

CORPORATION FALCONBRIDGE COPPER

DRILL HOLE RECORD

SRM 1 →

SRM 21

Re-log Drill holes

Mr. Sicker

092B/13

827727

METRIC UNITS

IMPERIAL UNITS

HOLE NUMBER SRM-1	GRID PF	FIELD COORDS	LAT. 818S	DEP. 038W	ELEV. 496m	COLLAR BRNG. 000T	COLLAR DIP -60°	HOLE SIZE BQ	FINAL DEPTH 135.67m	
PROJECT 205	CLAIM #	SURVEY COORDS.				DATE STARTED: DATE COMPLETED: 1979	CONTRACTOR: Fulton's Farm CORE STORAGE: CASING:			
PURPOSE RELOG SEREM DRILLHOLES								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	

HOLE NO. _____

ZIPPY PRINT * - BRIDGEPORT, RICHMOND

LOGGED BY I.D. P.E.E

Checked 19/12/83 ADP

FROM TO	ROCK TYPE	COLOUR	GRAIN SIZE	TEXTURE AND STRUCTURE	ANGLE TO CORE AXIS	ALTERATION	SULPHIDES	REMARKS
(0-9.45)	OVERBURDEN							
(9.45-34.45)	DIORITE	green	fg-mg	Quite massive, homogeneous, unfoliated to locally weakly foliated. Qtz-carb veins and vlts common. (1.21-2.43m) (20.73-25.60) Numerous carb veinlets oriented at Chilled over .30m at base CONTACT SHARP AT	50° 40°	A little very weak epidote-silica at (9.75) and agian at (16.15). Otherwise only altered immediately adjacent to veins and even there only to a very limited degree	NIL	Locally might be mistaken for an ardesite but no extrusive textures and a district chill/baked lower contact.
(34.45-45.12)	RHYOLITE FLOW OR INTRUSION (QP)	creamy grey	fg	Massive homogeneous, siliceous rhyolite. Probably hornfelsed by the intrusion. Possible from the contact, quartz eyes up to 5-6mm dia. become apparent. They are obviously masked by rex nearer the contact.	very very wk but 45°-55°	Possible weak sil but more likely hornfelsing with some remobilization Weak sericite	Occ. trace Py	Doesn't jump out and hit you like the very coarse QP but probably because of rex during hornfelsing.
(45.12-45.43)	CLAY RICH RHYOLITE	cream	fg-mg	Quite rotten, granular, clay rich rhyolite with quartz-carb veining. Probable base to above flow		Mod. white due to flow base reactions	NIL	
(45.43-45.58)	RUBBLY CONTACT ZONE	cream-grey	fg	In situ fragmental(rubbly) at top of tuffs/cherts and base of overlying flow.			NIL	
(45.58-76.67)	RHYOLITE TUFF AND CHERT (includes QP sections)	light grey to creamy	fg-cy	More heterogeneous bedded sequence of rhyolitic tuffs and lapilli tuffs with cherty interbeds and	(47.25)=58°	Very weakly sericitic	NIL to trace (Py)	

FROM TO	ROCK TYPE	COLOUR	GRAIN SIZE	TEXTURE AND STRUCTURE	ANGLE TO CORE AXIS	ALTERATION	SULPHIDES	REMARKS	
				strongly quartz-porphyritic beds. (45.57-48.17) Mainly lapilli tuffs, some tuff and chert. A few qtz-eyes. (48.17-50.30) Strong qtz-eyes in lapilli tuff (QP) grades into:- (50.30-51.37) Tuffs and chert (51.37-51.52) Fault gouge. No appreciable displacement (same unit both sides) (51.52-56.09) Mainly tuffs with cherty horizons. Occasionally porphyritic. (56.09-56.40) Fault gouge (56.40-75.61) Quartz porphyritic tuff and lapilli tuff. (58.53) starts to become increasingly sheared, broken and quartz veined. Textures become less apparent, though local qtz-eyes					
					Bedding (51.21)= 71°			All Hanginwall	
					Quite steep ?			Still hangingwall. Very broken up now though.	
					Bedding (53.65)= 60°				
					(58.84)= 40°			Brings QP back up/down in contact with tuffs and cherts. Distinctly more foliated than QP higher in hole however.	
					(62.19)= 40°	Moderately sericitc in broken area.	Local traces of pyritic	Becoming good QP	

FROM TO	ROCK TYPE	COLOUR	GRAIN SIZE	TEXTURE AND STRUCTURE	ANGLE TO CORE AXIS	ALTERATION	SULPHIDES	REMARKS	
				<p>present and possible lapilli size frags.</p> <p>(65.24-65.85) Massive, barren qtz (carb) vein.</p> <p>(67.07-68.90) Badly ground core. But obvious QP on both sides.</p> <p>(73.78-74.39) Massive, barren qtz vein</p> <p>(75.60-76.67) Fault zone qtz vein accompanied by ground core.</p>					
(76.67-82.01)	RHYOLITE TUFF, LAPILLI TUFF, MINOR CHERT	grey	fg	<p>Hangingwall sequence of pyroclastics and cherty tuffs.</p> <p>CONTACT SHARP AT (badly broken)</p>	(76.52)= 30° (end of vein/ gouge.	Locally sericitic but distinctly less so than in the footwall.	(77.13-77.74) 2-3% disseminated Py (tr. Cp?) in slightly chloritic matrix. Elsewhere trace Py.	Possibility that 75.60-76.67 fault separates hangingwall sequence from a structurally overlying footwall slice, but appears too strongly quartz porph. to be Fw.	
(82.01-86.28)	GRAPHITIC ARGILLITE	charcoal grey	fg	<p>Variably graphitic argillite with several tuff screens lamination quite distorted but averages 30-40° (Often less though)</p> <p>CONTACT SHARP AT</p>	Banding (84.14)= 40° 22°		Fairly pervasive 1-2% Py (cp) locally more, usually in association with qtz-veins. Tends to be smeared along foliation planes.		

FROM TO	ROCK TYPE	COLOUR	GRAIN SIZE	TEXTURE AND STRUCTURE	ANGLE TO CORE AXIS	ALTERATION	SULPHIDES	REMARKS
(86.28-90.55)	RHYOLITE RHYODACITE TUFFS	Creamy grey to green	fg	Poker chip core. Altered looking tuffs with occ. argillite screens.		Moderately sericitic and chloritic	1% smeared on foliation.	NOTE: From 90.55 core is all split for assay. Check Serem's logs for sulphides. Occ. sex's missing.
(90.55-91.01)	ORE HORIZON?			Chips of sericitic tuff and veiny quartz with significant cp-sp. Could, however, be stringers	very erratic	Very strong sericite	Best section -35% sulphides. (poss Barite, rest is veiny qtz) over .07-.10m. Of S, 50%sp, 25%cp, 25%py. Rest of section mainly smears of cp (py) in sericitic tuff.	
				CONTACT NOT SEEN				
(91.01-92.38)	GRAPHITIC ARGILLITE	grey	fg	More argillite than graphite but locally strong. Core still very chippy.			Trace-2% cp-py assoc'd with qtz veins.	
				CONTACT GRADATIONAL?				
(92.38-93.75)	SERICITIC, PYRITIC, RHYOLITE TUFF			Very sericitic tuff with 3-4% disseminated py-cp	very erratic	Strong sericite	3-4% py-cp	
(93.75-97.56)	FAULT ZONE			Chips and gouge derived from all rock types. Poor recovery.	Probably at shallow angle		Occ. Py-cp, usually in qtzos chips.	

FROM TO	ROCK TYPE	COLOUR	GRAIN SIZE	TEXTURE AND STRUCTURE	ANGLE TO CORE AXIS	ALTERATION	SULPHIDES	REMARKS
(97.56-135.67)	RHYOLITE FLOW (STRINGER ZONE)	creamy	fg	Quite massive, homogeneous rhyolite flow with common dark ellipsoid area which may be deformed vesicles. Occ. vague Qtz-eye. Local fine stream blast breccia zone.	(101.21) = 47° (104.26) = 47° (117.07) = 55° (127.43) = 50°	Moderately sericitic. Fine orangey carbonate quite common, both disseminated and as veinlets. Possibly enhanced silica content accompanying stringers.	Trace- 1/2% diss'd py. From about 107.62 becomes distinctly stringery. Pyritic veinlets from 1mm to about 3cm across cut the core, usually at quite a high angle. (132.01) Particularly strong Py-stringer area, with traces of Sp.	If not originally vesicular, distinction mottled texture should be useful for correlation anyway. Flow like homogeneity. May be due to pervasion alteration and consequent loss of texture.
(135.67)	E.O.H.							

ASSAY SHEET

SIGNIFICANT ASSAYS FROM SEREM SAMPLING

Sample Number	From (m)	To (m)	Estimate		Length (m)	% Cu	% Zn	% Pb	oz/t	oz/t	% Ba	g/t Ag	g/t Au	% MgO	% Fe	PPM Cu	PPM Zn	PPM Pb	PPM Ag	PPB Au			
			gm/t Ag	gm/t Au					SiO ₂	SiO ₂	Na ₂ O												
	90.54	90.97			0.4 ³	0.765	2.59	1.02	2.45	0.34	NA	84.0	11.7										
	90.97	91.52			.54	0.25	1.04	0.12	0.52	0.013	1.72	17.8	0.45										
	91.52	93.04			1.52	0.28	1.03	0.21	0.63	0.025	1.65	21.6	0.86										
	93.04	94.51			1.46	0.29	0.93	0.11	0.62	0.062	1.05	21.3	2.13										
Average	90.54	94.51			3.96	0.33	1.19	0.26	0.81	0.071													
	124.54	135.67																					
	Numerous 'noisy' values:-				usually	0.009	0.10	0.09	0.08	0.006													
					1.52	-.079	-1.12	-0.33	-0.57	-.025													

LITHOGEOCHEMISTRY

MAJOR OXIDES

TRACE ELEMENTS

SAMPLE NUMBER	FROM (m)	TO (m)	SiO ₂	Al ₂ O ₃	CaO	MgO	Na ₂ O	K ₂ O	FeO	MnO	TiO ₂	PPM Pb, Ba	ppm Cu	ppm Zn	ppm Pb	ppm Ag	ppb Au	Rock Type	Alt	Min	Grid
BCD 45	42.37	45.42	74.0	12.9	2.10	1.92	3.29	1.64	6.92	0.03	0.13	740	6	59							
QP rhyolite																					
46	62.50	66.46	71.0	12.3	3.65	1.54	1.62	3.16	1.61	0.04	0.13	2300	6	17							
rhy. tuff, lapilli tuff																					
47	82.01	86.28							3.38	0.05		5800	51	174	6	0.3	38				
g. arg.																					
48	103.65	106.70	68.5	14.6	2.78	2.16	3.22	2.22	2.07	0.05	0.20	1610	21	37							
Footwall rhyolite																					
49	127.43	130.48	74.2	13.6	0.58	0.99	1.28	3.63	2.27	0.02	0.18	6800	60	1830							
Foot wall rhyolite																					

Hole No. SRM-1

Entered by _____

Logged by 127

Page No. 7

CORPORATION FALCONBRIDGE COPPER

DRILL HOLE RECORD

X METRIC UNITS
 IMPERIAL UNITS

HOLE NUMBER SRM 3	GRID	FIELD COORDS	<u>LAT.</u>	<u>DEP.</u>	<u>ELEV.</u>	COLLAR BRNG.	COLLAR DIP	HOLE SIZE	FINAL DEPTH 127.1m.
PROJECT	CLAIM #	SURVEY COORDS.				DATE STARTED: DATE COMPLETED:	CONTRACTOR: CORE STORAGE: Fulton Farm CASING:		
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

HOLE NO SRM 3
ZIPPY PRINT -- BRIDGEPORT, RICHMOND

LOGGED BY M. Burson
Sept. 1983

<u>From</u> <u>To</u>	<u>Rock Type</u>	<u>Texture and Structure</u>	<u>Angle to</u> <u>Core Axis</u>	<u>Alteration</u>	<u>Sulphides</u>	<u>Remarks</u>
0 to 12.8	Overburden					
12.8 to 20.4	Fractured Rock (Overburden?)	- mixed lithologies which range from diorite to dacite, rhyolite, feldspar porphyry, etc.			- occasional pyrite stringers	- only 5' of recovery core in pieces up to 3" long. Some pieces are definitely rounded. I suspect this overburden rather than a fault zone.
20.4 to 26.8	Diorite	Grey, m.g.-c.g. - very massive. Sausseritized feldspars are very abundant, generally 1-5mm but can range up to +1cm. Possible chill margin and quartz veining at lower contact.		- moderate chlorite alteration		- moderate amounts of quartz and quartz-pyrite veinlets
26.8 to 29.0	Rhyolite Tuf [?]	- light grey, m.g. to c.g. - lapilli-sized fragments, very siliceous. Possible minor quartz eyes. Very small (<<1mm) fspar? Tan coloured but clay (prob).		- becomes very sericitic in last foot		
29.0 to 30.2	Dacitic Flow Top Breccia	- dk green and purple, m.g. to c.g. - fragments from 1mm to 1cm. Many quartz angydules, minor amethyst. Lower contact and angle throughout section is - small feldspar developed.	55°	- very good hematite, pervasive throughout section and occasionally as 2-3mm wide veins. Possible minor chlorite alteration.		

<u>From</u> <u>To</u>	<u>Rock Type</u>	<u>Texture and Structure</u>	<u>Angle to</u> <u>Core Axis</u>	<u>Alteration</u>	<u>Sulphides</u>	<u>Remarks</u>
30.2 to 63.7	Dacite to Rhyolite Tuff/Flow	- med. green to light grey, f.g. to m.g. - Often good banding. Darker greenish bands generally have good feldspar developed. Lighter grey obviously more siliceous. Angle generally but variable. Fold nose at 127'. Becomes finer grained towards bottom of section. Also more siliceous in general.	65°	- generally moderate chlorite alteration and minor sericite. Minor quartz veining throughout. Moderate carbonate veining 195'-205'		
63.7 to 84.1	Dacitic Feldspar Porphyry	- dark grey to tan, f.g. to m.g. - Minor quartz eyes present. Darker areas are in general finer grained with almost exclusive feldspar development. Feldspars 1-2mm. Tan & dk grey areas generally 1-3mm long. Angle Towards end of section feldspars getting difficult to see i.e. more altered, but still present.	55°	- Generally dark green but some sections are a light tan colour, presumably from alteration. Tan sections are generally coarser grained and seem to have more silica. Tan colouration due to infusion of carbonate mainly as small veinlets and joint infillings. Generally good quartz- carbonate veining through- out. Darker areas have moderate chl. alt., lighter have minor sericite.		
84.1 to 89.6	Quartz Vein	- Moderate carbonate as well. Often has sections and fragments of wall rock i.e. fspar porphyry which in general exhibits more sericitic alt'n. Lower "contact" is fairly arbitrary - is at point where amount of porphyry is greater than amount of quartz.				

<u>From</u> <u>To</u>	<u>Rock Type</u>	<u>Texture and Structure</u>	<u>Angle to</u> <u>Core Axis</u>	<u>Alteration</u>	<u>Sulphides</u>	<u>Remarks</u>
84.1 to 127.1	Dacite Feldspar Porphyry	- tan to 92.7m then dark grey/green, f.g. - feldspar phenos up to 3-4mm. Unit appears to get much more fragmental towards bottom of section - fspar still present but in general more sparse.		- Generally lots of carbonate veinlets. Some- times fragmental. Minor chlorite and sericite occasional qtz veins. Minor sericite alteration. Appears more siliceous at bottom of hole.		
127.1	E.O.H.					Note: Hole originally recorded in M. Burson's notebook.
		checked DVL 05/12/84				

LITHOGEOCHEMISTRY

MAJOR OXIDES

TRACE ELEMENTS

SAMPLE NUMBER	FROM ()	TO ()	SiO ₂	Al ₂ O ₃	CaO	MgO	Na ₂ O	K ₂ O	FeO	MnO	TiO ₂	P ₂ O ₅	ppm Cu	ppm Zn	ppm Pb	ppm Ag	ppb Au	Rock Type	Alt	Min	Grid		
BCD 0439																							
Diorite																							
0440																							
Dac./Rhy																							
0441																							
Dacite																							
0442																							
Dac./Rhy.																							

Hole No. SRM 3

Entered by _____

Logged by M. Burson

Page No. _____

CORPORATION FALCONBRIDGE COPPER

DRILL HOLE RECORD

X METRIC UNITS
IMPERIAL UNITS

HOLE NUMBER SRM 9	GRID CFC	FIELD COORDS	LAT. 8+10S	DEP. 6+06E	ELEV.	COLLAR BRNG. 180°	COLLAR DIP 45°	HOLE SIZE BQ	FINAL DEPTH 128.6m.
PROJECT 205	CLAIM # Richard III (39-G)	SURVEY COORDS				DATE STARTED: DATE COMPLETED:	CONTRACTOR: CORE STORAGE: Fulton Farm CASING:		
PURPOSE To test an area with no outcrop east of Richard III								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

<u>From To</u>	<u>Rock Type</u>	<u>Texture and Structure</u>	<u>Angle to Core Axis</u>	<u>Alteration</u>	<u>Sulphides</u>	<u>Remarks</u>
0 to 2.9	Overburden					
2.9 to 9.45	Feldspar Felsic Tuff	Colour - grey Grain Size - v.f.g. - massive, feldspar phyrlic felsic volcanic - feldspar phenocrysts are <1 1/2mm and constitute 3-5 volume %, subhedral to angular and white to pinkish-white - rare quartz eyes - feldspars define wk foliation	50°	- weak sericite	- barren to 1% diss. py.	
9.45 to 12.2	Chloritic Mafic to Intermediate Tuff	Colour - light green Grain Size - v.f.g. - CI=40, almost aphanitic		- moderate to strong chlorite	- trace pyrite except for one 2mm pyrite veinlet	- core split from 9.45 to 13.7m
12.2 to 17.2	Felsic Tuff to Lapilli Tuff	Colour - grey Grain Size - f.g. to aphan. - contains scattered quartz eyes (<2mm, up to 2%) sometimes with pinkish-white feldspars similar to 2.9 to 9.45 - texture appears clastic				

<u>From</u> <u>To</u>	<u>Rock Type</u>	<u>Texture and Structure</u>	<u>Angle to</u> <u>Core Axis</u>	<u>Alteration</u>	<u>Sulphides</u>	<u>Remarks</u>
17.2 to 17.8	Intermediate Dyke	<p>Colour - greenish-grey</p> <p>Grain Size - f.g.</p> <ul style="list-style-type: none"> - upper contact sharp with 2mm chill zone - equigranular mixture of feldspar and ferromagnesian minerals - CI=25 - massive 	40 ^D	<ul style="list-style-type: none"> - little altered - cut by quartz-chlorite vein with minor chlorite 	- barren	
17.8 to 22.9	Felsic Lapilli Tuff	<p>Colour - grey</p> <p>Grain Size - aphan.</p> <ul style="list-style-type: none"> - chloritic patches which are lenticular occur throughout unit although they are distributed irregularly; commonly >4mm, some are up to 3cm long (veinlets?) - scattered (0-1%) quartz eyes from 1/4 to 2 1/2mm - white, subhedral to euhedral feldspar phenocrysts occur throughout unit (5%, <1mm) but are not conspicuous - chloritic patches define a weak foliation (not gneissic) - contact with underlying unit indistinct, possibly gradational over 20cm 	45 ^D	<ul style="list-style-type: none"> - weak to moderate sericite, fragments altered to chlorite 	- barren	

<u>From</u> <u>To</u>	<u>Rock Type</u>	<u>Texture and Structure</u>	<u>Angle to</u> <u>Core Axis</u>	<u>Alteration</u>	<u>Sulphides</u>	<u>Remarks</u>
22.9 to 30.25	Felsic Tuff	Colour - whitish - grey Grain Size - aphan. - distinguished from overlying unit by absence of chlorite patches and speckled appearance - contains elliptical patches which are zoned from greenish cores to siliceous grey margins, some lack greenish cores - massive, no foliation - 1-2% quartz eyes (<2mm) - 2-3% subhedral feldspar (< 1/2mm) - chlorite patches or veinlets reappear below 28m		- weak sericite	- barren to 28m, then 1% pyrite associated with chlorite veinlets to base of unit	- BCD 2920 23.5-26.2
30.25 to 30.4	Grey Chert	Colour - grey Grain Size - aphan - weakly banded in part, with component of lithic material - some interbeds of underlying unit - basal contact sharp	20° 45°		- one speck of pyrite	
30.4 to 31.0	Felsic Tuff	Colour - grey Grain Size - aphan. - contains possible chert fragments near top contact - similar to 17.8 to 22.9 except more obviously volcaniclastic		- moderate sericite and chlorite	- 1% disc. pyrite - 3% sphalerite over 1cm with associated chert(?) at base of unit	- possibly units are younging down hole as indicated by chert fragments.

<u>From</u> <u>To</u>	<u>Rock Type</u>	<u>Texture and Structure</u>	<u>Angle to</u> <u>Core Axis</u>	<u>Alteration</u>	<u>Sulphides</u>	<u>Remarks</u>
31.0 to 40.5	Felsic Tuff to Lapilli Tuff	Colour - grey Grain Size - f.g. - contains oval quartz eyes (<2mm), approx. 1-2% - some sections consist of fragments less than 2-3mm while others have large chloritic patches up to 2cm long and a pronounced gneissic texture	45°	- strongly chloritic with poker chip fracturing from 32 to 36m	- two thin (cm) thick bands of pyrite (10%) and pyrite and chal- copyrite (5% total sulphides) near top of unit	- Core split from 31.0 to 31.6m and possibly split from 31.9 to 37.8m - BCD 2921 32.6 - 36.3m
40.5 to 41.2	Fault Zone	Colour - grey Grain Size - f.g. - fault gouge from 40.5 to 40.7 and 43.2 to 41.2 - felsic lapilli tuff similar to 31.0 to 40.5 m section from 40.7 to 43.2		- altered to clays	- 20% pyrite over 10cm between 40.9 and 41.0m. - trace pyrite in general	- 50% core recovery - BCD 2925 40.9-41.0m
41.2 to 90.0	Diorite	Colour - greenish-grey Grain Size - m.g. - equigranular, CI=60 - below possible fault zone at 78.6m diorite contains almost acicular flecks of a dark mineral (ilmenite?) which define a weak foliation and 15% grey grains (quartz or unaltered plagioclase)		- chlorite on fractures	- barren	- badly broken core from 73.2 to 78.6m may indicate fault or shear zone - BCD 2923 85.6-88.1m
90.0 to 99.0	Fault	- predominantly gouge with some sections of recognizable diorite at very beginning and felsic tuff through the rest of the fault zone			- barren	- Major fault zone with deformation extending into wall rocks.

<u>From</u> <u>To</u>	<u>Rock Type</u>	<u>Texture and Structure</u>	<u>Angle to</u> <u>Core Axis</u>	<u>Alteration</u>	<u>Sulphides</u>	<u>Remarks</u>
99.0 to 102.7	Felsic Lapilli Tuff	Colour - grey Grain Size - aphan. - Roughly similar to 22.9 to 30.25 section		- moderately altered to sericite and chlorite - possibly bleached weakly at basal contact	- trace pyrite	- BCD 2934 100.5-102.7
102.7 to 128.6	Diorite	Colour - grey Grain Size - f.g. to m.g. - f.g. near upper contact grading to m.g. over 2m - shearing of diorite extends 15m below contact - more foliated over last 10m of hole due to shearing?		- numerous carbonate veinlets in the sheared zone - saussuritized feldspars - some hematite on fractures	- barren	- called andesite by Ronning
128.6		E.O.H.				

Summary Log SRM9

<u>From</u>	<u>To</u>	
0	2.9	Overburden
2.9	9.5	feldspar felsic tuff
9.5	12.2	chloritic mafic to intermediate tuff
12.2	30.3	felsic tuff to lapilli-tuff
30.3	30.4	grey chert
30.4	40.5	felsic tuff to lapilli-tuff, chloritic with poker chip fractures
40.5	41.2	fault zone
41.2	90.0	diorite
90.0	99.0	fault
99.0	102.7	felsic lapilli-tuff
102.7	128.6	diorite

checked DVL 04/12/84

ASSAY SHEET

Sample Number	From ()	To ()	Estimate		Length (m)	% Cu	% Zn	% Pb	oz/t Ag	oz/t Au	% SiO₂	% FeO	% Na ₂ O	% MgO	% Fe	PPM Cu	PPM Zn	PPM Pb	PPM Ag	PPB Au			
			Cu	Zn																			
SEREM'S ANALYSES																							
	9.7	11.7			2	0.20																	
	11.7	13.7			2	0.12	0.20	0.03	0.09	0.003	3.09	.10											
	13.7	14.9			1.2	0.09																	
	31.1	31.7			0.6	0.20																	
	99.9	101.5			1.6	0.06																	
	101.5	102.7			1.2	0.03	0.03	0.02	0.09	0.002	3.09	.07											

LITHOGEOCHEMISTRY

MAJOR OXIDES

TRACE ELEMENTS

SAMPLE NUMBER	FROM ()	TO ()	MAJOR OXIDES										TRACE ELEMENTS					Rock Type	Alt	Min	Grid
			SiO ₂	Al ₂ O ₃	CaO	MgO	Na ₂ O	K ₂ O	FeO	MnO	TiO ₂	ppm Ba	ppm Cu	ppm Zn	ppm Pb	ppm Ag	ppb Au				
BCD 2920	23.5	26.2	74.2		2.43	1.84	3.42				0.22	1310	4	28			-2				
Felsic Tuff ²⁵																					
2921	32.6	36.3	58.4		1.08	7.71	0.58				0.53	940	10	146			-2				
Felsic Tuff to Lap-Tuff ²⁴																					
2922			50.3		9.40	5.26	2.49				2.99	150	198	70			6				
Diorite Std.																					
2923	85.6	88.1	47.9		9.63	3.80	2.68				2.35	200	320	121			6				
Diorite ²⁴																					
2924	100.5	102.7	76.2		2.15	2.75	1.00				0.20	860	460	102			-2				
Felsic Lapilli-Tuff ¹⁰³																					
2925	40.9	41.0	67.6		2.08	1.17	3.24				0.32	920	9	29			22				
Fault Zone ⁴ <i>wrong meterage</i>																					

Hole No. SRM 9

Entered by D. Lefebure

Logged by D. Lefebure

Page No. _____

CORPORATION FALCONBRIDGE COPPER

DRILL HOLE RECORD

METRIC UNITS
 IMPERIAL UNITS

HOLE NUMBER SRM 10	GRID CFC	FIELD COORDS	LAT. 8+05S	DEP. 10+56E	ELEV. 600m.	COLLAR BRNG. 197°	COLLAR DIP 45°	HOLE SIZE BQ	FINAL DEPTH 95.4m.
PROJECT 205	CLAIM # Bluebell (51-G)	SURVEY COORDS.				DATE STARTED: DATE COMPLETED:	CONTRACTOR: CORE STORAGE: Fulton Farm CASING: Yes		
PURPOSE To test coincident IP, VLF and vector pulse anomalies.								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

<u>From</u> <u>To</u>	<u>Rock Type</u>	<u>Texture and Structure</u>	<u>Angle to</u> <u>Core Axis</u>	<u>Alteration</u>	<u>Sulphides</u>	<u>Remarks</u>
0 to 1.52m	Overburden					
1.52 to 9.78	Feldspar Porph. Felsic Volcanic Tuff	Colour - pale grey with white Grain Size - porphyry; aphanite matrix with 1-2mm euhedral to subhedral feldspars. - 1-20% 1-2mm feldspar in felsic matrix; the feldspar content defining bedding in a few places namely: 6.56-6.71 - 30-40% 1-3mm feldspars (almost spherulitic look) which are anhedral - euhedral (often with corroded cores) 7.50 - thin 5mm finely laminated cherty tuff separating two feldspar porphyry tuffs with 10 and 5% feldspars respectively. - schistosity not very well developed.	48° 90°!	- weakly sericitic only - feldspars are generally weakly saussuritized	- 1-2% coarse (2mm) disseminated pyrite between 6.50-7.70m.	- this unit could be subdivided into many thin feldspar porphyritic horizons, but this seems unnecessary - BCD 2882 1.52-4.50
9.78 to 10.6	Interbedded thin fine felsic tuff and feldspar porphyritic interm. tuff	Colour - pale grey, and medium green with white Grain Size - aphanitic to aphanitic with 1-3mm phenocrysts - sharp upper contact - grades from fine tuff at 9.78m. to feldspar porphyritic interm. (felsic) tuff by 9.90 - 10-20cm thick feldspar rich zones separated by 2-3cm fine ash tuffs - sometimes get well interbedded zones (fine ash & feldspar porphyry)	48°	- feldspars are strongly saussuritized in an increasingly (down hole) chloritic matrix	- nil - 2-3% pyrite	- f e l d s p a r p o r p h y r y i s e s s e n t i a l l y t h e s a m e a s a b o v e e x c e p t a c h l o r i t i c m a t r i x !

<u>From</u> <u>To</u>	<u>Rock Type</u>	<u>Texture and Structure</u>	<u>Angle to</u> <u>Core Axis</u>	<u>Alteration</u>	<u>Sulphides</u>	<u>Remarks</u>
16.40	Altered Intermediate? Feldspar Porphyritic Tuff	Colour - dark green with white Grain Size - porphyry 0.5-3mm feldspars - 2-20% 1-5mm subhedral (corroded) feldspars (generally increasing down hole) - 1% qtz eyes at 16.30m! in this chloritic zone, schistosity becomes more developed than last two horizons.	63° (14.02m)	- feldspars are moderate to strongly saussuritized (yellow) and generally corroded - matrix is moderately (green) chloritic until (15.9) when gets more felsic looking (1% qtz eyes!) - 1% carbonate veinlets from 16.0 - 16.4	- Tr-1% pyrite-dissemin- ated 10.26 - 2cm -20% pyrite parallel to schistosity 10.70-10.80 20-30% pyrite (coarse dissem- inations) in coincident bleached zone	
poor box	core					
16.4 to 17.30	Siliceous Felsic Tuff	Colour - light grey Grain Size - aphanitic with 1mm sized feldspar				- split core from 17.0 - 17.40 up to 20% pyrite

could not log box 3&4 or 16.30 - 30.18m.

<u>From</u> <u>To</u>	<u>Rock Type</u>	<u>Texture and Structure</u>	<u>Angle to</u> <u>Core Axis</u>	<u>Alteration</u>	<u>Sulphides</u>	<u>Remarks</u>
30.18	Felsic qtz and feldspar phyrlic tuff grading into qtz porphyritic felsic tuff (trace feldspar)	- variable qtz and feldspar phenocryst content qtz 1-4% 1-3mm eyes feldspar TR-10% 0.1? - 3mm subhedral fsp but on whole-felsic character retained (getting quite siliceous) 31.3 chloritic band 33.1 sulphide zone - schistosity weakly developed down hole (36m)	42° 62°	- weak sericite alteration - occasional 3-4mm chloritic bands (with 5-10% pyrite associated)	- Tr-2% dissem. pyrite - 33.1 4cm 60% pyrite in QP? felsic tuff - 33.3-33.4 10cm 25% disseminated pyrite - 36.25 3cm 40% disseminated pyrite - split core from 41.15-42.0 - up to 20% pyrite along 1-2cm thick sections in bleached qtz-porph felsic tuff - 43.7 2cm 40% pyrite - 44.4 4cm 30-40% pyrite	- BCD 2883 42.0-45.0
52.3	Felsic Tuff	Colour - light cherty grey with green specks - essentially aphyric - Tr-5% 1-2mm chl streaks (fragments) in grey felsic matrix - wk schistosity	55°		- split core 41.16-49.5 1-10% disseminated pyrite sometimes forming thin sulphide bands (1-10mm)	
49.75 to 52.30	Feldspar porphyritic felsic tuff (trace qtz eyes)	Colour - grey with white - upper contact - not well defined - approx. 5% 1-3mm (1.0mm average) subhedral white feldspar - Tr-1% (barely visible) 1.0mm qtz eyes - lower contact sharp against felsic tuff (3mm angular frags at contact)	55°	- feldspar - saussuritized and sometimes have hazy outlines	- 1-2% pyrite generally 51.4 cm 10% py 51.7 cm 10% py 51.8 3cm 20-30% py	

<u>From</u> <u>To</u>	<u>Rock Type</u>	<u>Texture and Structure</u>	<u>Angle to</u> <u>Core Axis</u>	<u>Alteration</u>	<u>Sulphides</u>	<u>Remarks</u>
52.30 to 52.75	Cherty Felsic Tuff	Colour - grey Grain Size - aphan. - very siliceous, nearly chert containing 3% quartz eyes less than 1mm and scattered feldspar phenos		- feldspars sausseritized?	- pyrite occurs disseminated throughout unit (2%) and as several 1/2cm thick bands of 10% pyrite	
52.75 to 74.23	Feldspar Phyric Felsic Lapilli-Tuff	Colour - grey Grain Size - aphan. - contains zones with identifiable fragments of cherty rhyolite (sometimes with quartz eyes), chloritic patches and whitish patches; largest fragments are 4cm in maximum dimension - feldspar phenocrysts occur throughout unit but appear to be most abundant where it is difficult to identify fragments; 2-15%, subhedral, <2mm, altered? - almost gneissic texture from fragments from 57 to 59.0m. - some minor folding in gneissic section - cherty rhyolite layer from 55.87 to 56.05 with associated pyrite.	65°		- bands of pyrite 70% py 53.15-63.17m 80% py 54.53-54.54 2-15% py 55.87-56.05 60% py 57.05-57.71 15% py 57.89-57.90 30% py 61.92-61.93 5-20% py 69.65-69.95 in sphal? - diss. pyrite (trace) throughout unit, 1-2% diss. pyrite common in cherty sections - pyrite bands are not parallel to foliation but do appear to coincide with minor changes in lithology	- BCD 2885 57.65-57.71 - Core split from 66.7 to 68.5m. and 69.65 to 69.95
74.23 to 76.27	Siliceous Felsic Tuff	Colour - white Grain Size - aphan. - massive siliceous rocks with microphenocrysts of feldspar (<1/2mm) and glassy accicular patches (<1mm) - grades into gneissic texture below 75.9 caused by lapilli fragments		- very weak sericite	- 1/2% diss. pyrite 20% py 75.64-75.66m.	

<u>From</u> <u>To</u>	<u>Rock Type</u>	<u>Texture and Structure</u>	<u>Angle to</u> <u>Core Axis</u>	<u>Alteration</u>	<u>Sulphides</u>	<u>Remarks</u>
76.77 to 95.4	Feldspar Phyric Felsic Tuff or Flow	Colour - grey Grain Size - aphan. - 7% subhedral feldspars (<1mm) and 2% oval quartz eyes <2mm in a siliceous matrix - rock has no foliation and is massive		- appears relatively fresh, may be silicified - quartz-chlorite vein from 71.05 to 71.2 with minor associated pyrite - silicified appearance may be weak hornfels texture?	- trace pyrite except for three pyritic bands in split core 86.48-86.55m - 50% py, tr cp. 87.03-87.20 - 50% py, tr cp. 87.44-87.51 - 70% py - middle band may have associated 5% barite (black, hard mineral)	Split core from 86.46 to 87.5m. BCD 2886 87.03-87.09 BCD 2887 80.2-81.6

95.4 E.O.H.

Summary Log SRM 10

0 to 1.52 overburden
1.52 to 16.4 feldspar phyric intermediate to felsic
tuff
16.4 to 52.3 felsic tuff, quartz and feldspar
phenocrysts in some sections, pyrite
stringers.
52.3 to 52.75 cherty felsic tuff, 2% py.
52.75 to 95.4 feldspar phyric felsic lapilli-tuff,
pyrite stringers.

checked DVL 04/12/84

ASSAY SHEET

Sample Number	From ()	To ()	Estimate		Length (m)	% Cu	% Zn	% Pb	gm/T Ag	gm/T Au	% Ba	% TiO2	% Na2O	% MgO	% Fe	PPM Cu	PPM Zn	PPM Pb	PPM Ag	PPB Au		
			Cu	Zn																		
BCD 2885	57.65	57.71			0.06	1.74	0.01	<0.01			0.15										70% py	in tuff
2886	87.03	87.09			0.06	0.41	2.45	0.02			0.01										60% py	in tuff
SEREM'S	Assays								oz/t	oz/t												
	16.8	17.2			0.4	0.01	0.02	0.01	0.08	0.003												
	20.4	21.8			1.4	0.05																
	41.2	42.1			0.9	0.12																
	48.2	49.7			1.5	0.06																
	67.1	68.6			1.5	0.01	0.03	0.01														
	69.7	70.0			0.3	0.59																
	86.3	87.4			1.1	0.09	0.55	0.02	0.10	0.005												

LITHOGEOCHEMISTRY

MAJOR OXIDES

TRACE ELEMENTS

SAMPLE NUMBER	FROM ()	TO ()	MAJOR OXIDES										TRACE ELEMENTS					Rock Type	Alt	Min	Grid
			SiO ₂	Al ₂ O ₃	CaO	MgO	Na ₂ O	K ₂ O	FeO	MnO	TiO ₂	Ba	ppm Cu	ppm Zn	ppm Pb	ppm Ag	ppb Au				
BCD 2882	1.52	4.52	76.6		1.44	3.76	1.13				0.22	1790	8	102			8				
Feld. Porph. Felsic tuff																					
2883	42.0	45.0	77.9		0.61	2.11	0.64				0.15	1600	56	20			-2				
QFP Felsic Tuff																					
2887	80.2	81.6	70.2		3.89	3.51	0.64				0.22	1860	6	29							
Feld. Phyrlic Felsic Tuff																					

Hole No. SRM 10 Entered by Marc Legault Logged by Marc Legault Page No. _____

<u>From</u> <u>To</u>	<u>Rock Type</u>	<u>Texture and Structure</u>	<u>Angle to</u> <u>Core Axis</u>	<u>Alteration</u>	<u>Sulphides</u>	<u>Remarks</u>
0 to 1.8	Overburden					
1.8 to 5.8	Felsic Flow?	Colour - grey Grain Size - aphan. - massive with 2% qtz eyes (<2mm) - lapilli-sized cherty fragments near base 5.5 to 5.8m.	20°	- little altered	- trace pyrite	
5.8 to 8.68	Felsic Tuff	Colour - grey Grain Size - aphan. - 5% microphenocrysts of subhedral to euhedral feldspar - occasional qtz eye		- very minor chlorite	- barren	
8.68 to 10.68	Feldspar Phyric Felsic Lapilli-Tuff	Colour - green and white Grain Size - f.g. - 7% white, subhedral phenocrysts of feldspar - fragments of chert and felsic volcanic visible in some pieces of core -1 to 5cm.	50°	- sericite in feldspars?	- tr to 10% pyrite as disseminations	

<u>From</u> <u>To</u>	<u>Rock Type</u>	<u>Texture and Structure</u>	<u>Angle to</u> <u>Core Axis</u>	<u>Alteration</u>	<u>Sulphides</u>	<u>Remarks</u>
10.68 to 11.70	Microdiorite	Colour - greyish-green Grain Size - f.g. - equigranular mixture of feldspar and chloritized ferromagnesian minerals - CI=35 - non-magnetic - upper contact relatively sharp with no chill zone - basal contact not as clearly defined but relatively sharp	80°	- couple of carbonate veinlets	- trace py	
11.70 to 16.36	Feldspar Phyric Felsic Lapilli-Tuff	- similar to 8.68 to 10.68m - banding (bedding?) near basal contact	25°		- sulphide content increasing - 2 pyritic stringers with associated chlorite at 13m. - 1-5% diss. pyrite	BCD 2887 13.0-15.8m
16.36 to 16.91	Crowded Feldspar Phyric Crystal Tuff	Colour - green Grain Size - Aphan. - 30° euhedral to subhedral, creamy white feldspars (< 1 1/2mm) in glassy matrix - top contact vague, bottom contact relatively sharp and irregular	35°	- feldspar to sericite	- barren	
16.91 to 19.35	Grey Intermediate Tuff	Colour - grey Grain Size - v.f.g. - more broken up core than adjoining units - contains possible fragments of crowded feldspar crystal tuff near upper contact		- moderately chloritic in certain sections	- 1-2% diss. py.	

<u>From To</u>	<u>Rock Type</u>	<u>Texture and Structure</u>	<u>Angle to Core Axis</u>	<u>Alteration</u>	<u>Sulphides</u>	<u>Remarks</u>
19.35 to 29.0	Feldspar Felsic Tuff	Colour - grey Grain Size - f.g. - grain size decreases towards base of unit concurrently with unit becoming more massive - f.g. portion has a very weak foliation - 2% round qtz eyes <2mm and 5-10% feldspar (<1 1/2mm) - basal and upper contacts gradational		- minor chl, sericite	- sulphide stringers at 20.28-20.35 90% py 21.43-21.46 qtz vein with 20% py 22.1-22.45 py, cp stringers-15% sulphides 24.41-24.42 50% py with qtz vein - minor py, cp stringers and 1-2% py throughout unit	- core split from 22.07 to 22.60m
29.0 to 64.0	Quartz Feldspar Phyric Dacite	Colour - grey Grain Size - aphan. - creamy white, subhedral feldspar phenocrysts (<2mm) form 5 to 7% of unit - gray, oval quartz eyes (< 1 1/2mm) are obvious but less abundant (3%) - massive no foliation - basal contact not seen 48.35-48.45 v.f.g. dacite dyke - beige colour - sharp basal contact - 2% round qtz eyes (<1mm)	85°	- feldspars altered to sericite? - minor sericite - some of split core has a light green colour somewhat similar to MTS3 green mica	- trace to 2% pyrite disseminated throughout - py, cp veinlets from 1/2cm to 4cm wide approximately 1 per metre - veinlets generally become thinner towards the base of the unit	- Core split from 33.03-34.37 41.75-43.02 59.31-60.10 - BCD 2890 38.10-40.93 - BCD 2891 - 2895 43.3-49.7

<u>From To</u>	<u>Rock Type</u>	<u>Texture and Structure</u>	<u>Angle to Core Axis</u>	<u>Alteration</u>	<u>Sulphides</u>	<u>Remarks</u>
64.0 to 79.4	Siliceous Felsic Tuff	Colour - greenish-grey Grain Size - aphan. - massive with approx. 2% tiny phenocrysts of feldspar (< 1/2mm) - small dark green, elongate, oval patches visible in some pieces of core (<4mm) could be fragments or alteration - rare small qtz eyes noted - feldspars increase in size to maximum of 1 1/2mm towards base - unit becomes more massive (less broken up) and more siliceous (silicified?) towards base		- wk sericite	- 1% diss. py with occasional 2-3mm py veinlet - good pyritic stringers at 73.74 to 73.77, 74.65 to 74.70, 78.82 to 78.85, 71.92 to 71.96 and 72.40 to 72.45	- core more broken up than QFP - core split from 71.9 to 73.5 76.3 to 78.3 BCD 2896 73.9-76.5
79.4 to 79.52	Pyritic Cherty Felsic Tuff	Colour - grey Grain Size - aphan to f.g. - two bands of chert? and pyrite interbedded with felsic tuff - chert? is not pure, grey - basal contact is sharp while upper contact is not obvious	35°		- 10-30% pyrite in bands	- could be possible ore horizon, stringers did not have associated quartz BCD 2897 79.4-79.52 BCD 2900 77.54-77.61
79.52 to 80.15	Siliceous Felsic Tuff	Colour - white Grain Size - massive - 2% qtz eyes <2mm and possible microfeldspars - very massive, siliceous		- possibly bleached	- 1-5% pyrite as disseminations and one small patch	- BCD 2898 79.52-80.15

<u>From</u> <u>To</u>	<u>Rock Type</u>	<u>Texture and Structure</u>	<u>Angle to</u> <u>Core Axis</u>	<u>Alteration</u>	<u>Sulphides</u>	<u>Remarks</u>
80.15 to 80.55	Pyritic Siliceous Felsic Tuff	Colour - grey Grain Size - v.f.g. - white feldspar phenocrysts <1mm, approx. 5%			- 5-30% diss. pyrite	- BCD 2899 80.15-80.55
80.55 to 111.0	Siliceous Felsic Tuff to Lapilli- Tuff	Colour - grey Grain Size - aphan - phenocryst content is very variable, this may reflect primary lithologies or alteration largest feldspars are subhedral <1 1/2mm, approx. 4% and similar to 29.0 to 64.0m. - quartz eyes are generally smaller and <1% - felsic and chert fragments up to 5cm noted from 90 - 96m.		- possible silicified - minor epidote with one or two stringers - more siliceous near shear zone	- 1-2% diss. py. - pyrite stringers at 77.55-77.60 77.85-77.92 85.49-85.52 91.34-91.36 cp, py 92.10-92.14 98.05-98.13 103.84-103.88 - stringers generally at high angle to core axis	- core split from 92.1-93.6 105.2-106.9 BCD 2901 108.6-110.3
111.0 to 111.15	Gouge	Colour - grey Grain Size - f.g. - soft, clay-like sericitic material		- sericite	- one 2mm seam of blackish pyrite	- shear zone
111.15 to 152.15	Felsic Tuff To Lapilli Tuff	- similar to 80.5 to 111.0m - predominantly tuff - gneissic texture due to fragments?	40°	- chlorite appears on fractures below approx. 118m	- pyritic stringers 120.77-120.82 123.07-123.10 qtz vein with py 123.97-124.00 ibid 125.30-125.40 chloritic section with 5% diss. py - no stringers below 130m - 1-3% py throughout unit 151.55 to 151.65 - 10-20% py in chl. & qtz	- core split from 120.4 to 121.3 135.3 to 137.2 and 148.4 to 149.9 - BCD 2902 142.2-145.1 - 130.20 to 130.30 Gouge - minor shear associated grey qtz veinlets.

<u>From</u> <u>To</u>	<u>Rock Type</u>	<u>Texture and Structure</u>	<u>Angle to</u> <u>Core Axis</u>	<u>Alteration</u>	<u>Sulphides</u>	<u>Remarks</u>
152.15 to 153.0	Feldspar Diorite Porphyry	Colour - grey Grain Size - f.g. - upper contact sharp with 1/2mm chill zone - 5% euhedral white feldspar, 1-5mm	20 ⁰	- fresh except for patchy carbonate alteration	- barren	- BCD 2903 152.4-152.6
153.0	E.O.H.					

Summary Log SRM 11

0 - 1.8	overburden
1.8 - 10.7	felsic tuff, becoming feldspar phyric towards base
10.7 - 11.7	microdiorite
11.7 - 29.0	feldspar felsic tuff, moderate chlorite and sericite
29.0 - 64.0	quartz feldspar phyric dacite, minor sericite and green mica?
64.0 - 79.4	siliceous felsic tuff with pyritic stringers
79.4 - 80.55	pyritic cherty felsic tuff, 10-30% py as bands
80.55 - 111.0	felsic tuff to lapilli-tuff, silicified?, pyrite stringers
111.0 - 111.2	gouge, py
111.2 - 152.2	felsic tuff to lapilli-tuff, chlorite, pyrite stringers to 130m.
152.2 - 153.0	feldspar diorite porphyry

Checked DVL 04/12/84

LITHOGEOCHEMISTRY

MAJOR OXIDES

TRACE ELEMENTS

SAMPLE NUMBER	FROM ()	TO ()	MAJOR OXIDES										TRACE ELEMENTS					Rock Type	Alt	Min	Grid	
			SiO ₂	Al ₂ O ₃	CaO	MgO	Na ₂ O	K ₂ O	FeO	MnO	TiO ₂	ppm Ba	ppm Cu	ppm Zn	ppm Pb	ppm Ag	ppb Au					
BCD 2889	13.0	15.8	69.1		1.01	1.71	1.47				0.25	1620	17	65								
Feld Phyrlic Felsic Tuff																						
2890	38.1	40.9	75.7		3.22	2.42	0.54				0.15	3030	6	29								
QF Phyrlic Dacite																						
2891	43.3	44.2											2600	72								34
QF Phyrlic Dacite																						
2892	44.2	45.7											460	57								8
QFP - wk py, cp																						
2893	45.7	47.0											820	55								8
QFP - wk py, cp																						
2894	47.0	48.3											1230	59								6
QFP - wk py, cp																						
2895	48.3	49.7											1080	74								8
QFP - wk py, cp																						
2896	73.9	76.5											550	17								8
Siliceous Felsic Tuff													average					1092	61		11 / 6.6m.	
2898	79.52	80.15										2190										4
Siliceous Felsic Tuff																						
2901	108.6	110.3	70.0		0.33	3.13	14.0 ^{0.14}				0.22	1780	58	29								
Siliceous Felsic Tuff																						

Hole No. SRM 11

Entered by D. Lefebure

Logged by D. Lefebure

Page No. _____

LITHOGEOCHEMISTRY

MAJOR OXIDES

TRACE ELEMENTS

SAMPLE NUMBER	FROM ()	TO ()	MAJOR OXIDES										TRACE ELEMENTS					Rock Type	Alt	Min	Grid	LOI		
			SiO ₂	Al ₂ O ₃	CaO	MgO	Na ₂ O	K ₂ O	FeO	MnO	TiO ₂	ppm Ba	ppm Cu	ppm Zn	ppm Pb	ppm Ag	ppb Au							
BCD 2902	142.2	145.1	66.5		0.93	6.37	0.81				0.18	740	141	36										
Felsic Tuff and Lapilli Tuff																								
2903	152.4	157.6	49.3	13.8	9.93	5.55	1.78	0.07	14.4	0.21	2.47	40						6						2.60
Feldspar Diorite Porphyry																								
2904			50.5		9.01	5.37	2.72				2.95	240	270	71				12						
Diorite Standard																								

Hole No. SRM 11 Entered by _____ Logged by D. Lefebure Page No. _____

ASSAY SHEET

Sample Number	From ()	To ()	Estimate		Length ()	% Cu	% Zn	% Pb	gm/T Ag	gm/T Au	% SiO ₂	% TiO ₂	% Na ₂ O	% MgO	% Ba	PPM Cu	PPM Zn	PPM Pb	PPM Ag	PPB Au				
			Cu	Zn																				
BCD 2897	79.4	79.52			0.12	0.01	0.01	0.01	0.5						0.07						50	Pyritic cherty felsic tuff		
2899	80.15	80.55			0.4	0.02	0.01	0.01	0.5						0.14						20	Pyritic siliceous felsic tuff		
2900	77.54	77.61			0.07	3.20	0.02	0.01	6.5						0.14						180	Pyritic stringer		

CORPORATION FALCONBRIDGE COPPER

DRILL HOLE RECORD

METRIC UNITS
IMPERIAL UNITS

HOLE NUMBER SRM 12	GRID PF	FIELD COORDS	LAT. 488E	DEP. 701S	ELEV. 575.0m	COLLAR BRNG.	COLLAR DIP	HOLE SIZE BQ	FINAL DEPTH 306.3m
PROJECT PF	CLAIM #	SURVEY COORDS.				DATE STARTED: DATE COMPLETED:	CONTRACTOR: Fulton CORE STORAGE: Farm CASING:		
PURPOSE Re-log								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

FROM TO	ROCK TYPE	COLOUR	GRAIN SIZE	TEXTURE AND STRUCTURE	ANGLE TO CORE AXIS	ALTERATION	SULPHIDES	REMARKS
0-6.1	Overburden							
6.1-22.3	Rhyolite Tuff	Light grey	fg-mg	Light grey, fairly massive in places. Other sections have vague colour banding.	80°	Minor chl esp. on fracture surfaces. Minor sericite.	Minor py stringers & moderate diss.	Fairly siliceous - good competent core.
22.3-31.4	Rhyolite/DAC Tuff	med. grey/green	fg-mg	M.g. tuff with good feldspar development. Poss. lapilli size frags - very indistinct - faint colour banding - minor quartz eyes.	60°	Chl stringer @ 22.9 2-3 cm wide. Minor sericite alt'n	v.f.g. py diss.	
31.4-60.8	Rhyolite Tuff	light grey/green	fg-mg	Some unit as 6.1-22.3 Mainly mg but occasional lapilli size frags. Very siliceous but increase in lapilli size frags in last foot.	60°	Minor sericite & chl.	Diss. py only in last 10 ft.	
60.8-62.3	Rhyodacite Porphyry	Dk gr.	fg	Sub-to euhedral fspar phenos set in dark fg matrix fspar sausser often clumped together. Often see clasts (5mm). Some poss. more felsic. Lower contact very sharp. Upper contact not sharp but quartz vein is at contact. Similar to unit in MS74-5 which is alteration product around stringer. Minor qtz veining.	60°	Chlorite minor epidote?	Diss. py	
62.3-72.2	Rhyodacite Tuff	Med. gr.	fg-mg	Poss. finer grained =ent of above unt. Fspar developed (sausser) but much smaller (1mm). Odd quartz eye observed.	45° Lower contact 50°	67.4 - many qtz-carb veinlets. Carb. weathered out.	Mod. amount of diss. py & qtz-py veinlets	Poss. a more altered felsic.

FROM TO	ROCK TYPE	COLOUR	GRAIN SIZE	TEXTURE AND STRUCTURE	ANGLE TO CORE AXIS	ALTERATION	SULPHIDES	REMARKS
72.2-75.1	Rhyolite Tuff	lt. grey	mg	Very siliceous unit with good partings every 2-3mm caused by sericite along foln.		Good sericite	Diss. py minor stringers.	
75.1-85.3	Rhyodacite Tuff	Md. Gr.	fg-mg	Fg tuff. Much stretching. Whole zone is quite broken. Good gouge @ 78.6-78.9. Becomes banded last 1.5m. Light grey & med. green. Generally grey is more siliceous.	40°	Good chl alt'n. Minor qtz veinlets.	Diss. py - poss minor stringers.	
85.3-99.2	Rhyolite Tuff (qe)	Lt. grey	mg	Very siliceous. Possibly has had silica addition. Lower contact @ Often qtz eyes - usually 1mm but up to 5mm.	45°	Sericite	Minor py stringers & diss.	
99.2-99.7	Gabbro?	Green	fg	Possible gabbroic sill. Lower contact at 45°	45°		Minor disseminated pyrite.	
99.7-117.3	Rhyodacitic Tuff	Green/grey	fg	Small (1-2mm) quartz eyes throughout. Very homogenous and siliceous.		Moderate chlorite Minor sericite occasional quartz and/or quartz-carbonate vein	Good pyrite throughout minor disseminations but mainly as small (1-2mm) quartz-pyrite stringers.	
117.3-155.4	Rhyolite Tuff	Lt. grey (slightly greenish)	fg-mg	Generally fairly homogenous siliceous tuff with small but ubiquitous quartz eyes. Possibly equivalent of above unit with less chlorite alteration. Often stretched(?) fragments. Quartz eyes diminish towards bottom of section. Lower contact is approximate only. Fault zone between 154.26 and 156.09.		Chlorite - not as intense as in above unit Increase in chlorite in fault.	Minor pyrite stringers. Occasional quartz veins.	Fault 154.2-156.1 Good recovery.

FROM TO	ROCK TYPE	COLOUR	GRAIN SIZE	TEXTURE AND STRUCTURE	ANGLE TO CORE AXIS	ALTERATION	SULPHIDES	REMARKS
155.4-160.0	Dacite Tuff	Light greenish/grey	vfg	Can vaguely discern fragments. Possible welded tuff? Seems to be some flow or compression. Often very tiny (1mm) quartz eyes.		Good quartz veining throughout		Possible chilled intrusive
160.0-164.3	Rhyolite Tuff	Light Grey	fg	Very siliceous tuff.		Good sericite.	Minor disseminated pyrite & very thin stringers.	Core generally very broken.
164.3-182.0	Rhyolite Tuff/flow Dacitic? Welded Tuff		mg fg	Intercalated rhyolite tuff and more intermediate, welded tuff. Former is fairly homogenous and quite gritty in appearance. Rarely lapilli-sized clasts. Contacts @ Towards end of section is a greener, more intermediate unit which has good feldspar development. Almost looks intrusive.	50-60°	Moderate chlorite alteration and moderate quartz veining. Often good sericite. Often good quartz veining at 50° and generally about 1 cm. wide.	Minor disseminate pyrite.	Gouge - 167.6-168.3 175.9-176.2
182.0-184.7	Fault Gouge			Often pebble-sized pieces. Upper Contact @	45°			
184.7-306.3	Andesite	Dk. Grey/Green	mg	Very homogenous. Good porphyritic andesite. Good feldspar development. 193.2-193.9 Barren quartz vein. 197.5 - 10cm epidote. 209.4 - Fold nose. Up to this point, the unit has been quite massive. After 209.4 there is approximately 10' of foliation @	55°	Minor chlorite throughout. 197.5 - 10 cm epidote. 220.1 - Begins to get minor quartz-hematite development as veinlets and on joints. Also begin to get epidote altered knots which are up to 1cm in size. Often have whitish alteration rims. Very sporadic.		

FROM TO	ROCK TYPE	COLOUR	GRAIN SIZE	TEXTURE AND STRUCTURE	ANGLE TO CORE AXIS	ALTERATION	SULPHIDES	REMARKS
				243.8 - 1 foot dyke or stringer of vfg dark green chlorite rich unit. Top Contact @ Bottom Contact @	80° 40°	261.2-263.0 Good epidote alteration. 269.8-272.8 Epidote and disseminated pyrite. 274.9-292.3 No epidote except small vein. At 285.9 Fair hematite on joint surfaces. 292.3-306.3 Good epidote knots as before.		

LITHOGEOCHEMISTRY

MAJOR OXIDES

TRACE ELEMENTS

SAMPLE NUMBER	FROM (ft)	TO (ft)	MAJOR OXIDES										TRACE ELEMENTS					Rock Type	Alt	Min	Grid
			SiO ₂	Al ₂ O ₃	CaO	MgO	Na ₂ O	K ₂ O	FeO	MnO	TiO ₂	P ₂ O ₅	ppm Cu	ppm Zn	ppm Ba	ppm Ag	ppb Au				
0428	20	30	69.1	14.7	1.83	2.21	3.33	2.30	2.36	0.068	0.20		11	64	1390						
	(6.09)	(9.14)																			
0429	120	130	73.6	13.0	0.84	3.08	1.36	2.96	2.76	0.072	0.17		36	350	1730						
	(36.58)	(39.63)																			
0430	220	230	62.7	14.7	1.06	6.70	2.37	1.25	6.70	0.315	0.42		240	1170	1280						
	(67.07)	(70.12)																			
0431	330	340	58.6	16.8	1.01	7.79	0.12	2.82	7.32	0.287	0.65		58	340	1290						
	(100.60)	(103.63)																			
0432	420	430	73.4	11.9	1.18	1.53	1.55	2.63	3.10	0.022	0.15		211	67	3830						
	(128.04)	(131.09)																			
0433	525	535	71.9	12.7	0.77	3.08	0.98	2.53	6.40	0.066	0.23		290	64	1500						
	(160.06)	(163.10)																			
0434	620	630	52.2	17.0	3.54	7.39	5.39	0.78	9.12	0.207	0.68		61	148	440						
	(189.02)	(192.07)																			
0435	720	730	53.5	16.8	5.65	5.62	5.49	0.56	9.27	0.148	0.68		93	60	280						
	(219.51)	(222.56)																			
0436	820	830	55.6	16.3	4.45	5.60	5.74	0.78	8.39	0.156	0.70		78	67	300						
	(250.00)	(253.04)																			
0437	920	930	55.2	16.6	3.22	6.88	5.61	0.82	8.80	0.186	0.65		80	106	270						
	(280.48)	(283.53)																			
0438	995	1005	51.6	16.1	7.95	5.24	4.68	0.73	8.17	0.194	0.70		209	75	370						
	(303.35)	(306.40)																			

Hole No. SRM 12

Entered by _____

Logged by BURSON

Page No. 6

LITHOGEOCHEMISTRY

MAJOR OXIDES

TRACE ELEMENTS

SAMPLE NUMBER	FROM (ft)	TO (ft)	MAJOR OXIDES										TRACE ELEMENTS					Rock Type	Alt	Min	Grid
			SiO ₂	Al ₂ O ₃	CaO	MgO	Na ₂ O	K ₂ O	FeO	MnO	TiO ₂	P ₂ O ₅	ppm Cu	ppm Zn	ppm Ba	ppm Ag	ppb Au				
0428	20	30	69.1	14.7	1.83	2.21	3.33	2.30	2.36	0.068	0.20		11	64	1390						
	(6.09)	(9.14)	7.6																		
0429	120	130	73.6	13.0	0.84	3.08	1.36	2.96	2.76	0.072	0.17		36	350	1730						
	(36.58)	(39.63)	38.1																		
0430	220	230	62.7	14.7	1.06	6.70	2.37	1.25	6.70	0.315	0.42		240	1170	1280						
	(67.07)	(70.12)	68.5																		
0431	330	340	58.6	16.8	1.01	7.79	0.12	2.82	7.32	0.287	0.65		58	340	1290						
	(100.60)	(103.65)	102.1																		
0432	420	430	73.4	11.9	1.18	1.53	1.55	2.63	3.10	0.022	0.15		211	67	3830						
	(128.04)	(131.09)	129.5																		
0433	525	535	71.9	12.7	0.77	3.08	0.98	2.53	6.40	0.066	0.23		290	64	1500						
	(160.06)	(163.10)	161.6																		
0434	620	630	52.2	17.0	3.54	7.39	5.39	0.78	9.12	0.207	0.68		61	148	440						
	(189.02)	(192.07)	190.5																		
0435	720	730	53.5	16.8	5.65	5.62	5.49	0.56	9.27	0.148	0.68		93	60	280						
	(219.51)	(222.56)	221																		
0436	820	830	55.6	16.3	4.45	5.60	5.74	0.78	8.39	0.156	0.70		78	67	300						
	(250.00)	(253.04)	251																		
0437	920	930	55.2	16.6	3.22	6.88	5.61	0.82	8.80	0.186	0.65		80	106	270						
	(280.48)	(283.53)	282																		
0438	995	1005	51.6	16.1	7.95	5.24	4.68	0.73	8.17	0.194	0.70		209	75	370						
	(303.35)	(306.40)	305																		

Hole No. SRM 12 305

Entered by _____

Logged by BURSON

Page No. 6

Intervals in pencil
are in meters.

LITHOGEOCHEMISTRY

MAJOR OXIDES

TRACE ELEMENTS

SAMPLE NUMBER	FROM (ft)	TO (ft)	MAJOR OXIDES										TRACE ELEMENTS					Rock Type	Alt	Min	Grid	
			SiO ₂	Al ₂ O ₃	CaO	MgO	Na ₂ O	K ₂ O	FeO ₂₃	MnO	TiO ₂	P ₂ O ₅	ppm Cu	ppm Zn	ppm Pb	ppm Ag	ppb Au					
0428	20	30	69.1	14.7	1.83	2.21	3.33	2.30	2.36	0.068	0.20		11	64	1390							
	(6.09)	(9.14)																				
0429	120	130	73.6	13.0	0.84	3.08	1.36	2.96	2.76	0.072	0.17		36	350	1730							
	(36.58)	(39.63)																				
0430	220	230	62.7	14.7	1.06	6.70	2.37	1.25	6.70	0.315	0.42		240	1190	1280							
	(67.07)	(70.12)																				
0431	330	340	58.6	16.8	1.01	7.79	0.12	2.82	7.32	0.289	0.65		58	340	1290							
	(100.60)	(103.65)																				
0432	420	430	73.4	11.9	1.18	1.53	1.55	2.63	3.10	0.022	0.15		211	67	3830							
	(128.04)	(131.09)																				
0433	525	535	71.9	12.7	0.97	3.08	0.98	2.53	6.40	0.066	0.23		290	64	1500							
	(160.06)	(163.10)																				
0434	620	630	52.2	17.0	3.54	7.39	5.39	0.78	9.12	0.207	0.68		61	148	440							
	(189.02)	(192.07)																				
0435	720	730	53.5	16.8	5.65	5.62	5.49	0.56	9.27	0.148	0.68		93	60	280							
	(219.51)	(222.56)																				
0436	820	830	55.6	16.3	4.45	5.60	5.74	0.78	8.39	0.156	0.70		78	67	300							
	(250.00)	(253.04)																				
0437	920	930	55.2	16.6	3.22	6.88	5.61	0.82	8.80	0.186	0.65		80	106	270							
	(281.49)	(283.53)																				
0438	995	1005	51.6	16.1	7.95	5.24	4.68	0.73	8.17	0.194	0.70		209	75	370							
	(303.85)	(306.40)																				

Hole No. SRM 12

Entered by _____

Logged by Burson

Page No. 7

Summary Log SRM 12

0 - 6.1	Overburden
6.1 - 22.3	Rhyolite Tuff, massive, mod. diss. py.
22.3 - 31.4	Feldspar Phyric Dacite Tuff, minor qtz eyes
31.4 - 60.8	Rhyolite Tuff to Lapilli Tuff, minor sericite and chlorite, diss. py. at base
60.8 - 72.2	Feldspar Rhyodacite Porphyry. Tuff and Lapilli Tuff, diss. py, qtz-carb. veinlets
72.2 - 78.6	Rhyolite Tuff, banded?, sericite, diss. py. and minor stringers
78.6 - 78.9	Gouge
78.9 - 85.3	Rhyolite Tuff, chl. alt, diss. py.
85.3 - 154.3	Quartz Phyric Rhyolite Tuff, chlorite, pyrite
154.3 - 156.1	Fault
156.1 - 160.0	Quartz Phyric Dacite Tuff, qtz veining
160.0 - 182.0	Rhyolite Tuff and Lapilli Tuff, feldspar phyric towards base, mod. chl. and qtz veining, minor diss. py.
182.0 - 184.7	Fault Gouge
184.7 - 306.3	Feldspar Andesite Porphyry
306.3	E.O.H.

CORPORATION FALCONBRIDGE COPPER

DRILL HOLE RECORD

METRIC UNITS
 IMPERIAL UNITS

HOLE NUMBER SRM 13	GRID CFC	FIELD COORDS	LAT. 3+75S	DEP. 17+86E	ELEV. 695	COLLAR BRNG. 198	COLLAR DIP 52°	HOLE SIZE BQ	FINAL DEPTH 196.6m
PROJECT 205	CLAIM # Victoria (73-G)	SURVEY COORDS.				DATE STARTED: DATE COMPLETED:	CONTRACTOR: CORE STORAGE: Fulton Farm CASING: yes		
PURPOSE To test the G zone EM anomaly in a zone of low IP resistivity.								RQD LOG	PULSE EM SURVEY
								COLLAR SURVEY	MULTISHOT SURVEY
ACID TESTS			TROPARI TESTS			MULTISHOT DATA			
DEPTH ()	CORRECTED ANGLE	DEPTH ()	CORRECTED ANGLE	DEPTH ()	AZIMUTH	DIP	DEPTH ()	AZIMUTH	DIP
SEREM coordinates 60E, 4+80N and Ronning reports hole striking 180° and cipping 55°									

HOLE NO. SRM 13
 ZIPPY PRINT * -- BRIDGEPORT, RICHMOND

LOGGED BY David Lefebure

<u>From</u> <u>To</u>	<u>Rock Type</u>	<u>Texture and Structure</u>	<u>Angle to</u> <u>Core Axis</u>	<u>Alteration</u>	<u>Sulphides</u>	<u>Remarks</u>
0 to 10.1	Overburden					
10.1 to 11.5	Diorite (w/ky feldspar phyric)	Colour - grey Grain Size - f.g. - CI=40 - 2-3% subhedral to anhedral, white feldspars (<2mm) in f.g. equigranular matrix - massive, no foliation		- minor epidote on fractures	- barren	- UNIT A
11.5 to 12.32	Altered Diorite	Colour - grey Grain Size - f.g. - similar to above but pitted, brownish on fractures - pits define a foliation	45°	- no reaction with acid - ? Fe-carbonate alteration	- barren	- UNIT B
12.32 to 14.61	UNIT A (Diorite)					
14.61 to 14.9	UNIT B (Altered Diorite)					
14.9 to 19.75	UNIT A (Diorite)	- contains a patch of m.g. to c.g., pegmatitic qtz-bearing diorite - contact sharp with diorite - later dyke or xenolith	70°			- BCD 2905 15.4-18.6

<u>From To</u>	<u>Rock Type</u>	<u>Texture and Structure</u>	<u>Angle to Core Axis</u>	<u>Alteration</u>	<u>Sulphides</u>	<u>Remarks</u>
19.75 to 26.05	UNIT B (Altered Diorite)					
26.05 to 28.13	UNIT A (Diorite)	- minor pegmatitic section, sharp contacts	35° 40°			
28.13 to 28.85	UNIT B (Altered Diorite)					
28.85 to 39.0	Diorite	Colour - grey Grain Size - f.g. - equigranular		- epidote and qtz-chl veinlets - one qtz-chl veinlet with pyrite		
39.0 to 40.8	UNIT B (Altered Diorite)	Grain Size - v.f.g.		- Fe-carbonate mylonitization of diorite?		- BCD 2906-2970 39.0-40.8
40.8 to 41.8	Quartz Vein	- white quartz vein with 0-10% iron- carbonate - few patches of altered diorite			- chalcopyrite occurs associated with chlorite veining - one section of 10% cp over 10cm at base, otherwise trace	- BCD 2908-2909 40.8-41.8
41.8 to 44.35	UNIT B (Altered Diorite)					- BCD 2910 41.8-44.35

<u>From To</u>	<u>Rock Type</u>	<u>Texture and Structure</u>	<u>Angle to Core Axis</u>	<u>Alteration</u>	<u>Sulphides</u>	<u>Remarks</u>
44.35 to 59.4	Feldspar Diorite Porphyry	Colour - grey Grain Size - f.g. - 10% white feldspars >2mm, subhedral to euhedral		- sporadic quartz and carbonate veinlets		
59.4 to 61.9	UNIT B and UNIT A					
61.9 to 93.2	Dior. & Feldspar Diorite Porphyry			- more qtz & carbonate veinlets at varying angles to core, particularly towards base		
93.2 to 94.4	Chilled Diorite Margin	Colour - brownish-grey Grain Size - v.f.g. - massive, CI=50, chilled margin - aphanitic for basal 5cm - contact sharp but flames of diorite intrude felsic	5 ^o	- abundant carbonate patches and veinlets - quartz veins and "eyes" within 15cm of contact.		- quartz "eyes" may be amygdules or boudinaged qtz veins
94.4 to 114.8	Felsic Lapilli Tuff and Tuff	Colour - white, green, green white Grain Size - f.g. - commonly has a wky gneissic appearance or patchy appearance due to dk green and white fragments - 1/2 to 2% round, gray quartz eyes (<2mm), occasionally up to 4mm - maximum fragment size approx. 4cm - basal contact sharp	45-50 ^o 30 ^o	- more cream-coloured because of sericite near upper contact - several qtz veinlets within 1/2m of contact	- barren	- BCD 2911 102.6-105.5

<u>From</u> <u>To</u>	<u>Rock Type</u>	<u>Texture and Structure</u>	<u>Angle to</u> <u>Core Axis</u>	<u>Alteration</u>	<u>Sulphides</u>	<u>Remarks</u>
114.8 to 130.4	Feldspar Diorite Porphyry	Colour - grey Grain Size - f.g. - aphan chilled margin extends to 115.4 with accicular, dk green specks (< 1 1/2mm) - 7% subhedral, white feldspar phenocrysts - chilled basal contact aphanitic	25°			
130.4 to 131.5	Felsic Lapilli-Tuff	- similar to 94.4 to 114.8 but appears more "baked" - qtz eyes visible				
131.5 to 154.5	Diorite	Colour - grey Grain Size - v.f.g. - upper contact not sharp, aphanitic zone less than 1cm thick? - grades into an aphanitic basal chill zone	high angle 70°			
154.5 to 156.1	Felsic Lapilli-Tuff	- similar to 130.4 to 131.5		- cut by several qtz and carbonate veinlets	- barren	
156.1 to 159.4	Major Fault Zone	- gouge and felsic volcanic			- barren	- very poor core recovery - 50%
159.4 to 163.7	Mixed Diorite and Felsic Tuff	- chaotic mixture of diorite and felsic tuff, predominantly felsic tuff		- possibly silicified	- barren	

<u>From</u> <u>To</u>	<u>Rock Type</u>	<u>Texture and Structure</u>	<u>Angle to</u> <u>Core Axis</u>	<u>Alteration</u>	<u>Sulphides</u>	<u>Remarks</u>
163.7 to 172.5	Diorite	Colour - greenish-grey Grain Size - f.g. - equigranular mixture of feldspar and ferromagnesian - basal contact appears obscured by quartz vein		- weakly chloritized in sections with hematite on fractures - below 165m. there are several quartz-chlorite veins 167.0-167.2 - tr. cp. 167.45-167.9 168.1-168.25 170.20-170.27 170.95-171.15 171.62-171.67 172.26-172.32 172.42-172.50 veinlets		
172.5 to 173.25	Intermediate to Felsic Lapilli-Tuff?	Colour - grey Grain Size - aphan. - 1% small quartz eyes (<1/2mm) - colour is streaky with some distinct chloritic patches which could be fragments		- wkly chloritic or sericitic		- 1/2% diss. py.
173.25 to 173.28	Pyritic Exhalite? with Chert Fragments	Grain Size - f.g. - equigranular mixture of pyrite, chlorite and chert - occasional chert fragments up to 4mm - forms a distinct band with sharp contacts	45°	- approximately 45% chlorite forming matrix to pyrite		- approximately 35% pyrite

<u>From</u> <u>To</u>	<u>Rock Type</u>	<u>Texture and Structure</u>	<u>Angle to</u> <u>Core Axis</u>	<u>Alteration</u>	<u>Sulphides</u>	<u>Remarks</u>
173.28 to 196.6	Intermediate to Felsic Lapilli-Tuff	Colour - grey and green Grain Size - f.g. - the unit has a weakly gneissic texture which appears to be lapilli- sized mafic and siliceous fragments - small quartz eyes (<2mm) occur throughout unit (approx. 2%) but feldspars (<1mm) were only noted in several limited sections.	45°	- chlorite alteration is more pronounced than in volcanics higher in the hole - core is commonly broken parallel to gneissic banding, not poker chip but distinctly more broken than rocks higher in the hole	- trace diss. pyrite except for minor pyritic horizons or veinlets at several place with associated chlorite.	- BCD 2912 177.6-179.2 - BCD 2913 193.6-196.6
196.6	E.O.H.					

Summary Log SRM 13

0 to 10.1	overburden
10.1 to 40.8	f.g. diorite, wkly feldspar phyric or Fe-carbonated
40.8 to 41.8	quartz vein
41.8 to 94.4	f.g. diorite, as above
94.4 to 114.8	felsic lapilli tuff and tuff
114.8 to 156.1	feldspar diorite porphyry with thin screens of felsic lapilli tuff
156.1 to 159.4	major fault zone
159.4 to 163.7	mixed diorite and felsic tuff
163.7 to 172.5	f.g. diorite with Qtz-chlorite veins
172.5 to 173.3	inter. to felsic lapilli-tuff
173.3 to 173.3	3 cm basal pyritic (35%) horizon with chert fragments
173.3 to 196.6	inter. to felsic lapilli-tuff, chl. alteration

LITHOGEOCHEMISTRY

MAJOR OXIDES

TRACE ELEMENTS

SAMPLE NUMBER	FROM ()	TO ()	MAJOR OXIDES										TRACE ELEMENTS					Rock Type	Alt	Min	Grid							
			SiO ₂	Al ₂ O ₃	CaO	MgO	Na ₂ O	K ₂ O	FeO	MnO	TiO ₂	Ba	ppm Cu	ppm Zn	ppm Pb	ppm Ag	ppb Au											
BCD 2910	42.4	44.4													580													
Iron-Carbonate Altered diorite																												
2911	102.6	105.5	72.3		1.19	1.89	2.57					0.17	1530	29	16													
Felsic Lapilli Tuff																												
2912	177.6	179.2	72.1		0.27	2.12	0.22					0.13	930	109	45													
Felsic Lapilli Tuff																												
2913	193.6	196.6	76.4		0.27	2.06	2.21					0.15	750	10	64													
Felsic Lapilli-Tuff																												
2905	15.4	18.6	49.6		10.4	5.42	1.90					2.74	200	172	67													
diorite																												
2906	39.0	40.2												760														
diorite																												
2907	40.2	40.8												1350														
diorite																												
2908	40.8	42.3												11400														
quartz vein																												
2909	42.3	42.4												40000														
quartz vein with cp																												
average	39.0	44.4												4462														

↓
on assay sheet

Hole No. SRM 13

Entered by David Lefebure

Logged by David Lefebure

Page No. _____

CORPORATION FALCONBRIDGE COPPER

X METRIC UNITS
IMPERIAL UNITS

DRILL HOLE RECORD

HOLE NUMBER SRM 14	GRID CFC	FIELD COORDS	LAT. 5+44S	DEP. 17+85S	ELEV. 663	COLLAR BRNG. 0°	COLLAR DIP 55°	HOLE SIZE BQ	FINAL DEPTH 141.7m.	
PROJECT 205	CLAIM # Victoria (73-G)	SURVEY COORDS				DATE STARTED: DATE COMPLETED:	CONTRACTOR: CORE STORAGE: Fulton Farm CASING: not located			
PURPOSE To test the C zone EM anomaly in a broad zone of low IP resistivity.								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	
SEREM cocordinates near 60E		3+10N								

<u>From To</u>	<u>Rock Type</u>	<u>Texture and Structure</u>	<u>Angle to Core Axis</u>	<u>Alteration</u>	<u>Sulphides</u>	<u>Remarks</u>
0 to 41.5m.	Overburden					As noted at surface, hole cuts Nitinat Formation and Island granodiorite boulders.
41.5 to 69.0m.	Green and white Felsic Lapilli-Tuff	Colour - greyish-green Grain Size - aphan to f.g. - variably banded similar to gneissic texture described in SRM13, banding sometimes weakly folded - small quartz eyes (<2mm) are difficult to see but almost always present - small feldspars noted in one or two sections (<1mm, 3%)	45°	- poker chip fracturing on core and poor core recovery consistent with strong alteration - moderate chlorite and weak sericite produce moderately micaceous fracture surfaces	- pyrite content varies from trace throughout much of the unit to 10% in several 1/2cm thick bands	- core badly broken up from 41.5 to 54.6m, only 33% core recovery BCD 2914 40.2-60.4 Core recovery from start of hole to 70m approximately 40%
69.0 to 71.6	Shear Zone	Colour - grey Grain Size - f.g. - soft poorly consolidated strongly micaceous zone		- almost completely sericite		
71.6 to 90.5	Green and white Felsic Lapilli Tuff	- similar to 41.5 to 69.0 - possible fault zones or shear zones with very soft rock at 83.3 to 83.5 86.2 to 86.6 88.6 to 90.2		- white quartz vein at 84.1 to 84.2 with associated sericite and chlorite - all of the unit is altered to sericite and chlorite	- 1% disseminated pyrite - 5-15% pyrite in chlorite matrix with minor chert from 88.3 to 88.4	- from 79.3 to 90.5m 50% core recovery BCD 2915 79.3-83.3 BCD 2916 88.4-90.6

<u>From To</u>	<u>Rock Type</u>	<u>Texture and Structure</u>	<u>Angle to Core Axis</u>	<u>Alteration</u>	<u>Sulphides</u>	<u>Remarks</u>
90.5 to 91.5	Massive Pyrite	Colour - silver grey Grain Size - f.g. - Semi-massive to massive pyrite (60-80%) with interstitial chert and possible Fe-carbonate or feldspar (no reaction with HCl). Seven cm wide white quartz vein with pyrite at top contact. Bottom contact not in core, 3cm of sericitic felsic tuff in core box.				- actually only 0.6m of core between depth markers BCD 2917 90.6-91.5
91.5 to 92.8	Intermediate Dyke	Colour - grey Grain Size - f.g. to v.f.g. - equigranular, massive mixture of ferromagnesian feldspar and quartz minerals - one quartz eye approx. 2 1/2mm long - grades from f.g. to v.f.g. at base - no contacts recovered in core		- relatively unaltered	- barren	
92.8 to 105.0	Green and White Felsic Tuff and Lapilli-Tuff	Colour - grey, white and green Grain Size - aphan to f.g. - weakly gneissic texture to some parts and chloritic patches are suggestive of fragments - 3-4% grey, oval quartz eyes up to 3mm - <1/10mm creamy flecks? - shear zones at 93.3 to 93.8 and 100.5 to 101.2 - white quartz with carbonate of feldspar with fragments of wallrock 101.0 to 101.2	45°	- less altered than section from 71.6 to 90.5m. - minor chlorite grading into intense chlorite for several short sections	- barren except for 3% py over 5cm in shear zone (100.5 to 101.2)	- Core less broken up than above pyritic horizon reflecting less alteration BCD 2918 94.7-99.6

<u>From</u> <u>To</u>	<u>Rock Type</u>	<u>Texture and Structure</u>	<u>Angle to</u> <u>Core Axis</u>	<u>Alteration</u>	<u>Sulphides</u>	<u>Remarks</u>
105.0 to 113.0	Diorite	Colour - grey Grain Size - f.g. - chilled aphanitic margin grades to f.g. diorite with feldspar pheno- crysts (3%, <2mm) - aphanitic margin foliated parallel to contact	45°	- carbonate and quartz veinlets	- barren	
113.0 to 141.7	Diorite	Colour - grey Grain Size - m.g. - at approximately 113.0m unit becomes pegmatitic then diorite changes to ilmenite(?) bearing diorite which is m.g. and commonly foliated	45°	- numerous qtz-chl and carbonate veinlets continue - white quartz vein with chalcopryrite veining at 128.8 to 129.1	- barren - 10% cp over 10cm.	BCD 2919 134.4-137.5
141.7	E.O.H.					

Summary Log ERM 14

0 to 41.5	overburden
41.5 to 69.0	felsic lapilli-tuff
69.0 to 71.6	shear zone
71.6 to 90.5	felsic lapilli-tuff
90.5 to 91.5	massive pyrite
91.5 to 92.8	intermediate dyke
92.8 to 105.0	felsic lapilli-tuff
105.0 to 141.7	diorite (chilled margin)

checked DVL 04/12/84

ASSAY SHEET

Sample Number	From ()	To ()	Estimate		Length ()	% Cu	% Zn	% Pb	gm/T Ag	gm/T Au	% SiO ₂	% TiO ₂	% Na ₂ O	% MgO	%	PPM Cu	PPM Zn	PPM Pb	PPM Ag	PPB Au					
			Cu	Zn																					
BCD 2916	88.4	90.6			2.2	0.01	0.01	0.01	0.5				0.16							15	felsic lapilli-tuff				
2917	90.6	91.5			0.6	0.01	0.01	0.01	1.0						0.01					60	massive pyrite				

SRM 14

HOLE NO _____

PAGE _____

LITHOGEOCHEMISTRY

MAJOR OXIDES

TRACE ELEMENTS

SAMPLE NUMBER	FROM ()	TO ()	MAJOR OXIDES										TRACE ELEMENTS					Rock Type	Alt	Min	Grid	LOI	
			SiO ₂	Al ₂ O ₃	CaO	MgO	Na ₂ O	K ₂ O	FeO	MnO	TiO ₂		ppm Cu	ppm Zn	ppm Pb	ppm Ag	ppb Au						
BCD 2914	40.2	60.4	69.7		0.37	3.00	0.17				0.18	1220	8	31									
Felsic Lapilli Tuff																							
2915	79.3	83.3	76.2		0.46	3.80	0.09				0.18	800	24	59									
Felsic Lapilli Tuff																							
2918	94.7	99.6	71.7		1.41	1.35	3.56				0.15	820	3	16									
Felsic Tuff																							
2919	134.4	137.5	45.8	13.6	8.45	3.55	2.24	0.32	14.4	0.19	2.87	130											6.80
Diorite																							

ZIPPY PRINT © — BRIDGEPORT, RICHMOND

CORPORATION FALCONBRIDGE COPPER

DRILL HOLE RECORD

METRIC UNITS
 IMPERIAL UNITS

HOLE NUMBER SRM 15	GRID PF	FIELD COORDS	LAT. 160N	DEP. 209W	ELEV.	COLLAR BRNG. 205?	COLLAR DIP	HOLE SIZE BQ	FINAL DEPTH 197.5m.
PROJECT 204	CLAIM #	SURVEY COORDS.				DATE STARTED: DATE COMPLETED:	CONTRACTOR: CORE STORAGE: Fulton Farm CASING: Not found		

PURPOSE Relog SEREM drilling	RQD LOG	PULSE EM SURVEY
	COLLAR SURVEY	MULTISHOT SURVEY

ACID TESTS				TROPARI TESTS			MULTISHOT DATA		
DEPTH ()	CORRECTED ANGLE	DEPTH ()	CORRECTED ANGLE	DEPTH ()	AZIMUTH	DIP	DEPTH ()	AZIMUTH	DIP

<u>From To</u>	<u>Rock Type</u>	<u>Texture and Structure</u>	<u>Angle to Core Axis</u>	<u>Alteration</u>	<u>Sulphides</u>	<u>Remarks</u>
0 to 7.0	Overburden					
7.0 to 23.8	Rhyolite Tuff (QP?)	Creamy Grey, f.g. - core very badly broken with poor recovery. Chips are sericitic, locally chloritic. Some are distinctly qtz-porphyrific. Pseudo banded, crenulated.	14° 7.6m rapidly becoming 33-35° (beyond 9.1m)	- string sericite, local chlorite	- stringery py.	
23.8 to 38.4	Massive Chlorite- (Sericite) Alteration	Green-tan, f.g. - small chips of intense alteration	30°	- Intense chlorite sericite	- 5-10% py (-cp)	
38.4 to 39.0	Fault Gouge					
39.0 to 43.6	Quartz Porphyry	Cream colour, f.g.-c.g. - good QP with 5-10% quartz-eyes to 10mm in a very sericitic matrix. Quite strongly crenulated	40°	- strong sericite	- 1% py, locally more	
43.6 to 44.2	Fault Zone	- badly broken and ground				

<u>From</u> <u>To</u>	<u>Rock Type</u>	<u>Texture and Structure</u>	<u>Angle to</u> <u>Core Axis</u>	<u>Alteration</u>	<u>Sulphides</u>	<u>Remarks</u>
44.2 to 197.5.	QE Rhyolite Tuff (grading to QP locally)	Grey-green, f.g.-c.g. - unlike anything logged around the Lenora & Tye. Quite homogeneous, relatively unaltered but distinctly quartz porphyritic. Quantity varies from 0-10% but usually less than 5mm in diameter. Rarely feldspar bearing as per the area south of the Mine fault or in the Chemainus R. Certain zones contain almost no quartz eyes but these cannot be picked out as beds and no evidence for lamination or fragmental texture is seen. 177.4m become noticeably QP again.	240-45°	- Weak sericite-chlorite - Occ. more sericitic zone - chlorite accompanies stringery zones.	- approx. 1% diss'd py. Locally much stronger in stringery sections. - more cp apparent down the hole - stronger sulphides occur at 74.7, 81.7, 86.0, 93.6, 100.3, 114.3, 121.6, 135.0, 133.8, 151.8, 157.4, 163.4, 174.9 (stringers)	- Definite QP in places not in others - stringery mineralization implies fw but alteration is limited
197.5m	E.O.H.					
	Checked DVL 04/12/84					

LITHOGEOCHEMISTRY

MAJOR OXIDES

TRACE ELEMENTS

SAMPLE NUMBER	FROM ()	TO ()	MAJOR OXIDES										TRACE ELEMENTS					Rock Type	Alt	Min	Grid
			SiO ₂	Al ₂ O ₃	CaO	MgO	Na ₂ O	K ₂ O	FeO	MnO	TiO ₂	ppm Ba	ppm Cu	ppm Zn	ppm Pb	ppm Ag	ppb Au				
BCD 0017	31.4	34.3	30.2	20.0	0.804	11.7	0.088	2.00	22.7	0.423	1.55	1170	650	181							
0018	46.6	49.7	69.3	14.5	0.190	2.77	1.86	2.66	3.72	0.050	0.233	1430	430	25							
Quartz Eye Rhyolite																					
0019	62.5	65.5	70.6	13.8	0.152	2.09	0.187	3.76	4.86	0.046	0.183	2050	570	28							
Quartz Eye Rhyolite - Lapilli Tuff																					
0020	78.6	81.7	70.4	12.1	0.264	1.14	0.632	3.13	6.94	0.042	0.166	2300	122	25							
0021	93.9	96.9	71.0	11.7	0.225	1.40	0.173	3.25	6.94	0.032	0.183	2030	730	23							
0022	107.9	111.0	66.7	13.8	0.309	2.78	0.175	3.22	6.58	0.071	0.200	1840	350	37							
0023	121.3	124.4	66.7	13.2	0.374	3.68	0.186	2.82	8.11	0.072	0.200	1520	480	42							
0024	138.1	141.1	68.4	13.2	0.720	2.50	0.266	2.84	5.90	0.061	0.183	1640	280	57							
0025	154.8	157.9	68.2	13.4	0.172	2.35	0.285	2.96	6.75	0.042	0.183	1780	1290	105							
0026	170.1	173.1	70.6	12.8	0.383	2.19	0.369	2.72	7.01	0.045	0.166	1650	450	102							

Hole No. SRM 15

Entered by _____

Logged by A. J. Davidson

Page No. _____

LITHOGEOCHEMISTRY

MAJOR OXIDES

TRACE ELEMENTS

SAMPLE NUMBER	FROM ()	TO ()	MAJOR OXIDES										TRACE ELEMENTS					Rock Type	Alt	Min	Grid		
			SiO ₂	Al ₂ O ₃	CaO	MgO	Na ₂ O	K ₂ O	FeO	MnO	TiO ₂	ppm Ba	ppm Cu	ppm Zn	ppm Pb	ppm Ag	ppb Au						
BCD 0027	185.3	188.4	72.1	12.6	0.373	1.06	2.75	2.05	4.23	0.038	0.183	1100	880	87									

Hole No. SRM 15

Entered by _____

Logged by A. J. Davidson

Page No. _____

CORPORATION FALCONBRIDGE COPPER

DRILL HOLE RECORD

METRIC UNITS
 IMPERIAL UNITS

HOLE NUMBER SRM 16	GRID	FIELD COORDS	LAT.	DEP.	ELEV.	COLLAR BRNG.	COLLAR DIP	HOLE SIZE	FINAL DEPTH	Approx. 132.9m	
PROJECT	CLAIM #	SURVEY COORDS.				DATE STARTED:	CONTRACTOR: Fulton's	CORE STORAGE: Farm			CASING:
PURPOSE								RQD LOG		PULSE EM SURVEY	
								COLLAR SURVEY		MULTISHOT SURVEY	

ACID TESTS				TROPARI TESTS			MULTISHOT DATA		
DEPTH ()	CORRECTED ANGLE	DEPTH ()	CORRECTED ANGLE	DEPTH ()	AZIMUTH	DIP	DEPTH ()	AZIMUTH	DIP

<u>From To</u>	<u>Rock Type</u>	<u>Texture and Structure</u>	<u>Angle to Core Axis</u>	<u>Alteration</u>	<u>Sulphides</u>	<u>Remarks</u>
0 to 8.8	Overburden					
8.8 to 21.6	Andesite	- brownish - well sheared but local recognizable textures. Distinctly vesicular near top with qtz-sulph (py-cp) filled vesicles. Loses vesicularity with depth and becomes increasingly sulphide rich. Possibly becomes tuffaceous. No sharp contact. Probably gradational. Core angles	0-25°	- massive chlorite	- sulphides sheared and crenulated along with host.	
21.6 to 23.8	Rhyodacite Lapilli Tuff	- Quartzose lapilli <2cm diameter in qtz-sericite matrix. shearing present but much less pronounced. Angles at	20°		- only 2/3% py.	
23.8 to 49.7	Vesicular Andesite and Tuffs	- Intermixed vesicular andesite and tuffs or interflow breccia zones. At least some of the "vesicular andesite" is probably intensely chloritized QP. Most obvious in "rhyodacite P+" section where lapilli are actually very large quartz eyes. Likely to be the footwall type QP (i.e. not the main one).		- Recrystallization has allowed pyrite to move into these low strain areas.	- Quartz-sulphides in vesicles again. Most sulphides (py) again in tuffaceous zones where thin (approx. 1cm) beds have been folded into zig-zag pattern about the major cleavage. Local sulphide content 40-50% over a few cm. Average 10%.	

<u>From To</u>	<u>Rock Type</u>	<u>Texture and Structure</u>	<u>Angle to Core Axis</u>	<u>Alteration</u>	<u>Sulphides</u>	<u>Remarks</u>
49.7 to 50.6	Andesite- Dacite Dyke	- unsheared, massive. Lower contact sharp but irregular.		- unaltered	- 3-4% speckling of pyrite	
50.6 to 70.4	Vesicular Andesite and Tuffs	- As 23.8 to 49.7m. More obvious vesicular sections than bedded sections but several 1-8cm bands of semi-massive to massive pyrite with minor cp may be beds.		- still sericite- chlorite	- see texture	
70.4 to 72.5	Cherty Exhalite	- Interbeds of chert and sulphides (pyrite) <1-5cm across. Contact sharp at Bedding likewise at a shallow angle. Bottom contact also sharp and almost parallel to CA.	15-20°			
72.5 to 96.0	Rhyolite Lapilli Tuff	- Lapilli small (usually <1.5cm) and quartzose. Matrix sheared and quartz-sericite rich. Lapilli become very sparse with local concentrations to 25-30% of rock.		- Approx. 79.3m starts to get more chloritic, darker green though still same rock. 82.9 to 83.4 silicified 83.4 to 83.7 strongly chloritic with py-cp stringers. By 86.9m rhyolite becomes intensely chloritized or interbedded with chloritic tuff bands which have been disrupted and streaked.		

<u>From To</u>	<u>Rock Type</u>	<u>Texture and Structure</u>	<u>Angle to Core Axis</u>	<u>Alteration</u>	<u>Sulphides</u>	<u>Remarks</u>
96.0 to 98.2	Chert	- Beds and thin disrupted bands of chert				- Some with disseminated py.
98.2 to 99.4	Rhyolite(?) Lapilli Tuff	- Approaching gabbro contact is shot through with quartz veins and quite baked looking. Sharp contact with overlying tuff.	36°			- Strongly disseminated to semi-massive magnetite at 99.2 to 99.4m.
99.4 to 132.9	Gabbro	- c.g. - Gg generally with about 3m of chill. Distinctly different from phases seen to date around the Lenora-Type. - Also possibly different phase (with mt) for first 1.5m (another contact at 100.6m).		- Local carb. epidote veinlets.	Local	
132.9	E.O.H.					Note: Hole originally recorded in IDP notebook. Checked DVL 04/12/84

LITHOGEOCHEMISTRY

MAJOR OXIDES

TRACE ELEMENTS

SAMPLE NUMBER	FROM ()	TO ()	MAJOR OXIDES										TRACE ELEMENTS					Rock Type	Alt	Min	Grid	
			SiO ₂	Al ₂ O ₃	CaO	MgO	Na ₂ O	K ₂ O	FeO	MnO	TiO ₂	ppm Ba	ppm Cu	ppm Zn	ppm Pb	ppm Ag	ppb Au					
BCD 0011	11.6	14.6	29.3	16.4	0.54	16.1	0.003	0.042	22.9	0.549	1.37	30	890	340								
Andesite/Dacite																						
0012	21.6	23.8	61.8	14.5	1.35	6.25	0.179	2.55	7.86	0.222	0.984	1200	26	120								
Sericitic Rhyolite																						
0013	43.6	46.6	39.1	17.4	0.91	10.8	0.066	1.81	17.3	0.304	1.45	980	30	143								
Sericitic And-Dac.																						
0014	59.1	62.2	44.7	18.1	0.89	9.15	0.094	2.37	16.7	0.280	1.53	1170	230	115								
Sericitic And-Dac.																						
0015	77.4	80.5	66.3	13.0	0.30	3.20	0.088	2.80	9.38	0.087	0.333	1480	1800	70								
Rhyolite Lapilli Tuff																						
0016	89.9	93.0	66.1	12.1	0.93	3.88	0.528	1.45	11.6	0.187	0.350	1010	17	150								
Chloritic Rhy. Lapilli Tuff?																						

Hole No. SRM 16

Entered by _____

Logged by I. D. Pirie

Page No. _____

CORPORATION FALCONBRIDGE COPPER

DRILL HOLE RECORD

METRIC UNITS
 [] IMPERIAL UNITS

HOLE NUMBER SRM 17	GRID	FIELD COORDS	LAT.	DEP.	ELEV.	COLLAR BRNG.	COLLAR DIP	HOLE SIZE	FINAL DEPTH	
PROJECT	CLAIM #	SURVEY COORDS.				DATE STARTED: DATE COMPLETED:	CONTRACTOR: CORE STORAGE:			CASING:
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

HOLE NO. SRM 17
 ZIPPY PRINT * — BRIDGEPORT, RICHMOND

LOGGED BY Ian D. Pirie
April, 1983

<u>From To</u>	<u>Rock Type</u>	<u>Texture and Structure</u>	<u>Angle to Core Axis</u>	<u>Alteration</u>	<u>Sulphides</u>	<u>Remarks</u>
0 to 9.1	Overburden	- boulders				
9.1 to 34.1	Vesicular Andesite- Dacite	- Poker chip core 100%. Very fissile.		- Sericitic with distinctive tan colour (massive chlorite-sericite).		- Several zones of ground core
34.1 to 35.7	Cherty Rhyolite Chlorite, Fault Gouge	- small piece of chert or, cherty rhyolite with 5% disseminated pyrite, then goes into an intense shear zone with black greasy chlorite, some intense fault gouge and locally semi-massive sulphides				
35.7 to 39.0	Mylonite?	Light grey-green. - strong crenulated cleavage and kink banding		- soft sericite-chlorite rich rock		
39.0 to 40.8	Chert or Cherty Rhyolite	- local tuffaceous sections sheared. Otherwise massive but broken up			- 5-8% disseminated pyrite	
40.8 to 45.0	Vesicular Andesite- Dacite?	- similar to 9.1 to 34.1m? Poker chip again				

<u>From To</u>	<u>Rock Type</u>	<u>Texture and Structure</u>	<u>Angle to Core Axis</u>	<u>Alteration</u>	<u>Sulphides</u>	<u>Remarks</u>
45.0 to 45.1	Pyritic Tuff	- tuffaceous zone			- 20-25% pyrite	
45.1 to 59.7	Quartz-Eye Rhyolite	- much smaller quartz eyes than in SRM 18 but distinct. Rock is sheared.		- light coloured and sericitic with pervasive disseminated pyrite		
59.7 to 61.3	Andesite Dyke	- similar to SRM 16				
61.3 to 107.2	Quartz-Eye Rhyolite					Note: Hole originally recorded in IDP notebook.
107.2	E.O.H.					
	checked DVL 04/12/84					

LITHOGEOCHEMISTRY

MAJOR OXIDES

TRACE ELEMENTS

SAMPLE NUMBER	FROM ()	TO ()	MAJOR OXIDES										TRACE ELEMENTS					Rock Type	Alt	Min	Grid	
			SiO ₂	Al ₂ O ₃	CaO	MgO	Na ₂ O	K ₂ O	FeO	MnO	TiO ₂	ppm Ba	ppm Cu	ppm Zn	ppm Pb	ppm Ag	ppb Au					
BCD 0028	12.8	15.9	45.3	17.8	0.672	10.6	0.091	2.20	14.4	0.444	0.967	1000	180	240								
And - dac?																						
0029	31.1	34.1	56.0	13.4	0.969	5.87	0.134	1.19	12.6	0.277	0.850	780	58	153								
Chert/Cherty Rhy.																						
0030	45.1	48.2	71.4	13.0	0.128	1.48	0.124	3.81	5.43	0.037	0.183	2000	600	36								
Quartz Eye Rhyolite																						
0031	52.1	55.2	65.9	15.3	0.686	3.58	1.25	3.02	5.65	0.132	0.233	1750	176	72								
Quartz Eye Rhyolite																						
0032	66.1	69.2	66.5	15.7	0.211	3.60	0.696	3.74	4.19	0.121	0.216	1460	57	58								
Quartz Eye Rhyolite																						
0033	83.2	86.2	68.0	12.8	0.205	3.18	0.117	2.99	6.21	0.086	0.166	1600	1330	46								
Quartz Eye Rhyolite																						
0034	103.9	107.0	71.2	13.8	0.311	2.85	0.30	3.10	5.29	0.042	0.166	1560	53	33								
Quartz Eye Rhyolite																						

Hole No. SRM 17

Entered by _____

Logged by I. D. Pirie

Page No. _____

CORPORATION FALCONBRIDGE COPPER

DRILL HOLE RECORD

METRIC UNITS
IMPERIAL UNITS

HOLE NUMBER SRM 18	GRID	FIELD COORDS	LAT.	DEP.	ELEV.	COLLAR BRNG.	COLLAR DIP	HOLE SIZE	FINAL DEPTH 153.9m.	
PROJECT	CLAIM #	SURVEY COORDS.				DATE STARTED: DATE COMPLETED:	CONTRACTOR CORE STORAGE: CASING:			
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	

<u>From To</u>	<u>Rock Type</u>	<u>Texture and Structure</u>	<u>Angle to Core Axis</u>	<u>Alteration</u>	<u>Sulphides</u>	<u>Remarks</u>
0 to 16.2	Overburden					
16.2 to 24.1	Quartz Porphyry Rhyolite	- 5-10% quartz eyes, extremely schistose feldspar porphyry but fsp altered to sericite		- disseminated and remobilized sulphides up to 1% - intense sheared and possible alteration		28.1m - fault gouge 29.9m - heavy sulphides 10% py/6", tr cp - contact marked by sulphides
34.1 to 67.1	Dacite Tuff	- few quartz eyes, probably dacitic tuff/volcaniclastic. Volcaniclastic fragments well sorted, fine. Some faint hints of bedding or banded beds. Becoming more fragmental looking at 54.9m. Still few quartz eyes.		- slightly more chloritic-mafic. - general soapy greenish colloidal texture	- some diss. py. but less than QP	- 44.2m. fault gouge - 64.6 good cp stringer over 2"
67.1 to 88.1	Andesite Tuff-Flow	- similar to above but with broken soft talcy beds (68.6m) and more tuffaceous nature. Still quartz eyes in places. Some hint of vesicules also (72.3m, 72.5m) with sulphide filling. Not as sheared as QP at top. Could definitely be all vesicular?		- Quite altered with talc-chlorite. Not as much sericite.		- 84.4 Rusty fault gouge.

<u>From To</u>	<u>Rock Type</u>	<u>Texture and Structure</u>	<u>Angle to Core Axis</u>	<u>Alteration</u>	<u>Sulphides</u>	<u>Remarks</u>
88.1 to 89.0	Exhalite?	- Contact marked by moderately bedded cherty-quartzose-pyrite.		- Still sheared and very sericitic.	- Banded pyrite over 3 ft. with chert-qtz.	
89.0 to 94.5	Dacite Vesicular Flow or Quartz Eye Rhyolite	- Light Colour - Vesicular or tuffaceous quartz eye rhyolite - more acidic (rhy-dac) vesicle filling is qtz + py or quartz eyes.		- Siliceous in places with bands of pyrite throughout	- Vesicles and disseminated sulphides up to 1% of rock. - Pyrite band at 93.6.	
94.5 to 100.0	Massive Dacite	- More massive, almost no vesicles. Broken banded look at 96.9 to 100.0m with darker green more chl. bands/beds. Still extremely sheared.		- more chl-talcy.	- few sulphides	
100.0 to 104.9	Lapilli Tuff Dacite	- becoming very fragmental looking in light and dark clasts up to 1-2cm in size. Not banded looking but fragments similar in composition to darker bands. Still odd ovoid quartz. Very fracture. Some quartz eyes.			- Still lots of sulphides, disseminated and some in narrow bands.	
104.9 to 105.8	Diabase Dyke					
105.8 to 113.4	Quartz Eye Rhyolite Tuff	- Similar to 100.0 to 104.9m. Becoming felsic fragmental.			- disseminated sulphides	

<u>From To</u>	<u>Rock Type</u>	<u>Texture and Structure</u>	<u>Angle to Core Axis</u>	<u>Alteration</u>	<u>Sulphides</u>	<u>Remarks</u>
113.4 to 114.3	Pyritic Felsic Tuff				- good sulphide bands, not likely a horizon.	
114.3 to 125.0	Fault Gouge	- Very intense fault gouge (shear). Still strongly gouged to 125.0m.			- 10-15% sulphides (pyrite) at 120.7m.	- No core recovery from 120.7m to 121.9
125.0 to 129.5	Dacitic Tuff	- slightly more mafic looking becoming better banded in fine bands. Still with some quartz eyes though very small. Banding very crenulated.			- Varies from barren to few diss. sulphides.	
129.5 to 144.5	Finely Bedded Dacitic Tuff	- Still crenulated fine banding. Still some quartz eyes throughout. Still a very acidic rock. Becoming more intensely sheared and altered.		- Becoming more chloritic with sulphides on chloritic shears.	- No disseminated sulphides, essentially just pyrite. Distinct lack of diss. or "vesicle" type sulphides	
144.5 to 147.5	Fault Gouge	- Quite acidic, very strong fault gouge.				- Very poor core recovery.
147.5 to 149.4	Rhyolite with Quartz Eyes					

<u>From</u> <u>To</u>	<u>Rock Type</u>	<u>Texture and Structure</u>	<u>Angle to</u> <u>Core Axis</u>	<u>Alteration</u>	<u>Sulphides</u>	<u>Remarks</u>
149.4 to 153.9	Rhyolite Dacite Lapilli Tuff	- Band at 153.3		- Quartz vein at 151.2m.	- Distinct lack of sulphides (diss.) compared with upper part of hole.	
153.9	E.O.H.					Note: from AJD's notebook.
		checked DVL 10/12/84				

LITHOGEOCHEMISTRY

MAJOR OXIDES

TRACE ELEMENTS

SAMPLE NUMBER	FROM ()	TO ()	MAJOR OXIDES										TRACE ELEMENTS					Rock Type	Alt	Min	Grid	
			SiO ₂	Al ₂ O ₃	CaO	MgO	Na ₂ O	K ₂ O	FeO	MnO	TiO ₂	ppm Ba	ppm Cu	ppm Zn	ppm Pb	ppm Ag	ppb Au					
BCD 0001	16.2	19.2	74.9	12.5	0.098	0.560	0.187	3.78	1.64	0.015	0.166	1340	17	9								
Sheared QP																						
0002	30.5	33.5	68.4	14.7	0.154	1.71	0.196	4.12	4.46	0.032	0.216	2400	153	19								
QP?																						
0003	45.7	48.8	67.2	14.2	0.185	3.03	0.175	3.34	6.38	0.076	0.200	2310	1080	45								
0004	60.4	63.4	70.2	13.4	0.175	2.57	2.51	1.90	4.19	0.083	0.166	1240	110	43								
0005	76.2	79.3	71.2	13.0	0.126	1.72	1.97	2.65	3.79	0.055	0.166	1470	920	39								
0006	91.1	94.2	73.2	12.5	0.098	1.41	0.144	3.53	5.33	0.041	0.166	1880	550	59								
0007	106.1	109.1	69.3	12.5	0.365	2.02	1.02	2.83	5.49	0.063	0.183	1480	780	56								
0008	121.9	125.0	70.4	12.3	0.228	2.19	0.009	3.08	6.11	0.067	0.166	1710	590	73								
0009	136.9	148.5	70.8	13.0	0.164	2.32	0.181	3.32	5.38	0.081	0.166	1840	600	62								
0010	150.9	153.9	71.9	12.1	0.466	1.67	0.253	2.93	5.72	0.052	0.150	1730	740	56								

Hole No. SRM 18

Entered by _____

Logged by I. D. Pirie, A. J. Davidson

Page No. _____

CORPORATION FALCONBRIDGE COPPER

METRIC UNITS
IMPERIAL UNITS

DRILL HOLE RECORD

HOLE NUMBER SRM 20	GRID SEREM	FIELD COORDS	LAT. 8+10N	DEP. 62E	ELEV.	COLLAR BRNG. 005°	COLLAR DIP -60°	HOLE SIZE	FINAL DEPTH 48.8m.	
PROJECT 205	CLAIM # Fortuna (L42)	SURVEY COORDS.				DATE STARTED: DATE COMPLETED: Dec/1980	CONTRACTOR: CORE STORAGE: Fulton's Farm CASING			
PURPOSE To test the Northeast Copper horizon near the Fortuna adit								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	
				48.8m?	-59°	005°				
				Note: Hole stopped because of drilling						
				problems in broken up, rubbly						
				gabbro.						

CORPORATION FALCONBRIDGE COPPER

DRILL HOLE RECORD

METRIC UNITS
IMPERIAL UNITS

HOLE NUMBER SRM 21	GRID SEREM	FIELD COORDS	LAT. 8+10N	DEP. 59+03E	ELEV.	COLLAR BRNG. 004°	COLLAR DIP -65°	HOLE SIZE NQ	FINAL DEPTH 162.8m.	
PROJECT Peppa	CLAIM# Fortuna (L45)	SURVEY COORDS				DATE STARTED:	CONTRACTOR: Fulton's Farm			
PURPOSE To test the Northeast Copper Zone near the Fortuna adit.							DATE COMPLETED: Dec/80	CORE STORAGE: Fulon's Farm		
								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
				?162.8m	014°	-60°			

Note: 43.4% core recovery

<u>From To</u>	<u>Rock Type</u>	<u>Texture and Structure</u>	<u>Angle to Core Axis</u>	<u>Alteration</u>	<u>Sulphides</u>	<u>Remarks</u>
0 to 12.3m	Overburden					
12.3m to 44.5m	Diorite	<p>Colour - greenish-gray Grain Size - m.g. - homogeneous, massive, with slightly porphyritic nature to some feldspar phenocrysts in groundmass of feldspar and ferromagnesian groundmass - approx. 2% diss. f.g. metallic phase in ilmenite? - occasionally feldspars exhibit a porphyritic texture</p>		<p>- weathered on fractures - discoloured zone from 21.9 to 24.5m.</p>	barren	<p>core broken badly from 12.3 to 16.0 21.4 to 25.0 BCD 2851 19.8-21.9</p>
44.4 to 46.9	Foliated Diorite?	<p>Colour - greenish brown Grain Size - aph. Moderately foliated, patchy colouring, no distinct minerals</p>	50°	- very soft, altered to sericite?	barren	Not as chloritic as normal marginal foliated diorite
46.9 to 50.52	Chloritic Mafic Tuff	<p>Colour - dark green Grain Size - f.g. - patchy texture may indicate clasts at top of unit - clearly fragmental with light coloured clasts <3mm</p>	45°	- strongly altered to chlorite	<1% diss. py and cp as minor veinlets or bands	

<u>From</u> <u>To</u>	<u>Rock Type</u>	<u>Texture and Structure</u>	<u>Angle to</u> <u>Core Axis</u>	<u>Alteration</u>	<u>Sulphides</u>	<u>Remarks</u>
50.52 to 50.6	Chert	Colour - gray Grain Size - aphan. - massive			<1/2% diss. py.	
50.6 to 54.73	Massive Andesite	Colour - gray Grain Size - aphan. to f.g. - massive, very siliceous - possibly microfeldspar phenocrysts <1/3mm			- 1-2% py as patches, disseminations and short veinlets	BCD 2852 50.6 - 54.1
54.73 to 60.7	Gray Chert	Colour - gray Grain Size - aphan. - massive - banded towards base	35°		- 1-2% diss. pyrite	
60.7 to 75.0	Intermediate Tuff	Colour - gray Grain Size - very f.g. - sugary texture with anhedral grains - massive		- moderately chloritized	- 2-5% py as disseminations, patches and veinlets - 67.85 to 74.4 fine stringers of pyrite spaced from 2 to 40 cm apart	Switch to BQ core at 62.7m. Ground core and poor recovery from 62.8 to 65.2m
75.0 to 82.83	Pyritic Intermediate? Flow	Colour - gray Grain Size - f.g. to aphan. - scattered Qtz-filled amygdules, <3mm, elongate, 1% - massive - foliation defined by pyrite, amygdules	45°	- moderately sericitic	- 3 to 5% py as disseminations	

<u>From</u> <u>To</u>	<u>Rock Type</u>	<u>Texture and Structure</u>	<u>Angle to</u> <u>Core Axis</u>	<u>Alteration</u>	<u>Sulphides</u>	<u>Remarks</u>
82.83 to 83.77	Chert	Colour - gray Grain Size - aphan. - massive			- barren	
83.7 to 86.2	Intermediate Tuff	Colour - gray Grain Size - f.g. - Siliceous, weakly foliated, probably fragmental rock	45°	- moderately sericitic	- Pyrite (5-7%) occurring in cm to several cm wide bands - 84.85 86.9 87.2 - 1-3% disseminated pyrite throughout unit.	- BCD 2853 84.4 - 87.2
86.2 to 88.5	Chert	Colour - gray Grain Size - aphan. - massive			- <1% v.f.g. diss. py.	
88.5 to 90.8	Felsic Lapilli Tuff	- darker, elongate fragments(?) in a siliceous matrix - moderate foliation defined by fragments and pyrite - fragments stretched so have width to length ratio of 1:10	45°	- fragments moderately chloritic and matrix sericitic	- 1-3% diss. py. - 90.5 - 90.8 more pyritic (3-7%) and more chloritic	
90.8 to 92.78	Diorite Dyke	Colour - light grey Grain Size - f.g. - equigranular		- minor carbonate veinlets	- barren	

<u>From</u> <u>To</u>	<u>Rock Type</u>	<u>Texture and Structure</u>	<u>Angle to</u> <u>Core Axis</u>	<u>Alteration</u>	<u>Sulphides</u>	<u>Remarks</u>
92.78 to 93.27	Intermediate to Felsic Tuff	Colour - green and white Grain Size - f.g. - moderate foliation - f.g. granular nature		- chloritic upper contact - 4cm	- 1-4% diss. py.	
93.27 to 93.78	Chert	Colour - Grey Grain Size - aphan. - massive - basal contact sharp	35 ⁰		- fine diss. py (1%) with pyrite veinlets 0 - 5% py.	
93.78 to 122.2	Intermediate to Felsic Tuff	Colour - grey Grain Size - f.g to aphan. - weakly foliated, granular texture - possible small amygdules from 98.6 to 99.3m. - more felsic from approx. 109m. downhole		- strongly chloritic adjacent to sulphides - less chlorite below 109m.	- 1-5% py as dissemina- tions, veinlets - 96.47-93.8 - 10% py in chloritic matrix - 96.1 to 96.2 - 5% cp in chloritic matrix - 99.27 to 99.35 - 10% cp with qtz vein and chlorite - 100.92-100.98 - 15% py - 101.32-101.37 - 15% py	- BCD 2855 110.75-114.0
122.2 to 127.05	Fault Gouge	- gouge - qtz vein from 126.94 to 126.96				
127.05 to 132.97	Intermediate Tuff	Colour - green Grain Size - f.g. - strongly foliated with kink banding and small folds	40 ⁰	- numerous qtz veinlets parallel to foliation - pervasive carbonate	- barren	- strong foliation and qtz veinlets reflect proximity to fault

<u>From</u> <u>To</u>	<u>Rock Type</u>	<u>Texture and Structure</u>	<u>Angle to</u> <u>Core Axis</u>	<u>Alteration</u>	<u>Sulphides</u>	<u>Remarks</u>
132.97 to 135.25	Feldspar Intermediate Porphyry Flow	Colour - purplish - green Grain Size - aphan. - 20% plagioclase phenocrysts <1mm in siliceous matrix - weakly foliated - silicified adjacent to diorite		- minor chlorite - some silicification	- barren	
135.25 to 136.02	Diorite Dyke	Colour - grey Grain Size - f.g. - contains some quartz approx. 5% - non-magnetic			- barren	
136.02 to 162.8	Feldspar Intermediate Porphyry Flow	Colour - greyish green - similar to 132.92 to 135.25 but more altered - foliation is variable, usually absent - below 150.3m epidote frequently replaces feldspars and as patches with silica - looks andesitic		- hematite on fractures - qtz vein at 154.72-154.76 - epidote alteration very pronounced below 150.3m	- barren	- BCD 2856 152.05-154.95
162.08		E.O.H.				

SUMMARY LOG

<u>FROM</u>	<u>TO</u>	
0	12.3m	Overburden
12.3	44.4	Diorite
44.4	46.9	Foliated Diorite
46.9	50.52	Chloritic Mafic Tuff, <1% py, cp
50.52	54.73	Massive Andesite, 1-2% py
54.73	60.7	Grey Chert, 1-2% py
60.7	75.0	Intermediate Tuff, 2-5% py, chlorite, pyrite stringers
75.0	122.2	Intermediate Tuff to Lapilli Tuff, 1-7% py, moderately sericitic with chlorite associated with sulphides. Interbedded cherts with little or no sulphides.
122.2	127.05	Fault Gouge
127.05	162.8	Feldspar Intermediate Porphyry Flow, Epidote alteration.
162.8		E.O.H.

Conclusions

1. The fault at 122.2 to 127.05m is a major structural feature and separates two different parts of the Mt. Sicker stratigraphy.
2. One thick chert band and a number of thinner chert layers were intersected in the hole which could mark favourable horizons.
3. All significant mineralization occurs in the intermediate tuffs above the fault. It occurs as pervasive disseminated pyrite with areas of weak stringer mineralization. Chalcopyrite occurs frequently in trace to minor amounts. Best chalcopyrite occurs between 90 and 100m (see Serem assays as well).
4. Chlorite and sericitic alteration of felsic tuffs is moderately intense and could be marginal to a major hydrothermal system.

LITHOGEOCHEMISTRY

MAJOR OXIDES

TRACE ELEMENTS

SAMPLE NUMBER	FROM ()	TO ()	MAJOR OXIDES										TRACE ELEMENTS					Rock Type	Alt	Min	Grid			
			SiO ₂	Al ₂ O ₃	CaO	MgO	Na ₂ O	K ₂ O	FeO	MnO	TiO ₂	Ba ppm	ppm Cu	ppm Zn	ppm Pb	ppm Ag	ppb Au							
BCD 2851	19.8	21.9	49.2		10.9	6.22	2.43	0.15			2.60	100	139	52										
Diorite																								
2852	50.6	54.1	45.4		0.35	13.3	0.03	1.36			1.23	740	61	290										
Massive Adnesite																								
2853	84.4	87.2	65.0		0.20	3.73	0.07	3.37			0.32	1600	540	89										
Felsic Tuff																								
2855	110.75	114.0	52.8		2.64	5.85	0.43	0.93			0.65	400	390	109										
Felsic Tuff																								
2856	152.05	154.95	55.0		4.03	1.74	5.89	1.58			0.66	1180	4	68										
Feldspar Andesite Porphyry																								
2854			50.3		9.92	5.39	2.18	0.66			2.92	230	198	61										
Diorite Standard																								

Hole No. SRM 21

Entered by D. Lefebure

Logged by D. Lefebure

Page No. _____

FROM TO	ROCK TYPE	TEXTURE AND STRUCTURE	ANGLE TO CA	ALTERATION	MINERALISATION	REMARKS
0.00 TO 9.45	OVERBURDEN .OB/					
9.45 TO 34.45	DIORITE .DIOR/					
34.45 TO 45.10	QP FLOW .FF QP/			.M ser/		
45.10 TO 82.00	FELSIC TUFF, CHERT .FTQP, Cht/					
82.00 TO 86.30	ARGILLITE .Arg/				.1-2% py/	
86.30 TO 90.55	FELSIC TUFFS .FT/			.M ser, chl/	.1% py/	
90.55 TO 92.40	QUARTZ VEIN & ARGILLITE .QV, Arg/				.90.55-91.0L .50% sph, 25% cp, 25% py/	
92.40 TO 93.75	RHYOLITE TUFF .FT/			.S ser/	.3-4% py, cp/	
93.75 TO 97.60	FAULT .FAULT/					
97.60 TO 135.70	FELSIC FLOW .FF/			.M ser, carb/	.tr-1% py/	

HOLE NUMBER: SRM1

ASSAY SHEET

DATE: 29-February-1988

Sample	From (m)	To (m)	Length (m)	ASSAYS					GEOCHEMICAL					COMMENTS
				CU PPM	ZN PPM	AG PPM	AU PPB	BA PPM	CU %	ZN %	AG G/T	AU G/T	PB %	
	90.54	90.97	0.43						.765	2.59			1.02	
	90.97	91.52	0.55						.25	1.04			.12	
	91.52	93.04	1.52						.28	1.03			.21	
	93.04	94.51	1.47						.29	.93			.11	

HOLE NUMBER: SRM1

ASSAY SHEET

PAGE: 3

Sample	From (m)	To (m)	Length (m)	SiO2 (%)	Al2O3 (%)	CaO (%)	MgO (%)	Na2O (%)	K2O (%)	Fe2O3 (%)	MnO2 (%)	TiO2 (%)	BA (%)	Cu (PPM)	Zn (PPM)	Pb (PPM)	Ag (PPM)	Au (PPB)	As (PPM)	Sb (PPB)	Sr (%)	Zr (%)	TOTAL (%)	Pb (%)	BA (PPM)	
45	42.37	45.42	3.05	74.00	12.90	2.10	1.92	3.29	1.64	.92	.03	.13		6	59											740
46	62.50	66.46	3.96	71.00	12.30	3.65	1.54	1.62	3.16	1.61	.04	.13		6	17											2300
47	82.01	86.28	4.27							3.38	.05			51	174	6	.3	38								5800
48	103.65	106.70	3.05	68.50	14.60	2.78	2.16	3.22	2.22	2.07	.05	.20		21	37											1610
49	127.43	130.48	3.05	74.20	13.60	.58	.99	1.28	3.63	2.27	.02	.18		60	1830											6800

HOLE NUMBER: SRM3

MINNOVA INC.
DRILL HOLE RECORD

IMPERIAL UNITS: METRIC UNITS: X

PROJECT NAME: SIC
PROJECT NUMBER: 305
CLAIM NUMBER:
LOCATION: NTS 92B/13

PLOTTING COORDS GRID: MTS
NORTH:
EAST:
ELEV:

ALTERNATE COORDS GRID:
NORTH: 0+ 0
EAST: 0+ 0
ELEV: 0.00

COLLAR DIP: x ' "
LENGTH OF THE HOLE: 127.10m
START DEPTH: 0.00m
FINAL DEPTH: 127.10m

COLLAR GRID AZIMUTH: x ' "

COLLAR ASTRNOMIC AZIMUTH: x ' "

DATE STARTED: 0, 0
DATE COMPLETED: 0, 0
DATE LOGGED: 0, 0

COLLAR SURVEY: NO
MULTISHOT SURVEY: NO
RQD LOG: NO

PULSE EM SURVEY: NO
PLUGGED: NO
HOLE SIZE:

CONTRACTOR:
CASING:
CORE STORAGE:

PURPOSE:

DIRECTIONAL DATA:

Depth (m)	Astronomic Azimuth	Dip degrees	Type of Test	FLAG	Comments	Depth (m)	Astronomic Azimuth	Dip degrees	Type of Test	FLAG	Comments
-	-	-	-	-		-	-	-	-	-	
-	-	-	-	-		-	-	-	-	-	
-	-	-	-	-		-	-	-	-	-	
-	-	-	-	-		-	-	-	-	-	
-	-	-	-	-		-	-	-	-	-	
-	-	-	-	-		-	-	-	-	-	
-	-	-	-	-		-	-	-	-	-	
-	-	-	-	-		-	-	-	-	-	
-	-	-	-	-		-	-	-	-	-	
-	-	-	-	-		-	-	-	-	-	
-	-	-	-	-		-	-	-	-	-	
-	-	-	-	-		-	-	-	-	-	
-	-	-	-	-		-	-	-	-	-	
-	-	-	-	-		-	-	-	-	-	
-	-	-	-	-		-	-	-	-	-	
-	-	-	-	-		-	-	-	-	-	
-	-	-	-	-		-	-	-	-	-	
-	-	-	-	-		-	-	-	-	-	
-	-	-	-	-		-	-	-	-	-	
-	-	-	-	-		-	-	-	-	-	
-	-	-	-	-		-	-	-	-	-	
-	-	-	-	-		-	-	-	-	-	
-	-	-	-	-		-	-	-	-	-	
-	-	-	-	-		-	-	-	-	-	
-	-	-	-	-		-	-	-	-	-	
-	-	-	-	-		-	-	-	-	-	
-	-	-	-	-		-	-	-	-	-	
-	-	-	-	-		-	-	-	-	-	
-	-	-	-	-		-	-	-	-	-	
-	-	-	-	-		-	-	-	-	-	
-	-	-	-	-		-	-	-	-	-	
-	-	-	-	-		-	-	-	-	-	
-	-	-	-	-		-	-	-	-	-	
-	-	-	-	-		-	-	-	-	-	
-	-	-	-	-		-	-	-	-	-	
-	-	-	-	-		-	-	-	-	-	
-	-	-	-	-		-	-	-	-	-	

HOLE NUMBER: SRM3

DRILL HOLE RECORD

LOGGED BY: M. BURSON

PAGE: 1

MINNOVA INC.
DRILL HOLE RECORD

HOLE NUMBER: SRM3

DATE: 29-February-1988

FROM TO	ROCK TYPE	TEXTURE AND STRUCTURE	ANGLE TO CA	ALTERATION	MINERALISATION	REMARKS
0.00 12.80	DVERBURDEN .OB/					
12.80 26.80	DIORITE .DIOR/					
26.80 84.10	FELSIC FLOW .FF/			.W-M chl, ser/		
84.10 89.60	QTZ VEIN .QV/					
89.60 127.10	FELSIC FLOW? .FF,FP/			.M carb/		

HOLE NUMBER: SRM3

DRILL HOLE RECORD

LOGGED BY: M. BURSON

PAGE: 2

Sample	From (m)	To (m)	Length (m)	ASSAYS					GEOCHEMICAL				COMMENTS
				CU PPM	ZN PPM	AG PPM	AU PPB	BA PPM	CU %	ZN %	AG G/T	AU G/T	

Sample	From	To	Length	SI02	AL2O3	CAO	MGO	NA2O	K2O	FE2O3	MNO2	TIO2	BA	CU	ZN	PB	AG	AU	AS	SB	SR	ZR	TOTAL	PB	BA
	(m)	(m)	(m)	%	%	%	%	%	%	%	%	%	%	PPM	PPM	PPM	PPM	PPB	PPM	PPB	%	%	%	%	PPM

HOLE NUMBER: SRM9

MINNOVA INC.
DRILL HOLE RECORD

DATE: 29-February-1988

FROM TO	ROCK TYPE	TEXTURE AND STRUCTURE	ANGLE: TO CA	ALTERATION	MINERALISATION	REMARKS
0.00 TO 2.90	DVERBURDEN .OB/					
2.90 TO 9.45	FELSIC TUFF .FTFP/			.W ser/		
9.45 TO 12.20	MAFIC TUFF .MT/			.S chl/		
12.20 TO 41.20	FELSIC TUFF, LAPILLI TUFF .FT,FLT/			.W-S ser/ 32.0-36.0 .S chl/		
41.20 TO 90.00	DIORITE .DIOR/					
90.00 TO 99.00	.FAULT/					
99.00 TO 102.70	FELSIC LAPILLI TUFF .FLT/			.M ser, chl/		
102.70 TO 128.60	DIORITE .DIOR/					

HOLE NUMBER: SRM9

DRILL HOLE RECORD

LOGGED BY: D. LEFEBURE

PAGE: 2

Sample	From (m)	To (m)	Length (m)	ASSAYS					GEOCHEMICAL					COMMENTS	
				CU PPM	ZN PPM	AG PPM	AU PPB	BA PPM	CU %	ZN %	AG G/T	AU G/T	PB %		
	9.70	11.70	2.00							.20					
	11.70	13.70	2.00							.12	.20			.03	
	13.70	14.90	1.20							.09					
	31.10	31.70	0.60							.20					
	99.90	101.50	1.60							.06					
	101.50	102.70	1.20							.03	.03			.02	

Sample	From (m)	To (m)	Length (m)	SiO2 %	Al2O3 %	CaO %	MgO %	Na2O %	K2O %	Fe2O3 %	MnO2 %	TiO2 %	BA %	Cu PPM	Zn PPM	Pb PPM	Ag PPM	Au PPB	As PPM	Sb PPB	Sr %	Zr %	TOTAL %	Pb %	BA PPM		
2920	23.50	26.20	2.70	74.20		2.43	1.84	3.42				.22		4	28												1310
2921	32.60	36.30	3.70	58.40		1.08	7.71	.58				.53		10	146												940
2925	40.90	41.00	0.10	67.60		2.08	1.17	3.24				.32		9	29												920
2923	85.60	88.10	2.50	47.90		9.63	3.80	2.68				2.35		320	121												200
2924	100.50	102.70	2.20	76.20		2.15	2.75	1.00				.20		460	102												860

MINNOVA INC.
 DRILL HOLE RECORD

HOLE NUMBER: SRM10

IMPERIAL UNITS:

METRIC UNITS: X

PROJECT NAME: SIC
 PROJECT NUMBER: 305
 CLAIM NUMBER: BLUEBELL (51-6)
 LOCATION: NTS 92B/13

PLOTTING COORDS GRID: MTS
 NORTH: 805.00S
 EAST: 1056.00E
 ELEV: 600.00

ALTERNATE COORDS GRID:
 NORTH: 0+ 0
 EAST: 0+ 0
 ELEV: 0.00

COLLAR DIP: -45x 0' 0"
 LENGTH OF THE HOLE: 95.40m
 START DEPTH: 0.00m
 FINAL DEPTH: 95.40m

COLLAR GRID AZIMUTH: 197x 0' 0"

COLLAR ASTRNOMIC AZIMUTH: 197x 0' 0"

DATE STARTED: 0, 0
 DATE COMPLETED: 0, 0
 DATE LOGGED: 0, 0

COLLAR SURVEY: NO
 MULTISHOT SURVEY: NO
 RQD LOG: NO

PULSE EM SURVEY: NO
 PLUGGED: NO
 HOLE SIZE: BQ

CONTRACTOR:
 CASING:
 CORE STORAGE: FULTON FARM

PURPOSE: TO TEST COINCIDENT IP, VLF AND VECTOR PULSE ANOMALIES.

DIRECTIONAL DATA:

Depth (m)	Astronomic Azimuth	Dip degrees	Type of Test	FLAG	Comments	Depth (m)	Astronomic Azimuth	Dip degrees	Type of Test	FLAG	Comments
-	-	-	-	-		-	-	-	-	-	
-	-	-	-	-		-	-	-	-	-	
-	-	-	-	-		-	-	-	-	-	
-	-	-	-	-		-	-	-	-	-	
-	-	-	-	-		-	-	-	-	-	
-	-	-	-	-		-	-	-	-	-	
-	-	-	-	-		-	-	-	-	-	
-	-	-	-	-		-	-	-	-	-	
-	-	-	-	-		-	-	-	-	-	
-	-	-	-	-		-	-	-	-	-	
-	-	-	-	-		-	-	-	-	-	
-	-	-	-	-		-	-	-	-	-	
-	-	-	-	-		-	-	-	-	-	
-	-	-	-	-		-	-	-	-	-	
-	-	-	-	-		-	-	-	-	-	
-	-	-	-	-		-	-	-	-	-	
-	-	-	-	-		-	-	-	-	-	
-	-	-	-	-		-	-	-	-	-	
-	-	-	-	-		-	-	-	-	-	
-	-	-	-	-		-	-	-	-	-	
-	-	-	-	-		-	-	-	-	-	
-	-	-	-	-		-	-	-	-	-	
-	-	-	-	-		-	-	-	-	-	
-	-	-	-	-		-	-	-	-	-	
-	-	-	-	-		-	-	-	-	-	
-	-	-	-	-		-	-	-	-	-	
-	-	-	-	-		-	-	-	-	-	
-	-	-	-	-		-	-	-	-	-	
-	-	-	-	-		-	-	-	-	-	
-	-	-	-	-		-	-	-	-	-	
-	-	-	-	-		-	-	-	-	-	
-	-	-	-	-		-	-	-	-	-	
-	-	-	-	-		-	-	-	-	-	

MINNOVA INC.
DRILL HOLE RECORD

HOLE NUMBER: SRM10

DATE: 29-February-1988

FROM TO	ROCK TYPE	TEXTURE AND STRUCTURE	ANGLE TO CA	ALTERATION	MINERALISATION	REMARKS
0.00 TO 1.50	OVERBURDEN .OB/					
1.50 TO 52.30	FELSIC TUFF .FTFP/					
52.30 TO 52.75	FELSIC TUFF, CHERT .FT,Cht/				.2% py/	
52.75 TO 0.00	FELSIC TUFF .FT/		.W ser/		.py stringers/	

HOLE NUMBER: SRM10

DRILL HOLE RECORD

LOGGED BY: M. LEGAULT/D. LEFEBURE

PAGE: 2

Sample	From (m)	To (m)	Length (m)	ASSAYS					GEOCHEMICAL					COMMENTS	
				CU PPM	ZN PPM	AG PPM	AU PPB	BA PPM	CU %	ZN %	AG G/T	AU G/T	PB %		
	16.80	17.20	0.40							.01	.02			.01	
	20.40	21.80	1.40							.05					
	41.20	42.10	0.90							.12					
	48.20	49.70	1.50							.06					
2885	57.65	57.71	0.06							1.74	.01			.01	
	67.10	68.60	1.50							.01	.03			.01	
	69.70	70.00	0.30							.59					
	86.30	87.40	1.10							.09	.55			.02	
2886	87.03	87.09	0.06							.41	2.45			.02	

Sample	From (m)	To (m)	Length (m)	SiO2 %	Al2O3 %	CaO %	MgO %	Na2O %	K2O %	Fe2O3 %	MnO2 %	TiO2 %	BA %	Cu PPM	Zn PPM	Pb PPM	Ag PPM	Au PPB	As PPM	Sb PPB	Sr %	Zr %	TOTAL %	Pb %	BA PPM	
2882	1.52	4.52	3.00	76.60		1.44	3.76	1.13				.22		8	102			8								1790
2883	42.00	45.00	3.00	77.90		.61	2.11	.64				.15		56	20			2								1600
2887	80.20	81.60	1.40	70.20		3.89	3.51	.64				.22		6	29											1860

MINNOVA INC.
DRILL HOLE RECORD

HOLE NUMBER: SRM11

IMPERIAL UNITS:

METRIC UNITS: X

PROJECT NAME: SIC
PROJECT NUMBER: 305
CLAIM NUMBER: BLUEBELL (51-6)
LOCATION: NTS 92B/13

PLOTTING COORDS GRID: MTS
NORTH: 805.00S
EAST: 1056.00E
ELEV: 600.00

ALTERNATE COORDS GRID:
NORTH: 0+ 0
EAST: 0+ 0
ELEV: 0.00

COLLAR DIP: x ' "
LENGTH OF THE HOLE: 153.00m
START DEPTH: 0.00m
FINAL DEPTH: 153.00m

COLLAR GRID AZIMUTH: 197x 0' 0"

COLLAR ASTRNOMIC AZIMUTH: 197x 0' 0"

DATE STARTED: 0, 0
DATE COMPLETED: 0, 0
DATE LOGGED: 0, 0

COLLAR SURVEY: NO
MULTISHOT SURVEY: NO
RQD LOG: NO

PULSE EM SURVEY: NO
PLUGGED: NO
HOLE SIZE: BQ

CONTRACTOR:
CASING:
CORE STORAGE: FULTON FARM

PURPOSE: TO TEST COINCIDENT IP, VLF AND VECTOR PULSE ANOMALIES.

DIRECTIONAL DATA:

Depth (m)	Astronomic Azimuth	Dip degrees	Type of Test	FLAG	Comments	Depth (m)	Astronomic Azimuth	Dip degrees	Type of Test	FLAG	Comments
-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-

MINNOVA INC.
DRILL HOLE RECORD

HOLE NUMBER: SRM11

DATE: 29-February-1988

FROM TO	ROCK TYPE	TEXTURE AND STRUCTURE	ANGLE: TO CA:	ALTERATION	MINERALISATION	REMARKS
0.00 TO 1.80	OVERBURDEN .OB/					
1.80 TO 29.00	FELSIC TUFF .FT,FP/				920.3-24.4L .py stringers/	
29.00 TO 64.00	QFP FLOW? .FF,QFP/			.W ser/	.tr-2% py/	
64.00 TO 111.15	FELSIC TUFF .FT/			.sil/	964.0-79.4L .py stringers/ 979.4-79.5L .10-30% py/ 980.15-80.55L .5-30% py/ 980.55-111.15L .1-2% py/	
111.15 TO 152.15	FELSIC TUFF, LAPILLI TUFF .FT,LT/				.1-3% py/	
152.15 TO 153.00	DIORITE .DIOR/					

HOLE NUMBER: SRM11

DRILL HOLE RECORD

LOGGED BY: D. LEFEBURE

PAGE: 2

Sample	From (m)	To (m)	Length (m)	ASSAYS					GEOCHEMICAL					COMMENTS	
				CU PPM	ZN PPM	AG PPM	AU PPB	BA PPM	CU %	ZN %	AG G/T	AU G/T	PB %		
2900	77.54	77.61	0.07				180			3.20	.02	6.5		.01	
2897	79.40	79.52	0.12				50			.01	.01	.5		.01	
2899	80.15	80.55	0.40				20			.02	.01	.5		.01	

Sample	From (m)	To (m)	Length (m)	SiO2 %	Al2O3 %	CaO %	MgO %	Na2O %	K2O %	Fe2O3 %	MnO2 %	TiO2 %	BA %	Cu PPM	Zn PPM	Pb PPM	Ag PPM	Au PPB	As PPM	Sb PPB	Sr %	Zr %	TOTAL %	Pb %	BA PPM	
2889	13.00	15.80	2.80	69.10		1.01	1.71	1.47				.25		17	65											1620
2890	38.10	40.90	2.80	75.70		3.22	2.42	.54				.15		6	29											3030
2891	43.30	44.20	0.90											2600	72			34								
2892	44.20	45.70	1.50											460	57			8								
2893	45.70	47.00	1.30											820	55			8								
2894	47.00	48.30	1.30											1230	59			6								
2895	48.30	49.70	1.40											1080	74			8								
2896	73.90	76.50	2.60											550	17			8								
2898	79.52	80.15	0.63															4								2190
2901	108.60	110.30	1.70	70.00		.33	3.13	.14				.22		58	29											1780
2902	142.20	145.10	2.90	66.50		.93	6.37	.81				.18		141	36											740
2903	152.40	157.60	5.20	49.30	13.80	9.93	5.55	1.78	.07	14.4	.21	2.47						6								40

MINNOVA INC.
 DRILL HOLE RECORD

HOLE NUMBER: SRM12

IMPERIAL UNITS:

METRIC UNITS: X

PROJECT NAME: SIC
 PROJECT NUMBER: 304
 CLAIM NUMBER:
 LOCATION: NTS 92B/13

PLOTTING COORDS GRID: MTS
 NORTH: 701.00S
 EAST: 488.00E
 ELEV: 575.00

ALTERNATE COORDS GRID:
 NORTH: 0+ 0
 EAST: 0+ 0
 ELEV: 0.00

COLLAR DIP: x ' "
 LENGTH OF THE HOLE: 306.30m
 START DEPTH: 0.00m
 FINAL DEPTH: 306.30m

COLLAR GRID AZIMUTH: x ' "

COLLAR ASTRNDMIC AZIMUTH: x ' "

DATE STARTED: 0, 0
 DATE COMPLETED: 0, 0
 DATE LOGGED: 0, 0

COLLAR SURVEY: NO
 MULTISHOT SURVEY: NO
 RQD LOG: NO

PULSE EM SURVEY: NO
 PLUGGED: NO
 HOLE SIZE: BQ

CONTRACTOR:
 CASING:
 CORE STORAGE: FULTON FARM

PURPOSE: RELOG

DIRECTIONAL DATA:

Depth (m)	Astronomic Azimuth	Dip degrees	Type of Test	FLAG	Comments	Depth (m)	Astronomic Azimuth	Dip degrees	Type of Test	FLAG	Comments
-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-

HOLE NUMBER: SRM12

MINNOVA INC.
DRILL HOLE RECORD

DATE: 29-February-1988

FROM TO	ROCK TYPE	TEXTURE AND STRUCTURE	ANGLE: TO CA:	ALTERATION	MINERALISATION	REMARKS
0.00 TO 6.10	OVERBURDEN .OB/					
6.10 TO 182.00	FELSIC TUFF .FT/			.W-M chl, ser/		
182.00 TO 184.70	.FAULT/					
184.70 TO 306.30	ANDESITE FLOW? .AndF,FP/					

HOLE NUMBER: SRM12

DRILL HOLE RECORD

LOGGED BY: M. BURSON

PAGE: 2

HOLE NUMBER: SRM12

ASSAY SHEET

DATE: 29-February-1988

Sample	From (m)	To (m)	Length (m)	ASSAYS					GEOCHEMICAL					COMMENTS
				CU PPM	ZN PPM	AG PPM	AU PPB	BA PPM	CU %	ZN %	AG G/T	AU G/T	PB %	

HOLE NUMBER: SRM12

ASSAY SHEET

PAGE: 3

Sample	From (m)	To (m)	Length (m)	SiO2 %	Al2O3 %	CaO %	MgO %	Na2O %	K2O %	Fe2O3 %	MnO2 %	TiO2 %	BA %	Cu PPM	Zn PPM	Pb PPM	Ag PPM	Au PPB	As PPM	Sb PPB	Sr %	Zr %	TOTAL %	Pb %	Ba PPM	
428	6.09	9.14	3.05	69.10	14.70	1.83	2.21	3.33	2.30	2.36	.068	.20		11	64											1390
429	36.58	39.62	3.04	73.60	13.00	.84	3.08	1.36	2.96	2.76	.072	.17		36	350											1730
430	67.07	70.12	3.05	62.70	14.70	1.06	6.70	2.37	1.25	6.70	.315	.42		240	1170											1280
431	100.60	103.65	3.05	58.60	16.80	1.01	7.79	.12	2.82	7.32	.287	.65		58	340											1290
432	128.04	131.09	3.05	73.40	11.9	1.18	1.53	1.55	2.63	3.10	.022	.15		211	67											3830
433	160.06	163.10	3.04	71.90	12.70	.77	3.08	.98	2.53	6.40	.066	.23		290	64											1500
434	189.02	192.07	3.05	52.20	17.00	3.54	7.39	5.39	.78	9.12	.207	.68		61	148											440
435	219.51	222.56	3.05	53.50	16.80	5.65	5.62	5.49	.56	9.27	.148	.68		93	60											280
436	250.00	253.04	3.04	55.60	16.30	4.45	5.60	5.74	.78	8.39	.156	.70		78	67											300
437	280.48	283.53	3.05	55.20	16.60	3.22	6.88	5.61	.82	8.80	.186	.65		80	106											270
438	303.35	306.40	3.05	51.60	16.10	7.95	5.24	4.68	.73	8.17	.194	.70		209	75											370

HOLE NUMBER: SRM13

MINNOVA INC.
DRILL HOLE RECORD

IMPERIAL UNITS: METRIC UNITS: X

=====

PROJECT NAME: SIC	PLOTTING COORDS GRID: MTS	ALTERNATE COORDS GRID:	COLLAR DIP: -52x 0' 0"
PROJECT NUMBER: 305	NORTH: 375.00S	NORTH: 0+ 0	LENGTH OF THE HOLE: 196.60m
CLAIM NUMBER: VICTORIA (73-6)	EAST: 1786.00E	EAST: 0+ 0	START DEPTH: 0.00m
LOCATION: NTS 92B/13	ELEV: 695.00	ELEV: 0.00	FINAL DEPTH: 196.60m

COLLAR GRID AZIMUTH: 198x 0' 0" COLLAR ASTRNOMIC AZIMUTH: 198x 0' 0"

DATE STARTED: 0, 0 COLLAR SURVEY: NO PULSE EM SURVEY: NO CONTRACTOR:
DATE COMPLETED: 0, 0 MULTISHOT SURVEY: NO PLUGGED: NO CASING:
DATE LOGGED: 0, 0 RQD LOG: NO HOLE SIZE: 80 CORE STORAGE: FULTON FARM

=====

PURPOSE: TO TEST THE C ZONE EM ANOMALY IN A ZONE OF LOW IP RESISTIVITY.

=====

DIRECTIONAL DATA:

Depth (m)	Astronomic Azimuth	Dip degrees	Type of Test	FLAG	Comments	Depth (m)	Astronomic Azimuth	Dip degrees	Type of Test	FLAG	Comments
-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-

FROM TO	ROCK TYPE	TEXTURE AND STRUCTURE	ANGLE: TO CA:	ALTERATION	MINERALISATION	REMARKS
0.00 TO 10.10	OVERBURDEN .OB/					
10.10 TO 94.40	DIORITE .DIOR/					
94.40 TO 114.80	FELSIC TUFF, LAPILLI TUFF .FT,LT/					
114.80 TO 154.50	DIORITE .DIOR/					
154.50 TO 156.10	FELSIC LAPILLI TUFF .FLT/					
156.10 TO 159.40	.FAULT/					
159.40 TO 163.70	FELSIC TUFF .FT/					
163.70 TO 172.50	DIORITE .DIOR/					
172.50 TO 196.60	FELSIC TUFF, LAPILLI TUFF .FT,LT/		.M chl/		9173.25-173.28L .35% py/	

Sample	From (m)	To (m)	Length (m)	ASSAYS					GEOCHEMICAL					COMMENTS
				CU PPM	ZN PPM	AG PPM	AU PPB	BA PPM	CU %	ZN %	AG G/T	AU G/T	PB %	
2906	39.00	40.20	1.20	760			2							
2907	40.20	40.80	0.60	1350			2							
2908	40.80	42.30	1.50	11400			484							
2909	42.30	42.40	0.10	40000			540							
2910	42.40	44.40	2.00	580										

Sample	From (m)	To (m)	Length (m)	SiO2 %	Al2O3 %	CaO %	MgO %	Na2O %	K2O %	Fe2O3 %	MnO2 %	TiO2 %	Ba %	Cu PPM	Zn PPM	Pb PPM	Ag PPM	Au PPB	As PPM	Sb PPB	Sr %	Zr %	TOTAL %	Pb %	Ba PPM	
2905	15.40	18.60	3.20	49.60		10.4	5.42	1.90				2.74		172	67											200
2911	102.60	105.50	2.90	72.30		1.19	1.89	2.57				.17		29	16											1530
2912	177.60	179.20	1.60	72.10		.27	2.12	.22				.13		109	45											930
2913	193.60	196.60	3.00	76.40		.07	2.06	2.21				.15		10	64											750

MINNOVA INC.
DRILL HOLE RECORD

HOLE NUMBER: SRM14

IMPERIAL UNITS: METRIC UNITS: X

PROJECT NAME: SIC	PLOTTING COORDS GRID: MTS	ALTERNATE COORDS GRID:	COLLAR DIP: -55x 0' 0"
PROJECT NUMBER: 305	NORTH: 544.00S	NORTH: 0+ 0	LENGTH OF THE HOLE: 141.70m
CLAIM NUMBER: VICTORIA (73-6)	EAST: 1785.00E	EAST: 0+ 0	START DEPTH: 0.00m
LOCATION: NTS 92B/13	ELEV: 663.00	ELEV: 0.00	FINAL DEPTH: 141.70m
	COLLAR GRID AZIMUTH: 360x 0' 0"	COLLAR ASTRNOMIC AZIMUTH: 360x 0' 0"	

DATE STARTED:	0, 0	COLLAR SURVEY: NO	PULSE EM SURVEY: NO	CONTRACTOR:
DATE COMPLETED:	0, 0	MULTISHOT SURVEY: NO	PLUGGED: NO	CASING:
DATE LOGGED:	0, 0	RQD LOG: NO	HOLE SIZE: BQ	CORE STORAGE: FULTON FARM

PURPOSE: TO TEST THE C ZONE EM ANOMALY IN A BROAD ZONE OF LOW IP RESISTIVITY.

DIRECTIONAL DATA:

Depth (m)	Astronomic Azimuth	Dip degrees	Type of Test	FLAG	Comments	Depth (m)	Astronomic Azimuth	Dip degrees	Type of Test	FLAG	Comments
-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-

HOLE NUMBER: SRM14

MINNOVA INC.
DRILL HOLE RECORD

DATE: 29-February-1988

FROM TO	ROCK TYPE	TEXTURE AND STRUCTURE	ANGLE: TO CA:	ALTERATION	MINERALISATION	REMARKS
0.00 TO 41.50	OVERBURDEN .OB/					
41.50 TO 90.50	FELSIC LAPILLI TUFF .FLT/			.M chl, ser/	.1-10% py/	
90.50 TO 91.50	CHERT, SEMI- MASSIVE SULPHIDES .Cht, SMS/				.60-80% py/	
91.50 TO 105.00	FELSIC TUFF .FT, QP/			.W chl/		
105.00 TO 141.70	DIORITE .DIOR/					

HOLE NUMBER: SRM14

DRILL HOLE RECORD

LOGGED BY: D. LEFEBURE

PAGE: 2

Sample	From (m)	To (m)	Length (m)	ASSAYS					GEOCHEMICAL					COMMENTS	
				CU PPM	ZN PPM	AG PPM	AU PPB	BA PPM	CU %	ZN %	AG G/T	AU G/T	PB %		
2916	88.40	90.60	2.20				15			.01	.01	.5		.01	
2917	90.60	91.50	0.90				60			.01	.01	1.0		.01	

Sample	From (m)	To (m)	Length (m)	SiO2 %	Al2O3 %	CaO %	MgO %	Na2O %	K2O %	Fe2O3 %	MnO2 %	TiO2 %	BA %	Cu PPM	Zn PPM	Pb PPM	Ag PPM	Au PPB	As PPM	Sb PPB	Sr %	Zr %	TOTAL %	Pb %	BA PPM	
2914	40.20	60.40	20.20	69.70		.37	3.00	.17				.18		8	31											1220
2915	79.30	83.30	4.00	76.20		.46	3.80	.09				.18		24	59											800
2918	94.70	99.60	4.90	71.70		1.41	1.35	3.56				.15		3	16											820
2919	134.40	137.50	3.10	45.80	13.60	8.45	3.55	2.24	.32	14.4	.19	2.87														130

MINNOVA INC.
DRILL HOLE RECORD

HOLE NUMBER: SRM15

IMPERIAL UNITS: METRIC UNITS: X

PROJECT NAME: SIC	PLOTTING COORDS	GRID: MTS	ALTERNATE COORDS	GRID:	COLLAR DIP: x ' "
PROJECT NUMBER: 305		NORTH: 180.00N		NORTH: 0+ 0	LENGTH OF THE HOLE: 197.50m
CLAIM NUMBER:		EAST: 209.00W		EAST: 0+ 0	START DEPTH: 0.00m
LOCATION: NTS 92B/13		ELEV:		ELEV: 0.00	FINAL DEPTH: 197.50m

COLLAR GRID AZIMUTH: 205x 0' 0"

COLLAR ASTRONOMIC AZIMUTH: 205x 0' 0"

DATE STARTED: 0, 0	COLLAR SURVEY: NO	PULSE EM SURVEY: NO	CONTRACTOR:
DATE COMPLETED: 0, 0	MULTISHOT SURVEY: NO	PLUGGED: NO	CASING:
DATE LOGGED: 0, 0	RQD LOG: NO	HOLE SIZE: BQ	CORE STORAGE: FULTON FARM

PURPOSE: RELOG SEREM DRILLING.

DIRECTIONAL DATA:

Depth (m)	Astronomic Azimuth	Dip degrees	Type of Test	FLAG	Comments	Depth (m)	Astronomic Azimuth	Dip degrees	Type of Test	FLAG	Comments
-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-

HOLE NUMBER: SRM15

DRILL HOLE RECORD

LOGGED BY: A. DAVIDSON

PAGE: 1

HOLE NUMBER: SRM15

MINNOVA INC.
DRILL HOLE RECORD

DATE: 29-February-1988

FROM TO	ROCK TYPE	TEXTURE AND STRUCTURE	ANGLE TO CA	ALTERATION	MINERALISATION	REMARKS
0.00 TO 7.00	OVERBURDEN .OB/					
7.00 TO 197.50	FELSIC TUFF .FT,OP/		923.8-38.4L	.S chl/	923.8-38.4L .5-10% py/ 974.7-176.8L .py stringers/	

HOLE NUMBER: SRM15

DRILL HOLE RECORD

LOGGED BY: A. DAVIDSON

PAGE: 2

HOLE NUMBER: SRM15

ASSAY SHEET

DATE: 29-February-1988

Sample	From (m)	To (m)	Length (m)	ASSAYS					GEOCHEMICAL					COMMENTS
				CU PPM	ZN PPM	AG PPM	AU PPB	BA PPM	CU %	ZN %	AG G/T	AU G/T	PB %	

HOLE NUMBER: SRM15

ASSAY SHEET

PAGE: 3

Sample	From (m)	To (m)	Length (m)	SiO2 %	AL2O3 %	CAU %	MGO %	NA2O %	K2O %	FE2O3 %	MNO2 %	TiO2 %	BA %	CU PPM	ZN PPM	PB PPM	AG PPM	AU PPB	AS PPM	SB PPB	SR %	ZR %	TOTAL %	PB %	BA PPM		
17	31.40	34.30	2.90	30.20	20.00	.804	11.7	.088	2.00	22.70	.423	1.55		650	181												1170
18	46.60	49.70	3.10	69.30	14.50	.190	2.77	1.86	2.66	3.72	.050	.233		430	25												1430
19	62.50	65.50	3.00	70.60	13.80	.152	2.09	.187	3.76	4.86	.046	.183		570	28												2050
20	78.60	81.70	3.10	70.40	12.10	.264	1.14	.632	3.13	6.94	.042	.166		122	25												2300
21	93.90	96.90	3.00	71.00	11.70	.225	1.40	.173	3.25	6.94	.032	.183		730	23												2030
22	107.90	111.00	3.10	66.70	13.80	.309	2.78	.175	3.22	6.58	.071	.200		350	37												1840
23	121.30	124.40	3.10	66.70	13.20	.374	3.68	.186	2.82	8.11	.072	.200		480	42												1520
24	138.10	141.10	3.00	68.40	13.20	.720	2.50	.266	2.84	5.90	.061	.183		280	57												1640
25	154.80	157.90	3.10	68.20	13.40	.172	2.35	.285	2.96	6.75	.042	.183		1290	105												1780
26	170.10	173.10	3.00	70.60	12.80	.383	2.19	.369	2.72	7.01	.045	.166		450	102												1650
27	185.30	188.40	3.10	72.10	12.60	.373	1.06	2.75	2.05	4.23	.038	.183		880	87												1100

MINNOVA INC.
DRILL HOLE RECORD

HOLE NUMBER: SRM16

IMPERIAL UNITS: METRIC UNITS: X

PROJECT NAME: SIC
PROJECT NUMBER:
CLAIM NUMBER:
LOCATION: NTS 928/13

PLOTTING COORDS GRID: MTS
NORTH:
EAST:
ELEV:

ALTERNATE COORDS GRID:
NORTH: 0+ 0
EAST: 0+ 0
ELEV: 0.00

COLLAR DIP: x ' "
LENGTH OF THE HOLE: 132.90m
START DEPTH: 0.00m
FINAL DEPTH: 132.90m

COLLAR GRID AZIMUTH: x ' "

COLLAR ASTRONOMIC AZIMUTH: x ' "

DATE STARTED: 0, 0 COLLAR SURVEY: NO
DATE COMPLETED: 0, 0 MULTISHOT SURVEY: NO
DATE LOGGED: 0, 0 RQD LOG: NO

PULSE EM SURVEY: NO
PLUGGED: NO
HOLE SIZE:

CONTRACTOR:
CASING:
CORE STORAGE: FULTON FARM

PURPOSE:

DIRECTIONAL DATA:

Depth (m)	Astronomic Azimuth	Dip degrees	Type of test	FLAG	Comments	Depth (m)	Astronomic Azimuth	Dip degrees	Type of Test	FLAG	Comments
-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-

MINNOVA INC.
DRILL HOLE RECORD

HOLE NUMBER: SRM16

DATE: 29-February-1988

FROM TO	ROCK TYPE	TEXTURE AND STRUCTURE	ANGLE TO CA	ALTERATION	MINERALISATION	REMARKS
0.00 TO 8.80	OVERBURDEN .OB/					
8.80 TO 21.60	ANDESITE FLOW .AndF/			.S chl/		
21.60 TO 23.80	FELSIC TUFF .FT/					
23.80 TO 70.40	ANDESITE FLOW, TUFFS .AndF,T/					
70.40 TO 72.50	CHERTY EXHALITE .Cht,Exh/				.pyritic/	
72.50 TO 99.40	FELSIC LAPILLI TUFF .FLT/			979.3-86.9L .M chl/ 986.9-96.0L .S chl/		
99.40 TO 132.90	GABBRO .Gb/					

HOLE NUMBER: SRM16

DRILL HOLE RECORD

LOGGED BY: I. PIRIE

PAGE: 2

Sample	From (m)	To (m)	Length (m)	ASSAYS					GEOCHEMICAL					COMMENTS
				CU PPM	ZN PPM	AG PPM	AU PPB	BA PPM	CU %	ZN %	AG G/T	AU G/T	PB %	

Sample	From (m)	To (m)	Length (m)	SI02 %	AL2O3 %	CAO %	MGO %	NA2O %	K2O %	FE2O3 %	MNO2 %	TIO2 %	BA %	CU PPM	ZN PPM	PB PPM	AG PPM	AU PPB	AS PPM	SB PPB	SR %	ZR %	TOTAL %	PB %	BA PPM	
11	11.60	14.60	3.00	29.30	16.40	.54	16.10	.003	.042	22.9	.549	1.37		890	340											30
12	21.60	23.80	2.20	61.80	14.50	1.35	6.25	.179	2.55	7.86	.222	.984		26	120											1200
13	43.60	46.60	3.00	39.10	17.40	.91	10.80	.066	1.81	17.30	.304	1.45		30	143											980
14	59.10	62.20	3.10	44.70	18.10	.89	9.15	.094	2.37	16.70	.280	1.53		230	115											1170
15	77.40	80.50	3.10	66.30	13.00	.30	3.20	.088	2.80	9.38	.087	.333		1800	70											1480
16	89.90	93.00	3.10	66.10	12.10	.93	3.88	.528	1.45	11.60	.187	.350		17	150											1010

MINNOVA INC.
DRILL HOLE RECORD

HOLE NUMBER: SRM17

IMPERIAL UNITS: METRIC UNITS: X

PROJECT NAME: SIC	PLOTTING COORDS GRID: MTS	ALTERNATE COORDS GRID:	COLLAR DIP: x ' "
PROJECT NUMBER:	NORTH:	NORTH: 0+ 0	LENGTH OF THE HOLE: 107.20m
CLAIM NUMBER:	EAST:	EAST: 0+ 0	START DEPTH: 0.00m
LOCATION: NTS 92B/13	ELEV:	ELEV: 0.00	FINAL DEPTH: 107.20m
COLLAR GRID AZIMUTH: x ' "		COLLAR ASTRNOMIC AZIMUTH: x ' "	

DATE STARTED: 0, 0	COLLAR SURVEY: NO	PULSE EM SURVEY: NO	CONTRACTOR:
DATE COMPLETED: 0, 0	MULTISHOT SURVEY: NO	PLUGGED: NO	CASING:
DATE LOGGED: 0, 0	RQD LOG: NO	HOLE SIZE:	CORE STORAGE:

PURPOSE:

DIRECTIONAL DATA:

Depth (m)	Astronomic Azimuth	Dip degrees	Type of Test	FLAG	Comments	Depth (m)	Astronomic Azimuth	Dip degrees	Type of Test	FLAG	Comments
-	-	-	-	-		-	-	-	-	-	
-	-	-	-	-		-	-	-	-	-	
-	-	-	-	-		-	-	-	-	-	
-	-	-	-	-		-	-	-	-	-	
-	-	-	-	-		-	-	-	-	-	
-	-	-	-	-		-	-	-	-	-	
-	-	-	-	-		-	-	-	-	-	
-	-	-	-	-		-	-	-	-	-	
-	-	-	-	-		-	-	-	-	-	
-	-	-	-	-		-	-	-	-	-	
-	-	-	-	-		-	-	-	-	-	
-	-	-	-	-		-	-	-	-	-	
-	-	-	-	-		-	-	-	-	-	
-	-	-	-	-		-	-	-	-	-	
-	-	-	-	-		-	-	-	-	-	
-	-	-	-	-		-	-	-	-	-	
-	-	-	-	-		-	-	-	-	-	
-	-	-	-	-		-	-	-	-	-	
-	-	-	-	-		-	-	-	-	-	
-	-	-	-	-		-	-	-	-	-	
-	-	-	-	-		-	-	-	-	-	
-	-	-	-	-		-	-	-	-	-	
-	-	-	-	-		-	-	-	-	-	
-	-	-	-	-		-	-	-	-	-	

HOLE NUMBER: SRM17

DRILL HOLE RECORD

LOGGED BY: I. PIRIE

PAGE: 1

MINNOVA INC.
DRILL HOLE RECORD

HOLE NUMBER: SRM17

DATE: 29-February-1988

FROM TO	ROCK TYPE	TEXTURE AND STRUCTURE	ANGLE: TO CA:	ALTERATION	MINERALISATION	REMARKS
0.00 TO 9.10	OVERBURDEN .OB/					
9.10 TO 34.10	ANDESITE FLOW .AndF/			.M ser, chl/		
34.10 TO 40.80	CHERT, FELSIC TUFF .Cht, FT/			.M ser, chl/	.5% py/	
40.80 TO 45.00	ANDESITE FLOW .AndF/					
45.00 TO 45.10	PYRITIC TUFF .PyT/				.20-25% py/	
45.10 TO 107.20	FELSIC TUFF .FT,QP/					

HOLE NUMBER: SRM17

DRILL HOLE RECORD

LOGGED BY: I. PIRIE

PAGE: 2

HOLE NUMBER: SRM17

ASSAY SHEET

DATE: 29-February-1988

Sample	From (m)	To (m)	Length (m)	ASSAYS					GEOCHEMICAL					COMMENTS
				CU PPM	ZN PPM	AG PPM	AU PPB	BA PPM	CU %	ZN %	AG G/T	AU G/T	PB %	

HOLE NUMBER: SRM17

ASSAY SHEET

PAGE: 3

Sample	From (m)	To (m)	Length (m)	SiO2 %	AL2O3 %	CaO %	MgO %	Na2O %	K2O %	FE2O3 %	MNO2 %	TiO2 %	BA %	CU PPM	ZN PPM	PB PPM	AG PPM	AU PPB	AS PPM	SB PPB	SR %	ZR %	TOTAL %	PB %	BA PPM	
28	12.80	15.90	3.10	45.30	17.80	.672	10.6	.091	2.20	14.4	.444	.967		180	240											1000
29	31.10	34.10	3.00	56.00	13.40	.969	5.87	.134	1.19	12.60	.277	.850		58	153											780
30	45.10	48.20	3.10	71.40	13.00	.128	1.48	.124	3.81	5.43	.037	.183		600	36											2000
31	52.10	55.20	3.10	65.90	15.30	.686	3.58	1.25	3.02	5.65	.132	.233		176	72											1750
32	66.10	69.20	3.10	66.50	15.70	.211	3.60	.696	3.74	4.19	.121	.216		57	58											1460
33	83.20	86.20	3.00	68.00	12.80	.205	3.18	.117	2.99	6.21	.086	.166		1330	46											1600
34	103.90	107.00	3.10	71.20	13.80	.311	2.85	.30	3.10	5.29	.042	.166		53	33											1560

MINNOVA INC.
DRILL HOLE RECORD

HOLE NUMBER: SRM18

IMPERIAL UNITS:

METRIC UNITS: X

PROJECT NAME: SIC
PROJECT NUMBER:
CLAIM NUMBER:
LOCATION:

PLOTTING COORDS GRID: MTS
NORTH:
EAST:
ELEV:

ALTERNATE COORDS GRID:
NORTH: 0+ 0
EAST: 0+ 0
ELEV: 0.00

COLLAR DIP: x ' "
LENGTH OF THE HOLE: 153.90m
START DEPTH: 0.00m
FINAL DEPTH: 153.90m

COLLAR GRID AZIMUTH: x ' "

COLLAR ASTRONOMIC AZIMUTH: x ' "

DATE STARTED: 0, 0
DATE COMPLETED: 0, 0
DATE LOGGED: 0, 0

COLLAR SURVEY: NO
MULTISHOT SURVEY: NO
R&D LOG: NO

PULSE EM SURVEY: NO
PLUGGED: NO
HOLE SIZE:

CONTRACTOR:
CASING:
CORE STORAGE:

PURPOSE:

DIRECTIONAL DATA:

Depth (m)	Astronomic Azimuth	Dip degrees	Type of Test	FLAG	Comments	Depth (m)	Astronomic Azimuth	Dip degrees	Type of Test	FLAG	Comments
-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-

HOLE NUMBER: SRM18

MINNOVA INC.
DRILL HOLE RECORD

DATE: 29-February-1988

FROM TO	ROCK TYPE	TEXTURE AND STRUCTURE	(ANGLE) TO CA	ALTERATION	MINERALISATION	REMARKS
0.00 TO 16.20	OVERBURDEN .OB/					
16.20 TO 34.10	QFP FLOW? .FF,QFP/					
34.10 TO 67.10	FELSIC TUFF .FT/			.W chl/		
67.10 TO 88.10	ANDESITE FLOW .AndF/			.S chl - talc/		
88.10 TO 89.00	EXHALITE .EXH/				.pyritic/	
89.00 TO 114.30	FELSIC TUFF .FT,QP/				9113.4-114.3L .5-10% py/	
114.30 TO 125.00	.FAULT/					
125.00 TO 144.50	FELSIC TUFF .FT/					
144.50 TO 147.50	.FAULT/					
147.50 TO 153.90	FELSIC TUFF .FT/					

HOLE NUMBER: SRM18

DRILL HOLE RECORD

LOGGED BY: A. DAVIDSON

PAGE: 2

HOLE NUMBER: SRM18

ASSAY SHEET

DATE: 29-February-1988

Sample	From (m)	To (m)	Length (m)	ASSAYS					GEOCHEMICAL					COMMENTS
				CU PPM	ZN PPM	AG PPM	AU PPB	BA PPM	CU %	ZN %	AG G/T	AU G/T	PB %	

HOLE NUMBER: SRM18

ASSAY SHEET

Sample	From (m)	To (m)	Length (m)	SiO2 %	Al2O3 %	CaO %	MgO %	Na2O %	K2O %	Fe2O3 %	MnO2 %	TiO2 %	BA %	Cu PPM	Zn PPM	Pb PPM	Ag PPM	Au PPB	As PPM	Sb PPB	Sr %	Zr %	TOTAL %	Pb %	BA PPM	
1	16.20	19.20	3.00	74.90	12.50	.098	.560	.187	3.78	1.64	.015	.166		17	9											1340
2	30.50	33.50	3.00	68.40	14.70	.154	1.71	.196	4.12	4.46	.032	.216		153	19											2400
3	45.70	48.80	3.10	67.20	14.20	.185	3.03	.175	3.34	6.38	.076	.200		1080	45											2310
4	60.40	63.40	3.00	70.20	13.40	.175	2.57	2.51	1.90	4.19	.083	.166		110	43											1240
5	76.20	79.30	3.10	71.20	13.00	.126	1.72	1.97	2.65	3.79	.055	.166		920	39											1470
6	91.10	94.20	3.10	73.20	12.50	.098	1.41	.144	3.53	5.33	.041	.166		550	59											1880
7	106.10	109.10	3.00	69.30	12.50	.365	2.02	1.02	2.83	5.49	.063	.183		780	56											1480
8	121.90	125.00	3.10	70.40	12.30	.228	2.19	.009	3.08	6.11	.067	.166		590	73											1710
9	136.90	148.50	11.60	70.80	13.00	.164	2.32	.181	3.32	5.38	.081	.166		600	62											1840
10	150.90	153.90	3.00	71.90	12.10	.466	1.67	.253	2.93	5.72	.052	.150		740	56											1730

Not checked - missing

MINNOVA INC.
DRILL HOLE RECORD

IMPERIAL UNITS: METRIC UNITS: X

HOLE NUMBER: SRM20

PROJECT NAME: SIC	PLOTTING COORDS GRID: MTS	ALTERNATE COORDS GRID:	COLLAR DIP: -60x 0' 0"
PROJECT NUMBER: 305	NORTH: 810.00N	NORTH: 0+ 0	LENGTH OF THE HOLE: 48.80m
CLAIM NUMBER: FORTUNA (L42)	EAST: 62.00E	EAST: 0+ 0	START DEPTH: 0.00m
LOCATION: NTS 92B/13	ELEV:	ELEV: 0.00	FINAL DEPTH: 48.80m

COLLAR GRID AZIMUTH: 5x 0' 0" COLLAR ASTRNOMIC AZIMUTH: 5x 0' 0"

DATE STARTED: 0, 0	COLLAR SURVEY: NO	PULSE EM SURVEY: NO	CONTRACTOR:
DATE COMPLETED: 0, 0	MULTISHOT SURVEY: NO	PLUGGED: NO	CASING:
DATE LOGGED: 0, 0	RQD LOG: NO	HOLE SIZE:	CORE STORAGE: FULTON FARM

PURPOSE: TO TEST THE NORTHEAST COPPER HORIZON NEAR THE FORTUNA ADIT.

DIRECTIONAL DATA:

Depth (m)	Astronomic Azimuth	Dip degrees	Type of Test	FLAG	Comments	Depth (m)	Astronomic Azimuth	Dip degrees	Type of Test	FLAG	Comments
48.80	5x 0'	-59x 0'	TRD-PARI			-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-

HOLE NUMBER: SRM20

MINNOVA INC.
DRILL HOLE RECORD

DATE: 29-February-1988

FROM	ROCK		ANGLE				REMARKS
TO	TYPE	TEXTURE AND STRUCTURE	TO CA	ALTERATION	MINERALISATION		

HOLE NUMBER: SRM20

DRILL HOLE RECORD

LOGGED BY:

PAGE: 2

Sample	From (m)	To (m)	Length (m)	ASSAYS					GEOCHEMICAL					COMMENTS
				CU PPM	ZN PPM	AG PPM	AU PPB	BA PPM	CU %	ZN %	AG G/T	AU G/T	PB %	

Sample	From (m)	To (m)	Length (m)	SI02 %	AL2O3 %	CAO %	MGO %	NA2O %	K2O %	FE2O3 %	MNO2 %	TIO2 %	BA %	CU PPM	ZN PPM	PB PPM	AG PPM	AU PPB	AS PPM	SB PPB	SR %	ZR %	TOTAL %	PB %	BA PPM
--------	-------------	-----------	---------------	-----------	------------	----------	----------	-----------	----------	------------	-----------	-----------	---------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	---------	---------	------------	---------	-----------

HOLE NUMBER: SRM21

MINNOVA INC.
DRILL HOLE RECORD

IMPERIAL UNITS: METRIC UNITS: X

PROJECT NAME: SIC
PROJECT NUMBER: 305
CLAIM NUMBER: FORTUNA (L45)
LOCATION: NTS 92B/13

PLOTTING COORDS GRID: MTS
NORTH: 810.00N
EAST: 5903.00E
ELEV:

ALTERNATE COORDS GRID:
NORTH: 0+ 0
EAST: 0+ 0
ELEV: 0.00

COLLAR DIP: -65x 0' 0"
LENGTH OF THE HOLE: 162.80m
START DEPTH: 0.00m
FINAL DEPTH: 162.80m

COLLAR GRID AZIMUTH: 4x 0' 0"

COLLAR ASTRNOMIC AZIMUTH: 4x 0' 0"

DATE STARTED: 0, 0
DATE COMPLETED: 0, 0
DATE LOGGED: 0, 0

COLLAR SURVEY: NO
MULTISHOT SURVEY: NO
RQD LOG: NO

PULSE EM SURVEY: NO
PLUGGED: NO
HOLE SIZE: NO

CONTRACTOR:
CASING:
CORE STORAGE: FULTON FARM

PURPOSE: TO TEST THE NORTHEAST COPPER ZONE NEAR THE FORTUNA ADIT.

DIRECTIONAL DATA:

Depth (m)	Astronomic Azimuth	Dip degrees	Type of Test	FLAG	Comments	Depth (m)	Astronomic Azimuth	Dip degrees	Type of Test	FLAG	Comments
162.80	14x 0'	-60x 0'	TRD-PARI			-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-

HOLE NUMBER: SRM21

DRILL HOLE RECORD

LOGGED BY: D. LEFEBURE

MINNOVA INC.
DRILL HOLE RECORD

HOLE NUMBER: SRM21

DATE: 29-February-1988

FROM TO	ROCK TYPE	TEXTURE AND STRUCTURE	ANGLE TO CA	ALTERATION	MINERALISATION	REMARKS
0.00 TO 12.30	OVERBURDEN .OB/					
12.30 TO 46.90	DIORITE .DIOR/					
46.90 TO 50.50	MAFIC TUFF .MaT/		.S chl/			
50.50 TO 50.60	CHERT .Cht/					
50.60 TO 54.70	ANDESITE FLOW .AndF/				.1-2% py/	
54.70 TO 60.70	CHERT .Cht/				.1-2% py/	
60.70 TO 82.80	FELSIC TUFF .FT/		.M chl, ser/		.3-5% py/	
82.80 TO 83.70	CHERT .Cht/					
83.70 TO 90.80	FELSIC TUFF, LAPILLI TUFF .FT,LT/				.1-3% py/	
90.80 TO 92.80	DIORITE .DIOR/					
92.80 TO 122.20	INTER- MEDIATE TUFF .IT/		.S chl/		.1-5% py/	

HOLE NUMBER: SRM21

DRILL HOLE RECORD

LOGGED BY: D. LEFEBURE

PAGE: 2

MINNOVA INC.
DRILL HOLE RECORD

HOLE NUMBER: SRM21

DATE: 29-February-1988

FROM TO	ROCK TYPE	TEXTURE AND STRUCTURE	ANGLE: TO CA:	ALTERATION	MINERALISATION	REMARKS
122.20 TO 127.00	.FAULT/					
127.00 TO 162.80	ANDESITE FLOW .AndF,FP/					

HOLE NUMBER: SRM21

DRILL HOLE RECORD

LOGGED BY: D. LEFEBURE

PAGE: 3

Sample	From (m)	To (m)	Length (m)	ASSAYS					GEOCHEMICAL					COMMENTS	
				CU PPM	ZN PPM	AG PPM	AU PPB	BA PPM	CU %	ZN %	AG G/T	AU G/T	PB %		
	46.94	48.46	1.52							.26	.06				
	87.17	88.70	1.53							.58	.05				
	89.92	89.99	0.07							.18	.04				
	95.55	96.47	0.92							.73	.04				
	107.90	109.73	1.83							.14	.03				
	117.50	117.99	0.49							.25	.04				
	122.22	123.75	1.53							.06	.08				

Sample	From (m)	To (m)	Length (m)	SiO2 %	AL2O3 %	CAO %	MGO %	NA2O %	K2O %	FE2O3 %	MNO2 %	TiO2 %	BA %	CU PPM	ZN PPM	PB PPM	AG PPM	AU PPB	AS PPM	SB PPB	SR %	ZR %	TOTAL %	PB %	BA PPM	
2851	19.80	21.90	2.10	49.20		10.90	6.22	2.43	.15			2.60		139	52											100
2852	50.60	54.10	3.50	45.40		.35	13.30	.03	1.36			1.23		61	290											740
2853	84.40	87.20	2.80	65.00		.20	3.73	.07	3.37			.32		540	89											1600
2855	110.75	114.00	3.25	52.80		2.64	5.85	.43	.93			.65		390	109											400
2856	152.05	154.95	2.90	55.00		4.03	1.74	5.89	1.58			.66		4	68											1180