87-575-16239

GEOLOGICAL, GEOPHYSICAL REPORT

ON THE

PATERSON LAKE 1 - 6 MINERAL CLAIMS

RECORD NUMBERS

2000, 1993, 2207, 2208, 2216, 2209

ALBERNI MINING DIVISION

NTS 92F/6E, 7W

LATITUDE 49° 20'48" N / LONGITUDE 125° 00'01" W

MAY 15, 1987

BY

ELLEN E. LAMBERT, J.C. STEPHEN

Owners:

D. PATERSON ET.AL.

Operator:

DELLATERRA RESOURCES LTD.

Work Done By:

J.C. STEPHEN EXPLORATIONS LTD.

Dates:

APRIL 1 - MAY 15, 1987

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INTRODUCTION

Initial exploration of mineralized copper occurrences on the Paterson Lake 1-6 claims has recently been completed. The program involved cutting a large grid to cover the most significant mineralized showings, a magnetometer, VLF-EM and IP survey over the grid, geologic mapping of the entire property at 1:5000 scale and sampling of mineralized occurrences and interesting alteration.

Rock types on the property are dominantly Triassic Karmutsen volcanics consisting of massive and pillow basalt flows and basaltic tuff. A Jurassic granodiorite intrusion is exposed on the extreme western edge of the property and local hornblende porphyry dykes cut the volcanics. Northwest-trending faults are evident as pronounced linear features on aerial photos and local northwest shears are seen in many road cuts.

Copper mineralization, in the form of malachite, chalcopyrite, together with pyrite and bornite, occurs within Karmutsen volcanics in local shear zones and quartz breccias as well as in shear zones at the entrance to two caved-in adits. Low grade gold and silver mineralization is associated with the copper mineralization.

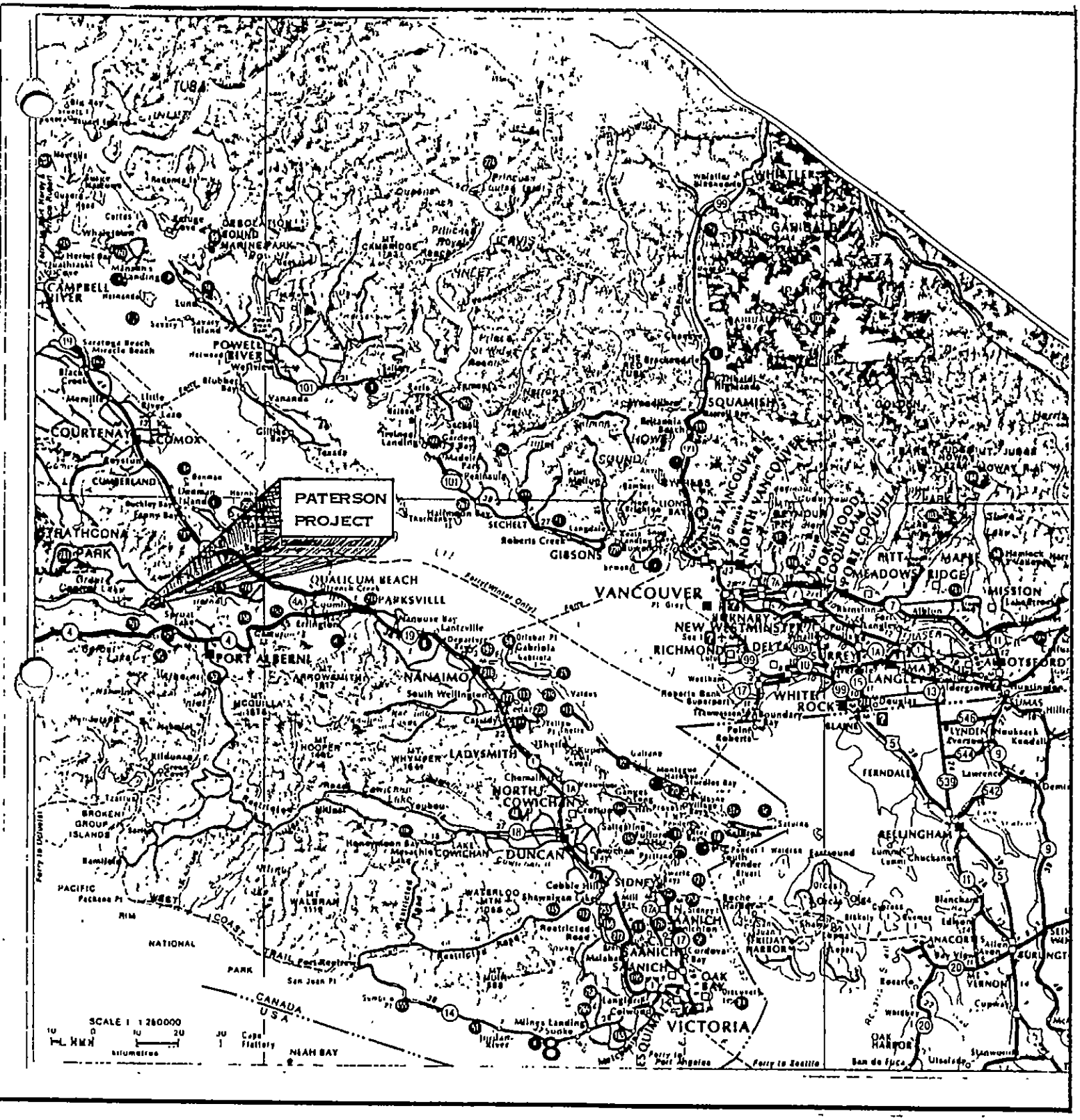
The purpose of this report is to describe in detail the geology, geophysics, mode of occurrence of mineralization and assay results of the Paterson Lake 1 - 6 claims.

LOCATION, ACCESS AND PHYSIOGRAPHY

The Paterson Lake 1 - 6 claims are located 20 km northwest of the town of Port Alberni on Vancouver Island (Figure 1). They are situated along the northeast shore of Great Central Lake, extending north of the shore for approximately 4 km and west of Stamp River for 6 km.

Access to the property from Nanaimo is by way of Highway 19 to Parksville and Highway 4 through Port Alberni, and 13 km west to Great Central Lake road. This road turns north and is paved for about 5 km before becoming McMillan-Bloedel's Ash Main logging road. A bridge at the start of this logging road crosses the Stamp River and is near the southeastern corner of the claim group. Logging activity spanning in excess of 50 years has produced several generations of logging roads and timber rejuvenation. Recent logging roads combined with access to a transmission line (that traverses the claims) provides a variety of ready access to most parts of the property.

Elevation of the claim area ranges from 83 m above sea level at Great Central Lake to approximately 480 m in the western portion. Slopes above the lake rise abruptly to 300+m and basically level off into a hummocky terrain characterized by topographic knobs devoid of timber and covered with moss, and separated by forested and occasionally swampy areas. The knobs commonly have very steep slopes on their northeast sides, and local cliff development with heights reaching 15-60 m makes direct access difficult. The entire region has been glaciated which has resulted in most outcrops having very smooth surfaces.



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DELLA TERRA RESOURCES LTD

PATERSON PROJECT

92F/6E,7W

LOCATION MAP

FIGURE 1

REGISTER OF CLAIMS AND OWNERSHIP

The Paterson Lake claim group consists of a total of 72 units from the following claims:

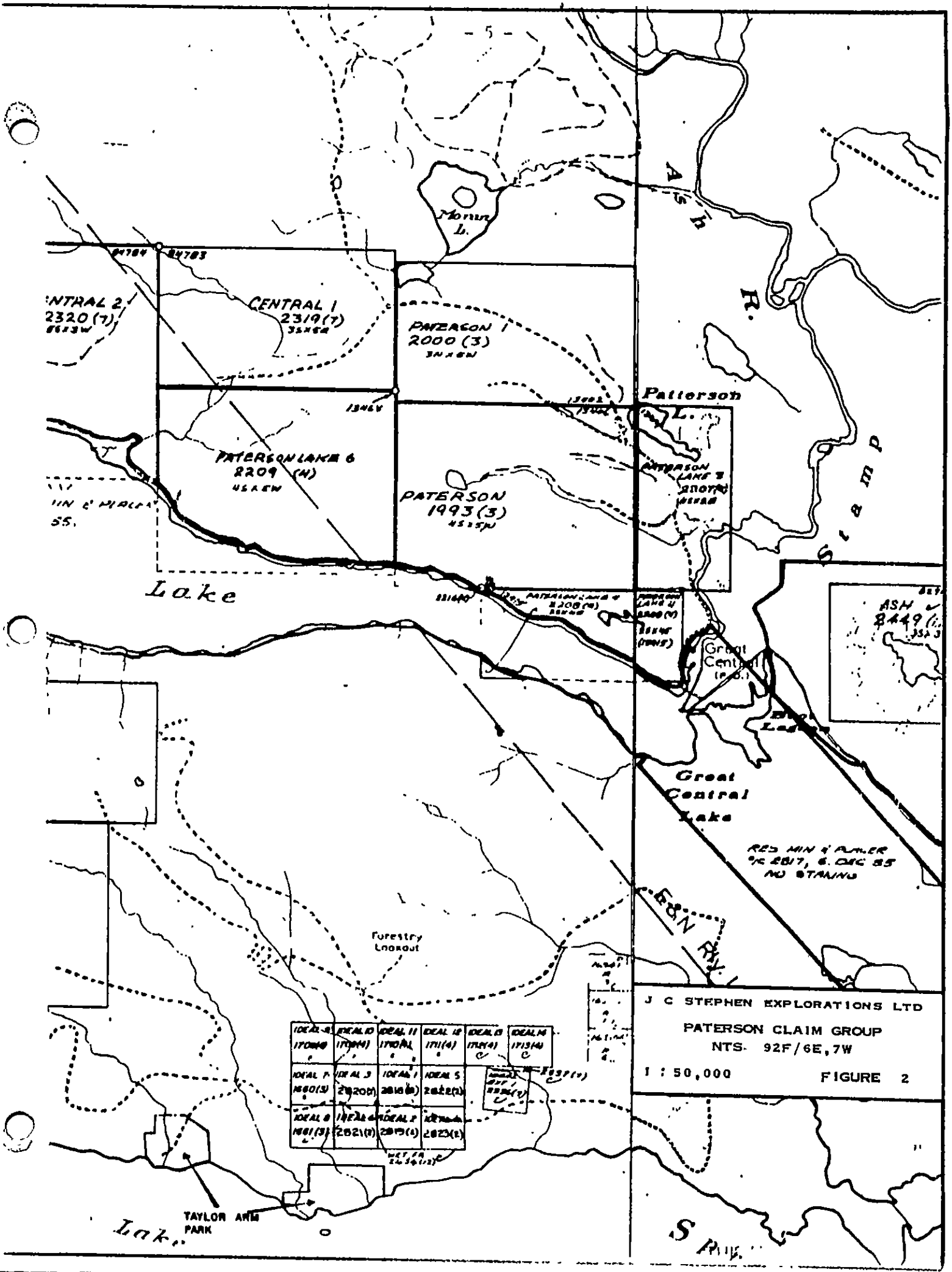
Name	Record Number	Units	Recording Date
Paterson Lake #1	2000	15	March 19, 1984
Paterson Lake #2	1993	20	March 9, 1984
Paterson Lake #3	2207	8	April 27, 1984
Paterson Lake #4	2208	8	April 27, 1984
Paterson Lake #5	2216	1	April 27, 1984
Paterson Lake #6	2209	20	April 27, 1984

The claims were recorded in the name of Herbert McMaster as of the dates shown and one third interests were transferred by various 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 March 1987. Relative location of the claims is shown in Figure 2.

The LCP for Paterson Lake 1 - 3 claims is located next to a secondary road running along the northeast edge of Patterson Lake, 75 m east of Ash Main logging road. It is situated 25 m north of this secondary road.

The LCP and Initial Post for Paterson Lake 4 and 5 is located approximately 400 m north of Great Central Lake and 450 m west of the pond occurring south of Branch 77 logging road.

The LCP for Paterson Lake 6 was not located.


Morrow L.
CENTRAL 1
2319(7)
PATERSON 1
2000 (3)
PATERSON LAKE 6
2209 (4)
PATERSON
1993(3)
Patterson L.
Lake
Great Central Lake
Forestry Lookout
TAYLOR ARM PARK
Lake
J C STEPHEN EXPLORATIONS LTD
PATERSON CLAIM GROUP
NTS- 92F/6E,7W
1 : 50,000
FIGURE 2

PREVIOUS AND PRESENT WORK

Previous workings on the Paterson property include two short adits (probably dating 50 years or more and presently caved in) and a few blasted outcrops; no additional exploration work is evident or has been reported. The only printed material concerning mineralization on the Paterson Lake claim is an in-house report by D.V. Lefebure for Corporation Falconbridge Copper dated February 5, 1986.

Present work for this report included the construction of a grid whose baseline runs approximately 290° for 3.5 km with crosslines at 100 m or 200 m intervals and stations every 25 m. A VLF-EM and magnetometer survey were conducted at 12.5 m spacings on all crosslines, and an IP survey was conducted at 25 m spacings on selected lines that cover the most significant mineralization and avoid large cliffs. Geologic mapping at a scale of 1:5000 on aerial-photo blowups was performed over the entire claim group. Rock sampling of the known mineralized occurrences, as well as ankerite alteration, quartz veining and silt from creeks, were analyzed for copper, gold and silver.

REGIONAL GEOLOGY

The region surrounding the Paterson claims is dominated by Karmutsen volcanics and granodiorite plutonic rocks of the Island Intrusions. According to Muller (1977) these units belong to the Insular Belt (a Canadian Cordillera subdivision), which is described as being partly comprised of a thick shield of upper Triassic basalts and a Jurassic volcanic-plutonic complex.

The Karmutsen Formation (middle to upper Triassic) underlies a major portion of Vancouver Island and is up to 6000 m thick. It consists of tholeiitic volcanic rocks erupted along an oceanic rift system. Three members have been identified and include a lower pillow lava member (deep marine), a middle pillow breccia and aquagene tuff member (shallow marine) and an upper massive flow member (subareal) with interbedded pillow lava, breccia and sedimentary units.

The Jurassic Island Intrusions underlie about one-quarter of Vancouver Island and are granitoid stocks and batholiths that intruded Karmutsen volcanics.

The region has many steep northerly and westerly faults probably developed during rifting that produced Karmutsen lavas. Younger northwest and northeast faults may be associated with Mesozoic and Tertiary subduction processes.

Glaciers covered the entire island during the Pleistocene and produced many deep linear valleys now occupied by lakes. Great Central Lake, bordering the southern edge of the Paterson claims, is one of these glaciated valleys.

PROPERTY GEOLOGY

(Map I)

The Paterson claims are almost entirely underlain by Karmutsen basaltic lavas. A granodiorite intrusion is exposed along road cuts in the extreme western portion of Paterson #6 claim and the contact with Karmutsen volcanics is completely obscured by a broad valley filled with Quaternary alluvium and glacial till. A pronounced topographic change exists between the volcanics and intrusives: the terrain underlain by volcanics is characteristically comprised of hummocks with numerous knobs and cliffs, irregular drainage and local swamps; the terrain underlain by intrusives consists of smooth continuous hillslopes culminating in blunt peaks.

Hornblende porphyry dykes and diorite dykes cut the volcanics and are presumably related to the Jurassic intrusion to the west.

Karmutsen volcanics on the property consist of lava flows of different basalt types. Pillow lavas, massive and porphyritic flows, and tuffaceous units were recognized and are believed to represent parts of the middle and upper members of the Karmutsen package. The outline of individual flows is obscure but many hummocks have gentle slopes to the southwest and are steep on their northeast sides which may reflect flow morphology. Pronounced joint surfaces seen at many outcrops may be subparallel to flow-top surfaces; they generally strike north to northwest and dip shallowly to the southwest and less often to the northeast.

The entire volcanic unit exhibits low-grade metamorphism to prehnite-pumpellyite grade. Epidote, quartz, chlorite and minor calcite alteration is widespread through the unit and may be related to hydrothermal activity at the time of formation.

During mapping of the Karmutsen volcanics an attempt was made to separate different basaltic units. Outcrops along roads and in clear-cut areas allowed ready identification of basalt types, however, a large portion of the exposed outcrops on the property have extensive moss cover and have been glaciated to a smooth flat surface, which made identification more difficult.

Six basaltic rock types were identified, mapped and grouped into two major categories (based on common association) for the final geologic map: 1) pillow lavas, flow-top breccias and fragmental units form one category as they are always found together and are presumed to belong to a common eruptive event; 2) porphyritic basalt and tuffaceous units are easily separable along road cuts but their appearance is nearly identical on moss-covered and glacially smoothed outcrops. It became an impossible task to separate these two during mapping, therefore they were both mapped as unit "r". Unit r rocks always have amygdaloidal basalt (unit "a") and minor massive basalt (unit "m") associated with them and are believed to be genetically related. Unit r, a and m, therefore, are grouped together to comprise the second category.

Rock Units

Karmutsen Volcanics - Triassic

Group 1

p = **pillow basalt** - ovoid blobs of porphyritic basalt (dark greenish gray with white specks) surrounded by chilled margins (dark green, very fine grained) and intrapillow debris (quartz + epidote and chlorite). Individiual pillows are obvious at fresh road cuts, but on weathered surfaces are characterized by buff-coloured ovoids surrounded by rusty red rims (chilled margins) and mottled green and white, brecciated intrapillow debris.

f = **flow-top breccia** - same appearance as pillows but more chaotic; weathers to form irregular blebs and blocks of gray-green basalt surrounded by a mixture of rusty red, buff and dark green pillow debris.

g = **fragmental basalt** - angular fragments of pillow or flow-top breccias cemented by a chaotic mixture of all components. Often weathers orange-red with whitish or dary gray-green to black breccia fragments of differing composition.

Group 2

m = **massive basalt** - very fine grained, dark green to greenish black with minor amygdules filled with chlorite, quartz or epidote. Blocky character to outcrops; very smooth weathered surfaces with no obvious features.

a = **amygdaloidal** - abundant amygdules within massive, porphyritic or tuffaceous flows. Commonly filled with epidote + quartz, or chlorite. Forms a knobby or studded appearance on weathered and glaciated surfaces, where the matrix is buff coloured and the amygdules are green or white. Amygdules vary in size from 1 mm to 20 cm width.

r = **porphyritic and tuffaceous basalt** - porphyritic = very fine grained dark green groundmass with whitish, square feldspar phenocrysts; tuffaceous = fine to medium grained, mottled olive green and dark green rock fragments(?) with whitish green feldspar crystals. Weathered surfaces are buff to buff-orange with white specks (feldspars); tuffaceous rocks sometimes weather to give a rough, bumpy texture like a rash. Grades into amygdaloidal basalt.

Intrusions - Jurassic

D = **granodiorite stock** - black and white, coarse grained granodiorite with feldspar, biotite, minor quartz and hornblende.

d = **hornblende-feldspar porphyry dyke** - phenocrysts consist of needles of black hornblende and white, square feldspars in a bluish green, very fine grained groundmass. Weathers to a cream colour with black needles of hornblende. Widths of dykes vary from 1 m to 5 m.

Veins and Alteration

q = **quartz breccia** - angular fragments of dark-green basalt surrounded by radiating quartz rims and drusy vugs, minor siderite, calcite and limonite; associated with copper mineralization.

n = **ankerite alteration** - quartz + calcite (siderite?) and minor mariposite in highly altered basalt (coloured light grayish green) that characteristically weathers to a rusty orange colour and is very hard to break.

y = **mylonite** - alternating dark green and greenish white streaks that resembles a fine-grained gneiss. Occurs in a narrow zone surrounded by unsheared, tuffaceous basalt.

Structure

No large faults were readily observed in outcrop on the property, but pronounced linear trends are obvious on aerial photos. On the ground these linear trends are long, narrow, straight valleys sometimes with creeks running down them. They generally trend east-west to northwesterly and are assumed to represent fault zones. Elsewhere, tall, steep cliffs may be bounded by faults as they too are often oriented in a westerly to northwesterly direction.

Small shear zones are evident in many road cuts and are commonly limonite stained with local gouge, and less often are associated with quartz veining and copper mineralization. Clear-cut areas on air photos show small, faint, linear trends that on the ground are represented by elongate hummocks separated by linear, vegetated hollows. Where these hollows intersect road cuts shears are seen, and it is assumed that most elongate hummocks on the property are bounded by similar small shear zones. Many of these shears trend east-west, although shears oriented in all directions were observed over the entire property. Some dykes were observed to have shears along their margins as well.

A mylonite was found in the Paterson 6 claim in tuffaceous basalt. Exposure is poor but small outcrops and float indicate the zone is oriented north-south with a steep dip to the east.

Alteration and Mineralization

Epidote and quartz alteration occurs separately but widespread over the entire property. It mainly occurs as the fillings in amygdules and as stringers and veinlets in many tuffaceous and amygdaloidal basalt outcrops. These veins and stringers dominantly trend east-west, and less often northwesterly, with near-vertical dips. Irregular masses of epidote and quartz are also observed in the wall rocks around shear zones.

Ankerite alteration (with or without associated limonite) and quartz breccia are found at a few localities on the property. They occur along narrow, linear zones and could be a result of original volcanic eruptions or of later hydrothermal activity, perhaps related to Cretaceous intrusions.

Mineralization on the Paterson property is in the form of malachite, azurite, chalcopyrite and bornite associated with narrow shear zones, quartz breccias and small quartz veins. The following is a summary of mineralized occurrences on the property and their assay results.

1) Many small quartz + epidote veins with associated minor sulphides (chalcopyrite and pyrite) are found sporadically around the property and assayed < 200 ppm Cu, < 50 ppb Au and < 0.3 ppm Ag. One outcrop of quartz veining on Branch 77 logging road (samples 83 and 84) gave 2250 - 5500 ppm Cu, 27 - 65 ppb Au and 0.3 - 0.7 ppm Ag.

2) Quartz breccias were seen at two small pits along Branch 77 logging road. The eastern occurrence (samples 49 - 55, 78 - 82) consists of brecciated tuffaceous basalt with drusy quartz, massive quartz, limonite, siderite, ankerite and minor chalcopyrite + bornite + malachite. It is exposed along a 4 m wide linear zone bearing 85° - 90° for approximately 50 m. Assay results gave 57 - 3900 ppm Cu, 2 -61 ppm Au and 0.1 -0.8 ppm Ag.

3) Epidote-altered tuffaceous basalt along a narrow shear zone occurs on Branch 79 above Round Lake (samples 44-47). Minor chalcopyrite + pyrite + malachite occurs in the epidote, mainly in the hanging wall above the shear zone oriented 130° and dipping 45° east. Assay results gave 5000 ppm to 3.21% Cu, 2-1500 ppb Au and 2.1 -57.0 ppm Ag.

4) Two short adits (presently caved in) occur along a major east-west linear trend (occupied by a creek) east of Mud Lake. Tuffaceous basalt is sheared, brecciated and silicified along a trend oriented 115° and dipping 65° north, with the adits oriented perpendicular to

the strike. The shear exposed in the walls immediately south of the adit entrance contains a series of parallel zones: the first zone extends from the creek 2.5 m toward the adit entrance and is fractured tuffaceous basalt; the second zone is 1.5 m wide of sheared tuffaceous basalt (sample 70); the third zone is a 1.5 m wide competent, quartz "vein" with associated limonite, azurite, malachite, chalcopyrite and bornite (samples 71 and 72); the fourth zone is the last zone before the adit entrance and is a rusty breccia of tuffaceous basalt (sample 73). Looking in to the adit it appears the rock type is once again fractured tuffaceous basalt. Assay results of these samples as follows:

	Cu (%)	Au (ppb)	Ag (ppm)
B - 70	1.64	48	2.3
71	1.92	84	3.6
72	5.91	440	12.8
73	2.61	243	4.3

A second adit (located 5 m east of the first adit) exposes rocks in the walls south of the adit entrance that are limonized and fractured tuffaceous basalt. Sample 74 from here assayed 290 ppm Cu, 3 ppb Au and 0.1 ppm Ag. It appears as though this second adit is situated too far north of the mineralized shear zone and missed it entirely.

A fractured zone occurs on the south side of the creek in tuffaceous basalt, opposite the adits. It has been hand-mucked and exposes quartz veins along a fracture set oriented 155° and dipping 50° northwest. Chalcopyrite + bornite is very local and occurs in a quartz vein 40 - 50 cm wide, with malachite stain extending into outlying fractures. Samples 66 - 69 from here assayed:

	Cu (ppm)	Au (ppb)	Ag (ppm)
66	760	3	0.1
67	1.12%	157	2.6
68	7,200	63	0.5
69	1.69%	89	1.8

Mineralization in the vicinity of the adits and hand-mucked quarry has the potential to be 15 m wide if it is continuous across the creek. The creek occupies a pronounced linear trend obvious on air photos and may represent a large fault.

A summary of geochemical results obtained from initial sampling of mineralization, quartz veining and alteration follows. Locations of the samples are shown on Map Ia in the pocket of this report.

LIST OF GEOCHEMICAL SAMPLE RESULTS

Sample No.	Rock Type	% Cu	ppm Cu	oz Au	ppb Au	ppm Ag
B-30	Silicified volcanics/ankerite		10		2	0.1
B-31	Silicified volcanics/ankerite		36		-1	0.1
B-32	Bedded? tuff		59		30	0.1
B-33	Breccia near dyke		180		2	0.1
B-34	Pyroclastics		23		1	0.1
B-35	Breccia volc.		46		1	0.1
B-36	Breccia volc.		181		3	0.1
B-37	Breccia volc.		41		5	0.1
B-38	Breccia volc.		192		3	0.1
B-39	Silt sample		340		5	0.1
B-40	Ankerite alteration		65		3	0.1
B-41	Breccia volc.		26		1	0.1
B-42	Breccia volc.		590		15	0.1
B-43	Ankerite alteration		120		3	0.1
B-44	Cu and quartz in shears	2.24%	+10,000	.024	885	3.0
B-45	Cu and quartz in shears	2.61%	+10,000	.030	1,500	57.0
B-46	Cu and quartz in shears		5,000		19	2.1
B-47	Cu and quartz in shears	1.64%	+10,000	.004	2	4.5
B-48	Float breccia		700		3	0.1
B-49	Ankerite alteration		680		8	0.1
B-50	Ankerite alteration		57		2	0.1
B-51	Ankerite alteration		1,280		10	0.2
B-52	Ankerite alteration		1,000		21	0.2
B-53	Ankerite alteration		1,390		10	0.2
B-54	Ankerite alteration		1,760		17	0.3
B-55	Quartz breccia		1,500		24	0.4
B-56	Weak ankerite		138		2	0.1
B-57	Ankerite quartz breccia		30		-1	0.1
B-58	Ankerite quartz breccia		15		-1	0.1
B-59	Ankerite quartz breccia		7		-1	0.1

Sample No.	Rock Type	% Cu	ppm Cu	oz Au	ppb Au	ppm Ag
B-60	Ankerite quartz breccia		7		-1	0.1
B-61	Ankerite quartz breccia		200		4	0.3
B-62	Ankerite quartz breccia		27		-1	0.1
B-63	Quartz float		400		1,350	0.9
B-64	Breccia float		51		5	0.5
B-65	Interpillow breccia		71		10	0.1
B-66	Float rubble on shear		760		3	0.1
B-67	Float rubble on shear	1.12%	10,000		157	2.6
B-68	Float rubble on shear		7,200		63	0.5
B-69	Float rubble on shear	1.69%	+10,000		89	1.8
B-70	Cu mineralization at adits	1.64%	+10,000		48	2.3
B-71	Cu mineralization at adits	1.92%	+10,000		84	3.6
B-72	Cu mineralization at adits	5.91%	+10,000		440	12.8
B-73	Cu mineralization at adits	2.61%	+10,000		243	4.3
B-74	Cu mineralization at adits		290		3	0.1
B-75	Silt sample		83		-5	0.1
B-76	Quartz vein in volcanics		154		3	0.1
B-77	Breccia		170		5	0.5
B-78	Quartz breccia, ankerite		1,150		12	0.1
B-79	Quartz breccia, ankerite		3,900		61	0.8
B-80	Quartz breccia, ankerite		2,500		31	0.4
B-81	Quartz breccia, ankerite		2,650		26	0.4
B-82	Float		80		3	0.1
B-83	Minor quartz veins		2,250		27	0.3
B-84	Minor quartz veins		5,500		65	0.7
B-85	Ankerite float		180		2	0.1
B-86	Ankerite float		132		-5	0.1
B-87	Ankerite float		450		31	0.1
B-88	Float		48		2	0.1
B-89	Quartz breccia		87		13	0.1

Sample No.	Rock Type	% Cu	ppm Cu	oz Au	ppb Au	ppm Ag
B-90	Quartz breccia				14	0.1
B-91	Float				3	0.1
B-92	Silt		na		-5	0.1
B-93	Silt		na		-5	0.1
B-94	Silt		na		-5	0.1
B-95	Quartz breccia float/cpy				-1	0.3
B-96	Ankerite				4	0.1
B-97	Ankerite				3	0.1
B-98	Ankerite				5	0.1
B-99	Ankerite				2	0.1
B-100	Interpillow breccia				12	0.1
B-101	Interpillow breccia				20	0.1
B-102	Interpillow breccia				12	0.1
B-103	Silt		na		-5	0.1
B-104	Hb prophyry dyke				-1	0.1
B-105	Ankerite				6	0.1

GEOPHYSICS

MAGNETOMETER SURVEY

Purpose

A ground magnetometer survey was conducted on grid lines established on claims Paterson Lake 1, 2 and 3 to assist in interpretation of the geology of the claim group and to investigate the possibility of a magnetic expression associated with the mineral showings.

Instrumentation

The survey was conducted by Scott Geophysics Ltd. using a Scintrex MP-4 magnetometer incorporated in an IGS-2 instrument and a MP-3 base magnetometer station established on the property for magnetic corrections. Field readings were corrected to the base station values with data reduction and plotting being done with a Sharp PC 7000 micro-computer and an Epson printer.

Presentation

Magnetic survey data is plotted by computer by grid stations without correction for actual on site errors in the location of grid stations. Map II records the magnetic readings numerically and Map III records the computer generated contoured magnetic intensity. Comparison of the location of topographic and man-made features between the computer grid and the air photo locations shows overall acceptable correlation.

Interpretation

The Group 1 Karmutsen volcanics consisting of pillow basalt, flow-top breccia and fragmental basalt exhibit a realtively high but flat magnetic expression. Readings range from 55800 to 56400 gammas.

The Group 1 outcrop area at about 42+00E and 20+00N might be extended both east and west with reference to the magnetic expression. A magnetic low parallels this structure on the north side where a steep north facing slope occurs. To the west a large area is mapped as Group 1 volcanics and is shown by the magnetic survey as a broad high in the west-central portion of the grid area.

More or less parallel to the magnetic high through 42E, 20N and south of that high is a series of strong, narrow magnetic low anomalies. These anomalies lie directly on the power line and might be attributed to that power line.

The zone is broken at 30E to 32E; 41E to 42+50E and 52E to 54E where the power line appears not to affect the magnetic survey. Rock unit 'a', amygdaloidal basalt, is mapped in this area and is unlikely to cause such intense lows.

A series of magnetic lows occurs on most lines from 40E at 26N to 56E at 16+50N. Massive basalts are mapped to the northeast and the zone is marked, in part, by swamps and low ground as at 50E, 20N.

This zone may mark an important discontinuity in the geology, possibly a major shear zone. All known mineral occurrences of importance lie west of this zone.

The main zone of mineralization on the property lies at 43E, 25N where the magnetic pattern indicates a west trending low to the south and a parallel high to the north. This magnetic structure does not appear to follow the air photo linear to the west and it may be that the mineralization is controlled by a contact zone between magnetic and non-magnetic volcanics rather than by an apparent zone of fracturing indicated by the air photo linear.

A strong magnetic low occurs at about 54E, 14N south of the mineralized shear zone on the east side of the main road. The magnetic expression here is analogous to that at 43E, 25N with a magnetic low to the south, a magnetic high to the north and both located a short distance west of the magnetic lows trending northwest from 46E, 16+50N.

VLF-EM SURVEY

Purpose

The VLF-EM survey was carried out to test for electromagnetic conductors which might indicate heavy sulphide mineralization directly and to assist in interpretation of the geology by comparison with other information on the property.

Instrumentation

The survey was carried out by Scott Geophysics Ltd. using the Scintrex VLF-4 instrument incorporated in the IGS-2 unit. Processing was done with a PC-7000 micro-computer and Epson printer. The Seattle 24.8 kHz transmitter was used and the data has been Fraser filtered for presentation on Map IV.

Presentation

Map IV shows Fraser Filter contours for the grid area. Values after filtering are plotted midway between grid survey stations.

Interpretation

A strong zone of high Fraser filter values extends along the power line and is due to the power line effect.

Over most of the property, the VLF data is relatively flat and can be correlated to the magnetic pattern.

A VLF anomaly extends west from the adit mineral zone location at 43E, 25N. The Fraser filter contours generated by the computer centre on Mud Lake but this high may, in general, be discounted since no readings were taken over the lake. The westerly trend of the zone is, however, outlined to the north of the magnetic low and constitutes an exploration target.

The series of magnetic lows running northwest from 56E, 16+50N is repeated by the VLF survey giving a series of anomalies which may indicate a conductive zone. The strongest portions of this anomalous trend occur on lines 50E and 52E at the north margin of a swamp area. Although the anomaly may be enhanced by the swamp this zone should be carefully prospected for signs of mineralization.

On line 54E at about 14+50N a weak VLF anomaly coincides with the location of the mineralized shear in this area.

INDUCED POLARIZATION SURVEY

Introduction

Induced polarization and resistivity surveys were conducted over portions of Della Terra Resources Ltd.'s Patterson Project, Port Alberni Area, B.C. The work was conducted within the period May 7 to 13, 1987, by Scott Geophysics Ltd. on behalf of J.C. Stephen Explorations Ltd.

The pole dipole electrode array was used on the survey, with an "a" spacing of 25 meters and "n" separations of 1 to 5. The current electrode was to the north of the receiving electrodes on all survey lines.

Survey Location

The Patterson Project is located about 20 kilometers northwest of Port Alberni, B.C. Access is via a network of logging roads from Port Alberni.

Survey Grid and Survey Coverage

A total of 10.5 line kilometers were completed on the Patterson Project.

Personnel

Alan Scott, geophysicist, was the party chief on the survey and operated the IPR11 receiver. Doug Paterson was on site for the duration of the project on behalf of JC Stephen Explorations, and assisted with logistics and grid preparation.

Instrumentation and Procedures

A Scintrex IPR11 time domain microprocessor based induced polarization receiver and a Scintrex 2.5 kw IPC7 transmitter were used for the survey. Readings were taken using a 2 second alternating square wave. The chargeability for the eighth slice (690 to 1050 milliseconds) is the value

that has been plotted on the plans and pseudosections.

The survey data was archived, processed, and plotted using a Corona PPC 400 microcomputer running Scintrex Soft II software.

Observations

A preliminary examination of the results of the induced polarization survey indicates the presence of weak chargeability highs (greater than 8 mv/v within a background of 4 mv/v).

No significant chargeability anomaly occurs on Line 29E but two small and rather weak zones occur on line 28E. the more southerly corresponds to a small local magnetic low anomaly, while the more northerly occurs at a local magnetic high just south of one of the intense lows occurring along the powerline. Local, relative resistivity lows correspond to these chargeability highs. The northerly chargeability high corresponds to the Round Lake mineralized zone.

There are no significant chargeability anomalies on lines 36E - 38E. Local patterns in the IP resistivity profiles may be helpful in interpretation of geology if detailed work proceeds.

On Line 39E at 22+75N a local, rather amorphous, chargeability high occurs (to 10 m sec). Resistivity is locally higher at this location. This zone is at the apparent north contact of a wide zone of magnetic highs. No mineralization has been reported in this area.

Lines 40E and 41E show no chargeability anomalies while line 42E shows weak highs at 21+25, 23+50 and 24+25N. The most northerly of these may correspond to the Adit Zone but the anomaly is weak and poorly defined. There is a corresponding decrease in resistivity. This zone lies on a strong magnetic low which trends at about 290°.

A very shallow chargeability zone to 7 m sec occurs at 25+25N.

These zones are very poorly defined on line 44E.

On line 44E from about 17+50N to 18+50N chargeability values to 8.8 m sec indicate the west end of an anomalous zone trending at about 110° through to line 50E, the limit of the IP survey. This zone lies north of the power line along the trend of a magnetic high for the most part. Values on line 50E reach 13.22 m sec.

A chargeability low occurs on line 50E at about 21N where an anomaly was expected to correspond to a Fraser filter VLF-EM anomaly. A resistivity low occurs here and is most likely due to shearing or a change in rock type.

Recommendations

The survey grid should be extended to the west from line 28E to explore for continuation of the Round Lake IP and mineralized zone.

The survey grid should be filled in and extended south of the baseline between 29E and 44E to further explore the apparent horizon which hosts the Round Lake zone and the chargeability anomalies east from 44E to 50E.

The grid should be filled in with more closely spaced lines over the Adit Zone and closely spaced geophysical surveys should be conducted.

The IP survey should be extended from 50E, south of the base line, to cover the Road Zone.

CONCLUSIONS AND RECOMMENDATIONS

Prospecting has located several zones of copper mineralization with associated low grade values in gold and silver hosted by Karmutsen volcanics in an area directly northwest of the Duncan - Port Alberni trend of older Sicker Group rocks which host important mineral deposits.

The regional 1:250,000 geological maps show a northwest trending fault through the Paterson Lake area which may be partially represented by a magnetic low - VLF-EM anomalous zone just east of the more important mineral showings on the property.

Assays of up to 4.28% copper, 1.7 oz/t silver and 0.03 oz/t gold have been obtained.

It is recommended that the following exploration program be conducted.

Phase I

a) Detailed geological mapping of the individual mineral occurrences indicated by the program just completed.

b) Extension of the picket line grid to provide more detail in the Adit Zone, Swamp Zone, Round Lake Zone and Road Zone areas.

c) Extension of the magnetic and VLF-EM surveys over these detail areas. These surveys are more cost effective at this time than the IP surveying has proved to be. Detailed soil sampling should be attempted. IP surveying is justified south of the baseline from 29E to 43E to fill in the anomalous horizon.

d) Detailed prospecting along the Swamp Zone indicated by the current magnetic and VLF-EM surveys. This prospecting should include detailed geochemical sampling in this low lying area.

e) Backhoe excavation of the Adit Zone to clear out debris at the entrance to the old workings and to remove overburden along the east and west trends of the zone.

This program is assumed to require a budget of $40,000 - $60,000.

Phase II

Depending on continued encouragement in Phase I, trenching should be carried out along strike of the better zones. It is assumed that the Round Lake and Road zones will lend themselves to further exploration by trenching.

A Hydra Wink diamond drill should be used to drill approximately 1,000 feet of BQ core in 4 or 5 drill holes to give an initial test of the Adit, Round Lake and Road zones.

This program would cost in the order of $50,000.

Phase III

Based on results of Phase II exploration, a program of more extensive diamond drilling may be justified. This program might be considered to require 2,500 to 3,500 feet of drilling at a cost of $100,000 or more.

Respectfully submitted
J.C. Stephen Explorations Ltd.

J.C. Stephen

DETAILED MAPPING OF SELECTED TARGETS

Upon examination of results of previous sampling and/or geophysical surveys on the Paterson property four areas were selected as showing potential for copper, gold mineralization. These zones include the Adit Zone, Lake Zone, Swamp Zone and Road Zone, each named for a nearby feature.

Detailed mapping was conducted around each zone and the zone was located with reference to the geophysics grid. In this way the geophysical anomaly could be tied to the accompanying rock type or mineralization found. In the case of the Swamp Zone no outcrop was observed but a sample of rock float and five soil samples were taken.

The following is a short description of each zone.

Adit Zone

The geology of the Adit Zone (located between lines 42+00 and 44+00E at 24+50N) is dominated by amygdaloidal basalt. There are a few small outcrops of porphyritic basalt but with no apparent continuity between them. (see Figure 1).

Prominent mineralization is confined to the area of adit one where a highly altered and silicified unit is in contact with unmineralised porphyritic basalt. The contact has an attitude of 255° dipping 53°N. The altered unit appears to be some type of volcanic which has been very chloritised with some carbonate veining. The unit is increasingly silicified to the northwest. With increased silicification the unit appears more like a large quartz vein. Mineralization is characterized by disseminated pyrite and chalcopyrite in 4 mm to 1 cm blebs or stringers. Sulphide content increases with increased silicification and may be as high as 15% in spots. Malachite staining is abundant on weathered surfaces.

According to the trend of mineralization seen in Adit 1 the location of Adit 2 is too close to the creek to intersect it. The lack of mineralization in Adit 2 confirms this trend.

There is no outcrop across the creek from Adit 1 nor is there any for some distance along the 255° trend. For this reason it is not possible to state whether the mineralization continues or is faulted off at the creek. The same problem is apparent on the hill to the NE of the adit.

On the south side of the creek about 20 m upstream there are a number of narrow (1 cm or less) quartz veins which carry up to 10% pyrite and chalcopyrite. These veins trend 260 - 270° and dip to the North. This vein-type mineralization is also seen another 20 m upstream where sample 58420 H was taken. It is possible that these veins are in the hanging wall of the main unit in Adit 1 or, if the creek is a fault, they are another distinct showing. Sample 58420H contains 450 ppb Au, 3500 ppm Cu and 0.5 ppm Ag. If this sample is from the hangingwall of the Adit 1 mineralization it indicates a substantial width of possible gold mineralization.

As seen in other unmineralized fractures the 255° - 270° trend is dominant in this area.

Lake Zone

The Lake Zone is located at line 28+00E from 15+75N to 16+25N. (see Figure II). Like the Adit zone, the dominant rock type is amygdaloidal basalt. To the north however the rock is all massive basalt.

The best exposure is along the road where two zones of mineralization are seen. Pyrite and chalcopyrite mineralization up to 5% of the rock, occurs in irregular blebs or stringers. Occasionally the sulphide is filling amygdules. Mineralization is localized between shear zones where intense epidote alteration has occurred. It should be noted that the whole zone is distinguished by pervasive epidote alteration where amygdules are

alternately filled with calcite or epidote. The numerous shear planes, and veins trend 300° - 330° dipping steeply east. A small porphyritic diorite dyke is seen on the road trending 308°. The presence of this dyke may indicate a larger intrusive body at depth which may have been the source of the epidote forming fluids.

Above the road rock exposure is very limited due to moss cover so the zones of mineralization were not traced. The 300° structural trend was not as apparent either but epidote alteration was still pervasive.

Swamp Zone

A magnetic anomaly was noted at the Northeast end of a swamp south of Paterson Lake. An examination of the area did not reveal any outcrop. A boulder of highly silicified and quartz veined volcanic was found so it was sampled (58419 H). Unfortunately if contained $<$5 ppb Au, 195 ppm Cu and 0.1 ppm Ag.

Five soil samples were taken along a line which ran above the swamp for 100 m from the road. The end of the soil line is located at 52+13E, 20+64N (see Figure III). Again the results all show $<$ 5 ppb Au, 35 ppm Cu and 0.2 ppm Ag. However the line appears to parallel geology so the samples are not representative of the area.

Road Zone

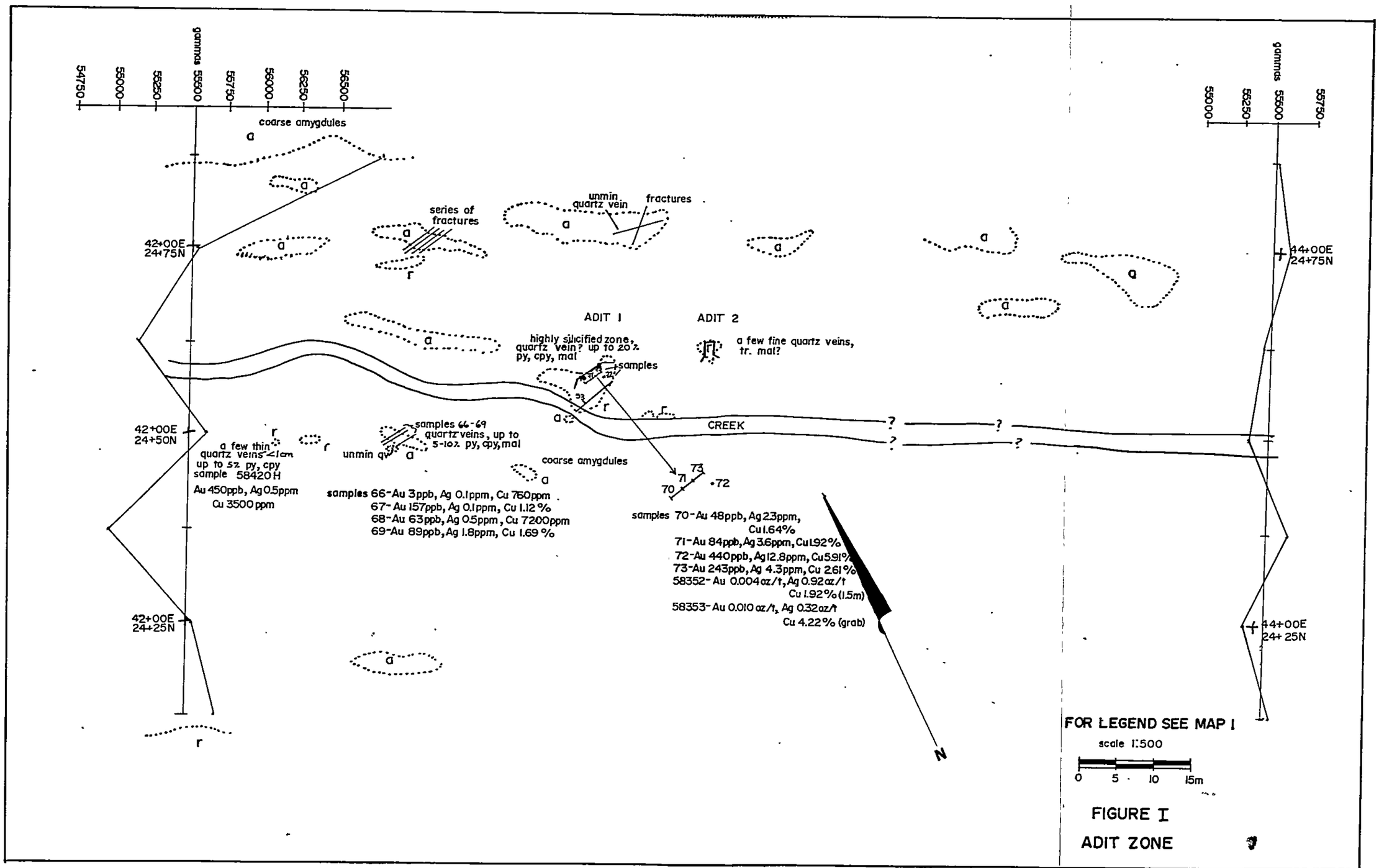
The Road Zone is located in a quarry on the road south of Paterson Lake. Across the road is a gravel pit. The nearest geophysics line is 54+00E at 14+75N. An intermediate line at 55+00E was put in. (see Figure IV).

The only outcrop exposed is in the quarry. Amygdaloidal basalt is probably dominant but at the showing itself it may be porphyritic.

All shearing and fracturing appears to be entirely N-S. A zone of very weathered bornite mineralization is localized along two parallel shears 40 cm apart. Each shear is approximately 10 cm wide. The rock is extremely chloritised and malachite stain is abundant.

REFERENCES

Muller, J.E., 1977, Geology of Vancouver Island, Geol. Surv. of Canada Open File Report #463.



FOR LEGEND SEE MAP I

scale 1:500

0 5 10 15m

FIGURE I

ADIT ZONE

m

m

m

+ 27+00E
16+25N

ep vein

m

+ 28+00E
16+25N

a

amygdules filled with epidote and calcite, no min.

fractures

coarse amygdules, filled with epidote

a

fractures

+ 27 00E
16 00N

epidote filled amygdules

a

+ 28+00E
16+00N

fractures

m

a

increased epidote alteration and mineralisation between two shears, blobs of py cpy in amygdules or calcite veins
samples 44-46

tr py

a

amygdules filled with ep+ca

tr po

a

tr cpy, mal with ep

a

a

ep

samples:
44-Au 0.024oz/t, Cu 2.24%
45-Au 0.03oz/t, Cu 2.61 %
46-Au 19ppb, Cu 5000ppm
58354-Au 0.016oz/t, Ag 1.21oz/t
Cu 1.42% (4m)

a

intense ep alt with cpy and py blebs and veins

shear
59 65 70

a

a

77

dec ep inc ca in ams

a

unmin quartz vein
4 cm

j

dyke

j

sample 47
Au 0.004 oz/t
Cu 1.64%
58355 Au 0.002 oz/t,
Ag 0.05 oz/t, Cu 0.41%

+ 27+00E
15+75N

ROAD

+ 28+00E
15+75N

FOR LEGEND SEE MAP I

scale 1:500

0 5 10 15m

FIGURE II

LAKE ZONE

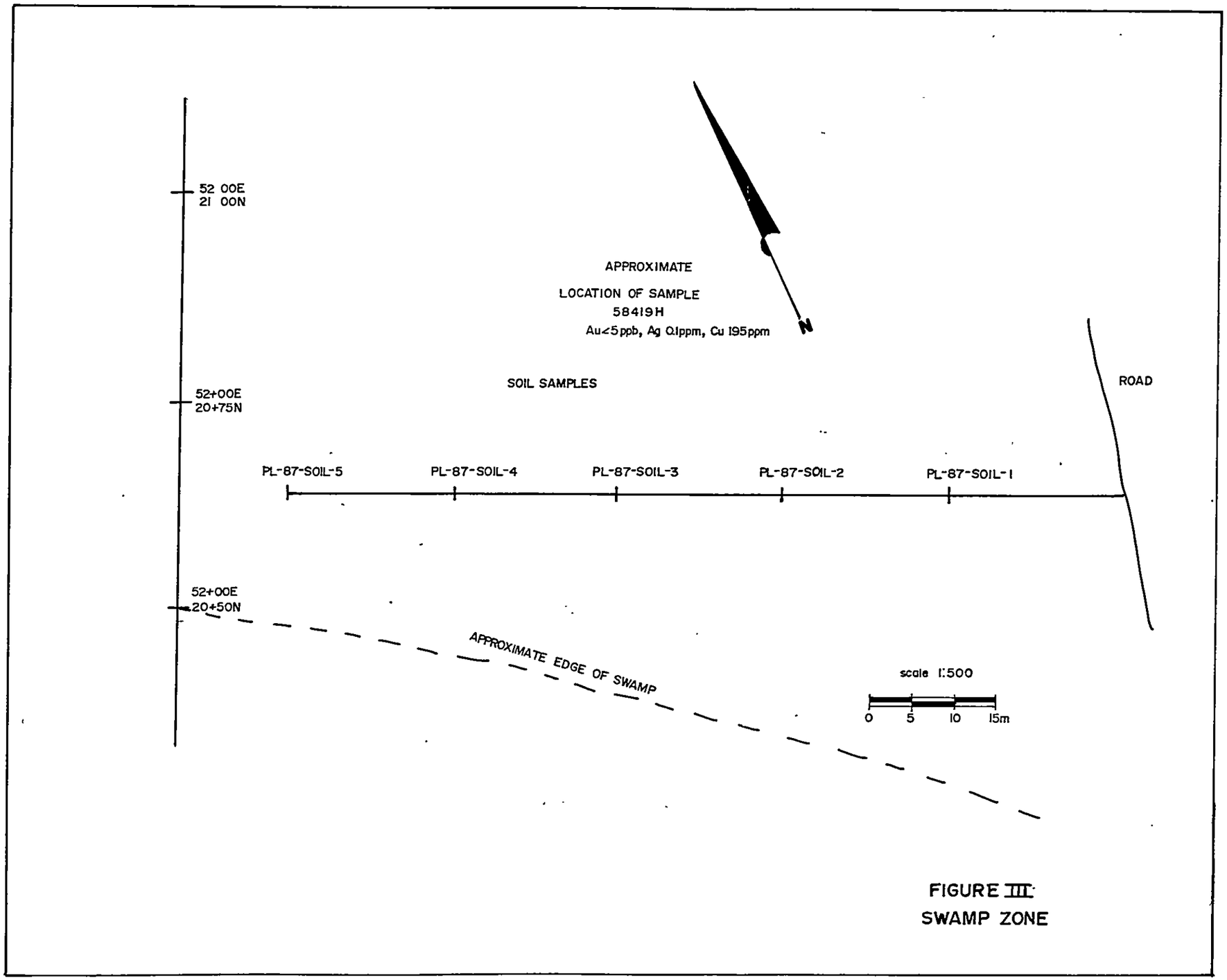
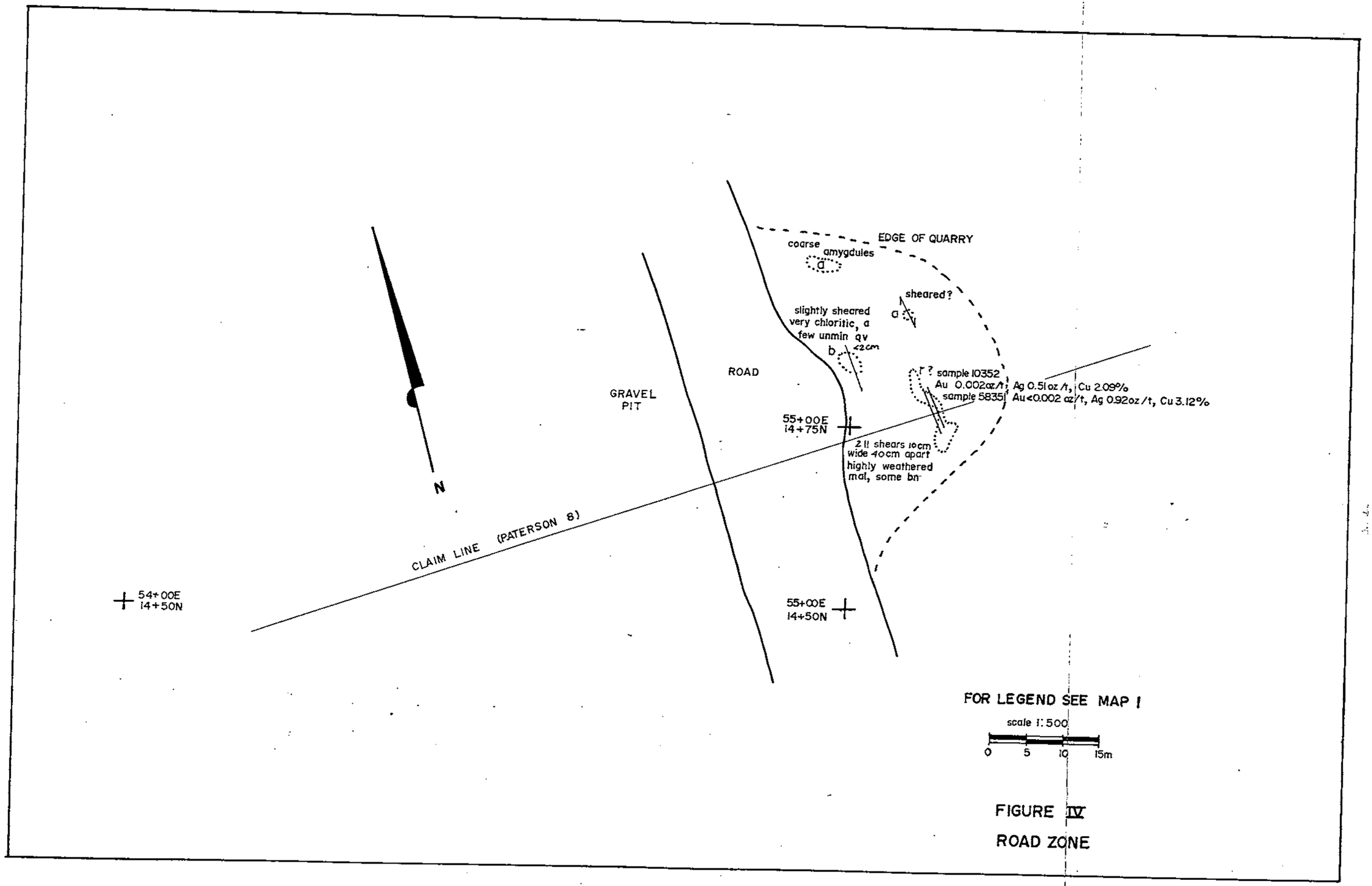


FIGURE III
SWAMP ZONE



FOR LEGEND SEE MAP I

scale 1:500

0 5 10 15m

FIGURE IV

ROAD ZONE

PATERSON LAKE PROJECT

DELLATERRA RESOURCES LTD.

COST STATEMENT

LINE CUTTING on claims Paterson Lake 1,2,3

Ron Bilquist - Contractor - April 1 - 13, 1987

34.9 km baseline and cross lines $ 9,378.00

GEOLOGICAL MAPPING AND REPORTS on claims Paterson Lake 1-6

Ellen E. Lambert Geologist Mapping April 15-30
May 1-15

1:5000 Scale Mapping

C. Sayer Geologist Examination of Showings

Resampling for Assay

Including Vehicles, Hotel, Air Photos, Etc. $ 13,852.80

SCOTT GEOPHYSICS on claims Paterson Lake 1,2,3

IP, VLF-EM and Magnetic Surveys $ 18,525.13

April 20-27, May 7-13, 1987

TOTAL EXPENDITURES	$ 41,755.93
LESS AMOUNT FILED TO APRIL 17, 1987	$ 10,352.00
EXPENDITURES THIS PERIOD	$ 31,403.93

J.C. Stephen Explorations Ltd.

J.C. Stephen, President

JCS/ms

APPENDIX I

STATEMENT OF QUALIFICATIONS

I, Ellen E. Lambert, of Vancouver, B.C., hereby certifty that:

1. I am a Fellow of the Geological Association of Canada.

2. I have a Bachelors Degree in Geology from the University of Washington (1979) and a Masters Degree in Geology from the University of New Mexico (1983).

3. I have practised off and on as a Geologist since 1979 in gold exploration, on large-scale mapping projects with the GSC, and as a teacher.

4. This report is based upon a study of all available data on the Paterson Lake claims, and detailed mapping by myself from April 16th to May 8th, 1987.

5. I have no interest, and no intent to acquire any interest, in the described claims.

Vancouver, B.C.
May 1987

Ellen E. Lambert

Ellen E. Lambert, B.Sc., M.Sc.
Geologist

A P P E N D I X II

CORPORATION FALCONBRIDGE COPPER MEMO FEBRUARY 5, 1986

CORPORATION FALCONBRIDGE COPPER

MEMORANDUM

DATE: February 5, 1986

Doug Paterson
2886 6 Ave Port Alberni. BC

A TO: A. J. Davidson

C.C. IS A IS TO: D. Patterson

DE FROM: D. V. Lefebure

phone 723 7519.

SUJET SUBJECT: Evaluation of Patterson Lake Property, Vancouver Island, 92F/7W + 92F/6E

Introduction

On November 9, 1985 Alex Davidson and I visited the Patterson Lake Property with the three Port Alberni prospectors who own it. During the Property examination the showings on the eastern half of the Property were examined and sampled.

Target

Precious metals in quartz veins and altered volcanic wallrock.

Location

This Property is located on Vancouver Island in the Alberni Mining Division, approximately 15km northwest of Port Alberni. The claims extending along the northeast side of Great Central Lake and are easily accessible by paved and gravel roads. Strathcona Provincial Park adjoins the Property on the northwest.

Ownership

The claims are owned by four prospectors from Port Alberni. We have dealt with:

Doug Patterson	and	Herb McMaster
2886 6th Avenue		Port Alberni, B. C.
Port Alberni, B. C.		723-7027
V9Y 2H3		

The property encompasses the following claims (see Figure 1):

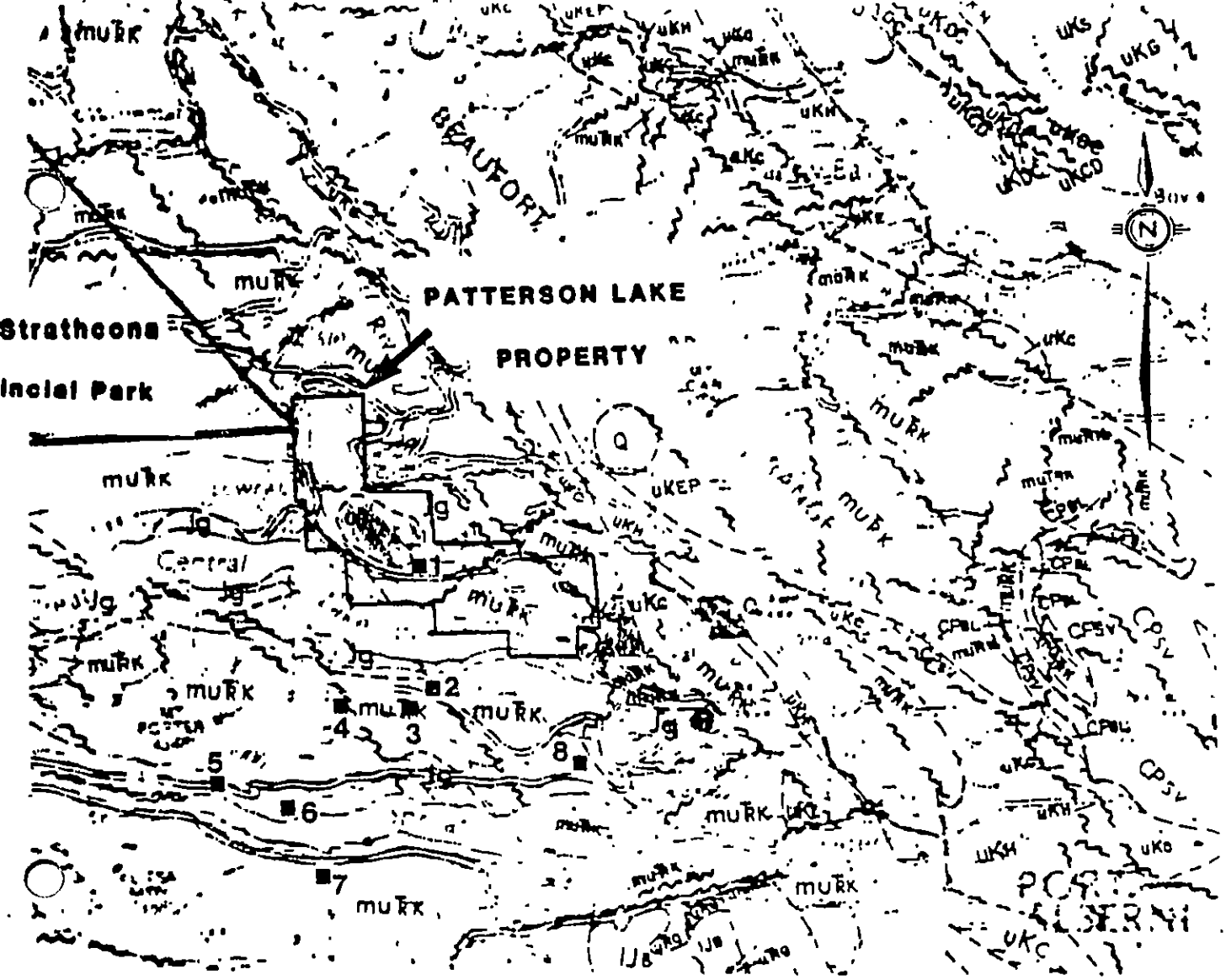
Name	Record No.	Units
Paterson	1993(3)	20
Paterson 1	2000(3)	15
Paterson Lake 3	2207(4)	8
Paterson Lake 4	2208(4)	8
Paterson Lake 6	2209(4)	20
Central 1	2319(7)	15
Central 2	2320(7)	15
Central 3	2321(7)	16
Central 4	2322(7)	18
Central 5	2323(7)	18
Central 6	2462(12)	6
Central 7	2463(12)	6
Ash #1	2552(7)	18
Ash #2	2553(5)	18

Previous Work

Exploration on the Property has been limited to trenching and adits on various showings. No assessment reports have been filed from this area. The current owners have been blasting and digging on some of the known quartz veins and shear zones to find more mineralization.

Geology

The area is underlain by Karmutsen basalts, Island intrusions and Nanaimo sediments (Figure 2) which are cut by NE-, NW- and E-trending faults. Paul Wilton, B.C.M.E.M.P.R. district geologist, has identified a feldspar porphyry dyke on the claims of possible Tertiary age which may be related to the precious metal mineralization.



Legend

■ Minfile Listing
1 - Centennial (Roseanne) - Fe, Cu #293
2,3,4 - Hm - Cu or Cu, Sb, Hg, #306, 307, 230
5,6 - Herb - Cu #232, 362
7 - Murphy - Johnson - Cu #249
8 - R - Cu #341

UK - Nanaimo sediments
Jg - Island intrusions
MuRK - Karmutsen volcanics

Figure 2 Geology of the Great Central Lake area (from Muller, 1977)

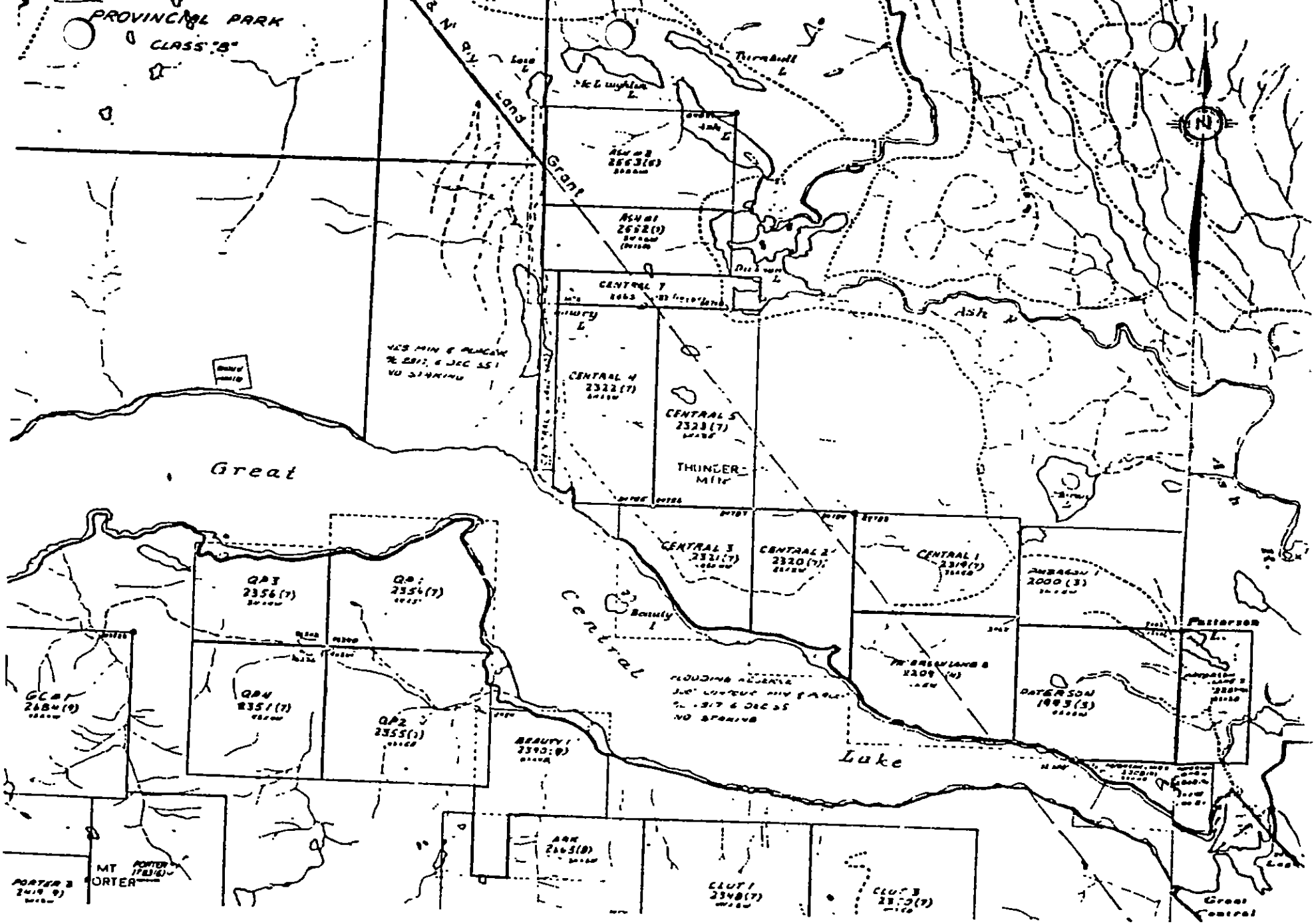


Figure 1 Location of Patterson Lake Property claims.

Mineralization

Three types of mineralization occur on the Property:

1) copper in shear zones
2) gold in quartz veins + carbonate
3) gold and copper in altered volcanics.

Shear zones containing bornite, chalcopyrite, pyrite and magnetite are present with good copper values over narrow widths (5.6% Cu, BCS 2392, Table 1)). Centennial, the only showing on the claims listed in Minfile, is a shear zone in amygdaloidal Karmutsen basalt containing chalcopyrite, pyrite and magnetite in a quartz gangue.

Several quartz veins sometimes with carbonate, were examined which reportedly carry gold values. Some carry minor amounts of pyrite. The single CFC analysis of a quartz vein contains only 5 ppm Au. Both the quartz veins and shear zones trend north and east.

The most promising type of mineralization consists of chalcopyrite and bornite with associated gold and possibly silver (reportedly 0.35 to 2.5 oz/ton silver) in altered Karmutsen volcanics. Both epidote alteration and silicification of volcanics, sometimes with associated sulphides, is found in a number of outcrops. One exposure of amygdaloidal basalt with chalcopyrite and bornite adjacent to a Tertiary (?) feldspar porphyry dyke contains high gold (95 and 5500 ppb Au) and copper (25,500 and 81,000 ppm) values. Further sampling is required to establish the extent of mineralization in the altered volcanics.

Table 1. Gr[illegible]sample analyses from Patterson [illegible]ke Property

MIN-EN Laboratories Ltd.

Specialists in Mineral Environments

705 WEST 15th STREET NORTH VANCOUVER, B.C. CANADA V7M 1T2

NE:(604)980-5814 OR (604)988-4524 TELEX: 04-352828

GEOCHEMICAL ANALYSIS CERTIFICATE

COMPANY: CORP.FALCONBRIDGE COPPER
PROJECT: 302/305
ATTENTION: D.LEFEBURE/A.DAVIDSON

FILE: 5-924
DATE: NOV.27/85.
TYPE: ROCK GEOCHEM

I hereby certify that the following are the results of the geochemical analysis made on 6 samples submitted.

SAMPLE NUMBER	AG ppm	CU PPM	AU PPB	
CS-2390	1.2	450	5	Outcrop #1, quartz vein
2391	0.8	90	5	Outcrop #3, silicified Karmutsen volcanic
2392	36.9	56000	45	Outcrop #5, malachite-bornite shear zone
2393	20.1	25500	95	Outcrop #6, altered Karmutsen adjacent to dyke
2394	24.0	51000	5500 .160/t	Outcrop #6, disseminate chalcopyrite on fractur ~~and in amygdules in Karmutsen lava.~~
CS [illegible]2397	5.1	7900	50	Outcrop #7, chalcopyrite and malachite with quartz gangue in altered Karmutsen.

Chemex Labs Ltd.
Analytical Chemists • Geochemists • Registered Assayers
212 BROOKSBANK AVE. NORTH VANCOUVER,
BRITISH COLUMBIA, CANADA V7J-2C1
PHONE (604) 984-0221

CERTIFICATE OF ANALYSIS A8713562

To: STEPHEN, J.C. EXPLORATION LIMITED

746 REGAL CRESCENT
NORTH VANCOUVER, B.C.
V7K 2X8

Page No. :1
Tot. Pages:2
Date :01-MAY-87
Invoice # :I-8713562
P.O. # :NONE

Project : PATTERSON DELLA TERRA
Comments: PATERSON LAKE PROJECT

SAMPLE DESCRIPTION	PREP CODE		Cu ppm	Ag ppm Aqua R	Au NAA ppb
87 B 030	205	---	10	0.1	2
87 B 031	205	---	36	0.1	< 1
87 B 033	205	---	180	0.1	2
87 B 034	205	---	23	0.1	1
87 B 035	205	---	46	0.1	1
87 B 036	205	---	181	0.1	3
87 B 038	205	---	192	0.1	3
87 B 040	205	---	65	0.1	3
87 B 041	205	---	26	0.1	1
87 B 042	205	---	590	0.1	15
87 B 043	205	---	120	0.1	3
87 B 044	205	---	>10000	3.0	885
87 B 045	205	---	>10000	57.0	1500
87 B 046	205	---	5000	2.1	19
87 B 047	205	---	>10000	4.5	2
87 B 048	205	---	700	0.1	3
87 B 049	205	---	680	0.1	8
87 B 050	205	---	57	0.1	2
87 B 051	205	---	1280	0.2	10
87 B 052	205	---	1000	0.2	21
87 B 053	205	---	1390	0.2	10
87 B 054	205	---	1760	0.3	17
87 B 055	205	---	1500	0.4	24
87 B 056	205	---	138	0.1	2
87 B 057	205	---	30	0.1	< 1
87 B 058	205	---	15	0.1	< 1
87 B 059	205	---	7	0.1	< 1
87 B 060	205	---	7	0.1	< 1
87 B 061	205	---	200	0.3	4
87 B 062	205	---	24	0.1	< 1
87 B 063	205	---	400	0.9	1350
87 B 064	205	---	31	0.5	5
87 B 065	205	---	71	0.1	10
87 B 066	205	---	760	0.1	3
87 B 067	205	---	10000	2.6	157
87 B 068	205	---	7200	0.5	63
87 B 069	205	---	>10000	1.8	89
87 B 070	205	---	>10000	2.3	48
87 B 071	205	---	>10000	3.6	84
87 B 072	205	---	>10000	12.8	440

CERTIFICATION : Ian Bichler

Chemex Labs Ltd.
Analytical Chemists * Geochemists * Registered Assayers
212 BROOKSBANK AVE., NORTH VANCOUVER,
BRITISH COLUMBIA, CANADA V7J-2C1
PHONE (604) 984-0221

CERTIFICATE OF ANALYSIS A8713562

To: STEPHEN, J.C. EXPLORATION LIMITED

746 REGAL CRESCENT
NORTH VANCOUVER, B.C.
V7K 2X8

Project : PATTERSON
Comments:

Page No. :2
Tot. Pages:2
Date :01-MAY-87
Invoice # :I-8713562
P.O. # :NONE

SAMPLE DESCRIPTION	PREP CODE		Cu ppm	Ag ppm Aqua R	Au NAA ppb
87 B 073	205	--	>10000	4.3	243
87 B 074	205	--	290	0.1	3
87 B 076	205	--	154	0.1	3
87 B 077	205	--	170	0.5	5
87 B 078	205	--	1150	0.1	12
87 B 079	205	--	3900	0.8	61
87 B 080	205	--	2500	0.4	31
87 B 081	205	--	2650	0.4	26
87 B 082	205	--	80	0.1	3
87 B 083	205	--	2250	0.3	27
87 B 084	205	--	5500	0.7	65
87 B 085	205	--	180	0.1	2
87 B 087	205	--	450	0.1	31
87 B 088	205	--	48	0.1	2
87 B 089	205	--	87	0.1	13
87 B 090	205	--	-----	0.1	14
87 B 091	205	--	-----	0.1	3
87 B 095	205	--	-----	0.3	< 1
87 B 096	205	--	-----	0.1	4
87 B 097	205	--	-----	0.1	3
87 B 098	205	--	-----	0.1	5
87 B 099	205	--	-----	0.1	2
87 B 100	205	--	-----	0.1	12
87 B 101	205	--	-----	0.1	20
87 B 102	205	--	-----	0.1	12
87 B 104	205	--	-----	0.1	< 1
87 B 105	205	--	-----	0.1	6

CERTIFICATION : Ian Bichler

Chemex Labs Ltd.
Analytical Chemists * Geochemists * Registered Assayers
212 BROOKSBANK AVE., NORTH VANCOUVER,
BRITISH COLUMBIA, CANADA V7J-2C1
PHONE (604) 984-0221

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V7J 1E9

Page No. : 1
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Date : 28-APR-87
Invoice # : I-8713563
P.O. # : NONE

Project : PATTERSON
Comments:

SAMPLE DESCRIPTION	PREP CODE		Cu ppm	Ag ppm Aqua R	Au ppb FA+AA
87 B 032	201	—	59	0.1	30
87 B 037	201	—	41	0.1	5
87 B 039	201	—	340	0.1	5
87 B 075	201	—	83	0.1	< 5
87 B 086	201	—	132	0.1	< 5
87 B 092	201	—	-----	0.1	< 5
87 B 093	201	—	-----	0.1	< 5
87 B 094	201	—	-----	0.1	< 5
87 B 103	201	—	-----	0.1	< 5

CERTIFICATION : Hart Bichler

Chemex Labs Ltd.

Analytical Chemists * Geochemists * Registered Assayers

212 BROOKSBANK AVE., NORTH VANCOUVER,
BRITISH COLUMBIA, CANADA V7J-2C1

PHONE (604) 984-0221

CERTIFICATE OF ANALYSIS A8714743

To : STEPHEN, J.C. EXPLORATION LIMITED

746 REGAL CRESCENT
NORTH VANCOUVER, B.C.
V7K 2X8

Project : PATTERSON
Comments:

Page No. : 1
Tot. Pages: 1
Date : 22-MAY-87
Invoice # : I-8714743
P.O. # : NONE

SAMPLE DESCRIPTION	PREP CODE		Cu %	Au FA oz/T
87 B 044	214	---	2.24	0.024
87 B 045	214	---	2.61	0.030
87 B 047	214	---	1.64	0.004
87 B 063	214	---	-----	0.042
87 B 067	214	---	1.12	-----
87 B 069	214	---	1.69	-----
87 B 070	214	---	1.64	-----
87 B 071	214	---	1.92	-----
87 B 072	214	---	5.91	-----
87 B 073	214	---	2.61	-----

ALL ASSAY DETERMINATIONS ARE PERFORMED OR SUPERVISED BY B.C. CERTIFIED ASSAYERS

CERTIFICATION : W. Glen Bonsini

Chemex Labs Ltd.

Analytical Chemists * Geochemists * Registered Assayers

212 BROOKSBANK AVE., NORTH VANCOUVER,
BRITISH COLUMBIA, CANADA V7J-2C1

PHONE (604) 984-0221

CERTIFICATE OF ANALYSIS A8714001

To : STEPHEN, J.C. EXPLORATION LIMITED

746 REGAL CRESCENT
NORTH VANCOUVER, B.C.
V7K 2X8

Project : PATERSON
Comments:

Page No. : 1
Tot. Pages: 1
Date : 6-MAY-87
Invoice # : I-8714001
P.O. # : NONE

SAMPLE DESCRIPTION	PREP CODE		Cu %	Ag FA oz/T	Au FA oz/T
58351 H	207	—	3.12	0.92	< 0.002
58352 H	207	—	1.92	0.15	0.004
58353 H	207	—	4.22	0.32	0.010
58354 H	207	—	1.42	1.21	0.016
58355 H	207	—	0.41	0.05	< 0.002

Peter Christopher took these

ALL ASSAY DETERMINATIONS ARE PERFORMED OR SUPERVISED BY BC CERTIFIED ASSAYERS

CERTIFICATION : W. Dankmeijer

Chemex Labs Ltd.

Analytical Chemists * Geochemists * Registered Assayers
212 BROOKSBANK AVE., NORTH VANCOUVER,
BRITISH COLUMBIA, CANADA V7J-2C1
PHONE (604) 984-0221

CERTIFICATE OF ANALYSIS A8715306

To : STEPHEN, J.C. EXPLORATION LIMITED

746 REGAL CRESCENT
NORTH VANCOUVER, B.C.
V7K 2X8

Page No. : 1
Tot. Pages: 1
Date : 2-JUN-87
Invoice # : I-8715306
P.O. # : NONE

Project : DELLATERA
Comments:

SAMPLE DESCRIPTION	PREP CODE		Cu ppm	Ag ppm Aqua R	Au ppb FA+AA
58419	205	—	195	0.1	< 5
58420	205	—	3500	0.5	450

CERTIFICATION : Ian Bachlor

Chemex Labs Ltd.

Analytical Chemists * Geochemists * Registered Assayers
212 BROOKSBANK AVE., NORTH VANCOUVER,
BRITISH COLUMBIA, CANADA V7J-2C1
PHONE (604) 984-0221

CERTIFICATE OF ANALYSIS A8715305

To: STEPHEN, J.C. EXPLORATION LIMITED

746 REGAL CRESCENT
NORTH VANCOUVER, B.C.
V7K 2X8

Project : DELLATERA
Comments:

Page No. :1-B
Tot. Pages: 1
Date :03-JUN-87
Invoice # :I-8715305
P.O. # :NONE

SAMPLE DESCRIPTION	PREP CODE		Mo ppm	Na %	Ni ppm	P ppm	Pb ppm	Sb ppm	Se ppm	Sr ppm	Ti %	Tl ppm	U ppm	V ppm	W ppm	Zn ppm
PL-87-SOIL-1	201	238	< 1	0.01	13	250	< 2	< 5	< 10	43	0.24	< 10	< 10	100	< 5	30
PL-87-SOIL-2	201	238	< 1	0.01	9	320	< 2	< 5	< 10	34	0.22	< 10	< 10	86	< 5	36
PL-87-SOIL-3	201	238	< 1	0.01	12	280	< 2	< 5	< 10	31	0.23	< 10	< 10	108	< 5	34
PL-87-SOIL-4	201	238	< 1	0.01	10	280	4	< 5	< 10	30	0.26	< 10	< 10	115	< 5	32
PL-87-SOIL-5	201	238	< 1	0.01	8	100	6	< 5	< 10	49	0.19	< 10	< 10	91	< 5	18

CERTIFICATION : B. Cuyle

J.C. STEPHEN EXPLORATIONS LTD.

GEOCHEMICAL DATA SHEET — ROCK GEOCHEM SAMPLING

B.C. GOLD SYNDICATE

NTS 92 F 6W 7E, 3W.

SAMPLER C. SAYER.

PROJECT ALBERNI (J.C. STEPHEN EXP)

LINE

DATE FEB 7 1987

AIR PHOTO No.

SAMPLE NUMBER	LOCATION	ROCK TYPE	ALTERATION	MINERALIZATION	STRIKE / DIP	ADDITIONAL REMARKS	APPARENT WIDTH	TRUE WIDTH	ASSAYS Au.	Ag	Cu%
10351 H	ASH CLAIMS ABOVE ASH LAKE	KARMUTSEN VOLCANICS	chloritic	Pod Py Cpy		2' wide zone 260°/80°S SULPHIDE RICH POD 2cm W of Qtz carb veins, blebs cpy 29074A		GRAB	0.005	0.15	0.44
10352 H	PATERSON LAKE #3 E. Side Main Road			CHALCOCITE? Bornite ABUNDANT MALACHITE		TWO 6" SHEAR ZONES 40cm 2' APART 348°/80°E	4'	CHIP SAMPLE	0.002	0.51	2.09
10354 H	DOUG'S SMALL PIECE OF FLOAT BELOW SNOW								0.002	0.13	0.25
29069 A	PATERSON LAKE #1 INSIDE RR GRADE THUNDER BAY	VOLCANICS		Bornite, Cpy blebs + stringers in sil'd altered volc					0.030	0.13	3.21
070 A	PATERSON LAKE #1 N SIDE THUNDER BAY RD	PILLOWED? VOLCANICS	ZONE BETWEEN 2 SHEARS	Cpy Bornite ? Epidote			3'	CHIP	0.062	0.06	0.44
071 A	PATERSON L. #1 #1 ADIT			Py, cpy in silic zone above shear	295°/NE		5'	CHIP	0.006	0.13	1.26
072 A	PATERSON L. #1 S SIDE RR GRADE			Series of Qtz veins					0.006	0.13	1.92
073 A	PATERSON L. #1 #1 ADIT		SHEARED VOLC CHLORITIC	Zone below shear			5'	GRAB	0.002	0.13	2.08
074 A	ASH CLAIMS ROAD ABOVE WEST SIDE ASH LAKE	KARMUTSEN VOLCANICS	chloritic			2' wide zone Str 90°/60°S Qtz carb veins, blebs cpy	Zone 2'	GRAB	0.028	0.58	4.28

J.C. STEPHEN EXPLORATIONS LTD.

GEOCHEMICAL DATA SHEET – SOIL SAMPLING

B.C GOLD SYNDICATE

NTS 92F 6W

SAMPLER C. Sayer

DATE May 28

PROJECT Dellaterra

LINE

AIR PHOTO NO.

SAMPLE NO.	LOCATION	Depth	Horiz	DESCRIPTION				SLOPE	VEG.	ADDITIONAL OBSERVATIONS OR REMARKS	ASSAYS			
				Colour	Part Size	% ORG.	Ph				Au	As		
PL-87 Soil 1		10cm	B	Med reddish				Mod to						
Soil 2		10cm	B	brown				gentle						
3		10cm	B											
4		10cm	B											
5		15cm	B					Mod - steep		Difficult to find good sample, too humus Sayer maybe stumping?				

J.C. STEPHEN EXPLORATIONS LTD.

GEOCHEMICAL DATA SHEET — ROCK GEOCHEM SAMPLING

B.C. GOLD SYNDIC.

NTS 92 F 6W

SAMPLER C. Sayer

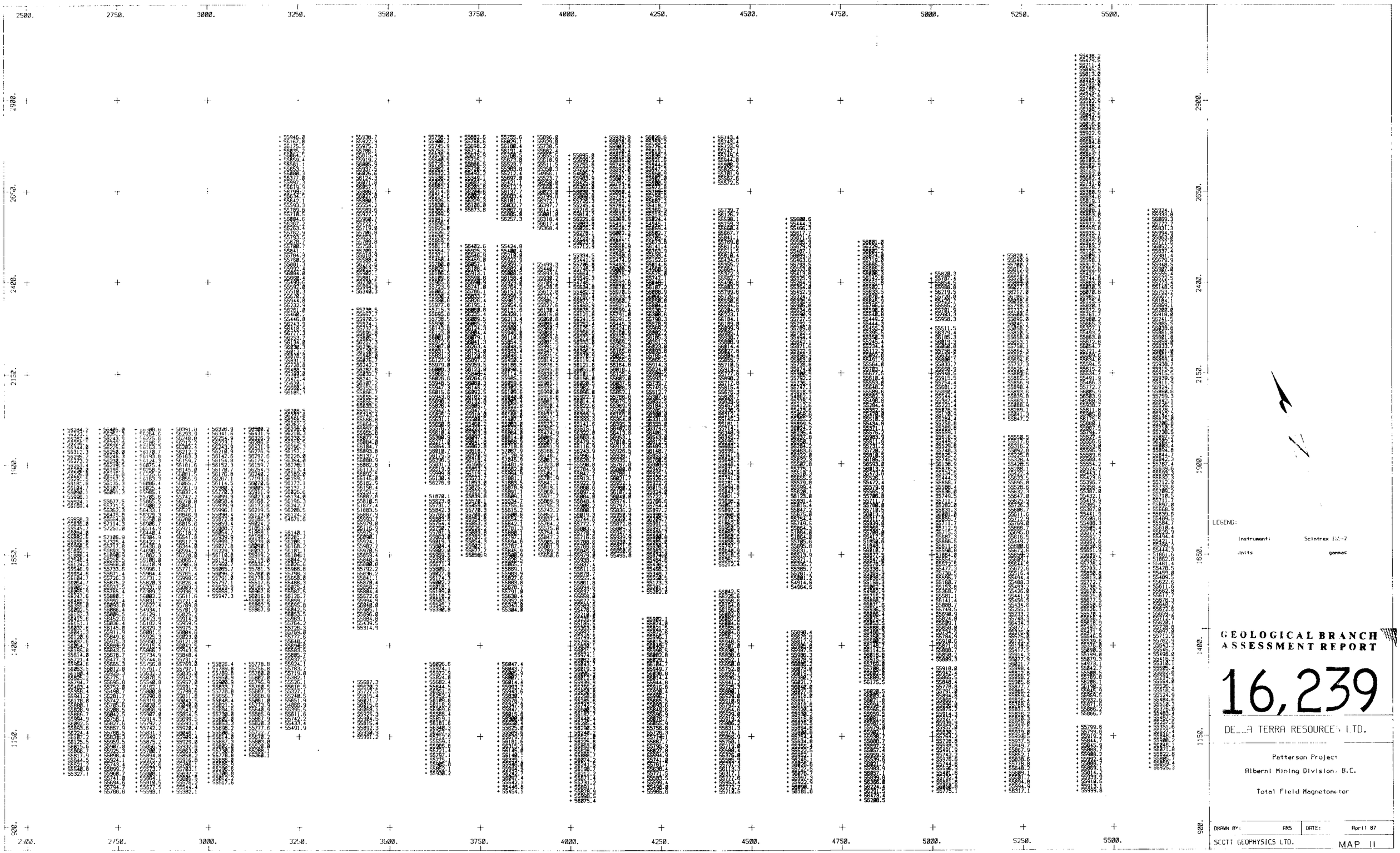
PROJECT Dellaterra

LINE

DATE May 26

AIR PHOTO No.

	SAMPLE NUMBER	LOCATION	ROCK TYPE	ALTERATION	MINERALIZATION	STRIKE / DIP	ADDITIONAL REMARKS	APPARENT WIDTH	TRUE WIDTH	ASSAYS Au.	As.	Sb.	
(1)	58419	NE of swamp left of road	E. Basalt	Chloritised; Qtz veined			Float - sample						
(2)	58420	24+49 N (40.12) = 42+12 E	porph.? basalt	Chloritised, Qtz veins.	1-5% Py Cpy in veins		Grab very small o/c						
(3)													
(4)													
(5)													
(6)													
(7)													
(8)													
(9)													
(10)													
(11)													
(12)													
(13)													
(14)													
(15)													
(16)													
(17)													
(18)													
(19)													
(20)													



LEGEND:

Instrument: Scintrex IGS-2

Units gammas

GEOLOGICAL BRANCH
ASSESSMENT REPORT

16,239

DELTA TERRA RESOURCES LTD.

Patterson Project

Alberni Mining Division. B.C.

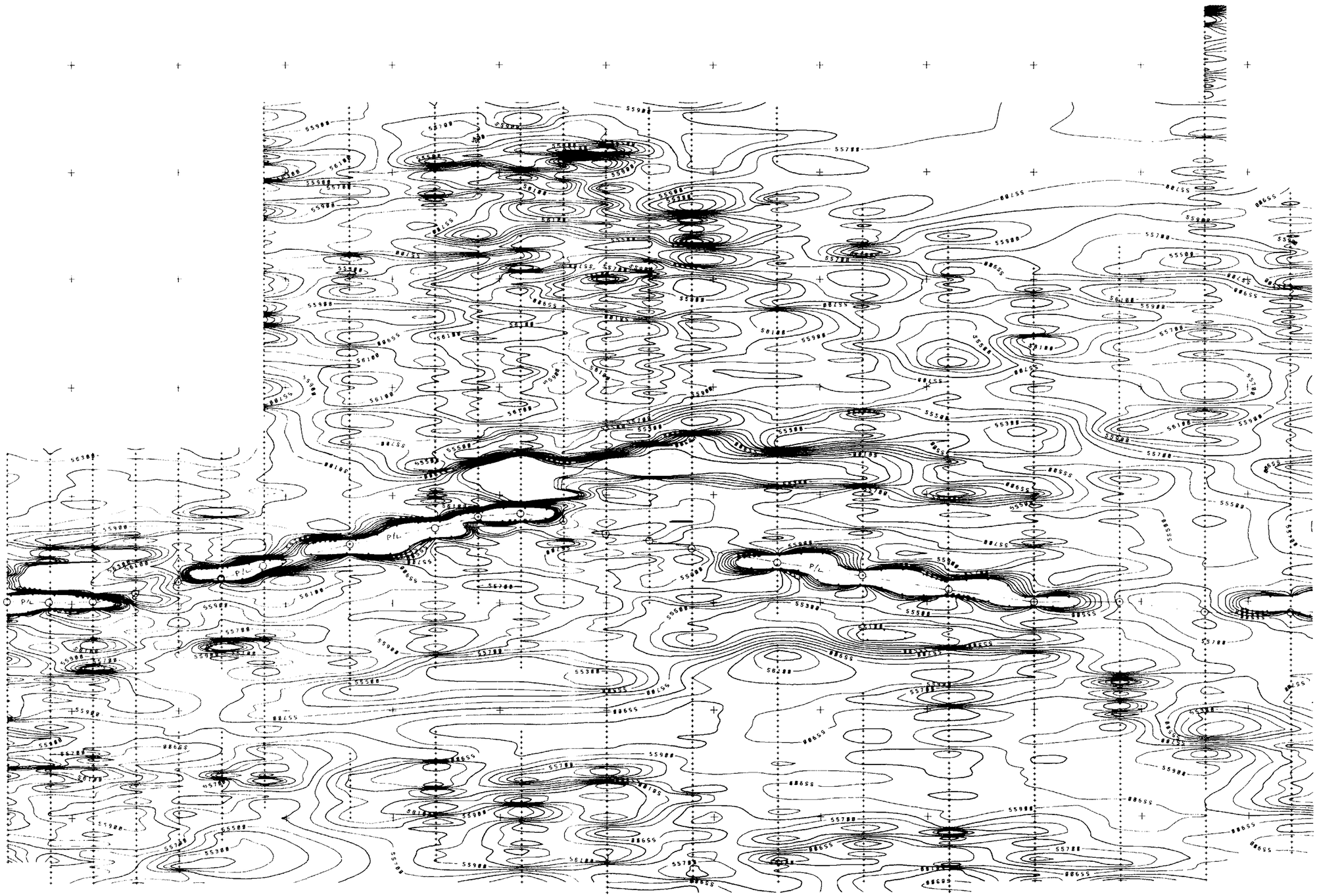
Total Field Magnetometer

DRAWN BY:	ARS	DATE:	April 87

SCOTT GEOPHYSICS LTD. MAP 11

2500. 2750. 3000. 3250. 3500. 3750. 4000. 4250. 4500. 4750. 5000. 5250. 5500.

2900. 2650. 2400. 2150. 1900. 1650. 1400. 1150. 900.



LEGEND:

Instrument: Scintrex IGS 2

heavy contours @ 200 gamma intervals

light contours @ 100 gamma intervals

ticks on low side of 55000 gammas

GEOLOGICAL BRANCH
ASSESSMENT REPORT

16,239

DELLA TERRA RESOURCES LTD.

Patterson Project

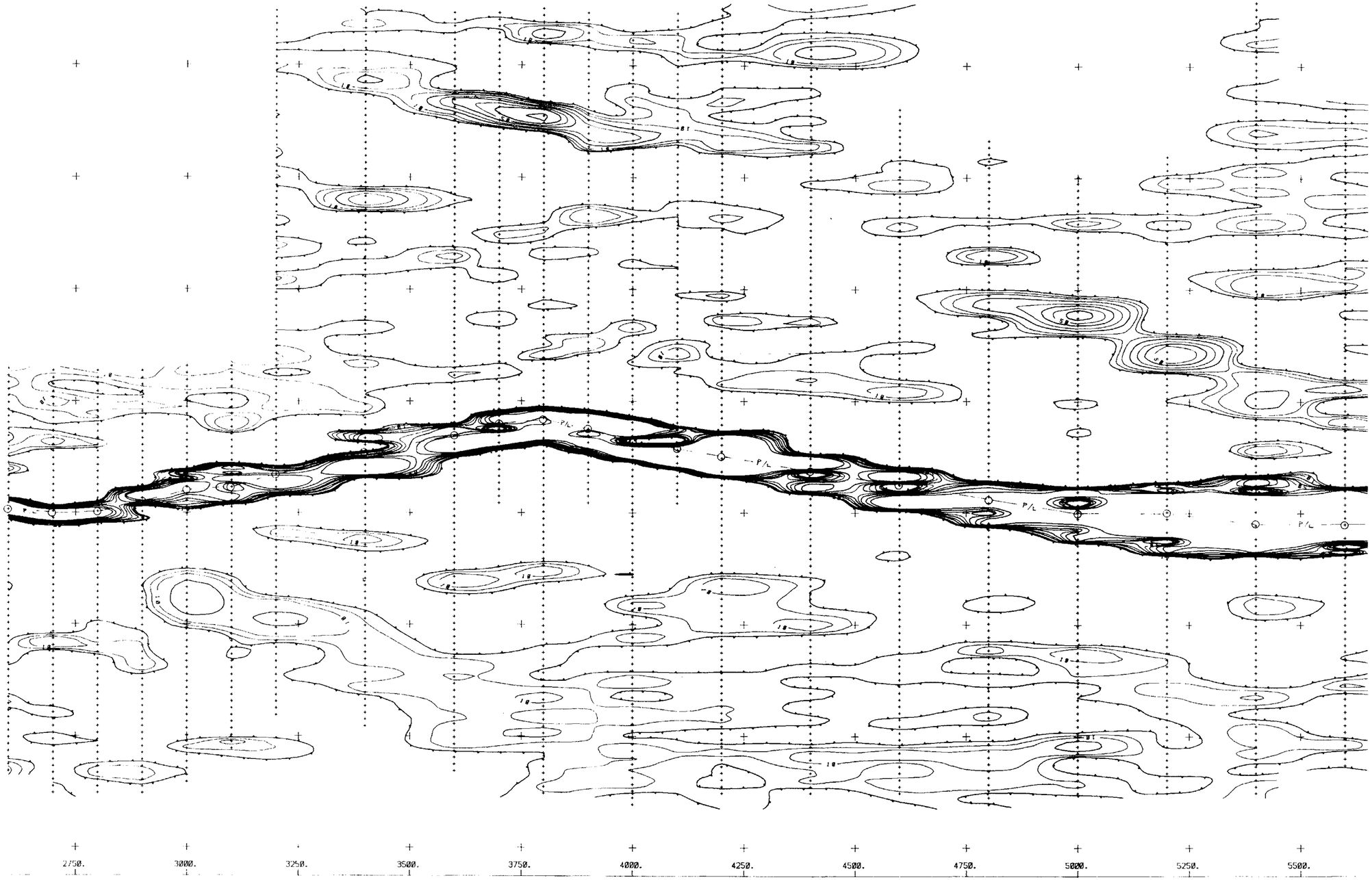
Alberni Mining Division, B.C.

Total Field Magnetometer

DRAWN BY:	ARS	DATE:	April 87
SCOTT GEOPHYSICS LTD.			MAP III

2500. 2750. 3000. 3250. 3500. 3750. 4000. 4250. 4500. 4750. 5000. 5250. 5500.

2900. 2650. 2400. 2150. 1900. 1650. 1400. 1150. 900.



LEGEND:

Station NLK (Seattle, Washington) at 24.8 kHz

In Phase values filtered at 15 meter interval

heavy contours: @ 0, 20, 40, 60, 80, 100 %

ticks indicate depression side of 0 %

light contours: @ 5, 10, 30, 50 %

NOTE: the plotting points on the plan indicate the filtered data location (15 meter intervals)

DELLA TERRA RESOURCES LTD.

Patterson Project

Alberni Mining Division, B.C.

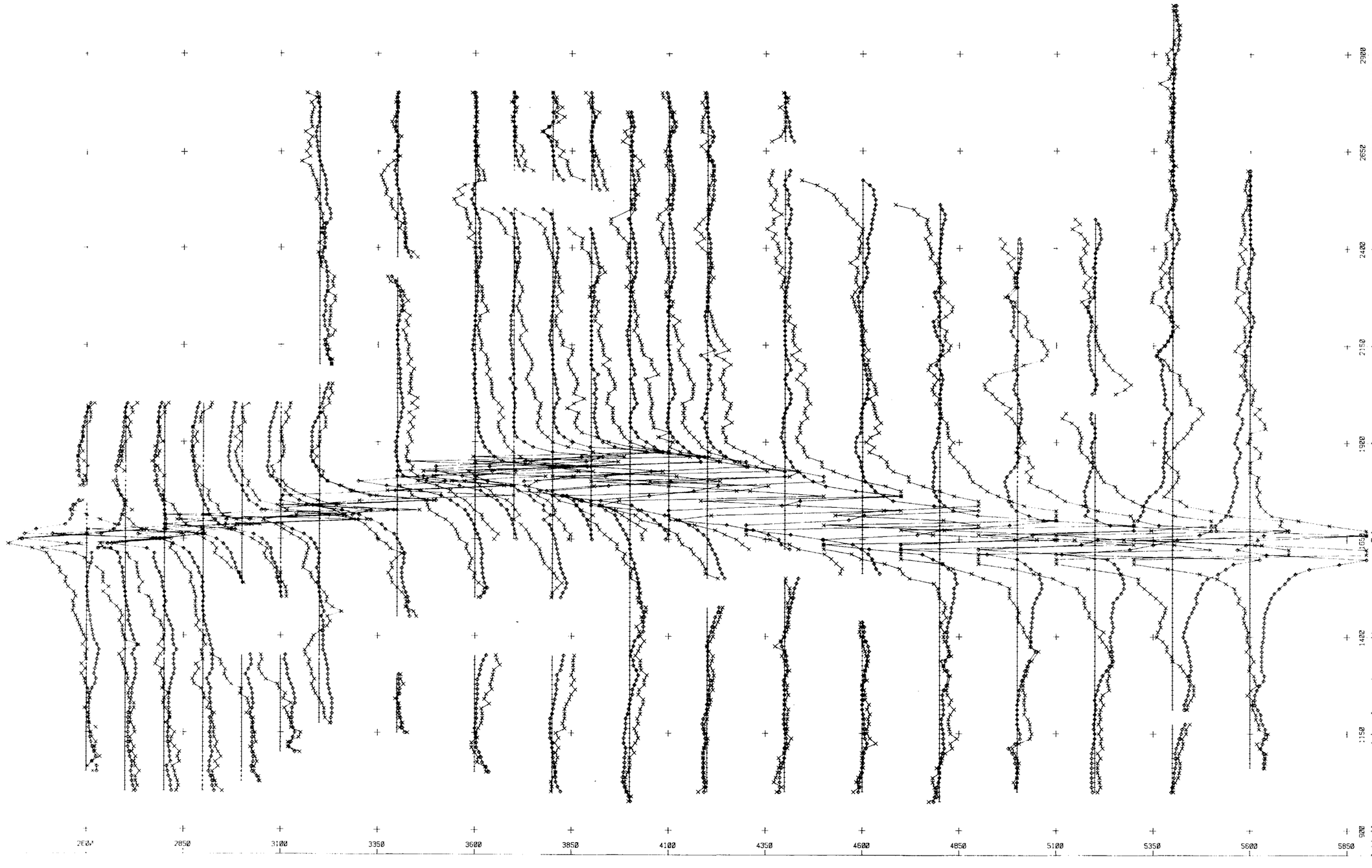
Fraser Filter Contour Plan

DRAWN BY:	RRS	DATE:	April 87

SCOTT GEOPHYSICS LTD. MAP IV

2350 2600 2850 3100 3350 3600 3850 4100 4350 4600 4850 5100 5350 5600 5850

2900 2650 2400 2150 1900 1650 1400 1150 900



LEGEND:

Station NLK (Seattle, Washington) at 24.8 kHz

In Phase values at 20% / cm

Quadrature values at 20% / cm

Zero % at the line

Positive values above the line

Instrument: Scintrex IGS-2

GEOLOGICAL BRANCH ASSESSMENT REPORT

16,239

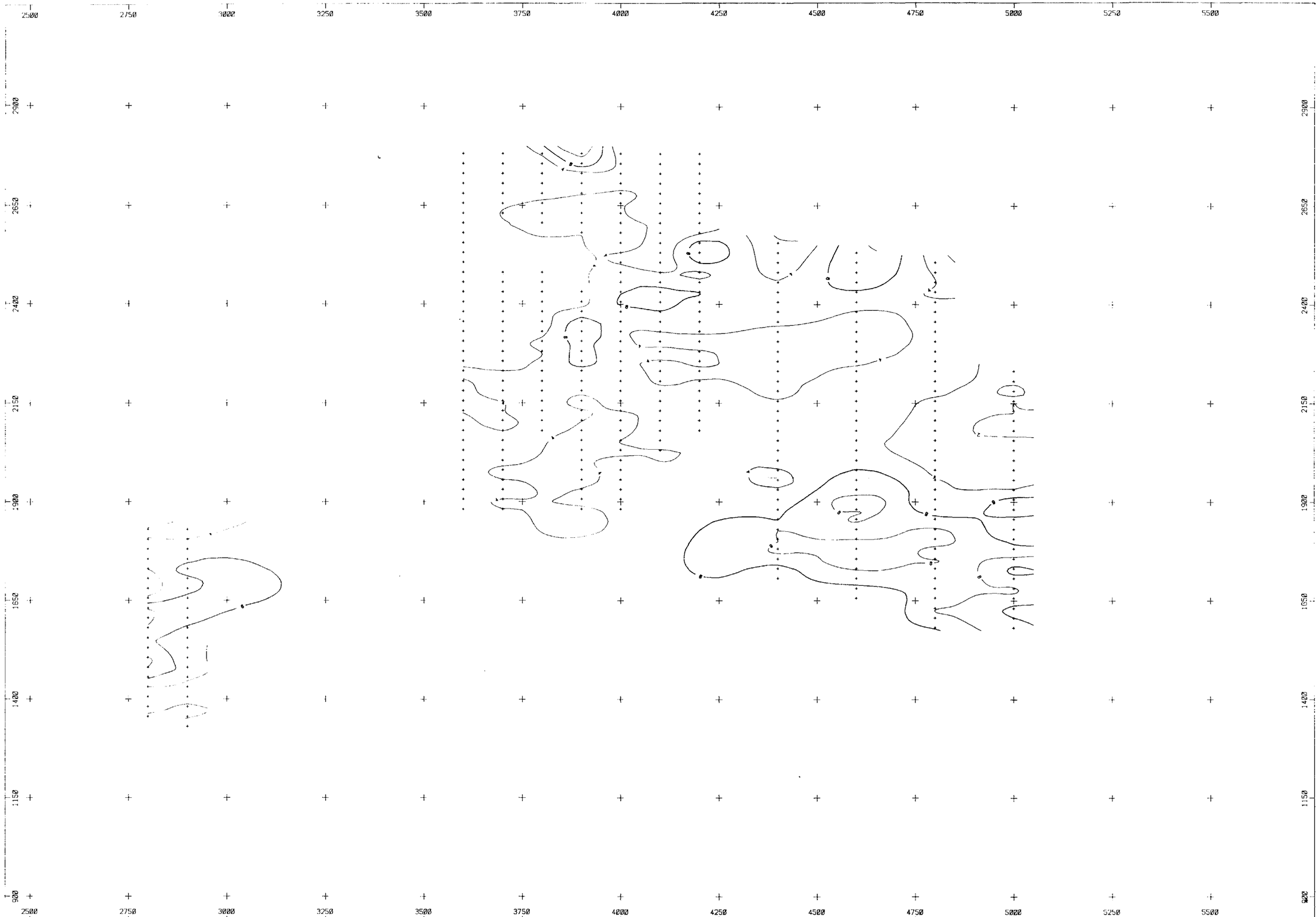
DELLA TERRA RESOURCES LTD.

Patterson Project

Alberni Mining Division, B.C.

VLF Survey

DRAWN BY:	RKS	DATE:	April 1987
SCOTT GEOPHYSICS LTD.			MAP V



LEGEND:

Pole dipole array	a=25 meters	n=1
Current electrode		N of potent ials
Heavy contour lines:		6, 18 mv/v
Light contour lines:		2, 4, 8 mv/v

GEOLOGICAL BRANCH
ASSESSMENT REPORT

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DELTA TERRA RESOURCES LTD.

PATTERSON PROJECT

Port Alberni Area, B.C.

IPR]] Survey - Chargeability Contour Plan

M7 (690 to 1050 milliseconds)

DRAWN BY:	ARS	DATE:	May, 1987

SCOTT GEOPHYSICS LTD. MAP VI

2500 2750 3000 3250 3500 3750 4000 4250 4500 4750 5000 5250 5500

2900 2650 2400 2150 1900 1650 1400 1150 900

LEGEND:

Pole dipole array a=25 meters n=1

Current electrode N of potentiele

Logarithmic contours: 1, 1.5, 2, 3, 5, 7.5, 10

Heavy contour lines: 300, 1000, 3000 ohm meters

GEOLOGICAL BRANCH ASSESSMENT REPORT

16,239

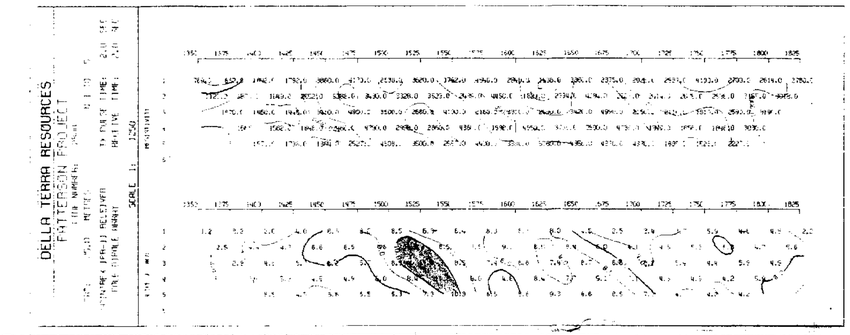
DELLA TERRA RESOURCES LTD.

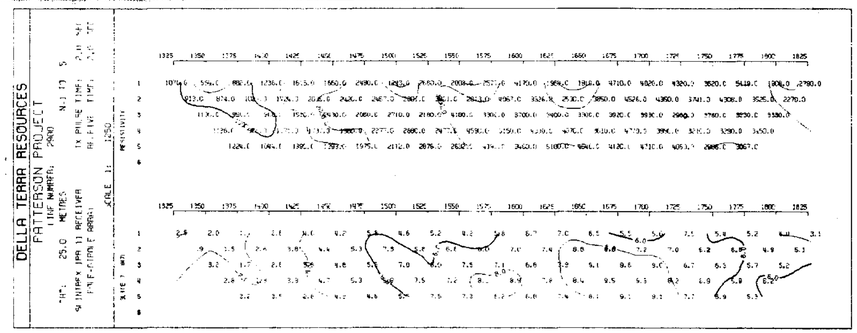
PATTERSON PROJECT

Port Alberni Area, B.C.

IPR11 Survey - Resistivity Contour Plan

DRAWN BY:	ARS	DATE:	May, 1987
SCOTT GEOPHYSICS LTD.		MAP	VII





GEOLOGICAL BRANCH
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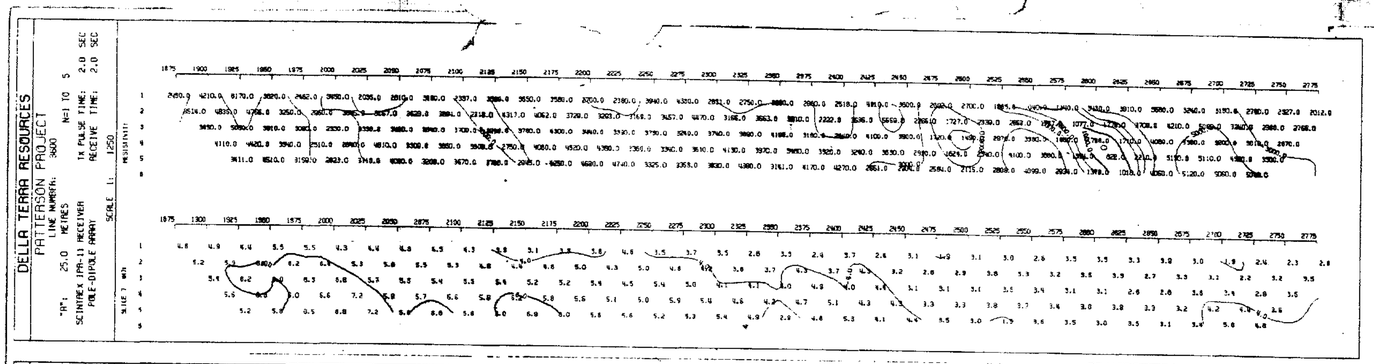
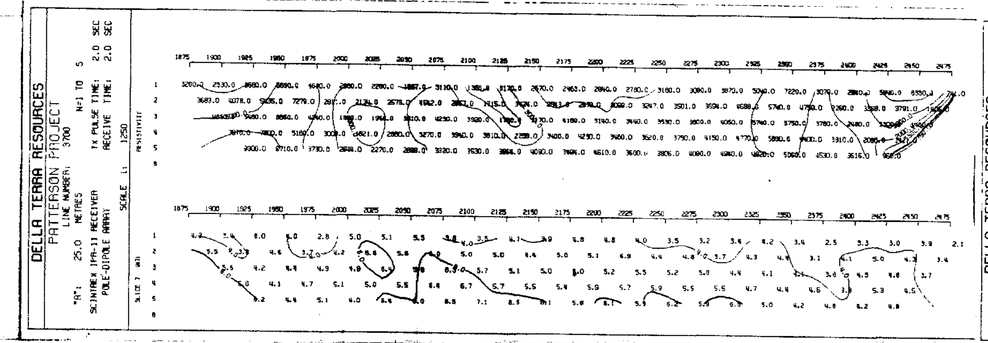
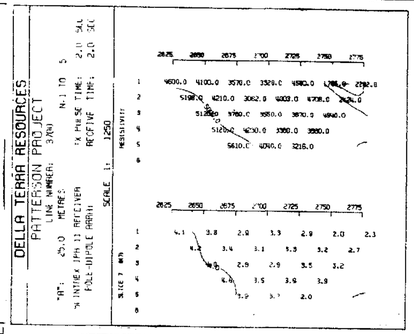
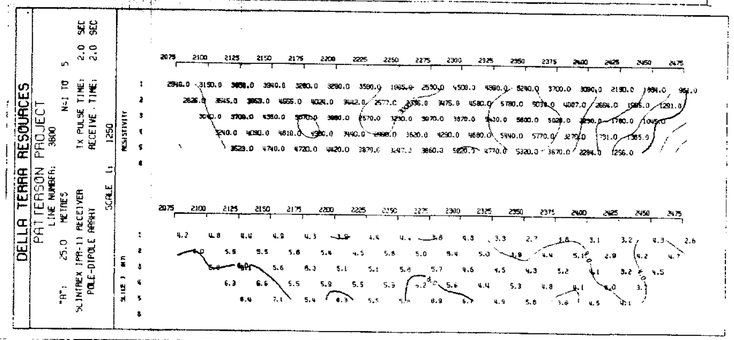
16,239

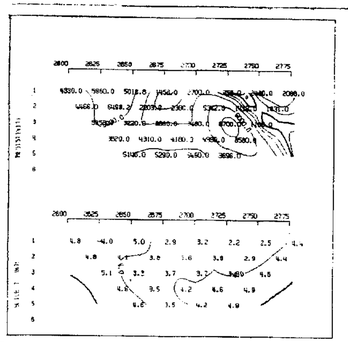
FIGURE 3

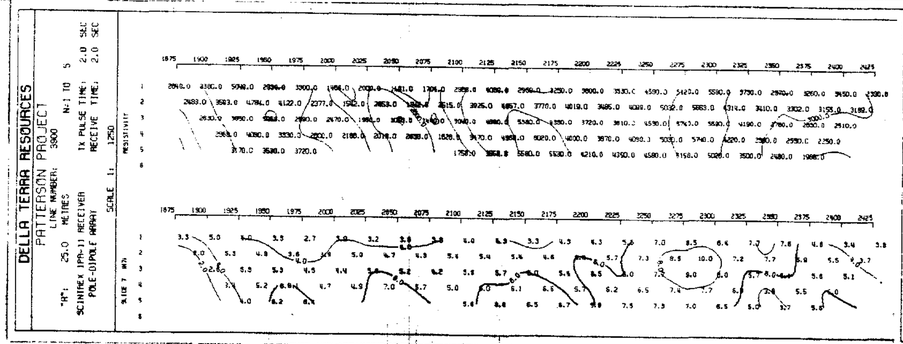


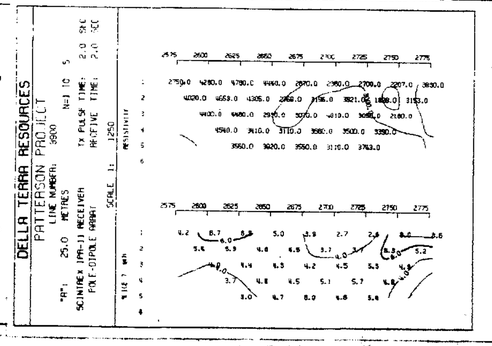












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ASSESSMENT REPORT

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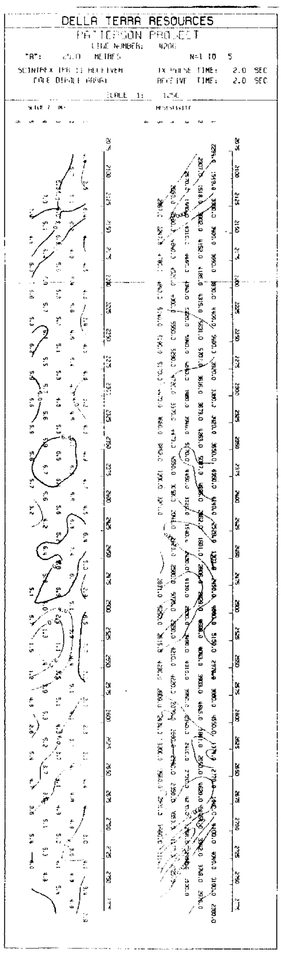
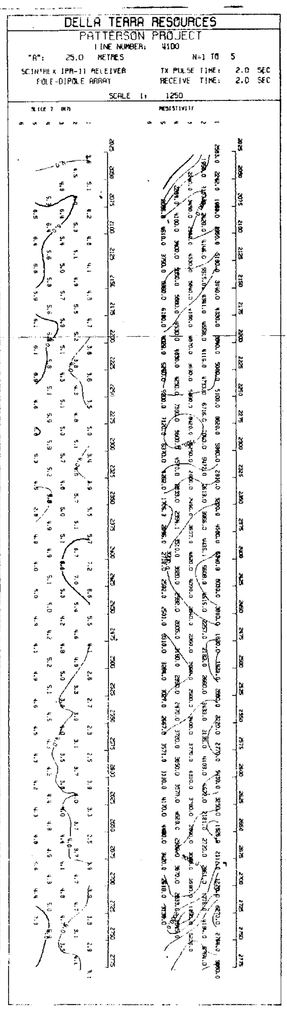
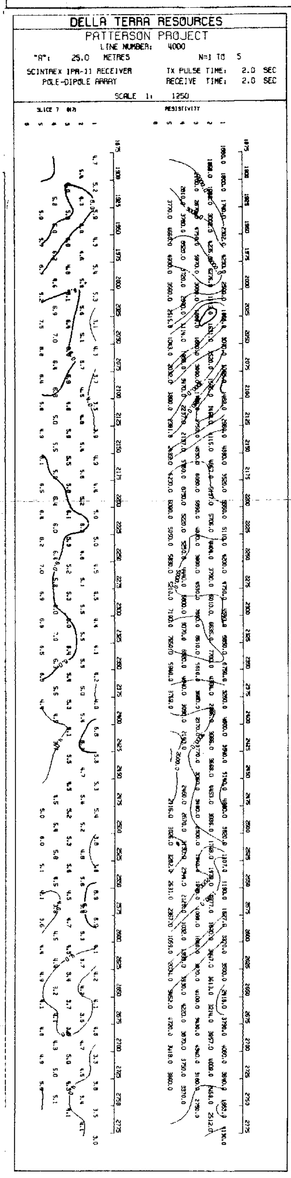
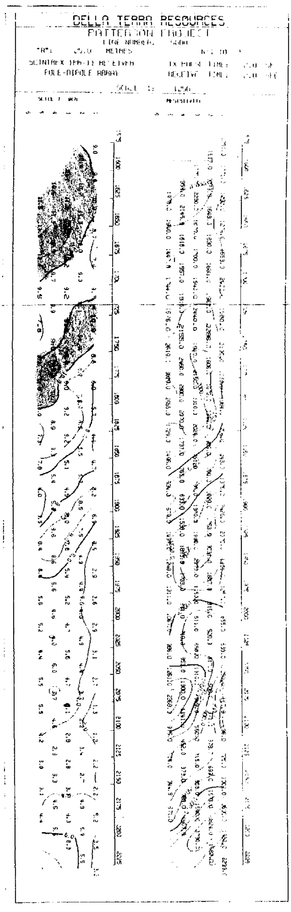
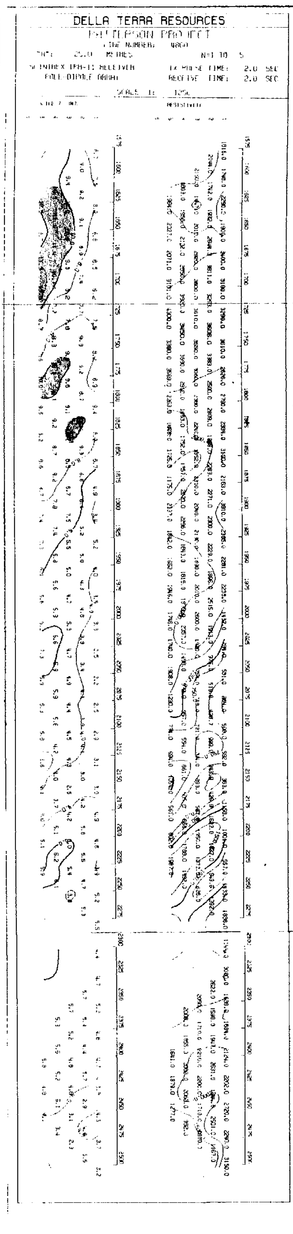
FIGURE 4

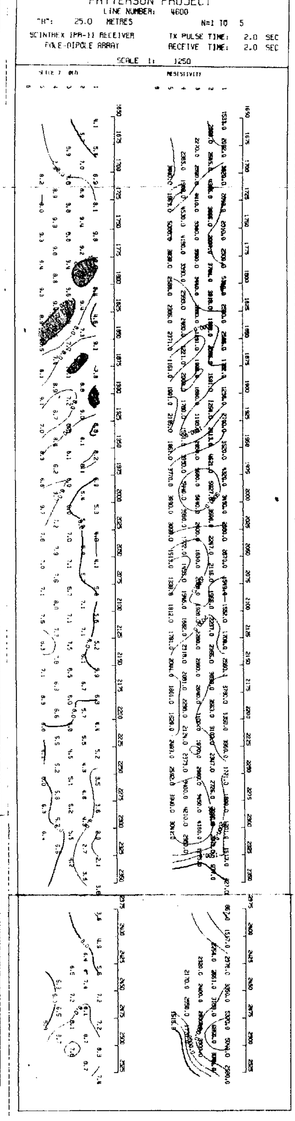


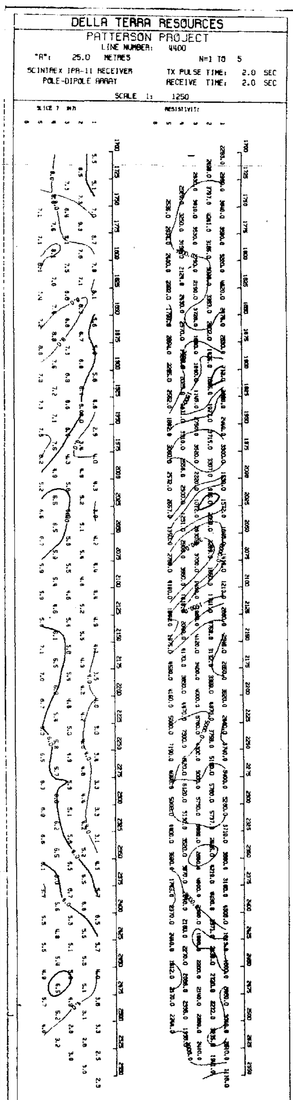












SCALE 1:5000

1 INCH = 400 FEET

N

J.G. STEPHEN EXPLORATIONS LTD.
DELLA TERRA RESOURCES LTD.

PATERSON LAKE PROJECT

GEOLOGY

MAY 1987

MAP 1

SWAMP

ROAD

PATERSON LAKE

ADIT

ROUND LAKE

HORAN LAKE

GREAT CENTRAL LAKE

LEGEND

ROCK UNITS

QUATERNARY
Q - alluvium, glacio-fluvial

JURASSIC: ISLAND INTRUSIONS
Di - diorite stock
Gd - hornblende porphyry dyke

TRIASSIC: KARMUTSEN VOLCANICS
UNIT 1
m - massive basalt
a - amygdaloidal basalt
f - porphyritic and hyaloclastic basalt
UNIT 2
p - pillowed basalt
l - lime tuff breccia
b - fragmental basalt

ALTERATION
q - quartz breccia
s - silicification
y - pyritization
Cu - copper mineralization

SYMBOLS

geological contact (approximate, inferred, unknown)
possible fault
logging road (main, quarry, secondary)
old railway grade
power transmission line
creek
cut baseline
grid stations
strike and dip of joints
strike and dip of metamorphic foliation
bench
adit
campsite location
trenching