# 1983

WORK REPORT FOR TETS GROUP

MINERAL CLAIMS - 40 units

OWNED BY J. SHELFORD

OOTSA LAKE ARGA

HOUSTON B. C.

CMINECA MINING DIVITION

126 57 E53 51 N - CLAIM MAP M 93 E 15 W

OPERATOR JOHN SHELFORD

CORE LOCGED BY UEL MYBRE (NORAEDA)

BY

BOX 166 BURNS LAKE B. C.

DATF : JAN. 20 1984

GEOLOGICAL BRANCH ASSESSMENT REPORT

12,175



# TABLE OF CONTENTS

	Docto
INTRODUCTION	Page
HISTORY	I
LOCATION and ACCESS	2
TOPOGRAPHY and CLIMATE	2
REGIONAL GEOLOGY	3
PROPERTY GEOLOGY	4
PREVIOUS WORK 5	, 6 , 7
1983 Drill Program	8
1983 PHISICAL WORK REPORT	9
PHISICAL WORK STATMENT	IO
DRILL HOLE STATMENT	II
ADITIONAL EXPENSES	12
LIST OF EXPENSES	13
PUMP HILL -	I4
SPECTOGRAPHIC ASSAY	15
ASSAY	16
LIST OF CLAIMS AND WORK CREDITS	17
DIAMOND DRILL HOLE S I	18
DIAMOND DRILL HOLE S2	19
DIAMOND DRILL HOLE S 3	20
DIAMOND DRILL HOLE S4 S I CORE LOGGING	2I 22
s 2 CORE LOGGING	23
S 3 CORE LOGGING	24
S 4 CORE LOGGING	24 A
S4 CORE LOGGING	25
S4 analyses	26
COMMENTS	27 , 28

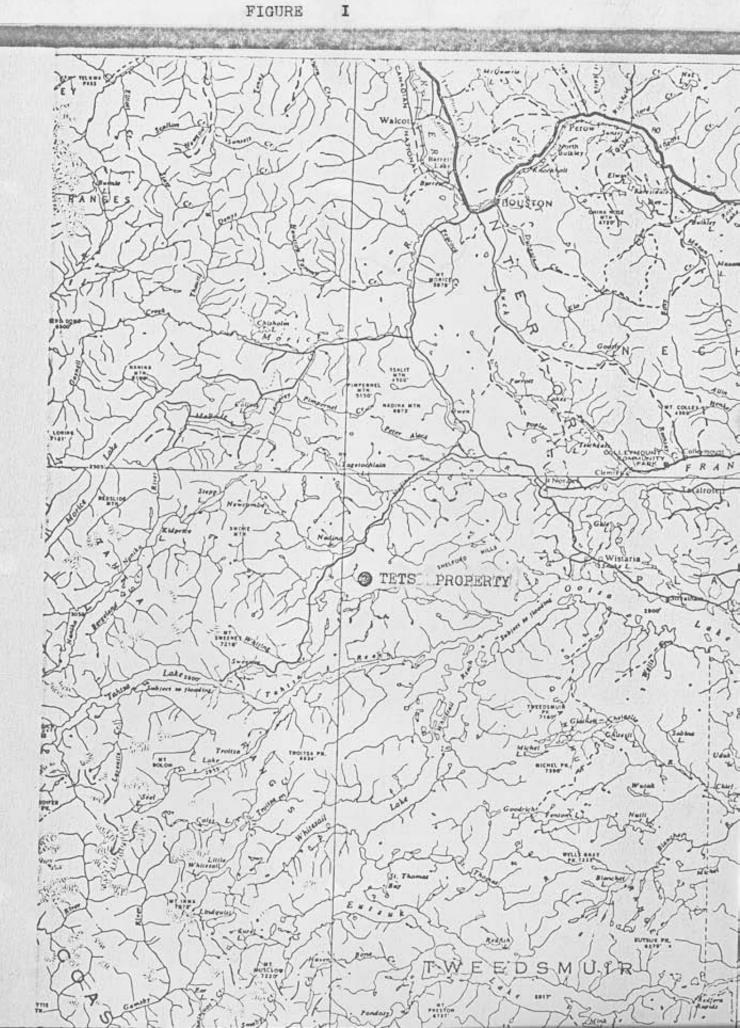
## LIST of ILLUSTRATIONS

Figure I MAP of AREA

Figure 2 Claim Map

Figure 3 Drill Hole Locations on Claim Map and trenches

Figure 4 Drill Hole and trenches on grid Map



#### INTRODUCTION

The writer was born in the area in 1916, has prospected actively since 1950, and has been engaged in development work since 1959, during wich time two drill programs were observed as to methods and results. In 1980 the writer directed a small drill program which produced useful information.

#### HISTORY

The Tets claims were first staked in July 1969 by J. Shelford; Tets 7- 14 were added in April 1970; Tets 15- 16 were staked to reclace Fets 1-2(lapsed by mistake); Tets 17-30 were staked in Sept. 1971; Tets 31-47 were staked in May 1972; Fets 43-54 were staked in May 1972; nine fractions Tets 55-67 were added in Aug. 1973.

The property was optioned to Sibola Copper Wines (later Sibola Mines) in 1970.

On June 22,1973 Frangus Exploration Astreblug optioned the property and carried out work during 1973- 74, at which time the option was abandoned.

Fy Cept. 1977 all claims were abandoned except Ters 3-12, fers 15.24 and 26.

In Sept. 1977 the claims were regrouped under the grid system as 15 units, names lets claim.

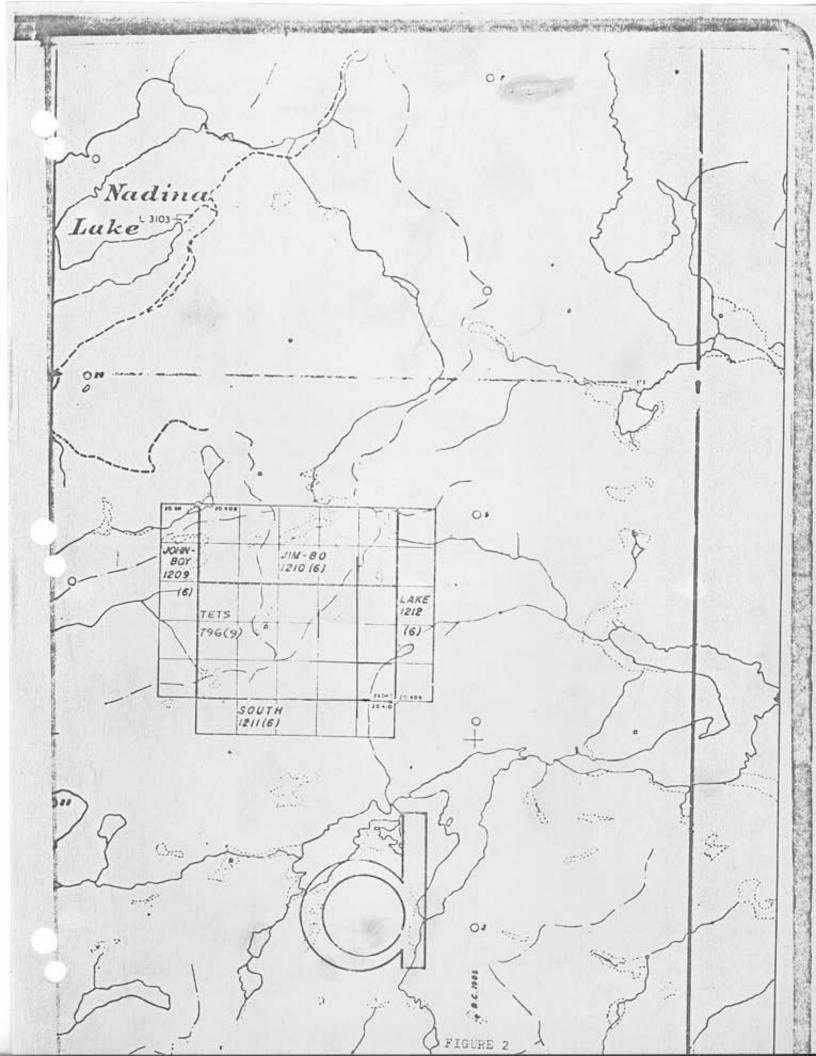
In 1978 John Boy 5 units, Jim Bo 10 units, South 5 units, and Lake 5 units were added, and grouped as the Tets group.

In Feb. 1980 Sibols dropped the option and all claims were transferred to J. Shelford.

In 1980 a small smallow drill program was

undertaken in the area known as Swamp Show, which illustrated the dip and strike of the known mineralized area, asisted by some blasting and trenching etc.

During I98I drilling at 2 sites was undertaken and phisical work was continued.



#### LOCATION AND ACCESS

"The TETS claims are located approximately 5 miles (8.05 km) northeast of Twinkle Lake, which is 40 miles (64.37 km) south of Houston, B.C. Twinkle Lake is accessible via the Tahtsa Lake road from Houston. During the 1973 program the property was serviced by an Alpine Helicopters machine, based at Twinkle Lake." Sibola built a short, 4-wheel drive access road 84 miles west of Burns Lake, near Nadina Lake, from the northwest. Logging by Eurocan Pulp & Paper has since provided an all-weather access route from the south directly onto the property.

#### TOPOGRAPHY AND CLIMATE

"Topography on the property varies from moderate to rugged with elevations ranging from 3300 to 4700 feet (1,006 m - 1,433 m). The topography appears to be structurally and geologically controlled, with the ridges exposed and the troughs occupied by swampy meadows.

The property is heavily forested with balsam, spruce and pine, all of commercial value. A logging access road has been constructed across the south-west corner of the property.

The climate is of a temperate nature, with warm summers and cold winters. The area is free of snow from July through October, making the area more readily accessible and more easily worked during this period."

#### REGIONAL GEOLOGY

The area has received substantial geological activity since the discovery at Goosly Lake. Dr. Neil Church \* has spent substantial time on original mapping in the district. He shows that the region is underlain by "... a diverse suite of Mesozoic and Tertiary volcanic rocks and a number of small intrusions ...".

Specific units of the volcanic suite act as host to mineralization resulting from the feeder intrusions.

Mineralization most sought after in the area are termed "Volcanogenic" deposits. These are usually higher grade, smaller tonnage, massive and mixed sulphides of copper, lead and zinc, with substantial values in silver and some gold.

"The main stratigraphic divisions compose a lower sequence of metamorphosed strata, believed to be early Mesozoic age, and an upper sequence of cover rocks of Tertiary and possible late Mesozoic age."

"The igneous intrusions consist of acid, intermediate and basic alkaline types.

Most of these bodies are clearly younger than the lower series strata and some appear to be volcanic necks and feeders to the Tertiary volcanic rocks."

The Goosly Lake deposit, owned by Equity Mining - now under option to Granby Mines, consists of four main zones of massive and disseminated mineralization in Lower Mesozoic volcanic rocks.

Mineralization includes pyrite, pyrrhotite, chalcopyrite with minor tetrahedrite and sphalerite. The key value is in the silver which is probably related to the tetrahedrite.

The mineral zone lies within an alteration zone near the contact of syeno-monzonites and dacite.

The Nadina property near Owen Lake is also a significant mineral deposit.

The belt from Goosly, Nadina to Tsalit Mountain and reaching to the Sibola property has received substantial exploration activity by major and junior companies.

<sup>\*</sup> Church (1970) Geology of the Owen Lake, Parrott Lakes and Goosly Lake Area, G.E.M. pp. 119 - 125.

## PROPERTY GROLOGY

No geologicial map has been made of the area. Intrusive dykes have been reconised in the centre of the property.

Breccia, fracture, and alteration of rock appear to occur in a semicircle to the E, S and west of the intrusive area, which is closely associated with known mineral showings, associated with rhyolite dacite, tuff etc.

Mineralization consists of lenses, breccia fillings and decimated sphalerite, bournite, chalcopyrite and pyrite.

Some geological knowledge was gained during the I980 drill season. Rock structure in the Swamp Snow area appeared to have a M-S strike and a nearly vertical or past vertical dip, and mineralization appeared to be associated with the structure.

#### PREVIOUS WORK \*

"On June 22, 1973, GRANGES EXPLORATION AKTIEBOLAG optioned the property and implemented the 1973 program. Between June 30 and August 5 of 1973 they carried out 8.75 miles (14.05 km) of line cutting. They collected and assayed 1294 soil samples and ran 40.63 line miles (65.39 km) of magnetometer survey. The results from this program are given in the report: Sibola Option, GRANGES EXPLORATION AKT. by R.E. Reid and G. Zbituoff.

During 1974, GRANGES carried out a limited amount of soil sampling and trenching (154 samples and two blast trenches), then returned the property to Sibola.

The Company continued the work on the property to determine the validity of the geochemical results. Later in 1974 work was done on the Granges Show at 6N - 66E, to include 33 holes and pits. This soil zinc anomalous area (Granges H5), was found to contain zinc, both "black jack" and "ruby" sphalerite.

The zone follows a massive shatter-breccia zone with mainly disseminated and rim-textured sphalerite with some local chalcopyrite. Comparison of the soil zinc map and the zinc found in place indicates that the soil results are indicative in the Granges Area.

In 1975, physical work was carried out again. A 10' x 10' trench was blasted at "Jim's Pit" and sampled, uncovering massive bornite. Five test pits were dug at the "Zinc Pit" and 3 pits and one trench on the "Hill Top Show". The Zinc Pit contained Zinc, Copper, Silver and Lead replacing shattered pyrite. The Hill Top Show is contained in the large Copper anomalous zone centered 6N - 56E and explains the cause. Blasting and trenching uncovered native copper and chalcocite in small quartz-calcite veinlets. The size or magnitude is not known but can explain high soil copper.

In 1976, 27 blast holes and pits and a 15 foot by 4 foot trench were added to the Granges Show.

In 1977, a new area was found at "Base 48". Nineteen test holes, two ten foot trenches, one twelve foot trench and a ten foot by ten foot test hole were blasted into the overburden and underlying rock. This are contains good exposure of copper-silver, bornite-chalcopyrite-tetrahedrite(?) over an area 25 feet by 400 feet, open at both ends."

<sup>\* -</sup> Summary by Sibola staff.

## PREVIOUS WORK CONTINUED

Rock stripping and trenching T979

A total of IO54 cubic feet or 71.5 cubic meters of rock was blasted trenched and pitted in four zones on the property. The areas selected were near the diamond drill targets to broaden the visable rock exposure and sampling.

In zone I the Stump Show. Pase 48 area ( DD N o. 6 to No.9), two rock trenches were blasted totalling I450 cubic feet, and eight pitts for 384 cubic feet totalling I834 ft(58.0)M

In zone 7the Bear Snow (DD NoII to No .16) three rock trenches and twelve pitts were blasted, totalling 2402 cubic feet or (82 cubic meters)

In zone 3, the Base 44 Snow (TD No .24 and No .25) two rock trenches and two rock pitts were blasted for II22 cubic feet (3I.8 cubic meters

In zone 4, the Grangus Show area (DDNo.29) one rock trench was blasted and four rock pitts for696 cubic feet or 19.6 cubic meters

# DIAMOND DRILL PROGRAM

Mauro C. Paretta 26985- 100 AVE. Whannook B.C. completed 29 diamond drill noles for a total of I800FT. using a winkie drill and a Passe Par Toute (all terain viechicle) for transport of the drill, water was pumped from local water sources with one and two pumps in tandem.

This was done as a result of Ron STokes

#### PREVIOUS WORK CONTINUED

recomendation that known showings be crosscut with a drill to test at depth, however very little of this was done, and instead most noles were of a prospecting nature in anomolus areas. Consequently they were so far apart that it is impossible to get structure information from any two holes to compare them.

In 1980 a shallow drill program was done in the Swamp Show area.

In 1981 one drill note and some trenching was done at the HArry Snow, also eight very shallow holes were put in at the Granges Show.

# 1983 DRILL PROGRAM

On June 19 the drill was moved, and set up at the Stump Show at 48 E 2 S. Drill was placed with the intent of crosscutting the contact of a dark volcanic tuff and a red volcanic porphery breccia, with a gossan between them. SI was collared on the red volcanic at 45° down facing N60 E. Water supply was poor, and remained so all year. The water pressure pump broke down, so a siphon system was tried. At 4 ft the drill bitt was ruined and the diamonds were lost in the hole at 4 ft, so SI was abandoned.

S2 was collared at the same site at 50 down facing N60E on June 26 got to IO ft, cased to 4 ft, ground was very badly fractured and lots of problems were encountered, core recouvery was poor, and drill just wouldn't penetrate, on July IO hole S2 was abandoned and drill was moved 30 ft S60W to a rock face which didn't appear to be as badly fractured. Hole S3 was collared at 45 down facing N60E. Cased 2 ft, drilled to 9 ft, from 9 ft to I3 ft no core was recouvered.

On July 17 we worked all day, and got no core and wore out drill equipment, so we cemented hole. On July 24 cement was drilled out, there was no improvement, so S3 was abandoned.

Drill was moved back 40 ft on to the dark volcanic rock at the original Stump Show .S4 was collared at 40 down facing N30E; drilled to I2 ft and cemented hole .On Aug. 28 cement was drilled out and got to I9.6 ft . Sept. I drilled to 35 ft ,Sept. I8 drilled to 55 ft . On Sept 25 drilled to 65 ft . On Oct. 23 drilled to 72 ft , had frost problems with water line . So drill was dismantled , Motors taken out for overhaul , and equipment stored ,for next season.

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			J1M-30	2	
			1210		
JOHN			TETS		LAKE 12/2
JOHN BOY 1209			796		1414
		)( 5 <sup>2</sup> 5 <sup>3</sup> +3 <sup>6</sup>			
	and the state of t	J		A CONTRACTOR OF THE CONTRACTOR	
	•	, i	50UT H 1211		
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LEGEND

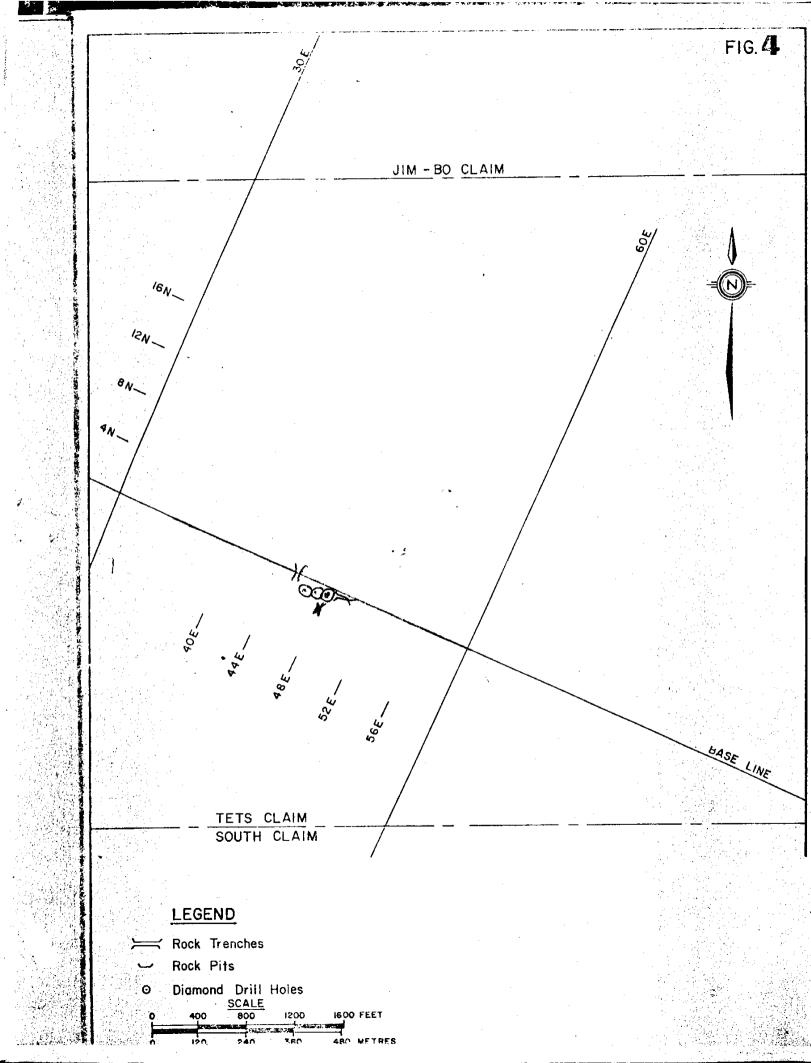
ROCK TRENCH

O DIAMOND DRILL HOLE

O SUMOFF 3280FT M920FT

SCALE

FIGURES
TETS GROUP
DIAMOND DRILL
HOLE
AND
TRENCHING
LOCATION MAP
JSHELFORD FERM



# 1983 PHISICAL WORK REPORT

Blasted and stripped downhill to south from Stump Show to expose continuation of mineralization, extended trench for IO ft x 3 ft x 4 ft deep.

During the drill program, stripping was done on road bank to north of road across Stump Show for 96 ft to east, this stripping revealed a probable structure in this area of strike N, dip vertical, and mineralization appearing to be structure controlled. Four bands of mineralization were crossed in this trench, SI the original Stump Show I2 ft wide, an eratic fracture fill, containing bornite and chalcopyrite. Then a blank of 7 ft, then a band of 7 ft (S2) containing disceminated chalcopyrite and some galena. Then a 7 ft blank followed by another 7 ft of mineralization (S3) similiar in all respects to S2, then a blank of I0 ft, followed by 34 ft of mineralization (S4) similiar in all respects to S2 and S3. This appears to be the most stable deposit found to date. A sample is away for assay, and drilling should be done on this showing.

One trench was blasted at base 46 at a contact of two different rock types, which revealed chalcopyrite in red porphery. Trench IO ft X 4 ft X 3 ft.

# PHISICAL WORK STATMENT FOR 1983

I trench IO ft x 3ft x 4ft deep= I20 cu ft & \$169 =\$202.80

Itrench IOft x 4ft x 3ft deep = I20 cu ft & \$1.69 =\$ 202.80

stripping 96 ft x 3ft x 3ft = 854 ft & \$169 = \$1443.26

\$ I848.86

	DRILL HOLE	STATMENT 198	3	
<u>Hole</u>	Casing Depth	Days Worked	Dates Worked	Hole Cemented
SI	4 ft 4 ft	I	June I9	
S2	4 ft IO ft	2	June 26 July IO	)
S3	2 ft 13 ft	3	July IO , 17,24	I2 ft
S4	72 ft	6	July 24, Aug. 28, Sept. II, I8, 25, Oct. 23	I3 ft
	10ft 99ft	10-		25 Ft
IO ft	cased ⊌ 🇦 50.00	o <b>∜500.0</b> 0		
25 ft	cemented @\$10.00	0 <b>₹250.</b> 00		
99 ft	core @\$25.00	*2475 <b>.</b> 00		
	Total	\$3225.00		

# ADITIONAL EXPENSES FOR 1983

Core Storage Building 7ft x 8 ft = 56 sq. ft. 56 sq.ft. 4 \$18.00 sqft. = \$ 1008.00

Core boxes 4 @ \$15.00 = \$60.00

Total

\$1068.00°

# LIST OF EXPENSES TO SUBSTANTIATE DRILL PROGRAM FOR 1983

Diamond Drill rental IO days @ \$100.00	= <b>\$1000.00</b>
Power Saw rental	<b>#400.00</b>
Camper rental	<b>₫7</b> 00 <b>.</b> 00
Play-cat rental	<b>₽</b> 500 <b>.</b> 00
Diamond Drill crew 2 men @ \$90.00 =	\$1800 <b>.</b> 00
Transportation to claims I80. miles =	<b>₿360.00</b>
Fuel for drill 50 gal @ 210 gal=	\$105.00
Oil for drill I5 qts. & I.89 =	<sup>‡</sup> 28 <b>.</b> 35

## MANY HILL

Some work and study was done at 56 H XI2 N an area known as Pump Hill. This area is composed of the most exposed rocks on the property, a knob like hill, with a steep face, composed of a gabro plug, and several small gabro dykes raidating from plug into an andesite body, one dyke can be traced for 300 ft from plug. These dykes appear to have a random strike and dip.

A small skarn area has been located at base of cliff between the gabro and andesite.

Two assays are enclosed from this area, Pump Hill no I an assay of a grab sample of a flat lying tetrahadrite vein in andesite. Pump Hill no 2 a spectographic assay of dyke material, showing an unusual gallium assay..

. This would be an interesting area to drill , but water supply is very difficult , as no known stream can be used . There is a small catch basin to N/ W of hill which exists for one month .

Wr. John C. Shelford

Burns Lake, B.C.

P.O. Box 166

H

# Warnock Hersey Professional Services Ltd.

125 East 4th Avenue Vancouver B.C. V5T1G4 (604) 876-4111 Telex 04-54360



PHONE: (604) 876-41 TELEX: 04-54360

FILE NO. 468 - 23915

DATE April 11, 1978

#### SEMI QUANTITATIVE SPECTROGRAPHIC ANALYSES

Mr Merrby Crrtify that the following are the results of semi quantitative spectrographic analyses made on samples submited.

SAMPLE IDENTIFICATION	Al	Sb	As	Ba	Be	Bi	В	Cd	Ca	Cr	Co	Cu	Ga	Au	Fe
	8.0	ND	ND	0.01	ND	NO	ND	ND	5.0	0.01	Trace	0.03	0.02	Trace	Najor
15		lac .										110			1
SAMPLE IDENTIFICATION	Pb	Mg	Mn	Мо	Nb	Ni	Si	Ag	Sr	Ta	Sn .	Ti	W	V	Zn
dike p Hill	ND	3.0	0,2	Trace	ND	0.005	matrix	tnace	0.03	ND	ND	0.0	ND	0.03	Trace
gabro dike from Pump Hill															

All results expressed as \_Percent by weight

Note: Rejects retained one week.

Warnock Hersey Professional Services Ltd.



Certificate of Assay

COAST ELDRIDGE PROFESSIONAL SERVICES DIVISION

WARNOCK HERSEY INTERNATIONAL LIMITED

125 EAST 4tH AVE. VANCOUVER 10, B.C., CANADA



PHONE: (604) 876-4111 TELEX: 04.50353 CABLE ADDRESS: ELDRIGO

FILE NO. A . 3-3 . 1-09-7579

DATE

August 15, 1500

MARKED SOUNCES PALUE OUNCES CENT CENT CENT CENT CENT CENT CENT CENT	ENT CENT
0.02 0.70 33.3 51.53	
	à
91	

Gold calculated at \$ ..... per ounce

Mr. John Shelford

Burns Lake, B.G.

P.O. Box 166

I7
TETS GROUP
LIST OF CLAIMS and DISTRIBUTION OF WORK

CLAIMS	RECORD NO.	VALID TO	RECORD DATE	WORK CREDITS APPLIED FOR
TETS I-15	796	1987	sept	Iyear
JOHN BOY I-	5 1209	1984	JUNE	I year
JIM BO I-IO	1210	1984	JUNE	I year
SOUTH I-5	1211	1985	JUNE	
LAKE I-5	1212	1985	JUNE	I year

1983 DIAMOND DRILL PROGRAM

oft

r

r

IO ft

TT Andesitic Tuff

J. Shelford
Diamond Drill
Hole S I
Mar. 20 1984

#### 1983 DIAMOND DRILL PROGRAM

 $\tau$   $\tau$  Andesitic Tuff  $\tau$   $\tau$  or flow

FIGURE
J. Shelford

Diamond Drill
Hole S 2

Mar. 20 1984

1983 DIAMOND DRILL PROGRAM

TO ft

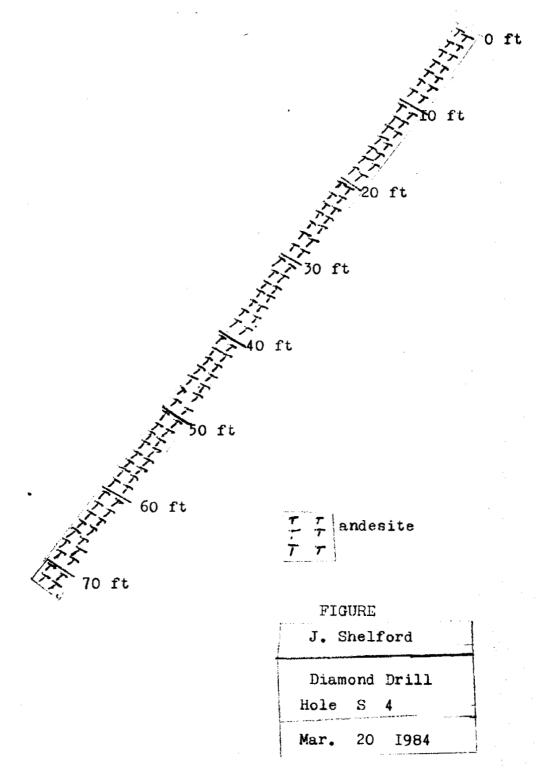
0 ft

 $\begin{bmatrix} \overline{r} & \overline{\tau} \\ \overline{r} & \overline{r} \end{bmatrix}$  and esitic

FIGURE
J. Shelford

Diamond Drill Hole S3

Mar. 20 1984



				NORANE	A EXPLORA	ATION COMPA	NY, LIMITE	D									
Collared			Completed 19 June 8	Core Size 23 mm	Property	Tets (Stum	p showing	g)		Project No		NTS	S No. 93	E/15W			
			FIELD COORDINATES				SURVEYED		INATES			She		f 1			
Lat.	2 S		Elev.	Dip _ 45°	Lat.		Elev.			Dip		Но	Hole No.				
Dep.	48 E		Depth 4 feet	Bearing N 60 E	Dep.		Depth			Bearing			S-:	Ĺ			
Footage	Rec'y	Graphic Lo	og	Description			% Sulp	Est. Grade	Sample	No. Lt.							
			4' casing				·						·				
			1 foot core re	covered as follows	:						·						
			very fine grai	ned, dark grayish	red (5 R	3/2)											
			crystal tuff o	r flow, andesitic,			0	_									
			with pale oliv	e (10 Y 6/2) patch	es	•								22			
			(fragments, al	teration?) to 10 c	m, weathe	red at top	-										
	,		(more reddish	brown)													
		•															
				6500141/m	\			•									
				(8)	2)												
				O DEL MYERS	CLOSS												
				PELION !													
						All B											
						13 March				De	1 Myere						

DATE \_\_\_\_13 March 1984

LOGGED BY Del Myers

			·	ATION COMP				····									
ed			Completed 10 July 8	3 Core Size 23 mm	Property	Tets (St	ump sł	nowing	g)		Projec	t No	 <del></del>	NTS No. 93 E/15W			
			FIELD COORDINATES			-	SUR	/EYED	COORDI	NATES			 She	et /	of		
			Elev.	Dip - 50°	Lat.		Elev.				Dip		 Hol	e No.			
	,,		Depth 10 feet	Bearing N 60° E	Dep.		Dept		<b>.</b>		Bearin	ng	 1	s -	- 2		
ege	Rec'y	Graphic L	og	Description				% Sulp.	Est. Grade	Sample	No.	Lt.					
			4' casing, s	ame location as S-1													
			2' core rec	overed as follows:													
			fractured,	fractured, some 2 stage breccia, carbonate veined,													
			very fine g	very fine grained, dark grayish red crystal tuff													
		·	or flow as	or flow as in S-1, also dark brownish black											23		
			(5 YR 3/1)	(5 YR 3/1) to dark olive gray (5 Y 3/1), very fine													
			grain, ande	site flow with carb	onate fi	.lled fract	ures										
			and vesicul	es, no visible sulf	ides												
				\$\$0C147/0													
			ğ	200													
			10,0	DEL MYERS S													
			3.	FELLOW													
						Del.	71-										

DATE\_

Del Myers \_ LOGGED BY\_

	Completed 24 July 83	Core Size 23 mm	Property Tets (S	tumn show	Property Tets (Stump showing) Project No								
	FIELD COORDINATES	GOVE OILE 25 IIIII	1005 (8	SURVE			NATES				ITS No. 93 Sheet /	of /	
[ E	Elev.	Dip -45°	Lat.	Elev.				Dip			lole No.		
1	Depth 13 feet	Bearing N 60° E	Dep.	Depth				Bearing			S	- 3	
y Graphic Log		Description		5	% Sulp.	Est. Grade	Sample	No. Lt			·		
	30 feet @ S60	°W from S-1											
	2' casing												
	0-5' : 3' cor	e recovered											
	5-10' : 3' cor	e recovered	;										
	10-13' : 2.5' c	ore recovered											
	very fine grain	, olive black (5 Y	7 2/1), to olive g	ray					,			24	
	(5 Y 4/1), ande	site with 5-10% pi	ink feldspar cryst	als									
	to 3 mm												
	coarse sand, ma	inly moderate brow	vn in color (5 YR	3/4),									
-	andesitic, simi	lar to S-1 and S-2	2 rock except brok	en									
	into sand					•							
	ЕОН	ASSOCIATION											
		DEL MYERS					· .						
		S. FELLOW:	1)	10									

DATE 13 March 84

LOGGED BY\_\_

Del Myers

#### NORANDA EXPLORATION COMPANY, LIMITED

ollared			Completed 23 Oct. 83	Core Size 23 mm	Property Tets (Stum	p Sho	wing)		Р	roject No	 NT	NTS No. 93 E/15W		
			FIELD COORDINATES			SURV	EYED	COORDI	NATES		Sh	Sheet 1 of 3		
.at.			Elev.	Dip -40°	Lat.	Elev.			C	)ip	 Но	ole No.		
ep.			Depth 72 feet	Bearing	Dep.	Depti	h		E	Bearing	 	S	- 4	
Footage	Rec'y	Graphic Lo	og	Description			% Sulp.	Est. Grade	Sample N	o. Lt.				
			10 feet south	of S-1										
			0-14' : 10' r	ecovered										
			14-19.5' : 5.5	' recovered										
			19.5-25' : 4.5	' recovered										
			25-29' : 3.5	' recovered										
			29-35' : 5'	recovered										
			35-42' : 7'	recovered									1	
			42-55' : 9'	recovered										
			55-60' : 5'	recovered										
			60-72' : 3'	recovered										
			72' 52.5	' recovered (73% r	ecovery)									
0			assume no reco	very										
4			very fine grai	n, dark brownish g	ray (5 YR 3/1)									
			with 1 mm feld	spar crystals and	carbonate									
			chlorite (?) v	einlets										
					DATE			L	OGGED B	Υ				

NORANDA EXPLORATION COMPANY, LIMITED

ared		Completed	Core Size	Property Tets (Stump	showing	)		Project N	Vo		NTS No.			
		FIELD COORDIN	NATES		SURVEYED		NATES				Shee	t 2 of	3	
		Elev.	Dip	Lat.	Elev.			Dip			Hole	No.	4	
		Depth	Bearing	Dep.	Depth			Bearing		· 		,		
otage	Rec'y Graphic L	.og	Description		% Sulp.	Est. Grade	Sample	No. L	.t.				· · · · · · · · · · · · · · · · · · ·	
7		very fine	grain, dark brownish	gray (5 YR 3/1)										
		andesite	flow and flow breccia	with abundant calcite	-									
		filled ve	sicules with pale gree	en silicate mineral	:									
		as rims.											<u></u>	
6		very fine	grain, dark brownish	gray andesite flow		·							25	
		with mino	r calcite veinlets an	d amygdules										
9.5		ash to la	pilli tuff of above r	ock with calcite-green	1		1							
		silicate	mineral matrix, 2 cm	thick calcite veinlet										
0.5		very fine	grain, dark brownish	gray andesite with										
		common ca	lcite amygdules											
4		very fine	grain, dark olive gr	ay (5 Y 3/1) to dark					-			·		
		brownish	gray (5 YR 3/1) andes	ite with common to										
		intense f	racturing commonly fi	lled with calcite and/	or/									
		hematite,	rock appears to hav	e been flow with short										
		sections	of tuff or breccia											

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#### NORANDA EXPLORATION COMPANY, LIMITED

NORANDA EXPLORATION COMPANY, LIMITED																
Collared			Completed	Core Size	Property Tets (Stump show			)	Pro	Project No				NTS No.		
			FIELD COORDINATES	SURVEYED COORDINATES								Shee	Sheet 3 of 3			
Lat.			Elev.	Dip	Lat.	E	ev.	Dip	Dip				Hole No.			
Dep.			Depth	Bearing	Dep.	D	Depth			Bearing				s - 4		
Footage	Rec'y	Graphic L	og	Description			% Sulp.	Est. Grade	Sample No.	Lt.						
			Samples for Ge	eochemical Analyses	:				(ppm)	<u>Au</u>	Ag	Cu P	<u>Zn</u>	<u>Mo</u>		
			20	0 - 20.5'					X14522	.010	0.6	18	2 190	< 2		
			40	0-40.5'					X14523	.010	0.4	4 2	4 730	< 2		
			60	0-60.5'	,				X14524	.010	0.4	16	2 290	< 2		
															26	
		,											· · · · · · · · · · · · · · · · · · ·			
							\$\$0C14									
						[\$\cdot\]		30								
				,		010	DEL MYER	CA <sub>N/2</sub>								
						101	ELOW	10/								
										De	1/1	7	•			
	<del></del>				DATE13 M	arch 1	.984	LC	OGGED BY_	De:	1 Mye	rs		•		

#### COMMENTS

Core is stored at the home of J. Shelford.

At 27 ft the drill cuttings came out inky black, usually an indication of sulfides. No sludge was saved, and on pulling core no core was saved for aprox 2 ft.

During the past two years the writer has done considerable study of mineralization in the Stump Show area to form an opinion on just what the minerals were present, and just what mineral carried the silver. Which consistently runs between Ioz. to 22oz Samples of rock in large pieces were brought home from Stump I 2, 3, and 4 also Stump South, and cut into slabs in a rock saw, these slabs were studied under a microscope for rock alteration and mineralization, all areas appeared to be similiar in rock types, and to a great degree in alteration, calcite, chlorite, montmillerite and pyrophyllite. Mineralization varied a lot, and is hard to define because some mineralization is very fine only visable under a microscope.

Streak, hardness, acid tests and percipation were tried, Copper showed more than one would expect from appearence,

especially at Stump 4 .

A tereyish black, soft metalic mineral appeared in several areas.

One slab from Stump 4was taken to Smithers to Willard Thompson a geologist. Ihad seen a greyish mineral, but due to fineness hadnt identified it, I asked him if he could identify any mineral which could carry silver. After considerable study through a microscope he said you have two minerals chalcocite, and tetrahedrite, and he proceeded to point out the minerals with a pin

On cutting the samples from Stump south, no grey minerals showed, just chalcopyrite and bornite, the interesting part was that on cutting the first slab off a fresh surface only the minerals showed. The second slab revealed a black rim around the mineral, on the third or fourth slab, and on through the rock to about the third from the end in the centre of the slab the mineral was surrounded by a coating of bright red. this faded in a day or so. Assays shows 2 oz silver.

## COMMENTS CONTINUED

On inspecting the core from S 4 hole, the writer observed the following

pyrophyllite

at I7 ft

bornite

at 4 ft

6 ft

35 ft

pyrite

at 7 ft

8 -16 ft

46 ft

chalcopyrite

at 6 ft

7 -8 ft

I2 - I5 ft

dark soft metalic (similiar to sample looked at by Thomson

at 22 ft

26 -32 ft

38 ft

44 ft

52 ft

54 ft

57 ft

58 ft

This mineral is always in or near calcite