6	27	1.16	55	.15	4	5.08	.01	.05	<2	5
L51+00N 47+75E	<1	43	10	20	.3	8	4	204	1.85	2	<5	<2	<2	10	.5	<2	<2	58	.27	.047	3	13	.49	15	.14	3	1.75	.02	.03	<2	3
L51+00N 48+00E	1	4	4	16	<.3	2	<1	21	4.32	7	<5	<2	<2	7	<.2	<2	<2	19	.09	.046	2	3	.05	10	.02	<3	.33	.02	.03	<2	<1
L51+00N 48+25E	<1	3	<3	4	<.3	2	<1	13	.37	2	<5	<2	<2	15	<.2	<2	<2	2	.08	.036	1	1	.10	10	<.01	<3	.11	.02	.02	<2	<1
L51+00N 48+50E	<1	4	<3	6	<.3	2	1	22	.28	<2	<5	<2	<2	13	.3	<2	<2	3	.05	.031	1	2	.09	10	.01	3	.13	.02	.02	<2	<1
L51+00N 48+75E	<1	4	<3	14	<.3	2	<1	28	3.06	19	<5	<2	<2	12	.2	<2	<2	15	.17	.037	2	2	.03	10	.01	4	.31	.02	.02	<2	1
L51+00N 49+00E	<1	5	3	3	<.3	3	<1	9	.28	<2	<5	<2	<2	5	.2	<2	<2	6	.03	.028	1	2	.04	8	.01	<3	.30	.02	.01	<2	<1
L51+00N 49+25E	1	8	<3	11	<.3	3	1	14	.56	<2	<5	<2	<2	9	.2	<2	<2	5	.07	.055	1	2	.05	10	.01	<3	.29	.02	.03	<2	<1
L51+00N 49+50E	<1	7	5	2	.3	3	1	9	.25	<2	<5	<2	<2	3	.3	<2	<2	15	.02	.032	2	7	.02	6	.01	<3	1.39	.01	.01	<2	1
L51+00N 49+75E	<1	4	<3	5	<.3	2	1	9	.16	3	<5	<2	<2	10	<.2	<2	2	3	.03	.022	1	1	.07	6	.01	<3	.20	.02	.01	<2	<1
L47+00N 50+25E	1	14	11	22	<.3	4	2	144	1.85	4	<5	<2	<2	9	.6	<2	2	88	.12	.012	5	15	.24	15	.16	<3	1.89	.01	.02	<2	1
L47+00N 50+50E	3	38	13	38	<.3	8	4	276	3.97	8	<5	<2	2	9	.6	<2	3	161	.15	.012	6	22	.65	21	.24	<3	2.79	.01	.03	<2	3
L47+00N 50+75E	1	41	8	44	.7	8	3	250	2.97	15	<5	<2	2	8	.7	6	<2	72	.11	.015	3	24	.44	23	.12	<3	3.17	.01	.03	4	10
L47+00N 51+00E	<1	30	4	37	<.3	6	4	228	2.99	17	<5	<2	<2	6	.8	3	<2	69	.09	.012	3	18	.42	23	.10	3	2.18	<.01	.02	2	4
L47+00N 51+25E	2	16	8	16	<.3	4	2	103	2.32	5	<5	<2	<2	5	.3	<2	<2	61	.06	.005	2	13	.16	13	.09	<3	1.33	<.01	.01	<2	4
L47+00N 51+50E	2	9	5	11	<.3	<1	<1	75	1.53	<2	<5	<2	<2	3	<.2	<2	<2	45	.04	.003	1	10	.11	9	.07	<3	1.00	<.01	<.01	<2	4
L47+00N 51+75E	<1	8	<3	9	.3	2	2	54	1.18	9	<5	<2	<2	2	.3	5	<2	32	.03	.003	1	6	.08	9	.04	<3	.67	<.01	.01	2	3
L47+00N 52+00E	<1	5	<3	5	<.3	2	2	43	.49	9	<5	<2	<2	2	.2	5	2	18	.02	.002	1	3	.06	9	.03	<3	.46	<.01	<.01	3	3
L47+00N 52+25E	<1	8	<3	10	<.3	4	2	67	.58	15	<5	2	<2	2	.5	13	<2	19	.02	.004	1	3	.12	8	.03	3	.53	<.01	.01	5	3
RE L47+00N 52+25E	<1	8	<3	10	<.3	4	2	61	.58	12	<5	<2	<2	1	.3	10	<2	17	.02	.003	<1	2	.12	9	.02	<3	.44	<.01	.01	4	2
L47+00N 52+50E	<1	4	<3	7	<.3	2	1	41	.39	4	<5	<2	<2	1	<.2	3	<2	11	.01	.002	<1	2	.07	9	.01	<3	.30	<.01	<.01	<2	7
L47+00N 52+75E	<1	5	<3	7	<.3	3	1	36	.41	9	<5	<2	<2	1	.3	3	<2	11	.01	.001	1	2	.06	7	.02	<3	.33	<.01	<.01	<2	3
L47+00N 53+00E	<1	3	<3	3	<.3	1	<1	23	.50	2	<5	<2	<2	1	.2	<2	<2	13	.01	.001	<1	2	.04	2	.02	<3	.24	<.01	<.01	<2	9
L47+00N 53+25E	<1	4	3	4	<.3	1	1	27	.45	4	<5	<2	<2	1	<.2	<2	3	11	.01	.001	<1	3	.04	4	.02	<3	.28	<.01	<.01	<2	15
L47+00N 53+50E	<1	4	<3	4	<.3	1	1	25	.41	5	<5	<2	<2	1	<.2	2	<2	11	.01	.001	<1	3	.04	<1	.02	<3	.29	<.01	<.01	<2	2
L47+00N 53+75E	<1	4	<3	60	<.3	3	<1	62	.53	2	<5	<2	<2	70	<.2	<2	<2	3	1.13	.033	<1	1	.11	18	<.01	<3	.11	.02	.02	<2	1
L47+00N 54+00E	<1	4	<3	44	<.3	2	<1	70	.19	2	<5	<2	<2	32	<.2	<2	<2	2	.24	.023	1	1	.14	12	<.01	3	.13	.03	.03	<2	<1
L47+00N 54+25E	1	5	<3	40	<.3	2	<1	13	.17	<2	<5	<2	<2	14	<.2	<2	<2	6	.07	.022	1	2	.09	7	.01	<3	.19	.02	.02	<2	<1
L47+00N 54+50E	1	7	<3	65	<.3	3	1	14	.39	5	<5	<2	<2	21	.3	2	<2	6	.09	.037	1	2	.11	12	.01	<3	.23	.03	.02	<2	<1
L47+00N 54+75E	<1	4	5	26	<.3	4	1	9	.20	8	<5	<2	<2	8	<.2	<2	<2	17	.08	.029	2	3	.03	11	.02	<3	.41	.01	.01	<2	<1
L47+00N 55+00E	<1	3	<3	14	<.3	2	<1	7	.12	<2	<5	<2	<2	39	<.2	<2	<2	2	.21	.020	<1	1	.19	11	<.01	<3	.08	.03	.01	<2	<1
L47+00N 55+25E	<1	3	<3	30	<.3	2	<1	7	.14	2	<5	<2	<2	23	<.2	<2	<2	2	.07	.025	1	2	.13	12	<.01	3	.12	.02	.02	<2	<1
STANDARD C/AU-S	20	56	35	123	6.6	68	31	1090	3.94	38	17	6	34	48	17.1	16	22	64	.51	.090	38	59	.89	174	.08	23	1.89	.06	.14	8	45

Sample type: SOIL. Samples beginning 'RE' are Reruns and 'RRE' are Reject Reruns.



SAMPLE#	Mo ppm	Cu ppm	Pb ppm	Zn ppm	Ag ppm	Ni ppm	Co ppm	Mn ppm	Fe %	As ppm	U ppm	Au ppm	Th ppm	Sr ppm	Cd ppm	Sb ppm	Bi ppm	V ppm	Ca %	P %	La ppm	Cr ppm	Mg %	Ba ppm	Ti %	B ppm	Al %	Na %	K %	W ppm	Au* ppb
L47+00N 55+50E	<1	3	7	20	<.3	1	<1	22	.15	<2	<5	<2	<2	16	.3	<2	<2	2	.12	.028	1	2	.10	8	<.01	<3	.15	.02	.01	<2	<1
L47+00N 55+75E	1	2	5	25	<.3	<1	<1	25	.17	<2	<5	<2	<2	26	<.2	<2	<2	2	.10	.021	<1	1	.14	8	<.01	3	.11	.03	.01	<2	1
L47+00N 56+00E	1	3	4	34	<.3	1	1	16	.23	4	<5	<2	<2	25	<.2	<2	<2	4	.20	.044	2	2	.08	16	.01	3	.25	.02	.02	<2	1
L47+00N 56+25E	1	3	<3	29	<.3	2	<1	18	.29	5	<5	<2	<2	17	<.2	<2	<2	4	.17	.048	1	2	.06	13	.01	<3	.21	.02	.03	<2	<1
L47+00N 56+50E	<1	1	3	16	<.3	<1	<1	23	.17	<2	<5	<2	<2	18	<.2	<2	<2	2	.10	.025	1	2	.09	10	.01	<3	.16	.03	.02	<2	<1
L47+00N 56+75E	<1	6	<3	10	.3	2	<1	9	.31	3	<5	<2	<2	12	<.2	<2	<2	6	.09	.024	2	3	.05	11	.01	<3	.28	.02	.01	<2	<1
L47+00N 57+00E	<1	3	3	41	<.3	<1	1	22	.06	3	<5	<2	<2	37	.5	<2	2	1	.09	.025	<1	1	.31	10	<.01	3	.06	.03	.03	<2	<1
L47+00N 57+25E	1	2	4	17	<.3	2	<1	14	.98	2	<5	<2	<2	18	.2	<2	<2	2	.13	.038	1	1	.06	6	<.01	<3	.11	.02	.02	<2	1
L47+00N 57+50E	1	2	3	21	<.3	1	1	10	1.02	21	<5	<2	<2	17	.2	<2	<2	5	.18	.035	2	1	.04	13	.01	<3	.19	.02	.01	<2	<1
RE L47+00N 57+50E	1	1	4	20	<.3	2	<1	15	1.00	17	<5	<2	<2	17	.3	<2	<2	5	.17	.034	2	2	.03	12	.01	<3	.18	.02	.01	<2	-
L45+00N 35+00E	1	7	6	14	.4	3	1	95	.28	8	<5	<2	<2	20	.2	<2	<2	10	.18	.042	2	5	.09	13	.01	<3	.49	.02	.04	<2	2
L45+00N 35+25E	1	21	22	47	<.3	9	4	424	2.95	9	<5	<2	<2	12	.6	<2	3	89	.15	.029	4	19	.96	31	.10	<3	2.12	.02	.04	<2	1
L45+00N 35+50E	2	48	25	59	.3	10	4	356	4.06	32	<5	<2	2	11	.7	<2	<2	119	.14	.016	6	27	.96	60	.09	<3	4.39	.01	.04	<2	4
L45+00N 35+75E	2	22	21	21	<.3	4	3	147	1.40	7	<5	<2	<2	7	.5	2	<2	56	.09	.009	5	15	.43	30	.14	<3	1.95	.01	.05	<2	6
L45+00N 36+00E	2	31	35	48	<.3	9	4	285	3.14	14	<5	<2	<2	12	.6	<2	<2	123	.15	.012	7	33	.73	49	.17	<3	3.89	.01	.02	<2	9
L45+00N 36+25E	2	33	21	55	<.3	5	5	315	2.80	12	<5	<2	<2	12	.7	<2	<2	74	.16	.015	5	19	.69	44	.12	<3	2.70	.01	.03	<2	4
L45+00N 36+50E	2	36	19	45	<.3	10	5	269	2.18	15	<5	<2	<2	14	.5	<2	<2	83	.21	.013	7	28	.69	27	.12	<3	3.10	.01	.03	<2	3
L45+00N 36+75E	2	28	18	45	.3	8	4	258	5.59	20	<5	<2	3	10	1.3	<2	<2	119	.13	.014	5	29	.55	26	.16	<3	3.10	.01	.02	<2	5
L45+00N 37+00E	2	38	19	44	.5	7	4	237	4.71	17	<5	<2	3	12	.8	<2	2	118	.16	.014	4	41	.53	16	.18	<3	3.92	.01	.03	<2	5
L45+00N 37+25E	1	18	32	44	.3	16	6	338	2.63	6	<5	<2	<2	7	1.0	<2	<2	93	.18	.022	5	45	1.11	13	.17	<3	2.88	.02	.02	<2	3
L45+00N 37+50E	1	14	16	35	.3	9	3	336	1.98	6	<5	<2	<2	10	.5	<2	<2	72	.14	.019	6	29	.88	16	.11	3	2.51	.01	.04	<2	3
L45+00N 37+75E	2	44	21	46	<.3	8	3	282	3.35	21	<5	<2	2	10	.6	<2	2	95	.13	.014	4	30	.67	31	.15	<3	4.11	.01	.02	<2	3
L45+00N 38+00E	<1	5	4	9	<.3	3	<1	36	.49	<2	<5	<2	<2	12	.2	<2	<2	9	.12	.029	1	3	.11	6	.02	<3	.33	.02	.02	<2	<1
L45+00N 38+25E	<1	4	<3	8	<.3	2	1	54	.42	4	<5	<2	<2	8	.2	<2	<2	12	.05	.023	2	5	.12	11	.03	<3	.54	.02	.01	<2	<1
L45+00N 38+50E	<1	2	3	6	<.3	<1	<1	22	.29	<2	<5	<2	<2	27	.3	<2	<2	3	.09	.022	1	2	.15	8	.01	<3	.17	.02	.02	<2	<1
L45+00N 38+75E	<1	2	5	6	<.3	3	<1	12	.24	<2	<5	<2	<2	24	.2	<2	<2	2	.13	.044	1	1	.12	11	.01	<3	.12	.03	.04	<2	1
STANDARD C/AU-S	21	57	37	124	6.2	66	33	980	3.93	41	17	8	44	51	19.1	18	21	57	.52	.093	40	58	.88	198	.06	26	1.89	.06	.14	3	46

Sample type: SOIL. Samples beginning 'RE' are Reruns and 'RRE' are Reject Reruns.

**APPENDIX 2**

**COST STATEMENT**

**Kamaka Resources Ltd.**

6074, 45A Avenue, Delta, B.C. V4K 1M7 Phone: (604) 940-1591

**EXPENDITURES** (N.B. Please provide actual all-inclusive costs, including salaries and wages, equipment and machinery rental, supplies, services, transportation and accommodation directly attributable to the field program.)

(a) For the following, the full cost (100% of expenditures) are eligible:

Geological Surveys, Map and Report Preparation and Related Costs		\$
<b>Geophysical Surveys (line-kilometres)</b>		
Ground		
Magnetic	30.3 line km	\$ 7535
Electromagnetic		\$
Induced Polarization		\$
Radiometric		\$
Seismic		\$
Other		\$
Airborne		\$
		\$ 7535.00
		\$ 7535.00
<b>Geochemical Surveys (No. of samples analysed 1657)</b>		
Soil	1657 @ \$28.00 incl. collection + 30cl ICP + Au	\$ 48148.89
Silt		\$
Rock		\$
Other		\$
		\$ 48148.89
		\$ 48148.89
<b>Drilling</b>		
Surface.....	m @ \$ _____ =	\$
Underground.....	m @ \$ _____ =	\$ N/A
		\$
		\$
<b>Related Technical Surveys</b>		
Sampling/Assaying		\$
Petrographic		\$
Mineralogic		\$
Metallurgic		\$ N/A
		\$
		\$
<b>Preparatory/Physical</b>		
Line/Grid (kilometres)	51.2 km grid	\$ 10,000.00
Trenching (metres)		\$
		\$ 10,000.00
		\$ 10,000.00
<b>Other Exploration Costs</b> Logistical/Geol interpretation, report		
Helicopter		\$ 4731.00
TRAVEL MOB/VEHICLES		\$ 9096.60
CAMP FOOD SUPPLIES		\$ 8060.73
(54 men. x 138 days)		\$ 7500.00
		\$ 29388.33
		\$ 29388.33
<b>Total Eligible Expenses</b>		\$ 95072.22

(b) For the following activities only 25% of total costs are eligible:

<b>Tunneling, Drifting, Other Lateral Excavation, Shaft Sinking</b> (25% of total expenses are eligible)		
.....	m @ \$..... = x 25% =	\$
.....	m @ \$..... = x 25% =	\$
		\$
		\$
<b>(c) TOTAL ELIGIBLE EXPENDITURES:</b>		\$ 95072.22

KNOB HILL PROJECT

NOV-DEC 1995

Winfield Resources Ltd														
Knob Hill Project														
Jan-96														
Personnel		1-15 Nov	16-30 Nov	1-15 Dec	16-31 Dec			Totals \$	GST					
P. Dasler P. Geo.		4.00	3.50	2.40	1.00			4142.00	289.94					
P MacDonald, field Assist.		5.00	15.00	12.00				8800.00	616.00					
J Telegus, field Assist		4.00	15.00	5.00				6600.00	462.00					
S Salmon, field Assist		4.00	12.00	0.00				4400.00	308.00					
J Boutwell, field Assist			9.00	5.00				3850.00	269.50					
D O'Neill, field Assist		4.00	15.00	11.00				8250.00	577.50					
D Leighton Snr Geol		4.00	3.00	0.00				2660.00	186.20					
A Wardwell field Assist			5.00	6.00				3025.00	211.75					
<b>Totals Days</b>	<b>143.90</b>	<b>25.00</b>	<b>77.50</b>	<b>41.40</b>	<b>0.00</b>	<b>0.00</b>		<b>41727.00</b>	<b>2920.89</b>			<b>2920.89</b>		
DISBURSEMENTS														
Date	Item	Gross	NET	GST	Food /Accom	Hotel	Transportation	Supplies	Field Equip Rental	H.Equip/Heli	Contractor	Assays	Office	Disb Fee
15-Nov	Kamaka Inv 95-11-01	9265.28	8253.86	1011.42	1585.78	721.01	260.67	3611.59	1350.00				42.64	682.17
30-Nov	Kamaka Inv 95-11-07	12418.81	10242.02	2176.79	981.12	53.20	524.41	2581.97		4701.90			63.50	1335.92
15-Dec	kamaka 95-12-02	9625.73	8100.06	1525.67	963.67	170.20	2665.65	983.21		1156.50	600.00		713.17	847.66
31-Dec	Kamaka 95-12-06	28648.33	26749.28	1899.05						3238.20		19392.14	629.90	3489.04
		0.00	0.00	0.00										
<b>Totals</b>	<b>Disbursement Totals</b>	<b>59958.15</b>	<b>53345.22</b>	<b>6612.93</b>	<b>3530.57</b>	<b>944.41</b>	<b>3450.73</b>	<b>7176.77</b>	<b>1350.00</b>	<b>9096.60</b>	<b>600.00</b>	<b>19392.14</b>	<b>1449.21</b>	<b>6354.79</b>
	Check	59958.15	53345.22											
	Disbursement Fees		6354.79											
	Labour		41727.00			inv								
	GST		9533.82											
	<b>TOTAL INCL GST</b>		<b>104606.04</b>											
	<b>NET</b>		<b>95072.22</b>											

**APPENDIX 3**

**Petrological Report  
Assessment Report Maps and Data**

**Kamaka Resources Ltd.**

6074, 45A Avenue, Delta, B.C. V4K 1M7 Phone: (604) 940-1591

**PETROGRAPHIC REPORT ON FOUR POLISHED THIN SECTIONS FROM VANCOUVER ISLAND**

Report for: Peter Dasler, Manager  
Kamaka Resources Ltd.  
6074 45A Avenue  
Delta, B.C.  
V4K 1M7.

Invoice attached

Dec. 21, 1993

**KH3: BRECCIATED ?INTERMEDIATE PLUTONIC ROCK, ALTERED TO CHLORITE-SERICITE-PYRITE, CUT BY THIN ANDESINE-QUARTZ VEINLETS**

Dark green and white, brecciated, pyritic, possibly plutonic igneous rock cut by thin white fractures with white hard envelopes. Dark green areas are soft and fine-grained. No attraction to a magnet; no reaction to cold dilute HCl. In polished thin section, the modal mineralogy is approximately:

Plagioclase feldspar (andesine?)	60%
Chlorite (2 varieties)	25%
Sericite	5%
Pyrite	5%
Quartz (mainly secondary)	3%
Rutile, ilmenite, trace sphene	2%
Carbonate, ?zircon	tr

Plagioclase feldspar makes up the bulk of this slide, as both euhedral crystals to 2 mm long and finely comminuted, broken shards about 0.1-0.2 mm in size. In places, glomeratic aggregates up to 3.5 mm in diameter occur; these may be fragments of a ?former plutonic rock. The plagioclase is mildly sericitized in places to fine subhedral flakes up to 0.1 mm diameter, but twinning is still evident with extinction angles  $Y^{010}$  of up to  $27^\circ$ , and the relief appears slightly higher than that of quartz, indicating a composition of andesine, about  $An_{40}$ . Compositional zoning is absent, suggesting the observed composition is secondary.

Chloritic patches up to 7 mm across are of subhedral to irregular outline, suggestive of replacement of former ?mafic crystals up to 6 mm long. The patches are dominated by either one of two varieties of chlorite, either length-fast, with anomalous green interference colours or length-slow, with anomalous blue interference colours. Both have very similar pale green pleochroism, indicating similar Fe: (Fe+Mg) ratios close to 0.5. The crystals are subhedral and average about 0.1 mm diameter. There are minor amounts of fine-grained  $TiO_2$  minerals, such as rutile as cores to sphene, forming aggregates to 0.2 mm across, in the chloritic areas. In addition, in places there are traces of quartz, plagioclase, sericite and a mineral similar to sericite but forming radiating rosettes up to 0.25 mm diameter, that may be pyrophyllite (although detailed X-ray work would be needed to confirm this). Skeletal laths of rutile probably reflect relict titanomagnetite crystals up to 0.2 mm; traces of ilmenite remain.

Thin veinlets crossing the slide are of quartz, plagioclase and traces of sericite, chlorite and carbonate. Plagioclase in the veins forms small subhedral crystals up to 0.25 mm long, with extinction angle  $Y^{010}$  about  $20^\circ$  and relief about the same as that of quartz indicating an andesine composition about  $An_{35}$ , similar to that of the plagioclase in the wall rock. Quartz in the veins (and in rare fine patches in the wall rock) forms fine sub- to anhedral crystals about 0.05 mm in diameter. Traces of limonite are found along late fractures in the centers of the veinlets.



Pyrite generally forms sub- to euhedral crystals up to 0.5 mm across, although aggregating to several mm diameter clumps. Pyrite is associated with minor secondary quartz, sericite and chlorite, and appear to be earlier than the feldspathic veinlets.

In summary, this appears to be a chloritized, brecciated, pyritic ?dioritic rock that has been cut by late andesine-quartz veins.

KH4: STRONGLY PLAGIOCLASE-CHLORITE-CALCITE SERICITE ALTERED ?PLUTONIC ROCK, VEINED BY TOURMALINE-CALCITE-QUARTZ-MAGNETITE-PYRITE

Dark and light green, brecciated-looking rock that attracts a magnet and reacts strongly to cold dilute HCl in places due to fine-grained calcite. Dark green to black areas are irregular in outline, up to 1.5 cm across, softer than steel, and contain most of the pyrite whereas pale creamy green host to these areas is harder than steel, with white borders adjacent to the dark green areas. In polished thin section, the mineralogy is approximately:

Plagioclase feldspar (relict primary and secondary)	30%
Chlorite	30%
Tourmaline (schorlitic)	20%
Carbonate (calcite)	10%
Sericite	5%
Quartz (secondary, mainly veins)	2%
Magnetite	2%
Pyrite	1%
Rutile, sphene	<1%

The light creamy green areas of this section are similar to the main mass of KH3; although considerably more altered to fine sericite, carbonate and chlorite, they appear to have been mostly feldspar originally. Some of this feldspar forms ghosted relict crystals up to 1 mm long, but most is found as very fine-grained (25 to 50  $\mu$ m) subhedral crystals. Where these smaller crystals are clear and about 50  $\mu$ m in size, they look secondary (as in the veins of KH3). Thus there appears to be both relict primary and also abundant secondary plagioclase in this sample. The composition is not determinable due to the alteration of primary and small size of secondary crystals. At the margins of the feldspathic areas, secondary recrystallized feldspar is common, as clear but anhedral grains that cannot be distinguished from quartz; if quartz is present, it is not obvious due to the similarity of indices, suggesting an andesine plagioclase composition as in KH3. Minor  $TiO_2$  relic crystals are of rutile/sphene.

Chloritic areas are composed of fine subhedral flakes to 25  $\mu$ m diameter, mainly with anomalous blue interference colours and length-slow character indicating slightly higher Fe content than in KH3. Near and in the tourmaline veins, chlorite is coarser grained, up to 0.2 mm, with bright green pleochroism confirming an Fe:(Fe+Mg) ratio around 0.5-0.6. Minor chlorite with anomalous green interference colours and less pleochroism is present, indicating lower Fe contents.

Coarse, bladed tourmaline crystals up to 1.5 mm long are found in the veins and dark green patches, intimately mixed with coarse subhedral crystals of calcite to 3.5 mm diameter. Deep sea-green pleochroism of tourmaline indicates high Fe:(Fe+Mg) ratios probably up to 0.8. There is some quartz, as subhedral crystals to 0.25 mm, present in the veins. Magnetite forms sub- to euhedral crystals to laths up to 1 mm long, concentrated in the dark green chloritic areas. Minor fine anhedral pyrite up to 0.25 mm in diameter is intimately mixed with the magnetite in places, indicating a common origin, possibly replacing former bladed Fe-silicates (such as the coarse tourmaline with which it is closely associated). Similar aggregates of magnetite and pyrite are also found along tourmaline-carbonate-chlorite veins. Pyrite is also found as scattered aggregates to 1 mm across of rounded subhedral crystals up to 0.4 mm diameter.

KH5: CHLORITE-EPIDOTE SERICITE-PYRRHOTITE-QUARTZ ALTERED FRAGMENTAL VOLCANIC OF INTERMEDIATE (ANDESINE-QUARTZ PHYRIC) COMPOSITION

Light grey-green brecciated or fragmental ?intermediate volcanic rock containing subrounded clasts to 1 cm long of grey to creamy colour in a comminuted matrix. There is only a trace of reaction to cold dilute HCl in 3-4 mm long rusty limonite patches, and the rock is only weakly magnetic in places. It is hard and siliceous. In polished thin section, the mineralogy is approximately:

Plagioclase (andesine?)	70%
Chlorite	10%
Quartz (mainly phenocryst shards; minor secondary)	5%
Epidote	5%
Sericite	5%
<b>Pyrrhotite</b> (trace marcasite)	3%
Rutile, sphene	2%
Chalcopyrite, sphalerite	tr

Plagioclase is found as both sub- to euhedral crystals and ?shards of crystals up to 1 mm long and as fine laths in the matrix hosting the larger crystals. In turn, fragments of this porphyritic to tuffaceous rock are found with rounded outlines, and scattered crystals or shards of quartz to 1 mm long, in a matrix of crushed similar material plus minor chlorite and TiO<sub>2</sub> minerals (sphene, rutile). It is difficult to judge the feldspar composition due to fine-grained sericite and epidote alteration, but poor extinction angles of about 30° and relief about the same as or higher than quartz suggest andesine to possibly labradorite composition, about An<sub>45-50</sub>.

Chlorite forms patches up to about 1 mm across with highly irregular outlines; mixtures with epidote, quartz and skeletal rutile suggests these may represent former mafic crystals that have been thoroughly altered. As in KH3, both green and blue anomalous interference colours are seen, although both varieties have only weak green pleochroism and a Fe:(Fe+Mg) ratio probably around 0.5.

Epidote is found as clusters of sub- to euhedral crystals up to 0.4 mm long with anomalous interference colours and no pleochroism indicating Fe-poor composition (clinozoisite). Epidote is associated with chlorite as replacement of feldspar and ?former mafic crystals, and appears to be related to a system of late fractures along which limonite is common.

Minor secondary quartz is found as subhedral crystals to 0.25 mm size around pyrrhotite that forms sub- to euhedral crystals up to 0.5 mm diameter, or in aggregates of somewhat porous masses to 2 mm long, loosely associated with microfractures along which epidote is found and limonite has penetrated. Note that the sulphide is **pyrrhotite**, not pyrite, and it is found in the matrix of the rock; only rarely does it replace feldspar phenocrysts. Rare subhedral crystals of fine chalcopyrite to 50 μm and sphalerite to 0.1 mm are found associated with the iron sulphides in some areas. In places, the pyrrhotite shows incipient oxidation to marcasite.

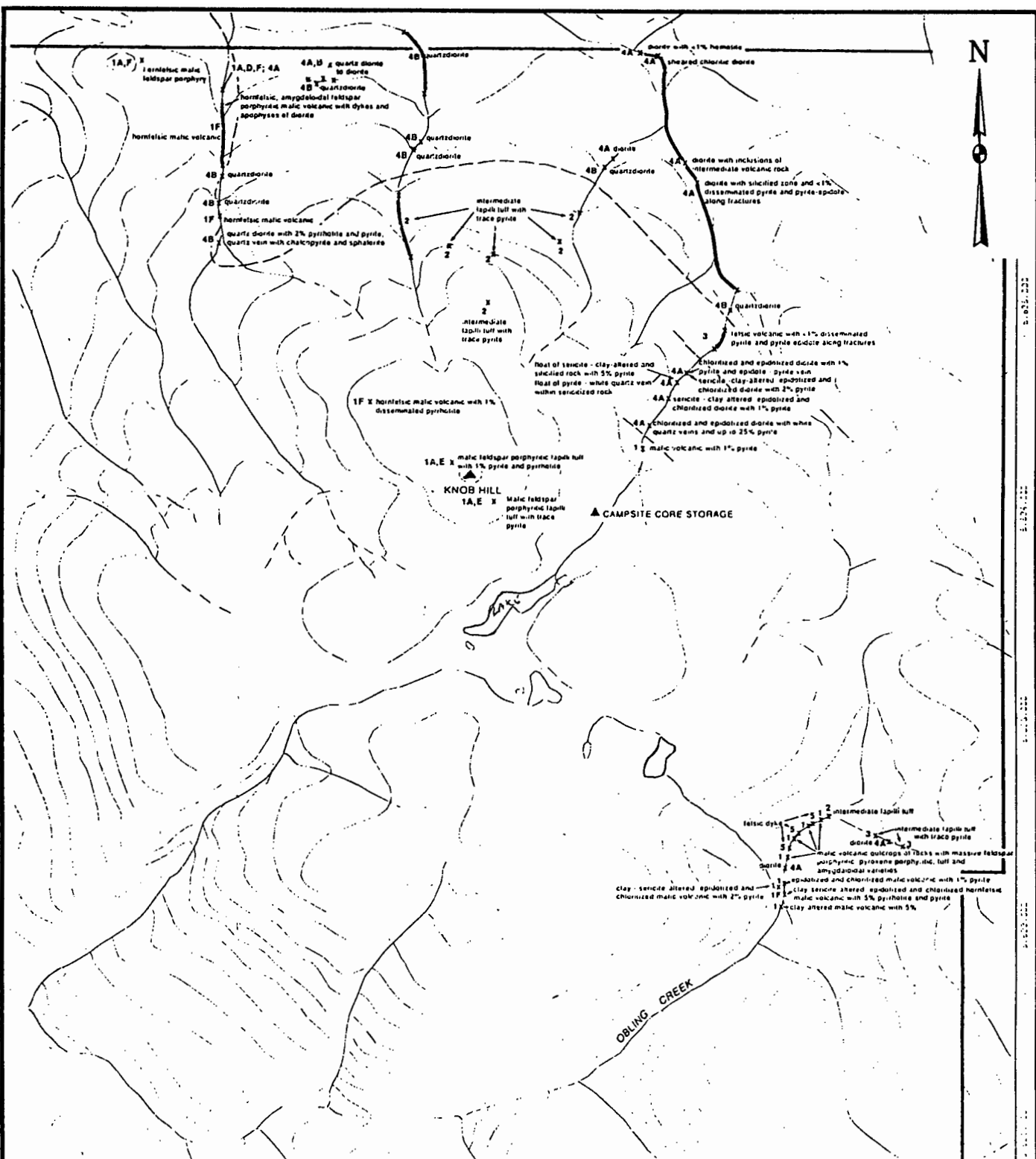
This appears to be an intermediate to felsic, fragmental volcanic rock composed of variably ?andesine-quartz mafic phyric clasts and broken shards in a comminuted matrix of similar material, altered to chlorite-epidote-pyrite quartz-sericite. In contrast to KH4, most feldspar appears to be primary rather than secondary.

## 1993 ROCK DESCRIPTIONS

### Sample Number

- KH1 Siliceous, rusty pyrite rich volcanics. On central claim line approx 270 m south of Knob Hill trig. Sample in outcrop.
- KH2 Parsons Bay Fm from creek gully on north side of block. Bleached, finegrained ash tuff with faint laminations. 1% disseminated pyrite.. Pink garnet mineralization 1%.
- KH3\* Siliceous pyrite rich volcanics 500 m south knob hill trig. V. Fine ash tuff? Trace sphalerite?
- KH4\* Actinolite skarn in fine grained green volcanics. Sample from 1976 drill programme unknown hole or footage. Sample for polished section work.
- KH5\* Very rusty lapilli tuff. Exterior bleached to light tan. Interior grey-green with extensive pyrite dissemination. Dark clots (covellite?). Lapilli fragments to 2 cm. Rough exterior texture because of fragments.
- KH6\* Dark grey-green volcanic tuff with purple discoloration from pervasive biotite alteration. Sample from 1976 drill core, unknown hole or footage.

\* see petrological report appendix 3



**KAMAKA RESOURCES LTD.**

**KNOB HILL PROPERTY**

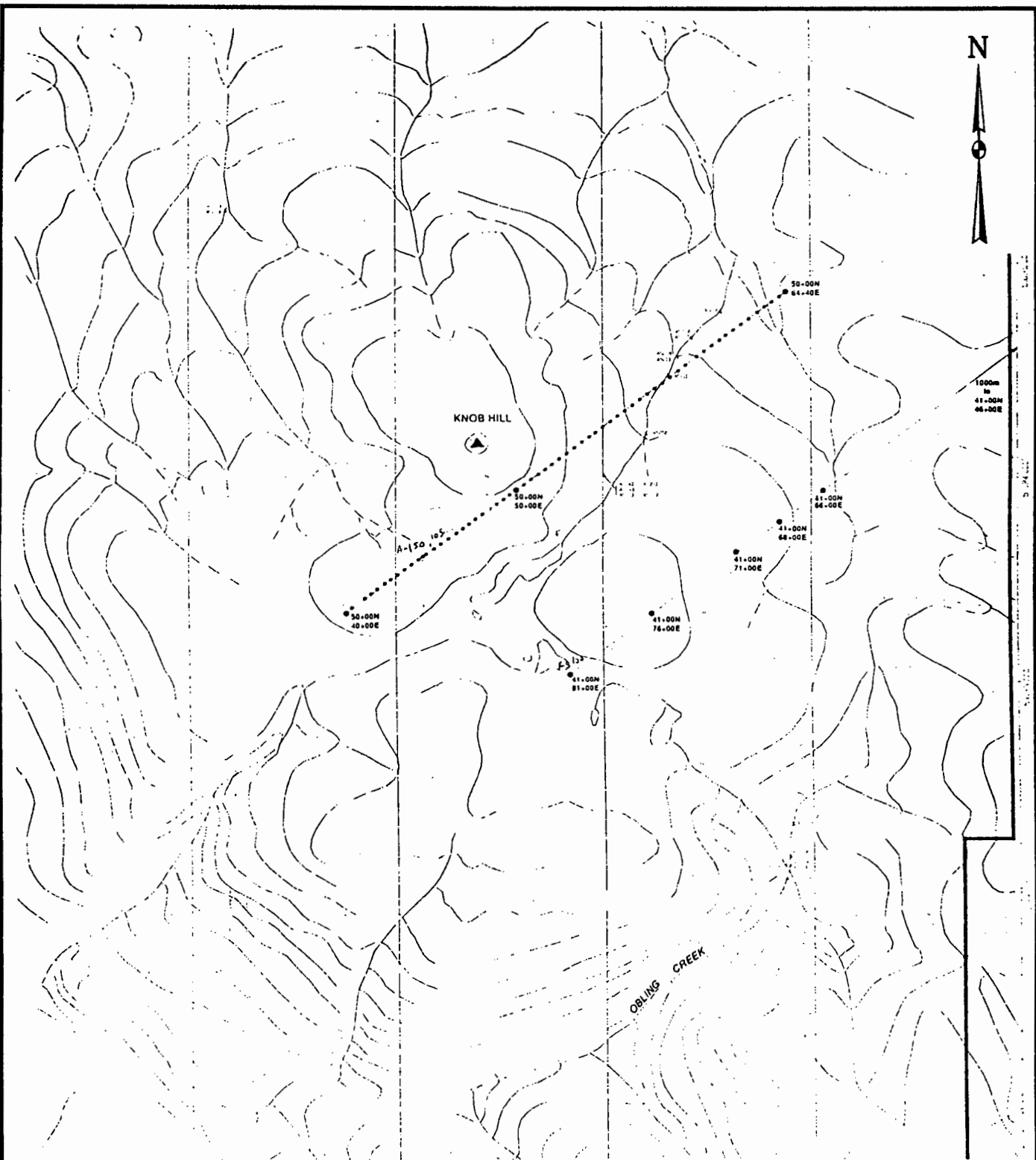
**PLACER DOME  
MAPPING**

**KAMAKA RESOURCES LTD.**

Scale: As shown      Figure:      Date: APR. 1995

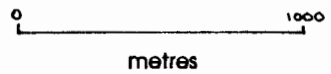


1000m  
to  
41-00N  
66-00E



Knob Hill

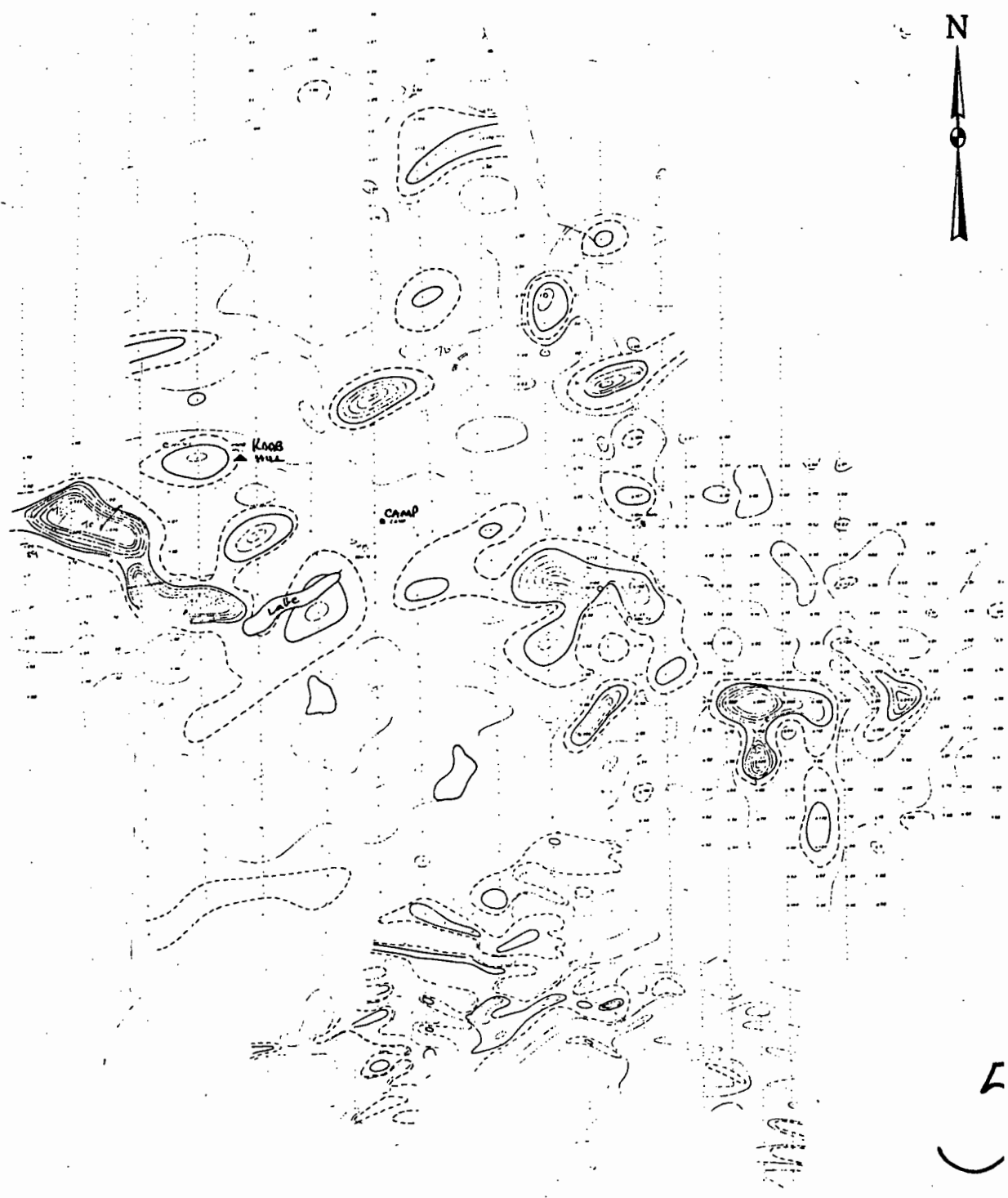
Oblique Creek



KEY

- soil sample or pit site

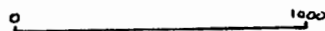
<b>KAMAKA RESOURCES LTD.</b>		
<b>Knob Hill Property</b>		
<b>PLACER DOME SOIL SAMPLES</b>		
<b>KAMAKA RESOURCES LTD.</b>		
Scale: As shown	Figure:	Date: APR. 1995



**KEY**

Basal Till 120ppm threshold 50ppm contours

Basal Till >90ppm (70percentile)



Metres

Assessment report 5809

**KAMAKA RESOURCES LTD.**

**KNOB HILL PROPERTY**

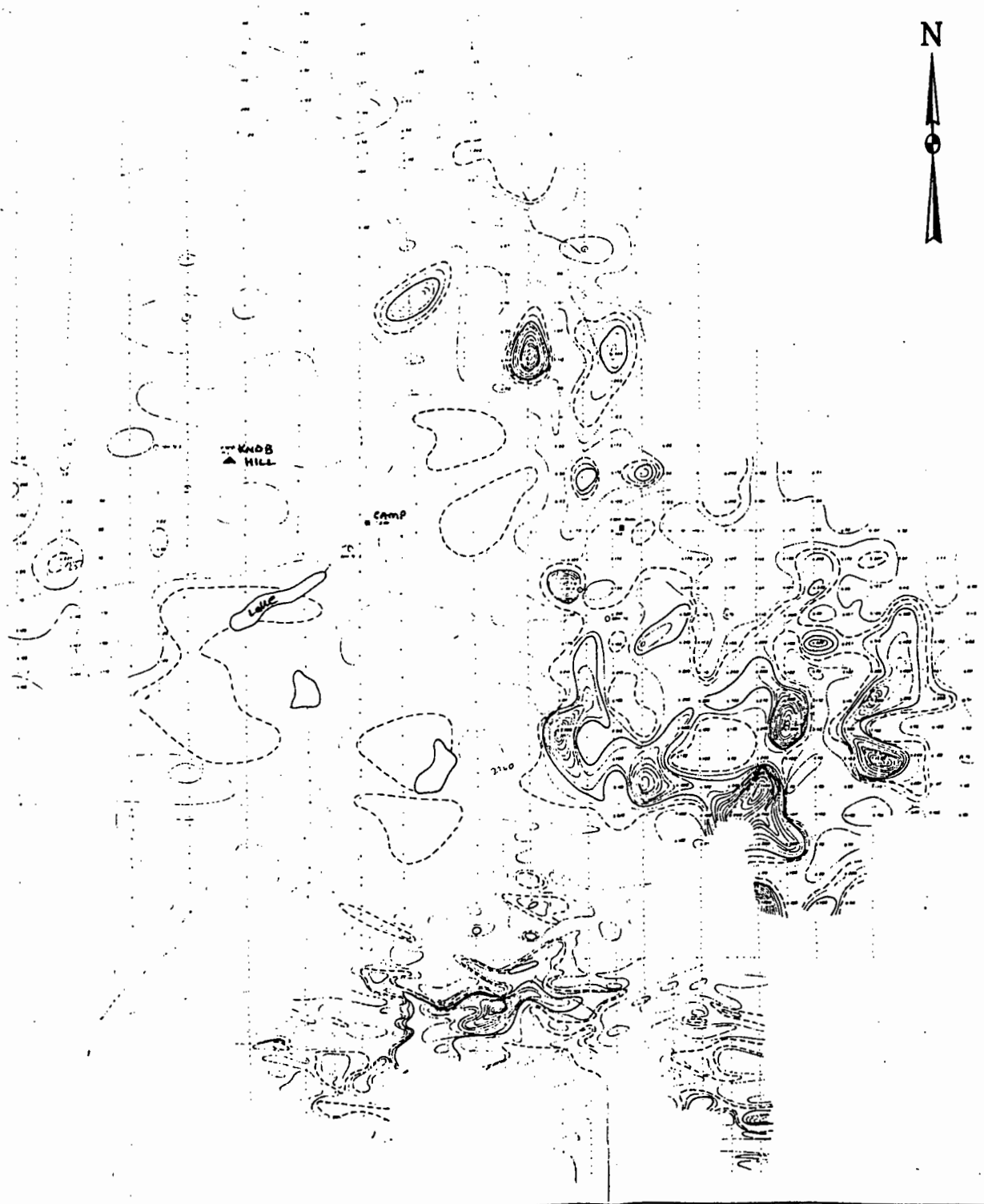
**CHEVRON GEOCHEMISTRY  
COPPER  
(1975)**

**KAMAKA RESOURCES LTD.**


Scale: As shown

Figure:

Date: APR. 1995



**KEY**

 Basal Till 50ppm Zn contours

 Basal Till >200ppm Zn (70percentile)



Metres

Assessment report 5809

**KAMAKA RESOURCES LTD.**

**KNOB HILL PROPERTY**

**CHEVRON GEOCHEMISTRY  
ZINC  
(1975)**

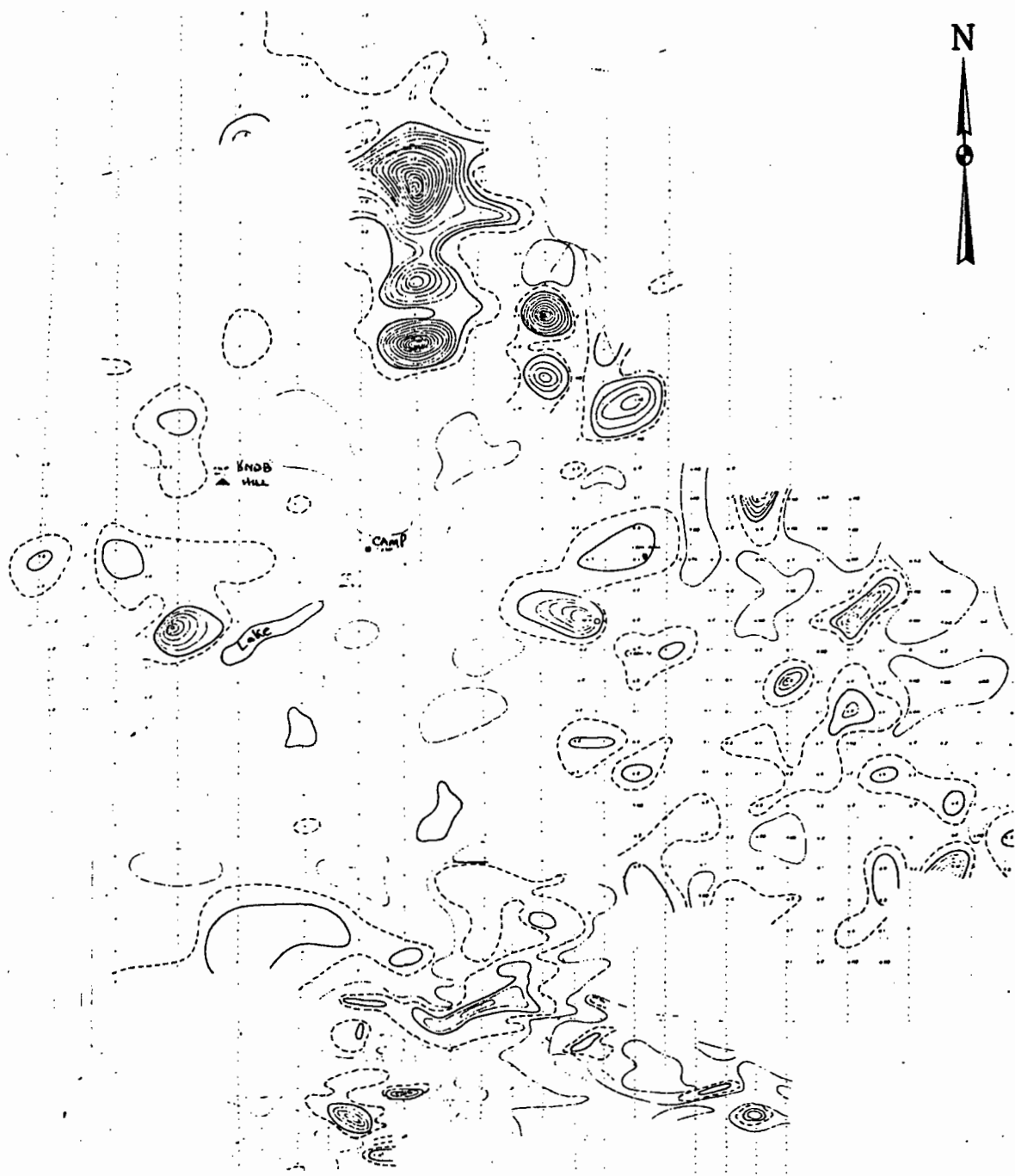
**KAMAKA RESOURCES LTD.**

Scale: As shown

Figure:

Date: APR. 1995





**KEY**

○ Basal Till 4.8ppm threshold 2ppm contours

⊖ Basal Till >2.8ppm (70percentile)



Metres

Assessment report 5809

**KAMAKA RESOURCES LTD.**

**KNOB HILL PROPERTY**

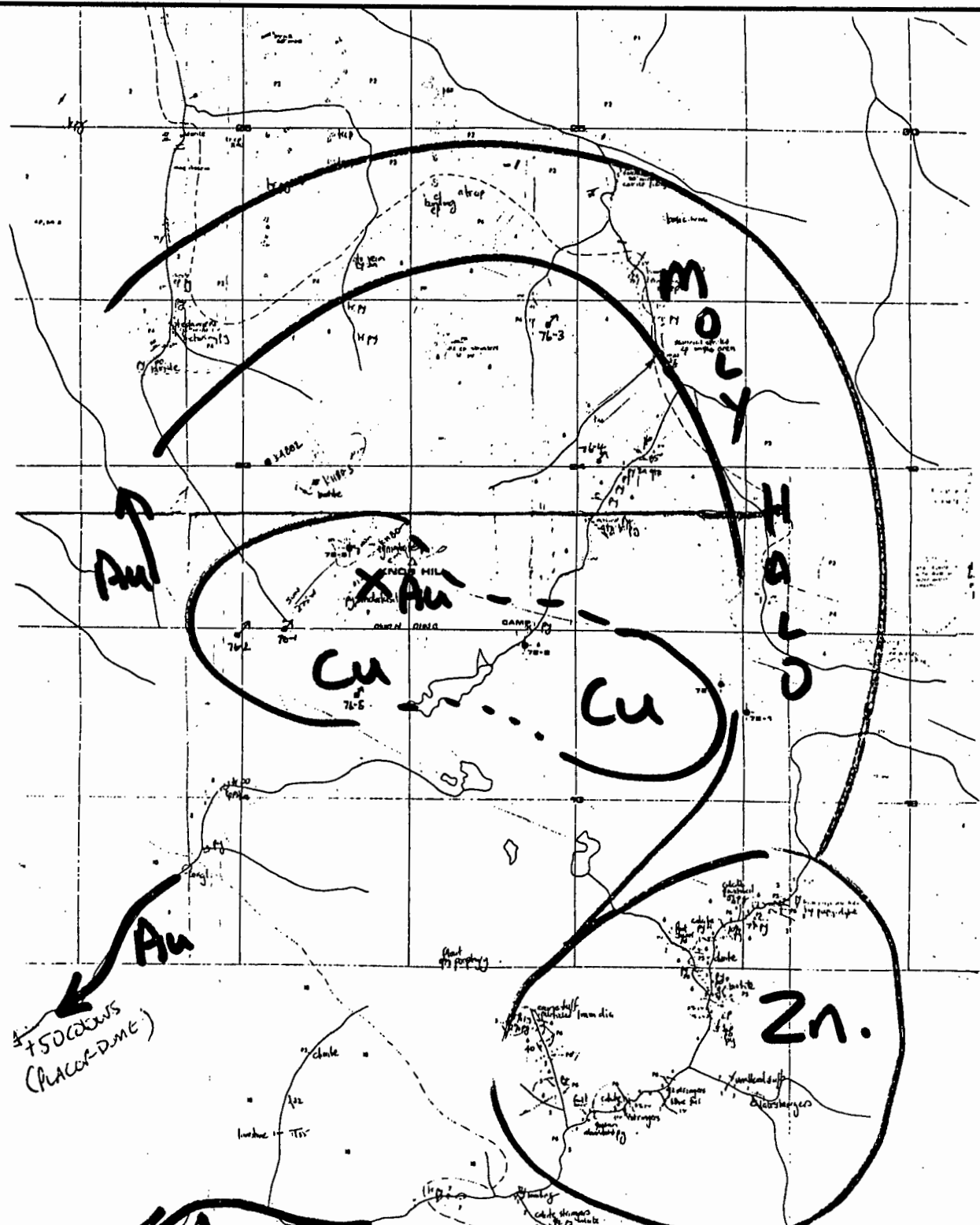
**CHEVRON GEOCHEMISTRY  
MOLYBDENUM  
(1975)**

**KAMAKA RESOURCES LTD.**

Scale: As shown

Figure:

Date: APR. 1995



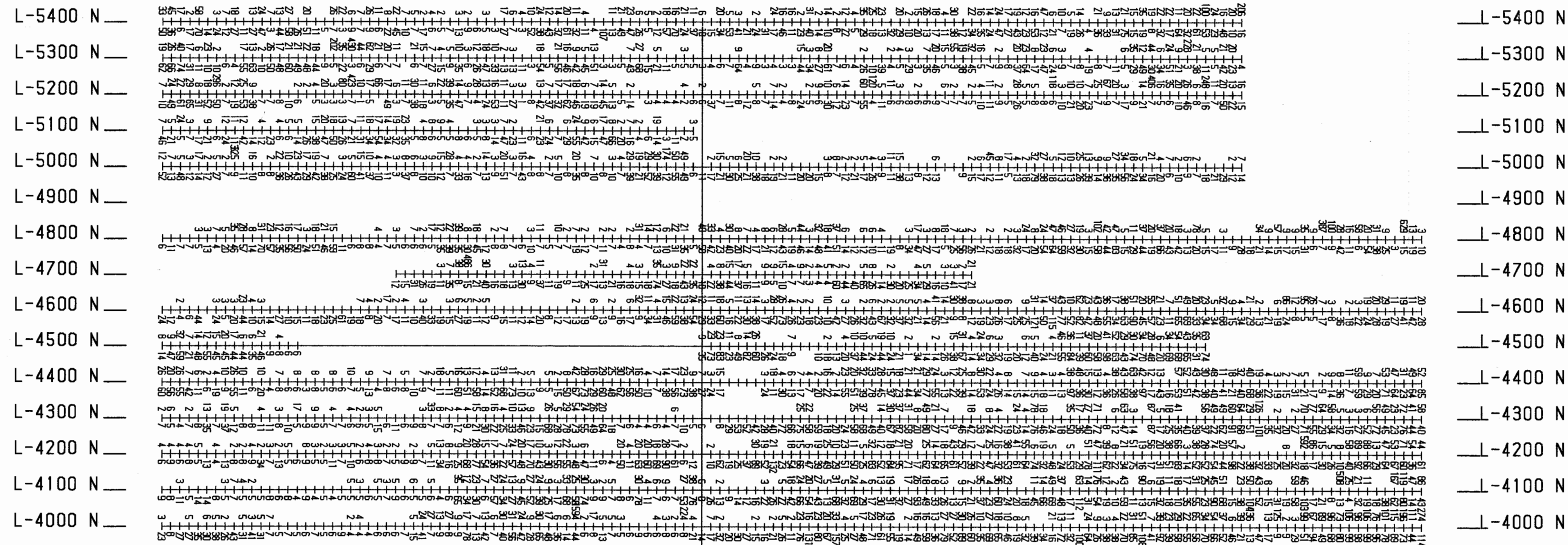
- KEY**
- Fault
  - Granodiorite 1
  - Granodiorite 2
  - Rhyodacite
  - Bonanza Volcanics
  - Bonanza Volcs. hornfels/siliceous
- 76-2<sup>7</sup> drill site

<b>KAMAKA RESOURCES LTD.</b>		
<b>KNOB HILL PROPERTY</b>		
<b>GEOLOGY &amp; GEOCHEMISTRY COMPILATION</b>		
<b>KAMAKA RESOURCES LTD.</b>		
Scale: As shown	Figure:	Date: APR. 1995

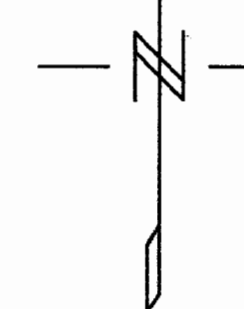
RECEIVED  
P. M95

25,354  
JAN 15 1996  
PROSPECTORS PROGRAM  
MEMPR

3600 E 3900 E 4200 E 4500 E 4800 E 5100 E 5400 E 5700 E 6000 E 6300 E 6600 E 6900 E



3600 E 3900 E 4200 E 4500 E 4800 E 5100 E 5400 E 5700 E 6000 E 6300 E 6600 E 6900 E



Declination: 23

Legend Top: ARSENIC (ppm) - below 2 ppm not plotted  
Bottom: ZINC (ppm)

Scale 1:10000



KAMAKA RESOURCES LTD					
FIRST CHOICE INDUSTRIES LTD					
KNOB HILL PROPERTY NORTHERN VANCOUVER ISLAND NANAIMO M.D., B.C.					
SOIL GEOCHEMISTRY SURVEY ZINC AND ARSENIC DATA					
Drawn by: RTM	Job No. 95-27	NTS 1021/16	Scale 1:10000	Date Jan. 96	Map No. 4B

GEOLOGICAL SURVEY BRANCH  
ASSESSMENT REPORT

RECEIVED

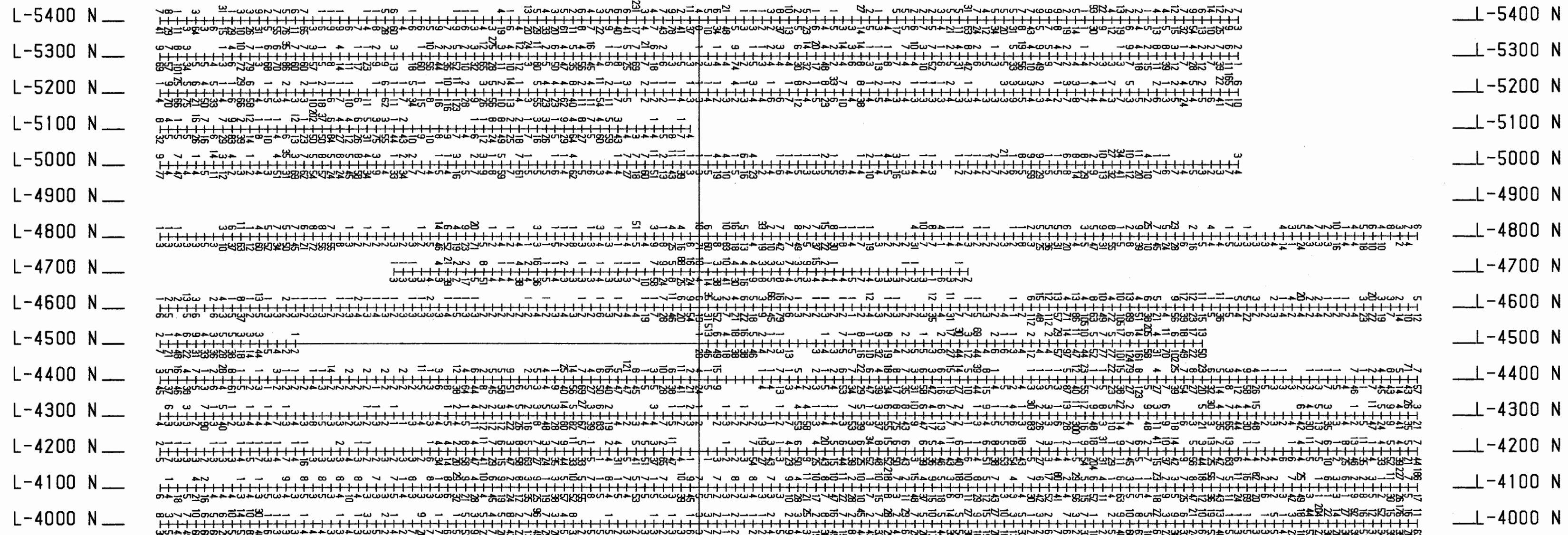
JAN 15 1996

25,354

SPECTORS PROGRAM  
M/M/R

3600 E 3900 E 4200 E 4500 E 4800 E 5100 E 5400 E 5700 E 6000 E 6300 E 6600 E 6900 E

BL



3600 E 3900 E 4200 E 4500 E 4800 E 5100 E 5400 E 5700 E 6000 E 6300 E 6600 E 6900 E

Declination: 23

Legend Top: GOLD (ppb) - below 1 ppb not plotted  
Bottom: COPPER (ppm)

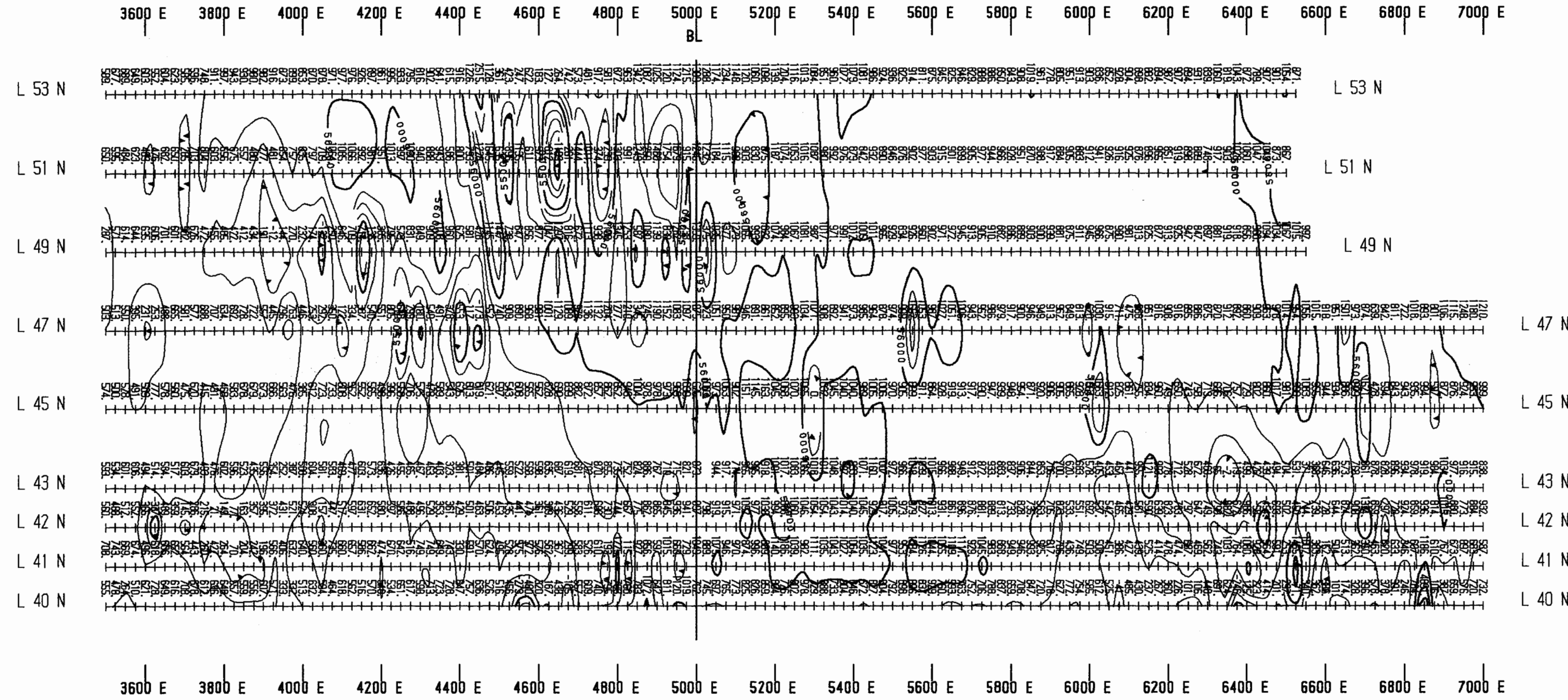
Scale 1:10000  
100 0 100 200 300 400 500  
(metres)

KAMAKA RESOURCES LTD					
FIRST CHOICE INDUSTRIES LTD					
KNOB HILL PROPERTY NORTHERN VANCOUVER ISLAND NANAIMO M.D., B.C.					
SOIL GEOCHEMISTRY SURVEY GOLD AND COPPER DATA					
Drawn by: RTM	Job No. 95-27	NTS 1021/16	Scale 1:10000	Date Jan. 96	Map No. 4A

GEOLOGICAL SURVEY BRANCH  
ASSESSMENT REPORT

25,354

Declination: 23



Instrumentation: Scintrex Proton Precession  
Magnetometer, Model MP-2

Contour Interval: 250 nT (gammas)

Note: 55,000 nT (gammas) has been  
deducted from each value.

Surveyed By: David O'Neill

Survey Date: Dec. 1995

Data reduction: Geotronics Surveys Ltd.

RECEIVED  
M95  
JAN 15 1996  
PROSPECTORS PROGRAM  
MEMBER

Scale 1:10000  
100 0 100 200 300 400 500  
(metres)

KAMAKA RESOURCES LTD  
FIRST CHOICE INDUSTRIES LTD  
KNOB HILL PROPERTY  
NORTHERN VANCOUVER ISLAND  
NANAIMO M.D., B.C.  
MAGNETIC SURVEY  
CONTOUR PLAN

Drawn by: RTM	Job No. 95-27	NTS 1021/16	Scale 1:10000	Date Jan. 96	Rep. No. 6P-16a
------------------	------------------	----------------	------------------	-----------------	--------------------