

# **L J PROPERTY**

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NOV 0 5 1990	
GOVERNMENT AGENT <b>ATLIN</b>	
TRANS. #	17.

## **Geological and Geochemical Assessment Report on the L J Property**

**L J Mineral Claim Record No. 3669  
Atlin Mining Division  
NTS 104K/11 and 104K/14  
Latitude 58° 44' North/Longitude 133° 12' West  
British Columbia**

**October 31, 1990**

**on behalf of**

**SOLOMON RESOURCES LTD.**

**by**

**David M. Strain  
and  
Clive Aspinall, M. Sc; P. Eng.**

**Keewatin Engineering Inc.  
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Vancouver, B.C.  
V6C 1E5**

LOG NO: 11-14	RD.
ACTION:	
FILE NO:	

**20,433**  
**GEOLOGICAL BRANCH  
ASSESSMENT REPORT**

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**ABSTRACT**

The 20 unit LJ Mineral Claim 100% owned by Cominco Ltd. is under an option agreement to Solomon Resources Ltd. Previously reported gold values from samples of quartz veins in shears include: 22,400 ppb Au over 1 metre; 40,000 ppb Au over 0.20 metres and 10,400 ppb Au over 0.25 metres.

Recent work by Keewatin Engineering Inc. on behalf of Solomon Resources Ltd. did not find similar high grades in immediately adjacent areas.

Two different zones of mineralization, 750 metres apart, were located. Zone #1 is characterized by pyrite-arsenopyrite in various combinations estimated from 2% to 10% singly or combined with host veins in structures related to a 150 metre main fault with an azimuth of 178°. They consist of proximal quartz-carbonate vein breccias 2 - 30 centimetres wide, and not more than 10 metres

long, a 46 metre long by 50 centimetre wide resistant dark grey sulphidic silicified gouge section and an 84 metre long by a .30 to 2.0 metres wide quartz flooded breccia section. Both sections are within the main fault. Combined average rock grades (16 samples) from these vein structures in zone #1 are: 139.31 ppb Au, 0.78 ppm Ag, 6296.25 ppm As. Area of zone #1 is 25,000 square metres.

Zone #2 mineralization has a higher visible sulphide content estimated up to 10%, and localized into four quartz-sericite veins hosted in shears. Three of these veins are not more than 5 metres in length. The fourth vein could be up to 30 metres in length. All veins trend between 110° - 140° and widths range between 4 and 25 centimetres. Average rock grades (5 samples) are: 901.20 ppb Au, 1.46 ppm Ag, 3130 ppm As. Area of zone #2 is 6875 square metres. Contour soil sampling suggests the mineralized zones are limited in extent.

These low gold-silver values are not economic. Limited further follow-up work is recommended.

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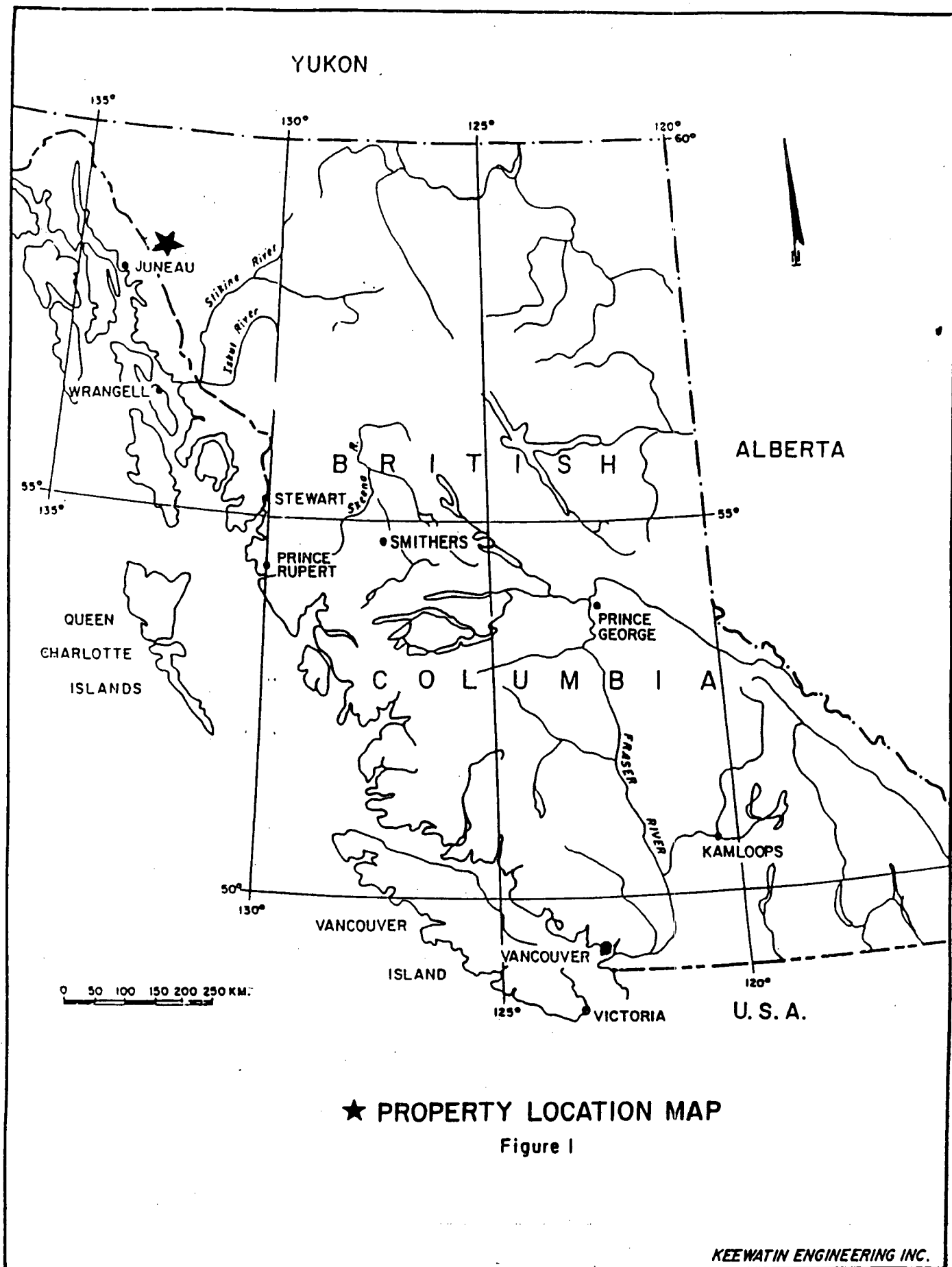
## **INTRODUCTION**

Solomon Resources Ltd. of Vancouver commissioned, in July 1990, Keewatin Engineering Inc. to conduct a field exploration programme on the LJ Mineral Claim (Record No. 3669) located in the Mount Lester Jones area, Tulsequah region, northwest British Columbia (Ref: Figure 1). The programme was to be carried out during the 1990 field season, and the work had to be completed prior to the L. J. Claim anniversary date of August 17, 1990 so that assessment work could be credited towards the property.

The objective of this programme was to evaluate the property's potential for hosting economic precious metal deposits, and for the purpose of fulfilling the assessment requirements. Exploration consisted of geological mapping and geochemical sampling. Geochemistry included litho-geochemical, stream silt and soil sampling.

### **Location and Access**

The LJ Mineral Claim is located in northwestern B. C. within the Atlin Mining Division, NTS sheets 104K/11 and 104K/14 and is centered on 58° 44' N Latitude and 133° 12' W longitude. The Alaskan capital city, Juneau, lies approximately 70 km to the southwest, and the village of Atlin is 97 km northwest.



Access is best gained via helicopter from Atlin. The nearest useable airfield is at the junction of the Tulsequah and Taku Rivers approximately 25 km southwest of the claim.

### **Property and Ownership**

The LJ Mineral Claim-20 units (Ref: Figures 2,3) was staked on August 17, 1989 and is at present 100% owned by Cominco Ltd. (700 - 409 Granville Street, Vancouver, B.C. V6C 1T2). On June 22, 1990 Solomon Resources Ltd. signed a letter of agreement with Cominco Ltd. to option six mining properties in northwest British Columbia, one of which included the LJ Claim. The terms are summarized below:

<u>On or Before</u>	<u>Cumulative Expenditures</u>
December 31, 1990	\$150,000 (Firm)
December 31, 1991	\$350,000 (Optional)
December 31, 1992	\$650,000 (Optional)
December 31, 1993	\$1,000,000 (Optional)

Solomon Resources Ltd. can earn a 51% interest by expending \$1,000,000 on all six properties. Upon the earn-in Cominco may earn back to a 51% interest and become the operator of any property by expending two times Solomon's expenditures on that property. On the properties in which Cominco declines to earn back operatorship that interest will convert to a 20% carried interest.



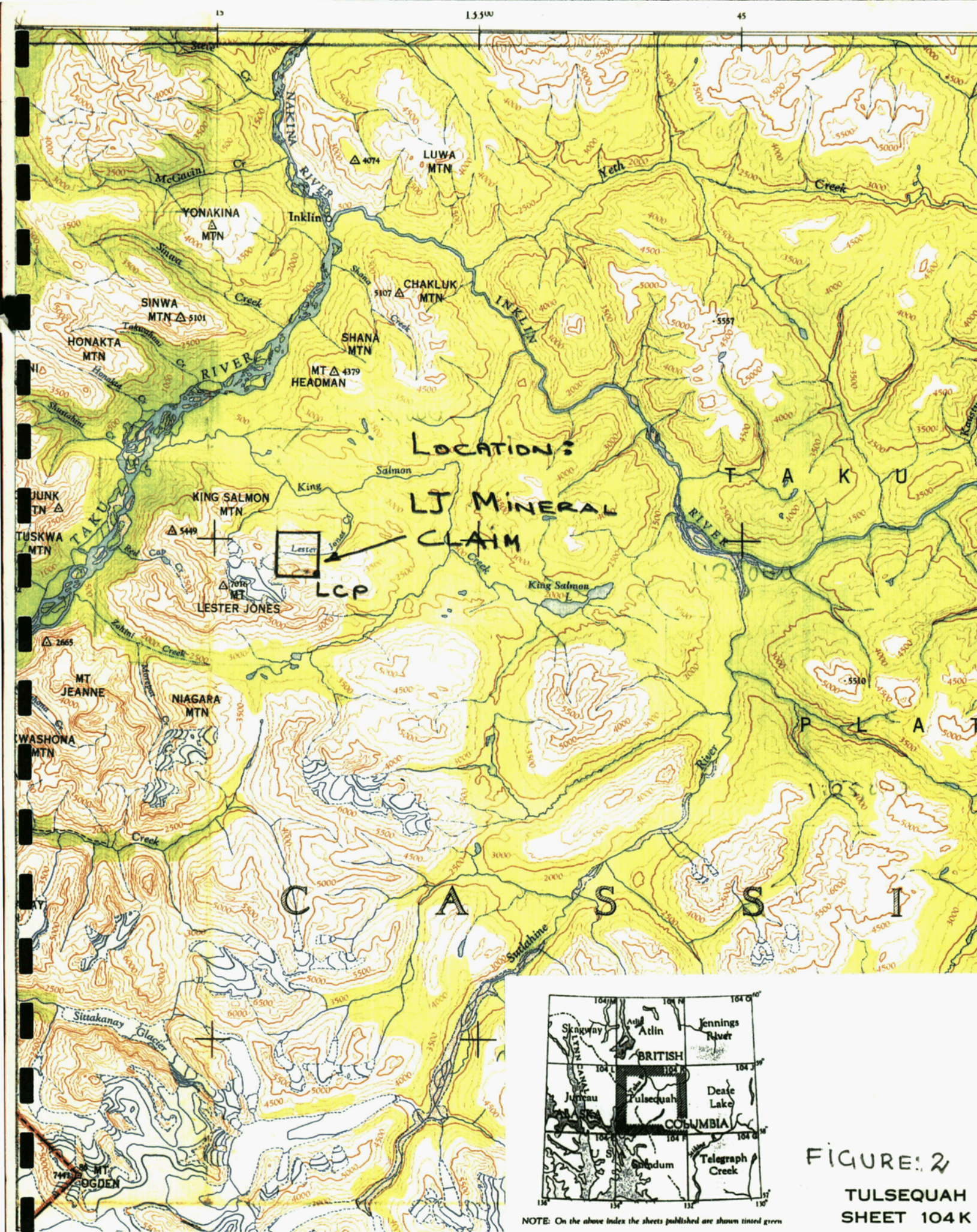


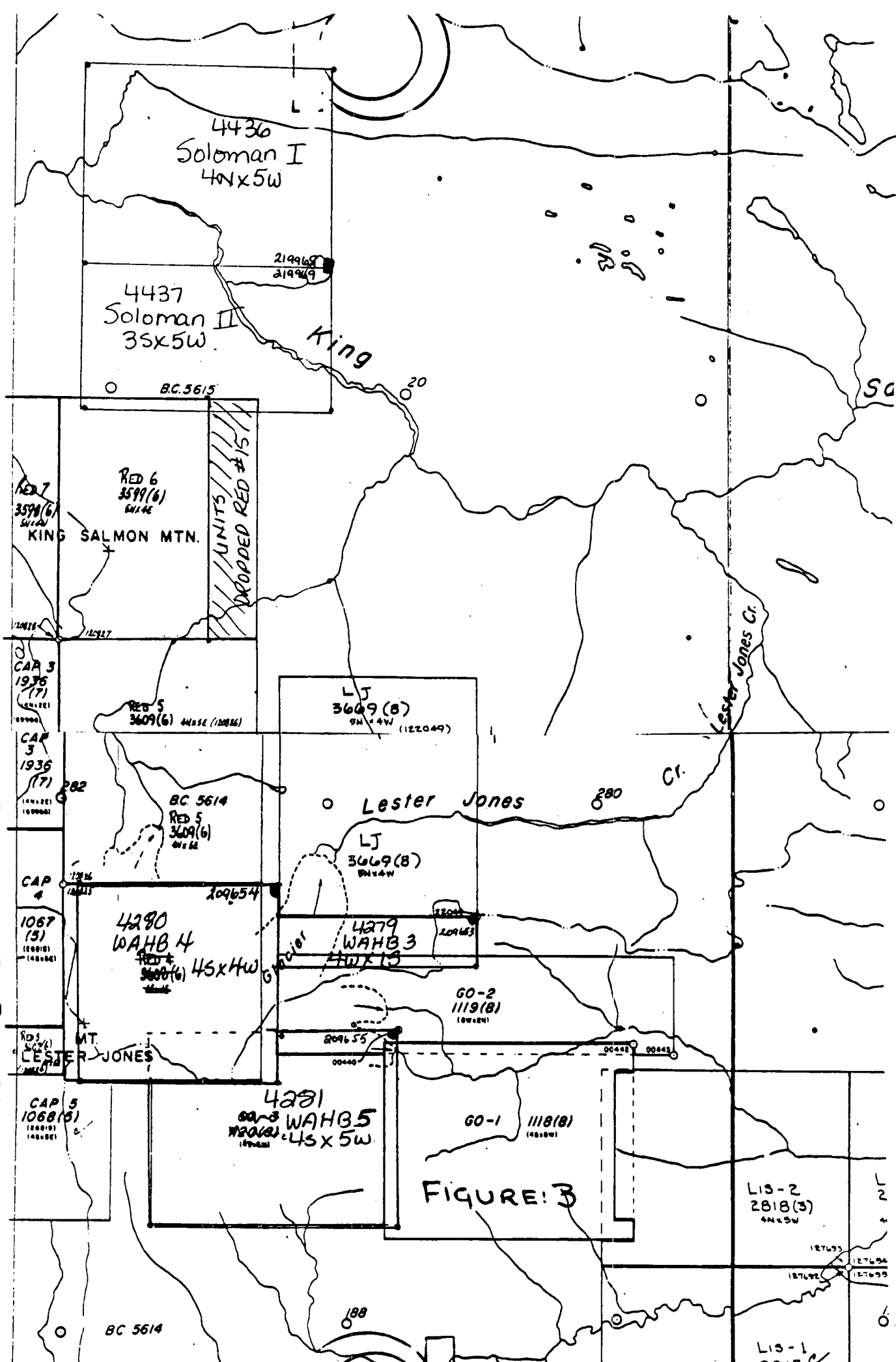
FIGURE: 2

TULSEQUAH  
SHEET 104 K

NOTE: On the above index the sheets published are shown tinted green



**M 104K/11E**



Upon either Solomon delivering production decision notice or with a notice of an underground exploration programme Cominco Ltd. may earn back operatorship and a 51% on any property by funding two times Solomon's expenditures on the property. If Cominco declines to earn back operatorship on any property the carried interest will be converted to a 3% NSR.

### **Physiography, Climate and Vegetation**

The LJ Mineral Claim lies just within the Boundary Ranges physiographic subdivision at its northeastern boundary with the Taku division of the Stikine Plateau. Within the Boundary Ranges, the larger rivers, such as the Taku and their tributaries have dissected the terrain into discrete groups of mountains with steep, rugged peaks. The Stikine Plateau is a deeply incised area of nearly flat summits mainly below 5000 feet in elevation.

The property is situated on the northeast flank of Mt. Lester Jones. A small valley glacier extends onto the southwest corner of the claim and is the headwaters of Lester Jones Creek, which flows east through the southern part of the claim. Most of the claim is traversable with only a small percentage of the area being occupied by cliffs or extremely rugged topography. Elevations range from 3000 feet in the Lester Jones Creek valley and along the north claim boundary, to 5330 feet in the extreme southeast corner.

The area around Mt. Lester Jones receives somewhat less annual precipitation than the Alaskan coast, but considerably more than areas immediately east. The slopes up to timber line do not clear of snow until July. August is the most favourable month to conduct field work.

Timberline is at an elevation of approximately 4500 feet. Very limited vegetation has taken hold in the area around Lester Jones Creek where the valley bottom is covered by fill and moraine. Grasses and stunted balsam dominate on the slopes and ridges.

### **Previous Exploration**

The LJ Mineral Claim was staked by Cominco geologists following the discovery of several parallel shears with associated veining and carbonate alteration hosting reported significant gold mineralization. Limited field work by Cominco geologists discovered exposed shear zones up to 1 metre wide and traceable for ten's of metres before being concealed by overburden. Reported values from samples of mineralized shears include: 22,400 ppb Au (0.65 opt) over 1 metre; 40,000 ppb Au (1.17 opt) over 0.20 metres; and 10,400 ppb Au (0.30 opt) over 0.25 metres.

The general area of the claim had previously been staked by others; one claim post in the area had claim tags dating back to the 1940's.



## **Regional Geology**

The property is located at the boundary between the Coast Plutonic Complex and the Intermaritanne Belt geological provinces of the Canadian Cordillera. The main tectano-stratigraphic pattern conforms to the general cordilleran pattern; suture zones and affiliated faults, fold and batholithic axes having a northwest trend.

In the immediate region, upper Triassic Stuhini Group volcanics and sediments, and lower and middle Jurassic Laberge Group sediments predominate (Ref: Figures 4). Plugs of post middle Jurassic granodiorite intrude Stuhini stratigraphy on Mt. Lester Jones. Felsic dykes and plugs, genetically related to early Tertiary Sloko Group flows and pyroclastics, abound throughout the region.

## **Economic Geology**

The LJ Mineral Claim is located with the Tulsequah mining camp, and 12 km northeast of the confluence of the Taku and Tulsequah rivers. Previously operating mines in the region were Polaris Taku, Tulsequah Chief and the Big Bull. The Polaris Taku Mine was a precious metals producer from 1938 to 1951; 683,337 tonnes of ore were milled, averaging 10.5 g/t Au; 0.5 g/t Ag; and 0.01% Cu. Recent proven and possible reserves are reported at 131,500 tonnes



15° 133° 00' 45'



LEGEND

- QUATERNARY**  
PLEISTOCENE AND RECENT
- 19 Fluvialite gravel, sand, silt; glacial outwash, till, alpine moraine and undifferentiated colluvium; 19a, landslides
- TERTIARY AND QUATERNARY**  
LATE TERTIARY AND PLEISTOCENE  
LEVEL MOUNTAIN GROUP
- Basalt, olivine basalt, related pyroclastic rocks; in part younger than some of 19
- 17 HEART PEAKS FORMATION: rusty-weathering trachyte and rhyolite flows, pyroclastic rocks, and related intrusions
- CRETACEOUS AND TERTIARY**  
LATE CRETACEOUS AND EARLY TERTIARY  
SLOKO GROUP
- 14 Light green, purple and white rhyolite, dacite, and trachyte flows, pyroclastic rocks, and derived sediments
- 15 16 Probably genetically related to 14; 15. Felsite, quartz-feldspar porphyry 16. Medium- to coarse-grained, pink, biotite-hornblende quartz monzonite
- PRE-UPPER CRETACEOUS**
- 13 CENTRAL PLUTONIC COMPLEX: granodiorite, quartz diorite; minor diorite, leuco-granite, migmatite and gneiss; age and relationship to 12 uncertain
- JURASSIC AND/OR CRETACEOUS**  
POST MIDDLE JURASSIC
- 12 12a, hornblende-biotite granodiorite; 12b, biotite-hornblende quartz diorite; 12c, hornblende diorite; 12d, sugite diorite. Age and relationship to 13 uncertain
- JURASSIC**  
LOWER AND MIDDLE JURASSIC  
LABERGE GROUP (10, 11)
- 11 TAKWAHONI FORMATION: granite-boulder conglomerate, chert-pebble conglomerate, greywacke, quartzose sandstone, siltstone, shale
- 10 INKLIN FORMATION: well bedded greywacke, graded siltstone and silty sandstone, pebbly mudstone, limy pebble conglomerate; 10a, limestone
- TRIASSIC**  
UPPER TRIASSIC
- 9 SINWA FORMATION: limestone; minor sandstone, argillite, chert
- STUHINI GROUP (7, 8)
- 7 7. Mainly volcanic rocks; andesite and basalt flows, pillow lava, volcanic breccia and agglomerate, lapilli tuff; minor volcanic sandstone, greywacke, and siltstone
- 8 KING SALMON FORMATION: thick bedded, dark greywacke, conglomerate, mudstone, siltstone, and shale; minor andesitic lava, volcanic breccia, tuff, limestone, limy shale; locally enclosed in 7
- LOWER OR MIDDLE TRIASSIC (?)**
- 6 Fine- to medium-grained, strongly foliated diorite, quartz diorite; and minor granodiorite; age uncertain
- TRIASSIC AND EARLIER**  
PRE-UPPER TRIASSIC
- 4 Fine-grained, clastic sediments and intercalated volcanic rocks, largely altered to greenstone and phyllite; chert, jasper, greywacke, limestone; 4a, mainly chert, slate, argillite; minor greenstone; 4b, mainly greenstone; 4c, limestone, may include some 1
- 5 Quartz-eldite-amphibole gneiss; quartz-biotite schist, garnetiferous schist, augen gneiss, tremolite marble; mainly metamorphosed equivalents of 3 and 4, may be in part older than 3
- PERMIAN**
- 3 Chiefly limestone and dolomitic limestone; minor chert, argillite, sandy limestone
- PERMIAN (?)**
- May not all be of the same age
- 1 Peridotite, serpentinite, small irregular bodies of gabbro and pyroxene diorite
- 2 Fine- to medium-grained gabbro and pyroxene diorite
- A Diorite gneiss, amphibolite, migmatite; age unknown

GEOLOGICAL BRANCH  
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20,433

(Section of)  
MAP 1262A  
GEOLOGY  
TULSEQUAH AND JUNEAU  
CASSIAR DISTRICT  
BRITISH COLUMBIA

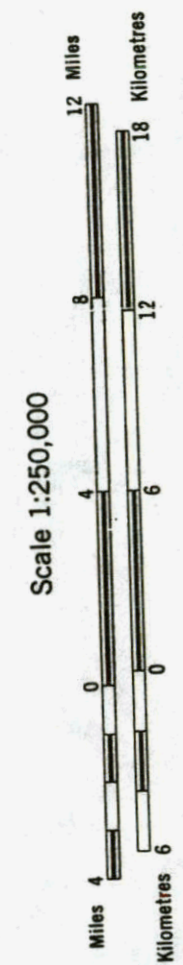


FIGURE: 4



grading 13.7 g/t Au. The Tulsequah Chief is a classic kuroko-type stratiform massive sulphide deposit, and was a producer of base and precious metals from 1951 to 1957; the Big Bull produced similar ores from 1951 to 1956.

Recent drilling by Cominco-Redfern has discovered two new sulphide lenses at Tulsequah Chief; Redfern has calculated a potential geological reserve, including previous reserves, to the 3500 level at 5.8 million tons grading 0.08 oz/ton Au (2.496g/t) and 2.9 oz/ton Ag (90.48 g/t), 1.6% Cu, 1.3% Pb and 7.0% Zn. Further drilling to be completed prior to end November 1990 is expected to provide further information regarding these reserves.

## **1990 EXPLORATION PROGRAMME ON LJ MINERAL CLAIM**

### **Summary of Work**

Between July 3, 1990 and July 19, 1990 Keewatin Engineering Inc. spent approximately 56 man days on the LJ Claim. Reconnaissance geological mapping at 1:10,000 scale was initially completed (Ref: Map No.1); more detailed geological mapping was done on two especially established grids covering 25,000 square metres and 6875 square metres. These two grids are referred to as Grid #1 (Ref: Map No.2) and Grid #2 (Ref: Map No.3) and are located 750 metres apart (Ref: Map No.4). A programme of soil sampling was completed (Ref: Maps No.4,5,6). The following samples from the property were collected

and analyzed:

Rock grab & rock chip	25
Soils	167
Silts	<u>2</u>
	194 samples

## **GEOLOGY**

### **Property Geology**

The LJ Mineral Claim is underlain by epiclastic rocks of the King Salmon Formation (Stuhini Group), and relatively sparse felsic to intermediate dykes. On the property, the King Salmon Formation is comprised of two distinct members: (1) a lower, coarse epiclastic breccia; (2) overlying interbedded silt stones and wackes (Ref: Map No.1)

Well indurated coarse epiclastic breccia occupies the lowest areas surrounding Lester Jones Creek. Outcrops of these rocks are generally massive, lacking primary depositional features; however, higher in the section they become interbedded with finer epiclastic breccias (wackes). Unaltered exposures weather green and locally grey. The recent retreat of ice has left much of the bedrock free of soil and lichen cover, and clearly revealing textural and compositional characteristics. A high degree of textural variation was observed, from matrix supported boulder breccias, to clast supported equigranular breccias. A high degree of angularity is displayed by all size

ranges with the exception of some of the largest clasts, where a slight degree of rounding was noted. Most of the clasts are volcanic but in certain localities fragments of dark grey limestone, jasper and fine grained clastics comprise part of the rock. The term epiclastic breccia was used because it is believed that these coarse breccias were deposited by purely sedimentary processes. Locally intercalated with these breccias are non-fragmental, intermediate to mafic porphyritic flows.

Upwards in the section, massive coarse epiclastic breccia gives way to thick bedded lithic wackes and then rather abruptly into medium to thin bedded grey wackes and silt stones. These wackes are brown to grey, weathered medium grained arenites with abundant plagioclase fragments, and locally contain dark, angular lithic fragments. The siltstones display similar weathering and colour characteristics, but individual beds are thinner than the wacke beds.

Three distinctly different types of dykes were observed in the southern part of the claim.

1. A 5 to 10 metre wide, tan to grey weathering, light tan felsic dyke of definite Sloko Group affiliation. This dyke was traced for approximately 600 metres along a strike of  $090^{\circ}$ .
2. Two subparallel, resistant, grey weathering, dark grey, magnetic, plagioclase biotite porphyritic intermediate dykes trending at  $035^{\circ}$ .

3. A 10 metre wide, orange weathering, tan, weakly sericitized and carbonatized, plagioclase porphyritic dacite dyke trending approximately 075°

### **Structure**

All measurements taken of bedding gave strikes between 096° and 140°. Dips in the southwest part of the claim are 40° - 60° to the southwest, while in the east-central part of the claim dips range from 22° to 50° towards the northeast. It is clear that the claim is situated on an anticline whose fold axis trends an azimuth of approximately 132°.

A 178° trending fault with steep west dip was identified in the southwestern portion of the claim cutting fine and coarse epiclastic rocks. A grid was established over the structure and geologically mapped at a scale of 1:1000 (Grid #1). A two metre wide recessive zone and anastomosing shears mark the fault which is traceable for 150 metres. The northern and southern extensions of the fault are hidden under till deposits. A dextral displacement of 50 metres is indicated by a 10 metre wide offset dyke. Numerous subordinate faults, marked by quartz-carbonate breccias, recessive zones and gossans, occur adjacent. The most pervasive of these smaller structures have trends from 020° to 050°, with very steep dips.

A conjectural fault occurs underlying talus and till on Grid #2 with a trend of approximately 110°. In the immediate vicinity of Grid #2, and perhaps related to the inferred 110° trending fault, are a number of mineralized veins occupying shears trending between 110° and 140°. None of these veins were traceable for more than 30 metres. Their maximum width is 25 centimetres.

Structures similar to the subordinate faults on Grid #1 are common within the coarse eqiclastic breccias, especially in the area where Lester Jones Creek makes a broad bend from a northeast to an easterly direction. No preferred orientation for these structures is evident.

### **Veining and Mineralization**

Veining on the LJ Mineral Claim is not abundant; veins that are present can be subdivided into:

- chalcedonic quartz veins
- barren quartz veins/quartz flooded zones (non-chalcedonic)
- quartz stringers (non-chalcedonic)
- quartz carbonate vein breccias (non-chalcedonic)
- quartz veins in shears (non-chalcedonic)

The chalcedonic quartz veins were observed in the extreme southeast corner of the claim; one vein was observed and sampled (90 MSR-036) in the centre of

the claim. These veins were noted to occur in areas of carbonatized and weakly pyritized rock, but contain no sulphides themselves. Similar chalcedonic veining occurs locally within the main fault on Grid #1; there they are narrower and not as continuous as the above. Chalcedonic veining was observed outside of the LJ Mineral Claim.

Details of the non-chalcedonic quartz veins are given below; three types are mineralized.

### **Detailed Geological Mapping: Grids #1 and #2**

Grid #1 is dominated by a fault trending 178° already discussed above; it is referred to as the main fault (Ref. Map No.2). Mineralized quartz veins associated with this fault are related structural infillings of quartz breccia, silicified gouge and mineralization. Three types are noted:

- 1) In the southern part of this grid, the fault is poorly exposed. Where adjacent outcrops can be seen, orange weathered-carbonate vein breccias are present. This is the most common type of veining; they range between 2 - 30 centimetres wide, are light grey, locally banded, and abundant, completely carbonatized angular rock fragments are hosted within. Locally these vein breccias contain up to 5% combined pyrite and arsenopyrite, and in most places have associated reddish



weathering carbonatized envelopes.

- 2) Between base line stations 10 + 16N to 10 + 62N part of the main fault is comprised of a 50 centimetre wide resistant dark grey to black sulphidic silicified fault gouge. This zone weathers a rusty colour reflecting 5 - 10% sulphide content. Pyrite occurs throughout the zone as fine grained aggregates, while arsenopyrite mineralization is concentrated close to the footwall and hanging wall contacts. Arsenopyrite constitutes approximately 1/10th of the total sulphides, and occurs as very small acicular grains.
- 3) From baseline stations 10 + 62N to 11 + 46N the main fault manifests itself as 0.3 metres to 2.0 metres wide light coloured quartz-flooded breccia. Sugary, light grey matrix quartz comprises 50 - 60% of the rock, supporting dark and light grey (clay altered) angular fragments. This quartz-flooded breccia contains approximately 2% pyrite as isolated blebs.

Results from rock samples collected along the main fault exhibiting this vein fill give weakly anomalous gold and silver values (94 ppb - 410 ppb and 0.8 - 2.9 ppm respectively). The silicified black fault gouge exhibits acicular arsenopyrite plus pyrite gave arsenic values ranging from 993 ppm - 15,801 ppm As. Traces of galena were noted in a silicified pyritic zone subparallel to

the main fault; it is the only other sulphide positively identified.

Non-mineralized quartz stringers, quartz veins and chalcedonic quartz veins are also exposed adjacent to the main fault.

The main fault, and associated vein structures within Grid #1, are hosted by rocks of the King Solomon Formation. These are generally well bedded grey to green weathering siltstones and wackes (grit) and thick bedded to massive lithic wackes and coarse epiclastic breccias. The main fault was not traced beyond the confines of Grid #1.

Grid #2 contains (Ref: Map No.3) more visible pyrite-arsenopyrite, estimated up to 10% combined sulphides in quartz-sericite veins occupying shears trending between azimuth 110° - 140°. Mineralization within the veins consists of fine grained aggregates of pyrite plus arsenopyrite (stubby and acicular varieties), the pyrite to arsenopyrite ratio is estimated to range from 5:1 to 1:1. The quartz is fine grained and grey in colour, with local impregnations and films of greenish sericite(?). These veins pinch and swell within their host shears, ranging in width from 4 centimetres to 25 centimetres. The veins are traceable up to 5 metres along strike, and may be inferred in one case to extend to 30 metres, based on recessive gullies.

Non-mineralized quartz stringers, and quartz veins are also exposed in Grid #2.

Cominco sample sites were identified by flagging in Grid #2, but not in Grid #1.

Grid #2 is underlain by a coarse epiclastic unit of the King Salmon Formation; locally these rocks have been moderately to intensively carbonatized, possibly caused by the inferred fault trending 110° azimuth.

## **GEOCHEMISTRY**

### **Soil Sampling**

A total of 167 soil samples (Ref: Map No. 4) were collected from the LJ Mineral Claim; 18 of these samples were collected from Grid #2, the balance were collected following elevation contours at 50 metre intervals on upper valley slopes. Here the sample material either consisted of talus fines or 'B' horizon soils. Where soil had developed, the 'B' horizon profile ranged between 15 cm to 35 cm below surface. Soil development in the southwest quaderant of the claim is very limited due to scouring by glacial action at the headwaters of Lester Jones Creek; in sections of Lester Jones Creek moraine material had been dumped by glacial action and this material was not sampled. No soils have developed on Grid #1.

Analyses of all samples were made by Acme Analytical Laboratories Ltd. in Vancouver following published procedures for 30 element ICP and geochemical

gold wet extraction. Results for soil samples, included in the appendices of this report, are disappointing for precious metals. Of the total 167 soil samples collected only one sample is deemed truly highly anomalous in gold and silver; this sample assayed:

90' MCS-116            4,560 Au ppb            3.3 Ag ppm            19,953 As ppm

This sample was collected over a quartz vein on the west side of Grid #2. A statistical evaluation was carried out on 166 soil sample values of gold and arsenic; the one sample not included in this evaluation is sample 90' MCS-116. Silver values (soil) gave generally flat values between 0.1 - 0.3 ppm so were not included in this evaluation: parameters for gold and arsenic are listed below:

<u>Gold (ppb)</u>	<u>Arsenic (ppm)</u>
n - 166: $\bar{x}$ - 12.9	n - 166: $\bar{x}$ - 101.8
SD - 15.6	SD - 121.8
2SD - 31.1	2SD - 243.6
3SD - 46.7	3SD - 365.47

N.B: SD - Standard Deviation

These parameters were converted to logarithms and plotted on semi logarithmic paper to obtain a cumulative frequency distribution for these elements, and included in the appendices (Figure #5). Although the procedure followed Hawkes and Webb (1962) in categorizing "Possibly" anomalous and "Probably" anomalous sample values - the gold in soil in areas tested on the LJ Mineral Claim are not considered anomalous (sample 90' MCS-116 excepted) from a

mineral exploration view point; a group of samples, 5 - 10% of the total collected with a threshold value of 400 ppb Au in this environment, would be considered worthy of further exploration investigations (personal opinion - Aspinall).

Arsenic was analyzed with the hope that it would act as a pathfinder element for gold, but its usefulness in this case remains questionable.

### **Rock Sampling**

Eleven rock grab samples and five rock chip samples were collected from Grid #1. These samples came from selected quartz vein and quartz breccia associated with the main fault. Details of the rock and chip samples from both grids and elsewhere on LJ Mineral Claim are given in the appendices. Locations of Grid #1 samples are provided on Map No.4; Au-Ag-As grades of these samples are as follows:

<u>Rock Grab</u>	<u>Au ppb</u>	<u>Ag ppm</u>	<u>As ppm</u>
90' MSR-030	1	0.2	502
90' MSR-031	1	0.2	54
90' MSR-032	3	0.8	3959
90' MSR-033	410	2.9	9240
90' MSR-034	220	1.7	993
90' MSR-035	94	0.4	9916
90' MSR-038	13	0.2	546
90' MSR-039	126	2.3	10017
90' MSR-040	12	0.1	1378
90' MSR-041	92	0.4	8522
90' MSR-043	470	0.7	18625

**Rock Chip**

90' MSC-007	270	1.7	9709
90' MSC-008	108	1.2	3437
90' MSC-009	29	0.8	2309
90' MSC-010	200	0.8	15801
90' MSC-011	180	0.1	5732
Average Grade: 16 samples	139.31	0.78	6296.25
Mean Grade: 5 rock chip samples	149.69	0.95	4454.13

Five rock samples came from grid #2 quartz-sericite veins occupying shears trending between azimuth 110° - 140°. These veins pinch and swell within their host shears, and range in width from 4 centimetres to 25 centimetres; details are given in the appendices. Au-Ag-As grades are:

<u>Sample No.</u>	<u>Au ppb</u>	<u>Ag ppm</u>	<u>As ppm</u>
90' MCR-063	840	1.2	2058
90' MCR-064	2100	1.5	9316
90' MCR-065	1150	3.7	2703
90' MCR-066	6	0.3	13
90' MSR-045	410	0.6	1562
Average Grade: 5 samples	901.20	1.46	3130

Three rock grab samples were collected adjacent to the grids; their locations are illustrated on Map No.4. Their Au-Ag-As grades are:

<u>Sample No.</u>	<u>Au ppb</u>	<u>Ag ppm</u>	<u>As ppm</u>
90' MSR-036	47	0.1	33
90' MSR-037	10	0.1	59
90' MSR-042	470	0.7	1084

**Stream Sediment Samples**

Two stream sediment samples were collected on the LJ Mineral Claim. They

contain background values (Ref: Map No.4). These are:

<u>Sample No.</u>	<u>Au ppb</u>	<u>Ag ppm</u>	<u>As ppm</u>
90' MSL-009	1	0.9	107
90' MSL-010	1	0.1	145

## **CONCLUSIONS AND RECOMMENDATIONS**

Previously reported samples from mineralized shears grading 22,400 ppb Au (0.65 opt) over 1 metre; 40,000 ppb Au (1.17 opt) over 0.20 metres; and 10,400 ppb Au (0.30 opt) over 0.25 metres are believed to have originated from Grid #2; previous years flagging found with 1989 sample numbers support this assumption. The 1990 exploration programme did not locate new extensions with equivalent gold values; however it did identify two zones of mineralization on the LJ Mineral Claim; but neither exhibit economic gold or silver values.

Zone #1 mineralization is associated with a 150 metre long fault trending 178°. It includes three distinct types of mineralized vein fill from within the main fault itself, or appendages to it. The most common is orange weathered carbonate vein breccia ranging in width from 2 - 30 centimetres with local concentrations of up to 5% combined pyrite and arsenopyrite. The second type is a 46 metre long and 50 centimetre wide resistant dark grey to black sulphidic

silicified fault gouge with an estimated 5 - 10% sulphide content of pyrite and minor arsenopyrite. The third type is an 84 metre long, 0.3 - 2.0 metre wide quartz flooded breccia with an estimated 2% pyrite. Weak gold-silver grades with high arsenic grades characterize zone #1; average grades are 139.31 ppb Au, 0.78 ppm Ag, 6296.25 ppm As. Zone #1 mineralization is confined to Grid #1, an area of 25000 square metres.

Zone #2 mineralization averages 901.20 ppb Au, 1.46 ppm Ag, 3130 ppm As (after 5 rock samples). Mineralization is concentrated in four quartz-sericite veins hosted by shears trending between 110° - 140°. These veins pinch and swell from 4 to 25 centimetres width and three of them are traceable for up to 5 metres in length; the fourth may extend up to 30 metres. All are found within Grid #2, an area of 6875 square metres. Mineralization may be related to an inferred fault trending 110°.

Both zones of mineralization are hosted within sedimentary rocks of the King Salmon formation and occur on either side of an anticlinal axis. Consequently both may be stratigraphically related.

The 1990 programme concludes that the LJ Mineral Claim is not a priority target area for precious metals. It is recommended, however, that a three man team spend an additional 4 days on the claim: trenching of the inferred 30 metre long vein on Grid #2 be carried out, with additional rock and geochemical soil



sampling in the same area. The northern part of the LJ Mineral Claim should be tested by geochemical soil sampling. A VLF-Magnetometer survey across the main structures on Grids 1 and 2 is recommended.

## **CERTIFICATE OF DAVID M. STRAIN**

I, **DAVID M. STRAIN**, of P.O. Box 214, Atlin, B.C., state:

- 1) I am a geologist residing at the above address.
- 2) I graduated from Cambrian College of Applied Arts and Technology with a diploma in Geological Engineering Technology. I attended the University of British Columbia enrolled in Geological Sciences from 1980 to 1983.
- 3) This report is based on my personal field examination of the property.

Dated at **Atlin, B.C.**, this **31st** day of **October, 1990**.



---

David M. Strain, Geologist

## **CERTIFICATE OF CLIVE ASPINALL**

**I, Nicholas Clive Aspinall, of 117 - 1230 Haro Street, Vancouver, B.C.**

**V6E 4J9, do hereby certify that:**

- 1) I am a Consulting Geologist with the firm of Keewatin Engineering Ltd.  
with offices at Suite 800, 900 West Hastings Street, Vancouver, B.C.,  
V6C1E5.**
- 2) I am a graduate of McGill University with a Bachelor of Science degree in  
1964 and a Master of Science degree from Camborne School of Mines in  
1987, in Mining Geology, and I have practised my profession for 26 years.**
- 3) I am a member in good standing of the Association of Professional  
Engineers of British Columbia and a Fellow of the Geological Association of  
Canada.**
- 4) I am a co-author of the report entitled "Geological and Geochemical  
Assessment Report of the LJ Property, LJ Mineral Claim Record No.  
3669, Atlin Mining Division, NTS 104K/11 and 104K/14, Latitude 58° 44'  
North/Longitude 133° 12' West, British Columbia" dated October 31,  
1990. I was present on the property while the work was being done.**
- 5) I do not own or expect to receive any interest (direct, indirect, or  
contingent) in the property described herein, nor in the securities of  
Solomon Resources Ltd, in respect of services rendered in the preparation  
of this report.**

**Dated at Atlin, British Columbia, this 31th day of October 1990 A.D.**

**Respectfully submitted,**

  
**Clive Aspinall, M.Sc. P. Eng.**  


## BIBLIOGRAPHY

- Casselman, M. J. Cominco-Redfern Tulsequah Chief Massive Sulphide Deposit Northwest British Columbia. Cominco Ltd. A paper given at Mineral Exploration Group Luncheon, Vancouver, B.C. Spring of 1990.
- Dandy, Linda. Tulsequah Mining Camp. Unpublished paper. 02/90. Available at BCDM office, Smithers, B.C.
- Hawkes, H. E. and Webb, J. S. Geochemistry in Mineral Exploration. 1962
- Kerr, F. A. Taku River Map Area. Geological Survey of Canada Memoir 248. 1948
- Koch Jr., George S, and Link, Richard F. Statistical Analysis of Geological Data. Volume 2. 1971
- ACME Analytical Laboratories Ltd. Assaying and Geochemical Analysis. Effective December 1, 1989

## **APPENDICES**

**STATEMENT OF COSTS****LJ Claim Group: Assessment Work**

Clive Aspinall	5 days @ \$450.00 per day	\$2250.00
David Strain	15 days @ \$350.00 per day	5250.00
Douglas Jack	5 days @ \$300.00 per day	1500.00
Lance Goodwin	3 days @ 250.00 per day	750.00
Suzanne Radford	3 days @ 215.00 per day	645.00
Alistair Skey	15 days @ 175.00 per day	2625.00
Matthew Aspinall	3 days @ 160.00 per day	480.00
Carrol Goodwin	7 days @ 225.00 per day	1575.00

**\$15075.00****Accommodation**

56 man days @ \$60.00	3360.00
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**Analytical**

150 samples @ \$15.00 plus 10%	2475.00
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**Transportation**

6.6 helicopter hours @ \$718.70 plus 10%	5217.77
Fixed wing costs plus 10%	768.20

**Report writing, map reproduction, typing**

3000.00

**Total****\$29895.97**

## **SUMMARY OF PERSONNEL**

- i) **Clive Aspinall: Consulting Geologist**  
**117-1230 Haro Street, Vancouver, B.C. V6E 4T9**
- ii) **David M. Strain: Exploration Geologist**  
**Atlin, B.C. VOW IAO**
- iii) **Douglas Jack: Prospector/Field Assistant**  
**Atlin, B.C. VOW IAO**
- iv) **Lance Goodwin: Field Assistant**  
**Atlin, B.C. VOW IAO**
- v) **Suzanne Radford: Field Assistant**  
**Atlin, B.C. VOW IAO**
- vi) **Alistair Skey: Field Assistant**  
**Adelaide, Australia**
- vii) **Matthew Aspinall: Field Assistant**  
**117-230 Haro Street, Vancouver, B.C. V6E 4T9**
- viii) **Carrol Goodwin: Cook**  
**Atlin, B.C. VOW IAO**

# LIST OF STRUCTURAL MEASUREMENTS

## Bedding

### SW Area

118°/50° SW  
121°/45° SW  
112°/60° SW  
096°/40° SW  
118°/43° SW  
096°/54° S  
128°/42° SW  
135°/48° SW  
112°/56° SW  
116°/48° SW

### NE Area

140°/50° NE  
106°/22° N

## Joints

069°/vert	100°/vert.
006°/85° W	100°/52° N
168°/vert.	086°/82° S
034°/75° NW	085°/08° N
046°/77° SE	048°/85° NW
069°/40° NW	063°/65° NW
014°/vert.	105°/vert
116°/80° N	

Barren Qtz. Vns	Qtz-Carb. Vn. Bx's	Mineralized Qtz Breccia & Qtz. Vns.
016	077°/85° N, 039°/vert.	178°/85° W (Main Fault)
020°	137°/60° NE, 036°/vert.	008°/vert. 130°/80° S
132°	046°/vert, 052°/vert	030°/vert. 136°/85° S
060°/85° S	100°/52° N, 078°/vert	030°/vert. 127°/60° N
026°/54° W	096°/58° N	020°/80° W 140°/vert.
008°/vert.	046°/85° NW	040°/75° SE
	062°/68° NW	045°/vert.
	113°/55° NE	



## ROCK SAMPLE DESCRIPTIONS

**90 MSR-030:** Poddy bx zone ~ 40 cm wide, subparallel to main structure; 008°. Qtz-carb flooded w/ abnt. 1 mm wide py stringers. Rock wths. orange brn. fresh surface is dk - light grey. Qtz stringers to 2 cm, greyish translucent. fine bx cemented by grey carbonate or qtz-carb. mixture. Tr. v.f.g. aspy.

**90 MSR-031:** Taken from structure with numerous 1 mm white carbonate stringers. Local small aggregates of py; no aspy observed.

**90 MSR-032:** Taken from 10 cm wide, grey and orange wth. qtz-carb. veinlet striking 037°. Veins have weak banded nature and appear to be more of qtz-carb replacement than infilling of a dilatant area. Veins locally contain 2% aspy occurring mainly as fine needles 0.1 mm x 1 mm. The presence of these needles may indicate Au in the aspy structure.

**90 MSR-033:** Grab from main fault structure. 0.5 m wide recessive zone w/ 3 cm wide chalcedonic qtz-vein and pyritic, black fault bx. Abnt. aspy needles 2 - 3%

**90 MSR-034:** Grab from main fault structure. 40 cm wide resistant zone. Rusty, dark grey silicified bx w/ abnt. diss. py and aspy - 4% combined.

**90 MSR-035:** Grab from W selvage of a 1.0 m wide qtz-flooded bx zone within main fault structure. Rock is black w/ abnt. 5% med. grained py as diss. and 1.0 stringers. Tr. aspy.

**90 MSR-036:** Grab of 10 - 20 cm wide milky chalcedonic qtz vein without sx. Strike 060° / 85° S. E central area of claim.

**90 MSR-037:** Same loc. as SR-036. Grab of wall rock on either side of sample SR-036 within 20 cm. Alt<sup>ed</sup> and microveined fig. wacke.

**90 MSC-007:** 1.0 m chip across siliceous pyritic zone subparallel to main structure. The mineralized portion of the structure is approx. 25 cm wide (10% py, < 1/2% galena, < 1/2% acic. aspy). Surrounding rock clay alt<sup>ed</sup> and locally w/ hematit = colouration. Subtle banded nature to grey quartz ± carbonate, and pyrite.

**90 MSR-038:** Qtz-carb vn bx float from same vein system as sample 90MSR-032. Trend = 040° /vert. Pieces sampled avg. 15 cm in width. Mottled grey/ orange/ white qtz-carb. filled bx w/ 2% coarse py.

**90 MSC-008:** 1.2 m chip across locally rusty wth., siliceous resistant zone. Py occurs throughout interval (5%) w/ aspy: occurring only in the last 20 cm assoc. w/ discontinuous chalcedonic veining. Rock is generally black in colour and may be result of rehealing, of graphitic gauge. Chalcedonic qtz. is very light grey, translucent and is more of a breccia infilling than vein.

**90 MSR-039:** Grab representing 20 cm width of structure. Rusty wth, weakly sif., black fault gouge. 10 - 15% py. w/ local concentrations of v.f.g. aspy. Transition btwn. recessive and resistant zones.

**90 MSC-009:** 1.0 m chip across same resistant zone as samples SC-008 and SR-039. Here not as well mineralized w/py. Most of interval is very dk. grey w/ 10-2 mm xtline qtz. stringers coated w/ unusual orange-brn zeolite(?). Narrow sections of interval are well mineralized with acic. aspy.

**90 MSC-010:** 0.4 m chip of resistant grey-blk bx. Here w/ chalcedonic quartz, 5 - 8% py and 1% aspy. Rehealed fault gouge w/ 10% fragments varying from 1 to 10 mm in size and white to blk. in colour.

**90 MSR-040:** Grab from 1.5 m wide qtz-flooded bx zone. Zone difficult to chip sample. Wth's light grey. Fresh surface is grey w/ black fragments. Qtz is sugary; py content in order of 2% isolated blebs. Some white clay alt<sup>ed</sup> frags.

**90 MSR-041:** Grab of = 20 cm wide qtz + carb. flooded vein bx. trending @ 041° w/ steep NW dip to vert. Sampled because could see traces of acic. aspy.

**90 MSR-042:** (1143 m) W side of LJ Ck. 082° /vert. - trending 20 cm wide. Orange with qtz-carb. vein bx with v.f.g. py and aspy.(?)

**90 MSR-043:** (1153 m) = 10 m NE of Bl 10 + 00 E, 14 + 25 N (Grid #1). Qtz-vein in 020° structure.

**90 MSR-044:** (1360 m). S central part of claim. Float in talus. Just 1 piece of very rusty, "frothy" light grey qtz. w/ fig. aspy or py.

**90 MSR-045:** Grid #2. - 094° - trending rock face w/ narrow qtz-veinlets. Intensely carb<sup>ed</sup> w/ 10% combined py and aspy.

**90 MSC-011:** Grid #1. 1.0 m chip of qtz-flooded bx. Here bx is locally very rusty w/ less qtz and more wallrock frags. Sx content variable from place to place across interval (conc. in FW and HW selvages). 4 - 5% py, 1 - 3% aspy.

**90' MCR-063:** Grid #2. Channel sample collected across 50 cm wide shear. Two quartz veinlets (5 cm wide each) with associated pyrite. These veinlets have been displaced by 15 - 20 cm.

**90' MCR-064:** Grid #2. Rock grab. Outcrop with quartz veinlet (7 cm wide) and associated pyrite. Vein hosted in shear striking 130°/80° S.

**90' MCR-065:** Grid #2. Silicified vein 5 cm wide with associated pyrite. Striking 150°/90° dip.

**90' MCR-066:** Grid #2. Quartz vein 4 cm wide. Strike 95°/90° dip.

## **GEOCHEMICAL ANALYSES**

# LJ CLAIM AU-As Statistic Analysis

## CUMULATIVE FREQ: DISTRIBUTION

CONVERTED (Log)

DATA

REF ACME GEOCHEM

ANALYSIS CERTS:

PROJECT M1046LJ

Au: normal Data

Log Data

$n = 166$

$n = 166$

2SD = 1.49

$\bar{x} = 12.9$

$\bar{x} = 1.11$

3SD = 1.67

SD = 15.6

SD = 1.19

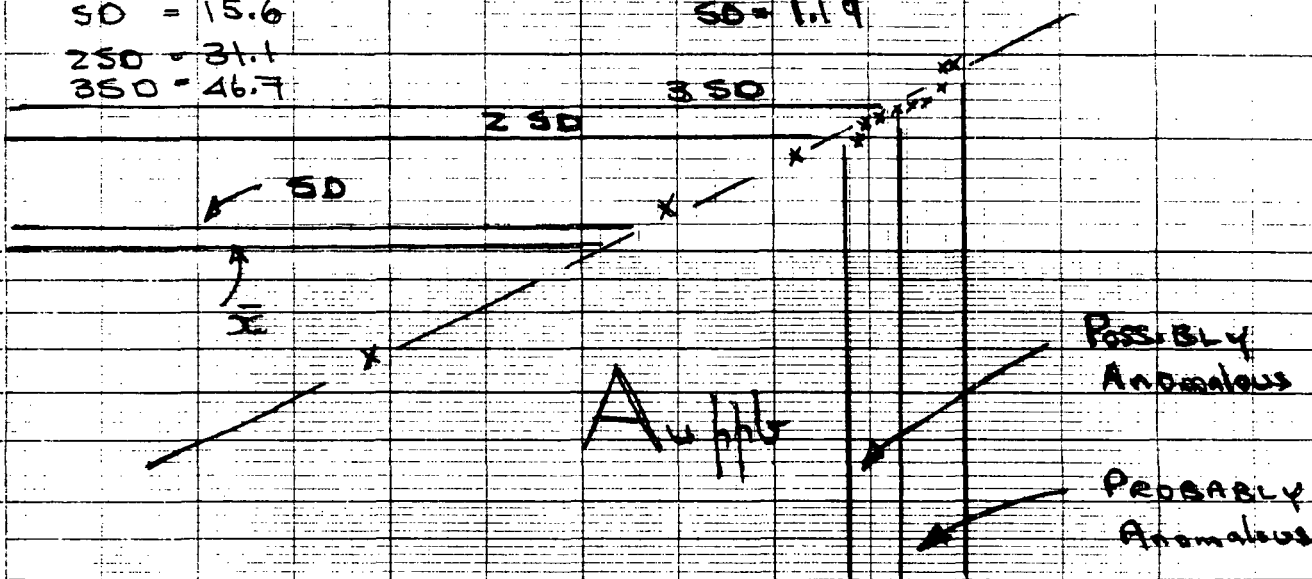
2SD = 31.1

3SD = 46.7

2SD

3SD

Au (Log ppm)



As normal Data

Log Data

$n = 166$

$\bar{x} = 2.0$

$\bar{x} = 101.8$

SD = 121.8

SD = 2.08

2SD = 243.6

2SD = 2.38

3SD = 365.4

3SD = 2.56

As (Log ppm)

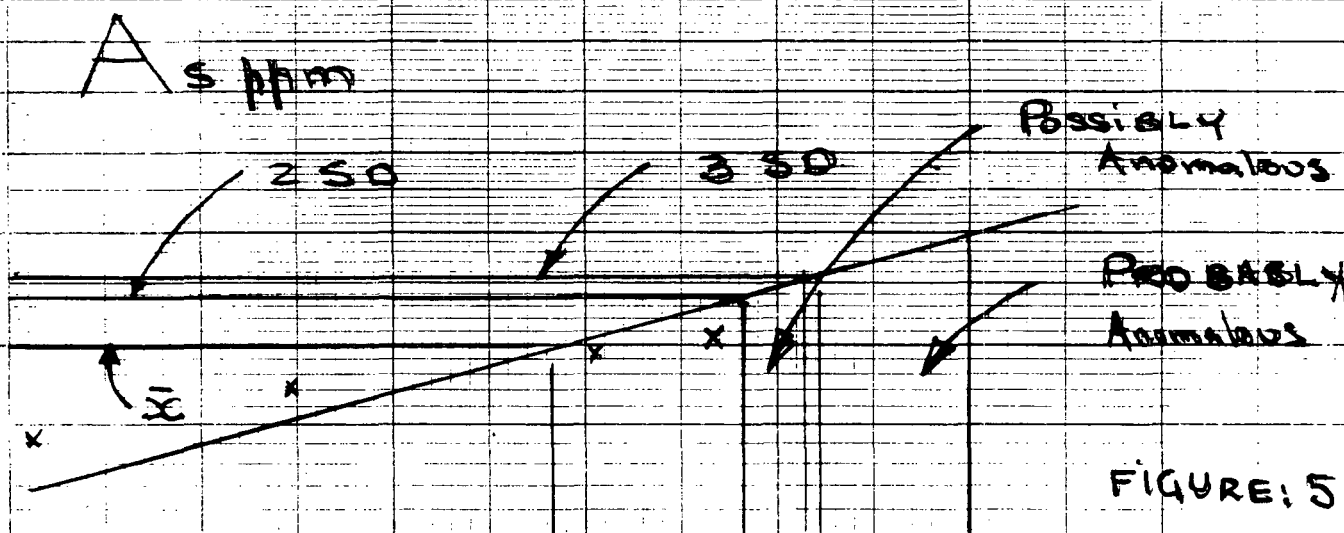


FIGURE: 5

Cum Freq % Au - As

N.C. Ashinall Oct 98

# Keewatin Engineering PROJECT M FILE # 90-2492

Pa

SAMPLE#		U	Pb	Zn	Ag	Ni	Co	Mn	Fe	As	U	Au	Th	Sr	Cd	Sb	Bi	V	Ca	P	La	Cr	Mg	Ba	Fl	S	Al	Na	K	h
	n	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%	%	ppm	ppm	%	ppm	%	ppm	%	%	%	ppm
90 MSL 010	1	53	135	295	.9	15	11	669	3.37	107	5	ND	1	48	2.4	7	2	65	.68	.122	10	25	.77	69	.05	11	1.27	.04	.07	1
90 MSL 010	1	59	16	122	.1	10	25	3798	12.23	145	5	ND	1	124	3.1	2	2	69	.58	.102	8	12	.40	298	.01	2	1.38	.03	.09	1

# Keewatin Engineering PROJECT M FILE # 90-2492

PLE#	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	U	Au*
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%	%	ppm	ppm	%	ppm	%	%	%	%	%	ppm	ppb
90 MGS-X:1350m/0+50M	1	72	64	125	.7	26	18	899	4.10	75	5	ND	3	107	1.9	5	2	75	2.00	.130	12	40	1.11	140	.10	10	2.10	.12	.18	1	29
90 MGS-X:1350m/0+00N	1	69	57	114	.5	25	16	805	3.90	63	5	ND	2	86	1.0	2	2	70	1.50	.133	12	33	1.04	110	.10	5	1.83	.07	.12	1	12
90 MGS-X:1540m/0+00E	1	182	4	105	.1	16	31	1671	7.12	37	6	ND	1	49	.9	2	2	85	.36	.076	6	7	.50	195	.01	3	1.76	.04	.12	1	16
90 MGS-X:1540m/0+50E	1	226	11	139	.1	12	35	1621	9.33	922	5	ND	1	19	.8	6	2	127	.19	.091	6	8	.42	150	.01	2	1.44	.02	.10	1	38
90 MGS-X:1540m/1+00E	1	254	14	143	.2	23	42	2185	10.14	305	5	ND	1	40	2.4	2	2	140	.34	.127	13	15	.76	212	.01	5	2.32	.01	.10	1	28
90 MGS-X:1540m/1+50E	1	215	13	137	.1	18	36	2381	9.47	699	6	ND	1	34	1.3	6	2	129	.39	.128	11	12	.42	563	.01	2	1.83	.01	.10	1	69
90 MGS-X:1540m/2+00E	1	244	3	139	.1	17	33	1843	10.35	82	5	ND	1	28	1.2	2	2	146	.39	.106	10	7	.30	329	.01	4	1.21	.04	.14	1	40
90 MGS-X:1540m/2+50E	1	227	2	140	.1	13	30	1399	10.41	66	5	ND	1	19	1.3	2	2	136	.35	.096	10	5	.22	155	.01	5	1.06	.02	.11	1	18
90 MGS-X:1540m/2+92E	1	150	10	131	.1	11	30	2193	8.53	56	5	ND	1	38	.5	3	2	97	.76	.106	6	6	.19	153	.01	9	.96	.02	.16	1	46
90 MSS 052	1	82	8	122	.1	11	19	1257	6.89	41	5	ND	1	56	.6	5	2	72	.30	.163	7	13	.39	129	.01	2	1.75	.02	.10	1	3
90 MSS-X:1270m/5+00E	1	89	7	120	.1	9	18	1632	6.39	53	5	ND	1	17	.2	4	2	69	.11	.214	5	14	.25	153	.01	3	1.87	.01	.09	1	2
90 MSS-X:1270m/5+50E	1	101	18	130	.1	6	21	1723	6.96	57	5	ND	1	12	.5	6	2	54	.06	.236	2	6	.11	108	.01	3	1.27	.01	.09	1	1
90 MSS-X:1270m/6+00E	1	111	8	129	.1	8	21	1573	7.41	73	5	ND	1	18	.2	5	2	59	.06	.183	5	7	.12	154	.01	6	1.43	.02	.11	1	2
90 MSS-X:1275m/4+50E	1	123	13	143	.1	5	24	1782	7.41	36	5	ND	1	17	.3	2	2	60	.24	.169	5	5	.17	272	.01	5	1.40	.02	.11	2	1
90 MSS-X:1300m/0+00E	1	150	11	138	.1	8	25	1619	8.27	27	5	ND	1	69	.3	5	2	75	.35	.164	6	5	.24	168	.01	2	1.20	.02	.10	1	1
90 MSS-X:1300m/0+50E	1	113	13	124	.1	5	23	2020	7.51	34	5	ND	1	14	.2	7	2	75	.04	.180	4	7	.11	186	.01	7	1.46	.01	.08	1	4
90 MSS-X:1300m/1+00E	1	74	2	114	.1	7	16	1614	6.25	106	5	ND	1	19	.2	28	2	52	.05	.195	7	7	.11	141	.01	2	1.37	.02	.10	1	5
90 MSS-X:1300m/1+50E	1	77	7	144	.1	5	18	1593	7.01	36	5	ND	1	20	.5	22	2	49	.08	.200	9	9	.14	93	.01	8	1.59	.01	.08	1	1
90 MSS-X:1300m/2+00E	1	84	14	121	.1	19	18	946	6.20	52	5	ND	1	27	.2	5	2	84	.20	.123	9	23	.65	100	.02	9	2.48	.02	.07	1	1
90 MSS-X:1300m/2+50E	1	61	4	110	.1	6	13	1032	6.10	36	5	ND	1	11	.2	5	2	64	.06	.218	4	11	.16	88	.01	5	1.71	.01	.09	1	2
IS-X:1300m/3+00E	1	88	14	153	.1	7	21	2362	7.21	27	5	ND	1	18	.3	8	2	48	.06	.233	6	7	.16	185	.01	4	1.44	.02	.13	1	
IS-X:1300m/3+50E	1	113	9	140	.1	5	24	2127	7.45	29	5	ND	1	9	.9	2	2	83	.07	.194	4	10	.23	150	.01	2	1.98	.01	.11	1	
IS-X:1300m/4+05E	1	56	10	161	.2	5	15	1572	7.65	39	5	ND	1	13	1.2	2	2	101	.10	.166	3	13	.14	206	.01	2	2.00	.02	.10	1	
ARD C/AU-S	18	58	37	132	7.2	67	31	1028	4.03	39	19	6	36	51	18.4	14	18	56	.52	.094	36	58	.91	182	.07	37	1.93	.06	.14	13	

90 P	1	116	12	97	.1	21	20	1011	6.00	219	5	ND	1	32	.2	6	2	115	.56	.106	10	18	.92	137	.04	10	1.62	.04	.12	1	13
90 P	2	89	23	82	.6	19	13	505	6.58	58	5	ND	1	12	.2	5	2	115	.11	.071	7	25	.57	67	.02	4	3.05	.03	.05	1	5
90 MGS 018	1	161	8	72	.1	13	19	1561	7.48	34	5	ND	1	29	.5	5	2	98	.73	.203	14	9	.31	306	.01	4	1.44	.01	.13	1	1
90 MGS 019	1	196	2	98	.1	22	24	1292	7.92	46	5	ND	1	31	.5	6	4	127	.63	.182	13	6	.64	98	.02	15	.99	.02	.14	1	4
90 MGS-X:1106m/6+00E	1	188	5	106	.1	7	22	1331	8.44	46	5	ND	1	24	.2	5	2	96	.44	.118	10	6	.32	268	.01	6	1.16	.01	.14	1	1
90 MGS-X:1106m/6+50E	1	206	4	111	.1	14	26	1847	8.56	53	5	ND	1	29	.5	4	4	102	.54	.100	9	6	.43	278	.01	11	1.19	.01	.15	1	1
90 MGS-X:1106m/7+00E	1	138	12	98	.2	11	26	2803	7.59	37	5	ND	1	24	.2	4	2	137	.79	.227	6	9	.52	212	.01	8	1.62	.01	.14	1	1
STANDARD C/AU-S	19	60	37	132	7.3	73	29	1024	4.12	40	21	7	37	53	18.9	15	19	55	.54	.094	37	57	.97	180	.07	33	1.91	.06	.14	11	51

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 U AND LIMITED FOR NA K AND AL. AU DETECTION LIMIT BY ICP IS 3 PPM.  
- SAMPLE TYPE: P1-P4 Soil P5 Silt P6 Rock AU\* ANALYSIS BY ACID LEACH/AA FROM 10 GM SAMPLE.

DATE RECEIVED: JUL 20 1998 DATE REPORT MADE: July 24/90 SIGNED BY: C. Leong, J. Huang, D. TOYE, C. LEONG, J. HUANG; CERTIFIED B.C. ASSAYERS

ASSAY RECOMMENDED

GEOCHEMICAL ANALYSIS CERTIFICATE

Keewatin Engineering PROJECT M File # 90-2492 Page 1

800 - 900 W. Hastings St., Vancouver BC V6C 1E5

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	M	Au*
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%	%	ppm	ppm	%	ppm	%	%	%	%	%	ppm	ppb
90 MDS-X: 1370m/0+00SE	1 141	41 121		1	19	27 2122	7.86	135	5	ND	1 26			1 11	2	3	2 115	.10	.150	9	24	.61 161	.02	2 2.67	.02	.10		2	5		
90 MDS-X: 1370m/0+50SE	1 127	21 115		1	18	23 2042	7.41	89	5	ND	1 11			1 22	5	5	2 79	.22	.143	13	30	.57 213	.01	2 3.11	.01	.08		1	2		
90 MDS-X: 1370m/1+09SE	1 73	75 141		3	21	14 822	5.72	74	5	ND	1 22			2 11	1.2	11	3 85	.10	.115	11	31	.65 117	.01	3 3.40	.02	.09		1	8		
90 MDS-X: 1370m/1+60SE	2 91	58 129		5	22	20 1519	5.87	60	5	ND	2 11			1 45	1.2	6	2 96	.52	.100	8	30	.65 182	.01	2 3.32	.02	.10		1	7		
90 MDS-X: 1370m/2+00SE	1 111	49 131		2	26	23 1459	6.48	63	5	ND	1 45																				
90 MDS-X: 1370m/2+50SE	1 147	26 141		2	13	44 7450	7.79	51	5	ND	1 53			2 3	3	2 131	.63	.253	8	21	.42 259	.01	2 2.89	.01	.10		1	3			
90 MDS-X: 1370m/3+16SE	1 130	23 109		1	42	25 1424	6.12	52	5	ND	1 19			1 19	4	4 2 98	.20	.115	11	49	.90 149	.01	2 3.34	.02	.09		2	5			
90 MDS-X: 1450m/6+65NW	6 275	6 117		1	20	43 2435	12.05	128	5	ND	1 41			1 41	2.4	3 2 111	.61	.099	10	13	.57 131	.01	2 1.72	.02	.10		1	1			
90 MDS-X: 1450m/6+15NW	1 200	14 115		1	10	31 2474	8.74	195	5	ND	1 49			1 49	1.1	4 4 76	.51	.138	6	8	.24 404	.01	6 1.65	.01	.11		2	3			
90 MDS-X: 1450m/5+46NW	1 222	9 134		2	16	43 2647	9.15	116	5	ND	1 65			1 65	1.9	7 2 126	.77	.110	5	12	.64 260	.01	6 2.04	.02	.12		1	2			
90 MDS-X: 1450m/5+00NW	1 222	18 129		1	19	39 2671	9.01	356	5	ND	1 30			1 30	2.7	4 3 157	.41	.112	10	26	.89 278	.01	2 2.78	.02	.09		1	6			
90 MDS-X: 1450m/4+50NW	1 256	30 129		2	19	40 4770	8.47	78	5	ND	1 28			1 28	3.3	10 2 167	.50	.149	15	26	.93 255	.02	3 2.79	.02	.07		3	4			
90 MDS-X: 1450m/4+00NW	1 227	15 124		1	14	30 2587	8.42	55	5	ND	1 51			1 51	3.4	2 2 131	.84	.146	15	15	.66 262	.01	2 2.29	.02	.11		1	4			
90 MDS-X: 1450m/3+67NW	1 202	10 124		1	15	32 1747	7.80	197	5	ND	1 34			1 34	7	5 2 70	.27	.107	6	7	.17 244	.01	2 1.26	.02	.13		1	1			
90 MDS-X: 1450m/3+00NW	1 352	25 148		1	19	54 3517	7.96	42	5	ND	1 37			1 37	2.6	2 2 170	.80	.184	9	17	.86 144	.06	6 2.98	.02	.09		1	2			
90 MDS-X: 1450m/2+50NW	1 166	15 119		1	11	31 2901	7.57	54	5	ND	1 40			1 40	1.1	2 2 105	.39	.261	7	12	.36 207	.01	2 2.15	.02	.09		2	1			
90 MDS-X: 1450m/2+00NW	1 200	4 120		2	19	35 1810	8.28	263	5	ND	1 46			1 46	1.7	3 2 100	.51	.077	4	13	.31 330	.01	3 1.27	.03	.14		1	3			
90 MDS-X: 1450m/1+48NW	1 183	7 114		1	12	20 1008	6.67	114	5	ND	1 32			1 32	.6	2 2 86	.19	.147	7	10	.27 209	.01	4 1.71	.02	.14		1	2			
90 MDS-X: 1450m/1+00NW	1 157	15 114		1	11	23 1780	6.82	310	5	ND	1 32			1 32	.3	6 2 83	.17	.226	4	11	.15 307	.01	2 1.57	.02	.10		2	1			
90 MDS-X: 1450m/0+50NW	2 167	13 122		1	14	24 1752	6.75	43	5	ND	1 19			1 19	1.0	3 5 84	.10	.169	6	9	.19 262	.01	3 1.76	.02	.10		1	1			
90 MDS-X: 1450m/0+00NW	2 134	7 84		1	11	14 692	5.84	28	5	ND	1 23			1 23	1.1	3 2 105	.13	.161	6	10	.18 200	.01	2 2.27	.03	.07		1	1			
90 MGS 001	1 290	9 107		1	9	24 1132	6.79	14	5	ND	1 22			1 22	.2	2 2 51	.19	.064	7	3	.14 175	.01	2 1.28	.03	.14		1	4			
90 MGS 002	1 206	20 108		1	15	36 2725	7.66	35	5	ND	1 37			1 37	1.6	2 3 180	.65	.169	7	19	.99 83	.12	6 2.88	.03	.05		1	21			
90 MGS 003	1 429	20 160		8	25	98 4802	9.88	65	5	ND	1 40			1 40	4.2	2 2 315	.74	.168	11	27	1.07 93	.19	14 3.29	.02	.04		1	14			
90 MGS 004	2 198	28 127		3	16	53 5516	9.21	57	5	ND	1 100			1 100	3.1	2 2 183	.87	.266	18	20	.83 135	.04	4 3.08	.02	.06		1	48			
90 MGS 005	1 112	4 144		1	6	26 2015	7.74	29	5	ND	1 160			1 160	1.1	2 2 71	.53	.123	8	3	.23 190	.01	8 .96	.02	.13		1	69			
90 MGS 006	1 134	15 131		1	6	25 2139	7.87	37	5	ND	1 68			1 68	1.7	4 2 86	.49	.128	10	8	.31 210	.01	2 1.38	.02	.12		1	13			
90 MGS 007	1 138	26 123		2	11	28 3020	7.39	47	5	ND	1 36			1 36	1.5	5 2 93	.33	.181	6	12	.47 161	.01	3 2.02	.01	.12		1	11			
90 MGS 008	1 170	8 113		1	10	34 2825	8.43	59	5	ND	1 31			1 31	2.2	7 6 103	.47	.146	11	11	.30 562	.01	2 1.57	.02	.15		2	17			
90 MGS 009	1 229	18 81		1	10	20 1214	7.52	64	5	ND	1 24			1 24	2	6 6 75	.62	.231	19	4	.18 480	.01	4 1.54	.01	.17		1	9			
90 MGS 010	1 272	8 167		1	12	32 1907	10.90	132	5	ND	1 33			1 33	1.7	3 2 141	.50	.097	5	5	.23 182	.01	13 1.03	.02	.16		2	9			
90 MGS 011	1 222	6 149		1	11	23 1108	9.90	86	5	ND	1 22			1 22	1.8	2 2 138	.46	.148	9	6	.21 156	.01	3 1.02	.02	.14		2	10			
90 MGS 012	2 166	12 121		1	17	28 1326	7.44	183	5	ND	1 23			1 23	.8	11 2 90	.34	.049	5	11	.19 296	.01	5 1.14	.02	.10		1	9			
90 MGS 013	7 64	4 113		1	24	15 558	5.77	84	5	ND	1 12			1 12	.4	3 6 62	.08	.131	3	11	.11 84	.01	2 1.49	.02	.09		2	5			
90 MGS 014	11 40	6 88		1	36	15 1222	4.63	59	5	ND	1 32			1 32	.4	10 2 44	.59	.073	7	8	.05 99	.01	7 .82	.03	.09		1	5			
90 MGS 015	8 50	7 104		1	28	14 560	4.49	101	5	ND	1 125			1 125	.8	11 2 45	3.99	.080	3	8	.16 103	.01	4 1.00	.04	.15		1	8			
90 MGS 016	6 73	31 87		1	29	24 1334	9.37	231	5	ND	1 29			1 29	2.0	17 2 49	.60	.114	13	11	.20 142	.01	5 1.49	.02	.12		1	13			
STANDARD C/AU-S	18 60	40 132	7.3	68	31 1028	4.03	38	17	7	37	51	18.9	15	22	56	.52	.094	36	58	.91 183	.07	36 1.93	.06	.14	11	47					

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. AU DETECTION LIMIT BY ICP IS 3 PPM.  
 - SAMPLE TYPE: P1-P3 Soil P4 Silt P5 Rock AU\* ANALYSIS BY ACID LEACH/AA FROM 10 GM SAMPLE.

DATE RECEIVED: JUL 13 1990 DATE REPORT MAILED: July 17/90 SIGNED BY: D. TOYE, C. LEONG, J. WANG; CERTIFIED B.C. ASSAYERS

P. 10/10

JUL 24 '90 10:15 SOLOMON\_RES. LTD -- 604 684 9877



Keewatin Engineering PROJECT 046 (L.J) FILE # 90-2706

AA

P

	No	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
90 MGS-X:1106m/7+50E	1	195	7	116	.2	15	26	1291	8.33	56	5	ND	1	29	.2	8	2	105	.65	153	8	8	.49	235	.01	15	1.15	.02	.16	1	16
90 MGS-X:1106m/8+00E	1	216	2	84	.2	4	26	1720	6.06	39	5	ND	1	32	.5	3	2	53	1.57	098	5	2	.21	193	.01	15	.95	.01	.25	1	8
90 MGS-X:1106m/8+50E	1	215	18	104	.1	16	30	3396	9.15	55	5	ND	1	27	.7	5	2	158	.58	176	15	12	.88	254	.01	4	2.62	.01	.11	1	24
90 MGS-X:1106m/9+00E	1	238	11	106	.1	13	26	2057	9.87	26	5	ND	1	23	.4	11	2	165	.76	141	9	9	.27	508	.01	5	1.10	.01	.12	1	13
90 MGS-X:1115m/5+50E	1	208	7	80	.1	12	19	1075	7.80	49	5	ND	1	42	.2	6	3	103	1.14	199	12	7	.46	271	.01	8	1.65	.01	.15	1	9
90 MGS-X:1127m/0+00E	2	109	11	110	.1	17	21	1513	6.03	64	5	ND	1	12	.2	7	2	99	.10	160	7	21	.47	95	.01	7	2.26	.02	.09	1	7
90 MGS-X:1127m/0+50E	1	267	14	126	.1	16	41	3069	9.50	70	5	ND	1	43	.9	5	2	113	.74	117	9	6	.51	207	.01	12	1.47	.02	.20	1	14
90 MGS-X:1127m/5+00E	1	227	7	142	.1	18	34	2058	9.58	85	5	ND	2	36	1.1	8	2	112	.56	146	10	7	.36	263	.01	13	1.03	.02	.19	1	7
90 MGS-X:1132m/1+59E	1	232	9	108	.1	14	35	2089	8.77	124	5	ND	1	22	1.0	7	3	109	.46	120	7	6	.61	195	.02	9	1.43	.01	.15	2	11
90 MGS-X:1160m/2+00E	1	237	2	120	.1	19	36	2340	9.26	68	5	ND	1	31	.5	8	2	117	.72	117	8	5	.48	144	.01	10	1.10	.01	.14	1	8
90 MGS-X:1160m/2+50E	2	155	5	84	.2	15	23	1657	7.68	47	5	ND	1	33	.2	8	2	122	.98	225	8	8	.30	113	.01	2	1.47	.01	.10	1	5
90 MGS-X:1160m/2+77E	1	138	25	88	.1	14	22	1847	7.20	46	5	ND	1	29	1.0	6	2	140	.80	169	7	13	.60	118	.02	3	2.24	.02	.06	1	15
90 MGS-X:1160m/3+25E	1	218	10	134	.1	18	33	1942	9.55	46	5	ND	1	38	.7	8	2	109	.46	133	7	6	.39	261	.01	6	.91	.02	.14	1	10
90 MGS-X:1160m/3+83E	1	242	2	129	.1	21	34	1969	9.43	59	5	ND	1	31	.3	7	2	106	.54	157	10	7	.43	230	.01	7	.95	.01	.15	1	
90 MGS-X:1160m/4+00E	1	234	8	113	.1	20	31	1811	8.33	79	5	ND	1	42	.6	5	2	95	.72	190	9	4	.33	213	.01	11	.94	.01	.22	1	
90 MGS-X:1160m/4+50E	1	178	11	99	.1	15	20	1579	7.08	72	5	ND	1	28	.2	5	2	134	.69	165	11	13	.72	139	.02	5	2.25	.02	.09	1	
90 MJS-X:1200m/0+00E	1	137	4	104	.1	7	31	2048	7.99	43	5	ND	1	14	.4	2	2	128	.14	088	2	4	.35	167	.01	2	2.16	.02	.08	1	4
90 MJS-X:1200m/0+50E	2	95	15	87	.1	6	16	915	6.23	56	5	ND	1	19	.2	3	2	116	.27	120	7	13	.39	164	.01	4	1.99	.01	.11	1	5
90 MJS-X:1200m/1+00E	1	128	23	109	.1	10	23	1830	7.28	60	5	ND	1	20	.2	4	3	90	.31	117	7	9	.67	136	.01	3	2.08	.01	.12	1	11
90 MJS-X:1200m/1+50E	1	125	12	96	.1	10	14	1244	5.80	23	5	ND	1	17	.2	2	2	74	.28	160	4	11	.30	137	.01	4	1.56	.01	.13	1	6
90 MJS-X:1200m/2+00E	1	99	14	97	.1	7	13	588	5.53	46	5	ND	1	10	.2	2	2	89	.87	165	6	11	.57	215	.01	5	2.76	.01	.11	1	1
90 MJS-X:1200m/2+50E	2	64	14	124	.1	8	13	2516	5.02	43	7	ND	1	33	.2	3	2	101	.40	194	4	14	.23	271	.01	5	1.34	.02	.16	1	2
90 MJS-X:1200m/3+00E	2	100	9	89	.1	10	17	1715	6.72	33	5	ND	1	42	.4	9	2	121	.50	200	3	9	.25	219	.01	5	1.44	.01	.12	1	3
90 MJS-X:1200m/3+50E	1	147	19	131	.1	13	26	4390	5.63	32	5	ND	1	24	.8	3	2	109	.61	372	11	16	.53	211	.02	3	3.10	.01	.06	2	5
90 MJS-X:1200m/4+00E	1	128	10	99	.1	9	22	1990	7.91	82	5	ND	1	9	.2	8	2	72	.14	197	4	6	.17	149	.01	5	2.06	.01	.12	1	3
90 MJS-X:1200m/4+50E	2	84	16	51	.1	6	10	331	7.69	38	5	ND	1	6	.2	3	2	109	.03	155	4	12	.16	46	.01	2	2.06	.01	.05	1	1
90 MJS-X:1200m/5+11E	1	180	5	92	.1	12	29	1183	7.76	99	5	ND	1	19	.2	3	2	88	.58	110	4	2	.15	163	.01	4	.78	.02	.16	1	3
90 MJS-X:1200m/5+50E	1	176	3	134	.1	4	25	1621	8.26	233	5	ND	1	90	.3	9	2	74	.46	082	3	4	.29	111	.01	7	.62	.02	.12	1	9
90 MJS-X:1200m/6+00E	1	64	11	110	.1	7	17	1123	6.43	289	5	ND	1	67	.2	4	2	65	.31	111	4	9	.14	168	.01	4	1.58	.02	.08	1	2
90 MJS-X:1200m/6+78E	1	80	22	93	.1	25	16	600	5.68	103	5	ND	1	101	.6	8	2	90	.34	066	8	24	.68	207	.01	5	2.84	.02	.07	1	6
90 MJS-X:1200m/7+00E	1	139	12	154	.1	9	22	1226	9.21	44	5	ND	1	57	.2	4	2	100	.18	219	8	7	.16	200	.01	2	1.42	.01	.10	1	1
90 MJS-X:1200m/7+50E	1	166	2	130	.1	8	27	1374	9.44	44	5	ND	1	44	.2	3	2	105	.28	081	6	4	.21	378	.01	3	1.43	.02	.12	1	1
90 MJS-X:1200m/8+00E	2	89	9	92	.1	6	14	767	6.43	39	5	ND	1	15	.2	2	2	120	.09	113	3	13	.22	140	.01	3	2.04	.02	.07	1	4
90 MJS-X:1200m/8+50E	1	148	8	122	.1	11	19	1093	7.26	108	5	ND	1	40	.2	4	2	71	.34	206	2	7	.12	111	.01	3	.79	.01	.15	1	1
90 MJS-X:1200m/9+30E	1	196	8	107	.1	12	32	2485	7.79	30	5	ND	1	18	.3	2	2	124	.50	090	9	12	1.20	214	.01	2	2.55	.01	.12	1	2
90 MGS 053	1	172	10	88	.1	9	32	2957	6.42	33	5	ND	1	37	.2	2	2	106	1.13	202	13	12	.88	213	.01	6	2.33	.01	.13	2	2
90 MGS 054	1	220	8	154	.1	19	33	1626	8.34	321	5	ND	1	116	.5	8	2	75	.44	153	5	5	.16	152	.01	13	.79	.02	.16	1	1
90 MJS-X:1270m/6+50E	1	91	7	101	.1	7	16	1429	6.99	40	5	ND	1	11	.2	4	2	78	.04	231	4	8	.13	121	.01	5	1.69	.01	.07	1	
90 MJS-X:1270m/7+00E	1	90	15	131	.1	10	20	1762	7.18	48	5	ND	1	40	.2	4	2	69	.76	223	4	8	.16	179	.01	5	1.69	.02	.09	1	
90 MJS-X:1270m/7+42E	1	196	7	107	.2	13	24	773	9.60	62	5	ND	1	34	.2	9	2	152	.25	190	2	8	.15	162	.01	2	1.23	.02	.09	1	
90 MJS-X:1270m/7+72E	1	177	13	141	.1	14	29	2457	9.30	72	5	ND	1	17	.2	10	3	111	.08	121	5	12	.27	145	.01	4	2.04	.02	.09	1	
90 MJS-X:1270m/8+00E	1	224	9	121	.1	15	25	855	8.82	126	5	ND	1	10	.2	11	2	101	.03	102	2	8	.11	137	.01	5	1.24	.02	.07	1	
90 MJS-X:1270m/8+50E	1	138	11	103	.2	12	24	1709	7.85	26	5	ND	1	9	.3	5	2	112	.84	136	2	12	.19	148	.01	3	2.28	.02	.07	1	
90 MJS-X:1270m/9+07E	1	231	14	124	.1	15	33	2160	9.09	29	5	ND	1	22	1.3	2	2	119	.44	083	6	8	.72	236	.01	7	1.60	.01	.12	1	
RD C/AU-S	19	59	38	132	7.2	69	30	1030	4.06	38	22	7	37	53	18.6	16	21	56	.53	891	37	57	.94	180	.07	34	1.98	.06	.14	11	4

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
90 MCS 134	1	135	30	155	.4	41	36	1282	7.28	78	5	ND	1	47	.6	3	2	77	.59	.132	12	37	.61	201	.01	2	1.12	.01	.11	1	1
90 MCS 135	1	172	39	174	.7	41	34	1863	9.11	51	5	ND	1	56	1.0	2	2	127	.55	.120	16	75	.94	176	.01	2	1.67	.01	.08	1	5
90 MCS 136	2	121	100	339	1.3	31	24	1652	5.83	36	5	ND	1	51	2.6	8	2	75	.63	.156	15	25	.77	162	.01	2	1.54	.02	.08	2	1
90 MCS 137	2	93	24	129	.4	44	23	1031	5.23	34	5	ND	1	48	.7	2	2	80	.53	.126	10	44	.88	140	.01	2	1.27	.02	.06	1	1
90 MCS 138	1	133	13	120	.2	48	36	1208	7.18	112	5	ND	1	46	.4	2	2	116	.55	.110	8	74	.99	222	.01	2	1.16	.01	.07	1	4
BL 10+00N L10+75E	1	61	20	88	.2	23	16	772	3.92	194	5	ND	2	81	.7	3	2	91	1.79	.107	11	24	.76	114	.06	7	1.07	.04	.08	2	6
BL (OFFSET) 10+00N L11+80E	1	46	27	77	.3	14	13	557	4.87	127	5	ND	3	44	1.0	2	2	224	.80	.130	15	35	.63	65	.09	6	.94	.06	.08	1	26
BL (OFFSET) 10+00N L11+25E	1	65	21	88	.2	19	14	797	3.99	74	5	ND	2	41	.7	2	2	104	.70	.117	13	25	.70	94	.07	11	1.00	.04	.06	1	6
BL (OFFSET) 10+00N L11+50E	1	51	31	76	.3	15	15	688	6.04	62	5	ND	3	32	.9	2	2	310	.73	.146	17	43	.62	62	.08	3	.84	.03	.07	1	2
BL (OFFSET) 10+00N L11+75E	1	41	28	81	.1	13	10	360	4.23	60	5	ND	3	47	.8	2	2	194	.79	.149	16	32	.61	56	.08	5	.95	.05	.07	1	5
BL (OFFSET) 10+00N L12+00E	1	240	2	110	.1	10	28	1431	7.29	93	5	ND	1	41	.7	2	2	75	1.22	.102	3	8	.41	125	.01	4	.55	.01	.20	1	3
BL (OFFSET) 10+00N L12+25E	1	87	27	93	.2	19	18	1127	5.14	122	5	ND	2	37	1.1	2	2	134	.68	.122	13	24	.70	122	.06	6	1.00	.03	.09	2	10
BL (OFFSET) 10+00N L12+50E	1	73	33	85	.2	16	17	910	4.56	170	5	ND	2	45	.5	2	4	120	.77	.122	13	22	.68	118	.06	15	1.06	.05	.10	2	24
BL (OFFSET) 10+00N L12+75E	1	69	36	104	.3	22	19	837	5.23	150	5	ND	2	48	.8	2	2	166	.79	.131	14	32	.70	109	.07	6	1.02	.04	.08	1	6
L10+75E L10+25N	1	215	5	87	.1	12	31	1584	7.78	38	5	ND	1	34	.4	12	2	56	.89	.121	4	7	.36	158	.01	5	.47	.01	.15	1	13
L11+00E L10+22N	1	163	7	94	.1	15	27	2050	6.22	60	5	ND	1	21	1.0	2	2	79	.56	.109	7	8	.43	254	.01	12	1.16	.01	.11	1	8
L11+25E L10+22N	1	143	6	85	.1	13	21	2110	5.20	65	5	ND	1	103	1.2	2	2	79	1.46	.119	10	13	.61	208	.01	19	1.58	.01	.09	1	22
L11+50E L10+35N	1	161	8	88	.1	12	25	1669	6.27	59	5	ND	1	47	.7	2	2	89	1.20	.106	7	10	.56	177	.01	4	.88	.01	.11	1	7
L11+75E 10+35N	1	149	9	93	.1	13	25	1309	5.99	437	5	ND	1	37	1.3	8	2	81	.94	.097	7	10	.52	173	.01	10	.86	.01	.11	1	74
L12+00E 10+25N	1	203	6	87	.1	18	30	1336	5.86	91	5	ND	1	31	1.0	14	2	79	1.32	.079	5	8	.50	80	.01	4	.61	.01	.10	1	40
L12+25E 10+25N	1	233	2	112	.1	16	32	2035	7.46	143	5	ND	1	23	.3	11	2	100	.76	.132	7	12	.50	127	.01	4	.94	.01	.10	1	9
L12+50E 10+25N	1	218	5	111	.1	22	35	2363	7.66	229	5	ND	1	30	.5	11	3	112	.77	.142	10	14	.52	174	.01	15	1.17	.01	.10	1	23
L12+75E 10+25N	1	223	17	107	.1	20	26	2814	7.48	339	5	ND	1	54	.5	6	2	120	.83	.174	12	20	.71	399	.02	9	1.52	.02	.13	1	45
STANDARD C/AU-S	18	57	36	131	7.1	70	31	1076	3.84	39	20	7	37	53	18.6	18	19	55	.53	.093	38	58	.86	180	.07	36	1.78	.06	.14	11	48

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	V	Au*
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%	%	ppm	ppm	%	ppm	%	%	%	%	%	ppm	ppb
90 MGR 001	1	509	14797	72893	286.8	5	15	31996	18.40	50143	5	5	1	56	609.0	12488	3	1	1.34	.007	2	16	.52	10	.01	2	.15	.01	.03	1	3220
90 MGR 002	1	1932	9889	59993	221.9	17	23	4698	22.42	20972	5	3	1	9	575.0	1307	2	7	.07	.019	2	17	.08	1	.01	2	.25	.01	.05	1	1100
90 MSR 044	44	14	44	84	.7	4	4	183	2.33	325	5	2	1	11	.9	5	4	5	.02	.007	2	1	.02	43	.01	6	.17	.01	.07	1	1290
90 MSR 045	1	155	16	112	.6	10	20	1226	5.90	1562	5	2	1	153	1.0	57	5	15	5.03	.119	4	9	1.61	29	.01	5	.34	.01	.16	1	410
90 MCR 056	2	248	93	74	2.2	15	9	285	8.61	92	5	ND	1	35	1.5	26	2	36	.45	.005	2	26	.77	3	.10	3	1.63	.02	.01	1	9
90 MCR 057	2	65	23	69	.5	18	12	538	2.95	337	5	ND	1	173	1.2	8	2	43	4.52	.129	5	33	.86	13	.11	4	4.50	.59	.04	1	6
90 MCR 058	5	19	61	32	.6	17	5	230	1.85	3393	6	ND	1	6	.5	26	2	13	.17	.055	5	19	.13	35	.01	2	.40	.01	.10	1	400
90 MCR 060	2	16	24	86	.4	5	2	412	.57	126	5	ND	1	90	.2	3	2	4	4.67	.012	2	4	.05	31	.01	2	.08	.01	.03	1	7
90 MCR 061	6	699	32	59	3.8	21	21	369	9.09	579	5	ND	1	120	1.3	10	8	54	3.09	.119	4	25	.74	19	.04	2	2.41	.17	.06	1	4
90 MCR 063	1	176	72	131	1.2	8	24	1618	6.77	2098	7	ND	1	168	1.8	87	2	25	5.26	.120	2	10	1.52	20	.01	6	.30	.01	.13	1	840
90 MCR 064	1	70	7	63	1.5	6	12	2079	5.57	9316	6	2	1	193	1.2	50	2	44	6.41	.071	3	10	2.37	17	.01	6	.25	.01	.11	1	2100
90 MCR 065	1	185	499	107	3.7	8	23	1529	6.43	2703	6	2	1	127	1.3	117	2	16	4.24	.117	3	10	1.20	28	.01	9	.39	.01	.21	1	1150
90 MCR 066	3	50	6	37	.3	10	7	838	2.72	13	5	ND	1	124	1.0	8	3	19	5.51	.036	2	14	1.86	24	.01	10	.15	.01	.07	1	6
90 MCR 067	1	19	25	47	.7	3	4	927	3.16	80	5	ND	1	694	1.1	9	2	16	24.74	.010	2	7	2.11	76	.01	2	.42	.01	.04	2	19
90 MCR 068	2	91	4	56	.3	10	13	187	6.77	193	5	ND	1	15	1.2	12	2	38	.24	.038	3	2	.08	12	.01	6	.32	.01	.09	1	41
90 MCR 069	7	73	12	47	.2	14	13	1288	5.09	7214	6	ND	1	25	1.1	127	2	20	1.15	.023	4	8	.23	41	.01	5	.20	.01	.08	1	210
90 MCR 070	2	124	10987	17479	49.3	7	39	7110	19.61	1410	6	4	1	131	116.5	47	3	2	5.68	.019	3	20	.48	1	.01	8	.09	.01	.05	1	500
90 MCR 071	1	1664	16399	23411	296.9	5	16	29061	13.88	30047	5	4	1	85	178.5	11719	8	2	2.00	.012	3	15	.65	7	.01	4	.10	.01	.06	1	2710
90 MCR 072	1	4196	16104	5966	308.9	1	4	39507	12.78	2274	5	3	1	196	48.9	10853	2	1	2.23	.001	2	13	.80	13	.01	2	.06	.01	.03	1	1600
90 MCR 073	1	723	17557	2670	281.1	5	8	63250	15.74	7398	5	ND	1	115	24.8	9881	8	1	1.78	.007	2	15	.66	14	.01	2	.10	.01	.03	1	500
90 MCR 074	1	13	5570	22	38.4	1	3	97270	23.87	810	5	ND	3	83	2.4	250	7	1	1.65	.005	2	18	.56	4	.01	2	.10	.01	.03	1	20
90 MCR 075	2	107	2250	13850	19.0	11	11	5264	13.39	434	5	2	1	12	144.6	51	2	65	.26	.090	4	21	.73	19	.01	5	3.32	.01	.12	1	58
90 MCR 076	1	46	21290	957	32.6	11	7	11449	10.40	6677	5	ND	1	57	2.3	7151	2	5	.59	.022	2	11	.13	92	.01	2	.14	.01	.08	1	770
90 MCR 077	3	387	23025	52293	263.8	43	57	17368	7.90	15046	6	ND	1	49	536.7	10291	2	4	.14	.032	2	12	.04	11	.01	2	.14	.01	.06	1	690
90 MCR 078	1	240	13052	2449	228.3	23	29	3383	23.66	33369	5	ND	1	14	22.4	446	2	99	.13	.083	2	23	.56	5	.01	6	3.44	.01	.03	1	1490
90 MCR 079	1	71	9654	6357	69.1	9	7	20820	9.42	109	5	ND	1	16	61.3	82	2	28	.22	.000	3	12	.26	22	.01	5	1.27	.01	.09	1	26
90 MCR 080	1	868	16373	419	309.4	1	3	56729	16.15	2503	5	ND	2	261	9.0	9806	2	1	3.36	.004	2	17	.77	11	.01	2	.10	.01	.02	1	260
90 MCR 081	2	93	215	60	2.5	9	13	931	4.38	8738	6	ND	1	57	1.2	13	2	14	1.84	.049	2	5	.49	32	.01	2	.28	.01	.11	1	180
STANDARD C/AU-R	18	57	39	128	7.2	72	31	1104	3.68	42	15	7	38	53	18.8	16	17	55	.54	.098	38	59	.87	179	.07	36	1.88	.06	.14	11	550

ASSAY RECOMMENDED for Pb, Zn, As > 1%  
 Ag > 30 ppm  
 Sb > 1000 ppm.

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Page

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
90 MGS-X:1350m/19+00N	1	133	23	116	.2	3	23	3032	7.45	56	5	ND	1	13	.2	5	8	101	.19	142	2	6	.14	149	.01	2	1.25	.02	.10	1	47
90 MGS-X:1350m/18+50N	1	110	11	125	.1	6	22	1596	8.05	33	6	ND	1	18	.2	4	2	70	.14	136	5	8	.28	173	.01	5	1.80	.01	.08	2	33
90 MGS-X:1350m/18+00N	1	105	21	121	.1	7	24	1749	8.61	35	5	ND	2	14	.8	2	2	101	.04	153	4	11	.28	117	.01	3	2.85	.01	.06	1	44
90 MGS-X:1350m/17+50N	1	72	28	131	.1	17	16	797	6.62	45	6	ND	1	35	.2	2	2	88	.19	121	6	22	.66	263	.01	3	2.55	.01	.06	1	27
90 MGS-X:1350m/17+00N	2	101	32	111	.2	14	16	1444	5.55	55	5	ND	1	94	.2	2	3	102	.31	201	12	24	.52	103	.02	2	2.68	.01	.07	2	20
90 MGS-X:1350m/16+50N	1	158	22	129	.1	14	26	2336	8.25	70	7	ND	2	53	.5	10	3	78	.28	176	13	12	.31	119	.01	2	1.83	.01	.08	5	29
90 MGS-X:1350m/16+00N	2	91	25	108	.3	15	19	1494	5.55	57	5	ND	1	30	.7	5	2	81	.40	187	7	20	.56	112	.01	5	1.82	.02	.11	1	24
90 MGS-X:1350m/15+50N	1	128	38	150	.2	22	20	1422	6.27	91	5	ND	1	24	1.0	3	2	117	.31	156	13	27	.93	71	.04	6	2.78	.02	.08	1	10
90 MGS-X:1350m/14+50N	2	300	25	189	.2	23	44	9528	10.57	56	5	ND	1	75	3.6	2	8	118	.65	163	22	17	.87	165	.02	2	3.16	.01	.08	1	29
90 MGS-X:1350m/14+30N	2	281	50	191	.6	34	40	2611	8.48	105	7	ND	1	48	2.1	3	4	160	.56	137	11	35	1.17	69	.07	11	3.32	.02	.07	2	10
90 MGS-X:1350m/14+00N	1	224	32	147	.3	22	38	1975	8.27	48	5	ND	2	36	1.1	6	2	105	.41	103	8	19	.76	178	.02	5	1.99	.02	.08	1	13
90 MGS-X:1350m/13+50N	1	102	42	108	.1	18	16	772	5.26	75	5	ND	1	19	.6	2	2	90	.19	116	10	29	.66	78	.03	2	3.72	.01	.04	2	20
90 MGS-X:1350m/13+00N	1	98	29	103	.2	14	20	1205	5.74	68	5	ND	1	18	.5	2	5	123	.23	164	14	33	.78	63	.04	5	3.63	.01	.06	1	17
90 MGS-X:1350m/12+50N	1	124	47	116	.1	17	13	624	4.68	107	5	ND	2	19	.2	3	2	89	.27	112	9	28	.73	82	.04	5	3.50	.02	.05	1	24
90 MGS-X:1350m/12+00N	1	116	43	166	.3	23	22	1312	6.66	237	5	ND	2	41	1.1	5	4	101	.42	129	11	32	.85	164	.02	7	3.38	.02	.08	1	38
90 MGS-X:1350m/11+50N	1	69	31	122	.2	19	21	1546	5.92	68	5	ND	1	22	.6	2	2	123	.35	203	11	29	.89	120	.04	7	2.67	.02	.13	1	85
90 MGS-X:1350m/11+00N	1	91	138	227	3.0	19	17	752	4.68	762	6	ND	3	85	1.0	5	2	74	.97	139	14	25	.98	88	.07	2	1.93	.06	.12	1	19
90 MGS-X:1350m/10+50N	2	88	61	148	.1	21	22	1151	5.85	141	5	ND	1	28	1.0	3	2	95	.28	152	12	26	.70	126	.03	2	3.72	.02	.06	1	12
90 MGS-X:1350m/10+00N	3	65	39	129	.5	15	13	1416	5.26	85	5	ND	1	23	.2	3	3	85	.21	225	9	28	.50	129	.02	2	3.10	.01	.05	1	17
90 MGS-X:1350m/9+50N	2	66	52	140	.2	24	15	704	4.54	189	5	ND	2	21	.2	3	2	87	.31	091	10	28	.79	68	.05	6	3.07	.02	.07	1	51
90 MGS-X:1350m/9+00N	5	83	37	137	.5	16	29	2095	7.34	110	5	ND	1	20	1.5	2	7	134	.11	189	7	36	.67	108	.02	2	3.23	.02	.06	1	21
90 MGS-X:1350m/8+50N	4	142	25	165	.1	18	29	2079	7.85	67	8	ND	1	16	3.0	2	4	145	.07	241	15	28	.79	119	.01	2	3.83	.02	.06	1	28
90 MGS-X:1350m/8+00N	7	78	30	142	.3	14	20	1859	6.43	100	5	ND	1	14	.3	3	2	123	.06	179	8	34	.44	104	.02	2	2.72	.02	.07	1	17
90 MGS-X:1350m/7+50N	7	84	31	148	.2	16	22	1850	6.75	85	5	ND	1	30	1.2	6	4	124	.15	232	6	27	.54	118	.01	2	2.49	.02	.07	1	9
90 MGS-X:1350m/7+00N	2	241	15	129	.1	13	32	1839	7.61	26	5	ND	1	15	.5	3	3	85	.04	137	7	10	.25	133	.01	2	1.71	.02	.11	1	31
90 MGS-X:1350m/6+50N	5	136	15	192	.3	40	25	957	6.11	62	5	ND	1	56	2.7	6	3	92	.64	116	9	20	.85	162	.01	2	2.24	.05	.11	1	9
90 MGS-X:1350m/6+00N	15	146	13	276	.3	47	20	1047	6.28	47	5	ND	1	40	3.0	2	3	116	.49	143	7	19	.54	220	.01	2	2.21	.03	.08	1	5
90 MGS-X:1350m/5+50N	8	66	27	157	.4	23	16	1156	6.20	89	5	ND	1	17	1.3	7	2	106	.12	212	4	30	.29	151	.01	3	2.04	.02	.07	1	11
90 MGS-X:1350m/5+00N	7	66	33	135	.2	14	18	1155	5.80	100	5	ND	1	86	1.2	3	2	104	.61	168	6	41	.55	93	.01	2	2.78	.02	.08	1	11
90 MGS-X:1350m/4+50N	1	125	45	146	.5	40	24	1202	5.81	114	5	ND	2	66	1.2	2	2	115	.89	131	12	70	1.86	160	.07	5	2.53	.05	.12	1	7
90 MGS-X:1350m/4+00N	1	137	54	174	.8	39	24	992	6.09	254	5	ND	1	60	.9	3	2	97	.76	129	13	52	1.53	129	.03	5	2.25	.04	.10	1	42
90 MGS-X:1350m/3+50N	3	103	46	143	.5	40	19	885	5.28	93	5	ND	1	57	.7	4	3	105	.73	125	11	56	1.52	94	.05	5	2.14	.04	.09	1	27
90 MGS-X:1350m/3+00N	1	99	47	126	.6	37	20	1051	5.13	69	5	ND	1	66	.8	3	2	103	.78	131	10	58	1.65	94	.07	7	2.23	.06	.09	1	50
90 MGS-X:1350m/2+50N	1	101	41	134	.5	36	21	1017	5.39	58	5	ND	2	93	1.2	2	2	113	1.46	121	11	60	1.87	115	.11	9	2.58	.07	.12	1	30
90 MGS-X:1350m/2+00N	1	93	42	127	.6	32	20	871	4.47	56	5	ND	2	82	.7	2	2	92	1.18	114	10	50	1.47	108	.12	8	2.19	.07	.11	1	21
90 MGS-X:1350m/1+50N	1	80	27	103	.4	29	17	785	4.32	51	5	ND	1	69	.2	2	2	84	.98	119	10	48	1.43	99	.08	7	2.00	.07	.10	1	10
STANDARD C/AU-S	18	58	43	132	7.3	70	32	1021	4.11	39	21	7	36	52	18.3	15	19	56	.53	098	36	60	.93	179	.07	34	1.94	.06	.14	13	53

## GEOCHEMICAL ANALYSIS CERTIFICATE

Keewatin Engineering PROJECT 046 File # 90-2849 Page 1 3

800 - 900 W. Hastings St., Vancouver BC V6C 1E5

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	V	Au*
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%	%	ppm	ppm	%	ppm	%	%	%	%	%	ppm	ppb
90 MGS 019	1	74	22	68	.2	10	11	628	5.38	68	5	ND	1	19	.7	2	2	127	.24	.075	8	17	.44	86	.02	3	2.18	.02	.05	1	10
90 MGS 020	1	97	25	100	.1	14	19	922	5.77	53	5	ND	1	14	.9	2	4	116	.22	.096	7	20	.59	97	.01	6	2.91	.02	.06	1	8
90 MGS 021	2	48	13	53	.3	7	7	434	5.57	48	5	ND	1	10	.5	2	2	132	.08	.065	7	18	.20	54	.02	2	2.20	.01	.04	1	2
90 MGS 022	1	69	14	66	.2	7	9	361	6.11	45	5	ND	1	13	.8	2	2	108	.12	.078	5	16	.33	60	.02	2	2.34	.01	.03	1	7
90 MGS 023	1	80	18	86	.1	15	14	719	4.55	47	5	ND	1	40	.5	2	3	112	.72	.096	12	23	.78	114	.06	22	1.56	.03	.06	1	2
90 MGS 024	1	84	18	83	.1	17	16	934	4.34	38	5	ND	1	40	.5	2	2	98	.66	.090	12	22	.85	112	.06	4	1.61	.03	.09	1	14
90 MGS 025	1	86	31	105	.1	22	19	1221	4.69	43	5	ND	2	63	1.0	2	5	96	.60	.107	13	24	.86	131	.05	3	1.85	.02	.08	1	8
90 MGS 055	5	285	14	137	.1	26	42	3282	11.81	409	5	ND	1	45	.2	45	2	105	.83	.128	12	19	.55	198	.01	102	1.49	.01	.08	1	10
90 MCS 106	3	41	71	136	.1	15	20	1980	5.51	323	8	ND	2	40	.9	2	2	73	.49	.139	20	25	1.08	207	.01	2	2.98	.01	.06	1	3
90 MCS 107	2	67	102	189	.5	25	11	573	4.44	287	5	ND	1	52	.9	2	5	57	.68	.154	11	34	.89	67	.07	3	3.77	.01	.06	1	5
90 MCS 108	1	72	79	130	.4	27	17	720	3.70	383	5	ND	2	77	.9	2	2	50	1.00	.133	11	26	.75	72	.05	2	2.94	.02	.07	1	9
90 MCS 109	4	142	172	184	.8	41	25	1082	6.60	1122	6	ND	1	82	.9	5	4	71	.49	.153	16	38	.95	110	.07	4	3.52	.02	.07	1	10
90 MCS 110	2	146	341	166	1.4	33	22	1137	7.18	718	8	ND	2	36	.8	5	7	94	.58	.135	12	27	1.22	46	.01	2	2.22	.03	.08	1	4
90 MCS 111	3	242	111	164	.7	56	29	1148	7.59	430	6	ND	1	66	.6	3	3	78	.59	.143	12	51	.87	94	.07	2	3.11	.02	.06	1	20
90 MCS 112	2	441	8881	3304	38.9	94	48	2894	8.17	6280	8	ND	2	119	27.8	131	41	92	.63	.152	12	75	.96	162	.01	2	1.74	.01	.12	1	6
90 MCS 113	1	277	501	650	7.8	58	23	2125	5.50	156	5	ND	4	43	3.3	3	16	73	.92	.138	18	61	1.05	101	.02	2	2.35	.01	.08	1	6
90 MCS 114	5	270	108	319	1.1	15	21	2304	3.53	301	5	ND	3	28	1.7	4	6	69	.88	.172	17	10	.28	32	.01	5	1.47	.01	.08	1	13
90 MCS 115	6	140	40	108	.6	13	29	2168	6.79	140	5	ND	2	39	.7	5	2	75	.74	.157	17	8	.31	67	.01	2	1.55	.01	.10	1	1
90 MCS 116	1	302	17	341	3.3	11	28	1632	14.88	19953	9	3	1	52	.2	175	2	41	.60	.128	4	10	.16	77	.01	6	.44	.01	.08	1	4560
90 MCS 117	1	162	10	97	.1	14	25	1267	5.66	118	5	ND	1	84	.7	5	2	60	3.01	.110	6	13	1.03	90	.01	7	.66	.01	.11	1	6
90 MCS 118	4	66	24	97	.2	12	12	895	5.52	148	5	ND	1	16	1.0	4	3	115	.11	.140	6	27	.34	100	.01	2	2.56	.01	.03	2	1
90 MCS 119	2	82	81	146	.2	22	14	675	4.20	462	8	ND	1	18	1.1	2	3	79	.26	.119	10	26	.61	60	.04	2	3.35	.01	.04	1	3
90 MCS 120	3	74	48	124	.1	17	14	1126	4.87	148	5	ND	1	16	1.0	2	2	92	.16	.109	10	26	.56	64	.03	3	2.81	.01	.05	1	1
90 MCS 121	1	78	20	85	.1	10	14	1060	5.14	64	5	ND	1	16	.5	2	2	101	.08	.130	7	14	.37	103	.01	2	2.25	.01	.05	1	1
90 MCS 122	1	144	14	109	.1	12	29	2002	6.49	55	5	ND	1	45	.9	2	2	80	.40	.171	14	17	.65	92	.01	2	2.41	.01	.06	1	8
90 MCS 123	1	94	21	81	.1	14	19	2179	6.07	47	5	ND	2	36	.8	2	2	79	.44	.130	14	21	.41	131	.01	2	2.52	.01	.06	1	2
90 MCS 124	1	131	20	114	.1	18	21	1445	7.15	60	5	ND	1	29	.8	3	3	223	.31	.095	7	33	1.25	79	.12	2	3.34	.01	.04	1	5
90 MCS 125	1	82	46	138	.1	23	17	1121	4.76	76	5	ND	1	14	1.0	3	2	87	.17	.121	12	26	.74	133	.02	2	2.74	.01	.07	1	1
90 MCS 126	5	99	32	116	.1	16	16	995	5.73	62	5	ND	1	19	.4	4	3	91	.17	.137	8	20	.46	121	.01	2	2.26	.01	.06	1	4
90 MCS 127	1	149	20	124	.1	18	20	1455	7.21	57	5	ND	1	25	.7	5	2	102	.32	.135	14	22	.67	137	.01	2	1.79	.01	.07	1	1
90 MCS 128	2	81	52	122	.4	21	19	934	4.72	65	5	ND	1	15	.7	2	3	99	.17	.121	12	28	.75	99	.02	2	3.00	.01	.05	1	1
90 MCS 129	1	158	10	105	.1	10	24	1226	5.50	68	5	ND	1	37	.6	2	2	40	1.76	.146	5	3	.32	59	.01	5	.46	.01	.14	1	1
90 MCS 130	1	135	6	58	.1	6	17	1163	4.55	28	5	ND	1	35	.6	2	3	55	2.08	.085	4	5	.56	41	.01	2	.88	.01	.17	1	1
90 MCS 131	1	201	6	110	.1	15	33	1652	9.05	5	5	ND	1	14	.2	2	2	72	.33	.076	6	8	.31	147	.01	4	.86	.02	.13	1	1
90 MCS 132	1	101	23	99	.1	20	18	1199	5.26	51	5	ND	1	39	.6	2	2	90	.57	.103	11	20	.72	153	.04	4	1.58	.02	.08	1	2
90 MCS 133	1	72	32	102	.1	23	17	937	4.28	37	5	ND	2	43	.8	2	2	91	.59	.109	13	25	.91	105	.07	3	1.65	.03	.09	1	3
STANDARD C/AU-S	17	57	40	129	7.2	69	31	1051	3.86	39	20	7	37	52	18.9	14	21	56	.55	.095	36	56	.88	179	.07	35	1.83	.06	.14	11	52

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. AU DETECTION LIMIT BY ICP IS 3 PPM.  
 - SAMPLE TYPE: P1-P2 Soil P3 Silt P4 Rock P5 H.M. AU\* ANALYSIS BY ACID LEACH/AA FROM 10 GM SAMPLE.

DATE RECEIVED: JUL 25 1990

DATE REPORT MAILED:

SIGNED BY: *C. Long* D. TOYE, C. LEONG, J. WANG; CERTIFIED B.C. ASSAYERS

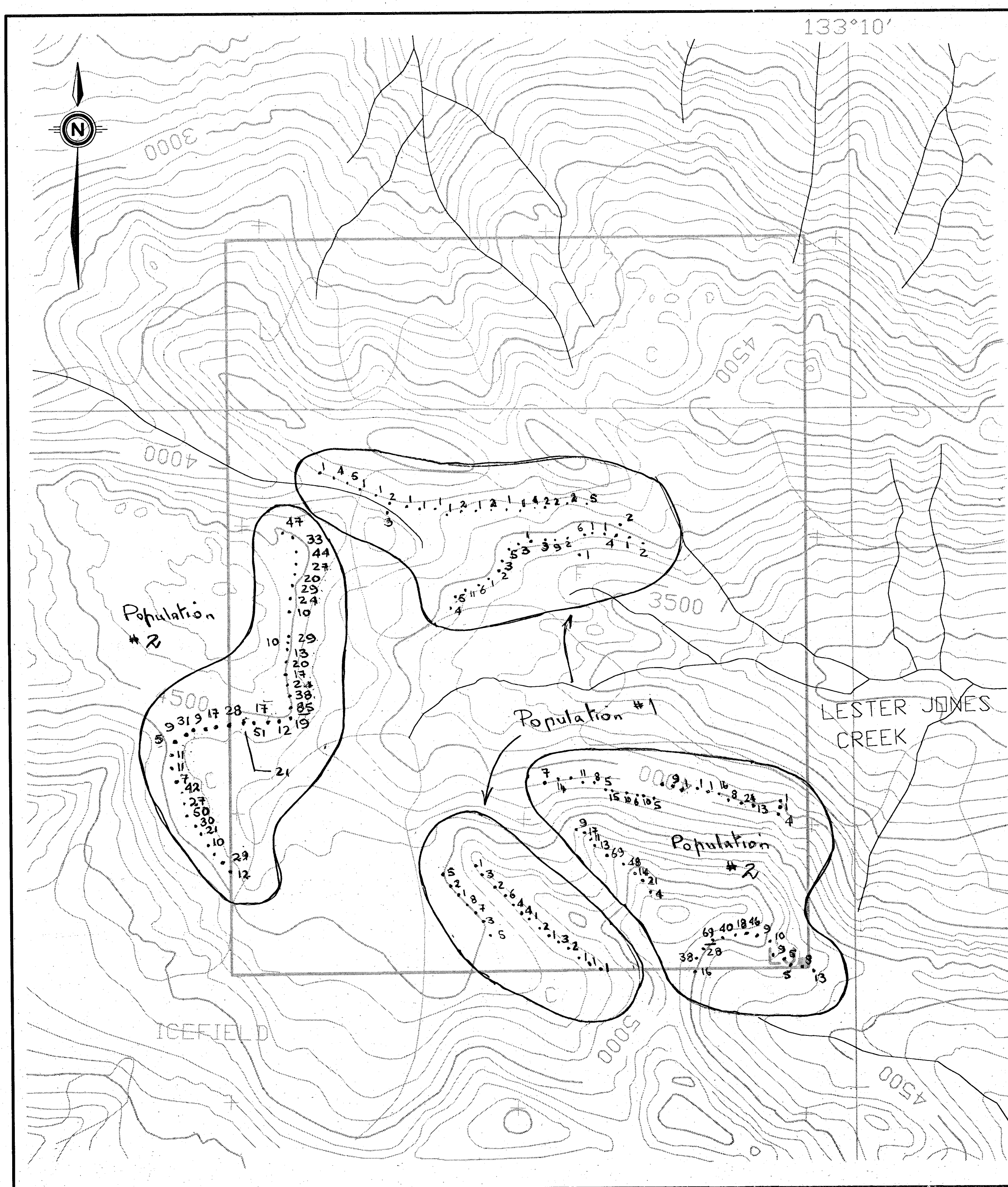
# Keewatin Engineering PROJECT 046 (L.J) FILE # 90-2706

Pac

EN	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		
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%	%	ppm	ppm	%	ppm	%	%	%	%	%	%	%
90 C 007	1	167	86	324	1.7	8	13	1445	9.84	9709	6	ND	1	129	3.6	46	2	34	4.32	0.03	2	13	1.17	25	.01	6	.28	.01	.08	1	270
90 C 008	4	199	36	183	1.2	12	14	445	5.87	3637	5	ND	1	45	1.7	37	2	13	1.54	0.03	2	7	.33	21	.01	2	.29	.01	.12	1	108
90 MSC 009	4	125	12	85	.8	10	11	795	3.77	2909	5	ND	1	89	.2	21	2	16	2.18	0.03	2	8	.63	68	.01	3	.27	.01	.11	1	29
90 MSC 010	3	96	19	42	.8	11	12	558	4.85	15801	5	ND	1	80	.18	117	2	15	1.73	0.03	2	9	.57	26	.01	3	.28	.01	.11	1	200
90 MSR 036	3	28	20	13	.1	10	4	112	.62	33	5	ND	1	18	.12	2	2	8	.03	0.03	2	9	.82	1444	.01	6	.14	.01	.05	1	47
90 MSR 037	2	111	2	74	.1	11	14	714	3.78	59	5	ND	1	64	.5	2	2	30	.76	0.04	2	6	.32	435	.01	6	.29	.01	.10	1	10
90 MSR 038	1	62	8	50	.2	6	6	1809	5.78	346	5	ND	1	335	.9	16	2	54	9.36	0.07	2	11	2.74	148	.01	2	.15	.01	.06	1	13
90 MSR 039	3	168	52	181	2.3	13	10	55	6.85	18017	5	ND	1	9	.18	69	2	7	.14	0.04	2	4	.82	23	.01	5	.24	.01	.18	1	126
90 MSR 040	8	9	12	24	.1	13	8	861	1.72	1378	5	ND	1	86	.2	10	2	16	1.77	0.02	2	11	.46	40	.01	8	.22	.01	.07	1	12
90 MSR 041	2	12	30	46	.4	9	5	2069	4.95	6522	7	ND	1	301	.6	111	2	15	5.90	0.01	3	10	1.84	18	.01	12	.11	.01	.04	1	92
90 MSR 042	2	65	13	17	.7	23	43	753	7.47	1084	5	ND	1	73	.2	9	2	26	3.39	0.05	2	11	1.13	22	.01	8	.27	.01	.11	1	470
90 MSR 043	3	125	13	88	.9	15	26	255	4.64	18625	5	ND	1	22	.6	53	2	12	.43	0.02	2	5	.17	25	.01	4	.28	.01	.12	1	368

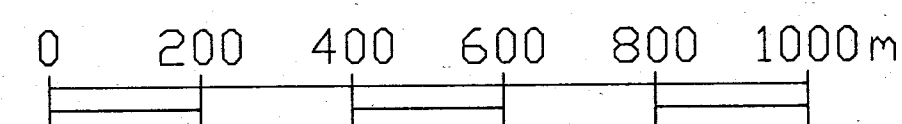
	Mo	Cu	Pb	Zn	Ag	Ni	Co	Mn	Fe	As	U	Au	Th	Sr	Cd	Sb	Bi	V	Ca	P	La	Cr	Mg	Ba	Ti	B	Al	Na	K	W	Au*
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%	%	ppm	ppm	%	ppm	%	ppm	%	%	%	ppm	ppb
MSR 030	1	67	4	123	.2	7	7	1577	4.21	502	5	ND	1	299	.7	4	4	25	6.89	.037	3	7	1.81	143	.01	2	.35	.01	.06	1	1
MSR 031	3	72	5	211	.2	6	8	2597	5.74	54	5	ND	1	225	2.1	2	2	36	8.69	.053	3	9	2.90	22	.01	2	.24	.01	.04	1	1
MSR 032	2	24	9	27	.8	4	5	837	2.66	3959	5	ND	1	158	.2	25	3	19	7.29	.019	2	5	1.16	49	.01	2	.12	.01	.06	1	3
MSR 033	2	196	131	340	2.9	8	14	128	6.12	9240	6	ND	1	27	3.4	34	2	6	.51	.037	2	5	.11	13	.01	3	.20	.01	.08	1	410
MSR 034	3	117	132	237	1.7	7	9	325	3.99	993	5	ND	1	22	1.9	10	2	9	.77	.061	2	5	.18	26	.01	3	.24	.01	.12	1	220
90 MSR 035	4	15	10	12	.4	9	7	33	2.70	9916	5	ND	1	7	.2	26	2	4	.06	.010	2	6	.02	33	.01	4	.16	.01	.08	1	94



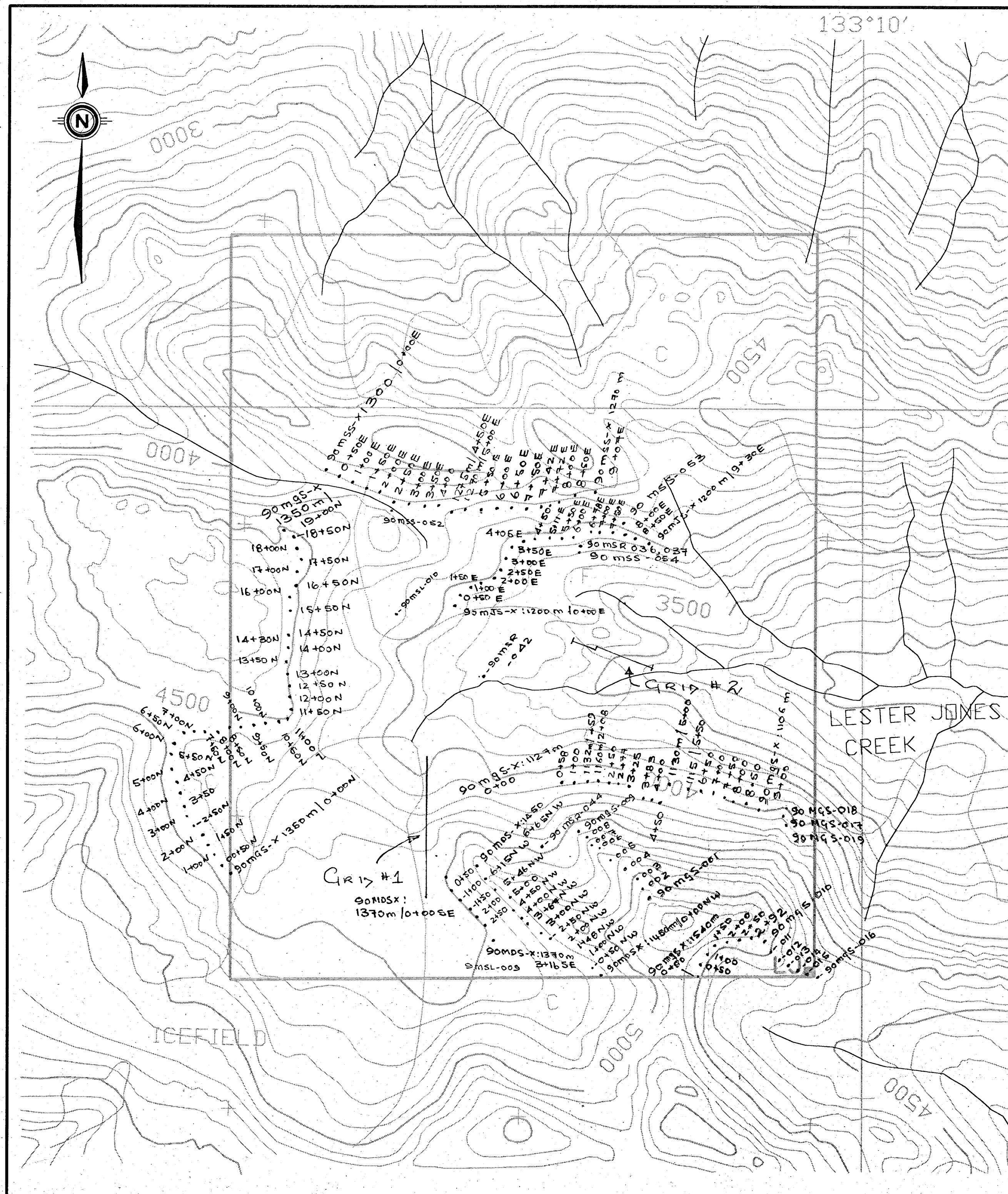


GEOLOGICAL BRANCH  
ASSESSMENT REPORT

20,433



SOLOMON RESOURCES LTD.	
LJ PROPERTY	
Auph - Soils	
(Contour)	
DATE: OCT. 1990	NTS: 104K/11E, 104K/14E
PROJECT: 046 LJ	BY: N.C. ASPINALL
SCALE: 1:10,000	+ David Strain.
Keewatin Engineering Inc.	MAP No. 5



GEOLOGICAL BRANCH  
ASSESSMENT REPORT

LEGEND **20,433**

90' mgs - x: 1300m/ 9+30E (or) 004

Sample  
No

No and Position  
of Sample

contour level

Area

TYPE (S= Soil); (R= Rock);  
(L= Stream)

Sampler  
PROJECT

Year

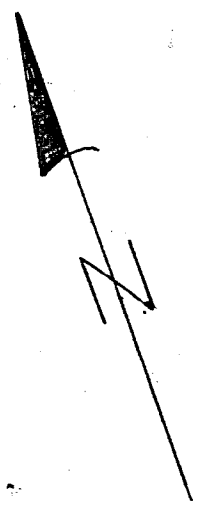
0 200 400 600 800 1000m

SOLOMON RESOURCES LTD.

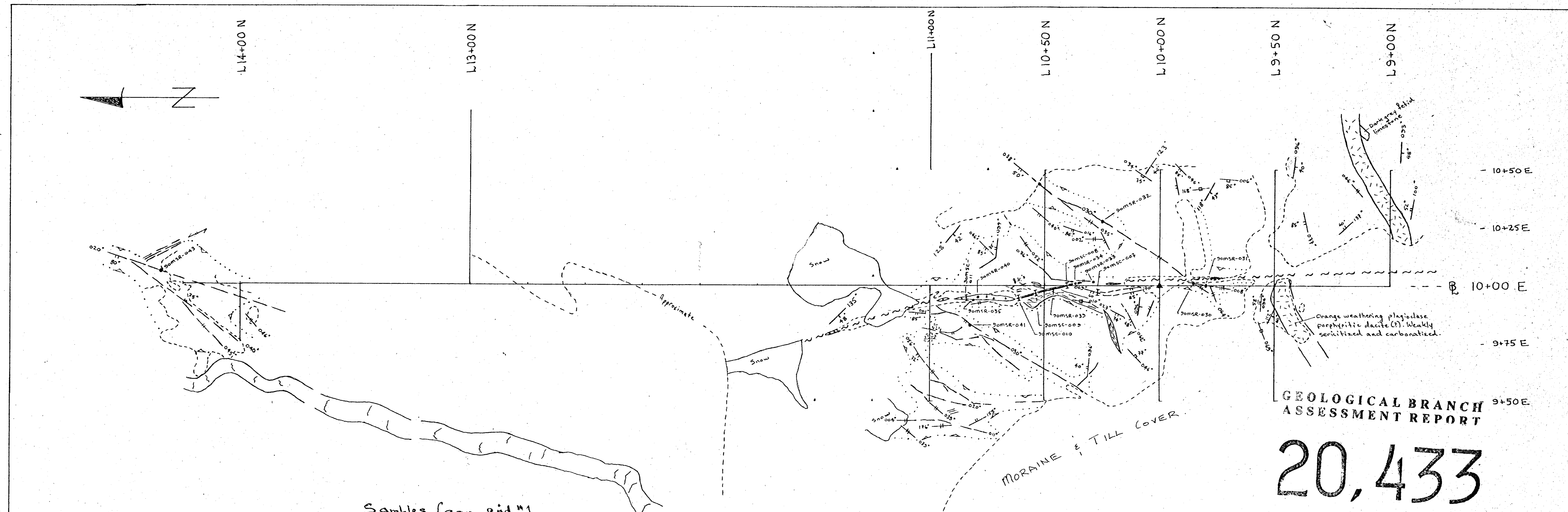
LJ PROPERTY

Locations: Grids # 1 and #2;  
Rock samples; Soil and  
Stream samples.

DATE: OCT. 1990	NTS: 104K/11E, 104K/14E
PROJECT: 046LJ	BY: NCA / D.S
SCALE: 1:10,000	
Keewatin Engineering Inc.	MAP No. 4







GEOLOGICAL BRANCH  
ASSESSMENT REPORT

20,433

# LEGEND

- Outcrop
- Carbonate Alteration-teeth point to altered areas.
- Quartz-carbonate vein breccia.
- Silicified fault gouge.
- Quartz-flooded breccia
- Kaolinite(?) and quartz stringers.
- Fault
- Joint
- Bedding
- Quartz veins
- Sample locations (chip, grab)
- 1946 claim cairn.

## Samples from grid #1

Rock:	Au pph	As pphm
90' MSR-030	1	502
90' MSR-031	1	54
90' MSR-032	3	3,959
90' MSR-033	410	9,240
90' MSR-034	220	993
90' MSR-036	94	9,916
90' MSR-038	13	546
90' MSR-039	126	10,017
90' MSR-040	12	1,378
90' MSR-041	92	8,522

LESTER JONES CREEK

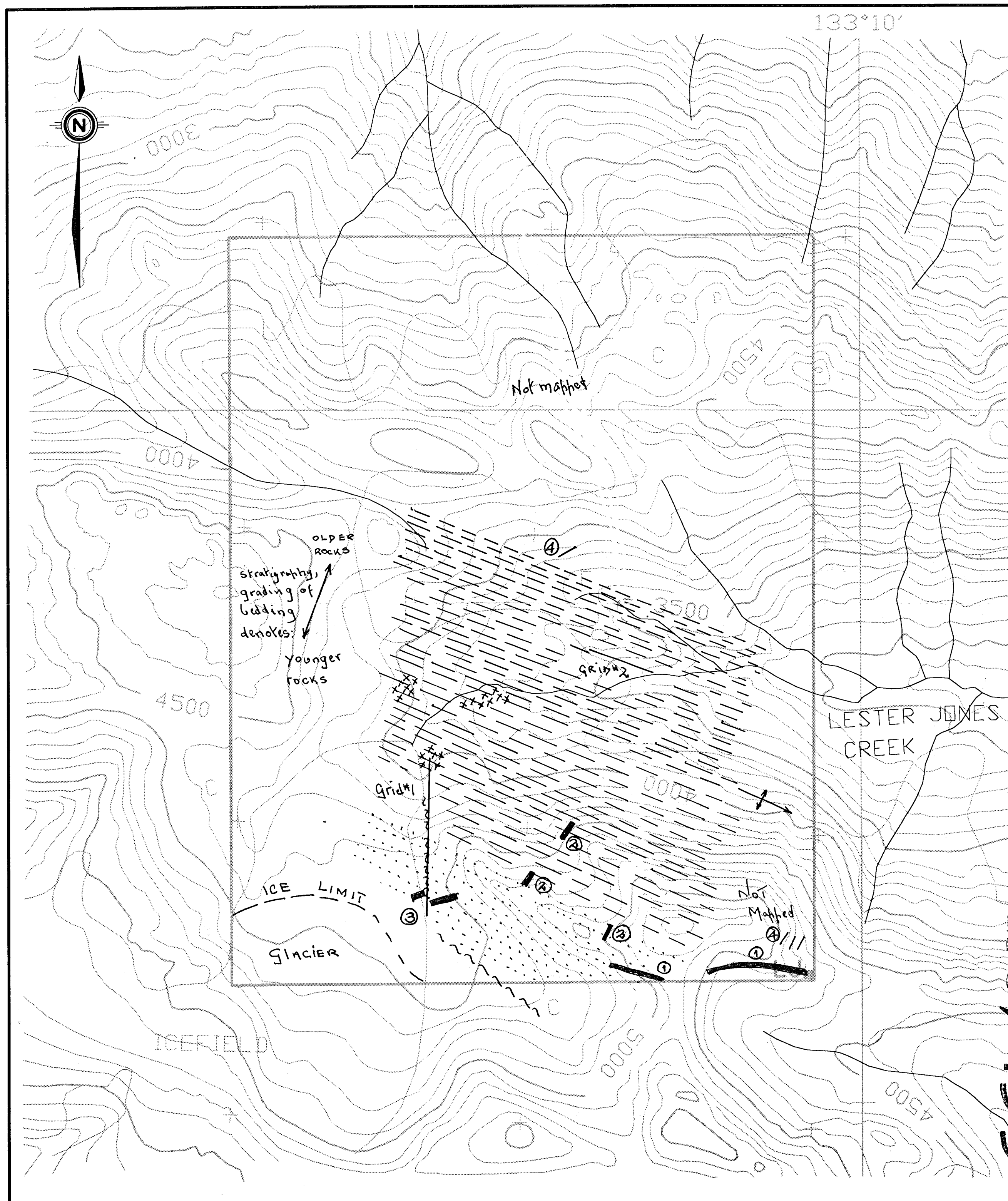
Rock and chip	Au pph	As pphm
90' MSR-043	470	18,625
90' MSC-007	270	9,709
90' MSC-008	108	3,437
90' MSC-009	29	2,309
90' MSC-010	200	15,801
90' MSC-011	180	5,732

LITHOLOGY - Generally well bedded, grey green to green weathering siltstones and wackes (grit) in south part of grid; thick bedded to massive, lithic wackes and coarse epiclastic breccias in north part of grid.

GRID #1 - L J CLAIM  
GEOLOGY AND SAMPLE LOCATION MAP

KEEWATIN ENGINEERING INC.

FIGURE NO.	NTS 104K/11
SCALE 1:1000	MAP NO. 2
Revised: <1ve Aspinall, Oct 1990	DATA - DM. STRAIN (July, 1990)



## Legend

Units of the King Salmon Formation  
(Sukini Group, Upper Triassic)

Generally well bedded, grey-green weathering silty sand and wackes, striking as depicted

Dark grey and green weathering, orange weathering (carbonatized) fine clastic breccia, grading to thick bedded massive, lithic wackes and coarse clastic breccia, striking as depicted.

- ① Type #1 dyke
- ② Type #2 dyke
- ③ Type #3 dyke

④ Chalcidonic quartz Veins

xxx Carbonatization

Anticline Axis

Fault

0 200 400 600 800 1000m

SOLOMON RESOURCES LTD.

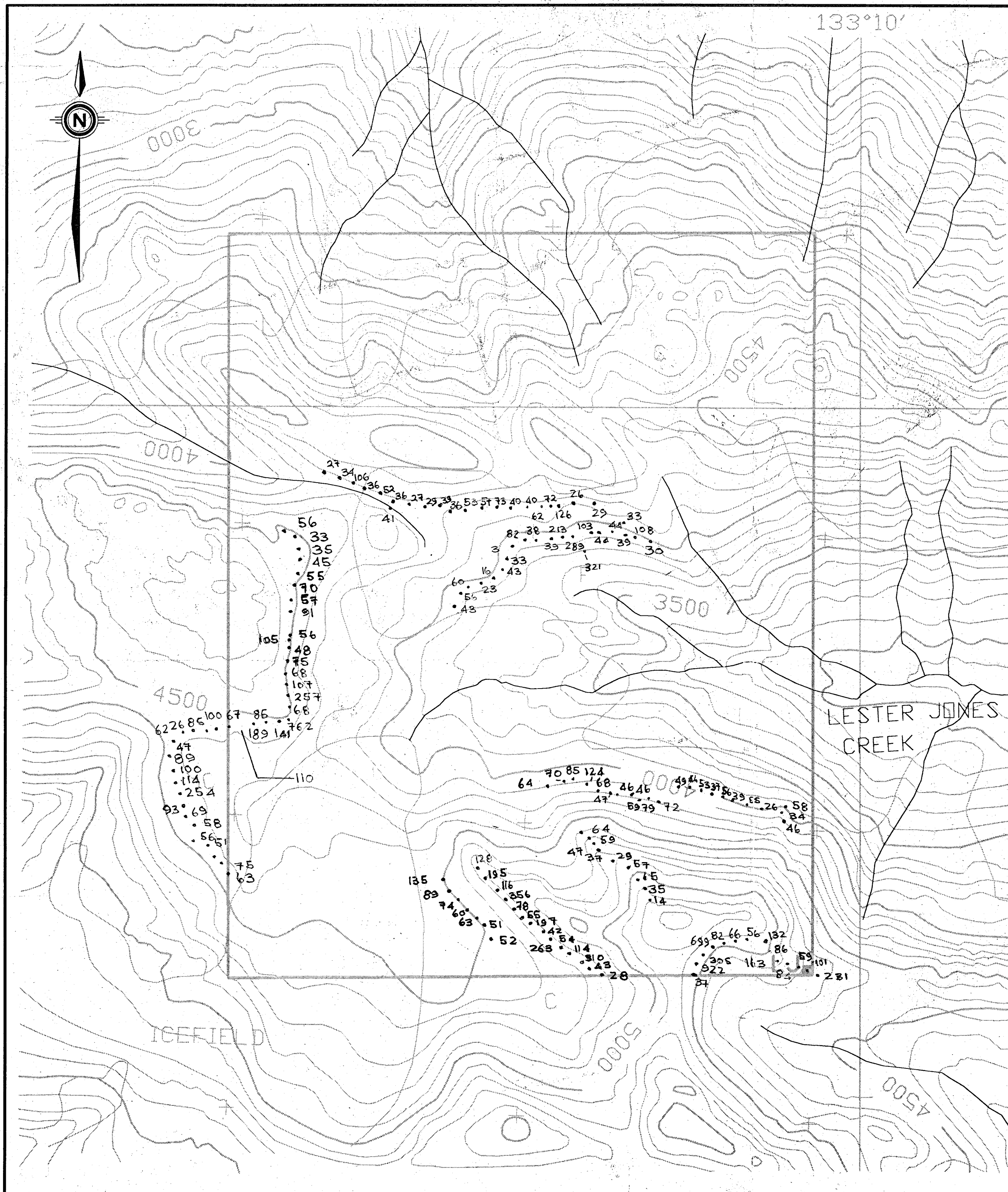
LJ PROPERTY

GEOLOGY

DATE: OCT. 1990	NTS: 104K/11E, 104K/14E
PROJECT: 046 LJ	BY: DAVID STEIN
SCALE: 1:10,000	Revised: (Live Aspinall)
Keewatin Engineering Inc.	MAP No. 1

GEOLOGICAL BRANCH  
ASSESSMENT REPORT

20433



GEOLOGICAL BRANCH  
ASSESSMENT REPORT

20,433

0 200 400 600 800 1000m

SOLOMON RESOURCES LTD.

LJ PROPERTY

As ppm - Soils  
(contour)

DATE: OCT. 1990	NTS: 104K/11E, 104K/14E
PROJECT:	BY: N. C. ASPINALL
SCALE: 1:10,000	+ David Strain
Keewatin Engineering Inc.	MAP No. 6