86-993-15494

GEOLOGICAL REPORT

MT. SHEA PROPERTY
MARIA CLAIM 3441

LIARD MINING DIVISION

N.T.S. 104 I/7W 58°20'N, 128°~~58~~ 59.2' W

R. Pesalj, December 1986
Imperial Metals Corporation (Owner/Operator)

TABLE OF CONTENTS

1.0 Summary

Mapping and rock sampling of the Maria claims of the Mt. Shea property conducted between July 2 and July 9, 1986 revealed well exposed serpentinized ultramafics cut by subvertical quartz veins having the thickness of 0.3-0.5m. The samples of quartz vein from outcrop and float collected contain no gold mineralization with only one sample returning 0.57% Cu and 10.3 ppm Ag. Other samples collected in course of mapping and sampling returned only background base and precious metal values.

2.0 Introduction

This report pertains to geological mapping and rock sampling on the Maria claim by Imperial Metals Corporation between July 2 and 9, 1986. The work was carried out by the camp located at the Alice Shea Creek, approximately 2 km from the Maria claim.

3.0 Property (Figure 1)

Mt. Shea property consists of one mineral claim comprising 16 units. The owners of the property are J. Kubiak and R. Carbery of Langley, B.C. At the time the field work was done, the property was optioned to Imperial Metals Corporation.

4.0 Location, Access, Topography (Figure 2)

The property is located in the North Central B.C., approximately 60 kilometers southeast of Dease Lake in the Liard Mining Division. The property lies on the northern slope of Mt. Shea at an elevation between 1,200 and 1,700m above the sea level. The property lies within the Alice Shea Creek and Wheaton Creek drainages, tributaries of Turnagain River. Open alpine conditions prevail throughout the property. Access to the property is by a helicopter during the summer or by a winter road from Dease Lake to within 6 kilometers from the claim.

5.0 Regional Geology

The Mt. Shea property is situated within the Omineca Tectonic Belt of the Canadian Cordillera and lies between the Kutcho Fault on the east and Nahlin Salmon Fault to the west. Dominant lithologies in the property area belong to the Cache Creek Group of Mississipian to Permian age represented by sediments including chert, slate, argillite, limestone, basic volcanics and gabbroic and serpentinized ultramafic rocks. The property was examined for its potential for gold mineralization in quartz veins that occur in the southwestern corner of the Maria claim.

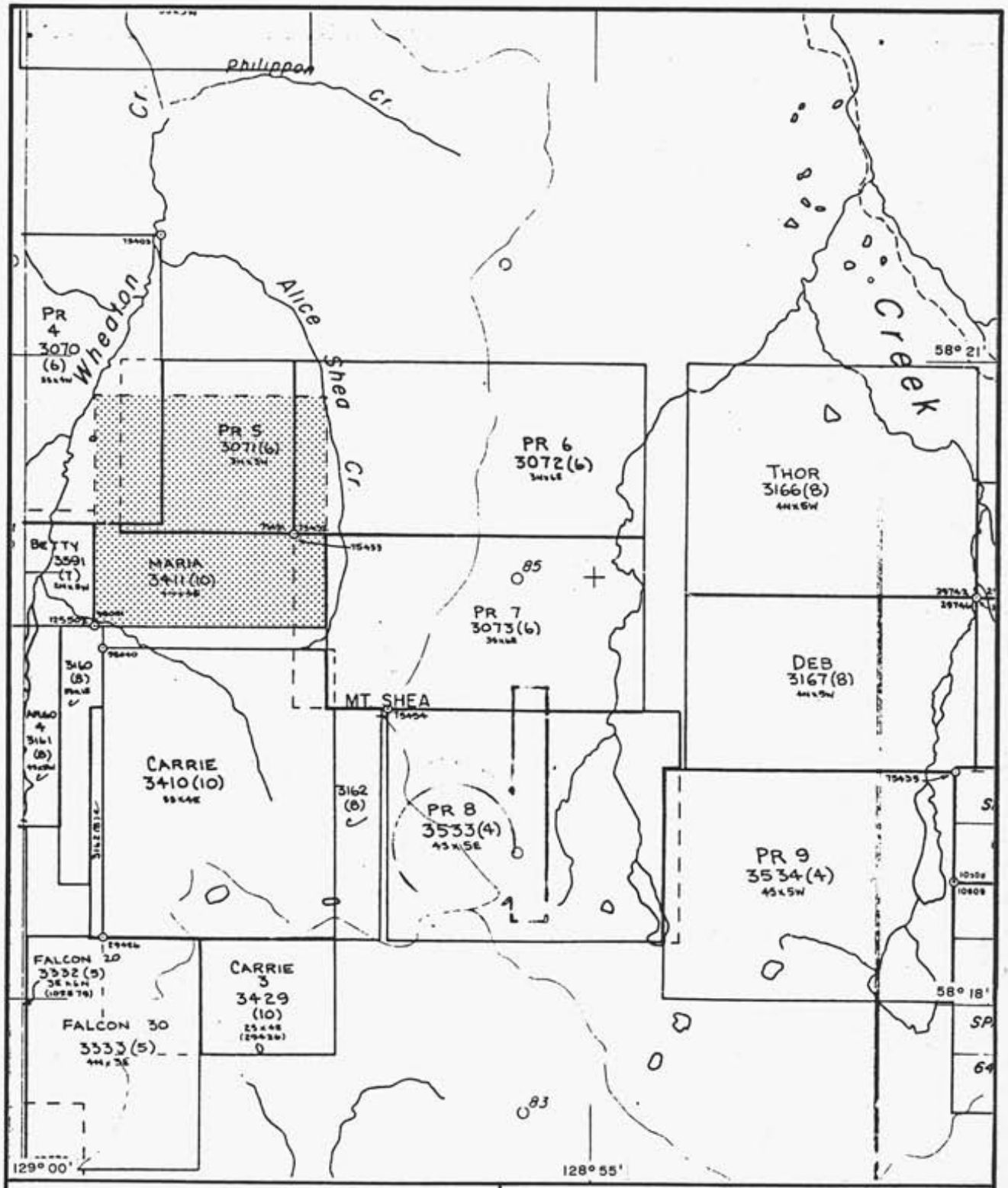
6.0 Detail Geology (Figure 3)

Good rock exposures on the property are found in the southwestern corner, where detail mapping and rock sampling were conducted. The area of interest represents an outcrop on top of the hill over an area approximately 5 hectares. The northern and western slopes of the hill are covered by a thick talus material and rock exposures are lacking.

6.1 Lithology

The main rock type over the large area on the property is a massive, coarse grained ultramafic of pyroxenitic to peridotitic composition that shows moderate serpentinization in the outcrop. This unit has rusty colour and displays rough surface due to differential weathering of the mineral components.

To the south, a highly serpentinized unit was mapped in the outcrops close to the claim boundary. The contact area between the two rock units displays a bleached zone that can be followed for 150 meters along the hillside. Angular float of white quartz vein material is found along the entire length of the zone. On the east end quartz vein 30 cm wide is exposed in several outcrops. This is an area where bleached zone bifurcates and widens to the north from its easterly strike. Two other outcrops of the quartz veins are found on the northern flank of the hill, both approximately 0.5m wide. Elsewhere on the property abundant quartz vein float was mapped and sampled along the talus slopes. The largest angular float was observed on the southwestern part of the hill, where the vein blocks measuring 1m across can be seen, but no outcrop can be found under a thick talus cover.



IMPERIAL METALS CORPORATION

MT. SHEA

FIGURE 1 N.T.S. 1041/7W

CLAIM MAP

Km 1 0 1 2 Km

SCALE: 1:50 000	GEOLOGIST: R. PESALJ
DATE: DECEMBER 1986	DRAWN BY: S. HAWORTH

IMPERIAL METALS CORPORATION

MT. SHEA

FIGURE 2 N.T.S. 1041

LOCATION MAP

Km 5 0 5 10 Km

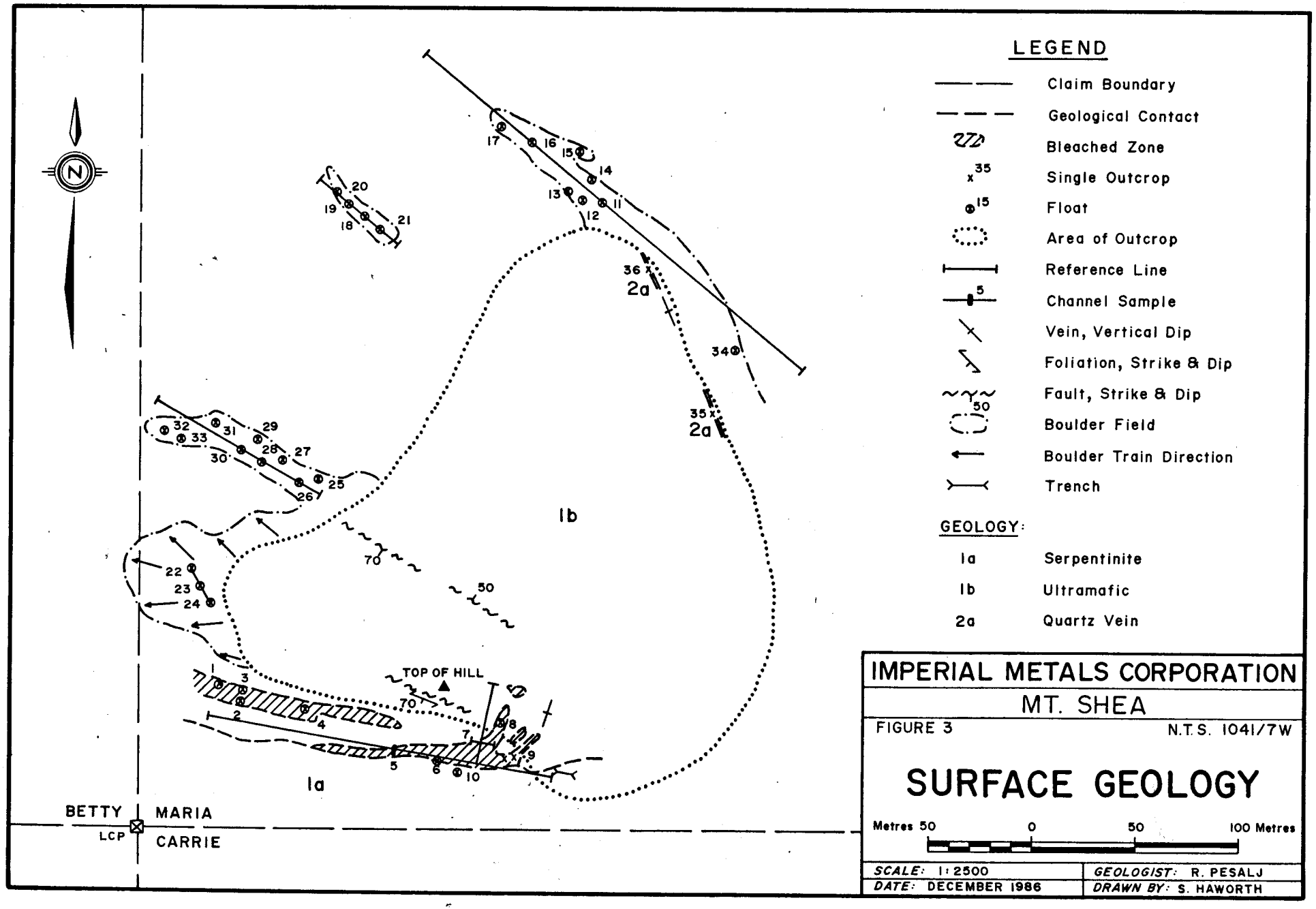
SCALE: 1:250000	GEOLOGIST: R. PESALJ
DATE: DECEMBER 1986	DRAWN BY: S. HAWORTH

6.2 Structure

A northwesterly striking faults in the massive ultramafic unit were observed over the large outcrop with dips 50^{o}-70^{o} in northeasterly and northwesterly direction. The dips observed in the quartz vein outcrops are near vertical.

6.3 Mineralization

Sampling of the quartz vein float and bleached ultramafics on the property revealed no gold mineralization. The highest gold value in the quartz vein samples collected was 2 ppb. An anomalous value of 0.5/% Cu and 10.3 ppb Ag was obtained from a quartz vein float in talus material on the northern side of the large outcrop area. The vein contained inclusions of green chloritic volcanic and occasional grains and blebs of chalcosite and malachite stain. Only background gold values were obtained from the samples taken across the bleached zone on the south side of the large outcrop area.


LEGEND
Claim Boundary
Geological Contact
Bleached Zone
Single Outcrop
Float
Area of Outcrop
Reference Line
Channel Sample
Vein, Vertical Dip
Foliation, Strike & Dip
Fault, Strike & Dip
Boulder Field
Boulder Train Direction
Trench
GEOLOGY:
1a Serpentinite
1b Ultramafic
2a Quartz Vein
TOP OF HILL
BETTY
MARIA
LCP
CARRIE
IMPERIAL METALS CORPORATION
MT. SHEA
FIGURE 3
N.T.S. 104I/7W
SURFACE GEOLOGY
Metres 50 0 50 100 Metres
SCALE: 1:2500
GEOLOGIST: R. PESALJ
DATE: DECEMBER 1986
DRAWN BY: S. HAWORTH

AUTHOR'S QUALIFICIATIONS

1. I, Radomir Pesalj, B.Sc Geological Engineering 1963, University of Belgrade, Yugoslavia, am a member of the Society of Economic Geologists Inc.

2. Since graduation I worked as a mining and exploration geologist on numerous projects throughout Canada. Presently a permanent staff geologist with Imperial Metals Corporation of Vancouver, B.C.

3. I carried out work on the Mt. Shea property described in this report.

Rad. Pesalj

RADOMIR PESALJ, December 1986

STATEMENT OF EXPENDITURES

Personnel:		
R. Pesalj	July 2 - 9	$ 2,000.00
M. McDowell	July 5 - 7	360.00
Food and Accomodation:		
Camp cost	11 man days @ $40/day	440.00
Analytical Costs:		
36 rock samples (30 element ICP & Au) @ $13.00		468.00
Field Supplies:		
Flagging, sample bags, etc.		150.00
Transportation:		
Helicopter	1.5 hours @ $525/hour	787.50
Shipping		30.00
Airfare	Vancouver - Dease Lake	691.40
Report Preparation, Drafting:		500.00
	TOTAL	$ 5,426.90

APPENDIX I

Rock Sample Descriptions

TRAVERSE NUMBER _____ PROJECT Mt. Shea GEOLOGIST(S) R. Pesalj

N.T.S. 104I/7W AREA Dease Lake DATE July 1986

SAMPLE NUMBER	SAMPLE TYPE			SAMPLE LENGTH, WIDTH, AREA	LATITUDE, LONGITUDE and/or U.T.M.	SAMPLE DESCRIPTION	RESULTS (ppm)/%/oz. per ton)						
	RX Rock, Talus	Fe carbonate content	Grab, Chip, Channel			Rock type, lithology, character of soil, stream silt, etc. Formation, Mineralization, etc.	Au ppb	Ag ppm	As ppm	Sb ppm	Pb ppm	Zn ppm	
MSH-1	Talus		Chip	1m		Angular boulder of bleached ultramafic rock cut by white quartz veins 1-10cm across. Boulder is 1 x 0.5m. Chip sample across the boulder.							
MSH-2	Talus		Chip	1m		Angular boulder of green, bleached ultramafic cut by white quartz veins as sample above. Chip sample across the boulder.							
MSH-3	Talus		Chip	1m		As above. Chip sample across the boulder.							
MSH-4	Talus		Grab			White, coarse grained quartz vein flow float. Vein is 20cm wide.							
MSH-5	Talus		Chip	2m		Chip sample across 2m wide bleached zone with fragments of serpentinite and quartz vein.							
MSH-6	Talus		Grab			Sample of bleached ultramafic in the zone with quartz vein fragments.							
MSH-7	Talus		Chip	4m		Sample across the bleached ultramafic with float of white coarse grained quartz vein.							
MSH-8	Talus		Grab			White quartz vein, coarse grained, few pyrite cubes 1mm across.							

TRAVERSE NUMBER _____ PROJECT Mt. Shea GEOLOGIST(S) R. Pesalj

N.T.S. 104I/7W AREA Dease Lake DATE July 1986

SAMPLE NUMBER	SAMPLE TYPE			SAMPLE LENGTH, WIDTH, AREA	LATITUDE, LONGITUDE and/or U.T.M.	SAMPLE DESCRIPTION	RESULTS (ppm)/%/oz. per ton)						
	RX Rock, Talus	Fe carbonate content	Grab, Chip, Channel			Rock type, lithology, character of soil, stream silt, etc. Formation, Mineralization, etc.	Au ppb	Ag ppm	As ppm	Sb ppm	Pb ppm	Zn ppm	
MSH-9	Rock		Grab			White, coarse grained quartz vein 30 cm wide, dip subvertical.							
MSH-10	Rock		Grab			Fresh ultramafic rock of peridotitic composition. Large phenocrysts of olivine in olivine-pyroxene groundmass.							
MSH-11	Talus		Grab			White coarse grained quartz vein. Boulder 1 x 0.5m, angular.							
MSH-12	Talus		Grab			White coarse grained quartz vein. Angular boulder 1 x 1m.							
MSH-13	Talus		Grab			Quartz vein with inclusions of green chloritic volcanic, occasional grains and blebs of chalcosite and malachite stain. Angular boulder 0.5 x 0.5m.							
MSH-14	Talus		Grab			White, coarse grained quartz vein. Angular boulder 30 x 30cm.							
MSH-15	Talus		Grab			White coarse grained quartz vein. Angular boulder 0.5 x 0.4m.							
MSH-16	Talus		Grab			Green highly bleached volcanic cut by white quartz vein 0.5cm across. Disseminated pyrite less than 1%. Angular flat 0.5 x 0.3m.							

TRAVERSE NUMBER _____ PROJECT Mt. Shea GEOLOGIST(S) R. Pesalj

N.T.S. 104I/7W AREA Dease Lake DATE July 1986

SAMPLE NUMBER	SAMPLE TYPE			SAMPLE LENGTH, WIDTH, AREA	LATITUDE, LONGITUDE and/or U.T.M.	SAMPLE DESCRIPTION	RESULTS (ppm)/%/oz. per ton)						
	RX Rock, Talus	Fe carbonate content	Grab, Chip, Channel			Rock type, lithology, character of soil, stream silt, etc. Formation, Mineralization, etc.	Au ppb	Ag ppm	As ppm	Sb ppm	Pb ppm	Zn ppm	
MSH-17	Talus		Grab			White coarse grained quartz vein. Angular float 30 x 20cm.							
MSH-18	Talus		Grab			White, coarse grained quartz vein as above, angular float 50 x 60cm.							
MSH-19	Talus		Grab			Same as above. Angular float 30 x 40cm.							
MSH-20	Talus		Grab			Same as above 30 x 30cm angular float.							
MSH-21	Talus		Grab			White coarse grained quartz vein. Angular boulder 1.0 x 0.7 m.							
MSH-22	Talus		Grab			White coarse grained quartz vein from a float 1.5 x 1.0m, angular.							
MSH-23	Talus		Grab			Beige and white quartz vein, coarse grained. Angular float 1.0 x 0.5m. on the talus slope.							
MSH-24	Talus		Grab			Same as above. Angular float 1 x 0.5m on the talus slope.							
MSH-25	Talus		Grab			Greenish quartz vein at the contact with serpentinized ultramafic rock. Float, angular 0.3 x 0.3m.							
MSH-26	Talus		Grab			White, very coarse grained quartz vein from a float 1 x 1m on the talus slope. Float angular.							

TRAVERSE NUMBER _____ PROJECT Mt. Shea GEOLOGIST(S) R. Pesalj

N.T.S. 104I/7W AREA Dease Lake DATE July 1986

SAMPLE NUMBER	SAMPLE TYPE			SAMPLE LENGTH, WIDTH, AREA	LATITUDE, LONGITUDE and/or U.T.M.	SAMPLE DESCRIPTION	RESULTS (ppm)/%/oz. per ton)						
	RX Rock, Talus	Fe carbonate content	Grab, Chip, Channel			Rock type, lithology, character of soil, stream silt, etc. Formation, Mineralization, etc.	Au ppb	Ag ppm	As ppm	Sb ppm	Pb ppm	Zn ppm	
MSH-27	Talus		Grab			Same as MSH-26. Float 1.5 x 1.0m on the slope, angular.							
MSH-28	Talus		Grab			White, very coarse grained vein. Sample taken from a float 0.4 x 0.3m at the slope (angular).							
MSH-29	Talus		Grab			White, very coarse grained quartz-feldspar vein from a boulder 0.5 x 0.4m (angular).							
MSH-30	Talus		Grab			White, very coarse grained quartz vein from a float 0.6 x 0.5m angular.							
MSH-31	Talus		Grab			White, very coarse grained quartz. Float 0.6 x 0.5m, angular.							
MSH-32	Talus		Grab			White and beige quartz-feldspar vein from a float 0.5 x 0.6m angular. Slight banding present.							
MSH-33	Talus		Grab			White quartz vein from a float 0.3 x 0.3m (angular).							
MSH-34	Talus		Grab			White, very coarse quartz vein with minor greenish-tuff inpurities. Sample from float 0.5 x 0.3m in rubble.							

TRAVERSE NUMBER _____ PROJECT Mt. Shea GEOLOGIST(S) R. Pesalj

N.T.S. 104I/7W AREA Dease Lake DATE July 4, 1986

SAMPLE NUMBER	SAMPLE TYPE			SAMPLE LENGTH, WIDTH, AREA	LATITUDE, LONGITUDE and/or U.T.M.	SAMPLE DESCRIPTION	RESULTS (ppm)/%/oz. per ton)						
	RX Rock, Talus	Fe carbonate content	Grab, Chip, Channel			Rock type, lithology, character of soil, stream silt, etc. Formation, Mineralization, etc.	Au ppb	Ag ppm	As ppm	Sb ppm	Pb ppm	Zn ppm	
MSH-35	Talus		Grab			Buff, very coarse grained quartz from a							
						float measuring 1.0 x 0.5m (angular).							
						This float could be close to the outcrop.							
						Several smaller floats around this one.							
						This outcrop can be traced for 3m. than							
						pinches out.							
MSH-36	Talus		Grab			White, coarse grained quartz vein in the							
						outcrop. The vein is 0.50m wide and							
						strikes @ 180° with vertical dip.							

APPENDIX II

Analytical Data

ACME ANALYTICAL LABORATORIES LTD. 852 E.HASTINGS ST.VANCOUVER B.C. V6A 1R6 PHONE 253-3158 DATA LINE 251-1011

GEOCHEMICAL ICP ANALYSIS

.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.CA.P.CR.MG.BA.TI.B.AL.NA.K.W.SI.ZR.CE.SN.Y.NB AND TA. AU DETECTION LIMIT BY ICP IS 3 PPM.
- SAMPLE TYPE: ROCK CHIPS AU* ANALYSIS BY AA FROM 10 GRAM SAMPLE.

DATE RECEIVED: JULY 10 1986 DATE REPORT MAILED: July 14/86 ASSAYER. D. Toye. DEAN TOYE. CERTIFIED B.C. ASSAYER.

IMPERIAL METALS PROJECT - 6103 FILE # 86-1397

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
MSH-1	1	6	3	8	.2	16	5	183	.88	3	5	ND	2	76	1	2	2	42	2.75	.002	2	9	.68	80	.11	4	.80	.04	.07	1	1
MSH-2	1	5	2	12	.1	66	7	217	1.14	3	5	ND	2	68	1	2	3	45	2.36	.001	2	74	1.02	143	.12	4	1.21	.03	.25	1	1
MSH-3	1	4	2	13	.2	25	6	138	.90	2	5	ND	1	24	1	2	2	18	1.09	.002	2	12	.79	131	.01	4	.93	.05	.28	1	1
MSH-4	1	3	3	3	.1	7	1	48	.41	3	5	ND	1	23	1	2	2	12	.31	.002	2	6	.10	44	.01	5	.41	.10	.04	1	1
MSH-5	3	34	4	22	.4	198	22	403	2.54	5	5	ND	1	8	1	2	2	29	.65	.001	2	233	4.04	29	.04	7	2.11	.03	.02	2	1
MSH-6	2	46	2	18	.1	45	20	314	1.84	3	5	ND	1	3	1	2	3	13	.73	.001	2	15	2.65	10	.02	2	2.28	.02	.01	1	2
MSH-7	2	24	2	17	.1	49	17	314	1.95	2	5	ND	1	8	1	2	2	19	.55	.001	2	34	2.28	23	.04	2	1.94	.05	.04	2	1
MSH-8	1	3	2	2	.2	5	1	24	.22	2	5	ND	1	3	1	2	2	1	.02	.001	2	6	.03	10	.01	2	.17	.13	.01	1	1
MSH-9	1	14	2	3	.2	10	1	41	.32	2	5	ND	1	4	1	2	2	4	.06	.001	2	6	.10	35	.01	5	.22	.12	.03	1	1
MSH-10	4	16	5	93	.3	59	25	835	6.05	5	8	ND	1	70	1	2	2	75	.87	.142	15	20	2.37	84	.44	2	1.04	.26	.05	2	2
MSH-11	1	6	2	2	.1	4	1	23	.23	3	5	ND	1	4	1	2	3	1	.01	.001	2	4	.04	41	.01	2	.15	.14	.01	1	1
MSH-12	1	4	2	2	.1	6	1	21	.23	2	5	ND	1	3	1	3	3	1	.01	.001	2	5	.02	8	.01	3	.13	.14	.01	1	1
MSH-13	1	5716	2	2	10.3	9	1	104	.53	4	5	ND	1	6	1	2	2	11	.74	.001	2	6	.53	250	.01	3	.18	.10	.04	1	1
MSH-14	1	1	2	2	.1	8	1	25	.21	2	5	ND	1	4	1	2	2	1	.09	.001	2	7	.02	67	.01	2	.13	.13	.01	1	1
MSH-15	1	14	2	1	.2	4	1	19	.22	2	5	ND	1	4	1	2	2	1	.02	.001	2	5	.01	9	.01	2	.15	.16	.01	1	2
MSH-16	1	345	5	7	.7	27	10	143	.61	2	5	ND	1	2	1	2	5	14	1.38	.001	2	10	.55	35	.01	5	.12	.07	.02	1	1
MSH-17	1	5	2	1	.1	3	1	22	.19	2	5	ND	1	2	1	2	2	1	.01	.002	2	3	.02	20	.01	5	.12	.13	.01	1	1
MSH-18	1	2	2	3	.2	2	1	14	.18	2	5	ND	1	2	1	2	2	1	.01	.001	2	3	.01	7	.01	3	.11	.13	.01	1	1
MSH-19	1	6	2	1	.1	2	1	14	.19	2	5	ND	1	2	1	2	2	1	.01	.002	2	4	.01	9	.01	3	.14	.14	.01	1	1
MSH-20	1	3	2	1	.1	5	1	12	.17	3	5	ND	1	2	1	2	2	1	.01	.001	2	3	.01	7	.01	2	.11	.13	.01	1	1
MSH-21	1	5	7	9	.3	8	1	32	.23	5	5	ND	1	2	1	2	2	1	.02	.001	2	8	.02	13	.01	2	.15	.16	.01	1	1
MSH-22	1	2	4	1	.1	5	1	14	.19	2	5	ND	1	1	1	2	6	1	.01	.001	2	3	.01	7	.01	2	.11	.13	.01	1	1
MSH-23	1	15	6	4	.1	8	3	44	.43	2	5	ND	1	2	1	2	2	2	.02	.002	2	5	.13	87	.01	4	.21	.14	.02	1	1
MSH-24	1	2	3	1	.2	3	1	15	.23	3	5	ND	1	2	1	2	2	1	.01	.001	2	3	.01	7	.01	4	.15	.18	.01	1	1
MSH-25	1	94	4	3	.3	19	4	77	.44	3	5	ND	1	3	1	2	3	5	.32	.001	2	13	.21	62	.01	2	.21	.18	.01	1	1
MSH-26	1	4	2	1	.1	4	1	15	.20	2	5	ND	1	1	1	2	2	1	.01	.001	2	4	.01	27	.01	4	.14	.15	.01	1	1
MSH-27	1	2	2	1	.1	3	1	12	.19	2	5	ND	1	2	1	2	2	1	.01	.001	2	4	.01	11	.01	2	.13	.15	.01	1	1
MSH-28	1	2	2	1	.1	2	1	13	.19	2	5	ND	1	1	1	2	5	1	.01	.001	2	4	.01	10	.01	4	.11	.14	.01	1	1
MSH-29	1	3	2	1	.2	3	1	10	.19	2	5	ND	1	2	1	2	4	1	.01	.001	2	4	.01	7	.01	3	.13	.15	.01	1	1
MSH-30	1	5	4	3	.2	8	2	31	.34	2	5	ND	1	2	1	2	3	1	.01	.001	2	5	.10	21	.01	2	.21	.15	.03	1	1
MSH-31	1	2	3	1	.1	4	1	19	.23	2	5	ND	1	4	1	2	3	1	.02	.001	2	3	.03	98	.01	2	.15	.15	.01	1	1
MSH-32	1	4	2	1	.1	4	1	17	.23	2	5	ND	1	2	1	2	3	1	.01	.001	2	5	.02	10	.01	3	.14	.14	.01	1	2
MSH-33	1	4	2	1	.1	4	1	16	.26	2	5	ND	1	1	1	2	3	1	.01	.001	2	5	.05	13	.01	2	.19	.19	.01	1	1
MSH-34	1	16	5	6	.1	9	2	56	1.36	2	5	ND	1	1	1	2	3	1	.05	.001	2	5	.05	48	.01	3	.15	.16	.01	1	1
MSH-35	1	3	2	2	.1	9	2	40	.30	2	5	ND	1	1	1	2	7	1	.02	.001	2	5	.09	13	.01	2	.14	.14	.01	1	1
MSH-36	1	2	2	1	.1	3	1	11	.20	2	5	ND	1	1	1	2	4	1	.01	.001	2	3	.04	186	.01	2	.14	.12	.01	1	1
STD C/AU 0.5	21	56	40	127	7.1	68	29	1069	3.96	37	20	6	32	45	17	16	18	61	.48	.101	37	58	.88	176	.08	38	1.72	.06	.12	15	500