

83-#320-#11240

**GEOLOGICAL BRANCH
ASSESSMENT REPORT**

11,240

GEOLOGICAL AND GEOCHEMICAL REPORT

ON THE GERIMI 1 - 27 CLAIMS

BRITISH COLUMBIA

CARIBOO MINING DIVISION

by

S.L. Topham, B.Sc.

and

P. E. Fox, Ph.D., P.Eng.

**Fox Geological Consultants Ltd.
410 - 675 West Hastings Street
Vancouver, B.C.**

Gerimi 1 - 27 Claims

NTS 93 A/13W

NTS 93 B/16E

52°48'N 122°13'W

**Work paid for by Dome Exploration (Canada) Limited
July 20, 1983**

CONTENTS

	<u>Page</u>
INTRODUCTION	1
LOCATION, ACCESS AND TOPOGRAPHY	1
CLAIM INFORMATION	4
REGIONAL GEOLOGY	5
GERIMI 1-4 GEOLOGY	
Regional Geology	5
Lithology	6
SAMPLING PROGRAM	8
RESULTS	11
DISBURSEMENTS	
Mapping Gerimi 1-4	12
Linecutting, Flagging, Sampling Gerimi 5-27	13
REFERENCES	14

TABLES

Table I	Metres of Grid Cut and Sampled Per Claim	9
---------	--	---

ILLUSTRATIONS

Figure 1	Location Map	2
Figure 2	Claim Map	3
Figure 3	Geological Map Gerimi 1-4	Pocket
Figure 4	Geochemical Map - Cantin Creek Grid	Pocket
Figure 5	Geochemical Map - Nyland Lake Grid	Pocket

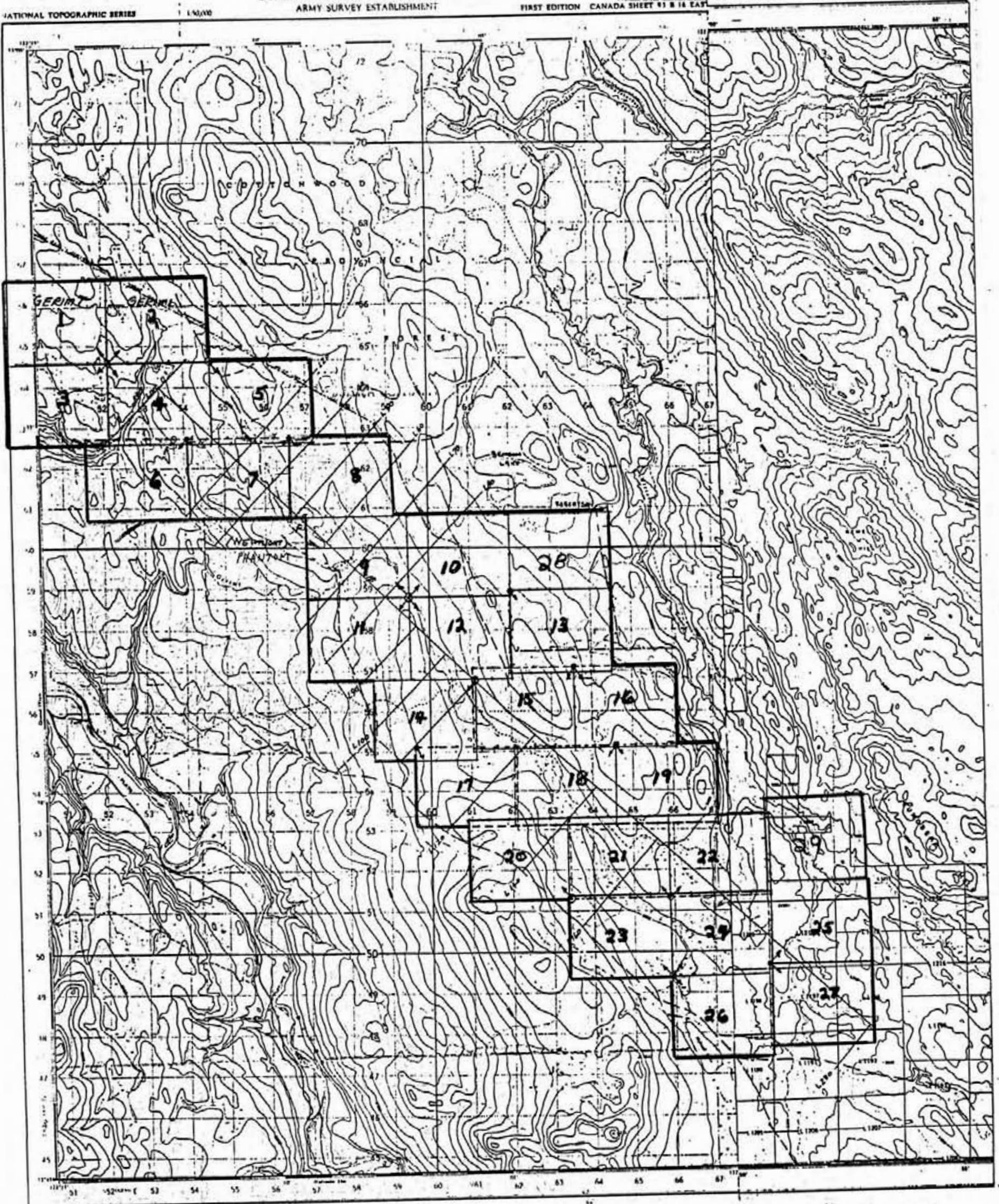
INTRODUCTION

This report summarizes the results of the 1982 exploration of the Gerimi claims. Gerimi 1 - 27, comprising 540 units (13,500 hectares) was originally staked in June and July, 1982. Gerimi 28 (20 units, 500 hectares) was staked in November 1982 followed by Gerimi 29 (20 units, 500 hectares) in June 1983. From July 20 to October 10, 1982, 23 kilometres of base line and 117 kilometres of grid line were cut and flagged on Gerimi 5-27, followed by soil sampling. Detailed mapping at a scale of 1:15,000 was carried out on Gerimi 1-4 during the same period. The programs were designed to aid in an evaluation of the property.

LOCATION, ACCESS AND TOPOGRAPHY

The Gerimi property consists of 29 claims lying along a northwesterly "line" some 26.3 kilometres in length. The northernmost claims lie 6 kilometres east of the Quesnel River and 20 kilometres east-southeast of the town of Quesnel. The southernmost claims encompass the northern half of Nyland Lake and lie 9 kilometres east of the Quesnel River. Access to the site is by a series of gravel-surfaced roads - the old Nyland Lake Road, the Branch 2700 Forestry Road and the Branch 500 Forestry Road - leading from Highway 26, the Barkerville Highway, 16 kilometres east of Quesnel.

Local terrain consists of rolling hill country typical of the interior plateau region. Southern slopes are thickly vegetated by spruce and tag alder stands. Northern hill slopes are more open. Altitudes range from peaks above 3800 metres to a low of 2300 metres at Cantin Creek. The area exhibits erosional and depositional features of continental glaciation which moved in a general northwesterly direction, somewhat paralleling the north-northwesterly strike of the Quesnel Belt rock and lineament or fault system.



QUESNEL RIVER
BRITISH COLUMBIA

FIGURE 2

CLAIM MAP - GERIMI 1-27

SCALE 1:100,000

NTS 93 A/13E, B/16W

GEOLOGICAL BRANCH
ASSESSMENT REPORT

11,240

CLAIM INFORMATION

Expiry dates shown assume work described herein is accepted for assessment purposes.

	<u>Record No.</u>	<u>Units</u>	<u>Expiry Date</u>
Gerimi	1	20	July 20, 1985
	2	20	July 20, 1985
	3	20	July 20, 1985
	4	20	July 20, 1986
			(\$1,600 towards 1987 work)
	5	20	July 20, 1985
	6	20	July 20, 1985
	7	20	July 20, 1985
	8	20	July 20, 1985
	9	20	July 20, 1985
	10	20	July 20, 1985
	11	20	July 20, 1985
	12	20	July 20, 1985
	13	20	July 20, 1985
	14	20	July 20, 1985
	15	20	July 20, 1985
	16	20	July 20, 1985
	17	20	July 20, 1984
	18	20	July 20, 1985
	19	20	July 20, 1985
	20	20	July 20, 1985
	21	20	July 20, 1985
	22	20	July 20, 1985
	23	20	July 20, 1985
	24	20	July 20, 1985
	25	20	July 20, 1985
	26	20	July 20, 1985
	27	20	July 20, 1985
	28	20	November 23, 1983
	29	20	June 27, 1984

REGIONAL GEOLOGY

The Gerimi property is situated in the eastern part of the Quesnel Trough not far from the eastern boundary with metamorphosed units of the Cariboo Mountains. In the prospect region, the Mesozoic Takla Group, comprising submarine volcanic rock and breccia together with their derived sedimentary units, discontinuous carbonate horizons, and marine sediments, is dominant.

The major northwest trend of the Quesnel Belt stratigraphy is interrupted by systems of northeasterly trending block faults. Complex intrusive stocks and sills of quartz monzonite, diorite and syenite intrude the volcanic rocks and sediments of the Takla Group. The QR stock is one example of this type of intrusion which showed associated porphyry copper-type mineralization. Alkalic stocks recognized at Maud, Shiko, and Kwun Lakes coincide with a northwesterly trending lineament.

Exploration work in this area is an extension of previous work which concentrated on locating subvolcanic plutons and exploring country rock in and around stocks for the porphyry-type deposits.

GERIMI 1 - 4 GEOLOGY

Regional Geology

A thin but extensive mantle of glacial till covers virtually all of the area of interest. Geology was compiled from a combination of mapping the few visible outcrops, creek bed and road cut sampling, prospecting carried out during linecutting and flagging, Bailey's Morehead Lake thesis, and Assessment Report 6701.

Main structural features of the claim area include northeasterly trending faults and offset blocks, resulting in sharp breaks in lithological continuity. Sequences of units inferred to be "younging" towards the centre of the property delineate a probable syncline with felsic breccia and greywacke core and mafic basalt crest.

The property is underlain by a sequence of epiclastic units followed by volcanoclastic rock, passing from grey and green upwards into maroon basalt and breccia, some calcareous. The mafic volcanic sequence ends with grey basalt flows, pillow lava and breccia, on top of which lie the felsic breccia and flows indicating the presence of a felsic stock.

Lithology

Unit 1 - Argillite, sandstone, conglomerate

Specimens of this unit outcrop to the north and west of Gerimi 2. The unit consists of fine grained, grey siliceous siltstone with white, grey and pale green bands of some 5 cm width. The siltstone is cut by quartz veins and dykes up to 15 cm. It is in contact with fine grained black argillite which contains fine hematite veins. A few calcite veins cut both siltstone and argillite. No bedding was seen.

Unit 2e - Pyritic argillite and wacke

This unit comprises fine and medium grained grey and green volcanoclastic sandstone and weakly pyritic argillite, showing minor epiclastic argillite and sandstone. Augite phenocrysts 5-15 mm, showing larger phenocrysts in coarser grained material, are present, together with isolated propylitic fragments of up to 50% epidote, local lenses of calcite, and disseminated hematite, magnetite and pyrite. The rock is cut by 5-10 mm epidote veins.

Unit 2d - Maroon wacke, breccia, basalt rubble

This unit, in the southeast corner of Gerimi 3, consists of fine grained maroon basalt, propylite, phenocrysts of augite and feldspar, amygdules of analcite and minor calcite, and up to 20% calcite overall. Fragments are brecciated. The maroon basalt is intercalated with maroon, fine to medium grained bedded sandstone which consists of some 30% mafic rock, occasionally calcareous, with isolated epidote aggregates. Strike of the bedding is northwest, dip 60 to 80 degrees northeast. Some crossbedding was noted.

Unit 2c - Calcareous basalts, commonly pyritic

This basalt is fine grained, grey to black, with 15% calcite. Phenocrysts include subhedral to euhedral feldspar, brown pitted pyroxene and subhedral and euhedral augite. Amygdules include analcite and isolated spherical quartz-muscovite. Fine pyrite, both disseminated and in aggregates, and disseminated magnetite are present.

Unit 2b - Maroon basalt and breccia

The basalt is fine grained, brecciated and consists of frequent augite phenocrysts, feldspar phenocrysts, analcite amygdules and calcite amygdules. Frequency of analcite amygdules varies locally from 15% to 50%. Breccias, consisting of subrounded to subangular fragments, are considered to be slump or flow in origin.

Unit 2a - Grey monolithologic breccia, flows, pillow lava

This breccia consists of fine grained grey and black basalt containing feldspar and augite phenocrysts. Fragments are rounded to subrounded and include fine to medium grained felsic tuff and rounded to subrounded fragments of hornblende basalt and propylite, and amygdules of analcite and lesser calcite. Fine pyrite, disseminated and in aggregates, and magnetite are present.

Unit 3 - Felsic rock: massive polyolithologic breccia flows, wacke, conglomerate, breccia

The maroon and grey felsic breccias are coarse, chaotic, unsorted breccias containing from 1-40% rounded to subrounded fragments. Felsic fragments, occasionally reminiscent of pillow shapes, contain up to 40% subhedral and euhedral augite. Mafic and dioritic fragments are also present. Epidote veins and aggregates, and epidote-rich propylitic fragments are locally prominent. Isolated felsic flows are fine grained, greenish grey porphyries containing augite phenocrysts. Hematite, disseminated magnetite, isolated pyrite and occasional sphalerite were noted. In the area of Cantin Creek, the breccia changes from polyolithologic to monolithologic -- consisting of felsic material only. Minor greywacke forms beds within the felsic fragments. The felsic material is generally distinguished by the presence of andesite and syenite fragments, and the light colour of fragments and groundmass.

Unit 4 - Diorite, monzonite, syenite (Cantin Creek stock)

A total of 409 m, 5 holes, was percussion drilled within the stock in September, 1977, for Newconex Canadian Exploration. Holes 1, 2 and 3 did not penetrate bedrock. Cuttings consisted of a grey, fine grained, pyritic, hornblende-augite diorite below a layer of quartz-feldspar material. Can 4 returned the quartz-feldspar at 57.6 m (Fox classifies it as mixed diorite and syenite from 30.5 m to 76 m and barren grey diorite below). Can 5 returned waxy, epidote-rich, chloritic, fine grained hornblende-augite basalt chips from 12 m to 91 m (Assessment Report 6701).

SAMPLING PROGRAM

The program consisted of grid preparation and soil sampling. One hundred and thirty kilometres of line were cut and flagged. This consisted of 23 kilometres of baseline and 117.5 kilometres of grid line, spaced one kilometre apart and flagged at 50 metre intervals. Work was done intermittently between July 20, 1982 and October 10, 1982.

Geochemical work consisted of soil samples collected at 50-metre intervals along established grid lines. Samples were taken from the B horizon where possible, or from tills and talus material. Bogs and swamps were specifically avoided. Two thousand samples were taken; nineteen hundred and eighty seven were analyzed.

Approximately one kilogram samples were collected by mattock and stored in kraft paper bags. Samples were screened and the -80 mesh fraction pulverized and analyzed by Acme Analytical Laboratories, 852 East Hastings Street, Vancouver, B.C. Gold content only was analyzed, both by atomic absorption techniques and by fire assay.

The summer was exceptionally wet, resulting in extra time required for linecutting, flagging, sampling and vehicle repair.

TABLE I
METRES OF GRID CUT AND SAMPLED PER CLAIM

	<u>Line No.</u>	<u>Metres</u>	<u>Total Metres Per Claim</u>
Gerimi 5	20S	2200	2200
Gerimi 6	20S	300	300
Gerimi 7	20S 30S	2500 2800	5300
Gerimi 8	30S 40S 50S	2200 3500 2600	8300
Gerimi 9	50S 60S 70S	1600 4550 900	7050
Gerimi 10	70S 80S 90S	2700 2600 1600	6900
Gerimi 11	60S 70S 80S	1250 2200 1850	5300
Gerimi 12	80S 90S 100S	1050 2800 1000	4850
Gerimi 13	100S 110S 120S	2200 2200 800	5200
Gerimi 14	90S 100S 110S	1900 2850 300	5050
Gerimi 15	100S 110S 120S	250 2450 1750	4450
Gerimi 16	120S 130S 140S	950 2900 1375	5225
Gerimi 17	110S 120S 130S	2300 2700 300	5300

Gerimi 18	120S	350	
	130S	2300	
	140S	1750	4400
Gerimi 19	140S	825	
	150S	3050	
	160S	1300	5775
Gerimi 20	130S	1000	
	140S	1850	
	150S	850	3700
Gerimi 21	150S	2000	
	160S	2350	
	170S	400	4750
Gerimi 22	160S	400	
	170S	3000	
	180S	2500	5900
Gerimi 23	160S	1150	
	170S	2600	
	180S	1200	4950
Gerimi 24	180S	1700	
	190S	2550	
	200S	650	4900
Gerimi 25	190S	1300	
	200S	2250	
	210S	2200	5750
Gerimi 26	190S	1550	
	200S	1900	
	210S	1500	4950
Gerimi 27	210S	1700	
	220S	3150	
	230S	2000	6850

RESULTS

Results of geochemical analysis are given in Figures 4 and 5. Each sample site is plotted, indicating a division of gold content into three groups. Threshold value of 20 ppb was taken at the 98th cumulative percentile. Anomalous values of 20 ppb and above were separated from sub-anomalous values of 10 to 19.9 ppb. Samples with assays below 10 ppb were considered to be indicative of background population.

A bimodal distribution is evident, showing some 1.5% to 2.0% anomalous population. Nineteen hundred and eighty seven samples were tested. Sixty four samples (3.22%) were at or above 10 ppb. Thirty-four samples (1.71%) were at or above 20 ppb.

One target area can be discerned from the plot, in Gerimi 26 and 27. First indication of anomalous and sub-anomalous area can be seen on Line 230S on the southeast corner of the claim; it includes two subanomalous samples below the southern boundary on Line 220S, then continues in a northwesterly direction, paralleling glacial drag, on Lines 207S and 200S in Gerimi 26.

No other easily recognizable targets are evident. The effects of glaciation, deglaciation and erosion have obscured the record. More sampling is planned for 1983, along with detailed exploration of the one target.

DISBURSEMENTS

1. Mapping Gerimi 1 - 4

Salaries:	Bruland	16 days @ \$240	\$ 3,840
	Cameron	12 days @ \$160	1,920
Accommodation, board, travel:			
		28 man-days @ \$53.89	1,509
Vehicle rental, gasoline, repair:			
		28 vehicle-days @ \$48.08	1,346
Drafting and report writing:			
	Bruland	2 days @ \$240	480
Consulting - P. E. Fox, Ph.D., P.Eng.:			
		Time in field - 1 day @ \$400	400
			<hr/>
			\$ <u>9,495</u>

2. Linecutting, flagging, sampling Gerimi 5 - 27

Salaries:	Bruland	43 days @ \$240	\$10,320	
	Cameron	18 days @ \$160	2,880	
	Hunt	54 days @ \$144	7,776	
	Fitzgerald	27 days @ \$ 96	2,592	
	McCosh	46 days @ \$ 96	4,416	\$ 27,984
Accommodation, board, travel				10,131
Telephone and radio				2,354
Vehicle rental, gasoline, repair				
	2 4-wd: 166 vehicle days @ \$48.08			7,981
Equipment and supplies				5,156
Maps, photocopy				2,316
Geochemistry - Acme Analytical				
	2,000 samples @ \$6.50		\$13,000	
	Freight		221	13,221
Consulting - P.E. Fox, Ph.D., P.Eng.				
	Time in field - 10 days @ \$400			4,000
Report writing				500
				<u>\$ 73,643</u>
117.35 km. of line cut and sampled				
Cost per km = \$627.55				
TOTAL DISBURSEMENTS				<u>\$ 83,138</u>

Work paid for by Dome Exploration (Canada) Limited

Prepared by:

FOX GEOLOGICAL CONSULTANTS LTD.

S. L. Topham, B.Sc.

July 20, 1983

P. E. Fox, Ph.D., P.Eng.

REFERENCES

Bailey, David Gerard, 1978. The geology of the Morehead Lake area, south central British Columbia, Ph.D. thesis, Queens University.

Richardson, P.E., 1978. Percussion drilling on the Can 1 claim, British Columbia Department of Energy, Mines and Petroleum Resources Assessment Report No. 6701.

Tipper, H.W., R.B. Campbell, G.C. Taylor and D.F. Scott, 1979. Map 1424A, Parsnip River sheet 93A.

FOX GEOLOGICAL CONSULTANTS LTD

410 - 675 W. Hastings St.,
 Vancouver, B.C.
 Canada V6B 1N2

Tel. (604) 669-5736

August 15, 1983

Chief Gold Commissioner
 Ministry of Energy, Mines and Petroleum Resources
 Mineral Resources Branch
 Victoria, B.C. V8V 1X4

Dear Sir:

Re: Statement of Exploration and Development
Gerimi 1-27 Claims *Caribou*

Please find enclosed two copies of the report covering geological mapping on Gerimi 1-4, and linecutting and soil sampling on Gerimi 5-27. This report is to accompany the Statement of Exploration and Development filed July 20, 1983.

Yours very truly

FOX GEOLOGICAL CONSULTANTS LTD.

Sarah L. Topham

Sarah L. Topham

Encl.

6721

**GEOLOGICAL BRANCH
 ASSESSMENT REPORT**

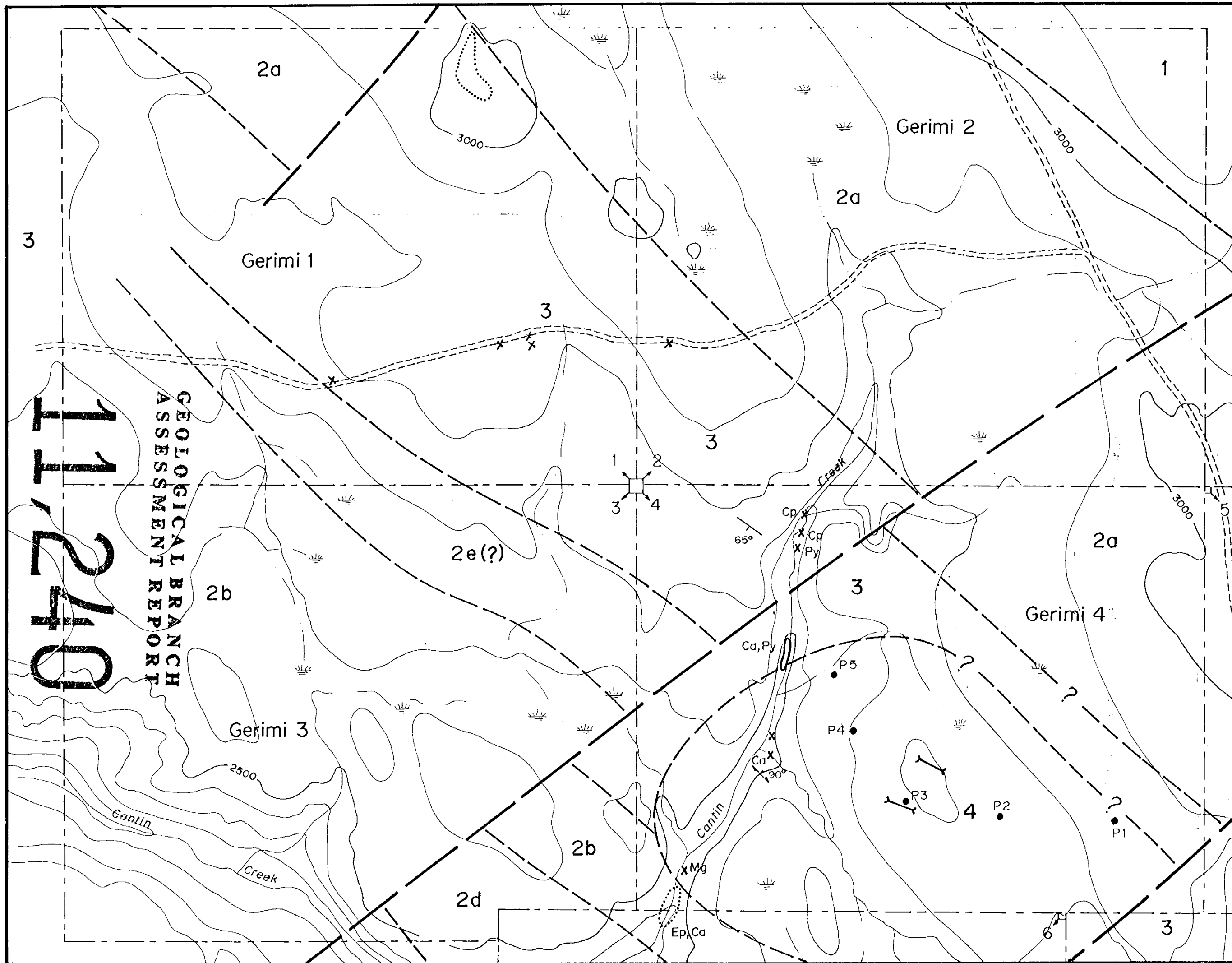
11,240

MINISTRY OF ENERGY, MINES
 AND PETROLEUM RESOURCES

AUG 17 1983

MINERAL TITLES FILE ROOM

REFERENCE	CASE	INITIALS
C.G.C.		
D.C.G.C.		
G.C.		
FILED		
INDEXED		
SEARCHED		
SERIALIZED		
FILED		
FILE NO.	83 DS 18 B.V.	
FILED CLERK	AUG 23 1983 AW	



11240
 GEOLOGICAL BRANCH
 ASSESSMENT REPORT

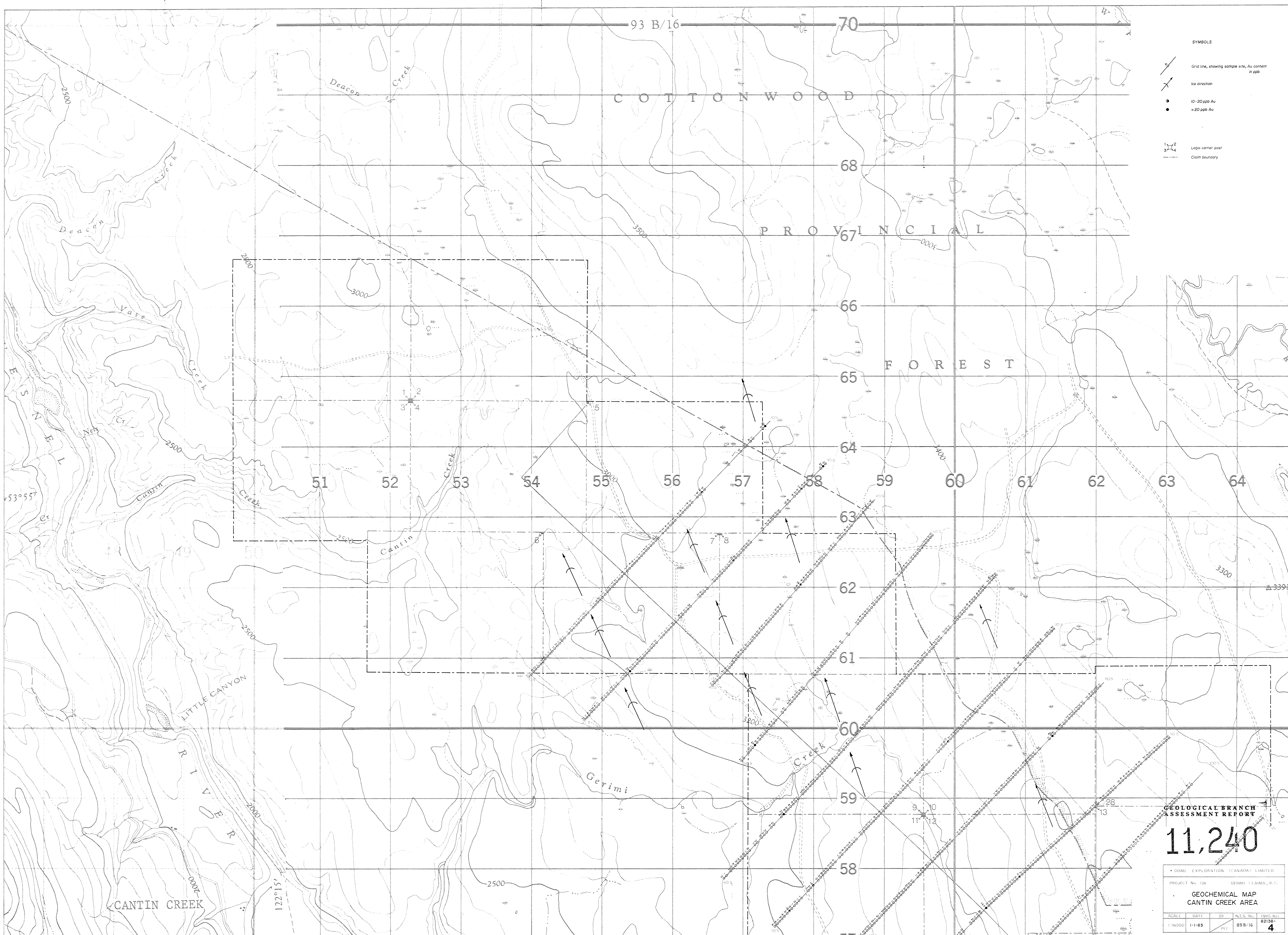
LEGEND

- JURASSIC**
- 4** Diorite, monzonite, gneiss
 - 3**felsite: massive p... breccia, flows, pillow lava, etc.
- TRIASSIC**
- 2** Marine volcanics:
 - 2a** Grey monolithic breccia, flows, pillow lava
 - 2b** Maroon basalt and breccia
 - 2c** Calcareous basalts, commonly pyritic
 - 2d** Maroon wacke, breccia, basalt rubble
 - 2e** Pyritic argillite and wacke
 - 1** Argillite, sandstone, conglomerate

SYMBOLS

- Geological contact: approximate, assumed
 - Outcrop
 - Area of continuous outcrop
 - Fault (assumed)
 - Bedding, overturned bedding
 - Foliation
 - Trench
 - Percussion drill hole
 - Claim boundary
 - Legal corner post
- Py=Pyrite, Hm=Haematite, Ca=Calcite, Ce=Chalcocite
 Mg=Magnetite, Cp=Chalcopyrite, Ep=Epidote

DOME EXPLORATION (CANADA) LIMITED				
PROJECT NO: 138		GERIMI 1-4		
GEOLOGICAL MAP				
CANTIN CREEK				
SCALE	DATE	BY	N.T.S. No	DWG. No.
1:15,000		DLP PEF	93B /16	3



- SYMBOLS**
- Grid line, showing sample site, Au content in ppb
 - Ice direction
 - 10-20 ppb Au
 - >20 ppb Au
 - Leica corner post
 - Claim boundary

**GEOLOGICAL BRANCH
ASSESSMENT REPORT**

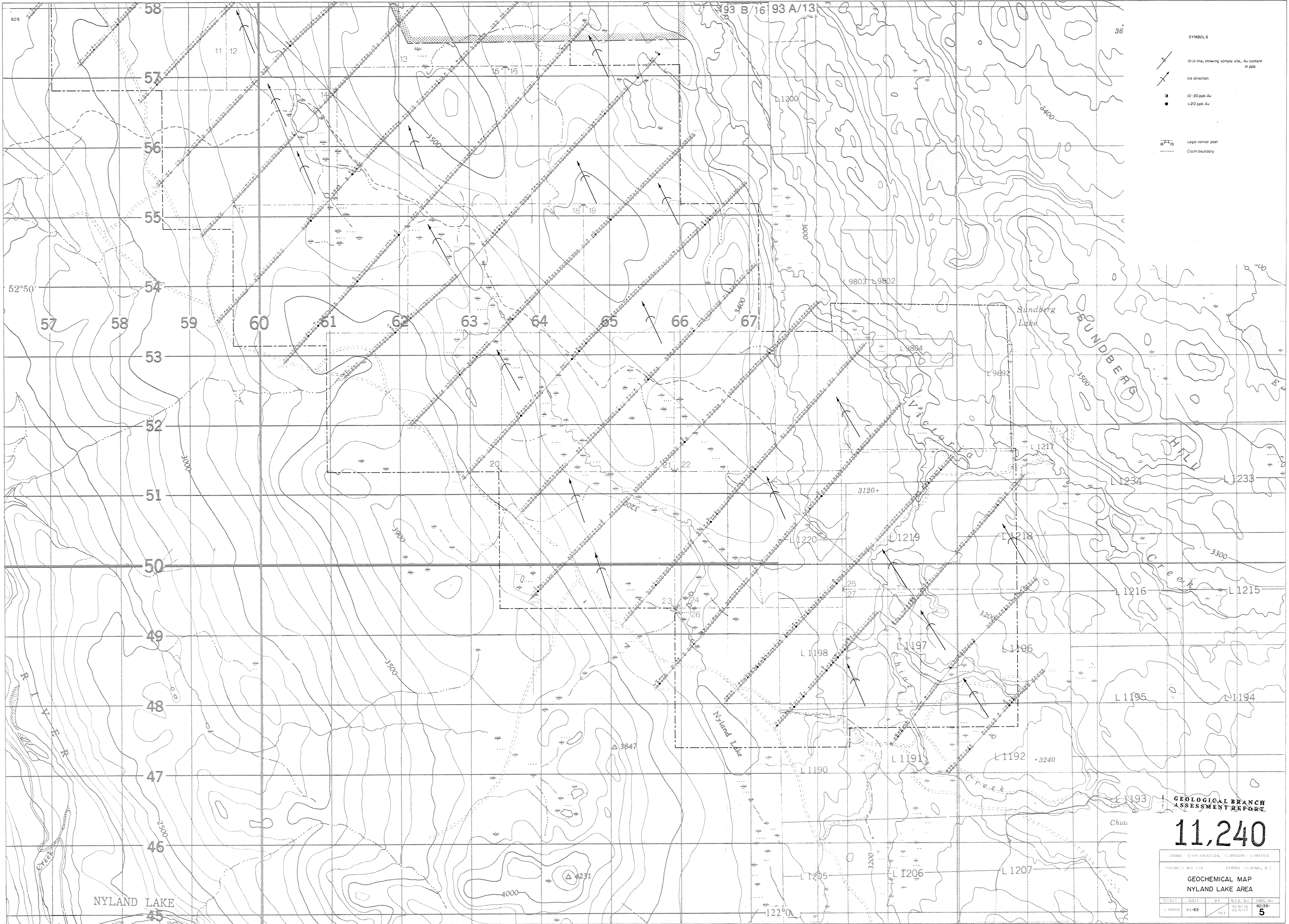
11,240

DUME EXPLORATION (CANADA) LIMITED

PROJECT No: 138 GERMI CLAIMS, B.C.

**GEOCHEMICAL MAP
CANTIN CREEK AREA**

SCALE	DATE	BY	N.T.S. No.	EWG. No.
1:6000	1-1-83	PEF	95B/16	82138-4



- SYMBOLS**
- Grid line, showing sample site, Au content in ppb
 - Ice direction
 - 10-20 ppb Au
>20 ppb Au
 - Legal corner post
 - Claim boundary

**GEOLOGICAL BRANCH
ASSESSMENT REPORT**

11,240

DOMEX EXPLORATION (CANADA) LIMITED		PROJECT NO: 138		GFM/1 CLAIMS, B.C.	
GEOCHEMICAL MAP NYLAND LAKE AREA					
SCALE:	DATE:	BY:	N.T.S. No.:	DWG. No.:	
1:5000	11-83	PEF	83 B/16 83 A/13	82158-	5