

GEOCHEMICAL REPORT

GOLD PATHFINDER TRACE ELEMENT

GEOCHEMISTRY

on the

RIDGE AREA

LOG NO: 0815	RD.
ACTION:	
FILE NO:	

JAMBOREE PROPERTY

CARIBOO MINING DIVISION

NTS 93A/7W

LATITUDE 52° 15' W  
LONGITUDE 122° 50' W

SUB-RECORDER  
RECEIVED  
AUG 10 1990  
M.R. # ..... \$.....  
VANCOUVER, B.C.

for

IMPERIAL METALS CORPORATION

DENNIS GORC  
AUGUST, 1990  
VANCOUVER, B.C.

GEOLOGICAL  
BRANCH  
ASSESSMENT  
REPORT

20,194

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1.0 INTRODUCTION

Previous work on the Ridge area had established several gold and arsenic soil anomalies as well as VLF electromagnetic anomalies. Many of these anomalies were coincident with each other.

Soil samples from this area were analysed for gold pathfinder trace elements: arsenic, antimony, bismuth, germanium, selenium, tellurium and mercury. Aim of program was to further investigate the geochemical and geophysical anomalies of previous programs. Previous anomalies which were also anomalous in the above elements would become more attractive gold targets.

2.0 CLAIM DATA

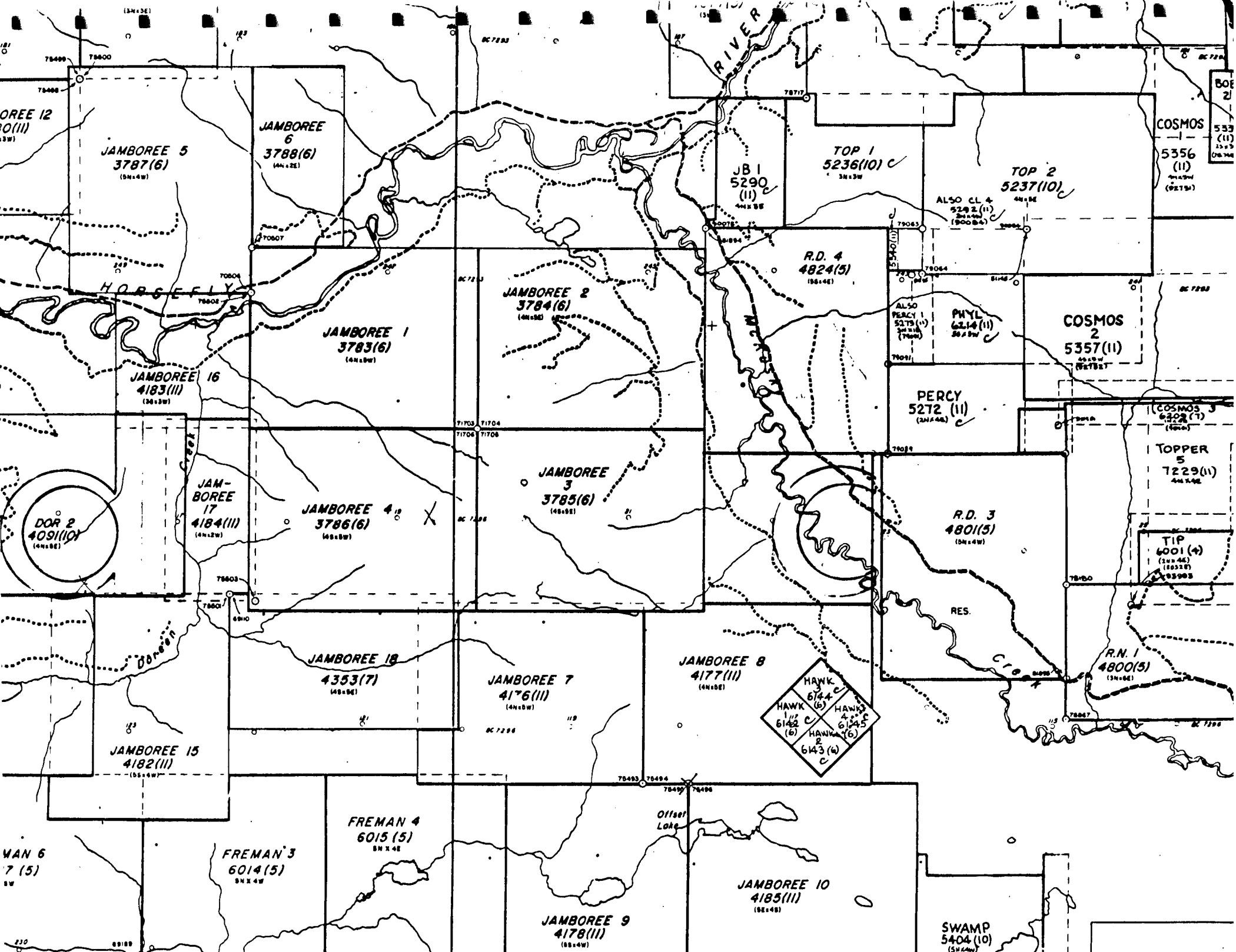
The Jamboree claim block consists of 18 modified grid claims totalling 290 units. These claims are listed as owned by Imperial Metals Corporation, but are subject to a joint venture partnership which also includes Geomex Development Inc., Ruanco Enterprises Ltd., and International Display Corporation.

As of June 24, 1988 the Jamboree property has been divided into the following groups for assessment purposes:

<u>Group 1</u>	<u>Claim Name</u>	<u># of Units</u>
	Jamboree 1	20
	Jamboree 2	20
	Jamboree 3	20
	Jamboree 4	20
	Jamboree 18	<u>20</u>
		<u>100 units</u>

<u>Group 2</u>	<u>Claim Name</u>	<u># of Units</u>
	Jamboree 5	20
	Jamboree 6	8
	Jamboree 12	9
	Jamboree 13	9
	Jamboree 14	9
	Jamboree 15	20
	Jamboree 16	9
	Jamboree 17	<u>8</u>
		<u>92 units</u>

<u>Group 3</u>	<u>Claim Name</u>	<u># of Units</u>
	Jamboree 7	20
	Jamboree 8	20
	Jamboree 9	20
	Jamboree 10	20
	Jamboree 11	<u>20</u>
		<u>100 units</u>



JAMBOREE 5  
3787(6)  
(5N14W)

JAMBOREE 6  
3788(6)  
(4N12E)

TOP 1  
5236(10)  
3N13W

TOP 2  
5237(10)  
4N13E

COSMOS  
5356  
(11)  
(213W)  
(9219)

JB 1  
5290  
(11)  
4N12 SE

ALSO CL. 4  
5292 (11)  
3N13W  
(900 SW)

R.D. 4  
4824(5)  
(5N14E)

ALSO PERCY  
5275 (11)  
3N13W  
(7000)

PHYL  
(6214 (11)  
5N13W

COSMOS  
2  
5357(11)  
4N13W  
(9219)

JAMBOREE 2  
3784(6)  
(4N12E)

JAMBOREE 1  
3783(6)  
(4N12W)

JAMBOREE 16  
4183(11)  
(3N13W)

COSMOS 3  
5358 (11)  
(5N14E)

TOPPER  
5  
7229(11)  
4N13E

JAMBOREE 17  
4184(11)  
(4N12W)

JAMBOREE 4  
3786(6)  
(4N12W)

JAMBOREE 3  
3785(6)  
(4N12E)

PERCY  
5272 (11)  
(2N14E)

R.D. 3  
4801(5)  
(5N14W)

TIP  
6001 (4)  
(2N14E)  
(1052E)  
5359B

DOR 2  
4091(10)  
(4N12E)

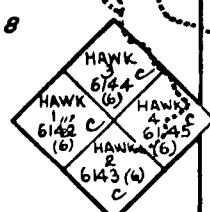
JAMBOREE 18  
4353(7)  
(4N12E)

JAMBOREE 7  
4176(11)  
(4N12W)

JAMBOREE 8  
4177(11)  
(4N12E)

RES.

R.N. 1  
4800(5)  
(5N14E)



JAMBOREE 15  
4182(11)  
(5N14W)

FREMAN 4  
6015 (5)  
5N14E

Offshore  
LOAG

JAMBOREE 10  
4185(11)  
(5N14E)

FREMAN 3  
6014(5)  
5N14W

JAMBOREE 9  
4178(11)  
(5N14W)

SWAMP  
5404 (10)  
(5N14W)

FREMAN 6  
7 (5)  
SW

TABLE 1 - CLAIM DATA

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<u>Name</u>		<u>Units</u>	<u>Record No.</u>	<u>Record Date</u>
Jamboree	1	20	3783 (6)	24/06/81
Jamboree	2	20	3784 (6)	24/06/81
Jamboree	3	20	3785 (6)	24/06/81
Jamboree	4	20	3786 (6)	24/06/81
Jamboree	5	20	3787 (6)	24/06/81
Jamboree	6	8	3788 (6)	24/06/81
Jamboree	7	20	4176 (11)	26/11/81
Jamboree	8	20	4177 (11)	26/11/81
Jamboree	9	20	4178 (11)	26/11/81
Jamboree	10	20	4185 (11)	26/11/81
Jamboree	11	18	4179 (11)	26/11/81
Jamboree	12	9	4180 (11)	26/11/81
Jamboree	13	9	4181 (11)	26/11/81
Jamboree	14	9	4186 (11)	26/11/81
Jamboree	15	20	4182 (11)	26/11/81
Jamboree	16	9	4183 (11)	26/11/81
Jamboree	17	8	4184 (11)	26/11/81
Jamboree	18	20	4353 (7)	12/07/82

### 3.0 LOCATION, ACCESS AND TOPOGRAPHY

The Jamboree property is situated approximately 85 km east of Williams Lake, B.C. in the Cariboo Mining Division. The claims straddle the Horsefly River near its junction with McKusky Creek. The latitude is 52°15'N and longitude is 120°50'W on NTS map sheet 93A/7W.

Access is by an all-weather logging road from the town of Horsefly, 20 km to the west. Secondary logging roads provide good access to peripheral areas of the claims, including the North Grid and Offset Grid areas.

The Jamboree claims are located in the western foothills of the Cariboo Mountains. Elevations range between 900 meters on the Horsefly River to 1700 meters on the Ridge area in the central portion of the claim group. Much of the lower areas have been logged providing good exposure while the mature forests on the upper mountain slopes allow good walking. The central Ridge Area is relatively flat with several marshes and swamps among large stands of evergreen.

### 4.0 EXPLORATION HISTORY

The Jamboree claims 1-6 were staked in June, 1981 in response to the release of geochemical data by the British Columbia Government indicating the area was anomalous in arsenic. The Jamboree 7-17 claims were staked in October, 1981 after additional soil and silt sampling was carried out in the region. The Jamboree 18 claim was staked in July, 1982 to fill in open ground between Jamboree 7 and 15.

The 1982 exploration program began with the establishment of a geochemical sampling grid on the central area of the claim block. Reconnaissance lines were run elsewhere. Results were encouraging with several gold-arsenic anomalies outlined. One rock sample from outcrop in the Doreen lake area assayed 0.121 oz/ton Au over 1 meter.

In 1983 the geochemical grid was expanded to cover a much larger portion of the claim group. The original grid's baseline was extended to the Horsefly River in the northwest and to the Jamboree 11 claim in the southeast corner of the claim block.



A program of soil and rock geochemical sampling and geological mapping was carried out. A total of 1760 soil samples were taken of which 103 returned gold values of greater than 25 ppb. The maximum value obtained was 5250 ppb Au. Over the course of geological mapping 230 rock chip samples were taken and geochemically analysed.

During July 1983 an airborne magnetometer and EM survey was completed. Results of this initial phase of exploration outlined three major target areas warranting further exploration. A trenching and subsequent rotary/percussion drilling program was carried out on the Doreen Creek area (Jamboree 15 claim block) and the Offset Lake area (Jamboree 8 and 10). This phase of exploration yielded encouraging results including two trench samples at Doreen Lake which ran 0.145 and 0.118 oz/t Au over 2 meters. The third exploration target outlined was the Ridge area which includes most of Jamboree 1, 3, 4 and 7 claims. In the Ridge area geochemical soil sampling outlined several areas of anomalous gold and arsenic. A large soil anomaly along a creek on the north-central area of Jamboree 4 also yielded high Au values from outcrop exposed along the canyon walls.

In June 1987 a VLF electromagnetic and magnetometer survey was completed along 17 kilometers of new grid on the above Ridge area. In addition, 639 soil samples and 31 rock samples were collected.

In October 1987 grids were completed in the Offset Lake and North Horsefly areas. A total of 385 soil samples were taken on the North Grid and outlined several weak gold anomalies.

A total of 562 soil samples were taken on the Offset Grid. Results from the soil sampling defined soil anomalies for gold, copper, arsenic, nickel and chromium.

In 1988 induced polarization surveys were completed over the Ridge, Doreen and Offset target areas. Several anomalous zones were outlined. In addition four diamond drill holes (417.5 m) tested geophysical/geochemical targets on the Doreen and Offset target areas. Two drill holes (320 m) in the Offset target area returned a high of 880 ppb Au over 2.1 m from a chloritized fault zone.

Two diamond drill holes (194.1 m) completed on the Doreen grid returned a high of 610 ppb Au over 1.4 m.

In 1989 14 km of magnetometer-VLF electromagnetic surveys were completed on the Doreen grid outlining possible east-west conductors.

## 5.0 REGIONAL GEOLOGY

The Jamboree claims lies within the Quesnel Trough, a narrow tectonic depression in which Mesozoic sedimentary and volcanic rocks were deposited. The Trough extends from the U.S. border to 57°N latitude.

In the vicinity of the Jamboree property the Quesnel Trough is fault-bounded to the west by the Paleozoic Cache Creek Group and to the east by Paleozoic and Precambrian strata. The prevailing structural trend is northwesterly.

The Quesnel Trough is the host for several important gold and copper-gold deposits included the Cariboo-Bell deposit (100,000,000 tons grading 0.37% Cu and 0.015 oz/ton Au); QR deposit (950,000 tons grading 0.21 oz/ton); Ingerbelle-Copper Mountain (200,000,000 tons grading 0.5% Cu, 0.005 oz/ton Au).

## 6.0 PROPERTY GEOLOGY

### 6.1 Lithologies

The Jamboree claim group is underlain by an Upper Triassic - Lower Jurassic volcanoclastic - sedimentary assemblage assigned to the Quesnel River Group by Campbell (G.S.C. open file 544, 1978).

The regional bedding trend strikes north to the northwesterly with moderate to steep easterly dips. Regional metamorphism increases in intensity to the east where interbedded tuffs and argillites have been converted to phyllites.

The rocks underlying the property have been divided into three main units based largely upon field geological mapping carried out by G. Richards and R. Simpson from June 9 to October 15, 1983. These are a lower tuff-argillite sequence, a middle volcanic breccia zone and an upper, predominantly argillitic sequence. The lower unit is intruded by a dioritic stock and associated andesitic sills and/or dykes assigned to a fourth unit.

The lower part of the unit 1 assemblage is exposed near Doreen Creek and consists of interbedded and commonly laminated, argillites and tuffs. The rocks are virtually unmetamorphosed with the exception of a hornfels halo developed around a dioritic stock. Equivalent rocks exposed north of the Horsefly River are cherty tuffs overlain by laminated tuffs with occasional lapilli tuff horizons.

Higher in the section, resistant andesitic tuffs, including minor crystal and lapilli tuff, form cliffs and knobs on the upper slopes of the central hill. These are overlain by more recessive interbedded tuff and argillite with minor volcanoclastic sandstone near the top.

Massive uniform andesite containing hornblende needles 1-4 mm long and aphanitic, dark green andesite containing small (.5 mm) hornblende crystals and no readily discernable breccia texture. These rock types are commonly foliated and chloritized.

The andesite breccia is overlain by unit 3, a predominantly sedimentary sequence of black to brownish argillite and shaly phyllite with minor interbedded phyllitic tuff. This unit is recessive and poorly exposed.

In the Doreen lake vicinity, argillites and tuffs of unit 1 have been intruded by a fine grained diorite stock resulting in a hornfels halo extending 200 to 300 meters from the contact exposed in two creek beds east of Doreen Creek. Hornfels development is more widespread on the hillside north of Doreen Lake. The diorite and related hornblende andesite - microdiorite sills and/or dykes are assigned to unit 4 but may be contemporaneous with the andesite breccia of unit 2.

The presence of numerous, sub-angular, glacial float boulders combined with a prominent magnetic anomaly located southeast of Offset Lake, indicates the presence of a gabbro-hornblendite body. Thick glacial deposits cover this area and no outcroppings have been uncovered.

Unit 1 is conformably overlain by a resistant andesite breccia zone (unit 2) which varies from 150 to 300 meters in thickness. On top of the central hill, fragments of the andesite breccia are of two types; andesite fragments characterized by tabular hornblende crystals 4 to 10 mm long and 3 to 5 mm wide; and andesite fragments with acidular hornblende crystals 1 mm wide and 3 to 4 mm in length. The size of the clasts is generally greater than 10 cm in diameter but decreases to 1 cm

within 100 m of the top. Graded bedding is more evident in the top 100 m with fragments decreasing in size to less than 3 mm within 50 m of the top. A dust tuff horizon, normally less than 10 m in thickness, occurs with fragments decreasing in size to less than 3 mm within 50 m of the top. A dust tuff horizon, normally less than 10 m in thickness, occurs at the top of unit 2. Finer grained lenses occur within the coarser breccias and the most southeasterly outcrops of this unit. In the Offset lake area, the andesite breccia typically contain 10% dioritic fragments with some gabbro and hornblendite fragments in a microdiorite matrix. Fragments are extremely angular and vary widely in diameter from a few centimeters to several decimeters.

## 6.2 Hydrothermal Alteration

Ankerite is the most widespread alteration mineral on the property. It occurs in all rock types but is most commonly associated with fault zones and with silicified phyllite zones of unit 1 northeast of Offset Lake.

Quartz veins cut all units and silicification is common within argillite and argillite-tuff sequences of units 1 and 3. Strongly silicified zones occur in unit 1 rocks below the andesite breccia contact. Large quartz vein fragments exceeding 1 m in width lie in a logged clearing near the southeast corner of the Jamboree 8 claim near recessive outcroppings of unit 3.

Mariposite commonly occurs with ankerite and quartz in silicified phyllites near Offset Lake and in float boulders on the Jamboree 5 claims north of the Horsefly River.

Weak to moderate chlorite alteration of hornblende is widespread in units 2 and 4. Stronger chloritization is associated with fault zones.

Epidote alteration is mainly confined to the andesite breccia in the Offset Lake area. Strongly epidotized boulders occur in old glacial moraines east of Offset Lake.

Gypsum commonly coats fractures and bedding surfaces of argillite in the Doreen Creek area.

## 7.0 SOIL GEOCHEMISTRY

### 7.1 Introduction

A total of 158 soil samples from the Ridge grid were submitted to Acme Labs of Vancouver for analysis of several gold pathfinder trace elements: arsenic, antimony, bismuth, germanium, selenium, tellurium and mercury. Acme Labs used a hybrid ICP technique to test for all the above elements except mercury. Mercury was tested by flameless atomic absorption.

The above elements are often associated with many types of gold deposits and it was hoped that anomalous values of such elements would enhance previous geochemical and geophysical targets and provide further definition of gold targets.

The samples submitted were from lines 97N, 99N, 101N and 108N on the Ridge grid. Since this is only a portion of the Ridge grid, the definition of geochemical patterns and possible conclusions will be limited. This program is meant as a further geochemical investigation of the area.

### 7.2 Results

The most significant values were those of arsenic and antimony which included several anomalous values. Bismuth, germanium, selenium, tellurium and mercury also returned several high values. Arsenic/mercury results are given in Figure (5), selenium/tellurium results are given in Figure (6).

<u>Arsenic</u>	Range 2.1 - 543.9 ppm Anomalous > 200 ppm
<u>Antimony</u>	Range 0.1 - 25.2 ppm Anomalous > 10 ppm
<u>Bismuth</u>	Range 0.1 - 2.7 ppm
<u>Germanium</u>	Range 0.1 - 2.0 ppm
<u>Selenium</u>	Range 0.1 - 4.7 ppm
<u>Tellurium</u>	Range 0.1 - 1.3 ppm
<u>Mercury</u>	Range 10 - 220 ppb

TABLE 2 - SIGNIFICANT GOLD PATHFINDER  
TRACE ELEMENT GEOCHEMISTRY - RIDGE GRID

<u>Element</u>	<u>Grid Location</u>	<u>Value (ppm)</u>
Arsenic	108N 100+50E	403
	108N 98+00E	401
	99N 97+25E	413
	99N 99+50E	543
Antimony	108N 103+75E	25.2
	108N 98+00E	19.2
Bismuth	108N 100+00E to 100+75E	1.7 to 1.9
	L101N 103+50E	1.7
	L99N 96+75E	1.7
Germanium	97N 101+25E to 101+75E	1.1 to 1.3
Selenium	108N 101+25E	2.5
	108N 95+00E	4.6
	101N 103+50E to 104+25E	2.1 to 2.5
	99N 96+75E	4.7
Tellurium	108N 100+00E	1.3
	408N 98+00E	1.2
Mercury	99N 96+75E	200
	101N 97+75E	220
	108N 95+00E	210

A comparison of the above geochemical results with the previous gold geochemistry reveal several coincident anomalous values.

<u>Grid Location</u>	<u>Au (ppb)</u>	<u>Significant Pathfinder Geochemistry</u>
L108N 101+25E	270	As, Bi, Sb, Se, Te
L108N 101+50E	96	Sb, Se, Te
L108N 98+00E	87	As, Sb, Te
L99N 97+25E	128	As, Sb, Bi, Se, Te, Hg

## 8.0 COMPILATION OF EXPLORATION RESULTS - RIDGE GRID

A compilation of previous exploration results on the Ridge grid is given on Figure 7.

Included on the map are the location of the following results.

- (a) induced polarization - chargeability
- (b) induced polarization - resistivity
- (c) VLF - electromagnetic
- (d) Magnetometer
- (e) Soil geochemical - gold (30 ppb, 100 ppb)
- (f) Soil geochemical - arsenic (200 ppm)
- (g) Geology

One notes that several of the above anomalies are coincident suggesting that further work be done in these areas.

One notes that several of the induced polarization chargeability occur within the volcanic andesite breccia unit suggesting possible stratabound sources for these anomalies. Similar anomalies were indicated in the Offset Lake area of the Jamboree property which is underlain by similar stratigraphy to that of the Ridge grid. At Offset Lake partial drill testing suggested that stratabound graphitic and pyritic zones were the source for the chargeability highs.

One should note however that crosscutting VLF electromagnetic conduction also occur within these chargeability highs and may provide an additional or alternate source for the chargeability.

## 9.0 CONCLUSIONS

Analysis of gold pathfinder elements: As, Sb, Bi, Ge, Te, Hg all included some significant values.

Plotting of results indicate east-west trends similar to previously outlined in geochemical and geophysical surveys. Many of the anomalies are coincident with previous anomalies.

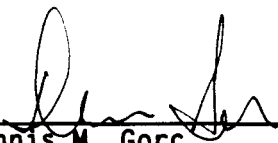
Compilation of all exploration to date indicate several coincident geochemical and geophysical anomalies which require further investigation. Detailed mapping, trenching and diamond drilling will be required to test these anomalies.

10.0 STATEMENT OF QUALIFICATIONS

I, DENNIS M. GORC, residing at 406 - 1176 Falcon Drive in Coquitlam, British Columbia, V3E 2N8 state that:

1. I graduated from Queen's University, Kingston, Ontario with a B.Sc. (Eng.) degree in mineral exploration in May 1976;
2. Since 1976, I have supervised mineral exploration programs in British Columbia, North West Territories, Manitoba and Ontario;
3. I am present employed as a geologist with Imperial Metals Corporation, Suite 800 - 601 West Hastings Street in Vancouver, British Columbia;
4. I supervised the work on the Jamboree property.

DATED this 9 of August, 1990.

  
\_\_\_\_\_  
Dennis M. Gorc  
IMPERIAL METALS CORPORATION  
Vancouver, British Columbia



11.0 REFERENCES

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A P P E N D I X I

GEOCHEMICAL ANALYSES

### GEOCHEMICAL ICP ANALYSIS

.500 GRAM SAMPLE IS DIGESTED WITH 3ML 3-1-2 HCL-HNO3-H2O AND .2 ML HF AT 95 DEG.C FOR ONE HOUR AND IS DILUTED TO 10 ML WITH WATER.  
 ANALYSIS BY HYDRIDE ICP. GE - PARTIAL LEACHED.  
 - SAMPLE TYPE: SOIL PULP HG ANALYSIS BY FLAMELESS AA.

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

Imperial Metals Corporation PROJECT 6307 FILE # 89-4678 Page 1

SAMPLE#	As PPM	Sb PPM	Bi PPM	Ge PPM	Se PPM	Te PPM	Hg PPB
108+00N 100+00E	50.9	1.9	1.7	.7	.6	1.3	80
108+00N 100+25E	72.7	2.7	2.7	.2	.4	1.1	70
108+00N 100+50E	403.5	5.2	1.8	.4	.5	.8	80
108+00N 100+75E	197.6	2.9	1.9	.8	.2	.8	60
108+00N 101+00E	219.5	6.1	1.1	.3	1.0	.5	40
108+00N 101+25AE	274.2	11.6	1.0	.2	1.9	.8	70
108+00N 101+25BE	189.7	10.8	.9	.4	2.5	.8	50
108+00N 101+50E	141.3	5.6	1.0	.3	1.2	.4	40
108+00N 101+75E	101.1	6.6	.6	.1	1.5	.2	50
108+00N 102+00E	71.6	5.7	.8	.5	.6	.4	60
108+00N 102+25E	53.2	1.7	1.1	.5	.1	.1	40
108+00N 102+50E	29.0	.3	.7	.7	.1	.2	20
108+00N 102+75E	44.1	1.4	1.1	.6	.1	.3	80
108+00N 103+00E	12.6	.1	.3	.7	.1	.2	40
108+00N 103+25E	109.8	2.5	.9	.6	.1	.1	50
108+00N 103+50E	61.3	5.5	.9	.7	.1	.3	110
108+00N 103+75E	154.9	25.2	1.3	.4	.4	.5	80
108+00N 104+00E	32.2	.6	1.0	.5	.3	.4	70
108+00N 104+25E	9.7	.3	.4	.5	.1	.2	90
108+00N 104+50E	18.6	.8	.4	.2	.1	.1	50
108+00N 104+75E	17.1	3.1	.5	.3	.7	.1	60
108+00N 105+00E	14.9	1.1	.6	.7	.3	.1	40
101+00N 100+00E	7.0	.1	.7	.8	.1	.2	50
101+00N 100+25E	16.8	.8	.5	.5	.2	.3	80
101+00N 100+50E	8.9	.1	.5	.9	.1	.2	70
101+00N 100+75E	9.0	.9	1.1	.9	.2	.7	40
101+00N 101+00E	20.0	.9	.8	.5	.2	.2	50
101+00N 101+25E	8.6	.2	.5	.7	.1	.2	30
101+00N 101+50E	53.3	1.6	.6	.7	.2	.3	50
101+00N 101+75E	24.3	.2	.1	.5	.1	.2	40
101+00N 102+00E	169.5	1.3	1.3	.5	1.0	.2	140
101+00N 102+25E	56.3	.9	1.2	.5	.1	.2	60
101+00N 102+50E	12.5	.7	.4	.7	.1	.3	40
101+00N 102+75E	43.7	.8	.5	.8	.1	.1	50
101+00N 103+00E	10.2	.1	.3	.7	.1	.1	30
101+00N 103+25E	40.8	1.2	.7	.5	1.0	.3	80

SAMPLE#	As PPM	Sb PPM	Bi PPM	Ge PPM	Se PPM	Te PPM	Hg PPB
101+00N 103+50E	19.8	1.0	1.7	.6	2.5	.3	180
101+00N 103+75E	156.3	1.1	1.2	.8	2.3	.4	100
101+00N 104+00E	45.3	1.9	.5	.5	2.5	.1	70
101+00N 104+25E	23.2	1.4	.8	.7	2.1	.1	80
101+00N 104+50E	15.8	.6	.7	.5	.2	.1	100
101+00N 104+75E	8.7	.5	.6	.8	.3	.1	40
101+00N 105+00E	2.1	.1	.6	.9	.1	.2	30
99N 95+00E	35.9	1.3	.9	.7	1.0	.2	60
99N 95+25E	30.9	1.2	1.0	.7	.6	.1	50
99N 95+50E	30.5	1.1	.9	.5	.6	.1	30
99N 95+75E	15.8	.6	1.0	.5	.1	.1	60
99N 96+00E	25.3	.7	.5	.5	.6	.1	30
99N 96+25E	20.3	.9	.5	.5	.3	.1	40
99N 96+50E	30.6	1.2	.9	.3	.5	.1	130
99N 96+75E	24.2	.9	1.7	.7	4.7	.1	200
99N 97+00E	50.3	1.1	1.0	.7	1.1	.3	30
99N 97+25E	413.4	12.1	1.1	.4	2.5	.8	120
99N 97+50E	140.1	2.1	.6	.7	.4	.4	80
99N 97+75E	47.0	2.3	.6	.6	.6	.2	70
99N 98+00E	15.5	.6	.5	.9	.4	.3	90
99N 98+25E	25.7	.9	.5	1.1	.3	.1	100
99N 98+50E	21.1	1.3	.7	.9	1.5	.2	180
99N 98+75E	224.3	3.9	.6	.4	.8	.1	70
99N 99+00E	58.3	.9	.7	.7	2.0	.1	110
99N 99+25E	122.7	1.1	1.0	.8	2.2	.2	190
99N 99+50E	543.9	9.2	.8	.6	.5	.8	90
99N 99+75E	19.5	.1	.5	.9	.2	.5	40
99N 100+00E	269.8	1.0	1.0	.6	.2	.5	30
99N 100+25E	42.6	.9	1.0	1.0	.1	.2	60
99N 100+50E	17.7	1.0	.8	.8	.1	.3	70
99N 100+75E	29.9	.9	.5	.9	.6	.2	50
99N 101+00E	11.4	.1	.7	.7	.3	.1	40
99N 101+25E	12.3	1.0	.8	1.0	.3	.4	70
99N 101+50E	16.7	.8	.4	.4	.2	.1	60
99N 101+75E	14.0	1.2	.8	1.1	.2	.2	50
99N 102+00E	28.3	1.4	.6	.7	.2	.1	80

SAMPLE#	As PPM	Sb PPM	Bi PPM	Ge PPM	Se PPM	Te PPM	Hg PPB
99N 102+25E	14.5	.8	1.0	.5	.9	.5	30
99N 102+50E	34.5	.6	.7	.6	.6	.3	50
99N 102+75E	84.7	.4	.4	.4	1.0	.1	40
99N 103+00E	13.1	1.1	.5	.5	.2	.1	30
99N 103+25E	7.3	.5	.9	.6	.2	.1	30
99N 103+50E	8.3	1.3	.4	.5	.5	.1	50
99N 103+75E	3.1	1.7	.7	.6	.2	.2	100
99N 104+00E	16.0	4.8	.5	.8	.8	.2	70
99N 104+25E	11.3	1.1	.4	.5	.6	.1	60
99N 104+50E	14.7	1.6	.4	.5	.3	.1	50
99N 104+75E	10.2	2.2	.3	.3	.6	.1	60
99N 105+00E	6.7	.6	.3	.3	.2	.1	50
97N 95+00E	28.2	5.0	.4	.4	1.1	.1	60
97N 95+25E	21.5	2.5	.4	.5	1.1	.1	110
97N 95+50E	19.1	2.3	.5	.6	1.0	.2	50
97N 95+75E	56.0	5.0	.5	.7	.7	.2	130
97N 96+00E	157.0	7.6	.5	.5	1.5	.2	60
97N 96+25E	39.9	2.2	.8	.7	.4	.2	50
97N 96+50E	38.0	2.8	.7	.5	.2	.2	70
97N 96+75E	77.2	7.2	.5	.4	.7	.1	60
97N 97+00E	46.8	2.6	.4	.4	.3	.1	40
97N 97+25E	35.0	1.8	.3	.3	.3	.1	50
97N 97+50E	36.3	3.8	.5	.5	1.4	.1	130
97N 97+75E	106.3	3.4	.5	.7	.8	.1	90
97N 98+00E	264.1	8.3	.5	.5	1.9	.2	60
97N 98+25E	247.1	4.8	.7	.7	2.0	.1	120
97N 98+50E	129.9	4.9	.8	.8	1.2	.2	100
97N 98+75E	161.6	3.3	.8	.5	.7	.1	80
97N 99+00E	71.2	1.9	.5	.8	1.0	.1	60
97N 99+25E	26.0	1.4	.4	.8	.1	.2	30
97N 99+50E	16.8	.8	.3	.5	.4	.1	50
97N 99+75E	59.1	1.4	.7	.7	.2	.1	60
97N 100+00E	32.9	1.3	.3	.6	.1	.2	70
97N 100+25E	12.5	1.7	.3	.8	.3	.3	60
97N 100+50E	51.7	1.2	.4	.9	.1	.4	50
97N 100+75E	16.4	.7	.7	.8	.1	.3	40

SAMPLE#	As PPM	Sb PPM	Bi PPM	Ge PPM	Se PPM	Te PPM	Hg PPB
97N 101+00E	22.5	1.0	.8	.8	.1	.1	60
97N 101+25E	6.7	.5	.6	1.1	.1	.1	70
97N 101+50E	9.0	1.5	.9	1.3	.1	.4	180
97N 101+75E	10.2	1.2	1.0	1.2	.2	.5	40
97N 102+00E	5.3	.8	.4	1.0	.1	.3	60
97N 102+25E	9.8	1.3	.6	1.0	.2	.6	30
97N 102+50E	10.4	1.2	.8	1.1	.2	.4	30
97N 102+75E	8.3	.8	.5	1.1	.1	.3	50
97N 103+00E	16.6	1.7	.7	.8	.4	.2	40
97N 103+25E	7.9	1.2	.8	1.3	.1	.3	50
97N 103+50E	18.7	1.1	.5	1.1	.1	.3	30
97N 103+75E	60.0	.1	.6	.8	.3	.1	70
97N 104+00E	23.8	1.7	1.2	.9	1.2	.3	150

SAMPLE#	As PPM	Sb PPM	Bi PPM	Ge PPM	Se PPM	Te PPM	Hg PPB
L101N 95+00E	19.5	.7	1.0	.6	.9	.4	100
L101N 95+25E	7.2	.1	.7	1.0	.1	.1	40
L101N 95+50E	16.8	.2	.8	.6	.1	.1	10
L101N 95+75E	11.7	.1	.6	.5	.1	.1	10
L101N 96+00E	16.0	.1	.6	.7	.1	.2	50
L101N 96+25E	17.6	.1	.6	.7	.1	.2	60
L101N 96+50E	18.7	.6	.9	.8	.3	.3	40
L101N 96+75E	36.8	.7	.5	.5	.4	.2	70
L101N 97+00E	23.0	.4	.8	.8	.3	.2	60
L101N 97+25E	17.8	.1	.8	.6	.1	.1	50
L101N 97+50E	318.0	4.5	.9	.7	.5	.6	100
L101N 97+75E	274.5	13.0	1.0	.6	1.7	1.0	220
L101N 98+00E	233.9	13.1	.5	.6	.9	.8	70
L101N 98+25E	89.5	11.4	1.1	.8	1.1	1.0	60
L101N 98+50E	104.9	.7	.6	.5	.4	.1	60
L101N 98+75E	16.1	.1	.3	.6	.2	.1	50
L101N 99+00E	29.0	.8	.6	.4	2.1	.1	60
L101N 99+25E	44.8	1.4	1.0	.7	1.9	.4	90
L101N 99+50E	2.7	.1	.3	.9	.1	.5	30
L101N 99+75E	18.4	.1	.5	.4	.1	.1	60
L108N 95+00E	74.9	1.7	1.1	.6	4.6	.6	210
L108N 95+25E	57.9	2.3	1.2	.8	1.1	.7	50
L108N 95+50E	34.3	.6	.5	.9	.6	.5	30
L108N 95+75E	64.4	1.4	.5	.5	.8	.3	40
L108N 96+00E	102.3	2.5	.4	.5	.2	.1	30
L108N 96+25E	50.0	1.4	.5	.6	.3	.3	20
L108N 96+50E	72.8	2.2	.7	.6	.2	.5	30
L108N 96+75E	39.2	1.4	.4	.6	.4	.1	60
L108N 97+00E	50.9	2.5	.3	.6	.1	.2	40
L108N 97+25E	18.7	.1	.3	.7	.1	.1	50
L108N 97+50E	355.6	16.6	.7	.8	.4	1.1	60
L108N 97+75E	91.6	1.0	.4	.7	.3	.5	50
L108N 98+00E	401.2	19.2	.6	.7	.9	1.2	40
L108N 98+25E	88.7	1.3	.5	.6	.5	.4	60
L108N 98+50E	117.5	3.2	.5	.7	.6	.4	10
L108N 98+75E	172.3	5.5	.5	.5	.5	.6	30
L108N 99+00E	242.8	6.4	.5	.8	.6	.6	60



A P P E N D I X    I I

COST STATEMENT

COST STATEMENT

Gold Pathfinder Trace Element Geochemistry

RIDGE AREA

Jamboree Property, Cariboo M.D.

May 10 - June 11, 1990

Wages

D. Gorc	May 24, 25, June 11, 1990	\$ 660	
D. Johannessen	May 10, 11, 14, 15( $\frac{1}{2}$ ), 16, 17	<u>825</u>	\$1,485.00

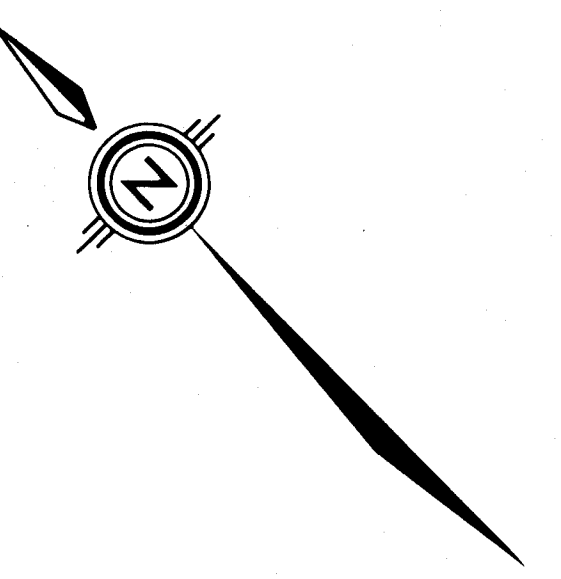
Geochemistry

158 samples hydride ICP-As, Sb, Bi, Ge, Se, Te flameless A.A. - Hg	1,137.60
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Miscellaneous

Report, drafting, computer, etc.	<u>1,000.00</u>
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TOTAL	<u><u>\$3,622.60</u></u>
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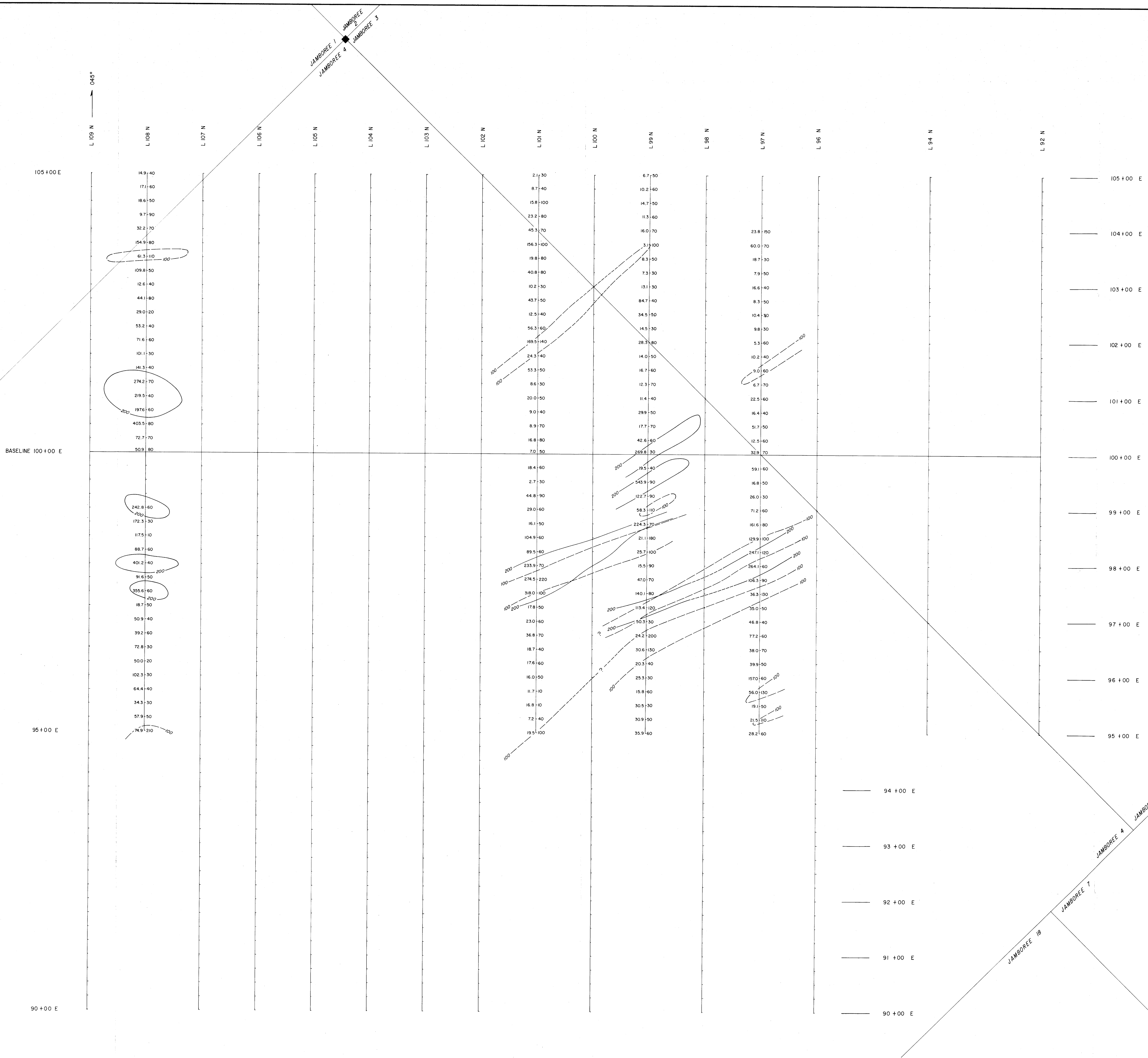
GEOLOGICAL BRANCH  
ASSESSMENT REPORT

20,194

135°

GEOLOGICAL BRANCH  
ASSESSMENT REPORT

20,194



LEGEND

- LCP
- GRID LINE, SOIL SAMPLE LOCATION
- 309.50 As (ppm)
- 200— GEOCHEMICAL ARSENIC 200 PPB CONTOURS
- 100--- GEOCHEMICAL MERCURY 100 PPB CONTOURS

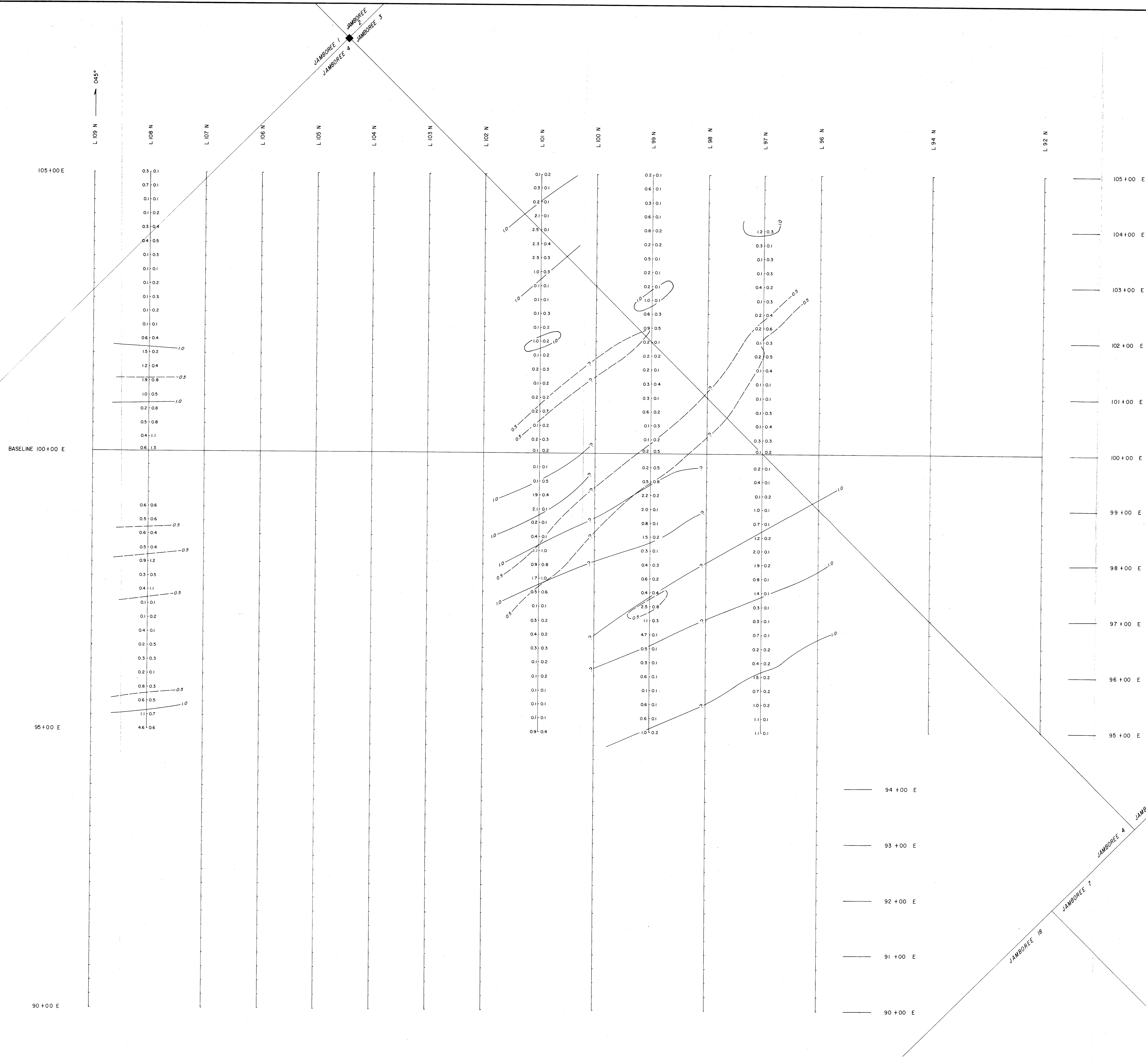
IMPERIAL METALS CORPORATION  
JAMBOREE  
CARIBOO M.D., B.C.

FIGURE 6 N.T.S. 95A 7W

**RIDGE GRID  
SOIL GEOCHEMISTRY  
ARSENIC/MERCURY**

metres 0 50 100 150 200 250

SCALE: 1:2500	GEOLOGIST: D. GORC
DATE: MAY, 1990	DRAWN BY: J. CORKUM



**LEGEND**

- LCP
- GRID LINE, SOIL SAMPLE LOCATION
- 0.1-0.4  $\frac{Se}{Te}$  (ppm/10ppm)
- 10 — GEOCHEMICAL SELENIUM 1.0 ppm CONTOURS
- - - 0.5 - - - GEOCHEMICAL TELLURIUM 0.5 ppm CONTOURS

**IMPERIAL METALS CORPORATION**  
JAMBOREE  
CARIBOO M.D., B.C.

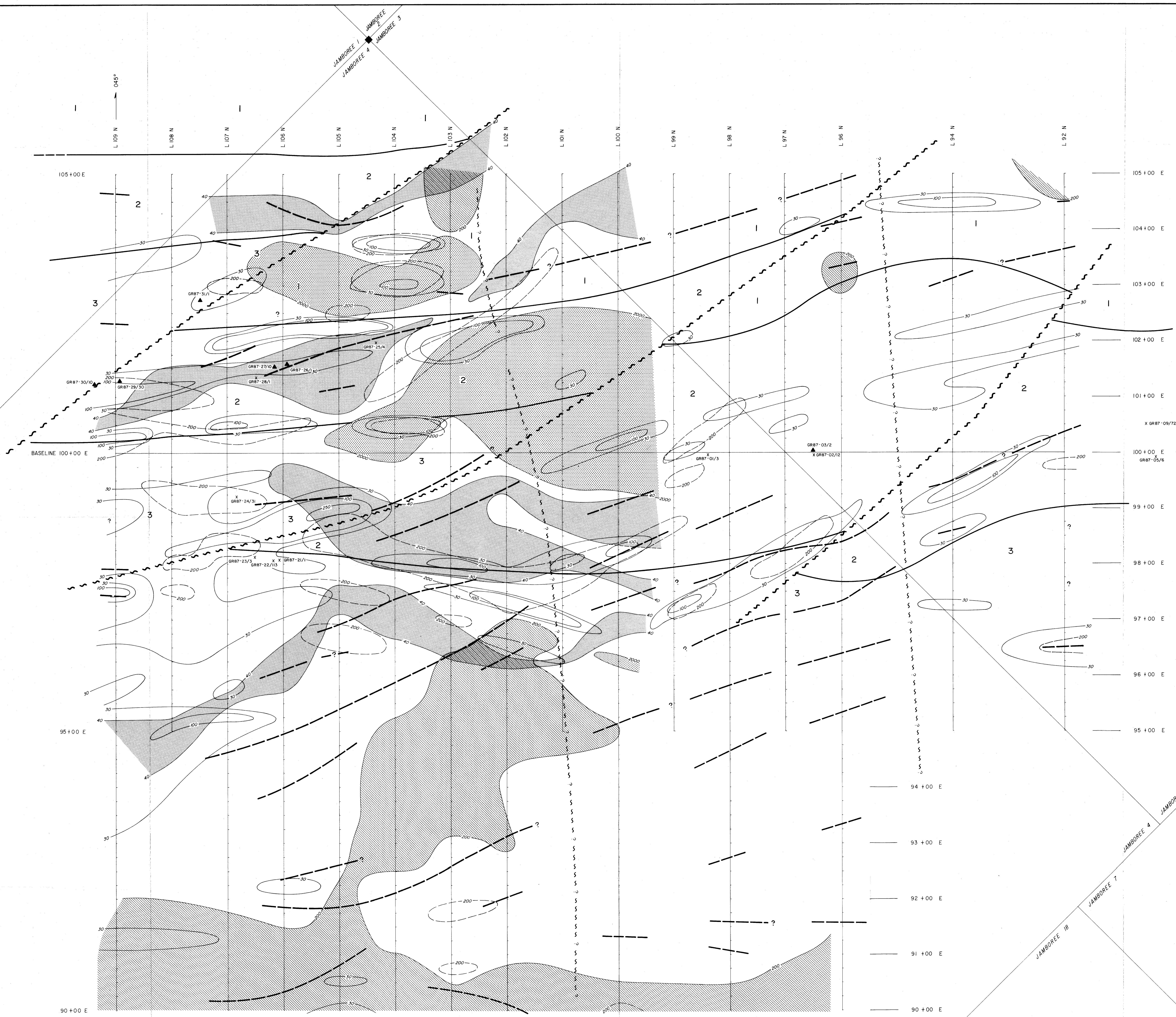
FIGURE 7  
**RIDGE GRID  
SOIL GEOCHEMISTRY  
SELENIUM/TELLURIUM**

metres 0 50 100 150 200 250

SCALE: 1:2500  
DATE: MAY, 1990

GEOLOGIST: D. GORC  
DRAWN BY: J. CORKUM





135°  
GR87-04/1  
GR87-06/2 X GR87-07/10  
GR87-08/1

**LEGEND**

- ▲ 30 ROCK SAMPLE LOCATION (OUTCROP), Au ppm
- × 30 ROCK SAMPLE LOCATION (FLOAT), Au ppm
- LCP
- GRID LINE, SOIL SAMPLE LOCATION

NOTE: SOIL SAMPLES TAKEN IN 1988 INCLUDE SAMPLES FROM L 97 N, L 99 N, L 101 N AND L 103 N. THE REMAINING SAMPLING WAS DONE IN 1987.

**GEOPHYSICAL - GEOCHEMICAL**

- 40 INDUCED POLARIZATION CHARGEABILITY N+1
- 8000 INDUCED POLARIZATION RESISTIVITY N+1
- VLF EM ANOMALY
- ~ ~ ~ FAULT - GEOPHYSICAL INTERPRETATION
- 200 TOTAL MAGNETIC FIELD 50000 GAMMA CONTOUR
- 100 GEOCHEMICAL GOLD 100 AND 30 PPM CONTOURS
- 200 GEOCHEMICAL ARSENIC 200 PPM CONTOURS

**GEOLOGY**

- 1 ARGILLITE - MINOR INTERBEDDED TUFF
- 2 ANDESITE BRECCIA
- 3 INTERBEDDED TUFF AND ARGILLITE
- ~ ~ ~ FAULT - GEOLOGICAL
- GEOLOGIC CONTACT

**IMPERIAL METALS CORPORATION**  
JAMBOREE  
CARIBOO M.D., B.C.

FIGURE 8 N.T.S. 93A 7W

**RIDGE GRID  
COMPILATION MAP**

metres 0 50 100 150 200 250

SCALE: 1:2500 GEOLOGIST: D. GORC  
DATE: MAY, 1990 DRAWN BY: J. CORKUM