

ARIS SUMMARY SHEET

District Geologist, Victoria

Off Confidential: 89.11.18

ASSESSMENT REPORT 18577

MINING DIVISION: Alberni

PROPERTY: Central Zeballos  
LOCATION: LAT 50 01 00 LONG 126 48 00  
UTM 09 5542583 657611  
NTS 092L02W

CAMP: 029 Zeballos - Kyuquot Area

CLAIM(S): XX,XY,XZ  
OPERATOR(S): Canalaska Res.  
AUTHOR(S): Freeze, J.C.  
REPORT YEAR: 1989, 24 Pages  
COMMODITIES  
SEARCHED FOR: Gold, Silver  
KEYWORDS: Jurassic, Bonanza Group, Volcanics, Tertiary, Quartz diorite  
Quartz veins, Dykes

WORK  
DONE: Prospecting, Geochemical  
PROS 25.0 ha  
Map(s) - 1; Scale(s) - 1:5000  
ROCK 1 sample(s) ;ME

RELATED  
REPORTS: 07012, 12077, 18770

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VANCOUVER, B.C.			

GEOLOGICAL ASSESSMENT REPORT  
 on the  
 BRITANNIA M GROUP  
 of the  
 CENTRAL ZEBALLOS PROPERTY  
 ALBERNI MINING DIVISION  
 WEST COAST VANCOUVER ISLAND, BRITISH COLUMBIA  
 NTS 92L/2W  
 50° 02.5'N 126° 46.5'W

FOR

FILMED

NEW IMPACT RESOURCES INC.  
 1840 - 200 GRANVILLE STREET  
 VANCOUVER, BRITISH COLUMBIA

AND

CANALASKA RESOURCES LTD.  
 SUITE 920 - 625 HOWE STREET  
 VANCOUVER, B.C.  
 V6C 2T6

PREPARED BY

BEATY GEOLOGICAL LTD.  
 SUITE 900 - 625 HOWE STREET  
 VANCOUVER, BRITISH COLUMBIA  
 V6C 2T6

Author: J.C. FREEZE, F.G.A.C.

MARCH, 1989

GEOLOGICAL BRANCH  
 ASSESSMENT REPORT

18,577

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## 1. INTRODUCTION

The geology and economic potential of a precious metal prospect covered by the Central Zeballos property held by New Impact Resources Inc. and under option to CanAlaska Resources Ltd. is discussed in this report. The data presented was obtained during a recent exploration programme carried out by Beaty Geological Ltd. In addition to recent findings, results of exploration, development and mining programmes carried out since the discovery of the prospect in the late 1930's, have been summarized. Additional exploration programmes are recommended to test the economic potential of these claims.

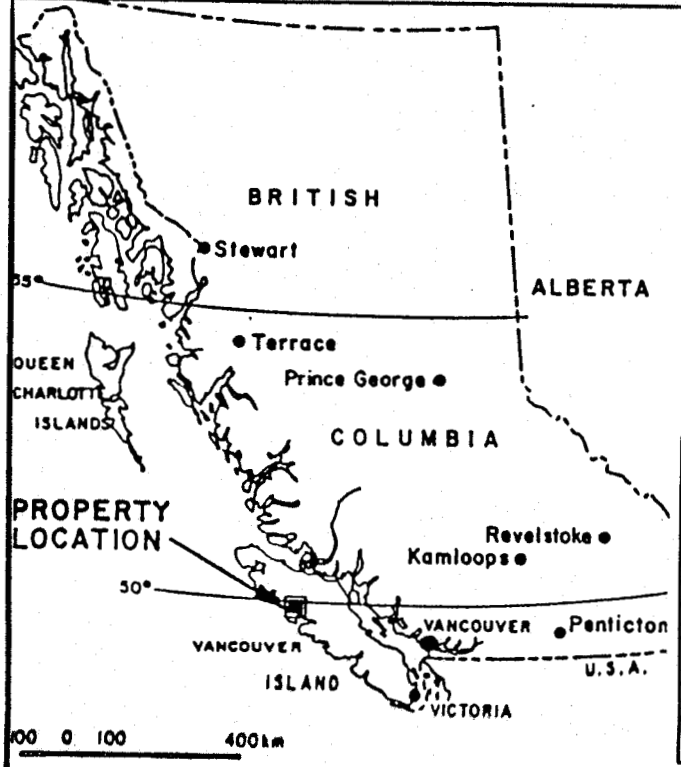
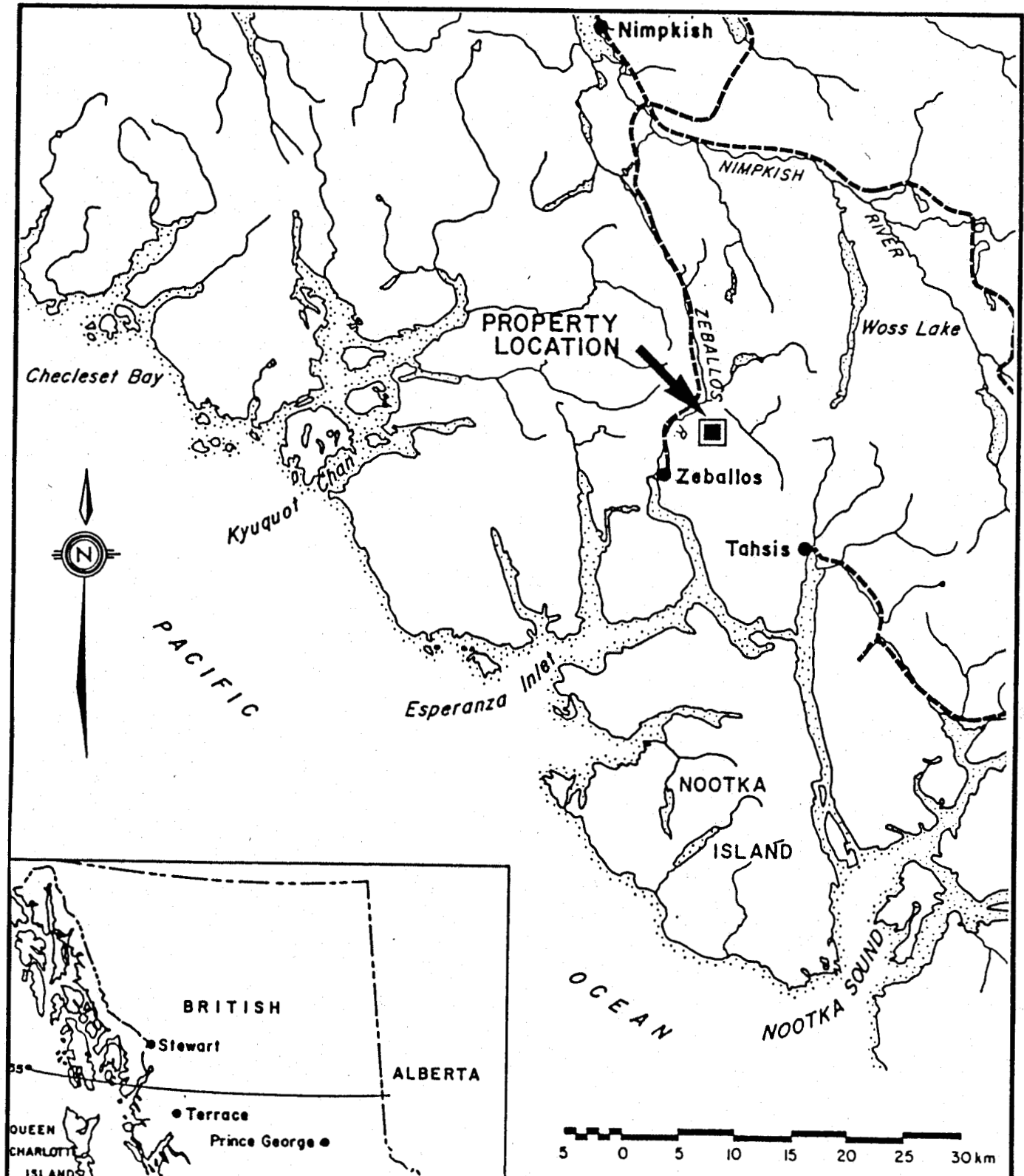
### 1.1 Location and Access

The Central Zeballos property is situated on the west coast of Vancouver Island, British Columbia and is located on N.T.S. Map Sheet 92L/2W at  $50^{\circ}02.5'N$  and  $126^{\circ}46.5'W$ . Declination for the area is  $23^{\circ}$ . The property is 15 road kilometres north of the village of Zeballos, 90 road kilometres south of the town of Port McNeill and 200 road kilometres northwest of the city of Campbell River. The claim blocks cover a total area of approximately 6 square kilometres (150 hectares or 371 acres) see Figure 1.2.

The Central Zeballos property is accessed via a network of logging roads. The main line heads north from Zeballos and connects with the Island highway at 42 kilometres. Logging roads following both Goldvalley Creek and Spud Creek valleys provide access to the Scafe, Rimy, Britannia B and M claims.

Sea port access is currently available at Campbell River. Air access by helicopter is available either from bases in Goldriver or Campbell River.

Groceries, fuel, lumber and general supplies are available to a limited extent in Zeballos. The remainder may be trucked from Campbell River, Port Hardy or Port McNeill.



<b>CANALASKA RESOURCES LTD.</b>	
LOCATION MAP	
<b>CENTRAL ZEBALLOS PROPERTY</b>	
BEATY GEOLOGICAL LTD.	
SCALE As shown	DATE Nov., 1988
DRAWN JF, GR	DRAWING No. FIGURE 1.1

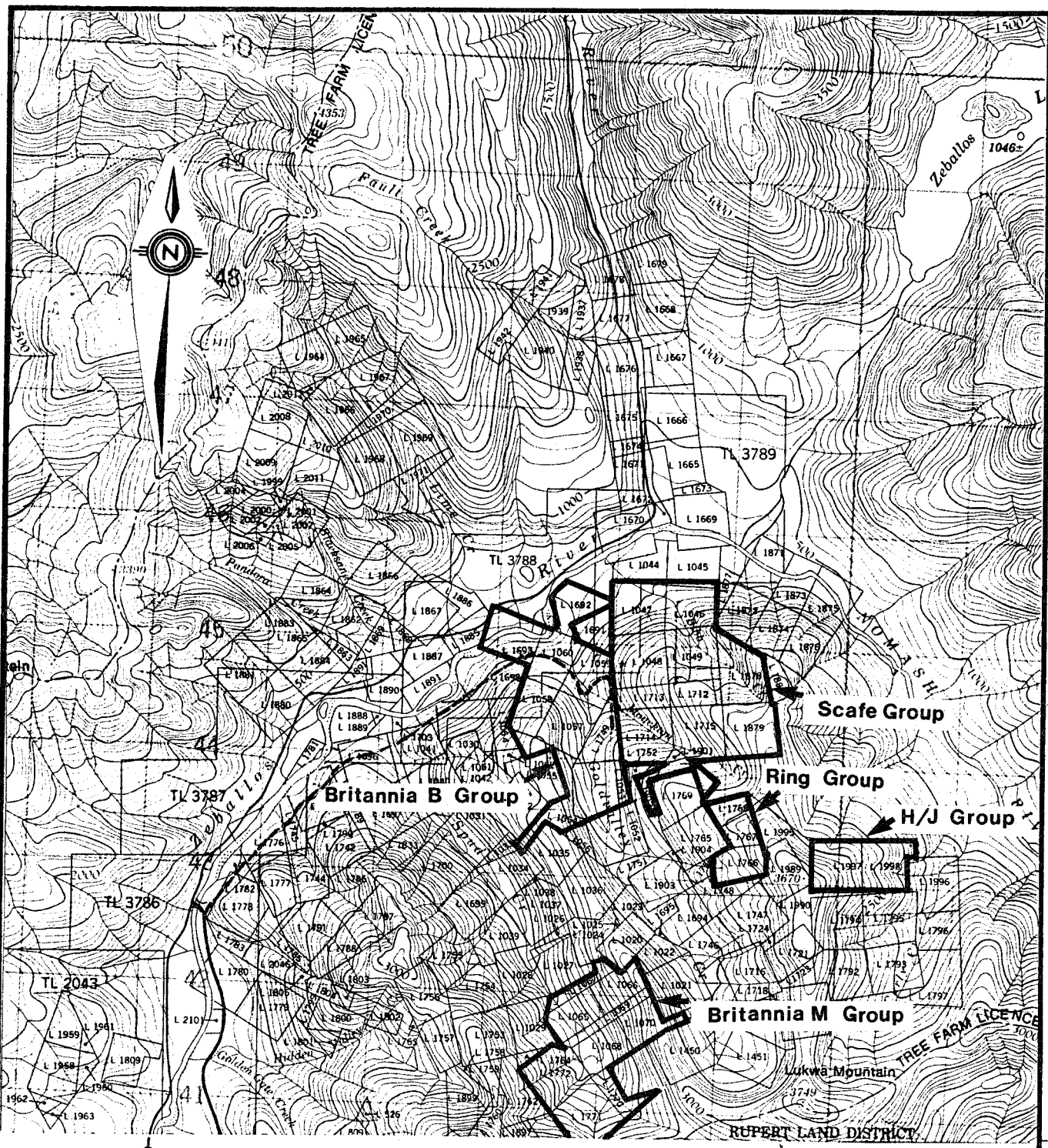
## 1.2 Property

The Central Zeballos property is held by 22 crown grants and 11 reverted crown grants in the Alberni mining division as listed below. It is understood that the property is held by New Impact Resources Inc. and is under option to CanAlaska Resources Ltd., however, the legal terms are not covered by the scope of this report.

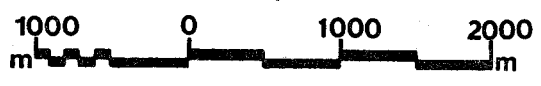
Table 1.2  
Claim Status

Group	Name	Expiry Date	Lot No.	Rec No.	Status
Scafe	AE		L1046		C.G.
	AD		L1047		C.G.
	Extension No. 5	12/13/91	L1048	1577	R.C.G.
	Extension No. 6		L1049		C.G.
	Extension No.10		L1712		C.G.
	Extension No. 9	12/13/91	L1713	1576	R.C.G.
	Extension No. 7	12/13/91	L1714	1575	R.C.G.
	Extension No. 8		L1715		C.G.
	Mon Fraction		L1878		C.G.
	Bas Fraction		L1879		C.G.
Britannia B	Rimy 6 & 1	12/13/91	L1901/02	1574	R.C.G.
	B-1		L1053		C.G.
	B-2 Fraction		L1054 <sup>1</sup>		C.G.
	B-3		L1057		C.G.
	B-5		L1058		C.G.
	B-4		L1059		C.G.
	B-6		L1060		C.G.
	T		L1692		C.G.
	B-7		L1693		C.G.
	Wet Fraction		L1749		C.G.
Britannia M	M-1		L1065		C.G.
	M-2		L1066		C.G.
	M-3 Fraction		L1067		C.G.
	M-4		L1068		C.G.
	M-6 Fraction		L1069		C.G.
	M-5		L1070		C.G.
	XY	12/13/91	L1770	1572	R.C.G.
	XX	12/13/91	L1771	1571	R.C.G.
	XZ	12/13/91	L1772	1573	R.C.G.
	Rimy	Rimy 8	02/13/90	L1766	2471
Rimy 5 & 7		02/13/90	L1767/68	2470	R.C.G.
H/J	H and J No.7	02/13/90	L1997	2472	R.C.G.
	H and J No.8	02/13/90	L1998	2473	R.C.G.

<sup>1</sup> An undivided interest only as to lot 1054 except that part lying southwest of the production northwesterly of the northeasterly boundary of Lot 1035, Rupert District (Surface Title Number 128049-1)



Zeballos  
2km



<b>CANALASKA RESOURCES LTD.</b>	
CLAIM MAP CENTRAL ZEBALLOS PROPERTY	
BEATY GEOLOGICAL LTD.	
SCALE	1:50,000
DATE	NOV, 1988
DRAWN	JF, GR
DRAWING No.	FIGURE 1.2

NTS 92 L/2W

### 1.3 Physiography, Vegetation and Climate

The claims are situated on the west coast of Vancouver Island, 25 kilometres east of the Pacific Ocean. The region has a wet climate; snow cover in winter is moderate; rain, snow, and wind storms are common all year round. Mean annual precipitation is greater than 250 cm.

The property covers a rugged, mountainous terrain with elevations ranging from 90 metres (300 feet) to 1,113 metres (3,650 feet). Some slopes are extremely steep, but most may be traversed with care.

Westerly flowing tributaries to the Zeballos River drain the property. The Zeballos River flows southwesterly into Esperanza Inlet which enters the Pacific Ocean 23 kilometres west of the property.

Natural vegetation cover is moderate to dense and typical of west coast rain forest. Cedar, hemlock and balsam trees with thick to moderate underbrush characterize the vegetation. Alder trees grow in thick patches where logging has taken place.

Water and timber resources for exploration and development purposes are plentiful. Several tributaries to the main creeks carry sufficient drilling water during most of the year.



#### 1.4 History

##### Zeballos Camp

The discovery of placer gold in the Zeballos River in 1907 encouraged prospecting in the surrounding area and led to the discovery of gold bearing quartz veins. The first "gold vein" was staked in 1924 on the Tagore property, 1 1/2 miles up from the mouth of the Zeballos River, and by 1929 forty claims had been staked in the Zeballos River valley. Mining began in the winter of 1934-1935 following the discovery of the rich gold - quartz veins on the White Star, Spud Valley and Privateer properties on Spud Creek. The first shipments were made from these properties in 1937 and 1938. By the end of 1948 a total of 287,811 ounces of gold had been produced from a total of 651,000 ton mined of which 370,750 ton were milled. Average gold grade was 0.44 ounces per ton mined and 0.75 ounces per ton milled.

In 1962 Zeballos Iron Mines Ltd. produced 3700 tons of iron per day from a magnetite skarn in the Karmutsen volcanics north of the Zeballos River. The ore was shipped from a deep sea port in Zeballos. Production ceased and the mine was sold in 1972 due to world iron markets.

##### Britannia Properties

The Britannia B and M groups of claims were originally staked and explored by the Britannia Mining and Smelting Company. Several gold bearing veins were discovered and investigated by short adits but were not developed for production.

##### Recent History

In 1981, Impact Resources Inc. (now New Impact Resources Inc.) acquired the Central Zeballos property and since that time has carried out exploration programmes comprising back sampling of the old workings, rehabilitation of a portion of the old workings, diamond drilling of a dolomitic limestone body in the No. 9 level crosscut, reconnaissance prospecting and sampling and a soil geochemical survey. Results were encouraging and warranted additional exploration and rehabilitation of the old workings.

Both the Spud Valley and Privateer properties have received a renewed interest since 1984 and are currently being developed by McAdam Resources Inc. and New Privateer Mines Ltd, respectively. McAdam Resources reports reserves of 429,533 tons grading 0.25 ounces per ton over a 4 foot mining width.

In the Fall of 1988 CanAlaska Resources Ltd. optioned the Central Zeballos property from New Impact Resources Inc. and carried out an exploration programme comprising the following: rehabilitation of the No. 9 level crosscut; back sampling and geological mapping of the accessible levels of the mine; surface prospecting and geological mapping, geophysical surveys; geochemical sampling and a compilation of all data previously collected. Results of these surveys are discussed in the following sections.

#### 1.5 1988 Exploration Programme

In 1988 an exploration programme was undertaken by geologists, and field technicians employed by Beaty Geological Ltd. under the direction of J.C. Freeze. Approximately \$5,000.00 was spent on exploration which was carried out between September 1 and October 7.

Geological mapping and prospecting was carried out over two areas on the Britannia M group of claims at a scale of 1:5,000 (see Figure 2.3). The areas covered are shown on Figure 2.3, the first is at the base of the northwesterly trending cliffs which define the eastern side of Spud Valley, the second area is the cirque at the head of Spud Valley. The total area covered by this work is approximately 5.8 hectares.

Due to the character of the high grade but narrow veins and the dense vegetation in this camp successful exploration must be carried out in a cautious and detailed manner. For this reason extensive areas are not covered quickly. Only one vein worth sampling was discovered therfor only the one rock sample was collected and analysed for precious metals.

## GEOLOGY

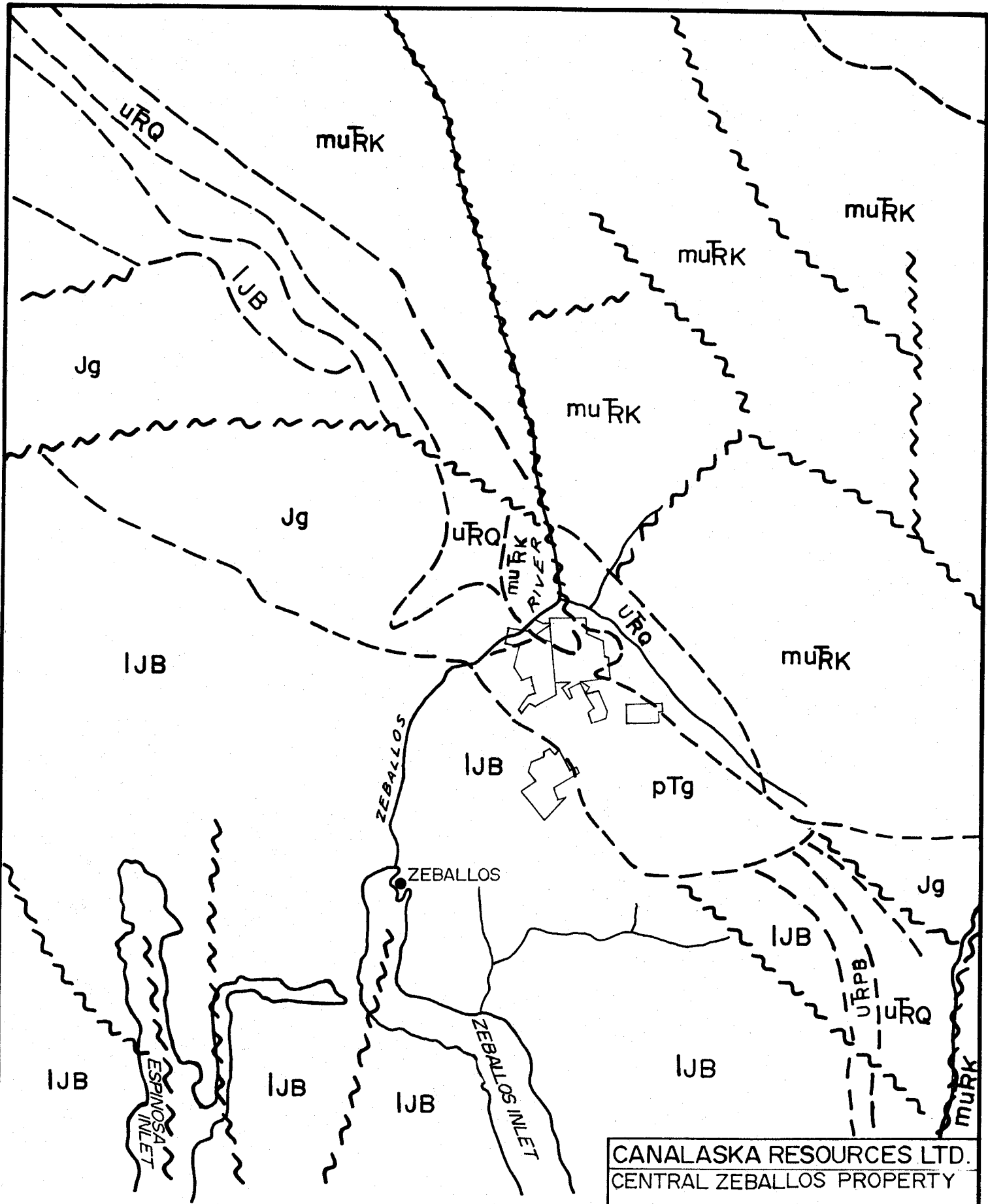
2.1 Regional Geology

The Zeballos River area was mapped initially by H.C. Gunning of the Geological Survey of Canada ("G.S.C.") in 1932 as part of a regional map covering an area of 142 square miles. Gunning's report and map are part of the G.S.C. Summary Report 1932. The most recent geological work in the area was compiled in 1977 by J.E. Muller as G.S.C. Open File 463 (see Figure 2.1).

The oldest rocks in the area are Triassic volcanics and sediments correlated with the Vancouver Group in the Nimpkish Lake region. In the Zeballos area the group is represented by two formations. The lower is the Karmutsen Formation comprising mafic to intermediate volcanics and volcanoclastics; overlying the Karmutsen volcanics is the Quatsino limestone. These rocks lie in fault contact along the northern branch of the Zeballos River north of the property. Early Jurassic Bonanza Group volcanics overlie the Vancouver Group on the southwest portion of the Britannia claims.

The volcanic and sedimentary rocks were intruded and in part replaced by a Jurassic Island Intrusion of granodioritic to quartz dioritic composition which outcrops in a northwesterly trending body predominantly north of the Zeballos River. A younger intrusive named the Zeballos (quartz diorite) Batholith, which has been dated at 38 Ma (Tertiary - Oligocene/Eocene) intrudes all older rocks and outcrops in a southeasterly trending body south of the Zeballos River.

The gold bearing quartz veins are believed to have been emplaced during the late stages of the Tertiary quartz diorite intrusion along with mafic and felsic dykes which are seen both to crosscut and be crosscut by the veins.



CANALASKA RESOURCES LTD.	
CENTRAL ZEBALLOS PROPERTY	
REGIONAL GEOLOGY	
BEATY GEOLOGICAL LTD.	
SCALE 1:125,000	DATE SEPT., 1988
DRAWN JF,GR	FIGURE 2.1

SEE OPPOSING PAGE FOR LEGEND  
 Taken from G.S.C. Open File 463  
 by J.E. Muller, 1977

# TABLE OF FORMATIONS OF VANCOUVER ISLAND

## SEQUENTIAL LAYERED ROCKS

## CRYSTALLINE ROCKS, COMPLEXES OF POORLY DEFINED AGE

	PERIOD	STAGE	GROUP	FORMATION	SYM-BOL	AVERAGE THICKNESS IN m. ±	LITHOLOGY	NAME	SYM-BOL	ISOTOPIC AGE		LITHOLOGY			
										Pb/U	K/Ar				
<b>CENOZOIC</b>		EOCENE to OLIGOCENE		late Tert. volc's of Port McNeill	Tvs										
				SOOKE BAY	mpTsb		conglomerate, sandstone, shale								
				CARMANAH	eoTc	1,200	sandstone, siltstone, conglomerate								
				ESCALANTE	eTE	300	conglomerate, sandstone								
		early EOCENE			METCHOSIN	eTM	3,000	basaltic lava, pillow lava, breccia, tuff	SOOKE INTRUSIONS - basic METCHOSIN SCHIST, GNEISS LEECH RIVER FM.	silicic Tg Tgb Tmn JKL	32-59 31-49 47 38-41	quartz diorite, trondhjemite, agmatite, porphyry gabbro, anorthosite, agmatite chlorite schist, gneissic amphibolite phyllite, mica schist, greywacke, argillite, chert			
					MAESTRICHTIAN	uKGA	350	sandstone, conglomerate							
		<b>MESOZOIC</b>		LATE	CAMPAIAN	SPRAY	uKS	200	shale, siltstone						
						GEOFFREY	uKG	150	conglomerate, sandstone						
						NORTHUMBERLAND	uKN	250	siltstone, shale, sandstone						
						DE COURCY	uKDC	350	conglomerate, sandstone						
CEDAR DISTRICT	uKCD					300	shale, siltstone, sandstone								
EXTENSION - PROTECTION	uKEP					300	conglomerate, sandstone, shale, coal								
HASLAM	uKH					200	shale, siltstone, sandstone								
COMOX	uKC					350	sandstone, conglomerate, shale, coal								
CENOMANIAN	ALBIAN					QUEEN	conglomerate unit	IKQc	900	conglomerate, greywacke					
							APTIAN?	CHARLOTTE	siltstone shale unit	IKQp	50	siltstone, shale			
<b>PALEOZOIC</b>	DEV. or EARLIER?			VALANGINIAN			LONGARM	IKL	250	greywacke, conglomerate, siltstone					
				TITHONIAN		Upper Jurassic sediment unit	uJs	500	siltstone, argillite, conglomerate	PACIFIC RIM COMPLEX	JKP		greywacke, argillite, chert, basic volcanics, limestone		
				TOARCIAN?	BONANZA	volcanics	IJB	1,500	basaltic to rhyolitic lava, tuff, breccia, minor argillite, greywacke	ISLAND INTRUSIONS WESTCOAST SILICIC COMPLEX basic	Jg PMns PMnb	141-181 163-192	granodiorite, quartz diorite, granite, quartz monzonite quartz-feldspar gneiss metaquartzite, marble hornblende-plagioclase gneiss, quartz diorite, agmatite, amphibolite		
				PLIENSCHACHIAN		HARBLEDOWN	IJH		calcareous siltstone, greywacke, silty-limestone, minor conglomerate, breccia						
				TRIASSIC	MID LATE	LADINIAN	VANCOUVER	NORIAN	uRPB	450	limestone				
								KARNIAN	uRO	400	limestone	diabase sills limestone metavolcanic rocks	PRb Ls PMmv		metavolcanic rocks, minor meta-sediments, limestone, marble
								KARMUTSEN	muRK	4,500	basaltic lava, pillow lava, breccia, tuff				
				TRIASSIC	EARLY	JURASSIC	SICKER	sediment-sill unit	rdS	750	metasiltstone, diabase, limestone				
								BUTLE LAKE	CPBL	300	limestone, chert				
								sediments	CPSS	600	metagreywacke, argillite, schist, marble				
TRIASSIC	EARLY	JURASSIC	SICKER	volcanics	CPsv	2,000	basaltic to rhyolitic metavolcanic flows, tuff, agglomerate	TYEE INTRUSIONS COLQUITZ GNEISS WARK DIORITE GNEISS	Pg Pns Pnb	>390 >390 163-182	meta-granodiorite, metaquartz diorite, metaquartz porphyry quartz feldspar gneiss hornblende-plagioclase gneiss quartz diorite, amphibolite				

## 2.2 Regional Mineralization

The mineral deposits of the Zeballos Camp have been investigated and described by geologists of the Minister of Mines for B.C. and the Geological Survey of Canada since 1908. Descriptions given by J.S. Stevenson (1935 to 1948) and by Bancroft (1940) have been found to be accurate and informative. The Zeballos camp is well known for its' rich gold bearing quartz veins which produced a total of 287,811 ounces of gold between 1934 and 1948.

### Vein Structure

These veins comprise quartz and sulphides in well defined fault fissures which are rarely more than a foot in width but maintain fairly uniform strikes and dips for considerable distances. The gold bearing vein material occurs as lenticular bodies, often referred to as ore shoots, within the consistent structures making reserves difficult to block out by diamond drilling.

Some of the gold bearing veins occur in sheeted zones comprised of joints spaced 2 to 8 inches apart over widths of up to 4 feet. Although narrow gouge films and quartz sulphide stringers line these joints the gold grades over the 4 foot width is often less than in the narrower but solid veins. These sheeted zones often grade into narrow shears containing high grade lenticular quartz sulphide veins.

### Vein Composition

The vein material comprises sulphides and gold occurring in a gangue of quartz and minor carbonate. Gold grades appear to have an inverse relationship the amount of carbonate in the gangue. Films of gouge usually line the walls to the quartz sulphide veins. Banding occurs both between the quartz and sulphides and between the sulphides themselves indicating a sequential deposition. The quartz occurs in a comb texture made up of pyramid shaped crystals with sulphides often occurring between crystals. Sulphides comprising pyrite, sphalerite, arsenopyrite, chalcopyrite, galena, pyrrhotite and minor marcasite make up from 10 to 50%, averaging 25%, of the vein material.

Crushed country rock occurring in vein shears with gold bearing stringers and disseminated pyrite are usually low in gold content. Brecciated vein matter characterizes many parts of the veins and includes fragments of wall rock up to 10 inches across. Some of the wall rock fragments have been totally replaced by silicification. Where this has not occurred the wall rock tends to dilute the mineralization.

Visible gold often occurs in the veins but commercial ore may not contain any gold visible to the naked eye. The Privateer and the Goldfield veins are the best known for gold crystals and hackly masses of visible gold. Gold distribution in the quartz sulphide ore is directly proportional to the sphalerite and galena content. This evidence suggests that these minerals were precipitated from the same solutions although banding evidence indicates that the gold was deposited slightly later than the base metals. As a rule quartz veins containing pyrite and arsenopyrite without sphalerite and galena do not contain very much gold. The entire depositional sequence is believed to have started with pyrrhotite and some sphalerite, followed by arsenopyrite, pyrite, sphalerite, chalcopyrite, galena and gold. Mineral associations with gold are varied: it replaces arsenopyrite, pyrite and galena and occurs along the contact of quartz and the various sulphides, galena, sphalerite and pyrite. It also occurs entirely surrounded by quartz or moulded around the ends of prismatic quartz crystals.

The deposition of quartz appears to have started soon after the pyrrhotite and to have been repeated several times before the final stages of mineralization. The earliest quartz is dark grey and contains fine grained arsenopyrite and pyrite. This grey quartz forms the walls to most gold bearing veins as well as most of the gangue in narrow veins. A second stage quartz is drusy and white while a third and last stage quartz is white and barren of both sulphides and gold.

#### Wallrock Alteration

Alteration along the veins occurs in all rock types but is more intense along those crosscutting granodiorite and quartz diorite. Complete sericitization of the plagioclase crystals and total destruction of biotite and hornblende crystals has occurred in these intrusive rocks. The lime silicate rocks show little alteration and the volcanics show an altered zone up to 6 inches from the vein shears.

In addition to the gold bearing quartz veins the Zeballos camp hosts several skarn deposits. The largest discovered to date is a magnetite skarn in the Karmutsen volcanics north of the Zeballos River. In 1962 Zeballos Iron Mines Ltd. produced 3700 tons of iron per day from this skarn. Production ceased in 1972 due to world iron markets. Other skarn deposits host magnetite, copper and gold. Impressive gold results have recently been announced from the Footwall property on the Artlish River.

### 2.3 Property Geology

Jurassic Bonanza Group volcanics underlie the western portion of the Britannia M claim group. These volcanics comprise basaltic to rhyolitic lava, tuff, breccia, minor argillite and greywacke.

The Tertiary aged quartz diorite, Zeballos Batholith, underlies the largest portion of the Central Zeballos property. This body intrudes the Triassic Karmutsen volcanics and the Quatsino limestone in the north and southeasterly portions of the Scafe group of claims; the Bonanza volcanics in the western portion of the Britannia M claim group; and the Jurassic granodiorite body in the northwestern part of the Britannia B claim group. Several altered mafic xenoliths occurring in the batholiths are believed to be remnants of the volcanics and older intrusives which have been granitized by the intruding body.

A third intrusive event is evidenced by felsic and mafic dykes which occur along the same structures as the gold bearing veins. They are believed to have been injected at the same time as the mineralization was deposited. The dykes themselves are highly altered and mineralized in places.



## 2.4 Property Mineralization and Alteration

### Britannia M Claim Group

Several narrow gold bearing quartz sulphide veins have been discovered over the years on the Britannia M claims. In the 1930's, three gold bearing veins were discovered and drifted on for short distances. The following are results obtained from a report written for the Britannia Mining and Smelting Company Ltd in 1937.

Vein	Adit	Length feet	Elevation Claim	Assay oz/ton	Width inches
Free Gold	Upper	56	M	0.61	4.7
"	Lower	38	M	1.51	2.5
Goat		100	M	0.31	9
Long		82	M	0.19	4

One of these veins and adits was discovered and sampled during the recent programme. Although these veins are narrow where exposed on the Britannia M claims they are very continuous and extend onto claims held by McAdam Resources Inc. in Goldvalley. These veins parallel the Goldfield and other veins currently being developed by McAdam Resources Inc. on the Spud Valley property which bounds the northern edge of the Britannia M claims.

The character of the gold bearing veins is the same as that described under regional mineralization.

### 3. GEOCHEMISTRY

#### 3.1 Rock Chip Sampling

##### 3.1.1 Sampling, Sample Preparation and Analytical Procedures

Rock chip sampling was carried out by J.C. Freeze during the recent field programme. A sample was taken across the width of the one vein discovered. This vein comprised 2 centimetres of clay gouge.

The sample was placed in a numbered plastic bag and sent to Chemex Labs Ltd. in North Vancouver for analysis. In the laboratory, the sample was dried and crushed in two stages in jaw and cone crushers. A sub-sample of approximately 250 gm was then ring pulverized to minus 140 mesh. A 40 gram sample of the pulp was then analyzed for gold by fire assay preconcentration and gravimetric finish. The sample was also analysed for 32 other elements by ICP (Inductively Coupled Plasma).

##### 3.1.2 Presentation and Discussion of Results

The sample (No.43220) collected and analysed contains 0.024 ounces per ton gold, 0.22 ounces per ton silver, 695 ppm arsenic, 280 ppm barium, 98 ppm lead and 245 ppm zinc. These values indicate that the structure sampled is mineralized and should be investigated further. Like many structures in the Zeballos camp this vein may widen out along strike. The sample location is shown on Figure 2.3. Analytical results are shown in Appendix I.

## CONCLUSIONS

The Britannia M claims host narrow gold bearing veins which parallel the veins currently being developed by McAdam Resources Inc. on the claims bounding the Britannia M claims to the north (in Spud Creek valley). These veins have the potential to develop into better widths along their strike and dip extent.

The recently completed exploration programme will allow an update and likely an increase of ore reserve estimates in the old workings. Diamond drilling is warranted to test the strike and dip extent of the main vein and the narrower parallel veins. Diamond drilling is also warranted to test the strike and dip extent to the veins on the Britannia properties.

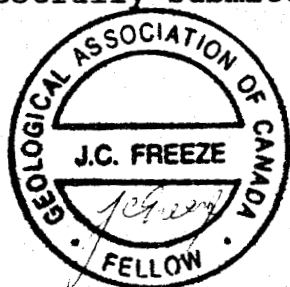
## RECOMMENDATIONS

Based on the conclusions stated, the following exploration programme is recommended.

### Surface Drilling Britannia M Claims

- 1) The gold bearing veins on this property should be tested by diamond drilling for an increase in width along their strike and dip extent.

Respectfully Submitted,



Joanne C. Freeze, B.Sc., F.G.A.C.

Cost Statement

## To professional services rendered:

R. Beaty	3.0 day @ \$275.00	\$ 825.00	
J. Freeze	28.0 days @ \$250.00	7,000.00	
A. Rybaltowski	11.25 days @ \$275.00	3,093.75	
G. Dion	7.05 days @ \$155.00	1,092.75	
D. Culbert	8.50 days @ \$275.00	2,337.50	
O. Korolew	5.0 days @ \$155.00	775.00	
D. Rondeau	19.0 days @ \$155.00	2,790.00	
R. Geszler	6.0 days @ \$155.00	930.00	
K. Heberlein	6.0 days @ \$175.00	1,050.00	
25% Contract expenses (UIC, CPP, WCB)	<u>4,973.50</u>	\$ 24,867.50	

## To disbursements as per attached:

TNT Mine Contracting	\$ 53,000.00		
Geochemical analysis (Chemex)		4,187.50	
Magnetometer rental (Ashworth)		1,200.00	
Computer rental (BGL)		600.00	
Truck rental (BGL)		300.00	
Accommodation (Zeballos Hotel)		304.40	
	(Little Prospectors)	702.00	
Supplies and meals (Zeballos service)		241.80	
	(Zeballos cafe)	239.85	
	(ICA)	115.50	

## Expense accounts:

(R. Geszler)	\$ 450.98		
(D. Culbert)	541.73		
(A. Rybaltowski)	249.79		
(J. Freeze)	1,216.61		
(J. Freeze, est)	<u>1,000.00</u>	3,459.11	
Reproductions (Dominion)		265.92	
Equipment (Deakin)		290.14	
	(Neville Crosby)	934.21	
Drafting		50.00	
Secretarial		300.00	
Accounting		80.00	
Photocopies and postage		<u>34.60</u>	66,304.53

To 10% overhead charge

9,117.20**Total costs****\$ 100,289.23**

Scafe Group	75%	\$ 75,216.92
Britannia B Group	20%	\$ 20,057.85
Britannia M Group	5%	\$ 5,014.46

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**STATEMENT OF QUALIFICATIONS**

**NAME:** Freeze, J.C., (nee Ridley), F.G.A.C.

**PROFESSION:** Consulting Geologist

**EDUCATION:** 1981 B. Sc. Geology -  
University of British Columbia

1978 B.A. Geography -  
University of Western Ontario

**PROFESSIONAL ASSOCIATIONS:** Fellow of the Geological Association of Canada

**EXPERIENCE:** 1987 - Present: Consulting Geologist with Stillwater Enterprises Ltd. Directing exploration programs and reviewing properties in Canada and U.S.A.

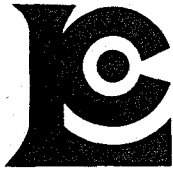
1985 - 1986: Project Coordinator - Geologist with White Geophysical Inc. Coordinating mineral exploration projects involving geology, geochemistry, geophysics and diamond drilling in B.C. and Yukon.

1981 - 1985: Project Geologist with Mark Management Ltd. Hughes-Lang Group. Responsible for precious metals exploration programs involving geology, geochemistry, geophysics and diamond drilling in Western Canada.

1979 - 1981: Summer and part-time Geologist involved with coal exploration in N.E. B.C. with Utah Mines Ltd.

APPENDIX I

Rock Geochemistry Results



# Chemex Labs Ltd.

Analytical Chemists \* Geochemists \* Registered Assayers

212 BROOKSBANK AVE., NORTH VANCOUVER,  
BRITISH COLUMBIA, CANADA V7J-2C1

PHONE (604) 984-0221

To: BEATY GEOLOGICAL LIMITED

900 - 625 HOWE ST.  
VANCOUVER, BC  
V6C 2T6

Project: 218

Comments: CC: J.C. FREEZE

Page No.: 1-A  
Tot. Pages: 1  
Date: 11-OCT-88  
Invoice #: I-8824692  
P.O. #: NONE

## CERTIFICATE OF ANALYSIS A8824692

SAMPLE DESCRIPTION	PREP CODE		Au FA	Ag FA	Al	Ag	As	Ba	Be	Bi	Ca	Cd	Co	Cr	Cu	Fe	Ga	Hg	K	La	Mg
			oz/T	oz/T	%	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	%	ppm	ppm	%	ppm	%
43210	207	238	0.004	< 0.01	6.36	< 0.2	50	10	< 0.5	2	10.05	2.5	15	22	218	3.10	< 10	< 1	0.47	< 10	0.58
43211	207	238	0.320	0.47	0.52	13.8	>10000	10	< 0.5	< 2	0.22	9.5	< 1	9	397	3.20	< 10	< 1	0.25	< 10	0.03
43212	207	238	0.890	0.49	0.38	18.0	>10000	10	< 0.5	< 2	0.06	7.0	7	9	205	13.15	< 10	< 1	0.17	< 10	0.02
43213	207	238	0.004	< 0.01	0.85	0.6	4370	40	< 0.5	< 2	0.26	0.5	< 1	4	44	0.83	< 10	< 1	0.58	10	0.06
43214	207	238	0.674	0.33	0.18	12.4	>10000	10	0.5	< 2	0.07	5.0	< 1	13	232	5.62	< 10	< 1	0.05	< 10	0.01
43215	207	238	0.430	0.42	0.62	10.2	>10000	20	< 0.5	< 2	0.42	3.5	< 1	8	41	3.41	< 10	< 1	0.25	10	0.11
43216	207	238	0.004	0.03	2.12	0.8	1430	410	< 0.5	< 2	0.48	2.5	7	19	153	2.31	< 10	< 1	0.26	10	0.79
43217	207	238	0.006	0.05	2.40	2.0	735	90	< 0.5	14	0.48	0.5	7	24	962	4.77	< 10	< 1	0.32	10	0.99
43218	207	238	0.004	0.08	1.78	1.2	240	120	< 0.5	< 2	0.40	< 0.5	10	16	806	3.42	< 10	1	0.49	10	0.75
43219	207	238	0.004	0.01	1.59	3.2	170	220	< 0.5	6	0.28	0.5	31	24	2650	6.69	< 10	< 1	0.72	10	1.14
43220	207	238	0.024	0.22	2.81	1.4	695	280	< 0.5	< 2	1.08	1.5	18	15	67	2.12	< 10	1	0.37	20	0.35
43221	207	238	0.012	0.23	0.61	0.4	110	50	< 0.5	< 2	0.12	< 0.5	< 1	14	127	1.82	< 10	< 1	0.26	< 10	0.29
43222	207	238	0.008	0.24	0.95	0.2	55	110	< 0.5	< 2	0.10	< 0.5	< 1	8	46	1.69	< 10	< 1	0.24	10	0.30
43223	207	238	< 0.002	0.03	1.27	0.4	55	40	< 0.5	< 2	0.54	< 0.5	6	7	67	2.42	< 10	< 1	0.27	10	0.44

ALL ASSAY DETERMINATIONS ARE PERFORMED OR SUPERVISED BY B.C. CERTIFIED ASSAYERS

CERTIFICATION :

*B. Coughlin*





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Analytical Chemists \* Geochemists \* Registered Assayers

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## CERTIFICATE OF ANALYSIS A8824692

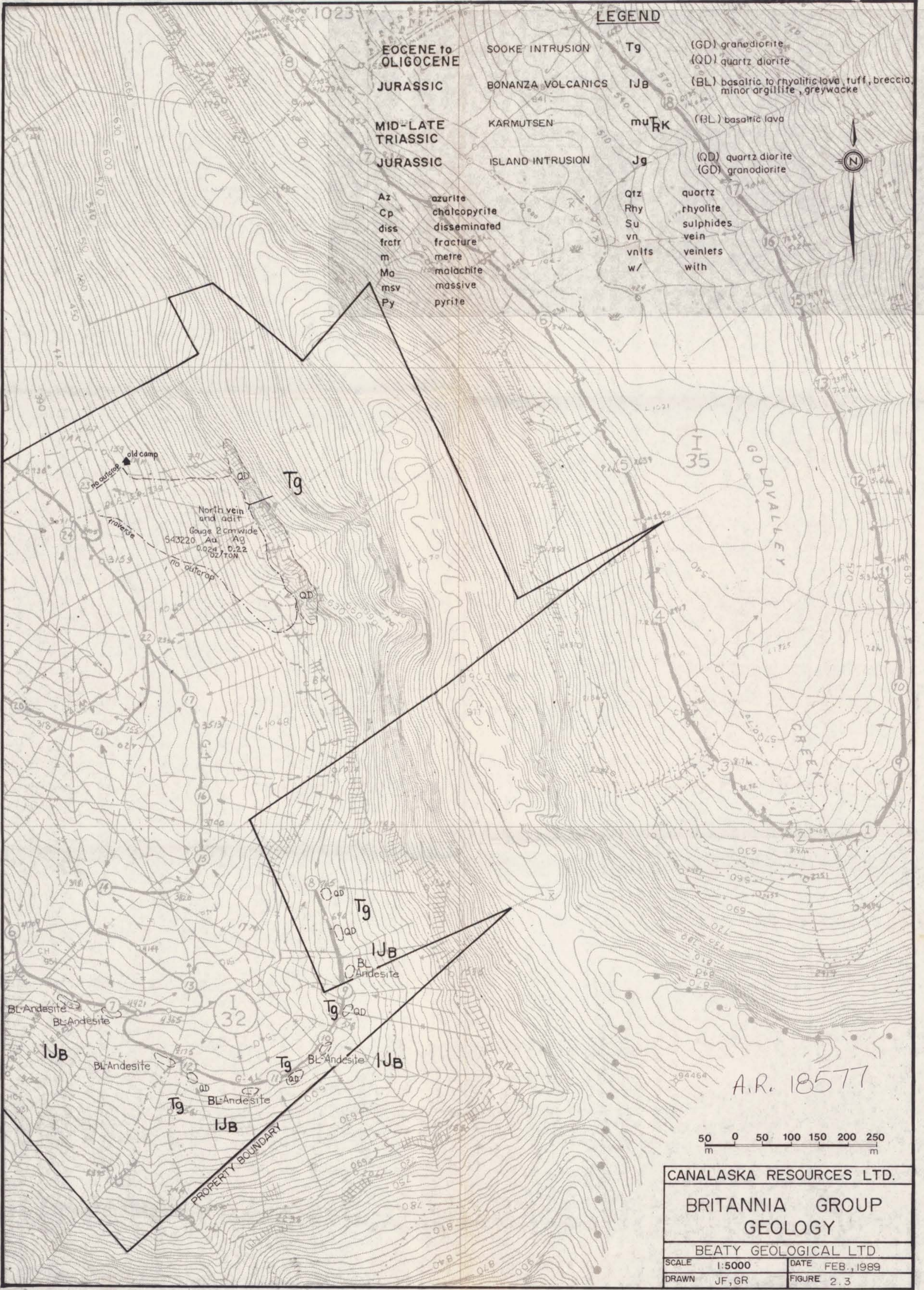
SAMPLE DESCRIPTION	PREP CODE	Mn ppm	Mo ppm	Na %	Ni ppm	P ppm	Pb ppm	Sb ppm	Sc ppm	Sr ppm	Ti %	Tl ppm	U ppm	V ppm	W ppm	Zn ppm
43210	207 238	119	4	0.24	18	190	180	10	9	132	0.12	< 10	< 10	60	5	532
43211	207 238	35	< 1	< 0.01	5	240	606	5	< 1	4	< 0.01	< 10	< 10	2	< 5	1055
43212	207 238	36	< 1	< 0.01	5	120	324	60	1	2	< 0.01	< 10	< 10	7	5	891
43213	207 238	62	1	< 0.01	3	460	58	< 5	< 1	5	< 0.01	< 10	< 10	< 1	< 5	142
43214	207 238	48	< 1	< 0.01	4	50	1095	30	< 1	6	< 0.01	< 10	< 10	3	< 5	446
43215	207 238	179	< 1	< 0.01	4	370	2580	10	< 1	17	< 0.01	< 10	< 10	2	5	532
43216	207 238	285	6	0.03	10	290	102	< 5	3	611	0.04	< 10	< 10	18	25	570
43217	207 238	193	6	0.02	10	530	74	5	6	57	0.07	< 10	< 10	40	40	188
43218	207 238	194	2	0.11	8	430	30	< 5	4	30	0.15	< 10	< 10	31	10	102
43219	207 238	294	4	0.06	19	610	40	< 5	8	14	0.21	< 10	< 10	60	875	203
43220	207 238	608	3	0.01	17	230	98	5	3	192	0.03	< 10	< 10	29	5	245
43221	207 238	161	1	0.04	10	160	46	< 5	1	8	0.10	< 10	< 10	18	15	106
43222	207 238	168	< 1	0.06	3	460	30	< 5	< 1	6	< 0.01	< 10	< 10	3	< 5	80
43223	207 238	435	< 1	0.06	3	490	20	< 5	3	27	0.18	< 10	< 10	20	< 5	73

ALL ASSAY DETERMINATIONS ARE PERFORMED OR SUPERVISED BY BC CERTIFIED ASSAYERS

CERTIFICATION :

*B. Coughlin*





EOCENE to OLIGOCENE  
 JURASSIC  
 MID-LATE TRIASSIC  
 JURASSIC

SOOKE INTRUSION  
 BONANZA VOLCANICS  
 KARMUTSEN  
 ISLAND INTRUSION

Az azurite  
 Cp chalcopyrite  
 diss disseminated  
 frctr fracture  
 m metre  
 Ma malachite  
 msv massive  
 Py pyrite

**LEGEND**

Tg (GD) granodiorite  
 (QD) quartz diorite  
 IJB (BL) basaltic to rhyolitic lava, tuff, breccia, minor argillite, greywacke  
 mu<sub>TRK</sub> (BL) basaltic lava  
 Jg (QD) quartz diorite  
 (GD) granodiorite  
 Qtz quartz  
 Rhy rhyolite  
 Su sulphides  
 vn vein  
 vn/ls veinlets  
 w/ with



old camp  
 no outcrop  
 North vein and adit  
 Gauge 2 cm wide  
 543220 Au Ag  
 0.024 D.22  
 0.2/TON  
 no outcrop  
 traverse

A.R. 18577

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CANALASKA RESOURCES LTD.	
BRITANNIA GROUP GEOLOGY	
BEATY GEOLOGICAL LTD.	
SCALE 1:5000	DATE FEB., 1989
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