

ARIS SUMMARY SHEET

District Geologist, Smithers

Off Confidential: 89.02.16

ASSESSMENT REPORT 17051

MINING DIVISION: Atlin

PROPERTY: BR  
LOCATION: LAT 58 36 13 LONG 133 28 59  
UTM 08 6496701 588150  
NTS 104K11W

CLAIM(S): BR  
OPERATOR(S): Dominion Explorers

AUTHOR(S): Fekete, M.  
REPORT YEAR: 1988, 22 Pages

COMMODITIES

SEARCHED FOR: Antimony, Gold, Silver

GEOLOGICAL

SUMMARY: The claims are underlain by faulted and folded argillaceous phyllites and quartzites of the Upper Triassic Stuhini Group. Fault replacement-type mineralization occurs and consists of massive to disseminated stibnite and minor pyrite in quartz gangue.

WORK

DONE: Physical, Geological  
GEOL 0.5 ha  
Map(s) - 1; Scale(s) - 1:100  
ROCK 32 sample(s) ;SB,PB,AU,AG  
TREN 50.0 m 9 trench(es)

MINFILE: 104K

LOG NO: 0222	RD.
ACTION: 11/88	
FILE NO:	

ASSESSMENT REPORT  
for  
work performed on the  
**BR MINERAL CLAIM GROUP**  
  
BR/RNG Property  
Stuhini Creek, Tulsequah Area  
58°36'N, 133°30'E  
Atlin Mining Division

FILED

for  
**DOMINION EXPLORERS INCORPORATED**  
November 7-13, 1987

by  
MARK FEKETE, Geologist  
February 10, 1988

**GEOLOGICAL BRANCH  
ASSESSMENT REPORT**

**17,051**

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1. INTRODUCTION

This report was prepared for Dominion Explorers Incorporated to evaluate the potential of the company's BR and RNG claims in Northwestern British Columbia, for economically viable antimony deposits.

Data for the report was obtained during a five day work program in November 1987. The program saw reclamation, sampling and mapping of a number of old hand trenches over a showing on the BR claims.

## 2. SUMMARY AND CONCLUSIONS

Antimony mineralization of fracture replacement type occurs on the BR claims and may be observed in a number of old hand trenches. The mineralization is related to a shear zone which has a strike length of at least 75 meters in a general southeast to northwest direction, has a surface exposure of not less than 10 meters, and dips gently to the southwest. Tightly folded, faulted argillaceous phyllites, quartzites and minor gneisses host the mineralized intervals.

Faulting is characterized by two distinct trends: one roughly northwest, the other roughly northeast. Both fault sets provide hanging wall and footwall contacts for mineralized intervals but also crosscut and truncate these intervals. This indicates that both sets influenced deposition of mineral solutions and occurred before, during and after mineral deposition.

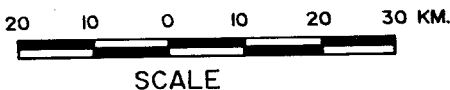
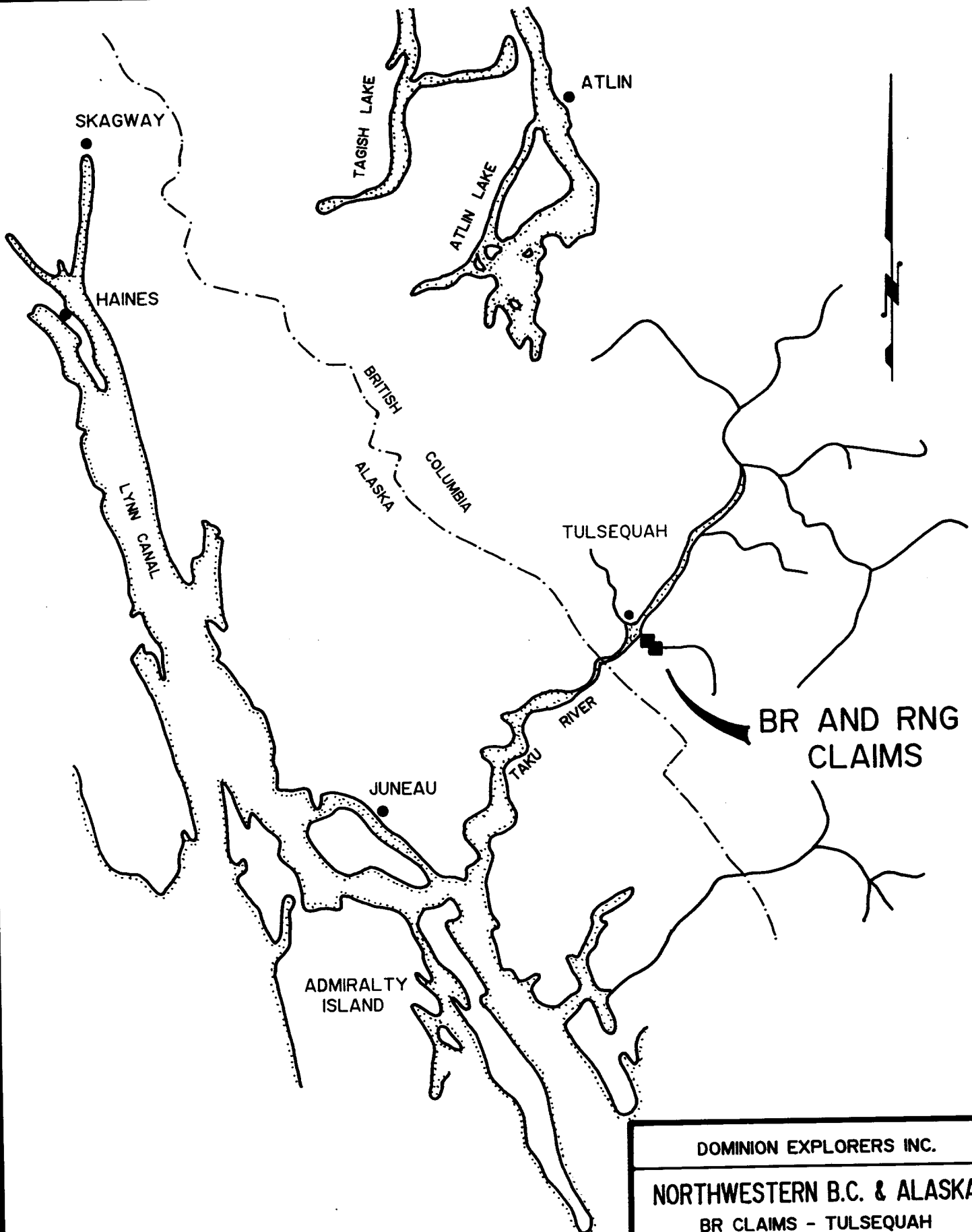
Stibnite is the primary antimony mineral. It occurs as massive lenses grading up to 27.9% Sb or as fine to coarse disseminated clots and blebs within a dirty quartz gangue. This disseminated material carries up to 8.74% Sb. Random assays for silver, although not outstanding in an economic sense, are high enough to suggest that silver may be useful geochemically.

This report recommends that a program of soil geochemistry and basic geophysics over the existing antimony showing be planned for the forthcoming field season, as well as reconnaissance contour soil sampling and prospecting over the rest of the property.

### 3. LOCATION AND ACCESS

The RNG and BR claims are located at approximate latitude 58°36'N and longitude 133°30'W, and straddle map sheets 104-K-12 and 104-K-11 in the Atlin Mining Division. The group covers an area on either side of Stuhini Creek from the mouth to a point approximately 5 km upstream. Stuhini Creek flows into Taku River directly opposite the mouth of Tulsequah River. From this confluence, Taku flows some 65 km southeast before emptying into the Pacific Ocean at a point roughly 30 km south of Juneau, Alaska. The village of Atlin, British Columbia, lies 105 km to the north of the claim group. Figure 1 provides an index map of north-western B.C. and the Alaskan Panhandle.

Access to the area is by fixed or rotary wing aircraft. A landing strip is situated on Tulsequah River's west bank, 5 km upstream from the mouth. During low water there are numerous gravel bars which may accommodate a small fixed wing aircraft. Alternatively, float planes may land on Taku River during high water. When using fixed wing aircraft, it is necessary to travel to Stuhini Creek by boat, where a footpath provides access to the claims from the creek's mouth. Two helicopter pads exist on the property, providing access to rotary wing aircraft. Helicopters and planes are available for charter in Atlin.



DOMINION EXPLORERS INC.		
NORTHWESTERN B.C. & ALASKA		
BR CLAIMS - TULSEQUAH		
SCALE : 1 : 1,000,000	DATA : M. FEKETE	FIGURE : 1
DATE : JAN. 1988	DRAWN : MFECONOMICS LTD.	

4. PROPERTY

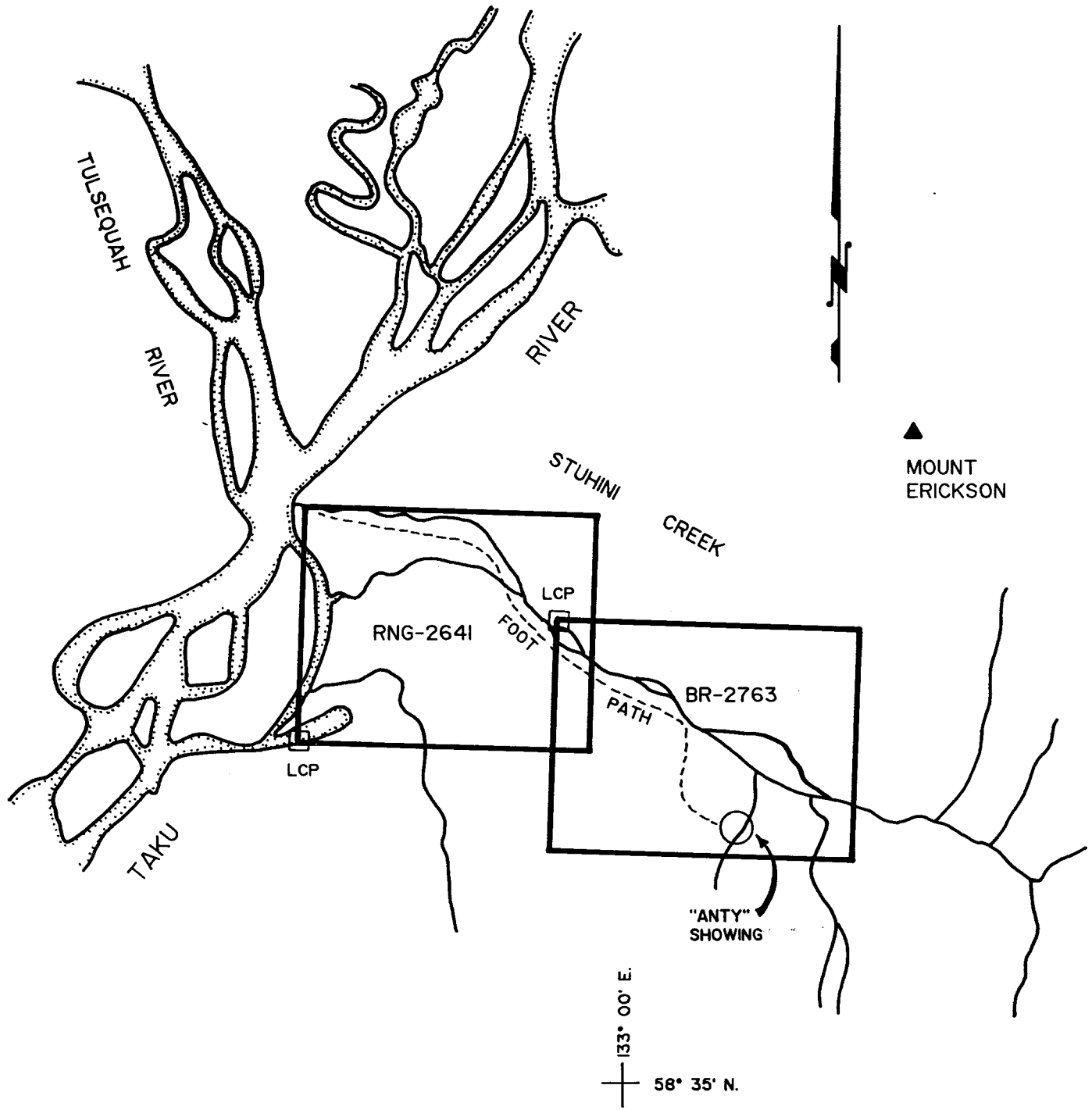
The property consists of two adjoining claim blocks, each consisting of 20 500 x 500 meter units, and designated as the BR and RNG blocks, respectively. Figure 2 provides a claim block location plan.

Both groups were located by Bradley T. White as agent for Dominion Explorers Incorporated, with whom 100% interest in both groups rests. The claims were recorded with the Atlin Mining Division's office in Atlin, B.C.

The particulars of the claims are described as follows:

<u>Claim Name</u>	<u>L.C.P. Tag No.</u>	<u>Record No.</u>	<u>Expiry Date</u>
RNG	28824	2641	June 24, 1987
BR	28853	2763	November 1987





1000 500 0 1000 METRES  
SCALE

DOMINION EXPLORERS INC.		
CLAIM LOCATION MAP BR CLAIMS - TULSEQUAH		
SCALE : 1:50,000	DATA : M. FEKETE	FIGURE : 2
DATE : JAN. 1988	DRAWN : DOMINION EXPLORERS LTD.	

5. TOPOGRAPHY, VEGETATION AND CLIMATE

Access within the claim group is hampered by extreme topography and thick vegetation. Elevation in the area ranges from 25 to 1825 meters above sea level. On the property itself, elevations range from 25 to 750 meters, for a total relief of 725 m.

Treeline in the area is roughly at 800 m so that the property is entirely covered by vegetation characteristic of west coast rain forests. Side hills show lush growths of large evergreens such as Sitka spruce, hemlock and fir with thick undergrowths of a wide variety of bushes and shrubs including devil's club, mountain alder and wild rose. This thick cover is broken only by precipitous cliff faces and steep gullies subject to frequent rock and snow slides. Valley floors are characterized by large cottonwoods, birch and willow trees with heavy undergrowths of vine maple, blackberry, elderberry and a plethora of other shrubs and bushes.

The area receives a generous amount of precipitation due to warm, moisture-laden Pacific winds. Typical yearly averages for the area range between 200-400 cm total precipitation with as much as 75% of that falling as snow during winter months.

6. HISTORY

The Tulsequah-Taku area has been actively prospected in the past for a variety of commodities including gold, silver, antimony, lead and zinc. It has seen three producing mines: Polaris-Taku, Tulsequah Chief and Big Bull.

In 1944, prospectors for Leta Exploration staked an occurrence of stibnite discovered on the south bank of Stuhini Creek.

The approximate location of this discovery is indicated by a circle on Figure 2, as the 'Anty' showing.

Clifford McNeil restaked the prospect in the summer of 1965 as the ANTY 1-10 claims. That same year, some 16 trenches were blasted and hand mucked. Samples from 15 of those trenches were reported to assay between 0.10 and 40.38% antimony. In 1966, the claims were transferred 50% to Homestake Mineral Development Company and 50% to New Taku Mines Limited. The following summer, Homestake geologist John Bucholz mapped and sampled the trenches as part of a reconnaissance program of the ANTY group. Subsequent to a geological report based on Bucholz' mapping, the claims were allowed to lapse.

Dominion Explorers Incorporated acquired the RNG and BR claims in 1986. The Anty showing lies within the BR claim block. In May/June 1987, a two-man crew cut a four kilometer footpath, two helicopter pads and two campsites on the property. In November, geologist Mark Fekete and local fisherman Rick Smith were contracted to accompany Larry Lebedoff, agent for Dominion Explorers, to perform work at the Anty showing. The results of that work form the basis for this report.

## 7. GENERAL GEOLOGY

The Taku River map area was mapped on a regional scale by F. A. Kerr as described in G.S.C. Memoir 248 published in 1948. Kerr mapped the area underlying the property as Stuhini Group. According to Kerr, this group is overlain by the Honakata Group, underlain by the King Salmon Formation, and separated from both by unconformities. All three units are Upper Triassic in age.

The Stuhini Group is estimated to be 2300-3100 meters thick and grades down section as follows:

<u>Characteristics</u>	<u>Thickness</u>
Tuff, greywacke, argillite, sandstone and conglomerate	150 m
Conglomerate, greywacke and tuff, with some lava breccias; limestones; volcanics (andesite); basal conglomerate	600-1375 m
Unconformity	
Lava with tuff; breccia, conglomerate, greywacke; andesite; basal conglomerate	1525 m

Kerr's map also indicates that a thin finger of "pre-Permian" rock also underlies the property. This vaguely classified rock is characterized as a series of quartz-mica schists, quartzites, argillites and slates, which is mainly meta-sedimentary but may be, at least partially, meta-volcanic (andesite?). White and Bucholz (1967) suggest that this finger of pre-Permian material is actually more extensive and underlies the area of the ANTY showing. They cite the following as evidence:

1. Similarity of pre-Permian schists near Polaris-Taku Mine to rocks in Stuhini valley.
2. Difference of ANTY showing with type of mineral deposits normally associated with Stuhini Group.
3. Greater degree of regional metamorphism indicating earlier age than Upper Triassic.

GENERAL GEOLOGY (continued)

Structurally, the Taku area is dominated by two regional fault sets. The Taku Set trends northwest while the Tulsequah Set trends northeast. Stuhini Valley roughly parallels a synclinorium which exhibits southeast plunging minor drag folds.

## 8. 1987 EXPLORATION PROGRAM

### 8.1 Introduction

Between November 7 and 13, 1987 a three-man crew performed a sampling program on the BR claim block. The main objective of the program was to rehabilitate and resample a number of old hand trenches on the ANTY showing. A small soil sampling survey and some reconnaissance mapping were also planned. The crew was successful at locating, mapping and sampling a number of trenches. A thick covering of fresh snow prevented soil sampling and effective reconnaissance mapping.

### 8.2 Geology

The ANTY showing occurs within a zone of shearing which strikes roughly southeast and dips gently southwest. This shear zone has a strike length of at least 75 m and is no less than 10 m across its width at surface. A total of 16 pits and trenches were completed within the shear zone in 1965.

This area was mapped at a scale of 1:100 as shown in Figure 3 (in back folder). Mapping was limited to locating the trenches and measuring the attitude of mineralized intervals, faults and fractures. A complete structural study is beyond the scope of this report as the primary mandate of the work was to resample the mineralization.

However, several structural trends are apparent in the attitudes of the numerous faults and fractures observed. The first and most consistent trend roughly parallels Anty Creek and varies from 000° to 030° strike. Dips on this trend range from near vertical to 45° in an east to southeast direction. The second trend is less apparent, strikes roughly at 100°, and dips from near vertical to 60° in a northerly direction. Both of these systems crosscut, truncate and form contacts for mineralized intervals. Intense folding is evidenced by numerous minor drag folds. Although no

## 1987 EXPLORATION PROGRAM (continued)

measurements were taken, it was noted that these folds plunge in a general southerly direction. In some instances, mineralization appears to be influenced by folding.

Mineralization varies from massive sulfides to coarse disseminated sulfides within a gangue of breccia or stockwork grungy quartzite. The major sulfide is stibnite, accounting for roughly 90% of total sulfides. Pyrite and possibly arsenopyrite make up the remaining 10%. The abrupt, discontinuous nature of the mineralization reflects a close association with the complex structure of the host rock.

The host rock varies between argillaceous phyllites to grey, dirty quartzites. Some narrow zones, usually associated with intense folding, show gneissic (banded) textures. The rock is generally very durable and competent forming steep, abrupt outcrops.

### 8.3 Sampling

Nine trenches were located and mucked out to a point suitable for mapping and sampling. White and Bucholz (1967) show some 15 trenches and pits on their maps. Some of these have obviously been filled in and obscured by heavy vegetation and slide material. On some trench walls, masses of moss up to 30 cm thick had accumulated.

A total of 32 rock samples were collected, numbered and placed in plastic sample bags. An effort was made to obtain true widths across all sampling intervals; in some cases, however, sampling in this manner was not possible due to poor exposure or complex structure of the mineralized interval. Nevertheless, the author feels that all samples are reasonably representative.

The samples were sent to Dominion Explorers' Durham Mines Division in New Brunswick for analysis. All samples were run for antimony and lead. A few selected

1987 EXPLORATION PROGRAM (continued)

samples were also assayed for gold and silver.

Sample locations, widths, descriptions and assay values obtained for each sample are summarized as follows:

<u>Trench No.</u>	<u>Sample No.</u>	<u>Width (m)</u>	<u>Description</u>	<u>% Sb</u>	<u>% Pb</u>	<u>% Au</u>	<u>% Ag</u>	
A	1	0.4	Sheared argillite with disseminated stibnite	1.24	.030			
	2	0.55	HW to min. zn. - sheared argillite	0.21	.005			
	3	0.64	Massive stibnite	5.95	.045	.001	.035	
B	4	0.54	Grungy broken quartzite with minor disseminated stibnite	0.13	.004	.002	.034	
C	5	0.98	Broken rusty quartzite with minor stibnite	0.88	.010			
D	6	0.28	Stockwork quartzite with minor stibnite	0.90	.011			
	7	0.16	Stockwork with blebs of stibnite	4.45	.024			
	8	0.30	Massive fine crystalline stibnite	13.80	.061			
	9	0.26	Ditto	2.25	.006			
	10	0.58	Ditto	11.80	.044			
	11	0.60	Stockwork with blebs of stibnite	3.91	.018			
	12	0.50	HW to min. zn. - deformed argillite	0.24	.004			
	13	0.65	Ditto	1.40	.011			
	14	0.80	FW to min. zn. - sheared argillite	1.02	.013			
	E	15	0.30	Massive stibnite with quartz selvages	6.89	.027		
		16	0.50	FW to min. zn. - sheared argillite	0.10	.003		
F	17	0.65	Ditto	0.48	.004			
	18	0.42	Massive stibnite with disseminated pyrite on HW	8.04	.006			
	19	0.75	Massive stibnite	10.40	.007			
G	20	0.29	Grey to white sheared quartzite with 2% disseminated py	0.07	.002			
	21	0.45+	Massive stibnite	8.53	.017			
H	22	0.76	FW veins:stockwork with clots of massive stibnite	8.74	.002		0.38	
	23	0.76	Ditto	25.30	.013			
	24	0.60	Ditto	7.99	.029			
	25	1.00	HW to min. zn. - sheared, deformed argillite	0.11	.029			
	26	0.88	HW vein - stockwork with clots of massive stibnite	4.50	.010			
	27	0.93	FW vein - ditto	4.92	.018			
	28	0.80	FW vein - massive stibnite	12.60	.011	.001	0.31	
	29	0.80	HW vein - ditto	14.0	.026			
	30	0.60	FW vein + FW - massive stibnite + argillite	3.45	.013			
I	31	0.38	HW vein - massive stibnite	27.9	.007			
	32	0.65	Grey to white quartzite with clots of massive stibnite	16.2	.055			



9.        RECOMMENDATIONS

A small grid with a baseline oriented parallel to the general trend of the shear zone should be established. This grid would provide reference for geochemical and geophysical surveys over the showing. If characteristic geochemical or geophysical anomalies can be established over this zone of known mineralization, they may be used to extend the strike length of zone.

Reconnaissance contour soil sampling and prospecting should be pursued as methods for locating other zones of mineralization. These zones may also be defined and improved by utilizing the geochemical and geophysical profiles established over the Anty showing.

10.     REFERENCES

BOYLE, R. W.

1974:   Elemental Associations in Mineral Deposits and Indicator Elements  
of interest in Geochemical Prospecting (Revised); Geol. Surv.,  
Canada, Paper 74-45.

KERR, F. A.

1948:   Taku River Map Area, British Columbia; Geol. Surv., Canada,  
Memoir 248.

WHITE, L. G. and BUCHOLZ, J.

1967:   Geological Report on the ANTY group of Mineral Claims  
(unpub. assessment report).

APPENDIX I

ASSAY CERTIFICATE



# DOMINION EXPLORERS INC.

DURHAM MINES DIVISION  
PRINCE WILLIAM • NEW BRUNSWICK E0H 1S0

TELEPHONE (606) 464-9761

SAMPLES	%SB	%PB	Au oz./T	Ag oz./T
A-1	1.24	0.030		
A-2	0.21	0.005	0.001	0.035
A-3	5.95	0.045	0.002	0.034
B-4	0.13	0.004		
C-5	0.88	0.010		
D-6	0.90	0.011		
D-7	4.45	0.024		
D-8	13.8	0.061		
D-9	2.25	0.006		
D-10	11.8	0.044		
D-11	3.91	0.018		
D-12	0.24	0.004		
D-13	1.40	0.011		
D-14	1.02	0.013		
E-15	6.89	0.027		
E-16	0.10	0.003		
F-17	0.48	0.004		
F-18	8.04	0.006		
F-19	10.4	0.007		
G-20	0.07	0.002		
G-21	8.53	0.017		
H-22	8.74	0.002	N.D.	0.38
H-23	25.3	0.013		
H-24	7.99	0.029		
H-25	0.11	0.003		
H-26	4.50	0.010		
H-27	4.92	0.018		
H-28	12.6	0.011	0.001	0.31
H-29	14.0	0.026		
H-30	3.45	0.013		
H-31	27.9	0.007		
H-32	16.2	0.055		

APPENDIX II

ITEMIZED STATEMENT OF COSTS

Appendix II  
ITEMIZED STATEMENT OF COSTS

a) Personnel

<u>Name</u>	<u>Position</u>	<u>Days</u>	<u>Description</u>		
Mark Fekete	Geologist	5	Field		
		2	Travel		
		3	Report		
		<u>10</u>	Total @ \$150/day =	\$1,500.00	
Larry Lebedoff	Prospector	5	Field		
		2	Travel		
		3	Expediting		
		<u>10</u>	Total @ \$175/day =	1,750.00	
Rick Smith	Field	5	Field		
	Assistant	2	Travel		
		<u>7</u>	Total @ \$150/day =	<u>1,050.00</u>	\$ 4,300.00

b) Transportation

Helicopter charters	\$2,075.44	
Fixed wing charters	361.80	
Truck rental: 4 days @ \$25/day	100.00	
Truck mileage: 395.5 miles @ 50¢/mile	<u>199.75</u>	2,734.99

c) Equipment

Fuel	\$114.75	
Sample bags	92.75	
Flagging, toposil, etc.	51.25	
Polyethylene and flares	30.00	
Film and developing	17.00	
Hip waders	39.95	
Miscellaneous	<u>190.88</u>	536.58

d) Rentals

Camp: 6 days @ \$50/day	\$300.00	
Power saw: 6 days @ \$21.75/day	130.50	
SBX-11 radio	<u>50.00</u>	480.00

e) Food and Accommodation

Groceries	\$342.97	
Hotel	<u>90.00</u>	432.97

f) Assays

Analysis	\$592.00	
Shipping	<u>277.12</u>	869.12

g) Report Preparation

Drafting	\$75.00	
Typing and reproduction	75.00	
Phone calls	<u>25.00</u>	175.00

TOTAL EXPENSES

\$9,588.66

APPENDIX III

STATEMENT OF QUALIFICATIONS

Appendix III  
STATEMENT OF QUALIFICATIONS

I, **MARK FEKETE**, of the City of Whitehorse in the Yukon Territory, do hereby state:

THAT I am a graduate of the University of British Columbia, having obtained a B.Sc. degree in Geology - May 1986;

THAT I have been active in mineral exploration in various capacities on a full-time and part-time basis for ten years in the Yukon Territory, British Columbia and Australia;

THAT I participated in the work described in this report between November 7 and 13, 1987 on a contract basis with Dominion Explorers Inc;

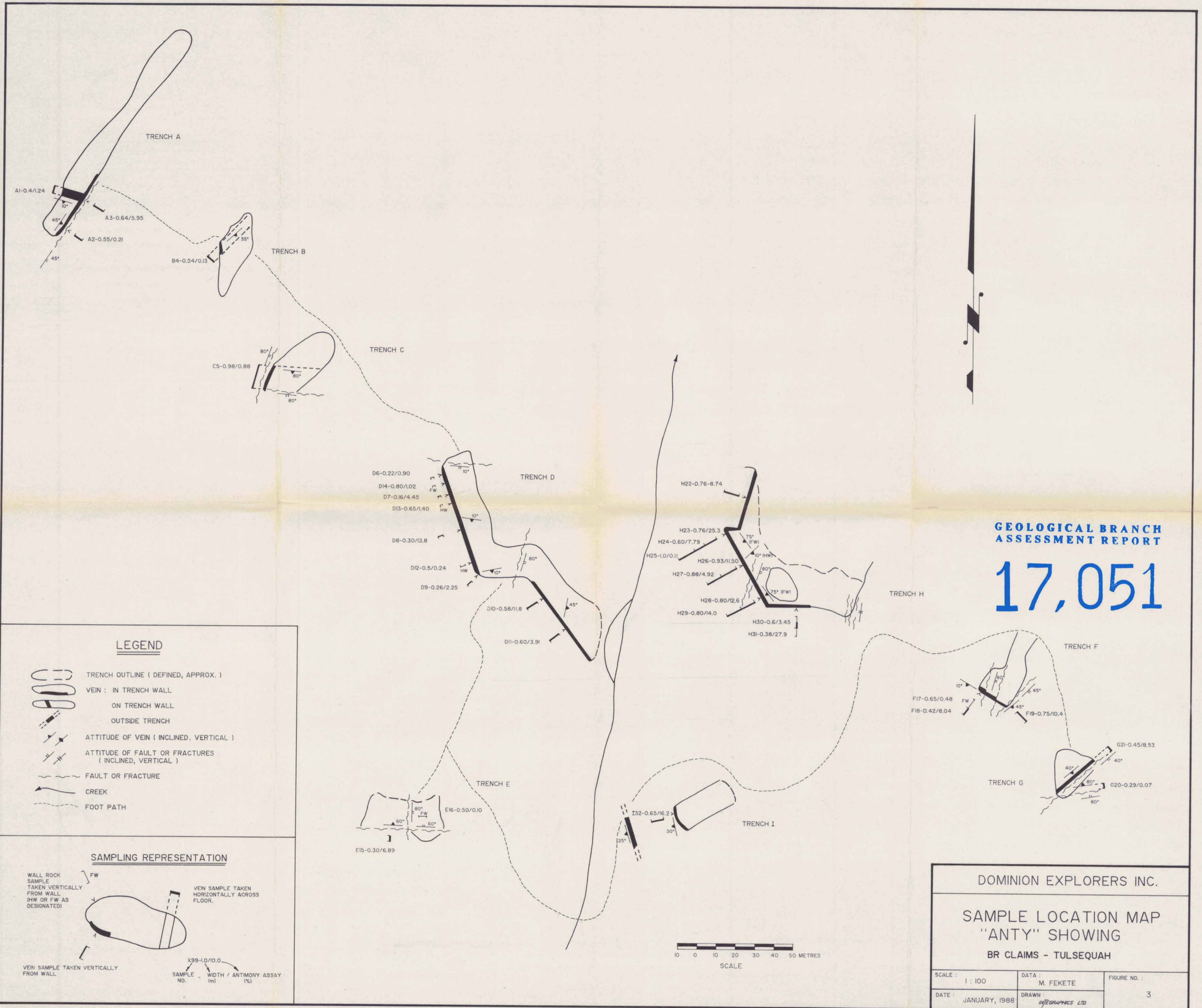
THAT I have no interest, directly or indirectly, in the BR or RNG claims, nor do I expect to receive any interest.

SIGNED at Whitehorse, Yukon, this 14 day of February, 1988.



Mark Fekete, B.Sc.





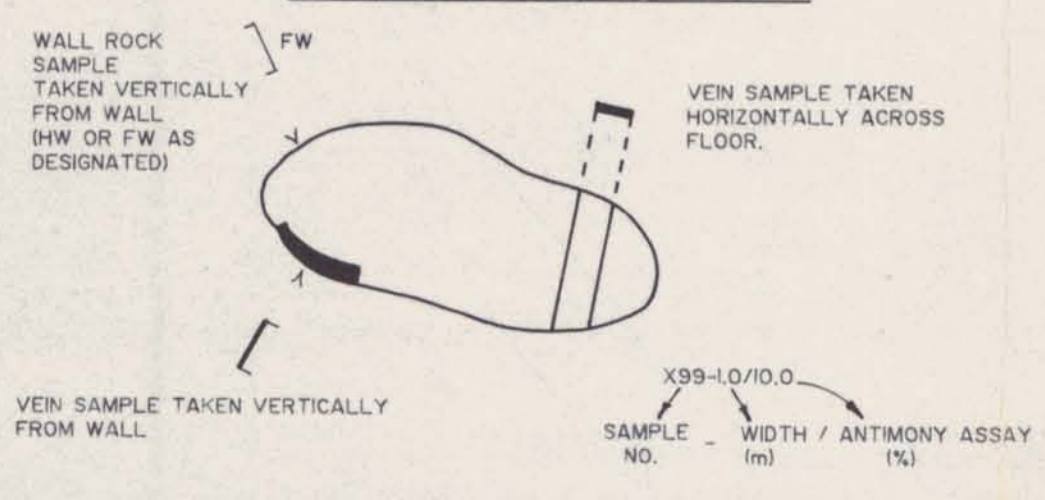
**GEOLOGICAL BRANCH  
ASSESSMENT REPORT**

**17,051**

**LEGEND**

- TRENCH OUTLINE ( DEFINED, APPROX. )
- VEIN : IN TRENCH WALL
- ON TRENCH WALL
- OUTSIDE TRENCH
- ATTITUDE OF VEIN ( INCLINED, VERTICAL )
- ATTITUDE OF FAULT OR FRACTURES ( INCLINED, VERTICAL )
- FAULT OR FRACTURE
- CREEK
- FOOT PATH

**SAMPLING REPRESENTATION**



DOMINION EXPLORERS INC.		
SAMPLE LOCATION MAP "ANTY" SHOWING BR CLAIMS - TULSEQUAH		
SCALE : 1 : 100	DATA : M. FEKETE	FIGURE NO. :
DATE : JANUARY, 1988	DRAWN : INTEGRAPHICS LTD.	3