RICE BAY

GEOLOGICAL MAPPING AND LITHOGEOCHEMICAL SAMPLING

August - September, 1988

NTS 52C/11 PN 526

D. J. ALDERMAN
FALCONBRIDGE LIMITED
Winnipeg, Manitoba

SUMMARY AND CONCLUSIONS

This report is the synthesis of information gathered during a mapping and lithogeochemical sampling program completed in August - September, 1988, on the Rice Bay claim group in Northwestern Ontario.

The mapped area is composed of NE striking, NW dipping metavolcanic and metasedimentary units with a host of intrusive units ranging from pegmatites to gabbros. Alteration, capped by an iron formation, may indicate two distinct volcanic events. The iron formation may represent sedimentary accretion during a hiatus in volcanic activity.

There is no economic grade mineralization on the property, although a favorable environment for an economically viable massive sulphide deposit exists.

INTRODUCTION

From August 21 - September 4, 1988 a geological mapping and lithogeochemical sampling program was carried out to further explore and possibly re-evaluate the base metal potential of the Rice Bay Claims.

The Rice Bay Claim Group comprises 37 contiguous claims in the Watten Township, Northwestern Ontario (Fig 1). These claims were staked in December 1984 and January 1985 to encompass several airborne EM anomalies in an area with economically viable base metal potential.

The mapping was carried out at a scale of 1:2400 along an old grid. All rocks in the area mapped have been exposed to at least amphibolite grade metamorphism and as a result have lost their primary mineralogy and textures.

The author was capably assisted by G. Rogers, M. Edwards and M.Peshko. 137 rock samples were collected and all were sent to X-Ray Assay Lab for whole rock lithogeochemistry.

LOCATION AND ACCESS

The Rice Bay Claims are located 20km. north - east of Fort Frances and 3 km. north of the Trans-Canada (Highway17). Access to the property is by boat from the Great Bear Marina located on Highway 17 (Fig. 1).

CLAIM STATUS

Table 1 provides a summary of the claims and recording dates.Figure 2 shows the location of each claim.

PREVIOUS WORK

The Rice Bay Claims have been a site of geologic interest since 1913 when Lawson (GSC) first mapped the area. Table 2 provides a summary of work performed on the property. A 3m. x 3 m. X 2m. deep pit and a 7m. x 1.5m. x 2m. deep trench are found on a lean chert-magnetite-garnet formation on Claim K829977. No record of these works has been filed.

TABLE 1: RICE BAY CLAIM GROUP

CLAIM NUMBER	RECORDING DATE	ASSESSMENT DUE (DAYS)	DATE DUE
K829964	DEC. 12, 1984	60	DEC. 12, 1989
K829965	DEC. 12, 1984	60	DEC. 12, 1989
K829966	DEC. 12, 1984	60	DEC. 12, 1989
K829967	DEC. 12, 1984	60	DEC. 12, 1989
K829968	DEC. 12, 1984	60	DEC. 12, 1989
K829969	DEC. 12, 1984	60	DEC. 12, 1989
K829970	DEC. 12, 1984	60	DEC. 12, 1989
K829971	DEC. 12, 1984	60	DEC. 12, 1989
K829972	DEC. 12, 1984	60	DEC. 12, 1989
K829973	DEC. 12, 1984	60	DEC. 12, 1989
K829974	DEC. 12, 1984	60	DEC. 12, 1989
K829975	DEC. 12, 1984	60	DEC. 12, 1989
K829976	DEC. 12, 1984	60	DEC. 12, 1989
K829977	DEC. 12, 1984	60	DEC. 12, 1989
K829978	DEC. 12, 1984	60	DEC. 12, 1989
K829979	DEC. 12, 1984	60	DEC. 12, 1989
K829980	DEC. 12, 1984	60	DEC. 12, 1989
K829981	DEC. 12, 1984	60	DEC. 12, 1989
K829982	DEC. 12, 1984	60	DEC. 12, 1989
K829983	DEC. 12, 1984	60	DEC. 12, 1989
K829984	DEC. 12, 1984	60	DEC. 12, 1989
K829985	DEC. 12, 1984	60	DEC. 12, 1989
K829986	DEC. 12, 1984	60	DEC. 12, 1989
K829987	DEC. 12, 1984	60	DEC. 12, 1989
K829988	DEC. 12, 1984	60	DEC. 12, 1989
K829989	DEC. 12, 1984	60	DEC. 12, 1989
K829990	DEC. 12, 1984	60	DEC. 12, 1989
K829991	DEC. 12, 1984	60	DEC. 12, 1989
K829992	DEC. 12, 1984	60	DEC. 12, 1989
K829993	DEC. 12, 1984	60	DEC. 12, 1989
K839325	JAN. 24, 1985	60	JAN. 24, 1989
K839328	JAN. 24, 1985	60	JAN. 24, 1989
K839329	JAN. 24, 1985	60	JAN. 24, 1989
K839330	JAN. 24, 1985	60	JAN. 24, 1989
K839331	JAN. 24, 1985	60	JAN. 24, 1989
K839332	JAN. 24, 1985	60	JAN. 24, 1989
K839333	JAN. 24, 1985	60	JAN. 24, 1989

TABLE 2
PREVIOUS WORK

DATE	SURVEYOR	TYPE OF WORK
1974	Harris, O.G.S.	Mapping at 1:31,680
1980	O.G.S.	AEM Survey, map #80496
1984	Poulsen, O.G.S.	Regional compilation of the Mine Centre - Fort Frances area.
Dec.1984 Jan.1985	Kidd Creek Mines Ltd.	Staking the Rice Bay Claims
Feb.1985	Kidd Creek Mines Ltd.	Geophysics - Mag, HLEM and VLF surveys
May-Aug. 1985	Kidd Creek Mines Ltd. (M Morrice)	Mapping (1:2400) and litho-geochemical programs
Mar.1986	Kidd Creek Mines Ltd.	Drilling RB-1 (1098') Assay returns were very low.

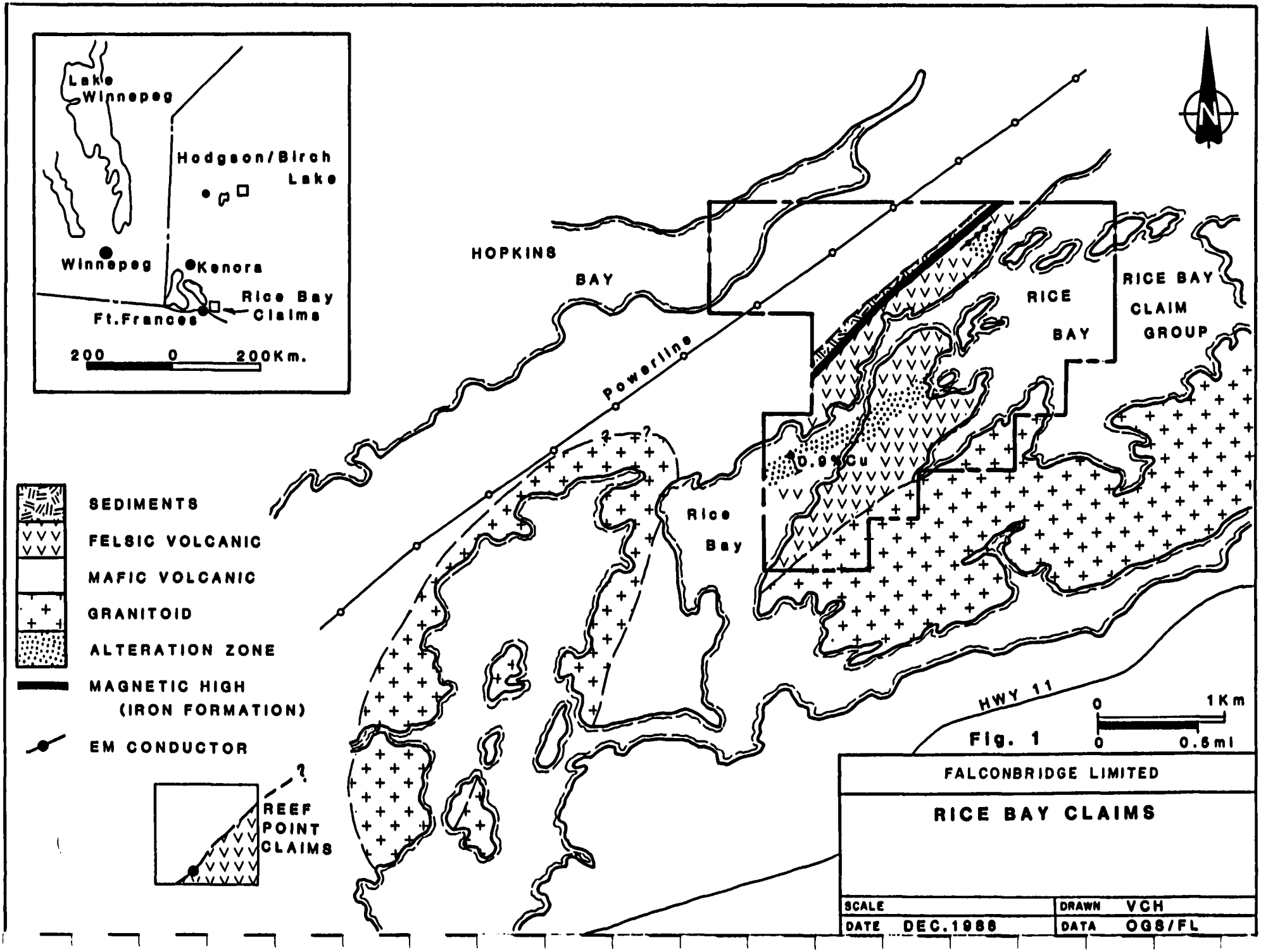

Lake Winnepeg
Hodgson/Birch Lake
Winnepeg
Kenora
Rice Bay Claims
Ft.Frances
200 0 200Km.
HOPKINS BAY
RICE BAY
RICE BAY CLAIM GROUP
Powerline
0.8% Cu
Rice Bay
HWY 11
0 1Km
0 0.5mi
SEDIMENTS
FELSIC VOLCANIC
MAFIC VOLCANIC
GRANITOID
ALTERATION ZONE
MAGNETIC HIGH (IRON FORMATION)
EM CONDUCTOR
REEF POINT CLAIMS
FALCONBRIDGE LIMITED
RICE BAY CLAIMS
SCALE
DRAWN VCH
DATE DEC.1988
DATA OGS/FL

Fig. 1

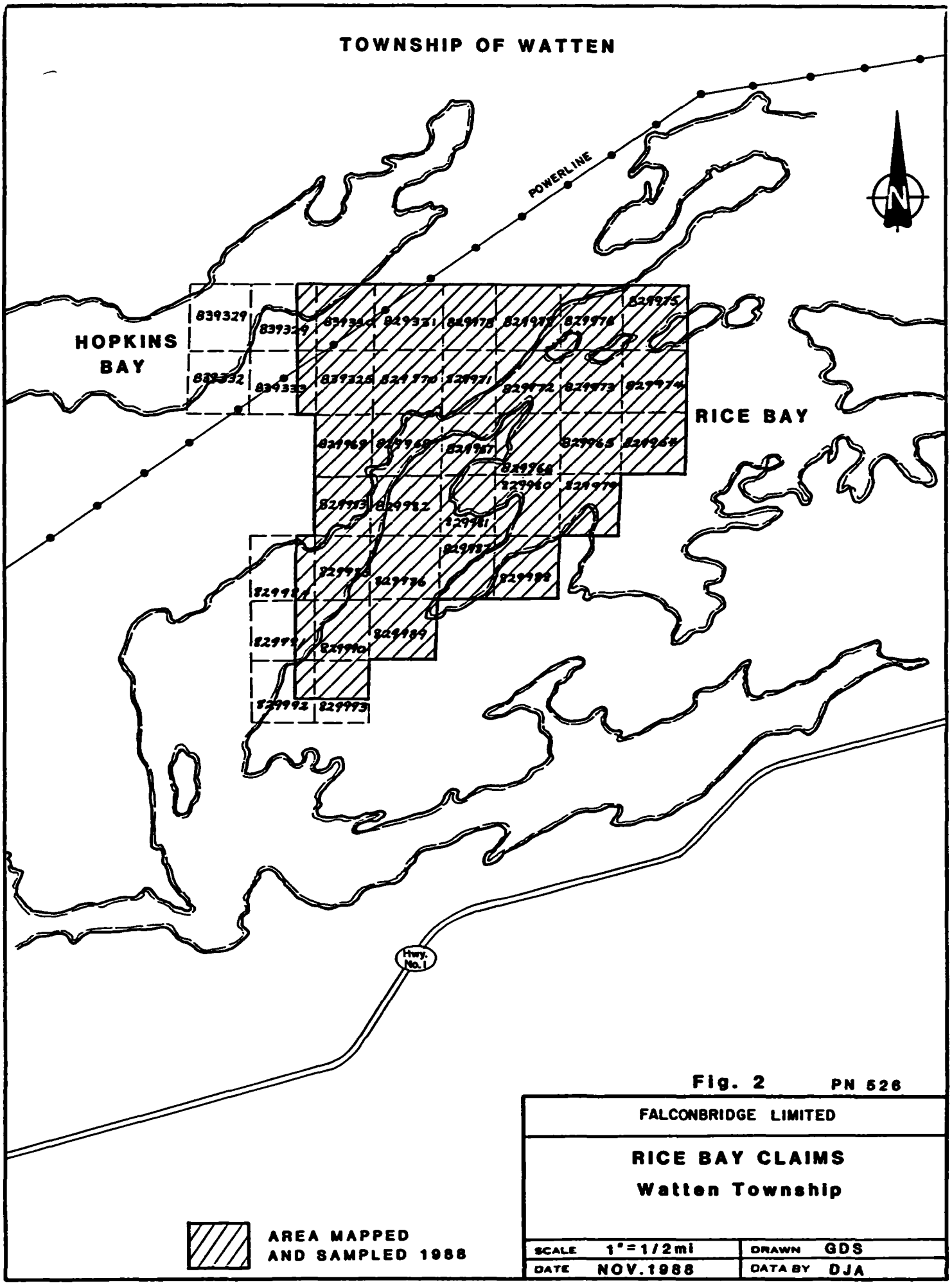


Fig. 2 PN 526

FALCONBRIDGE LIMITED	
RICE BAY CLAIMS Watten Township	
SCALE 1"=1/2mi	DRAWN GDS
DATE NOV.1988	DATA BY DJA

REGIONAL GEOLOGY

The Rice Bay Claim Group occurs within the boundary zone between the Wabigoon Subprovince to the north and the Quetico Subprovince to the south. This zone is comprised of a westward thickening wedge of metavolcanic, metasedimentary and plutonic rocks bounded to the north by the Quetico Fault and to the south by the Seine River-Rainy Lake Fault.

More specifically the claim group is on the northwest flank of the Rice Bay Dome. This feature has been thoroughly mapped and had been interpreted (Lawson,1913; Harris,1974) as a simple dome with an older metasedimentary core. Poulson (1980 and 1984), however, demonstratd a younging direction toward the center of the dome, indicating that that the domal sequence is overturned.In addition he also believes that the core consists of metavolcanic rocks. Poulsen is correct in declaring that the core of the Rice Bay Dome is metavolcanic, but his view on the younging direction of the rocks may be erroneous.

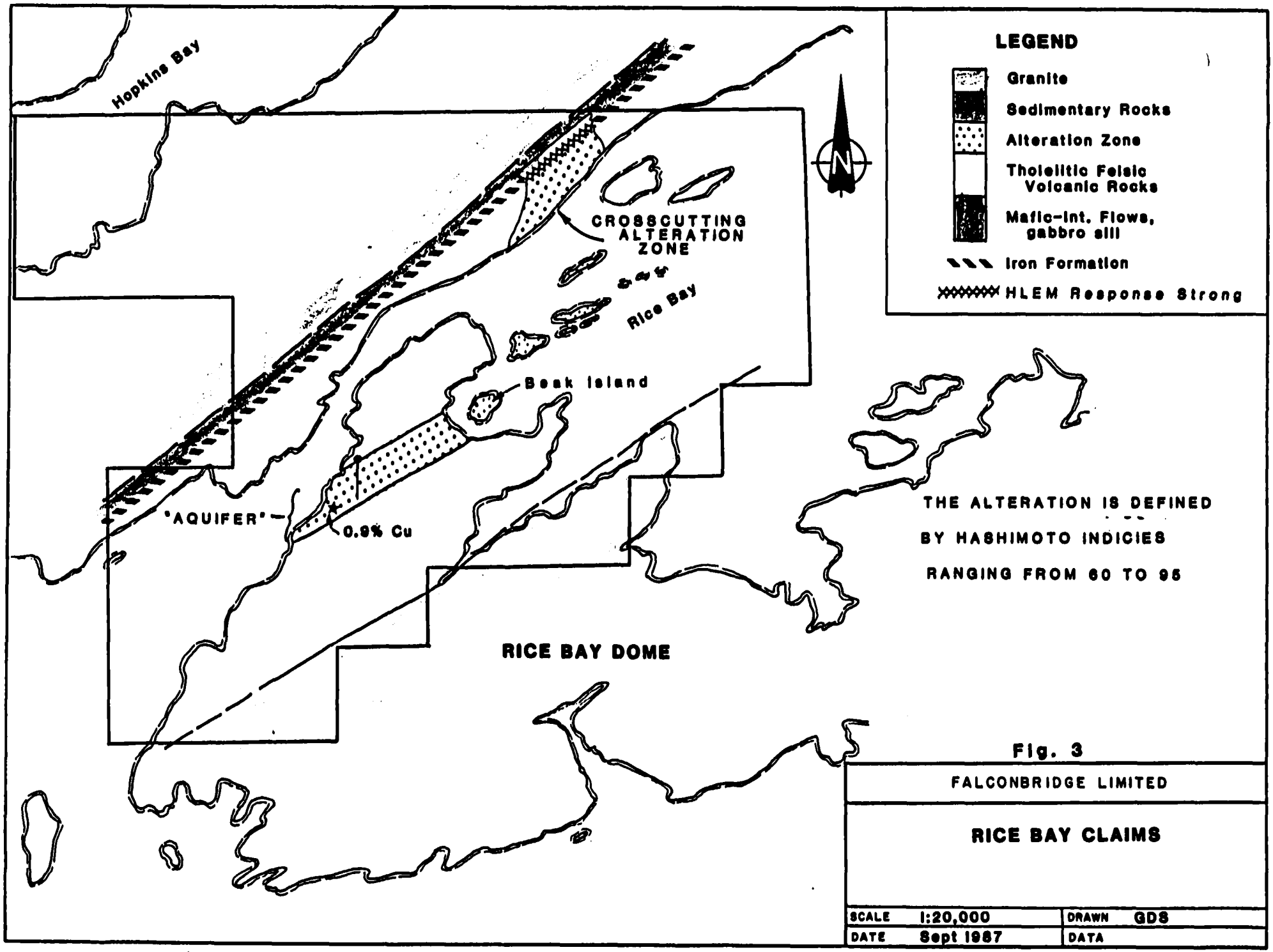
Alteration on the property is truncated in the NW portion of the mapped area by a lean cherty iron formation. The cessation of alteration indicates a temporal hiatus in the volcanic sequence during which the thin sedimentary package was deposited. The sediments were then overlain by mafic volcanic flows. This would necessitate a younging direction to the NW of the property away from the core of the dome.

PROPERTY GEOLOGY

Outcrop exposure on the property is poor as more than 70% of the area is covered by water or swamp (Fig. 3). The property is underlain by NE trending, NW dipping metavolcanics, metasediments and plutonic rocks. The altered rocks south-east of the banded iron formation (BIF) have a sillimanite, kyanite, cordierite and garnet mineral assemblage indicating that the rocks have undergone middle amphibolite metamorphism. The presence of chlorite pods and veinlets indicates subsequent retrograde metamorphism. The mafic flows NE of the BIF show no mineral assemblages that would be associated with the high grade metamorphism of altered mafic volcanics.

With the exception of later stage intrusive rocks such as pegmatites, the rocks display a strong NE to SW foliation parallel to stratigraphy.

The degree of metamorphism combined with the intense structural events in the area have obliterated primary structures on the property.


LEGEND
Granite
Sedimentary Rocks
Alteration Zone
Tholeiitic Felsic Volcanic Rocks
Mafic-Int. Flows, gabbro sill
Iron Formation
HLEM Response Strong
Hopkins Bay
CROSSCUTTING ALTERATION ZONE
Rice Bay
Beak Island
"AQUIFER"
0.9% Cu
THE ALTERATION IS DEFINED BY HASHIMOTO INDICIES RANGING FROM 60 TO 95
RICE BAY DOME
Fig. 3
FALCONBRIDGE LIMITED
RICE BAY CLAIMS
SCALE 1:20,000
DRAWN GDS
DATE Sept 1987
DATA

LITHOLOGY AND STRATIGRAPHY

Garnetiferous Felsic Flow (Unit 1)

This unit is comprised of massive flows forming a 400 m. thick sequence in the soutern portion of the map area. It is homogenous, fine to medium grained, containing gneissic rhyolitic rocks with garnet porphyroblasts throughout.

The unit is light grey to pale pink on a weathered surface and light pink on a fresh surface. The rock is composed of quartz (50%), feldspar (45-50%) and biotite (1-5%) groundmass with 2-5 mm anhedral garnet porphyroblasts. Some of the garnet has undergone retrograde metamorphism to chlorite. Occasional chlorite rich = garnet = biotite seams, 0.5 to 3.0 cm. wide, are found throughout the unit. Generally trending N-S, these seams also form anastomosing networks that may be mistaken for a pillowed texture.

Felsic Volcaniclastics (Unit 2)

Overlying the garnetiferous felsic flows is a 700 m.to 800 m. thick unit of fine grained rhyolite tuff. This unit is light grey to buff colored on a weathered surface and light grey on a fresh surface.

The unit is composed of quartz (40-50%), plagioclase (30-40%) and biotite (5-25%) with minor muscovite, sericite and localized garnet. The biotite content shows patchy variation throughout the unit with higher concentrations of biotite in the upper (NW) portion of the unit. These rocks are cut by thin (1-3 cm.) chlorite-rich seams. These seams trend almost exclusively N-S and appear locally across the unit. Also present are quartz-plagioclase sweats, locally up to 5%, that are oriented parallel to foliation.

This unit is intruded by fine grained felsic and granitic pegmatite dykes and sills.In claims K829985 and K829973 along the shoreline there are discontinuous units of sericitized silicified felsic fragmental within the felsic volcaniclastic. These units are white on a weathered surface and 0.5 m. to 5.0 m. thick. The clasts range from 5-10 cm. long and from 1-2 cm. wide and are aligned with the long axis parallel to stratigraphy. These units had previously been labelled as fiame, but this interpretation is incorrect. They seem to be related to a shear zone that conforms to stratigraphy.

There are occasional felsic volcaniclastics of similar composition in the nortern potion of the property occuring as discontinuous lenses in the mafic-intermediate flows. These lenses are fine grained and well layered (1-2 cm.).

Iron Formation (Unit 3)

A 5 m.- 10 m. thick horizon of banded iron formation overlies the felsic volcaniclastics. This unit is comprised of interlayered banded iron formation, felsic intrusive and epiclastic sediments.

The iron formation is well bedded with 1 cm. - 2 cm. beds of cherty, magnetite-rich,and garnetiferous amphibolite-rich material. The iron formation occurs as 0.5-1.5 m. layers between felsic intrusive and epiclastic sediments. The contacts along these layers are often sheared and strongly sericitized. Trace pyrite and pyrrhotite are disseminated as fine sub-hedral grains throughout the unit.

To the north-east of the mapped area the iron formation becomes enriched in garnetiferous amphibolite with 40% garnet and 30% magnetite. Pyrite, as 1-2 mm. cubes and fine grained pyrrhotite are found in concentrations up to 2% within a trench on claim K.829977. The iron formation does not out crop in the south-west portion of the mapped area, but a distinctive magnetic signature enables this unit to be traced through this area.

Epiclastic Sedimentary Rocks (Unit 4)

Epiclastic sediments form a 50-100 m. thick horizon directly overlying the banded iron formation. These rocks are schistose, with a cleavage parallel to stratigraphy. The rocks are light grey on a weathered surface and are composed of fine grained quartz (40-50%), plagioclase (20-25%) and biotite (25-30%) with minor garnet and sericite.

Mafic Volcanic Rocks (Unit 5)

The NW portion of the mapped area is comprised of mafic volcanics interlayered with intermediate volcanics and minor epiclastic sediments. There are flows and volcaniclastics of both basalt and andesite composition. Four distinct horizons are recognizable, ranging from 10 to 100 m.thick.

The mafic flows dominate the upper mafic volcanic horizons. These flows occur as massive amphibolites up to 5 m. thick. The mafic flows are fine grained and composed of amphibole (60 - 90%) and plagioclase (10 - 40%). There are local chlorite rich areas, with anastomosing chlorite stringers. The mafic flows are interlayered with mafic volcaniclastics and possible pillowed flows (Morrice, 1986).

The mafic volcaniclastic rocks are generally fine grained mafic tuffs. These rocks have a pronounced layering of plagioclase rich and amphibolite rich bands. There are also calc - silicate rich layers commonly interbanded with the amphibolite layers throughout the unit.

Rare disseminated pyrite was found associated with the calc - silicate layers and minor garnetiferous amphibolite layers were found locally throughout the unit.

Intermediate Volcanic Rocks (Unit 6)

The intermediate volcanic rocks on the property consist of fine and medium grained volcaniclastics. They are found as lenses in the package of mafic volcanics to the NW of the mapped area, and there are isolated lenses found in the felsic rocks to the south.

These lenses trend parallel to stratigraphy pinching to the NE. The lenses are up to 100 m. thick and are composed of interlayered intermediate (75 %) and mafic (25 %) volcaniclastics. These rocks weather grey - light grey.

The coarse grained intermediate volcaniclastics are matrix - supported clasts of felsic to mafic origin although dominantly intermediate. The fine grained matrix is amphibolitic. The clasts define a foliation parallel to stratigraphy.

Felsic Intrusive (QFP) (Unit 7)

Numerous fine grained felsic intrusives are found in the Rice Bay area. These rocks are generally massive and non-foliated. These units weather white to light grey, except for the intrusives within and conformable to the BIF which are buff colored.

Although the quartz and feldspar phyric types are dominant there are also aphyric and potassium feldspar phyric versions.

Foliated Biotite Granite (Unit 8)

A 150 - 200 m. wide unit of medium grained biotite granodiorite outcrops in the SE portion of the mapped area. This unit conformably underlies Unit 3 in a sill - like fashion. This unit weathers grey and contains darker mafic wisps. The unit is composed of plagioclase (60 - 70%), quartz (20 - 30%), biotite (5 - 15%) and trace garnet. Minor biotite - rich shears occur locally throughout the unit.

Biotite - Bearing Mafic Dykes (Unit 9)

Biotite - bearing mafic dykes are a common, but volumetrically minor , component of the Rice Bay area. These dykes are dark green on weathered surfaces and are locally altered to chlorite. The dykes are composed of Hornblende (70%), biotite (25%) and plagioclase (5%). The dykes cross-cut stratigraphy but have developed a foliation parallel to stratigraphy.

Mafic Intrusive Suite (Unit 10)

There are two distinct intrusive sills in the nortern portion of the mapped area. These sills are both at least 120 m. thick. The northernmost sill has no upper contact on the property. These sills are predominantly gabbroic with minor diorite, anorthsite and ultramafic components.

Granitic Intrusives and Pegmatites (Unit 11)

Minor dykes and sills of fine to medium grained granite and pegmatite intrude all lithologic units on the property. These units are non-foliated, weather white to buff and are predominantly discontinuous. The pegmatites range up to 80 m. thick in the south, but are often less than 10 m. wide. Pegmatites are mostly found south of the iron formation.

STRATIGRAPHIC SEQUENCE FOR RICE BAY PROPERTY

ROCK UNIT	COMMENTS
Granitic Intrusives & Pegmatites (11)	
Mafic Intrusive Suite (10)	
Biotite - bearing Mafic Dykes (9)	Sequence derived from cross-cutting relationships
Foliated Biotite Granodiorite (8)	
Felsic Intrusive (QFP) (7)	
Intermediate Flows (6)	
Mafic Flows (5)	Second Volcanic Event
Epiclastic Sediments (4)	
Lean Cherty Iron Formation (3)	Hiatus in Volcanic Activity
Felsic Tuff (2)	
Garnetiferous Felsic Flows (1)	First Volcanic Event

METAMORPHISM

All rocks in the Rice Bay area have undergone medium grade regional metamorphism of at least amphibolite facies. Garnet is found throughout the mapped area. Sillimanite is found in the SE portion of the mapped area as isolated crystals in the groundmass and as oval faserkiesel in the more altered areas.

The presence of chlorite replacing biotite and pseudomorphing garnet is evidence for widespread retrograde metamorphism across the property. This retrograde metamorphism is particularlly strong in the southern portion of the mapped area. The chlorite in the altered areas is a bottle green, possibly a pseudomorph after cordierite.

GEOPHYSICS

In March, 1985, a geophysical survey was carried out on the property by M.W.Zang. The survey consisted of proton precession magnetometer, VLF electromagnetic and horizontal loop electromagnetic traverses. A total of seven poor to highly conductive zones werer delineated. Of interest is a strong HLEM anomaly coincident with the iron formation north of Beak Island.This conductor is approximately 360 m. long.

LITHOGEOCHEMISTRY

Data collected during the 1988 sampling program was analyzed with a whole rock database. The plots generated illustrate that the felsic tuff the target for the majority of the sampling, is of tholeiitic rhyolite composition.

The Hashimoto and ACNK alteration indicies showed alteration throughout the felsic volcanics and showed extreme alteration along an alteration zone conformable to stratigraphy within the felsic pile. The Hashimoto index showed very little if any alteration above the BIF but revealed a zone joining the BIF to the afforementioned alteration zone.

Figure 4, a plot of Zr / Ti versus Nb / Y shows the strong clustering of felsic volcanics in the rhyolite field. Alteration of these units is illustrated in Figures 5 and 6. In Fig. 5, the ACNK diagram, alteration outside the igneous spectrum is shown as a relative increase in the ratio of alumina to calcium, sodium and potassium, probably resulting from the hydrothermal breakdown of feldspars. A plot of ACNK versus the Hashimoto alteration index (Fig. 6) shows a small portion of samples have very high ACNK and Hashimoto values. These samples however do not occur in a single specific area.

The samples generating high Hashimoto values (> 70 is significant) are shown on Map 2 (back pocket). Two areas of high value concentration are outlined: a formational zone through Beak Island and a second zone, with a small number of highly altered rocks south east of the iron formation, north of Beak Island.

REFERENCES

Beakhouse, GP (1984) Reconnaissance investigation of granitoid and medium to high grade metasedimentary terrains: volcanic components and mineral potential; p. 14-18 in Summary of Field Work, 1984, by the Ontario Geological SLurvey, edited by John Wood, Owen L. White, R. B. Barlow and A.C. Colvine. Ontario Geological Survey Misc. Paper 119

Harris, F.R. (1974) Geology of the Rainy Lake Area, District of Rainy River' Ontario Division of Mines, Geological Report 115, 94p. Accomapnaied by Maps 2278 and 2279, Scale 1 inch to 1/2 mile.

Lawson, A.C. (1913) The Archean Geology of Rainy Lake, Restudied; Geological Survey of Canada, Memoir 40, 111p. Accompanied by Geological Map 98A, Scale 1 inch to 1 mile (Geology 1911)

Morrice, M.G. (1987) Geological Report Rice Bay Claims NTS 52C/11 Kidd Creek Mines Ltd. Report of work filed for assessment Ontario Ministry of Natural Resources

Poulsen, K.H. (1984) The Geological Setting of Mineralization in the Mine Centre-Fort Frances Area, District of Rainy River' Ontario Geological Survey Open File Report 5512, 126p., 5 tables, 30 figures and 1 map in back pocket.

Poulsen, K.H., Borradaile, G.J., and Kellenbeck, M.M. (1980) An inverted Archean Succession at Rainy Lake Ontario' Canadian Journal of Earth Sciences, Volume 17, p. 1358-1369.

Zang, M.W. (1985) Geophysical Report. Rice Bay Claims, Watten Township NTS 52C/11. Kidd Creek Mines Ltd. Report of geophysical work filed for assessment, Ontario Ministry of Northern Affairs and Mines

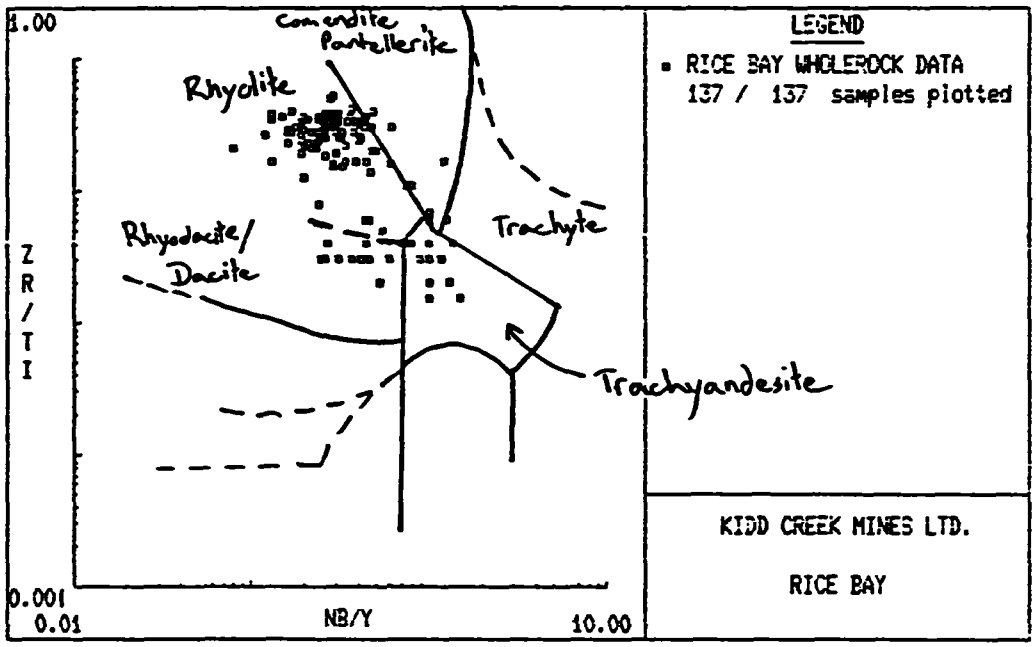

1.00
Comendite
Pantellerite
Rhyolite
Rhyodacite/
Dacite
Trachyte
Trachyandesite
Z
R
/
T
I
0.001
0.01
NB/Y
10.00
LEGEND
RICE BAY WHOLEROCK DATA
137 / 137 samples plotted
KIDD CREEK MINES LTD.
RICE BAY

Fig. 4

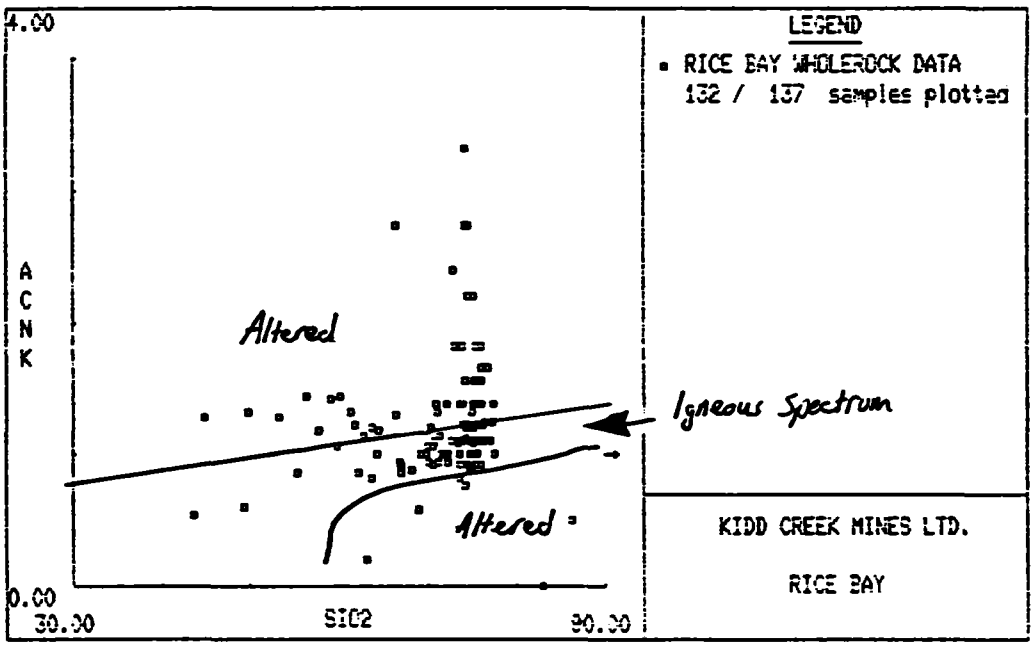

4.00
A
C
N
K
0.00
30.00
SIO2
90.00
Altered
Altered
LEGEND
RICE BAY WHOLEROCK DATA
132 / 137 samples plotted
Igneous Spectrum
KIDD CREEK MINES LTD.
RICE BAY

Fig. 5

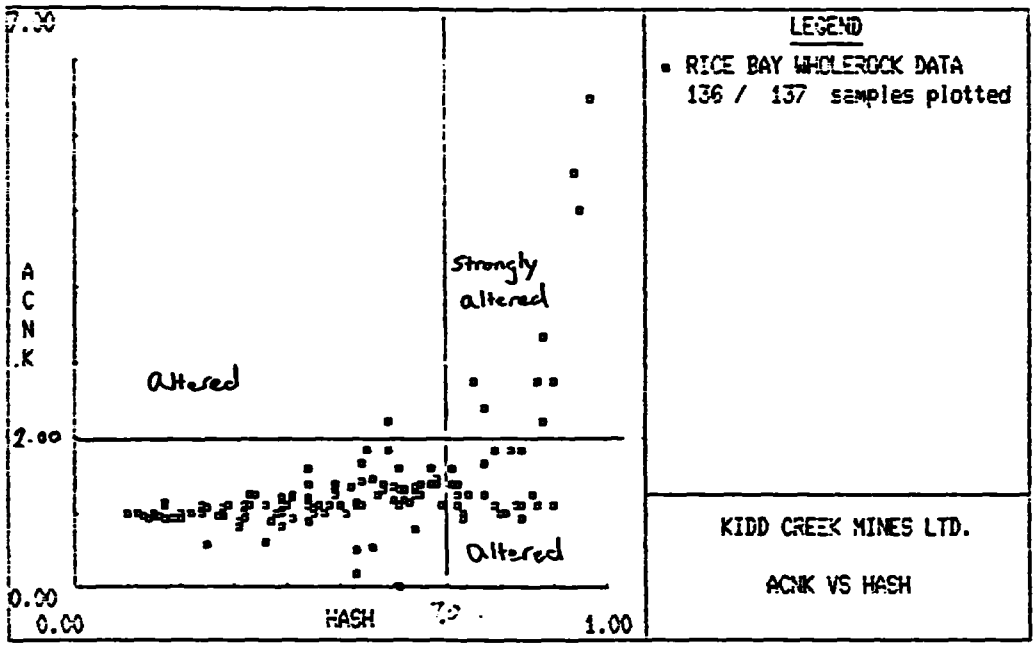

7.30
ACNK
2.00
0.00
0.00
HASH
1.00
Strongly altered
Altered
Altered
LEGEND
• RICE BAY WHOLEROCK DATA
136 / 137 samples plotted
KIDD CREEK MINES LTD.
ACNK VS HASH

Fig. 6

APPENDIX I

Ontario

Ministry of Natural Resources

File_____

GEOPHYSICAL – GEOLOGICAL – GEOCHEMICAL TECHNICAL DATA STATEMENT

TO BE ATTACHED AS AN APPENDIX TO TECHNICAL REPORT
FACTS SHOWN HERE NEED NOT BE REPEATED IN REPORT
TECHNICAL REPORT MUST CONTAIN INTERPRETATION, CONCLUSIONS ETC.

Type of Survey(s) Mapping and Lithogeochemical Sampling

Township or Area Watten Township

Claim Holder(s) Falconbridge Limited

Survey Company Falconbridge Limited

Author of Report David Alderman

Address of Author 100-3074 Portage Avenue Winnipeg

Covering Dates of Survey August 21 - September 4, 1988
(linecutting to office)

Total Miles of Line Cut _____

SPECIAL PROVISIONS CREDITS REQUESTED

ENTER 40 days (includes line cutting) for first survey.

ENTER 20 days for each additional survey using same grid.

DAYS per claim.

Geophysical
—Electromagnetic _____
—Magnetometer _____
—Radiometric _____
—Other _____
Geological _____
Geochemical _____

AIRBORNE CREDITS (Special provision credits do not apply to airborne surveys)

Magnetometer _____ Electromagnetic _____ Radiometric _____
(enter days per claim)

DATE: Dec 20/88 SIGNATURE: D. Alderman
Author of Report or Agent

Res. Geol. _____ Qualifications 2.10/66

Previous Surveys

File No.	Type	Date	Claim Holder

MINING CLAIMS TRAVERSED
List numerically

(prefix) (number)

TOTAL CLAIMS _____

If space insufficient, attach list

837 (5/79)

GEOCHEMICAL SURVEY – PROCEDURE RECORD

Numbers of claims from which samples taken 829966-73, 829975-77, 829979-83, 829985-87 and 839325

Total Number of Samples 137

Type of Sample Lithogeochemical Rock
(Nature of Material)

Average Sample Weight 2kg

Method of Collection Hammer and chisel

Soil Horizon Sampled --

Horizon Development --

Sample Depth --

Terrain --

Drainage Development --

Estimated Range of Overburden Thickness

SAMPLE PREPARATION
(Includes drying, screening, crushing, ashing)

Mesh size of fraction used for analysis

General

ANALYTICAL METHODS

Values expressed in: per cent ☐
p. p. m. ☐
p. p. b. ☐

Cu, Pb, Zn, Ni, Co, Ag, Mo, As,-(circle)

Others

Field Analysis (____ tests)

Extraction Method

Analytical Method

Reagents Used

Field Laboratory Analysis

No. (____ tests)

Extraction Method

Analytical Method

Reagents Used

Commercial Laboratory (____ tests)

Name of Laboratory

Extraction Method

Analytical Method

Reagents Used

General

RICE BAY CLAIMS

K829966
K829967
K829968
K829969
K829970
K829971
K829972
K829973
K829975
K829976
K829977
K829979
K829980
K829981
K829982
K829983
K829985
K829986
K829987
K839325
K839330
K839331

APPENDIX II

STATEMENT OF QUALIFICATIONS

With regard to my report of February and March, 1988 for Falconbridge Limited, I DAVID J. ALDERMAN of 830 - 4th Street, Brandon, Manitoba do certify that:

1) I am a graduate of McMaster University (B. Sc., Geology 1985);

2) I have been practising my profession continuously since 1986;

3) I have no interest in the claims covered by this report nor do I expect to receive any interest.

DAVID J. ALDERMAN

WITNESS: _____

APPENDIX III

SAMPLE \ %	SIO2	AL2O3	CAO	MGO	NA2O	K2O	FE2O3	MNO	TIO2	P2O5	CR2O3	LOI	SUM
WA2901	73.6	11.0	0.58	1.27	2.02	4.13	5.51	0.11	0.29	0.04	0.02	0.62	99.4
WA2902	71.4	15.7	1.23	0.31	4.37	4.15	1.09	0.02	0.17	0.06	0.02	0.85	99.7
WA2903	63.7	15.3	3.00	1.40	6.00	2.64	3.98	0.07	0.56	0.23	<0.01	2.00	99.3
WA2904	74.2	9.86	0.12	3.32	0.55	1.55	6.63	0.04	0.37	0.07	0.02	2.16	99.0
WA2905	71.3	16.4	2.84	0.47	6.53	1.37	1.01	0.02	0.13	0.05	0.02	0.31	100.6
WA2906	69.9	16.3	2.95	0.59	6.44	1.11	1.03	0.02	0.14	0.07	0.02	0.77	99.5
WA2907	69.3	17.9	2.13	0.40	8.29	1.07	0.79	0.03	0.11	0.04	0.02	0.31	100.5
WA2908	93.9	0.83	0.68	0.30	0.20	0.11	2.20	0.05	0.06	0.03	0.05	0.62	99.0
WA2909	83.0	0.31	1.05	1.64	0.09	0.18	11.6	0.40	0.03	0.06	0.04	1.00	99.4
WA2910	63.1	0.74	3.05	3.57	0.16	0.08	28.8	0.48	0.05	0.05	0.02	-0.23	99.9
WA2911	68.3	15.8	3.80	1.17	4.39	2.45	2.41	0.05	0.27	0.09	0.02	0.62	99.6
WA2912	74.8	10.3	0.35	0.85	1.37	5.80	4.96	0.04	0.29	0.04	0.02	0.54	99.6
WA2913	75.0	10.4	0.90	0.80	0.60	7.28	2.01	0.06	0.16	0.04	0.03	2.39	99.9
WA2914	56.4	12.8	2.79	4.45	0.81	3.05	14.5	0.23	1.42	0.29	0.02	2.39	99.3
WA2915	70.6	14.5	1.10	0.19	6.75	1.76	3.36	0.02	0.14	0.06	0.02	1.31	100.0
WA2916	71.3	15.6	1.02	0.29	8.07	1.05	1.29	0.02	0.16	0.06	0.03	0.85	99.9
WA2917	60.2	16.5	2.06	3.25	2.61	2.79	8.81	0.11	0.64	0.16	0.04	2.23	99.6
WA2918	61.4	16.1	2.16	2.84	2.99	2.79	7.74	0.12	0.61	0.16	0.03	2.47	99.6
WA2919	59.8	16.6	2.28	2.82	4.80	3.03	7.97	0.13	0.68	0.16	0.03	0.77	99.2
WA2920	66.9	16.7	3.62	0.89	5.01	2.35	2.25	0.06	0.32	0.14	0.01	1.00	99.5
WA2921	59.1	17.2	2.14	3.29	2.80	2.53	9.22	0.12	0.66	0.14	0.04	2.62	100.0
WA2922	67.0	14.0	3.55	1.57	4.12	3.01	4.60	0.07	0.45	0.15	0.02	0.85	99.6
WA2923	74.8	13.0	1.04	0.32	4.56	3.31	2.10	0.04	0.18	0.06	0.02	0.93	100.5
WA2924	61.8	16.3	2.61	3.00	3.21	2.63	8.08	0.11	0.65	0.17	0.04	1.16	99.9
WA2925	76.3	10.7	0.34	0.62	1.36	5.76	3.69	0.13	0.19	0.03	0.02	0.47	99.8
WA2926	74.3	9.60	1.65	2.24	1.06	2.40	6.85	0.18	0.14	0.03	0.03	1.08	99.7
WA2927	44.8	8.90	3.82	5.37	0.29	0.42	34.7	1.68	0.12	0.05	<0.01	0.23	100.5
WA2928	86.2	1.49	1.06	1.17	0.14	0.21	8.31	0.36	0.06	0.02	0.04	0.77	99.9
WA2929	49.8	12.6	3.40	4.23	0.38	1.45	26.5	1.12	0.18	0.04	0.01	0.47	100.3
WA2930	73.8	11.5	1.05	2.07	2.80	2.43	4.08	0.06	0.15	0.04	0.03	1.00	99.2
WA2931	70.6	15.9	2.04	0.72	5.38	2.21	1.66	0.03	0.17	0.06	0.02	1.08	100.0
WA2932	43.7	6.23	5.47	7.40	0.49	0.21	34.3	1.56	0.09	0.04	<0.01	0.70	100.3
WA2933	53.2	9.19	3.14	4.54	0.29	0.90	27.8	1.19	0.13	0.04	0.01	-0.46	100.1
WA2934	63.7	12.5	1.30	2.56	4.63	1.31	10.7	0.02	1.05	0.26	0.02	0.85	99.0
WA2935	64.5	13.0	1.98	7.99	3.50	0.99	3.37	0.05	0.82	0.19	0.02	2.62	99.2
WA2936	67.1	12.7	0.84	1.06	6.64	0.63	9.80	0.03	0.56	0.13	0.02	0.23	99.9
WA2937	64.3	13.5	2.09	3.69	3.73	2.44	8.52	0.06	0.57	0.12	0.02	0.93	100.1
WA2938	75.0	12.2	1.25	1.91	2.89	2.12	2.85	0.04	0.37	0.06	0.03	1.00	100.1
WA2939	71.9	15.9	2.16	0.37	6.23	1.79	1.00	0.02	0.15	0.07	0.02	0.54	100.4
WA2940	75.7	11.6	0.62	1.67	5.12	1.18	3.10	0.03	0.33	0.05	0.03	1.00	100.6
WA2941	66.5	12.9	1.78	5.60	2.90	2.16	4.55	0.04	0.97	0.24	0.02	2.23	100.0
WA2942	75.0	11.0	1.60	3.85	3.01	1.43	1.34	0.04	0.42	0.06	0.03	1.16	99.1
WA2943	75.1	12.1	0.80	0.72	5.82	0.66	4.09	0.03	0.31	0.06	0.02	0.70	100.6
WA2944	72.9	12.5	0.23	2.95	1.43	2.67	4.78	0.05	0.30	0.04	0.02	2.08	100.2
WA2945	76.0	11.0	1.58	1.34	5.35	0.09	3.19	0.05	0.38	0.05	0.02	0.47	99.7
WA2946	59.7	13.6	0.09	5.74	0.16	1.56	13.4	0.08	0.53	0.10	0.01	4.08	99.3
WA2947	73.5	10.6	0.03	3.74	0.25	1.49	6.73	0.04	0.37	0.05	0.02	2.70	99.7
WA2948	72.3	16.1	2.33	0.39	6.69	0.83	0.93	0.02	0.11	0.06	0.02	0.47	100.4
WA2949	72.3	11.0	0.05	3.15	0.27	1.51	8.00	0.06	0.43	0.06	0.03	2.39	99.4
WA2950	62.8	16.4	3.52	2.84	2.40	3.78	6.17	0.08	0.54	0.16	0.04	1.54	100.5

XRF W.R.A. SUMS INCLUDE ALL ELEMENTS DETERMINED. FOR SUMMATION, ELEMENTS ARE CALCULATED AS OXIDES

SAMPLE \ %	SIO2	AL2O3	CAO	MGO	NA2O	K2O	FE2O3	MNO	TIO2	P2O5	CR2O3	LOI	SUM
WA2951	77.2	10.2	0.70	0.71	1.37	5.05	3.28	0.05	0.32	0.06	0.02	1.00	100.2
WA2952	73.6	10.7	3.14	1.22	2.31	2.27	5.50	0.11	0.40	0.06	0.02	0.77	100.3
WA2953	75.6	11.2	1.26	1.32	1.17	4.91	2.83	0.06	0.36	0.10	0.02	1.00	100.0
WA2954	73.7	11.1	1.64	0.75	1.02	6.30	2.87	0.04	0.46	0.09	0.02	0.77	99.0
WA2955	76.8	10.7	0.05	0.37	0.83	7.38	2.35	0.08	0.19	0.05	0.02	0.62	99.6
WA2956	75.3	10.3	0.76	0.64	0.96	6.61	2.97	0.05	0.17	0.03	0.02	0.62	98.6
WA2957	74.9	10.1	0.03	5.06	0.28	0.93	7.68	0.03	0.26	0.03	0.03	1.16	100.6
WA2958	73.0	11.3	0.85	2.19	2.01	1.29	6.56	0.13	0.28	0.04	0.02	1.85	99.7
WA2959	72.7	11.0	2.07	2.32	2.42	1.77	5.62	0.12	0.29	0.03	0.03	0.85	99.4
WA2960	75.8	11.7	0.27	1.08	3.07	1.56	4.40	0.06	0.29	0.04	0.02	1.54	100.0
WA2961	74.5	11.6	0.28	2.12	1.06	1.97	6.02	0.08	0.28	0.03	0.02	2.08	100.2
WA2962	74.3	11.5	1.35	1.48	4.03	1.18	4.81	0.12	0.29	0.04	0.02	0.70	100.0
WA2963	75.0	11.6	1.29	0.96	4.82	0.78	4.63	0.05	0.27	0.04	0.03	0.77	100.4
WA2964	75.9	11.6	0.67	0.47	4.91	1.27	4.13	0.04	0.27	0.03	0.02	0.54	100.0
WA2965	74.4	11.6	0.92	1.03	3.83	1.37	5.84	0.07	0.31	0.04	0.02	0.93	100.5
WA2966	74.8	11.5	1.83	1.28	4.40	0.70	4.59	0.10	0.28	0.03	0.03	0.77	100.4
WA2967	75.6	11.4	1.98	1.31	3.44	0.81	4.38	0.09	0.30	0.04	0.02	1.00	100.5
WA2968	74.2	11.1	0.16	2.64	0.66	3.09	5.85	0.07	0.28	0.04	0.02	1.85	100.2
WA2969	75.2	11.4	1.18	0.89	4.36	1.33	4.80	0.09	0.30	0.03	0.02	0.54	100.3
WA2970	75.4	11.4	1.42	0.67	4.88	0.81	4.60	0.07	0.30	0.03	0.02	0.39	100.1
WA2971	76.1	11.5	1.16	0.47	5.77	0.62	3.87	0.05	0.26	0.03	0.02	0.31	100.3
WA2972	72.0	15.9	2.44	0.38	6.69	0.66	0.94	0.03	0.13	0.05	0.02	0.39	99.9
WA2973	72.1	11.0	1.86	1.33	2.85	2.46	6.57	0.08	0.36	0.06	0.02	0.77	99.6
WA2974	71.5	11.2	2.04	0.99	3.10	2.14	7.69	0.04	0.36	0.03	0.02	0.23	99.5
WA2975	73.9	11.4	0.63	0.80	3.43	2.04	7.12	0.04	0.38	0.06	0.02	0.54	100.5
WA2976	70.4	11.8	0.90	1.42	3.95	2.33	8.50	0.07	0.43	0.06	0.02	0.47	100.5
WA2977	74.1	11.7	1.07	1.12	2.12	4.16	4.80	0.06	0.47	0.08	0.02	0.62	100.5
WA2978	76.9	10.9	0.37	2.07	4.36	1.88	2.96	0.04	0.26	0.02	0.02	0.39	100.4
WA2979	76.0	11.0	0.19	1.53	2.61	2.76	4.61	0.04	0.29	0.03	0.02	1.08	100.4
WA2980	70.0	16.6	2.97	0.70	5.25	2.05	1.29	0.03	0.16	0.06	0.01	0.85	100.2
WA2981	74.5	10.8	0.20	1.89	2.87	3.83	4.64	0.04	0.25	0.02	0.02	0.54	99.8
WA2982	73.5	13.4	1.38	0.88	4.85	2.16	2.82	0.03	0.22	0.05	0.02	0.54	100.0
WA2983	71.0	11.6	0.39	1.27	1.79	3.95	8.25	0.08	0.37	0.05	0.02	1.16	100.1
WA2984	75.3	11.3	0.22	1.62	2.24	3.47	5.20	0.03	0.22	0.05	0.02	0.85	100.7
WA2985	75.4	11.3	0.09	1.02	1.21	3.74	5.65	0.04	0.28	0.03	0.02	1.16	100.1
WA2986	74.6	11.0	0.08	1.40	0.67	4.14	6.83	0.03	0.24	0.04	0.02	1.31	100.6
WA2987	71.4	16.3	2.48	0.52	5.84	1.24	1.21	0.02	0.19	0.07	0.02	0.54	100.1
WA2988	69.0	10.8	7.18	1.26	2.32	1.87	6.06	0.14	0.42	0.08	0.01	0.47	99.8
WA2989	70.8	10.9	2.14	2.12	1.34	3.42	7.12	0.11	0.46	0.07	0.01	0.85	99.5
WA2990	72.1	11.4	1.10	1.44	0.97	3.90	6.89	0.08	0.47	0.08	0.02	1.23	99.9
WA2991	70.2	16.4	2.66	0.60	5.50	2.57	1.21	0.02	0.18	0.07	0.01	0.39	100.0
WA2992	74.5	13.7	1.00	0.59	5.49	2.41	1.34	0.03	0.24	0.04	0.02	0.62	100.2
WA2993	57.8	13.5	2.18	3.82	2.30	2.86	14.6	0.20	1.60	0.32	0.01	1.16	100.5
WA2994	49.4	13.9	9.09	3.64	2.45	2.79	15.0	0.33	2.04	0.34	<0.01	0.93	100.1
WA2995	SMPMISS	SMPMISS	SMPMISS	SMPMISS	SMPMISS	SMPMISS	SMPMISS	SMPMISS	SMPMISS	SMPMISS	SMPMISS	SMPMISS	---
WA2996	SMPMISS	SMPMISS	SMPMISS	SMPMISS	SMPMISS	SMPMISS	SMPMISS	SMPMISS	SMPMISS	SMPMISS	SMPMISS	SMPMISS	---
WA2997	SMPMISS	SMPMISS	SMPMISS	SMPMISS	SMPMISS	SMPMISS	SMPMISS	SMPMISS	SMPMISS	SMPMISS	SMPMISS	SMPMISS	---
WA2998	76.2	11.0	0.53	0.60	1.30	5.50	3.67	0.16	0.23	0.06	0.02	0.62	100.1
WA2999	75.2	11.6	0.81	2.91	1.99	1.12	3.79	0.07	0.24	0.06	0.03	2.23	100.2
WA3000	76.8	10.2	0.95	2.79	2.02	0.67	4.16	0.11	0.24	0.05	0.03	2.00	100.2

XRF W.R.A. SUMS INCLUDE ALL ELEMENTS DETERMINED. FOR SUMMATION, ELEMENTS ARE CALCULATED AS OXIDES

SAMPLE \ %	SIO2	AL2O3	CAO	MGO	NA2O	K2O	FE2O3	MNO	TIO2	P2O5	CR2O3	LOI	SUM
WA4001	74.7	11.0	0.33	1.60	4.25	2.04	4.76	0.05	0.22	0.03	0.02	0.54	99.7
WA4002	74.9	11.3	0.88	1.29	3.49	2.57	5.11	0.05	0.25	0.03	0.02	0.54	100.7
WA4003	74.0	10.7	0.23	1.62	3.04	3.49	4.51	0.04	0.24	0.05	0.02	0.62	98.8
WA4004	76.3	9.88	0.21	1.46	2.91	2.67	5.72	0.06	0.20	0.03	0.03	0.70	100.4
WA4005	75.0	11.1	0.26	1.35	2.79	4.13	4.20	0.04	0.18	0.02	0.02	0.62	99.9
WA4006	73.9	11.0	0.23	2.03	2.60	3.95	5.06	0.06	0.21	0.03	0.02	0.85	100.2
WA4007	75.3	11.3	0.58	0.81	4.64	1.68	4.15	0.05	0.25	0.04	0.02	0.77	99.8
WA4008	77.4	10.8	0.51	0.93	2.93	2.33	4.15	0.05	0.22	0.03	0.03	1.00	100.6
WA4009	76.1	10.8	0.18	1.95	2.59	2.08	4.45	0.06	0.23	0.03	0.03	1.39	100.1
WA4010	75.2	11.9	1.11	0.99	3.67	2.06	3.57	0.06	0.21	0.03	0.01	0.70	99.7
WA4011	74.3	11.1	0.98	2.36	1.51	2.67	5.01	0.08	0.23	0.03	0.01	1.23	99.7
WA4012	75.3	11.0	0.12	1.69	1.99	3.57	4.54	0.04	0.25	0.03	0.02	1.08	99.8
WA4013	71.1	12.2	0.44	1.59	2.30	3.29	7.69	0.08	0.37	0.05	0.01	1.16	100.4
WA4014	73.2	10.8	0.21	1.38	0.96	3.80	8.30	0.07	0.31	0.04	0.02	1.31	100.6
WA4015	74.3	12.0	0.54	0.95	4.04	2.19	4.72	0.06	0.36	0.04	0.01	0.77	100.2
WA4016	74.6	10.7	1.62	1.93	3.50	1.60	5.44	0.04	0.32	0.06	0.03	0.47	100.5
WA4017	66.5	10.8	0.19	2.21	0.40	2.92	15.1	0.09	0.32	0.05	0.02	0.85	99.6
WA4018	74.8	11.4	0.42	1.06	3.64	3.07	4.39	0.05	0.26	0.05	0.02	0.62	100.0
WA4019	75.5	11.0	0.65	1.07	2.49	3.18	4.40	0.06	0.21	0.04	0.02	0.85	99.7
WA4020	73.9	11.3	0.65	1.70	2.15	3.53	5.05	0.10	0.26	0.04	0.02	0.85	99.8
WA4031	73.7	10.3	1.61	0.95	0.89	5.85	3.98	0.05	0.38	0.08	0.02	0.62	98.6
WA4032	76.7	10.6	0.34	0.76	1.03	5.92	2.87	0.05	0.16	0.03	0.01	0.62	99.3
WA4033	75.3	11.3	0.28	0.44	0.98	7.65	2.21	0.05	0.18	0.03	0.02	0.47	99.1
WA4034	75.9	10.9	0.72	0.59	0.82	7.23	2.70	0.06	0.15	0.05	0.02	0.39	99.7
WA4035	76.8	10.6	1.35	1.04	1.37	4.92	2.24	0.08	0.14	0.03	0.02	0.70	99.5
WA4036	74.3	10.4	3.12	0.81	0.48	5.53	3.76	0.08	0.44	0.09	0.02	0.70	99.9
WA4037	74.9	10.4	1.08	1.05	1.19	4.90	4.35	0.05	0.40	0.07	0.02	0.77	99.4
WA4038	75.9	10.9	0.51	0.43	0.67	6.88	2.24	0.08	0.19	0.05	0.02	0.77	98.8
WA4039	55.3	13.9	5.40	2.71	2.08	3.16	13.1	0.15	2.14	0.71	<0.01	0.77	99.6
WA4040	77.6	10.4	0.32	0.31	1.44	6.61	1.38	0.03	0.14	0.03	0.02	0.47	99.0

XRF W.R.A. SUMS INCLUDE ALL ELEMENTS DETERMINED. FOR SUMMATION, ELEMENTS ARE CALCULATED AS OXIDES

SAMPLE \ PPM	RB	SR	Y	ZR	NB	BA	NI	CU	ZN
WA2901	103	49	92	367	20	746	<10	33	87
WA2902	109	767	12	58	15	1460	<10	48	16
WA2903	86	1390	<10	141	15	1400	15	61	86
WA2904	22	<10	169	529	41	453	<10	<10	33
WA2905	34	633	<10	20	<10	582	<10	30	27
WA2906	50	673	<10	28	12	587	<10	38	37
WA2907	39	625	<10	24	14	321	<10	44	35
WA2908	<10	<10	<10	<10	<10	51	<10	48	23
WA2909	12	<10	<10	<10	<10	68	<10	64	59
WA2910	<10	<10	<10	<10	30	73	<10	21	40
WA2911	72	659	16	62	22	798	14	48	53
WA2912	96	30	91	430	29	1260	<10	37	54
WA2913	123	73	93	269	35	879	<10	49	39
WA2914	82	34	60	256	22	527	<10	43	210
WA2915	62	375	<10	23	<10	1120	<10	45	27
WA2916	33	422	<10	25	<10	541	<10	42	28
WA2917	118	303	18	122	21	532	75	51	66
WA2918	104	389	12	98	<10	747	58	73	73
WA2919	161	410	<10	100	26	567	59	45	114
WA2920	75	959	<10	46	<10	907	10	49	63
WA2921	112	260	15	80	15	604	70	71	81
WA2922	60	712	47	112	21	917	<10	54	51
WA2923	84	134	<10	124	16	802	<10	67	36
WA2924	99	373	20	107	<10	697	39	57	69
WA2925	109	94	97	385	38	1030	<10	36	160
WA2926	78	118	100	307	36	293	<10	24	131
WA2927	30	<10	106	312	39	140	<10	<10	165
WA2928	27	<10	24	61	29	87	<10	67	75
WA2929	55	60	110	436	54	244	<10	22	158
WA2930	89	181	95	341	12	237	<10	44	162
WA2931	67	442	16	110	12	478	10	23	79
WA2932	15	27	108	178	38	86	<10	18	133
WA2933	49	17	131	282	34	157	<10	<10	88
WA2934	50	116	68	361	31	523	<10	24	20
WA2935	41	163	144	402	34	267	<10	43	54
WA2936	28	63	94	442	19	287	<10	25	33
WA2937	88	139	80	463	38	426	<10	38	84
WA2938	66	56	191	520	41	1920	<10	34	31
WA2939	54	1010	<10	53	<10	1200	<10	38	37
WA2940	55	164	152	476	36	319	<10	42	37
WA2941	63	103	84	375	37	586	<10	24	46
WA2942	46	147	184	571	30	308	11	17	44
WA2943	33	59	149	542	39	638	14	27	45
WA2944	64	31	148	560	45	800	<10	28	79
WA2945	15	127	184	629	29	109	17	22	21
WA2946	46	<10	206	790	54	602	14	27	43
WA2947	32	<10	138	573	35	418	17	25	37
WA2948	36	578	<10	43	<10	639	<10	14	32
WA2949	47	<10	130	605	30	335	17	11	19
WA2950	135	363	16	94	<10	1150	47	48	68

SAMPLE \ PPM	RB	SR	Y	ZR	NB	BA	NI	CU	ZN
WA2951	91	52	98	424	33	871	<10	24	61
WA2952	60	29	116	502	27	558	<10	27	182
WA2953	98	55	168	473	34	817	<10	15	147
WA2954	116	39	121	427	40	994	11	18	109
WA2955	104	10	87	401	37	905	<10	11	43
WA2956	132	24	104	286	31	810	<10	21	58
WA2957	<10	<10	152	505	45	261	11	24	31
WA2958	43	25	169	517	43	427	<10	17	89
WA2959	86	273	107	489	32	468	10	30	72
WA2960	33	29	142	525	38	239	<10	16	61
WA2961	53	<10	118	465	39	597	<10	<10	64
WA2962	28	<10	142	526	36	210	<10	18	93
WA2963	39	81	131	532	25	223	11	31	76
WA2964	64	21	97	545	41	499	<10	22	56
WA2965	40	50	147	528	34	391	<10	<10	91
WA2966	22	12	133	543	25	132	<10	12	64
WA2967	32	12	127	510	22	222	10	37	65
WA2968	89	<10	133	489	21	754	<10	53	87
WA2969	45	70	138	485	36	547	<10	21	107
WA2970	22	13	153	514	30	298	<10	30	68
WA2971	28	109	113	537	33	277	<10	42	37
WA2972	13	1230	<10	43	<10	842	<10	28	19
WA2973	58	28	106	526	20	444	<10	24	63
WA2974	56	33	63	514	25	433	<10	11	49
WA2975	57	49	121	427	23	463	<10	28	49
WA2976	87	15	90	514	45	388	13	52	118
WA2977	65	21	121	496	32	762	<10	30	49
WA2978	73	88	122	489	22	663	<10	31	51
WA2979	81	69	137	653	43	713	<10	11	70
WA2980	42	745	<10	40	16	756	<10	39	46
WA2981	108	53	115	452	21	727	<10	24	251
WA2982	75	254	75	334	23	727	<10	35	69
WA2983	65	<10	94	388	37	820	<10	21	104
WA2984	91	<10	131	449	33	797	11	27	83
WA2985	80	<10	106	465	35	619	<10	11	99
WA2986	106	<10	67	514	30	853	<10	21	92
WA2987	47	952	<10	51	<10	1130	<10	32	35
WA2988	39	93	121	407	35	519	<10	16	63
WA2989	72	33	74	453	45	646	<10	17	57
WA2990	55	<10	113	481	51	956	<10	15	68
WA2991	67	757	<10	40	<10	1080	<10	23	29
WA2992	42	324	39	251	<10	761	<10	<10	28
WA2993	81	144	28	256	25	676	<10	22	160
WA2994	42	109	47	210	25	1050	25	30	161
WA2995	SMPMISS	SMPMISS	SMPMISS	SMPMISS	SMPMISS	SMPMISS	SMPMISS	SMPMISS	SMPMISS
WA2996	SMPMISS	SMPMISS	SMPMISS	SMPMISS	SMPMISS	SMPMISS	SMPMISS	SMPMISS	SMPMISS
WA2997	SMPMISS	SMPMISS	SMPMISS	SMPMISS	SMPMISS	SMPMISS	SMPMISS	SMPMISS	SMPMISS
WA2998	106	44	147	477	31	713	<10	<10	89
WA2999	45	289	187	580	32	268	<10	22	126
WA3000	37	296	144	482	44	173	<10	26	149

SAMPLE \ PPM	RB	SR	Y	ZR	NB	BA	NI	CU	ZN
WA4001	65	100	158	479	23	661	<10	12	143
WA4002	76	97	130	537	32	800	<10	<10	164
WA4003	89	85	146	513	29	806	<10	15	75
WA4004	107	14	112	445	40	716	13	25	328
WA4005	103	67	92	588	27	828	<10	13	95
WA4006	117	54	128	474	33	824	<10	14	123
WA4007	52	63	116	575	35	700	<10	19	133
WA4008	72	13	99	513	27	534	<10	17	113
WA4009	43	28	137	475	35	548	<10	12	121
WA4010	71	123	99	442	13	592	<10	21	62
WA4011	65	<10	138	543	38	361	<10	12	78
WA4012	84	<10	123	447	34	625	<10	20	90
WA4013	81	13	98	382	33	619	<10	16	100
WA4014	77	<10	77	476	32	862	<10	24	82
WA4015	46	31	144	576	28	642	<10	27	85
WA4016	56	67	108	567	31	470	<10	22	143
WA4017	58	<10	262	405	20	313	<10	<10	132
WA4018	90	52	132	580	32	754	<10	24	86
WA4019	85	<10	111	644	31	728	<10	20	108
WA4020	97	11	135	495	34	786	<10	29	126
WA4031	100	72	126	443	38	956	<10	<10	52
WA4032	110	34	84	289	40	1520	<10	24	67
WA4033	128	28	161	322	43	1040	<10	19	90
WA4034	109	23	91	268	40	1010	<10	21	47
WA4035	117	33	151	259	38	705	<10	35	57
WA4036	109	28	129	396	38	874	<10	17	81
WA4037	116	49	83	468	40	977	<10	50	186
WA4038	112	13	75	369	31	1020	<10	71	45
WA4039	96	38	69	369	32	442	16	77	142
WA4040	113	50	69	249	43	1110	<10	51	24

SAMPLE \ %	SIO2	AL2O3	CAO	MGO	NA2O	K2O	FE2O3	MNO	TIO2	P2O5	CR2O3	LOI	SUM
WA4021	73.9	11.1	0.12	1.74	0.97	3.81	5.36	0.03	0.27	0.03	0.03	1.16	98.7
WA4022	76.0	10.5	0.13	1.79	1.47	3.56	4.47	0.05	0.22	0.03	0.03	0.93	99.4
WA4023	74.2	11.0	1.38	1.31	3.63	1.97	4.55	0.04	0.24	0.03	0.02	0.31	99.0
WA4024	75.2	10.8	0.13	1.19	2.97	3.16	4.91	0.05	0.23	0.03	0.02	0.70	99.6
WA4025	73.5	11.0	1.74	1.68	3.41	1.63	4.99	0.04	0.27	0.05	0.02	0.54	99.1
WA4026	72.3	16.5	2.55	0.29	6.59	1.32	0.68	0.02	0.11	0.05	0.01	0.16	100.7
WA4027	75.5	11.0	0.41	1.02	3.62	3.02	4.36	0.06	0.24	0.03	0.02	0.54	100.1
WA4028	76.1	11.0	0.19	1.30	3.46	1.62	4.85	0.06	0.29	0.04	0.02	1.08	100.2
WA4029	77.1	10.8	0.34	0.90	4.14	1.64	3.49	0.03	0.23	0.04	0.02	0.54	99.4
WA4030	62.3	14.2	3.66	4.52	4.51	1.98	6.72	0.10	0.61	0.18	0.04	0.47	99.7

XRF W.R.A. SUMS INCLUDE ALL ELEMENTS DETERMINED. FOR SUMMATION, ELEMENTS ARE CALCULATED AS OXIDES

SAMPLE \ PPM	RB	SR	Y	ZR	NB	BA	NI	CU	ZN
WA4021	111	<10	126	446	28	714	<10	<10	109
WA4022	105	24	112	468	32	649	<10	29	120
WA4023	86	610	118	508	28	875	<10	19	136
WA4024	94	40	129	517	35	1040	<10	14	77
WA4025	65	213	108	494	28	562	<10	51	70
WA4026	49	597	<10	34	11	609	<10	28	25
WA4027	95	75	138	529	21	883	<10	26	157
WA4028	47	18	140	686	37	541	<10	20	69
WA4029	52	20	133	483	35	560	<10	25	26
WA4030	61	704	126	986	15	876	78	17	81

Ministry of Northern Development and Mines
Ontario

Report of Work
(Geophysical, Geological, Geochemical and Expenditures)

52C11NE0061 2.11974 WATTEN

900

2.11974

Type of Survey(s): Geological Mapping

Township or Area: Watten Township

Claim Holder(s): Falconbridge Limited Box 40 Commerce Court West

Prospector's Licence No.: A21647

Address: Toronto, Ontario M5L 1B4

Survey Company: Falconbridge Limted

Date of Survey (from & to): 21 08 88 04 09 88 (Day Mo. Yr. Day Mo. Yr.)

Total Miles of line Cut:

Name and Address of Author (of Geo-Technical report): David Alderman 100-3074 Portage Avenue Winnipeg, Manitoba R3K OY2

Credits Requested per Each Claim in Columns at right

Special Provisions		Days per Claim
For first survey: Enter 40 days. (This includes line cutting)	Geophysical	
	- Electromagnetic	
	- Magnetometer	
For each additional survey: using the same grid: Enter 20 days (for each)	- Radiometric	
	- Other	
	Geological	
	Geochemical	
Man Days		**Days per Claim**
Complete reverse side and enter total(s) here	Geophysical	
	- Electromagnetic	
	- Magnetometer	
	- Radiometric	
	- Other	
	Geological	25
	Geochemical	
Airborne Credits		**Days per Claim**
Note: Special provisions credits do not apply to Airborne Surveys.	Electromagnetic	
	Magnetometer	
	Radiometric	

Mining Claims Traversed (List in numerical sequence)

Prefix	Number	Expend. Days Cr.
K	829969	25
	829970	25
	829971	25
	829977	25
	829978	25
	829983	25
	829986	25
	829989	25
	829990	25
	829993	25
	839325	25
	839330	25
	839331	25
	839333	25

RECEIVED NOV 2 1988 MINING LANDS SECTION

ONTARIO GEOLOGICAL SURVEY ASSESSMENT FILES OFFICE JAN 30 1989 RECEIVED

KENORA MINING DIV. RECEIVED NOV 18 1988 AM 9:55 PM 7,8,9,10,11,12,1,2,3,4,5,6

Expenditures (excludes power stripping)

Type of Work Performed:

Performed on Claim(s):

Calculation of Expenditure Days Credits

Total Expenditures $ ÷ 15 = Total Days Credits

Instructions: Total Days Credits may be apportioned at the claim holder's choice. Enter number of days credits per claim selected in columns at right.

Total number of mining claims covered by this report of work: 14

829 964

For Office Use Only

Total Days Cr. Recorded: 350 | Date Recorded: 88 Nov 18 | Mining Recorder: Scott Kivett

Date Approved as Recorded: See Revised Statement | Branch Director:

Date: Nov 9th, 1988 | Recorded Holder or Agent (Signature): D. Alderman

Certification Verifying Report of Work

I hereby certify that I have a personal and intimate knowledge of the facts set forth in the Report of Work annexed hereto, having performed the work or witnessed same during and/or after its completion and the annexed report is true.

Name and Postal Address of Person Certifying: David Alderman 100-3074 Portage Avenue Winnipeg, Manitoba R3K OY2

Date Certified: Nov 9, 1988 | Certified by (Signature): D. Alderman

Assessment Work Breakdown

Man Days are based on eight (8) hour Technical or Line-cutting days. Technical days include work performed by consultants, draftsmen, etc..

Type of Survey: Geological Mapping

Technical Days				Technical Days Credits		Line-cutting Days		Total Credits		No. of Claims		Days per Claim
50	X	7	=	350	+		=	350	÷	14	=	25

Type of Survey:

Technical Days				Technical Days Credits		Line-cutting Days		Total Credits		No. of Claims		Days per Claim
	X	7	=		+		=		÷		=	

Type of Survey:

Technical Days				Technical Days Credits		Line-cutting Days		Total Credits		No. of Claims		Days per Claim
	X	7	=		+		=		÷		=	

Type of Survey:

Technical Days				Technical Days Credits		Line-cutting Days		Total Credits		No. of Claims		Days per Claim
	X	7	=		+		=		÷		=	

BREAKDOWN OF MAN HOURS FOR RICE BAY GEOLOGICAL MAPPING

Technical Man Hours
Field Mapping

D. Alderman	Aug 21st - Sept 4th/88	15 days @ 11 hrs/day =	165 hrs
G. Rogers	Aug 21st - Sept 4th/88	15 days @ 11 hrs/day =	165 hrs
M. Peshko	Aug 26th - Aug 28th/88	3 days @ 11 hrs/day =	33 hrs
		Total	363 hrs

Office

Computer & Report Drafting	D. Alderman	24 hrs
Drafting	G.Schween, V. Harp	12 hrs
Computer & Data Entry	K. Mann	2 hrs
	Total	38 hrs
	Total Man Hours	401 hrs

401 hrs / 8 hour day x 7 = 350 days work credit

350 days / 14 claims = 25 work days credit/claim

Ministry of Northern Development and Mines

Ontario

Report of Work

(Geophysical, Geological, Geochemical and Expenditures)

2.11974

DOCUMENT No. W8801· 293

Mining Act Mining Lands

Instructions: – Please type or print.
– If number of mining claims traversed exceeds space on this form, attach a list.
Note: – Only days credits calculated in the "Expenditures" section may be entered in the "Expend. Days Cr." columns.
– Do not use shaded areas below.

Type of Survey(s)
Lithogeochemical Survey

Township or Area
Watten Township

Claim Holder(s)
Falconbridge Limited Box 40 Commerce Court West

Prospector's Licence No.
A21647

Address
Toronto, Ontario M5L 1B4

Survey Company
Falconbridge Limited

Date of Survey (from & to): 21 08 88 (Day | Mo. | Yr.) 25 08 88

Total Miles of line Cut

Name and Address of Author (of Geo Technical report)
David Alderman 100-3074 Portage Avenue Winnipeg, Manitoba R3K OY2

Credits Requested per Each Claim in Columns at right

Special Provisions		Days per Claim
For first survey: Enter 40 days (This includes line cutting)	Geophysical	
	- Electromagnetic	
	- Magnetometer	
For each additional survey using the same grid: Enter 20 days (for each)	- Radiometric	
	- Other	
	Geological	
	Geochemical	

Man Days		Days per Claim
Complete reverse side and enter total(s) here	Geophysical	
	- Electromagnetic	
	- Magnetometer	
	- Radiometric	
	- Other	
	Geological	
	Geochemical	9

Airborne Credits		Days per Claim
Note: Special provisions credits do not apply to Airborne Surveys.	Electromagnetic	
	Magnetometer	
	Radiometric	

Mining Claims Traversed (List in numerical sequence)

Prefix	Number	Expend Days Cr.
K	829969	9
	829970	9
	829971	9
	829977	9
	829978	9
	829983	9
	829986	9
	829989	9
	829990	9
	829993	9
	839325	9
	839330	9
	839331	9
	839333	9

Prefix	Number	Expend Days Cr.

RECEIVED NOV 18 1988 KENORA MINING DIV.

Expenditures (excludes power stripping)

Type of Work Performed

Performed on Claim(s)

Calculation of Expenditure Days Credits

Total Expenditures: $ ÷ 15 = Total Days Credits

Instructions
Total Days Credits may be apportioned at the claim holder's choice. Enter number of days credits per claim selected in columns at right.

829 964

Total number of mining claims covered by this report of work: 14

For Office Use Only

Total Days Cr. Recorded	Date Recorded	Mining Recorder
126	88 nov 18	Scott Rivett
	Date Approved as Recorded	Branch Director
	See Revised Statement	

Date: Nov 9/88

Recorded Holder or Agent (Signature)

Certification Verifying Report of Work

I hereby certify that I have a personal and intimate knowledge of the facts set forth in the Report of Work annexed hereto, having performed the work or witnessed same during and/or after its completion and the annexed report is true.

Name and Postal Address of Person Certifying
David Alderman 100-3074 Portage Avenue Winnipeg, Manitoba R3K OY2

Date Certified: Nov 9/88

Certified by (Signature)

Assessment Work Breakdown

Man Days are based on eight (8) hour Technical or Line-cutting days. Technical days include work performed by consultants, draftsmen, etc..

Type of Survey: Lithogeochemical Sampling

Technical Days				Technical Days Credits		Line-cutting Days		Total Credits		No. of Claims		Days per Claim
18	X	7	=	126	+		=	126	÷	14	=	9

Type of Survey:

Technical Days				Technical Days Credits		Line-cutting Days		Total Credits		No. of Claims		Days per Claim
	X	7	=		+		=		÷		=	

Type of Survey:

Technical Days				Technical Days Credits		Line-cutting Days		Total Credits		No. of Claims		Days per Claim
	X	7	=		+		=		÷		=	

Type of Survey:

Technical Days				Technical Days Credits		Line-cutting Days		Total Credits		No. of Claims		Days per Claim
	X	7	=		+		=		÷		=	

BREAKDOWN OF MAN HOURS FOR RICE BAY LITHOGEOCHEM PROJECT

Technical Man Hours

Sample Collection

August 21st-25th/88	Mark Edwards	5 days @ 11 hours/day =	55 hrs
August 21st-25th/88	Mike Peshko	5 days @ 11 hours/day =	55 hrs
		Total	110 hrs

Office

Compilation & Report Drafting	D. Alderman	8 hrs
Drafting	G. Schween, V. Harp	4 hrs
Computer & Data Entry	K. Mann	14 hrs
Sample Preparation & Shipping	D. Alderman	8 hrs
	Total	34 hrs
	Total Man Hours	144 hrs

144 hours / 8 hour day x 7 = 126 days work credit

126 / 14 claims = 9 work days credit/claim

Ontario

Ministry of
Northern Development
and Mines

Ministère du
Développement du Nord
et des Mines

Mining Lands Section
3rd floor, 880 Bay Street
Toronto, Ontario
M5S 1Z8

Telephone: (416) 965-4888

January 26, 1989

Your file: W8801-292
W8801-293
Our file: 2.11974

Mining Recorder
Ministry of Northern Development and Mines
808 Robertson Street
P.O. Box 5200
Kenora, Ontario
P8N 3X9

Dear Sir:

Re: Notice of Intent dated January 11, 1989 - Geological Survey
submitted on Mining Claims K 829969 et al in Watten Township

The assessment work credits, as listed with the above-mentioned Notice of Intent, have been approved as of the above date.

Please inform the recorded holder of these mining claims and so indicate on your records.

Yours sincerely,

W.R. Cowan
Provincial Manager, Mining Lands
Mines & Minerals Division

SH:pl
Enclosure

cc: Mr. G.H. Ferguson
Mining and Lands Commissioner
Toronto, Ontario

Falconbridge Limited
Box 40, Commerce Court West
Toronto, Ontario
M5L 1B4

Resident Geologist
Kenora, Ontario

Mr. David Alderman
Suite 100
3074 Portage Avenue
Winnipeg, Manitoba
R3K 0Y2

Ministry of Northern Development and Mines
Ontario

Technical Assessment Work Credits

File 2.11974

Date: January 11, 1989

Mining Recorder's Report of Work No.: W8801-292

Recorded Holder: Falconbridge Limited

Township or Area: Watten Township

Type of survey and number of Assessment days credit per claim	Mining Claims Assessed
Geophysical	
Electromagnetic _____ days	
Magnetometer _____ days	K 829969 to 971 inclusive 829977-78-83-86-89-90 839325-30-31
Radiometric _____ days	
Induced polarization _____ days	
Other _____ days	
Section 77 (19) See "Mining Claims Assessed" column	
Geological 29 days	
Geochemical _____ days	
Man days [X] Airborne [ ]	
Special provision [ ] Ground [X]	
[ ] Credits have been reduced because of partial coverage of claims.	
[ ] Credits have been reduced because of corrections to work dates and figures of applicant.	

Special credits under section 77 (16) for the following mining claims

No credits have been allowed for the following mining claims

[X] not sufficiently covered by the survey

K 829993

[X] insufficient technical data filed

K 839333

The Mining Recorder may reduce the above credits if necessary in order that the total number of approved assessment days recorded on each claim does not exceed the maximum allowed as follows: Geophysical - 80; Geologocal - 40; Geochemical - 40; Section 77(19) - 60.

Ministry of Northern Development and Mines
Ontario

Technical Assessment Work Credits

File: 2.11974

Date: January 11,1989

Mining Recorder's Report of Work No.: W8801-293

Recorded Holder: Falconbridge Limited

Township or Area: Watten Township

Type of survey and number of Assessment days credit per claim	Mining Claims Assessed
Geophysical	
Electromagnetic _____ days	
Magnetometer _____ days	K 829969 to 971 inclusive 829977-83-86 839325
Radiometric _____ days	
Induced polarization _____ days	
Other _____ days	
Section 77 (19) See "Mining Claims Assessed" column	
Geological _____ days	
Geochemical 18 days	
Man days [X] Airborne [ ]	
Special provision [ ] Ground [X]	
[ ] Credits have been reduced because of partial coverage of claims.	
[ ] Credits have been reduced because of corrections to work dates and figures of applicant.	

Special credits under section 77 (16) for the following mining claims

No credits have been allowed for the following mining claims

[X] not sufficiently covered by the survey

K 829978-89-90-93
839330-31

[X] insufficient technical data filed

K 839333

The Mining Recorder may reduce the above credits if necessary in order that the total number of approved assessment days recorded on each claim does not exceed the maximum allowed as follows: Geophysical - 80; Geologocal - 40; Geochemical - 40; Section 77(19) - 60.

THE TOWNSHIP OF WATTEN

DISTRICT OF RAINY RIVER

KENORA MINING DIVISION

SCALE: 1-INCH = 40 CHAINS

Obikoba Lake Area (M. 2126)

Northeast Bay

RAINY LAKE

U.S.A.

INTERNATIONAL BOUNDARY

McIrvine Twp. & Area (M. 2095)

Halkirk Twp. (M. 2081)

LEGEND

PATENTED LAND	(P)
CROWN LAND SALE	C.S.
LEASES	(L)
LOCATED LAND	Loc.
LICENSE OF OCCUPATION	L.O.
MINING RIGHTS ONLY	M.R.O.
SURFACE RIGHTS ONLY	S.R.O.
ROADS	
IMPROVED ROADS	
KING'S HIGHWAYS	
RAILWAYS	
POWER LINES	
MARSH OR MUSKEG	
MINES	
CANCELLED	C
PATENTED FOR SRO	

NOTES

400' Surface Rights Reservation along the shores of all lakes and rivers.

Lot And Concession Lines Hereon Are Projected From The Best Information Available, But Their True Position Is Not Guaranteed. For Official Survey Purposes Consult Survey Plan And Field Notes Of Record In The Ministry of Natural Resources

Islands Numbered 1 To 77 Inclusive Form Part Of Watten Twp.

All Islands In Rainy Lake Withdrawn From Staking Under Sec. 39 Sub Sec c Of The Mining Act.

PATENTED for surface and mining rights.
PATENTED S.R.O.
Used only with summer resort locations or when space is limited.

Flooded Lands Shown Thus:

Flooding Rights Reseserved Up To 1116.6' Above Mean Sea Level On All Land Bordering On Rainy Lake. File: 4922, 5476.

AREAS WITHDRAWN FROM STAKING

S.R. - SURFACE RIGHTS M.R. - MINING RIGHTS

	Section	Order No	Date	Disposition	File
(R)	PUBLIC RESERVE		NOV 14/62	S R	163472
(R)	42(RSO 1950)		OCT 9/69	S R	"
(R)	RESERVE			S R	"
(R)	RESERVE		NOV 27/67	S R	"
(R)	42(RSO 1960)		MAR 25/65	S R	23863

RE-OPENED DEC. 10/86

(R) SEC 36/80 W.58/82 NOV 23/82 S.R.&M.R.

SAND and GRAVEL

(S)	MTC PIT 571	(S) MTC Gravel Reserve	(S) Gravel File 30705
(S)	" " 572	(S) MTC PIT 879	(S) " " 13429-30
(S)	" " 574	(S) " " 880	(S) " " 37750
(S)	" " 575		(S) " " 10578
(S)	" " 576	(S) " " 1657	(S) " " 11744-45
(S)	" " 577	(S) " " 1748	(S) " " 10578
(S)	" " 604	(S) Gravel File 37682	(S) " " 837779
(S)	" " 605	(S) Gravel	(S) " " 37683
(S)	" " 633	(S) Sand File 28007	(Q) QUARRY PERMIT
(S)	" " 651	(S) Gravel File 37661	
(S)	" " 802	(S) MTC PIT 1747	
(S)	" " 803	(S) Gravel File 11451	
(S)	" " 813	(S) " " 1015	
(S)	" " 814	(S) " " 20307	

OCT 14 1986

PLAN NO. - M.2128

ONTARIO

MINISTRY OF NATURAL RESOURCES

SURVEYS AND MAPPING BRANCH

52C11NE0061 2 11974 WATTEN

200

J.R.v.K.

HOPKINS BAY

RICE BAY

Beak Island

Lakeshore
Swamp
Powerline
Claim post

2.11974

Map 1

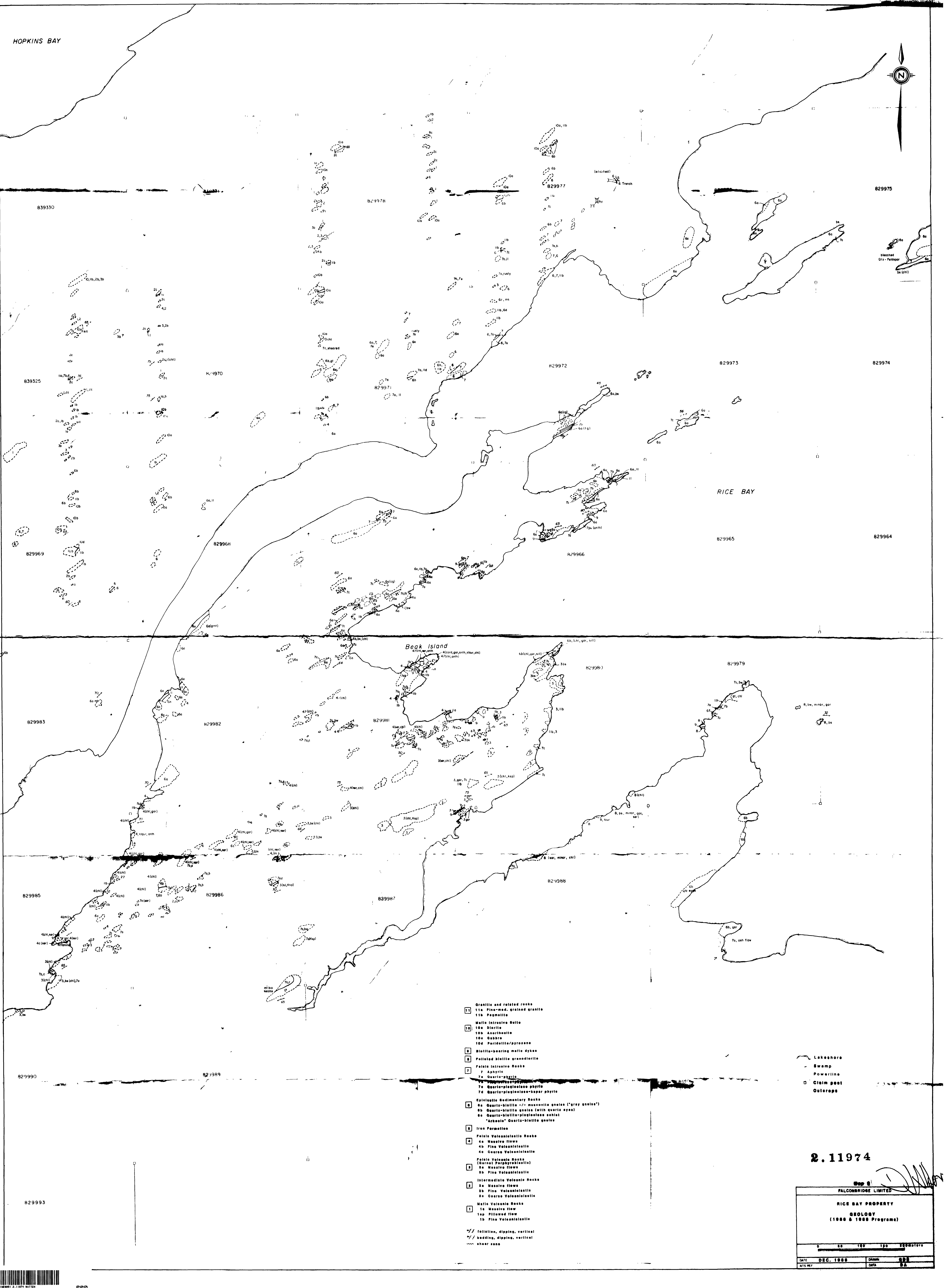
FALCONBRIDGE LIMITED

RICE BAY PROPERTY
Sample Locations

0 50 100 150 250 meters

DATE DEC. 1988 | DRAWN GDS
NTS REF | DATA DA

Rice Bay Sht 1


HOPKINS BAY
RICE BAY
Beak Island
839330
839325
829978
829977
829975
829970
829971
829972
829973
829974
829969
829964
829965
829966
829980
829979
829983
829982
829981
829985
829986
829987
829988
829990
829989
829993
Lakeshore
Swamp
Powerline
Claim post
Outcrops
Granitic and related rocks
11 11a Fine-med. grained granite
11b Pegmatite
Mafic Intrusive Suite
10 10a Diorite
10b Anorthosite
10c Gabbro
10d Peridotite/pyroxene
9 Biotite-bearing mafic dykes
8 Foliated biotite granodiorite
Felsic Intrusive Rocks
7 7 Aphyric
7a Quartz-phyric
7c Quartz-plagioclase phyric
7d Quartz-plagioclase-kspar phyric
Epiclastic Sedimentary Rocks
6 6a Quartz-biotite -/- muscovite gneiss
6b Quartz-biotite gneiss (with quartz eyes)
6c Quartz-biotite-plagioclase schist
"Arkosic" Quartz-biotite gneiss
5 Iron Formation
Felsic Volcaniclastic Rocks
4 4a Massive flows
4b Fine Volcaniclastic
4c Coarse Volcaniclastic
Felsic Volcanic Rocks (Garnet Porphyroblastic)
3 3a Massive flows
3b Fine Volcaniclastic
Intermediate Volcanic Rocks
2 2a Massive flows
2b Fine Volcaniclastic
2c Coarse Volcaniclastic
Mafic Volcanic Rocks
1 1a Massive flow
1ap Pillowed flow
1b Fine Volcaniclastic
foliation, dipping, vertical
bedding, dipping, vertical
shear zone
2.11974
FALCONBRIDGE LIMITED
RICE BAY PROPERTY
GEOLOGY
(1986 & 1988 Programs)
0 50 100 150 200 meters
DATE DEC. 1988
DRAWN
NTS REF
DATA
220

HOPKINS BAY

RICE BAY

Beak Island

839330 839331 829978 829977 829976 829975

829970 829971 829972 829973 829974 839325

829968 829969 829966 829965 829964

829983 829982 829981 829980 829979

829985 829986 829987 829988

829990 829989

829993

Lakeshore
Swamp
Powerline

2.11974

Map 8

FALCONBRIDGE LIMITED

RICE BAY PROPERTY

Hashimoto indices from 1988,1989
Lithogeochemical Program

0 50 100 150 200 meters

DATE DEC. 1989 | DRAWN SDS
NTS REF | DATA DA