HAIDA PROPERTY
ASSESSMENT REPORT
KAMLOOPS MINING DIVISION
92P/9W

GEOLOGICAL BRANCH
ASSESSMENT REPORT

20,014

Part 1 of 3

ASSESSMENT REPORT OF THE 1989 AND 1990

GEOLOGICAL, GEOPHYSICAL AND GEOCHEMICAL PROGRAMS

ON THE

HAIDA PROPERTY

KAMLOOPS MINING DIVISION

LATITUDE 51° 32' N
LONGITUDE 120° 23' W

NTS 92 P/9W

FOR

ELECTRUM RESOURCES CORPORATION (OWNER)
575 SAVILLE CRESCENT
NORTH VANCOUVER, B.C. V7N 3A9

AND

VITAL PACIFIC RESOURCES LTD.
32 SHAFTESBURY AVENUE
TORONTO, ONTARIO M4T 1A1

AND

TECK CORPORATION (OPERATOR)
1199 WEST HASTINGS STREET
VANCOUVER, B.C. V6E 2K5

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MAY 2, 1990 KAMLOOPS, B.C.

SUMMARY

Teck Corporation completed a geological, geochemical, geophysical, trenching and diamond drilling exploration program on the Haida Property between September 1989 and March 1990 at the cost of about $400,000.

The property which covers 4,650 hectares, is composed of 20 modified grid claims, 100% owned by Electrum Resources Corporation. The claims have been optioned to Vital Pacific Resources Ltd., and Teck Corporation has been granted an option to fund the exploration on behalf of Vital Pacific Resources Ltd.

The property is situated 100 km north of Kamloops in the Nicola Group volcanics and sediments. The belt of Nicola Group and Jurassic intrusions south of Kamloops host several significant Porphyry Copper deposits (Highland Valley and Copper Mountain) and a Copper skarn deposit (Craigmont).

Due to extensive overburden coverage the property has had limited exploration since the discovery of gold and copper mineralization in 1933. During the 1960's and 1970's exploration was directed towards porphyry copper mineralization, while in the early part of the 80's it was directed towards gold bearing skarn mineralization. Exploration prior to Teck's involvement located a skarn with up to .3 oz/ton Au and >1% Cu, and a porphyry style chargeability anomaly.

Initially the present program included geological, geochemical and geophysical surveys. This work located coincident chargeability, magnetic and VLF-EM anomaly reflecting skarn, and chargeability anomalies possibly reflecting porphyry style mineralization. Follow-up trenching exposed magnetite-pyrrhotite skarn breccia averaging .3% Cu over 6m, but no significant gold credits. Subsequent limited drilling intersected magnetite-pyrrhotite skarn with up to .13% Cu over 13 m.

Drilling of the chargeability anomalies for porphyry style mineralization located fresh pyritized diorite in one area, and pyritized graphitic argillite in another area. These results indicate a limited potential for porphyry style mineralization and the further exploration should be directed toward the copper skarn potential. Additional drilling as well as geophysical surveys are recommended.

TABLE OF CONTENTS

ILLUSTRATIONS

TABLE OF CONTENTS (cont'd)

ILLUSTRATIONS (cont'd)

TABLES

APPENDICES

INTRODUCTION

The Haida Property is located in the central interior of B.C. within the Kamloops Mining Division. It is composed of 20 modified grid claims comprising 230 units covering approximately 4,650 hectares. Several of these claims overlap each other due to the necessity of covering internal fractions and lapsed two-post claims. These claims are all 100% owned by Electrum Resources Corporation, and are under option to Vital Pacific Resources Ltd. Teck Corporation has been granted an option to earn an interest and participate in the joint venture by funding the expenditures for Vital Pacific Resources Ltd.

The property is situated in Nicola Group volcanics and sediments adjacent to the northern margin of the Thuya Batholith, which is a favourable host for both porphyry copper and copper skarn mineralization. South of Kamloops a belt of the Nicola Group and Jurassic intrusions host several significant Porphyry Copper (Highland Valley and Copper Mountain) and Copper skarn deposits (Craigmont).

Due to the extensive overburden coverage, this part of the Nicola Group has seen only limited exploration since the discovery of gold and copper mineralization on the property in 1933. Copper and gold mineralization located in the scattered outcrops combined with favourable regional geology, indicates that there is a potential for locating porphyry copper-gold or copper-gold skarn mineralization on the property.

This report summarizes the results of geological, geochemical and geophysical surveys in addition to trenching and diamond drilling carried out on the property between September 1989 and March 1990.

LOCATION, ACCESS, PHYSIOGRAPHY

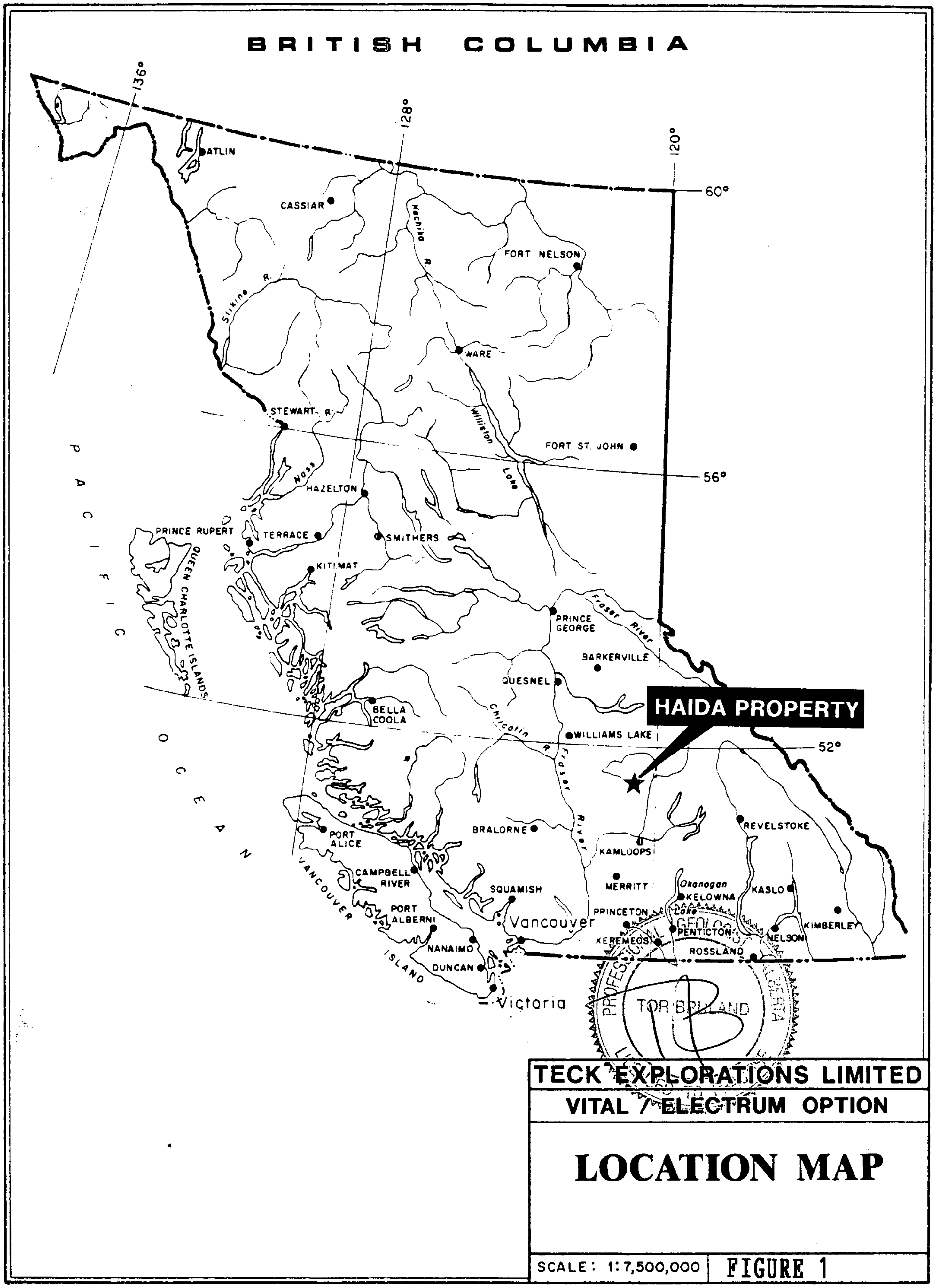
The Haida Property is located about 100 km north of Kamloops and 20 km west of Little Fort in south-central B.C. (Figure 1). The old workings on the property are located at latitude 51° 32' N and longitude 120° 23' W on NTS map sheet 92 P/ 9W.

Provincial Highway number 24, which connects Little Fort with 100 Mile House, straddles the southern boundary of the property. Access from highway 24 to the north across the property is provided by the Taweel Forest Access Road. A network of logging roads which branches off from Taweel Road provides reasonable internal access.

The property is located on an upland plateau region with subdued topography and elevations ranging from 1,260 metres to 1,630 metres. Vegetation consists of a mixture of deciduous and coniferous trees, ranging from mature virgin timber to second generation growth following intermittent logging over several decades. The climate is moderate and does not pose a significant problem for year-round exploration. An electric power line runs parallel with Highway 24, and both Little Fort and 100 Mile House are connected to main railway lines.

CLAIM DATA

The Haida Property which consists of 20 modified grid mineral claims comprising 230 units and covers approximately 4,650 hectares, is located in the Kamloops Mining Division of B.C., NTS 92 P/W (Figure 2 and Table 1).

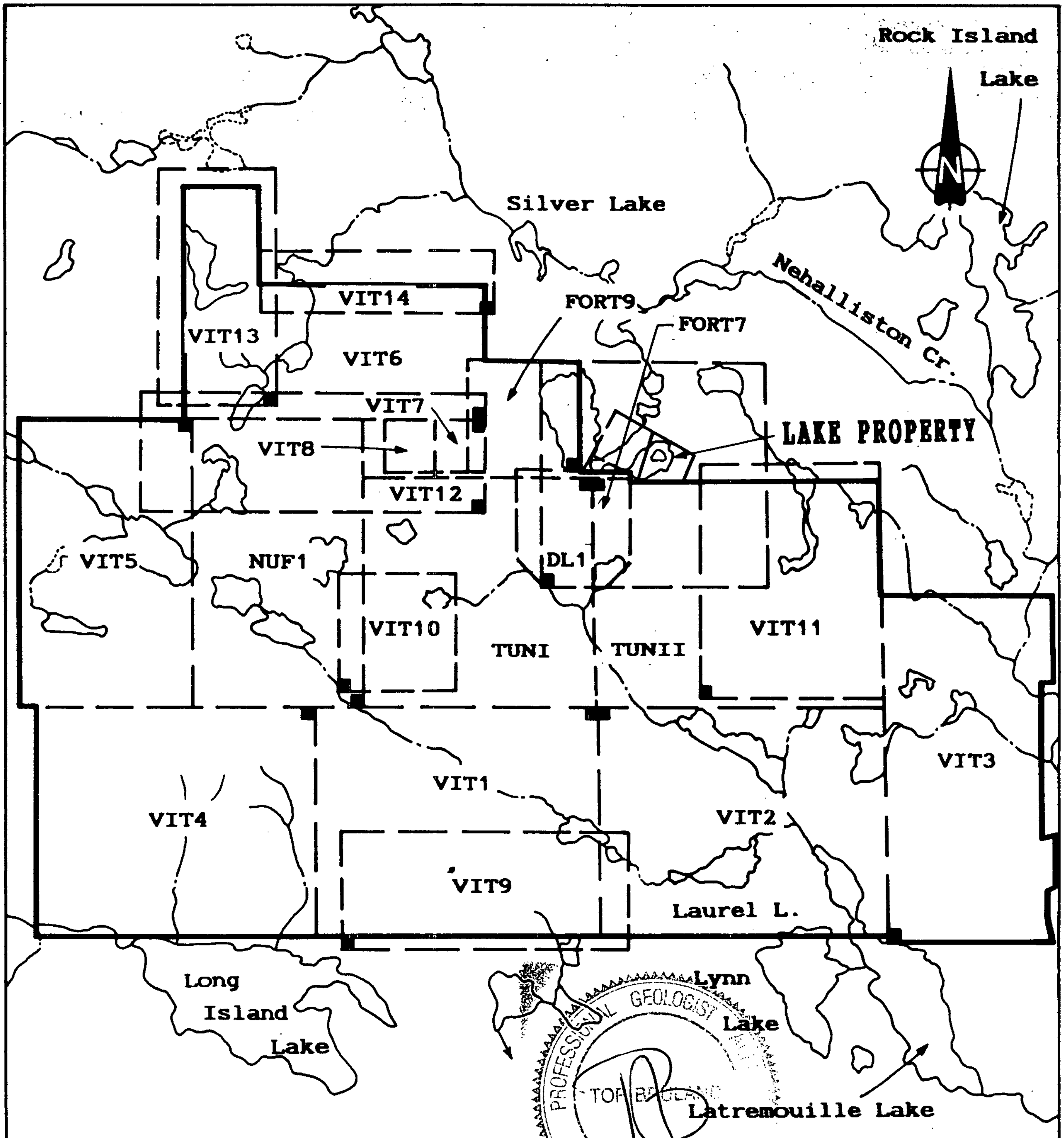


TECK EXPLORATIONS LIMITED

VITAL / ELECTRUM OPTION

LOCATION MAP

SCALE: 1:7,500,000 | FIGURE 1



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HAIDA PROPEPTY

NTS 92P/9W

CLAIM MAP

SCALE-1:50000	FIGURE 2
DATA:T.B.	

DATE:APRIL, 1990

TABLE 1

LIST OF CLAIMS

Claims	Units	Record No.	Expiry Date Current	Assessment Pending
FORT 7	4	178	Dec. 30/95	Dec. 30/2000
FORT 9	4	428	Jun. 25/99	Jun. 25/2000
TUN I	16	2921	Sep. 8/99	Sep. 8/2000
TUN II	20	2922	Sep. 8/99	Sep. 8/2000
NUF #1	15	2927	Sep. 9/99	Sep. 9/2000
VIT 1	20	7062	May 29/99	May 29/2000
VIT 2	20	7063	May 29/97	May 29/2000
VIT 3	18	7064	May 29/97	May 29/2000
VIT 4	20	7065	May 29/99	May 29/2000
VIT 5	15	7066	May 29/98	May 29/2000
VIT 6	10	7067	May 29/99	May 29/2000
VIT 7	1	7068	May 29/98	May 29/2000
VIT 8	1	7069	May 29/97	May 29/2000
VIT 9	10	8903	Sep. 30/90	Sep. 30/2000
VIT 10	4	8904	Oct. 2/90	Oct. 2/2000
VIT 11	12	8905	Oct. 3/90	Oct. 3/2000
VIT 12	12	8906	Oct. 2/90	Oct. 2/2000
VIT 13	8	8925	Oct. 25/90	Oct. 25/2000
VIT 14	4	8926	Oct. 26/90	Oct. 26/2000
DL 1	16	9124	Feb. 3/91	Feb. 3/2001

All the claims are 100% owned by Electrum Resources Corporation. Both Vital Pacific Resources Ltd. and Teck Corporation can earn an interest in all the claims by way of an option agreement and a joint venture.

Following filing of the maximum assessment work, all the claims will be put in good standing for 10 additional years to the year 2000 and 2001. The claims are divided into 3 groups for assessment work filing purposes:

North Haida Group FORT 9,VIT 5,VIT 6,VIT 7,VIT 8,VIT 12,VIT 13, VIT 14

South Haida Group FORT 7,TUN I,NUF #1,VIT 1,VIT 4,VIT 9,VIT 10

East Haida Group TUN II,VIT 2,VIT 3,VIT 11,DL 1

PB

HISTORY

High grade gold skarns were initially discovered in 1933 on the ground covered by the FORT 7 claim adjacent to Deer Lake. Reports by the Ministry of Mines indicate that Premier Gold Mines Co. obtained assays of several ounces per ton gold from these showings. A short adit and several small pits in the area probably date back to the mid 1930's.

During the late 1960's and early 1970's,the area covered by the Haida Property was explored for porphyry copper mineralization by Anaconda, Rio Tinto and United Copper Co. Work completed at this time included wide spaced grid soil geochemistry; magnetometer, VLF-EM and IP geophysical surveys, limited trenching and some drilling. Anaconda completed six diamond drill holes for about 2,000 feet in the Deer Lake, Nora Lake and Laurel Lake areas during 1967 and 1968, but results from this work are not available in the public records.

Barrier Reef Resources completed detailed grid geology, soil geochemistry and EM geophysical surveys in the Heidi Lake area during 1972 and 1973. Reports in the public records indicate that three short holes were drilled but no details are available. The surveys indicate a large zone of anomalous zinc, arsenic, mercury and copper geochemistry.

Rio Tinto completed 9 percussion holes for a total of 1,500 feet in the Goose Lake - Laurel Lake - Rio's Deer Lake area during 1974 and 1975 without intersecting significant copper mineralization. Neither of these three programs did any systematic gold analyses, and none of the drill holes exceeds 250 feet in depth.

In 1977 Meridian Resources completed soil geochemistry and magnetometer surveys on three detailed grids at McLeod Lake, No Fish Lake and Deer Lake. Reports indicate the presence of sporadic

13

gold-arsenic-copper anomalies in soils. Meridian percussion drilled 2 holes totalling 455 m within the area of the FORT 9 claim, west of Deer Lake. The first hole returned strongly anomalous copper values below 70 metres, but there is no mention of any gold analyses.

During 1980 Tunkwa Copper Mines Ltd. completed grid soil geochemistry, magnetometer and VLF-EM surveys over the entire area of the FORT 7, FORT 9, TUN I, TUN II and NUF #1 claims. Lines were spaced 200 metres apart with 25 metre stations. This survey indicated the presence of seven linear gold soil anomalies, four of which could be up to 1 km in length. These gold anomalies are partly coincident with anomalous values in arsenic and zinc. Tunkwa Copper Mines Ltd. chose not to follow up any of these anomalies, drilling instead seven diamond drill holes in the vicinity of the original Deer Lake showings. The results of this drilling are not in the public records.

In 1987 the property was optioned by Vital Pacific Resources Ltd. During 1987 and 1988 they completed geochemical soil survey, geophysical IP survey and two diamond drill holes totalling 432.9 m in the Heidi Lake area. The drilling identified the source of the IP anomaly to be a 3 m thick banded siltstone with 5-10% pyrrhotite and trace of chalcopyrite at a depth of over 100m.

In 1988 Vital Pacific Resources Ltd. completed a detailed IP, magnetometer and VLF-EM survey over the Lakeview showing at Deer Lake in addition to a reconnaissance IP, magnetometer and VLF-EM survey on 200 m spaced lines between Porphyry Lake and Nora Lake. These two surveys outlined a large chargeability anomaly with coincident but spotty anomalous magnetic and VLF-EM values south of Deer Lake, and a semi-circular continuation to the southeast of Deer Lake. This chargeability anomaly was open to the northwest and the southeast.

Follow up work by Vital Pacific Resources Ltd. consisted of 1,462.8 m of diamond drilling in 14 holes on the coincident IP, magnetic and VLF-EM anomalies on the Lakeview and the South Lakeview skarn showings west and southwest of Deer Lake. This drilling intersected .105 oz/ton Au over 4 m in skarn at 16 m depth in hole 88-8 in the Lakeview area; and .169 oz/ton Au over 4 m at 33 m depth in hole 88-9 and .17% Cu over 25 m at a depth of 11 m in hole 88-12 in skarn in the South Lakeview area.

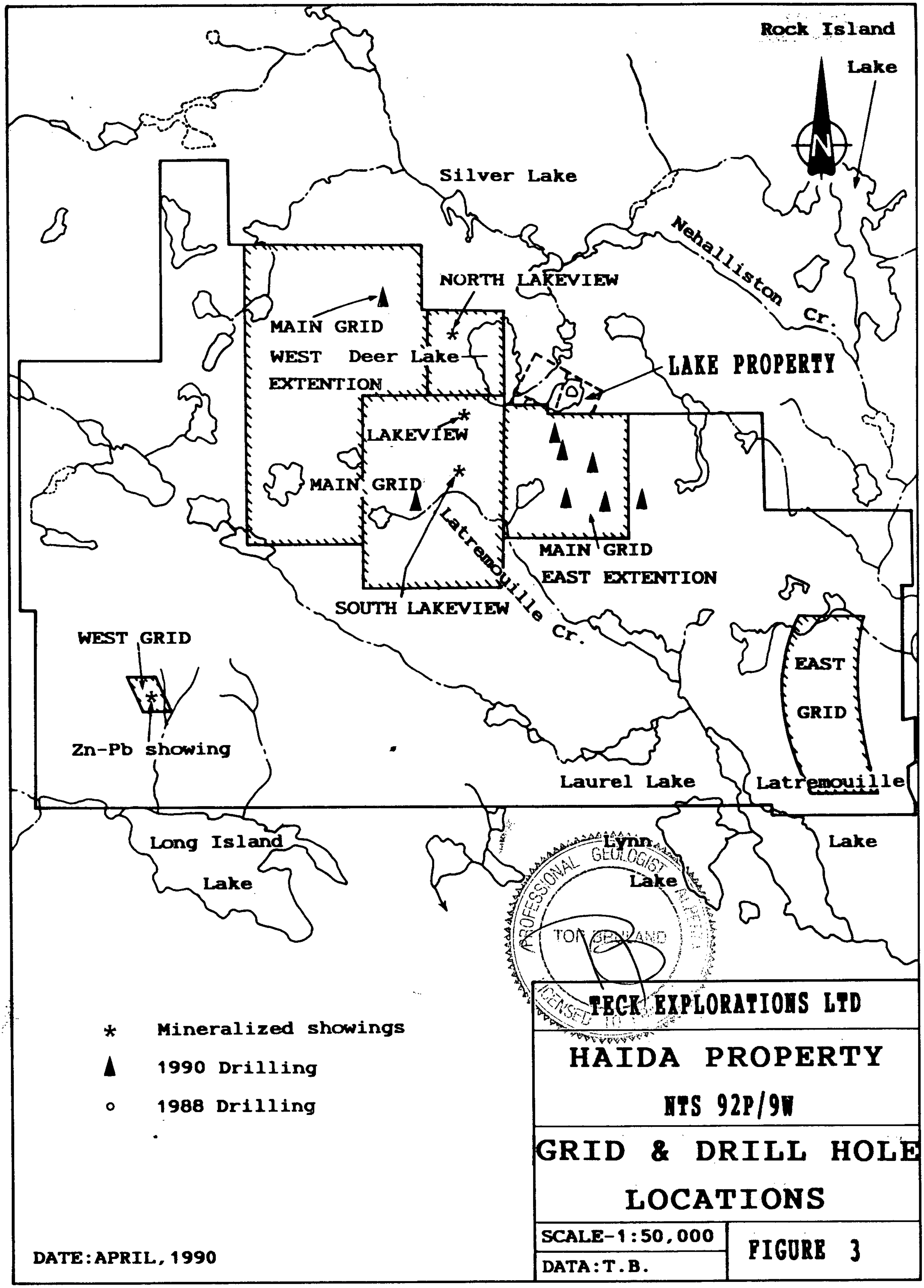
OBJECTIVE OF THE CURRENT PROGRAM

With the potential for both copper-gold skarn and porphyry copper-gold mineralization on the property, a program of geological mapping, geophysics and soil geochemistry was designed to test both of these possibilities. Geological mapping on a scale of 1:5,000 was carried out to define the extent of the different rock units previously identified on the property.

A detailed infill IP, magnetometer and VLF-EM geophysical survey was done on the Main Grid (Figure 3) to help define the anomalies located during the 1988 survey. Magnetometer and VLF-EM Surveys were done on two additional grids, and a geochemical soil survey was carried out on all three grids.

Coincident magnetic and VLF-EM anomalies southwest and west of Deer Lake were tested by trenching, and the anomaly southwest of Deer Lake was subsequent tested by drilling.

Testing of the semi-circular chargeability anomaly for porphyry copper-gold mineralization was done by drilling. A large scale IP and magnetometer survey was completed to the west of the Main Grid to locate the northwest extension of this chargeability anomaly.



Rock Island
Lake
Silver Lake
Nehalliston Cr.
NORTH LAKEVIEW
MAIN GRID
WEST Deer Lake
EXTENTION
LAKE PROPERTY
LAKEVIEW
MAIN GRID
Latremouille Cr.
MAIN GRID
EAST EXTENTION
SOUTH LAKEVIEW
WEST GRID
Zn-Pb showing
EAST
GRID
Laurel Lake
Latremouille
Lake
Long Island
Lake
Lynn
Lake
PROFESSIONAL GEOLOGIST
TOR BRULAND
LICENSED
* Mineralized showings
▲ 1990 Drilling
o 1988 Drilling
TECK EXPLORATIONS LTD
HAIDA PROPERTY
NTS 92P/9W
GRID & DRILL HOLE
LOCATIONS
SCALE-1:50,000
DATA:T.B.
FIGURE 3
DATE:APRIL,1990

Utilizing two 4x4 trucks work was completed with a crew of four staying at the Lac des Roches Resort in Bridge Lake 20 km west of the property along Highway 24. Supplies were available in 100 Mile House, 60 km to the west, or in Kamloops, 140 km to the south.

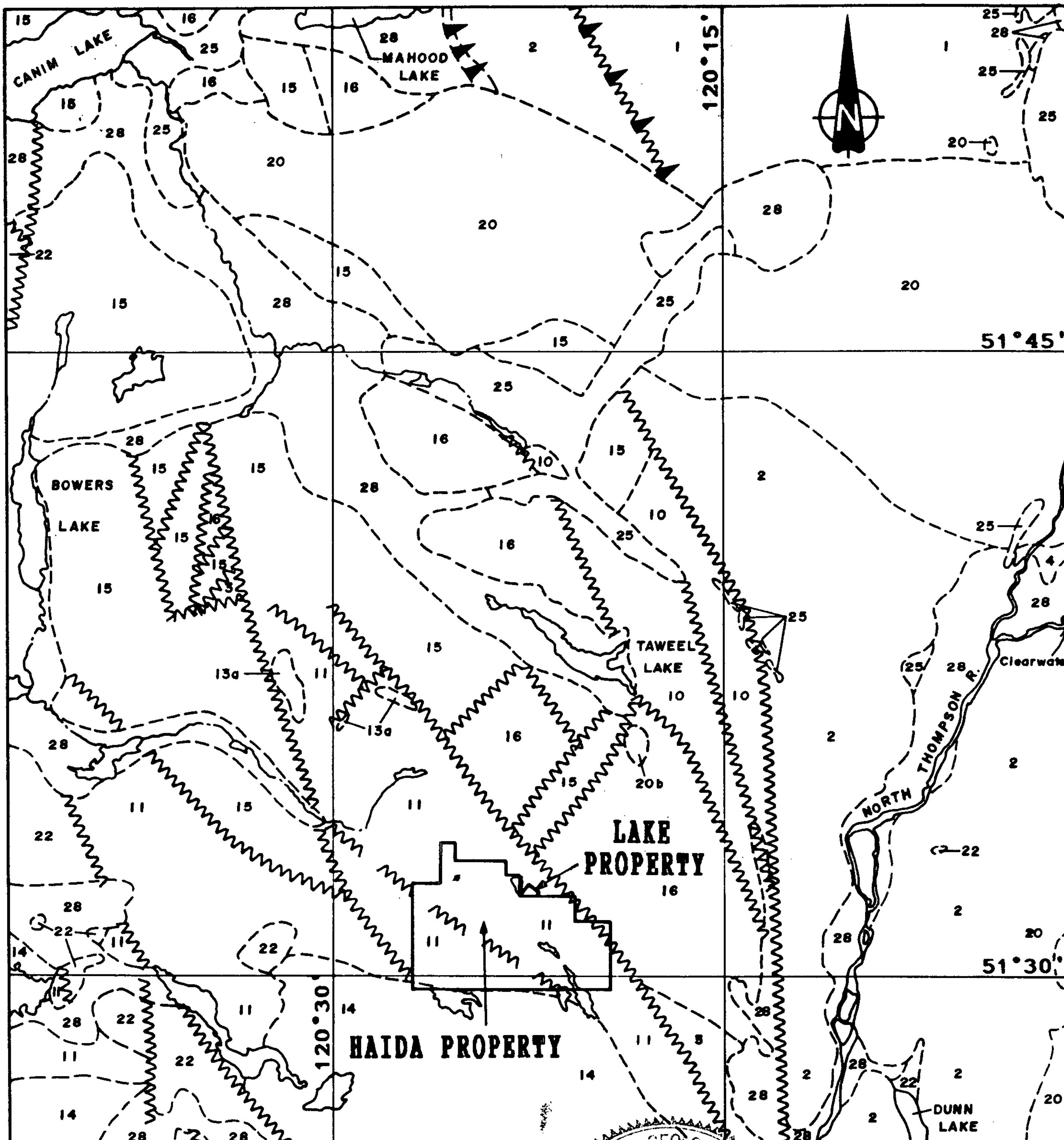
REGIONAL GEOLOGY

The regional geology of the area is characterized by a mosaic of fault blocks of sedimentary and volcanic rocks that range in age from Permian to Lower Jurassic. To the south these rocks have been truncated by the northern part of the Thuya Batholith, and in the northwest they have been intruded by fine grained leucogranite and leucosyenite porphyry stocks that may be satellites to the Thuya Batholith (Preto, 1977).

The most widespread rocks in the area belong to the Triassic to Lower Jurassic Nicola Group of massive and fragmental andesite, thin bedded and pyroclastic tuff; interbedded calcareous siltstone, argillite shale and sandstone; and well bedded limestone. The Nicola Group is in fault contact with undivided Jurassic volcanics and sediments, and is intruded by Jurassic syenites, monzonites and diorite stocks believed to be apophyses of the Thuya Batholith (Figure 4). The Nicola Group has been altered and recrystallized to various degrees adjacent to the intrusions. Some of the diorites are probably dykes or sills, but some could be recrystallized andesite.

The area has been subject to low grade regional metamorphism resulting in widespread chlorite, epidote and carbonate alteration with abundant quartz, carbonate and epidote veins. Hydrothermal alteration is characterized by silicification along pyroxene-rich seams. Local folding in the Nicola Group is developed in response to movements on faults, since this group was not folded by regional stresses.

16



Geology from:GSC map 1278A- Bonaparte Lake (92P). By R.B.Campbell & H.W.Tipper (1964,1965).

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NTS 92P/9W

REGIONAL GEOLOGY

SCALE-1:250,000	FIGURE 4
DATE:APRIL,1990	

LEGEND

QUATERNARY

PLEISTOCENE AND RECENT

| 28 | Till, gravel, alluvium. |

TERTIARY

MIOCENE AND/OR PLIOCENE

| 25 | Plateau lava, olivine basalt. |

EOCENE AND OLIGOCENE KAMLOOPS GROUP

| 22 | SKULL HILL FORMATION: Dacite, trachyte, basalt, andesite, rhyolite. |

CRETACEOUS

RAFT AND BALDY BATHOLITHS

| 20 | Biotite quartz monzonite and granodiorite; minor pegmatite.
20b - aplite, leuco quartz monzonite and granite. |

JURASSIC

SINEMURIAN TO MIDDLE JURASSIC

| 16 | Porphyritic augite andesite breccia and conglomerate. |
| 15 | *Andesite arenite, siltstone, grit, breccia and tuff.* |

TRIASSIC OR JURASSIC

THUYA AND TAKOMKANE BATHOLITHS

| 14 | Hornblende biotite quartz diorite and granodiorite, monzonite, gabbro, hornblendite. |
| 13a | Syenite and monzonite. |

TRIASSIC

NICOLA GROUP

| 11 | Augite andesite flows and breccia, tuff, argillite, greywacke, limestone. |
| 10 | Shale, argillite, phyllite, siltstone, limestone. |

PERMIAN

| 4 | Basic volcanic flows, tuff, chert, limestone, argillite. |

PENNSYLVANIAN AND PERMIAN

| 3 | Volcanic arenite, greenstone, argillite, phyllite, minor quartz mica schist, limestone, basaltic and andesitic flows, amphibolite, conglomerate and breccia. |

MISSISSIPPIAN AND/OR LATER

SLIDE MOUNTAIN GROUP

| 2 | FENNELL FORMATION: Pillow lava flows, greenstone, argillite, chert, minor amphibolite, limestone and breccia. |

WINDERMÈRE OR CAMBRIAN AND LATER

KAZA OR CARIBOO GROUP

| 1 | *Feldspathic quartz mica schist, quartzite, phyllite, marble, greenstone, amphibolite.* |

LEGEND FOR FIGURE 4 13

Mineralization of the area is wide spread and can be divided into three groups. Copper with minor gold, lead and silver have been identified in skarn; lead and silver with minor copper are found in shear zones; and copper in quartz stockwork is found in granites of the Thuya Batholith. The area has been intensely block faulted following at least one episode of mineralization. The major structural trends are northwest and northeast.

PROPERTY GEOLOGY

The property is covered by a relatively thin layer of glacial material which ranges in thickness from about 1 m to about 15 m obscuring most of the bedrock. The general direction of the ice movements from the last two major ice ages are to the south and southeast from the Cariboo Mountains, with the southeast flow predominant across the property. Numerous augite porphyry erratics are found.

The glacial overburden coverage is estimated to be about 98% with the majority of outcrops located in the hillier parts, especially in those areas which are underlain by granitoid intrusives.

The property is believed to be completely underlain by a sequence of andesitic flows, tuff, argillite, siltstone and chert of the Triassic to early Jurassic Nicola Group. These rocks have subsequently been intruded by the Jurassic Thuya Batholith and its associated satellite stocks which range in composition from granodiorite to diorite. In addition structurally controlled ultra-mafic amphibolite occurs in several sublinear belts.

Lithologies on the property have a general northwest to south-east strike with a steep dip to the southwest. They have been divided into 8 units from the oldest to the youngest (Figure 5).

<u>Sediments</u>: These are the oldest rocks on the property, and are a mixture of argillite, graphitic argillite, chert and siltstone. Bedding is well developed but rarely seen in outcrops. In drill holes bedding is found as either thin laminated beds of siltstone, chert and argillite; or defined by laminae of primary calcite. The sediments are well mineralized throughout with 1-5% pyrite and minor disseminated pyrrhotite. The pyrite and pyrrhotite content are believed to be a result of the regional metamorphism.

<u>Limestone</u>: This unit varies in thickness from less than 1 m to several 10's of metres, and it is most dominant in the area west of Deer Lake. It is fine grained, occasional finely laminated, recrystallized, massive, light to dark grey and barren of sulphide mineralization.

<u>Andesite</u>: The andesites are both interbedded with the sediments and intrude them as dykes. They are fine grained, massive or porphyritic with subhedral augite and hornblende phenocrysts. The andesitic tuff is almost visually indistinguishable from the chert. Generally the sulphide content (pyrite and minor pyrrhotite) of the andesite is lower than for the sediments ranging from trace to 2%.

<u>Hornfels</u>: Both sediments and andesite have undergone hornfels alteration along intrusive contacts. In the andesite it is characterized by the presence of Tremolite/Actinolite. The sulphide content in the hornfels is varied and believed to reflect the host. The andesite hornfels can locally contain up to 2% chalcopyrite.

<u>Skarn</u>: Skarn formed along or near the intrusive contacts, and can sometimes be identified as endoskarn or exoskarn. The overall composition varies widely between four major end-member components; garnet, diopside, sulphide and oxide. The individual component minerals can be present from zero to 80-100%. Copper mineralization seems to be associated with the magnetite and pyrrhotite content, with the best values occurring in the semi-

13

massive magnetite-pyrrhotite breccia seen in trenches 4 and 4A (Figure 8).

Granodiorite: The granodiorite is exposed along the southern border of the property in the Thuya Batholith. It is medium grained with about 35% hornblende, local minor biotite, and minor to 2% sulphides in the form of pyrite and occasional traces of chalcopyrite. The batholith is fresh with locally minor chlorite and epidote alteration associated with late veins.

Diorite: This is a group name for several intrusives believed to be facies variation apophyses to the Thuya Batholith. Included are diorite, hornblende diorite, quartz monzodiorite, plagioclase porphyry and felsic intrusions. They are mineralized to various degrees with 1-5% pyrite and locally trace amounts of chalcopyrite. The intrusives are relatively fresh with chloritic alteration, and minor epidote and carbonate.

Amphibolite: This could be another facies variation of the diorite. It is fine to very coarse grained with 70 to 90% hornblende and disseminated magnetite.

Limited outcrop exposure, scant drill data and extensive block faulting prevent a meaningful interpretation of the geology. As a result only the outcrops and subcrops have been plotted on the property geology maps without an interpretation (Figure 5).

MINERALIZATION

Historically the belt of Nicola Group and Jurassic intrusions south of Kamloops have hosted both porphyry copper and copper skarn deposits. Both types of mineralization have been identified in the Nicola Group on the property. Previous work has located >1% Cu in massive pyrrhotite skarn, as well as up to .2 oz/ton Au in garnet-diopside skarn over mineable widths.

13

During this year's mapping of the property, 181 rock samples were collected (Figure 6 and Appendix II). They were sent to Chemex Labs Ltd. in North Vancouver where they were analyzed for gold by standard fire assay with atomic absorption finish and for 32 elements (Ag, Al, As, Ba, Be, Bi, Ca, Cd, Co, Cr, Cu, Fe, Ga, Hg, K, La, Mg, Mn, Mo, Na, Ni, P, Pb, Sb, Sc, Sr, Ti, Tl, U, V, W and Zn) using a nitric-aqua-regia digestion and analyzed by inductively coupled plasma spectroscopy (Appendix III).

This sampling located significant chalcopyrite in an altered porphyry intrusive to the southeast of Deer Lake, which assayed up to .71% Cu (465021). Follow up work on this target by drilling suggests that it is of limited extent. Quartz-pyrite +/- chalcopyrite veins occur locally and the associated pyritic alteration is barren of economic copper values.

Zinc-lead-gold-silver mineralization located this year in the southwest corner of the property was trenched and found to be discontinuous. It has been interpreted as manto type mineralization often found to be associated with porphyry and skarn mineralization, but in this case the economic potential is considered to be low.

Work this year has established that the potential economic mineralization on this property is associated with the skarn. Although the garnet-diopside skarn locally assays up to 1.46 oz/ton Au (465418), gold mineralization is discontinuous and probably not cogenetic since it does not correlated with any of the other elements in the skarn. Copper mineralization is found in the form of fracture coatings and disseminated chalcopyrite in endoskarn, exoskarn and actinolite hornfels; and assay up to about .30% Cu over mineable widths (Trench 4 and 4A). The higher grade copper values have been located in semi-massive to massive pyrrhotite, massive magnetite or magnetite-pyrrhotite breccia, which assays up to .63% Cu over 1 m (465420). All copper values in the skarn are found without any significant gold values. Copper mineralized skarn has been located along a 1 km north-south trend to the west of Deer Lake in addition to the northern part of the semi-circular chargeability anomaly to the southeast of Deer Lake. Mineralization has suffered post-ore faulting which has made correlations extremely difficult.

In addition to the exposed skarn mineralization on the property, the geophysical survey has located several areas with possible skarn geophysical signatures

GEOCHEMICAL SURVEY

In order to locate and define possible mineralization trends a soil geochemistry survey was completed on three separate grids (Figures 3, 5, 7 and 15). Eight hundred and seventy eight soil samples were collected. They were all sent to Chemex Labs Ltd. in North Vancouver where they were analyzed for gold by standard fire assay with atomic absorption finish and for 32 elements (Ag, Al, As, Ba, Be, Bi, Ca, Cd, Co, Cr, Cu, Fe, Ga, Hg, K, La, Mg, Mn, Mo, Na, Ni, P, Pb, Sb, Sc, Sr, Ti, Tl, U, V, W and Zn) using a nitric-aqua-regia digestion and analyzed by inductively coupled plasma spectroscopy (Appendix III).

The East grid (Figures 3 and 5,sheet 2) is located over a linear belt of diorite and amphibolite in the southeast corner of the property. The baseline is north-south with lines spaced 100 m apart, and 291 samples were collected at 50 m spacing. The results of the soil survey indicate erratic high Au to 195 ppb, Cu to 1,204 ppm and Zn to 382 ppm. Since the rock samples of amphibolite contained only background values for gold and copper no follow-up was done in this area.

The West grid (Figures 3, 5,sheet 1 and 15) is located over the Zn-Pb showing which returned up to .15 oz/ton Au, 2.58 oz/ton Ag, 2.74% Pb and 3.75% Zn, in the southwest corner of the property. Sixty three samples were collected at 25 m intervals on 50 m lines from a north-south baseline, and the purpose of the geochemical survey was to determine possible strike extension of this showing. A coincident Zn-Pb-As anomaly was centred over the showing, without strike indication. The soil returned only background values for gold and silver.

The Main Grid is located south of Deer Lake (Figures 3, 5,sheet 3 and 4,and 7). The survey was completed on a grid with an east-west baseline. The lines were spaced 50 m apart over the known skarn mineralization southwest of Deer Lake, and 100 m apart farther to the west. A total of 524 samples were collected at 50 m station spacing. The analytical results returned spotty anomalous values of Au, Cu and Zn, and a north-south elongate arsenic anomaly. There is no correlation between the known skarn mineralization and the soil anomalies. Subsequent trenching in this area exposed a thick extensive layer of clay, and it is believed that this impregnable clay layer camouflaged any underlying mineralization. The spotty high values are believed to reflect thin overburden overlying mineralization or down-ice dispersion.

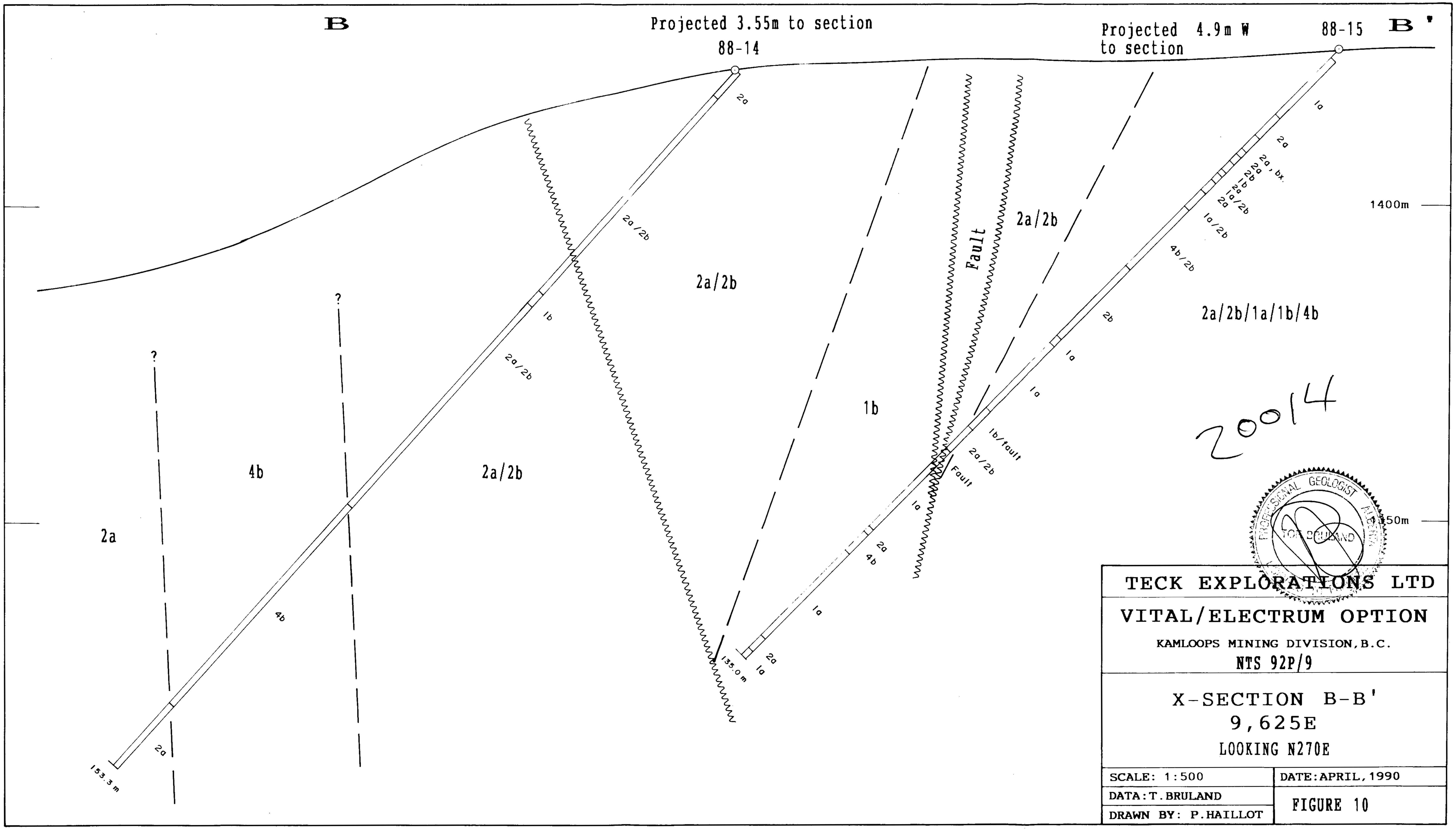
TRENCHING

Trenching on the property was carried out by Anthony & Associates Contracting Ltd. of Kamloops, B.C. with a Kamatsu Excavator. It was done along old skidder trails and roads to keep the disturbance to a minimum without compromising on the desired exposure. The exposed trenches were sampled by 1 m continuous chip samples. Four hundred and twenty samples were collected (Appendix II) and sent to Chemex Labs Ltd in North Vancouver where they were analyzed for gold by standard fire assay with atomic absorption finish and for 32 elements (Ag, Al, As, Ba, Be, Bi, Ca, Cd, Co, Cr, Cu, Fe, Ga, Hg, K, La, Mg, Mn, Mo, Na, Ni, P, Pb, Sb, Sc, Sr, Ti, Tl, U, V, W and Zn) using a nitric-aqua-regia digestion and analyzed by inductively coupled plasma spectroscopy (Appendix III).

The trenching was concentrated on the South Lakeview showing (Figures 7 and 8) to locate the strike extension of the known copper and gold mineralization. A total of ten trenches and nine pits were completed for a total of 1,336 m, but only about half of this exposed bedrock. The remainder had to be abandoned when the excavator encountered clay/hard pan in excess of four feet in thickness. The trenching exposed mostly skarn with minor andesite and diorite, and the detailed mapping managed to subdivide these three units into several subunits based on their mineral composition (Figure 8). A partial three dimensional picture of this area (Figure 8, section A-A' and Figure 10, section B-B') indicates a northwest strike and steep dip to the southwest for the andesite and skarn. This geometry corresponds well with information gathered elsewhere on the property during the property reconnaissance mapping.

The sulphide and oxide mineralization of the skarn has a northerly strike, indicating that this is a later and possibly structurally controlled event. The magnetite-pyrrhotite mineralization was subsequently broken up by faulting.

The trenches were sampled more or less continuously (Figure 9),and the best results were found at the junction of trenches 4 and 4A. A 6 by 15 m exposed magnetite-pyrrhotite breccia assayed .3% Cu over 6 m. In addition to this a 10 m exposure of actinolite-epidote altered andesite in trench 3 averaged .2% Cu over 10 m. This mineralization can be traced 20 m to the southwest to trench 6, where 6 m of similar actinolite-epidote altered andesite averaged .2% Cu. In trench 5 magnetite skarn averaged .17% Cu


B
Projected 3.55m to section
88-14
Projected 4.9m W
to section
88-15
B'
1400m
1350m
2a/2b
Fault
2a/2b
2a/2b/1a/1b/4b
1b
4b
2a/2b
2a
153.3m
135.0m
20014
TECK EXPLORATIONS LTD
VITAL/ELECTRUM OPTION
KAMLOOPS MINING DIVISION, B.C.
NTS 92P/9
X-SECTION B-B'
9,625E
LOOKING N270E
SCALE: 1:500
DATE: APRIL, 1990
DATA: T. BRULAND
DRAWN BY: P. HAILLOT
FIGURE 10

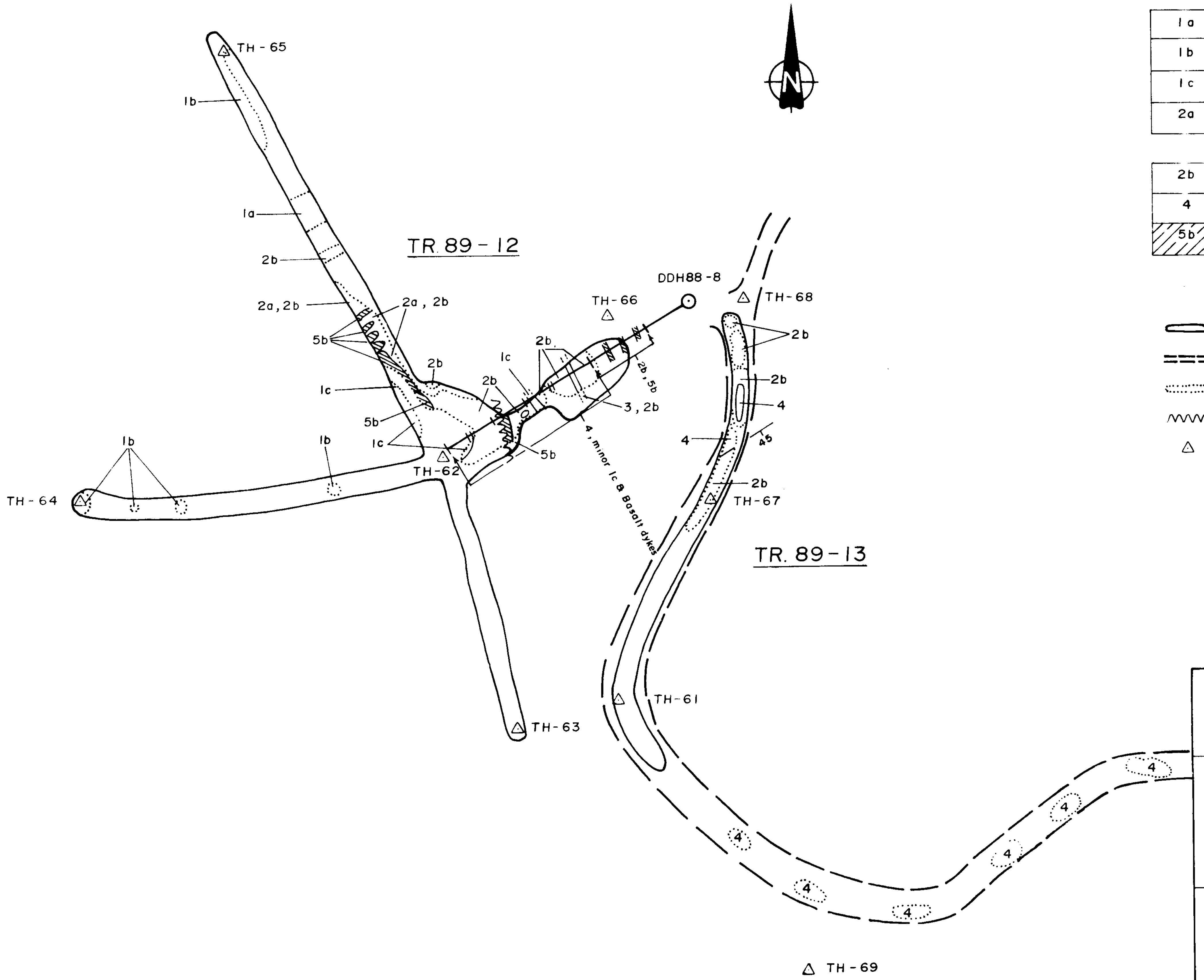
over 6 m. Previous drilling does not seem adequately to have tested the mineralization exposed by the trenching, since all but one hole has been drilled in a southerly direction, oblique to the interpreted dip direction.

The only significant gold value 1.46 oz/ton Au over 1 m (465418) is located in the western end of trench 4, to the west of the visible sulphide and oxide mineralization. However, additional trenching in this area did not locate any additional significant gold values.

Trenching of the Lakeview showing was carried out around drill hole 88-8 to follow-up massive magnetite-pyrrhotite in skarn which returned .11 oz/ton Au over 3 m. Two hundred and thirty three metres of trenching were done in three trenches and six pits (Figures 7 and 11), most of which reached bedrock. The excavation to the southeast of drill hole 88-8 exposed limestone while to the west and north it exposed magnetite-garnet-diopside skarn. To the far west the trenching located diorite. Continuous chip sampling of the skarn returned .18% Cu over 18 m to the northwest of the old drill hole (Figure 12). It is not believed that drill hole 88-8 with a southwest azimuth adequately tested this mineralization which is interpreted to have a north-south strike. Additional drilling should be directed towards the down-dip extension by drilling due west.

Some trenching was done on the North Lakeview showing to follow up pyrrhotite and magnetite float located adjacent to an old sloughed in trench (figures 7 and 13). Two trenches and nine pits were completed for a total of 134 m with about 50% exposed bedrock. This trenching exposed andesite and skarn with a NE-SW striking magnetite skarn. Sampling of these trenches returned only background values, (Figure 14) and no follow-up work is warranted at the present time.

TB



LEGEND

1a	Hornblende Diorite porphyry.
1b	Diorite, may be moderately to intensely silicified.
1c	Plagioclase porphyry dykes.
2a	Actinolite hornfels
2b	Garnet / Diopside skarn.
4	Grey banded Limestone.
5b	Massive magnetite with associated pyrrhotite, minor chalcopyrite.

- Trench outline.
- Road.
- Limit of outcrop.
- Fault
- Survey stations

0 5 10 15 20 30 40
METERS

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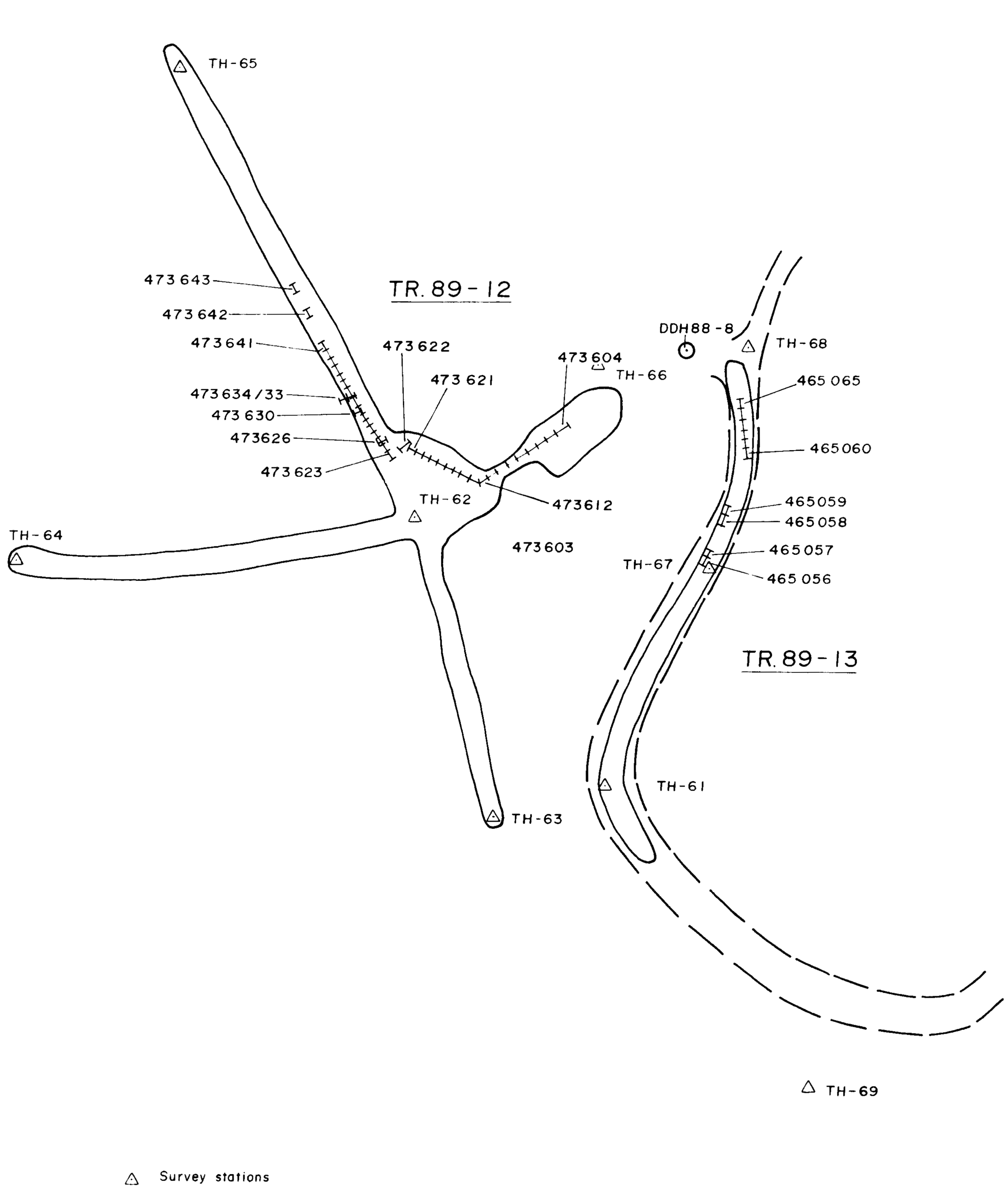
VITAL PACIFIC ELECTRUM OPTION

HAIDA PROPERTY
NTS 92 P/9 W
LAKEVIEW SHOWING

TRENCH GEOLOGY - 1989

SCALE - 1 : 500	DATE - JANUARY, 5, 1990
DATA - T. BRULAND	REVISED -
DRAWN BY - P. HAILLOT	FIG. No. 11



0 5 10 15 20 25 30 35 40
METERS

TOR BRULAND

TECK EXPLORATIONS LTD
VITAL PACIFIC / ELECTRUM OPTION

HAIDA PROPERTY
NTS 92 P/9W
LAKEVIEW SHOWING

SAMPLE LOCATIONS

SCALE - 1 : 500	DATE - JANUARY, 5, 1990
DATA - T. BRULAND	REVISED -
DRAWN BY - P. HAILLOT	FIG. No. 12

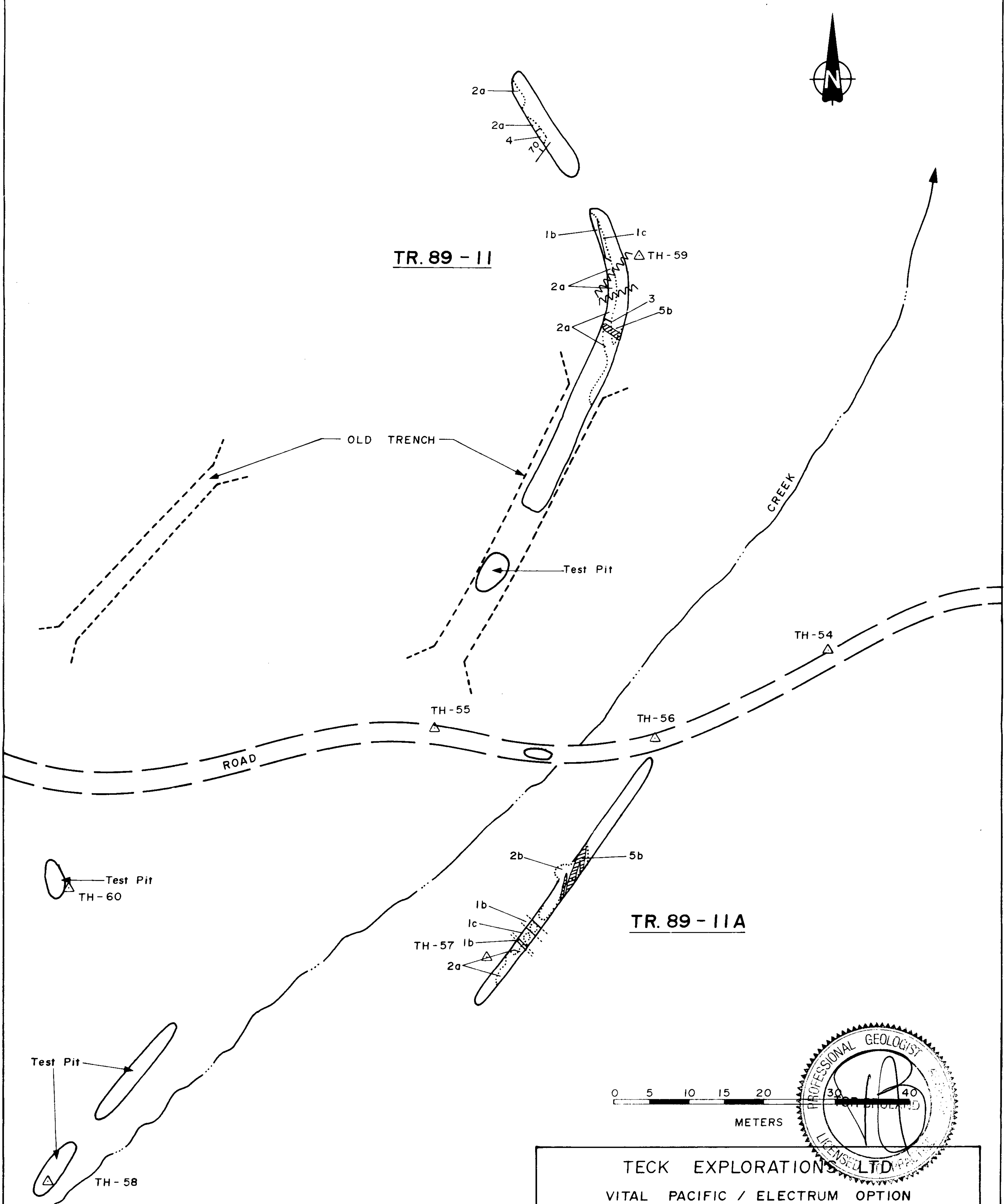
In order to locate the source of an elongate coincident high chargeability and magnetic anomaly to the southwest of the South Lakeview showing (Anomaly B, Figure 16), a series of 14 pits were dug along this anomaly. Only two pits exposed bedrock, the pit at line 3W and 11+20S located amphibolite with disseminated magnetite, while the other at line 8W and 4+90S exposed fresh diorite (Figures 5 and 7). The amphibolite explains the magnetic anomaly, but not the chargeability anomaly.

Trenching around the Zn-Pb showing consisted of 280 m of trenching in three trenches and three pits. The strike extension of this showing was not found, although several of the samples were anomalous in zinc and silver (Figure 15). Due to the discontinuous character of this mineralization no follow-up work is warranted.

GEOPHYSICAL SURVEY

Pacific Geophysical Ltd.of Vancouver, B.C. completed 2 separate geophysical surveys on the property. Both their detailed reports are included as Appendix VI and Appendix VII. The East and the West grids were covered with VLF-EM and magnetometer surveys (Figures 3 and 5). The anomalies are found to reflect either magnetic amphibolite or faults, and no follow-up work is warranted.

In the fall of 1989 an in-fill, IP, magnetometer and VLF-EM survey on the Main Grid was completed. This survey consisted of IP on 200 m lines to complement the IP survey completed by Lloyd Geophysics Limited in 1988. The magnetometer and VLF-EM survey was completed on 50 m lines over the known skarn mineralization and 100 m lines to the west. Lloyd's data from 1988 from both the Main Grid and the Main Grid East Extension were included in Pacific Geophysics Ltd. interpretation. A semi-circular high chargeability anomaly on the East Extension may indicate porphyry style mineralization and several smaller coincident high chargeability, magnetic and VLF-EM anomalies on the Main Grid reflects skarn



1b	Diorite, minor chlorite alt., weakly propylitized with chlorite, epidote present, patchy.
1c	Plagioclase porphyry dykes, minor pyroxene phenocrysts.
2a	Propylitic alt. of dark green bedded Andesite; epidote, chlorite, pyrite; possible volcanic flow.
2b	Garnet/Diopside skarn, minor qtz stockwork associated.
4	Pale grey massive Limestone (dolomitized).
5b	Massive magnetite in skarn, actinolite, pyrrhotite.
△ TH-60	Survey station

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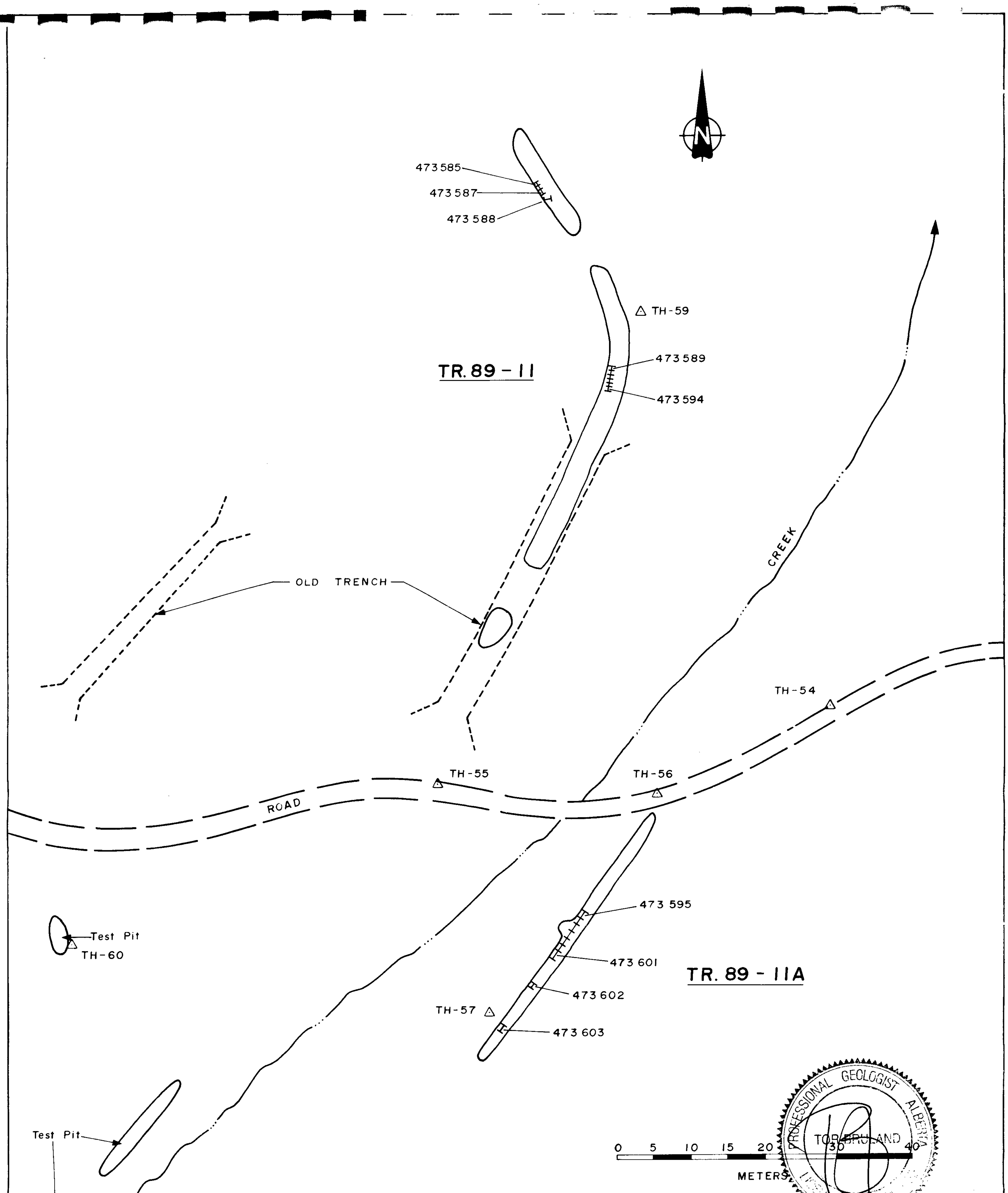
HAIDA PROPERTY

NTS 92P/9W

NORTH LAKEVIEW SHOWING

TRENCH GEOLOGY - 1989

SCALE - 1 : 500	DATE - JANUARY, 5, 1989
DATA - T. BRULAND	REVISED -
DRAWN BY - P. HAILLOT	FIG. No. 13



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VITAL PACIFIC / ELECTRUM OPTION

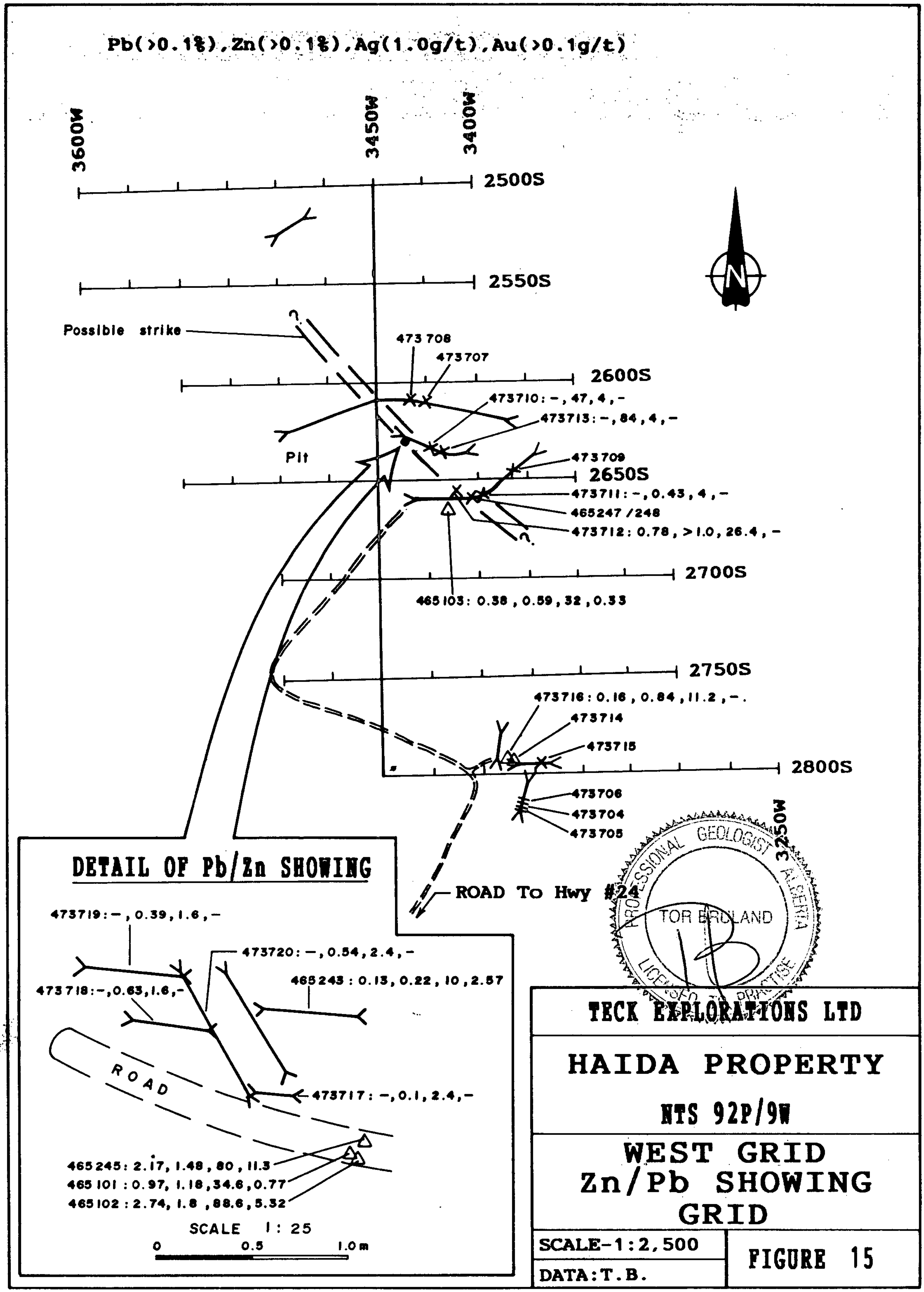
HAIDA PROPERTY

NTS 92 P/9 W

NORTH LAKEVIEW SHOWING

SAMPLE LOCATIONS

SCALE - 1:500	DATE - JANUARY, 5, 1990
DATA - T. BRULAND	REVISED -
DRAWN BY - P. HAILLOT	FIG. No. 14



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HAIDA PROPERTY

NTS 92P/9W

WEST GRID
Zn/Pb SHOWING
GRID

SCALE-1:2,500

DATA: T.B.

FIGURE 15

mineralization (figure 16). Several drill hole locations to test the semi-circular anomaly have been suggested by Paul Cartwright of Pacific Geophysics Ltd.

In the spring of 1990 Pacific Geophysical Ltd. completed an IP and magnetometer survey on the Main Grid West Extension to define the open high chargeability anomaly to the northwest, and to explore the area for porphyry style mineralization. This survey outlined two large high chargeability and low resistivity anomalies, one in the northeast and one in the southwest (Figure 16).

The coincident chargeability,magnetic and VLF-EM anomalies in the South Lakeview and Lakeview areas have been found by both trenching and drilling to be due to sulphide and oxide bearing skarn with variable amount of sub-economic copper mineralization. However, potential for economic mineralization still exists in this area.

The high chargeability and low resistivity anomaly C was found by drilling to reflect graphitic-pyritic argillite, and it is believed that anomaly C1 reflect similar rock. Neither of these anomalies warrants further work.

Anomaly B (Figure 16) might reflect metallic sulphides and warrants drill testing. Of the remaining 9 anomalies, only two are interpreted to reflect metallic sulphides in an amount that warrants additional work. Since anomaly K is located adjacent to the northeastern claim boundary, only anomaly J1 warrants work at the present time. Prior to drilling this anomaly, it needs to be defined by additional IP survey.

DIAMOND DRILLING

In the spring of 1990 a 13 hole 5747 feet drill program was completed on 4 separate targets on the property (figures 3, 5 and 7; and Table 2). The drilling was done by L.D.S. Diamond Drilling Ltd. of Kamloops, B.C. using a Longyear super 38 diamond drill extracting NQ-size drill core. The core was logged and split at Lac des Roches Resort 20 km west of the property along Highway 24. Both logging and sampling were done in 3 m sample intervals for the porphyry targets, and in 1 m sample intervals for the Cu skarn target. A magnetometer survey was done on the core in conjunction with the logging using an EDA k-2 Magnetic Susceptibility Meter. The drill logs are enclosed in Appendix IV. All the core was shipped to Barrier where it is stored inside a fenced area together with the core from the 1988 drilling.

In holes 90-25, 90-26 and 90-27 every third sample was split. A total of 619 samples were collected, representing 89% of the core. All samples were sent to Chemex Labs Ltd. in North Vancouver where they were assayed for gold by standard fire assay with atomic absorption finish and for 9 elements (Ag, Co, Cu, Fe, Mn, Mo, Ni, Pb and Zn) by using a nitric-aqua-regia digestion and analyzed by inductively coupled plasma spectroscopy (Appendix V).

Seven holes for 1,248.7 m were drilled along the margin of the semi-circular chargeability anomaly (southeastern part of anomaly A Figure 16) southeast of Deer Lake (figures 3 and 5, sheet 4). The majority of the holes were located on the inside of the anomaly and drilled outwards.

Drill hole 90-17 was collared in diorite and intersected endoskarn between 59.7 and 87.5 m. The hole was completed in diorite at 168.6 m. The analytical results returned background values for Cu and Au.

B

Drill hole 90-18 was collared in diorite and intersected andesite augite porphyry between 108.1 and 139.3 m. The hole was completed in diorite at 200.3 m. Analytical results returned background values for Cu and Au.

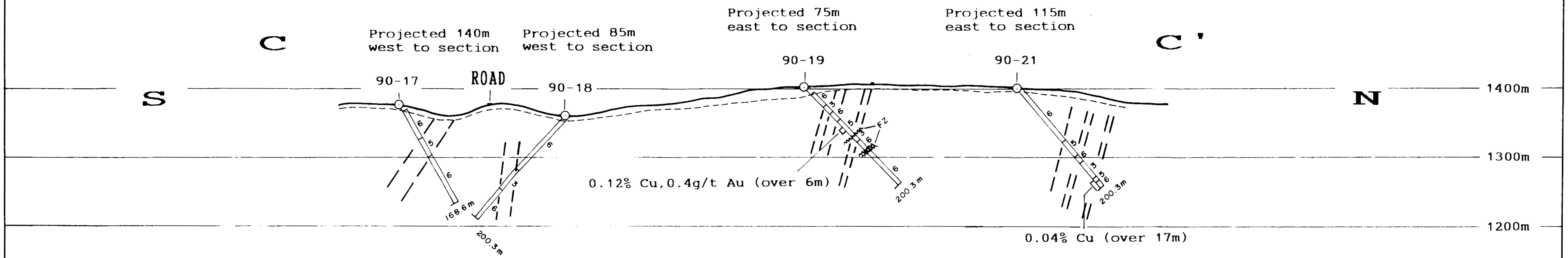
Drill hole 90-19 was collared in diorite and intersected andesite porphyry between 41.7 and 56.0 m, endoskarn between 69.0 and 99.1 m and andesite porphyry again between 100.1 and 105.9 m. It was completed in diorite at 200.3 m. Analytical results returned .125 Cu and .01 oz/ton Au over 6 m in the endoskarn at 84.0 m.

The above described drill holes have been projected on cross section 1,075E (Figure 17), and the limited data indicate that the diorite could be in the form of sills rather than dykes or stocks. The same trend can be seen by the three following drill holes from the same general area projected onto cross section 795E (Figure 18).

Drill hole 90-20 intersect diorite from the collar to completion at 200.3 m, and the analytical results returned background values for Cu and Au.

Drill hole 90-22 was collared in diorite, intersected endoskarn between 71.1 and 77.0 m, argillite between 77.0 and 88.5 m, additional endoskarn between 88.5 and 108.7 m and from 157.0 m to it was completed at 200.3 m. The analytical results returned .4% Cu and .018 oz/ton Au over 3 m in endoskarn at 102.0 m.

Drill hole 90-23 was collared in endoskarn, intersected diorite between 51.1 and 69.0 m, and was completed in endoskarn at 96.9 m. The analytical results returned .1% Cu and .003 oz/ton Au over 3 m in endoskarn at 78.0 m.



20014

PROFESSIONAL GEOLOGIST
TOR BRULAND

LEGEND

1	Argillite
2	Limestone
3	Andesite
4	Hornfelsed sediments
5	Skarn
6	Diorite
7	Granodiorite
8	Amphibolite
FZ	Fault zone

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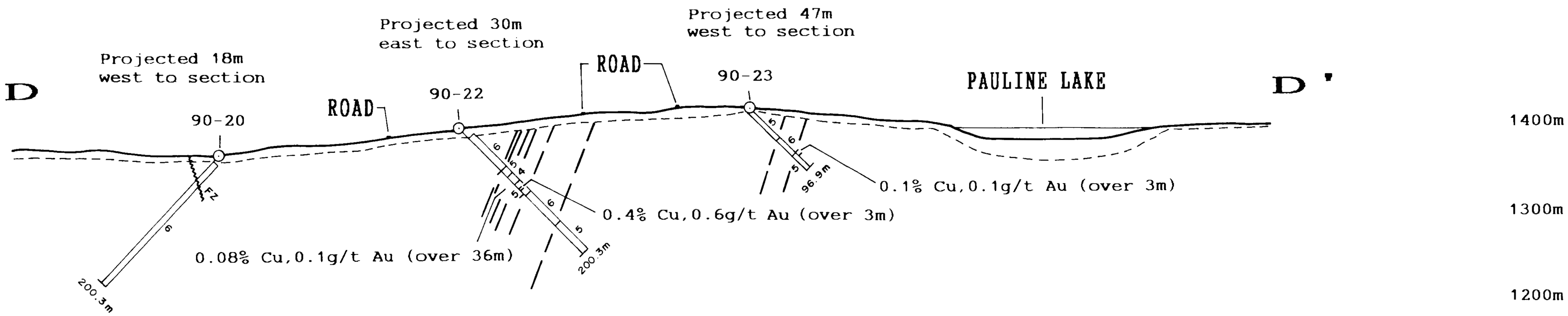
VITAL/ELECTRUM OPTION

KAMLOOPS MINING DIVISION, B.C.
NTS 92P/9

X-SECTION C-C'
1,075E
LOOKING N270E

SCALE: 1:5000	DATE: APRIL, 1990
DATA: T. BRULAND	FIGURE 17
DRAWN BY: P. HAILLOT	



2014

LEGEND

1	Argillite
2	Limestone
3	Andesite
4	Hornfelsed sediments
5	Skarn
6	Diorite
7	Granodiorite
8	Amphibolite
FZ	Fault zone

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KAMLOOPS MINING DIVISION, B.C.

NTS 92P/9

X-SECTION D-D'
795E

LOOKING N270E

SCALE: 1:5000	DATE: APRIL, 1990
DATA: T. BRULAND	FIGURE 18
DRAWN BY: P. HAILLOT	

TABLE 2

DRILL HOLE DATA

Drill Hole#	Co-ordinates	Grid Locat.	Elev-ation	Azimuth	Dip	Depth	Target
90-17	9,650.4N	738S	1,366.6m	N001.5E	-59	168.6m	Porphyry
	10,993.6E	1,200E					Cu
90-18	9,880.2N	512S	1,369.5m	N179.5E	-50	200.3m	Porphyry
	10,928.7E	1,191E					Cu
90-19	10,191,7N	200S	1,404.9m	N357E	-45	200.3m	Porphyry
	10,780.9E	1,000E					Cu
90-20	9,829.0N	580S	1,373.4m	N180.5E	-45	200.3m	Porphyry
	10,622.8E	829E					Cu
90-22	10,154.9N	249S	1,394.3m	N358.5E	-45	200.3m	Porphyry
	10,560.7E	773E					Cu
90-23	10,406.1N	000BL	1,412.5m	N358.5E	-44	96.9m	Porphyry
	10,552.6E	770E					Cu
90-24	9,724.7N	640S	1,380.7m	N358E	-44.5	182.0m	Porphyry
	11,462.0E	1,684.5E					Cu
90-25	11,682.1N	1,370N	1,459.6m	N002E	-65	84.4m	Porphyry
	8,705.3E	1,070W					Cu, IP
90-26	11,402.2N	1,082N	1,452.5m	N356E	-44	89.9m	Porphyry
	8,735.0E	1,050W					Cu, IP
90-27	9,607.8N	780S	1,425.8m	N042.5E	-45	196.3m	IP, Mag.
	9,288.2N	610W					
90-28	10,102.6N	330S	1.406.5m	N288E	-47	57.0m	Cu skarn
	9,859.2E	0					
90-29	10,102.1N	330S	1,406.0m	N353.5E	-45.5	41.8m	Cu skarn
	9,861.6E	0					
90-30	10,010.3N	435S	1,416.2m	N289E	-43	33.8m	Cu skarn
	9,837.0E	0					

Total 1,751.9 m(5,747')

B

Drill hole 90-24 is located in the eastern part of the semi-circular chargeability anomaly (Figure 16). This hole intersected bedded argillite, limestone and quartzite hornfels from the collar to the bottom of the hole at 182.0 m. The analytical results returned background values for Cu and .035 oz/ton Au over 3 m in argillite and limestone at 78.0 m.

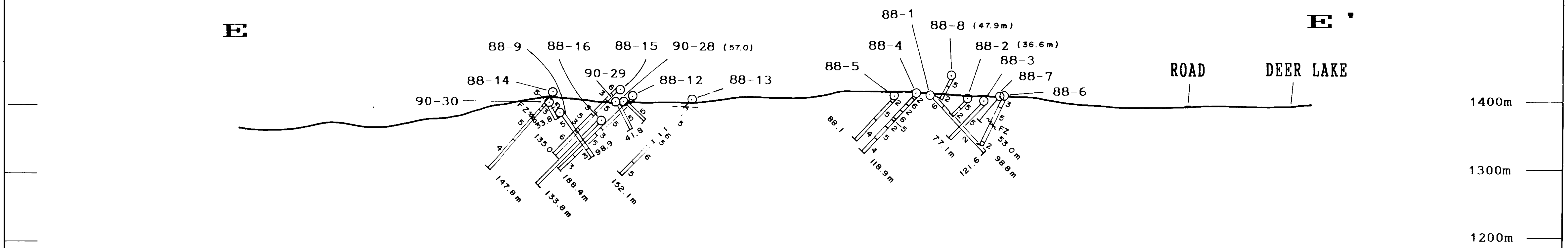
The drilling of this potential porphyry Cu system located fresh diorite with chlorite, minor sericite and epidote alteration. The chargeability anomaly is explained by the generally high pyrite content of 2-5%. This indicates that the present surface is located low in the Phyllic and Argillic alteration halos on the border of the pyrite shell in the porphyry copper ore deposit model. The presence of pyrite and magnetite in the endoskarn suggest that the drilling was done peripheral to a possible ore shell at the very bottom of a possible porphyry copper system.

Drilling of the coincident high chargeability and low resistivity anomaly to the northwest of Deer Lake (northwestern part of anomaly A Figure 16) was done in two holes (90-25 and 90-26) for a total of 174.3 m. Both holes have been projected onto cross section 1,055W (Figure 21).

Drill hole 90-25 was collared in andesite and intersected graphitic bedded argillite between 33.5m and the bottom of the hole at 84.4m. The analytical results returned background values for both copper and gold.

Drill hole 90-26 was collared in andesite and intersected graphitic bedded argillite between 22.6m and the bottom of the hole at 89.9m. Analytical results returned background values for both copper and gold.

TB



20014

LEGEND

1	Argillite
2	Limestone
3	Andesite
4	Hornfelsed sediments
5	Skarn
6	Diorite
7	Granodiorite
8	Amphibolite
FZ	Fault zone

PROFESSIONAL GEOLOGIST ALBERTA TOR BRULAND

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KAMLOOPS MINING DIVISION, B.C.

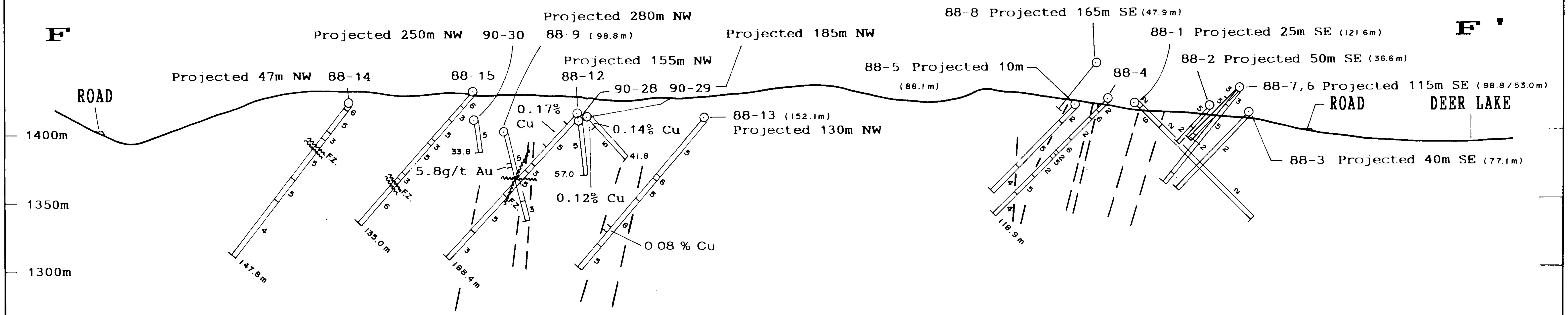
NTS 92P/9

X-SECTION E-E'

20W

LOOKING N270E

SCALE: 1:5000	DATE: APRIL, 1990
DATA: T. BRULAND	FIGURE 19
DRAWN BY: P.HAILLOT	



20014

LEGEND

1	Argillite
2	Limestone
3	Andesite
4	Hornfelsed sediments
5	Skarn
6	Diorite
7	Granodiorite
8	Amphibolite
FZ	Fault zone

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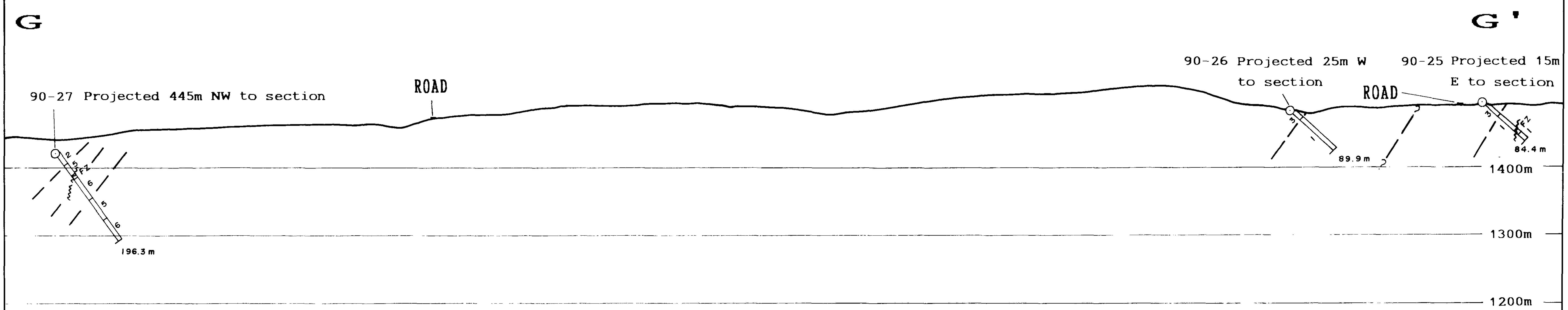
NTS 92P/9

X-SECTION F-F'

N025E

LOOKING N295E

SCALE: 1:2500	DATE: APRIL, 1990
DATA: T. BRULAND	FIGURE 20
DRAWN BY: P. HAILLOT	



20014

LEGEND

1	Argillite
2	Limestone
3	Andesite
4	Hornfelsed sediments
5	Skarn
6	Diorite
7	Granodiorite
8	Amphibolite
FZ	Fault zone

TOR BRULAND

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VITAL/ELECTRUM OPTION

KAMLOOPS MINING DIVISION, B.C.

NTS 92P/9

X-SECTION G-G'
1,055W

SCALE: 1:5000	DATE: APRIL, 1990
DATA: T. BRULAND	FIGURE 21
DRAWN BY: P. HAILLOT	

The presence of graphite and locally up to 10% disseminated pyrite in both holes explains the high chargeability and the low resistivity anomaly in this area, and no further work is warranted for this area. The southwestern chargeability and resistivity anomaly (Anomaly C1 Figure 16) with a similar geophysical signature and a graphitic argillite outcrop, warrants no further work.

The coincident chargeability and magnetic anomaly (anomaly B on Figure 16) was tested by one drill hole (Figure 5, sheet 3).

Drill hole 90-27 was collared in marble and intersected diorite between 19.7 and 55.7 m. Between 55.7 and 84.0 m the hole intersected an amphibolite with up to 10% disseminated magnetite, which explains the magnetic anomaly. Diorite was intersected between 84.0 and 106.2 m, followed by endoskarn between 106.2 and 153.0 m, and diorite again between 153.0 m and the bottom of the hole at 196.0 m. The chargeability anomaly is explained by up to 5% disseminated pyrite locally in the diorite. The analytical results returned background values for both Cu and Au, and no further work is warranted for this anomaly.

The Cu skarn at the South Lakeview showing was tested by three short holes to establish the down dip extension of the mineralization (Figures 3, 5, 7, 8, 10, 19 and 20). The potential of this mineralization was not adequately tested by this limited drill program.

Drill hole 90-28 was collared in magnetite-pyrrhotite skarn and intersected garnet endoskarn between 29.1 m and the bottom of the hole at 57.0 m. Analytical results returned .12% Cu over 6 m in the magnetite-pyrrhotite skarn at 2.0 m.

Drill hole 90-29 from the same location was collared in magnetite-pyrrhotite skarn and intersected garnet endoskarn between 16.0 m and the end of the hole at 41.8 m. Analytical results returned .13% Cu over 13 m in the magnetite-pyrrhotite skarn at 3.0 m. Both holes were drilled oblique to the strike, so the intersections do not represent a true thickness.

Drill hole 90-30 was collared in an actinolite/tremolite hornfels of which continued to the bottom of the hole at 33.8 m. The analytical results returned .1% Cu over 2 m at the bottom of the hole.

The limited drilling of the South Lakeview showing located the down dip extension of the magnetite-pyrrhotite breccia skarn located on surface. Present drilling in magnetite-pyrrhotite skarn, in addition to .17% Cu over 25 m in magnetite-pyrrhotite skarn at 11.0 m in hole 88-12 indicates that a potential for economic copper mineralization exists at the South Lakeview showing. This potential and the other known skarns should be followed up by additional drilling.

CONCLUSION AND RECOMMENDATION

Work during the present program has found that the thick extensive clay layer in the overburden throughout the property limits effective exploration methods to geophysical surveys and drilling.

Results to date indicate that the property has potential for economic Cu skarn mineralization similar to the Craigmont Mine in the Nicola Group to the south of Kamloops. Although limited drilling at the South Lakeview showing has intersected subeconomic copper mineralization, the mineralization has not been delineated. The potential size and extent of the Cu mineralization at the South

Lakeview showing should be assessed by deep drilling. Similar skarn at both the Lakeview and North Lakeview showings are essentially untested, and could host additional copper mineralization. Geophysical surveys have located several areas on the property with a geophysical signature similar to the skarn at the South Lakeview showing which should be tested for Cu mineralization.

The present program has adequately tested and explained the porphyry Cu potential southeast of Deer Lake, which was found to be a low level barren pyrite halo possibly adjacent to an ore shell. Further exploration toward locating this possible ore shell should be directed toward the southeast by extending the geophysical IP survey to define the open chargeability anomaly. This should be given low priority since previous limited shallow drilling to the south has been unsuccessful in locating economic mineralization.

The large chargeability and resistivity anomalies northwest of Deer Lake and north of Heidi Lake are caused by bedded pyritized graphitic argillite with no economic potential.

The Zn-Pb mineralization located in the southwest corner of the property has been interpreted as being discontinuous manto style mineralization usually found adjacent to both Cu skarn and porphyry Cu mineralization. It can be used as a regional pathfinder to economic mineralization, but is in itself probably without any economic potential on this property.

The J1 chargeability anomaly in the northwest should be defined by an additional geophysical survey.

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6. Lowell,J.D. & Guilbert,J.M.(1970) Lateral and Vertical Alteration-Mineralization Zoning in Porphyry Ore Deposits: Economic Geology, volume 65 No. 4

7. Murton, J.W., P. Eng - Final Report December 1973 - Bog-Fri Option 1973, company report

8. Preto, V.A.G. (1977) - Geology of the area between Eakin Creek and Windy Mountain, B.C.D.M.- G.E.M. 1970, p.307

9. Rockel, E.R. (1987) - Report on Induced Polarization and Resistivity Surveys on the NUF 1, TUN 1 and VIT 1 claims, for Vital Pacific Resources Ltd., company report

10. Rockel, E.R. (1988) - Report on Geophysical Surveys on the Deer Lake and Haida Grids, for Vital Pacific Resources Ltd., company report

11. Rockel, E.R. (1987) - Report on Geophysical Surveys on the Deer Lake and Haida Grids, for Vital Pacific Resources Ltd., company report

12. Symonds, D.F. & Montgomery, J.H. (1977) - Report on the Deer Lake Copper-Gold Prospect, Kamloops, M.D., B.C. on behalf of Meridian Resources Ltd., B.C.D.M.A.R. 6586

13. Westerman, C.J. (1987a) - Geochemical report on Fort 9 Mineral Claim, for Electrum Resources Ltd. and Vital Pacific Resources Ltd., filed for assessment credits June 1987

14. Westerman, C.J. (1987b) - Geological, Geochemical and Geophysical report on the Haida Gold Property, for Vital Pacific Resources Ltd., filed for assessment credits August 1987

15. Westerman, C.J. (1988a) - Assessment Report on the Phase I Diamond Drilling Program on the Haida Gold Property for Vital Pacific Resources Ltd., November 15, 1988

16. Westerman, C.J. (1988b) - Assessment Report on the Phase II Diamond Drilling Program on the Haida Gold Property for Vital Pacific Resources Ltd., December 15, 1988

17. The following B.C.D.M. Assessment Reports are pertinent to the area of the Haida gold property: AR#905, 907, 910, 981, 1061, 1123, 1169, 1690, 2712, 3349, 3945, 4028, 4260, 4262, 4264, 4678, 4684, 4835, 4947, 5424, 5425, 5734, 6586

18. The mineralization within the Haida Gold property is referred to in the following B.C. government publications: M.M.A.R. 1930 - p.191, 1966 - p143, 1967 - p.133, G.E.M. 1970 - p.312, 1971 - p.334, 1972 - p.320, 1973 - p.275, 1977 - p.E179.

CERTIFICATE

I, Tor Bruland, of the city of White Rock, Province of British Columbia, do hereby certify:

1. I am a Consulting Geologist with Cascade Geological Services, 16126 12A Avenue, White Rock, B.C. V4A 6V9 on contract with Teck Explorations Ltd.,960-175 Second Avenue, Kamloops, B.C. V2C 5W1.

2. I am a graduate of the University of Bergen, Norway, with a Cand. Mag. (B.Sc.) degree in Geology (1977), and a Cand. Real. (M.Sc.) degree in Geology (1980).

3. I am a Professional Geologist licensed in the Province of Alberta with The Association of Professional Engineers, Geologists and Geophysicists of Alberta.

4. I am a registered Fellow of the Geological Association of Canada.

5. I have been practising my profession for 13 years, in Norway between 1977 and 1980, and since 1980 in British Columbia, Yukon and the western U.S.

6. This report is based on my own observations and the observations of people under my supervision on the Haida property between September 20, 1989 and March 28, 1990.

7. I have no direct or indirect interest, nor do I expect to receive any interest, directly or indirectly, in the property or securities of Teck Corporation, Vital Pacific Resources Ltd. or Electrum Resources Corporation or any of its affiliates.

8. I give my consent to the use of my name and this report for qualification requirements but not for advertising purposes.

DATED at White Rock, British Columbia this 2nd day of May 1990.

PROFESSIONAL GEOLOGIST
TOR BRULAND
ALBERTA
LICENSED TO PRACTISE

TOR BRULAND, M.Sc., P.Geol., FGAC

APPENDIX I

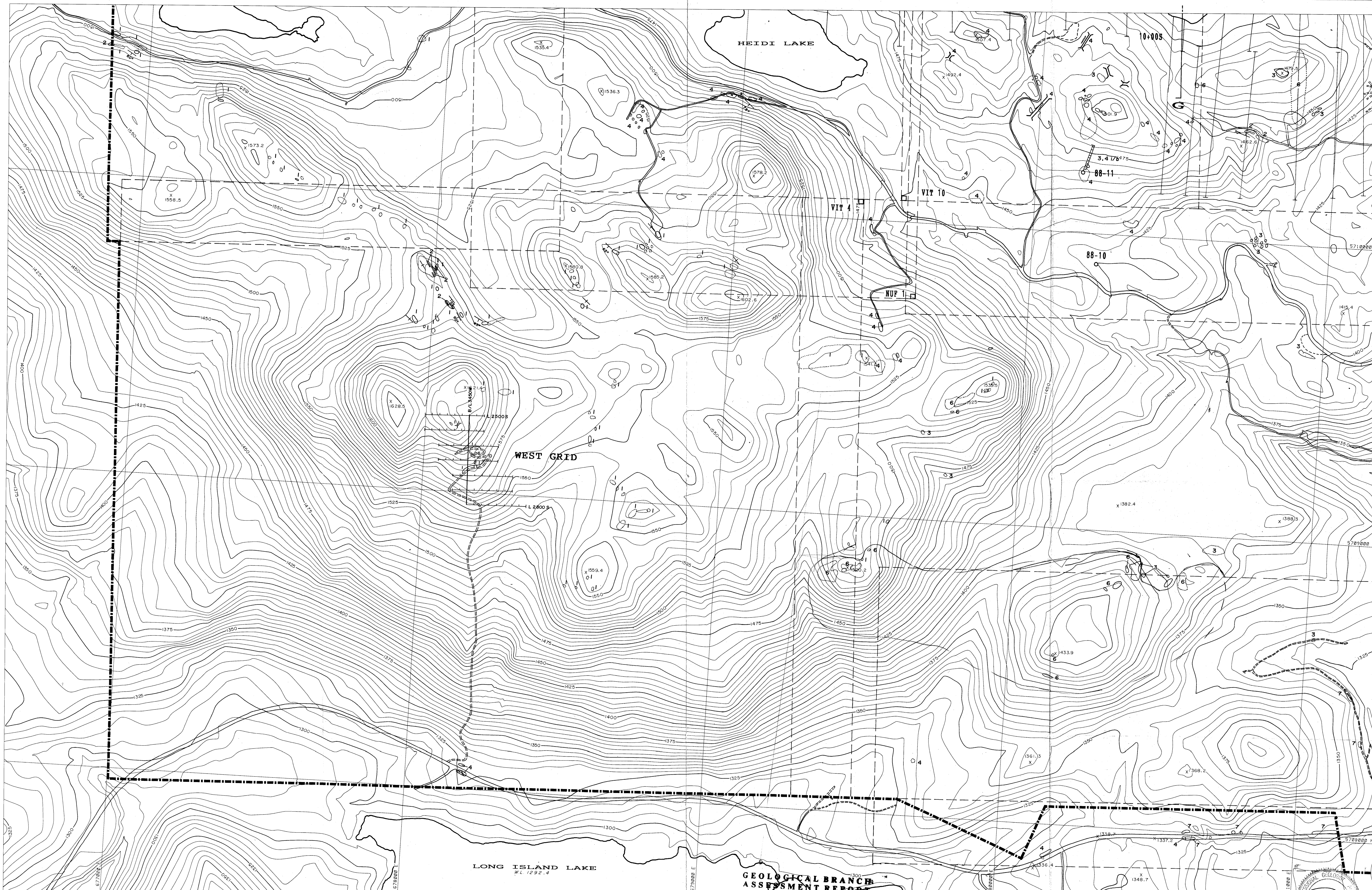
STATEMENT OF COST

STATEMENT OF COSTS

Geology Salaries

Office Supervision	$ 1,530.92	
T. Bruland, Project geologist 174 days @$192.5	33,495.00	
L. Grexton, Geologist 23 days @$235.95	5,426.85	
P. Roberts, Geologist 126 days @$185.90	23,423.40	
T. Archibald, Prospector 27 days @$165.00	4,455.00	
G. Lovang, Field Technician 64 days @$178.10	11,398.40	
K. Chubb, Field Technician 52.5 days @$156.00	8,190.00	
J. Fitzgerald, Field Technician 17 days @$143.00	2,431.00	
C. Brown, Field Technician 20 days $128.70	2,574.00	$92,924.57
Linecutting: 72.89 km of IP standard		27,264.11
Geophysics: (46.35km IP, 71.9 km, magnetometer, 45.5 km VLF-EM)		59,351.93
Diamond Drilling: 5,747 feet @ $18.51/foot		106,371.87
Trenching: (2,011m with hoe)		16,194.75
Site Preparation, drill sites, road preparation (with bulldozer)		11,110.00
Assaying: (554 drill core samples, 601 rock samples, 878 soil samples)		38,511.68
Claim Staking (VIT & DLI claims)		2,637.89
Transportation and Shipping		17,617.30
Room and Board 417 ¼ man days @ $24.15/man day		10,335.20
Office and Field supplies, equipment rental		5,372.04
Office cost, Phone, Mail etc		2,438.27
Drafting, Maps, Prints, Supplies etc		7,175.45
Government Fees		496.00
Legal fees		2,180.00
		$399,981.06

TB



LEGEND

1	Argillite	4	Hornfelsed sediments	7	Granodiorite	⊥	Bedding
2	Limestone	5	Skarn	8	Amphibolite	⊥	Foliation
3	Andesite	6	Diorite				

SHEET INDEX

20,014 Part 1 of 3

PRELIMINARY RECONNAISSANCE TYPE MAPPING
SCALE AND ELEVATION DATUM BASED ON LIMITED GROUND CONTROL
RESULTING IN GOOD RELATIVE BUT UNCERTAIN MAP ACCURACY.

McElhanney
REF. NO. 50890-

MCELHANNEY GEOSURVEYS LTD.
200-1166 ALBERNI STREET VANCOUVER B.C.
COMPILED FROM AERIAL PHOTOGRAPHY TAKEN IN 1985 AT AN APPROXIMATE SCALE OF 1:15000
MAP SCALE 1:5,000
CONTOUR INTERVAL 5 METRES
DATE COMPILED OCTOBER 1989
SHEET NUMBER 1 OF 4

TECK EXPLORATIONS LTD
VITAL PACIFIC / ELECTRUM OPTION
HAIDA PROJECT
GEOLOGY
ORTHOPHOTO

FIGURE 5

LEGEND

1	Argillite	4	Hornfelsed sediments	7	Granodiorite		Bedding
2	Limestone	5	Skarn	8	Amphibolite		Foliation
3	Andesite	6	Diorite				

SHEET INDEX

3	4
1	2

PRELIMINARY RECONNAISSANCE TYPE MAPPING
SCALE AND ELEVATION DATUM BASED ON LIMITED GROUND CONTROL
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COMPILED FROM AERIAL PHOTOGRAPHY TAKEN IN 1985 AT AN APPROXIMATE SCALE OF 1:15000

MAP SCALE 1:5.000 | CONTOUR INTERVAL 5 METRES

DATE COMPILED OCTOBER 1988 | SHEET NUMBER 2 OF 4

TECK EXPLORATIONS LTD
VITAL PACIFIC / ELECTRUM OPTION

HAIDA PROJECT
GEOLOGY
ORTHOPHOTO

FIGURE 5

LEGEND

1	Argillite	4	Hornfelsed sediments	7	Granodiorite		Bedding
2	Limestone	5	Skarn	8	Amphibolite		Foliation
3	Andesite	6	Diorite				

SHEET INDEX

PRELIMINARY RECONNAISSANCE TYPE MAPPING
SCALE AND ELEVATION DATUM BASED ON LIMITED GROUND CONTROL
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AT AN APPROXIMATE SCALE OF 1:15000

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DATE COMPILED	OCTOBER 1988	SHEET NUMBER	3 OF 4

TECK EXPLORATIONS LTD
VITAL PACIFIC / ELECTRUM OPTION

HAIDA PROJECT
GEOLOGY

ORTHOPHOTO

FIGURE 5

LEGEND

1	Argillite	4	Hornfelsed sediments	7	Granodiorite	⊥	Bedding
2	Limestone	5	Skarn	8	Amphibolite		Foliation
3	Andesite	6	Diorite				

SHEET INDEX

3	4
1	2

PRELIMINARY RECONNAISSANCE TYPE MAPPING
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200-1166 ALBERNI STREET VANCOUVER B.C.

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AT AN APPROXIMATE SCALE OF 1:15000

MAP SCALE 1:5,000 | CONTOUR INTERVAL 5 METRES
DATE COMPILED OCTOBER 1989 | SHEET NUMBER 4 OF 4

20,014

Part 1 of 3

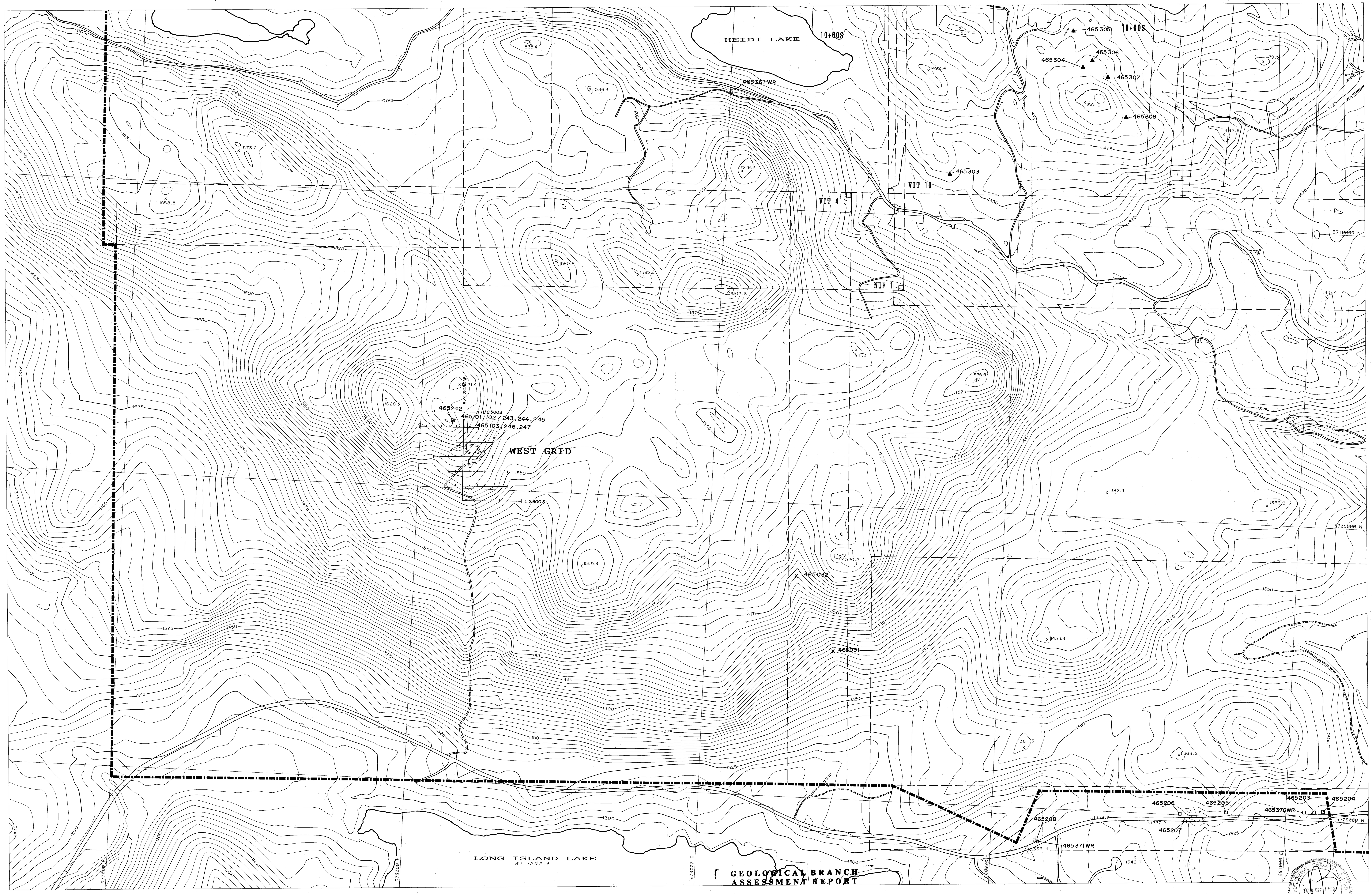
TECK EXPLORATIONS LTD
VITAL PACIFIC / ELECTRUM OPTION

HAIDA PROJECT

GEOLOGY

ORTHOPHOTO

FIGURE 5



LEGEND

□ ROCK SAMPLE	△ FLOAT SAMPLE
▲ LOCAL FLOAT SAMPLE	X SILT SAMPLE

SHEET INDEX

3	4
	2

20,014 Part 1 of 3

PRELIMINARY RECONNAISSANCE TYPE MAPPING
SCALE AND ELEVATION DATUM BASED ON LIMITED GROUND CONTROL
RESULTING IN GOOD RELATIVE BUT UNCERTAIN MAP ACCURACY.

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COMPILED FROM AERIAL PHOTOGRAPHY TAKEN IN 1985 AT AN APPROXIMATE SCALE OF 1:15000

MAP SCALE	1:5,000	CONTOUR INTERVAL	5 METRES
DATE COMPILED	OCTOBER 1989	SHEET NUMBER	1 OF 4

TECK EXPLORATIONS LTD
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HAIDA PROJECT
SAMPLE LOCATIONS

ORTHOPHOTO

FIGURE 6

GEOLOGICAL BRANCH
ASSESSMENT REPORT

20,014

Part 1 of 3

LEGEND

- □ ROCK SAMPLE
- ▲ LOCAL FLOAT SAMPLE
- △ FLOAT SAMPLE
- X SILT SAMPLE

SHEET INDEX

3	4
1	2

PRELIMINARY RECONNAISSANCE TYPE MAPPING
SCALE AND ELEVATION DATUM BASED ON LIMITED GROUND CONTROL
RESULTING IN GOOD RELATIVE BUT UNCERTAIN MAP ACCURACY.

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MCELHANNEY GEOSURVEYS LTD.
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COMPILED FROM AERIAL PHOTOGRAPHY TAKEN IN 1985 AT AN APPROXIMATE SCALE OF 1:15000

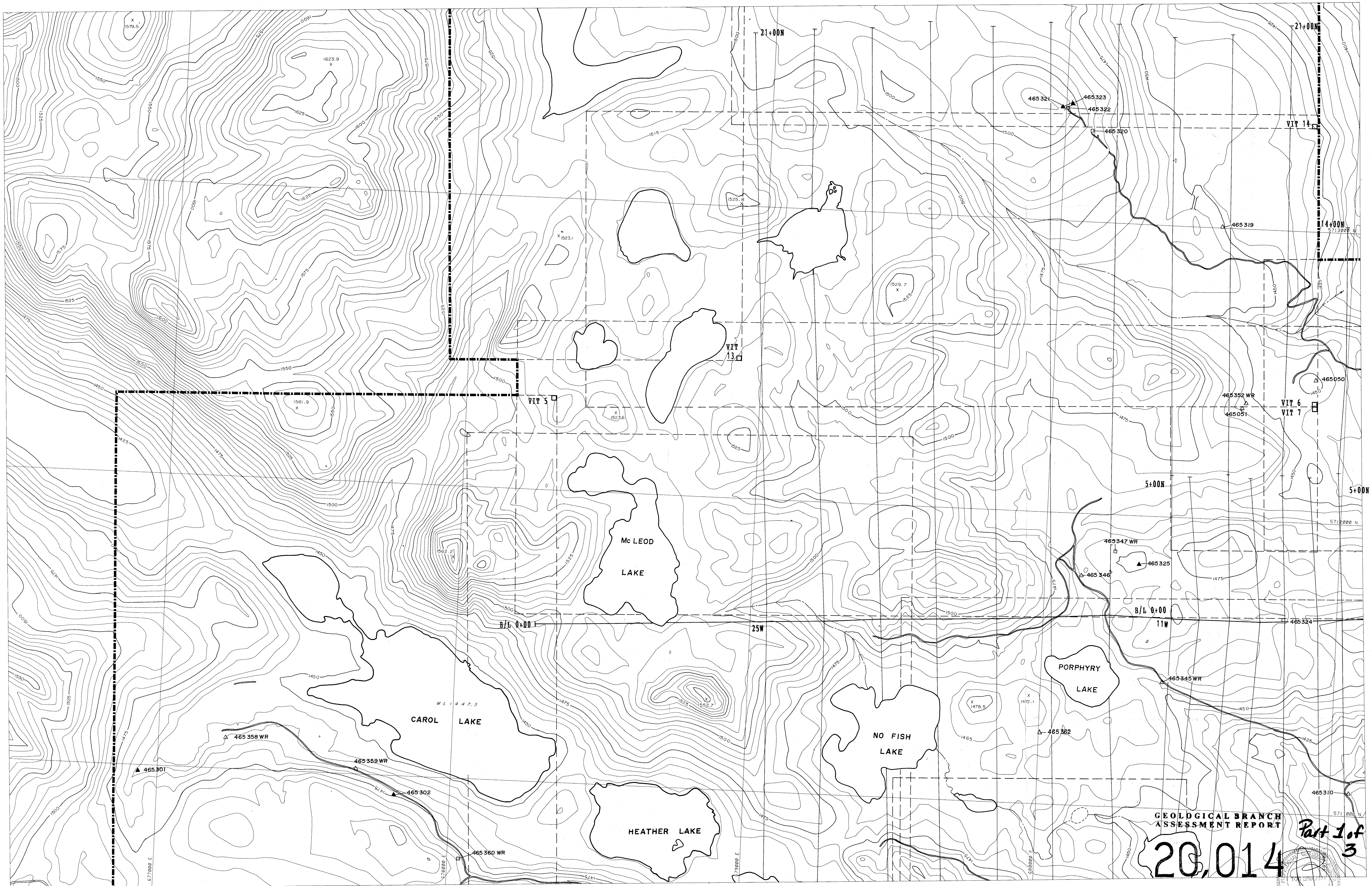
MAP SCALE	1:5,000	CONTOUR INTERVAL	5 METRES
DATE COMPILED	OCTOBER 1988	SHEET NUMBER	2 OF 4

TECK EXPLORATIONS LTD
VITAL PACIFIC / ELECTRUM OPTION

HAIDA PROJECT
SAMPLE LOCATIONS

ORTHOPHOTO

FIGURE 6



LEGEND

□ ROCK SAMPLE
▲ LOCAL FLOAT SAMPLE
△ FLOAT SAMPLE
X SILT SAMPLE

SHEET INDEX

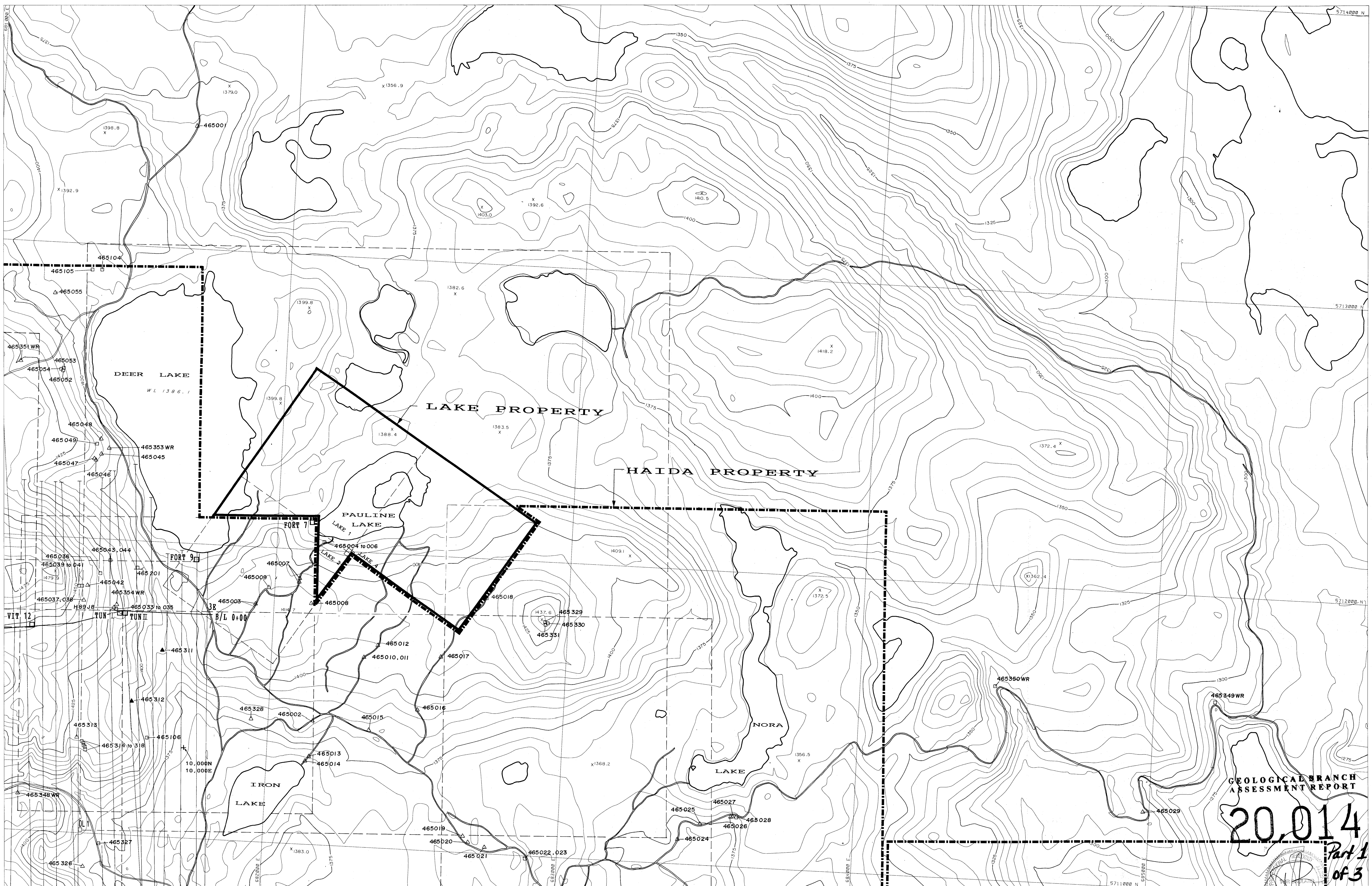
3	4
1	2

PRELIMINARY RECONNAISSANCE TYPE MAPPING
SCALE AND ELEVATION DATUM BASED ON LIMITED GROUND CONTROL
RESULTING IN GOOD RELATIVE BUT UNCERTAIN MAP ACCURACY.

McElhanney
REF. NO. 50890-

MCELHANNEY GEOSURVEYS LTD.
200-1166 ALBERNI STREET VANCOUVER B.C.
COMPILED FROM AERIAL PHOTOGRAPHY TAKEN IN 1985
AT AN APPROXIMATE SCALE OF 1:15000
MAP SCALE 1:5,000 | CONTOUR INTERVAL 5 METRES
DATE COMPILED OCTOBER 1988 | SHEET NUMBER 3 OF 4

TECK EXPLORATIONS LTD
VITAL PACIFIC / ELECTRUM OPTION
HAIDA PROJECT
SAMPLE LOCATIONS
ORTHOPHOTO
FIGURE 6



LEGEND

- □ ROCK SAMPLE
- ▲ LOCAL FLOAT SAMPLE
- △ FLOAT SAMPLE
- X SILT SAMPLE

SHEET INDEX

3	4
1	2

PRELIMINARY RECONNAISSANCE TYPE MAPPING
SCALE AND ELEVATION DATUM BASED ON LIMITED GROUND CONTROL
RESULTING IN GOOD RELATIVE BUT UNCERTAIN MAP ACCURACY.

McElhanney
REF. NO. 50890-

MCELHANNEY GEOSURVEYS LTD.
200-1166 ALBERNI STREET VANCOUVER B.C.

COMPILED FROM AERIAL PHOTOGRAPHY TAKEN IN 1985 AT AN APPROXIMATE SCALE OF 1:15000

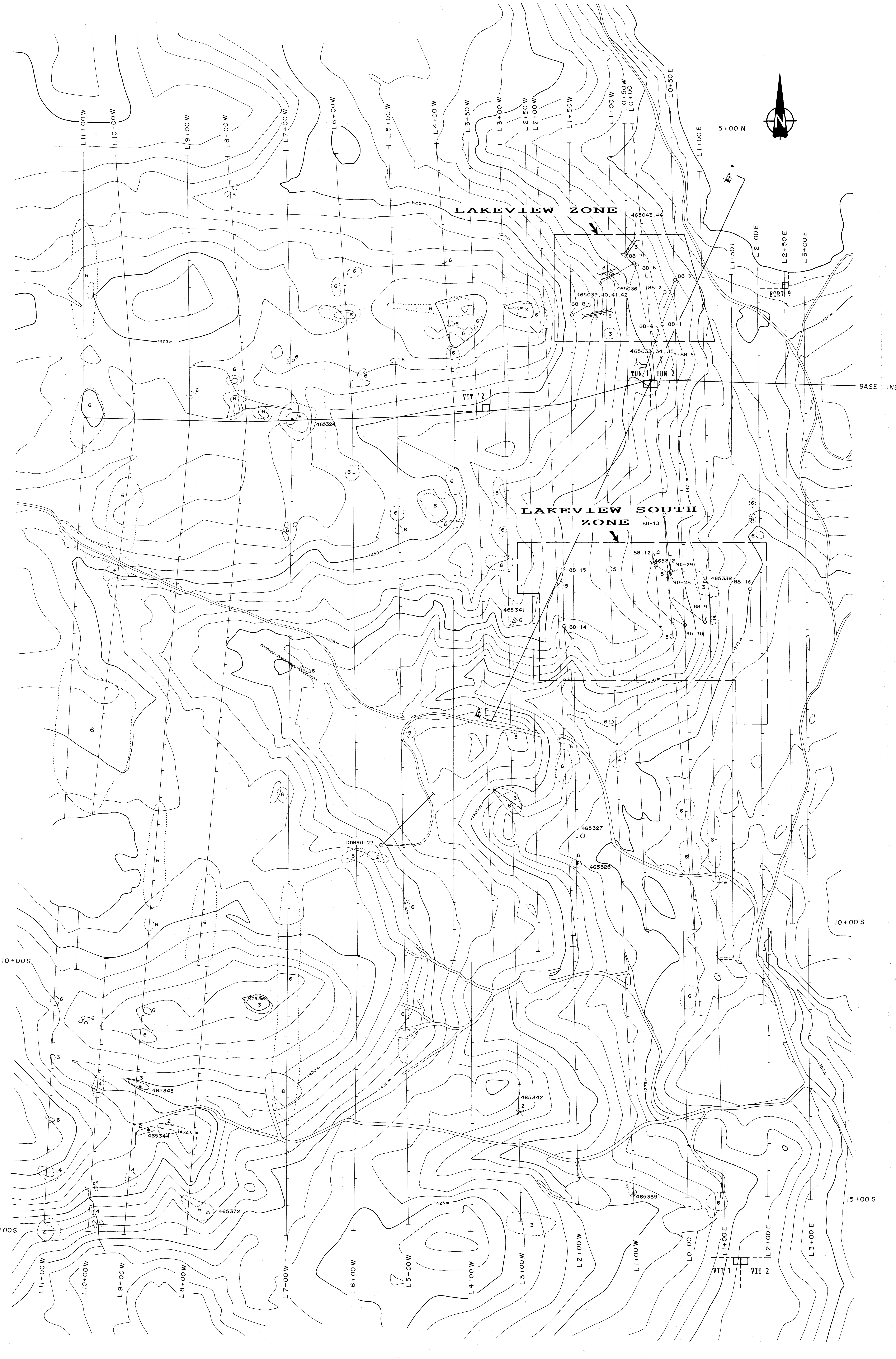
MAP SCALE 1:5,000 | CONTOUR INTERVAL 5 METRES
DATE COMPILED OCTOBER 1989 | SHEET NUMBER 4 OF 4

TECK EXPLORATIONS LTD
VITAL PACIFIC / ELECTRUM OPTION

HAIDA PROJECT
SAMPLE LOCATIONS

ORTHOPHOTO

FIGURE 6



LEGEND

1 Argillite
2 Limestone
3 Andesite
4 Hornfelsed sediments
5 Skarn
6 Diorite
7 Granodiorite
8 Amphibolite
FZ Fault zone
Outcrop
Subcrop

GEOLOGICAL BRANCH
ASSESSMENT REPORT

20,014

Part 1 of 3

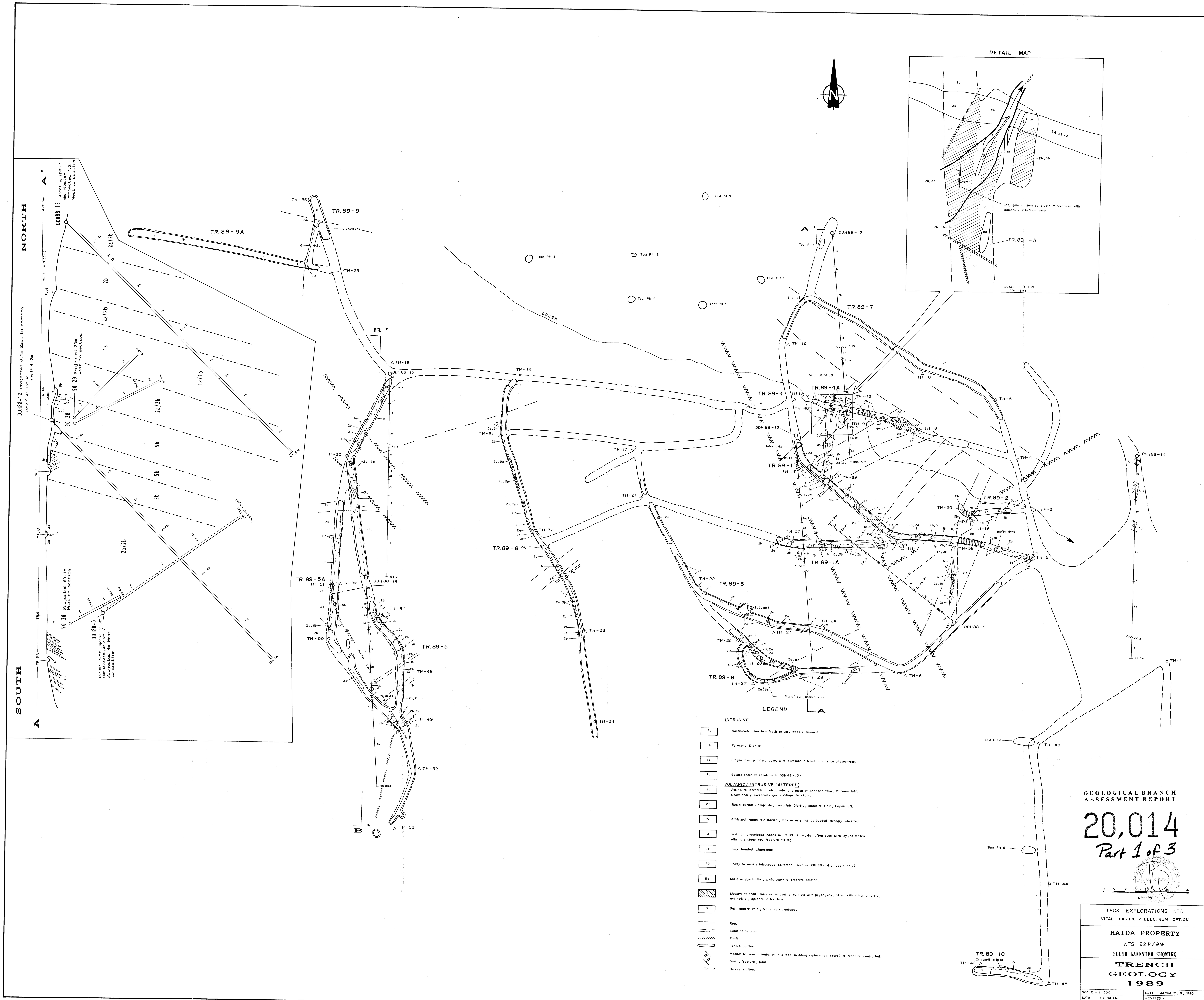
0 20 50 100 150 200
METERS

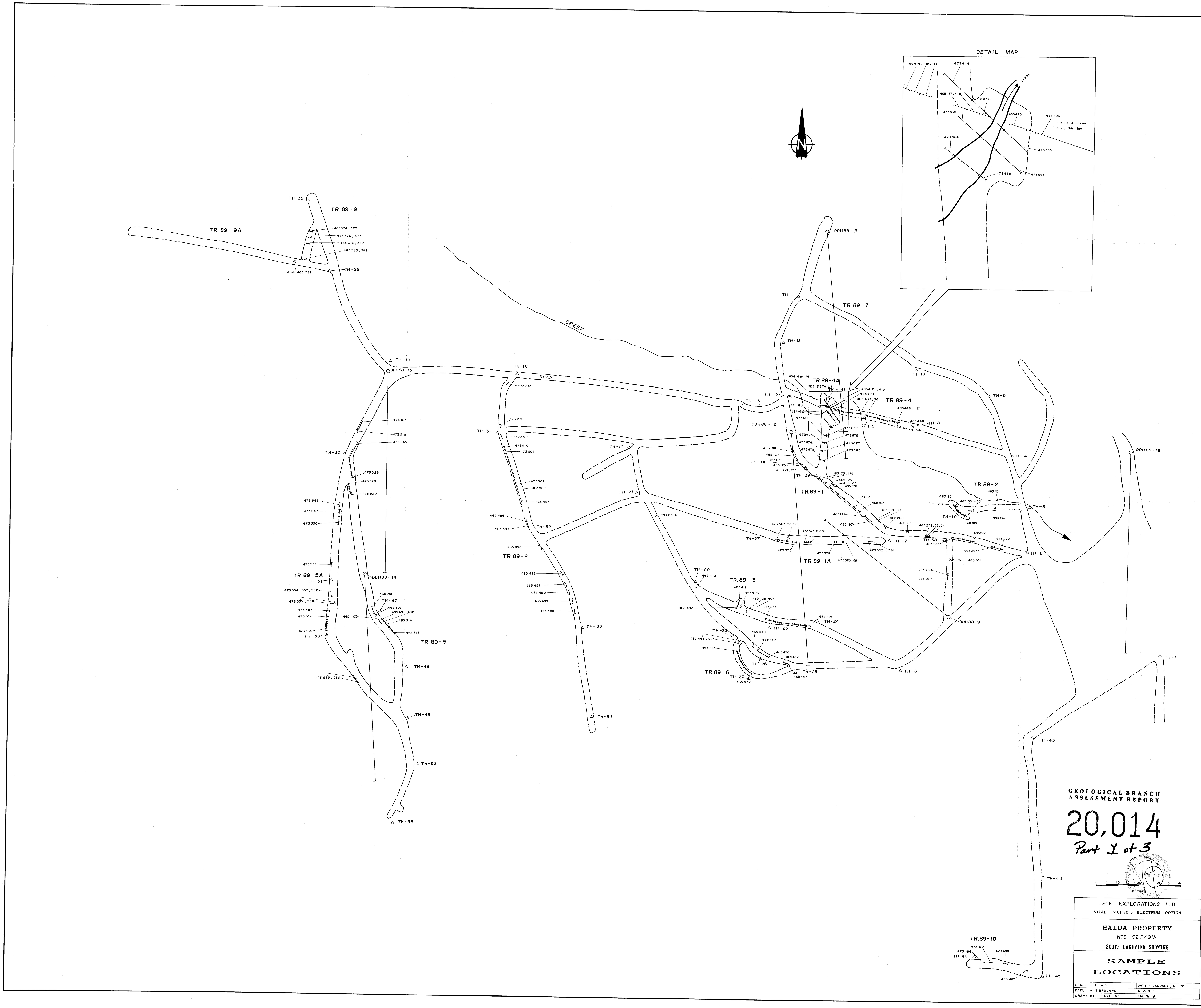
TECK EXPLORATIONS LTD
VITAL PACIFIC / ELECTRUM OPTION

HAIDA PROPERTY
NTS 92P/9W

MAIN GRID GEOLOGY

SCALE - 1 : 2500	DATE : JANUARY , 1989
DATA : T. BRULAND , P.	REVISED -
DRAWN BY : P. HAILLOT	FIG. No. 7


DETAIL MAP
TR. 89 - 4A
Conjugate fracture set ; both mineralized with numerous 2 to 5 cm veins.
CREEK
TR. 89 - 9A
TR. 89 - 9
TR. 89 - 7
TR. 89 - 4
TR. 89 - 1
TR. 89 - 1A
TR. 89 - 2
TR. 89 - 3
TR. 89 - 5A
TR. 89 - 5
TR. 89 - 6
TR. 89 - 8
TR. 89 - 10
DDH88 - 12
DDH88 - 13
DDH88 - 14
DDH88 - 15
DDH88 - 16
DDH88 - 9
Test Pit 1
Test Pit 2
Test Pit 3
Test Pit 4
Test Pit 5
Test Pit 6
Test Pit 7
Test Pit 8
Test Pit 9
NORTH
SOUTH
Mix of soil, broken rock
LEGEND
INTRUSIVE
1a Hornblende Diorite - fresh to very weakly skarned
1b Pyroxene Diorite.
1c Plagioclase porphyry dykes with pyroxene altered hornblende phenocrysts.
1d Gabbro (seen as xenoliths in DDH 88 - 15)
VOLCANIC / INTRUSIVE (ALTERED)
2a Actinolite hornfels - retrograde alteration of Andesite flow, Volcanic tuff. Occasionally overprints garnet/diopside skarn.
2b Skarn garnet, diopside ; overprints Diorite, Andesite flow, Lapilli tuff.
2c Albitized Andesite / Diorite, may or may not be bedded, strongly silicified.
3 Distinct brecciated zones in TR. 89 - 2, 4, 4a, often seen with py, po matrix with late stage cpy fracture filling.
4a Grey banded Limestone.
4b Cherty to weakly tuffaceous Siltstone (seen in DDH 88 - 14 at depth only)
5a Massive pyrrhotite, ± chalcopyrite fracture related.
5b Massive to semi - massive magnetite veinlets with py, po, cpy ; often with minor chlorite, actinolite, epidote alteration.
6 Bull quartz vein, trace cpy, galena.
Road
Limit of outcrop
Fault
Trench outline
Magnetite vein orientation - either bedding replacement (rare) or fracture controlled.
Fault, fracture, joint.
TH - 12 Survey station.
GEOLOGICAL BRANCH
ASSESSMENT REPORT
20,014
Part 1 of 3
0 5 10 15 20 30 40
METERS
TECK EXPLORATIONS LTD
VITAL PACIFIC / ELECTRUM OPTION
HAIDA PROPERTY
NTS 92 P/9W
SOUTH LAKEVIEW SHOWING
TRENCH
GEOLOGY
1989
SCALE - 1 : 500
DATE - JANUARY, 6, 1990
DATA - T. BRULAND
REVISED -
DRAWN BY - P. HAILLOT
FIG. No. 8



GEOLOGICAL BRANCH
ASSESSMENT REPORT

20,014

Part 1 of 3

0 5 10 15 20 30 40
METERS

TECK EXPLORATIONS LTD
VITAL PACIFIC / ELECTRUM OPTION

HAIDA PROPERTY
NTS 92 P/9 W
SOUTH LAKEVIEW SHOWING

SAMPLE LOCATIONS

SCALE - 1:500	DATE - JANUARY, 6, 1990
DATA - T. BRULAND	REVISED -
DRAWN BY - P. HAILLOT	FIG. No. 9


GEOLOGICAL BRANCH
ASSESSMENT REPORT
20,014
Part 1 of 3
To Accompany Report By : G.D.LOCKHART, B.Sc.
: P.A.CARTWRIGHT, P.Geoph.
Instrument : EDA OMNI IV / EDA IP-6
Field : TOTAL
Datum : 49000 nT
Contour Interval : 1000 nT
Anomalous IP Class. : Strong
: Moderate
: Weak
Outline of Anomalous IP Zone :
Axes of Selected VLF-EM Conductors :
TECK EXPLORATIONS LTD.
MAGNETOMETER SURVEY
INDUCED POLARIZATION INTERPRETATION
HAIDA GOLD PROJECT : MAIN GRID KAMLOOPS M.D.,B.C.
SCALE = 1 : 5000 DATE : SEP 88, OCT/NOV 89
SURVEY BY : M.StP/GDL : FEB/MAR 90
FILE : MHAIDA.EXT NTS : 92P8/9
Pacific Geophysical Ltd.

Fig. 16