

83-#179 - #11218

DU PONT OF CANADA EXPLORATION LIMITED

ASSESSMENT REPORT OF GEOLOGICAL AND GEOCHEMICAL
WORK PERFORMED ON THE

PHIL 1, 2 & 3 CLAIMS

IN 1982

VANCOUVER MINING DIVISION

LAT. 50°31'N, LONG. 125°21'W

NTS: 92-K-6 & 11

OWNERS OF CLAIMS: Du Pont of Canada Exploration Limited
Esso Minerals Canada Limited

OPERATOR : Du Pont of Canada Exploration Limited

by,

J. A. Korenic

GEOLOG 1982 March 24 AMTH
ASSESSMENT REPORT

11,218

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I. INTRODUCTION1. Location and Access

The PHIL claims are situated in southwestern British Columbia (92K/6 & 11) along the east shore of Phillips Arm.

Access into the property is via helicopter from Campbell River, 50 kilometres to the south or boat from Shoal Bay 4-7 kilometres to the south. During the course of the follow-up work, accommodation was at the Shoal Bay Lodge.

2. Physiography

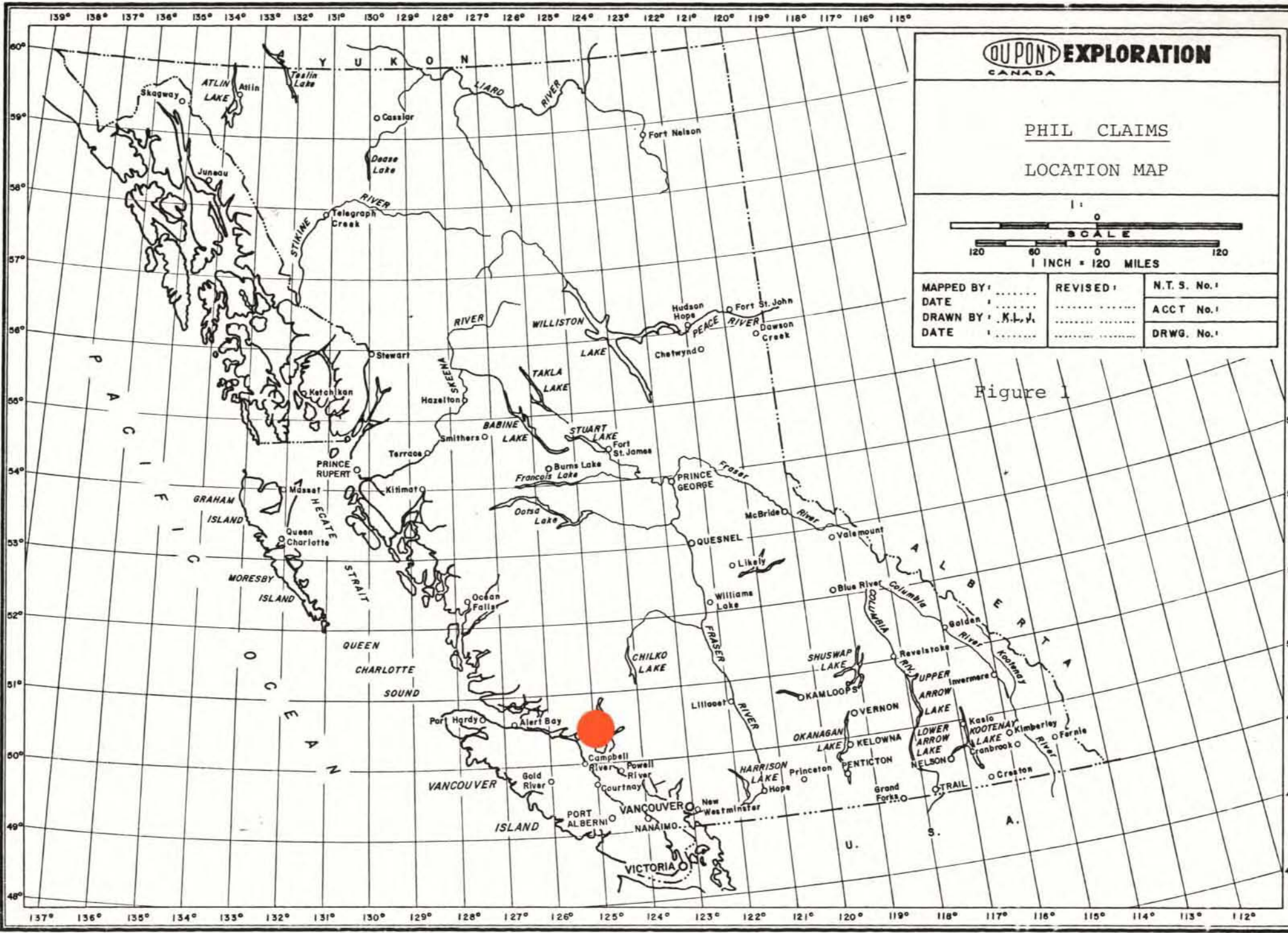
Elevation on the property varies from sea-level on Phillips Arm to +1130 metres along the eastern claim boundary of PHIL 1. The property displays a moderate to steep (24°) west sloping terrain which has been deeply incised by precipitous streams. Along Creek 'A' between +105 metres and +600 metres extensive use of ropes would be required to follow-up the creek. Except for areas above +1100 metres and sections of shoreline, no helicopter drop-off spots were noted on the property because of a dense growth of conifers. Sampling during the follow-up program therefore required traversing up the creeks from the inlet and working down from the ridge.

3. Claim Status

The PHIL property consists of three adjoining claims which entail a total of 32 units. Pertinent data for each claim is listed below:

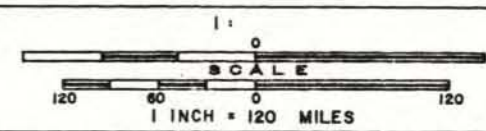
PHIL 1 (20 units) -	Record No.:	1227
	Tag No.:	81399
	Date Staked:	1982 July 27
	Date Recorded:	1982 August 9
	Expiry Date:	1983 August 9

PHIL 2 (8 units) -	Record No.:	1228
	Tag No.:	81400
	Date Staked:	1982 July 28
	Date Recorded:	1982 August 9
	Expiry Date:	1983 August 9



DU PONT EXPLORATION
CANADA

PHIL CLAIMS
LOCATION MAP



MAPPED BY:	REVISED:	N.T.S. No.:
DATE:	ACCT No.:
DRAWN BY: M.L.V.	DRWG. No.:
DATE:	

Figure 1

PHIL 3 (4 units) - Record No.: 1229
 Tag No.: 81401
 Date Staked: 1982 July 28
 Date Recorded: 1982 August 9
 Expiry Date: 1983 August 9

The claims are held jointly by Du Pont of Canada Exploration Limited and Esso Minerals Canada Ltd.

4. Property History and Economic Assessment

Within recent years, portions of the PHIL property have been held. These have included the 'ONLY HOPE, MARTHA A, CEEK 3 and CEEK' claims and the 'GINGER' and 'JOANNE' claims. No data with respect to these properties have been found.

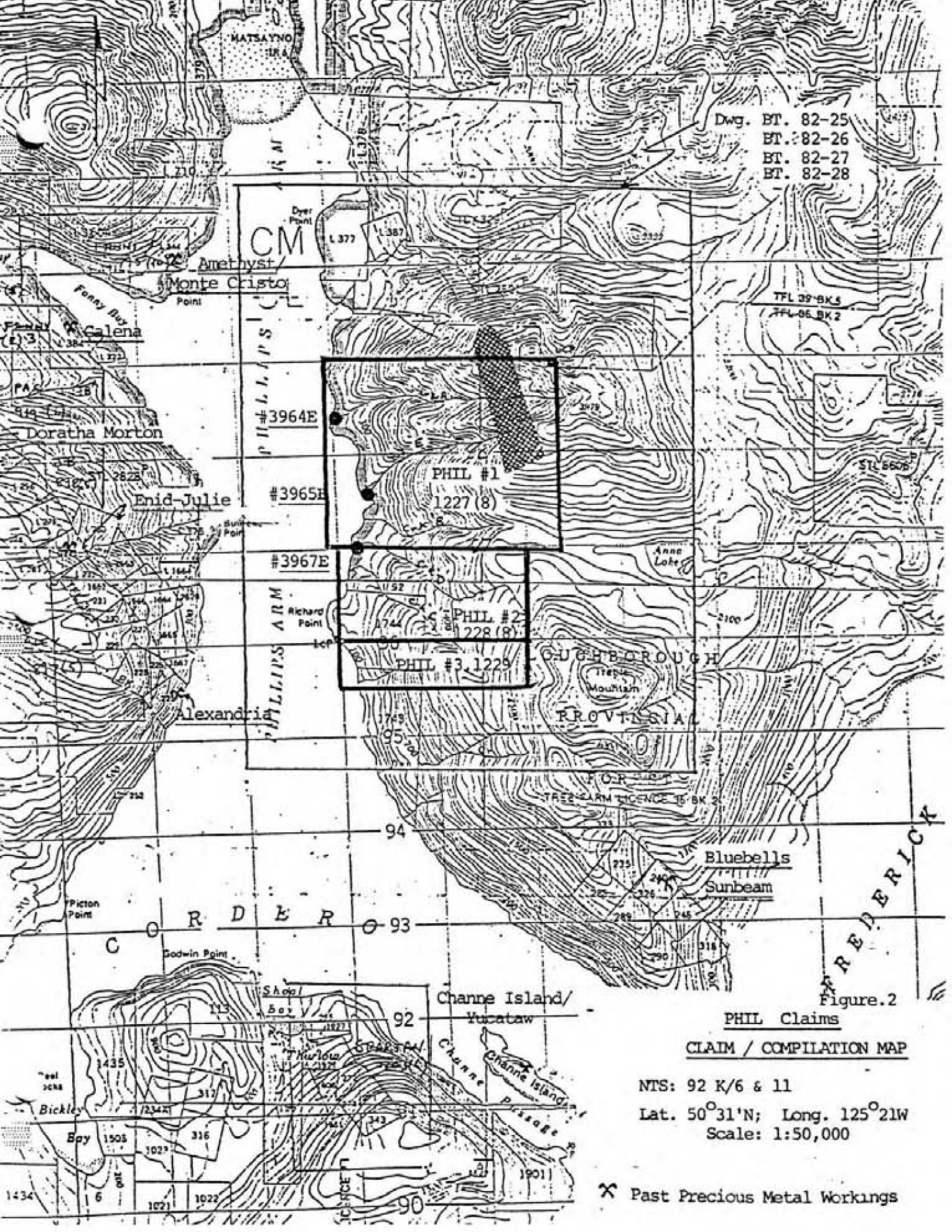
On the western side of Phillips Arm, immediately across from the PHIL claims, exploration has been conducted during the past 85 years. The Doratha Morton property located west of Phillips Arm, south of Fanny Bay, represents the most significant occurrence in the district. During the period 1896-1899, a total of 9707 tons were mined and milled grading 0.46 oz/ton Au and 1.09 oz/ton Ag.

The PHIL claims were staked on the basis of anomalous gold and lesser copper and/or silver values from Heavy Mineral concentrates obtained during a regional geochemical program conducted in May 1982. Subsequent follow-up along the anomalous streams suggests the source to be located at an elevation of above 700 metres within PHIL 1.

The economic potential of the property is dependent upon the extent and nature of the mineralization and this has yet to be determined.

5. Summary of Work

The PHIL 1, 2 and 3 claims were staked on 1982 July 27 and 28. Subsequent to the staking, 5 man-days were spent by Hi-Tec Resource Management Ltd. (on behalf of Du Pont and Esso) prospecting and collecting stream sediments along three ravines. In total, 13 stream sediments and 8 rock samples were collected and geochemically analyzed. On August 19 - 21, a Du Pont crew utilized 10 1/2 man-days following up the anomalies. Work entailed detailed (200 metre spacing) stream sediment sampling and geological



Dwg. BT. 82-25
 BT. 82-26
 BT. 82-27
 BT. 82-28

Phillips Arm

PHIL #1
 1227 (8)

PHIL #2
 1228 (8)

PHIL #3
 1229

Other labels: Dyer Point, Amethyst, Monte Cristo, Fenny Bay, Galena, Doratha Morton, Enid-Julie, Richard Point, Alexandria, Bluebells, Sunbeam, Channe Island/Yucataw, Channe Passage, Channe Island.

Figure.2
 PHIL Claims
 CLAIM / COMPILATION MAP

NTS: 92 K/6 & 11
 Lat. 50°31'N; Long. 125°21W
 Scale: 1:50,000

X Past Precious Metal Workings

mapping along four streams draining the property. One day was spent mapping the ridges above 'A' and 'E' Creeks. In total (including Hi-Tec follow-up) 32 stream sediments and 25 rock samples were collected and analyzed. The Geological mapping was performed at a scale of 1:10,000 (Dwg.BT.82-25).

II. GEOLOGY

1. Regional

The Bute Inlet map sheet (excluding Vancouver and Quadra Islands) is underlain by Tertiary-Cretaceous quartz diorite-granodiorite of the Coast Plutonic Complex.

Engulfed by this Complex are a series of northwest trending steeply dipping Cretaceous and Palaeozoic/Triassic metasedimentary and metavolcanic pendants. In general, these belts are 2-4 kilometres in width although in several cases are up to 12 kilometres across.

A narrow (0.6-1.2 kilometres) and continuous metasedimentary pendant belt trends northwesterly for a distance of 70 kilometres from the entrance of Bute Inlet to Knight Inlet.

Roddick (Open File 480; 1977) describes rocks within this belt as being northwest striking, steeply dipping, Palaeozoic-Triassic in age and quite intensely altered and metamorphosed. The major component of this belt includes quartz-biotite-(hornblende) schists, gneiss, quartzite, argillite, limestone and thinly bedded marble. Volcanics (greenstone) are a relatively minor occurrence.

A major, fault zone (assumed) occurs in line with the metasedimentary belt although it is indicated to occur further south along Calm and Lewis Channels. Descriptions of these metasedimentary rocks commonly denote the presence of considerable shearing which may indeed reflect a northward extension of the zone.

2. Property

Reconnaissance mapping by the GSC (Open File #480) indicates that the area immediately east of Phillips Arm in the vicinity of the PHIL claims is underlain

by diorite and granodiorite of the Coast Crystalline Complex.

Geological mapping during the follow-up phase has shown the property to be predominantly underlain by intermediate intrusives which engulf several northwest and north trending argillaceous and andesitic pendants. Due to the restrictive nature of the mapping performed to date - largely confined to stream courses, the pendants are poorly outlined. Argillite, in part graphitic, limestone and lesser greywacke and andesite occur along Creeks 'C' and 'D' below +220 metres (725 feet). This pendant may be as much as 800 metres in width. Along the northeast contact the pendant rocks display a northwest strike (320°) and a vertical dip whereas further to the south along creek 'C' a moderate (45°) southwest dip is prevalent.

At the headwaters of Creeks 'A' and 'E' massive andesite (-dacite) occurs as a north-south striking pendant(?). The west contact is not defined and as such, the unit has a width of at least 150-200 metres with a known strike of at least 1250 metres.

The following is a brief description of the various rock units observed on the property.

. Andesite (-dacite) - Unit 1

The andesite, trending north-south near the head of Creeks 'A' and 'E' is generally dark green to greyish-green in colour, massive, fine-grained and relatively homogenous. Locally, particularly at the head of Creek 'E', the unit grades compositionally to dacite. Even though the unit is not conformable to the general strike/trend of other pendants in the district, it likely represents a pendant although a late high level intrusive origin (dyke) cannot be ruled out.

. Limestone, Lesser Argillite/Greywacke - Unit 2, 2a

Along creek 'D' the sedimentary assemblage consists of limestone becoming argillaceous upstream. The unit is white to grey in colour, crystalline, thinly bedded and contorted.

Within Creek 'C' the limestones are well bedded to massive and variable in colour being white to

blue-grey. Argillites and dark grey greywackes are interbedded. Locally, the unit has been intensely fractured and/or folded. Minor barren quartz veins are noted.

. Andesite - Unit 2a

Light green in colour, weakly chloritized, this unit occurs as interbeds within the above sedimentary sequence.

. Granodiorite - Unit 3

This unit is described across the ridge at the head of creek 'A'. The unit exhibits a well rounded weathered surface - light grey in colour. It is massive and barren and represents the Coast Crystalline complex. South of creek 'A', andesitic inclusions are hosted.

. Diorite - Unit 4, 4a

This unit is the most prevalent across the property. Texturally it is quite heterogenous, varying from being massive and medium-grained to a silicified, relatively fine-grained variety. In part, the intrusive is weakly chloritized with minor epidote being present. The diorite contains 75-80 percent feldspar, 20-25 percent hornblende and only minor quartz. No significant mineralization is associated.

. Andesitic Dykes

Late andesitic (-basaltic) dykes are encountered across much of the claims, an exception being the granodiorite at the head of creek 'A'. The dykes vary from being 0.3 - 3.0 metres in width, are fine-grained and dark green in colour, exhibit sharp well defined contacts and locally contain up to 5 percent pyrite. Within creek 'D', such dykes comprise up to 3 percent of the rock volume.

3. Mineralization

Along creek 'E', a handful of scattered massive sulphide boulders were noted along the gully up to at least the +420 metre elevation at which point the creek was inaccessible. These samples are deeply gossanous, well rounded, average 15x20x25 centimetres

in size and consist of well banded massive pyrrhotite with lesser pyrite (5-20 percent) and chalcopyrite (2-5 percent). The host rock is usually not evident although one sample reveals it to be andesite. Two such samples were assayed, results were disappointing containing no significant precious values.

Creek 'E':

<u>Sample</u>	<u>Cu</u> (%)	<u>Pb</u> (%)	<u>Zn</u> (%)	<u>Ag</u> (oz/t)	<u>Au</u> (oz/t)
0505F	0.615	0.01	0.01	0.22	0.002
0507F	0.855	0.01	0.01	0.28	0.002

Particularly along streams 'A' and 'E', in addition to the above, numerous pyritic (10-30 percent) gossanous andesitic boulders were noted. Assay/geochemical results proved negative.

Sampling by 'Hi-Tec' in late July along the upper precipitous reaches of Creek 'A' revealed pendant material (weathered andesite [??]) hosting 5 mm magnetite stringers. One such sample was geochemically analyzed:

Sample #0321F - 6350 ppm Cu, 21.5 ppm Ag, 3350 ppb Au.

A similar magnetite bearing andesite sample was collected later in August, south of Creek 'A' at +1012 metres (3320 feet). No significant values were obtained (#0511F).

An intensely weathered intrusive sample (#0323F), 250 metres downstream, geochemically analyzed 570 ppb gold.

Assay and geochemical analyses of rock samples collected during the follow-up indicate the source for the stream sediment geochemistry to occur at an elevation of between +760 metres (2500 feet) and +915 metres (3000 feet) within creek 'A' and above +425 metres (1400 feet) in the vicinity of creek 'E'. The nature and mode of the precious metal mineralization, although largely unknown, appears to be associated with the north-south predominantly andesite bearing pendant. Results obtained from other rock samples collected during the follow-up program are as follows:

Rock Geochemistry

<u>Sample</u>	<u>Rock Type</u>	<u>Cu</u> (ppm)	<u>Pb</u> (ppm)	<u>Zn</u> (ppm)	<u>Ag</u> (ppm)	<u>Au</u> (ppb)
0320F	Ck'A'; +885m 2% py Qtz diorite	175			0.5	20
0322F	Ck'A', +840m sheared QD, 3% py	460			1.9	40
0324F	Ck'A', +625m Argillite(?)	600			1.6	5
0325F	Ck'B', +152m Dior. 2% py, tr mt	121			1.0	5
0326F	Ck'B', +120m Dior, py seam	149			0.8	5
0327F	Richard Pt. Float, q.v., pyritic	430			5.9	120
0468F	Ck'A', Float and. py +20m	142	13	80	1.2	15
0469F	Ck'A' Float and. py +35m	169	12	19	0.8	10
0471F	Ck'A' Float and. py +40m	316	10	23	0.8	5
0472F	Ck'A' Float and. py +60m	540	12	20	1.5	5
0500F	Ck'D', +65m Andes. dyke py	128	17	33	1.0	5
0501F	Ck'D', +120m Shear, and. dyke	23	12	11	0.6	5
0502F	Ck'D', +210m limest/arg.	8	8	8	0.3	5

Rock Geochemistry (continued)

<u>Sample</u>	<u>Rock Type</u>	<u>Cu</u> (ppm)	<u>Pb</u> (ppm)	<u>Zn</u> (ppm)	<u>Ag</u> (ppm)	<u>Au</u> (ppb)
0503F	Ck'D', +40m Float: Goss, composite	89	22	42	1.1	10
0504F	Ck'D', +95m Float: Andes.	105	19	40	0.8	5
0506F	Ck'E', Float: Andes., 5-7% py	397	10	31	0.7	5
0508F	Ck'C', 0.3m Shear zone	131	35	750	1.9	5
0509F	Ck'C', andes/ limest., py	90	35	65	1.1	5

Assays

<u>Sample</u>	<u>Rock Type</u>	<u>Cu</u> (%)	<u>Pb</u> (%)	<u>Zn</u> (%)	<u>Ag</u> o/t	<u>Au</u> o/t
0470F	Ck'A', +35m Andes, mass py, tr cpy	0.026	0.01	0.01	0.03	0.001
0510F	Ck'E' Float, +100 m mt.py in andes.	0.025	0.01	0.01	0.01	0.001
0511F	Ridge, +1012m mt in andes.	0.013	0.01	0.01	0.01	0.001

III. GEOCHEMISTRY1. Procedure

A total of 32 stream sediments were obtained along five streams draining the PHIL 1, 2 and 3 claims. Where possible samples were collected at 200 metre intervals.

The samples were placed in numbered wet-strength sample envelopes and their various locations were flagged indicating their respective numbers. The rock samples were collected in plastic bags.

The stream sediment and rock samples were shipped to Min-En Laboratories in North Vancouver for preparation and analysis. The stream sediments were sieved to -80 mesh and analyzed for Cu (ppm), Au (ppb) and Ag (ppm). Twelve of the samples were also analyzed for Pb (ppm), Zn (ppm) and As (ppm). The rock samples were crushed, split, pulverized and sieved to -100 mesh. Five samples were assayed for Cu (ppm), Ag (ppm) and Au (ppb). Twelve of the samples were also analyzed for Pb (ppm) and Zn (ppm). Rock analyses are discussed under 'Mineralization'.

2. Results

Three streams - #3964E (Creek 'A'), #3965E (Creek 'E') and #3967E (Creek 'D'), contained anomalous gold (silver and/or copper) values from the Heavy Mineral concentrate samples collected during the regional program (BT.82-26, 27 & 28).

Follow-up gold results reveal an anomalous source in an area from approximately the upper reaches of Creek 'E' north into Creek 'A'. Samples along creeks 'A' and 'E' analyzed up to 380 and 240 ppb gold respectively. Background concentrations were obtained along creeks 'B', 'C' and 'D'.

Copper results closely conform with the gold analyses. In the upper reaches of Creek 'A' analyses varied from 80-205 ppm whereas within Creek 'E', the best sample, 6651E, contained 80 ppm. This sample was derived from a stream gully that contains occasional massive po-py-cpy float samples.

The three southern streams contained no significant results. Copper varies from 22-45 ppm. The uppermost sample on Creek 'B', #314F, contains 50 ppm copper.

Silver fails to clearly define the potential source area as depicted by both the copper and gold geochemistry. Along creek 'E', values increase upstream from 0.7 ppm to 1.1 ppm Ag. On creek 'A', samples 308F, 309F and 311F contain 0.7-0.8 ppm Ag, considered to be weak but in marked contrast to samples above and below which analyzed 0.3-0.4 ppm Ag. Results along creek 'D' and 'C' are reflective of lithologic variations.

Lead, zinc and arsenic concentrations have not been analyzed for creek 'A' and 'B'. No significant observations are noted. Concentrations with respect to zinc appear to be indicative of host rock variations rather than mineralization. Arsenic results vary from 4-13 ppm. A weak correlation may be made with the gold analyses.

IV. CONCLUSIONS

Follow-up work on the PHIL claims reveal a potential area of gold-silver and/or copper mineralization in the northeast corner of PHIL 1, in the upper reaches of creek 'A' and 'E'. Mineralization encountered to date (#321F, 505F and 507F) would be sufficient to explain the anomalous HM and follow-up stream sediments. The extent, nature and exact mode of occurrence have yet to be defined.

V. COST STATEMENT

1. Personnel

Two samplers, provided by Hi-Tec Resource Management Ltd., worked on the claims July 28, 30 and 31, 1982.

During the period 1982 August 19-21 the following Du Pont personnel worked on the property:

Geologists: J. A. Korenic
J. Forbes
T. Hanel

Geological Field Assistants: P. Webb
J. Mackay

. 2 Samplers (Hi-Tec), 5 mandays @ \$245/day	\$1,225.00
. 3 Geologists, 5.5 mandays	617.11
. 2 Geological Field Ass'ts, 5 mandays	<u>296.46</u>
	\$2,138.57

2. Camp Operations

Accommodation & Meals 10.5 mandays @ \$60.00/day	\$ 630.00
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3. Analytical Costs

Min-En Laboratories, North Vancouver, BC
 Invoice #1099A, 937A

. 5 Assays (Cu, Au, Ag) @ \$22.50/ea	\$ 112.50
. 2 Assays (Ni) @ \$8.50/ea	17.00
. 19 Rock Geochem. (Cu, Au, Ag) @ \$9.30 ea, incl. prep.	176.70
. 12 Rock Geochem. (Pb, Zn) @ \$2.90 ea	34.80
. 32 Stream Sediments (Cu, Au, Ag) @ \$8.75 ea, incl. prep.	280.00
. 12 Stream Sediments (Pb, Zn, As) @ \$4.80 ea.	<u>57.60</u>
	\$ 678.60

4. Transportation

. Aug. 18/82: Campbell River-Shoal Bay CoVal Air Ltd., Invoice #048379	\$ 152.40
. Aug. 21/82: Shoal Bay-Campbell River CoVal Air Ltd., Invoice #00663	118.20
. Aug. 21/82: Campbell River-Shoal Bay- PHIL Claims (return), Okanagan Heli- copters Ltd., Invoice #H27531, 2.3 hrs	1,035.00
. Aug. 19-21/82: Boat Rental (Shoal Bay Lodge)	<u>150.00</u>
	\$1,455.60
PHIL claims Portion (10.5/15 mandays):	\$1,018.92

5. Report Preparation

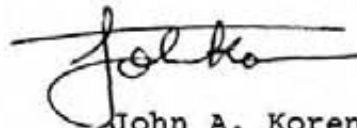
. Preparation/Compilation, 3 days	\$ 516.72
. Drafting, 4 days	404.44
. Typing, 1 day	<u>70.00</u>
	\$ 991.16

GRAND TOTAL: \$5,457.25

VI. QUALIFICATIONS

I, John A. Korenic, do hereby certify that:

1. I am a geologist residing at 11758 Wildwood Crescent, Pitt Meadows, British Columbia and employed by Du Pont of Canada Exploration Limited.
2. I am a graduate of the University of Calgary with a B.Sc. degree in geology (1975).
3. I am a Fellow of the Geological Association of Canada.
4. I am a Member of the Canadian Institute of Mining and Metallurgy.
5. I have practised my profession in geology continuously for the past 8 years in the Yukon, British Columbia and various other provinces in Canada.
6. Between July 22 and 1982 August 21, I supervised/directed a geological and geochemical program on the PHIL Claim Group on behalf of Du Pont of Canada Exploration Limited.



John A. Korenic
1983 March 28

APPENDIX A

MIN-EN Laboratories Ltd.

Specialists in Mineral Environments

Corner 15th Street and Bewicke

705 WEST 15th STREET

NORTH VANCOUVER, B.C.

CANADA

ANALYTICAL PROCEDURE REPORTS FOR ASSESSMENT WORK

PROCEDURE FOR GOLD GEOCHEMICAL ANALYSIS.

Geochemical samples for Gold processed by Min-En Laboratories Ltd., at 705 W. 15th St., North Vancouver Laboratory employing the following procedures.

After drying the samples at 95°C soil and stream sediment samples are screened by 80 mesh sieve to obtain the minus 80 mesh fraction for analysis. The rock samples are crushed and pulverized by ceramic plated pulverizer.

A suitable sample weight 5.0 or 10.0 grams are pre-treated with HNO_3 and HClO_4 mixture.

After pretreatments the samples are digested with Aqua Regia solution, and after digestion the samples are taken up with 25% HCl to suitable volume.

At this stage of the procedure copper, silver and zinc can be analysed from suitable aliquote by Atomic Absorption Spectrophotometric procedure.

Further oxidation and treatment of at least 75% of the original sample solutions are made suitable for extraction of gold with Methyl Iso-Butyl Ketone.

With a set of suitable standard solution gold is analysed by Atomic Absorption instruments. The obtained detection limit is 5 ppb.

*MIN-EN Laboratories Ltd.**Specialists in Mineral Environments*Corner 15th Street and Bewicke
705 WEST 15th STREET
NORTH VANCOUVER, B.C.
CANADAANALYTICAL PROCEDURE REPORTS FOR ASSESSMENT WORKPROCEDURES FOR Mo, Cu, Cd, Pb, Mn, Ni, Ag, Zn, As, F

Samples are processed by Min-En Laboratories Ltd., at 705 W. 15th St., North Vancouver Laboratory employing the following procedures.

After drying the samples at 95°C soil and stream sediment samples are screened by 80 mesh sieve to obtain the minus 80 mesh fraction for analysis. The rock samples are crushed by a jaw crusher and pulverized by ceramic plated pulverizer.

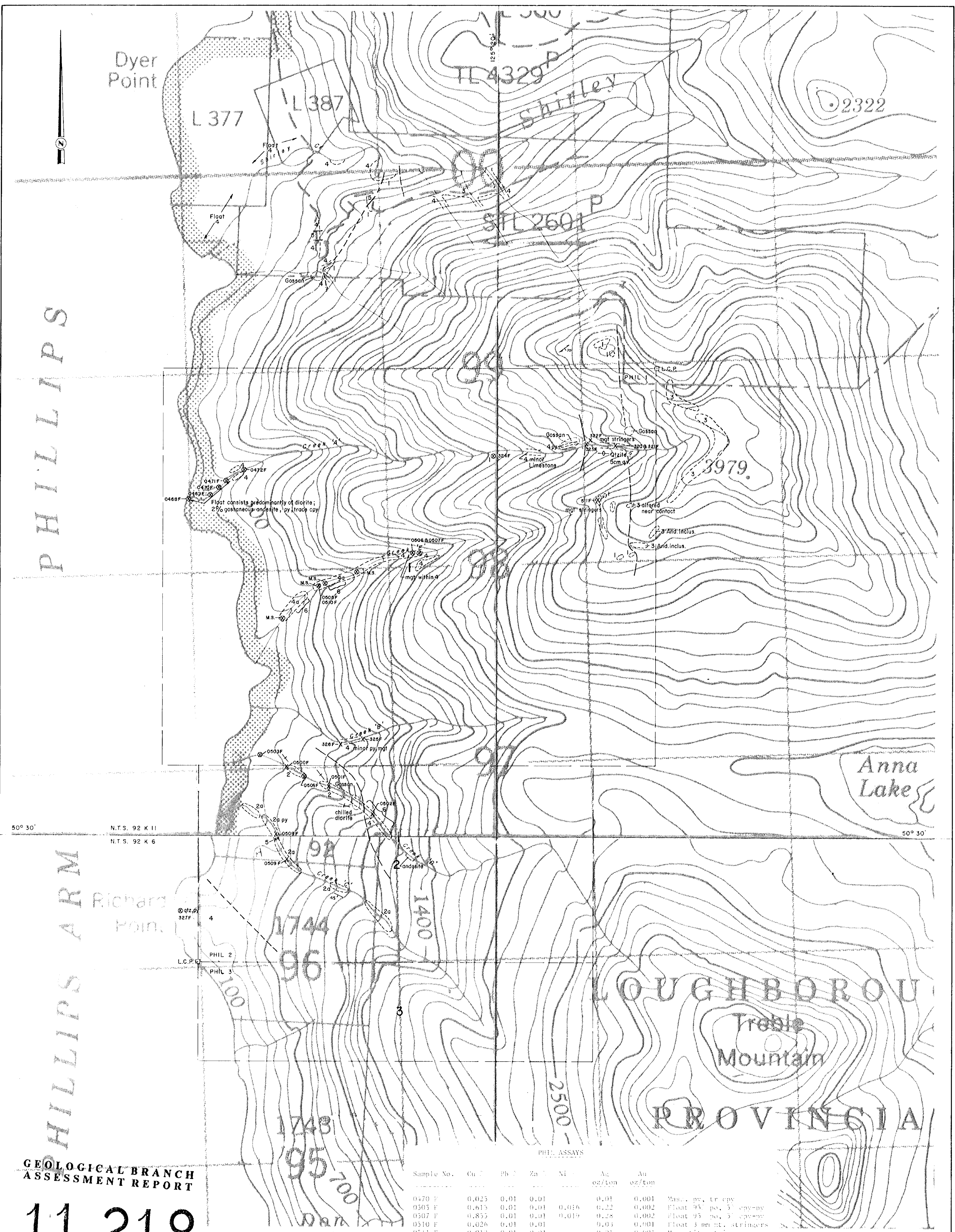
1.0 gram of the samples are digested for 6 hours with HNO_3 and HClO_4 mixture.

After cooling samples are diluted to standard volume. The solutions are analyzed by Atomic Absorption Spectrophotometers.

Copper, Lead, Zinc, Silver, Cadmium, Cobalt, Nickel and Manganese are analysed using the CH_2H_2 -Air flame combination but the Molybdenum determination is carried out by C_2H_2 - N_2O gas mixture directly or indirectly (depending on the sensitivity and detection limit required) on these sample solutions.

For Arsenic analysis a suitable aliquote is taken from the above 1 gram sample solution and the test is carried out by Gutzeit method using $\text{Ag CS}_2\text{N} (\text{C}_2\text{H}_5)_2$ as a reagent. The detection limit obtained is 1.2 ppm.

Fluorine analysis is carried out on a 200 milligram sample. After fusion and suitable dilutions the fluoride ion concentration in rocks or soil samples are measured quantitatively by using fluorine specific ion electrode. Detection limit of this test is 10 ppm F.



PHILLIPS

PHILLIPS ARM

GEOLOGICAL BRANCH
ASSESSMENT REPORT

11,218

LEGEND

6	ANDESITE DIKES	○	OUTCROP
5	QUARTZ FELDSPAR PORPHYRY	---	CONTACT, APPROXIMATE
4	DIORITE a) HETEROGENEOUS DIORITE	---	CONTACT, ASSUMED
3	GRANDIORITE		QUARTZ VEIN, VERTICAL
2	LIMESTONE, MARBLE, ARGILLITE a) LIMESTONE, ARGILLITE, GREYWACKE, ANDESITE	/	FOLIATION (POSSIBLE BEDDING)
1	ANDESITE (- DACITE)	/	BEDDING, INCLINED, VERTICAL
		X-323F	ROCK SAMPLE LOC. & No.
		○	FLOAT (ROCK SAMPLE IF WITH No.)
		○	FLOAT, MASSIVE SULFIDE (po, py, cpy)
		○	GOSSAN
		cpy	CHALCOPYRITE
		mgt	MAGNETITE
		py	PYRITE
		po	PYRRHOTITE

PHIL ASSAYS

Sample No.	Cu %	Pb %	Zn %	Ni %	Ag oz/ton	Au oz/ton	Remarks
0470 F	0.023	0.01	0.01		0.01	0.001	Mass. py, tr cpy
0505 F	0.615	0.01	0.01	0.036	0.22	0.002	Float 95% py, 5% cpy-py
0507 F	0.855	0.01	0.01	0.019	0.28	0.002	Float 95% py, 5% cpy-py
0510 F	0.026	0.01	0.01		0.03	0.001	Float 3 mm mt. stringers
0511 F	0.013	0.01	0.01		0.01	0.001	Magnetite stringers

PHIL ROCK GEOCHEMISTRY

Sample No.	Cu ppm	Pb ppm	Zn ppm	Ag ppm	Au ppb	Remarks
0320 F	175			0.5	20	2% py, 00
21	6350			21.5	3350	5 mm Mgt Stringers
22	460			1.9	50	Sheared 00 37 py
23	182			2.9	570	
24	600			1.6	5	
25	121			1.0	5	2% py
26	149			0.8	5	Mass. py sections
0327 F	430			5.9	120	Q.V., Mass. py on frac.
0468 F	142	13	80	1.2	15	Float
69	169	12	19	0.8	10	Float
71	216	10	23	0.8	5	Float
0472 F	540	12	20	1.5	5	Float - Mass. py pods
0500 F	128	17	33	1.0	5	Pyritic
01	23	12	11	0.6	5	
02	8	8	8	0.5	5	
03	89	22	52	1.1	10	Float
04	105	19	40	0.8	5	Float
06	397	10	31	0.7	5	Float 5-7% py
08	131	35	750	1.9	5	Shear zone - 0.3 m
0509 F	90	35	65	1.1	5	

**BUTE-TOBA PROJECT
PHIL CLAIMS
GEOLOGY**

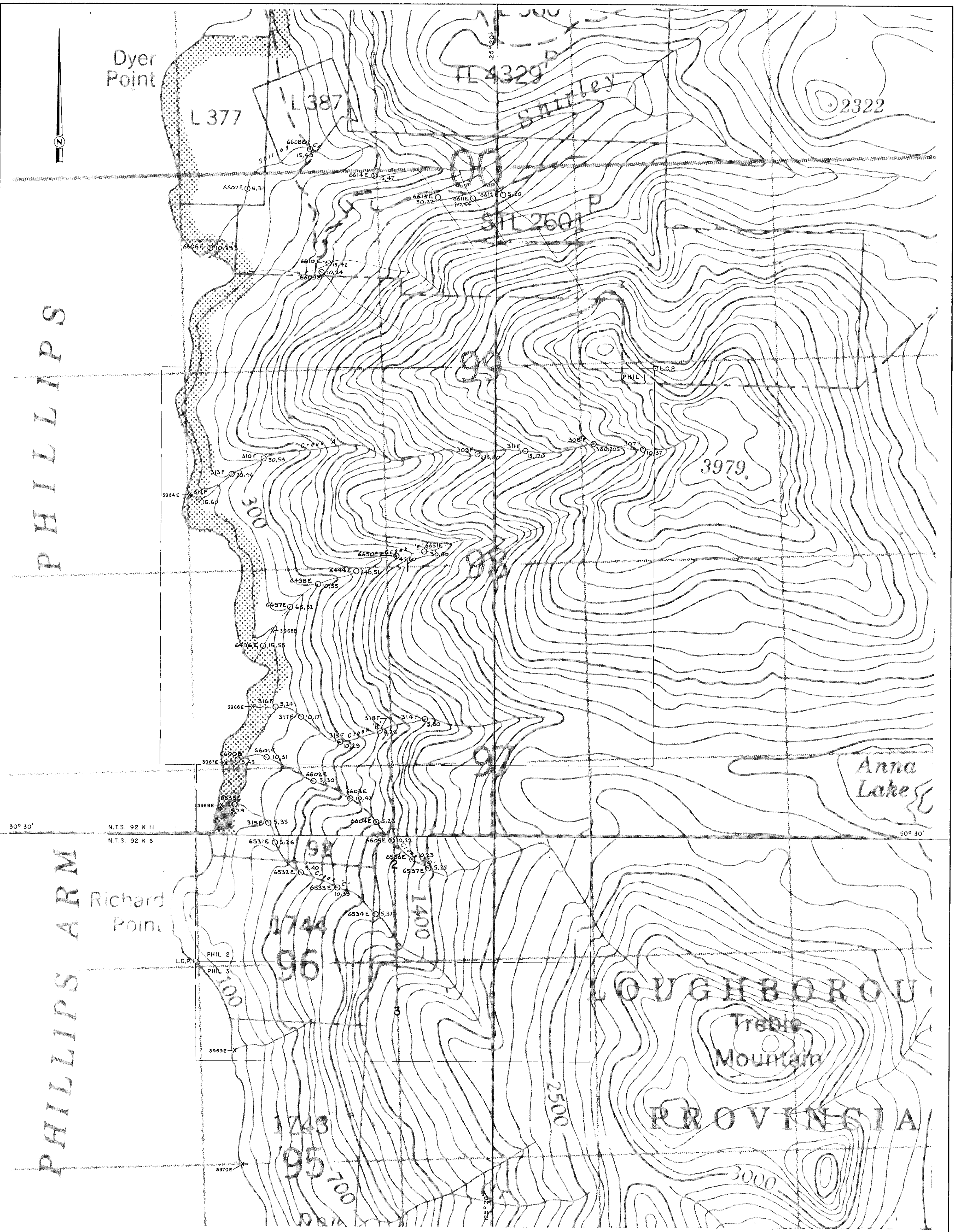
VANCOUVER MINING DIVISION, BRITISH COLUMBIA

MAPPED BY: LAK, FTH
DATE: 82 07 10
DRAWN BY: K L J
DATE: 82 10 20

REVISOR: [blank]
DATE: [blank]

NTS No.: 92 K 6 8 II
ACCT No.: 348-01
DRWG No.: BT.82-25

SCALE
1 INCH = 200 FEET



LEGEND

511F-X ORIGINAL RECONNAISSANCE STREAM SEDIMENT SAMPLE LOCATION

6633E O FOLLOW-UP STREAM SEDIMENT SAMPLE LOCATION & No.

O 5.25 1st No IS VALUE FOR Au IN P.P.B. 2nd No IS VALUE FOR Cu IN P.P.M.

RECONNAISSANCE SAMPLING - HEAVY MINERAL CONCENTRATES (-20 mesh)

Sample No.	Cu (%)	Zn (%)	Ag ppm	Au ppb	HM(%)
3964 E	102	52	1.0	350	13.36
65	43	40	0.7	120	12.99
66	20	26	0.5	5	6.76
67	233	72	1.4	200	9.43
68	46	98	0.9	5	7.47
69	10	20	0.3	5	9.33
3970 E	8	17	0.2	5	3.45

GEOLOGICAL BRANCH ASSESSMENT REPORT

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DUPONT EXPLORATION CANADA

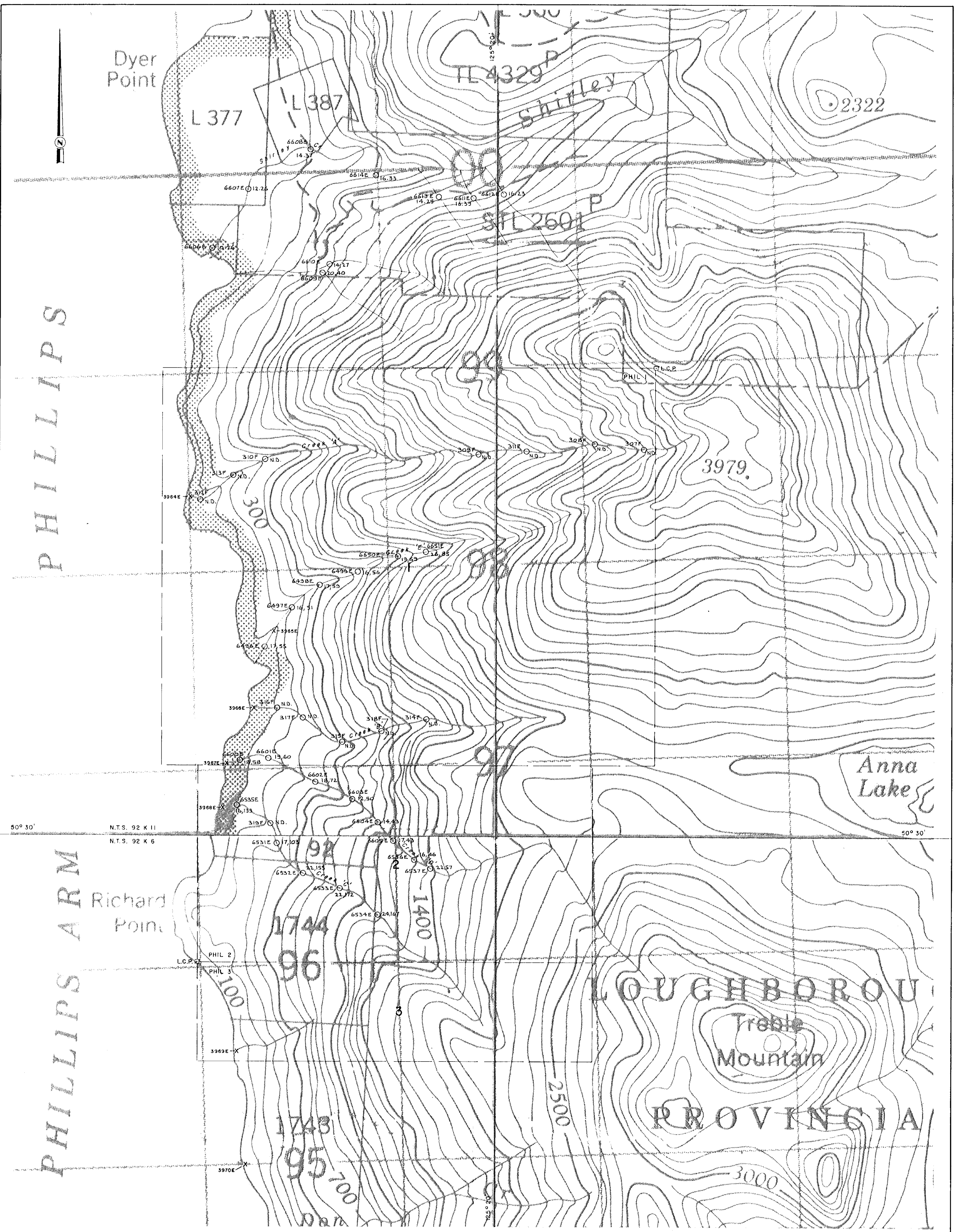
BUTE-TOBA PROJECT PHIL CLAIMS GEOCHEMISTRY
Au IN P.P.B. & Cu IN P.P.M.

VANCOUVER MINING DIVISION, BRITISH COLUMBIA

Scale: 1 inch = 833 feet

MAPPED BY: J.A.K., F.T.H. DATE: 82 12 21
DRAWN BY: K.L.J. DATE: 82 10 18

REVISED: N.T.S. No: 92 K 6 8 11
ACCT No: 348-01
DRWG No: BT-82-26



LEGEND

- 511F-X ORIGINAL RECONNAISSANCE STREAM SEDIMENT SAMPLE LOCATION
- 6533E O FOLLOW-UP STREAM SEDIMENT SAMPLE LOCATION & No.
- O14-A3 1st No IS VALUE FOR Pb IN P.P.M.
2nd No IS VALUE FOR Zn IN P.P.M.
- ND. Pb-Zn NOT DETERMINED

RECONNAISSANCE SAMPLING -
HEAVY MINERAL CONCENTRATES (-20 mesh)

Sample No.	Cu (Z)	Zn (Z)	Ag ppm	Au ppb	HM(%)
3964 E	102	32	1.0	350	15.36
65	43	40	0.7	120	12.39
66	20	26	0.5	5	6.76
67	225	72	1.4	200	9.43
68	46	98	0.9	5	7.47
69	10	20	0.3	5	9.33
3970 E	8	17	0.2	5	3.45

**GEOLOGICAL BRANCH
ASSESSMENT REPORT**

11,218

UPON EXPLORATION
CANADA

**BUTE-TOBA PROJECT
PHIL CLAIMS
GEOCHEMISTRY
Pb, Zn IN P.P.M.**

VANCOUVER MINING DIVISION, BRITISH COLUMBIA

m 500 0 1000 300 600 m

SCALE

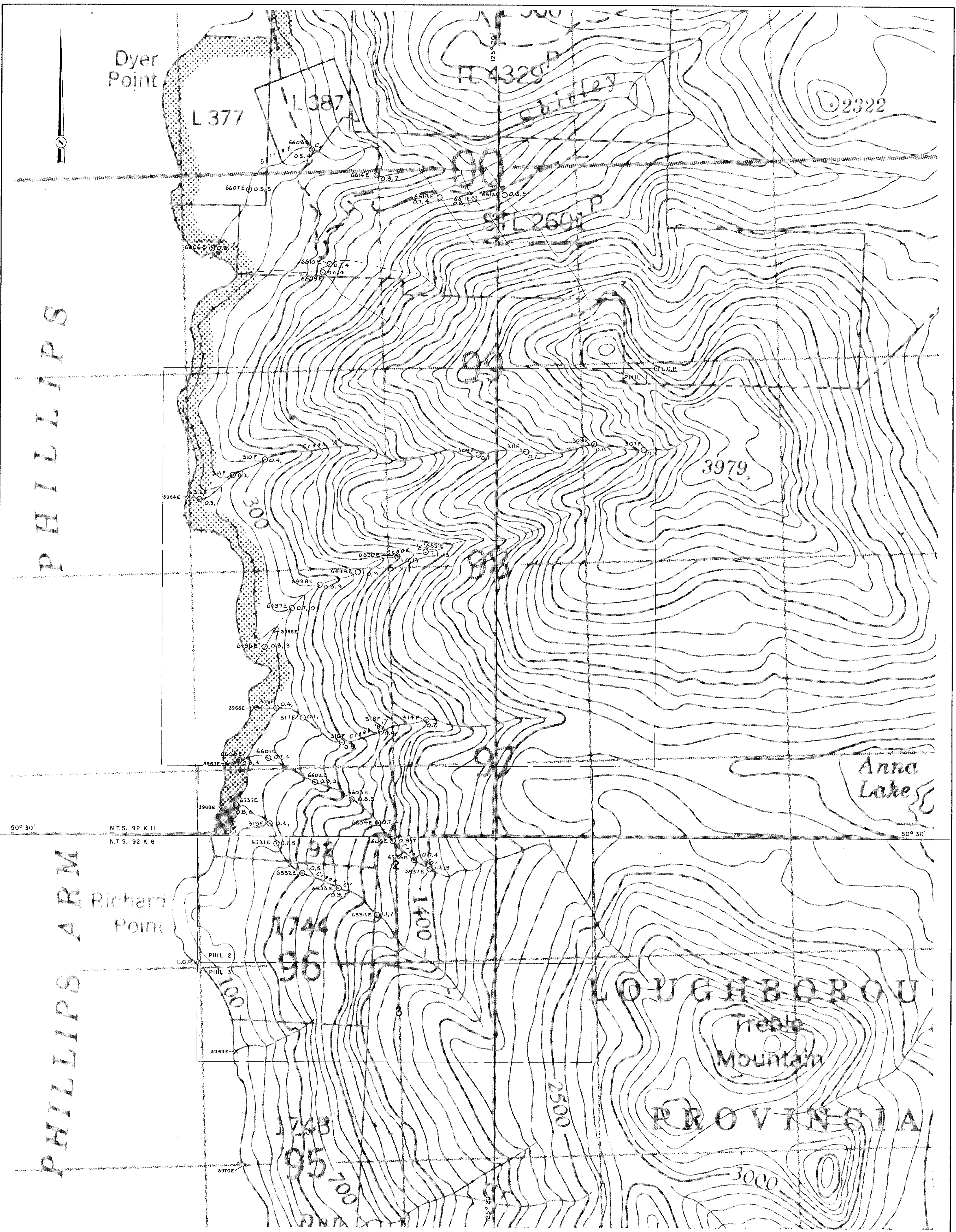
0 1 INCH = 333 FEET

MAPPED BY: JAK, JETH
DATE: 82 03 10

DRAWN BY: K L J
DATE: 82 10 19

REVISED: 82 08 19-21

N.T.S. No: 92 K 6 B 11
ACCT No: 358-01
DRWG. No: BT-82-27



LEGEND

- 011F-X ORIGINAL RECONNAISSANCE STREAM SEDIMENT SAMPLE LOCATION
- 6533E O FOLLOW-UP STREAM SEDIMENT SAMPLE LOCATION & No.
- O 07.9 1st No IS VALUE FOR Ag IN P.P.M. 2nd No IS VALUE FOR As IN P.P.M.
- O - 300F SERIES - 'As' NOT DETERMINED

RECONNAISSANCE SAMPLING -
HEAVY MINERAL CONCENTRATES (-20 mesh)

Sample No.	Cu (%)	Zn (%)	Ag ppm	Au ppb	HM (%)
3964 E	102	52	1.0	350	15.36
63	43	40	0.7	120	12.99
66	20	26	0.5	5	6.76
67	235	72	1.4	200	9.43
68	46	98	0.9	5	7.47
69	10	20	0.3	5	9.33
3970 E	8	17	0.2	5	3.45

**GEOLOGICAL BRANCH
ASSESSMENT REPORT**

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DUPONT EXPLORATION
CANADA

**BUTE-TOBA PROJECT
PHIL CLAIMS
GEOCHEMISTRY**
Ag, As IN P.P.M.

VANCOUVER MINING DIVISION, BRITISH COLUMBIA

MAPPED BY: JAK, J.F.T.H.
DATE: 92 09 19-30

DRAWN BY: K.L.J.
DATE: 92 10 19

REVISED:

N.T.S. No: 92 K 6 B 11
ACCT No: 358-01
DRWG. No: BT. 82-28

0 1 10 200 300 600 m

SCALE

1 INCH = 333 FEET