RICHARDSON GEOLOGICAL CONSULTING LTD.
4569 WEST 13TH AVENUE, VANCOUVER, B.C. V6R 2V5
TELEPHONE: (604) 224-4272

PLATINUM GROUP ELEMENTS ON THE WHIPSAW PROPERTY

SIMILKAMEEN MINING DIVISION, BRITISH COLUMBIA

NTS 92H/7

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

FOR

MARTECH INDUSTRIES INC.

BY

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

Vancouver, B.C. May 16, 2000

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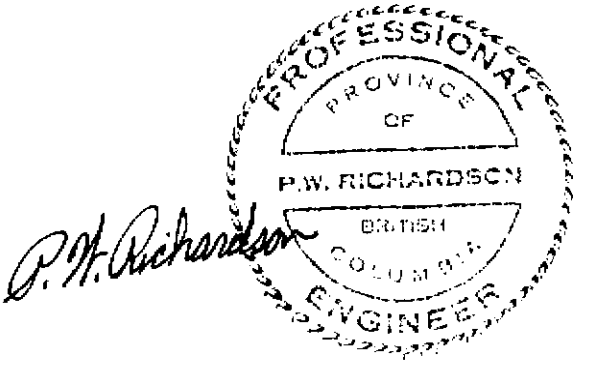
LIST OF ILLUSTRATIONS

SUMMARY

The Whipsaw property has been explored for mineralization, including copper, gold, silver, molybdenum, zinc and lead, that is related to the Whipsaw Porphyry stock. The stock intrudes the west-dipping contact between the Upper Triassic Nicola Group volcanics and sediments and the Jurassic-Cretaceous Eagle Granodiorite. Copper, molybdenum and gold mineralization has been found mainly in the Nicola rocks, and appears to be related spatially to the perimeter of the Whipsaw Porphyry.

Drilling programs, based on geophysics and geochemistry correlated with geology, have outlined extensive areas near the Whipsaw Porphyry that contain 0.2-0.3% copper mineralization accompanied by some molybdenum. Soil geochemistry has indicated an area of gold potential, the Skarn area, in the southern part of the Porphyry area. In addition, an area along and south of Whipsaw Creek is cut by several sulphide-bearing quartz veins with lead, zinc, gold and silver.

There is also the potential for platinum group elements (PGE) to occur on the property. These elements are known to occur in the Tulameen ultrabasic intrusions, near the Copper Mountain Stock and in placer deposits in Whipsaw Creek downstream to the east of the Whipsaw property. With the recent increase in the prices of these metals and the decrease in the cost of doing reliable assays for them, it has become prudent to search the property for possible sources of the PGE placer occurrences in Whipsaw Creek. A beginning was made in this search by assaying 113 pulps for platinum and palladium. The pulps were the only ones in storage available from earlier trenching and diamond drilling programs, and, although not from ideal places to start the search for PGE, were from mineralized zones, and the assaying program described in this report made it possible to start the PGE investigation prior to the 2000 field season. Nothing of economic interest was found, but other areas with more potential for PGE will be investigated.

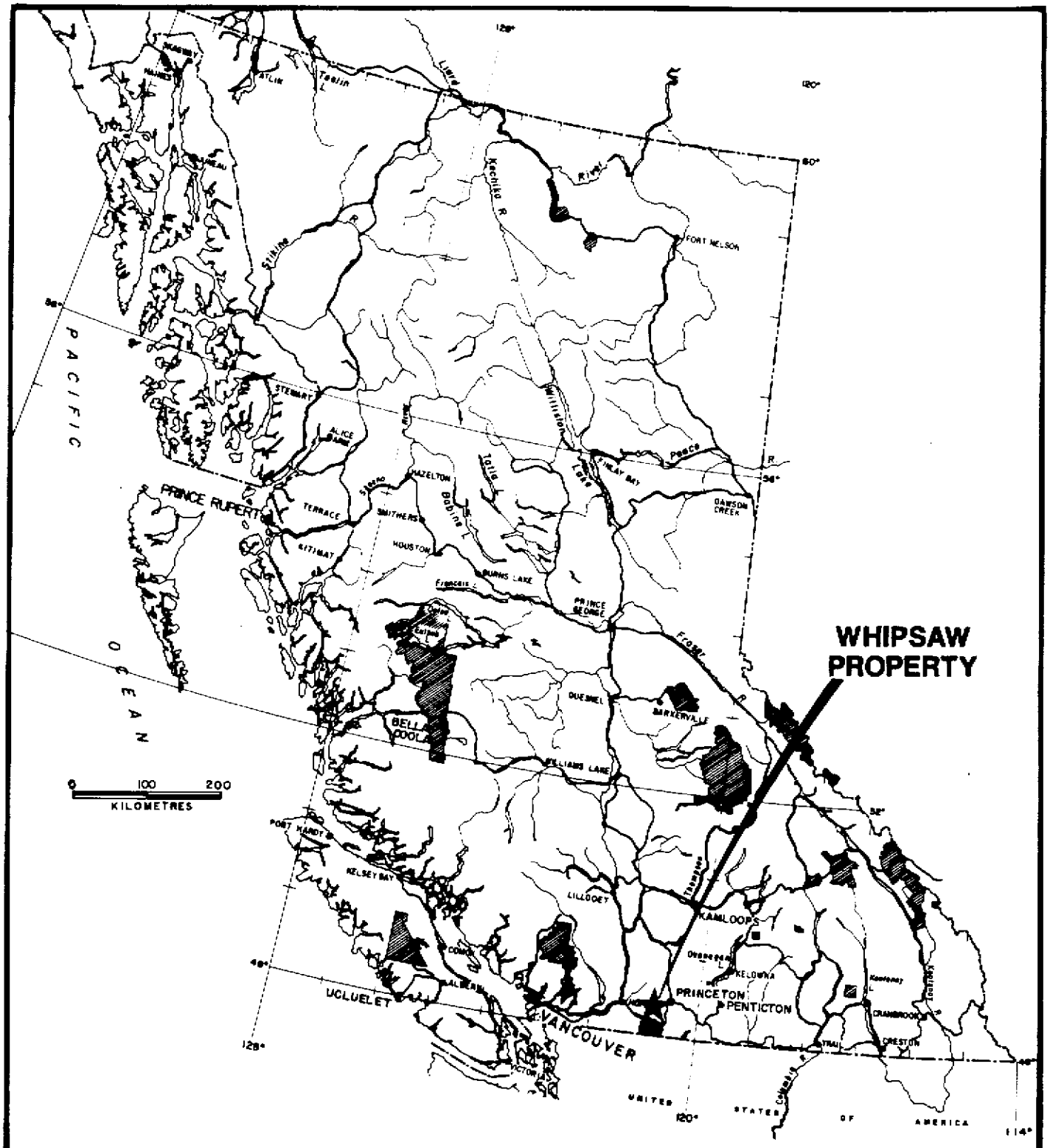


INTRODUCTION

The Whipsaw property, which is in the Similkameen District of British Columbia, contains mineralization that includes Cu, Au, Ag, Mo, Zn and Pb in several zones related to the Whipsaw Porphyry stock and that extends over a large area north and south of Whipsaw Creek. After the original staking of gold-bearing, quartz-sulfide vein deposits in 1908, mineral claims covering various parts of the mineralized area had been held continuously by several owners. Major geochemical stream sediment and soil anomalies containing up to 1.8% copper were discovered in 1959 in two tributaries entering Whipsaw Creek from the north. The difficult ground situation became even more complex after this discovery of the porphyry potential in the northern part of the present property. In 1987, the ground was consolidated by World Wide Minerals Ltd., making it possible to plan exploration projects without property line constraints (Richardson, 1988a). Almost all the exploration work done since that time has been concentrated on the copper and copper-gold potential of the property near the perimeter of the Whipsaw stock. Several drill intersections contain greater than 0.2 % copper with some individual drill intersections assaying between 0.4 and 0.5% copper (Paulus, 1972).

There is also the potential for platinum group elements (PGE) to occur on the property. Elsewhere in the general area, these elements occur in the Tulameen ultrabasic intrusions, near the Copper Mountain Stock and as placer deposits in Whipsaw Creek downstream to the east of the Whipsaw property (Figure 2). With

the recent increase in the prices of these metals and the decrease in the cost of doing reliable assays for them, it has become prudent to explore the property near known areas of mineralization and favourable geology for possible sources of the PGE placer occurrences in Whipsaw Creek. A beginning was made in this search by assaying 113 pulps for platinum and palladium. The pulps were the only ones in storage available from earlier trenching and diamond drilling programs, and, although not from ideal places to start the search for PGE, were from mineralized zones, and the assaying program described in this report made it possible to start the PGE investigation prior to the 2000 field season.



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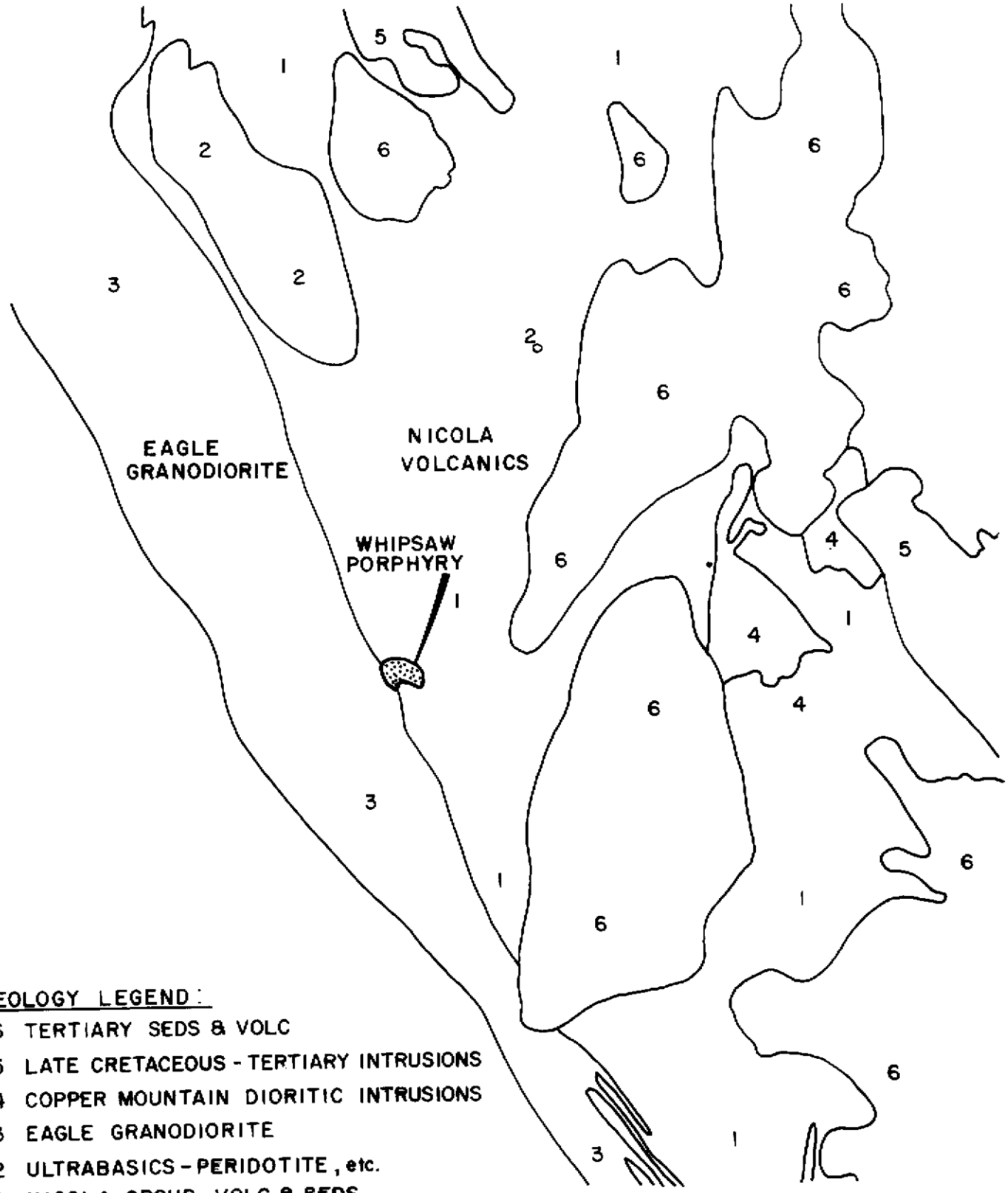
WHIPSAW PROPERTY

LOCATION MAP

FIGURE 1

May, 1998 P.W.R.



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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ACCESS MAP

FIGURE 2

May, 1998 P.W.R.

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WHIPSAW PROPERTY

CLAIM MAP

FIGURE 3

May, 1998 P.W.R.

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 southwest of Princeton. The Similkameen copper-gold mine is 15 km ENE of the property (Figure 2).

Access from Vancouver is via Highway 401 to Hope and Highway 3 to Princeton. Thirteen km south of Princeton, a good logging road leaves Highway 3 at Whipsaw Creek and goes southwestward along the north bank of the creek through the property, a distance of 20 km to the camp (Figure 2). Numerous logging and mining roads give good access to most parts of the property.

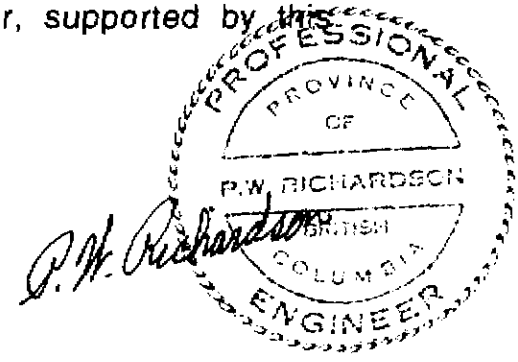
Whipsaw Creek flows eastward through the middle of the property (Figure 3). The topography within the property is generally moderate, but there are some deeply incised valleys. Elevations range from 1385 m to 1660 m. The property is covered with large stands of commercial evergreen trees. There is little undergrowth, but dense brush does occur locally. Extensive logging is currently being done, and there are increasing areas of clearcut which have obliterated the company's grid lines in some areas. In general, outcrop is sparse, but in many areas the overburden is less than one metre deep. Swampy areas occur near the sources of most of the creeks.

CLAIMS

The Whipsaw property is made up of 22 mineral claims and one Mineral Lease totaling 151 units (Figure 3). The pertinent claim data are as follows:

Name	Title No.	No. of Units	Record Date	Expiry Date
Mineral Lease #336(lots 172 & 1549-1556)	250138	1	Jan 13/64	Jan 13/2001
MJ3	248611	6	July 26/77	Mar 16, 2005
MET 1	249225	20	May 13/87	Mar 16/2005
MET 2	249226	20	May 13/87	Mar 16/2005
MET 3	249277	12	Nov 24/87	Mar 16/2005
MET 4	249278	8	Nov 24/87	Mar 16/2005
MET 5	249279	15	Nov 24/87	Mar 16/2005
MET 6	249280	9	Nov 24/87	Mar 16/2005
MET 7	249281	20	Nov 24/87	Mar 16/2005
OK#1	250180	1	June 29/64	Mar 16/2005
OK#2	250181	1	June 29/64	Mar 16/2005
OK#3 Fr.	250237	1	Mar 18/66	Mar 16/2005
OK#4 Fr.	250238	1	Mar 18/66	Mar 16/2005
OK#5 Fr.	250239	1	Mar 18/66	Mar 16/2005
Silvertip No.1	250241	1	June 28/66	Mar 16/2005
Silvertip No. 2	250242	1	June 28/66	Mar 16/2005
OK#6 Fr.	250326	1	June 25/71	Mar 16/2005
OK#7 Fr	250327	1	June 25/71	Mar 16/2005
OK#8	250328	1	July 09/71	Mar 16/2005
PORPH 1	301858	12	June 21/91	Mar 16/2001*
NORTH HILL #1	302359	9	July 19/91	Mar 16/2001
SOUTH HILL #2	302360	9	July 22/91	Mar 16/2001
		151 units		

*Expiry date when the work applied for, supported by this 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 and Mines. All claims are owned by Mr. Charles R. Martin.

HISTORY

Placer deposits in the Tulameen and Similkameen rivers and their tributaries have been known since the 1860s. However. it was not until 1885 that rich placer deposits of gold and platinum were discovered in Granite Creek near the town of Tulameen (Figure 2). Shortly afterwards, gold and platinum placer deposits were discovered in Whipsaw Creek downstream to the east of the present Whipsaw property. Prospecting for bedrock deposits led to the staking of gold and silver-bearing veins in the central part of the property in 1908.

In 1959, reconnaissance stream sediment sampling by Texas Gulf Sulphur Company discovered major stream sediment Cu-Zn anomalies in 45 and 47 Mile creeks, tributaries entering Whipsaw Creek from the north (Bacon, 1960). Follow-up work outlined soil geochemical, electromagnetic and induced polarization anomalies near the headwaters of 47 Mile Creek (Figures 3 & 4; Bacon, 1960 & 1961; Holyk, 1962). This anomalous area was explored successively by several companies (Seraphim, 1963; Hallof 1963; Mustard, 1969; Macauley and Paulus, 1971). Also during this period, adjacent properties were held by several other companies and individuals. Despite the property boundary constraints to exploration programs, large areas of 0.2-0.3% Cu with accompanying molybdenum were

discovered by limited diamond drilling programs while investigating the various geochemical and geophysical anomalies (Heim, 1987).

In 1985, World Wide Minerals Ltd. did soil sampling in the area of the BZ trenches to test for precious as well as base metals (Heim, 1985). It was found that the entire area of the BZ trenches was within a large Cu-Zn soil anomaly accompanied by anomalous Au, Ag and As values. In 1986, the trenches were extended and rock samples were cut which assayed as high as 11.62 g/t Au and 185.1 g/t Ag across 0.61 m in a shear zone (Heim, 1987).

In 1987, World Wide Minerals Ltd. succeeded in consolidating the property, and did a soil sampling program over its central part. A total of 5580 samples were collected and analyzed for Au and, separately, for 31 elements using the inductively coupled plasma (ICP) method. In late 1987 and January 1988, the company diamond drilled 30 holes totaling 3040.1 m (10,000 ft) on part of the BZ zone and on two zones south of Whipsaw Creek (Richardson, 1988b). Also 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 (Walker, 1987). Several VLF-EM anomalies have yet to be examined in the field. An intense magnetic anomaly in the SE portion of the property probably indicates the presence of an ultrabasic intrusion.

In 1990, World Wide did a three hole diamond drilling program immediately north of the Whipsaw Porphyry (Richardson, 1990a and 1990b).

In 1991, the northern half of the Whipsaw property was optioned to Phelps Dodge Corporation of Canada, Limited. Their

representatives conducted diamond drilling and percussion drilling programs in 1991 and an additional small diamond drilling program in 1992 (Fox, 1992; Fox and Goodall, 1992).

In 1990 and 1992, World Wide began a program of detail geochemical surveying to follow up the anomalous areas south of Whipsaw Creek that were discovered by the extensive 1987 reconnaissance geochemical survey.

In 1995, Martech Industries Inc. drilled seven diamond drill holes to continue testing the copper mineralization around the periphery of the stock, and, in 1997, drilled one additional diamond drill hole near the south boundary of the stock. Two more diamond drill holes were drilled in 1998.

GEOLOGY

The Whipsaw 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 west-dipping contact zone is intruded by the Whipsaw Porphyry. Dykes of feldspar porphyry extend north and south of the stock near and parallel to the Nicola-Eagle Granodiorite contact. The northwest portion of the Whipsaw Porphyry outcrops and has been mapped (Figure 4; Mustard, 1969). However, the southeast lobe of the porphyry stock occurs in an area of sparse outcrop, and the outline of this part of the stock is based mainly on magnetic and geochemical data.

The Whipsaw Porphyry is the apparent 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 perimeter of the Whipsaw Porphyry but mostly in Nicola rocks bordering the porphyry. To the south, the porphyry Cu-Mo-Au mineralization decreases and Au-Ag-Cu-Zn mineralization occurs in pyrite-bearing quartz veins and associated disseminated deposits. An area with skarn zones occurs just north of Whipsaw Creek near the Nicola-Eagle Granodiorite contact (Figure 4). This skarn area coincides with the area of the highest soil gold geochemical anomalies on the property, but has not been examined in detail yet.

The platinum group element (PGE)-bearing Tulameen ultrabasic intrusion lies 12 km NNW of the Whipsaw porphyry and additional

smaller ultrabasic intrusions are reported to occur as far south as Whipsaw Creek (Figure 2). An intense magnetic anomaly in the southeast portion of the Whipsaw property is probably caused by such a body of ultrabasic rocks. If the postulated ultrabasic body exists, it could be the source of the platinum in the placer deposits in Whipsaw Creek east of the Whipsaw property. A second possible source of the platinum is the known porphyry copper mineralization on the property: at nearby Copper Mountain, PGE have been reported accompanying the copper-gold mineralization along the perimeter of the Copper Mountain Stock, mostly on the west side in PGE-enriched zones. A third possible source of the PGE-bearing placer deposits is the mineralization in quartz veins outcropping along Whipsaw Creek. A fourth possible source of the placer platinum is the Tertiary sedimentary basin in which platinum and gold particles were probably "parked" during and after the intense Early Tertiary peneplanation, which included the erosion of the Tulameen ultrabasic rocks and their satellites to the south (Figure 2).

The 2000 PROGRAM OF ASSAYING AVAILABLE PULPS FOR PGE

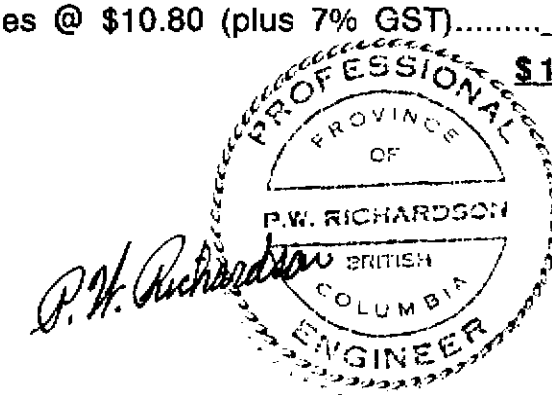
A beginning was made in the search for PGE by assaying 113 available pulps for platinum and palladium. The pulps were in storage from earlier trenching and diamond drilling programs. The two areas tested were as follows:

(1) The area adjacent to the mineralized south boundary of the Whipsaw porphyry explored by diamond drill holes M97-8, M98-9 and M98-10 (Figures 4, 5 and 6; Appendices 1 and 2). No significant amounts of Pt or Pd were found to occur in these samples.

(2) The BZ zone, which is in Nicola rocks 1400 metres south of the above diamond drill holes (consequently, further from the main body of the Whipsaw Porphyry) and is adjacent to 45 Mile Creek (Figures 7 and 8; Appendix 2). The BZ samples are rock samples cut from bulldozer and backhoe trenches excavated to test soil anomalies No significant amounts of Pt or Pd were found to occur in these samples.

COSTS OF THE 2000 PGE ASSAYING PROGRAM

P.W. Richardson - Consulting, organizing samples
1.2 days @ $500/day.....$600.00
Assaying - 113 samples @ $10.80 (plus 7% GST)..... 1,305.83
$1,905.83



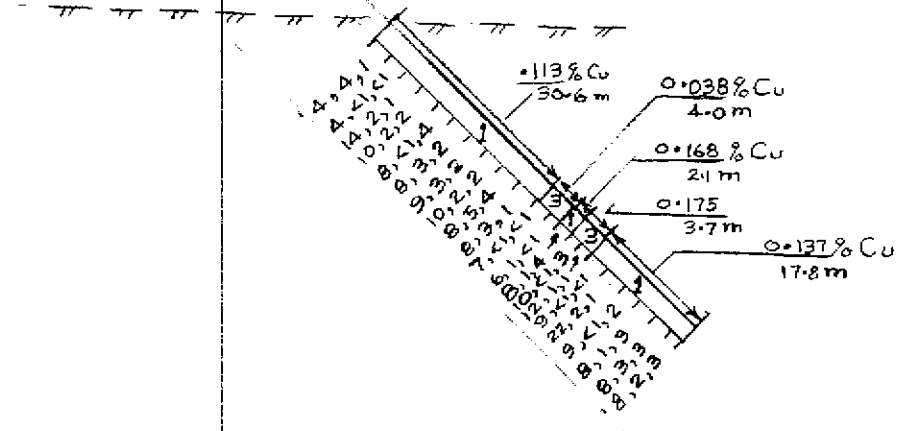
8900 E

9000 E

1600 elev.

M 98-10

ob.



Au, Pt, Pd (all in ppb)
140, 3, 5

1500 elev.

3 Porphyry

1 Nicola Group (volcanics & seiments)

SCALE

0 1:1,000 50m

Section Looks Northwest

8900 E

9000 E

PROFESSIONAL ENGINEER
PROVINCE OF BRITISH COLUMBIA
P.W. RICHARDSON

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DDH M98-10

FIGURE 6

November, 1998 (revised May, 2000) P.W.R.

9,200 E

Trench 8

Sample #24

Sample #35

5, 6, 7
<1, 4, 6
3, 6, 8
7, 3, 7
3, 6, 4
3, 4, 3
64, 4, 7
91, 5, 6
105, 2, 5
464, 2, 7
20, 4, 8
10, 3, 5
16, 4, 6

N

Trench 3

10,500 N

10,500 N

Zone

road

Five Mile Creek

Forty -

Trench 5

Sample #9

Sample #18

5, 1, 1
9, 3, 7
130, 1, 5
46, 1, 4
4, <1, 3
4, <1, 4
46, 1, 3
92, 1, 4
30, 1, 1
61, 2, 1

LEGEND

Au, Pt, Pd (all in ppb)
140, 3, 5

10,300 N

10,300 N

PROFESSIONAL ENGINEER
PROVINCE OF BRITISH COLUMBIA
P.W. RICHARDSON

P.W. Richardson

Scale: 1:1,000

0 50m

9,000 E

Sample #23

Sample #19

Trench 7

7, <1, 1
5, <1, 1
15, <1, 2
3, <1, 2
3, <1, 4

To accompany Report entitled "Platinum Group Elements on the Whipsaw Property" by Paul W. Richardson, Ph.D.,P.Eng. Dated May 16, 2000.

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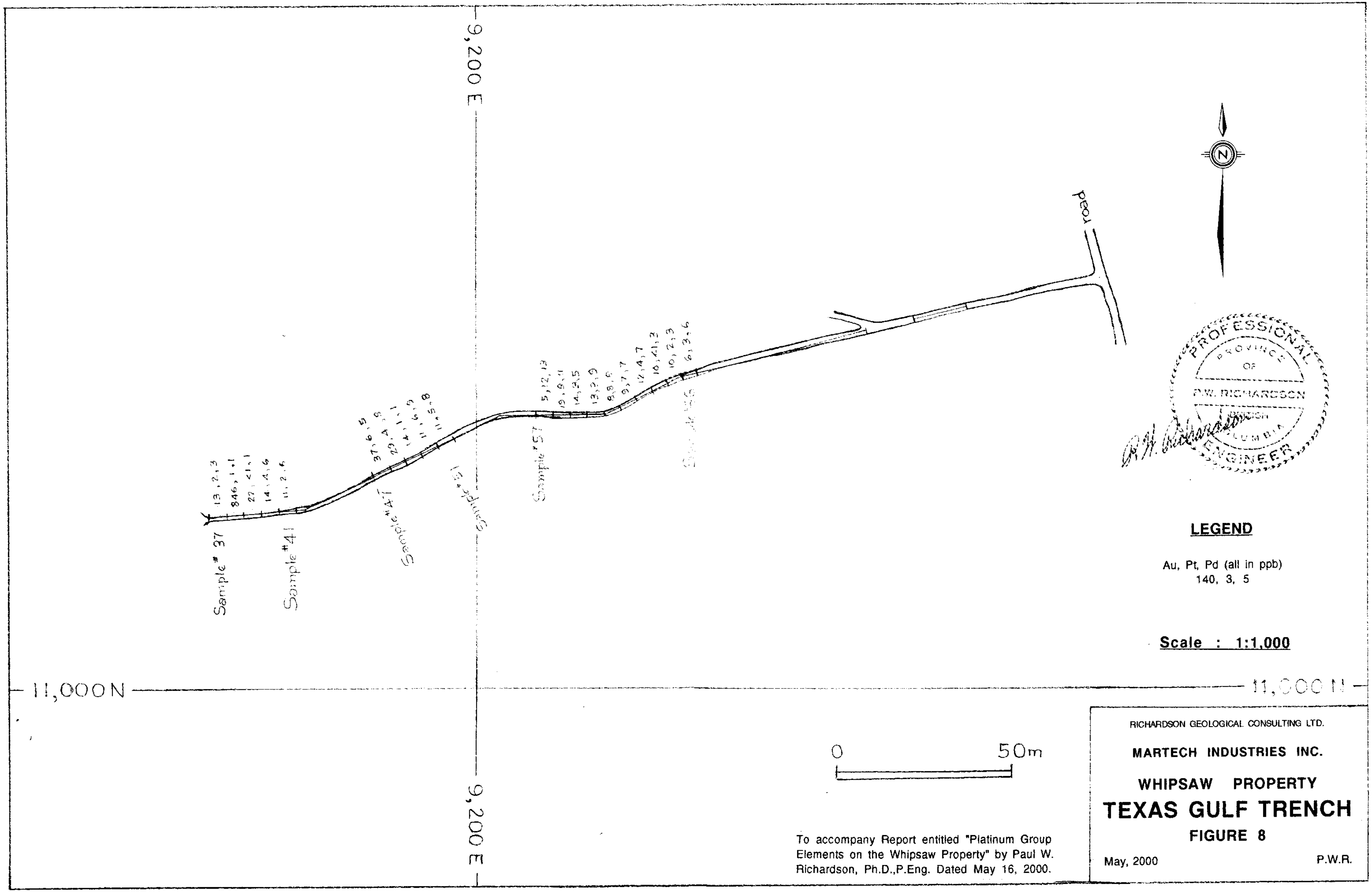
BZ ZONE

FIGURE 7

May, 2000 P.W.R.



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WHIPSAW PROPERTY

TEXAS GULF TRENCH

FIGURE 8

May, 2000 P.W.R.

CONCLUSIONS

(1) In the two areas from which samples were assayed for Pt and Pd, no significant amounts PGE were found.

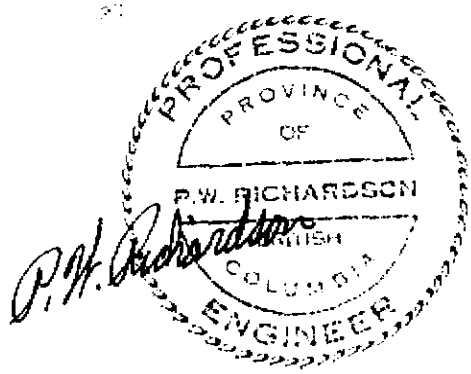
(2) There are parts of the BZ zone with higher grade copper and gold mineralization than those parts tested.

(3) Other areas of the property with potential for PGE and which are untested for those elements are as follows:

- (a) The Skarn area (Figure 4).
- (b) The Metestoffer and Silvertip zones along Whipsaw Creek (Richardson, 1989).
- (c) The Five Fissures and Knight and Day zones south of Whipsaw Creek.
- (d) The intense magnetic anomaly south of Whipsaw Creek (Walker, 1987).

RECOMMENDATIONS

(1) Do a modest program of soil sampling in the above-mentioned areas, and analyze the samples for PGE.



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RICHARDSON GEOLOGICAL CONSULTING LTD.
4569 WEST 13TH AVENUE, VANCOUVER, B.C. V6R 2V5
TELEPHONE: (604) 224-4272

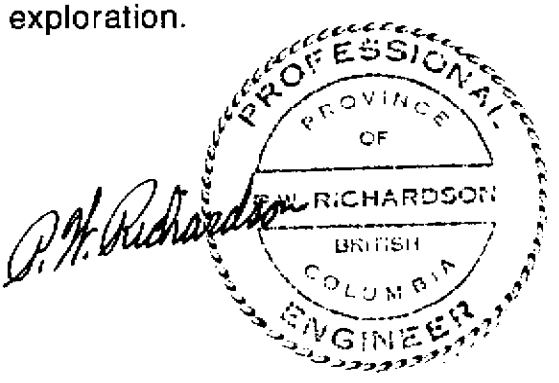
STATEMENT OF QUALIFICATIONS

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 programs, except in periods at university, since 1945, and has participated in numerous exploration programs 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. He has carried out or supervised many diamond drilling programs since 1950.

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

The writer has worked on the Whipsaw property for several years. Elsewhere in the Quesnel Trough, the writer has worked on other properties associated with alkalic porphyry systems, particularly at Copper Mountain, at the Lorraine Property and at the QR gold deposit during the early stages of exploration.



APPENDIX 1 - Diamond Drill Logs

MARTECH INDUSTRIES INC.

DIAMOND DRILL RECORD

LOCATION: 11,802 ; 8,860

AZIMUTH: 064°

DIP: -48°

LENGTH: 60.96 m

ELEVATION: 1594 m

HOLE NO: M-97-8

PROPERTY: WHIPSAW

CLAIM NO: MET 7

STARTED:

CORE SIZE: BQ Wireline

DATE LOGGED: February 17, 1998

SECTION:

COMPLETED: November 30, 1997

DIP TESTS: —

LOGGED BY: P.W. Richardson

PURPOSE: To continue section of 91-1 and M95-4

METRES from	METRES to	DESCRIPTION		L	Recovered
0	4.88	CASING	4.88-7.92	3.04	1.50
4.88	60.90	PORPHYRY	7.92-10.97	3.05	3.05
		Light grey, fine-grained	10.97-14.02	3.05	1.50
		groundmass. Vague phenocrysts	14.02-17.07	3.05	3.10
		1-2 mm of feldspars.	17.07-18.90	1.83	1.00
		Limonite on fractures to	18.90-20.72	1.82	0.60
		37.0 decreasing beyond 31.0	20.72-23.16	2.44	2.70
		Limonite accompanied by minor	23.16-26.21	3.05	1.15
		malachite and a black, sooty	26.21-29.26	3.05	1.65
		mineral. V. minor, v. fine-	29.26-32.31	3.05	2.00
		grained disseminated pyrite	32.31-35.36	3.05	3.05
		increasing at end of brecciated section	35.36-37.79	2.43	2.10
		No chalcopyrite seen in " "	37.79-39.62	1.83	2.50
		Chalcopyrite present (± 0.1%)	39.62-41.45	1.83	1.20
		starting at 37.0m, and increas-	41.45-44.50	3.05	3.05
		ing to 0.2% towards end.	44.50-47.55	3.05	3.05
		Rare MoS$_2$ on some fractures.	47.55-50.59	3.04	3.05
		especially near end.	50.59-52.58	1.99	2.00
		Quartz veining starting 51.00 m	52.58-55.47	2.89	2.00
60.90	60.96	VOLCANICS	55.47-58.52	3.05	2.40
		Medium to dark green,	58.52-60.96	2.44	2.50
		fine-grained, schistose.			
		With py + minor cp.			
		End of hole at 60.96 m.			

SAMPLE No.	METRES from	METRES to	LENGTH METRES	Cu ppm	Au ppb	Ag ppm	Zn ppm	Ni ppm	Fe %
153301	5.00	8.00	3.00	941	5	1.2	71	6	1.20
302		11.00	3.00	985	12	2.1	50	5	1.26
303		14.00	3.00	1012	19	2.6	48	3	1.25
304		17.00	3.00	1342	20	2.5	88	6	1.91
305		20.00	3.00	894	14	1.5	75	4	1.53
306		23.00	3.00	1281	49	0.4	53	5	1.23
307		26.00	3.00	1086	13	1.1	49	5	1.32
308		29.00	3.00	1587	17	2.2	64	6	1.67
309		32.00	3.00	2808	19	2.5	53	6	1.90
310		35.00	3.00	2722	25	2.1	67	9	1.77
311		38.00	3.00	2299	14	2.2	68	7	1.45
312		41.00	3.00	1159	8	1.0	8	6	1.23
313		44.00	3.00	2369	87	2.1	99	6	1.66
314		47.00	3.00	3593	23	3.3	94	9	1.63
315		50.00	3.00	2322	18	2.3	82	7	1.49
316		53.00	3.00	1742	13	1.8	77	5	1.55
317		56.00	3.00	2710	19	2.7	96	6	1.77
318		59.00	3.00	1784	10	1.7	78	4	1.49
319		60.90	2.90	3277	19	3.0	106	6	1.96
320		60.96	0.06	3784	31	4.4	347	91	6.42

MAHTECH INDUSTRIES INC.

DIAMOND DRILL RECORD

LOCATION: 11,824 N, 8,900 E

AZIMUTH: 065°

HOLE NO: M98-9

PROPERTY: WHIPSAW

DIP: -45° LENGTH: 70.40 m ELEVATION: 1594 m CLAIM NO: MET 7

STARTED: October 7, 1998 CORE SIZE: BQ Wireline DATE LOGGED: Oct 21-22/98 SECTION:

COMPLETED: October 12, 1998 DIP TESTS: — LOGGED BY: P.W. Richardson

PURPOSE: Drilled 30 m ahead of M97-8 to test volcanics seen in toe of M97-8

METRES from	METRES to	DESCRIPTION
0	3.96	CASING
3.96	27.20	PORPHYRY - Aphanitic with 5% white feldspar phenocrysts 1-3 mm, light tan to white Limonite and minor malachite on stockwork of closely spaced fractures. 0.2% / 24.2 m
27.20	46.00	VOLCANICS - Schist, fine-grained dark green, fractures with limonite to 34.0. Then some what chloritic with fine-grained pyrite on schistosity (±60°) and fractures. Very rare chalcopyrite. 0.20% / 18.8 m
46.00	72.23	PORPHYRY. Aphanitic ground-mass, 15% 2-3 mm feldspar pheno-crysts, light grey. Shearing w. minor chalcopyrite 56.70 - 57.80 & 60.10. 0.15% / 24.4 m
		End of Hole at 70.40 m
		Casing left in hole.

SAMPLE No.	METRES from	METRES to	LENGTH METRES	Cu ppm	Au ppb	Ag ppm	Zn ppm	Ni ppm	Fe %
200551	3.00	6.00	3.00	2108	3	0.7	33	8	1.49
52	6.00	9.00	3.00	3044	12	1.1	36	6	1.37
53	9.00	12.00	3.00	915	19	2.6	55	5	1.60
54	12.00	15.00	3.00	879	22	3.1	51	9	1.47
55	15.00	18.00	3.00	1580	17	3.3	136	20	2.50
56	18.00	21.00	3.00	4939	25	7.6	305	88	4.62
57	21.00	24.00	3.00	1737	19	4.5	89	10	1.51
58	24.00	27.20	3.20	1418	17	3.0	73	9	1.66
59	27.20	30.20	3.00	2194	74	2.3	558	87	5.56
60	30.20	33.20	3.00	1834	13	2.0	371	59	4.05
61	33.20	36.20	3.00	1758	15	1.7	325	92	4.58
62	36.20	39.20	3.00	1892	16	2.2	431	128	6.01
63	39.20	42.20	3.00	2424	15	2.9	637	122	5.88
64	42.20	46.00	3.80	2283	23	3.1	652	84	5.43
65	46.00	49.00	3.00	284	9	0.5	43	8	1.86
66	49.00	52.00	3.00	1099	16	1.3	63	21	2.43
67	52.00	55.00	3.00	1990	22	2.5	77	32	3.11
68	55.00	56.70	1.70	682	7	0.8	73	43	2.33
69	56.70	57.80	1.16	4465	37	4.4	108	33	4.66
70	57.80	60.80	3.00	1892	36	2.6	58	18	3.16
71	60.80	63.80	3.00	1970	25	2.1	44	7	2.34
72	63.80	66.80	3.00	1125	25	1.6	40	15	2.51
73	66.80	69.80	3.00	1909	34	3.0	69	36	4.03
74	69.80	70.40	0.60	508	6	0.8	34	11	1.7

MARTECH INDUSTRIES INC.

DIAMOND DRILL RECORD

HOLE No. M98-10

LOCATION: 11,680 N , 8,912 E

AZIMUTH: 065°

DIP: -45°

LENGTH: 68.58 m

ELEVATION: 1580 m

PROPERTY: WHIPSAW

CLAIM No: MET 7

STARTED: October 14, 1998

CORE SIZE: BQ Wireline

DATE LOGGED: October 22/23, 98

SECTION:

COMPLETED: October 18, 1998

DIP TESTS: —

LOGGED BY: P. W. Richardson

PURPOSE: Drilled to test an IP Anomaly along strike from target in M98-9

METRES from	METRES to	DESCRIPTION	SAMPLE No.	METRES from	METRES to	LENGTH METRES	Cu ppm	Au ppb	Ag ppm	Zn ppm	Ni ppm	Fe %
0		CASING										
	11.00	OVERBURDEN (no casing)										
		Boulders in clay including										
		1.00 m sandstone boulder 0.60										
		m core clay on bedrock										
11.00	41.60	VOLCANICS - fine-grained	200575	11.00	14.00	3.00	126	6	.6	42	30	2.83
		light greenish grey, Schistose	76	14.00	17.00	3.00	405	6	1.3	42	19	2.14
		& color banding at 80°-90°	77	17.00	20.00	3.00	1129	8	2.7	96	112	5.90
		5% py in reticulating fractures .113/30.6	78	20.00	23.00	3.00	1575	9	1.4	153	151	6.81
			79	23.00	26.00	3.00	1449	8	1.2	131	132	6.22
			80	26.00	29.00	3.00	1452	8	1.3	169	126	5.98
			81	29.00	32.00	3.00	1547	10	1.3	117	83	5.88
			82	32.00	35.00	3.00	1429	14	1.4	152	114	6.91
			83	35.00	38.00	3.00	1084	5	.8	98	91	6.20
			84	38.00	41.60	3.60	1084	6	.9	127	77	6.54
41.60	45.60	PORPHYRY - Aphanitic w 20% .038/4.0	85	41.60	43.60	2.00	329	6	.5	96	23	3.40
		white 2-3 mm feldspar crystals	86	43.60	45.60	2.00	425	4	.4	61	11	2.43
45.60	47.70	VOLCANICS - as to 41.60 .162/2.1	87	45.60	47.70	2.10	1625	13	1.0	116	79	6.69
47.70	51.40	PORPHYRY - as to 45.60 with .175/3.7	88	47.70	49.50	1.80	2253	10	1.9	120	31	4.10
		short sections of volcanics	89	49.50	51.40	1.90	1246	10	1.0	112	28	4.03
51.40	68.58	VOLCANICS - As to 41.60	90	51.40	54.40	3.00	1440	8	1.5	148	49	5.53
			91	54.40	57.40	3.00	1784	20	1.9	1871	40	5.24
		.137/17.8	92	57.40	60.40	3.00	1118	6	.9	92	42	5.37
			93	60.40	63.40	3.00	1674	6	1.0	98	62	7.25
			94	63.40	66.40	3.00	1286	6	1.2	123	79	5.59
		End of Hole at 68.58 m. Casing left in hole	95	66.40	68.58	2.18	1157	6	.9	75	50	5.44

APPENDIX 2 - Assay Certificates

ACME ANA' 'ICAL LABORATORIES LTD. 852 E. HASTINGS ST. V' 'OUVER BC V6A 1R6 PHONE(604)253-3158 FAX(604)'53-1716
(ISC)2 Accredited Co.)

GEOCHEM PRECIOUS .ETALS ANALYSIS

Martech Industries Inc. File # A000800 Page 1
4569 W. 13th Ave, Vancouver BC V6R 2V5 Submitted by: Paul Richardson

SAMPLE#	Au** ppb	Pt** ppb	Pd** ppb	
9	5	1	1	BZ Zone Trench #5 Extension #2
10	9	3	7	
11	30	1	5	
12	46	1	4	
13	14	<1	3	
14	14	<1	4	
15	46	1	3	
16	92	1	4	
17	30	1	1	
18	61	2	1	
19	3	2	3	BZ Zone Trench #7
20	3	<1	1	
21	15	<1	2	
22	5	<1	2	
23	7	<1	1	
24	5	6	7	BZ Zone Trench #8
25	<1	4	6	
26	3	6	8	
27	7	3	7	
28	3	6	4	
29	3	4	3	
30	64	4	7	
RE 30	65	1	7	
31	91	5	6	
32	105	2	5	
33	464	2	7	
34	20	4	8	
35	10	3	5	
36	16	4	6	
37	13	2	3	Texas Gulf Trench
38	846	1	1	
39	22	<1	1	
40	14	4	6	
41	11	2	6	
47	37	6	5	
STANDARD FA100	45	50	47	

GROUP 3B - FIRE GEOCHEM AU, PT, PD - 30 GM SAMPLE FUSION, DORE DISSOLVED IN AQUA - REGIA, ICP ANALYSIS. UPPER LIMITS = 10 PPM.
- SAMPLE TYPE: ROCK PULP Samples beginning 'RE' are Reruns and 'RRE' are Reject Reruns.

DATE RECEIVED: MAR 10 2000 **DATE REPORT MAILED:** March 20/2000 **SIGNED BY** ..... D. TOYE, C.LEONG, J. WANG; CERTIFIED B.C. ASSAYERS

Data ✓ FA ___

SAMPLE#	Au** ppb	Pt** ppb	Pd** ppb	
48	29	4	8	
49	14	1	1	
50	11	6	9	
51	11	5	8	
57	5	12	13	
58	19	8	11	Texas Gulf Trench
59	14	3	5	
60	13	3	9	
61	8	8	8	
62	9	7	7	
63	12	4	7	
64	10	<1	3	
65	10	2	3	
66	6	3	6	
B 153301	5	<1	<1	
B 153302	12	2	<1	
B 153303	19	1	<1	
B 153304	17	<1	2	
B 153305	9	1	1	
B 153306	<1	<1	<1	
RE B 153306	2	<1	<1	DDH M 97-8
B 153307	5	<1	<1	
B 153308	16	1	<1	
B 153309	17	<1	<1	
B 153310	5	1	1	
B 153311	15	42	<1	
B 153312	4	<1	1	
B 153313	11	<1	1	
B 153314	13	5	1	
B 153315	11	<1	2	
B 153316	9	1	3	
B 153317	15	1	1	
B 153318	7	1	<1	
B 153319	16	1	1	
B 153320	30	3	6	.06m in volcanics.
STANDARD FA100	45	47	48	

Sample type: ROCK PULP. Samples beginning 'RE' are Reruns and 'RRE' are Reject Reruns.

Data ___ FA ___

SAMPLE#	Au** ppb	Pt** ppb	Pd** ppb	
B 200551	4	<1	<1	
B 200552	14	<1	1	
B 200553	19	<1	<1	
B 200554	21	<1	<1	
B 200555	16	<1	1	
B 200556	27	2	3	
B 200557	17	<1	1	
B 200558	10	<1	<1	
B 200559	13	<1	3	
B 200560	20	<1	1	DDH M98-9
B 200561	20	<1	2	
B 200562	14	2	2	
B 200563	15	1	3	
B 200564	20	3	3	
B 200565	4	<1	<1	
B 200566	12	1	<1	
B 200567	23	<1	<1	
B 200568	5	<1	1	
RE B 200568	2	<1	<1	
B 200569	30	2	2	
B 200570	29	2	1	
B 200571	24	<1	<1	
B 200572	14	2	1	
B 200573	33	2	1	
B 200574	5	<1	<1	
B 200575	4	4	1	
B 200576	4	<1	<1	
B 200577	14	2	1	
B 200578	10	2	2	
B 200579	8	<1	4	DDH M98-10
B 200580	8	3	2	
B 200581	9	3	2	
B 200582	10	2	2	
B 200583	8	5	4	
B 200584	8	3	1	
STANDARD FA100	46	43	50	

Sample type: ROCK PULP. Samples beginning 'RE' are Reruns and 'RRE' are Reject Reruns.

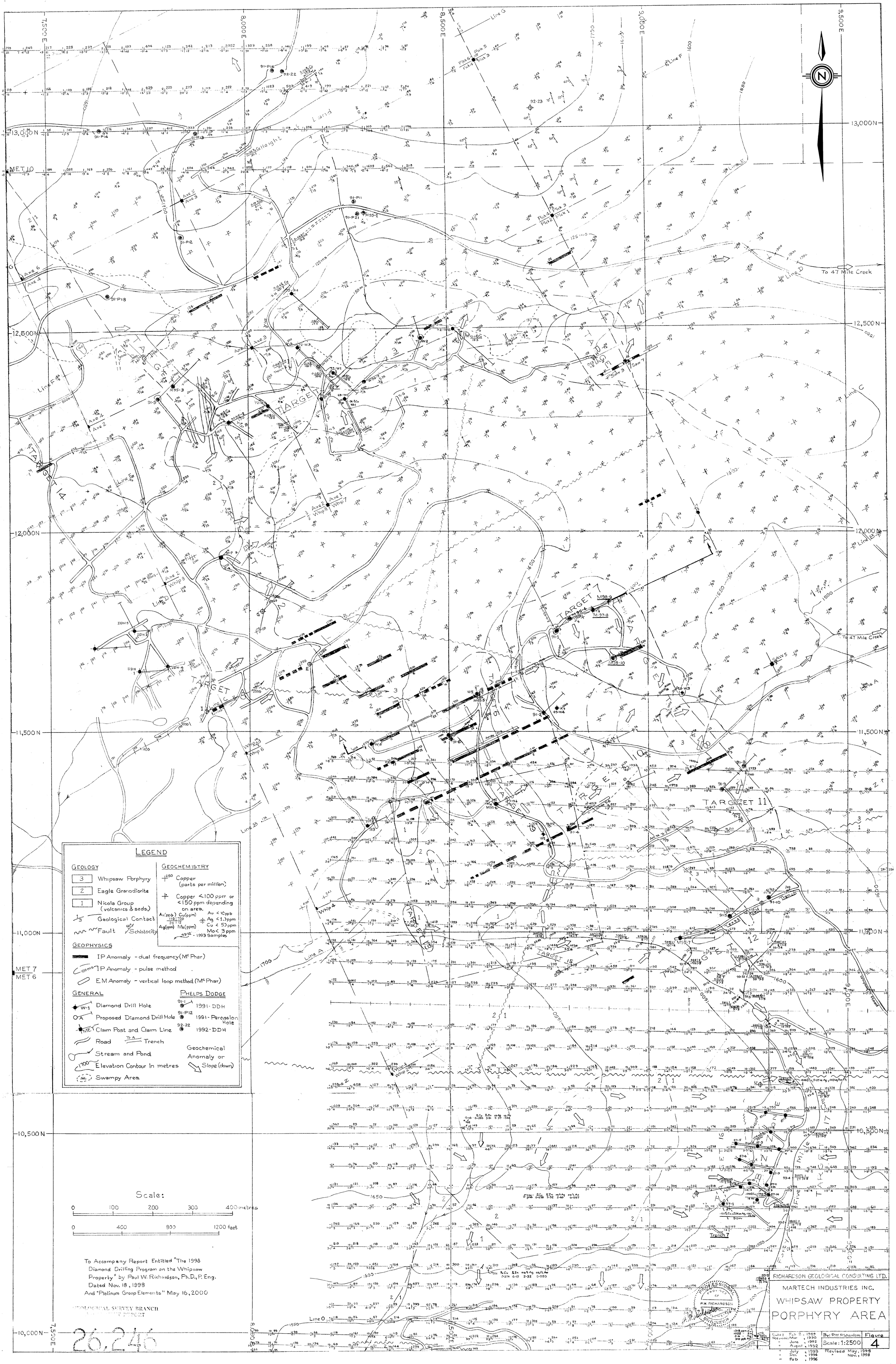
Data 1 FA ___

SAMPLE#	Au** ppb	Pt** ppb	Pd** ppb
B 200585	7	<1	<1
B 200586	6	1	<1
B 200587	8	1	4
B 200588	10	<1	3
B 200589	12	1	1
B 200590	9	<1	1
B 200591	20	2	1
RE B 200591	24	2	2
B 200592	9	<1	2
B 200593	8	1	3
B 200594	8	3	3
B 200595	8	2	3
STANDARD FA100	46	45	45

DDH M98-10

Sample type: ROCK PULP. Samples beginning 'RE' are Reruns and 'RRE' are Reject Reruns.

Data / FA ___



LEGEND

GEOLOGY

3 Whipsaw Porphyry
2 Eagle Granodiorite
1 Nicola Group (volcanics & seds.)
Geological Contact
Fault
60° Schistocity

GEOCHEMISTRY

250 Copper (parts per million)
Copper <100 ppm or <150 ppm depending on area.
Au(ppb) Cu(ppm) / Ag(ppm) Mo(ppm): 110 | 700 / 2.1 | 12
Au < 10ppb, Ag < 1.0ppm, Cu < 50ppm, Mo < 3ppm
93-12 - 1993 Samples

GEOPHYSICS

IP Anomaly - dual frequency (McPhar)
100ms IP Anomaly - pulse method
EM Anomaly - vertical loop method (McPhar)

GENERAL

W-1 Diamond Drill Hole
A Proposed Diamond Drill Hole
MET Claim Post and Claim Line
Road
Tr A Trench
Stream and Pond
1700 Elevation Contour in metres
Swampy Area
Geochemical Anomaly or Slope (down)

PHELPS DODGE

91-1 1991-DDH
91-P12 1991-Percussion Hole
92-22 1992-DDH

Scale:

0 100 200 300 400 metres

0 400 800 1200 feet

To Accompany Report Entitled "The 1998 Diamond Drilling Program on the Whipsaw Property" by Paul W. Richardson, Ph.D., P. Eng. Dated Nov. 18, 1998
And "Platinum Group Elements" May 16, 2000

PROFESSIONAL ENGINEER PROVINCE OF BRITISH COLUMBIA P.W. RICHARDSON

P.W. Richardson

RICHARDSON GEOLOGICAL CONSULTING LTD.

MARTECH INDUSTRIES INC.

WHIPSAW PROPERTY
PORPHYRY AREA

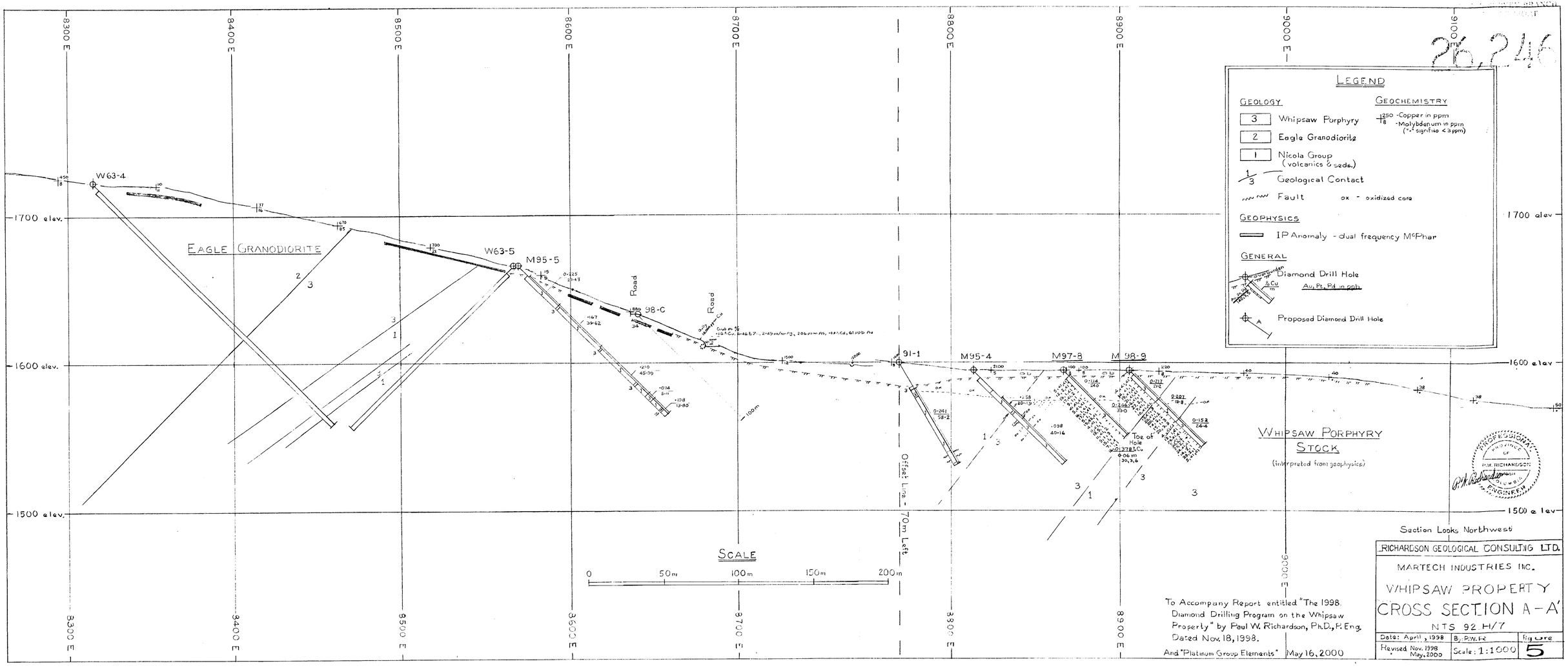
Date: Feb 2, 1989
Revised: Mar, 1990
" June, 1992
" August, 1992
" July, 1993
" Dec, 1994
" Feb, 1996

By: P.W. Richardson

Scale: 1:2500

Figure 4

Revised May, 1998
" Nov., 1998



26,246

Section Looks Northwest

To Accompany Report entitled "The 1998 Diamond Drilling Program on the Whipsaw Property" by Paul W. Richardson, Ph.D., P. Eng. Dated Nov. 18, 1998.

And "Platinum Group Elements" May 16, 2000

RICHARDSON GEOLOGICAL CONSULTING LTD.

MARTECH INDUSTRIES INC.

WHIPSAW PROPERTY

CROSS SECTION A-A'

NTS 92 H/7

Date: April, 1998	By: P.W.R	Fig. Core
Revised Nov. 1998 May, 2000	Scale: 1:1000	5