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**THE GEOLOGICAL AND GEOCHEMICAL REPORT  
OF THE THREE MILE 1,2,3,4 CLAIM GROUP**

in the

Skeena Mining Division

for

Navarre Resources Corp.,  
201-744 W. Hastings St.,  
Vancouver, B.C. V6C 1A5

by

Andris Kikauka, B.Sc., F.G.A.C.

Nov. 30, 1990

**GEOLOGICAL BRANCH  
ASSESSMENT REPORT**

**20,698**

STATEMENT OF COSTS

On the Three Mile Claim Group, Skeena Mining Division

FIELD CREW:

Mob/Demob	\$	600
A. Kikauka (Geologist) July 23-27, @350/day		1,750
K. Antoniak (Geotechnician) July 23-27, @125/day		625
H. Ball (Geotechnician) July 23-27, @100/day		500
C. Antoniak (Geotechnician) July 23-27, @100/day		500
Food/Lodging/Fuel/Equipment, @60/man/day X 20		1,200

SERVICES:

Helicopter support (+fuel), 3 hrs. @775/hr.		2,325
Geochemical analysis, @ 13/sample X 129		1,677
Report		<u>500</u>
Total=		9,677

## SUMMARY

The Three Mile 1,2,3,4 Claim Group consists of 4 contiguous mineral claims consisting of 48 units. The claims are located 1.5-7.5 km. east of the head of Alice Arm and lie within the Skeena Mining Division.

The claims are within the southern edge of the "Stewart Complex", which consists of Mesozoic volcanics and sediments that border the east margin of the Coast Plutonic Complex. The property is underlain by Lower to Middle Jurassic argillaceous siltstone, greywacke, conglomerate, limestone, volcanic breccia, lithic and crystal tuff, and chert. This sequence is warped, folded, and faulted and locally intruded by a series of dykes which are part of the Coast Range Plutonic Complex.

The area of Alice Arm is historically noted for mining. At least 5 major mineral deposits are within 20 km. of Alice Arm. The Three Mile Claim Group has a history of exploration that has led to the identification of four mineral occurrences of base and precious metals.

Geological mapping identified zones of pyrite mineralization with minor graphite developed. Assays from these zones of mineralization returned low values of base and precious metals, however these zones indicate there is potential for ore. This potential is verified by the presence of base and precious metal geochemical highs in the grid area.

A geochemical survey outlined an area of above average Ag-Au-Pb-Zn-Cd-Sb-Bi-Mn (soil and stream sediment), located 1200-1600 m. east of the confluence of Foxey Ck. and the Illiance R. This zone roughly parallels the east-west trend of the Illiance R., and occurs in an area of a volcanic-sediment contact. The 400 m. long zone requires detailed follow up geochemistry and geophysics. An area above average Ag in soils occurs 100-300 m. east of the confluence of the Illiance R. and Foxey Ck. This area coincides with a zone of northeast trending diorite dykes and the historic workings of the Three Mile adits. Detailed follow up in this area is required.

The Three Mile Claim Group is highlighted by several historic showings, zones of well mineralized country rock, base and precious metal geochemical anomalies, relatively easy access, and established mining infrastructure. For these reasons, a second phase of exploration is recommended. Phase 2 recommendations include detailed geology, geophysics, and geochemistry. A proposed budget of \$20,000 would be required to complete phase 2. Contingent on phase 2 results a third phase of diamond drilling is recommended.

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## 1.0 INTRODUCTION

This report summarizes the field work performed on the Three Mile 1,2,3,and 4 Claim Group carried out on July 23-27,1990. The author, Mr. Andris Kikauka, planned and supervised all fieldwork and was present on the subject claims from July 23-27, 1990.

## 2.0 LOCATION, ACCESS, TOPOGRAPHY

The Three Mile 1,2,3,and 4 Claim Group is located 1.5-7.5 km. east of the head of Alice Arm, along the Illiance River (fig. 2). Elevations on the property range from 60-800 m. above sea level. The townsite of Kitsault, located 3 km. east of the claim, is accessible by a well maintained road. An overgrown trail exists from the Kitsault townsite to the head of the Illiance River following the valley floor.

The topography is dominated by a linear (east-west) break in the slope along the Illiance River valley. The moderate slope north of the river is incised by numerous northeast trending creeks. In contrast, the steep slope south of the river rises abruptly above the valley. Further south, in the area of the Amax Molybdenum Deposit, the dominant topographic feature is flat lying lava flows, e.g. flat topped Widdzech (Table) Mountain.

The three distinct landforms within the claim group is unique and is explainable by the underlying geological formations, i.e. the Illaince River follows a major break in lithology enhanced by structure.

## 3.0 PROPERTY STATUS

The Three Mile 1,2,3,and 4 Claim Group consists of 4 contiguous claims comprising 48 units located in the Skeena Mining Division. The claims are owned by Navarre Resources Corp.

<u>Claim name</u>	<u># of units</u>	<u>Record #</u>	<u>Record Date</u>	<u>Expiry Date</u>
Three Mile 1	6	8287	Dec.20,89	Dec.20,90
Three Mile 2	6	8288	Dec.20,89	Dec.20,90
Three Mile 3	18	8289	Dec.20,89	Dec.20,90
Three Mile 4	18	8290.	Dec.20,89	Dec.20,90

The total area of the claim group, allowing for overlap of previous mineral claims, is approximately 1100 hectares.

#### 4.0 AREA HISTORY

Major mineral deposits located in the vicinity of Alice Arm include Anyox, Torbit-Dolly Varden, B.C. Moly, and Maple Bay. The Anyox massive sulphide deposit produced in excess of 30 million tons of ore which averaged 1.7 g/t Au, 9.3 g/t Ag, 1.5% Cu, and 0.5% combined Pb-Zn. The mineralization occurs as lenses near the basaltic pillow lavas overlain by generally conformable clastic sediments.

The Torbit-Dolly Varden silver deposit consists of a network of mineralized quartz veins emplaced along shear zones in fractured volcanic and sedimentary rocks. Total production was 1,284,882 tons grading 485 g/t Ag, 0.4% Pb, and 0.02% Zn. Mineralization consists of sphalerite, galena, pyrite, tetrahedrite, and pyrargyrite.

The B.C. Moly deposit contains mineral reserves of 10-20 million tons of 0.3% molybdenum. Mineralization occurs as disseminations in a ring shaped zone within a calc-alkaline intrusive complex.

The Maple Bay copper deposit consists of a series of quartz veins averaging 1.5% Cu. The veins are characterized by above average lateral and vertical continuity. One of the veins, called the "Outsider", produced 138,854 tons of 2.0% Cu, with very minor amounts of Au-Ag.

The Ajax prospect reports a drill indicated reserve of 529,967,000 tons of 0.09% molybdenum. The Mac (Sunrise, Silver Band) prospect contains Pb-Zn-Ag mineral zones. In 1929 an 1160 foot adit was driven.

In 1984, a government regional geochemical survey analyzed numerous elements (with the exception of Au) in stream sediments. In an area 10-15 km. north, south, and east of Alice Arm, above average Cu-Pb-Zn-Ag-Mo-Hg-As-Fe-Mn-W-Co were obtained. This multi-element assemblage is an indication that many varieties of mineralization are present in the area.

Historically, the area has been active in mining activity for the past 90 years. With the increase of activity within the "Stewart Complex" mineral belt, the Alice Arm area will likely be examined in greater detail over the next few years.

#### 5.0 PROPERTY HISTORY

Previous work has outlined several mineral occurrences within the Three Mile 1,2,3,4 Claim Group. These mineral

occurrences are summarized in the following list (source; government mineral inventory, minfile);

<u>Showing Name</u>	<u>Distance to Alice Arm</u>	<u>Commodity present</u>
Casey	1.3 km.	Pb
Three Mile	3.9 km.	Ag, Pb, Zn, Au
Montana	4.6 km.	Ag, Pb, Zn, Cu, Sb
Ingraham's	5.3 km.	Ag, Pb
Silver Leaf	7.0 km.	Ag

All of the above showings are located along a linear trend along the valley floor of the Illiance River.

The Three Mile showing consists of 2 quartz-pyrite (with minor marcasite-calcite-sphalerite-galena-anthracolite) shear-breccia zones 15-20 feet wide. A 140 foot adit was driven in 1930. Two reported assays of .02 oz/t Au, 2.0 oz/t Ag were obtained (minfile # P133).

Ingraham's showing is comprised of quartz-calcite-pyrite-galena veins-stockwork hosted by argillaceous sediments cut by porphyritic dykes which strike NE. An assay of vein material returned 11 oz/t Ag, 28% Pb, and trace Au (minfile # P134).

The Silver Leaf is described as mineralized bands of black cherty felsic rock up to 50 feet wide, in contact with diorite. Mineralization consists of galena, pyrite, tetrahedrite with a reported assay of 1.2 oz/t Ag, 6.5% Pb, and trace Au (minfile # P135).

## 6.0 GENERAL GEOLOGY

The Stewart Complex includes a thick sequence of mainly late Triassic to late Middle Jurassic volcanic, sedimentary, and metamorphic rocks. These have been intruded and cut by a mainly granitic to syenitic suite of Lower Jurassic through Tertiary plutons which together form part of the Coast Range plutonic complex. Deformation, in part related to intrusive activity has produced complex fold structures along the main intrusive contacts with simple open folds and warps dominant along the east side of the complex. Cataclasis marked by strong north-south structures are prominent structural features that cut all pre-Jurassic units.

Country rocks in the general Stewart area comprise mainly Hazleton Group strata which includes the Lower Jurassic Unuk River Formation, the Middle Jurassic Betty Creek Formation, and the Upper Jurassic Nass River Formation (Grove 1971, 1986). In the general Stewart area, the Unuk River strata includes mainly fragmental andesitic volcanics,

epiclastic volcanics and minor volcanic flows. Widespread Aalenian uplift and erosion was followed by deposition of the partly marine volcanoclastic Betty Creek Formation, the mixed Salmon River Formation, and the dominantly shallow marine Nass River Formation.

Intrusive activity in the Stewart area has been marked by Lower to Middle Jurassic Texas Creek granodiorite with which many ore deposits, including the Silbak-Premier and Big Missouri, are associated. Younger intrusions include the extensive Hyder Quartz Monzonite and the many Tertiary Dyke Swarms which form a large part of the Coast Plutonic Complex. Mineral deposits such as the B.C. Molybdenum deposit at Alice Arm and a host of smaller deposits are localized in or related to these 48 to 52 m.y. plutons which include part of the regionally extensive Portland Canal Dyke Swarm (Grove, 1986).

Northwest and northeast-trending faults transect the region. Displacements are relatively small on a regional scale. Many of these faults have been intruded by Tertiary diorite and lamprophyre dykes (Dawson, 1986).

## **7.0 1990 FIELD PROGRAM**

### **7.1 SCOPE AND PURPOSE**

From July 23-27, 1990, one geologist and three geotechnicians carried out geological mapping and geochemical surveys.

The purpose of the program was;

- a) to cover the property with detailed geological and geochemical surveys to evaluate the mineral potential of the property.
- b) systematically sample mineralization.

### **7.2 METHODS AND PROCEDURES**

Utilizing a compass and hip chain a flagged grid was established on the Three Mile 3 claim. Using the east-west trending Illiance River valley as a base line, the grid lines extended 150 m. north and south of the river at 150 m. spacing, covering an area of 1.9 X 0.6 km.(fig. 4). A total of 8.4 km. of line grid was surveyed.

Using a grub hoe, soil samples were collected from the B horizon of the well developed soil profile. The average sample depth was 30 cm., and a total of 108 samples were taken along the grid lines.

Using a -20 mesh screen and a shovel, stream sediment fines

were collected in the active channel of small 0.3-2.0 m. wide streams. Samples were collected in paper bags and dried. A total of 16 samples were taken.

Geological mapping was restricted to creek and river bedrock exposures, and drawn at a scale of 1:10,000.

## 8.0 RESULTS

### 8.1 GEOLOGY AND MINERALIZATION

Geological mapping of the Three Mile 1,2,3,4 Claim Group has identified a sedimentary unit (Salmon River Formation, Middle Jurassic) that overlies the mixed volcanics and sediments (Unuk R. Fm., Lower Jurassic). Lithologies of the Unuk R. Fm. consist of alternating volcanic breccias and conglomerate, epiclastic sedimentary rock, argillaceous siltstone, sandstone, minor chert and limestone. The lithologies of the Salmon R. Fm. consist of a well bedded, folded sequence of black argillaceous siltstone, sandstone, minor conglomerate and limestone.

Generally folded and warped, the Salmon R. Fm. sediments have little or no metamorphic mineral assemblages developed except at the contact of intrusive stocks and dykes. The Unuk R. Fm. has undergone weak, ubiquitous deformation producing foliation and lineation. It is possible that the deformation is associated with a major fault structure that parallels the Illiance River.

The Jurassic sequence of volcanics and sediments are intruded by diorite and lamprophyre dykes associated with the 45-55 m.y. Coast Range Plutonic Complex. These dykes trend northeast and follow creek-fault zones.

The fault zone along the Illiance River has complicated the interpretation of stratigraphy, however a general east-west strike and moderate to steep dip of the strata is indicated.

Observed mineralization consisted of pyrite-calcite-quartz disseminated in sheared country rock. Some of the mineralization was sampled, returning low base and precious metal values. The old workings were not located. It is suspected that they are buried and overgrown. The mature forest and soil horizon make it difficult to trace bedrock, however soil geochemistry is useful.

### 8.2 GEOCHEMISTRY

6 different areas of above average Cu-Pb-Zn-Ag-Au-As-Sb soil geochemistry were located on the grid area. A sample taken at L14+50E 1+50N returned a value of 1638 ppb Au, with above

average Pb-Zn-Ag-Cd. A sample from L16+00E 1+50N returned a value of 1999 ppm Pb, 1503 ppm Zn, 1.7 ppm Ag, 25.9 ppm Cd, 236 ppm Sb, and 48 ppb Au. At L12+50E 0+50N and L13+00E 1+00N above average Pb-Zn-Ag-As-Sb-Bi-Cd values occur. At L7+50E 1+00N and 1+50N 2.5-3.5 ppm Ag values occur. L1+50E and L3+00E north of the Illiance R. above average Pb-Zn-Ag values occur. In fact, all of the above average values come from the north side of the river.

The nature and extent of the underlying bedrock in the areas of the geochemical highs is largely unknown. Detailed follow up geochemical sampling, prospecting, and trenching would be necessary to identify buried mineral occurrences.

Stream sediment sampling identified a creek near L16+00E that drains from the north, giving the following values; 2769 ppm Pb, 11,937 ppm Zn, 1.3 ppm Ag, 18,642 ppm Mn, 257 ppm As, 159.4 ppm Cd, 60 ppm Sb, 28 ppb Au. This creek sample coincides with the geochemical highs located on the soil grid at L16+00E and L14+50E. These zones require detailed investigation.

In the southeast corner of the claim group a number of calc-alkaline intrusives with related molybdenum mineralization are reported. This is another area of the property that requires detailed mapping and geochemical surveying.

## 9.0 CONCLUSION

The Three Mile 1,2,3,4 Claim Group has potential for hosting an economic deposit of Cu-Pb-Zn-Ag-Au and/ or Mo for the following reasons;

- 1) Numerous mineral showings up to 50 feet in width with significant Cu-Pb-Zn-Ag-Au values, are reported in the Illiance River valley.
- 2) Geological mapping indicates a sequence of mineralized volcanics and sediments similar to the stratigraphy of nearby mineral deposits.
- 3) Geochemically high values of Cu-Pb-Zn-Ag-Au-As-Sb-Bi-Cd-Mn in the grid area indicate numerous mineral zones are present.
- 4) The southeast portion of the claim has reported occurrences of quartz monzonite with potential for molybdenum mineralization (similar to the B.C.Moly deposit)
- 5) Access to the mining and milling infrastructure of Kitsault is relatively easy. The claim group is at a low elevation and year round work is relatively easy.

## 10.0 RECOMMENDATIONS

A second phase of mineral exploration is recommended to provide detailed follow up of geochemical anomalies, trenching in areas of historic workings, and zones of mineralized country rock. The following work program is recommended;

- 1) Detailed geochemical surveys (soil and stream sediment) covering geochemical anomalies outlined in the 1990 field program.
- 2) Regional geochemical surveys to cover areas outside of the 1990 field program.
- 3) Geophysical surveys (magnetics and conductivity) to cover 1990 grid area and extensions to the north.
- 4) Detailed geological mapping north of the Illiance R. and regional mapping to the south.
- 5) Trenching in areas of mineralization, and/or geophysical and geochemical anomalies.

Contingent on phase 2 results, a third phase of exploration, including diamond drilling, is recommended.

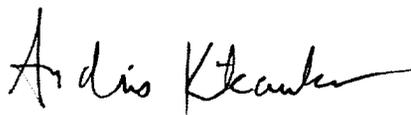
**11.0 PROPOSED BUDGET****PHASE 2**

Geologist and 3 geotechnicians (10 days)	\$ 6,500
Geophysical survey (20 km.)	4,000
Assays	2,000
Trenching	2,000
Camp costs	3,000
Helicopter support	2,000
Report	500
Phase 2 total	<u>20,000</u>

**PHASE 3**

Diamond drilling (1000 m.)	\$100,000
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Respectfully submitted;



Andris Kikauka, B.Sc., F.G.A.C.

## REFERENCES:

- Alldrick, D.J., 1987, Stratigraphy and Petrology of the Stewart Mining Camp. Min. of E.M.&P. Res. Report of Geological Fieldwork.
- Alldrick, D.J., 1988, Geological Setting of Precious Metals in the Stewart Area. Min of E.M.&P. Res. Report of Geological Fieldwork.
- Grove, E.W., 1971, Geology and Mineral Deposits of the Stewart Area, B.C.D.M. Bulletin 58.
- Grove, E.W., 1986, Geology and Mineral Deposits of the Unuk R., Salmon R., Anyox Area. Min. of E.M.&P. Res., Bulletin 63.
- Report of the Minister of Mines, B.C., 1932, 1923, 1919
- Hanson, G., Portland Canal Area, B.C., G.S.C. Memoir 175, 1935.
- Dawson, G.L., Geology and Mineral Deposits of the Kitsault Valley, 1986, B.C. Min. of E.M. & Pet. Res., Geological Fieldwork, Paper 1986-1

STATEMENT OF QUALIFICATIONS

I, Andris Kikauka, do hereby declare that;

- I graduated from Brock University, Faculty of Geological Sciences, St. Catharines, Ontario, 1979, receiving Honours B.Sc., First Class.

- From 1976-79 have performed geological fieldwork for uranium on the Canadian Shield.

- From 1979-90 have performed geological fieldwork for precious metal and base metal on the cordillera of Western Canada.

- I am a fellow in good standing with the Geological Association of Canada.

- Personally participated in the field work of this report, reviewed and assessed the data.

- I have no direct interest in the subject claims or the securities of Navarre Resources Corp.

- I consent to the use of this report in a Prospectus of material facts for the purpose of private or public financing.

Respectfully submitted;



Andris Kikauka, B.Sc., F.G.A.C.

BRITISH COLUMBIA

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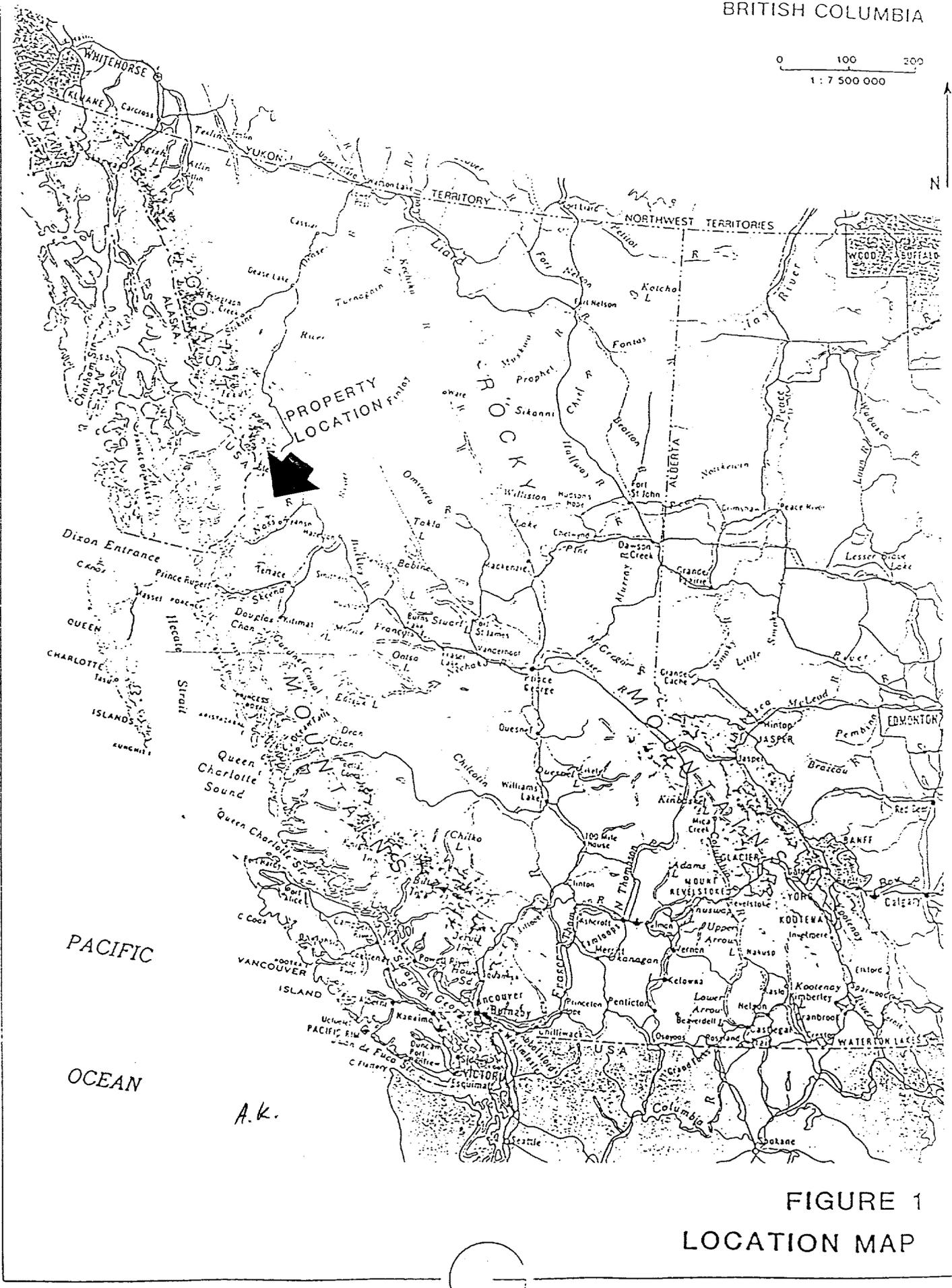
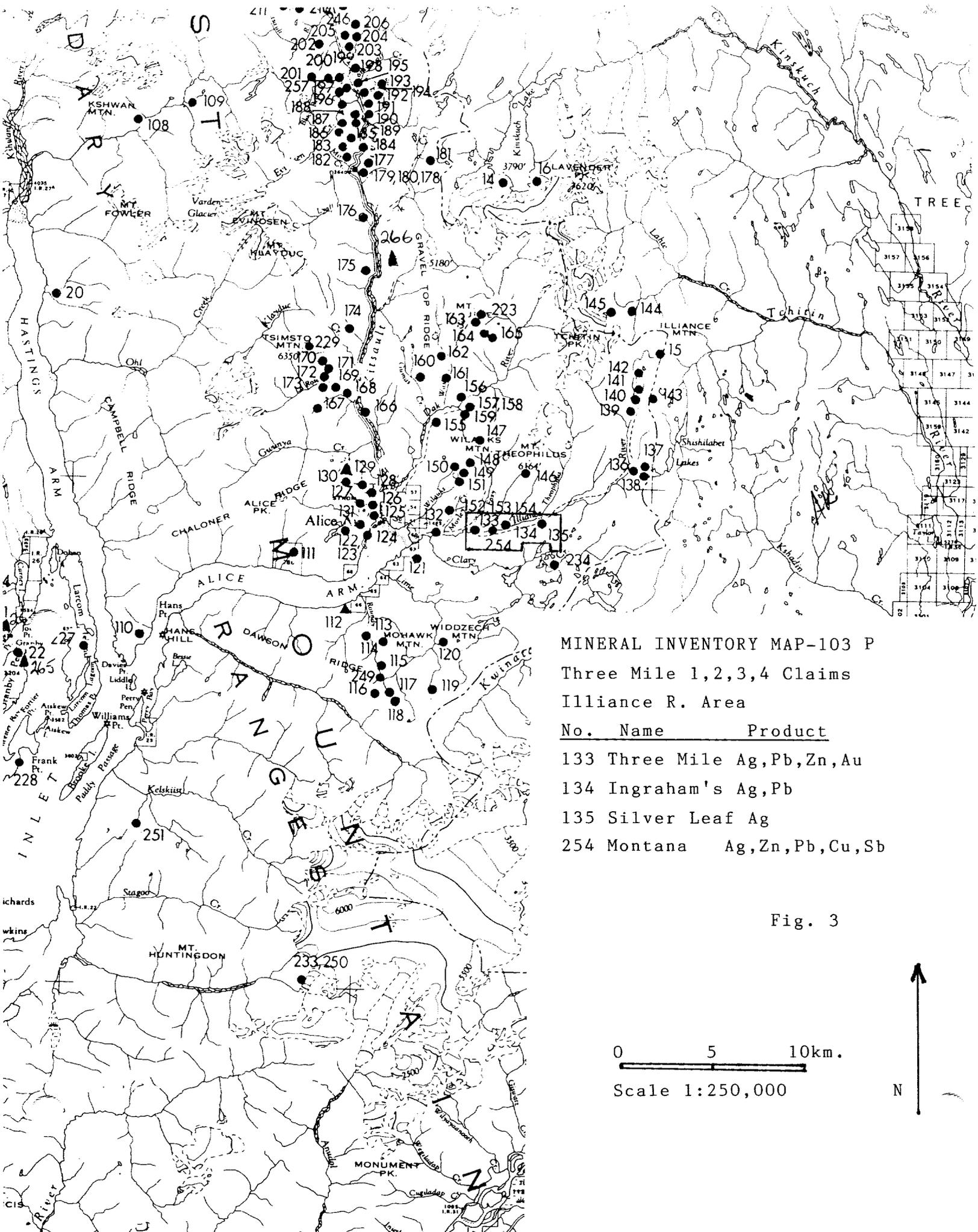


FIGURE 1  
LOCATION MAP





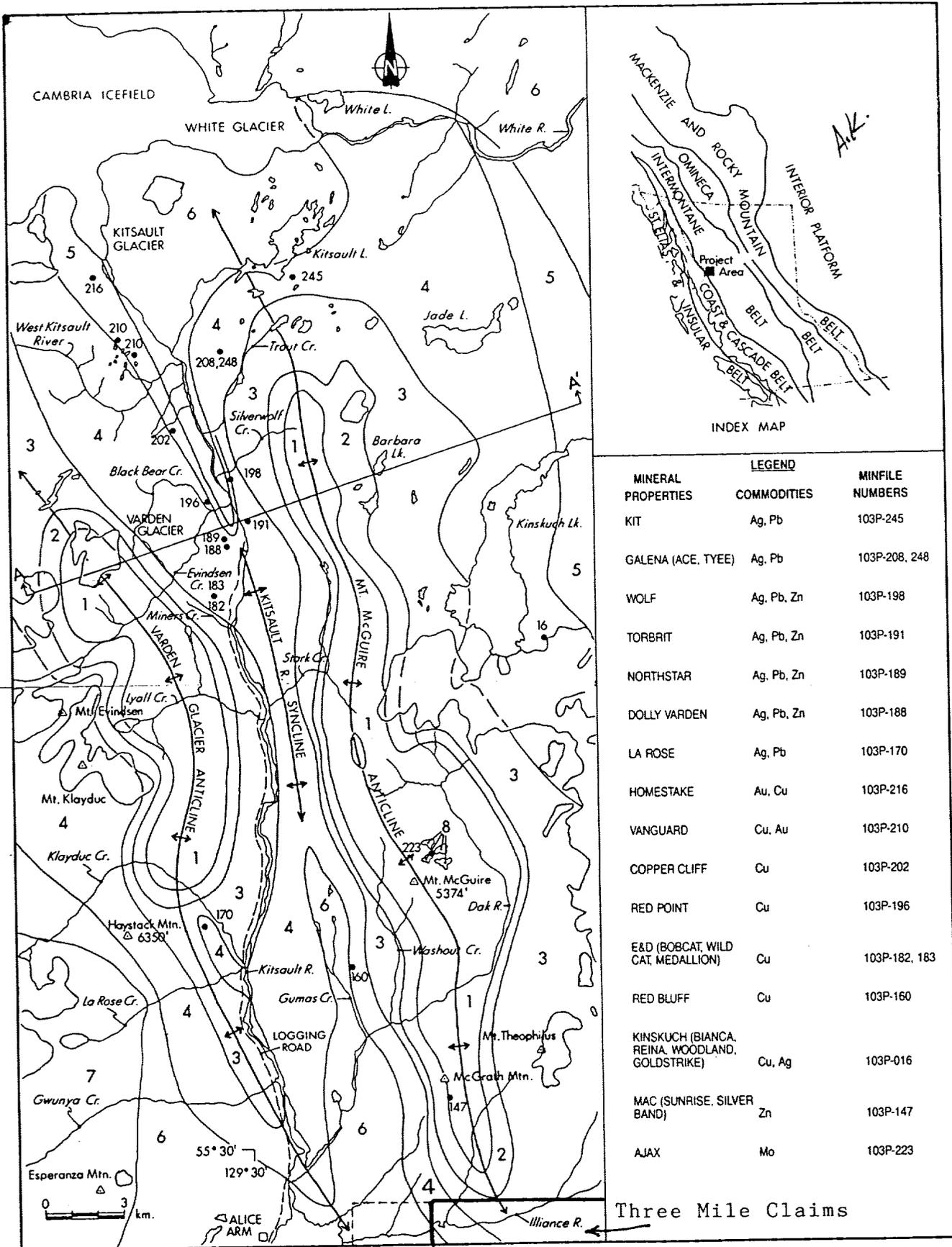
MINERAL INVENTORY MAP-103 P  
 Three Mile 1,2,3,4 Claims  
 Illiance R. Area

No.	Name	Product
133	Three Mile	Ag,Pb,Zn,Au
134	Ingraham's	Ag,Pb
135	Silver Leaf	Ag
254	Montana	Ag,Zn,Pb,Cu,Sb

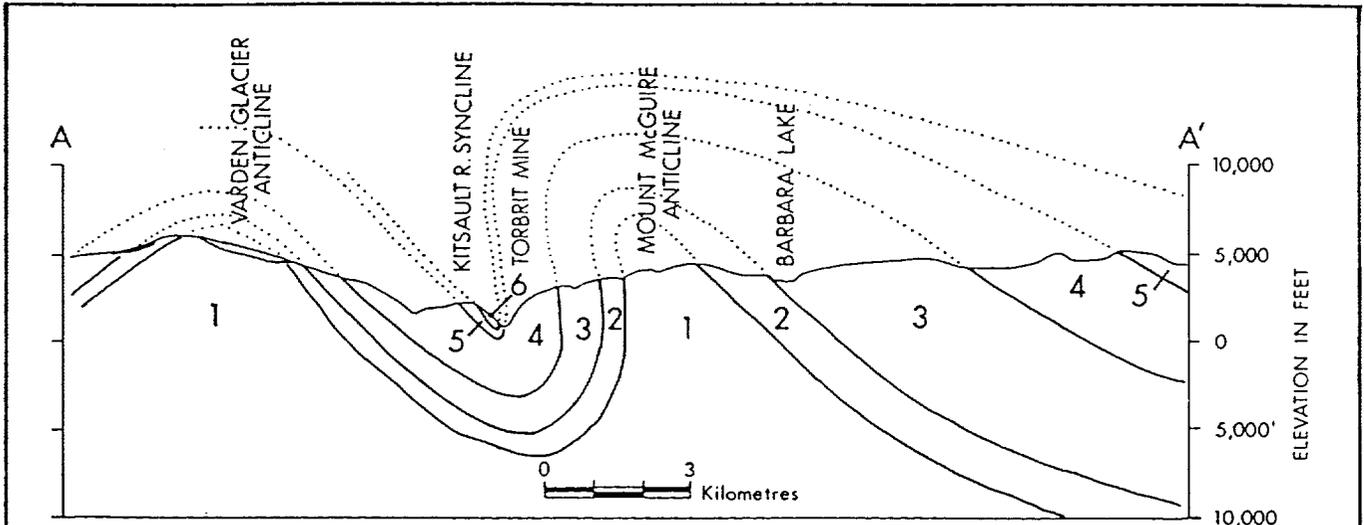
Fig. 3

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 Scale 1:250,000





Regional Geology, Kitsault R. Area- Fig. 4 (after Dawson, 86)



LEGEND

- |   |  |
|---|--|
| <p><b>INTRUSIVE ROCKS</b></p> <p><b>TERTIARY</b></p> <p>9 MINOR DYKES: MICRODIORITE (a); GRANODIORITE (b); LAMPROPHYRE (c)</p> <p>8 AJAX INTRUSIONS: QUARTZ FELDSPAR PORPHYRITIC QUARTZ MONZONITE (a); BIOTITE QUARTZ MONZONITE (b); 55.1 Ma (K/Ar)</p> <p>7 COAST PLUTONIC COMPLEX: QUARTZ MONZONITE (a); GRANODIORITE (b); 43-51 Ma (K/Ar)</p> <p><b>INTRUSIVE CONTACT</b></p> <p><b>VOLCANIC AND SEDIMENTARY ROCKS</b></p> <p><b>MIDDLE TO UPPER JURASSIC</b></p> <p>6 BASAL FOSSILIFEROUS WACKE (a); BLACK SILTSTONE AND WACKE (b); MINOR INTRAFORMATIONAL CONGLOMERATES AND LIMESTONE (c)</p> <p><b>LOWER JURASSIC</b></p> <p>5 GREEN AND MAROON VOLCANIC BRECCIA (a); EPICLASTIC CONGLOMERATE AND SEDIMENTS (b); LOCAL DACITIC FLOWS AND PYROCLASTICS (c)</p> | <p><b>VOLCANIC AND SEDIMENTARY ROCKS (CONTINUED)</b></p> <p><b>LOWER JURASSIC (CONTINUED)</b></p> <p>4 FELDSPAR-HORNBLLENDE PORPHYRITIC ANDESITIC PYROCLASTICS (a) AND FLOWS/SILLS (b); MINOR INTERBEDS OF LIMESTONE, SILTSTONE, SANDSTONE, CHERT, AND BARITE (c)</p> <p>3 BASAL POLYMICHTIC CONGLOMERATE, MINOR INTERBEDDED LIMESTONE, SILTSTONE, GRIT, SANDSTONE (a); SILTSTONE, ARGILLITE (b); VOLCANIC BRECCIA, MINOR INTERBEDDED SILTSTONE, SANDSTONE (c); INTERBEDDED SILTSTONE, SANDSTONE, AND PEBBLE CONGLOMERATE (MARKER HORIZON) (d)</p> <p>2 AUGITE (OLIVINE) PORPHYRITIC BASALT FLOWS, PILLOWED FLOWS (a); AUGITE-FELDSPAR PORPHYRITIC BASALT PYROCLASTICS AND VOLCANIC BRECCIAs (b); EPICLASTIC CONGLOMERATE, MINOR INTERBEDDED SILTSTONE, ARGILLITE, AND LIMESTONE (c)</p> <p>1 SILTSTONE, ARGILLITE, WACKE (a); RARE LIMESTONE (b); BOTTOM OF UNIT NOT SEEN</p> |
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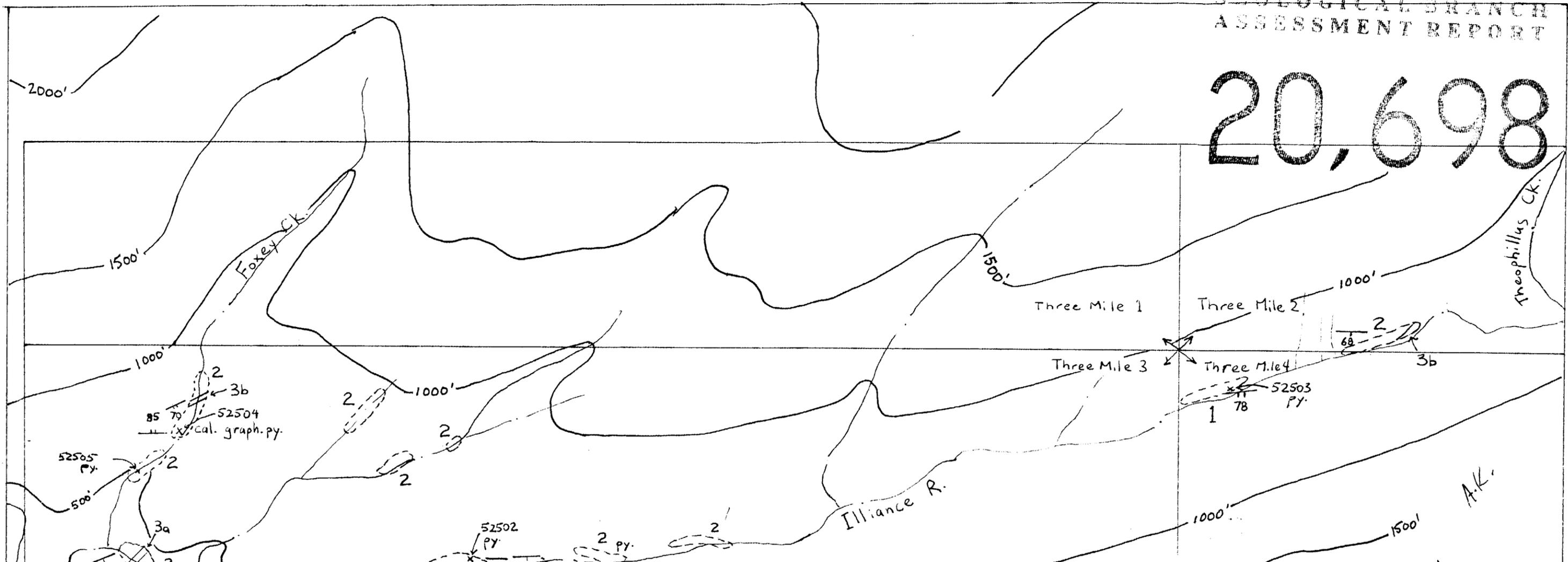
SYMBOLS

- |                            |                                 |
|----------------------------|---------------------------------|
| VEIN MINERALIZATION        | CRACKLE BRECCIA' MINERALIZATION |
| STRATABOUND MINERALIZATION | PORPHYRY MINERALIZATION         |

Cross section- Kitsault R. Valley- Fig. 5 (after Dawson, 86)

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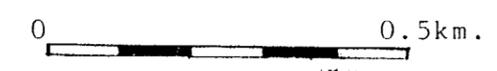
THREE MILE CLAIM GROUP= GEOLOGY- FIG. 6  
NTS-103 P/6 W- Navarre Res. Corp., July, 1990

LEGEND

- Tertiary (intrusive rocks)
  - 3b Intermediate dyke+hb.-feldspar phenocrysts.
  - 3a Mafic dyke+hb.-biotite phenocrysts.
- Middle Jurassic (sediments)
  - 2 Black argillaceous siltstone, greywacke, minor conglomerate and limestone.
- Lower Jurassic (volcanics and sediments)
  - 1 Green-grey volcanic breccia, lithic tuff, crystal tuff, sandstone, siltstone, chert

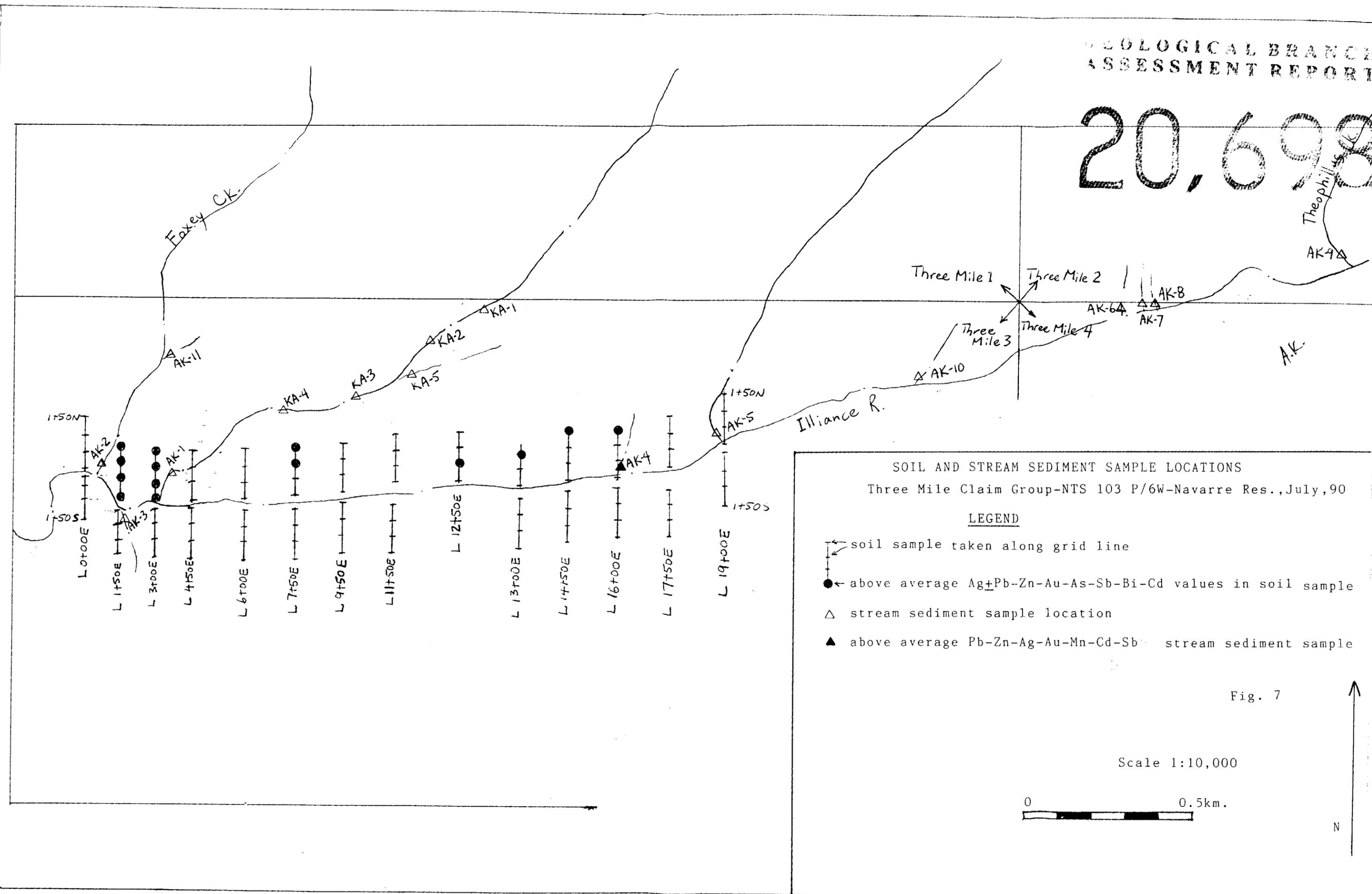
py.=pyrite  
cal.=calcite  
graph.=graphite  
musc.=muscovite  
○ outline of outcrop  
— bedding  
— vein

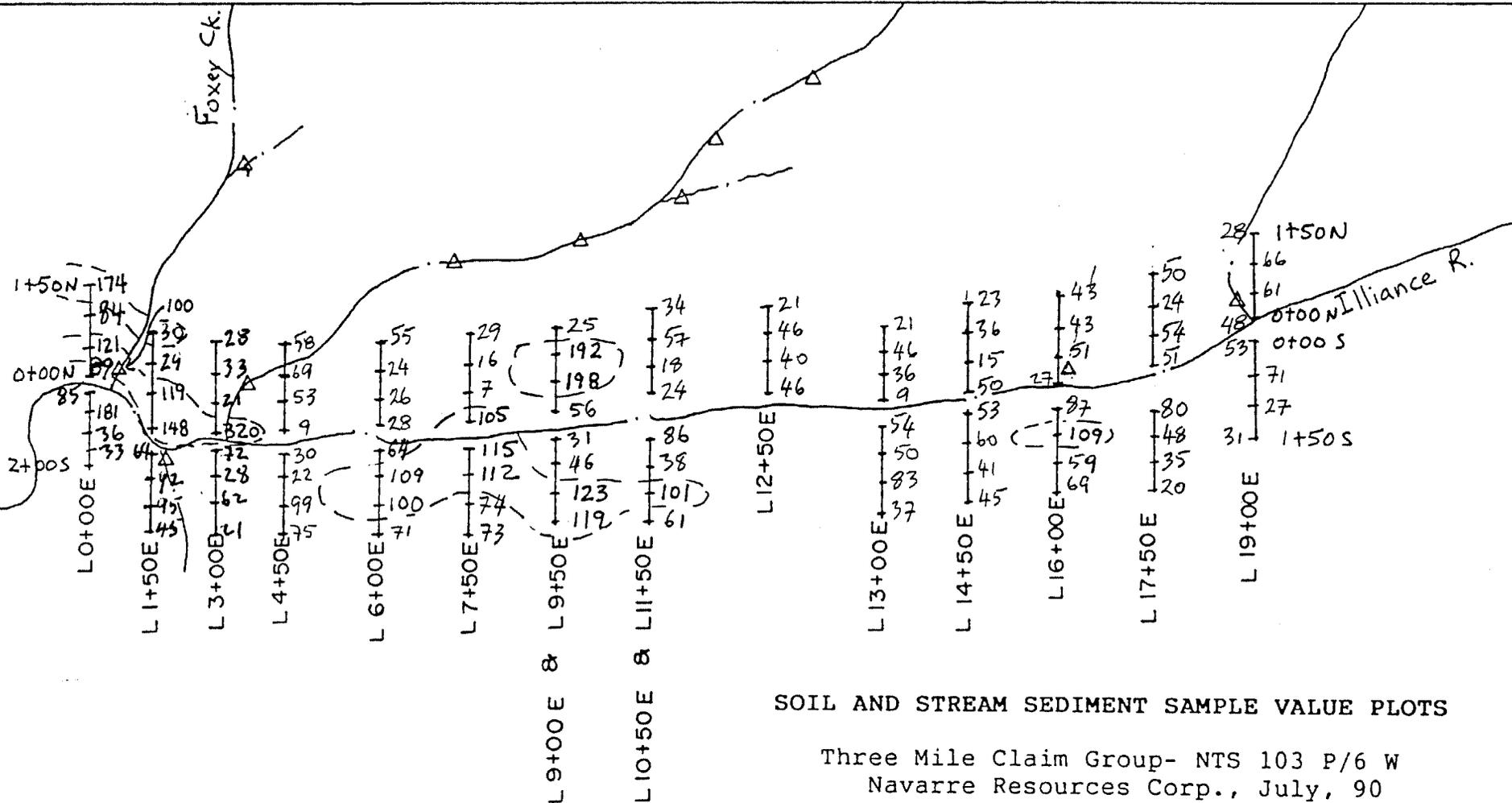
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SOIL AND STREAM SEDIMENT SAMPLE VALUE PLOTS

Three Mile Claim Group- NTS 103 P/6 W  
Navarre Resources Corp., July, 90

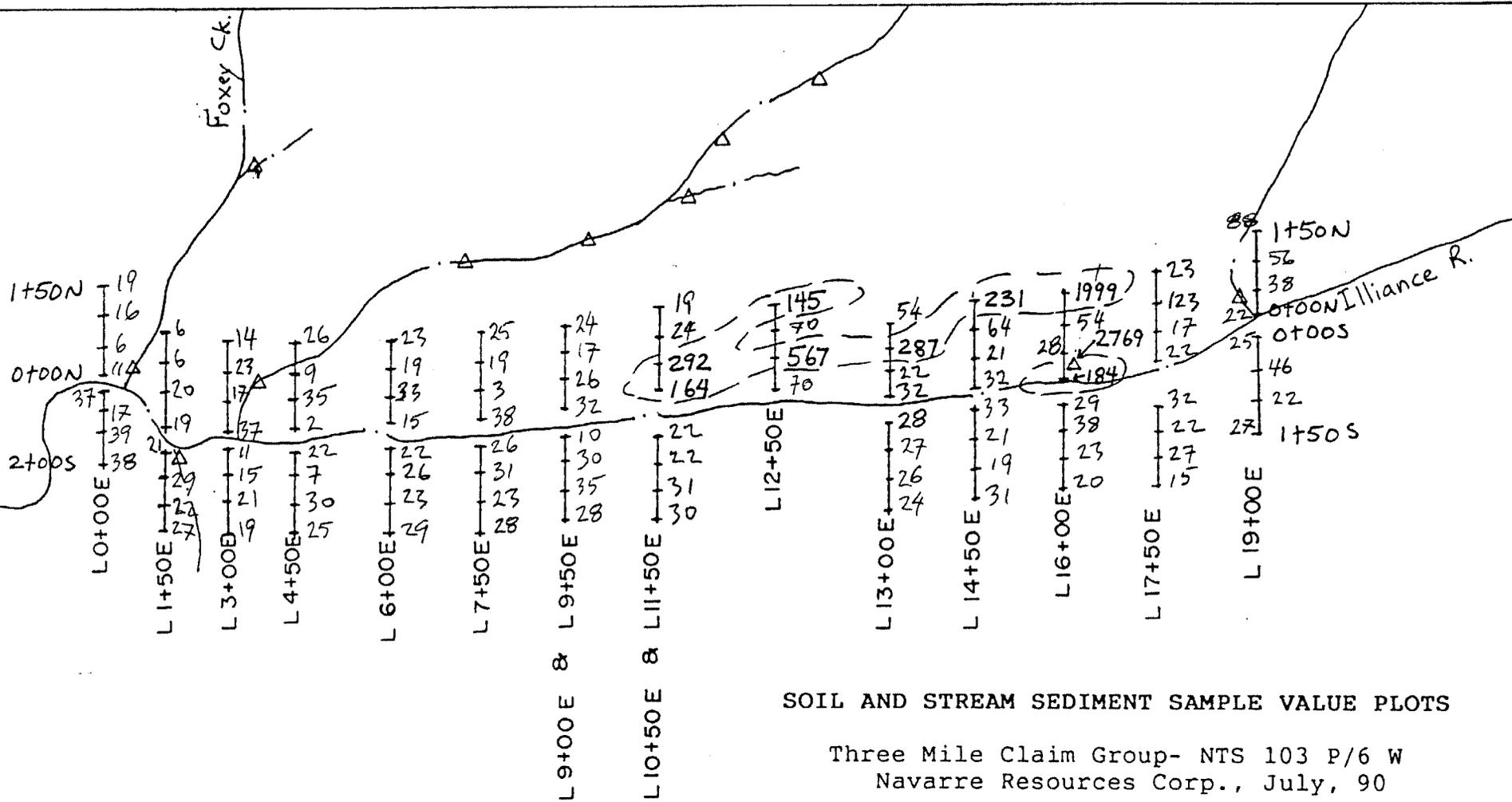
LEGEND

- Soil sample taken along grid line
- 320 ← Value plotted  $\geq 100$  ppm Cu (15.7% of total)
- $\Delta_{139}$  Stream sediment sample location
- Value plotted  $\geq 100$  ppm Cu (18.2% of total)

Fig. 7a - Cu

A.K.





SOIL AND STREAM SEDIMENT SAMPLE VALUE PLOTS

Three Mile Claim Group- NTS 103 P/6 W  
Navarre Resources Corp., July, 90

LEGEND

- Soil sample taken along grid line
- 1999 ← Value plotted  $\geq 100$  ppm Pb (7.4 % of total)
- △ 2769 ← Stream sediment sample location
- Value plotted  $\geq 100$  ppm Pb (9.1 % of total)

A.K.

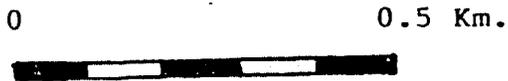
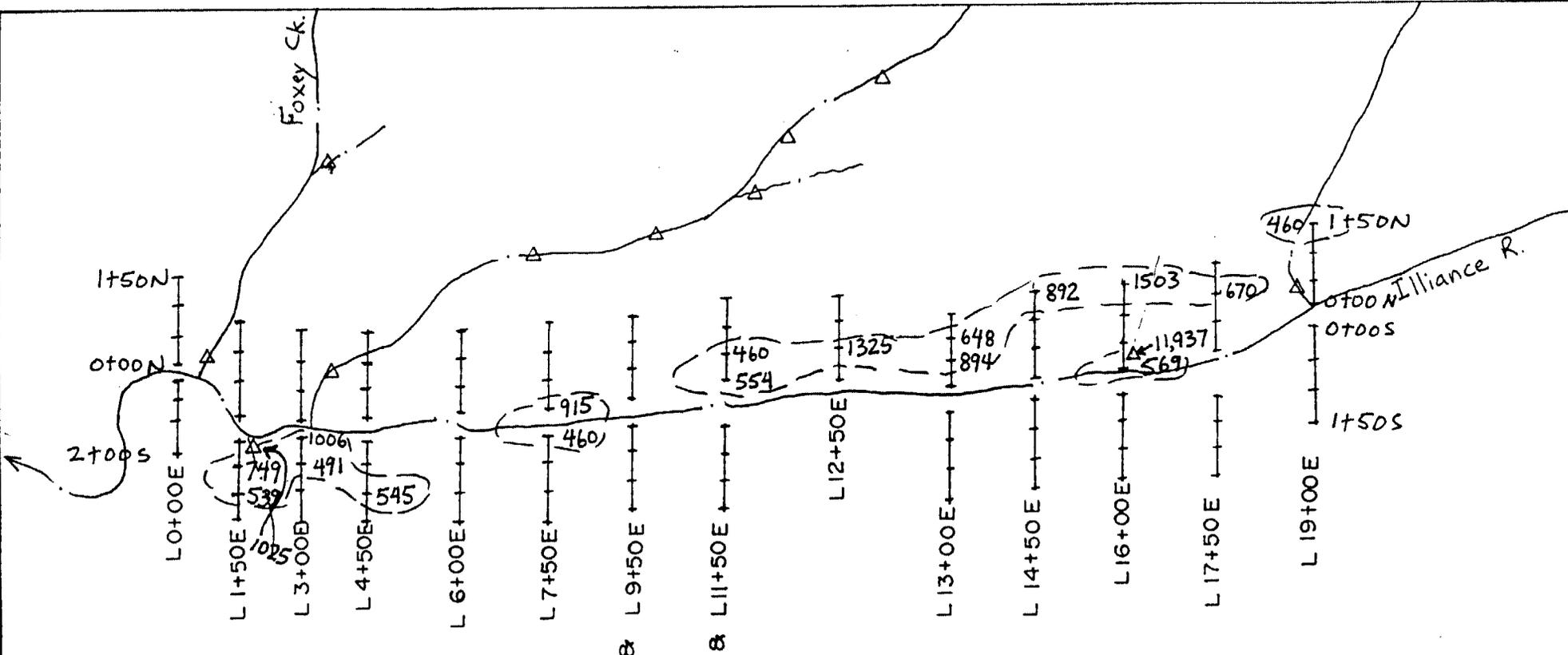


Fig 7b - Pb N ↑



**SOIL AND STREAM SEDIMENT SAMPLE VALUE PLOTS**

Three Mile Claim Group- NTS 103 P/6 W  
Navarre Resources Corp., July, 90

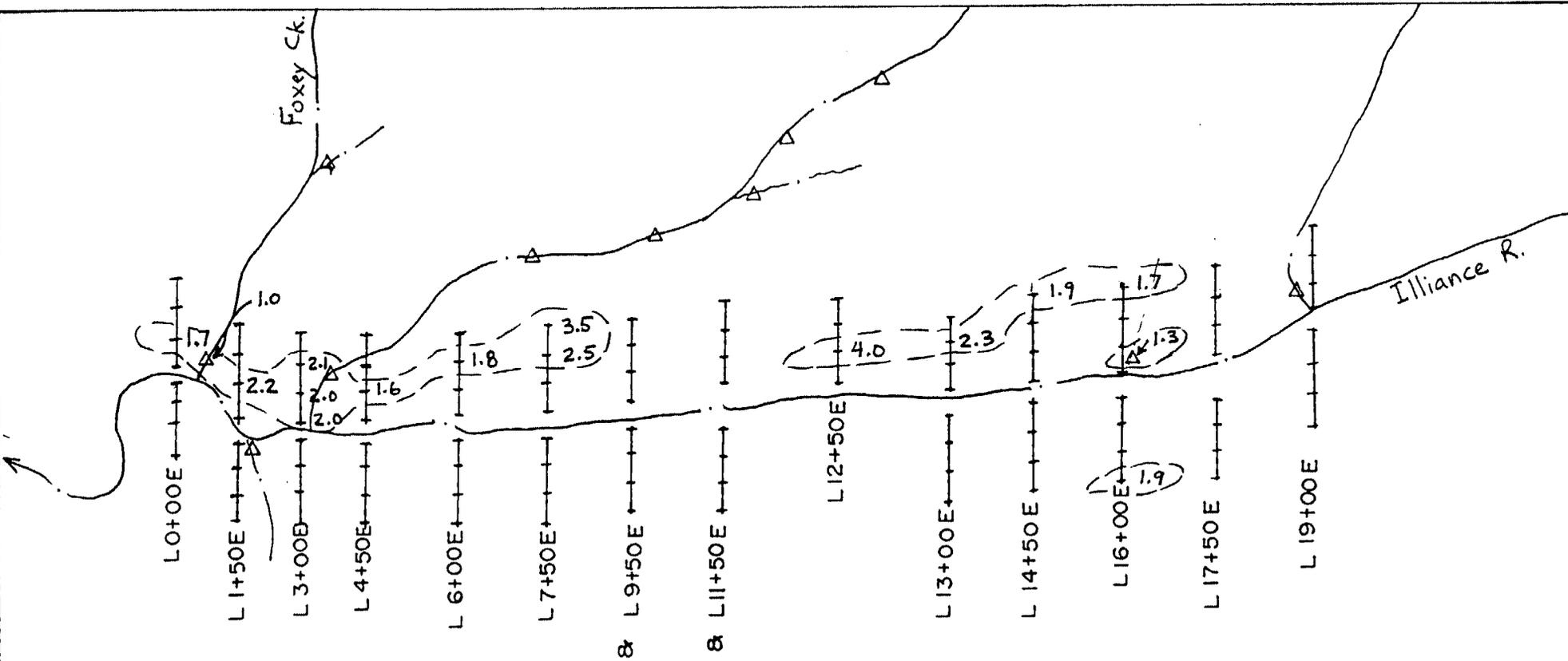
**LEGEND**

- Soil sample taken along grid line
- 1503 ← Value plotted  $\geq 450$  ppm Zn (15.7% of total)
- △ 11,937 ← Stream sediment sample location
- Value plotted  $\geq 450$  ppm Zn (27.3% of total)

A.K.



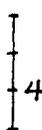
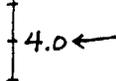
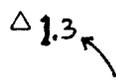
Fig 7c - Zn

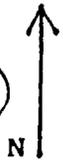


**SOIL AND STREAM SEDIMENT SAMPLE VALUE PLOTS**

Three Mile Claim Group- NTS 103 P/6 W  
Navarre Resources Corp., July, 90

**LEGEND**

-  Soil sample taken along grid line
-  Value plotted  $\geq 1.5$  ppm Ag  
(12.0 % of total)
-  Stream sediment sample location
-  Value plotted  $\geq 1.0$  ppm Ag  
(18.2 % of total)



A.K.

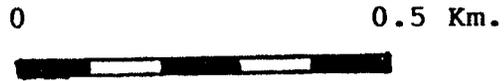
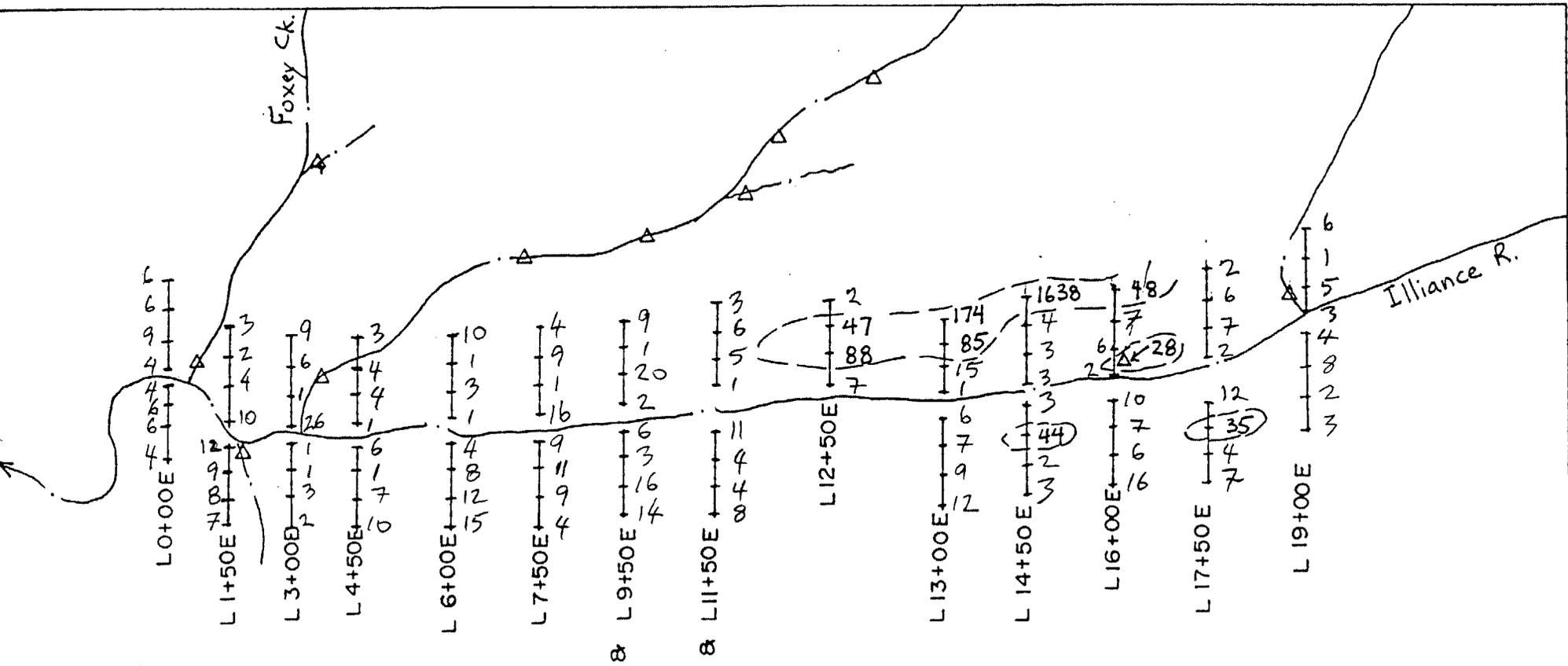


Fig 7d - Ag



SOIL AND STREAM SEDIMENT SAMPLE VALUE PLOTS

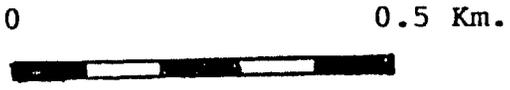
Three Mile Claim Group- NTS 103 P/6 W  
Navarre Resources Corp., July, 90

LEGEND

- Soil sample taken along grid line
- 1638 ← Value plotted  $\geq 35$  ppb Au  
(7.4% of total)
- $\Delta$  28 ← Stream sediment sample location
- Value plotted  $\geq 28$  ppb Au  
(9.1% of total)

Fig 7e - Au

A.K.



GEOCHEMICAL ANALYSIS CERTIFICATE

Appendix A

Navarre Resource Corp. PROJECT 3M File # 90-3120 Page 1

201 - 744 W. Hastings St., Vancouver BC V6C 1A5

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
L0+00E 0+150N	3	174	19	41	.6	42	34	1123	7.04	46	5	ND	1	19	.2	10	2	34	.68	.106	2	14	.17	154	.01	6	.76	.01	.04	1	6
L0+00E 0+100N	2	84	16	56	.4	36	31	1586	6.64	28	5	ND	1	25	1.3	8	2	58	.55	.101	5	29	.46	208	.01	4	1.82	.03	.10	1	6
L0+00E 0+50N	16	121	6	340	1.7	80	22	1109	5.08	46	5	ND	1	38	3.9	11	2	71	1.28	.136	7	31	.93	151	.01	6	1.14	.01	.06	1	9
L0+00E 0+00N	10	89	11	235	1.0	56	15	713	4.10	34	5	ND	1	42	2.7	8	2	79	1.34	.108	6	31	1.06	235	.01	7	1.34	.02	.12	1	4
L0+00E 0+50S	2	85	37	278	.5	41	23	2213	5.74	45	5	ND	1	40	1.6	9	2	70	.69	.132	12	19	.86	261	.05	6	1.70	.02	.06	1	4
L0+00E 1+00S	1	181	17	45	.4	21	32	1316	10.13	23	5	ND	1	24	.6	13	2	78	1.89	.135	2	12	.63	64	.01	5	.95	.01	.01	1	6
L0+00E 1+50S	7	36	39	155	1.2	11	7	710	15.73	74	5	ND	1	14	1.0	16	2	179	.06	.240	6	46	.01	77	.03	8	5.16	.01	.01	1	6
L0+00E 2+00S	2	33	18	159	.9	23	19	1124	7.82	33	5	ND	1	4	1.1	14	2	67	.02	.089	8	37	.29	100	.02	5	6.68	.01	.01	1	4
L1+50E 0+150N	3	30	6	50	.6	7	3	152	2.15	21	5	ND	1	6	.2	3	2	90	.03	.063	7	16	.14	59	.01	8	1.17	.01	.06	1	3
L1+50E 0+100N	5	29	6	123	.8	7	3	68	2.30	39	5	ND	1	11	.3	5	2	76	.02	.050	7	12	.01	55	.01	6	.83	.01	.01	1	2
L1+50E 0+50N	2	119	20	177	2.2	20	9	555	9.98	48	5	ND	1	6	.8	14	2	85	.05	.222	5	36	.26	66	.01	9	2.29	.01	.02	1	4
L1+50E 0+00N	2	148	19	183	.7	55	39	3106	6.94	27	5	ND	1	26	1.4	12	2	77	.55	.138	16	41	1.36	176	.01	6	3.23	.02	.12	1	10
L1+50E 0+50S	3	69	21	246	.2	66	33	3571	6.67	27	5	ND	1	27	.9	10	2	53	.53	.099	18	28	1.03	212	.06	5	2.48	.02	.06	1	12
L1+50E 1+00S	7	92	29	749	1.5	31	17	1806	6.84	87	5	ND	1	11	1.7	15	2	59	.13	.183	13	23	.55	98	.01	5	1.97	.01	.05	1	9
L1+50E 1+50S	7	95	22	539	.5	42	18	1042	5.93	68	5	ND	1	14	2.5	13	2	68	.06	.085	13	30	.50	243	.01	6	2.68	.01	.03	1	8
L1+50E 2+00S	5	45	27	246	1.2	15	6	447	9.62	68	5	ND	1	6	.9	17	4	106	.07	.093	8	38	.15	63	.02	6	4.39	.01	.04	1	7
L3+00E 0+150N	4	28	14	92	1.1	14	3	147	5.32	30	5	ND	1	4	.2	8	3	113	.01	.113	7	29	.16	62	.01	4	1.67	.01	.05	1	9
L3+00E 0+100N	3	33	23	191	2.1	28	6	222	6.68	34	5	ND	1	4	.4	7	2	78	.03	.046	5	36	.56	58	.01	4	2.16	.01	.02	1	6
L3+00E 0+50N	3	21	17	69	2.0	7	3	106	9.49	36	5	ND	1	2	.2	5	2	153	.01	.055	7	35	.01	39	.02	6	1.84	.01	.01	1	1
L3+00E 0+00N	1	320	37	59	2.0	24	52	2194	7.74	47	5	ND	1	81	.5	18	2	69	1.45	.130	3	12	1.02	211	.01	6	1.97	.01	.03	1	26
L3+00E 0+50S	7	72	11	1006	.5	49	12	1542	3.69	42	5	ND	1	84	9.1	8	2	40	1.67	.142	5	22	.63	111	.01	8	1.34	.02	.06	1	1
L3+00E 1+00S	2	28	15	491	.2	50	14	1599	3.32	22	5	ND	1	46	5.5	4	2	35	.78	.079	3	28	.67	101	.01	4	1.43	.01	.03	1	1
L3+00E 1+50S	2	62	21	258	.4	54	14	776	4.90	30	5	ND	1	8	.7	5	2	54	.07	.084	8	47	.83	124	.01	6	2.52	.01	.06	1	3
L3+00E 2+00S	2	21	19	141	1.0	31	12	860	6.23	21	5	ND	1	14	.6	5	2	117	.20	.147	10	37	.76	127	.19	2	3.48	.02	.01	1	2
L4+50E 1+50N	2	58	26	181	.9	49	16	760	5.14	28	5	ND	1	9	.5	5	2	61	.03	.057	7	47	.81	134	.01	6	2.75	.02	.13	1	3
L4+50E 1+00N	3	69	9	147	.4	37	16	829	4.54	14	5	ND	1	32	1.4	4	2	65	.56	.112	8	34	1.06	307	.01	5	1.69	.02	.11	1	4
L4+50E 0+50N	5	53	35	386	1.6	23	9	478	7.68	75	5	ND	1	3	.7	10	2	70	.02	.084	11	41	.40	129	.01	4	4.93	.01	.05	1	4
L4+50E 0+00N	1	9	2	148	.1	4	1	64	.37	3	5	ND	1	46	.4	2	2	4	.06	.022	2	3	.10	30	.01	2	.21	.02	.02	1	1
L4+50E 0+50S	10	30	22	141	1.2	12	3	142	7.69	40	5	ND	1	3	.4	5	2	85	.01	.054	10	28	.01	29	.02	2	3.06	.01	.01	1	6
L4+50E 1+00S	2	22	7	70	.7	5	2	163	.77	11	5	ND	1	12	.3	2	2	30	.12	.066	6	3	.06	44	.01	4	.75	.01	.05	1	1
L4+50E 1+50S	7	99	30	545	.3	63	52	5099	8.18	50	5	ND	1	11	2.3	15	2	54	.19	.163	33	19	.62	163	.01	4	2.72	.01	.07	1	7
L4+50E 2+00S	5	75	25	316	.2	48	40	5077	6.51	46	5	ND	1	17	1.3	11	2	44	.36	.168	25	18	.65	214	.01	4	1.97	.02	.15	1	10
L6+00E 1+50N	6	55	23	372	1.0	34	11	756	5.13	54	5	ND	1	10	.8	8	2	64	.06	.069	10	35	.68	169	.01	5	2.22	.02	.09	1	10
L6+00E 1+00N	4	24	19	217	1.8	17	8	793	5.32	43	5	ND	1	10	.5	9	2	62	.05	.088	7	23	.43	85	.01	4	2.80	.02	.07	1	1
L6+00E 0+50N	10	26	33	238	.7	11	7	914	11.07	79	5	ND	1	12	.5	11	2	115	.03	.343	7	25	.17	65	.02	5	2.33	.01	.06	1	3
L6+00E 0+00N	4	28	15	116	.7	8	4	223	5.12	24	5	ND	1	5	.2	5	3	33	.01	.079	10	11	.32	101	.01	3	2.10	.02	.10	1	1
STANDARD C/AU-S	18	58	35	131	6.9	70	32	1045	3.95	37	17	7	37	53	18.4	15	18	56	.51	.089	37	55	.91	181	.09	34	1.88	.06	.14	12	50

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 Rock AU\*\* ANALYSIS BY FA/ICP FROM 10 GM SAMPLE.

DATE RECEIVED: AUG 3 1990 DATE REPORT MAILED: Aug 13/90 SIGNED BY: C. Leung, D. TOYE, C. LEONG, J. WANG; CERTIFIED B.C. ASSAYERS

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
L6+00E 0+50S	2	64	22	177	1.0	52	22	1848	6.99	34	5	ND	1	11	.7	11	3	45	.15	.108	8	39	.70	89	.03	6	3.72	.01	.03	1	4
L6+00E 1+00S	3	109	26	351	.4	105	42	4300	7.43	46	7	ND	1	38	1.1	11	2	45	.59	.159	24	26	.93	135	.06	6	2.23	.03	.08	1	8
L6+00E 1+50S	3	100	23	366	.5	107	44	4428	7.19	40	8	ND	1	46	.9	10	2	37	.72	.125	20	24	.91	141	.05	6	2.07	.03	.09	1	12
L6+00E 2+00S	5	71	29	313	.5	49	44	4293	7.81	42	7	ND	1	20	.9	9	2	54	.24	.131	17	26	.66	186	.03	7	3.25	.02	.03	1	15
L7+50E 1+50N	1	29	25	95	3.5	18	4	180	1.15	10	5	ND	1	7	.6	2	2	29	.07	.120	12	36	.40	156	.01	3	2.12	.01	.04	1	4
L7+50E 1+00N	2	16	19	80	2.5	9	3	178	5.35	25	5	ND	1	3	.5	3	2	80	.01	.035	9	25	.12	53	.02	3	1.85	.01	.02	1	9
L7+50E 0+50N	1	7	3	143	.2	2	1	85	1.00	6	5	ND	1	9	.2	2	2	36	.04	.030	20	3	.02	52	.01	5	.57	.01	.08	1	1
L7+50E 0+00N	9	105	38	915	.6	39	25	2182	6.16	117	5	ND	2	7	1.7	12	2	36	.07	.141	19	18	.61	59	.02	7	1.60	.01	.07	1	16
L7+50E 0+50S	5	115	26	460	.5	121	51	5562	6.87	52	9	ND	1	26	1.6	19	2	41	.54	.128	31	23	.74	165	.01	7	2.14	.01	.08	1	9
L7+50E 1+00S	4	112	31	398	.1	137	47	4975	6.38	70	7	ND	2	19	1.2	28	2	36	.38	.112	35	31	.83	157	.01	7	1.96	.01	.07	1	11
L7+50E 1+50S	4	74	23	303	.4	87	40	4689	6.15	44	8	ND	2	23	1.0	14	2	37	.48	.115	23	26	.81	164	.02	6	2.09	.01	.13	1	9
L7+50E 2+00S	6	73	28	286	.4	41	57	4958	6.44	37	5	ND	1	25	.8	11	3	44	.51	.128	30	16	.58	193	.01	5	2.17	.02	.17	1	4
L9+50E 1+50N	3	25	24	128	.4	6	6	543	4.64	49	5	ND	1	5	.4	5	2	88	.08	.078	12	12	.11	85	.04	4	1.97	.01	.05	1	9
L9+50E 1+00N	1	192	17	116	.3	5	13	1012	8.72	50	5	ND	1	3	.9	10	2	100	.04	.131	13	10	.17	126	.01	7	4.02	.01	.09	1	1
L9+50E 0+50N	5	198	26	308	.9	10	22	1462	10.79	97	5	ND	1	5	1.8	10	2	82	.04	.194	12	14	.09	158	.01	8	4.76	.01	.03	1	20
L9+50E 0+00N	1	56	32	209	.4	16	15	1381	5.71	40	5	ND	1	31	1.2	7	2	78	.51	.134	9	15	.81	199	.06	7	1.50	.02	.04	1	2
L9+00E 0+50S	2	31	10	96	.3	20	11	1805	4.08	23	5	ND	1	8	.3	4	2	32	.16	.130	8	16	.59	80	.01	7	1.36	.01	.10	1	6
L9+00E 1+00S	3	46	30	111	.3	29	28	6517	4.83	22	5	ND	1	49	.8	9	2	71	.65	.183	9	26	.90	169	.05	6	1.85	.07	.11	1	3
L9+00E 1+50S	7	123	35	374	.6	79	55	6826	8.43	42	6	ND	2	55	1.5	17	2	35	.98	.170	29	13	.46	197	.01	9	1.70	.01	.08	1	16
L9+00E 2+00S	7	119	28	365	.5	78	54	6574	8.16	44	7	ND	1	52	1.5	15	2	37	.93	.162	28	13	.48	191	.01	8	1.65	.01	.08	1	14
L10+50E 0+50S	3	86	22	273	.5	81	38	4068	6.96	30	5	ND	1	32	1.0	10	2	42	.51	.120	18	26	.85	138	.03	4	2.02	.02	.08	1	11
L10+50E 1+00S	4	38	22	211	.4	38	34	4748	6.03	33	5	ND	1	30	.6	9	2	41	.54	.108	10	24	.74	193	.01	5	2.14	.02	.11	1	4
L10+50E 1+50S	4	101	31	290	.6	71	52	3329	10.73	42	5	ND	1	35	1.3	10	2	51	.72	.109	11	27	.33	154	.01	7	3.31	.01	.07	1	4
L10+50E 2+00S	4	61	30	233	.4	44	52	4690	7.40	38	5	ND	1	13	.6	14	2	46	.25	.114	13	23	.73	155	.01	8	2.36	.02	.13	1	8
L11+50E 1+50N	1	34	19	182	.6	4	15	2040	9.03	56	5	ND	1	7	1.0	7	3	62	.09	.150	12	9	.12	170	.01	5	5.22	.01	.01	1	3
L11+50E 1+00N	2	57	24	246	.5	58	18	1070	5.48	41	5	ND	1	7	.9	9	2	53	.03	.067	7	45	.91	103	.01	6	2.38	.01	.08	1	6
L11+50E 0+50N	9	18	292	460	1.0	5	3	2489	4.13	82	5	ND	1	12	10.9	23	2	57	.17	.112	11	10	.06	125	.01	5	1.96	.01	.06	1	1
L11+50E 0+00N	3	24	164	554	.3	6	11	2210	6.77	89	5	ND	1	8	1.4	27	2	31	.04	.172	17	6	.06	124	.01	5	1.96	.01	.06	1	1
L12+50E 1+50N	14	21	145	321	.2	2	9	1622	7.97	1815	5	ND	1	3	1.0	22	2	46	.01	.083	22	6	.01	67	.01	4	2.19	.01	.05	1	2
L12+50E 1+00N	8	46	70	373	.8	8	30	3746	7.13	761	5	ND	2	4	.6	29	2	21	.04	.096	13	9	.01	99	.01	5	1.81	.01	.06	1	47
L12+50E 0+50N	5	40	567	1325	4.0	5	14	8191	6.99	758	7	ND	2	6	5.4	74	2	33	.07	.284	12	6	.01	109	.01	5	1.03	.01	.13	1	88
L12+50E 0+00N	1	46	70	259	.9	12	10	869	4.66	49	5	ND	1	32	2.6	9	2	64	.38	.093	5	12	.62	177	.04	5	1.30	.01	.04	1	7
L13+00E 1+50N	1	21	54	351	1.0	8	10	4070	5.10	908	5	ND	3	10	1.1	21	2	40	.08	.107	19	11	.19	158	.01	5	2.50	.01	.15	1	174
L13+00E 1+00N	3	46	287	648	2.3	14	16	5733	5.74	820	6	ND	2	16	3.3	40	2	60	.11	.158	18	23	.25	168	.02	4	3.02	.02	.10	1	85
L13+00E 0+50N	3	36	22	894	.1	2	1	398	.42	56	5	ND	1	143	5.4	6	2	2	2.97	.058	2	3	.13	49	.01	11	.21	.01	.03	1	15
L13+00E 0+00N	1	9	32	202	.1	2	6	651	2.40	27	5	ND	1	5	.2	5	2	54	.07	.032	26	3	.08	70	.01	4	.98	.01	.13	1	1
STANDARD C/AU-S	18	58	42	131	7.1	70	32	1043	3.95	39	18	8	39	53	17.9	15	20	55	.51	.089	36	56	.91	181	.09	34	1.89	.06	.14	13	50

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
L13+00E 0+00S	1	54	28	192	.6	14	16	1794	5.70	30	5	ND	1	34	.7	7	2	77	.56	.148	11	17	.90	249	.07	7	1.73	.02	.07	1	6
L13+00E 0+50S	1	50	27	157	.3	13	15	1420	5.30	36	5	ND	1	24	.7	7	2	72	.41	.122	9	16	.82	158	.06	6	1.62	.02	.05	1	7
L13+00E 1+00S	5	83	26	324	.8	42	41	4506	6.69	47	6	ND	1	12	1.1	16	2	51	.22	.177	31	29	.61	139	.02	5	2.42	.01	.06	1	9
L13+00E 1+50S	5	37	24	181	.7	15	33	5864	5.30	34	8	ND	1	10	.4	11	2	49	.17	.240	18	15	.28	115	.01	5	1.82	.02	.13	1	12
L14+50E 1+50N	1	23	231	892	1.9	2	16	5286	5.28	39	5	ND	6	8	8.0	11	2	36	.17	.124	22	7	.36	113	.01	4	3.00	.01	.21	1	1638
L14+50E 1+00N	4	36	64	286	.7	8	5	392	11.41	71	5	ND	1	3	1.1	10	2	81	.05	.074	9	24	.07	49	.02	4	2.91	.01	.05	1	4
L14+50E 0+50N	1	15	21	188	.9	3	5	852	2.98	14	5	ND	1	7	.5	3	2	54	.08	.062	9	4	.03	81	.01	6	.76	.01	.11	1	3
L14+50E 0+00N	1	50	32	192	.4	15	14	1266	5.14	36	5	ND	1	26	.8	7	2	65	.42	.113	10	14	.82	215	.05	6	1.54	.02	.04	1	3
L14+50E 0+00S	1	53	33	228	.5	16	14	1365	5.41	32	5	ND	1	43	1.1	9	2	69	.68	.136	8	15	.83	233	.06	5	1.44	.02	.06	1	3
L14+50E 0+50S	2	60	21	258	.1	54	36	5344	6.36	45	5	ND	1	15	.8	9	2	37	.32	.153	17	20	.76	163	.03	5	2.41	.02	.16	1	44
L14+50E 1+00S	3	41	19	241	.4	61	34	3018	5.45	29	5	ND	1	10	.4	9	2	35	.19	.089	13	34	.89	149	.01	5	2.32	.02	.12	1	2
L14+50E 1+50S	4	45	31	264	.2	53	50	3866	7.18	45	5	ND	1	8	.4	13	4	39	.16	.257	13	39	.73	75	.01	5	2.15	.01	.07	1	3
L16+00E 1+50N	5	43	1999	1503	1.7	3	63	13067	3.83	215	7	ND	6	8	25.9	236	2	25	.12	.126	13	8	.02	187	.01	4	.94	.01	.20	2	48
L16+00E 1+00N	1	43	54	195	.5	13	17	1758	5.09	37	5	ND	1	27	1.1	8	2	63	.44	.120	9	14	.79	264	.04	5	1.70	.01	.05	1	7
L16+00E 0+50N	1	51	28	203	.5	15	16	1665	5.62	35	5	ND	1	32	.9	7	2	76	.52	.151	11	16	.83	306	.07	5	1.59	.02	.05	1	6
L16+00E 0+00N	1	27	184	569	.3	4	15	1787	6.83	56	5	ND	1	3	.9	15	2	75	.05	.041	9	7	.15	85	.01	4	2.67	.01	.14	1	2
L16+00E 0+00S	4	87	29	345	.3	87	42	4981	6.35	71	5	ND	1	63	1.1	9	2	37	1.01	.119	18	23	.68	216	.02	5	2.41	.01	.06	1	10
L16+00E 0+50S	4	109	38	398	.5	93	44	5797	6.15	69	6	ND	1	35	1.1	10	2	36	.72	.163	19	26	.64	164	.02	5	2.48	.01	.05	1	7
L16+00E 1+00S	6	59	23	316	1.2	13	21	2155	8.24	75	5	ND	1	6	1.2	8	2	70	.10	.211	15	23	.15	98	.02	3	4.59	.01	.03	1	6
L16+00E 1+50S	6	69	20	396	1.9	20	19	1923	7.81	83	5	ND	1	6	1.3	7	2	58	.18	.307	9	22	.23	95	.02	5	4.08	.01	.04	1	16
L17+50E 1+50N	1	50	23	191	.4	16	14	1221	4.92	29	5	ND	1	41	.9	3	2	66	.46	.111	7	15	.83	240	.06	6	1.74	.04	.17	1	2
L17+50E 1+00N	1	24	123	670	.3	5	21	5740	5.14	35	5	ND	2	14	3.3	7	2	46	.33	.118	11	7	.29	192	.01	3	1.91	.01	.23	1	6
L17+50E 0+50N	1	54	17	161	.3	16	18	1161	6.15	19	5	ND	1	15	.4	5	2	72	.30	.130	8	16	.84	146	.02	5	2.40	.02	.12	1	7
L17+50E 0+00N	1	51	22	176	.2	15	14	1179	4.85	26	5	ND	1	33	.7	4	2	66	.60	.114	8	15	.91	186	.05	6	1.69	.03	.12	1	2
L17+50E 0+00S	5	80	32	274	.4	48	35	4238	6.82	137	5	ND	1	19	.7	9	2	43	.26	.089	19	17	.51	237	.02	5	2.57	.01	.07	1	12
L17+50E 0+50S	3	48	22	185	.6	26	18	2356	5.15	95	5	ND	1	13	.5	6	2	42	.19	.106	11	15	.51	135	.01	5	1.85	.02	.11	1	35
L17+50E 1+00S	5	35	27	199	.4	17	31	3948	6.99	51	5	ND	1	10	.4	5	2	59	.19	.490	12	18	.44	127	.01	4	2.15	.02	.49	1	4
L17+50E 1+50S	4	20	15	109	.2	8	7	1540	3.23	36	5	ND	1	7	.5	2	2	63	.12	.101	15	10	.26	79	.01	6	1.90	.02	.09	1	7
L19+50E 1+50N	1	28	88	460	1.0	4	16	2042	5.36	54	5	ND	1	27	.5	8	3	69	.51	.120	10	7	.22	180	.01	3	3.02	.01	.13	1	6
L19+50E 1+00N	1	66	56	261	.3	15	22	3626	5.58	49	5	ND	1	59	1.6	9	2	70	1.12	.153	7	16	.74	706	.02	7	1.74	.02	.11	1	1
L19+50E 0+50N	1	61	38	197	.3	16	21	1948	5.62	41	5	ND	1	26	1.2	7	2	74	.48	.126	9	19	.85	342	.01	5	1.94	.02	.13	1	5
L19+50E 0+00N	1	48	22	175	.1	11	17	1098	5.17	29	5	ND	1	25	.7	5	2	83	.47	.112	5	15	.99	438	.01	6	1.86	.02	.13	1	3
L19+50E 0+00S	1	53	25	177	.3	14	14	1253	5.03	26	5	ND	1	44	.8	2	2	70	.60	.111	7	14	.91	351	.07	7	1.71	.04	.13	1	4
L19+50E 0+50S	3	71	46	337	.6	39	36	2656	6.47	66	5	ND	1	6	1.2	10	2	42	.04	.119	12	18	.45	97	.03	3	4.40	.01	.02	1	8
L19+50E 1+00S	3	27	22	95	.9	9	6	1211	3.71	33	5	ND	1	9	.2	2	3	66	.10	.082	6	10	.33	89	.06	2	2.68	.01	.06	1	2
L19+50E 1+50S	4	31	27	208	.1	19	47	4174	6.74	46	5	ND	1	13	.5	2	2	45	.17	.619	6	16	.45	200	.03	6	2.36	.02	.24	1	3
STANDARD C/AU-S	18	61	37	131	7.1	71	32	1042	3.95	39	17	7	38	53	18.9	14	19	57	.51	.090	35	56	.89	182	.09	36	1.88	.06	.14	13	49

Navarre Resource Corp. PROJECT 3M FILE # 90-3120

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
A 52501	2	29	10	136	.7	10	2	208	4.74	31	5	ND	1	79	.4	5	2	93	1.58	.727	17	32	.89	207	.01	4	1.91	.03	.20	1	9
A 52502	10	64	51	185	.1	16	30	561	18.84	337	8	ND	2	91	1.4	94	2	79	2.24	.722	19	12	.05	16	.02	2	.57	.02	.29	1	11
A 52503	13	26	81	34	1.0	7	4	76	18.54	227	5	ND	1	18	.9	29	2	3	.48	.072	4	4	.02	8	.01	3	.30	.01	.16	1	13
A 52504	1	13	2	11	.1	6	3	1368	1.16	5	5	ND	2	802	.2	2	2	11	25.52	.020	2	11	.43	20	.01	2	.49	.01	.01	1	7
A 52505	6	11	2	147	.1	14	1	186	.64	6	5	ND	1	56	2.4	2	2	22	1.10	.009	2	12	.26	16	.01	3	.06	.01	.01	2	1
STANDARD C	18	62	40	131	7.2	71	32	1044	3.95	39	15	7	40	52	18.4	15	19	58	.51	.092	39	59	.91	183	.09	33	1.89	.06	.13	13	-

GEOCHEMICAL ANALYSIS CERTIFICATE

Navarre Resource Corp. File # 90-3122

201 - 744 W. Hastings St., Vancouver BC V6C 1A5

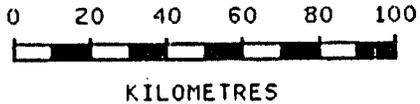
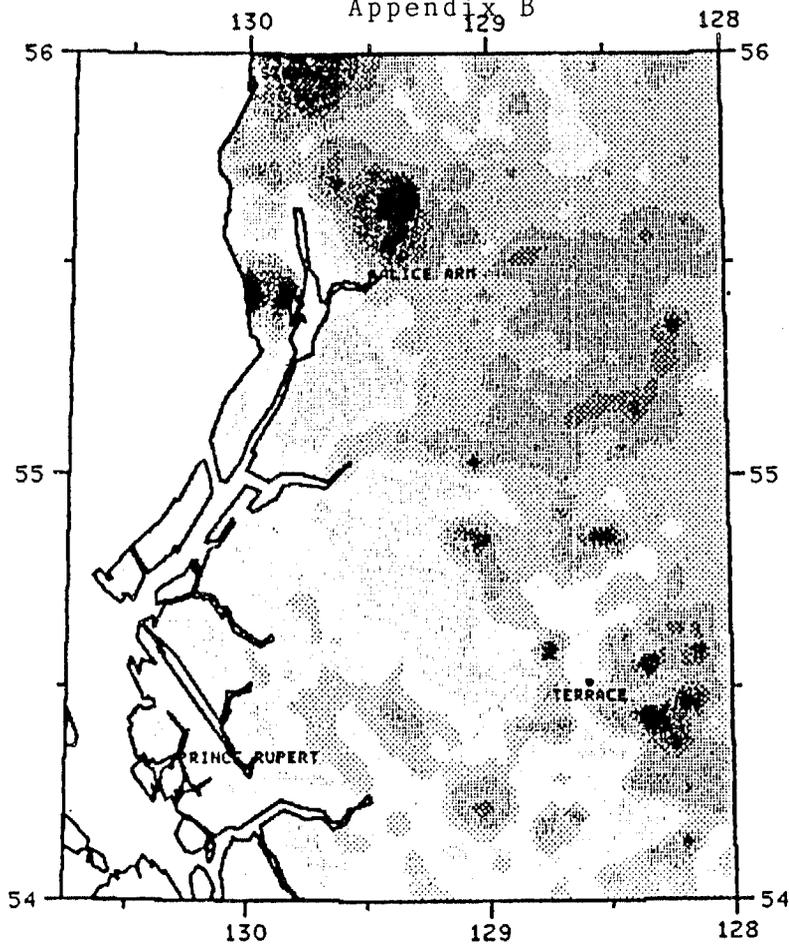
SAMPLE#	Mo	Cu	Pb	Zn	Ag	Ni	Co	Mn	Fe	As	U	Au	Th	Sr	Cd	Sb	Bi	V	Ca	P	La	Cr	Mg	Ba	Ti	B	Al	Na	K	W	Au**
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%	%	ppm	ppm	%	ppm	%	%	%	%	%	ppm	ppb
AK 1	3	87	13	200	.6	48	20	1113	4.96	15	5	ND	1	41	2.2	5	2	60	.78	.142	12	39	1.13	264	.01	5	1.54	.01	.05	1	5
AK 2	11	100	9	291	1.0	65	15	664	3.85	29	5	ND	1	49	3.4	5	2	66	1.32	.121	10	35	1.15	254	.01	6	1.35	.02	.14	1	8
AK 3	5	45	13	1025	.5	46	11	1060	4.94	45	5	ND	1	34	5.1	4	2	62	.44	.110	12	32	.74	132	.02	4	1.68	.03	.11	1	9
AK 4	3	48	2769	11937	1.3	11	20	18642	4.65	257	5	ND	1	58	159.4	60	2	32	.49	.112	21	19	.24	809	.01	5	1.37	.01	.19	2	28
AK 5	1	77	48	398	.3	26	21	1539	6.21	40	5	ND	1	56	3.2	8	2	89	.69	.149	12	24	1.16	917	.03	5	2.23	.04	.15	1	5
AK 6	1	31	59	497	.4	51	23	1662	7.85	9	5	ND	1	151	4.9	2	2	286	1.56	.063	8	29	1.82	215	.45	4	3.32	.35	.12	1	1
AK 7	1	31	5	226	.1	61	24	881	8.48	5	5	ND	1	141	1.7	2	2	348	1.53	.065	8	32	1.90	211	.42	3	3.29	.35	.12	1	1
AK 8	1	42	8	219	.3	66	27	1005	7.32	6	5	ND	1	131	1.5	2	2	209	1.48	.074	9	30	2.10	219	.34	5	3.46	.32	.14	1	1
AK 9	1	139	9	64	.7	68	38	1967	6.00	26	5	ND	1	108	1.3	8	2	43	5.40	.130	5	62	2.52	218	.01	8	.78	.01	.02	1	6
AK 10	1	79	9	104	.1	10	16	1008	8.82	36	5	ND	1	60	.6	2	2	208	.74	.152	14	17	1.28	787	.15	6	1.76	.03	.14	1	5
AK 11	9	29	16	338	.2	27	11	1383	4.86	76	5	ND	1	38	2.0	14	2	30	.61	.134	13	6	.57	230	.01	5	1.30	.02	.13	1	13

KA 1	5	92	12	220	.4	54	20	1028	4.79	22	5	ND	1	43	2.7	7	2	56	.86	.141	13	38	1.10	245	.01	7	1.41	.01	.05	1	6
KA 2	3	80	11	220	.2	47	18	902	4.49	21	5	ND	1	41	2.1	5	2	62	.70	.124	13	40	1.12	527	.01	7	1.65	.02	.17	1	4
KA 3	3	80	8	180	.3	44	18	799	4.64	12	5	ND	1	42	1.7	4	2	70	.59	.116	11	44	1.25	765	.02	8	1.80	.03	.18	1	5
KA 4	4	93	12	204	.2	50	20	1059	4.95	14	5	ND	1	43	2.3	8	2	60	.83	.148	13	40	1.15	253	.01	5	1.54	.01	.05	1	6
KA 5	1	52	12	168	1.0	17	18	456	10.81	10	5	ND	1	3	.8	2	2	80	.03	.051	7	24	.13	143	.01	2	4.93	.01	.03	1	1
STANDARD C/AU-S	18	58	37	131	6.7	71	32	1044	3.95	40	16	7	38	52	18.4	15	20	58	.51	.091	39	60	.91	183	.09	34	1.91	.06	.14	13	48

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: Soil -80 Mesh AU\*\* ANALYSIS BY FA\ICP FROM 10 GM SAMPLE.

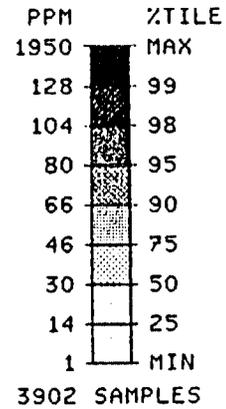
DATE RECEIVED: AUG 3 1990 DATE REPORT MAILED: Aug 11/90. SIGNED BY: *C. Leong* D. TOYE, C. LEONG, J. WANG; CERTIFIED B.C. ASSAYERS

Appendix B



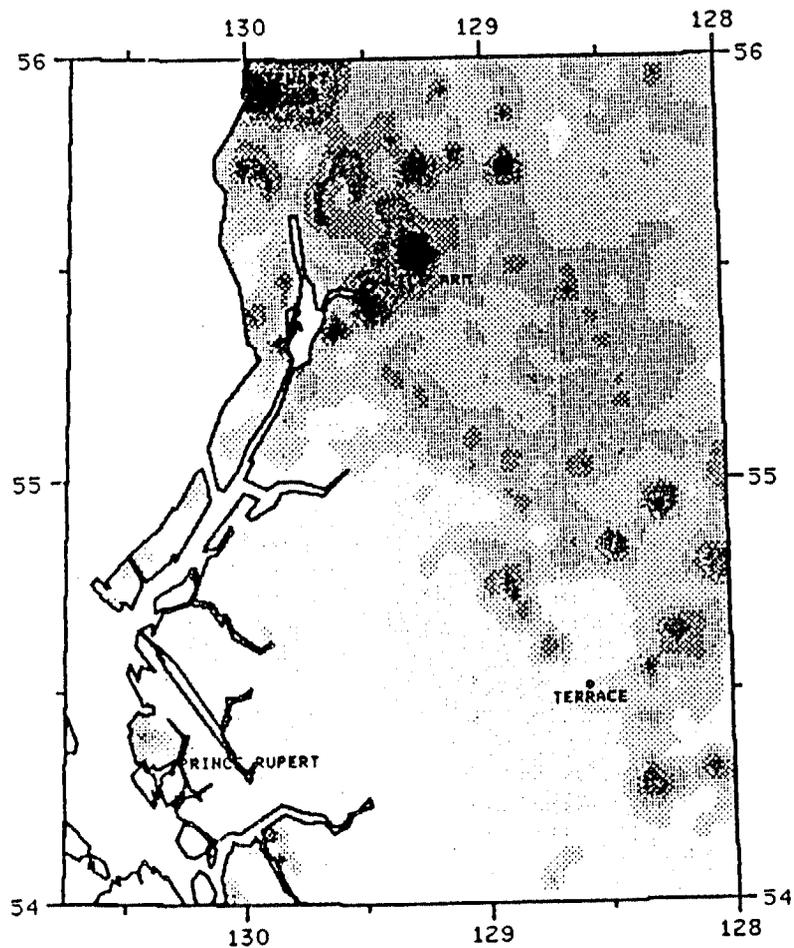
NATIONAL  
GEOCHEMICAL RECONNAISSANCE  
PRINCE RUPERT AREA, BRITISH COLUMBIA  
NTS 103I AND 103P. PART OF NTS 103J AND 103O

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STREAM SEDIMENTS

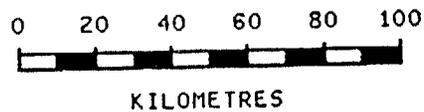
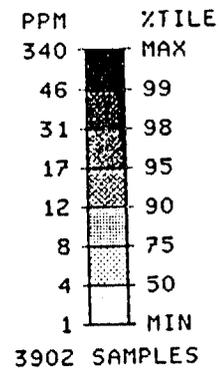


RESOURCE GEOCHEMISTRY SUBDIVISION  
GEOLOGICAL SURVEY OF CANADA

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 GEOCHEMICAL RECONNAISSANCE  
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 NTS 103I AND 103P. PART OF NTS 103J AND 103O

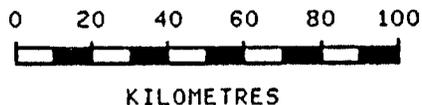
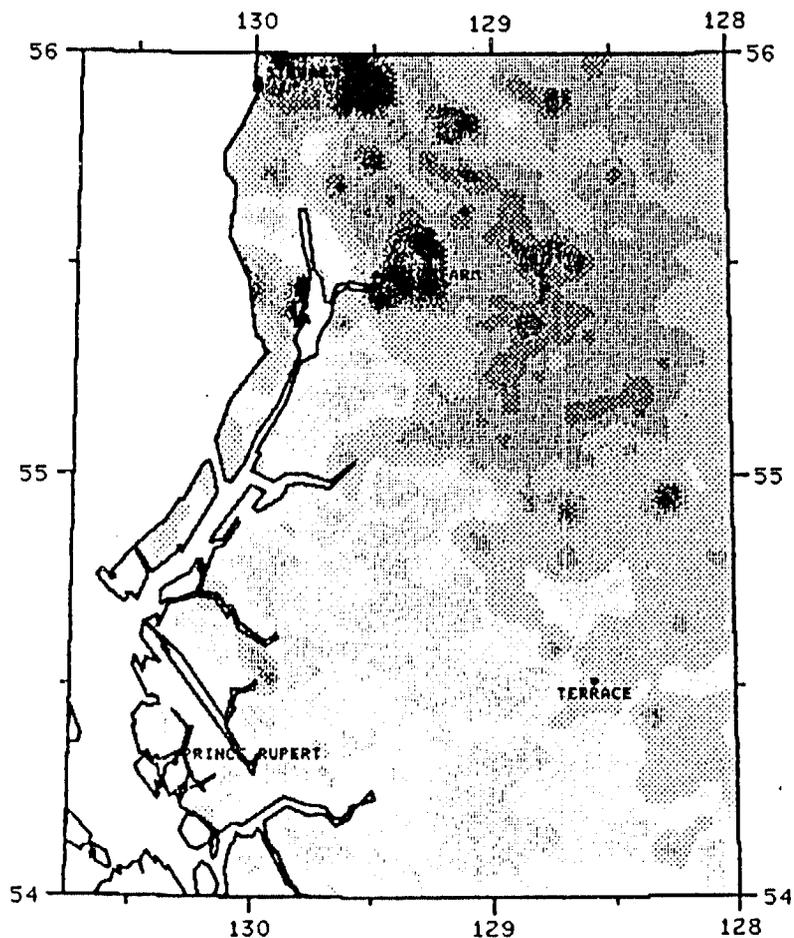


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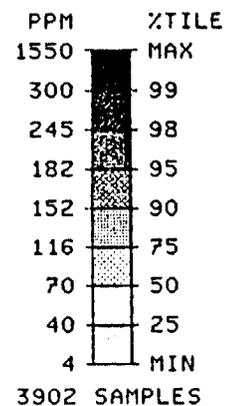


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 NTS 103I AND 103P. PART OF NTS 103J AND 103O

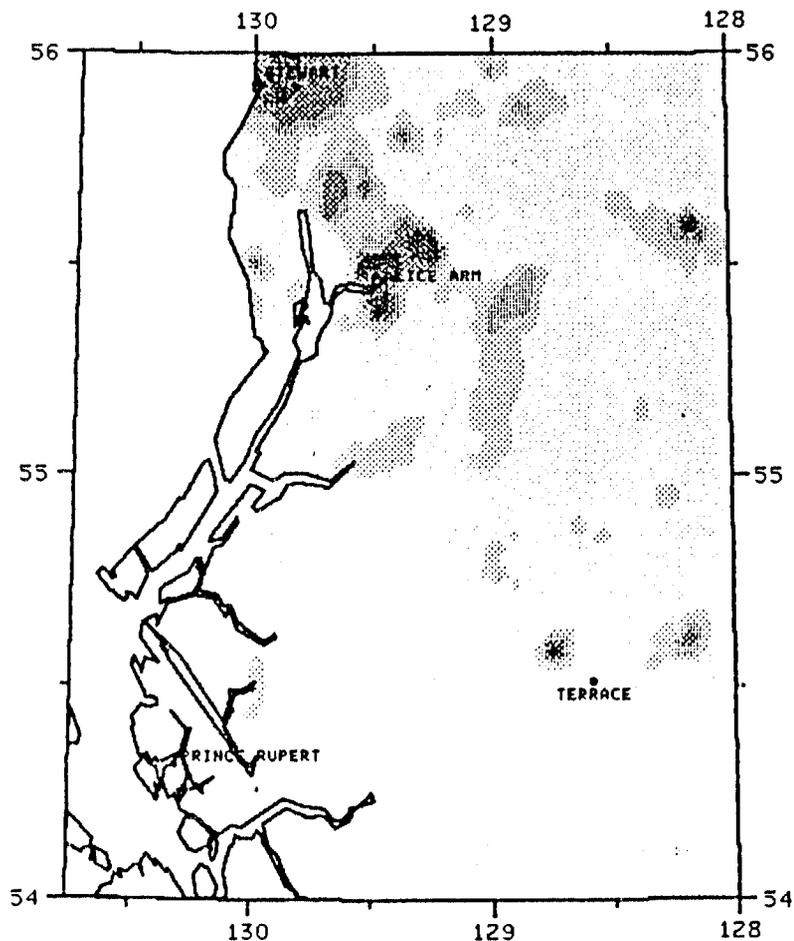


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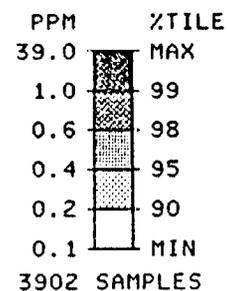


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PRINCE RUPERT AREA, BRITISH COLUMBIA  
NTS 103I AND 103P, PART OF NTS 103J AND 103O

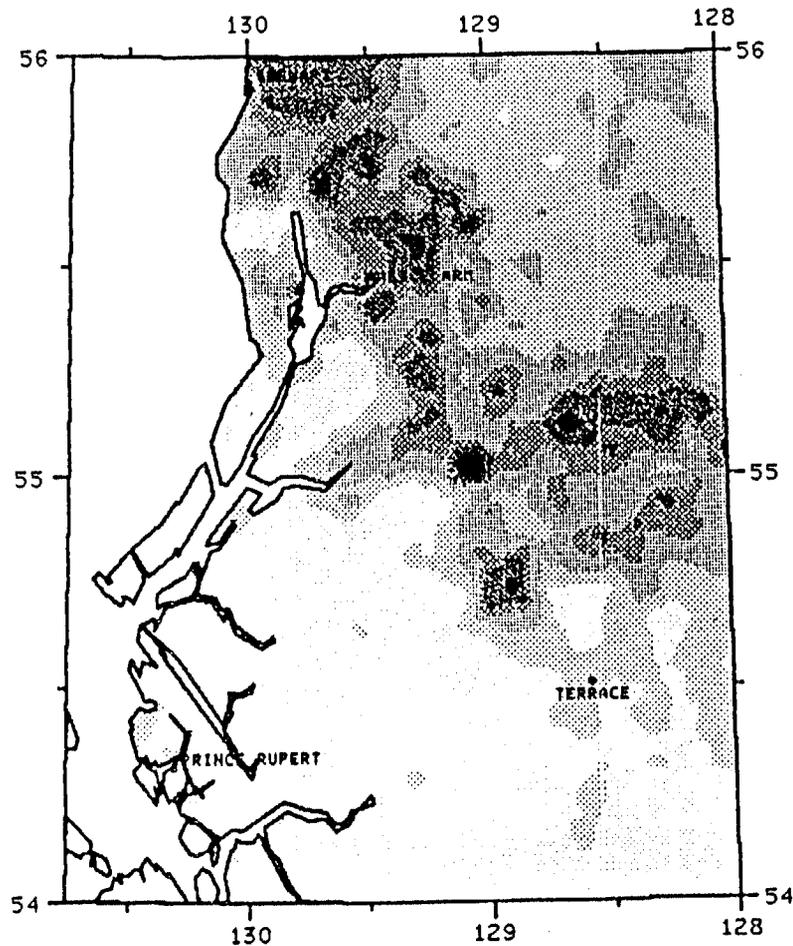


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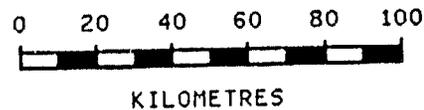
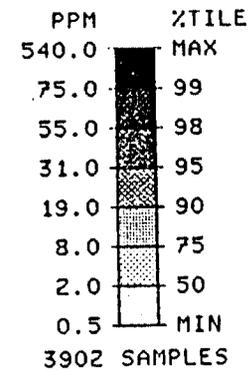


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 NTS 103I AND 103P. PART OF NTS 103J AND 103O

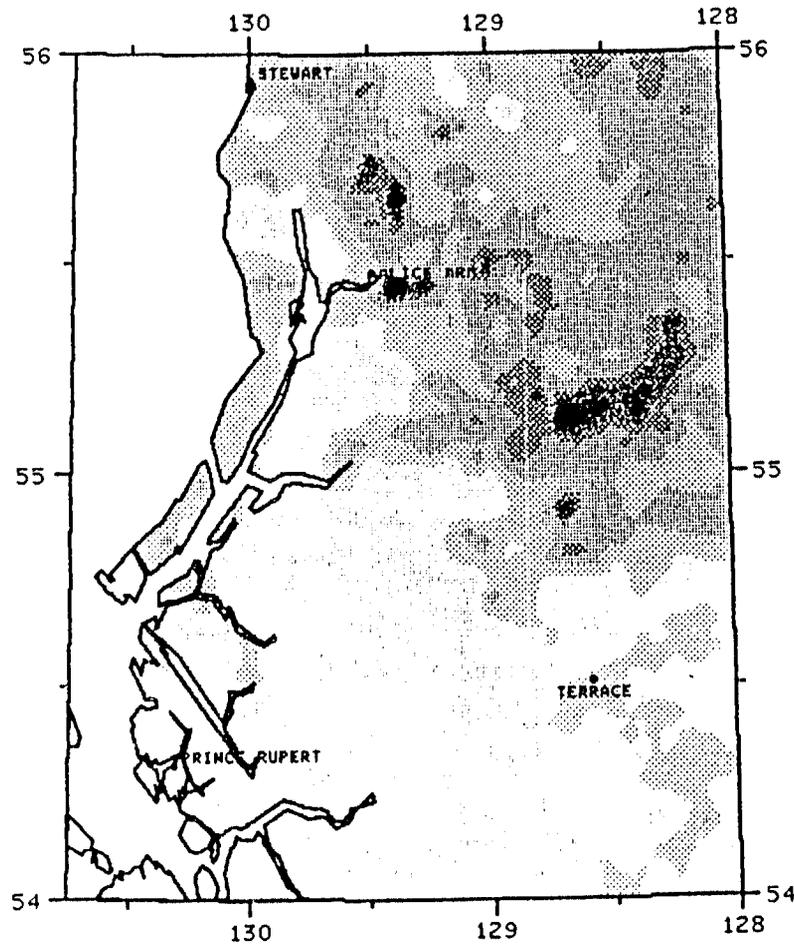


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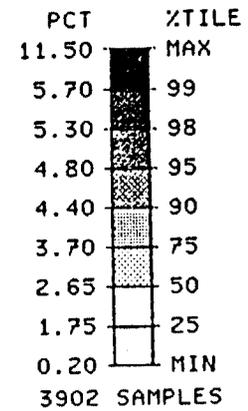


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PRINCE RUPERT AREA, BRITISH COLUMBIA  
NTS 103I AND 103P. PART OF NTS 103J AND 103O

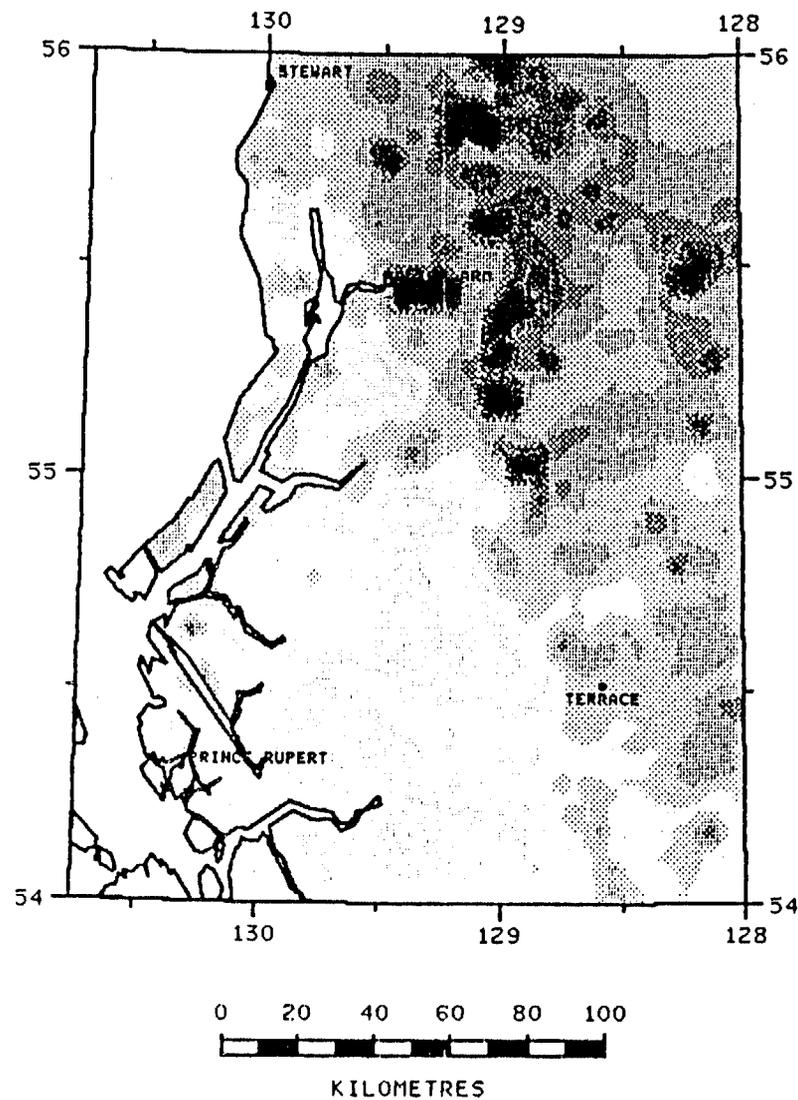


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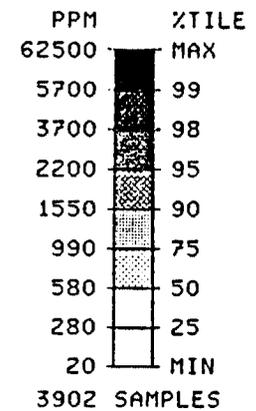


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NTS 103I AND 103P. PART OF NTS 103J AND 103K

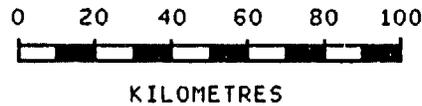
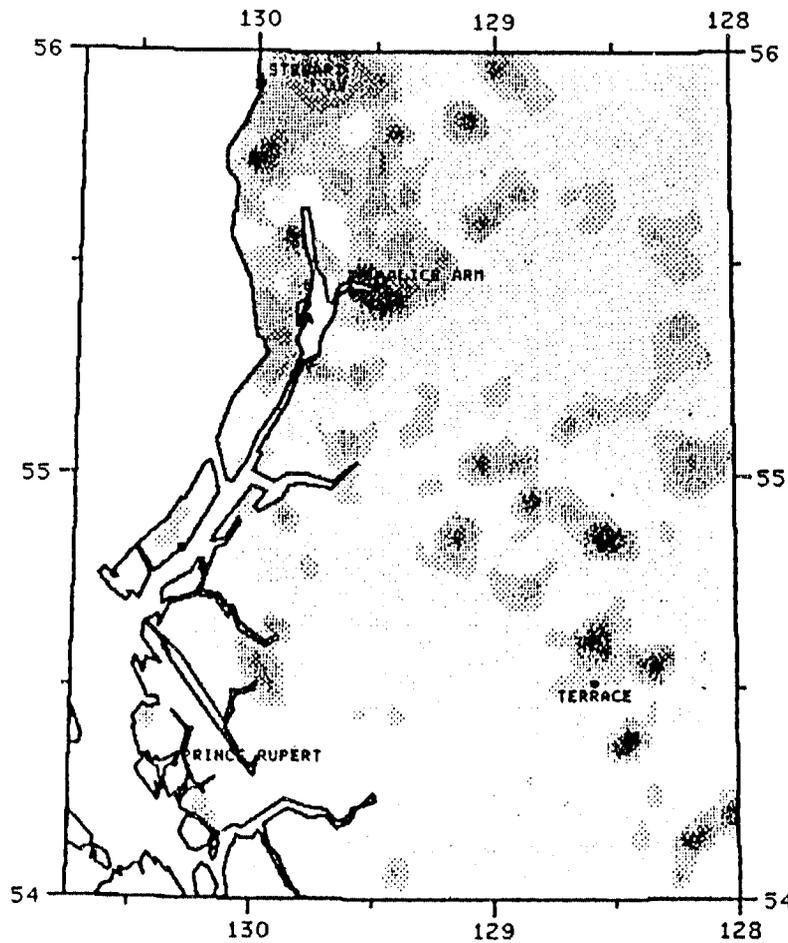


MANGANESE  
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STREAM SEDIMENTS

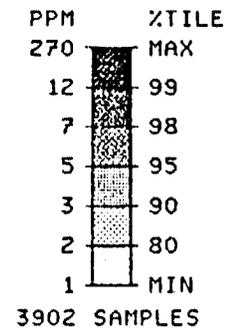


RESOURCE GEOCHEMISTRY SUBDIVISION  
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NATIONAL  
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 NTS 103I AND 103P. PART OF NTS 103J AND 103O

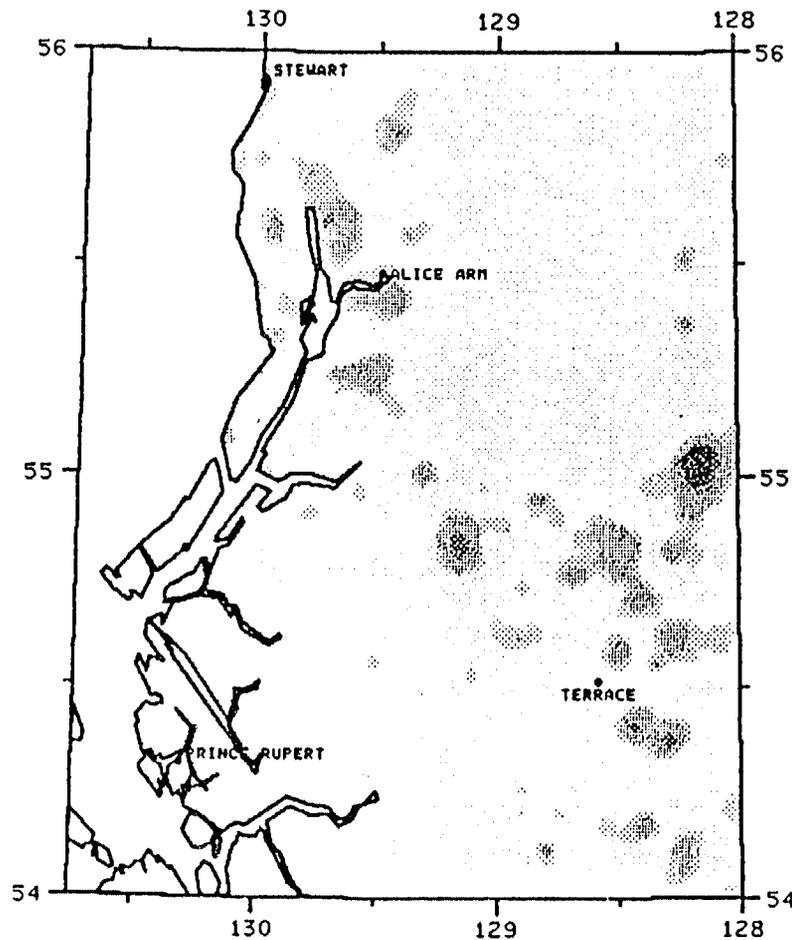


MOLYBDENUM  
 IN  
 STREAM SEDIMENTS

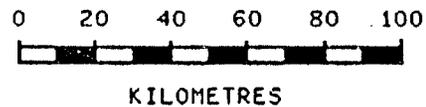
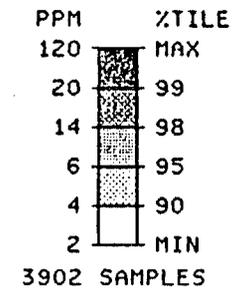


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 NTS 103I AND 103P. PART OF NTS 103J AND 103O

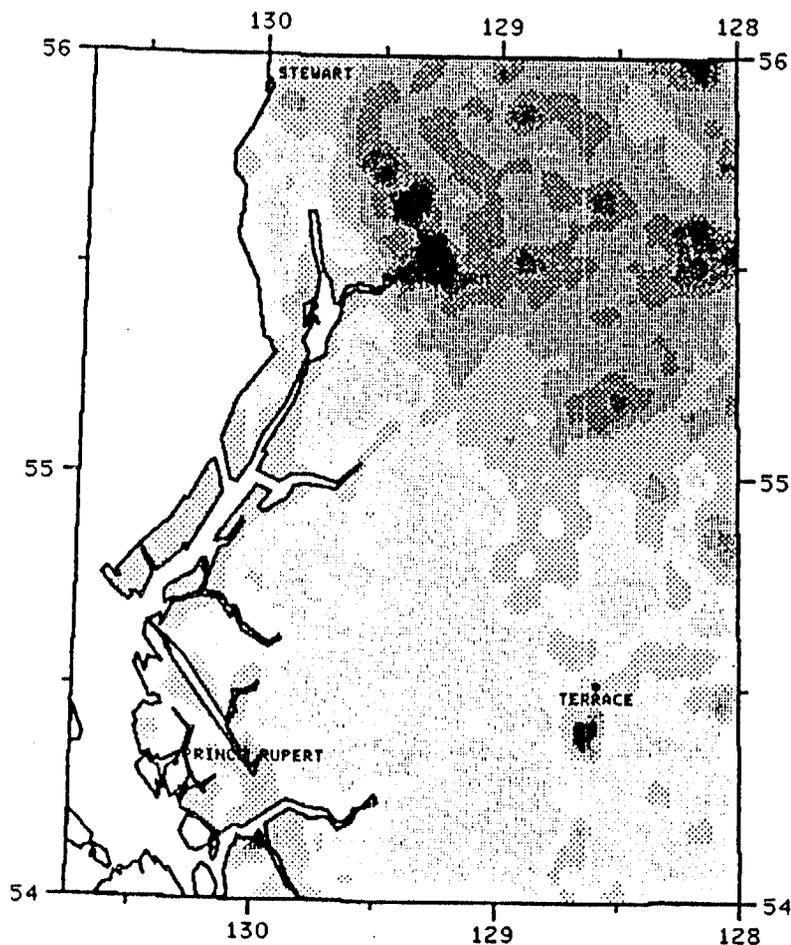


TUNGSTEN  
 IN  
 STREAM SEDIMENTS

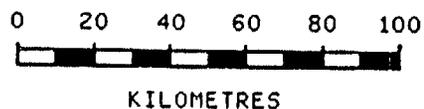
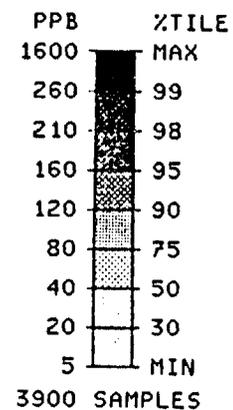


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NTS 103I AND 103P. PART OF NTS 103J AND 103O

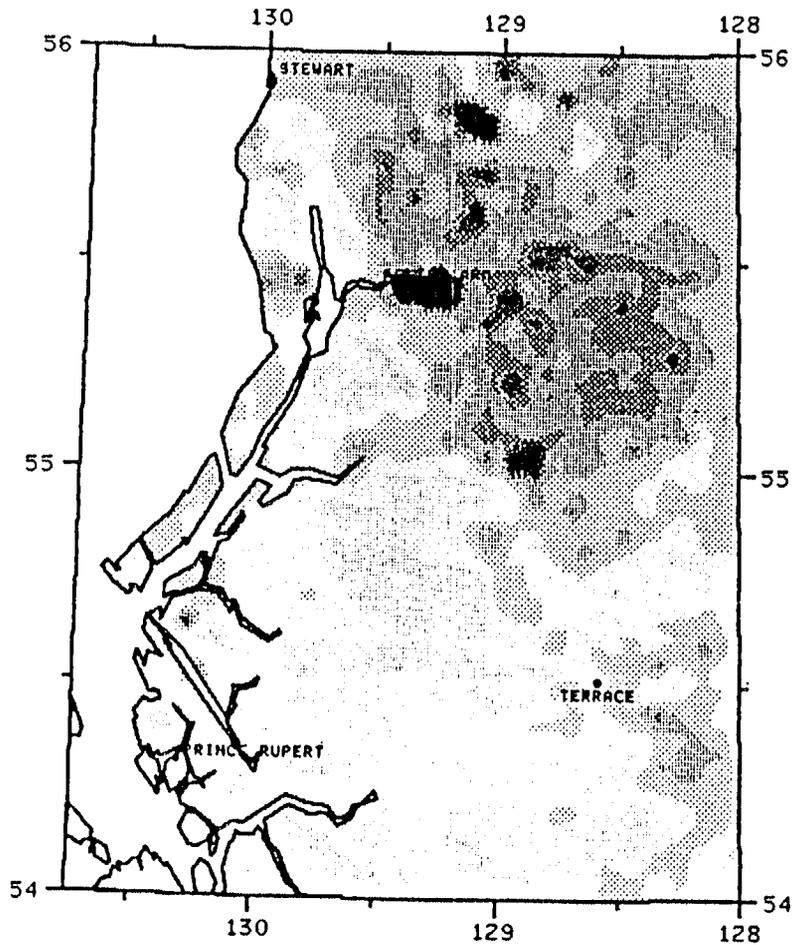


MERCURY  
IN  
STREAM SEDIMENTS

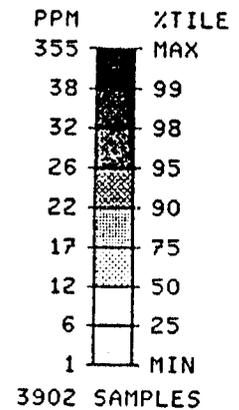


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NTS 103I AND 103P, PART OF NTS 103J AND 103O



COBALT  
IN  
STREAM SEDIMENTS

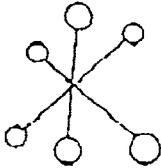


0 20 40 60 80 100

KILOMETRES

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APPENDIX D  
**ECO-TECH LABORATORIES LTD.**  
 ASSAYING • ENVIRONMENTAL TESTING  
 10041 East Trans Canada Hwy., Kamloops, B.C. V2C 2J3 (804) 573-5700 Fax 573-4667

GEOCHEMICAL LABORATORY METHODS

SAMPLE PREPARATION (STANDARD)

1. Soil or Sediment: Samples are dried and then sieved through 80 mesh nylon sieves.
2. Rock, Core: Samples dried (if necessary), crushed, riffled to pulp size and pulverized to approximately -140 mesh.
3. Heavy Mineral Separation:  
 Samples are screened to -20 mesh, washed and separated in Tetrabromothane.  
 (SG 2.98)

METHODS OF ANALYSIS

All methods have either certified or in-house standards carried through entire procedure to ensure validity of results.

1. Multi-Element Cd, Cr, Co, Cu, Fe (acid soluble),  
 Pb, Mn, Ni, Ag, Zn, Mo

Digestion

Hot aqua-regia

Finish

Atomic Absorption, background correction applied where appropriate

A) Multi-Element ICP

Digestion

Hot aqua-regia

Finish

ICP

15. Gold

Digestion

Finish

- a) Fire Assay Preconcentration followed by Aqua Regia Atomic Absorption
- b) 10g sample is roasted at 800°C then digested with hot Aqua Regia. The gold is extracted by MIBK and determined by A.A.