CORPORATION FALCONBRIDGE COPPER

6415 - 64th Street
Delta, B.C., Canada V4K 4E2
Telephone (604) 946-5451

February 23, 1987

Mr. John Gammon, Manager
Exploration British Columbia
Mineral Resources Division
Ministry of Energy, Mines & Petroleum
Resources
Parliament Buildings
Victoria, B. C.
V8V 1X4

Re: FAME GRANT 10962E-15

Dear John;

Please find enclosed the completed FAME Form 3 - Application for Payment for our Mt. Sicker Project (FAME GRANT 10962E-15). Also enclosed are the completed technical reports and cost statements for the geophysical programs and the 1986 drilling program (3115.6m). Still to come (as discussed with you) is the final technical report on the 1987 drilling (1533.0m). This report will be sent as soon as it is completed (mid March).

I hope these reports are satisfactory. We feel that the FAME program has made a significant contribution to our exploration program on Mt. Sicker and that it will have been a contributing factor to new discoveries in the area.

Please call if you have any questions.

Yours truly,

A. J. Davidson
Exploration Manager
Western Canada

AJD/ik

VICTORIA

FAME 015-15719

Province of British Columbia

Ministry of Energy, Mines and Petroleum Resources

ASSESSMENT REPORT TITLE PAGE AND SUMMARY

TYPE OF REPORT/SURVEY(S)	TOTAL COST
Geophysical, Drilling	$429 253.00

AUTHOR(S) H.L. Gibson SIGNATURE(S)

DATE STATEMENT OF EXPLORATION AND DEVELOPMENT FILED 24 Feb/87 YEAR OF WORK 1986

PROPERTY NAME(S) MT. SICKER

COMMODITIES PRESENT Zn, Cu, Ag, Au, Ba

B.C. MINERAL INVENTORY NUMBER(S), IF KNOWN 92B-1, 2, 3, 87, 88, 90,

MINING DIVISION Victoria NTS 92B 13W

LATITUDE 48° 54' 52' LONGITUDE 123° 51' 46'

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)):

Queen Bee	XL	Sicker 1
Key City	Herbert	Rocky 2
Tony	Morley-Jayone	Estelle

OWNER(S)

(1) Corporation Falconbridge Copper

MAILING ADDRESS

6415 - 64th Street
Delta, BC V4K 4E2

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

(1) — Same — (2)

MAILING ADDRESS

— Same —

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

The underlying rocks are Sicker Group, Myra Formation felsic to intermediate pyroclastics and minor sediments similar to Buttle Lake, Twin J and Lara deposits. The host rocks of the The property includes the formerly producing Lenora-Tyee mines.

REFERENCES TO PREVIOUS WORK

A.R. 1104, 1714, 3741, 3950, 3951, 4904, 5164, 6996, 7875, 8168, 8264, 11328, 6699, 7434, 7714, (over) 12172, 12317, 14735, 14929

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	IPOL 23.3 km	Sicker 1, Rocky 2	
Radiometric			
Seismic			
Other			
Airborne			
GEOCHEMICAL (number of samples analysed for ....)			
Soil			
Silt			
✓ Rock	329 ME		
Other			
DRILLING (total metres; number of holes, size)			
✓ Core	DIAD 4648.6 m, 16 holes, NQ	see front.	
Non-core			
RELATED TECHNICAL			
✓ Sampling/assaying	195, Pb, Pb, Zn, Ag, Au		
Petrographic			
Mineralogic			
Metallurgic			
PROSPECTING (scale, area)			
PREPARATORY/PHYSICAL			
Legal surveys (scale, area)			
Topographic (scale, area)			
Photogrammetric (scale, area)			
✓ Line/grid (kilometres)	23.4 km		
Road, local access (kilometres)			
Trench (metres)			
Underground (metres)			
		TOTAL COST	429 253.00

FOR MINISTRY USE ONLY	NAME OF PAC ACCOUNT	DEBIT	CREDIT	REMARKS:
Value work done (from report) 429253				
Value of work approved				
Value claimed (from statement)				
Value credited to PAC account				
Value debited to PAC account				
Accepted IEK Date	Rept. No. 15719			Information Class (1)

(b) Goods and Services

Description	Expenditure B.C.	Expenditure Outside
Meals, Groceries, etc.	$	$
Camping Supplies, Equipment, etc.		
Accommodation /Food	6,110	
Transportations — Scheduled Air		
— Air Charter		
— Vehicle Rentals	3,350	
— Vehicle O and M Costs		
— Other (specify)		
Equipment Rentals —		
Equipment Rentals — Trenching, etc.		
— Geophysical, etc.		
— Other (specify)		
Contract Drilling 4648.60m	376,536.60	
Consultant Services IP DEEPEM	15,154.70 9,010.00	
Assays and Analyses	7,769.45	
Communications		
Other (specify) Linecutting	11,332.50	

9. IMPACT OF **FAME** GRANT

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

$ 200,000

130 person/days employment.

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

The main achievement of this FAME funded program was that it a) extended the Lenora-Tyee horizon west to the Chemainus River, b) intersected significant stringer sulphides on the Postuk-Fulton or northern horizon and at the potential Myra Nitinat contact, c) intersected new zinc mineralization at another new horizon.

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

BC EXPLORATION BRITISH COLUMBIA

FINANCIAL ASSISTANCE FOR MINERAL EXPLORATION

Grant Identification No. 10962E-15

FORM 3

APPLICATION FOR PAYMENT

FILMED

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

LOG NO: 0224 MGE-F //
ACTION:
FILE NO:

1. Date of this Application
February 23, 1987

2. Applicant's Identification and Location
Name
Corportion 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.:
Telephone No.:
City, Town, Village:
Province:
Postal Code:

5. British Columbia Free Miner Certificate No. CORFAC 279317

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.

Signature of Applicant or Signing Officer

A. J. Davidson
Name (please print)

Regional Exploration Manager
Title/Occupation (please print)

Mt. Sicker Project
Project Name (please print)

Corporation Falconbridge Copper
Company (please print)

February 23, 1987
Date

GEOLOGICAL BRANCH
ASSESSMENT REPORT

15,719

PART

T 1052

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 23.3 km	$ 15,154.71	
Radiometric	$	
Seismic	$	
Other Borehole PEM	$ 9,010.00	
Airborne	$	
	$ 24,164.71	$ 24,164.71
Geochemical Surveys (No. of samples analysed for ____)		
Soil	$	
Silt	$	
Rock	$	
Other	$	
	$	$
Drilling		
Surface 4648.60 m @ $ 81.00	= $ 376,536.60	
Underground m @ $	= $	
	$ 376,536.60	$ 376,536.60
Related Technical Surveys		
Sampling/Assaying 329 core samples	$ 7,769.45	
Petrographic	$	
Mineralogic	$	
Metallurgic	$	
	$ 7,769.45	$ 7,769.45
Preparatory/Physical		
Line/Grid (kilometres) 23.38 km	$ 11,332.50	
Trenching (metres)	$	
	$ 11,322.50	$ 11,322.50
Other Exploration Costs (attach detailed schedules)		
Accommodation/Food	$ 6,110.00	
Vehicle Rentals	$ 3,350.00	
	$	
	$ 9,460.00	$ 9,460.00
Total Eligible Expenses		$ 429,253.26

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

Tunneling, 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						
General Labourers						
Drillers/Helpers						
Equipment Operators						
Geologists	5		179		46,179	
Geophysicists	7		79		9,770	
Geochemists						
Engineers						
Supervisory	2		9		2,200	
Consulting						
Secretarial	1		20		3,000	
Managerial						
Legal						
Accounting						
Others (specify) Draftsperson	1		20		2,000	
Others (specify)						
TOTALS	16		307		$64,149	$

PART 1 OF 5

Mt. Sicker Property

Report on the 1986 Drill Programme

Victoria Mining Division

NTS 92B/13W

48° 59' Latitude, 123° 51' Longitude

Owner/Operator: Corporation Falconbridge Copper

by: H. L. Gibson

January 30, 1987

Claims

Queen Bee	Herbert
Key City	Morley-Jane
Tony	Estelle
XL	

Table of Contents

LIST OF FIGURES

INTRODUCTION

This assessment report summarizes results of the 1986 drill program on CFC's Mt. Sicker property. A total of 3115m in 11 holes (MTS 17 to 27) were drilled. Results of a Pole-Dipole IP Survey are contained in an appended Assessment report.

Location and Access

The Mt. Sicker property is located 40 km north of Victoria and 10 km north of Duncan, on Vancouver Island (Figure 1). An extensive system of 2WD + 4WD logging roads from the Island Highway provide excellent access to the property. Topography is moderate with elevations ranging from 150 - 700m. The property is covered by a dense mixed forest of douglas fir, alder and cedar.

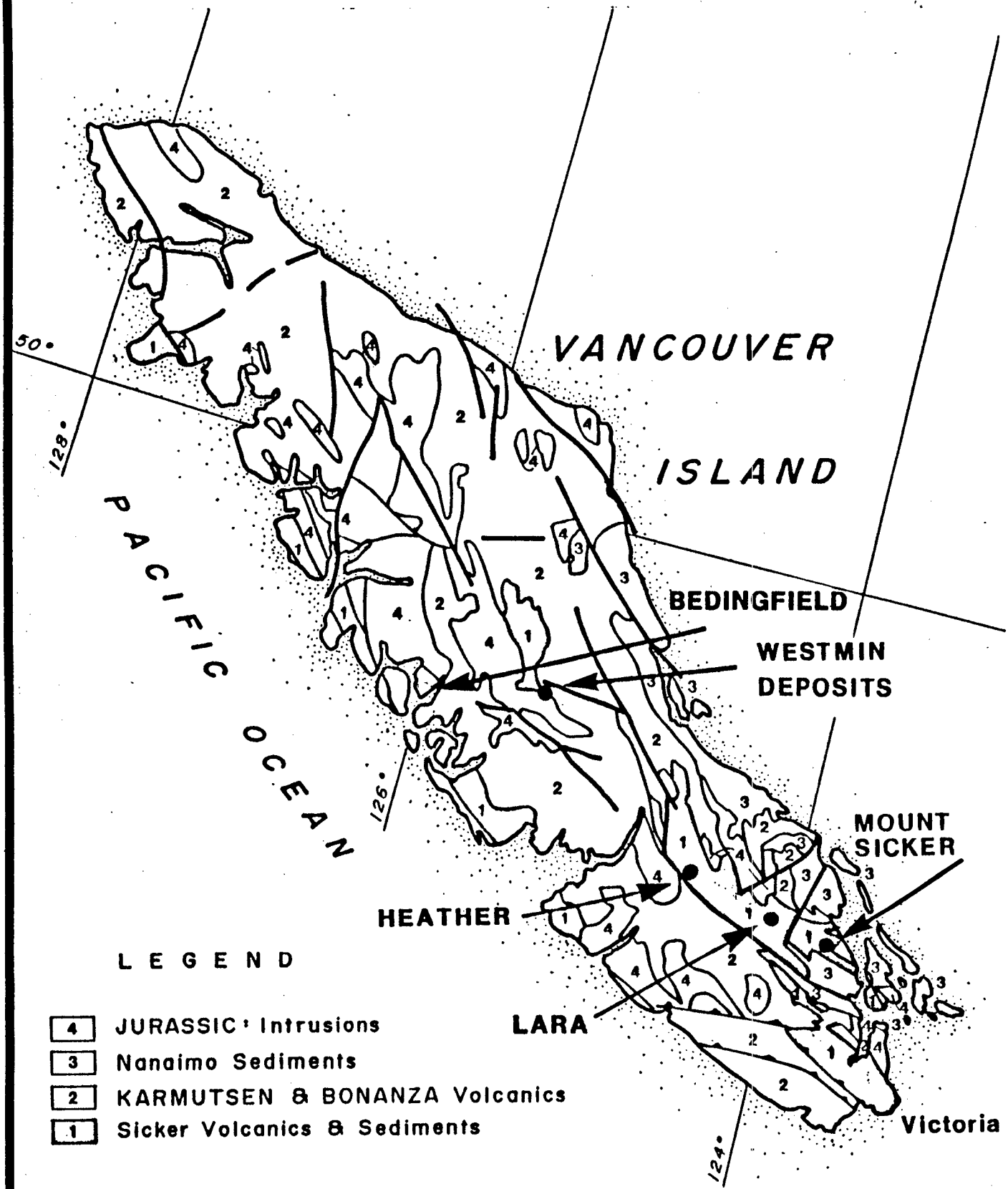
Property Definition and History

The Mt. Sicker property consists of 3 contiguous options (Postuk-Fulton, Peppa and Lieberman Options) and CFC claims (Figure 2) for a total of 192 units. The claims, listed in Appendix I (78 in total) are subdivided into the Rocky and Lenora groups as illustrated in Figure 3. The Mt. Sicker property (Peppa Option) contains two former producers, the Lenora & Tyee deposits, which collectively yielded approx. 300,000 tons grading 3.31% Cu, 7.51% Zn, 2.75 oz/ton Ag and 0.13 oz/ton Au. The Lenora Tyee deposits discovered in 1898, were largely mined out by 1909, but were worked intermittently until 1947. Previous exploration of the property principally by Duncanex, Mt. Sicker Mines & SEREM focussed on the former mine area and along the Postuk-Fulton and NE Copper exhalites along the north slope of Mt. Sicker.

GEOLOGY

Regional Geology

The Mt. Sicker property is located in the Cowichan-Horne Lake uplift. The Cowichan-Horne Lake Uplift is one of 3 fault bounded structural



VANCOUVER ISLAND

GEOLOGY

SCALE : 1:2,000,000

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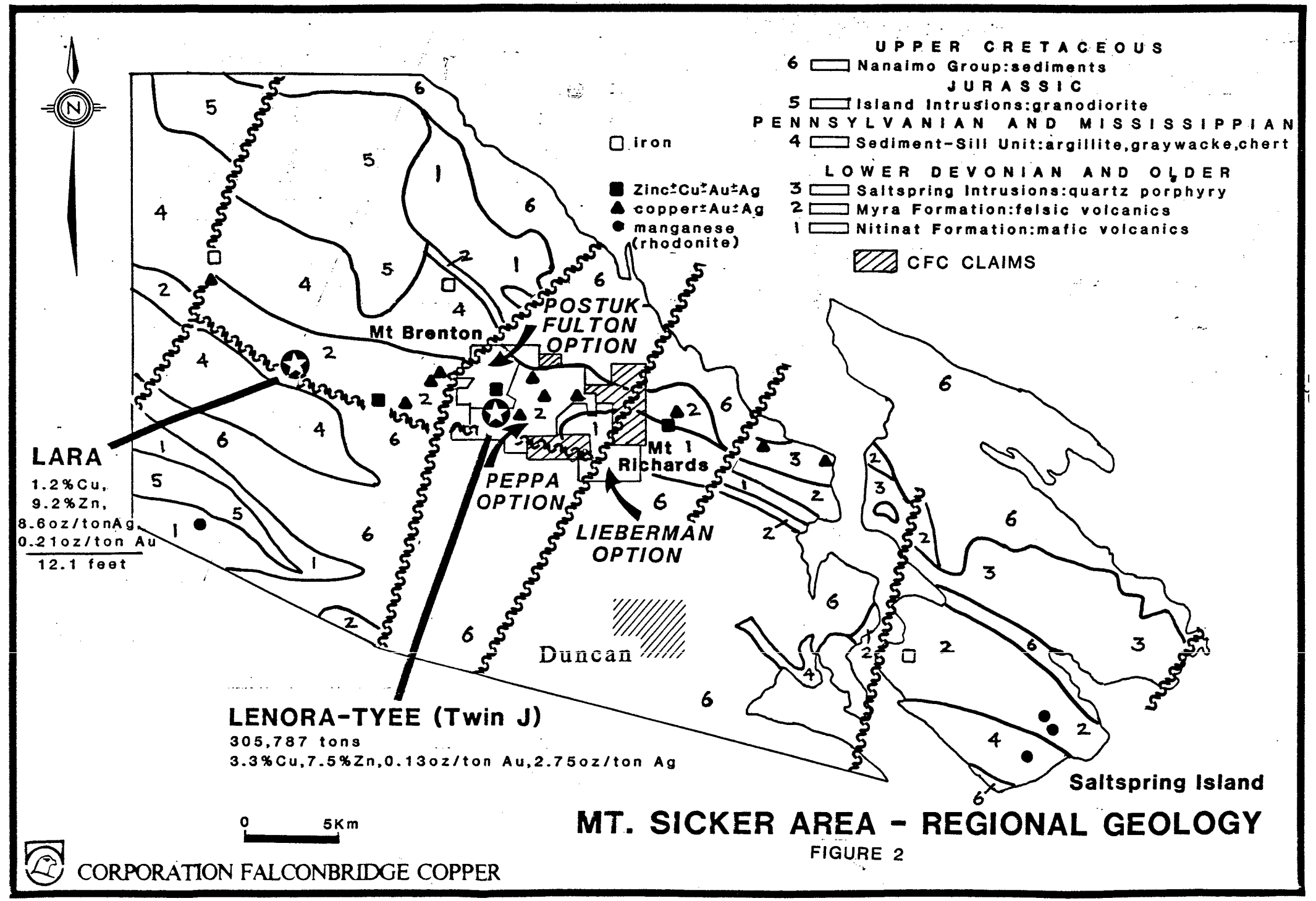
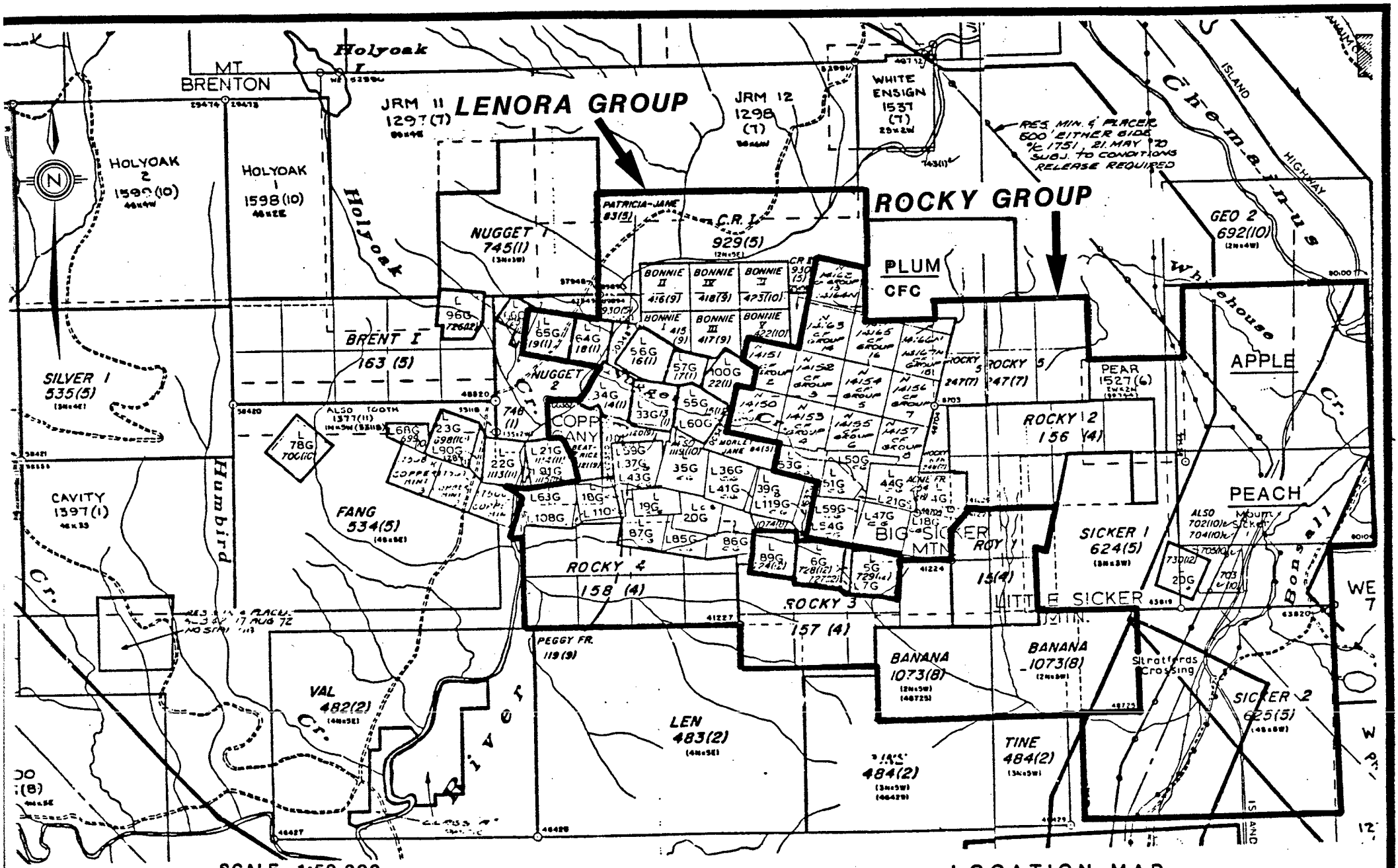
FIGURE 1



MT. SICKER AREA - REGIONAL GEOLOGY

FIGURE 2



CLAIMS OF THE LENORA AND ROCKY GROUPS

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FIGURE 3 92B/13

culminations that expose the Paleozoic Sicker Group of Vancouver Island (Figure 1). Muller (1980) subdivided the Sicker Group, as follows, in order of increasing age:

1) Buttle Lake Formation - consists of recrystallized crinoidal limestone interbedded with calcareous siltstone and chert
2) Sediment - Sill Unit - thinly bedded to massive argillite, siltstone and chert interlayered with diabase sills
3) Myra Formation - basic to rhyodacitic banded tuff, breccia and lava with interbedded argillite, siltstone and chert
4) Nitinat Formation - basaltic lavas and agglomerates with minor to massive banded tuff layers

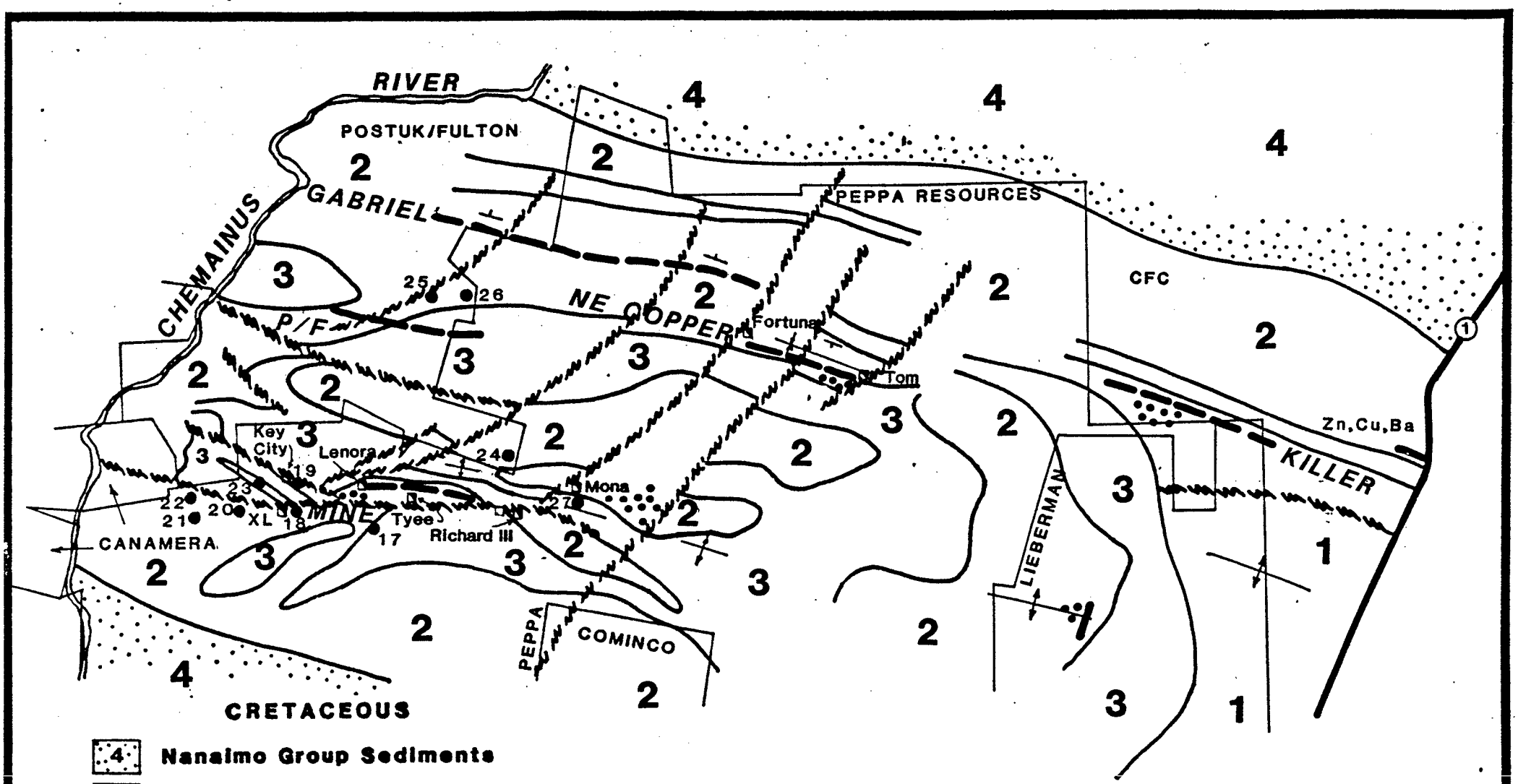
Cretaceous sediments of the Nanaimo Group unconformably overly the Sicker group; the contact is commonly marked by a basal conglomerate containing volcanic fragments derived from the Sicker Group.

The structure of the Sicker group is characterized by southwest verging, asymmetric and vertical, open and isoclinal folds (Muller, 1980). West - northwest and northeast trending faults disect the Sicker Group of the Cowichan-Horne Lake Uplift into numerous fault blocks. Movement along those faults is interpreted to have been mostly Tertiary in age (Muller, 1980). Metamorphic grade ranges from subgreenschist to greenschist.

Geology of the Mt. Sicker Property

The Mt. Sicker Property is underlain by Sicker Group volcanic rocks, Nanaimo group sediments and gabbro-dioritic intrusions of uncertain age. The Sicker group is readily subdivided into the Myra and Nitinat Formations (Figures 4 and 5).

The Myra Formation, which underlies the bulk of the Mt. Sicker property, consists of thick massive units of felsic and subordinate mafic pyroclastic/flow rocks with minor ash, argillaceous sediment and chert. The Lenora-Tyee VMS deposits, stratigraphically equivalent(?) to Westmin's Myra-Lynx deposits, occur within the Mine Package. The Mine Package is a distinct well bedded succession (approx. 70 m. thick) of quartz and



MT. SICKER PROPERTY

- GEOLOGY -

FIGURE 4

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quartz-feldspar crystal tuffs, local flows/domes, fine felsic/andesitic ash and minor chert and/or argillite.

The Nitinat formation (Figure 4) is restricted to the east end of the property and is well exposed along the Island Highway. The formation consists of epidotized pyroxene and/or plagioclase porphyritic andesitic-basaltic flows, flow breccias and debris flows (minor pyroclastic rocks). Felsic units are rare and where found are typically thin localized deposits of fine laminated ash/tuff associated with chert.

The structure of the Mt. Sicker property is dominated by a large asymmetric, west-northwest trending, shallow west-plunging anticline, the Mt. Sicker anticline, whose fold axis is interpreted to lie 300m north of the Lenora-Tyee deposits. The Lenora-Tyee deposits are situated within the Mine Package on the shallow-dipping south limb of the Mt. Sicker anticline. The Postuk-Fulton and stratigraphicaly equivalent Northeast Copper cherts, along the north slope of Mt. Sicker, define the Mine Package on the north limb of the Mt. Sicker anticline. Smaller anscillary drag folds have been identified at NE Copper and Lenora - Tyee.

The Nitinat Formation which covers the Mt. Sicker anticline plunges shallowly west below Mt. Sicker from it's surface exposures in the east. The Myra-Nitinat contact is interpreted to be the stratigraphically equivalent to the "H-W Horizon" at Buttle Lake which hosts Westmin's world class H-W VMS deposit. This stratigraphically lower contact occurs at variable depths on the Mt. Sicker Property and is a prime exploration target.

WORK COMPLETED

Eleven holes were drilled (MTS-17 to 27) for a total of 3115m of NQ core. Holes ranged in length from 163 to 840 m. Core from each hole was systematically sampled for a 12 element ICP analysis (SiO_2, TiO_2, Al_2O_3, CaO, Na_2O, K_2O, MgO, MnO_2, Fe_2O_3, Zr, Pb, Ba; plus Cu, Zn by A.A.) and where mineralized assayed for Cu, Zn + or - Au, Ag, Ba. The core is stored at the Fulton Farm, 6719 Lakes Road, Duncan, B. C.

A Pole-Dipole IP survey was conducted in the "Gap area" (23 km), results of this survey are contained in an appended Assessment Report. A borehole PEM survey of holes MTS-17 to 24 and selected earlier holes was attempted. All holes were blocked near surface and the survey aborted.

DRILL HOLE SUMMARY AND RESULTS

A brief summary of each hole is outlined below and their location illustrated in Figure 4 and 5. More detailed descriptions are contained in drill logs of Appendix I and in sections of Figure 6.

MTS-17

MTS-17 was located to test the steep south dipping Mine Package down dip from the former Lenora-Tyee deposit. Although no significant sulphides were intersected MTS-17 did encounter a pyritic argillaceous sediment (10% pyrite) from 480.63 - 480.85m. which may mark a stratigraphically lower horizon below the Lenora-Tyee Mine Package. MTS-17 was deepened to 839.42m. during the fall program to test for stacked mineralization at the Myra-Nitinat contact. Although only pyrite stringer mineralization was encountered MTS-17 did provide valuable structural/ stratigraphic information that will facilitate further testing of this lower contact.

Summary Log

0 - 25.0	Diorite
25.0 - 160.5	Rhyodac. flows, crystal tuff, tuff and ash
160.5 - 275.0	Diorite
275.0 - 311.42	Rhyodacite crystal tuff
311.42 - 403.70	Andesitic tuff, lapilli tuff, minor ash
403.70 - 468.92	Mine Fault plus diorite
468.92 - 522.33	Rhyodacitic tuff, crystal tuff, minor andesite Argillaceous pyritic sediment (10% py) from 480.63-480.85m
522.33 - 539.44	Diorite
539.44 - 682.29	Rhyodacitic crystal tuffs
682.29 - 706.41	Diorite
706.41 - 794.50	Interbedded rhyodacitic and andesitic crystal tuffs
794.50 - 839.42	Predominately andesitic crystal tuffs (Nitinat Formation?)

MTS-18 to MTS-23

MTS-18 to 20 inclusive and MTS-23 tested the faulted extension of the Lenora-Tyee Mine Package, west of the former deposits, in the Key City shaft area. MTS-21 and 22 were directed at the Mine Package west of Key City and south of the South Fault.

MTS-18 failed to intersect the Mine Package but did encounter encouraging mineralization (0.35% Zn/0.3m) in stratigraphically lower units. MTS-19 intersected the base of Mine Package approx. 75m east of the Key City shaft; significant pyrite stringer mineralization was intersected in sericitized rhyodacitic ashes (43.30 - 50.9m) immediately above a quartz prophyritic rhyodacite flow/dome. MTS-20 intersected chloritized and mineralized crystal tuff units of the Mine Package (71.32 - 180.9m) dilated by a diorite dyke (87 - 145m). Hole MTS-23 intersected thinly bedded felsic ash and tuff, the up-dip extent of the Lower Horizon encountered in MTS-20. Holes MTS-20 and 21 missed the Mine Package but did intersect encouraging disseminated and stringer pyrite-chalcopyrite mineralization in stratigraphically lower rhyodacitic and andesitic tuffs.

Summary Logs

MTS-18

0 - 260.9	Interbedded succession of rhyodacitic ash, tuff, crystal tuff with minor andesite. Possible footwall to Mine Package. Best assay: 0.35% Zn/0.3m @ 32.0m

MTS-19

0 - 43.30	Interbedded rhyodacitic tuff, lapilli tuff 0.58% Cu/0.73m @ 13m
43.30 - 50.9	Sericitized rhyodacitic crystal tuff with pyrite stringer mineralization 0.37% Cu/0.45m @ 44.55m
50.9 - 123.4	Quartz porphyritic rhyolite flow, pyrite stringer mineralization 0.32% Cu/0.3m @ 98.0m

123.4 - 163.4	Interbedded rhyodacitic quartz-crystal tuff and ash

MTS-20

0 - 55.0	Andesitic crystal tuff, tuff and massive rhyolite
55.0 - 71.32	Fault and diorite
71.32 - 87.65	Chloritized quartz-crystal tuffs - Mine Package 0.18% Cu/1.51m
87.65 - 145.0	Diorite
145.0 - 180.9	Chloritized quartz-crystal tuffs - Mine Package 0.35% Cu/0.78m
180.9 - 257.2	Sericitized rhyolite flow
257.2 - 270.9	Bedded felsic ash/chert - "lower horizon"
270.9 - 293.52	Diorite and rhyodacitic tuff

MTS-21

0 - 29.15	Interbedded rhyodacitic quartz-crystal tuffs, ash
29.15 - 178.45	Andesitic tuff and lapilli tuff, minor rhyolite 0.49% Cu, 0.11% Zn/0.65m @ 124.55m
178.45 - 279.55	Feldspar porphyritic dacite flow and flow breccia 5.12% Cu, 0.31% Zn/0.12m @ 231.8m - stringer mineralization
279.55 - 288.03	Massive rhyolite and diorite

MTS-22

0 - 83.4	Rhyodacitic quartz-crystal tuffs/ash and dacitic tuff
83.4 - 102.52	Feldspar porphyritic dacite flow 0.79% Cu/0.25m @ 88.5m
102.52 - 196.6	Interbedded rhyodacitic quartz-crystal tuff, ash and lapilli tuff 0.17% Cu/0.58m @ 137.37m
196.6 - 202.08	Aphyric rhyolite

MTS-23

0 - 55.1	Quartz and feldspar-crystal tuffs
55.1 - 106.25	Diorite
106.25 - 134.90	Quartz-crystal tuff

134.90 - 145.73	Rhyodacitic ash, minor tuff - up-dip extension of "lower horizon" intersected in MTS-20 0.35% Cu/0.95m @ 134.8m
145.73 - 199.03	Rhyodacitic crystal tuffs, minor ash

MTS-24

MTS-24 was located to test the Mine Package north and east of the Lenora - Tyee deposits below a strong IP anomaly. MTS-24 encountered quartz-crystal tuffs, felsic ash and chert to 42.65m that may constitute the base of the Mine Package.

Summary Log

0 - 38.8	Quartz crystal tuff, tuff and lapilli tuff; minor diorite
38.8 - 42.65	Thin bedded felsic ash/minor chert 0.1% Cu/0.34m, 4500 ppm Ba
42.65 - 53.0	Dacitic tuff
53.0 - 81.85	Diorite
81.85 - 163.67	Rhyodacitic tuff, quartz-crystal tuff and ash 5.24% Cu, 0.1% Zn, 14 gm/T Ag and 100 ppb Au/0.18m - stringer mineralization
163.67 - 166.72	Andesitic tuff

MTS-25 and 26

MTS-26 and 26 were directed at testing the Mine Package, hosting the Postuk-Fulton horizon, on the north slope of Mt. Sicker. Both holes intersected a mineralized, chloritized and locally Ba enriched Mine Package consisting of well bedded dacitic ash, tuff and chert containing up to 20% pyrite and 6% chalcopyrite (values up to 2.12% Cu/0.6m). Pyrite-pyrrhotite - minor chalcopyrite stringer mineralization was encountered in epidotized andesitic volcaniclastics stratigraphically above the Mine Package in both holes.

Summary Logs

MTS-25

0 - 112.63	Epidotized andesitic ash, tuff, tuff breccia and flows
	Pyrite - pyrrhotite (chalcopyrite) stringer mineralization
	from 87.3 - 87.8m and from 98 - 105m
	1.13% Cu/0.5m at 87.3m
112.63 - 191.0	Mine Package, chloritized pyritic dacitic ash and chert
	0.99% Cu, 1.18% Zn/1.45m at 113.85
	1.94% Cu, 0.1% Zn/0.23m at 117.25m
191.0 - 252.07	Felsic ash, tuff and massive rhyolite flow

MTS-26

0 - 43.59	Diorite and dacite dykes
43.59 - 153.4	Epidotized andesitic tuff, tuff breccia and flows
	Pyrrhotite-pyrite (chalcopyrite) stringer mineralization
	from 137.87 - 153.4m
	0.16% Cu/1.44m @ 149.66m
153.4 - 236.8	Chloritized mine Package - dacitic ash and chert
	2.12% Cu/0.6m @ 168.90m
236.8 - 249.02	Sericitized rhyodacitic crystal tuffs and ash
	0.34% Cu/0.41m @ 238.16m

MTS-27

MTS-27 was located to test an interpreted east continuation of the Lenora-Tyee mine horizon across the Fortuna faults and below the Mona diorite. Anomalous zinc mineralization, principally fine sphalerite stringers, was encountered below the diorite within Ba enriched, weakly sericitized quartz-crystal tuffs similar to those at Lenora-Tyee 1km to the west.

Summary Log

0 - 40.70	Diorite

40.70 - 201.47 Mine Package, weakly sericitized rhyodacitic ash and quartz-crystal tuffs with fine pyrite-chalcopyrite-sphalerite stringers up to 3.0cm wide
0.21% Zn/1.2m @ 41.95
0.33% Cu, 5.70% Zn/0.07m @ 52.42m

CONCLUSIONS

Results of the 1986 drill program are encouraging. Drilling drfined and tested the Lenora-Tyee Package for 600m west of the former deposits. Although no significant base metal mineralization was intersected in holes MTS-18 through 23, strong pyrite stringer mineralization encountered in MTS-19, within a quartz-porphyritic rhyodacite flow, may warrant an additional drill hole. Mineralization intersected in MTS-21 and 22, located stratigraphically below the Mine Package, may define a "Lower mineralized horizon" that will be evaluated through mapping and lithogeochem surveys along the Chemainus River to the west.

Holes MTS-24 and 27 located 500m and 1000m west of the Lenora-Tyee deposits intersected copper-zinc stringer mineralization within a quartz-crystal tuff, ash and chert succession which may define the Mine package east of the Fortuna Fault. Anomalous zinc mineralization in MTS-27 definitely warrants follow-up drilling both down dip and to the east.

Mineralization encountered within chloritized dacitic ash and chert (Postuk-Fulton horizon) of the Mine Package in both MTS-25 and 26 warrants follow-up drilling especially to the west where the horizon is shallow and wide-open. Stringer sulphides encountered in andesitic volcanics above the Mine Package in both MTS-25 and 26 point to a stratigraphically higher target yet to be tested.

REFERENCES

Muller, J. E., 1980; The Paleozoic Sicker Group of Vancouver Island, B. C. GSC Paper 79-30, 22p.

ITEMIZED COST STATEMENT

1986 DRILLING

Contractor - F. Boisvenu		
3115.6m @ $55.01/m		171,399.08
Machine, Man and Cat hours		15,675.00
Materials		17,428.22
Plastic Pile (Line drill holes)		8,100.00
Salaries		
H. Gibson	50 days @ $350/day	17,500.00
M. Gray	19 days @ $300/day	5,700.00
D. Small	30 days @ $150/day	4,500.00
E. Denholm	20 days @ $150/day	3,000.00
Field Expenses		
Truck	50 days at $50/day	2,500.00
Food/accommodation	119 days at $40/day	4,750.00
Analyses		
329 lithogeochem and assay samples @ $23.62 each		7,769.45
Report Preparation		
H. Gibson	2 days @ $350/day	700.00
Drafting, typing, materials etc.		1,000.00
TOTAL COSTS		$260,021.75

ITEMIZED COST STATEMENT

GEOPHYSICAL SURVEYS

Linecutting (23.38km)		
Contractor: Quest Canada Expl. Services @ $484.71/km		11,332.50
IP Survey		
Contractor: A Scott, 23.3km (2 operators)		8,930.00
3 assistants for 9 days @ $110/day		2,970.00
Food, accommodation, fuel		1,354.71
Supervision		
C. Burge 2 days @ $300/day		600.00
Report and Interpretation (Assessment report appended)		
C. Burge 3 days @ $300/day		900.00
Drafting, Typing, etc.		400.00
		26,477.21
Borehole PEM Survey		
Contractor: Quantech Consulting Inc.		
D. Anderson, operator	17 days @ $250/day	4,250.00
E. Spat, assistant,	17 days @ $150/day	2,550.00
Truck	17 days @ $50/day	850.00
Accommodation/food	34 mandays @ $40/day	1,360.00
		9,010.00
TOTAL COSTS		$ 35,487.21

STATEMENT OF QUALIFICATIONS

I, Harold L. Gibson hereby certify that:

1) I hold an Honours Bachelor of Science Degree and a Master of Science Degree from Queen's University, Kingston Ontario and Carleton University, Ottawa, Ontario.

2) I am an Associate member of the Geological Association of Canada.

3) I have practised by profession in exploration continuously since graduation in 1976.

4) I have based conclusions contained in this report on knowledge of the area, my previous experience and results of field work conducted on the property.

Harold L. Gibson

Date February 23, 1987

Harold L. Gibson M.Sc.
Delta, British Columbia

APPENDIX I

CLAIMS

Province of British Columbia
Ministry of Energy, Mines and Petroleum Resources
MINERAL RESOURCES BRANCH-TITLES DIVISION

SUB-RECORDER
RECEIVED
MAY 16 1986
M.R. # ..... $ .....
VANCOUVER, B.C.

MINERAL ACT

FORM I

NOTICE TO GROUP

Mining Division Victoria Location Mt. Sicker Area

Name of group Lenora Group Map No. 92B/13W

We, the undersigned owners* of the following adjoining claims, desire to group them according to the provisions of the *Mineral Act*:–

NAME OF CLAIM	No. of Units	Record No.	Month of Record	SIGNATURE OF OWNER*	Free Miner Certificate No.
Rocky 4 ✓	8	158	4	Alex J. Davidson	212869 DAVIAJ
Little Nugget ✓	1	13	1	agent for	
Chemainus ✓	1	14	1	Corporation Falconbridge Copper	
Belle ✓	1	15	1		278726 COREAC
Dunsmuir ✓	1	16	1		
Seattle ✓	1	17	1		
Copper King ✓	1	18	1		
Copper Queen ✓	1	19	1		
Queen Bee ✓	1	22	1		
Alliance Fr. ✓	1	120	9		
Patricia Jane Fr. ✓	1	83	5		
Peggy Fr. ✓	1	119	9		
Beatrice ✓	2	121	9		
Morley-Jane Fr. ✓	1	84	5		
Bonnie I ✓	1	415	9		
Bonnie II ✓	1	416	9		
Bonnie III ✓	1	417	9		
Bonnie IV ✓	1	418	9		
Bonnie V ✓	1	422	10		
Bonnie VI ✓	1	423	10		
CR I ✓	10	929	5		
CR II ✓	10	930	5		
XL ✓	1	19G			
Herbert ✓	1	20G			
Lenora ✓	1	35G			
Tyee ✓	1	36G			
Key City ✓	1	37G			
Richard III MC ✓	1	39G			
Magic Fraction MC ✓	1	41G			
NT Fraction ✓	1	43G			
International Fraction ✓	1	60G			
Donald ✓	1	63G			
Thelma Fraction ✓	1	85G			
Imperial Fraction ✓	1	86G			
Doubtful Fraction ✓	1	87G			
Muriel Fraction ✓	1	108G			
International A Fr. ✓	1	1119	10		
Westholme Fr. MC ✓	1	59G			
Phil Fraction ✓	1	110G			
Stephanie Fr. ✓	1	1074	8		
Rocky 1 ✓	4	155	4		
Rocky 3 ✓	8	157	4		
Banana ✓	10	1073	8		
	88				

Province of British Columbia
Ministry of Energy, Mines and Petroleum Resources
MINERAL RESOURCES BRANCH–TITLES DIVISION

SUB-RECORDER
RECEIVED
MAY 16 1986
M.R. # ..... $ .....
VANCOUVER, B.C.

MINERAL ACT

FORM I

NOTICE TO GROUP

Mining Division ....Victoria..... Location ...Mt. Sicker Area.....

Name of group .....Rocky Group..... Map No. ....92B/13W....

We, the undersigned owners* of the following adjoining claims, desire to group them according to the provisions of the *Mineral Act*:–

NAME OF CLAIM	No. of Units	Record No.	Month of Record	SIGNATURE OF OWNER*	Free Miner Certificate No.
Sicker 1 ✓	9	624	5	Alex J. Davidson	212869 DAVIAJ
Rocky 2 ✓	8	156	4	as agent for	
Sicker 2 ✓	20	625	5	Corporation Falconbridge Copper	
Rocky 5 ✓	6	247	7		278726 CORFAC
Rocky 6 Fr. ✓	1	248	7		
Acme Fraction FR ✓	1	254	8		
CF Group #1 ✓	1	14150	10		
CF Group #2 ✓	1	14151	10		
CF Group #3 ✓	1	14152	10		
CF Group #4 ✓	1	14153	10		
CF Group #5 ✓	1	14154	10		
CF Group #6 ✓	1	14155	10		
CF Group #7 ✓	1	14156	10		
CF Group #8 ✓	1	14157	10		
CF Group #13 ✓	1	14162	10		
CF Group #14 ✓	1	14163	10		
CF Group #15 ✓	1	14164	10		
CF Group #16 ✓	1	14165	10		
CF Group #17 ✓	1	14166	10		
CF Group #18 ✓	1	14167	10		
Lawarance ✓	1	730	12		
Pear ✓	4	1527	6		
Peach ✓	12	1623	1		
Apple ✓	12	1624	1		
Acme MC ✓	1	4G			
Tony ✓	1	18G			
Donagan MC ✓	1	18G			
Dixie Fraction MC ✓	1	21G			
Golden Rod MC ✓	1	44G			
Nellena MC ✓	1	47G			
Moline Fraction MC ✓	1	50G			
Blue Bell MC ✓	1	51G			
Estelle MC ✓	1	53G			
Westholme MC ✓	1	54G			
	98				

* May be signed by agent on behalf of owner.

OFFICE USE

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

RECORD OF MINERAL CLAIM - MINERAL ACT

FORM G

MAP NO. 92 B/13We, Eb

RECORD NO. 1665

MINING RECEIPT NO. 359405H RECORDED AT Victoria B.C. THIS 25th DAY OF April, 19 86

DO NOT WRITE IN SHADED AREAS

GOLD COMMISSIONER

Victoria
(MINING DIVISION)

APPLICATION TO RECORD A MINERAL CLAIM.

I, COLIN BURGE (NAME) AGENT FOR CORPORATION FALCONBRIDGE COPPER, (NAME)

6415 64TH ST; DELTA, B.C. (ADDRESS) DELTA, B.C. V4K 4C2 (ADDRESS)

VALID SUBSISTING F.M.C. NO. 217273 VALID SUBSISTING F.M.C. NO. CORTAC 2 792 726

STATE THAT: I COMMENCED LOCATING THE PLUM MINERAL CLAIM

1 ON THE 22 DAY OF APRIL, 19 86 AT 9:00 a.m. (TIME - INDICATE A.M. OR P.M.) AND COMPLETED THE LOCATION

ON THE 22 DAY OF APRIL, 19 86 AT 5:00 pm (TIME - INDICATE A.M. OR P.M.) CONSISTING OF

3 (NUMBER) UNIT LENGTHS East (DIRECTION) AND 2 (NUMBER) UNIT LENGTHS north (DIRECTION) AND I HAVE IMPRESSED ALL THE REQUIRED INFORMATION

ON METAL TAGS NO. 94957, WHICH HAS BEEN SECURELY FASTENED TO THE POSTS AS REQUIRED UNDER THE REGULATIONS.

2 IDENTIFICATION POST(S) NOT PLACED WERE 1N3E, 2N3E, 2N1E, 2N2E, 2N3E

(corner post not placed in northeast due to land under agriculture. (B. Haskings is aware of this situation)

3 CHECK "✓" APPLICABLE SQUARE

[✓] THE LEGAL CORNER POST

† [ ] THE WITNESS POST FOR THE LEGAL CORNER POST

IS SITUATED: 2.1 km at

(BRIEFLY DESCRIBE POSITION OF POST RELATIVE TO KNOWN TOPOGRAPHICAL OR SURVEYED FEATURES THAT RELATE TO FEATURES ON A MAP)

0° from the peak of Mt. Sicker on the north flanks at Corporation Falconbridge Copper's cut line 14+00 East junction with tieline 2+00N.

† BEARING AND DISTANCE TO TRUE POSITION OF LEGAL CORNER POST FROM THE WITNESS POST ____ °

BEARING AND DISTANCE FROM IDENTIFICATION POST TO WITNESS POST ____ °

4 I HAVE COMPLIED WITH ALL THE TERMS OF THE MINERAL ACT AND REGULATIONS PERTAINING TO THE STAKING OF MINERAL CLAIMS AND HAVE ATTACHED A PLAN, ACCEPTABLE TO THE GOLD COMMISSIONER OF THE LOCATION.

Colin Burge
SIGNATURE

SUB RECORDER DUNCAN
VICTORIA - M.D.
OFFICE STAMP

OFFICE USE ONLY

NO. OF UNITS ____

WORK NUMBERS	C/L IN $	MINING RECEIPT AND DATE RECORDED	TYPE OF WORK	DATE OF EXPIRY	CREDIT WORK IN $		TRANSFERS (B/S'S, ASSIGNMENTS, CONVEYANCES)

OWNER

APPENDIX II

DRILL LOGS

CORPORATION FALCONBRIDGE COPPER

Grid Co-Ordinates 2+00W/10+02S

DRILL HOLE RECORD

x METRIC UNITS
IMPERIAL UNITS

HOLE NUMBER	GRID	FIELD COORDS	LAT.	DEP.	ELEV.	COLLAR BRNG.	COLLAR DIP	HOLE SIZE	FINAL DEPTH
MTS-17	CFC		10+02S	2+00W	516	0°	65°	NQ	534.92m

PROJECT	CLAIM #	SURVEY COORDS.	DATE STARTED: June 2/86	CONTRACTOR: F. Boisvenu
PN 305			DATE COMPLETED: June 11/86	CORE STORAGE: Duncan CASING: 4.26m

PURPOSE
To test for Mine stratigraphy south of the Mine Fault

RQD LOG
COLLAR SURVEY
PULSE EM SURVEY
MULTISHOT SURVEY

ACID TESTS				TROPARI TESTS			MULTISHOT DATA		
DEPTH (m)	CORRECTED ANGLE	DEPTH (m)	CORRECTED ANGLE	DEPTH (m)	AZIMUTH	DIP	DEPTH ( )	AZIMUTH	DIP
4.26	65°	442	60°	156	11°	72°			
30	65°	487	59°	309.37	(magnetic?) 323°?	64°			
61	65°			401.42	331°	75°			
91	65°								
122	65°								
152	65°								
183	64-63°								
213	64-63°								
244	64°								
274	63-64°								
350	62°								
396	61°								

HOLE NO MTS-17

LOGGED BY Harold L. Gibson

From To	Rock Type	Texture and Structure	Angle to Core Axis	Alteration	Sulphides	Remarks
0 to 6.7	Casing					
6.70 to 25.0	Diorite	Broken pieces of diorite (fine-grained) from 4.26 to 5.20. From 5.20 to 5.40 - aphanitic, pale green-grey, calcite veined and carbonated diorite.	Contact at 5.40, calcite veins, shr'd and carbon-ated @ 40° to C.A.	Weak carbonate-calcite.		
5.40 to 6.30	Rhyolite Dyke	Colour - pale white Grain Size - aphanitic Massive rhyolite, <1% (<3mm) quartz phenocrysts.		Calcite veins @ 60-70° to C.A.		
6.30 to 10.35	Feldspar Porphyritic Diorite	Massive diorite, fine grained groundmass with 8% weakly glomeroporphyritic subhedral feldspar phenocrysts up to 4mm in size. Contact at 10.35 marked by a 1.5cm wide zone of aphanitic, carbonate-mafic dyke? (similar to unit from 5.20-5.40m). Calcite veins at 40°	Contact at 10.35 @ 40° to C.A.			
10.35 to 13.75	Rhyolite	Colour - grey Grain Size - aphanitic Massive, aphanitic rhyolite with <1% quartz phenocrysts up to 3mm in size (subhedral) fine feldspar phenocrysts? - irregular 2 X 3cm chl clot at 11.86m - Foliation weak at 95° to C.A.	Contact @ 40°	Nil		

From To	Rock Type	Texture and Structure	Angle to Core Axis	Alteration	Sulphides	Remarks
13.75 to 32.35	Feldspar Porphyritic Dacite - Rhyodacite Crystal tuff?	Colour - light green-grey Foliated crystal tuff? 3-6% subhedral feldspar phenocrysts <1% quartz phenocrysts - thin (<2-3mm) chloritic wisps parallel to foliation - vitric frags? - foliated @ 65° to C.A. +6% Feldspar crystals from 19.20 to 19.90m. - calcite/quartz veins at 40° to C.A. and 80° to C.A. After 20.35m unit changes "gradationally" into a more massive, uniform weakly foliated feldspar porphyritic rhyodacite with up to 8% feldspars locally. - trace quartz eyes, <3mm - % of feldspar variable - Increasingly more sheared/ foliated from 31-32.35m - "graphitic" shears at 80° to C.A. from 31.1 - 31.45 and at 32.35m with intervening areas of chlorite/sericite gouge.		Pervasive weak? sericite alteration, silicification patch (8cm) at 14.55m - epidote patch at 26.5m	Trace specks of pyrite.	Weak shear at 70° to C.A. at 15.8m. Geochem #3929 17.37 - 20.42m
32.35 to 36.55	Rhyodacite Flow?	Colour - light green-grey Grain Size - aphanitic Massive, feldspar phyric weakly banded, ?-foliated dacite? - trace QP? - calcite/qtz veins at 40-75° to C.A. - shattered appearance from 35.00-36.55, with minor gouge zones (<2cm wide) 60° to C.A. - good gouge at 36.55m. - faint flow-banding @ 32.65m at 50° to C.A. - light and darker green alternating laminae.		Pervasive chlorite/ sericite alteration - patchy hematitic staining (weak) from 35.00 to 36.55m	Trace pyrite	

From To	Rock Type	Texture and Structure	Angle to Core Axis	Alteration	Sulphides	Remarks
36.55 to 45.0	Dacite Flow/ Tuff	Colour - grey-green Grain Size - aphanitic Feldspar porphyritic. Dacite, contains from 4-8% 2-3mm subhedral crystals - moderate to strong foliation @ 65° to C.A. from 36.55 - 37.15m. - possible flow-banding (?) from 43.68m - 45.0m at 70-75° to C.A. Massive white quartz-vein from 43.58 - 43.68m at 70° to C.A. - Shallow quartz veins from 43.40 to 43.58m - insitu brecciated - vitro clastic appearance of unit from 44.80 to 45.0m.		Weak epidote alteration of feldspars and of ground-mass.	Trace pyrite	Geochem #3930 38.10 - 41.15
45.0 to 79.7	White Rhyolite	Colour - white Grain Size - aphanitic Massive, homogeneous rhyolite - <1%, 2-3mm quartz phenocrysts - mottled texture from 48.3 - 48.7m associated with shallow, <5 , quartz vein. - Becomes insitu brecciated from 50.5 - 52.5, distinct shattered appearance with "rounded fragments" of massive rhyolite separated by thin (<1mm) fractures. At 52.5m, grades into a light grey, weakly hematitic rhyolite to 55m. Crude, fine lenticular bands @ 80° to C.A. (more mafic, chloritic bands) in this interval. 25cm wide, strong fault gouge at 58.25m, fault @ 60° to C.A. - quartz/calcite veins at 75-45° to C.A. After 59.0m unit varies from massive, to finely flow-banded, locally insitu brecciated and shattered and is weakly + variably mottled by fine hematite. - quartz eyes <1-2mm - becomes increasingly finely flow banded or foliated from 77.80-79.70		- irregular to mottled patchy chlorite alteration along fine fractures	Trace pyrite	Distance from 46.02 - 47.05 measured 3.1m not 1.03m indicating a 2.07m error. Geochem #3931 74.06 - 77.11

From To	Rock Type	Texture and Structure	Angle to Core Axis	Alteration	Sulphides	Remarks
79.7 to 80.60	Rhyodacite Lapilli Tuff	Colour - light grey Grain Size - fine grained-aphanitic Massive rhyodacite with up to 30% eliptical felsic clots that appear to be small lapilli (<7mm) or feldspar(?) - groundmass is light grey and aphanitic Chloritic gouge from 80.85 - 80.95 @ 65° 80.40 - 80.60 @ 70°		Nil	Trace pyrite	
80.60 to 89.90	Massive Rhyolite	Colour - light grey Relatively massive rhyolite - moderate foliation @ 65° to C.A. - fine, <2mm quartz eyes (<5%) - shallow, irregular calcite veins - badly broken with minor gouge at 83.21m @ 50° C.A. and from 86.3 - 86.6 with gouge at 86.55 @ 60° - Possibly contorted flow-banding @ 87.0m - quartz veins at 25° to C.A. at 89.50		Weak sericite alteration.	Trace pyrite.	
89.90 to 92.10	Altered Mafic Unit	Colour - dark green Grain Size - aphanitic - Massive mafic unit - Feldspar phenocrysts - Massive white quartz vein with chlorite veined pyrite from 91.05 - 91.60m @ 40° to C.A.	Contact at 35° at 92.10m?	Pervasive, patchy epidote alteration.	Trace pyrite	Altered Diorite? or Feld-xstal tuff

From To	Rock Type	Texture and Structure	Angle to Core Axis	Alteration	Sulphides	Remarks
92.10 to 106.30	Rhyolite Crystal Tuff	Colour - light grey Grain Size - aphanitic Massive, foliated (weakly) rhyolite - 1-2mm quartz eyes (<2%) - aphanitic groundmass - foliated @ 45° to C.A., possibly flow-banded - quartz veins at 5-10° and 50-60° to C.A. - faint flowbanding - euhedral quartz phenocrysts deflect foliation - contact at 106.30 @ 50° to C.A., no evidence of chilling but banding is markedly absent - few insitu brecciated areas	Contact at 106.30 @ 50° to C.A.	Nil	Trace pyrite	Massive flow? on crystal tuff? Geochem #3932 99.36 - 102.41
106.30 to 133.30	Crystal Tuff/Lapilli Tuff Rhyodacitic	Colour - light to dark grey-green 106.30 - 108.90 Massive, light green dacite-rhyodacite with 5 to locally 10% subhedral feldspar crystals and QP - diffuse feldspar phyric dark green "fragments" - probable crystal tuff - sheared from 106.30 to 107.85 @ 45-50° to C.A. 108.90 to 111.60 Distinct, dark grey-green feldspar phyric fragments from several cms to 10cm - faint, pink hematitic staining of fragments - matrix is a light green-grey feldspar-Quartz phyric crystal tuff. - frags foliated at 45-50° to C.A. - Fragments become much larger or unit becomes massive after 111.60m Strong fault with quartz veins and gouge from 112 - 112.60 @ 5-10° to C.A. and from 112.90-113.15 at 5° to C.A.		- weak chlorite alteration - patchy epidote alteration of feldspar and in groundmass where cut by quartz vein shears. Hematization, silicification associated with quartz veins.	Trace pyrite	

From To	Rock Type	Texture and Structure	Angle to Core Axis	Alteration	Sulphides	Remarks
		After 111.60 unit is a massive crystal tuff with both quartz (<3%) and feldspar (up to 10%) crystals from 1-4mm in size. - few quartz veins at 45°, 20° and 30° to C.A. - strong epidote alteration from 115.15 - 116.7 associated with quartz veins and sericite quartz vein, with hematitic envelopes. Silicified quartz vein shear from 123.45 - 124.05, Quartz veins @ 5-90° to C.A. Silicified shear at 65-70° to C.A. Massive green chlorite with quartz veins. Shattered quartz/chlorite veined epidotized crystal tuff from 128.80-129.15 and from 130.4 to 133.3. White quartz veins at 45° to C.A.				
133.30 to 133.50	Dacitic Tuff Crystal tuff	Colour - light grey-green Fine feldspar crystals (1mm) in intermediate matrix. - alternating light grey to white and pale green beds of fine tuff or ash - bedding(?) at 70° to C.A.		Weak epidote	Nil	
133.50 to 134.90	Dacitic-Rhyodacitic Vitric Lapilli Tuff	Colour - pale green-grey Monolithic lapilli sized (2mm to 1.5cm) "vitric" aphyric light green fragments (25-30%) in a siliceous grey matrix with clots of epidote altered feldspar crystals - fragments elongate @ 15° to C.A. - frags - angular to subrounded and shard-like in form.	contact at 114.90 at 65°?	Weak epidote alteration of feldspar and diffuse patches in matrix.	Nil	Good pyroclastic rock. Geochem #3933 133.5 - 134.85

From To	Rock Type	Texture and Structure	Angle to Core Axis	Alteration	Sulphides	Remarks
134.90 to 137.4	Andesite Crystal Tuff and Tuff	Mixture of andesitic crystal tuff with epidote altered feldspar phenocrysts and more massive aphyric fine grained sediment/ash? - possible disrupted bedding	?	Weak epidote alteration of feldspars	Nil	
137.4 to 141.7	Rhyolite Dyke?	Colour - light to dark grey Grain Size - aphanitic Massive, weakly quartz porphyritic (<1%) rhyolite - QP <2mm - strongly sheared and graphitic from 138.65 to 139.85 - shearing @ 40° to C.A.	45° to CA at 137.4 60° to CA at 141.7	Weak graphitic		
141.7 to 147.3	Diorite?/ Crystal Tuff	Colour - light green-grey Grain Size - fine - medium grained Looks like a massive, fine-medium grained diorite but contains grey, small, <1cm, siliceous (quartz-rich) "fragments" - unit also characterized by changes in grain size - possible crystal tuff		Weak epidote alteration of feldspars	Trace ccp	Cut for thin section
147.3 to 148.0	Rhyodacite and Diorite dykes	Badly broken core 147.3 to 147.55. Rhyodacite dyke?, elongate quartz amygdules? at 65° to C.A. 147.55 - 148.0 Pieces of feldspar porphyritic diorite - epidotized.		Nil		

From To	Rock Type	Texture and Structure	Angle to Core Axis	Alteration	Sulphides	Remarks
148.0 to 158.0	Rhyodacite Dyke (weakly feldspar phyric)	Colour - grey Grain Size - aphanitic Massive unit, consisting of a) 3-4%, 2-3mm white subhedral feldspar crystals b) 6-8% lenticular chloritic wisps (2-4mm X 10-20mm) with irregular ends c) massive, light coloured aphanitic, aphyric groundmass - wisps elongate @ 70° to CA - not strongly foliated - white, silicified(?) shear zone from 150.90 - 151.50 @ 25° to CA		Nil	1% diss. and clotty pyrite.	Massive non-foliated nature of unit suggests it may be an intrusion. - very blocky ground.
158.0 to 160.50	Feldspar Porphyritic Rhyodacite	Colour - grey Grain Size - aphanitic 5%, subhedral 2-4mm feldspar crystals <1% quartz eyes aphanitic siliceous groundmass - massive unit - not foliated		Nil	Nil	Probable dyke. - cut by an aphanitic andesite dyke from 160.35 - 160.40 @ 60° to CA

From To	Rock Type	Texture and Structure	Angle to Core Axis	Alteration	Sulphides	Remarks
160.50 to 275.20	"F" Diorite	Colour - green Grain Size - medium grained F. gr - m. gr diorite with 4-6% phenocrysts (weakly glomero-porphyritic) from 5mm to 1cm. - massive non foliated unit - strongly quartz-calcite veined with local shears from 172.82 - 175.86 @ <30° to CA Unit becomes less obviously porphyritic and more equigranular after 176.90 - possible Fault/shear marked by gouged broken core and quartz veins from 189.5 - 190.20 @ 80° to CA. From 204.70 to 213.6, unit is distinctly darker in colour, fine - coarse grained and magnetitic (magnetite). This unit is well foliated and sheared from 205.05 to 206.60 @ 65-75° to CA (magnetic from 204.7 - 211.0) At 213.6 unit becomes f. gr. with aphanitic, finely feldspar phyric sections (weakly - non magnetic). Calcite veins at <5°, and 65°to CA Quartz veins/calcite vein shear from 215.8 - 216.15 @ 70° to CA. Bleached shear from 223-223.5 @ 70° Quartz-calcite veins at 30-50° to CA. Numerous calcite/quartz veins at 40-75° to CA from 268-272m. Unit becomes fine-grained and eventually aphanitic from 274.7 - 275.2	contact at 275.2 @ 50° to CA	weak epidote alteration of feldspars - weak chloritic alteration - calcite veins/fractures at 5-55° to CA - few quartz veins at 75° - few irregular diffuse epidote patches		F. gr. - aphanitic massive phases from 161.7-161.20 166.3-166.5 184.5-185.55 (aphanitic dyke) 197.8-198.25 209.1-209.37 Weak shears @ 166.3 @ 30° 169.35 @ 25° Geochem #3934 166.7 - 169.7 Geochem #3935 206.34 - 209.39 Geochem #3936 252.07 - 255.11

From To	Rock Type	Texture and Structure	Angle to Core Axis	Alteration	Sulphides	Remarks
275.2 to 302.55	Rhyodacite Crystall Tuff?	Colour - grey-green 6-15% Quartz phenocrysts, subhedral to anhedral, from 1-3mm. <5% Feldspar phenocrysts, subhedral. - aphanitic groundmass - chloritic shear (20° to CA) at 276.55m and 15cm wide chloritic gouge (45-50° CA) at 277.20. Percentage of quartz/feldspar phenocrysts (crystals) variable - calcite filled fractures @ 30-50° to CA, foliated @ 70° to CA - white quartz-vein breccia from 289.80 - 290.30, veins @ 80-30° to CA - chloritic gouge over 10cm at 287.4 at 20° to CA	Contact @ 275.2 marked by 10cm of qtz-veined brecci-ated core	Weak chlorite alteration but pervasive.	Trace pyrite	Geochem #3937 279.5 - 282.55 Geochem #3938 297.78 - 300.80
302.55 to 306.00	Fine-grained Diorite	Colour - green Grain Size - fine grained Massive, weakly feldspar porphyritic diorite.	Contact at 302.55 @ 70° - few calcite/ quartz veins contact at 306.00 f.gr. + foliated	Epidote (weak)		Strongly foliated and sheared from 303.0 - 303.4, @ 45° to CA Calcite/quartz veins @ 45° and 0-5° to CA

From To	Rock Type	Texture and Structure	Angle to Core Axis	Alteration	Sulphides	Remarks
306.00 to 311.42	Rhyodacite Crystal Tuffs, + Tuffs	306.00 - 306.4 Quartz-Feldspar rhyodacite crystal tuff (as above). Strongly sheared with quartz veins and hematite from 306.0 - 306.25 @ 40-50° to CA. 306.4 - 311.30 Chloritized rhyodacite tuffs? Percentage of crystals (Feldspar and quartz) varies within unit from <1% to 5-6%, and may represent individual beds or variations in phenocryst content within a single unit. 311.30 - 311.42 Crystal tuff as above.		Pervasive weak-moderate chlorite alteration.	Trace pyrite.	
311.42 to 314.55	Andesite/ Dacite Crystal Tuff	Colour - light grey-green Grain Size - aphanitic Predominately a massive non bedded andesite/Dacite tuff? with sections containing fine (2-3mm X 5-15mm) chlorite/sericite wisps after possible vitric fragments? - wisps most prominant from 312.40 - 313.00 313.35 - 313.40 - Possible fine "ash" bed (2cm) at 80-75° to CA at 314.50. White quartz veins from 314.05 - 314.2 @ 30° to CA with ms chl and 1% pyrite.	Bedding? at 70-80° to CA	Weak epidote alteration, pervasive weak chlorite alteration.	Nil	

From To	Rock Type	Texture and Structure	Angle to Core Axis	Alteration	Sulphides	Remarks
314.55 to 393.13	Andesitic Tuffs and Crystal Tuffs	Colour - green Grain Size - fine-medium grained Epidotized (weakly) medium grained Andesitic tuffs (or diorite?) - massive but with rapid variations in grain size possibly reflecting alteration but may indicate unit is a crystal tuff(?) - aphanitic sections are chloritic and may be altered areas or beds? Sheared gouge zone from 329.3 - 329.50 @ 75° to CA. Strongly sheared, hematitic, weakly graphitic shear/fault zone with broken core from 333.00 - 337.10 - strongest shearing with gouge at 5-10° to CA - white quartz vein from 328.3 - 328.65, with ms chlorite and tr pyrite at 75° to CA Faint, monolithologic "fragments" from 314.6 - 327. Frags difficult to separate from groundmass, maybe weakly mafic anygdaloidal and range in size up to 3-4cm. Feldspar crystals in matrix. Aphanitic section from 324.5 to 324.68 maybe a fine tuff, bedding @ 60°? On either side of shear, from 332 - 343, unit is badly broken & blocky and consists of andesitic tuff and crystal tuff (FP).		Weak but pervasive chlorite alteration. Strong but patchy epidote alteration, diffuse to sharp bounded epidote-quartz patches from <1cm to +8cm.	trace pyrite, up to 1% pyrite in fractures within epidote altered areas/patches	No distinct frags observed however white weathering areas up to 2 X 4cm, altered in part to epidote may be alteration or fragments? Geochem #3939 324.61 - 327.96

From To	Rock Type	Texture and Structure	Angle to Core Axis	Alteration	Sulphides	Remarks
		From 343m - 349 unit is massive and fine-grained with distinct round epidote - quartz balls, weak shears/calcite veins @ 40-35° to CA. After 349m unit is characterized by alternating sections of 1) feldspar porphyritic crystal tuff, good coarse feldspar crystals to 5mm 2) massive, aphanitic sections 3) strongly epidotized sections with epidote patches from <1cm to 4cm. Some of this epidote may be amygdule in filling - chloritic shears at 45-35° to CA at 352 - Extremely well bedded, thin-bedded to laminated andesitic tuff and ash from 363.0-363.55, bedding at 50-60° to C.A. - fractured with hematite/magnetite fine veinlets from 373.85 to 374.15 Calcite veins, gash-like @ 40° to C.A. Thin, 1-2cm andesitic ash beds separate massive, epidotized feldspar crystal tuff beds @ 390.46, 390.67, and 390.76 @ 60° to C.A. Ripped up bed of Andesitic - Dacitic ash at 392.05. Unit becomes well bedded at 40-45° to C.A. from 392.85 to 393.13 - bedding defined by 3cm to <1cm alternating laminae of andesitic ash and feldspar crystal tuff.			- Minor pyrite in ash bed at 363.4 - bleb of chalcopyrite in quartz vein @ 363.65m	Geochem #3940 361.88 - 364.23

From To	Rock Type	Texture and Structure	Angle to Core Axis	Alteration	Sulphides	Remarks
393.13 to 403.70	Bedded Ash Unit	Thin-medium bedded light green, green and pale grey andesitic ash tuff. Bedding variable @ 30-40° to C.A. 393.13 - 395.32 massive to laminated grey ash, 1-2% fine pyrite along laminae, tr. chalcopyrite. 395.32 - 400.05 Massive thin bedded - laminated green andesitic ash tuff with light grey "felsic" beds at 30° to C.A. From 400.05 - 400.25 well bedded, grey ash @ 45° to C. A. with 1-2% ccp and 3% pyrite along laminae 400.25 - 402.12 Andesitic ash tuff with minor grey ash beds @ 45° to C.A. Minor pyrite (2 - 3%) from 400.5 to 401.3 From 402.12 - 403.06 Contorted grey, ash (cherty) laminae in andesitic tuff with 3-5% pyrite and tr. ccp. 403.06 - 403.7 Massive andesitic tuff with minor chert and ash beds (broken).		Pervasive chlorite alteration in andesitic tuffs. - calcite/quartz gash-like veins at 20-45° to C.A.	Sulphides chiefly pyrite as fine disseminated grains, bleby clots or as fine fracture-fillings principally along and parallel to bedding - trace ccp, however in interval from 400.05 - 500.25 with some felsic laminae. 395.32 - 400.05 Contain up to 2-3% ccp over several cms width.	Assay #3901 393.80 - 395.20 Assay #3902 400.05 - 400.25 Geochem #3926 395.32 - 398.37 Assay #3903 400.5 - 401.3 Assay #3904 402.12 - 403.06 Assay #3905 403.06 - 404.46

From To	Rock Type	Texture and Structure	Angle to Core Axis	Alteration	Sulphides	Remarks
403.70 to 443.48	Fault Zone	Colour - green 403.70 - 418.79 Strongly foliated, sheared andesite, minor intact feldspar crystals and quartz-eyes (?) suggest unit is a crystal tuff - disrupted & broken grey "dacitic" ash beds @ 410m, 411.2m @ 30° to CA Foliation at 30° to C.A. Interval from 414.95 - 415.74 is a sheared finely bedded tuff with alternating dark green, chloritized beds and grey, cherty-ash beds. Bedding @ 40° to C.A. 418.79 to 423.3 Chloritized Fault gouge, foliation @ 30° however main shear zones @ <20° 423.3 to 424.37 Interbedded chlorite andesitic tuff and grey-ash (dacitic) beds. Pyrite + ccp along bedding. Bedding at 45-50° to C.A.		Pervasive strong chlorite and locally sericite alteration - soft sheared + altered(?) rock.	Fine disseminated and minor fracture pyrite throughout unit (2%) and tr ccp. Assay #3906 405.75 - 407.4 Bleby and stringer pyrite, up to 8% over 5cm locally, in strongly sheared, chloritized weakly carbonated tuff. Assay #3907 414.95 - 415.74 5-6% diss pyrite, tr. ccp parallel to bedding. Assay #3908 416.25 - 417.35 Stringer + diss. pyrite in chloritized andesitic tuff, 2% py. Assay #3909 418.79 - 422.15 Grab samples of pyrite mineralized gouge (tr ccp) to Au assay.	

From To	Rock Type	Texture and Structure	Angle to Core Axis	Alteration	Sulphides	Remarks
		424.37 - 426.2 Chloritized andesite crystal tuff (FP, QP) with 15cm wide grey ash bed at 45-50° to CA at 424.7. 426.2 - 429.9 Sericitic felsic tuff, ash bed with disseminated and fracture pyrite (2-3%). Foliation at 45-50° to C.A., and crenulated. Fine approx. 2mm, quartz eyes (<2%). 429.9 - 434.45 Strongly sheared chloritized andesitic tuff? (crystal tuff?) 2-3% diss. pyrite throughout - calcite veins @ 45-40° to C.A. and <20° to C.A. 434.45 - 442.40 Sheared, and calcite veined (70-60° and 30°). Massive diorite (or crystal tuff). Hematite associated with calcite veins, minor epidote. - good epi. altered feldspars from 434.95 to 437. 442.40 - 442.80 Sheared, weakly quartz porphyritic (1-2mm, <3% QP) rhyodacitic crystal tuff? - strongly chl/sericite altered - pale brown carbonate alteration from 442.40 - 442.50 may be in felsic ash beds? - trace pyrite 442.80 - 443.48 STRONG GOUGE AND FAULT BRECCIA - MINE FAULT? - chlorite mud and carbonate (calcite) @ approx. 30-35° to CA			Assay #3910 423.3 - 424.37 8-10% diss. pyrite along bedding planes and 1% chalcopyrite over 2-4cm intervals.	Geochem #3927 426.2 - 429.9 + Au Geochem #3928 429.9 - 434.45 + Au

From To	Rock Type	Texture and Structure	Angle to Core Axis	Alteration	Sulphides	Remarks
438.48 to 468.92	Diorite	Colour - dark green Grain Size - fine - medium grained Fine gr. chilled margin to 439.6, therafter med grained, weakly magnetic and with a color index of 35-45% mafics - not foliated - few calcite/hematite fractures at 30-60° - sections with coarse acicular mafic crystals, almost pegmatitic - becomes increasingly veined by calcite near contact from 468.20 - 468.92, veins at 45° to CA.	contact @ 468.92 at 25° and marked by chloritic gouge	Weak epi. alteration of feldspars, minor carbonate (calcite) in groundmass - hematitic calcite-veined fractures	Weakly magnetic locally.	Could be down faulted equivalent of the F. Diorite encountered earlier in the hole between 160.5 - 275.2m. (Mine Fault)

From To	Rock Type	Texture and Structure	Angle to Core Axis	Alteration	Sulphides	Remarks
468.92 to 480.63	Mineralized Rhyodacite Tuff/Lapilli Tuff	Colour - light green to grey Grain Size - aphanitic 468.92 to 480.63 Massive rhyodacitic unit, however small (<1.5cm) diffuse looking fragements imparting a mottled appearance suggest unit may be a lapilli tuff. Distinct fragments from 471.6 to 476.0m may be primary or the results of secondary brecciation due to veining (sulphides). Few calcite veins at 40-45° to C.A., unit is heared over .3m at contact (468.92). Internal contact @ 470.85 at 45° (fine py along contact). Weak fault zone from 479.5 to 479.90 at 30° to C.A.	contact @ 480.63 at approx. 85° to C.A.	Weak and localized chl. alteration associated with sulphide mineralization.	Good disseminated and stringer i.e fracture controlled sulphides throughout, principally pyrite, but with fine chalcopyrite and an extremely fine grained (locally calcite bearing) dark grey - black mineral (possibly fine pyrite + sphalerite). Unit will average 5-6% combined sulphides overall but with sections containing up to 10-15% sulphide over 15-10cm locally - 474.30 - 474.80. Assay #3912 470.85 - 472.50 Assay #3913 472.5 - 474.12 Assay #3914 474.12 - 475.55 Assay #3915 475.55 - 477.31 Assay #3916 477.31 - 479.00 Assay #3917 479.00 - 480.63	Geochem #3941 474.26 - 477.31

From To	Rock Type	Texture and Structure	Angle to Core Axis	Alteration	Sulphides	Remarks
480.63 to 480.85	Argillaceous Pyritic Sediment	Two beds of dark brownish grey, aphanitic carbonate - quartz, sulphide bearing argillaceous "mud" from 480.63 - 480.72 and 480.78 - 480.85, separated by a thin bed of "andesitic" crystal (FP) tuff (480.72 - 480.78). Brown "mud" beds contain fragments of rhyodacite and quartz eyes (8% total) and although the grain size is extremely fine appear to consist of fine calcite, pyrite and quartz and possibly some graphite. - no internal stratification, however it does extend downwards into underlying rhyolite but "not" into overlying rhyolite - tops up hole?	Contact @ 85° to C.A.		Fine pyrite in brown carbonate/quartz beds - plus 10% pyrite? - fine sphalerite?? Assay #3918 480.63 - 480.72 plus 480.78 - 480.85 Fine white metallic mineral with pyrite (<<1%).	

From To	Rock Type	Texture and Structure	Angle to Core Axis	Alteration	Sulphides	Remarks
480.85 to 491.2	Rhyolite Crystal Tuff	Colour - pale grey Grain Size - aphanitic Weakly quartz-porphyritic containing <1%, anhedral quartz crystals from 2mm-3mm - aphanitic, aphyric matrix/ groundmass - unit has a distinct "layered" appearance accenuated by sulphide at approx. 45-50° to C.A. however locally the layering is irregular and contorted - could be disrupted bedding or flow-banding - possible crystal tuff or rhyolite flow - more siliceous areas may be cherty beds or silicified flow layering - weak shear from 486.20 - 866.75 @ 45° to C.A.		- weak sericite alteration	Unit characterized by both fine disseminated pyrite throughout and by "striking" pyrite stringers that collectively constitute 10-15% of unit. Pyrite stringers associated with dark grey-brown aphanitic material containing fine pyrite and minor carbonate (not graphite as it does not conduct). - chalcopyrite is spotty but occurs as both diss. grains and as blebs in pyritic fractures but constitutes approx. <10% of sulphides - good bleby chalcopyrite @ 487.15 in quartz and with calcite-quartz veins near contact with diorite at 491.18. Assay #3919 480.85 - 482.63 Assay #3920 482.63 - 484.28 Assay #3921 484.28 - 486.76 Assay #3922 486.76 - 488.80 Assay #3923 488.80 - 490.05 Assay #3924 490.05 - 490.20	Geochem #3942 483.71 - 486.76

From To	Rock Type	Texture and Structure	Angle to Core Axis	Alteration	Sulphides	Remarks
491.2 to 508.20	Diorite	Colour - dark green Grain Size - f. gr. - m. gr. Chilled, f.gr. dyke margins from 491.2 - 495, giving way to a more massive, medium grained diorite - calcite veins at 30-40° to C.A. - strong .05m calcite/qtz vein at 40° to C.A. @ 504.1m		Patchy and vein-like epidote alteration.	10% pyrite in first 15cm of diorite at chilled contact (491.2) - minor bleby & diss. pyrite in epidote altered areas - tr. ccp	Cut by lamp dyke from 493.45 - 495.40 at 50° to C.A.
508.20 to 508.85	Rhyodacitic Tuff	Colour - light green-grey Grain Size - aphanitic Massive rhyodacitic tuff? - disected by fractures filled with "grey grunge" of unknown mineralogy - does not reat with HCL or conduct.	Contact @ 508.85 @ 50°	Weak sericite alteration.	Trace pyrite	
508.85 to 522.33	Andesitic Tuff(?)	Colour - green Grain Size - aphanitic Massive, homogeneous andesite, aphyric and aphanitic - cut by calcite (quartz) veins at 45-60° to C.A. Faint brecciation associated with some epi altered areas - possibly flow/pillow contact? Quartz veins (calcite) at 70° to CA from 522.05 - 522.20.		Patch epidote alteration.	Minor pyrite and tr. ccp in calcite-qtz veins from 511.20 to 511.75. Assay #3925 511.2 - 511.77	Possibly a flow? Geochem #3943 514.2 - 517.24
522.33 to 534.92 E.O.H.	Diorite	Colour - green Grain Size - f. gr. - m. gr. Massive, uniform.		Weak epidote alteration of Feldspar.	Weak magnetic.	

LITHOGEOCHEMISTRY

SAMPLE NUMBER	FROM (m)	TO (m)	MAJOR OXIDES SiO_2	Al_2O_3	CaO	MgO	Na_2O	K_2O	FeO	MnO	TiO_2	Ba	TRACE ELEMENTS ppm Cu	ppm Zn	% Pb	ppm Ag	ppb Au	Rock Type	Alt	Min	% Zr	
3929	17.37	20.42	68.89	15.63	3.35	1.39	2.77	2.67	2.92	0.12	0.34	.073	8	96	.005						.009	
3930	38.10	41.15	68.08	15.56	2.99	1.73	3.78	2.22	3.47	0.13	0.37	.099	11	116	.005						.009	
3931	74.06	77.11	68.92	14.75	2.27	0.66	2.93	4.61	2.29	0.09	0.33	.064	16	29	.005						.007	
3932	99.36	102.41	68.48	14.58	4.39	0.60	3.37	3.96	2.67	0.11	0.35	.087	15	34	.005						.008	
3933	133.5	134.85	71.64	13.81	3.33	0.88	3.80	1.42	3.05	0.14	0.34	.070	30	196	.005						.005	
3934	166.7	169.7	49.42	15.53	9.00	4.95	2.25	0.41	13.85	0.30	2.47	.010	175	108	.005						.013	
3935	206.34	209.39	54.76	11.72	5.56	2.11	2.96	0.97	16.52	0.42	2.42	.053	380	156	.005						.045	
3936	252.07	255.11	49.37	15.04	10.38	5.66	2.32	0.47	12.20	0.27	2.07	.011	185	80	.005						.012	
3937	279.5	282.55	66.21	15.43	2.88	2.12	4.49	1.91	4.23	0.11	0.39	.036	12	44	.005						.007	
3938	297.78	300.80	66.12	15.59	2.90	2.13	3.79	2.68	4.05	0.08	0.40	.103	21	50	.005						.007	
3939	324.61	327.96	55.39	17.47	6.64	4.99	2.62	1.79	8.58	0.18	0.80	.044	74	72	.005						.005	
3940	361.88	364.23	52.89	16.82	6.35	5.64	3.97	1.06	10.21	0.23	1.35	.027	130	100	.005						.008	
3926	395.32	398.37	60.86	17.77	1.27	5.38	2.06	3.64	6.60	0.24	0.63	.214	60	235	.009						.005	
3927	426.2	429.9	68.09	14.21	0.41	5.97	0.54	2.56	6.47	0.20	0.35	.131	192	136	.005						.007	
3928	429.9	434.45	55.43	17.10	1.33	8.27	1.89	1.35	11.23	0.45	0.82	.069	600	182	.012						.005	
3941	474.26	477.31	70.31	15.17	0.31	2.83	2.18	3.16	3.95	0.18	0.35	.155	106	108	.005						.008	
3942	483.71	486.76	71.37	13.66	0.48	3.40	0.87	3.32	5.25	0.04	0.29	.110	61	32	.005						.008	
3943	514.2	517.24	51.06	13.90	9.79	5.64	2.48	0.07	12.71	0.28	2.44	.007	172	76	.005						.014	

Hole No. MTS-17 Entered by _____ Logged by _____ Page No. 23

ASSAY SHEET

Sample Number	From (m)	To (m)	Estimate Cu	Estimate Zn	Length ( )	% Cu	% Zn	% Pb	gm/T Ag	ppb Au	% SiO_2	% TiO_2	% Na_2O	% MgO	% Fe	PPM Cu	PPM Zn	PPM Pb	PPM Ag	PPB Au			
3901	393.80	395.20				.012	.01		0.2	5													
3902	400.05	400.25				.43	.04		2.0	135													
3903	400.5	401.3				.056	.02		0.2	15													
3904	402.12	403.06				.044	.04		0.2	10													
3905	403.06	404.46				.044	.03		0.2	5													
3906	405.75	407.4				.04	.02		0.3	5													
3907	414.95	415.74				.032	.02		0.2	10													
3908	416.25	417.35				.085	.02		0.2	5													
3909	418.79	422.15				.093	.02		0.3	5													
3910	423.3	424.37				.096	.02		0.4	35													

HOLE NO MTS-17

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ZIPPY PRINT - [illegible] PORT, RICHMOND

CORPORATION FALCONBRIDGE COPPER

DRILL HOLE RECORD

x METRIC UNITS
IMPERIAL UNITS

HOLE NUMBER	GRID	FIELD COORDS	LAT.	DEP.	ELEV.	COLLAR BRNG.	COLLAR DIP	HOLE SIZE	FINAL DEPTH
MTS-17 Ext.			2+00W	10+00S		0°	-65°	BQ	839.42m

PROJECT	CLAIM #	SURVEY COORDS.	DATE STARTED / DATE COMPLETED	CONTRACTOR / CORE STORAGE / CASING
PN 305 Mt. Sicker			DATE STARTED: Nov 27/86	CONTRACTOR: F. Boisvenu CASING: NQ rods to 152.5m stuck

PURPOSE: Deepen Existing drillhole through diorite (approx. 200-250m) to intersect Myra-Nitinat contact

RQD LOG
COLLAR SURVEY
PULSE EM SURVEY
MULTISHOT SURVEY

ACID TESTS				TROPARI TESTS			MULTISHOT DATA		
DEPTH (ft)	CORRECTED ANGLE	DEPTH ( )	CORRECTED ANGLE	DEPTH (ft)	AZIMUTH	DIP	DEPTH ( )	AZIMUTH	DIP
1900	57-58°			2734	020°	46°			
2100	54-55°								
2300	No Line								
2500	No Line								
2700	(Not received)								

HOLE NO MTS-17 Ext.

LOGGED BY M. Gray

ZIPPY PRINT - -- BRIDGEPORT, RICHMOND

From To	Rock Type	Texture and Structure	Angle to Core Axis	Alteration	Sulphides	Remarks
532.49 to 593.44	DIORITE local FELDSPAR PORPH. DIORITE	Colour - dark to med. green +/- grey Grain size - fine med. to med. +/- fine +/- med. coarse Variable grain size and shape but generally equigranular, med. grained, hypidiomorphic to pandiomorphic. Mode: 35-45% feldspar, 5% qtz 1-5% hematite, 40-50% matice (now chlorite) Feldspar 1-6mm, avg 2mm Qtz <1-2mm, avg 1mm Hematite <<1-1mm, avg <1mm Mafics <1-4mm, avg 2mm -note local fine grained section (chilled?) also shears f.gr. -also subporphyritic to porphyritic texture, 532.49 to 545m -hypidiomorphic in subporphyritic sections, pandiomorphic in equigranular sections.	533.89m-45 ? 547.00m-60 ? 551.20m-30 559.75m-20 565.70m-50 fol'n	Consists of i)calcite vein +/- qtz, ii)epidote +/- calcite +/- hematite veins iii) hematite +/- calc. veins iv) selective hematization/ carb. v) pervasive chloritization +/- epidote +/- albite (?) vi) epidotization +/- hematite, poss. envelopes pervasive i) Minimum 2 generation calcite, white veinlets 1-10mm (avg 2mm) locally with py (rare) ii) x-cut by minimum 2 generations of calcite. Pistachio green, vague margins, cont. <1-5mm, avg 2mm	Py & cpy locally as euhedral diss. grains & blebs, assoc. with "sheared diorite" and with calcite veins, lesser with epidote veins. 533.59-533.94: <1%-tr cpy 533.58-535.08: tr cpy 537.33-537.63: <1% cpy 541.63-544.28: Tr py, tr cpy 544.28-548.88: <1-1% py 546.95-547.65: <1% cpy, py 548.08-552.62: tr-1% py, tr cpy 553.07-553.62: <1% py, tr cpy 555.77-558.12: tr-1% py, tr cpy 563.35-565.73: tr py 568.55-569.06: <1-2% euhedral py 572.51-572.61: 3-5% py, <1% cpy 579.76-579.96: 2% py diss. 589.99-590.40: 1-3% py diss.	Locally weak magnetic sections at 535.53m, 539.00m, 547.73m Hematite varies from <1% -5% *mislatch - tube not locked from 590.40 - 593m44m at diorite - rhyolite contact

From To	Rock Type	Texture and Structure	Angle to Core Axis	Alteration	Sulphides	Remarks
		Sheared (?) section fine gr. or chilled? black-green chloritic zones with lt. brown alteration mineral diss. (5%) 535.63-536.13m, 537.05-537.2m, 541.85-541.90m, 543.66-545.30m, 547.05-547.35m, 552.55-553.12m, 556.77-557.77m		iii) metallic reddy-brown fracture coatings & veinlets +/- calcite <1-3mm, avg 1mm iv) strong selective hematite replacement of mafics (?)/strong selective calcite-hematite replacement of feldspar(?) v) pervasive greenschist facies chloritized-albitized?-epidotized throughout. vi) poss. veins, pervasive epidotization with diss. hematite grains. Pistachio green.		
593.44 to 600.30	FELSIC ASH TUFF +/- QTZ EYE CRYSTAL TUFF +/- MINOR TUFF with 5% fine lapilli *NOTE LT. GREY DYKE AT 594.20 - 594.40m	Colour - lt. to med. grey +/- sl. green Grain size - fine + fine to med. crystals and frags. Crude layering in fine gr. ash-tuffs near start of interval Mainly felsic ash tuffs with local qtz eye crystal tuff +/- feldspar, with qtz phenocrysts <2mm-0.5mm size, local frags 2mm x 3mm with <1mm Fp phenocrysts ie) 594m Qtz eye +/- feldspar crystal tuff: -matrix supported, 5-20% qtz phenos avg. 1mm, subrounded shape Note weakly foliated, with local narrow shears 60 - 90 C.A.	80 (70 - 90)	Pervasive weak seritization throughout, local mod. patches, assoc. with shears. Weak chloritization throughout. Veins include tr calcite, also white qtz veinlets and patches (no py).	Mainly 1-2% diss fine gr. pyrite throughout, also tr cpy to <1%. Locally patches & discont. stringers 1-2mm thick with 3-5% py, <1% cpy over 5-20cm intervals ie) 598.34m, 596.75m, 595.50-595.85m	Ashs, with interlayered crystal tuff.

From To	Rock Type	Texture and Structure	Angle to Core Axis	Alteration	Sulphides	Remarks
600.30 to 601.50	FAULT BRECCIA (of above FELSIC ASH)	Colour - lt. grey-green Grain size - fine matrix, frags <1mm-2cm In situ breccia + rotated breccia with intermittent med. grey clay(?) seams 0.5cm. Monolithic matrix qtz, fragments felsic ash	Top ctc 75 Bottom ctc 40 - 60 ?	Qtz veins + matrix, mod. sericite, local strong over narrow sections.	1-3% fine gr. diss. py throughout with local section 5-10% over 2cm	
601.50 to 614.17	FELSIC ASH TUFF (same as above)	Colour - lt. to med. grey to sl. green Grain size - fine Local crude layering homgeneous looking ash tuff. (same as above) Qtz eyes <2mm avg 1mm, 5-10% throughout much of section, subrounded ie)612.95m	layering 45 (35 - 50)	Pervasive weakly sericitized, local moderate. Weak locally chloritized.	1-3% diss fine gr. py throughout. Tr cpy Minor narrow sections with 10% py <5cm, tr cpy stringers. Note 2-3mm wide stringers at 612.35m (1% cpy, 20% py).	Section has less heterolithic appear. + consistent 5-10% qtz eye content
614.17 to 614.60	FAULT ZONE (PYRITIC MUD)	Colour - dark grey Grain size - fine to very fine Maluble clay-py mud/gouge (very weakly conductive)	Top ctc ? Bottom 35 ?	Clay? - pyritization	1-5% fine gr. pyrite diss. Poss. fine gr. grey sulphide.	

From To	Rock Type	Texture and Structure	Angle to Core Axis	Alteration	Sulphides	Remarks
614.60 to 646.94	FELSIC ASH-CRYSTAL TUFF	Colour - lt. grey-green Grain size - very fine with fine crystals			Py fine to med. gr. mainly as diss (1-3%), also as 1-2mm discont. stringers and wisps up to 15% py locally over narrow sections 5-10cm Tr cpy locally with py, especially stringers	
		614.60 - 615.20: Lt. grey felsic tuff, silicified. Otherwise similar to below (poss. bleached)	35	Silicified? + weak seritization + mod. pyritization		
		615.20 - 630.50: Felsic ash crystal tuff. Qtz eyes <1mm-2mm avg 1mm, approx. 10-15% throughout; spherical shape, minor <5% feldspar phenocrysts.	25 - 30 (15 - 40)	Weak seritization + weak chloritization(?) + weak pyritization Minor qtz veins 1-2mm weak throughout, no sulphides in them.		
		630.50 - 632.00: Felsic crystal ash tuff; matrix or crystal supported; 10-20% mm avg qtz eyes, 5-10% 1-2mm feldspar phenos. Crystals are subhedral, qtz grey-translucent spheroidal	35 (45 - 30)	very weak seritization, pervasive +/- very weak chloritization (?) + weak pyritization		
		632.00 - 639.17: Felsic ash crystal tuff; less crystal, more ash	35 (45 - 20)	Weak sericite pervasive +/- weak chlorite + weak pyritization (alteration stronger in narrow shears, breccia)		
		639.17 - 646.75: Felsic crystal tuff (lithic frags present) 30-40% crystal/frags	20 - 40	Weak seritization pervasive + weak pyritization		

From To	Rock Type	Texture and Structure	Angle to Core Axis	Alteration	Sulphides	Remarks
646.94 to 655.35	FELSIC to INTERMED. ASH TUFFS	Colour - lt. to med. green-grey Grain size - fine Weakly foliated Felsic to intermediate ash tuff Rare crystals include: i) mafic clots? ii) qtz eyes iii) feldspar all <2mm, subhedral Local brecciated sections at 447.50-448.25m, 650.22-649.92m, 651.56-657.86m, 653.02-653.27m	35 (25 - 50) layer Fol'n 45	Weak & weak to mod. seritization, minor chlorite, weak pyritization throughout -Note greenish colour due greenish-silver sericite	1-3% diss. py locally up to 5% over narrow section (<10cm) diss. + stringers	Note local mafic clots
655.35 to 656.65	FAULT GOUGE/MUD + QTZ VEIN	Colour - white to cream & dark grey Grain size - fine with 1cm breccia frags Qtz vein white-grey, x-cut & brecciated by stockwork of white-cream <1-3mm veinlets. Fragments angular, little rotation. End of interval has parallel 1cm qtz veins (parallel to fol'n, layering)	Top ctc 45 Bottom 45 - 35	Silicification, two generations. Weak pyritization	1-3% diss. fine gr. euhedral py in qtz + grey fault mud -end of interval 3-5% py in patches.	Qtz vein breccia in fault Fault gouge/mud at central 30cm of interval.
656.65 to 662.30	FAULTED & STRONGLY SHEARED FELSIC to INTERMED. ASH TUFFS	Colour - lt. green-grey Grain size - fine with milled frags <1cm Brecciated & faulted (milled) Weak foliation Felsic to intermediate Ash Tuff Fine grained Breccia fragments <1mm-<1cm; monolithic, subrounded.	layering? + shear 40 - 45 ?	Very weak seritization pervasive, weak to mod. seritization in milled breccia portions/frags Tr chlorite Weak qtz veinlets, avg 1-2mm (micro faults x-cut) Weak pyritization	2-5% py mainly as small blebs + patches + stringers 1-2mm thick. Py fine gr. mainly euhedral.	Section has intermittent milled-up breccia within the felsic ashes, poss. not sheared.

From To	Rock Type	Texture and Structure	Angle to Core Axis	Alteration	Sulphides	Remarks
662.30 to 682.29	FELSIC F.G. ASH TUFFS +/- CRYSTAL TUFF BEDS	Colour - lt. to med. green-grey Grain size - very fine to fine, local med. crystals			2-5% very fine to med gr. py, mainly diss & blebs (fine gr. py is silvery, med.gr is brassy yellow) Locally up to 8% over 5-10cm in ellipsoid patches and discont. stringers. Also in qtz veins ie) 666.90m, 669.25m	
		662.30 - 671.00: fine. gr Felsic Ash Tuff	35 - 40 (15 - 45)	Weak seritization, tr chloritization, weak pyritization		
		671.00 - 671.02: Feldspar crystal Ash bed 5-10%, 1-2mm, euhedral to subhedral	Top ctc 45	Weak seritization, tr chloritization		
		671.02 - 671.42: Fine gr. Felsic Ash Tuff	45 - 55	Weak seritization Weak qtz-py-epidote (clots) veinlets. Tr to weak chlorite		
		671.42 - 671.72: fine feldspar crystal-tuff (felsic) 40-50% mm subhedral feldspar phenos	45 - 50			
		671.72 - 672.90: fine gr. Felsic Ash Tuff	35 - 40	Weak seritization Weak pyritization		
		672.90 - 675.27: Fine gr. Felsic Ash/very fine Crystal Tuff <1mm-1mm feldspar +/- qtz crystals	35 - 45	Very weak to weak seritization, tr chloritization, weak pyritization	See above	Qtz eyes increase down section?
		675.27 - 676.77: Fine Crystal Tuff - Felsic; 10-20% crystals <1mm-1mm approx. 5% qtz eyes	45 - 55	Weak seritization Weak pyritization		
		676.77 - 678.79: Crystal Tuff - Felsic; 10-15% qtz eyes <2mm 5% feldspar phenos <2mm	(45 - 55) 45	Weak seritization Weak pyritization		
		678.79 - 682.34: Qtz eye Crystal Tuff-Felsic; 20% qtz eyes <1-1mm avg., subangular to subrounded 10-20% feldspar? 1mm avg Looks weak to mod. foliated	50 (40 - 60)	Weak seritization Tr chloritization Weak pyritization		

From To	Rock Type	Texture and Structure	Angle to Core Axis	Alteration	Sulphides	Remarks
682.29 to 706.41	FELDSPAR PORPHYRY DIORITE	Colour - med to dark green-grey Grain size - fine groundmass, med. to very coarse Porphyritic - locally glomeroporphyritic (snowflake) Feldspar phenos 1-10mm avg 3-4mm, euhedral to subhedral, weakly epidote altered (saus.) Groundmass is fine to very fine gr. mixture of feldspar and chloritized mafics. 688.43 - 688.53: 50 C.A. top 30 C.A. bottom. Local narrow shears +/- breccia. Dark green-black chlorite & fine gr. +/- calcite-qtz veins. 690.65 - 690.90m 693.93 - 694.03m 696.33 - 696.73m	Bottom 45	Pervasive chloritization, greenschist metamorphism? Feldspar weakly sausseratized in phenocrysts Very weak to weak calcite veins 1mm-5mm avg 2mm Tr qtz veins +/- chlorite 1-15mm thick x-cut by calcite.	Tr to <1% diss sulphides throughout	BCD 692.00 - 695.00m Phases vary from feldspar porph. diorite to narrow sections of f.g. diorite (dykes?) to local section of med. grained diorite. Mode: 5-15% feldspar phenos 20-30% feldspar groundmass 50% mafics
		Brecciated & veined from 700.30 - 703.93m. Fine grained diabase phase of Diorite, not cross-cutting(?)		Chloritization + weak to mod. calcite veins & associated breccia along margins. Irregular veins + discont. 1-5mm thick.	No visible sulphides	Note 5-10% leucoxene 1mm-.05mm grains. Has skeletal exsoluation texture.

From To	Rock Type	Texture and Structure	Angle to Core Axis	Alteration	Sulphides	Remarks
706.41 to 706.83	DIABASE-LAMP-ROPHYRE DYKE	Colour - very dark green Grain size - fine to aphanitic with fine to med. mafic phenos Weakly porphyritic, matrix very fine grained, phenos 10-15% 1-2mm subhedral? mafics.	Top ctc 45 Bottom 45 ?	Chloritization weak to mod. pervasive greenschist	No visble sulphides	Weakly magnetic throughout
706.83 to 718.67	ANDESITE CRYSTAL TUFFS with DISTINCT CRYSTAL BEDS now in transition rocks	Colour - dark to med. green +/- grey Grain size - aphanitic to very coarse crystals & epidote balls Weakly foliated Andesite Crystal Tuff - Ash Tuff	35 & 45 (30 - 50)	Epidote ball type alteration throughout. Somewhat selective, nucleat around feldspar crystals? -epidote patches/balls 1mm to 15mm avg 2-3mm -range 3-30% avg. 5 & 10%		Epidote ball alteration ubiquitous. Pseudo porphyry look. Clusters of balls common.
718.67 to 725.12	QTZ EYE CRYSTAL TUFF FELSIC +/- INTERMED.	Colour - lt. to med. grey-green Grain size - aphanitic matrix, fine very coarse crystals Weakly foliated Felsic Ash with <5-10% qtz eyes avg 3-4mm (poss. frags) range 1-6mm diameter. Homogeneous looking unit. End 2m of interval toward a felsic-interval med. to coarse ash.	45 - 50	Weak to very weak seritization, tr chloritization Weak pyritization Weak to mod. qtz veins +/- silicification cont., avg 2-3mm thick up to 2cm thick.	1-3% fine gr. py, locally up to 5% over 5-10cm as stringers <2mm wide continuous.	

From To	Rock Type	Texture and Structure	Angle to Core Axis	Alteration	Sulphides	Remarks
725.12 to 738.00	ANDESITE CRYSTAL TUFF & ASH TUFF	Colour - med. to dark green-black Grain size - aphanitic matrix, fine to coarse crystals Weakly foliated Andesite Crystal Tuff interlayered with Ash. Crude layering - gradational to next band. Phenocrysts are plag subhedral to euhedral, avg 1-2mm 725.12 - 727.07: Andesite Crystal Tuff beds & Ash. 727.07 - 730.30: Fine Sah Tuff +/- minor Crystal Tuff. 730.30 - 733.05: Crystal Tuff. 733.05 - 733.85: Andesite Ash Tuff. 733.85 - 738.00: Crystal Tuff +/- Andesite Tuff.	layering 45 (45 - 55)	Mod. chloritization pervasive; weak to mod. epidotization locally in crystal tuff bands, epidote is selective and strong locally.	1-5% py diss; locally 3-5% py over 10-25cm section. Py is fine gr. diss. brassy euhedral	Note 729.69m: slickensides BCD# Litho 727.90 - 730.90m BCD# Assay 729.10 - 729.89m
738.00 to 749.21	QTZ EYE CRYSTAL TUFF	Colour - lt. grey to med. grey, tr. green Grain size - aphanitic matrix, fine crystals. Homogeneous - massive looking qtz eye crystal tuff (Rhyolitic) 20-15% 1-2mm qtz eyes, 1-2% feldspar phenos <1mm Weak foliation gives crude alignment of phenocrysts	45 (25 - 45) fol'n	Very weak to weak seritization mainly on foliation Tr chloritization Weak to mod. qtz veins avg 2-3mm thick, one zone has irregular veins and veinlets with poss. assoc. silicification 741.00 - 741.54m	1-5% diss fine gr. py, locally up to 3-5% coarse gr. assoc. with qtz veins. Also a pseudo stringer of py with qtz at 744.02 - 744.12m 1cm wide approx. 50% py	Possible flow - very homogeneous massive, though haven't seen good flow banding.

From To	Rock Type	Texture and Structure	Angle to Core Axis	Alteration	Sulphides	Remarks
749.21 to 754.61	INTERMED. to FELSIC ASH TUFFS + FELDSPAR CRYSTAL TUFFS	Colour - med. & lt. green-grey Grain size - aphanitic matrix, fine crystals Weak to mod. foliated Bedded ashes and crystal tuff; locally well bedded, 4-8mm layers ie) 752.74m Crystal Tuff is fine to very fine gr. feldpspar <1mm approx. 30% feldspar, <2% qtz	Top ctc 35 Bottom ctc 15 - 20 ? fol'n/ layering 25 (20 - 40)	Weak seritization pervasive Weak local chloritization Very weak epidote clots 749.21 - 749.75m Very weak calcite veinlets avg 1mm up to 8mm	1-5% diss. fine gr. pyrite + local stringers 1-3mm. 751.94 to 753.17m: 5% py as discont. stringers + diss. Tr cpy?	Interlayered intermediate ash/crystal tuff with minor felsic tuff and fel-intermed. tuffs.
754.61 to 756.00	ANDESITE ASH TUFF	Colour - dark green to black Grain size - very fine to fine Very weakly foliated Relatively massive andesite tuff with epidote patches (brecciated balls) -poss. a very fine gr. crystal ash tuff	20 - 25 ? crude	Strong epidotization, patchy up to 8cm. 754.61 - 756.00m epidotized interval Weak chloritization pervasive Tr sericite Very weak calcite veinlets <1mm, locally infill fractures within epidote patches.	1-2% diss. py blebs throughout	Possible intermed. to felsic 756m to due to loss of epidotization Traces of hematite present
756.00 to 757.17	INTERMED.-FELSIC TUFFS +/- CRYSTAL TUFF	Colour - med. green-grey Grain size - aphanitic to fine Weak to mod. foliated Crudely layered intermed. to felsic fine ashes up to 20% fine gr. feldspar phenos	20 (15 - 25)	Weak chloritization, weak seritization, no epidote Mod. pyritization	3-7% diss. & stringer py, brassy subhedral grain throughout. avg 5%	

From To	Rock Type	Texture and Structure	Angle to Core Axis	Alteration	Sulphides	Remarks
757.17 to 757.90	QTZ EYE CRYSTAL-LITHIC(?) ASH TUFF	Colour - lt. grey Grain size - aphanitic matrix, coarse crystals Weak to mod. foliated Qtz eye crystal tuff (Rhyolitic) has 10-15% qtz eyes range 1-8mm avg 2-3mm & 4-5mm also <2% fine feldspar phenos	20 - 25 fol'n	Tr chloritization Tr to very weak seritization Tr calcite veinlets	1-3% very fine & fine gr. py diss. minor discont. stringers	
757.90 to 760.66	INTERMED. ASH TUFFS (ANDESITIC)	Colour - med. green Grain size - aphanitic to fine Weak to mod. foliated Weakly layered ash tuff (Andesitic) fine ash, locally more felsic bands (dacitic)	20 fol'n/ layering	Weak to mod. chloritization Tr sericite No epidote	3-10% brassy yellow fine to med. gr. pyrite as diss. & discont. stringers. Locally stringers over 45cm with 15-20% py ie)758.91 - 759.36m	
760.66 to 762.10	QTZ EYE CRYSTAL TUFF with minor bands ANDESITIC ASH	Colour - lt. to med. grey; tr green Grain size - aphanitic matrix, fine to coarse crystals Similar to above qtz eye crystal tuff 10-15% qtz eyes, avg 4mm Note 5mm-15mm andesitic bands	20 - 25 layering	Tr to very weak seritization Tr chloritization Weak pyritization	1-5% diss. brassy py Fine gr. also discont. stringers Avg. 3% py	

From To	Rock Type	Texture and Structure	Angle to Core Axis	Alteration	Sulphides	Remarks
762.10 to 770.72	ANDESITE ASH TUFFS	Colour - med. to dark green-black Grain size - aphanitic to fine matrix, fine crystals Weak foliated, locally mod. Andesite +/- Dacite Ash Tuffs, some fine gr. feldspar & mafic phenos throughout <1mm.	30 (20 - 40) fol'n	Weak +/- mod. chloritization pervasive Tr seritization local epidote patches at 765.97-766.22m 766.48-766.88m 767.18-767.53m 769.22-769.47m Epidote up to 3cm diameter balls rounded to subrounded balls.	Mainly stringers and patches of brassy yellow fine to med gr. py, range 2-40% often as stringers of discont. lenses. 762.10-762.85m: 3-5% py, diss 762.85-763.25m: 3-8% py, stringers 763.25-764.23m: 3-5% py, diss. 764.23-764.93m: 10-25% py, stringers 764.23-767.97m: 3-5% py, diss. 767.97-769.23m: 5-10% py, diss., stringer 769.23-770.72m: 1-5% py, diss, stringer	
770.72 to 772.96	FELSIC ASH to QTZ EYE CRYSTAL TUFF	Colour - lt. to med. grey, tr. green Grain size - aphanitic matrix, fine to coarse crystals Weakly foliated Felsic Ash to Qtz Eye Crystal Tuff Qtz eyes 5-15%, 1-6mm, avg 2-3mm	40 fol'n (30 - 50)	Tr to very weak seritization Tr chlorite along fol'n Very weak pyritization Weak to locally mod. qtz-calcite +/- epidote veins present	Py avg. 2% range <1-5% mainly diss. Locally as small (<1cm) blebs	
772.96 to 774.73	ANDESITE ASH TUFF	Colour - med. green Grain size - aphanitic to fine matrix Weak to mod. foliated Andesite Ash Tuff +/- Crystal Tuff with sparse epidote patches.	25 - 30 (20 - 40)	Weak to mod. chloritization Selective strong epidotized patches as beige-green subangular to subrounded balls <1cm to 10cm, avg 2cm, isloated balls/patches Very weak pyritization.	1-5% py, avg 1% throughout.	Minor diss hematite <2% locally, assoc. with epidote? Poss. minor crystal tuff present but obscurred by alteration.

From To	Rock Type	Texture and Structure	Angle to Core Axis	Alteration	Sulphides	Remarks
774.73 to 787.10	QTZ EYE CRYSTAL TUFF	Colour - Med. to lt. grey, sl. green Grain size - aphanitic matrix, fine to coarse crystals Weakly foliated Qtz eye crystal Tuff Relatively homogeneous looking 10-25% qtz eyes, range 0.5-4mm, avg 1-2mm	35 - 40 (25 - 45) fol'n	Very weak seritization, locally weak Tr to weak chlorite Very weak to weak mod. calcite veinlets One veinlet? with epidote patches at 782.20m	1-2% fine gr. py diss. throughout, locally sections have up to 5-8% py over narrow intervals (10cm)	
787.10 to 793.58	ANDESITE ASH TUFF - minor fine CRYSTAL TUFF	Colour - dark to med. green Grain size - aphanitic to fine matrix. Very weakly foliated Andesite Ash with Crystal Tuff Ash sections, relatively massive looking. Feldspar crystal are selectively strongly sausseratized, approx. 20% feldspar locally.	35 - 40 (10 - 50)	Weak chloritization pervasive Weak to mod. epidotization throughout - balls/patches range from <1cm to 4cm avg 1cm, subrounded; locally as discont. stringers. Weak to very weak calcite veinlets <2mm thick Tr to very weak qtz veinlets 3-4mm thick.	<1-2% diss subhedral pyrite fine gr., assoc. somewhat with epidote alteration.	
793.58 to 794.50	FELDSPAR-QTZ EYE FELSIC CRYSTAL TUFF (poss. a QTZ-FELDSPAR PORPH. DYKE?)	Colour - lt. to med. green-grey Grain size - aphanitic matrix, fine to med. crystals Very weak foliated Massive looking Upper contact distinguishable but orientation varies Felsic Ash Tuff Feldspar 5-20% subhedral to euhedral avg 1mm some zoned as denoted by sausserization Qtz eyes 1-5% 1mm-6mm, avg 2-3mm Poss. rare lapilli 4-5mm with feldspar phenos.	40 (40 - 45) top ctc 80 ?	Barren to tr sericite Tr chlorite Weak epidotization of feldspar phenos throughout section, also clots of epidote, small balls <1cm locally	No visible sulphides to trace	

From To	Rock Type	Texture and Structure	Angle to Core Axis	Alteration	Sulphides	Remarks
794.50 to 809.63	ANDESITE ASH TUFF to CRYSTAL ASH TUFF	Colour - med. to dark green with lt. green epidote patches Grain size - aphanitic to fine matrix, fine to med. crystals. Very weak to weaky foliated Relatively homogeneous looking aside from the alteration (ep). Andesite Ash Tuff +/- Crystal-Ash Feldspar crystals fange 5-40%, avg 25%, <1-2mm avg 1-2mm, no distinct "beds" of feldspar crystal tuff. Feldsp. selectively sausseritized. Poss. 1-5% mafic phenocrysts locally 2-3mm. Narrow fault? at 802.23 - 802.28m 801.32 - 809.63: Andesite Tuff - Crystal Tuff (Poss. a flow by probably not as epidote balls are spherical vs. ellipsiodal)	35 - 40 (25 - 45)	Weak to mod. chloritization Very weak to stong/intense epidotization ranges from sparsely diss. epidote balls(?) to intense epidotized patches (15cm) or balls 794.50-794.82: Mod. epidote 794.82-794.95: strong ep. 794.95-795.20: weak to mod. epidote 795.20-795.40: strong ep. 795.40-797.55: Mod. +/- strong epidote 797.55-798.05: very weak epidote 798.05-800.10: weak ep. 800.10-801.32: weak to mod. ep., weak calcite veinlets 1mm, very weak qtz veinlets 2-5mm 801.32-802.23: weak ep. 802.23-804.35: weak +/- mod. epidote 804.35-804.88: mod. +/- strong patches epidote 804.88-807.11: weak to mod. epidote 807.11-807.86: Mod. to weak epidote 807.86-809.63: weak ep. Weak pervasive chlorite alteration 801.32 - 809.63m	Diss. brassy subhedral to euhedral py 1-3%, avg. 1-2% as grains & patches. Locally 5% over 10cm assoc. with qtz vein.	Traces of hematite on some fracture coatings

From To	Rock Type	Texture and Structure	Angle to Core Axis	Alteration	Sulphides	Remarks
809.63 to 812.34	ANDESITE FLOW - AMYG(?) or DYKE with AMYG. CHILLED MARGINS	Colour - med. to dark green +/- grey Grain size - very fine Massive amygdaloidal flow(?) or dyke(?) 3-5% amygd. range 1-15mm avg 2mm, infilled with epidote and qtz. Narrow 1-2cm chilled margin, 3mm bleached margin of chill	 20 - 30	Very weak pervasive chlorite alteration Amygd. infill with epidote & qtz	Tr to no visible sulphides	
812.34 to 814.80	ANDESITE DYKE	Colour - dark to med. green Grain size - very fine Massive Andesite Dyke (no amygdules) Lower contact, chilled 2-3cm bleached margin	Top ctc ? Bottom ctc 25	Very weak 1-2mm calcite veinlets Very weak pervasive chloritization	Tr to no visible sulphides	

From To	Rock Type	Texture and Structure	Angle to Core Axis	Alteration	Sulphides	Remarks
814.80 to 827.35	ANDESITE ASH TUFF +/- CRYSTAL-ASH TUFF	Colour - med. to dark green Grain size - aphanitic to fine matrix, fine to med. crystals Very weakly foliated, relatively massive. Andesite Ash Tuff - Crystal-Ash Tuff (poss. flow?) Note epidote altered feldspar phenos and square outlined phenos pyroxene(?) to epidote which have lt. green rinds and med. green cores (10%) Epidote "balls" up to 2cm diameter. Minor fault gouge at 817.24m	45 (30 - 45)	Pervasive very weak to weak chloritization, locally weak +/- mod. at 815.20 - 815.60m Very weak to mod. +/- strong epidotization 814.80-815.50m: very weak epidote 815.50-816.05m: weak ep. 816.05-816.87m: mod. ep. 816.87-818.40m: weak to mod. epidote 818.40-818.55m: mod. ep. 818.55-818.85m: mod. to weak ep. 818.85-822.00: very weak to weak ep. 822.00-826.00: weak +/-mod. ep. 826.00-826.95: tr ep. 826.95-827.35m: mod. to strong ep. + qtz vein	1-8% py as diss grains and patches. avg.3% py, locally sections with 5-8% py absent of epidote alteration; diss, also local stringers 2-10mm thick ie) 819.80m, 825.03m, 825.13m, 825.19m 826.95 - 827.35m: 1% cpy as patches with hematite in qtz vein 3-5% diss py	Assay BCD 6443 825.00-825.25m 5-8% py, stringers Litho BCD 6056 822.00 - 825.00m Assay BCD 6484 826.95 - 827.35m 3-5% py, 1% cpy
827.35 to 829.20	ANDESITE DYKE	Colour - dark green-black Grain size - fine to aphanitic Massive, weak to mod. foliated Equigranular dyke. Irregular but sharp contact along with qtz-calc. vein	Top ctc 0 - 15	Weak pervasive chloritization Weak to mod. local calcite 1mm veinlets	2-8% py, avg 3-5% as fine gr. diss. and blebs	Litho BCD 6076 827.35 - 829.20m

From To	Rock Type	Texture and Structure	Angle to Core Axis	Alteration	Sulphides	Remarks
829.20 to 830.58	DACITE ASH TUFF (or DYKE)	Colour - med. grey to sl. green Grain size - aphanitic to fine Relatively massive/homogeneous <3% qtz eyes, <1mm <5% feldspar phenos.	Fol'n 0 - 10	Tr chlorite, Tr epidote	1-5% py, avg 2-3%	Litho 829.20 - 830.58m
830.58 to 833.96	ANDESITE DYKE (same as above ANDESITE DYKE)	Colour - dark green Grain size - aphanitic to fine Massive, weak to mod. foliated, equigranular dyke - andesitic	ctcs broken up fol'n 0 - 10	Very weak chloritized throughout	3-5% fine gr py mainly as diss.	Lith BCD 6078 830.58 - 833.96m
833.96 to 839.42 E.O.H.	DACITE ASH TUFF or DYKE (poss. FLOW) similar to previous DACITE	Colour - dark grey to med grey Grain size - aphanitic to fine Weakly foliated, homogeneous looking. <3% qtz eyes <1mm <5% feldspar phenos <1mm diameter	ctc broken up	Tr sericite/chlorite	Avg. 3% diss. py fine gr, Note: 833.96 - 835.76m: 5-10% py as irregular patchy stringers	Assay BCD 6485 833.96 - 835.76m: 5-10% py Lith BCD 6079 834.00 - 837.00m

MTS 17

ASSAY SHEET

Sample Number	From (m)	To (m)	Estimate Cu	Estimate Zn	Length (m)	% Cu	% Zn	% Pb	gm/T Ag	gm/T Au	% SiO_2	% TiO_2	% Na_2O	% MgO	% Fe	PPM Cu	PPM Zn	PPM Pb	PPM Ag	PPB Au			
BCD 6402	614.17	614.60	-	-	0.43	0.068	0.08		0.4	0.01													
6404	655.24	656.50	-	-	1.26	0.012	0.01		0.2	0.01													
6421	762.80	764.23	-	-	1.43	0.001	0.01		0.4	0.01													
6422	764.23	764.93	-	-	0.70	0.001	0.01		1.5	0.01													
6423	768.02	769.20	-	-	1.18	0.001	0.01		0.5	0.01													
6443	825.00	825.26	-	-	0.26	0.005	0.02		0.8	0.01													
6484	826.95	827.35	1%	-	0.40	0.012	0.01		0.2	0.02													
6485	833.96	835.76	-	-	1.80	0.001	0.02		0.4	0.01													

HOLE NO MTS-17 Ext.

MTS 17 **LITHOGEOCHEMISTRY**

			MAJOR OXIDES										TRACE ELEMENTS									
SAMPLE NUMBER	FROM (m)	TO (m)	SiO_2	Al_2O_3	CaO	MgO	Na_2O	K_2O	Fe203	MnO_2	TiO_2	ppm Ba	ppm Cu	ppm Zn	ppm Pb	ppm Ag	% Zr	Rock Type	Alt	Min	Grid	
BCD 6005	539.00	542.00	47.90	14.53	10.37	6.31	2.51	0.08	12.90	0.35	2.59	60	192	96	50		0.007					
DIORITE																						
6006	596.00	599.00	69.53	13.90	1.80	3.41	0.73	2.99	5.08	0.08	0.37	1110	800	92	50		0.005					
6007	626.00	629.00	77.70	11.77	0.66	2.15	0.21	2.65	2.76	0.06	0.14	1220	14	36	50		0.005					
6008	652.00	655.00	71.35	13.61	1.46	3.38	0.24	2.54	5.02	0.08	0.29	1370	224	50	50		0.005					
6014	677.00	680.00	68.88	13.73	1.11	3.97	1.83	2.27	5.78	0.15	0.29	1140	12	36	50		0.005					
6023	692.00	695.00	47.27	14.93	11.10	6.66	1.96	0.07	13.23	0.31	1.98	50	124	64	130		0.005					
DIORITE																						
6039	711.00	714.00	56.08	16.45	3.40	6.01	3.19	1.27	10.26	0.43	0.68	580	120	72	100		0.005					
ANDESITE																						

Hole No. MTS - 17 EXT Entered by M.J. Gray Logged by M.J. Gray

LITHOGEOCHEMISTRY

			MAJOR OXIDES										TRACE ELEMENTS								
SAMPLE NUMBER	FROM (m)	TO (m)	SiO_2	Al_2O_3	CaO	MgO	Na_2O	K_2O	Fe203	MnO_2	TiO_2	ppm Ba	ppm Cu	ppm Zn	ppm Pb	ppm Ag	% Zr	Rock Type	Alt	Min	Grid	
6040	745.00	748.00	74.97	13.03	0.62	1.87	3.48	1.69	2.17	0.09	0.15	1500	2	28	50		0.005					
RHYODACITE																						
6041	764.00	767.00	50.63	18.32	1.96	8.16	2.23	1.65	12.83	0.33	0.95	3890	8	72	180		0.005					
ANDESITE																						
6055	790.50	793.50	55.89	16.86	3.14	8.17	3.11	0.42	9.12	0.26	0.77	410	42	68	110		0.005					
ANDESITE																						
6056	822.00	825.00	53.46	18.59	4.59	6.09	4.25	0.60	8.97	0.27	0.91	380	8	52	80		0.005					
ANDESITE																						
6076	827.35	829.20	58.40	16.04	1.49	6.88	3.93	0.51	9.47	0.24	0.70	.044	36	38	.015 %		0.005					
ANDESITE DYKE																						
6077	829.20	830.58	73.19	11.87	0.43	3.42	3.59	0.69	4.50	0.11	0.21	.088	28	16	.005		0.005					
DACITE																						
6078	830.58	833.96	55.93	16.96	0.83	7.92	3.85	0.62	10.59	0.27	0.71	.084	12	52	.015		0.005					
ANDESITE DYKE																						
6079	834.00	837.00	71.47	12.04	0.13	3.23	3.26	1.10	6.43	0.11	0.21	.125	6	16	.005		0.005					
DACITE																						

Hole No. MTS -17 EXT Entered by M.J. Gray Logged by M.J. Gray Page No. 21

CORPORATION FALCONBRIDGE COPPER

Grid Co-ordinates, 6+40W/8+70S

DRILL HOLE RECORD

x METRIC UNITS
IMPERIAL UNITS

HOLE NUMBER	GRID	FIELD COORDS	LAT.	DEP.	ELEV.	COLLAR BRNG.	COLLAR DIP	HOLE SIZE	FINAL DEPTH
MTS-18	CFC		8+70S	6+75W	385m	360	-55°	NQ	260.29m

PROJECT	CLAIM #	SURVEY COORDS.	DATE STARTED	DATE COMPLETED	CONTRACTOR	CORE STORAGE	CASING
PN 305			June 12/86	June 16/86	F. Boisvenu	Duncan	3.3m

PURPOSE

RQD LOG
COLLAR SURVEY
PULSE EM SURVEY
MULTISHOT SURVEY

ACID TESTS				TROPARI TESTS			MULTISHOT DATA		
DEPTH (m)	CORRECTED ANGLE	DEPTH ( )	CORRECTED ANGLE	DEPTH ( )	AZIMUTH	DIP	DEPTH ( )	AZIMUTH	DIP
30.5	-55°			Tropari sent for repair					
61									
91									
122									
152	-56°								
183	-55°								
213	-56°								
244	-55°								

HOLE NO MTS-18

ZIPPY PRINT - — BRIDGEPORT, RICHMOND

LOGGED BY A. J. Davidson
H. L. Gibson

From To	Rock Type	Texture and Structure	Angle to Core Axis	Alteration	Sulphides	Remarks
0 to 6.5		Casing				
6.5 to 9.5	Diorite	Coarse grained, equigranular to 6.5 then fsp. porphy. (border phase??) to 6.5 - 9.5 poss. intermediate crystal tuff		Strongly epidotized to 6.5 then unaltered.	Trace pyrite	
9.5 to 10.2	Rhyolite - Rhyodacite Tuff	Fine grained with occasional quartz phenos to 5mm.				
10.2 to 10.9	Intermediate Ash Tuff	Medium grey-green, fine grained broken up. Becoming silicified or dacitic in comp. 10.67 - 10.85		Very weak sericite quartz vein at 10.3/10cm	Trace pyrite	
10.9 to 11.8	Quartz Porphyry	10-15% qtz eyes to 5m, foliated at 80°		Weak sericite		
11.8 to 12.2	Quartz Eye Rhyolite	Occasional quartz eyes (1%) to 5mm size, aph-fg matrix.		Very, very weak sericite		
12.2 to 12.65	Intermediate Ash Tuff	Pale green, with fine cherty ash bed markings contact at 20° to CA Possible load casts & flames indicate tops to top of hole.	20°			
12.65 to 13.15	Diorite					
13.15 to 16.1	Intermediate Ash Tuff/ Flow	F - mg with occasional bands of more felsic/cherty ash at 13.7-13.9, 14.1, 14.7.	Cherty beds at 40°	No	Tr-2% py associated with cherty beds.	

From To	Rock Type	Texture and Structure	Angle to Core Axis	Alteration	Sulphides	Remarks
16.1 to 17.4	Chert - Cherty Ash	Very fine grained chert, starts with 2cm wide band of cherty argillite, then aph banded lt. grey chert, broken up & fractured		Cut by fine quartz & calcite veinlets.	Tr - 3% pyrite on fractures.	BCD 4726
17.4 to 19.7	Diorite					
19.7 to 21.64	Rhyolite - Rhyodacite Tuff	Fairly massive, med grained with occasional pheno & distinct fragments. Weakly banded at 60° to CA		Fresh in weak sericite.	Tr - 1% pyrite in wisps & diss., blebs py at contacts.	
21.64 to 26.2	Rhyodacite Ash - Lapilli Tuff	Well foliated, v.v. fine quartz eyes with lapilli to 2cm.	Fol. 60°	Wk - occ. mod. sericite. Tr chl in wisps.	Tr-2% py through in diss. & fractures fine veinlets.	
26.2 to 32.0	Rhyolite Ash - Cherty Rhyolite (Vit)	Becoming more massive, occ. quartz eyes with zones of cherty rhyolite. Micro quartz porph. cc/mm. Shows kink banding occ. Broken up & occ gouge from 29 - 31.4		Wk - occ mod. sericite.	Tr - 2% pyrite in fol. & diss.	
32.0 to 32.3	Rhyolite Crystal Tuff Py-Cp-Chl	Rhyolite crystal tuff with fsp phyric		fsp - ep chl bands	5-15% py, 0.5% cp, poss tr sph?	
32.3 to 39.15	Rhodacite Ash Crystall Tuff - Lapilli Tuff	F - mg & cherty in places to 34 then mottled lapilli texture with chlorite along foliation & fsp phyric.		Mottled green white text due to chl wisps mod ser + mod chl alt Some chl-ep most fresh.	Py 1-3% along foliation + associated with chloritic zones 3-5% py from 38-39.	
39.15 to 44.7	Rhyodacite Ash Fsp Phyric Crystal Tuff	Fsp phyric to 1-2mm, f.g. matrix, no quartz eyes, 10-15% fsp phenos. Extremely cherty with green talc colour from 41.2 - 41.9		Wk - mod. chl, wk ep. Some fsps - ep.	Tr - 1% py throughout along foliation + associated with chl.	

From To	Rock Type	Texture and Structure	Angle to Core Axis	Alteration	Sulphides	Remarks
44.7 to 60.45	Rhyolite Rhyodacite Ash - Lapilli Tuff	v.f.g. to start then becoming more lapilli size frags from 51, occ. qtz phenos, lt grey overall. Occ. cherty/glassy patches.	Fol. 80°	Wk ser + chl (mod.)	1-3% py throughout. Also patches <2cm of blebs of py associated with cherty patches.	
60.45 to 63.3	Quartz Eye Rhyolite	Well foliated, lt. grey rhyolite with 5-10% fine (<1mm) quartz eyes.	Fol. 90°	Mod. ser.	Tr py	
63.3 to 73.3	Rhyodacite Lapilli Tuff	Lt-med green, occasional quartz pheno cherty sections. Becoming more chl from 69.		Mod. chlorite mottling - lapilli; more chloritic from 69-73.	Tr - 1% py associated with more chl zones along foliation.	
73.3 to 93.2	Quartz Eye Rhyolite Tuff Lapilli Tuff	Lt grey - white, fine microporphy. qtz throughout, well foliated + kink banded. Becoming strongly gouged from 84.0m due to upcoming fault.		Mod - intense? sericite. Strong foliation + alt. - paper schist. Also due to upcoming fault.	1-5% py in thin wisps bandes + patches with black soft min? graph? sph? Also py with gouge zone.	
93.2 to 95.7	Fault Gouge Contact	Strong fault gouge with clay + hem.	60°			
95.7 to 105.95	Mafic Crystal Tuff	Fsp phyric in part diorite looking except for hem + leucoxene in matrix. Poss. fragmental + (Nitinat like?)		Quartz calcite veinlets throughout + epidote patches, hematite + leucoxene. Strong qtz veins from 105-105.55		
105.95 to 106.2	Diorite Dyke	Poss. xeno or frag. in mafic tuff.			Tr - 1% po.	
106.2 to 107.2	Mafic Tuff	As above with leucoxene				

From To	Rock Type	Texture and Structure	Angle to Core Axis	Alteration	Sulphides	Remarks
107.2 to 107.65	Diorite Dyke	Poss. frag.				
107.65 to 113	Rhyolite Tuff - Lapilli Tuff	Microcrystalline, no quartz eyes.	Contact at 50°	Mod chl + ser	Py 1-3% along contact.	
113 to 113.38	Fault Gouge				Py frags in fault gouge, py in band at contact.	
113.38 to 113.9	Mafic Tuff	A/A leucoxene, foliated.				
113.9 to 115.6	Diorite Dyke	Poss. frags.				
115.6 to 119.45	Mafic Tuff	With diorites from 116.35 - 116.6 117.5 - 117.7		Leucoxene + hem chl.	py, po	
119.45 to 132.0	Diorite	C.g. ep.				
132.0 to 148.6	Rhyolite Ash - Lapilli Tuff	Well doliated, f-m.g. with patches or veins or bands of mafic tuff at 133.3 133.85 - 134.2 Becoming kink foliated from 135 Chloritized ash? frags from 143-145. 145.2-145.65 F.g. mafic dyke 147.9-148.1 Fault gouge.	Bands 50° Fol. 60°	Mod sericite + fol. weak chl along fol. silicified from 140.	Tr-1% py along foliation + in blebs + associated with bands mafic tuff (diss). Occ. patches of py. Py increasing to 2-3% overall from 135. 141.72-141.73 Band of 20% py with 1% cp. Mafic dyke with tr py.	Assay #4730 137.55-138.55 Assay #4731 136.2-137.0
148.6 to 164.0	Mafic Tuff or Foliated Margin of Diorite	Foliated, f-m.g., leucoxene rich with calcite and qtz veins, leucoxene aligned along foliation 160 - as above becoming coarser grained.	30-50°	Chloritized?	Tr - 1% pyrite along foliation.	

From To	Rock Type	Texture and Structure	Angle to Core Axis	Alteration	Sulphides	Remarks
164.0 to 178.75	Diorite	Coarse grained Foliated margin 178.2 - 178.75				
178.75 to 180.95	Rhyodacitic Tuff	Colour - grey Grain Size - aphanitic Massive rhyodacitic tuff, speckled appearance possibly reflecting feldspar crystals - thin <10cm sections (beds?) of aphanitic argillaceous? andesitic tuff	contact at 180.95 at 60°		2-3% disseminated and bleby pyrite	
180.95 to 186.1	Andesitic Tuffs, Lapilli Tuffs	180.95 - 183.0 Medium to thin-bedded, aphanitic aphyric andesitic tuff and minor ash. Beds range in thickness from several cm to +20cm. Siliceous, "cherty" interbed @ 181.45 - 181.60 @ 55° to C.A. 183.0 - 186.1 - massive, thick-bedded andesitic tuff, bedding contact at 183.0 @ 70°			2-3% fine disseminated pyrite throughout, somewhat concentrated along fractures that parallel bedding - two, 1cm blebs of chalcopyrite in quartz vein at 181.90m - possible "bed" of massive pyrite in ash tuffs at 181.85m. 5cm wide section at "base" of unit with 25° to pyrite at 35-60° to C.A. in chl. carbonate veined andesitic tuff(?)	Geochem 3948 180.95 - 183.50

From To	Rock Type	Texture and Structure	Angle to Core Axis	Alteration	Sulphides	Remarks
186.1 to 214.80	Interbedded Rhyolite Tuff, Ash, Crystal Tuff and minor Andesitic Tuff	Colour - light grey Grain Size - aphanitic From 186.1 to 188.0 unit is definitely a breccia with lapilli size felsic, aphyric grey-green fragments (somewhat diffuse looking) in a darker green matrix - odd distinct large fragments up to 5cm in size - lapilli tuff After 188m units consists of massive sections of grey massive to green-grey mottled rhyodacite tuff? and minor sections "beds", of andesitic tuff - -contorted, thinly laminated felsic ash from 190.45 - 190.80 at <40° to C.A. Some sections have a mottled appearance and may be rhyodacitic crystal tuffs (Feldspar crystals). Strong gouge zone - fault - from 191.11 - 191.65 at <25° to C.A. 188 - 200.2 Interbedded massive rhyodacitic tuff, lapilli tuff and minor ash.		- weak but pervasive chlorite alteration	3-4% disseminated pyrite throughout rhyodacitic tuffs - locally sections 1-2cm wide contain up to 10% py - tr. ccp. - generally more sulphide (pyrite) in thinly bedded - laminated ash section (3-6%).	Geochem #3949 197.20 - 201.85 Assay #4729 206.04 - 206.60 (pyrite in laminated felsic ash).

From To	Rock Type	Texture and Structure	Angle to Core Axis	Alteration	Sulphides	Remarks
		200.2 - 200.4 Rhyodacitic crystal tuff - quartz + feldspar crystals = 8% 200.4 - 201.15 Rhyodacitic tuff, crystal tuff 201.15 - 201.25 Andesitic tuff, contact at 30° 201.25 - 201.85 Rhyodacitic tuff contact at 40° 201.85 - 202.25 Crystal tuff, 8% quartz/feldspar crystals 202.25 - 202.8 Andesitic tuff, massive 202.8 - 202.9 Rhyodacite tuff 202.9 - 203.0 Andesitic tuff 203.0 - 203.45 Quartz veins + chlorite 203.45 - 205.32 Rhyodacitic crystal tuff, massive - quartz and feldspar crystals 205.32 - 205.8 Andesitic tuff and ash, bedding at 50° to C.A. 205.8 - 207.0 Rhyodacitic tuff and minor ash laminae, bedding of ash at 30-45° to C.A. 207.0 - 208.45 Thin bedded - laminated andesitic tuff and minor ash laminae. Bedding at 65° to C.A. 208.45 - 214.80 Massive dacitic, weakly chloritized tuff - faintly laminated and finer grained from 208.45 - 210.90m.				

From To	Rock Type	Texture and Structure	Angle to Core Axis	Alteration	Sulphides	Remarks
214.80 to 219.35	Diorite	Colour - green Aphanitic, chilled contacts, feldspar porphyritic margins and interior. - calcite veins (60-70°) in dyke margins	contact at approx 80° to C.A.	Epidote altered feldspar.		
219.35 to 234.5	Interbedded Rhyolitic Tuff/ Crystal Tuff and Andesitic Tuff	219.35 - 221.8 Aphanitic, aphyric, massive rhyodacitic tuff - pale grey-buff siliceous mottling - frags - from 221.1 to 221.35m. 221.8 - 223.1 Aphanitic, andesitic tuff, massive with a faint lamination - thin interbed of rhyodacitic tuff (<5cm) at 222.6m, bedding at 222.6 also appears to be sub-parallel to to C.A. 223.1 - 234.5 Rhyodacitic crystal tuff ash tuff with minor felsic ash - crystal tuffs defined by 8-15%, epidotizied feldspar crystals up to 3mm - rhyolite tuffs some as crystal tuffs but lack feldspar crystals - felsic ash beds are massive to laminated sections with bedding at 50° to C.A. Thinbedded felsic ash at 225.65 - 225.85 (50° to C.A.) and from 232.75 - 232.86 (broken core).	contact at 223.1 at 55-60° to C.A.		- fine diss. pyrite (2-3%) throughout unit - irregular 3cm clot of ccp/py at 225.65m in thinly bedded ash unit	Geochem #3950 221.8 - 223.1 Geochem #4501 223.1 - 225.65

From To	Rock Type	Texture and Structure	Angle to Core Axis	Alteration	Sulphides	Remarks
234.5 to 252.0	Diorite	Colour - green Grain Size - fine-grained Massive, fine-grained diorite with 6% epidotized feldspar phenocrysts <4mm in size - few calcite veins at 50-40° to C.A. Contains sections of massive, aphanitic mafic tuff(?) from 242.8 - 244.1 @ 70° 248.93 - 249.27 @ 60° Diorite contact chilled at 249.27 with xenoliths of massive aphanitic tuff at contact - massive white quartz veins at 242.81 - 243.05 at 50° 243.12 - 243.22 at 50°	contact at 252.0m at 40°	Weak epidote alteration of feldspar		Aphanitic mafic Xenoliths within diorite contain fine feldspar crystals (5-10%) locally (<1mm).
252.0 to 260.29 E.O.H.	Andesitic Tuff	Colour - green Grain Size - aphanitic Massive, aphanitic andesitic tuff. 1-5mm subrounded grey "felsic fragments" (<5%) - cut by mineralized, pyritic veins, chloritic envelopes surrounding veins inpart a bedded structure to unit (at <15° to C.A.) - calcite veins at 15-40° to C.A.		- chlorite alteration mantling pyrite veins.	- minor diss. pyrite - up to 10% pyrite in narrow (2-5mm) veins at <15° to CA	Geochem #4502

LITHOGEOCHEMISTRY

SAMPLE NUMBER	FROM (m)	TO (m)	MAJOR OXIDES										TRACE ELEMENTS									
			SiO_2	Al_2O_3	CaO	MgO	Na_2O	K_2O	FeO	MnO	TiO_2	Ba	ppm Cu	ppm Zn	% Pb	% Zr	ppb Au	Rock Type	Alt	Min	Grid	
3944	13.1	16.1	54.21	19.09	3.67	5.56	3.86	2.75	7.63	0.18	0.76	0.16	65	104	.005	.005						
3945	35.5	38.2	71.47	14.77	0.69	2.58	2.73	2.76	3.28	0.20	0.31	0.116	46	92	.005	.006						
3946	75.75	78.80	75.23	12.96	0.53	2.85	1.35	2.70	3.38	0.13	0.16	.093	195	88	.005	.005						
3947	140.35	143.25	71.81	14.22	2.13	1.49	1.46	3.45	3.38	0.06	0.33	.194	500	48	.005	.005						
3948	180.95	183.50	58.24	17.54	1.02	5.48	4.21	1.10	10.20	0.24	0.71	.062	695	208	.017	.005						
3949	197.2	201.85	72.30	12.98	1.48	2.13	3.69	1.45	3.82	0.10	0.32	.104	116	62	.005	.005						
3950	221.8	223.1	56.41	17.18	0.75	8.04	0.13	2.53	12.82	0.31	0.62	.161	158	152	.010	.005						
4501	223.1	225.65	75.07	12.36	1.23	2.35	0.62	2.81	4.05	0.09	0.13	.166	13	41	.005	.005						
4502	255.12	257.55	41.14	18.30	8.29	8.39	2.88	0.09	16.67	0.37	2.25	.007	35	180	.014	.010						

Hole No. MTS-18 Entered by _____ Logged by _____ Page No. 11

ASSAY SHEET

Sample Number	From (m)	To (m)	Estimate Cu	Estimate Zn	Length (m)	% Cu	% Zn	% Pb	gm/T Ag	ppb Au	% SiO_2	% TiO_2	% Na_2O	% MgO	% Fe	PPM Cu	PPM Zn	PPM Pb	PPM Ag	Ba			
4726	16.1	17.4				.006	.010			5										2490			
4727	32.0	32.3				.056	.35	.001		5									1.2				
4728	80.9	82.0				.031	.29	.035		5									1.5	1200			
4729	206.04	206.60				.001	.01		0.1	5													
4730	137.55	138.55				.030	.01		0.4	5													
4731	136.2	137.0				.028	.02		1.0	10													

HOLE NO MTS-18

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CORPORATION FALCONBRIDGE COPPER

Grid Co-ordinates 7+40S, 6+40W

DRILL HOLE RECORD

x METRIC UNITS
IMPERIAL UNITS

HOLE NUMBER	GRID	FIELD COORDS	LAT.	DEP.	ELEV.	COLLAR BRNG.	COLLAR DIP	HOLE SIZE	FINAL DEPTH
MTS-19	CFC		7+45S	6+65W	395	0°	-50	NQ	163.68m

PROJECT	CLAIM #	SURVEY COORDS.	DATE STARTED	DATE COMPLETED	CONTRACTOR	CORE STORAGE	CASING
PN 305			June 17/86	June 19/86	F. Boisvenu	Duncan	3.65m

PURPOSE

RQD LOG
COLLAR SURVEY
PULSE EM SURVEY
MULTISHOT SURVEY

ACID TESTS				TROPARI TESTS			MULTISHOT DATA		
DEPTH (m)	CORRECTED ANGLE	DEPTH ( )	CORRECTED ANGLE	DEPTH ( )	AZIMUTH	DIP	DEPTH ( )	AZIMUTH	DIP
20	50.5°								
61	50°								
91	50°								
122	49°								
152	48°								

HOLE NO MTS-19

LOGGED BY H. L. Gibson

ZIPPY PRINT - - BRIDGEPORT, RICHMOND

From To	Rock Type	Texture and Structure	Angle to Core Axis	Alteration	Sulphides	Remarks
0 to 3.65m	Casing					
3.65 to 43.30	Interbedded Rhyolitic Tuffs, Lapilli tuffs and Ash	Colour - light grey Grain Size - aphanitic 3.65 - 22.86 Massive rhyodacitic crystal tuff - fine, <2mm, quartz eyes (1-2%) - foliation @ 60-65° to CA 22.86 - 23.65 - felsic ash unit, massive, not bedded - possibly silicified - aphyric - few calcite/quartz veins at 40-60° to CA Contact at 23.65 @ 65° to CA Weak shear, at 22.2m @ 70° to CA 23.65 - 36.5m Foliated, kinked, sericitic felsic tuff/ash - aphanitic, aphyric - diss. and stringer pyrite. Foliation at 45-50° to CA Band of intermediate (dacitic) tuff? from 25.09 - 25.15m - trace to 1% fine (1mm) quartz eyes - sericitic gouge from 26.3 to 26.6 @ 50° to CA		Weak sericite alteration to 23.65 Moderate sericite alteration from 23.65 to 36.50m Weak sericite alteration from 37.50 - 43.30m	1-3% fine disseminated pyrite throughout to 23.65m 25% pyrite, tr. ccp in a 5cm and 1cm wide band (60° to CA) at 10.8m From 13.27 to 14.0 good chalcopyrite - pyrite in stringers up to 8mm wide - average <3% ccp over interval Assay #4732 13.27 - 14.0 Assay #4733 10.70 - 11.15 Assay #4734 25.15 - 26.4 Assay #4735 29.65 - 30.07 Semi Massive pyrite/ quartz	Geochem #4503 6.09 - 8.53 45% recovery from 3.65 - 6.09m - boulders of Diorite at 3.65m? 96% recovery from 6.09-8.53m Geochem #4504 23.65 - 25.09

From To	Rock Type	Texture and Structure	Angle to Core Axis	Alteration	Sulphides	Remarks
		36.50 - 38.68 Aphanitic, aphyric, massive to banded (bedded at 40-50° to CA) rhyodacitic ash - siliceous, cherty appearance from 36.5 - 37.35 thereafter more tuffaceous in appearance.			From 23.65 to 35.0 unit is characterized by 3-5% disseminated pyrite with stringers or bands of near massive pyrite (tr. ccp) from 2-3mm (averaging 1-2cm) up to 20cm. Semi massive (25% pyrite) pyrite, tr. ccp from 29.65 - 30.07 plus vein-like quartz in sericitic felsic tuffs (#4735) Assay #4736 35.0 - 36.5m 10-15% pyrite as stringers + disseminations tr. ccp.	Geochem #4505 36.50 - 38.68
		38.68 - 39.50 Quartz-eye crystal tuff, 1-2% QP up to 3mm. - foliation wraps around crystals - rhyodacitic aphanitic matrix - minor, <1% diss. pyrite				
		39.50 - 43.30m Massive, grey rhyodacitic tuff, trace 1-2mm quartz crystals - pyrite stringers/fractures at 50° to CA - <1% diss. pyrite			From 42.80 - 43.30 unit contains 8% pyrite, principally as stringers @ <20° to CA, tr. to minor ccp (<1%) Assay #4737 42.80 - 43.30	Geochem # 4506 39.55 - 42.80

From To	Rock Type	Texture and Structure	Angle to Core Axis	Alteration	Sulphides	Remarks
43.30 to 44.16	Semi-massive Stringer Sulphides	Colour - Brass yellow Sulphides with milky-white quartz, minor sericitic rhyolite			Unit averages (+)30% pyrite with two sections 12cm in width with >60% pyrite, tr. ccp. Assay #4738 43.30 - 44.16	Coarse-grained textures (+5cm) similar to stringers at Tom shaft and elsewhere on property (Mona, Killer Gossan) and to those at Buttle Lake.
44.16 to 44.55	Sericitic Pyritic Rhyolitic Tuff	Colour - light grey Grain Size - aphanitic Aphanitic, quartz porphyritic massive rhyolite tuff - foliation @ 35° to CA - milky-quartz veins at <35° to CA - quartz eyes (2%) typically <3mm but up to 5mm		Moderate sericite alteration	Pyrite, minor chalcopyrite in (<30°) stringers <1cm in width - 10% sulphides overall, <1% ccp Assay #4739 44.16 - 44.55 (Geochem also)	
44.55 to 45.00	Semi-Massive Stringer Sulphides	Colour - yellow - 30% sulphides - sericitic rhyolite - milky quartz		Strong sericite	Chiefly pyrite but with minor ccp (<1%) - massive sulphides (>60% sulphides) over 13cm from 44.60 - 44.73 Assay #4740 44.55 - 45.00	- coarse grained (5mm) stringers

From To	Rock Type	Texture and Structure	Angle to Core Axis	Alteration	Sulphides	Remarks
45.00 to 50.9	Sericitic Rhyolitic Crystal Tuffs/Tuff	Colour - light grey Grain Size - aphanitic - fine 1-2mm quartz eyes (<2%) - odd 3mm quartz crystals - aphanitic matrix - faint massive, lighter cherty grey fragments - possible "bed" of lapilli tuff from 45.65 to 46.10, - charagerized by light grey aphanitic lapilli size (<3cm) rhyodacite frags (<20%) in a lighter grey, more sericitic matrix. Bedding @ 60° - 20° to CA From 47.6 - 48.2 unit has a banded appearance (<20°) reflecting alternating light + dark grey cm-size bands - odd sections with fine feldspar (<1mm) crystals after 50m.		Weak sericite alteration throughout, however unit is characterized by narrow sections of massive light green sericite which could be totally altered portions of tuff or altered "ash" beds? - sericite sections at 46.1 - 46.30 at <10° to CA 46.55 - 46.8 at 30° to CA 47.45 - 47.6 at 25° to CA - sericitic sections characterized by massive nature and sharp contacts	Diss. and stringer pyrite throughout unit - 2-5% Assay #4741 46.8 - 47.45 Good py (minor ccp, <1%) in stringers with light apple-green micas Locally - 8% sulphides	Geochem #4507 45.00 - 46.8 Geochem #4508 50.9 - 53.94
50.9 to 123.4	QP Rhyolite	Colour - light grey Grain Size - aphanitic Massive, aphanitic grey rhyolite. Contact at 50.9m is "gradational", Quartz eyes become more abundant 2-3% and larger (up to 6mm) and the unit is generally more massive - possible flow? Variable percentage of feldspar phenocrysts - quartz phenocrysts subhedral and clear grey in colour <1% fine (1mm) feldspar phenocrysts locally. - foliation more pronounced in sericite altered sections. Strongly foliated (sheared locally) from 65.53 - 71.0m, main fault, with gouge, from 69.60 - 69.85m at 40° to CA. - quarz-veined (<30° to CA), chloritic shear zone from 100.25 - 100.65		Wk sericite altation to nil. - moderate sericite alteration from 86.87 - 90.52 - moderate foliation and 3-4% diss + fracture pyrite (Geochem #4510). Moderate to weak sericite alteration associated with stringer mineralization from 98.0 - 98.65m	Specks of fine disseminated pyrite - pyrite stringer mineralization at 76.3m, 77.2m, 81.8 (over 5cm) - tr ccp - 3-4% py (ftr + diss) from 86.40 - 90.52 - 20% pyrite, 1% ccp in stringers with milky quartz from 98.0 to 98.30 (Assay #4742) and 15% pyrite tr. ccp in fine stringers from 98.52 to 98.65 at 50° to CA	Box #14 From approx. 78.0m - 83.0m box opened on transit and the core spilled. Geochem #4509 72.23 - 75.28m Geochem #4510 86.87 - 90.52 Geochem #4511 117.04 - 120.09

From To	Rock Type	Texture and Structure	Angle to Core Axis	Alteration	Sulphides	Remarks
		After 120.4 unit has a "speckled grey appearance" and noticeably less QP (<1%) and appears to grade into a massive, finely feldspar phyric rhyolite at 123.40m.		Moderate, pervasive sericite alteration from 99.70 - associated with 1-2% diss. and fracture pyrite - 10% pyrite (tr. ccp) with grey quartz and sericitic rhyolite from 107 - 107.57 (Assay #4743)	Pyrite, trace to nil ccp stringers (1-2cm wide) at 112.1, 113.35, 116.1, 118.5, 118.7, 119, 121.25 at 30-60° to CA	
123.4 to 129.05	Feldspar Phyric Rhyolite	Colour - light grey Grain Size - aphanitic Massive homogenous unit 3-4%, 1-2mm, white feldspar crystals - aphanitic matrix - broken and sheared rhyolite from 125.5 - 126.7 - 8cm of gouge at 126.17 (50°) marks fault	Contact at 129.05 @ 40-45° - sharp	- wk sericite	- few stringers of pyrite (<1cm wide) - 2cm wide py stringers at 45° to CA at contact at 129.05	Rhyolite crystal tuff or flow
129.05 to 130	Quartz Crystal Tuff (Rhyolite)	Colour - grey - 8-12%, 1-3mm quartz, phenocrysts - aphanitic matrix - massive, non bedded unit			Fine irregular stringers of pyrite	
130 to 130.95	Feldspar Phyric Rhyolite	Same as 123.4 - 129.05 Contact at 130.95 not sharp but marked by absence of feldspar crystals				
130.95 to 144.30	Aphyric Rhyolite	Colour - grey Grain Size - aphanitic Massive, homogeneous aphanitic, aphyric rhyolite - foliated @ 30° to CA - tr. quartz eyes		- weak sericite	py stringers scattered throughout unit with 5cm of pyrite stringer mineralization @ 137.4m (Assay #4744, 137.66 - 137.45m) - minor (1%) diss. pyrite - tr. ccp	Geochem #4512 138 - 141

From To	Rock Type	Texture and Structure	Angle to Core Axis	Alteration	Sulphides	Remarks
144.30 to 144.80	Fault Gouge	- strong fault - chlorite/sericite gouge - 40° to CA				
144.80 to 163.68m E.O.H.	Quartz Eye Rhyolite	Colour - grey Grain Size - aphanitic Massive rhyolite, aphanitic with 1% fine (<2mm) subhedral quartz crystals - unit foliated within 3m of fault otherwise massive - foliated at 45-50° to CA - weakly sheared from 154.40 to 155.8 at 35° to CA - kinked foliation		- weak sericite where foliated in proximity to fault	- fine disseminated and fracture/stringer pyrite locally - good 1-5cm wide py stringer at 30° to CA at 145.20m	Aphanitic mafic dykes from 158.90 - 159.2 at 50° 151.88 - 161.98 at 70° and a 2cm wide mafic dyke @ 156.1m Geochem #4513 149.35 - 152.40

LITHOGEOCHEMISTRY

SAMPLE NUMBER	FROM (m)	TO (m)	MAJOR OXIDES SiO_2	Al_2O_3	CaO	MgO	Na_2O	K_2O	FeO	MnO	TiO_2	Ba	TRACE ELEMENTS ppm Cu	ppm Zn	% Pb	% Zr	ppb Au	Rock Type	Alt	Min	Grid	
4503	6.09	8.53	71.43	13.27	1.68	3.76	1.06	2.55	4.22	0.11	0.30	.085	76	44	.005	.005						
4504	23.65	25.09	73.98	12.24	1.05	2.52	0.69	2.62	5.46	0.05	0.25	.123	225	28	.005	.005						
4505	36.5	38.68	73.78	10.88	1.48	1.21	0.32	2.72	8.58	0.05	0.21	.152	128	24	.005	.005						
4506	39.55	42.80	72.14	12.60	2.71	1.27	0.70	2.87	5.94	0.08	0.25	.170	119	22	.005	.005						
4507	45.0	46.8	66.78	17.67	0.95	1.10	0.30	4.87	5.78	0.05	0.70	.338	33	21	.005	.005						
4508	50.9	53.94	71.17	14.21	2.15	2.28	1.16	2.54	5.04	0.13	0.29	.191	215	36	.005	.005						
4509	72.23	75.28	71.85	14.03	0.79	3.35	0.90	2.56	4.44	0.07	0.29	.111	56	43	.005	.005						
4510	86.87	90.52	72.28	13.37	0.90	3.59	0.48	2.43	5.00	0.08	0.26	.176	76	55	.005	.005						
4511	117.04	120.09	70.00	14.09	2.13	3.20	0.65	2.48	5.42	0.12	0.28	.147	29	45	.005	.005						
4512	138.00	141.00	71.87	13.80	0.71	2.57	2.31	2.31	4.54	0.05	0.23	.148	24	20	.005	.005						

Hole No. MTS-19 Entered by _____ Logged by _____

LITHOGEOCHEMISTRY

SAMPLE NUMBER	FROM (m)	TO (m)	MAJOR OXIDES SiO_2	Al_2O_3	CaO	MgO	Na_2O	K_2O	FeO	MnO	TiO_2	Ba	TRACE ELEMENTS ppm Cu	ppm Zn	% Pb	% Zr	ppb Au	Rock Type	Alt	Min	Grid	
4513	149.35	152.40	71.49	13.74	0.72	2.60	2.34	2.05	5.50	0.08	0.27	.125	184.	40	.005	.005						

Hole No. MTS-19 Entered by _____ Logged by _____ Page No. 9

ASSAY SHEET

Sample Number	From (m)	To (m)	Estimate Cu	Estimate Zn	Length (m)	% Cu	% Zn	% Pb	gm/T Ag	ppb Au	% SiO_2	% TiO_2	% Ba	% MgO	% Fe	PPM Cu	PPM Zn	PPM Pb	PPM Ag	PPB Au			
4732	13.27	14.0				.58	.01		3.6	30			900										
4733	10.7	11.15				.31	.01		1.5	10			790										
4734	25.15	26.4				.12	.01		1.7	5			850										
4735	29.65	30.07				.11	.01		2.5	15													
4736	35.0	36.5				.002	.01		0.2	5													
4737	42.8	43.30				.011	.01		0.4	5													
4738	43.3	44.16				.067	.01		1.8	20													
4739	44.16	44.55				.006	.02		0.1	5													
4740	44.55	45.00				.372	.01		3.0	70													
4741	46.8	47.45				.007	.02		0.2	5													
4742	98.0	98.3				.324	.01	.01	3.9	40													

HOLE NO MTS-19

ZIPPY PRINT - - PRINT, RICHMOND

CORPORATION FALCONBRIDGE COPPER

Grid Co-ordinates 8+40S/8+65W

DRILL HOLE RECORD

x METRIC UNITS
IMPERIAL UNITS

HOLE NUMBER	GRID	FIELD COORDS	LAT.	DEP.	ELEV.	COLLAR BRNG.	COLLAR DIP	HOLE SIZE	FINAL DEPTH
MTS-20	CFC		8+40S	9+00W	370m	0°	-55°	NQ	293.52m

PROJECT	CLAIM #	SURVEY COORDS.	DATE STARTED: June 19/86 DATE COMPLETED: June23/86	CONTRACTOR: F. Boisvenu CORE STORAGE: Duncan CASING: 4.57
PN 305				

PURPOSE

RQD LOG . . PULSE EM SURVEY . .
COLLAR SURVEY . . MULTISHOT SURVEY . .

ACID TESTS				TROPARI TESTS			MULTISHOT DATA		
DEPTH (m)	CORRECTED ANGLE	DEPTH ( )	CORRECTED ANGLE	DEPTH ( )	AZIMUTH	DIP	DEPTH ( )	AZIMUTH	DIP
30	53°								
61	53°								
91	53°								
122	53°								
152	53°								
183	52-53°								
213									
244	50°								
274	49°								

HOLE NO MTS-20

LOGGED BY H. L. Gibson

From To	Rock Type	Texture and Structure	Angle to Core Axis	Alteration	Sulphides	Remarks
0 to 4.57	Casing					
4.57 to 5.18	Diorite					Broken pieces of Diorite
5.18 to 8.27	Massive Rhyolite	Colour - light grey Grain Size - aphanitic Massive, aphanitic, aphyric rhyolite - streaky light green colouration - sheared, gouged contact with Diorite at 7.7m (80-75°.)		Weak chlorite alteration?	Pyrite (tr. ccp) stringer mineralization, minor diss. pyrite - pyrite - chalcopyrite stringers over 3-5cm at 50° to CA @ 6.5m	Aphanitic mafic (And) dyke from 7.1 - 7.7m at 80°. to CA
8.27 to 38.95	Diorite/ Andesite Crystal Tuffs	Colour - green Grain Size - fine grained - aphanitic, aphyric chilled margins grade in to f. gr. feldspar porphyritic interior - massive milky white quartz veins from 17.7 - 17.75 at 40°. 17.82 - 18.07 at 60°. 19.8 - 19.90 20.37 - 20.45 at 30°. After 16m unit is heterogeneous and is characterized by random sections of fine-grained feldspar porphyritic diorite, aphanitic "diorite" and pyroxene? diorite - heterogeny of unit may indicated diorite is a succession of mafic andesitic crystal tuffs.	contact at 8.27m @ 75°.?	- epidote alteration feldspars	Weakly magnetic locally - 3cm X 1cm bleb of massive chalcopyrite in white quartz vein at 17.85m.	Heterogeneous nature of unit with feldspar porphyritic, aphanitic and f. gr. sections suggests unit may be bedded andesitic crystal tuffs. Geochem #4514 29.26 - 32.31

From To	Rock Type	Texture and Structure	Angle to Core Axis	Alteration	Sulphides	Remarks
		- Feldspar Porphyritic to 17.37 - aphanitic from 17.37 - 18.63 - Feldspar Porphyritic 18.63 - 20.00 - Pyroxenite Porphyritic ?) from 20.0 - 23.30 - Feldspar Porphyritic from 23.30 - 23.60 (at 30°.) - aphanitic from 23.60 - 24.35 - Feldspar Porphyritic from 24.35 - 24.44 - aphanitic from 24.44 - 24.50 (at 80°.) - Feldspar porphyritic from 24.50 - 26.75 (30°.) - aphanitic from 26.75 - 29.75 - From 29.75 to 38.95 unit consists of alternating sections (Beds?) of feldspar porphyric diorite or crystal tuff (Andesitic), aphanitic diorite/tuff at - Possible good bedding at 35.05 at 75°. - 80°. to CA - from 35.95 - 38.95 unit is a lighter grey colour - strong gouge (Fault) over 5cm at 38.95m @ 80° to CA				
38.95 to 55.0m	Rhyolite tuff and ash	Colour - grey-green Grain Size - aphanitic Unit has a "marbled appearance" with irregular to bed-like disrupted bands of siliceous, white rhyolite alternating with and within darker grey rhyolite - siliceous bands don't appear to be frags but may be disrupted beds - orginal bedding @ 45-60° to CA? Sections of massive rhyolite may be thicker beds of rhyolite tuff - strong foliation with local shear zones in unit after 50.70m approaching main fault zone - foliation at 60°, shear at <40°		- siliceous white "beds" may be silicified felsic ash	- pyrite (plus minor to trace chalcopyrite) along fractures oriented at 30 - 60 to CA subparallel to parallel to bedding(?) 1-2% total sulphides	Geochem #4515 38.95 - 41.2

From To	Rock Type	Texture and Structure	Angle to Core Axis	Alteration	Sulphides	Remarks
55.0 to 56.80	Fault Zone	55.0 - 56.4 Sheared feldspar porphyritic diorite(?) 56.4 - 56.80 Chlorite - clay gouge zone at 30° to CA				
56.80 to 71.32	Diorite	Colour - green Predominately a fine-grained to aphanitic but with distinctly feldspar porphyritic sections between 57.10 to 57.60 and 64.85 to 69.2 - Quartz veins from 1cm - 12cm in width at 60° to CA		Weak epidote alteration of feldspars	Chalcopyrite blebs in quartz veins at 62.85m and 64.7m	

From To	Rock Type	Texture and Structure	Angle to Core Axis	Alteration	Sulphides	Remarks
71.32 to 87.65	"Mine Horizon"	Colour - shades of grey! Grain Size - aphanitic Unit consists of Quartz porphyritic (<1% - 2%) tuff and ash that is strongly chloritized/sericitized and interlayered with cherty siliceous and massive chloritic beds locally. Bedding ranges from 25° to CA (most common) to 50° to CA - Quartz crystals range to 5mm, are subhedral and have a bluish cast. - Possible tectonic; shear related breccia @ 73.05 - 73.30 - broken sheared massive chloritic bed at 73.5m - bedding @ 25-30° to CA at 74.05m - alternating siliceous QP + chl QP beds - massive chlorite (black) beds and brownish siliceous bed (2.5cm) thick @ 25° to CA from 74.35 - 74.55m - Massive to thick-bedded QP chloritic beds from 74.55 to 81.80 with crude "wispy layering". From 81.80 - 83.80 unit is an extremely fine-grained, chloritized QP - med/ash From 83.80 - 87.65 QP, chloritized crystal tuff Few, white quartz veins at 30° + 70° to CA		- pervasive strong chlorite/sericite alteration of QP crystal tuff/ash - massive chloritic beds	- principally pyrite but with minor to trace chalcopyrite averaging a total of 3-5% throughout entire section - up to 2% ccp over 10cm locally - Best ccp from 74.55 - 81.80 which should average slightly less than 1% ccp over interval with section of 5-6% ccp over 5cm locally (83.30m) - Brown colouration (buff) to some more siliceous beds as at 74.40, suggest fine sphalerite. Assay #4745 72.35 - 73.20 Assay #4740 74.16 - 74.98 Assay #4747 74.98 - 76.55 Assay #4748 76.85 - 78.7 Assay #4749 80.20 - 81.80 Assay #4750 82.35 - 83.80 Assay #4701 84.43 - 86.00 Assay #4702 86.00 - 87.65	Mine Horizon here is a massive to thin bedded unit of QP tuff, ash and "mafic" (chloritic) sediment that is strongly chloritized and mineralized. Unit is a bedded succession that may underly the Lenora-Tyee argillitic units Geochem #4516 74.98 - 78.33 Geochem #4517 81.38 - 84.43

From To	Rock Type	Texture and Structure	Angle to Core Axis	Alteration	Sulphides	Remarks
87.65 to 145.0	Diorite	Aphanitic to feldspar porphyritic border - margin of Diorite - milky white quartz veins from 1cm to locally. 35m wide at <30° to CA - numerous gash-like irregular quartz and calcite veins at 5-20° to CA - becomes massive and fine-med. grained after 107.8m (finer grained, aphanitic sections <20cm wide may be chilled margins marking internal contacts) - becomes finer grained - aphanitic after 142.80 towards contact at 145.0	contact at 145.0 @ 70° to CA	Weak epidote alteration of feldspar	bleb (5m X 1.5cm) of ccp at 120.60m	Geochem #4518 108.81 - 111.86

From To	Rock Type	Texture and Structure	Angle to Core Axis	Alteration	Sulphides	Remarks
145.0 to 180.90	Mine Horizon	Colour - green Mine Package comprises a secession of chloritized ash, fine tuff and crystal tuff units of originally rhyodacitic composition indicated(?) by the presence of ubiquitous anhedral quartz crystals from 1mm to 6mm in size which comprise from <1% to 5% of some units - Bedding defined by variation in size/percentage of QP and grain size (ash vs tuff) - Bed thicknesses from 3cm - 1m (+) - Bedding somewhat kinked + folded but ranges from 45° to 70°(+) to CA - Fault gouge (chloritic) from 148.72 - 148.95 @ 80° to CA - Foliation @ 60° to CA and at <30° but kinked From 145.0 - 153.90 sequence of finely QP (1-3mm, <1% to 3%) ash, tuff and crystal tuff beds.		Assuming Quartz eyes indicated a more felsic provinance unit is pervasively chloritized	Fine disseminated, bleby and fracture sulphide chiefly pyrite and chalcopyrite are scattered throughout the unit (2-5%) Sulphide along foliation but also along bedding planes Assay #4703 148.13 - 150.60m 5-8% sulphides, approx. 1% ccp Assay #4704 155.33 - 156.36 Fine diss. py - ccp with a good stringer of ms ccp-py (1.5cm) at 155.37m at 85°to C.A. Assay #4705 158.80 - 159.46 Py - minor ccp with quartz veins + dissemination - 10% sulphides Assay #4706 160.45 - 162.30 Stringer + bleby diss. py-ccp- 10-15% total - 1% ccp good ccp stringer vein (5% over 2cm) at 161.83m	Repeat of mine package offset along Diorite(?) Geochem #4519 145.08 - 148.13 Geochem #4520 156.36 - 158.80 Geochem #4521 175.87 - 178.92

From To	Rock Type	Texture and Structure	Angle to Core Axis	Alteration	Sulphides	Remarks
		After 153.90 unit is more massive and contains 3 - +5% QP From 174.0m - 178.92 bed contains 5-8% QP From 178.92 - 180.03 QP crystal tuff with <2% QP 180.03 - 180.90 - med. - thinly bedded felsic ash, and tuff bedding at 55-60° to CA			From 162.90 - 173.40 unit contains 5-8% diss, bleby and fracture pyrite - chalcopyrite with good ccp stringers? from 163.1 - 163.15 - 5% ccp Assay #4707 162.90 - 163.68 Assay #4708 163.68 - 164.90 Assay #4709 164.90 - 166.52 Assay #4710 167.42 - 169.77 Assay #4711 169.77 - 170.8 Assay #4712 170.8 - 173.40 Assay #4713 180.03 - 180.90 Up to 10% py, minor ccp - qtz veins	

From To	Rock Type	Texture and Structure	Angle to Core Axis	Alteration	Sulphides	Remarks
180.90 to 257.2	Rhyolite Flow or Tuff	Colour - light grey Grain Size - aphanitic Massive, aphanitic, aphyric rhyolite - crude, faint banding at 60-30° to CA defined by variations in color (light-dark grey 3mm-1cm bands) may be bedding? - few calcite/quartz veins at 5-30° to CA - <1% fine (1mm) quartz eyes locally - gouged, sheared from 194.0 - 194.45 at 5-10° to CA - 5cm of gouge at 45° CA at 191.7 - unit becomes more massive and less "banded" in appearance after 197.5m and has a fine-grained "granular" texture to 245.3 - minor shear with py stringers at 45° to CA from 212.85 to 213.05 - Quartz vein is shear at 245.2-245.3 at 60° to CA		- nil to weak sericite - sericite alt. associated with pyrite stringer.	Fine disseminations of pyrite (tr ccp) as fracture fillings + along banding throughout unit. Py stringer mineralization - ccp in quartz vein (3° to CA) at 192m, 194.10m, 203.3, 224.50 (pyrite) Assay #4714 190.3 to 191.63 5% diss. pyrite, trace ccp Assay #4715 218.68 - 219.2 Chalcopyrite stringers + pyrite from 218.96 - 219.3 - 5% ccp over 7cm Good pyrite (minor ccp) stringer from 227.68 to 228.35m - 15-20% pyrite in sericitized rhyolite. Stringers @ 20-45° to CA Assay #4716 5cm wide py (minor ccp) stringers at 235.05 - 235.20 Assay #4717	Geochem #4522 181.97 - 185.01 Geochem #4523 212.44 - 215.49 Geochem #4524 239.88 - 248.93 Core broken from 224.63 to 226.40m

From To	Rock Type	Texture and Structure	Angle to Core Axis	Alteration	Sulphides	Remarks
		245.3 - 249.05 Strongly foliated, moderately sericite/chl altered rhyolite - possible crystal tuff - foliation at 45°, and locally kinked 249.05 - 257.2 Fine grained aphanitic, weakly QP crystal tuff with possible finely fragmental sections (lapilli tuffs - felsic fragments)				
257.2 to 270.09	Bedded Felsic Ash/Cherts Lapilli Tuff and Tuffs	Colour - grey 257.2 to 263.50m Rhyolitic tuff - mottled texture of light grey - green possibly reflecting fragments or broken beds - <1% QP - quartz veins at 20° to CA at 259.65m - thin bed of andesitic ash/ or mafic dyke at 35° to CA from 259.40 - 259.45 - fine tuff section from 259.8 - 260.7 contact at 260.7 at 20° to CA		Moderate to weak sericite alteration	257.2 - 265.25 1-2% fine diss pyrite, tr ccp From 261.0 - 262.25 unit contains approx. 3-5% sulphides in matrix to breccia and locally +10% sulphides - pyrite over 20cm from 261.95 to 262.15 (tr ccp) Assay #4718 Fine-grained dark sulphides (brown) possible fine pyrite and sphalerite(?)	Geochem #4524 257.2 - 260.7 Geochem #4525 265.25 - 267.80

From To	Rock Type	Texture and Structure	Angle to Core Axis	Alteration	Sulphides	Remarks
		Interlayered felsic ash, chert, lapilli tuff and tuff 263.50 - 263.70 Felsic ash/chert, internal laminated at 45° to CA however beds are broken and actual bedding may be at 20° to CA 263.70 - 264.0 Felsic lapilli tuff, QP 264.0 - 264.15 Bedded siliceous felsic ash, chert, minor pyrite - Bedding at 80° to CA 264.15 - 265.25 Chloritized felsic lapilli tuff - broken beds, - chloritized - thin cherty ash bed (3cm) at 265.05 at 60° to CA 265.25 - 266.30 - thin bedded to laminated felsic ash, cherty - minor pyrite contact at 265.25 @ 40-30°, at 266.30 at 15° to CA - Minor andesitic ash near base of unit			Assay #4719 267.80 - 268.50 3-4% pyrite/tr. ccp along bedding + in fractures Assay #4720 269.5 - 269.60 Well bedded, brownish sediment, fine pyrite - barite Ba analysis also.	

From To	Rock Type	Texture and Structure	Angle to Core Axis	Alteration	Sulphides	Remarks
		266.30 - 267.15 Rhyolite tuff - light grey felsic fragments - chloritized 267.15 - 269.30 Thin bedded to laminated felsic ash and chert, minor andesitic ash - internal bedding at 5-30° to CA - contorted layering - contact at 269.30 @ 40° 269.30 - 270.09 - fine andesitic ash with felsic ash beds at 40° to CA - minor pyrite in felsic ash beds				
270.09 to 286.00	Diorite	Colour - green Grain Size - f.gr. - m. gr. Aphanitic - f. gr. chilled margins with gash-like calcite veins at 3 + 20° to CA from 270.09 - 273.3m - Feldspar porphyritic f. gr. - m. gr. interior to 283.2 - F. gr. chilled margins from 283.2 to 286.0	Contact at 270.09 at 40° to CA	Weak epidote alteration of feldspars		
286.00 to 293.52 E.O.H.	Rhyolite	Colour - grey Grain Size - aphanitic Massive, rhyolite tuff/lapilli tuff - fine (<1mm) quartz crystals (<1%) - possible felsic lapilli size frags (<1cm - 2cm) from 286.0 - 288.40 may be broken beds - streakly chloritic bands (beds?) <1cm in width) - more massive after 288.40 but still contain fine irregular wispy chloritic bands at 40° to CA Broken core with thin 2-4cm wide shears at <45° to CA from 290.5-291.7		- weak chlorite alteration	Fine disseminated pyrite along fractures + with chloritic wisps/bands 1-2% overall	Geochem #4526

LITHOGEOCHEMISTRY

SAMPLE NUMBER	FROM (m)	TO (m)	MAJOR OXIDES SiO_2	Al_2O_3	CaO	MgO	Na_2O	K_2O	FeO	MnO	TiO_2	P_2O_5	TRACE ELEMENTS ppm Cu	ppm Zn	% Pb	% Zr	ppb Au	Rock Type	Alt	Min	Grid	
4514	29.26	32.31	50.56	14.33	10.30	6.48	1.69	0.05	12.84	0.32	1.84	.005	172	98	.014	.008						
4515	38.95	41.20	72.34	14.00	0.91	1.39	3.54	2.19	3.82	0.10	0.18	.074	52	28	.005	.005						
4516	74.98	78.33	58.40	16.71	0.57	8.40	2.19	1.47	9.10	0.48	0.78	.028	276	196	.005	.005						
4517	81.38	84.43	58.30	16.72	0.28	8.28	2.05	1.72	9.84	0.46	0.79	.028	840	208	.005	.006						
4518	108.81	111.86	50.91	15.46	8.49	5.58	2.17	0.26	12.98	0.28	2.18	.012	160	92	.007	.010						
4519	145.08	148.13	58.13	16.42	0.34	9.04	1.23	1.43	10.80	0.29	0.78	.034	560	260	.007	.006						
4520	156.36	158.80	59.20	16.31	0.42	7.31	3.02	0.93	10.11	0.43	0.77	.022	196	248	.005	.005						
4521	175.87	178.92	57.52	16.28	0.59	7.53	3.33	0.69	10.49	0.66	0.77	.021	1080	268	.012	.005						
4522	181.97	185.01	73.43	13.15	1.12	2.38	1.31	2.82	3.82	0.29	0.32	.075	22	68	.005	.007						
4523	212.44	215.49	72.18	13.63	1.34	2.55	2.43	2.16	3.71	0.17	0.32	.073	180	84	.005	.008						

Hole No. MTS-20 Entered by _____ Logged by _____ Page No. 13

LITHOGEOCHEMISTRY

			MAJOR OXIDES										TRACE ELEMENTS									
SAMPLE NUMBER	FROM (m)	TO (m)	SiO_2	Al_2O_3	CaO	MgO	Na_2O	K_2O	FeO	MnO	TiO_2	Ba	ppm Cu	ppm Zn	% Pb	% Zr	ppb Au	Rock Type	Alt	Min	Grid	
4524	257.2	260.7	73.25	13.14	1.46	2.26	3.29	1.58	3.30	0.11	0.30	.054	12	57	.005	.008						
4525	265.25	267.00	70.52	13.76	1.39	3.29	1.77	2.35	4.96	0.17	0.38	.075	44	80	.005	.007						
4526	286.3	290.45	73.44	13.55	1.04	1.69	3.04	2.08	3.52	0.09	0.30	.094	188	80	.005	.005						

Hole No. MTS-20 Entered by _____ Logged by _____ Page No. 14

ASSAY SHEET

Sample Number	From (m)	To (m)	Estimate Cu	Estimate Zn	Length (m)	% Cu	% Zn	% Pb	gm/T Ag	ppm Au	% SiO_2	% TiO_2	% Na_2O	% MgO	% Fe	PPM Cu	PPM Zn	PPM Pb	PPM Ag	PPB Au			
4745	72.35	73.20				.023	0.03		0.8	5													
4746	74.16	74.98				.01	0.02		1.7	5													
4747	74.98	76.55				.038	0.01		1.6	5													
4748	76.85	78.7				.039	0.01		1.2	10													
4749	80.20	81.80				.043	0.02		0.4	5													
4750	82.35	83.80				.187	0.02		1.9	20													
4701	84.43	86.00				.04	0.01		1.2	5													
4702	86.00	87.65				.06	0.02		2.1	10													
4703	148.13	150.6				.108	0.01		1.6	10													
4704	155.33	156.36				.216	0.02		2.3	30													
4705	158.80	159.46				.035	0.01		1.9	10													
4706	160.45	162.30				.21	0.03		2.6	35													
4707	162.90	163.68				.35	0.02	0.01	4	65													
4708	163.68	164.9				.127	0.01	0.01	2.3	5													
4709	164.90	166.52				.093	0.01	0.01	2.1	5													
4710	167.42	169.77				.174	0.02	0.01	2.6	10													
4711	169.77	170.8				.116	0.01	0.01	3.4	25													
4712	170.8	173.4				.182	0.02	0.01	2.0	10													
4713	180.03	180.9				.090	0.01	0.01	1.7	15													
4714	190.3	191.63				.002	0.01	0.01	1.3	5													

HOLE NO. MTS-20

ASSAY SHEET

Sample Number	From (m)	To (m)	Estimate Cu	Estimate Zn	Length ( )	% Cu	% Zn	% Pb	gm/T Ag	ppb Au	% SiO_2	Ba.	% Na_2O	% MgO	% Fe	PPM Cu	PPM Zn	PPM Pb	PPM Ag	PPB Au			
4715	218.68	219.2				.063	0.01	0.01	1.2	10													
4716	227.68	228.35				.027	0.01	0.01	2.3	30													
4717	235.05	235.2				.175	0.01	0.01	1.9	15													
4718	261.95	262.15				.004	0.01	0.02	0.3	5													
4719=	267.8	268.5				.009	0.01	0.01	0.2	5		1540											
4720	269.5	269.6				.012	0.01	0.01	0.4	5		920											

HOLE NO MTS-20

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Grid Co-Ordinates 9+45S/11+20W

DRILL HOLE RECORD

x METRIC UNITS
IMPERIAL UNITS

HOLE NUMBER	GRID	FIELD COORDS	LAT.	DEP.	ELEV.	COLLAR BRNG.	COLLAR DIP	HOLE SIZE	FINAL DEPTH
MTS-21	CFC		9+40S	11+85W	304m	0°	-50	NQ	288.03m

PROJECT	CLAIM #	SURVEY COORDS.	DATE STARTED	DATE COMPLETED	CONTRACTOR	CORE STORAGE	CASING
305			June 25/86	June 28/86	F. Boisvenu	Duncan	3.7m

PURPOSE

RQD LOG
COLLAR SURVEY
PULSE EM SURVEY
MULTISHOT SURVEY

ACID TESTS				TROPARI TESTS			MULTISHOT DATA		
DEPTH (ft)	CORRECTED ANGLE	DEPTH ( )	CORRECTED ANGLE	DEPTH (ft)	AZIMUTH	DIP	DEPTH ( )	AZIMUTH	DIP
100	50			497	90	78°(?)			
200									
300	50								
400	50								
500									
600	49								
700	49-50								
800	48								
900	48-49								

HOLE NO MTS-21

LOGGED BY Harold L. Gibson

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From To	Rock Type	Texture and Structure	Angle to Core Axis	Alteration	Sulphides	Remarks
0 to 3.7	Casing					
3.7 to 10.05	QP, Rhyodacitic Crystal Tuffs	Colour - dark grey green 3.7 - 4.4 Dacitic to rhyodacitic crystal tuff containing 3-5%, fine (1mm) feldspar crystals in an aphanitic dacitic matrix - foliated @ 40-50 to CA 4.4 - 10.27 Medium bedded chloritized QP crystal tuff, bedding defined by variations in percentage of quartz crystals from 4.4 - 5.45, densely packed, crowded quartz crystals (+6%, 2-4mm) From 5.45 - 5.85, bed contains fewer quartz crystals (<3%) From 5.85 - 7.0 Crowded QP crystal tuff as above, +10% quartz crystal up to 4mm in size contact at 7m at 45-50 to CA and gradational 7.0 - 9.63 Well foliated, quartz crystal tuff/lapilli tuff - foliated at 40 to C.A. - <3% QP - fine (1-2mm) flesic "frags" observed with Binocular microscope 9.63 - 10.05 Crowded QP crystal tuff, +10%, 1-4mm anhedral QP, dacitic matrix - fine bedding (1-2cm) at 60 to CA		Pervasive moderate chlorite alteration	Fine diss. (1-2%) pyrite in matrix and along fractures - tr. ccp	Geochem #4527 4.87 - 7.92 This chloritic QP tuff succession and underlying QP units may be equivalent to QP chloritic, Mine Sequence units intersected in holes MTS-20 + 22. QP units in MTS-21 may be offset along south fault.

From To	Rock Type	Texture and Structure	Angle to Core Axis	Alteration	Sulphides	Remarks
10.05 to 11.15	Andesitic Tuff and QP crystals	Colour - dark grey-green Fine "Andesitic" ash/tuff with Quartz Crystal tuff bed from 10.17 - 10.35 at 50 to CA - contact at 10.05 at 55-60		Weak chlorite alteration	Diss. pyrite (<1%)	Geochem #4528 10.05 - 11.15
11.15 to 12.05	Quartz Crystal Tuff	Colour - dark grey Massive, non-bedded unit with 1-2% QP up to 4mm		Pervasive, moderate chlorite alteration	1% diss. pyrite	
12.05 to 22.0	Diorite	Colour - green Weakly feldspar porphyritic margins, prophyritic, fine-grained interior - few quartz veins at 45 to CA		Weak epidote alteration of feldspar		
22.0 to 22.63	Quartz Crystal Tuff	Colour - grey Aphanitic, massive groundmass - 5% 1-3mm QP	Contact at 22.63 grada-tional	Very weak chlorite alteration	<1% diss. pyrite	
22.63 to 26.2	Bedded Rhyodacitic Ash	Colour - light - med. grey Grain Size - aphanitic Aphanitic, rhyodacitic ash beds, thin-thick bedded Bedding @ 75-85 to CA - Andesitic ash bed from 25.45 - 25.75 - thin beds (<5cm) of crystal (FP) tuff		Very weak chl. alteration	Trace pyrite	Geochem #4529 22.63 - 26.2
26.2 to 26.65	Andesitic Ash	Colour - grey Grain Size - aphanitic Massive bed of andesitic ash				

From To	Rock Type	Texture and Structure	Angle to Core Axis	Alteration	Sulphides	Remarks
26.65 to 26.70	Chloritized Dacitic Ash	Colour - dark grey-green Grain Size - aphanitic Massive bed of dacitic ash		Chlorite		
26.70 to 26.95	QP Crystal Tuff	Colour - dark grey Grain Size - aphanitic matrix Massive bed of QP crystal tuff - 2% QP - 4mm - fine FP crystals			Trace pyrite	
26.95 to 29.15	Rhyolitic Ash	Colour - grey Grain Size - aphanitic Massive, aphanitic ash, 1-2% QP (4mm) - non bedded	shear at 29.15 at 70	Weak sericite		Geochem #4530 26.95 - 29.15
29.15 to 62.55	Epidotized Andesite - Dacite Tuff - Lapilli tuff	Colour - green 2915 - 32.50 Massive, non bedded andesitic - Dacitic tuff, - Bed of QP crystal tuff from 29.98 - 30.6 32.50 - 62.00 Andesitic - Dacitic tuffs, crystal tuff, - Possible frags altered to epidote - Occasional QP (<1% - 4mm) - variations in % of epidote patches/frags may define crude massive, thick beds - few quartz/chl vein at 60 to CA - Quartz-crystal tuff bed from (AND-DAC) 50.30 to 53.0m at 60 to CA. Quartz crystals are more abundant near "base" of unit suggesting tops are up-hole. - thin bedded to laminated sections of andesitic ash separate massive to thick-bedded andesitic units at 60 to CA - "Square" mafic "pyroxene" crystals in andesitic tuff (<5%) from 57.15 - 58.0m. Crystals up to 1cm in size.		Spotty epidote alteration from 31.7 to 32.0 32.80 - 62.00 Pervasive epidote alteration principally as <1.5cm spots, which constitute up to 20% of some sections and as diffuse patches up to +5cm in size - smaller epidote spots may be after primary frags?	Fine diss. pyrite	Geochem #4531 32.61 - 35.60 Geochem #4532 44.80 - 47.85

From To	Rock Type	Texture and Structure	Angle to Core Axis	Alteration	Sulphides	Remarks
62.00 to 63.05	Thin Bedded Laminated Andesitic Ash	Interbedded fine andesitic tuffs/ ash. Bedding defined by light and dark green alternating beds from 20cm to <1cm Bedding @ 60-75 to CA		- weak epidote alteration of same beds	Tr pyrite	
63.05 to 64.50	Interbedded Rhyolite ash Tuff and Andesitic ash	Colour - grey-green 63.05 - 63.75 Aphanitic, aphyric rhyodacitic ash bed - wk chlorite alteration - minor pyrite 63.75 - 64.05 Epidotized, thin bedded to laminated andesitic ash/tuff. Bedding offset on small scale faults - soft - sed. loading features indicate tops down-hole? - 3cm wide cherty bed at "base" of unit (64.50) 64.05 - 64.50 Rhyodacitic crystal tuff with QP + FP - weakly hematized and chloritized.		variable, minor epidote + chlorite	minor, <1% pyrite throughout unit	
64.50 to 66.43	Thin Bedded Andesitic and Felsic Ash	Colour - green Grain Size - aphanitic Interbedded fine beds (<1cm) of grey to pink, hematitized felsic ash with green andesitic ash beds (up to 5cm) - Bedding locally disrupted and brecciated - Intraformational breccia - Bedding from 30-60 to CA		Weak hematite, chlorite	Tr pyrite	

From To	Rock Type	Texture and Structure	Angle to Core Axis	Alteration	Sulphides	Remarks
66.43 to 70.50	Andesitic Crystal Tuff	Poorly sorted crystal tuff containing - 2-3% anhedral to square mafic crystals to 1cm - 5% subhedral quartz crystals - <3% feldspar crystals In an aphanitic andesitic matrix - felsic ash bed (4cm wide) at 66.75m - possibly some lithic lapilli (<0.5cm) contact at 70.5m		- silicification patches - minor epidote alteration - hematitized quartz veins parallel to CA	Tr pyrite	Geochem #4533 66.43 - 69.19
70.50 to 82.8		70.50 - 71.85 contact at 70.5 marked by 2cm of felsic, brownish grey ash Thin bedded to laminated Andesitic Tuff/Ash - Bedding at 60 to CA 71.85 - 72.23 Rhyolite crystal tuff - 10% anhedral QP up to 3mm - aphanitic, rhyolitic matrix - steep contact 72.23 - 72.61 Andesitic ash bed massive - wk chlorite alteration 72.61 - 72.86 Rhyolitic crystal tuff - QP as above - contact parallel to CA - could be a block!! 72.86 - 82.8 Massive thick bedded to thin bedded (laminated) Andesitic tuff and ash. Bedding at 60 to CA - quartz - calcite hematite filled fractures at 40-90 to CA - mafic crystal (frags?) occur in some beds. From 79.4 - 82.8 unit looks more And - Dacitic in composition, and contains both mafic "pyroxene crystals" (1%) in a foliated matrix in could be ash flow tuff unit.		70.50 - 71.85 Wk chlorite-epidote alteration 71.85 - 72.23 Zip Tr. pyrite 72.86 - 82.8 Wk chlorite alteration, minor epidote	72.86 - 82.8 Minor pyrite throughout, tr. ccp 1% pyrite over 5cm at 82.8m.	Geochem #4534 72.86 - 82.8

From To	Rock Type	Texture and Structure	Angle to Core Axis	Alteration	Sulphides	Remarks
82.8 to 83.90	Andesitic Ash Tuff	Colour - green Grain Size - aphanitic Massive, homogeneous chloritized Andesitic - Dacitic ash tuff with 1%. Quartz crystals - increasingly foliated after 84.40m. - bed (<10cm - broken core) of QP Felsic Tuff from 83.3 - 83.40 - sheared and broken - few quartz veins		Pervasive chlorite alteration (moderate)	fine diss & fracture pyrite - 1% overall	- could be part of unit from 79.4 to 82.8 Geochem # 82.8 - 83.90m
83.90 to 90.30	Rhyolite	Colour - grey - white Grain Size - aphanitic Massive unit, strongly foliated and sheared - 1% quartz crystals up to 5mm - shear/fault zone for 84.30 to 89.30, strong gouge at 84.8m at 45 to CA - unit crudely banded after 89.60m		Sericite alteration	1-2% pyrite in distinct bands from 89.6 to 90.30m	Assay #4721 83.55 - 90.30 (+ Ba)
83.90 to 109.75	Rhyolitic Ash Flow unit?	Colour - light grey - white Grain Size - aphanitic 83.90 to 96.50 Massive unit, aphanitic and uniform - tr. quartz eyes (<2mm) - milky white quartz veins up to 20cm wide at 45 to CA from 92.65 - 93.45 96.50 to 106.20 Massive foliated rhyolite with faint, elongate to wispy more chloritic "mafic" fragments (2-4mm X 10-15cm) - local feldspar crystals + quartz eyes (<1%) 106.20 to 109.75 After 106.20 unit contains angular epidote "patches" which occur throughout unit or concentrated 2-3cm wide bands at 60-75 to CA - may be altered fragments - good epidote/hematite altered lithic block (3cm X 3cm) at 109m. - fine wispy to angular mafic fragments <1cm in size (2-5%)		Wk sericite alteration	Tr. disseminated pyrite - minor diss pyrite (1%) and pyrite within more chloritic "fragments" - tr ccp	Geochem #4535 93.57 - 96.62 Geochem #4536 102.71 - 105.76

From To	Rock Type	Texture and Structure	Angle to Core Axis	Alteration	Sulphides	Remarks
109.75 to 125.20	Epidotized Andesitic Tuff and Ash	Colour - green Grain Size - fine-grained Massive fine-grained Andesitic tuff. Thick bedded. Possible thin (1-2cm thick) beds of andesitic ash at 60-65 to CA at 116.6 Laminated felsic ash bed from 115.3 - 115.8 at 80 to CA From 118.15 to 120.5, unit has a fragmental appearance with dark green "mafic" lapilli + possible epidotized fragments From 124.5 to 125.20 unit is an aphanitic fine grained AND-DAC ash, without epidote spotting - massive, non-bedded unit		Diffuse epidote patches occur throughout unit	124.55 - 125.20, stringer + fracture controlled py - ccp mineralization 3-5% sulphides overall <1% ccp Assay #4722 124.55 - 125.20	Geochem #4537 111.86 - 114.91
125.20 to 139.45	Andesitic Ash/Tuff	Colour - green-grey Grain Size - f. gr. - aphanitic 125.20 - 125.55 Thin bedded, chert (silicified felsic ash?), bedding at 60 to CA - trace pyrite 125.55 - 127.65 Thin bedded to laminated (3cm to 0.5cm thick beds) ANDESITE - DACITIC ash and minor tuff Bedding @ 65-80 to CA - some broken, disrupted beds - minor pyrite along bedding - cherty beds (15cm) mark "base" of unit	contact at 125.2 @ 70 to CA sheared			Geochem #4538 125.20 - 125.55 Geochem #4539 125.55 - 127.65

From To	Rock Type	Texture and Structure	Angle to Core Axis	Alteration	Sulphides	Remarks
		127.65 to 139.45 Thin - medium bedded andesitic ash/tuff alternating with thinly - bedded to laminated grey Dacitic ash + minor chert Bedding @ 45-50 to CA 70 - grading suggests tops are down hole		Epidote alteration, minor chlorite of ash.	Minor (<1%) pyrite + tr ccp throughout unit	Geochem #4540 133.19 - 136.24
139.45 to 145.0	Epidotized Andesitic Tuff	Colour - grey - green Grain Size - aphanitic Epidote altered, aphanitic Andesitic tuff - massive unit, possibly bedded after 143.80m.		Pervasive epidote alteration principally as fine 2mm - 1cm sized clots (15-20%) - variation in % of epidote defines banding at 70 to CA (Bedding) from 143.80 - 145.0 - epidote may be alter. "frags" or feldspar crystals	Tr pyrite	
145.0 to 147.15	Dacitic Tuff	Colour - light grey-green Grain Size - aphanitic Massive, non-bedded unit - streaky foliation (chloritic bands 1m X +3cm) at 50 to CA		Moderate, pervasive chlorite alteration	Disseminated and fracture (foliation) controlled pyrite/ chalcopyrite throughout - 2-3% Assay #4723 145.25 - 145.77 5-6% py, 5% ccp in stringers plus milky quartz 10cm of 20% pyrite 1% ccp from 145.6 - 145.7	Geochem #4541 145.77 - 147.15
147.15 to 147.73	Epidotized Andesite Crystal Tuff	Colour - green Grain Size - aphanitic 6%, 1-2mm epi-altered feldspars - aphanitic matrix		Weak epidote	Tr. pyrite	

From To	Rock Type	Texture and Structure	Angle to Core Axis	Alteration	Sulphides	Remarks
147.73 to 152.7	Dacitic Tuff?	Colour - grey-green Grain Size - aphanitic - massive, aphyric unit - cut by milky white quartz veins at 5 + 75 to CA - tr. quartz crystals - Sections of broken core contain pieces of FP AND Crystal Tuff		- chloritized (mod.) locally	fracture + diss pyrite throughout unit and associated with quartz veins - 3m X 1cm bleb of ccp at 148.05m - stringer of pyrite - minor ccp with quartz vein from 152.58 - 152.70m.	Assay #4724 151.62 - 152.70
152.7 to 153.7	Andesitic Tuff	Colour - green Grain Size - aphanitic Massive, non bedded unit - aphyric		pervasive chlorite alteration (moderate)	fine, bleby pyrite along fractures tr. ccp	
153.7 to 157.4	Aphyric Rhyolite	Colour - grey Grain Size - aphanitic Massive, non bedded unit - foliated at 70 to CA - massive cherty siliceous areas may be frags or less foliated rhyolite - sheared from 153.8 - 154.25 with broken core - 2cm of chloritic And. tuff? at contact			Tr pyrite throughout with 5% pyrite, tr. ccp in two 3cm +2cm wide quartz veins at 75 to CA @ 156.8 + 156.88	
157.4 to 161.8	Quartz Eye Rhyolite	Colour - grey Grain Size - aphanitic - kinked, foliated rhyolite - foliation at 75-80 to CA with kink bands - 3-4% anhedral QP from 1mm to 4mm - massive aphanitic matrix		Weak, pervasive sericite alteration	Bleby and disseminated fracture pyrite parallel to foliation - tr. pyrite - 15% sulphide in stringers from 160.4 - 160.52 at 75 - 70 to CA in chl/ser rhyolite Assay #4725 160.35 - 160.73	- QP crystal tuff Geochem #4542 157.54 - 161.8

From To	Rock Type	Texture and Structure	Angle to Core Axis	Alteration	Sulphides	Remarks
161.8 to 164.1	Rhyolite	Colour - grey Grain Size - aphanitic Gradational contact at 161.8 unit differs from quartz eye rhyolite above in 1) <1% to Tr. QP 2) more massive nature - milky white quartz vein from 163.4 to 163.85m - ccp + py in quartz vein			Pyrite - ccp in quartz veins - good ccp in 1.5cm wide quartz vein at 161.05m	
164.1 to 178.45	Andesitic Tuffs, Crystal Tuffs and minor Dacite	Colour - green Grain Size - aphanitic 164.1 - 166.75 Massive, non-bedded unit 166.75 - 178.45 Medium to thin bedded alternating succession of 1) aphanitic, aphyric andesitic tuff/ash 2) thin beds of siliceous cherty ash 3) Beds of andesitic tuff with 1-2% epidotized, silicified lithic frags up to 3cm in size 4) Beds of lapilli tuff with 10-20%, 3mm - 1cm siliceous, epidotized lapilli. Quartz vein in chl shear marked by broken core from 474.3 - 474.7 Milky white quartz veins at 65 to CA from 175.77 - 175.97 and 176.14 - 176.29		164.1 - 166.75 Wk chlorite alteration	164.1 - 166.75 - stringer pyrite ccp mineralization from 165.0 - 165.65m Assay #4676 Assay #4677 171.8 to 172.1 - ccp - py in fractures and "sphalerite" in fragments (sphalerite bleb 1 X 1.5cm)	Geochem #4543 169.77 - 172.8

From To	Rock Type	Texture and Structure	Angle to Core Axis	Alteration	Sulphides	Remarks
178.45 to 220.00	Dacite Flow, Flow Breccia	Colour - grey Grain Size - aphanitic 178.45 - 185.5 Breccia unit - possible flow breccia with sections or beds of massive aphyric dacite. Dacite breccia consists of feldspar phyric (epi altered) dacite/ rhyodacite + tr. QP separated by grey aphanitic dacite - sections of massive non-porphyritic dacite may be beds of dacite tuff? After 185.5 - unit is predominately a massive FP, wk QP Rhyodacite massive flow? that is faintly brecciated from 201.05 to 201.3 - unit is extremely fine-grained and chloritized from 201.35 to 201.70 where sheared at 75 to CA Fine insitu breccia from 202.40 to 202.8 After 207m unit is characterized by stronger epi alteration of feldspar and as irregular patches, with the amount of epidote decreasing after 219.8m Contact at 220.0 is sharp, decrease in feldspar towards unit suggest chilling of "flow" Breccia immediately below contact may be related to underlying unit.		Wk epi alt. of feldspars Strong epi alt. from 207 - 219.8m - epidote patches appear to be largely replacing feldspar crystals however large angular nature of some "patches" may be after original frags or simply alteration patches within in matrix.	minor ccp-pyrite in quartz veins - fine diss + fracture controlled pyrite in grey dacitic tuff matrix - irregular stringers of fine pyrite, minor ccp and dark grey brown (pyrite) invade unit from 192 to 193.0m Assay #4678 192 - 193m 3-5% py, tr. ccp Bleb of ccp (3m X 1.5cm) at 200.55m clot of massive pyrite 5cm X 2cm in epidote patch at 212.55m.	Geochem #4544 181.96 - 185.01 Geochem #4545 206.35 - 209.4

From To	Rock Type	Texture and Structure	Angle to Core Axis	Alteration	Sulphides	Remarks
220.0 to 224.43	Aphyric to weakly FP Dacite	Colour - grey Grain Size - aphanitic Massive grey Dacite, <1% feldspar crystals but with 2-3% locally. - 10cm wide breccia zone at 220.0 consists of angular blocks of aphyric to wk FP dacite in a f. gr. fragmental, chloritic matrix (Flow contact breccia?)		Weak epidote alteration of feldspar - occasional epidote patch	Tr. pyrite, <1%	
224.43 to 232.0	Massive Rhyodacite - Dacite	Colour - light grey Grain Size - aphanitic Massive aphanitic aphyric rhyodac. - insitu "tectonic breccia" with angular rhyolite frags in a white quartz vein matrix from 226.05 - 226.75 - contact at 232.0 marked by increase in percentage of Feldspar and by faint breccia - Feldspar phyric sections (2%)		- unit becomes more chloritic from 227.0 to 232.0, moderate chlorite alteration	Tr. diss. pyrite and 1-2cm pyritic bands with tr ccp (<10% sulphide) - 1cm wide py-ccp stringer at 228.15 (75) - 5cm wide quartz vein with <2% pyrite, tr ccp at 228.5m - ccp-pyrite stringers with vein quartz from 231.25 to 231.45, <1% Cu - strong ccp-pyrite stringer from 231.8 - 231.92 at 75 to CA, 30% sulphide, 5-6% ccp Assay #4679 231.25 - 231.45 Assay #4680 231.8 - 231.92 Minor diss. pyrite, tr. ccp - fine fracture controlled sulphides, <1% overall	

From To	Rock Type	Texture and Structure	Angle to Core Axis	Alteration	Sulphides	Remarks
232.0 to 249.95	Feldspar Porphyritic Dacite	Contact at 232.0 marked by fragments of FP, epi alt. dacite in an aphanitic siliceous matrix - 5% pyrite, +1% ccp at ctc in an irregular breccia zone <.10m wide. Typically a homogeneo us, massive unit containing 3-5% feldspar crystal from 1mm - 3mm. - aphanitic, aphyric chloritic sections from: 233.55 - 236.0 237.4 - 241 243.1 - 245.5 - fault at 35 to CA 247.9 - 249.65 maybe mafic tuffs but appear to be chloritized, sheared sections of core with obliteration of the Feldspar crystals + increase in chlorite		Chlorite alteration associated with shears as indicated.	Minor diss. pyrite, tr. ccp - fine fracture controlled sulphides, <1% overall Assay #4681 241.35 - 242.05 bleb - diss pyrite (5%) + minor ccp (<1%) Assay #4682 244.42 - 244.86 - crudely banded (<2mm - 1cm wide), fracture controlled sulphides - principally pyrite but with <1% ccp - 3-4% sulphide over interval.	
249.95 to 279.55	Aphanitic fine grained Dacite?	Colour - grey Grain Size - aphanitic Massive, foliated homogeneous aphyric grey dacite Strong fault zone from 251.30 - 254.35 with 0.3m of chloritic gouge at 253.5m @ 30 to CA Unit becomes increasingly fine-grained, chloritic and "aphyric" where foliated - sheared. Badly broken core, (1-5cm pieces) from 267.5 - 270.75, 0.6m lost to ground core.		Pervasive moderate chlorite alteration	Fine to med. grained pyrite and tr. ccp as irregular stringers up to 1cm wide in sheared, epidotized zones <1% sulphide overall - foliation at 80	- Possibly a f.gr. tuffaceous unit or sheared equivalent of FP Dacite above Geochem #4547 250.1 - 254.81

From To	Rock Type	Texture and Structure	Angle to Core Axis	Alteration	Sulphides	Remarks
279.55 to 286.85	Massive Rhyolite	Colour - grey-white Grain Size - aphanitic 4-5%, 1-2mm feldspar crystals - aphanitic - strong shear at 75 to CA from 279.62 - 279.85. - 5cm wide quartz vein from 286.80 to 286.85m at 75 to CA - milky quartz veins up to 10cm wide at 70 from 285.94 - 286.35	contact at 279.55 lost	Weak sericite	Tr fracture controlled pyrite	Geochem #4548 279.70 - 282.55
286.85 to 288.03	Diorite?	Colour - green Grain Size - f. gr. Massive diorite, aphanitic margins grades into a weakly feldspar phyric interior			Tr pyrite	possible mafic - tuff

LITHOGEOCHEMISTRY

			MAJOR OXIDES										TRACE ELEMENTS									
SAMPLE NUMBER	FROM (m)	TO (m)	SiO_2	Al_2O_3	CaO	MgO	Na_2O	K_2O	FeO	MnO	TiO_2	Ba	ppm Cu	ppm Zn	% Pb	% Zr	ppb Au	Rock Type	Alt	Min		
4527	4.87	7.92	70.21	14.10	0.76	1.77	3.70	4.60	3.24	0.12	0.33	0.09	12	44	.005	.006						
4528	10.05	11.15	56.07	16.98	1.64	6.73	4.26	2.93	8.83	0.19	0.75	.058	42	60	.005	.005						
4529	22.63	26.2	70.58	14.31	1.94	1.51	3.66	3.18	2.90	0.05	0.33	.084	12	20	.005	.006						
4530	26.95	29.15	70.43	13.92	2.10	2.43	2.73	3.24	3.30	0.08	0.32	.078	10	32	.005	.006						
4532	44.80	47.85	57.75	16.79	5.55	3.28	5.05	1.28	7.91	0.16	0.73	.058	52	76	.005	.005						
4533	66.43	69.19	59.99	16.96	3.17	3.25	6.40	1.14	7.24	0.16	0.69	.013	46	36	.005	.006						
4534	79.40	82.8	56.76	17.00	4.58	5.12	0.48	4.40	8.69	0.39	0.83	.084	80	336	.068	.005						
4535	93.57	96.62	70.68	14.35	1.27	1.45	3.20	3.49	3.56	0.19	0.37	.146	72	60	.005	.005						
4536	102.71	105.76	70.14	14.37	1.01	1.80	2.57	4.17	3.80	0.24	0.36	.182	24	56	.005	.005						
4537	111.86	114.91	53.12	16.87	8.79	4.32	3.64	0.51	9.83	0.72	0.71	.017	132	194	.005	.005						

Hole No. MTS-21 Entered by _____ Logged by _____ Page No. _____

LITHOGEOCHEMISTRY

SAMPLE NUMBER	FROM (m)	TO (m)	MAJOR OXIDES SiO_2	Al_2O_3	CaO	MgO	Na_2O	K_2O	FeO	MnO	TiO_2	Ba	TRACE ELEMENTS ppm Cu	ppm Zn	% Pb	% Zr	ppb Au	Rock Type	Alt	Min	Grid	
4538	125.20	125.55	72.84	12.28	2.45	1.92	4.53	1.08	3.03	0.22	0.28	.087	12	96	.005	.005						
4539	125.55	127.65	65.38	16.04	1.23	3.67	3.68	2.54	5.15	0.30	0.49	.171	92	132	.005	.006						
4540	133.19	136.24	58.40	18.16	3.24	3.76	5.01	1.73	7.03	0.40	0.65	.141	114	260	.005	.005						
4541	145.77	147.15	55.15	17.43	0.99	9.24	1.68	2.03	10.42	0.53	0.83	.117	220	228	.005	.005						
4542	157.54	161.8	73.28	13.59	0.22	2.82	1.37	3.12	3.74	0.19	0.24	.090	80	108	.005	.008						
4543	169.77	172.8	60.14	16.65	2.34	3.85	4.66	0.92	8.33	0.59	0.90	.038	89	193	.005	.011						
4544	181.96	185.01	69.19	14.57	1.83	2.23	3.10	1.89	5.20	0.25	0.37	.070	168	72	.005	.008						
4545	206.35	209.4	65.12	16.56	2.09	2.03	5.33	1.15	5.42	0.28	0.42	.046	36	73	.005	.010						
4546	227.68	230.73	69.25	15.32	1.21	1.63	5.21	1.24	4.26	0.21	0.36	.040	46	107	.005	.009						
4547	250.1	254.81	64.22	15.54	2.51	3.13	2.64	2.66	7.20	0.29	0.34	.112	28	76	.005	.009						

Hole No. MTS-21 Entered by _____ Logged by _____ Page No. _____

LITHOGEOCHEMISTRY

SAMPLE NUMBER	FROM (m)	TO (m)	MAJOR OXIDES SiO_2	Al_2O_3	CaO	MgO	Na_2O	K_2O	FeO	MnO	TiO_2	Ba	TRACE ELEMENTS ppm Cu	ppm Zn	% Pb	% Zr	ppb Au	Rock Type	Alt	Min	Grid	
4548	279.70	282.55	72.49	14.50	1.42	2.05	2.05	2.85	2.85	0.15	0.30	.089	16	48	.005	.009						

Hole No. MTS-21 Entered by _____ Logged by _____ Page No. _____

ASSAY SHEET

Sample Number	From (m)	To (m)	Estimate Cu	Estimate Zn	Length ( )	% Cu	% Zn	% Pb	gm. T Ag	ppb Au	% SiO_2	Ba	% Na_2O	% MgO	% Fe	PPM Cu	PPM Zn	PPM Pb	PPM Ag	PPB Au			
4722	124.55	125.20				0.492	0.11	0.01	3.2	20		1510											
4723	145.25	145.77				0.141	0.01	0.01	2.0	15													
4724	151.62	152.70				0.07	0.01	0.01	0.3	5													
4725	160.35	160.73				0.352	0.02	0.01	4.3	65		660											
4676	165.0	165.65				0.160	0.01	0.01	3.8	20													
4677	171.8	172.1				0.493	0.04	0.01	4.2	60													
4678	192.0	193.0				0.044	0.01	0.01	0.4	5													
4679	231.25	231.45				0.299	0.02	0.01	2.0	5													
4680	231.80	231.92				5.12	0.31	0.01	26.5	130													
4681	241.35	242.05				0.032	0.01	0.01	1.0	5													
4682	244.42	244.86				0.042	0.01	0.01	1.6	5													

HOLE NO MTS-21

PAGE

CORPORATION FALCONBRIDGE COPPER

DRILL HOLE RECORD

METRIC UNITS X
IMPERIAL UNITS

HOLE NUMBER	GRID	FIELD COORDS	LAT.	DEP.	ELEV.	COLLAR BRNG.	COLLAR DIP	HOLE SIZE	FINAL DEPTH
MTS-22	CFC		8+ 20S	11+80W	305	0	-45	NQ	202.8
PROJECT: 305	CLAIM #	SURVEY COORDS.				DATE STARTED: June 29/86 DATE COMPLETED: Jul 02/86	CONTRACTOR: Boisvenu CORE STORAGE: Duncan		CASING: 6.7

PURPOSE

RQD LOG
COLLAR SURVEY
PULSE EM SURVEY
MULTISHOT SURVEY

ACID TESTS				TROPARI TESTS			MULTISHOT DATA		
DEPTH ( )	CORRECTED ANGLE	DEPTH ( )	CORRECTED ANGLE	DEPTH ( )	AZIMUTH	DIP	DEPTH ( )	AZIMUTH	DIP
100	45 fuzzy			402'	320	45			
200	45 fuzzy			657	322	47			
300	45								
400									
500	44								
600	44								

HOLE NO MTS-22

ZIPPY PRINT - — BRIDGEPORT, RICHMOND

LOGGED BY Harold Gibson

From To	Rock Type	Texture and Structure	Angle to Core Axis	Alteration	Sulphides	Remarks
0 to 6.7	Casing					
6.7 to 25.00	Interbedded Rhyolitic Tuff/Ash and Dacite Tuff	color - grey grain size - aphanitic Grey, aphanitic (weakly fp) tuff. Foliation at 80 degrees to CA and locally kinked. 7.58 - 7.78 Andesitic tuff (<3% feldspar crystals); ctc at 7.58 at 80 degrees to CA. 7.78 - 1.70 Light and dark grey dacitic tuff and ash, thin - medium bedded at 80-85 degrees to CA. 10.70 - 11.80 m Thin bedded to laminated dark to light grey dacitic ash bedding at 70 - 85 degrees to C.A. Beds offset along small faults and folded. 11.80 - 25.00 Thin to medium bedded grey-white rhyolitic tuff (tr FP) and dark grey-green tuff with sections of thin-bedded to medium bedded andesitic ash. Bedding at 70 - 80 degrees to C.A. and commonly caught up into tight minor folds. Axial plane of folds at 60 degrees - 80 degrees to CA.		Weak to moderate sericite alteration	<1% fine diss pyrite along bedding/fracture - banded pyrite (3-5%) in felsic tuff from 17.80 - 18.22 Assay #4683	Geochem #4549 14.38 - 17.37

From To	Rock Type	Texture and Structure	Angle to Core Axis	Alteration	Sulphides	Remarks
25.00 to 48.90	Quartz-eye Rhyolitic (tuff?)	color - light grey grain - aphanitic Massive, homogeneous unit - 2% fine, <1mm anhedral quartz eyes - <1% feldspar crystals, aphanitic & foliated matrix - foliation at 80 degrees to CA and kinked locally - fine, <1cm wide, dark grey-green bands may be beds of more mafic-intermediate ash		Weak-moderate sericitic alteration	- fine, 1% diss pyrite along bedding/foliation planes - 3 cm wide band of cgr massive pyrite at 90 degrees to CA at 39.3 (tr ccp)	Geochem #4550 25.91 - 28.95 Core is broken into 15 cm to <2 cm chips and becomes increasingly broken after 47.0m
48.90 to 69.82	Grey Cherty Felsic Ash	color - light and dark grey grain - aphanitic Aphyric (tr <0.5m quartz eyes) massive grey rhyolite - banding of unit a product of alternating light grey, grey, dark grey and light green bands (disrupted beds?) at 75 to CA. - some cherty-looking, siliceous, hard bands - unit is broken into 1.0 - 2 cm pieces from 48.90 - 52m with a strong fault, gouge zone from 49.85 - 50.90 m at 30 degrees to CA - beds/bands are more siliceous and cherty in appearance after 60.3m			Fine, <1% pyrite along and within beds - occasional bed from 2cm to 1cm wide of fine to mgr. pyrite and tr ccp parallel to banding - minor, <1% ccp in cherty siliceous banded tuff form	Geochem #4552 56.99 - 61.57

From To	Rock Type	Texture and Structure	Angle to Core Axis	Alteration	Sulphides	Remarks
69.82 to 83.40	Grey Dacite Tuff	color - grey grain - aphanitic Massive homogeneous unit which consists of: 1) 1-4mm irregular to ovoid spots of more siliceous?, epi altered material - may be altered fine lapilli or alteration patches but some are alt. feldspar. 2) Matrix/groundmass of aphanitic grey dacite. Fuzzy, blocky fragment forms (in situ bx?) from 76-76.45m. Possible bedded unit, bedding ctc at 75.53m at 65 degrees. After 75.45 tp 78.55, unit has a faint brecciated appearance (lapilli tuff?) with light grey dacitic fragments and chloritic fragments. Strongly sheared after 79.4m, with a strong chloritic gouge from 79.45 to 80.05m at 60 degrees to CA.		weak chl alt	Fine 2% pyrite and tr ccp throughout unit. From 78.55 - 79.3m unit is cut by stringers of ccp from <0.3cm to 1.3cm at 65 - 80 degrees to CA. Assay #4686.	Geochem #4551 75.28 - 78.33

From To	Rock Type	Texture and Structure	Angle to Core Axis	Alteration	Sulphides	Remarks
83.4 to 102.52	Feldspar Porphyritic Dacitic Crystal Tuff/Flow	color - dark grey-green grain - aphanitic 83.4 to 85.05 Shear, fault zone with chloritic gouge at <40 degrees to CA. 85.05 - 102.52 Massive, aphanitic unit with 5-6%, 2-3mm epidote altered subhedral crystals in a aphanitic matrix. - where chloritized unit loses fp texture and is massive and aphanitic. From 92.55 to 95.05 unit is a grey, aphanitic aphyric dacite with 5-10cm sections containing feldspar crystals locally. May be an ash bed. Ctc at 92.55 is sharp at 60 degrees, ctc at 95.05 gradational. Unit from 99.80 to 102.52 is aphanitic and aphyric to wk feldspar phyric (<1% FP locally)	Ctc at 102.52 sharp and sheared at 65 degrees		Fine pyrite along fractures <1% Pyrite-ccp stringers from 2-3m to 3cm from 88.5 - 88.75 (Assay #4687) 8% sulphide over interval with 1% ccp. 2-3% diss and blebby pyrite, tr ccp in dacitic ash bed from 92.55 to 95.0m. Ccp and pryite in irregular stringers (<3% sulphides over 5 cm) at 98.0m with fine 2mm to 1 cm stringers of py-minor cp scattered through core from 101-102.25.	Geochem #4553 89.30 - 92.35 Geochem #4554 92.55 - 95.0 Geochem #4555 99.66 - 102.25
102.52 to 118.0	Rhyolite Ash	color - light dark grey grain - aphanitic Aphanitic, predominately aphyric rhyolitic ash, medium to thick bedded, light grey, grey and green-gray beds. Trace fine QP in some beds (<<1%, <1mm in size). Odd cream-white cherty beds (<5cm wide). Bedding at 60 degrees to CA. Minor (?) shear from 108.52 - 108.67 with chloritic gouge at 45-50 degrees to CA.			Minor py + tr ccp along bedding ? or parallel fractures	Geochem #4556 114.91 - 117.45

From To	Rock Type	Texture and Structure	Angle to Core Axis	Alteration	Sulphides	Remarks
118.0 to 122.3	Rhyolitic Crystal Tuff	color - light grey grain - aphanitic Massive, homogeneous, well foliated rhyolite - 3-5%, fine (1mm) white feldspar crystals - foliation at 75 degrees to CA, weakly and locally kinked	ctc at 118 sharp at 60 degrees ctc at 122.3 sharp at 40 degrees	weak sericite	minor diss pyrite	
122.3 to 126.27	Andesitic Crystal Tuff	Predominately a massive andesitic unit with 3-6%, 1-2mm feldspar crystals. Interbeds of siliceous rhyolite tuff from 124.5 to 124.85 at 50 degrees to CA and from 125.89 to 126.0m at 70 degrees to CA. Andesitic unit crudely colour banded green-dark grey green locally.		Pervasive chlorite alteration. Epidote alteration of feldspar.	Minor pyrite, tr ccp along fractures	Geochem #4557 121.6 to 126.27
126.2 to 131.20	Diorite and fault	Feldspar porphyritic. Diorite from 126.2 to 127.10. Sheared, foliated chloritic andesitic? from 127.10 to 130. Strong gouge from 127.4 m-130.15m at 40 degrees.		Pervasive chlorite alteration.	Minor pyrite in fractures.	"South Fault", splay of mine fault?
131.20 to 136.24	QP chloritized Andesite-Dacite	Color - green Grain - aphanitic Massive, aphanitic andesite-dacite unit, moderate to weak foliation at 60 degrees to CA - 40. Distinctly QP near 131.20 containing up to 4% 2-3mm anhedral crystals. Bulk of unit is aphanitic to weakly QP - <1%. Non bedded unit	Ct at 131.20 at 55 degrees	Pervasive chlorite alteration	Fine diss pyrite -<1%	Geochem #4558 131.20 - 133.88 Chloritized QP tuff units same as those intersected in MTS-20 and 21. Part of mine Package? Stratigraphically below Lenora-Tyee argillite units.

From To	Rock Type	Texture and Structure	Angle to Core Axis	Alteration	Sulphides	Remarks
136.24 to 139.53	Grey Bedded Tuff (QP)	Color - grey Grain - aphanitic Massive banded unit, banding a result of alternating light grey-green bands/beds at 45 degrees to 60 degrees to CA. Units weakly QP containing 1% - <1% 2mm quartz eyes.	weak to moderate sericite altera- tion		Fine pyrite as disseminations or as thin (<1cm bands) parallel to bedding. Minor ccp locally. <2% sulphide over unit. Assay samples+ #4688 136.27 - 136.65m #4869 137.37 - 137.95	

From To	Rock Type	Texture and Structure	Angle to Core Axis	Alteration	Sulphides	Remarks
139.53 to 173.68	Crystal Tuff/Ash	Medium to thin bedded "felsic" crystal tuff/ash containing 2-3% anhedral quartz phenocrysts from 3mm - 8mm in size. Bedding ranges from 60-65 degrees to 30 degrees to CA. Predominately crystal tuff but aphanitic, chloritic beds are probably altered ash beds - both are QP. Variation in % of QP within tuff units suggests some internal stratification. After 171.80 unit is predominately a chloritized ash, QP are not conspicious. Crudely bedded 45-50 degrees to CA.	Ct at 173.68 at 40 - 45 to CA	Chiefly pyrite but with variable ccp principally occurring as irregular stringers/bands from 2mm to locally 1 cm wide parallel - subparallel to bedding. Assay #4690 141.57 - 142.34 5% sulphides over, with stringers/beds of ccp-py <1% ccp Assay #4691 142.65 - 143.80 6-8% sulphides overall Pyrite and ccp stringers - 1% ccp over interval. Assay #4692 (145.39-146.8) 6% pyrite - <1% ccp over interval as fine disseminations and stringers parallel to bedding?/foliation. Assay #4693 (146.8 - 148.15) 6%-7% Pyrite - <1% ccp Assay #4694 (148.15 - 148.95) 5%-6% pyrite - 1% ccp Assay #4695 - 152.68 - 153.03 - ccp (<1%) in fine QP ash Assay #4695 - 159.94 - 161.05 Assay #4697 - 162.97 - 163.67 Assay #4698 - 164.85 - 165.57		Quartz "porphyritic" nature of tuff suggests it may be an alered felsic unit? Geochem #4559 148.95 - 152.28m Geochem #4560 161.05 - 162.30 Geochem #4561 169.71 - 172.71

From To	Rock Type	Texture and Structure	Angle to Core Axis	Alteration	Sulphides	Remarks
173.68 to 180.70	Rhyolitic Quartz Eye Crystal Tuff	Color - grey Grain - aphanitic Massive, non-bedded unit. 2-3% anhedral quartz crystals <5mm in size. Aphanitic, foliated rhyolitic matrix.	Ctc at 180.70 marked by broken sheared core over 10cm	Weak sericite aleration	Pyrite, 2-3% overall, principally as irregular stringers at 10 degrees - 40 degrees to CA and as disseminated grains.	Geochem #4562 175.56 - 178.61
180.70 to 196.6	Chloritized Rhyodacitic Tuff/Ash	Color - dark grey-green Grain - aphanitic Massive, thick bedded to locally thin bedded tuff, and minor ash. Quartz crystals account for 1-2% of some units but are absent or <1% in sections. 5-10cm wide chloritic gouge zones at 187.6 (50 degrees); 189.7		Pervasive moderate chlorite alteration.	Disseminated and fracture pyrite throughout - 1-2% overall, with sections containing up to 10% pyrite, tr ccp over 10cm. Assay #4699 191.80 - 192.17	Geochem #4563 186.53 - 189.58
196.6 to 202.08 EOH	Aphyric Rhyolite	Color - grey Grain - Aphanitic Massive, grey, aphanitic aphyric rhyodacite Non bedded. Ctc at 196.6 is approximate as unit appears to grade into overlying non chloritized unit.			<1% blebby and disseminated pyrite.	Geochem #4564

ASSAY SHEET

Sample Number	From ( )	To ( )	Estimate Cu	Estimate Zn	Length ( )	% Cu	% Zn	% Pb	gm/T Ag	PBb Au	% SiO_2	Ba	% Na_2O	% MgO	% Fe	PPM Cu	PPM Zn	PPM Pb	PPM Ag	PPB Au			
4683	17.8	18.22				0.080	0.01	0.01	2	10		1200											
84	62.12	63.41				0.087	0.01	0.01	1	5		1000											
85	64.05	65.55				0.091	0.01	0.01	1.2	5													
86	78.55	79.3				0.089	0.01	0.01	0.8	5		1020											
87	88.5	88.75				0.790	0.02	0.01	4.3	10													
88	136.27	136.65				0.120	0.04	0.01	3.5	15													
89	137.37	137.95				0.170	0.04	0.01	2.4	25													
90	141.57	142.34				0.141	0.02	0.01	2.3	5													
91	142.65	143.80				0.072	0.02	0.01	3.6	110													
92	145.39	146.8				0.11	0.02	0.01	1.9	5													
93	146.8	148.15				0.073	0.02	0.01	1.5	5													
94	148.15	148.95				0.27	0.04	0.01	3.0	10													
95	152.68	153.03				0.098	0.02	0.01	2.0	5													
96	159.94	161.05				0.138	0.01	0.01	2.1	15													
97	162.97	163.67				0.039	0.01	0.01	2.2	5													
98	164.85	165.57				0.076	0.01	0.01	2.4	10													
4699	191.8	192.17				0.022	0.02	0.01	2.5	5													

HOLE NO MTS-22

ZIPPY PRINT - — BRIDGEPORT, RICHMOND

LITHOGEOCHEMISTRY

SAMPLE NUMBER	FROM (m)	TO (m)	MAJOR OXIDES SiO_2	Al_2O_3	CaO	MgO	Na_2O	K_2O	FeO	MnO	TiO_2	Ba	TRACE ELEMENTS ppm Cu	ppm Zn	% Pb	% Zr	ppb Au	Rock Type	Alt	Min	Grid	
4549	14.38	17.37	71.60	14.14	0.70	2.89	3.02	2.51	3.32	0.19	0.31	.134	24	90	.005	.007						
4550	25.91	28.05	75.25	13.29	0.73	1.41	3.41	2.37	1.79	0.09	0.16	.148	8	29	.005	.007						
4551	75.28	78.33	68.34	15.51	1.07	1.91	4.34	1.77	5.18	0.27	0.36	.064	66	82	.005	.009						
4552	56.99	61.57	75.82	13.0	0.21	0.63	3.28	2.19	2.97	0.07	0.14	.101	500	38	.005	.006						
4553	89.30	92.35	68.73	14.74	1.41	2.11	4.44	1.28	4.90	0.25	0.36	.050	48	72	.005	.008						
4554	92.55	95.0	69.30	14.40	0.52	1.80	2.87	2.51	6.38	0.18	0.34	.091	56	64	.005	.009						
4555	99.66	102.25	68.33	14.97	1.01	2.05	4.75	1.41	5.38	0.20	0.34	.061	440	76	.005	.009						
4556	114.91	117.45	74.47	13.65	1.01	1.81	1.55	3.0	2.69	0.11	0.19	.088	14	45	.005	.007						
4557	121.6	126.27	58.42	17.01	2.58	5.32	2.23	1.65	10.22	0.39	0.64	.067	180	120	.005	.005						
4558	131.2	133.88	57.45	17.84	0.85	8.33	3.18	1.10	8.26	0.38	0.82	.100	58	360	.005	.005						

Hole No. MTS-22 Entered by _____ Logged by _____ Page No. 11

LITHOGEOCHEMISTRY

			MAJOR OXIDES										TRACE ELEMENTS									
SAMPLE NUMBER	FROM (m)	TO (m)	SiO_2	Al_2O_3	CaO	MgO	Na_2O	K_2O	FeO	MnO	TiO_2	Ba	ppm Cu	ppm Zn	% Pb	% Zr	ppb Au	Rock Type	Alt	Min	Grid	
4559	148.95	152.28	60.12	16.59	0.42	7.03	1.46	1.99	9.33	0.45	0.71	.064	640	296	.005	.005						
4560	161.05	162.30	58.94	16.83	0.24	7.69	0.80	2.19	10.75	0.34	0.73	.056	400	170	.005	.005						
4561	169.71	172.71	58.28	17.11	0.61	8.07	2.14	1.48	9.23	0.43	0.75	.051	480	152	.005	.006						
4562	175.56	178.61	67.51	12.55	0.77	4.86	0.31	2.38	9.54	0.33	0.26	.133	60	92	.005	.007						
4563	186.53	189.58	55.2	18.81	0.38	6.55	3.20	1.74	11.42	0.34	0.79	.119	398	153	.007	.005						
4564	197.4	200.45	72.33	13.62	0.26	2.73	3.84	1.37	3.97	0.14	0.32	.077	20	74	.005	.005						

Hole No. MTS-22 Entered by _____ Logged by _____ Page No. 12

CORPORATION FALCONBRIDGE COPPER

Grid Co-ordinations 7+20S/8+50W

DRILL HOLE RECORD

X METRIC UNITS
IMPERIAL UNITS

HOLE NUMBER	GRID	FIELD COORDS	LAT.	DEP.	ELEV.	COLLAR BRNG.	COLLAR DIP	HOLE SIZE	FINAL DEPTH
MTS-23	CFC		7+20S	8+85W	390	0°	-50	NQ	199.03

PROJECT	CLAIM #	SURVEY COORDS.	DATE STARTED	DATE COMPLETED	CONTRACTOR	CORE STORAGE	CASING
305			July 2/86	July 4/86	Boisvenu	Duncan	4.8m

PURPOSE

RQD LOG
COLLAR SURVEY
PULSE EM SURVEY
MULTISHOT SURVEY

ACID TESTS				TROPARI TESTS			MULTISHOT DATA		
DEPTH ( )	CORRECTED ANGLE	DEPTH ( )	CORRECTED ANGLE	DEPTH ( )	AZIMUTH	DIP	DEPTH ( )	AZIMUTH	DIP
100	50			335					
200	50								
300									
400	50								
500	50								
600	50								
700									

HOLE NO MTS-23

LOGGED BY H.L. Gibson

From To	Rock Type	Texture and Structure	Angle to Core Axis	Alteration	Sulphides	Remarks
0 to 4.0	Casing					
4.8 to 55.1	Quartz Feldspar Rhyolite Tuffs and Lapilli Tuffs	Colour - grey Grain - aphanitic 4.8 - 43.85 Massive, well foliated altered rhyolite - non-bedded? - foliated at <30 degrees to CA - minor quartz veins at 15-30 degrees to CA - 1-3% quartz eyes (anhedral) up to 4mm - trace feldspar crystals <1mm - 3-5 mm felsic fragments (feldspar?) from 19.70 - 20.0 m and again from 25.6 - 26.0m may define lepilli tuff beds (fine QP) - crude banded appearance of unit suggests it may be a clastic, tuffaceous, crystal tuff sequence - thin (<5 cm wide) sericitic shears at 50 degrees to CA - core is broken and blocky - lapilli tuff beds (white felsic fragments <5 cm) from 30.6 - 31.13, 35.8 - 43.85 - felsic fragments from 3mm to 1 cm are elongate parallel to foliation at 50 degrees to CA. Fragments may in part be feldspar crystals. Quartz crystals up to 5 mm constitute <1%-3% of the unit and both "fragments" and quartz crystals sit in a light-green-grey aphanitic siliceous matrix. Aphanitic, aphyric, carbonate-rich (calcite) unit from 47.3 - 47.65 is likely a rhyodacite dike but may be an ash bed (lacks foliation at 45 degrees to CA).		Pervasive weak - moderate sericitic alteration	Stringers of fine pyrite and minor ccp (<1%) from 6.8 to 7.5 at <40 degrees to CA. Assay #4700 Assay #4651 26.46 - 26.90 Chalcopyrite - pyrite stringers, section averages 2% ccp overall. Stringers up to 1 cm wide. Unit is characterized by five stringers of pyrite from <2 m to 1 cm wide, with minor to nil ccp that parallel foliation. 2-3% pyrite throughout tuffs.	Geochem # 4565 8.80 to 14.32 Geochem 4566 23.47 - 26.21 Thin, <10 cm, carbonated mafic dikes cut unit at 11.85 and 12.15 at 5 degrees and 20 degrees to CA 1.35 m of core lost from 11.27 to 14.32 (55% recovery). Geochem #4567 31.75 to 35.66 Geochem #4568 41.75 to 43.85 Geochem #4569 43.85 to 46.77

From To	Rock Type	Texture and Structure	Angle to Core Axis	Alteration	Sulphides	Remarks
		Strong, gouge zones at 28.95m at <30 degrees; 36.6 at 40 degrees. 43.85 - 50.55 Foliated to sheared (60 degrees) massive "bedded" rhyolitic ash/tuff unit. Trace QP. Banding (bedding) parallel to foliation at 60 degrees. Strong shear with minor gouge from 47.3 - 47.60 at 60 degrees to CA. After 50.55 to 55.1, unit is more massive, only weakly foliated and aphyric - possible massive rhyolite flow or tuff.				
55.1 to 106.25	Diorite	Aphanitic chilled margins grade rapidly (over 1m) into a medium grained, feldspar porphyritic interor with phenocrysts up to 1.5 cm in size. Calcite, hamatite filled fractures at 70 degrees to CA. Fine grain aphanitic sections may be chilled margins of multiple diorite dikes?	Ctc at 55.1 at 80 degrees Ctc at 106.25 at 70 degrees	Weak epidote alt of feldspars	Minor ccp in quartz, calcite veins <40 degrees to CA.	

From To	Rock Type	Texture and Structure	Angle to Core Axis	Alteration	Sulphides	Remarks
106.25 to 121.55	Quartz-Eye Rhyolite	Colour - grey Grain - aphanitic Massive, homogeneous unit Well foliated at 70-75 degrees to CA - foliation kinked 1% to 2% fine 1-3 mm anhedral quartz eyes Trace feldspar crystals Weak shear at 20 degrees to CA at 108.65 - 108.80 m Foliation/bedding folded into open fractures with limbs at 80 degrees and 10 degrees to CA Alternation of light and dark grey bands suggests unit may be bedded (75 degrees to 80 degrees to CA). Strongly sheared from 120.7 - 121.55 with gouge over test 20 cm at 70 degrees to CA.		Pervasive, moderate sericitic alteration	Fine, 1% disseminated pyrite throughout Thin <1 cm to 2.5 cm wide bands of 20-30% fine pyrite (tr ccp) scattered through unit from 115.5 to 120.7 at 65 degrees - 85 degrees to CA	Massive, light green-grey carbonated (calcite) unit, probable aphyric dike from 112.9 to 113.2. Contacts lost in broken core. Core broken into chip-size piece from 2-3 cm to 20 cm Geochem #4570 110.2 - 114.3 Geochem # 4571 116.43 - 120.7
121.55 to 134.90	Quartz-Eye Rhyolite	121.55 to 121.95 Carbonated (calcite) light green grey, aphanitic, weakly epidote altered mafic dike or tuff. Crude banding suggests it may be a tuff. Fine diss pyrite and minor ccp in fractures. 121.95 to 134.90 Massive rhyolite unit as above but with fewer, <1% quartz eye (1-3mm). Fine <1mm specks may be feldspar crystals (1-2%). Well foliated at 50 degrees to CA, locally kinked and folded. Thin shears at <5 degrees and 30 degrees to CA. 4 cm wide band of epi-altered carbonated mafic tuff at 45 degrees to CA at 130.52m.		Pervasive sericite alteration.	Fine 1% pyrite throughout unit. Fine pyrite in irregular bands to 5mm wide which parallel foliation along with minor ccp. Assay #4652 133.07 to 133.50 4-5% sulphides, 0.5% ccp	

From To	Rock Type	Texture and Structure	Angle to Core Axis	Alteration	Sulphides	Remarks
134.90 to 145.73	Dacite-Rhyodacite Ash, minor Tuff	Colour - grey Grain - aphanitic Thin bedded to laminated ash. Beds range in thickness to 15cm but are commonly <1cm and finely laminated. Grading in fine ash laminate/beds suggest tops up hole. Bedding ranges from 2-3 degrees to 10 degrees to CA (typical) to 70 degrees to 80 degrees to CA and is locally folded (open) with limbs 70 - 80 degrees and <10 degrees to CA (minor scale structures effect bedding attitude of unit). Strong fault with sericitic gouge from 136.2-136.6 at <30 degrees to CA (?) Fine felsic cherty laminae (silicified ash?) Thin interbeds (up to 15 cm wide) of andesitc tuff	Ctc at 134.90 and 145.73 at 70 to 75 degrees to CA.	Pervasive moderate to weak sericite. Odd epidote patch	Fine dissemiated and blebby pyrite, minor ccp along bedding and foliation planes 1 - 2% overall. From 134.85 - 135.80 unit contains 10% sulphide and 1% ccp. Assay #4653 Sulphides along bedding plane.	Geochem #4572 135.80 - 139.15
145.73 to 156.25	Quartz-Eye Rhyolite Crystal Tuff?	Colour - grey Grain - aphanitic Massive, homogeneous unit. Non-bedded, foliated a 45 degrees to CA, locally kinked. 1% fine 1-3.5 mm anhedral quartz eyes. Aphanitic rhyolitic matrix.		Weak sericite alteration.	1-2% fine disseminated blebby and minor fracture filling pyrite.	Geochem #4573 146.3 - 150.87

From To	Rock Type	Texture and Structure	Angle to Core Axis	Alteration	Sulphides	Remarks
156.25 to 164.30m	Rhyodacite Lapilli Tuff	Colour - grey Grain - aphanitic Massive, broken unit, non-bedded. 3 to 10% light, buff coloured 2-4mm ovoid to irregular spots that may be fine granular epidote and quartz and replacing fragments or accretionary lapilli? 1%, 2mm - 5mm quartz crystals. Aphanitic rhyodacitic matrix. Chlorite shear at 35 degrees to CA at 162.7m.		Weak sericite alteration.	Fine fracture filled stringers of pyrite, tr ccp. <1% sulphide overall with sections containing up to 5% pyrite over 20 cm.	Geochem #4574 156.3 - 160.02
164.30 to 169.40	QP Rhyolite	Colour - medium grey Grain - aphanitic massive, non-bedded unit. 1% quartz crystals (anhedral) from 2m to 6m. Aphanitic matrix/groundmass		Weak-moderate sericite chlorite alteration.	Blebby pyrite/chalcopyrite in matrix and along fractures. 1% sulphide overall.	Very blocky broken core; thin shears at 50 degrees to CA. Granulated core from 167.83 to 167.84. Geochem #4575 164.30 - 169.40
169.40 to 184.00	Diorite	Aphanitic, fine-grained chilled calcite-veined margins (45 degrees), fine-med grained interior. - Weakly feldspar porphyritic.	50 at 169.40	Epidote alt. of feldspar	weak-moderately magnetic	
184.0 to 191.2	QP Rhyolitic Crystal Tuffs	Colour - grey-green Grain - aphanitic Massive unit, crude bedding defined by variation in % of quartz crystals. Typically contains 1% QP but locally up to 5-6% QP up to 4mm. Foliated at 25 - 30 degrees to CA.		Weak to moderate sericite alteration.	Disseminated and fracture controlled fine and blebby pryite 2-3% over unit. Blebs of pyrite up to 1.5 x 1cm. Tr ccp	Geochem #4576 185.07 - 190.5

From To	Rock Type	Texture and Structure	Angle to Core Axis	Alteration	Sulphides	Remarks
191.2 to 199.03	Thin bedded to Laminated Andestic - Dacite Ash/minor Tuff	Colour - dark grey - grey Grain - aphanitic 191.2 - 191.90 Aphanitic andestic ash, massive bed. 1% blebby pyrite. chlorite altered. 191.90 - 192.80 Rhyodacitic ash, massive and cherty. 192.80 - 109.03 Thin bedded to laminated andesite-dacite ash and minor tuff Bedding folded with limbs at <5 degrees to 65 degrees to Ca. Foliation at 30 degrees to Ca.		Pervasive moderate chlorite alteration.	Blebby pyrite and fine diss pyrite along bedding planes and fractures. Assay # 4654 193.85 - 194.90 10% pyrite, 1% ccp #4658 194.90 - 196.30 8% pyrite, <1% ccp	Geochem #4577 196.60 - 199.03

ASSAY SHEET

PBb Ba

Sample Number	From ( )	To ( )	Estimate Cu	Estimate Zn	Length ( )	% Cu	% Zn	% Pb	gm/T Ag	gm/T Au	% SiO_2	% TiO_2	% Na_2O	% MgO	% Fe	PPM Cu	PPM Zn	PPM Pb	PPM Ag	PPB Au			
4700	6.8	7.5				0.003	0.01	0.01	1.8	5													
4651	26.46	26.90				0.27	0.01	0.01	4.5	40													
52	133.07	133.50																					
53	134.85	135.8				0.354	0.02	0.01	4.0	45		830											
54	193.85	194.9				0.503	0.01	0.01	4.2	50		810											
55	194.90	196.3				0.052	0.01	0.01	1.9	10		770											

HOLE NO MTS-23

PAGE 8

LITHOGEOCHEMISTRY

SAMPLE NUMBER	FROM (m)	TO (m)	MAJOR OXIDES SiO_2	Al_2O_3	CaO	MgO	Na_2O	K_2O	FeO	MnO	TiO_2	Ba	TRACE ELEMENTS ppm Cu	ppm Zn	% Pb	% Zr	ppb Au	Rock Type	Alt	Min	Grid	
4565	8.80	14.32	74.72	13.39	1.48	1.72	0.63	3.21	3.2	0.05	0.32	13.39	32	42	.005	.005						
4566	23.47	26.21	71.05	12.93	4.19	2.12	0.49	2.58	4.76	0.08	0.26	12.93	108	53	.005	.005						
4567	31.75	35.66	74.83	12.57	1.30	1.95	0.60	2.67	4.48	0.05	0.27	12.57	64	42	.005	.005						
4568	41.75	43.85	72.72	12.71	3.50	1.84	0.99	2.04	4.28	0.06	0.26	12.71	26	44	.005	.005						
4569	43.85	46.77	71.83	13.35	1.98	2.07	1.13	2.65	4.88	0.07	0.34	13.35	92	64	.005	.005						
4570	110.2	114.3	72.51	13.25	0.92	4.16	1.13	2.15	4.15	0.12	0.29	13.25	20	92	.005	.005						
4571	116.43	120.7	73.11	13.89	1.06	2.37	0.58	3.13	3.80	0.08	0.30	13.89	384	68	.005	.005						
4572	135.8	139.15	69.49	13.92	1.57	4.11	0.74	1.83	5.99	0.24	0.49	13.92	56	99	.005	.005						
4573	146.3	150.87	72.21	14.22	1.09	2.68	1.81	2.12	3.87	0.22	0.31	14.22	121	96	.005	.005						
4574	156.3	160.02	72.11	13.86	1.86	1.94	1.76	2.33	4.23	0.18	0.29	13.86	53	64	.005	.005						

Hole No. MTS-23 Entered by _____ Logged by _____ Page No. 9

LITHOGEOCHEMISTRY

SAMPLE NUMBER	FROM (m)	TO (m)	MAJOR OXIDES SiO_2	Al_2O_3	CaO	MgO	Na_2O	K_2O	FeO	MnO	TiO_2	Ba	TRACE ELEMENTS ppm Cu	ppm Zn	% Pb	% Zr	ppb Au	Rock Type	Alt	Min	Grid	
4575	164.3	169.4	71.80	13.67	1.96	2.36	2.89	1.57	3.97	0.14	0.30	13.67	228	72	.005	.005						
4576	185.07	190.5	69.74	14.96	0.74	2.82	1.87	2.44	5.59	0.10	0.31	14.96	360	54	.005	.005						
4577	196.6	199.03	62.12	17.22	1.00	4.68	2.04	2.12	8.50	0.21	0.54	17.22	46	66	.005	.005						

Hole No. MTS-23 Entered by _____ Logged by _____ Page No. 10

CORPORATION FALCONBRIDGE COPPER

Grid Co-ordinates 6+20S, 5+65E

DRILL HOLE RECORD

x METRIC UNITS
IMPERIAL UNITS

HOLE NUMBER	GRID	FIELD COORDS	LAT.	DEP.	ELEV.	COLLAR BRNG.	COLLAR DIP	HOLE SIZE	FINAL DEPTH
MTS-24	CFC		6+20S	5+20E	578m	0	50	NQ	166.72

PROJECT	CLAIM #	SURVEY COORDS.	DATE STARTED: July 5/86 DATE COMPLETED July 8/86	CONTRACTOR: Boisvenu CORE STORAGE: Duncan CASING: 3.55
304				

PURPOSE

RQD LOG
COLLAR SURVEY
PULSE EM SURVEY
MULTISHOT SURVEY

ACID TESTS				TROPARI TESTS			MULTISHOT DATA		
DEPTH ( )	CORRECTED ANGLE	DEPTH ( )	CORRECTED ANGLE	DEPTH ( )	AZIMUTH	DIP	DEPTH ( )	AZIMUTH	DIP
100	50			542	351	48			
200	49								
300	49								
400	49								
500	49								

HOLE NO MTS-24

LOGGED BY H.L. Gibson

From To	Rock Type	Texture and Structure	Angle to Core Axis	Alteration	Sulphides	Remarks
0 to 3.55	CASING					
3.55 to 26.00	Quartz-Feldspar Porphyritic Rhyolite	Color - grey Massive unit, non-bedded 1%-3% anhedral quartz-eyes to 2-3mm 1%-4% subhedral feldspar crystals <3mm Aphanitic, aphyric matrix-groundmass Unit has an insitu-brecciated shattered appearance with light grey, 1-2mm mega-perlitic textured fractures separatiing darker grey rhyolite. "Fragments" range from <1cm to 10 cm.		Weak sericite altered	1-2% disseminated pyrite throughout unit. Assay #4656 23.25 - 23.60 3% pyrite, 1% ccp as blebby stringers #4567 24.37 - 25.30 5%-6% pyrite, <1% ccp as irregular stringers in matrix to fragments or as diss sulphide patches up to 2cm in size	Monolithogic, in situ nature of breccia suggests it may be a primary flow breccia or tectonic bx. Geochem #4578 11.27 - 14.32
26.00 to 36.74	Rhyolitic Tuffs, Lapilli Tuff and Ash	26.00 - 26.70 Speckled rhyolite tuff - lapilli tuff? Fine ash interbeds at 25 degrees to CA 26.70 - 26.85 Aphanitic, aphyric ash 26.85 - 26.92 Fine lapilli tuff, 1-2 mm dark gray fragments or crystals 26.92 - 27.05 Fine felsic ash, ctc at 45 degrees to CA 27.05 - 36.74 Sequence of massive, rhyolitic, QP crystal tuffs		weak sericte	2-3% fine diss and blebby pyrite, tr ccp	Geochem #4579 27.10 - 32.61

From To	Rock Type	Texture and Structure	Angle to Core Axis	Alteration	Sulphides	Remarks
36.74 to 38.8	Diorite	Color - green Grain - fine grain Fine gr. - aphanitic margins, fine-grained interior Chilled ctc from 38.6 - 38.8 is light green and dotted with 5% elongate (1mm x 5m) mafic spots that may be amydules (possibly a separate dike?)	At 36.74 ctc at 70 degrees Ctc at 38.8 at 70 degrees	Weak epidote alt	Calcite veins at 83.6 m to 83.65 at 60 degrees contains 8% fine grain pyrite and tr ccp	
38.8 to 42.65	Thin bedded to Laminated Felsic Ash/and minor Chert	Color - grey-green 38.8 - 39.34 Thin bedded, laminated felsic ash, bedding at 40 degrees - 45 degrees to CA. Bedding defined by alternation of light and dark grey ash and chert beds up to 4 cm thick. 39.34 - 39.45 Breccia unit - fragments consist of a) aphyric aphanitic fine quartz or -chert, subangular and from 4mm - 2.5 cm in size. b) rhyolitic fragments up to 15 cm Possible intraformational breccia 39.45 - 39.60 Grey felsic ash/chert bed 39.60 - 39.80 Mafic, andesitic tuff bed with disrupted beds of felsic ash 39.80 - 42.65 Thin bedded felsic ash, bedding at 60 degrees and 5 degrees to CA, kink folded		Weak sericite alteration	1-2% Fine grained pyrite along bedding planes, up to 5-6% pyrite and tr ccp over 10-15 cm Assay #4658 39.0 - 39.34	Heavy oil coating. Geochem #4580 39.45 - 42.60

From To	Rock Type	Texture and Structure	Angle to Core Axis	Alteration	Sulphides	Remarks
42.65 to 53.00	Dacitic - Rhyodacitic Tuff	Massive unit, typically thick bedded with 1-2 cm wide beds of felsic ash at 50-60 degrees to CA		Pervasive moderate chl alteration	Fine diss pyrite and chalcopyrite throughout - 3% - 4% sulphide. 5% py, <1% ccp from 42.73 - 43.32 Assay #4659	Geochem # 4581 44.5 - 47.29 Thin fine grained feldspar porphyrite diorite dike from 49.86 to 50.14 at 80 degrees to Ca
53.00 to 81.85	Diorite	Color - green Grain - aphanitic - medium green Aphanitic, chilled margin to 56.0m, medium grained, feldspar porphyritic diorite from 56.0 - 81.30m. Few calcite and epidote veins at 45 degrees - 70 degrees to CA. Chilled, fine-grained diorite from 81.30 - 81.85m.		Weak epi alt of feldspar.		Fine grained mafic/feldspar porphyritic diroite? from 69.85 to 70.75 at 75 degrees to CA
81.85 to 84.00	Rhyolitic Crystal Tuff	Color - grey Grain - aphanitic Massive, medium-bedded unit. Beds contain from 1-3% quartz crystals up to 3 mm and 1-5%, 1-2 mm feldspar crystals in an aphanitic matrix - unit has a banded, streaky appearance with thin lenticular dark grey-green wisps from 8 mm to 2 cm from 83.65 - 84.00 Bedding at 60 - 70 degrees to CA		Weak sericite alteration	Tr pyrite	

From To	Rock Type	Texture and Structure	Angle to Core Axis	Alteration	Sulphides	Remarks
84.00 to 89.10	Rhyodacitic Tuff/Ash	Color - grey Grain - aphanitic Massive non-bedded unit Aphyric, homogeneous Foliated at 75 degrees to CA	Ct at 84.00m at 65 degrees to CA	Weak sericite alteration	Disseminated fine-grained pyrite along bedding - foliation planes 2-3% overall. From 84.50 - 85.00, 5% pyrite, tr ccp. 3.5 cm pyrite "bed", (band) consisting of 40% pyrite and <1% ccp at 88.86m, with parallel pyrite bands 2-3mm - 1 cm wide from 88.7 - 89.10 m Assay #4660 88.70 - 89.10	Geochem #4582 84.45 - 89.10 1.5 m lost at 85.5. Core is blocky and in chips over most of interval.
89.10 to 89.45	Rhyolite Crystal Tuff	Color - grey Grain - aphanitic Massive, thin-bedded unit - bedding at 60 degrees. 1-2% quartz crystals up to 6 mm. Thin - 2 cm wide chloritic bed at 89.35m	60 degrees at 89.10 and 89.45	Moderate sericite alteration	2% diss pyrite	
89.45 to 90.2	Rhyodacitic Tuff/Ash	Same as unit from 84.00 to 89.10m				

From To	Rock Type	Texture and Structure	Angle to Core Axis	Alteration	Sulphides	Remarks
90.2 to 144.6	Andesite-Dacitic Tuff units	Color - grey-green Grain - aphanitic 90.2 - 144.6 Massive, medium to thick bedded andesitc-dacitic tuff. Beds range in color from grey, dark grey-green to pale green. Bedding at 45 - 50 degrees to Ca. Minor, <5%, fine feldspar (<1mm) in some units. Occasional (<1%) fine (<3m) mafic clots that could be lapilli-sized fragments. Bedding kink-folded with limbs at 60-70 degrees and 5% to CA. Thick massive beds after 115m and predominately andesitic in composition to 144.6.		Pervasive moderate cholorite/sericite alteration.	Disseminated blebby pyrite along foliation, bedding planes. 1-2% pyrite throughout unit. 3mm - 7mm pyrite (tr ccp) clot - fragments - occur in andesitic tuff (<1%) at 124.0m. Assay #4661 141.75 - 143.1 5-6% diss and stringer pyrite, minor ccp (<1%) Assay #4662 144.0 - 144.6 3 cm wide band of coarse-grained pyrite (clastic fragments?) with parallel stringers of course grain pyrite at 70-80 degrees to CA, 10% pyrite over interval, tr ccp.	Geochem #4583 107.29 - 110.33 #4584 133.19 - 136.25 FP, epidotized diorite dike from 143.10 - 143.67 m, at 75 degrees to CA.
144.6 to 146.23	Quartz Crystal Tuff	Color - grey Grain - aphanitic 144.6 - 146.23 Chloritized, quartz crystal tuff with 3% QP up to 6 mm and locally up to 2% fine lenticular wispy chloritic "fragments" (1mm x 1 cm).		Moderate chlorite/sericite alteration. (1% ccp)	8-10% stringer and diss pyrite, tr ccp throughout. Assay #4663 144.6 - 145.15m, good pyrite stringer up to 4 cm wide at 144.8m (75 degrees to CA). Assay #4664 145.55 - 146.23, cgr pyrite stringer up to 3 cm wide (145.80m) at 75-85 degrees to CA.	

146.23 to 163.67	Chloritized Dacitic Tuff and Ash	Color - grey to grey-green Grain - aphanitic 146.23 - 148.53 Massive dacitic tuff, fine grained, aphanitic. Fine (<1mm) feldspar crystals? 148.53 - 149.25 Dacitic ash, thin bedded, at 80 degrees to CA. 149.25 - 150.72 Quartz crystal tuff - 2.3%, 3 mm - 7mm recrystalized? round quartz crystals and faint mafic lapilli in an aphanitic matrix. 150.72 - 151.8 Thin bedded aphyric dacitic tuff/ash. Bedding at 80 - 75 degrees to CA. 151.8 - 156.05 Massive dacitic tuff, non bedded unit. Grades into overlying thin bedded unit, lower contact sharp at 60 degrees to CA. Contains 2-3% diss pyrite and tr ccp. 156.05 - 156.23 Bedding at 65 degrees to CA. Rhyolite crystal tuff bed - 5% QP to 6 mm - 6-7% FP, <2mm - aphanitic grey matrix 156.23 - 158.66 Rhyolite tuff, crystal tuff - 10% quartz crystals up to 5mm - 3% fine, <1mm feldspar crystals - aphanitic matric 158.66 - 163.67 Dacitic tuff, massive and aphanitic, non-bedded - fine, <1mm light colored specks may be feldspar (2-5%) - shear, with chloritic gouge from 161.7 to 161.85 at 85 degrees to CA. Thin diorite dike from 161.85 - 161.97 at 80 degrees to CA.	2-3% disseminated and fracture controlled pyrite throughout with minor to tr ccp. Assay #4665 149.07 to 149.25 5% ccp as irregular stringer up to 1 cm wide, 1% pyrite. Assay #4666 158.96 - 159.65 3-4% pyrite as stringers, tr ccp.	Geochem #4585 146.23 - 149.07 Geochem #4586 149.25 - 150.72 Geochem #4588 160.63 - 163.67

From To	Rock Type	Texture and Structure	Angle to Core Axis	Alteration	Sulphides	Remarks
163.67 to 166.72 EOH	Andesitic Tuff	Color - green Grain - aphanitic Massive, non-bedded unit. Dacitic bed/section from 164.1 - 164.55 Chlorite gouge zone at diorite ctc from 165.8 to 165.95 m at 70 degrees		Pervasive moderate chl alt	<3% diss and fracture pyrite Minor ccp	Diorite dikes from 164.55 to 164.73 at 75 degrees and from 165.95 - 166.72 at 60 degrees to CA.

PPb Ba

ASSAY SHEET

Sample Number	From ( )	To ( )	Estimate Cu	Estimate Zn	Length ( )	% Cu	% Zn	% Pb	gm/T Ag	gm/T Au	% SiO_2	% TiO_2	% Na_2O	% MgO	% Fe	PPM Cu	PPM Zn	PPM Pb	PPM Ag	PPB Au			
4656	23.25	23.6				0.334	0.01	0.01	2.1	30													
57	24.37	25.30				0.129	0.01	0.01	2.2	10													
58	39.0	39.34				0.100	0.01	0.01	2.0	10		4500											
59	42.73	43.32				0.057	0.02	0.01	2.0	5													
60	88.70	89.10				0.032	0.02	0.01	2.1	30													
61	141.75	143.1				0.380	0.01	0.01	3.0	20													
62	144.0	144.6				0.329	0.01	0.01	2.4	10													
63	144.6	145.15				0.094	0.01	0.01	2.0	5		1140											
64	145.55	146.23				0.30	0.01	0.01	2.0	10		940											
65	149.07	149.25				5.24	0.10	0.01	14.0	100													
66	158.96	159.65				0.051	0.06	0.02	2.3	5													

HOLE NO. MTS-24

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LITHOGEOCHEMISTRY

SAMPLE NUMBER	FROM (m)	TO (m)	MAJOR OXIDES										TRACE ELEMENTS									
			SiO_2	Al_2O_3	CaO	MgO	Na_2O	K_2O	FeO	MnO	TiO_2	Ba	ppm Cu	ppm Zn	% Pb	% Zr	ppb Au	Rock Type	Alt	Min	Grid	
4578	11.27	14.32	73.05	14.58	0.36	1.57	3.97	2.12	2.72	0.10	0.28	.133	19	102	.005	.005						
4579	27.10	32.61	69.50	15.53	0.40	2.16	4.54	1.76	4.06	0.14	0.36	.073	120	540	.005	.005						
4580	39.45	42.60	63.91	16.39	0.89	4.84	1.45	2.88	7.15	0.35	0.55	.200	252	160	.005	.005						
4581	44.5	47.29	62.98	16.62	1.02	5.70	2.31	2.12	6.77	0.42	0.54	.098	352	352	.005	.005						
4582	84.45	89.10	61.28	16.76	0.39	7.24	0.37	2.88	8.60	0.35	0.54	.092	254	150	.005	.005						
4583	107.29	110.33	61.76	16.20	0.89	7.11	2.13	1.84	7.57	0.44	0.53	.101	216	174	.005	.005						
4584	133.19	136.25	60.75	16.71	0.37	8.96	1.13	2.00	7.41	0.44	0.54	.101	164	196	.005	.005						
4585	146.23	149.07	64.75	15.84	0.31	5.15	1.66	2.38	7.63	0.27	0.48	.114	1000	136	.005	.005						
4586	149.07	150.72	64.53	15.76	0.36	5.61	1.60	2.20	7.35	0.32	0.51	.110	1520	168	.005	.005						
4587	153.0	156.05	70.22	13.47	0.27	3.64	1.31	2.47	6.68	0.15	0.32	.128	1280	92	.005	.005						

Hole No. MTS-24 Entered by _____ Logged by _____ Page No. 10

LITHOGEOCHEMISTRY

			MAJOR OXIDES										TRACE ELEMENTS									
SAMPLE NUMBER	FROM (m)	TO (m)	SiO_2	Al_2O_3	CaO	MgO	Na_2O	K_2O	FeO	MnO	TiO_2	Ba	ppm Cu	ppm Zn	% Pb	% Zr	ppb Au	Rock Type	Alt	Min	Grid	
4588	160.63	163.67	66.06	15.19	0.62	4.22	2.67	2.12	6.90	0.11	0.41	.117	206	40	.005	.005						

Hole No. MTS-24 Entered by _____ Logged by _____ Page No. 11

CORPORATION FALCONBRIDGE COPPER

Grid Co-ordinates - 2+50N, 0+80E

DRILL HOLE RECORD

x METRIC UNITS
IMPERIAL UNITS

HOLE NUMBER	GRID	FIELD COORDS	LAT.	DEP.	ELEV.	COLLAR BRNG.	COLLAR DIP	HOLE SIZE	FINAL DEPTH
MTS-25			2+60N	0+75E	470m	185	51°	NQ	252.07m
PROJECT PN 305 Mt. Sicker	CLAIM #	SURVEY COORDS.				DATE STARTED: Dec 1/86 DATE COMPLETED:	CONTRACTOR: F. Boisvenu CORE STORAGE: Fulton Farm CASING:		

PURPOSE

RQD LOG
COLLAR SURVEY
PULSE EM SURVEY
MULTISHOT SURVEY

ACID TESTS				TROPARI TESTS			MULTISHOT DATA		
DEPTH (ft	CORRECTED ANGLE	DEPTH ( )	CORRECTED ANGLE	DEPTH (ft)	AZIMUTH	DIP	DEPTH ( )	AZIMUTH	DIP
100	50°			623	143°	-49°			
200	49-50°								
300	50°								
400	50°								
500	74-75° -	not correct							
600	no line								
700	49°								
800	49-50°								

HOLE NO MTS-25

LOGGED BY Harold L. Gibson

ZIPPY PRINT - — BRIDGEPORT, RICHMOND

From To	Rock Type	Texture and Structure	Angle to Core Axis	Alteration	Sulphides	Remarks
0 to 3.05	CASING					
3.05 to 23.0	Epidotized Andesitic Tuff and Ash	Colour - dark to light grey green Grain - fine to aphanitic 3.05 - 8.25m Andesitic ash, tuff unit. Poorly defined bedding defined by light green epidotized "beds" alternating with darker green laminae. Beds from 3-4mm to 4cm thick at approx. 55 - 60°CA - irregular chloritic "frags" or vein segments 8.25 - 14.32m Epidotized Lapilli Tuff - poorly defined somewhat diffuse-looking fragments from <1cm to 5-6cm - subangular in form - in situ brecciated appearance - thin bed of aphanitic, aphyric felsic ash (white) at 40° to CA from 11.00 - 11.06m. - quartz (minor calcite) veins at <20° to CA 14.32 - 23.0m Predominately grey to light green andesitic ash unit. Fine epidote spots (1-2mm) define sections that may be crystal-tuff (epi altered feldspar crystals) beds. - Distinct darker grey irregular lapilli to 4cm in a light grey matrix from 17.10-17.55m - Distinct bedded section of fp crystal tuff from 20.5 to 20.86m with bedding at 50° to CA		Pervasive mod-strong epidote alteration - diffuse epidote patches, chlorite associated sulphide stringers/fracture fillings from 13.53 - 14.32m	3-4%, frature controlled, fine py, po and minor ccp from 13.53-14.32m Fine disseminated, bleby and locally fracture controlled py (tr ccp) throughout unit - <1% sulphides. 3% py-po, tr ccp in stringers with chlorite over 4 cm at 15.35m.	Assay #6401 13.53-14.15 Geochem #6001 8.23-11.27

From To	Rock Type	Texture and Structure	Angle to Core Axis	Alteration	Sulphides	Remarks
23.0 to 24.05	Fault Zone	Colour - green-grey Strongly foliated and broken core - broken and segmented blue-grey quartz veins, minor calcite. - chloritized/sericitized sheared andesite? - foliation at <45° to CA		Sericitic, chloritic epidote alt. andesite?	Tr py	
24.05 to 90.53	Andesite Ash-Tuff	Colour - grey to grey-green Grain - fine 24.05 to 27.90 Massive, aphanitic andesitic ash/v. fine tuff - weak and localized epidote alteration 27.90 - 32.0 moderately epidotized andesitic ash/v. fine tuff and accretionary lapilli tuff. Bedding totally disrupted and broken (primary slumping of "wet" tuffaceous seds?) - acc. lapilli form distinct beds <1cm - 3cm wide consisting of 10-20% 1-3mm round light green acc. lappilli in an ash matrix. - acc. lapilli also occur within massive ash/v. fine tuff beds (<5%) - some acc. lapilli beds are graded; tops up hole? - qtz-calcite veins at <50° and >30° to CA from 30.80 - 31.4 faint fragment forms - angular fragments up to 5 cm with lighter coloured margins 31.4 - 32.0: broken core - andesite tuff?		24.05-27.90 V. weak epidote alteration. 27.80 - 32.0 distinct epidote patch development with psuedobx texture. - patchs locally look distinct but are diffuse and gradational into tuff/ash matrix - their outer margin containing more qtz than epidote and imparting a grey versus a light green/grey colour. - patchs form 1cm to in amoeboid forms to 10cm.	<1% disseminated and fracture controlled pyrite from 24.05-27.90m 27.90 - 32.0 minor pyrite (<1%) and tr ccp	Geochem #6002 28.34 - 31.4

From To	Rock Type	Texture and Structure	Angle to Core Axis	Alteration	Sulphides	Remarks
		32.0 - 36.95 Aphanitic, massive andesitic tuff - v. fine grained - possible lapilli-size fragments from 32.8 to 39.05m - small, faint 1mm circular spots - possible accretionary lapilli (15-20%) from 34.6 - 34.8m		32.0 - 36.95 Weak-nil epidote alteration		
		36.95 - 38.7 Bedded-laminated ash unit Crude-faint bedding at 60 - 70° to CA Crystal (FP) rich light coloured mottled section from 38.10 to 38.7m		36.95 - 38.7: nil	2-3% stringer like pyrite with chl. ash from 37.6-38.10m	
		38.7 - 64.92 Bleached, grey, massive andesite - Strong fault marked by broken core from 39.65 to 44.51m with stong muddy gouge from 40.0 to 41.0m with 0.5m of core missing over the latter interval. - crude layering locally at 65° to CA. Layering a result of alternating light and dark colour laminae and laminae with a mgr. granular texture - feldspar crystals?		38.7 - 64.2 Andesite is bleached and light-grey in appearance with irregular - amoeboid shaped mottled patches of silicification and sercite-epidote alteration up to 20cm in size. Alteration patchs commonly cut by quartz veins with massive green-grey chlorite. - local spots of py, tr ccp up to 3-4cm in size with 10-15% sulphide. After 57.30 epi-qtz patche take on an in situ bx texture imparting a fragmental texture to the altered patch - irregular chlorite in veins separate frags - could be frag beds but look more like alteration texture/structure.	38.7 - 64.92 <1% diss pyrite throughout interval, however locally epidote/qtz alt. patchs contain 3-4% sulphides, chiefly py but with some ccp. Coarse blebs of ccp (1%) occur in epidote/qtz atl patchs at 51.0m	Geochem #6003 48.45 - 51.2 Calcite-qtz veins at 50 - 80 to CA

From To	Rock Type	Texture and Structure	Angle to Core Axis	Alteration	Sulphides	Remarks
		64.92 - 65.10 Andesitic crystal tuff with 10-15% feldspar crystals in a v. fine andesitic tuff/ash matrix.		64.92 - 65.10 Irregular silicification alteration patchs with a distinct vein-like appearance (notably from 64.92-65.06m)		
		65.10 - 72.20 Andesitic ash, minor crystal tuff (Fp crystals) - crude faint layering at 50 - 60° to CA		65.10 - 72.20 Weak epidote alteration, silicification.		
		72.20 - 76.60 Andesitic accretionary lapilli tuff -crude, indistinct layering at 65° to CA -5-20% accretionary lapilli, consisting of round to ovoid felsic forms with mafic cores occasionally preserved. 4cm wide shear/gouge zone at 76.80m at 75° to CA		72.20 - 76.60 Weak pervasive epidote alteration -weak to moderate chlorite alteration from 74.75 - 75.70m	72.20 - 76.60 <10% diss pyrite, with 2% py from 74.75 - 75.70m	Geochem #6004 74.75 - 75.50m
		76.60 - 79.30 -Contact at 76.60 is gradational and located to separate crudely bedded acc. lapilli tuffs from more massive in situ bx. tuffs. -massive grey andesite tuff - in situ brecciated with a light grey green sericitic vein-network matrix.		76.60 - 79.30 Sericitic vein-network matrix, mod-strong sericite alteration from 78.30 to 78.70m	76.60 - 79.30 <10% pyrite	

From To	Rock Type	Texture and Structure	Angle to Core Axis	Alteration	Sulphides	Remarks
		79.30 - 85.6 From 79.30 - 81.65, massive chloritic andesitic tuff After 81.65m unit is an andesitic lapilli tuff with light green-grey typically tabular angular fragments up to 4cm long x 1.5cm wide in a leucoxene-chloritized sulphide bearing matrix. -Breccia may be primary volcanic bx or syn. sed slump bx - tabular shape of frags reminiscent of broken beds?		79.30 - 85.6 Pervasive weak to moderate chlorite alteration especially apparent in matrix to breccias (leucoxene crystals dot chloritized andesite) Epidote patchs for 2-3cm to 0.7m are not chloritized but are cut by gash-like quartz/massive chlorite veins. Bx texture of Andesite not apparent in epidote alteration patchs.	79.30 - 85.6 Chloritized section of unit characterized by irregular-bleby stringers of pyrite - minor pyrrhotite and trace chalcopyrite Epidote patchs noticeably lack sulphides -Interval contains 2-3% sulphides overall with section up to 10cm wide averaging 5-6% sulphides.	
		85.6 - 90.53 Strongly epidotized andesite tuff, lapilli tuff? Fragments/texture difficult to discern because of intense epidote-quartz alteration -crude layered look to unit? Massive grey chert, weakly laminated, from 88.81-88.89m at 80° (?) to CA - good exhalative horizon (minor ash laminae, 1% py)		85.6 - 90.53 Moderate to intense epidote alteration and silicification. Irregular alteration patchs up to 0.30m veined by gash-like chlorite and quartz veins.	Pyrite, pyrrhotite and minor chalcopyrite stringers from 87.3-87.80m, near massive pyrrhotite veins (+40% sulphide) over 2-3cm at 40° to CA Assay #6403 87.3 - 87.80m	Geochem #6009 87.80 - 90.53m
90.53 to 93.25	Chloritized Andesite Tuff	Colour - green-grey Grain - aphanitic Massive unit, chloritized and mineralized -possibly bedded, however alteration masks most testures/structures		Pervasive chlorite alteration (unit may be more dacitic)	- irregular stringers of pred. pyrrhotite and pyrite with tr. ccp throughout unit - 2-3% overall.	Geochem #6010 90.53 - 93.25

From To	Rock Type	Texture and Structure	Angle to Core Axis	Alteration	Sulphides	Remarks
93.25 to 96.80	Rhyodacite Lapilli Tuff	Colour - grey Grain - aphanitic Good lapilli to block size fragments of predominately sericitized rhyodacite (some with elongate chloritic spots-amygdules) and massive grey rhyodacite. Fragments are angular and the breccia verges on being matrix supported -matrix is a fine dacitic ash and from 5-20% pyrite		Moderately chloritized from 93.25 to 92.10 95.10 - 96.80: moderately sericitized.	2-20% pyrite, tr. ccp and pyrrhotite in matrix to breccia. Section averages 3-5% sulphides Assay #6405 95.10 - 95.75: 5% sulphides	Geochem #6011 93.25 - 96.80 (except section from 95.10-95.75)
96.80 to 112.63	Epidotized Andesitic Tuff and And/Dac Ash	Colour - dark green to grey Grain - f.gr Predominent rock type is a strongly epidotized andesitic tuff/ash. Most textures/structures destroyed or masked by alteration - crude layering locally apparent along with epidotized lapilli size fragments? Epidotized andesitic units separated by thin units of grey, massive homogeneous to faintly laminated andesite/dacite ash and minor chert from: 97.45 - 97.47: chert 97.84 - 97.90 at 70° to CA; cherty ash 98.0: 2cm wide band of cherty ash at 80° to CA 104.95 - 105.20: Andesitic/Dacitic ash at 70° 105.8 - 106.0: And/Dac ash at 60° 106.05 - 106.20: And/Dac ash at 60° to CA.		Pervasive strong epidote alteration, distinct patchs with diffuse boundaries.	Fine diss and clotty stringers of pyrite, tr. ccp and po. Section averages 2-3% sulphides with narrow intervals (<15cm) of 10%-15% py. Ultra fine pyrite in And/Dac Ash units - 1-3% Assay #6406 98.00 - 99.17: 4% py Assay #6407 101.23 - 101.82: 3-4% py; 2-4cm py bands with 20% py Assay #6408 104.62 - 105.0: 2% py; Tr ccp	Geochem #6012 99.17 - 104.24 (does not include assayed intervals) Geochem #6013 104.95 - 105.20 105.80 - 106.0 And/Dac Ash units

From To	Rock Type	Texture and Structure	Angle to Core Axis	Alteration	Sulphides	Remarks
112.63 to 121.70	Chloritized Pyritic And/Dac Ash, minor Chert	Colour - grey Grain - fine 112.63 - 112.95 Thin bedded, chloritized andesite/dacite ash; 8mm wide massive pyrite bed at 80° to CA Qtz vein with sericite and pyrite at 50°to CA from 112.78 to 112.86m and over 2cm at 112.95m.	ctc at 112.63m is sharp and at 80° to CA	112.63 - 112.95 Strong chlorite/sericite alteration	112.63 - 112.95 -2% py average over section - chiefly as distinct beds/laminae or diss in beds. -py in qtz vein - 3-5% at 112.78 to 112.86m	START OF MINE PACKAGE hosting Postuk-Fulton Horizon
		112.95 - 113.50 Thin-bedded, massive light and dark grey chert. Ovoid inclusions (3cm x 1cm) of felsic ash are identical to those observed in the NE Copper cherts 2.1km to the east. Thin pyrite (<5mm) laminae at 80 - 85° to CA.		112.95 - 113.50 nil	112.95 - 113.50 2% py, tr. ccp along laminae in chert -distinct pyrite beds (<0.5cm in width - 60-70% py)	

From To	Rock Type	Texture and Structure	Angle to Core Axis	Alteration	Sulphides	Remarks
		113.5 - 121.70 Grey, chloritized andesite/dacite ash/tuff. Crude layering difficult to discern from foliation. Fine quartz and calcite veins (<4mm) at 75 - 80° to CA -discontinuous, transposed pyrite laminae at 75 - 85° to CA -Tectonic bx from 118.3-118.43m with siliceous cherty frags in a quartz-vein matrix at 80° to CA		113.50 - 121.70 Pervasive strong chlorite alteration; lack of epidote alteration suggests a more "dacitic" original composition.	113.5 - 121.70 Setion characterized by 3-6% py overall with sections over 10-20cm of 15-20% pyrite. Pyrite as fine disseminations, as disseminated blebs (<3mm) and fine reticulate stringers. Chalcopyrite ranges from tr. to locally 4% over 8cm widths. Typically as irregular discontinuous stringers, blebs and to a lesser extent as fine disseminated grains. Assay #6409 113.85 - 115.30: 6% sulphides; <1% ccp Assay #6410 116.8 - 117.25: 5% py; <1% ccp Assay #6411 117.25 - 117.48: 10% py; 3% ccp Assay #6412 117.48 - 118.20: 5% sulphides; <1% ccp	Geochem #6015 118.20 - 121.70m

From To	Rock Type	Texture and Structure	Angle to Core Axis	Alteration	Sulphides	Remarks
121.70 to 130.60	Massive, thin bedded Chert, minor Chloritized Ash	Colour - light grey Grain - aphanitic Massive, thin bedded to laminated chert -bedding defined by colour variation light-dark grey to black in massive chert -bedding ranges from <20° to 80° to CA - soft sediment deformation? - with chert, however, ctc's with ash are sharp at range from 70° - 80° to CA - commonly sheared with minor gouge locally -few ash nodules in chert a la NE Copper! -Pyritic ash interbed (8-10% py) from 122.47-122.60m at 70° to CA and at 129.8-130.30m; and 127.87-128.05 (all pyritic with Tr ccp) -apple-green micas in chert from 127.30-127.41m.	ctc at 121.7m sharp at 70° to CA		Assay #6413 124.05 - 124.36: 6% sulphide; <1% ccp Assay #6417 124.70 - 125.57: 3-4% py; <1% ccy	Geochem #6016 121.70 - 124.05 Geochem #6017 127.41 - 130.60 Stratigraphic equivalent of NE Copper Cherts

From To	Rock Type	Texture and Structure	Angle to Core Axis	Alteration	Sulphides	Remarks
130.60 to 191.0	Chloritized Andesite/ Dacite Ash/ minor Tuff; Chert	Colour - grey Grain - fine to aphanitic Chloritized dark grey Andesite/Dacite Ash/ minor Tuff. -homogeneous fgr.-aphanitic unit -faint bedding in ash, or is it foliation - strongly foliated/sheared at ctc with chert (130.60) and from 130.6 - 135.5m (Fault zone?) -foliation at 80 - 85° to CA -chert interbed from 130.85 - 131.12m -thin cherty ash and chert beds (<3cm) at 80° to CA -cherty ash with ultra-fine pyrite from 137.10 - 138.0m at 80 - 85° to CA. -calcite/qtz veins at 70 - 85° to CA - few at 45° to CA -Laminated chert section from 145.69 to 146.33m and from 146.51 to 146.38m. Chert is thinly bedded, with light and dark grey beds and pyrite-rich laminae that are contorted and folded-bedding at <25 - 70° to CA. Contacts with adjacent ash are sharp but chl ash is strongly sheared.	ctc at 130.6m sharp/ sheared at 75 - 80 to CA	Pervasive, strong chlorite alteration except in chert interbeds -unit is more massive, less foliated after 151.44 possibly reflection either a change in composition/ grain size or decreasing alteration (chlorite). From 183,70 to 191.0m ash unit averages 3-4% pyrite throughout with narrow sections (<15cm) of 15-20% py - typically c.gr py in stringers at 90° to CA with 20% - 25% pyrite from 189.75-191.0m	1-2% diss pyrite and tr ccp throughout unit -ultra fine (<<1mm) py in cherty ash interbeds (5-6%) -distinct laminae <0.5cm wide of massive fine pyrite -tr ccp as blebs, disseminated grains and discontinuous stringers. After 164m sulphide content of chloritized ash increases 2-4% overall, with distinct <1cm-2cm wide stringers of f-cgr. pyrite, tr. ccp.	Geochem #6018 140.82 - 144.40: ash, cherty ash Geochem #6019 145.69 - 147.38: chert (except ash interval from 146.33-146.51m) Geochem #6020 147.38 - 151.44: chl, sheared, veined andesite/dacite ash

From To	Rock Type	Texture and Structure	Angle to Core Axis	Alteration	Sulphides	Remarks
		After 151.44 unit is a weakly foliated massive, thin bedded And/Dac Ash/Tuff - distinctly less foliated and more intact. -fine pyrite as distinct laminae, <0.5cm in width and minor chert laminae interbeds - bedding at 80 - 50° to CA -massive white quartz vein with angular clots of massive chlorite from 157.15m-157.80m, at <20° to CA -4mm wide py bed at 170.17m at 80° to CA - interbedded with laminated chloritic ash -shear/fault from 168.8 - 169.05 and from 169.25 - 169.60 at 85 - 90° to CA -3cm wide bed of green Dacitic ash at 189.75m at 80° to CA	ctc at 191.0 sheared at 75° to CA	Strong epidote alteration patch from 175.8-159.40m	Assay #6415 164.06 - 164.81m: 2-3% py <1% bleby chalcopyrite (up to 1cm) Assay #6416 166.03 - 166.80: <1% bleby ccp (<0.5cm); 2% py Assay #6417 180.25 - 181.15: 6-7% py; <1% ccp Assay #6418 183.79 - 185.45: 8% pyrite as disseminated grains and stringers - beds at 80° to CA Assay #6419 189.20 - 191.0m	Geochem #6021 161.85 - 164.06: Tr py, ccp; chloritized ash Geochem #6022 172.0 - 175.58m Geochem #6024 176.78 - 179.82: 2-3% py, Tr. ccp Geochem #6025 185.45 - 189.20: pyritic ash
191.0 to 192.30	Grey Rhyodacitic Ash	Colour - grey Grain - aphanitic Thin bedded - laminated ash. Bedding defined by alternating grey, dark gray and black laminae. Bedding at 70° to CA -occasional quartz veins at approx. 50° to CA	Bedding at 70° CA	Weak sericite	2-3% pyrite overall, typically as massive py (+30%) stringers at 70 - 90° to CA	Geochem #6026 191.0 - 192.30

From To	Rock Type	Texture and Structure	Angle to Core Axis	Alteration	Sulphides	Remarks
192.30 to 198.15	Sericitized Pyritic Dacitic Ash	Colour - dark grey Grain - aphanitic Interbedded grey "dacitic" chloritized ash and greenish andesitic tuff and possible crystal tuff (fp) -4cm wide chloritic shear at 196.70m at 85° to CA	Bedding at 80° to CA	Chlorite - pervasive	2-4% avgerage pyrite throughout - cgr. disseminated grains - tr ccp -5% pyrite, tr ccp in qtz vein stringer from 197.3 - 195.4m	Geochem #6027 194.16 - 198.15
198.15 to 240.10	Rhyodacite Massive Tuff or Flow	Colour - light grey Grain - aphanitic Massive, grey rhyodacite -homogeneous uniform unit, no discernable bedding or breccia recognized -crude, weak discontinuous dark grey "chloritic" banding at 70 - 90° to CA - commonly associated with cgr. pyrite stringers -Tr. fine (<2mm) quartz eyes -3cm wide sericite shear at 85° to CA at 205m. 210.32 - 211.5: weakly epidotized andesite dike or tuff - strong shear/fault from 211.5-211.80m marked by chl. gouge (65 - 70° to CA) 212.45 - 212.60: chloritized tuff - andesite at 70° to CA Slightly more chloritic from 222.05-223.05 with tr-1% quartz eyes up to 3-4mm - crystal tuff bed.		Weak to nil sericite alt. -dark banding (<1cm) wide) commonly associated with py veins may be alt. - chlorite. Mod-weak sericite alteration after 223.05m	1% fine diss pyrite, Tr. ccp throughout -good py, tr. ccp stringers oriented at 75 - 90° to CA From 199.45 to 200.75m, 4% pyrite, chiefly as stringers 1cm wide. 5cm stringers of py (tr. ccp) at 200.6 and 200.7m. Assay #6420 199.45 - 200.75m	Geochem #6028 200.75 - 203.30 Geochem #6029 215.53 - 218.54 Geochem #6030 224.64 - 227.69 Geochem #6031 236.83 - 239.88

From To	Rock Type	Texture and Structure	Angle to Core Axis	Alteration	Sulphides	Remarks
		From 223.05 to 227.73m, unit is more strongly foliated at 70° to CA with 4cm wide shear at 225.2m at 70° to CA. Minor quartz-vein-tectonic bx from 227.60-227.73m After 227.75 to 240.10: rhyodacite unit has a distinct "banded " appearance with wispy-discontinuous darker grey bands <2cm wide that contrast with text/min identical grey rhyodacite. Banding at 70 - 85°to CA and occasionally kinked. Strong fault-gouge zone (sericitic) with quartz veins from 235.5 to 235.83m at 80° to CA				
240.10 to 252.07 EOH	Quartz-eye Rhyodacite Crystal Tuff (Flow?)	Colour - light grey Grain - fine Similar to overlying unit except lacks "banded" structure and contains more quartz-phenocrysts -1-locally 2% fine <2mm quartz-eyes, massive homogeneous unit -quartz eyes are elliptical and may be "metamorphic granular qtz" rather than primary crystals? -foliation at 65 - 70°to CA -Good distinct quartz eyes, up to 4mm, after 249.50m -unit has a speckled appearance (fine 4 x 1mm chlorite wisps) and locally with darker grey discontinuous bands.	ctc at 240.10 marked by thin shear (1cm)	Weak but pervasive	1% fine and coarse diss pyrite	Mafic dike (andesite) from -243.80-244.80m at 30° to CA -248.75-249.20m at 40° to CA -249.30-249.35m -249.40-249.44m at 30° to CA Geochem #6032 246.70 - 252.07

LITHOGEOCHEMISTRY

			MAJOR OXIDES										TRACE ELEMENTS									
SAMPLE NUMBER	FROM (m)	TO (m)	SiO_2	Al_2O_3	CaO	MgO	Na_2O	K_2O	FeO	MnO	TiO_2	Ba	ppm Cu	ppm Zn	% Pb	ppm Ag	ppb Au	Rock Type	Alt	Min	Zr%	Total
6001	8.23	11.27	42.42	17.68	20.12	4.26	0.30	0.06	11.02	0.80	0.81	.005	50	32	.008						.005	97.48
Andesite																						
6002	28.34	31.40	47.62	23.08	6.20	3.64	3.02	2.94	9.07	0.25	1.90	.042	18	60	.007						.005	97.77
Andesite																						
6003	48.45	51.20	49.02	20.62	7.02	3.79	2.54	1.28	11.14	0.20	1.57	.033	1200	72	.008						.005	97.22
Andesite																						
6004	74.75	75.50	41.33	18.35	7.92	3.04	0.47	0.04	25.26	0.34	0.87	.005	140	80	.009						.005	97.63
Andesite																						
6009	87.80	90.53	47.65	21.45	6.34	2.46	1.80	3.24	12.59	0.25	1.31	.240	840	76	.010						.005	97.34
Andesite																						
6010	90.53	93.25	49.62	20.13	5.42	2.10	1.98	3.49	12.53	0.19	1.54	.190	1800	80	.005						.005	97.20
Andesite																						
6011	93.25	96.80	49.67	19.53	5.92	1.89	1.10	5.30	12.26	0.15	1.51	.229	190	28	.005						.005	97.56
Rhyodacite																						
6012	99.17	104.24	50.41	18.84	11.67	4.58	0.49	1.80	15.62	0.34	0.96	.169	296	40	.005						.005	104.88
Andesite																						
6013	104.95 105.80	105.20 106.0	47.10	22.89	3.83	4.17	2.37	4.79	10.54	0.18	1.27	.371	144	32	.005						.005	97.50
Andesite																						
6015	118.20	121.70	42.23	24.97	0.74	5.35	0.14	6.70	15.32	0.40	1.20	.429	68	104	.006						.005	97.47
Andesite/Dacite																						

Hole No. MTS-25 Entered by _____ Logged by Harold L. Gibson Page No. 15

LITHOGEOCHEMISTRY

SAMPLE NUMBER	FROM (m)	TO (m)	MAJOR OXIDES SiO_2	Al_2O_3	CaO	MgO	Na_2O	K_2O	FeO	MnO	TiO_2	Ba	TRACE ELEMENTS ppm Cu	ppm Zn	% Pb	ppm Ag	ppb Au	Rock Type	Alt	Min	Zr%	Total
6016	121.70	124.05	87.06	4.11	1.18	1.35	0.02	0.96	2.69	0.13	0.20	.076	30	40	.005						.005	97.76
Chert																						
6017	127.41	130.60	84.79	4.33	0.68	3.43	0.01	0.36	3.75	0.30	0.21	.025	76	72	.005						.005	97.89
Chert																						
6018	140.82	144.40	46.18	20.78	0.40	12.30	0.94	2.13	12.35	0.87	1.05	.106	400	300	.023						.005	97.15
Ash/Chert																						
6019	145.69	147.38	71.59	11.63	0.58	5.62	0.42	2.05	5.21	0.28	0.47	.107	24	232	.006						.005	97.96
Chert/minor Ash																						
6020	147.38	151.44	49.69	11.83	6.67	17.58	0.05	0.04	10.28	0.80	0.58	.005	108	420	.021						.005	97.55
Andeiste/Dacite																						
6021	161.85	164.06	53.45	15.35	0.65	11.77	0.95	0.40	12.94	0.75	0.81	.021	1600	240	.023						.005	97.11
Ash-Andesite/Dacite																						
6022	172.0	175.58	39.03	18.78	0.84	12.82	0.07	1.27	21.72	0.80	1.45	.058	320	248	.016						.005	96.86
Andesite/Dacite																						
6024	176.78	179.82	42.39	18.60	0.52	12.80	0.02	1.19	19.24	0.67	1.46	.054	40	204	.028						.005	96.98
Andesite/Dacite																						
6025	185.45	189.20	40.97	20.14	0.54	11.97	0.05	1.96	19.27	0.61	1.49	.087	40	184	.019						.005	97.10
Andesite/Dacite																						
6026	191.0	192.30	51.76	17.96	0.47	6.02	0.09	3.76	15.70	0.25	1.35	.173	200	80	.008						.005	97.55
Dacite																						

Hole No. MTS-25 Entered by _____ Logged by Harold L. Gibson Page No. 16

LITHOGEOCHEMISTRY

SAMPLE NUMBER	FROM (m)	TO (m)	MAJOR OXIDES SiO_2	Al_2O_3	CaO	MgO	Na_2O	K_2O	FeO	MnO	TiO_2	Ba	TRACE ELEMENTS ppm Cu	ppm Zn	% Pb	ppm Ag	ppb Au	Rock Type	Alt	Min	Zr %	Total
6027	194.16	198.15	47.72	17.85	1.29	9.17	0.12	1.96	17.12	0.60	1.28	.086	680	144	.021						.005	97.23
Dacite																						
6028	200.75	203.30	72.77	13.88	0.23	1.36	0.47	3.75	5.05	0.05	0.25	.154	1000	40	.005						.005	97.97
Rhyodacite																						
6029	215.53	218.54	71.26	14.26	0.05	2.99	0.13	3.70	4.85	0.09	0.25	.155	1200	60	.007						.005	97.75
Rhyodacite																						
6030	224.64	227.69	71.01	14.65	0.12	2.55	0.11	3.71	5.28	0.10	0.26	.183	760	32	.005						.005	97.98
Rhyodacite																						
6031	236.83	239.88	73.70	13.95	0.50	0.95	2.91	2.47	2.93	0.05	0.26	.133	580	20	.005						.005	97.85
Rhyodacite																						
6032	246.70	252.07	72.01	13.40	0.30	1.26	1.38	2.93	6.13	0.06	0.23	.160	760	76	.005						.005	97.87
Rhyodacite																						

Hole No. MTS-25 Entered by _____ Logged by Harold L. Gibson Page No. 17

ASSAY SHEET

Sample Number	From (m)	To (m)	Estimate Cu	Estimate Zn	Length (m)	% Cu	% Zn	% Pb	gm/T Ag	gm/T Au	% Ba	% TiO_2	% Na_2O	% MgO	% Fe	PPM Cu	PPM Zn	PPM Pb	PPM Ag	PPB Au			
6401	13.53	14.15			0.62	.182	.01		2.0	.02													
6403	87.30	87.80			0.50	1.13	.04		6.2	.03													
6405	95.10	95.75			0.65	.003	.01		1.2	.01													
6406	98.00	99.17			1.17	.024	.01		1.0	.01													
6407	101.23	101.82			0.59	.010	.02		0.2	.02													
6408	104.62	105.0			0.38	.043	.02		1.2	.01													
6409	113.85	115.30			1.45	.990	1.18		5.2	.03	.17												
6410	116.8	117.25			0.45	.320	.08		4.0	.01	.12												
6411	117.25	117.48			0.23	1.94	.10		12.0	.14	.02												
6412	117.48	118.20			0.72	.122	.05		2.0	.01	.14												
6413	124.05	124.36			0.31	.220	.02		2.1	.01	.01												
6414	124.70	125.57			0.87	.002	.02		1.0	.04	.01												
6415	164.06	164.81			0.75	.384	.05		2.0	.01	.01												
6416	166.03	166.80			0.77	.158	.03		0.4	.01	.01												
6417	180.25	181.15			0.90	.082	.04		2.6	.01													
6418	183.79	185.45			1.66	.059	.03		2.1	.02													
6419	189.20	191.0			1.8	.264	.02		1.0	.01													
6420	199.45	200.75			1.3	.011	.04		2.4	.01													

HOLE NO MTS-25

CORPORATION FALCONBRIDGE COPPER

Grid Co-ordinates 2+55N, 3+15E

DRILL HOLE RECORD

x : METRIC UNITS
: IMPERIAL UNITS

HOLE NUMBER	GRID	FIELD COORDS	LAT.	DEP.	ELEV.	COLLAR BRNG.	COLLAR DIP	HOLE SIZE	FINAL DEPTH
MTS-26			2+60N	3+15E	495 m	170°	45	NQ	249.02
PROJECT	CLAIM #	SURVEY COORDS.				DATE STARTED: DATE COMPLETED:	CONTRACTOR: F. Boisvenu CORE STORAGE: Duncan		CASING: 11.27m
PN 304									

PURPOSE: Test the PF Horizon east of MTS-8

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

ACID TESTS				TROPARI TESTS			MULTISHOT DATA		
DEPTH (ft)	CORRECTED ANGLE	DEPTH ( )	CORRECTED ANGLE	DEPTH (ft)	AZIMUTH	DIP	DEPTH ( )	AZIMUTH	DIP
100	46°			701	59.5M/36T	48			
200	46°								
300	45°								
400	46°								
500	45-46°								
600	47°								
700	47°								
800	46°								

HOLE NO MTS-26

LOGGED BY Harold Gibson 0-~~170.08~~

M. Gray 170.08-249.02

From To	Rock Type	Texture and Structure	Angle to Core Axis	Alteration	Sulphides	Remarks
0 to 11.27	CASING					
11.27 to 43.59	DIORITE AND FP DACITE DYKES	Colour - green grey + grey Grain Size - f.g. 11.27 - 25.95 Badly broken, oxidized core - weathered surface - diorite 25.95 - 26.00 Chilled margin of diorite 26.00 - 27.50 Dacite FP crystal tuff or dyke 27.50 - 31.40 F.g. diorite? Feldspar porphyritic 6-4% feldspar phenocrysts <3mm 31.40 - 32.90 Dacite crystal tuff or dyke, 8-10% 2-3mm fp, irregular mafic clots <3mm (4%), contact at 31.40 at 30 degrees and 15 degrees at 32.90 32.90 - 34.60 FP diorite 34.60 - 35.25 FP Dacite crystal tuff or dyke 35.25 - 37.20 FP diorite, 5% feldspar phenocrysts, aphanitic groundmass 37.20 - 38.70 Strongly epidotized andesite tuff? 38.70 - 39.40 Feldspar porphyritic diorite 39.40 - 39.95 Dacite crystal tuff (fp - 10%) or dyke, contact at 70 degrees + 40 degrees 39.95 - 43.59 Pred. a fp diorite with thin intervals of dacite from 40.20 - 40.22, 40.3 - 40.40, 40.45 - 40.35 and epidotized andesite from 40.55 - 40.65m		Strongly epidotized from 37.20 - 38.70m. Well developed epidote patches		

From To	Rock Type	Texture and Structure	Angle to Core Axis	Alteration	Sulphides	Remarks
43.59 to 68.27	STRONGLY EPIDOTIZED ANDESITE	Colour - dark grey to light pistachio green Grain Size - f.g. 43.59 - 48.35 Although strongly epidotized the fragmental nature of this unit is clearly displayed. Dark grey-green angular andesitic fragments variably replaced by epidote - however some are pristine! Intense epidote altered areas display relict insitu? - closely packed fragmental texture - odd, <1% strongly amugdaloidal (epidote-qtz filled) scoria frags - unit is probably an andesitic lapilli tuff - lapillistone 48.35 - 53.0 Unit is characterized by massive sections of dark grey grey andesite with irregular clusters of small epidote patches. Feldspar crystals are epidotized and define crude fp-rich beds? at 70 degrees to CA. Large strongly epidotized patches (<10cm) dot core and are typically strongly amugdaloidal (qtz-epi filled). Amygdules are <3mm and elongate but are smaller (<1mm) toward the epidote patch margin thus defining a chilled rim that is symmetric about the frag.		Pervasive, strong epidote alteration of lapilli-tuff including both frags and matrix - preferential epidote alt. of Fp crystals in andesite crystal tuff, scoria frags with smaller more diffuse patch alteration of tuff matrix. Alteration so intense and pervasive after 53.0m that primary textures/ structures not preserved.	Minor pyrite	Geochem #6033 43.59 - 46.63

From To	Rock Type	Texture and Structure	Angle to Core Axis	Alteration	Sulphides	Remarks
		These epidotized 'a' patches are altered andesite scoria, probably bombs, that are randomly distributed + supported in the ash, crystal tuff matrix - bread crust bombs? 53.0 - 68.27 Strongly epidotized andesite lapilli tuff - textures/structures difficult to recognized. Thin Fp diorite dyke from 53.0 - 53.10m at 75 degrees to CA from 56.32 - 56.70m at 75 degrees; from 57.55 - 57.65 at 60 degrees; from 58.0 - 59.15 at 55 degrees; from 61.15 - 61.54m at 65 degrees; from 62.4 - 63.09 at 60 degrees; and from 63.30 - 64.70m. Dykes have chilled aphyric ribbed margins and Fp (6-8%) interiors. Quartz vein - breccia fault zone from 59.65 - 59.98m at 75 degrees to CA - minor chloritic gouge. - faint 'a' fragment like forms locally recognized.				Geochem #6034 64.70 - 68.27m

From To	Rock Type	Texture and Structure	Angle to Core Axis	Alteration	Sulphides	Remarks
68.27 to 75.83	FP DIORITE AND FP DACITE	Colour - dark + light grey Grain Size - aphanitic groundmass Complex alternating assemblage of FP diorite and FP Dacite. Dacite is light grey in colour; contains from 6-8% fuzzy feldspar crystals up to 3mm in an aphanitic grey matrix/ groundmass with fragments "xenoliths" of fp diorite. Diorite contains 4-6% sharp, 1-3mm feldspar crystals in an aphanitic groundmass. Diorite locally appears to be finer-grained (chilled) and ribbed adjacent to FP Dacite. If dacite is intrusive and not volcanic, occurrence of fp diorite xenoliths and chilling diorite adjacent to Dacite suggest intrusions were consanquinous. FP Dacite from; 68.27 - 69.19; 69.72 - 69.82; 70.75 - 70.94; 72.05 - 72.41; 73.22 - 75.83.		Nil	Tr pyrite to Nil	Geochem #6035 69.19 - 72.24 (minus FP Dac. sections) Geochem #6036 72.24 - 73.97 (minus FP Dacite sections)

From To	Rock Type	Texture and Structure	Angle to Core Axis	Alteration	Sulphides	Remarks
75.83 to 84.13	PLEXUS OF FP DIORITE/ DACITE DYKES AND ANDESITIC VOLCANICS	Colour - light grey green, grey and dark green Grain Size - f.g. Complex dyke assemblage as described above but with screens of epidotized andesitic volcanics - tuffs/lapilli tuffs 75.83 - 76.94 - aphyric, epidotized andesitic tuff? - 5mm wide pyrite stringer @ 80 degrees to CA at 76.02m contact at 75.83 at 40 degrees, however from 76.15 - 76.94 half the core is andesitic tuff, the other FP diorite - shallow contact, subparallel to CA 76.94 - 77.80 FP diorite, contact at 77.80m sharp at 50 degrees 77.80 - 78.01 FP Dacite, contact at 78.01 at 65 degrees to CA 78.01 - 79.40 Strongly epidotized andesitic lapilli tuff? tr. pyrite 79.40 - 80.57 FP Diorite, contacts at 55 degrees 80.57 - 80.75 Epidotized andesite 80.75 - 82.15 FP Diorite, contacts at 60 degrees 82.15 - 83.72 Weakly epidotized, dark grey andesitic tuff and crystal tuff (FP) 83.72 - 84.13 FP Diorite, contacts at 60 degrees		Strong - moderate epidote alteration of volcanic screens between dykes	Minor pyrite in andesite tuffs, good pyrite stringers (3% py over 7cm) at 76.0m	Geochem #6037 75.83 - 83.72 (minor diorite/ dacite dykes)

From To	Rock Type	Texture and Structure	Angle to Core Axis	Alteration	Sulphides	Remarks
84.13 to 95.80	ANDESITE TUFF AND FLOW BRECCIA	Colour - green Grain Size - f.g. Strongly epidotized andesite - bleached, quartz veined and hematitic shear zone from 84.13 - 84.65 @ 75 degrees to CA FP Diorite dykes from 85.20 - 85.25 @ 40 degrees; 85.37 - 85.42 @ 45 degrees; 85.51 - 85.55 @ 30 degrees; 85.58 - 85.65 at 65 degrees and 86.15 - 86.45 at 45 degrees to CA. From 84.13 - 86.55 unit may be an epidotized andesite ash/crystal tuff. From 86.55 - 95.80 Coarse Andesitic monolithic tuff breccia. Fragments are of two main types 1) amygdaloidal to massive f.g. light green-grey andesite. Fragments are irregular to amoeboid in form but are commonly broken with angular margins. Frags range from 0.4m to 2cm. Amygdaules are eliptical - elongate in form and filled with chlorite-epidote-qtz (up to 1cm in size). These large fragments typically lack or have partial chilled margins up to 1cm wide of dark grey hyaloclastite - the rim does not completely mantle fragments. 2) The matrix is composed of fine, <1m shard like dark grey fragments identical to the chilled rim of large clasts and is interpreted as hyaloclastite. The hyaloclastite fragments and coarser lava fragments or an intact framework with a fine ash/tuff matrix. Excellent flow breccia, absence of finer lava fragment in matrix indicates a flow vs pyroclastic brecciation.		Patchy epidote alteration to 86.50, pervasive weak alteration from 86.50 -	Tr pyrite - irregular, discontinuous patches of fne py, tr ccp in stringer within epidote altered areas from 94.48 - 95.50m	Excellent preservation - is this really Mt. Sicker? Geochem #6038 92.75 - 95.40

From To	Rock Type	Texture and Structure	Angle to Core Axis	Alteration	Sulphides	Remarks
95.80 to 102.0	ANDESITIC ASH/TUFF AND LAPILLI TUFF	Colour - grey-green Grain Size - f.g. Although pervasive epidote alteration and epidote patches obscure text/structures unit appears to be an interbedded succession (med-bedded) of andesitic tuff/ash and lapilli tuff. Andesitic tuff units less altered than breccia beds. - bedding @ approx. 45-50 degrees to CA - possible andesite dyke a tuff unit from 99.6 - 99.78 at 40 degrees to CA - not epidote altered - fine hyaloclastic looking breccia from 100.30 - 100.37m - few calcite/qtz veins @ - strongly foliated from 101.80 to 102.0m @ 70 degrees to CA		Pervasive moderate epidote alteration with localized areas - patches of intense epi. alt.	Localized 2-4cm clots of fine massive pyrite or pyritic stringers principally within epidote altered patches. <1% py overall	
102.0 to 105.25	MASSIVE ANDESITE DYKE	Colour - grey Grain Size - aphanitic Massive, homogenous unaltered Feldspar porphyritic (3%) andesite dyke or crystal tuff? - massive, unaltered nature suggests unit is a dyke - cut by gash-like quartz veins at 50 + 30 to C.A. - aphanitic uniform grey groundmass	Contact's at 30 to CA	Nil	Nil	

From To	Rock Type	Texture and Structure	Angle to Core Axis	Alteration	Sulphides	Remarks
105.25 to 122.04	INTER-BEDDED ANDESITIC ASH AND CRYSTAL TUFF	Colour - green grey Grain Size - f.g. 105.25 - 107.07 F.g. andesitic ash, green in color, massive. Calcite quartz veins @ 50 to CA 107.07 - 107.43 Andesite crystal tuff, massive, with 20%, <1mm feldspar crystals 107.43 - 107.85 Discontinuous thin bedded grey andesitic ash and feldspar crystal tuff. Bedding @ 80 to CA 107.85 - 115.15 Andesitic crystal tuff, massive unit with 10-25% fine (<1mm) feldspar crystals. Thin aphyric andesite dyke from 106.10 - 106.17 at 35 degrees Lapilli-tuff interbed from 109.8 - 110.30. Dark grey-grey lapilli-size fragments in a crystal (FP) rich matrix - framework supported. - Ribbed, feldspar porphyritic andesite dykes from: 112.30 - 113.2 (crystal tuff xenoliths) 113.6 - 113.65 114.95 - 115.0 115.3 - 115.4 115.85 - 116.15 116.20 - 116.27 116.40 - 116.45 116.90 - 117.93 at 50 degrees 118.46 - 118.80		105.25 - 107.85 Nil 107.85 - 115.15 epidote alteration of feldspar 115.15 - 122.04 epidote altered fp and minor epidote patches	105.25 - 107.85 Minor, <1% pyrite 107.85 - 115.15 <1% pyrite 115.85 - 122.04 <1% py but with irregular pyrite stringers from 119.0 - 119.75 - 1% pyrite	

From To	Rock Type	Texture and Structure	Angle to Core Axis	Alteration	Sulphides	Remarks
		Andesite lapilli tuff bed from 115.15 - 115.55. Andesite lapilli (angular) in a lighter grey - siliceous feldspar crystals? matrix - framework supported. 115.55 - 122.04 Interbedded andesite crystal tuff (FP), andesitic tuff, minor lapilli tuff and predominately f.g. andesite ash/tuff. - crude bedding @ 75 to CA Massive green andesitic ash bed from 121.35 - 122.04				Geochem #6042 118.80 - 121.50
122.04 to 122.83	ANDESITIC ACCRETION-ARY LAPILLI TUFF	122.04 - 122.11 Accretionary lapilli tuff - 3 distinct beds 1.5cm wide consisting of 2mm - 3mm round felsic (feldspar) lapilli which constitutes 25% of bed - matrix is fine andesitic ash which also separates accretionary lapilli tuff beds. Bedding @ 75 - 80 to CA 122.11 - 122.50 Massive andesite ash, odd accretionary lapilli - massive 122.50 - 122.83 Bedded accretionary lapilli tuff as described above. Bedding at 70 to CA		Weak chlorite	Tr pyrite	Similar accretionary lapilli tuff units intersected along strike in MTS-25 at 27.90 - 32.0m 32.0 - 36.95m and 72.10 - 76.60m
122.83 to 123.05	ANDESITIC CRYSTAL TUFF	Colour - green Grain Size - f.g. Quartz-veined/chlorite veined andesitic crystal tuff.				

From To	Rock Type	Texture and Structure	Angle to Core Axis	Alteration	Sulphides	Remarks
123.05 to 123.32	ANDESITE DYKE	Colour - grey-green Grain Size - f.g. Massive, homogeneous aphyric andesite.				
123.32 to 127.95	ANDESITIC TUFF- BRECCIA AND TUFF	Colour - mottled grey-green Grain Size - f.g. 123.32 - 123.61 Massive, andesitic ash 123.61 - 124.25 Crudely layered epidotized andesite tuff. Unit characterized by streaky light green grey and dark grey beds and beds with 10%, up to 7m, round to avoid siliceous forms composed of pred quartz with minor feldspar imparting a concentric to radiating texture - spherulites or amygdules. 124.45 - 127.95 Heterogeneous looking unit because of variable epidote alteration. Light to dark green subangular to angular fragments from 6-7cm to 1-2cm in an andesitic, possibly fine crystal tuff (FP) matrix - Matrix supported 126.6 - 126.68 Andesite dyke at 40 to CA.		Weak chlorite alteration from 123.32 - 124.45 124.45 - 127.95 Moderate pervasive epidote alteration.	<1% py throughout	Geochem #6043 124.45 - 127.95
127.95 to 131.95	ANDESITIC TUFFS	Colour - green-grey Grain Size - f.g. F.g. crudely bedded andesitic tuff and fine crystal tuff (FP <1mm, <10%) - bedding @ 80 to CA - 4cm quartz vein shear at 80 to CA at 129.9m with sericitic envelope from 129.65 - 130.09m		Weak chlorite alteration	8% py parallel to bedding over 5cm at 130.15m, <1% pyrite overall.	Geochem #6044 127.95 - 131.95

From To	Rock Type	Texture and Structure	Angle to Core Axis	Alteration	Sulphides	Remarks
131.95 to 133.21	ANDESITE TUFF BRECCIA AND ASH	Colour - grey green to dark green Grain Size - f.g. 131.95 - 132.15 Qtz-chlorite vein breccia at <10 to CA in bleached pale green - buff coloured andesite 132.15 - 132.3 Buff coloured ultra-fine andesitic? ash 132.3 - 133.20 Monolithologic andesite breccia. Dark grey-green andesite fragments in an aphanitic light grey matrix. Fragments range from 14cm to 1-2cm, are aphyric but dotted with round to squarish epidote knots from 2mm - 7mm in size. Some epidote knots may be altered feldspar others with round-oval shape are amygdules. - May be a flow breccia		Weak epidote alteration	Tr pyrite	
133.21 to 134.83	FELDSPAR PORPHYRITIC ANDESITE DYKE	Colour - grey green Aphanitic groundmass <2%, <3mm feldspar phenocrysts.				
134.83 to 137.87	ANDESITIC TUFFS	Colour - dark-light green Grain Size - f.g. Massive, crudely bedded andesitic tuff.		Weak, spotty epidote alteration	1% diss. + fracture pyrite	

From To	Rock Type	Texture and Structure	Angle to Core Axis	Alteration	Sulphides	Remarks
137.87 to 143.98	STRONGLY EPIDOTIZED ANDESITE	Colour - Light grey green to pistachio green Grain Size - f.g. Strongly epidotized andesite - alteration so intense as to destroy most primary textures/structures. - homogeneous epidote altered areas to however display some textural variation - small, 1-2mm mafic amygdules define amygdaloidal lapilli clasts + crude layering is locally observed. - epidote altered andesite cut by irregular quartz/chlorite veins - gashes to 140.3 thereafter disected by irregular Sulphide Stringers!		Pervasive, intense epidote alteration - essentially one large alteration patch. Epidote alt. overprinted by chl. alt. mantling with sulphide stringers.	1% py, tr pyrrhotite from 137.87 - 140.30 with up to 2-3% sulphides in qtz/chl veins. From 140.3 - 143.98 irregular stringers of + clots up to 4cm in diameter of pyrite, pyrrhotite + tr chalcopyrite dominate core - est. interval to contain 6-8% sulphide total with local section up to 15cm wide with 15-20% sulphide - most stringers are fine, reticulate + discontinuous but coalesce to form a ramifying sulphide-rich network. Similar to Py-Po sulphide interval in strongly epi altered andesite of MTS-25 from 79-87m approx.	Andesite dyke from 139.87 to 140.05 @ 50 to CA Geochem #6045 137.87 - 140.30 Assay #6424 140.30 - 141.12 Assay #6425 141.50 - 143.98
143.98 to 144.70	CHLORI-TIZED ASH	Colour - black Grain Size - f.g. Massive aphanitic ash.		Pervasive, strong epidote alteration.	C.g. pyrite, tr pyrrhotite as irregular bands - stringers at 80 to CA 5% sulphides Assay #6426 143.98 - 144.70	

From To	Rock Type	Texture and Structure	Angle to Core Axis	Alteration	Sulphides	Remarks
144.70 to 146.37	MASSIVE ANDESITE FLOW?	Colour - grey-green Grain Size - f.g. Massive aphanitic andesite. Andesite is strongly amygdaloidal from 144.70 to 145.70m. Amygdules range from 1-2mm to 8mm, are ovoid in form, filled by feldspar, quartz, pyrite and constitute 10-12% of the flow. From 145.70 - 146.37 andesite is marked less amygdaloidal (<10%) and brecciated - possible flow breccia. Minor grey chert at massive flow - breccia transition at 145.70m		Moderate pervasive chlorite alteration	2-3% sulphides as amygdule fillings, disseminations and irregular stringers.	Geochem #6046 144.70 - 146.37

From To	Rock Type	Texture and Structure	Angle to Core Axis	Alteration	Sulphides	Remarks
146.37 to 153.4	ALTERED ANDESITE TUFFS AND LAPILLI TUFFS	Colour - light grey-green to black 146.37 - 147.33 Chloritized andesite ash - massive + pyritic.		146.37 - 147.33 Strong chlorite alt.	146.37 - 147.33 8% pyrite, minor ccp <1% as bleby discontinuous stringers Assay #6427 146.37 - 147.33	May have clipped section of stringer zone - spectacular sulphide + chlorite alt. Geochem #6047 147.33 - 148.12
		147.33 - 148.12 Crudely bedded andesite ash, minor 1cm wide grey chert beds from 147.80 - 147.95 Bedding at 80 to CA		147.33 - 148.12 Pervasive weak epidote alteration	147.33 - 148.12 2% py, tr ccp - irregular stringers and disseminated grains	
		148.12 - 148.13 Chloritized andesitic ash - massive		148.12 - 148.13 Strong chlorite alteration	8-9% py, tr ccp - irregular, bleby stringers.	Assay 6428 148.12 - 149.66
		148.13 - 153.4 Massive, epidotized and chloritized andesite - faint breccia texture locally - lapilli tuff, with fragments distinguished from epidotized matrix by their amygdules.		Pervasive moderate epidote alteration overprinted by strong, black chlorite alteration associated with sulphide stringers.	Sulphide content variable but averages 5-8% with sections up to 15cm wide containing 15-20% sulphide. Sulphides chiefly pyrite, pyrrhotite + tr. chalcopyrite that occur as irregular, discontinuous + bleby stringers that form a reticulate ramifying network - excellent Stringer-Zone Sulphide.	Assay #6429 149.66 - 151.10 10-15% sulphide Assay #6430 151.10 - 152.0 10-15% sulphide Geochem #6048 152.0 - 153.4 General restriction of pyrrhotite to epi altered areas of tuffs suggest composition of rock may have buffered equilibrium sulphide assemblage.

From To	Rock Type	Texture and Structure	Angle to Core Axis	Alteration	Sulphides	Remarks
153.4 to 162.20	INTER-BEDDED DACITIC ASH, TUFF AND MINOR LAPILLI TUFF	Colour - grey Grain Size - aphanitic 153.4 - 153.76 Moderately sheared, grey dacitic tuff, unit appears massive but upper 5cm of unit may be finely bedded at 80 to CA 153.76 - 155 Massive, finely pyritic, grey dacite tuff - <2% fine aphanitic grey lapilli 155.0 - 157.4 Dacite tuff - lapilli tuff - elongate dark grey and chloritic frags <2cm + occasionaly subangular grey aphyric fragments that deflect foliation and are not elongate. Matrix is a f.g. dacitic tuff with <1% 1-2mm quartz crystals - ultra fine pyrite in matrix and as irregular stringers or lenses of med. grained pyrite at 80 to CA 157.4 - 158.95 Massive andesitic tuff with thin intervals of felsic ash. Bedding @ 80-75 to CA	Contact at 153.4 sharp at 80 to CA	Pervasive moderate sericite alteration	3-5% py throughout as fine disseminated grains in matrix but also as med. grained pyrite in discontinuous stringers <5mm wide oriented at 80-85 to CA	Geochem #6049 153.92 - 156.97
		158.95 - 160.42 Streaky tuff with beds of light grey, grey, buff and dark grey dacitic tuff and minor lapilli tuff - bedding disrupted @ 80 to CA - pyrite - elliptical light grey siliceous frags <1cm characterized lapilli tuff beds. 160.42 - 162.20 Dacitic lapilli tuff, frags are amygdaloidal with up to 15% dark grey amygdules up to 3mm Fragments are subangular and range up to 4cm.		Pervasive weak sericite alteration	Pyrite typically m.g., as stringers parallel to bedding.	Geochem #6050 158.95 - 160.42

From To	Rock Type	Texture and Structure	Angle to Core Axis	Alteration	Sulphides	Remarks
162.20 to 166.65	GREY CHLORI-TIZED ANDESITE ASH and minor CHERT	Colour - grey Grain size - fine Massive, homogeneous grey chloritized ash/minor tuff -massive, no obvious bedding -odd (<<1%) clast of grey chert (<1.5cm). Thin interbeds of massive grey chert from 165.86 - 165.94 166.13 - 166.14 at 80 degrees 166.42 - 166.50 at 80 degrees (plus qtz veins)		Pervasive moderate chlorite alteration	fine + m.gr disseminated pyrite concentrated into lense-like stringers up to 7mm wide parallel to bedding - 2-3% py overall -irregular clotty discontinuous stringers of chalcopyrite throughout core Assay #6431 162.82 - 162.98 1-2% ccp Assay #6432 163.55 - 165.00 <1% ccp Assay #6433 165.84 - 166.42 1% ccp Assay #6434 chert - 2% py - sau. 166.42 - 166.50 Assay #6435 2% ccp - 20% fine bedded pyrite 166.50 - 166.65 Pyrite and chalcopyrite from 166.50 - 166.65 constitutes 15-20% of unit and is remobilized bedded sulphide.	Geochem #6051 162.20 - 165.84

From To	Rock Type	Texture and Structure	Angle to Core Axis	Alteration	Sulphides	Remarks
166.65 to 167.50	GREY CHERT, minor ASH	Colour - grey Grain size - aphanitic Basal 10 cm of unit is massive grey chert however bulk of unit is an intraformational slump breccia. Breccia consists of irregular "rounded" forms of massive grey chert with 1-3mm wide ultrafine pyrite laminae that are contorted and broken along with the chert. Squeezed between the irregular chert frags is a fine dacitic ash containing 1-2% ultra fine disseminated pyrite -Chert also contains nodules of pyritic grey ash a la NE copper cherts -Bedding at 70 - 75 to CA, however locally contorted + folded due to slumpage? with challow core axis angles (5-30%) -nodules in chert up to 3 cm.	ctc at 166.65 at 80 to CA	Weak sericite alteration of ash.	Chiefly pyrite within pyritic laminae + diss. throughout matrix of ash. Fine irregular blebs of chalcopyrite (<5mm, <1%) occur in matrix ash.	Unlike MTS-25 which was cut by stringer sulphide this chert has stratiform bedded sulphide. Geochem #6052 166.65 - 167.50

From To	Rock Type	Texture and Structure	Angle to Core Axis	Alteration	Sulphides	Remarks
167.50 to 170.08	GREY DACITIC and CHLORITIZED ASH/TUFF	Colour - grey + black Grain size - fine 167.50 - 167.78 from 167.50 to 167.54 unit is a finely bedded Dacitic ash - bedding at 75 to CA from 167.54 to 167.78 fine Dacitic Tuff with 10-15%, elongate 2-4mm chloritic frags in a grey dacitic matrix.		167.50 - 167.78 nil to weak chlorite alteration	167.50 - 167.78 Good bedded pyrite and chalcopyrite (some remobilized into fractures) in bedded ash from 167.5 to 167.54 -irregular patches/stringers of chalcopyrite <6mm to 167.78 -8% py overall 1-2% ccp Assay #6436 167.50 - 167.78	
		167.78 - 170.08 Chloritized "dacitic" lapilli tuff/tuff -irregular, elongate black chloritized lapilli up to 4cm long but typically <1.5cm supported in a lighter grey dacitic ash matrix - frags elongate at 80 to CA. -minor ash interbeds (<2cm wide) at 70 - 80 to CA.		Pervasive moderate to strong alteration -preferential strong alteration of frags?	Best section of chalcopyrite mineralization. From 167.78 to 169.50m chalcopyrite occurs as fine disseminated grains (<1mm), as irregular blebs/clots (<5mm), fine discontinuous irregular stringers and massive stringers of remobilized ccp beds up to 1.3cm wide at 85 to CA -section will average 1-2% ccp throughout but with sections containing up to 5% ccp over 10cm. -pyrite occurs throughout section up to 5% -sulphides drop off quickly after 169.50m	Assay #6437 167.78 - 168.90 Assay #6438 168.90 - 169.50

From To	Rock Type	Texture and Structure	Angle to Core Axis	Alteration	Sulphides	Remarks
170.08 to 193.34	CHLORI-TIZED GREY DACITIC/ ANDESITIC ASH/TUFF +/- minor CHERT	Colour - grey Grain size - fine 170.08 - 171.30 (gradational ctc) massive, homogeneous grey ash 171.30 - 174.04 (weakly foliated) Mainly homogeneous med. to dark grey ash-lapilli. Beds/layers of ash tuff with 20-30% lapilli size fragments drawn out parallel to the foliation. Individual beds have sharp contacts, 1-50cm thick, somewhat darker grey (poss. more chloritic) -Ash with lapilli approx. 70% of this section. 174.04 - 187.44 Massive grey ash, relatively homogeneous with minor crystal tuff beds 1-8cm thick, <1mm feldspar phenos and minor ash-lapilli.	 70 - 80 75 - 80 (60 - 80)	170.08 - 171.30 Pervasive moderate chlorite alteration. 171.30 - 174.04 Pervasive weak to mod. chloritization. Locally pervasive weak sericitization. Pervasive weak chloritization +/- moderate. Pervasive weak sericitization, locally narrow sections of medium sericitization.	170.08 - 171.30 <1% py, tr. ccp 171.30 - 174.04 1-5% v.fine gr. and fine. gr. diss py, locally as stringers. Also as subround patches. Avg. 3% throughout. 174.04 - 177.06 1-3% diss. py, avg. 1-2% 177.06 - 186.95 1-8% avg. 3-5%, as diss. and as stringers (discont.) 1-4mm thick with fine to med. gr. pyrite. Also tr to 2% ccp, avg. <0.5% occurs as patches and irregular stringers. "Patchy occurrence of cpy" in this section. 186.95 - 187.44 3-8% py as stringers, patches and diss. ccp locally as fine gr. large patches.	Litho BCD - 6053 177.30 - 180.30 Assay BCD - 6439 3% py, 1-2% ccp 177.05 - 177.27 BCD 6440 2-8% py, <1-1% ccp 179.36 - 180.62

From To	Rock Type	Texture and Structure	Angle to Core Axis	Alteration	Sulphides	Remarks
		187.44 - 187.52 Light grey aphanitic cherty tuff.	Layering	Very weak sericitization	187.44 - 187.52: 5% py mainly v. fine gr. diss.	
		187.53 - 187.72 Med. to dark green chloritic ash (andesite-dacite)		Mod. to strong chloritization	187.52 - 187.72: 8% py as stringers 1-3mm thick, v.fine gr. to fine gr. py.	
		187.72 - 188.06 Massive aphanitic chert with minor bands of dacitic ash <1cm thick.	75	Tr. sericite, tr. chlorite	187.72 - 188.06: 3-5% fine gr. py as discontinuous irregular 1-2mm stringers + diss.	
		188.06 - 188.46 Poorly layered fine gr. dacite ash tuff + minor chert (10%) 0.5cm layers + minor cherty tuff.		Weak sericitization, tr. to weak chloritization.	188.06 - 188.46: 3-5% py as v. fine gr. diss. + bands	
		188.46 - 189.34 Poorly to moderately layered cherty tuff 2-8mm bands avg. 2-3mm, also v. fine gr. py within individual layers. Heterogeneous overall as it varies in chert vs. ash content.	75	Weak to mod.? sericitization, tr. chlorite	188.46 - 189.34: 5-8% py mainly as v.fine gr. diss., also as 1-3mm thick py stringers (py diss. within) Tr. ccp as small patches.	
		189.34 - 191.42 Fine grained grey dacitic ash, relatively homogeneous.	75 - 80	Weak seritization, tr. chlorite	189.34 - 191.42: 6-10% py mainly as discont. stringers, and fine gr. diss.	
		191.42 - 193.34 Interlayered cherty tuff, dacitic ash, and chloritic ash tuff. Poorly layered	70	Weak to mod. chlorite (individual layered) weak seritization	191.42 - 192.02: 5-10% mainly disont. <1-2mm stringers, + minor v. fine gr. diss. 192.02 - 192.63: 8-30% py, avg. 10%, mainly med. gr. stringers + v. fine gr. diss. 192.63 - 193.36: 5-10% py avg. 5% mainly stringers.	

From To	Rock Type	Texture and Structure	Angle to Core Axis	Alteration	Sulphides	Remarks
193.34 to 195.90	CHERT and MINOR CHERTY TUFF (end of interval)	Colour - lt. grey, tr. green Grain size - aphanitic to very fine Very crude layering noted locally otherwise massive V. fine gr. to aphanitic chert with chloritic seams + patches (5%) along crude layering. Chert has ellipsoid nodules/concretions 1-2cm by 0.5-1cm approx. 5% throughout. Top contact not clear but changes from cherty tuff (interlayered) to chert. Bottom contact is gradational chert to cherty tuff.	approx. 70	Minor chlorite patches with py parallel to layering. Mod. to string chlorite Traces of sericite throughout V. weak qtz veinlets, milky white.	2-10% py, v. fine gr. to med. gr., brassy yellow, mainly as grains or patches within chloritic seams or lenses (up to 30% py within individual patches) Py also diss. + irregular stringers in chert. Ccp fine gr. as small patches +/- py, "spotty" occurrence.	Chlorite patches or partings mainly lensoid, discont., dark green. Litho BCD 6054 193.34 - 195.90 Chert only, left chlorite seams Assays BCD 6441 193.51 - 193.82 Approx. 8% py mainly with chlorite, 1-2% ccp as isolated patches. BCD 6442 194.98 - 195.40 approx. 8-10% py, stringers + patches, 1-2% ccp diss patches.

From To	Rock Type	Texture and Structure	Angle to Core Axis	Alteration	Sulphides	Remarks
195.90 to 225.62	AND.-DAC. LAMINATED F.GR. ASH TUFF with minor sections of CHERT & CHERTY TUFF	Colour - med. to dark green and lt. grey-green Grain size - fine to aphanitic and aphanitic (lt. grey - green)				
		195.90 - 197.83 Weakly foliated, poor to mod. laminated. Andesite-Dacite lt. to med. green ash tuff, strong chloritic alteration. Note black phenocrysts locally in bands.	50 - 70	Strong chloritization pervasive Weak local seritization	195.90 - 196.48: 5-8% py in stringers + diss. v.fine gr. 196.48 - 197.83: 3-5% py in stringers and diss., v.f.g.	
		197.83 - 198.13 Massive chert +/- minor chert tuff with chloritic seams <0.5cm thick.	80 ?	Strong chl seams/ partings parallel to foliation	197.83 - 198.13: 2-3% diss., 3-5% in calcite patches	
		198.13 - 199.91 Fine. gr., poorly laminated lt. green-grey ash tuffs. Minor banded cherty-tuff at upper and lower contacts.		Strong chl, perv.	198.13 - 199.91: 3-15% py, mainly as stringers 1-2mm wide, avg. 0-5% py, also as diss. Tr. ccp patches locally.	Assay BCD 6444 199.66 - 199.91: 10-15% py, 1% ccp
		199.91 - 200.32 Massive lt. green-grey chert with chloritic bands. Note 2 by 1cm nodules conspicuous. Chloritic seams <0.5cm thick.	85 upper ctc 85 th-out	Moderate to strong chl in seams.	191.91 - 200.32 1-2% py diss. in chert 3-5% py in chloritic seams.	
		200.32 - 200.43 Qtz vein-breccia, broken up chloritic fragments in qtz matrix	top 80 bottom 35	Qtz vein Strong chloritization of fragments	5-8% diss., fine to coarse gr. euhedral py.	
		200.43 - 200.83 Interlaminated ash tuff and cherty tuff (15%). Crudely laminated.	65 lam.	Strong chloritization pervasive	5-10% py mainly fine gr. in <1-2mm parallel stringers.	
		200.83 - 201.23 Dacitic ash-lapilli stone tuff(?), poss. syndepositional breccia. Fragments subrounded with vague outlines. Frags aligned parallel to layering, 1mm-10mm avg. 3-4mm	60 - 65	very weak to weak chloritization pervasive Tr. sericite	5% py as diss. fine to med. gr. and minor discont. stringers.	

From To	Rock Type	Texture and Structure	Angle to Core Axis	Alteration	Sulphides	Remarks
		201.23 - 202.26 Poorly lam. Lt. green-grey dacitic lam. ash + interlam. chloritic andesite ash + bands of syndepositional breccia(?) (poss. cherty tuff present)		Very weak to weak chlorite except in Andesitic layers - strong chlorite Tr. sericite	5-8% py, diss. + discont. stringers. <0.5% ccp fine gr. irregular shaped patches.	Assay BCD 6445 201.38 - 201.80 5-10% diss. py + irregular stringers 1-<2% ccp patches
		202.26 - 203.57 Interlam. dac-and ash with and. (chloritic) bands/lams. approx. 5-10cm thick, avg. 1 band per 50 cm	70	Mod. chloritization and strong chlorite in andesite ash bands.	8-20% py, avg. 8-10% mainly diss. v.f.gr. euhedral py + med. gr. py. Note, in Andesite bands med. gr. lensoid grains orientated parallel to banding.	
		203.57 - 207.71 Fine gr. laminated And-Dac. med green ash Relatively homogeneous.	70 - 80	Strong chloritization pervasive Tr. epidote	1-3% py avg., tr. ccp mainly diss. locally 3-8% as stringers + diss. py + up to 0.5% ccp over 25cm.	Litho BCD 6057
		207.71 - 208.59 Poorly laminated. Interlam. med. grey ash and cherty tuff. Poss. minor syndepositional breccia within specific layers.	layers 75 - 80	Very weak to weak chloritization selective bands, but pervasive within Tr sericite	8-15% v. fine to fine gr. py as weakly defined bands and diss. Avg. 10% py	
		208.59 - 212.89 Grey-green fine gr. ash tuff, minor interlam. cherty tuff at top of interval.	Fol-layer 50 - 65	Mainly strong pervasive chlorite locally weak ie) 208.59-209.60 Tr. sericite Tr to weak qtz veinlets 3-4mm thick.	5-15% py mainly as fine gr. diss. also med to coarse gr. patches and diss. Minor stringers Avg. 8%	Assay BCD 6446 10% diss py, and discont. stringers <1% ccp 212.60 - 212.89
		212.89 - 213.10 Minor fault, sheared and gouged chloritic tuffs.	top - 45 bottom ?	Strong to intense chloritization pervasive	5-10% diss py, fine gr.	

From To	Rock Type	Texture and Structure	Angle to Core Axis	Alteration	Sulphides	Remarks
		213.10 - 224.03 Homogeneous looking fine gr. dacite-and. ash tuff very similar to above poss. greyer -Locally mod. laminated felsic ash.	50 (45 - 25)	Strong chlorite pervasive, locally moderate	Avg 5-8% py mainly diss. Range 3-20%, discont. stringers. Local tr of ccp ie 219.84-220.20 as patches	Assay BCD 6447 219.84 - 220.20 10-15% py; 1-2% ccp
		224.03 - 224.94 Fault zone, sheared chloritic ash ; gouge. Lt. to med. green	top 80	Strong chlorite pervasive Weak to mod. qtz veinlet throughout	5-8% fine to med gr. diss py	Litho BCD 6058 214 - 217m
		224.94 - 225.62 Green-grey fine gr. ash tuffs dac.-and. Similar to above. Pyritic	Layering 75 - 80	Mod. to strong chlorite pervasive Weak to strong/intense qtz veinlets, strong/intense near lower contact	8-12% py med. to fine gr. mainly as stringer 1-3mm thick, cont. & discont. parallel to layering. Some stringers pinch & swell. Locally <1% ccp as patches.	Assay BCD 6448 224.94 - 225.62 8-12% py, <1% ccp
225.62 to 226.46	ANDESITE DYKE - F.G DIABASE DYKE	Colour - med. to dark green-grey Grain size - very fine Massive, non foliated equigranular Brecciated by irregular calcite veins.	top ctc 45 - 50 bottom ctc 20	Tr to very weak chlorite pervasive. Weak to mod. calcite veins and vein-breccia, up to 5cm thick (70 to CA)	No visible sulphides to tr. py	
226.46 to 227.74	FELSIC DYKE FELDSPAR PORPH?	Colour - lt. white-grey, tr. green Grain size - fine to aphanitic GM, FM phenos? (poss. equigranular) Massive, porphyritic dacite feldspar porph? 10-15% vague 1-2mm FP phenocrysts <5% chlorite altered mafic phenocrysts? <2mm	top ctc 20 Bottom ctc ?	Chloritization of mafic crystals? <5% Mod. calcite 1-2mm veinlets	<1% py diss., fine gr.	

From To	Rock Type	Texture and Structure	Angle to Core Axis	Alteration	Sulphides	Remarks
227.74 to 236.80	DACITE-AND ASH TUFFS & CHERTY TUFF & AND. ASH TUFF	Colour - med. to lt. grey - med. to dark green Grain size - fine Weakly foliated				
		227.74 - 229.11 Poorly laminated to mod. Relatively homogeneous dacitic lt. to med. grey fine ash with minor 0.3-1cm bands of cherty ash-chert (<5%).	layers 75	Mod. to strong & strong chlorite pervasive +/- sericite	2-15% py diss + stringers, avg. 3-5% Ccp locally as small patches 227.99-228.30: 10-15% py	Ccp poss. assoc. with cherty bands. Assay BCD 6449 227.99 - 228.80 5-15% py, <1% ccp
		229.11 - 230.21 Very poorly laminated, fine gr. homogeneous ash tuff Dac.-Andesite lt. grey to sl. green	fol'n 70	Mod. +/- mod. to strong chlorite pervasive +/- sericite Weak calcite 1-2mm veinlets	5-12% py, mainly 2-8mm thick stringer med. to coarse gr., also diss py, fine gr. Local small irregular <1cm patches ccp (<1% overall)	Assay BCD 6450 229.38 - 230.22 8-12% py, <1% ccp
		230.21 - 231.64 Crudely laminated andesite-dacite fine gr. ash tuff. Homogeneous.	fol'n 70 - 75	Strong chlorite pervasive	Py mainly diss. med. to coarse gr. with minor stringers 3-8%, avg. 5% Ccp tr to <1% throughout, locally 1-2% over 20cm as diss. <5mm irregular patches.	Assay BCD 6451 231.04 - 231.29 1-2% ccp, 5% py
		231.64 - 236.77 Massive to very crudely laminated. Weakly foliated. Homogeneous Andesite, fine gr, med to dark green ash tuff.	70 - 80 ?	Mod. to strong chlorite pervasive	3-8% py, avg. 5% as diss., minor stringers Tr of cp throughout	Litho BCD 6059 231.70 - 234.70

From To	Rock Type	Texture and Structure	Angle to Core Axis	Alteration	Sulphides	Remarks
236.80 to 249.02 E.O.H.	RHYODACITE QTZ EYE ASH - CRYSTAL TUFF (poss. FLOW?) with CHERTY TUFF locally and minor DACITE-ANDESITE	Colour - lt. to med. grey with greenish hue Grain size - aphanitic to fine matrix to groundmass. Fine to very coarse crystals.				Assay BCD 6452 238.16 - 238.57 8% stringers + diss py 1-2% ccp discont. stringers.
		236.80 - 238.63 Weakly foliated Dacite-Andesite; relatively homogeneous, grey to sl. green fine ash tuff, <1% poss. qtz eyes <2mm, local very fine "dust" ash.	upper ctc 45 fol'n 75 - 80	Strong chlorite/ seritization pervasive	5-8% py mainly med. gr diss as lenses in stringers, also fine gr. diss. py throughout Tr to <1% ccp throughout as small patches.	
		238.63 - 238.93 Weakly foliated crudely laminated grey fine tuff with 1-2% <2mm qtz eyes.	layers 55	Mod. seritization pervasive +/- chlorite	5% py diss very fine to fine grained.	
		238.93 - 239.06 Minor fault, lt. grey-green shear planes.	top ctc 40 ? bottom ctc 25 - 30	Mod. to strong seritization along planes + strong chlorite 1-3mm planes	3-5% fine gr. diss py	

From To	Rock Type	Texture and Structure	Angle to Core Axis	Alteration	Sulphides	Remarks
	(Dominated by Qtz eye Porph. Crystal Tuff)	239.06 - 240.80 Very weak foliation, massive Qtz Eye crystal Ash Tuff (or flow?) 10-20% Qtz Eyes <1-8mm, avg. 1-2mm, sub-rounded Minor chloritic bands interlam.	bottom ctc 45 ? fol'n 50 ?	Very weak to weak seritization pervasive	3-10% fine to med. gr. py, avg. 5-8%, mainly diss. Also <1-2% ccp patchy and discont. stringers.	Assay BCD 6453 239..14 - 239.47 8% py diss - stringers 2% ccp stringers
		240.80 - 241.06 Massive chert, lt. grey, aphanitic. Minor interlam. felsic ash.	Top 80 bottom 80	Strong seritization in felsic bands	3-5% py fine gr, in stringers. Minor diss.	
		241.06 - 242.22 Weak foliated, poorly laminated, fine gr., grey-green dacitic ash tuff & cherty tuff. Cherty tuff - 5mm bands also nodules(?) within ash (5%) Note possible qtz eye	fol'n-layers 80	Mod. seritization +/- chlorite pervasive except cherty bands.	3-8% py, avg. 5% mainly fine gr. diss,, also local stringers 1-4mm thick with chlorite envelopes Tr ccp	
		242.22 - 242.43 Well sheared dacite ash, green grey; poss. fault.	top ctc 70 bottom ctc 70 - 90	Strong seritization +/- strong chlorite	3-5% diss fine gr. py	

From To	Rock Type	Texture and Structure	Angle to Core Axis	Alteration	Sulphides	Remarks
		242.43 - 242.68 Weakly foliated. Fine gr. Dac.-And. Ash crudely laminated. Lt. grey-green	Fol'n 75	Mod. sericite/chlorite pervasive	8-10% fine gr. diss py <1-1% ccp.	
		242.68 - 242.89 Very weak foliation. Very fine gr. Andesitic Ash + And. Ash-crystal Tuff, lt. to med. to dark green. Note distinct layers of crystal-ash. Also note poss. graded bedding; upright tops at 242.68m	Layers 80	Strong chlorite pervasive Mod. qtz veinlets 1-2mm also tension gashes.	3% fine to med. gr. py diss. + patches	
		242.89 - 243.59 Weakly foliated. Fine to very fine gr. Dacitic Ash with interlam. cherty Tuff +/- chert. Poorly to mod. laminated locally well lam. Very lt. grey to med. grey Avg. 3-4mm bands Note some bands contain up to 10% qtz eyes	Layers 80 - 85	Weak to strong sericite selective bands.	8-12% very fine to fine gr. py diss + 1-3mm stringers. Note very fine gr. py lenses in chert tuff (sawn)	
		243.59 - 243.97 Very weak foliation. Relatively homogeneous. Qtz eye crystal tuff approx. 20% 1-2mm qtz eyes		Mod. to strong seritization pervasive	8-12% fine to med. gr py diss + stringers	
		243.97 - 244.03 Minor fault - sericite gouge silvery-white	Top 60 - 70 bottom 80 - 90	Strong pervasive sericite	5% fine gr. diss. py	
		244.03 - 246.50 Rhyodacite Qtz Eye Crystal Tuff (poss. Flow?). Very homogeneous looking. 10-35% qtz eyes, avg. 20%, range 0.5mm-7mm, avg. 2mm	Fol'n(?) 70 - 80	Weak locally mod. seritization pervasive Tr to very weak chlorite	5-10% diss. + stringer py, avg. 5-8% Note 5mm stringer, fine gr at 245.30m. 5-8% F - V.f.g. py diss. throughout.	
		246.50 - 246.75 Minor fault. White-pale green, some sericite gouge	top ctc 80 bottom ctc 70 - 75	Strong seritization pervasive + intense. Poss. grey carbon on fract? Also qtz veins heal fault irregular 5mm veins.		

From To	Rock Type	Texture and Structure	Angle to Core Axis	Alteration	Sulphides	Remarks
		246.75 - 249.02 Qtz eye crystal tuff same as above, poss. more chlorite	fol'n 65	Weak to mod. sericite pervasive +/- chl.	3-15% py diss. + stringer similar to above, avg. 8% py Tr ccp locally.	Litho BCD 6060 246.00 - 249.00
		E.O.H.				

LITHOGEOCHEMISTRY

SAMPLE NUMBER	FROM (m)	TO (m)	MAJOR OXIDES SiO_2	Al_2O_3	CaO	MgO	Na_2O	K_2O	FeO	MnO	TiO_2	TRACE ELEMENTS ppm Ba	ppm Cu	ppm Zn	ppm Pb	ppm Ag	% Zr	Rock Type	Alt	Min	Grid	
6033	43.59	46.63	43.81	18.28	17.35	3.45	1.51	0.08	10.58	0.86	0.98	50	32	2080	90		.005					
Andesite																						
6034	64.70	68.27	40.98	18.65	21.36	3.31	0.22	0.01	11.19	0.81	1.02	50	8	22	80		.005					
Epi-Andesite																						
6035	69.19	72.24	55.05	17.90	7.30	3.64	3.93	1.46	7.31	0.35	0.64	590	20	80	80		.005					
Diorite																						
6036	72.24	73.97	67.88	15.95	3.01	1.10	4.83	1.82	2.86	0.15	0.28	620	4	28	50		.005					
Dacite Dyke																						
6037	75.83	83.72	47.79	18.54	9.49	4.03	1.35	3.46	10.95	0.41	1.17	1580	42	80	120		.005					
Andesite - Epi.																						
6038	92.75	95.40	45.00	19.40	12.94	3.87	2.96	0.20	11.12	0.38	1.55	140	28	76	80		.005					
Andesite																						
6042	118.80	121.50	48.40	21.80	5.52	2.68	1.23	3.19	12.23	0.18	1.75	760	12	44	60		.005					
Andesite																						
6043	124.45	127.95	54.71	22.05	4.95	1.90	3.77	2.59	5.87	0.15	1.72	540	2	32	60		.005					
Andesite																						
6044	127.95	131.95	50.03	21.06	4.81	2.55	4.10	2.11	11.20	0.18	1.34	680	160	56	60		.005					
Andesite																						
6045	137.87	140.30	45.30	18.72	14.67	1.70	0.11	0.33	15.25	0.33	0.97	140	174	40	80		.005					
Andesite																						

Hole No. MTS-26 Entered by _____ Logged by Harold Gibson / Michael Gray Page No. 31

LITHOGEOCHEMISTRY

SAMPLE NUMBER	FROM (m)	TO (m)	MAJOR OXIDES SiO_2	Al_2O_3	CaO	MgO	Na_2O	K_2O	FeO	MnO	TiO_2	TRACE ELEMENTS ppm Ba	ppm Cu	ppm Zn	ppm Pb	ppm Ag	% Zr	Rock Type	Alt	Min	Grid	
6046	144.70	146.37	43.91	19.88	3.66	5.57	1.13	2.04	19.19	0.29	1.01	1260	336	68	140		.005					
Andesite																						
6047	147.33	148.12	48.07	19.28	4.65	4.07	1.05	2.36	16.00	0.20	0.95	1670	600	48	100		.005					
Andesite																						
6048	152.0	153.4	34.56	18.91	8.69	6.10	0.01	0.08	26.84	0.40	0.90	50	620	84	240		.005					
Andesite																						
6049	153.92	156.97	55.31	19.73	1.40	1.98	0.22	5.95	10.81	0.15	1.56	2910	132	60	50		.005					
Dacite/Andesite																						
6050	158.95	160.42	53.74	19.01	1.46	4.88	0.12	4.12	10.98	0.54	1.48	1360	128	132	60		.005					
Dacite/Andesite																						
6051	162.2	165.84	50.44	20.57	0.89	7.75	0.90	3.38	11.08	0.56	1.62	1110	76	174	150		.005					
Andesite																						
6052	166.65	167.50	74.22	9.98	0.58	3.64	0.50	1.65	6.44	0.28	0.41	870	240	124	50		.005					
Chert																						
6053	177.3	180.3	45.46	19.02	0.55	12.25	1.11	0.96	15.97	1.00	0.93	510	840	360	230		.005					
Grey Ash																						
6054	193.34	195.90	82.61	4.20	1.57	3.41	0.12	0.10	4.76	0.31	0.20	50	120	440	50		.005					
Chert																						
6057	204.5	207.5	47.25	17.91	1.70	15.08	1.09	0.21	12.23	1.03	0.92	140	376	600	170		.005					
Andesite																						

Hole No. MTS-26 Entered by _____ Logged by Harold Gibson / Michael Gray Page No. 32

LITHOGEOCHEMISTRY

			MAJOR OXIDES										TRACE ELEMENTS									
SAMPLE NUMBER	FROM (m)	TO (m)	SiO_2	Al_2O_3	CaO	MgO	Na_2O	K_2O	FeO	MnO	TiO_2	ppm Ba	ppm Cu	ppm Zn	ppm Pb	ppm Ag	% ZR	Rock Type	Alt	Min	Grid	
6058	214	217	46.26	20.54	0.45	12.23	0.06	2.62	12.41	1.07	1.61	1220	16	320	250		.005					
Dacite																						
6059	231.70	234.70	48.10	18.16	1.58	9.33	3.15	0.22	14.42	0.89	1.40	140	224	184	220		.005					
Andesite																						
6060	246.00	249.00	74.29	13.61	0.14	1.35	0.12	3.93	4.25	0.06	0.26	1370	176	36	50		.005					

Hole No. MTS-26 Entered by _____ Logged by Harold Gibson / Michael Gray Page No. 33

ASSAY SHEET

Sample Number	From (m)	To (m)	Estimate Cu	Estimate Zn	Length (m)	% Cu	% Zn	% Pb	gm/T Ag	gm/T Au	oz/T Ag	oz/T Au	% Na_2O	% MgO	ppm Ba	PPM Cu	PPM Zn	PPM Pb	PPM Ag	PPB Au			
6424	140.30	141.12			0.82	0.064	0.02		2.1	0.01	0.06	.001											
6425	141.50	143.98			2.45	0.075	0.01		2.0	0.01	0.06	.001											
6426	143.98	144.70			0.72	0.030	0.02		2.3	0.01	0.07	.001											
6427	146.37	147.33			0.96	0.050	0.02		2.0	0.01	0.06	.001											
6428	148.12	149.66			1.54	0.042	0.01		1.2	0.01	0.04	.001											
6429	149.66	151.10			1.44	0.165	0.02		2.0	0.02	0.06	.001											
6430	151.10	152.0			0.90	0.096	0.01		1.8	0.01	0.05	.001											
6431	162.82	162.98			0.16	1.21	0.09		6.8	0.04	0.20	.001											
6432	163.55	165.00			1.45	0.097	0.03		1.0	0.01	0.03	.001											
6433	165.84	166.42			0.58	1.370	0.07		6.0	0.04	0.18	.001											
6434	166.42	166.50			0.08	1.170	0.04		3.9	0.03	0.11	.001											
6435	166.50	166.65			0.15	0.28	0.05		3.0	0.02	0.09	.001											
6436	167.50	167.78			0.28	0.875	0.06		2.5	0.03	0.07	.001											
6437	167.78	168.90			1.12	0.910	0.06		2.2	0.04	0.06	.001											
6438	168.90	169.50			0.60	2.12	0.07		6.6	0.05	0.18	.001											
6439	177.05	177.27			0.22	0.60	0.05		2.2	0.03	0.06	.001											
6440	179.36	180.52			1.16	0.169	0.04		1.0	0.02	0.03	.001											
6441	193.51	193.82			0.31	0.234	0.25		2.2	0.02	0.06	.001			100								
6442	194.98	195.40			0.42	0.020	0.07		0.2	0.01	0.01	.001			200								
6444	199.66	19[9].91			0.25	0.096	0.03		2.0	0.02	0.06	.001			1400								

HOLE NO MTS-26

ASSAY SHEET

Sample Number	From (m)	To (m)	Estimate Cu	Estimate Zn	Length (m)	% Cu	% Zn	% Pb	gm/T Ag	gm/T Au	oz/T Ag	oz/T Au	% Na_2O	% MgO	% Fe	PPM Cu	PPM Zn	PPM Pb	PPM Ag	PPB Au			
6445	201.38	201.80			0.42	0.088	0.02		2.0	0.02	0.06	0.001											
6446	212.60	212.89			0.29	0.468	0.06		3.0	0.05	0.09	0.001											
6447	219.84	220.20			0.36	0.330	0.05		3.8	0.03	0.11	0.001											
6448	224.94	225.62			0.68	0.077	0.03		1.8	0.01	0.05	0.001											
6449	227.98	228.80			0.82	0.014	0.01		2.0	0.01	0.06	0.001											
6450	229.38	230.22			0.84	0.029	0.02		1.0	0.01	0.03	0.001											
6451	231.04	231.29			0.25	0.119	0.03		1.0	0.02	0.03	0.001											
6452	238.16	238.57			0.41	0.340	0.02		2.1	0.02	0.06	0.001											
6453	239.14	239.47			0.33	0.214	0.02		0.9	0.02	0.03	0.001											

HOLE NO MTS-26

CORPORATION FALCONBRIDGE COPPER

DRILL HOLE RECORD

X METRIC UNITS
IMPERIAL UNITS

HOLE NUMBER	GRID	FIELD COORDS	LAT.	DEP.	ELEV.	COLLAR BRNG.	COLLAR DIP	HOLE SIZE	FINAL DEPTH
MTS-27			9+00S	9+00E	640m.	026°	-51°	NQ	201.47m
PROJECT 305	CLAIM #	SURVEY COORDS.				DATE STARTED: Dec 11, 1986 DATE COMPLETED: Dec 13, 1986	CONTRACTOR: F. Boisvenu CORE STORAGE: Fulton Farm	CASING:	3.66m.

PURPOSE: To intersect the faulted eastern extension of the Mine Package (Lenora-Tyee Horizon) east of the Fortuna Fault. This is the first of two holes testing the shallow down-dip extent of Ba-enriched, Na-depleted and pyrite mineralized tuffs below a diorite sill + VPEM conductors.

RQD LOG
COLLAR SURVEY
PULSE EM SURVEY
MULTISHOT SURVEY

ACID TESTS				TROPARI TESTS			MULTISHOT DATA		
DEPTH (ft	CORRECTED ANGLE	DEPTH ( )	CORRECTED ANGLE	DEPTH (m)	AZIMUTH	DIP	DEPTH ( )	AZIMUTH	DIP
100	No Line			152.44	023°	47°			
200	49-50°								
300	48°								
400	48°								
500	48°								
661	47°								

HOLE NO MTS-27

LOGGED BY M. J. Gray

From To	Rock Type	Texture and Structure	Angle to Core Axis	Alteration	Sulphides	Remarks
0 to 3.66	CASING					
3.66 to 40.70	DIORITE (WITH ANDESITE DYKES)	Colour - med. green & white Grain size - fine to coarse 3.66 - 4.88: extremely blocky. 4.88 - 7.72: Med. grained equigranular 30% feldspar euhedral, avg. 1-2mm; range <1-12mm. 7.22 - 7.30: Andesitic aphanitic to fine grained dark green dyke (poss. a phase of diorite). 7.30 - 9.45: Diorite similar to above diorite. 9.45 - 9.66: Andesitic dyke, similar to above. Note aphanitic to very fine grained. 9.66 - 11.22: med. to coarse grained diorite, similar to above. 11.22 - 11.23: Fault plane, noted by veins discont. past plane. 11.23 - 11.95: Med. grained diorite; same as above. 11.95 - 12.11: Andesite Dyke similar to above with qtz vein-breccia margins/contact. 12.11 - 20.12: Med. gr to coarse gr. diorite Equigranular to subporph. Dark green-white.	 top 75 bottom 60 contact 40 - 45 top & bottom contact 30 top 55 bottom 65	Pervasive chloritizaion (weak to mod.) of mafics throughout interval. very weak to weak irregular calcite veinlets <1-2mm thick	nil to 1%	Note Mn and Fe stainig on fracture coatings. Note hematite diss. in diorite 1-2%, and as purple patches within dykes 1-5% Note calcite-qtz veins fill contact between diorite and dykes. Lithogeochem BCD 11.00 - 14.10

From To	Rock Type	Texture and Structure	Angle to Core Axis	Alteration	Sulphides	Remarks
		20.12 - 24.07: Med. to dark green v.fine grained Andesitic Dyke, massive, equigranular, irregular 1-3mm calcite veinlets throughout (weak to mod.).	Top ctc 45 bottom ctc 5	Note coarse crystal calcite veins +/- vugs (hobnail calcite) up to 1cm across		
		24.07 - 24.72: Med. grained, weakly porph. diorite.				
		24.72 - 24.93: Aphanitic Andesitic Dyke.	top 35 bottom 60			
		24.93 - 25.23: Chilled margin of Diorite with pervasive wispy chlorite-epidote stringers.	bottom 60			
		25.23 - 32.00: Med. to coarse grained Diorite, locally weakly porph. also local tr. glomerocrysts, otherwise equigranular. Feldspar 1mm-12mm, avg. 2mm, Note large tabular laths approx. 1% throughout interval. approx. 35-40% feldspar.				
		32.00 - 40.70: Distinctly porph. Diorite 5-15% feldspar phenocrysts; 2-4mm; 10-25% groundmass feldspar <2mm, minor glomerocrysts.(40.10 - 40.70 bleached, chilled margin)				

From To	Rock Type	Texture and Structure	Angle to Core Axis	Alteration	Sulphides	Remarks
40.70 to 45.71	DACITIC - F.G. ASH TUFF	Colour - lt. to med. grey-green Grain size - fine Weakly foliated Dacitic fine grained Ash Tuff with approx. 2% <2mm qtz eyes (range <1-8mm diameter) Crudely laminated locally.	top ctc 65 sharp fol'n 60	Weak to strong sericite, weak to mod. chlorite 40.70 - 41.47: weak to mod. sericite pervasive 41.47 - 42.67: Mod. to strong sericite pervasive	Sulphides mainly as 1-2mm stringers also as diss. of fine gr. py Py 3-8%, avg. 5% Sph tr-<1% throughout, associated with stringer py. Cpy tr-<1% fine gr. patches associated with stringer py *In Mislatch section stringers 1mm-10mm have 5-15% py, tr cpy, 30-50% sph.	Assay BCD 6454 41.45 - 42.17m: 5% py, <<1-1% sph., tr cpy Assay BCD 6455 42.17 - 42.76m: 5-8% py stringers <1-1% sph, tr-<1% cpy Mislatch 42.67 - 45.71 Lithgeochem BCD 6061 40.75 - 42.67m: Lithgeochem BCD 6062 42.67 - 45.72m Assay BCD 6456 42.99 - 43.07m: 3-5% py, 2-3% sph, <1% cpy Assay BCD 6457 43.15 - 43.24m: 5% py, 3-5% sph, 1% cpy

Drill To	Rock Type	Texture and Structure	Ang a to Core Axis	Alteration	Sulphides	Remarks
45.71 to 57.41	RHYODACITE QTZ PORPH. FLOW (?) (poss. CRYSTAL TUFF)	Colour - lt. grey-white Grain size - aphanitic groundmass, fine to coarse crystals. Very weakly foliated Rhyodacite qtz porph. flow(?); apparent flow banding (shard lenses). Very homogeneous looking 5-15%, Avg 5-10% qtz phenocrysts glassy smokey grey to lt. grey 0.5mm-3mm, avg. 1-<2mm; sub-rounded (Poss. 42.67 - 45.71m Ash Tuff, but within mislatch section)	flow bands or fol'n (?) 45 (40 - 55) Py-Zn-Cu bands/ stringers 80 - 85 py +/- cpy stringer parallel fol'n generally	Tr to very weak seritization pervasive.	Py diss. throughout fine gr., locally stringers irregular to cont., 1-4mm thick, range 3-10% (30% in massive bands), avg. 5-7% Cpy fine gr. tr. throughout, locally up to 1-2%, mainly assoc. with py stringers. Sph. black to reddy-brown in 1-15mm stringers/bands assoc. with py. Tr to 2% (30% in bands)	Lithogeochem BCD 6063: 48.40 - 51.40m. Assay BCD 6458 45.72 - 46.72m: 3-5% py, Tr cpy, <1-1% sph. Assay BCD 6459 46.72 - 47.60m: 3-5% py, Tr-<1% cpy, <1-1% sph. Assay BCD 6460 47.60 - 48.40m: 5-10% py, <1-2% cpy, <1-2% sph. Assay BCD 6461 48.40 - 49.40m: 3-7% py, Tr-<1% cpy, Tr-<1% sph. Assay BCD 6462 49.40 - 50.60m: 3-7% py, Tr-<1% cpy, Tr-1% sph. Assay BCD 6463 50.60 - 51.22m: 3-8% py, Tr cpy, Tr sph. Assay BCD 6464 51.22 - 51.49m: 5% py, 1-2% sph, Tr-<1% cpy. Note 4mm irregular Py-Sph band. Assay BCD 6465 51.49 - 52.42m: 3-5% py, Tr cpy, Tr sph. Assay BCD 6466

From To	Rock Type	Texture and Structure	Angle to Core Axis	Alteration	Sulphides	Remarks
						3-30% py (30% in massive sulphide band). Note band or sulphides is 3mm to 15mm thick, avg. 10mm. Assay BCD 6467 52.49 - 52.93m: 4-10% py, Tr-1% sph, Tr-1% cpy. Assay BCD 6468 52.93 - 53.64m: 3-5% py, Tr sph, Tr cpy. Assay BCD 6469 53.64 - 54.14m: 5% py, Tr-<1% sph, Tr-<1% cpy.
57.41 to 59.92	DACITIC FLOW(?) (poss. DAC-RHY. ASH TUFF)	Colour - Med. green to lt. green, to grey Grain size - aphanitic matrix; very fine crystals (phenocrysts) Very weak foliation, crude banding poss. flow structure. Dacitite flow? or ash. Locally weakly porphyritic Tr qtz eyes (<2%), <1mm crude flow banding (?) textures.	40 - 45 flow banding or fol'n	Very weak to weak seritization pervasive +/- chlorite.	Py is diss. as fine to med. gr. discont. stringers parallel to fol'n (py diss. in stringers) range 2-12%, avg. 2-5%, 12% in local areas over 50 cm ie)58.26 - 58.76m Tr cpy locally	Lithogeochem BCD 57.41 - 59.80m
59.92 to 60.00	FAULT - (MINOR)	Colour - lt. grey-white Grain size - fine Sericite fault gouge	top ctc 80 bottom 80	Intense seritization	3-5% diss py	

From To	Rock Type	Texture and Structure	Angle to Core Axis	Alteration	Sulphides	Remarks
60.00 to 70.52	RHYODAC. FLOW(?)-QTZ EYE PORPH. (poss. CRYSTAL ASH,TUFF)	Colour - lt. grey. Locally with greenish hue Grain size - aphanitic groundmass; fine to coarse crystals Weakly foliated, Qtz eye porph. Rhyodacite Flow (?) or Crystal-Ash Tuff. 5-15% qtz eyes, range <1-6mm diameter, avg. 1-2mm. Very homogeneous looking unit.	Fol'n or flow banding 35 - 45	Very weak sericite pervasive, locally weak Tr. chlorite throughout	2-15% sulphides overall 60.00 - 65.00: avg. 5-8% sulphides (py) 65.00 - 70.52: avg. 2-5% sulphides (py) Mainly fine gr. pyrite as stringers 1-3mm also diss throughout. Cpy as fine gr. diss. within stringers Tr-2%. Tr. sph locally (?).	Lithogeochem BCD 6064 67.00 - 70.00 Assay BCD 6470 62.63 - 63.37m: 8-10% py, 1-2% cpy, Tr sph (?) Assay BCD 6471 63.37 - 63.72m: 5-8% py, <1-1% cpy, Tr sph (?) Assay BCD 6475 67.19 - 67.45m: 3-5% py, 1-2% cpy
70.52 to 71.04	ANDESITE DYKE (AMYGDA-LOIDAL?) (DIORITE?)	Colour - med. green Grain size - very fine to aphanitic Very weakly foliated. Equigranular Andesitic Dyke with 1-2mm diameter epidote filled amgydules (?) near contacts.	top ctc 60 - 65 bottom approx. 45	Weak chlorite Weak selective epidote (poss. infills spheroidal amygdules)	1-3% diss. euhedral fine gr. py	Lithogeochem BCD 6065
71.04 to 74.78	QTZ EYE PORPH. FLOW, RHYO-DACITE	Colour - Lt. grey +/- pale green Grain size aphanitic groundmass Weakly foliated Rhyodacite qtz eye porphyry flow, massive homogeneous unit similar to above. <5% qtz eyes, avg. <2mm diameter.	Fol'n or flow banding 60 (50-60)	Very weak sericite, pervasive. Weak chlorite as 1-2mm envelopes on py stringers	1-5% fine gr. py, avg. 2-3%. Py occurs mainly as cont. stringers, 1-2mm, also minor diss. Tr cpy locally in stringers.	

From To	Rock Type	Texture and Structure	Angle to Core Axis	Alteration	Sulphides	Remarks
74.78 to 79.83	DACITIC LAPILLI-TUFF to ASH TUFF +/- QTZ EYE PORPH. FLOWS(?)	Colour - lt. green grey 74.78 - 75.61: Monolithic green-grey lapilli tuff. Matrix supported, aphanitic. Frags avg. 3-5mm x 1-2mm, 10-20% Lt. to med. green. No qtz eyes.	Top ctc? 50 fol'n 45	Weak seritization, pervasive. Local with chlorite bands parallel to fol'n.	1-3% py fine gr., avg. 1% as stringers +/- diss.	
		75.61 - 76.22: Grey qtz eye porph. flow(?) similar to 71.04-74.78m.	fol'n/flow banding 45	Very weak to nil sericite Weak chlorite as stringers with py.	2-3% fine to med. gr. py mainly discont. 1mm thick stringers	
		76.22 - 77.18: Monolithic green-grey lapilli tuff similar to 74.78-75.61m, except 30-50% fragments (lapilli) -rounded to subrounded lenses. Note very fine grained feldspar phenos. in matrix.	Fol'n ? 65	Weak seritization pervasive, locally mod. Weak chloritization of frags (?).	2-3% py fine gr., discont. stringers up to 3mm thick.	Lithogeochem BCD 6067 76.22 - 77.18m
		77.18 - 77.54: Lt. grey feldspar porph. flow? or feldspar crystal ash tuff. Feldspar (1mm approx. 15% diss. Massive homogeneous looking. No qtz eyes.	Top ctc? fol'n 40	Very weak to weak seritization, pervasive.	2-5% mainly fine gr. py in stringers. 1-2mm thick.	Note poss. shards
		77.54 - 77.63: Lt. grey pyritic lapilli tuff. 10-20% frags up to 2cm x 1cm, avg. 3-4mm x 1-2mm, subrounded. Sharp contacts defined by py content.	Top ctc 65 bottom ctc 70	Very weak sericite.	Fine grained diss. py pervasive, poss. stringers(?) 15% py	Possible stringers.
		77.63 - 79.30: Lt. green-grey lapilli tuff +/- minor laminated ash ie) at 77.73m. Similar to above lapilli tuffs.	fol'n 45 good layering at 40	Very weak to weak sericite +/- chlorite pervasive.	1-3% fine gr. diss. py	Good layering c/a
		79.30 - 79.83: Qtz eye crystal tuff or flow(?) lt. grey +/- green	fol'n or flow banding 45	Very weak seritization, pervasive.	1-3% py mainly in stringers	

From To	Rock Type	Texture and Structure	Angle to Core Axis	Alteration	Sulphides	Remarks
79.83 to 79.85	FAULT	Colour - lt. green Grain size - fine Sericite + chlorite gouge coatings on fractures	35 (sub parallel fol'n)	Strong seritization +/- chloritization.	5-8% diss. fine gr. py	
79.85 to 81.01	DACITIC FELDSPAR PORPH. +/- QTZ EYE FLOW (poss. CRYSTAL TUFF as local CRYSTAL BANDS present)	Colour - lt. green-grey Grain size - aphanitic groundmass, fine to med. crystals. Qtz feldspar porph. flow(?) Lt. green-grey. <5% grey qtz eyes subangular to subrounded avg. 1-2mm. Feldspar phenos 5-10%, <1mm. Locally sausaritized.	30 - 35 fol'n or flow banding	Tr sericite, tr. chlorite except mod. chlorite with py stringers. Selective weak epidote alteration of feldspar near and within chlorite-py stringers.	1-2% fine gr. diss. py avg. Locally up to 15% over 5cm in stringers, avg. stringer 8mm (parallel fol'n)	
82.01 to 82.30	FAULT	Colour - lt. green Grain size - fine to aphanitic Strongly foliated to sheared with some gouge.	Top ctc 45 Bottom ?	Strong sericite pervasive Mod. qtz veinlets 5mm	Tr to 3% diss. py	
82.30 to 92.30	DACITE-RHYODACITE FELDSPAR-QTZ PORPH. FLOW(?) (poss. TUFF, similar to previous unit)	Colour - lt. green-grey Grain size - aphanitic groundmass, fine to med. crystals. Weak foliation. Feldspar-qtz porph. flow(?), has sections with no qtz eyes. Feldspar 5-15%, avg. 10%, angular-subangular <1-2mm. Qtz eyes <1-8mm avg. 1-2mm, Locally up to 8%, low as tr, subrounded to subangular. Note sheared section from 86.13 to 86.68m	Fol'n/ flow banding? 45 (30 - 45)	Very weak to weak seritization, pervasive	3-8% fine gr. py, avg. 5% mainly in irregular 1-3mm stringers.	Locally feldspar crystal bands <2cm suggest a poss. relative homogeneous crystal ash tuff Lithogeochem BCD 6068 86.75 - 89.75m

From To	Rock Type	Texture and Structure	Angle to Core Axis	Alteration	Sulphides	Remarks
92.30 to 109.68	FELDSPAR CRYSTAL TUFF +/- QTZ EYE DACITIC (FLOW?)	Colour - lt. to very lt. green-grey Grain size - aphanitic to fine matrix, fine to coarse crystal. Very weakly foliated. Dacitic crystal-lithic tuff, lt. green/grey to very pale green/grey, relatively homogeneous overall. Feldspar (plag) <1mm-2mm, avg. 1mm-<2mm, euhedral, angular to subangular. Clusters of feldspar locally look like frag. with fuzzy margins, locally look like crystal-ash layers. Good layering absent. Qtz eyes locally present throughout <5%.	Fol'n 45 layering 50 ?	Nil to locally very weak seritization. Selective weak to mod. epidotization of feldspar phenocrysts throughout. Bleached(?) 99.58 - 109.68m	1-8% py throughout, avg. 3-5%. Mainly stringers, irregular + diss. Tr to 1% cpy in stringers locally.	Note pyritic unit (dyke?) at 96.48 - 96.58m Lithgeochem BCD 6069 93.50 - 96.50m Lithogeochem BCD 6070
109.68 to 110.43	FAULT (in FELDSPAR CRYSTAL-LITHIC TUFF)	Colour - lt. grey + green Grain size - fine to aphanitic groundmass, crystals & frags fine to very coarse. Blocky with sections of gouge & seam of clay. Gouge has milled frags up to 2cm long.	top ctc 65 Bottom ctc 40 - 45	Strong seritization in gouge, clay(?) along seams.	1-5% py	
110.43 to 112.79	DACITE-RHYODACITE FLOW? QTZ EYE (poss. a TUFF?)	Colour - lt. to med. grey +/- green Grain size - aphanitic groundmass, fine to med. crystals Weakly foliated. Dacite-rhyodacite flow(?) 5-8% 1mm qtz eyes <5-10% <1mm feldspar crystals, locally with epidotization.	Fol'n(?) 20 (15 - 30)	Very weak sericite, pervasive +/- chlorite Traces of weak epidotization of feldspars.	3-15% py, avg. 5% fine gr. py mainly as irregular stringers, also as diss. Tr to 2% cpy patches within py stringers	Assay BCD 6476 110.69 - 111.04m: 8% py, 1-2% cpy Assay BCD 6477 111.87 - 112.27m: 8% py, 1% cpy
112.79 to 114.35	ANDESITE DYKE (FELDSPAR PORPHYRY?)	Colour - lt. to med. green Grain size - aphanitic to fine grained. Massive, aphanitic to fine grained andesite dyke, weakly porphyritic toward centre.	Top ctc 5 - 10 Bottom ctc 85	Weak pervasive chlorite - epidote. Local weak to mod. calcite veinlets. qtz vein 0 - 10 C.A. 25mm thick.	1-2% fine gr. diss. py	Note black chlorite envelope on qtz vein Lithogeochem BCD 6071 112.92 - 114.33m

From To	Rock Type	Texture and Structure	Angle to Core Axis	Alteration	Sulphides	Remarks
114.35 to 119.27	QTZ EYE PORPHYRY FLOW, RHYODACITE (poss. TUFF?)	Colour - lt. grey with a green hue Grain size - aphanitic groundmass, fine to coarse crystals. Weakly foliated. Rhyodacite qtz eye porphyry flow 5-15% qtz eyes <1-6mm, avg. 1-2mm, subangular to rounded. Homogeneous looking unit. Locally see <5% feldspar phenos.	Fol'n or flow banding 30 (20 - 35)	Very weak seritization, pervasive, Tr epidotization of feldspar.	5-15% py, fine grained in diss. throughout, avg. 5%, also in 2-4mm thick cont. qtz-py stringers +/- chlorite (no envelope) Tr cpy in stringers.	Lithogeochem BCD 6478 115.20 - 118.57m
119.27 to 120.02	FAULT	Colour - lt. green grey Grain size - aphanitic to coarse Mod. sheared zone with narrow <5cm seams of gouge (pale green-grey).	50 - 55 (seams)	Very weak sericite except in gouge seams strong. Infilled by qtz + calcite veinlets.	5-7% diss. mod. to coarse gr. py.	
120.02 to 137.81	DACITE CRYSTAL-LITHIC TUFF (LAPILLI TUFF Poss.) (some lapilli size frags)	Colour - med. to light green-grey Grain size - aphanitic, fine to coarse crystals. Weakly foliated. Dacitic crystal lithic tuff. 120.02 - 125.56: Matrix supported lapilli tuff. Qtz phenocrysts 5-20% Feldspar 3-15%, avg. 1mm Frags <2cm, <5%; subrounded to rounded. Homogeneous looking, no layering. 123.14m: Fault at 15 to C.A.		Locally silicified(?) lt. grey qtz veins discont. poss. some silicification. Very weakly sericitized. 120.02 - 128.20 Weakly sericitized. 128.20 - 137.81	Py diss. 5-10% fine gr., also stringers 1-8mm averall avg. approx. 8% py in interval. Locally 20% py in silicified zones.	Assay BCD 6479 10-20% py, <1-3% cpy. Lithogeochem BCD 6072 120.50 - 123.50m Lithogeochem BCD 131.00 - 134.00

From To	Rock Type	Texture and Structure	Angle to Core Axis	Alteration	Sulphides	Remarks
		125.56 - 130.76: Grey qtz eye dacite-rhyodacite crystal-lithic tuff. Approx. 5%, 2mm avg. round qtz eyes, locally clustered.		Weak selective epidotization of feldspar (plag).	1-5% fine gr. diss py + 1-3mm stringers, tr cpy	
		130.76 - 134.11: Silicified(?) dacite crystal lithic tuff, lt. grey similar to above dacite tuffs.		Silicification(?) pervasive		Lithogeochem BCD 131.00 - 134.00
		134.11 - 134.95: Silicified + in situ breccia of dacite crystal-lithic tuff.		Silicification(?) pervasive Tr sericite		
		134.95 - 137.81: Dacite crystal-lithic tuff (similar to above).		Very weak sericite		
137.81 to 143.21	RHYODACITE QTZ-EYE PORPHYRY FLOW(??) (poss. CRYSTAL TUFF)	Colour - lt. grey +/- green hue Grain size - aphanitic groundmass, fine to coarse crystals (phenocrysts). Weakly foliated. Rhyodacite Qtz eye porph. flow(?) 5-10% qtz eyes (1-6mm.	fol'n 40 (30 - 45)	Tr to very weak seritization Weak chlorite as envelopes to py stringers	5-15% py mainly as stringers 1-8mm avg 4mm +/- cpy diss within stringers.	Assay BCD 6481 139.15 - 140.21m: 8-10% py, 1-2% cpy Assay BCD 6482 137.81 - 138.61m: 8-10% py, 1% cpy Lithogeochem BCD 6073 138.16 - 141.16m
143.21 to 143.30	FAULT (narrow)	Colour - lt. green Grain size - as above Sheared rhyodacite (above) - no gouge.	approx. 45	Strong seritization	5% fine grained diss. py	

From To	Rock Type	Texture and Structure	Angle to Core Axis	Alteration	Sulphides	Remarks
143.30 to 171.92	RYHODACITE to DACITE ASH TUFF & CRYSTAL ASH TUFF	Colour - lt. grey with slight green to lt. green-grey Grain size - aphanitic matrix, fine to coarse crystals (phenocrysts).				
		143.30 - 145.09: Rhyodacite crystal-ash tuff (poss. silicified) lt. grey, fine grained. Qtz eyes <1-5mm, avg 1-2mm; <2%.		Tr to very weak sericite pervasive	3-20% stringers & diss py	Assay BCD 6478 143.64 - 144.01m: 10-20% py, 2-3% cpy
		145.09 - 146.80: Rhyodacite Qtz Eye crystal Tuff, lt. grey 5-10% qtz eyes.		Tr to very weak sericite pervasive	3-15% py Stringers generally parallel to fol'n	Assay BCD 6483 145.14 - 145.92m: py 8%, cpy 1-2% "3" 5-20mm sulphide stringers. Assay BCD 6484 146.32 - 146.96m: 10-15% py, 1% cpy includes 3cm thick massive sulphide band/stringer
		146.80 - 146.96: Dacite qtz-feldspar crystal-ash tuff		Mod. to strong irregular veinlets of epodite	3-5% py	
		146.96 - 149.35: Dacite qtz eye crystal tuff (silicified?)		Silicification(?) Tr sericite	3-8% py	
		149.35 - 152.26: rhyodacite-dacite crystal-ash tuff, lt. grey to sl. green; 5% qtz eyes throughout.		Tr to very weak seritization	1-8%, avg 3-5% fine gr. py	Note narrow fault at 151.50m C.A. 30 .
		152.26 - 171.92: Weakly foliated dacite crystal-lithic tuff; lt. green-grey, homogeneous looking. No qtz eyes.	Fol'n. 40 (25 - 45)	Very weak to weak seritization, pervasive	3-8% py diss. throughout	lithogeochem BCD 6075 158.00 - 161.00m

From To	Rock Type	Texture and Structure	Angle to Core Axis	Alteration	Sulphides	Remarks
171.92 to 172.37	ANDESITE ASH TUFF to CRYSTAL TUFF	Colour - med. to dark green Grain size - fine to aphanitic Weakly foliated. Andesite crystal tuff.		Weak chlorite pervasive Strong calcite veinlets, some assoc. brecciation.	1-3% py avg., at contact 15% py over 10cm.	
172.37 to 173.53	DACITE CRYSTAL-ASH TUFF (with QTZ EYES)	Colour - lt. grey-green Grain size - aphanitic matrix, fine to med. crystal. Weakly foliated. Dacite crystal-ash tuff.		Very weak seritization, pervasive.	1-5% diss. fine gr. py One central band is semi-massive approx. 40% py over 8cm, as discont. 1-2mm subparallel stringers.	includes minor fault seams 35 C.A.
173.53 to 174.46	ANDESITE ASH to CRYSTAL-ASH TUFF (same as above)	Colour - med. green Grain size - fine Weakly foliated. Andesite ash tuff +/- crystals, locally layered.	ctc at 173.65m at 75 C.A.	Weak chlorite, pervasive Tr to weak epidote	1-3% diss fine gr. py	Assay BCD 173.65 - 173.92m
174.46 to 175.00	DACITE CRYSTAL-ASH TUFF (same as above)	Colour - lt. to med. grey Grain size - aphanitic matrix, fine to med. phenocrysts. Same as above. Dacite crystal ash tuff.		Very weak sericite	1-5% diss fine gr. py	
175.00 to 175.28	ANDESITE ASH-TUFF (same as above)	Colour - med. green Grain size - fine Weakly foliated, distinct layers avg 1cm fine ash beds in fine crystal tuff. Andesite tuff.	layering 50	Weak to mod. chlorite pervasive. Weak selective epidotization of feldspar crystals.	2-3% diss. fine gr. py	Excellent layering within ash tuffs.

From To	Rock Type	Texture and Structure	Angle to Core Axis	Alteration	Sulphides	Remarks
175.28 to 175.73	DACITE ASH to CRYSTAL ASH (same as previous)	Colour - lt. to med. grey Grain size - aphanitic to fine. Massive, weakly foliated dacite ash +/- crystal tuff 10-20% feldspar <1mm phenos, <2% qtz eyes.	Top ctc 45 fol'n 45 bottom ctc 15 - 20	Very weak seritization	5% fine gr. py diss.	
175.73 to 175.83	FELSIC BAND	Colour - biege to white Grain size - aphanitic to fine, Weakly foliated, mod. laminated. Dacite ash tuff.	Top ctc 15 - 20 bottom 20	Mod. seritization, pervasive.	Tr py	Good layering/ lamination
175.83 to 201.47 E.O.H.	DACITE CRYSTAL-ASH TUFF (poss. FLOW?) with QTZ & FELDSPAR PHENOS.	Colour - lt. green-grey Grain size - aphanitic matrix, fine to coarse crystals. Weak to locally mod. foliated. Dacitic ash tuff +/- rhyodacite ash tuff. Generally homogeneous looking dacitic tuff. Qtz eye content 0-5% varies throughout the section. Feldspar 5-20% <1mm.	Fol'n 45 (40 - 50)	Very weak to weak seritization pervasive Tr chlorite throughout.	1-5% py Mainly in <1-2mm discont. stringers.	probably an ash tuff. Shear/gouge at 197.80m Lithogeochem BCD 180.18 - 183.18 Lithogeochem BCD 6080 198.47 - 201.47m.

LITHOGEOCHEMISTRY

SAMPLE NUMBER	FROM (m)	TO (m)	MAJOR OXIDES SiO_2	Al_2O_3	CaO	MgO	Na_2O	K_2O	FeO	MnO	TiO_2	ppm Ba	TRACE ELEMENTS ppm Cu	ppm Zn	ppm Pb	ppm Ag	% Zr	Rock Type	Alt	Min	Grid	
6061	40.75	42.67	60.18	17.84	0.92	4.45	1.36	3.42	8.47	0.20	0.70	1010	308	560	50		.005					
Dacite																						
6062	42.67	45.72	71.05	14.83	0.47	1.59	0.17	4.27	4.49	0.05	0.48	1100	352	2120	50		.005					
Rhy-Dac																						
6063	48.40	51.40	75.98	13.62	0.31	0.98	0.19	4.12	2.59	0.03	0.24	1170	38	48	50		.005					
Rhy-Dac																						
6064	67.00	70.00	76.51	12.74	0.89	1.64	0.78	3.06	2.22	0.03	0.18	1330	100	44	50		.005					
Rhy-Dac																						
6065	57.41	58.80	72.75	13.20	1.09	2.69	0.31	3.23	4.49	0.06	0.24	1120	8	64	50		.005					
6066	70.52	71.04	52.30	15.64	12.47	5.05	1.30	0.88	8.84	0.24	0.70	350	120	640	50		.005					
And Dyke																						
6067	76.22	77.18	73.82	14.26	0.46	2.58	0.46	3.44	2.66	0.04	0.31	1240	48	40	50		.005					
Dac																						
6068	86.75	89.75	71.50	14.50	1.01	3.99	0.49	2.82	3.26	0.08	0.31	980	6	60	150		.005					
Dac																						
6069	93.50	96.50	66.46	14.95	6.07	4.13	0.40	1.45	4.00	0.10	0.32	1230	40	24	50		.005					
Dac																						
6070	106.0	109.0	69.98	14.92	3.90	3.06	1.52	2.01	2.21	0.04	0.34	1420	4	4	50		.005					
Dac																						

Hole No. MTS-27 Entered by _____ Logged by M. J. Gray Page No. 16

LITHOGEOCHEMISTRY

			MAJOR OXIDES										TRACE ELEMENTS								
SAMPLE NUMBER	FROM (m)	TO (m)	SiO_2	Al_2O_3	CaO	MgO	Na_2O	K_2O	FeO	MnO	TiO_2	ppm Ba	ppm Cu	ppm Zn	ppm Pb	ppm Ag	% Zr	Rock Type	Alt	Min	Grid	
6071	112.92	114.33	51.31	13.67	12.47	5.51	0.51	0.05	9.57	0.26	0.67	50	44	58	240		.005					
And dyke																						
6072	120.5	123.5	72.62	10.63	0.46	2.78	0.63	2.01	7.77	0.06	0.26	990	12	20	50		.005					
Dac																						
6073	138.16	141.16	72.38	12.20	1.01	2.23	0.89	2.68	5.62	0.04	0.27	2270	450	8	50		.005					
Rhy-Dac																						
6074	115.2	118.57	72.37	12.12	6.07	2.25	0.86	2.60	6.81	0.03	0.26	1310	220	20	50		.005					
Rhy-Dac																						
6075	158.0	161.00	69.24	13.99	3.90	4.56	2.05	1.99	4.70	0.05	0.29	1160	920	4	50		.005					
Dac																						
6080	198.47	201.47	68.48	13.80	0.01	5.04	0.39	2.63	7.23	0.08	0.32	1290	52	14	100		.005					
Dac																						
6081	11.00	14.10	47.43	15.31	9.95	5.46	2.34	0.54	13.02	0.30	2.28	640	184	72	180		.008					
Dior																						
6082	131.00	134.00	71.36	13.97	0.28	2.71	0.20	3.50	5.45	0.04	0.32	2020	130	8	50		.005					
Dac																						

Hole No. MTS-27 Entered by _____ Logged by M. J. Gray Page No. 17

ASSAY SHEET

Sample Number	From (m)	To (m)	Estimate Cu	Estimate Zn	Length (m)	% Cu	% Zn	% Pb	gm T Ag	gm T Au	% SiO_2	% TiO_2	% Na_2O	ppm Ba	% Fe	PPM Cu	PPM Zn	PPM Pb	PPM Ag	PPB Au			
6454	41.45	42.17			0.72	0.016	0.11		0.1	0.01				1400									
6455	42.17	42.67			0.50	0.038	0.35		0.2	0.02				1300									
6456	42.99	43.07			0.08	0.050	0.74		0.6	0.03				1100									
6457	43.15	43.24			0.09	0.054	4.20		2.2	0.10				1000									
6458	45.72	46.72			1.00	0.004	0.02		0.2	0.05				1100									
6459	46.72	47.60			0.88	0.019	0.04		0.3	0.03													
6460	47.60	48.40			0.80	0.006	0.21		0.2	0.14													
6461	48.40	49.40			1.00	0.002	0.02		0.1	0.02													
6462	49.40	50.60			1.20	0.008	0.03		0.1	0.01													
6463	50.60	51.22			0.62	0.14	0.01		0.2	0.01													
6464	51.22	51.49			0.27	0.010	0.40		0.1	0.02													
6465	51.49	52.42			0.93	0.014	0.24		0.2	0.01													
6466	52.42	52.49			0.07	0.332	5.70		4.8	0.10													
6467	52.49	52.93			0.44	0.008	0.63		0.2	0.01													
6468	52.93	53.64			0.71	0.010	0.04		0.1	0.03													
6469	53.64	54.14			0.50	0.010	0.25		0.1	0.01													
6470	62.63	63.37			0.74	0.344	0.09		4.0	0.14													
6471	63.37	63.72			0.35	0.020	0.03		0.6	0.01													
6475	67.19	67.45			0.26	0.035	0.02		0.2	0.01													

HOLE NO MTS-27

ASSAY SHEET

Sample Number	From (m)	To (m)	Estimate Cu	Estimate Zn	Length (m)	% Cu	% Zn	% Pb	gm/T Ag	gm/T Au	% SiO_2	% TiO_2	% Na_2O		% Fe	PPM Cu	PPM Zn	PPM Pb	PPM Ag	PPB Au			
6476	110.69	111.04			0.35	0.276	0.02		1.9	0.09													
6477	111.87	112.27			0.40	0.008	0.01		0.4	0.05													
6479	131.11	132.04			0.93	0.062	0.01		0.3	0.02													
6480	134.95	135.29			0.34	0.281	0.01		0.5	0.01													
6482	137.81	138.61			0.80	0.015	0.02		0.1	0.01													
6481	139.15	140.21			1.06	0.259	0.01		0.2	0.03													
6478	143.64	144.01			0.37	0.250	0.02		0.5	0.03													
6483	145.14	145.92			0.78	0.380	0.01		0.3	0.03													

HOLE NO MTS-27

APPENDIX III

POLE-DIPOLE IP SURVEY ASSESSMENT REPORT

Province of British Columbia

Ministry of Energy, Mines and Petroleum Resources

ASSESSMENT REPORT TITLE PAGE AND SUMMARY

TYPE OF REPORT/SURVEY(S)	TOTAL COST
GEOPHYSICAL REPORT	$26,487.21

AUTHOR(S) Colin M. Burge SIGNATURE(S)

DATE STATEMENT OF EXPLORATION AND DEVELOPMENT FILED Jan 26, 30/87 YEAR OF WORK 1986

PROPERTY NAME(S) Mt. Sicker

COMMODITIES PRESENT Cu, Zn, Ag, Au

B.C. MINERAL INVENTORY NUMBER(S), IF KNOWN

MINING DIVISION Victoria NTS 92B/13

LATITUDE 48°59' LONGITUDE 123°50'

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)]

Apple Record # 1624 12 units
Peach # 1623 12 units

OWNER(S)

(1) Corporation Falconbridge Copper (2)

MAILING ADDRESS

6415 - 64th Street
Delta, B. C. V4K 4E2

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

(1) Corporation Falconbridge Copper (2)

MAILING ADDRESS

Same as above

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

The Mt. Sicker Property is underlain by felsic and mafic volcaniclastic rocks and flows belonging to the Myra Formation of the Paleozoic Sicker Group. Triassic diorite dykes crosscut the stratigraphy. The conformable units form a geanticlinal structure which plunges gently to the West. East-trending and northeast-trending faults of varying displacements divide the area into numerous fault blocks. Corporation Falconbridge Copper's exploration program is directed towards discovering polymetallic massive sulphide deposits similar to the Buttle Lake deposits in Strathcona Park. The Lenora and Tyee Mines, two past producers on the Mt. Sicker Property, produced a total of 305,787 tons of copper-zinc-gold-silver ore.

REFERENCES TO PREVIOUS WORK

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	23.3 km	Sicker 1 and Rocky 2	$13,254.71
Radiometric			
Seismic			
Other	Report and supervision		1,900.00
Airborne			
GEOCHEMICAL (number of samples analysed for ....)			
Soil			
Silt			
Rock			
Other			
DRILLING (total metres; number of holes, size)			
Core			
Non-core			
RELATED TECHNICAL			
Sampling/assaying			
Petrographic			
Mineralogic			
Metallurgic			
PROSPECTING (scale, area)			
PREPARATORY/PHYSICAL			
Legal surveys (scale, area)			
Topographic (scale, area)			
Photogrammetric (scale, area)			
Line/grid (kilometres)	23.38km	Sicker 1 and Rocky 2	11,332.50
Road, local access (kilometres)			
Trench (metres)			
Underground (metres)			
		TOTAL COST	$26,487.21

FOR MINISTRY USE ONLY	NAME OF PAC ACCOUNT	DEBIT	CREDIT	REMARKS:
Value work done (from report)				
Value of work approved				
Value claimed (from statement)				
Value credited to PAC account				
Value debited to PAC account				
Accepted ..... Date	Rept. No.			Information Class

Geophysical Report
Mt. Sicker Property

Victoria Mining Division

NTS 92B/13W

48°59' Latitude 123°50' Longitude

Owner: Corporation Falconbridge Copper

Operator: Corporation Falconbridge Copper

Applied to Claims:

Rocky Group

Peach 1623

Apple 1624

January 23, 1986

Colin Burge

TABLE OF CONTENTS

LIST OF FIGURES

1. INTRODUCTION

Corporation Falconbridge Copper has acquired mineral rights to a group of claims covering much of Mt. Sicker. An exploration program for polymetallic massive sulphide is currently in progress on these claims. This report summarizes a 23.3km Induced Polarization and Resistivity Survey conducted as part of the 1986 work program.

1.1 Location and Access

The Mt. Sicker property is located approximately 13 kilometres north of Duncan, British Columbia (Figure 1). A network of dirt and gravel roads provide access for 2-wheel drive vehicles to the claims from the Trans Canada Highway.

1.2 Property Definition

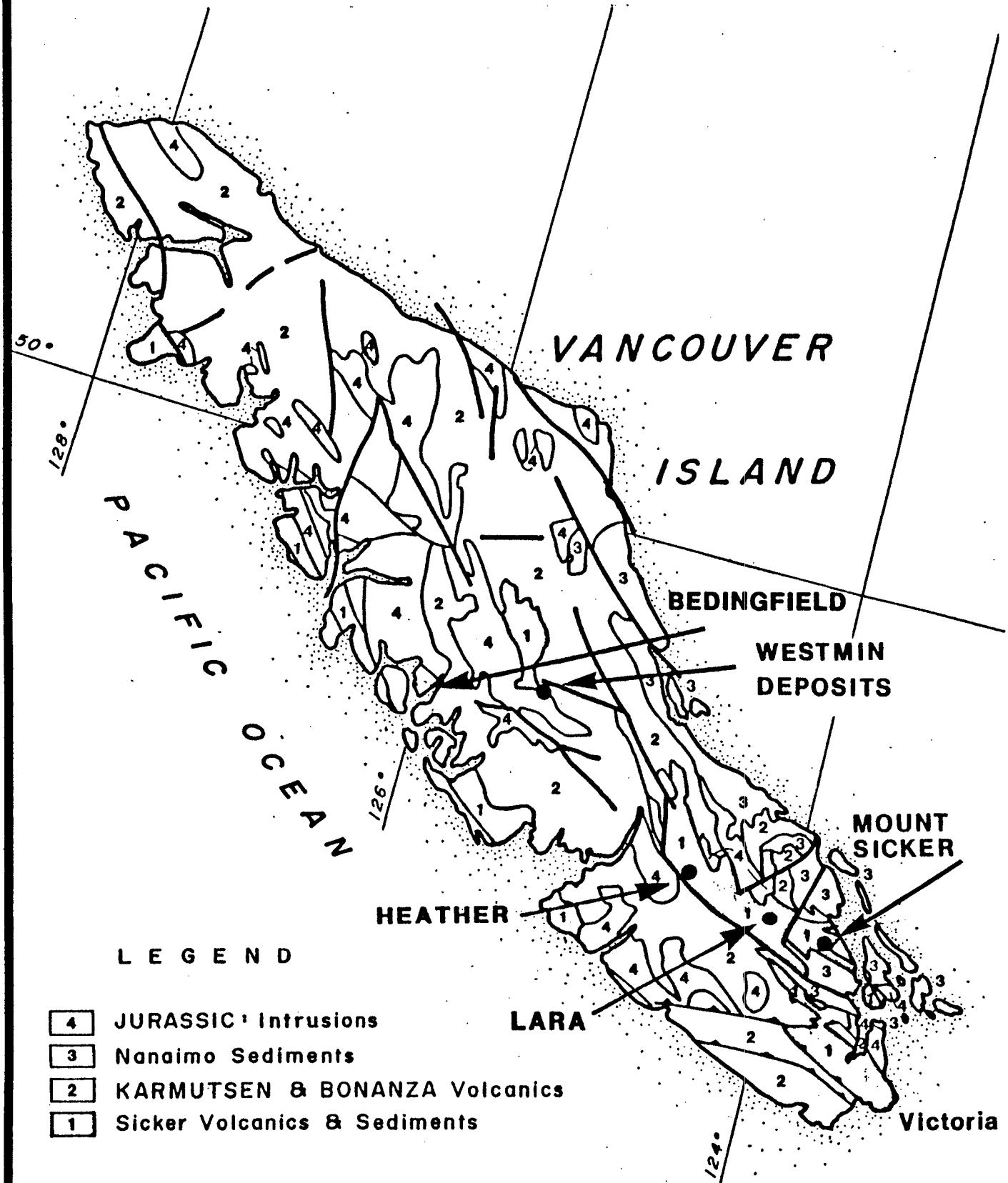
Work completed by Corporation Falconbridge Copper described in this report will be applied to the following claims, members of the Rocky Group (see Figure 2).

Claim Name	Record No.	No. of Units	Record Date
Apple	1624	12	January 30, 1986
Peach	1623	12	January 30, 1986

2. MT. SICKER AREA GEOLOGY

The Mt. Sicker area is underlain by Paleozoic Sicker Group volcanic rocks and Cretaceous Nanaimo Group sediments. These rocks are cut by the Paleozoic Saltspring intrusions, Jurassic Island intrusions and diorite/gabbro bodies. Muller (1980) has divided the Sicker Group as follows:

i) Buttle Lake Formation
ii) Sediment - Sill Unit
iii) Myra Formation
iv) Nitinat Formation



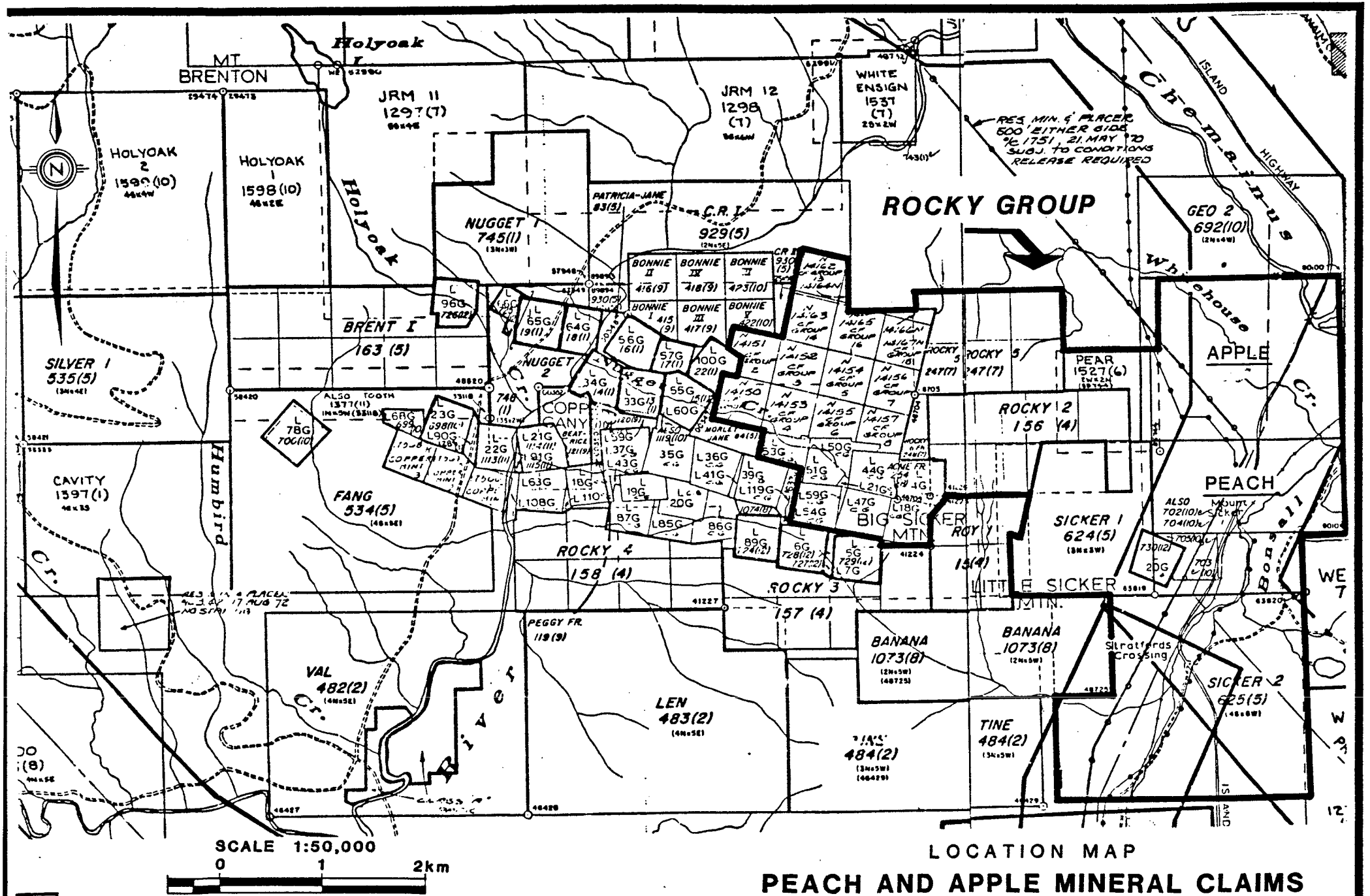
VANCOUVER ISLAND

GEOLOGY

SCALE : 1:2,000,000

CORPORATION FALCONBRIDGE COPPER

FIGURE 1



SCALE 1:50,000

0 1 2km

LOCATION MAP

PEACH AND APPLE MINERAL CLAIMS

ROCKY GROUP

92B/13

FIGURE 2

CORPORATION FALCONBRIDGE COPPER

In the Mount Sicker area the Myra Formation is represented by basic to rhyodacitic banded tuff, breccia and lava with interbedded argillite, siltstone and chert. The Lenora - Tyee volcanogenic massive sulphide deposits occur in Myra formation felsic rocks. The Nitinat Formation basaltic lavas and breccias with minor massive to banded tuff layers forms the base of the Sicker Group.

The Nanaimo Group conglomerate, sandstone and shale beds unconformably overly the Sicker Group rocks. The unconformity is commonly marked by a conglomerate containing fragments of Sicker Group volcanic rocks.

West to northwest and northeast striking faults divide the Mount Sicker area volcanic rocks into fault blocks. The majority of fault movement occurred in Tertiary time. Within the fault blocks the conformable units are folded and exhibit a penetrative deformation. These folds, possibly of Jurassic age, are assymmetrical with northwest-trending axes.

3. GEOPHYSICAL SURVEY

3.1 Technical Specifications

A Scintrex IPC-7 2.5 kw time domain transmitter was used for this survey. Data was received on a Scintrex IPR-11 time domain micro processor based induced polarization receiver. This instrument operates on an alternating square wave transmitted current pulse train, and sample the decay curve at ten semilogarithmically spaced times after cessation of each pulse. A two second on/ two second off pulse was used on the survey. The data is continually averaged until the operator is satisfied convergence has occurred, and is filed into solid state memory. The eighth slice (from 690 to 1050 milliseconds after shut off: midpoint at 870 milliseconds) is the value that has been plotted on the plans and pseudosections.

A pole dipole electrode array at an "a" spacing of 50 meters was used on the survey with readings taken at "n" separations of 1, 2, 3, 4 and 5. the current electrode was to the south of the receiving electrodes on all survey lines.

Survey data for both chargeability (millivolts/volt) and resistivity (ohm-meters) are plotted on plan maps which display data for n=1. Figure 4 and 5.

3.2 Work Done

An additional 23.38km of slope-corrected grid lines were added to the existing Mt. Sicker grid system. These lines currently form the southeast extension of the Mt. Sicker grid. The lines are 100 metres apart and were picketed every 25 metres.

The induced polarization and resistivity survey (Alan Scott Geophysics) covered 23.3 kilometres of grid line all south of the Mount Sicker grid system baseline. The survey covered from Line 22+00E to Line 38+00E (Figure 3).

4. INTERPRETATIONS AND CONCLUSIONS

Figure 4 displays several chargeability highs (greater than 30 millivolts/volt) associated with resistivity lows plotted on Figure 5. These coincident anomalous zones cluster along the length of line 26+00E. These results indicate a high sulphide content in the underlying unit. Surface mapping suggests this is a flat-lying volcanic unit. In Figures 4 and 5 a creek is shown which may be the surface expression of a north-south trending fault which also may have contributed to the mineralization in the vicinity of line 26+00E.

The strongest anomalies produced during this survey were centered around the following stations:

Line 26+00E	12+50S
Line 26+50E	14+50S
Line 26+00E	17+00S
Line 27+00E	18+50S
Line 25+00E	21+50S
Line 23+00E	20+50S

These areas represent priority targets and should be trenched and subsequently drilled. Chalcopyrite-pyrite mineralized volcanic rocks were discovered in the tailings pile of an old shaft located at Line 27+00E and 18+40S. This represents our best exploration target.

Moderate chargeability highs were obtained at the following locations:

Line 31+00E 6+00S

Line 33+00E 15+50S to Line 37+00E 14+00S

Very high resistivity values encountered in the northwest of the survey area (Figure 5) are the result of a very large quartz vein system with little or no mineralization observed.

5. ITEMIZED COST STATEMENT

Linecutting and IP Survey

1.	Linecutting (23.38km)	
	Contractor: Quest Canada Exploration Services Inc.	
	13.45km at $350.00 per km	4,707.50
	9.93km cost plus linecutting	6,625.00
		11,332.50
2.	IP Survey (23.30km)	
	Contractor: Alan Scott	8,930.00
	3 assistants for 9 days @ $110/day	2,970.00
	Field expenses, food, accommodation	1,354.71
		13,254.71
3.	Supervision	
	C. Burge 2 days @ $300/day	600.00
4.	Report Preparation and Interpretation	
	C. Burge 3 days @ $300/day	900.00
5.	Drafting and Typing etc.	400.00
	TOTAL	$26,487.21

STATEMENT OF QUALIFICATIONS

I, Colin M. Burge hereby certify that:

1) I hold a Bachelor of Science from the University of Waterloo

2) I have practised my profession continuously since graduation in 1981

3) I personally supervised the work reported herein.

16/2/87
Date

Colin M. Burge

Induced Polarization and Resistivity Surveys

Field Work Completed: June 24 to July 2, 1986

Mt. Sicker Project, Vancouver Island, B. C.

STATEMENT OF QUALIFICATIONS OF PERSONNEL
RESPONSIBLE FOR SURVEY

Alan Scott: B.Sc. (Geophysics) 1970, University of British Columbia 15 years experience in mining geophysics
4013 West 14th Avenue, Vancouver, B. C. 228-0237.

Maps

GEOLOGICAL BRANCH
ASSESSMENT REPORT

15,719
PART 1 OF 2

LEGEND

CRETACEOUS

- 4 — Nanaimo Group Sediments
- 3 — Diorite intrusions(age unknown)

PALEOZOIC
SICKER GROUP

- 2 — Rhyolitic-Dacitic Volcanics
- 1 — Andesitic Volcanics
- Mineralized chert, ash argillite (mine package)

SYMBOLS

- Shaft/old workings
- Bedding
- Anticline
- Syncline

RIVER
CHEMAINUS
POSTUK-FULTON
PEPPA RESOURCES
QUEEN BEE
MTS-26
Postuk-Fulton
NUGGET
CREEK
FAULT
MORLEY-JAYNE
KEY CITY
MINE FAULT
MTS-23
MTS-18
MTS-22
MTS-21
TONY
MTS-20
XL
MTS-19
Tailings Pond
ADIT
MTS-17
HERBERT
YANKEE
FAULT
Lenora-Tyee
LENORA
TYEE
RICHARD
MTS-24
ESTELLE
MONA
MTS-27
WESTHOLME
COPPER
FAULT
NORTHEAST
FORTUNA FAULT
Gabriel
Northeast Copper
TOM
BL 00
BL 705
BL 1835
L 12+00 W
L 10+00 W
L 8+00 W
L 6+00 W
L 4+00 W
L 2+00 W
L 0+00
L 2+00 E
L 4+00 E
L 6+00 E
L 8+00 E
L 10+00 E
L 12+00 E
L 14+00 E
L 16+00 E
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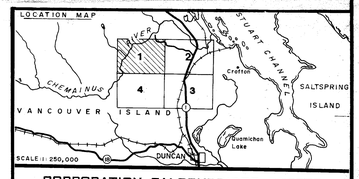
L 20+00 E
L 22+00 E
L 24+00 E
L 26+00 E
L 28+00 E
L 30+00 E

LOCATION MAP


CORPORATION FALCONBRIDGE COPPER

MT. SICKER AREA

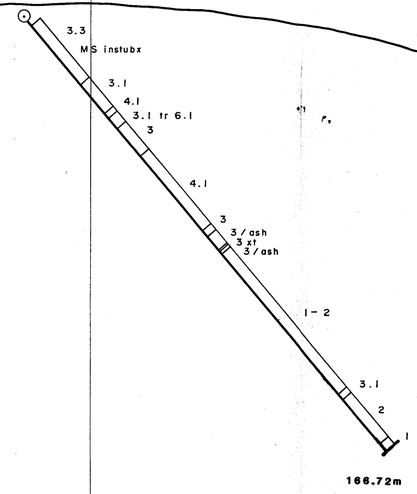
GENERALIZED GEOLOGY
1986 DRILL HOLE LOCATIONS

0 50 100 200 300 400 500 m
SCALE: 1:5000

DRAWN BY: HLG		FIG. NO.: 5
DATE: DEC. 1986	N.T.S. 92 B/13	

8 S | 6 S | 4 S | 2 S

MTS 24



166.72m

500m

400m

300m

200m

- L E G E N D -

- 1 MAFIC VOLCANICS
- 2 INTERMEDIATE VOLCANICS
  - 2.2 Feldspar Phyric
- 3 FELSIC VOLCANICS
  - 3.1 Quartz Phyric
  - 3.2 Feldspar Phyric
  - 3.3 Quartz Feldspar Phyric
- 4 MAFIC INTRUSIONS
  - 4.1 Diorite
  - 4.2 Gabbro
  - 4.4 Quartz Bearing Diorite
- 5 FELSIC INTRUSIONS
  - 5.3 Andesite
- 6 SEDIMENTS
  - 6.1 Chert
  - 6.2 Argillite/Shale

CORPORATION FALCONBRIDGE COPPER

MT. SICKER PROPERTY

SECTION 5+00 E

- 10 S -

LOOKING WEST

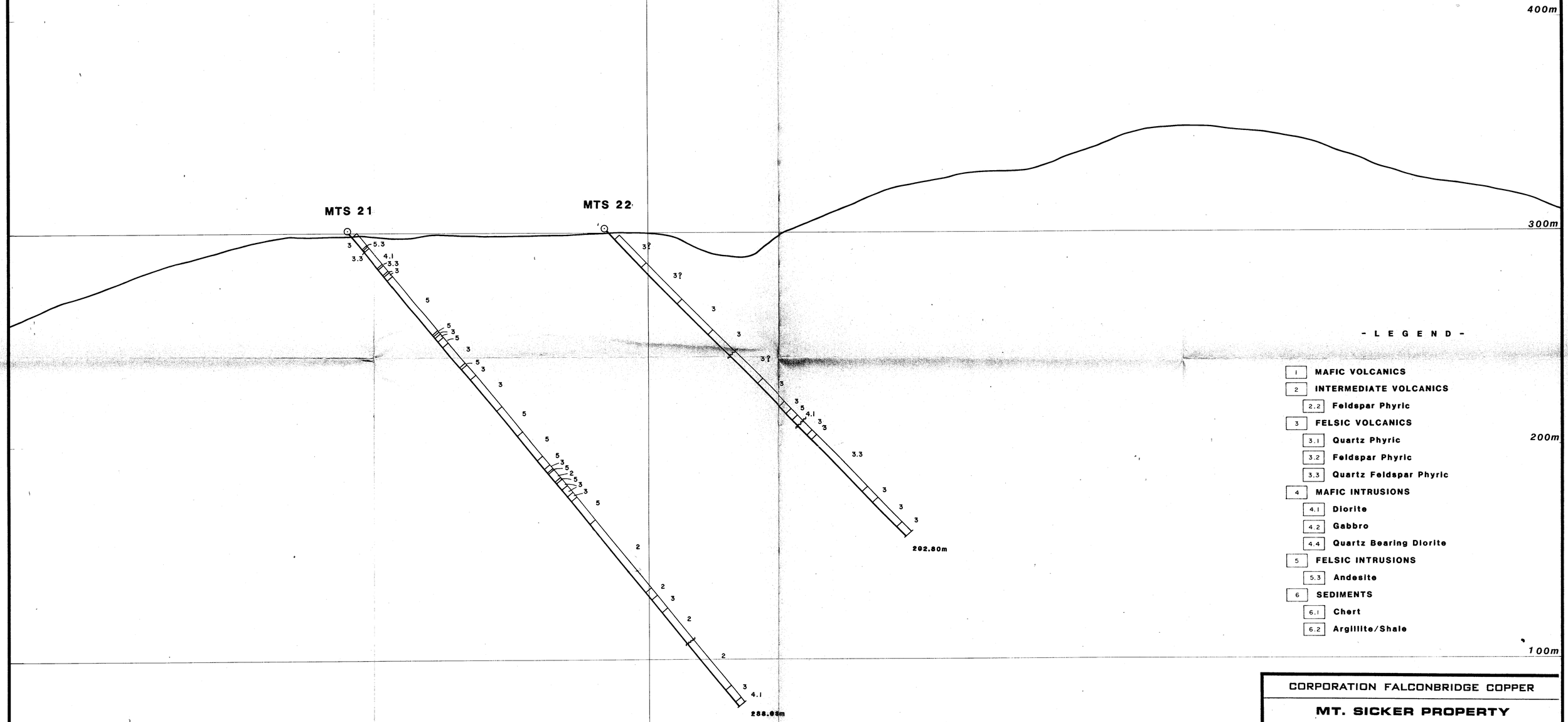
0 50 100m

SCALE: 1:1000

DRAWN BY: HG/dm		FIG. NO.: 6d
DATE: DEC. 1986	N.T.S. 92B/13	

GEOLOGICAL BRANCH
ASSESSMENT REPORT

15,719
PART 1 OF 2



- LEGEND -

- 1 MAFIC VOLCANICS
- 2 INTERMEDIATE VOLCANICS
  - 2.2 Feldspar Phyric
- 3 FELSIC VOLCANICS
  - 3.1 Quartz Phyric
  - 3.2 Feldspar Phyric
  - 3.3 Quartz Feldspar Phyric
- 4 MAFIC INTRUSIONS
  - 4.1 Diorite
  - 4.2 Gabbro
  - 4.4 Quartz Bearing Diorite
- 5 FELSIC INTRUSIONS
  - 5.3 Andesite
- 6 SEDIMENTS
  - 6.1 Chert
  - 6.2 Argillite/Shale

CORPORATION FALCONBRIDGE COPPER

MT. SICKER PROPERTY

SECTION 12+00 W
- 10 S -
LOOKING WEST

0 50 100m

SCALE: 1:1000

DRAWN BY: HG/dm		FIG. NO.: 6c
DATE: DEC. 1986	N.T.S. 92B/13	

0 2N 4N

500m

400m

300m

200m

MTS-25

5.3
5.3
5.3
5.3
5.3
5.3
5.3
5.3
5.3
5.3
5.3
5.3
5.3
5.3
2
5.3
2
5.3, 2
2
2
2
2
2
5.3
3, 2
3.2
5.3
5.3
5.3
3, 2

252.07m

- LEGEND -

- 1 MAFIC VOLCANICS
- 2 INTERMEDIATE VOLCANICS
  - 2.2 Feldspar Phyric
- 3 FELSIC VOLCANICS
  - 3.1 Quartz Phyric
  - 3.2 Feldspar Phyric
  - 3.3 Quartz Feldspar Phyric
- 4 MAFIC INTRUSIONS
  - 4.1 Diorite
  - 4.2 Gabbro
  - 4.4 Quartz Bearing Diorite
- 5 FELSIC INTRUSIONS
  - 5.3 Andesite
- 6 SEDIMENTS
  - 6.1 Chert
  - 6.2 Argillite/Shale

CORPORATION FALCONBRIDGE COPPER

MT. SICKER PROPERTY

SECTION 1+00 E

- 2S -

LOOKING WEST

0 50 100m

SCALE: 1:1000

DRAWN BY: HG/dm

DATE: DEC. 1986

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FIG. NO.: 6e

GEOLOGICAL BRANCH
ASSESSMENT REPORT

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PART 10F2

0 | 2N | 4N

500m

MTS-26

4.1
4.1
2
4.1
2
4.1
5.3
4.1
2
4.1
5.3
5.3
4.1
4.1 / 2
5.3
5.3
4.1
5.3
5.3
5.3
5.3
5.3
2
2
2
2
2
2
5.3
3
3
2
2
3
249.02m

400m

300m

200m

- LEGEND -

- 1 MAFIC VOLCANICS
- 2 INTERMEDIATE VOLCANICS
  - 2.2 Feldspar Phyric
- 3 FELSIC VOLCANICS
  - 3.1 Quartz Phyric
  - 3.2 Feldspar Phyric
  - 3.3 Quartz Feldspar Phyric
- 4 MAFIC INTRUSIONS
  - 4.1 Diorite
  - 4.2 Gabbro
  - 4.4 Quartz Bearing Diorite
- 5 FELSIC INTRUSIONS
  - 5.3 Andesite
- 6 SEDIMENTS
  - 6.1 Chert
  - 6.2 Argillite/Shale

CORPORATION FALCONBRIDGE COPPER

MT. SICKER PROPERTY

SECTION 3+00 E

- 2S -

LOOKING WEST

0 50 100m

SCALE: 1:1000

DRAWN BY: HG/dm

DATE: DEC. 1986

N.T.S. 92B/13

FIG. NO.: 6f

GEOLOGICAL BRANCH
ASSESSMENT REPORT

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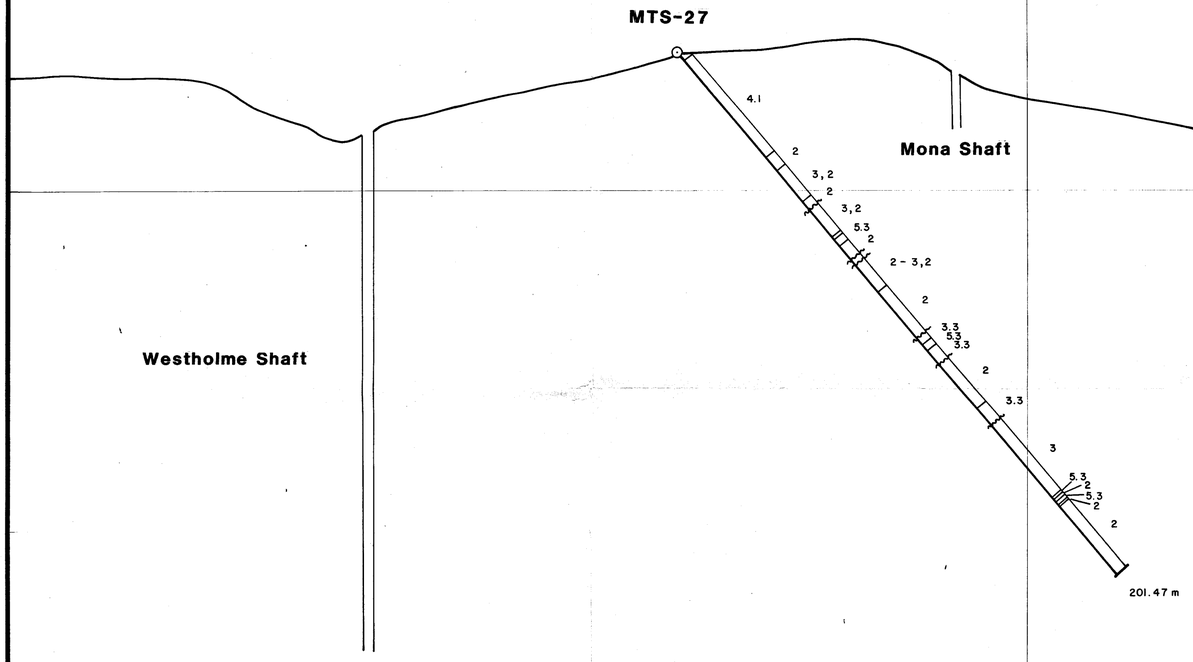
PART 10F2



700m

600m

500m

400m

- LEGEND -

- 1 MAFIC VOLCANICS
- 2 INTERMEDIATE VOLCANICS
  - 2.2 Feldspar Phyric
- 3 FELSIC VOLCANICS
  - 3.1 Quartz Phyric
  - 3.2 Feldspar Phyric
  - 3.3 Quartz Feldspar Phyric
- 4 MAFIC INTRUSIONS
  - 4.1 Diorite
  - 4.2 Gabbro
  - 4.4 Quartz Bearing Diorite
- 5 FELSIC INTRUSIONS
  - 5.3 Andesite
- 6 SEDIMENTS
  - 6.1 Chert
  - 6.2 Argillite/Shale

CORPORATION FALCONBRIDGE COPPER

MT. SICKER PROPERTY

SECTION 9+00 E

- 10 S -

LOOKING WEST

0 50 100m

SCALE: 1:1000

DRAWN BY: HG/dm		FIG. NO.: 6g
DATE: DEC. 1986	N.T.S. 92B/13	

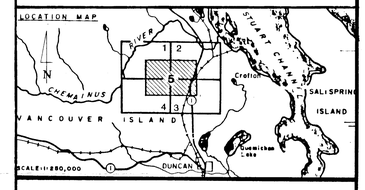
ROCKY 5
ROCKY 2
ROCKY 5
CF GROUP 7
CF GROUP 8
L20+00E
L25+00E
L30+00E
L35+00E
L40+00E
L45+00
L50+00E
BASELINE 1+83S
PEAR
PEACH
PEACH
PEAR
APPLE
SICKER 1
ROCKY 2
APPLE
BC TEL
RELAY TOWER
SICKER 1
TIELINE 20+00S
LITTLE SICKER
MOUNTAIN
SICKER 2
LAWARANCE
SICKER 2
STRATFORD'S
CROSSING
MINES ROAD
Bonsall Creek
Whitehouse Creek
PEACH
APPLE
N

LEGEND

CLAIM BOUNDARIES

NOTE: CLAIM BOUNDARIES ARE APPROXIMATE
(FROM 1:50,000 GOVERNMENT CLAIM MAPS)

LOCATION MAP



MAJOR ROADS
SECONDARY ROADS
1986 LINECUTTING
EXISTING CUT GRID

GEOLOGICAL BRANCH
ASSESSMENT REPORT

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CORPORATION FALCONBRIDGE COPPER

MT. SICKER PROPERTY

ROCKY CLAIM GROUP

0 100 200 500
SCALE: 1:5000 METRES

DRAWN BY. C.B.
DATE: JAN. 1987
N.T.S. 92B/13
FIG. NO.: 3

L20+00E

L25+00E

L30+00E

L35+00E

L40+00E

L45+00

L50+00E

BASELINE 1+83S

TIELINE 20+00S

BC TEL
RELAY TOWER

△ LITTLE SICKER
MOUNTAIN

MINES ROAD

STRATFORD'S
CROSSING

Whitehouse Creek

Bonsall Creek

1

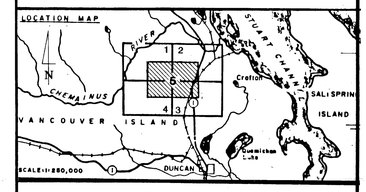
N

LEGEND

Contour of chargeability (millivolts/volt)

3\1.5\0 chargeability in millivolts/volt

LOCATION MAP



MAJOR ROADS

SECONDARY ROADS

1986 LINECUTTING

EXISTING CUT GRID

GEOLOGICAL BRANCH
ASSESSMENT REPORT

15,719

PART 1 OF 2

CORPORATION FALCONBRIDGE COPPER

MT. SICKER PROPERTY
I.P. SURVEY
TOTAL CHARGEABILITY
SCINTREX IPR-11
POLE-DIPOLE

FIELD M7 SEP:50 metres

0 100 200 500

SCALE: 1:5000 METRES

DRAWN BY: C.B.		FIG. NO.: 4
DATE: JAN 1987	N.T.S. 92B/13	

NW-14427

GEOLOGICAL BRANCH
ASSESSMENT REPORT

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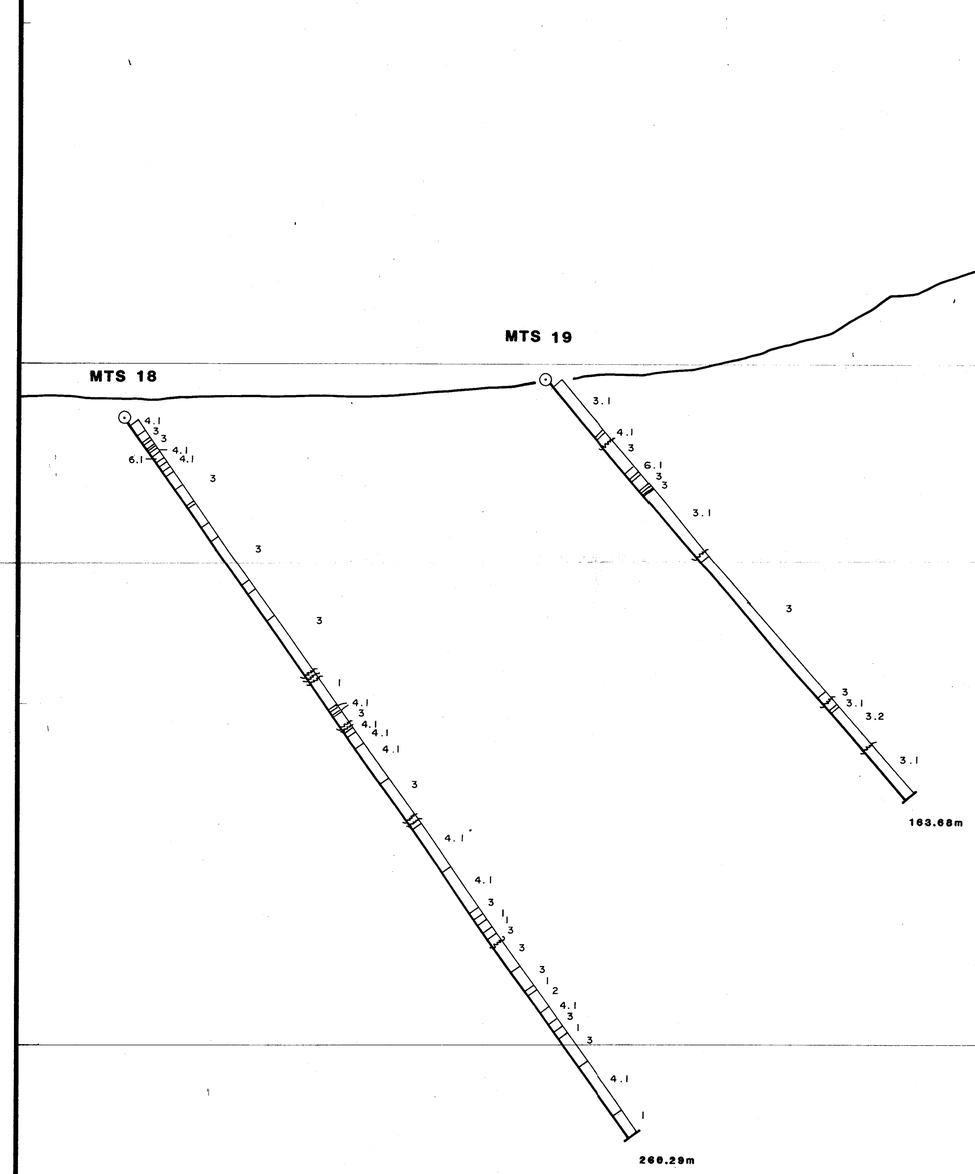
PART 1 OF 2



500m
400m
300m
200m

- LEGEND -

- 1 MAFIC VOLCANICS
- 2 INTERMEDIATE VOLCANICS
  - 2.2 Feldspar Phyric
- 3 FELSIC VOLCANICS
  - 3.1 Quartz Phyric
  - 3.2 Feldspar Phyric
  - 3.3 Quartz Feldspar Phyric
- 4 MAFIC INTRUSIONS
  - 4.1 Diorite
  - 4.2 Gabbro
  - 4.4 Quartz Bearing Diorite
- 5 FELSIC INTRUSIONS
  - 5.3 Andesite
- 6 SEDIMENTS
  - 6.1 Chert
  - 6.2 Argillite/Shale

CORPORATION FALCONBRIDGE COPPER

MT. SICKER PROPERTY

SECTION 6+50 W
- 10 S -
LOOKING WEST

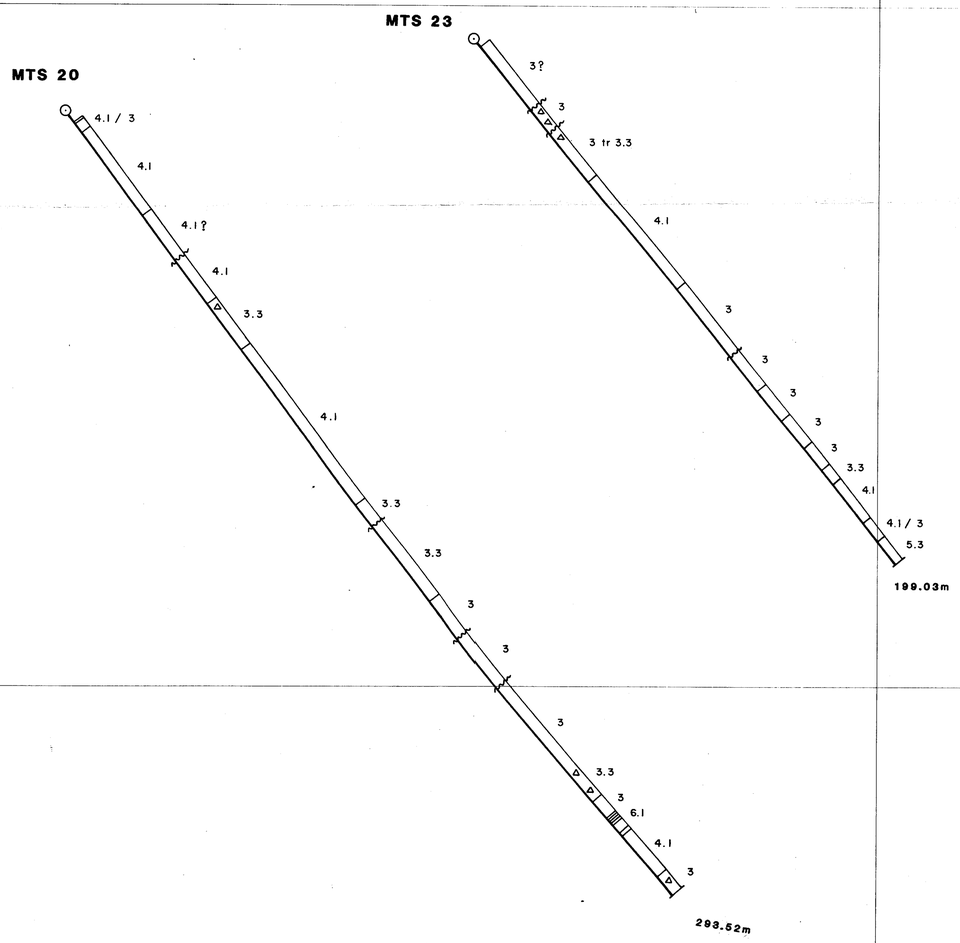
0 50 100m

SCALE: 1:1000

DRAWN BY: HG/dm		FIG. NO.: 6a
DATE: DEC. 1986	N.T.S. 92B/13	

500m

400m



300m

- L E G E N D -

- 1 MAFIC VOLCANICS
- 2 INTERMEDIATE VOLCANICS
  - 2.2 Feldspar Phyric
- 3 FELSIC VOLCANICS
  - 3.1 Quartz Phyric
  - 3.2 Feldspar Phyric
  - 3.3 Quartz Feldspar Phyric
- 4 MAFIC INTRUSIONS
  - 4.1 Diorite
  - 4.2 Gabbro
  - 4.4 Quartz Bearing Diorite
- 5 FELSIC INTRUSIONS
  - 5.3 Andesite
- 6 SEDIMENTS
  - 6.1 Chert
  - 6.2 Argillite/Shale

200m

CORPORATION FALCONBRIDGE COPPER

MT. SICKER PROPERTY

SECTION 9+00 W
- 10 S -
LOOKING WEST

0 50 100m

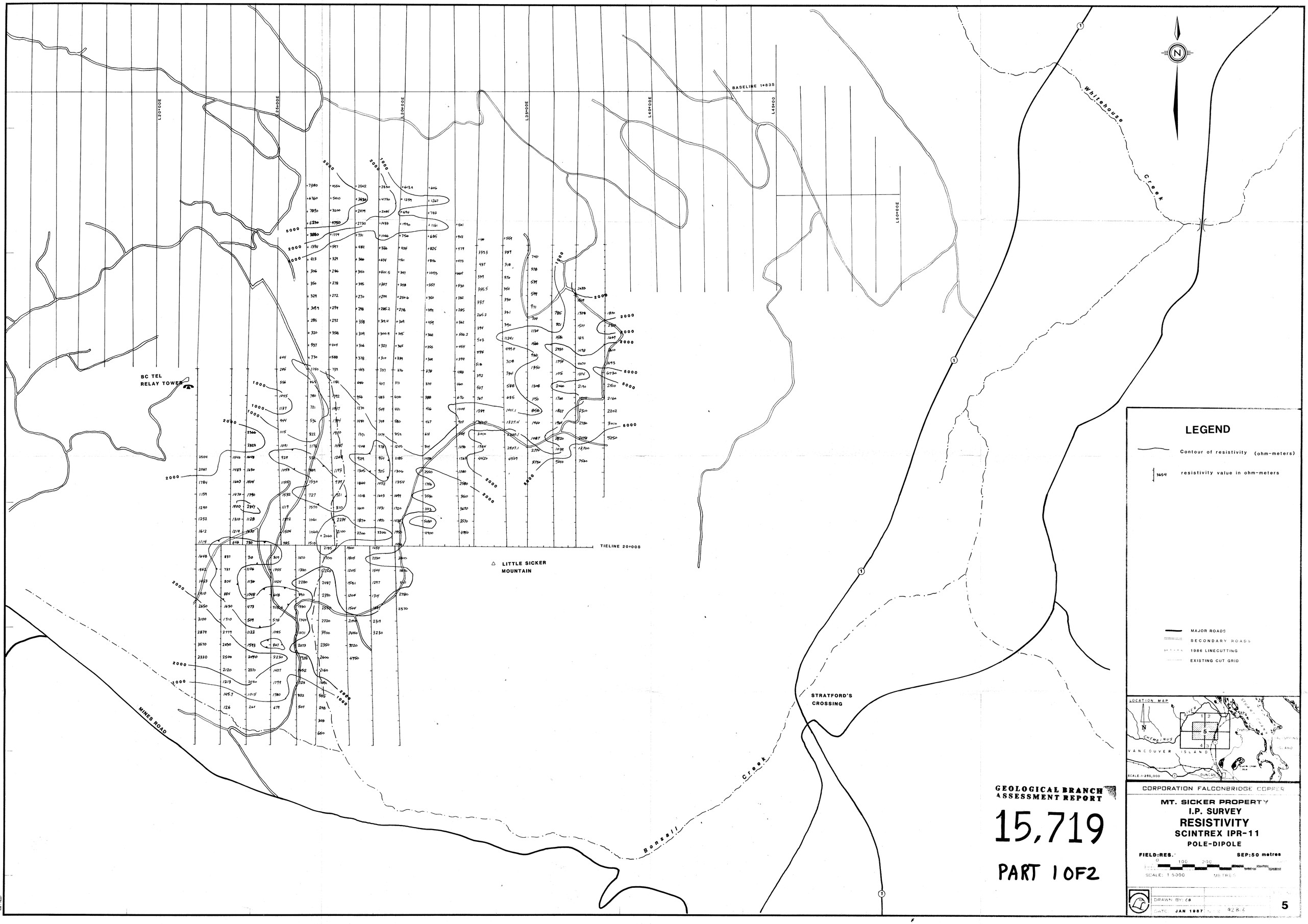
SCALE: 1:1000

DRAWN BY: HG/dm

DATE: DEC. 1986

N.T.S. 92B/13

FIG. NO.: 6b



LEGEND

Contour of resistivity (ohm-meters)

3654 resistivity value in ohm-meters

MAJOR ROADS

SECONDARY ROADS

1986 LINECUTTING

EXISTING CUT GRID

GEOLOGICAL BRANCH
ASSESSMENT REPORT

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PART 1 OF 2

CORPORATION FALCONBRIDGE COPPER

MT. SICKER PROPERTY

I.P. SURVEY

RESISTIVITY

SCINTREX IPR-11

POLE-DIPOLE

FIELD:RES. SEP:50 metres

0 100 200

SCALE: 1:5000 METRES

DRAWN BY: CB

DATE JAN 1987 FILE 9286

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