

LOG NO:	SEP 10 1992	RD.
ACTION:		
FILE NO:		

**ASSESSMENT REPORT ON WATER  
AND SILT  
GEOCHEMISTRY,  
AND GEOLOGY IN THE  
GETTY CLAIMS AREA.  
HIGHLAND VALLEY, B.C.**

**AUGUST 27, 1992.**

Prepared for: Robak Industries  
and John Lepinski.  
1000 Austin Ave;  
Coquitlam, B.C.,  
V3K 3P3.

By: Gower Thompson and Associates Ltd.  
201-615 Eighth Street,  
New Westminster, B.C.  
V3M 3S3.

Analysis Performed By:

Min En Labs,  
Vancouver, B.C.

**GEOLOGICAL BRANCH  
ASSESSMENT REPORT**

**22,481**

Table of Contents		Page
	Table of Contents	i ✓
	List of Tables	ii ✓
	Statement of Costs	iii ✓
1.0	Summary	1
1.1	Conclusions	1
1.2	Recommendations	1 ✓
2.0	Introduction	2
2.1	Terms of Reference	2 ✓
2.2	Location and Access	2 ✓
2.3	Sample Parameters	2 ✓
3.0	Claim Status	3 ✓
4.0	General Geology	4 ✓
5.0	Mineral Deposits	5
5.1	Getty North	5
5.2	Getty South	6
5.3	Getty West	7
6.0	Water Geochemistry	7 ✓
7.0	Water Sample Notes	25
8.0	Silt Sample Notes	26 ✓
9.0	Qualifications	27
10.0	References	28 ✓

#### List of Appendices

Appendix A      Analytical Results, Min En Laboratories ✓

List of Tables		Page
Table One	Claim Data, Event 3019529	3 /
Table Two	Claim Data, after event 3019529	3 /
Table 6.1	Station A - 92 - 01: Getty 62	8 /
Table 6.2	Station B - 92 - 01: Getty 63	9
Table 6.3	Station C - 92 - 01: Getty 38	10
Table 6.4	Station D - 92 - 01: Getty 26	11
Table 6.5	Station E - 92 - 01: Getty 26, 28	12
Table 6.6	Station F - 92 - 01: Getty 19	13
Table 6.7	Station G - 92 - 01: Getty 18	14
Table 6.8	Station H - 92 - 01: Getty 72	15
Table 6.9	Station I - 92 - 01: Getty 87	16
Table 6.10	Station J - 92 - 01: Getty 91	17
Table 6.11	Station K - 92 - 01: Getty 92	18
Table 6.12	Station L - 92 - 01: L 4467	19
Table 6.13	Station M - 92 - 01: Getty 47	20
Table 6.14	Station N - 92 - 01: Getty 53	21
Table 6.15	Station O - 92 - 01: L 5607	22
Table 6.16	Station P - 92 - 01: L 5483	23
Table 6.17	Station Q - 92 - 01: Getty 56	24

#### List of Figures

Figure 1	Location Map 1 inch = 136 miles /
Figure 2	Location Map 1 inch = 25 miles /
Figure 3	Geology Map, Guichon Batholith 1 inch = 3 miles /
Figure 4	Sample Locations, Claims, Geology, 1:12,500 /

STATEMENT OF COSTS

Wages: Stephen C. Gower, Geologist. June 3 to June 10, 1992.  
Seven days at \$250.00/day.....\$1750.00  
  
Elaine M. Thompson, Technician. June 3 to June 10, 1992  
Seven days at \$100.00/day.....\$700.00  
  
Support Costs 7 days at \$50.00/person/day.....\$700.00  
  
4 Wheel Drive Truck, 8 days at \$75/day.....\$600.00  
  
8 Wheel Drive ATV Rental, 4 days at \$50/day.....\$200.00  
  
Gasoline.....\$185.00  
  
Sample Bottles.....\$20.00  
  
Access.....\$250.00  
  
Subtotal.....\$4405.00  
  
Amount claimed for Assessment, Event 3019529.....\$3600.00

Costs after June 10, 1992.

June 11 to August 9, 1992

Egress.....\$250.00  
  
Analysis, water and silt.....\$1096.75  
  
Drafting, 8 hours at \$28.50/hour.....\$228.00  
  
Report.....\$700.00

Additional costs claimed with this report.....\$2274.75

EVENT NO. \_\_\_\_\_

FILED IN. NEW WEST

DATE. SEPT 5/92

## 1.0

### Summary

This report discusses the first in a series of geochemical studies being carried out on the Getty claim group to understand the water and silt parameters in the area. This report deals with sampling carried out in June 1992. The second sample collection was completed in late August and is undergoing analysis in early September. The second series of samples are being analyzed for the same suite as the first with the addition of nitrate, nitrite and ammonia.

## 1.1

### Conclusions

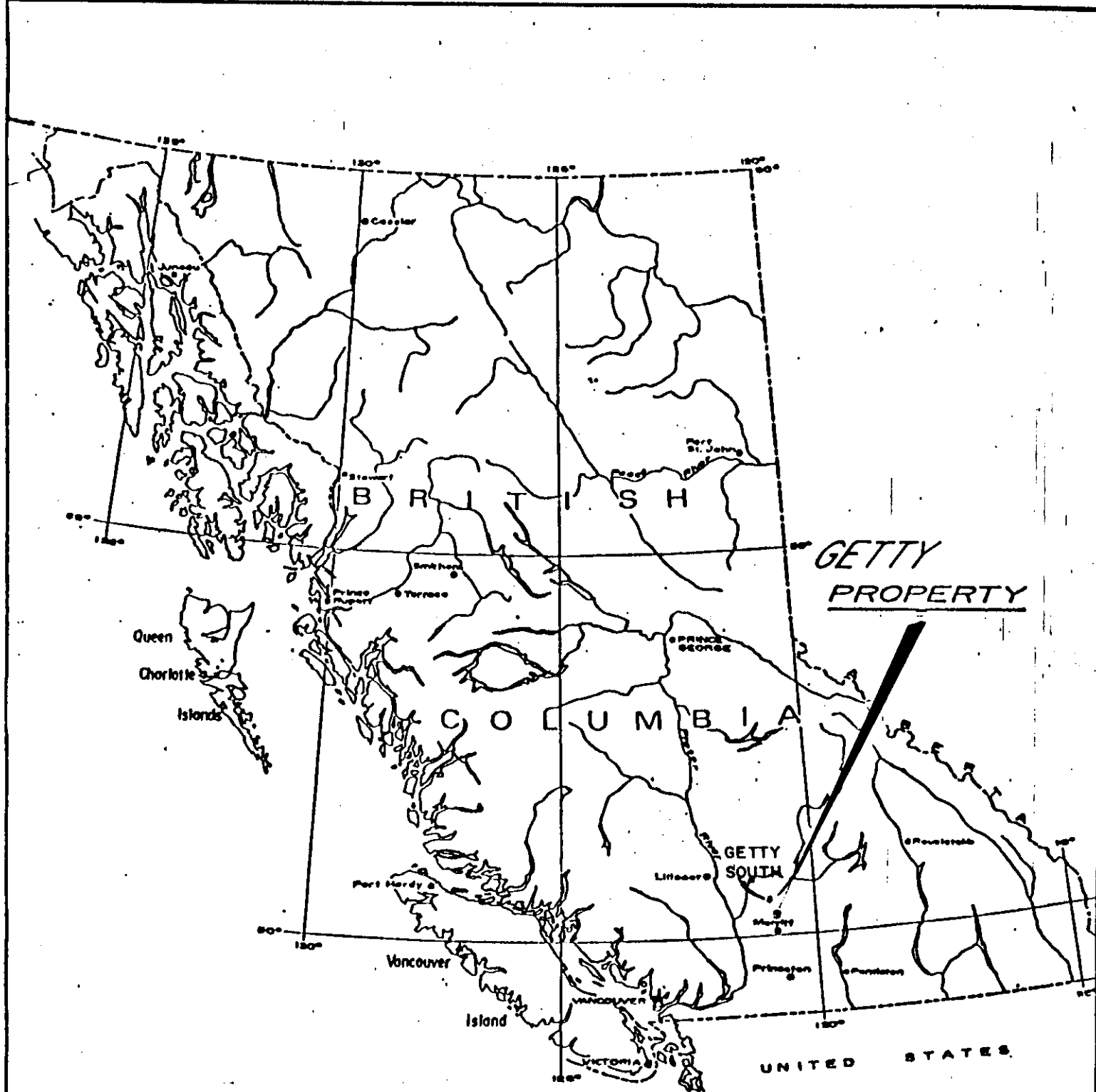
As this is the first in a series of ongoing analysis it is premature to draw any conclusions at this time.

## 1.2

### Recommendations

Two silt samples returned unexpectedly high values and require follow up in subsequent surveys. These samples are as follows.

<u>Sample No.</u>	<u>Anomalous Value</u>
A - 92 - S1	5.7 ppm Ag.
N - 92 - S1	49 ppm Mo.



**KRAIN/GETTY PROPERTY**

**LOCATION MAP**

HIGHLAND VALLEY, B.C.

SCALE  
1" = 136 Miles

## 2.0

## Introduction

### 2.1 Terms of Reference

Gower Thompson and Associates Ltd. was employed by Robak Industries and John Lepinski to carry out water quality analysis and silt geochemistry on the Getty claims Area. The purpose of these surveys was to gather baseline data on mineral content, pH, sulphate and total dissolved solids in streams.

These studies are designed to gather data for environmental purposes and to explore for new areas of mineralization hidden under drift cover. The geochemical data was incorporated into a geological framework developed as the survey was carried out. Areas requiring further follow up are identified in this report. Further sampling will be carried out throughout the year at the sample stations to generate additional data.

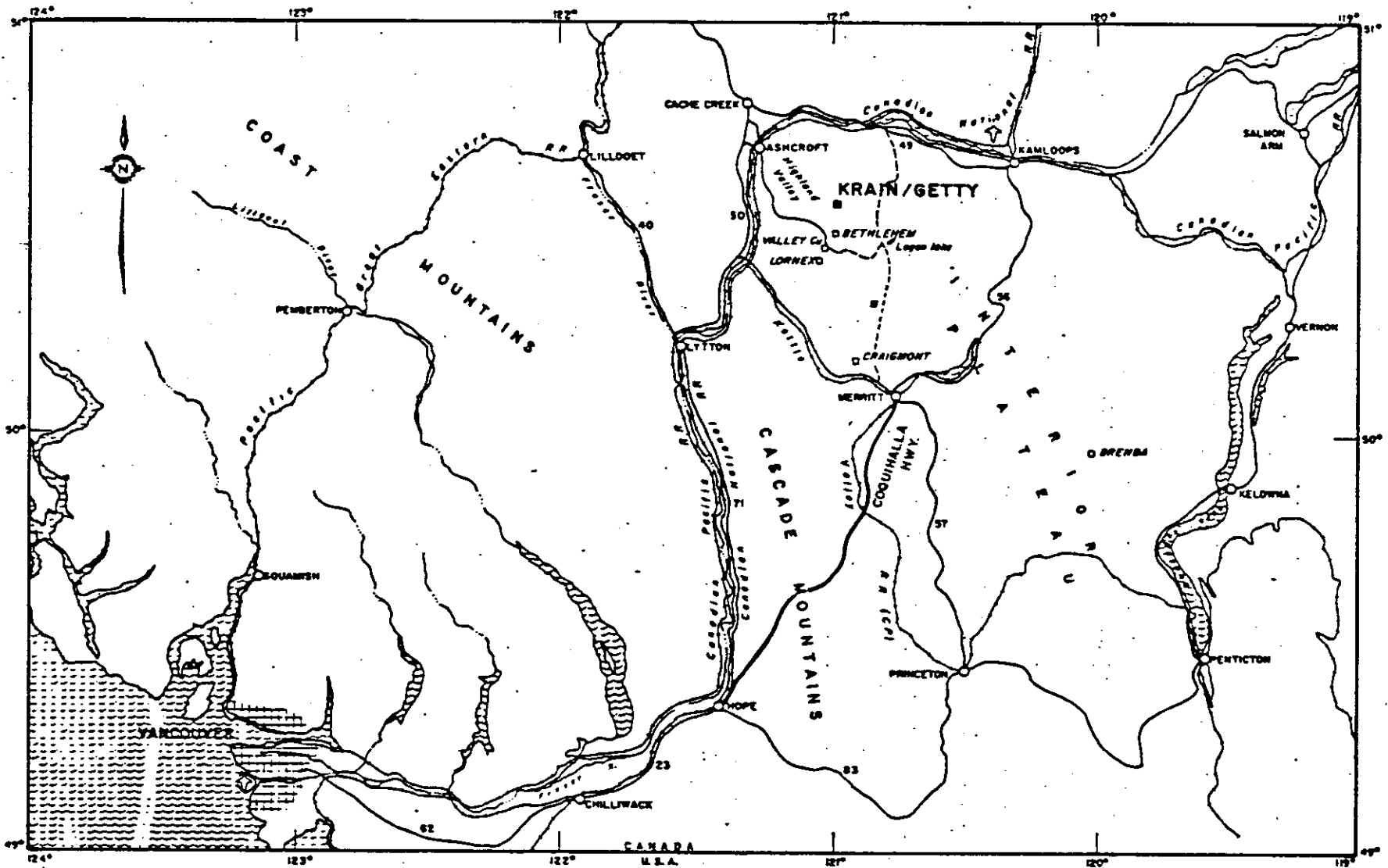
### 2.2 Location and Access

The Getty claims are located in the Highland Valley of B.C. at approximately Lat. 50 degrees 35 minutes; Longitude 121 degrees 00 minutes in the Kamloops Mining Division. The claims are centered about 6 kilometres north of the Bethlehem Mine and include the deposits previously known as the Krain (Getty North), Trojan - South Seas (Getty South) and Transvaal ( Getty West) deposits. Access to the claims is via the Bose Lake road which branches off the paved road leading to the old Bethlehem Mill.

### 2.3 Sample Parameters

A total of 17 sample sites surrounding the claim area were prepared for the program. These sites were selected for relative ease of access while maximizing the area of influence for the drainage area. The sample sites were marked by blazing a nearby tree and affixing an aluminum tag on which the date of sampling could be marked. Samples were taken by Elaine M. Thompson of Gower Thompson and Associates Ltd. Field notes, sample locations and silt sampling were the responsibility of the author. Bottles used for collection were supplied by Min-En Labs of Vancouver, B.C. Two 100 millilitre samples were taken to a pH of 1 to 2 in the field by the addition of 4 to 5 drops of nitric acid. A single 250 millilitre sample of water was also collected for the pH determination in the Lab. All water samples were analyzed in accordance with standard laboratory procedures.

An all terrain vehicle was required to facilitate access to some of the sample locations. Other sites are easily accessible by 4 wheel drive truck.



LOCATION MAP





### 3.0 Claim Status

This report covers work declared on the following mineral claims under event number 3019529 in Kamloops on June 8, 1992. A further statement of costs has been filed with this report.

Table One.

<u>NAME</u>	<u>UNITS</u>	<u>NEW EXPIRY DATE*</u>	<u>TENURE NUMBER</u>
Getty 9	1	August 16, 1993	221569
Getty 10	1	August 16, 1993	221570
Getty 11	1	August 16, 1993	221571
Getty 12	1	August 16, 1993	221572
Getty 13	1	August 16, 1993	221573
Getty 14	1	August 16, 1993	221574
Getty 15	1	August 16, 1993	221575
Getty 16	1	August 16, 1993	221576
Getty 17	1	August 16, 1993	221577
Getty 18	1	August 16, 1994	221578
Getty 20	1	August 16, 1993	221580
Getty 22	1	August 16, 1993	221582
Getty 23	1	August 16, 1993	221583
Getty 24	1	August 16, 1993	221584
Getty 80	1	June 10, 1993	218508
Getty 81	1	June 10, 1993	218509
Getty 82 Fr.	1	June 10, 1993	218510
Getty 83 Fr.	1	June 10, 1993	218511
Getty 85	1	June 11, 1993	218513
Getty 86	1	June 11, 1992	218557
Getty 91	1	July 1, 1993	218557
Getty 92	1	July 1, 1993	218558

Table Two

Getty 26	8	January 7, 1994	218221
Getty 27	1	January 5, 1994	218222
Getty 28	1	January 5, 1992	218223
Getty 29	1	January 5, 1992	218224

\* Pending approval of this report

The majority of the posts have been examined in the field and have found to be as described on the affidavits. A legal survey is being carried out in August and September to accurately locate the true position of the crown grants and mineral claims in the area.

These claims form part of the Getty #3 Group recorded in Kamloops on June 5, 1992.

The batholith has been divided into phases based on textural and compositional parameters. Dr. K.E. Northcote established the formal names in 1969 which have been adhered to by subsequent geological studies. These phases trend from older to younger from the outer margins inwards towards the core of the batholith.

1. The outermost border phase of the batholith which commonly contains inclusions of country rock is referred to as the Hybrid phase. This phase varies in composition from amphibolite to monzonite.

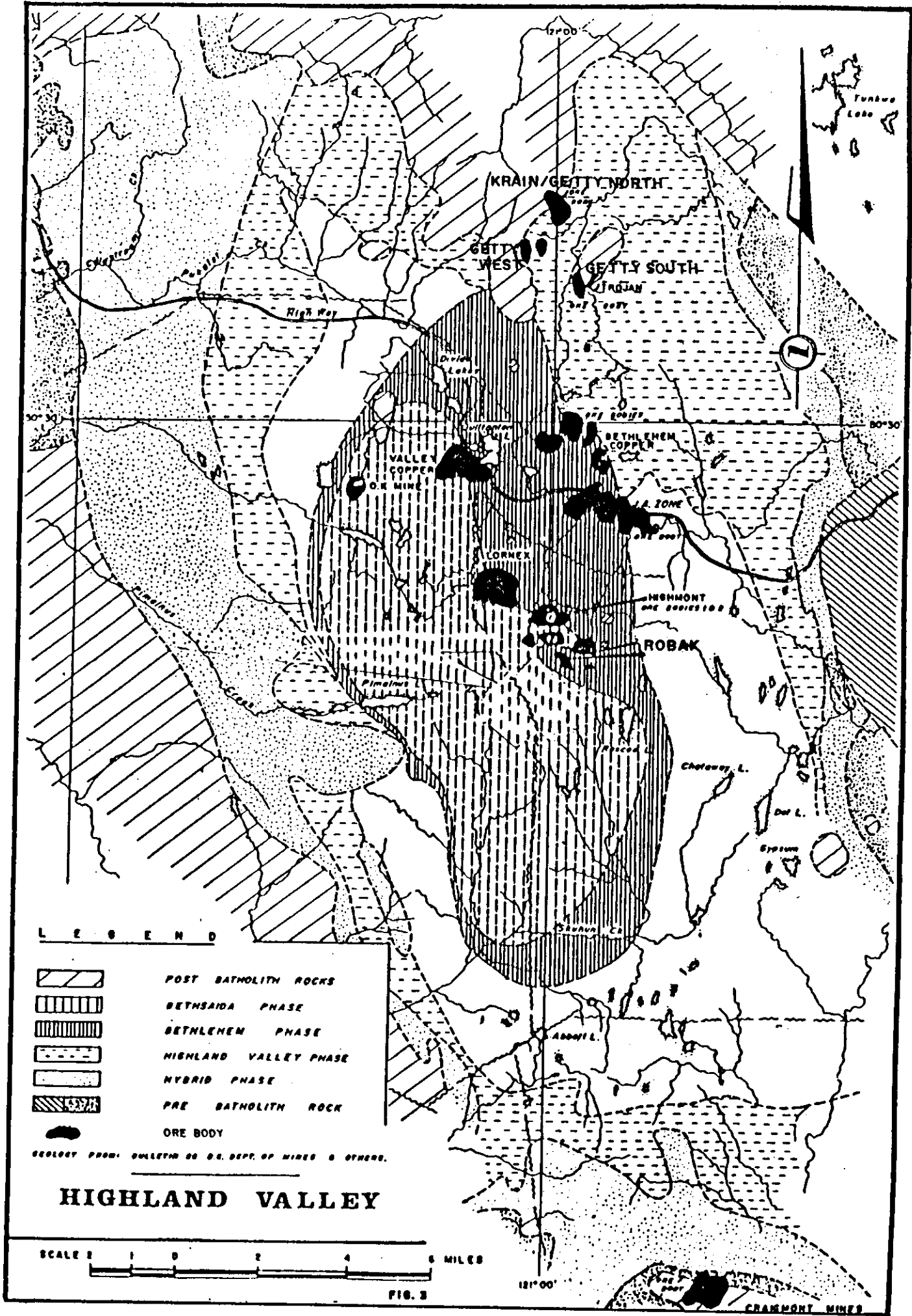
2. The next phase inwards is the Highland Valley phase which consists of the Chataway and Guichon varieties. The Chataway variety consists of about 12 percent mafics with hornblende predominating over biotite. The Guichon variety consists of quartz diorite to granodiorite which contains about 15% mafics evenly distributed between biotite and hornblende.

3. The Bethlehem phase in the next inwards in the batholith. This phase consists of granodiorite which contains approximately 8 % mafics. The characteristic criteria of the Bethlehem phase is the presence of grains of fine to medium mafic crystals enclosed by coarse grained hornblende crystals.





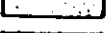


4. The next phase consists of the Bethsaida phase which varies from granodiorite to quartz monzonite. It generally is in gradational contact with the Bethlehem phase. It contains about 6% mafic minerals. Biotite is the predominant mafic mineral in the northern part of the Batholith; in the southern part of the batholith biotite and hornblende are present in equal quantities.

5. The Skeena variety consists of the border phase of the contact between the Bethlehem and Bethsaida phases. The composition is generally granodiorite. The mafic textures are similar to the Bethlehem phase, however the grain size is larger, the mafic content lower and the quartz is coarser grained.

6. The youngest phase consists of a swarm of porphyry dykes which extends northward from the Bethlehem deposits and encloses the Getty North, South and West deposits. ( previously known as the Krain, Trojan and Transvaal deposits ). A strong zone of hydrothermal alteration accompanies the dyke swarm. Feldspar minerals are altered to sericite, carbonate and clay. The mafic minerals are altered to chlorite, carbonate and epidote.



**LEGEND**

-  POST BATHOLITH ROCKS
-  BETHSAIDA PHASE
-  BETHLEHEM PHASE
-  HIGHLAND VALLEY PHASE
-  HYBRID PHASE
-  PRE BATHOLITH ROCK
-  ORE BODY

GEOLOGY FROM: BULLETIN OF U.S. DEPT. OF MINES & OTHERS.

**HIGHLAND VALLEY**

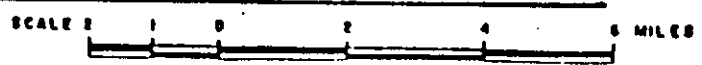


FIG. 3

121°00'

CRAMMONT MINES

## 5.0 Mineral Deposits

Three major mineral deposits have been discovered in the Getty claims area. A brief description is as follows:

### 5.1 Getty North (previously known as Krain)

The Getty North deposit occurs as a partially buried porphyry copper system with a length of at least 500 metres, a width of at least 350 metres and a depth of at least 450 metres. Additional drilling is required to delineate the outer boundaries of the deposit.

Mineralization consists of chalcopyrite, bornite and pyrite which occur as specks, disseminations and fracture fillings within Guichon Quartz Diorite which has been intruded by a younger porphyry. In plan view the copper zone appears to be cylindrical with the axis plunging to the southeast.

A zone of oxidation has been developed which forms a cap of secondary copper minerals at and near surface in the northern part of the porphyry. This mineralization forms a relatively homogeneous unit up to 120 metres thick which has been preserved from erosion by Early Tertiary Basals. These basals onlap onto the oxide zone in the vicinity of Krain Lake and form the northern boundary of the proposed open pit.

## 5.2 Getty South (Previously known as Trojan - South Seas)

The Getty south deposit is hosted in a breccia pipe and its associated shatter zone. The breccia zone is somewhat elongated along a north south axis with a length of approximately 500 meters, a width of approximately 300 meters and a mineralized depth of at least 200 meters. The main body of the breccia has a moderate dip to the west, which the copper mineralization appears to be following. The east margin of the breccia is commonly fault bounded.

Fragments within the breccia consist of Guichon Granite, quartz diorite, porphyritic quartz diorite and dacite porphyry. The size of the breccia clasts varies from several millimetres to meters. The higher grade copper zones always coincide with a fine clast size. The clasts are cemented in a matrix of brown mica, quartz, tourmaline, calcite, chlorite, specular hematite and copper minerals.

Copper mineralization consists of secondary copper minerals at and near surface, underlain by primary chalcopyrite and some bornite. Chalcocite is present at surface and through the interface between primary and secondary mineralization.

The highest copper grades and the strongest alteration occur in the margins of the breccia zone where the clasts are smallest. The margins also contain elongated crush zones which have undergone later alteration and mineralization. The centre of the breccia as exposed in the underground workings consists of a fairly coarse, massive, hard unit which is only weakly altered and mineralized.

### 5.3 Getty West (Previously known as Transvaal)

The Getty West is the least understood of the mineral centres in the claim area. In this area Guichon Quartz Diorite is cut by a younger porphyry dykes probably related to the Bethlehem phase. Crush zones variably mineralized with copper follow the porphyry dykes. This copper mineralization forms high grade lenses that have been explored superficially by underground workings and shallow trenches. Spectacular showings of copper oxide are present at surface. The property appears to represent an uneroded porphyry copper environment similar to the Bethlehem deposit located to the south.

### 6.0 Water geochemistry

The samples were placed in coolers after collection and transported in a secure environment to Min-En Laboratories in Vancouver for analysis. The samples were analyzed for pH, suspended solids, dissolved sulphate, and a 31 element ICP package. The second series of samples collected in August are being run for all of the above plus nitrate, nitrite and ammonia. The results of the first analysis are included as Tables 6.1 to 6.17 as follows.

Water Analysis

Table 6.1

Station A - 92 - 01

Parameter	June 6/92
pH	7.21
Dissolved Sulphate	5 Mg/L
Suspended Solids	9 Mg/L
Copper	0.002 ppm
Molybdenum	0.004 ppm
Lead	0.002 ppm
Zinc	0.001 ppm
Manganese	0.005 ppm
Iron	0.39 ppm
Silver	0.003

Silt Values

Copper	56 ppm
Molybdenum	1 ppm
Lead	61 ppm
Zinc	157 ppm
Silver	5.9 ppm *

Table 6.2

Station B - 92 - 01

Parameter	June 6, 1992
pH	7.25
Dissolved Sulphate	6 Mg/L
Suspended Solids	< 1 Mg/L
Copper	0.002 ppm
Molybdenum	0.002 ppm
Lead	0.004 ppm
Zinc	0.001 ppm
Manganese	0.005 ppm
Iron	0.52 ppm
Silver	0.004 ppm

Silt Values

Copper	62 ppm
Molybdenum	1 ppm
Lead	40 ppm
Zinc	103 ppm
Silver	0.7 ppm



Table 6.3

Station C - 92 - 01

Parameter June 6, 1992

pH	7.20
Dissolved Sulphate	6 Mg/L
Suspended Solids	8 Mg/L
Copper	0.002 ppm
Molybdenum	0.002 ppm
Lead	0.012 ppm
Zinc	0.001 ppm
Manganese	0.225 ppm
Iron	0.39 ppm
Silver	0.001 ppm

Silt Values

Copper	123 ppm
Molybdenum	2 ppm
Lead	32 ppm
Zinc	75 ppm
Silver	0.2 ppm

Table 6.4

Station D - 92 - 01

Parameter	June 6, 1992
pH	7.51
Dissolved Sulphate	4 Mg/L
Suspended Solids	1 Mg/L
Copper	0.004 ppm
Molybdenum	0.004 ppm
Lead	0.004 ppm
Zinc	0.001 ppm
Manganese	0.005 ppm
Iron	0.13 ppm
Silver	0.001 ppm

Silt Values

Copper	174 ppm
Molybdenum	1 ppm
Lead	10 ppm
Zinc	81 ppm
Silver	0.1 ppm

Table 6.5

Station E - 92 - 01

Parameter	June 6, 1992
pH	7.49
Dissolved Sulphate	4 Mg/L
Suspended Solids	< 1 Mg/L
Copper	0.008 ppm
Molybdenum	0.002 ppm
Lead	0.002 ppm
Zinc	0.002 ppm
Manganese	0.010 ppm
Iron	0.08 ppm
Silver	0.001 ppm

Silt Values

Copper	149 ppm
Molybdenum	1 ppm
Lead	17 ppm
Zinc	80 ppm
Silver	0.1 ppm

Table 6.6

Station F - 92 - 01

Parameter	June 7, 1992
pH	7.33
Dissolved Sulphate	4 Mg/L
Suspended Solids	2 Mg/L
Copper	0.064 ppm *
Molybdenum	0.006 ppm
Lead	0.002 ppm
Zinc	0.007 ppm
Manganese	0.10 ppm
Iron	0.32 ppm
Silver	0.001 ppm

Silt Values

Copper	1329 ppm *
Molybdenum	2 ppm
Lead	10 ppm
Zinc	82 ppm
Silver	0.5 ppm

\* Highly anomalous

Table 6.7

Station G - 92 - 01

Parameter	June 7, 1992
pH	6.90
Dissolved Sulphate	3 Mg/L
Suspended Solids	8 Mg/L
Copper	0.002 ppm
Molybdenum	0.004 ppm
Lead	0.004 ppm
Zinc	0.001 ppm
Manganese	0.005 ppm
Iron	0.18 ppm
Silver	0.001 ppm

Silt Values

Copper	No sample taken
Molybdenum	No sample taken
Lead	No sample taken
Zinc	No sample taken
Silver	No sample taken

Table 6.8

Station H - 92 - 01

Parameter	June 7, 1992
pH	7.35
Dissolved Sulphate	8 Mg/L
Suspended Solids	31 Mg/L
Copper	0.002 ppm
Molybdenum	0.004 ppm
Lead	0.002 ppm
Zinc	0.002 ppm
Manganese	0.040 ppm
Iron	3.59 ppm
Silver	0.001 ppm

Silt Values

Copper	63 ppm
Molybdenum	1 ppm
Lead	8 ppm
Zinc	65 ppm
Silver	0.7 ppm

Table 6.9

Station I - 92 - 01

Parameter	June 8, 1992
pH	8.45
Dissolved Sulphate	10 Mg/L
Suspended Solids	11 Mg/L
Copper	0.002 ppm
Molybdenum	0.002 ppm
Lead	0.002 ppm
Zinc	0.021 ppm
Manganese	0.020 ppm
Iron	1.16 ppm
Silver	0.002 ppm

Silt Values

Copper	No sample taken
Molybdenum	No sample taken
Lead	No sample taken
Zinc	No sample taken
Silver	No sample taken

Table 6.10  
Station J - 92 - 01

Parameter	June 8, 1992
pH	6.99
Dissolved Sulphate	3 Mg/L
Suspended Solids	<1 Mg/L
Copper	0.002 ppm
Molybdenum	0.004 ppm
Lead	0.002 ppm
Zinc	0.005 ppm
Manganese	0.005 ppm
Iron	0.73 ppm
Silver	0.002 ppm

Silt Values

Copper	No sample taken
Molybdenum	No sample taken
Lead	No sample taken
Zinc	No sample taken
Silver	No sample taken



Table 6.11  
Station K - 92 - 01

Parameter	June 8, 1992
pH	7.00
Dissolved Sulphate	2 Mg/L
Suspended Solids	<1 Mg/L
Copper	0.010 ppm
Molybdenum	0.006 ppm
Lead	0.020 ppm
Zinc	0.026 ppm
Manganese	0.025 ppm
Iron	5.47 ppm
Silver	0.004 ppm

Silt Values

Copper	No sample taken
Molybdenum	No sample taken
Lead	No sample taken
Zinc	No sample taken
Silver	No sample taken

Table 6.12

Station L - 92 -01

Parameter	June 8, 1992
pH	6.64
Dissolved Sulphate	3 Mg/L
Suspended Solids	3 Mg/L
Copper	0.020 ppm
Molybdenum	0.002 ppm
Lead	0.002 ppm
Zinc	0.023 ppm
Manganese	0.010 ppm
Iron	0.17 ppm
Silver	0.002 ppm

Silt Values

Copper	451 ppm
Molybdenum	1 ppm
Lead	7 ppm
Zinc	55 ppm
Silver	0.10 ppm

Table 6.13

Station M - 92 - 01

Parameter	June 9, 1992
pH	7.15
Dissolved Sulphate	5 Mg/L
Suspended Solids	14 Mg/L
Copper	0.002 ppm
Molybdenum	0.004 ppm
Lead	0.002 ppm
Zinc	0.024 ppm
Manganese	0.005 ppm
Iron	0.09 ppm
Silver	0.002 ppm

Silt Values

Copper	103 ppm
Molybdenum	2 ppm
Lead	13 ppm
Zinc	59 ppm
Silver	0.1 ppm

Table 6.14

Station N - 92 - 01

Parameter	June 9, 1992
pH	7.41
Dissolved Sulphate	3 Mg/L
Suspended Solids	5 Mg/L
Copper	0.002 ppm
Molybdenum	0.002 ppm
Lead	0.014 ppm
Zinc	0.007 ppm
Manganese	0.040 ppm
Iron	0.10 ppm
Silver	0.001 ppm

Silt Values

Copper	338 ppm
Molybdenum	49 ppm *
Lead	128 ppm
Zinc	60 ppm
Silver	0.1 ppm

Table 6.15

Station O - 92 - 01

Parameter	June 9, 1992
pH	7.58
Dissolved Sulphate	4 Mg/L
Suspended Solids	10Mg/L
Copper	0.028 ppm *
Molybdenum	0.004 ppm
Lead	0.018 ppm
Zinc	0.021 ppm
Manganese	0.010 ppm
Iron	0.05 ppm
Silver	0.001 ppm

Silt Values

Copper	No sample taken
Molybdenum	No sample taken
Lead	No sample taken
Zinc	No sample taken
Silver	No sample taken

Table 6.16

Station P - 92 - 01 ( Also utilized in Highland Valley study )

Parameter	June 9, 1992	Mean 1990 (Valley Copper)
pH	7.66	7.12
Dissolved Sulphate	5 Mg/L	14
Suspended Solids	4 Mg/L	2
Copper	0.016 ppm	0.034 ppm
Molybdenum	0.006 ppm	0.012 ppm
Lead	0.002 ppm	-
Zinc	0.001 ppm	-
Manganese	0.005 ppm	-
Iron	0.01 ppm	0.048 ppm
Silver	0.001 ppm	-

Silt Values

Copper	No sample taken
Molybdenum	No sample taken
Lead	No sample taken
Zinc	No sample taken
Silver	No sample taken

Table 6.17

Station Q - 92 - 01

Parameter	June 9, 1992
pH	7.51
Dissolved Sulphate	3 Mg/L
Suspended Solids	3 Mg/L
Copper	0.002 ppm
Molybdenum	0.002 ppm
Lead	0.016 ppm
Zinc	0.017 ppm
Manganese	0.175 ppm
Iron	0.39 ppm
Silver	0.001 ppm

Silt Values

Copper	118 ppm
Molybdenum	16 ppm
Lead	126 ppm
Zinc	21 ppm
Silver	0.10 ppm

7.0

## Water Sample Notes

<u>Sample No.</u>	<u>Width</u>	<u>Depth</u>	<u>Flow,</u>	<u>Colour</u>	<u>Field pH</u>	<u>Drops Acid</u>
A - 92 - 01	0.5m	0.1m	7sec/m	clear	5 - 6	4
B - 92 - 01	0.5m	0.1m	10/m	clear	5 - 6	4
C - 92 - 01	0.4m	0.1m	20/m	clear	6	4
D - 92 - 01	1.0m	0.1m	3/m	clear	6	4
E - 92 - 01	1.0m	0.1m	2/m	clear	5 - 6	4
F - 92 - 01	0.5m	0.1m	23/m	clear	5 - 6	5
G - 92 - 01	1.0m	0.1m	10/m	clear	5 - 6	5
H - 92 - 01	0.4m	0.05m	4/m	clear	5 - 6	5
I - 92 - 01	0.3m	0.01m	Trickle	clear	5 - 6	5
J - 92 - 01	0.5m	0.05	5/m	clear	5 - 6	5
K - 92 - 01	0.6m	0.1m	5/m	clear	5 - 6	5
L - 92 - 01	1.0m	0.02m	Trickle	clear	5	5
M - 92 - 01	0.5m	0.05m	Trickle	clear	5 - 6	5
N - 92 - 01	1.0m	0.05	Trickle	clear	6	5
O - 92 - 01	1.5m	0.2m	5/m	clear	5 - 6	5
P - 92 - 01	1.5m	0.25	3/m	clear	5 - 6	5
Q - 92 - 01	0.5m	0.2m	2/m	clear	5 - 6	5



8.0

## Silt Sample Notes

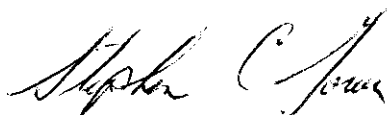
Sample No.	Silt	Sand	Gravel	Organic	Notes
A - 92 - S1	X			X	Edge of clearcut.
B - 92 - S1	X			X	U shaped gully.
C - 92 - S1	X			X	In clearcut, swampy.
D - 92 - S1	X	X		X	In clearcut, good flow
E - 92 - S1	X	X		X	As above.
F - 92 - S1	X	X		X	5.5 road marker.
G - 92 - S1					No Sample Taken.
H - 92 - S1	X	X		X	Clearcut.
I - 92 - S1					No sample taken.
J - 92 - S1					Silt taken prior.
K - 92 - S1					No sample taken.
L - 92 - S1	X			X	Vicinity of showings.
M - 92 - S1	X			X	
N - 92 - S1	X			X	High organic.
O - 92 - S1					Taken on main Trojan road.
P - 92 - S1					HVV sample site, Trojan.
Q - 92 - S1	X			X	High organic.

9.0

Qualifications

I, Stephen C. Gower of 985 Gatensbury Street, Coquitlam, B.C. do hereby certify that:

1. I have been practising as a geologist for a period of approximately 22 years for mining exploration and consulting companies. During this time I have made extensive use of geochemistry as an exploration and environmental tool.
2. I obtained a B.Sc. in geology from the University of British Columbia in 1970, and have completed masters courses in property evaluation and exploration.
3. I am a fellow in the Geological Association of Canada.
4. This report is based on Field work carried out by Gower Thompson and Associates Ltd. during the period June 3 to June 11, 1992 and is part of an ongoing study of the geochemistry of streams draining the Getty property.
5. This report has been assisted by chemists of Min-En Labs and by Dr. M. J. Beattie, P.Eng. of Beattie Consulting Ltd.
6. I am currently employed as a geologist by Gower Thompson and Associates Ltd.



Stephen C. Gower

B.Sc; F.G.A.C.

August 27, 1992

Bacon Donaldson and Associates Ltd. Compilation of Reports regarding the Krain Getty Project. March 1990.

Eco-Tech Laboratories. Water Quality Analysis in the Highland Valley. Prepared for Highland Valley Copper for the 1990 year.

Northcote, K.E.; Geology and Geochronology of the Guichon Batholith. 1969.

Analytical Results - Min En Labs.

Appendix A.



**MIN  
• EN  
LABORATORIES**  
(DIVISION OF ASSAYERS CORP.)

**SPECIALISTS IN MINERAL ENVIRONMENTS**  
CHEMISTS • ASSAYERS • ANALYSTS • GEOCHEMISTS

**VANCOUVER OFFICE:**  
705 WEST 15TH STREET  
NORTH VANCOUVER, B.C. CANADA V7M 1T2  
TELEPHONE (604) 980-5814 OR (604) 988-4524  
FAX (604) 980-9621

**SMITHERS LAB.:**  
3176 TATLOW ROAD  
SMITHERS, B.C. CANADA V0J 2N0  
TELEPHONE (604) 847-3004  
FAX (604) 847-3005

Assay Certificate

2V-0497-WA1

Company: **GOWER THOMPSON & ASSOC. LTD.**  
Project: **GETTY**  
Attn: **STEPHEN C. GOWER**

Date: **JUN-18-92**  
Copy 1. **GOWER THOMPSON & ASSOC. LTD. VANCOUVER**

*We hereby certify* the following Assay of 17 WATER samples submitted JUN-11-92 by S. C. GOWER.

Sample Number	SO4 MG/L	PH %	*S.S. MG/L
92-01 A	5	7.21	9
92-01 B	6	7.25	<1
92-01 C	6	7.20	8
92-01 D	4	7.51	1
92-01 E	4	7.49	<1
92-01 F	4	7.33	2
92-01 G	3	6.90	8
92-01 H	8	7.35	31
92-01 I	10	8.45	11
92-01 J	3	6.99	<1
92-01 K	2	7.00	<1
92-01 L	3	6.64	3
92-01 M	5	7.15	14
92-01 N	3	7.41	5
92-01 O	4	7.58	10
92-01 P	5	7.66	4
92-01 Q	3	7.51	3

\* SUSPENDED SOLIDS.

Certified by \_\_\_\_\_

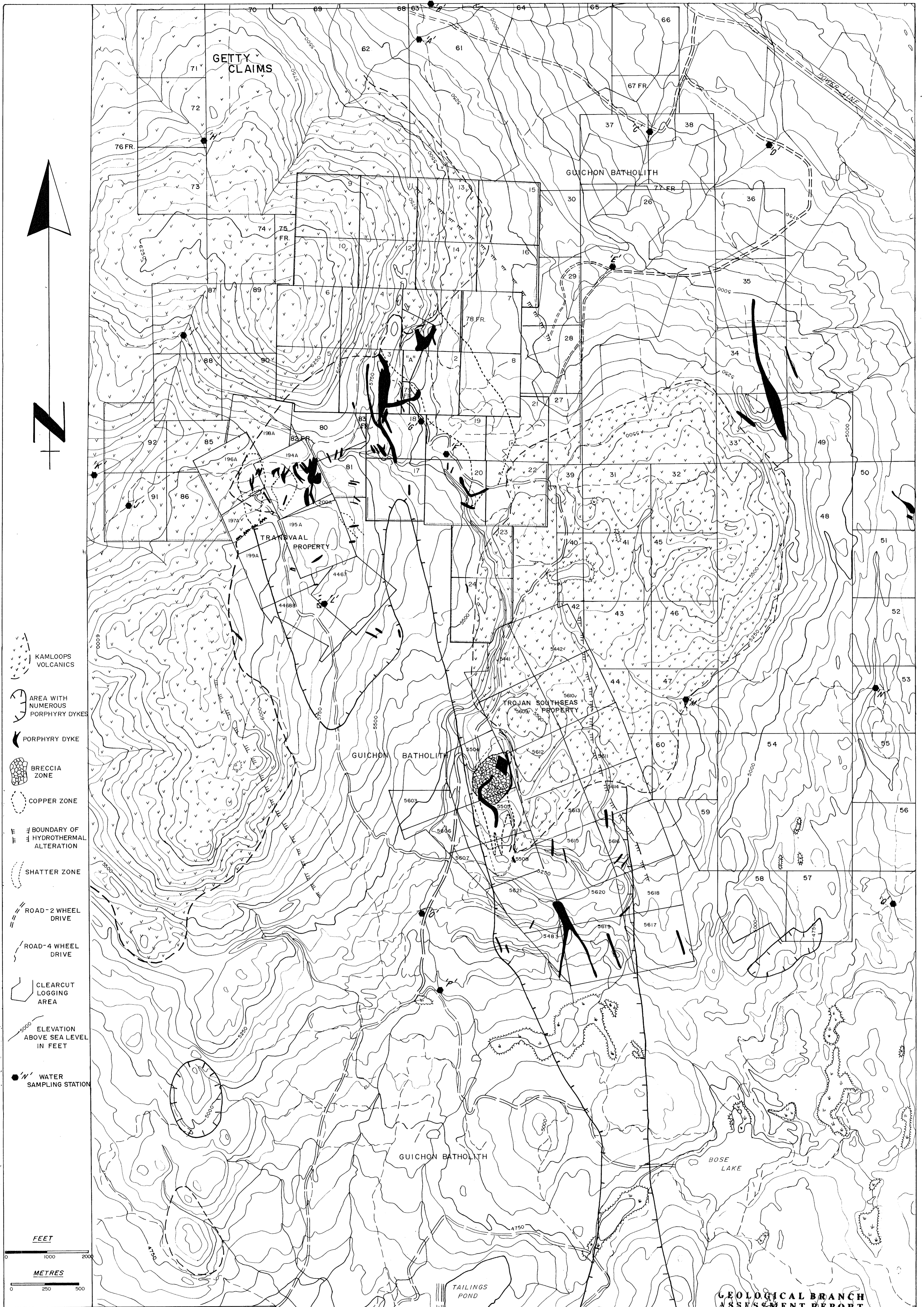


COMP: GOWER THOMPSON & ASSOC. LTD.  
 PROJ: GETTY  
 ATTN: STEPHEN C.GOWER

**MIN-EN LABS — ICP REPORT**  
 705 WEST 15TH ST., NORTH VANCOUVER, B.C. V7M 1T2  
 (604)980-5814 OR (604)988-4524

FILE NO: 2V-0497-WJ1  
 DATE: 92/06/17  
 \* WATER \* (ACT:WATER)

SAMPLE NUMBER	AG PPM	AL PPM	AS PPM	B PPM	BA PPM	BE PPM	BI PPM	CA PPM	CD PPM	CO PPM	CR PPM	CU PPM	FE PPM	K PPM	LI PPM	MG PPM	MN PPM	MO PPM	NA PPM	NI PPM	P PPM	PB PPM	SB PPM	SE PPM	SI PPM	SN PPM	SR PPM	TI PPM	V PPM	ZN PPM
92-01 A	.003	.47	.08	.01	.010	.0002	.002	7.34	.001	.005	.015	.002	.39	1.71	.01	4.10	.005	.004	2.09	.005	.17	.002	.006	.035	18.68	.002	.052	.020	.012	.001
92-01 B	.004	.49	.11	.01	.015	.0002	.010	10.80	.001	.005	.015	.002	.52	2.82	.01	5.08	.005	.002	2.87	.010	.16	.004	.012	.030	21.77	.002	.060	.022	.016	.001
92-01 C	.001	.03	.10	.01	.025	.0001	.002	27.50	.002	.005	.010	.002	.39	3.53	.01	9.52	.225	.002	4.46	.005	.26	.012	.002	.035	20.07	.002	.098	.002	.006	.001
92-01 D	.001	.12	.05	.01	.015	.0001	.002	18.40	.001	.005	.005	.004	.13	2.29	.01	4.82	.005	.004	2.77	.015	.15	.004	.004	.035	15.20	.002	.058	.010	.008	.001
92-01 E	.001	.07	.05	.01	.020	.0001	.002	17.70	.001	.005	.005	.008	.08	2.13	.01	4.37	.010	.002	2.54	.005	.16	.002	.002	.035	14.64	.002	.060	.004	.009	.002
92-01 F	.001	.61	.06	.01	.045	.0001	.002	16.95	.002	.005	.005	.064	.32	1.22	.01	2.59	.010	.006	2.01	.005	.12	.002	.002	.035	12.11	.002	.042	.016	.006	.007
92-01 G	.001	.52	.06	.01	.025	.0001	.002	9.68	.001	.005	.005	.002	.18	2.03	.01	3.91	.005	.004	2.25	.005	.14	.004	.002	.015	18.46	.002	.046	.018	.006	.001
92-01 H	.001	6.16	.04	.01	.070	.0001	.002	7.29	.001	.005	.015	.002	3.59	3.56	.01	3.49	.040	.004	2.43	.005	.22	.002	.002	.035	34.47	.002	.058	.318	.015	.002
92-01 I	.002	1.58	.03	.01	.030	.0001	.002	7.21	.001	.005	.015	.002	1.16	2.69	.01	2.91	.020	.002	2.53	.015	.12	.002	.008	.015	21.57	.002	.042	.072	.014	.021
92-01 J	.002	1.42	.05	.01	.015	.0001	.012	5.14	.002	.005	.010	.002	.73	2.03	.01	2.38	.005	.004	1.91	.005	.18	.002	.008	.020	20.38	.002	.038	.064	.008	.005
92-01 K	.004	10.54	.11	.01	.040	.0001	.022	7.01	.001	.005	.025	.010	5.47	2.69	.01	4.04	.025	.006	2.48	.020	.33	.020	.016	.065	42.24	.004	.052	.498	.018	.026
92-01 L	.002	.09	.08	.01	.020	.0001	.002	7.51	.002	.005	.010	.020	.17	.86	.01	1.78	.010	.002	1.63	.005	.07	.002	.002	.015	6.95	.002	.038	.006	.005	.023
92-01 M	.002	.05	.06	.01	.010	.0001	.002	15.39	.001	.005	.005	.002	.09	1.09	.01	4.50	.005	.004	3.75	.005	.08	.002	.002	.030	11.76	.002	.092	.004	.006	.024
92-01 N	.001	.01	.02	.01	.050	.0001	.002	53.08	.002	.005	.005	.002	.10	1.97	.01	9.28	.040	.002	4.58	.005	.09	.014	.002	.050	11.88	.002	.076	.002	.006	.007
92-01 O	.001	.01	.04	.01	.030	.0001	.002	23.93	.004	.005	.010	.028	.05	1.55	.01	3.30	.010	.004	2.75	.005	.07	.018	.004	.040	11.71	.002	.046	.002	.006	.021
92-01 P	.001	.01	.05	.01	.030	.0001	.002	23.54	.001	.005	.005	.016	.01	1.22	.01	3.24	.005	.006	2.71	.005	.12	.002	.002	.025	11.69	.002	.044	.002	.005	.001
92-01 Q	.001	.01	.04	.01	.020	.0001	.002	38.33	.001	.005	.005	.002	.39	1.77	.01	6.24	.175	.002	4.22	.005	.06	.016	.002	.035	12.83	.002	.060	.002	.005	.017



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DRAWN BY: E. THOMPSON, S. GOWER      DATE: JUNE, 1990. A09 47/92  
FIG. 4      SCALE: 1:12500

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ASSESSMENT REPORT

22,481

WATER QUALITY SURVEY