

DU PONT OF CANADA EXPLORATION LIMITED

GEOLOGICAL AND GEOCHEMICAL REPORT

ON THE ADO 1 & 2 CLAIMS

LIARD MINING DIVISION

LAT. 57°37', LONG. 127°28'

NTS: 94-E-11W

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: 1981 June 10

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I INTRODUCTION(a) Location

The ADO 1&2 claims are located 11 km northwest of Claw Mountain, at the headwaters of an unnamed tributary of Addogacho Creek. Elevations on the property range from 1555m along the central part of the southern boundary to about 2010 m on both the eastern and western boundaries. The claims are above the tree line and are covered with sparse low shrubs and alpine grasses.

(b) Access

Access to the claims is most convenient by rotary wing aircraft from the Sturdee River airstrip; a distance of 50 km to the southeast.

(c) Claim Definition

The ADO 1&2 represent 18 contiguous units with record numbers, tag numbers, and record dates as listed below.

Claim (units)	Record Number	Tag Number	Record Date
ADO1 (9)	1489	45874	July 25, 1980
ADO2 (9)	1490	45875	July 25, 1980

The current owner and operator of the claims is Du Pont of Canada Exploration Limited. The claims were staked to facilitate work on an auriferous geochemical anomaly.

(d) Economic Assessment of the Property

There has been no extensive previous exploration on the property, to the writer's knowledge. No significant economic mineralization was noted during the course of the present investigation.

(e) Summary of Work Performed

A total of 10 stream sediment samples were collected at 200 m intervals from the south central part of the claim group and analyzed for gold. One rock sample was collected and analyzed for Au, Ag, Cu, Pb, Zn.

Geological mapping was completed along the sides of the creeks using the geochemical sampling line for control. The results are plotted at a scale of 1:10,000, on Drwg. No. Ar.80-235.

N.T.S. 94 E 11W

1:50 000

57° 50'

127° 30'

3-1222

426

14-1220

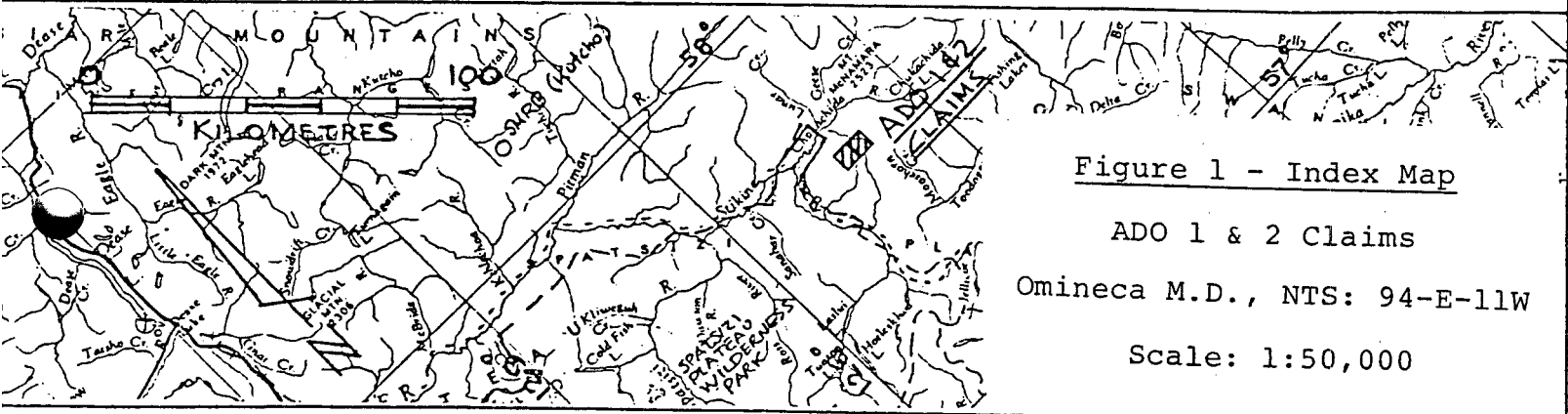
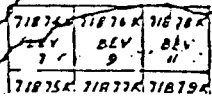
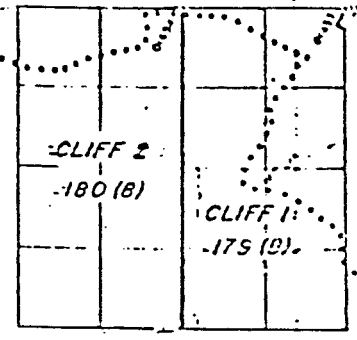
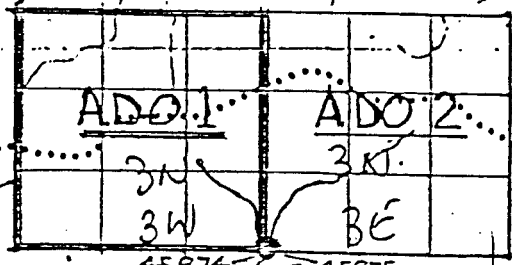
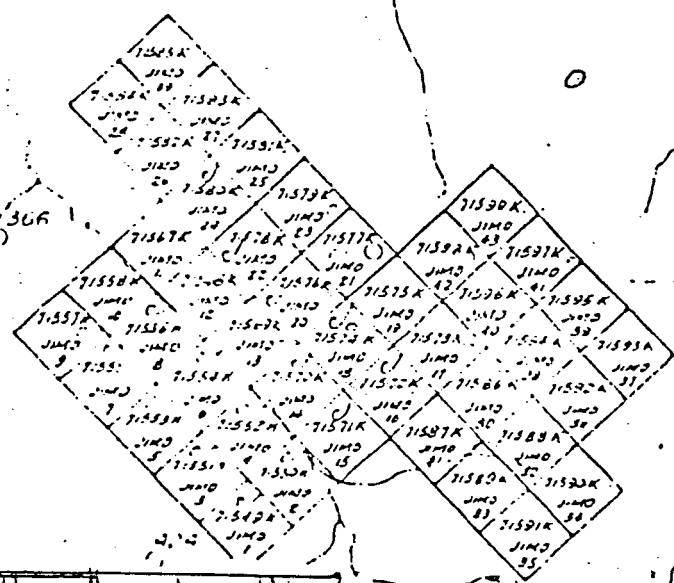


Figure 1 - Index Map

ADO 1 & 2 Claims

Omineca M.D., NTS: 94-E-11W

Scale: 1:50,000

II GEOLOGY

(a) Introduction

The ADO 1&2 claims are within the Intermontane Belt, about 110 km west of the eastern margin. This belt is composed of Mesozoic volcanic, sedimentary, and intrusive rocks.

(b) Lithology

(i) Dacite

This unit is medium grey, fine grained and massive. The crackled surface texture and lack of obvious clasts suggest that the dacite occurs as a flow, rather than a pyroclastic unit. No sulphide minerals were noted in the outcrop.

The assayed rock sample (float) consisted of a 6 cm wide quartz vein hosted in carbonate altered dacite. The quartz vein contained about 1% combined pyrite and chalcopyrite. The location of the float piece down slope from the dacite outcrop suggests that more quartz veins could be present in the dacite lithology.

(ii) Intermediate Volcanic Agglomerate

This unit is a matrix supported agglomerate, with fine grained maroon-coloured clasts averaging 20 cm in a matrix of fine grained medium grey andesitic tuff. The clasts comprise about 60% of the rock, and bedding in the tuffaceous matrix is chaotic. The contact with the underlying massively bedded tuff was not observed.

(c) Structure

Bedding attitudes indicated that the beds strike 110-120° and dip 45-55° to the southwest. No major folds or faults were noted on the claims, though broad anticlinal and synclinal structures have been mapped by others approximately 2 km to the northwest of the claims.

(d) Mineralization

No significant precious or base metal mineralization was noted during the present investigation. However, as only a small portion of the bedrock was examined, the possibility of economic mineralization being present cannot be discounted.

(e) Conclusions

The lithology as mapped suggests that the claim group is probably underlain by the basal part of the Toadogone Group volcanic rocks. No major folds or faults were observed. A piece of quartz vein float hosted in carbonate altered dacite suggests that the dacite unit may contain more and/or larger mineralized quartz veins.

III GEOCHEMICAL SURVEY(a) Sample Collection, Preparation and Analyses

A total of 10 stream sediment samples were collected from the two streams in the south central part of the claim group. Sample intervals were measured with topofil and the sample line followed the stream courses. The sample interval was 200 m. At each sample site a metal scoop was used to collect about 500 gms of silt-sand sized material from the creek bed and placed in a wet-strength soil sample envelope. The sample was numbered and specific information describing the sample and the sample site was recorded on a data card. A flag bearing the sample number was placed at the collection site.

The stream sediment samples were sent to Min-En Laboratories in North Vancouver for preparation and analyses. The samples were oven dried and sieved to either -20 or -80 mesh. The -20/-80 mesh fraction was analyzed for Au according to the procedure outlined in Appendix A.

One rock sample consisting of mineralized quartz vein hosted in carbonate altered dacite collected on the ADO 1 claim was assayed for Au, Ag, Cu, Pb, Zn according to standard procedures.

(b) Results and Interpretation

Drawing AR80-236 shows the sample numbers, locations, and values obtained. Gold values range from 5 to 15 ppb, which are considered to be background values in this volcanic terrain. These results do not substantiate the 1250 ppb value in the -100 mesh fraction of a sample collected in the northeast trending tributary near the legal claim post.

The one rock sample assayed 0.001 oz/ton Au, 0.01 oz/ton Ag, 0.01% Pb, 0.01% Zn, 0.104% Cu, which suggests that quartz veins on the property are mineralized with low concentrations of base and precious metals.

IV

COST STATEMENT(a) Wages

	<u>Rate/Day</u>	<u>Dates</u>	<u>No. of Days</u>	<u>Cost</u>
1 geologist	\$172.00	Aug.20/80,Jan.7/81	2	\$ 344.00
1 geol. asst.	50.82	Aug.29/80	1	50.82
1 field asst.	46.58	Aug.20/80	1	46.58
1 field asst.	39.18	Aug.29/80,Jan.6/81	2	78.36
				<u>519.76</u>

(b) Room and Board

A per diem rate of \$49.56 applies to 4 person days listed above for August 20, 1980

198.24

(c) Transportation

i) Transportation to the field area:
The total cost of transporting the field crew to the Sturdee River airstrip is \$6170.63, and is prorated over 19 claim groups. The amount \$324.77 applies to this claim group.

324.77

ii) In support of field work:
Terr-Air Invoice #933, including:
1.0 hours @ \$365.00/hr on August 20,1980
Fuel: 30 gallons @ \$3.00/gal

455.00
779.77

(d) Analytical Services

<u>No.</u>	<u>Type</u>	<u>Elements</u>	<u>Unit Cost</u>	
10	Stream sediments	Au	\$ 4.25	42.50
10	Stream sediments	Preparation	0.60	6.00
1	Rock	Cu,Pb,Zn,Au,Ag	31.00	31.00
1	Rock	Preparation	2.50	2.50
				<u>82.00</u>

(e) Report Preparation

	<u>Rate/Day</u>	<u>Date</u>	<u>No. of Days</u>	
Drafting	\$ 147.00	May 8/81	1	147.00
Typing	62.00	May 8/81	1	62.00
				<u>209.00</u>

GRAND TOTAL:

\$1788.77

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 August 20 and 1981 May 14, I supervised/directed a field programme on the ADO 1 and 2 claims on behalf of Du Pont of Canada Exploration Limited.

Gerald A. Harron

Gerald A. Harron
1981 May 14

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.

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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.

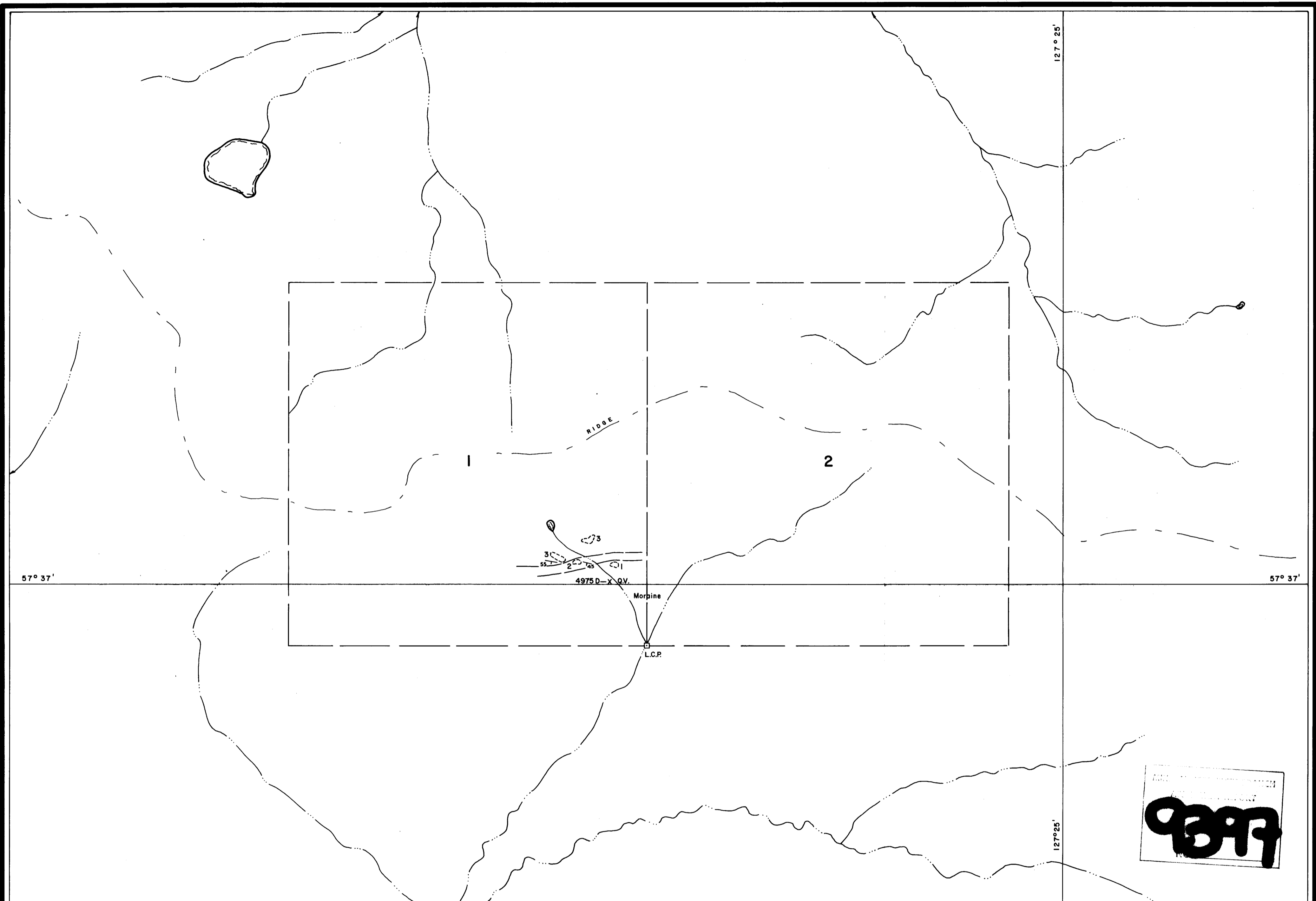
1.0 gram of the samples are digested for 6 hours with HNO_3 and HClO_4 mixture.

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.



9877

LEGEND

- 3 INTERMEDIATE VOLCANIC AGGLOMERATE
- 2 INTERMEDIATE MASSIVE TUFF
- 1 DACITE

SYMBOLS

- OUTCROP
- CONTACT, ASSUMED
- BEDDING, STRIKE & DIP
- X-4975D ROCK SAMPLE LOCATION & No.
- Q.V. QUARTZ VEIN
- CLAIM BOUNDARY & LEGAL CORNER POST

ROCK ASSAYS					
Tag No.	Au ozs/ton	Ag ozs/ton	Cu %	Pb %	Zn %
4975 D	0.001	0.01	0.104	0.01	0.01



DU PONT EXPLORATION
CANADA

ARGONAUT PROJECT
ADO CLAIMS
GEOLOGY

CHAPPELLE AREA, BRITISH COLUMBIA

J.A. Harris

m 300 0 1000 300 600 m

SCALE

ft 1000 0 1000 2000 ft

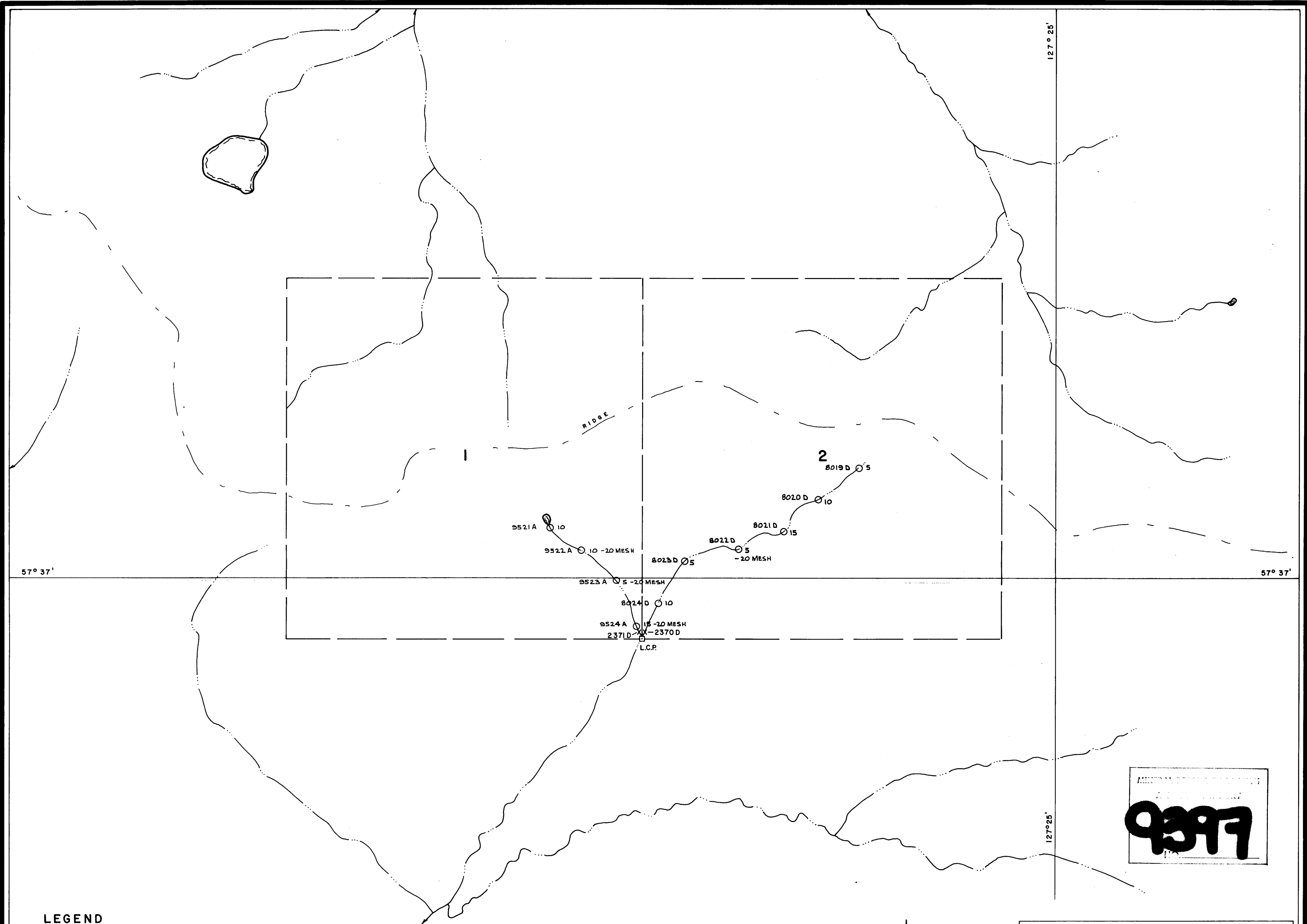
1 INCH = 833 FEET

MAPPED BY: G.A.H. REVISED: N.T.S. No.: 94 E 11W

DATE: 80 08 17 ACCT No.: 347-64

DRAWN BY: K.L.J.

DATE: 81 03 01 DRWG. No.: AR. 80-235



LEGEND

- 9521A ○ STREAM SEDIMENT SAMPLE LOCATION & No.
- ¹⁰ -80 MESH VALUE FOR Au IN P.P.B.
- X- 2371D ORIGINAL STREAM SEDIMENT SAMPLE LOC. & No.

ORIGINAL SAMPLE RESULTS

Tag	Mesh	Au P.P.B.	As P.P.M.	Pb P.P.M.	Cu P.P.M.	Ag P.P.M.	%H.M.
2370	- 20	10					4.36
	-100	1250	14	10	82	0.5	
2371	- 20	5					5.52
	-100	25	7	19	76	0.2	

Note Regarding Original Sample Results:
 The results of the analysis of the heavy concentrate from the -20(-20 +100 mesh) fraction are not weighted.

MINERAL DEVELOPMENT
 ACT OF 1962
9397



DUPONT EXPLORATION
CANADA

ARGONAUT PROJECT
ADO CLAIMS
GEOCHEMISTRY
 Au IN P.P.B.
 CHAPPELLE AREA, BRITISH COLUMBIA

1 INCH = 833 FEET
 1:10000

MAPPED BY: G.A.H.	REVISED:	N.T.S. No.: 94 E 11W
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