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SUPERINTENDENT OF BROKERS AND

VANCOUVER STOCK EXCHANGE (Development Company)



STATEMENT OF MATERIAL FACTS **#58**/89 EFFECTIVE DATE: October 2, 1989

TICKER TAPE RESOURCES LTD.

205 - 700 West Pender Street, Vancouver, British Columbia, V6C 1G8 Phone: (604) 681-9212 NAME OF ISSUER, ADDRESS OF HEAD OFFICE AND TELEPHONE NUMBER

100 - 200 Granville Street, Vancouver, British Columbia, V6C 1S4 ADDRESS OF REGISTERED AND RECORDS OFFICES OF ISSUER

Central Guaranty Trust Company 800 West Pender Street, Vancouver, British Columbia, V6C 2V7 NAME AND ADDRESS OF REGISTRAR & TRANSFER AGENT FOR ISSUER'S SECURITIES IN BRITISH COLUMBIA

The securities offered hereunder are speculative in nature. Information concerning the risks involved may be obtained by reference to this document; further clarification, if required, may be sought from a broker.

OFFERING : 1,500,000 UNITS

Each Unit consists of One Common Share and Two Series "A" Warrants; two such warrants will entitle the holder thereof who exercises such warrant to purchase one additional common share of the Issuer at any time up to the close of business within one year following the Offering Day at the offering price of the Units.

а. 	Price to Public (estimated)*	Commission	Estimated Net Pro- ceeds to be Received by the Issuer
Per Unit	\$0.70	\$0.0525	\$0.6475
Total	\$1,050,000	\$78,750	\$971,250

* To be calculated in accordance with the Rules of the Vancouver Stock Exchange.

ADDITIONAL OFFERING

The Agents have agreed to purchase (the "Guarantee") any of the Units offered hereby which have not been sold at the conclusion of the Offering (see "Consideration to Agents"). Any Units acquired by the Agents under the Guarantee will be distributed under the Statement of Material Facts through the facilities of the Vancouver Stock Exchange at the market price at the time of sale.

AGENTS

CANARIM INVESTMENT CORPORATION LTD. 2200 - 609 Granville Street Vancouver, British Columbia, V7Y 1H2

GEORGIA PACIFIC SECURITIES CORP. 1600 - 555 Burrard Street Vancouver, British Columbia, V7X 1S6 YORKTON CONTINENTAL SECURITIES INC. 10th Floor - 1055 Dunsmuir Street Vancouver, British Columbia, V7X 1L4

HAYWOOD SECURITIES INC. 11th Floor - 400 Burrard Street Vancouver, British Columbia, V6C 3A6

PACIFIC INTERNATIONAL SECURITIES INC.

1500 - 700 West Georgia Street Vancouver, British Columbia V7Y 1G1

Neither the Superintendent of Brokers nor the Vancouver Stock Exchange has in any way passed upon the merits of the securities offered hereunder and any representation to the contrary is an offence.

Rud Oct. 25/89 #634

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1. PLAN OF DISTRIBUTION

A. THE OFFERING

By Agreement dated for reference August 10, 1989, as amended by Amending Agreements dated August 29, 1989 and September 22, 1989 (collectively the "Agency Agreement"), TICKER TAPE RESOURCES LTD. (the "Issuer") appointed the following as its agents (the "Agents") to offer, through the facilities of the Vancouver Stock Exchange (the "Exchange"), 1,500,000 Units of the Issuer (the "Units") at a fixed price in the amounts set opposite their respective names (the "Offering"):

Agents		No. of Units
Canarim	Investment Corporation Ltd.	1,100,000
Yorkton	Continental Securities Inc.	200,000
Georgia	Pacific Securities Corp.	100,000
Haywood	Securities Inc.	50,000
Pacific	International Securities Inc.	50,000

The Offering will take place on the "Offering Day", which will be not more than one hundred and eighty (180) calendar days after the date this Statement of Material Facts is accepted for filing by the Exchange and the Superintendent of Brokers for the Province of British Columbia (the "Effective Date").

The offering price of the Units (the "Offering Price") will be determined in accordance with the rules of the Exchange, at a premium over the average trading price of the Issuer's shares as determined by the Exchange, subject to the agreement of the Issuer and the Agents. The purchasers of any Units under the Offering will be required to pay regular commission rates as specified by the by-laws and rules of the Exchange.

The Agents reserve the right to offer selling group participation in the normal course of the brokerage business to selling groups of other licenced dealers, brokers and investment dealers who may or may not be offered part of the commissions derived from the Offering.

The obligations of the Agents under the Agency Agreement may be terminated prior to the opening of the market on the Offering Day at their discretion on the basis of their assessment of the state of the financial markets and may also be terminated upon the occurrence of certain stated events.

The Issuer has agreed to notify the Agents of any further public equity financing that it may require or propose to obtain during the twelve-month period following the Effective Date and the Agents shall have the right of first refusal to provide such financing. REPORT ON THE TICKER TAPE PROPERTY, ISKUT RIVER AREA FOR TICKER TAPE RESOURCES LTD. AND CHERYL RESOURCES LTD.

(TEXT)

Kim Hudson, Geologist George Cavey, Geologist

November 30, 1988

OREQUEST



SUMMARY

During 1988, OreQuest Consultants Ltd. carried out exploration on behalf of Ticker Tape Resources Ltd. and Cheryl Resources Inc. on their claims in the Iskut River area of northwestern British Columbia. This program consisted of follow up chip sampling, mapping and diamond drilling of a gold showing (King Vein) and base metal showings (North and South Zones) discovered in 1987. A total of 990.6 metres was drilled in nine holes, of which five (452.8 metres total) tested the King Vein and four (537.8 metres total) tested the North Zone. In addition the rest of the property was prospected as weather conditions permitted, soil samples were collected along topographic contours along with stream sediment samples. Expenditures for the 1988 program were \$375,500, exclusive of management fees.

Most of the work concentrated on the North and South Zones and the King Vein. The 1987 grid was accurately established over the North Zone, South Zone and King Vein. The North Zone and King Vein were mapped in detail, resulting in the discovery of the Darwin Vein outcropping 35 to 40 metres south (below) the King Vein on the same steep southeast facing slope. Mineralized areas in the North and South Zones, the King Vein and Darwin Vein were extensively chip sampled. Prospecting of the rest of the property, which is covered to a large extent by glaciers or snow, was carried out when weather permitted helicopter access to isolated outcrops in the icefields. Four localities produced grab samples anomalous in silver, copper and/or gold, the most accessible of which occurs in a steep north-south gorge in the north wall of the Chubby Creek Basin, approximately 1.3 km southwest of the King Vein. Soil and stream sediment sampling on the property was limited to the southeastern, lowest-lying area and was carried out along topographic contours. The granodiorite hosted King Vein, featuring both massive and vuggy quartz, has (on surface) a shallow northerly dip, varies in width from 7 to 130 cm and is discontinuously exposed along 150 metres. Mineralogy includes pyrite with minor chalcopyrite, bornite, native gold and possibly stibnite and native bismuth. A weighted average of vein samples, collected at 2 to 4 metre intervals along the 150 m exposure produced a grade of 1.002 oz/ton gold over an average width of 0.30 metres. Individual samples ranged in gold grade from 0.007 oz/ton over 0.50 metres to 20.140 oz/ton over 0.20 metres. Diamond drilling of the vein (five holes from one set-up north of the outcrop) produced four gold intercepts: 3.315 oz/ton over 0.45 m, 0.531 oz/ton over 0.44 m, 0.294 oz/ton over 0.43 m and 0.408 oz/ton over 0.50 m. The vein was intercepted much earlier in the drill holes than anticipated, resulting in an apparent change in dip direction from shallow northerly to shallow southerly. Drill intercepts therefore represent apparent up-dip extensions of the vein ranging from 13 to 38 metres. Mapping indicates that a possible eastern extension of the vein is offset by faulting downhill to the southeast.

The newly discovered Darwin Vein is similar in nature to the King Vein only much narrower (3 to 13 cm) and shorter in exposed strike length (33 metres). Surface exposure indicates a shallow to moderate southeasterly dip. The vein was sampled at eight sites, producing values from 190 ppb gold over 3 cm to 0.516 oz/ton gold over 3 cm. King Vein drill holes were extended to test the Darwin Vein but the latter is difficult to identify with great certainty. Suspected vein intercepts, some including altered wallrock, are indicated in four holes with values ranging from 20 ppb gold over 1.10 m to 0.055 oz/ton gold over 1.30 m. The tenuous identification of the vein precludes any observations regarding strike and dip extension at this stage.

The North Zone, located 500 metres northeast of the King Vein, features limestone-hosted skarn mineralization consisting of finely disseminated galena, sphalerite, pyrite and trace chalcopyrite with garnet, epidote and chlorite. A 175 metre square area surrounded by snow and ice fields was gridded and mapped in detail. A 250 metre long VLF-EM conductor defined in a 1987 survey over the same grid was found to be related to a shear zone containing disseminated pyrite and arsenopyrite. Magnetic anomalies are attributed to chlorite-magnetite rich dykes. Four drill holes from two sites were completed within this area, totalling 537.8 metres. Low grade silver-lead-zinc mineralization was intersected in all holes. The highest weighted averages for each metal, from different intercepts, are: 3.13 oz/ton silver over 2.7 metres (hole TT 88-6), 1.11% lead over 3.2 metres (hole TT 88-7) and 2.44% zinc over 6.7 metres (hole TT 88-9). Intercepts in the 1987 drilling program produced similar silver-lead-zinc results, however a gold intercept of 0.213 oz/ton over 1 metre was recorded in the footwall of a hornblende porphyry dyke. The 1988 drilling did not encounter any significant gold values downdip in this dyke or in other similar dykes observed in the area.

The South Zone, situated 150 metres northeast of the King Vein but across an ice field southwest of the North Zone, is hosted by the same lithologies as the North Zone but is complicated by faulting. Limited chip and grab sampling produced low values with the exception of one grab sample from the Grant Showing, which assayed 5.9 oz/ton silver, 9.57% lead and 8.17% zinc.

The Chubby Creek gorge occurrences comprise pyritic, limonitic and hematitic north-northeasterly trending shears within variably silicified and altered intermediate to mafic volcanics and argillaceous siltstones. A rhyodacitic dyke or sill was also noted. Grab samples assayed from a few ppb to 0.28 oz/ton gold. The individual shears are small occurrences but alteration, shearing and fracturing is sufficiently widespread to warrant further investigation. A stream sediment sample from a creek draining this area produced a gold value of 660 ppb.

Other anomalous grab samples were collected from isolated outcrops scattered at high elevations throughout the glaciers. Access to these areas is severely restricted by generally inclement weather. Narrow (2 to 10 cm), closely spaced quartz-carbonate veins yielded grab samples assaying as high as 28.39 oz/ton silver and 21.5% copper and a grab sample from the associated alteration zone assayed 3.36 oz/ton silver and 2% copper. Other scattered shears and narrow quartz veins assayed as high as 0.066 oz/ton gold.

Continued evaluation of the King Vein/Darwin Vein area and of the Chubby Creek area is recommended. This work should include surface exploration for the western and eastern strike extensions of the King Vein to prepare for a five-hole, 450 metre diamond drilling program. One hole should be directed at the eastern fault-offset extension of the vein and the rest, on 200 metre centres, at the western strike extension. Survey control to date has been done with chain, compass and altimeter and it is strongly recommended that a transit survey be carried out to properly locate vein surface traces, previous drill hole collars and sampling sites as well as all new work. This is essential to the accurate definition of the vein's attitude and to the planning of additional drilling in this rugged terrain. Detailed geological mapping and sampling, grid controlled where possible, is recommended for the Chubby Creek occurrences. Technical climbing expertise will be required for some of this work. No work is recommended for the North or South Zones. Cost of the program is estimated at \$250,000, including management fees.

TABLE OF CONTENTS

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Summary

Introduction	1
Property Description	1
Location and Access	1
Claim Status	2
Physiography and Vegetation	2
Area History	3
Regional Geology	5
Exploration Results	1
Previous Work	7
North Zone	1
Geology	8
Mineralization	14
Geochemistry	16
Geophysics	18
Drilling	18
South Zone	18
Geology	24
Mineralization	26
Geochemistry	26
King Vein and Darwin Vein	27
Geology	27
Mineralization	29
Geochemistry	30
Drilling	31
Prospecting	37
Regional Property Geochemistry	38
Silt and Heavy Metal	38
Soil	39
Conclusions	40
Recommendations	43
Budget Estimate	
Statement of Qualifications	
Kím Hudson, Geologist	
George Cavey, F.G.A.C.	

Bibliography

LIST OF TABLES

Table	1	Claim Information	Page 2		
Table	2	Comparative Chart of the Mineralized Showing in the Iskut Gold Camp, B.C.	Following	Page	5
Table	3	North Zone Drill Information	Page 20		
Table	4	North Zone Drill Intersections	Following	Page	21
Table	5a	King Vein Weighted Averages (Chip Samples) - Vein (Gold)	Following	Page	30
Table	5 b	King Vein Weighted Averages (Chip Samples) - Vein and Wall Rock (Gold)	Following	Page	31
Table	6	King Vein Drill Information	Page 32		
Table	7a	King Vein and Darwin Vein			
		Mineralized Drill Intersections	Following	Page	32
Table	7b	King Vein and Darwin Vein Weighted Averages	Dago 33		
Table	0	(core samples) - vein and wallfock (Gord)	rage JJ		
Table	õ	King vein Assay comparison	Page 33		

LIST OF PLATES

Plate	1	Aerial View of North Zone, South Zone and King Vein	Following	Page	2
Plate	2	Tuffaceous Limestone Invaded by Subvolcanic	Following	Page	12
Plate	3	Hornblende Porphyry Dyke and			
		Chlorite-Magnetite Rich Dyke	Following	Page	13
Plate	4	South Zone	Following	Page	25
Plate	5	Aerial View of Grant Showing and King Vein	Following	Page	26
Plate	6	King Vein	Following	Page	29

.

•

. •

LIST OF FIGURES

Figure	1	Property Location Map	Following	Page	1
Figure	2	Claim Map	Following	Page	2
Figure	3a	General Mineralized Zones Location Map	Following	Page	7
Figure	3b	Location Map of Mineralized Zones	Following	Page	7
Figure	4	North Zone Geology	Following	Page	8
Figure	5	North Zone Sample Locations	In Pocket		
Figure	6	North Zone Rock Geochemistry	Following	Page	16
Figure	7a	North Zone Drill Section TT88-6, DDH 87-5	In Pocket		
Figure	7b	North Zone Drill Section TT88-7	In Pocket		
Figure	7c	North Zone Drill Section TT88-8	In Pocket		
Figure	7d	North Zone Drill Section TT88-9	In Pocket		
Figure	8	South Zone Geology	In Pocket		
Figure	9	King Vein and Darwin Vein Geology	Following	Page	27
Figure	10	King Vein and Darwin Vein Sample Location Plan	In Pocket		
Figure	11	King Vein and Darwin Vein Gold Geochemistry	Following	Page	30
Figure	12a	King Vein Drill Section TT88-1, TT88-2	Following	Page	33
Figure	12b	King Vein Drill Section TT88-3, TT88-5, TT88-2	Following	Page	34
Figure	12c	King Vein Drill Section TT88-4, TT88-2	Following	Page	35
Figure	13	Property Geology and Rock Sample Location Map	In Pocket		
Figure	14a	Soil and Silt Sample Location Plan	In Pocket		
Figure	14b	Soil and Silt Geochemistry (Gold)	In Pocket		
Figure	14c	Soil and Silt Geochemistry (Silver)	In Pocket		
Figure	14d	Soil and Silt Geochemistry (Lead)	In Pocket		
Figure	14e	Soil and Silt Geochemistry (Zinc)	In Pocket		

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LIST OF APPENDICES

Appendix 1	North Zone and South Zone Chip Sample Descriptions
Appendix 2	Prospecting Grab Sample Descriptions
Appendix 3	Drill Logs
Appendix 4	Geochemical Analytical Reports

INTRODUCTION

The 1988 exploration program on the Ticker Tape claims conducted by OreQuest Consultants Ltd., under the management of Prime Explorations Ltd., was carried out with three objectives: 1) second stage drilling was required in the North Zone. Four holes tested this zone with a total of 537.8 m. 2) more detailed analysis was required in areas where mineralization was defined by preliminary 1987 mapping and prospecting. Included in this work was a 452 m, 5 hole drill program on the King Vein. 3) grass roots exploration was needed over the new claims added to the Ticker Tape claim group since 1987. Exploration began in mid July and ended early October 1988.

PROPERTY DESCRIPTION

Location and Access

The property is located on the eastern edge of the Coast Mountain Range approximately 110 km northwest of Stewart, B.C. (Figure 1). The claims lie in the Liard Mining Division, NTS 104B/14E and 104B/15W. The center of the property is at longitude 131 00'W and latitude 56 50'N.

The area is serviced by frequent scheduled and chartered fixed wing flights from Smithers to the Bronson Creek Airstrip on the south shore of the Iskut River. Fixed wing flights into the Bronson Camp also originate from Wrangell, Alaska and Terrace, B.C. The claims lie some 15 km north of the airstrip where several helicopters are based during the field season and were used for access to the property. Rapidly changing weather conditions often hampered safe travel to and from the property, with extensive fog forming around the substantial ice and snow cover.



Claim Status

The Ticker Tape property consists of 21 mineral claims totalling 295 units (Figure 2), the following is a list of pertinent claim data. Expiry dates reflect assessment already filed for 1988 field work. Some claims, marked with an asterisk "*", will have additional assessments filed when 1988 expenditures are tabulated.

TABLE 1

Claim	Record No.	Date Recorded	# of Units	Expiry Date
Ver 3	3895	February 19/88	16	February 19/99
Ver 4	3896	February 19/88	16	February 19/99
New 7	3919	February 19/87	16	February 19/99
New 8	3920	February 19/87	16	February 19/99
Ice 1	4195	September 2/87	12	September 2/93*
Ice 2	4196	September 2/87	15	September 2/93*
Ice 3	4197	September 2/87	12	September 2/93*
Ice 4	4198	September 2/87	20	September 2/93*
Ice 5	4199	September 2/87	10	September 2/93*
Ice 6	4214	September 17/87	10	September 17/94
Ice 7	4215	September 17/87	10	September 17/98
Ice 8	4216	September 17/87	20	September 17/94
Ice 9	4217	September 17/87	20	September 17/98
Ice 10	4218	September 17/87	10	September 17/94
Ice 11	4219	September 17/87	20	September 17/94
Ice 12	4220	September 17/87	20	September 17/94
Ice 13	4221	September 17/87	16	September 17/94
Ice 14	4222	September 17/87	10	September 17/94
Ice 15	4223	September 17/87	8	September 17/94
Ice 16	4224	September 17/87	6	September 17/94
Ice 17	4225	September 17/87	12	September 17/98

Physiography and Vegetation

The claim area is approximately 75% covered by ice fields. The largest area of rock exposure occurs on the southern margin of the claim area where the Verrett River and Chubby Creek have cut steep walled valleys. Relief varies from 500 metres above sea level to 1800 m in the north central region. The North Zone, South Zone and King Vein areas occur in the south central claim area on the margins of an ice field between 1350 and 1550 m elevation. Plate 1 shows the







North Zone

exposure of rock is complete except in areas of snow or glacial debris. Snow cover is a major limiting factor to exploration of these claims. Exposure is best from late July to mid September. Tree line begins at 1200 m elevation and is characterized by stunted pine trees and alpine vegetation of moss, lichen and small shrubs which gives way to dense vegetation with an undergrowth of devil's club lower in the valley.

AREA HISTORY

The first recorded work in the Iskut region was in 1907 when a group from Wrangell, Alaska, staked nine claims north of Johnny Mountain. Crown granted claims along Bronson Creek and on the north slope of Johnny Mountain were subsequently worked by the Iskut Mining Company. By 1920, a 30 foot adit revealed gold, silver, and galena mineralization in a number of veins and stringers. Activity carried on into the 1930's when interest in precious metals was concentrated in the Stewart area. Some sporadic placer operations were also located in the Unuk River Valley.

In 1954, Hudson's Bay Mining and Smelting found the Pick Axe showing and some high grade gold-silver-lead-zinc float on the upper slopes of Johnny Mountain. The claims were worked and allowed to lapse and are now part of the Skyline Exploration Ltd. Reg deposit.

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Porphyry copper - molybdenum deposits were of interest in the 1960's when several major mining companies undertook reconnaissance exploration programs in the area. arsenic a result, claims were staked on Johnny Mountain and Sulphurets Creek.

From 1965 to 1971, Silver Standard Mining and later Sumitomo worked the E & L prospect on Nickel Mountain at the headwaters of Sulphurets Creek. Trenching, drilling, and 460 metres of underground development proved reserves of 3.2 million tons of 0.8% nickel and 0.6% copper.

Massive sulphide float originating from the head of the Bronson Creek glacier resulted in Skyline staking the Inel property in 1969. Skyline also restaked the Reg property in 1980. Between 1981 and 1985, various exploration programs were conducted on both properties for high grade gold and polymetallic massive sulphide mineralization.

In 1986, drilling and underground work on the Stonehouse gold zone confirmed the presence of high grade gold mineralization with silver and copper also present over minable widths. Reserves from a Jan. 15, 1988 Skyline news release are as follows:

a. 1 a'	GOID	_
Stonehouse Zone	(oz/t)	Tons
Total Measured	1.246	121,000
Total Drill Indicated	0.556	236,875
Total Inferred	0.57	700,000
TOTAL	0.644	1,057,875

Inel Resources Ltd. had driven an adit for approximately 100 metres below the Main Sulphide Zone on their property by the end of October 1987. It is an exploratory adit that is being utilized for underground diamond drilling. Previous drill results from 1984 returned gold values up to .940 oz/t over 2.1 m and silver values as high as 20.22 oz/t over 1.3 m.

In 1965, Cominco discovered mineralization on the ground now held jointly by Cominco Ltd. and Delaware Resources Corp. The work prior to 1986 consisted of mapping, sampling and trenching. In 1986, Delaware provided funds under an earn-in option agreement with Cominco and began an extensive drill program. The joint venture partners have recently announced an ore reserve of 1.1 million metric tonnes (1.21 million tons) of 24 gm/tonne (0.70 oz/ton) gold from the Twin Zone (Vancouver Stockwatch December 7, 1987). The deposit remains open to depth and along strike. Underground work began in April, 1988. Colossus Resources Equities Inc. has recently completed a purchase of approximately 51% of Delaware Resources' common stock.

Gulf International Minerals received positive results from their 1987 drill program on the McLymont claims located at the north end of the Iskut mining camp. Gold values up to 1.6 oz/t and silver assays up to 39.73 oz/t over 36.5 feet (hole 87-29) were recovered from precious metal bearing, magnetic, stratabound sulphide zones. Drilling continued in 1988, producing additional good results including 15.1 feet grading .810 oz/t gold and 16.1 feet of .645 (Hole 88-28) and 6.9 feet grading 3.551 oz/t gold in Hole 88-35 (Vancouver Stockwatch).

A brief comparative chart of the mineralized showings in the Iskut area is presented in Table 2.

REGIONAL GEOLOGY

Regional geological mapping of the Iskut River area (Kerr, 1948, GSC Memoir 246, 9 - 1957 and GSC Map 1418 - 1979) has been expanded by Grove in two recent detailed works which define this area as the Stewart Complex (Grove, 1971, 1986).

TABLE 2. COMPARATIVE CHART OF THE MINERALIZED SHOWINGS IN THE ISKUT GOLD CAMP, B.C.

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NAME	LOCATION	OUNER	CLASSIFICATION	ORE MINERALS	ASSOCIATED MINERALS	ASSOCIATED ALTERATION	ASSOCIATED STRUCTURES	ASSOCIATED INTRUSION	HOST ROCKS	toninage grade
SKY, SPRAY	Snippaker Cr	Hector Res.	VEIN	gold	galena sphalerite chalcopyrite pyrite magnetite arsenopyrite	chlaritic	102/90 120/75NE	harnblende parphyry dike (?)	greywacke) siltstone	
GAB (Ken Showing)	northwest of Newmont Lk	Prisn (Pezgold)		goid silver chalcopyrite galena sphalerite	pyrite arsenopyrite Fe carbonate magnetite	chlaritic pyritic	065/72W vein 70 lineament	quartz feldspar porphyry; syenodiorite to syenite plug	carbonate; andesite agglomerate	grab samples up to 1.86 oz/t Au
MERIDOR	lskut R	Meridor -	SHEAR VEIN	gold chałcopyrite sphalerite molybdenum	pyrite pyrrhotite barite magnetite	biotite sericitic silicic kspar	080-090/90 shear	syenite parphyry	greywacke, argillite, limestone, minor siltstone	
VINSLOW	Upper Branson Cr	Vinslow	SHEAR VEIN	gold silver chalcopyrite	pyrite magnetite	chloritic biotite	120/80N		greywacke) siltstane	
WINSLOW	lskut R	Vinslow	SHEAR VE IN	chalcopyrite sphalerite	pyrite pyrrhotite arsenopyrite	sericitic carbonate	110/70-80W		felsic volc- argillites in fault contact	
KING VEIN	Verrett R	Ticker Tape Res	VEIN	901d bornite chalcopyrite stibnite (?)	quartz pyrite magnetite	chloritic potassic silicic argillic	flat vein		granodiorite	
North Zone	Verrett R	Ticker Tape Res	SKARN	silver galena sphalerite gold	chlorite magnetite fspar pyrite	silicic chloritic kspar		internediate subvoicanic	l i mestone	

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NOTE: Above table is a compilation based on informal discussions with explorationists in the Iskut Camp.

TABLE 2. COMPARATIVE CHART OF THE MINERALIZED SHOWINGS IN THE ISKUT GOLD CAMP, B.C.

NAME	LOCATION	OWNER	CLASSIFICATION	ORE MINERALS	ASSOCIATED MINERALS	ASSOCIATED ALTERATION	ASSOCIATED STRUCTURES	ASSOCIATED	HOST ROCKS	Toninage grade
SNIP	Branson Cr	Comínco- Delaware	SHEAR VEIN	gold tellurides(Pb-Bi) chalcopyrite sphalerite galena	quartz carbonate pyrite pyrrhotite aolybdenum arsenopyrite	biotite pyritic kspar	110-120/65U shear	orthoclase porphyry (Red Bluff only)	Feldspathic wackes; siltstones; pebbly wacke	1.2 mil tonnes 0.7 az/tan Au
REG	Johnny Mt	Skyline	VEIN MASSIVE SULF	gold electrum chalcopyrite sphalerite galena	quartz sulfosalts	kspar chloritic	070/70N shear,fract	feldspar porphyry	volcaniclastics; porphyritic flows (Unuk Fw?)	1.05 mil tons 0.644 oz/t Au
INEL	Snippaker Mt	Inel	VEIN SHEAR	gold silver chalcopyrite sphalerite galena	quartz pyrrhotite k-feldspar pyrite	kspar silicic chloritic	shear stockwork	kspar bearing syenodiorite; alaskite; mafic dikes	basalt- siltstone contact (Unuk-Betty Cr Fa)	Main Zone 0.39 oz/t Au 0.44 oz/'0.44 oz/t Ag 6.56 % Zn 0.18 % Cu
DAN- BURNIE	Jekill R	Skyline (Pezgold)	VEIN SHEAR BRECCIA	silver gold galena	quartz pyrrhotite pyrite	pyritic argillic sericitic propyllitio	NU +/- NE faults c		argillites; siltstones; andesitic volcaniclastics	
CAN, JP	lskut R	Norman (Pezgold)	SKARN VEIN	galena sphalerite chalcopyrite	pyrite			hornblende granodiorite	granite-arkose contact≖vein limestone≖skarn	
WARATAH	lskut R	Tungco Res	VEIN	gold chalcopyrite galena sphalerite silver	magnetite arsenopyrite	propylliti	c 145/65NE 155/70 SW 170/45 W vein	kspar porphyry, monzonite	monazite; aggionerate (Unuk Fm ?)	1.12 m of 0.65 oz/t 2.4 m wide, 70 m strike (0.24 oz/t Au
MelyMONT	McLymont Cr	Guif Internationa	VEIN I SHEAR SKARN	gold chalopyrite galena sphalerite	pyrite magnetite arsenopyrite	silicic	120-140 shear	quartz monzonite	quartz porph; chert-marble; sst-marble contacts	36 ft of 1.6 oz/t Au

The Stewart Complex, as defined by Grove, lies south of the Iskut River and north of Alice Arm. It is bounded by the Coast Plutonic Complex on the west and the Bowser Basin to the east. It is composed of Late Paleozoic, and Mesozoic volcanics and sediments which were intruded during Mesozoic and Tertiary times.

The oldest units in the complex are Mississippian or Permian carbonates and other marine sediments. Upper Triassic epiclastic volcanics, marbles, sandstones and siltstones lie unconformably above the Permian. These are overlain by sedimentary and volcanic rocks of the Jurassic Hazelton Group which are lithologically similar to the Triassic section. The Hazelton Group has been subdivided (Grove, 1986) into the Early Jurassic Unuk River Formation, the Middle Jurassic Betty Creek and Salmon River Formations, and the Upper Jurassic Nass Formation.

The Unuk River Formation forms an angular unconformity with the underlying Late Triassic rocks and consists of volcanic rocks and sediments which include lithic tuffs, pillow lavas with carbonate lenses and some thin bedded siltstones. Betty Creek rocks unconformably overlie the Unuk River Formation and are characterized by bright red and green volcaniclastic agglomerates with sporadic, intercalated andesitic flows, pillow lavas, chert, and carbonate lenses. The Salmon River Formation is a thick assemblage of colour banded andesitic siltstones and lithic wackes that form a conformable to disconformable contact with the underlying Betty Creek Formation. The Nass Formation consists of weakly deformed argillites, siltstones, and greywackes which unconformably overlie the Salmon River Formation.

These volcanic and sedimentary successions were intruded by the Coast Plutonic Complex during the Mesozoic and Tertiary periods. A wide variety of intrusive phases are present including granodiorite, quartz monzonite, and diorite. Small satellite plugs and dyke systems range in age from Late Triassic to Tertiary and may be important for localizing mineralization.

Major structural features of the Stewart Complex include the western boundary contact with the Coast Intrusive Complex and the northern thrust fault along the Iskut River where Paleozoic strata has moved southward across Middle Jurassic and older units. Regional tectonic normal faults also border the complex to the south and east (Grove, 1986).

EXPLORATION RESULTS

Previous Work

The only previous work on the Ticker Tape claims was carried out in 1987. The claim group then consisted of the Ice 1 to 5, 7 and 9 claims as well as Ver 3 and 4, New 7 and 8.

The 1987 exploration program involved prospecting, geologic mapping and geochemical sampling on New 7 and 8. During this phase the King Vein was discovered with a high grade grab sample value of 56.3 oz/t gold. The North and South Zones with high silver-lead-zinc values were also discovered.

Follow up work included establishing a grid over the North Zone on which VLF-EM and magnetometer surveys were conducted. The mineralized limestones were then drilled. Seven holes were fanned from a single set up for a total of 408 m





(1337') of drilling. Silver values ranged from 2.0 g/t to 219.0 g/t (6.39 oz/t) and gold values ranged from 0.01 g/t to 7.30 g/t (0.213 oz/t).

The known mineralized showings on the Ticker Tape claims include the North Zone, South Zone, and King Vein. The relative positions of these three zones are indicated in Figure 3a and 3b.

NORTH ZONE

Geology

The geology of the North Zone has been mapped at 1:500 scale (Figure 4). The reference numbers given with each lithology in the following descriptions refer to the units on Figure 4. The North Zone is underlain by andesitic volcanics, unit 1, which are possibly a part of the Unuk Formation, forming a ridge on the east side of the North Zone grid. The west side of the grid is characterized by a package of steeply westward dipping limestones greywackes and volcanics with a fault-emplaced wedge of volcaniclastics and mafic volcanics. These rocks are possibly of the Betty Creek Formation. Graded bedding in the greywacke suggests the sequence is not overturned.

The contact of the andesites with unit 2 is not exposed in the map area. Finely bedded limestone, jasperoid and basalts typify unit 2.

There are two types of limestones in the North Zone, tuffaceous and pelloidal limestone, which are distinguished by their textural differences. Tuffaceous limestone, unit 3, contains thin intercalations of andesitictrachyandesitic tuff. It is easily recognized in the field by differential



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weathering of the narrow tuff layers. The weathered surface is generally a velvety red-brown colour or a pale grey, while the fresh surface is pale grey.

Tuffaceous limestone is also bright red where it has been hematized in the contact zone of intermediate subvolcanic or chlorite-magnetite rich dykes. Generally fine grained, the tuffaceous limestone is recrystallized to a coarse grained variety both where it is in contact with intermediate subvolcanic and where it is cut by prominent fractures. Coarse iron carbonates locally occur in the recrystallized limestone giving it a "spotted texture".

Very finely disseminated galena and sphalerite replace the primary tuff layers in areas proximal to intermediate subvolcanics.

Tuffaceous limestone occurs along both the southeastern and western margins of the grid area dipping generally to the west. Faulting through the central map area may have raised the western block causing a re-exposure of the tuffaceous limestone on the west side.

Pelloidal limestone, unit 4, conformably overlies the tuffaceous limestone in the center of the map area and underlies it on the west side, below a breccia zone. The weathered surface is commonly red-brown or white where it is recrystallized.

Pelloidal limestone is composed of structureless carbonate spheres less than 1 mm in diameter with occasional lime clasts and possible crinoids. Beds vary in thickness from several centimeters to pencil-line thick black layers separating

pelloidal beds less than 1 cm in thickness.

Finely disseminated galena and sphalerite occur in the pelloidal limestone, most notably near chlorite-magnetite rich dykes.

Vesicular basalt, unit 5, with rafts of limestone, occurs in both conformable and faulted contact with the pelloidal limestone. Weathered surface is limonitic and friable. A narrow bedded felsic tuff, unit 5b, occurs within the vesicular basalt.

The contact between the vesicular basalt and volcanic sediments, unit 6, is a pyritic fault parallel to bedding. These volcanic sediments include bedded, sericitically altered greywackes, basaltic breccias and calcareous pillow basalts which dip approximately 75 degrees to the west. Disseminated arsenopyrite, pyrite and pyrrhotite occur in these sediments proximal to the faulted areas.

Bedded greywackes and mudstones, unit 7, occur across a fault contact to the west of the volcanic sediments. They are olive grey in colour and fine upwards in repeated sequences approximately 15 cm thick. Up to 20% pyrite occurs along bedding planes.

The greywackes are conformably overlain by basaltic agglomerate, unit 8, which contains subrounded clasts of porphyritic andesite, volcanic bombs and red limestone. Clasts are 1 to 60 cm in diameter and are supported by a basaltic matrix.

Micritic black limestone, unit 9, occurs in the northwest region of the map area. Narrow dykes of pyritic andesite cut the limestone in a north-south direction.

The tuffaceous and pelloidal limestones and the andesitic volcanics have been invaded by an intermediate subvolcanic, unit A, on both the west and east margin of the map area. The intrusion appears to have been preferentially emplaced along lithological contacts and faults. Compositionally, the intermediate subvolcanic is very similar to the tuff layers in the tuffaceous limestone.

A high level of emplacement of the intrusion is evidenced by its fine grain size, violent style of emplacement and the broadly fingering nature of the related chlorite-magnetite rich dykes. Its violent emplacement is suggested by intense brecciation of the country rock along the contact zones and numerous large subrounded xenoliths within the intrusion.

Faults occur subparallel to the intrusion within the contact zone and localize the more intense mineralization suggesting the faults either pre-date the intrusion or are contemporaneous with emplacement of the intrusion, which brought in the metals.

The intermediate subvolcanic is magnetic and on rare occasions porphyritic with hornblende and feldspar phenocrysts. It is composed of approximately equal proportions of potassium feldspar and plagioclase, and minor secondary biotite. Magnetite can form as much as 6% of the rock and quartz is conspicuously absent.

The intermediate subvolcanic could possibly be a fine grained equivalent of a syenitic monzonite. This may be significant since syenites are believed to be associated with mineralization on the Inel, Gab and Meridor properties (Table 2). The rock is dark green in colour and occasionally hematized to a dark burgundy. Weathered surface is a dark blue-green and commonly manganese stained. Its magnetic nature and colour on weathered surface distinguish the intermediate subvolcanic from the older andesites.

Dykes rich in chlorite and magnetite, with up to 3% cubic pyrite, finger through the limestones along bedding planes and across sedimentary features. The limestone in contact with these dykes is commonly hematized to a bright red colour. A silicified halo occasionally surrounds the chlorite-magnetite rich dykes. Finely disseminated sphalerite and galena occur in the limestones in contact with these dykes. Chlorite also replaces primary textures proximal to the dykes.

In the contact zone of the intermediate subvolcanic and the limestone, the intermediate subvolcanic displays an autobrecciation texture in which subvolcanic fragments are displaced by a few centimeters without rotation (Plate 2). Possibly, pods of intermediate subvolcanic were emplaced and fractured with calcite being remobilized into the fracture spaces. The calcite surrounding the fragments is coarse grained suggesting a possible high volatile content and recrystalization.

The chlorite-magnetite rich dykes and intermediate subvolcanics are compositionally very similar. They also are both characterized by a high cadmium



Plate 2: Tuffaceous limestone invaded by a pod of intermediate subvolcanic.

content.

Hornblende porphyry dykes, unit B, are known to occur at three locations in the map area - each proximal to intermediate subvolcanics and hosted by limestones. They are 30 to 50 cm thick and are localized along faults and fractures. Thirty meters southeast of drill site D (Figure 4) chlorite-magnetite rich dykes are seen to emanate directly from a hornblende porphyry dyke (Plate 3). This indicates that the hornblende porphyry dykes and chlorite-magnetite rich dykes are contemporaneous and therefore the hornblende porphyry dykes are also related to the intermediate subvolcanic.

The dykes are characterized by a homogeneous groundmass of feldspar and amphibole grains less than 3 mm in size, surrounding randomly oriented amphibole phenocrysts up to 1 cm in length. Rutile granules are more or less common within the amphiboles. The amphiboles are commonly altered to chlorite and the dykes themselves are locally affected by carbonate alteration. Pyrite and magnetite are locally weakly disseminated.

Narrow felsic dykes, unit C, are emplaced along late faults in the North Zone. They are fine grained, highly siliceous and contain up to 3% pyrite.

The geologic history of the North Zone can be summarized by the following sequence of events:

1. deposition of andesitic volcanics

2. deposition of tuffaceous limestone, pelloidal limestone and minor volcanics



Plate 3: Hornblende porphyry dyke (pale green) with chlorite-magnetite rich dykes emanating directly from it. Note the rock hammer on left margin for scale.

- 3. emplacement of intermediate subvolcanic into units 1 and 2.
 - a) chlorite-magnetite rich dykes emplaced in limestones
 -hematization of proximal limestones
 -local silicification
 - b) delicate replacement of primary sedimentary textures by fine grained galena and sphalerite
 - c) emplacement of hornblende porphyry dykes
 - d) shatter fracturing of the limestones possibly related to a build up of volatiles in the cooling intrusive
 -galena or sphalerite emplaced along fractures
 - e) planar fracturing
 -fluids moved through the limestone precipitating potassium feldspar and magnetite
 - f) recrystalization of limestone into coarse iron carbonates and calcite, along planar fractures
- 4. faulting peripheral to the intermediate subvolcanic

- faulting appears to localize mineralization and is therefore thought to be contemporaneous with emplacement of intermediate subvolcanic

5. strike slip faulting causing the emplacement of volcanic sediments with pyrite and arsenopyrite mineralization

- the absence of chlorite-magnetite rich dykes in this rock package suggests these rocks were faulted into place after intrusion of the intermediate subvolcanic

6. supergene oxidation corroding the limestone, creating a vuggy limonitic unit and altering the feldspar to clay and magnetite and/or altering pyrite to goethite

Mineralization

In the North Zone, mineralization occurs as finely disseminated galena and sphalerite in the limestones and as coarse grained pyrite and arsenopyrite related to a strike slip fault.

Thin sections show the very finely disseminated pyrite, galena and sphalerite occur with garnet, epidote and chlorite in the tuff layers indicating skarn mineralization. Trace chalcopyrite is also present. This mineralization occurs in areas proximal to intermediate subvolcanics. Sphalerite is generally red in colour and is locally so fine grained that it gives the limestone a rose colour.

The limestones have been affected by both hydrofracturing and planar fracturing. Coarse honey or red-colored sphalerite occurs locally in both types of fractures, as does coarse galena. Very rarely, however, do galena and sphalerite occur together in these fractures, indicating they filled the fractures in separate mineralizing events.

On the weathered surface, the most intensely mineralized areas are recognized by a powdery mustard coloured stain (possibly pyromorphite). Pods of galena up to 5 cm across occur in the fresh rock here. On rare occasions, cream colored ankerite occurs with galena in a zoned texture similar to zebra rock.

Gold mineralization was found to exist in pelloidal limestones during the 1987 drilling program. A 1 meter intersection of 0.213 oz/t gold was recorded in DH-87-5, occurring in the footwall of a hornblende porphyry dyke.

A major strike slip fault cuts through the center of the North Zone in a north-south direction. It trends subparallel to bedding in the volcanic and sedimentary rocks exposed on surface, and forms breccia zones in the underlying pelloidal limestones. In both rock types, coarse grained pyrite and arsenopyrite are associated with the deformation event. Geochemistry

Surface chip samples were taken in the North Zone to determine the grade of mineralization related to :

intermediate subvolcanic in contact with algal and pelloidal limestones
 algal and pelloidal limestones proximal to intermediate subvolcanic
 algal and pelloidal limestones cut by chlorite-magnetite-rich dykes
 hornblende porphyry dykes in contact with algal and pelloidal limestones
 felsic dykes and their host rocks
 recrystallized limestone enveloping rocks cut by east-west trending fractures
 late north-south trending fault structures
 quartz-barite veins

Samples were chipped across variable lengths, determined by the geology, between 0.5 and 1.2 m long. The exact lengths are given along with brief sample descriptions and silver-lead-zinc values in Appendix 1. Samples were analyzed by the ICP method for ten elements (Ag, Ar, Ba, Bi, Cd, Co, Cu, Mo, Pb and Zn) and geochemically for gold by fire assay with an AA finish at Vangeochem Labs in Vancouver. Sample locations and results are presented in Figure 5 located in the back pocket and Figure 6.

1) Chip samples of the intermediate subvolcanic are generally anomalous in silver and reach a high of 9.02 oz/t silver. Lead and zinc are also anomalous, ranging from 0.33 to 8.79% lead and 0.36 to 18.3% zinc. Cadmium values are commonly greater than 100 ppm and arsenic is occasionally anomalous.

2) Pelloidal and tuffaceous limestones near the intermediate subvolcanic contact each appear to be receptive to different elements. The pelloidal limestones are generally higher in zinc with a high value of 2.56%. Cadmium levels are locally greater than 100 ppm. Contrastingly, tuffaceous limestone is anomalous in silver and lead but not in the same proportions. Possibly a mineral


other than galena is hosting the silver values, or, there were several generations of galena only one of which was silver bearing. In the areas of mustard coloured surface weathering, lead, zinc and silver reach highs of 18.93%, 17.63% and 16.99 oz/t respectively.

3) Samples of limestones cut by chlorite-magnetite-rich dykes are elevated in zinc and to a lesser extent lead and silver. Zinc values ranged from 1.4% to 4% while lead and silver reached levels of 1.4% and 13.9 ppm respectively.

4) Hornblende porphyry dykes contained no detectable gold, nor did the host rocks to the dyke. High cadmium is associated with the dykes. Zinc values are generally higher than lead in the tuffaceous limestone wallrocks with maximum values of 4.6 oz/t silver, 5.86% lead and 4.79% zinc over 1.2 meters.

5) Felsic dykes are elevated in base metal values (maximum value of 1.8% zinc and 0.4% lead). Silver and gold values are very low.

6) East-west trending fractures enveloped by recrystallized limestone contain up to 85ppb gold, local high cadmium, 1-2% zinc and 0.1-0.8% lead.

7) Late fault structures are characterized by an arsenic anomaly (>1000 ppm). Gold values were elevated to a high of 110 ppb gold in a limestone raft within vesicular basalts. Silver values are slightly elevated in the basalt agglomerate (7.3 and 19.3 ppm). Lead values are low and zinc is moderately anomalous (up to 0.4%).

8) Base and precious metal values associated with the quartz-barite veins are low. Arsenic is locally anomalous.

Geophysics

In 1987 a VLF-EM survey was conducted over the North Zone Grid. A northsouth trending conductor 250 m long was outlined and was interpreted as a vertical sheet conductor with variable conductivity along its length. Drilling has shown the VLF anomaly is related to a shear zone cutting volcanics and limestones which contain disseminated arsenopyrite and pyrite in the fault zone.

The magnetic anomalies outlined by the 1987 survey are related to chloritemagnetite rich dykes which cut the limestones.

The geophysical grids were not extended in 1988 due to the steepness of the topography.

Drilling

The North Zone was first drilled in October of 1987. Seven holes were drilled off a single set up since, at that time, only one was possible and the program ended abruptly due to the harsh weather conditions. Drilling of the North Zone and King Vein was therefore recommended for the summer months to optimize drilling conditions. First stage drilling intersected two mineralized limestones and a one meter interval of 0.213 oz/t gold in the footwall of a hornblende porphyry dyke. The second phase of drilling began in August of 1988 to test the downdip extension of the silver-lead-zinc-gold mineralization and its strike length to the north where VLF-EM and magnetic anomalies were outlined in 1987. A total of 537.8 meters (1765 feet) was drilled in four holes from two drill sites during this program. Table 3 summarizes the pertinent drill hole information. The drill hole locations and their surface projections are indicated in Figure 4 in the back pocket.

Diamond drilling was carried out by Falcon Drilling of Prince George, BC, using a custom built drill comparable to a JKS 300. The entire length of core was split with half sent to Vangeochem Labs in Vancouver and the remainder stored in the Bronson camp. Sampling was done in 1.5 metre intervals or within geologic boundaries. Samples were analyzed by ICP methods for 10 elements (Ag, Pb, Zn, Cu, Mo, As, Cd, Co, Bi, Ba) and geochemically for gold by fire assay with an AA finish. Gold values greater than 1000 ppb and silver, lead and zinc values greater than maximum detection limits by ICP (50 ppm silver, 2% lead and zinc) were also assayed. The analytical results for the drilling are located in Appendix 4g.

Detailed geologic drill logs are available in Appendix 3. Drill hole 87-5 was also relogged using the terminology set forth in the 1988 surface mapping program to allow correlation between the work done over the two years and to relate the anomalous gold and silver values of 1987 to the current geologic units. This log is also found in Appendix 3. The 1987 drill core is now stored in the Bronson camp.

The following paragraphs provide a description of the drill targets for each hole, followed by a summary of the geology encountered with geochemical results. Mineralized intervals in each hole have been summarized in Table 4 as weighted averages. Cut-off grades for mineralization were set at 1 oz/t silver and/or 1% lead or zinc.

TABLE 3

HOLE No.	LOCATION		AZIM	DIP	LENGTH	TARGET ZONE	
	(line)	(station)	(deg.)	(collar)	(m)		
TT-88-6	2+125	1+77W	115	-60	173.4	down dip of DH-87-5	
TT-88-7	2+125	1+77W	315	-60	103.4	mineralized limestone	
TT-88-8	1+24S	1+70W	060	-60	137.2	mineralized limestone	
						VLF anomaly	
TT-88-9	1+24S	1+70W	115	-45	123.8	mineralized limestone VLF anomaly	

Hole TT-88-6

Drill hole TT-88-6 was collared above an area where 1987 surface grab samples of recrystallized limestone cut by east-westerly fractures assayed 454 and 359 ppm silver.

The hole was designed to continue to the downdip extension of the gold mineralization intersected in 1987, namely a one meter intersection of 0.213 oz/t gold in the footwall of a hornblende porphyry dyke (Figure 7). The theory that hornblende porphyry may have brought in the gold on the Ticker Tape claims is supported by the occurrence of a hornblende porphyry proximal to gold mineralization on the Hector Resources Properties (Table 2). Drill hole six was continued to the intersection of intermediate subvolcanic to determine the silver, lead and zinc content of the limestones in the contact zone.

TABLE I	4.	NORTH	ZONE	MINERALIZED	DRILL	INTERSECTIONS

DRILL HOLE	Interval From	(m) TO	LENGTH	WEIGHTED Ag(oz/t)	AVERAGE Pb(%)	Zn(%)	ROCK TYPE
TT-88-6	5.6	17.0	11.4	1.40	0.57	1.91	TUFFACEOUS LIMESTONE
	55.9	58.6	2.7	3.13	0.11	1.08	PELLOIDAL LIMESTONE
	76.8	84.9	7.1	1.22	0.89	1.69	LIMONITIC RXSTAL'D LIMESTONE
	89.3	92.4	4.1	1.20	0.24	0.83	TUFFACEOUS LIMESTONE
	117.4	123.5	6.1	1.20	0.29	0.39	INTERMEDIATE SUBVOLCANIC
TT -88 -7	12.0	18.0	6.0	1.36	0.34	1.05	TUFFACEOUS LIMESTONE
	26.7	29.6	2.9	1.12	0.66	1.14	TUFFACEOUS LIMESTONE
	43.8	47.0	3.2	0.75	1.11	1.25	CARBONATE BRECCIA
	49.5	54.5	5.0	1.30	0.57	1.08	TUFFACEOUS LIMESTONE
	65.5	76.0	10.5	0.67	0.81	1.29	TUFFACEOUS LIMESTONE
	78.3	82.3	4.0	1.19	0.85	1.61	LIMONITIC LIMESTONE
	86.8	89.3	2.5	1.39	0.96	1.48	LINONITIC LIMESTONE
	92.8	97.3	4.5	0.81	0.93	0.87	LIMONITIC LIMESTONE
tt -88- 8	88.6	91.9	3.3	0.15	0.22	1.99	PELLOIDAL LIMESTONE
	97.2	107.7	11.3	0.18	0.30	1.60	PELLOIDAL LIMESTONE
tt -88 -9	8 6.5	96.4	10.9	0.09	0.26	1.76	PELLOIDAL LIMESTONE
	102.4	109.1	6.7	0.26	0.49	2.44	PELLOIDAL LIMESTONE

The top 17 m of Hole TT-88-6 cut through tuffaceous limestone which contained finely disseminated and fracture related sphalerite and galena. Within this unit a 11.4 m interval assays 2.48% combined lead-zinc and 1.4 oz/t silver (Table 4). Thin section work indicates the mineralization is associated with the tuffaceous horizons.

Underlying the tuffaceous limestone is a breccia zone which probably is related to the fault emplacement of older tuffaceous limestone onto younger pelloidal limestone. A 2.7 m section of 1.08% zinc occurs within the altered pelloidal limestone (Table 4).

Mineralization is again encountered immediately down hole from a fault between 76.8 and 84.9 m. This fault corresponds to faulting seen on surface and projected along strike into the drill section. Limonitic recrystallized limestone below the fault grades 1.22 oz/t silver and 2.58% combined lead-zinc over 7.1 metres. From 89.3 to 92.4 m less altered tuffaceous limestone grades 1.2 oz/t silver and 1.07% combined lead-zinc. It would appear that the silver grade was not affected by the alteration presumably associated with the faulting, while lead-zinc values were possibly enhanced by the event.

The hornblende porphyry dyke was encountered on both sides of the fault at the pelloidal limestone-tuffaceous limestone contact. Using the dyke as a marker horizon, a 4 m dip-slip movement is indicated. No significant gold values were detected in the host rocks although there was a zone of very poor recovery immediately below the dyke where the fault occurs.

At the contact between tuffaceous limestone and intermediate subvolcanic 6.1 metres of 1.2 oz/t silver and 0.68% combined lead zinc was intersected.

Hole TT-88-7

The hole was targeted at the steeply dipping limestone-intermediate subvolcanic contact 34 m northwest of the collar. Surface alteration marks the pods of fairly massive galena which occur in a trend subparallel to the contact zone.

Hole TT-88-7 remained in tuffaceous limestone throughout its length with the exception of a short carbonate breccia zone (Figure 7b). It did not intersect the intermediate subvolcanic indicating the contact dips variably to the west. It was the most mineralized hole on the North Zone with a total of 38.1 metres of anomalous silver-lead-zinc values. There is fairly poor correlation between the occurrence of visible mineralization and anomalous grades. No pods of massive galena, as seen on surface, were intersected. From 78.3 to 82.3 and 86.8 to 87.3 m the limestone is limonitic and altered. Combined lead-zinc values are slightly higher here, 2.46% and 2.44%, compared to 1.39%, 1.80% and 1.65% in unaltered tuffaceous limestone. Carbonate breccia also assayed higher, combined lead-zinc values of 2.36%.

Silver values are lower in the carbonate breccia (0.75 oz/t). Within the tuffaceous limestone silver values range from 0.67 to 1.36 oz/t. Similarly, silver ranges from .81 to 1.39 oz/t in the limonitic limestone.

Hole TT-88-8, TT-88-9

Drill holes eight and nine were collared west of a north-south trending VLF and poddy magnetic anomaly outlined in 1987 The VLF anomaly was interpreted as a vertical sheet type conductor with variable character along its strike. Several drill intersections were therefore required to test the zone. Surface mapping indicated the anomaly was related to a pyrite and arsenopyrite bearing fault zone.

Both drill holes were extended beyond the VLF anomaly into the pelloidal limestones. They tested the northerly strike extension of this unit which was drilled some 100 metres to the south in 1987 (Figure 7c and 7d).

A hornblende porphyry dyke occurs perpendicular to drill holes 8 and 9, west of the VLF anomaly. These holes both tested the association of gold mineralization with that intrusive phase.

Very minor mineralization was encountered in TT88-8. Only zinc is at anomalous levels, specifically in pelloidal limestones and mudstones near the intermediate subvolcanic contact where 11.3 m of 1.4% zinc and 3.3 m of 1.83% zinc occur.

The VLF anomaly is related to the steeply dipping faults with associated disseminated pyrite and arsenopyrite. These faults bound a wedge of steeply westward dipping volcanics and sediments and continue into the underlying limestones.

No gold mineralization was detected in the footwall of the hornblende porphyry dyke near the top of TT-88-8.

Pelloidal limestones reach 120 ppb gold in TT-88-8 near a chlorite-magnetite rich dyke and intermediate subvolcanic. All other values are of background levels.

Drill hole TT88-9 is also low in silver and lead values while zinc values are higher. Between 102.4 and 109.4 m the pelloidal limestone grades 2.44% zinc and .49% lead. There is also a 16.9 m section of 1.76% zinc in pelloidal limestones between 86.5 and 96.4 m.

The fault zone was encountered again in TT-88-9, marked by fault gouge, disseminated pyrite and arsenopyrite, and brecciation.

Gold levels are largely below the detection limit. Within the intermediate subvolcanic a high of 160 ppb was reached and carbonate veins in limestone near the intermediate subvolcanic contact ran 150 ppb. Tuffaceous limestone below a hornblende porphyry produced values of 70, 130 and 120 ppb gold. The pyritearsenopyrite fault zone is consistently below detection limit for gold.

SOUTH ZONE

Geology

Preliminary mapping of the South Zone indicates that the lithologies intersected in the north zone extend to this area (Figure 4 and 8).

The South Zone rises steeply from the southwest margin of a glacier and can be subdivided into three showings: Lower South Zone, Upper South Zone and Grant Showing (Plate 4).

In the Lower South Zone, faults parallel to bedding at 087 degrees cut through felsic tuffs and sandstones which interdigitate with limestone. These sediments form a bed 14 m thick striking 080 degrees, hosted in a thick package of andesitic volcanics.

The Grant Showing is hosted by pelloidal and tuffaceous limestones which have been invaded by intermediate subvolcanics. The emplacement of the subvolcanic may have been controlled by the limestone/andesite contact. Tuffaceous limestone occurs in the lower elevations (1400 m) of the showing while pelloidal and recrystallized limestone are seen at 1510 meters. The contact between these two limestones is obliterated by a talus slope. Generally, however, it occurs in a north-south direction compatible with the trend of these rocks in the North Zone. The Grant Showing is bounded to the north and south by andesitic volcanics giving the zone itself an east-west trend. The limestones may have been fault emplaced as a block within the andesites. Alternatively, the bounding andesites may actually be intermediate subvolcanics which intruded the limestones perpendicular to their contact. Thin section work and detailed ' geologic mapping will be necessary to determine this.

The Upper South Zone is a fault bounded package of volcanics, greywackes and jasperoids. It is marked by limonite and jarosite as well as 2-3% disseminated pyrite.



Plate 4: View of the South Zone as seen from the North Zone (foreground). The proposed drill set-up for the South Zone is located near the second peak from the right.

Mineralization

Disseminated galena and sphalerite occur in tuffaceous limestone along the intermediate subvolcanic contact in the Grant Showing. Mustard colored weathering (possible pyromorphite) commonly occurs over areas of higher galena content. Mineralization is generally more extensive in the tuffaceous limestones. Grab samples of the pelloidal limestone taken in 1987 returned 558 and 473 ppm silver. The Grant Showing is terminated to the west by the fault which also cuts off the King Vein (Plate 5).

Mineralization in the Lower and Upper South Zones consists of pyrite with minor amounts of chalcopyrite and galena disseminated in the sediments, which are limonitic and cut by faults.

Geochemistry

The Upper and Lower South Zones and Grant Showing underwent limited chip and grab sampling in the 1988 season. The pyritic sediments of the Lower South Zone contain elevated silver values (up to 21.8 ppm) and local elevated lead and zinc (up to 0.36% lead and 0.45% zinc). No gold was detected. The Upper South Zone samples averaged 4.8 ppm silver and contained no detectable gold. Lead and zinc values are generally very low with spotty anomalous barium and arsenic values.

Grab samples were taken from the Grant Showing. The best result was 5.9 oz/t silver, 9.57% lead and 8.17% zinc. Cadmium and arsenic are locally anomalous.



Plate 5: Aerial view of the King Vein and South Zone. The Grant Showing is marked by a rusty brown talus slope cut off by the fault at one end and the glacier on the other. KING VEIN and DARWIN VEIN

Geology

The King Vein and the Darwin Vein are hosted by a medium grained granodiorite which has undergone several stages of alteration. On surface the King Vein appears to have a shallow northerly dip while the Darwin Vein exhibits a shallow to moderate southeasterly dip.

The granodiorite contains 20% mafic minerals and up to 15% quartz in grains up to 5mm long in a homogeneous texture. Pervasive chloritic alteration is common throughout the granodiorite and is locally overprinted by silicification, potassic alteration, argillic alteration and fracture-related chlorite-magnetite.

Silicification occurs in two styles. Firstly, pervasive silica envelopes some veins and overprints chloritic and intense potassic alteration. Secondly, irregular microveinlets of clear quartz cut argillically altered areas indicating this silica phase post dated the argillic alteration event. This type of alteration is most commonly seen in the vein footwalls.

Potassic alteration is fracture controlled ranging in extent from a few centimeters to several metres.

Argillic alteration is also fracture controlled but confined to more proximal areas (less than one metre). Dendritic pyrolusite and supergene limonitic staining (liesegang banding) commonly occur within argillic alteration zones. Areas of potassic and argillic alteration were possibly more permeable and therefore more susceptible to supergene oxidation.



Several diabase dykes occur in the map area, providing possible marker horizons for the drilling and putting some time restrictions on the geologic history of the area. Narrow quartz veins which dip more steeply than the King Vein are cut off by the diabase dykes as well as occurring within them. These veins are seen to merge with the King vein without sharp contact. These relationships suggest the higher angle veins, diabase dykes and the King Vein occurred within a relatively short time span. Carbonate alteration is consistently seen in the diabase dykes and their host rocks.

In drill core, the King Vein is most commonly enveloped by potassic, silicic and argillic alteration. In outcrop the footwall of the King Vein is intensely chloritized while the hanging wall looks fairly fresh.

The geologic history of the King vein can be summarized by the following events:

- 1. deposition of andesitic volcanics
- 2. intrusion of granodiorite
 - a) pervasive chloritization with local silicification

b) hydrofracturing with chlorite, pyrite and occasionally quartz emplaced along fractures

- c) faulting and emplacement of narrow quartz veins
- emplacement of diabase dykes

 a) carbonate alteration
- 4. faulting and emplacement of flat veins: Darwin and King Veins
 - a) potassic and argillic alteration
 - b) veinlets of feldspar-magnetite or pyrite

c) silicification

5. supergene oxidation controlled by fractures and fault zones.

Mineralization

The King Vein, discovered in 1987, varies in thickness from 7 to 130 cm and has a surface strike length of 150 meters (Plate 6). The core region of this quartz vein is often miarolitic with euhedral quartz crystals up to 4 cm long growing into open space. Massive pyrite occurs in the center of the vein and at its margins. Pyrite appears to have been introduced late into the vein in both these cases. Pyrite in the center of the vein fills the last open spaces while pyrite along the contacts is a late addition deposited where late fault movement caused detachment. Brecciation of the altered wallrock near pods of pyrite at the vein-wallrock contact support the theory that late movement along the fault was taken up in the areas where alteration of the wallrock weakened it.

Acicular metallic silver crystals (possible stibnite) are intimately associated with visible gold. Minor chalcopyrite, bornite and possible native bismuth also occur in the quartz vein.

The Darwin Vein, discovered in 1988, occurs 40 m vertically below the King Vein, and is very similar in appearance to the King Vein in its vuggy texture and pyrite occurrences. Very fine grained visible gold was seen at station 28 W.

The Darwin Vein is 33 m long on surface and varies in thickness from 3 to 13 cm. Unlike the King Vein, it is tightly folded and thrusted.

Additional mineralization occurs 300 m above the King Vein, in the form of narrow, closely spaced veins with chalcopyrite, pyrite and native bismuth. They were found to contain up to 1.4 oz/t silver and 90 ppb gold.



lower right for scale. The 1988 drill site can be seen along the top of the photograph. Photograph taken late August.

Geochemistry

Preliminary samples of the King Vein were taken perpendicular to the vein at 2 m sample intervals for stations from 20E to 18W. Three 1 meter samples were taken, when possible, with the middle sample being centered on the vein. The vein was later chipped strictly across its width making a total of 4 samples per station along this section.

From 20W to 130W stations were 4 m apart with three chip samples taken at each station: one across the vein, the second 1 metre into the hanging wall and the third 1 metre into the footwall. The sample locations and gold content are indicated in Figures 10 and 11.

There is a very strong association of gold with an acicular steel grey mineral in hand specimen and a geochemical bismuth anomaly. Bismuth values possibly indicate an area of potential gold mineralization which did not assay high gold due to a nugget effect.

The Darwin Vein was chip sampled across the vein at 4 m intervals.

Samples were analyzed by 10 element ICP and assayed for gold at Vangeochem Labs in Vancouver. Generally, the King Vein carries gold consistently along its strike length. The wallrock, however, very rarely carries gold grade.

Table 5a provides a compilation of the vein gold grades and a weighted average grade for the vein.



TABLE 5a. KING VEIN WEIGHTED AVERAGE (CHIP SAMPLES)-VEIN (GOLD)

2 ¹¹ 2

STATION LOCATION	VEIN GO WIDTH (m))LD (az/t)
130W	0.50	0.007
1260	0.10	0.014
1220	0.10	0.018
1 09 W	0.20	0.000
106₩	0.50	0.002
102W	0.30	0.011
88W	0.20	0.325
84W	0.20	1.394
80W	0.20	1.272
76W	0.65	0.289
72W	0.34	0.146
68W	0.49	0.627
64W	0.41	0.098
61W	u.32 0.73	u.445 n 589
5411	0.25	0.307
	0.18	0.200
52W	1.30	0.120
48W	0.70	0.096
44W	0.42	0.062
40W	0.28	0.665
36W	0.47	0.745
32W	0.51	1.543
28W	U.33	3.040
24	U.3U	1 779
200	0.30	1.337
18W	U.27 n 79	2 415
16W 1711	0.27	1 991
1911	n 2n	1 038
101	0.20	1.307
4W	0.12	1.902
24	0.09	0.120
0	0.10	0.000
10E	0.10	3.103
12E	0.20	3.465
13E	0.20	20.140
16E	0.10	0.907
18E	0.08	0.694
20E	0.10	2.415
total Average Width	12.145 0.303625	
WEIGHTED AVERA	ge grade	1.002 OV

WEIGHTED AVERAGE GRADE AVERAGE GRADE 1.002 OVER 0.30m 0.203 OVER 1.5m (5ft) The King Vein grades 1.00 oz/t gold over its average width of 0.30 m. Diluting that value to a mining width, the King Vein carries 0.20 oz/t over 1.5 m (5.0 ft).

Weighted average calculations were also done including the vein sample and the best adjacent wallrock sample (Table 5b). Over an average width of 1.24 m, the zone grades 0.35 oz/t gold. Over a mining width of 1.5 m (5 ft) the zone grades 0.29 oz/t gold.

Diamond Drilling

The King Vein was drilled in late August 1988 following a program of detailed geologic mapping and chip sampling. Due to the steepness of the terrain there were only two drill sites available in the vicinity of the King Vein (Plates 5 and 6). Drill collar locations were determined using an altimeter and chain with slope corrections.

Five holes totalling 1483 feet (452.8 m) were drilled from a single site at 1416 m elevation, 45 m above the King Vein. Table 6 summarizes the pertinent drill hole information and the hole locations with their projections to surface are on Figure 8. Detailed drill logs are given in Appendix 3.

The diamond drilling was carried out by Falcon Drilling of Prince George, B.C., utilizing a custom drill comparable to a JKS 300, and BQ size drill core. Core intersections of the King Vein and Darwin Vein were photographed and sent to Vangeochem Labs in their entirety. The rest of the hole was split with half being sent for analysis and half being stored at the Bronson Camp for future

	S VEIN VEI	GHTED AVER	AGES-VEIN AND WALLROCK ((
1	GOLD	VEIN AND	WEIGHTED
	GRADE	WALLROCK	AVERAGE
	(oz/t)	WIDTH(=)	GOLD (oz/t)
	0.007	0.50	0.007
	n nn2		
	0.002	1.10	0.003
	0.004		
	0.000	1 10	0 009
	0.010	0.20	0.000
	0.000	0.20	
	0.001	1.50	0.001
	0.001		
	0.004	1.30	0.005
	0,004		
	0.325	1.20	0.058
	1.394		
	0.002	1.20	0.234
	0.011		
	1.272	1.20	0.221
	0.005		- · · · · · · · · · · · · · · · · · · ·
	0.000	1.45	0.117
	0.035	7.99	
	0.144	1.34	0.063
	0.013	****	
	0.627	1.49	0.215
	0.014	• • • • •	
	0.094	1.41	0.038
	0.070 0 444	* • • •	
	D 174		
	1.589	0.92	0.372
	0.137	.	
	0.134		
Ċ,	0.200		
	0.071	2.68	0.073
	0.137		
ŝ	0.120		
	0.047	3.30	0.103
	0.033		
	0.000	1.70	0.059
	0.077		
	0.042	1.47	0.034
	0.061		
	0.665	1.28	0,193
	0.084		
,	0.745	1.47	0.297
	0.745	*•*1	W + b T T
	1 547	1.51	0.522
	1.343	1.51	UIVEL
2	3 048	1 33	0.761
		T 1 90.	
	0.225	1.30	0.055
. (0.575	1.00	0.575
	0.283	1.00	0.283
2	3.200		

GOLD)

TABLE 55. KING VEIN WEIGHTED AVERAGES-VEIN AND WALLROCK (GOLD)

STATION LOCATION	Ì	GOLD GRADE	VEIN AND WALLROCK	WEIGHTED AVERAGE GOLD (pz/t)
160	VLUR	0.701	1.00	0.701	
140	VLUR	0.055	1.00	0.055	
120	VEUR	1.138	1.00	1.138	
104	VLUR	0.191	1.00	D.191	
60	VLUR	0.200	1.00	0.200	
24	VLUR	0.050	1.00	0.050	
0	VLUR	0.023	1.00	0.002	
10E	VLUR	0.786	1.00	0.786	
12E	VEUR	1.021	1.00	1.021	
14E	VLUR	0.343	1.00	0.343	
16E	VLUR	0.321	1.00	0.321	
18E	VLUR	0.005	1.00	0.005	
20E	VLUR	0.674	1.00	0.674	
TOTAL			47.10		
AVERAGE	UIDTH		1.239		
WEIGHTED	AVERAG	ε		0.35	OVER 1.24.
				0.29	OVER 1.5m(Sft)

reference. Samples were analyzed by Vangeochem Labs in Vancouver for geochemical and assay gold values (using a 15 gm and 20 gm sample size respectively) and, 10 element ICP (Ag, As, Ba, Bi, Cd, Co, Cu, Mo, Pb, Zn).

TABLE 6

Hole No.	Location	Dip (collar) (deg.)	Azim (deg.)	Length m	Geologic Target
TT-88-1	1416 m elev.	-60	160	103.4	King & Darwin Vein
TT-88-2	1416 m elev.	-90	0	100.6	King & Darwin Vein
TT-88-3	1416 m elev.	-60	095	72.9	King & Darwin Vein
TT-88-4	1416 m elev.	-60	210	91.2	King & Darwin Vein
TT-88-5	1416 m elev.	-60	275	83.9	King & Darwin Vein

The King Vein was successfully intersected in drill holes 1, 3, 4 and 5 with widths varying from 43 to 50 cm. Visible gold was seen in the core from drill holes 1, 3 and 4. Table 7a summarizes the most favorable intersections from the drilling program. The weighted average values of the mineralized vein intersections are listed in Table 7b. Gold was found to be the only element in economic quantities. Bismuth shows a very strong association with gold and is therefore a good indicator element. Arsenic may also be a good indicator (Table 7a).

The Darwin Vein was intersected in drill holes 1, 3, 4 and 5. In the cases of both veins, the wallrock does not carry any appreciable gold. Carbonate veins cutting mafic dykes, however, were found to carry gold.

DRILL HOLE	intersi From (=)	ECTION To(m)	sample Length	SAMPLE TYPE	Au oz/t (ppb)	Bi PP m	As ppm
TT-88-1	28.10	29.50	1.40	KV-Hangingwall	<.005	<3	<3
	29.50	29.95	0.45	KV-Vein	3.315	88	40
	29.95	31.00	1.05	KV-Footwall	0.013	3	20
	70.80 71.90 73.10 73.55 74.40	71.90 73.10 73.55 74.40 76.70	1.10 1.20 0.40 0.85 2.30	DV-Hangingwall DV-Hangingwall DV-Vein DV-Footwall DV-Footwall	<.005 <.005 0.031 0.010 0.006	(3) (3) (3) (3)	7 11 20 40 22
TT -88 -2	9.60	11.10	1.50	Narrou veinlet	0.040		
TT-88-3	31.60	32.70	0.90	KV-Hangingwall	<.005	<3	17
	32.70	33.14	0.44	KV-Vein	D.531	31	47
	33.14	34.20	1.60	KV-Footwall	<.005	<3	26
	51.20	52.50	1.30	DV & Wallrock	0.055		
TT-88-4	17.50	18.00	0.50	Qtz-py vein	0.312		
	24.90	26.20	1.30	KV-Hangingwall	<.005	(3)	10
	26.20	26.63	0.43	KV-Vein	0.294	11	18
	26.63	27.40	0.77	KV-Footwall	<.005	(3)	20
	27.40	28.80	1.40	KV-Footwall	(70)	(3)	23
	70.80	72.00	1.20	DV-Hangingwali	<.005	<3	16
	72.00	72.17	0.17	DV-Vein	<.005	<3	64
	72.17	72.60	0.63	DV-Footwali	<.005	<3	14
TT-88-5	28.60	29.10	0.50	KV-Hangingwall	(180)	<3	9
	29.10	29.60	0.50	KV-Vein	D.408	12	341
	29.60	30.60	1.00	KV-Footwall	O.014	<3	21
	65.60	66.60	1.00	DV-Hangingwall	(180)	<3	25
	66.60	67.70	1.10	DV-Vein	(20)	<3	10
	67.70	68.55	0.85	DV-Footwall	(10)	<3	16
	72.9	73	0.1	Qtz-py veinlet	0.362		

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TABLE 7a. KING VEIN AND DARWIN VEIN MINERALIZED DRILL INTERSECTIONS

TABLE 7b

KING VEIN and DARWIN VEIN WEIGHTED AVERAGES (CHIP SAMPLES) -VEIN and WALLROCK (GOLD)

Drill Hole	Vein and Wallrock Length (m)	Weighted Average Gold (oz/t)	
TT-88-1 King Vein	1.5	1.004	
Darwin Vein	1.25	1.011	
TT-88-3 King Vein	1.34	0.174	
TT-88-4 King Vein	1.2	0.105	
TT-88-5 King Vein	1.5	0.145	

The significance of associated elements (referred to above) deserves consideration because visible gold in the King Vein is quite coarse and assay results may therefore be subject to a nugget effect. To test this a one assay and two assay ton sample size was analyzed with the following results:

TABLE 8

Drill Hole No.	l/2 assay ton (oz/t)	l assay ton (/ (oz/t)	A) l assay ton ((oz/t)	B) 2 assay ton* (oz/t)
TT-88-1	3.315	3.072	2.661	2.866
TT-88-3	.513	1.369	.683	1.026
TT-88-4	.294	.647	.520	.584
TT-88-5	.408	.468	.326	.397

*average of A and B

Considerable variability in the analyses is evident and a two assay ton analysis of the vein intersections is recommended for future drilling.



TT-88-1

Drill hole TT-88-1 was directed at intersecting both the King Vein and the Darwin Vein in their thicker regions.

The King Vein was intersected at 29.5 m. It has an apparent thickness of 0.45 m which is consistent with the vein thickness at surface, and assays 3.315 oz/t gold. Ten specks of gold were visible in the core. The vein is enveloped by a 4 m zone of intense argillic and silicic alteration and iron oxidation from probable supergene weathering.

The Darwin Vein was intersected at 73.1 m and has thickened from 12 cm to an apparent thickness of 40 cm, assaying 0.031 oz/t gold.

TT-88-2

Drill hole TT-88-2 further tested the King and Darwin Veins northward. Neither of the veins was intersected.

Narrow carbonate veinlets assayed .04 oz/t over a 1.5 m interval (Figure 12a).

TT-88-3

On its eastern side, the King Vein in seem to terminate at a fault which experienced 70 m vertical uplift of the King Vein side. Visible gold was commonly found between stations 14E and 12W. TT-88-3 was targeted at this zone of visible gold on the eastern King Vein.



The King Vein was successfully intersected at 32.7 m which was higher than expected, indicating a southerly dip in this area as opposed to what is seen on surface. The vein grades 0.531 oz/t gold and 1.62 oz/t silver across its 44 cm apparent thickness. Minor visible gold was seen with up to 5% pyrite and possible stibnite.

The hanging wall of the King Vein shows a broad zone of potassic and silicic alteration. The footwall shows the same alteration but in a much narrower zone (Figure 12b).

Several quartz-pyrite veinlets up to 2 cm wide were intersected between 51.2 and 52.5 m. They are surrounded by carbonate alteration and probably represent the Darwin Vein. The 1.3 m interval assays 0.055 oz/t gold.

TT-88-4

Drill hole TT-88-4 was aimed at the western extension of the King Vein where surface exposure of the vein was discontinuous.

The vein was intersected at 26.2 m. It assays 0.294 oz/t over its 43 cm apparent width.

The hangingwall of the King Vein is brecciated and hematitic. The vein itself contains two flecks of gold colors, possible native bismuth and minor pyrite. The footwall displays pervasive carbonate and silicic alteration and fracture controlled chloritic alteration in a zone 20 cm wide (Figure 12c).



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The Darwin Vein was intersected at 72 m, having a 17 cm apparent thickness. It is vuggy and pyritic but does not carry detectable gold.

A pyritic and carbonate altered mafic dyke was intersected between 14.9 and 18.6 m. At 17.5 m this dyke has been brecciated and healed by carbonates and cut by narrow quartz veins with 10% pyrite. This material ran 0.312 oz/t over 0.5 m.

TT-88-5

Drill hole TT-88-5 was targeted at the northern extension of the King Vein and Darwin Vein 50 m and 97 m from their surface exposures respectively.

The King Vein was intersected at 29.1 m indicating a steeper dip than seen on surface.

The vein assayed 0.408 oz/t gold over an apparent thickness of 50 cm, and contains pods of massive pyrite and minor needles of possible stibnite.

The hanging wall shows cataclastic deformation with late disseminated pyrite and assays 180 ppb gold. The footwall is a 1 metre zone of intense potassic alteration cut by minor quartz-pyrite veinlets, assaying 480 ppb gold.

The drilling suggests that the vein may have rolled (?) from a shallow northerly dip apparent on surface to a southerly dip further north (into the hillside). Proper transit surveying of the surface trace and drillhole collar locations should precede further work. At present dip extensions into the h.llside range from 13 to 38 metres (Figure 9).

PROSPECTING

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Four new localities of anomalous precious metal values have been outlined by the 1988 prospecting program. Sample locations are indicated on Figure 13. Brief geologic descriptions of the samples are found in Appendix 2.

In the northwest corner of the Ice 10 claim north-south trending quartz and carbonate veins 2 to 10 cm wide carry 28.39 oz/t silver, 21.5% copper and 4.72 oz/t silver, 1.73% copper (sample numbers 24869, 24875) (Figure 13). The narrow veins are closely spaced and a sample of the alteration zone around them indicated 3.36 oz/t silver and 2% copper (#24872).

The prospecting of a north-south gorge on the north wall of the Chubby Creek Basin, up drainage from a heavy metal stream sample which assayed 660 ppb gold, led to several mineralized northeasterly trending shears. These shears may be related to regional north-east fault structures which may be significant since several mineralized showings are localized around them (ie. Gulf International's Northwest Zone and Consolidated Sea Gold's Northeast, Northwest and Southwest Zones).

Locally the shear zones are marked by pyrite, limonite and hematite. A felsic to intermediate dyke also occurs in the mineralized area.

Grab samples from these shears assayed 0.172 and 0.034 oz/t gold (#21066, #21096). Northeasterly trending faults cut the gorge at 019 /66W. These shears are locally silicified and contain pyrite, arsenopyrite, jarosite and hematite. Samples of this material assay 0.054, 0.137 and 0.28 oz/t gold (#21097, #21098 and #21099).

Across the ice field to the north, a similar mineralized structure was found. Grab samples of silicified and pyritic volcanics cut by northeast trending faults carried gold values of 0.034, 0.042 and 0.055 oz/t gold (#21083, #21084 and #21085).

Other local anomalies indicated by prospecting include a pyritic horizon in a limestone bed east of the King Vein which carried 940 ppb gold in a grab sample (#21007); and, narrow quartz veins south and southwest of the King Vein which carried 0.066 and 0.046 oz/t gold (#21052, #21054).

REGIONAL PROPERTY GEOCHEMISTRY

Silt and Heavy Metal Sampling

Silt and heavy metal samples were taken from each of the drainages which feed Chubby Creek from the north side. Samples were dried and sifted to -80 mesh and finally analyzed by fire assay with an AA finish for gold (20 gm sample size) and 10 element ICP for Ag, Pb, Zn, Cd, As, Co, Bi, Cu, Mo and Ba. The base and precious metal results have been plotted on Figures 16 to 19.

Sampling has shown that a high ranking value of copper, silver or lead in a silt sample corresponds well with a high ranking heavy metal sample. For gold, however, heavy metal samples gave much higher anomalous values allowing better definition of the interesting areas.

Silt and heavy metal samples indicate the steep northern valley walls of Chubby Creek are highly anomalous in gold, with values ranging from 220 to 660 ppb (heavy metal). Zinc and to a lesser extent lead values are anomalous downstream with values as high as 414 ppm zinc and 126 ppm lead in silt samples.
Soil Geochemistry

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Due to the steep topography and limited soil development only the southern claim area is amenable to soil sampling. Soil samples were taken at 15 to 30 cm depths, dried, sifted to -80 mesh and analyzed by ICP for Ag, Pb, Zn, Ba, Bi, Co, Cd, Mo, Cu and by fire assay with an AA finish for gold. Soil, silt and heavy metal sample locations and their gold, silver, lead and zinc values are plotted on Figures 14a to 14e, located in the back pocket.

Gold values were generally very low ranging from below detection limit to 35 ppb. The higher values occur on the north slope of Chubby Creek east of Cripple Creek. The anomalous gold values in heavy metal samples came from the drainage area just west of Cripple Creek. Possibly these soils are indicating a weak gold enhancement halo.

Silver values ranged from .1 to 9.4 ppm and values above 2 ppm are considered anomalous. The highest values occur near the Ver 4 - New 7 claim boundary in downhill trains which extend across 2 or 3 contour lines. Small clusters of higher silver values also occur further east at the 1100, 1000 and 800 m elevations.

Lead values above 100 ppm are considered anomalous in this area. Clusters of greater than 200 ppm lead values occur on the east end of contour lines 1100, 1000 and 800, proximal to silver anomalies.

Zinc values above 100 ppm are common in the north slope of Chubby Creek. Values from 276 to 959 ppm zinc occur proximal to the lead-silver anomalies. The extreme southeast corner of Ver 4 at 600 and 500 m contours hosts a cluster of 4 samples around 200 ppm zinc.

CONCLUSIONS

The North Zone stratabound silver-lead-zinc mineralization occurs in two limestone units with a known strike length of 220 m to a depth of 110 m. The mineralized units are open to the north, south and at depth. The mineralization is very fine grained skarn type, with higher values associated with the tuffaceous limestone. Chip sampling of the intermediate subvolcanic showed it was anomalous in silver-lead-zinc. Since mineralization is localized around this intrusive phase, it is believed to be the source of the metals.

Surface chip samples reach high silver, lead and zinc values of 9.02 oz/t, 7.3% and 9.24% respectively. Drilling produced the following highest weighted averages for each metal, from different intercepts: 3.13 oz/ton silver over 2.7 metres (hole TT 88-6), 1.11% lead over 3.2 metres (hole TT 88-7) and 2.44% zinc over 6.7 metres (hole TT 88-9).

Gold mineralization found in the footwall of a hornblende porphyry dyke in the 1987 drilling, was not found to occur in association with other intersections of that dyke or other hornblende porphyry dykes elsewhere on the property.

The VLF anomaly is related to disseminated arsenopyrite and pyrite along a vertical fault zone. No gold values were found in association with this structure. Chlorite-magnetite rich dykes are responsible for the pods of magnetic anomalies.

The two mineralized limestones of the North Zone occur in the South Zone with consistent north-south sedimentary contact orientations. Furthermore, South Zone mineralization was introduced by intermediate subvolcanics which invaded along the andesite-limestone contact, similar to the situation in the North Zone.

The South Zone, however, is cut off by andesites, possibly through faulting, giving the zone an east-west trend. Limited chip and grab sampling produced low values with the exception of one grab sample from the Grant Showing, which assayed 5.9 oz/ton silver, 9.57% lead and 8.17% zinc.

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The King Vein, 150 m long on surface with its thickness varying from 7 to 130 cm, appears to have a shallow northerly dip and roughly east-west strike. From drilling, the vein is known to be broadly folded in a north south direction as well. The apparent dip extension of the vein ranges from 13 to 38 metres. The vein averages 1.00 oz/t over an average width of 0.30 m, which when diluted to a 1.5 m (5 ft) width, grades 0.20 oz/t. Drill intersections range from 0.292 to 3.315 oz/t gold over apparent widths of 40 to 50 cm.

The Darwin Vein situated 35 to 40 metres south (below) the King Vein, is similar in nature to it only much narrower (3 to 13 cm) and shorter in exposed strike length (33 metres). Surface exposure indicates a shallow to moderate southeasterly dip. The vein was sampled at eight sites, producing values from 190 ppb gold over 3 cm to 0.516 oz/ton gold over 3 cm. King Vein drill holes were extended to test the Darwin Vein but the latter is difficult to identify with great certainty. Suspected vein intercepts, some including altered wallrock, are indicated in four holes with values ranging from 20 ppb gold over 1.10 m to 0.055 oz/ton gold over 1.30 m. The tenuous identification of the vein precludes any observations regarding strike and dip extension at this stage.

Four new areas of anomalous precious metal values have been outlined by the 1988 prospecting program. They include narrow closely spaced veins with up to 28 oz/t silver and 21.5% copper. The alteration zone around the veins carries 3.36 oz/t silver and 2% copper in grab samples. A northeasterly trending shear zone,

located in a gorge on the north side of the Chubby Creek drainage basin, assays up to 0.28 oz/t gold and a northeast trending structure cutting volcanics north of the main ice fields carries up to 0.055 oz/t gold in grab samples. Narrow quartz veins south and east of the King Vein carry up to 0.066 oz/t gold.

In summary, both the North Zone and King Vein occurrences are related to an intrusive source and are characterized by chloritic alteration which was followed by potassium-feldspar veining. The similarities in the character of these two mineralized zones may suggest that they are related to a single mineralizing event which manifested itself in different ways depending on the host rocks. More specifically, the more competent granodiorite fractured creating the open space for veins while the limestone reacted to form fine grained skarn mineralization. The presence of gold in the veins and not in the skarn may be a function of depth of emplacement.

Furthermore, in a review of the mineralized occurrences of the Iskut gold camp, the environment in which the King Vein and North zone formed appears geologically favourable. From Table 2, it can be said that mineralization in the Iskut is most commonly vein or skarn type. The intrusive source is most commonly a potassium-feldspar porphyry, quartz monzonite or syenodiorite to syenite porphyry. The mineralization is polymetallic (ie. gold with copper, silver, lead and zinc) and commonly associated with pyrite, arsenopyrite and magnetite among others. The two most commonly noted associated alterations are chloritic and potassium-feldspar as seen on Skyline's Reg property, the Inel property, the Sky and Spray claims and the Gab claims. This investigation has shown that these features are common to the Ticker Tape mineralization. The main geologic difference between the known economic showings and the Ticker Tape showings is the fine grained nature of the source intrusive. Perhaps the North Zone

represents a higher level of emplacement than most showings in the Iskut.

In addition, the major northeast trending fault zone along which the Northwest Zone of Gulf International, and the Northwest, Northeast and Southwest Zones of Consolidated Sea Gold are localized, is seen on orthophotographs to trend onto the Ticker Tape claims immediately south of the King Vein and North Zone. Gulf has intersected 1.605 oz/t gold over 36.5 feet in drill hole 87-29. Surface samples from Consolidated Sea Gold have returned gold assay values as high as 1.85 oz/t. The King Vein and North Zone are therefore located along a major structure known to be proximal to other mineralized showings of significant gold grade. The similar geologic character of the Ticker Tape mineralization to these mineralized showings in the Iskut camp continue to make it an interesting area.

RECOMMENDATIONS

The silver-lead-zinc values in the limestones are not significant enough to merit further work in the North Zone at the current metal prices.

Gold values in the North Zone were indicated by only one sample. Reanalysis of this sample is recommended to determine if it is reproducible. Alternatively, gold mineralization may be very sporadic and other sampling methods should be investigated. Perhaps the entire core around hornblende porphyry dykes should be analyzed and/or a two assay ton sample size should be used for the analyses.

The South Zone has similar geology to the North Zone and in view of the North Zone drilling results, further development is not warranted at this time.

Significant gold grades are consistently obtained in the King Vein. It is recognized that the vein as presently known is too narrow to have economic potential but by the same token its extent has not been fully defined. The possibility that the vein may yet thicken has not been discounted. Further drilling is recommended but it should be preceded by accurate survey location of the vein's surface trace and existing drill collars to provide accurate control. This will certainly result in the adjustment of existing sections and influence the choice of future drill sites which should also be surveyed in prior to their use. The terrain above the King Vein is very precipitous and, given the shortness of the season at these elevations, the choices for drillsites will be limited and must be maximized.

A drill hole should also be considered for exploration of a possible down dropped eastern extension of the King Vein beyond the terminating fault. The narrow quartz vein found southeast of the King Vein area may be an extension of either the King or Darwin Vein. Detailed geology of this area would facilitate definition of drill targets.

The most promising showing found by prospecting is the northeast trending shear zone in the Chubby Creek drainage basin. More intensive prospecting and, where the terrain allows, trenching is recommended to further define the extent of this mineralization and prepare for possible drilling.

BUDGET ESTIMATE

Wages		
Senior Geologist – 4 days @ \$400/day	\$ 2,400	
Project Geologist - 14 days @ \$300/day	4,200	
Senior Prospector - 14 days @ \$265/day	3,710	
Assistant – 14 days @ \$225/day	3,150	
Surveyor - 14 days @ \$225/day	3,150	
Rod Man - 14 days @ \$225/day	3,150	
Samplers - 2 x 14 days @ \$225/day	6,300	
Accountant/Manager - 4 days @ \$250/day	1,000	0 07 040
		\$ 27,000
Support - 108 man days @ \$125/man day		13,500
Assaying		
Soils - 200 2 \$15.50/sample	\$ 3,100	
Rocks - 100 @ \$17.50/sample	1,750	4 950
		4,830
Helicopter - 1.8 hours/day x 14 days @ \$600/day		15,120
Fixed Wing (estimate)		3,000
Mob/Demob		3,500
Communications (estimate)		2,500
Equipment Rentals (estimate)		3,500
Supervision		4,000
Data Compilation, Drafting and Reporting		8,000
Diamond Drilling (estimate, all inclusive) 1,500 feet @ \$75	/ft	<u>_112,500</u>
		\$197,530
Contingency @ 10%		19,730
Management @ 15%		32,589
		\$249,849

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CERTIFICATE of QUALIFICATIONS

I, George Cavey, of 6891 Wiltshire Street, Vancouver, British Columbia hereby certify:

- I am a graduate of the University of British Columbia (1976) and hold a BSc. degree in geology.
- 2. I am presently employed as a consulting geologist with OreQuest Consultants Ltd. of 404-595 Howe Street, Vancouver, British Columbia.
- 3. I have been employed in my profession by various mining companies since graduation.
- 4. I am a Fellow of the Geological Association of Canada.
- 5. I am a member of the Canadian Institute of Mining and Metallurgy.
- 6. The information contained in this report was obtained by supervision of the work done on the property by OreQuest Consultants Ltd.
- 7. Neither OreQuest Consultants Ltd. nor myself have or expect to receive direct or indirect interest in the property nor in the securities of Ticker Tape Resources Ltd. or Cheryl Resources Ltd.
- 8. I consent to and authorize the use of the attached report and my name in the Company's Prospectus, Statement of Material Factor or other public document.

George Consulting

DATED at Vancouver, British Columbia, this 30th day of November, 1988.

CERTIFICATE of QUALIFICATIONS

1, George Cavey, of 6891 Wiltshire Street, Vancouver, British Columbia hereby certify:

- 1 am a graduate of the University of British Columbia (1976) and hold a BSc, degree in geology.
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- 8. I consent to and authorize the use of the attached report and my name in the Company's Prospectus, Statement of Material Factor or her public document.

George Consulting

DATED at Vancouver, British Columbia, this 30th day of November, 1988.

CERTIFICATE of QUALIFICATIONS

I, Kim Hudson, of 2225 Acadia Road, Vancouver, British Columbia hereby certify:

- I am a graduate of the University of British Columbia (1984) and hold a
 B.Sc. degree in geology.
- 2. I am a graduate of Queen's University (1988) and hold a M.Sc. in mineral exploration.
- 3. I am presently employed as a geologist with OreQuest Consultants Ltd. of 404-595 Howe Street, Vancouver, British Columbia.
- 4. I have been employed in my profession by various mining companies since 1981.
- 5. The information contained in this report was obtained by supervision of the work done on the property and the materials listed in the bibliography.
- 6. Neither OreQuest Consultants Ltd. nor myself have or expect to receive direct or indirect interest in the property nor in the securities of Ticker Tape Resources Ltd. and Cheryl Resources Ltd.
- 7. I consent to and authorize the use of the attached report and my name in the Company's Prospectus, Statement of Material Facts or other public document.

Kim Hudson Geologist

DATED at Vancouver, British Columbia, this 4th day of November, 1988.

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