REPORT ON THE PATERSON LAKE PROPERTY
ALBERNI MINING DIVISION,
GREAT CENTRAL LAKE AREA, BRITISH COLUMBIA

LOCATION:

PROPERTY FILE

N.T.S.: 92F-6E,7W LATITUDE: 49° 20'N. LONGITUDE: 125° 00'W.

CLAIMS

PATERSON LAKE #1 THROUGH #6

REPORT FOR

DELLATERRA RESOURCES LTD.

1013-837 WEST HASTINGS STREET VANCOUVER, BRITISH COLUMBIA V6C 1B6

PREPARED BY

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MAY 25, 1987

SUMMARY

The Paterson Lake Property, consisting of 72 metric units is situated near Great Central Lake, Vancouver Island, British Columbia. The property has excellent road access with a number of logging roads passing through the property. The property was acquired by Dellaterra Resources Ltd. to check a favourable geological setting for precious metal enhanced massive sulphide or tabular lodes associated with known copper showings.

This report relies heavily on the results of an initial exploration program conducted for Dellaterra on the Paterson Lake Property (Lambert and Stephen, 1987; Howell and Stephen, 1987). The writer examined the geological setting of the property and obtained check analyses of known showings. Copper values obtained during the 1987 surveys range from background to 5.91% and gold values range from
(1 ppb up to 1,500 ppb. Geological, geochemical and geophysical surveys have outlined four priority exploration targets that are summarized in Figure 4 of this report. The four main target zones are the Adit Zone, Road Zone, Round Lake Zone and Swamp Zone. The Adit, Road and Round Lake zones have known copper and gold occurrences and the Swamp Zone is a coincident magnetic and Fraser Filter VLF-EM anomaly. A zone of anomalous induced polarization is open to the west of the Round Lake Zone.

The writer has outlined a staged exploration program for further testing the mineral potential of the Paterson Lake Property. A recommended Stage I program of trenching, detailed mapping, geochemical sampling and geophysical follow-up is estimated to cost \$50,000. Contingent on successful completion of the Stage I program an initial diamond drill test will be warranted. A Stage II, 1000 foot (~300 meter) drill test is estimated to cost \$50,000 and a contingent Stage III, 2500 foot (~750 meter) drill test is estimated to cost \$100,000.

INTRODUCTION

The Paterson Lake Property, consisting of the Paterson Lake one to four and Paterson Lake 6 metric claims and Paterson Lake 5 two-post claim totaling 72 units or about 1800 hectares is situated at Great Central Lake on Vancouver Island, British Columbia. The prospect was located for Herber McMaster in 1984 to cover a number of copper and gold showings and two old adits. The writer was retained by management of Dellaterra Resources Ltd. to direct and supervise exploration of the Paterson Lake Property and to outline a program of further exploration, if warranted.

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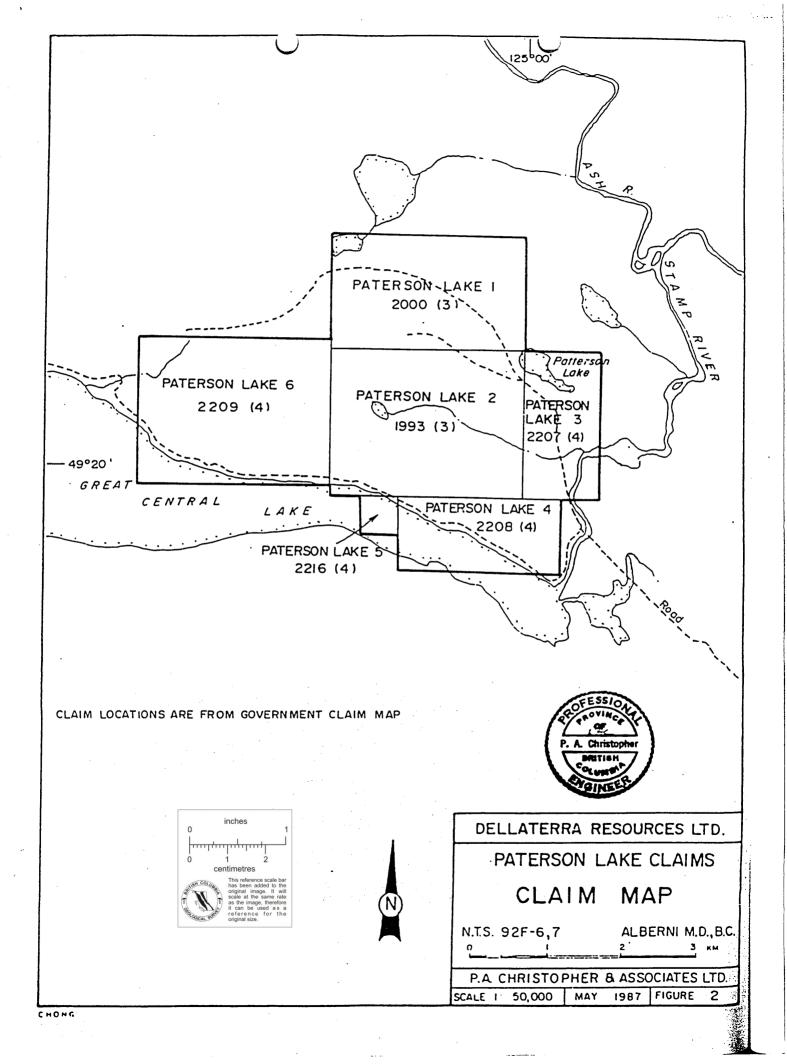
This report is based on a review of previous exploration conducted on the property and in the claim area, results of an initial exploration program conducted for Dellaterra Resources Ltd. in April and May, 1987, and a field examination of the property conducted by the writer on April 25, 1987. The writer has relied heavily on a geological and sampling report by W.A. Howell and J.C. Stephen (May 15, 1987) and a geological and geophysical report by Ellen E. Lambert and J.C. Stephen (May 15, 1987). Exploration results provide justification for further work and a staged exploration program for further development of the property is presented. A Stage I program of trenching, geochemical sampling and geophysical follow-up is warranted. Stage II and III diamond drill programs are contingent on the results of previous programs.

LOCATION AND ACCESS (Figures 1 & 2)

The Paterson Lake Property, under option by Dellaterra Resources Ltd. is situated at Great Central Lake, Vancouver Island, British Columbia about 20 kilometers northwest of the town of Port Alberni (Figures 1 & 2). The claims are in NTS map sheets 92F-6E and 92F-7W at geographic coordinates 49° 20'N. latitude and 125° 00'W. longitude. The Paterson Lake 1 through 6 claims are situated along the northeast shore of Great Central Lake and extend north of the lake for about 4 kilometers and west of Ash River for about 6 kilometers. Patterson Lake is covered by parts of the Paterson Lake 1, 2 and 3 claims and parts of Paterson Lake 2, 4, 5, and 6 claims extend into Great Central Lake.

Access to the property from Nanaimo is via Highway 19 and Highway 4 to Port Alberni and 13 kilometers west to the Great Central Lake Road. The Great Central Lake Road is paved for 5 kilometers before becoming McMillian-Bloedel's Ash Main logging road. A bridge crosses the Ash River at the start of the logging road and is near the southeastern corner of the claim group (Lambert and Stephen, 1987). Recent logging roads and access roads for a transmission line that traverses the claims provide ready access to most areas of the claims.

Elevations in the claim area range from 83 meters at Great Central Lake to approximately 480 meters in the western portion of the claim area. Elevations rise abruptly from the lake level to about the 400 meter level where moss covered topographic knobs with steep northeast sides occur. The knobs have cliff development with heights of 15 to 60 meters.



PROPERTY DEFINITION (Figure 2)

The Paterson Lake Property, consisting of the Paterson Lake I through 6 claims totaling 72 units is situated in the Alberni Mining Division. The Paterson Lake 1 through 4 and Paterson Lake 6 claims are metric claims that were staked using the modified grid system and the Paterson Lake 5 claim is a single unit two post claim. The claims were all recorded in the name of Herbert McMaster between April 27 and March 19, 1984 with one third interests transfered by bills of sale to each of Douglas William Paterson and Sylvester E. Tresierra. Dellaterra Resources Ltd. entered into an option agreement to earn up to 100% interest in the claims in February 1987.

The common legal corner post for Paterson Lake 1 through 3 claims, examined by the writer on April 25, 1987 is located 75 meters east of the Ash Main logging road and 25 meters north of a road running along the northeast edge of Patterson Lake. The common legal corner post for Paterson Lake 4 and initial corner post for Paterson Lake 5 was located by crews conducting exploration for Dellaterra Resources Ltd. but was not examined by the writer. The legal corner post for Paterson Lake 6 is shown on the government claim map to be located along the westerly boundary of Paterson Lake 1 but the location has not been field checked. The writer recommended the staking of an additional claim north of the Paterson Lake 4 and Paterson Lake 5 claims to insure that the claims overlap.

Pertinent claim data for the Paterson Lake Property is shown in Table 1 and claim locations after British Columbia government claim maps 92F-6E and 92F-7W are shown on Figure 2.

Table 1. Pertinent Claim Data For Paterson Lake Property.

Name		Record #	<u>Units/Shape</u>	Expiry	Record Date
Paterson Lake	# 1	2000	15/5Wx3N	1988	March 19, 1984
Paterson Lake	#2	1993	/20/5Wx4S	1988	March 9, 1984
Paterson Lake	#3	2207	8/2Ex4S	1988	April 27, 1984
Paterson Lake	#4	2208	8/4Ex2S	1988	April 27, 1984
Paterson Lake	#5	2216	1/2 post	1988	April 27, 1984
Paterson Lake	#6	2209	20/5Wx4S	1988	April 27, 1984

HISTORY

The Paterson Lake Property was staked for Herbert McMaster in March and April of 1984 to cover two short adits and several known copper-gold occurrences. After recording of the Paterson Lake claims, one third interests were transferred by bills of sale to each of Douglas William Paterson and Sylvester E. Tresierra. No published record of the mineral occurrences is known to exist, but a private report dated February 6, 1986 was prepared by D.V. Lefebure for Corporation Falconbridge Copper.

Dellaterra Resources Ltd. entered into an option agreement to earn up to 100% interest in the claims in March 1987. A work program was conducted by Main Explorations Ltd. in March and April, 1987 with one year assessment work filed to maintain the claims. The work program included grid construction, geological mapping at a scale of 1:5,000, rock sampling, and VLF-EM, magnetic and induced polarization surveys with a total cost of \$ 65,830. The writer examined the property and reviewed the work programs with Mr. J.C. Stephen on April 25, 1987.

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REGIONAL GEOLOGY (Figures 3, 4 & 5)

The Paterson Lake Property is situated in the Insular Tectonic Belt of the Canadian Cordillera. The region around the Paterson Lake Property is shown by Muller (1977) to be underlain by Triassic Vancouver Group rocks and granodioritic rocks of the Island Intrusions. The claim area is shown to be underlain by Triassic Karmutsen volcanic. The Karmutsen Formation unconformably overlies the Pennsylvanian and/or older Sicker Group or is separated from the Sicker Group by a sediment-sill unit at the base of the Vancouver Group. The Sicker Group is known to contain precious metal enhanced massive sulphide deposits at Buttle Lake, Mt. Sicker and in the China Creek area.

The Triassic Karmutsen Formation which underlies a major portion of Vancouver Island is up to 6300 meters thick. The unit consists mainly of tholeitic volcanic rocks which have been divided into a lower pillow lava member, a middle pillow breccia and aquagine tuff member and an upper massive flow member.

The Jurassic Island Intrusions are mainly granodioritic with lesser granite and quartz monzonite. The Island Intrusions cut both the Karmutsen volcanics and Sicker Group rocks.

The entire area has been glaciated which has resulted in outcrops with smooth surfaces and variable thickness of glacial till.

PROPERTY GEOLOGY (Figure 6)

The geology of the Paterson Lake Property has been mapped by Lambert and Stephen (1987) with a summary of their work shown on Figure 6. The Paterson Lake claims are mainly underlain by Karmutsen basaltic lavas with a granodiorite intrusion exposed along road cuts in the western portion of Paterson Lake 6 claim. The contact between the granodiorite body and the Karmutsen volcanics is obscured by a broad valley filled with Quaternary alluvium and glacial till. Hornblende porphyry and diorite dykes, probable offshoots of the granodiorite body cut the volcanics.

The Karmutsen volcanics, consisting of basaltic lava flows, pillow lavas, massive and porphyritic flows and associated tuffs are believed to be part of the middle and upper members of the Karmutsen volcanics. Weak evidence indicates north to northwest strikes and shallow dips for the flow units.

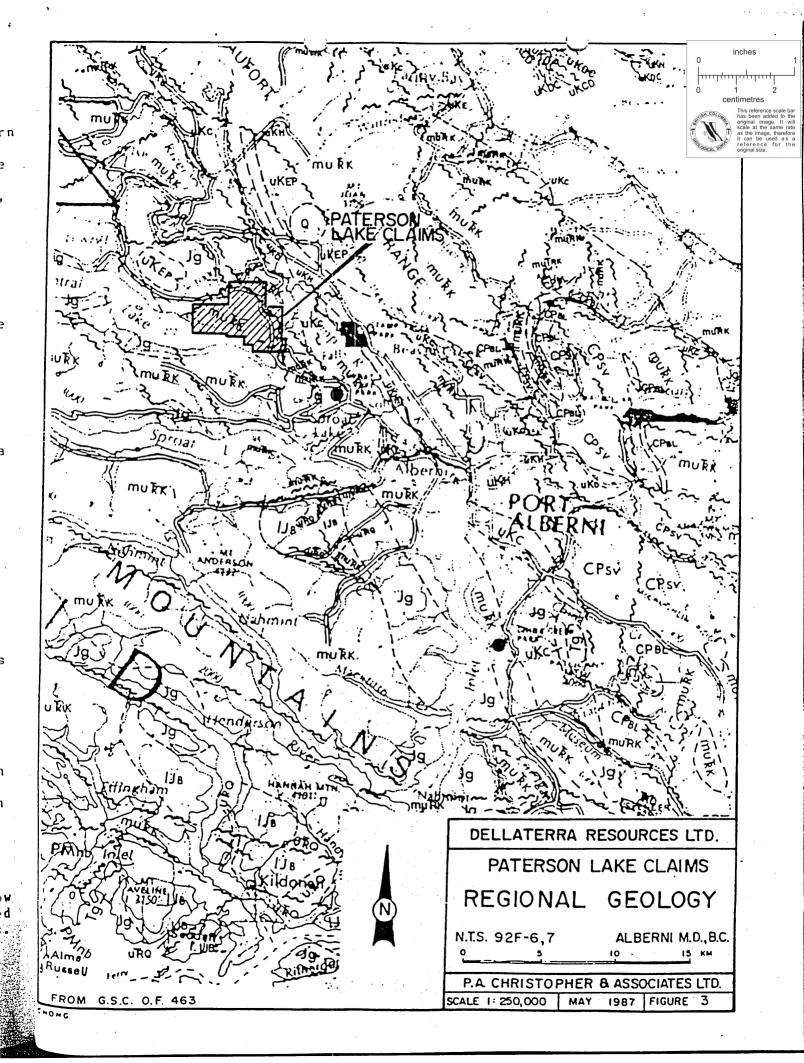


TABLE OF FORMATIONS OF VANCOUVER ISLAND SEQUENTIAL LAYERED ROCKS CRYSTALLINE ROCKS, COMPLEXES OF POORLY DEFINED AGE							CRYSTALLINE ROCKS	APLEX	(ES O	F POORLY DEFINED AGE		
SYM - WERAGE SYM - ISOTOPIC AGE							LITHOLOGY					
PERI	30	STAGE	GROUP	late Tert, volc's of Port McNeill	BOL	IN M.±	ETHOLOGY	NAME	BOL	РЬ/U	K/Ar	
ZOIC												
				SOOKE BAY	mpī sa		conglomerate, sandstone, shale					
		EOCENE 10		CARMANAH	eoTc	1,200	sandstone, siltstone, coglomerate	silicic	Tg		32-59	quartzdiorite, trondhje mite, agmolite, porphyry
		OLIGOCENE		ESCALANTE	eT t	300	conglomerate, sandstone	SOOKE INTRUSIONS basic	Tgb		31-49	gabbro.anorthosite,agmatite
0		early EOCENE		METCHOSIN	eTM	3,000	basaltic lava, pillow lava, breccia, tuff	METCHOSIN SCHIST, GNEISS LEECH RIVER FM.	JKI			chlorite schist, gneissic amphibalite abvillite, mica schist, arevwacke
		MAESTRICHTIAN		GABRIOLA	uKGA	350	sandstone, conglomerate				3.	phyllite, mica schist. greywacke argillite, chert
				SPRAY	UKS	200	shale, silts to ne					
				GEOFFREY	uKG	150	conglomerate, sandstone	1.				
		8 2		NORTHUMBERLAND	UKN	250	siltstone, shale, sandstone					020
	F	CAMPANIAN	OMIANAN	DE COURCY	uKoc	350	conglomerate, sandstone	1				
4	4			CEDAR DISTRICT	uKco	300	shale, siltstone, sandstone	1				
	-			EXTENSION · PROTECTION	UKEP	300	conglomerate.sandstone.shale, coal	i t				
,			2 V	HASLAM	υКн	200	shale, silts tone, sands tone					
		SANTONIAN		COMOX	uKc	350	sandstone, conglomerate, shale, coal	i i				
		CENOMANIAN	QUEEN	conglomerate unit	IKod	900	conglomerate, greywacke	!				
JURAS	71	ALBIAN APTIAN?	CHARLOTTE	siltstone shale unit	IKop	IKop 50 IKi, 250 uJs 500	siltstone, shale	PACIFIC RIM COMPLEX	JKP			
	4	MLANGINIAN BARREMIAN		LONGARM	IKų		greywacke, conglomerate, siltstone					
	94	TITHONIAN		Upper Jurassic	uJs		siltstone, argillite, conglomerate					greywocke orgillite, chert, basic
	15=	TOARCIAN?		sediment unit	IJB	1,500	basaltic to rhyalitic lava tuff breecia	ISLAND INTRUSIONS	Jg		granodiorite, quartz diorite. I granite, quartz monzonile	
	ARL	PLIENSBACHIAN	BONANZA	HARBLEDOWN	П		basaltic ta chyolitic lava, tuff, breccia, minor orgillite, greywacke argillite, greywacke, tuff	COMPLEX basic	PM nb		163-19	quartz-feldspargneiss metaquartzite, marble
	1	NORIAN		PARSON BAY	UK PE		calcareous siltstone, greywacke, silty -		<u> </u>			hornblende-plagioclase gnei quartz diorite, agmalite, amph bolite
	TE E		VANCOLIVER	QUATSINO	uko	400	limestone					bonie
V	7	KARNIAN	VAIVEOUVE	KARMUTSEN	mulk	-	basalic lava, pillow lava, breccia, tuff	Pakara dilla	Pīb	-		
0				· · · · · · · · · · · · · · · · · · ·	-	-		diabase sills	Ls	1		
-		LADINIAN		sediment - sill unit	kd:	-	metasiltstone, diabase, limestone	metavolcanic rocks	PMm	1		metavolcanic rocks, minor me sediments; limestone, marble
9 6			CICALL	BUTTLE LAKE	CPs	-	10 1 March 201 1 M					
J Z	¥		SICKER	sediments	CPs	-	, ,		-			
2 2	-	-		volcanics	CPs	2,000	basaltic to rhyolitic metavolcanic flows, tuff, agglomerate		-	1		metagranodiorite metaguartz
DEV. or	LIER							TYEE INTRUSIONS	Pg	>390		quartz feldspar aneiss
Z \\ \\ \\ \\ \\ \\ \\ \\ \\ \\ \\ \\ \\	AR						7 - 7	WARK DIORITE GNEIS			63-18	phornblende-plagioclase gnei avartz diorite, amphibolite

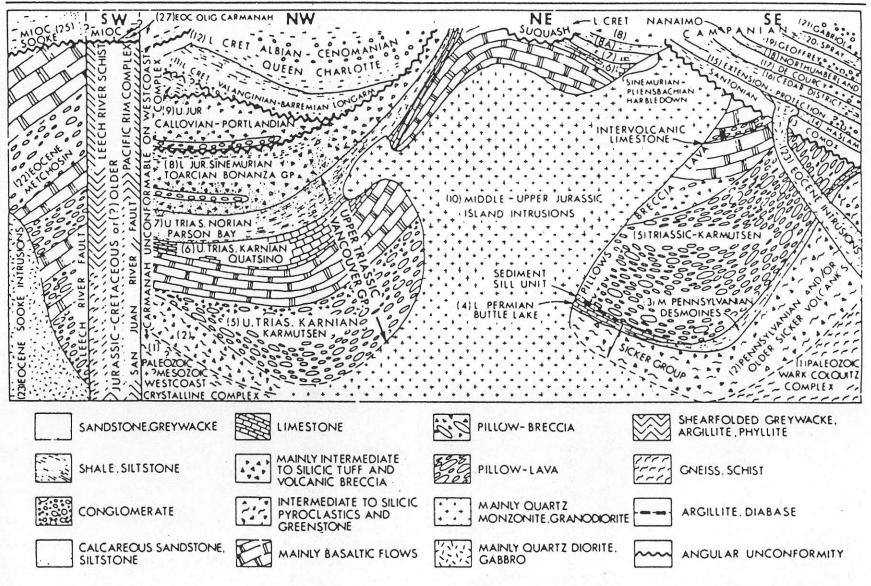
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FIGURE 4

RELATIONSHIPS OF FORMATIONS OF VANCOUVER ISLAND



DELLATERRA RESOURCES LTD.

Six rock types were identified by Lambert and Stephen (1987) and grouped into two map units: 1) pillow lavas, flow top breccias and fragmentals and 2) porphyritic basalt and tuff.

Intrusive rocks on the property consist of a coarse grained granodiorite body with feldspar, biotite, quartz and hornblende, and a hornblende-feldspar porphyry dyke rock with phenocrysts consisting of needles of black hornblende and white, square feldspars in an aphanitic, bluish green, goundmass. The granodiorite occurs in the western part of the Paterson Lake 6 claim with hornblende-feldspar porphyry dykes from 1 meter to 5 meters in width cutting Karmutsen volcanics.

A number of pronounced east-west to northwesterly trending linear zones are apparent on aerial photos. The trend reflects long, narrow valleys that are assumed to be fault zones. Some dykes have shears along their margins and the main structural trends are present as shears and faults at known mineral showings.

MINERALIZATION

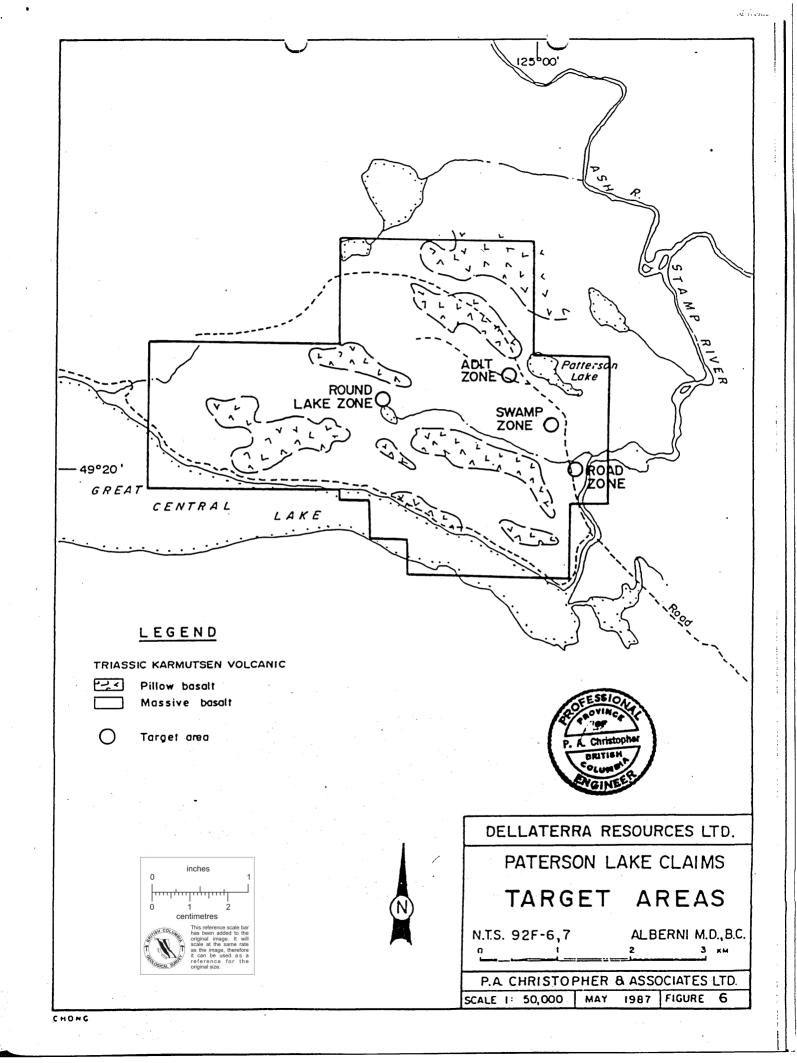
Mineralization on the Paterson Property consists of malachite, azurite, chalcopyrite, bornite and pyrite in narrow shear zones, quartz breccias and small quartz veins. Three target zones with visible copper mineralization and associated anomalous gold geochemical values have been identified. Mineralized target zones (Figure 6) include the adit zone, road zone and Round Lake zone.

In the adit zone, two short adits occur along a strong east-west linear trend that extends easterly from Mud Lake. Chalcopyrite, bornite, malachite, and azurite occur over 10 feet of siliceous volcanics and chloritic shear zone. Assay values range up to 5.91% copper with associated gold values up to 440 ppb.

Epidote-altered tuffaceous basalt on Branch Road 79 above Round Lake contains minor chalcopyrite, pyrite and malachite (Round Lake Zone). Assay results range from 5000 ppm to 3.21% copper and from 2 to 1500 ppb (assay check 0.030 oz/ton) gold. The zone is enhanced by the fact that IP line 28E, closest line to the showing indicated two weakly anomalous zones which are open to the west (Lambert and Stephen, 1987).

The road zone occurs along the main access road south of the Thunder Bay road turn off where a 3 foot shear zone at the east margin of a pit assayed 2.09% copper, <0.002 oz/ton gold and 0.051 oz/ton silver (Howell and Stephen, 1987).

The strongest gold response was from quartz float sample 63 which assayed 0.042 oz/ton gold. The sample is from a logging road landing southeast of Round Lake. Additional prospecting is required to determine the significance of the sample. Quartz breccia was also observed in two small pits along Branch 77 logging road. Brecciated tuffaceous basalt with drusy quartz, chalcopyrite, bornite and malachite is exposed along a 4 meter wide zone trending 85-90°. Assay results range from 57 to 3900 copper, 2 to 61 ppb gold and 0.1 to 0.8 ppm silver (Lambert and Stephen, 1987).



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DISCUSSION

The initial geological, geochemical and geophysical evaluation of the Paterson Lake Property (Howell and Stephen, 1987; Lambert and Stephen, 1987) have been successful in defining four target zones (Figure 6). The Road Zone, Adit Zone, and Round Lake Zone have known copper and gold showings with the Round Lake Zone also supported by anomalous induced polarization results. The Swamp Zone is situated along a topographic linear which passes through the Adit Zone. The Swamp Zone is a combination of a VLF-EM Fraser Filter anomaly and a magnetic anomaly (low) with the coincident geophysical anomalies representing a priority exploration target.

Property geology indicates that east-west and northwesterly structural zones influence the location of mineralization on the Paterson Lake Property. The structure should pass through the underlying Sicker Group rocks which are known hosts for precious metal enhanced massive sulphide deposits (Twin J, Western Mines) and structurally controlled auriferous quartz-carbonate zones (Yellow Creek). Surface showings may be remobilized expressions of larger mineralized zones that occur at or below the unconformity between Vancouver Group rocks (Karmutsen volcanics) and the Sicker Group. Induced Polarization or pulse electromagnetic methods surveys might indicate stronger mineralized zones at depth.

CONCLUSIONS AND RECOMMENDATIONS

The initial exploration program conducted for Dellaterra Resources Ltd. on the Paterson Lake Property has been successful in defining four priority target zones for follow-up with detailed geological, geochemical, and geophysical surveys to define areas for trenching. The Stage I program has an excellent chance of locating initial drill targets in each of the target zones.

The writer has outlined a staged exploration program for further testing the mineral potential of the Paterson Lake Property. A recommended Stage I program of trenching, detailed mapping, geochemical sampling and geophysical follow-up is estimated to cost \$50,000. Contingent on successful completion of the Stage I program an initial diamond drill test will be warranted. A Stage II, 1000 foot (300 meter) drill test is estimated to cost \$50,000 and a contingent Stage III, 2500 foot (750 meter) drill test is estimated to cost \$100,000. Cost Estimates for the staged program follow:

COST ESTIMATES

Stage I. Geological, Geochemical, Geophysical Follow-up & Trenching.

Mobilization/Demobilization Grid Preparation	\$ 1,000 5,000
Geophysical Follow-up (IP, VLF-EM, Magnetics)	20,000
Geochemical Sampling	5,000
Geological Mapping	10,000
Reporting	4,000
Contingency	<u>5,000</u>

Stage I total \$ 50,000

BIBLIOGRAPHY

- Howell, W.A. and Stephen, J.C., 1987. Geological and Sampling Report on the Paterson Lake 1-6 Mineral Claims. for Dellaterra Resources Ltd. dated May 15, 1987.
- Lambert, Ellen E. and J.C. Stephen, 1977. Geological, Geophysical Report on the Paterson Lake 1 6 Mineral Claims for Dellaterra Resources Ltd. dated May 15, 1987.
- Muller, J.E., 1977. Geology of Vancouver Island. G.S.C. Open File 463.