

84-#541-12737
1185

DIAMOND DRILL REPORT

AR, HN CLAIMS

Kamloops Mining Division
NTS 82M/4W

Owner: Corporation Falconbridge Copper
Operator: Corporation Falconbridge Copper

Author: A. J. Davidson
July 10, 1984

Claims

AR 1	HN 1
AR 2	HN 2
AR 3	HN 3
AR 4	HN 4
AR 5	HN 5
AR 6	HN 6
AR 7	HN 7
AR 8	HN 8
AR 10	HN 9
AR 11 Fr.	HN 10

**GEOLOGICAL BRANCH
ASSESSMENT REPORT**

12,737

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REA GOLD

INTRODUCTION

The Rea Gold property was optioned by Corporation Falconbridge Copper in November 1983 after the discovery of a massive sulphide outcrop. Since then a total of 3067.4 metres in 29 holes have been drilled and two ore lenses totalling 119,795 tonnes and grading 18.2 g/t Au, 141.2 g/t Ag, 0.85% Cu, 4.11% Zn, 3.67% Pb (undiluted : Buffam method - probable + proven) have been outlined.

The following report summarizes the findings to December 31, 1983. It should be emphasized that these findings and conclusions are derived entirely from diamond drilling and that, because of snow, no surface work has been done by CFC thus far.

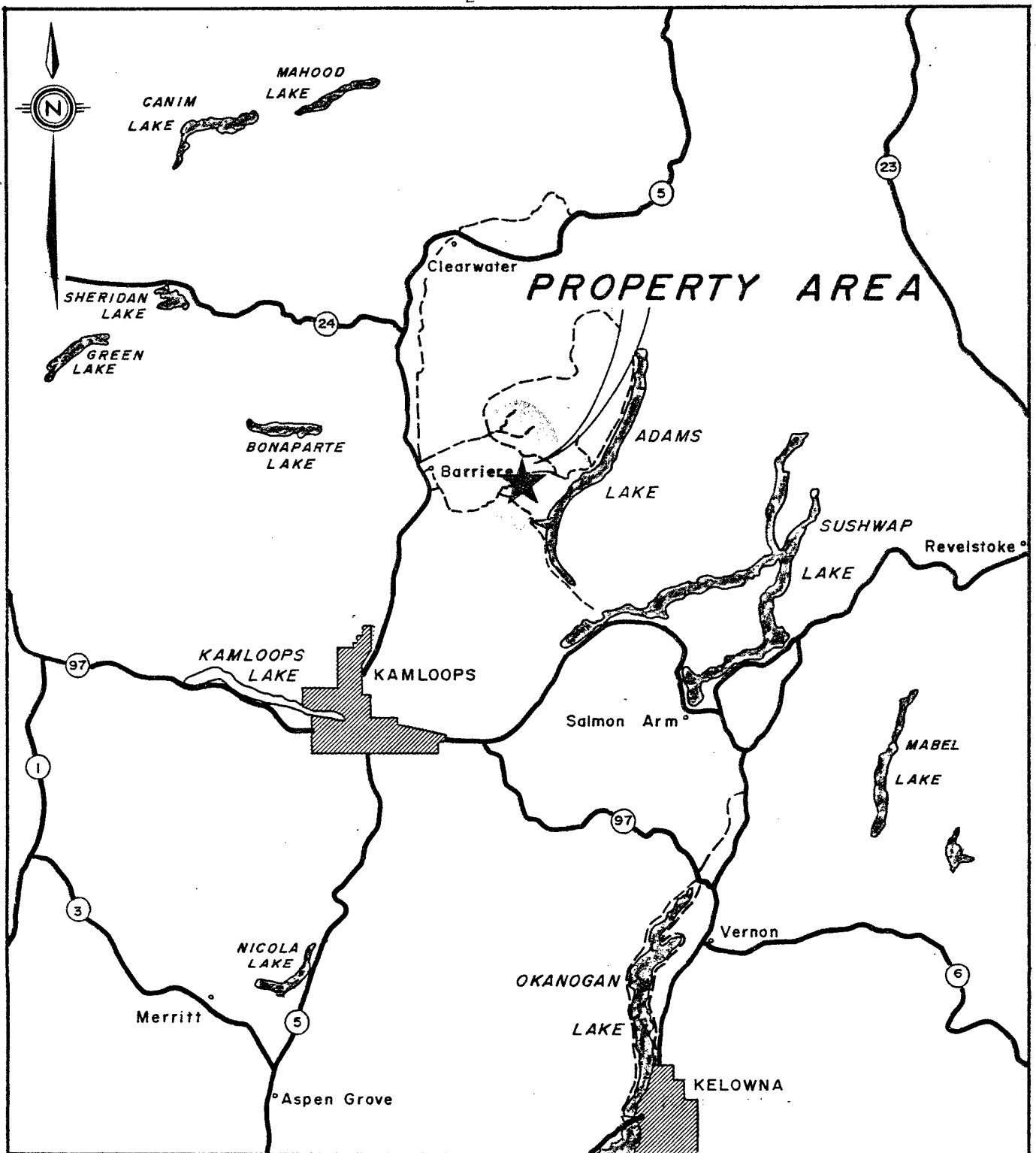
Location & Access

The Rea Gold property is located approximately 40 km east of Barriere, B. C. and about 100 km northeast of Kamloops. The property lies on the northwest slope of Samatosum Mtn., straddles Johnson Creek and includes a part of Johnson Lake (Figure 1).

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

Vegetation

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



SCALE



BAR PROJECT
REA GOLD OPTION
LOCATION MAP

FIGURE

Fauna

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

Topography

Relief in the area is moderate. The elevation at the deposit site is approximately 1400m and the peak of Samatosum Mountain is 1996m. Johnson Lake is at 100m and Adams Lake is at 460m.

History

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

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

Regional Geology

The area is underlain by a complex assemblage of volcanics and sediments of the Upper Paleozoic (Carboniferous) Eagle Bay Formation (Figure 2). These have undergone several phases of deformation involving folding and thrusting and producing a moderate to strong foliation in most of the units. Deformation generally increases eastward towards the margin of the Shuswap Complex. To the north, the Eagle Bay is intruded by granite and quartz monzonite of the Cretaceous Baldy Batholith.

Property

The property consists of the following contiguous claims:

<u>Name</u>	<u>Units</u>	<u>Record No.</u>	<u>Month</u>
AR 1	1	4687	September
AR 2	1	4688	September
AR 3	1	4689	September
AR 4	1	4690	September
AR 5	1	4691	September
AR 6	1	4692	September
AR 7	1	4693	September
AR 8	1	4694	September
AR 10	6	4770	September
AR 11 Fr.	1	4771	September
HN 1	20	4802	October
HN 2	1	4855	October
HN 3	10	4790	October
HN 4	1	4791	October
HN 5	1	4792	October
HN 6	1	4793	October
HN 7	1	4794	October
HN 8	16	4856	October
HN 9	15	4857	October
HN 10	15	4858	October

WORK DONE

Fourteen diamond drill holes were completed to test the massive sulphide showing. The holes are as follows:

<u>Hole</u>	<u>Azimuth</u>	<u>Dip</u>	<u>Claim</u>	<u>Length (m)</u>	<u>Size</u>
RG 1	225 ^o	-50	AR 4	157.3	NQ
RG 2	225 ^o	-50	AR 4	92.0	NQ
RG 3	225 ^o	-50	AR 3	110.6	NQ
RG 4	225 ^o	-50	AR 4	89.7	NQ
RG 5	225 ^o	-50	AR 4	139.0	NQ
RG 6	225 ^o	-50	AR 4	129.5	NQ
RG 7	225 ^o	-50	AR 4	81.7	NQ
RG 9	225 ^o	-50	AR 4	82.9	NQ
RG 10	225 ^o	-50	AR 4	93.0	NQ
RG 11	225 ^o	-50	AR 4	164.4	NQ
RG 12	225 ^o	-50	AR 4	146.9	NQ
RG 13	225 ^o	-50	AR 3	93.3	NQ
RG 14	225 ^o	-50	AR 3	128.3	NQ
RG 15	225 ^o	-50	AR 3	8.5	NQ

				1517.10	

TECHNICAL DATA

The holes were drilled to test the strike and dip extensions of the outcropping massive sulphides. The holes all encountered mixed lithologies of volcanoclastic and sedimentary rocks. No massive sulphides were encountered in any of the drill holes. Correlation of the geology between the various drill holes is difficult although a general stratigraphic succession of volcanics through volcanoclastics to sediments can be recognized.

CONCLUSIONS

The fact that none of the holes encountered no massive sulphides indicates that the discovery outcrop of massive sulphide has extremely limited strike and dip extents and probably represents a small lense. However drilling should be done along the same trend and in other parts of the property to search for additional lenses.

COST STATEMENT

Diamond Drilling Longyear Ltd.

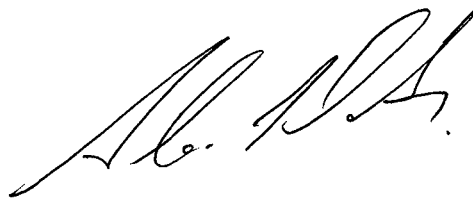
1607.1 metres at \$59.65/metre	\$95,863.51
Testing	6,768.00
Mob/demob	8,000.00
Casing	8,790.74
Left in Hole	1,597.00
Tractor	16,987.00
	<hr/>
	\$144,679.32

The core is stored in a rented house at Sikwan Bay

STATEMENT OF QUALIFICATIONS

I, Alex J. Davidson hereby certify that:

- 1) I hold a Bachelor of Science Degree (Geology Major) and a Master of Science Degree in Economic Geology from McGill University, Montreal, Quebec.
- 2) I have practised my profession in exploration continuously since graduation.
- 3) I have based conclusions and recommendations contained in this report on knowledge of the area, my previous experience and the results of the field work conducted on the property.



Alex J. Davidson MSc.
Vancouver, British Columbia

J. J. Watkins, M.Sc., Queens, 1980.

M. Atkinson, B.Sc. Carleton, 1978

CORPORATION FALCONBRIDGE COPPER

DRILL HOLE RECORD

X METRIC UNITS
IMPERIAL UNITS

HOLE NUMBER RG-1	GRID Main	FIELD COORDS	LAT 9975NW	DEP. 0+96NE	ELEV. 1492.61	COLLAR BRNG Grid SW 225°	COLLAR DIP -50	HOLE SIZE NQ	FINAL DEPTH 157.3
PROJECT 212	CLAIM#	SURVEY COORDS				DATE STARTED: Nov 21, 1983 DATE COMPLETED: Nov 23/83	CONTRACTOR: Longyear CORE STORAGE. CASING 3.7m.		
PURPOSE Test Rea Gold Showing								ROD LOG COLLAR SURVEY	PULSE EM SURVEY MULTISHOT SURVEY
ACID TESTS				TROPARI TESTS			MULTISHOT DATA		
DEPTH (m)	CORRECTED ANGLE	DEPTH ()	CORRECTED ANGLE	DEPTH (m)	AZIMUTH	DIP	DEPTH ()	AZIMUTH	DIP
30.5	48°			157.5	013°?	41°			
61.0	45°								
91.0	44°								
122.0	42°								
152.0	41°								

HOLE NO RG-1
ZIPPY PRINT - BRIDGEPORT RICHMOND

LOGGED BY M. Atkinson

FROM TO	ROCK TYPE	COLOUR	GRAIN SIZE	TEXTURE AND STRUCTURE	ANGLE TO CORE AXIS	ALTERATION	SULPHIDES
3.7-4.8	Sil. Tuff	Yellowish	Fine Medium 1-3mm.	Weakly schistose, siliceous w. sericitic laminae	90°	Oxidized - surface Sericite	Spotty up to 20% pyrite crosscutting stringers and clots pyrite-quartz.
4.8-7.4	Lap. Tuff	Yellow-Grey	Medium 1-10mm	Indistinct fragments up to 1cm. Siliceous-sulphide frags, sericite laminae weakly schistose.	80-90°	Sericitic laminae	Sulphide rich fragments to 1cm. X-cutting quartz-py stringers to 5mm.
7.4-17.1	Lap. Tuff	Yellow-Grey	Medium 1-30mm	Distinct Sil-py frags to 3cm. Frags sheared Wk-Mod Schistosity. Broken Gouge @ 13.5m.	(60)70-90°	Sericitic laminae Minor Talc	Sulphide rich frags and X-cutting qtz-py stringers to 5mm. 10-40% Sulphide
17.1-19.9	Sil. Lap. Tuff	Lt. grey Yellow	Medium 1-10cm	White Siliceous & Py Frags and Brx. 18.7-19.7 Sulphide 60 cm lost. Gouge Coarse Sil. & Ser. Frags. to >5cm.		Talc-Sericite laminae	10-40% py laminae and frags
19.9-20.8	Sil. Lap. Tuff			20.4 Gouge - no core loss White cloudy fragments Brecciated Silica Flooded Tuff?	90°	Few talc laminae. Sil. flooding	5-20% Sulphide stockwork and laminae
20.8-23.0	Sil. Lap. Tuff	Lt. grey Yellow		Sericitic and Siliceous Fragments in Talc-Ser Schistose Matrix. Coarse Frags. >5cm @ 21m. 22.2 Gouge - no core loss	70-90°	Talc (Ser.) Silica Qtz flooding 22.5-23.0m	Py clots and laminae Very fine pyrite 10-20%. 22.5-23.0 Py 40-80% fine laminae in quar
23.0-24.2	Black Chert	Dk. Grey Black	Very Fine	Coarsely broken (fragmental?) w. sulphide fracture fill. @ 23.7 Silica flooded brecciated 1mm opaque white phenocrysts ghosts-siliceous leucoxene?	70°	Silica flooded Siliceous rock.	Black fine grained sulphide on fractures in "chert".

HOLE NO RG-1

ZIPPY PRINT® - BRIDGEPORT, RICHMOND

FROM TO	ROCK TYPE	COLOUR	GRAIN SIZE	TEXTURE AND STRUCTURE	ANGLE TO CORE AXIS	ALTERATION	SULPHIDES
24.2-26.0	Sil. Lap. Tuff to Tuff	Lt. Grey Yellow	Medium Coarse	Siliceous Frags >5cm in moderately schistose matrix 25.4-26.0 Crudely laminated Siliceous tuff White opaque ghosts 3-5% leucoxene?	70° 60°	Talc-Sericite schist matrix	Frags. 10% sulphide in Matrix >40% sulphide ≈10-20% py overall.
26.0-26.2	Sil. Lap. Tuff-Sulphide Rich	Lt. grey Pyritic	to 10mm	White siliceous fragments to 1cm. in schistose talc.			30-50% pyrite fine grained and granular pyrite to 5mm.
26.2-28.2	Lap. Tuff Talc Schist			Siliceous fragments (finely laminated) in talc schistose matrix. Mod. to strong schistosity Gouge 27.1 no core loss Fine lam. exhalite? frags.	70-90°	Talc (Ser.)	27.3-27.5 26.2-26.9 Lenses and laminae Mass Py ≈30-50% overall otherwise 5-10% py dissem.
28.2-33.8	Sil. Tuff to Lap. Tuff	Yellow	1-15mm	Sil. Frags to 3cm in mod. schistose talc matrix 28.2-29.7, 31.5-33.8. 29.7-31.5 Fine banded Siliceous tuff & talc schist indistinct banding. 32.0-32.5 2 qtz veins? 5cm thick cleavage (crenulation?) @ 50° to C.A. esp. @ 30.5m, 32.5m. 33.3-33.6 QP. tuff sil-py clots (frags?) in ser. schist. Sil. frags to 1.5cm	70-90°	Talc schist matrix. Ser. laminae 20% ser.-bright yellow	10-15% fine pyrite disseminations and laminae @ 32.3m sulphide rich frags. 32.0-32.5 20% py laminae & dissem. 33.3-33.6 granular pyrite <1-2mm py 10-20%

HOLE NO RG-1

ZIPPY PRINT * - BRIDGEPORT, RICHMOND

FROM TO	ROCK TYPE	COLOUR	GRAIN SIZE	TEXTURE AND STRUCTURE	ANGLE TO CORE AXIS	ALTERATION	SULPHIDES
33.8-36.2	Sil. Lap. Tuff			33.6 to 33.8 Sil. Lap. Tuff White Sil. Frags and Black Cherty Frags and disrupted Cherty bands. 1-3cm amygrags + Leucoxene 34.9-35.4 Siliceous frags - no black cherty, white to light grey frags.	80-90°	Talc Schist Laminae and Matrix Minor talc laminae	30-40% pyrite f.g. and granular disseminations and laminae. Granular framboidal pyrite textures @ 35.7-36.20-30% py f.g. and granular disseminations + laminae. Trace galena.
36.2-40.0	Sil. Brx. Lap. Stone	Yellow Lt.grey		Coarsely broken siliceous fragmental. White siliceous frags. >5cm. 39.5 Talc gouge-no core lost.	80-90°	Talc laminae and partings.	5-10% pyrite, tr. cp. disseminations, incipient fractures 5-20mm long.
40.0-47.7	Talc Schist and Sil. Tuff			Fine laminated Chert w. Talc Schist Crumpled and disrupted banding transposed by schistosity. 46.4-47.3 Black Cherty and siliceous 48.4 Talc Gouge 50.2-50.4 47.3-47.5 Siliceous, massive light grey, fine leucoxene 1-5%.	80-90°	Talc Schist Siliceous Fragments > 60% Talc Silica flooded	5-10% pyrite on fractures and schistosity 50% pyrite @ 41.0m. py on fractures <5%
47.7-50.9	Sil. Lap. Tuff	Yellow Lt.grey	1-5cm Frags.	Sil. laminated frags angular 1- >5cm. Talc Matrix. 48.4 Talc Gouge 49.8 White siliceous and Black Cherty Frags.	80-90°	Talc Schist Matrix	5% sulphide dissem. and in fractures 20% py laminae 20% @ 50.3
50.9-53.0	Black to Lt. grey Chert	Black to Grey Dk.		Chert breccia - Brx Matrix is Graphitic-Siliceous Qtz veins @ 51.8 2-3mm. Frag finely laminated. Minor leucoxene.		Siliceous Silica Flooded?	5-10% fine pyrite 85% 50.6-53.6 gouge 52.5-52.7 80% fine grain and granular pyrite. 50.9-51.0 30-40% pyrite.

HOLE NO RG-1

FROM TO	ROCK TYPE	COLOUR	GRAIN SIZE	TEXTURE AND STRUCTURE	ANGLE TO CORE AXIS	ALTERATION	SULPHIDES
53.0-54.8	Sil. Lap. Tuff and Tuff	Yellow-Grey Lt-Dk Grey		Banded siliceous fragments 2-20mm in talc schist matrix. Finely banded tuff and disrupted tuff. 53.0-53.5 Siliceous cherty breccia. Light to dark grey broken up chert - quartz veins.	70°	Talc Schist matrix-moderately schistose 50% talc. Minor Talc Lamellae	5-10% pyrite-fine disseminations and laminae Qtz and py on fractures <5% pyrite
54.8-56.5	Sulphide rich mixed talc and siliceous Lap. Tuff	Yellow Grey to Grey		Coarse fragmental felsic siliceous frags 5- 50mm 55.5-56.0 Talc rich fine grained tuff-felsic 56.1 - sulphide gouge - no core lost. Lower contact broken.	80-90°	Siliceous - silica flooded? Talc rich schist.	30-40% dissem. pyrite and pyritic matrix to frags.
56.5-57.3	Felsic Fragmental	Lt.Grey	1-10mm	1-10mm hard grey angular fragments. Gouge lower contact @ 57.3m		Silica flooded. Hard, cloudy whitish spots up to 2mm.	Sulphide disseminated 5% in siliceous sections. 56.6,56.9 20% pyrite fragme and laminae.
57.3	Mafic Volcani-clastic	Lt.-Dk. Grey	f.g.	Coarsely fragmental mafic rock. Fine grained light grey rock, 10-15% white spots up to 1mm. Qtz amygdules, leucoxene? Intercalated black chert infills as matrix to volcani-clastic crude banding and flattening @ 80° to C.A. 57.3-58.6 Banded light grey siliceous fragmental. Cherty fragments and few mafic fragments (leucoxene-bearing).	70-80° 80-90°	Bleached, silicified to weakly bleached. Bleached, silicified.	Generally <5% dissem. pyrite. Concentrated at fragment boundaries. 30% pyrite disseminations and laminae.

RG-1

HOLE NO

ZIPPY PRINT * - BRIDGEPORT, RICHMOND

FROM TO	ROCK TYPE	COLOUR	GRAIN SIZE	TEXTURE AND STRUCTURE	ANGLE TO CORE AXIS	ALTERATION	SULPHIDES
				58.6-58.7 Fine banded sulphide and fine 1-2mm sulphide fragments in black graphitic cherty matrix.	80-90°		30% pyrite
				59.7-60.4 Coarse fragmental lapilli tuff or flow breccia. Angular mafic frags. in black cherty graphitic matrix.			Pyrite concentrated in margins of frags. and in matrix. NB-few py clasts. ≈10-15% pyrite.
				61.9 2cm qtz vein @ 080 to C.A. rebrecciated perpendicular to vein walls.			
				62.4-62.9 Coarse mafic fragmental including mafic clasts, sulphide clasts in black graphitic cherty matrix.	80°	Bleached	Py clasts, py dissem. in mafic clasts and in matrix. 5-10% pyrite.
				64.1-64.8 Sulphide rich mafic volcanoclastic.		Chloritic? mafic frags.	Crudely banded pyrite laminae, also colloform pyrite on sulphide fragments and quartz. averages 40-50% py.
				66.8-66.9 10cm gouge - no core loss. Lower boundary sharp 70° to C.A.			
				66.9-68.0 Mafic Volcanoclastic Fragments up to 1cm wide, Also black argillite between fragments. Coarse fragmental.		Weakly bleached	10% pyrite, infilling between fragments.
68.0-	Mfc. VC		Coarse	68.0-69.6 Mafic volcanoclastic Argillite between clasts, Coarse grained.	75°	Moderately bleached.	1% pyrite in clasts and within argillite.
				69.5-69.6 - Quartz filled tension g shes.	50°		

RG-1

HOLE NO _____

ZIPPY PRINT * - BRIDGEPORT, RICHMOND

FROM TO	ROCK TYPE	COLOUR	GRAIN SIZE	TEXTURE AND STRUCTURE	ANGLE TO CORE AXIS	ALTERATION	SULPHIDES
			Fine	69.6-72.8 Fine grained-medium grained mafic volcaniclastic, Ash-like frags. Argillic interbeds with frags of volcaniclastic.	90°	Weak bleaching	Pyrite clots at 72.8.
				72.8-76.9 Mafic volcaniclastic as above with less argillic interbeds. Some very small qtz clasts.		Moderately bleached.	
		Lt.Green		76.9-86.0 Mix Clastic Unit, Clasts of altered footwall siliceous tuff, mafic volcaniclastic, quartz. Crude bedding. Distinctly different unit.	80°	Moderately-intensely bleach. Silicified with qtz veins and network-stockwork texture.	
				86.0-88.3 As above with interbeds & partings of black chert increasing from 87.2-88.3.		Less bleached.	Pyrite (1%) dissem. from 87.2-88.3
				88.3-89.0 Gouge Zone - No Core Loss. Graphite - qtz shear.			
89.0	Mix. Qtz. Lapilli Stone & Argillite		Fine to Medium Grained	89.0-104.4 Good quartzose lapillistone - conglomerate Qtz. clasts up to 5mm long. Gross grading shows tops downhole. Mixed with zone of graphitic argillite up to 1 metre long. Some good blue quartz eyes and cherty frags. Very coarse at 104.4		Unaltered	Occasional pyrite clasts & bands associated with argillitic layers.
104.4	Argillite			104.4-109.0 Fine grained graphitic argillite with minor interbeds of fine grained qtz lapilli stone.	80°	Unaltered.	Minor pyrite interbedded.

RG-1

HOLE NO _____

ZIPPY PRINT * - BRIDGEPORT, RICHMOND

FROM TO	ROCK TYPE	COLOUR	GRAIN SIZE	TEXTURE AND STRUCTURE	ANGLE TO CORE AXIS	ALTERATION	SULPHIDES
109.0	Qtz Lapilli Stone		Fine to Medium	109.0-119.5 Fine to coarse grained qtz lapilli stone, Excellent graded beds. Tops consistently downhole. Few argillic interbeds and thin clasts of argillite, blue qtz, chert. Well sorted more matrix supported.	80°	Unaltered.	Minor pyrite clasts
119.5	Qtz Lapilli Stone		Coarse to Fine	119.5 Excellent series of graded beds each approximately 1m - 1.5m thick. Very coarse (up to 8m) frags at base grading upwards (downhole) to fine lapillistone + argillite. Individual cycles easily recognizable clasts well sorted and stretched 2:1		No	Minor clasts pyrite.
129.5	Mix Argillite with minor Qtz lapilli Stone			Bedded argillite with minor (2-5cm) beds qtz lapillistone.	80°	No	Minor clasts pyrite.
133.8	Argillite			Well bedded and laminated argillite fine grained with lighter bands more sandy material. Good soft sedimentary structure i.e. convoluted laminations lode casts etc.	80°	No	
157.3				End of Hole.			

RG-1

HOLE NO _____

CORPORATION FALCONBRIDGE COPPER

DRILL HOLE RECORD

METRIC UNITS
IMPERIAL UNITS

HOLE NUMBER RG-2	GRID Main	FIELD COORDS	LAT 100+00NW	DEP 0+50NE	FL.EV 1494.33	COLLAR BRNG Grid S.W. 225°	COLLAR DIP -50°	HOLE SIZE NQ	FINAL DEPTH
PROJECT 212	CLAIM#	SURVEY COORDS				DATE STARTED: Nov 22/83 DATE COMPLETED: Nov 23/83	CONTRACTOR: Longyear CORE STORAGE: CASING 3.4 m.		
PURPOSE Test Rea Gold Showing								RQD LOG COLLAR SURVEY	PULSE EM SURVEY MULTISHOT SURVEY
ACID TESTS				TROPARI TESTS			MULTISHOT DATA		
DEPTH (m)	CORRECTED ANGLE	DEPTH (CORRECTED ANGLE	DEPTH (m)	AZIMUTH	DIP	DEPTH ()	AZIMUTH	DIP
31	48			015?	97	47			

HOLE NO RG-2
ZIPPY PRINT - BRIDGEPORT RICHMOND

LOGGED BY J. I. Watkins

FROM TO	ROCK TYPE	COLOUR	GRAIN SIZE	TEXTURE AND STRUCTURE	ANGLE TO CORE AXIS	ALTERATION	SULPHIDES
0-3.4							
3.4-23.9	Felsic lapilli stone with sulphide/quartz stockwork	Yellow grey to tan	fine	Uniform sections broken with talc schist, sections through out of vague to distinct lapilli, matrix poor, clasts upto 20mm., talc schist seams throughout up to 10mm wide @ 80° to C.A. clay + schist gouge @: 13.0m 10mm wide 16.1m to 17.3m with possible fault bx. 22.2m 5mm wide 22.5 to 22.9 with loose flt bx. 23.4m, 40mm wide black chert: @11.8m, 20mm wide 17.5 to 17.7 banded siliceous tuffs: 17.9 to 18.5 19.2 to 19.3 lower contact sharp and broken.	talc schist 80° 85° 85° 90° +90° 85° 85° 85° contorted contorted 80°	10% talc throughout as talc schist	qtz + sulphide stockwork to incipient stockwork ≈10% by volume predominately py with trace cp @ 20.3 2% PbS from 22.6 to 22.9
23.9-24.4	Mixed sulphide - mafic - felsic	medium and light grey	fine granular	30% sulphides occurring as distinct clasts to 5mm and fine disseminations in mixed host of altered mafic and felsic lapilli and tuff. 40% mafic (as from strata. h.w.) and 20% sericitic/talc lapilli and tuff (as from strata. f.w.), 10% quartz matrix. - strongly sheared grading to moderately sheared with depth	80°	bleached mafic clasts, talc/sericitic felsic clasts	predominately fine graine granular and distinct clasts of pyrite 30%

- lower contact gradation

HOLE NO RG-2

FROM TO	ROCK TYPE	COLOUR	GRAIN SIZE	TEXTURE AND STRUCTURE	ANGLE TO CORE AXIS	ALTERATION	SULPHIDES
24.4-26.0	Mafic volcaniclastic with sulphides	Light grey mafic clasts, dk grey sulphide rich matrix	fine grained	distinct light grey mafic clastic ranging from 20 to 60mm, subround in part vaguely mottled by lighter grey spots to 1mm. 40% dk grey sulphiderich matrix mottled with 1mm light grey spots lower contact sharp & sheared	80°	strongly bleached mafic clasts	20% sulphides as fine diss. py in dk grey siliceous matrix.
26.0-27.5	Mafic (Sulphide Rich) Tuff	dk to medium grey	fine grained	fine granular sulphide rich mafic tuff crudely banded with sulphide clasts to 1mm concentrated along bedding planes, sericitic/talc clasts to 2mm concentrated 2-3mm wide beds increasing in concentration with depth to 5% - unit moderately schistose @ 27.2: 10mm vein granular qtz-feldspar? with trace PbS Lower contact gradational	80° 80° 75°	introduced altered clasts	30% fine granular py tr. PbS
27.5-28.1	Coarse Felsic Lapilli Stone	Light Grey	fine grained	Light grey felsic clasts flattened to 20mm. from 27.7 to 27.8: fault gouge probable mafic sulphide tuff.	80° 85°		Minor py
28.1-28.2	Fault Gouge	Light Grey		With 40% white qtz veining	85°		10% py

HOLE NO RG-2

ZIPPY PRINT* - BRIDGEPORT, RICHMOND

FROM TO	ROCK TYPE	COLOUR	GRAIN SIZE	TEXTURE AND STRUCTURE	ANGLE TO CORE AXIS	ALTERATION	SULPHIDES
28.2-28.8	Felsic/Mafic lapilli Tuff with Sulphides	mixed light & dark grey tan clasts, dk grey matrix	fine grained	From 28.2 to 28.4: 40% light grey felsic clasts, subrounded to 10mm 20% tan talc/sericite subangular clasts to 3mm. 10% fine tuffaceous mafic component 30% sulphide. @ 28.4: 50mm. wide fault gouge from 28.4 to 28.8: 60% tan talc/ser. clasts, subangular to 3mm. 40% py. Lower contact sharp.	90° 60°	introduced altered clasts	From 28.2 to 28.4: 30% py granular clasts to 1mm. From 28.4 to 28.8: py as 1mm clasts & diss. grading to coarser clasts to 10mm. with depth.
28.8-29.2	Silicified Mafic Volcanic	Light Grey	fine grained	Primary textures masked totally by silica flooding. Lower contact gradation.		Silicified	2% patchy cubic py.
29.2-29.6	Semi-Massive Sulphide	Light Grey	fine grained	50% blotchy py with 30% white qtz and 20% bleached mafic host. Lower contact gradational with py bands @ 70°	Irregular	Pyritized silicified	50% py
29.6-39.3	Bleached Mafic Volcanic-Clastic	Light Grey	fine grained	Unit has fine tuffaceous appearance throughout, scattered qtz rich spots to 1mm. - poss. amyg. or pseudomorphed phenos, ghost clasts to 20mm. subround gives unit flow by appearance, from 35.2 to 35.5: possible mafic dyke, bleached moderately broken along schist planes. Lower contact gradational.	70° 75°-85°	Strongly bleached	From 29.6 to 29.7: 2-3% diss. py decreasing to trace with depth.

RG-2

HOLE NO _____

FROM TO	ROCK TYPE	COLOUR	GRAIN SIZE	TEXTURE AND STRUCTURE	ANGLE TO CORE AXIS	ALTERATION	SULPHIDES
39.3-57.3	Bleached Mafic Volcanic-Clastic With Intercalated Black Chert	Light Grey and Black	fine grained	Mafic clasts as above coarsely brecciated throughout with 20 to 25% interclastic black (graphitic) chert, breccia subangular to ragged clasts from 5mm. to >20mm. From 42.0 to 45.0: strongly broken along 85° schistosity Lower contact sharp.	80°	Strongly bleached clasts	Trace py.
57.3 (72.5)	Intercalated Argillite and Quartz Porphyry	Black and Medium Grey	Fine grained to granular	Poorly bedded dk grey to black argillite intercalated with coarse to fine Q.P. with individual Q.P. beds ranging from 3mm. to 1 metre, several coarse beds showing grading to fine Q.P. indicating tops down the hole. <u>Quartz porphyry:</u> from 57.5 to 57.6; @ 57.7, 60mm. wide; @ 57.8, 25mm. wide; from 57.7 to 59.3 30% fine Q.P. beds up to 20mm. in width from 59.35 to 59.5; from 60.1 to 60.2; from 60.3 to 60.4; from 60.5 to 60.9; from 61.0 to 61.3; from 61.4 to 61.7; from 61.9 to 62.0; from 62.1 to 62.8; from 63.0 to 63.3.	Bedding	From 64.8 to 65: 5% pyrite as clasts or framboids in Q.P. & argillite.	

RG-2

HOLE NO _____

FROM TO	ROCK TYPE	COLOUR	GRAIN SIZE	TEXTURE AND STRUCTURE	ANGLE TO CORE AXIS	ALTERATION	SULPHIDES
72.8-80.7	Quartz Rich Epiclastic Sandstone to Conglomerate	Lt. Grey	Fine to Coarse Grained	<p>QP: from 63.5 to 64.3; from 64.7 to 64.8; from 64.9 to 65.0; @ 65.2, 20mm. wide; @ 65.3, 30mm. wide; from 65.3 to 69.1, 20% fine light grey bands up to 5mm. (possible fine Q.P.); from 69.1 to 69.4; from 70.0 to 70.2; from 70.7 to 71.0; from 71.2 to 72.1 with grading from coarse Q.P. to fine down hole.</p> <p>Sandstone-fine quartz and siltstone fragments.</p> <p>76.1-77.0 78.7-80.7 Coarse sandstone to conglomerate. Quartz and siltstone clasts 1-10mm in fine sandstone matrix.</p> <p>Gouge 74.8, 75.3 No core lost.</p> <p>78.2-78.7 Light green, bleached sandstone. This section cut by and bounded by quartz veins 1-3cm.</p>		Fresh	Traces pyrite
80.7-92.0 END	Epiclastic Sediments	Dk Grey -Black	v.fine to coarse	<p>Very fine grained graphitic argillite interbanded w. quartz rich greywacke.</p>	70-80°	Fresh	Trace pyrite

HOLE NO RG-2

FROM TO	ROCK TYPE	COLOUR	GRAIN SIZE	TEXTURE AND STRUCTURE	ANGLE TO CORE AXIS	ALTERATION	SULPHIDES
80.7- 92.0 END Con't				Graded bedding i.e. @ 87.4m, 89.0m, scours i.e. @ 88.0-88.8m indicate tops toward bottom of hole. Slaty cleavage @ 40° to C.A. i.e. @ 87.4m. Graphitic Gouge @ 82.9, 84.8-85.0 85.6m no core loss. 90-91.6 Quartz vein. Massive quartz. Talc and Sericite seams @ 90.1-90.2			Trace pyrite

HOLE NO RG-2

CORPORATION FALCONBRIDGE COPPER

DRILL HOLE RECORD

X METRIC UNITS
IMPERIAL UNITS

HOLE NUMBER RG-3	GRID Main Grid	FIELD COORDS	LAT. 100+25	DEP. 0+86.5 NE	ELEV. 1478.14	COLLAR BRNG. Azm 225	COLLAR DIP -50°	HOLE SIZE NQ	FINAL DEPTH 110.6	
PROJECT PN 212	CLAIM#	SURVEY COORDS.				DATE STARTED: Nov. 26/83 DATE COMPLETED: Nov. 28/83	CONTRACTOR: Longyear CORE STORAGE: CASING. 6.4m			
PURPOSE Test Rea Gold Showing								RDD LOG COLLAR SURVEY	PULSE EM SURVEY MULTISHOT SURVEY	
ACID TESTS				TROPARI TESTS			MULTISHOT DATA			
DEPTH (m)	CORRECTED ANGLE	DEPTH ()	CORRECTED ANGLE	DEPTH ()	AZIMUTH	DIP	DEPTH ()	AZIMUTH	DIP	
30m	-49°									
60m	-49°									
91m	-46°									

HOLE NO RG-3
ZIPPY PRINT - BRIDGEPORT RICHMOND

LOGGED BY M. Atkinson

FROM TO	ROCK TYPE	COLOUR	GRAIN SIZE	TEXTURE AND STRUCTURE	ANGLE TO CORE AXIS	ALTERATION	SULPHIDES
6.4-10.1	Felsic Lapilli Tuff	Rusty light grey	coarse	Highly oxidized Felsic fragments up to 15mm. 6.4-8.7 Poorly consolidated, gougy.		Surface oxidation	10-15% pyrite in matrix and in felsic fragments Few py clasts.
10.1-14.0	Felsic Lapilli Tuff to Tuff	Lt. Grey	Coarse	Highly siliceous felsic fragmental <1mm to 10mm felsic fragments. Weakly banded.	80-90	5% sericite?	15-20% pyrite disseminated and laminae. Few sulphide clasts.
14.0-19.6	Rhyolite Fragmental	Lt. Grey	Fine to Med.	Massive, aphanitic siliceous rock. Quartz porphyritic and fragmental esp. 17.8-18.9 and @ 16.4m. 14.0-14.6 16.5-17.3, 19.1-19.6 Black graphitic cherty matrix to qtz and chert clasts. 15.9m Banded chert black to light grey. Disrupted banding.		Silicified, minor talc seams.	14.0-16.9 <5% disseminated 16.9-19.6 5-10% disseminated pyrite and in fractures with quartz. Incipient stockwork. Also pyritic laminae esp. @ 17.7
19.6-22.9	Talc Rich Felsic Lap. Tuff to Tuff	Yellow Lt. Grey	Med. to Coarse	2mm-30mm angular siliceous fragments and banded cherty fragments in talc schist matrix.	70-80	Talc Schist matrix.	19.6-21.0 <5% dissem. pyrite, few pyrite clasts. 21.0-22.2 Massive pyrite bands and contorted bands up to 25% pyrite overall. 22.2-22.9 10% pyrite disseminations and bands.
22.9-26.6	Felsic Fragmental Lap. Tuff to Tuff	Lt. Grey	Fine to Medium	White angular siliceous fragments, very little fine siliceous matrix. 25.8-26.2 Black cherty matrix.		Silicified fragments.	Disseminated pyrite 5%, Few pyritic fractures.

RG-3

HOLE NO _____

FROM TO	ROCK TYPE	COLOUR	GRAIN SIZE	TEXTURE AND STRUCTURE	ANGLE TO CORE AXIS	ALTERATION	SULPHIDES
26.6-33.2	Talc Rich Felsic Lap. Tuff to Tuff	Yellow Light grey	Fine to coarse	Siliceous fragments fine to coarse grained in finely banded talc rich tuff. 28.1-30.0 Black cherty matrix to fragments. Cherty fragments up to 3cm. 30.2-33.2 Fine banded talc rich tuff, some contorted bedding.		Talc schist matrix and talc rich pods.	Disseminated pyrite in matrix and in clasts, few sulphide clasts. 5-10% pyrite. Locally 15-20%, i.e. 27.0, 29.9m, 25.5.
33.2-35.9	Felsic Lapilli Store and Lapilli Tuff with Sulphide Stockwork	Lt.Grey	Medium to Coarse	Siliceous fragments, very little matrix. Cut by 1-5mm sulphide stockwork. 34.0,34.4 to 35.3 Talc rich matrix to coarse felsic fragments.		Extremely siliceous. Talc rich matrix.	Stockwork sulphide "stringer zone" < 1% arsenopyrite. Traces chalcopyrite @ 33.9m. Sulphides 5-10% overall Brittle fracture stockwork
35.9-37.3	Semi Massive to massive Sulphides	Dk.Grey	Fine grained	Very fine grained pyritic sulphides including chloritic? lenses i.e. @ 36.4. Strat. lower contact sharp @ 70° Strat. upper contact gouge zone 20cm thick. No core lost. 36.6-37.1 Siliceous fragmental: lapilli stone with 20-30% pyrite.	60-80	Chloritic? interbeds.	Pyritic sulphides very fine - indistinctly banded Chalcopyrite and arsenopyrite also very fine grained. 50-80% sulphide except 36.6-37.1 approx. 20-30% pyrite.
37.3-40.9	Mafic Volcaniclastic	Dk.Grey to Black	Fine grained	Mafic volcaniclastic fine white spots to 1mm - probable amygdules 40.5-40.7 Black graphitic gouge. No core loss.	70-80	Talc & chlorite?	Patchy pyritic zones, 5% pyrite overall.
40.9-75.0	Mafic Flow	Light greenish grey	Fine	Massive mafic rock. Mafic phenocrysts bleached to light grey color. Few indistinct fragment ghosts 1-5cm 1cm quartz vein at 47.0@ 20° to C.A.		Bleached, hard rock, sericitic phenocrysts, and fragments.	<1% pyrite.

HOLE NO RG-3

ZIPPY PRINT* - BRIDGEPORT, RICHMOND

FROM TO	ROCK TYPE	COLOUR	GRAIN SIZE	TEXTURE AND STRUCTURE	ANGLE TO CORE AXIS	ALTERATION	SULPHIDES
40.9-75.0 Con't				55.0-75.0 Light tan colored fragments - irregular, angular shapes, mafic phenocrysts. Still massive to internally brecciated mafic flow. Thin black cherty argillite interbeds and irregular fillings.			
75.0-75.9	Mafic Fragmental Lapilli Tuff	Greenish grey	Coarse	Mafic angular irregular fragments with light grey siliceous matrix. Fragments 1cm to 3cm.			
75.9-76.5	Mafic Fragmental		Coarse	Mafic Fragments Irregular 1cm to >5cm. Altered amygdaloidal fragments in Black cherty argillite matrix.	60-80	Talc altered fragments weakly schistose.	
76.5-78.7	Sulphide Rich Siliceous Argillite	Black to Lt. Grey		Black argillitic sediment - pyrite rich Siliceous quartz clastic sections i.e. 77.1-78.0 Strat. lower contact 70% to C.A. 76.5-76.7 Black graphitic sulphide rich gouge - no core lost.			30-50% sulphide very fine grained sulphide mud laminae few ripup sulphide clasts, fine-med grained granular pyrite. 77.1-77.4 10% dissem. pyrite Locally 60-70% pyrite i.e. 77.7, 78.5.
78.7-80.3	Argillite	Black	Very Fine	Banded black graphitic argillite. Regular to contorted banding. Few fine grained siliceous clastic bands.	70-80		

FROM TO	ROCK TYPE	COLOUR	GRAIN SIZE	TEXTURE AND STRUCTURE	ANGLE TO CORE AXIS	ALTERATION	SULPHIDES
80.3-86.7	Quartz Rich Epiclastic Sandstone	Lt.Grey	Fine to Medium	Quartz rich sandstone also silty fragments chert and blue quartz clasts. Few 2-5 cm argillite interbeds mark individual sandstone beds. Scours indicate tops downhole. 85.5 Pyrite rich Felsic lapillistone clast similiar to alteration zone below M.S. Talc lamellas, angular siliceous fragments. Occurs at stratigraphic base of quartz sandstone bed.	80	Fresh	Traces pyrite locally up to 1%. Rare sulphide frags. 85.5- 7cm pyrite rich felsic lapilli stone clast. 30% pyrite.
86.7-91.0	Argillite	Black	Very Fine-Fine	Finely interbanded black graphitic argillite and fine quartz rich sandstone. Graphitic gouge @ 88.0.	70-90		1% pyrite irregular dissem:
91.0-99.6	Quartz rich Epiclastic Sandstone	Light Grey	Fine-Medium	Similiar to 80.3-86.7 98.3-99.1 Light green talc rich quartz sandstone bounded by and cut by quartz veins. 99.1-99.3 Quartz vein.	70-90		< 1% pyrite.
99.6-110.6	Argillite and Quartz Sandstone	Black-Lt.Grey	Very Fine-Fine	Interbedded graphitic argillite and fine quartz rich sandstone. Scours, Ripups, graded bedding all indicate tops downhole. 102,103.4,103.8 - Brokenup graphitic argillite and gouge. No core lost. 103.5-103.7, 106.8, 109.8: Bull Quartz Vein. EOH	70-90		Traces pyrite.

HOLE NO RG-3

CORPORATION FALCONBRIDGE COPPER

DRILL HOLE RECORD

METRIC UNITS
IMPERIAL UNITS

HOLE NUMBER RG-4	GRID Main	FIELD COORDS	LAT. 99+50NW	DEP. 0+62.5NE	ELEV. 1511.51	COLLAR BRNG. 42M 225°	COLLAR DIP -50°	HOLE SIZE NQ	FINAL DEPTH 110.0m
PROJECT PN 212	CLAIM #	SURVEY COORDS				DATE STARTED: Nov.26/83 DATE COMPLETED: Nov.28/83	CONTRACTOR: Longyear CORE STORAGE:	CASING: 3.7m	
PURPOSE Test Rea Gold Showing								RQD LOG COLLAR SURVEY	PULSE EM SURVEY MULTISHOT SURVEY
ACID TESTS			TROPARI TESTS			MULTISHOT DATA			
DEPTH (m)	CORRECTED ANGLE	DEPTH ()	CORRECTED ANGLE	DEPTH ()	AZIMUTH	DIP	DEPTH ()	AZIMUTH	DIP
30	-46°								
60	-46°								
90	-46°								

HOLE NO RG-4
ZIPPY PRINT - BROOKPORT RICHMOND

LOGGED BY J. J. Watkins

FROM TO	ROCK TYPE	COLOUR	GRAIN SIZE	TEXTURE AND STRUCTURE	ANGLE TO CORE AXIS	ALTERATION	SULPHIDES
3.7-11.3	Felsic Lapilli Tuff (Oxidized)	White & Grey Clasts in Tan Host	Fine Grained	Banded broken throughout, white and grey subround clasts in talc rich tan coloured schistose host, clast average 10mm in dia. Lower contact broken, gradational.	85-90°	Oxidized talc schist.	From 3.7 to 10.0: 3% py as disseminations. From 10.0 to 10.3: 25% inter felsic frag. pyrit From 10.3 to 11.3: 5% diss. inter clastic py.
11.3-19.2	Felsic Lapilli Tuff	White & Grey Clasts in Tan and Dk. Grey Host	Fine Grained	Broken throughout; white felsic subround to round clasts in talc rich schistose host, clasts size from 5 to 15mm., ck grey cherty/ argillite sections from: 11.4 to 11.6, 12.8 to 13.2, 15.4 to 15.7, 17.6 to 19.2 Lower contact broken, gradational.	85°	Talc schist.	Diss. and wispy sulphide bands throughout averaging 15% py for total interval, higher concentrations as wispy bands from: 14 to 14.3 - 40% py 15.2 to 15.7 - 25% py 18.6 to 19.2 - 20% py
19.2-23.0	Talc Schist (Tuff)	Tan	Fine	Predominately talc schist with 10-20% intra layered siliceous bands and occasional felsic lapilli up to 5mm in diameter. Lower contact marked by 10mm. gouge.	90°	Talc	5% diss. and rare patchy py 1% as pyritic wisp up to 2mm wide.
23.0-23.4	Mixed Lapilli Tuff (Talc Schist)	Light grey & tan	Fine	Mixed lapilli with distinct clasts of black chert, white rhyolite, sericitic rhyolite and clasts consisting of 90% fine pyrite, clasts are subangular to subround and range up to 20mm in length. 30% matrix as talc schist. Lower contact gradational.	90°	Talc	10% py as clasts

HOLE NO RG-4

FROM TO	ROCK TYPE	COLOUR	GRAIN SIZE	TEXTURE AND STRUCTURE	ANGLE TO CORE AXIS	ALTERATION	SULPHIDES
23.4-24.7	Talc Schist with Felsic Lapilli	Tan to light grey	Fine	70% talc schist with white rhyolite clasts to 30mm Lower contact gradational.	90°	Talc	10% py as disseminations and incipient Qtz & py stockwork.
24.7-25.3	Argillite	Black to grey	Fine	Whispy argillite interrupted by irregular 1mm Qtz veining, whispy sulphides. From 25.1 to 25.2: fault gouge. Lower contact distinct.	80-90°	Talcose.	20% diss. py. in whispy bands.
25.3-28.5	Talc Schist with Felsic Lapilli	Tan and Light grey with dk grey intervals		Talc Schist with 20% light grey rhyolite lapilli up to 20cm. med to dk grey argillite rich sections from 25.4 to 25.5, 25.9 to 26.1, from 26.2 to 26.3: probable bed of quartz pebble QP to 5% diss. py. in sharp contact to talc sch. @ 28.3: 30mm flt gouge Lower contact sharp	85° 80° 90° 85°	Talc Schist	5% diss. py. throughout. 2% whispy bands of fine diss. py.
28.5-31.6	Black Graphitic Chert	Black	Fine	Fairly massive with ghost areas suggesting the presence of frags to 20mm, cut by 10% irregular white Qtz veins up to 5mm in width. Lower contact broken.	None	None.	Very fine diss. py (1%) and trace of fine Aspy.
31.6-33.0	Intercalated Black, Black Chert, Grey Chert & Talc Schist	Black, Grey, Tan	Fine	Mixed band and broken bands (frags?) of black graphitic chert, grey chert and talc schist but by 15% irregular white Qtz veins to 10mm wide. 30% talc schist as bands up to 1cm.	75-90°	Talc	10% py as diss. and whispy bands predominately assoc. with talc schist sections.

Lower contact gradational.

HOLE NO RG-4

FROM TO	ROCK TYPE	COLOUR	GRAIN SIZE	TEXTURE AND STRUCTURE	ANGLE TO CORE AXIS	ALTERATION	SULPHIDES
33.0-38.1	Cherty (Felsic) Tuff	Light Grey	Fine	Poorly banded cherty tuff with intercalated talc schist, cherty bx, and sulphide rich bands and stockwork. @ 33.5: 10mm fault gouge +bx Lower contact gradational.	75-90° 90°	Talc	From 34.2 to 34.8: 30% sulphides as fine granular pyrite in stringers to 20mm wide associated with talc schist. from 35.6 to 26.3: 20% sulphides a fine granular pyrite in stringers to 5mm with 10mm bands @ 36.3 of 60% py. from 37.0 to 37.5: 50% coarse nodular py patches in talc schist.
38.1-39.0	Intercalated Argillite Chert BX & Talc Schist	Dk grey Lt grey Tan	Fine	60% dk grey talcose argillite with 20% subround light grey cherty clasts up to 20mm and 20% tan talc schist bands up to 30mm. Lower contact sharp.	85° 90°	Talc	20% py throughout with bands containing 50% coarse py from 38.3 to 38.4 and 38.9 to 39.0
39.0-47.2	Banded Felsic Tuff with Sulphide Stockwork.	Tan to med. grey	Fine	Well banded tan tuff throughout with very rare siliceous clast, 10% inter banded light to med. grey zone to 20cm suggesting minor argillite component. Lower contact gradational.	80-90°	Talc	10% sulphide (Py to tr.Cp) as stringers up to 10mm and as incipient stringers 1-3mm., from 39.6 to 39.8 and from 40.0 to 40.1: 40% sulphides as py with trace Cp associated with talc schist.
47.2-48.5	Felsic Tuff with Chert Clasts	Tan	Fine	Banded tan tuff with 20% subround light grey siliceous clasts to 30mm, tan tuff in part broke to subangular clasts to 15mm. Lower contact marked by 1cm band of cherty lapilli stone.	80-90° 90°	Talc	15% py as discontinuous bands in bedding/schist planes, in part crosscutting.

RG-4

HOLE NO _____

FROM TO	ROCK TYPE	COLOUR	GRAIN SIZE	TEXTURE AND STRUCTURE	ANGLE TO CORE AXIS	ALTERATION	SULPHIDES
48.5-49.0	Mixed Sulphide Felsic Lapilli Tuff	Dk grey	Fine	50% felsic lapilli and tuff in matrix of fine diss. Py (50%). Clast size to 10mm. Lower contact marked by 2cm fault gouge.	90°	None	50% py & Aspy.
49.0-49.3	Argillite	Dk grey	Fine	Argillite vaguely banded with clasts of fine diss. py flattened to 10mm.		Talccse	20% py as clasts
49.3-67.8	Mafic Tuff	Med.grey	Fine	Uniformly textured mafic tuff with ghost lapilli, brecciated section with interclastic black graphitic chert. from 49.3 to 51.0 with 20% chert. from 55.5 to (61.7) with 30% chert. 65.0 to 66.0 20% chert. 66.2 to 67.8 Mafic tuff with talc rich matrix. Distinct angular fragments. Fine (1mm) white spots feldspars? lapilli?	80-90°	Talc rich matrix.	
7.8-89.7	Argillite and Epiclastic Sandstone	Blk-Lt. Grey	Fine-Medium	Interbedded black graphitic argillite and quartz rich sandstone. Thick argillite sections with 10-30cm sandstone beds. Blue quartz, chert, argillite clasts. 68.9-69.1 Bull Quartz vein. 69.1-69.3 Graphitic Sulphide rich gouge. 69.3-69.5 Very fine grained pyritic sulphide mudstone. Scours indicate tops downhole. 76.5-76.7 Coarse clastic quartz sediment. Coarse argillite ripups.	60-80°		Mostly <1% disseminated pyrite. Irregular local, concentrations of pyrite particularly in sandstone layers. Rare possible pyrite clasts Pyrite clasts ?@ 75.3, 76.6

RG-4

HOLE NO _____

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FROM TO	ROCK TYPE	COLOUR	GRAIN SIZE	TEXTURE AND STRUCTURE	ANGLE TO CORE AXIS	ALTERATION	SULPHIDES
89.7-95.6	Argillite and Epiclastic Sandstone			<p>Finely interbanded argillite and epiclastic sandstone. Graded bedding and scours indicated tops downhole.</p> <p>95.3-95.5 Quartz vein with talc pods.</p>	80-90°	None	< 1% pyrite in sandstone layers.
95.6-110.0 END	Epiclastic Sandstone			<p>Fine to coarse quartz rich Epiclastic sandstone. Chert, siltstone, quartz, Siliceous clasts angular to subrounded.</p> <p>106.7-107.3 Crudely graded coarse sandstone. Flattened clasts.</p> <p>96.9-99.0 Strongly quartz veined - talc rich pods.</p> <p>END</p>	70-80°		< 1% pyrite.

HOLE NO RG-4

CORPORATION FALCONBRIDGE COPPER

DRILL HOLE RECORD

METRIC UNITS
IMPERIAL UNITS

HOLE NUMBER	GRID	FIELD COORDS	LAT.	DEP.	ELEV.	COLLAR BRNG.	COLLAR DIP	HOLE SIZE	FINAL DEPTH
RG-5	Main		100+00NW	1+34	1470.38	Grid S.W. Az 225	-50°	NQ	139.0m
PROJECT 212	CLAIM#	SURVEY COORDS				DATE STARTED: Nov. 28/83 DATE COMPLETED: Nov.30/83	CONTRACTOR: Longyear CORE STORAGE: CASING: 6.4m		
PURPOSE								ROD 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
30m	46°								
61m	46°								
91	44°								
122m	44°								
139m	45°								

FROM TO	ROCK TYPE	COLOUR	GRAIN SIZE	TEXTURE AND STRUCTURE	ANGLE TO CORE AXIS	ALTERATION	SULPHIDES
6.4-20.0	Felsic Lapilli Tuff	Lt. Grey -yellow	Fine-coarse	Siliceous angular irregular fragments in sericite, pyrite rich matrix. Also irregular siliceous banding. Few (<1%) clots green mica. Quartz porphyritic.	80-90°	Sericitic weakly schistose matrix.	Fine grained pyrite in matrix forms bands and disseminations. Also nodular pyrite 1-10mm irregularly disseminated. Pyrite 5-10% Locally up to 20% i.e. 17.3-17.8, 18.0-18.5
20.0-22.6	Felsic Lapillistone	Lt grey	Coarse	Coarsely broken massive siliceous Lapillistone. Fragments >5cm. Pyrite dissem. 21.1-22.0 Felsic Lapilli Tuff-sericitic matrix. Fine to medium frags.	80-90°	Extremely siliceous fragments. Silicified?	Fine grained pyrite dissem in frags <1% and in matrix 5-10% overall. Massive pyrite matrix infill. 21.2-22.0 10% pyrite fine grained in matrix and nodular pyrite.
22.6-32.9	Felsic Tuff			Fine felsic fragmental. Quartz porphyritic. Talc-sericite matrix to siliceous fragments. 25.0-25.4 Siliceous Lapillistone.	80-90°	Talc and sericite weakly schistose matrix.	Pyrite fine grained and nodular dissemination. Thin massive pyritic bands 10% py.
32.9-45.8	Felsic Lapilli Tuff	Lt Grey -yellow	Med.to coarse	Medium to coarse felsic fragments in talc sericite bearing matrix. 32.9-35.9 and 38.9- Very coarse siliceous fragments 1cm - 5cm	80-90°	Talc and sericite bearing matrix to frags.	5-10% pyrite fine grained in matrix and nodular pyrite. Few pyrite rich frags. Locally 15-20% pyrite i.e. 33.6-35.9
45.8-46.8	Rhyolite Lapillistone	Lt grey		Weakly banded siliceous fragmental. Coarse angular frags. Very little matrix.		Silicified frags.	Pyrite interstitial to frag <5% overall.

HOLE NO RG-5

FROM TO	ROCK TYPE	COLOUR	GRAIN SIZE	TEXTURE AND STRUCTURE	ANGLE TO CORE AXIS	ALTERATION	SULPHIDES
46.8-48.0	Felsic Lapilli		Fine-Medium	Siliceous fragments in talc-pyrite bearing matrix. 5		Talc bearing matrix.	Pyrite fine grained and nodular dissem. in matrix. Also pyrite rich and massive pyrite frags 5-10% pyrite overall.
48.0-51.2	Mixed Tuff & Graphitic Chert	Yellow Lt-Dk Grey	Fine	Fine to coarsely laminated talc rich tuff, black graphitic chert. Swirly contorted and transposed banding. 50.2-51.2 Black chert. Coarsely brecciated.		Talc rich bands.	Bands and disseminations of pyrite. Irregularly distributed. Most of core < 5% py. Semi massive 1-2 cm sections. Core averages 5% py.
51.2-54.6	Mixed Felsic Lapilli Tuff and Lapillistone	Lt. grey	Fine-Medium	Fine to coarsely tuffaceous. Siliceous elongated frags. Pyrite-rich frags.		Talc rich matrix.	Mostly < 5% pyrite dissem. fine to med. grained. 53.8-54.6 Pyrite rich nodules up to 3cm, disseminations 30-40% pyrite 20% py @ 53.5.
54.6-60.6	Chert	Lt-Dk Grey		Laminated cherty breccia. Fine black chert interbeds, Some lapillistone and talc-rich lapilli tuff interbedded.	70-90°	Minor talc.	Pyrite bands and infillings, disseminations. About 5% py.
60.6-65.8	Felsic Lapilli Stone and Chert	Lt. grey	Coarse	Massive to coarsely fragmental siliceous rock. Very little matrix-minor talc Interbanded black graphitic chert - and chert-minor irregular contorted bedding.		Minor talc. Sericite.	Incipient stockwork on fine 1 to 2 cm spaced fractures. 5% pyrite overall. Locally up to 10%. Chalcopyrite and arsenopyrite in incipient stockwork from 65.4m-65.8 < 1% overall.
65.8-70.5	Talc Rich Felsic Lapilli Tuff	Lt Grey -yellow	Med-coarse	Angular siliceous frags in talc rich schistose matrix. 66.8-69.2 Massive bull quartz-carbonate vein.		Talc bearing matrix.	Semi massive pyritic bands and dissemination. Incipient stockwork in talc-poor sections i.e. 68.3-69.4 5-10% pyrite overall.

FROM TO	ROCK TYPE	COLOUR	GRAIN SIZE	TEXTURE AND STRUCTURE	ANGLE TO CORE AXIS	ALTERATION	SULPHIDES
70.5-72.8	Coarse Banded Chert	Lt grey	Med-Coarse	Coarsely broken and banded chert. Very little matrix. 71.7-72.8 Extremely siliceous light grey.			Pyrite dissem. and massive infilling in matrix. 5% overall. 1% chalcopyrite and arsenopyrite.
72.8-73.2	Semi Massive Sulphide	Dk grey	Fine	72.8-72.9 Sulphide rich gouge - also siliceous frags. 72.9-73.05 Massive sulphide pyrite. Crudely banded very fine pyrite with 1mm py nodules. 73.05-73.2 50% pyrite with siliceous fragments. Pyrite forms infillings and semi massive bands. 73.2 Upper contact sharp @ \pm 90 to C.A.			Sulphides - only pyrite distinguished.
73.2-78.1	Silicified Mafic Fragmental	Lt grey		Light grey cloudy fragments and insitu brecciation. White silicified rims on fractures esp. 73.2 to 75.0m. Cloudy white spots 1-3mm. Lapilli? 73.8-73.9 Sulphide rich gouge.		Silicification of mafic Barite?	Semi massive sulphide bands - only pyrite distinguished and pyrite filling in-situ brx fractures 5-10% py overall. 73.6-74.1 Sulphide rich gouge and fine sulphide mud 30% pyrite.
78.1-80.4	Mafic Fragmental	Dk grey	Fine-Medium	In-situ brecciation of mafic rock and finely fragmental mafic rock. 79.3-79.8 White spots to 1mm lapilli?		Less silicified than 73.2-78.1	Interstitial to frags and pseudo-frags. 5-10% py 78.9-79.3 and 79.7-80.4: 15-20% fine pyrite.
80.4-83.9	Mafic Volcaniclastic	Grey		Ghost fragments, few 1-2mm white spots possible lapilli.		Bleached.	2-3% disseminated pyrite.
83.9-85.8	Graphitic Chert	Black		Massive to brecciated. Not banded. 85.5-85.8 Brecciated fragmental Frags 1-2 cm.			Irregular pyrite disseminations and colloform textures 5-10% pyrite overall.

FROM TO	ROCK TYPE	COLOUR	GRAIN SIZE	TEXTURE AND STRUCTURE	ANGLE TO CORE AXIS	ALTERATION	SULPHIDES
85.8-101.9	Massive Mafic to weakly Volcaniclastic	Lt. Green	Fine	Ghost fragments and massive textured mafic rock. Uniform.		Bleached.	< 1% dissem. pyrite. 2cm quartz vein with 50% pyrite @ 96.7m
101.9-106.8	Mafic Volcaniclastic	Lt-Dk Grey Green	Medium -Coarse	Coarsely fragmental mafic - white spots to 1mm in frags. Black graphitic cherty matrix to frags. Crude planar fabric @ 70-90°		Minor talc in frags.	< 1% pyrite
106.8-107.5	Pyritic Argillitic Sediment	Dk grey to black		30-40% pyrite in dirty black graphitic sed. 106.8-107.0 Sulphide rich graphitic gouge. 107.1-107.2 Massive bull quartz vein.			30-40% disseminated and nodular pyrite. Few thin 1-3mm massive pyrite bands.
107.5-112.5	Mafic Volcaniclastic	Grey	Fine	Finely fragmental mafic. White spots up to 2mm - probable lapilli.		Minor talc.	10-15% pyrite disseminated and in elongat clots.
112.5-119.0	Argillite and Epiclastic Sandstone	Lt grey - Black	Fine	Thinly interbanded black graphitic argillite and quartz rich sandstone. Graded bedding and scours indicate tops downhole.	80-90°	Unaltered	Irregular clots 1% overall
119.0-139.0	Epiclastic Sandstone	Grey	Fine-Medium	Fine to medium quartz rich sandstone. Siltstone, chert, siliceous, clasts & quartz grains. Angular elongate to rounded clasts. Grossly graded individual beds up to 1.5m thick. 122.3-122.6 Bleached sandstone cut by quartz veining, minor chlorite.	80-90°	Unaltered	< 1% dissem. pyrite.

HOLE NO RG-5

CORPORATION FALCONBRIDGE COPPER

DRILL HOLE RECORD

METRIC UNITS
IMPERIAL UNITS

HOLE NUMBER RG-6	GRID Main	FIELD COORDS	LAT 99+50NW	DEP 1+29 NE	ELEV. 1489.94	COLLAR BRNG. 225°	COLLAR DIP -50°	HOLE SIZE NQ	FINAL DEPTH 129.5
PROJECT 212	CLAIM #	SURVEY COORDS.				DATE STARTED: Nov 28/83 DATE COMPLETED: Nov 30/83	CONTRACTOR: Longyear CORE STORAGE.		CASING: 3.3m
PURPOSE								ROD LOG COLLAR SURVEY	PULSE EM SURVEY MULTISHOT SURVEY
ACID TESTS				TRÓPARI TESTS			MULTISHOT DATA		
DEPTH ()	CORRECTED ANGLE	DEPTH ()	CORRECTED ANGLE	DEPTH ()	AZIMUTH	DIP	DEPTH ()	AZIMUTH	DIP
30	-49°								
61	-46°								
91	-46°								
122	-46°								

FROM TO	ROCK TYPE	COLOUR	GRAIN SIZE	TEXTURE AND STRUCTURE	ANGLE TO CORE AXIS	ALTERATION	SULPHIDES
3.3-8.2	Oxidized Quartz Talc/Sericite Schist (Lapilli Tuff)	Tan	Fine	Tan, broken with 5% 1-2mm quartz-sulphide bands parallel with schist. Lower contact gradational.	90°	Talc/ser.	3% py - oxidized
8.2-15.5	Felsic Lapilli Tuff	Medium Grey	Fine	Fine lapilli tuff, finely clastic with frags to 2mm in qtz & wispy talc/ser. schist host - unit weakly to moderately schistose. Lower contact gradational.	90°	15% talc/ser and wispy bands.	3 to 5% diss. py throughout from 9.5 to 10.2 distinct py rich clasts flattened to 2cm (5% by vol.)
15.5-38.3	Talc/Ser. Felsic Lapilli Tuff	Tan	Fine	Gradational from above with talc/ser and sulphide content increasing 5% to 20% with depth, no marked change in Lapilli tuff texture or sulphide content; sulphide occurs as blotches (clasts?) to 10mm and bands to 5mm. 2cm fault gouge @ 22.3 Lower contact gradation.	90° 90°	Talc/(Ser) grading from 20% to 60% in siliceous host.	Very gradational from 5% at upper contact to 10% py @ 30m. from 30 to 38.3 20% py.
38.3-49.1	Felsic Lapilli Tuff	Medium Grey	Fine	Distinct felsic lapilli with clasts to 1cm in siliceous host scattered talcose sections Sulphides (py) occurs as lamellia rich bands to 5mm.	85-90°	Scattered talc, silicified?	Predom py 15% fairly uniform throughout.
49.1-61.3	Felsic Lapilli Tuff	Light to Medium Grey	Fine	Coarse to fine lapilli in tuff & sulphide host, scattered wispy bands of talc, coarse lapilli clasts may fine lapilli tuff brecciated and tectonically flattened to give the appearance of	80-85°	20% wispy talc, silicified.	from 49.1 to 51.5: 20% py. from 51.5 to 54.3: 10% py. from 54.3 to 57.6: 15% py. from 57.6 to 59.2: 50% py. as bands to 3cm. from 59.2 to 61.3: 25% py.

FROM TO	ROCK TYPE	COLOUR	GRAIN SIZE	TEXTURE AND STRUCTURE	ANGLE TO CORE AXIS	ALTERATION	SULPHIDES
49.1-61.3 Con't				epiclastic - sulphides probably represent tectonically flattened stockwork. @ 49.7: 3cm fault gouge @ 57.5: 1cm fault gouge @ 59.0: 1cm fault gouge Lower contact broken	85° 85° 85° 80°		
61.3-63.3	Graphitic Chert	Black	Fine	Broken and fracture chert with graphite well developed along fracture planes, 10% bull qtz veinlets, broken & very weakly sheared. From 61.3 to 61.5: 20% talc band to 1cm wide Lower contact distinct.	75° 80° 90°	Silicified?	5% py as nodules to 3mm.
63.3-68.2	Grey Chert to Chert Bx	Medium Grey	Fine - Aphani-tic	Banded to insitu broken contorted grey chert with dk grey cherty lamellae and inter frag. filling. From 65.1 to 65.2: bull qtz vein with 1% diss. arsenopy. Lower contact gradational.	80°	Silicified	3% py with trace Aspy associated with dk grey chert infilling. from 65.1 to 65.2: 1% Aspy in qtz vn.
68.2-73.0	Mixed Lapilli Tuff	Lt.grey & tan		Mixed lapilli tuff with lightly grey cherty clasts, talc rich tuffaceous clasts and talc rich argillaceous clasts in a matrix of argillite, talc schist and sulphides. @ 69.1: 10cm fault gouge @ 70.8: 10cm fault gouge @ 73.0: 1cm fault gouge- Lower contact.	80° 80-90° 80-90° 90°	Talc	From 68.2 to 69.1: 20% py. and blotches up to 5mm. from 69.1 to 73.0: 7% py as dissemination and concordant lamellae.

FROM TO	ROCK TYPE	COLOUR	GRAIN SIZE	TEXTURE AND STRUCTURE	ANGLE TO CORE AXIS	ALTERATION	SULPHIDES
73.0-77.9	Grey & Graphitic Cherty & Chert Bx	Medium & Dk Grey	Fine-aphanitic	Banded to insitu broken dk grey to black graphitic chert, @ 73.1: 3cm wide fine sulphide clastic bed containing 30% clastic py in cherty argillite, matrix to bx black graphitic chert. Lower contact lost core.	85° 85°	Silicified?	10% sulphides as py with trace Aspy occurring predominately in matrix as blotchy concentration to chert bx.
77.9-78.5	Massive Sulphide	Dull Grey	granular	80% sulphides in blotchy white quartz gouge.		Silica flooded?	70% Aspy. 10% py.
78.5-79.4	Graphitic Chert Bx	Dk grey	Fine	Brecciated graphitic chert, light to dk grey cherty clasts to 5mm in 30% black graphitic cherty matrix. At 79.1: 6cm qtz vein Lower contact broken.	80°	Silicified	20% Py. 5% Aspy.
79.4-82.6	Talc Schist Cherty Bx.	Tan to medium grey	Fine	60% talc schist with intercalated cherty frags. mixed argillite and sulphides. At 79.4 to 79.5: gouge At 82.4: 5mm gouge At 81.0: 2mm gouge At 81.5: 5mm gouge From 82.3 to 82.4: bull qtz vein From 82.4 to 82.6: broken & gouge.	contorted 80° 80° 90° 60° 85°	Talc	10% py as blotchy patches in talc schist.

HOLE NO RG-6

FROM TO	ROCK TYPE	COLOUR	GRAIN SIZE	TEXTURE AND STRUCTURE	ANGLE TO CORE AXIS	ALTERATION	SULPHIDES
82.6-84.1	Grey to Tan Chert	Grey to tan	Fine	Poorly banded, weakly insitu broken chert with 10% wispy talc schist. Lower contact broken	contorted 80°	Blotchy pervasive talc + 10% talc schist.	5% py in interstitial to insitu broken chert.
84.1-89.4	Mixed Lapilli Tuff	Grey	Fine	Mixed clasts of bleached mafics, talc, chert and pyritic clasts in argillaceous host. From 88.9 to 89.4: argillite rich. At 87.2: 10mm gouge At 89.1: 3mm gouge Lower contact distinct.	80° 80° 90°	Talcose host From 87.2 to 88.0: silica plus py. flooded	From 84.1 to 87.2: 10% py with tr. Aspy as diss. in argillaceous host. From 87.2 to 88.0: 40% py assoc. with silica flooding From 88.0 to 88.9: 20% py. as clasts and diss. From 88.9 to 89.4: 5% diss. py.
89.4-115.2	Bleached Mafic Flow (VC?)	Medium Grey	Fine	Fairly uniform and massive, no ghost frags present as seen in previous holes. scattered insitu fracturing with argillite/chert fracture filling. From 113.0 to 115.2: insitu bx or possible flow bx with subround clasts 20% cherty argillite matrix. Lower contact marked by fault gouge.		Bleached & talcose.	Up to 1% diss. py. @ 102.1 badly broken with broken & ground py + quartz - 50% over 10-20mm?? (looks out of place).
115.2-115.6	Fault Gouge	Dk grey	Fine	Strong gouge grading to weaker gouge.	+ 90°		Grading to 20% diss. py as in lower unit.
115.6-116.8	Mixed Lapilli Tuff	Dk grey	Fine	From 115.6 to 116.4: distinct clastic with frags of bleached mafics, argillite and pyritic argillite. Clasts flattened to 4mm. From 116.4 to 116.6: argillite rich 10% band & clastic sulphide.	75°	Weakly talcose	From 115.6 to 116.4: 20% py as clasts and diss. From 116.4 to 116.6: 10% py as diss. concentration in 1-2mm bands. From 116.6 to 116.8: 80% massive granular pyrite.

RG-6

HOLE NO _____

ZIPPY PRINT * - BRIDGEPORT, RICHMOND

FROM TO	ROCK TYPE	COLOUR	GRAIN SIZE	TEXTURE AND STRUCTURE	ANGLE TO CORE AXIS	ALTERATION	SULPHIDES
115.6- 116.8 Con't				From 116.6 to 116.8: massive sulphides. Lower sharp.	85°		
116.8- 129.5	Intercalated Argillite/ Epiclastic Sandstone	Dk grey & medium grey	Fine	90% argillite to 126.5 with fine grained sandstone up to 30cm. From 126.5 to 129.5: 80% fine to medium grained epiclastic sandstone. END OF HOLE	90°		< 1% py

HOLE NO RG-6

CORPORATION FALCONBRIDGE COPPER

DRILL HOLE RECORD

METRIC UNITS
IMPERIAL UNITS

HOLE NUMBER RG-7	GRID Main	FIELD COORDS	LAT. 99+25	DEP. 0+52 NE	ELEV. 1524.94	COLLAR BRNG. 225	COLLAR DIP -50	HOLE SIZE NQ	FINAL DEPTH 81.7m
PROJECT 212	CLAIM #	SURVEY COORDS.				DATE STARTED: Nov 30/83 DATE COMPLETED: Dec 1/83	CONTRACTOR: Longyear CORE STORAGE: CASING. 4.6m		
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
30	-48°								
61	-48°								
81.7	-48°								

HOLE NO RG-7
ZIPPY PRINT - BRIDGEPORT RICHMOND

LOGGED BY M. Atkinson

FROM TO	ROCK TYPE	COLOUR	GRAIN SIZE	TEXTURE AND STRUCTURE	ANGLE TO CORE AXIS	ALTERATION	SULPHIDES
4.6-8.6	Felsic Tuff	Light Yellow-Grey	Fine	Fine felsic fragmental quartz phenocrysts, in sericite bearing matrix. 6.9-7.2 1-3 cm quartz veins and nodules.	70-80°	Sericite bearing matrix 30% matrix.	5-10% pyrite fine dissemination is matrix, granular pyrite up to 1mm, few thin 1-3mm semi-massive sulphide bands.
8.6-18.3	Felsic Lapilli Tuff	Light Yellow Grey	Fine-Coarse	Medium-coarse felsic angular fragments 1- >5cm. Sericitic matrix. Disrupted quartz vein avoids minor green mica < 1%	80-90°	Sericitic (+talc) matrix to frags. 8.6-11.6 30% matrix 11.6-14.0 10-15% matrix 14.0-18.3 30-40% matrix	Disseminated pyrite in matrix, pyrite-rich fragments, broken pyrite rich quartz veins. 10% pyrite overall. Locally as low as 5%.
18.3-19.3	Epiclastic Conglomerate	Grey	Medium	Medium grained angular clast conglomerate, chert, siltstone, QP, pyrite rich fragments. <u>Good arsenopyrite rich clast. 20% asp in clast.</u> Matrix poor cgl.	80-90°	Sericite-talc bearing matrix <5% matrix.	Arsenopyrite-pyrite rich matrix to conglomerate. 1% arsenopyrite. 5% pyrite. Pyrite-arsenopyrite rich frags.
19.3-37.7	Felsic Lapilli Tuff	Light Yellow Grey	Fine-Medium	Angular irregular felsic frags, quartz phenocrysts, minor green mica. Talc sericite matrix to frags. Few pyrite rich frags.	80-90°	Talc-sericite matrix. Mostly 20-30% matrix.	5-10% finely disseminated pyrite, few pyrite-rich frags, thin 1-3mm semi-massive pyrite veins. @ 30.6m 1% arsenopyrite finely dissem. with 5-10% pyrite in matrix to siliceous frags. 32.5-33.3 Up to 15-20% pyrite as above.
37.7-38.7	Mixed tuff and Graphitic Chert	Light Yellow Grey	Fine	Brecciated graphitic chert in talc-rich matrix. Contorted irregular banding.		Talc rich matrix >50% Schistose.	10% pyrite disseminated in matrix.

FROM TO	ROCK TYPE	COLOUR	GRAIN SIZE	TEXTURE AND STRUCTURE	ANGLE TO CORE AXIS	ALTERATION	SULPHIDES
38.7-40.6	Chert and Quartz veins	Light Grey	Fine	Brecciated chert to graphitic chert heavily cut by pyritic quartz pod material. Highly siliceous zones in chert.		Silicification?	30-40% pyrite in highly siliceous quartz pods. Irregular semi-massive to massive pyrite zones up to 10cm. Traces Ag-rich galena in quartz.
40.6-47.1	Mixed Tuffaceous Chert & Chert Tuff includes semi-massive sulphide.			Banded fine grained cherty-tuff and tuffaceous chert Highly siliceous, brecciated to fragmental. 46.0-46.2 Lt. grey thinly banded chert.		Talc bearing matrix.	41.2-41.8 30-40% pyrite including up to 10% arsenopyrite as semi-massive bands and infilling to siliceous fragments. 41.5-41.7 60% pyrite and arsenopyrite (30% py, 30% Aspy). 42.6 5cm 60% arsenopyrite 40.6-41.2 41.7-47.1 5-10% pyrite overall including 1% arsenopyrite overall. 15% arsenopyrite, @ 41.1m 30% pyrite 2cm semi massive band.
47.1-48.0	Talc-rich Felsic Tuff			Fine grained thinly banded tuff. Interbanded talc rich and siliceous layers.	80-90°	Talc rich moderately schistose matrix ≈ 50% matrix.	< 5% pyrite disseminated.
48.0-49.3	Felsic Lapilli-Stone to Lapilli Tuff	Light Grey,	Fine-Medium	Felsic fragmental in minor talc matrix.	80-90°	< 10% talc rich matrix.	
49.3-49.9	Mixed Sulphide Rich Clastic	Grey		Felsic, cherty, graphitic chert clasts in sulphide matrix.			30-40% pyrite as fine sulphide matrix to clastic.

RG-7

HOLE NO _____

FROM TO	ROCK TYPE	COLOUR	GRAIN SIZE	TEXTURE AND STRUCTURE	ANGLE TO CORE AXIS	ALTERATION	SULPHIDES
49.9-51.8	Mafic Tuff	Light Dk grey		Probable mafic tuff. White spots 1mm lapilli? 50.6-50.8 Silicified mafic fragmental - no sulphides.		Talc rich moderately schistose rock.	5-10% fine disseminated pyrite.
51.8-69.2	Mafic Flow?	Light Green	Fine	Massive uniform textured mafic rock. Ghost fragments. Probable mafic flow, internally brecciated. Cut by black graphitic chert pods and irregular fracture fills.		Bleached	
69.2-69.7	Mafic Volcani- clastic Gouge	Black		Mafic volcanoclastic gouge.		Talc	5% fine pyrite
69.7-81.7	Argillite and Epiclastic Sandstone	Black / Lt.grey	Fine- Medium	Thickly interbedded graphitic argillite and quartz rich sandstone. Blue quartz, chert, argillite, felsic clasts. Crude grading and scours indicate tops downhole. 75.5-76.0 Quartz veins.			1-2% irregularly disseminated pyrite. Trace cp in qtz vein.

CORPORATION FALCONBRIDGE COPPER

METRIC UNITS
IMPERIAL UNITS

DRILL HOLE RECORD

HOLE NUMBER RG - 9	GRID MAIN	FIELD COORDS	LAT 99+00 NW	DEP 0+49 NE	ELEV 1530.45	COLLAR BRNG. 225°	COLLAR DIP - 50°	HOLE SIZE 30	FINAL DEPTH 82.9 m
PROJECT 212	CLAIM #	SURVEY COORDS				DATE STARTED: Dec 2, 83 DATE COMPLETED: Dec 3, 83	CONTRACTOR: Longyear CORE STORAGE: CASING 3.3		
PURPOSE								ROD 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
30	-47°								
61	-47°								

LOGGED BY J.J. WATKINS

FROM TO	ROCK TYPE	COLOUR	GRAIN SIZE	TEXTURE AND STRUCTURE	ANGLE TO CORE AXIS	ALTERATION	SULPHIDES
3.3 - 6.8	Oxidized Felsic Lapilli Tuff	Rust	Fine	Broken and sheared Felsic Lapilli tuff. Lower contact gradational	85°	Oxidized 15% wispy bands tal/ser	5% Py diss.
6.8 - 9.7	Felsic Lapilli Tuff	Med Grey	Fine	Typical with flattened felsic clasts in tal/ser/py matrix, moderately schistose Lower contact broken, appear sharp.	85-90	10-20% talc/ser as bands up to 2 cm Minor oxidation along sch. planes.	20% py as diss concentration up to 2 cm.
9.7 - 10.8	Felsic Lapilli Stone	Med to Lt Grey	Fine	Predominantly chert clasts in 5% schistose matrix. Clasts average 2cm, are subround. Lower contact broken, probably sharp.	-----	Silicified 5% talc/ser	10% py assoc. with interclastic schistosity.
10.8 - 17.9	Felsic Lapilli Tuff	Med to Lt Grey	Fine	Felsic lapilli in 5% talc/ser (chlorite?) schistose matrix. Lower contact broken.	85°	5% talc/ser and possible chlorite	15% py developed in schistosity and in scattered cross cutting veinlets to 5mm wide.
17.9 - 18.3	Grey chert	Med Grey	Fine to aphanitic	Fairly massive with 5% wispy talc/ser throughout Lower contact broken	-----	Silicified	1-3% diss py
18.3 - 36.1	Altered Mafic?? Tuff with numerous chert sections (Felsic Lapilli Tuff?)	Med Grey	Fine	Mottled mafic tuff with numerous cherty bands, broken and stretched to give unit a felsic lapilli texture. From 18.3-24.5: 50% chert in talcose mafic? Tuff host - felsic lapilli tuff. From 24.5-26.0: 10% cherty bands.	85°	Talc/(ser)	10-15% diss Py throughout. Trace AsPy in chert bands @ 27.9, from 28.9 to 30.5, 34.2.

RG - 9

HOLE NO _____

ZIPPY PRINT * - BRIDGEPORT, RICHMOND

FROM TO	ROCK TYPE	COLOUR	GRAIN SIZE	TEXTURE AND STRUCTURE	ANGLE TO CORE AXIS	ALTERATION	SULPHIDES
18.3 - 36.1				cont'd from page 2 From 26.1-36.1: Typical looking felsic lapilli 30 to 50% cherty clasts and bands. Lower contact gradational			
36.1 - 44.9	Felsic Lapilli Tuff			Possibly altered mafic tuff? Typical with felsic clasts (not chert) throughout with 10% interclastic talc/ser.	85°	Talcose wispy talc/ser bands = 10%	From 36.1-37.6: 40% py in bands to 2cm, trace AsPy. From 37.6-44.9: 2-% Py wit trace AsPy
44.9 - 46.1	Mixed Lapilli Tuff	Dark Grey	Fine	Mixed flattened clasts of talc/ser schist, chert and sulphide rich frags in pyrite rich matrix. Weakly heeled fault bx from 44.9-45.1. Lower contact marked by 10 cm quartz vein.	85°	Talc/ser frags.	30% Py trace AsPy
46.1 - 47.4	Brecciated Chert	Med to Lt Grey	Fine to aphanitic	Crudely banded and broken with 10% inter frag talc schist, becomes less chert like with depth. Lower contact marked by fault gouge	80-85	10% Talc	10% Py, 1% AsPy inter-clastic.
47.4 - 48.5	Massive to Semi massive sulphides	Dull	Fine granular	From 47.4-47.5: Fault gouge From 47.5-47.7: sulphide rich argillite. From 47.7-48.3: Massive sulphide 10% qtz gouge. From 48.3-48.5: Coarse modular pyrite (trace AsPy) in 40% argillite host. Lower contact gradational.	80° 80°	Talcose argillite host.	From 47.4-47.5: 30% Py. 2% AsPy. From 47.5-47.7: 40% Py, 5% AsPy. Trace Pbs, Cp. From 47.7-48.3: 70% Py, 5% Pbs, 5% AsPy, tr. Cp From 48.3-48.5: 60% Py, trace AsPy, Cp, Pbs.

FROM TO	ROCK TYPE	COLOUR	GRAIN SIZE	TEXTURE AND STRUCTURE	ANGLE TO CORE AXIS	ALTERATION	SULPHIDES
48.5 - 56.1	Sulphide Rich Mafic Tuff	Dk Grey	Fine	<p>Fine granular sulphide rich mafic tuff with 10-20% argillite component characterized by fine (to 1mm) white spotting throughout = possible pseudomorphed phenos or amydules now qtz filled.</p> <p>From 49.2-49.9: Broken and weakly heeled "fault gouge"</p> <p>From 50.3-50.4: broken fault gouge.</p> <p>Lower contact fairly distinct</p>	<p>85-90</p> <p>$\pm 90^\circ$</p> <p>$\pm 90^\circ$</p>	<p>From 48.5-50.4: Bleached Light grey.</p> <p>From 50.4-56.1: hematite stained throughout grading to hematite stained stockwork.</p>	Very fine diss. Py and AsPy 20% Py, 3% AsPy
56.1 - 70.3	Bleached Mafic Tuff	Light to Dk Grey		Insitu fractured bleached mafic tuff, with 10% black cherty argillite as fracture filling.	-----	Bleached	1-3% diss. Py
70.3 - 71.4	Sulphide Gouge & Qtz Vein	Lt Green	Fine	Fine sulphide talc rich gouge heavily cut by quartz veins. 40 cm core lost.			30-50% pyrite. Quartz veins barren
71.4 - 82.9	Mixed Argillite and Epiclastic Sandstone		Fine to Med	<p>Thinly bedded graphitic argillite with thin 10 cm to thick 1m sandstone beds. Quartz, chert, siltstone angular clasts.</p> <p>Strongly cut by quartz, veins especially 80.5-81.2m</p>	70-90	Unaltered	
				END OF HOLE			

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HOLE NO _____

ZIPPY PRINT® - BRIDGEPORT, RICHMOND

CORPORATION FALCONBRIDGE COPPER

DRILL HOLE RECORD

METRIC UNITS
IMPERIAL UNITS

HOLE NUMBER RG-10	GRID MAIN	FIELD COORDS	LAT. L98 + 00	DEP. 0+19.5 NE	ELEV. 1548.71	COLLAR BRNG. 225	COLLAR DIP -50	HOLE SIZE NQ	FINAL DEPTH 93.0m
PROJECT 212	CLAIM#	SURVEY COORDS				DATE STARTED: Dec 4/83 DATE COMPLETED: Dec 5/83	CONTRACTOR Longyear CORE STORAGE CASING 6.1 m		
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
30	-46°								
61	-43°								
91	-43°								

HOLE NO RG - 10
ZIPPER PRINT - BRIDGEPORT RICHMOND

LOGGED BY M. ATKINSON

FROM TO	ROCK TYPE	COLOUR	GRAIN SIZE	TEXTURE AND STRUCTURE	ANGLE TO CORE AXIS	ALTERATION	SULPHIDES
6.1 - 16.3	Felsic Tuff	Dark Grey		Siliceous fragments, 1mm white lapilli in chlorite talc rich matrix. Moderately schistose.	60-70	Talc and chlorite altered	Some sections very heavy pyrite 50-60% groundcore. Mostly 5-10% very fine pyrite (and arsenopyrite ?)
16.3 - 17.5	Quartz stockwork in Felsic Tuff	Grey		Felsic rock strongly cut by quartz veins @ 70-90 to C.A.		Talc, quartz veining	Arsenopyrite and pyrite in and marginal to quartz veins. 15-20% sulphides overall.
17.5 - 43.7	Felsic Tuff to lapilli Tuff	Light Grey	Fine	Felsic fragmented. Lapilli up to 3mm - graded lapilli beds? talc + sericite lamellae between siliceous nodules		Talc and sericite on fractures and minor in matrix 5% overall.	17.5-24.2 Disseminated, semi massive bands and veinlet pyrite 10-20% overall traces arsenopyrite throughout. Trace chalcopyrite @ 24. m 23.9-24.2: 30-40% pyrite includes 5% arsenopyrite, trace chalcopyrite. 24.2-43.6: 5-10% diss. and veinlet pyrite traces arseno.
43.7 - 53.3	Chert and Cherty Breccia	White to Dk Grey	Fine	Finely banded to massive white to graphitic chert. Few talc rich tuffaceous bands. Irregular, contorted to transposed bedding. 46.8-47.9: Quartz vein rich, silica flooded section.		Talc rich bands esp.	Heavy sulphides throughout. 43.6-50.9: 10% pyrite, 1% arsenopyrite overall. 45.6-47.0: 10% arsenopyrite trace chalcopyrite in quartz rich section. 50.9-53.3: 25-35% pyrite including 5% arsenopyrite. 1-2% chalcopyrite.

RG - 10

HOLE NO _____

ZIPPY PRINT® - BRIDGEPORT, RICHMOND

FROM TO	ROCK TYPE	COLOUR	GRAIN SIZE	TEXTURE AND STRUCTURE	ANGLE TO CORE AXIS	ALTERATION	SULPHIDES
53.3 - 54.9	Quartz and Sulphides	White & Dark		Quartz rich section veins and/or silica flooded zone.		Quartz	50% sulphides. Arsenopyrite and chalcopyrite rich. 20% arsenopyrite. 1-3% chalcopyrite. 53.3-53.4, 54.8-54.9: Massive sulphide sections.
54.9 - 55.8	Cherty Tuff	Lt Yellow Grey		Coarsely broken talc bearing chert. Fractures are talc coated.		Talc on fractures	5-10% pyrite on fractures and in clots. Trace arsenopyrite.
55.8 - 58.7	LOST CORE						
58.7 - 59.0	Sulphide rich chert	Dk Grey	Fine	Fine grained siliceous chert		Siliceous	25% pyrite and pyrite disseminated. About 5% arsenopyrite.
59.0 - 60.7	Quartz Vein	White		59.0-59.7: Massive white crystalline quartz. 59.0-59.7: Massive quartz with sulphide mineralization			59.7-60.7: Mineralized with 5-10% pyrite, trace galena and chalcopyrite. 59.8-59.9: Heavy galena vein cutting quartz. 60.9-61.2: 5% pyrite disseminated in matrix.
60.7 - 62.9	Talc rich mafic tuff	Yellow	Fine to Med	Talc rich altered mafic tuff Weakly banded, white spotting 1mm. 60.9-61.2: Felsic lapilli tuff. Angular siliceous frags in talc rich matrix. 61.3-61.6: Quartz veins cutting.		Talc and sericite rich 30-40% talc.	61.3-61.6: arsenopyrite in fractures and quartz veins 1-2mm cubes.

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HOLE NO _____

ZIPPY PRINT * - BRIDGEPORT, RICHMOND

FROM TO	ROCK TYPE	COLOUR	GRAIN SIZE	TEXTURE AND STRUCTURE	ANGLE TO CORE AXIS	ALTERATION	SULPHIDES
62.9 - 93.0	Argillite & Epiclastic Sandstone	Lt Grey to Black	Fine	Thinly banded black graphi- tic argillite and fine grained epiclastic sandstone. Becomes more sandy from 88.5 to bottom of hole. 88-2-88.5: Quartz vein-barren 85.9-86.2: Quartz vein-barren	60-80	Minor talc	Clots and disseminations of pyrite. 1% overall

HOLE NO RG - 10

ZIPPY PRINT® - BRIDGEPORT, RICHMOND

CORPORATION FALCONBRIDGE COPPER

METRIC UNITS X
IMPERIAL UNITS

DRILL HOLE RECORD

HOLE NUMBER RG - 11	GRID MAIN	FIELD COORDS	LAT. 99+100 NW	DEP. 1+65 NE	ELEV. 1501.53	COLLAR SRNG. 225°	COLLAR DIP -50°	HOLE SIZE NØ	FINAL DEPTH 164.4
PROJECT 212	CLAIM#	SURVEY COORDS.				DATE STARTED: Dec 5, 1983 DATE COMPLETED: Dec 7, 1983	CONTRACTOR: Longyear CORE STORAGE: CASING 6.7		
PURPOSE								RØD 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
30	-47°								
61	-49°								
91	-49°								
122	-48°								
152	-46°								

FROM TO	ROCK TYPE	COLOUR	GRAIN SIZE	TEXTURE AND STRUCTURE	ANGLE TO CORE AXIS	ALTERATION	SULPHIDES
6.7 - 11.2	Oxidized Ser/Talc Schist	Tan	Fine	Moderately schistose with 20-30% siliceous bands and 10-20% pyritic bands up to 1 cm in schist host. Lower contact broken probably sharp.	80-85	60% talc/ser	10-20% py
11.2 - 13.7	Rhyolite Breccia	Light Grey	Fine aphanitic	Matrix poor rhyolite fragmental, rhyolite frags to 3cm, 5% inter frag sec/talc, frags aphanitic, massive and uniform textured. Fine leucoxene-type spotting. Lower contact broken, sharp?	-----	Silicified	1-3% py
13.7 - 34.8	Felsic Tuff and Lapilli Tuff	Med Grey	Fine	Moderately banded, weakly schistose fairly uniform coarse felsic tuff with ghost lapilli clasts throughout. From 13.7 to 14.9: moderately schistose and oxidized. From 33.5 to 34.8: unit coarser to felsic lapilli tuff. Lower contact gradational.	85° 85°	Wk chlorite along schistosity, from 13.7-14.9: oxidized and mod schistose (ser?). Scattered fractures with oxidized surfaces	1-3% diss py through, fairly uniform. From 33.5 to 34.8: 5-7% coarse py
34.8 - 44.6	Felsic Lapilli Tuff	Med to dk Grey	Fine	As above but sulphide content higher with very fine diss py in 50% inter lapilli wkly to moderately sericitic host, 1-5 mm lapilli distinct occur has creamy grey to light grey clasts in dk sulphide rich host.	85°	Wk to moderate sericite	20% fine py

FROM TO	ROCK TYPE	COLOUR	GRAIN SIZE	TEXTURE AND STRUCTURE	ANGLE TO CORE AXIS	ALTERATION	SULPHIDES
44.6 - 51.3	Felsic Lapilli Tuff	Med Grey and Tan	Fine	Typical lapilli tuff as above, wk to moderate sericite/talc grading to weak sericite/talc with depth. Lower contact gradational	85°	Wk to moderate ser/talc	5-10% diss and patchy py at 48.5: 3cm wide py (80%) qtz vein at 60°.
51.3 - 58.1	Altered Felsic Lapilli Tuff (Schist)	Tan	Fine	As before, however, moderately to strongly altered to talc/ser schist moderately schistose, 20% distinct felsic lapilli throughout. Lower contact sharp	80° - 85°	Moderate to strong talc/sericite.	10-2% Py, diss and patchy bands in schistosity.
58.1 - 58.3	Banded chert (siliceous exhalite)	Light Grey	Aphanitic	Fairly well banded with bands 5mm to 1 cm wide Lower contact sharp	80-85°	Siliceous	10% patchy and diss Py and lmm concentrations paralleling banding.
58.3 - 79.3	Felsic Lapilli Tuff	Light to Med Grey	Fine	Typical lapilli tuff, wkly schistose finely tuffaceous to 61.3. From 61.3 to 62.4: strongly schistose From 64.9 - 65.5: banding broken with possible fault gouge @ 65.4 At 66.0: 1 cm fault gouge At 67.5: 1 cm broken gouge At 69.6: 2 cm gouge From 71.9 - 71.9: Cherty lapilli stone clast supported clast 2-3 cm Lower contact gradational	85° 85° 75° ? 80°	wk chl/ser/talc	From 58.3-68.0: 5% diss Py From 68.0-72.0: 10% diss Py in wispy bands From 72.0-79.3: 10% grading to 5% diss Py.

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HOLE NO _____

ZIPPY PRINT * - BRIDGEPORT, RICHMOND

FROM TO	ROCK TYPE	COLOUR	GRAIN SIZE	TEXTURE AND STRUCTURE	ANGLE TO CORE AXIS	ALTERATION	SULPHIDES
79.3 - 97.9	Felsic Lapilli Tuff with pyrite Stockwork	Med Grey	Fine	Felsic lapilli tuff as before but coarsely broken and bedded in part with py + qtz stockwork veins up to 1cm, at 93.6 pyrite rich vein 4 wide @ 90°. From 83.8-85: strongly schistose, broken At 89.2: 3 cm fault gouge. At 96.2: 1 cm fault gouge. Lower contact marked by narrow gouge and fault bx 1 cm wide.	80° 80° 45° 90° 80°-90°	grades from weak ser/talc/chl to wk chlorite	20-3-% pyrite, increasing with depth, as distinct pyrite (qtz) stockwork with veins averging 1cm, and as poorly defined disseminated zones crudely paralleling schistosity.
97.9 - 101.5	Graphitic chert	Black	aphanitic	Black chert with graphite developed along fracture planes, massive looking, broken throughout. From 100.6-100.8: bull qtz vein with broken contacts Lower contact broken.	-----	Silicified	1-2% fine diss. Py
101.5 - 103.9	Chert Breccia	Med Grey	aphanitic	Insitu broken grey chert with 10% wispy talc/ser interstitial. Lower contact marked by 2cm fault gouge	variable ± 90°	10% talc/ser, silicified host?	10% Py assoc with talc/ser trace AsPy
103.9 - 104.8	Talc Schist with chert breccia	Tan and Light Grey	Fine	60% talc schist, 40% grey chert fragments Lower contact gradational	85-90	60% talc	5% diss Py

HOLE NO RG 11

ZIPPY PRINT * - BRIDGEPORT, RICHMOND

FROM TO	ROCK TYPE	COLOUR	GRAIN SIZE	TEXTURE AND STRUCTURE	ANGLE TO CORE AXIS	ALTERATION	SULPHIDES
104.8 - 110.2	Mixed chert clasts and talcose tuff	Tan & Med to light Grey	Fine	Mixed assemblage of light and medium grey chert clasts, 30% talc rich tuffaceous fragments and interclastic wisps.	variable	30% talc fragments	10% interclastic Py with a tr. As Py.
110.2 - 116.1	Chert Breccia	Dk Grey	aphanitic	Broken and clastic chert with clasts to 2 cm, subround to subangular in a siliceous sulphide host. Lower contact gradational	variable	Silicified	From 110.2 - 112.0: 15-20% clastic looking pyrite with 1% AsPy From 112.0 - 112.6: 40% clastic looking Py with 3% As Py From 112.6 - 116.1: 10% Py (trace AsPy)
116.1 - 119.2	Brecciated talc schist and chert	Tan	Fine	Predominately talc rich fragments, 30% grey chert fragments, with 10% stockwork and diss. sulphide. Lower contact gradational		Strong talc	10% Py <1% AsPy
119.2 - 128.1	Chert Breccia with Massive Sulphides	Dk Grey	aphanitic	Broken and clastic chert in a siliceous host, massive sulphide sections up to 15 cm thick decreasing in concentration and thickness with depth, unit grades from a medium grey to a light grey to a tannish light grey with depth in response to increase in talc content and possibly a tuffaceous component. Lower content gradational	85°-90°	Silicified grading wk/moderate talc with depth	20% as bands of massive sulphide up to 15 cm wide 12% Py 3% cp 5% AsPy tr. Pbs } in massive sections From 119.2-119.5: 30% Py, 2% As Py From 119.5-121.0: 10% Py, 5% As Py From 121.0 - 121.3: 10% Py 10% As Py, 3% Cp From 121.3-121.45: Massive 40% Py, 40% AsPy, 3% Cp @ 90° From 121.45-121.8: 2% Py, 2% AsPy

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HOLE NO

ZIPPY PRINT® - BRIDGEPORT, RICHMOND

FROM TO	ROCK TYPE	COLOUR	GRAIN SIZE	TEXTURE AND STRUCTURE	ANGLE TO CORE AXIS	ALTERATION	SULPHIDES
119.2 - 128.1				cont'd from page 5			cont'd from page 5 From 121.8-121.9: massive 40% Py, 30% AsPy, 2% Pbs, 3% Cp. From 121.9-122.5: 3cm massive bands @ 81° carrying 40% Py, 40% AsPy, 3% Cp, tr. Pbs. From 122.5-128.1: overall 10% Py, 1% AsPy, Tr. Pbs, and Cp with sulphide rich intervals @: 124.0 - 4cm \overline{w} 50% Py, 3% AsPy, 1% Cp, Tr. Pbs 124.4 - 8cm \overline{w} 50% Py, 1-2% AsPy, Tr. Cp, Pbs. 124.6 - 4cm \overline{w} 60% Py, 3% Aspy, 1% Cp, 1% Pbs. 127.3-1cm \overline{w} 60% Py, 1% AsPy TrCp, TrPbs.
128.1 - 134.0	Mixed Chert and Talc Schist	Tan	Fine	Cherty bands with wispy talc schist grading with depth to talc schist with scattered cherty bands.		Strong talc with depth	overall sulphides @ 10% Py with Tr. AsPy, Pbs Cp. From 130.2-130.7: 30% Py, 1% AsPy, 1% Cp, 1% Pbs as massive bands to 1cm @ 85°
134.0 - 135.0	Mixed Sulphitic Argillite & Felsic Lapilli	Dk to Med Grey	Fine	Well bedded talcose argillite with mixed felsic lapilli, subround to 1 cm, totalling 30% of unit, argillite with clastic fine sedimentary pyrite bands to 5mm wide. Lower contact fault gouge.	80°	wk to med talc	30% sulphide as fine sedimentary pyrite

HOLE NO. RG - 11

FROM TO	ROCK TYPE	COLOUR	GRAIN SIZE	TEXTURE AND STRUCTURE	ANGLE TO CORE AXIS	ALTERATION	SULPHIDES
135.0 - 137.6	Mixed Felsic Lapilli and Sulphidic Argillite	Med to Dk Grey	Fine	Mixed clastic predominantly felsic lapilli as in above unit totalling 60% with argillite bands and flat clasts totalling 20%, 20% sulphides as bands assoc. to argillite and frags. From 135.0-135.2: broken fault gouge Lower contact	80° 80°-90°	Talcosse	20% Py as diss. in argillite bands to 3mm and clasts to 2mm.
137.6 - 140.0	Cherty Argillite	Black	Fine to aphanitic	Very hard chert argillite with well developed band enhanced by fine grained sedimentary pyrite developed along bedding planes, excellent fine sedimentary sulphide textures, 10% scattered felsic lapilli, graphite developed along fractured planes, framboidal pyrite to 2mm, Lower contact gradational	80°-85°	Silicified argillite?	25% pyrite as well defined sedimentary concentrations and as framboids.
140.0 - 141.0	Mixed Felsic Lapilli and Cherty Argillite	Med Grey to black		60% med grey felsic clasts to 1 cm in a black cherty argillite (as above) host. From 139.8-140.0: fracture and qtz heeled cherty argillite.	85°	Silicified	20% blotchy Py.
141.0 - 142.8	Mixed Clastic	Dk Grey	Fine	Fine mixed clastic in cherty argillite host, mixture of black chert, pyrite, argillite clasts, fragment size not exceeding 1mm, graded beds up to 30 cm, firm 142.0-142.8 clast size increased to 1 cm.	85°	Silicified	20% Py - fine clastic and framboidal.

RG -11

HOLE NO _____

ZIPPY PRINT * - BRIDGEPORT, RICHMOND

FROM TO	ROCK TYPE	COLOUR	GRAIN SIZE	TEXTURE AND STRUCTURE	ANGLE TO CORE AXIS	ALTERATION	SULPHIDES
141.0 - 142.8				cont'd from page 7 Lower contact sharp	85°		
142.8 - 154.8	Mafic Tuff	Med and Dk Grey	Fine	Coarsely broken with 10-20% inter frag black cherty argillite host, the tuff is textured with 1mm creamy grey siliceous spots through- out, rare massive tuffa- ceous sections to 1m. Lower contact gradational	80°-90°	Bleached Mafic	1-2% diss. Py
154.8 - 164.4	Argillite & Epiclastic Sandstone		Fine	From 154.8-156.7 argillite	80-85		2% diss Py
			Med	From 156.7-157.6: epiclastic sandstone			5% blotchy Py
			Fine	From 157.6-157.8: argillite	80-85		2% diss Py
			Med	From 157.8-160.2: epiclastic sandstone			1% Py
			Fine	From 160.2-160.3: argillite	90°		1% Py
			Med	From 160.3-163.8: epiclastic sst			1% Py
			Fine	From 163.8-164.4: argillite	90°		1% Py
164.4				END OF HOLE			

CORPORATION FALCONBRIDGE COPPER

METRIC UNITS
IMPERIAL UNITS

DRILL HOLE RECORD

HOLE NUMBER <u>RG-12</u>		GRID <u>MAIN</u>		FIELD COORDS	LAT. <u>98 + 50 NW</u>	DEP. <u>1 + 09 NE</u>	ELEV. <u>1526.98</u>	COLLAR BRNG. <u>225</u>	COLLAR DIP <u>-50</u>	HOLE SIZE <u>NQ</u>	FINAL DEPTH <u>146.9 m</u>
PROJECT <u>212</u>		CLAIM #		SURVEY COORDS				DATE STARTED: <u>Dec. 6</u> DATE COMPLETED: <u>Dec. 7</u>	CONTRACTOR: <u>LONGYEAR</u> CORE STORAGE:		CASING: <u>6.4 m</u>
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		
30m	46°										
61m	43°										
91m	44°										
146.9m	45°										

HOLE NO RG-12
ZIPPY PRINT - BRIDGEPORT RICHMOND

LOGGED BY M. Atkinson

FROM TO	ROCK TYPE	COLOUR	GRAIN SIZE	TEXTURE AND STRUCTURE	ANGLE TO CORE AXIS	ALTERATION	SULPHIDES
6.4-20.1	Felsic Lapilli Tuff	Lt-Med Grey	Fine	Uniform textured siliceous rock. 10% quartz phenocrysts 20-30% white lapilli up to 1mm. Weak foliations @: Very little matrix	80-90	Minor chloritic	< 5% spotty disseminated pyrite
20.1-42.8	Talc rich Felsic Lapilli	Yellow Grey	Fine to Med	Siliceous bands and indistinct fragments separated by talc rich lamellae and bands. Weak schistosity	80-90	20-40 talc rich matrix (+ sericite?)	10-15% pyrite rich laminae, bands and disseminations, few py-rich fragments 29.1-32.6 5% disseminated pyrite
42.8-79.4	Felsic Lapilli Tuff to Lapillistone	Lt Grey- Yellow	Fine to Coarse	Medium to coarse siliceous fragments in talc-sericite matrix, quartz, phenocrysts 43.2-43.6 coarsely broken felsic lapillistone - very little matrix 57.4-58.2 Gouge sulphide rich with coarse siliceous rock fragments. No core loss 66.9-70.4 Cut by quartz veins every 10-20 cm. 1-2% fine pyrite in quartz veins. More talc Probably more tuffaceous 71.5 Fine kink shear @	80-90 60-80 50-60	< 10% talc-sericite matrix Very siliceous fragments sericite + talc gouge more talc-rich section	5-10% disseminated pyrite 45.8-50.8 10-2% disseminated pyrite and pyrite rich laminae, pyrite rich fragments 53.6 pyrite 10-15% 15-20% pyrite in rock frags and gouge 10-15% pyrite overall with 1-2% pyrite in quartz veins. Trace cp in qtz vein @ 79.0

RG-12

HOLE NO _____

ZIPPY PRINT® - BRIDGEPORT, RICHMOND

FROM TO	ROCK TYPE	COLOUR	GRAIN SIZE	TEXTURE AND STRUCTURE	ANGLE TO CORE AXIS	ALTERATION	SULPHIDES
79.4-83.7	Felsic Tuff	Lt green	Fine	Fine grained, light green siliceous rock. Fine white spots to Imm-probable lapilli		Minor chlorite and sericite	5% disseminated pyrite
83.7-89.4	Felsic Lapilli Tuff to Lapillistone	Lt Grey	Fine to Med	Fine grained massive febic rock, coarsely broken, in-situ breccia and minor lapilli tuff 83.7-84.6		Extremely siliceous rock. 86.0-87-7 Fractures @ 10-20 cm density with 30% bright green mica, quartz veins	< 5% pyrite in fractures and disseminations. 86.6-87.7 trace chalcopryrite in quartz veins. 5-1-% pyrite in fractures
89.4-95.5	Mixed chert and talc-rich Tuff			Fine banded graphitic chert. Contorted and transposed banding, also coarsely broken cherty breccia 89.8-90.3 Massive fine grained felsic rock. 5% pyrite disseminated 90.3-92.9 Thinly banded talc rich siliceous tuff-aceous rock, minor graphitic chert interbands cut by 2-3 cm quartz veins. 92.9-95.5 Graphitic chert with 5-10 cm quartz veins (silica flood?) throughout.	80-90	Talc-rich tuff Silicification	89.4-89.8 5-10% pyrite disseminations and fracture fill. 5% clotty disseminated pyrite. 5% pyrite disseminated. <5% pyrite
95.5-97.7	Felsic tuff to Lap tuff	Light Greenish Grey	Fine	Fine grained siliceous rock, coarsely broken 95.5-96.3 96.3-97.7 Talc rich matrix to irregular fragments of mixed quartz and <u>barite</u> . baritic rims to fragments.			<5% pyrite infractures and disseminations. 96.3-97.7 5-10% pyrite in talc matrix and in siliceous-baritic fragments.

RG-12

HOLE NO _____

ZIPPY PRINT * - BRIDGEPORT, RICHMOND

FROM TO	ROCK TYPE	COLOUR	GRAIN SIZE	TEXTURE AND STRUCTURE	ANGLE TO CORE AXIS	ALTERATION	SULPHIDES
97.7 - 100.3	Mixed graphitic chert and Tuff	Greenish Yellow to black	Fine	Finely banded graphitic chert and talc rich siliceous tuff. 98.8-99.5 Cut by 2-10cm quartz veins	80-90	Talc rich tuffaceous bands	10-15% pyrite laminae along banding.
100.3 - 101.1	Massive Sulphides ?			100.3-101.1 Only 20cm ground core in box. Quartz and massive Sulphide			Fine grained massive pyrite and arsenopyrite
101.1 - 123.4	Mafic Tuff	Greenish Grey	Fine	Uniform textured greenish fine grained mafic rock. White lapilli to 1mm, ghost fragments coarsely broken (>20cm) with argillite infillings 115.0 → In situ brecciation of mafic lapilli tuff into 105cm pseudo fragments with black graphitic argillite infilling.	70-80	Chloritic	<1% disseminated pyrite
123.4 - 126.1	Quartz veins and graphitic argillite breccia			Thinly banded graphitic argillite, brecciated and broken. 40% of the interval is quartz vein material barren. 50% gouge and broken core.			

RG 12

HOLE NO _____

FROM TO	ROCK TYPE	COLOUR	GRAIN SIZE	TEXTURE AND STRUCTURE	ANGLE TO CORE AXIS	ALTERATION	SULPHIDES
126.1- 146.9	Argillite and Epiclastic Sandstone		Fine to Medium	Thinly banded black graphitic argillite with interbands of quartz rich sandstone. Scours indicate tops downhole 137.3-138.0 and 138.5-146.9 coarser sandstone beds up to 2mm clasts -crudely graded - tops downhole.	80-90	Unaltered	<1% pyrite

RG-12

HOLE NO _____

CORPORATION FALCONBRIDGE COPPER

DRILL HOLE RECORD

METRIC UNITS
IMPERIAL UNITS

HOLE NUMBER RG - 13	GRID Main	FIELD COORDS	LAT. 101 NW	DEP. 1+03 NE	ELEV. 1447.44	COLLAR BRNG. Az225	COLLAR DIP -50	HOLE SIZE NQ	FINAL DEPTH 93.3M
PROJECT 212	CLAIM #	SURVEY COORDS.				DATE STARTED: Dec 8, 1983 DATE COMPLETED: Dec 10, 1983	CONTRACTOR: Longyear CORE STORAGE.		CASING: 14.0 m
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
30	-49°								
61	-48°								
91	-48°								

HOLE NO RG - 13
ZIPPY PRINT - BRIDGEPORT RICHMOND

LOGGED BY M. Atkinson

FROM TO	ROCK TYPE	COLOUR	GRAIN SIZE	TEXTURE AND STRUCTURE	ANGLE TO CORE AXIS	ALTERATION	SULPHIDES
14.0 - 22.0	Felsic Lapilli Tuff	Light Yellow Grey	Fine-Med	Siliceous fragments elongate ovoid fragments in \approx 10% talc-sericite matrix fragments <1-5 mm	70-80	Minor talc and sericite in matrix	Fine disseminated pyrite and clots of pyrite up to 5mm 5-10% pyrite overall
22.0 - 26.2	Sulphide rich Felsic Breccia	Dk Grey	Med.	Siliceous fragments angular irregular shapes <1-3cm. Fine felsic fragmental matrix - minor sericite. <10% matrix. Quartz veinlets -brecciated (and boudined)		Very siliceous	20-30% pyrite in matrix to felsic fragments and some pyrite rich fragments
26.2 - 27.1	Talc rich Felsic Tuff to lapilli tuff	Yellow-Grey	Fine-Med	Talc schist matrix - few quartz phenocrysts, brecciated quartz veins, angular elongate siliceous fragments <1cm.	60-70	60% talc matrix. Strongly schistose.	10-15% very fine disseminated pyrite.
27.1 - 27.3	Semi-Massive Sulphide		Fine-Med	27.1-27.15 Black chert. 27.15-27.2 Felsic fragmental - angular white siliceous frags 27.2-27.3 Semi massive sulphide.		Siliceous	27.2-27.3 50-60% coarse pyrite in dark matrix
27.3 - 27.6	Fault Gouge			10 cm core lost quartz, talc. sulphide rich.	60		
27.6 - 29.7	Mafic tuff to breccia	Light Purplish Grey	Fine - Med	Mafic tuff in situ breccia and ghost fragments 28.4-29.2 Quartz vein sub-parallel to C.A.		Talc bearing bleached	Disseminated clots of pyrite and incipient pyritic fractures 5% py overall

FROM TO	ROCK TYPE	COLOUR	GRAIN SIZE	TEXTURE AND STRUCTURE	ANGLE TO CORE AXIS	ALTERATION	SULPHIDES
29.7 - 80.5	Mafic Tuff	Purplish Grey	Fine	Uniform textured fine mafic tuff, some ghost fragments and in-situ brx with black cherty argillite infillings. White mottled spots and infillings of feldspar and quartz 1-3 mm, Fine lapilli. 51.9-60.7 Mafic volcanoclastic angular irregular fragments up to 1 cm in talc chlorite matrix - minor cherty argillite beds and argillite frags in volcanoclastic gradational into main breccia mafic tuff unit.	60-80	Talcose and bleached talc rich sections @ 72.8, 74.1-74.8 talc bearing	Black argillite infillings on fractures are sulphide rich. Also disseminated clots and incipient pyritic fractures. 2-3% py overall. 1cm massive py bands, veins @ 31.5, 32, 34.7 <2% pyrite
80.5 - 93.3	Epiclastic Sandstone	Grey	Fine-Med	Quartz rich epiclastic sandstone, subangular to rounded clasts stretched clasts, blue quartz eyes, chert clasts, siltstone clasts Argillite beds up to 1m thick, more commonly 10 cm. Graded bedding shows tops downhole 83.5-85.4 Talc rich section of argillite and sandstone, cut by quartz veins.	70-80	Unaltered Talc rich sandstone matrix	Traces pyrite 1% Fine disseminated pyrite
93.3				- END OF HOLE -			

HOLE NO RG - 13

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METRIC UNITS X
IMPERIAL UNITS

DRILL HOLE RECORD

HOLE NUMBER RG-14	GRID	FIELD COORDS	LAT 102+100 NW	DEP 1+37.5	ELEV. 1404.84	COLLAR BRNG 225°	COLLAR DIP -50°	HOLE SIZE NO	FINAL DEPTH 128.3
PROJECT 212	CLAIM #	SURVEY COORDS.				DATE STARTED: Dec 11, 1983 DATE COMPLETED: Dec 12, 1983	CONTRACTOR: Longyear CORE STORAGE. CASING 24.4		
PURPOSE Note: Subcropping bedrock probably encountered @ 7.0 m but unable to core until 24.4.								ROD 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
30	-49°								
61	-49°								
91	-49°								
122	-49°								

FROM TO	ROCK TYPE	COLOUR	GRAIN SIZE	TEXTURE AND STRUCTURE	ANGLE TO CORE AXIS	ALTERATION	SULPHIDES
24.4 - 50.7	Schistose Felsic Lapilli Tuff	Med Grey to Grey Green	Fine	Strongly schistose with intervals throughout of schist turning to clay/schist gouge zones. @ 27.7: Zemclay gouge @ 34.8: 1cm X Z schist gouges From 35.9 to 36. clay schist gouge At 42.0, 42.1 and 42.3 schist gouge 1-2 cm wide. Patchy talc rich areas start appearing @ 45.0 increasing with depth	80°-85° 80° 80° 60° upper contact 80°	strongly altered to an assemblage of talc-sericite and chlorite, this alteration facies is visually darker (chl?) than the talc rich alteration facies, rare qtz + kspar (?) veinlet.	strong sulphides throughout predominately as blotches and downout lamella in schistosity, rare (20% of total sulphide) as stringers sulphides species: all pyrite sulphide content: 20-30% py
50.7 - 51.9	Graphitic Chert	Black to dk grey	aphanitic	Badly broken, black chert, typical	-----	Silicified	10% blotchy py
51.9 - 54.5	Quartz Vein	Bull	Coarse	Predominately massive bull quartz broken talcose rich section to 52.0. At 53.3: broken graphitic chert over 10 cm. Lower contact sharp	----- 40°	-----	1-2% py
54.5 - 56.5	Talc Schist	Tan	Fine	70% talc with light grey chert throughout, evident banding in chert strongly contorted and disrupted. Strong schist weakly veined with 10% qtz + py stockwork, stockwork stands out well in contrast to tan talc schist host.	80°	Strong talc	10% py

HOLE NO. RG - 14

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FROM TO	ROCK TYPE	COLOUR	GRAIN SIZE	TEXTURE AND STRUCTURE	ANGLE TO CORE AXIS	ALTERATION	SULPHIDES
56.5 - 59.8	Mixed talc, chert and argillite	variable	Fine	Strongly schistose, 50% talc-rich sections with intervals to 0.5 m of mixed talc schist, chert and argillite, banding where evident is strongly contorted and disrupted. Lower contact gradational.	80°	Talc-rich	10% patchy pyrite
59.8 - 60.0	Chert breccia	Dk grey	Fine	Clast supported breccia, lapilli sized clasts, in part, insitu in nature in a dk grey siliceous host. Lower contact sharp.	85°	Silicified?	5% fine diss py
60.0 - 60.5	Talc schist	Tan	Fine	Talc rich with 20% grey chert as probable disrupted bands.	85°	Talc rich	10% diss. py
60.5 - 60.8	Mixed chert, argillite & sulphides	Tan & dk grey	Fine	60% disrupted chert bands in argillite-sulphide host, @ 60.7: 1cm band of massive sulphide displaying soft sed features. Lower contact gradational	85°-90°	Talcose	20%
60.8 - 61.4	Mixed Talc schist, chert and argillite	Tan and dk grey	Fine	70% talc schist with clasts and disrupted bands. Wispy argillite with pyrite. Lower contact sharp	85°	Talc rich	10% py
61.4 - 61.9	Fault gouge (Mafic Tuff)	Light Grey	Fine	Broken and schistose mafic tuff.	85°	Talcose	@% diss. Py
61.9 - 84.1	Mafic Tuff	Med to Light Grey	Fine	Mafic tuff, uniformed textured, massive, insitu brecciated throughout with interfrag black cherty argillite, grading from 10 to 20% with depth, broken and moderately		Bleached from 74.2 to 76.9: talc/ per clasts 80°	Overall @ 2% py from 74.2 to 76.9: 20% py

RG - 14

HOLE NO

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FROM TO	ROCK TYPE	COLOUR	GRAIN SIZE	TEXTURE AND STRUCTURE	ANGLE TO CORE AXIS	ALTERATION	SULPHIDES
61.9 - 84.1				<p>cont'd from page 3</p> <p>schistose increasing intensity with depth.</p> <p>from 74.2 to 76.9: 50% mixed fine lapilli tuff and coarse mafic clasts, fine lapilli contain clasts altered to talc/sericite.</p> <p>from 76.9 to 77.7: <u>Fault zone</u> with well developed gouge, irregular qtz veining and 30% graphitic schist and gouge.</p> <p>Lower contact broken</p>	30° upper contact fairly sharp		
84.1 - 86.5	Argillite	black & light grey	Fine	<p>Well bedded argillite, individual beds to 1cm.</p> <p>Lower contact gradational</p>	85°-90°	-----	1% Py
86.5 - 93.3	Epiclastic Sandstone	Med Grey	Fine to Med	Fairly massive and uniformed textured throughout, individual beds to 1 m thick.	90°	Rare bleached section	1% Py
93.3 - 97.1	Argillite and Epiclastic Sandstone	Med to Light Grey	Fine	<p>80% bedded argillite. 20% fine grained sst to 0.5 m thick.</p> <p>Lower contact gradational</p>	85-90		1% Py
97.1 - 128.3	Epiclastic Sandstone	Med Grey	Fine to Coarse	Predominately sst with 10% argillite as beds to 0.5 m, sst beds to 1 m thick coarse grading to fine up and down hole.			
128.3				END OF HOLE			

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DRILL HOLE RECORD

X METRIC UNITS
IMPERIAL UNITS

HOLE NUMBER RG-15	GRID Main	FIELD COORDS	LAT. 103+00	DEP. 1+40NE	ELEV. 1386.28	COLLAR BRNG. 225	COLLAR DIP -49°	HOLE SIZE NQ	FINAL DEPTH 98.5m
PROJECT 212	CLAIM#	SURVEY COORDS				DATE STARTED: Dec. 13/83 DATE COMPLETED: Dec. 15/83	CONTRACTOR: Longyear CORE STORAGE. CASING: 2464,		

PURPOSE	ROD LOG COLLAR SURVEY	PULSE EM SURVEY MULTISHOT SURVEY
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ACID TESTS				TROPARI TESTS			MULTISHOT DATA		
DEPTH (m)	CORRECTED ANGLE	DEPTH ()	CORRECTED ANGLE	DEPTH ()	AZIMUTH	DIP	DEPTH ()	AZIMUTH	DIP
30	-44°								
60									
90	-46°								

FROM TO	ROCK TYPE	COLOUR	GRAIN SIZE	TEXTURE AND STRUCTURE	ANGLE TO CORE AXIS	ALTERATION	SULPHIDES
24.6 - 30.5	Felsic Tuff to fine Lapilli Tuff	Lt.Grey	Fine	Uniform fine grained light grey felsic tuff - fine lapilli up to 1mm, quartz phenocrysts rare. Weakly foliated @ 28.3 - 10cm talc rich gouge.	70-80°	<5% talc matrix	5% disseminated pyrite, few pyritic laminae.
30.5 - 45.0	Felsic Lapilli Tuff	Lt.Grey -Yellow	Medium -Coarse	Siliceous irregular to ovoid fragments and bands, minor talc rich matrix of probable tuffaceous origin.	60-80°	5-10% talc rich matrix.	10% disseminated pyrite and pyritic matrix to frags. 30% pyritic bands @ 40.5, 43.3, 41.6.
45.0- 47.6	Talc rich Felsic Tuff and Graphitic Chert	Yellow Grey	Fine	Fine siliceous bands and talc rich bands. Minor siliceous breccia fragments and talc rich matrix. 45.0-45.3, 45.7-45.8 Black graphitic chert breccia. Brecciated appearance - matrix infilling is quartz and sulphides.	70-80°	Talc rich bands and matrix 30-40%.	Few pyritic bands and disseminated pyrite 5-10%. Matrix infilling quartz plus 20% pyrite, traces of arsenopyrite, chalcopyrite, galena.
47.6- 58.5	Graphitic Chert	Black	Fine	Finely banded black chert, regular to contorted and transposed banding. 51.5-52.0 Quartz vein sub-parallel to C.A. Minor py. 52.5-52.7 Quartz veining and silica flooding.			<5% pyrite in quartz veinlets in cleavage and in bedding. 56.7 Traces chalcopyrite and galena in quartz veinlets.

FROM TO	ROCK TYPE	COLOUR	GRAIN SIZE	TEXTURE AND STRUCTURE	ANGLE TO CORE AXIS	ALTERATION	SULPHIDES
58.5-65.3	Talc rich Felsic Tuff	Yellow-Grey	Fine	Finely banded siliceous and talc rich bands. Contorted, transposed irregular banding. Incipient quartz-pyrite stockwork throughout. Minor graphitic chert inter-bands @ 60.4-61.3, 61.9-62.0 Graphitic chert band.		50-60% talc alteration of probable tuffaceous material.	2-3% pyrite in fine fractures and quartz veinlets. 1-3cm quartz veins w. 10% pyrite, trace Cu Fe S ₂ @ 58.6, 59.3, 62.6, 63.7, 64.1m.
65.3-65.8	Gouge			Talc and graphite rich gouge and badly broken core. 65.7 1cm brecciated semi massive sulphide band.	50° contact		65.7 1cm brecciated semi massive sulphide band - pyritic, traces aspy and cpy?
65.8-68.7	Mafic Volcaniclastic	Dark Grey	Fine-Medium	Fine mafic tuff to lapilli tuff. Weakly foliated @ White spots up to 1mm (baritic?) In-situ brecciation locally.	70-80°	Talc and chlorite alteration.	Pyritic fragments and matrix to fragments 10-15% overall.
68.7-70.2	Mixed Graphitic Argillite and Quartz Veins	Black & White		68.7-68.75 Gouge 68.75-70.2 Broken and brecciated graphitic argillite and broken irregular quartz veins.		Quartz veins.	5-10% pyrite disseminations and lamellae in argillite.
70.2-79.0	Argillite and Epiclastic Sandstone	Dk Grey	Fine	Thinly bedded graphitic argillite and fine sandstone. Scours indicate tops downhole.		Unaltered.	Blotchy and disseminated pyrite <1%.

RG-15

HOLE NO

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FROM TO	ROCK TYPE	COLOUR	GRAIN SIZE	TEXTURE AND STRUCTURE	ANGLE TO CORE AXIS	ALTERATION	SULPHIDES
79.0- 98.5	Epiclastic Sandstone to Conglomerate	Grey	Fine- Coarse Sand	Crudely bedded sandstone - sub angular to subrounded blue quartz eyes, argillite, chert, felsic clasts in fine sandstone matrix.	70-90°	Unaltered. 95.0-96.0 Bleached, lt greenish grey, cut by quartz veins, minor talc rich matrix.	Dissem and clots of pyrite 1% overall.

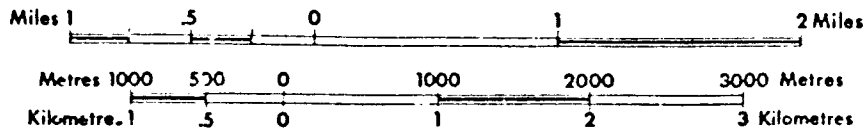
HOLE NO RG-15

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GEOLOGICAL BRANCH ASSESSMENT REPORT

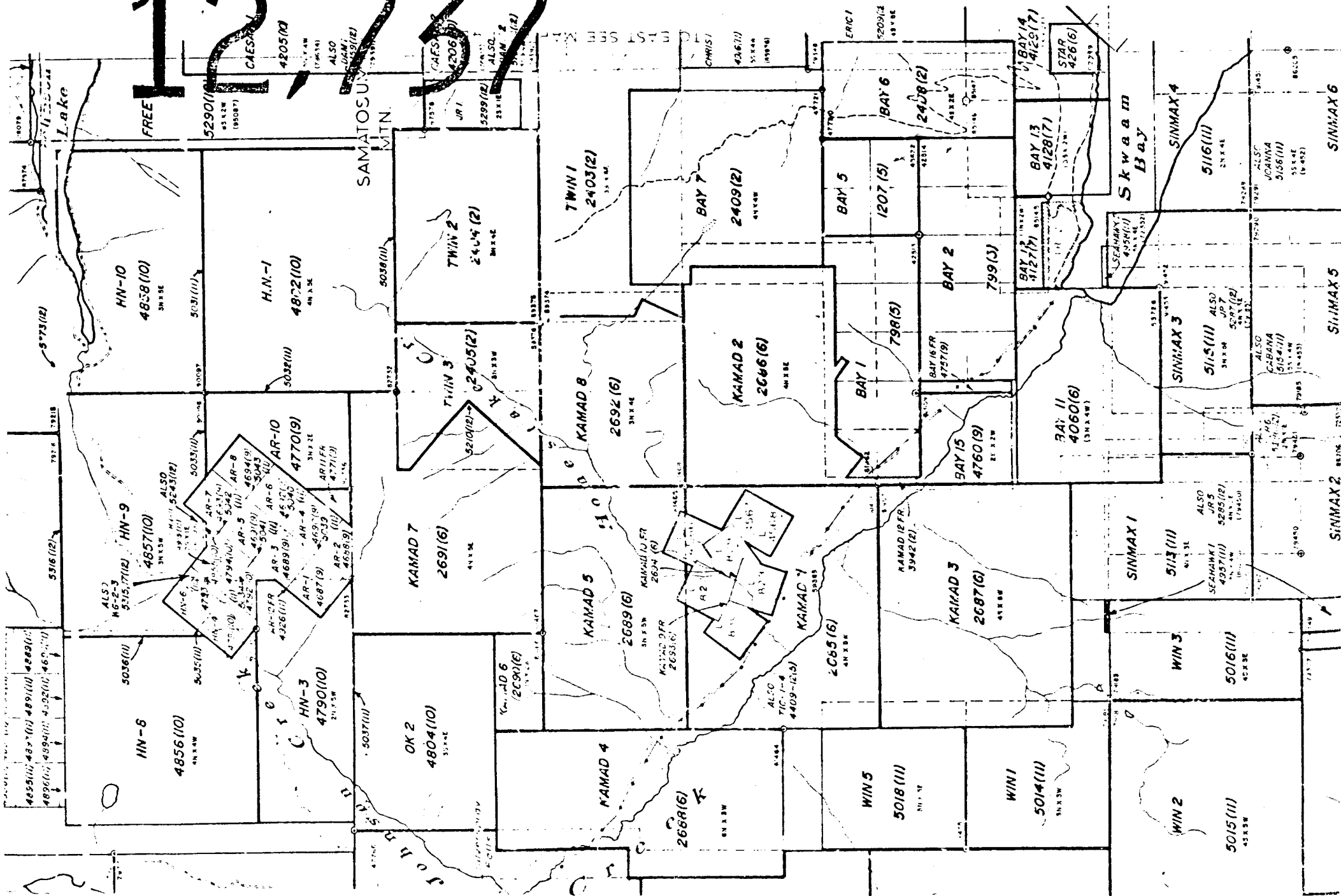
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Ministry of Energy, Mines and Petroleum Resources

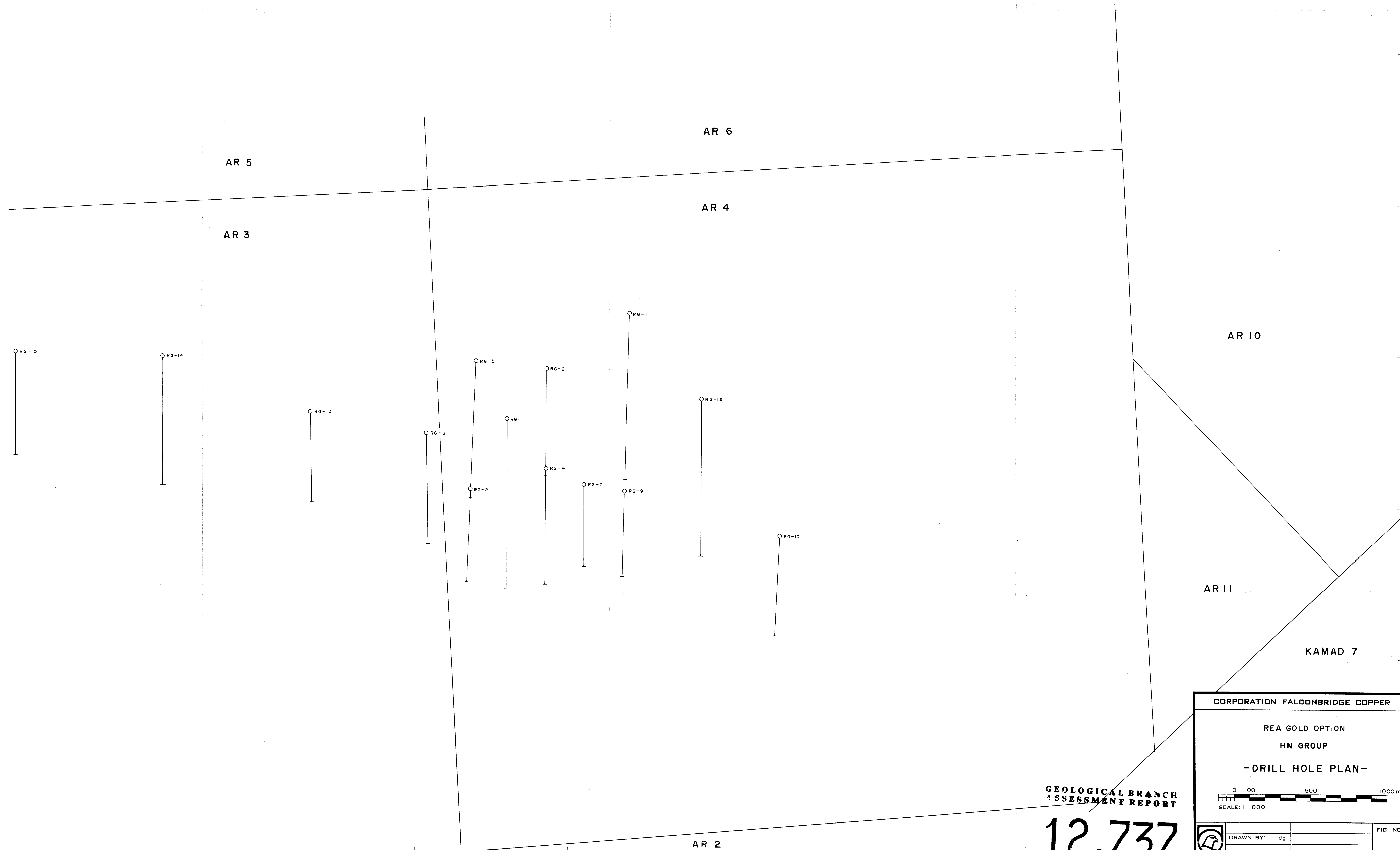
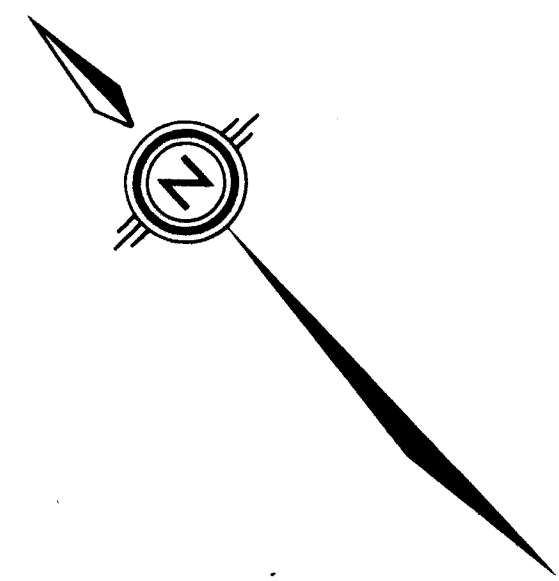
LEGEND
 CROWN GRANTED MINERAL CLAIM
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GEOLOGICAL BRANCH
ASSESSMENT REPORT

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