

84-#184 - #12121
2

PROSPECTING REPORT

CLAIMS : J & L1
J & L2 (fraction)
J & L3 (fraction)
J & L4 (fraction)

MINING DIVISION : Similkameen

N.T.S. : 92H/10W

LATITUDE : 49°31' N

LONGITUDE : 120°54' W

OWNER/OPERATOR : Imperial Metals Corporation

AUTHOR : I.R. Corvalan

DATE : January 24, 1984

**GEOLOGICAL BRANCH
ASSESSMENT REPORT**

12,121

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IMPERIAL METALS CORPORATION	
TULAMEEN PROJECT	
FIGURE 1	N.T.S. 92H/10W
J & L CLAIM GROUP LOCATION MAP	
Km 200 0 200 400 600 Km	
SCALE: 1:12 500 000 Approx.	GEOLOGIST: R. CORVALAN, P.Eng
DATE: JANUARY 1984	DRAWN BY: S. HAWORTH

1. INTRODUCTION

1.1 Location and Access :

The J & L claim group is located in Britton Creek, 700m of the confluence of Britton Creek and Tulameen River. The coordinates of the area are: Latitude 120° 54' West. N.T.S. map #92H/10W, Similkameen M.D. The terrain is rugged with elevations ranging from 850m to 300m. Access is by a gravel road that runs along the Tulameen River. The claim area is 11 km N.W. of the village of Tulameen, the nearest supply centre.

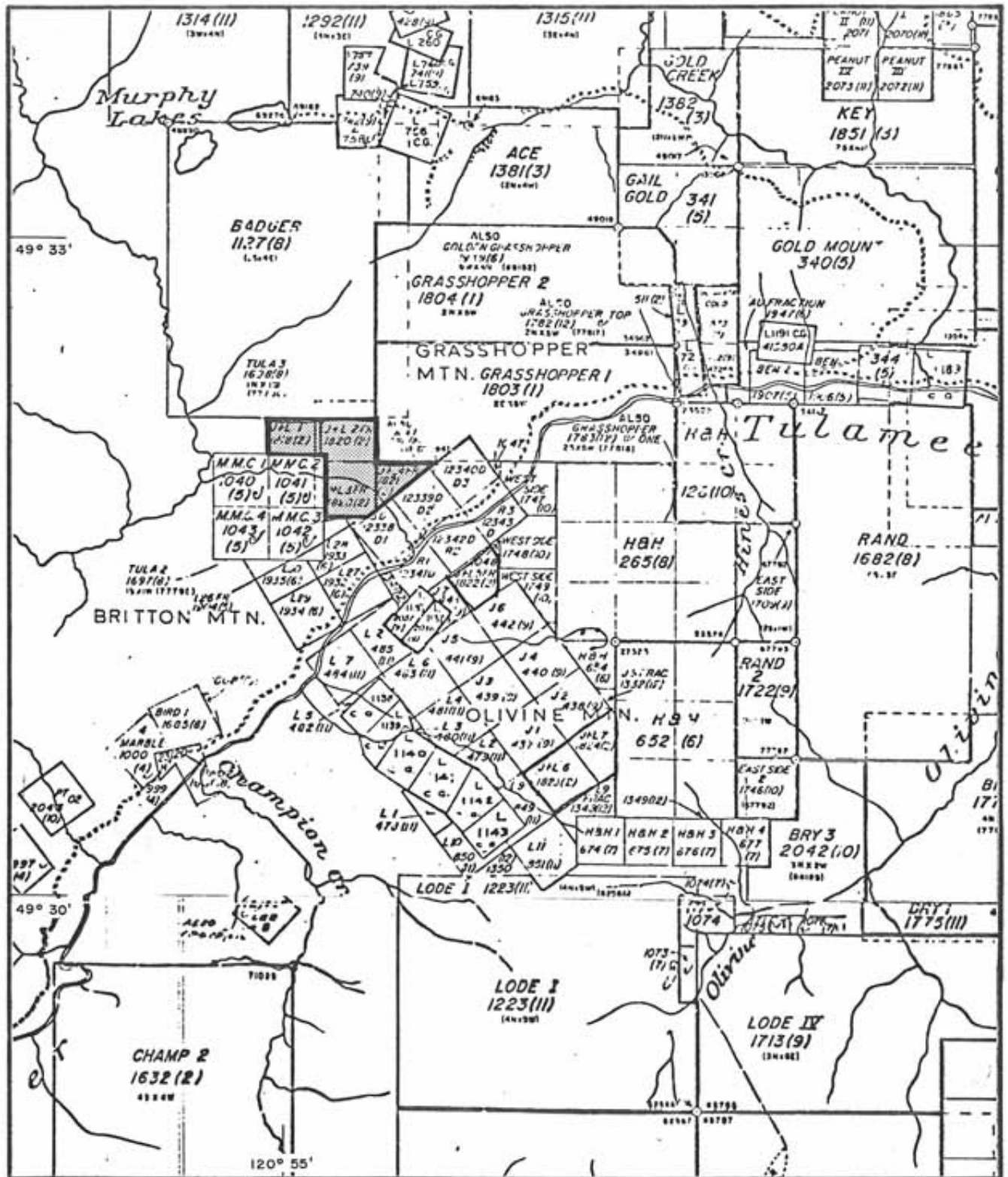
1.2 Property :

The property is covered by the following claims owned by Imperial Metals Corporation, Vancouver, B.C.

<u>Claim Name</u>	<u>Record Number</u>	<u>Due Date</u>
J + L 1	1818	February 11, 1983
J + L 2 (fraction)	1819	February 11, 1983
J + L 3 (fraction)	1820	February 11, 1983
J + L 4 (fraction)	1821	February 11, 1983

1.3 History :

In the Tulameen area, placer gold deposit was discovered in the 1860's. Some platinum occurred with gold, but no attempt to recover it was made up to 1885. Since then more than 40,000 oz of platinum has been produced. Geological investigations by the G.S.C. (1910) and the U.S. Geological Survey (1902) showed that the source of the placer platinum was the Olivine-Grasshopper ultrabasic stock. Numerous attempts have been made to find economic platinum lode deposits, but low grade sample results and expensive assay fees discouraged a systematic testing of the area.



IMPERIAL METALS CORPORATION
 TULAMEEN PROJECT
 FIGURE 2 N.T.S. 92H/10W
**J & L CLAIM GROUP
 CLAIM MAP**

Km 1 0 1 2 Km

SCALE: 1:50 000	GEOLOGIST: R. CORVALAN, P.Eng
DATE: JANUARY 1984	DRAWN BY: S. HAWORTH

1.4 Geology :

In general the rock of the area consists of a series of andesites interbedded with limestone, argillite and schist of triassic age. The series has been intruded by plutonic rocks including granite, granodiorite and the olivine Grasshopper ultrabasic stock. The J & L claim group is located close to the centre of the ultrabasic stock which is a large body of pyroxenite enclosing a core of peridotite dunite. Platinum may be associated with one of these rocks.

1.5 Mineralization :

Platinum is reported to be present in the peridotite stock, particularly where serpentinization was strong or where the rock was rich in chromite (Camsell, 1913). Kemp (1902) sampled all the unusual phases of the rocks across the district; but although he obtained high platinum assays they were erratically distributed. The possibility of platinum to be present as disseminate and have economical grade has not been studied systematically. This preliminary study attempts to evaluate this possibility.

1.6 Summary of Work Done :

The claim group was visited to determine existence of Platinum in outcrops. Outcrops were sparse with exception of the Britton Creek area. Seven samples were taken on the right side of Britton Creek. The property was visited June 23, 1983.

2. OUTCROP SAMPLING

2.1 Sample Location :

Figure #3 shows description, location and results of the samples taken.

2.2 Interpretation :

This preliminary rock geochem sampling shows the existence of platinum anomalous values on 3 of the rock units studied. Platinum nuggets assayed by Hart (1982) are showed in table #1 if we consider the ratio Pt (Pt+Ir+Os) (see table #2) We can assume that the platinum content of our rock samples may represent only a small percentage of the platinum group element (PGE) content. Table #1 also shows that osmium and iridium are important constituents of the platinum placers of the Tulameen area.

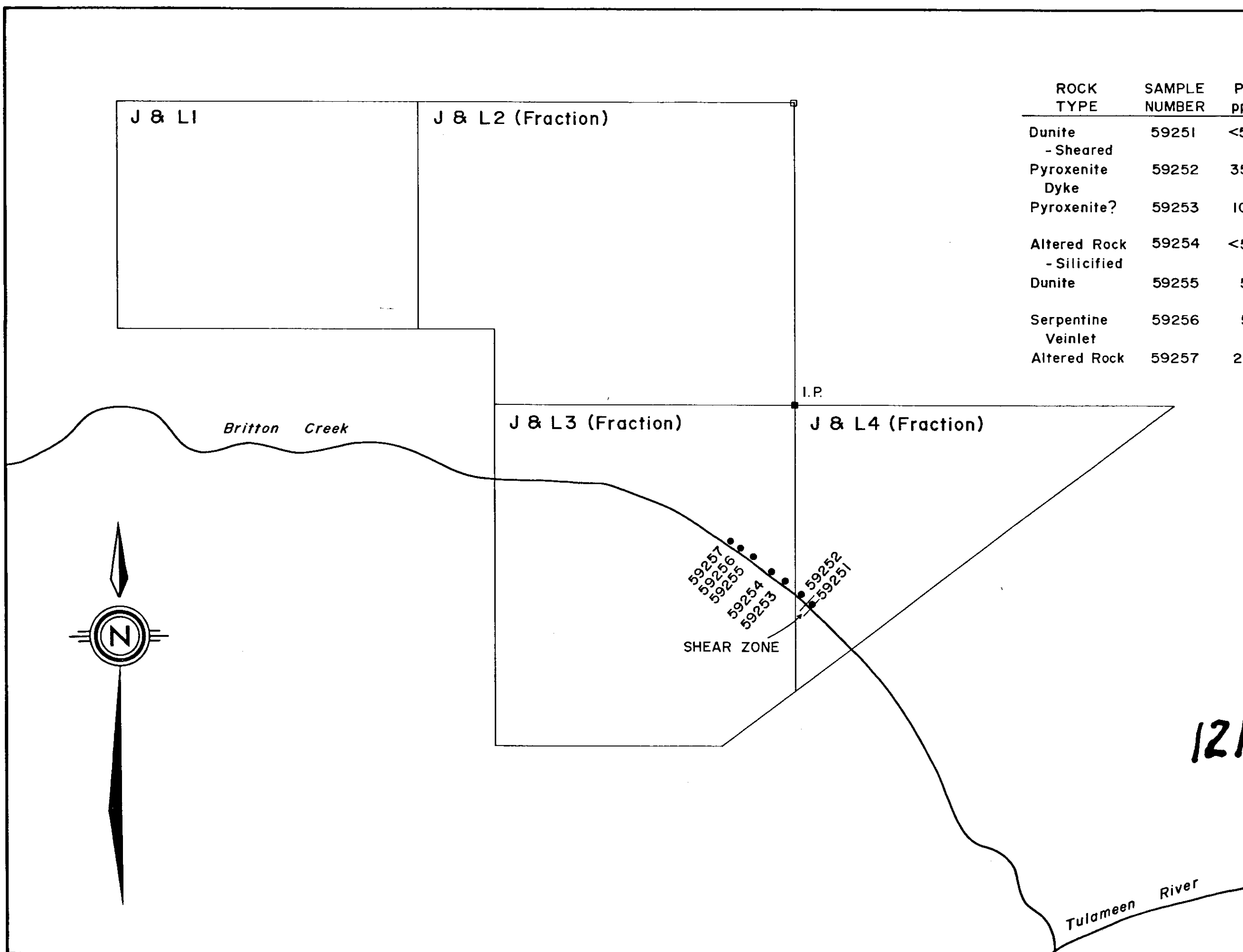
2.3 Conclusions :

The probability of finding disseminated P.G.E. in some of the rock types of the Olivine Grasshopper area is high.

2.4 Recommendations :

It is recommended to carry out a systematic rock and/or soil sampling program on the J & L claims, samples must be assayed for platinum, osmium and iridium.

ROCK TYPE	SAMPLE NUMBER	Pt ppb	Au ppb	Cr ppm
Dunite - Sheared	59251	<50	20	1400
Pyroxenite Dyke	59252	350	40	68
Pyroxenite?	59253	100	10	37000
Altered Rock - Silicified	59254	<50	10	2680
Dunite	59255	50	10	210
Serpentine Veinlet	59256	50	10	920
Altered Rock	59257	200	10	1940



12121 *see*

IMPERIAL METALS CORPOR
TULAMEEN PROJECT
FIGURE 3 N.T.S.
**J & L CLAIM GROUP
OUTCROP SAMPLING**

Metres 100 0 100

SCALE: 1:5000 GEOLOGIST: R. COR
DATE: JANUARY 1984 DRAWN BY: S. HAW

TABLE # 1

Pt - Ir - Os .

Table III EPMA results and formula for nuggets 1,2,and3.

Analysis	% ELEMENT									TOTALS	Analysis	FORMULA.	MINERAL NAME	REFERENCE
	Fe	Ni	Ni	Cu	Re	Os	Ir	Pt	S					
1	8.3	0.2	0.3	0.3	-	10.1	82.5	-	101.7	92.6	1 Pt _{0.66} Ir _{0.08} Fe _{0.23} Ni, Cu, Re _{<0.01} *	ISO FERROPLATINUM.	Cabri P166	
2	0.3	-	1.5	3.7	16.6	67.5	10.2	-	99.8	77.7	2 Ir _{0.72} Os _{0.18} Pt _{0.11} Cu _{0.05} Re _{0.04} Fe _{0.01}	OSMIRIDIUM.	P161	
3	0.3	-	1.6	4.1	17.9	66.9	9.1	-	99.9	76.0	3 Ir _{0.64} Os _{0.17} Pt _{0.09} Cu _{0.05} Re _{0.04} Fe _{0.01}	OSMIRIDIUM.	P161	
4	4.8	-	5.6	1.7	5.7	46.8	43.1	-	107.7	4	Ir _{0.36} Pt _{0.32} Os _{0.04} Fe _{0.13} Cu _{0.13} S _{0.01}	IRIDIUM ANALOGUE TULAMEENITE?	P194	
5	0.3	-	1.9	3.4	17.3	70.8	9.2	-	102.9	5	Ir _{0.66} Os _{0.16} Pt _{0.09} Cu _{0.05} Re _{0.03} Fe _{0.01}	OSMIRIDIUM	P161	
6	8.1	0.2	0.8	0.2	-	6.4	86.7	0.2	102.6	6	Pt _{0.64} Ir _{0.05} Fe _{0.22} Cu _{0.02} S _{0.01} Ni _{<0.01} *	ISO FERROPLATINUM	P166	
7	10.8	0.2	10.5	0.3	-	8.3	73.9	0.2	104.2	7	Pt _{0.47} Ir _{0.05} Fe _{0.24} Cu _{0.22} S _{0.01}	TULAMEENITE	P165	
8	0.4	0.1	0.7	3.7	15.8	71.6	10.5	-	102.8	8	Ir _{0.67} Os _{0.15} Pt _{0.10} Re _{0.04} Cu _{0.02} Ni _{0.02} Fe _{0.01}	OSMIRIDIUM.	P161	
9	0.5	0.1	0.7	3.4	15.5	72.6	10.3	-	103.1	9	Ir _{0.68} Os _{0.15} Pt _{0.10} Re _{0.03} Cu _{0.02}	OSMIRIDIUM	P161	
10	8.3	0.2	0.3	0.5	-	13.4	81.5	0.2	104.4	10	Pt _{0.64} Ir _{0.11} Fe _{0.23} Ni, Cu, Re _{<0.01} *	ISO FERROPLATINUM	P166	
11	5.7	-	0.7	0.9	3.1	35.5	61.5	0.1	107.5	11	Pt _{0.50} Ir _{0.21} Os _{0.03} Fe _{0.16} Cu _{0.02}	FERRON IRIDIAN PLATINUM		
12	3.0	-	1.1	1.6	3.8	66.0	24.3	0.1	99.9	12	Ir _{0.60} Pt _{0.21} Os _{0.04} Fe _{0.09} Cu _{0.04} Re _{0.04}	PLATINIRIDIUM	P161	

IDEAL FORMULAS

ISO FERROPLATINUM - Pt₃Fe.
TULAMEENITE - Pt₂Fe.Cu

PLATINIRIDIUM - Ir_{0.80} Pt_{0.20}
OSMIRIDIUM - Ir_{0.80} Os_{0.20}

so y.

Pt - Os - Ir

* Cabri (1981).

9/12

TABLE NO. 2

(Based on Table No. 1, (Hart, 1982))

<u>Analysis</u>	<u>Pt</u> <u>%</u>	<u>Ir + Os + Pt</u>	<u>Pt/(Ir + Os + Pt)</u>
1	82.5	92.6	.89
2	10.2	94.3	.11
3	9.1	93.9	.097
4	43.1	95.6	.456
5	9.2	97.3	.095
6	86.7	93.1	.935
7	73.9	82.2	.911
8	10.5	97.9	.107
9	10.3	98.4	.105
10	81.5	94.9	.859
11	61.5	100.1	.615
12	24.3	94.1	.258

BIBLIOGRAPHY

- C. Camsell, 1913 "Geology and Mineral Deposits of the Tulameen District, B.C. G.S.C. Memoir No. 26.
- C.J. Coveney, 1980 'Report on the J-L Claims' Internal Report, Ricard Resources Ltd.
- D. Hart, 1982 'Prospect evaluation - mineral exploration in B.C. Canada and Arizona U.S.A. Sc. thesis, University of London.
- J.F. Kemp, 1902 "The geological relations and of platinum and associated metals" U.S.A. Geological Survey, Bulletin No. 193.

ANNEX #1

Statement of expenditures on J & L Mineral Claim Group for 1983.
(June 23, 1983)

Wages and Salaries		
I.R. Corvalan	1 day @ \$200/day	\$ 200.00
J. Agar (helper)	1 day @ \$80/day	80.00
Geochemical Analysis		
7 assay Au @ \$3.50 each		24.50
7 assay Cr @ \$1.80 each		12.60
7 assay Pt @ \$6.25 each		43.75
		<u>\$ 94.85</u>
Transportation		
Truck rental	1 day @ \$40 each	\$ 40.00
Gas		20.00
Meals		20.00
Report preparation		<u>300.00</u>
	TOTAL	<u><u>\$ 754.85</u></u>

ANNEX #2

IN MATTER OF THE
B.C. MINERAL ACT

AND

IN MATTER OF A OUTCROP SAMPLING
CARRIED OUT ON THE

J & L CLAIM GROUP

LOCATED IN THE SIMILKAMEEN MINING DIVISION
OF THE PROVINCE OF BRITISH COLUMBIA
MORE PARTICULARLY N.T.S. 92H/10W

A F F I D A V I T

I, I. RUBEN CORVALAN, P. ENG., OF THE CITY DISTRICT OF NORTH VANCOUVER
IN THE PROVINCE OF BRITISH COLUMBIA, MAKE OATH AND SAY :

1. THAT I AM AN EMPLOYEE OF IMPERIAL METALS CORPORATION AND AS SUCH
HAVE A PERSONAL KNOWLEDGE OF THE FACTS TO WHICH I HEREINAFTER
DISPOSE;
2. THAT ANNEXED HERETO AND MARKED AS "ANNEX #1" IS A TRUE COPY OF
EXPENDITURES ON A GEOCHEMICAL AND TRENCHING PROGRAM CARRIED OUT
ON THE J & L CLAIM GROUP;
3. THAT THE SAID EXPENDITURES WERE INCURRED THE DATE OF JUNE 23,
1983, FOR THE PURPOSE OF MINERAL EXPLORATION ON THE ABOVE CLAIMS.


I.R. CORVALAN, P. ENG.

ANNEX #3

IMPERIAL METALS CORPORATION

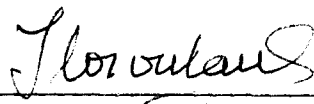
STATEMENT OF QUALIFICATIONS

I, I. RUBEN CORVALAN, P. ENG. OF THE CITY OF NORTH VANCOUVER,
BRITISH COLUMBIA, HEREBY CERTIFY :

1. THAT I AM A PROFESSIONAL ENGINEER RESIDING AT #117 - 908
BERKLEY ROAD, NORTH VANCOUVER, BRITISH COLUMBIA;
2. THAT I GRADUATED WITH A MINING ENGINEERING DEGREE FROM THE
UNIVERSITY OF CHILE, CHILE, IN 1969;
3. THAT I HAVE PRACTICED GEOLOGY AND GEOCHEMISTRY IN SOUTH
AMERICA AND CANADA FOR THE LAST 15 YEARS.

DATED THIS 10th DAY OF February, 1984
AT VANCOUVER, BRITISH COLUMBIA.

SIGNED


I.R. CORVALAN, P.ENG.

Jec

ANNEX #4

SAMPLE RESULTS



CHEMEX LABS LTD.

212 BROOKSBANK AVE.
NORTH VANCOUVER, B.C.
CANADA V7J 2C1

• ANALYTICAL CHEMISTS

• GEOCHEMISTS

• REGISTERED ASSAYERS

TELEPHONE: (604) 984-0221
TELEX: 043-52597

CERTIFICATE OF ANALYSIS

TO : ROSSBACHER LABORATORY LIMITED

2225 SOUTH SPRINGER AVENUE
BURNABY, B.C.
V5B 3N1

CERT. # : A8313647-001-
INVOICE # : I8313647
DATE : 15-AUG-83
P.C. # : NONE
IMPERIAL METALS

Sample description	Prep code	Pt pps						
59251	214	<50	--	--	--	--	--	--
59252	214	350	--	--	--	--	--	--
59253	214	100	--	--	--	--	--	--
59254	214	<50	--	--	--	--	--	--
59255	214	<50	--	--	--	--	--	--
59256	214	50	--	--	--	--	--	--
59257	214	200	--	--	--	--	--	--



MEMBER
CANADIAN TESTING
ASSOCIATION

Certified by *Hart Bichler*



CHEMEX LABS LTD.

212 BROOKSBANK AVE.
NORTH VANCOUVER, B.C.
CANADA V7J 2C1

TELEPHONE: (604) 984-0221
TELEX: 043-52597

• ANALYTICAL CHEMISTS

• GEOCHEMISTS

• REGISTERED ASSAYERS

*** INVOICE ***

To : ROSSBACHER LABORATORY LIMITED

Invoice # : 18313647

2225 S. SPRINGER AVENUE
BURNABY, B.C.
V5B 3N1

Date : 15-AUG-83
P.C. # : NONE
Project IMPERIAL METALS

Invoice for analytical work reported on certificate(s) A8313647-001

Quantity	Analysed for code description	unit price	amount
7	413 - Pt ppb	6.25	43.75

Sample preparation and other charges :

7	214 - Bag pulp	0.00	0.00
---	----------------	------	------

TOTAL \$ 43.75

Please pay this amount ----> \$ 43.75
=====

TERMS -- NET 30 DAYS

1.5 % per month (18 % per annum) charged on overdue accounts



MEMBER
CANADIAN TESTING
ASSOCIATION

Rossbacher Laboratory Ltd.

GEOCHEMICAL ANALYSTS & ASSAYERS

BURNABY, B. C.
CANADA
TELEPHONE: 299-6910

CERTIFICATE OF ANALYSIS

TO: IMPERIAL METALS LTD.
United Kingdom Bld.
Vancouver, B.C.

CERTIFICATE NO. 83243.4
INVOICE NO. 3216
DATE ANALYSED 83/07/25
PROJECT CIMA RESOURCES

No.	Sample	pH	Mo	Cu	Pb	Zn	Ag	PPB Au	Cr	No.
01	78452				28	34	0.2	20		01
02	78453				290	14	0.4	10		02
03	58951						2.2	80		03
04	58952						81.0	13,000	-	04
05	58953						48.0	7,000	⇒	05
06	58954						0.6	10		06
07	58955						0.2	10		07
08	58956						20.0	3,300		08
09	59251							201,400		09
10	59252							40,68		10
11	59253							1027,000		11
12	59254							102,630		12
13	59255							10,210		13
14	59256							10,920		14
15	59257							101,940		15
16	59260						0.8	70		16
17	59262						15.0	7000	⇒	17
18	59271						0.4	20		18
19	59272				12		0.4	10		19
20	59273				60	14	0.2	10		20
21	59274						0.2	10		21
22	59275					66	0.2			22
23	59276			230	360	112	1.0	10		23
24	59277					58	0.2			24
25	59278				16		0.2	10		25
26	59279			84		74	0.2	10		26
27	59280			2.1	20	54	0.2	10		27
28	59281			72	94	90	0.2	10		28
29										29
30										30
31										31
32										32
33										33
34										34
35										35
36										36
37										37
38										38
39										39
40										40

VALUES IN PPM UNLESS NOTED OTHERWISE.

Certified by

R. Rossbacher

Rossbacher Laboratory Ltd.

GEOCHEMICAL ANALYSTS & ASSAYERS

2226 S. SPRINGER AVE.
 BURNABY, B. C.
 CANADA
 TELEPHONE: 299-6910
 AREA CODE: 604

IMPERIAL METALS LTD.
United Kingdom Ltd.
Vancouver, B.C.
Cima Resources, R. Corvalan

DATE Aug 21, 1983

INVOICE NO. 5216

CERTIFICATE NO. 83243

ITEM	DESCRIPTION		SUB-TOTAL	TOTAL
3	Geochem analysis for 4 elements	\$ 3.35	\$ 10.05	
79		3 2.90	229.10	
11		2 2.40	26.40	
39		1 1.80	70.20	
125		Au 3.50	437.50	
103	Soil sample prep	0.50	51.50	
29	Rock sample prep	2.00	58.00	
				<u>\$ 882.75</u>