



Province of
British Columbia
Ministry of
Energy, Mines and
Petroleum Resources



EXPLORATION BRITISH COLUMBIA

FINANCIAL ASSISTANCE FOR MINERAL EXPLORATION

Grant
Identification
No. 10962E-13

FORM 3

APPLICATION FOR PAYMENT

INSTRUCTIONS:

- Please type or print
- Please submit completed forms, with a copy of the final technical report, to:
Manager, EXPLORATION BRITISH COLUMBIA, Mineral Resources Division
Ministry of Energy, Mines and Petroleum Resources
Parliament Buildings, Victoria, B.C. V8V 1X4

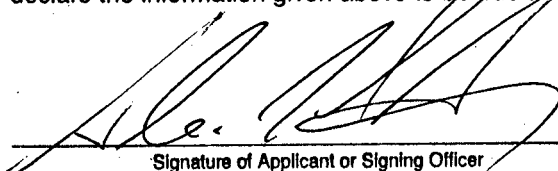
FILMED

LOG NO: 0226

MGE-F /

ACTION:

FILE NO:

1. Date of this Application		
January 30, 1987		
2. Applicant's Identification and Location		
Name Corporation Falconbridge Copper		
Address — Street Number and Name, Apt. No. 6415 - 64th Street		Telephone No. 946-5451
City, Town, Village Delta	Province B. C.	Postal Code V 4 K 4 E 2
3. Head Office Location		
Address — Street Number and Name, Apt. No. P. O. Box 91, Suite 3970, Commerce Court West		Telephone No. 416-982-7272
City, Town, Village Toronto	Province Ontario	Postal Code M 5 L 1 C 7
4. Mailing Address (if different from above)		
Address — Street Number and Name, Apt. No. Same as above		Telephone No.
City, Town, Village	Province	Postal Code
5. British Columbia Free Miner Certificate No. 279317 CORFAC		
<p>6. I/We, Corporation Falconbridge Copper, hereby apply for payment of a grant under the Exploration British Columbia Financial Assistance for Mineral Exploration Program and declare the information given above to be true and accurate.</p>		
 Signature of Applicant or Signing Officer		Alex J. Davidson Name (please print)
Exploration Manager, Western Canada Title/Occupation (please print)		Rea Gold Project Name (please print)
Corporation Falconbridge Copper Company (please print)		Date SAW 3/17/87

GEOLOGICAL BRANCH ASSESSMENT REPORT

15,718

KAMLOOPS

FAME E13-15718



Province of
British Columbia

Ministry of
Energy, Mines and
Petroleum Resources

ASSESSMENT REPORT
TITLE PAGE AND SUMMARY

TYPE OF REPORT/SURVEY(S)	TOTAL COST
Drilling	\$ 197 045.51

AUTHOR(S) I. D. Pirie SIGNATURE(S)

DATE STATEMENT OF EXPLORATION AND DEVELOPMENT FILED 26 Feb/87 YEAR OF WORK 1986

PROPERTY NAME(S) REA GOLD

COMMODITIES PRESENT Ag, Zn, Pb, Au, Cu, Ba

B.C. MINERAL INVENTORY NUMBER(S), IF KNOWN 82M-191

MINING DIVISION Kamloops NTS 82M 4W

LATITUDE 51° 08' LONGITUDE 119° 49'

NAMES and NUMBERS of all mineral tenures in good standing (when work was done) that form the property (Examples: TAX 1-4, FIRE 2 (12 units); PHOENIX (Lot 1706); Mineral Lease M 123; Mining or Certified Mining Lease ML 12 (claims involved)):

REA 1

OWNER(S)

(1) - Sam - (2)

MAILING ADDRESS

- same -

OPERATOR(S) (that is, Company paying for the work)

(1) Corporation Falconbridge Copper

MAILING ADDRESS

6415 - 64. Street
Delta, BC.
V4K 4E2

Carboniferous Eagle Bay Formation

SUMMARY GEOLOGY (lithology, age, structure, alteration, mineralization, size, and attitude):

A sequence of mafic volcanics and volcaniclastics interbedded with siliceous exhalites, opillites and greywackes is overturned striking northwest and dips 30° to 60° northeast. Massive Sulphide - base mineralization is hosted by siliceous exhalite at or close to the contact between mafic volcanics and sedimentary rocks.

REFERENCES TO PREVIOUS WORK A.R. 12737, 14185

TYPE OF WORK IN THIS REPORT	EXTENT OF WORK (IN METRIC UNITS)	ON WHICH CLAIMS	COST APPORTIONED
GEOLOGICAL (scale, area)			
Ground
Photo
GEOPHYSICAL (line-kilometres)			
Ground
Magnetic
Electromagnetic
Induced Polarization
Radiometric
Seismic
Other
Airborne
GEOCHEMICAL (number of samples analysed for)			
Soil
Silt
✓ Rock	45 ME, whole rock	.....	.....
Other
DRILLING (total metres; number of holes, size)			
✓ Core	DIAD 3253.0 m, 12 holes, HQ	see front	.....
Non-core
RELATED TECHNICAL			
✓ Sampling/assaying	250, Cu, Zn, Pb, Ag, Au, As, Sb, Ba	.....	.....
Petrographic
Mineralogic
Metallurgic
PROSPECTING (scale, area)			
PREPARATORY/PHYSICAL			
Legal surveys (scale, area)
Topographic (scale, area)
Photogrammetric (scale, area)
Line/grid (kilometres)
Road, local access (kilometres)
Trench (metres)
Underground (metres)
			TOTAL COST 197 045.51

FOR MINISTRY USE ONLY	NAME OF PAC ACCOUNT	DEBIT	CREDIT	REMARKS:
Value work done (from report) 197 045.51	Information Class ①
Value of work approved	
Value claimed (from statement)	
Value credited to PAC account	
Value debited to PAC account	
Accepted <i>MEK</i> Date	Rept. No. 15718	

7. EXPENDITURES (N.B. Please provide actual all-inclusive costs, including salaries and wages, equipment and machinery rental, supplies, services, transportation and accommodation directly attributable to the field program.)

(a) For the following, the full cost (100% of expenditures) are eligible:

Total
Eligible Expenses

	\$
Geological Surveys, Map and Report Preparation and Related Costs	
Geophysical Surveys (line-kilometres)	
Ground	
Magnetic	\$
Electromagnetic	\$
Induced Polarization	\$
Radiometric	\$
Seismic	\$
Other	\$
Airborne	\$ _____
	\$
Geochemical Surveys (No. of samples analysed for _____)	
Soil	\$
Silt	\$
Rock	\$
Other	\$ _____
	\$
Drilling	
Surface 3253.4 m @ \$ 48.019 = \$	
Underground m @ \$ = \$ 156,225.68	\$ 156,225.68
	\$
Related Technical Surveys	
Sampling/Assaying	\$ 9,880.00
Petrographic	\$
Mineralogic	\$
Metallurgic	\$ _____
	\$ 9,880.00
Preparatory/Physical	
Line/Grid (kilometres)	\$
Trenching (metres)	\$ _____
	\$
Other Exploration Costs (attach detailed schedules)	
Salaries, Travel, Field Expenses (averaged over programme at \$9.51/m)	\$
.....	\$
.....	\$ 30,939.83
	\$ 30,939.83
Total Eligible Expenses	\$ 197,045.51

(b) For the following activities only 25% of total costs are eligible:

Tunnelling, Drifting, Other Lateral Excavation, Shaft Sinking (25% of total expenses are eligible)	
..... m @ \$ = \$ × 25% = \$	
..... m @ \$ = \$ × 25% = \$ _____	
	\$

(c) TOTAL ELIGIBLE EXPENDITURES: \$

8. **SUPPLEMENTARY INFORMATION:** The following information is required in order to help determine the contribution which mineral exploration activity makes to the economy, and relates to the utilization of B.C. vs. outside labour and services. Only figures directly attributable to the funded program should be included (approximate figures acceptable, but please be as accurate as possible).

(a) **Employment, wages and salaries**

Type	No. Employed		No. Person-days		Salaries/Wages Paid	
	B.C.	Outside	B.C.	Outside	B.C.	Outside
Prospectors					\$	\$
Linecutters						
Technicians	1		55		5500	
General Labourers						
Drillers/Helpers						
Equipment Operators						
Geologists	1		55		11000	
Geophysicists						
Geochemists						
Engineers						
Supervisory	1		10		2500	
Consulting						
Secretarial	2		4		400	
Managerial						
Legal						
Accounting						
Others (specify) Drafting	1		4		4800	
Others (specify)						
TOTALS					\$ 19880	\$

(b) Goods and Services

Description	Expenditure	
	B.C.	Outside
Meals, Groceries, etc.	\$ 2809.83	\$
Camping Supplies, Equipment, etc.	1000.00	
Accommodation	2200.00	
Transportations — Scheduled Air	1000.00	800.00
— Air Charter		
— Vehicle Rentals	2000.00	
— Vehicle O and M Costs	1250.00	
— Other (specify)		
Equipment Rentals —		
Equipment Rentals — Trenching, etc.		
— Geophysical, etc.		
— Other (specify)		
Contract Drilling	156,225.68	
Consultant Services		
Assays and Analyses	9880.00	
Communications		
Other (specify)		

9. IMPACT OF FAME GRANT

(a) Please indicate what level of expansion of your project was attributable to receiving a FAME grant.

\$ 50,000

25 person/days employment.

(b) Please indicate what you feel to be the main achievement of this FAME funded program.

This \$50,000 FAME grant allowed us to expand the Silver Zone drilling program by approximately 30%. This allowed us to make more accurate estimates of the drill indicated mineral inventory at the Silver Zone.

REA GOLD OPTION
PN 312

FOLLOW UP DRILLING ON SILVER ZONE DISCOVERY
RG-77 TO RG-88 (INCL.)

KAMLOOPS MINING DIVISION
NTS 82M/4W

CORPORATION FALCONBRIDGE COPPER
6415 - 64TH STREET
DELTA, B. C. V4K 4E2

IAN D. PIRIE
JANUARY, 1987

TABLE OF CONTENTS

	Page
INTRODUCTION	1
General	1
Location and Access	1
Vegetation	2
Fauna	2
Topography	4
PROPERTY AND OWNERSHIP	4
HISTORY	6
REGIONAL GEOLOGY	7
LOCAL GEOLOGY	7
WORK DONE	8
PURPOSE	8
RESULTS	8
CONCLUSIONS AND RECOMMENDATIONS	11
ITEMIZED COST STATEMENT	12
CERTIFICATE OF QUALIFICATIONS	13

APPENDIX I

Drill Logs (RG-77 to RG-88)

LIST OF FIGURES

Figure 1	Location Map	3
Figure 2	Claim Configuration	5
Figure 3	Longitudinal Section	10

LIST OF MAPS

Map 1	Drill Hole Locations	In Pocket
-------	----------------------------	-----------

INTRODUCTION

General

The Rea Gold property was optioned by Corporation Falconbridge Copper in November 1983 after the discovery of a massive sulphide outcrop. Since then several small but high grade sulphide lenses have been delineated with combined reserves on three of them (the Main Zone) of around 267,000 tonnes grading 6.5 gm/T Au and 73.4 gm/T Ag, along with values in Cu, Pb and Zn.

Recent work has concentrated on a second mineralized horizon discovered in 1985 (the Silver Zone Horizon). By mid 1986 widely spaced drillholes had intersected narrow, often high grade mineralization over a strike length of 3.2 km. A 600 m long section of this produced better thicknesses, (up to 8.7 m) and grades to 1200 g/T Ag plus.

This report describes the results of drilling done in September and October, 1986 to further delineate this new zone.

Location and Access

The Rea Gold property is located approximately 40 km east of

Barriere, B.C. and about 100 km northeast of Kamloops (Figure 1). The property lies on the northwest slope of Samatosum Mtn., straddles Johnson Creek and includes a part of Johnson Lake.

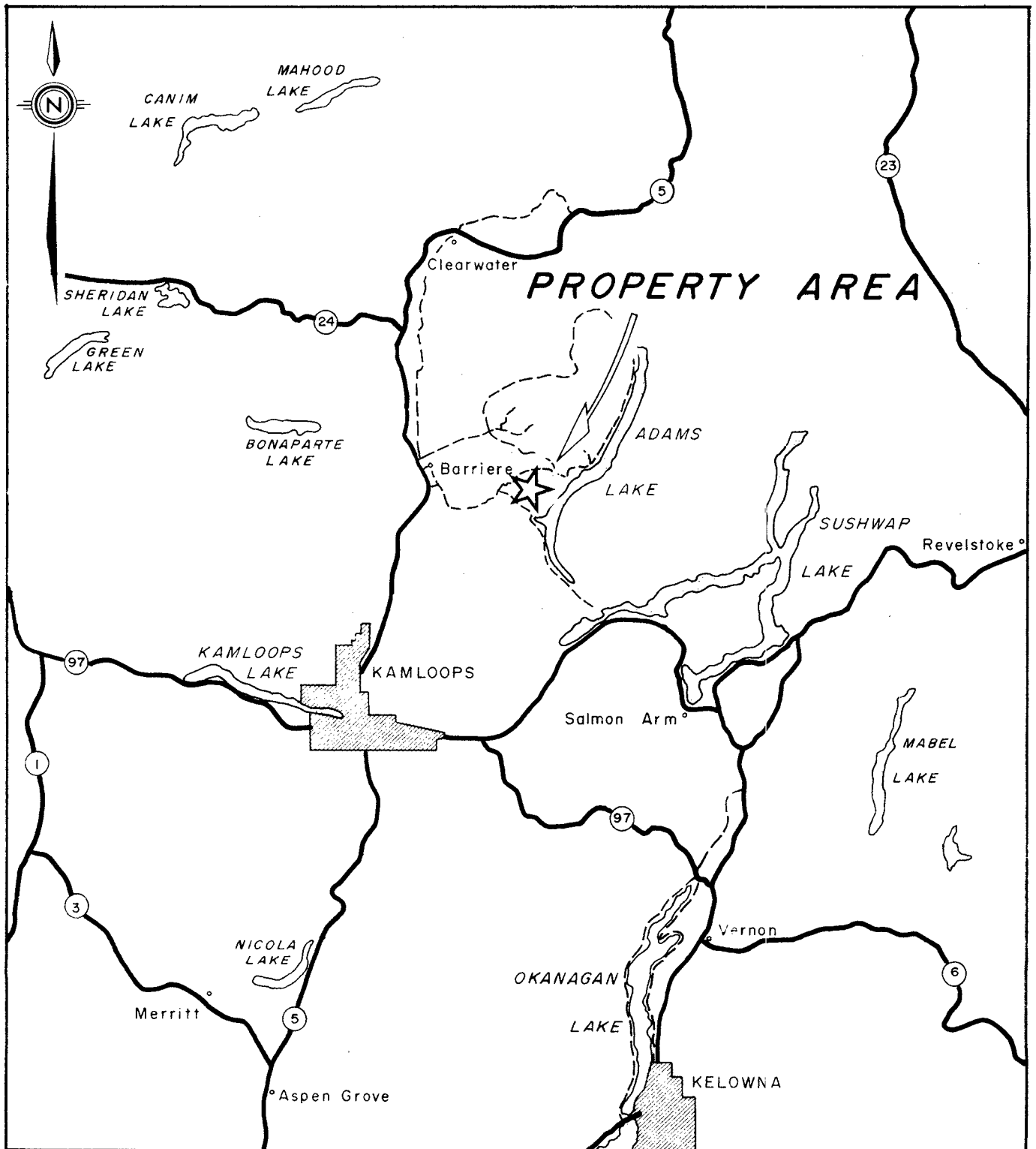
Access is by two or four wheel drive vehicle north from Skwaam Bay along the Adams Lake road to the Samatosum cutoff (28 1/2 km) and up the Samatosum road for 21 kilometres. Alternatively, access may be had up the Johnson Creek road from Sinmax Valley.

Vegetation

The property is covered by douglas fir and lodgepole pine with lesser amount of spruce, balsam and cedar. However the immediate area of the Rea deposit has been recently (1980) logged over and active logging continues in several places.

Fauna

The area is classified as Class IV supporting little to no wildlife.



SCALE



REA GOLD OPTION LOCATION MAP

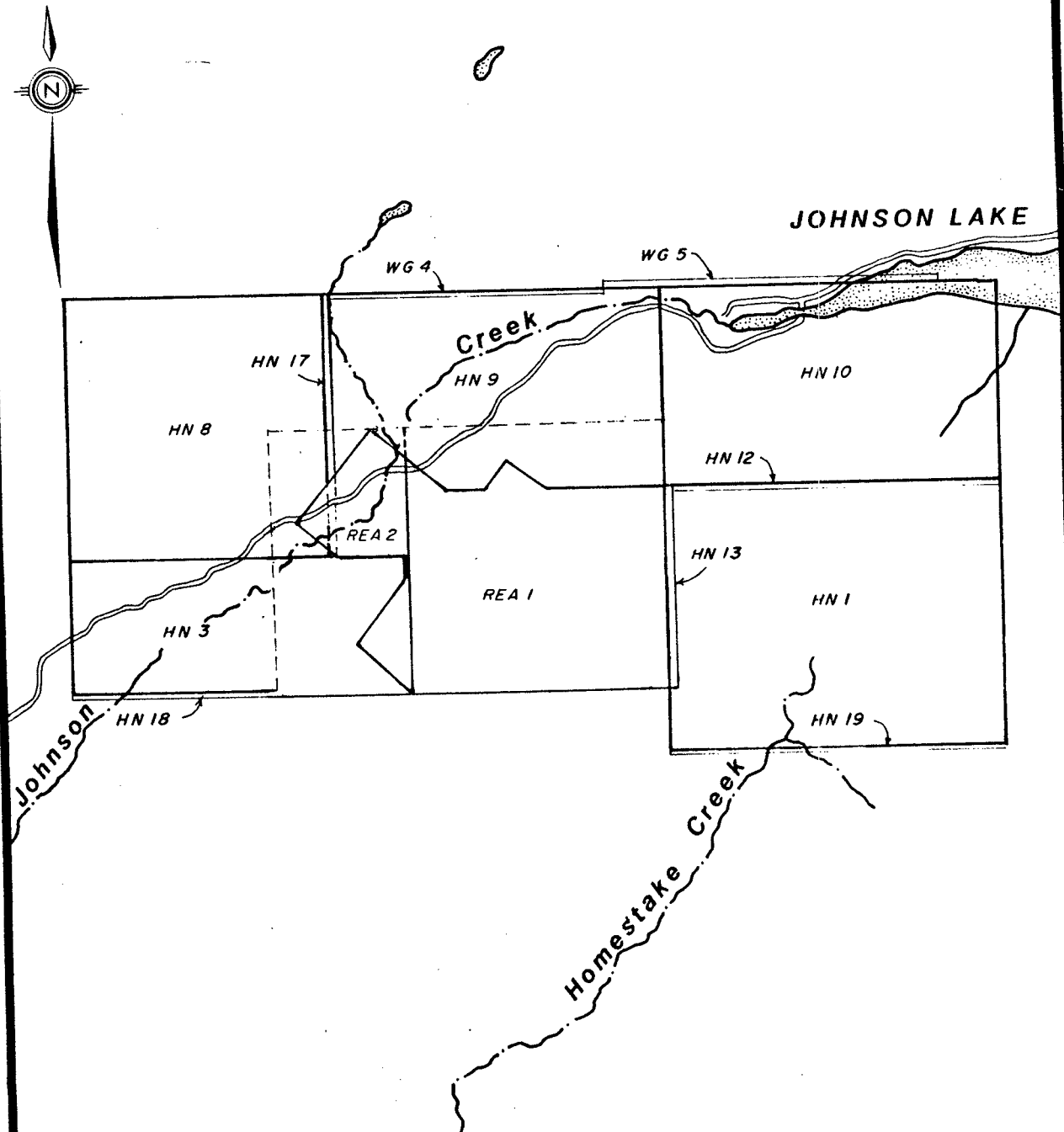
Topography

Relief in the area is moderate. The elevation at the exploration site is between 1400 and 1600 m and the peak of Samatosum Mountain is 1996 m. Johnson Lake is at 1100 m and Adams Lake is at 460 m.

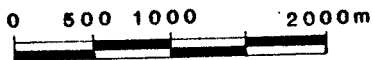
PROPERTY AND OWNERSHIP

The Rea Gold property consists of 14 modified grid claims and fractional claims owned and operated by Corporation Falconbridge Copper (Figure 2). These are:

<u>Claims Name</u>	<u># units</u>	<u>Month</u>	<u>Record #</u>
Rea 1	16	November	6422
Rea 2	8	November	6423
HN 1	20	October	4802
HN 3	10	October	4790
HN 8	16	October	4856
HN 9	15	October	4857
HN 10	15	October	4858



**REA GOLD OPTION
CLAIM CONFIGURATION**



HN 12 Fr	1	November	5031
HN 13 Fr	1	November	5032
HN 17 Fr	1	November	5036
HN 18 Fr	1	November	5037
HN 19 Fr	1	November	5038
WG 4 Fr	1	December	5316
WG 5 Fr	1	December	5373

Drilling was carried out on the Rea 1 claim entirely.

HISTORY

Intermittent exploration activity in the area since the 1920's has resulted in the discovery of numerous occurrences of base and precious metal sulphides, often accompanied by barite. Of these only one, the Homestake Mine, has any reported production.

The Rea Gold mineralization was discovered in August, 1983, by Mr. A Hilton of Kamloops. The discovery was the result of a two year prospecting program based on recent government geological maps and using a field geochemical kit. Anomalous silt and soil samples localized the prospecting to an area on the NW flank of Samatosum Mountain. Active logging in the right area at the right time

revealed a red, hematitic gossan subsequently found to overlie massive sulphides.

REGIONAL GEOLOGY

The area is underlain by a complex assemblage of volcanics and sediments of the Upper Paleozoic (Carboniferous) Eagle Bay Formation. These have undergone several phases of deformation involving folding and thrusting producing a moderate to strong foliation in most of the units. Deformation generally increases eastward towards the margin of the Shuswap Complex. To the north, the Eagle Bay is intruded by granite and quartz monzonite of the Cretaceous Baldy Batholith.

LOCAL GEOLOGY

The Rea Gold property itself is mainly underlain by a sequence of mafic volcanics and volcanoclastics interbedded with siliceous exhalites, argillites and greywackes. Much of the sequence is overturned and strikes NW-SE and dips 30-60 to the NE.

Sulphide-barite mineralization is hosted by siliceous exhalite at or close to the contact between mafic volcanics and sediments.

WORK DONE

The work done in this programme consisted of the drilling of 12 NQ diamond drillholes for a total meterage of 3253.4 m. Logs are in Appendix 1 complete with assay and geochemical data. A location map is in the back pocket.

PURPOSE

The purpose of this drilling program was to further delineate mineralization on the "Silver Zone" horizon discovered in mid 1986. This mineralization consists of stratiform zones of disseminated to massive sphalerite and tetrahedrite in altered tuffs and sediments (Muddy Tuff).

RESULTS

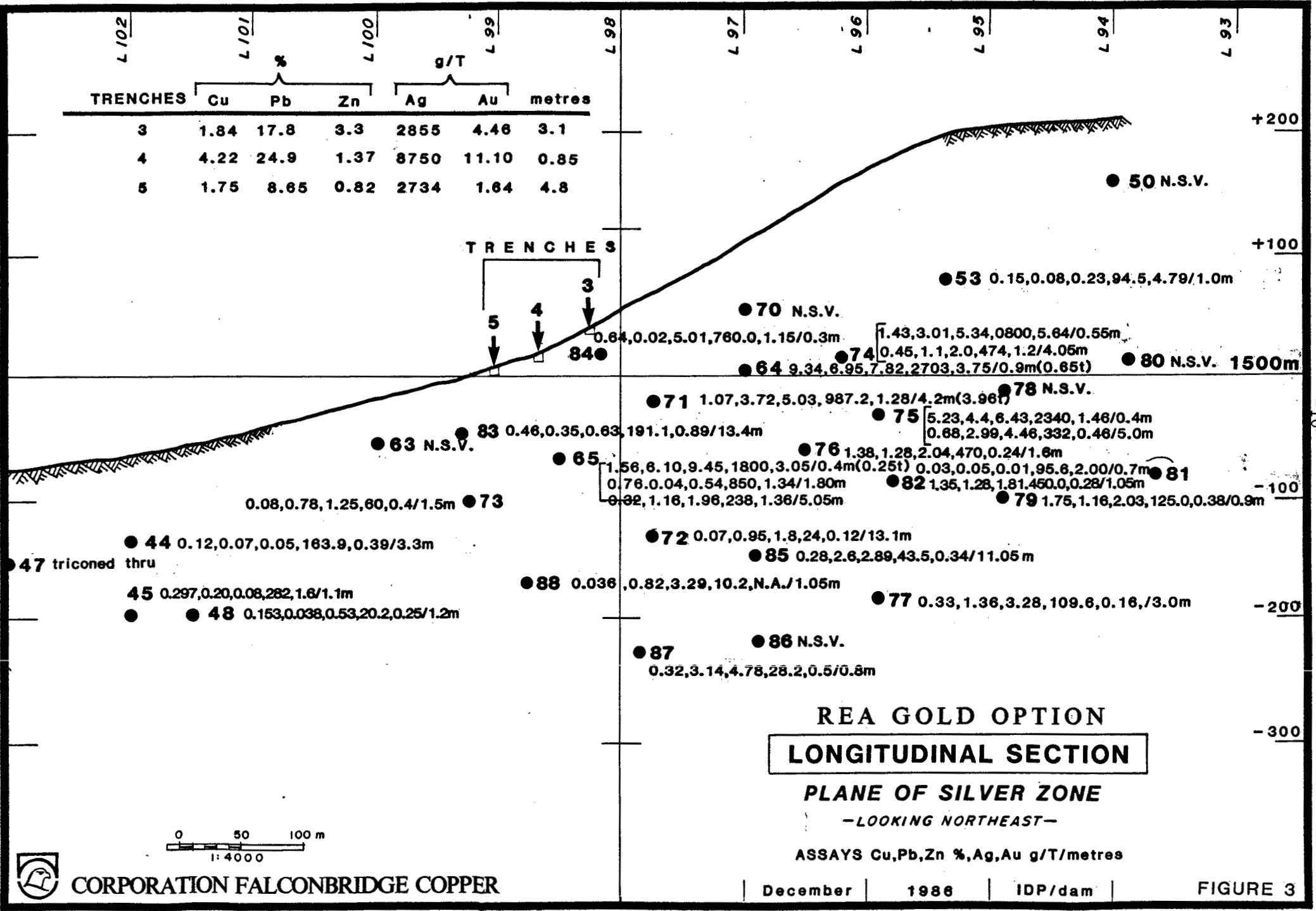
A total of 12 drillholes were put down, the locations of which are shown on Map 1 (in back pocket). All were collared in basaltic

flows in the structural hangingwall, but stratigraphic footwall of the mineralization, thence passing into the ore hosting tuffs and sediments. Because of the stratiform nature of the mineralization, it is possible to show the relative pierce points in the form of a longitudinal section. This is included as Figure 3.

All holes intersected sulphides of some sort. Most significant in terms of grade were RG-82 and RG-83 which intersected 1.35% Cu, 1.81% Zn, 1.28% Pb, 450g/T Ag and 0.28g/T Au over 1.05m and 0.5% Cu, 0.53% Zn, 0.38% Pb, 210g/T Ag and 0.96g/T Au over 12.1m respectively. Most spectacular in terms of sulphide content was RG-85 which intersected 11.05m of massive sulphides grading 0.28% Cu, 2.8% Zn, 2.6% Pb, 43g/T Ag and 0.34g/T Au.

There appear to be three types of mineralization represented in this zone. Firstly, there is distinctly syngenetic sulphide, dominantly pyritic in nature and locally well bedded. Secondly, there is sphalerite - tetrahedrite associated with fine quartz veinlets and silicification which is marginally later in the paragenetic sequence. Thirdly, there are sulphide pods associated with strong quartz veining which may be significantly younger.

At the present time there is not sufficient data to determine if and how these different forms of mineralization connect. Additional drilling to narrow the gaps between holes is necessary. However, the chances are good that a medium sized, high grade ore body exists within the limits of the current drill coverage. In addition, the broad mineralized zone thus far delineated is open in almost all



CORPORATION FALCONBRIDGE COPPER

directions and suggests the likelihood of other bodies yet to be discovered.

CONCLUSIONS AND RECOMMENDATIONS

The recently completed programme has produced a number of ore grade intersections and considerably broadened the already large mineralized zone known on the Silver Zone horizon. It has also shed much light on the nature of the mineralization which will be invaluable in the planning of future programmes.

Further drilling is definitely warranted. Priority should be given to fill in drilling to establish the continuity of the known zone. An underground exploration programme may be necessary to supplement this. Step out drilling elsewhere on the down dip continuation of the horizon should be pursued as and when funds become available. More concrete proposals will be given after further rigorous assessment of the data.

This property remains an exciting exploration project, one of the best in a geological belt of very high potential.

ITEMIZED COST STATEMENT

DRILLING

Contractor: G&D Drilling, Kamloops, B. C.

10,671 feet (3253.4m) @\$14/ft	149,394.00
Casing and casing shoes	4,564.68
Road building	2,267.00

ANALYSES Assays & geochem	9,880.00
--------------------------------	----------

SALARIES, TRAVEL, FIELD EXPENSES ETC.

(3253.4m X 9.51/m)	<u>30,939.83</u>
--------------------	------------------

TOTAL	197,045.51
-------	------------

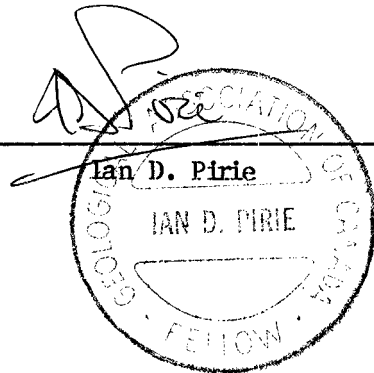
Certificate of Qualifications

I, Ian D. Pirie certify that:

1. I am an Exploration Geologist residing at 2727 W. 15th Avenue, Vancouver, B. C.
2. I have a BSc (Hons.) in Applied Geology from the University of Strathclyde, Glasgow, Scotland (1977) and a MSc (Geology/Geochemistry) from Queen's University at Kingston, Ontario (1980).
3. I have practised my profession since 1977.
4. I personally carried out or supervised the work reported herein.

JAN 29th, 1987

Date



APPENDIX I

(Drill Logs (RG-77 to RG-88))

CORPORATION FALCONBRIDGE COPPER

DRILL HOLE RECORD

X METRIC UNITS
IMPERIAL UNITS

HOLE NUMBER RG-77	GRID	FIELD COORDS	LAT. 95+98	DEP. 7+15NE	ELEV. 1671(approx.)	COLLAR BRNG. 225°	COLLAR DIP -90°	HOLE SIZE NQ	FINAL DEPTH 346.6m
PROJECT PN 312	CLAIM #	SURVEY COORDS.				DATE STARTED: Sept.12/86 DATE COMPLETED: Sept.16/86	CONTRACTOR: G&D CORE STORAGE: Skwaan Bay CASING: 3.2m left in hole		
PURPOSE To test the Silver Zone at the -150m level on section 96+00								RQD LOG	PULSE EM SURVEY
								COLLAR SURVEY	MULTISHOT SURVEY
ACID TESTS				TROPARI TESTS			MULTISHOT DATA		
DEPTH ()	CORRECTED ANGLE	DEPTH ()	CORRECTED ANGLE	DEPTH ()	AZIMUTH	DIP	DEPTH ()	AZIMUTH	DIP
32.3	88°			343.5	206°	-80°			
78.0	87°								
127.1	84°								
173.7	82°								
224.6	81°								
264.3	85°(?) - wrong								
313.0	80°								

HOLE NO RG-77
ZIPPY PRINT - BRIDGEPORT, RICHMOND

LOGGED BY G.S.W.

<u>From</u> <u>To</u>	<u>Rock Type</u>	<u>Texture and Structure</u>	<u>Angle to</u> <u>Core Axis</u>	<u>Alteration</u>	<u>Sulphides</u>	<u>Remarks</u>
			83.0 m 65°	81.1 - 174.55 Unaltered 1% qtz veinlets. Grey to greenish grey frags in dark green chloritic ash.		95.25 - 96.35 blocky core marking fault zone
		95.25 2cm wide fault gouge	93.0m 55°			
			97.5m 50°		123.45 - 1 mm wide stringer of chocolate brown sph associated with qtz veinlet.	
			100.0m 60°			
		155.9 - 156.1 - fault gouge	111.0m 60°		162.55 - 162.65 - 2-3% cp, tr tetrahedrite in qtz vein	
		162.2 - 165.0 - fault gouge throughout this interval.	119.5m 60°			
		Fault gouge at: 173.9 (5cm)	132.0m 55°			Blocky core from 172.7 - 178.3 marks a fault zone.
		174.5 (5cm)	141.0m 55°			
			152.0m 55°			
			160.0m 55°			
				174.55 - 218.7 - fragments becoming weakly to moderately sericitic-matrix still relatively unaltered; 1-2% qtz-carbonate veins throughout	182.1 - 182.95 - 2-3% py, tr galena associated with qtz veins and sericitic zones.	
					186.2 - 186.7 3-5% py tr galena, tr sph in q.v. and adjacent sericitic zone.	

<u>From</u> <u>To</u>	<u>Rock Type</u>	<u>Texture and Structure</u>	<u>Angle to</u> <u>Core Axis</u>	<u>Alteration</u>	<u>Sulphides</u>	<u>Remarks</u>
			181.8m 55°			
			188.0 60°			
		188.6 - 188.8 fault gouge	217.0m 60°	219.65 - 236.9 Sericitic fragments with zones of intense silica flooding and sericite at	218.7 - 219.65 1% diss py	
		199.85 - 200.3 fault gouge		219.9 - 220.2	219.2 - 220.2 2-3% py, tr galena and tetrahedrite	
		218.7 - 219.65 sericitic cht zone		220.7 - 221.15 222.55 - 222.7 224.85 - 225.55	220.7 - 221.15 3% py 222.55 - 222.7 2-3% py, 2-3% cp, tr gal, tet. 224.85 - 225.55 1-2% py tr gal. 226.3 - 228.95 - 2-3% py tr 1% tet; tr gal	
		Fault gouge and blocky core from 235.35 to 236.9	238.0m 60°	236.9 - 239.4 - becoming intensely sericitic and silicified.		
		-- contact sharp --				
239.4 - 244.30	Chert with argillite zones	Colour - greenish grey to black Grain - fine grain Generally well foliated Fault gouge at 239.8 - 240.1 and 241.0 - 241.1	242.0m 60°	Pervasive sericite in cherty zones.	tr diss py throughout 241.2 - 242.0 - 3-5% diss py	

<u>From To</u>	<u>Rock Type</u>	<u>Texture and Structure</u>	<u>Angle to Core Axis</u>	<u>Alteration</u>	<u>Sulphides</u>	<u>Remarks</u>
244.3 - 261.2	Rea Breccia	colour - black grain - fine grain Chert and argillite fragments in black to grey, fine grain argillic matrix.		1-2% qtz veins		Thin semi-massive sulphide bands (up to 2cm wide) throughout and diss sulphides Sulphides = sph (1-2%), py (10-15%) py occurs both in bands and as very fine grain matrix to fragments.
261.2 - 277.4	Muddy Tuff	Colour - grey Grain - fine grain Well bedded 268.5-268.8 chert fragments in argillic matrix. Fault gouge periodically from 269.2-271.8 269.7 - 271.8 black argillite and wacke 273.4 - 273.8 - argillite	262.6m 60° 264.0m 50° 267.8m 60° 276.0m 50°	Pervasive silica flooding 265.7-266.9 - qtz veining, silica flooding of tuff		261.2-265.7 - 20% py, 1-2% sph, tr cp, tet, gal. 2 types of pyrite - occurs as subhedral to anhedral blebs and as very fine grain host to blebs of py, sph 265.7 - 266.9 - 10% py, 2-3% sph, 1-2% tet. tr gal 266.9 - 268.1 - 10% py, 1-2% sph, tr tet 268.1 - 268.5 60-70% py in black and cherty matrix, tr tetrahedrite in qtz-rich zones 268.8-269.7 - 10% very fine grain py 271.8 - 277.4 - 15% very fine grain py parallel to bedding

<u>From</u> <u>To</u>	<u>Rock Type</u>	<u>Texture and Structure</u>	<u>Angle to</u> <u>Core Axis</u>	<u>Alteration</u>	<u>Sulphides</u>	<u>Remarks</u>
277.4 - 327.8	Debris flow (Muddy tuff with more fragments than usual)	Colour - dark grey Grain - fine grain Chert, argillite, wacke and the odd pyrite fragment in a argillite to wacke matrix. Also have the odd argillite bed.	1% qtz. veins			
			291.7m 55°			
			293.5m 45°			
			295.05m 35°			
			297.85 25°			
			300.7m 35°			
						2-3% diss py throughout , medium grain py, sph and tet in qtz veins. Best zones at: 279.35 - 279.5 semi-massive py with 5% tet, gal - 70-80% sulphides 289.15-291.25 50% sulphides in qtz matrix with inclusions of pyritic argillite (20-30%). 45% = py, 1-2% = tetrahedrite; 3-5% light brown sph; tr cp, 1% galena. 291.25 - 294.8 15-20% very fine grain py as beds within argillic matrix, tr cp, sph, gal and tetrahedrite occur in qtz veinlets throughout unit. 294.8 - 295.5 massive pyrite with tr tetrahedrite interstitially; matrix to py cubes=qtz. 295.05-297.85 massive py occurring as anhedral to subhedral cubes, tr-1% tetrahedrite interstitially; matrix to sulphides is qtz (<5%); tr sph at margins of massive py

<u>From</u> <u>To</u>	<u>Rock Type</u>	<u>Texture and Structure</u>	<u>Angle to</u> <u>Core Axis</u>	<u>Alteration</u>	<u>Sulphides</u>	<u>Remarks</u>
					298.4 - 299.85 20% very fine grain py as wisps and beds in moderately sericitic matrix	
					299.85 - 300.7 1% sph, 3-5% py, tr tetrahedrite? in qtz vein	Qtz vein approximately parallel to core axis, have 60-70% pyritic argillite inclusions
					300.7-301.0 massive py 5% sph; 1-2% tetrahedrite qtz matrix; py and sph occur as subhedral to anhedral blebs (up to 3-4mm diameter).	
					301.0 - 302.05 - 10% qtz vein with 5% py, 1% tetrahedrite, tr cp	
					302.05 - 317.9 - 15-20% very fine grain pyrite in argillic matrix to debris flow fragments	

<u>From</u> <u>To</u>	<u>Rock Type</u>	<u>Texture and Structure</u>	<u>Angle to</u> <u>Core Axis</u>	<u>Alteration</u>	<u>Sulphides</u>	<u>Remarks</u>
		Fault gouge periodically from 313.2 to 315.9	315.5m 20°	310.2 - 311.5 10% qtz vein approx. parallel to CA	310.3 - 311.5 1-2% py, tr-1% tet in q.v.	
			320.3 45°		316.5 - 316.6 1% galena, tet in 1cm wide q.v., parallel to CA	
			321.0 35°		317.9 - 320.3 - 15-20% mineralized qtz veins in pyritic (20% py) matrix - over interval have 3-5% sph, 2-3% galena	
					320.3 - 322.2 - pyrite muddy sediment - 20-25% v fine grain pyrite	
					322.2 - 324.0 - 5% qtz veins in pyritic sediment - 1-2% sph, tr galena in quartz veins	
				324.0 - 327.0 50% pyritic sediment inclusions in quartz vein, 5-7% sph, 2-3% galena tr tetrahedrite(?) associated with galena	324.0 - 327.0 - looks like a breccia with qtz matrix	
327.8 - 328.6	Fault gouge	Colour - grey		327.0 - 327.8 - 10-15% v.f.g. pyrite.		

<u>From</u> <u>To</u>	<u>Rock Type</u>	<u>Texture and Structure</u>	<u>Angle to</u> <u>Core Axis</u>	<u>Alteration</u>	<u>Sulphides</u>	<u>Remarks</u>
328.6 - 341.9	Pyritic argillite to wacke	Colour - dark grey Grain - fine grain Locally well bedded with crosscutting foliation	Foliation at 331.0m = 35° 331.0m = 80° = bedding 335.4m - bedding - 90° Foliation 25° 340.0m - bedding 60°	Pervasively moderately sericitic 341.6 - 341.9 - bull white quartz vein	328.6 - 341.6 - 10-15% very fine grain pyrite as beds within muddy sediment = argillite	
342.3 - 346.6	Chert and sericitic tuff	Colour - yellow grey Grain - fine grain Well foliated/bedded	346.0m - 60°	Sericitic tuff interbedded with chert 1-2% qtz veins	1-2% diss py	
346.6	End of Hole					

ASSAY SHEET

Sample Number	From (m)	To (m)	Estimate		Length (m)	% Cu	% Zn	% Pb	gm/T Ag	gm/T Au	% As	% Sb	% Ba	% MgO	% Fe	PPM Cu	PPM Zn	PPM Pb	PPM Ag	PPB Au			
			Cu	Zn																			
BCD 4226	27.6	29.3			1.7	.02	.33	.14	6.5	.01	.01	.01	.01										
4227	29.3	30.05			0.75	.019	.04	.04	7.8	.02	.01	.01	.01										
4228	30.05	31.2			1.15	0.108	1.07	.29	5.7	.05	.01	.01	.01										
4229	31.2	32.2			1.1	.016	.09	.10	6.4	.10	.01	.01	.01										
4230	32.3	33.9			1.6	.014	.01	.02	2.6	.05	.01	.01	.01										
4231	33.9	35.4			1.5	.01	.04	.02	5.8	.01	.01	.01	.01										
4232	35.4	36.7			1.3	.009	.02	.01	2.2	.02	.01	.01	.02										
4233	36.7	38.2			1.5	.008	.08	.25	4.3	.06	.01	.01	.02										
4234	38.2	39.7			1.5	.01	.03	.01	2.0	.02	.01	.01	.01										
4235	39.7	41.2			1.5	.012	.02	.01	2.1	.01	.01	.01	.01										
4236	41.2	42.7			1.5	.010	.01	.01	2.3	.01	.01	.01	.01										
4237	42.7	44.0			1.3	.013	.01	.01	2.0	.05	.01	.01	.01										
4238	44.0	45.15			1.15	.013	.01	.01	1.6	.02	.01	.01	.01										
4239	57.0	58.5			1.5	.014	.01	.01	1.2	.01	.01	.01	.01										
4240	58.5	59.95			1.45	.013	.01	.01	1.0	.02	.01	.01	.01										
4286	218.7	219.9			1.2	.016	.2	.49	2.4	.02	.01	.01	.01										
4287	219.9	221.15			1.25	.018	.24	.16	1.5	.05	.01	.01	.01										
4288	221.15	222.7			1.55	.096	.18	.11	1.4	.04	.01	.01	.01										

HOLE NO RG-77

PAGE 10

ASSAY SHEET

Sample Number	From (m)	To (m)	Estimate		Length (m)	% Cu	% Zn	% Pb	gm/T Ag	gm/T Au	% As	% Sb	% Ba	% MgO	% Fe	PPM Cu	PPM Zn	PPM Pb	PPM Ag	PPB Au			
			Cu	Zn																			
BCD 4289	224.85	226.3			1.45	.013	.06	.16	2.2	.10	.01	.01	.01										
4290	226.3	227.5			1.2	.011	.03	.02	2.3	.01	.01	.01	.01										
4291	227.5	228.95			1.45	.012	.32	.28	2.0	.12	.01	.01	.01										
4301	246.0	247.5			1.5	.014	.11	.04	2.4	.01	.01	.01	.01										
4302	247.5	249.0			1.5	.064	.33	.31	24.6	.02	.01	.01	.01										
4303	249.0	250.5			1.5	.042	.13	.13	8.8	.01	.01	.01	.01										
4304	250.5	252.0			1.5	.052	.36	.27	14.5	.10	.01	.01	.01										
4305	252.0	253.5			1.5	.028	.14	.07	7.9	.08	.01	.01	.01										
4306	253.5	255.0			1.5	.024	.56	.14	10.2	.16	.01	.01	.01										
4307	255.0	256.5			1.5	.023	.22	.10	9.4	.22	.01	.01	.01										
4308	256.5	258.0			1.5	.015	.07	.13	4.0	.20	.01	.01	.01										
4309	258.0	259.5			1.5	.021	.18	.07	6.2	.21	.01	.01	.01										
4310	259.5	261.2			1.7	.036	.24	.14	8.2	.24	.01	.01	.01										
4292	261.2	262.7			1.5	.014	.17	.09	4.2	.15	.01	.01	.01										
4293	262.7	264.2			1.5	.010	.01	.01	1.5	.05	.01	.01	.01										
4294	264.2	265.7			1.5	.016	0.27	.14	6.0	.20	.01	.01	.01										
4295	265.7	266.9			1.2	0.032	1.3	0.72	14.6	0.28	.01	.01	.01										
4296	266.9	268.1			1.2	.022	0.93	.30	6.2	.80	.01	.01	.01										
4297	268.1	268.5			0.4	0.082	0.91	0.55	18.0	0.4	.18	.04	.01										
4298	268.5	269.7			1.2	0.010	.02	.02	1.7	0.4	.01	.01	.01										

HOLE NO RG-77

PAGE 11

ZIPPY PRINT - BRIDGEPORT, RICHMOND

ASSAY SHEET

Sample Number	From (M)	To (M)	Estimate		Length (M)	% Cu	% Zn	% Pb	gm/T Ag	gm/T Au	% As	% Sb	% Ba	% MgO	% Fe	PPM Cu	PPM Zn	PPM Pb	PPM Ag	PPB Au			
			Cu	Zn																			
BCD 4241	288.3	289.15			0.85	.01	.03	.02	.2	.05													
4242	289.15	290.2			1.05	.126	4.67	2.30	18.0	.22	.20	.06	.01	) 0.068 Cu,	4.5 Zn,	2.08 Pb,	15.5 g/t Ag,	0.20 Au/2.1m					
4243	290.2	291.25			1.05	.09	4.32	1.86	13.0	.18	.10	.02	.01)									
4245	291.25	292.2			0.95	.022	.75	.83	5.6	.02													
4244	293.8	294.8			1.0	.012	.07	.05	1.0	.04													
4246	294.8	295.05			0.25	.325	.94	1.98	53.0	.40	.15	.16	.01										
4247	295.05	296.4			1.35	.02	.06	.12	.2	.01													
4248	296.4	297.85			1.45	.008	.02	.02	.3	.01													
4249	297.85	298.4			0.65	.060	.52	.67	12.8	.23	.01	.02	.01										
4250	298.4	299.4			1.0	.006	.02	.02	.2	.01													
4276	299.85	300.7			0.85	.005	.21	.12	.3	.01													
4277	300.7	301.0			0.3	.027	3.24	1.82	10.4	.02	.01	.01	.01										
4278	301.0	302.05			1.05	.010	.17	.28	.6	.01													
4279	317.9	319.1			1.2	.057	2.03	.92	18.4	.04													
4280	319.1	320.3			1.2	.018	.84	.52	6.0	.01													

LITHOGEOCHEMISTRY

MAJOR OXIDES

TRACE ELEMENTS

SAMPLE NUMBER	FROM (m)	TO (m)	MAJOR OXIDES										TRACE ELEMENTS					Rock Type	Alt	Min	Grd Zr	TOTAL
			SiO ₂	Al ₂ O ₃	CaO	MgO	Na ₂ O	K ₂ O	FeO	MnO	TiO ₂	Ba +Pb	ppm Cu	ppm Zn	ppm Pb	ppm Ag	ppb Au					
BCD4476	11.0	14.0	49.19	14.5	7.32	10.10	3.63	.03	10.99	.25	1.37	.005	95	87	.005						.005	97.39
Mafic pyroclastic flow			relatively unaltered, tr py																			
BDC4477	47.7	50.9	46.37	15.74	5.90	12.50	2.00	.12	12.73	.33	1.52	.009	90	120	.015						.005	97.25
Mafic pyroclastic flow			relatively unaltered, 1-2% py																			
BCD4478	75.0	78.0	45.40	14.64	8.78	11.14	1.41	1.22	12.75	.30	1.55	.101	73	112	.005						.005	97.30
Mafic pyroclastic flow			30% sericitic fragments, tr py																			
BCD4479	111.9	114.9	46.69	15.08	6.91	11.20	3.17	.02	12.55	.28	1.52	.024	77	72	.006						.005	97.46
Mafic pyroclastic flow			relatively unaltered																			
BCD4480	142.3	145.4	44.77	16.60	6.14	11.67	2.83	.04	13.34	.28	1.62	.010	87	84	.007						.006	97.32
Mafic pyroclastic flow			relatively unaltered																			
BCD4481	175.4	178.3	50.55	16.52	4.10	10.45	3.17	.03	11.02	.23	1.40	.031	92	110	.005						.005	97.51
Mafic pyroclastic flow			fragments moderately sericitic																			
BCD4482	206.3	209.4	45.25	15.07	7.33	12.28	1.13	.01	14.08	.33	1.62	.005	100	270	.170						.006	97.27
Mafic pyroclastic flow			1% qtz. carb. veins, weakly sericitic fragments																			

Hole No. RG-77

Entered by _____

Logged by _____

Page No. 14

CORPORATION FALCONBRIDGE COPPER

DRILL HOLE RECORD

x METRIC UNITS
IMPERIAL UNITS

HOLE NUMBER RG-78	GRID	FIELD COORDS	LAT. 95+00	DEP. 6+70NE	ELEV. 1671 Approx	COLLAR BRNG. 225°	COLLAR DIP -65°	HOLE SIZE NQ	FINAL DEPTH 270.4m	
PROJECT PN 312	CLAIM# REA 1	SURVEY COORDS.				DATE STARTED: Sept 17/86 DATE COMPLETED: Sept 20/86	CONTRACTOR: G&D CORE STORAGE: Skwaam Bay CASING: hole		3.0 m left in	
PURPOSE To test the Silver Zone at the 1500m level on section 95+00								RQD LOG COLLAR SURVEY	PULSE EM SURVEY MULTISHOT SURVEY	
ACID TESTS				TROPARI TESTS			MULTISHOT DATA			
DEPTH (m)	CORRECTED ANGLE	DEPTH ()	CORRECTED ANGLE	DEPTH (m)	AZIMUTH	DIP	DEPTH ()	AZIMUTH	DIP	
88.7	63°			267.3	209	-66°(?)				
105.5	63°									
184.0	60°									
218.5	60°									

HOLE NO RG-78
ZIPPY PRINT - BRIDGEPORT RICHMOND

LOGGED BY G. S. Wells

<u>From</u> <u>To</u>	<u>Rock Type</u>	<u>Texture and Structure</u>	<u>Angle to</u> <u>Core Axis</u>	<u>Alteration</u>	<u>Sulphides</u>	<u>Remarks</u>
0 to 3.0	OVERBURDEN					
3.0 to 199.45	MAFIC PYRO- CLASTIC FLOW	Colour - light green with buff yellow fragments Grain Size - f.g. - m.g. Lapilli and block size fragments in ashy matrix; slightly flattened in foliation plane. 16.5-17.4 - fault gouge 18.0-18.35 - fault gouge 29.1-30.7 - blocky core & fault gouge 33.45-33.85 - fault gouge 71.1-71.3 - fault gouge	19.7m-65° 49.0m-75° 61.5m-70° 67.0m-70° 74.0m-70°	Fragments are pervasively sericitic quartz veins at: 6.0-6.15 6.7-7.3 - bull white 15.2-17.4 33.85-35.0 35.0-41.05 pervasive silica flooding and sericitic zone, tr green mica 51.25-98.2 - relatively unaltered - greenish grey fragments in f.g., chloritic, ashy matrix - 1% qtz veins throughout	Tr py throughout except where noted below: 6.0-6.15 - 5% cp, gal sph in vein 15.2-17.4 - tr diss py 17.4-18.0 - 2-3% diss py 33.45-33.85 - 5% py, tr galena and cp in fault gouge 33.85-35.0 - 5% diss py in quartz veins 35.0-41.05 - 7-8% diss py	8-2-11.3 - core tube mismatch - missing 1.8m of core. 48.3-59.1 - blocky core marks a fault zone - locally fault gouge within the zone

<u>From</u> <u>To</u>	<u>Rock Type</u>	<u>Texture and Structure</u>	<u>Angle to</u> <u>Core Axis</u>	<u>Alteration</u>	<u>Sulphides</u>	<u>Remarks</u>
			87.0m-70°	98.2-103.9 - fragments a buff yellow colour due to pervasive sericitization qtz veins at:		
		89.9-90.4 - fault gouge & blocky core		91.2-91.5	91.5-92.0 - 1-2% py	
		92.95-93.0 - fault gouge	101.0m-70°	92.0-92.45	92.0-92.45 - 1-2% py, tr galena	
				93.6-95.8	93.6-95.8 - 1-2% py, tr galena	
		102.6-102.7 - fault gouge		95.8-97.3 - intense sericite with pervasive qtz veins.	95.8-97.3 - 3-5% py	
			118.0m-70°	103.9-154.1 - relatively unaltered grey fragments in f.g. green chloritic, ashy matrix.	131.7-131.8 - sph, galena, cp (total sulphides = 30%) in qtz carb vein	
			125.8m-70°	1% qtz veins.	134.8 - 5cm wide carb vein with py, cp, galena	
		134.9-135.05 - fault gouge with tr carb vein fragments containing galena & pyrite.	146.5m-65°			142.2-154.1 - blocky core with fault gouge locally parallel to fault zone
		154.1-163.7 - well-foliated, more ashy zone	156.0m-70°	154.1- approx 187.1 - pervasive carb+qtz veining parallel to foliation (10-15% veins)	162.0-163.7 - 3-5% diss py	
		fault gouge at 157.0-157.1	163.0m-65°		163.7-199.45 - 1% diss py	
		183.4-183.9 - fault gouge	170.0m-70°	183.4-186.4 - pervasive light green sericite	180.0 - 7cm wide carb veins with sph & galena	
		189.2-190.0 - fault breccia with silicified matrix.	185.0m-70°	190.0-199.45 - pervasively silicified with weak to moderate sericite.		
199.45 to 202.2	CHERT WITH SERICITIC WISPS	Colour - yellow-grey Grain Size - f.g. Contacts sharp - gouge (1-2cm) at both upper & lower contacts	198.8m-75°	Sericitic wisps throughout altered tuffaceous material	3-5% f.g. pyrite with tr cp, sph and tetrahedrite?	

<u>From To</u>	<u>Rock Type</u>	<u>Texture and Structure</u>	<u>Angle to Core Axis</u>	<u>Alteration</u>	<u>Sulphides</u>	<u>Remarks</u>
202.2 to 230.4	MUDDY PYRITIC TUFF	Colour - grey Grain Size - f.g. Weakly foliated 204.35-204.7 - black argillite with grey cherty interbeds. 204.7-230.4 - muddy pyritic tuff with grey chert interbeds Pyrite is v.f.g. and very finely bedded.	203.0-60°	pervasively silicified from 202.2-204.35	202.2-204.35 - 10% py as v.f.g. wispy beds and disseminations tr-1% galena, tetrahedrite, tr sph & 2-3% reddish light brown specks = sph? or leucoxene, tr arsenopyrite 204.7-206.3 - 1-2% v.f.g. py 206.3-208.7 - 20% py 208.7-217.9 - 5-7% v.f.g. py with the odd speck of sph.	
		fault gouge intermittantly from 215.3-216.45	220.0m-60°		217.9-222.4 - 10-15% py - occurs as v.f.g. beds and coarser crystals which occur in beds; tr tetrahedrite interstitially to this coarser grained pyrite 222.4-226.2 - 5% v.f.g. bedded py 226.2-230.4 - 25-30% v.f.g. bedded pyrite	
		222.4-224.2 - fault gouge	229.0m-50°			
		- wisps of argillite in muddy tuff within 0.4m of contact				
230.4 to 238.15	ARGILLITE	Colour - black Grain Size - v.f.g. Well-bedded with the odd sandy (wacke) layer.	235.0m-70° 238.0m-80°	none	the odd thin (1-2cm) pyrite bed 237.8 - 1-2% arseno- pyrite crystals over 2cm	
		-- contact sharp --				
238.15 to 259.9	PYRITIC MUDDY TUFF	Well-bedded Fault gouge at: 239.2-240.2 243.0-244.2 244.4-244.55 249.6-249.8 245.4-259.9 - 2-3% grey chert fragments in muddy pyritic tuff matrix.	248.0m-45° 253.0m-80°	pervasively sericitic with 5% qtz veins throughout	10-15% v.f.g. pyrite generally in beds 241.1-241.2 - tr. tetrahedrite in silica- enriched zone 244.55-259.9 - tr sph, gal, cp, 1-2% tet associated with coarser grained pyrite (10-15%)	

<u>From</u> <u>To</u>	<u>Rock Type</u>	<u>Texture and Structure</u>	<u>Angle to</u> <u>Core Axis</u>	<u>Alteration</u>	<u>Sulphides</u>	<u>Remarks</u>
259.9 to 270.4 E.O.H.	CHERT WITH SERICITIC TUFF	Colour - greyish yellow Grain Size - f.g. Well-bedded	265.0m-70° 270.0m-70°	Sericitic wisps throughout chert	1-2% diss py	

ASSAY SHEET

Sample Number	From (m)	To (m)	Estimate		Length (m)	% Cu	% Zn	% Pb	gm/T Ag	gm/T Au	% SiO ₂	% TiO ₂	% Na ₂ O	% MgO	% Fe	PPM Cu	PPM Zn	PPM Pb	PPM Ag	PPB Au			
			Cu	Zn																			
BCD 4311	33.45	35.0			1.55	.007	.09	.08	2.0	.01													
4312	35.0	36.5			1.5	.003	.01	.01	0.1	.01													
4313	36.5	38.0			1.5	.002	.01	.01	0.4	.01													
4314	38.0	39.5			1.5	.003	.01	.01	0.1	.01													
4315	39.5	41.05			1.55	.005	.01	.02	0.6	.02													
4316	199.45	200.9			1.45	.004	.02	.02	0.2	.01													
4317	200.9	202.2			1.3	.023	.04	.06	2.7	.02													
4318	202.2	203.2			1.0	.008	.30	.10	4.0	.01													
4319	203.2	204.35			1.15	.009	.02	.01	3.2	.03													
4320	217.9	219.4			1.5	.041	.08	.08	22.0	.018													
4321	219.4	220.9			1.5	.016	.03	.03	11.8	.04													
4322	220.9	222.4			1.5	.007	.01	.01	5.1	.02													
4323	227.7	229.2			1.5	.005	.02	.01	2.0	.30													
4324	240.2	241.6			1.4	.053	.36	.21	15.9	.04													
4325	241.6	243.0			1.4	.020	.34	.17	12.0	.34													

HOLE NO RG-78

PAGE 6

ASSAY SHEET

Sample Number	From (m)	To (m)	Estimate		Length (m)	% Cu	% Zn	% Pb	gm/T Ag	gm/T Au	% SiO ₂	% TiO ₂	% Na ₂ O	% MgO	% Fe	PPM Cu	PPM Zn	PPM Pb	PPM Ag	PPB Au			
			Cu	Zn																			
BCD 4326	244.55	246.1			1.55	.019	.24	.15	6.3	.12													
4327	246.1	247.7			1.6	.019	.32	.12	3.2	.03													
4328	247.7	249.2			1.5	.023	.23	.18	3.7	.14													
4329	249.2	250.7			1.5	.065	.24	.20	9.8	.04													
4330	250.7	252.2			1.5	.029	.38	.24	8.1	.03													
4331	252.2	253.7			1.5	.010	.09	.09	4.3	.20													
4332	253.7	255.2			1.5	.008	.02	.01	0.2	.02													
4333	255.2	256.7			1.5	.184	1.13	.64	20.4	.26													
4334	256.7	258.2			1.5	.012	.62	.16	4.2	.17													
4335	258.2	259.9			1.7	.020	1.38	.82	12.5	.26													

HOLE NO RG-78

PAGE 7

LITHOGEOCHEMISTRY

MAJOR OXIDES

TRACE ELEMENTS

SAMPLE NUMBER	FROM (m)	TO (m)	MAJOR OXIDES										TRACE ELEMENTS					Rock Type	Alt	Min	Zr	Total
			SiO ₂	Al ₂ O ₃	CaO	MgO	Na ₂ O	K ₂ O	FeO	MnO	TiO ₂	Ba	ppm Cu	ppm Zn	% Pb	ppm Ag	ppb Au					
BCD 4483	23.5	26.5	41.17	16.67	8.06	12.44	1.55	0.81	14.5	0.31	1.77	.030	98	118	.006						.006	97.33
mafic pyroclastic flow			15-20% sericitic fragments; tr py																			
BCD 4484	60.0	63.1	48.22	14.94	7.25	11.17	2.14	0.01	11.95	0.30	1.41	.006	99	91	.019						.005	97.39
mafic pyroclastic flow			relatively unaltered																			
BCD 4485	105.5	108.4	49.55	13.93	9.00	9.41	2.61	0.01	10.85	0.32	1.34	.005	152	1160	.064						.005	97.09
mafic pyroclastic flow			relatively unaltered																			
BCD 4486	148.4	151.5	50.95	14.51	4.21	12.64	1.45	0.01	11.85	0.28	1.44	.005	94	104	.008						.005	97.34
mafic pyroclastic flow			chloritic matrix																			
BCD 4487	175.9	178.9	32.29	18.18	14.63	14.54	0.19	1.63	13.16	0.53	2.01	.057	28	113	.005						.011	97.24
mafic pyroclastic flow			10-15% carb-qtz veins; 1% py																			

Hole No. RG-78

Entered by _____

Logged by _____

Page No. 8

CORPORATION FALCONBRIDGE COPPER

DRILL HOLE RECORD

* METRIC UNITS
IMPERIAL UNITS

HOLE NUMBER RG-79	GRID	FIELD COORDS	LAT. 95+00	DEP. 6+70NE	ELEV. 1671(approx)	COLLAR BRNG. 225°	COLLAR DIP -90°	HOLE SIZE NQ	FINAL DEPTH 286.5m
PROJECT 312 Rea Gold	CLAIM# REA 1	SURVEY COORDS.				DATE STARTED: Sept 20/86 DATE COMPLETED: Sept 23/86	CONTRACTOR: G & D CORE STORAGE: Skwaam Bay CASING: 3.4m left in hole		

PURPOSE
To test the Silver Zone at the -100m level on section 95+00

RQD LOG : : PULSE EM SURVEY : :
COLLAR SURVEY : : MULTISHOT SURVEY : :

ACID TESTS				TROPARI TESTS			MULTISHOT DATA		
DEPTH (m)	CORRECTED ANGLE	DEPTH ()	CORRECTED ANGLE	DEPTH (m)	AZIMUTH	DIP	DEPTH ()	AZIMUTH	DIP
35.7	88°			267.3	207°	-69°			
110.3	87°								
177.1	78°								
238.0	86°(?)								

HOLE NO RG-79
ZIPPY PRINT - BRIDGEPORT RICHMOND

LOGGED BY G. S. Wells

<u>From</u> <u>To</u>	<u>Rock Type</u>	<u>Texture and Structure</u>	<u>Angle to</u> <u>Core Axis</u>	<u>Alteration</u>	<u>Sulphides</u>	<u>Remarks</u>
0 - 3.4	OVERBURDEN					
3.4 - 225.55	MAFIC PYRO- CLASTIC FLOW	Colour - greenish grey Grain - fine - medium grained Lapilli and block size fragments in fine grained ashy matrix. Fragments slightly stretched in plane of foliation.	8.2m 55° 19.0m 55° 31.0m 60° 40.0m 60° 57.0m 55° 78.0m 55° 91.0m 55°	3.4-51.25 fragments are pervasively moderately sericitic - light yellow in colour 8.9-26.8 10% qtz veins 22.3-25.4 silicified zone with green mica 25.4-43.55 pervasively silicified and sericitic qtz - carb vein at 33.9-36.3 51.25-123.7 - becoming relatively unaltered, grey fragments in dark green, chloritic, ashy matrix, 1% qtz, carb veins	tr, diss py except where noted below 22.3-25.4 - 5.7% diss py 31.0-33.9 3-5% diss py 33.9-36.3 3-5% sulphides in vein - primarily py with traces of cp, sph, galena, and tetrahedrite 36.3-453.55 - 7-8% py	8.9 - 16.8 blocky core 19.9-25.6 core box dumped accidentally by assistant! 28.3-29.7 blocky core and fault gouge zone sampled in RG-78 approx. 20m up-dip 69.4-74.1 - blocky core and fault gouge marks a fault zone
		Fault gouge at: 42.9-42.95 70.4-70.7 82.7-81.8				

<u>From</u> <u>To</u>	<u>Rock Type</u>	<u>Texture and Structure</u>	<u>Angle to</u> <u>Core Axis</u>	<u>Alteration</u>	<u>Sulphides</u>	<u>Remarks</u>
		Fault gouge at: 109.8 - 110.3 111.0 - 111.1 113.1 - 113.2	104.0m 60°	123.7 - 125.5 sericitic fragments	125.6 - 127.3 3-5% py, tr galena	
		125.5 - 125.6	122.0m 50°	125.6 - 130.3 moderate to intense sericite alt with 10% qtz carb veining.	129.15-130.3 2-3% py, tr-1% galena, tr sph	
		Fault gouge at: 137.1 - 137.2 149.6 - 149.65 150.4 - 151.5	140.0m 65°	130.3 - 137.1 - weak sericite alteration		
			155.0m 60°	137.1 - 149.9 relatively unaltered fragments in chloritic ash		
		167.5 - 198.7	166.0m 65°	149.9 - 167.5 fragments becoming weakly sericitic 1-2% qtz in carb veins	156.6 - 156.75 2-3% sph, 1-2% galena in carb. vein	
		Unit has a few fragments - primarily a fine to medium grained ash. Contact with fragment-rich part of unit is indistinct.	176.0m 55°	167.5-198.7 pervasively chloritic and carbonate rich; 5-10% carb qtz. veins	167.5-198.7 1% diss py	
		Fault gouge at: 193.6 - 193.95 195.5 - 195.7	191.0m 60°	196.5 - 198.4 Pervasive carb-ser- epidote alteration		Blocky core from 194.4 - 196.1
			217.5m 55°	198.4-208.0 - fragments are buff yellow colour (weak to moderate sericite). matrix chloritic 1-2% qtz - carb veins		
			223.0m 65°	208.0-225.55 - unit becoming more pervasive sericitic. 1-2% qtz - carb veins; sericitic alteration; boundary diffuse.		

<u>From</u> <u>To</u>	<u>Rock Type</u>	<u>Texture and Structure</u>	<u>Angle to</u> <u>Core Axis</u>	<u>Alteration</u>	<u>Sulphides</u>	<u>Remarks</u>
		Contact Sharp				
225.55 - 232.3	CHERT	Colour - grey Grain - fine grained Greyish white angular chert fragments in grey siliceous matrix. Fault gouge zones at: 226.8 - 226.9 227.6 - 228.3 231.15 - 231.6 231.4 - 232.6 2-3% argillite fragments in chert Fault gouge at contact from 232.3 - 232.6	231.0m 70°	sericitic slips throughout unit	225.55 - 228.6 3-5% diss py tr sph, tet 228.6 - 229.5 - 25% sulphide, 5% cp, 2-3% tetrahedrite; 3-5% sph; 10-15% py; tr galena 229.5 - 231.7 3-5% py, tr sph and tetrahedrite 231.7 - 232.2 30-35% py, tr-3% leucoxene 232.2 - 232.3 - none	
232.3 - 254.3	MUDDY TUFF	Colour - dark grey Grain Size - f.g. Well-bedded Locally have fragments (2-3mm) stretched parallel to bedding matrix is v.f.g. dark grey & generally pyritic. Fault gouge at 235.8-239.5.	235.0m-65° 239.5m-80° 245.5m-70° 254.0m-70°	Mildly sericitic & locally siliceous "silica flooding"	10-15% v.f.g. pyrite occurs as beds and small (2-3mm) fragments stretched parallel to foliation tr sph & tetrahedrite in more siliceous area (tr-1%)	
254.3 - 259.5	BLACK ARGILLITE WITH BEDS OF MUDDY PYRITIC TUFF	Colour - argillite-black, muddy tuff-grey Grain Size - f.g. Argillite is graphitic along bedding planes; 5-10% grey f.g. wacke fragments in f.g. matrix. Pyritic Muddy Tuff beds with argillite fragments at: 255.55 - 257.3 259.2 - 259.3	255.1-70°	254.3 - 254.65 Qtz vein with argillite fragments.	5-10% v.f.g. pyrite in Muddy Tuff sections 1-2% py diss. in argillite.	

<u>From</u> <u>To</u>	<u>Rock Type</u>	<u>Texture and Structure</u>	<u>Angle to</u> <u>Core Axis</u>	<u>Alteration</u>	<u>Sulphides</u>	<u>Remarks</u>
259.5 - 286.5 E.O.H.	MUDDY TUFF	<p>Colour - grey Grain Size - f.g. Debris flow texture with f.g. grey chert fragments (5-10%) and the odd black argillite fragment Matrix = f.g. greyish black pyritic tuff. 269.7 - <1% fragments i.e. has a more tuffaceous/ sediment look to unit Fault gouge at: 270.8 - 271.55 271.9 - 272.2 276.5 - 281.2 285.3 - 286.5</p>	<p>267.0m-55° 275.0-60° 285.0-60°</p>	<p>2-3% qtz veins - pervasively sericitic along foliation planes</p>	<p>15-20% v.f.g. pyrite in muddy tuff matrix throughout. 263.1-263.7 2-3% sph & tr-1% tetrahedrite.</p>	<p>272.7-276.5 - blocky core with thin fault gouge zones. 281.2-285.3 - blocky core</p>

ASSAY SHEET

Sample Number	From (m)	To (m)	Estimate		Length (m)	% Cu	% Zn	% Pb	gm/T Ag	gm/T Au	% SiO ₂	% TiO ₂	% Na ₂ O	% MgO	% Fe	PPM Cu	PPM Zn	PPM Pb	PPM Ag	PPB Au			
			Cu	Zn																			
BCD 4336	125.6	127.3			1.7											36	1330	220	1.6	25			
4337	129.15	130.3			1.15											525	2900	1640	3.7	15			
4338	225.55	227.0			1.45	.001	.01	.01	.4	.01													
4339	227.0	228.6			1.6	.002	.04	.01	.2	.02													
4340	228.6	229.5	2%	1.5%	0.9	1.75	2.03	1.16	125.0	.38													
4341	229.5	230.6			1.1	.033	.025	.18	5.4	.04													
4342	230.6	231.7			1.1	.012	.01	.02	1.9	.01													
4343	231.7	232.2			0.5	.03	.17	.14	12.6	.02													
4344	246.0	247.5			1.5											140	90	116	5.4	30			
4345	260.2	261.7			1.5	.003	.01	.01	1.8	.01													
4346	261.7	263.1			1.4	.007	.02	.03	4.3	.02													
4347	263.1	263.7			0.6	.021	1.46	.67	27.4	.01													
4348	263.7	265.2			1.5	.004	.04	.02	4.1	.02													

HOLE NO RG-79

PAGE 6

ZIPPY PRINT - BRIDGEPORT, RICHMOND

LITHOGEOCHEMISTRY

MAJOR OXIDES

TRACE ELEMENTS

SAMPLE NUMBER	FROM (m)	TO (m)	MAJOR OXIDES										TRACE ELEMENTS					Rock Type	Alt	Min	Zr	Total	
			SiO ₂	Al ₂ O ₃	CaO	MgO	Na ₂ O	K ₂ O	FeO	MnO	TiO ₂	Ba	ppm Cu	ppm Zn	% Pb	ppm Ag	ppb Au						
BCD 4488	93.6	96.6	47.12	15.03	7.44	10.94	2.55	0.01	11.72	0.23	1.95	.092	80	78	.005							.009	97.09
Mafic pyroclastic flow -			unaltered																				
BCD 4489	139.6	142.3	51.56	14.06	8.03	9.02	2.77	0.02	10.31	0.31	1.37	.008	75	103	.006							.005	97.48
Mafic pyroclastic flow -			unaltered																				
BCD 4490	175.9	178.9	46.40	16.30	7.38	10.24	2.96	0.01	12.19	0.26	1.56	.005	84	106	.009							.007	97.32
Mafic pyroclastic flow -			ash - 5-10% carbonate veins, pervasive carbonate - chlorite																				
BCD 4491	208.0	211.1	45.76	15.58	8.10	11.74	1.37	0.11	12.33	0.38	1.98	.009	73	195	.019							.009	97.39
Mafic pyroclastic flow -			pervasive moderate sericite; tr. py.																				

Hole No. RG-79 Entered by _____ Logged by _____ Page No. 7

CORPORATION FALCONBRIDGE COPPER

DRILL HOLE RECORD

X . METRIC UNITS
 . . . IMPERIAL UNITS

HOLE NUMBER RG-80	GRID	FIELD COORDS	LAT. 94+00NW	DEP. 6+20NE	ELEV. 1681 (approx)	COLLAR BRNG. 218°	COLLAR DIP -60°	HOLE SIZE NQ	FINAL DEPTH 242.9m
PROJECT PN 312	CLAIM # REA 1	SURVEY COORDS.				DATE STARTED: Sept 23/86 DATE COMPLETED: Sept 26/86	CONTRACTOR: G&D CORE STORAGE: Skwaam Bay CASING: left in hole		
PURPOSE To test the Silver Zone at the +50m level on section 94+00								RQD LOG COLLAR SURVEY	PULSE EM SURVEY MULTISHOT SURVEY
ACID TESTS				TROPARI TESTS			MULTISHOT DATA		
DEPTH (m)	CORRECTED ANGLE	DEPTH ()	CORRECTED ANGLE	DEPTH (m)	AZIMUTH	DIP	DEPTH ()	AZIMUTH	DIP
35.7	62°			239.9	212.5°	57°			
92.0	61°								
126.8	60°								
211.8	58°								

HOLE NO RG-80
 ZIPPY PRINT - BRIDGEPORT, RICHMOND

LOGGED BY G. S. Wells

<u>From</u> <u>To</u>	<u>Rock Type</u>	<u>Texture and Structure</u>	<u>Angle to</u> <u>Core Axis</u>	<u>Alteration</u>	<u>Sulphides</u>	<u>Remarks</u>
0 to 12.5	OVERBURDEN					Casing
12.5 to 189.3	MAFIC PYRO- CLASTIC FLOW	Colour - greenish grey Grain Size - f.g. Lapilli & block sized fragments in f.g. ash; fragments, are slightly stretched in the foliation plane.	26.0m-70°	12.5-18.9 - fragments weakly sericitic - buff yellow in colour 18.9-111.4 - relatively unaltered grey fragments in f.g. dark green chloritic ashy matrix 1-2% qtz-carb veins.	tr diss py throughout 37.85-37.9 - 1% cp, 1% tet in qtz-carb vein 38.1-38.35 - 1% py, tr cp, tetrahedrite in qtz-carb vein.	12.5-41.7 - core blocky with the odd thin zone of fault gouge.
		Fault gouge at 42.2-42.4 44.1-44.6 46.8-48.0 57.6-57.8 59.4-59.7 61.0-61.2 76.4-76.6	49.0m-65° 55.0m-60° 62.0m-80°			
		78.3-118.9 - fault zone 111.4-189.3 - well foliated zone - has a more ashy look (<5% fragments) siliceous.	67.5m-65° 97.0m-70° 114.0m-70° 122.0m-70°	111.4-127.0 - pervasive qtz-carb veining (10-15%) of sericitic-chloritic alteration.	101.4 - 1cm stringer of tetrahedrite and cp associated with carb vein. 111.4-127.0 - 1-2% diss py in altered zone.	78.3-118.9 - Major fault zone - very blocky core & fault gouge throughout

<u>From To</u>	<u>Rock Type</u>	<u>Texture and Structure</u>	<u>Angle to Core Axis</u>	<u>Alteration</u>	<u>Sulphides</u>	<u>Remarks</u>
			132.5m-65° 139.3m-70°	127.0-148.5 chloritic ash with 10-15% carb veins. 148.5-189.3 - core has mottled look due to pervasive mild sericite alteration + minor chlorite & 5-10% qtz + carb veining & 1% qtz fragments (subrounded) up to 1-2cm diameter) - also have 2-3% yellow coloured sericitic fragments.	127.0-148.5 - 1% diss py 148.5-175.45 - tr tetrahedrite in qtz veins; 1-2% diss py 157.0 - 1cm wide stringer of py & tetrahedrite	Blocky core at 143.5-146.9
		177.2-177.4 - fault gouge 177.2-179.5 - possible siliceous tuff - 1% sericitic fragments near lower contact.	186.0m-50°	179.5-186.1 - 1% light green very soft mineral occurs in veinlets = talc?	175.45-175.7 - 1% cp, 30-40% py, tr tetrahedrite - associated with qtz vein 175.9-176.0 - tr-1% cp, tr tet, 40% py in qtz vein 177.2-179.5 - 30% py-locally as semi-massive bands, tr-1% cp, tr tetrahedrite 179.5-181.3 - 2-3% diss py tr sph & tetrahedrite in more siliceous areas & qtz veins 181.3-189.3 - 1-2% diss py.	
189.3 to 190.45	CHERT BRECCIA	Colour - grey with greyish black matrix Grain Size - f.g. 10-15% grey chert fragments stretched slightly in plane of foliation. matrix = grey to black wacke to argillite -- Contacts sharp --		189.9-190.25 - qtz vein with sericitic slips	1% diss py	

<u>From To</u>	<u>Rock Type</u>	<u>Texture and Structure</u>	<u>Angle to Core Axis</u>	<u>Alteration</u>	<u>Sulphides</u>	<u>Remarks</u>
190.45 to 191.8	PYRITIC MUDDY TUFF	Colour - grey Grain Size - v.f.g. Finely bedded Interbedded with black argillite on mm scale -- Contact Sharp --				50% very finely bedded pyrite in siliceous matrix.
191.8 to 194.35	BLACK ARGILLITE	Colour - black Grain Size - f.g. 3-5% wispy fragments of pyritic, muddy tuff & wacke in v.f.g. black matrix (graphitic) -- Contact sharp --	192.0m-65°	tr qtz veins		tr cp; py
194.35 to 202.45	MUDDY TUFF	Colour - grey Grain Size - f.g. Finely bedded 196.1-196.6 - fault gouge and blocky core. 201.1-202.45 - fault gouge.	195.5m-75°	pervasively sericitic 197.05-198.35 - more siliceous zone with 1-2% reddish brown leucoxene and 5% emerald green mica (fuchsite). 198.35-199.3 - qtz vein with 5% sericitic fragments. 199.7-200.6 - white qtz vein with 5% sericitic (yellowish grey) fragments.	194.35-197.05 - 15-20% very finely bedded pyrite 197.05 - 198.35 - 3-5% py. 198.35 - 199.3 - 1% py in fragments 199.3-199.7 - 10% py, tr tet. 199.7-200.6 - 1% py associated with sericitic fragments 200.6-202.45 - 5-10% v.f.g. py with tr tetrahedrite in qtz veins.	

<u>From</u> <u>To</u>	<u>Rock Type</u>	<u>Texture and Structure</u>	<u>Angle to</u> <u>Core Axis</u>	<u>Alteration</u>	<u>Sulphides</u>	<u>Remarks</u>
202.45 to 209.6	CHERT	Colour - brownish grey Grain Size - f.g. Well-bedded	203.0m-60° 205.8m-50° 208.8m-70°	pervasive brownish yellow sericite wisps & 2-3% qtz veins. larger qtz veins at: 202.4-202.6 203.6-204.2	202.45-209.6 - 15-20% f.g. pyrite; tr cp, tet primarily in qtz veins.	pyrite occurs as f.grained beds & disseminated cubes.
209.6 to 212.6	PYRITIC MUDDY TUFF	Colour - grey Grain Size - v.f.g. Contains 1-2% grey chert fragments - generally very finely bedded fault gouge: 209.6-210.2		pervasively sericitic	15-20% v.f.g. bedded pyrite	
212.6 to 218.4	CHERT	Colour - grey Grain Size - f.g. Well-bedded	216.0m-70°	Unaltered 216.7-218.4 - White qtz vein	3-5% diss py cubes	
218.4 to 225.6	REA BRECCIA	Colour - greyish black Grain Size - f.g. Well-bedded, grey chert fragments in black cherty matrix.		White qtz vein at: 219.1-221.0 221.0-224.2 - pervasive qtz veining provides matrix to greyish black chert	218.4-219.1 - 2-3% diss py cubes 219.1-approx. 221.0 - 1-2% py, tr sph in qtz vein. 221.0-224.2 - tr-1% py	

<u>From</u> <u>To</u>	<u>Rock Type</u>	<u>Texture and Structure</u>	<u>Angle to</u> <u>Core Axis</u>	<u>Alteration</u>	<u>Sulphides</u>	<u>Remarks</u>
225.6 to 237.9	ALTERED SEDIMENT OR MAFIC ASH(?)	Colour - brownish grey Grain Size - f.g. Well-bedded - grey chert beds with the odd muddy tuff fragment - interbeds of f.g. wacke	227.0m-70° 233.8m-70° 236.0m-50°	Pervasively altered 3-5% reddish brown leucoxene occur as wisps parallel to bedding 1-2% emerald mica (fuchsite) - locally weakly sericitic qtz veins at: 225.6-226.55 228.05-228.2 234.5-234.7 235.2-235.6 235.7-235.9 236.7-237.2	10% diss py, tr sph in qtz veins	
237.9 to 242.9 E.O.H.	CHERT WITH SERICITIC TUFF	Colour - greyish yellow Grain Size - f.g. Interbedded grey chert and yellow sericitic tuff.	242.9m-70°	Tuffaceous material is sericitic	1-2% diss py	

ASSAY SHEET

Sample Number	From (m)	To (m)	Estimate		Length (m)	% Cu	% Zn	% Pb	gm/T Ag	gm/T Au	% SiO ₂	% TiO ₂	% Na ₂ O	% MgO	% Fe	PPM Cu	PPM Zn	PPM Pb	PPM Ag	PPB Au			
			Cu	Zn																			
BCD 4349	156.8	158.3			1.5											115	1100	1040	2.0	20			
4350	175.45	177.2			1.75	0.21	0.27	0.36	6.2	.03													
4351	177.2	178.4			1.2	.043	0.57	0.30	4.4	.02													
4352	178.4	179.5			1.1	0.27	0.25	0.22	9.0	.01													
4353	179.5	181.0			1.5											58	215	725	2.0	5			
4354	181.0	182.5			1.5											74	1160	430	1.5	20			
4355	197.05	198.35			1.3				0.2	.01													
4356	198.35	199.7			1.35				0.2	.62													
4357	199.7	201.1			1.4				0.2	.22													
4358	205.0	206.5			1.5	.026	0.08	0.08	4.8	.05													
4359	206.5	208.0			1.5	.012	0.07	0.08	2.0	.20													
4360	208.0	209.6			1.6	.044	0.06	0.10	8.4	.38													
5542	228.2	229.7			1.5											87	102	108	1.6	70			
5543	229.7	231.2			1.5											75	109	72	1.6	40			

RG-80

HOLE NO _____

PAGE 7

ZIPPY PRINT - BRIDGEPORT, RICHMOND

LITHOGEOCHEMISTRY

MAJOR OXIDES

TRACE ELEMENTS

SAMPLE NUMBER	FROM (m)	TO (m)	MAJOR OXIDES										TRACE ELEMENTS					Rock Type	Alt	Min	Zr	Total		
			SiO ₂	Al ₂ O ₃	CaO	MgO	Na ₂ O	K ₂ O	FeO	MnO	TiO ₂	Ba	ppm Cu	ppm Zn	% Pb	ppm Ag	ppb Au							
BCD 4492	38.7	41.5	48.8	14.79	6.33	10.93	2.39	0.01	12.48	0.27	1.54	.005	96	87	.005						.005	97.56		
Mafic pyroclastic flow			unaltered; tr py																					
BCD 4493	72.2	75.3	47.2	14.88	7.25	11.00	3.77	0.01	11.58	0.26	1.44	.005	82	68	.005						.005	97.42		
Mafic pyroclastic flow			unaltered																					
BCD 4494	111.9	114.0	50.9	15.29	5.77	10.59	1.84	0.93	10.65	0.28	1.19	.022	90	155	.009						.005	97.50		
Mafic pyroclastic ash -			sericite - chlorite; 10-15% qtz-carb veins; 1-2% py																					
BCD 4495	148.5	151.4	44.6	14.82	10.56	11.76	2.57	0.51	10.45	0.65	1.50	.025	135	175	.022						.005	97.43		
Mafic pyroclastic ash -			pervasive sericite-chlorite; 5-10% qtz-carb veins																					
BCD 4470	232.0	235.0	52.71	18.69	1.75	3.13	0.61	3.77	13.66	0.34	2.30	.438	45	99	.005		140				.012	97.4		
Mafic pyroclastic ash -			intense sericite; 3-5% leucoxene																					

Hole No. RG-80

Entered by _____

Logged by _____

Page No. 8

<u>From To</u>	<u>Rock Type</u>	<u>Texture and Structure</u>	<u>Angle to Core Axis</u>	<u>Alteration</u>	<u>Sulphides</u>	<u>Remarks</u>
198.0 to 205.6	CHERT BRECCIA	Colour - grey Grain Size - f.g. Grey chert fragments in a f.g. grey silicified and sericitic matrix. Fault gouge at: 201.4-202.8		Matrix pervasively sericitic and silicified.	1-2% diss py throughout.	- contact between Mafic Pyroclastic flow & Chert Breccia indistinct - Chert Breccia may just be extremely silicified Mafic Pyroclastic.
205.6 to 207.2	REA BRECCIA	Colour - black Grain Size - f.g. Greyish black chert fragments in f.g. black, cherty matrix.		unaltered	205.6 - 206.7 - tr-1% diss sph, tr tet associated with diss sph, py (10-15%)	205.9-207.5 - blocky core
207.2 to 221.0	PYRITIC MUDDY TUFF	Colour - grey Grain Size - f.g. Tr chert and/or wacke fragments (0.5cm X 2.3mm) throughout - finely bedded fault gouge at 208.2 - 209.0 210.0 - 210.1	210.0m-60° 215.5m-60°	pervasively sericitic along foliation/bedding planes - locally siliceous	10-15% v.f.g. bedded py tr sph, tetrahedrite in siliceous zones	
221.0 to 221.7	ARGILLITE	Colour - black Grain Size - f.g. whole unit - very blocky core			Tr sph in qtz vein	

<u>From To</u>	<u>Rock Type</u>	<u>Texture and Structure</u>	<u>Angle to Core Axis</u>	<u>Alteration</u>	<u>Sulphides</u>	<u>Remarks</u>
221.7 to 245.5	MUDDY TUFF	Colour - grey Grain Size - f.g. 221.7 - 228.5 - Debris flow - fragments of wacke, chert and argillite in muddy tuff matrix - lower contact of Debris flow indistinct Fault gouge at: 230.0 - 230.7 231.55 - 232.0 236.6 - 237.8 240.5 - 240.8 241.95 - 242.05 243.1 - 243.5 245.0 - 245.5 -- contact sharp at 45° to CA --	224.0m-60° 231.0m-50° 239.0m-50° 244.0m-30°	pervasively sericitic 1-2% qtz veins	5-10% v.f.g. bedded pyrite	
245.5 to 258.5	REA BRECCIA	Colour - black Grain Size - f.g. Grey chert fragments chastically arranged in black cherty matrix - locally graphitic along fracture planes - core angles within unit are locally very shallow -- fault gouge at contact --	245.5m-45° 250.5m-40° 255.5m-20°	2-3% quartz veins	2-3% diss py cubes tr sph in qtz veins	-low core angles= folding? or dragging due to proximity to a fault blocky core at: 246.0-246.7 repetition of Rea Breccia due to faulting
258.5 to 260.7	ALTERED MAFIC ASH	Colour - grey Grain Size - f.g. Well-bedded fault gouge at: 260.25 - 260.7	259.5m-55°	3-5% reddish brown leucoxene as wisps parallel to bedding 260.25-260.7 - green mica (fuchsite) associated with fault gouge	2-3% diss py	similar to unit overlying Rea Breccia in RG-80

<u>From</u> <u>To</u>	<u>Rock Type</u>	<u>Texture and Structure</u>	<u>Angle to</u> <u>Core Axis</u>	<u>Alteration</u>	<u>Sulphides</u>	<u>Remarks</u>
260.7 to 263.55	DEBRIS FLOW	Colour - dark grey Grain Size - f.g. Consists of abundant (70-80%) fragments in f.g. grey matrix - fragments consist of wacke, chert, argillite, pyritic muddy tuff - aligned parallel to bedding/ foliation - arrangement of fragments chaotic	262.7m-70°			
263.55 to 294.9	PYRITIC MUDDY TUFF	Colour - grey Grain Size - f.g. Generally well-bedded - locally looks cherty fault gouge at: 263.55 - 265.5 266.1 - 266.3	266.0m-60°	pervasively siliceous & sericitic	263.55 - 266.4 - 10-15% v.f.g. bedded py, tr cp, tetrahedrite in siliceous areas 266.4 - 267.8 - 8-10% py; 1% sph and 1% tetrahedrite in siliceous areas 267.8 - 268.4 - approx 5% v.f.g. py 268.4 - 269.1 - 80% pyrite with marcasite nodules occurring in beds (2-4cm thick)	

<u>From To</u>	<u>Rock Type</u>	<u>Texture and Structure</u>	<u>Angle to Core Axis</u>	<u>Alteration</u>	<u>Sulphides</u>	<u>Remarks</u>
		Fault gouge at 273.4 - 273.6	271.8m-60° 273.0m-60° 275.3m-50°		269.1 - 271.0 - 20% v.f.g py, tr sph, tet 271.0 - 271.8 - 70-80% py in siliceous matrix 271.8 - 274.3 - 20-25% v.f.g. py; tr sph, tet 274.3 - 275.7 - 30-35% py (f.g. beds of m.g. cubes in siliceous areas); 3% sph, 2% tetrahedrite	
		276.5 - 285.6 - Debris flow chert, argillite, wacke fragments in muddy tuff matrix - locally well bedded. Fault gouge at: 277.7 - 278.0 283.6 - 283.8	281.0m-50° 287.0m-45°	White quartz veins at: 287.3 - 287.9	275.7 - 285.6 - 10% v.f.g. py (typical of muddy tuff) 285.6 - 294.9 - 5-10% v.f.g. py	Debris flow similar to that at 260.7 - 263.55 except for muddy tuff matrix
		285.6 - 294.9 - f.g. muddy tuff with quartz veins.	292.0m-60°	288.3 - 288.7 289.2 - 290.9 292.3 - 294.4 294.5 - 294.9	292.3 - 294.4 - tr py, cp in quartz veins 294.5 - 294.9 - tr galena in quartz veins	
294.9 to 311.8 E.O.H.	SEDIMENTS	Colour - greyish black Grain Size - f.g. Interbedded black argillite, wacke & grey chert - well bedded - locally have chert fragments in argillite & wacke matrix Fault gouge at: 301.55 - 301.8 303.7 - 303.85	298.0m-70° 301.5m-50° 310.0m-70°	Locally weakly sericitic	1-2% diss py	

ASSAY SHEET

Sample Number	From (M)	To (M)	Estimate		Length (M)	% Cu	% Zn	% Pb	gm/T Ag	gm/T Au	% SiO ₂	% TiO ₂	% Na ₂ O	% MgO	% Fe	PPM Cu	PPM Zn	PPM Pb	PPM Ag	PPB Au			
			Cu	Zn																			
BCD 4372	195.1	196.1			1.0	.109	1.48	0.96	50.0	0.2													
4373	196.1	197.2			1.1	.031	0.10	0.07	4.4	.06													
4374	205.6	206.4			0.8	.031	0.42	0.12	7.8	.05													
4361	263.55	265.0			1.45	.04	0.16	0.18	14.2	.30													
4362	265.0	266.4			1.4	.01	0.03	0.05	6.0	.13													
4363	266.4	267.8			1.4	.092	1.07	0.41	14.0	.27													
4364	267.8	268.4			0.6	.010	0.11	0.06	8.1	.26													
4365	268.4	269.1			0.7	.026	0.01	0.05	95.6	2.00													
4366	269.1	271.0			1.9	.01	0.13	0.06	14.8	.76													
4367	271.0	271.8			0.8	.016	0.02	0.07	32.4	1.49													
4368	271.8	273.1			1.3	.015	0.93	0.08	6.5	.28													
4369	273.1	274.3			1.2	.012	0.19	0.08	4.1	.12													
4370	274.3	275.7			1.4	.078	1.80	1.18	10.8	.51													
4371	275.7	277.2			1.5	.013	0.02	0.04	3.6	.53													

RG-81

HOLE NO _____

PAGE 7

LITHOGEOCHEMISTRY

MAJOR OXIDES

TRACE ELEMENTS

SAMPLE NUMBER	FROM (m)	TO (m)	MAJOR OXIDES										TRACE ELEMENTS						Rock Type	Alt	Min	Zr	Total						
			SiO ₂	Al ₂ O ₃	CaO	MgO	Na ₂ O	K ₂ O	FeO	MnO	TiO ₂	Ba	ppm Cu	ppm Zn	% Pb	ppm Ag	ppb Au												
BCD 4496	117.0	120.1	51.38	15.22	4.24	9.99	2.76	0.03	11.91	0.21	1.57	0.04	78	87	.005						.005	97.37							
Mafic Pyroclastic flow - unaltered, tr py																													
BCD 4497	147.5	150.4	46.68	15.11	10.38	8.76	2.85	0.07	11.71	0.30	1.47	.005	101	96	.005							.005	97.35						
Mafic pyroclastic flow - 3-5% qtz-carb veins; tr py																													
BCD 4498	182.0	185.0	32.79	18.46	10.50	15.05	0.58	1.88	14.52	0.91	2.24	.071	60	350	.018							.010	97.03						
Mafic pyroclastic flow - weak sericite, 5% qtz veins; 1-2% py																													

ZIPPY PRINT - BRIDGEPORT, RICHMOND

CORPORATION FALCONBRIDGE COPPER

DRILL HOLE RECORD

X METRIC UNITS
IMPERIAL UNITS

HOLE NUMBER RG-82	GRID	FIELD COORDS	LAT. 96+00	DEP. 7+15NE	ELEV. 1671 (approx)	COLLAR BRNG. 220°	COLLAR DIP -77°	HOLE SIZE NQ	FINAL DEPTH 294.7m
PROJECT PN 312	CLAIM# REA 1	SURVEY COORDS.				DATE STARTED: Oct. 1/86 DATE COMPLETED: Oct. 5/86	CONTRACTOR: G&D CORE STORAGE: Skwaam Bay CASING: left in hole 3.0m		
PURPOSE To test the Silver Zone at the -95m level on section 96+00								RQD LOG COLLAR SURVEY	PULSE EM SURVEY MULTISHOT SURVEY
ACID TESTS				TROPARI TESTS			MULTISHOT DATA		
DEPTH (m)	CORRECTED ANGLE	DEPTH ()	CORRECTED ANGLE	DEPTH (m)	AZIMUTH	DIP	DEPTH ()	AZIMUTH	DIP
62.2	74°			288.6	199.5°	67°			
121.3(?)	69°								
181.4	68°								
236.8	66°								
294.7	64°								

HOLE NO RG-82
ZIPPY PRINT * - BRIDGEPORT, RICHMOND

LOGGED BY G. S. Wells

<u>From To</u>	<u>Rock Type</u>	<u>Texture and Structure</u>	<u>Angle to Core Axis</u>	<u>Alteration</u>	<u>Sulphides</u>	<u>Remarks</u>
0 to 3.0	OVERBURDEN					casing
3.0 to 232.1	MAFIC PYRO- CLASTIC FLOW	Colour - greenish grey Grain Size - f. to m.g. frags f.g. matrix Lapilli and block size greenish grey fragments in f.g., dark green ashy matrix - fragments stretched slightly in plane of foliation.		1-2% qtz-carb veins 15.2-29.95 - fragments a buff yellow colour due to weak sericite alteration 29.95-31.05 - intense sericite alteration 31.05-34.8 - qtz vein with tr green fuchsite 34.8-43.2 - pervasive intense sericite-chlorite with 5% qtz veins 43.2-75.7 - fragments a buff yellow colour due to weak sericite alteration 1-2% qtz-carb veins 75.7-170.5 - relatively unaltered grey mafic fragments in dark green chloritic, ashy matrix 2-3% qtz-carb veins throughout	tr diss py 31.05-34.8 - 10% diss py 34.8-43.2 - 3-5% py & tr diss galena in qtz veins 43.2-175.8 - tr-1% diss py	
		fault gouge at: 90.15 - 90.25				

<u>From</u> <u>To</u>	<u>Rock Type</u>	<u>Texture and Structure</u>	<u>Angle to</u> <u>Core Axis</u>	<u>Alteration</u>	<u>Sulphides</u>	<u>Remarks</u>
		Some of fragments have 15-20% qtz-filled amygdules	145.0m-60°			
		151.5 - 151.8 - fault gouge	157.0m-60°	170.5 - 175.8 - weakly sericitic frags (2-3% qtz veins)		
		175.8 - 204.2 - ashy zone -strongly foliated	168.8m-70°		175.8-197.8 - tr-1% diss py	
		fault gouge at: 184.6 - 185.0	178.5m-65°	175.8-197.8 pervasive carb-chl-qtz alteration (approx. 10-15% carb-qtz veins)		
			187.0m-75°			
			191.0m-75°			
			196.5m-65°			
			200.0m-70°	- locally carb blebs look like amygdules		
		204.2 - 232.1 - lapilli tuff - greenish yellow frags.	217.0m-70°	197.8-204.2 - intense carb-ser-chl-qtz - core a greenish yellow colour		
				204.2-223.75 - pervasive moderate silicification + carb	213.65-216.4 - 10% py + tr sph & galena in qtz veinlets throughout zone	
			227.0m-65°	223.75-232.1 - pervasive		
			231.0m-70°	intensely silicified & sericitic	197.8-232.1 - tr-1% diss py	
		-- contact sharp at 80° to CA --				
232.1 to 234.1	CHERT	Colour - greenish grey to black Grain Size - f.g. Well-bedded chert & chert breccia; locally the odd argillitic & sericitic tuff zone Fault breccia at: 232.9 - 233.35	233.5m-70°	233.35 - 234.1 - sericitic tuff intermixed with grey and black chert	tr diss py	
		-- contact sharp at 60° to CA --				

<u>From</u> <u>To</u>	<u>Rock Type</u>	<u>Texture and Structure</u>	<u>Angle to</u> <u>Core Axis</u>	<u>Alteration</u>	<u>Sulphides</u>	<u>Remarks</u>
234.1 to 268.0	MUDDY TUFF	Colour - grey Grain Size - f.g. Well-bedded debris flow consisting of chert, argillite fragments in f.g. pyritic matrix. Fault gouge throughout zone from 234.1 to 237.8	238.0m-70°	pervasive silica "flooding" & sericitic	sph & tetrahedrite restricted to silicified areas host rocks=pyritic muddy tuff (15-20% py very finely bedded) 234.1-235.15 - 2-3% sph; 5-7% tetrahedrite (in part due to 2-3cm bands of semi-massive tetrahedrite at 234.55- 234.65) 235.15-239.45 - 1% sph, tr-1% tetrahedrite 239.45-240.3 - 5% sph, 1% tetrahedrite 240.3-244.2 - tr sph, tet in qtz veinlets 244.2-244.35 - tr-1% sph, tr cp, tet, 2-3% py 244.6-244.9 - 2-3% sph, 1-2% tet, tr cp, 3-5% py 245.3-245.5 - 40-50% sulphides, 20% sph, 20% py, 5% tetrahedrite 246.2-246.5 - 50-60% sulphides, 5-7% sph, 5-7% tetrahedrite, tr cp, 40-50% py 249.75-249.9 - 7-8% tetrahedrite, 3-5% sph, 5% py 249.9-259.6 - tr sph, tetrahedrite in siliceous veinlets throughout pyritic muddy tuff	
		fault gouge at: 242.1 - 242.9	242.0m-70°			
			242.7m-70°	siliceous, sulphide zones at: 244.2-244.35 244.6-244.9		intervals between these zones have tr sph, tet in qtz veinlets
			245.0m-70°	245.3-245.5 246.2-246.5 249.75-249.9		
		fault gouge at: 254.0-254.25	260.5m-70°			
		263.1-268.0 - finely bedded pyritic muddy tuff (no exotic fragments)		263.1-268.0 - series of white qtz veins - major veins at: 263.6-264.3 264.5-264.7 265.75-265.9	263.1-268.0 - 40% v.f.g. bedded pyrite; tr cp, tetrahedrite and sph in qtz veins	
		-- contact sharp at 70° to CA --	267.6m-70°			

<u>From</u> <u>To</u>	<u>Rock Type</u>	<u>Texture and Structure</u>	<u>Angle to</u> <u>Core Axis</u>	<u>Alteration</u>	<u>Sulphides</u>	<u>Remarks</u>
268.0 to 286.7	SEDIMENTS	Colour - grey to greenish grey with white qtz veins Interbedded wackes, greenish siltstones and argillites (locally graphitic) fault gouge at: 282.2-283.0 285.5-285.6 286.2-286.3	269.5m-55° 281.0m-65°	5-10% white qtz veins with major qtz veins at: 268.75-271.9 285.6-286.2	tr diss py tr arsenopyrite in argillite	
286.7 to 294.7 E.O.H.	CHERT, SERICITIC TUFF AND ARGILLITE	Colour - grey with yellowish wisps & black argillite Grain Size - f.g. well-bedded - argillitic beds more prevalent towards bottom of hole	288.6m-70°	tuffaceous parts are pervasively sericitic	2-3% diss py	

ASSAY SHEET

Sample Number	From (M)	To (M)	Estimate		Length (M)	% Cu	% Zn	% Pb	gm:T Ag	gm:T Au	% SiO ₂	% TiO ₂	% Na ₂ O	% MgO	% Fe	PPM Cu	PPM Zn	PPM Pb	PPM Ag	PPB Au	% As	% Sb	PPM As
			Cu	Zn																			
BCD 4408	213.65	215.0			1.35											90	7500	2800	3.5	35			495
4409	215.0	216.4			1.4											37	780	3050	1.8	25			360
4376	234.1	235.15			1.05	1.35	1.81	1.28	450	0.28											.20	.80	
4377	235.15	236.6			1.45	.078	0.39	0.22	26.2	0.14											.02	.04	
4378	236.6	238.1			1.5	.067	0.10	0.22	14.9	0.06											.03	.03	
4379	238.1	239.45			1.35	.058	0.10	0.11	12.8	0.10											.01	.03	
4380	239.45	240.3			0.85	.184	1.50	0.83	29.6	0.05											.01	.07	
4381	240.3	241.8			1.5	.016	0.01	0.06	4.9	0.01											.01	.01	
4382	241.8	243.0			1.2	.028	0.08	0.12	10.3	0.05													
4383	243.0	244.2			1.2	.038	0.03	0.03	8.9	0.06													
4384	244.2	245.3			1.1	.06	1.02	0.26	14.0	0.04											.01	.03	
4385	245.3	246.5			1.2	.10	1.64	1.29	32.8	0.08											.01	.06	
4386	246.5	248.0			1.5	.007	0.02	0.02	6.1	0.04													
4387	248.0	249.5			1.5	.056	0.08	0.08	14.3	0.02													
4388	249.5	250.5			1.0	.106	0.41	0.19	30.2	0.06													
4389	250.5	252.0			1.5	.008	0.01	0.01	3.4	0.01													
4390	252.0	253.5			1.5	.009	0.01	0.01	2.3	0.04													
4391	253.5	255.0			1.5	.021	0.03	0.02	5.9	0.05													
4392	255.0	256.2			1.5	.017	0.02	0.02	4.7	0.18													

HOLE NO RG-82

PAGE 6

LITHOGEOCHEMISTRY

MAJOR OXIDES

TRACE ELEMENTS

SAMPLE NUMBER	FROM (m)	TO (m)	MAJOR OXIDES										TRACE ELEMENTS					Rock Type	Alt	Min	Zr	Total	
			SiO ₂	Al ₂ O ₃	CaO	MgO	Na ₂ O	K ₂ O	FeO	MnO	TiO ₂	Ba	ppm Cu	ppm Zn	% Pb	ppm Ag	ppb Au						
BCD 4499	178.2	181.4	44.72	14.53	13.61	8.08	1.98	0.80	11.78	0.29	1.46	.046	90	81	.005							.005	97.29
Mafic pyroclastic ash -			10-15% carb-qtz veins; pervasive chlorite																				
BCD 4500	224.6	227.7	48.01	16.23	8.73	8.83	0.25	2.60	10.47	0.33	1.81	.137	52	166	.006							.007	97.41
Mafic pyroclastic flow -			intense sericite and silica alteration, tr py																				

ZIPPY PRINT * - BRIDGEPORT, RICHMOND

<u>From To</u>	<u>Rock Type</u>	<u>Texture and Structure</u>	<u>Angle to Core Axis</u>	<u>Alteration</u>	<u>Sulphides</u>	<u>Remarks</u>
0 to 9.4	OVERBURDEN					casing
9.4 to 17.4	ALTERED MAFIC PYRO- CLASTIC FLOW	Colour - buff yellow Grain Size - f.g. Well-foliated - intense alteration gives unit a cherty look - green mafic remnants seen at start of hole fault gouge and blocky core from 16.0 - 18.6 obscures contact	14.5m-45	Intense pervasive sericite & silicification	2-3% diss py	
17.4 to 52.5	SEDIMENTS	Colour - dark grey to black Grain Size - f.g. Interbedded wackes and graphitic argillites 33.4-52.5 - interbedded f.g. sericitic siltstone and quartzite fault gouge at: 50.8-51.5	19.0m-35 23.0m-50 44.0m-55	1-2% qtz veins 33.4-52.5 - pervasive sericite alteration bleaches rocks a light greenish yellow mineralized qtz veins (45-50%) from 36.35 to 49.75 green muchsite zones occur at: 45.45-46.2 47.8-48.2	20.4-20.6 - massive pyrite 3-5% py throughout- generally associated with argillic beds 33.4-36.35 - 3-5% py, tr tetrahedrite in quartzite and qtz veinlets 36.35-49.75 - 10-15% total sulphides, 2% cp; 1-2% galena, 2% sph, 2% tetrahedrite - primarily in qtz veins 7-8% py in qtz veins & host rock - includes a 5cm wide bleb of massive cp at 47.5	sericitic alteration associated with qtz veining

<u>From To</u>	<u>Rock Type</u>	<u>Texture and Structure</u>	<u>Angle to Core Axis</u>	<u>Alteration</u>	<u>Sulphides</u>	<u>Remarks</u>
52.5 to 59.5	FAULT BRECCIA AND GOUGE	Colour - black to grey Grain Size - f.g. matrix + frags Greyish whie qtz fragments & black chert frags & graphitic argillite in black silicified matrix Major fault gouge at: 53.35 - 54.1 54.4 - 54.8 55.7 - 59.1			None	
59.5 to 89.55	MUDDY TUFF	Colour - grey Grain Size - f.g. 59.5 - 62.9 - interbedded graphitic argillite and pyritic muddy tuff Argillite beds at 60.55 - 61.1 61.5 - 61.6 62.2 - 62.5 Fault gouge at: 60.15 - 60.35 62.9 - 89.55 - Debris flow - argillite, chert and wacke fragments in a pyritic muddy tuff matrix fault gouge at: 68.1 - 68.3		tr qtz veins		20-25% finely bedded pyrite in muddy tuff; 10-15% py occurring as blebs in argillite beds 62.8-62.9 - massive pyrite v.f.g. .
89.55 to 96.3 E.O.H.	ARGILLITE AND CHERT	Colour - black Grain Size - f.g. Grey chert fragments and beds in f.g. black argillite - locally graphitic.	91.0m-60			8-10% py primarily in argillite

ASSAY SHEET

Sample Number	From (m)	To (m)	Estimate		Length (m)	% Cu	% Zn	% Pb	gm.T Ag	gm.T Au	% SiO ₂	% TiO ₂	% Na ₂ O	% MgO	% Fe	PPM Cu	PPM Zn	PPM Pb	PPM Ag	PPB Au	% As	% Sb	% Ba
			Cu	Zn																			
BCD 4394	33.4	34.9			1.5	.006	.01	.09	26.0	38.0													
4395	34.9	36.35			1.45	.029	.04	.01	25.8	0.15													
4396	36.35	37.8			1.45	.213	.70	.02	256.0	2.62											0.02	0.14	0.90
4397	37.8	39.3			1.5	.014	.13	.01	13.8	0.10											0.01	0.02	1.12
4398	39.3	40.6			1.3	.117	.14	.03	106.4	0.64											0.01	0.08	1.22
4399	40.6	42.0			1.4	.426	.39	.48	460.0	0.60											0.01	0.26	1.07
4400	42.0	43.5			1.5	.373	.70	1.30	307.5	0.85											0.01	0.15	0.43
4401	43.5	44.7			1.2	.378	.38	.17	422.0	0.39											0.01	0.20	1.01
4402	44.7	45.9			1.2	.050	.02	.21	7.7	0.24											0.01	0.02	1.02
4403	45.9	47.0			1.1	.338	.52	.18	79.0	0.82											0.01	0.05	0.40
4404	47.0	48.45			1.45	2.43	1.62	.84	210.0	2.15											0.01	0.08	0.84
4405	48.45	49.75			1.3	.046	1.53	.10	13.7	0.20											0.01	0.02	1.14
4406	49.75	51.3			1.55	.036	.02	.03	2.1	0.20													
4407	51.3	52.5			1.2	.009	.06	.06	1.9	0.16													
5522	31.9	33.4			1.5	.006	.02	.01	2.0	0.23													
5523	33.4	34.9			1.5	.005	.01	.01	1.2	0.22													
4396	resplit					.24	.61	.01	278.0	0.44													
4394	resplit from original					.004	.01	.04	0.2	0.64													

qtz veins 0.46% Cu; 0.63% Zn; 0.35% Pb; 191.1 g/T Ag,
 0.8 g/T Au, 0.92% Ba over 13.4m (36.35-49.75)
 includes 0.5% Cu; 0.53% Zn; 0.38% Pb; 210.2 g/T Ag
 0.4 g/T Au over 12.1m (36.35-48.45)

RG-83

HOLE NO _____

PAGE _____

<u>From To</u>	<u>Rock Type</u>	<u>Texture and Structure</u>	<u>Angle to Core Axis</u>	<u>Alteration</u>	<u>Sulphides</u>	<u>Remarks</u>
0 to 6.7	OVERBURDEN					casing
6.7 to 28.8	ALTERED MAFIC PYRO- CLASTIC FLOW	Colour - yellow - grey Grain Size - f.g. well-foliated fault gouge at 17.7 - 18.5	24.0m-55	pervasive intense sericite and silica alteration obliterates all original textures 28.4-28.8 - white qtz vein	3-5% diss py 22.8-22.9 - tr cp and tetrahedrite in qtz vein	6.7-14.5 - very blocky core
28.8 to 32.6	FAULT GOUGE	Colour - grey Qtz vein and sericitic mud - gouge & blocky core throughout				
32.6 to 50.1	SEDIMENTS & QUARTZ VEINS	Colour - greyish yellow with white quartz veins Grain Size - v.f.g. Core very blocky Sediment v.f.g. - siltstones - well-foliated 42.6-50.1 - f.g. grey, wacke(?), massive & featureless fault gouge at 44.1-44.6		34.0-34.8 - quartz vein 35.9-42.3 - 80% qtz veins & green fuchsite in host rock inclusions 42.3-44.6 - 10-15% qtz veins with tr green fuchsite 47.5-48.1 - silicified with tr green fuchsite	34.5-34.8 - well mineralized qtz vein - 15% sulphides, 7-8% sph, 7-8% tetrahedrite - sulphides occur as blebs 35.9-42.3 - 2-3% py, associated with green fuchsite in host rock inclusions 42.3-47.5 - 1-2% py 47.5-48.1 - 35% py, 1% arsenopyrite, tr-1% cp, tet, galena	similar to surface showing trench #3 35.9-42.6 - blocky core

<u>From To</u>	<u>Rock Type</u>	<u>Texture and Structure</u>	<u>Angle to Core Axis</u>	<u>Alteration</u>	<u>Sulphides</u>	<u>Remarks</u>
50.1 to 51.7	SILICIFIED ZONE WITH ARGILLITE INCLUSIONS	Colour - black Grain Size - f.g. brecciated look		pervasively silicified	5-7% py associated with argillite; tr tet, sph locally	possible fault breccia?
51.7 to 52.2	FAULT GOUGE	Colour - dark grey Contains qtz and muddy tuff fragments				
52.2 to 88.0	MUDDY TUFF	Colour - grey Grain Size - f.g. Debris flow consisting of argillite, wacke & pyritic muddy tuff fragments in a v.f.g. pyritic muddy tuff matrix - fragments generally elongate in plane of foliation and up to 1cm long. -- contact sharp at 70 to C.A. --	57.0m-40 66.0m-60 73.0m-60 85.0m-60	tr qtz-carb veins	52.2-75.5 - 30-35% v.f.g., bedded pyrite throughout sph bleb at 74.4 75.5-87.7 - 5-10% v.f.g. pyrite 87.7-88.0 - 40% pyrite	
88.0 to 101.7	SILICIFIED CHERT	Colour - grey Grain Size - f.g. Locally see weakly bedded chert fragments in pervasively silicified matrix - hard to tell if this is a chert or qtz vein -- contact gradational --		intensely silicified	99.3-100.35 - 5-7% py, tr cp.	
101.7 to 113.7 E.O.H.	ARGILLITE WITH CHERT BEDS AND FRAGMENTS	Colour - black Grain Size - f.g. Interbedded argillite and chert, locally grey chert fragments in argillite matrix - well-bedded	103.0m-55 108.0m-70 113.0m-60	Tr qtz veins	Tr diss py	

ASSAY SHEET

Sample Number	From (m)	To (m)	Estimate		Length (m)	% Cu	% Zn	% Pb	gm. T Ag	gm. T Au	% As	% Sb	% Na ₂ O	% MgO	% Fe	PPM Cu	PPM Zn	PPM Pb	PPM Ag	PPB Au			
			Cu	Zn																			
BCD 5513	33.0	34.5			1.5											56	116	77	5.4	110			
5514	34.5	34.8			0.3	0.642	5.01	0.02	760.0	1.15													
5515	34.8	36.3			1.5											38	38	68	3.0	85			
5516	36.3	38.1			1.8											72	180	59	2.4	45			
5517	38.1	39.9			1.8											34	186	88	1.4	30			
5518	39.9	41.4			1.5											62	260	90	2.8	25			
5519	41.4	43.0			1.6											24	46	12	0.7	5			
5520	43.0	44.6			1.6											42	120	20	1.2	40			
5521	47.5	48.1			0.6	0.140	1.22	0.56	16.0	0.20	0.01	0.01											

HOLE NO RG-84

PAGE 4

<u>From</u> <u>To</u>	<u>Rock Type</u>	<u>Texture and Structure</u>	<u>Angle to</u> <u>Core Axis</u>	<u>Alteration</u>	<u>Sulphides</u>	<u>Remarks</u>
0 to 3.4	OVERBURDEN					
34 to 206.2	MAFIC PYRO- CLASTIC FLOW	Colour - light green. Grain size - f-mgr. lapilli & block-sized fragments in f.gr ashy matrix. Well-foliated.	14.7m-75°	3.4 - 22.6: fragments a light yellow colour due to pervasive, mild sericite; matrix is chloritic. 2-3% qtz veins.	1-2% diss. py	
			26.4m-70°	22.6 - 104.95: relatively unaltered light grey fragments in a dark green chloritic ash. 2-3% carb-qtz veins		
			35.5m-70°		68.4 - 69.5: 30% sulphides - primarily py with cp, tet (1-2%) in carb. vein.	68.8-69.2: blocky & ground core
			50.0m-80°			
			75.3m-70°			
		fault gouge at: 79.5 - 79.6 90.3 - 90.4	94.0m-80°	104.95 - 111.6: intense sericite & silicification major qtz veins at: 107.95-108.45 109.0 -110.0	104.95 - 111.6: 1-2% diss. py	78.0-90.5: blocky core
			121.5m-70°	111.6 - 131.4: weak to moderate sericite (frags a light yellow colour) with 3% carb-qtz veins. 130.6-131.4 - qtz-carb vein.	106.1: 3-4cm wide carb vein with cp, sph, tet & galena.	111.9- 114.3: blocky core

<u>From</u> <u>To</u>	<u>Rock Type</u>	<u>Texture and Structure</u>	<u>Angle to</u> <u>Core Axis</u>	<u>Alteration</u>	<u>Sulphides</u>	<u>Remarks</u>
			145.0m-70°	131.4 - 191.9: relatively unaltered. 1% qtz-carb veins		
		fault gouge at: 166.4 - 166.6 174.9 - 175.35	158.0m-65°			
			169.5m-75° 188.0m-65°	191.9 - 206.2: pervasive intense sericite & silica alteration.	191.9 - 206.2: 1-2% diss. py	
		fault gouge at: 198.2 - 198.55 199.85 - 200.5			193.9 - 104.2: 1-2% tetrahedrite. 1% sph in qtz-ser vein.	
					201.15 - 201.9: 1% sph & tr. cp, tet, galena in qtz vein network; 3-5% py.	
					202.65: 2cm wide q.v. with sph & tet	
		2 cm of gouge material at contact				
206.2 to 223.3	CHERT & SERICITIC TUFF	Colour - yellowish grey Grain size - f.gr interbedded chert & sericitic tuff.	207.5m-70° 211.5m-65°	tuffaceous material is pervasively sericitic. 3-5% qtz veins throughout	2-3% diss. py	
					222.5 - 223.3: tr-1% sph in qtz veinlets	

<u>From To</u>	<u>Rock Type</u>	<u>Texture and Structure</u>	<u>Angle to Core Axis</u>	<u>Alteration</u>	<u>Sulphides</u>	<u>Remarks</u>
223.3 to 252.7	MUDDY TUFF	223.3 - 224.9: interbedded with grey cht. 224.9 - 225.8: fault gouge 225.8 - 241.05: chert fragments in siliceous muddy tuff matrix & interbeds of black argillite. Muddy tuff has siliceous look. 241.05 - 252.7: siliceous muddy tuff with the odd chert fragment. Poorly bedded fault gouge at: 248.9 - 249.1 249.3: pyrite occurs as round concentrically banded nodules.	228.0m-60° 239.2m-75° 252.2m-65°	mild sericite & patchy silicified areas 241.05 - 252.7: pervasively siliceous with 5-7% late qtz veins.	223.3-241.05: 10-15% py; tr-1% sph, tr. tet in siliceous areas & late qtz veins 241.05-252.7: 5-7% py occurring as v.fgr. beds in host rock & m-cgr. subhedral to anhedral masses in late q.v.s. 1-2% sph; tr-1% tetrahedrite restricted to late qtz veins.	IDP concur - cherty ruddy tuff

<u>From To</u>	<u>Rock Type</u>	<u>Texture and Structure</u>	<u>Angle to Core Axis</u>	<u>Alteration</u>	<u>Sulphides</u>	<u>Remarks</u>
252.7 to 263.75	MASSIVE SULPHIDES	Colour - brassy yellow with grey inclusions Grain Size - f-cgr 252.8 - 254.0: sulphides weakly bedded.	253.6m-75°		252.7-254.0: massive sulphides with siliceous matrix - primarily py with 8-10% sph; 3-5% tetrahedrite; 1% cp. Locally py occurs as frambroids up to 1 cm diameter.	
		254.1 - 255.9: interbedded v.fgr. pyrite beds and mgr. pyrite and framboidal pyrite beds.	254.3m-75°		254.0-254.1: bed of siliceous pyritic (15-20%) muddy tuff with 0.5 cm wide qtz stringer with tr. sph, py & tet. 254.1-255.9: massive sulphides with locally siliceous zones. Primarily py - occurs as fine beds, mgr. crystals and frambroids (up to 2 cm diameter) throughout zone; 5% sph; 1-2% tetrahedrite; tr galena; tr-1% cp (sph,tet,gal & cp occur with mgr and framboidal py.)	siliceous patches invariably have sph, tetrahedrite +/- cp, galena.
		256.25 - 258.1: pyrite framboidal up to 1 cm diameter in siliceous areas; pyrite & sph weakly bedded	257.5m-70°		255.9-256.24: pyritic (15-20%) muddy tuff. 256.25-258.1: massive sulphides with siliceous zones primarily py with 10% light brown sph; 3-5% tetrahedrite; tr cp; tr-1% galena	
		258.1 - 260.1: finely bedded pyrite/tetrahedrite; with frambroids of py near base.	258.7m-65°		258.1-260.1: massive sulphides; primarily py with 1-2% tetrahedrite; 10% light brown sph; 3-5% cp; 10% galena	

<u>From To</u>	<u>Rock Type</u>	<u>Texture and Structure</u>	<u>Angle to Core Axis</u>	<u>Alteration</u>	<u>Sulphides</u>	<u>Remarks</u>
		260.1 - 260.35: fragments of pyritic muddy tuff in siliceous matrix - well-bedded	260.2m-55°		260.1-260.35: siliceous pyritic muddy tuff	overall estimate of economic sulphides from 252.7-263.75 (11.05m) is 7-8% sph; 2-3% tetrahedrite; 1-1.5% cp; 1-2% galena
		260.35 - 263.75: well-bedded; locally have frambroids of py up to 1 cm diameter.	261.0m-65° 262.0m-60°		260.35-263.75: semi-massive to massive sulphides in siliceous matrix (80% sulphides) - primarily py with 7-8% light brown sph; 2-3% tetrahedrite; 1-2% cp	
263.75 to 291.4	PYRITIC MUDDY TUFF	Colour - dark grey Grain Size - fgr. Well-bedded with 1-2% grey chert fragments - between pyritic material have grey siliceous beds. Fault gouge at 268.2 - 268.55m	266.0m-55° 273.6m-50° 280.0-50°	1% qtz veins - weakly sericitic	20-25% v.fgr. bedded py, tr. sph, tet., cp, galena in late qtz veins	
		fault gouge & blocky core at: 268.2 - 268.55m	287.3m-70°		287.1: 2 cm wide zone with sph & tet.	
		286.5 - 288.7: interbedded chert and muddy tuff.		288.7 - 291.4: qtz vein with muddy tuff inclusions	288.7-289.0: 15-20% py; tr cp in q.v.	
291.4 to 294.7 EOH	CHERT AND SERICITIC TUFF	Colour - yellowish grey Grain Size - f.gr interbedded chert & tuff	292.0m-65°	tuffaceous material pervasively sericitic		

LITHOGEOCHEMISTRY

MAJOR OXIDES

TRACE ELEMENTS

SAMPLE NUMBER	FROM (m)	TO (m)	MAJOR OXIDES										TRACE ELEMENTS					Rock Type	Alt	Min	Zr	Total
			SiO ₂	Al ₂ O ₃	CaO	MgO	Na ₂ O	K ₂ O	FeO	MnO	TiO ₂	Ba	ppm Cu	ppm Zn	% Pb	ppm Ag	ppb Au					
BCD 4451	41.8	44.8	45.22	14.88	8.76	11.64	2.05	0.04	12.92	0.34	1.60	.005	112	102	.005						.005	97.46
Mafic pyroclastic flow -			relatively unaltered																			
BCD 4452	75.3	78.3	45.11	15.19	8.23	11.83	2.25	0.02	12.77	0.31	1.69	.005	86	77	.005						.005	97.39
Mafic pyroclastic flow -			relatively unaltered																			
BCD 4453	111.9	114.9	46.73	15.69	5.39	12.62	1.64	0.30	12.66	0.34	1.92	.031	75	116	.005						.007	97.32
Mafic pyroclastic flow -			weakly sericitic, tr py																			
BCD 4454	136.2	139.3	46.22	15.32	7.25	11.89	1.97	0.01	12.83	0.29	1.66	.010	102	155	.005						.005	97.46
Mafic pyroclastic flow -			relatively unaltered																			
BCD 4455	169.8	172.8	43.51	16.58	5.33	13.56	1.93	0.01	14.33	0.26	1.72	.007	96	86	.005						.005	97.24
Mafic pyroclastic flow -			relatively unaltered																			
BCD 4456	194.2	197.2	41.73	16.13	6.85	12.83	0.07	1.86	12.83	0.55	1.95	.094	360	8300	.108						.010	95.01
Mafic pyroclastic flow -			intensely sericitic & silicified; 1-2% py																			

Hole No. RG-85

Entered by _____

Logged by _____

Page No. 9

FROM TO	ROCK TYPE	COLOUR	GRAIN SIZE	TEXTURE AND STRUCTURE	ANGLE TO CORE AXIS	ALTERATION	SULPHIDES	REMARKS	
0 to 3.0	OVERBURDEN							casing	
3.0 to 213.8	MAFIC PYROCLASTIC FLOW	Green with yellow-green to grey frags	f.g.	Lapilli & block-sized mafic fragments in ashy matrix - frags stretched slightly in plane of foliation	16.0m-70° 32.7m-60° 49.6m-65° 61.5m-60° 74.0m-60° 92.3m-60° 136.0m-60° 142.0m-60° 175.0m-65° 198.0m-65° 204.0m-60°	3.0 - 18.3 - fragments a buff yellow colour due to sericite alteration 2-3% qtz veins 18.3 - 132.4 - relatively unaltered; 1-2% qtz-carb veins larger white qtz veins at: 115.4 - 115.7 116.4 - 116.8 127.1 - 127.9 130.3 - 132.4 - has inclusions of host rock Host rock adjacent to qtz veins only very weakly sericitic 132.4 - 176.6 - weak sericite - core a yellowish green colour 176.6 - 200.3 - pervasive moderate silicification & weak sericite 200.3 - 208.3 - becoming intensely sericitic & silicified	Tr-1% diss py 27.2 - tr galena in qtz vein 38.6 - 1% cp, 1% galena in 2cm wide qtz vein 112.2 - 112.3 - qtz veins with cp, galena, sph, py 116.4 - 116.8 - 1% cp, tr galena in vein 127.1 - 127.9 - 3-5% py, tr-1% cp, tr galena, sph 130.3 - 132.4 - 1-2% py, tr sph, galena 148.0 - 148.1 - 1-2% galena in qtz vein tr diss py	fault gouge & breccia at: 115.0 - 115.4 200.3 - 208.3 - fragments indistinct in altered zone	blocky core at; 148.4 - 150.1 162.2 - 168.9 184.6 - 199.5 - blocky core

FROM TO	ROCK TYPE	COLOUR	GRAIN SIZE	TEXTURE AND STRUCTURE	ANGLE TO CORE AXIS	ALTERATION	SULPHIDES	REMARKS
213.8 to 267.45	CHERT, SERICITIC TUFF AND ARGILLITE	Yellowish grey to black	f.g.	Fault gouge at: 210.4 - 210.7	208.6m-60°	- core bleached light yellow with apple green colour (due to epidote?) from 204.95 to 206.3 208.3 - 213.8 - weakly sericitic weak to moderate silicification		
				Interbedded chert, tuff & argillite - locally have grey chert fragments in argillite matrix fault gouge throughout: 213.8 - 214.9	215.5m-55° 218.5m-60°	Tuffaceous material pervasively sericitic. 2-3% qtz veins throughout.	3-5% diss py - primarily associated with chert and sericitic tuff.	
				blocky core & fault at: 241.7 - 242.0	229.0m-70° 235.0m-65° 249.0m-50° 253.6m-65° 257.0m-65°			
				Contact gradational				
267.45 to 327.8	MUDDY TUFF, CHERT AND SERICITIC TUFF	grey	f.g.	Chert beds and fragments in a pyritic muddy tuff matrix; wispy beds of sericitic tuff throughout from 267.45 - 283.5	272.0m-65°	Tuffaceous zones are sericitic (light yellow in colour) - 3-5% qtz veins & siliceous zones	267.45 - 283.5 - muddy tuff sections consist of v.f.g. bedded pyrite Overall approx. 10-15% py; tr sph, tet, cp and galena in siliceous patches. 283.5 - approx. 197.0 20-25% py occurring as v.f.g. beds and m.g. anhedral to subhedral grains in siliceous areas. 1% sph, 0.5-1.0% galena, tr cp, tetrahedrite - primarily in siliceous areas which generally cross-cut the bedding.	
				284.8 - 293.65 - Interbeds of v.f.g. black argillite, chert, muddy tuff - argillite is locally graphitic fault gouge at: 293.65 - 293.8	281.0m-70° 287.0m-60°			283.5 - 279.0 - fringe-type mineralization to RG-85. Massive Sulphide Zone

RG-86

HOLE NO.

ZIPPY PRINT - BRIDGEPORT, RICHMOND

PAGE 3

FROM TO	ROCK TYPE	COLOUR	GRAIN SIZE	TEXTURE AND STRUCTURE	ANGLE TO CORE AXIS	ALTERATION	SULPHIDES	REMARKS
				<p>293.8 - 303.9 - Interbeds of argillite and grey pyritic muddy tuff only - also have fragments of each rock type in the other.</p> <p>Fault gouge at: 303.65 - 303.7</p> <p>303.9 - 327.8 - pyritic muddy tuff, finely bedded</p> <p>308.0 - 309.0 - round (up to 1cm diameter) siliceous "nodules" in pyritic muddy tuff matrix.</p> <p>Fault gouge at: 312.5 - 312.65 313.6 - 313.9 317.35 - 317.7 317.85 - 318.0</p> <p>Thin (2-3cm) fault gouge zones throughout the interval: 318.0 - 324.4</p> <p>-- quartz vein at contact --</p>			<p>297.0 - 309.9 - 35-40% v.f.g. py in muddy tuff & m.g. py in veinlets; tr sph, galena, tetrahedrite throughout zone.</p> <p>309.9 - 317.35 - 30-35% v.f.g. py, 1% sph, tr-1% galena, tr tetrahedrite in siliceous areas.</p> <p>317.35 - 327.8 - 15-20% v.f.g. pyrite, tr sph, tet in siliceous areas.</p>	
327.8 to 347.2	ALTERED MAFIC ASH?	Greyish brown	f.g.	<p>Massive to very poorly foliated wacke.</p> <p>334.8 - 337.6 - grey to black chert with sericitic wisps. Contacts with this unit ill-defined.</p> <p>-- contact sharp --</p>	<p>305.0m-60° 310.5m-70°</p>	<p>303.9 - 327.9 - pervasively silicified muddy tuff & pervasive sericite.</p> <p>326.8 - 327.8 - qtz vein with muddy tuff inclusions.</p> <p>3-5% wisps of brownish sericite?; 3-5% qtz veins</p> <p>327.8 - 328.6 - emerald green fuchsite at contact zone.</p> <p>337.6 - 338.3 - tr pale green talc (very soft).</p>	<p>2-3% diss py throughout with local enrichments as noted below.</p> <p>337.6 - 338.3 - 15-20% py, tr-1% arsenopyrite</p> <p>339.6 - 339.9 - 40% py, 2% sph, 2% galena, 1% cp.</p>	

FROM TO	ROCK TYPE	COLOUR	GRAIN SIZE	TEXTURE AND STRUCTURE	ANGLE TO CORE AXIS	ALTERATION	SULPHIDES	REMARKS
347.2 to 357.65	CHERT, BLACK ARGILLITE	Dark grey to black	f.g.	Grey interbeds of chert and chert fragments in black argillite, also have grey wacke fragments. Bedding is quite variable from shallow to steep core angles. -- contact sharp --	349.0m-50° 355.6m-80°	Relatively unaltered.	Tr-1% diss py	
357.65 to 358.7 E.O.H.	ALTERED MAFIC ASH?	Grey	f.g.	Same as at 327.8 - 347.2			Tr-1% py	

ASSAY SHEET

Sample Number	From (m)	To (m)	Estimate		Length (m)	% Cu	% Zn	% Pb	gm/T Ag	gm/T Au	% SiO ₂	% TiO ₂	% Na ₂ O	% MgO	% Fe	PPM Cu	PPM Zn	PPM Pb	PPM Ag	PPB Au			
			Cu	Zn																			
BCD 4427	276.95	278.45			1.5	.001	.03	.02	0.5	.01													
4428	281.9	283.5			1.6	.001	.08	.01	0.3	.01													
4429	283.5	285.0			1.5	.015	.88	.58	4.8	.01													
4430	285.0	286.5			1.5	.023	.65	.37	12.4	.02													
4431	286.5	288.0			1.5	.003	.19	.64	3.9	.03													
4432	288.0	289.6			1.6	.012	.51	.13	2.0	.01													
4433	289.6	291.0			1.4	.006	.60	.14	1.8	.01													
4434	291.0	292.5			1.5	.041	.69	.33	7.9	.03													
4435	292.5	294.0			1.5	.002	.68	.65	6.0	.01													
4436	294.0	295.5			1.5	.104	.42	.46	4.1	.08													
4437	295.5	297.0			1.5	.039	.27	.49	4.9	.03													
4438	309.9	311.4			1.5	.002	.14	.07	8.3	.01													
4439	311.4	312.9			1.5	.040	.13	.09	3.9	.04													
4440	312.9	314.4			1.5	.005	.06	.01	15.4	.07													
4441	314.4	315.9			1.5	.003	.12	.02	10.2	.02													
4442	315.9	317.35			1.45	.014	1.70	.31	3.5	.01													

RG-86

HOLE NO _____

PAGE 7

ASSAY SHEET

Sample Number	From (m)	To (m)	Estimate		Length (m)	% Cu	% Zn	% Pb	gm. T Ag	gm. T Au	% SiO ₂	% TiO ₂	% Na ₂ O	% MgO	% Fe	PPM Cu	PPM Zn	PPM Pb	PPM Ag	PPB Au			
			Cu	Zn																			
BCD 4443	326.8	327.8			1.0											26	52	84	1.1	35			
4444	327.8	328.6			0.8											39	120	36	0.9	10			
4445	328.6	330.1			1.5											45	156	39	1.1	10			
4446	337.6	338.3			0.7	.029	1.06	0.43	10.0	0.02													
4447	338.3	339.6			1.3											195	380	860	1.3	5			
4448	339.6	339.9			0.3	.672	5.20	2.56	17.8	0.04													
4449	339.9	341.4			1.5											830	2900	2350	2.1	25			

HOLE NO RG-86

PAGE 8

LITHOGEOCHEMISTRY

MAJOR OXIDES

TRACE ELEMENTS

SAMPLE NUMBER	FROM (m)	TO (m)	MAJOR OXIDES										TRACE ELEMENTS					Rock Type	Alt	Min	Zr	Total
			SiO ₂	Al ₂ O ₃	CaO	MgO	Na ₂ O	K ₂ O	FeO	MnO	TiO ₂	Ba	ppm Cu	ppm Zn	% Pb	ppm Ag	ppb Au					
BCD 4457	150.6	153.6	48.65	14.28	7.09	10.81	2.31	0.11	11.29	0.35	2.19	.005	51	180	.005		NA				.011	97.10
Mafic pyroclastic flow -			weakly sericitic; tr py																			
BCD 4458	178.0	181.1	47.09	16.16	4.28	12.91	2.42	0.16	12.25	0.32	1.56	.005	110	101	.005		NA				.005	97.16
Mafic pyroclastic flow -			moderately sericitic and silicified, tr py																			
BCD 4469	331.3	334.4	43.72	16.18	9.39	10.32	0.29	1.86	12.68	0.60	2.10	.066	65	184	.005		20				.011	97.22
Mafic pyroclastic flow?			intense ser-silica alteration, tr-1% py																			

ZIPPY PRINT © - BRIDGEPORT, RICHMOND

CORPORATION FALCONBRIDGE COPPER

DRILL HOLE RECORD

x METRIC UNITS
IMPERIAL UNITS

HOLE NUMBER RG-87	GRID	FIELD COORDS	LAT. 98+00NW	DEP. 9+06NE	ELEV. 1595m(approx)	COLLAR BRNG. 225°	COLLAR DIP -75°	HOLE SIZE NQ	FINAL DEPTH 360.6m
PROJECT PN 312	CLAIM# REA 1	SURVEY COORDS.				DATE STARTED: Oct 17/86 DATE COMPLETED: Oct 21/86	CONTRACTOR: G&D CORE STORAGE: Skwaam Bay CASING: 3.0m left in hole		
PURPOSE To test the Silver Zone on section 98+00 100 metres down-dip of RG-72								RQD LOG COLLAR SURVEY	PULSE EM SURVEY MULTISHOT SURVEY
ACID TESTS				TROPARI TESTS			MULTISHOT DATA		
DEPTH (m)	CORRECTED ANGLE	DEPTH ()	CORRECTED ANGLE	DEPTH (m)	AZIMUTH	DIP	DEPTH ()	AZIMUTH	DIP
57.0	73°			349.6	208° true	-61°			
99.7	73°								
178.9	70°								
224.6	66°								
270.4	63°								
291.7	62°								

<u>From</u> <u>To</u>	<u>Rock Type</u>	<u>Texture and Structure</u>	<u>Angle to</u> <u>Core Axis</u>	<u>Alteration</u>	<u>Sulphides</u>	<u>Remarks</u>
0 to 3.0	OVERBURDEN					CASING
3.0 to 214.9	MAFIC PYRO- CLASTIC FLOW	Colour - green Grain size - f.gr lapilli & block size fragments in f.gr ash matrix	11.0m-70	3.0 - 21.6: weakly sericitic and silicified (5% qtz veins) large white qtz veins at: 5.1 - 5.5 9.45 - 9.8	3.0-21.6: 1-2% diss. py	
				21.6 - 25.75: intensely sericitic and silicified	21.6-25.75: 5% diss. py	
				25.75 - 31.5: weakly to moderately sericitic & silicified	25.75-31.5: 2-3% diss. py 26.4: tr sph, tet. in qtz vein	
		fault gouge at: 25.8 - 25.85 29.95 - 30.2 30.5 - 31.0 51.5 - 51.7	35.0m-65	31.5 - 38.8: moderate to intense sericite with larger qtz veins at: 32.2 - 33.85: tr. green mica? 36.0 - 36.7 37.9 - 38.5	31.5-38.8: 3-5% diss py 32.2-33.85: tr galena in qtz vein 37.9-38.5: 1% galena, tr cp in q.v.	
				38.8 - 51.7: yellow, weakly sericitic mafic frags in dark green chloritic ash	38.8-51.7: 1% py except where noted below	
				qtz veins at: 39.1 - 39.2 40.7 - 42.0 45.7 - 46.8	39.1-39.2: tr galena, cp 40.7-42.0: tr-1% galena; 1-2% py 45.7-46.8: 2-3% py, 3% galena; tr cp, sph	

<u>From To</u>	<u>Rock Type</u>	<u>Texture and Structure</u>	<u>Angle to Core Axis</u>	<u>Alteration</u>	<u>Sulphides</u>	<u>Remarks</u>
			59.7m-65	51.7 - 145.7: relatively unaltered; 1-2% qtz-carb veins.	51.7 - 145.7: tr diss. py	
			76.5m-70	63.85-69.4: 10-15% qtz-carb veins		
			109.5m-70			
			125.0m-60			
			145.5m-55			
		fault gouge & blocky core at: 149.6 - 150.9	162.0m-60	145.7 - 182.0: fragments a light yellow in colour due to weak sericite matrix chloritic and weakly silicified		
			166.4m-70			
		182.0 - 197.0: more ashy veining irregular & also parallel to foliation	196.0m-55	182.0 - 197.0: pervasive qtz-carb veining (15-20%) & weak sericite-chlorite alteration	145.7-197.0: 1% diss py	
		197.0 - 214.9: light grey mafic fragments in brownish grey matrix 205.45 - 209.3: blocky core with minor fault gouge		197.0 - 214.9: pervasive moderate silicification & carb. Fragments altered (ser) to light brown colour.	197.0-214.9: tr diss py	

<u>From</u> <u>To</u>	<u>Rock Type</u>	<u>Texture and Structure</u>	<u>Angle to</u> <u>Core Axis</u>	<u>Alteration</u>	<u>Sulphides</u>	<u>Remarks</u>
		fault gouge at contact				
214.9 to 301.7	CHERT, SERICITIC TUFF, ARGILLITE	Colour - grey to yellowish grey with black argillite Grain size - f.gr Interbedded cht, tuff and argillite.	217.0m-60	tuffaceous component is pervasively sericitic 1-2% qtz veins		214.9-223.8: 3-5% diss py - primarily associated with sericitic tuff
		fault gouge from 214.9 - 215.2				
		Zones with large argillite component & minor chert and sericitic tuff at:	223.0m-65			223.8-301.7: tr-1% diss py
		227.9 - 237.9	235.0m-55			247.0: 0.5 cm stringer with cp
		247.9 - 251.4	240.0m-55	268.1 - 298.4: 25-30% white qtz veins		258.6: 2 cm stringer with py, galena, sph, tetrahedrite
		260.1 - 296.9	247.0m-70			
		fault gouge at: 259.85 - 260.1	259.5m-60	284.4 - 285.5: 1-2% white barite? associated with		
		289.9 - 290.1	264.0m-60	qtz vein		
		292.3 - 292.4	287.0m-70			
		295.8 - 295.9				

<u>From</u> <u>To</u>	<u>Rock Type</u>	<u>Texture and Structure</u>	<u>Angle to</u> <u>Core Axis</u>	<u>Alteration</u>	<u>Sulphides</u>	<u>Remarks</u>
		Contact indistinct				
301.7 to 351.1	MUDDY TUFF	Colour - grey Grain size - f.gr matrix & frags 301.7 - 333.0: Debris flow texture; chert, argillite and wacke? fragments in pyritic muddy, tuff matrix. No apparent grading on sorting of fragments. Have the odd thin (0.1mm) bed of argillite	302.5m-70	301.7 - 304.7: 2-3% qtz veins and siliceous patches. Weakly sericitic	301.7-304.7: 20-25% py as v.fgr beds and m.gr cubes in siliceous zones. Tr sph, tet, galena in siliceous patches.	
				304.7 - 306.3: siliceous matrix to sulphides	304.7-305.5: Semi-massive sulphides in siliceous matrix 85-90% sulphides - primarily py with 2-3% sph; tr-0.5% galena; tr-1% tetrahedrite	
		fault gouge at: 321.7 - 322.2 322.7 - 322.85 324.3 - 324.4	310.0-65	306.3 - 311.7: 2-3% siliceous patches	305.3-306.3: 30% py, 1-2% sph; tr-1% tetrahedrite in siliceous (cherty looking) host.	
			314.0m-70	311.7 - 329.35: relatively unaltered. 1% qtz veins	306.3-311.7: 30-35% v.fgr bedded, pyrite which is typical of the muddy tuff. Tr sph, tetrahedrite and galena in siliceous patches	
				329.35 - 333.0: 10-15% siliceous patches	311.7-329.35: 10-15% v.fgr pyrite in muddy tuff; have the odd speck of sph & tet in siliceous patches	
		333.0 - 351.1: finely bedded Muddy Tuff with only the odd chert fragment.			329.35-333.0: 30-35% v.fgr py; 1-2% sph, tr tet. in siliceous patches	mislatch at 324.5-327.7m - missing approx. 1.5m or core

<u>From</u> <u>To</u>	<u>Rock Type</u>	<u>Texture and Structure</u>	<u>Angle to</u> <u>Core Axis</u>	<u>Alteration</u>	<u>Sulphides</u>	<u>Remarks</u>
		fault gouge at: 346.7 - 347.8 348.2 - 348.35 350.15 - 350.4	343.0m-45	333.0 - 346.9: mildly sericitic with 2-3% siliceous patches	333.0 - 351.1: 30-35% v.fgr bedded pyrite	
		Contact sharp	346.6m-40	346.9 - 351.1: 10% white qtz veins	tr-1% diss. py.	
351.1 to 359.25	ALTERED MAFIC PYRO- CLASTIC FLOW	Colour - light grey with green fragments Grain size - f.gr well-foliated with 1-2% remnant green mafic fragments	352.6m-50	pervasively intensely silicified and sericitic		
		Qtz vein at contact	358.0m-55			
359.25 to 360.6 EOH	CHERT	Colour - grey Grain size - v.fgr weakly bedded	360.0m-65			

ASSAY SHEET

Sample Number	From (m)	To (m)	Estimate		Length (m)	% Cu	% Zn	% Pb	gm/T Ag	gm/T Au	% SiO ₂	% TiO ₂	% Na ₂ O	% MgO	% Fe	PPM Cu	PPM Zn	PPM Pb	PPM Ag	PPB Au				
			Cu	Zn																				
BCD 5501	301.7	303.2			1.5	.014	.33	.13	3.8	.18														
5502	303.2	304.7			1.5	.012	.41	.20	4.0	.10														
5503	304.7	305.5			0.8	.32	4.78	3.14	28.2	.50														
5504	305.5	306.3			0.8	.066	1.56	0.63	10.0	.25														
5505	306.3	307.8			1.5	.006	.20	.06	2.1	.03														
5506	307.8	309.3			1.5	.005	.09	.05	1.8	.02														
5507	309.3	310.5			1.2	.004	.01	.04	2.0	.01														
5508	310.5	311.7			1.2	.002	.07	.04	2.0	.01														
5509	329.35	330.5			1.15	.005	.50	.19	6.6	.02														
5510	330.5	331.7			1.2	.024	.62	.38	12.0	.03														
5511	331.7	333.0			1.3	.047	.54	.36	12.2	.02														
5512	337.6	339.1			1.5	.018	.62	.26	9.6	.23														

HOLE NO RC-87

PAGE 8

LITHOGEOCHEMISTRY

MAJOR OXIDES

TRACE ELEMENTS

SAMPLE NUMBER	FROM (m)	TO (m)	MAJOR OXIDES										TRACE ELEMENTS					Rock Type	Alt	Min	Zr	Total
			SiO ₂	Al ₂ O ₃	CaO	MgO	Na ₂ O	K ₂ O	FeO	MnO	TiO ₂	Ba	ppm Cu	ppm Zn	% Pb	ppm Ag	ppb Au					
BCD 4459	57.0	60.0	45.87	15.04	7.21	11.16	3.24	0.08	12.66	0.30	1.65	.117	105	75	.005						.005	97.32
Mafic pyroclastic flow - relatively unaltered																						
BCD 4460	90.5	93.6	45.62	14.66	8.78	12.24	1.72	0.02	12.51	0.31	1.65	.022	98	86	.005						.005	97.54
Mafic pyroclastic flow - relatively unaltered																						
BCD 4461	124.1	127.1	44.84	14.64	9.96	10.75	2.44	0.02	11.91	0.27	2.28	.034	74	80	.005						.011	97.15
Mafic pyroclastic flow - relatively unaltered																						
BCD 4462	157.1	160.3	47.77	14.94	6.81	11.88	1.89	0.01	12.19	0.36	1.53	.005	75	115	.005						.005	97.39
Mafic pyroclastic flow - weakly sericitic and silicified; 1-2% py																						
BCD 4463	200.3	203.3	44.81	14.99	7.71	13.97	0.04	0.61	12.62	0.57	1.90	.014	68	314	.021						.007	97.26
Mafic pyroclastic flow - moderately sericitic and silicified; tr py																						
BCD 4464	352.7	355.7	41.46	14.51	16.03	8.88	0.27	3.70	9.49	0.63	2.07	.134	66	52	.005						.012	97.18
Mafic pyroclastic flow(?) - intensely sericitic and silicified																						

Hole No. RG-87

Entered by _____

Logged by _____

Page No. 9

FROM TO	ROCK TYPE	COLOUR	GRAIN SIZE	TEXTURE AND STRUCTURE	ANGLE TO CORE AXIS	ALTERATION	SULPHIDES	REMARKS
0 to 3.4	OVERBURDEN							casing
3.4 to 126.6	MAFIC PYRO-CLASTIC FLOW	Greyish green	f.g.	Lapilli & block-sized fragments in f.g. ashy matrix. fragments stretched slightly in plane of foliation. Fault gouge at: 25.5 - (3cm) blocky core & minor fault gouge at: 38.9 - 50.2	11.4m-80° 28.0m-80° 49.5m-80° 65.0m-75° 73.5m-75° 96.0m-70° 125.0m-80°	3.4 - 84.5 - relatively unaltered; 1-2% qtz veins ashy matrix is chloritic frags are light grey to greenish grey in colour 37.35 - 38.1 - silicified & carbonate-rich zone 84.5 - 98.8 - fragments altered to a buff yellow colour (weak sericite) 1-2% qtz-carb veins 98.8 - 121.0 - fragments yellow due to pervasive sericitic matrix brownish grey due to pervasive moderate sericite, silica & chlorite alteration. 2-3% qtz-carb veins. 121.0 - 126.6 - intense silica and sericite-chlorite alteration - hard to distinguish fragments.	Tr diss. py except where noted below. 2-3% py in veins & tr cp 37.35 - 38.1 - 5-7% py, 1-2% cp, tr sph, galena, tetrahedrite. 41.2 - 41.7 - 10-15% py 125.15 - tr sph in qtz vein	
				-- contact sharp --				

FROM TO	ROCK TYPE	COLOUR	GRAIN SIZE	TEXTURE AND STRUCTURE	ANGLE TO CORE AXIS	ALTERATION	SULPHIDES	REMARKS
126.6 to 224.1	CHERT, ARGILLITE, SERICITIC TUFF	Black to dark grey	f.g.	Locally have chert fragments (grey) in black chert and/or argillite matrix. - argillite & chert interbedded with sericitic tuff - sericitic tuff & chert zones at: 136.8 - 148.2 153.85 - 157.5 177.1 - 181.3 162.1 - 214.9 - Chert fragments in a predominantly argillite matrix with minor sericite tuff. Fault gouge at: 167.2 (3cm) 169.8 (1cm) 171.4 - 171.7 173.85 - 173.9 188.1 (2cm) 190.1 - 190.6 192.5 - 192.6 199.1 - 199.5 214.9 - 224.1 - sericitic tuff and chert beds and fragments Fault gouge at: 219.3 - 219.5	134.0m-80° 150.0m-55° 158.0m-70° 165.2m-70° 170.0m-55° 186.5m-80° 196.5m-70° 207.0m-70° 222.5m-75°	Tuffaceous material is pervasively sericitic (light yellow in colour), 1-2% Qtz veins throughout	Tr py 2-3% py in sericitic tuff/chert zones	Mislatch at 142.3 - missing approximately 1.2m of core
224.1 to 240.75	MUDDY TUFF WITH CHERT FRAGMENTS & SERICITIC TUFF INCLUSIONS	Grey	f.g.	Chaotic arrangement of Muddy Tuff; chert fragments in muddy tuff & argillite matrix; and sericitic tuff.	234.0m-80°	1-2% siliceous patches 235.5 - 236.55 - have small elliptical siliceous "spots" - intimately associated with sph.	5% diss. py - v.f.g. associated with muddy tuff matrix. Tr-1% sph in siliceous areas more enriched areas at: 235.5 - 236.55 - 7-8% sph, 1% galena, tr-1% tetrahedrite, 10-15% py. Sph occurs as elliptical (2-3 mm X 1-2mm) spots	

RG-88

HOLE NO

ZIPPY PRINT - BRIDGEPORT, RICHMOND

PAGE 3

FROM TO	ROCK TYPE	COLOUR	GRAIN SIZE	TEXTURE AND STRUCTURE	ANGLE TO CORE AXIS	ALTERATION	SULPHIDES	REMARKS
240.75 to 263.1	MUDDY TUFF	Greyish brown	v.f.g.	Very finely bedded pyritic muddy tuff. Fault gouge throughout the interval: 241.75 - 243.0 Fault gouge at: 262.0 - 262.6 -- contact sharp --	248.5m-55° 259.7m-50°	5-10% siliceous areas gives rock a cherty look.	240.75 - 241.3 - 10-12% sph, 1% tetrahedrite, tr galena, 15% v.f.g. pyrite 241.3 - approx. 248.8 - 30-35% v.f.g. py, tr-1% sph, tr galena, tetrahedrite in siliceous patches 248.8 - 263.1 - 15-20% v.f.g. py, tr sph in qtz veinlets 253.8 - 254.1 - 1-2% sph, tetrahedrite in siliceous patch.	
263.1 to 275.0	ALTERED MAFIC PYRO-CLASTIC(?) ASH	Grey	f.g.	Predominantly ashy material weakly foliated blocky core at: 266.7 - 270.4 -- contact sharp --	272.0m-60°	pervasive intense sericite, silica & minor chlorite alteration	None	Lithogeochem sample # BCD 4468 (271.0 - 273.4)
275.0 to 276.5 E.O.H.	CHERT, ARGILLITE & MINOR SERICITIC TUFF	Greyish black	f.g.	Well-bedded	276.0m-50°		None	

ASSAY SHEET

Sample Number	From (M)	To (M)	Estimate		Length (M)	% Cu	% Zn	% Pb	gm/T Ag	gm/T Au	% As	% TiO ₂	% Na ₂ O	% MgO	% Fe	PPM Cu	PPM Zn	PPM Pb	PPM Ag	PPB Au			
			Cu	Zn																			
BCD 5530	37.35	38.1			0.75											5170	6150	4450	3.6	25			
5531	234.0	235.5			1.5	.001	.03	.01	1.6		.01										10		
5532	235.5	236.55			1.05	.036	3.29	.82	10.2		.01										20		
5533	236.55	238.0			1.45	.002	.02	.02	0.9		.01										5		
5534	240.75	241.3			0.55	.057	3.06	1.14	12.0		.01										20		
5535	241.3	242.8			1.5	.012	.15	.13	6.3		.01										10		
5536	242.8	244.3			1.5	.002	.09	.42	9.8		.01										20		
5537	244.3	245.8			1.5	.055	.43	.30	18.2		.01										50		
5538	245.8	247.3			1.5	.020	.74	.79	17.0		.01										80		
5539	247.3	248.8			1.5	.003	.28	.33	3.5		.01										10		
5540	253.6	254.6			1.0	.011	.39	.14	6.4		.01										5		

RG-88

HOLE NO _____

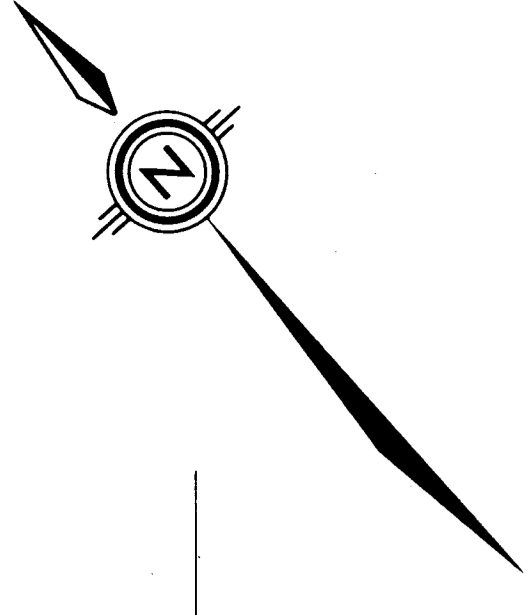
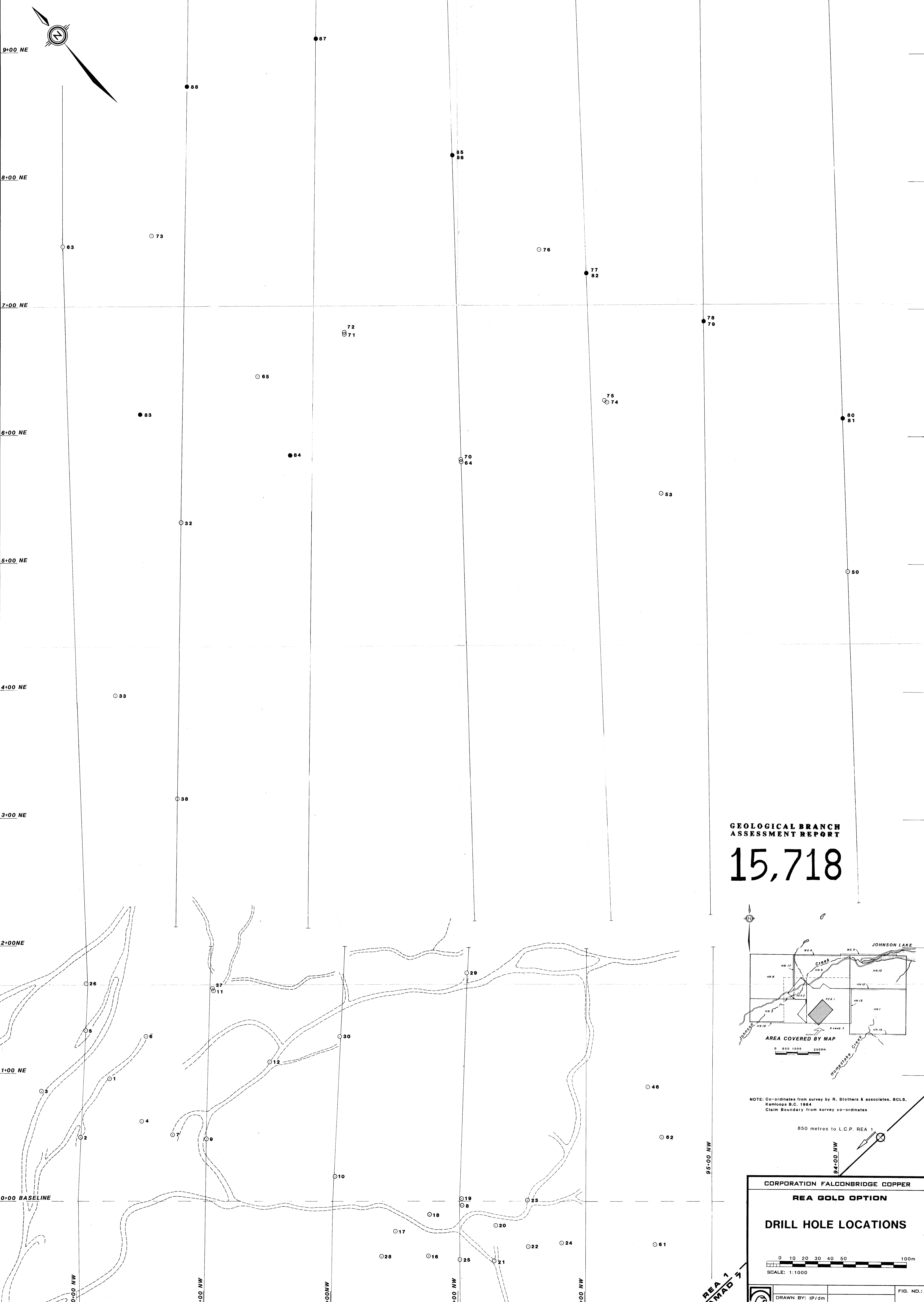
PAGE 5

LITHOGEOCHEMISTRY

MAJOR OXIDES

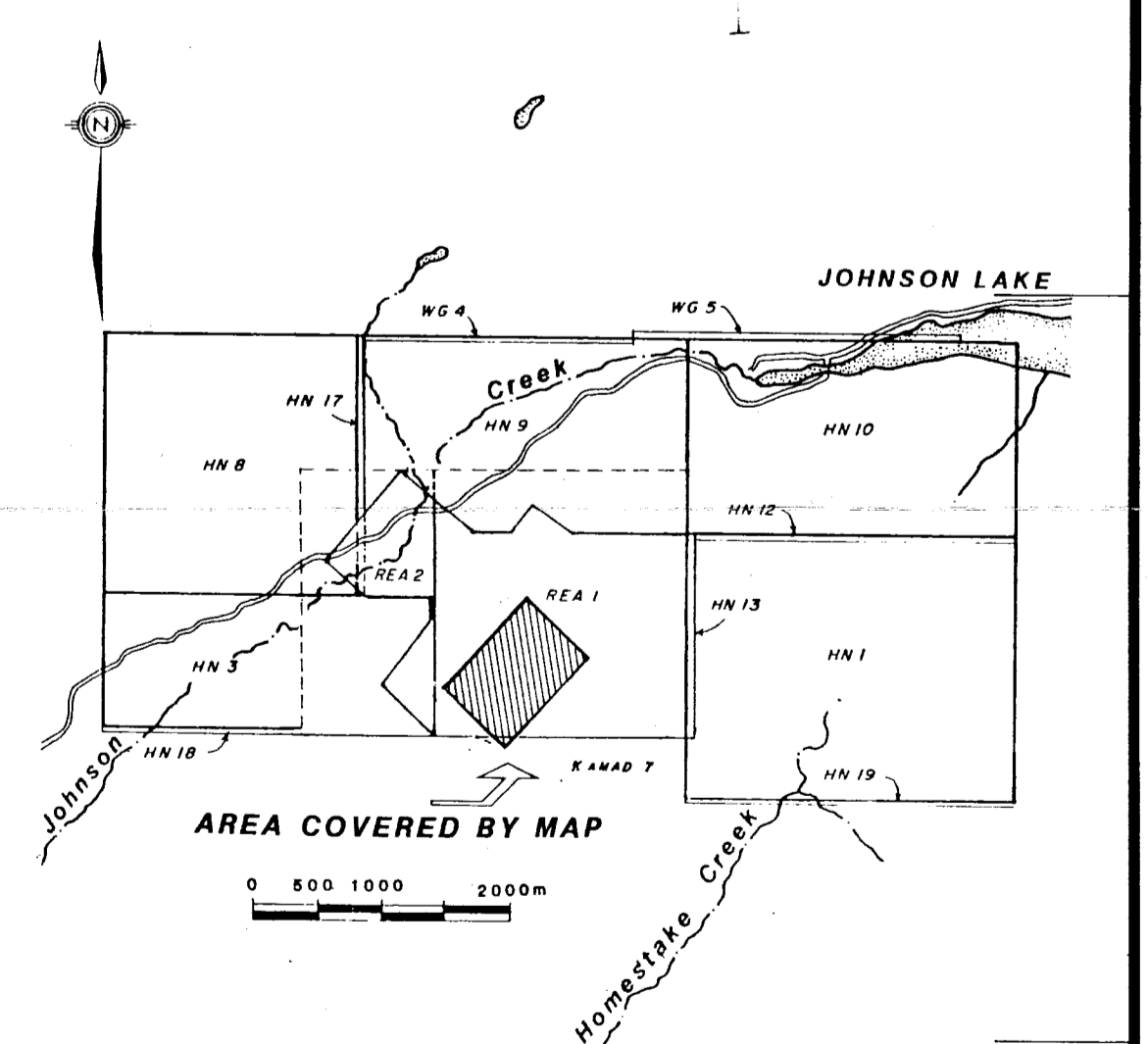
TRACE ELEMENTS

SAMPLE NUMBER	FROM (m)	TO (m)	MAJOR OXIDES										TRACE ELEMENTS					Rock Type	Alt	Min	Zr	Total
			SiO ₂	Al ₂ O ₃	CaO	MgO	Na ₂ O	K ₂ O	FeO	MnO	TiO ₂	Ba	ppm Cu	ppm Zn	Pb	ppm Ag	ppb Au					
BCD 4465	44.2	46.9	48.02	14.68	5.54	12.59	1.62	0.03	12.86	0.32	1.58	.019	80	130	.005		NA				.005	97.26
Mafic pyroclastic flow -			1-2% qtz-carbonate veins; tr-1% py																			
BCD 4466	75.3	78.3	44.22	15.27	8.17	12.11	1.98	0.02	13.77	0.27	1.54	.005	81	80	.014		10				.005	97.38
Mafic pyroclastic flow -			relatively unaltered																			
BCD 4467	108.8	111.9	42.33	16.47	5.68	14.37	1.31	0.02	15.24	0.28	1.68	.005	95	160	.031		5				.005	97.41
Mafic pyroclastic flow -			sericitic fragments																			
BCD 4468	271.0	273.4	44.26	16.35	9.07	9.76	0.69	2.2	12.31	0.44	2.13	.092	64	98	.020		5				.012	97.33
Mafic pyroclastic ash? -			intense sericite, chlorite, silica alteration																			



**GEOLOGICAL BRANCH
ASSESSMENT REPORT**

15,718



NOTE: Co-ordinates from survey by R. Stothers & associates, BCLS, Kamloops B.C. 1984.
Claim Boundary from survey co-ordinates

850 metres to L.C.P. REA 1

CORPORATION FALCONBRIDGE COPPER					
REA GOLD OPTION					
DRILL HOLE LOCATIONS					
<p>SCALE: 1:1000</p>					
	<table border="1"> <tr> <td>DRAWN BY: IP/dm</td> <td>FIG. NO.:</td> </tr> <tr> <td>DATE: JAN. 1987</td> <td>N.T.S. 82M/4W</td> </tr> </table>	DRAWN BY: IP/dm	FIG. NO.:	DATE: JAN. 1987	N.T.S. 82M/4W
DRAWN BY: IP/dm	FIG. NO.:				
DATE: JAN. 1987	N.T.S. 82M/4W				

**REA 1
KAMAD 3**