

# GM 18375

GEOLOGICAL REPORT, BLOCK H

Documents complémentaires

*Additional Files*



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Énergie et Ressources  
naturelles

Québec 

*Extract from prospectus*

J. H. MORGAN, Ph.D.  
CONSULTING GEOLOGIST

PUBLIC

RAN-LUX MINES LTD.

Ministere des Ressources Naturelles, Quebec  
REVISE  
SERVICE DES RESSOURCES MINIERES  
N° 18375

### Introduction

Ran-Lux Mines Ltd. owns seven properties. Three are in the Chibougamau area, Quebec, one in the Eastern Townships, two in New Brunswick, and one in Nova Scotia.

### BLOCK "H", ROY TOWNSHIP

Chibougamau District, Quebec.

### Property and Location

Block "H" is a surveyed area of 178 acres located north of the east discharge of Lake Chibougamau into Dore Lake. It is designated as Concession Miniere No. 66 by the Quebec Department of Natural Resources. It is in the southwest quarter of Roy township near the west boundary. It may be reached over Dore and Chibougamau Lakes, and the road to Lake Waconichi passes within one mile of the north boundary.

### History

In 1906-1907, Capt. H.A.C. Machin began the development of Block "H". A mining concession was granted in 1910. It was held by Capt. Machin and partners until 1957 when R.P. Mills acquired 15/16ths undivided interest. He acquired the remaining 1/16th in 1962. Block "H" except for about 24 acres in the southeast corner, was transferred by R.P. Mills to Ran-Lux Mines Ltd.

### Geology

The producing mines in the vicinity of Chibougamau and Dore Lakes are in an anorthosite mass that strikes across the lakes in a direction slightly north of east. The anorthosite is bordered to the north by a belt of volcanics and sediments intruded by sills of diorite, gabbro and ultra-basic rocks. A number of showings with copper mineralization, including those on Block "H", have been found in this belt. Diamond drilling on the property of Bruneau Mines Limited, about two miles west of Block "H", intersected ore-grade copper mineralization in several holes. Gold in appreciable amount is present in some intersections. The mineralization occurs in gabbro and in acid volcanic breccia with marked epidote alteration. Two adits have been driven to investigate these zones.

Block "H" is underlain by volcanics and gabbro sills. The drilling program in 1956 was confined to the south part of the property, particularly in the vicinity of the old pits. The drill holes encountered andesitic volcanics and gabbro and a wide leached zone thought to be a major fault zone striking northeast across the southern part of the property. No ore was found in this drill program, though some copper mineralization was encountered. The long-wire and resistivity surveys show the presence of a number of weakly conducting zones in the north part of the property.

J. H. MORGAN, Ph.D.  
CONSULTING GEOLOGIST

### Development

About 1906-1907 Capt. Machin located showings of copper mineralization on Block "H" about one-third of a mile north of the east discharge of Lake Chibougamau. Two pits were dug, about ten feet deep and 150 feet apart. These pits were sampled by the Chibougamau Commission in 1910. They reported interesting values in copper, low silver values, and traces of gold. These pits were relocated in 1952, cleaned out and re-sampled. Similar results were obtained.

In 1956 magnetic, electromagnetic and electrical resistivity surveys were performed, followed by 6,117 feet of diamond drilling in 14 holes. In 1960 a long-wire electromagnetic survey was done. In 1964 the old trenches were again cleaned out, blasted, and some sampling done. This work reveals the mineralization at this location to be erratic and discontinuous, though high-grade in places.

Two holes were drilled in 1964, a total of 1,179 feet, to test the conductors outlined in the long-wire electromagnetic surveys. No mineralization of economic interest was encountered.

No buildings or equipment are on the property.

### Recommendations

Additional work is not recommended at this time. Development on adjoining properties may warrant additional investigation on Block "H" in the future.

## BEAR BAY GROUP, ROY TOWNSHIP

### Chibougamau District

### Property and Location

The Bear Bay group consists of 20 claims near the centre of Roy township in the Chibougamau district of Quebec. These are identified by Miner's Certificates numbered C 212444, claims 1-5; C 212445, claims 1-5; C 212446, claims 1-5; and C 212447, claims 1-5. The area of the group is approximately 800 acres.

This property is accessible by Lake Chibougamau, lying east of Bear Bay near the north end of the lake.

### History

Concor Chibougamau Mines Ltd. acquired a group of claims in 1950-1953 covering most of the area now covered by this Ran-Lux group. Records prior to Concor's ownership are not available. Ran-Lux staked these claims in 1964.

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### Development

Geological mapping, prospecting and an electrical resistivity survey were done by Concor in 1954. Some zones of low resistivity were outlined. Subsequent diamond drilling by Concor was concentrated on claims to the northwest, outside the present Ram-Lux group. Electromagnetic check surveys and some prospect diamond drilling was done by Ram-Lux in 1964. About 2,000 feet of diamond drilling in six holes was done in 1965.

No buildings or equipment are on the property.

### Geology

The property is underlain by a volcanic series consisting of steeply dipping tuff, agglomerate and intermediate to acid flows. The south part of the property is underlain by gabbro, apparently intrusive into the volcanics. Small syenite dykes intrude the volcanics in places.

A northeast fault marked by a steep-walled depression crosses the west end of the property. An east-west depression marks a shear zone in the south part of the property. Trenches reveal small amounts of pyrrhotite, pyrite and chalcopyrite near this depression at one location. Test work by electromagnetic means and diamond drilling revealed similar sparse sulphide mineralization. Small amounts of copper and zinc sulphides were encountered in drilling one of the electrical anomalies in the north part of the property. Detailed electromagnetic work on this was done in the fall of 1965. This outlined an area of electrical conductivity striking northwest.

A number of showings of zinc and copper sulphides occur on the property of Tache Lake Mines Ltd., adjoining to the north. To the south, on the property of Sulphur Converting Corporation, a large zone of pyrrhotite and pyrite contains small amounts of zinc and copper sulphides. Similar showings occur about two miles to the east on the property of Gibson Mines Ltd.

### Recommendations

It is recommended that the electromagnetic anomaly outlined in the fall of 1965 be drilled. Five hundred feet of drilling, costing \$3,000, would be required.

## WHITTON TOWNSHIP

### Eastern Townships, Quebec

### Property and Location

Four claims, about 400 acres in area, comprise lots 7-10 incl., Range VI NE, of Whitton township. Miner's Certificates of these claims are numbered C 205931, claims 1 and 2 and C 205932, claims 1 and 2. This claim group is six miles north-northwest of the village of Megantic, Frontenac County, and is readily accessible over highways and gravelled roads. These lots are cultivated fields, pasture land and bush.

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### History

No previous development was done on the Ran-Lux property. A magnetic survey and self-potential check-survey have been completed. In the area development by diamond drilling was done in 1964-1965 by Labrador Mining and Exploration on molybdenite showings about one mile north of the Ran-Lux property, on the southeast side of Ste. Cecile Mountain. Similar showings have been investigated on St. Sebastien Mountain, some five miles northeast. No company-owned buildings or equipment are on the property.

### Geology

Ste. Cecile and St. Sebastien mountains each contain a core of granite that outcrops on the upper slopes. The granite intrudes a series of steeply dipping, northeast-striking sediments consisting of greywacke, slate and quartzite. Aplite and granite dykes intrude the sediments. Near the granite contact on the slopes of the mountains the sediments contain molybdenite in quartz veins. The molybdenite tends to be concentrated in the walls of quartz veins, so that a stockworks of quartz stringers is more favorable than large veins. A small amount of pyrrhotite is sometimes present. The zones on Ste. Cecile mountain respond to magnetic and self-potential surveys.

The Ran-Lux claims are underlain by northeast striking, vertical dipping sandy and slaty greywacke. Outcrops are scarce and the surface is covered by numerous large boulders of granite, presumably glacial debris from the nearby mountains.

### Development

A magnetic and self-potential survey of the Ran-Lux property has been completed. Some slight magnetic "highs" have been encountered, and some anomalous self-potential areas outlined. Four holes, 783 feet of diamond drilling, were drilled in 1965 to test these anomalies. Slight amounts of graphite were intersected. No mineralization of economic interest was encountered.

### Recommendations

It is recommended that these claims be allowed to lapse.

McKENZIE TOWNSHIP

Chibougamau, Quebec

### Property and Location

Ran-Lux Mines Ltd. owns three claims in the Bourbeau Lake sector of McKenzie township, Chibougamau, Quebec. These claims are identified by Miner's Certificates numbered C 193323, claim 1; C 193324, claim 1 and C 193327, claim 1. The area of the property is about 120 acres.

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This property adjoins east of Norbeau Mines (Quebec) Ltd., southwest of O'Sullivan Bay of Bourbeau Lake, four miles northeast of the town of Chibougamau. It is accessible by tractor road in its southern part or via Bourbeau Lake.

### History

The ground covered by this property was held since the late 1930's, most recently by Normandy Gold Mines Ltd. In 1962 these claims lapsed, were staked, and, in late 1964, acquired by Ran-Lux Mines Ltd. There are no buildings or equipment on the property.

### Development

Diamond drilling and trenching was done on this property at various times. Minor amounts of copper mineralization occur in outcrop and trenches in rhyolite and agglomerate southwest of O'Sullivan Bay. A magnetometer survey was made in 1965 and some electromagnetic work in 1964. Seven diamond drill holes, totalling 3,492 feet, were drilled.

Norbeau Mines (Quebec) Ltd. recently has sunk a shaft, built a mill and commenced production of gold from two veins located about one mile west of the Ran-Lux claims. On the claim immediately north of Ran-Lux, Norbeau found a new vein from which spectacular assays of gold were obtained in preliminary sampling. Subsequent drilling did not encounter similar values at depth.

### General Geology

The Bourbeau Lake sector is underlain by a series of east-west striking sills of basic to ultrabasic composition. These intrude pyroclastics and volcanics ranging from acid to basic in composition.

The Norbeau vein has a strike of N 30° E and dips at 45° - 70° to the southeast. A second vein, known as Number four, has been found in underground work. This vein strikes about north-south and dips 45° - 70° east. These veins occur in diorite and gabbro. There is some evidence that the ore in these veins is confined to a band of altered diorite (technically quartz chlorite hornblende gabbro). This band is 800-900 feet wide in the mine area and lies south of the south shore of Bourbeau Lake.

The new vein just north of Ran-Lux strikes east-west with a dip near vertical. Continuing on strike to the east it would cross the Ran-Lux boundary about 500 feet from its known outcrop. Several other veins occur in this vicinity, striking about east-west. These include the Sharpe vein, similar in appearance to the Norbeau vein, that carries erratic values in gold.

Aerial photos and aeromagnetic surveys indicate a system of east-west and northeast - striking faults in the Bourbeau Lake area. The Norbeau veins lie between two east-west faults, one along the south shore of Bourbeau Lake, the other about 2,500 feet to the south. This south fault

J. H. MORGAN, Ph.D.  
CONSULTING GEOLOGIST

is marked by a series of narrow, high magnetic anomalies. The Norbeau vein occurs in a northeast striking shear or fault. Another northeast fault is indicated in aerial photos to lie just west of O'Sullivan Bay.

#### Geology - Ran-Lux

Outcrops in the south part of the Ran-Lux property consist of volcanics and pyroclastics intruded by basic to ultrabasic sills.

The east-west fault that passes south of Norbeau crosses the Ran-Lux property. A northeast fault shows on aerial photos southwest of the property and appears to be displaced about 1,000 feet to the right by the east-west fault. The northeast faulted extension of this fault should occur on the Ran-Lux ground. The magnetometer survey gives some confirmation of the existence of this northeast fault in the south part of the property. Diamond drilling confirmed the presence of ultrabasic rocks and volcanics, but no economic mineralization was encountered. Attempts to locate the new vein of Norbeau on Ran-Lux ground were unsuccessful.

#### Recommendations

All the work previously recommended has been completed, without discovery of economic mineralization. Additional work is not recommended pending developments on the adjoining properties.

### CAMPOBELLO AND DEER ISLANDS

#### New Brunswick

##### Property and Location

Twenty-five claims, about 1,000 acres, on Campobello Island and five claims, about 200 acres, on Deer Island, New Brunswick, have been acquired by Ran-Lux Mines Ltd. The claims on Campobello Island are identified by Mining License No. 10562, tag numbers 185201 to 185225 and those on Deer Island by Mining License No. 10564, tag numbers 185268 to 185272. Both properties are readily accessible by road. Campobello Island may be reached by bridge from Lubec, Maine, and Deer Island by ferry from Letete, New Brunswick.

##### History

As far as known there is no previous history of mining exploration or development on these claim groups. They were staked in the late summer of 1965. There are no company-owned buildings or equipment on the properties.

J. H. MORGAN, Ph.D.  
CONSULTING GEOLOGIST

### Geology

Deer and Campobello Islands are underlain by volcanic and sedimentary rocks, intruded by sills of diorite and gabbro and by masses of younger (?) diabase and gabbro. The volcanic rocks are predominant and consist of rhyolite, volcanic breccia, andesite, basalt, tuff and agglomerate. Interbedded with the volcanics are shales, slates and cherty argillites. All these rocks have been tentatively placed in the Silurian. They strike northeast except in the south end of Campobello where the strike is northwest.

Zinc and lead mineralization occurs in small quartz veins in gabbro near Welshpool, about one mile northwest of the Campobello property. Lead mineralization also is found near the northeast end of Campobello Island. On Deer Island a deposit of ochre is reported in Quaternary sands.

Thirteen miles west of Deer Island, Dolsan Mines Limited are drilling promising showings near Pembroke, Maine. They are investigating a silver-zinc deposit with minor lead and copper content and another deposit containing commercial values in copper and gold. The geological setting in this vicinity resembles that at Deer and Campobello Islands in that interbedded volcanics and sediments of Silurian age have been intruded by diorite. These zones were located by drilling following geochemical surveys in the vicinity of an old copper showing.

Deer and Campobello Islands are fairly rugged with relief up to 300 feet above the sea. Outcrop is plentiful in most areas and overburden does not appear to be deep.

### Recommendations

Reconnaissance geochemical surveys and surface prospecting are recommended for the Ran-Lux properties on Deer and Campobello Islands. The estimated cost of this work is \$4,000.

## LONDONDERRY AREA

### Nova Scotia

#### Property and Location

Ran-Lux Mines Ltd. has mineral rights in the Londonderry area of Nova Scotia on 72 claims, an area of about 2,880 acres. In the East Mines area 16 adjoining claims are identified by Map Reference 11E11B, tract 12, claims A - H, and 11E6C, tract 108, claims J - Q, under License Number 5304. In the West Mines area 56 adjoining claims are described as Map Reference 11B5D, tract 90, claims J - Q, and tract 103, claims A - H, under License Number 5305; tract 102, claims A - H, License Number 4895;

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CONSULTING GEOLOGIST

tract 102, claims J - Q, License Number 5948; tract 103, claims J - Q, License Number 5949, and tract 104, claims A - H, J - Q, License Number 5950.

East Mines is in the Cobequid Mountains 13 miles northwest of Truro, Nova Scotia and West Mines is six miles west of East Mines. Both are readily accessible over motor roads and numerous bush roads traverse the property areas. Power lines cross the property.

### History

The East and West Mines were so named in the period from 1849 to 1908 when iron ore was mined at various locations along the south side of the Cobequid Mountains. The material mined was the oxidized product of weathering of large siderite-ankerite veins and would not be of ore grade today. Iron and steel smelters and rolling mills were located at Londonderry, about one mile south of West Mines.

Occurrences of copper and lead mineralization in the Cobequid Mountains have given rise to a number of periods of prospecting since the mines closed. The properties were acquired by application and by purchase from Lura Corporation in 1965 and 1966.

### Geology

The rocks in the vicinity of the East and West Mines are sandstones, argillites, volcanic tuff, agglomerate, chloritic schist and graphitic shale of Early Devonian age. These were intruded north of the mines by the Cobequid complex of granite, syenite and gabbro in the Late Devonian. South of the Cobequid fault Pennsylvanian sandstone, shale, conglomerate and mudstone occurs.

The most prominent structural feature of the area is the Cobequid fault which accounts for the escarpment forming the south side of the Cobequid Mountains. It strikes east-west and the south side is downthrown. The siderite veins from which iron ore was mined are parallel to the Cobequid fault and probably are related to it. The source of the mineralizing solutions could have been the acid intrusives and diorite and gabbro north of the veins. A number of north-south faults have been mapped, some of which displaced the Cobequid fault. It appears that many of the streams that flow down the south slope of the Cobequids occupy fault valleys.

Mining of the siderite veins was stopped when the workings ran into sulphur bearing material, thought to be barite in some cases. At one location, near West Mines a drill hole in the early 1900's was reported to have intersected 20 feet of "sulphides" below one of the iron pits. It is possible that zoning of mineralization occurred with development of sulphides at depth. Copper mineralization has been found north of the old workings and a number of specimens of copper-bearing float have been found south of the workings.

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CONSULTING GEOLOGIST

Development


Two areas were selected for soil sampling for geochemical investigation, one near East Mines and the other near West Mines. This work was done in early 1966. No significant soil anomalies were outlined in the East Mines area, but several anomalous areas have been outlined in the West Mines Area. These areas are high geochemically in lead and zinc, with some copper values. The areas have been prospected in detail.

Diamond drilling is now underway to test the areas of geochemical anomaly. One or two holes will be drilled to test the siderite-ankerite veins at depth.

Recommendations

It is recommended that a minimum of 2,000 feet of diamond drilling be done to test the geophysical indications and to explore the siderite-ankerite veins at depth. The cost of this program is estimated to be \$12,000.

Respectfully submitted,

  
J.H. Morgan, Ph. D.,  
Consulting Geologist

Montreal 3, P.Q.  
August 5, 1966


J. H. MORGAN, Ph.D.  
CONSULTING GEOLOGIST

C E R T I F I C A T E

I, JOHN HAROLD MORGAN, of the City of Montreal,  
Province of Quebec, hereby certify:

1. THAT I am a Geologist and reside at 4691 Bessborough Avenue, Montreal 28, Quebec, and have been practising my profession as a Geologist for twenty-five years;
2. THAT I am a graduate of the University of Manitoba (B.Sc.) and of the University of Wisconsin (M.Sc. and Ph.D.);
3. THAT I have no interest, nor do I expect to receive any interest, either direct or indirect, in the properties or securities of Ran-Lux Mines Ltd.;
4. THAT the accompanying report is based on observations and general knowledge of the areas; and
5. THAT I have visited and examined Block "H" on numerous occasions between 1952 and 1962. I examined the Bear Bay Group in 1954 and the Whitton township group in 1964. The McKenzie township group was examined in 1964 and 1965, and the Deer and Campobello Islands, New Brunswick, groups were visited in October 1965. The Londonderry Area was examined in 1966.

Montreal 3, P.Q.  
August 5, 1966

  
J.H. Morgan, Ph. D.,  
Consulting Geologist

McKENZIE TWP

ROY TWP

BRUNEAU MINES LTD.

BLOCK  
"H"

GRANITE  
RAN-LUX MINES LTD.

GRANITE

Volcanic-Basic SILL COMPLEX

COPPER RAND CHIBOUGAMAU MINES LTD.

Anorthosite

(PORTAGE ISLAND)

Lac aux Dorés

Lake Chibougamau

LOCATION MAP

RAN-LUX MINES LTD.

BLOCK "H"

ROY TOWNSHIP, QUEBEC

1 IN. = 1/2 MI.

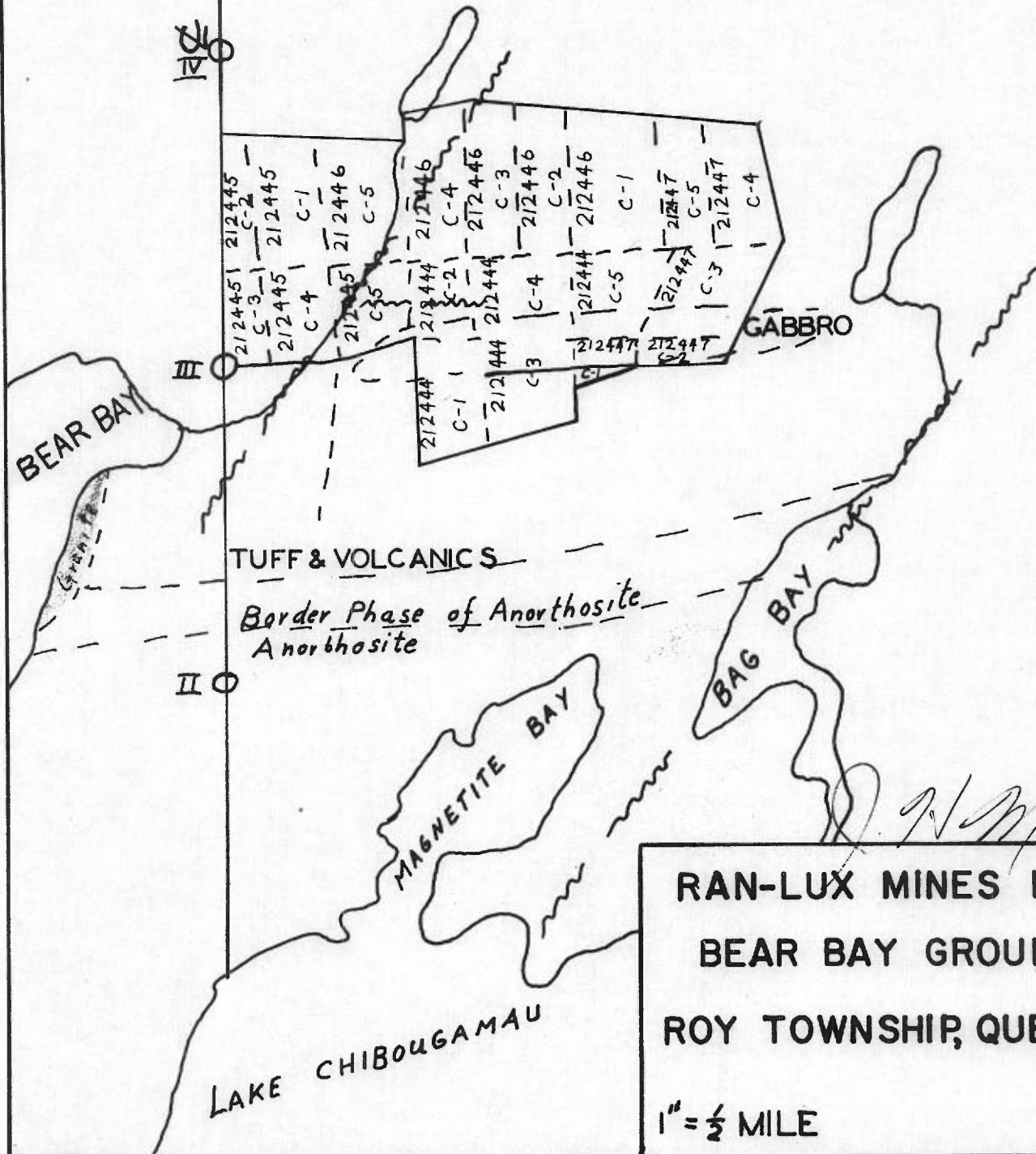
1966



*J. J. McLaughlin*



ROY TWP.



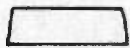
*P. N. Morgan*  
**RAN-LUX MINES LTD.**  
**BEAR BAY GROUP**  
**ROY TOWNSHIP, QUEBEC**  
1" = 1/2 MILE  
1966

N

# LEGEND



GRANITE



SLATES, GREYWACKE  
ETC.



ROADS



RAILROAD

STE. CECILE

MOUNTAIN

\*MOS<sub>2</sub>

\*MOS<sub>2</sub>

G.C. RLY.

MUSKRAT  
LAKE

THREEMILE  
LAKE

205931	CL. 2	□
205931	CL. 1	□
205932	CL. 1	□
205932	CL. 2	□

R. VI NE.

SHERBROOKE

C.P. RLY.

*J.P. Morgan*

RAN-LUX MINES LTD.  
WHITTON TWP, QUEBEC

1" = 1 MILE

1966

BOURBEAU LAKE



NORBEAU MINES (QUEBEC) LTD.

Sharpe Vein

New Vein

BAIE O'SULLIVAN

193324 CL. I

193323 CL I

193327 CL I

3M CENTER LINE

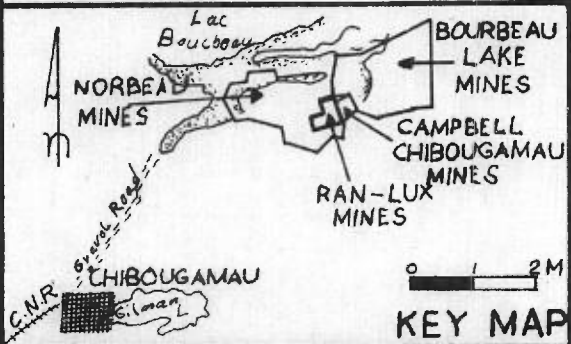
CAMPBELL CHIBOUGAMAU MINES LTD.

LEGEND

— QUARTZ VEIN

~ FAULT

~?~ PROBABLE FAULT



KEY MAP

*C. A. Morgan*

RAN-LUX MINES LTD.

McKENZIE TWP.

CHIBOUGAMAU, QUE.

SCALE 1"=600'

1966

# LEGEND



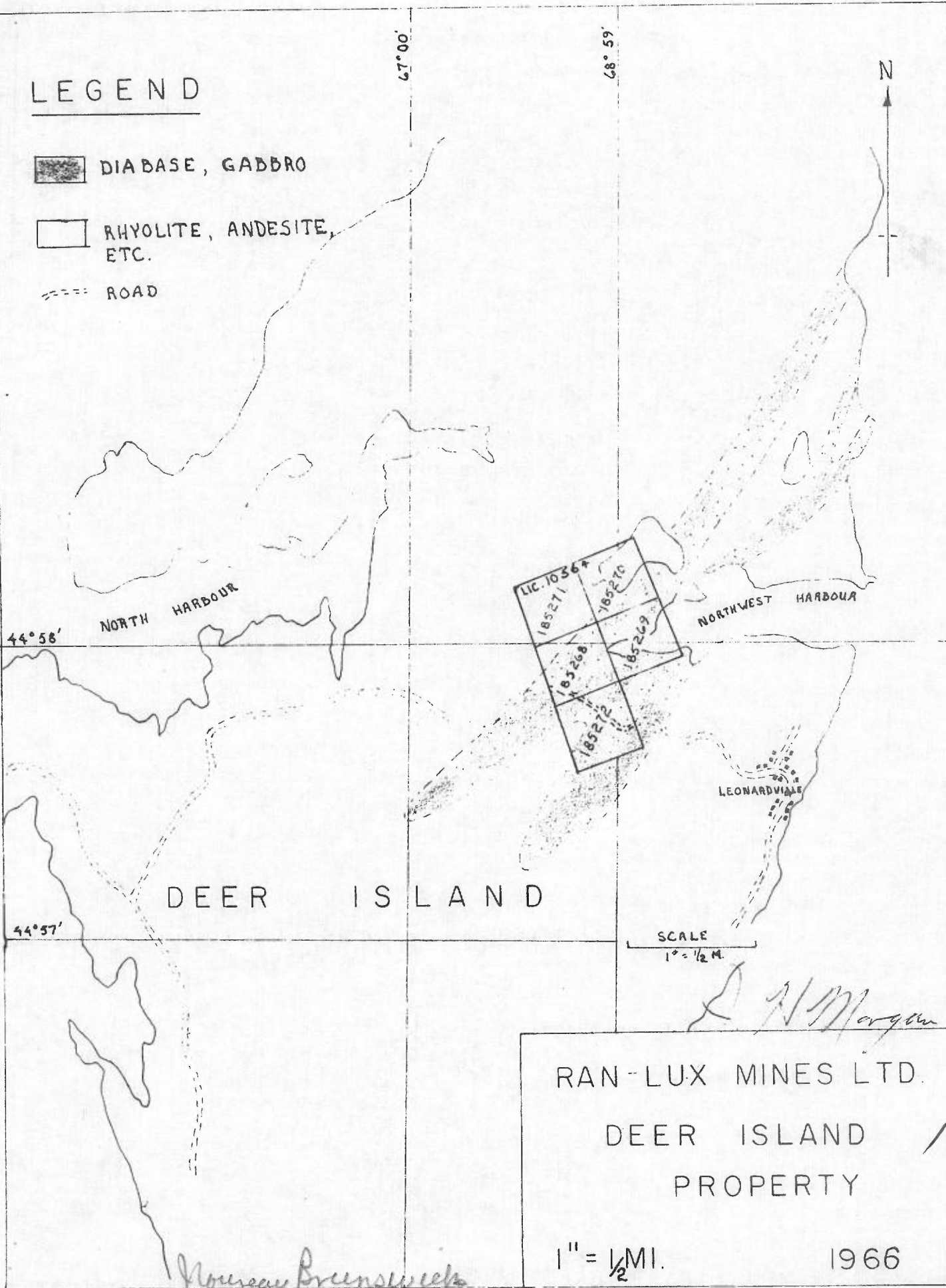
DIABASE, GABBRO

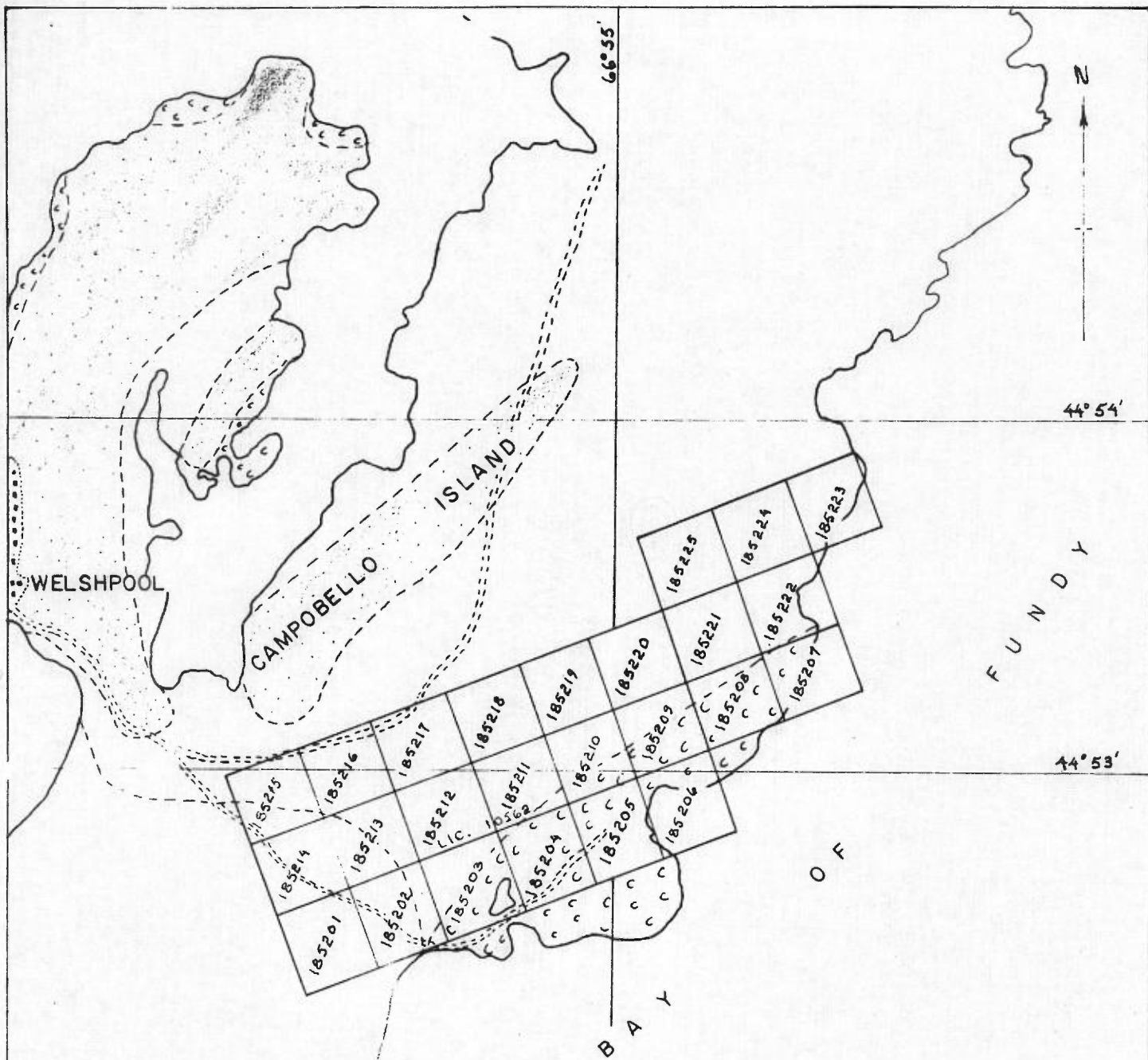


RHYOLITE, ANDESITE,  
ETC.







ROAD





LEGEND

-  DIABASE, GABBRO
-  RHYOLITE, ANDESITE, ETC.
-  SHALES, SLATES, ETC.
-  ROAD

SCALE  
1" = 1/2 MILE

*R. Margulies*

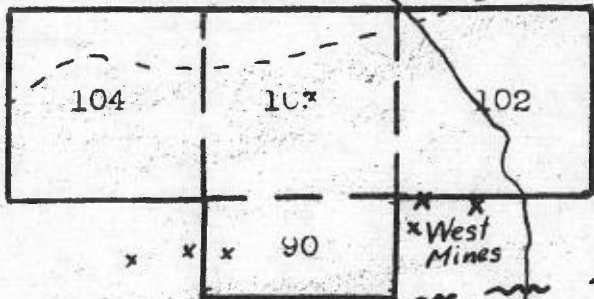
RAN-LUX MINES LTD.  
CAMPOBELLO ISLAND  
PROPERTY




1" = 1/2 MI.

1966

*New Brunswick*

N



-  Pennsylvanian Sediments
-  Cobequid Complex
-  Devonian Sediments & Volcanics

RAN - LUX MINES

Londonderry, N. S.

1 inch = 1 mile

1966

*Nouvelle Ecosse*

*J. J. Morgan*