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NI 43-101 Technical Report for the Nicholas-Denys Project, New Brunswick, Canada

Prepared for

Canadian Metals Incorporated
866, 3e Avenue
Val-d'Or (Quebec) J9P 1T1

Project Location
Latitude: 47°41' North; Longitude: 65°58' West
Province of New Brunswick, Canada

Prepared by:

Claude Savard, P.Geo.

InnovExplo Inc.
Val-d'Or (Québec)

Doug Clark, P.Geo.

Otnabog Exploration Inc.
Bathurst (New Brunswick)

Effective Date: May 20, 2021
Signature Date: May 20, 2021

SIGNATURE PAGE – INNOVEXPLO

NI 43-101 Technical Report for the Nicholas-Denys Project, New Brunswick, Canada

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Val-d'Or (Quebec) J9P 1T1

Project Location
Latitude: 47°41' North; Longitude: 65°58' West
Province of New Brunswick, Canada

Effective Date: May 20, 2021

(Original signed and sealed)

Claude Savard, P. Geo.
InnovExplo Inc.
Val-d'Or (Québec)

Signed at Val-d'Or on May 20, 2021

SIGNATURE PAGE – OTNABOG EXPLORATION INC.

NI 43-101 Technical Report for the Nicholas-Denys Project, New Brunswick, Canada

Prepared for

Canadian Metals Incorporated
866, 3e Avenue
Val-d'Or (Quebec) J9P 1T1

Project Location
Latitude: 47°41' North; Longitude: 65°58' West
Province of New Brunswick, Canada

Effective Date: May 20, 2021

(Original signed and sealed)

Doug Clark, P.Geo.
Otnabog Exploration Inc.
Bathurst (New Brunswick)

Signed at Bathurst on May 20, 2021

CERTIFICATE OF AUTHOR – CLAUDE SAVARD

I, Claude Savard, P.Geo. (OGQ No. 1057, PGO No. 2959), do hereby certify that:

1. I am a professional geoscientist, employed as Senior Geologist at InnovExplo Inc., located at 560, 3e Avenue, Val-d'Or, Québec, Canada, J9P 1S4.
2. This certificate applies to the report entitled "NI 43-101 Technical Report for the Nicholas-Denys Project, New Brunswick, Canada" (the "Technical Report") with an effective date of May 20, 2021, and a signature date of May 20, 2021, prepared for Canadian Metals Inc. (the "issuer").
3. I graduated with a Bachelor of Geology degree from Université du Québec à Chicoutimi (Chicoutimi, Québec) in 1996.
4. I am a member in good standing of the Ordre des Géologues du Québec (OGQ licence No. 1057), the Association of Professional Geoscientists of Ontario (PGO licence No. 2959) and the Association of Professional Engineers and Geoscientists of New Brunswick (APEGNB temporary licence No. L6242).
5. I have practiced my profession of geologist continuously for twenty-four (24) years, during which time I have been involved in mineral exploration, mine geology (underground and open pit), ore control and resource modelling projects for gold, copper, zinc and silver properties in Canada.
6. I have read the definition of "qualified person" set out in National Instrument/Regulation 43-101 ("NI 43-101") and certify that by reason of my education, affiliation with a professional association (as defined in NI 43-101) and past relevant work experience, I fulfill the requirements to be a qualified person for the purposes of that instrument.
7. I did not visit the project that is the subject of the Technical Report.
8. I am the author of items 1, 3 to 8, 13, and 25 to 27 of the Technical Report, and I am the co-author of and share responsibility for item 2 of the Technical Report.
9. I have not had prior involvement with the project that is the subject of the Technical Report.
10. I am independent of the issuer in accordance with the application of section 1.5 of NI 43-101.
11. I have read NI 43-101 and Form 43-101F1, and the sections of the Technical Report for which I am responsible have been prepared in accordance with that instrument and form.
12. I am not aware of any material fact or material change with respect to the subject matter of the Technical Report that is not reflected in the Technical Report, the omission to disclose which makes the Technical Report misleading.

Signed this 20th day of May 2021 in Val-d'Or, Québec, Canada.

(Original signed and sealed)

Claude Savard, P.Geo.
InnovExplo Inc.
claude.savard@innovexplo.com.

CERTIFICATE OF AUTHOR – DOUG CLARK

I, Doug Clark, P.Geo. (APEGNB-M5606) do hereby certify that:

1. I am president of Otnabog Exploration Inc. at 1010 Winton Crescent, Bathurst, New Brunswick, Canada, E2A 4G7.
2. This certificate applies to the report entitled “NI 43-101 Technical Report the Nicholas-Denys Project, New Brunswick, Canada (the “Technical Report”) with an effective date of May 20, 2021 and a signature date of May 20, 2021. The Technical Report was prepared for Canadian Metals Inc. (the “issuer”).
3. I graduated with a Bachelor's degree in Science from the University of New Brunswick (Fredericton, NB) in 1986.
4. I am a member in good standing of the Association of Professional Engineers and Geoscientists of New Brunswick (APEGNB licence No. M5606).
5. I have practiced my profession of geologist continuously for thirty-five (35) years, during which time I have been involved in a wide variety of mineral commodities and geological settings.
6. I have read the definition of a qualified person (“QP”) set out in Regulation 43-101/National Instrument 43-101 (“NI 43-101”) and certify that by reason of my education, affiliation with a professional association (as defined in NI 43-101) and past relevant work experience, I fulfill the requirements to be a QP for the purposes of NI 43-101.
7. I visited the project in early May, 2021, for the purposes of this Technical Report.
8. I am the author of item 12 of the Technical Report, and I am the co-author of and share responsibility for item 2 of the Technical Report.
9. I have not had prior involvement with the project that is the subject of the Technical Report.
10. I am independent of the issuer in accordance with the application of section 1.5 of NI 43-101.
11. I have read NI 43-101 and Form 43-101F1, and the sections of the Technical Report for which I am responsible have been prepared in accordance with that instrument and form.
12. I am not aware of any material fact or material change with respect to the subject matter of the Technical Report that is not reflected in the Technical Report, the omission to disclose which makes the Technical Report misleading.

Signed this 20th day of May 2021 in Bathurst, New Brunswick, Canada.

(Original signed and sealed)

Doug Clark, P.Geo.
Otnabog Exploration Inc.

otnabogdoug@rogers.com.

INNOVEXPLO

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1. SUMMARY

Introduction

Canadian Metals Incorporated ("Canadian Metals" or the "issuer"), retained InnovExplo Inc. ("InnovExplo") to prepare a technical report (the "Technical Report") on the exploration status for the Nicholas-Denys Project (the "Project").

The Technical Report was prepared in accordance with Canadian Securities Administrators' National Instrument 43-101 Standards of Disclosure for Mineral Projects ("NI 43-101") and Form 43-101F1. The mandate was assigned by Stéphane Leblanc, President, General Manager of Canadian Metals.

The effective date of this Technical Report is May 20, 2021.

InnovExplo is an independent mining and exploration consulting firm based in Val-d'Or, Québec.

Issuer

Canadian Metals is a Canadian mining company trading publicly on the Canadian Securities Exchange ("CSE") under the symbol CME.

The registered office and principal place of business of the issuer are located in the city of Val-d'Or at 866, 3e Avenue, Québec, J9P 1T1.

The Technical Report follows the CIM Definition Standards on Mineral Resources and Mineral Reserves of 2014 ("CIM Definition Standards").

Contributors and Qualified Persons

This Technical Report was prepared by InnovExplo employees Claude Savard (P.Geo.), Senior Geologist of InnovExplo, and Doug Clark (P.Geo.), President of Otnabog Exploration. Both are independent and qualified persons ("QPs") as defined by NI 43-101.

Ms. Savard is a professional geoscientist in good standing with OGQ (licence No. 1057), PGO (licence No. 2959) and APEGNB (temporary licence No. L6242). She is the author of items 1, 3 to 8, 13, and 25 to 27 and co-author of item 2 of the Technical Report.

Mr. Clark is a professional geologist in good standing with the APEGNB (licence No. M5606). He is the author of item 12 and co-author of item 2 of the Technical Report.

Property Description and Location

The Project is located in northeastern New Brunswick, in the Restigouche and Gloucester counties, approximately 24 km northeast of the city of Bathurst. The Property is easily accessible by a combination of paved and gravel roads from the town of Bathurst via Highway No. 11 and the secondary road from Nigadoo to Nicholas-Denys, a total distance of 21 km.

The Project consists of four (4) blocks of mineral claims (Ann's Creek, Beresford, Millstream and Goldstrike) covering a collective area of 12,270 ha (122.7 km^2).

On March 31, 2021, Canadian Metals signed a binding letter agreement with Targets Minerals Inc. to acquire the Property. Following the completion of the acquisition, Canadian Metals will assume the pre-existing NSR. The royalties on the Property consist of following:

- Beresford Copper claim block 3.0% (Au and Ag) and 2% (other metals), of which half can be bought back for $1.0M and the remaining half remain open further negotiations.
- Ann's Creek claim block 2.0% (Au and Ag) and 1.0% (other metals), that can be completely bought back for $1.75M.
- Beresford Copper and Ann's Creek claim blocks 1% NSR, of which half can be bought back for $1.0M.
- Goldstrike and Millstream claim blocks 2% NSR, of which half can be bought back for C$1.0M.

Geological Setting and Mineralization

The Project is located in the Canadian Appalachians, which stretch from the northernmost tip of Newfoundland through Nova Scotia, Prince Edward Island and New Brunswick, and into southern Quebec. The Canadian Appalachians, based on Early Paleozoic and older geological elements, have been subdivided into tectono-stratigraphic zones and subzones. From west to east, these are the Humber, Dunnage, Gander, Avalon and Meguma zones.

The Project is situated in the Bathurst Mining Camp ("BMC"). The BMC is part of the Gander zone and is made up of several different tectonic blocks and slivers: the Fournier, California Lake, Tetagouche and Sheephouse Brook blocks and the blueschist and Bamford Brook slivers interpreted as the remnants of extended continental, transitional, and oceanic crust, which formed part of a Japan Sea-style back-arc basin.

Massive sulphide deposits in the BMC mainly occur in the California Lake, Tetagouche and Sheephouse Brook blocks. Massive sulphides were deposited during most stages of intra-arc extension and subsequent back-arc basin formation. Deposition was most abundant during the late Arenig arc extension in the Tetagouche block and during coeval, early stages of arc rifting in the California Lake block.

The Project overlies the contact between the Ordovician Fournier Block to the south and the Silurian Matapedia cover sequence (Chaleurs Group) to the north. The Project area is also characterized by the presence of the Rocky Brook–Millstream fault system ("RBMF"), a major regional-scale structure that traverses the entire Property at the contact between the two groups.

There are over a hundred mineral occurrences reported in the Project, and these include several metal associations, such as Zn-Pb-Ag-Au, Cu, Au, Fe, Fe-Cu, Mo and Mo-Cu.

The principal mineralization on the Project consists of the following mineral occurrences:

- Hachey (Zn-Ag-Pb and Au) and Shaft (Ag-Pb-Zn-Au): mineralization consisting of semi-massive to massive sulphide veins and/or quartz-sulphide stringers, included in a broad disseminated sulphide zone.
- Henry (Pb-Zn-Au-Ag): massive to disseminated sulphides in or near carbonate-rich veins, fractures and lenses that cut the sheared and brecciated graphitic schist and argillite.

- Millstream (Pb-Zn-Sb-As): similar to the Henry Zone mineralization except that it contains appreciable chalcopyrite and jamesonite.
- Beresford Copper (Cu) and Millstream Iron (Fe): magnetite-chalcopyrite-rich lenses within a calc-silicate skarn zone. The magnetite lenses also contain pyrrhotite, W, F, Sn and Mo at the Millstream Iron occurrence.
- Nicholas-Denys (Mo): hosted in the Nicholas-Denys intrusion near its northern contact with the Silurian sediments, molybdenum occurs in quartz veinlets (along fractures) or as rosettes and disseminated flakes in cherty hornfels along the northern contact of the stock. Molybdenum is commonly associated with pyrite and chalcopyrite and locally with galena and sphalerite.
- Pine Tree (Zn-Pb-Ag): hosted by three E-NE-striking quartz-calcite-Zn-Pb-Ag lenses within a zone of disseminated pyrite and pyrrhotite approximately 180 m long and 45 m wide.
- Millstream West (Au): mineralization in altered siltstone and diabase, centred on the contacts of the dyke. Gold occurs in fine felty to massive arsenopyrite associated with quartz-carbonate veins and pervasive alteration.
- Clarinda (Au): quartz veins and pyritic zones hosted by carbonate-altered sediment, rhyolite and gabbro.

Interpretation and Conclusions

The objective of InnovExplo's mandate was to prepare a Technical Report on the exploration status of the Nicholas-Denys Project (the "Project"). This report also addresses the agreement between Canadian Metals and Targets Minerals Inc. for the proposed acquisition of a 100% interest in the Project. This report meets that objective.

The Project provides the issuer with an extensive county-scale (Restigouche and Gloucester counties) land position over a 30 km east-west stretch of the northern part of the Canadian Appalachians. The Project is located in the Bathurst Mining Camp ("BMC"), along the RBMF, the most important structure in the camp. The Project overlies the contact between the Ordovician Fournier Block to the south and the Silurian Matapedia cover sequence to the north. The rocks belong to the Fournier and Chaleur groups, respectively.

InnovExplo believes that the Project is at an early exploration stage, with a mineral potential supported by historical mineral resource estimates, many known mineral occurrences, and underexplored areas. Previous exploration work on the Project was mostly limited to the RBMF on the Ann's Creek and Beresford claim blocks. Many historical Zn-Pb-Ag-Au, Cu, Au, Fe, Fe-Cu, Mo and Mo-Cu intercepts are of potential economic interest. They should be confirmed by future drilling programs. Elsewhere on the Project, reconnaissance drilling has been carried out in selected areas on geophysical targets or based on trenching information.

After conducting a detailed review of all pertinent information, the authors conclude the following:

- There is potential to update and possibly increase the mineral resources in the Hachey Zone, contingent upon validating the results of diamond drill holes completed after the publication of the 2008 technical report.
- Geological and grade continuity is demonstrated for the Hachey Zone.

- There is potential to expand the known mineral occurrences on the Project with additional infill drilling, in particular, the Clarinda Extension, Hachey, Shaft, Henry, Millstream and Beresford Copper zones.
- Opportunities exist to discover additional mineralized zones on the Project.
- The Project is underexplored outside the known mineralized areas.

Recommendations

Based on the exploration status of the Nicholas-Denys Project, the authors recommend advancing the Millstream, Pine Tree, Shaft, Hachey, Dante, Raya, Henry East, Henry, Half Mile, Bradley and Clarinda zones to the next phase of development. InnovExplo also recommends continuing the property-scale exploration program, including compilation, geophysics, trenching, sampling and drill target generation, in addition to drilling on the more advanced claim blocks, such as Ann's Creek and Beresford. Figure 26.1 show the location of the main occurrences.

InnovExplo has prepared a cost estimate for the recommended two-phase exploration work program to serve as a guideline. The budget for the proposed program is presented in Table 26.1. Expenditures for Phase 1 are estimated at C$1.200M (incl. 15% for contingencies). Expenditures for Phase 2 are estimated at C$1.745M (incl. 15% for contingencies). The grand total is C$2.945M (incl. 15% for contingencies). Phase 2 is contingent upon the success of Phase 1.

2. INTRODUCTION

Canadian Metals Incorporated ("Canadian Metals" or the "issuer"), retained InnovExplo Inc. ("InnovExplo") to prepare a technical report (the "Technical Report") on the exploration status for the Nicholas-Denys Project (the "Project") in accordance with Canadian Securities Administrators' National Instrument 43-101 Standards of Disclosure for Mineral Projects ("NI 43-101") and Form 43-101F1. The mandate was assigned by Stéphane Leblanc, President, General Manager Exploration of Canadian Metals.

InnovExplo is an independent mining and exploration consulting firm based in Val-d'Or, Québec.

Canadian Metals is a Canadian mining company trading publicly on the Canadian Securities Exchange ("CSE") under the symbol CME.

The registered office and principal place of business of the issuer are located in the city of Val-d'Or at 866, 3e Avenue, Québec, J9P 1T1.

2.1 Terms of Reference

On March 31, 2021, Canadian Metals announced the signing of a binding letter agreement with Targets Minerals Inc. for the proposed acquisition of a 100% interest in the Nicholas-Denys Project located in New Brunswick.

The Project consists of four (4) claim blocks named Ann's Creek, Beresford, Millstream and Goldstrike, covering 122.7 km^2 along a 30-km strike length of the Rocky Brook–Millstream fault system (the Main Break and South Branch splays).

2.2 Report Responsibility and Qualified Persons

This Technical Report was prepared by Claude Savard (P.Geo.), Senior Geologist of InnovExplo, and Doug Clark (P.Geo.), President of Otnabog Exploration. Both are independent and qualified persons ("QPs") as defined by NI 43-101.

Ms. Savard is a professional geoscientist in good standing with OGQ (licence No. 1057), PGO (licence No. 2959) and APEGNB (temporary licence No. L6242). She is the author of items 1, 3 to 8, 13, and 25 to 27 and co-author of item 2 of the Technical Report.

Mr. Clark is a professional geologist in good standing with the APEGNB (Licence No. M5606). He is the author of item 12 and co-author of item 2 of the Technical Report.

2.3 Site Visit

Mr. Clark visited the Project in early May 2021. The site visit focused on the stripping and drilling on the Hachey Zone. Data verification included a general visual inspection of the Property, a review of drill collar location coordinates and a visual assessment of access roads.

Ms. Savard did not visit the Project for the purpose of this Technical Report.

2.4 Effective Date

The effective date of this report is May 20, 2021.

2.5 Sources of Information

The sources of information used to prepare this Technical Report are presented in items 3 and 27. Sections from reports authored by other consultants may have been directly quoted or summarized in this Technical Report and are so indicated, where appropriate.

The authors' assessment of the Project was based on published material in addition to the data, professional opinions and unpublished material submitted by the issuer. The authors reviewed all the relevant data provided by the issuer and/or by its agents.

The authors also consulted other sources of information, mainly the Government of New Brunswick's online claim management system and assessment work databases (GeoNB and NB e-CLAIMS, respectively), as well as documents published on SEDAR (www.sedar.com) under the issuer's profile, including technical reports, annual information forms, MD&A reports and press releases.

The authors reviewed and appraised the information used to prepare this Technical Report and believe that such information is valid and appropriate considering the status of the Project and the purpose for which this Technical Report is prepared. The authors have fully researched and documented the conclusions and recommendations made in this Technical Report.

2.6 Currency, Units of Measure, and Abbreviations

The abbreviations, acronyms and units used in this report are provided in Table 2.1 and Table 2.2. All currency amounts are stated in Canadian Dollars ($, C$, CAD), unless specified otherwise. Quantities are stated in metric units, as per standard Canadian and international practice, including metric tons (tonnes, t) and kilograms (kg) for weight, kilometres (km) or metres (m) for distance, hectares (ha) for area, percentage (%) for copper and nickel grades, and gram per metric ton (g/t) for precious metal grades. Wherever applicable, imperial units have been converted to the International System of Units (SI units) for consistency (Table 2.3).

Table 2.1 – List of Abbreviations

Acronyms	Term
43-101	National Instrument 43-101 (Regulation 43-101 in Québec)
Ai	Abrasion index
CA	Core angle
CAD:USD	Canadian-American exchange rate
CIM	Canadian Institute of Mining, Metallurgy and Petroleum
CIM Definition Standards	CIM Definition Standards for Mineral Resources and Mineral Reserves
CL	Core length
CoG	cut-off grade
DDH	Diamond drill hole
EA	Environmental assessment
GeoNB	New Brunswick Natural Resources and Energy Development: website gateway to geographic information

Acronyms	Term
mesh	US mesh
MRE	Mineral resource estimate
NAD	North American Datum
NAD 83	North American Datum of 1983
NB e_CLAIMS	New Brunswick Natural Resources and Energy Development: website electronic mineral claim
NI 43-101	National Instrument 43-101 (Regulation 43-101 in Québec)
NSR	Net smelter return
NTS	National Topographic System
QA/QC	Quality assurance/quality control
QP	Qualified person (as defined in National Instrument 43-101)
Regulation 43-101	National Instrument 43-101 (name in Québec)
RQD	Rock quality designation
RQI	Rock quality index
SAG	Semi-autogenous-grinding
SG	Specific gravity
UTM	Universal Transverse Mercator coordinate system

Table 2.2 – List of units

Symbol	Unit
%	Percent
$, C$	Canadian dollar
$/t	Dollars per metric ton
$US	American dollar
°	Angular degree
°C	Degree Celsius
µm	Micron (micrometre)
A	Ampere
avdp	Avoirdupois
cm	Centimetre
d	Day (24 hours)
ft	Foot (12 inches)
g	Gram
Ga	Billion years
g/t	Gram per metric ton (tonne)
h	Hour (60 minutes)
ha	Hectare

Symbol	Unit
in, "	Inch
k	Thousand (000)
ka	Thousand years
kg	Kilogram
km	Kilometre
km^2	Square kilometre
L	Litre
lb	Pound
M	Million
m	Metre
m^2	Square metre
m^3	Cubic metre
Ma	Million years (annum)
masl	Metres above mean sea level
mi	Mile
min	Minute (60 seconds)
mm	Millimetre
mm^2	Square millimetres
Mt	Million metric tons
oz	Troy ounce
oz/t	Ounce (troy) per short ton (2,000 lbs)
ppb	Parts per billion
ppm	Parts per million
psi	Pounds per square inch
rpm	Revolutions per minute
s	Second
s^2	Second squared
t	Metric tonne (1,000 kg)
ton	Short ton (2,000 lbs)
vol%	Percent by volume
y	Year (365 days)

Table 2.3 – Conversion Factors for Measurements

Imperial Unit	Multiplied by	Metric Unit
1 inch	25.4	mm
1 foot	0.3048	m
1 acre	0.405	ha
1 ounce (troy)	31.1035	g
1 pound (avdp)	0.4535	kg
1 ton (short)	0.9072	t
1 ounce (troy) / ton (short)	34.2857	g/t

3. RELIANCE ON OTHER EXPERTS

The authors did not rely on other experts to prepare this Technical Report. It was prepared by InnovExplo at the request of the issuer. Claude Savard (P.Geo.), Senior Geologist of InnovExplo, and Doug Clark (P.Geo.), President of Otnabog Exploration, are the QPs assigned to the mandate of reviewing technical documentation relevant to the Technical Report and recommending a work program if warranted.

The QPs relied on the issuer's information about mining titles, option agreements, royalty agreements, environmental liabilities and permits. Neither the QPs nor InnovExplo are qualified to express any legal opinion with respect to property titles, current ownership or possible litigation. This disclaimer applies to Item 4.

4. PROJECT DESCRIPTION AND LOCATION

4.1 Location

The Project is located in northeastern New Brunswick, in the Restigouche and Gloucester counties, approximately 24 km northeast of the city of Bathurst. The Property is easily accessible by a combination of paved and gravel roads from the town of Bathurst via Highway No. 11 and the secondary road from Nigadoo to Nicholas-Denys, a total distance of 21 km (Figure 4.1).

The Property covers 122.7 km^2, extending 30 km east-west and 6 km north-south. The coordinates of the approximate centroid are 65°57'46"W and 47°40'56"N (UTM: 277640E and 5283228N, NAD 83, Zone 20). The Project overlies the counties of Restigouche and Gloucester on NTS map sheet 21O/09 and 21P/12.

4.2 Mineral Title Status

Mineral title status was supplied by the issuer. InnovExplo verified the status of all mining titles using NB e-CLAIMS, the Government of New Brunswick's online claim management system (nbeclaims.gnb.ca).

The Project consists of four (4) blocks of mineral claims (Ann's Creek, Beresford, Millstream and Goldstrike) covering a collective area of 12,270 ha (122.7 km^2) (Table 4.1 and Figure 4.2).

On March 31, 2021, Canadian Metals signed a binding letter agreement with Targets Minerals Inc. to acquire the Property. Following the completion of the acquisition, Canadian Metals will assume the pre-existing NSR. The royalties on the Property consist of following:

- Beresford Copper claim block 3.0% (Au and Ag) and 2% (other metals), of which half can be bought back for $1.0M and the remaining half remain open further negotiations.
- Ann's Creek claim block 2.0% (Au and Ag) and 1.0% (other metals), that can be completely bought back for $1.75M.
- Beresford Copper and Ann's Creek claim blocks 1% NSR, of which half can be bought back for $1.0M.
- Goldstrike and Millstream claim blocks 2% NSR, of which half can be bought back for C$1.0M.

Table 4.1 presents a list of mineral claims with details of ownership, royalties and expiration dates.

Table 4.1 – List of mineral claims constituting the Nicholas-Denys Project

Claim block	Title Type	Title ID	NTS	Area (ha)	Expiration Date	Ownership	Royalties
Ann's Creek	M	4288	21 P/12	2545	2021-10-23	Canadian Metals Inc. (100%)	2% Au+Ag, 1% other metals, and 1% NSR
Beresford	M	3355	21 P/12	5195	2022-02-18	Canadian Metals Inc. (100%)	3.0% Au+Ag, 2% other metals, and 1% NSR
Goldstrike	M	8175	21 O/09	109	2022-04-12	Canadian Metals Inc. (100%)	2% NSR
Goldstrike	M	9188	21 O/09	196	2021-05-22	Canadian Metals Inc. (100%)	2% NSR
Goldstrike	M	8899	21 O/09	175	2021-11-07	Canadian Metals Inc. (100%)	2% NSR
Goldstrike	M	9478	21 O/09	152	2022-04-13	Canadian Metals Inc. (100%)	2% NSR
Goldstrike	M	9434	21 O/09	131	2022-02-15	Canadian Metals Inc. (100%)	2% NSR
Goldstrike	M	9360	21 O/09	588	2022-01-01	Canadian Metals Inc. (100%)	2% NSR
Goldstrike	M	8971	21 O/09	1001	2021-12-18	Canadian Metals Inc. (100%)	2% NSR
Goldstrike	M	9359	21 O/09	653	2022-01-01	Canadian Metals Inc. (100%)	2% NSR
Millstream	M	8382	21 O/09	609	2021-09-13	Canadian Metals Inc. (100%)	2% NSR
Millstream	M	9458	21 O/09	109	2022-03-13	Canadian Metals Inc. (100%)	2% NSR
Millstream	M	9233	21 O/09	87	2021-07-30	Canadian Metals Inc. (100%)	2% NSR
Millstream	M	9138	21 O/09	609	2022-04-06	Canadian Metals Inc. (100%)	2% NSR
Millstream	M	9139	21 O/09	109	2022-04-06	Canadian Metals Inc. (100%)	2% NSR

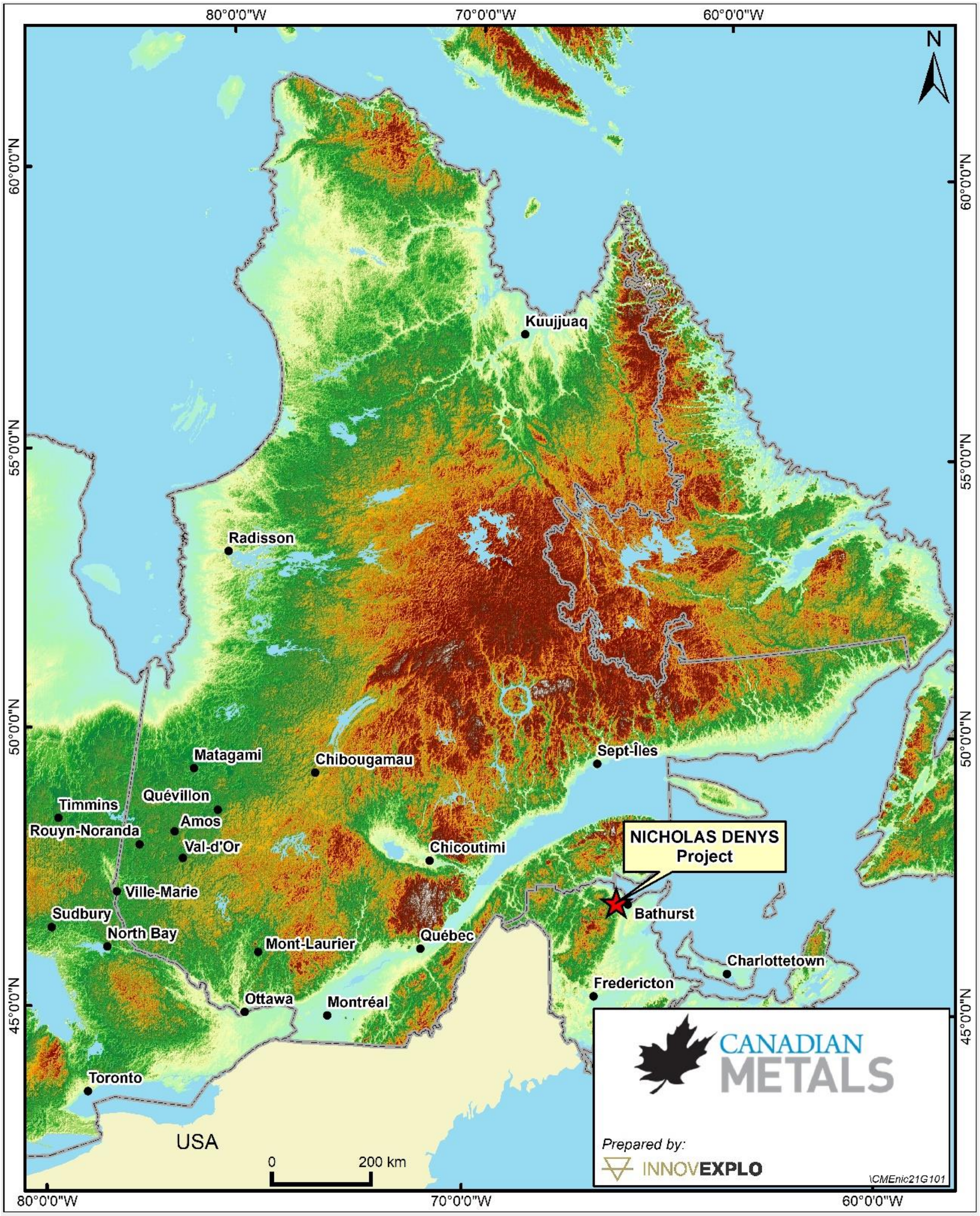


Figure 4.1 – Location of the Nicholas-Denys Project in the Province of New Brunswick

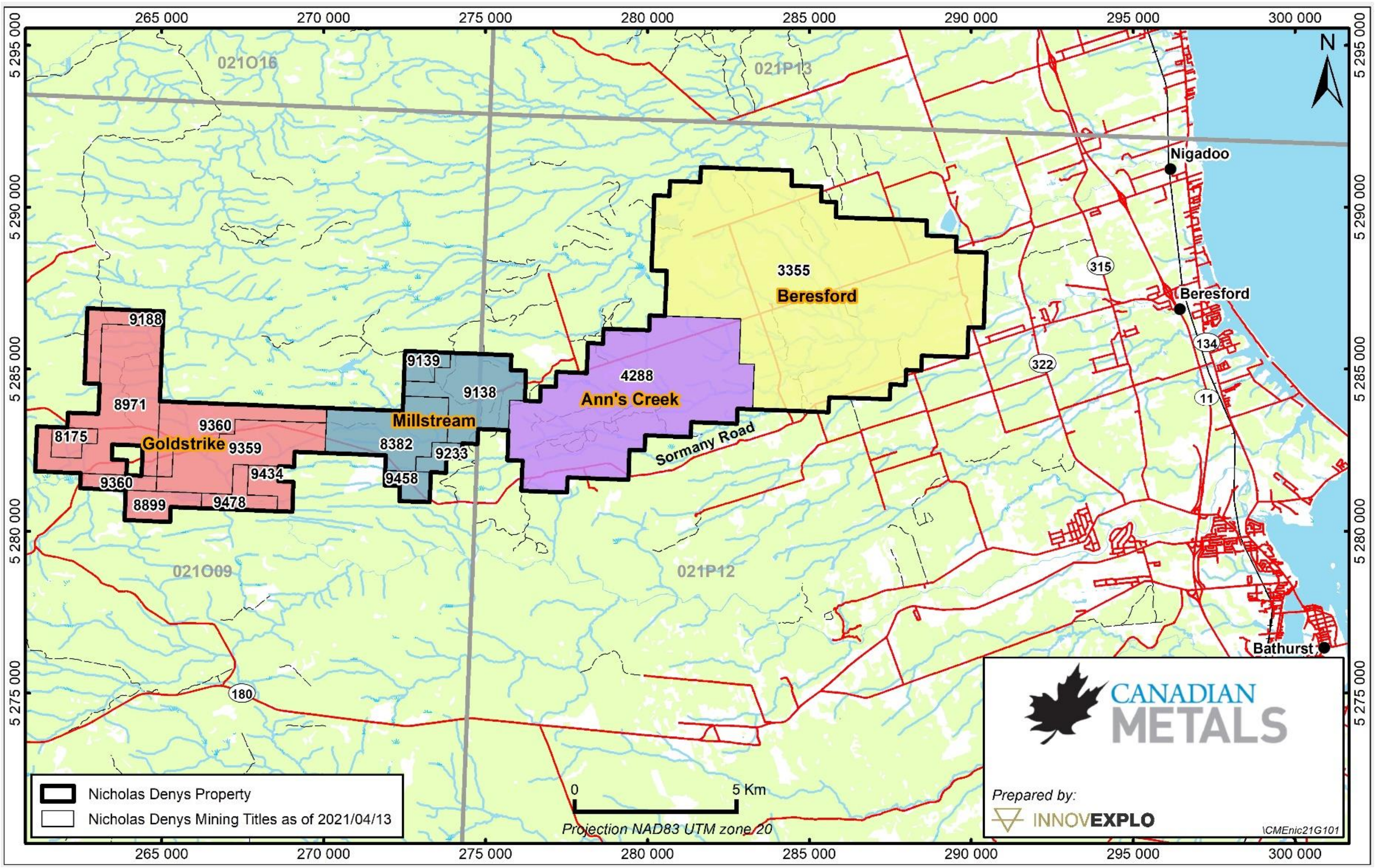


Figure 4.2 – Map of claim blocks comprising the Nicholas-Denys Project

4.3 Acquisition of the Nicholas-Denys Project

On March 31, 2021, Canadian Metals Inc. announced the signing of a binding letter agreement with Targets Minerals Inc. for the proposed acquisition of a 100% interest in the Nicholas-Denys Project located in New Brunswick.

4.4 Environment

The New Brunswick claim map for the Property does not indicate any restrictions for exploration work. Although private surface land rights exist on the Ann's Creek Property, the current status of the Nicholas-Denys Project regarding such rights is unknown to the authors. It is therefore recommended that the status of private surface land rights be assessed with respect to the Ann's Creek Property. If the Property is affected by a private landholding, the approval of any proposed surface physical disturbances and suitable compensation may be necessary before beginning work.

Although some traces of old mining operations still exist (the Shaft Zone), including small amounts of mining wastes near the Millstream River, the issuer is not responsible for the possible environmental impacts in this area. These mining wastes are located on private surface land (Figure 4.2) owned by Millstream Mines Ltd.

INNOVEXPLO

5. ACCESSIBILITY, CLIMATE, LOCAL RESOURCES, INFRASTRUCTURE AND PHYSIOGRAPHY

5.1 Accessibility

The main access to the eastern part of the Project is located in Gloucester County, northern New Brunswick, approximately 24 km northwest of Bathurst. The Property is easily accessible by a combination of paved and gravel roads from the town of Bathurst via Highway No. 11 and the secondary road from Nigadoo to Nicholas-Denys, a total distance of 21 km (Figure 5.1).

The access to the western part of the Project is located in Restigouche County, approximately 40 km northwest of Bathurst. The Project can be reached from Bathurst via Highway No. 11 and the secondary road from Beresford to the western part, a total distance of 35 km (Figure 5.1).

5.2 Climate

New Brunswick is under the influence of a typical continental-style climate marked by cold, dry winters and warm, humid summers. According to Environment Canada's climate data at the nearest weather station (Bathurst A) (climate.weather.gc.ca), the average temperatures are +19.12°C in July and -10.8°C in January. The mean annual temperature is +4.8°C. The lowest recorded temperature was -35.6°C, and the highest was +37.4°C. In this area, the temperature drops below freezing an average of 178.9 days per year. Snow accumulates from mid-October or November to early/mid-May, and freeze-up usually occurs in late December with break-up in March-April. Average annual precipitation indicates a mean rainfall of 122.9 mm, with the highest level of precipitation occurring in October (1,110.1 mm).

Exploration, mining and drilling operations may generally be carried out year-round with some limitations in specific areas. Surface exploration work (mapping, channel sampling) should be planned from mid-May to mid-October.

5.3 Local Resources and Infrastructure

Bathurst (Figure 5.1) is the closest full-service community and provides infrastructure and skilled manpower. It is an important centre for mining, forestry, fishing and tourism in northern New Brunswick. Electric power is provided by New Brunswick Power. There is an ample supply of water for processing. Water can be sourced from rivers or lakes. There are no mills or concentrators on the Project, but the Caribou Mine Mill located approximately 15 km southeast is a wholly-owned milling and tailings facility (Figure 5.1). A metallurgical complex owned by Brunswick Mining & Smelting is located at Belledune, approximately 40 km from the Project.

5.4 Physiography

The Property has an extensive cover of Pleistocene glacial sediments ranging from 5 to 117 m thick. Most of the area is covered by swamps and forests composed of spruce, fir and pine. Some areas of the Property have recently been logged and partly revegetated. The minimum and maximum elevations on the Property are 250 masl and 320 masl, respectively.

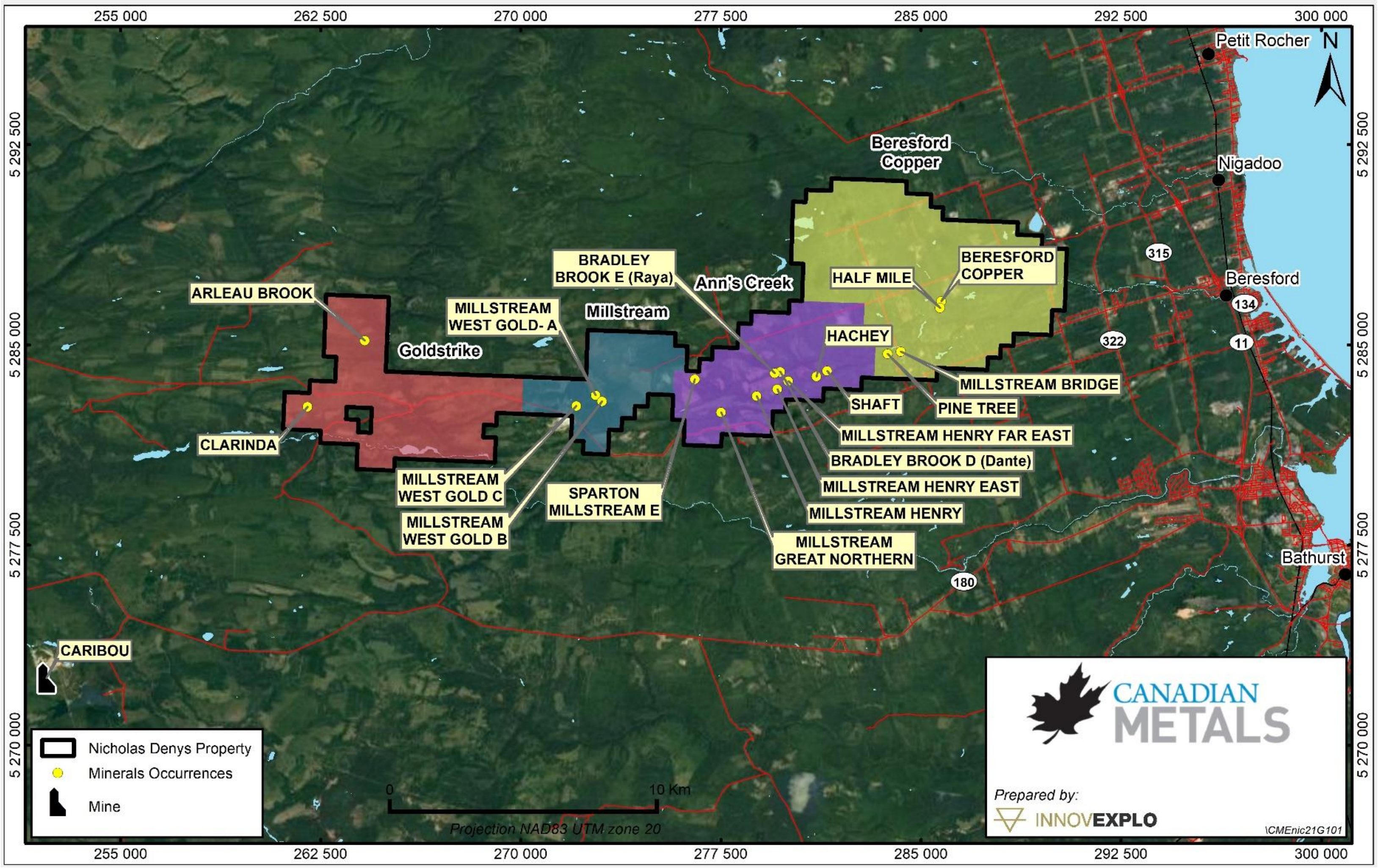


Figure 5.1 – Access and waterways of the Nicholas-Denys Project and the surrounding region

6. HISTORY

The information in this item was mostly taken from Turcotte and Pelletier (2008), Bernier (2014), Bernier and Gagné (2016), and from assessment reports in the Government of New Brunswick's database (NB e-CLAIMS). Other references are duly indicated where applicable.

The long history of mineral exploration on the Nicholas-Denys Project dates back to the discovery of several showings between 1880 and 1890, including the Shaft and Millstream iron showings. Mineral exploration accelerated in the early 1950s, with the discovery of several showings, including Beresford, Pine Tree, Half Mile and Shaft zones.

During the slightly more than three years when M. J. O'Brien Ltd held this ground, the exploration work consisted of 55,811 feet (17,011 m) of diamond drilling, almost 3,000 work days by labourers and staff, 150 miles (241.40 km) of line-cutting, and an electromagnetic ("EM") survey over 3.840 acres (1,554 ha). These exploration activities led to the discovery of four (4) concentrations of sulphides containing sufficient tonnage and high enough grades to approach economic standards. Grade and tonnage calculations were performed on these mineralized zones by M. J. O'Brien Ltd at the end of 1954, but constitute "historical resources". The calculations indicated that the Pine Tree deposit contained 105,560 tons at 3.40% Zn, 2.35% Pb and 2.35 oz/t Ag. The Half Mile deposit was estimated to contain 23,450 tons at 3.73% Zn, 3.88% Pb and 2.72 oz/t Ag. The Shaft deposit was evaluated to be 135,400 tons at 4.18% Zn, 2.82% Pb and 4.68 oz/t Ag. Calculations for the Hachey deposit were 59,400 tons at 2.14% Zn, 1.59% Pb, 7.23 oz/t Ag and 0.04 oz/t Au.

The only production from the Ann's Creek Property area was from the sulphide vein deposits of the Nigadoo Mine, which was discovered in 1953 by Anthonian Mining Corporation (Davies et al, 1967). Total tonnage produced by the time the mine shut down in August 1977 has been reported as 2,049,843 tons grading 0.28% Cu, 2.39% Pb, 2.50% Zn and 3.42 oz/t Ag. Reserves in the A, C and Anthonian veins were estimated to be 926,000 tons at 0.18% Cu, 3.13% Pb, 3.15% Zn and 3.6 oz/t Ag (Mackenzie, 1986). Much additional exploration work was performed on the Ann's Creek Property following mine closure.

Exploration work continued intermittently on several showings until the early 1990s, including Noranda's Beresford showing. In 1994 and 1995, Nebex conducted several geological and geophysical surveys, including an induced polarization ("IP") survey in the southern part of the Property, covering the Pine Tree, Half Mile, Shaft and Hachey zones. Several chargeability anomalies remain unexplored. In 2005, a heliborne magnetic ("Mag") and EM survey was flown over the Beresford Property. Several anomalies were detected, and most remain unexplored by drilling or trenching.

Figure 26.1 shows the main occurrences on the Project.

6.1 Ann's Creek and Beresford Claim Blocks

The significant historical work on the Ann's Creek and Beresford claim blocks consists of soil geochemistry, geophysics, prospecting, stripping, trenching and drilling.

The first geology and geochemistry studies in the Ann's Creek Property area and surrounding regions were conducted by the Geological Survey of Canada (Ells, 1881;

Young, 1911; Alcock, 1935; Alcock, 1941; Skinner and McAlary, 1952; Skinner, 1953; Skinner, 1956; Smith et al., 1957; Dawson, 1961; Boyle et al., 1966; and Davies et al., 1969). Other descriptions and geological maps were published by the New Brunswick Department of Lands and Mines (Jones and Smith, 1957; Davies, 1959; Jones, 1962). Additional geological studies from around the same time include Holyk (1956) and Smith and Skinner (1958).

The Ann's Creek Property area received much attention from geologists and prospectors from the late 1800s onwards. Skarn-type magnetite deposits were discovered around 1890, and part of the sulphide deposit belonging to Quebec Sturgeon River Mines Ltd was found before 1891 (Jack, 1894). Both deposits have been investigated many times since then. Lindeman (1909) and Young (1911) described the magnetite-skarn occurrences, and Alcock (1935, 1941) gave a brief description of the region as a whole. The first comprehensive report on the area was by Mackenzie (1951), who carried out an extensive exploration program in 1949 and 1950 on behalf of the Rocky Brook-Millstream Syndicate.

The Millstream Cu-Fe deposit was discovered in the early 1890s, Lentz et al., 1994. The area was explored and drilled intermittently until 1952, mainly to evaluate its Fe and Cu potential. In 1949, a syndicate of Fredericton businessmen financed nine (9) DDH that delineated two magnetite-rich lenses. One intersection averaged 1.4% Cu and 0.62% Zn over 4.5 m. In 1968, Sullico Mines Ltd drilled 21 DDH, which outlined the 150-m zone of Cu-bearing magnetite-rich skarn with a true width of 2.4 m. The zone averaged 1.2% to 1.5% Cu and 22 g/t Ag to a depth of 150 m (approx. 200 000 to 300 000 tonnes). Molybdenite was identified in two drill sections that assayed 0.56% Mo over 3.4 m in DDH Q-21 and 0.26% Mo over 0.85 m in DDH Q-20. The Beresford Cu skarn, the largest and highest-grade deposit in the area, is located 750 m to the southeast of the surface exposure of the intrusion. In 1952, Beresford Mines Ltd delineated the deposit with soil geochemical and geophysical surveys and continued with diamond drilling in early 1960s. The drill indicated reserves are 616,000 tonnes averaging 1.18% Cu or 220,000 tonnes averaging 1.75% Cu.

Table 6.1 summarizes the work from 1951 to 2020.

Table 6.1 – Historical work on the Ann's Creek claim block

Year	Company	Description of work / Highlights / Significant results	Ref.
1951-1954	M. J. O'Brien Ltd	Prospecting, geological mapping, trenching, diamond drilling, line cutting, EM survey. Discovery of 4 Zn-Pb-Ag deposits with calculations for grade and tonnage (Shaft, Hachey, Pine Tree and Half Mile). In 1951, the Rocky-Brook-Millstream Syndicate optioned to M. J. O'Brien Ltd the part of the concession comprising the roughly 3.8 miles (6.1 km) to the west of Sormany–Ann's Creek. Because the concession would not be renewed beyond July 1954, the Rocky-Brook-Millstream Syndicate staked the part of the concession belonging to M. J. O'Brien Ltd and transferred the claims to M. J. O'Brien Ltd according to their agreement. Historical resources: Pine Tree deposit: 105,560 tons at 3.40% Zn, 2.35% Pb and 2.35 oz/t Ag. Half Miles deposit: 23,450 tons at 3.73% Zn, 3.88% Pb and 2.72 oz/t Ag. Shaft deposit: 135,400 tons at 4.18% Zn, 2.82% Pb and	470417, 470419

Year	Company	Description of work / Highlights / Significant results	Ref.
		4.68 oz/t Ag. Hachey deposit: 59,400 tons at 2.14% Zn, 1.59% Pb, 7.23 oz/t Ag and 0.04 oz/t Au. **Historical “resources” and/or “reserves” should not be relied upon as it is unlikely, they conform to current NI 43-101 criteria or to CIM Definition Standards, and they have not been verified to determine their relevance or reliability. They are included in this section for illustrative purposes only and should not be disclosed out of context.**	
1955	Sturgeon River Mines Ltd	Evaluation of an underground development program on the Shaft deposit. Underground program recommended on the Shaft deposit.	470419
1956	Sturgeon River Mines Ltd	Shaft sinking, underground development and underground diamond drilling. Underground operation suspended in August 1957.	470419
1956	Conwest Exploration Co Ltd	Regional airborne Mag and EM survey: some geophysical anomalies.	471335
1962	Sturgeon River Mines Ltd	Surface plant at the Shaft deposit was removed.	470419
1967	Sullico Mines Ltd	IP survey (25.5 line-km) covering the SE part of the Ann's Creek Property): large number of IP anomalies.	470420
1968	Sullico Mines Ltd	Diamond drilling on the Hachey Zone. Best DDH intersection: 2.22% Pb, 3.02% Zn and 6.89 oz/t Ag over 11.45 m (H-6).	470420
1969	Sullico Mines Ltd	Soil sampling survey in the eastern part of the Ann's Creek Property: some soil anomalies.	470421
1971	Sullivan Mining Group	EM survey: some anomalies.	470366
1977	Millstream Mines Ltd	VLF EM survey in the centre of the Ann’s Creek Property; some VLF EM anomalies.	472439, 472484
1978 and 1981	Millstream Mines Ltd	Soil sampling survey: some soil anomalies.	472439, 472484
1982	Millstream Mines Ltd	5 DDH (410 m), one of which intersected the Shaft Zone.	472854, 473010
1983	Millstream Mines Ltd	7 DDH (663 m). Trenching and soil sampling. Best DDH intersection: 3.30% Pb, 2.48% Zn and 7.06 oz/t Ag over 4.60 m (Shaft Zone, hole 3-83).	473010
1987	Lacana Mining Corporation	VLF and Mag surveys. 4 DDH (540 m). Best DDH intersection: 224.9 g/t Ag over 18.5 m (M-87-1).	473376
1994	Nebex Resources Ltd	Detailed geological mapping, sampling, IP/resistivity and Mag surveys: 9 targets were selected for drill testing.	474508, 474532
1995	Nebex Resources Ltd	5 DDH (2,127 m). Several economically interesting values obtained, but widths were judged too narrow for economic exploitation.	474672

Year	Company	Description of work / Highlights / Significant results	Ref.
2005	Puma Exploration	Mag and surface Pulse EM surveys executed by Aeroquest. Pulse EM in 2 DDH. Several anomalies detected; most remain unexplored by drilling or trenching.	476360
2006	Puma Exploration	14 DDH (2,394 m) in the Hachey and Shaft zones. Best DDH intersection: 1.18% Zn, 0.43% Pb and 19.88 g/t Ag over 18 m (Shaft Zone, F06-04); 1.13% Zn, 0.78% Pb and 45.4 g/t Ag over 26.9 m (Hachey Zone, F06-03).	Puma Exploration press releases of May 4, 2007 and July 5, 2007
2007	Puma Exploration	Metallurgical testing on the Hachey Zone. Recovery from concentrates was 84.1% Zn, 88.6% Pb, 74.8% Ag and 67.6% Au.	Lascelles and Unger, 2007b
2007-2008	Puma Exploration	120 DDH (24,296 m, 11,835 core samples) drilled by Geominex on the Hachey and Shaft zones. Majority of holes intersected Ag-Pb-Zn-Au mineralization over thicknesses ranging from 3 to 25 m. Best DDH intersection: 0.215% Mo over 4.0 m (F07-09)	476648, 476680
2008	Puma Exploration	MRE: indicated resources of 181,410 t @ 4.45% ZnEq and inferred resources of 167,050 t @ 3.22% ZnEq. **These "Resources" are historical in nature and should not be relied upon. The qualified person has not done sufficient work to classify the historical estimate as current mineral resources or mineral reserves. It is unlikely they comply with current NI 43-101 requirements or follow CIM Definition Standards, and their relevance and reliability have not been verified. They are included in this section for illustrative purposes only and the issuer is not treating the historical estimate as current mineral resources.**	Turcotte and Pelletier, 2008
2009	Puma Exploration	3 DDH (291 m) and surface samples (8): Pine Tree Zone. Best grab sample: 2.97 g/t Ag, 508 g/t Au, 10.3% Pb and 7.8% Zn (sample 912408). Best DDH intersection: 209 g/t Ag, 1.78 g/t Au, 7.1% Pb and 4.4% Zn over 1.0 m (PT09-03).	
2010-2011	Puma Exploration	Geophysical surveys: EM (3.5 km) between the Hachey and Henry zones; InfiniTEM® (19.6 line-km) between the Shaft and Henry zones. 12 anomalies detected.	Bernier and Gagné, 2016
2011	Puma Exploration	Stripping and trenching in the Dante I, Henry-East and Bradley Gold zones. DDH on the Henry and Dante I zones. Trenching: 4,891.9 m and 949 samples. 3 strippings: Dante I (850 m^2), Henry-East (65 m^2) and Bradley Gold (250 m^2). 7 DDH on Dante I and 6 DDH on Henry. Best grab samples in Hachey Zone: up to 1,330 g/t Ag and 17.4 g/t Au. Ag-Pb-Zn showings located between the Hachey and Henry zones. Best channel samples at Cullinan: veins containing high-grade gold and silver, with concentrations of 21.1 g/t Au	477647, Puma Exploration press releases of Aug 23, Sept 20, Nov 10, Nov 30, Dec 21 and Dec 8, 2011

Year	Company	Description of work / Highlights / Significant results	Ref.
		and 106 g/t Ag in a surface grab sample. 7 samples contain gold grades above 10 g/t Au. Best channel samples in Henry Zone: up to 2,450 g/t Ag and 29.5 g/t Au, and up to 2,090 g/t Ag, 23.3 g/t Au, 47.9% Pb and 11.0% Zn. Discovery of continuous surface Ag and Au mineralization over a strike length of 500 m. Best grab samples in Henry Zone: up to 28.4 g/t Au, 697 g/t Ag and 10% Pb in grab samples. Geological information available shows the Ag-Au-Pb-Zn mineralization along the Rocky Brook–Millstream fault system ("RBMF") extends over a strike length of 750 m from the Henry lens. Best grab samples in Dante Zone: up to 1,020 g/t Ag and 0.27% Bi. Best DDH intersection at Dante: 44 g/t Ag, 0.67% Pb and 0.69% Zn over 74.5 m, including 194 g/t Ag, 1.31% Pb and 2.06% Zn over 6.6 m (FD11-05) Best DDH intersection at Henry: 4.8 g/t Au, 284 g/t Ag and 16.2% Pb+Zn over 0.25 m (FH11-02).	
2012	Puma Exploration	Trenching and stripping (2,550 m^2 and 29 samples). Discovery of Raya showing: grades ranging from 0.01 to 16 g/t Au; 5 to 2,590 g/t Ag; 0.01 to 3.41% Cu; 0.2 to 78.5% Pb and 0.1 to 21.6% Zn. 4 DDH (369m) on Dante I; 7 DDH (1,005 m) on Hachey; 7 DDH (634.5 m) on Raya; 13 DDH (1,251m) on Henry-East. Abitibi Geophysics conducted an InfiniTEM borehole survey in FH11-03 and FH12-13, yielding 2 anomalies. Best DDH intersections in Hachey Zone: 1.1 g/t Au over 17.5 m (FHA12-01); 446 g/t Ag, 1.54 g/t Au, 2.2% Pb and 5.8% Zn over 6.4 m, including 820 g/t Ag, 2.70 g/t Au, 3.5% Pb and 3.4% Zn over 3.0 m (FHA12-04) Best grab samples in Raya Zone: up to 2,590 g/t Ag and 16.0 g/t Au. Raya stripping exposed approximately 65 m of a highly altered sulphide zone comprised of lenses, veins and breccia of massive sulphide mineralization located at the contact between the sediments and a gabbro. Best DDH intersections: 5.8 g/t Au over 3.3 m (FD12-08). Best stripping results: between 0.01 to 16 g/t Au, 5 to 2,590 g/t Ag, 0.01 to 3.42% Cu, 0.2 to 78.5 % Pb and 0.1 to 21.5% Zn. Best channel samples in Henry East Zone: 4.45 g/t Au and 196 g/t Ag over 2.8 m (RH12-04). Best DDH intersection: 399 g/t Ag, 1.44 g/t Au, 2.04% Pb and 2.22% Zn over 0.7 m (FH12-01). Best channel samples in Dante Zone: 239 g/t Ag and 1.9% Pb over 6.3 m; up to 1,020 g/t Ag and 0.27% Bi; and 239 g/t Ag and 1.9% Pb over 6.3 m. Best DDH samples in Dante Zone: 111 g/t Ag, 1.2% Pb and 2.42% Zn over 2.7 m and 67 g/t Ag, 6.29% Pb and 4.69% Zn over 2.7 m (FD12-01).	477648, Puma Exploration press releases of Jan. 12, Jan 18, Feb. 6, Jul 5, Aug. 29, Oct. 31 and Nov. 15, 2012

Year	Company	Description of work / Highlights / Significant results	Ref.
		Best grab samples in Bradley Zone: gold grades of 43 samples average 2.4 g/t Au and range from 0.03 g/t Au to 18.4 g/t Au, with 42% of the samples grading over 1 g/t Au.	
2013-2014	Puma Exploration	Stripping on Hachey (3,650 m and 9 samples) and Shaft (4,050 m and 11 samples). Hachey: 2.37 g/t Au, 3,930 ppm Ag, 59.93% Pb and 1.06% Zn (J344869), and massive to semi-massive samples grading up to 7.42 g/t Au, 3,030 g/t Ag, 0.27% Cu, 60.0% Pb and 14.4% Zn were collected at surface at the west end of the Hachey Zone and at the both ends of the Shaft Zone. Best grab sample in Shaft Zone: 1.49 g/t Au, 981 g/t Ag, 12.3% Pb and 6.87% Zn (J344858). Best channel sample in Cullinan Zone: up to 263 g/t Ag, 1.8 g/t Au, 0.9% Zn and 1.0 % Sb. The Cullinan Ag-Au-Zn zone confirmed to be at least 600 m long.	477649, Puma Exploration press releases of Oct 30, 2013 and Sept 18, 2014
2015-2016	Puma Exploration	Prospecting at Pine Tree, Half Mile and Great Northern showings along the South Branch of the Rocky Brook Millstream Fault ("RBMF") and the Main Break 500 m north of it. Of 100 samples, 50 yielded economic values for Au, Ag, Pb and Zn: best grades of 29% Zn, 14% Pb, 491 g/t Ag and 8.8 g/t Au. Best results: 8.81 ppm Au, 208 ppm Ag, 3.58% Pb and 4.09% Zn (P193606); 0.5 ppm Au, 491 ppm Ag, 14.2% Pb and 0.98% Zn (P193585); 0.95 ppm Au, 175 ppm Ag, 11.05% Pb and 5.33% Zn (P193647); and 0.85 ppm Au, 132 ppm Ag, 3.58% Pb and 29.5% Zn (P193633).	477973 and Puma Exploration press releases of Aug 11, 2016
2020	Targets Minerals Inc.	Rock sampling (43 samples) on the Hachey, Dante West and East strippings, as well as Henry East and Ann's Creek, by Prospect Or Corp. Several elevated Au, Ag, Zn and Pb values in rocks; highest grades for each metal were 90.8 g/t Au, 3,590 g/t Ag, 27% Zn and 80.6% Pb.	Lavoie and Guitard, 2020

The significant historical work on the Beresford claim block consists of geophysical surveys, prospecting, trenching and drilling. A summary of the exploration work since 2005 is presented in Table 6.2.

Table 6.2 – Historical work on the Beresford claim block

Year	Company	Description of work / Highlights / Significant results	Ref.
2005	Puma Exploration	Prospecting, sampling (112 samples) and drilling 16 DDH (1664 m) to verify the lateral and depth continuity of the Pine Tree and Half Mile Pb-Zn-Ag deposits. Best results: 5.15 g/t Au, 150 m north of Stephen Brook. Between 1.0 and 4.3% Cu in channel samples on the Beresford Copper showing. Highest Pb, Zn and Ag values found at Pine Tree, Halt Mile, Millstream Bridge and Millstream 1.	476168
2007	Puma Exploration	3 DDH (442 m). Best DDH intersections: skarn Cu-Fe 3.22% over 0.25 m (F07-01) and 1.53% over 0.70 m (F07-02). Results explain 2 geophysical anomalies north of the Beresford Copper showing.	476372

Year	Company	Description of work / Highlights / Significant results	Ref.
2011	Puma Exploration	5 DDH (528 m) and 535 core samples on the Lavigne Brook showing. Best DDH intersections: 321 g/t Ag, 500 ppm Bi, 0.57% Cu and 8.04% Zn over 0.9 m; 45 g/t Ag over 6.6 m, including 95 g/t over 2.4 m (LB11-01); and 109 g/t Ag over 2.3 m, including 138 g/t Ag over 1 m (LB11-01).	477225
2012	Puma Exploration	2 DDH (1,248m) and 1,362 core samples on 2 anomalies in the area: Millstream Iron and Moly mine. Best DDH intersections: 0.18% Cu over 94.8 m, 0.14 g/t Au, 74 ppm Mo and 23 ppm W over 17.1 m (FM12-01); and 112 ppm Mo, 157 ppm Cu over 31.9 m (FM12-02).	477437
2014	Puma Exploration	4 DDH (3,495 m) and 3,727 core samples. Continuity of Cu skarn horizon confirmed between the Millstream and Beresford Copper showings and presence of large near-surface Cu-Mo system also confirmed.	477650
2014	Puma Exploration	15 trenches (1,955 m and 110 samples): trenches TR13-01 to TR13-05 in the SE part of the property and TR13-06 to TR13-15 in the NW. Some IP anomalies verified. Interesting values in 4 of the 5 trenches in the SE sector and 6 of the 10 trenches in the NW sector.	477650
2014	Puma Exploration	Surface IP survey covering 46.7 km and borehole IP surveys in FM12-02 and FND13-03. Surface IP survey detected 15 Priority-1 targets and 8 Priority-2 targets. Borehole IP surveys identified 7 targets: PP-1 to PP-7. The PP-3 and PP-5 targets suggest "off-hole" mineralization.	477650
2014	Puma Exploration	Re-analysis of Mag data from the Nicholas-Denys Project to produce a model for the Project and interpret the structures and lithologies to generate new targets. Results: 7 new targets for porphyry-type deposits and 2 new targets for massive sulphide-type deposits.	477650
2014	Puma Exploration	3D modelling/inversion of aeromagnetic survey carried out in 2004 on the Nicholas-Denys Property. 3D model of magnetic susceptibility also constructed for the granitic pluton. Magnetic inversion defined the dimensions and dips of strongly magnetic zones at depth.	477650
2014	Puma Exploration	3 DDH (1,014 m) and 910 core samples. Best DDH intersection: 1.0 g/t Ag, 207 ppm Cu and 330 ppm Mo over 522.1 m; 1.81 g/t Ag, 319 ppm Cu, and 627 ppm Mo over 209.1 m; 3.91 g/t Ag, 454 ppm Cu, and 1397 ppm Mo over 18 m; and 0.95 g/t Ag, 210 ppm Cu, 3560 ppm Mo over 2.4 m (FDN14-02) IP borehole surveys (864 m): detection of several anomalies in PND14-02 and FND14-02.	477721

6.2 Goldstrike Claim Block

The significant historical work on the Goldstrike claim block consists of geophysical surveys, soil surveys, stripping and drilling. A summary of the work is presented in Table 6.3.

Table 6.3 – Historical work on the Goldstrike claim block

Year	Company	Description of work / Highlights / Significant results	Ref.
1954	God's Lake Gold Mines Ltd	Arleau Brook area: first recorded exploration work in the vicinity of the Arleau Brook occurrence was by God's Lake Gold Mines Ltd (1954) who staked the ground to the west and south of the occurrence.	471748
1956	Fundy Bay Copper Mines Ltd	Arleau Brook area: airborne Mag and EM surveys immediately south and east of the occurrence.	471743
1986	Lacana Mining Corporation	Arleau Brook area: airborne Mag, gradiometer and VLF surveys over a large area. Revealed a large positive Mag anomaly south of URN 1403 and immediately north of the Clarinda gold occurrence (URN 1406). Picked up a series of subparallel, WSW-striking Mag anomalies southwest of the occurrence that probably reflect tectono-stratigraphy rather than mineralization.	473289
1986	Lacana Mining Corporation	Arleau Brook area: Lacana Mining reported regional stream geochemistry results on their Carl Gulch claim group, but no anomalous samples were reported near the occurrence.	473328
1999	Lorenzo Noel Group	Arleau Brook area: prospector Lorenzo Noel staked the property following the discovery of gold-bearing float. Prospecting, rock and soil samples, VLF and Mag surveys, and trenching. Zones of quartz veining within the rhyolite were anomalous in gold. Several anomalous Au assays were reported (best assays: 19,000 and 3,760 ppb Au).	475222
2002	Lorenzo Noel Group	Arleau Brook area: Lorenzo Noel reports on work from the Noel Grid Property, including prospecting, trenching, and rock and soil sampling.	475538
2003	Acadian Gold Corporation	Arleau Brook area: property optioned to Acadian Gold, who conducted a B-horizon soil survey outlining scattered pockets of above-background gold values. Source of gold remains unknown.	475726
1997	SLAM Exploration	Clarinda areas: SLAM Exploration optioned the property in September (assessment report 475114). Prospecting and geological mapping, grid establishment, trenching (15 trenches totalling 1000 m), and soil geochemistry survey. Of the 250 rocks and chip samples collected, approximately 75% returned Au values ranging between 0.25 g/t and 5.11 g/t. Gold mineralization and alteration (quartz, quartz-carbonate, sulphides) associated with favourable rock types near a major fault zone.	475114

Year	Company	Description of work / Highlights / Significant results	Ref.
1998	SLAM Exploration	Clarinda areas: geophysical surveys including VLF-EM, IP and Mag. 5 subparallel, SE-NW striking IP anomalies, some coincident with As-Au soil anomalies.	475167
2000	SLAM Exploration	Clarinda areas: line cutting, Mag, 15 DDH (1926 m). Drill core sampled and analyzed, as were soil, silt and grab samples from previously excavated trenches. Results of this work show anomalous gold in several drill holes: CL00-3 (17.1 m @ 0.674 g/t Au), CL00-7 (11.5 m @ 0.43 g/t Au), CL00-9 (10.7 m @ 0.626 g/t Au), CL00-11 (5.5 m @ 0.304 g/t Au) and CL00-15 (2 m @ 3.097 g/t Au). Some shorter intervals contain grades of up to 8 g/t Au. The best trench results came from LG-4 and TR98-pit 4, yielding 1 to 8.9 g/t Au from areas where red-brown hematitic (?) alteration is best-developed.	475374
2012-2013	Roland Lovesey	Clarinda areas: D. Mann reported the results of a soil geochemistry survey (2012 assessment report 477395), outlining a number of Au-Ag-As-Sb anomalies spatially associated with felsic volcanic rocks of the Benjamin Formation. Similar work was reported in 2013 (477527). Hole FM12-01 on the Millstream Iron skarn deposit and encountered 0.41% CuEq over 60.5 m.	477395, 477527, Puma Exploration press releases of March 13, 2013
2020	Targets Minerals Inc.	Rock sampling and trenching on Goldstrike. The Clarinda Extension area trench (165 m), contained felsic rocks. Values ranging from 1 g/t Au to 5.80 g/t Au were identified over a distance of more than 116 m. The reopened Clarinda (SLAM) trench, revealed silicified sedimentary rocks with quartz stockwork veining and iron carbonate alteration. 5 of the 7 rock samples collected yielded anomalous gold values, 1 of which graded 1.31 g/t Au. The Arleau Brook area trench (100 m N-S), contained felsic rocks. 17 rocks were analyzed, assays for 9 of them ranged from 32 ppb Au to 201 ppb Au.	Lavoie, 2020

6.3 Millstream Claim Block

Since the early 1950s, the general claim area has seen a great variety of exploration work including prospecting, geological mapping, drilling, shaft sinking and some underground exploration.

The significant historical work on the Millstream claim block consists of soil geochemistry surveys, geophysical surveys, prospecting and drilling. A summary of the exploration work is presented in Table 6.4.

Table 6.4 – Historical work on the Millstream Claim Block

Year	Company	Description of work / Highlights / Significant results	Ref.
1968-1969	North American Rare Metals	Western sector of the present Millstream A block was explored, Main Zone discovered.	474672
1987-1988	Acadia Mineral Ventures Ltd	Millstream B block: drilling (R. F. Mann, 1988-884) focused on arsenic-in-soil anomalies along the baseline. Several holes intersected significant gold mineralization in altered siltstone and diabase, centred on the dyke contacts. Best intersection was 0.32 oz/t Au over 5.0 ft (1.5 m).	473506
1988	Acadia Mineral Ventures Ltd	Sparton-Millstream A block: soil geochemistry survey, geophysical survey, prospecting and drilling. VLF survey picked up a shallow SE-dipping fault zone marked by intense brick-red alteration in drill core. 4 DDH (SM-88-18 to 21) intersected several altered diabase dykes (W. W. Gardiner, 1988d-895). One significant assay in hole SM-88-21 from an interval with a mafic dyke in a wide fault zone (VLF conductor): 0.125 oz/t Au over 0.9 ft (0.3 m). Most of the gold thought to be contained in a 0.25" to 0.5" wide (0.6 to 1.3 m) vein of massive pyrite and arsenopyrite. A boulder grading up to 0.2 oz/t Au was found about 100 m (328 ft) NE of hole SM-88-20 along the trace of the VLF conductor.	Gardiner, 1988d-89
1988	Acadia Mineral Ventures Ltd	Millstream C block: 15 DDH drilled on the occurrence. Holes MW88-17 to 22, 24 to 28 and BZ88-1 to BZ89-4 tested an outcrop of diabase dyke containing minor gold values. The location of the dyke is coincident with an arsenic-in-soil response and weak Mag and IP responses. Most holes intersected significant gold mineralization. Individual samples assayed up to 0.71 oz/t Au with the best intersection being 0.114 oz/t Au over 20.8 ft (6.3 m) (hole MW-88-25).	Gardiner, W.W., 1988a-881 and Gardiner, W.W., 1988c-887

Year	Company	Description of work / Highlights / Significant results	Ref.
1988	Acadia Mineral Ventures Ltd	Line cutting, prospecting, drilling (4 DDH) and extensive soil geochemistry and Mag and VLF surveys. Soil survey delineated only scattered 1-point or 2-point Au-As in-soil anomalies. VLF survey detected several NE-trending anomalies. Mag survey identified some narrow anomalous zones corresponding to mafic dykes. Holes SM88-17, -28, and -29 and MW88-23 tested an outcrop of diabase dyke containing minor gold values. The location of the dyke is coincident with an arsenic-in-soil response, and weak Mag and IP responses. All holes intersected significant gold mineralization. Individual samples assayed up to 0.993 oz/t Au with the best intersection being 0.1 oz/t Au over 8.1 ft (2.5 m) (hole SM-88-17). Hole MW88-23 was drilled to the west of a hole on the Sparton Millstream claim group, returning assays of ~1 oz/t Au over 1 ft (0.3 m), including 0.315 oz/t Au over 0.5 ft (0.2 m).	473605
1995	Nexbex Resources Ltd	Millstream A block: 5 DDH (2126.7 m) Best values: 2.04% Pb, 5.49% Zn and 1.38 oz/t Ag over 0.52 m; 6.0% Pb, 5.56% Zn and 3.18 oz/t Ag over 0.34 m; and 8.49% Zn over 0.48 m (hole MS-95-1) All targets tested contained quartz vein systems bearing Pb, Zn, Ag (+ minor Au), some containing economic values of Zn and Ag. Mineralized widths were narrow.	474672

7. GEOLOGICAL SETTING AND MINERALIZATION

This item is based mainly on Turcotte and Pelletier (2008). The information presented in subsection 7.4 was sourced from the New Brunswick Natural Resources and Energy Development website (consulted May 7-8, 2021). Other references are duly indicated where applicable.

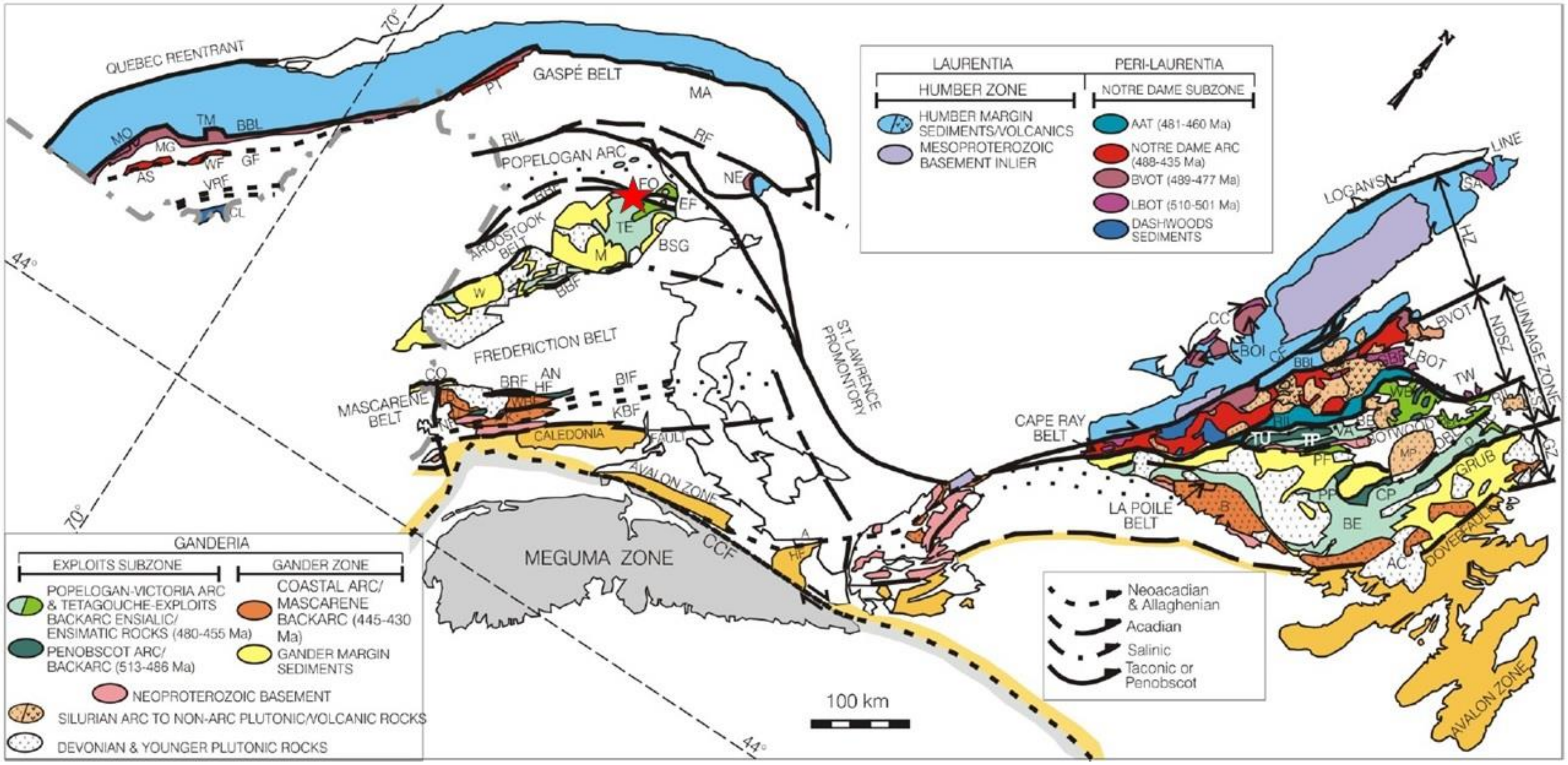
7.1 Regional Geology

The Project is located in the Canadian Appalachians, which stretch from the northernmost tip of Newfoundland through Nova Scotia, Prince Edward Island and New Brunswick, and into southern Quebec (Figure 7.1). The geology of the Canadian Appalachians records the opening and closing of the early Paleozoic Iapetus Ocean and the collision and accretion of island arcs and micro-continents that populated the Iapetus Ocean between Laurentia and Gondwana. The order and timing of terrane accretion and deformation events are in large part established by stratigraphic, paleontological, and structural studies of successor basins that link major elements of the orogen. The Canadian Appalachians, based on Early Paleozoic and older geological elements, have been subdivided into tectono-stratigraphic zones and subzones. From west to east, these are the Humber, Dunnage, Gander, Avalon and Meguma zones. The Project is in the Gander zone (Figure 7.1).

The Humber Zone (Figure 7.1) represents the leading edge of the Laurentian margin and is mainly underlain by Late Neoproterozoic to Ordovician rocks deposited on Grenvillian crystalline basement as a result of rifting and passive margin development. The Humber Zone is structurally divided into external and internal domains. The external domain consists of unmetamorphosed to very low metamorphic grade rocks forming an east-dipping imbricated stack of nappes. The internal domain consists of polydeformed greenschist- to amphibolite-grade metamorphic rocks characterized by complex folding and faulting. The western boundary of the Humber Zone is the Appalachian structural front. The eastern limit of the Humber Zone is represented by the Baie Verte–Brompton Line (Figure 7.1; BBL). The Baie Verte–Brompton Line is a major fault zone that separates the Humber Zone from the Dunnage Zone.

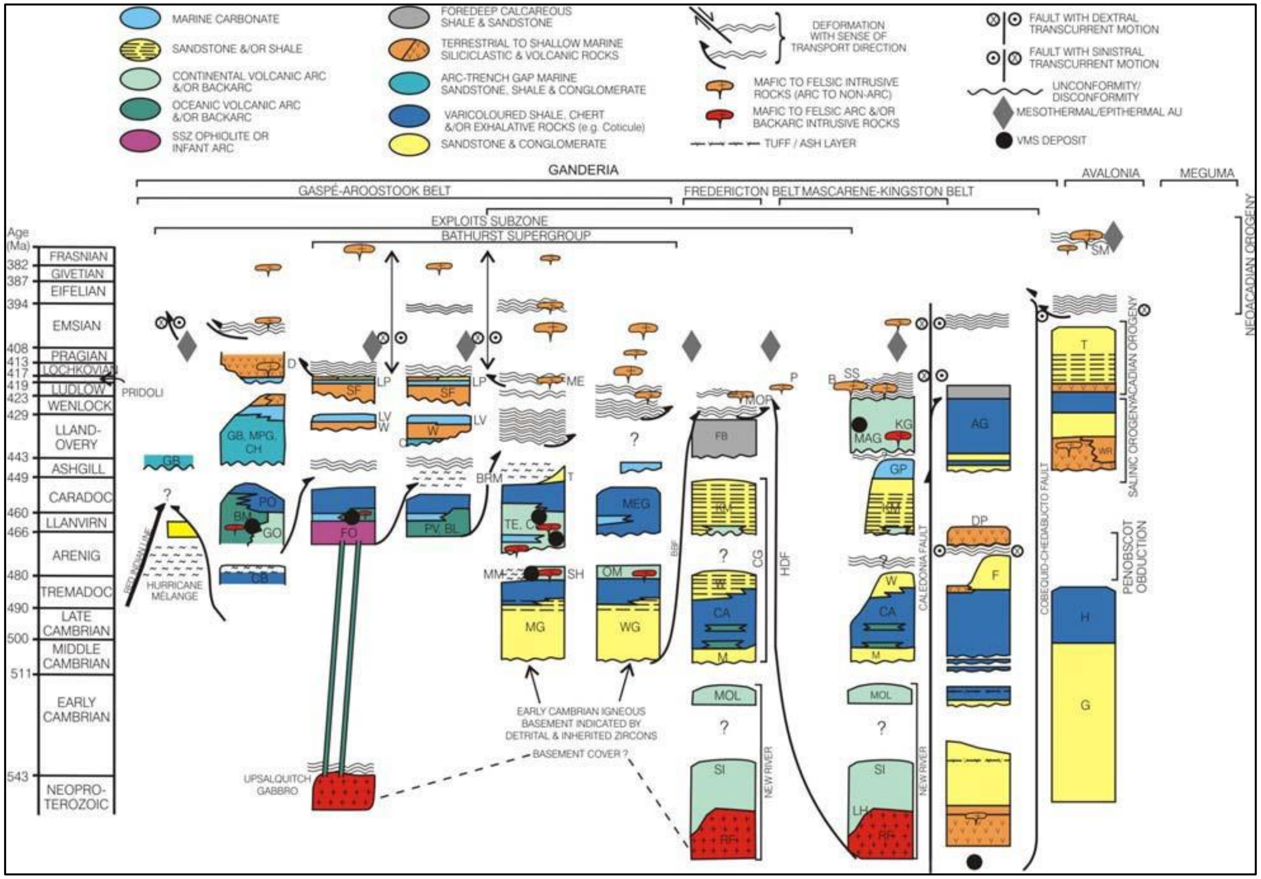
The Dunnage Zone (Figure 7.1) mainly contains the remnants of a Cambro-Ordovician infant arc and more mature arc terranes that existed within the Iapetus Ocean. The Dunnage Zone records the development and accretion of Cambro-Ordovician terranes, such as ophiolites, volcanic rocks, and deep marine sediments. The Dunnage Zone was deformed during the Acadian Orogeny and is characterized by very low to low-grade metamorphism.

The Gander, Avalon, and Meguma zones (Figure 7.1) represent peri-Gondwanan microcontinents (Ganderia, Avalonia and Meguma, respectively) that were sequentially accreted to Laurentia during the Middle Paleozoic (450-380 Ma). The Gander Zone (Figure 7.1 and Figure 7.2) comprises a distinct sequence of Lower Cambrian to Tremadoc (520-480 Ma) arenites, siltstones, and/or shales, generally considered to represent the outboard part of a passive margin (Gander margin).



Note: AAT: Annieopsquotch accretionary tract; AC: Ackley granite; AN: Annidale belt; AS: Ascott Complex; B: Burgeo batholith; BB: Badger belt; BBF: Bamford Brook fault; BBL: Baie Verte Brompton Line; BE: Baie d'Espoir Group; BIF: Belleisle fault; BOI: Bay of Island Complex; BVOT: Baie Verte oceanic tract; BRF: Basswood Ridge fault; BSG: Bathurst Supergroup; CB: Cripple Back-Valentine Lake plutons; CC: Coastal Complex; CCF: Cobequid-Chedabucto fault; CF: Cabot fault; CL: Chain Lakes Massif; CO: Cookson Group; CP: Coy Pond Complex; D: Davidsville Group; DBL: Dog Bay Line; EF: Elmtree fault; ESZ: Exploits Subzone; EX: Exploits Group; FO: Fournier Group; GBF: Green Bay fault; GF: Guadeloupe fault; GRUB: Gander River ultrabasic belt; GZ: Gander Zone; HF: Hollow fault; HH: Hodges Hill Pluton; HZ: Humber Zone; K: Kingston belt; KBF: Kennebacasis fault; LBOT: Lushs Bight oceanic tract; M: Miramichi Group; MA: Mont Albert ophiolite; MG: Magog Group; MO: Mount Orford ophiolite; MP: Mount Peyton pluton; NC: Noggin Cove Formation; NE: Neckwick Formation; NDSZ: Notre Dame Subzone; NR: New River Belt; PF: Pine Falls Formation; PP: Pipestone Pond Complex; PT: Pointe aux Trembles Formation; RBF: Rocky Brook-Millstream fault system; RF: Restigouche fault; RIL: Red Indian Line; SA: St Anthony Complex; TE: Tetagouche Group; TM: Thetford Mines ophiolite; TP: Tally Pond Group; TU: Tulks Group; TW: Twillingate trondhjemite; VA: Victoria arc; VRF: Victoria River fault; W: Woodstock Group; WB: Wild Bight Group; WBF: Wheaton Brook fault; WF: Weedon Fromation.

Figure 7.1 – Tectonic map of the Canadian Appalachians showing the Early Paleozoic tectono-stratigraphic zones, subzones and other major tectonic elements (from van Staal, 2007)



Note: AG: Arisaig Group; BBF: Bamford Brook fault; BL: Blueschist nappe; BM: Bald Mountain volcanic sequence of Winterville Formation (Maine); BRM: Belledune River mélange; C: Clemville Formation; CA: Calais Formation; CB: Chase Brook Formation (Maine); CG: Cookson Group; CH: Chaleurs Group; CL: California Lake Group; D: Dalhousie Group; DP: Dunn Point volcanics; F: Ferrona Formation; FB: Fredericton Belt sequence; FO: Fournier Group; G: Goldenville Group; GB: Grog Brook Group; GO: Goulette Brook Formation; GP: Goss Point Formation; H: Halifax Group; HDF: Honeydale fault; KBF: Kennebecasis fault; KG: Kingston Group; KM: Kendall Mountain Formation; LB: Lawson Brook schist; LP: La Plante Formation; LV: La Vieille Formation; M: Megunticook Formation; MAG: Mascarene Group; ME: Mount Elisabeth pluton; MEG: Meductic Group; MG: Miramichi Group; MM: Miramichi mélange; MOL: Mosquito Lake Formation; MOP: Mohannes pluton; MPG: Matapedia Group; OM: Oak Mountain Formation; P: Pocomoonshine gabbro; PO: Popelogan Formation; PV: Pointe Verte Formation; RF: Ragged Falls pluton; SF: Simpsons Field Formation; SH: Sheephouse Brook Group; SI: Simpsons Island Formation; SM: South Mountain batholith; SS: St. Stephen gabbro; T: Tomogonops Formation; TE: Tetagouche Group; TO: Torbrook Group; W: Woodland Formation; WE: Weir Formation; WG: Woodstock Group; WR: White Rock Formation.

Figure 7.2 – Summary of the tectono-stratigraphic evolution of the Exploits Subzone, and Gander and Avalon zones in Maritime Canada and Maine (modified from van Staal, 2007)

The Avalon Zone (Figure 7.1 and Figure 7.2) mainly comprises a distinctive belt of Neoproterozoic, largely juvenile, arc-related, volcano-sedimentary sequences and associated plutonic rocks that underwent a long-lived tectonic history, including orogenesis before deposition of a Cambrian-Ordovician shale rich platform sedimentary succession. The Meguma Zone is the most outboard terrane in the Canadian Appalachians. The oldest exposed part of the Meguma Zone comprises a thick (<10 km) Cambrian to Early Ordovician turbiditic sandstone-shale sequence of the Goldenville Group, which was largely deposited on the continental rise and/or slope to the outer shelf of a Gondwanan passive margin. Goldenville Group is overlain by the lower Ordovician Halifax Group, which represents a shoaling succession. The Meguma Supergroup (Goldenville and Halifax Groups) is disconformably by the Upper Ordovician to Early Devonian, dominantly shallow marine shelf siliciclastic sedimentary rocks of the Annapolis Supergroup. Rift-related bimodal volcanic rocks of the late Ordovician-Lower Silurian (442-438 Ma) White Rock Group occur at the base of the Annapolis Supergroup. These rift-related volcanic rocks may be related to the onset of rifting and departure of Meguma from Gondwana.

7.2 Local Geology

The Project is also located in the Bathurst Mining Camp ("BMC"). The BMC is made up of several different tectonic blocks and slivers: the Fournier, California Lake, Tetagouche and Sheephouse Brook blocks and the blueschist and Bamford Brook slivers (Figure 7.3 and Figure 7.4). Based on the Arenig-Caradoc volcanic history of the blocks and slivers, and the geochemical composition and physical characteristics of their constituent volcanic rocks, the blocks in the BMC have been interpreted as the remnants of extended continental, transitional, and oceanic crust, which formed part of a Japan Sea-style back-arc basin (Tetagouche-Exploits basin). The blocks and slivers preserved in the BMC were structurally juxtaposed during the Late Ordovician-Early Silurian closure of the Tetagouche-Exploit basin.

The Tetagouche-Exploits basin formed in response to protracted rifting of the Popelogan arc that started in the middle Arenig; this led to late Arenig-Caradoc seafloor spreading in parts of the Tetagouche-Exploits back-arc basin. The rifting responsible for the California Lake block (ca. 472-468 Ma) took place before the rifting of the Tetagouche (ca. 467-465 Ma) and Sheephouse Brook blocks (ca. 466-464 Ma). These three blocks have ensialic to transitional crust and share a similar pre-Arenig basement consisting of Miramichi Group deep water sandstones and shales. Oceanic to transitional back-arc crust is preserved in the Fournier block and blueschist and Bamford Brook slivers.

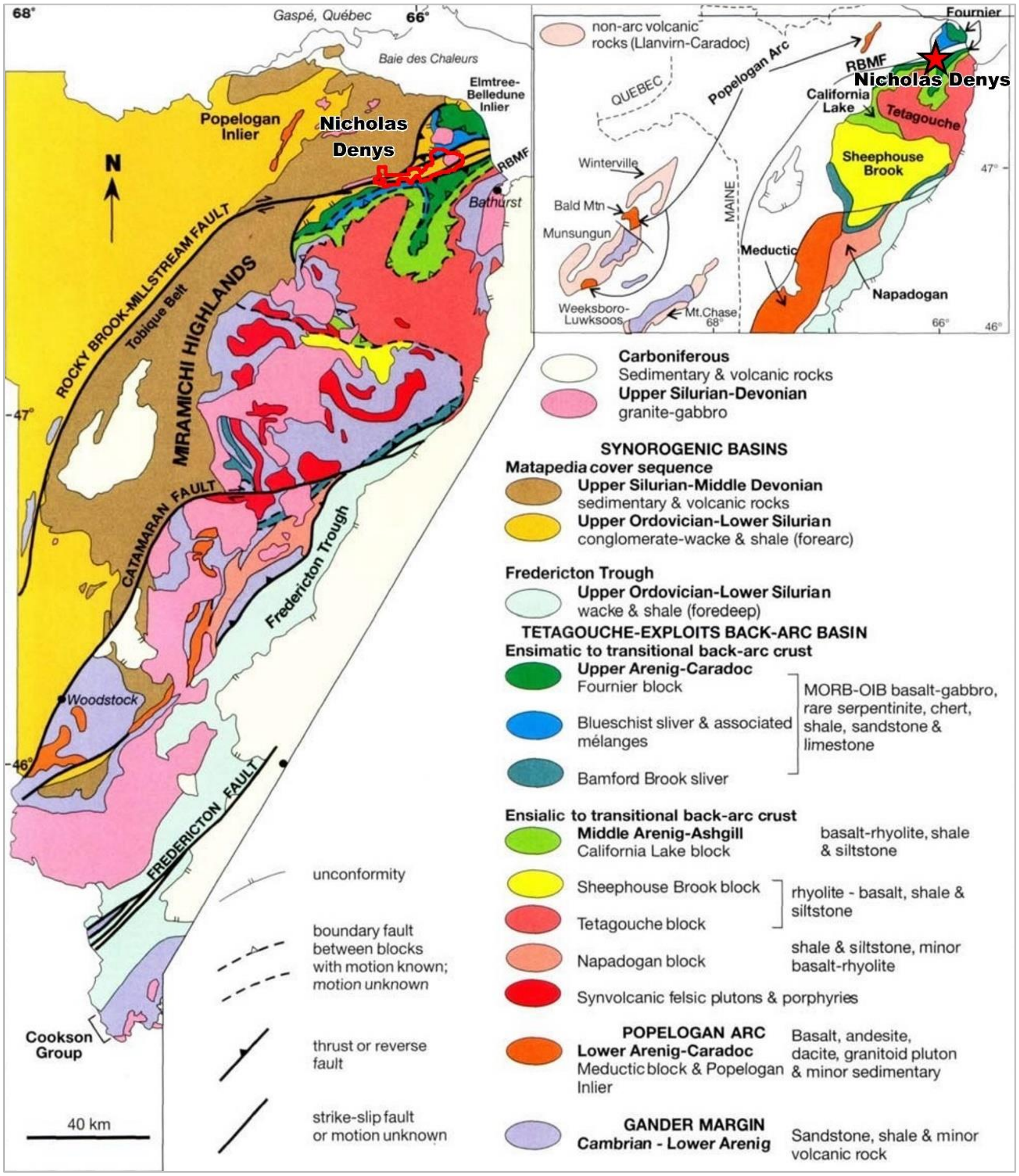
Massive sulphide deposits in the BMC (Figure 7.4) mainly occur in the California Lake, Tetagouche and Sheephouse Brook blocks. Massive sulphides were deposited during most stages of intra-arc extension and subsequent back-arc basin formation. Deposition was most abundant during the late Arenig arc extension in the Tetagouche block and during coeval, early stages of arc rifting in the California Lake block.

The deformation history of the BMC is polyphase, complex and long-lived. The penetrative polyphase ductile deformation (D1–D4) experienced by all rock units of the BMC started in the Late Ordovician (Ashgill) and lasted until the Late Devonian. The present distribution of the rocks, including massive sulphide deposits, is mainly controlled by D1 and lesser extent, D2 structures. D1 strain varies considerably and is invariably localized in thrust-related shear zones. Where massive sulphide deposits are affected by these shear zones, such as most Caribou type deposits in the Spruce Lake nappe, the strain has generally transformed them into very thin and long sulphide bodies. The S1 fabric is a composite structure and related to the formation of several generations of ductile thrusts and tight to isoclinal folds. The relationships between F1 folds and D1 thrusts are complex. The D1 structures comprise at least two generations of folds.

It is possible that D1 and D2 structural events represent a continuum in each tectonic block. If correct, the diachronous nature of D1 and hence also D2 between blocks may cause overprinting of D2 structures of an already accreted block by the younger D2 structures of subsequently accreted blocks. In such a scenario, the correlation of D1 and D2 structures between blocks on the scale of the Bathurst Mining Camp is tenuous.

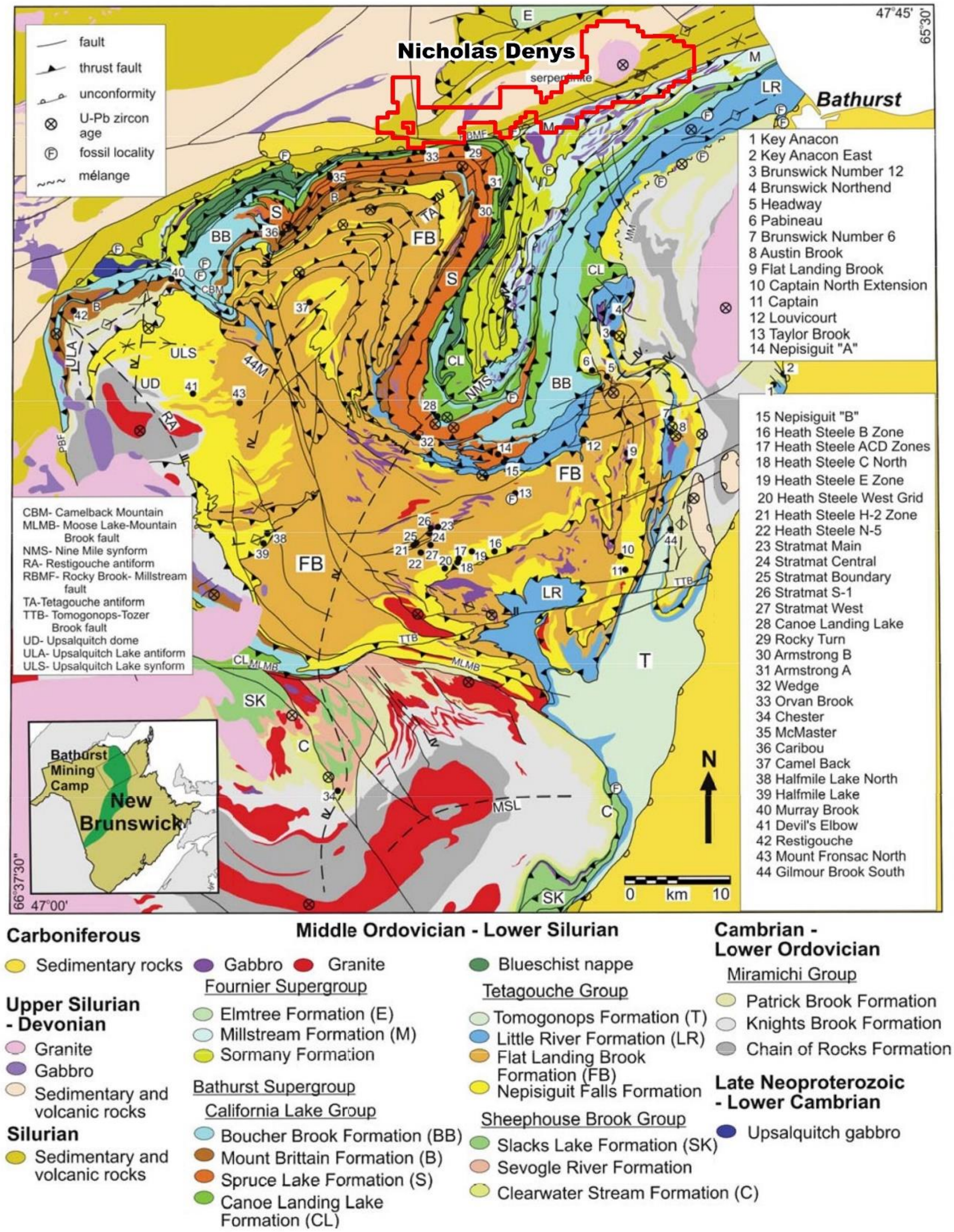
The F3 recumbent folds and kinks variably overprinted the D1 and D2 structures. Where vertical D3 shortening strain was high, the steeply dipping structures were transposed into D3 flat belts. Flat belts thus represent areas with significant vertical, ductile thinning. Where D3 strain was low, the rocks preserved their overall steep attitude, despite being thrown into open recumbent folds.

The youngest penetrative deformation in the BMC (D4) is kinematically associated with a regional dextral transpressive regime that became progressively localized into discrete brittle-ductile faults, the most important system being the Rocky Brook–Millstream fault zone (“RBMF”). The fault splays of the RBMF generally have a steep southerly dip and a moderately to steeply northeast-plunging stretching lineation. The lineation is generally best developed where the Chaleurs Group conglomerates and limestone have been affected by RBMF-related deformation. Shear bands, asymmetrical boudinages and sigmoidal tension gashes indicate that the RBMF mainly accommodated oblique, dextral reverse movements, uplifting the BMC with respect to most of the adjacent Chaleurs Group.



(from van Staal et al., 2003)

Figure 7.3 – Map showing the geology of central New Brunswick and adjacent Maine



(Adapted and modified from van Staal et al., 2003)

Figure 7.4 – Map showing the geology of the central Bathurst Mining Camp with distribution of major structures and massive sulphide deposits

7.3 Project Geology

The Project overlies the contact between the Ordovician Fournier Block to the south and the Silurian Matapedia cover sequence (Chaleurs Group) to the north (Figure 7.3 and Figure 7.4). The Project area is also characterized by the presence of the RBMF, a major regional-scale structure that traverses the entire Property at the contact between the two groups. Over 20 m of overburden have been recorded in certain areas of the Project.

7.3.1 Fournier Block

The Fournier Block consists of the Upper Neoproterozoic to lower Cambrian Upsalquitch gabbro (ca. 554-543 Ma), and the Lower to Middle Ordovician mafic igneous and sedimentary rocks of the Fournier Group (Figure 7.3, Figure 7.4, Figure 7.6 and Figure 7.7). The Fournier Group consists of the ophiolitic Sormany Formation and the overlying sedimentary rocks of the Millstream Formation. The mafic igneous rocks include oceanic pillow basalts with compositions ranging between mid-ocean ridge basalts ("MORB") and island arc basalts ("IAB"), synvolcanic gabbro and minor serpentinite of the Sormany Formation. Most of the Fournier Group preserved in the Bathurst Mining Camp probably represents transitional rather than true back-arc oceanic crust.

The Sormany basalts are overlain by and locally interlayered with shale, sandstone and minor limestone of the Millstream Formation (Figure 7.4). Tectonism during Ashgill time, and an unconformity between the Fournier Group and overlying late Llandovery to Lower Devonian sedimentary rocks of the Chaleur Group (Figure 7.6), suggest that the Fournier Group was deposited mainly before the Ashgill. The Sormany and Millstream formations are mostly composed of late Arenig to Caradoc rocks.

The Millstream Formation is made up of black to dark grey shale interbedded with minor green-grey and grey siltstone and very fine- to coarse-grained sandstone that occurs in the upward-fining sequences. The Millstream wackes, arkoses and rare conglomerates contain abundant felsic to intermediate volcanic clasts and quartz-feldspar phenoclasts. These clasts indicate proximity to a felsic to intermediate volcanic source, probably the Popelogan arc. The IAB compositions of some Fournier Group basalts also suggest proximity to the arc. Accordingly, van Staal et al. (2003) interpreted the Fournier Group as a remnant of transitional to oceanic crust that formed near the active margin of the Tetagouche-Exploits back-arc basin after the California Lake block had rifted off the Popelogan arc during the late Arenig. The isolated limestone lenses in the Millstream Formation may be large rafts of limestone that moved downslope from reefs situated around the exposed parts of mafic volcanoes or may represent large exotic blocks in a mélange. The Fournier and California blocks are separated by a poorly exposed but highly deformed shale mélange containing small blocks of basalt, limestone and sandstone.

7.3.2 Chaleurs Group

The Chaleurs Group (Figure 7.6 and Figure 7.7) is restricted to the northern part of the Chaleur Bay synclinorium (Figure 7.5), a northeasterly trending belt of Siluro-Devonian rocks extending from western New Brunswick to southern Gaspé. This belt lies between the Aroostook-Percé anticlinorium to the west and the Miramichi terrane (Miramichi Highlands) to the east. The Popelogan, Elmtree and Macquereau-Mictaw inliers are largely composed of Ordovician sedimentary and volcanic rocks lying unconformably beneath the Chaleur Group.

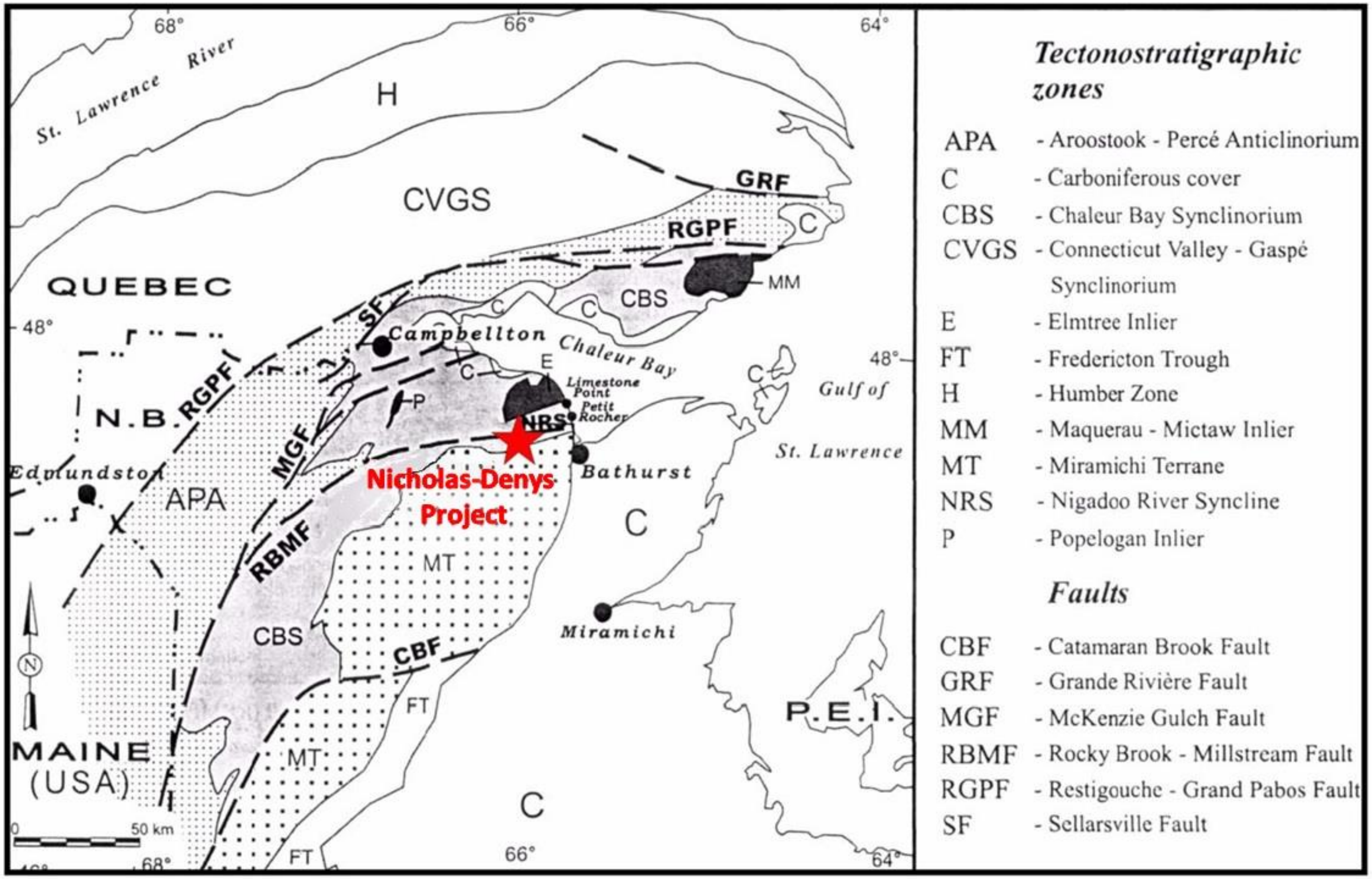
The internal stratigraphy and nomenclature of the Chaleur Group vary from one locality to another in the Chaleur Bay synclinorium. In northern New Brunswick, it generally comprises, in ascending stratigraphic order: (1) lower clastic rocks, (2) a lower limestone unit, (3) middle clastic and/or volcanic rocks, (4) an upper limestone unit, and (5) upper clastic rocks. In the Project area, the lower limestone is referred to as the La Vieille Formation and the upper limestone as the LaPlante Formation. The lower, middle and upper clastic rocks are represented by the Weir, Simpsons Field and Free Grant formations, respectively. The Weir and La Vieille formations are relatively restricted in distribution, occurring intermittently along the RBMF in the Project area.

The Simpsons Field Formation is exposed in a narrow belt along the margin of the Miramichi terrane (Figure 7.6). In the Project area, the predominant rock type is a pebble conglomerate that lies unconformably over the polydeformed Ordovician rocks. The clasts in the conglomerate include mafic and felsic volcanic rocks, gabbro, chert, quartz, jasper, granitoids and feldspar porphyry, all of which generally reflect the nearby underlying rocks. On the Project area, the Simpsons Field Formation is predominantly turbiditic sandstones and appears to conformably overlie La Vieille limestone that is intermittently exposed along the RBMF (Figure 7.6). The contact with the underlying La Vieille Formation is reportedly conformable in some areas and unconformable in others. The Simpsons Field Formation is conformably overlain by the Pridolian LaPlante Formation in most areas.

The LaPlante Formation can be subdivided into proximal and distal facies (Figure 7.6). It consists of dark grey fossiliferous bindstone and thinly bedded wackestone, interbedded with greenish-grey calcareous siltstone and shale. The La Plante Formation conformably overlies the Simpsons Field Formation and is conformably overlain by the Free Grant Formation.

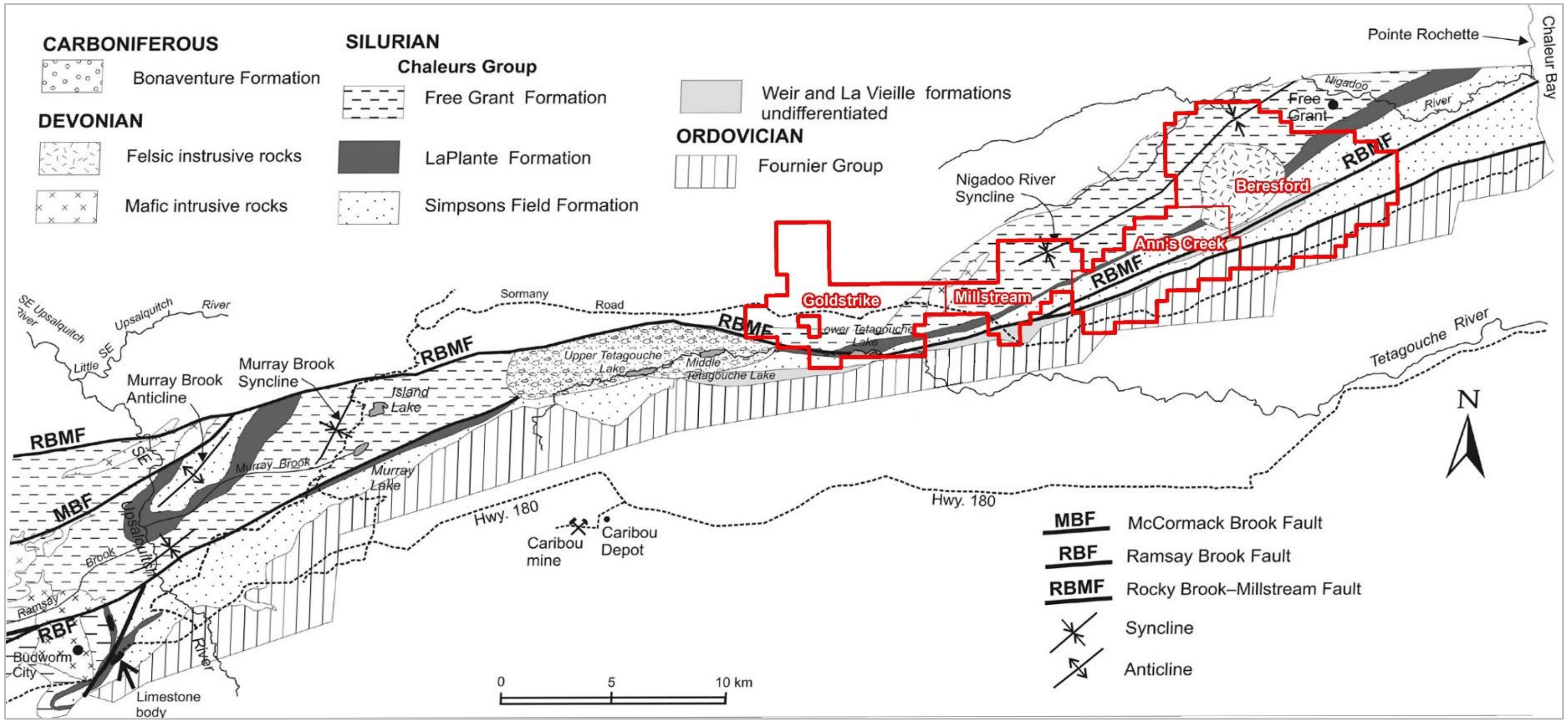
The Free Grant Formation comprises thinly bedded, ripple-laminated sandstone interlayered with medium (20-30 cm), non-calcareous, greenish-grey mudstone and minor red shale in the Property area (Figure 7.6). The Free Grant Formation is considered Late Silurian to Early Devonian in age.

The La Vieille and Weir formations (Figure 7.6) are relatively restricted in their distribution in the Property area, occurring intermittently along the RBMF.



(Adapted and modified from Wilson et al., 2005; Dimitrov and McCutheon, 2007)

Figure 7.5 – Simplified map showing the location of the Chaleur Bay synclinorium (light grey) in the northern New Brunswick and southern Gaspé regions



(Adapted and modified after van Staal et al. 2003; Dimitrov et al., 2004; Dimitrov and McCutheon, 2007)

Figure 7.6 – Simplified map showing the distribution of the Chaleurs Group rocks along the Rocky Brook–Millstream fault system (RBMF)

7.3.3 Devonian intrusion

The volcano-sedimentary sequence in the Project area is intruded by the molybdenite-bearing Nicholas-Denys granodiorite, dated at 381 ± 4 Ma (Davies et al. 1969; Walker et al. 1991). The intrusion's contact metamorphism aureole has been recognized up to at least 1 km to the south and southeast of the mapped intrusion.

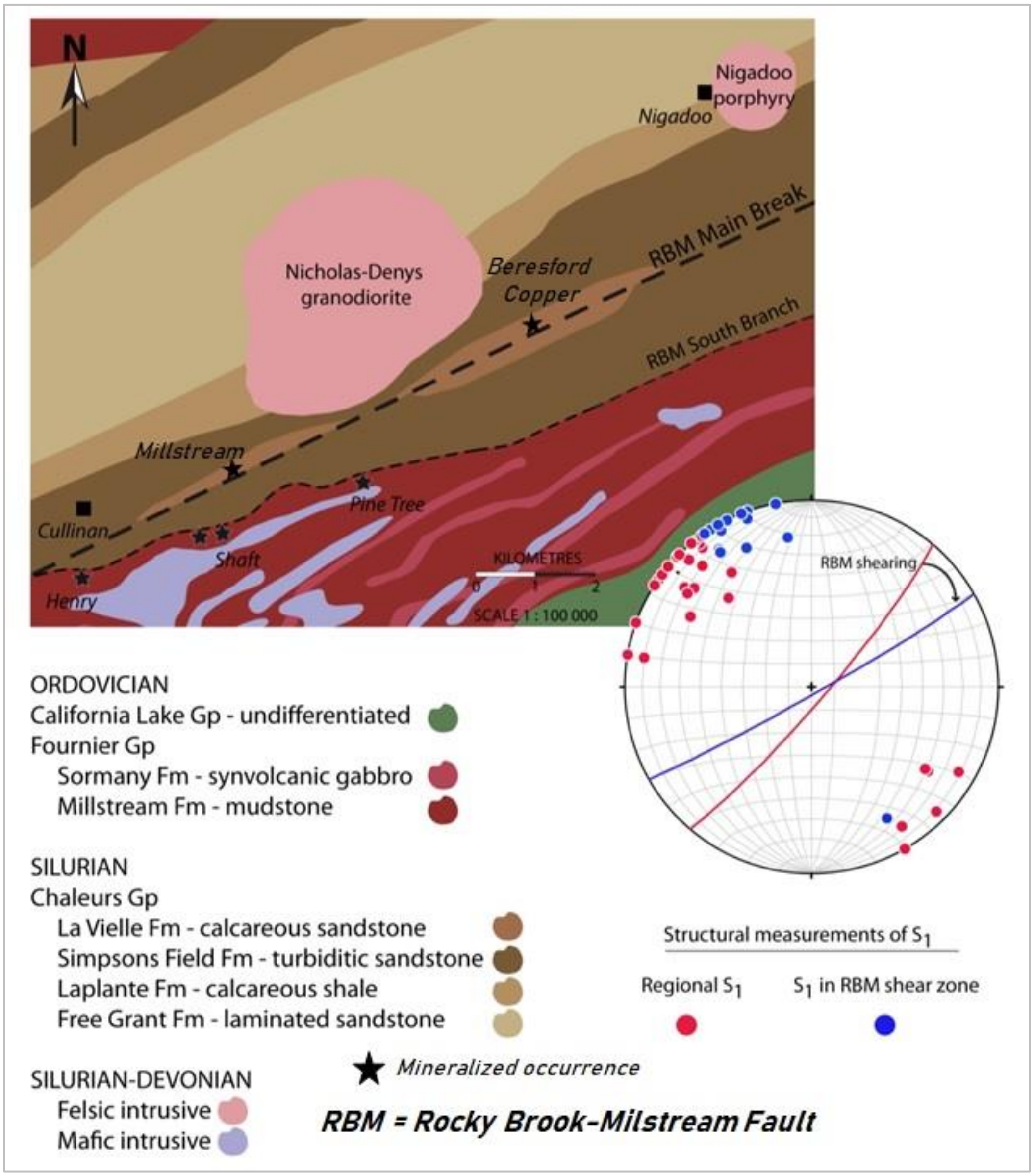
7.3.4 Structural geology

It is generally accepted that the rocks of the Chaleurs Group were deformed during the Acadian Orogeny, which culminated in Middle Devonian time. However, new evidence indicates that at least some deformation in older parts of the Chaleurs Group is related to the Salinic Disturbance, which culminated in Late Silurian time. In the Project area, the rocks have been affected by both folding and faulting.

Two sets of faults cut Silurian rocks in northern New Brunswick: an older northeast-trending set and a generally younger northwest tending set. The northeastern set defines prominent lineaments on aerial photographs and remote sensing images. However, the actual fault surfaces have rarely been observed. Most of these faults are characterized by bedding-parallel, subvertical shear surfaces that accommodated displacement in limbs of F2 folds parallel to the overall Acadian extensional direction. The northwest-trending faults are poorly represented on airborne images, and their ages are not well constrained. Some of them may be Reidel shears conjugate to the large northeast or even younger strike-slip motion.

The RBMF forms the break between the Tobique and Chaleur subzones of the Chaleur Bay Synclinorium and, further southeast, constitutes the tectonic contact between the Chaleur Bay Synclinorium and the Aroostook-Percé Anticlinorium. Silurian stratigraphy of the Chaleur Group shows marked contrasts on opposite sides of the fault. However, the sequence of Simpsons Field–LaPlante–Free Grant strata observed south of the fault is also observed north of the fault, farther east, allowing the post-Silurian dextral displacement to be estimated at 30 km. Most of the displacement occurred prior to 380 Ma due to the limited displacement (< 1km) observed for the Nicholas-Denys granodiorite (381 ± 4 Ma). Stratigraphic evidence implies that the RBMF was active during (Ludlovian) deposition of the Simpsons Field Formation and controlled the deposition of the Chaleurs Group in the southeast.

The RBMF splays into two parallel structures at the scale of the Project (Figure 7.7). The northern branch, also known as the Main Fault, coincides with the centre of the Simpson Field Formation, and the one following the contact between the Ordovician and Silurian volcano-sedimentary packages is known as the South Branch.



(Adapted and modified from Deakin, 2011)

Figure 7.7 – Simplified map showing the splays of the RBMF in the Project area

7.4 Mineralization

There are over a hundred mineral occurrences reported in the Project, and these include several metal associations such as Zn-Pb-Ag-Au, Cu, Au, Fe, Fe-Cu, Mo and Mo-Cu. Figure 7.8 shows the mineralized areas or zones of the Project that saw the bulk of the exploration work, including trenching, drilling and underground exploration.

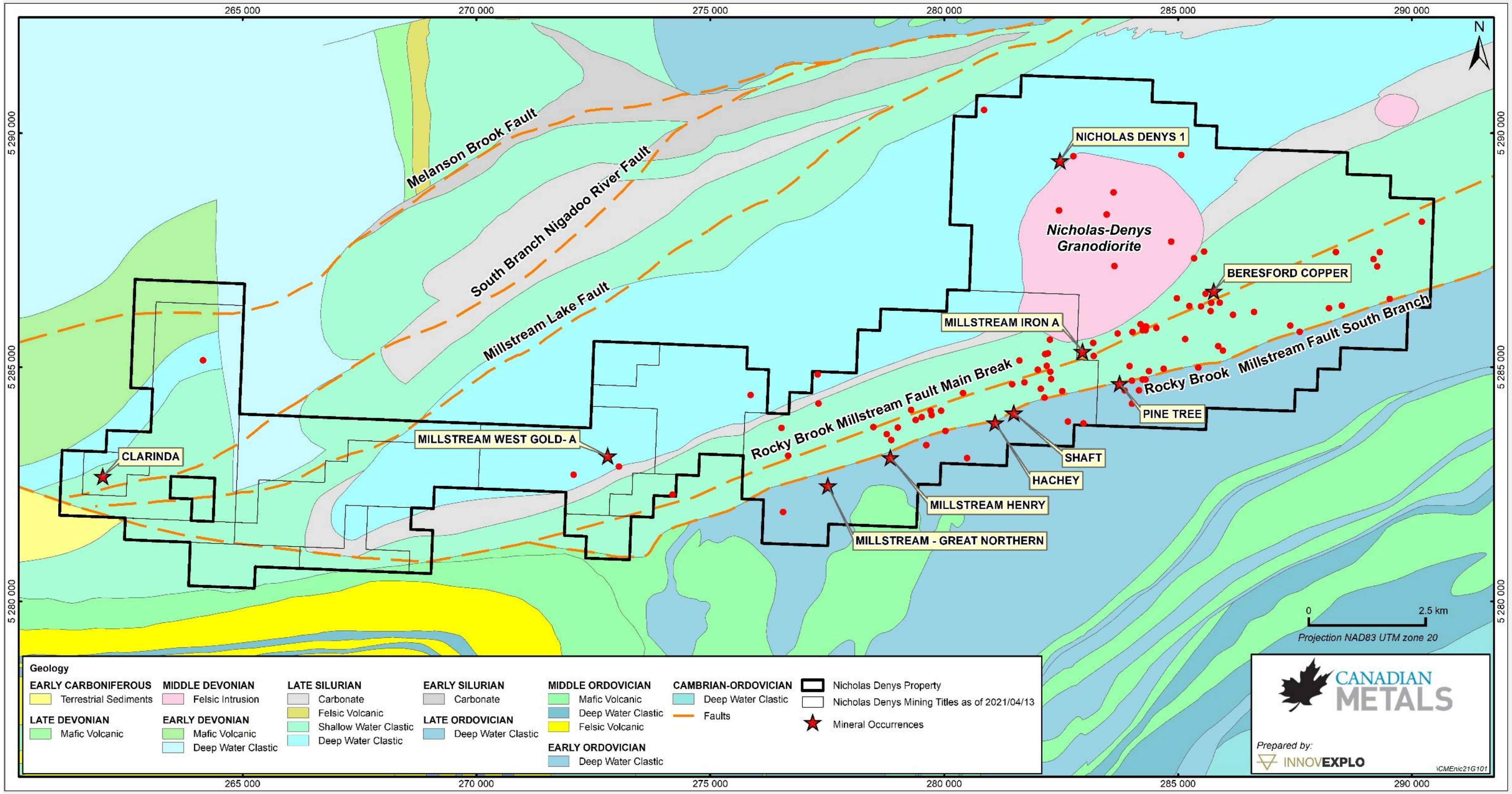


Figure 7.8 – Map of mineral occurrences on the Project. The most important, those that have been the subject of the most advanced exploration work, are named. The position of the Rocky Brook–Millstream fault system ("RBMF") is approximative.

7.4.1 Hachey and Shaft

The Hachey (a.k.a. Haché) and Shaft zones occur along the South Branch of the RBMF, which forms the break between the Silurian rocks of the Chaleur Bay Group and the Ordovician Fournier Group (Figure 7.8). This fault trends approximately N080 and appears to have a steep dip to the south. Drag-folds and distortion of minor fold axes near the fault indicate dextral strike-slip movement (Davies et al., 1969). The rocks in the vicinity of the Hachey and Shaft zones consist of dark grey phyllite, schist and argillite with minor greywacke (Davies et al., 1969). A few thin dykes of feldspar porphyry cut these rocks in places, but none were observed in or near the Hachey and Shaft zones. Due to severe faulting, the sedimentary rocks are now mylonites, breccias and schist, almost totally lacking in primary structures. Less deformed rocks farther removed from intense deformation exhibit graded bedding, which indicates the presence of several highly compressed isoclinal folds (Davies et al., 1969). The Shaft Zone lies just northeast of the junction of a major fault and a northwest-trending fault, and the Hachey deposit lies about 300 m southeast of this junction (Davies et al., 1969).

The sulphides in the Hachey and Shaft zones have two characteristic forms:

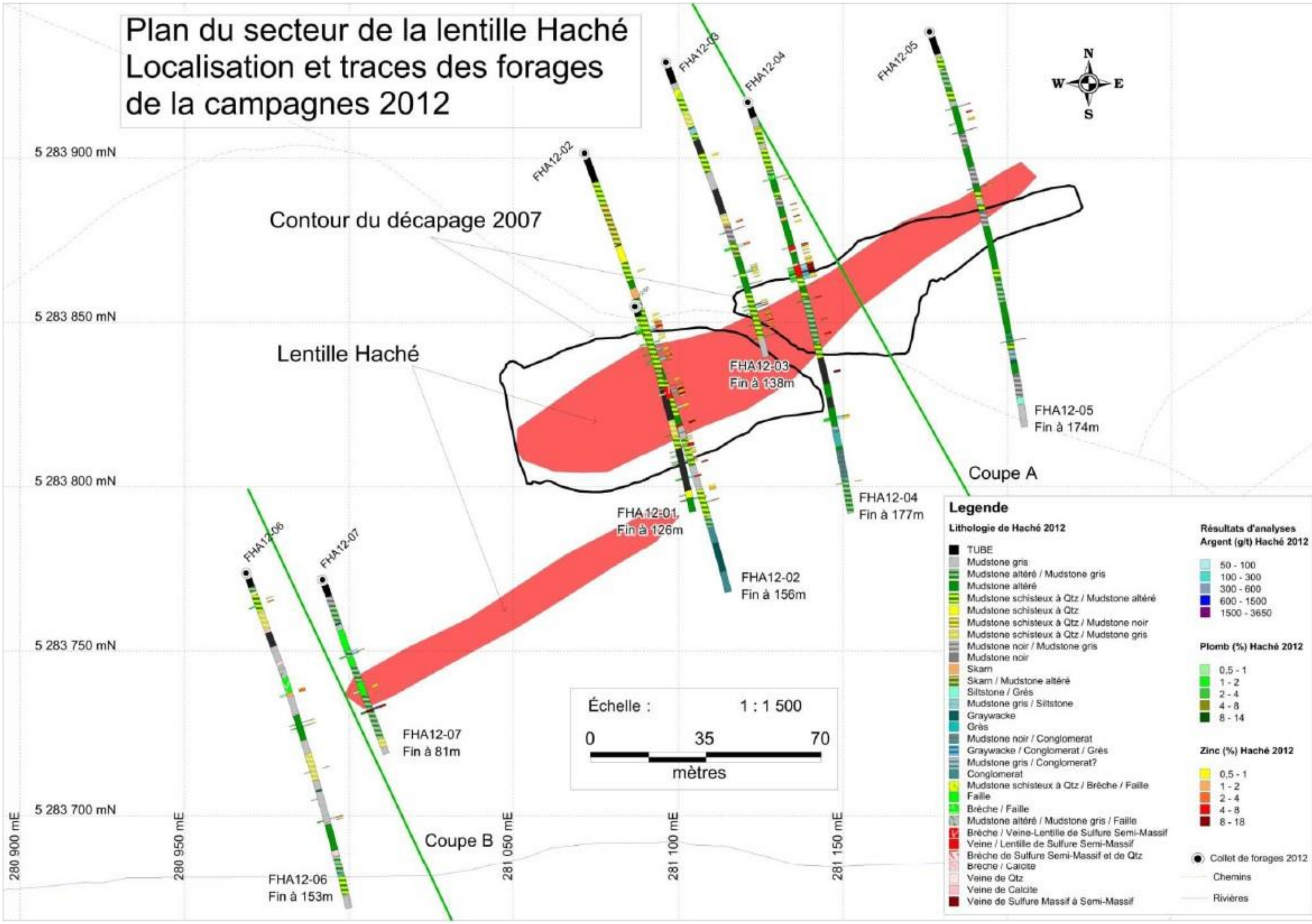
1. A broad zone of sparsely disseminated grains and thin seams of pyrrhotite and pyrite with very minor amounts of sphalerite and galena.
2. Concentrations of sphalerite and galena veins enclosed within the broad zone described in (1) above. In places, these vein concentrations constitute ore shoots.

The broad zones of pyrite and pyrrhotite are irregular and lenticular bodies up to 300 m long, less than 1 to 10 m wide and down to approximately 150 m vertical depth (Figure 7.9 and Figure 7.10). At the Hachey Zone, up to nine (9) lenses (broad zones) were interpreted based on visible sulphide content in drill core. Individual zinc-lead sulphide veins in the broad zones are narrow, commonly 10 cm to 1 m wide, but local vein concentrations occur over widths of 1.5 to 5 m. At the Shaft Zone, the local vein concentrations constituting the ore shoots are continuous, but individual veins pinch, swell and bifurcate throughout the length of the shoots. The lenses of the Hachey Zone consist of semi-massive to massive sulphide veins and/or quartz-sulphide stringers, included in a broad disseminated sulphide zone. The lenses dip steeply to the NNW.

7.4.2 Henry and Millstream

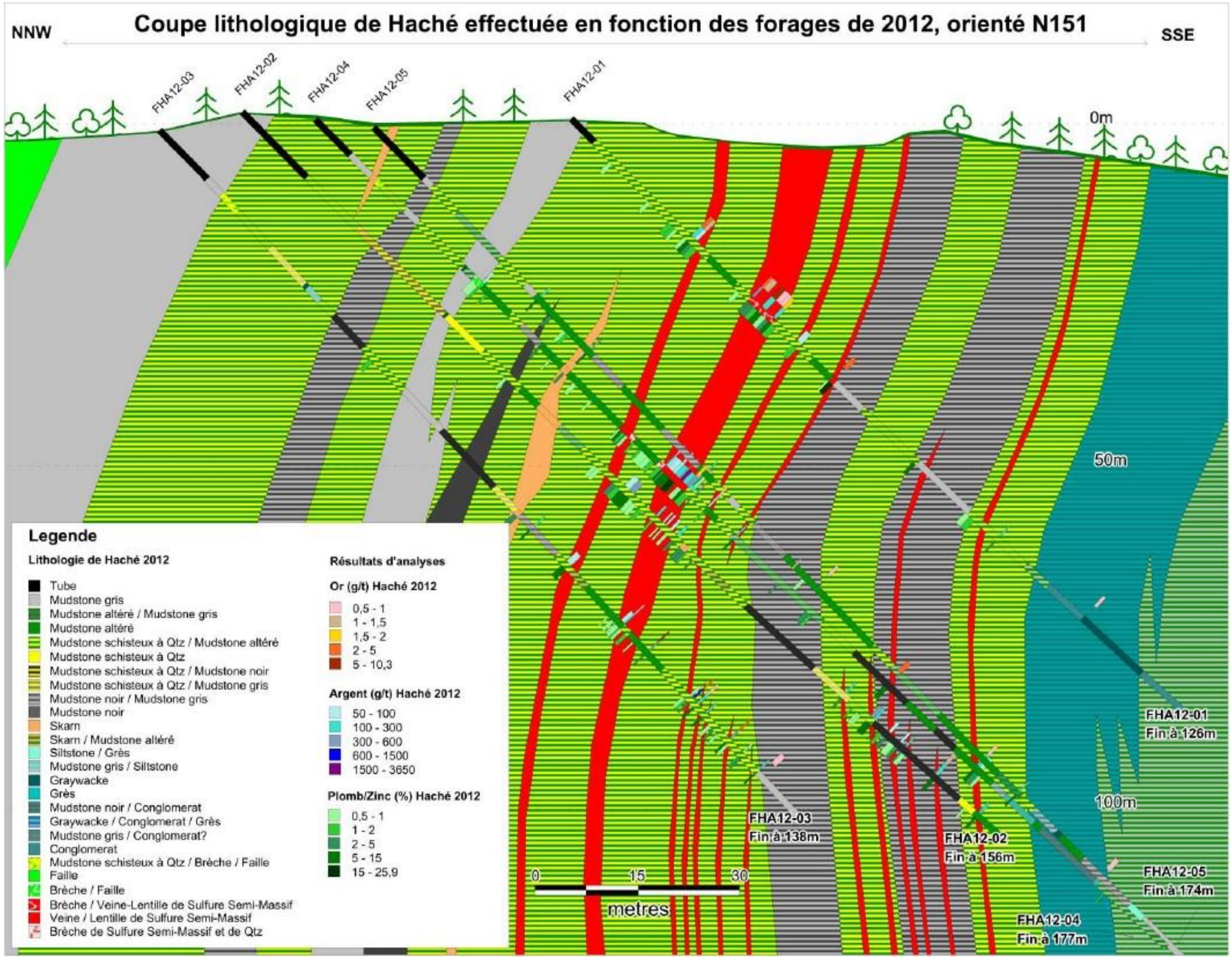
The Henry (a.k.a. Millstream Henry and N.A. Rare Metals Group 8) and Millstream (a.k.a. Millstream–Great Northern and N.A. Rare Metals Group 8A) zones occur approximately 2.5 km and 3.7 km, respectively, to the west-southwest along the South Branch of the RBMF, on strike from the Hachey and Shaft zones (Figure 7.8).

The Henry mineralization consists of massive to disseminated sulphides in or near carbonate-rich veins, fractures and lenses that cut the sheared and brecciated Tetagouche Group (Ordovician) graphitic schist and argillite. Individual veins form systems that pinch, swell and bifurcate over a strike length of more than 600 m and over a width of up to 120 m (New Brunswick Natural Resources and Energy Development website, consulted May 7, 2021). The veins generally strike NE, parallel to the RBMF, and dip 70°N, but NW-trending veins are also present. The deposit is apparently localized near the junction of a NW-trending fault and the NE-trending RBMF.



Note: “Coupe A”: Section A; “Lentille Haché”: Hachey mineralized lens; “Contour de décapage”: limits of the surface stripping.

Figure 7.9 – Map showing the Hachey Zone area and drilling (from Geominex, 2014)



Note: Section A from Figure 7.9.

Figure 7.10 – Cross-section of the Hachey mineral occurrence (from Geominex, 2014)

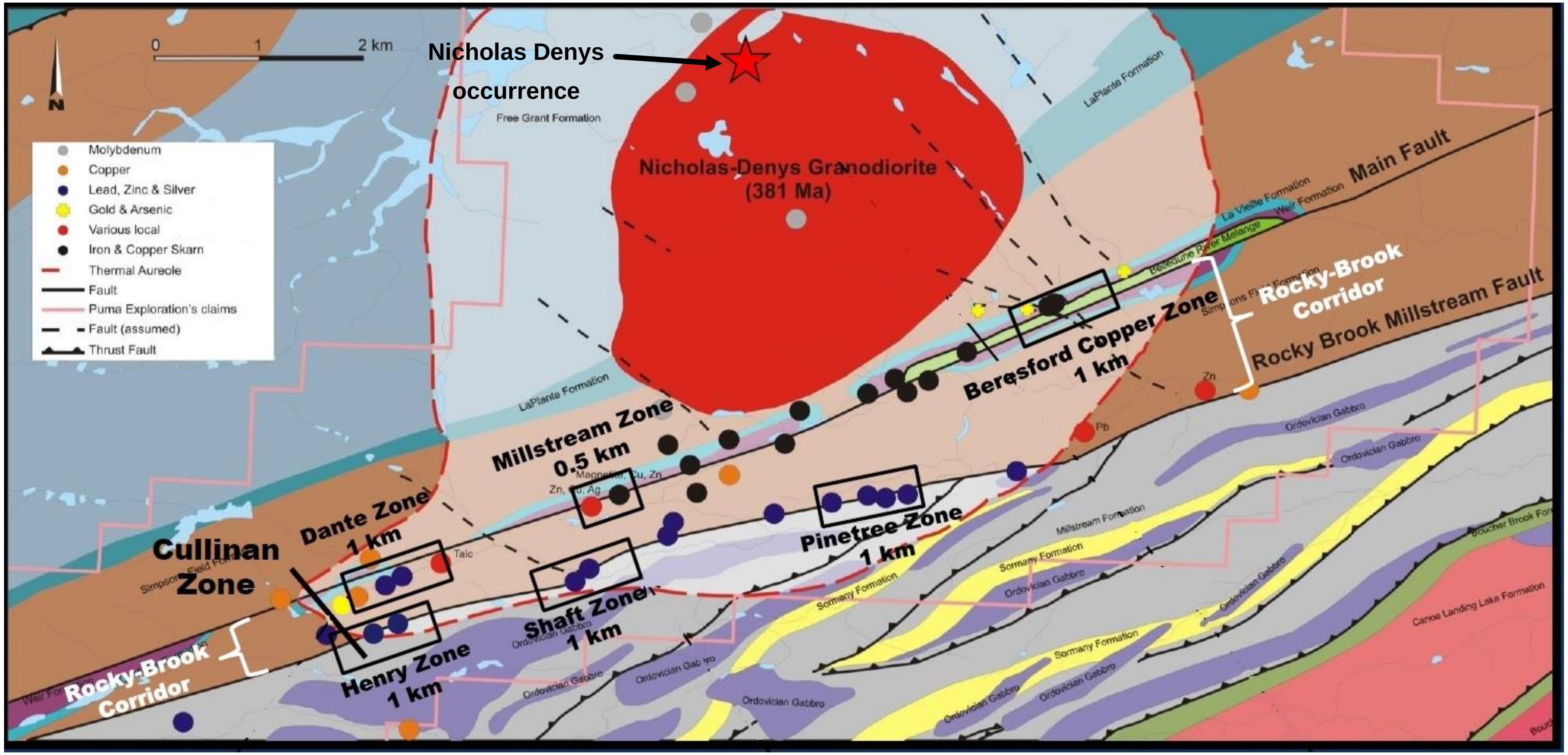
In 1970, an underground exploration program was completed in the Henry Zone by North American Rare Metals Ltd, producing a drift, a raise and an incline. The assayed material from the drift averaged 1.77% Pb, 1.47 % Zn, 0.03 oz/t Au and 4.15 oz/t Ag over 34 m. The assayed material from the raise averaged 4.19% Pb, 3.56% Zn, 0.073 oz/t Au and 11.75% Ag over 35 m. A second zone encountered in the decline, 63 m south of the main zone, returned grades of 2% Pb+Zn, 0.02 oz/t Au and 4 oz/t Ag over 21 m. Following a geophysical survey and a trenching program in 2011, Puma Exploration Inc. successfully discovered new mineralized zones to the east of Henry Zone (Henry East). This was followed by drilling in 2012. Drilling highlights include a 13 m intersection in DDH FH12-05 grading 0.90 g/t Au, 162 g/t Ag, 1.10% Pb and 1.38% Zn and a 3 m intersection in DDH FH12-10 grading 2.30 g/t Au, 187 g/t Ag, 1.46% Pb and 1.51 % Zn. Mineralization typically occurred in association with beds of siltstone or sandstone characterized by strong micro-folding with variably oriented foliation (possible kink folds). These rocks were cross-cut by fracture breccia and numerous multi-directional veins. This lithology hosts brecciated lenses and veins of sulphide mineralization.

The Millstream Zone is described as similar to the Henry Zone mineralization, except that it contains appreciable chalcopyrite and jamesonite (New Brunswick Natural Resources and Energy Development website, consulted May 7, 2021). The zone was discovered in 1958 by trenching that uncovered Pb-Zn-Sb-As vein mineralization. This was followed by the drilling of three (3) DDH in the mid-1960s, with hole No. 3 intersecting 50.8 oz/t Ag and 5.03% Zn over 0.3 m. More than 40 DDHs followed in the subsequent years until the early 1970s and later in the mid-1990s. These holes intersected sandstone, graphitic argillite, diabase, gabbro, grey porphyry, and diorite cut by numerous carbonate-sulphide veins. The mineral occurrence comprises two zones approximately 15.2 m apart, consisting of several east-trending veins of quartz-carbonate-pyrite-galena-sphalerite-jamesonite-arsenopyrite. The main vein in the zone dips 80°N and measures 427 m long. It has been drilled down to approximately 250 m in vertical depth and has an average width of 1.58 m. The average grade of the main vein is 4.5% Pb+Zn and 5.5 oz/t Ag. Additionally, hole 20 intersected 0.8 m grading 3.68% Sb.

7.4.3 Beresford Copper and Millstream Iron

The Beresford Copper (a.k.a. Beresford) and Millstream Iron zones occur within the contact metamorphic aureole of the Nicholas-Denys granodiorite intrusion and are located along the Main Break of the RBMF. Both mineralized zones are hosted by limestones of the Silurian La Vieille Formation belonging to the Chaleurs Group (Figure 7.11).

Both zones are similar geologically and mineralogically (New Brunswick Natural Resources and Energy Development website, consulted May 7, 2021*)*. Mineralization consists of magnetite-chalcopyrite-rich lenses that occur within a calc-silicate skarn zone. The magnetite lenses also contain pyrrhotite, and W, F, Sn and Mo were also reported at the Millstream Iron occurrence. The sulphide minerals occur in small irregular masses, veinlets and disseminations, cutting the magnetite-bearing bands forming the lenses. The magnetite lenses strike NE and dip steeply NW, generally conforming to the skarn band enclosing it.



Note: “Main Fault”: RBNF system Main Break; red star indicates the location of the Nicholas-Denys porphyry occurrence.

Figure 7.11 – Map showing the Beresford Copper and Millstream mineral occurrences within the contact metamorphic aureole (Source: September 18, 2014 Press Release, Puma Exploration Inc.; *in* SEDAR; consulted May 7, 2021)

Both occurrences have a lengthy exploration history. The last exploration drilling on the Beresford Copper occurrence was in 2007 (Puma Exploration Inc.) to test its Cu-Ag-Au potential and two geophysical anomalies. The best copper results were associated with skarn mineralization, grading 3.23% Cu over 25 cm in hole F07-01 and 1.53% Cu over 70 cm in hole F07-02. Drill holes also intersected late quartz-calcite-sulphide veins similar to those observed at the Lavigne's Brook and Stephen's Brook occurrences, located approximately 500 m west and 500 m, respectively, from Beresford Copper. The highlights from these veins include 213 g/t Ag over 1.05 m and 6.34% Zn over 45 cm in hole F07-01, and 8.38 g/t Au over 20 cm in hole F07-03. The assessment report concluded that Au-Ag-Zn vein mineralization was more promising than Cu-skarn mineralization (Baker, 2007).

The two mineralized lenses of the Millstream Iron occurrence are 274 m and 76 m long. The last exploration drilling took place during the 2007-2013 period (Puma Exploration Inc.). Three (3) DDH were drilled in 2007 to verify the style of mineralization at Millstream Iron and to evaluate the molybdenum content of the Cu-skarn mineralization. All three drill holes intersected Cu-skarn mineralization varying in thickness between 15 and 35 m. The best results occurred in hole F07-04 with a grade of 1.04% Cu over 9.75 m, which included a smaller zone of 2.05 m at 2.34% Cu. The best molybdenum results occurred in hole F07-05 (0.105% Mo over 0.75 m) and hole F07-06 (0.117% Mo over 0.9 m). In general, Cu and Mo mineralization did not appear to be related as the high-grade Cu and Mo zones did not overlap. In 2012, a single DDH was drilled, the objective being to test for the vertical extent of mineralization and to verify if mineralization is present near the Nicholas-Denys intrusion at depth. Best results include 0.18% Cu, 0.05 g/t Au, 249 ppm Mo and 90 ppm W over 94.8 m, which includes a 17.1 m interval grading 0.48% Cu, 0.14g/t Au, 74 ppm Mo and 23 ppm W. A high-grade interval of 3.3 m graded 1.07% Cu, 0.61g/t Au. This hole confirmed Cu-Fe skarn mineralization at depth, but no mineralization was found within the granodiorite in this hole. A single DDH was performed in 2013. This DDH was collared in peridotite and drilled to the northeast. In addition to several types of skarn alteration and granodiorite, this DDH intersected 94.8 m of 0.18% Cu, which included 17.1 m of 0.475% Cu.

7.4.4 Nicholas-Denys

The Nicholas-Denys (a.k.a. Nicholas-Denys 1) occurrence is hosted in the Nicholas-Denys intrusion near the northern contact with the Silurian sediments (Figure 7.11 and Figure 7.12). Molybdenum occurs in quartz veinlets (along fractures) as rosettes and disseminated flakes in the early Devonian granodiorite and Silurian cherty hornfels along the northern contact of the stock. The molybdenum is commonly associated with pyrite and chalcopyrite and locally with galena and sphalerite. Mineralization is the product of a hydrothermal system associated with the emplacement of the Nicholas-Denys Stock and feldspar porphyry dykes that intrude the host rock. The host rock is typified by hornfels argillite and occasional porcellanite (calcareous argillite) beds. A granodiorite dyke occurs as a matrix to brecciated hornfels. Scheelite (UV fluorescent) was found scattered in fractures and quartz veinlets. Porphyry dykes are also recorded in the historical (i.e., 1954-1968 period) drill logs, but this core is reportedly no longer available. Carbonate veinlets, particularly as matrix to crackle breccias, are post hornfels.

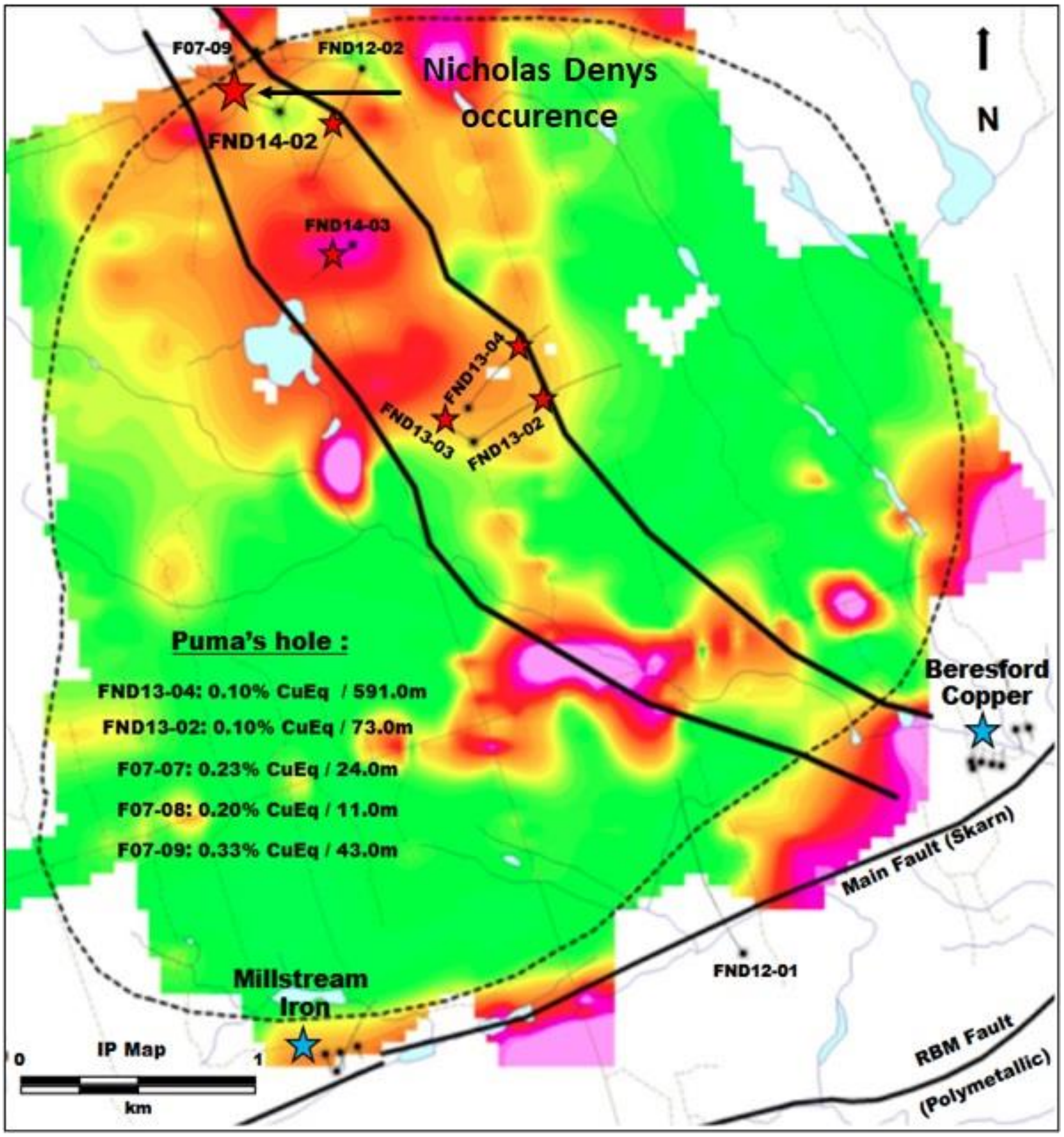


Figure 7.12 – Map showing the IP anomalies associated with the Nicholas-Denys mineral occurrence and interpreted porphyry system crosscutting the Nicholas-Denys granodiorite (Puma Exploration Inc corporate presentation).

The most recent exploration drilling was during the 2007-2014 period (Puma Exploration Inc.). Three (3) DDH were drilled in 2007 to confirm mineralization from historical drilling. All three holes intersected the same lithologies: hornfels and granodiorite. Mineralization was found in the granodiorite mainly associated with quartz veins centimetres to decimetres wide, but also disseminated in the host rock. Sulphide mineralogy consists of pyrite, pyrrhotite, chalcopyrite and molybdenite. Highlights include 24 m grading 0.037% Mo in hole F07-07, including an interval of 0.4 m grading 0.984% Mo, and 94 m grading 0.030% Mo in hole F07-09, including a 10.10 m interval grading 0.129% Mo. A single DDH was drilled in 2012, 726 m long and oriented southwest. It encountered anomalous zones of Cu-Mo mineralization as concentrations of multidirectional quartz veins crosscutting the granodiorite. In 2014, two DDH were drilled 200 m and 300 m to the south of this occurrence to test the vertical extent of Cu-Mo mineralization identified in previous trenching campaigns. Hole FND14-01 intersected 143.4 m grading 0.11 g/t Ag, 156 ppm Cu and 107 ppm Mo. Hole FND14-2 intersected 522.1 m grading 1.0 g/t Ag, 207 ppm Cu and 330 ppm Mo, including a 209.1 m interval grading 1.81 g/t Ag, 319 ppm Cu and 627 ppm Mo.

7.4.5 Pine Tree

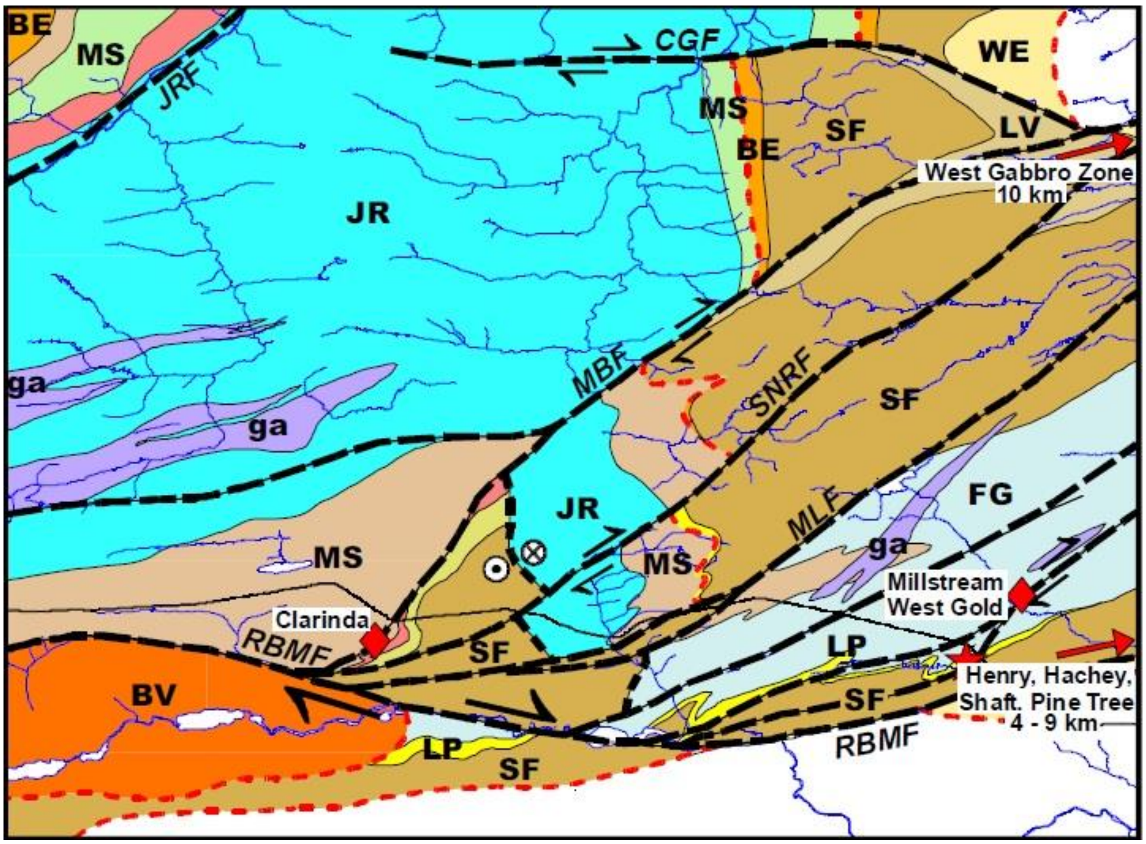
The Pine Tree occurrence (a.k.a. Rocky Brook) is located approximately 2.5 km east from the Hachey-Shaft occurrences along the South Branch of the RBMF (Figure 7.8 and Figure 7.11). Mineralization is hosted by three E-NE-striking lenses of quartz-calcite-Zn-Pb-Ag within a zone of disseminated pyrite and pyrrhotite approximately 180 m long and 45 m wide. The mineralization is considered similar to the Hachey and Shaft deposits located to the west. Mineralization occurs in Ordovician Fournier Group metasediments to the south of the southern branch of the RBMF. Devonian feldspar porphyry dykes intrude the host sequence. Part of the mineralization lies along the porphyry-sediment contact. The porphyry dykes intruded NW-trending fractures, which locally offset E-NE-trending faults. Mineralization in the 1960s period was defined over 213 m along trend, a width of 3.5 m and to a vertical depth of 40 m. One of the better intersections graded 6.36% Pb, 2.49% Zn, 6.15 oz/t Ag and 0.01 oz/t Au over 0.9 m. Exploration drilling was more recently conducted in 2005 and 2009 (Puma Exploration Inc.). Drilling confirmed that mineralization extends to a depth of 150 m. Other highlights include 4.4% Pb, 5.3% Zn and 103.9 g/t Ag over 0.8 m in hole F05-06 and 3.8% Pb, 3.8% Zn and 89.6 g/t Ag over 8 m in hole F05-08.

7.4.6 Millstream West Gold

The Millstream West Gold (a.k.a. Millstream West Gold-A) showing is located to the north of the RBMF and approximately 6 km west of the Hachey-Shaft occurrences (Figure 7.8 and Figure 7.13). Sixteen (16) DDH were drilled in the mid to late 1980s following the discovery of a locally derived quartz-ankerite boulder that assayed 0.2 oz/t Au and an As-in-soil anomaly coincident with a geophysical anomaly. Several holes intersected significant gold mineralization in altered siltstone and diabase, centred on the contacts of the dyke, the best intersection being 0.32 oz/t Au over 1.5 m. Gold occurs in fine felty to massive arsenopyrite associated with quartz-carbonate veins and pervasive alteration in Silurian sedimentary rocks of the Free Grant Formation adjacent to and within narrow dykes of diabase to fine-grained gabbro. Dykes are locally foliated. The length of the diabase has been estimated at approximately 365 m. The style of veining is still a matter of conjecture, but early indications are that the veins form a ladder-like pattern within the dyke, and locally in the wall rock, that has undergone limited deformation (shearing) to produce a curved (sigmoidal) pattern indicating structural control of the mineralization.

7.4.7 Clarinda

The Clarinda mineral occurrence is located approximately 16 km west of the Hachey-Shaft occurrences (Figure 7.8 and Figure 7.13), near the Project's western boundary. Clarinda lies in a fault-bound wedge with the east-trending RBMF system to the south. It is underlain by the Silurian Chaleurs Group at or near the northeast-trending contact with the Lower Devonian Dalhousie Group. The Chaleur Group units in the area comprise sediments and felsic volcanics. The felsic volcanics (Benjamin Formation, Dalhousie Group) are characterized by pink to locally black, chloritized feldspar-phyric rhyolites (Brown, 2010). This sequence is intruded by mafic dykes. Gold occurs in quartz veins and pyritic zones hosted by carbonate-altered sediment, rhyolite and gabbro. Gold grades are up to 15.8 g/t in outcrop. Soil anomalies assay up to 0.3 g/t Au and 1.8 g/t As. Gold values were detected over a strike length of 600 m with anomalous arsenic over 700 m. Up to 15 DDH were conducted on the occurrence. Anomalous gold was detected in several of the drill holes: CL00-3 returned 0.674 g/t Au over 17.1 m, CL00-7 returned 0.43 g/t Au over 11.5 m, CL00-9 returned 0.626 g/t Au over 10.7 m, CL00-11 returned 0.304 g/t Au over 5.5 m, and CL00-15 returned 3.097 g/t Au over 2 m. Some shorter intervals contain grades of up to 8 g/t Au.



Note: Ordovician rocks to the south and north are uncoloured. From oldest to youngest, the Silurian Chaleur Group consist of the Weir (WE), La Vieille (LV), Simpson Field (SF), La Plante (LP) and Free Grant (FG) formations. The Dalhousie Group conformably overlies the Chaleur Group and consist of the Mitchell Settlement (MS) and overlying Jacquet River (JR) formations. Numerous dextral strike-slip faults are present: the Rocky Brook-Millstream fault (RBMF), the Melanson Brook fault (MBF), the South Branch Nigadoo River Fault (SNRF), the Millstream Lake fault (MLF). Red dashes are unconformities. Mafic dykes (i.e., gabbro: ga) are also present in the area.

Figure 7.13 – Simplified map showing the location of the Millstream West Gold and Clarinda occurrences with respect to major lithological units and structures (Wilson, 2008)

8. DEPOSIT TYPES

The mineral occurrences on the various claim blocks of the Project share many characteristics with the following deposit types: silver-lead-zinc veins, sedimentary exhalative (SEDEX) deposits, skarn deposits and porphyry deposits.

8.1 Silver-Lead-Zinc Veins

Several occurrences in the Project area (e.g., Nigadoo and Cullinan; Deakin, 2011) have been classified as silver-lead-zinc veins (Figure 7.7). Information on this section was sourced from Turcotte and Pelletier (2008).

Silver-lead-zinc vein districts are commonly associated with major fault zones in clastic sedimentary terranes; individual veins occur in a variety of lithologies ranging in age from Proterozoic to Cenozoic. Silver-lead-zinc veins are a late feature in the tectonic evolution of orogens. Descriptive models for silver-lead-zinc veins in clastic metasedimentary terranes are given by Beaudoin and Sangster (1992) and Beaudoin and Sangster (1996) by comparing several mineralized districts. These comparative studies consisted of selected geologic features from six (6) classic districts: the Kokanee Range and Keno Hill, Canada; Coeur d'Alène, United States; Freiberg and the Harz Mountains, Germany; and Pribram, Czechoslovakia (Figure 8.1).

Silver-lead-zinc veins occur in clastic metasedimentary terranes, in contrast to epithermal veins which occur in volcanic terranes. Volcanic-hosted epithermal veins are also characterized by an Au-rich metal association, a shallow depth of emplacement, and regional alteration. Silver-lead-zinc veins are commonly spatially associated with granitic intrusions but not those related to porphyry-Cu mineralization. Although limestone replacement has occurred in some silver-lead-zinc vein districts, the morphology and mineralogy of silver-lead-zinc veins allow them to be distinguished from mantos, skarns, etc., even though the same metal assemblages may be present.

Traditionally, silver-lead-zinc veins have been genetically related to the intrusion of granitic plutons or batholiths. Little attention, however, has been directed to the sedimentary rocks hosting most of the veins. These rocks are typically thick and monotonous sequences dominated by fine- to medium-grained clastic rocks and minor carbonate, mafic volcanic and tuff units. Another common feature is that these sedimentary rocks have been metamorphosed to the greenschist facies or higher. The sedimentary basins containing the host sequences are part of Pb-Zn metallogenic provinces that typically contain large, sediment-hosted and commonly sedimentary exhalative massive sulphide deposits.

The granite intrusions spatially associated with silver-lead-zinc veins have diverse characteristics. The intrusions host veins (Kokanee Range, Pribram), some have been contact-metamorphosed veins (Coeur d'Alène), and others are remote from the vein district (Keno Hill, Freiberg, Harz Mountains). The intrusions range from small, zoned monzonite to syenite plutons to large and complex dioritic to granitic batholiths; a layered tholeiitic intrusion is reported in the Harz Mountains. Some plutons intruded fault zones after deformation had ceased (Keno Hill, Pribram), whereas others were dismantled by later fault movements (Coeur d'Alène).

Alteration associated with silver-lead-zinc veins is typically restricted to the vicinity of the veins and extends as much as several metres into the wall rocks. Alteration is commonly phyllic, characterized by sericitization, silicification and pyritization of the wall rocks.

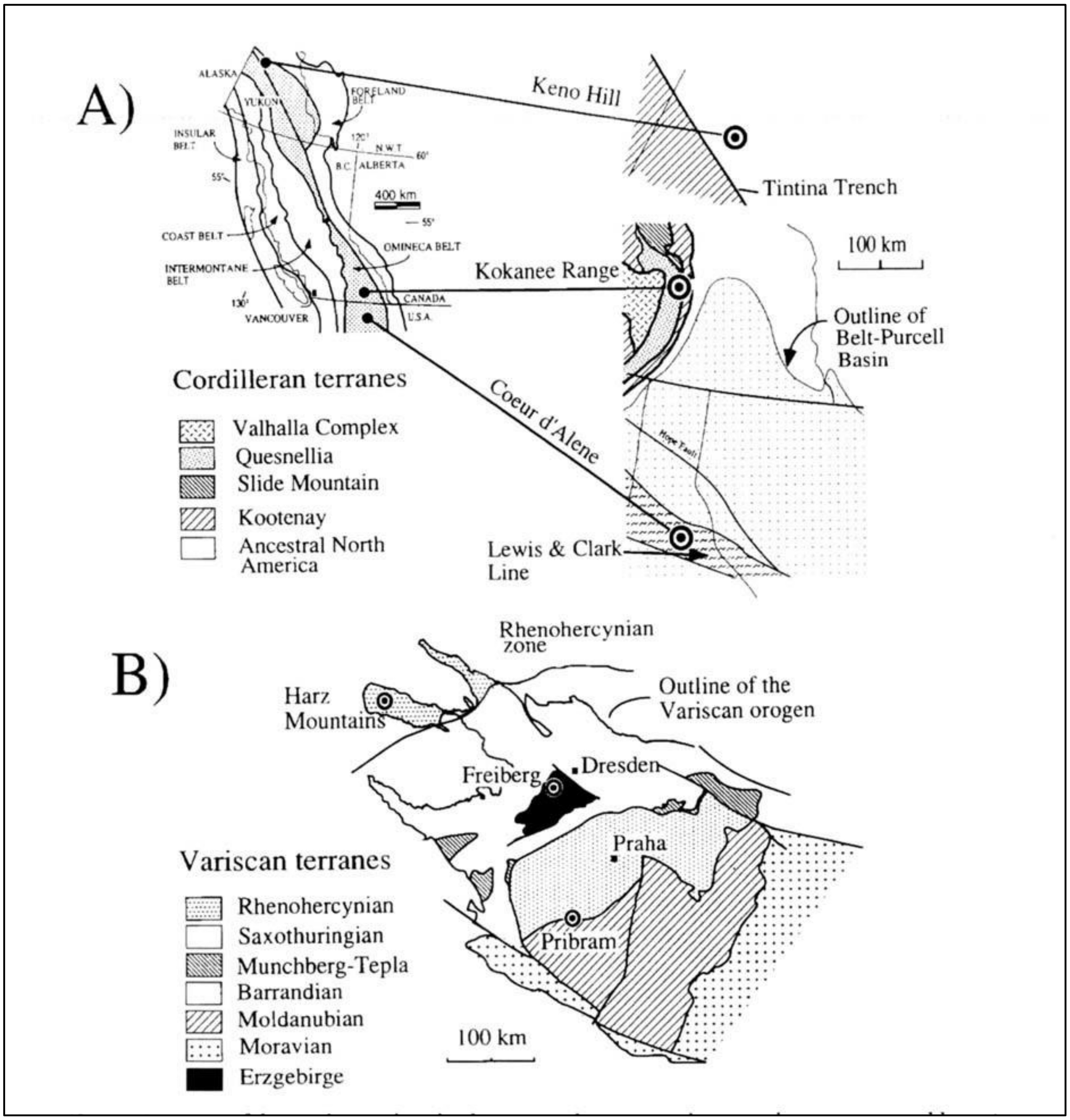


Figure 8.1 – Location of the six classics silver-lead-zinc vein districts in relation to terrane assemblage. A: Cordilleran orogen of North America. B: Variscan orogen of Europe (From Beaudoin and Sangster, 1992)

The classic silver-lead-zinc vein districts are found in two orogens: the Cordilleran orogen of North America and the Variscan orogen of Europe. The vein districts are in sedimentary basins dominated by clastic rocks that were deformed, metamorphosed, and intruded by igneous rocks. The silver-lead-zinc veins formed late in the tectonic evolution. The Kokanee Range is in the upper plate of the Valhalla metamorphic core complex, which was unroofed during the Eocene extension of the Cordilleran Orogen.

The Erzgebirge gneiss hosting the Freiberg district forms the lower plate of a low-angle extensional shear zone with veins occurring in a conjugate set of shear and tension fractures cutting a gneissic dome. Mineralization in the Pribram district is in structures subsidiary to the Central Bohemian shear zone and a major, dextral transpression fault zone at the boundary between the Barrandian and Moldanudian terranes.

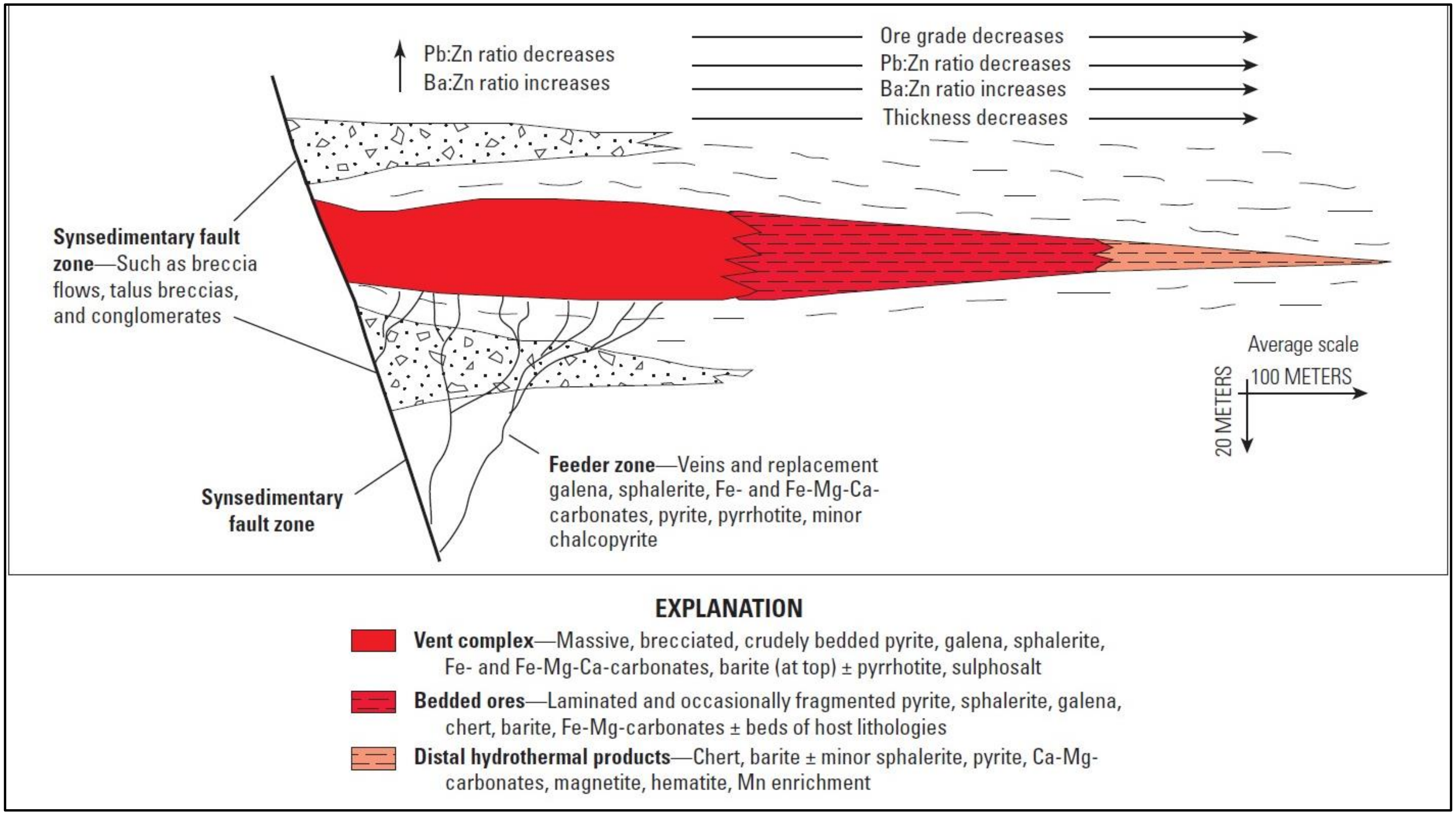
8.2 Sedimentary Exhalative Deposits (SEDEX)

A Master's thesis (Deakin, 2011) classified the Hachey, Shaft, Pine Tree and Henry sulphides lenses as compatible with sedimentary exhalative (SEDEX) mineralization based on the conformable nature of the sulphide lenses, the pre-deformation timing of the mineralization, sulphur isotopes studies suggesting the reduction of sulphur in anoxic conditions and the mineralizing fluid characteristics favourable to the precipitation of pyrrhotite. Most information presented in this section was obtained from Emsbo et al. (2010).

SEDEX Zn-Pb-Ag deposits are hosted by marine sedimentary rocks of intracratonic or epicratonic rift basins. Host rocks are carbonaceous shales, siltstones, and (or) carbonates of basin sag-phase sequences that were deposited on thick rift-fill sequences of sandstones, siltstones, conglomerates, red beds, and mafic or felsic volcanic rocks. Most deposits show no association with intrusive rocks.

Orebodies are generally tabular or stratiform and are localized in smaller fault-controlled subbasins near the margins of major depocenters and outboard of shallow-water carbonate platforms margins (Figure 8.2). Laminated or bedded sulphide ores in carbonaceous, pyritic, fine-grained shales and siltstones are characteristic of this deposit type. The principal ore minerals, sphalerite and galena, precipitated on or just below the sea floor from warm, saline basin brines (approx. 100–200°C and 17–30% total dissolved solids) that ascended along basin-controlling syn-sedimentary faults.

The metals were deposited and sequestered by the precipitation of sulphide minerals as a consequence of mixing of the metal-transporting brine, and the hydrogen sulphide (H_2S) produced locally by the bacterial, and perhaps thermochemical, reduction of local seawater sulphate.



Note: Fe, iron; Mg, magnesium; Ca, calcium; Pb, lead; Zn, zinc; Ba, barium; Mn, manganese

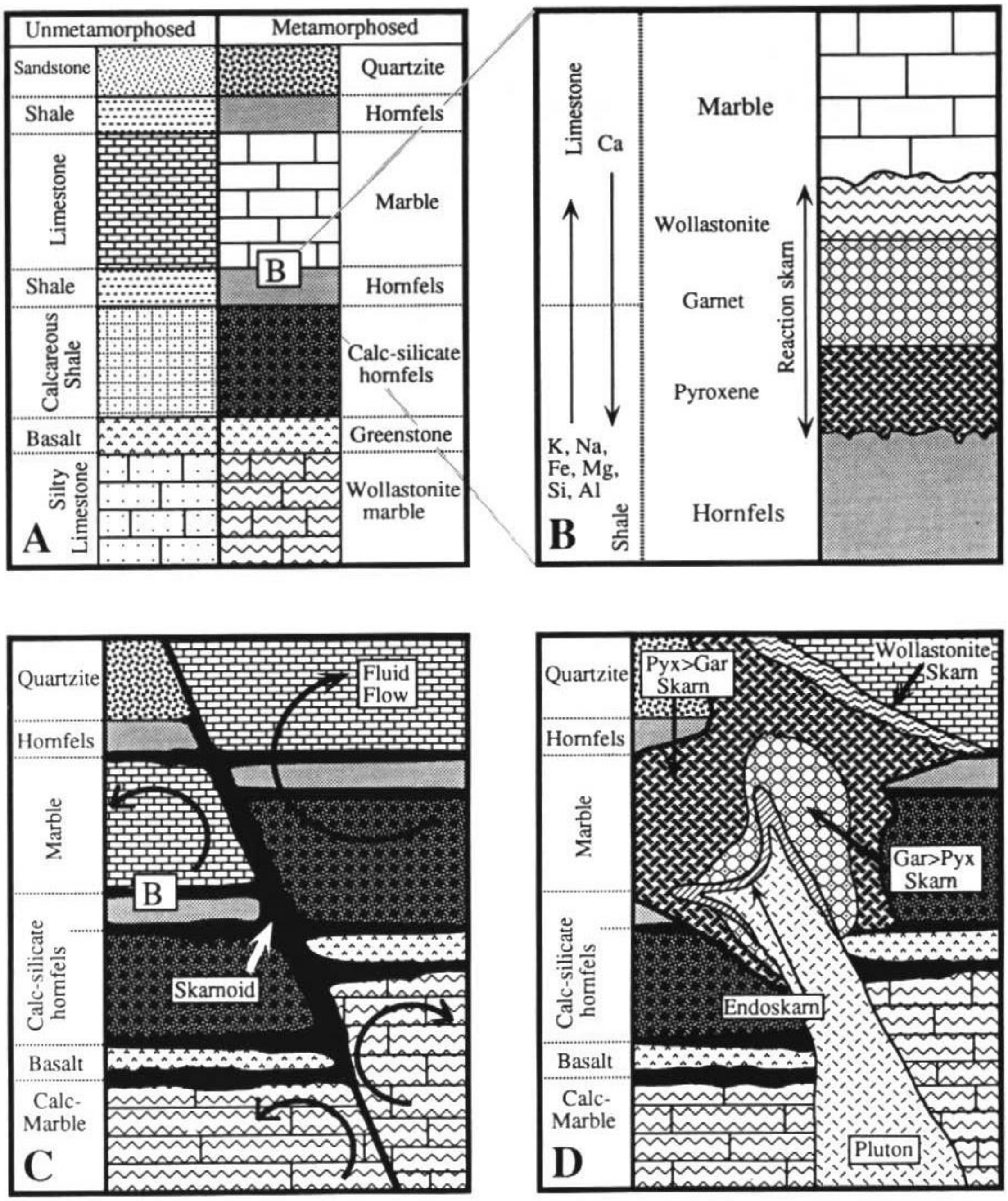
Figure 8.2 – Cross section showing morphology and distribution of ore types and mineralogic and geochemical zoning through an idealized sedex deposit (from Emsbo et al., 2010)

8.3 Skarn

Mineralization of the Beresford Copper and Millstream Iron occurrences are considered to be skarn-type mineralization.

Skarns deposits are formed by the replacement of carbonate-bearing rocks during regional or contact metamorphism and metasomatism (Corbett and Leach, 1998), in response to the emplacement of intrusions of varying compositions (Figure 8.3 and Figure 8.4). Skarns can be regarded as a specific type of Ca-Fe-Mg-Mn silicate alteration within a porphyry environment. Exoskarn and endoskarn describe deposits derived from sedimentary and igneous/intrusion protoliths, respectively. Calcic skarns form by replacing limestone and producing Ca-rich alteration products such as garnets (grossular-andradite), clinopyroxene (diopside-hedenbergite), vesuvianite, and wollastonite. Magnesian skarns form by replacing dolomite and producing Mg-rich alteration minerals such as diopside, forsterite, and phlogopite. Magnetite is common in magnesian skarns because the Mg-rich silicates do not take up iron. Skarns typically display complex mineral assemblages and are polyphase.

Early high-temperature alteration is typified by assemblages of anhydrous silicates and iron oxides (prograde phase). These are overprinted by later hydrous silicates and sulphides that formed at lower temperatures (retrograde phase). Spatial mineralogical zonations are related to both the lateral and vertical distance from the intrusion (i.e., to chemical potential and temperature gradients) and at depth (i.e., to these gradients plus pressure; Meinert, 1992). Based on the dominant economic metals, seven skarn types have been identified: Cu, Au, Pb-Zn, Fe, Mo, Sn and W. Copper skarns are typically dominated by andradite (Fe-rich) garnet grading into pyroxene and vesuvianite or wollastonite. Chalcopyrite dominates the mineralization close to the intrusion, whereas bornite occurs in the more distal wollastonite zone. Gold skarns are associated with diorite-granodiorite intrusions, arsenopyrite and pyrrhotite are the main sulphide minerals, however, Au mineralization as electrum may occur associated with bismuth and telluride minerals. Gold skarns can form distal from intrusions and may display similarities to low-sulphidation quartz-sulphide gold ± copper deposits.



Note: A – Isochemical metamorphism involves recrystallisation and changes in mineral stability without significant mass transfer; B – Reaction Skarn results from metamorphism of interlayered lithologies, such as shale and limestone, with mass transfer between layers on a small scale (bimetamorphism); C – Skarnoid results from metamorphism of impure lithologies with some mass transfer by small scale fluid movement; D – Fluid-controlled metasomatic skarn typically is coarse grained and does not closely reflect the composition or texture of the protolith.

Figure 8.3 – Types of skarn formation (Meinert, 1992)

8.4 Porphyry

Mineralization at the Nicholas-Denys occurrences is considered to be porphyry-style.

Porphyry copper deposits are large tonnage, low- to medium-grade deposits, with primary (hypogene) mineralization that is structurally controlled and spatially and genetically related to felsic to intermediate porphyritic intrusions (Sillitoe, 2010; Figure 8.4). Porphyry deposits occur in island arc and continental margins associated with the magmatic arc migration during subduction. The porphyry systems occur as clusters and alignments as well as in isolation. The deposits form in the upper 4 km or so of the crust associated with magmatic centres emplaced deeper, in the 5 to 15 km range. Intrusions, dike swarms and associated mineralization of the porphyry system stretch vertically over >3 km. The deposits are formed by magmatic-hydrothermal fluids with sulphide and oxide minerals precipitated from saline aqueous solutions at elevated temperatures. The interaction of hydrothermal fluids with the host rock causes widespread alteration and results in a characteristic zonation.

The alteration-mineralization in porphyry deposits is zoned outward from the intrusion as follows:

- Potassic Alteration Zone, the inner mineralized core, characterized by potassium feldspar and/or biotite;
- Phyllic Alteration Zone, characterized by sericite and chlorite-sericite;
- Argillic Alteration Zone, an area of clay alteration that can attain >1 km thick if unaffected by significant erosion;
- Propylitic Alteration Zone, the outermost alteration zone, dominated by chlorite and epidote, may extend several kilometres outwards.

If preserved, the argillic alteration zone above porphyry systems is called a lithocap. Subdivisions of porphyry deposits can be made based on their metal contents, mainly ratios between Cu, Mo and Au (Ag), to define them as Au, Cu (Mo-Au), Mo (Cu), W-Mo and Sn deposits (Seedorff et al., 2005). In the mineralized zone, the so-called disseminated ore is, in fact, an array of narrow, closely spaced veins (hydrofractures) or stockwork. Metal zoning is also characteristic of porphyry systems; Cu ± Mo ± Au cores have typically km-scale halos with anomalous Zn, Pb, Ag ± Mn in the outermost areas. In copper porphyry deposits, bornite is more common in the potassic zone rather than chalcopyrite, which is more abundant in the phyllic zone. In Au-rich Cu porphyry deposits, the Au tends to be associated in solid solution with bornite. Mo correlates less well than Au with Cu in Cu-Au porphyry systems. Mo tends to concentrate outside the Cu-Au cores. Lead, zinc and silver are more common in the propylitic alteration zone. Typical hypogene porphyry Cu deposits have average grades of 0.5 to 1.5% Cu, <0.01 to 0.04% Mo, and traces to 1.5 g/t Au, although a few "Au only" deposits have Au grades of 0.9 to 1.5 g/t Au, but little Cu (<0.1%).

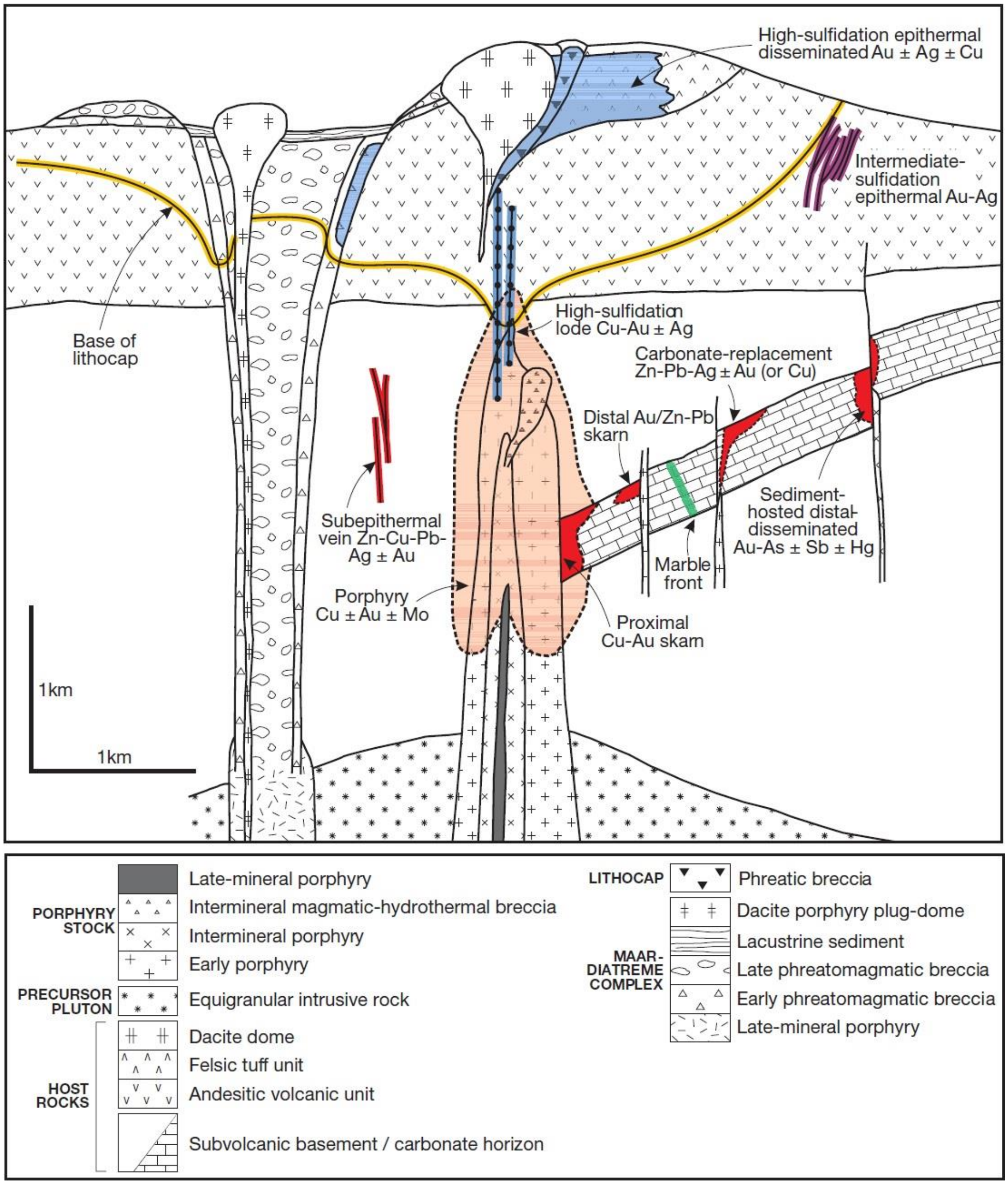


Figure 8.4 – Schematic model of a telescoped porphyry Cu system showing spatial interrelationships of a centrally located porphyry Cu ± Au ± Mo deposit in a multiphase porphyry stock (Sillitoe, 2010)

9. EXPLORATION

Not applicable at the current stage of the Project.

10. DRILLING

Not applicable at the current stage of the Project.

11. SAMPLE PREPARATION, ANALYSES AND SECURITY

Not applicable at the current stage of the Project.

12. DATA VERIFICATION

This item covers the data verification completed by Doug Clark (P.Geo.), consisting of a site visit that included a collar location verification, a review of selected drill core, independent sampling and database validation (including collar, downhole survey and assay data from the issuer's DDH).

12.1 Site Visit

The author visited the Project in early May 2021. The site visit focused on the Hachey Zone stripping and drilling. The site data verification included a general visual inspection of the Project, a review of drill collar location coordinates and a visual assessment of access roads.

The majority of the Puma Exploration Inc. drill core is now stored at the Department of Natural Resources ("DNR") Core Library in Madran, New Brunswick. At the core library, the author examined selected mineralized core intervals and reviewed the QA/QC program, the downhole survey data, and the descriptions of lithologies, alteration and mineralization. The author also performed independent check assays on selected intercepts, which were sawn into quarters by the author's contractor.

12.2 Core Review

The core boxes are stored on pallets outside the DNR Core Library in Madran, New Brunswick. They are in reasonably good order and properly labelled with aluminum tags indicating the DDH number and the from-to depths. The sample tags were present, and the wooden blocks placed at the beginning and end of each drill run were still in the boxes, and they matched the indicated footage on each box. The author validated the sample numbers and confirmed the presence of mineralization in the referenced half-core samples.

The author selected representative mineralized intervals and collected 9 samples for independent assaying from drill hole FHA12-01 (36.4-43.1 m). The samples are ¼ sawn by the author's contractor. The samples were placed in plastic bags and sealed in a plastic pail for transport to the independent assaying laboratory. Purolator Courier transported the samples to Activation Laboratories Ltd ("Actlabs") in Fredericton, New Brunswick.

The results of the independent re-assaying are pending, but the amount of mineralization present in the core seems to correspond with the original assay results (i.e., % sphalerite, galena, etc.) The author believes the field duplicates from the independent resampling program are reliable and consistent with the database.

12.3 Databases

12.3.1 Drill hole locations

Locating historical drill collars focused on the Hachey Zone. Most drill collars were labelled with aluminum tags and affixed to the casing by plastic pull ties. Three collars were found (F07-13, FHA12-01 and FHA12-04). The coordinates for the collars were within the +/- error of the Garmin Rino530HCx GPS used by the author (Figure 12.1) and corresponded to the information in the database.

Figure 12.1 – Collar location FHA12-01

The collar locations in the Project database are considered adequate and reliable.

12.3.2 Downhole surveys

Downhole surveys were conducted in most of the holes using a Reflex instrument. The downhole survey information is assumed to be accurate.

12.3.3 Assays

The author did not have access to the original certificates of assay but did have access to assay data filed in the appendices of various reports. These assay data appear to be from the original assay spreadsheets provided by the labs.

The final database is considered to be of good overall quality.

12.4 Conclusions

The author is of the opinion that the data verification process demonstrates the validity of the data and the protocols for the Project. The author considers the database for the Project to be valid and of sufficient quality.

13. MINERAL PROCESSING AND METALLURGICAL TESTING

The information presented in this item is based on Turcotte and Pelletier (2008). Other references are duly indicated where applicable.

One (1) metallurgical test was completed on mineralized material from the Hachey Zone. The test was conducted by SGS Lakefield Limited in the fall of 2007 (Marion et al., 2007; Lascelles and Unger, 2007a; and Lascelles and Unger, 2007b). The material has not been subjected to mineral processing.

13.1 Sample Preparation

On June 20, 2007, two rice bags containing samples weighing 30 kg were received at the SGS Lakefield site from Puma Exploration. A total of 24.9 metres of mineralized core were combined into one representative and homogeneous composite sample. The composite came from four (4) diamond drill holes on the Hachey Zone (Table 13.1).

Table 13.1 – Hachey composite

Holes	From (m)	To (m)	Length (m)	Au (g/t)	Ag (g/t)	Pb (%)	Zn (%)
F07-15	62.1	65.1	3.0	0.27	64	1.1	2.3
F07-15	70.9	75.1	4.2	6.20	1232	5.9	8.7
F07-16	46.0	55.2	9.2	1.45	247	3.0	3.9
F07-18	28.5	33.0	4.5	1.80	222	1.9	6.2
F07-20	39.0	43.0	4.0	0.26	87	1.6	4.0

The contents of the two bags forming the Hachey composite were crushed to minus 6 mesh and blended. A subsample was removed for the grindability test work; the remainder of the composite was crushed to minus 10 mesh and blended. A sample was removed for mineralogical characterization, and a second sample removed for standard chemical characterization. The remainder of the composite was rotary split into 1-kg charges. All material was stored in a freezer to prevent oxidation.

13.2 Sample Characterization

Head samples were submitted for analysis using standard chemical techniques. The returned assays were 3.67% Pb, 6.04% Zn, 2.20 g/t Au and 460 g/t Ag. The full table of assays can be found in Table 13.2.

Table 13.2 – Hachey composite head assays

Assays	Hachey Composite	Assays	Hachey Composite	Assays	Hachey Composite
Al (ppm)	33,000	Li (ppm)	< 5	Ti (ppm)	1,600
As (ppm)	11,000	Mg (ppm)	12,000	Tl (ppm)	< 30
Ba (ppm)	200	Mn (ppm)	2,700	U (ppm)	< 40

Assays	Hachey Composite	Assays	Hachey Composite	Assays	Hachey Composite
Be (ppm)	0.77	Mo (ppm)	< 10	V (ppm)	110
Bi (ppm)	< 20	Na (ppm)	3,100	Y (ppm)	10
Ca (ppm)	22,000	Ni (ppm)	49	Pb (%)	3.67
Co (ppm)	15	P (ppm)	360	Zn (%)	6.04
Cr (ppm)	43	Sb (ppm)	470	Au (ppm)	2.2
Cu (ppm)	630	Se (ppm)	< 30	Ag (ppm)	460
Fe (ppm)	180,000	Sn (ppm)	130	Cd (%)	0.0807
K (ppm)	14,000	Sr (ppm)	64	In (%)	0.003

The sample characterization of the Hachey composite carried out by SGS Lakefield Ltd indicated the presence of arsenic, antimony and cadmium. The concentrations of these elements may exceed smelter penalty levels.

13.3 Mineral Characterization

High-definition mineralogy was performed on the Hachey composite sample using QEMSCANTM technology. Galena and sphalerite were the main pay minerals, with pyrrhotite accounting for the largest percentage of the sulphide gangue. Pyrite and arsenopyrite were also present. The non-sulphide minerals were mainly quartz, feldspars, micas, chlorites, carbonates and amphiboles.

The mineralogical analysis revealed that 85% of the galena and 88% of the sphalerite occurred as free particles at 77 µm. The non-liberated galena was chiefly associated with sphalerite and arsenopyrite, though binary particles of galena and pyrite were also found. Non-liberated sphalerite was chiefly associated with pyrrhotite. Complex particles of sphalerite with pyrite and galena were also found.

The theoretical grade-recovery analysis indicates that 85.9% Pb grade may be achieved with 75% recovery in the overall sample. Similarly, 62.8% Zn grade may be achieved at 83.8% Zn recovery in the overall sample. This does not include mechanical effects, such as entrainment, that may occur during the selected metallurgical process. Flotation chemistry will also affect the true grades and recoveries. A substantial increase in sphalerite liberation may be observed with a more finely ground target. This may be achieved by the use of a regrind circuit in the metallurgical flow sheet. Improvements in galena liberation may also be achieved through the use of a regrind.

13.4 Grindability Testwork

A Bond Ball Mill grindability test was performed on the Hachey composite. The test was conducted with a closing size of 400 mesh (-37 µm). The Hachey composite had a Bond Work Index of 17.5 kWh/t, making it medium-hard in comparison to all samples in the SGS Lakefield Ltd database.

13.5 Rougher Flotation Tests

Rougher kinetics tests were conducted on the Hachey composite to examine the effect of the primary grind. The test conducted at the initial coarse grind of 80% passing 77 µm showed equivalent or higher Pb and Zn recovery than when finer grinding (75 µm and 69 µm) was used. Finer grinding improved Au recovery. Silver recovery was approximately equivalent in all tests (77 µm, 75 µm and 69 µm). Based on these test results, the coarsest grind of 77 µm was selected for a primary grind.

13.6 Cleaner Flotation Tests

The potential for cleaning the Pb and Zn rougher concentrates was explored in the next three flotation tests. The variables explored were pH in the Pb and Zn cleaning circuits, and the regrind size of the Pb cleaner.

Preliminary cleaner tests indicated that a Pb concentrate grade of 68.4% Pb could be achieved at 88.6% Pb recovery with a 20 µm regrind. Zinc concentrate grades of 49.8% Zn at 84.1% Zn recovery could be achieved with a 30 µm regrind using a flotation pH of 11.5 or greater. Gold and silver recoveries were 67.6% and 74.8%, respectively, for the corresponding final Pb cleaner concentrate. These concentrate grades and recoveries will likely improve with flow sheet optimization.

14. MINERAL RESOURCE ESTIMATES

Not applicable at the current stage of the Project.

15. MINERAL RESERVE ESTIMATES

Not applicable at the current stage of the Project.

16. MINING METHODS

Not applicable at the current stage of the Project.

17. RECOVERY METHODS

Not applicable at the current stage of the Project.

18. PROJECT INFRASTRUCTURE

Not applicable at the current stage of the Project.

19. MARKET STUDIES AND CONTRACTS

Not applicable at the current stage of the Project.

20. ENVIRONMENTAL STUDIES, PERMITTING, AND SOCIAL OR COMMUNITY IMPACT

Not applicable at the current stage of the Project.

21. CAPITAL AND OPERATING COSTS

Not applicable at the current stage of the Project.

22. ECONOMIC ANALYSIS

Not applicable at the current stage of the Project.

23. ADJACENT PROPERTIES

As at the effective date of this Technical Report, the online GeoNB claims database shows several claim blocks under different ownerships around the Property (Figure 23.1). The information on these adjacent properties obtained from the public domain has not been verified by InnovExplo. At the time of writing, the authors are not aware of any active exploration activities in the immediate area of the Property that would be relevant to this Technical Report.

Table 23.1 presents a summary of the mineral occurrences on the adjacent properties.

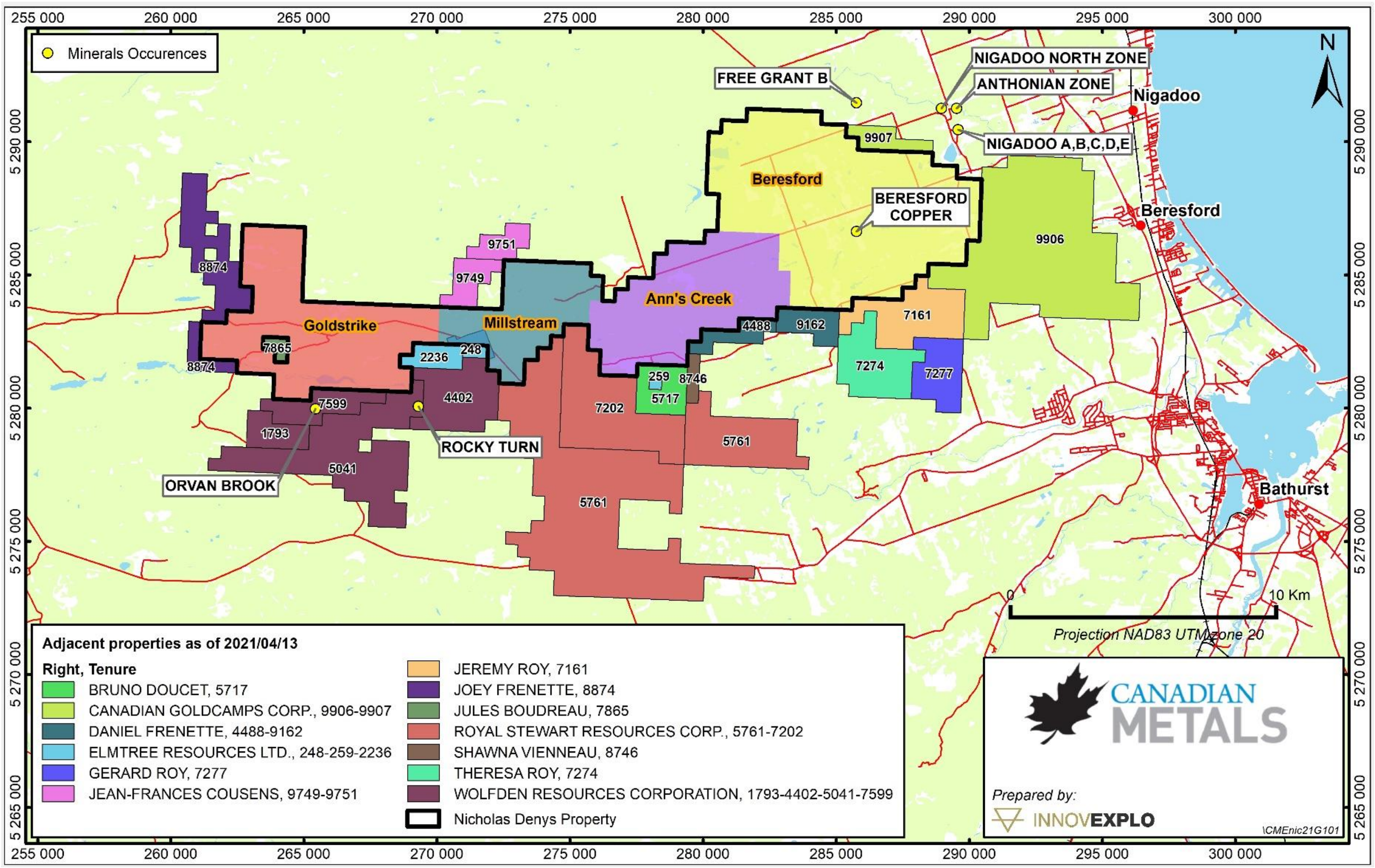


Figure 23.1 – Map of properties adjacent to the Nicholas - Denys Project

Table 23.1 – Mineral occurrences in adjacent properties

Mineralized Occurrence	Mineralization	Comments (GeoNB)
Anthonian Zone (a.k.a. Nigadoo No. 2)	Cu-Pb-Ag-Zn	Mineralized occurrence discovered by Anthonian Mining Corp. in 1953. The deposit consists of a system of steeply dipping veins striking NW and N-S. The veins cut Silurian argillite and greywacke, and an intrusive pipe of Devonian quartz-feldspar porphyry. Reserves have been calculated at 200,000 tons grading 0.23% Cu, 2.88% Pb, 2.84% Zn and 3.67 oz/t Ag (1960?) and 250,000 tons grading 0.15% Cu, 3.67% Pb, 3.36% Zn and 3.51 oz/t Ag (Mackenzie, 1986).
Free Grant B	Sb-Cu-Pb-Ag-Zn	Mineralized occurrence discovered following geochemical and geophysical surveys, Acadia Mineral Ventures Ltd in 1988. Drilled 4 holes (2, 4-6), 2 of which (holes 2 and 5) intersected base metal-bearing veins (Mann, 1988b-923). Galena, sphalerite and pyrite-pyrrhotite and minor chalcopyrite occur in quartz-carbonate veinlets cutting Silurian siltstone and greywacke within the metamorphic aureole of the Nicholas-Denys granodiorite. The best intersection is 3.45 ft (1.05 m) of 1.98 oz/t Ag, 5.28% Pb, 2.53% Zn and 413 ppm Sb in hole No. 5.
Nigadoo A,B,C,D,E (a.k.a. Nigadoo River Mine)	Sb-As-Bi-Cd-Cu-Au-In-Pb-Ag-Sn-Zn	Mineralized occurrence discovered by Anthonian Mining Corp. in 1953. Past producer, >1,000 t. This is occurrence No. 36 of Davies et al. (1969-879). Series of narrow, steeply-dipping veins consisting of massive coarse-grained sulphides with minor calcite and quartz. The deposit comprises 5 zones (A-E) that occur along NW- and N-striking faults that cut Silurian argillite and greywacke and Devonian quartz-feldspar porphyry. Only the A and C zones have been mined. In July 1964, Nigadoo Mines Ltd was reorganized and renamed Nigadoo River Mines. Controlling interest was acquired by the Sullivan Mining Group. Drilling resumed and the shaft dewatered in 1964. The reserve estimate at the time (non-compliant with NI 43-101) was 1,390,000 tons grading 4.36 oz/t Ag, 2.97% Pb, 2.77% Zn and 0.34% Cu across 6.8 ft (2 m). The shaft was deepened to 1756 ft (535 m) in 1965 and 12 levels to a depth of 1550 ft (472 m) were established (included levels at 1050, 1175, 1300, 1425 and 1550 ft). Preliminary recoveries were expected to be 57% Cu, 82% Pb, 84% Zn and 70% Ag. These zones were in production from 1967 to 1971. Production came from 9 levels, with mining being restricted to the A and C zones. Until 1971, mining had amounted to 1,241,279 tons grading approximately 0.24% Cu, 2.1% Zn, 2.2% Pb, 2.7 oz/t Ag, 0.6 lb/ton Cd and 0.2 lb/ton Bi. Production recommenced in 1973 and by 1974 (to August) had amounted to 134,877 tons grading 0.32% Cu, 2.85% Zn, 2.67% Pb and 3.84 oz/t Ag with reserves estimated to be 1.3 million tons grading 0.23% Cu, 3.15% Zn, 3.14% Pb and 3.98 oz/t Ag. Production continued until 1977, totalling 2,049,843 tons of ore producing the following concentrates: 89,841 tons of Zn, 90,752 tons of Pb and 10,628 tons of Cu concentrates (DNR Open File Report 80-4; probably includes Anthonian zone production).

Mineralized Occurrence	Mineralization	Comments (GeoNB)
Nigadoo North Zone (a.k.a. Nigadoo No. 3)	Cu-Pb-Ag-Zn	Mineralized occurrence discovered by the Anthonian Mining Corp. in 1953. The No. 3 deposit consists of a system of steeply dipping veins striking NW and N-S. The veins cut Silurian argillite and greywacke, and an intrusive pipe of Devonian quartz-feldspar porphyry. The grade is approximately 10 oz/t Ag, 0.5% Pb and 0.3% Zn. Shamrock Resources drilled 5 holes in 1987 in the vicinity of the Nigadoo holes.
Orvan Brook	As-Cu-Au-Ag-Zn	Massive sulphide boulders were first found by Mr. Joseph Kent of Bathurst on Armstrong Brook in 1860. The reserve estimate (non-compliant with NI 43-101) for this narrow ore body was 200,000 tons at 7% Zn, 1.5% Pb, 0.3% Cu and 1.5 oz/t Ag. Mineralization consists of very fine-grained, massive, banded, pyrite-sphalerite-galena-chalcopyrite-arsenopyrite-tetrahedrite (Skinner, 1974).
Rocky Turn	Cu-Pb-Ag-Zn	Wright (1938) reported that a crew working for Hans Lundberg, including Dr. L.V. Bell and W.C. Campbell, went on to discover the Orvan Brook occurrence. In 2015, Wolfden Resources Corp. reported (assessment report 477841) the results of Mag, VLF-EM and gravity surveys, soil geochemistry and diamond drilling (T-14-1 through T-14-20 and T-15-21 through T-15-23). The Rocky Turn Extension massive sulphide zone was discovered during the drill program, located approximately 200 m east of massive sulphide intersections in the Rocky Turn deposit. Massive sulphide mineralization was intersected in 6 of the 9 holes that tested the Rocky Turn Extension horizon, with the widest interval in T-14-02 with a true width of 4.8 m of massive sulphides. The highest grading interval ran 9.34% Zn, 4.15% Pb, 0.53% Cu, 216 g/t Ag and 2.18 g/t Au over 0.6 m (0.4 m true width), starting from 42.8 m in DDH T-14-04.

24. OTHER RELEVANT DATA AND INFORMATION

The QPs are not aware of any other relevant data and information that could have a significant impact on the interpretation and conclusions presented in this report.

25. INTERPRETATION AND CONCLUSIONS

The objective of InnovExplo's mandate was to prepare a technical report on the exploration status of the Nicholas-Denys Project (the "Project"). This report also addresses the agreement between Canadian Metals and Targets Minerals Inc. for the proposed acquisition of a 100% interest in the Project. This Technical Report meets that objective.

The Project provides the issuer with an extensive county-scale (Resticouche and Gloucester) land position over a 30 km east-west stretch of the northern part of the Canadian Appalachians. The Project is located in the Bathurst Mining Camp ("BMC"), along the Rocky Brook-Millstream fault system ("RBMF"), the most important structure in the camp. The Project overlies the contact between the Ordovician Fournier Block to the south and the Silurian Matapedia cover sequence to the north. The rocks belong to the Fournier and Chaleur Groups, respectively.

InnovExplo believes that the Project is at early exploration stage, with a mineral potential supported by historical mineral resource estimates, many known mineral occurrences, and underexplored areas. Previous exploration work on the Project was mainly limited to the RBMF on the Ann's Creek and Beresford claim blocks. Many historical intercepts (Zn-Pb-Ag-Au, Cu, Au, Fe, Fe-Cu, Mo and Mo-Cu) are of potential economic interest. They should be confirmed by future drilling programs. Elsewhere on the Project, reconnaissance drilling has been carried out in selected areas on geophysical targets or based on trenching information.

Goldstrike claim block

The potential for additional gold mineralization on the Goldstrike claim block is supported by exploration results, primarily from geophysics, soil geochemistry, stripping and drilling. The mineral occurrences (Clarinda and Arleau zones) lie in a fault-bounded wedge, with the east-trending RBMF to the south. The occurrences are found in rocks belonging to the Silurian Chaleurs Group at or near the northeast-trending contact within the Lower Devonian Dalhousie Group. The Chaleur Group units in the occurrence area comprise sediments and felsic volcanics.

In the Clarinda Zone, gold occurs in quartz veins and pyritic zones hosted by carbonate-altered sediment, rhyolite and gabbro. In the Arleau Zone, gold accompanies quartz veining, silica flooding and minor sericitization near the margin of rhyolite flows/sills of the Benjamin Formation. In some respects, it is similar to the Clarinda Zone along strike to the south.

Millstream claim block

The potential for additional gold mineralization on the Millstream claim block is supported by exploration results, primarily from soil geochemistry, geophysics, prospecting and drilling. The zones show various anomalous gold indicators.

The showings (Millstream West Gold-A, Millstream West Gold-B, Millstream West Gold-C and Millstream West Gold-E) are located north of the RBMF, hosted in units belonging to the Chaleur Group.

Several holes intersected significant gold mineralization in altered siltstone and diabase, centred on the contacts of the dyke. Gold occurs in fine felty to massive arsenopyrite associated with quartz-carbonate veins and pervasive alteration in Silurian rocks of the Free Grant Formation, adjacent to and within narrow dykes of diabase or fine-grained gabbro.

Ann's Creek claim block

Located approximately 23 km northwest of Bathurst, the Ann's Creek claim block is crossed by the RBMF, forming the break between the Ordovician Millstream Formation to the south and the Silurian Simpson Field Formation to the north. Many showings are located in this area, mostly clustered in the Hachey and Shaft zones. The rocks in the vicinity of these zones consist of dark grey phyllite, schist and argillite with minor greywacke.

The Hachey Zone consists of Zn-Ag-Pb and Au mineralization in an east-west striking vein that is equated with similar mineralization at the nearby Shaft deposit. The Hachey Zone is the most significant discovery on the Project. Recent drilling (completed in 2015) led to the discovery of five (5) new mineralized lenses to a vertical depth of 450 m.

The Shaft Zone consists of Ag-Pb-Zn-Au mineralization with thickness ranging from 3 to 25 m. The mineralization at the Shaft Zone is continuous on strike for 200 m and to a depth of 350 m, over mineable widths (3 to 4 m) and grades. The Henry and Millstream gold systems showings occur approximately 2.5 km and 3.7 km, respectively, to the southwest and on strike from the Hachey Zone, along the southern branch of the RBMF. The Henry mineralization consists of massive to disseminated sulphides in or near carbonate-rich veins, fractures and lenses. In 1970, an underground exploration program produced a drift, a raise and an incline. Following a geophysical survey and a trenching program in 2011, Puma Exploration Inc. successfully discovered a new showing to the east of the Henry Zone (Henry East).

Beresford claim block

Located east of the Ann's Creek claim block, the Beresford claim block is also crossed by the RBMF, which forms the break between the Ordovician Millstream Formation to the south and the Silurian Simpson Field Formation to the north. The granitic Nicholas-Denys intrusion is also present on the claim block. Many showings are located in this area, mostly clustered in the Beresford and Pine Tree zones.

Beresford Copper is a copper occurrence to the north of MacKenzie's main longitudinal (east-west) fault. It may occur along a northwest-southeast transverse fault followed by the Lavigne Brook. Mineralization consists of magnetite-chalcopyrite-rich lenses in a calc-silicate skarn zone. In 2007, Puma Exploration Inc. concluded that the Au-Ag-Zn vein mineralization was more promising than Cu-skarn mineralization.

The Pine Tree Zone (a.k.a. Rocky Brook) is located approximately 2.5 km east of the Hachey-Shaft occurrence along the South Branch of the RBMF. The mineralization is hosted by three E-NE-striking lenses of quartz-calcite-Zn-Pb-Ag, within a zone of disseminated pyrite and pyrrhotite approximately 180 m long by 45 m wide. The mineralization is considered similar to the Hachey-Shaft occurrence to the west. Mineralization occurs in Ordovician metasediments of the Fournier Group, south of the

RBMF. Exploration drilling in 2005 and 2009 (Puma Exploration Inc.) confirmed that mineralization extends to a depth of 150 m.

The Nicholas-Denys Zone (a.k.a. Nicholas-Denys 1) is hosted in the Nicholas-Denys intrusion near its northern contact with the Silurian sediments. Molybdenum occurs in quartz veinlets (along fractures). Most exploration drilling was conducted between 2007 and 2014 (Puma Exploration Inc.). Three (3) DDH were drilled in 2007 to confirm the mineralization encountered during historical drilling.

After conducting a detailed review of all pertinent information, the authors conclude the following:

- There is potential to update and possibly increase the mineral resources in the Hachey Zone, contingent upon validating the results of drilling conducted after the publication of the 2008 technical report.
- Geological and grade continuity is demonstrated for the Hachey Zone.
- There is potential to expand the known mineral occurrences on the Project with additional infill drilling, in particular, the Clarinda, Hachey, Shaft, Henry, Millstream and Beresford Copper zones.
- Opportunities exist to discover additional mineralized zones on the Project.
- The Project is underexplored outside the known mineralized areas.

Table 25.1 identifies the significant internal risks, potential impacts and possible risk mitigation measures that could affect the future economic outcome of the Project. The list does not include the external risks that apply to all mining projects (e.g., changes in metal prices, exchange rates, availability of investment capital, change in government regulations, etc.).

Significant opportunities that could improve the economics, timing and permitting are identified in Table 25.2. Further information and study are required before these opportunities can be included in the project economics.

Table 25.1 – Risks for the Project

RISK	Potential Impact	Possible Risk Mitigation
Geological model	Geological complexity: the mineralized system has been affected by shearing and folding, potentially decreasing the continuity of mineralization	Infill drilling to improve confidence in the continuity of mineralization. Consider elaborating a 3D geological model to follow up on grade, thickness and continuity of mineralization.
Inaccurate density	Bias in the tonnage estimate	Test to confirm the density of each structure and various host rocks.
Social acceptability/ Community support	Possibility that the Property could not be explored or exploited	Develop a proactive and transparent strategy to identify all stakeholders and develop a communication plan. Organize information sessions, provide information on the Project, and meet with host communities.

Table 25.2 – Opportunities for Project

Opportunity	Explanation	Potential Benefit
Update the Hachey Zone MRE	Potential for additional resources by incorporating drilling data not used in the historical resource estimate.	Potential to increase the current inferred resources.
Drilling on the Hachey Zone	Potential to extend mineralization at depth and to find additional mineralization in the vicinity of the deposit	Potential to increase resources
Exploration, geophysics, drilling on the Project	Opportunities to add mineralized zones to the Project	Potential to increase resources
The Property is underexplored outside the known mineralized zones	The Project is located in the Bathurst Mining Camp, along the Rocky Brook-Millstream Fault Zone, the most important structure in the camp, known to host Zn-Pb-Ag-Au, Cu, Au, Fe, Fe-Cu, Mo and Mo-Cu mineralization	Potential for new discoveries
Geophysics on the Goldstrike and Millstream gold system areas	Potential to identify lithological contacts and mineralization	Improved confidence in potential drill targets and thus better chances of discovering mineralization.
Additional infill drilling in the Goldstrike and Millstream gold system area	Would likely confirm and potentially expand known zones, particularly Clarinda, Arleau and Millstream	Potential to increase resources

26. RECOMMENDATIONS

Based on the exploration status of the Nicholas-Denys Project, the authors recommend advancing the Millstream, Pine Tree, Shaft, Hachey, Dante, Raya, Henry East, Henry, Half Mile, Bradley and Clarinda zones to the next phase of development. InnovExplo also recommends continuing the property-scale exploration program, including compilation, geophysics, trenching, sampling and drill target generation, in addition to drilling on the more advanced claim blocks, such as Ann's Creek and Beresford. Figure 26.1 shows the location of the main occurrences.

The recommended two-phase work program is detailed below.

<u>Phase 1</u>:

- Exploration
    - Regional compilation work is recommended for the Ann's Creek and Beresford claim blocks and the Rocky Brook–Millstream fault system ("RBMF").
    - On the Ann's Creek and Beresford claim blocks, excavation work should be planned at the Shaft, Pine Tree, Half Mile and Henry East occurrences to better define the mineralization. It will then be possible to perform channelling and target future drill hole locations. Trenching in some unexplored regions along the RBMF would also be in order.
    - The Millstream claim block is underexplored outside the known mineral occurrence. Compilation, stripping and mapping work are recommended.
- Geophysics
    - Ground geophysics surveys (IP and/or EM methods) are recommended for the Nicholas-Denys Zone to delineate the mineralized system and its potential extension.
    - IP surveying is recommended to the east of the Nicholas-Denys pluton to follow up on Mag anomalies in the Laplante Formation.
    - Ground geophysics surveys (IP and/or EM methods), stripping and mapping are recommended for the Clarinda Zone to delineate lithological contacts and better understand the gold system. The Goldstrike claim block is underexplored outside the known mineral occurrence; trenching and mapping are recommended.
- Data validation on the Hachey Zone (post-2008 MRE drill holes)
    - Drilling data obtained from the Hachey Zone since the last MRE of 2008 should be compiled, validated and interpreted. Further density results should be obtained from measurements on diamond drill core. Detailed data validation process should include a QA/QC review, checks against original assay certificates, checks against original survey reports (collar location and downhole surveys) to reach a confidence level appropriate for a future MRE update.
- In parallel with the exploration work program, it is also recommended that the issuer maintain a pro-active and transparent strategy and communication plan with local communities.

Phase 2:

- Updated MRE for the polymetallic Hachey deposit.
- Exploration drilling along the RBMF to potentially discover new zones (provisional Phase 1 follow-up).
- Exploration drilling on the Nicholas-Denys Zone and east of the Nicholas-Denys pluton (provisional Phase 1 follow-up).
- Exploration drilling on the Clarinda Zone (provisional Phase 1 follow-up).
- Exploration drilling on the Millstream claim block (provisional Phase 1 follow-up).

26.1 Cost Estimate for Recommended Work

InnovExplo has prepared a cost estimate for the recommended two-phase exploration work program to serve as a guideline. The budget for the proposed program is presented in Table 26.1. Expenditures for Phase 1 are estimated at C$1.200M (incl. 15% for contingencies). Expenditures for Phase 2 are estimated at C$1.745M (incl. 15% for contingencies). The grand total is C$2.945M (incl. 15% for contingencies). Phase 2 is contingent upon the success of Phase 1.

Table 26.1 – Estimated Costs for the Recommended Work Program

Phase 1 – Work Program	**Description**	**Budget Cost (CAD)**
Regional geoscience compilation for exploration targeting with a focus on the Ann's Creek, Beresford, Millstream and Goldstrike claim blocks		$ 0.075 M
Mechanical stripping, trenching, geological mapping and sampling on the Clarinda, Shaft, Pine Tree, Half Mile and Henry East zones, in specific unexplored areas along the RBMF and in underexplored areas outside the known mineralized occurrences on the Goldstrike and Millstream claim blocks		$0.650 M
Ground geophysics (IP and/or EM surveys) on the Nicholas-Denys Zone, to the east of the Nicholas-Denys pluton to test the Mag anomalies in the Laplante Formation, and on the Clarinda Zone.		$0.350 M
Data validation on the Hachey Zone (post-2008 MRE drill holes), including additional density measurements on drill core		$0.075 M
Community relations and communications plan		$0.050 M
Phase 1 Subtotal		**$1.200 M**
Phase 2 – Work Program	**Description**	**Budget Cost**
Updated mineral resource estimate for the Hachey polymetallic deposit		$0.120 M
Exploration drilling – along the RBMF system (provision for follow-up on Phase 1)	3,000 m	$0.750 M
Exploration drilling – Nicholas-Denys Zone and to the east of the Nicholas-Denys pluton (provisional Phase 1 follow-up)	1,000 m	$0.250 M
Exploration drilling – Clarinda Zone (provisional Phase 1 follow-up)	1,000 m	$0.250 M
Exploration drilling – Millstream claim block (provisional Phase 1 follow-up)	1,500 m	$0.375 M
Phase 2 Subtotal		**$1.745 M**
TOTAL (Phase 1 and Phase 2)		**$2.945 M**

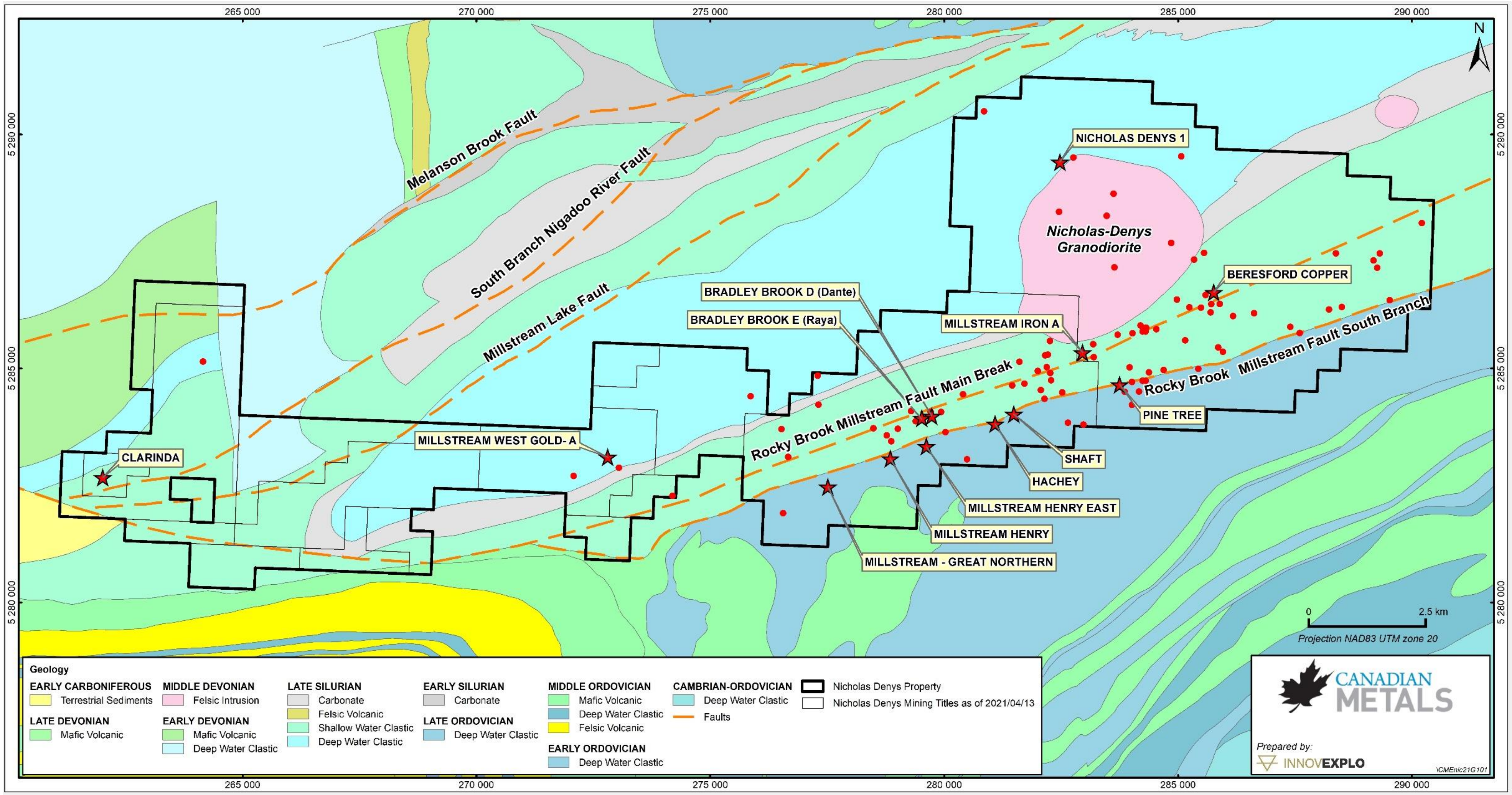


Figure 26.1 – Map of mineral occurrences on the Project

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