

**ASSESSMENT REPORT ON THE PILLDOLLA PROPERTY
1994 GEOLOGICAL PROGRAM**

LOG NO:	MAY 16 1995	U
ACTION:		
FILE NO:		

Vancouver Mining Division, British Columbia

NTS Map Area 92K/8

Latitude 50° 18'N Longitude 124° 07'W

Claims: PILLDOLLA 1 - 7

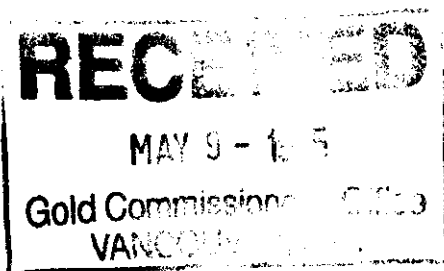
**Owner: Aquaterre Mineral Development Ltd.
1003, 470 Granville Street
Vancouver, BC
V6C 1V5**

**Operator: Aquaterre Mineral Development Ltd.
1003, 470 Granville Street
Vancouver, BC
V6C 1V5**

by

**M. Schatten, B.Sc.
November 30, 1994**

**Reviewed & Approved by
J. Kerr, P.Eng.**



**GEOLOGICAL BRANCH
ASSESSMENT REPORT**

23,897

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SUMMARY

Aquaterre Mineral Development Ltd. conducted a limited geological and rock sampling program on the Pildolla property from August 30 to September 12, 1994. The Cave Zone, hosted by an east to northeast trending moderately dipping shear within Coast Range Complex granodiorite, appears to be the likely source of most mineralized boulders that assay up to 0.369oz/ton Au, 8.73 oz/ton Ag and 2.15% Cu. This area and the extension of the shear to the east and west was prevented from being fully tested due to inclement weather.

Results of the limited sampling program confirmed the results of the 1993 work, indicating the extension of the mineralized shear an additional 15m to the west. At present, a total strike length of 80m of the Cave Zone and shear are mineralized with subeconomic grades of gold and copper mineralization ranging up to 677ppb Au and 0.3% Cu.

1. INTRODUCTION

1.1 Location, Access and Terrain

The Pildolla property (Figure 1) is located approximately 125 kilometres northwest of Vancouver, BC and 55 kilometres northeast of Powell River, BC. The village of Egmont on the Sunshine Coast lies 60 kilometres to the south. Princess Royal Reach at the head of Jervis Inlet is 10 kilometres to the southeast. Pildolla Creek runs east-west along the south end of the property draining into Skwawka River near the head of Jervis Inlet. The highest mountain peaks in the immediate claims area reach elevations of 1,970m.

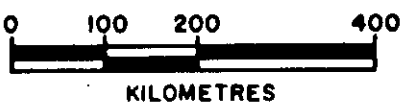
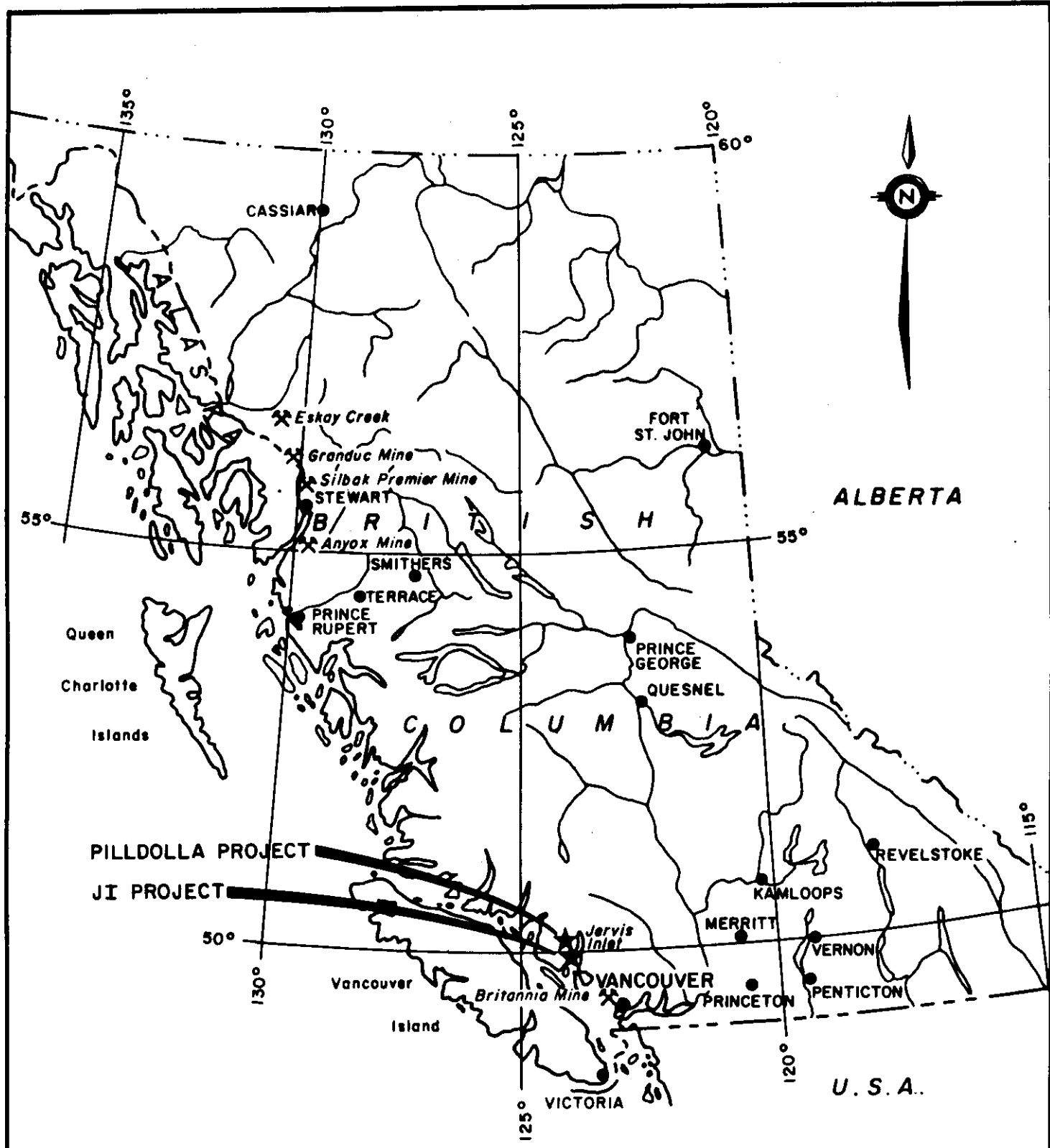
Access to the property is via helicopter which was based in Egmont for part of the program and in Sechelt for the remainder. Flight time from Egmont to the claims is approximately 25 minutes one way. Barging service is to a well maintained logging camp at the head of Jervis Inlet. West of there recent logging roads, following the north side of Pildolla Creek, come within one kilometre of the claims.

Physiographically, the claims area is steep especially when in major drainages such as Pildolla Creek. Elsewhere, topography is moderately steep. Vegetation consists of spruce and cedar with thick underbrush of slide alder and locally thorn bushes.

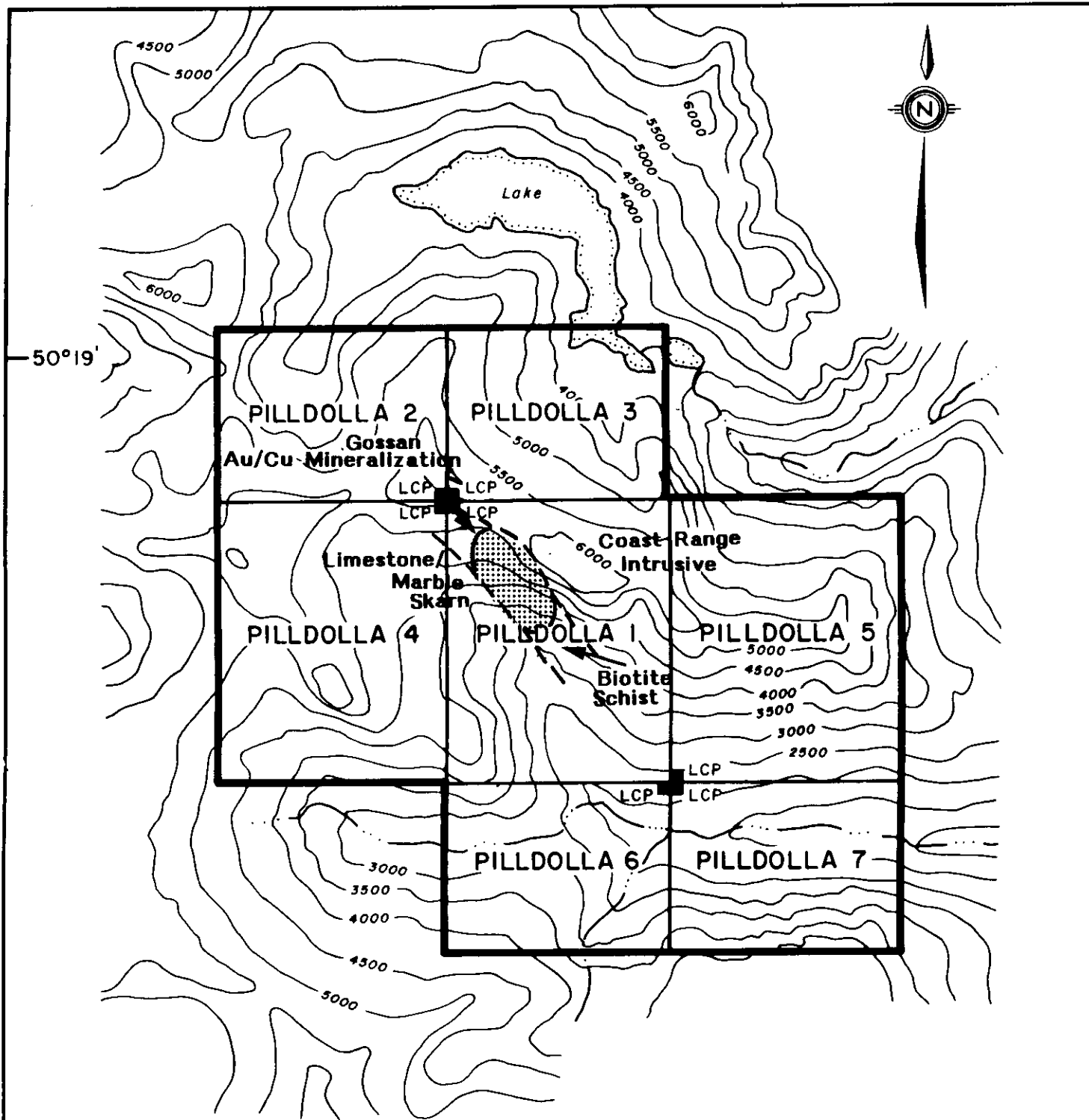
Precipitation in the area consists of heavy rainfall during the spring and fall months and snow accumulations of several feet between December and May.

1.2 Claim Status

The Pildolla property (Figure 2) comprises 7 mineral claims (108 units) all recorded in the name of Aquaterre Mineral Development Ltd.. The expiry dates in Table 1 reflect the dates that will be in effect upon acceptance of this report.



AQUATERRE MIN. DEV. LTD.	
PILLDOLLA AND JI PROJECTS VANCOUVER MINING DIVISION, B.C.	
LOCATION MAP	
FIGURE 1	
Date: FEBRUARY 1994	Scale: As Shown



AQUATERRE MIN. DEV. LTD.		
PILLDOLLA PROJECT VANCOUVER MINING DIVISION, B.C.		
CLAIM MAP		
FIGURE 2		
Date: FEB.1994	NTS: 92K/8	Scale: 1:50000

Table 1. Summary of Claim Particulars

<u>Claim Name</u>	<u>Units</u>	<u>Tenure No.</u>	<u>Expiry Date*</u>
Pilldolla 1	20	320675	08/14/1998
Pilldolla 2	12	320846	08/26/1997
Pilldolla 3	12	320847	08/26/1997
Pilldolla 4	20	320848	08/26/1997
Pilldolla 5	20	320849	08/26/1997
Pilldolla 6	12	320850	08/26/1997
Pilldolla 7	12	320851	08/26/1997
Total Units	108		

* Upon acceptance of this report.

1.3 History

There is no known recorded work on the claims and no sign of previous work is evident in the field. Aquaterre Mineral Development Ltd. in the course of a regional program in the area in 1993 located mineralized boulders that subsequently led to the staking of the claims.

1.3.1 Aquaterre Mineral Development Ltd. (1993)

Upon staking the Pilldolla claims a geological mapping, rock, soil and silt sampling and prospecting program was carried out. The majority of work was directed to a strongly gossanous cliff area (Cliff and Cave Zones) where a number of mineralized boulders were initially discovered on the Pilldolla 1 claim. A total of 236 rock samples, 42 soil samples and 21 silt samples were collected from the claims and analyzed. Typical results of mineralized talus boulders are in the order of 1,005ppb - 6,882ppb gold, 18.1ppm - 8.73ot silver, 0.178% - 0.91% copper and 17ppm - 1.34% lead. Chip sampling of the Cliff Zone area was unable to duplicate values found in the mineralized boulders. The highest value from the Cave Zone came from float collected at the base of an overhanging cliff with visible mineralization (malachite) and assayed 0.369oz/ton gold, 3.15oz/ton silver and 2.15% copper.

1.4 1994 Work Summary

Between August 30 and September 12, 1994 Aquaterre Mineral Development Ltd. undertook a geological mapping (scale 1:5,000), prospecting, rock and silt sampling program on the Pildolla property. Geological rock climbers were utilized when possible however the program was terminated early due to bad weather. A total of 29 rock samples and 6 silt samples were collected and analyzed for Au + 9 elements.

1.5 Claims Work Performed On

Pildolla 1 geological mapping (1:5,000) and prospecting
21 rock samples, 2 silt samples

Pildolla 2 geological mapping (1:5,000) and prospecting
5 rock samples, 1 silt sample

Pildolla 3 geological mapping (1:5,000) and prospecting
3 silt samples

Pildolla 4 geological mapping (1:5,000) and prospecting
2 rock samples

Pildolla 5 1 rock sample

2. GEOLOGY

2.1.1 Regional Geology

The Britannia belt is comprised of a series of northwest trending volcanic and sedimentary roof pendants enclosed by the Tertiary to Cretaceous Coast Plutonic Complex. Rocks in the roof pendants are of several different ages and have been divided into pre-Jurassic metamorphosed volcanics and sediments and Lower Cretaceous Gambier Group volcanics and sedimentary rocks (Figure 3).

Metamorphic rocks, generally of the upper greenschist to amphibolite facies consist of gneiss, schist, quartzite and amphibolite. The Gambier Group is comprised of volcanic andesite, dacite and rhyolite flows, tuffs and breccias, argillite, siltstone and limestone.

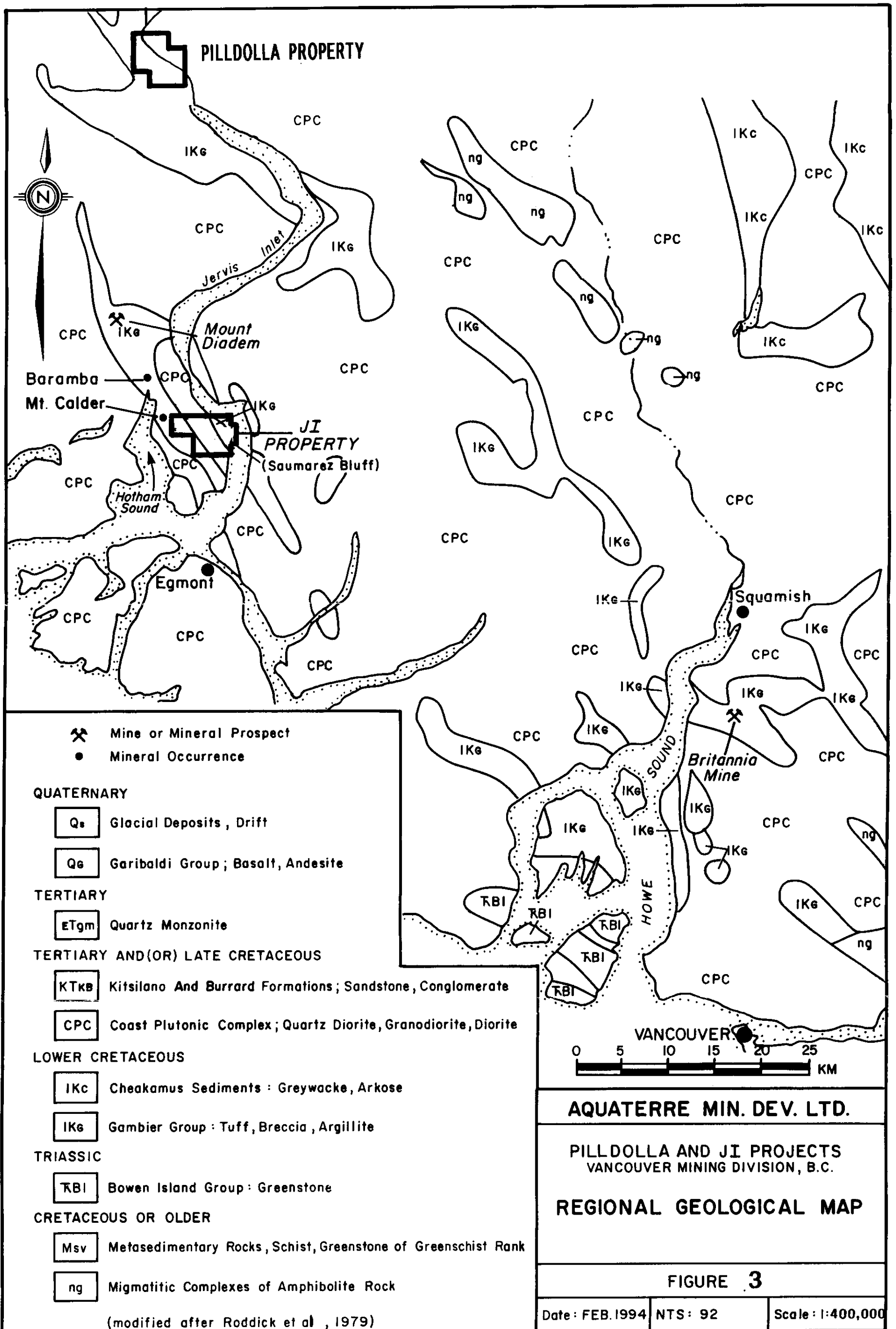
Roddick (1977) includes the Pildolla Creek area in Belt 5. The area falls at the north end of the pendant beginning some 18km to the south at Mt. Alice. The northern end of the belt is underlain by marble, schist and metavolcanics, differing considerably from the Mt. Alfred area to the south where shale, slate, argillite, schist, conglomerate, andesitic flows and breccias occur. The conglomerate consists predominantly of dacitic clasts ranging in size from 10cm to 2m.

Marble beds in the Pildolla Creek area are up to 3m thick with intercalated rhyolite and schist. Metavolcanic rocks including rhyodacite, andesitic volcanic breccia and chlorite schist are dominant in some areas. Siliceous volcanic rocks are commonly pyritiferous and rusty weathering. On the east side of Pildolla Creek near its headwaters, a complex relationship between the metavolcanics and intrusive body exists.

2.1.2 Regional Mineralization

The Mt. Diadem prospect is located 30km south of the Pildolla property and is underlain by similar Gambier Group rocks. Mineralization (Riccio et al, 1983) at the Lower Adit Zone consists of pods and lenses of massive sphalerite, chalcopyrite, pyrrhotite, galena and arsenopyrite developed within steeply dipping shears. At the Upper Adit Zone, an echelon stringer sulphides comprised of pyrrhotite-sphalerite, pyrrhotite-sphalerite-galena, pyrrhotite-chalcopyrite plus or minus tetrahedrite+pyrrhotite-sphalerite-chalcopyrite-galena form high grade zones up to 30m wide and 120m long enclosed by low grade zones.

The Britannia Mine is located 100km to the southeast of the Pildolla claims. During the period of 1905-1974, 52.7 million tonnes of ore grading 1.1% Cu, 0.65% Zn, 0.2oz/t Ag and 0.02oz/t Au were produced. Ten different deposits were defined within the Britannia shear zone. All mineralization occurred near the top



of a dacite pyroclastic unit overlain by argillites.

2.2 Property Geology

The northwest trending volcanic/sedimentary roof pendant underlies the central portion of the Pildolla claim block. Where examined, it is widest on the Pildolla 1 and Pildolla 4 claims reaching surface widths in excess of 1 kilometre. To the northwest, in the area of the Pildolla 1-4 common LCP, it narrows to approximately 200m.

On the (Figures 4 & 5) property the pendant is comprised of marble, limestone, metavolcanic and metasedimentary rocks, skarn, hornfels, quartz-mica schist, quartz-chlorite schist and rare amphibolite.

2.2.1 Lithologies

Limestone/Marble

At higher elevation, northeast of the headwaters of Pildolla Creek white marble and light grey limestone is exposed. Beds strike to the northwest and dip moderately to steeply to the southwest. Where the pendant narrows marble is dominant, elsewhere it is intercalated with limestone.

Skarn

Enclosing the marble, adjacent to the Coast Range granodiorite well-developed epidote-garnet skarn occurs, epidote crystals reaching lengths of 6cm. In areas where limestone dominates the skarn is less well-developed and may be intercalated with hornfels, schist and/or siliceous metavolcanics. Weak diopside, magnetite and chalcopyrite were also observed.

Hornfels

This unit is massive, fine-grained and medium to dark grey. It occurs with skarn near the pendant/intrusive contact. Disseminated pyrite, 2-20%, as grains, stringers and veinlets is common.

Quartz-Mica Schist

This unit outcrops extensively along the east side of the pendant in close proximity to the Coast Range granodiorite. The rocks are limonitic and pyritic. Fresh surfaces are medium to dark grey, fine- to medium-grained and have coarse crystals and clots of quartz enclosed by fine undulating bands of biotite. The unit has a well-developed foliation.

Pyrite is the most common sulphide and is seen throughout the unit as stringers, veinlets, blebs and disseminations. Cubes are to 1cm in size and often tarnished on weathered surfaces. Chalcopyrite is less common and occurs as blebs and

disseminations often intimately associated with pyrite. Massive pyrrhotite, galena and veins/veinlets of magnetite were seen in boulders and have not yet been located in place.

Fracture orientations indicate two sets: one trending 006/58W, 172/38E and the second trending 030/50W, 047/65NW, 039/20NW. Small shear zones noted trend 033/90 and 006/58W.

Quartz-Chlorite Schist

Narrow bands of quartz-chlorite schist occur within the quartz-mica schist. They are green-grey and fine- to medium-grained. A strong schistosity is developed by the alternating segregated bands of fine-grained chlorite, quartz and biotite. Rocks of this composition were also mapped at higher elevations on the west side of the headwaters of Pildolla Creek.

The most prominent fractures trend 133/18SW.

Biotite Schist

This unit outcrops near the head of a new logging road in the southwest corner of the claims. It is fine-grained, medium grey to black weathering brown and rusty. Muscovite and chlorite occur locally. Quartz is often present as veinlets likely due to metamorphic sweats. Sparse pyrite occurs both as fine-grained disseminations and narrow stringers.

Metavolcanic and Metasedimentary Rocks

Bands of undifferentiated siliceous metavolcanic and metasedimentary rocks are common within the schist unit. Petrographic analysis indicates at least part of the siliceous metavolcanics are of dacitic composition. Near the east side of the headwaters of Pildolla Creek and extending east these rocks are commonly strongly gossanous and contain 3-8% finely disseminated pyrite.

Granodiorite

The roof pendant is surrounded by Coast Range Complex granodiorite to diorite. Fresh surfaces are light grey, equigranular and medium- to coarse-grained. Mafic clots of hornblende and biotite are common. Near the pendant contacts intrusive rocks are pyritic and limonitic. Small shear zones seen as flattened, elongated minerals are frequent near contacts.

2.2.2 Structure

Several extensive shears cut the eastern half of the Pildolla property. The most prominent one trends east to northeast and dips moderately to the west and northwest. It can be traced near its eastern edge from the top of the granodiorite ridge, where it appears flat-lying, throughout the intrusive to the west. It passes through the Cave Zone several hundred metres east of the roof pendant. Examination of pendant rocks in the area of the projected structure did not confirm its presence, however the contact between the limestone/marble unit and the schist/metavolcanic package lies roughly along strike of the shear and may be a fault contact.

Several parallel to sub-parallel shears cut intrusive rocks above and below the Cave Zone shear.

Further inspection of these structures and their extensions was hampered by bad weather.

2.2.3 Mineralization

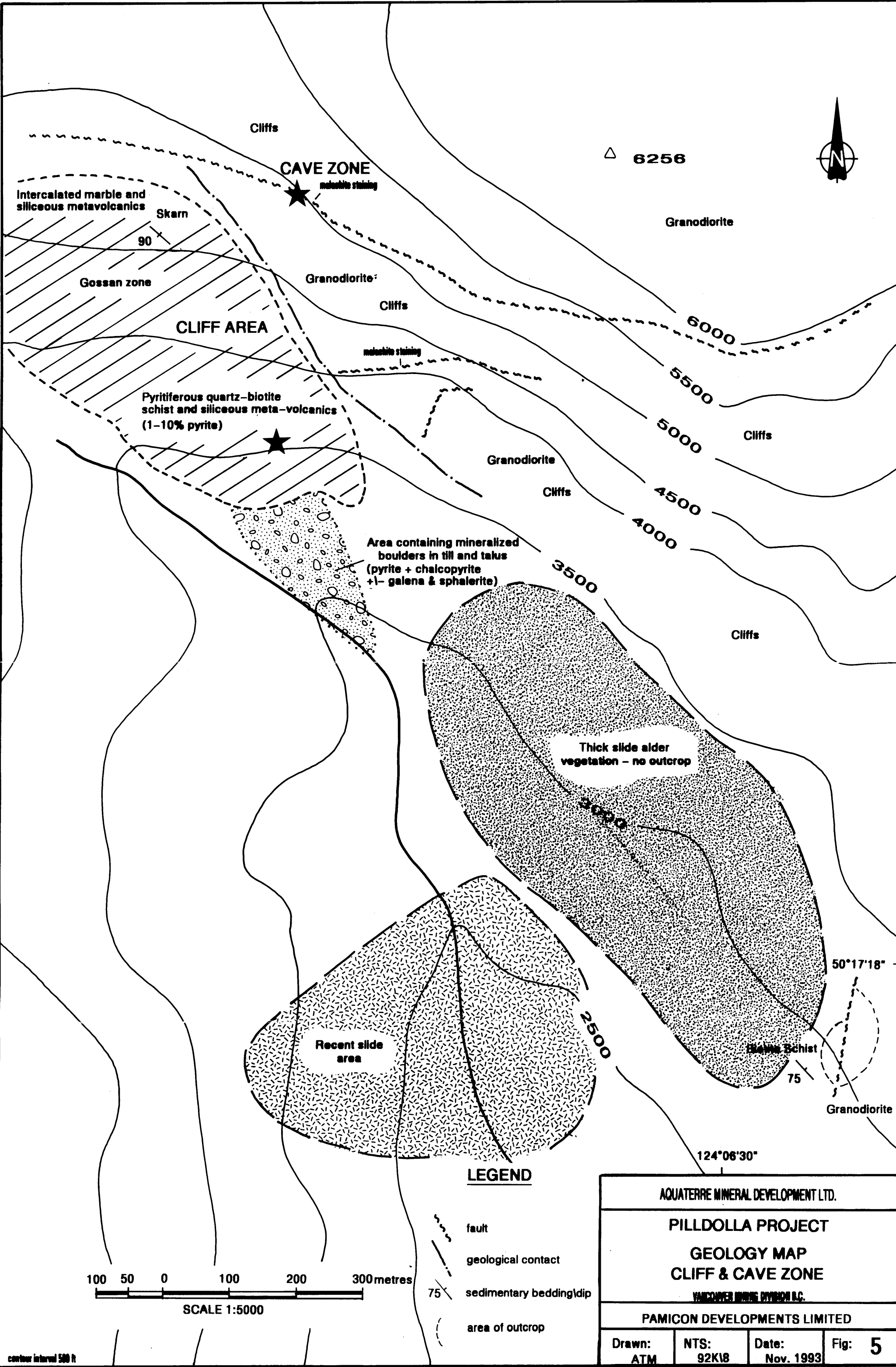
The 1993 field program by Aquaterre Mineral Development Ltd. identified the Cave Zone and Cliff area as targets for further exploration.

The Cave Zone (Figures 4 &5) is located northeast of the headwaters of Pildolla Creek along an east to northeast trending, moderately dipping shear within Coast Range granodiorite. Along the strike length of the Cave Zone (approximately 65m) the shear trends to the north and lies upslope, directly north of a talus fan containing well mineralized boulders. Where examined, the Cave Zone is 3m wide at the east end and 1m wide at the west end.

Sampling of mineralized boulders in 1993 (Todoruk & Schatten, 1993) indicate typical results in the order of 1,055-6,882ppb Au, 18.1ppm-8.73ot Ag, 1,782-9,111ppm Cu and 17ppm-1.34% Pb. Mineralization occurs as fine- to coarse-grained pyrite, disseminated and bleb chalcopyrite, minor galena, pyrrhotite and sphalerite.

Rock chip samples collected from the Cave Zone (Figure 6) by mountain climber geologists in 1993 did not duplicate values found in the mineralized boulders. The best result, sample 623253, came from float directly below mineralization seen in the overhanging cliff and assayed 0.369oz/ton Au, 3.15oz/ton Ag and 2.15% Cu. Mineralization consists of fine- to coarse-grained pyrite, minor chalcopyrite, sphalerite and galena.

The 1994 program started late in the season and had to be abandoned due to bad



weather prior to sampling the malachite stained overhanging cliff, the full extension of the shear and a lower malachite stained shear zone.

Rock samples, totaling 15, collected in 1994 by mountain climber geologists are from the west end of the Cave Zone and extending some 15m along the western part of the shear (Figure 6). Rock chip samples were collected across the shear generally over widths of 1 metre that in most sample locations cover the full width of the shear. Results range from <5-677ppb Au, <0.2-14.3ppm Ag and 25-3,287ppm Cu. Sample 54164, collected at the west end of the Cave Zone returned the best values of 677ppb Au, 14.3ppm Ag and 3,287ppm Cu.

The strongly gossaned Cliff area, located directly above the mineralized boulders in talus, was sampled in 1993 and failed to yield significant mineralization. Further examination of accessible gossaned pendant rocks to the north and west as well as rusty contact rocks in the east indicate they are unlikely sources of the mineralized boulders.

One target in the Cliff area for further exploration is a rusty cliff with malachite staining, spotted near the western edge of the Cliff Zone area by helicopter during the 1993 program but not sampled. The presence of malachite was neither confirmed or negated in 1994 as weather constraints did not permit time for the area to be examined by mountain climber geologists.

3. GEOCHEMISTRY

3.1 Silt Geochemistry

Silt samples, totaling 6, were collected from drainages north of strongly gossaned pendant rocks (Figure 4). Of these, 2 returned anomalous values. Samples 54351 and 54352 collected from streams approximately 40m apart almost due north of the Cave Zone carried 8ppb Au, 0.4ppm Ag, 118ppm Cu and 8ppb Au, 0.6ppm Ag, 215ppm Cu respectively.

Anomalous values from the silt samples conceivably could originate from the northern extension of the Cave Zone shear, 1.5-2km to the south.

4. DISCUSSION OF RESULTS

The limited 1994 program on the Pildolla property was successful in resolving the following:

- 1) Mineralized boulders found in talus and moraine at the base of the highly gossanous cliff appears to originate mainly from the Cave Zone shear and parallel to sub-parallel shears. Copper mineralization noted in the western Cliff Zone was not sampled.
- 2) The Cave Zone shear has been sampled over a strike length of 80m, with results ranging up to 677ppb, 14.3ppm Ag and 3,287ppm Cu over widths of 1 metre. Due to the extreme precipitous nature of the Cave, the entire widths of the shear could not be sampled. Malachite is noted in the overhanging roof portion of the zone.
- 3) Two subparallel shear zones are noted on the cliff face above the Cave Zone and one subparallel shear below.
- 4) Sampling in the area of the Cave Zone has not yielded economic values located in boulders at the base of the cliff.
- 5) Geological mapping defined the Coast Range intrusive contact along the west side of the roof pendant.
- 6) Traverses over areas of accessible gossaned pendant rocks west and north of the Cave Zone did not provide evidence of further significant mineralization.

A thorough geological and rock chip sampling program should be completed on the Cave Zone shear, parallel to subparallel shears above and below the Cave Zone shear and a malachite stained cliff within the western Cliff Zone, observed in 1993. Subsequent to geology and detailed rock sampling, two drill holes into the Cave Zone are recommended. A drill site has been located at the top of the ridge above the Cave Zone and would dictate hole target depths of 200-250m.

5. COST STATEMENT

LABOR (including travel)		
J. Kerr 1 day @ \$350/day	\$ 350.00	
M. Schatten 5 days @ \$210/day	1,050.00	
R. Falls 2 days @ \$260/day	<u>520.00</u>	\$1,920.00
CONTRACTS		
Helicopter		
10hrs @ \$707.50/hr (including fuel)	7,075.00	
pad rental - 5 days @ \$7.50/day	37.50	
Mountain Climber Geologists (including travel & 6 mandays standby) 11 mandays		
	3,775.00	
J. Payne PhD 1 day @ \$450/day	<u>450.00</u>	11,337.50
ROOM & BOARD		
19 mandays @ \$50/man/day	950.00	950.00
ANALYTICAL		
29 rock samples @ \$18/sample	522.00	
6 silt samples @ \$18/sample	<u>108.00</u>	630.00
PETROGRAPHICS		
3 thin sections @ \$100/section	300.00	300.00
RENTALS		
Radios 19mandays @ \$5/day	95.00	
Truck rental - 5 days @ \$40/day	200.00	
Mileage - 100km @ \$0.15/km	<u>15.00</u>	310.00
FIELD SUPPLIES	600.00	600.00
MISCELLANEOUS		
Telephone, ferry	225.00	225.00
PHOTOCOPIES, REPRODUCTIONS	200.00	200.00
DRAFTING, COMPILATION, REPORT		
M. Schatten 8days @ \$210/day	1,680.00	<u>1,680.00</u>
TOTAL EXPENSES		\$18,153.40

6. BIBLIOGRAPHY

Riccio, L., Crowe, G., Scott, A., Matysek, P., 1983; Geological, Geochemical and Geophysical Report on the Lois 1-6, 8, 9, Fox and Diadem Mineral Claims for Anaconda Canada Explorations.

Roddick, J. A., 1977; Notes on the Stratified Rocks of Bute Inlet Map-Area (excluding Vancouver and Quadra Islands), Geological Survey of Canada, Open File 480.

Roddick, J. A. and Woodsworth, G. J., 1977; Bute Inlet Map-Area (92K), Geological Survey of Canada, Open File 480.

Todoruk, S. L. and Schatten, M. G., 1993; 1993 Geological, Geochemical and Prospecting Report on the Pildolla Project for Aquaterre Mineral Development Ltd..

7. STATEMENT OF QUALIFICATIONS

I, MYRA G. SCHATTEN, resident of Calgary, Province of Alberta, hereby certifies as follows:

- 1. I am a contract geologist currently employed by Aquaterre Mineral Development Ltd. at 1003, 470 Granville St., Vancouver, BC.**
- 2. I was actively involved as a field geologist on the Pildolla property during the 1994 geological program and assisted in the collection of the data referred to in this report.**
- 3. I graduated from the University of Alberta, Edmonton, Alberta, B.Sc. Geology, 1987. I have been actively involved in mineral exploration since 1987.**

DATED at Vancouver, Province of British Columbia this 30th day of November, 1994.



M.G. Schatten, B.Sc.
Geologist

I, JOHN R. KERR, of Vancouver, British Columbia, do hereby certify that:

- 1. I am a member of the Association of Professional Engineers of British Columbia and a Fellow of the Geological Association of Canada.**
- 2. I am a geologist employed by Aquaterre Mineral Development Ltd. at 1003, 470 Granville St., Vancouver, BC.**
- 3. I am a graduate of the University of British Columbia (1964) with a B.A.Sc. degree in Geological Engineering.**
- 4. I have practiced my profession continuously since graduation.**
- 5. I supervised and assisted in the collection of the data as compiled in this report. I have reviewed the contents of this report which is based on the aforementioned data, and supervised the compilation and authorship by M. Schatten. I verify the costs as reported to be true.**
- 6. I am an officer and director of Aquaterre Mineral Development Ltd. and hold a direct and indirect interest in the securities of this company.**

DATED at Vancouver, Province of British Columbia this 30th day of November, 1994.

J.R. Kerr, P. Eng.

APPENDIX I
ROCK SAMPLE DESCRIPTIONS

Geochemical Data - ROCK SAMPLING

Sampler SCHATTEN
 Date SEPT 2, 5, 12 / 1994

Project _____
 Property PILLDOLLA

NTS _____
 Location Ref _____
 Air Photo No _____

SAMPLE NO.	LOCATION	SAMPLE TYPE	Sample Width True Width	DESCRIPTION			ADDITIONAL OBSERVATIONS	ASSAYS					
				Rock Type	Alteration	Mineralization		Au	Ag	Cu	Pb	Zn	Mn
54206	6420' ELEV.	GRAB		SKARN		≤ 5% PY ALONG FRACTURES DISS + BLEBS	② CONTACT W/ MARBLE. 5m WIDE SKARNY, PYRITIC ZONE	<5	0.3	51	<2	26	3
54207	6320' ELEV.	GRAB		SKARN	BIO, TREP GOSSANED	≤ 3% DISS + BLEBBY PY	WEST OF INTRUSIVE CONTACT	45	0.2	8	3	21	8
54211	3250'; EAST SIDE PILLDOLLA	CK. FLOAT		CONTACT BTWN MARBLE + DACITE		15% PY AS VNS, DISS, BLEBS	PY IN SILICEOUS JOLC - DACITE	9	0.3	61	8	44	5
54212	3260'; EAST SIDE PILLDOLLA	"		INTRUSIVE - ALT'D	STRONG LIM	3% DISS + BLEBBY PY	WK ALIGNMENT OF MAFICS	<5	0.2	14	13	24	3
54213	6060' ELEV.	GRAB		GRANITIC SCHIST	LIM	5-7% PY	ALONG EASTERN EXTENSION OF SHEAR FROM CAVE ZONE. FOLIATED.	174	2.2	186	<2	44	6
54214	5300' ELEV ALONG RIDGE FAR EAST OF CAVE ZONE	GRAB		ALT'D DACITE	LIM	1-3% DISS PY	FOLIATED. BEDDING 341/84E.	<5	<0.2	7	2	23	3
54351		SILT					DRAINING GOSSAN	8	0.4	118	4	57	6
54352		"					" "	8	0.6	215	35	100	25
54353		"					DRAINING GRANODIORITE (?)	<5	0.2	19	8	43	6
54354		"					" "	<5	0.2	24	8	50	9
54355		"					DRAINING GOSSAN	<5	0.2	31	12	84	9
54356		"					DRAINING GRANODIORITE (?)	<5	0.4	53	7	73	12

PAMIC DEVELOPMENTS LIMITED

Geochemical Data Sheet - ROCK SAMPLING

Sampler R.F. + M.S.

Project _____

NTS _____

Date SEPT 1994

Property PILLDOLLA

Location Ref _____

Air Photo No _____

SAMPLE NO.	LOCATION	SAMPLE TYPE	Sample Width True Width	DESCRIPTION			ADDITIONAL OBSERVATIONS	ASSAYS					
				Rock Type	Alteration	Mineralization		Au	Ag	Cu	Pb	Zn	Mo
54201	Pilldolla Creek	Grab	5cm 1-6cm	Qtz. Vn in Qtz-biotite schist		1% Py 1% Mag.	Vuggy, irregular vein with patchy Py, euhedral Mag.	<5	0.3	22	7	10	10
54202	Pilldolla Creek	Grab	5cm 5cm	Qtz. Pod in Granodiorite		1% Py	5x20cm Qtz pod w. patchy Py	<5	0.3	34	3	35	4
54203		Grab	10cm 5m	Quartz - Epidote skarn	S. EP S. QTZ	5-10% Py	5x15m skarn xenolith in granodiorite	11	0.8	141	42	11	4
54204		Grab	15cm 15cm	Quartz - epidote - quartz skarn	S. CB S. EP S. ST	5-10% Py	15cm wide pyritic horizon 1S skarn / hornfels.	44	2.0	70	9	26	6
54205		Grab	15cm 15cm	Quartz - epidote - garnet skarn	S. CB S. EP S. ST	1% Py	5m east along strike and in same horizon as 54204	13	1.2	124	10	35	3
54208		Grab	10cm 25m	Amphibolite schist		5-10% Py	Rusty schist at contact between granodiorite + marble 140/80 SW	45	40.2	106	3	22	6
54209		Grab	4cm 1-4cm	Calc-silicate skarn		99% Pb 0.5-1% Cp	Vein of massive sulphides crosscuts bedding. May follow a shear - attitude 135/22 SW	10	1.7	1676	<2	34	3
54062		GRAB	10cm 50cm	GRANODIORITE	S. ST	2-5% PY	STRONGLY PYRITIC ZONE WITHIN A LARGER (10x15m) XENOLITH → SKARNED SEGS WITHIN GD	<5	0.5	713	7	25	3

APPENDIX II
ANALYTICAL PROCEDURES



Bondar Clegg
Incheape Testing Services

Bondar-Clegg & Company Ltd.
150 Peniberton Avenue
North Vancouver, B.C.
V7P 2R5
Tel: (604) 985-0881
Fax: (604) 985-1071

Sample Preparation

Rock and Drill Core

1. All field material submitted was dried when required and reduced to -10 mesh using Jaw and Cone Crushers.
2. A 250 g representative split of the -10 mesh material was obtained using a Jones Riffle Splitter.
3. The representative split was pulverized to -150 mesh using a ring and puck pulverizer.
4. The pulverized material was homogenized, bagged and labelled.

Soil and Sediment Samples

1. All field material was dried at 60 °C.
2. The dried sample was screened for the -80 mesh particle fraction, unless an alternative fraction was requested.
3. The -80 mesh fraction was homogenized, bagged and labelled.

Au determination - Fire Assay Preconcentration finished by Atomic Absorption Spectroscopy

A thirty gram sample is weighed into a fire assay crucible. The fire assay preconcentration consists of a standard litharge fusion followed by cupellation of the lead button to obtain the precious metals concentrated into a tiny (about 3 mg) silver prill. Bondar-Clegg has adopted this technique as our primary method for the preconcentration of gold and other precious metals because of its proven track record and sensitivity. The silver prill is dissolved in aqua regia and the diluted solution is then aspirated into the AAS flame for measurement of the gold concentration.

The ICP procedure consists of taking a sample that has been put into an aqueous solution after an acid digestion and is aspirated into the plasma of the instrument for measurement of the concentration of the elements of interest. When the elements from the sample solution reach the high energy plasma, the intense heat of the plasma causes them to emit their characteristic wavelengths of light. The spectrometer isolates the light of the different elements and measures the amount of light at the specific wavelength for each element to be determined. This emission intensity is compared with that obtained from solutions of known element concentrations in order to calculate the concentrations of the elements in the sample.

The Hg was determined using a HNO₃/HCl extraction-Cold Vapour, Flow Injection/Atomic Absorption, detection level of 0.010 ppm.

Major and Minor Oxides on Selected Samples

The following major and minor oxides were determined on selected samples using a lithium metaborate fusion, Inductively Coupled Plasma Emission measurement:

<u>Element</u>	<u>Detection Level</u>	<u>Element</u>	<u>Detection Level</u>
SiO ₂	0.01%	Al ₂ O ₃	0.01%
Fe ₂ O ₃	0.01%	CaO	0.01%
MgO	0.01%	K ₂ O	0.01%
Na ₂ O	0.01%	TiO ₂	0.01%
P ₂ O ₅	0.01%	MnO	0.01%
BaO	0.01%	Cr ₂ O ₃	0.01%

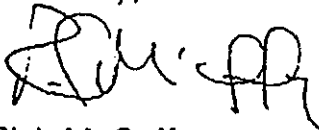
0.1 g of sample material is fused at 1050 °C for 15 minutes. The molten "jelly" is then dissolved in a HNO₃ acid solution. The solution is diluted and the major and minor oxides are then measured using an ICP-Atomic Emission Spectrometer.

Loss on Ignition

Loss on ignition is performed at a temperature of 850 °C for 4 hours. A 1 g test sample weight is used and a detection level of 0.05 % is achieved. Other LOI temperatures and times are available on request. All weights are down-loaded electronically into the Bondar-Clegg computer data base. All LOI calculations are performed by the computer after data acquisition is complete.

Should you need additional information, please contact me at (604) 985-0681.

Sincerely,

A handwritten signature in black ink, appearing to read "Rick McCaffrey". The signature is stylized with a large initial "R" and "M".

Rick McCaffrey
Manager, Geochem Department

APPENDIX III
ANALYTICAL RESULTS



Bondar Clegg Inchcape Testing Services

Geochemical Lab Report

REPORT: V94-01088.0 (COMPLETE)

DATE PRINTED: 5-OCT-94

PROJECT: J1/PILL

PAGE 1

SAMPLE NUMBER	ELEMENT UNITS	Au30 PPB	Ag PPM	Cu PPM	Pb PPM	Zn PPM	Mo PPM	As PPM	Sb PPM	Bi PPM	Hg PPM	Ba PPM
R2 54051		53	1.2	38	10	109	3	<5	<5	<5	0.026	10
R2 54052		7	0.4	15	78	74	3	22	35	<5	<0.010	26
R2 54053		<5	0.4	103	5	99	6	11	<5	<5	<0.010	19
R2 54054		<5	0.6	338	3	108	4	16	<5	<5	<0.010	21
R2 54055		19	0.5	37	<2	59	17	7	<5	7	<0.010	3
R2 54056		<5	0.2	67	10	31	5	<5	<5	<5	<0.010	21
R2 54057		<5	0.3	56	<2	44	3	<5	<5	<5	<0.010	12
R2 54058		15	0.3	370	7	77	12	20	<5	<5	<0.010	31
R2 54059		<5	0.5	408	2	43	8	6	<5	<5	<0.010	20
R2 54060		<5	0.3	334	5	42	1095	9	<5	<5	<0.010	31
R2 54061		17	1.2	612	3	53	49	7	<5	<5	<0.010	25
PILLULU → R2 54062		<5	0.5	713	7	25	9	27	<5	<5	<0.010	21
R2 54063		<5	0.5	258	7	42	68	<5	<5	<5	<0.010	30
R2 54064		<5	0.4	87	5	64	5	6	<5	<5	<0.010	17
R2 54065		<5	0.4	235	7	137	22	8	<5	<5	<0.010	22
R2 54066		<5	0.2	110	6	33	86	<5	<5	<5	<0.010	113
R2 54067		<5	0.3	181	5	27	5	<5	<5	<5	<0.010	21
R2 54068		<5	1.0	168	9	22	27	<5	<5	<5	<0.010	83
R2 54069		<5	0.6	49	13	4	338	<5	<5	<5	<0.010	28
R2 54070		<5	0.5	210	4	49	14	7	<5	<5	<0.010	20
R2 54071		<5	0.3	38	10	11	11	<5	<5	<5	<0.010	37
R2 54072		<5	<0.2	27	3	24	3	11	<5	<5	<0.010	23
↓ R2 54151		39	1.4	60	12	30	8	24	<5	11	<0.010	38
PILLULU R2 54152		35	0.8	108	8	246	9	14	<5	<5	0.015	70
R2 54153		15	0.7	60	11	75	24	<5	<5	<5	<0.010	32
R2 54154		24	1.5	88	35	118	7	<5	<5	7	<0.010	53
R2 54155		38	1.0	306	11	196	9	10	<5	<5	<0.010	23
R2 54156		<5	<0.2	25	6	86	3	5	<5	<5	<0.010	23
R2 54157		28	1.1	209	18	246	6	7	<5	12	0.026	39
R2 54158		80	2.3	990	10	184	12	5	<5	21	<0.010	11
R2 54159		71	2.4	1527	7	67	13	<5	<5	20	0.013	3
R2 54160		53	2.2	1040	3	92	10	11	<5	<5	<0.010	8
R2 54161		174	8.5	1094	14	247	30	23	<5	36	0.027	4
R2 54162		144	3.0	238	4	38	20	113	<5	29	<0.010	1
R2 54163		343	10.6	1934	97	347	11	387	<5	29	0.057	5
↑ R2 54164		677	14.3	3287	28	684	13	<5	<5	52	0.046	5
R2 54165		8	0.5	228	6	145	4	10	<5	<5	<0.010	44
R2 54166		<5	0.5	237	5	53	17	10	<5	<5	<0.010	20
R2 54167		<5	0.7	1151	6	36	17	9	<5	<5	<0.010	30
R2 54168		<5	1.1	976	3	59	26	<5	<5	<5	<0.010	24

Bondar-Clegg & Company Ltd.

130 Pemberton Avenue, North Vancouver, B.C., V7P 2R5, Canada

Tel: (604) 985-0681, Fax: (604) 985-1071

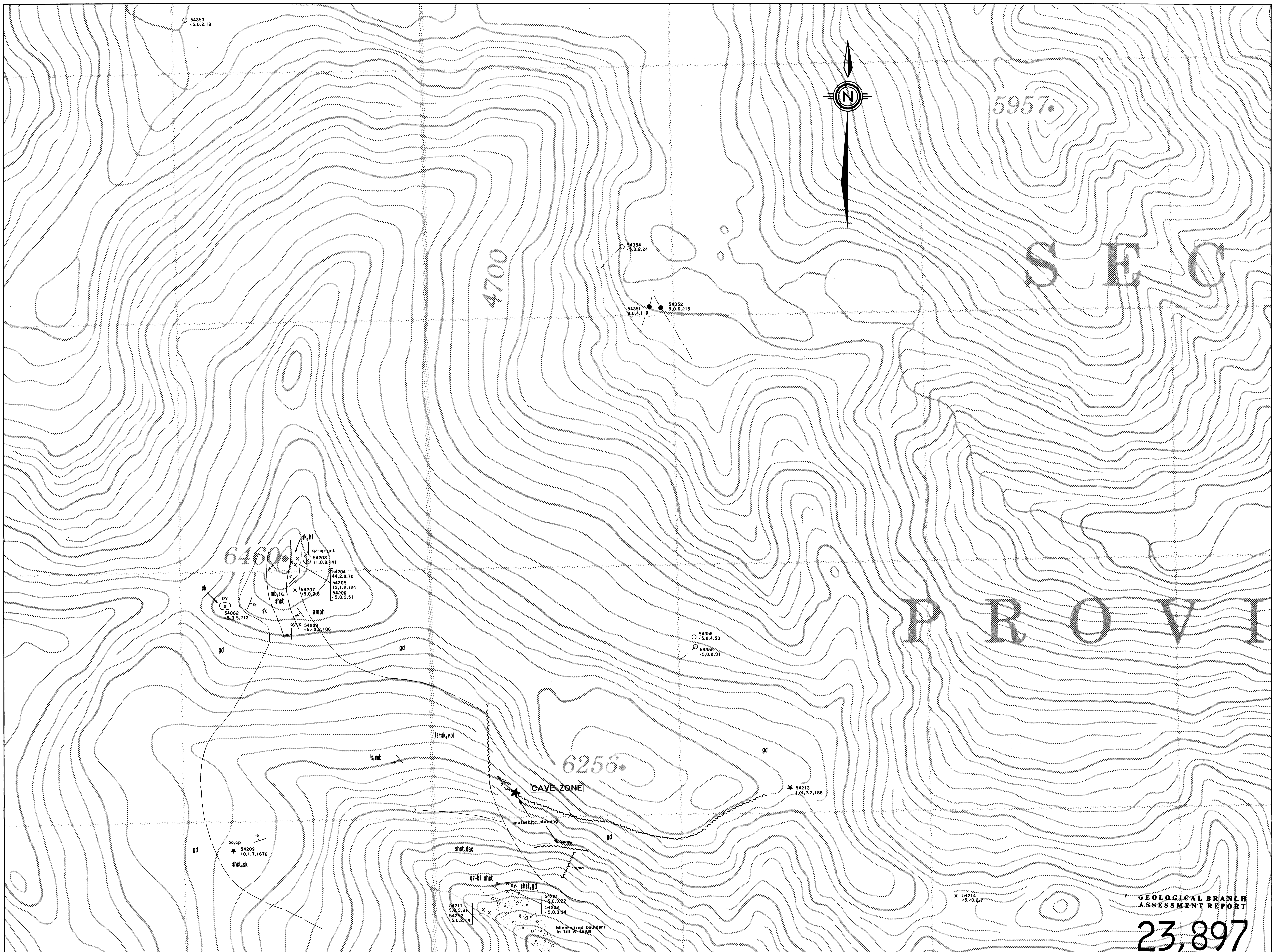
REPORT: V94-01088.0 (COMPLETE)

DATE PRINTED: 4-OCT-94

PROJECT: JI/PILL

PAGE 2

SAMPLE NUMBER	ELEMENT UNITS	Au30 PPM	Ag PPM	Cu PPM	Pb PPM	Zn PPM	Mo PPM	As PPM	Sb PPM	Bi PPM	Hg PPM	Ba PPM
R2 54169		♣	0.4	379	5	79	7	♣	♣	♣	<0.010	17
R2 54170		♣	0.3	51	♣	26	5	♣	♣	♣	<0.010	8
↓ R2 54201		♣	0.3	22	7	10	10	♣	♣	♣	<0.010	67
Fieldwork R2 54202		♣	0.3	34	3	35	4	♣	♣	♣	<0.010	69
R2 54203		11	0.8	141	♣	11	4	♣	♣	♣	<0.010	2
R2 54204		44	2.0	70	9	26	6	38	♣	♣	<0.010	16
R2 54205		13	1.2	124	10	35	3	23	♣	♣	<0.010	6
R2 54206		♣	0.3	51	♣	26	3	♣	♣	♣	<0.010	9
R2 54207		♣	0.2	8	3	21	8	♣	♣	♣	<0.010	19
R2 54208		♣	<0.2	106	3	22	6	12	♣	♣	<0.010	20
↑ R2 54209		10	1.7	1676	♣	34	3	15	♣	20	<0.010	2
R2 54210		♣	0.3	65	3	66	3	7	♣	♣	<0.010	10
↓ R2 54211		9	0.3	61	8	44	5	15	♣	♣	<0.010	17
R2 54212		♣	0.2	14	13	24	3	13	♣	♣	<0.010	23
P R2 54213		174	2.2	186	♣	44	6	♣	♣	10	<0.010	20
R2 54214		♣	<0.2	7	2	23	3	♣	♣	♣	<0.010	29
T1 54351		8	0.4	118	4	57	6	♣	♣	♣	0.014	77
T1 54352		8	0.6	215	35	100	25	7	♣	♣	0.016	83
T1 54353		♣	0.2	19	8	43	6	5	♣	♣	0.036	39
T1 54354		♣	0.2	24	8	50	9	10	♣	♣	0.015	75
↑ T1 54355		♣	0.2	31	12	84	9	12	♣	♣	0.023	168
T1 54356		♣	0.4	53	7	73	12	9	♣	♣	0.013	105



S E C

P R O V I

**GEOLOGICAL BRANCH
ASSESSMENT REPORT**

23,897

ls,mb MARBLE, LIMESTONE
white & light grey; intercalated beds of siliceous volcanics & skarnified sediments

gd GRANODIORITE
medium to coarse-grained, near sedimentary/volcanic contact may be skarnified, silicified & foliated

dac DACITE
includes undifferentiated siliceous meta-volcanics

sk,hf SKARN, HORNFELS
includes ep, ep-gnt, & qz-ep-gnt skarn & skarnified sediments

shst SCHIST
fine- to medium-grained, includes qz-bi & bi schist; often interbeds of undifferentiated siliceous volcanics

gd GRANODIORITE
medium to coarse-grained, near sedimentary/volcanic contact may be skarnified, silicified & foliated

LEGEND

--- geological contact

~~~~~ fault/shear

— bedding

py pyrite

po pyrrhotite

cp chalcopyrite

qz quartz

ep epidote

gnt garnet

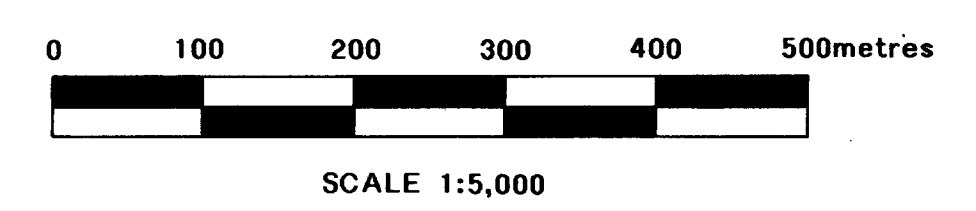
bi biotite

X Rock Sample - ppb Au, ppm Ag, ppm Cu

★ Anomalous Rock Sample - ppb Au, ppm Ag, ppm Cu

○ Silt Sample - ppb Au, ppm Ag, ppm Cu

● Anomalous Silt Sample - ppb Au, ppm Ag, ppm Cu



AQUATERRE MINERAL DEVELOPMENT LTD.

PILLDOLLA PROPERTY  
Vancouver Mining Division, BC

**GEOLOGY**

DATE: November, 1994    NTS: 92K/8    SCALE: 1:5,000  
 WORK BY: Aquaterre    DRAWN BY: MGS    FIGURE: 4

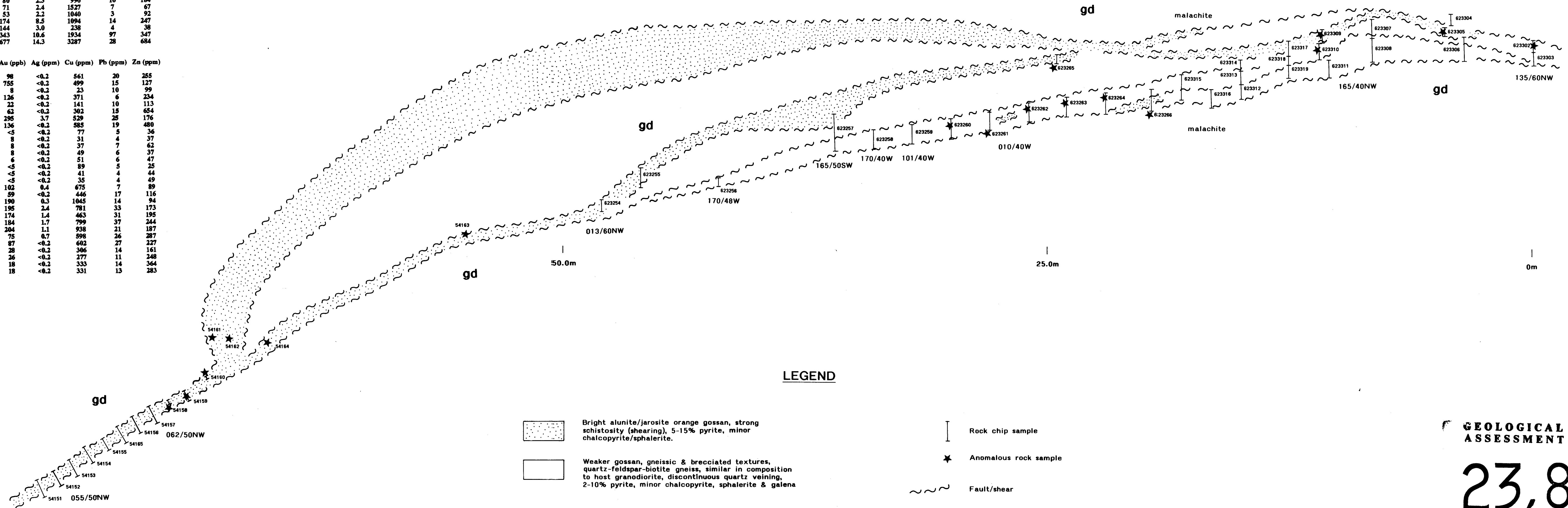


**RESULTS**

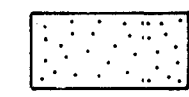





| 1994 Sample | Au (ppb) | Ag (ppm) | Cu (ppm) | Pb (ppm) | Zn (ppm) |
|-------------|----------|----------|----------|----------|----------|
| 54151       | 39       | 1.4      | 60       | 12       | 30       |
| 54152       | 35       | 0.8      | 108      | 9        | 246      |
| 54153       | 15       | 0.7      | 60       | 11       | 75       |
| 54154       | 24       | 1.5      | 88       | 35       | 118      |
| 54155       | 38       | 1.0      | 306      | 11       | 196      |
| 54156       | 8        | 0.5      | 228      | 6        | 145      |
| 54157       | <5       | <0.2     | 25       | 6        | 96       |
| 54158       | 28       | 1.1      | 209      | 18       | 246      |
| 54159       | 80       | 2.3      | 990      | 10       | 184      |
| 54160       | 71       | 2.4      | 1527     | 7        | 67       |
| 54161       | 53       | 2.2      | 1040     | 3        | 92       |
| 54162       | 174      | 8.5      | 1094     | 14       | 247      |
| 54163       | 144      | 3.0      | 238      | 4        | 38       |
| 54164       | 343      | 10.6     | 1934     | 97       | 347      |
| 54164       | 677      | 14.3     | 3287     | 28       | 684      |

| 1993 Sample | Au (ppb) | Ag (ppm) | Cu (ppm) | Pb (ppm) | Zn (ppm) |
|-------------|----------|----------|----------|----------|----------|
| 623303      | 98       | <0.2     | 561      | 20       | 255      |
| 623302      | 755      | <0.2     | 499      | 15       | 127      |
| 623304      | 8        | <0.2     | 25       | 10       | 99       |
| 623305      | 126      | <0.2     | 371      | 6        | 234      |
| 623307      | 22       | <0.2     | 141      | 10       | 113      |
| 623308      | 62       | <0.2     | 302      | 15       | 654      |
| 623309      | 295      | 3.7      | 529      | 25       | 176      |
| 623310      | 136      | <0.2     | 585      | 19       | 480      |
| 623311      | <5       | <0.2     | 77       | 5        | 36       |
| 623317      | 8        | <0.2     | 31       | 4        | 37       |
| 623318      | 8        | <0.2     | 37       | 7        | 62       |
| 623314      | 8        | <0.2     | 49       | 6        | 37       |
| 623313      | 6        | <0.2     | 51       | 6        | 47       |
| 623312      | <5       | <0.2     | 89       | 5        | 25       |
| 623316      | <5       | <0.2     | 41       | 4        | 44       |
| 623315      | <5       | <0.2     | 35       | 4        | 49       |
| 623266      | 102      | 0.4      | 675      | 7        | 89       |
| 623264      | 59       | <0.2     | 446      | 17       | 116      |
| 623265      | 190      | 0.3      | 1045     | 14       | 94       |
| 623263      | 195      | 2.4      | 781      | 33       | 173      |
| 623262      | 174      | 1.4      | 463      | 31       | 195      |
| 623261      | 184      | 1.7      | 799      | 37       | 244      |
| 623260      | 204      | 1.1      | 938      | 21       | 187      |
| 623259      | 75       | 0.7      | 598      | 26       | 287      |
| 623258      | 87       | <0.2     | 602      | 27       | 227      |
| 623257      | 28       | <0.2     | 306      | 14       | 161      |
| 623256      | 26       | <0.2     | 277      | 11       | 248      |
| 623255      | 18       | <0.2     | 333      | 14       | 364      |
| 623254      | 18       | <0.2     | 331      | 13       | 283      |

**SECTION FACING NORTH**



**LEGEND**

-  Bright alunite/jarosite orange gossan, strong schistosity (shearing), 5-15% pyrite, minor chalcopyrite/sphalerite.
-  Weaker gossan, gneissic & brecciated textures, quartz-feldspar-biotite gneiss, similar in composition to host granodiorite, discontinuous quartz veining, 2-10% pyrite, minor chalcopyrite, sphalerite & galena.
-  Granodiorite
-  Rock chip sample
-  Anomalous rock sample
-  Fault/shear

**GEOLOGICAL BRANCH  
ASSESSMENT REPORT**

**23,897**

0 1 2 3 4 5m  
SCALE 1:100

|                                                     |                    |          |
|-----------------------------------------------------|--------------------|----------|
| AQUATERRE MINERAL DEVELOPMENT LTD.                  |                    |          |
| PILLDOLLA PROPERTY<br>Vancouver Mining Division, BC |                    |          |
| <b>CAVE ZONE<br/>SKETCH SAMPLE MAP</b>              |                    |          |
| DATE: Nov., 1994                                    | SCALE: 1:100       | FIGURE:  |
| NTS: 92K/8                                          | WORK BY: Aquaterre | <b>6</b> |