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DIAMOND DRILLING REPORT

ON

THE WHIPSAW PROPERTY

SIMILKAMEEN MINING DIVISION, BRITISH COLUMBIA

NTS 92H/7

Latitude 49° 16' N ; Longitude 120° 45' W

OWNER: WORLD WIDE MINERALS LTD.

OPERATOR: WORLD WIDE MINERALS LTD.

BY

PAUL W. RICHARDSON, Ph.D., P.Eng.

P.W. Richardson

Vancouver, B.C. July 20, 1990.

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SUMMARY

The Whipsaw Property contains several types of mineralization, including copper, gold, silver, molybdenum and zinc, which are related to the Whipsaw Porphyry Stock. The stock is intruded along the regionally mineralized contact between the Nicola Group Volcanics and the Eagle Granodiorite. Copper and molybdenum mineralization is related spatially directly with the perimeter of the Whipsaw Porphyry. Gold, silver and zinc mineralization in quartz-pyrite veins and as replacements in wallrock adjacent to the veins lies to the south of the porphyry mineralization.

Intense copper stream sediment anomalies were discovered in 47 Mile Creek in 1959, and were traced upstream to the north and south contacts of the Whipsaw Porphyry. Over the years since 1959, the area of interest was covered by several separate properties. In 1987, for the first time, all the various properties were consolidated by World Wide Minerals Ltd., and it was possible to plan an exploration programme covering the entire area of interest. In addition to the above metals, within the Property there are two potential sources of the platinum found in the placer deposits in Whipsaw Creek east of the Property.

In the spring of 1990, a small programme of six diamond drill holes was done to test part of one of the 14 targets

in the Porphyry Area and one of the targets in the Quartz Vein Area. These were not the best targets, but were accessible at that time of year. A total of 683 metres (2241 feet) was drilled at a cost of $62,398.76. Better porphyry copper mineralization was found than was earlier known, and the gold-bearing quartz vein of the Silvertip Zone was enlarged.

INTRODUCTION

The Whipsaw Property, which is in the Similkameen District of British Columbia, contains copper, gold, silver, molybdenum and zinc mineralization in several zones related to the Whipsaw Porphyry intrusion and extending over a large area north and south of Whipsaw Creek. Placer deposits containing gold and platinum were mined in Whipsaw Creek downstream to the east of the Property. Within the Property are old prospect adits on gold and silver-bearing deposits in veins and adjacent wall rock. Major geochemical stream sediment and soil anomalies of Cu, Mo and Zn have been known since 1959. Since the original staking of quartz-sulfide vein deposits in 1908, the ground has always been fragmented with several owners. Recently, for the first time, the ground was consolidated by World Wide Minerals Ltd., and it has been possible to plan exploration projects without property line constraints.

In 1987, the writer was commissioned by Mr. Charles R. Martin, President of World Wide Minerals Ltd., to review all the available data, including historical data, those data derived from a recently completed, major soil sampling programme and airborne geophysical survey by World Wide Minerals and a diamond drill programme then in progress. The writer was to organize and summarize the data and to recommend a future course of action for the Company on the

Property. This was to include, if reasonable, specific recommendations for further exploration.

The Whipsaw Property is very large and contains at least two styles of mineralization: predominantly porphyry copper, molybdenum mineralization occurs around and in the Whipsaw Porphyry Intrusion and, south of the Porphyry Area, gold, silver, zinc-bearing veins and related replacement mineralization occur in several showings.

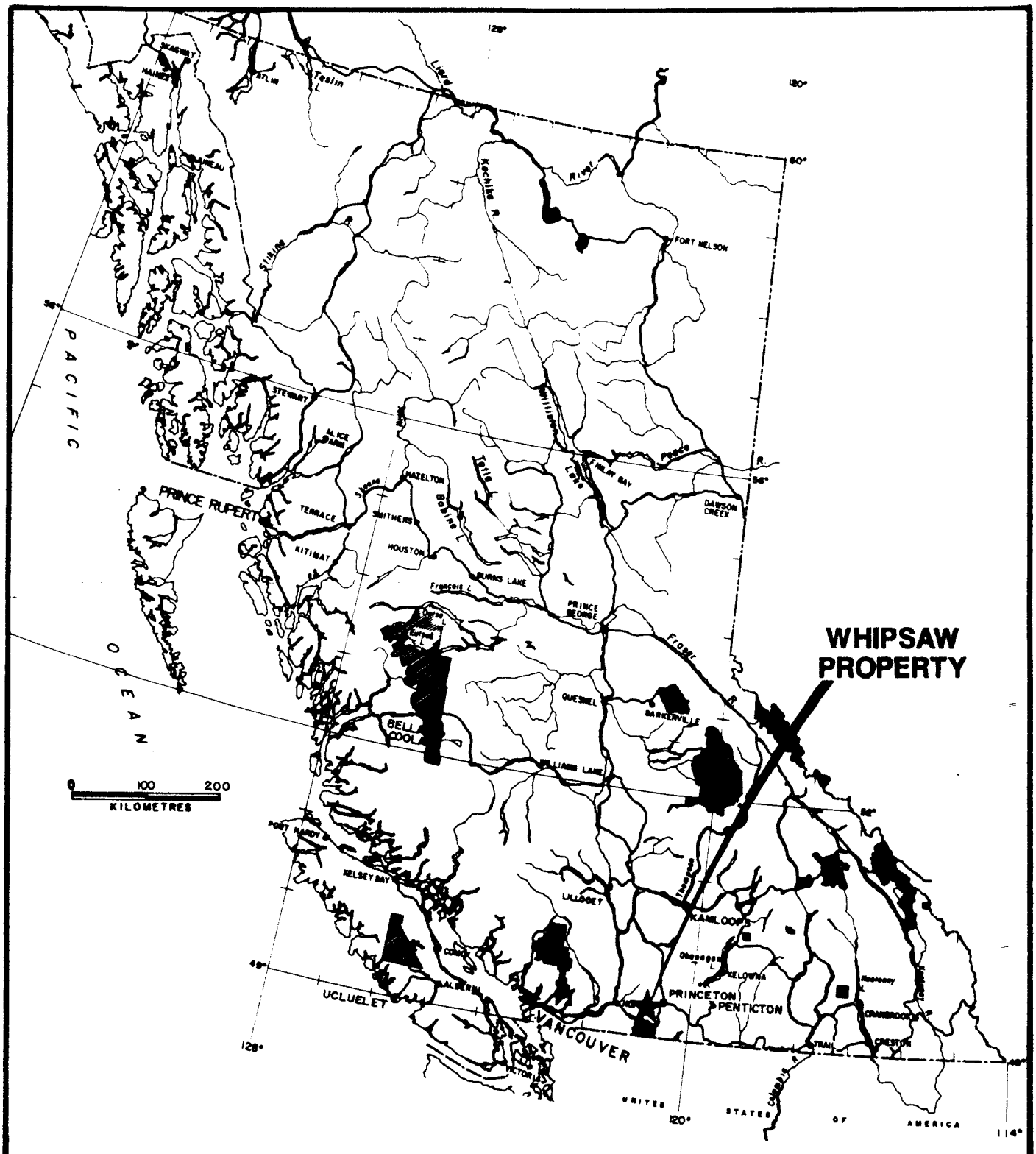
LOCATION AND ACCESS

The Whipsaw Property is in the Similkameen Mining Division, British Columbia, at latitude 49°16' N, longitude 120°45'W on NTS Map 92H/7 (Figure 1). The Property is 170 km east of Vancouver, and is 26 km SW of Princeton. The major Similco Copper-Gold Mine lies 15 km ENE of the Property (Figure 2).

Access from Vancouver is by paved road via Highway 401 and Highway 3 to Princeton. Thirteen km S of Princeton, a good logging road leaves Highway 3 and goes up the north bank of Whipsaw Creek through the Property, a distance of 18 km to the camp (Figure 2). Numerous logging and mining roads give good access to most parts of the Property.

Whipsaw Creek flows eastward through the middle of the Property (Figure 3). The topography on the Property is moderate with some deeply incised valleys. Elevations range from 1385 to 1660 m. The Property is covered with large stands of commercial evergreen trees with little undergrowth. Outcrop is very sparse, but in most places the overburden is not more than one metre deep.

The Princeton Area has a long tradition of mining with all the necessary infrastructure in place. The Whipsaw Property is within easy commuting distance of Princeton



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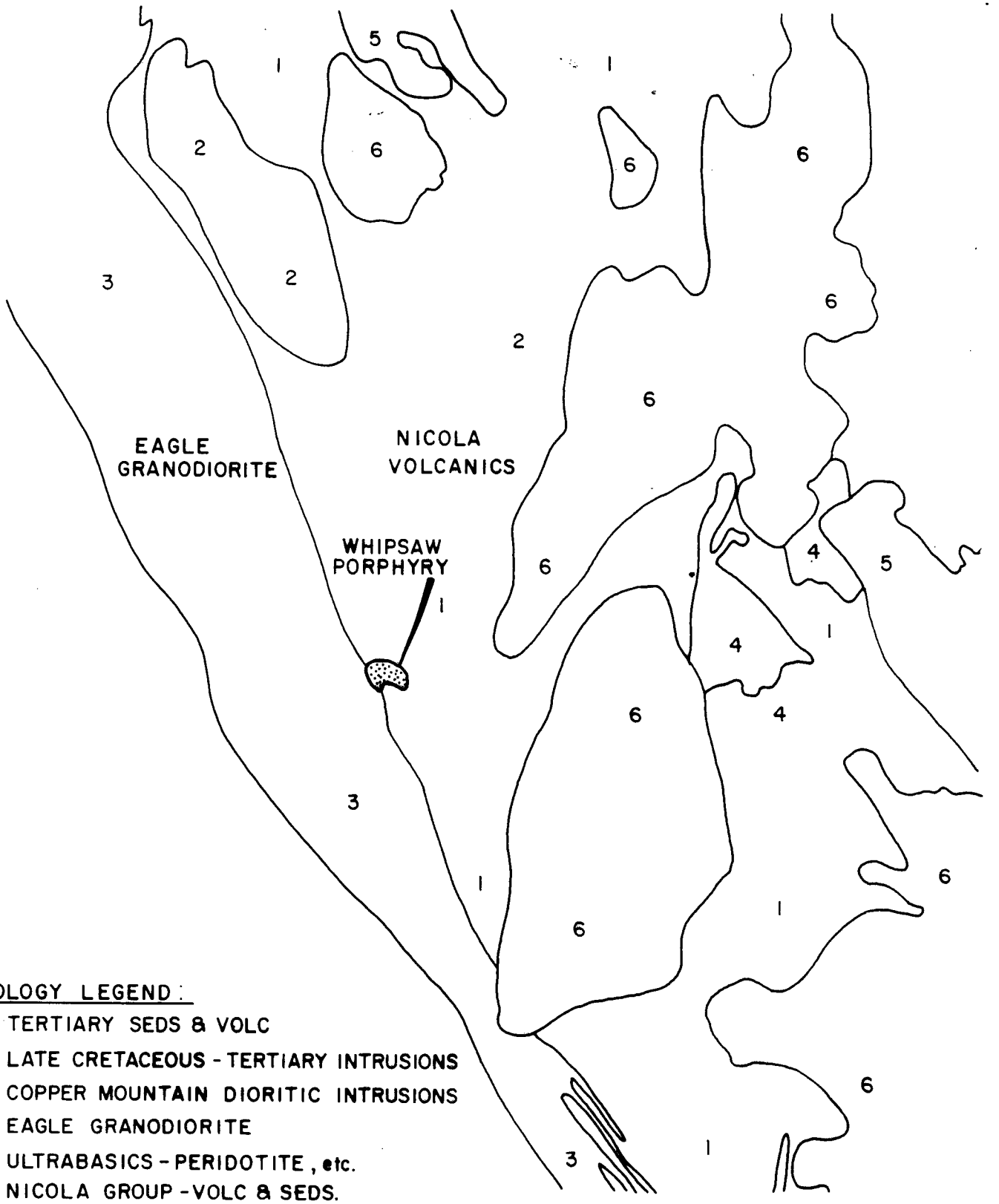
WHIPSAW PROPERTY

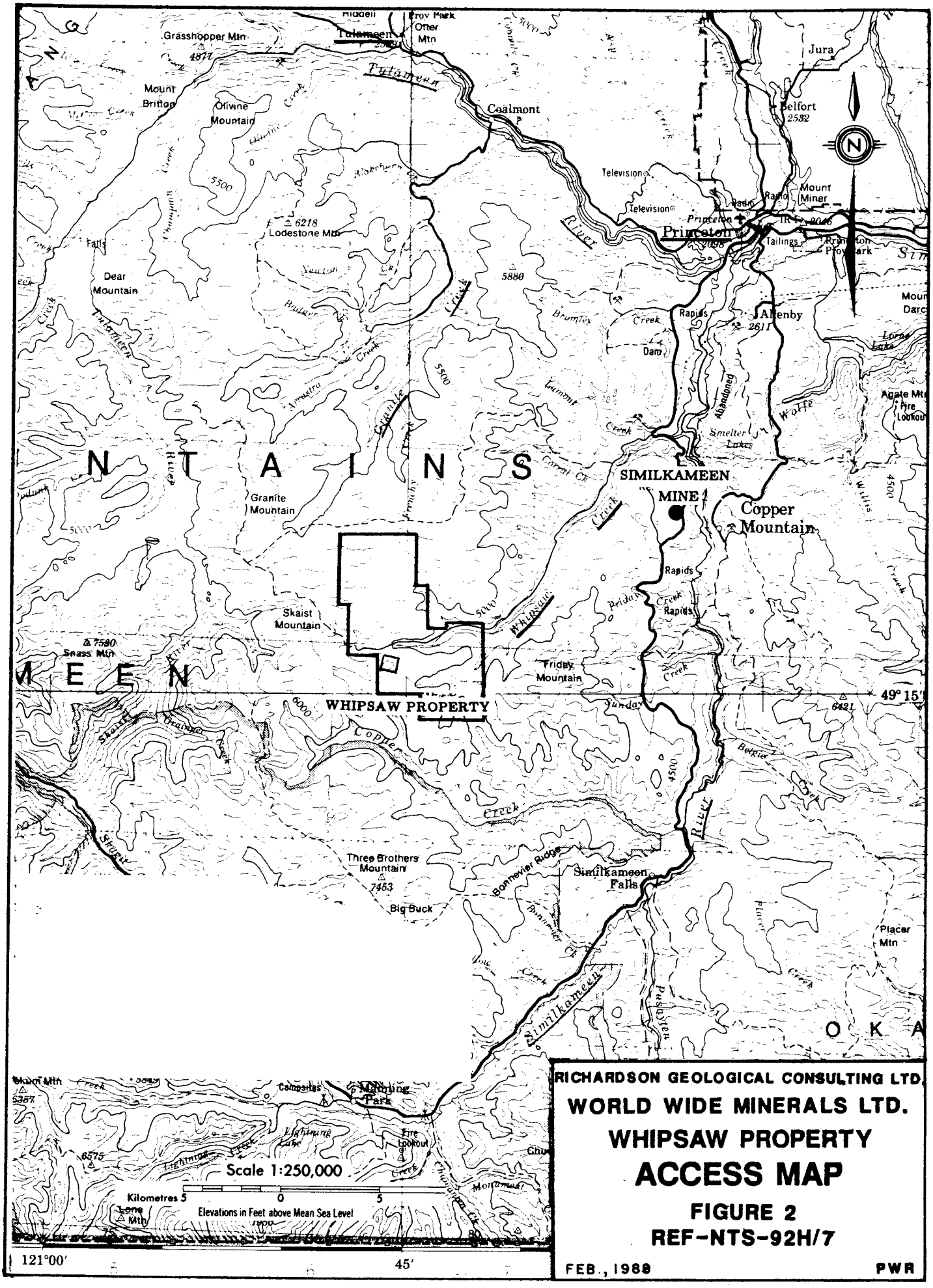
LOCATION MAP

DATE: FEB., 1988

BY: P.W.R.

FIGURE No. 1


EAGLE
GRANODIORITE
NICOLA
VOLCANICS
WHIPSAW
PORPHYRY
GEOLOGY LEGEND:
6 TERTIARY SEDS & VOLC
5 LATE CRETACEOUS - TERTIARY INTRUSIONS
4 COPPER MOUNTAIN DIORITIC INTRUSIONS
3 EAGLE GRANODIORITE
2 ULTRABASICS - PERIDOTITE, etc.
1 NICOLA GROUP - VOLC & SEDS.



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WHIPSAW PROPERTY

ACCESS MAP

FIGURE 2

REF-NTS-92H/7

FEB., 1988 PWR

where an experienced labour force lives. These factors are very favourable to the economics of a new mine in the area. There is good transportation to the port of Vancouver.

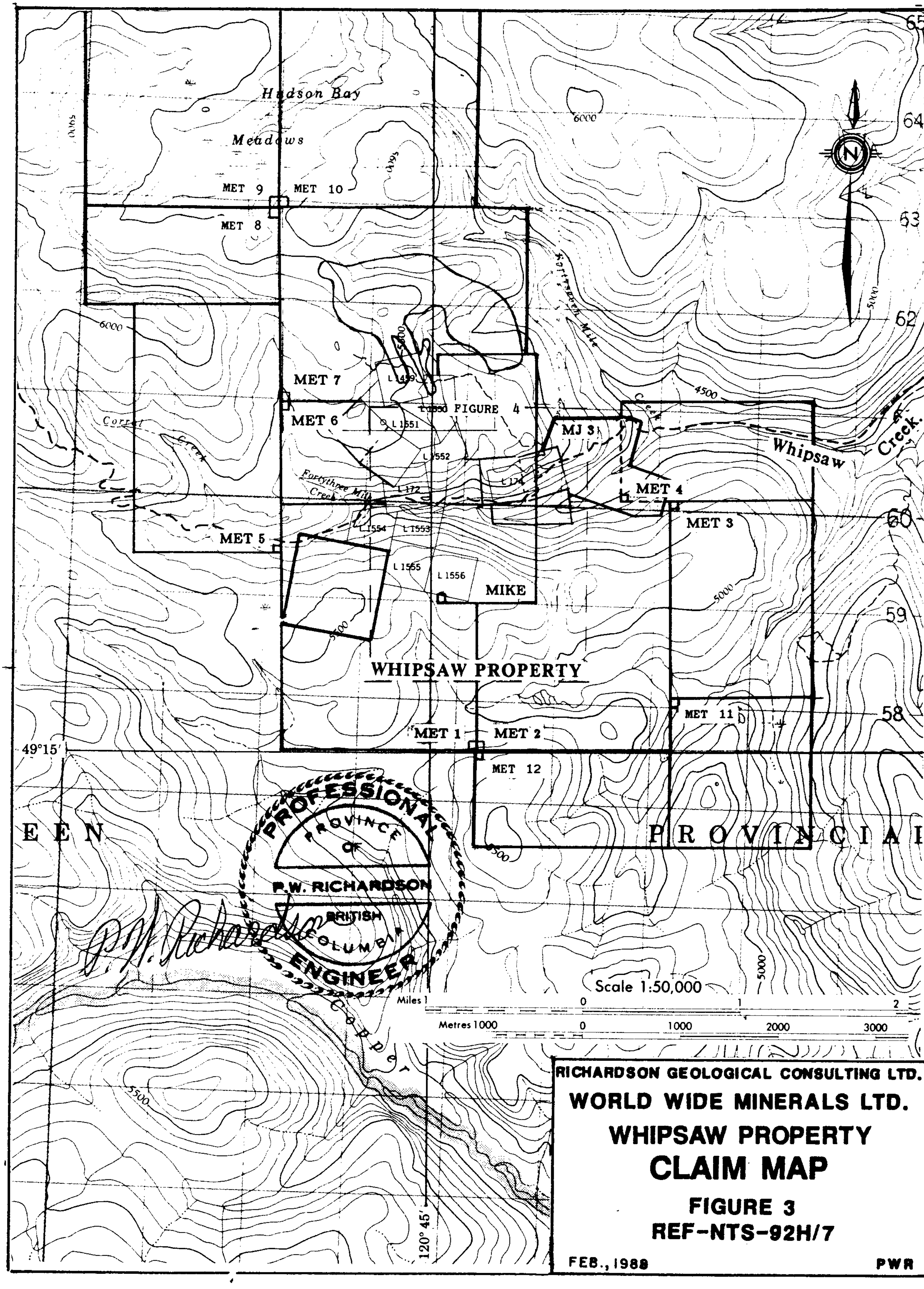
CLAIMS

The Whipsaw Property consists of two groups of mineral claims totalling 196 units. The pertinent claim data are as follows:

NORTH GROUP (98 units; grouping date April 23, 1990)

Name	Record No.	No. of Units	Record Date	Expiry Date
OK#3 Fr	15767	1	Mar. 18/66	Mar. 18/93*
MET 8	3106	8	Apr. 26/88	Apr. 26/93*
MET 9	3107	20	Apr. 26/88	Apr. 26/93*
MET 10	3108	20	Apr. 26/88	Apr. 26/93*
OK#6 Fr	33749	1	Jun. 25/71	Jun. 25/93*
OK#7 Fr	33750	1	Jun. 25/71	Jun. 25/93*
Silvertip No. 1	18218	1	Jun. 28/66	Jun. 28/93*
Silvertip No. 2	18219	1	Jun. 28/66	Jun. 28/93*
OK #2	11980	1	Jun. 29/64	Jun. 29/93*
MET 5	3066	15	Nov. 24/87	Nov. 24/93*
MET 6	3067	9	Nov. 24/87	Nov. 24/93*
MET 7	3068	20	Nov. 24/87	Nov. 24/93*

Total = 98 Units



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CLAIM MAP

FIGURE 3

REF-NTS-92H/7

FEB., 1988 PWR

SOUTH GROUP (98 units; grouping date April 23, 1990)

Name	Record No.	No. of Units	Record Date	Expiry Date
Mineral Lease #30	Lots 172 & 1549-1556	1	Jan. 13/64	Jan. 13/91
OK#4 Fr.	15768	1	Mar. 18/66	Mar. 18/93*
OK#5 Fr.	15769	1	Mar. 18/66	Mar. 18/93*
MET 11	3109	9	Apr. 26/88	Apr. 26/93*
MET 12	3110	8	Apr. 26/88	Apr. 26/93*
MET 1	2928	20	May 13/87	May 13/92*
MET 2	2929	20	May 13/87	May 13/92*
OK #1	11979	1	Jun. 29/64	Jun. 29/93*
OK #8	33825	1	Jul. 9/71	Jul. 9/93*
MJ3	245	6	Jul. 26/77	Jul. 26/93*
MIKE	411	10	Aug. 21/78	Aug. 21/93*
MET 3	3064	12	Nov. 24/87	Nov. 24/93*
MET 4	3065	8	Nov. 24/87	Nov. 24/93*

Total = 98 Units

* Expiry date when work applied for, supported by the present report, has been approved.

The above data conform with the records in the Princeton and Vancouver recording offices of the British Columbia Ministry of Energy, Mines and Petroleum Resources.

All claims are owned by World Wide Minerals Ltd.

The areas of the North and South Groups exist to distribute assessment work, which can be spread over a maximum of 100 units from work on any one unit (one unit equals approximately one claim in most other jurisdictions). These groups are only indirectly related to the "Porphyry Area" or the "Gold-Silver-Zinc Area", and the claims can be regrouped when convenient.

HISTORY

Although placer deposits in the Tulameen and Similkameen rivers and their tributaries had been known since the 1860's, it was not until 1885 that rich placer showings of gold and platinum were discovered near Tulameen especially in Granite Creek (Figure 2). The bonanza period of placer mining lasted for a decade. In this period, gold and platinum placer deposits were discovered in Whipsaw Creek downstream to the east of the Whipsaw Property. Prospecting led to the staking of gold and silver-bearing veins in the central part of the present Property in 1908 (Figure 3). These were explored at the time by trenching and underground work. Additional adits were driven in the period from 1927-1930.

In 1959, reconnaissance stream sediment sampling by Texas Gulf Sulphur led to the discovery of major stream sediment anomalies in tributaries of Whipsaw Creek (Bacon, 1960). Follow-up work outlined soil geochemical and induced polarization anomalies near the headwaters of 47 Mile Creek (Figure 3). The anomalies were caused by the weathering of porphyry copper-molybdenum mineralization in the northern part of the present Property. This anomalous area was worked on by Texas Gulf, Dome Exploration (Canada) Ltd., Moneta Porcupine Mines Limited, Amax Exploration Ltd. and Newmont Mining Ltd., and large tonnages of 0.1-0.3% Cu with

minor Mo were outlined by geochemical and geophysical surveys and diamond drilling (Heim, 1987).

Although the first mineral claims were staked in 1908, the various claim groups in the area have had separate ownerships since that time. From 1961, Whipsaw Mines Ltd. controlled the part of the ground near the valley bottom where the early prospects were located, and did several limited geochemical and drilling programmes, including, in 1968, two diamond drill holes under the Metestoffer Showing.

From 1970-73, geological and geochemical surveying was done by Stokes Exploration Management Co. Ltd. for Whipsaw Mines and for Skaist Minerals to the west. In an extensive 1970 soil sampling programme, the samples were analyzed for copper only. This survey obtained anomalies over areas of known mineralization and led to the discovery of the BZ zone. However, Au and Ag analyses were not done.

In 1974, Newconex Canadian Exploration Ltd. took 45 soil and rock samples near the known showings and near anomalies discovered by the 1970 survey. In addition, Newconex results showed an increase in Au and Ag in Whipsaw Creek stream sediments where the showings occur.

In 1982 and 1983, R.R. Culbert and J.R. Poloni compiled available older data on part of the present Property, and

did trenching and drilling programmes at the Metestoffer and BZ showing. The programmes met with some success, and additional work was recommended, but not done.

In 1985, Dr. Heim, on behalf of World Wide Minerals Ltd., did soil sampling in the area of the BZ trenches to test the area for precious as well as base metals. He found that the entire area of the BZ trenches was within a large Cu, Zn anomaly accompanied by anomalous Au, Ag and As values. In 1986, he extended the trenches and cut rock samples assaying as high as 0.339 oz/ton Au and 5.40 oz/ton Ag across 0.61 m.

Also in 1985, Lone Jack Resources did a soil sampling programme on their claims, which are now part of the Whipsaw Property, and collected 412 samples along a grid in the west-central part the Property and along road cuts (Mitchell, 1985). That winter, Lone Jack drilled eight diamond drill holes from roads near the Spencer Showing, across Whipsaw Creek from the Metestoffer Showing and on a geochemical anomaly in the NW corner of the Property. The holes intersected a breccia zone at the Spencer Zone and several narrow widths of values. The drilling was confined to being done from available roads because of deep winter snow.

In 1987, World Wide Minerals did a soil sampling programme over the central part of the Property collecting a total of 5580 samples which were analyzed for gold and, separately, for 31 elements using the ICP method. In late 1987 and January 1988, the Company also diamond drilled 30 holes totalling 3049.1 m (10,000 ft).

GEOLOGY

The Property covers 10 km of the regionally mineralized contact zone between the Upper Triassic Nicola Group and the Eagle Granodiorite (Figure 2). In the north-central part of the Property, the contact zone is intruded by the Whipsaw Porphyry. Copper-molybdenum-gold mineralization is related to the perimeter of the porphyry stock. Dykes of feldspar porphyry extend north and south of the stock near and parallel to the Nicola-Eagle Granodiorite contact.

The Whipsaw Porphyry is the source of a large hydrothermal system with which at least two types of mineral deposits are related. Porphyry copper-molybdenum-gold mineralization occurs disseminated and in veinlets within the Whipsaw Porphyry and in Nicola rocks bordering the porphyry. To the south, the porphyry copper-molybdenum-gold mineralization decreases abruptly, probably being cut off by E-W faulting, beyond which gold-silver-zinc mineralization occurs in quartz veins and associated disseminated deposits. An area in which skarns are reported occurs just north of Whipsaw Creek near the Nicola-Eagle contact. This area coincides with the area of the best gold geochemical anomalies on the Property.

An intense magnetic anomaly in the southeast portion of the Property is probably caused by a body of ultrabasic

rocks. If so, this could be the source of the platinum in the placer deposits in Whipsaw Creek east of the Whipsaw Property. A second possible source of platinum group elements (PGEs) is the mineralization associated with the Whipsaw Porphyry. At nearby Copper Mountain, PGEs have been reported as being associated with the copper-gold mineralization.

GEOPHYSICS

Several geophysical surveys have been done on various areas of the present Property by the owners of the smaller properties which have now been consolidated. In 1960, Texas Gulf Sulphur did an Induced Polarization (IP) survey in the apparent source area of their geochemical anomalies (Bacon, 1960). In 1961, they did a vertical loop electromagnetic survey and a magnetic survey to obtain specific drilling targets (Bacon, 1961). A 400 γ magnetic anomaly coincided with an EM anomaly which, in turn, partly coincided with an IP anomaly. Three diamond drill holes, W-1 to W-3, totalling 208 m were drilled to test the geophysical results.

In 1963, the writer, on behalf of the Dome-Moneta-Tennessee joint venture, drilled deeper holes, W4 and W5, on the Texas Gulf IP anomalies just to the south of the Whipsaw Porphyry and, in 1964, extended the IP survey area and did bulldozer trenching. Targets were not specific enough to continue at that time.

In 1971, Newmont Mining Ltd. did IP and Resistivity work extending the Texas Gulf coverage to the Nicola volcanics beyond the north border of the Whipsaw Porphyry (Ballantyne, 1971).

In 1987, World Wide Minerals did an airborne combined magnetometer and very low frequency electromagnetometer (VLF-EM) survey over the southern part of the Property. Several VLF-EM anomalies have yet to be examined in the field. An intense magnetic anomaly in the SE portion of the Property could be caused by an ultrabasic intrusion.

COMPILATION AND PURPOSE OF THE 1990 PROGRAMME

All the geological, geochemical and geophysical data relating to the Whipsaw Porphyry Area and the Gold-Silver-Zinc Area were collected and plotted on 1:2500 maps (Richardson, 1990a & b). Despite the mass of data, a fairly simple picture emerges. The steep-sided Whipsaw Porphyry intruded the moderate to steeply west-dipping contact between the Eagle Granodiorite and the Nicola Volcanics, the last including some sedimentary beds. The Whipsaw Porphyry has apophyses and dykes intruding the Nicola both to the north and the south. The Nicola rocks are altered and pyritized extensively near the porphyry. Some of the geophysical and geochemical anomalies have been partially tested by limited earlier drilling. The IP and geochemical anomalies along the north boundary of the porphyry were partially tested with very encouraging results: for approximately 600 metres parallel to the contact Paulus outlined a 75 metre thickness of 0.20% to 0.30% Cu in a larger zone of copper-molybdenum mineralization (Paulus, 1972). In general, less was known about the Southern Gold-Silver-Zinc Area, but interesting amounts of gold had been intersected during the 1987 diamond drill programme, especially at the Silvertip Showing.

Sixteen specific targets in the well-mineralized area around the Whipsaw Porphyry remained untested or only

partially tested (Richardson, 1990a). In early 1990, because of the difficulty of convincing inspecting geologists of companies with the capability of financing the next stages of the exploration that the compiled data and interpretation are valid, Mr. Martin, the President of World Wide Minerals Ltd., decided to carry out a limited diamond drilling programme. Because of difficult accessibility to most of the Property in the winter, one target selected for drilling was the north contact of the Whipsaw Porphyry which had been partially tested by earlier operators who drilled three scattered holes and one section of four holes sub-parallel to the schistosity. It was not unlikely that there were variations in grade across the schistosity and that there would be zones of better grade than the material drilled to that time. This was not the area with the best geochemistry or best combined geophysics and geochemistry, but was most accessible under winter conditions and was a good test case of the interpretation.

Another winter-accessible area along Whipsaw Creek is the Silvertip Showing. Drilling in 1987 had revealed Au-Ag-Zn mineralization in quartz-pyrite veins and adjacent wallrock (Richardson, 1988b). Three short holes were drilled to confirm and extend this discovery.

DRILLING RESULTS

A. THE PORPHYRY AREA

The diamond drill holes totalling 467.4 m (1534 ft) were drilled near the northern boundary of the Whipsaw Porphyry. These holes were drilled across the stratigraphy and subparallel to the contact (Figure 4; Appendices I & II). The best intersections were as follows:

	From(m)	To(m)	Width(m)	Cu(%)	Mo(%)
W90-7	10.20	37.00	26.80	0.298	0.015
	48.25	69.75	21.50	0.217	0.011
W90-8	50.00	68.00	18.00	0.243	0.006
	97.00	118.00	21.00	0.360	0.024
W90-9	92.60	127.50	34.90	0.185	0.015
	127.50	168.44	40.94	0.172	0.005

B. THE GOLD-SILVER-ZINC AREA

Three diamond drill holes totalling 215.5 m (707 ft) were drilled at the Silvertip Showing. These holes were placed near two drilled during the 1987 programme (Figure 5; Appendices I & II). The best intersections were as follows:

	From (m)	To (m)	Width (m)	Au (oz/ton)	Ag (oz/ton)	Cu (%)	Zn (%)
W90-403	5.69	6.50	0.81	0.030	0.73	-	0.67
	13.40	14.40	1.00	0.043	0.51	-	0.34
	26.00	26.30	0.30	0.129	8.46	0.81	1.76
W90-404	9.10	9.70	0.60	0.062	1.08	-	1.00
	28.46	28.57	0.11	0.245	4.94	2.13	3.85
	36.90	38.15	1.25	0.035	1.59	0.12	1.50
W90-405	32.00	33.40	1.40	0.072	0.50	0.02	0.05
	37.40	38.05	0.65	0.076	2.21	0.21	1.54
	50.80	52.00	1.20	0.051	1.32	0.06	0.26

CORE STORED ON THE MIKE CLAIM 400 METRES EAST OF 45 MILE CREEK

CONCLUSIONS

There are untested targets on the Property which will probably give better results than those tested to date because the untested targets are in areas with better geochemical and combined geochemical and geophysical results.

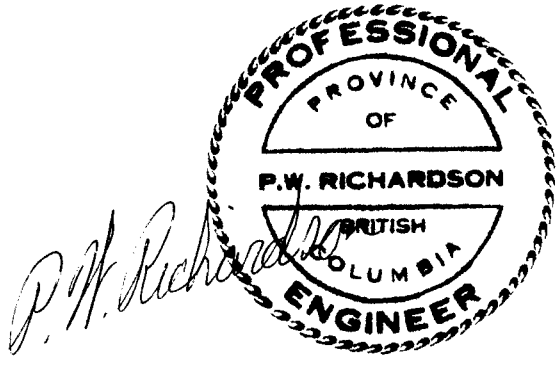
RECOMMENDATIONS

(1) In the Porphyry Area, additional targets should be tested by diamond drilling.

(2) In the Gold-Silver-Zinc Area, the 1987 results were confirmed near the Silvertip Prospect, but additional drill targets should be detailed in areas of other known geochemical anomalies and then investigated first by trenching and then, if reasonable, by diamond drilling.

STATEMENT OF EXPENSES

1 - Drilling Invoices	-	$31,001.60
2 - Material Invoices paid directly by World Wide (re diamond drilling supplies)	-	6,974.34
3 - Bulldozer Rental	-	1,712.00
4 - Assaying	-	2,976.56
5 - Supervision 54 days @ $300.00	-	16,200.00
6 - Expenses re Supervision Accommodation, meals, direct transportation	-	3,334.26
7 - Report Preparation Typing, photocopying, supplies	-	200.00
		$62,398.76



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Copies of these reports are available to be studied in the World Wide Minerals Ltd. office.

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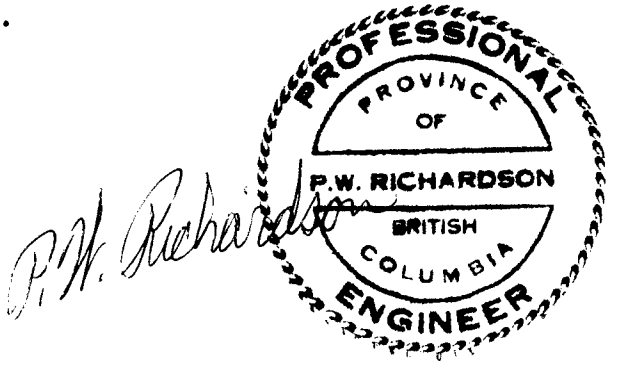
STATEMENT OF QUALIFICATIONS

The writer is a graduate of the University of British Columbia with B.A.Sc.(1949) and M.A.Sc.(1950) degrees in Geological Engineering and a Ph.D.(1955) degree from the Massachusetts Institute of Technology in Economic Geology and Geochemistry.

The writer has done fieldwork in mines and on exploration programmes, except in periods at university, since 1945, and has participated in numerous programmes which included geochemistry since 1953. He has a working knowledge of the major types of geophysics based on fieldwork in the Maritimes, Northern Ontario and Quebec and British Columbia, and has carried out or supervised many diamond drilling programmes since 1950.

The writer has been a Member of the Association of Professional Engineers of British Columbia since returning to British Columbia in 1966.



APPENDIX I

DRILL LOGS

WORLD WIDE MINERALS LTD.

DIAMOND DRILL RECORD

LOCATION:

HOLE NO: W90-7

AZIMUTH: 063°

PROPERTY: WHIPSAW

DIP: -46°

LENGTH: 130.75 m

ELEVATION: 1586.01 m

CLAIM NO: MET 7

STARTED: April 28, 1990

CORE SIZE: BQ

DATE LOGGED: & May 11

SECTION:

COMPLETED: May 6, 1990

DIP TESTS: 200' -

LOGGED BY: P.W. Richardson

PURPOSE: To test mineralization along the north side of the Whipsaw boundary

METRES from	METRES to	DESCRIPTION
0	9.14	CASING
9.14	10.20	FELDSPAR PORPHYRY - Medium grey, boundary conforms to sediments aphanitic dark gray groundmass with 50% white to light grey, 2-5 mm feldspar phenocrysts
10.20	12.50	VOLCANICS - Dark greenish gray, aphanitic, color banding @ 75°. Boxwork of fractures with pyrite and minor chalcopyrite
12.50	14.45	FELDSPAR PORPHYRY - As to 10.20
14.45	17.40	QUARTZ AND SILICIFIED - Very light green gray, aphanitic. Reticulating quartz veins with pyrite, chalcopyrite and molybdenite disseminated and on vein boundaries.
17.40	31.60	VOLCANICS - As to 12.50
31.60	33.90	FELDSPAR PORPHYRY
33.90	36.57	VOLCANICS - As to 12.50
36.57	48.25	DYKES - Medium to dark greenish gray, massive. Aphanitic v. dark groundmass w 10% 1-10 mm feldsper phenocrysts
48.25	69.75	VOLCANICS - As to 12.50 Sulphides about 5% but only rare chalcopyrite

SAMPLE No.	METRES from	METRES to	LENGTH METRES	Au ppb	Ag ppm	Cu ppm	Mo Zn ppm	Alter.	Pyrite
38101	9.14	10.20	1.06	6	1.2	948	60	60	3%
38102	10.20	12.50	2.30	16	2.4	3143	127	127	
38103	12.50	14.45	1.95	1	2.1	2090	222	222	3%
38104	14.45	17.40	2.95	2	3.5	3174	202	202	3%
38105	17.40	20.40	3.00	1	2.8	3921	121	121	
38106	20.40	23.40	3.00	8	1.6	1817	288	288	
38107	23.40	26.40	3.00	8	2.1	2852	83	83	
38108	26.40	29.40	3.00	26	3.1	3110	73	73	
38109	29.40	31.60	2.10	1	3.5	4889	246	246	
38110	31.60	33.90	2.30	11	2.8	2467	124	124	
38111	33.90	37.00	3.10	8	2.0	2657	94	94	
38112	37.00	40.00	3.00	45	1.6	815	46	46	
38113	40.00	43.00	3.00	1	1.3	661	39	39	
38114	43.00	46.00	3.00	7	1.3	704	43	43	
38115	46.00	48.25	2.25	12	2.2	1932	362	362	
38116	48.25	51.00	2.75	1	2.7	2907	192	192	
38117	51.00	54.00	3.00	1	2.3	2667	73	73	
38118	54.00	57.00	3.00	2	2.1	1704	114	114	
38119	57.00	60.00	3.00	10	3.1	1909	163	163	

WORLD WIDE MINERALS LTD.

DIAMOND DRILL RECORD

HOLE Nº: W90-7

PAGE Nº: 2 of 2

METRES from	METRES to	DESCRIPTION	SAMPLE Nº	METRES from	METRES to	LENGTH METRES	Au ppb	Ag ppm	Cu ppm	Mo Zn ppm	Alter.	Pyrite
		VOLCANICS (continued)	38120	60.00	63.00	3.00	4	1.6	1727	40		
			38121	63.00	66.00	3.00	8	1.8	1869	80		
			38122	66.00	68.00	2.00	1	2.7	2185	161		
			38123	68.00	69.75	1.75	1	2.4	2630	107		
69.75	104.50	FELDSPAR PORPHYRY (WHIPSAW)	38124	69.75	72.75	3.00	1	0.6	404	16		
		Light grey, medium-grained, with 2 mm feldspar phenocrysts in a slightly darker grey matrix. with 1-2% disseminated fine-grained pyrite and fine-grained pyrite and chalcopyrite mostly in fractures with chalcopyrite rare beyond 91.00 m.	38125	72.75	75.75	3.00	10	1.1	713	10		
			38126	75.75	78.75	3.00	9	1.5	892	8		
			38127	78.75	82.00	3.25	15	1.2	802	16		
			38128	82.00	85.00	3.00	6	0.2	163	6		
			38129	85.00	88.00	3.00	5	0.5	282	12		
			38130	88.00	91.00	3.00	7	0.7	448	9		
			38131	91.00	94.00	3.00	4	0.4	204	10		
			38132	94.00	97.00	3.00	7	0.2	150	8		
			38133	97.00	100.00	3.00	6	0.1	36	2		
			38134	100.00	103.00	3.00	8	0.3	197	1		
			38135	103.00	104.50	1.50	2	0.5	317	2		
104.50	130.75	FELDSPAR QUARTZ PORPHYRY (WHIPSAW)	38136	104.50	107.50	3.00	5	0.2	190	4		
		Light gray, medium to coarse-grained, with 5-10 mm feldspar and quartz phenocrysts in a very light aphanitic groundmass. Massive, 1% disseminated fine-grained pyrite Quartz phenocrysts rare at beginning	38137	107.50	110.50	3.00	13	0.5	245	12		
		End of Hole at 130.75 m.										

WORLD WIDE MINERALS LTD.

DIAMOND DRILL RECORD

LOCATION:

HOLE NO: W90-8

AZIMUTH: 045°

PROPERTY: WHIPSAW

DIP: -46° LENGTH: 153.46 ELEVATION: 1600.57 m CLAIM NO: MET 7

STARTED: May 7, 1990 CORE SIZE: NQ DATE LOGGED: May 12 & June 4 SECTION:

COMPLETED: June 3, 1990 DIP TESTS: — LOGGED BY: P.W. Richardson

PURPOSE: To test Copper Mineralization up Stratigraphy from DDH W90-7

METRES from	METRES to	DESCRIPTION	SAMPLE No.	METRES from	METRES to	LENGTH METRES	Au ppb	Ag ppm	Cu ppm	Mo ppm	Alter.	Pyrite
0	11.58	CASING - core from 11.00 m										
11.00	17.90	FELDSPAR PORPHYRY - medium grey, 2-5 mm white feldspar phenocrysts crowded in a medium gray aphanitic groundmass Rare (1%) 2-5 mm phenocrysts of biotite Rock very hard and massive but shattered. 1% fg. disseminated pyrite	38138	11.00	14.00	3.00	3	0.4	341	4		
			38139	14.00	16.00	2.00	4	0.4	335	5		
			38140	16.00	17.90	1.90	4	0.2	168	6		
17.90	20.00	VOLCANICS - Very dark gray to black, aphanitic. Schistosity at 80°. 5% pyrite fine grained along schistosity and in random fractures. Minor fine-grained chalcopyrite with pyrite on fractures. Core broken	38141	17.90	20.00	2.10	12	1.8	1866	22		
20.00	26.30	FELDSPAR PORPHYRY - As to 17.90	38142	20.00	23.00	3.00	4	0.2	187	5		
			38143	23.00	26.30	3.30	5	0.3	161	6		
26.30	28.65	VOLCANICS - As to 20.00 except 1-10 mm fractures filled with quartz with pyrite and minor chalcopyrite	38144	26.30	28.65	2.35	10	1.7	1520	68		
28.65	31.70	FELDSPAR PORPHYRY - As to 17.90 except very dark gray groundmass	38145	28.65	31.70	3.05	5	0.6	517	26		

WORLD WIDE MINERALS LTD.

DIAMOND DRILL RECORD

HOLE Nº: W90 - 8

PAGE Nº: 2 of 3

METRES from	METRES to	DESCRIPTION	SAMPLE Nº	METRES from	METRES to	LENGTH METRES	Au ppb	Ag ppm	Cu ppm	Mo ppm	Alter.	Pyrite
31·70	93·00	VOLCANICS - Dark grey, aphanitic, lighter bands often of 1-5 mm quartz at 80° to core axis. 5% pyrite in stockwork veinlets and disseminated. Very fine-grained chalcopyrite associated with pyrite on fractures. Minor fine-grained molybdenite with quartz veinlets	38146	31·70	35·00	3·30	6	1·7	1908	144		
			147	35·00	38·00	3·00	15	1·3	1747	82		
			148	38·00	41·00	3·00	8	2·0	2012	79		
			149	41·00	44·00	3·00	16	2·8	2568	105		
			38150	44·00	47·00	3·00	7	1·7	1837	77		
			151	47·00	50·00	3·00	8	1·6	1604	29		
			152	50·00	53·00	3·00	17	2·2	2697	46		
			153	53·00	56·00	3·00	17	1·9	2222	92		
			154	56·00	59·00	3·00	17	2·6	2970	28		
			155	59·00	62·00	3·00	10	2·0	1957	25		
			156	62·00	65·00	3·00	7	1·6	1823	55		
			157	65·00	68·00	3·00	21	2·8	2931	85		
			158	68·00	71·00	3·00	7	1·4	1581	41		
			159	71·00	74·00	3·00	16	1·7	1899	36		
			38160	74·00	77·00	3·00	11	1·3	1387	31		
			161	77·00	80·00	3·00	7	1·0	1435	72		
			162	80·00	83·00	3·00	10	1·2	1460	58		
			163	83·00	86·00	3·00	9	1·5	2072	51		
			164	86·00	89·00	3·00	12	1·4	1758	65		
			165	89·00	91·00	2·00	12	1·8	2397	72		
			166	91·00	93·00	2·00	25	2·2	2599	60		
93·00	97·00	FELDSPAR PORPHYRY	38167	93·00	95·00	2·00	8	1·2	1236	142		
			168	95·00	97·00	2·00	9	1·1	1293	74		
97·00	120·30	VOLCANICS - As to 93·00, but increasing chalcopyrite and molybdenite with chalcopyrite	38169	97·00	100·00	3·00	27	2·5	4156	91		
			170	100·00	103·00	3·00	23	2·5	3221	135		
			171	103·00	106·00	3·00	24	2·7	3259	201		
			172	106·00	109·00	3·00	19	3·1	3353	366		
			173	109·00	112·00	3·00	23	2·1	3134	172		
			174	112·00	115·00	3·00	30	4·2	4357	149		
			175	115·00	118·00	3·00	27	3·3	3735	519		
			176	118·00	120·30	2·30	19	2·3	2345	201		

•19.1 %Cu 19.3 m

•2.13 %Cu 19 m

•1.55 %Cu 15 m

•2.15 %Cu 10 m

•1.26 %Cu 4 m

WORLD WIDE MINERALS LTD.

DIAMOND DRILL RECORD

HOLE NO: W90-8

PAGE NO: 3 of 3

METRES from	METRES to	DESCRIPTION	SAMPLE NO	METRES from	METRES to	LENGTH METRES	Au ppb	Ag ppm	Cu ppm	~~Zn~~ Mo ppm	Alter.	Pyrite
120.30	121.30	FELDSPAR PORPHYRY - As to 17.90 but with quartz veins and well mineralized with pyrite and minor chalcopyrite	38177	120.30	121.30	1.00	12	1.5	1430	94		
121.30	122.90	VOLCANICS - As to 93.00 but much quartz veining. About 5% pyrite.	38178	121.30	122.90	1.60	23	3.3	3590	258		
122.90	128.31	FELDSPAR PORPHYRY - As to 17.90 but fractured with pyrite plus chalcopyrite.	38179	122.90	125.60	2.70	8	1.3	1355	161		
			180	125.60	128.31	2.71	15	2.2	1944	197		
128.31	131.70	VOLCANICS - As to 93.00 Core badly broken with about 50% recovery Pyrite and chalcopyrite on schistosity at 80°	38181	128.31	131.70	3.29	17	4.1	4728	81		
131.70	133.90	FELDSPAR PORPHYRY - As to 17.90	38182	131.70	133.90	2.20	12	2.0	1986	117		
133.90	137.46	VOLCANICS - As to 93.00	38183	133.90	137.46	3.56	13	3.3	3290	163		
137.46	138.50	FELDSPAR PORPHYRY - As to 17.90	38184	137.46	138.40	0.94	7	1.6	1775	96		
138.50	142.80	BRECCIA - Medium grey green, fragments .5 - 5 cm of dark volcanics, quartz and light porphyry in porphyritic groundmass. Minor pyrite and rare chalcopyrite.	38185	138.40	140.60	2.20	13	1.2	1186	121		
			186	140.60	142.80	2.20	9	0.9	957	44		
142.80	157.42	FELDSPAR PORPHYRY - As to 17.90 becoming altered and very fractured beyond 146.00. Gouge and faulting 149.30 to 149.80, becoming less altered beyond the fault. Some veinlets filled with carbonate Minor pyrite and very minor chalcopyrite	38187	142.80	146.00	3.20	4	0.4	338	12		
			188	146.00	149.00	3.00	8	0.9	763	23		
			189	149.00	151.23	2.23	21	2.6	2492	165		
			190	151.23	153.46	2.23	6	0.6	415	15		
		END OF HOLE AT 157.42 m.										

WORLD WIDE MINERALS LTD.

DIAMOND DRILL RECORD

LOCATION:

HOLE No W 90-9

AZIMUTH: 045°

PROPERTY: WHIPSAW CREEK

DIP: 45° LENGTH: 183.33 m ELEVATION: 1591.73 m CLAIM No: MET 7

STARTED: June 21, 1990 CORE SIZE: BQ DATE LOGGED: June 26 - July 7 SECTION:

COMPLETED: July 7, 1990 DIP TESTS: LOGGED BY: Paul W. Richardson

PURPOSE: To test for Copper, Molybdenum & Gold across Stratigraphy north of Whipsaw Porphyry

METRES from	METRES to	DESCRIPTION	SAMPLE No.	METRES from	METRES to	LENGTH METRES	Au ppb	Ag ppm	Cu ppm	Mo ~~Zn~~ ppm	Alter.	Pyrite
0	10.50	OVERBURDEN (Casing to 12.19)										
10.50	13.60	VOLCANICS - Very dark gray to black, aphanitic. Schistosity at 80° 5% pyrite along schistosity and in various fandom fractures. Minor chalcopyrite.	38191	10.50	12.05	1.55	13	1.6	1726	104		
			38192	12.05	13.60	1.55	14	1.9	1988	53		
13.60	14.02	FELDSPAR PORPHYRY - Light greenish grey, medium grained. Mostly 2-4 mm phenocrysts of feldspar crowded in a light grey groundmass. Rare biotite phenocrysts 2-3 mm. in size. Minor pyrite	38193	13.60	14.00	0.40	3	0.6	420	7		
14.02	27.55	VOLCANICS - As to 13.60	38194	14.00	17.00	3.00	9	1.6	2114	80		
			5	17.00	20.00	3.00	6	1.4	1736	52		
			6	20.00	23.00	3.00	9	1.8	2435	42		
			7	23.00	26.00	3.00	1	1.2	1373	51		
			8	26.00	27.55	3.00	1	1.6	1923	67		
27.55	28.35	FELDSPAR PORPHYRY - As to 14.02 Except 5 cm quartz on each contact and 2% pyrite	38199	27.55	28.35	0.80	1	0.5	603	14		
28.35	33.50	VOLCANICS - As to 13.60	38200	28.35	30.92	2.57	1	1.8	2068	47		
			38201	30.92	33.50	2.58	9	1.2	1397	41		

WORLD WIDE MINERALS LTD.

DIAMOND DRILL RECORD

HOLE NO: W 90 - 9

PAGE NO: 2 of 4

METRES from	METRES to	DESCRIPTION	SAMPLE NO	METRES from	METRES to	LENGTH METRES	Au ppb	Ag ppm	Cu ppm	Mo ppm	Alter.	Pyrite
33.50	34.86	FELDSPAR PORPHYRY - As to 14.02 but 5% Pyrite plus minor chalcopyrite	38202	33.50	34.86	1.36	4	0.7	701	27		
34.86	39.70	VOLCANICS - As to 13.60	38203	34.86	37.28	2.42	4	1.4	1458	96		
			4	37.28	39.70	2.42	9	1.5	2025	37		
39.70	41.10	FELDSPAR PORPHYRY - As to 14.02	38205	39.70	41.10	1.40	2	0.7	569	18		
41.10	51.50	VOLCANICS - As to 13.60	38206	41.10	44.00	2.90	4	1.6	1549	18		
			7	44.00	47.00	3.00	1	2.2	2.224	44		
			8	47.00	50.00	3.00	1	2.0	2019	31		
			9	50.00	51.50	1.50	10	0.9	1266	39		
51.50	53.50	FELDSPAR PORPHYRY - As to 14.02 but medium brown ground-mass and 3-5% pyrite plus minor chalcopyrite	38210	51.50	53.50	2.00	3	1.1	1179	60		
53.50	59.80	VOLCANICS - As to 13.60 Minor sphalerite at 55.5	38211	53.50	55.50	2.00	1	1.9	1950	63		
			12	55.50	57.50	2.00	11	2.0	2465	27		
			13	57.50	59.80	2.30	1	1.1	1331	77		
59.80	62.10	QUARTZ - Possibly very silicified dyke Very light grey, aphanitic; vague 2-3 mm "phenocrysts" similar to feldspar phenocrysts in dykes. Fractures with 3% pyrite and some chalcopyrite in later quartz veinlets	38214	59.80	62.10	2.30	1	0.3	368	65		
62.10	68.58	VOLCANICS - As to 13.6	38215	62.10	64.26	2.16	1	1.0	1486	24		
			6	64.26	66.42	2.16	1	0.9	1438	257		
			7	66.42	68.58	2.16	3	0.9	1217	1141		
68.58	71.40	QUARTZ White, fine grained, massive. 2% Pyrite. Later quartz-filled fractures with fine-grained molybdenite	38218	68.58	71.40	2.82	1	0.5	711	153		

WORLD WIDE MINERALS LTD.

DIAMOND DRILL RECORD

HOLE Nº: W90-9

PAGE Nº: 3 of 4

METRES from	METRES to	DESCRIPTION	SAMPLE Nº	METRES from	METRES to	LENGTH METRES	Au ppb	Ag ppm	Cu ppm	Mo ppm	Alter.	Pyrite
71·40	73·60	VOLCANICS - As to 13·6. With increasing +5% pyrite and patches of chalcopyrite	38219	71·40	73·60	2·20	18	0·9	1625	63		
73·60	77·60	QUARTZ - As to 71·40	38220	73·60	75·60	2·00	20	0·4	249	187		
			21	75·60	77·60	2·00	9	0·4	141	154		
77·60	87·40	VOLCANICS - As to 13·60	38222	77·60	80·05	2·45	21	1·2	1717	53		
		Fault of ground rock and pyrite 85·9-86·1	3	80·05	82·50	2·45	16	0·6	1079	71		
			4	82·50	84·95	2·45	13	0·6	1230	54		
			5	84·95	87·40	2·45	16	1·2	1755	94		
87·40	88·66	FELDSPAR PORPHYRY - As to 14·02	38226	87·40	88·66	1·26	14	0·4	666	131		
88·66	89·43	VOLCANICS - As to 13·60	38227	88·66	89·43	0·77	27	2·3	2453	126		
89·43	92·60	FELDSPAR PORPHYRY - As to 14·02	38228	89·43	92·60	3·17	9	0·2	450	38		
92·60	116·28	VOLCANICS - As to 13·60 but becoming more silicified from 105 - 107·5 and 111·5 to 113. About 5% pyrite, minor chalcopyrite and molybdenite, the last in late quartz veinlets	38229	92·60	95·00	2·40	26	1·7	1959	76		
			30	95·00	98·00	3·00	19	1·3	1661	94		
			31	98·00	101·00	3·00	21	1·7	2033	122		
			32	101·00	104·00	3·00	20	1·7	2350	93		
			33	104·00	107·00	3·00	20	1·8	2173	186		
			34	107·00	110·00	3·00	17	1·1	1715	532		
			35	110·00	113·00	3·00	14	1·0	1526	188		
			36	113·00	116·28	3·28	21	1·2	1736	135		
116·28	118·57	FELDSPAR PORPHYRY As to 14·02	38237	116·28	118·57	2·29	21	0·9	1287	73		
118·57	156·77	VOLCANICS - As to 13·60	38238	118·57	121·50	3·07	23	1·5	2131	110		
		120·5-1 - 122·52 - mislatch - ·50 m recovery	39	121·50	124·50	3·00	18	1·4	1664	53		
			40	124·50	127·50	3·00	22	1·5	1129	138		
			41	127·50	130·50	3·00	13	1·2	1438	59		
			42	130·50	133·50	3·00	22	1·0	1423	27		
			43	133·50	136·50	3·00	14	1·3	1715	41		

WORLD WIDE MINERALS LTD.

DIAMOND DRILL RECORD

HOLE NO: W90-9

PAGE NO: 4 of 4

METRES from	METRES to	DESCRIPTION	SAMPLE NO	METRES from	METRES to	LENGTH METRES	Au ppb	Ag ppm	Cu ppm	Mo ppm	Alter.	Pyrite
		VOLCANICS (continued)	38244	136.50	139.50	3.00	18	1.2	1468	25		
			45	139.50	142.50	3.00	21	2.2	2372	92		
		Dyke 155.78-155.93 - Feldspar porphyry	46	142.50	145.50	3.00	11	1.2	1545	63		
		as to 14.02	47	145.50	148.50	3.00	17	0.6	1216	49		
			48	148.50	151.50	3.00	18	1.6	1996	53		
			49	151.50	154.50	3.00	16	1.2	1530	46		
			50	154.50	156.77	2.27	17	1.6	2272	23		
156.77	159.25	FELDSPAR PORPHYRY - As to 14.02	38251	156.77	159.25	2.48	10	0.2	381	46		
159.25	168.44	VOLCANICS - As to 13.60 but lighter green	38252	159.25	162.50	3.25	14	1.3	1723	73		
		and epidote parallel to the schistosity	53	162.50	165.50	3.00	24	2.4	2484	65		
			54	165.50	168.44	2.94	20	2.2	2446	72		
168.44	172.51	FELDSPAR PORPHYRY - As to 14.02	38255	168.44	170.44	2.00	15	0.8	1240	49		
		but abundant pyrite & some chacopyrite	38256	170.44	172.51	2.07	6	0.9	1151	11		
		and molybdenite. Volcanics 170.85-171.00										
172.51	183.33	VOLCANICS - As to 13.60.	38257	172.51	175.50	2.99	5	1.2	1330	26		
		182.11 - 183.33 - short 0.9 m	58	175.50	178.50	3.00	16	3.1	2310	32		
			59	178.50	181.50	3.00	9	1.3	1370	40		
			60	181.50	183.33	1.83	7	1.1	1211	17		
		END OF HOLE AT 183.33 METRES										

WORLD WIDE MINERALS LTD.

DIAMOND DRILL RECORD

LOCATION: Silvertip Showing
HOLE NO. W 90 - 103
AZIMUTH: 280°
PROPERTY: W[illegible]
DIP: -45° **LENGTH:** 61·26 m **ELEVATION:** 1464·17 m **CLAIM NO.:** Mineral Lease #30
STARTED: April 9, 1990 **CORE SIZE:** BQ **DATE LOGGED:** April 11, 12, 17 1990 **SECTION:**
COMPLETED: April 12, 1990 **DIP TESTS:** — **LOGGED BY:** [illegible] W. Richardson
PURPOSE: To extend mineralization intersected in holes 87-401 & 87-402

METRES from	METRES to	DESCRIPTION	SAMPLE No.	METRES from	METRES to	LENGTH METRES	Au ppb	Ag ppm	Cu ppm	Zn ppm	Alter.	Pyrite	Check assays oz/ton
0	3·66	Overburden											
3·66	4·20	GRANODIORITE - light grey, medium-grained, massive, but some lighter and finer-grained											
4·20	5·69	HORNBLENDE SCHIST (Altered) - very dark, green grey, fine-grained, massive with light green, fine-grained irregular fragments or patches 1-3 cm in size.	38001	4·20	5·69	1·49	62	2·4	19	104			
5·69	6·50	HORNBLENDE SCHIST (Altered) As to 5·69 plus several 1-3 cm patches of medium-grained pyrite. Fractured at end.	38002	5·69	6·50	0·81	1030	25·0	246	6698			0·030
6·50	7·50	HORNBLENDE SCHIST - very dark green gray, medium to fine-grained, laminations 0·5-1 mm. @ 12°. Rare cross fractures 0·5-1 mm with epidote and minor pyrite	38003	6·50	7·50	1·00	26	0·8	59	128			
7·50	7·80	QUARTZ VEIN - light grey, massive appears to cross cut schistosity, minor fine-grained pyrite.	38004	7·50	7·80	0·30	24	0·6	27	167			
			38005	7·80	9·00	1·20	48	1·6	92	319			
7·80	13·40	HORNBLENDE SCHIST	38006	9·00	10·50	1·50	27	0·8	43	248			
		As to 7·50m but fractured for 0·3 m at	007	10·50	12·00	1·50	63	1·[illegible]	70	647			
		start. Schistosity 12°-20°	008	12·00	13·40	1·40	230	3·[illegible]	96	1439			
13·40	15·25	HORNBLENDE SCHIST (Altered)	009	13·40	14·40	1·00	[illegible]	17·[illegible]	143	3·107			0·043
		As to 7·50m [illegible], bleached, and	010	14·40	15·25	0·85	[illegible]	[illegible]	17	1141			
		1-2 mm fracture w. pyrite, sphalerite and											
		very minor chalcopyrite.											
15·25	20·10	HORNBLENDE SCHIST As to 7·50 m	38011	15·25	17·00	1·75	100	1·9	166	805			
		with increasing quartz and epidote [illegible]	012	17·00	18·50	1·50	143	2·3	153	530			
		[illegible] to [illegible] schistosity @ 18°	013	18·50	20·10	1·60	76	2·1	122	1515			

WORLD WIDE MINERALS LTD.

DIAMOND DRILL RECORD

HOLE Nº: 90-WW-103

PAGE Nº: 2 of 3

METRES from	METRES to	DESCRIPTION	SAMPLE Nº	METRES from	METRES to	LENGTH METRES	Au ppb	Ag ppm	Cu ppm	Zn ppm	Alter.	Pyrite	oz/ton Au checks
20.10	21.27	HORNBLENDE SCHIST As to 7.50m Altered with qtz and epidot, minor pyrite	38014	20.10	21.27	1.17	720	11.5	565	7426			
21.27	29.10	APLITE (?) Very altered but some less altered sections medium grey, medium grained, Other areas fine grained, light green grey massive with widely spaced 1-3 mm fractures with pyrite, chalcopyrite and sphalerite 26.10 - 26.30 - Coarse pyrite, chalcopyrite and sphalerite in qtz veins ± 50° to core.	38015	21.27	22.50	1.23	69	0.8	31	737			
			016	22.50	24.00	1.50	39	0.8	117	415			
			017	24.00	25.06	1.00	50	1.5	83	822			
			018	25.00	26.00	1.00	53	1.2	61	488			
			019	26.00	26.30	0.30	4330	190.1	8113	17,607			0.129
			020	26.30	27.70	1.40	14	0.7	45	188			
			021	27.70	29.10	1.40	54	2.2	64	353			
29.10	32.35	HORNBLENDE SCHIST As to 7.50 m Schistosity at 15°	022	29.10	30.60	1.50	220	14.0	772	4091			
			023	30.60	32.35	1.75	105	11.2	219	424			
32.35	32.90	APLITE As to 29.10. Conformable											
32.90	35.30	HORNBLENDE SCHIST ∠ 15°	024	32.35	33.85	1.50	11	0.4	38	571			
		Minor pyrite in hairline fractures at variable angles	025	33.85	35.30	1.45	15	0.8	79	214			
35.30	36.00	QUARTZ VEIN White, irregular, semi conformable, with some included, rounded fragments of schist 5-10 cm in size	026	35.30	36.00	0.70	21	0.7	56	363			
36.00	40.35	HORNBLENDE SCHIST As to 7.50 m Some fractures with pyrite and sphalerite 38.15 - 5 cm of qtz, pyrite, sphal 39.10 - 10 cm " " "	027	36.00	37.50	1.50	121	4.3	104	2200			
			028	37.50	39.00	1.50	142	3.3	296	2,702			
			029	39.00	40.35	1.35	710	35.7	709	23,641			
40.35	41.14	HORNBLENDE SCHIST - As to 7.50 m but altered sections with conformable and cross fractures 0.5-10 cm with quartz, pyrite, sphalerite	030	40.35	41.14	0.79	35	1.7	148	1,114			
41.14	50.00	HORNBLENDE SCHIST As to 7.50 m	38031	41.14	42.50	1.36	31	0.8	114	533			
		last 2 m, irregular 0.5-2.0 cm irregular	032	42.50	44.00	1.50	380	9.6	158	9028			
		quartz veining [illegible] and cross	033	44.00	[illegible]	1.50	59	2.8	332	532			
		schistosity making up 10% of rock. Minor	034	[illegible]	47.00	1.50	1	0.4	33	79			
		chalcopyrite and sphalerite in quartz.	035	47.00	[illegible]	1.50	5	0.4	25	139			
		schistosity 48 m @ 12°	036	[illegible]	50.00	1.50	80	2.0	222	720			

WORLD WIDE MINERALS LTD.

DIAMOND DRILL RECORD

HOLE Nº: 90-W-103

PAGE Nº: 3 of 3

METRES from	METRES to	DESCRIPTION	SAMPLE Nº	METRES from	METRES to	LENGTH METRES	Au ppb	Ag ppm	Cu ppm	Zn ppm	Alter.	Pyrite
50.00	50.90	GRANODIORITE - Light grey, medium-grained massive; contacts at 16°										
50.90	61.26	HORNBLENDE SCHIST As to 7.50m										
		1-2 mm cross fractures (±1% of rock) throughout.	38037	60.25	61.26	1.01	36	1.9	257	616		
		Schistosity 54m @ 12°; 59m @ 20°										
		End of Hole at 61.26 m.										

WORLD WIDE MINERALS LTD.

DIAMOND DRILL RECORD

LOCATION: Silvertip Showing | HOLE No: W90-404

AZIMUTH: 280° | PROPERTY:

DIP: -60° | LENGTH: 280' (85.34 m) | ELEVATION: 1464.11 m | CLAIM No: Silver Tip Lease #30

STARTED: April 12, 1990 | CORE SIZE: BQ | DATE LOGGED: April 18, 1990 | SECTION:

COMPLETED: April 16, 1990 | DIP TESTS: 200' | LOGGED BY: P.W. Richardson

PURPOSE: To test downward extension of mineralization in DDH W90-403

METRES from	METRES to	DESCRIPTION	SAMPLE No.	METRES from	METRES to	LENGTH METRES	Au ppb	Ag ppm	Cu ppm	Zn ppm	Alter.	Pyrite	oz/ton Au check assays
0	3.05	CASING											
3.05	4.00	GRANITE (boulder?)											
4.00	18.00	HORNBLENDE SCHIST - Very dark green gray, fine-grained, massive. Schistosity 0° to 5°. 9.10 - 9.70 - Cross fractures with pyrite and sphalerite.	38038	9.10	9.70	0.60	2140	37.2	189	9980			0.062
18.00	18.70	QUARTZ VEIN - White, medium-grained Sub conformable, irregular with minor disseminated, very fine-grained pyrite.	38039	18.00	18.70	0.70	37	1.9	148	389			
18.70	27.58	HORNBLENDE SCHIST As to 18.0 Sheared 24.6 - 25.0 with minor pyrite in cross fractures beyond 25.0. Schist 0°-6°	40	25.00	26.00	1.00	157	3.6	194	1119			
			41	26.00	27.58	1.58	28	1.1	137	427			
27.58	28.46	HORNBLENDE SCHIST As to 18.0 Some cross fracturing w 5% quartz pyrite	42	27.58	28.46	0.88	360	10.5	436	5327			
28.46	28.57	QUARTZ VEIN Coarse chalcopyrite, pyrite and sphalerite	380.13	28.16	28.57	0.11	8620	169.4	21,336	38,514			0.245
28.57	36.90	HORNBLENDE SCHIST As to 18.0 Fine cross fractures with quartz, pyrite and chalcopyrite. 29 m 0°	44	28.57	30.00	1.43	240	7.1	709	320			
			45	30.00	31.50	1.50	109	3.4	296	1087			
			46	31.50	33.00	1.50	65	7.5	296	1533			
			47	33.00	34.50	1.50	94	4.1	495	1278			
			48	34.50	35.70	1.20	93	5.2	188	540			
			49	35.70	36.90	1.20	15	0.8	87	238			
36.90	38.15	QUARTZ VEINS - Series of veins 60° to 90° to core with coarse pyrite and sphalerite. 50% very altered schist.	38050	36.90	38.15	1.25	1270	54.6	1189	15,051			0.035

WORLD WIDE MINERALS LTD.

DIAMOND DRILL RECORD

HOLE Nº: W90-404

METRES from	METRES to	DESCRIPTION	SAMPLE Nº	METRES from	METRES to	LENGTH METRES	Au ppb	Ag ppm	Cu ppm	Zn ppm	Alter.	Pyrite
38·15	38·90	HORNBLENDE SCHIST As to 18·00 but very altered and bleached with minor sphalerite in cross fractures.	38051	38·15	38·90	0·75	92	3·1	214	1313		
38·90	40·00	QUARTZ - White, medium grained, massive with 1 mm muscovite flakes.	38052	38·90	40·00	1·10	32	1·0	74	356		
40·00	85·34	HORNBLENDE SCHIST As to 18·0. Short section bleached near cross cutting quartz veinlets	38053	40·00	41·50	1·50	91	2·8	85	453		
			54	41·50	43·00	1·50	67	3·0	140	1542		
			55	43·00	44·50	1·50	30	1·0	61	121		
		41 m 12°	56	44·50	46·00	1·50	148	2·8	53	404		
		51 m 0°	57	46·00	47·50	1·50	19	0·8	86	63		
		61 m 0°	58	47·50	49·12	1·62	38	0·9	86	170		
		71 m 6°	59	49·12	49·27	0·15	107	5·1	271	7298		
		81 m 0-12°	60	49·27	50·50	1·23	9	0·8	103	95		
			38061	80·27	81·40	1·13	11	0·9	75	279		
		End of Hole at 85·34 m										

WORLD WIDE MINERALS LTD.

DIAMOND DRILL RECORD

HOLE No: W90-405

LOCATION: Silvertip Showing
PROPERTY: WHIPSAW
AZIMUTH: 233°
DIP: -45°
LENGTH: 68.88 m
ELEVATION: 1464.19 m
CLAIM No: Mineral Lease #30
STARTED: April 17, 1990
CORE SIZE: BQ
DATE LOGGED: April 20, 21, 1990
SECTION:
COMPLETED: April 21, 1990
DIP TESTS: —
Casing left in Hole
LOGGED BY: P.W. Thomson

PURPOSE: To test strike extension of mineralization in DDH: W87-401 & 402 and W90 403 & 404

METRES from	METRES to	DESCRIPTION	SAMPLE No.	METRES from	METRES to	LENGTH METRES	Au ppb	Ag ppm	Cu ppm	Zn ppm	Alter.	Pyrite	Check Assays oz/ton Au.
0	4.27	CASING											
4.27	27.20	HORNBLENDE SCHIST: Very dark greenish grey, fine grained, laminated at small angle. Broken to 8.5 m. By 5.9-6.4 7.0-8.50 - 0.2 m recovered	38062	5.94	6.40	0.46	134	2.3	67	266			
		19.2-20.4 : 1 cm quartz vein parallel to core with minor pyrite	38063	19.20	20.40	1.20	380	10.6	207	2966			
		10 m 0-5°											
		20 m 0-8°											
27.20	33.40	QUARTZ MUSCOVITE ROCK: White, medium-grained. Quartz + muscovite with some cross fracturing with minor pyrite. Minor medium green chlorite (?)	38064	27.20	28.70	1.50	17	0.8	41	92			
			38065	28.70	30.00	0.30	53	0.6	13	124			
			66	30.00	31.00	1.00	1	<0.2	8	28			
			67	31.00	32.00	1.00	35	0.2	4	23			
			68	32.00	33.40	1.40	2340	17.3	150	510			0.072
33.40	35.10	HORNBLENDE SCHIST As to 27.20	69	33.40	34.40	1.00	132	3.4	165	786			
		34 m - 0°-5°	70	34.40	35.10	0.70	114	2.7	163	1005			
35.10	38.05	HORNBLENDE SCHIST As to 27.20 but altered with 5% pyrite-filled cross fractures with two 6 cm quartz veins with coarse pyrite, chalcopyrite and sphalerite from 37.4-38.05.	71	35.10	36.30	1.20	42	1.4	108	798			
			72	36.30	37.40	1.10	92	2.3	183	1792			
			38073	37.40	38.05	0.65	2670	75.7	2104	15,394			0.076
38.05	38.55	QUARTZ MUSCOVITE ROCK - As to 33.40	38074	38.05	38.55	0.50	101	3.5	232	4139			
38.55	39.70	HORNBLENDE SCHIST As to 27.2 1 cm quartz vein with pyrite at 39.1 m	38075	38.55	39.70	1.15	340	34.5	180	1266			
39.70	42.75	QUARTZ MUSCOVITE ROCK: As to 33.40 Some dark green chert and fine pyrite in fractures	38076	39.70	40.70	1.00	105	2.7	144	920			
			38077	40.70	41.70	1.00	59	2.6	58	736			
			38078	41.70	42.75	1.05	22	0.5	51	290			

WORLD WIDE MINERALS LTD.

DIAMOND DRILL RECORD

HOLE No: W90-405

PAGE No: 2 of 2

METRES from	METRES to	DESCRIPTION	SAMPLE No	METRES from	METRES to	LENGTH METRES	Au ppb	Ag ppm	Cu ppm	Zn ppm	Alter.	Pyrite	check Assays oz/ton Au
42·75	48·00	HORNBLENDE SCHIST As to 27·20	38079	42·75	43·25	0·50	67	6·3	747	4960			
		Patches of light green bleaching conformable	80	43·25	44·75	1·50	24	0·6	99	167			
		and across schistosity. Some quartz veins	81	44·75	46·50	1·75	20	0·6	96	408			
		with pyrite.	82	46·50	48·00	1·50	15	0·2	61	127			
		42·9 & 43·2 - 1 cm quartz with pyrite,											
		chalcopyrite and sphalerite.											
		44 m - schistosity at 10°.											
48·00	48·64	As above but very altered with cross	38083	48·00	48·64	0·64	560	19·8	733	14,482			
		fractures and quartz veining and											
		pyrite and sphalerite											
48·64	50·50	HORNBLENDE SCHIST As to 27·20	38084	48·64	50·50	1·86	23	1·0	121	492			
50·50	50·80	QUARTZ VEINING with pyrite	38085	50·50	50·80	0·30	990	32·3	342	7496			
50·80	68·88	HORNBLENDE SCHIST - As to 27·20	38086	50·80	52·00	1·20	1760	45·3	632	2656			0·051
		Bleached at beginning											
		Hole running down schistosity which is	38087	55·90	56·37	0·47	220	2·5	237	2061			
		dark and light green banding 1 mm to											
		1 cm wide undulating slightly. ∠'s 0°-15°	38088	57·24	57·34	0·10	480	26·1	2224	7437			
		Some cross-cutting quartz veins with											
		pyrite or pyrite + chalcopyrite + sphalerite	38089	58·55	58·75	0·20	146	3·6	299	1770			
		as 57·24 - 57·34 -											
		61·35 - 61·75 plus narrower veinlets	38090	61·35	61·75	0·40	290	13·4	215	2279			
		66·80 1 cm quartz vein with pyrite											
		END OF HOLE at 68·88 m											

APPENDIX II

GEOCHEMICAL ANALYSIS CERTIFICATES

ACME ANALYTICAL LABORATORIES LTD. 852 E. HASTINGS ST. VANCOUVER B.C. V6A 1R6 PHONE(604)253-3158 FAX(604) 253-1716

GEOCHEMICAL ANALYSIS CERTIFICATE

(1)

World Wide Mineral File # 90-1068 Page 1

807 - 402 W. Pender St., Vancouver BC V6B 1T6 Submitted by: PAUL RICHARDSON

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 38001	2	19	8	104	2.4	31	7	566	2.64	6	<6	<3	<2	43	.5	<3	4	61	1.77	.058	2	65	1.47	59	.11	<3	1.95	.07	.32	<2	62
A 38002	<2	246	<3	6698	25.0	21	47	1755	8.15	57	<6	<3	2	55	31.0	<3	<3	146	4.97	.037	2	16	3.48	31	.07	<3	3.73	<.02	.19	<2	1030
A 38003	2	59	5	128	.8	21	17	563	3.81	20	<6	<3	<2	32	.6	<3	<3	114	1.07	.052	<2	36	1.54	144	.20	7	2.04	.07	.55	<2	26
A 38004	2	27	5	167	.6	9	3	355	1.52	3	<6	<3	3	20	.5	3	<3	27	.80	.012	5	11	.71	48	.02	3	.93	.04	.09	<2	24
A 38005	2	92	4	319	1.6	23	11	676	3.49	12	<6	<3	<2	38	1.5	<3	<3	96	1.92	.062	2	36	1.64	121	.18	<3	1.96	.04	.42	<2	48
A 38006	<2	43	5	248	.8	18	10	519	2.99	6	<6	<3	<2	25	1.0	<3	<3	82	1.22	.068	<2	31	1.46	115	.24	<3	1.64	.06	.51	<2	27
A 38007	2	70	5	647	1.9	16	13	562	3.58	10	<6	<3	<2	25	3.0	<3	<3	98	1.17	.049	<2	20	1.51	113	.26	<3	1.81	.07	.56	<2	63
A 38008	2	96	4	1439	3.3	8	13	591	4.15	14	<6	<3	2	25	6.4	<3	<3	98	1.14	.052	<2	7	1.47	90	.19	7	1.91	.04	.42	<2	230
A 38009	2	143	<3	3407	17.4	26	12	630	3.82	25	<6	<3	<2	34	16.7	<3	<3	76	1.46	.050	2	66	1.58	65	.10	3	1.91	.04	.30	2	1510
A 38010	2	17	4	1141	1.3	5	3	340	1.65	7	<6	<3	<2	19	5.5	<3	<3	17	.83	.015	4	6	.68	42	.03	4	.90	.03	.15	<2	133
A 38011	2	166	<3	805	1.9	9	11	713	3.72	12	<6	<3	<2	33	3.8	<3	<3	97	1.65	.049	<2	9	1.37	155	.24	<3	1.87	.05	.67	<2	100
A 38012	2	153	5	539	2.3	10	12	629	3.70	11	<6	<3	2	29	2.5	<3	3	98	1.32	.052	<2	8	1.32	77	.23	<3	1.72	.06	.44	2	143
A 38013	2	122	3	1515	2.1	11	14	648	4.22	23	<6	<3	2	36	7.1	<3	<3	112	1.49	.060	<2	12	1.57	100	.21	3	2.00	.06	.51	<2	76
A 38014	2	565	10	7426	11.5	18	15	758	4.72	42	9	<3	3	44	35.9	4	<3	121	1.87	.057	2	20	1.91	108	.21	6	2.46	.04	.87	<2	720
A 38015	2	31	3	737	.8	7	3	256	1.08	14	<6	<3	2	22	3.6	<3	<3	10	.83	.022	6	6	.33	30	<.02	5	.56	.03	.10	<2	69
A 38016	2	117	7	415	.8	7	3	466	1.57	13	<6	<3	<2	31	1.8	<3	<3	22	1.48	.039	5	6	.53	25	.03	6	.87	.03	.12	<2	39
A 38017	3	83	9	822	1.5	9	5	326	1.73	24	<6	<3	2	28	3.7	3	6	23	.90	.044	6	8	.54	55	.04	3	1.04	.05	.29	2	50
A 38018	2	61	13	488	1.2	8	6	286	1.99	34	<6	<3	2	28	2.2	<3	<3	20	1.05	.042	5	6	.48	35	.02	6	.95	.04	.19	<2	53
A 38019	3	8113	7987	17607	290.1	12	12	626	8.09	2200	<6	4	<2	54	89.5	38	46	4	3.38	.017	<2	7	.31	15	<.02	<3	.37	<.02	.13	<2	4330
A 38020	2	45	11	188	.7	7	3	346	1.42	14	<6	<3	<2	23	1.1	<3	<3	20	.84	.039	7	5	.41	39	.03	7	.76	.03	.16	<2	14
A 38021	2	64	38	353	2.2	7	4	365	1.81	19	<6	<3	2	22	1.6	<3	<3	17	.65	.043	6	6	.41	74	.05	7	.85	.04	.26	<2	54
A 38022	2	772	41	4091	14.0	31	15	856	4.08	45	<6	<3	<2	38	21.2	<3	<3	104	1.97	.059	<2	92	1.68	77	.18	<3	1.79	.05	.36	<2	220
A 38023	3	219	9	424	11.2	11	12	607	3.50	21	<6	<3	<2	29	2.4	<3	<3	74	1.08	.052	<2	10	1.11	175	.24	5	1.71	.04	.67	<2	105
A 38024	2	38	<3	571	.4	21	9	545	2.87	13	<6	<3	<2	21	2.9	<3	<3	51	.71	.050	2	66	1.18	150	.19	3	1.46	.04	.64	<2	11
A 38025	2	79	5	214	.8	8	12	633	3.70	10	<6	<3	<2	22	1.1	<3	<3	81	.83	.052	2	10	1.43	202	.26	<3	1.89	.04	.84	<2	15
A 38026	3	56	<3	363	.7	9	7	644	2.26	5	<6	<3	2	24	1.8	<3	<3	46	1.63	.020	5	8	.76	186	.12	4	1.12	.03	.46	<2	21
A 38027	2	104	45	2200	4.3	12	19	589	3.82	33	<6	<3	<2	31	11.0	<3	5	101	1.61	.038	<2	9	1.25	67	.18	<3	1.67	.06	.42	<2	121
A 38028	2	296	<3	2702	3.3	14	14	630	3.25	13	<6	<3	<2	31	13.1	<3	<3	102	1.94	.051	<2	12	1.39	49	.20	6	1.66	.06	.33	<2	142
A 38029	2	709	74	23641	35.7	16	23	883	5.22	219	<6	<3	<2	26	128.1	7	3	128	1.62	.039	<2	12	1.69	59	.14	<3	1.78	.05	.32	7	710
A 38030	<2	148	28	1114	1.7	16	21	828	4.17	158	<6	<3	<2	67	5.4	5	<3	135	1.80	.046	2	13	1.29	27	.09	7	1.64	.04	.14	4	35
A 38031	<2	114	13	533	.8	14	19	699	4.09	19	<6	<3	<2	30	2.8	<3	3	128	1.73	.044	<2	10	1.59	73	.22	<3	2.08	.08	.40	<2	31
A 38032	2	558	93	9028	9.6	15	19	2516	6.49	2559	<6	<3	2	63	45.5	30	<3	113	3.26	.037	3	9	1.77	16	<.02	9	.88	<.02	.15	3	380
A 38033	2	232	19	532	2.8	15	22	737	4.39	21	<6	<3	<2	30	2.8	<3	3	140	1.83	.049	<2	13	1.84	75	.24	3	2.15	.08	.40	<2	59
A 38034	<2	88	<3	79	.4	11	16	513	3.26	8	<6	<3	<2	15	.4	<3	<3	109	1.49	.053	<2	11	1.39	56	.21	4	1.74	.11	.27	<2	1
A 38035	2	82	<3	139	.4	17	11	475	2.56	7	<6	<3	2	18	.8	<3	6	77	1.43	.053	2	24	1.26	72	.17	4	1.36	.09	.12	<2	5
A 38036	2	222	36	720	2.0	12	20	850	4.42	16	<6	<3	<2	29	3.4	<3	<3	147	2.22	.049	<2	11	1.65	21	.18	9	1.96	.09	.20	<2	80
STANDARD C/AU-R	18	56	37	132	7.1	67	31	1049	3.94	39	16	6	37	48	17.5	15	20	57	.50	.094	38	56	.92	176	.08	39	1.93	.06	.14	11	510

W90-403

90 W-403

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: Core AU* ANALYSIS BY ACID LEACH/AA FROM 10 GM SAMPLE.

DATE RECEIVED: APR 25 1990 **DATE REPORT MAILED:** April 27/90. **SIGNED BY** C. Leong .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
A 38037	<2	257	<3	616	1.9	10	21	632	4.58	13	<6	<3	<2	19	2.9	3	<3	154	1.61	.061	<2	5	1.30	74	.21	<3	1.62	.10	.27	<2	36
A 38038	2	189	6	9980	37.2	21	38	959	6.93	55	<6	<3	<2	37	46.7	<3	<3	128	1.55	.044	<2	30	2.50	23	.09	<3	2.77	.04	.08	<2	2140
A 38039	2	148	<3	389	1.9	9	14	589	3.63	11	<6	<3	<2	38	1.8	<3	<3	109	1.46	.036	<2	5	1.63	46	.22	5	2.07	.09	.26	<2	37
A 38040	<2	194	<3	1119	3.6	7	13	544	3.34	6	<6	<3	<2	71	5.3	<3	<3	115	2.09	.036	<2	5	1.20	26	.13	<3	2.44	.18	.17	<2	157
A 38041	<2	137	5	427	1.1	8	14	537	3.40	4	7	<3	<2	42	2.0	<3	<3	115	1.77	.047	<2	4	1.21	19	.16	<3	2.12	.14	.19	<2	28
A 38042	<2	436	80	5327	10.5	34	23	739	5.63	102	<6	<3	<2	39	26.0	5	<3	133	1.80	.064	3	35	1.93	12	.08	<3	2.09	.06	.37	2	360
A 38043	2	21336	175	38514	169.4	15	38	586	10.96	392	<6	6	<2	41	190.4	5	66	91	1.09	.013	<2	11	1.33	11	.05	<3	1.40	.05	.35	3	8620
A 38044	<2	709	11	320	7.1	10	14	511	3.23	42	<6	<3	<2	57	1.5	3	<3	88	2.39	.037	<2	9	1.06	11	.10	<3	1.98	.15	.14	<2	240
A 38045	<2	296	4	1087	3.4	10	10	439	2.68	9	<6	<3	<2	33	5.4	<3	<3	82	1.59	.034	<2	9	1.14	15	.13	3	1.76	.13	.13	5	109
A 38046	<2	296	8	1533	7.5	8	11	513	2.72	9	<6	<3	<2	22	8.3	4	<3	82	1.51	.032	<2	10	1.26	17	.10	<3	1.50	.08	.12	<2	65
A 38047	<2	495	9	1278	4.1	11	14	649	3.42	11	<6	<3	<2	36	6.1	<3	7	98	1.86	.025	<2	10	1.70	17	.13	6	2.12	.10	.23	<2	94
A 38048	<2	188	6	540	5.2	11	15	544	3.25	9	<6	<3	<2	31	2.5	4	<3	89	1.92	.033	<2	10	1.36	30	.14	8	1.74	.11	.17	<2	93
A 38049	<2	87	25	238	.8	21	15	568	3.29	11	<6	<3	<2	41	1.1	<3	<3	94	1.66	.054	<2	24	1.57	43	.18	<3	2.00	.09	.30	<2	15
A 38050	3	1189	494	15051	54.6	23	25	966	7.55	344	10	<3	<2	41	76.6	18	11	78	2.19	.041	2	18	1.15	28	.03	<3	1.39	<.02	.19	<2	1270
A 38051	<2	214	11	1313	3.1	10	16	588	3.51	18	<6	<3	<2	39	6.5	4	<3	101	1.94	.049	<2	8	1.32	11	.13	5	1.87	.10	.16	<2	92
A 38052	2	74	10	356	1.0	7	4	236	.94	9	<6	<3	<2	13	1.9	<3	<3	14	.69	.006	2	5	.38	17	<.02	6	.54	.02	.09	<2	32
A 38053	<2	85	51	453	2.8	13	14	554	3.15	13	<6	<3	<2	28	2.2	4	<3	88	1.71	.040	<2	10	1.37	18	.15	<3	1.72	.08	.19	<2	91
A 38054	<2	140	33	1542	3.0	20	13	584	3.07	23	<6	<3	<2	30	8.3	4	<3	90	1.80	.045	<2	20	1.37	17	.16	4	1.67	.08	.21	<2	67
A 38055	<2	61	4	121	1.0	19	14	569	3.32	9	<6	<3	<2	28	.6	3	<3	95	1.48	.067	<2	22	1.55	75	.25	7	1.84	.07	.42	<2	30
A 38056	2	53	7	404	2.8	19	23	610	4.00	21	<6	<3	<2	30	1.5	<3	<3	102	1.58	.059	<2	25	1.58	53	.20	3	1.80	.06	.33	<2	148
A 38057	2	86	3	63	.8	11	12	465	2.81	7	<6	<3	<2	49	.4	6	<3	83	1.90	.043	<2	14	1.13	58	.15	3	2.10	.16	.20	<2	19
A 38058	<2	86	5	170	.9	8	14	527	3.38	11	<6	<3	<2	39	.3	<3	<3	102	1.67	.053	<2	8	1.17	26	.16	<3	1.84	.12	.19	<2	38
A 38059	<2	271	36	7298	5.1	9	24	842	4.99	30	<6	<3	<2	44	36.8	4	<3	125	3.22	.048	<2	6	1.54	15	.14	3	1.94	.06	.16	<2	107
A 38060	<2	103	<3	95	.8	4	12	447	2.75	5	<6	<3	<2	27	.2	3	<3	92	1.61	.051	<2	3	.92	20	.13	13	1.55	.11	.09	<2	9
A 38061	4	75	115	279	.9	13	13	503	1.86	14	<6	<3	<2	38	1.7	4	<3	30	2.32	.068	<2	15	.84	8	.13	<3	1.01	.02	.02	<2	11
A 38062	<2	67	<3	266	2.3	15	18	444	3.10	19	<6	<3	<2	31	2.0	<3	<3	82	1.27	.045	<2	13	1.33	48	.14	<3	1.86	.10	.23	<2	134
A 38063	<2	207	9	2966	10.6	26	23	505	3.08	26	<6	<3	<2	29	14.8	3	<3	62	1.52	.043	<2	72	1.41	61	.13	4	1.32	.03	.21	2	380
A 38064	<2	41	<3	92	.8	5	2	219	.77	<3	<6	<3	<2	13	.8	3	<3	11	.51	.016	5	4	.27	57	.02	6	.48	.02	.16	<2	17
A 38065	<2	13	<3	124	.6	5	<2	174	.50	<3	<6	<3	<2	16	.9	<3	<3	2	.65	.012	5	4	.13	28	<.02	7	.31	.02	.10	<2	53
A 38066	2	8	<3	28	<.2	6	<2	188	.43	<3	<6	<3	<2	9	<.2	<3	<3	<2	.39	.010	4	4	.09	22	<.02	3	.25	.02	.07	<2	1
A 38067	<2	4	3	23	.2	3	<2	162	.37	<3	<6	<3	<2	11	<.2	<3	<3	<2	.57	.012	4	3	.12	14	<.02	<3	.25	.02	.07	<2	35
A 38068	<2	150	<3	510	17.3	5	2	198	.77	3	<6	<3	<2	14	2.6	<3	<3	9	.56	.017	4	3	.34	25	<.02	5	.48	.02	.12	<2	2340
A 38069	<2	165	<3	786	3.4	13	14	512	3.11	14	<6	<3	<2	29	3.5	5	<3	82	1.49	.046	<2	19	1.28	44	.18	4	1.51	.05	.36	<2	132
A 38070	<2	163	<3	1005	2.7	14	12	507	2.84	6	<6	<3	<2	23	4.9	4	<3	76	1.56	.052	<2	29	1.06	45	.17	7	1.34	.07	.24	<2	114
A 38071	<2	108	<3	798	1.4	8	10	398	2.47	8	<6	<3	<2	28	4.2	5	<3	48	.97	.056	<2	6	.89	114	.13	5	1.26	.06	.31	<2	42
A 38072	<2	183	<3	1792	2.3	5	8	443	2.31	13	<6	<3	<2	33	9.1	3	<3	33	1.27	.059	5	4	.95	43	.03	<3	1.16	.03	.13	<2	92
STANDARD C/AU-R	18	58	38	133	7.0	70	31	1059	4.10	44	23	8	38	49	18.1	20	21	59	.52	.096	39	53	.97	177	.08	39	1.97	.06	.13	11	490

90W-403

90W-404

90W 405

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 38073	2	2104	137	15394	75.7	12	20	636	5.61	121	<6	<3	<2	32	71.2	<3	15	79	1.51	.032	<2	8	1.04	27	.07	<3	1.14	.02	.17	<2	2670
A 38074	2	232	43	4139	3.5	6	6	220	1.22	34	<6	<3	2	19	20.1	<3	<3	9	.70	.015	4	5	.25	25	<.02	<3	.33	<.02	.17	2	101
A 38075	<2	180	16	1266	34.5	17	20	711	4.39	29	<6	<3	<2	31	6.2	<3	<3	118	1.64	.039	<2	32	1.61	28	.15	<3	1.86	.04	.35	<2	340
A 38076	2	144	11	920	2.7	6	5	401	1.39	58	6	<3	<2	27	4.2	<3	4	14	1.30	.023	3	5	.45	35	<.02	4	.45	.02	.13	<2	105
A 38077	<2	58	9	736	2.6	7	8	524	2.60	24	<6	<3	<2	31	3.4	<3	<3	44	1.34	.051	5	6	1.00	28	.02	5	1.36	.03	.14	<2	59
A 38078	<2	51	14	290	.5	4	5	358	1.74	11	<6	<3	<2	24	1.3	<3	3	27	.80	.038	4	5	.65	86	.05	3	.84	.03	.23	<2	22
A 38079	<2	747	616	4960	6.3	13	19	1057	5.14	89	<6	<3	<2	50	25.0	<3	3	122	1.88	.042	2	15	1.70	25	.09	<3	1.79	.03	.42	<2	67
A 38080	<2	99	64	167	.6	11	16	731	3.55	11	<6	<3	<2	28	1.4	<3	3	102	1.59	.044	<2	17	1.37	27	.18	<3	1.68	.06	.25	<2	24
A 38081	<2	96	22	408	.6	16	17	752	3.84	12	<6	<3	<2	45	2.4	3	<3	109	2.30	.045	<2	16	1.61	19	.15	3	2.00	.04	.16	<2	20
A 38082	2	61	26	127	.2	16	14	655	2.98	30	<6	<3	<2	62	1.1	4	4	89	2.36	.042	<2	25	1.23	11	.14	<3	1.72	.08	.10	<2	15
A 38083	2	733	312	14482	19.8	21	23	1265	5.88	739	<6	<3	<2	62	71.4	23	3	83	3.32	.032	<2	15	1.20	15	.02	<3	.98	.02	.18	<2	560
A 38084	2	121	<3	492	1.0	19	17	634	3.47	18	6	<3	2	79	2.5	4	<3	106	2.04	.041	<2	21	1.62	20	.12	10	2.36	.13	.26	<2	23
A 38085	4	342	124	7496	32.3	21	34	642	7.29	724	<6	<3	<2	50	34.7	14	9	44	2.88	.015	<2	15	1.29	10	<.02	<3	.56	<.02	.22	4	990
A 38086	2	632	<3	2656	45.3	21	15	555	3.06	33	<6	<3	<2	44	12.7	4	<3	80	1.76	.036	<2	41	1.26	28	.11	9	1.49	.07	.18	<2	1760
A 38087	2	237	11	2061	2.5	20	15	596	3.09	7	<6	<3	<2	36	10.1	<3	<3	85	1.65	.046	<2	27	1.41	19	.16	3	1.77	.09	.16	<2	220
A 38088	2	2224	179	7437	26.1	14	8	637	2.82	5	<6	<3	<2	63	39.7	<3	<3	73	2.29	.046	<2	22	1.23	21	.12	5	2.07	.12	.15	34	480
A 38089	2	299	29	1770	3.6	16	16	596	2.98	13	<6	<3	<2	45	9.3	<3	<3	78	1.93	.042	<2	22	1.39	19	.14	<3	1.84	.10	.18	<2	146
A 38090	2	215	258	2279	13.4	14	11	1843	5.30	1731	<6	<3	3	96	11.4	81	3	36	6.76	.025	2	12	2.67	16	<.02	<3	.46	<.02	.11	2	290
STANDARD C/AU-R	18	56	35	133	7.1	67	31	1054	3.91	37	20	7	37	48	18.2	16	22	57	.49	.091	38	56	.92	175	.08	39	1.89	.06	.13	12	530

ASSAY RECOMMENDED for Cu, Zn >1%
Ag > 30 ppm.

ACME ANALYTICAL LABORATORIES LTD.
852 E. HASTINGS ST. VANCOUVER B.C. V6A 1R6
PHONE(604)253-3158 FAX(604)253-1716

DATE RECEIVED: MAY 3 1990

DATE REPORT MAILED: May.8/90.

ASSAY CERTIFICATE

World Wide Mineral FILE # 90-1068R

807 - 402 W. Pender St., Vancouver BC

PPB (from gram) → oz

SAMPLE#	CU %	ZN %	AG** oz/t	AU** oz/t	
A 38002	-	-	-	.030	✓ .030
A 38009	-	-	-	.043	✓ .044
A 38019	-	2.06	8.43	.129	✓ .126
A 38029	-	2.83	1.13	-	
A 38038	-	-	1.66	.062	✓ .062
A 38043	2.07	4.70	5.56	.245	✓ .251
A 38050	-	1.66	1.74	.035	✓ .037
A 38068	-	-	-	.072	✓ .068
A 38073	-	1.72	2.75	.076	.078
A 38075	-	-	.28	-	
A 38083	-	1.63	-	-	
A 38085	-	-	.92	-	
A 38086	-	-	1.51	.039	.051

- SAMPLE TYPE: Core Pulp AG** & AU** BY FIRE ASSAY FROM 1 A.T.

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

(2)

ACME ANALYTICAL LABORATORIES LTD. 852 E. HASTINGS ST. VANCOUVER B.C. V6A 1R6 PHONE(604)253-3158 FAX(604)253-1716

GEOCHEMICAL ANALYSIS CERTIFICATE

(3)

World Wide Mineral File # 90-1205

807 - 402 W. Pender St., Vancouver BC V6B 1T6

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 38101	60	948	11	171	1.2	10	9	249	2.31	5	5	ND	1	43	.4	2	2	59	.94	.101	16	12	.80	127	.07	2	1.23	.09	.50	1	6
A 38102	127	3143	8	149	2.4	14	23	233	4.56	15	5	ND	1	45	.8	2	2	170	2.28	.052	5	25	1.72	114	.19	4	2.37	.08	1.22	1	16
A 38103	222	2090	7	142	2.1	12	22	190	3.31	184	5	ND	1	47	.5	2	2	80	2.04	.112	10	16	.84	74	.08	3	1.47	.05	.61	1	1
A 38104	202	3174	6	130	3.5	9	12	83	1.45	133	5	ND	2	22	.8	2	2	19	1.34	.029	5	6	.16	24	.01	4	.36	.05	.10	1	2
A 38105	121	3921	7	120	2.8	17	28	180	4.86	661	5	ND	1	96	.9	2	2	169	1.73	.048	6	37	1.86	72	.17	3	2.51	.10	1.32	1	1
A 38106	288	1817	6	98	1.6	13	22	207	4.83	534	5	ND	1	157	.7	2	2	144	2.44	.051	5	20	1.75	85	.13	4	2.94	.15	1.12	1	8
A 38107	83	2852	7	122	2.1	14	26	234	4.97	100	5	ND	1	143	.8	2	2	170	2.48	.042	4	23	1.90	90	.16	3	2.65	.09	1.32	1	8
A 38108	73	3110	6	171	3.1	17	31	282	5.56	272	5	ND	1	153	1.1	2	2	188	1.69	.039	3	26	2.25	83	.18	4	2.76	.09	1.62	1	26
A 38109	246	4889	2	108	3.5	15	37	246	5.18	69	5	ND	1	177	1.2	3	2	164	2.93	.039	5	25	1.49	82	.14	6	2.31	.08	1.13	1	1
A 38110	124	2467	2	92	2.8	12	22	199	3.42	35	5	ND	1	109	.6	2	2	86	1.94	.113	15	19	1.04	77	.10	4	1.43	.05	.66	1	11
A 38111	94	2657	2	89	2.0	17	22	188	5.25	135	5	ND	1	127	.8	2	2	189	1.78	.042	4	31	1.66	69	.19	3	2.63	.11	1.29	1	8
A 38112	46	815	9	200	1.6	12	8	278	2.46	20	5	ND	1	118	.7	2	2	68	1.10	.078	8	19	1.05	70	.07	3	1.66	.13	.60	1	45
A 38113	39	661	7	462	1.3	13	8	313	2.47	2	5	ND	1	114	2.1	2	2	63	1.17	.080	9	18	.95	66	.07	6	1.61	.12	.56	1	1
A 38114	43	704	6	314	1.3	10	11	263	2.46	56	5	ND	1	104	1.3	2	2	56	1.78	.078	10	14	.69	39	.04	3	1.36	.05	.47	1	7
A 38115	362	1932	3	129	2.2	11	23	271	3.42	33	5	ND	1	112	.6	2	2	93	1.84	.065	12	14	1.10	80	.10	4	1.86	.05	.90	1	12
A 38116	192	2907	9	114	2.7	14	27	282	4.27	31	5	ND	1	78	.9	2	2	142	1.70	.035	5	20	1.72	98	.18	5	2.29	.07	1.32	1	1
A 38117	73	2667	6	109	2.3	21	36	275	6.32	25	5	ND	1	112	1.0	4	2	212	1.54	.043	5	36	2.76	76	.25	4	3.50	.11	2.01	1	1
A 38118	114	1704	5	187	2.1	14	26	394	5.02	37	5	ND	1	106	.9	3	2	153	2.01	.046	6	26	1.86	116	.19	5	2.47	.06	1.59	1	2
A 38119	163	1909	10	277	3.1	7	31	327	4.65	57	5	ND	1	67	1.5	2	2	110	1.50	.048	7	6	1.14	79	.14	3	1.86	.07	.99	1	10
A 38120	40	1727	4	99	1.6	9	26	277	5.47	9	5	ND	1	86	1.0	2	2	162	1.38	.048	5	14	1.72	90	.19	5	2.88	.13	1.37	1	4
A 38121	80	1869	6	112	1.8	16	28	334	5.48	8	5	ND	1	110	1.0	2	2	163	1.85	.048	4	29	1.86	82	.18	4	3.46	.24	1.27	1	8
A 38122	161	2185	8	132	2.7	17	43	360	6.37	10	5	ND	1	142	1.2	4	2	171	1.47	.049	2	26	2.11	58	.19	4	3.60	.25	.90	1	1
A 38123	107	2630	3	119	2.4	17	34	344	5.96	7	5	ND	1	153	1.4	4	2	195	1.32	.043	2	23	2.31	56	.21	4	3.58	.23	.76	1	1
A 38124	16	404	2	101	.6	11	11	225	1.97	2	5	ND	1	123	.3	2	2	45	.96	.083	4	15	.79	39	.07	3	1.28	.15	.25	1	1
A 38091	4	1196	302	30978	43.8	12	16	733	16.30	899	5	2	1	24	153.9	2	19	3	2.20	.027	2	27	.12	4	.01	2	.10	.01	.02	14	1750
A 38092	1	39	7	616	.1	3	2	223	.77	8	5	ND	2	87	5.0	2	2	9	9.13	.058	7	3	.22	26	.01	2	.43	.03	.14	1	4
STANDARD C/AU-R	18	59	37	130	6.5	72	31	1060	4.10	37	22	7	38	55	20.1	15	21	58	.51	.099	39	59	.93	183	.07	41	1.98	.06	.13	11	480

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: Core/Rock AU* ANALYSIS BY ACID LEACH/AA FROM 10 GM SAMPLE.

DATE RECEIVED: MAY 7 1990 **DATE REPORT MAILED:** May 10/90 . **SIGNED BY** C. Leong .D.TOYE, C.LEONG, J.WANG; CERTIFIED B.C. ASSAYERS

✓ ASSAY IN PROGRESS

ACME ANALYTICAL LABORATORIES LTD.
852 E. HASTINGS ST. VANCOUVER B.C. V6A 1R6
PHONE(604)253-3158 FAX(604)253-1716

DATE RECEIVED: MAY 10 1990

DATE REPORT MAILED: May.14/90

(4)

ASSAY CERTIFICATE

World Wide Mineral FILE # 90-1205R
807 - 402 W. Pender St., Vancouver BC V68 1T6

SAMPLE#	ZN %	AG** oz/t	AU** oz/t
A 38091	3.56	1.21	.047

- SAMPLE TYPE: Core/Rock Pulp AG** & AU** BY FIRE ASSAY FROM 1/2 A.T.

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

(4)

ACME ANALYTICAL LABORATORIES LTD. 852 E. HASTINGS ST. VANCOUVER B.C. V6A 1R6 PHONE(604)253-3158 FAX(604)253-1716

GEOCHEMICAL ANALYSIS CERTIFICATE

World Wide Mineral File # 90-1282

807 - 402 W. Pender St., Vancouver BC V6B 1T6 Submitted by: PAUL RICHARDSON

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 38125	10	713	7	94	1.1	7	5	170	1.59	4	5	ND	1	133	.8	2	2	33	.82	.073	4	13	.61	33	.08	2	.93	.10	.13	1	10
A 38126	8	892	6	81	1.5	6	4	161	1.43	2	5	ND	1	105	.8	2	3	31	.95	.075	3	13	.60	35	.08	2	1.00	.13	.12	1	9
A 38127	16	802	7	88	1.2	9	7	157	2.26	4	5	ND	1	145	.6	2	2	43	.86	.073	4	19	.71	40	.08	3	1.15	.12	.19	1	15
A 38128	6	163	6	52	.2	8	4	169	1.55	4	5	ND	1	168	.5	2	2	32	1.10	.075	4	16	.61	44	.07	2	1.18	.14	.14	1	6
A 38129	12	282	6	61	.5	8	5	197	1.83	4	5	ND	1	142	.4	2	2	33	1.10	.076	4	16	.64	38	.08	2	1.15	.13	.15	1	5
A 38130	9	448	6	74	.7	9	7	181	2.20	5	5	ND	1	177	.6	2	2	34	1.09	.075	4	14	.65	42	.07	2	1.14	.11	.14	2	7
A 38131	10	204	5	65	.4	8	6	171	2.26	5	5	ND	1	127	.2	2	2	35	.99	.074	4	14	.65	36	.07	2	.95	.10	.12	1	4
A 38132	8	150	11	70	.2	8	5	152	2.13	3	5	ND	1	164	.6	2	2	35	.98	.074	4	14	.63	31	.08	2	1.01	.10	.12	3	7
A 38133	2	36	13	38	.1	8	6	172	2.08	6	5	ND	1	255	.5	2	2	33	1.16	.074	5	14	.69	30	.07	2	1.07	.09	.10	4	6
A 38134	1	197	2	53	.3	8	4	184	1.96	2	5	ND	1	160	.5	2	2	34	1.15	.076	4	13	.59	29	.07	3	.93	.09	.09	7	8
A 38135	2	317	2	48	.5	8	6	204	2.25	3	5	ND	1	147	.2	2	2	36	1.20	.076	5	14	.66	32	.07	2	1.03	.09	.11	3	2
A 38136	4	190	2	42	.2	8	5	188	1.75	6	5	ND	1	105	.2	2	2	36	1.32	.078	7	13	.67	24	.04	2	.97	.08	.10	2	5
A 38137	12	245	9	35	.5	10	4	164	1.97	4	5	ND	1	113	.2	2	2	33	1.08	.075	6	16	.57	33	.04	3	1.05	.10	.13	1	13
A 38138	4	341	3	60	.4	7	5	164	2.10	6	5	ND	1	21	.2	2	2	35	1.07	.082	10	11	.52	46	.03	2	.68	.04	.16	1	3
A 38139	5	335	4	61	.4	8	4	170	2.06	6	5	ND	1	25	.2	2	2	31	1.44	.082	10	10	.43	71	.03	3	.63	.04	.17	1	4
A 38140	6	168	4	39	.2	7	6	158	2.24	17	5	ND	1	21	.2	2	2	28	1.81	.081	10	8	.29	41	.02	2	.59	.03	.14	1	4
A 38141	22	1866	6	92	1.8	13	24	217	6.43	18	5	ND	1	35	1.4	2	2	149	1.64	.062	6	15	1.12	58	.18	2	2.10	.12	.85	1	12
A 38142	5	187	7	41	.2	7	5	161	1.92	4	5	ND	1	25	.2	2	2	30	1.60	.081	11	9	.37	47	.02	2	.61	.03	.13	1	4
A 38143	6	161	5	51	.3	16	5	178	2.01	5	5	ND	1	29	.2	2	2	29	1.78	.083	11	20	.51	17	.01	3	.76	.04	.11	1	5
A 38144	68	1520	13	107	1.7	14	21	385	5.11	35	5	ND	1	34	.8	3	2	160	1.80	.056	6	33	1.46	81	.20	5	2.21	.09	1.08	1	10
STANDARD C/AU-R	18	58	44	129	6.6	67	31	1064	4.10	37	20	7	37	47	18.1	16	23	58	.49	.094	39	58	.87	175	.08	34	1.81	.06	.13	11	470

W90-7

W90-8

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: Core AU* ANALYSIS BY ACID LEACH/AA FROM 10 GM SAMPLE.

DATE RECEIVED: MAY 15 1990 **DATE REPORT MAILED:** May 16/90 **SIGNED BY.** .D.TOYE, C.LEONG, J.WANG; CERTIFIED B.C. ASSAYERS

ACME ANALYTICAL LABORATORIES LTD. 852 E. HASTINGS ST. VANCOUVER B.C. V6A 1R6 PHONE(604)253-3158 FAX(604)253-1716

GEOCHEMICAL ANALYSIS CERTIFICATE

(6)

World Wide Mineral File # 90-1423

807 - 402 W. Pender St., Vancouver BC V6B 1T6 Submitted by: PAUL RICHARDSON

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 38145	26	517	6	51	.6	10	7	209	2.59	3	5	ND	1	29	.2	2	2	65	.89	.082	11	15	.87	64	.09	7	1.15	.05	.47	2	5
A 38146	144	1908	12	89	1.7	18	20	210	5.05	3	5	ND	1	72	.4	2	2	181	1.26	.040	3	32	1.84	25	.24	7	3.37	.25	1.20	1	6
A 38147	82	1747	5	72	1.3	23	21	183	5.04	6	5	ND	1	38	.2	2	2	155	.75	.036	2	64	2.01	18	.27	9	2.63	.15	1.29	1	15
A 38148	79	2012	4	101	2.0	19	20	256	4.68	9	5	ND	1	38	.3	2	2	162	.75	.037	3	46	1.95	22	.24	2	2.56	.15	1.26	1	8
A 38149	105	2568	2	153	2.8	20	18	288	4.71	4	5	ND	1	27	.5	2	2	149	.82	.038	4	63	1.83	22	.18	3	2.00	.10	1.01	1	16
A 38150	77	1837	6	86	1.7	17	18	206	4.66	3	5	ND	1	27	.2	4	2	198	.65	.038	3	33	2.12	39	.28	6	2.44	.12	1.41	1	7
A 38151	29	1604	5	82	1.6	14	14	157	4.30	6	5	ND	1	22	.4	2	2	162	.61	.036	3	23	1.70	35	.23	3	1.99	.10	1.09	1	8
A 38152	46	2697	3	102	2.2	25	21	165	5.07	4	5	ND	1	22	.6	2	2	186	.69	.044	4	57	1.97	26	.27	5	2.32	.10	1.35	1	17
A 38153	92	2222	6	110	1.9	21	18	212	5.03	12	5	ND	1	34	.7	2	2	184	1.63	.040	4	44	1.85	39	.24	4	2.41	.11	1.29	1	17
A 38154	28	2970	6	133	2.6	26	27	216	5.13	4	5	ND	1	15	.6	2	2	186	.59	.045	3	46	2.05	23	.32	6	2.02	.06	1.41	1	17
A 38155	25	1957	2	143	2.0	30	24	237	5.66	22	7	ND	1	33	1.2	2	2	180	1.73	.040	4	75	2.18	25	.26	14	2.85	.13	1.47	1	10
A 38156	55	1823	6	112	1.6	17	17	204	4.35	5	5	ND	1	37	.6	3	2	146	.97	.042	3	31	1.74	34	.24	5	2.40	.14	1.15	1	7
A 38157	85	2931	5	179	2.8	25	20	303	5.73	3	5	ND	1	35	.9	2	2	220	.94	.037	2	54	2.81	34	.31	7	3.16	.14	1.75	1	21
A 38158 W90-8	41	1581	4	136	1.4	41	23	259	5.50	4	5	ND	1	44	.5	2	2	214	1.16	.043	2	89	2.90	31	.30	2	3.58	.17	1.68	1	7
A 38159	34	1899	9	137	1.7	67	29	272	5.67	6	5	ND	1	37	.5	2	2	185	.99	.054	3	142	2.95	19	.30	5	2.94	.12	1.54	2	16
A 38160	31	1387	8	155	1.3	60	26	260	5.35	7	5	ND	1	44	.9	3	2	165	.95	.049	2	118	2.75	20	.30	6	3.07	.15	1.45	2	11
A 38161	72	1435	2	116	1.0	42	23	214	4.71	5	5	ND	1	27	.8	4	2	179	.70	.052	2	106	2.59	26	.32	2	2.62	.11	1.53	1	7
A 38162	58	1460	2	132	1.2	64	25	262	5.12	2	5	ND	1	46	.5	3	3	183	1.07	.052	3	155	3.20	31	.33	5	3.43	.16	1.65	1	10
A 38163	51	2072	4	173	1.5	41	25	326	5.36	8	5	ND	1	47	1.0	4	2	183	2.21	.045	4	80	2.40	32	.23	8	2.93	.13	1.26	1	9
A 38164	65	1758	2	144	1.4	32	21	254	4.38	4	5	ND	1	38	.9	3	2	155	2.51	.066	5	57	2.22	31	.25	5	2.46	.12	1.25	1	12
A 38165	72	2397	3	123	1.8	33	27	233	5.29	9	5	ND	1	30	.7	3	2	205	.97	.039	5	67	2.56	33	.30	3	2.89	.11	1.70	1	12
A 38166	60	2599	9	277	2.2	22	28	258	4.95	14	5	ND	1	33	1.4	3	2	150	3.62	.041	7	30	1.36	29	.16	4	2.05	.05	.99	1	25
A 38167	142	1236	2	73	1.2	7	11	182	2.37	7	5	ND	1	28	.2	2	3	50	1.21	.082	14	9	.62	51	.05	2	.92	.04	.29	1	8
A 38168	74	1293	2	75	1.1	6	11	164	2.31	7	5	ND	1	24	.2	2	2	56	1.44	.080	14	8	.61	49	.06	2	.92	.04	.36	1	9
A 38169	91	4156	6	124	2.5	14	42	188	6.74	6	5	ND	1	29	.9	2	2	191	.83	.029	2	15	2.07	17	.29	4	2.76	.14	1.52	1	27
A 38170	135	3221	2	173	2.5	12	32	256	6.62	9	5	ND	1	37	1.3	3	2	206	.74	.028	2	13	2.22	21	.28	7	3.03	.17	1.57	1	23
A 38171	201	3259	5	447	2.7	15	34	271	6.07	11	5	ND	1	35	1.9	3	2	193	.76	.036	2	22	2.03	19	.29	2	2.89	.17	1.43	1	24
A 38172	366	3353	5	209	3.1	14	48	283	6.20	8	5	ND	1	22	1.0	3	4	204	.42	.035	2	22	2.06	19	.30	10	2.38	.10	1.46	1	19
A 38173	172	3134	2	111	2.1	17	33	189	5.85	7	5	ND	1	24	.5	4	2	184	.47	.040	2	28	2.04	21	.31	2	2.40	.10	1.47	1	23
STANDARD C/AU-R	18	57	37	132	6.8	68	31	1040	3.98	41	22	7	38	49	17.2	16	22	58	.51	.092	38	56	.93	178	.09	38	1.94	.06	.13	12	530

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: Core AU* ANALYSIS BY ACID LEACH/AA FROM 10 GM SAMPLE.

DATE RECEIVED: MAY 23 1990 **DATE REPORT MAILED:** May 29/90. **SIGNED BY** ..... D.TOYE, C.LEONG, J.WANG; CERTIFIED B.C. ASSAYERS

ACME ANALYTICAL LABORATORIES LTD. 852 E. HASTINGS ST. VANCOUVER B.C. V6A 1R6 PHONE(604)253-3158 FAX(604)253-1716

GEOCHEMICAL ANALYSIS CERTIFICATE

(7)

World Wide Mineral File # 90-1590

807 - 402 W. Pender St., Vancouver BC V6B 1T6 Submitted by: PAUL RICHARDSON

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
38174	149	4357	12	278	4.2	20	31	313	5.89	5	5	ND	1	41	2.1	2	4	188	.71	.038	2	36	2.25	58	.30	2	2.94	.14	1.50	1	30
38175	579	3735	5	198	3.3	16	29	255	4.79	6	5	ND	1	29	1.2	2	3	157	.61	.030	5	17	1.88	69	.23	6	2.29	.09	1.24	1	27
38176	201	2345	9	1582	2.3	19	40	321	7.10	6	5	ND	1	30	7.5	2	2	204	.48	.031	2	25	2.41	29	.23	2	2.54	.11	1.43	1	19
38177	94	1430	2	115	1.5	15	19	273	3.86	6	5	ND	1	38	.9	2	2	114	.58	.110	4	23	1.47	71	.24	2	1.60	.06	.83	1	12
38178	258	3590	12	356	3.3	21	36	267	5.96	16	5	ND	1	49	2.0	2	2	173	.96	.034	2	21	1.87	43	.23	3	2.98	.17	1.26	1	23
38179	161	1355	7	135	1.3	10	16	214	3.14	19	5	ND	1	36	.7	2	2	80	1.60	.086	11	12	.86	73	.10	2	1.26	.04	.55	1	8
38180	197	1944	4	166	2.2	13	25	233	3.32	7	5	ND	1	33	1.2	2	4	96	.80	.099	11	21	1.29	89	.15	4	1.43	.05	.65	1	15
38181	81	4728	4	329	4.1	26	29	340	6.21	10	5	ND	1	49	2.0	2	2	181	1.35	.031	3	50	1.91	66	.22	7	2.84	.13	1.20	1	17
38182	117	1986	2	93	2.0	8	13	283	3.04	6	5	ND	1	33	.6	2	2	72	1.57	.064	12	11	.74	81	.08	7	1.15	.04	.43	1	12
38183	163	3290	4	110	3.3	14	26	260	4.26	22	5	ND	1	32	1.5	2	2	139	1.22	.026	4	19	1.26	72	.18	6	1.85	.07	.94	1	13
38184	96	1775	4	73	1.6	14	18	189	2.86	24	5	ND	1	42	.4	2	2	86	1.89	.111	11	16	.93	85	.11	2	1.36	.04	.61	1	7
38185	121	1186	10	66	1.2	10	10	226	2.51	15	5	ND	1	43	.8	2	2	88	2.96	.057	8	14	.86	76	.08	3	1.35	.02	.57	1	13
38186	44	997	5	65	.8	10	9	215	2.58	51	5	ND	1	44	.2	2	3	60	2.27	.065	9	11	.64	110	.06	8	1.32	.03	.45	1	9
38187	12	298	2	39	.4	8	6	258	2.90	289	5	ND	1	44	.3	2	3	31	2.70	.064	8	7	.71	54	.01	2	.66	.03	.15	1	4
38188	23	763	5	80	.9	9	7	308	3.34	444	5	ND	1	42	.8	2	2	31	3.75	.058	6	6	.52	42	.01	4	.70	.02	.08	1	8
38189	165	2492	2	138	2.6	10	18	390	4.11	133	5	ND	1	74	.8	2	2	80	4.78	.039	5	9	1.06	37	.02	6	1.10	.01	.23	1	21
38190	15	415	2	73	.6	9	8	308	2.97	101	5	ND	1	67	.3	2	4	41	1.69	.068	7	8	.68	78	.04	9	1.32	.03	.37	1	6
STANDARD C/AU-R	18	57	38	132	6.9	67	30	1051	3.94	39	18	7	38	49	17.7	16	19	58	.50	.087	39	56	.91	175	.09	39	1.95	.06	.14	11	480

W90-8

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: Core AU* ANALYSIS BY ACID LEACH/AA FROM 10 GM SAMPLE.

DATE RECEIVED: JUN 5 1990 **DATE REPORT MAILED:** June 8/90. **SIGNED BY.....** D.TOYE, C.LEONG, J.WANG; CERTIFIED B.C. ASSAYERS

ACME ANALYTICAL LABORATORIES LTD. 852 E. HASTINGS ST. VANCOUVER B.C. V6A 1R6 PHONE(604)253-3158 FAX(604)253-1716

GEOCHEMICAL ANALYSIS CERTIFICATE

(8)

World Wide Mineral File # 90-2123

807 - 402 W. Pender St., Vancouver BC V6B 1T6

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
38191	104	1726	27	216	1.6	17	16	263	4.87	41	5	ND	1	40	1.2	2	2	136	.91	.043	3	32	1.65	51	.13	3	2.84	.21	.69	1	13
38192	53	1988	18	173	1.9	23	17	270	5.33	11	5	ND	1	40	1.9	2	2	160	.92	.044	3	34	1.84	51	.14	4	2.83	.20	.79	1	14
38193	7	420	8	60	.6	10	7	180	2.11	10	5	ND	1	24	.2	2	2	40	.96	.079	10	10	.48	41	.02	10	.79	.06	.11	1	3
38194	80	2114	20	196	1.6	23	18	303	5.23	6	5	ND	1	37	.9	2	3	172	1.24	.047	3	37	1.91	60	.15	3	2.88	.17	.84	1	9
38195	52	1736	18	142	1.4	22	19	246	5.10	9	5	ND	1	32	1.1	2	2	137	1.14	.046	3	41	1.78	59	.15	2	2.51	.15	.75	1	6
38196	42	2435	5	177	1.8	31	22	269	5.90	7	5	ND	1	28	1.5	2	2	190	1.08	.050	2	62	2.28	51	.19	5	2.86	.15	1.03	1	9
38197	51	1373	17	147	1.2	18	18	234	5.10	9	6	ND	1	22	.3	2	2	153	.95	.047	2	34	1.96	60	.16	4	2.28	.11	.79	1	1
38198	67	1923	18	206	1.6	26	21	239	5.34	11	5	ND	1	33	1.6	2	2	178	1.10	.046	3	49	2.17	56	.17	8	2.95	.14	.95	1	1
38199	14	603	3	71	.5	9	9	135	2.40	12	5	ND	1	23	.2	2	2	46	1.08	.071	9	13	.81	52	.03	2	.97	.05	.20	2	1
38200	47	2068	9	256	1.8	29	23	290	6.18	4	5	ND	1	35	1.6	2	8	190	1.30	.038	2	46	2.70	52	.17	2	3.10	.14	1.14	1	1
38201	41	1397	2	270	1.2	58	20	309	5.45	7	5	ND	1	54	1.7	2	4	193	1.59	.052	2	142	3.04	62	.17	6	3.65	.17	1.14	1	9
38202	27	701	3	183	.7	15	6	181	2.38	4	5	ND	1	26	.8	2	2	78	.53	.083	4	27	1.21	72	.10	8	1.12	.08	.41	1	4
38203	96	1458	2	147	1.4	73	25	267	5.52	4	5	ND	1	32	.7	3	2	201	.82	.065	2	192	3.47	67	.23	8	3.32	.12	1.38	1	4
38204	37	2025	8	230	1.5	60	23	259	5.78	5	5	ND	1	28	1.5	2	2	190	.80	.055	2	133	3.06	54	.22	4	3.10	.14	1.25	1	9
38205	18	569	9	103	.7	8	7	199	2.57	8	5	ND	1	24	.2	2	2	59	.67	.086	5	14	.97	62	.08	10	1.00	.06	.24	1	2
38206	18	1549	9	985	1.6	61	19	438	5.28	9	5	ND	1	50	4.6	2	5	172	2.89	.052	3	155	3.16	70	.18	2	3.20	.15	1.16	1	4
38207	44	2224	15	1929	2.2	53	17	340	5.49	3	5	ND	1	51	7.3	2	2	192	1.18	.050	2	123	2.85	54	.18	2	3.59	.20	1.16	2	1
38208	31	2019	15	329	2.0	56	23	317	6.11	3	5	ND	1	54	3.0	2	2	194	1.25	.053	2	113	3.00	54	.20	4	3.90	.22	1.25	1	1
38209	39	1266	6	146	.9	53	18	230	5.15	2	5	ND	1	79	2.1	2	2	180	1.43	.052	2	115	2.88	68	.19	2	3.95	.23	1.11	1	10
38210	60	1179	11	173	1.1	25	13	203	4.52	10	5	ND	1	51	.2	2	2	129	.76	.115	2	41	1.80	48	.14	7	2.01	.13	.72	1	3
38211	63	1950	16	868	1.9	31	19	314	5.56	8	5	ND	1	64	3.5	2	2	177	1.05	.048	2	62	2.24	60	.19	2	3.36	.22	1.01	1	1
38212	27	2465	5	1858	2.0	32	23	202	7.27	2	5	ND	1	102	8.7	2	2	144	1.22	.051	2	43	1.65	47	.13	5	3.05	.23	.74	1	11
38213	77	1331	15	179	1.1	17	23	244	5.92	5	5	ND	1	83	.8	2	2	197	1.10	.042	2	22	2.19	53	.17	2	3.67	.21	1.07	1	1
38214	65	368	6	83	.3	10	7	82	2.03	4	5	ND	1	32	.3	2	2	35	.41	.039	2	8	.69	27	.04	3	.91	.07	.24	1	1
38215	24	1486	9	98	1.0	8	23	190	6.47	3	5	ND	1	53	1.6	2	2	235	.94	.039	2	15	2.56	53	.21	2	3.75	.19	1.29	1	1
38216	257	1438	12	76	.9	16	19	173	5.78	3	5	ND	1	35	.4	2	3	193	.66	.044	2	35	2.22	56	.20	2	3.08	.15	1.16	1	1
38217	1141	1217	2	151	.9	13	18	165	5.32	2	5	ND	1	25	.6	2	2	194	.53	.035	2	24	1.98	44	.17	2	2.52	.11	.95	1	3
38218	153	711	4	113	.5	7	12	85	2.79	8	5	ND	1	13	.2	2	2	47	.50	.025	5	10	.69	35	.04	3	1.00	.06	.30	1	1
38219	63	1625	4	90	.9	19	21	141	5.93	2	5	ND	1	28	.9	2	5	175	.64	.052	2	36	2.12	57	.18	2	2.85	.14	1.08	1	18
STANDARD C/AU-R	18	57	36	132	7.1	65	28	955	3.86	36	21	7	36	48	17.6	16	19	55	.50	.091	36	55	.88	175	.08	36	1.85	.06	.13	11	490

W90-9

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: Core AU* ANALYSIS BY ACID LEACH/AA FROM 10 GM SAMPLE.

DATE RECEIVED: JUN 29 1990 **DATE REPORT MAILED:** July 4/90 **SIGNED BY** ..... D.TOYE, C.LEONG, J.WANG; CERTIFIED B.C. ASSAYERS

ACME ANALYTICAL LABORATORIES LTD. 852 E. HASTINGS ST. VANCOUVER B.C. V6A 1R6 PHONE(604)253-3158 FAX(604)253-1716

GEOCHEMICAL ANALYSIS CERTIFICATE

(9)

World Wide Mineral File # 90-2356 Page 1

807 - 402 W. Pender St., Vancouver BC V6B 1T6

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
38220	187	249	6	35	.4	4	9	52	1.81	2	5	ND	4	9	.2	2	2	18	.42	.026	7	4	.46	27	.01	6	.62	.04	.20	1	20
38221	154	141	5	40	.4	6	7	56	1.53	2	5	ND	3	11	.2	2	2	18	.45	.024	6	5	.40	26	.01	2	.61	.05	.19	1	9
38222	53	1717	5	74	1.2	20	41	140	7.72	7	5	ND	1	80	.5	2	3	194	.72	.043	2	28	2.12	48	.25	5	3.09	.17	1.39	1	21
38223	71	1079	9	59	.6	16	25	112	6.83	2	5	ND	1	209	.5	2	2	158	1.55	.045	2	23	1.87	66	.21	2	4.06	.31	1.19	1	16
38224	54	1230	3	73	.6	14	24	168	6.41	2	5	ND	1	126	.5	2	4	191	1.58	.046	2	24	2.27	66	.23	6	4.31	.33	1.33	1	13
38225	94	1755	6	74	1.2	16	33	151	6.94	3	5	ND	2	60	.4	2	2	183	1.69	.039	3	21	2.26	69	.21	3	3.56	.21	1.31	1	16
38226	131	666	3	50	.4	12	17	102	4.05	3	5	ND	1	32	.2	2	2	89	1.87	.109	8	19	1.30	57	.14	11	1.62	.06	.81	1	14
38227	126	2453	6	107	2.3	23	49	194	8.88	12	5	ND	2	32	.7	2	5	213	.62	.036	2	29	2.66	34	.26	2	3.46	.15	1.74	1	27
38228	38	450	3	65	.2	8	8	107	3.36	2	5	ND	1	32	.2	2	3	62	.51	.099	6	11	1.06	59	.13	11	1.20	.08	.54	1	9
38229	76	1959	6	132	1.7	20	30	240	7.40	6	5	ND	1	153	.8	2	2	219	1.76	.045	2	30	2.41	53	.23	2	5.08	.41	1.38	2	26
38230	94	1661	10	215	1.3	18	26	241	7.06	2	5	ND	1	105	.9	2	2	213	1.35	.049	2	35	2.30	52	.25	2	4.17	.35	1.35	1	19
38231	122	2033	10	117	1.7	36	28	238	7.18	19	6	ND	2	61	.8	2	2	214	2.24	.037	3	89	2.35	61	.25	8	3.75	.23	1.42	1	21
38232	93	2350	4	78	1.7	12	25	139	6.53	4	6	ND	2	27	.3	2	3	161	.68	.044	4	19	1.68	44	.22	5	2.39	.13	1.15	1	20
38233	186	2173	2	71	1.8	11	22	116	5.00	7	5	ND	1	29	.3	2	2	109	1.85	.044	5	16	1.23	72	.17	3	2.05	.10	.92	1	20
38234	532	1715	5	64	1.1	11	19	134	5.38	18	5	ND	2	31	.4	2	2	127	1.86	.043	4	16	1.35	59	.18	13	2.27	.09	.98	1	17
38235	188	1526	7	74	1.0	13	19	126	4.69	16	6	ND	2	22	.4	2	2	109	2.08	.050	5	15	1.36	55	.18	5	1.96	.04	.97	1	14
38236	135	1736	9	123	1.2	13	25	140	5.46	10	5	ND	1	23	.4	2	2	117	1.54	.044	4	16	1.44	54	.15	5	1.99	.05	.96	1	21
38237	73	1287	6	139	.9	20	18	148	4.71	6	6	ND	1	33	.4	2	2	99	1.46	.113	8	32	1.26	30	.15	16	1.71	.07	.85	15	21
38238	110	2180	10	208	1.5	14	29	201	7.24	11	5	ND	1	64	1.1	2	2	201	1.31	.040	3	19	2.31	44	.26	3	4.15	.29	1.59	1	23
38239	53	1664	9	109	1.4	42	27	182	6.59	6	5	ND	2	53	.5	2	3	184	1.02	.052	4	77	2.44	37	.26	10	3.48	.23	1.40	2	18
38240	138	1729	5	461	1.5	90	40	223	7.66	3	5	ND	1	61	2.1	2	3	185	1.41	.052	3	250	3.47	42	.26	2	4.15	.22	1.44	2	22
38241	59	1438	10	255	1.2	100	30	256	6.68	2	5	ND	1	90	1.4	2	2	186	1.98	.064	3	254	3.97	50	.27	5	5.32	.31	1.59	2	13
38242	27	1423	5	113	1.0	102	28	229	6.78	2	5	ND	1	112	.6	2	3	158	2.15	.067	4	259	3.41	49	.25	5	4.42	.30	1.19	1	22
38243	41	1715	8	121	1.3	86	33	208	6.85	8	5	ND	1	106	.7	3	2	162	2.18	.061	3	179	2.89	39	.25	6	4.91	.35	1.27	4	14
38244	25	1468	9	126	1.2	90	28	232	5.69	8	5	ND	1	67	.6	2	2	165	1.52	.067	4	230	2.99	63	.29	2	3.62	.26	1.30	2	18
38245	92	2372	8	197	2.2	93	30	258	6.29	9	5	ND	1	141	1.2	2	2	158	2.82	.064	3	240	3.13	65	.24	3	5.70	.33	1.37	2	21
38246	63	1545	9	257	1.2	89	30	215	5.90	2	5	ND	1	114	1.2	2	2	149	2.31	.054	3	202	2.95	68	.21	5	4.72	.32	1.30	2	11
38247	49	1216	7	116	.6	88	26	204	5.43	11	5	ND	1	170	.7	2	2	160	2.18	.057	3	219	3.13	89	.24	4	4.88	.32	1.44	1	17
38248	53	1996	5	116	1.6	86	31	191	6.45	5	5	ND	2	117	.8	2	4	174	1.38	.059	3	187	3.18	56	.29	5	4.10	.28	1.58	1	18
38249	46	1530	6	108	1.2	112	32	198	6.35	2	5	ND	2	156	.7	2	2	161	1.94	.060	3	287	3.20	70	.26	3	4.42	.33	1.31	1	16
38250	23	2272	8	116	1.6	109	29	203	6.16	2	5	ND	2	116	.6	2	2	152	1.75	.066	4	311	3.16	66	.26	10	3.93	.28	1.40	3	17
38251	46	381	2	60	.2	22	14	99	3.99	2	5	ND	2	35	.2	2	2	82	1.26	.106	5	38	1.39	65	.16	15	1.27	.08	.46	2	10
38252	73	1723	6	148	1.3	129	31	194	6.05	4	5	ND	1	137	.7	2	3	142	2.01	.055	3	347	3.02	79	.25	5	4.11	.30	1.24	1	14
38253	65	2494	8	171	2.4	118	33	151	5.85	5	5	ND	1	280	1.0	2	3	64	3.26	.058	2	162	1.19	50	.17	2	4.36	.31	.40	2	24
38254	72	2446	5	109	2.2	152	35	131	5.68	8	5	ND	1	290	1.0	2	3	60	2.91	.054	3	185	1.20	33	.15	2	4.06	.34	.34	1	20
38255	49	1240	2	54	.8	22	17	99	4.52	3	5	ND	1	70	.2	2	2	93	.70	.122	5	26	1.47	58	.15	6	1.37	.11	.54	1	15
STANDARD C/AU-R	18	58	35	132	7.3	72	31	945	4.03	39	24	6	38	53	18.5	16	20	57	.52	.094	37	59	.94	181	.09	34	1.98	.06	.13	13	530

W90-9

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: Core AU* ANALYSIS BY ACID LEACH/AA FROM 10 GM SAMPLE.

DATE RECEIVED: JUL 9 1990 **DATE REPORT MAILED:** July 12/90. **SIGNED BY** C. Leong .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
38256	11	1151	5	134	.9	43	14	130	3.99	3	5	ND	2	61	.2	2	2	76	1.11	.093	5	92	1.43	63	.10	3	1.77	.13	.48	1	6
38257	26	1330	3	251	1.2	122	27	248	5.31	2	5	ND	1	97	.7	2	2	123	1.87	.047	2	293	2.71	84	.20	4	4.13	.33	1.10	1	5
38258	32	2310	12	695	3.1	112	26	240	6.47	19	5	ND	1	103	3.0	3	2	90	2.23	.056	3	230	1.72	58	.14	6	3.36	.38	.54	1	16
38259	40	1320	3	86	1.3	78	24	134	4.50	2	5	ND	1	131	.3	2	2	73	1.70	.069	3	115	1.22	54	.15	2	2.72	.27	.43	1	9
38260	17	1211	7	102	1.1	85	28	174	5.81	2	5	ND	2	42	.2	2	2	130	1.01	.064	3	184	2.40	78	.24	8	2.44	.14	.91	1	7

GEOLOGICAL BRANCH
ASSESSMENT REPORT
20,165
8000 E
8200 E
8400 E
12,600 N
12,400 N
12,200 N
Granite Mtn Rd
1600
1590
W90-7
1586.01
W90-8
1604.6
MET 7
3N,2E
S. End Property
Trench P
Amax Trench 5
Nicola Volcanics
Whipsaw Porphyry
contact dips outward
PLAN
SECTIONS
Elev 1600 m
W90-9
overburden
0.185% Cu, 0.015% Mo
34.30 m
Elev 1500 m
0.172% Cu, 0.005% Mo
40.94 m
LEGEND
π - Feldspar Porphyry
q - Quartz
v - Volcanics
Elev 1600 m
stream
W90-8
overburden
0.243% Cu, 0.006% Mo
18.00 m
0.360% Cu, 0.024% Mo
21.00 m
Elev 1500 m
Elev 1600 m
W90-7
road
overburden
0.298% Cu, 0.015% Mo
26.80 m
0.217% Cu, 0.011% Mo
21.50 m
Elev 1500
Scale
0
50m
100m
note scale
PROFESSIONAL
PROVINCE OF
P.W. RICHARDSON
BRITISH COLUMBIA
ENGINEER
To Accompany Assessment Report Entitled
"Diamond Drilling Report on the Whipsaw Property"
Dated July 20, 1990 By Paul W. Richardson, P.Eng.
RICHARDSON GEOLOGICAL CONSULTING LTD.
WORLD WIDE MINERALS LTD.
WHIPSAW PROPERTY
PORPHYRY AREA
NORTH CONTACT TARGET
DDH PLAN & SECTIONS
DATE: JULY, 1990
BY: P.W.R.
Scale: 1:1000
FIGURE
4

GEOLOGICAL BRANCH
ASSESSMENT REPORT

20,165

8900 E

9000 E

9900 N

9800 N

To Hope Pass

To Princeton

LOT 172
LOT 1553
(Part of Mineral Lease #30

LOT 1552

Slide

Whipsaw Creek

Silvertip Adit

87-401

87-402

W90-403

W90-404

W90-405

1500

1490

1480

1470

1460

PLAN

SECTIONS

Elevation 1450 m

Elevation 1400 m

Elevation 1450 m

Elevation 1400 m

LEGEND

a - Aplite
q - Quartz
gd - Granodiorite
s - Hornblende Schist

Scale

0 25m 50m

note scale

PROFESSIONAL ENGINEER
PROVINCE OF BRITISH COLUMBIA
P.W. RICHARDSON

RICHARDSON GEOLOGICAL CONSULTING LTD.

WORLD WIDE MINERALS LTD.

WHIPSAW PROPERTY

SILVERTIP ZONE

DDH PLAN & SECTIONS

DATE: JULY, 1990	BY: P.W.R.	FIGURE
	Scale: 1:500	5

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