DU PONT OF CANADA EXPLORATION LIMITED

GEOLOGICAL AND GEOCHEMICAL REPORT

ON THE WARRIOR I, II, III CLAIMS

LIARD MINING DIVISION

LAT. 56°49'N, LONG. 130°54'W

NTS: 104-B-15W

OWNER OF CLAIMS: Du Pont of Canada Exploration Limited

OPERATOR: Du Pont of Canada Exploration Limited

G. A. Harron

Author: G. A. Harron

Date Submitted:

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I INTRODUCTION

(a) Location and Access

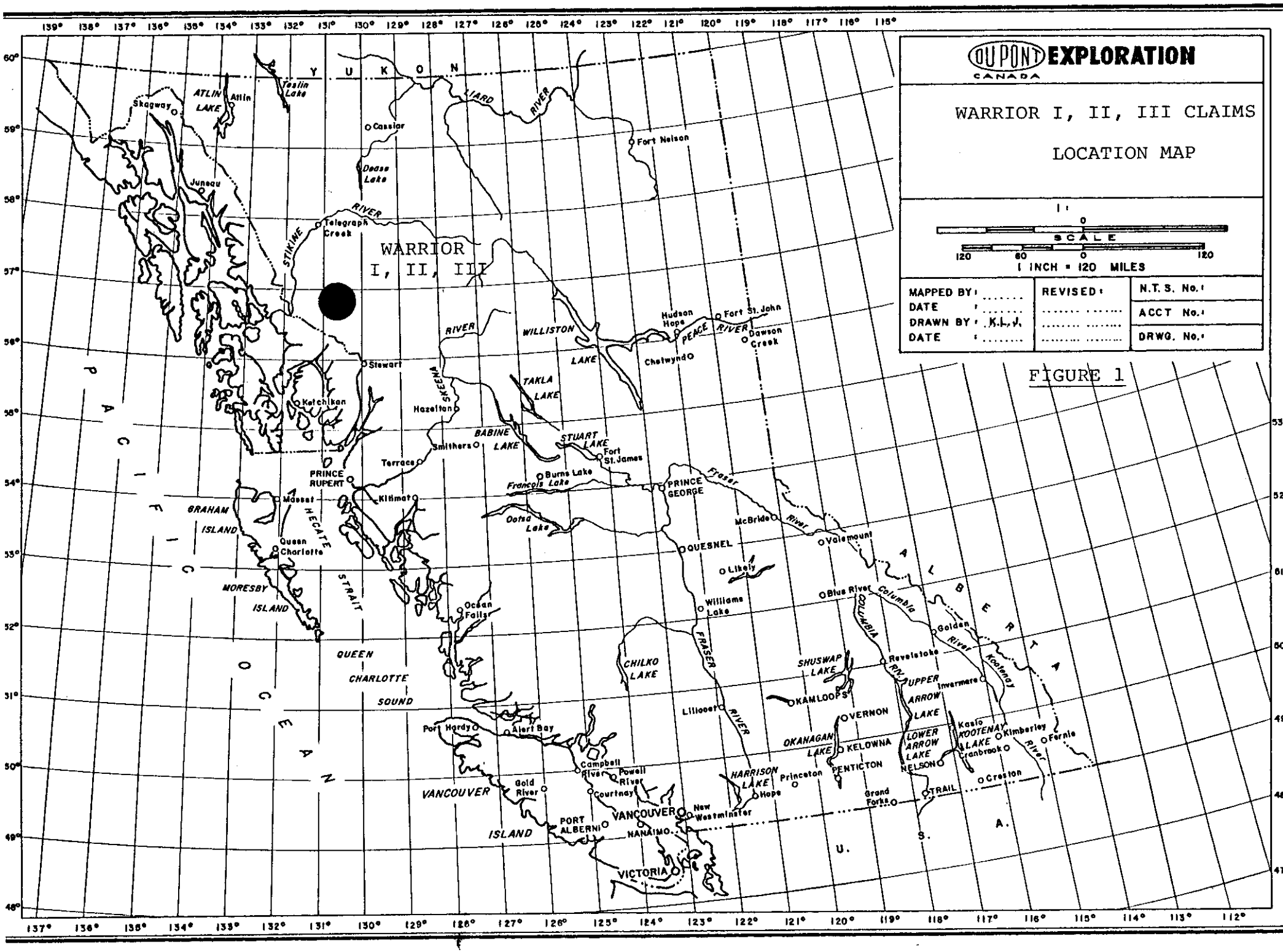
The WARRIOR 1-3 claims are located in northwestern British Columbia within the Liard Mining Division, NTS 104-B-15W. The property is situated north of the Iskut River between Newmont Lake and the headwaters of the Verrett River, along the upper reaches of an unnamed river. It is centered by latitude 56°49'N and longitude 130°54'W.

At present, access into the property is via helicopter either from the Stewart-Cassiar Highway 45 kilometres to the ENE or Stewart 105 kilometres to the southeast. Stewart represents the major (Canadian) supply centre within the region.

(b) Physiography

The WARRIOR property is situated within the Boundary Ranges of the Coast Mountains. This geographic province consists of a mountainous and glaciated terrain that exhibits relief in excess of 2000 metres. Tree line varies from 1000-1200 metres above sea level. Below this point, particularly within the lower valleys, vegetation predominantly consists of a dense growth of conifers. Active glaciation is prevalent in the area, particularly in terrain above 1500 metres. Immediately west of the WARRIOR claims occur one of the largest icefields in the province. Known as the Forrest Kerr Icefield it is up to 35 kilometres across.

Relief over the WARRIOR claims range from 1500 metres along the ridge to the east, to 600 metres at the junction of the south claim boundary and the main stream draining the property. Tree line is at approximately 1200 metres above sea level and therefore slightly in excess of half the property is situated above tree-line. A toe of the Forrest Kerr Icefield protrudes the property in the west.


DUPONT EXPLORATION
CANADA
WARRIOR I, II, III CLAIMS
LOCATION MAP
SCALE
120 60 0 120
1 INCH = 120 MILES
MAPPED BY:
DATE:
DRAWN BY: K.L.J.
DATE:
REVISED:
N.T.S. No.:
ACCT No.:
DRWG. No.:
WARRIOR I, II, III
FIGURE 1
YUKON
PACIFIC OCEAN
ALBERTA
U.S.A.
Skagway
Atlin
ATLIN LAKE
Teslin Lake
Cassiar
Dease Lake
LIARD RIVER
Fort Nelson
Juneau
STIKINE RIVER
Telegraph Creek
Stewart
Ketchikan
Hazelton
SKEENA RIVER
WILLISTON LAKE
TAKLA LAKE
Hudson Hope
Fort St. John
PEACE RIVER
Dawson Creek
Chetwynd
Smithers
BABINE LAKE
STUART LAKE
Fort St. James
Terrace
PRINCE RUPERT
Burns Lake
Francois Lake
PRINCE GEORGE
Fraser
McBride
River
Valemount
Masset
Kitimat
Ootsa Lake
QUESNEL
Likely
GRAHAM ISLAND
HECATE STRAIT
Queen Charlotte
MORESBY ISLAND
Ocean Falls
Williams Lake
Blue River
Columbia
Golden
River
QUEEN CHARLOTTE SOUND
CHILKO LAKE
FRASER
SHUSWAP LAKE
Revelstoke
KAMLOOPS
Invermere
UPPER ARROW LAKE
Kootenay
Lillooet
RIVER
VERNON
OKANAGAN LAKE
KELOWNA
LOWER ARROW LAKE
Kaslo
KOOTENAY LAKE
Kimberley
Fernie
Cranbrook
Port Hardy
Alert Bay
Campbell River
Powell River
PENTICTON
NELSON
Creston
HARRISON LAKE
Princeton
Hope
Courtney
Gold River
VANCOUVER
New Westminster
Grand Forks
TRAIL
PORT ALBERNI
NANAIMO
VANCOUVER ISLAND
VICTORIA

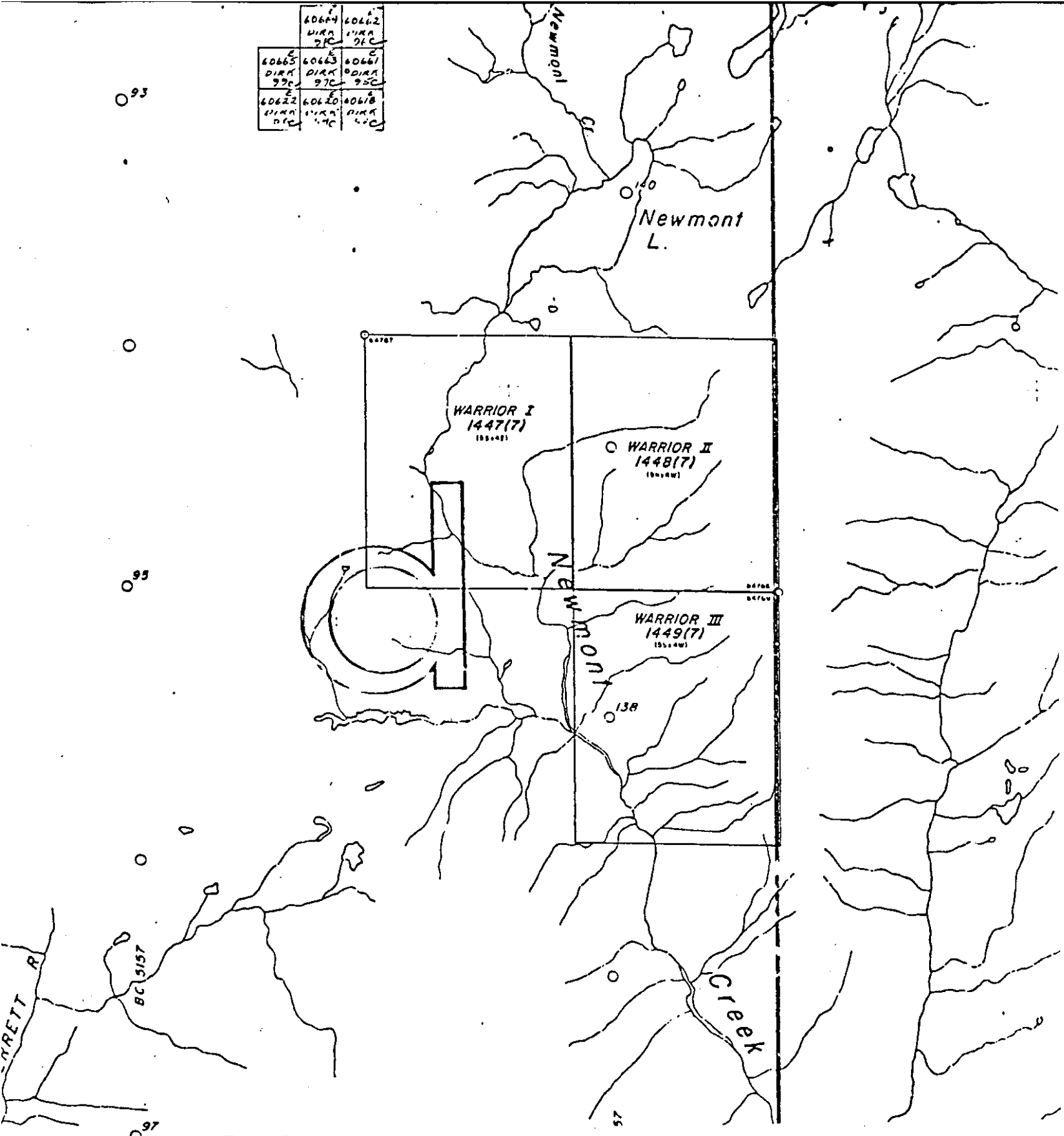


Figure 2 - INDEX MAP

WARRIOR I, II, III CLAIMS

NTS: 104-B-15W

SCALE: 1:50 000

Claims centered @:

Lat. 56°49'N

Long.130°54'W

LIARD MINING DIVISION

(c) Claim Status

The WARRIOR property consists of three adjoining mineral claims: WARRIOR I, II, and III. Each claim entails 20 units for a total of 60 units. Pertinent data for each claim is outlined below:

WARRIOR I (20 units)	Record No:	1447
	Tag No:	64767
	Date Staked:	June 26-27, 1980
	Date Recorded:	July 14, 1980
WARRIOR II (20 units)	Record No:	1448
	Tag No:	64768
	Date Staked:	June 26-27, 1980
	Date Recorded:	July 14, 1980
WARRIOR III	Record No:	1449
	Tag No:	64769
	Date Staked:	June 26-27, 1980
	Date Recorded:	July 14, 1980

(d) History and Economic Assessment of Property

The WARRIOR claims were staked on the basis of a regional stream sediment survey conducted in May-June, 1980.

On several occasions during the period 1962-1972 Newmont Mining Corporation of Canada Limited investigated an area immediately north and northwest of the WARRIOR claims. The work which also included the western portion of the WARRIOR claims entailed geological mapping, geophysics and a limited diamond drill programme. The exploration programme revealed the presence of several copper bearing skarn zones that occur at the contact of limestone interbeds and a diorite intrusive. No such occurrence was encountered within the WARRIOR claims.

The evaluation programme undertaken in 1980 encountered several gold and silver bearing quartz veins hosted by a quartz porphyry(?). The extent and nature of these occurrences are presently unknown.

(e) Summary of Work

The WARRIOR claims were staked on June 26-27, 1980. During the period June 30-July 2, several traverses that entailed soil sampling, stream sediment sampling and geological mapping was conducted across the property. The geological mapping was performed on a scale of 1:10 000 (Dwg. AR 80-146). A total of 27 stream sediment, 137 soil and 12 rock samples were obtained and analyzed.

II GEOLOGY

(a) Regional Geology

The Boundary Ranges of the Coast Mountains occur along the contact of the Intermontane and Coast Crystalline geologic provinces. The latter, the bulk of which occurs across the border in the Alaskan panhandle consists of Tertiary and Cretaceous quartz monzonite and quartz diorite. The Intermontane belt within the Iskut River area consists of Carboniferous and Permian schists and Upper Triassic andesite, basalt and clastic sediments.

Intruding the Intermontane belt within this region are a number of intrusives that include Triassic diorite and monzonite, Jurassic quartz diorite and Cretaceous and Tertiary quartz monzonite.

Pliocene - Recent aerial volcanism extruded rhyolites, basalts and tuffs within the Edziza Peak, Level Mountain and to a lesser extent Iskut River areas.

(b) Property Geology

The WARRIOR claims, as indicated by GSC Map 1418A (1974), are underlain by an inlier of Upper Triassic undifferentiated andesitic volcanic and clastic sedimentary rocks. Immediately to the east and west is the presence of a Cretaceous or Tertiary quartz monzonite.

The WARRIOR claims are predominantly underlain by andesite and andesitic tuffs interbedded with phyllites and limestone. The eastern margin of the property is intruded by quartz monzonite/ granite. Information obtained to date also indicates that WARRIOR I is at least in part underlain by a quartz porphyry and an unspecified granitic intrusive.

The following is a brief description of the various rock types observed on the claims.

i) Basic Dike

This unit is widely distributed across the property. It is dark grey-black in colour, aphanitic and varies from 10 centimetres to 11 metres in width.

ii) Granite-Quartz Monzonite

This intrusive occurs adjacent to the eastern boundary of the claims and may represent the margin of a Cretaceous/ Tertiary pluton as indicated on GSC map 1418A (1974). The unit is coarse grained and locally contains 5 m x 10 m andesite (?) inclusions.

Within the southeast corner of WARRIOR I is the presence of a gold-silver bearing quartz porphyry. This intrusive is massive, contains rusty patches and locally hosts erratically distributed quartz veins. The extent and orientation of this unit is unknown as is its relationship, if any, with the granite-quartz monzonite.

iii) Andesite

These intermediate volcanics represent the most widespread unit on the property. The andesites are generally dark green to grey, pyritic and in part tuffaceous. Locally (northeast corner of WARRIOR III) it exhibits a porphyritic texture. Another

intermediate variety, denoted as unit 1b on Dwg. AR 80-146, is widely distributed across the property. It is light grey to white in colour, cherty and pyritic. Tuffaceous sections occur adjacent to the eastern margin of the claims. Sediments are observed to occur as minor interbeds within the volcanics. Notably these include a black, well bedded graphitic, phyllite north of creek 2188 and a blue grey crystalline limestone in the south-east corner of WARRIOR II.

Structural data with respect to the WARRIOR claims is limited. Information obtained from the tuffaceous sequences to the east indicate a prevalent northeast strike and moderate-steep (48°-78°) south dip. This data concurs with the regional northeast trend. Several fault and fractured zones have been observed (Dwg. AR 80-146) however their significance and orientation are unknown. A series of basic dikes intrude the property. Their orientation appears to be variable.

(c) Mineralization

Both varieties of andesite are pyritic. Field observations have indicated that concentrations of up to ten percent are not uncommon. Immediately south of stream 2188 the volcanics that underlay a small grid are indicated to contain up to 20 percent pyrite.

Within WARRIOR I an erratic set of pyrite bearing quartz veins are hosted by a quartz porphyry(?). Assays revealed anomalous gold, silver and copper values. In addition, one sample returned values of 10.45% combined Pb-Zn. Results are shown below:

Samp.#	Au(o/t)	Ag(0/t)	Pb%	Zn%	Cu%
4050D	0.002	1.02	1.70	8.75	0.063
4051D	0.808	1.10	0.11	0.08	0.135
4052D	0.006	1.19	0.04	0.02	0.006
4053D	0.820	0.91	0.05	0.01	0.162
4054D	0.008	0.21	0.03	0.01	0.014
4055D	0.003	0.30	0.03	0.61	0.208
4056D	0.003	0.20	0.06	0.03	0.013
4058D	0.001	0.10	0.01	0.01	0.022
4059D	0.001	0.12	0.02	0.01	0.066
4060D	0.002	0.27	0.07	0.01	0.007
4061D	0.003	0.37	0.10	0.02	0.009
4062D	0.002	0.51	0.15	0.07	0.033

(d) Conclusions

The WARRIOR claims are underlain by a sequence of pyritic andesitic volcanics and intercalated sediments. The andesite is bounded to the east by a quartz monzonite-granite pluton. Within the southeast corner of WARRIOR I anomalous gold, silver and copper values are obtained from quartz veins hosted by a quartz porphyry(?). The extent and nature of this mineralization is at present unknown.

III GEOCHEMISTRY

(a) Procedure

A total of 27 stream sediment, 137 soil and 12 rock samples were obtained from the WARRIOR claims.

The stream sediment samples were collected exclusively within WARRIOR III along three tributaries of the 'main' stream. Samples were obtained along 25 metre intervals except in the southern stream which was spaced 50 metres apart. Each sample was placed in numbered wet strength sample envelopes and the various locations were flagged indicating their respective sample numbers.

The soil samples were collected from depths of 10 to 20 cm thereby obtaining a B or C horizon sample. As in the case of the stream sediment procedure the sample locations were flagged and deposited in Kraft envelopes. Three main north-south traverses were completed across WARRIOR I AND II. Samples were obtained at an average interval of 100 metres. Within WARRIOR III a small grid with a baseline 2500 metres in length and orientated north-south was established and sampled.

The twelve rock samples that were obtained were deposited in plastic bags. At the laboratory the samples were crushed, split, pulverized, sieved to -100 mesh and assayed for Au (oz/ton), Ag (oz/ton), Cu (%), Pb (%) and Zn (%).

The stream sediment, soil and rock samples were shipped to Min-En Laboratories in North Vancouver for preparation and analysis. The soil and most of the stream sediment samples were sieved to -80 mesh and analyzed for Au (ppb) and Ag (ppm), according to the procedure outlined in Appendix A. Three stream sediment samples were sieved to a -20 mesh whereas two were analyzed at -40 mesh.

(b) Results

Drawing AR 80-147 denotes the various sample locations and their respective results.

The stream sediment results largely revealed background values for Au:5-25 ppb. The middle tributary is considered weakly anomalous in silver.

Visual interpretation of the soil sample data indicates the Au background to be 5 ppb. Anomalous gold samples are considered to be greater than 35 ppb and occur as isolated spot highs. This is evident near the eastern margin of the property where sample #4532 contained 2350 ppb Au. Within WARRIOR I sample #6001 analyzed 325 ppb Au and is located proximal to rock sample #4053 which returned an anomalous gold assay.

Silver results within the soils range from 0.3 to 5.9 ppm. Values in excess of 3 ppm are considered anomalous. The anomalous silver samples occur as isolated spot highs non-coincident with the anomalous gold samples.

The small grid that was established within WARRIOR III, with the exception of one sample, returned negative results in terms of gold and silver.

In conclusion the reconnaissance soil geochemistry conducted on the property revealed only single sample isolated Au or Ag anomalies. In one instance, sample 6001, there is a known proximity and correlation with observed gold mineralization.

IV COST STATEMENT

(a) Wages

	Rate/ day	Dates	No of days	Cost
1 geologist	$172.28	June 30-Jul.2 1980	2	$ 344.56
1 jr. field asst.	46.58	as above	2	93.16
1 jr. field asst.	46.58	June 30/80	1	46.58
1 field asst.	51.88	June 30/80	1	51.88
1 geologist	180.44	November/80	1	180.44
1 geologist	146.92	Mar.17-19/81	3	440.76
			TOTAL	$1,157.38

(b) Room and Board

Per diem rate of $50.41 per person day
Total: 6 person days $ 302.46

(c) Transportation

Helicopter - (Vancouver Island Helicopters)

June 30	Invoice #20199	1.0 hr @ $325/hr	$ 325.00
July 1	Invoice #20127	1.0 hr @ $325/hr	325.00
July 2	Invoice #20129	1.0 hr @ $325/hr	325.00
			$ 975.00

(d) Analytical Services

Min-En Laboratories - Invoice #7250

12 rock - preparation (@ $2.50 each)	$ 30.00
12 rock - Au,Ag,Pb,Zn,Cu (@ $31.00 each)	372.00
164 stream seds./soil, preparation (@ $0.60 ea)	98.40
164 stream seds./soil, Ag, Au (@ $6.00 each)	984.00
	$1,484.40

(e) Report Preparation

	Rate	Dates	No.days	
Drafting	$127.00	Mar.17-18/81	2	$ 254.00
Typing	64.80	Mar.20,23/81	2	129.60
				$ 383.60

GRAND TOTAL $4,302.84

QUALIFICATIONS

I, Gerald A. Harron, do hereby certify that:

1. I am a geologist residing at 2810 Sechelt Drive, North Vancouver, British Columbia and employed by Du Pont of Canada Exploration Limited.

2. I am graduate of the University of Western Ontario with a M.Sc. degree in geology.

3. I am a registered Professional Engineer in the Province of Ontario.

4. I have practised my profession in geology continuously for the past 11 years in various provincial jurisdictions in Canada.

5. Between 1980 June 30 and 1981 March 23, I supervised/directed a field programme on the Warrior 1-3 claims on behalf of Du Pont of Canada Exploration Limited.

Gerald A. Harron

Gerald A. Harron
1981 March 23

PHONE 980-5814

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.
CANADA

ANALYTICAL PROCEDURE REPORTS FOR ASSESSMENT WORK

PROCEDURES 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.

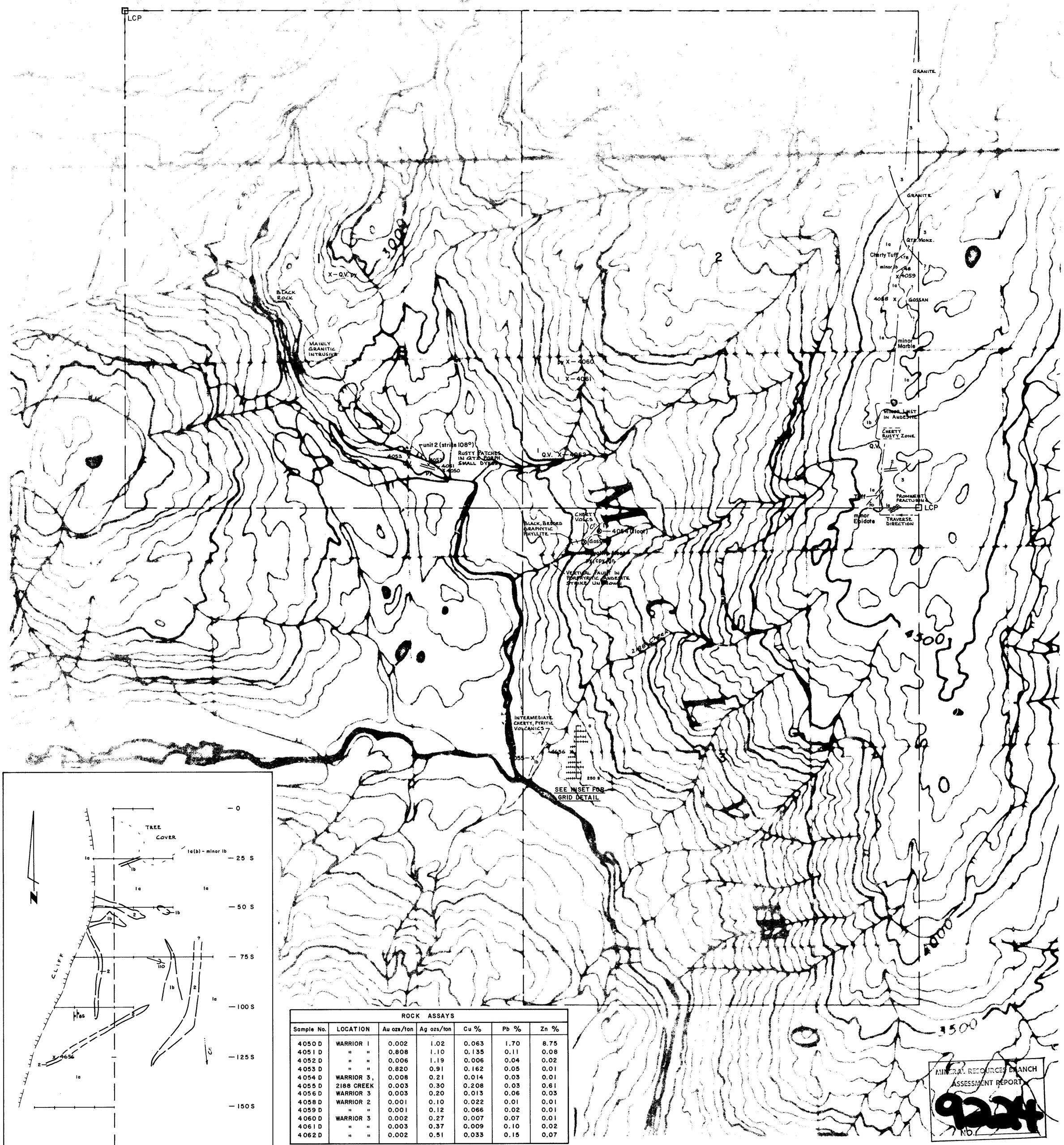
1.0 gram of the samples are digested for 6 hours with HNO_3 and $HClO_4$ mixture.

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 Gutzit method using Ag $CS_2N(C_2H_5)_2$ as a reagent. The detection limit obtained is 1. 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.


LCP
GRANITE
3
3
GRANITE
3
Qtz. Monz.
1a
Cherty Tuff
minor 1b
X 4059
4058 X
GOSSAN
minor Marble
Mineralized Zone in Andesite
Cherty Rusty Zone
Q.V.
Tuff
PROMINENT FRACTURING
LCP
minor Epidote
TRAVERSE DIRECTION
1
2
3
1a
1b
X – Q.V. py
BLACK ROCK
MAINLY GRANITIC INTRUSIVE
py X – 4060
X – 4061
unit 2 (strike 108°)
RUSTY PATCHES IN QTZ. PORPH. SMALL DYKES
4053
4052
4051
4050
Q.V. X – 4062
CHERTY VOLCS.
BLACK, BEDDED GRAPHYTIC PHYLLITE
X – 4064 (floor)
(Gossan)
py/cpy/gn
VERTICAL FAULT IN PORPHYRITIC ANDESITE STRIKES UNKNOWN
2 Kg Creek
INTERMEDIATE CHERTY, PYRITIC VOLCANICS
4056
4055 – X
1b
0
250 S
SEE INSET FOR GRID DETAIL
3500
4000
4500
5000
5500
6000
6500
7000
7500
8000
8500
9000
9500
10000
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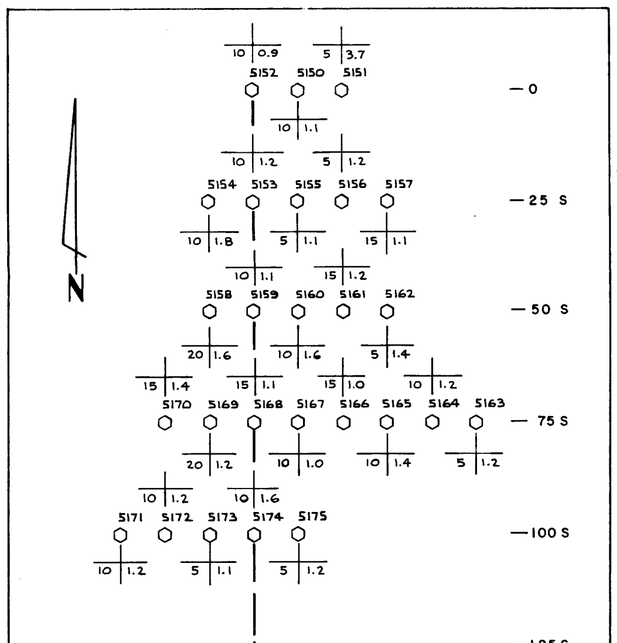
19000
19500
20000
20500
21000
21500
22000
22500
23000

ORIGINAL SAMPLE RESULTS

Tag	Mesh	Au P.P.B.	As P.P.M.	W P.P.M.	Sb P.P.M.	Pb P.P.M.	Cu P.P.M.	Ag P.P.M.	Cd P.P.M.	%H.M.
177D	- 20	40	1100	< 2	140	324	620	8.3	8.9	4.34
	-100	10	114	2	5	96	-	2.4	3.4	
1178D	- 20	75	550	< 2	85	189	690	5.4	8.0	0.87
	-100	15	300	2	30	90	-	2.6	5.8	
1179D	- 20	75	600	< 2	120	160	445	5.2	10.6	3.19
	-100	15	320	< 2	40	109	-	3.2	6.0	
1663D	- 20	85	2500	< 2	170	274	760	5.6	4.3	1.67
	-100	5	512	< 2	15	28	-	1.3	1.4	
2188D	- 20	40	1050	4	175	381	450	8.0	6.9	2.59
	-100	5	107	< 2	25	62	-	2.0	1.6	
2189D	- 20	20	1200	5	25	710	2080	15.0	15.8	3.28
	-100	< 5	152	3	10	77	-	2.0	11.4	
2191D	- 20	95	157	2	165	44	370	2.1	1.3	2.15
	-100	15	17	< 2	30	11	-	1.2	0.2	
2192D	- 20	65	145	2	85	100	330	2.2	0.8	1.90
	-100	25	8.9	3	25	14	-	1.3	0.3	



INSET
SCALE = 1:1000

Note Regarding Original Sample Results:

The results of the analysis of the heavy mineral concentrate from the -20(-20 +100 mesh) fraction are not weighted.

LEGEND

- 6036 — STREAM SEDIMENT SAMPLE LOCATION & No. ('D' SERIES)
- 6074 — SOIL SAMPLE LOCATION & No. ('D' SERIES)
- 10 / 25 — -20 MESH VALUE FOR Au IN P.P.B. / -80 MESH VALUE FOR Au IN P.P.B.
- 1.3 / 2.5 — -20 MESH VALUE FOR Ag IN P.P.M. / -80 MESH VALUE FOR Ag IN P.P.M.

NOTE: DUE TO CIRCUMSTANCES BEYOND OUR CONTROL THE LOCATION OF DATA ON THIS MAP MAY NOT BE TOTALLY ACCURATE.

DUPONT CANADA **EXPLORATION**

ARGONAUT PROJECT
WARRIOR CLAIMS
GEOCHEMISTRY
Au IN P.P.B. & Ag IN P.P.M.
ISKUT RIVER AREA, BRITISH COLUMBIA

B. A. Harron

1 : 10 000

m 300 0 300 600 m

SCALE

ft 1000 0 2000 ft.

1 INCH = 833 FEET

MAPPED BY : K.A.M.	REVISED :	N.T.S. No.: 104 B 15
DATE : JUNE '80		ACCT No.: 347-46
DRAWN BY : K.L.J.		DRWG. No.: AR. 80-147
DATE : NOV. '80		