# ARIS SUMMARY SHEET

Drict Geol	ogist, Smithers Off Confidential: 91.10.30
ASSESSMENT RE	PORT 20423 MINING DIVISION: Atlin
PROPERTY: LOCATION:	Tulsequah LAT 58 36 00 LONG 133 29 00 UTM 08 6496299 588143 NTS 104K12E
	RNG,BR Dominion Explorers
SEARCHED FOR: KEYWORDS:	Antimony Triassic,Stuhini Group,Stibnite,Pyrite,Arsenopyrite,Quartzites Phyllites
DONE: Geo MET	logical,Geochemical A 9 sample(s) ;ME Map(s) - 2; Scale(s) - 1:100
RELATED REPORTS: MINFILE:	17051 104K 023

Õ

LOG NO: 11-06	RD.
ACTION:	
FILE NO:	

### ASSESSMENT REPORT

for work performed on the

## BR/RNG MINERAL CLAIM GROUP

Tulsequah Property Stuhini Creek, Tulsequah Area

> 58'36'N, 133'30'E Atlin Mining Division

DOMINION EXPLORERS INC.

U. Abolins, October 1990

# GEOLOGICAL BRANCH ASSESSMENT REPORT

30

'5

# TABLE OF CONTENTS

1.	Introduction	1
2.	Summary and Conclusions	2
3.	Location and Access	3
4.	Property	6
5.	Topography, Vegetation and Climate	7
6.	History	8
7.	General Geology	9
8.	1987 Exploration Program	
	<pre>8.1 Introduction</pre>	10 10 11
9.	1990 Exploration Program	
	<ul> <li>9.1 Dominion Explorers Inc.</li> <li>Durham Mine Division, Lab Float</li> <li>Test on Tulsequah</li> <li>9.2 Field Work</li> </ul>	13 19

# APPENDICIES

1.	Statement of Qualifications
2.	Geochemical Lab Report

.....

# MAPS AND FIGURES

1.	Property Location Map	4
2.	Claim Location Map	5
3.	Sample Location Map	(Back Pocket)
4.	Property Sample Location Map	(Back Pocket)

# 1. Introduction

( )

This report was prepared by Dominion Explorers Inc. to summarize and evaluate the potential of the Company's BR and RNG antimony claims in Northwestern British Columbia.

Data for the report was obtained from previous operators and our work between 1987 to 1990. The Durham Mine at Lake George, New Brunswick ran a floatation/cleaner test on high grade stibnite samples collected from the Anty Vein.

#### 2. Summary and Conclusions

The Durham Mine floatation tests indicate that a fairly clean saleable concentrate can be produced from the Anty Vein stibnite. The arsenic content is slightly higher than desired but this may be due to the arsenopyritetiferous sediments hosting the stibnite lenses and not the stibnite itself.

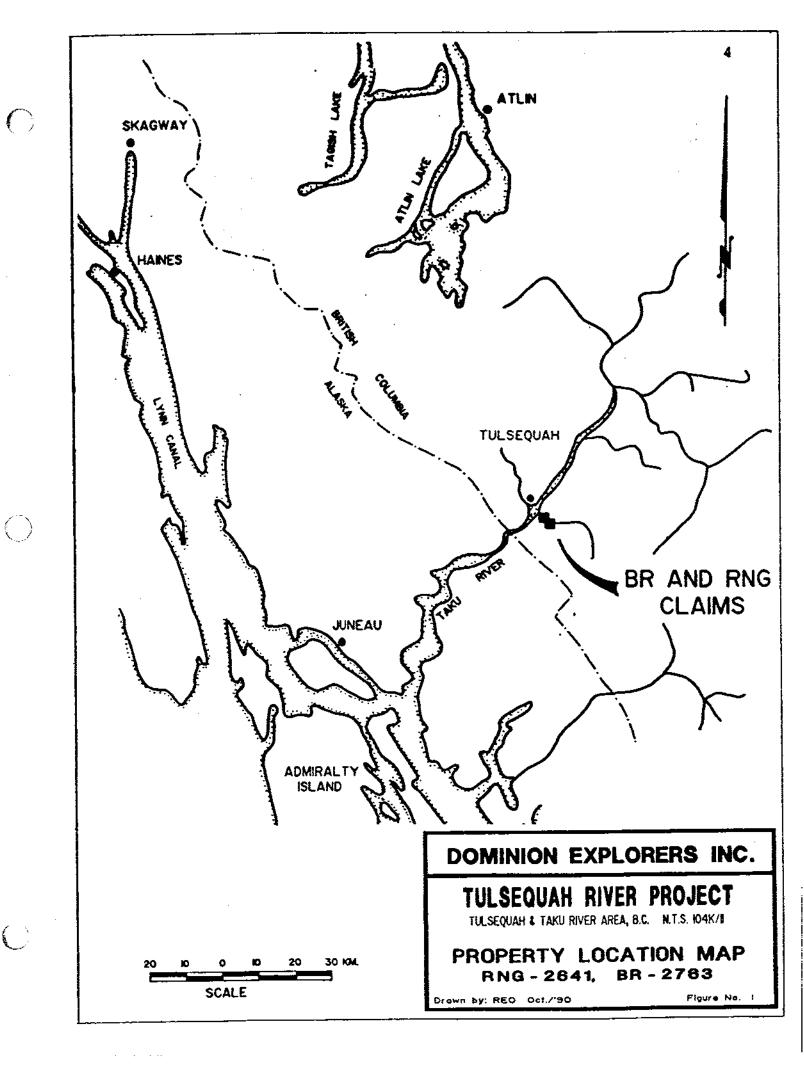
The reconnaissance survey shows that there is good potential on the claims for polymetallic sulphides such as found at the Cominco Ltd. and Redfern Resources Ltd. deposit. Previous work and present work has shown that soil sampling and geological prospecting is the best approach for extending known mineralization and for looking for new mineralization whether it be stibuite or chalcopyrite and sphalerite.

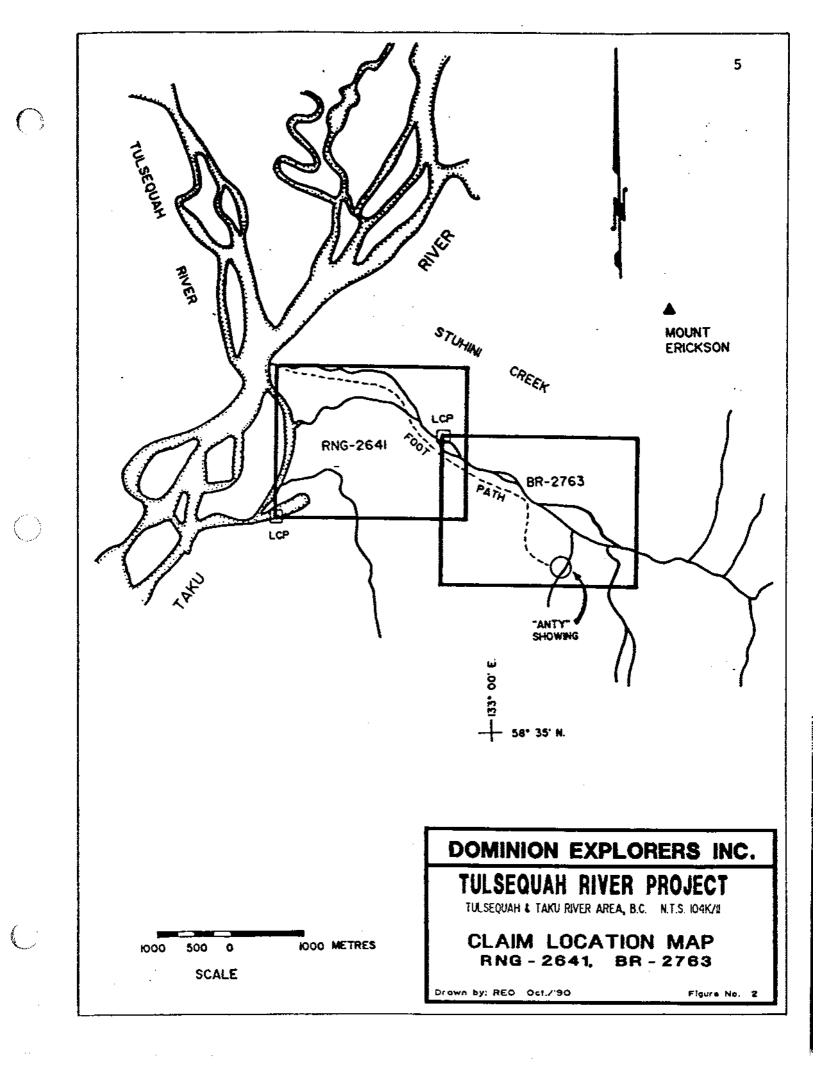
A program of soil sampling and geological prospectingmapping on a prepared grid system is warranted. The search for additional stibnite of course is tempered by poor markets, but the lack of known mineable reserves in the western world should offset any negative tendencies.

### 3. Location and Access

The Tulsequah Property, comprised of claims RNG and BR, each consisting of 20 units are located in the Tulsequah area immediately to the east of the junction of the Taku River, Tulsequah River and Stuhini Creek. The claims are approximately at 58 36'N latitude and 133 30W longitude and straddle map sheets 104K12 and 104K11 in the Atlin Mining Division. The two claims cover an area on either side of Stuhini Creek from the mouth to a point approximately 5 km upstream. The junction of Stuhini Creek and Taku River is approximately 100 km south of Atlin, British Columbia. The nearest community is Juneau, Alaska approximately 30 km to the southwest.

Access to the area is by boat from Juneau, Alaska or by fixed wing aircraft or helicopter. A gravel landing strip is situated on Tulsequah River's west bank 5 km upstream from the junction with the Taku River. During high water, fixed wing float planes may land on the Taku River. Access on the claims is by foot or helicopter.





# 4. Property

The property consists of two adjoining claims, each comprised of 20 units measuring 500 x 500 meters per unit. The claims are designated as RNG and BR. Both claims were located by Bradley T. White as agent for Dominion Explorers Inc. and were registered with the gold commissioner in Atlin, British Columbia. Dominion Explorers Inc. holds a 100% interest in the claims.

<u>Claim Name</u>	L.C.P. Tag No.	Record No.	<u>Recording Date</u>
RNG	28824	2641	June 24, 1986
BR	28853	2763	Nov. 19, 1986

### 5. Topography, Vegetation and Climate

Access within the claim group is hampered by extreme variations in topography and thick vegetation. Elevations in the immediate area range from 25 to 1,825 meters above sea level. On the property itself, elevations range from 25 to 750 meters.

Tree line in the area is roughly at 800 meters so that the property is entirely covered by vegetation characteristic of west coast rain forest. The sides of hills exhibit lush growths of large spruce, balsam and hemlock with thick undergrowths of alders and devil's club. This thick cover is broken only by precipitous cliff faces and steep gullies subject to frequent rock and snow slides. Valley floors on the other hand exhibit growths of large cottonwoods, birch, aspen and willow with heavy undergrowths of a vast variety of bush and shrubs such as alders, scrub maple, blackberry and elderberry. Outcrops are very sparse on the claims, generally less that 5%.

The area receives a generous amount of precipitation due to warm, moisture-laden Pacific winds. Typical yearly averages for the area range between 200 to 400 cm. total precipitation with as much as 75% of that falling as snow during winter months. Due to the abundance of moisture and steep valley walls, low cloud or fog is present a good 50% of the summer period.

7

# 6. History

The Tulsequah-Taku area has been actively prospected in the past for a variety of minerals. It has seen three producing mines: Polaris-Taku, Tulsequah Chief and Big Bull. It now appears that the area will see producers again in the near future as Cominco/Redfern are presently developing a deposit at the old Tulsequah Chief Mine where reserves are announced at 5.8 million tons of 1.6% Cu, 1.3% Pb, 7.0% Zn, 0.08 oz. Au and 2.9 oz. Ag per ton and Suntac Minerals Corporation reports a deposit of 1.4 million tons at a grade of 0.38 oz. Au/ton some 3 km to the south.

Stibnite was first discovered on the south bank of Stuhini Creek by Leta Exploration in 1944 and appears to coincide with the Anty Vein on the BR claim.

The prospect as restaked by C. McNeil in 1965 and apparently some 16 trenches were blasted on the showings. Samples were reported to assay between 0.10 and 40.38% Sb. In 1966, he optioned these claims jointly to Homestake Mineral Development Company and New Taku Mines Limited. In 1967, Homestake mapped and sampled the trenches as part of a reconnaissance program. The claims were then allowed to lapse.

In 1986, Dominion Explorers Inc. acquired the ground by staking. A program of trench rehabilitation and sampling was carried out in 1987. During the later part of 1989 and early 1990, a lab test to determine the floatability of the Tulsequah stibnite samples in a rougher/scavenger floatation and to determine whether or not the rougher/scavenger concentrate could be cleaned to produce a saleable product was conducted by Dominion's Durham Mine at Lake George, New Brunswick. As well in September 1990, a small geological/silt sampling program was conducted on the Tulsequah property in order to ascertain the feasibility of silt sampling in glacial streams and to look at the possibility of polymetallic mineralization in light of the recent activity of Cominco/Redfern and Suntac.

## 7. General Geology

The Tulsequah area was mapped on a regional scale by F.A. Kerr and is described in G.S.C. Memoir 248 published in 1948. The area is underlain by Upper Triassic sedimentary and volcanic rocks of the Stuhini Group which occur in the Intermontaine Belt on the eastern flank of the Batholith Coast Belt. The Stuhini Group consists of a sequence of greywacke, conglomerate, siltstone, andesite and basaltic rocks which generally trend NW-SE and measure some 10,000 feet in thickness. The Stuhini Group is underlain to the west by a sequence of Lower Triassic clastic sediments with intercalated volcanic rocks and overlain to the NE by Upper Triassic carbonate and clastic sediments of the Sinwa Formation, Lower Jurassic clastic sediments of the Takwahoni Formation and a thick sequence of Lower Jurassic clastic sediments of the Inklin Formation. The Stuhini rocks are cut by numerous batholitic intrusions of the Coast Belt, ranging from quartz-feldspar porphyry to guartz monzonite in composition. Kerr's map indicates that a thin finger of "pre-Permian" rock also underlines 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 (Homestake 1967) suggest that this finger of pre-Permian material is actually more extensive and underlies the area of the Anty Vein. They cite the following as evidence; similarity of pre-Permian schists near Polaris-Taku Mine to rocks in Stuhini valley, difference of the Anty showing with type of mineral deposits normally associated with the Stuhini Group, and a greater degree of regional metamorphism indicating earlier age than Upper Triassic.

Structurally, the 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

5

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 (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 the 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 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 various 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 various between argillacious 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 <u>Sampling</u>

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.

The 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.

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 samples were also assayed for gold and silver.

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

Trench	Sample No.	Width (m)	Description	% Sb	<u>% Pb</u>	AU OL/ton	AG oz/ton
•	1	0.4	Sheared argillite with disseminated stibuite	1.24	. \$30		
	2	0.55	HW to min. zn sheared argillite	0.21	. 905		
_	3	0.64	Massive stibnite	5.95	.045	. 001	. 035
8	4	0.54	Grungy broken quartzite with minor disseminated stibuite	0.13	. 804	. 802	.034
с	5	0.98	Broken justy quartilite with minor stibuite	0.28	.010		
Ď	6	0.28	Stockwork quartaite with minor stibnite	6.90	.011		
	7	0.16	Stockwork with blebs of stibnite	4.45	.024		
	1	0.30	Massive fine crystalline stibuite	13.80	.961		
	9	9.26	Ditto	2.25	. 906		
-	10	0.58	Ditto	11.80	.944		
	11	0.60	Stockwork with blebs of stibnite	3.91	.918		
	12	0.50	HW to min. zn deformed argillite	0.24	. 004		
	13	0.65	Ditto	1.40	.011		
	14	9.80	PW to min. zn sheared argillite	1.02	.013		
ε	15	0.30	Massive stibuite with quartz selvages	6.35	. \$27		
	16	0.50	PW to min. sn sheared argillite	0.19	. 003		
F	17	0.65	Ditto	0.41	. 894		
	18	0.42	Massive stibuite with disseminated pyrite on HW	8.04	. 906		
	19	0.75	Massive stibnite	10.40	. 007		
G	20	0.29	Grey to white sheared quartzite with 2% disseminated by	0.07	. 802		
	21	0.45+	Massive stibuite	8.53	.017		
н	22	0.76	PW vein-stockwork with clots of massive stibuite	8.74	.002		0.38
	23	0.76	Ditto	25.30	. 013		
	24	0.60	Ditto	7.59	. 629		
	25	1.00	HW to min. gn sheared, deformed argillite	9.11	. 029		
	26	0.88	HW vein - stockwork with clots of messive stibuite	4.50	.\$10		
	27	0.93	PW vein – ditto	4.92	.018		
	28	0.80	PW vein - massive stibuite	12.60	. #11	. 001	0.31
	29	0.80	HW vein - ditto	24.6	. 026		
	30	0.60	FW vein + FW - messive stibuite + argillite	3.45	.013		
	31	0.38	HW vein - massive stibnite	27.9	.807		
1	32	0.65	Grey to white quartzite with clots of massive stibuite	16.2	.055		

# 9. 1990 Exploration Program

## 9.1 Dominion Explorers Inc., Durham Mine Division Lab Float Test on Tulsequah

Purpose of the lab test was to determine the floatability samples in a rougher/scavenger Tulsequah ore the of not the floatation, and to determine whether or rougher/scavenger concentrate could be cleaned to produce a saleable product.

Nine ore samples marked H23, H24, H26, H27, H28, H29, H30 and H31 were individually crushed to minus  $\frac{1}{4}$ " in a laboratory jaw crusher. A portion of each sample was used to compile two 2,000 gram samples for floatation bench testing. Each sample portion was weighted according to individual trench footage indicated. The calculated composite assay of the ore samples used was 11.1% Sb and 1.12% As.

Each 2,000 gram sample was alternately dry ground in a Laboratory ball mill and screened on a 140 MESH (206 Micron) 8" Tylor screen until a final product of 90% passing 140 MESH was achieved.

Bench floatation was performed using a Denver lab scale floatation machine. Each 2,000 gram (nominally) sample was floated to produce first a rougher and then a scavenger concentrate. These two concentrates were individually weighed and sampled and then recombined to provide feed for the cleaning stages.

The first cleaner concentrate was produced and this concentrate was then cleaned one more time. First cleaner tail as well as 2nd cleaner concentrate and tail were dried, weighted, sampled and assayed for antimony and arsenic content. Both second cleaner concentrates were assayed for Selenium as well. Grinding and screening was done at Mineral Resources Lab in Fredericton by Dominion Explorers personnel. Assaying was done by K-F Laboratories in Fredericton.

Discrepancies in metal balance weights are attributable to product weighing. Assays are believed to be accurate. In test No. 1, the rougher concentrate, rougher tail, scavenger concentrate, scavenger tail, 1st cleaner tail, 2nd cleaner concentrate and 2nd cleaner tail are assayed values. In test No. 2 the rougher feed, concentrate and tail, the scavenger feed, concentrate and tail, the 1st cleaner tail, and the 2nd cleaner concentrate and tail are assayed values.

#### TULSAQUAH

Test No. 1

PURPOSE: To determine floatability of Tulsequah Ore from trench samples and to produce a saleable grade concentrate.

PROCEDURE: As outlined below.

- FEED: 2,000 grams representing Tulsequah samples H23, H24, H26, H27, H28, H29, H30 and H31.
- GRIND: 91.4% passing 106 Micron.

CONDITIONS: Rougher Floatation 35% solids/WT.

	Reagents	s, Lbs per	Ton	Time, Minutes				
STAGE	Activator	Collector	Frother		Condition	Froth	Ph	
Grind				91.4% - 106 M				
Rougher	1.0	0.06	0.06		1	5	6.	
Scavenger	0.5	0.03	0.03		1	5	-	
1st Cleaner	0.001	0.0002			1	5_	6.	
2nd Cleaner						3	6.	

# TEST NO. 1

٠

.

# ETALURGICAL RESULTS: Rougher/Scavenger

\_\_\_\_.

· - - - ----

\_.....

\_

	WEIGHT		ASSAY		METAL UNITS		& DISTRIBUTION	
PRODUCT	GMS	- 8	1Sb	*As	Sb	λs	Sb	λs
Rougher Feed	1,903	100%	11.1%	1.25%	211.2	23.8	100%	100%
Rougher Conc.	326.6	17.2%	53.3%	1.28%	174.1	4.2	82.4%	
Rougher Tail	1,576.4		2.3		36.3	17.4	17.2	
Scavenger Feed	1,559.7	100%	2.3%	1.10%	35.9	17.2	100%	100%
Scavenger Conc.	147.4	9.4%	14.2%	4.60%	20.9	6.8	58.2%	39.5%
Scavenger_Tail_	1,412.3	90.6%	1.19%	0.82%	16.8	11.6	46.8%	67.43
Ro. Conc. plus Scavenger Conc.			43.0%	2.43%	195.0	11.0	92.3%	46.2%

TEST NO. 1

METALURGICAL RESULTS: Cleaning

	WEIGHT		ASSAY		METAL UNITS		& DISTRIBUTION	
PRODUCT	GMS	8	\$Sb	%As	Sb	λs	Sb	As
1st Cleaner Feed	453.6	100%	43.0%	2.43%	195.0	11.0	100%	100%
1st Cleaner Conc.	236.7	52.2%	63.8%	0.84%	151.0	2.0	77.4%	18.2%
1st Cleaner Tail	216.9	47.8%	20.3%	4.17%	44.0	9.0	22.6%	81.8%
2nd Cleaner Feed	236.7		63.8%	0.84	151.0	2.0		
2nd Cleaner Conc.	123.3	52.1%	67.7%	0.22	83.5	0.3	55.3%	15.0%
2nd Cleaner Tail	113.4	47.9%	49.6%	1.49	56.2	1.7	37.2%	85.0%
Single Cleaning			63.8%	0.84%			71.5%	8.4%
Double Cleaning			67.7%	0.22%			39.5%	1.3%

TEST NO. 1

OBSERVATIONS (Visual):

Rougher Flotation - Very rich froth, heavy mineralization during the first 2 minutes of float. Changed to larger bubbles thereafter with not much weight but good colour maintained.

-----

Scavenger Flotation - Very slimy first part of float, using minimum air to control float. Froth remained dirty throughout with some antimony coloration evident.

1st Cleaner Flotation - Slow to start producing froth. Most concentrate was floated off during the first 2 minutes. Light mineralization thereafter to end of float.

2nd Cleaner Flotation - Froth rich and very good colour. Most flotation within first minute but colour remained good throughout. Not much recovery last two minutes.

16

# TULSEQUAH

TEST NO. 2

Ć

Ć

í.

	To repeat Test No. 1
PROCEDURE:	As outlined below
FEED:	As Test No. 1
GRIND:	89.9% passing 106 Micron
CONDITIONS:	Rougher Floatation 35% solids WT.

	Reagents	Lbs per !	Ton	Time, Minutes				
STAGE	Activator	Collector	Frother	Grind Co	ondition	Froth	Ph	
Grind				89.9% - 106 M		•		
Rougher	1.0	0.06	0.06		1	5	6.8	
Scavenger	0.5	0.03	0.03	<b></b>	1	5		
<u>lst Cleaner</u>	0.001	0.0002			1	5	6.5	
2nd Cleaner						3		

TEST NO. 2

METALURGICAL RESULTS: Rougher/Scavenger

	WEIGH	fT	ASS	AY	METAL	UNITS	& DIST	IBUTION
PRODUCT	GMS	8	<b>%</b> Sb	<b>%As</b>	Sb	As	SÞ	As
Rougher Feed	1,885.6	100%	11.4%	1.12%	215.0	21.1	100%	100%
Rougher Conc.	373.3	19.5%	49.4%	1.56%	184.4	5.8	85.8%	27.5%
Rougher Tail	1,512.3	80.5%	2.01%	0.98%	30.4	14.8	14.1%	70.0%
	1					     !		· · · · · ·
Scavenger_Feed	1,484.3	100%	2.01%	0.98%	29.8	14.5	100%	100%
Scavenger_Conc.	173.6	11.2%	8.57%	3.10%	14.9	5.4	67.1%	37.2%
Scavenger Tail	1,310.7	88.8%	1.08%	0.79%	14.2	10.4	47.7%	71.7%
Ro. Conc. plus Scavenger Conc.			38.1%	2.14%			92.78	53.1%

#### TEST NO. 2

	WEIG	T	ASS	AY	METAL	UNITS	& DIST	IBUTION
PRODUCT	GMS	8	1Sb	<b>ξ</b> λs	Sb	λs	Sb	As
1st Cleaner Feed	522.8	100%	38.1%	2.14%	199.2%	11.2	100%	100%
1st Cleaner Conc.	223.3	42.78	62.8%	0.99%	140.2	2.2	70.4%	19.6%
1st Cleaner Tail	299.5	57.3%	19.7%	3.02%	59.0	9.0	29.6%	80.4%
2nd Cleaner Feed	223.3	100%	62.8%	0.99%	140.2	2.2	100%	100%
2nd Cleaner Conc.	140.0	62.7%	67.2%		94.1	0.32		
2nd Cleaner Tail	83.3	37.3%	45.4%	2.20%	37.8	1.83	27.0%	82.8%
Single Cleaning			62.8%	0.99%			65.2%	10.4%
Double Cleaning			67.2%	0.23%			43.8%	1.5%

## METALURGICAL RESULTS: Cleaning

\_\_\_\_ ....

OBSERVATIONS (Visual):

- Rougher Flotation Very rich froth, heavy mineralization during the first 2 minutes of float. Changed to larger bubbles thereafter with not much weight but good colour maintained.
- Scavenger Flotation Very slimy first part of float, using minimum air to control float. Froth remained dirty throughout with some antimony coloration evident.
- 1st Cleaner Flotation Slow to start producing froth. Most concentrate was floated off during the first 2 minutes. Light mineralization thereafter to end of float.
- 2nd Cleaner Flotation Froth rich and very good colour. Most flotation within first minute but colour remained good throughout. Not much recovery last two minutes.

### Discussion

\_\_\_\_\_\_

Bench testing of Tulsaquah ore from trench samples indicates gold floatability. Arsenic rejection was quite reasonable in each unit operation even without the use of any specific depressants. Final concentrate was high grade at 67% Sb. Rougher/Scavenger recovery was good but cleaner recovery was low as was overall metal to concentrate.

The sample feed grade was rather high from a practicality point of view. Antimony dilution to 4% Sb would have resulted in a corresponding dilution of feed arsenic to 0.4% As. percentage distribution to rougher/scavenger Arsenic concentrate would then be correspondingly reduced. This would allow much more vigorous recovery efforts towards antimony in the cleaner concentrates without loss of grade or excessive arsenic contamination. During this testwork, floatation was not complete when the experiment time limits had been achieved. Additional reagents could have been stage added to improve metal recovery had this been the intent of the testwork.

Any further testing efforts should be directed toward cycle testing to determine grade/recovery relationships and arsenic distribution.

## 9.2 Field Work

Due to the renewed exploration activity in the Tulsequah area and the positive floatation tests on the Anty Vein stibnite, it was decided to spend several days at Tulsequah on a geological/geochemical reconnaissance survey. The reconnaissance geology survey was conducted to search for favourable geology which might host polymetallic sulphides such as found at the Cominco/Redfern property. the reconnaissance geochemical silt survey was run to check on the possibility of locating indicator streams. No soil sampling was done at this time as the survey by J. Buchholz for Homestake Minerals in 1967 showed the method to be very effective for locating antimony mineralization.

- - - . . .

During the course of the work, sulphide-bearing float was found on the steep western edge of the Stuhini Valley. the sulphides consisting of stringers and patches of pyrite, pyrrhotite and with some sphalerite boxwork occurred in a siliceous and altered metasediment. No outcrop could be found in the immediate vicinity. The weather during the work period and prior to that had been very rainy and as such all the streams were in torrential flow.

The rock sample assays verified the presence of the sphalerite mineralization and its polymetallic associations. The silt sample assay results were anomalous but inconclusive, probably due to the stream flooding and lack of a larger sample base. APPENDIX 1

. .....

#### STATEMENT OF QUALIFICATION

------

I, Uldis Abolins, of the City of North York, Municipality of Toronto, in the Province of Ontario, hereby certify as follows:

- That I am a Registered Professional Engineer of the Province of Quebec and Ontario and reside at 340 Burnett Avenue, Willowdale-North York, Ontario;
- That I am a graduate of the University of Toronto with a Bachelor of Applied Science in Geological Engineering;
- That I have practised my profession since graduation in 1967; and
- 4. That I am employed in the capacity as Vice-President, Exploration by Landmark Corporation of which Dominion Explorers Inc. is the mineral/mining arm.

Uldis Abolins, P.Eng.

October 31, 1990

# APPENDIX 2

- · ·

•

. .--

......

Borahar-Clegg & Company Ltd. LIO Pumberton Ave. North Vancouver, B.C. V7P 2R5 YO4) 985-0681 Telex 04-352667

ŧ



# Geochemical Lab Report

	REPORT: V90-	36264.0		DATE PRINTED: 2-0CT-90			
				PROJECT: NONE SIVEN	PAGE 1		
	SANPLE NUNGER	ELEMENT AU 30g UNITS PPB	SANPLE Number	ELEMENT AU 30g UNITS PPB			
	\$1 FE-01		R2 TU-05	12			
	51 FE-02						
	S1 FE-03						
	S1 FE-04						
	\$1 FE-05				······································		
	\$1 FN-01	· · · · · · · · · · · · · · · · · · ·					
	S1 FM-02						
	S1 S5-01						
	\$1 \$5-02						
	<u>51</u> 55-03	·					
	\$1 \$5-04						
	\$1 \$5-05						
	\$1 \$5-06 \$1 \$5-07						
	S1 S5-07 S1 S5-08						
··· \	········						
	S1 J-16	<5					
	S1 T-18	45					
	\$1 T-1C	<5					
	\$1 T-1D \$1 T-1E	6 7					
		/ 					
	S1 1-2A	<5					
	S1 T-28	16					
	S1 1-2C	<5					
	S1 1-3A	<5 /5					
	\$1 1-381	<5					
	\$1 7-382	<\$					
	S1 T-4A	<5					
	S1 3-48	19					
	S1 1-4C R2 F-01	9					
	RZ F-01	·					
	R2 S-1						
	R2 S-2						
	R2 S-3						
	R2.5-4 R2 5-5						
	¥7 2.2						
- 	R2 S-6	31					
الإست	R2 TU-01	73					
	R2 TU-02	23					
	R2 TU-03	22					
	R2 TU-04	49					

Boteler-Clegg & Company Ltd. 130 Pemberion Ave. North Vancouver, B.C. V7P 2R5 (1) 985-0681 Telex 04-352667

-- -



A DIVISION OF INCHCAPE INSPECTION & TESTING SERVICES.

----

Geochemical Lab Report

	REPORTI V90-	36264.1				PROJECT: NONE 61VEN PAGE							E 1A		
	SAMPLE NUMBER	ELEMENT	Ag PPN	Cu PPN	Pb PPM	Zn PPN	No PPN	N1 PPN	Co PPN	Cd PPN	Bi PPN	As PPN	Sb PPN		
	S1 FE-01														
	S1 FE-02 S1 FE-03														
	\$1 FE-04														
	\$1 FE-05														
	S1 FW-01							-							
	S1 FW-02 S1 S5-01														
	S1 S5-02														
	\$1 \$5-03														
	51 55-04											· - · -			
	S1 S5-05 S1 S5-06														
	S1 S5-07														
<- \	S1 S5-08														
<u></u>	S1 T-1A														
	S1 T-18 S1 T-10														
	\$1 I-10														
	\$1 T-1E								·						
<u></u>	S1 T-2A	<u></u>													
	S1 T-28 S1 T-2C														
	\$1 T-3A														
	\$1 1-381														
	S1 T-382	<u> </u>													
	S1 T-4A														
	S1 T-48 S1 T-40														
	R2 F-01														
	R2 S-1														
	R2 S-2														
	R2 S-3 R2 S-4														
	R2 5-5														
	R2 S-6														
)	R2 TU-01		0.7	201	20	6597	19	36	27	55	9	83	<5		
	R2 10-02		1.0	118	162	208	19 3 23	36 32 83	33 38	55 <1	9 <5 <5	105	<5 <5 <5		
	R2 TU-03		1.0	142	31	216	25	61	38	<1	5	37	<5		

Boadur-Clegg & Company Ltd. 130 Pernberton Ave. North Vancouver, B.C. V7P 2R5 "\$04) 985-0681 Telex 04-352667

- -



·-·\_

# Geochemical Lab Report

· –

	REPORT: V90-	36264.1							ATE PRINTEROJECT: NO		- 10	PAGE IB	
	SAMPLE NUMBER	ELEMENT UNITS	Fe PCT	Kn PCT	Te PPN	Ba PPN	Cr PPW	V PPit	Sn PPN	N PPN	La PPN	Al PCT	Ng PCT
	\$1 FE-01												
	\$1 FE-02												
	\$1 FE-03												
	\$1 FE-04 \$1 FE-05												
	S1 FW-01												·
	S1 FN-02												
	S1 S5-01												
	S1 S5-02												
	S1 S5-03					_							
· ·. — ·	51 55-04												
	S1 S5-05												
	\$1 \$5-06												
	S1 S5-07 S1 S5-08												
` <u> </u>	21 22-00	<u> </u>											
	S1 T-1A												
	S1 I-18												
	S1 T-1C S1 T-1D												
	51 T-1E												
	S1 1-2A												
	\$1 T-28												
	S1 T-2C												
	\$1 7-74												
	\$1 T-3A \$1 T-381												
	<u>51 T-381</u>		<u> </u>										
	51 T-381 												
	51 T-381 51 I-382 51 T-44												
	S1 T-381 S1 T-382 S1 T-4A S1 T-4B												
- 	S1 T-381 S1 T-382 S1 T-4A S1 T-4B S1 T-4C		***		·····								
	S1 T-381 S1 T-382 S1 T-4A S1 T-4B S1 T-4C R2 F-01												
	S1 T-381 S1 T-382 S1 T-4A S1 T-48 S1 T-46 R2 F-01 R2 S-1												
	S1 T-381 S1 T-382 S1 T-4A S1 T-4B S1 T-4C R2 F-01 R2 S-1 R2 S-2		**										
	S1 T-381 S1 T-382 S1 T-4A S1 T-4B S1 T-4C R2 F-01 R2 S-1 R2 S-2 R2 S-3		***										
	S1 T-381 S1 T-382 S1 T-4A S1 T-4B S1 T-4C R2 F-01 R2 S-1 R2 S-2		**		. <u></u>								
	S1 T-381 S1 T-382 S1 T-4A S1 T-4B S1 T-4C R2 F-01 R2 S-1 R2 S-2 R2 S-3 R2 S-4 R2 S-5		**										
·	S1 T-381 S1 T-382 S1 T-4A S1 T-4B S1 T-4C R2 F-01 R2 S-1 R2 S-2 R2 S-3 R2 S-4 R2 S-5 R2 S-6		2.08	0.02	<10	5		80	<21	<10		<u> 1 36</u>	0.36
)	S1 T-381 S1 T-382 S1 T-4A S1 T-4B S1 T-4C R2 F-01 R2 S-1 R2 S-2 R2 S-3 R2 S-4 R2 S-5		2.08	0.02 0.04	<10 <10	5 8	49 67	80 92	<20 <20	<10 <19	4 2	0.36 2.13	0.36

Bondar-Clegg & Company LAL 130 Pemberion Ave. North Vancouver, B.C. 77 2R5 D4) 985-0681 Telex 04-352667

.



# Geochemical Lab Report

				——				PR	TE PRINTED: DJECT: NOME	61VEN	PAGE	10
REP	RT: V90-3	5264.1									 Sð	
SAN		ELEWENT UNITS	Ca PCT	Na PCT	K PCT	Sr PPN	Y PPN	Сц РРМ	РЬ 2РМ	2n 99N	ррж 	
	FE-01											
51	FE-02											
\$1	FE-03											
	FE-04 FE-05									-		
	FW-01 FW-02											
	\$5-01											
	\$5-02											
\$1	\$5-03											
	\$5-04											
	\$5-05											
	\$5-06 \$5-07											
	\$5-08									·····		
)								77	9	67	6.9	
	T-1A							91	10	79	6.9	
	1-18							80 75	8 7	68 64	6.8 6.2	
	t-10 t-10							75 94	10	81	6.0	
	1-1E											
	1 T-2A							64 57	4	39 33	4.7	
	1 1-28							57 64	5	44	5.4	
	1 1-20							69	ġ	96	4.4	
S	1 T-3A							43	9	101	1.8	
S	1 1-381									43	5.0	·
	1 T-382							57 33	5 12	67	4.4	
	1 T-4A							34	19	68	4.7	
5	1 1-48							28	12	68	4.1	
	1 T-40											
i 	2 F-01								_		<u> </u>	
<u> </u>	2 5-1											
I	RZ S-2											
	2 S-3											
·	R2 S-4 R2 S-5										<u></u>	
		•							^ <b></b> ^	<b>.</b>		
	R2 S-6 R2 TU-01		0.70	<0.05	<0.05							
	R2 TU-02		2.57	<0.05	<0.05	15		5				
	R2 TU-03		0.64	0.06	0.09	20	;	)				

,

ŝ.

 $\bigcirc$ 

· · -- · · ·



- -

Geochemical Lab Report

\_\_\_

-----

A DIVISION OF INCHCAPE INSPECTION & TESTING SERVICES

R	EPORT: V90-36264.0 ( COMP	LETE )				REFERENCE INFO:	
	LIENT: DOMINION EXPLORERS ROJECT: NONE GIVEN	INC.				SUBMITTED BY: U. ABOLINS DATE PRINTED: 2-OCT-90	
	ORDER ELEMENT		NUMBER OF ANALYSES	LOWER DETECTION LINIT	EXTRACTION	METHOD	<b></b>
	1 .Au 30g Gold 30	41	5 PP8	Fire-Assay	Fire Assay AA		
<u></u>	SAMPLE TYPES	NUMBER	SIZE FI	RACTIONS	NUMBER	SAMPLE PREPARATIONS NUMBER	
	S SOILS R ROCK OR BED ROCK	29 12	1 -80 2 -15		29 12	DRY, SIEVE -80 29 CRUSH,PULVERIZE -150 12	
	REMARKS: THE FOLLOWING		RE ANALYZED I	FOR AU			······································
	S-5: 718 PP8 S-6: 141 PP8 	AU					
$\bigcirc$	ASSAY OF HIG		OW ON V90-36	264.6			
	REPORT COPIES TO: DOM.	INION EXPLOR	ERS INC.		INVOIO	E TO: DOMINION EXPLORERS INC.	
				· · · · · · · · · · · · · · · · · · ·			
					· · · · · · · · · · · · · · · · · · ·		······································
				· · · · ·	·····		

Bonder-Clegg & Company Ltd. 130 Penberton Ave. North Vancouver, B.C. V7P 2R5 \$04) 985-0681 Telex 04-352667



Geochemical Lab Report

#### A DIVISION OF INCHCAPE INSPECTION & TESTING SERVICES

REPORT: V90-36264.1 ( COMPLETE )

REFERENCE INFO:

# CLIENT: DOMINION EXPLORERS INC. PROJECT: NONE GIVEN

SUBNITTED BY: U. ABOLINS DATE PRINTED: 15-OCT-90

	ORDER		ELEMENT	NUNBER OF ANALYSES	LOWER DETECTION LINIT	EXTRACTION	NE THOD
	1	Ag	Silver	10	0.2 PPW	HW03-HC1 Hot Extr.	Ind. Coupled Plasma
	2	Cu	Copper	10	1 PPN	HN03-HC1 Hot Extr.	Ind. Coupled Plasma
· · · · · · · · · · · · · · · · · · ·	3	Pb	Lead	10	2 PPM	HN03-HC1 Hot Extr.	Ind. Coupled Plasma
	4	Zn	Zinc	10	1 PPM	HN03-HC1 Hot Extr.	Ind. Coupled Plasma 👘 🍍
	5	Ko	<b>Kolybó</b> enum	10	1 PPM	HN03-HC1 Hot Extr.	Ind. Coupled Plasma
	6	Ni	Nickel	10	1 PPM	HN03-HC1 Hot Extr.	Ind. Coupled Plasma
	7	Co	Cobalt	10	1 PPN	HN03-HC1 Hot Extr.	Ind. Coupled Plasma
	8	Cd	Cadeiue	10	1 PPM	HN03-HC1 Hot Extr.	Ind. Coupled Plasma
	9	8i	Bismuth	10	5 PPN	HN03-HC1 Hot Extr.	Ind. Coupled Plasma
	10	As	Arsenic	10	5 PP#	HN03-HCl Hot Extr.	Ind. Coupled Plasma
	11	Sb	Antieony	10	5 PP#	HR03-HC1 Hot Extr.	Ind. Coupled Plasma
<u> </u>	12	Fe	Iron	10	0.01 PCT	HNO3-HC1 Het Extr.	Ind. Coupled Plasma
	13	<b>M</b> D	Nanganese	10	0.01 PCT	HN03-HC1 Hot Extr.	Ind. Coupled Plasma
	14	Te	Tellurium	10	10 PPW	HNO3-HC1 Hot Extr.	Ind. Coupled Plasma
	15	8a	Barium	10	5 PPH	HN03-HC1 Hot Extr.	Ind. Coupled Plasma
	16	Cr	Chronium	10	1 PPM	HN03-HC1 Hot Extr.	Ind. Coupled Plasma
	17	¥	Vanadium	10	1 PPN	HN03-HC1 Hot Extr.	Ind. Coupled Plasma
	18	Sn		10	20 PPM	HN03-HC) Hot Extr.	Ind. Coupled Plasma
	19		Tungsten	10	10 PPW	HN03-HC1 Hot Extr.	Ind. Coupled Plasma
	20	La	Lanthanus	10	1 PPW	HN03-HC1 Hot Extr.	Ind. Coupled Plasma
	21	A1	Aluminum	10	0.02 PCT	HN03-HC1 Hot Extr.	Ind. Coupled Plasma
	22	Ng	Kagnesium	10	0.05 PCT	HN03-HC1 Hot Extr.	Ind. Coupled Plasma
	23	Ca	Calciu	10	0.05 PCT	HND3-HC1 Hot Extr.	Ind. Coupled Plasma
	24	Na	Sodiu	10	0.05 PCT	HNO3-HC1 Hot Extr.	Ind. Coupled Plasma
	25	K	Potassium	10	0.05 PCT	HN03-HC1 Hot Extr.	Ind. Coupled Plasma
	26	Sr	Strontium	10	1 PPM	HN03-HC1 Hot Extr.	Ind. Coupled Plasma
	27	Y	Yttrium	10	1 PPN	HN03-HC1 Hot Extr.	Ind. Coupled Plasma
	28	Cu	Copper	29	1 PPN	HN03-HC1 Hot Extr.	Atomic Absorption
	29	Pb	Lead	29	2 PPH	HN03-HC1 Hot Extr.	Atomic Absorption
	30	Zn	Zinc	29	1 PPM	HN03-HC1 Hot Extr.	Atomic Absorption
	31	Sb	Antimony	14	0.2 PPH	Not applicable	Inst. Neutron Activ.

.

the second s



Geochemical Lab Report

٠

A DIVISION OF INCHCAPE INSPECTION & TESTING SERVICES

CLIENT: DOMINION EXPLORERS INC.       SUBMITTED BY: U. ABOLINS DATE PRIMED: IS-OCT-90         SAMPLE TYPES       NUMBER       SIZE FRACTIONS       NUMBER         S SOLLS       29       1 -80       29         R ROCK OR BED ROCK       10       2 -150       10         REPORT COPIES TO: DOMINION EXPLORERS INC.       INVOLCE TO: DOMINION EXPLORERS INC.	RE	PORT: V90-36264.1 ( COMP	LETE )		-	REFERENCE INFO:	
S SOILS 29 1 -80 29 SAMPLES FROM STORAGE 39 R ROCK OR BED ROCK 10 2 -150 10 REPORT COPIES TO: DOMINTOM EXPLORERS INC. INVOICE TO: DOMINTOM EXPLORERS INC.			INC.				
R ROCK OR BED ROCK 10 2 -150 10 REPORT COPIES TO: DOMINION EXPLORERS INC. INVOICE TO: DOMINION EXPLORERS INC.		SAMPLE TYPES	NUMBER	SIZE FRACTIO	NS NUMBER	SAMPLE PREPARATIONS NUMBER	
						SAMPLES FROM STORAGE 39	
		REPORT COPIES TO: DOM	INION EXPLORE	RS INC.	· IN	VOICE TO: DOMINION EXPLORERS INC.	
	)====						
	- **						

# STATEMENT OF COSTS

# Tulsequah Property

Field Personnel	
U. Abolins - 4 days x \$450.00 M.L. Butler - 4 days x \$250.00	\$ 1,800.00 1,000.00
Food and Accomodation	
2 x 4 x \$100	800.00
Supplies	175.00
Mobilization/Demobilization (Smithers-Atlin)	2,000.00
Aircraft Support/Expediter	1,596.41
Laboratory Anaysis	363.40.
Report Preparation	
(2 days x \$450/day) plus \$200 typing + \$300 drafting)	1,400.00
Lab Floatation Test	2,250.00

Estimated Total - Awaiting Final Invoices \$11,384.81

\*.....

\_\_\_\_

-

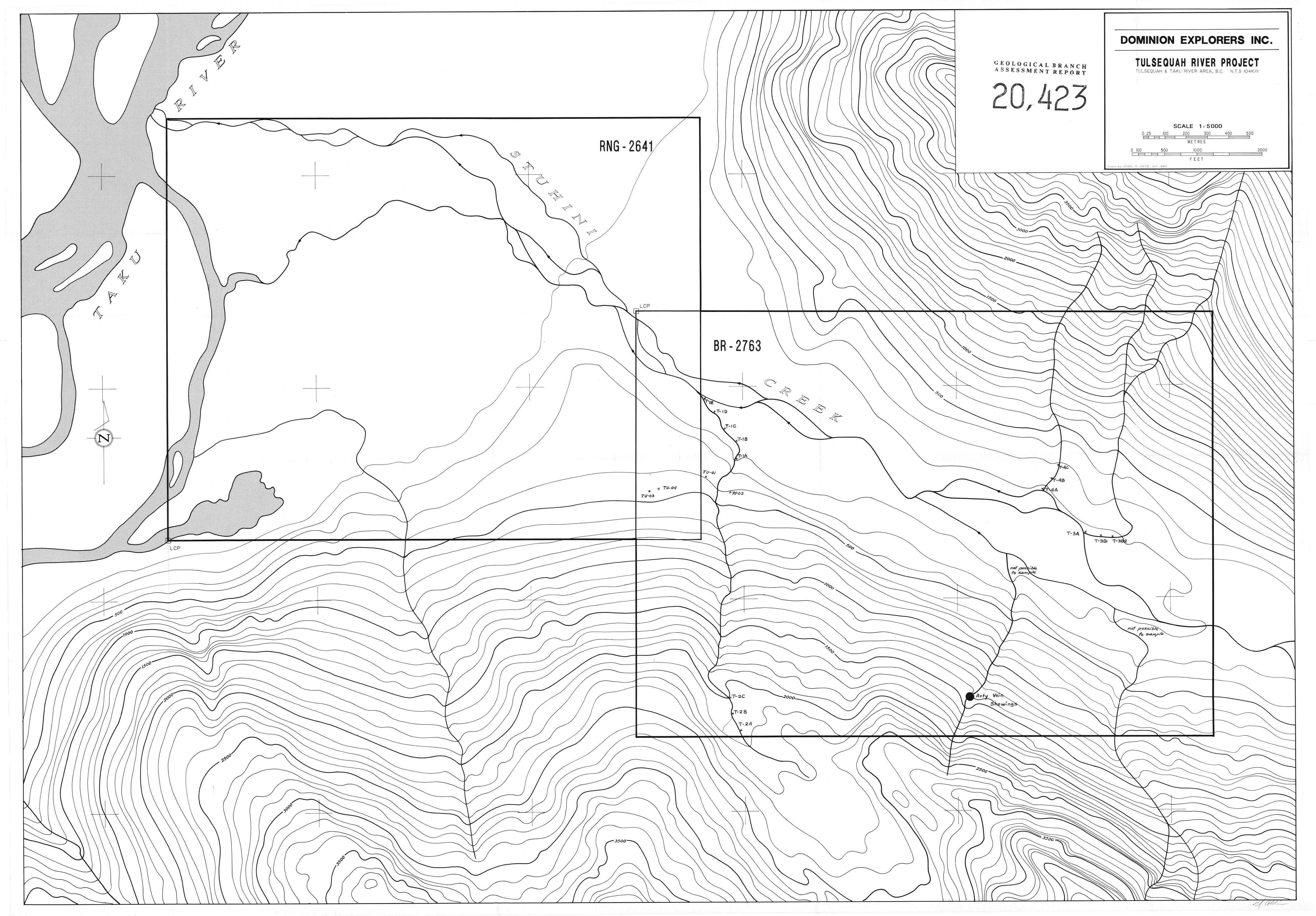
- - - -----

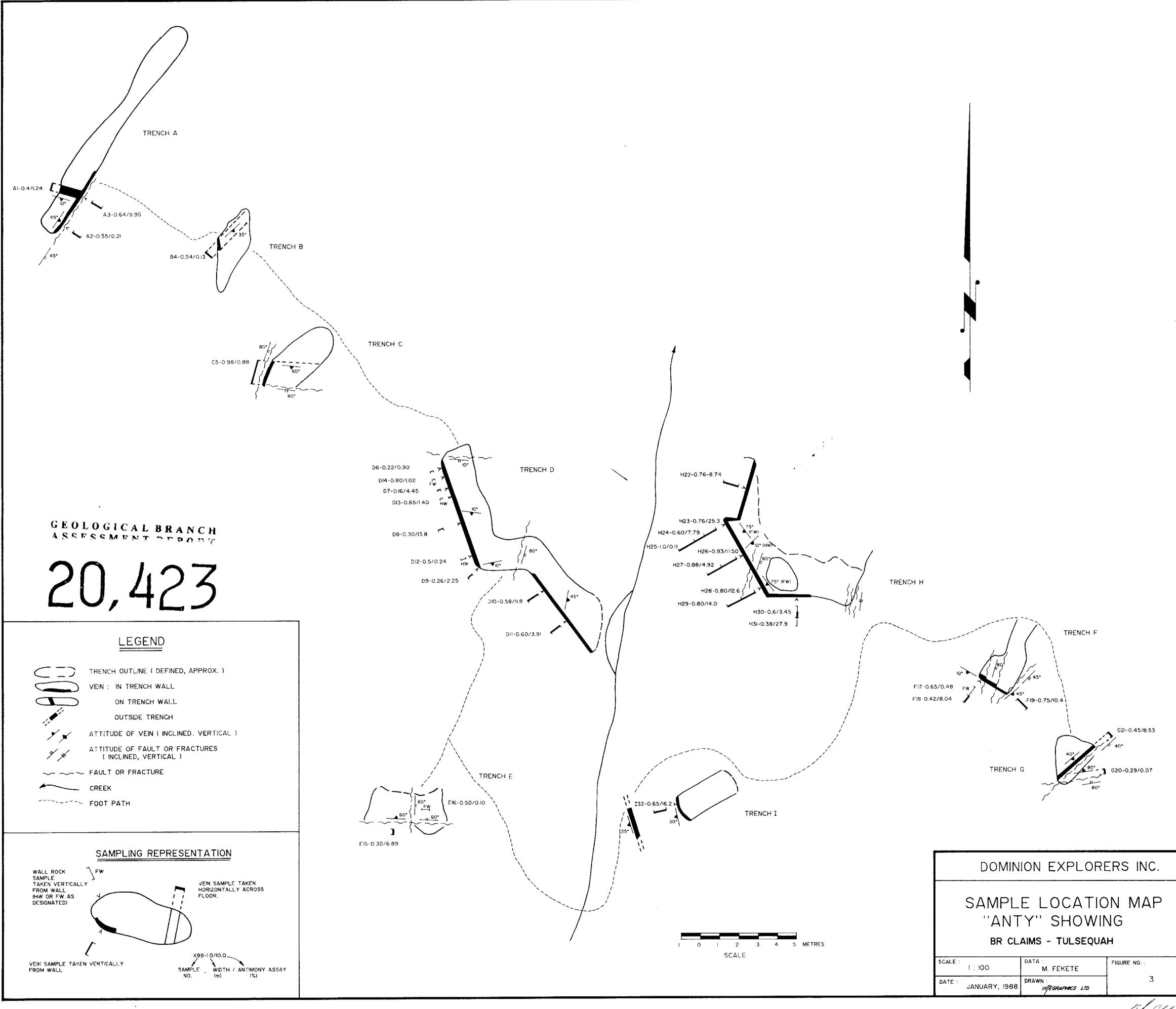
-----

J.A. Francis Vice-President, Finance DOMINION EXPLORERS INC.

-----

October 19, 1990





.

ref. alie\_

